Site Investigation Technical Memorandum Volume II

Former Standard Oil Bulk Plant
#5482
Wedron, LaSalle County, Illinois

Stantec

August 6, 2014

US EPA RECORDS CENTER REGION 5
476669

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261408.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261408.D
Lab Smp Id: IC 1 10098-49
Inj Date : 26-FEB-2014 12:39
Operator : SH2 Inst ID: 10msv5.i
Smp Info : IC 1 10098-49,1,1
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:52 shaider Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.121	1.116	(0.280)	6893	1.00000	0.96(a)
2	Chloromethane	50	1.230	1.231	(0.308)	7202	1.00000	0.98(TaQ)
3	Vinyl Chloride	62	1.279	1.274	(0.320)	6690	1.00000	0.96(a)
4	Bromomethane	94	1.467	1.463	(0.367)	992	1.00000	2.4(Q)
5	Chloroethane	64	1.540	1.536	(0.385)	4397	1.00000	1.0
6	Trichlorofluoromethane	101	1.619	1.615	(0.405)	8887	1.00000	1.0
7	Dichlorofluoromethane	67	1.650	1.645	(0.413)	13534	1.00000	1.2
8	Diethyl ether (Ethyl Ether)	59	1.802	1.797	(0.451)	4595	1.00000	1.2(Q)
9	Ethanol	45	1.869	1.882	(0.394)	190	20.0000	(aQM)
10	1,1-Dichloroethene	96	1.936	1.925	(0.484)	6167	1.00000	1.2
11	Trichlorotrifluoroethane	101	1.954	1.949	(0.489)	5842	1.00000	2.0
12	Carbon Disulfide	76	1.960	1.955	(0.490)	18456	1.00000	1.2
13	Iodomethane	142	2.033	2.028	(0.509)	988	1.00000	3.7(QM)
14	Acrolein	56	2.161	2.150	(0.541)	13254	10.0000	11.4
15	Allyl Chloride	41	Compound Not Detected.					
16	Isopropanol	45	2.270	2.260	(0.479)	3705	10.0000	15.0
17	Methylene Chloride	84	2.331	2.326	(0.583)	7818	1.00000	1.5
* 18	Acetone d6	46	2.337	2.326	(1.000)	124131	100.000	
19	Acetone	58	2.380	2.363	(1.018)	4103	5.00000	8.4
20	trans-1,2-Dichloroethene	96	2.459	2.448	(0.615)	6817	1.00000	1.2
21	Methyl Acetate	74	2.465	2.454	(0.617)	6716	5.00000	6.4
22	Hexane	86	2.508	2.503	(1.073)	3885	2.50000	3.6

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
23	Methyl-tert-butyl Ether	73	2.538	2.533	(0.635)	19573	1.00000	1.2
24	tert-Butyl Alcohol	59	2.617	2.606	(0.552)	8085	10.0000	12.5
25	Isopropyl Ether	45	2.860	2.850	(0.715)	22128	1.00000	1.2
26	Acetonitrile	41	Compound Not Detected.					
27	Chloroprene	53	2.946	2.935	(0.737)	10522	1.00000	1.2
28	1,1-Dichloroethane	63	2.964	2.953	(0.741)	11221	1.00000	1.2
29	Acrylonitrile	53	3.006	2.996	(0.752)	28556	10.0000	12.1
30	Ethyl-tert-butyl ether	59	3.152	3.142	(0.789)	19618	1.00000	1.2
31	Vinyl Acetate	43	3.159	3.154	(0.790)	22507	1.00000	1.5(Q)
32	cis-1,2-Dichloroethene	96	3.371	3.361	(0.843)	7392	1.00000	1.2
33	2,2-Dichloropropane	77	3.444	3.440	(0.862)	11282	1.00000	1.3
34	Cyclohexane	56	3.505	3.501	(0.877)	58295	5.00000	5.8
35	Bromochloromethane	130	3.517	3.501	(0.880)	3979	1.00000	1.1
36	Chloroform	83	3.560	3.555	(0.890)	12401	1.00000	1.2
37	Carbon Tetrachloride	117	3.651	3.647	(0.913)	9141	1.00000	1.2
38	Ethyl Acetate	43	3.651	3.640	(0.913)	48293	5.00000	6.0
39	Tetrahydrofuran	72	3.676	3.665	(1.573)	11476	10.0000	12.4
40	sec-Butyl Alcohol	45	3.694	3.677	(0.779)	7598	10.0000	14.2
41	1,1,1-Trichloroethane	97	3.700	3.689	(0.925)	10810	1.00000	1.2
42	2-Butanone	43	3.779	3.768	(0.945)	20291	5.00000	5.8
43	1,1-Dichloropropene	75	3.785	3.774	(0.947)	8677	1.00000	1.1
44	2,2,4-Trimethylpentane	57	3.846	3.841	(0.962)	15535	1.00000	1.2
45	Benzene	78	3.943	3.932	(0.986)	28649	1.00000	1.2
46	Propionitrile	54	3.962	3.957	(0.991)	9801	10.0000	10.7(Q)
47	Methacrylonitrile	41	3.974	3.969	(0.994)	26188	1.00000	1.6
* 48	Pentafluorobenzene	168	3.998	3.987	(1.000)	480702	50.0000	
49	Tert-amyl methyl ether	73	4.016	4.012	(1.005)	20804	1.00000	1.2(Q)
$ 50	1,2-Dichloroethane d4 (S)	65	4.028	4.024	(1.008)	237209	50.0000	49.6(Q)
51	1,2-Dichloroethane	62	4.071	4.066	(1.018)	7620	1.00000	1.1(Q)
52	Isobutanol	43	4.089	4.078	(0.863)	9297	20.0000	33.0(Q)
53	Tert-Amyl Alcohol	59	4.150	4.139	(0.876)	8751	10.0000	12.7(Q)
54	Methylcylohexane	98	4.290	4.285	(1.073)	5791	1.00000	1.2
55	Trichloroethene	130	4.302	4.291	(0.996)	7903	1.00000	1.2(Q)
* 56	1,4 Difluorobenzene	114	4.320	4.316	(1.000)	729158	50.0000	
57	Tert-amyl ethyl ether	59	4.442	4.431	(1.028)	17663	1.00000	1.2
58	n-Butanol	56	4.509	4.498	(0.951)	1974	10.0000	14.0(Q)
59	Dibromomethane	174	4.552	4.547	(1.053)	3851	1.00000	1.0(Q)
60	1,2-Dichloropropane	63	4.606	4.602	(1.066)	5883	1.00000	1.0(TQ)
61	Ethyl Arcylate	55	4.619	4.608	(1.069)	14403	1.00000	1.6(M)
62	Bromodichloromethane	83	4.643	4.638	(1.075)	9750	1.00000	1.2(Q)
63	Methyl Methacrylate	69	4.734	4.723	(1.096)	6102	5.00000	5.7
* 64	1,4 dioxane d8	96	4.740	4.735	(1.000)	32777	2000.00	
65	1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
66	3-Pentanone	57	4.856	4.845	(1.124)	8088	1.00000	1.5
67	2-Chloroethyl Vinyl Ether	63	4.959	4.954	(1.148)	11702	2.50000	2.9
68	cis-1,3-Dichloropropene	75	4.996	4.991	(1.156)	9896	1.00000	1.1
$ 69	Toluene-d8 (S)	98	5.093	5.088	(0.861)	873492	50.0000	49.5
70	Toluene	92	5.123	5.119	(0.866)	17539	1.00000	1.2
71	2-Nitropropane	43	5.330	5.319	(0.901)	46219	5.00000	6.0
72	Tetrachloroethene	166	5.330	5.326	(0.901)	8248	1.00000	1.2
73	4-Methyl-2-Pentanone	43	5.330	5.319	(0.901)	46219	5.00000	5.9
74	trans-1,3-Dichloropropene	75	5.349	5.344	(0.904)	10443	1.00000	1.2
75	4-Methyl-2-pentanol	45	5.379	5.374	(1.135)	28486	10.0000	27.0
76	Ethyl Methacrylate	69	5.428	5.423	(0.918)	12754	1.00000	1.3

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	1,1,2-Trichloroethane	97	5.434	5.429	(0.919)	6732	1.00000	1.2
78	Dibromochloromethane	129	5.531	5.526	(0.935)	7068	1.00000	1.1
79	1,3-Dichloropropane	76	5.580	5.575	(0.943)	10942	1.00000	1.2
80	1,2-Dibromoethane	107	5.653	5.648	(0.956)	6985	1.00000	1.2(TQ)
81	2-Hexanone	43	5.762	5.757	(0.974)	34727	5.00000	5.9
* 82	Chlorobenzene-d5	117	5.914	5.916	(1.000)	693980	50.0000	
83	Chlorobenzene	112	5.927	5.922	(1.002)	19670	1.00000	1.2(Q)
84	Ethylbenzene	91	5.933	5.928	(1.003)	38033	1.00000	1.3
85	1,1,1,2-Tetrachloroethane	131	5.957	5.952	(1.007)	7254	1.00000	1.2(Q)
86	M&P-Xylene	106	6.012	6.007	(1.016)	27714	2.00000	2.4
87	O-Xylene (1,2-Dimethylbenzene)	106	6.231	6.232	(1.053)	13670	1.00000	1.2
88	Styrene	104	6.261	6.256	(1.059)	21879	1.00000	1.2
89	Bromoform	173	6.279	6.281	(1.062)	5728	1.00000	1.1
90	Isopropylbenzene (Cumene)	105	6.395	6.390	(1.081)	32590	1.00000	1.2
$ 91	4-Bromofluorobenzene (S)	95	6.547	6.542	(0.907)	343133	50.0000	49.9
92	cis-1,4-Dichloro-2-Butene	53	6.577	6.579	(0.911)	2385	1.00000	1.0(QM)
93	Bromobenzene	156	6.608	6.609	(0.915)	8265	1.00000	1.2
94	n-Propylbenzene	91	6.614	6.609	(0.916)	38681	1.00000	1.2
95	1,1,2,2-Tetrachloroethane	83	6.657	6.652	(0.922)	10363	1.00000	1.3
96	2-Chlorotoluene	91	6.705	6.707	(0.928)	24900	1.00000	1.2
97	1,3,5-Trimethylbenzene	105	6.723	6.719	(0.931)	25885	1.00000	1.2
98	1,2,3-Trichloropropane	110	6.742	6.737	(0.933)	3586	1.00000	1.5
99	trans-1,4-Dichloro-2-Butene	53	6.760	6.755	(0.936)	6199	2.50000	2.7
100	4-Chlorotoluene	91	6.809	6.804	(0.943)	23141	1.00000	1.2
101	tert-Butylbenzene	119	6.918	6.913	(0.958)	21457	1.00000	1.2
102	1,2,4-Trimethylbenzene	105	6.961	6.956	(0.964)	25525	1.00000	1.2
103	sec-Butylbenzene	105	7.028	7.029	(0.973)	29698	1.00000	1.2
104	p-Isopropyltoluene	119	7.113	7.114	(0.985)	24475	1.00000	1.2
105	1,3-Dichlorobenzene	146	7.174	7.175	(0.993)	14765	1.00000	1.2
* 106	1,4-Dichlorobenzene-d4	152	7.222	7.224	(1.000)	369370	50.0000	
107	1,4-Dichlorobenzene	146	7.234	7.230	(1.002)	14585	1.00000	1.2(Q)
108	1,2,3 Trimethylbenzene	105	7.241	7.236	(1.811)	26884	1.00000	1.2
109	n-Butylbenzene	91	7.393	7.388	(1.024)	20059	1.00000	1.2
110	1,2-Dichlorobenzene	146	7.508	7.510	(1.040)	14511	1.00000	1.3
111	1,2-Dibromo-3-Chloropropane	157	8.056	8.051	(1.115)	6437	2.50000	2.8
112	Hexachlorobutadiene	225	8.500	8.495	(1.177)	3836	1.00000	1.4
113	1,2,4-Trichlorobenzene	180	8.524	8.519	(1.180)	7610	1.00000	1.2
114	Naphthalene	128	8.755	8.757	(1.212)	27936	1.00000	1.2
115	1,2,3-Trichlorobenzene	180	8.889	8.890	(1.231)	7687	1.00000	1.2
116	2-Methylnaphthalene	142	9.528	9.523	(1.319)	5476	0.50000	0.51(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261408.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261408.D
Lab Smp Id: IC 1 10098-49
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

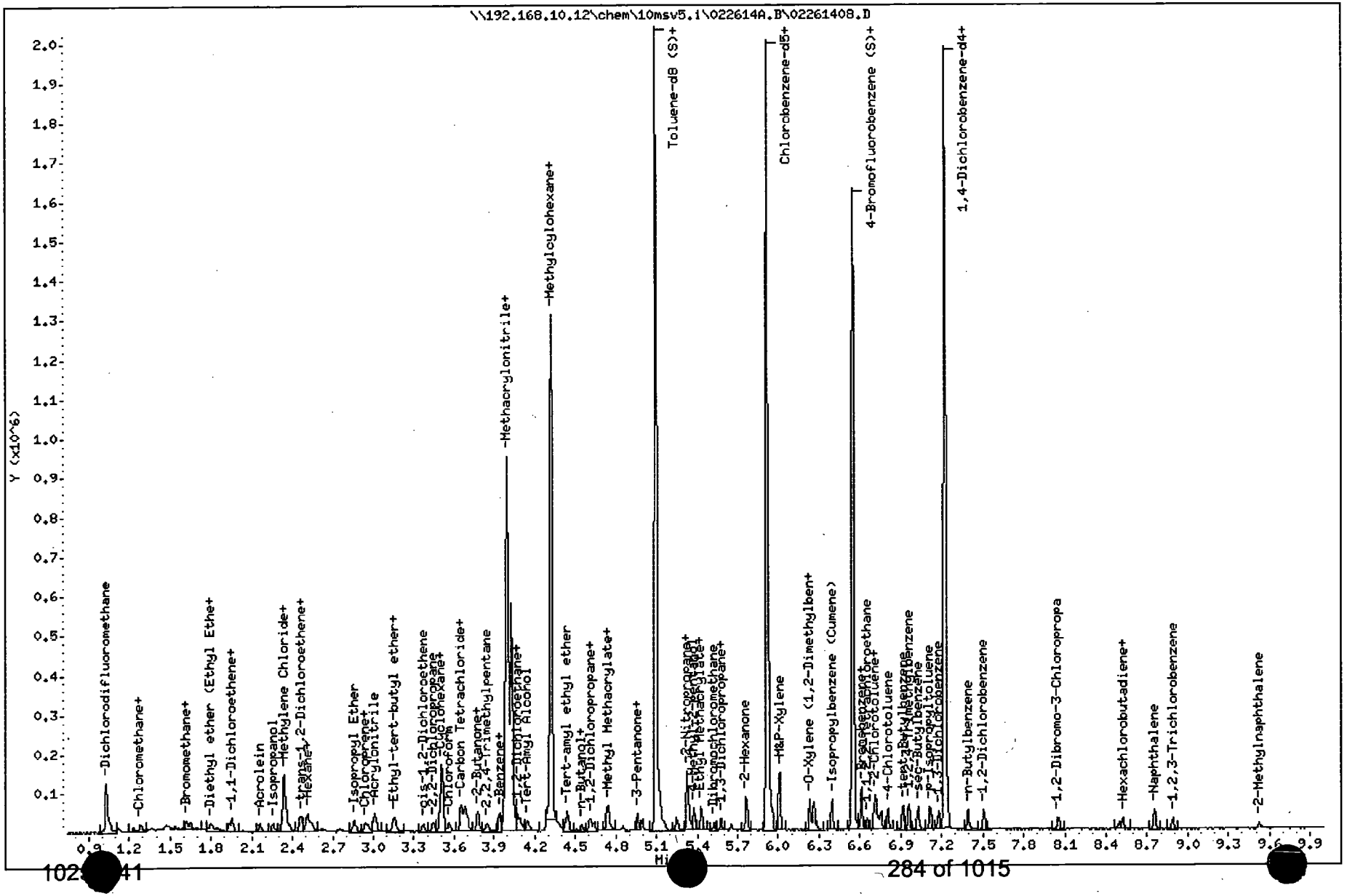
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	132549	66275	265098	124131	-6.35
48 Pentafluorobenzen	514078	257039	1028156	480702	-6.49
56 1,4 Difluorobenze	796453	398227	1592906	729158	-8.45
64 1,4 dioxane d8	17142	8571	34284	32777	91.21
82 Chlorobenzene-d5	743514	371757	1487028	693980	-6.66
106 1,4-Dichlorobenze	400705	200353	801410	369370	-7.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.34	0.53
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.15
56 1,4 Difluorobenze	4.31	3.81	4.81	4.32	0.14
64 1,4 dioxane d8	4.74	4.24	5.24	4.74	0.00
82 Chlorobenzene-d5	5.91	5.41	6.41	5.91	0.00
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261408.D
Date : 26-FEB-2014 12:39
Client ID:
Sample Info: IC 1 10098-49,1,1
Purge Volume: 10.0
Column phase: Rtx-VMS

Instrument: 10msv5.i
Operator: SH2
Column diameter: 0.18



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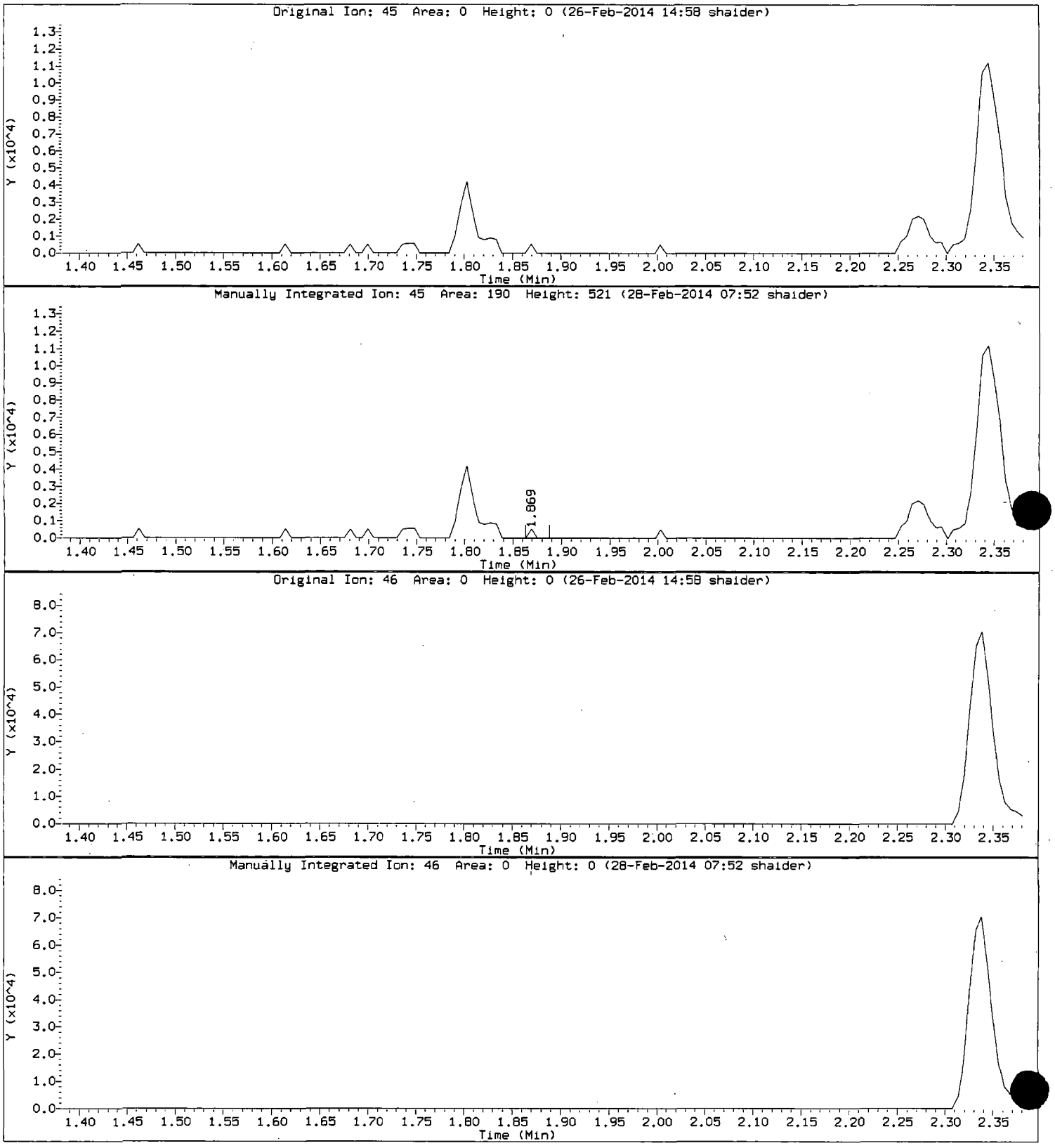
Injection Date: 26-FEB-2014 12:39
Instrument: 10msv5.i
Lab Sample ID: IC 1 10098-49

Compound: Ethanol
CAS Number: 64-17-5



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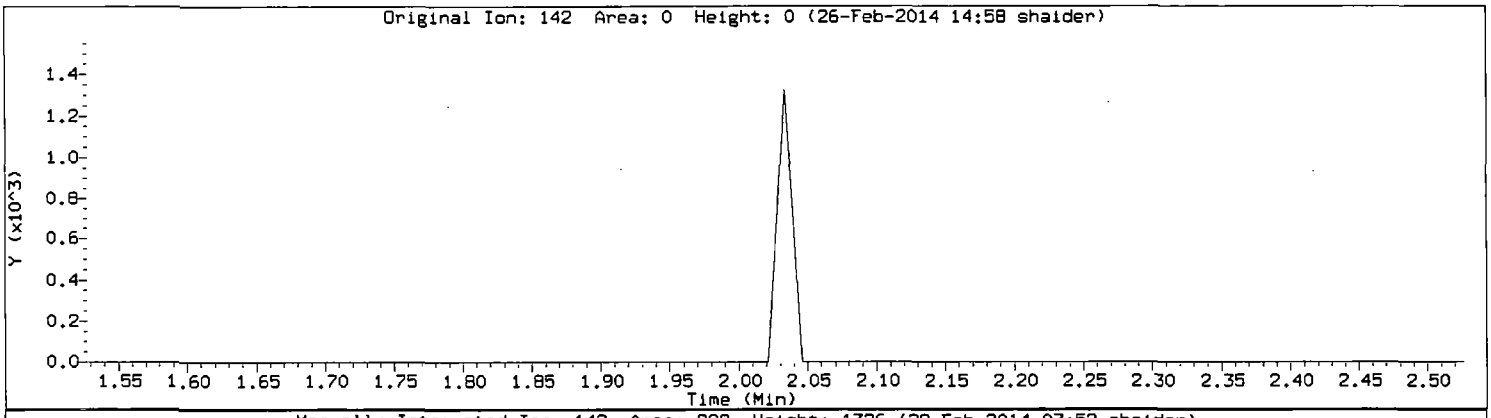
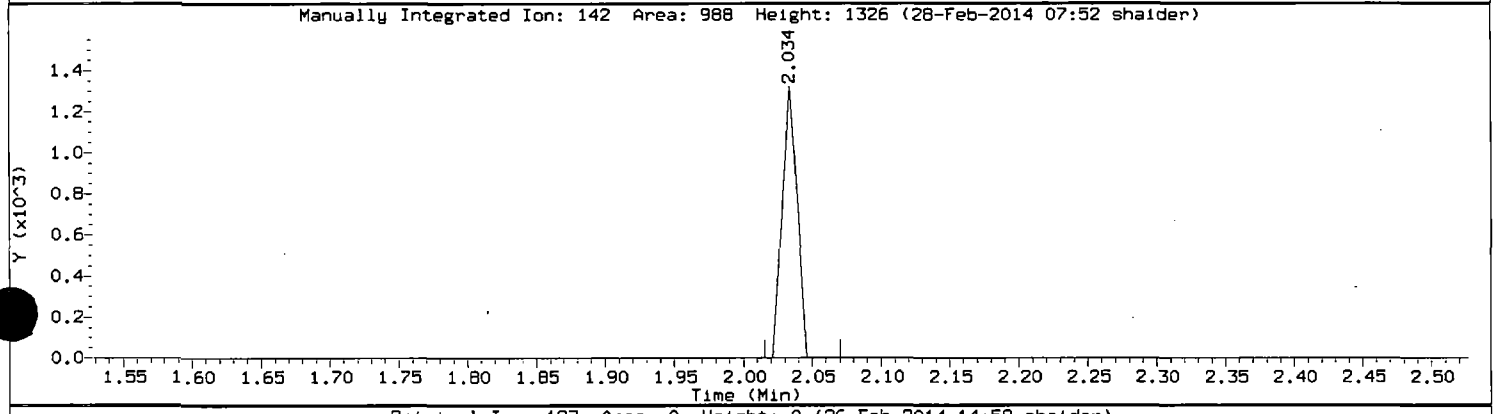
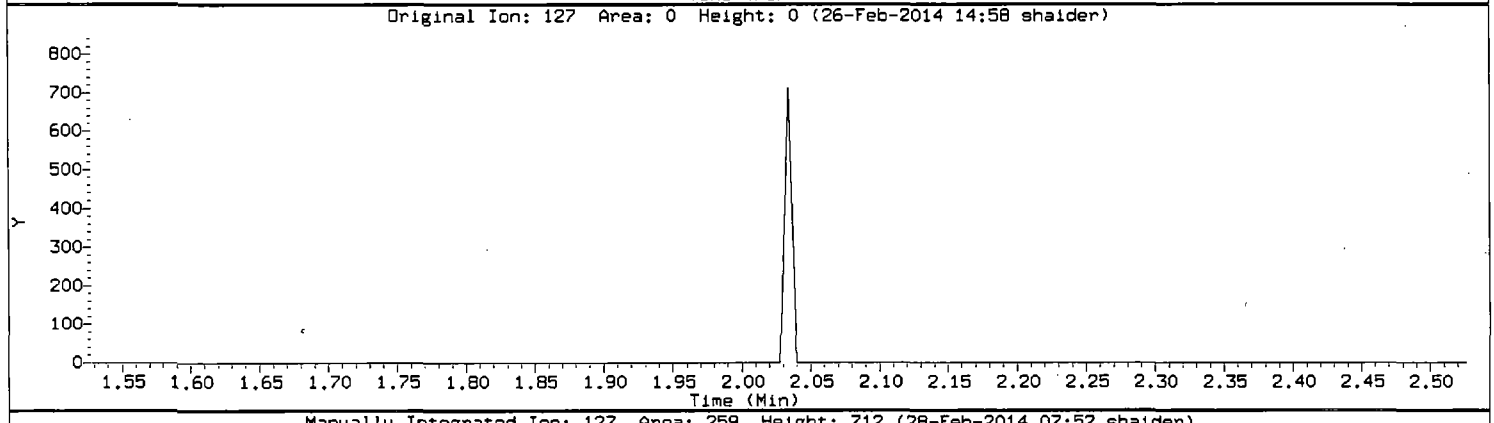
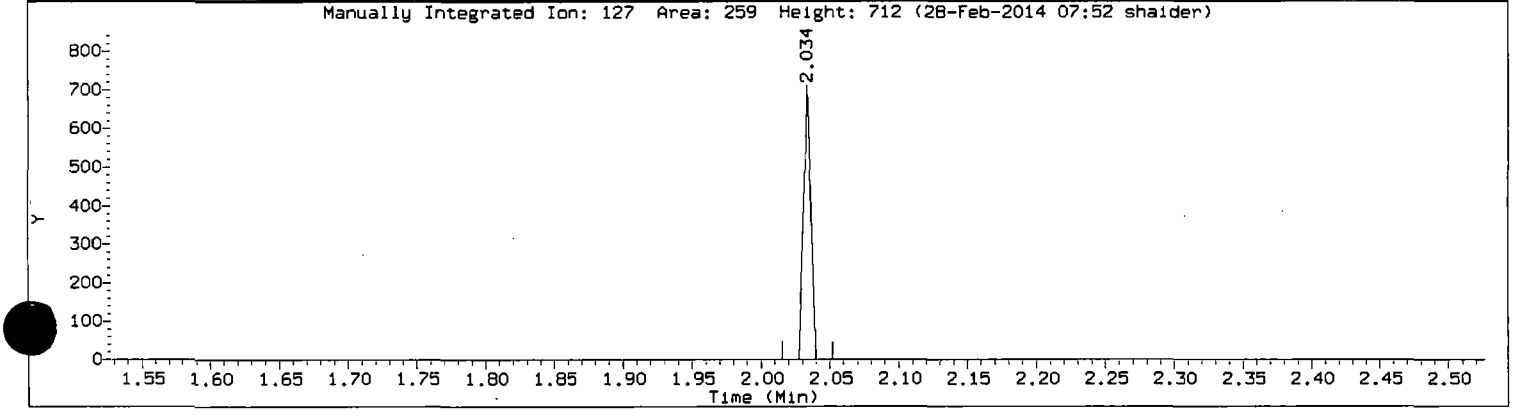
Injection Date: 26-FEB-2014 12:39
Instrument: 10msv5.i
Lab Sample ID: IC 1 10098-49

Compound: Iodomethane
CAS Number: 74-88-4









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Injection Date: 26-FEB-2014 12:39
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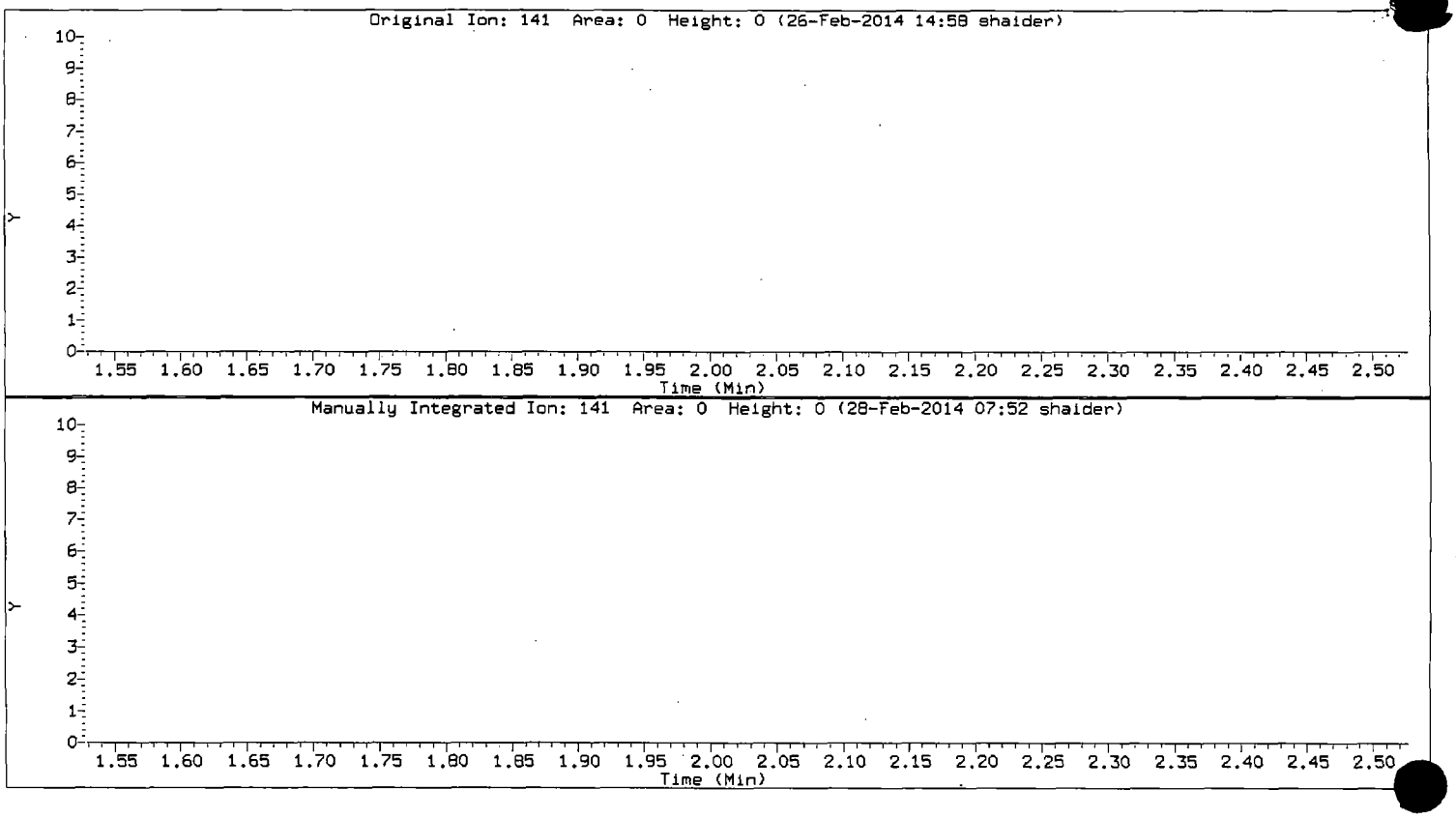
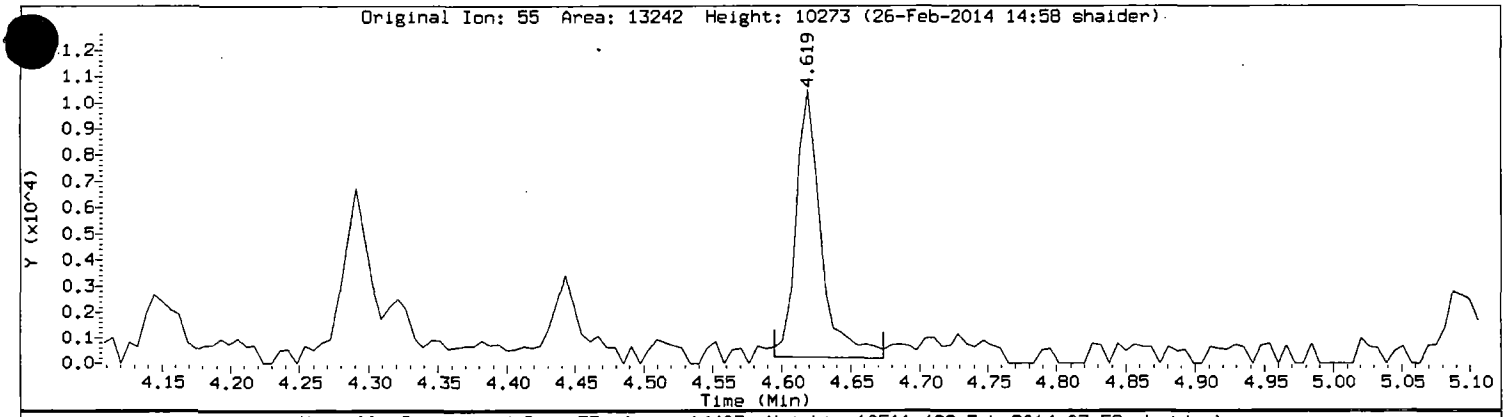
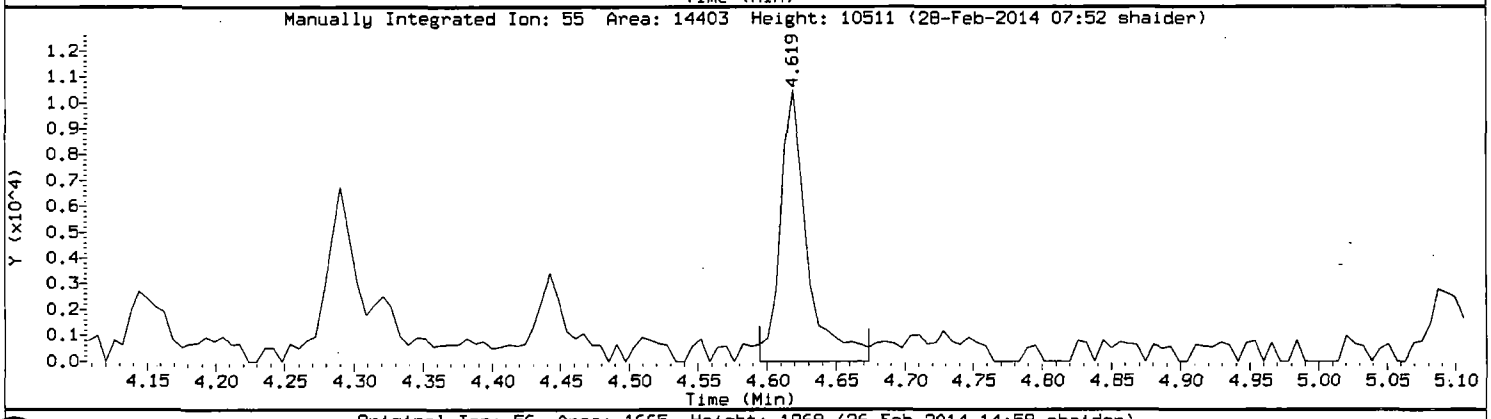
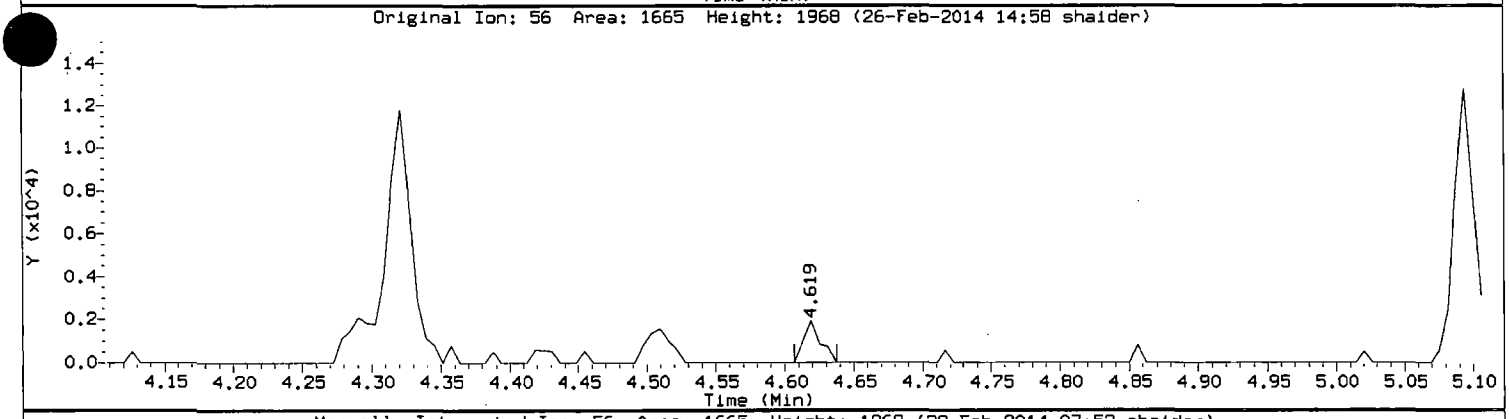


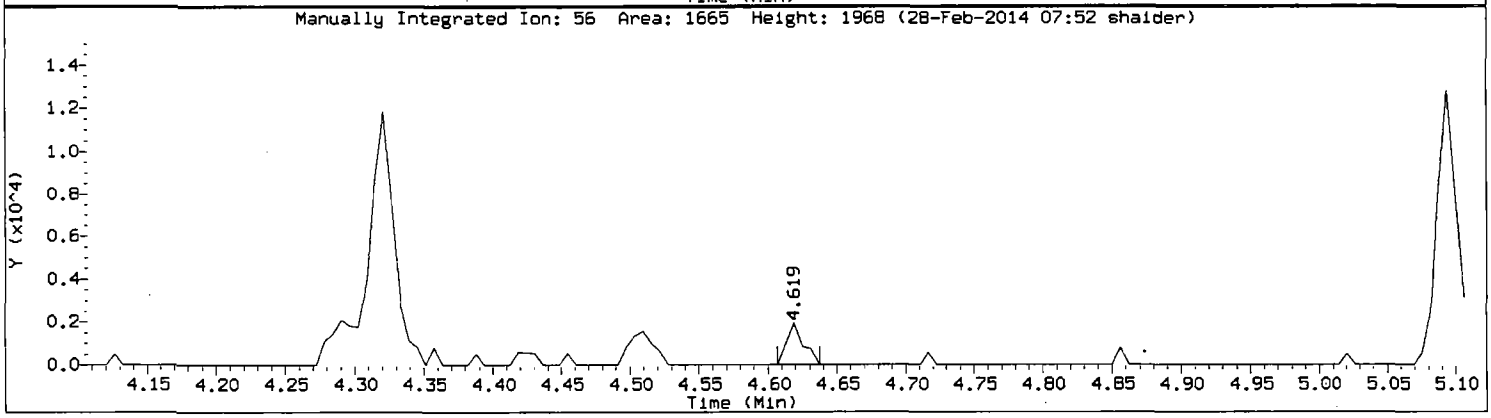
Injection Date: 26-FEB-2014 12:39
Instrument: 10msv5.i
Lab Sample ID: IC 1 10098-49

Compound: Ethyl Arcylate
CAS Number: 140-88-5



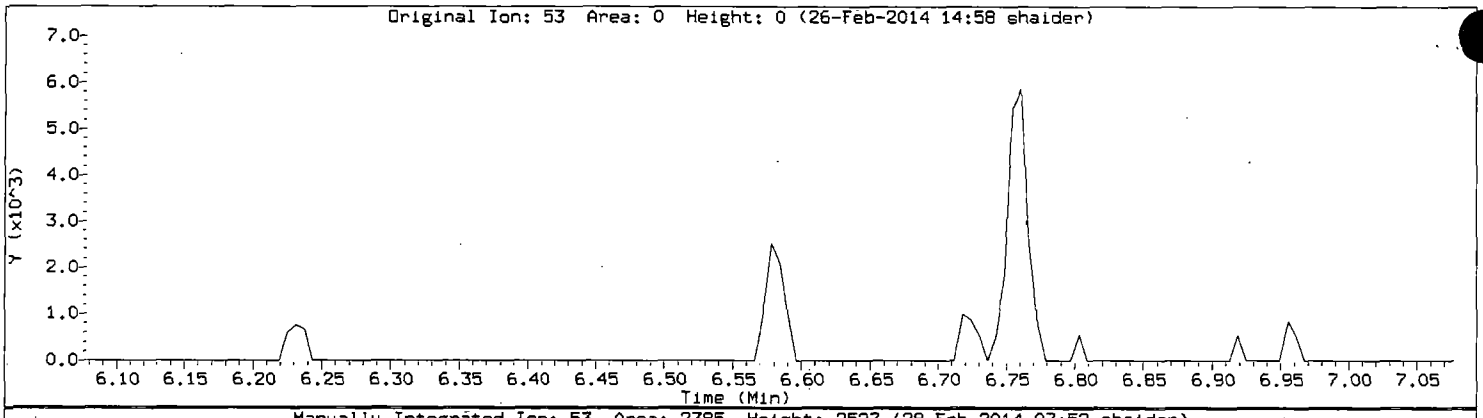


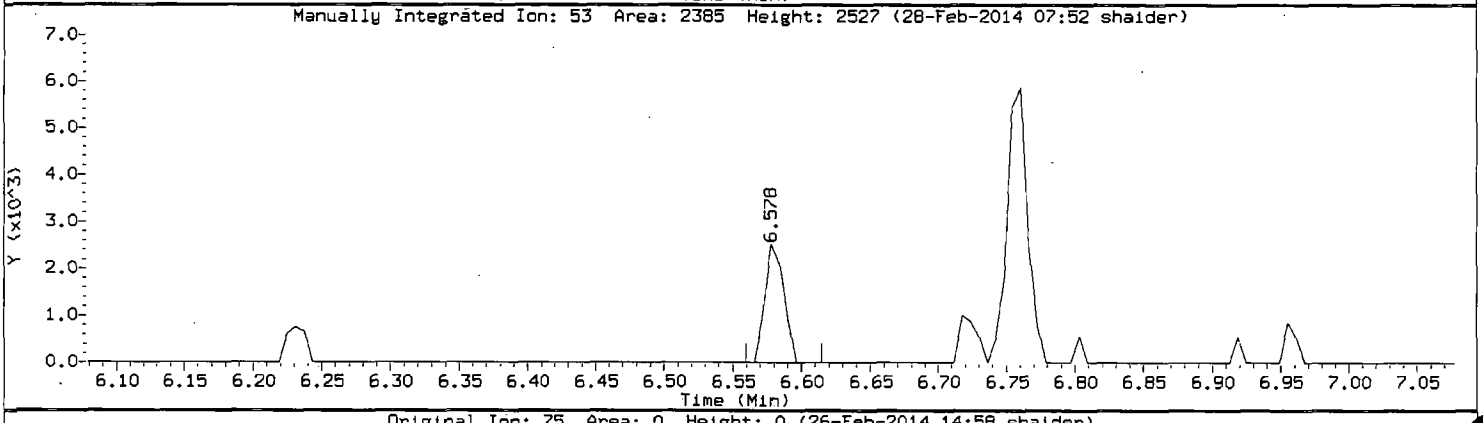


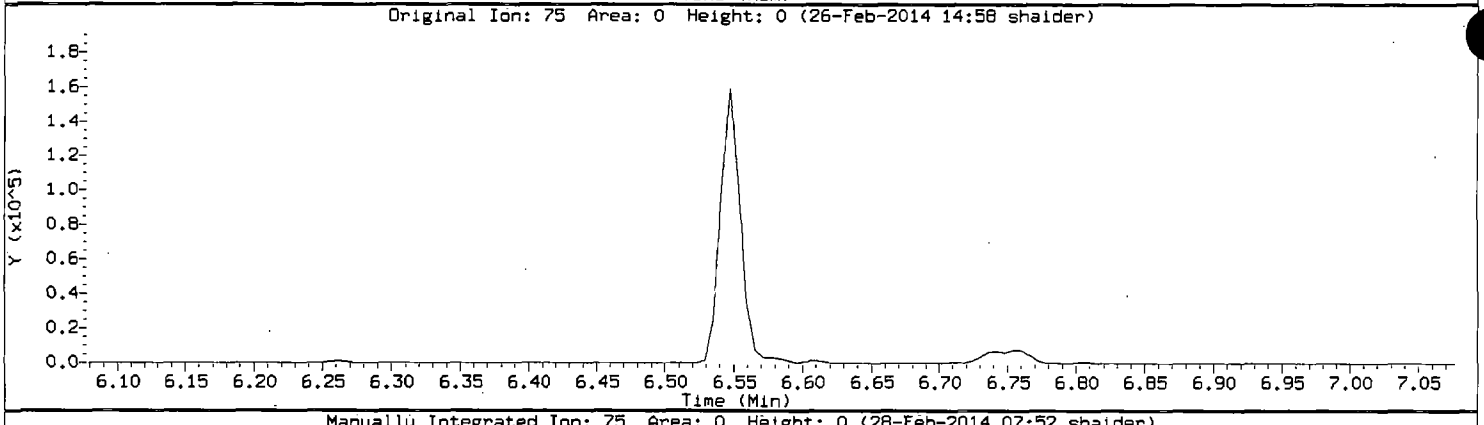


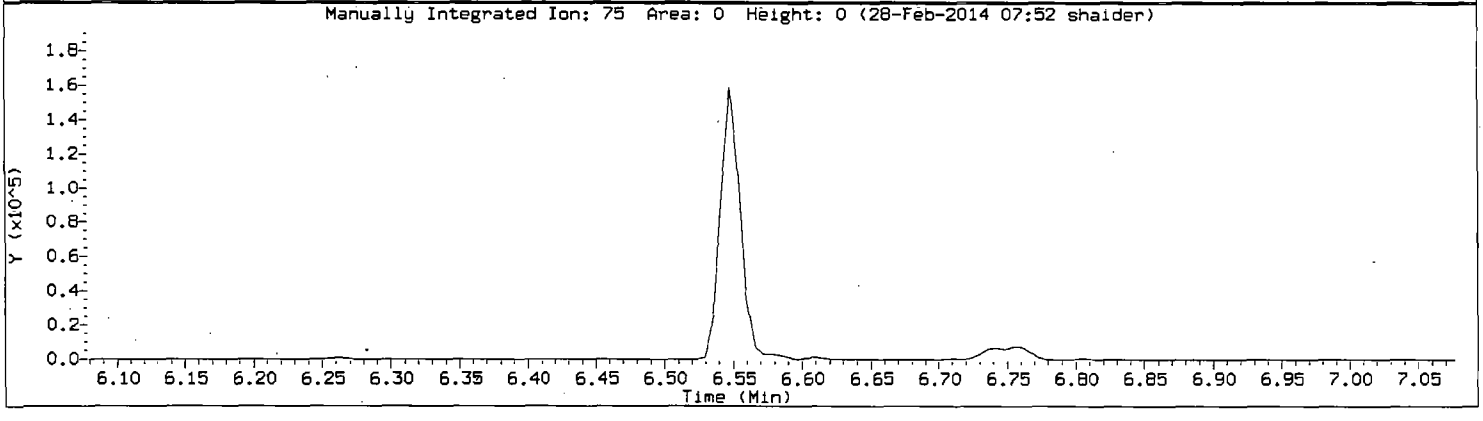
Injection Date: 26-FEB-2014 12:59
Instrument: 10msv5.i
Lab Sample ID: IC 1 10098-49

Compound: cis-1,4-Dichloro-2-Butene
CAS Number: 1476-11-5

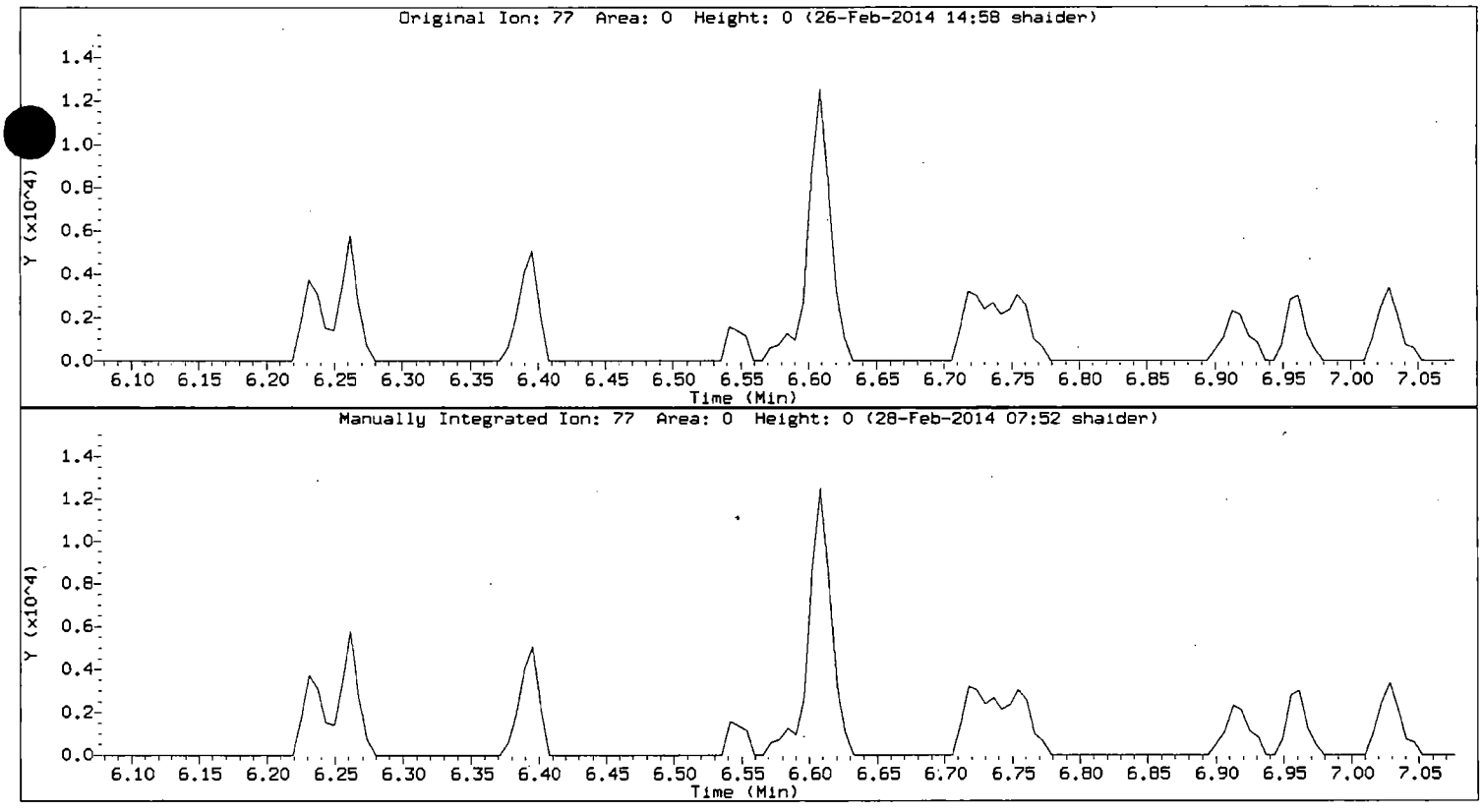








Injection Date: 26-FEB-2014 12:39
Instrument: 10msv5.i
Lab Sample ID: IC 1 10098-49



Data file: \\192.168.10.12\chem\10msv5.i\022614A.B\02261409.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261409.D
Lab Smp Id: IC 4 10098-49
Inj Date : 26-FEB-2014 12:54
Operator : SH2 Inst ID: 10msv5.i
Smp Info : IC 4 10098-49,1,1
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:52 shaider Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 9 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.120	1.116	(0.280)	24236	4.00000	3.3
2	Chloromethane	50	1.230	1.231	(0.308)	30951	4.00000	4.1
3	Vinyl Chloride	62	1.279	1.274	(0.320)	28886	4.00000	3.8
4	Bromomethane	94	1.467	1.463	(0.367)	4786	4.00000	3.9
5	Chloroethane	64	1.540	1.536	(0.385)	17939	4.00000	4.2
6	Trichlorofluoromethane	101	1.619	1.615	(0.405)	30687	4.00000	3.4
7	Dichlorofluoromethane	67	1.650	1.645	(0.413)	44892	4.00000	3.9
8	Diethyl ether (Ethyl Ether)	59	1.802	1.797	(0.451)	12979	4.00000	3.2
9	Ethanol	45	1.887	1.882	(0.398)	2720	80.0000	77.2(QM)
10	1,1-Dichloroethene	96	1.936	1.925	(0.484)	15627	4.00000	3.0
11	Trichlorotrifluoroethane	101	1.954	1.949	(0.489)	15042	4.00000	3.6
12	Carbon Disulfide	76	1.960	1.955	(0.490)	50901	4.00000	3.2
13	Iodomethane	142	2.033	2.028	(0.509)	5289	4.00000	4.6(TQ)
14	Acrolein	56	2.161	2.150	(0.540)	36255	40.0000	30.4
15	Allyl Chloride	41	2.258	2.247	(0.565)	28494	4.00000	3.5
16	Isopropanol	45	2.270	2.260	(0.478)	9126	40.0000	34.5
17	Methylene Chloride	84	2.337	2.326	(0.585)	19105	4.00000	3.5
* 18	Acetone d6	46	2.337	2.326	(1.000)	131108	100.000	
19	Acetone	58	2.374	2.363	(1.016)	10083	20.0000	19.7
20	trans-1,2-Dichloroethene	96	2.453	2.448	(0.614)	18905	4.00000	3.3
21	Methyl Acetate	74	2.465	2.454	(0.617)	18131	20.0000	17.0
22	Hexane	86	2.507	2.503	(1.073)	8485	10.0000	7.4

Data File: \\192.168.10.12\Chem\ICMS75.i\022614A.b\022614A.b
Report Date: 28-Feb-2014 07:53

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 Methyl-tert-butyl Ether	73	2.538	2.533	(0.635)	54158	4.00000	3.3
	24 tert-Butyl Alcohol	59	2.617	2.606	(0.551)	23763	40.0000	34.3
	25 Isopropyl Ether	45	2.854	2.850	(0.714)	58397	4.00000	3.2
	26 Acetonitrile	41	2.860	2.850	(0.715)	12175	40.0000	35.2(Q)
	27 Chloroprene	53	2.939	2.935	(0.735)	26192	4.00000	3.0
	28 1,1-Dichloroethane	63	2.964	2.953	(0.741)	31868	4.00000	3.3
	29 Acrylonitrile	53	3.006	2.996	(0.752)	82773	40.0000	34.1
	30 Ethyl-tert-butyl ether	59	3.146	3.142	(0.787)	55567	4.00000	3.2
	31 Vinyl Acetate	43	3.158	3.154	(0.790)	50674	4.00000	3.4
	32 cis-1,2-Dichloroethene	96	3.371	3.361	(0.843)	20752	4.00000	3.4
	33 2,2-Dichloropropane	77	3.450	3.440	(0.863)	29081	4.00000	3.3
	34 Cyclohexane	56	3.505	3.501	(0.877)	154116	20.0000	15.1
	35 Bromochloromethane	130	3.511	3.501	(0.878)	11738	4.00000	3.2
	36 Chloroform	83	3.566	3.555	(0.892)	31994	4.00000	3.2
	37 Carbon Tetrachloride	117	3.651	3.647	(0.913)	24954	4.00000	3.2
	38 Ethyl Acetate	43	3.651	3.640	(0.913)	136568	20.0000	16.5
	39 Tetrahydrofuran	72	3.675	3.665	(1.573)	33850	40.0000	34.8
	40 sec-Butyl Alcohol	45	3.688	3.677	(0.777)	20707	40.0000	36.4
	41 1,1,1-Trichloroethane	97	3.700	3.689	(0.925)	29990	4.00000	3.2
	42 2-Butanone	43	3.773	3.768	(0.944)	58471	20.0000	16.4
	43 1,1-Dichloropropene	75	3.779	3.774	(0.945)	25649	4.00000	3.2
	44 2,2,4-Trimethylpentane	57	3.846	3.841	(0.962)	38028	4.00000	2.8
	45 Benzene	78	3.943	3.932	(0.986)	81050	4.00000	3.4
	46 Propionitrile	54	3.967	3.957	(0.992)	29308	40.0000	31.2
	47 Methacrylonitrile	41	3.974	3.969	(0.994)	67103	4.00000	3.5
*	48 Pentafluorobenzene	168	3.998	3.987	(1.000)	493071	50.0000	
	49 Tert-amyl methyl ether	73	4.016	4.012	(1.005)	56059	4.00000	3.1(Q)
$	50 1,2-Dichloroethane d4 (S)	65	4.028	4.024	(1.008)	239772	50.0000	48.9(Q)
	51 1,2-Dichloroethane	62	4.071	4.066	(1.018)	22302	4.00000	3.2(Q)
	52 Isobutanol	43	4.089	4.078	(0.862)	20917	80.0000	69.5
	53 Tert-Amyl Alcohol	59	4.144	4.139	(0.873)	24893	40.0000	33.9
	54 Methylcylohexane	98	4.290	4.285	(1.073)	14422	4.00000	3.0
	55 Trichloroethene	130	4.302	4.291	(0.996)	21234	4.00000	3.2
*	56 1,4 Difluorobenzene	114	4.320	4.316	(1.000)	734628	50.0000	
	57 Tert-amyl ethyl ether	59	4.442	4.431	(1.028)	46281	4.00000	3.3
	58 n-Butanol	56	4.503	4.498	(0.949)	5256	40.0000	34.8(Q)
	59 Dibromomethane	174	4.551	4.547	(1.054)	12782	4.00000	3.4
	60 1,2-Dichloropropane	63	4.606	4.602	(1.066)	19012	4.00000	3.4(TQ)
	61 Ethyl Arcylate	55	4.618	4.608	(1.069)	31129	4.00000	3.3
	62 Bromodichloromethane	83	4.643	4.638	(1.075)	25062	4.00000	3.2
	63 Methyl Methacrylate	69	4.728	4.723	(1.094)	18115	20.0000	16.7
*	64 1,4 dioxane d8	96	4.746	4.735	(1.000)	35029	2000.00	
	65 1,4-Dioxane (P-Dioxane)	88	4.764	4.754	(1.004)	1201	80.0000	57.9(Q)
	66 3-Pentanone	57	4.856	4.845	(1.124)	19345	4.00000	3.5
	67 2-Chloroethyl Vinyl Ether	63	4.959	4.954	(1.148)	34238	10.0000	8.3
	68 cis-1,3-Dichloropropene	75	4.996	4.991	(1.156)	29842	4.00000	3.3
$	69 Toluene-d8 (S)	98	5.093	5.088	(0.861)	878257	50.0000	49.1
	70 Toluene	92	5.123	5.119	(0.866)	50610	4.00000	3.3
	71 2-Nitropropane	43	5.324	5.319	(0.900)	126095	20.0000	16.0
	72 Tetrachloroethene	166	5.330	5.326	(0.901)	23235	4.00000	3.4
	73 4-Methyl-2-Pentanone	43	5.324	5.319	(0.900)	126095	20.0000	16.0
	74 trans-1,3-Dichloropropene	75	5.348	5.344	(0.904)	29866	4.00000	3.3
	75 4-Methyl-2-pentanol	45	5.379	5.374	(1.133)	78650	40.0000	45.7
	76 Ethyl Methacrylate	69	5.427	5.423	(0.918)	30346	4.00000	3.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
77	1,1,2-Trichloroethane	97	5.434	5.429	(0.919)	18466	4.00000	3.3
78	Dibromochloromethane	129	5.525	5.526	(0.934)	19888	4.00000	3.1
79	1,3-Dichloropropane	76	5.580	5.575	(0.943)	29592	4.00000	3.2
80	1,2-Dibromoethane	107	5.653	5.648	(0.956)	19542	4.00000	3.3(Q)
81	2-Hexanone	43	5.762	5.757	(0.974)	97575	20.0000	16.3
* 82	Chlorobenzene-d5	117	5.914	5.916	(1.000)	703010	50.0000	
83	Chlorobenzene	112	5.926	5.922	(1.002)	54247	4.00000	3.3
84	Ethylbenzene	91	5.932	5.928	(1.003)	100133	4.00000	3.3
85	1,1,1,2-Tetrachloroethane	131	5.957	5.952	(1.007)	20062	4.00000	3.3(Q)
86	M&P-Xylene	106	6.011	6.007	(1.016)	77038	8.00000	6.7
87	O-Xylene (1,2-Dimethylbenzene)	106	6.237	6.232	(1.055)	37035	4.00000	3.3
88	Styrene	104	6.261	6.256	(1.059)	59933	4.00000	3.3
89	Bromoform	173	6.279	6.281	(1.062)	16430	4.00000	3.2
90	Isopropylbenzene (Cumene)	105	6.395	6.390	(1.081)	89399	4.00000	3.2
$ 91	4-Bromofluorobenzene (S)	95	6.547	6.542	(0.907)	343782	50.0000	49.2
92	cis-1,4-Dichloro-2-Butene	53	6.577	6.579	(0.911)	8088	4.00000	3.3
93	Bromobenzene	156	6.608	6.609	(0.915)	23028	4.00000	3.3
94	n-Propylbenzene	91	6.614	6.609	(0.916)	104773	4.00000	3.3
95	1,1,2,2-Tetrachloroethane	83	6.656	6.652	(0.922)	28279	4.00000	3.4
96	2-Chlorotoluene	91	6.711	6.707	(0.929)	67367	4.00000	3.3
97	1,3,5-Trimethylbenzene	105	6.723	6.719	(0.931)	71799	4.00000	3.3
98	1,2,3-Trichloropropane	110	6.742	6.737	(0.933)	8096	4.00000	3.3
99	trans-1,4-Dichloro-2-Butene	53	6.760	6.755	(0.936)	17374	10.0000	7.5
100	4-Chlorotoluene	91	6.808	6.804	(0.943)	63750	4.00000	3.3
101	tert-Butylbenzene	119	6.918	6.913	(0.958)	60516	4.00000	3.4
102	1,2,4-Trimethylbenzene	105	6.961	6.956	(0.964)	71519	4.00000	3.4
103	sec-Butylbenzene	105	7.027	7.029	(0.973)	78483	4.00000	3.2
104	p-Isopropyltoluene	119	7.119	7.114	(0.986)	68153	4.00000	3.2
105	1,3-Dichlorobenzene	146	7.180	7.175	(0.994)	39984	4.00000	3.3
* 106	1,4-Dichlorobenzene-d4	152	7.222	7.224	(1.000)	374858	50.0000	
107	1,4-Dichlorobenzene	146	7.234	7.230	(1.002)	40677	4.00000	3.3
108	1,2,3 Trimethylbenzene	105	7.240	7.236	(1.811)	73017	4.00000	3.3
109	n-Butylbenzene	91	7.392	7.388	(1.024)	55378	4.00000	3.1
110	1,2-Dichlorobenzene	146	7.514	7.510	(1.040)	38188	4.00000	3.3
111	1,2-Dibromo-3-Chloropropane	157	8.056	8.051	(1.115)	18318	10.0000	8.0
112	Hexachlorobutadiene	225	8.500	8.495	(1.177)	9293	4.00000	3.2
113	1,2,4-Trichlorobenzene	180	8.524	8.519	(1.180)	22431	4.00000	3.5
114	Naphthalene	128	8.761	8.757	(1.213)	77405	4.00000	3.3
115	1,2,3-Trichlorobenzene	180	8.889	8.890	(1.231)	20525	4.00000	3.3
116	2-Methylnaphthalene	142	9.528	9.523	(1.319)	16860	2.00000	1.5

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261409.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261409.D
Lab Smp Id: IC 4 10098-49
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

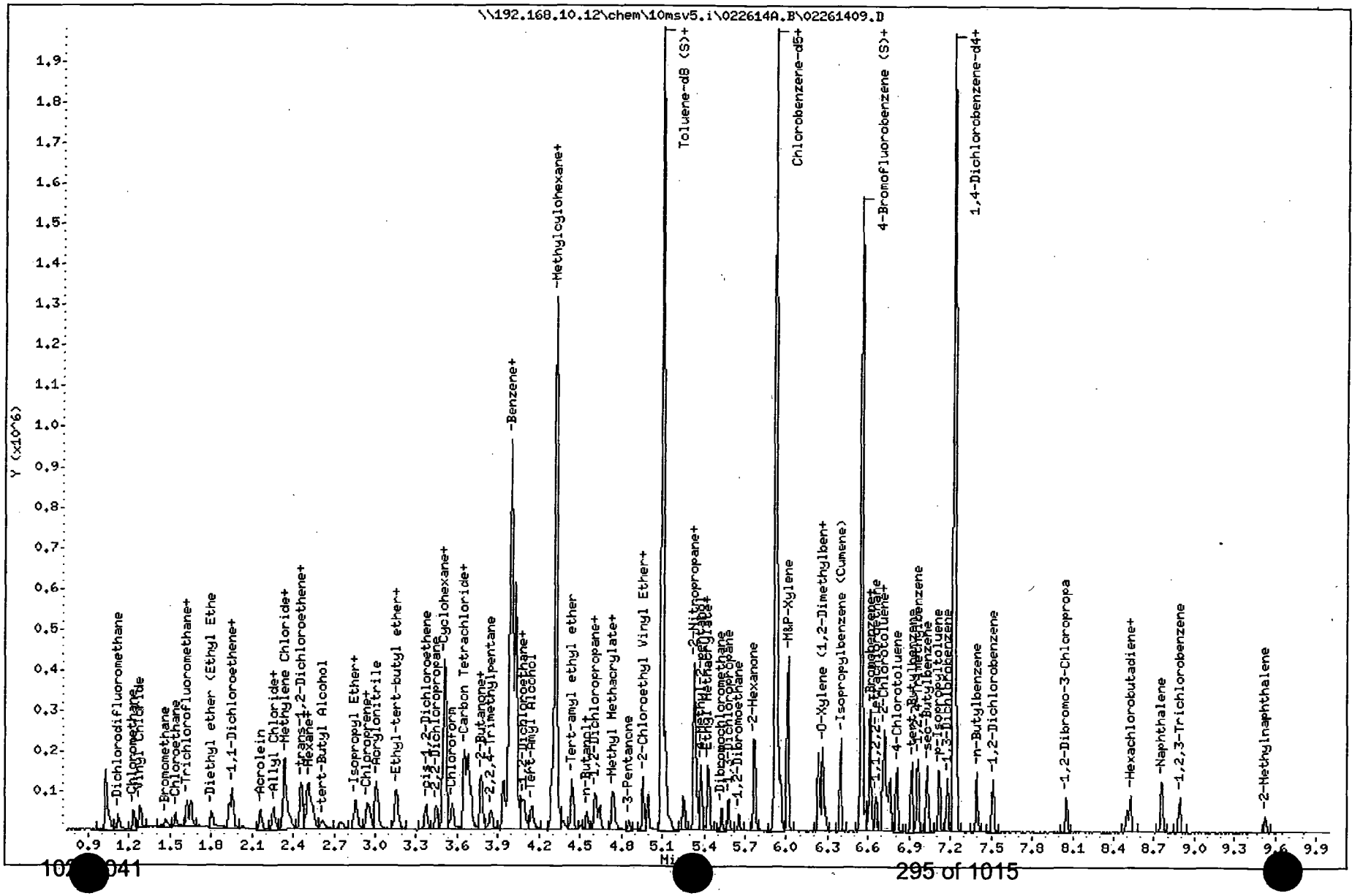
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
18 Acetone d6	132549	66275	265098	131108	-1.09	
48 Pentafluorobenzen	514078	257039	1028156	493071	-4.09	
56 1,4 Difluorobenze	796453	398227	1592906	734628	-7.76	
64 1,4 dioxane d8	17142	8571	34284	35029	104.35	<-
82 Chlorobenzene-d5	743514	371757	1487028	703010	-5.45	
106 1,4-Dichlorobenze	400705	200353	801410	374858	-6.45	

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.34	0.52
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.15
56 1,4 Difluorobenze	4.31	3.81	4.81	4.32	0.14
64 1,4 dioxane d8	4.74	4.24	5.24	4.75	0.13
82 Chlorobenzene-d5	5.91	5.41	6.41	5.91	-0.00
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

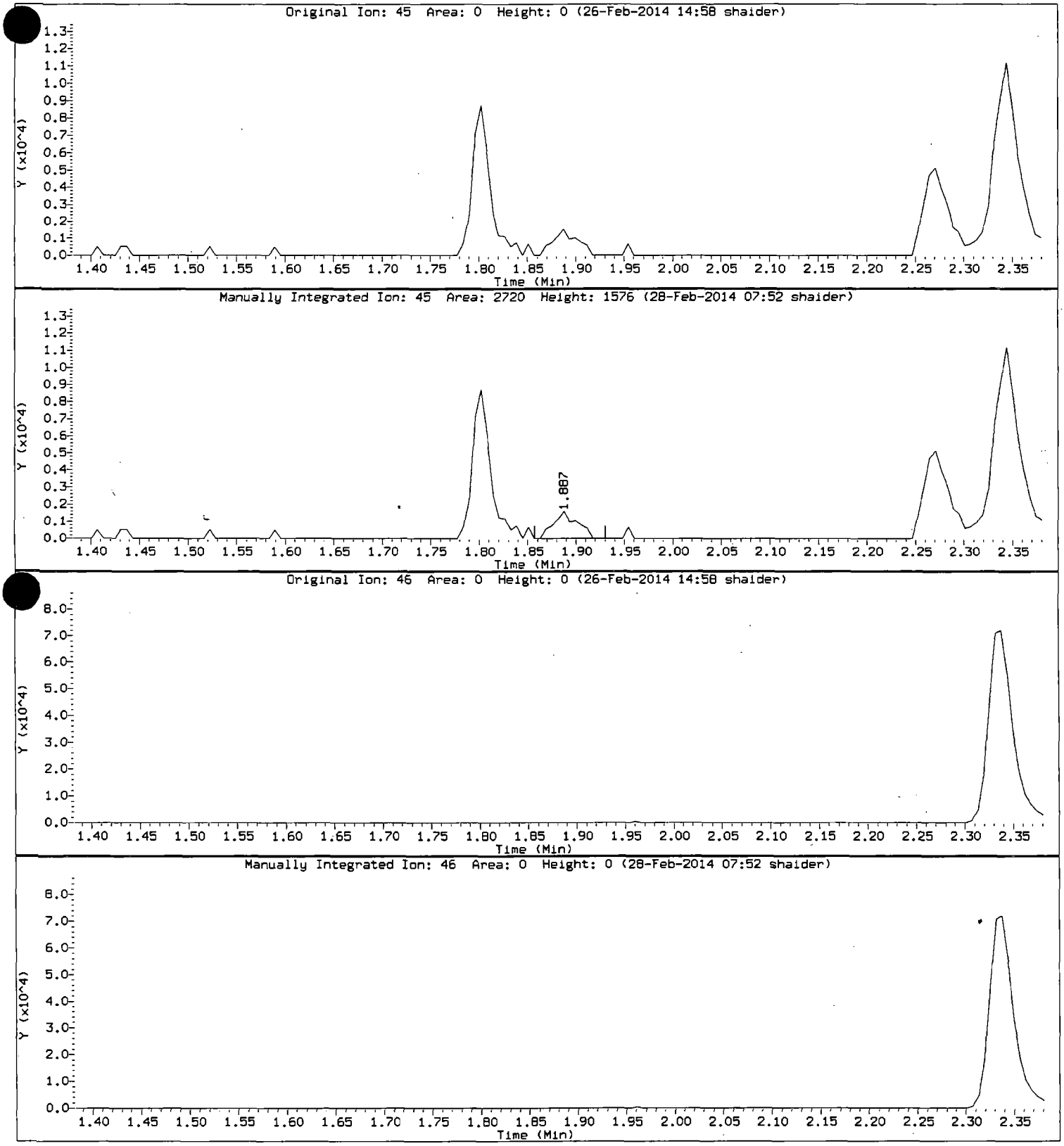
Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261409.D
Date : 26-FEB-2014 12:54
Client ID:
Sample Info: IC 4 10098-49,1,1
Purge Volume: 10.0
Column phase: Rtx-VMS

Instrument: 10msv5.i
Operator: SH2
Column diameter: 0.18



Injection Date: 26-FEB-2014 12:54
Instrument: 10msv5.i
Lab Sample ID: IC 4 10098-49

Compound: Ethanol
CAS Number: 64-17-5



Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261410.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261410.D
Lab Smp Id: IC 10 10098-49
Inj Date : 26-FEB-2014 13:08
Operator : SH2 Inst ID: 10msv5.i
Smp Info : IC 10 10098-49,1,1
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:52 shaider Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 10 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.120	1.116	(0.280)	76041	10.0000	10.2
2	Chloromethane	50	1.235	1.231	(0.309)	78027	10.0000	10.2
3	Vinyl Chloride	62	1.278	1.274	(0.320)	77093	10.0000	10
4	Bromomethane	94	1.466	1.463	(0.367)	14760	10.0000	7.8
5	Chloroethane	64	1.539	1.536	(0.385)	43996	10.0000	10.1
6	Trichlorofluoromethane	101	1.618	1.615	(0.405)	96338	10.0000	10.6
7	Dichlorofluoromethane	67	1.649	1.645	(0.413)	112481	10.0000	9.6
8	Diethyl ether (Ethyl Ether)	59	1.801	1.797	(0.451)	36641	10.0000	8.8
9	Ethanol	45	1.886	1.882	(0.398)	7655	200.000	252
10	1,1-Dichloroethene	96	1.935	1.925	(0.484)	45662	10.0000	8.7
11	Trichlorotrifluoroethane	101	1.953	1.949	(0.489)	47121	10.0000	9.3
12	Carbon Disulfide	76	1.959	1.955	(0.490)	138901	10.0000	8.7
13	Iodomethane	142	2.032	2.028	(0.508)	20848	10.0000	7.9
14	Acrolein	56	2.160	2.150	(0.540)	105740	100.000	87.4
15	Allyl Chloride	41	2.257	2.247	(0.565)	71830	10.0000	8.7
16	Isopropanol	45	2.269	2.260	(0.478)	27814	100.000	90.3
17	Methylene Chloride	84	2.336	2.326	(0.585)	51409	10.0000	9.3
* 18	Acetone d6	46	2.336	2.326	(1.000)	135668	100.000	
19	Acetone	58	2.373	2.363	(1.016)	26195	50.0000	49.4
20	trans-1,2-Dichloroethene	96	2.458	2.448	(0.615)	50233	10.0000	8.8
21	Methyl Acetate	74	2.464	2.454	(0.617)	50123	50.0000	46.3
22	Hexane	86	2.513	2.503	(1.075)	28155	25.0000	23.7

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261410.D
Report Date: 28-Feb-2014 07:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Methyl-tert-butyl Ether	73	2.537	2.533	(0.635)	140901	10.0000	8.4
	24 tert-Butyl Alcohol	59	2.616	2.606	(0.551)	68789	100.000	85.3
	25 Isopropyl Ether	45	2.859	2.850	(0.715)	159450	10.0000	8.5
	26 Acetonitrile	41	2.859	2.850	(0.715)	31993	100.000	91.3
	27 Chloroprene	53	2.945	2.935	(0.737)	75258	10.0000	8.6
	28 1,1-Dichloroethane	63	2.963	2.953	(0.741)	88291	10.0000	9.0
	29 Acrylonitrile	53	3.005	2.996	(0.752)	216123	100.000	87.8
	30 Ethyl-tert-butyl ether	59	3.151	3.142	(0.788)	152038	10.0000	8.8
	31 Vinyl Acetate	43	3.164	3.154	(0.792)	133571	10.0000	8.7
	32 cis-1,2-Dichloroethene	96	3.370	3.361	(0.843)	56826	10.0000	9.0
	33 2,2-Dichloropropane	77	3.450	3.440	(0.863)	78301	10.0000	8.9
	34 Cyclohexane	56	3.504	3.501	(0.877)	456108	50.0000	44.0
	35 Bromochloromethane	130	3.510	3.501	(0.878)	33735	10.0000	9.1
	36 Chloroform	83	3.565	3.555	(0.892)	91316	10.0000	8.9
	37 Carbon Tetrachloride	117	3.650	3.647	(0.913)	68698	10.0000	8.8
	38 Ethyl Acetate	43	3.650	3.640	(0.913)	380968	50.0000	45.3
	39 Tetrahydrofuran	72	3.675	3.665	(1.573)	95291	100.000	94.6
	40 sec-Butyl Alcohol	45	3.687	3.677	(0.777)	57854	100.000	87.3
	41 1,1,1-Trichloroethane	97	3.699	3.689	(0.925)	83895	10.0000	8.9
	42 2-Butanone	43	3.778	3.768	(0.945)	158639	50.0000	43.8
	43 1,1-Dichloropropene	75	3.784	3.774	(0.947)	69735	10.0000	8.4
	44 2,2,4-Trimethylpentane	57	3.851	3.841	(0.963)	117451	10.0000	8.7
	45 Benzene	78	3.942	3.932	(0.986)	212666	10.0000	8.8
	46 Propionitrile	54	3.967	3.957	(0.992)	85849	100.000	90.0
	47 Methacrylonitrile	41	3.979	3.969	(0.995)	185969	10.0000	9.2
*	48 Pentafluorobenzene	168	3.997	3.987	(1.000)	500246	50.0000	
	49 Tert-amyl methyl ether	73	4.015	4.012	(1.005)	158855	10.0000	8.8
$	50 1,2-Dichloroethane d4 (S)	65	4.027	4.024	(1.008)	247905	50.0000	49.8(Q)
	51 1,2-Dichloroethane	62	4.070	4.066	(1.018)	62202	10.0000	8.8
	52 Isobutanol	43	4.088	4.078	(0.862)	61198	200.000	175
	53 Tert-Amyl Alcohol	59	4.149	4.139	(0.874)	72573	100.000	85.0
	54 Methylcylohexane	98	4.289	4.285	(1.073)	41870	10.0000	8.6
	55 Trichloroethene	130	4.301	4.291	(0.996)	61205	10.0000	9.1
*	56 1,4 Difluorobenzene	114	4.319	4.316	(1.000)	756841	50.0000	
	57 Tert-amyl ethyl ether	59	4.441	4.431	(1.028)	131294	10.0000	9.0
	58 n-Butanol	56	4.502	4.498	(0.949)	15759	100.000	89.6
	59 Dibromomethane	174	4.551	4.547	(1.054)	35037	10.0000	9.0
	60 1,2-Dichloropropane	63	4.605	4.602	(1.066)	54687	10.0000	9.4
	61 Ethyl Arcylate	55	4.618	4.608	(1.069)	86509	10.0000	9.0
	62 Bromodichloromethane	83	4.642	4.638	(1.075)	71141	10.0000	8.7
	63 Methyl Methacrylate	69	4.733	4.723	(1.096)	49803	50.0000	44.7
*	64 1,4 dioxane d8	96	4.745	4.735	(1.000)	40751	2000.00	
	65 1,4-Dioxane (P-Dioxane)	88	4.757	4.754	(1.003)	3687	200.000	153(Q)
	66 3-Pentanone	57	4.855	4.845	(1.124)	51815	10.0000	9.1
	67 2-Chloroethyl Vinyl Ether	63	4.958	4.954	(1.148)	99092	25.0000	23.3
	68 cis-1,3-Dichloropropene	75	4.995	4.991	(1.156)	85938	10.0000	9.2
$	69 Toluene-d8 (S)	98	5.092	5.088	(0.860)	904976	50.0000	50.6
	70 Toluene	92	5.123	5.119	(0.865)	139654	10.0000	9.1
	71 2-Nitropropane	43	5.329	5.319	(0.900)	352833	50.0000	44.8
	72 Tetrachloroethene	166	5.329	5.326	(0.900)	64582	10.0000	9.3
	73 4-Methyl-2-Pentanone	43	5.329	5.319	(0.900)	352833	50.0000	44.8
	74 trans-1,3-Dichloropropene	75	5.348	5.344	(0.903)	81465	10.0000	9.1
	75 4-Methyl-2-pentanol	45	5.378	5.374	(1.133)	225249	100.000	90.3
	76 Ethyl Methacrylate	69	5.427	5.423	(0.917)	91610	10.0000	9.2

Data File: \\192.168.10.12\Chem\10msv5.i\022614A.B\02261410.D
Report Date: 28-Feb-2014 07:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	1,1,2-Trichloroethane	97	5.433	5.429	(0.918)	49588	10.0000	8.9
78	Dibromochloromethane	129	5.530	5.526	(0.934)	59803	10.0000	9.3
79	1,3-Dichloropropane	76	5.579	5.575	(0.942)	83337	10.0000	9.0
80	1,2-Dibromoethane	107	5.658	5.648	(0.956)	54880	10.0000	9.2
81	2-Hexanone	43	5.767	5.757	(0.974)	272931	50.0000	45.5
* 82	Chlorobenzene-d5	117	5.919	5.916	(1.000)	703925	50.0000	
83	Chlorobenzene	112	5.926	5.922	(1.001)	149929	10.0000	9.0
84	Ethylbenzene	91	5.932	5.928	(1.002)	266021	10.0000	8.8
85	1,1,1,2-Tetrachloroethane	131	5.956	5.952	(1.006)	55408	10.0000	9.1
86	M&P-Xylene	106	6.011	6.007	(1.015)	211199	20.0000	18.4
87	O-Xylene (1,2-Dimethylbenzene)	106	6.236	6.232	(1.053)	99853	10.0000	8.9
88	Styrene	104	6.260	6.256	(1.058)	168539	10.0000	9.2
89	Bromoform	173	6.284	6.281	(1.062)	45180	10.0000	8.9
90	Isopropylbenzene (Cumene)	105	6.394	6.390	(1.080)	250107	10.0000	9.1
$ 91	4-Bromofluorobenzene (S)	95	6.546	6.542	(0.906)	359582	50.0000	50.7
92	cis-1,4-Dichloro-2-Butene	53	6.583	6.579	(0.912)	20951	10.0000	8.5
93	Bromobenzene	156	6.607	6.609	(0.915)	64233	10.0000	9.2
94	n-Propylbenzene	91	6.613	6.609	(0.916)	293067	10.0000	9.2
95	1,1,2,2-Tetrachloroethane	83	6.656	6.652	(0.922)	75639	10.0000	9.0
96	2-Chlorotoluene	91	6.710	6.707	(0.929)	187406	10.0000	9.0
97	1,3,5-Trimethylbenzene	105	6.722	6.719	(0.931)	195867	10.0000	9.0
98	1,2,3-Trichloropropane	110	6.741	6.737	(0.933)	23698	10.0000	9.5
99	trans-1,4-Dichloro-2-Butene	53	6.759	6.755	(0.936)	50653	25.0000	21.6
100	4-Chlorotoluene	91	6.808	6.804	(0.943)	177045	10.0000	9.2
101	tert-Butylbenzene	119	6.917	6.913	(0.958)	167135	10.0000	9.1
102	1,2,4-Trimethylbenzene	105	6.960	6.956	(0.964)	198386	10.0000	9.2
103	sec-Butylbenzene	105	7.027	7.029	(0.973)	224782	10.0000	9.0
104	p-Isopropyltoluene	119	7.118	7.114	(0.986)	190584	10.0000	8.9
105	1,3-Dichlorobenzene	146	7.179	7.175	(0.994)	107214	10.0000	8.8
* 106	1,4-Dichlorobenzene-d4	152	7.221	7.224	(1.000)	380539	50.0000	
107	1,4-Dichlorobenzene	146	7.233	7.230	(1.002)	114242	10.0000	9.0
108	1,2,3 Trimethylbenzene	105	7.240	7.236	(1.811)	199093	10.0000	8.9
109	n-Butylbenzene	91	7.392	7.388	(1.024)	155973	10.0000	8.7
110	1,2-Dichlorobenzene	146	7.513	7.510	(1.040)	106627	10.0000	9.1
111	1,2-Dibromo-3-Chloropropane	157	8.055	8.051	(1.115)	54070	25.0000	23.2
112	Hexachlorobutadiene	225	8.499	8.495	(1.177)	25321	10.0000	8.7
113	1,2,4-Trichlorobenzene	180	8.523	8.519	(1.180)	59624	10.0000	9.1
114	Naphthalene	128	8.754	8.757	(1.212)	213849	10.0000	9.1
115	1,2,3-Trichlorobenzene	180	8.888	8.890	(1.231)	56806	10.0000	8.9
116	2-Methylnaphthalene	142	9.527	9.523	(1.319)	49732	5.00000	4.5

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261410.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261410.D
Lab Smp Id: IC 10 10098-49
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

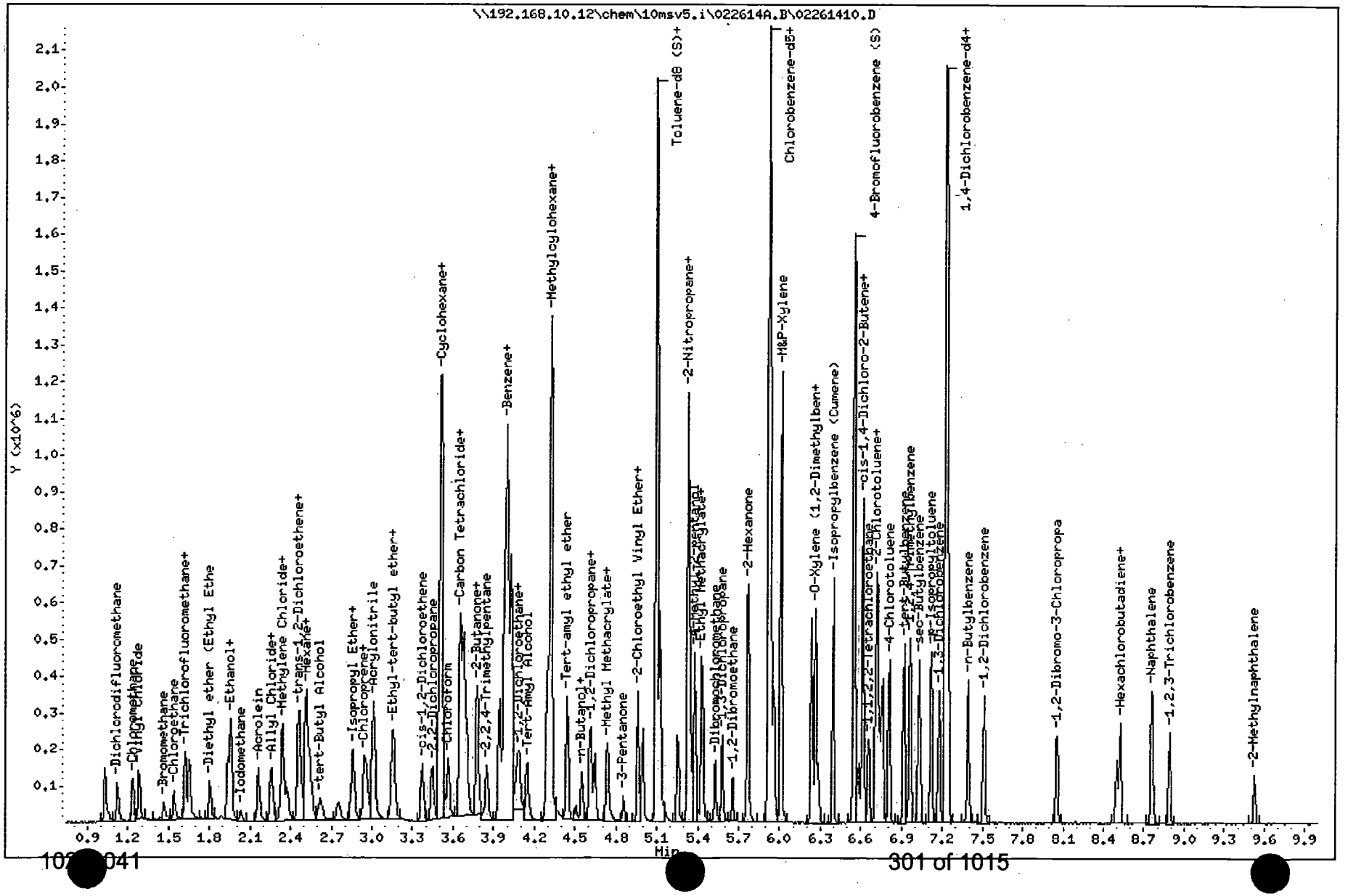
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	132549	66275	265098	135668	2.35
48 Pentafluorobenzen	514078	257039	1028156	500246	-2.69
56 1,4 Difluorobenze	796453	398227	1592906	756841	-4.97
64 1,4 dioxane d8	17142	8571	34284	40751	137.73 <-
82 Chlorobenzene-d5	743514	371757	1487028	703925	-5.32
106 1,4-Dichlorobenze	400705	200353	801410	380539	-5.03

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.34	0.48
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.13
56 1,4 Difluorobenze	4.31	3.81	4.81	4.32	0.12
64 1,4 dioxane d8	4.74	4.24	5.24	4.75	0.11
82 Chlorobenzene-d5	5.91	5.41	6.41	5.92	0.09
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261410.D
Date : 26-FEB-2014 13:08
Client ID:
Sample Info: IC 10 10098-49,1,1
Purge Volume: 10.0
Column phase: Rtx-VMS

Instrument: 10msv5.i
Operator: SH2
Column diameter: 0.18



Injection Date: 26-FEB-2014 13:08
Instrument: 10msv5.i
Lab Sample ID: IC 10 10098-49
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261411.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261411.D
Lab Smp Id: IC 20 10098-49
Inj Date : 26-FEB-2014 13:23
Operator : SH2 Inst ID: 10msv5.i
Smp Info : IC 20 10098-49,1,1
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:52 shaider Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 11 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.123	1.116	(0.281)	153094	20.0000	20.5
2	Chloromethane	50	1.232	1.231	(0.308)	155061	20.0000	20.3
3	Vinyl Chloride	62	1.281	1.274	(0.320)	155023	20.0000	19.8
4	Bromomethane	94	1.463	1.463	(0.366)	41949	20.0000	18.1
5	Chloroethane	64	1.536	1.536	(0.384)	88439	20.0000	20.2
6	Trichlorofluoromethane	101	1.622	1.615	(0.405)	192873	20.0000	21.3
7	Dichlorofluoromethane	67	1.652	1.645	(0.413)	224370	20.0000	19.2
8	Diethyl ether (Ethyl Ether)	59	1.804	1.797	(0.451)	85202	20.0000	20.5
9	Ethanol	45	1.889	1.882	(0.398)	14551	400.000	467(Q)
10	1,1-Dichloroethene	96	1.932	1.925	(0.483)	102530	20.0000	19.6
11	Trichlorotrifluoroethane	101	1.956	1.949	(0.489)	108189	20.0000	20.0
12	Carbon Disulfide	76	1.956	1.955	(0.489)	325987	20.0000	20.3
13	Iodomethane	142	2.035	2.028	(0.509)	68403	20.0000	17.8
14	Acrolein	56	2.163	2.150	(0.541)	234221	200.000	193
15	Allyl Chloride	41	2.254	2.247	(0.564)	172078	20.0000	20.8
16	Isopropanol	45	2.266	2.260	(0.478)	60739	200.000	182
17	Methylene Chloride	84	2.333	2.326	(0.583)	114614	20.0000	20.6
* 18	Acetone d6	46	2.333	2.326	(1.000)	140988	100.000	
19	Acetone	58	2.376	2.363	(1.018)	57619	100.000	104
20	trans-1,2-Dichloroethene	96	2.455	2.448	(0.614)	114896	20.0000	20.0
21	Methyl Acetate	74	2.467	2.454	(0.617)	113096	100.000	104
22	Hexane	86	2.516	2.503	(1.078)	66418	50.0000	53.8

Data File: \\192.168.10.12\Chem\10msv5.i\022614A.B\02261411.D
Report Date: 28-Feb-2014 07:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	23 Methyl-tert-butyl Ether	73	2.540	2.533	(0.635)	331724	20.0000	19.7	
	24 tert-Butyl Alcohol	59	2.613	2.606	(0.551)	155581	200.000	178	
	25 Isopropyl Ether	45	2.857	2.850	(0.714)	372241	20.0000	19.8	
	26 Acetonitrile	41	2.857	2.850	(0.714)	71125	200.000	203	
	27 Chloroprene	53	2.942	2.935	(0.735)	171075	20.0000	19.5	
	28 1,1-Dichloroethane	63	2.966	2.953	(0.742)	201636	20.0000	20.4	
	29 Acrylonitrile	53	3.009	2.996	(0.752)	507439	200.000	206	
	30 Ethyl-tert-butyl ether	59	3.149	3.142	(0.787)	344570	20.0000	19.8	
	31 Vinyl Acetate	43	3.161	3.154	(0.790)	313924	20.0000	20.5	
	32 cis-1,2-Dichloroethene	96	3.374	3.361	(0.843)	124698	20.0000	19.8	
	33 2,2-Dichloropropane	77	3.447	3.440	(0.862)	171797	20.0000	19.4	
	34 Cyclohexane	56	3.508	3.501	(0.877)	1069767	100.000	103	
	35 Bromochloromethane	130	3.514	3.501	(0.878)	78739	20.0000	21.2	
	36 Chloroform	83	3.562	3.555	(0.891)	200632	20.0000	19.5	
	37 Carbon Tetrachloride	117	3.654	3.647	(0.913)	162353	20.0000	20.8	
	38 Ethyl Acetate	43	3.654	3.640	(0.913)	851646	100.000	101	
	39 Tetrahydrofuran	72	3.672	3.665	(1.573)	211987	200.000	202	
	40 sec-Butyl Alcohol	45	3.690	3.677	(0.778)	135747	200.000	189	
	41 1,1,1-Trichloroethane	97	3.702	3.689	(0.925)	193656	20.0000	20.4	
	42 2-Butanone	43	3.775	3.768	(0.944)	356299	100.000	98.3	
	43 1,1-Dichloropropene	75	3.781	3.774	(0.945)	164769	20.0000	19.9	
	44 2,2,4-Trimethylpentane	57	3.848	3.841	(0.962)	279242	20.0000	20.6	
	45 Benzene	78	3.939	3.932	(0.985)	491322	20.0000	20.3	
	46 Propionitrile	54	3.964	3.957	(0.991)	191472	200.000	200	
	47 Methacrylonitrile	41	3.976	3.969	(0.994)	433799	20.0000	21.0	
*	48 Pentafluorobenzene	168	4.000	3.987	(1.000)	501238	50.0000		
	49 Tert-amyl methyl ether	73	4.019	4.012	(1.005)	364396	20.0000	20.1	
$	50 1,2-Dichloroethane d4 (S)	65	4.031	4.024	(1.008)	264391	50.0000	53.0	(Q)
	51 1,2-Dichloroethane	62	4.073	4.066	(1.018)	142910	20.0000	20.2	
	52 Isobutanol	43	4.085	4.078	(0.861)	141606	400.000	374	
	53 Tert-Amyl Alcohol	59	4.146	4.139	(0.874)	165348	200.000	179	
	54 Methylcylohexane	98	4.292	4.285	(1.073)	99185	20.0000	20.3	
	55 Trichloroethene	130	4.298	4.291	(0.994)	140888	20.0000	20.9	
*	56 1,4 Difluorobenzene	114	4.323	4.316	(1.000)	756645	50.0000		
	57 Tert-amyl ethyl ether	59	4.438	4.431	(1.027)	293618	20.0000	20.1	
	58 n-Butanol	56	4.505	4.498	(0.950)	36070	200.000	190	
	59 Dibromomethane	174	4.548	4.547	(1.052)	80080	20.0000	20.7	
	60 1,2-Dichloropropane	63	4.609	4.602	(1.066)	120187	20.0000	20.7	
	61 Ethyl Arcylate	55	4.615	4.608	(1.068)	202322	20.0000	21.1	
	62 Bromodichloromethane	83	4.645	4.638	(1.075)	163518	20.0000	20.1	
	63 Methyl Methacrylate	69	4.730	4.723	(1.094)	114052	100.000	102	
*	64 1,4 dioxane d8	96	4.742	4.735	(1.000)	44073	2000.00		
	65 1,4-Dioxane (P-Dioxane)	88	4.761	4.754	(1.004)	10308	400.000	395	(Q)
	66 3-Pentanone	57	4.852	4.845	(1.122)	117689	20.0000	20.6	
	67 2-Chloroethyl Vinyl Ether	63	4.961	4.954	(1.148)	219639	50.0000	51.8	
	68 cis-1,3-Dichloropropene	75	4.998	4.991	(1.156)	194753	20.0000	21.0	
$	69 Toluene-d8 (S)	98	5.095	5.088	(0.861)	906342	50.0000	51.1	
	70 Toluene	92	5.120	5.119	(0.865)	316207	20.0000	20.9	
	71 2-Nitropropane	43	5.326	5.319	(0.900)	812718	100.000	104	
	72 Tetrachloroethene	166	5.333	5.326	(0.901)	143386	20.0000	20.9	
	73 4-Methyl-2-Pentanone	43	5.326	5.319	(0.900)	812718	100.000	104	
	74 trans-1,3-Dichloropropene	75	5.345	5.344	(0.903)	184537	20.0000	20.8	
	75 4-Methyl-2-pentanol	45	5.375	5.374	(1.133)	515757	200.000	175	
	76 Ethyl Methacrylate	69	5.424	5.423	(0.917)	202073	20.0000	20.4	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	1,1,2-Trichloroethane	97	5.436	5.429	(0.919)	111357	20.0000	20.1
78	Dibromochloromethane	129	5.527	5.526	(0.934)	132857	20.0000	20.8
79	1,3-Dichloropropane	76	5.576	5.575	(0.942)	188231	20.0000	20.6
80	1,2-Dibromoethane	107	5.655	5.648	(0.956)	123133	20.0000	20.8
81	2-Hexanone	43	5.764	5.757	(0.974)	621717	100.000	105
* 82	Chlorobenzene-d5	117	5.917	5.916	(1.000)	697174	50.0000	
83	Chlorobenzene	112	5.929	5.922	(1.002)	334845	20.0000	20.4
84	Ethylbenzene	91	5.935	5.928	(1.003)	600225	20.0000	20.0
85	1,1,1,2-Tetrachloroethane	131	5.959	5.952	(1.007)	125246	20.0000	20.7
86	M&P-Xylene	106	6.008	6.007	(1.015)	472391	40.0000	41.7
87	O-Xylene (1,2-Dimethylbenzene)	106	6.233	6.232	(1.053)	226981	20.0000	20.5
88	Styrene	104	6.263	6.256	(1.059)	378645	20.0000	20.8
89	Bromoform	173	6.282	6.281	(1.062)	103408	20.0000	20.6
90	Isopropylbenzene (Cumene)	105	6.391	6.390	(1.080)	562963	20.0000	20.6
$ 91	4-Bromofluorobenzene (S)	95	6.549	6.542	(0.907)	357084	50.0000	49.2
92	cis-1,4-Dichloro-2-Butene	53	6.580	6.579	(0.911)	51497	20.0000	20.5
93	Bromobenzene	156	6.610	6.609	(0.915)	144029	20.0000	20.1
94	n-Propylbenzene	91	6.616	6.609	(0.916)	655473	20.0000	20.1
95	1,1,2,2-Tetrachloroethane	83	6.659	6.652	(0.922)	167120	20.0000	19.4
96	2-Chlorotoluene	91	6.707	6.707	(0.928)	418128	20.0000	19.6
97	1,3,5-Trimethylbenzene	105	6.720	6.719	(0.930)	446292	20.0000	20.0
98	1,2,3-Trichloropropane	110	6.738	6.737	(0.933)	52944	20.0000	20.8
99	trans-1,4-Dichloro-2-Butene	53	6.756	6.755	(0.935)	121974	50.0000	50.8
100	4-Chlorotoluene	91	6.805	6.804	(0.942)	400073	20.0000	20.2
101	tert-Butylbenzene	119	6.920	6.913	(0.958)	382825	20.0000	20.4
102	1,2,4-Trimethylbenzene	105	6.963	6.956	(0.964)	449662	20.0000	20.3
103	sec-Butylbenzene	105	7.030	7.029	(0.973)	520841	20.0000	20.3
104	p-Isopropyltoluene	119	7.115	7.114	(0.985)	446820	20.0000	20.4
105	1,3-Dichlorobenzene	146	7.176	7.175	(0.993)	250298	20.0000	20.1
* 106	1,4-Dichlorobenzene-d4	152	7.225	7.224	(1.000)	389456	50.0000	
107	1,4-Dichlorobenzene	146	7.237	7.230	(1.002)	257199	20.0000	19.9
108	1,2,3 Trimethylbenzene	105	7.243	7.236	(1.810)	447697	20.0000	19.9
109	n-Butylbenzene	91	7.389	7.388	(1.023)	374103	20.0000	20.5
110	1,2-Dichlorobenzene	146	7.510	7.510	(1.040)	242821	20.0000	20.2
111	1,2-Dibromo-3-Chloropropane	157	8.052	8.051	(1.115)	122804	50.0000	51.5
112	Hexachlorobutadiene	225	8.496	8.495	(1.176)	64131	20.0000	21.6
113	1,2,4-Trichlorobenzene	180	8.526	8.519	(1.180)	139963	20.0000	20.9
114	Naphthalene	128	8.758	8.757	(1.212)	494901	20.0000	20.6
115	1,2,3-Trichlorobenzene	180	8.891	8.890	(1.231)	131978	20.0000	20.2
116	2-Methylnaphthalene	142	9.524	9.523	(1.318)	114535	10.0000	10.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261411.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261411.D
Lab Smp Id: IC 20 10098-49
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:52
Level: LOW
Sample Type: WATER

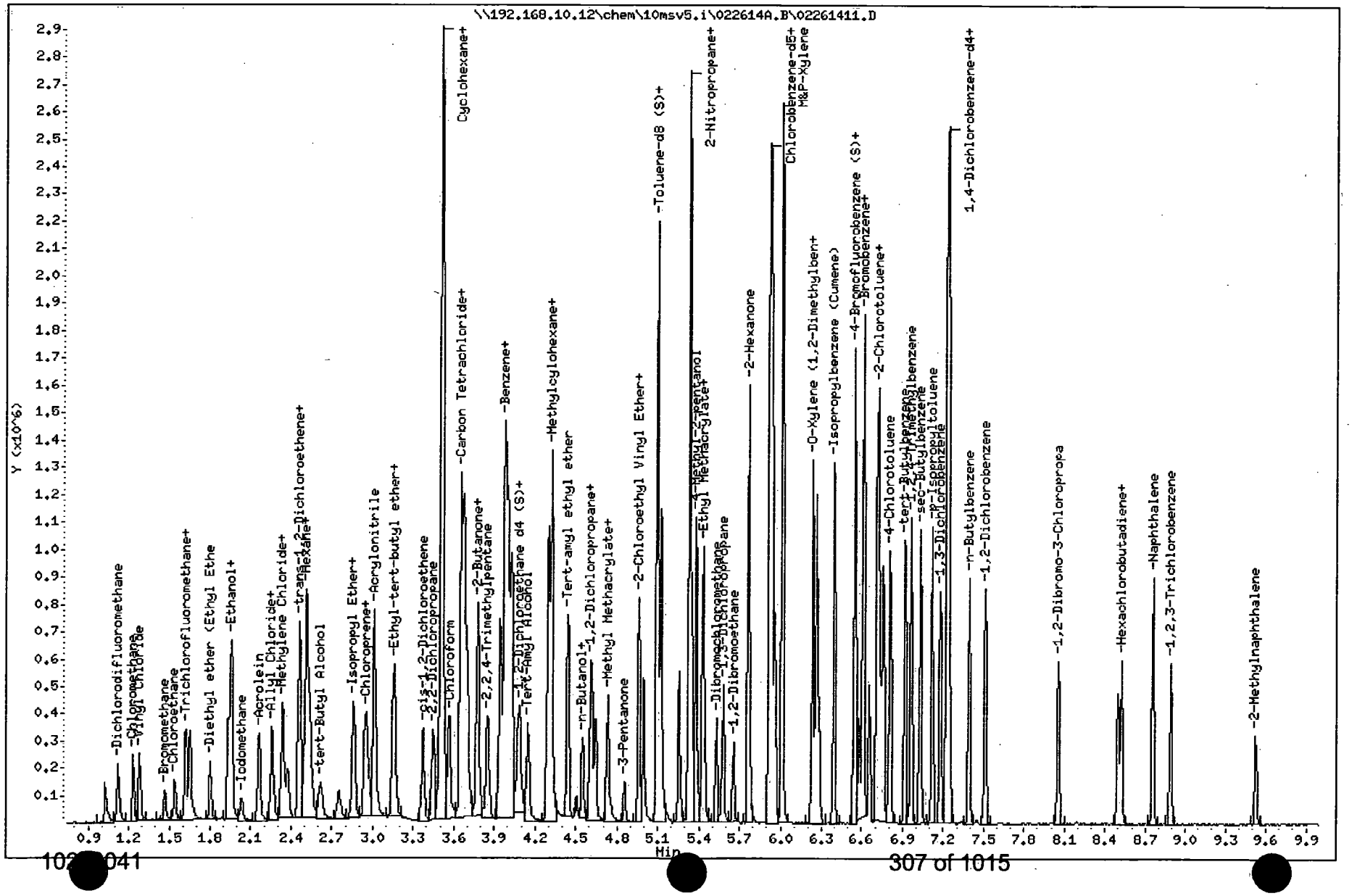
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
18 Acetone d6	132549	66275	265098	140988	6.37	
48 Pentafluorobenzen	514078	257039	1028156	501238	-2.50	
56 1,4 Difluorobenze	796453	398227	1592906	756645	-5.00	
64 1,4 dioxane d8	17142	8571	34284	44073	157.11	<-
82 Chlorobenzene-d5	743514	371757	1487028	697174	-6.23	
106 1,4-Dichlorobenze	400705	200353	801410	389456	-2.81	

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.33	0.36
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.21
56 1,4 Difluorobenze	4.31	3.81	4.81	4.32	0.19
64 1,4 dioxane d8	4.74	4.24	5.24	4.74	0.05
82 Chlorobenzene-d5	5.91	5.41	6.41	5.92	0.04
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.23	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261411.D
Date : 26-FEB-2014 13:23
Client ID:
Instrument: 10msv5.i
Sample Info: IC 20 10098-49,1,1
Purge Volume: 10.0
Operator: SH2
Column phase: Rtx-VMS
Column diameter: 0.18



Injection Date: 26-FEB-2014 13:23
Instrument: 10msv5.i
Lab Sample ID: IC 20 10098-49
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261412.D
Lab Smp Id: IC 50 10098-49
Inj Date : 26-FEB-2014 13:38
Operator : SH2 Inst ID: 10msv5.i
Smp Info : IC 50 10098-49,1,1
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:52 shaider Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 12 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.122	1.116	(0.281)	394459	50.0000	51.4
2	Chloromethane	50	1.231	1.231	(0.308)	409793	50.0000	52.2
3	Vinyl Chloride	62	1.280	1.274	(0.320)	411962	50.0000	50.9
4	Bromomethane	94	1.462	1.463	(0.366)	142878	50.0000	51.2
5	Chloroethane	64	1.535	1.536	(0.384)	226817	50.0000	50.6
6	Trichlorofluoromethane	101	1.620	1.615	(0.405)	498036	50.0000	53.5
7	Dichlorofluoromethane	67	1.651	1.645	(0.413)	581689	50.0000	48.4
8	Diethyl ether (Ethyl Ether)	59	1.803	1.797	(0.451)	209953	50.0000	49.3
9	Ethanol	45	1.888	1.882	(0.398)	26331	1000.00	940(Q)
10	1,1-Dichloroethene	96	1.931	1.925	(0.483)	261028	50.0000	48.6
11	Trichlorotrifluoroethane	101	1.955	1.949	(0.489)	286659	50.0000	49.8
12	Carbon Disulfide	76	1.955	1.955	(0.489)	833368	50.0000	50.6
13	Iodomethane	142	2.034	2.028	(0.509)	246280	50.0000	51.3
14	Acrolein	56	2.162	2.150	(0.541)	609009	500.000	490
15	Allyl Chloride	41	2.253	2.247	(0.563)	450987	50.0000	53.2
16	Isopropanol	45	2.265	2.260	(0.478)	150854	500.000	517
17	Methylene Chloride	84	2.332	2.326	(0.583)	294938	50.0000	51.7
* 18	Acetone d6	46	2.338	2.326	(1.000)	144841	100.000	
19	Acetone	58	2.369	2.363	(1.013)	142779	250.000	252
20	trans-1,2-Dichloroethene	96	2.454	2.448	(0.614)	299438	50.0000	50.8
21	Methyl Acetate	74	2.466	2.454	(0.617)	278024	250.000	250
22	Hexane	86	2.509	2.503	(1.073)	172723	125.000	136

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261412.D
Report Date: 28-Feb-2014 07:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Methyl-tert-butyl Ether	73	2.539	2.533	(0.635)	872666	50.0000	50.5
	24 tert-Butyl Alcohol	59	2.612	2.606	(0.551)	384541	500.000	503
	25 Isopropyl Ether	45	2.855	2.850	(0.714)	990003	50.0000	51.2
	26 Acetonitrile	41	2.855	2.850	(0.714)	191407	500.000	531
	27 Chloroprene	53	2.941	2.935	(0.735)	456979	50.0000	50.8
	28 1,1-Dichloroethane	63	2.965	2.953	(0.741)	515334	50.0000	50.8
	29 Acrylonitrile	53	3.008	2.996	(0.752)	1269595	500.000	501
	30 Ethyl-tert-butyl ether	59	3.147	3.142	(0.787)	923194	50.0000	51.8
	31 Vinyl Acetate	43	3.160	3.154	(0.790)	841412	50.0000	53.5
	32 cis-1,2-Dichloroethene	96	3.373	3.361	(0.843)	336097	50.0000	52.1
	33 2,2-Dichloropropane	77	3.446	3.440	(0.862)	448671	50.0000	49.4
	34 Cyclohexane	56	3.506	3.501	(0.877)	2713556	250.000	254
	35 Bromochloromethane	130	3.512	3.501	(0.878)	206236	50.0000	54.2
	36 Chloroform	83	3.561	3.555	(0.890)	523421	50.0000	49.6
	37 Carbon Tetrachloride	117	3.652	3.647	(0.913)	406830	50.0000	50.8
	38 Ethyl Acetate	43	3.652	3.640	(0.913)	2162319	250.000	250
	39 Tetrahydrofuran	72	3.671	3.665	(1.570)	521988	500.000	485
	40 sec-Butyl Alcohol	45	3.689	3.677	(0.778)	343384	500.000	547
	41 1,1,1-Trichloroethane	97	3.701	3.689	(0.925)	492498	50.0000	50.7
	42 2-Butanone	43	3.774	3.768	(0.944)	899394	250.000	242
	43 1,1-Dichloropropene	75	3.780	3.774	(0.945)	426482	50.0000	50.3
	44 2,2,4-Trimethylpentane	57	3.847	3.841	(0.962)	702837	50.0000	50.5
	45 Benzene	78	3.944	3.932	(0.986)	1259963	50.0000	50.8
	46 Propionitrile	54	3.963	3.957	(0.991)	483962	500.000	494
	47 Methacrylonitrile	41	3.975	3.969	(0.994)	1074654	50.0000	49.6
*	48 Pentafluorobenzene	168	3.999	3.987	(1.000)	514384	50.0000	
	49 Tert-amyl methyl ether	73	4.017	4.012	(1.005)	947108	50.0000	50.9
$	50 1,2-Dichloroethane d4 (S)	65	4.030	4.024	(1.008)	253467	50.0000	49.6(Q)
	51 1,2-Dichloroethane	62	4.072	4.066	(1.018)	387122	50.0000	53.2
	52 Isobutanol	43	4.084	4.078	(0.861)	351530	1000.00	1060
	53 Tert-Amyl Alcohol	59	4.145	4.139	(0.874)	392082	500.000	484
	54 Methylcylohexane	98	4.291	4.285	(1.073)	249969	50.0000	49.8
	55 Trichloroethene	130	4.297	4.291	(0.994)	354919	50.0000	51.3
*	56 1,4 Difluorobenzene	114	4.322	4.316	(1.000)	776813	50.0000	
	57 Tert-amyl ethyl ether	59	4.437	4.431	(1.027)	770823	50.0000	51.5
	58 n-Butanol	56	4.504	4.498	(0.950)	90382	500.000	542
	59 Dibromomethane	174	4.547	4.547	(1.052)	213852	50.0000	53.8
	60 1,2-Dichloropropane	63	4.607	4.602	(1.066)	318969	50.0000	53.6
	61 Ethyl Arcylate	55	4.614	4.608	(1.068)	520973	50.0000	53.0
	62 Bromodichloromethane	83	4.644	4.638	(1.075)	401794	50.0000	48.1
	63 Methyl Methacrylate	69	4.729	4.723	(1.094)	279854	250.000	245
*	64 1,4 dioxane d8	96	4.741	4.735	(1.000)	38619	2000.00	
	65 1,4-Dioxane (P-Dioxane)	88	4.760	4.754	(1.004)	23431	1000.00	1020
	66 3-Pentanone	57	4.851	4.845	(1.122)	307585	50.0000	52.5
	67 2-Chloroethyl Vinyl Ether	63	4.960	4.954	(1.148)	573067	125.000	132
	68 cis-1,3-Dichloropropene	75	4.997	4.991	(1.156)	508193	50.0000	53.3
$	69 Toluene-d8 (S)	98	5.094	5.088	(0.861)	937991	50.0000	50.7
	70 Toluene	92	5.125	5.119	(0.866)	809098	50.0000	51.2
	71 2-Nitropropane	43	5.325	5.319	(0.900)	2012766	250.000	247
	72 Tetrachloroethene	166	5.331	5.326	(0.901)	368645	50.0000	51.5
	73 4-Methyl-2-Pentanone	43	5.325	5.319	(0.900)	2012766	250.000	247
	74 trans-1,3-Dichloropropene	75	5.350	5.344	(0.904)	478337	50.0000	51.7
	75 4-Methyl-2-pentanol	45	5.374	5.374	(1.133)	1289101	500.000	478
	76 Ethyl Methacrylate	69	5.429	5.423	(0.918)	509446	50.0000	49.2

Data File: \\192.168.10.12\Chem\10msv5.i\022614A.B\02261412.D
Report Date: 28-Feb-2014 07:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	1,1,2-Trichloroethane	97	5.435	5.429	(0.919)	290705	50.0000	50.4
78	Dibromochloromethane	129	5.526	5.526	(0.934)	341546	50.0000	51.2
79	1,3-Dichloropropane	76	5.581	5.575	(0.943)	481389	50.0000	50.6
80	1,2-Dibromoethane	107	5.654	5.648	(0.956)	309180	50.0000	50.0
81	2-Hexanone	43	5.763	5.757	(0.974)	1545633	250.000	249
* 82	Chlorobenzene-d5	117	5.915	5.916	(1.000)	728035	50.0000	
83	Chlorobenzene	112	5.928	5.922	(1.002)	862489	50.0000	50.3
84	Ethylbenzene	91	5.934	5.928	(1.003)	1538573	50.0000	49.0
85	1,1,1,2-Tetrachloroethane	131	5.958	5.952	(1.007)	321921	50.0000	50.9
86	M&P-Xylene	106	6.013	6.007	(1.016)	1205389	100.000	102
87	O-Xylene (1,2-Dimethylbenzene)	106	6.232	6.232	(1.053)	576757	50.0000	49.8
88	Styrene	104	6.262	6.256	(1.059)	974363	50.0000	51.3
89	Bromoform	173	6.280	6.281	(1.062)	269721	50.0000	51.5
90	Isopropylbenzene (Cumene)	105	6.396	6.390	(1.081)	1463833	50.0000	51.3
$ 91	4-Bromofluorobenzene (S)	95	6.548	6.542	(0.907)	375915	50.0000	50.3
92	cis-1,4-Dichloro-2-Butene	53	6.579	6.579	(0.911)	137391	50.0000	53.1
93	Bromobenzene	156	6.609	6.609	(0.915)	373844	50.0000	50.6
94	n-Propylbenzene	91	6.615	6.609	(0.916)	1702066	50.0000	50.7
95	1,1,2,2-Tetrachloroethane	83	6.658	6.652	(0.922)	435670	50.0000	49.1
96	2-Chlorotoluene	91	6.712	6.707	(0.929)	1107812	50.0000	50.5
97	1,3,5-Trimethylbenzene	105	6.725	6.719	(0.931)	1173144	50.0000	50.9
98	1,2,3-Trichloropropane	110	6.743	6.737	(0.933)	137455	50.0000	52.5
99	trans-1,4-Dichloro-2-Butene	53	6.761	6.755	(0.936)	326898	125.000	132
100	4-Chlorotoluene	91	6.810	6.804	(0.943)	1030495	50.0000	50.5
101	tert-Butylbenzene	119	6.919	6.913	(0.958)	981359	50.0000	50.7
102	1,2,4-Trimethylbenzene	105	6.962	6.956	(0.964)	1176620	50.0000	51.5
103	sec-Butylbenzene	105	7.029	7.029	(0.973)	1342357	50.0000	50.8
104	p-Isopropyltoluene	119	7.120	7.114	(0.986)	1145367	50.0000	50.8
105	1,3-Dichlorobenzene	146	7.181	7.175	(0.994)	649712	50.0000	50.5
* 106	1,4-Dichlorobenzene-d4	152	7.223	7.224	(1.000)	401474	50.0000	
107	1,4-Dichlorobenzene	146	7.236	7.230	(1.002)	669605	50.0000	50.2
108	1,2,3 Trimethylbenzene	105	7.242	7.236	(1.811)	1176452	50.0000	51.0
109	n-Butylbenzene	91	7.394	7.388	(1.024)	966671	50.0000	51.3
110	1,2-Dichlorobenzene	146	7.509	7.510	(1.040)	614117	50.0000	49.6
111	1,2-Dibromo-3-Chloropropane	157	8.057	8.051	(1.115)	306816	125.000	125
112	Hexachlorobutadiene	225	8.501	8.495	(1.177)	164305	50.0000	53.6(A)
113	1,2,4-Trichlorobenzene	180	8.525	8.519	(1.180)	357133	50.0000	51.8
114	Naphthalene	128	8.756	8.757	(1.212)	1243052	50.0000	50.1
115	1,2,3-Trichlorobenzene	180	8.890	8.890	(1.231)	337808	50.0000	50.1
116	2-Methylnaphthalene	142	9.529	9.523	(1.319)	297852	25.0000	25.5

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261412.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261412.D
Lab Smp Id: IC 50 10098-49
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:52
Level: LOW
Sample Type: WATER

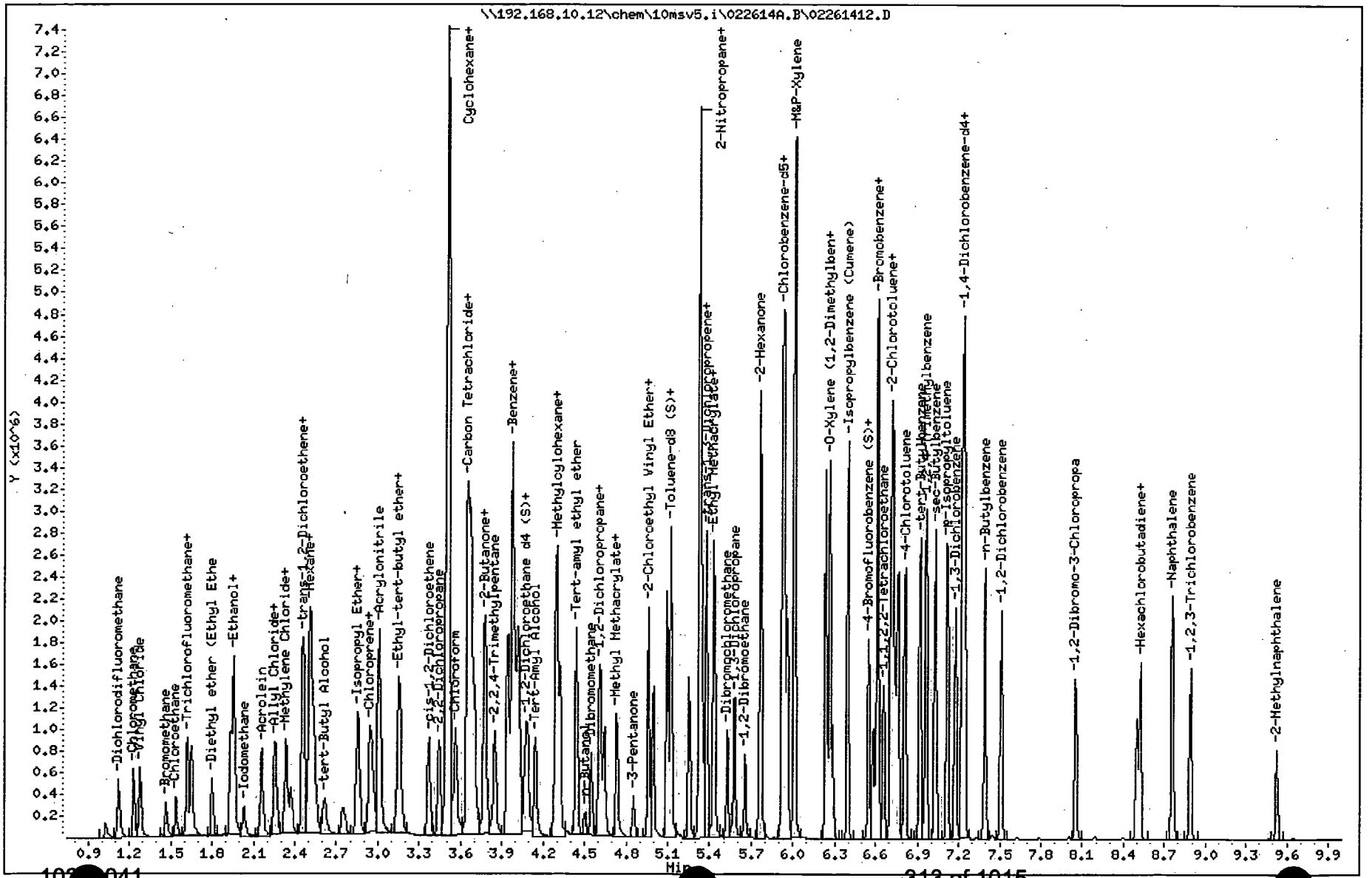
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	132549	66275	265098	144841	9.27
48 Pentafluorobenzen	514078	257039	1028156	514384	0.06
56 1,4 Difluorobenze	796453	398227	1592906	776813	-2.47
64 1,4 dioxane d8	17142	8571	34284	38619	125.29 <-
82 Chlorobenzene-d5	743514	371757	1487028	728035	-2.08
106 1,4-Dichlorobenze	400705	200353	801410	401474	0.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.34	0.57
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.18
56 1,4 Difluorobenze	4.31	3.81	4.81	4.32	0.17
64 1,4 dioxane d8	4.74	4.24	5.24	4.74	0.02
82 Chlorobenzene-d5	5.91	5.41	6.41	5.92	0.02
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	0.02

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261412.D
Date : 26-FEB-2014 13:38
Client ID:
Instrument: 10msv5.i
Sample Info: IC 50 10098-49,1,1
Purge Volume: 10.0
Operator: SH2
Column phase: Rtx-VMS
Column diameter: 0.18



Injection Date: 26-FEB-2014 13:38
Instrument: 10msv5.i
Lab Sample ID: IC 50 10098-49
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261413.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261413.D
Lab Smp Id: IC 100 10098-49
Inj Date : 26-FEB-2014 13:53
Operator : SH2 Inst ID: 10msv5.i
Smp Info : IC 100 10098-49,1,1
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:52 shaider Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 13 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.123	1.116	(0.281)	822742	100.000	105
2	Chloromethane	50	1.232	1.231	(0.308)	841612	100.000	105
3	Vinyl Chloride	62	1.281	1.274	(0.320)	832213	100.000	99.4
4	Bromomethane	94	1.463	1.463	(0.366)	356887	100.000	99.8
5	Chloroethane	64	1.536	1.536	(0.384)	453224	100.000	99.0
6	Trichlorofluoromethane	101	1.621	1.615	(0.405)	1030419	100.000	108
7	Dichlorofluoromethane	67	1.652	1.645	(0.413)	1166454	100.000	95.2
8	Diethyl ether (Ethyl Ether)	59	1.798	1.797	(0.450)	432176	100.000	99.5
9	Ethanol	45	1.889	1.882	(0.398)	77089	2000.00	2000(AQ)
10	1,1-Dichloroethene	96	1.932	1.925	(0.483)	547555	100.000	100
11	Trichlorotrifluoroethane	101	1.956	1.949	(0.489)	601507	100.000	100(A)
12	Carbon Disulfide	76	1.956	1.955	(0.489)	1737113	100.000	103
13	Iodomethane	142	2.035	2.028	(0.509)	551796	100.000	99.8
14	Acrolein	56	2.163	2.150	(0.541)	1280988	1000.00	1010
15	Allyl Chloride	41	2.254	2.247	(0.564)	932407	100.000	108
16	Isopropanol	45	2.266	2.260	(0.478)	318376	1000.00	1090
17	Methylene Chloride	84	2.333	2.326	(0.583)	600926	100.000	103
* 18	Acetone d6	46	2.333	2.326	(1.000)	155061	100.000	
19	Acetone	58	2.376	2.363	(1.018)	294869	500.000	486
20	trans-1,2-Dichloroethene	96	2.455	2.448	(0.614)	602660	100.000	100
21	Methyl Acetate	74	2.461	2.454	(0.615)	572789	500.000	504
22	Hexane	86	2.510	2.503	(1.076)	356158	250.000	262

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 Methyl-tert-butyl Ether	73	2.540	2.533	(0.635)	1735357	100.000	98.4
	24 tert-Butyl Alcohol	59	2.613	2.606	(0.551)	829864	1000.00	1080
	25 Isopropyl Ether	45	2.856	2.850	(0.714)	1944855	100.000	98.6(M)
	26 Acetonitrile	41	2.856	2.850	(0.714)	375555	1000.00	1020
	27 Chloroprene	53	2.942	2.935	(0.735)	941982	100.000	103
	28 1,1-Dichloroethane	63	2.966	2.953	(0.741)	1069448	100.000	103
	29 Acrylonitrile	53	3.008	2.996	(0.752)	2677333	1000.00	1040
	30 Ethyl-tert-butyl ether	59	3.148	3.142	(0.787)	1832446	100.000	101(M)
	31 Vinyl Acetate	43	3.161	3.154	(0.790)	1742675	100.000	109(M)
	32 cis-1,2-Dichloroethene	96	3.373	3.361	(0.843)	643678	100.000	97.7
	33 2,2-Dichloropropane	77	3.446	3.440	(0.862)	913981	100.000	98.7
	34 Cyclohexane	56	3.507	3.501	(0.877)	5477323	500.000	503(M)
	35 Bromochloromethane	130	3.513	3.501	(0.878)	394510	100.000	102
	36 Chloroform	83	3.568	3.555	(0.892)	1087115	100.000	101
	37 Carbon Tetrachloride	117	3.653	3.647	(0.913)	834792	100.000	102
	38 Ethyl Acetate	43	3.653	3.640	(0.913)	4417316	500.000	501
	39 Tetrahydrofuran	72	3.672	3.665	(1.574)	1074970	1000.00	934
	40 sec-Butyl Alcohol	45	3.690	3.677	(0.778)	724368	1000.00	1150
	41 1,1,1-Trichloroethane	97	3.702	3.689	(0.925)	1012039	100.000	102(M)
	42 2-Butanone	43	3.775	3.768	(0.944)	1880701	500.000	496
	43 1,1-Dichloropropene	75	3.781	3.774	(0.945)	874885	100.000	101
	44 2,2,4-Trimethylpentane	57	3.848	3.841	(0.962)	1479476	100.000	104
	45 Benzene	78	3.939	3.932	(0.985)	2521720	100.000	99.5
	46 Propionitrile	54	3.970	3.957	(0.992)	1010044	1000.00	1010
	47 Methacrylonitrile	41	3.976	3.969	(0.994)	2264941	100.000	100(A)
*	48 Pentafluorobenzene	168	4.000	3.987	(1.000)	524876	50.0000	
	49 Tert-amyl methyl ether	73	4.018	4.012	(1.005)	1908447	100.000	100
$	50 1,2-Dichloroethane d4 (S)	65	4.030	4.024	(1.008)	257821	50.0000	49.4(Q)
	51 1,2-Dichloroethane	62	4.073	4.066	(1.018)	768194	100.000	103(M)
	52 Isobutanol	43	4.085	4.078	(0.861)	742457	2000.00	2240
	53 Tert-Amyl Alcohol	59	4.146	4.139	(0.874)	867726	1000.00	1070
	54 Methylcylohexane	98	4.292	4.285	(1.073)	524160	100.000	102
	55 Trichloroethene	130	4.298	4.291	(0.994)	721639	100.000	102
*	56 1,4 Difluorobenzene	114	4.322	4.316	(1.000)	793062	50.0000	
	57 Tert-amyl ethyl ether	59	4.438	4.431	(1.027)	1579250	100.000	103
	58 n-Butanol	56	4.499	4.498	(0.949)	185795	1000.00	1110
	59 Dibromomethane	174	4.548	4.547	(1.052)	424157	100.000	104
	60 1,2-Dichloropropane	63	4.608	4.602	(1.066)	635890	100.000	105
	61 Ethyl Arcylate	55	4.614	4.608	(1.068)	1059194	100.000	106
	62 Bromodichloromethane	83	4.645	4.638	(1.075)	858930	100.000	101
	63 Methyl Methacrylate	69	4.730	4.723	(1.094)	572442	500.000	490
*	64 1,4 dioxane d8	96	4.742	4.735	(1.000)	38663	2000.00	
	65 1,4-Dioxane (P-Dioxane)	88	4.760	4.754	(1.004)	52658	2000.00	2300
	66 3-Pentanone	57	4.852	4.845	(1.122)	630251	100.000	105
	67 2-Chloroethyl Vinyl Ether	63	4.961	4.954	(1.148)	1148607	250.000	258
	68 cis-1,3-Dichloropropene	75	4.998	4.991	(1.156)	1016526	100.000	104
$	69 Toluene-d8 (S)	98	5.095	5.088	(0.861)	942087	50.0000	49.6
	70 Toluene	92	5.125	5.119	(0.866)	1643541	100.000	101
	71 2-Nitropropane	43	5.326	5.319	(0.900)	4132587	500.000	495
	72 Tetrachloroethene	166	5.332	5.326	(0.901)	754160	100.000	102
	73 4-Methyl-2-Pentanone	43	5.326	5.319	(0.900)	4132587	500.000	494
	74 trans-1,3-Dichloropropene	75	5.351	5.344	(0.904)	976712	100.000	103
	75 4-Methyl-2-pentanol	45	5.375	5.374	(1.133)	2731652	1000.00	1020
	76 Ethyl Methacrylate	69	5.430	5.423	(0.918)	1035210	100.000	97.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	1,1,2-Trichloroethane	97	5.436	5.429	(0.919)	576940	100.000	97.3
78	Dibromochloromethane	129	5.527	5.526	(0.934)	699223	100.000	102
79	1,3-Dichloropropane	76	5.576	5.575	(0.942)	976937	100.000	99.9
80	1,2-Dibromoethane	107	5.655	5.648	(0.956)	639304	100.000	101
81	2-Hexanone	43	5.764	5.757	(0.974)	3201984	500.000	503
* 82	Chlorobenzene-d5	117	5.916	5.916	(1.000)	747532	50.0000	
83	Chlorobenzene	112	5.928	5.922	(1.002)	1747168	100.000	99.3
84	Ethylbenzene	91	5.935	5.928	(1.003)	3104240	100.000	96.4
85	1,1,1,2-Tetrachloroethane	131	5.959	5.952	(1.007)	660087	100.000	102
86	M&P-Xylene	106	6.014	6.007	(1.016)	2433623	200.000	200
87	O-Xylene (1,2-Dimethylbenzene)	106	6.233	6.232	(1.053)	1176527	100.000	99.0
88	Styrene	104	6.263	6.256	(1.059)	2005045	100.000	103
89	Bromoform	173	6.281	6.281	(1.062)	561884	100.000	104
90	Isopropylbenzene (Cumene)	105	6.397	6.390	(1.081)	2979524	100.000	102
$ 91	4-Bromofluorobenzene (S)	95	6.549	6.542	(0.907)	391805	50.0000	51.0
92	cis-1,4-Dichloro-2-Butene	53	6.579	6.579	(0.911)	295159	100.000	111
93	Bromobenzene	156	6.610	6.609	(0.915)	754986	100.000	99.5
94	n-Propylbenzene	91	6.616	6.609	(0.916)	3428148	100.000	99.5
95	1,1,2,2-Tetrachloroethane	83	6.659	6.652	(0.922)	888947	100.000	97.6
96	2-Chlorotoluene	91	6.707	6.707	(0.928)	2254511	100.000	100
97	1,3,5-Trimethylbenzene	105	6.725	6.719	(0.931)	2374547	100.000	100
98	1,2,3-Trichloropropane	110	6.738	6.737	(0.933)	285275	100.000	106
99	trans-1,4-Dichloro-2-Butene	53	6.756	6.755	(0.935)	689685	250.000	271
100	4-Chlorotoluene	91	6.805	6.804	(0.942)	2091623	100.000	99.8
101	tert-Butylbenzene	119	6.920	6.913	(0.958)	2001455	100.000	101
102	1,2,4-Trimethylbenzene	105	6.963	6.956	(0.964)	2398032	100.000	102
103	sec-Butylbenzene	105	7.030	7.029	(0.973)	2763298	100.000	102
104	p-Isopropyltoluene	119	7.115	7.114	(0.985)	2348980	100.000	101
105	1,3-Dichlorobenzene	146	7.176	7.175	(0.993)	1338406	100.000	101
* 106	1,4-Dichlorobenzene-d4	152	7.224	7.224	(1.000)	412426	50.0000	
107	1,4-Dichlorobenzene	146	7.236	7.230	(1.002)	1365584	100.000	99.7
108	1,2,3 Trimethylbenzene	105	7.243	7.236	(1.811)	2378511	100.000	101
109	n-Butylbenzene	91	7.395	7.388	(1.024)	2010053	100.000	104
110	1,2-Dichlorobenzene	146	7.510	7.510	(1.040)	1269034	100.000	99.7
111	1,2-Dibromo-3-Chloropropane	157	8.052	8.051	(1.115)	645349	250.000	256
112	Hexachlorobutadiene	225	8.502	8.495	(1.177)	342386	100.000	109(A)
113	1,2,4-Trichlorobenzene	180	8.526	8.519	(1.180)	737942	100.000	104
114	Naphthalene	128	8.757	8.757	(1.212)	2540380	100.000	99.7
115	1,2,3-Trichlorobenzene	180	8.891	8.890	(1.231)	701111	100.000	101
116	2-Methylnaphthalene	142	9.524	9.523	(1.318)	620909	50.0000	51.7

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261413.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261413.D
Lab Smp Id: IC 100 10098-49
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:52
Level: LOW
Sample Type: WATER

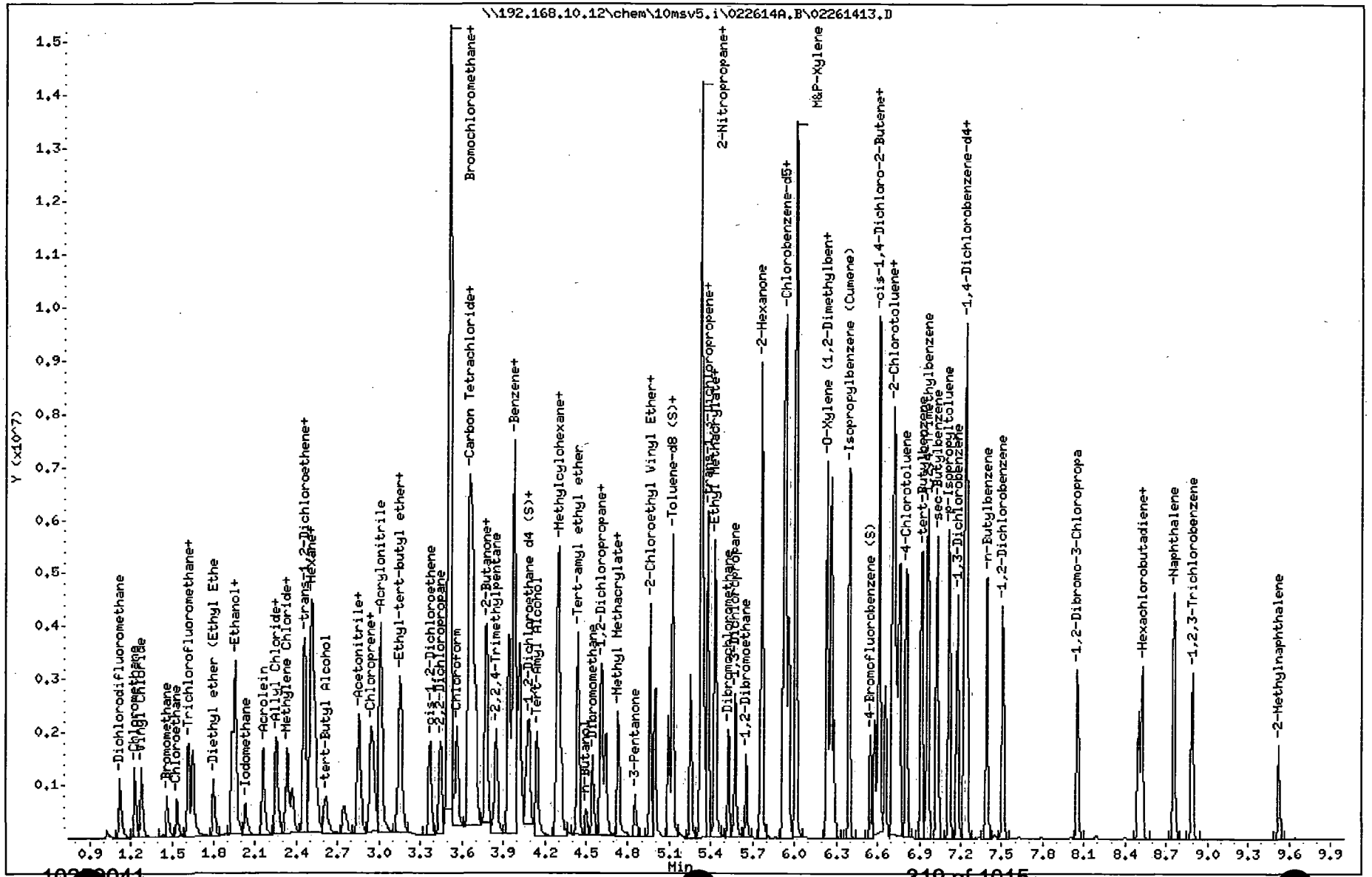
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
18 Acetone d6	132549	66275	265098	155061	16.98	
48 Pentafluorobenzen	514078	257039	1028156	524876	2.10	
56 1,4 Difluorobenze	796453	398227	1592906	793062	-0.43	
64 1,4 dioxane d8	17142	8571	34284	38663	125.55	<-
82 Chlorobenzene-d5	743514	371757	1487028	747532	0.54	
106 1,4-Dichlorobenze	400705	200353	801410	412426	2.93	

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.33	0.35
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.20
56 1,4 Difluorobenze	4.31	3.81	4.81	4.32	0.19
64 1,4 dioxane d8	4.74	4.24	5.24	4.74	0.04
82 Chlorobenzene-d5	5.91	5.41	6.41	5.92	0.03
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	0.03

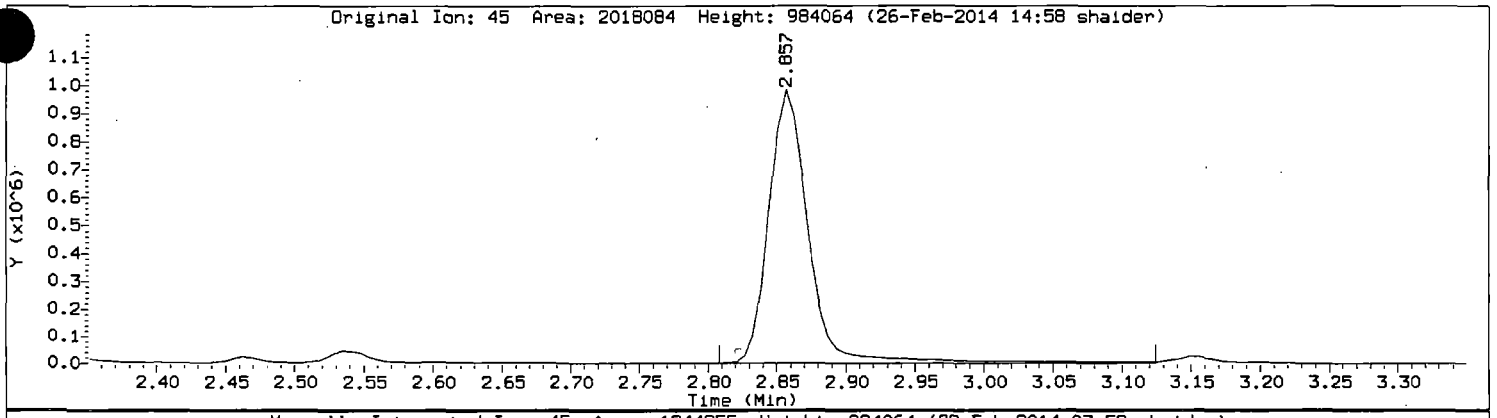
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

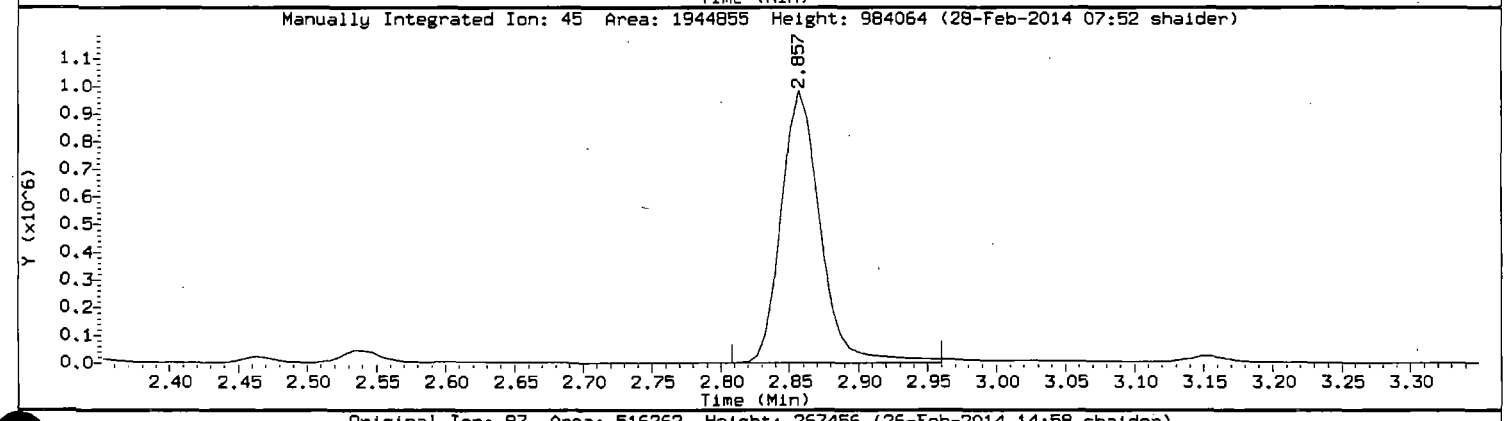
Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261413.D
Date : 26-FEB-2014 13:53
Client ID:
Instrument: 10msv5.i
Sample Info: IC 100 10098-49,1,1
Purge Volume: 10.0
Operator: SH2
Column phase: Rtx-VMS
Column diameter: 0.18

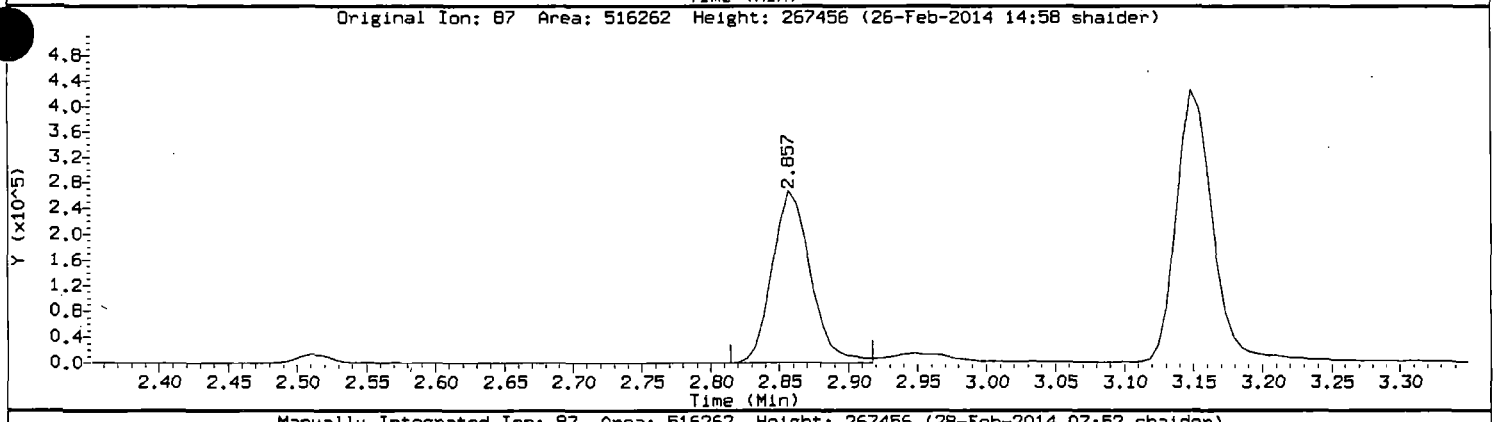


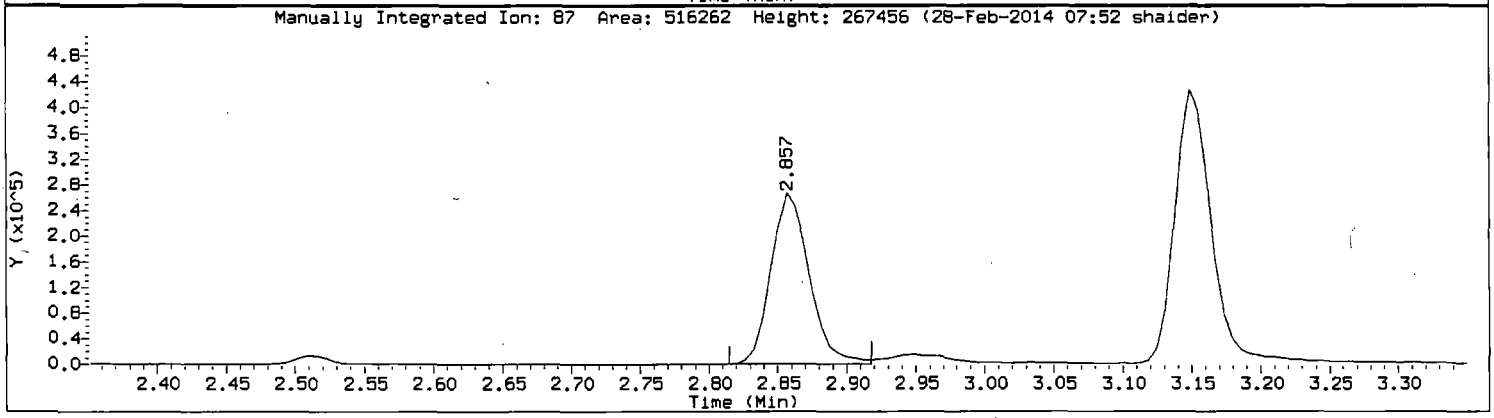
Injection Date: 26-FEB-2014 13:53
Instrument: 10msv5.i
Lab Sample ID: IC 100 10098-49

Compound: Isopropyl Ether
CAS Number: 108-20-3

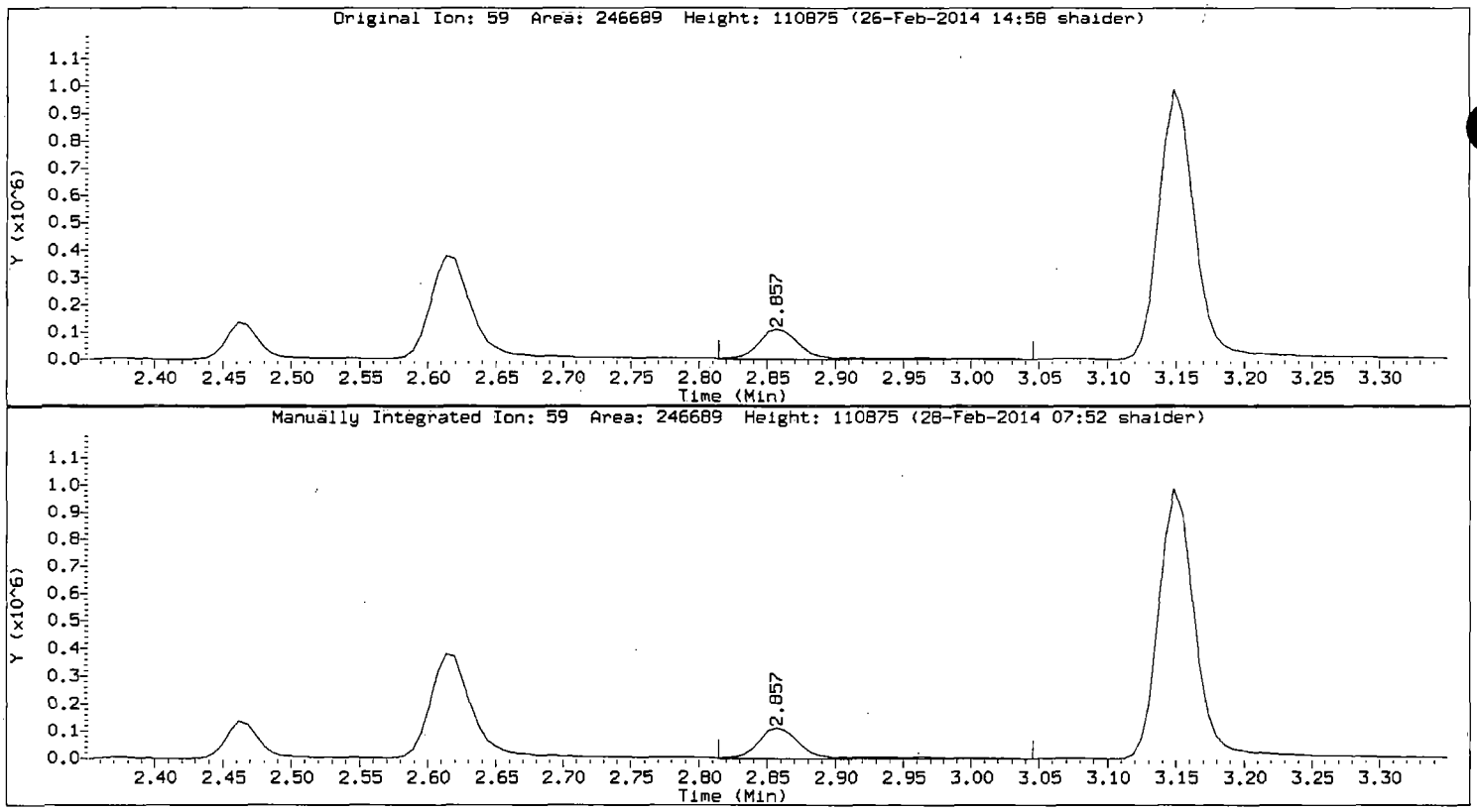






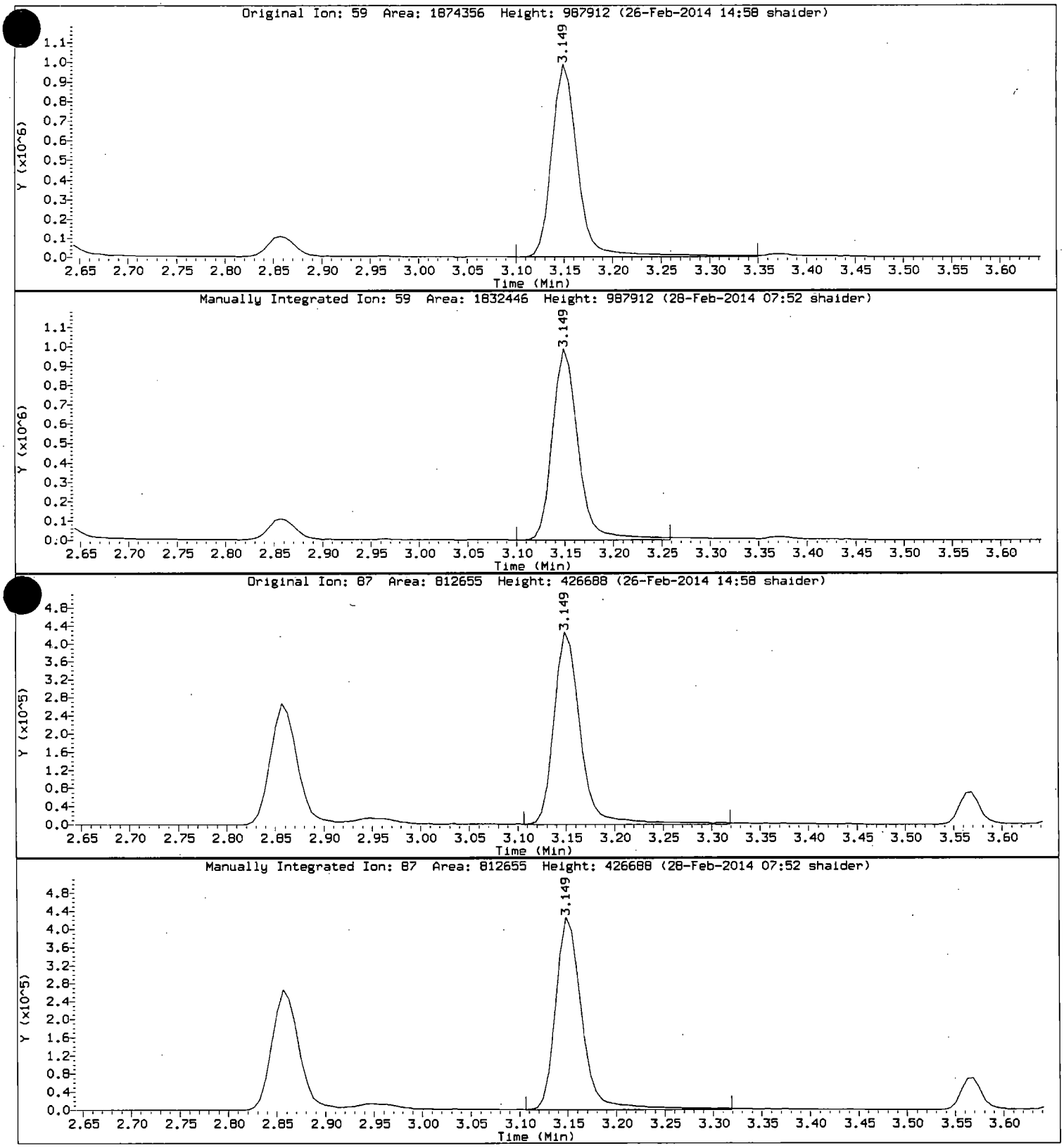


Injection Date: 26-FEB-2014 13:53
Instrument: 10msv5.i
Lab Sample ID: IC 100 10098-49



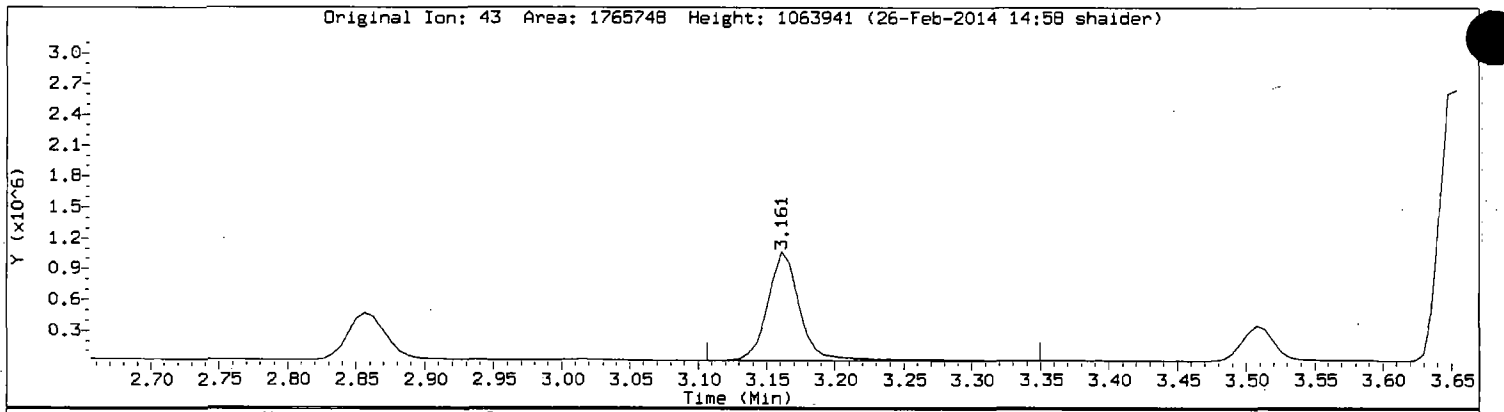
Injection Date: 26-FEB-2014 13:53
Instrument: 10msv5.i
Lab Sample ID: IC 100 10098-49

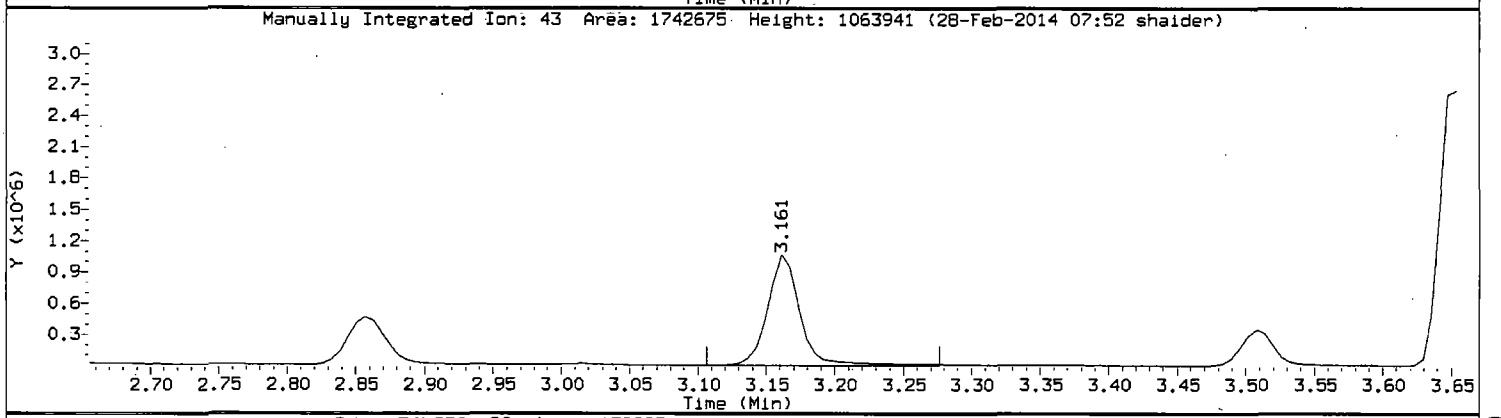
Compound: Ethyl-tert-butyl ether
CAS Number: 637-92-3

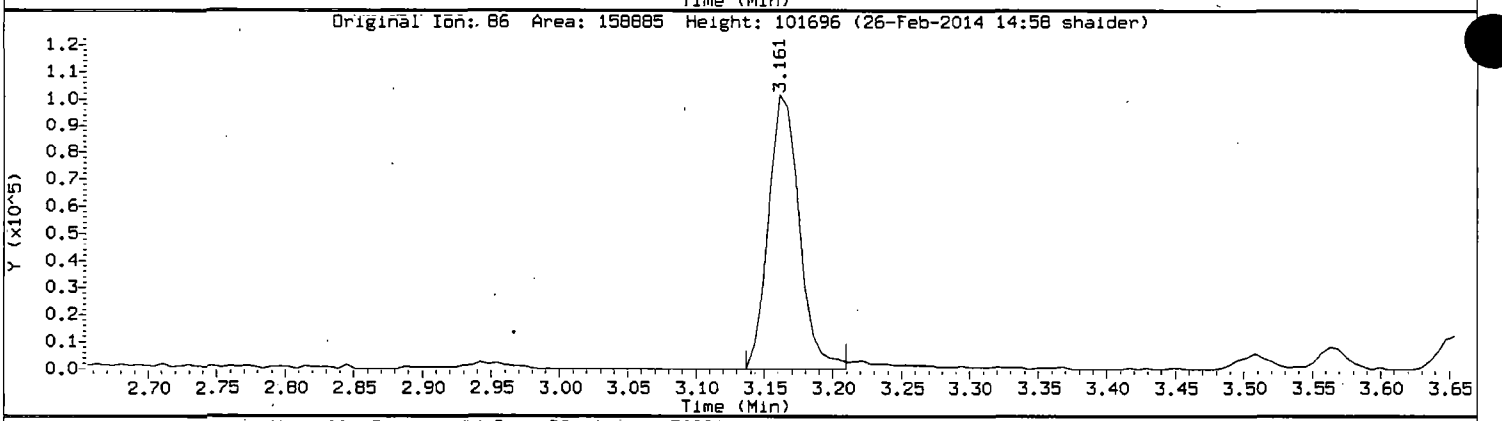


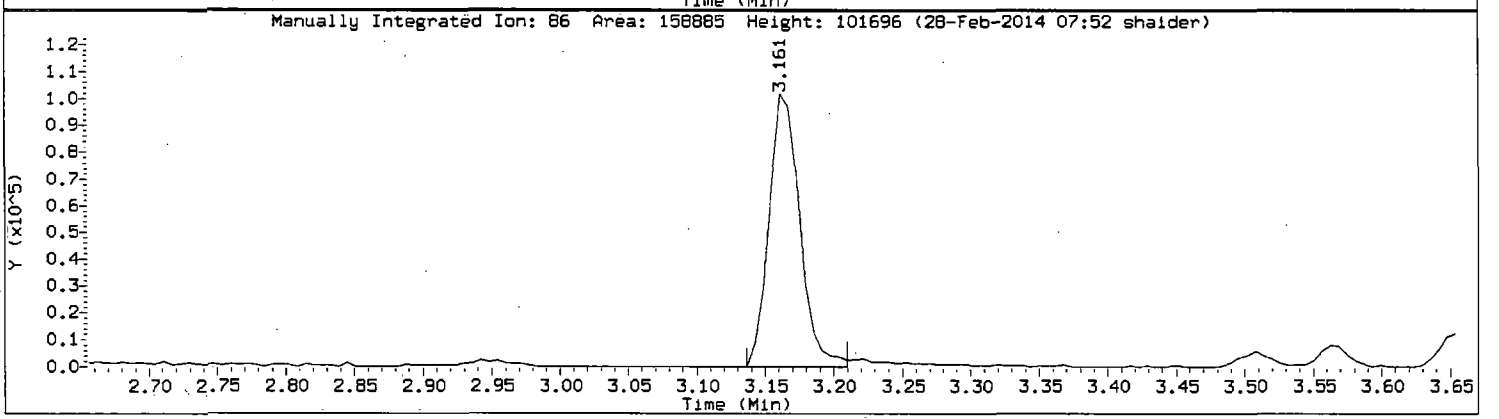
Injection Date: 28-FEB-2014 13:53
Instrument: 10msv5.i
Lab Sample ID: IC 100 10098-49

Compound: Vinyl Acetate
CAS Number: 108-05-4



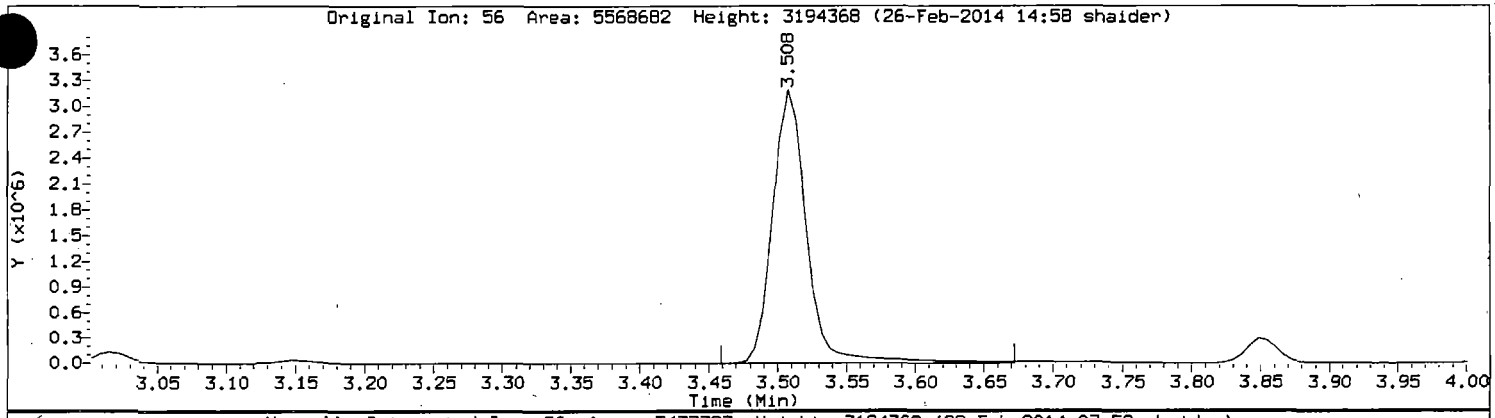


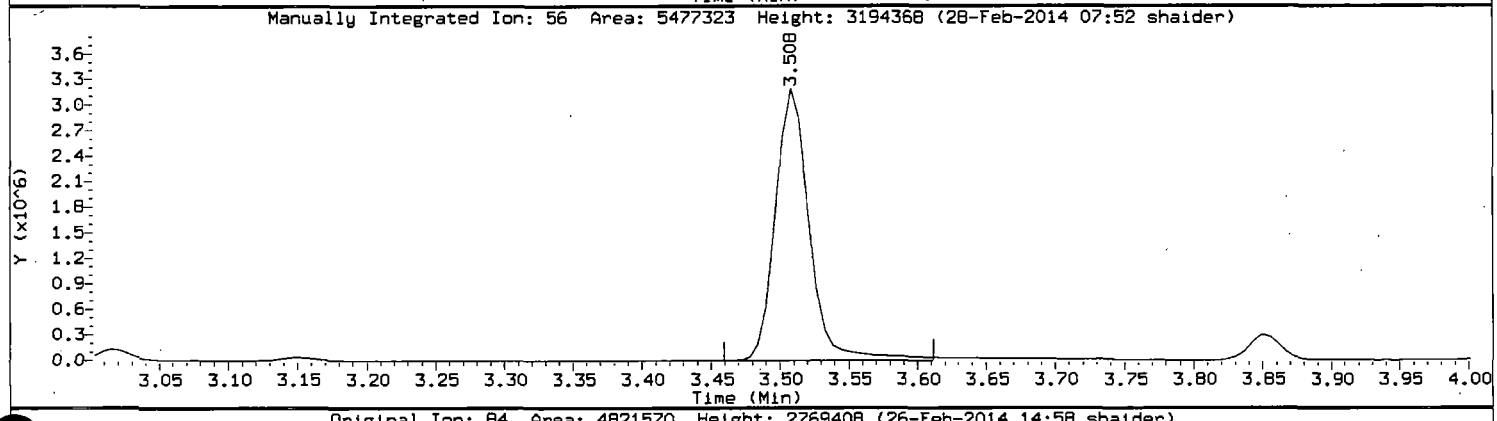


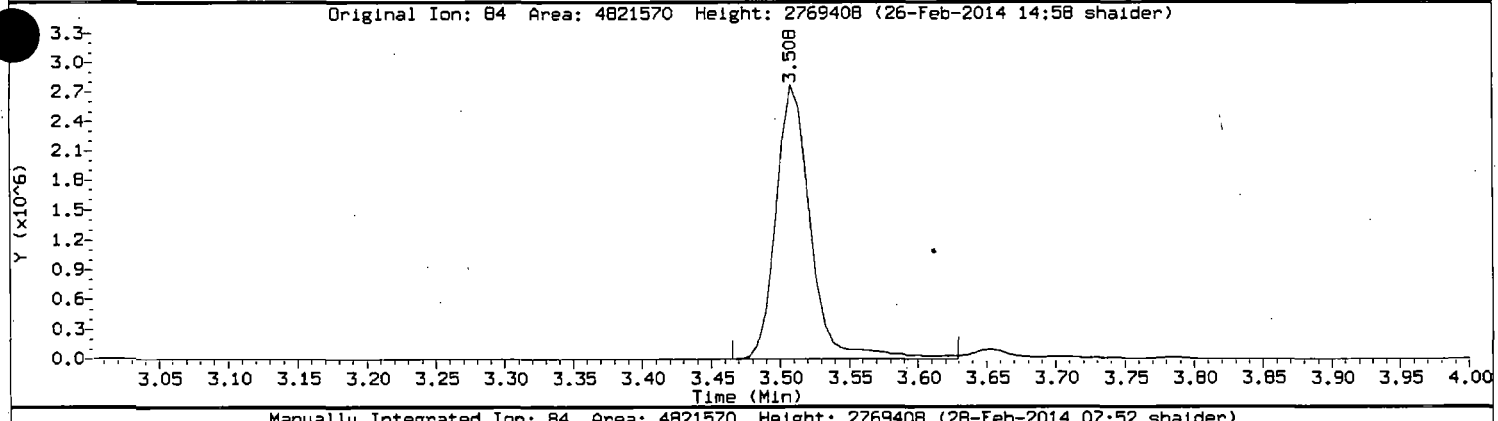


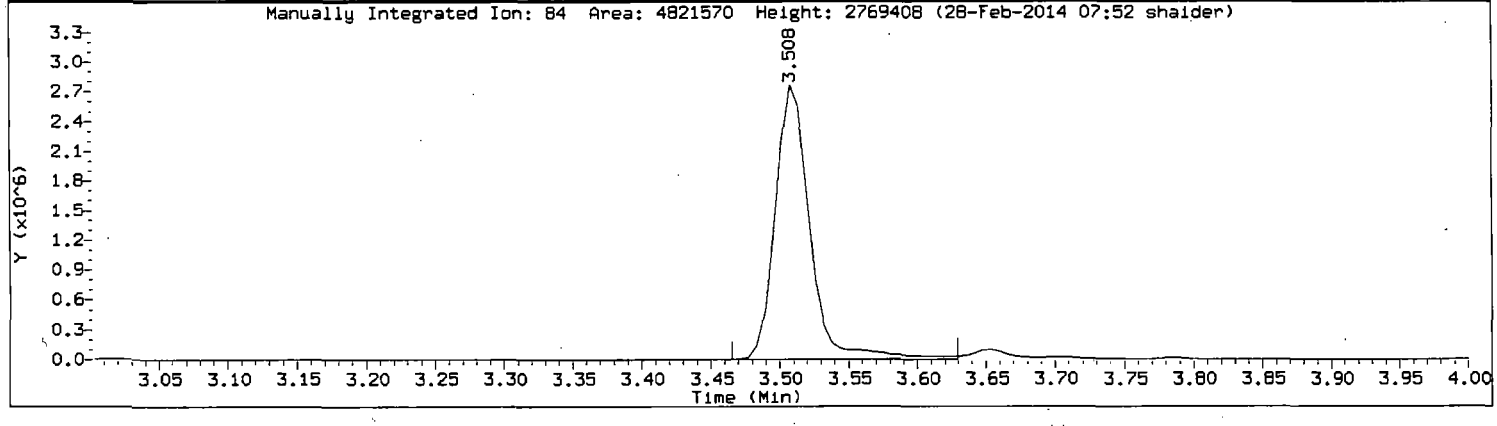
Injection Date: 26-FEB-2014 13:53
Instrument: 10msv5.i
Lab Sample ID: IC 100 10098-49

Compound: Cyclohexane
CAS Number: 110-82-7









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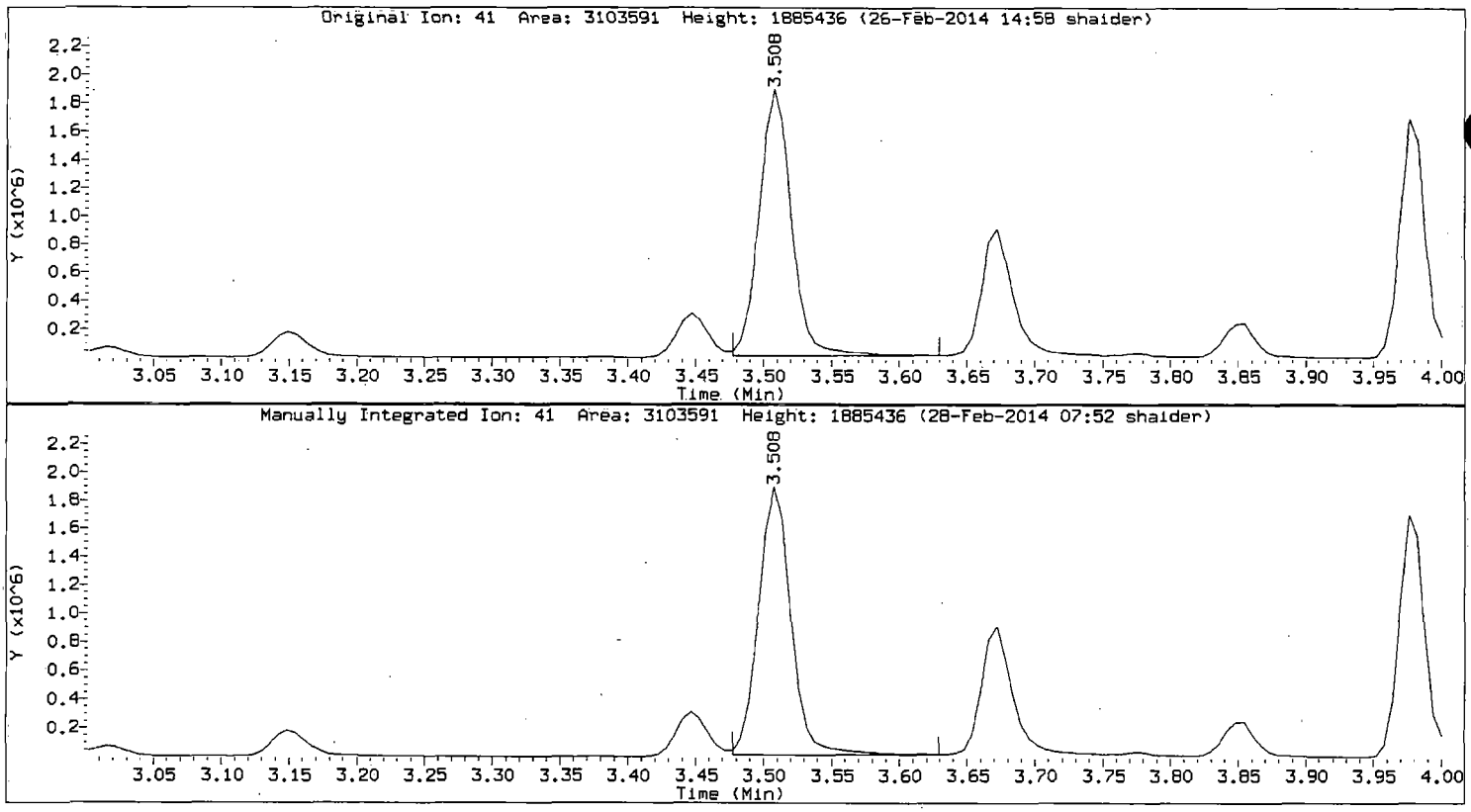
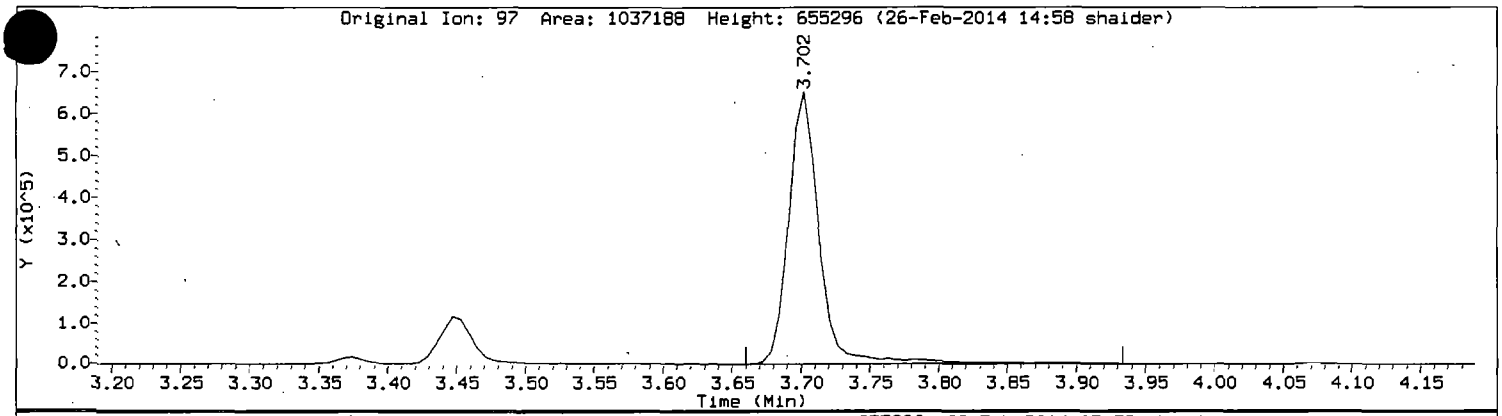
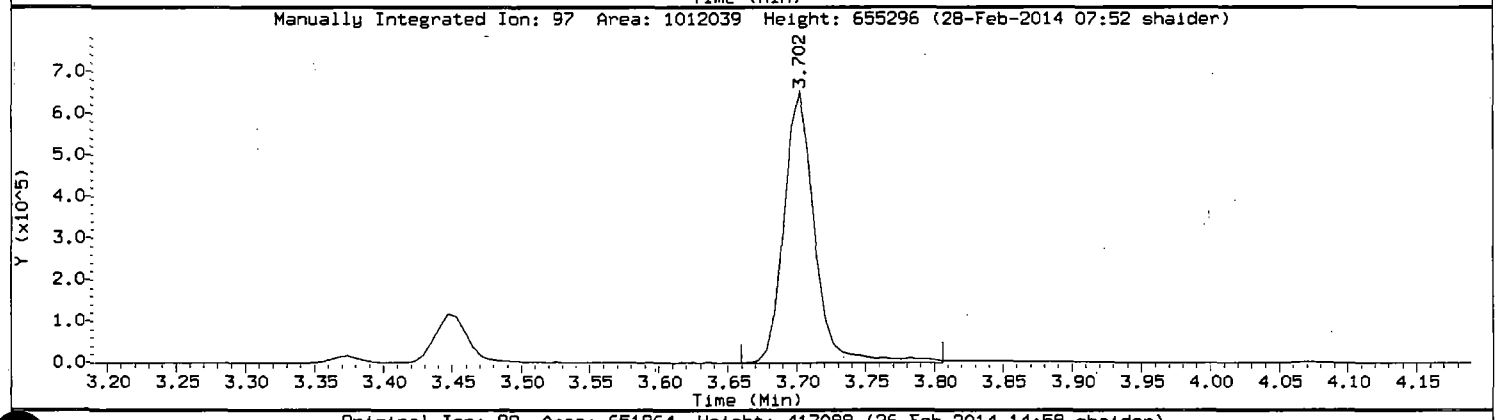
Instrument: 10msv5.i
Lab Sample ID: IC 100 10098-49

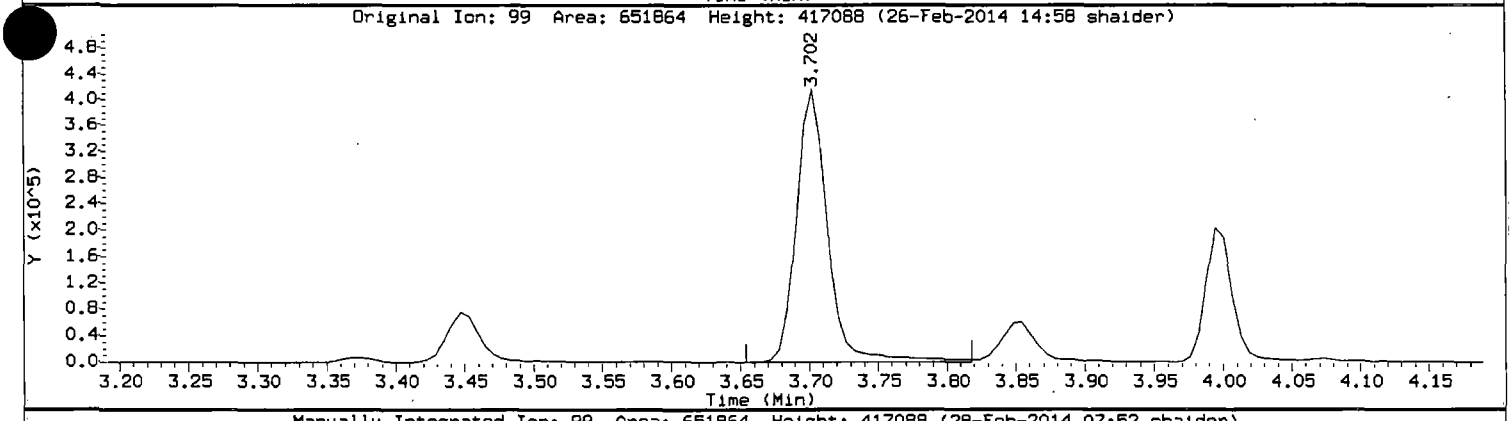


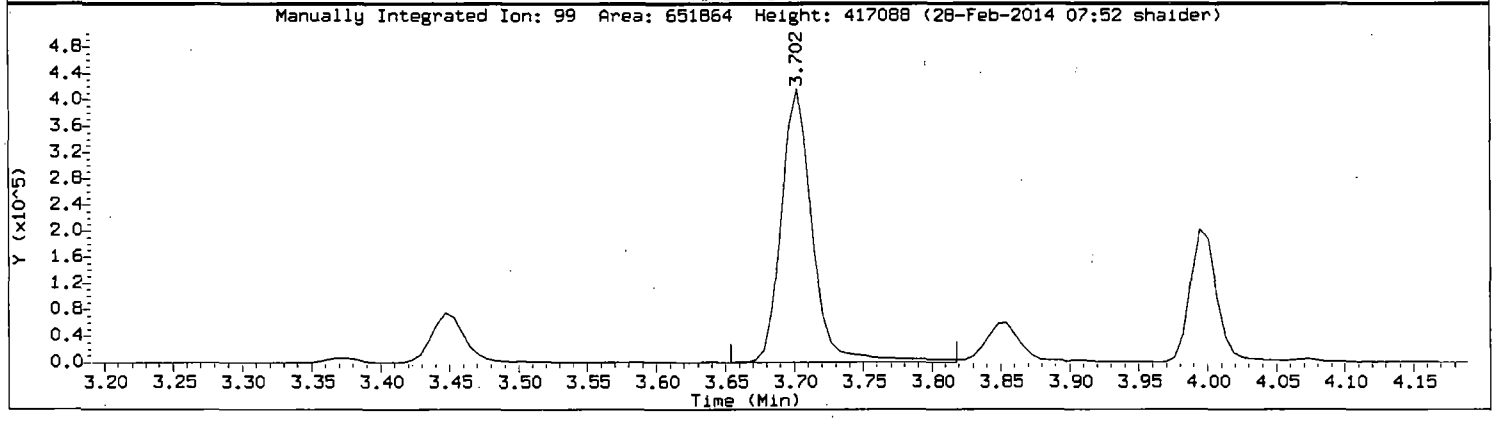
Injection Date: 26-FEB-2014 13:53
Instrument: 10msv5.i
Lab Sample ID: IC 100 10098-49

Compound: 1,1,1-Trichloroethane
CAS Number: 71-55-6

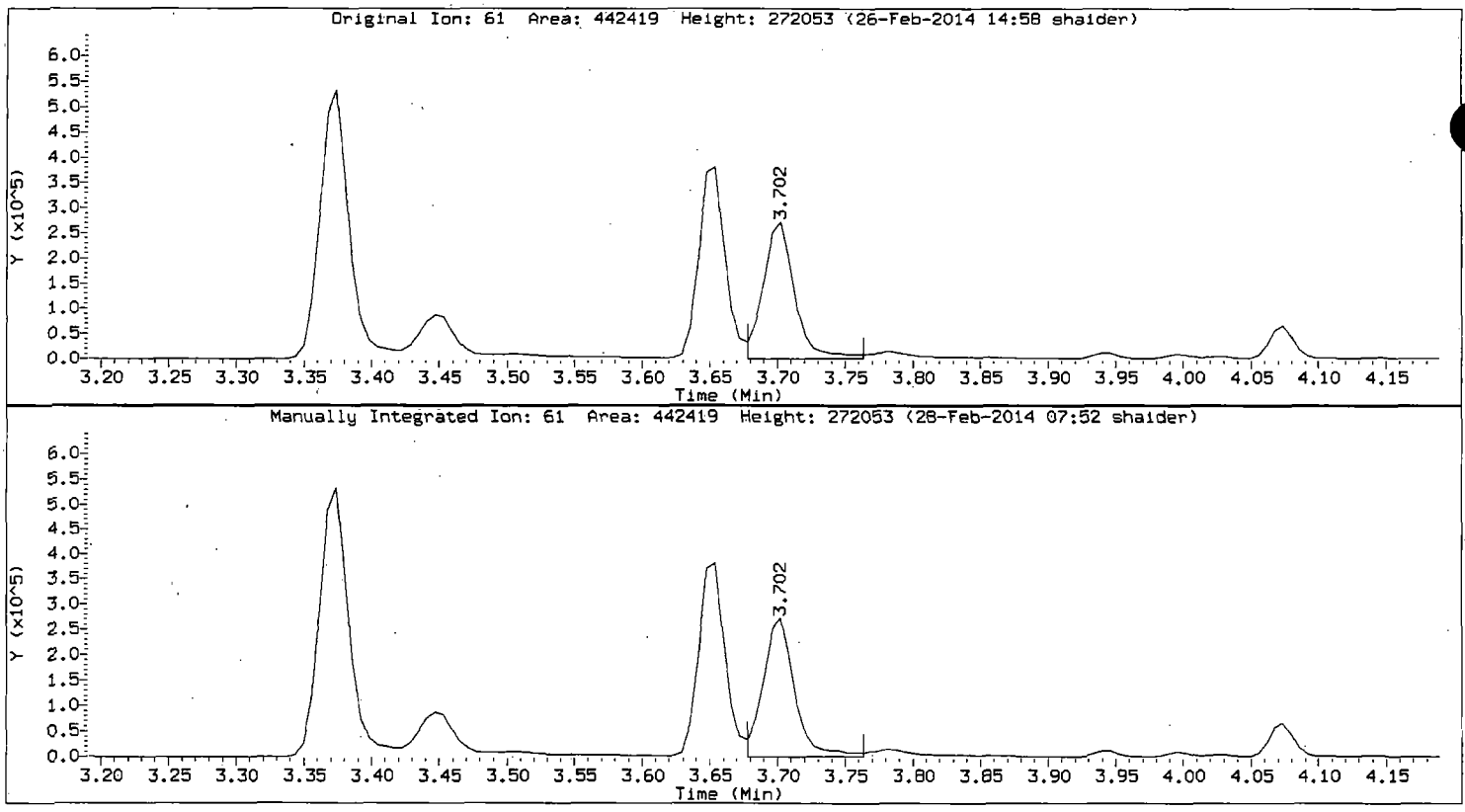






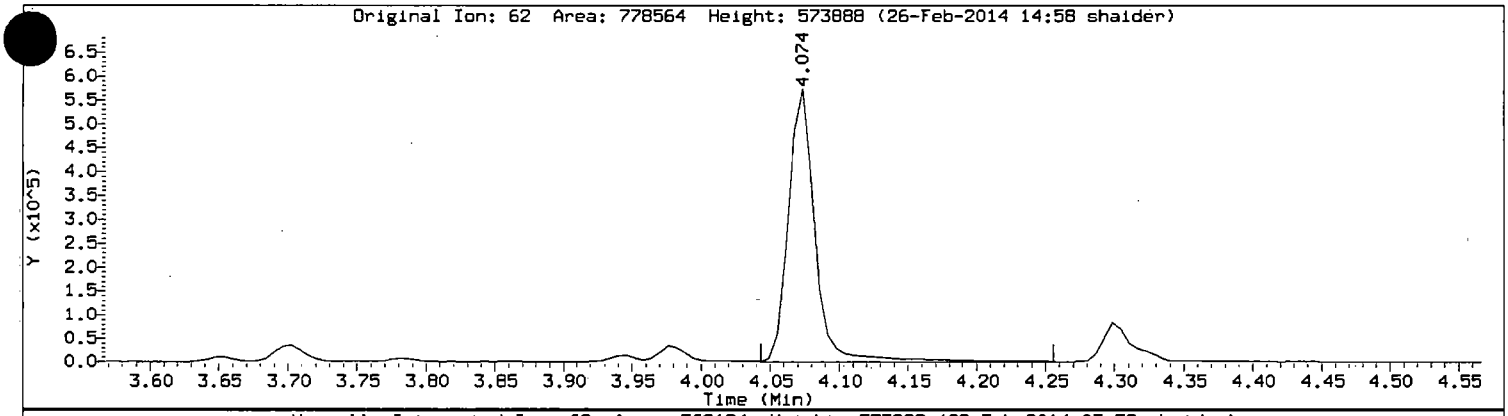


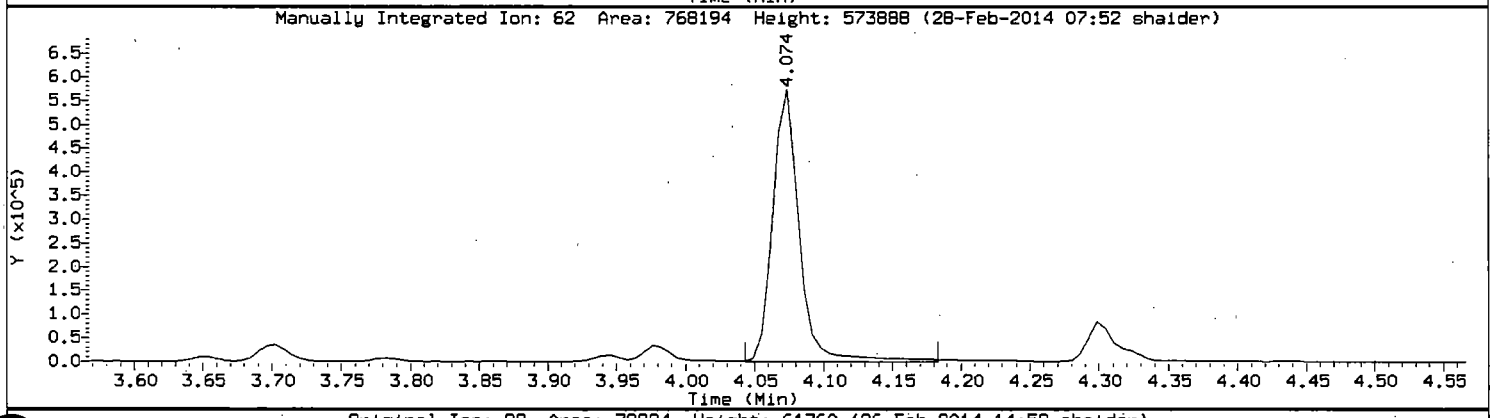
Injection Date: 28-FEB-2014 15:55
Instrument: 10msv5.i
Lab Sample ID: IC 100 10098-49

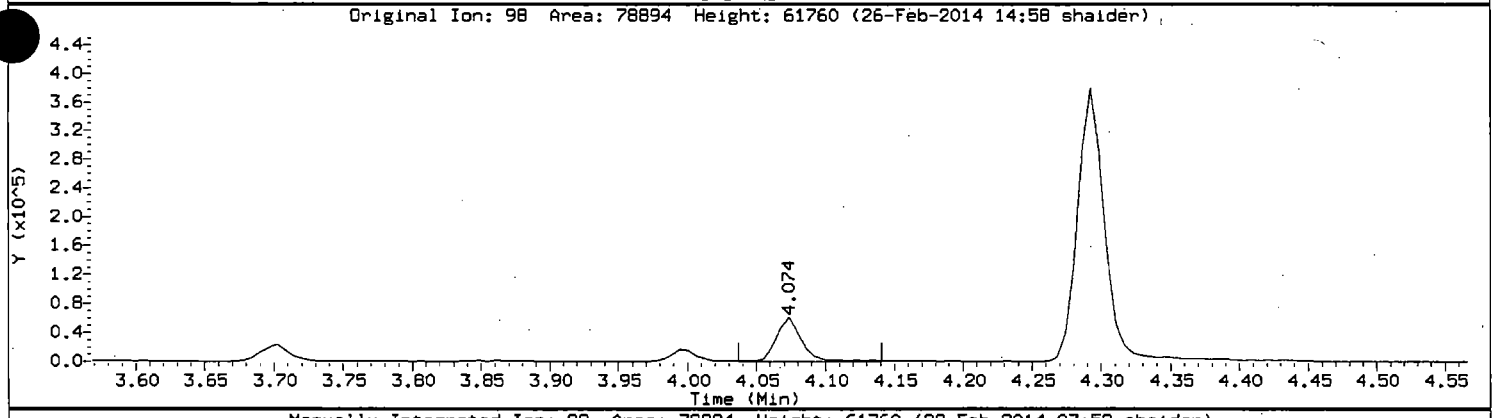


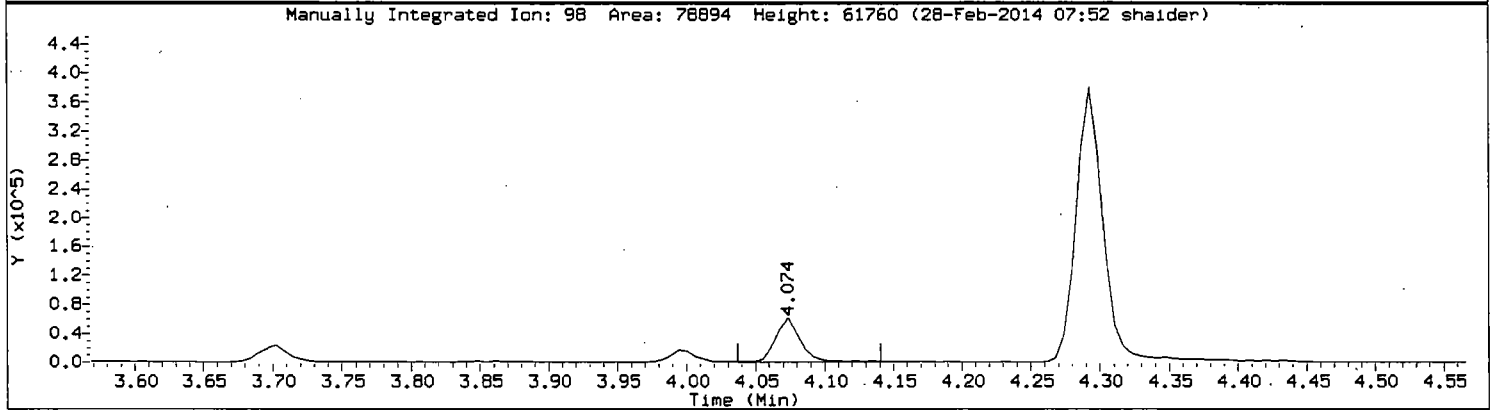
Injection Date: 26-FEB-2014 15:55
Instrument: 10msv5.i
Lab Sample ID: IC 100 10098-49

Compound: 1,2-Dichloroethane
CAS Number: 107-06-2









Data file: \\192.168.10.12\chem\10msv5.i\022614A.B\02261414.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261414.D
Lab Smp Id: IC 250 10098-49
Inj Date : 26-FEB-2014 14:08
Operator : SH2 Inst ID: 10msv5.i
Smp Info : IC 250 10098-49,1,1
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:52 shaider Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 14 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.121	1.116	(0.280)	2151445	250.000	273(A)
2	Chloromethane	50	1.230	1.231	(0.308)	2307011	250.000	287(A)
3	Vinyl Chloride	62	1.279	1.274	(0.320)	2197075	250.000	250(A)
4	Bromomethane	94	1.467	1.463	(0.367)	1099276	250.000	60.1
5	Chloroethane	64	1.534	1.536	(0.384)	1142635	250.000	248
6	Trichlorofluoromethane	101	1.619	1.615	(0.405)	2721545	250.000	285(A)
7	Dichlorofluoromethane	67	1.650	1.645	(0.413)	3010007	250.000	244
8	Diethyl ether (Ethyl Ether)	59	1.802	1.797	(0.451)	1130780	250.000	259(A)
9	Ethanol	45	1.893	1.882	(0.399)	136604	5000.00	1920(Q)
10	1,1-Dichloroethene	96	1.936	1.925	(0.484)	1499141	250.000	272(A)
11	Trichlorotrifluoroethane	101	1.954	1.949	(0.489)	1587173	250.000	250(A)
12	Carbon Disulfide	76	1.960	1.955	(0.490)	4623257	250.000	274(A)
13	Iodomethane	142	2.033	2.028	(0.509)	1392283	250.000	184(AM)
14	Acrolein	56	2.161	2.150	(0.541)	3273752	2500.00	2570(A)
15	Allyl Chloride	41	2.258	2.247	(0.565)	2320191	250.000	267(A)
16	Isopropanol	45	2.270	2.260	(0.478)	915940	2500.00	3000(A)
17	Methylene Chloride	84	2.337	2.326	(0.585)	1610932	250.000	275(A)
* 18	Acetone d6	46	2.337	2.326	(1.000)	158543	100.000	
19	Acetone	58	2.374	2.363	(1.016)	775069	1250.00	1250(A)
20	trans-1,2-Dichloroethene	96	2.453	2.448	(0.614)	1562886	250.000	258(AM)
21	Methyl Acetate	74	2.465	2.454	(0.617)	1510961	1250.00	1320(A)
22	Hexane	86	2.514	2.503	(1.075)	952208	625.000	686(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 Methyl-tert-butyl Ether	73	2.538	2.533	(0.635)	4663858	250.000	263(A)
	24 tert-Butyl Alcohol	59	2.617	2.606	(0.551)	2204687	2500.00	2750(A)
	25 Isopropyl Ether	45	2.854	2.850	(0.714)	5299600	250.000	267(A)
	26 Acetonitrile	41	2.854	2.850	(0.714)	1024222	2500.00	2770(A)
	27 Chloroprene	53	2.939	2.935	(0.735)	2476206	250.000	268(A)
	28 1,1-Dichloroethane	63	2.964	2.953	(0.741)	2858953	250.000	275(A)
	29 Acrylonitrile	53	3.012	2.996	(0.754)	6848175	2500.00	2640(A)
	30 Ethyl-tert-butyl ether	59	3.146	3.142	(0.787)	4894607	250.000	268(A)
	31 Vinyl Acetate	43	3.165	3.154	(0.792)	4448128	250.000	276(A)
	32 cis-1,2-Dichloroethene	96	3.371	3.361	(0.843)	1713631	250.000	259(A)
	33 2,2-Dichloropropane	77	3.450	3.440	(0.863)	2420955	250.000	260(A)
	34 Cyclohexane	56	3.511	3.501	(0.878)	13911272	1250.00	1270(A)
	35 Bromochloromethane	130	3.517	3.501	(0.880)	1023978	250.000	262(A)
	36 Chloroform	83	3.566	3.555	(0.892)	2916577	250.000	269(A)
	37 Carbon Tetrachloride	117	3.651	3.647	(0.913)	2230925	250.000	272(A)
	38 Ethyl Acetate	43	3.651	3.640	(0.913)	10987130	1250.00	1240
	39 Tetrahydrofuran	72	3.669	3.665	(1.570)	2755076	2500.00	2340
	40 sec-Butyl Alcohol	45	3.688	3.677	(0.777)	1683026	2500.00	2560(A)
	41 1,1,1-Trichloroethane	97	3.700	3.689	(0.925)	2698443	250.000	270(A)
	42 2-Butanone	43	3.773	3.768	(0.944)	4751456	1250.00	1240
	43 1,1-Dichloropropene	75	3.785	3.774	(0.947)	2258938	250.000	260(A)
	44 2,2,4-Trimethylpentane	57	3.852	3.841	(0.963)	3849514	250.000	269(A)
	45 Benzene	78	3.943	3.932	(0.986)	6439984	250.000	253(A)
	46 Propionitrile	54	3.974	3.957	(0.994)	2563077	2500.00	2550(A)
	47 Methacrylonitrile	41	3.980	3.969	(0.995)	5806682	250.000	238(A)
*	48 Pentafluorobenzene	168	3.998	3.987	(1.000)	527787	50.0000	
	49 Tert-amyl methyl ether	73	4.016	4.012	(1.005)	4959514	250.000	260(A)
$	50 1,2-Dichloroethane d4 (S)	65	4.035	4.024	(1.009)	276470	50.0000	52.7(Q)
	51 1,2-Dichloroethane	62	4.071	4.066	(1.018)	2058319	250.000	276(A)
	52 Isobutanol	43	4.089	4.078	(0.862)	1982383	5000.00	5710(A)
	53 Tert-Amyl Alcohol	59	4.150	4.139	(0.874)	2232122	2500.00	2630(A)
	54 Methylcylohexane	98	4.296	4.285	(1.075)	1381737	250.000	268(A)
	55 Trichloroethene	130	4.302	4.291	(0.996)	1883817	250.000	264(A)
*	56 1,4 Difluorobenzene	114	4.320	4.316	(1.000)	802307	50.0000	
	57 Tert-amyl ethyl ether	59	4.442	4.431	(1.028)	4085647	250.000	264(A)
	58 n-Butanol	56	4.503	4.498	(0.949)	475548	2500.00	2720(A)
	59 Dibromomethane	174	4.552	4.547	(1.053)	1140927	250.000	278(A)
	60 1,2-Dichloropropane	63	4.606	4.602	(1.066)	1677492	250.000	273(A)
	61 Ethyl Arcylate	55	4.619	4.608	(1.069)	2763339	250.000	272(A)
	62 Bromodichloromethane	83	4.643	4.638	(1.075)	2263093	250.000	262(A)
	63 Methyl Methacrylate	69	4.734	4.723	(1.096)	1484768	1250.00	1260(A)
*	64 1,4 dioxane d8	96	4.746	4.735	(1.000)	40434	2000.00	
	65 1,4-Dioxane (P-Dioxane)	88	4.758	4.754	(1.003)	128669	5000.00	5370(A)
	66 3-Pentanone	57	4.856	4.845	(1.124)	1636180	250.000	270(A)
	67 2-Chloroethyl Vinyl Ether	63	4.965	4.954	(1.149)	2957503	625.000	657(A)
	68 cis-1,3-Dichloropropene	75	4.996	4.991	(1.156)	2667940	250.000	271(A)
$	69 Toluene-d8 (S)	98	5.099	5.088	(0.861)	969254	50.0000	50.0
	70 Toluene	92	5.123	5.119	(0.865)	4199860	250.000	254(A)
	71 2-Nitropropane	43	5.330	5.319	(0.900)	9706318	1250.00	1140
	72 Tetrachloroethene	166	5.330	5.326	(0.900)	2034304	250.000	271(A)
	73 4-Methyl-2-Pentanone	43	5.330	5.319	(0.900)	9706318	1250.00	1140
	74 trans-1,3-Dichloropropene	75	5.349	5.344	(0.903)	2588690	250.000	267(A)
	75 4-Methyl-2-pentanol	45	5.379	5.374	(1.133)	6594926	2500.00	2500
	76 Ethyl Methacrylate	69	5.428	5.423	(0.917)	2675899	250.000	247

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
77	1,1,2-Trichloroethane	97	5.434	5.429	(0.918)	1515673	250.000	250(A)
78	Dibromochloromethane	129	5.531	5.526	(0.934)	1861414	250.000	266(A)
79	1,3-Dichloropropane	76	5.580	5.575	(0.942)	2543787	250.000	255(A)
80	1,2-Dibromoethane	107	5.659	5.648	(0.956)	1701194	250.000	262(A)
81	2-Hexanone	43	5.768	5.757	(0.974)	7650998	1250.00	1180
* 82	Chlorobenzene-d5	117	5.920	5.916	(1.000)	763037	50.0000	
83	Chlorobenzene	112	5.926	5.922	(1.001)	4515656	250.000	251(A)
84	Ethylbenzene	91	5.939	5.928	(1.003)	7638592	250.000	232
85	1,1,1,2-Tetrachloroethane	131	5.963	5.952	(1.007)	1738092	250.000	262(A)
86	M&P-Xylene	106	6.012	6.007	(1.015)	6119560	500.000	493
87	O-Xylene (1,2-Dimethylbenzene)	106	6.237	6.232	(1.053)	3052164	250.000	252(A)
88	Styrene	104	6.261	6.256	(1.058)	5079833	250.000	255(A)
89	Bromoform	173	6.285	6.281	(1.062)	1511402	250.000	275(A)
90	Isopropylbenzene (Cumene)	105	6.395	6.390	(1.080)	7318573	250.000	245
$ 91	4-Bromofluorobenzene (S)	95	6.553	6.542	(0.907)	397249	50.0000	50.7
92	cis-1,4-Dichloro-2-Butene	53	6.583	6.579	(0.911)	812031	250.000	299(A)
93	Bromobenzene	156	6.614	6.609	(0.915)	1998093	250.000	258(A)
94	n-Propylbenzene	91	6.614	6.609	(0.915)	8301969	250.000	236
95	1,1,2,2-Tetrachloroethane	83	6.656	6.652	(0.921)	2271604	250.000	244
96	2-Chlorotoluene	91	6.711	6.707	(0.928)	5730792	250.000	249
97	1,3,5-Trimethylbenzene	105	6.723	6.719	(0.930)	6014299	250.000	249
98	1,2,3-Trichloropropane	110	6.742	6.737	(0.933)	731194	250.000	266(A)
99	trans-1,4-Dichloro-2-Butene	53	6.760	6.755	(0.935)	1838129	625.000	709(A)
100	4-Chlorotoluene	91	6.809	6.804	(0.942)	5292235	250.000	247
101	tert-Butylbenzene	119	6.918	6.913	(0.957)	5041484	250.000	249
102	1,2,4-Trimethylbenzene	105	6.961	6.956	(0.963)	6015145	250.000	251(A)
103	sec-Butylbenzene	105	7.034	7.029	(0.973)	6858454	250.000	248
104	p-Isopropyltoluene	119	7.119	7.114	(0.985)	5902921	250.000	250
105	1,3-Dichlorobenzene	146	7.180	7.175	(0.993)	3444560	250.000	255(A)
* 106	1,4-Dichlorobenzene-d4	152	7.228	7.224	(1.000)	420844	50.0000	
107	1,4-Dichlorobenzene	146	7.234	7.230	(1.001)	3563627	250.000	255(A)
108	1,2,3 Trimethylbenzene	105	7.247	7.236	(1.812)	6025811	250.000	255(A)
109	n-Butylbenzene	91	7.393	7.388	(1.023)	5059303	250.000	256(A)
110	1,2-Dichlorobenzene	146	7.514	7.510	(1.040)	3269867	250.000	252(A)
111	1,2-Dibromo-3-Chloropropane	157	8.056	8.051	(1.114)	1637484	625.000	636(A)
112	Hexachlorobutadiene	225	8.500	8.495	(1.176)	869704	250.000	270(A)
113	1,2,4-Trichlorobenzene	180	8.524	8.519	(1.179)	1920182	250.000	266(A)
114	Naphthalene	128	8.761	8.757	(1.212)	6277801	250.000	242
115	1,2,3-Trichlorobenzene	180	8.889	8.890	(1.230)	1833411	250.000	260(A)
116	2-Methylnaphthalene	142	9.528	9.523	(1.318)	1570949	125.000	128(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261414.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261414.D
Lab Smp Id: IC 250 10098-49
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:52
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

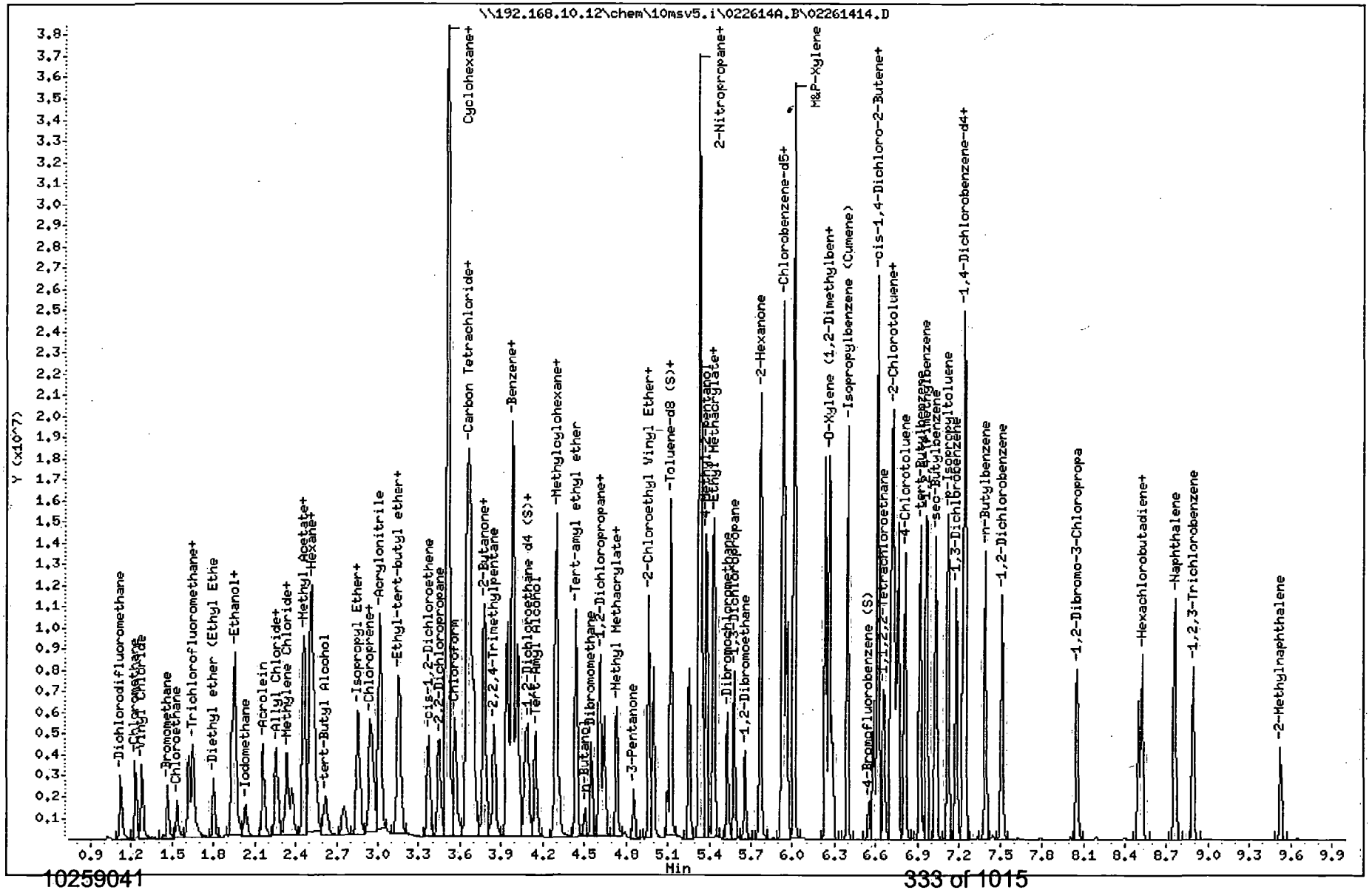
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	132549	66275	265098	158543	19.61
48 Pentafluorobenzen	514078	257039	1028156	527787	2.67
56 1,4 Difluorobenze	796453	398227	1592906	802307	0.74
64 1,4 dioxane d8	17142	8571	34284	40434	135.88 <-
82 Chlorobenzene-d5	743514	371757	1487028	763037	2.63
106 1,4-Dichlorobenze	400705	200353	801410	420844	5.03

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.34	0.52
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.15
56 1,4 Difluorobenze	4.31	3.81	4.81	4.32	0.14
64 1,4 dioxane d8	4.74	4.24	5.24	4.75	0.13
82 Chlorobenzene-d5	5.91	5.41	6.41	5.92	0.10
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.23	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

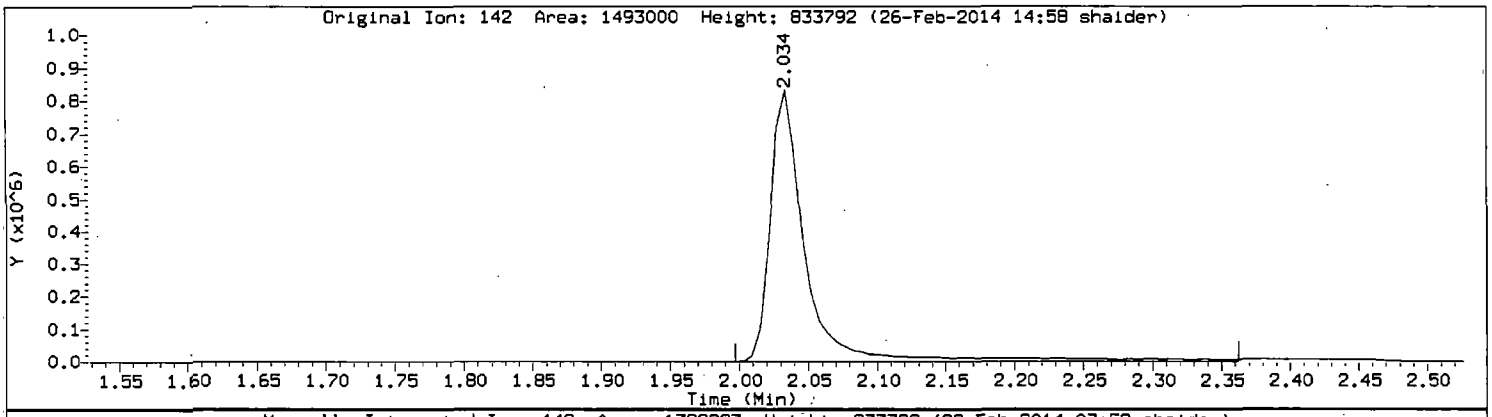
Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261414.D
Date : 26-FEB-2014 14:08
Client ID:
Sample Info: IC 250 10098-49,1,1
Purge Volume: 10.0
Column phase: Rtx-VMS

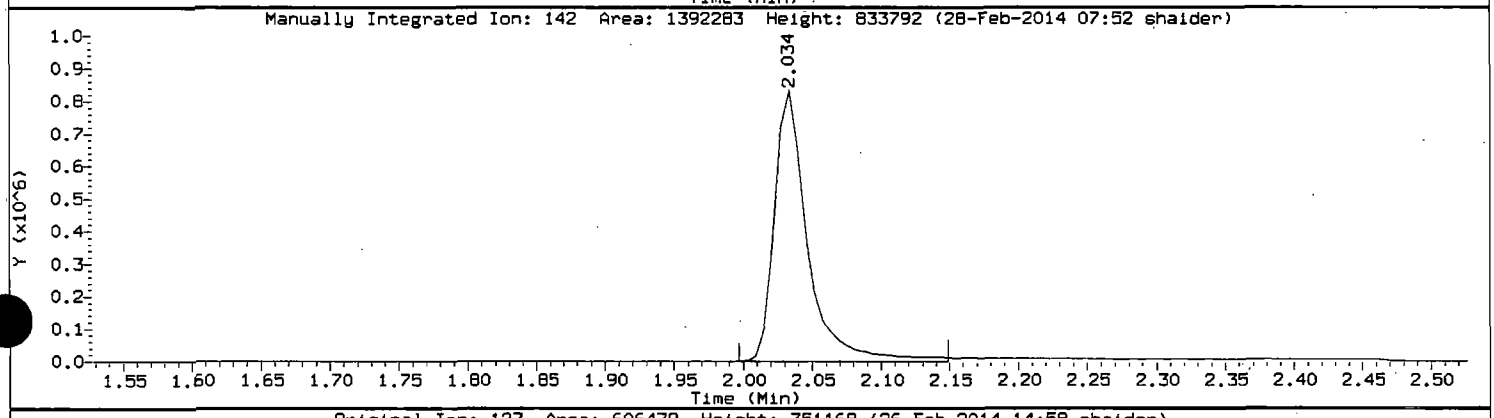
Instrument: 10msv5.i
Operator: SH2
Column diameter: 0.18

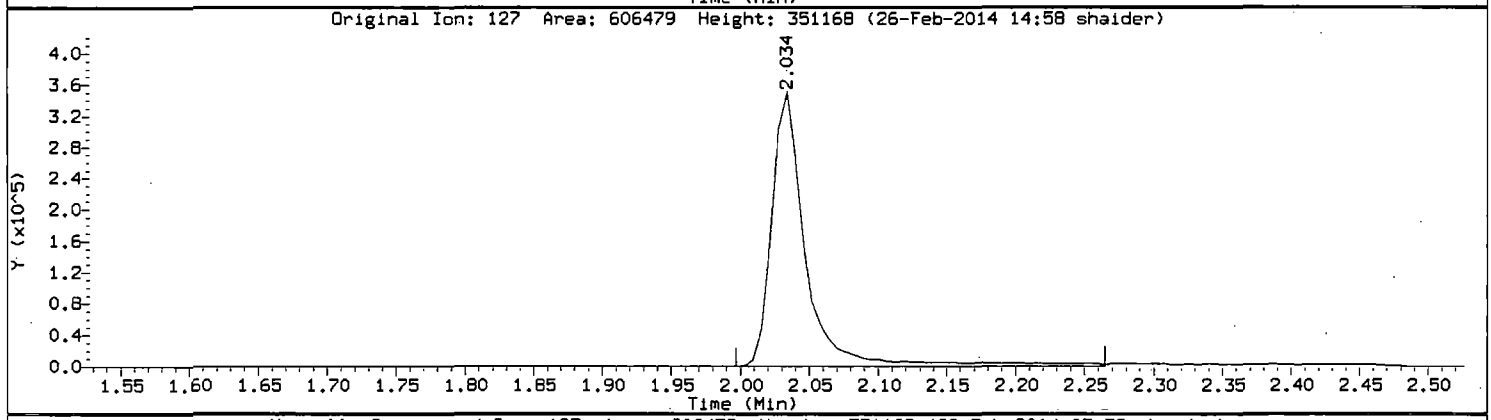


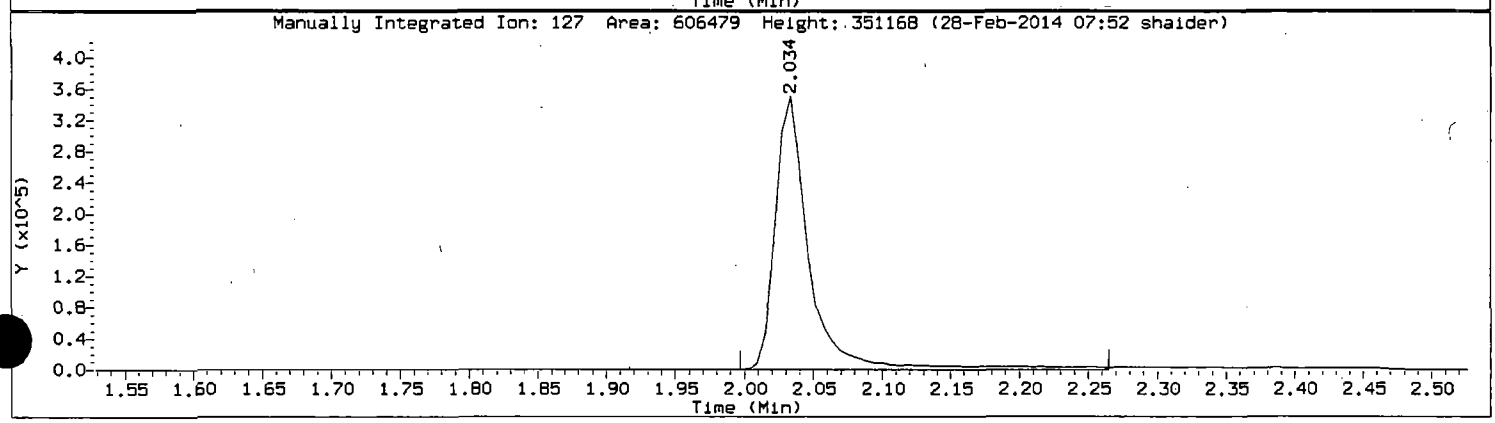
Data File: \\192.168.10.12\chem\10msv5.i\022614A.B/02261414.D
Injection Date: 26-FEB-2014 14:08
Instrument: 10msv5.i
Lab Sample ID: IC 250 10098-49

Compound: Iodomethane
CAS Number: 74-88-4

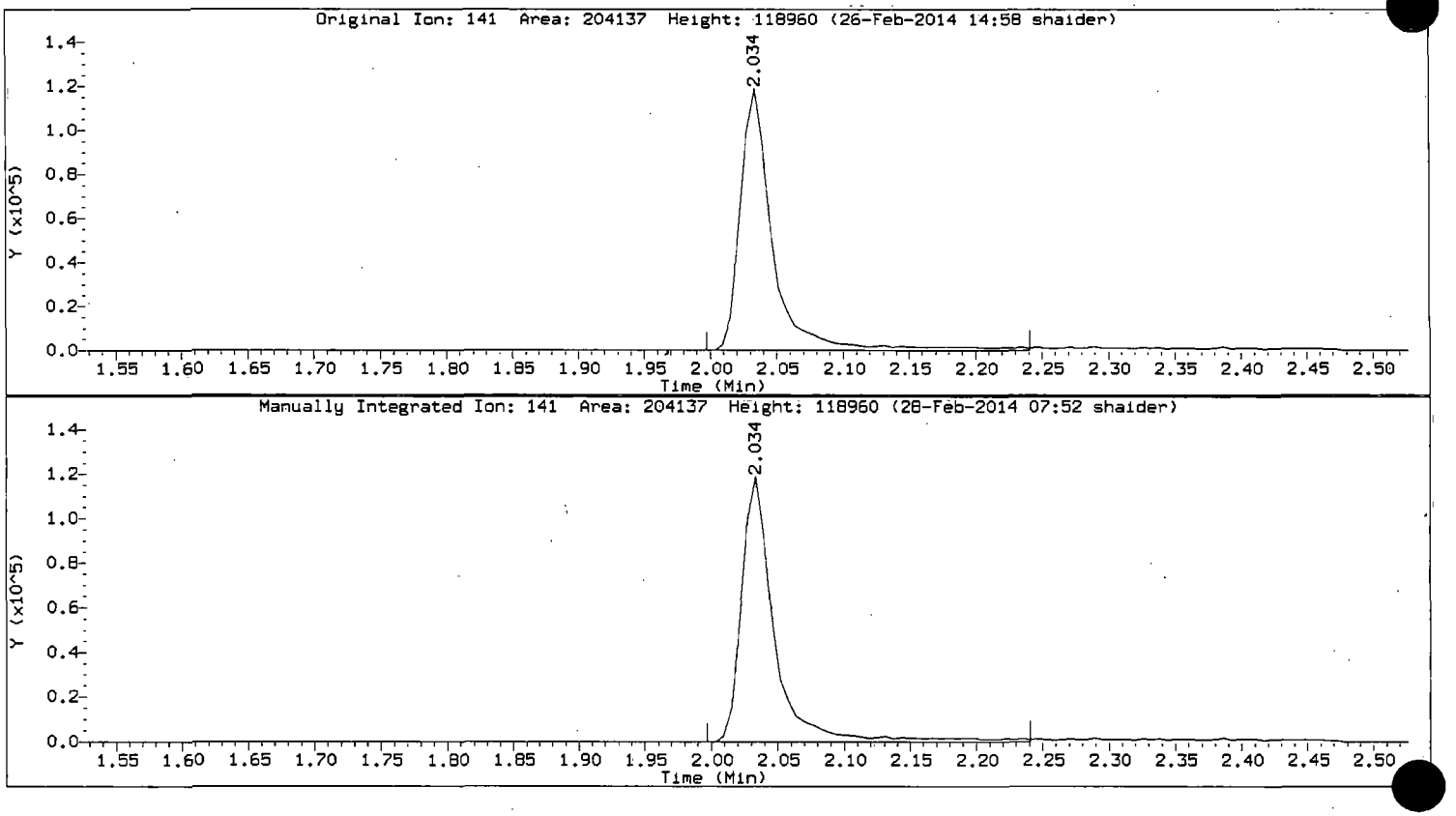






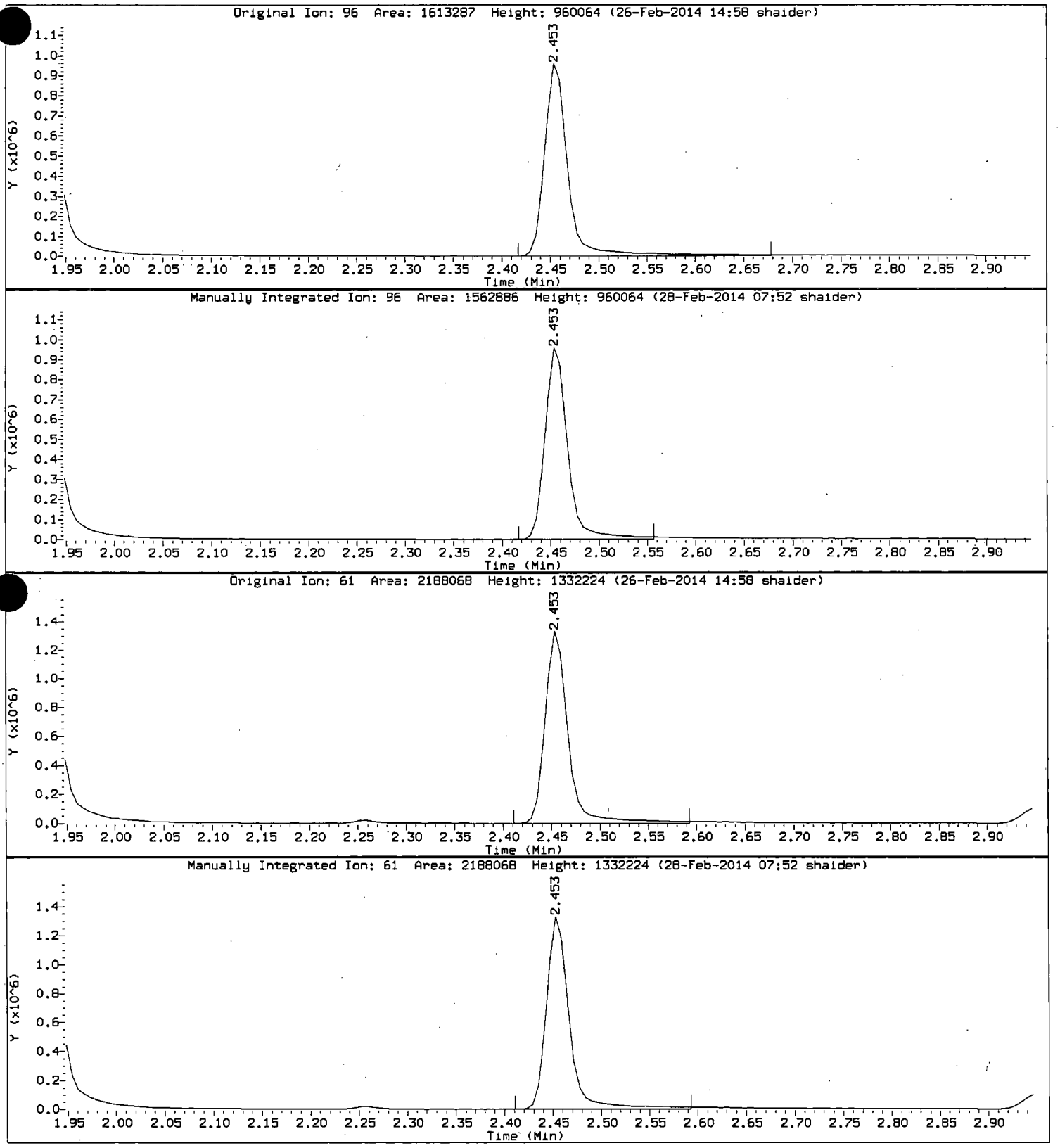


Data File: \\192.168.10.12\chem\10msv5.i\022614A.B/02261414.D
Injection Date: 26-FEB-2014 14:08
Instrument: 10msv5.i
Lab Sample ID: IC 250 10098-49

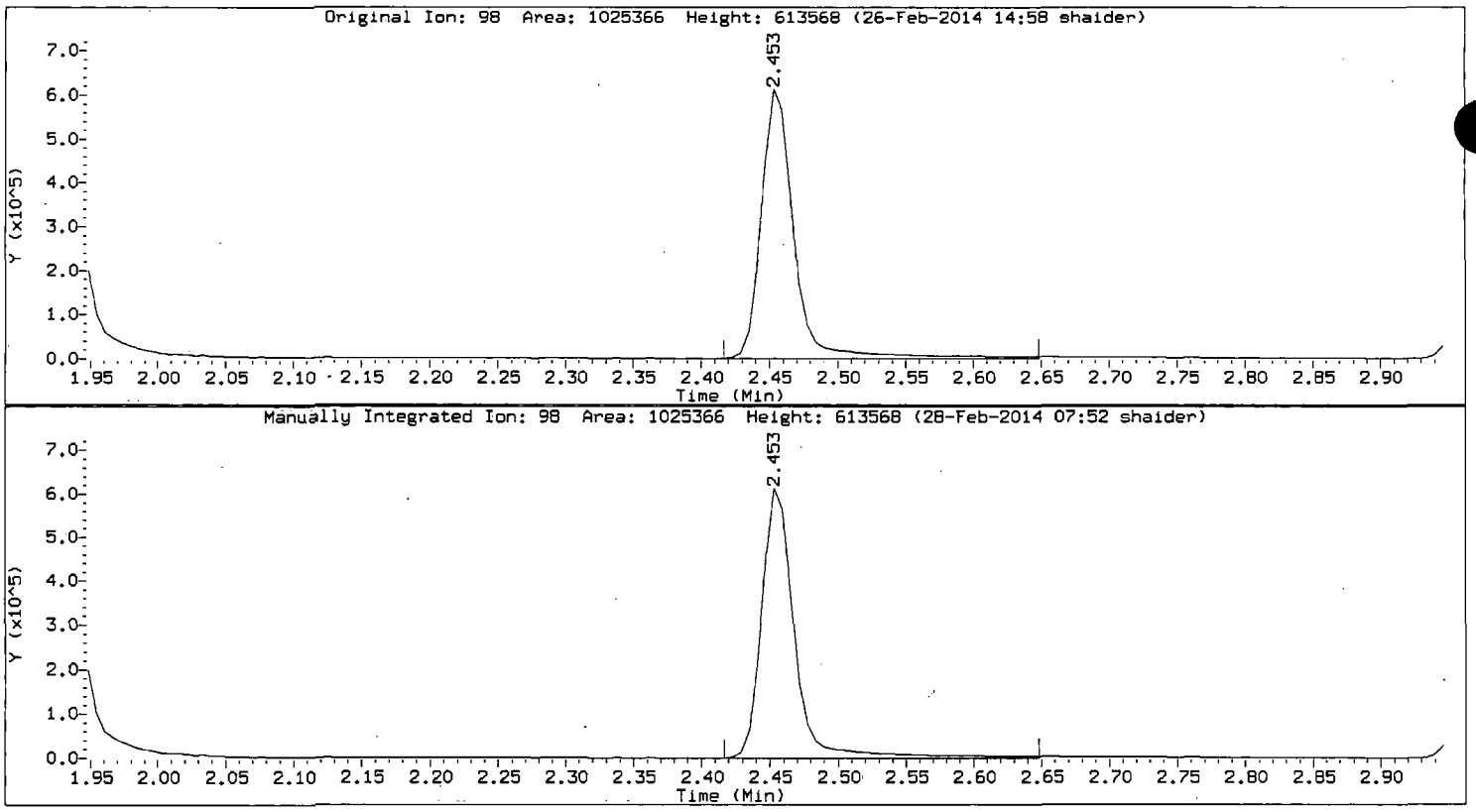


Injection Date: 26-FEB-2014 14:08
Instrument: 10msv5.i
Lab Sample ID: IC 250 10098-49

Compound: trans-1,2-Dichloroethene
CAS Number: 156-60-5



Injection Date: 26-FEB-2014 14:08
Instrument: 10msv5.i
Lab Sample ID: IC 250 10098-49



Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261418.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv5.i Injection Date: 26-FEB-2014 16:52
Lab File ID: 02261418.D Init. Cal. Date(s): 26-FEB-2014 26-FEB-2014
Analysis Type: WATER Init. Cal. Times: 12:09 14:08
Lab Sample ID: ICV 20 9525-595 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.74567	0.81618	0.81618	0.100	9.45616	30.00000	Averaged
2 Chloromethane	0.76230	0.82545	0.82545	0.100	8.28508	30.00000	Averaged
3 Vinyl Chloride	20.00000	20.06479	0.78140	0.100	0.32394	20.00000	Quadratic
4 Bromomethane	20.00000	24.71167	0.29882	0.050	23.55834	30.00000	Quadratic
5 Chloroethane	0.43600	0.44909	0.44909	0.050	3.00344	30.00000	Averaged
6 Trichlorofluoromethane	0.90429	0.92459	0.92459	0.100	2.24438	30.00000	Averaged
7 Dichlorofluoromethane	1.16740	1.06431	1.06431	0.010	-8.83055	30.00000	Averaged
8 Diethyl ether (Ethyl Ether)	0.41392	0.36031	0.36031	0.010	-12.95125	30.00000	Averaged
9 Ethanol	400	711	2.51906	0.050	77.65894	30.00000	Quadratic <-
10 1,1-Dichloroethene	0.52186	0.51981	0.51981	0.100	-0.39206	20.00000	Averaged
11 Trichlorotrifluoroethane	20.00000	18.55078	0.49751	0.010	-7.24608	30.00000	Quadratic
12 Carbon Disulfide	1.59905	1.47169	1.47169	0.100	-7.96475	30.00000	Averaged
13 Iodomethane	20.00000	15.67412	0.29041	0.010	-21.62942	30.00000	Quadratic
14 Acrolein	0.12086	0.11360	0.11360	0.010	-6.00367	30.00000	Averaged
15 Allyl Chloride	0.82379	0.91223	0.91223	0.010	10.73530	30.00000	Averaged
16 Isopropanol	15.11247	23.35874	23.35874	0.010	54.56600	30.00000	Averaged <-
17 Methylene Chloride	0.55435	0.54420	0.54420	0.100	-1.83031	30.00000	Averaged
19 Acetone	0.39085	0.40443	0.40443	0.010	3.47468	30.00000	Averaged
20 trans-1,2-Dichloroethene	0.57337	0.55441	0.55441	0.100	-3.30769	20.00000	Averaged
21 Methyl Acetate	0.10822	0.10064	0.10064	0.010	-7.00393	30.00000	Averaged
22 Hexane	0.87553	1.11120	1.11120	0.010	26.91776	30.00000	Averaged
23 Methyl-tert-butyl Ether	1.67998	1.62465	1.62465	0.300	-3.29316	20.00000	Averaged
24 tert-Butyl Alcohol	39.59003	78.40439	78.40439	0.010	98.04072	20.00000	Averaged <-
25 Isopropyl Ether	1.87834	1.81049	1.81049	0.010	-3.61219	30.00000	Averaged
26 Acetonitrile	0.03502	0.03255	0.03255	0.010	-7.06123	30.00000	Averaged
27 Chloroprene	0.87389	0.83418	0.83418	0.010	-4.54439	30.00000	Averaged
28 1,1-Dichloroethane	0.98559	0.91274	0.91274	0.200	-7.39124	20.00000	Averaged
29 Acrylonitrile	0.24610	0.22216	0.22216	0.010	-9.72664	30.00000	Averaged
30 Ethyl-tert-butyl ether	1.73241	1.71969	1.71969	0.010	-0.73466	20.00000	Averaged
31 Vinyl Acetate	1.52781	1.53537	1.53537	0.010	0.49488	30.00000	Averaged
32 cis-1,2-Dichloroethene	0.62738	0.61482	0.61482	0.100	-2.00279	20.00000	Averaged
33 2,2-Dichloropropane	0.88198	0.85058	0.85058	0.010	-3.55976	30.00000	Averaged
34 Cyclohexane	1.03672	0.99334	0.99334	0.100	-4.18465	30.00000	Averaged
35 Bromochloromethane	0.36997	0.37587	0.37587	0.010	1.59661	30.00000	Averaged
36 Chloroform	1.02589	1.00905	1.00905	0.200	-1.64221	20.00000	Averaged
37 Carbon Tetrachloride	0.77811	0.81464	0.81464	0.100	4.69503	30.00000	Averaged
38 Ethyl Acetate	0.84039	0.77612	0.77612	0.010	-7.64859	30.00000	Averaged
39 Tetrahydrofuran	0.74235	0.73647	0.73647	0.010	-0.79220	30.00000	Averaged
40 sec-Butyl Alcohol	32.51462	68.06516	68.06516	0.010	109	30.00000	Averaged <-
41 1,1,1-Trichloroethane	0.94477	0.88215	0.88215	0.100	-6.62812	20.00000	Averaged
42 2-Butanone	0.36156	0.31156	0.31156	0.050	-13.82688	30.00000	Averaged
43 1,1-Dichloropropene	0.82423	0.80847	0.80847	0.010	-1.91120	30.00000	Averaged
44 2,2,4-Trimethylpentane	1.35322	1.36723	1.36723	0.010	1.03551	30.00000	Averaged

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261418.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv5.i Injection Date: 26-FEB-2014 16:52
Lab File ID: 02261418.D Init. Cal. Date(s): 26-FEB-2014 26-FEB-2014
Analysis Type: WATER Init. Cal. Times: 12:09 14:08
Lab Sample ID: ICV 20 9525-595 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 Benzene	2.41315	2.31964	2.31964	0.500	-3.87514	20.00000	Averaged
46 Propionitrile	0.09530	0.07895	0.07895	0.010	-17.15186	30.00000	Averaged
47 Methacrylonitrile	20.00000	18.87277	1.94271	0.010	-5.63615	30.00000	Quadratic
49 Tert-amyl methyl ether	1.80738	1.69780	1.69780	0.010	-6.06300	20.00000	Averaged
$ 50 1,2-Dichloroethane d4 (S)	0.49711	0.52486	0.52486	0.200	5.58187	30.00000	Averaged
51 1,2-Dichloroethane	0.70734	0.68921	0.68921	0.100	-2.56300	20.00000	Averaged
52 Isobutanol	17.17170	35.19181	35.19181	0.010	105	30.00000	Averaged<-
53 Tert-Amyl Alcohol	41.90977	85.03895	85.03895	0.010	103	30.00000	Averaged<-
54 Methylcylohexane	0.48816	0.45041	0.45041	0.010	-7.73175	40.00000	Averaged
55 Trichloroethene	0.44553	0.41153	0.41153	0.200	-7.63076	20.00000	Averaged
57 Tert-amyl ethyl ether	0.96313	0.90727	0.90727	0.010	-5.79949	20.00000	Averaged
58 n-Butanol	8.63368	14.50624	14.50624	0.010	68.01924	30.00000	Averaged<-
59 Dibromomethane	0.25575	0.24953	0.24953	0.010	-2.43026	30.00000	Averaged
60 1,2-Dichloropropane	0.38313	0.37496	0.37496	0.100	-2.13110	20.00000	Averaged
61 Ethyl Arcylate	0.63283	0.61064	0.61064	0.010	-3.50557	30.00000	Averaged
62 Bromodichloromethane	0.53761	0.50646	0.50646	0.050	-5.79434	30.00000	Averaged
63 Methyl Methacrylate	0.07362	0.06746	0.06746	0.010	-8.36977	30.00000	Averaged
65 1,4-Dioxane (P-Dioxane)	1.18450	1.57383	1.57383	0.010	32.86939	30.00000	Averaged<-
66 3-Pentanone	0.37692	0.34752	0.34752	0.010	-7.79839	30.00000	Averaged
67 2-Chloroethyl Vinyl Ether	0.28043	0.26508	0.26508	0.010	-5.47495	30.00000	Averaged
68 cis-1,3-Dichloropropene	0.61400	0.62426	0.62426	0.050	1.66963	30.00000	Averaged
$ 69 Toluene-d8 (S)	1.27128	1.30514	1.30514	0.200	2.66360	30.00000	Averaged
70 Toluene	1.08438	1.05650	1.05650	0.400	-2.57144	20.00000	Averaged
71 2-Nitropropane	0.55878	0.51752	0.51752	0.010	-7.38294	30.00000	Averaged
72 Tetrachloroethene	0.49173	0.48182	0.48182	0.200	-2.01545	20.00000	Averaged
73 4-Methyl-2-Pentanone	0.55974	0.51752	0.51752	0.100	-7.54164	30.00000	Averaged
74 trans-1,3-Dichloropropene	0.63545	0.60897	0.60897	0.100	-4.16626	30.00000	Averaged
75 4-Methyl-2-pentanol	200	460	321	0.010	130	30.00000	Quadratic<-
76 Ethyl Methacrylate	0.71080	0.67646	0.67646	0.010	-4.83119	30.00000	Averaged
77 1,1,2-Trichloroethane	0.39650	0.36729	0.36729	0.100	-7.36684	30.00000	Averaged
78 Dibromochloromethane	0.45844	0.46163	0.46163	0.100	0.69460	30.00000	Averaged
79 1,3-Dichloropropane	0.65381	0.62909	0.62909	0.010	-3.78112	30.00000	Averaged
80 1,2-Dibromoethane	0.42482	0.41902	0.41902	0.100	-1.36681	20.00000	Averaged
81 2-Hexanone	0.42600	0.38077	0.38077	0.050	-10.61752	30.00000	Averaged
83 Chlorobenzene	1.17680	1.12710	1.12710	0.500	-4.22323	30.00000	Averaged
84 Ethylbenzene	2.15497	2.04114	2.04114	0.300	-5.28232	20.00000	Averaged
85 1,1,1,2-Tetrachloroethane	0.43438	0.41910	0.41910	0.010	-3.51815	30.00000	Averaged
86 M&P-Xylene	0.81281	0.79522	0.79522	0.300	-2.16296	20.00000	Averaged
87 O-Xylene (1,2-Dimethylbenze	0.79484	0.74169	0.74169	0.300	-6.68730	20.00000	Averaged
88 Styrene	1.30424	1.25002	1.25002	0.300	-4.15719	30.00000	Averaged
89 Bromoform	0.35964	0.34798	0.34798	0.100	-3.24248	30.00000	Averaged
90 Isopropylbenzene (Cumene)	1.95960	1.90147	1.90147	0.100	-2.96665	30.00000	Averaged
$ 91 4-Bromofluorobenzene (S)	0.93110	0.94737	0.94737	0.200	1.74753	30.00000	Averaged

Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv5.i Injection Date: 26-FEB-2014 16:52
Lab File ID: 02261418.D Init. Cal. Date(s): 26-FEB-2014 26-FEB-2014
Analysis Type: WATER Init. Cal. Times: 12:09 14:08
Lab Sample ID: ICV 20 9525-595 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
92 cis-1,4-Dichloro-2-Butene	0.32227	0.31225	0.31225	0.010	-3.10807	30.00000	Averaged
93 Bromobenzene	0.91966	0.87825	0.87825	0.010	-4.50295	30.00000	Averaged
94 n-Propylbenzene	4.17862	3.99957	3.99957	0.010	-4.28503	30.00000	Averaged
95 1,1,2,2-Tetrachloroethane	1.10442	1.03329	1.03329	0.300	-6.43994	30.00000	Averaged
96 2-Chlorotoluene	2.73086	2.63357	2.63357	0.010	-3.56245	30.00000	Averaged
97 1,3,5-Trimethylbenzene	2.86846	2.76283	2.76283	0.300	-3.68262	20.00000	Averaged
98 1,2,3-Trichloropropane	0.32615	0.32639	0.32639	0.010	0.07178	30.00000	Averaged
99 trans-1,4-Dichloro-2-Butene	0.30805	0.26385	0.26385	0.010	-14.35007	30.00000	Averaged
100 4-Chlorotoluene	2.54156	2.41349	2.41349	0.010	-5.03903	30.00000	Averaged
101 tert-Butylbenzene	2.40902	2.35128	2.35128	0.010	-2.39705	30.00000	Averaged
102 1,2,4-Trimethylbenzene	2.84616	2.77625	2.77625	0.300	-2.45641	20.00000	Averaged
103 sec-Butylbenzene	3.28976	3.22724	3.22724	0.010	-1.90025	30.00000	Averaged
104 p-Isopropyltoluene	2.80853	2.63597	2.63597	0.010	-6.14417	30.00000	Averaged
105 1,3-Dichlorobenzene	1.60187	1.54960	1.54960	0.600	-3.26337	30.00000	Averaged
107 1,4-Dichlorobenzene	1.66092	1.57036	1.57036	0.500	-5.45184	30.00000	Averaged
108 1,2,3 Trimethylbenzene	2.24070	2.16636	2.16636	0.010	-3.31778	40.00000	Averaged
109 n-Butylbenzene	2.34574	2.30694	2.30694	0.010	-1.65386	30.00000	Averaged
110 1,2-Dichlorobenzene	1.54316	1.45054	1.45054	0.400	-6.00185	30.00000	Averaged
111 1,2-Dibromo-3-Chloropropane	0.30610	0.26922	0.26922	0.010	-12.05032	30.00000	Averaged
112 Hexachlorobutadiene	0.38198	0.43100	0.43100	0.010	12.83136	30.00000	Averaged
113 1,2,4-Trichlorobenzene	0.85802	0.86887	0.86887	0.200	1.26393	30.00000	Averaged
114 Naphthalene	3.08826	2.96316	2.96316	0.300	-4.05082	20.00000	Averaged
115 1,2,3-Trichlorobenzene	0.83916	0.79225	0.79225	0.010	-5.58964	30.00000	Averaged
116 2-Methylnaphthalene	1.45576	1.29902	1.29902	0.100	-10.76699	20.00000	Averaged

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261418.D
Lab Smp Id: ICV 20 9525-595
Inj Date : 26-FEB-2014 16:52
Operator : SH2 Inst ID: 10msv5.i
Smp Info : ICV 20 9525-595
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:53 10msv5.i Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.116	1.116	(0.280)	172076	20.0000	21.9
2	Chloromethane	50	1.231	1.231	(0.309)	174031	20.0000	21.6
3	Vinyl Chloride	62	1.274	1.274	(0.320)	164744	20.0000	20.1
4	Bromomethane	94	1.463	1.463	(0.367)	63001	20.0000	24.7
5	Chloroethane	64	1.536	1.536	(0.385)	94682	20.0000	20.6
6	Trichlorofluoromethane	101	1.615	1.615	(0.405)	194932	20.0000	20.4
7	Dichlorofluoromethane	67	1.645	1.645	(0.413)	224389	20.0000	18.2
8	Diethyl ether (Ethyl Ether)	59	1.797	1.797	(0.451)	75965	20.0000	17.4
9	Ethanol	45	1.882	1.882	(0.398)	6015	400.000	711(Q)
10	1,1-Dichloroethene	96	1.925	1.925	(0.483)	109592	20.0000	19.9
11	Trichlorotrifluoroethane	101	1.949	1.949	(0.489)	104891	20.0000	18.6
12	Carbon Disulfide	76	1.955	1.955	(0.490)	310277	20.0000	18.4
13	Iodomethane	142	2.028	2.028	(0.509)	61227	20.0000	15.7
14	Acrolein	56	2.150	2.150	(0.539)	239507	200.000	188
15	Allyl Chloride	41	2.247	2.247	(0.564)	192326	20.0000	22.1
16	Isopropanol	45	2.260	2.260	(0.477)	27888	200.000	309
17	Methylene Chloride	84	2.326	2.326	(0.584)	114735	20.0000	19.6
* 18	Acetone d6	46	2.326	2.326	(1.000)	126380	100.000	
19	Acetone	58	2.363	2.363	(1.016)	51112	100.000	103
20	trans-1,2-Dichloroethene	96	2.448	2.448	(0.614)	116886	20.0000	19.3
21	Methyl Acetate	74	2.454	2.454	(0.616)	106088	100.000	93.0
22	Hexane	86	2.503	2.503	(1.076)	70217	50.0000	63.4(Q)

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261418.D
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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 Methyl-tert-butyl Ether	73	2.533	2.533	(0.635)	342527	20.0000	19.3
	24 tert-Butyl Alcohol	59	2.606	2.606	(0.550)	93607	200.000	396
	25 Isopropyl Ether	45	2.850	2.850	(0.715)	381707	20.0000	19.3
	26 Acetonitrile	41	2.850	2.850	(0.715)	68618	200.000	186(Q)
	27 Chloroprene	53	2.935	2.935	(0.736)	175870	20.0000	19.1
	28 1,1-Dichloroethane	63	2.953	2.953	(0.741)	192434	20.0000	18.5
	29 Acrylonitrile	53	2.996	2.996	(0.751)	468386	200.000	180
	30 Ethyl-tert-butyl ether	59	3.142	3.142	(0.788)	362563	20.0000	19.8
	31 Vinyl Acetate	43	3.154	3.154	(0.791)	323704	20.0000	20.1
	32 cis-1,2-Dichloroethene	96	3.361	3.361	(0.843)	129622	20.0000	19.6
	33 2,2-Dichloropropane	77	3.440	3.440	(0.863)	179329	20.0000	19.3
	34 Cyclohexane	56	3.501	3.501	(0.878)	1047135	100.000	95.8
	35 Bromochloromethane	130	3.501	3.501	(0.878)	79246	20.0000	20.3
	36 Chloroform	83	3.555	3.555	(0.892)	212738	20.0000	19.7
	37 Carbon Tetrachloride	117	3.647	3.647	(0.915)	171751	20.0000	20.9
	38 Ethyl Acetate	43	3.640	3.640	(0.913)	818145	100.000	92.4
	39 Tetrahydrofuran	72	3.665	3.665	(1.575)	186151	200.000	198
	40 sec-Butyl Alcohol	45	3.677	3.677	(0.776)	81263	200.000	419
	41 1,1,1-Trichloroethane	97	3.689	3.689	(0.925)	185984	20.0000	18.7
	42 2-Butanone	43	3.768	3.768	(0.945)	328437	100.000	86.2
	43 1,1-Dichloropropene	75	3.774	3.774	(0.947)	170451	20.0000	19.6
	44 2,2,4-Trimethylpentane	57	3.841	3.841	(0.963)	288254	20.0000	20.2
	45 Benzene	78	3.932	3.932	(0.986)	489051	20.0000	19.2
	46 Propionitrile	54	3.957	3.957	(0.992)	166456	200.000	166
	47 Methacrylonitrile	41	3.969	3.969	(0.995)	409584	20.0000	18.9
*	48 Pentafluorobenzene	168	3.987	3.987	(1.000)	527077	50.0000	
	49 Tert-amyl methyl ether	73	4.012	4.012	(1.006)	357948	20.0000	18.8
$	50 1,2-Dichloroethane d4 (S)	65	4.024	4.024	(1.009)	276639	50.0000	52.8(Q)
	51 1,2-Dichloroethane	62	4.066	4.066	(1.020)	145306	20.0000	19.5
	52 Isobutanol	43	4.078	4.078	(0.861)	84031	400.000	820(Q)
	53 Tert-Amyl Alcohol	59	4.139	4.139	(0.874)	101528	200.000	406
	54 Methylcylohexane	98	4.285	4.285	(1.075)	94961	20.0000	18.4
	55 Trichloroethene	130	4.291	4.291	(0.994)	134402	20.0000	18.5
*	56 1,4 Difluorobenzene	114	4.316	4.316	(1.000)	816476	50.0000	
	57 Tert-amyl ethyl ether	59	4.431	4.431	(1.027)	296307	20.0000	18.8
	58 n-Butanol	56	4.498	4.498	(0.950)	17319	200.000	336
	59 Dibromomethane	174	4.547	4.547	(1.054)	81495	20.0000	19.5
	60 1,2-Dichloropropane	63	4.602	4.602	(1.066)	122459	20.0000	19.6
	61 Ethyl Arcylate	55	4.608	4.608	(1.068)	199430	20.0000	19.3
	62 Bromodichloromethane	83	4.638	4.638	(1.075)	165405	20.0000	18.8
	63 Methyl Methacrylate	69	4.723	4.723	(1.094)	110157	100.000	91.6
*	64 1,4 dioxane d8	96	4.735	4.735	(1.000)	11939	2000.00	
	65 1,4-Dioxane (P-Dioxane)	88	4.754	4.754	(1.004)	3758	400.000	531(Q)
	66 3-Pentanone	57	4.845	4.845	(1.123)	113498	20.0000	18.4
	67 2-Chloroethyl Vinyl Ether	63	4.954	4.954	(1.148)	216431	50.0000	47.3
	68 cis-1,3-Dichloropropene	75	4.991	4.991	(1.156)	203876	20.0000	20.3
$	69 Toluene-d8 (S)	98	5.088	5.088	(0.860)	978293	50.0000	51.3
	70 Toluene	92	5.119	5.119	(0.865)	316767	20.0000	19.5
	71 2-Nitropropane	43	5.319	5.319	(0.899)	775839	100.000	92.6
	72 Tetrachloroethene	166	5.326	5.326	(0.900)	144463	20.0000	19.6
	73 4-Methyl-2-Pentanone	43	5.319	5.319	(0.899)	775839	100.000	92.4
	74 trans-1,3-Dichloropropene	75	5.344	5.344	(0.903)	182586	20.0000	19.2
	75 4-Methyl-2-pentanol	45	5.374	5.374	(1.135)	383178	200.000	460
	76 Ethyl Methacrylate	69	5.423	5.423	(0.917)	202821	20.0000	19.0

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	1,1,2-Trichloroethane	97	5.429	5.429	(0.918)	110124	20.0000	18.5
78	Dibromochloromethane	129	5.526	5.526	(0.934)	138408	20.0000	20.1
79	1,3-Dichloropropane	76	5.575	5.575	(0.942)	188617	20.0000	19.2
80	1,2-Dibromoethane	107	5.648	5.648	(0.955)	125633	20.0000	19.7
81	2-Hexanone	43	5.757	5.757	(0.973)	570821	100.000	89.4
* 82	Chlorobenzene-d5	117	5.916	5.916	(1.000)	749568	50.0000	
83	Chlorobenzene	112	5.922	5.922	(1.001)	337936	20.0000	19.2
84	Ethylbenzene	91	5.928	5.928	(1.002)	611989	20.0000	18.9
85	1,1,1,2-Tetrachloroethane	131	5.952	5.952	(1.006)	125658	20.0000	19.3
86	M&P-Xylene	106	6.007	6.007	(1.015)	476860	40.0000	39.1
87	O-Xylene (1,2-Dimethylbenzene)	106	6.232	6.232	(1.053)	222379	20.0000	18.7
88	Styrene	104	6.256	6.256	(1.058)	374790	20.0000	19.2
89	Bromoform	173	6.281	6.281	(1.062)	104333	20.0000	19.4
90	Isopropylbenzene (Cumene)	105	6.390	6.390	(1.080)	570111	20.0000	19.4
$ 91	4-Bromofluorobenzene (S)	95	6.542	6.542	(0.906)	387600	50.0000	50.9
92	cis-1,4-Dichloro-2-Butene	53	6.579	6.579	(0.911)	51101	20.0000	19.4
93	Bromobenzene	156	6.609	6.609	(0.915)	143727	20.0000	19.1
94	n-Propylbenzene	91	6.609	6.609	(0.915)	654539	20.0000	19.1
95	1,1,2,2-Tetrachloroethane	83	6.652	6.652	(0.921)	169101	20.0000	18.7
96	2-Chlorotoluene	91	6.707	6.707	(0.928)	430990	20.0000	19.3
97	1,3,5-Trimethylbenzene	105	6.719	6.719	(0.930)	452143	20.0000	19.3
98	1,2,3-Trichloropropane	110	6.737	6.737	(0.933)	53414	20.0000	20.0
99	trans-1,4-Dichloro-2-Butene	53	6.755	6.755	(0.935)	107948	50.0000	42.8
100	4-Chlorotoluene	91	6.804	6.804	(0.942)	394973	20.0000	19.0
101	tert-Butylbenzene	119	6.913	6.913	(0.957)	384792	20.0000	19.5
102	1,2,4-Trimethylbenzene	105	6.956	6.956	(0.963)	454340	20.0000	19.5
103	sec-Butylbenzene	105	7.029	7.029	(0.973)	528146	20.0000	19.6
104	p-Isopropyltoluene	119	7.114	7.114	(0.985)	431383	20.0000	18.8
105	1,3-Dichlorobenzene	146	7.175	7.175	(0.993)	253595	20.0000	19.3
* 106	1,4-Dichlorobenzene-d4	152	7.224	7.224	(1.000)	409131	50.0000	
107	1,4-Dichlorobenzene	146	7.230	7.230	(1.001)	256994	20.0000	18.9
108	1,2,3 Trimethylbenzene	105	7.236	7.236	(1.815)	456735	20.0000	19.3
109	n-Butylbenzene	91	7.388	7.388	(1.023)	377537	20.0000	19.7
110	1,2-Dichlorobenzene	146	7.510	7.510	(1.040)	237385	20.0000	18.8
111	1,2-Dibromo-3-Chloropropane	157	8.051	8.051	(1.115)	110145	50.0000	44.0
112	Hexachlorobutadiene	225	8.495	8.495	(1.176)	70534	20.0000	22.6
113	1,2,4-Trichlorobenzene	180	8.519	8.519	(1.179)	142192	20.0000	20.2
114	Naphthalene	128	8.757	8.757	(1.212)	484929	20.0000	19.2
115	1,2,3-Trichlorobenzene	180	8.890	8.890	(1.231)	129654	20.0000	18.9
116	2-Methylnaphthalene	142	9.523	9.523	(1.318)	106294	10.0000	8.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

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Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261418.D
Lab Smp Id: ICV 20 9525-595
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:17
Level: LOW
Sample Type: WATER

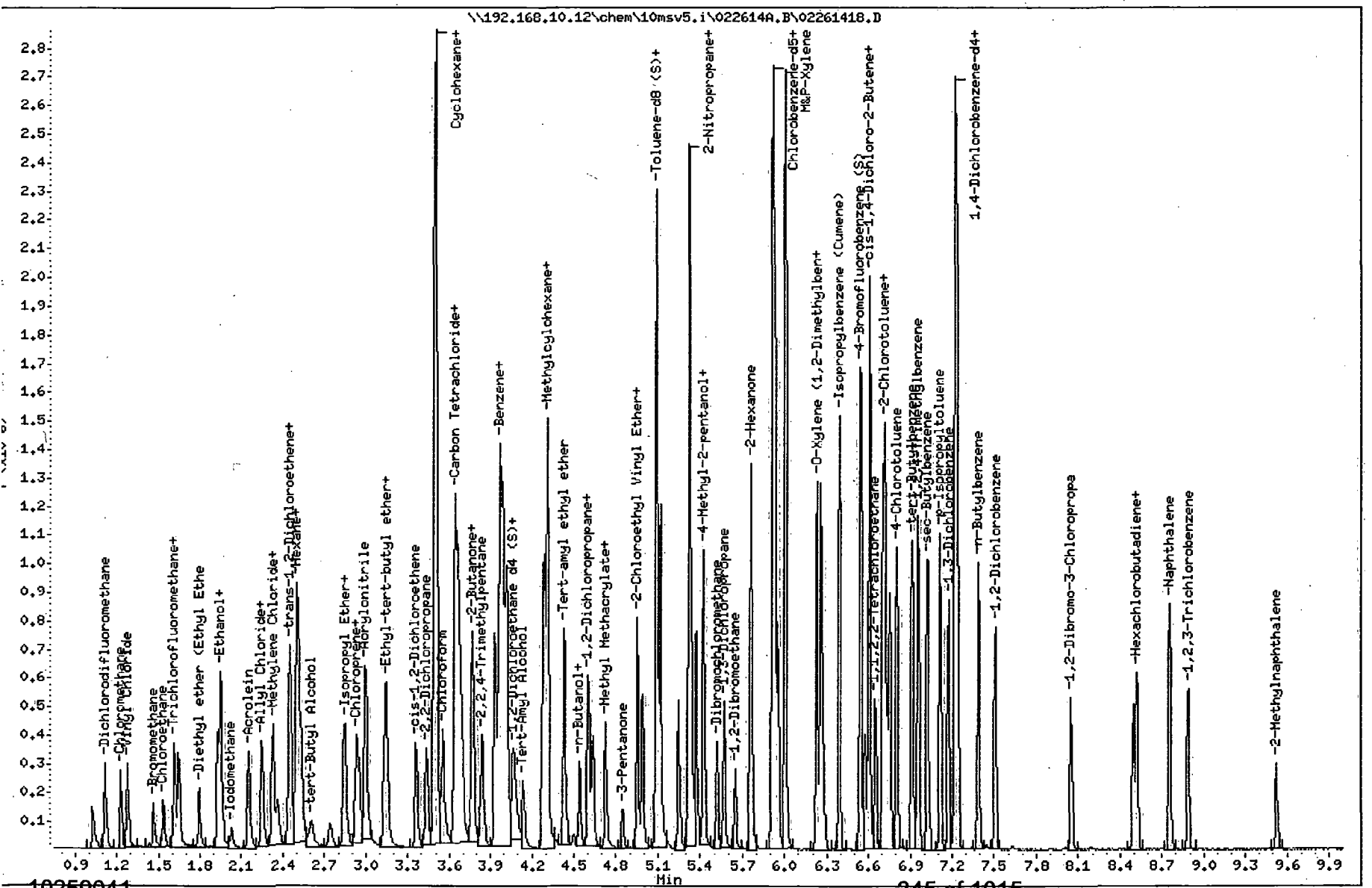
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
18 Acetone d6	140988	70494	281976	126380	-10.36	
48 Pentafluorobenzen	501238	250619	1002476	527077	5.16	
56 1,4 Difluorobenze	756645	378323	1513290	816476	7.91	
64 1,4 dioxane d8	44073	22037	88146	11939	-72.91	<-
82 Chlorobenzene-d5	697174	348587	1394348	749568	7.52	
106 1,4-Dichlorobenze	389456	194728	778912	409131	5.05	

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.33	-0.30
48 Pentafluorobenzen	4.00	3.50	4.50	3.99	-0.33
56 1,4 Difluorobenze	4.32	3.82	4.82	4.32	-0.16
64 1,4 dioxane d8	4.74	4.24	5.24	4.74	-0.15
82 Chlorobenzene-d5	5.92	5.42	6.42	5.92	-0.01
106 1,4-Dichlorobenze	7.23	6.73	7.73	7.22	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261418.D
Date : 26-FEB-2014 16:52
Client ID:
Instrument: 10msv5.i
Sample Info: ICV 20 9525-595
Purge Volume: 10.0
Operator: SH2
Column phase: Rtx-VMS
Column diameter: 0.18



Injection Date: 26-FEB-2014 16:52
Instrument: 10msv5.i
Lab Sample ID: ICV 20 9525-595
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

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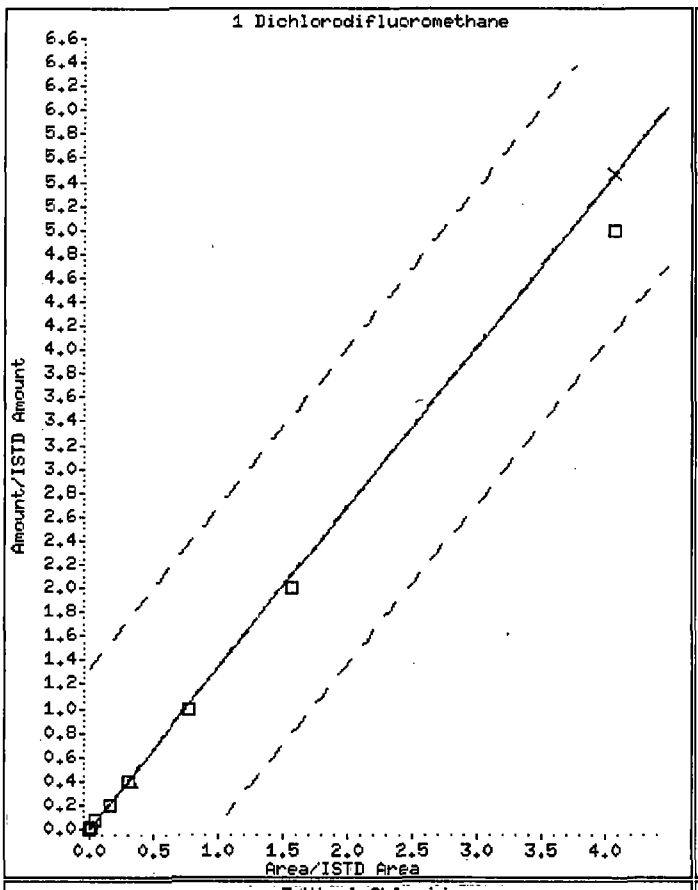

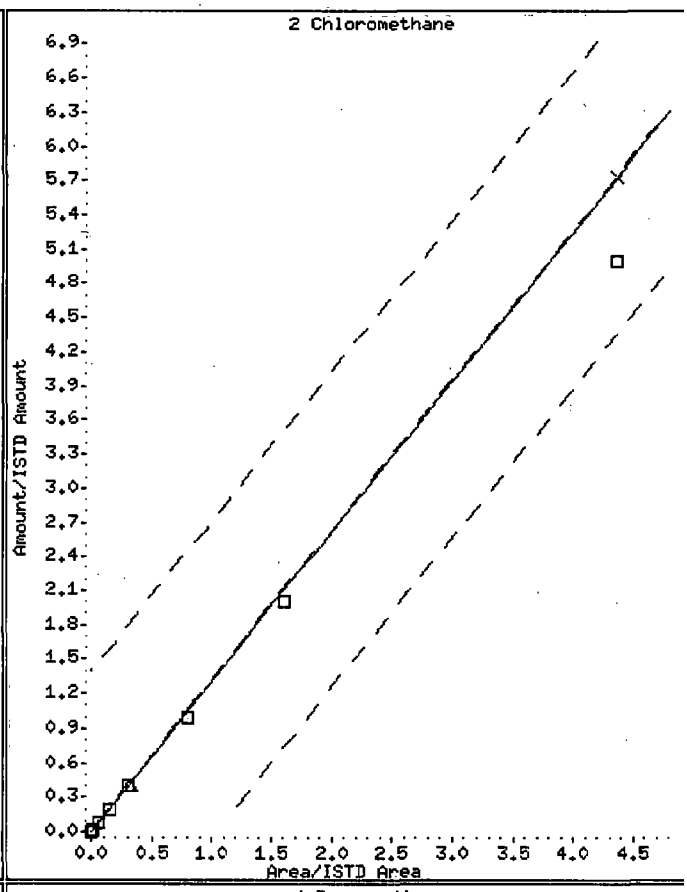

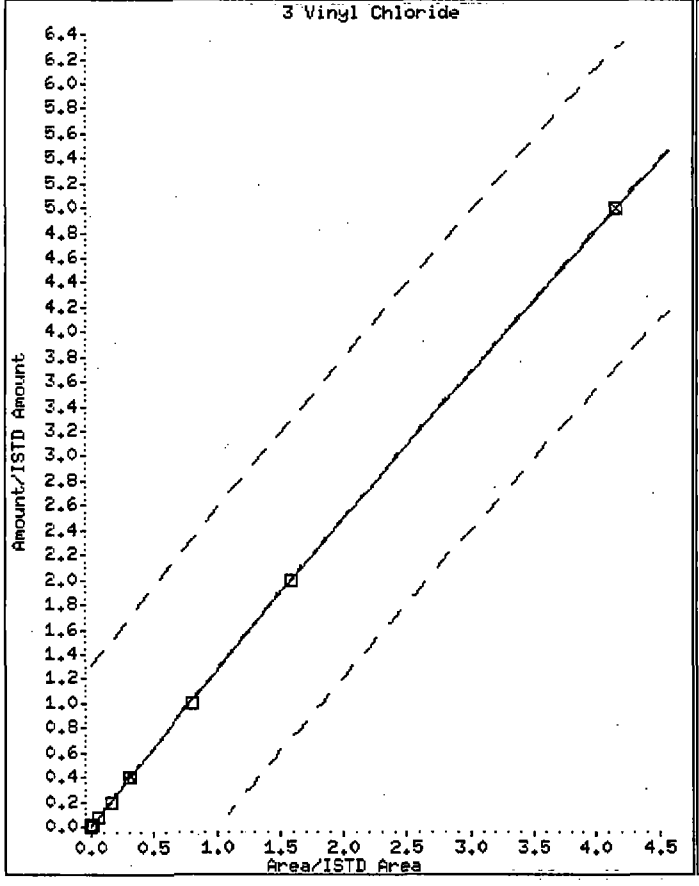

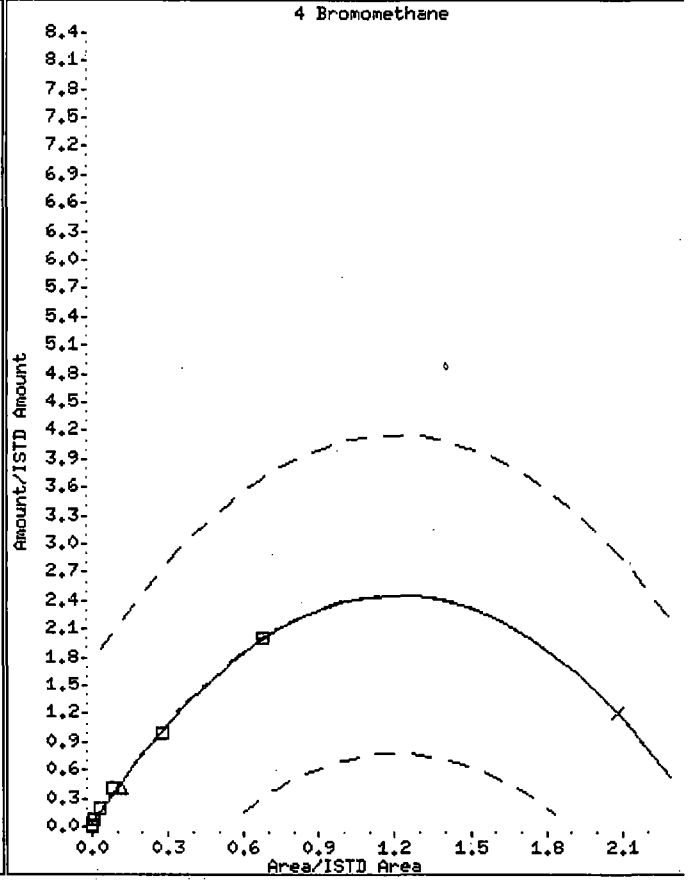

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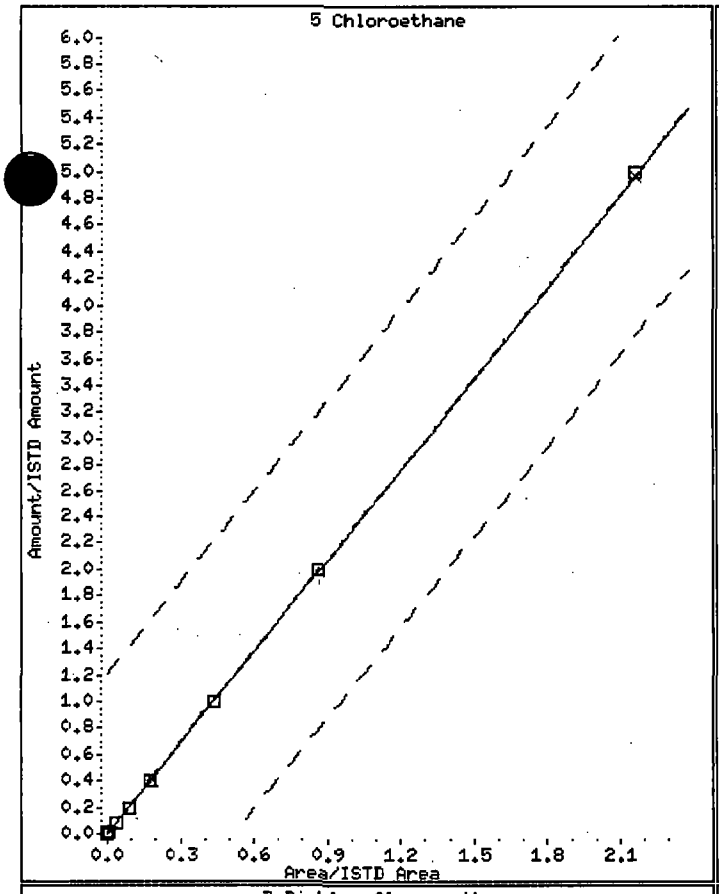

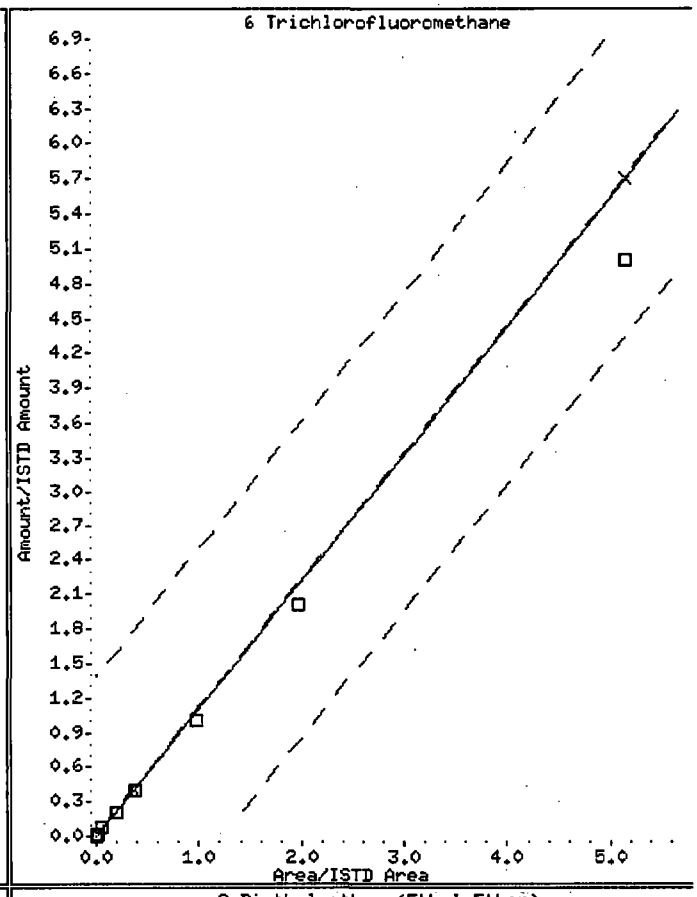

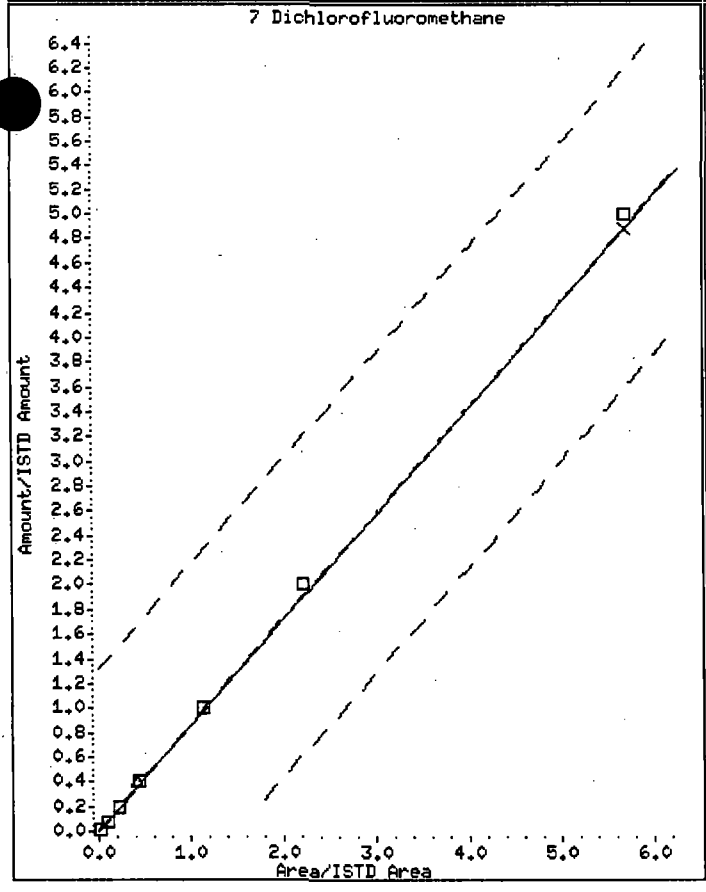

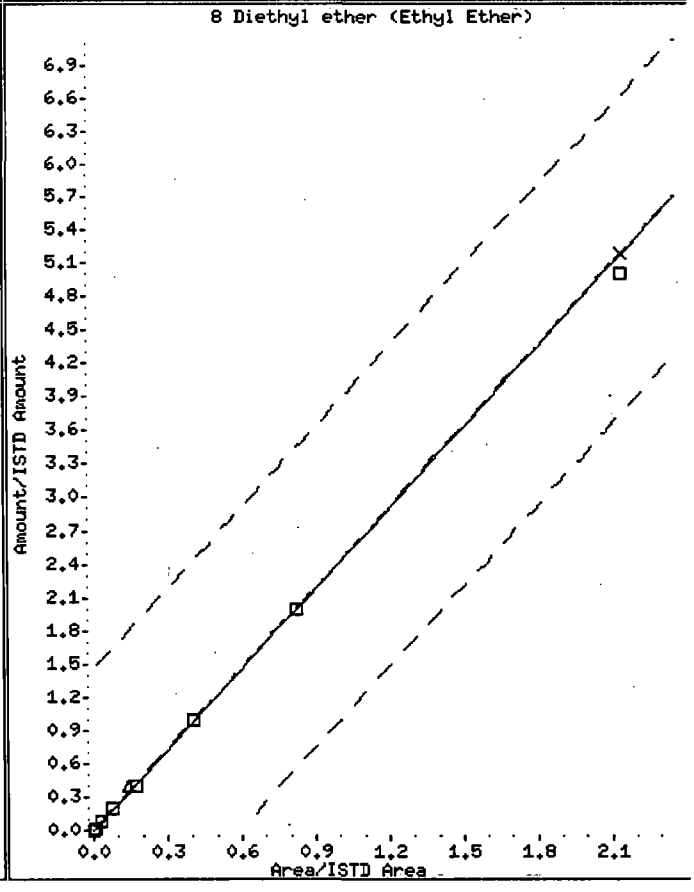

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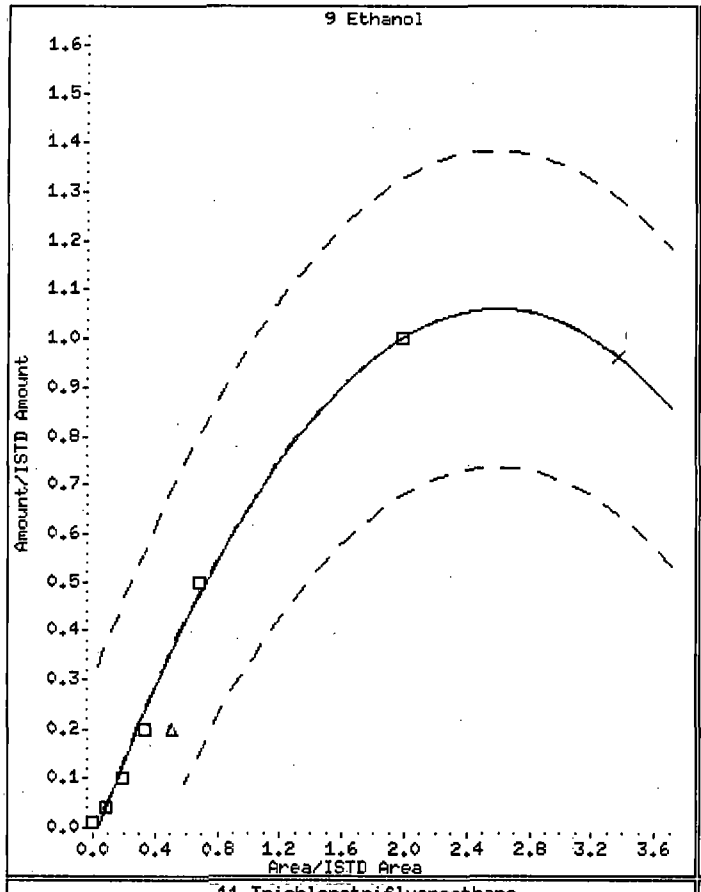

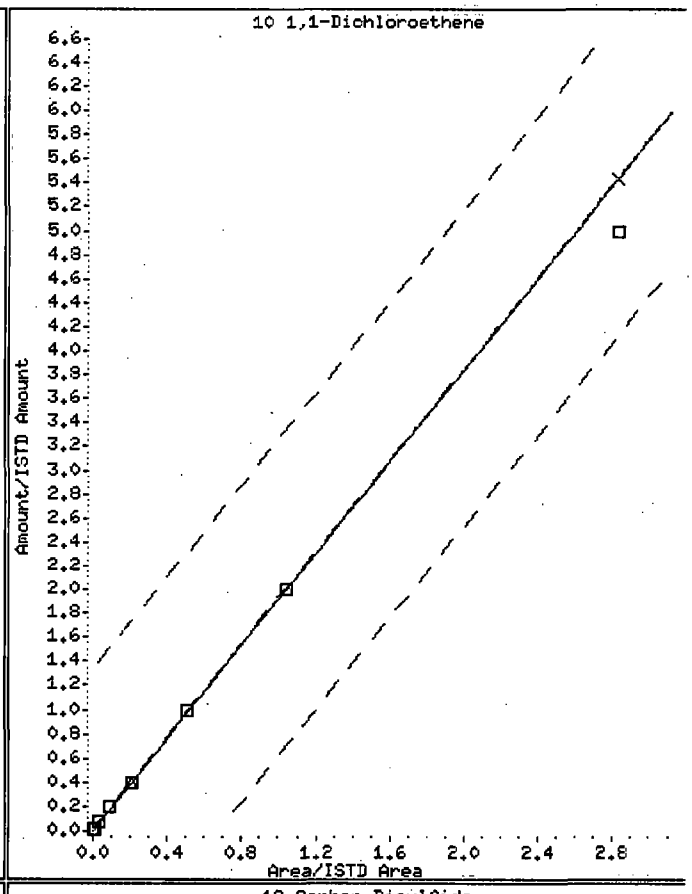

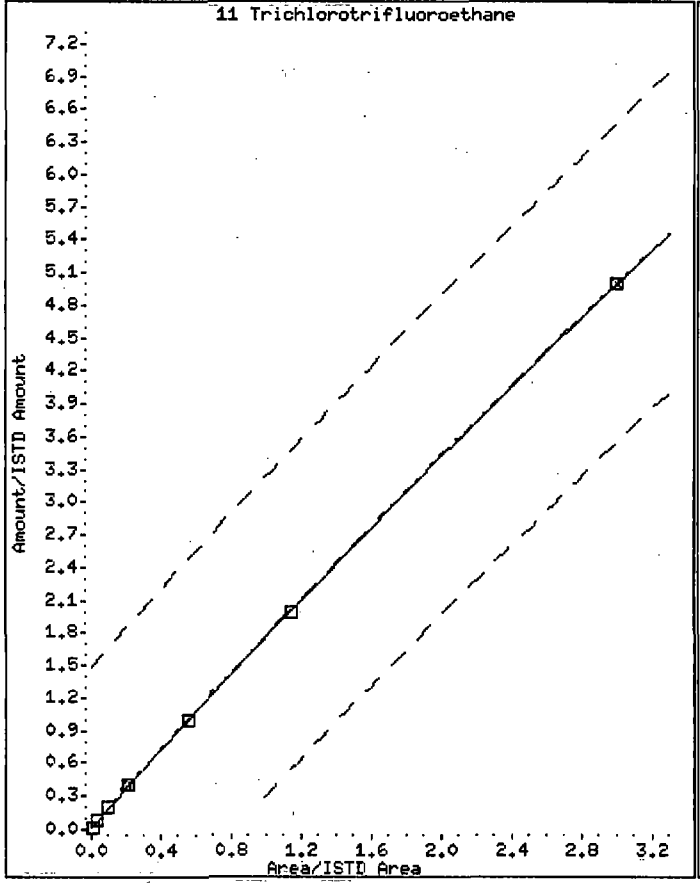

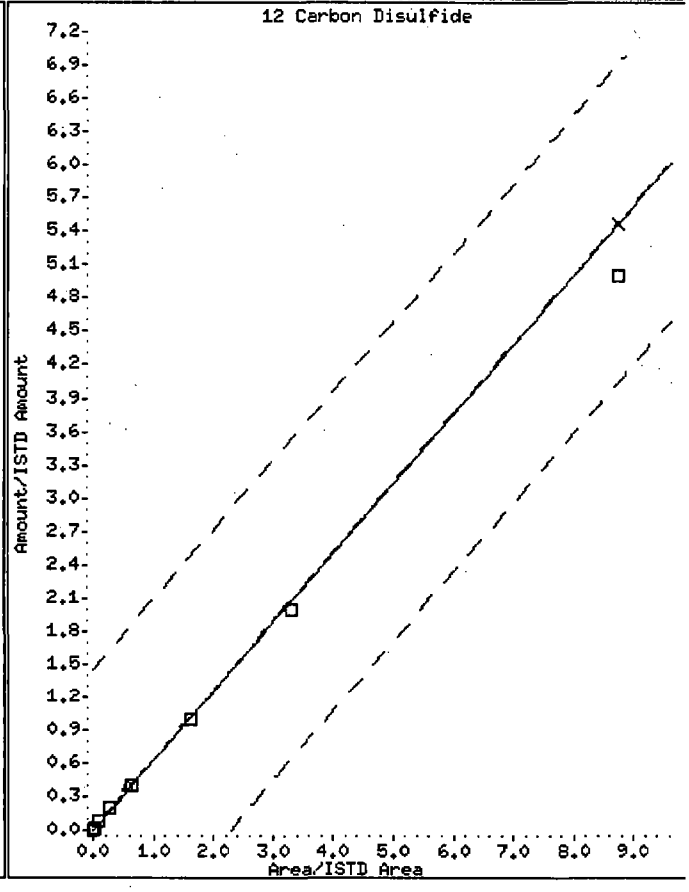

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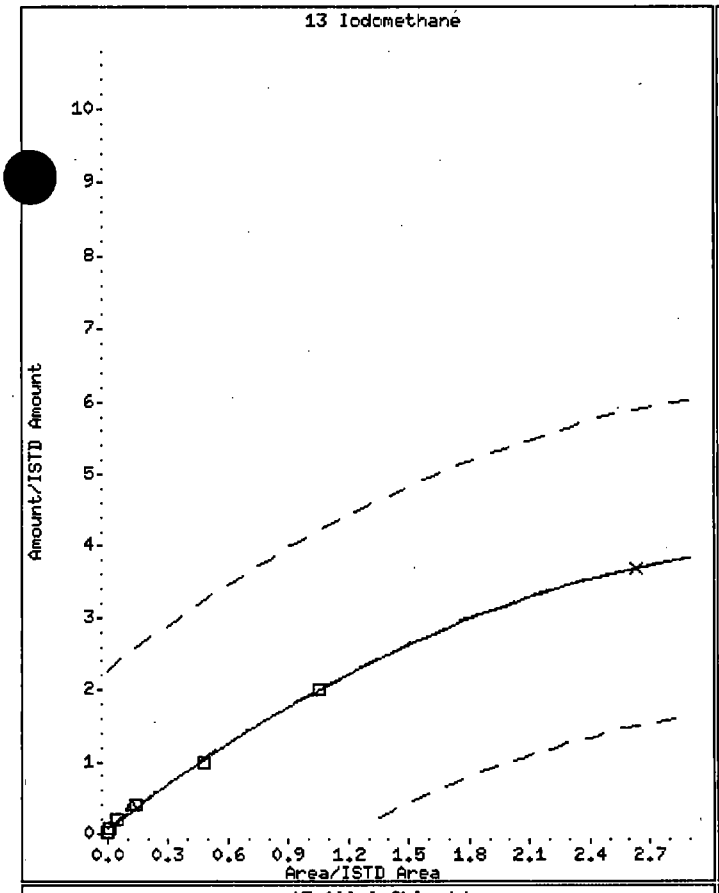

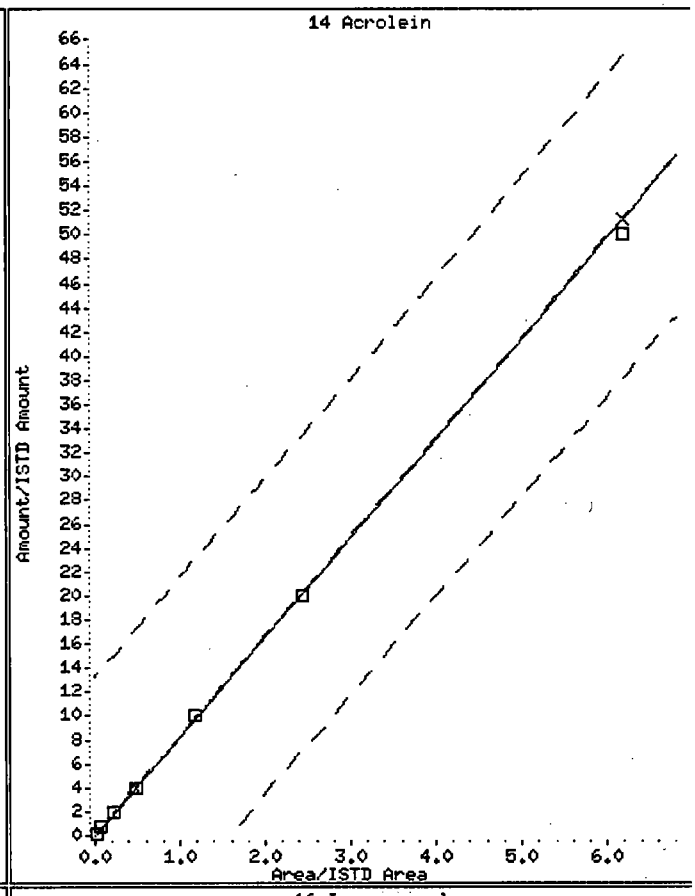

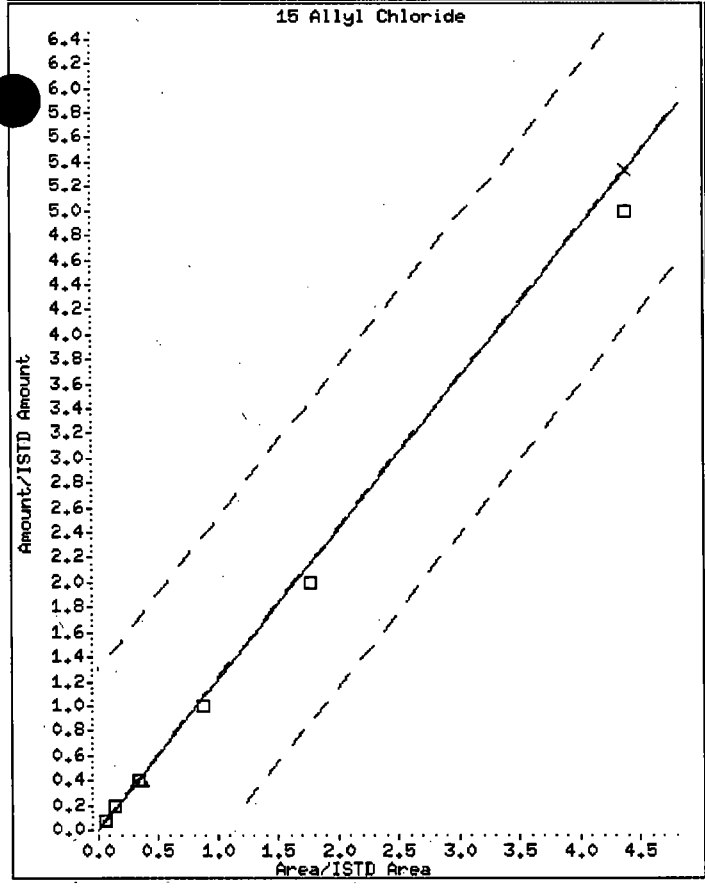

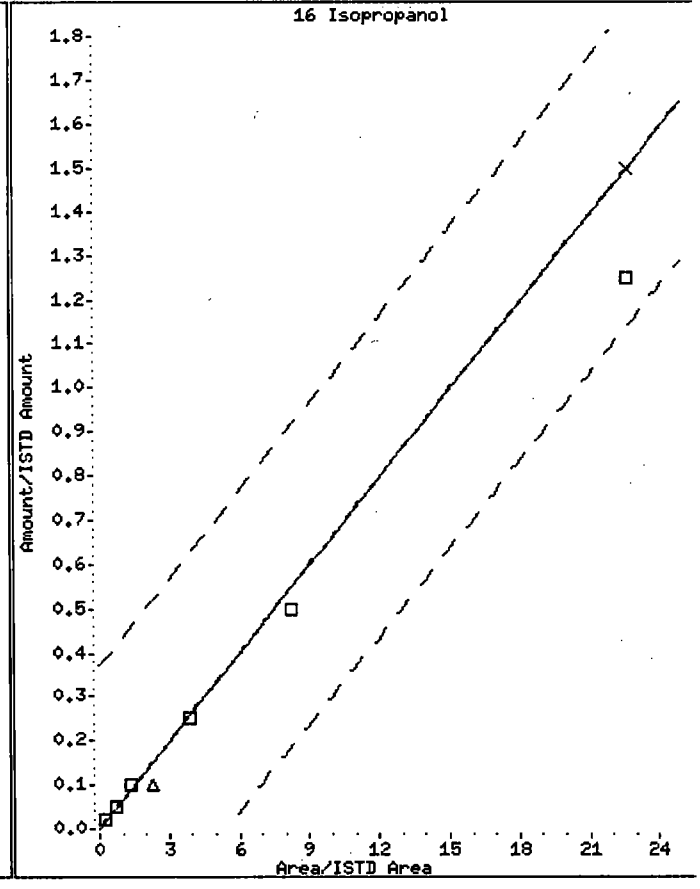

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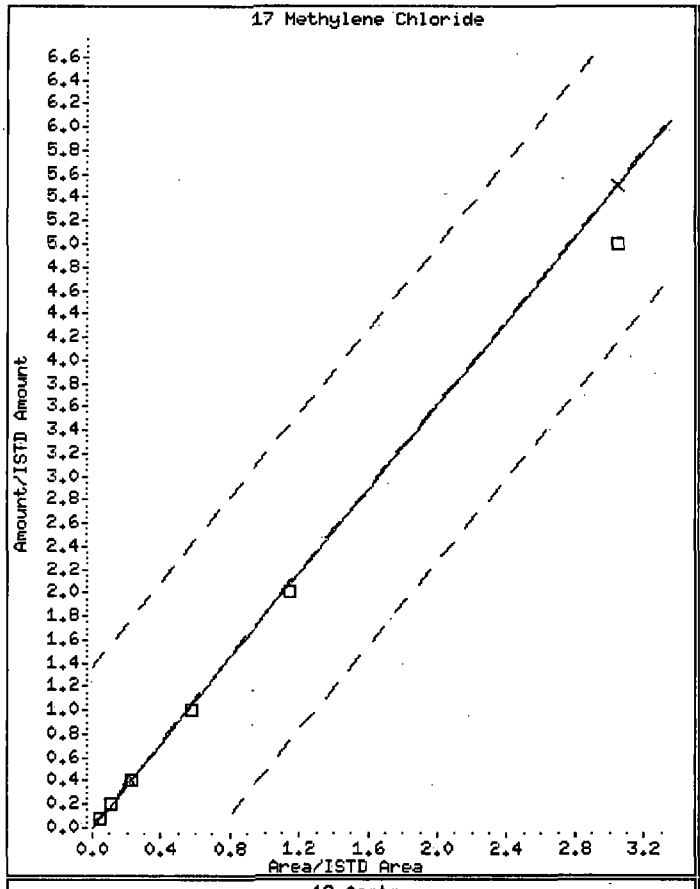

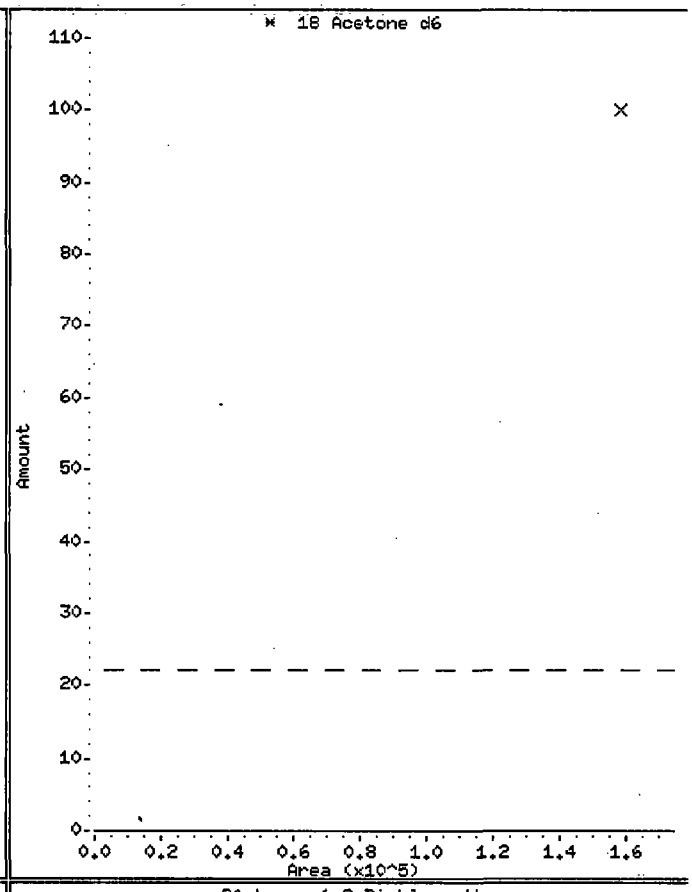

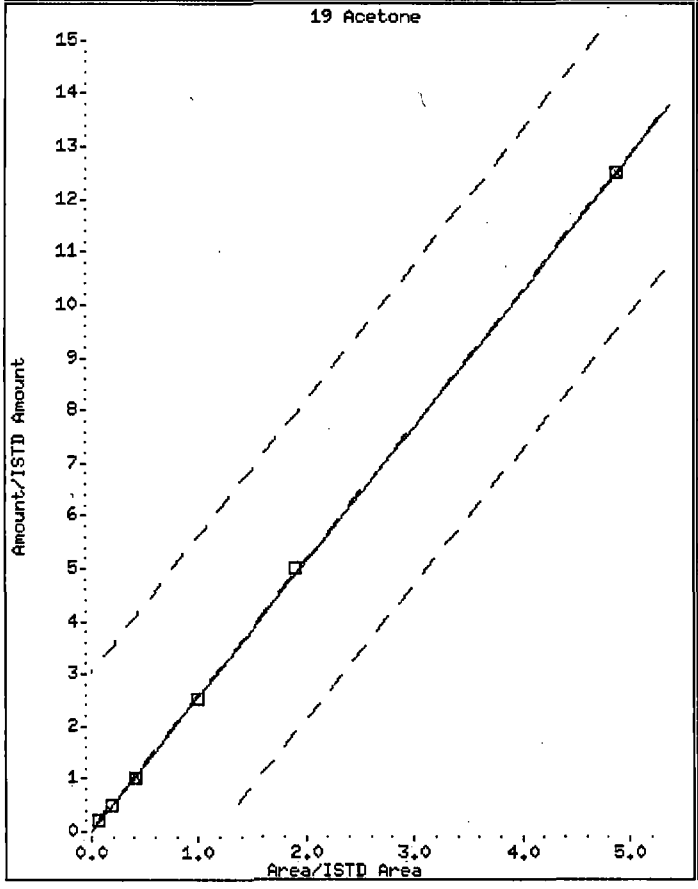

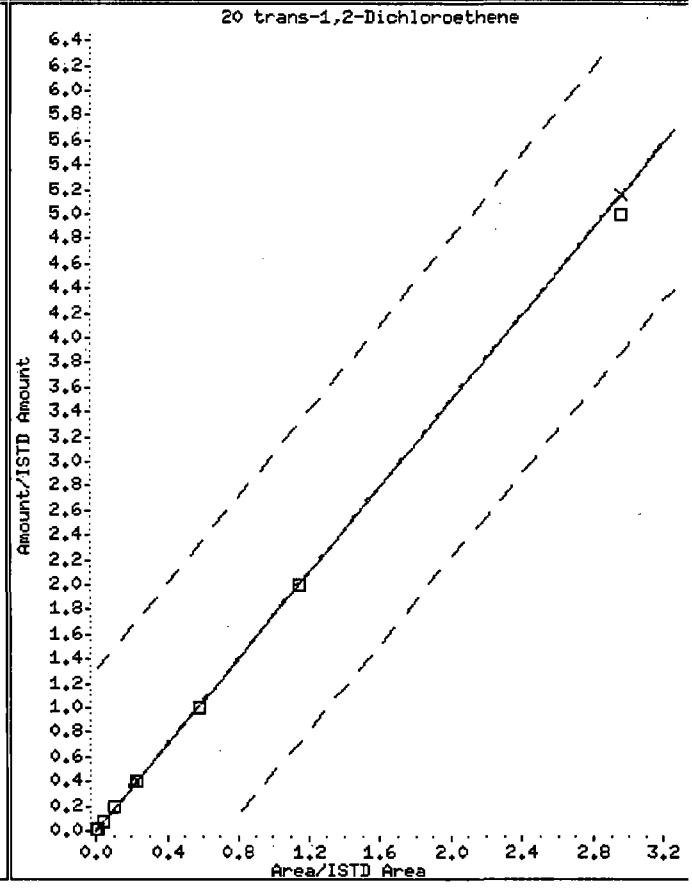

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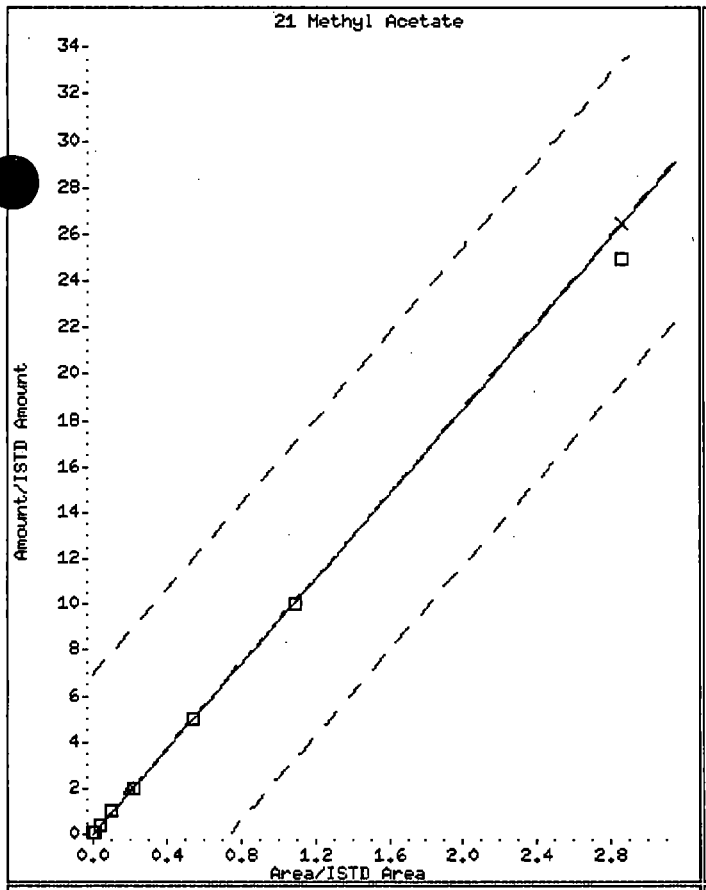

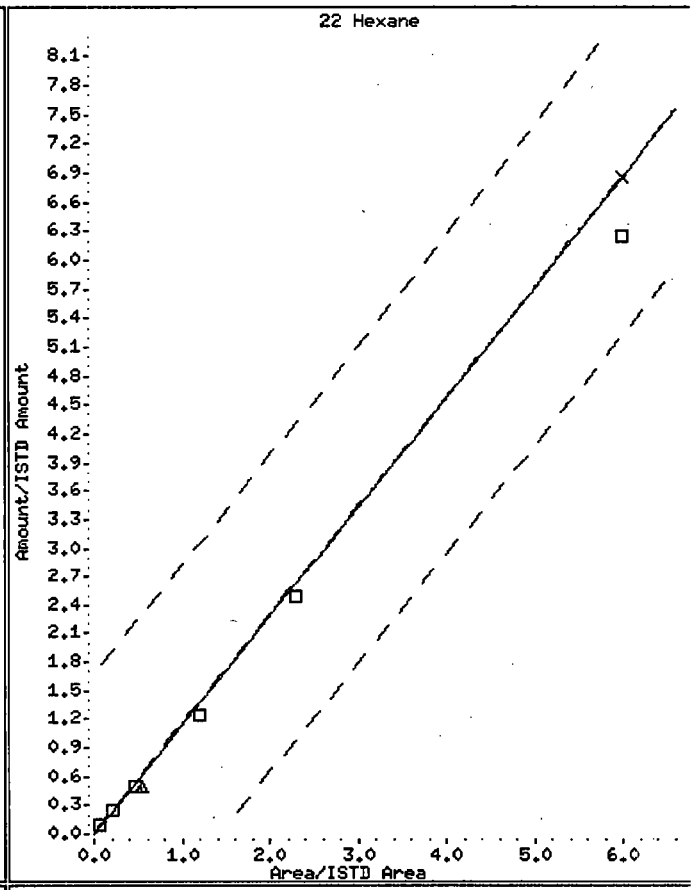

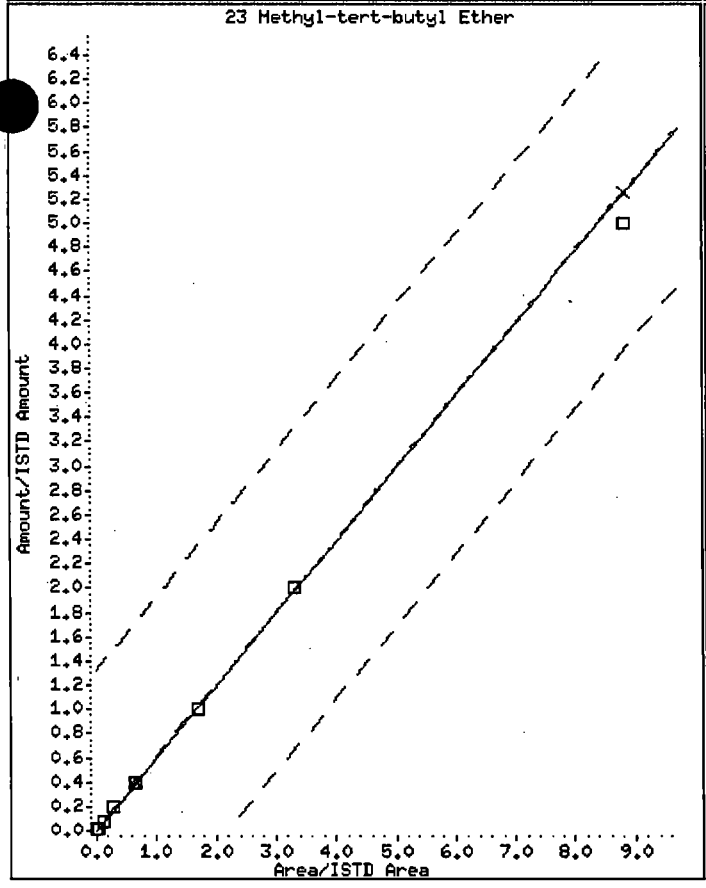

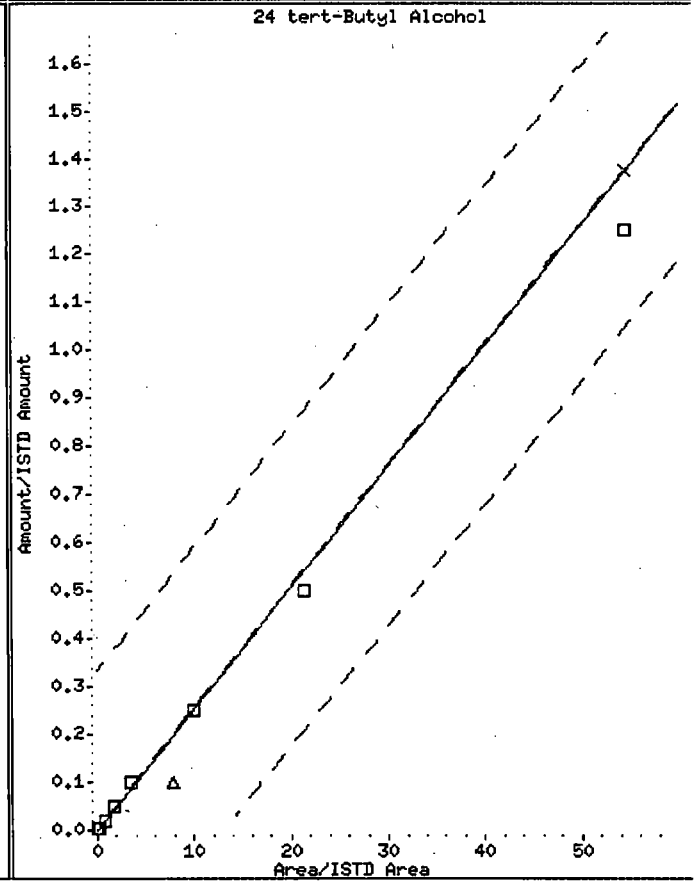

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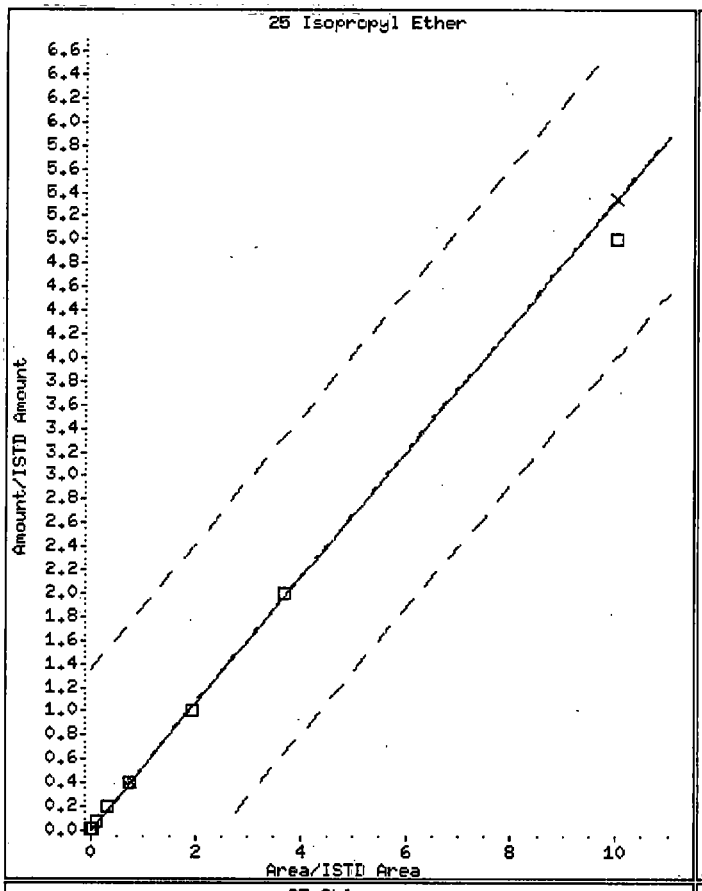

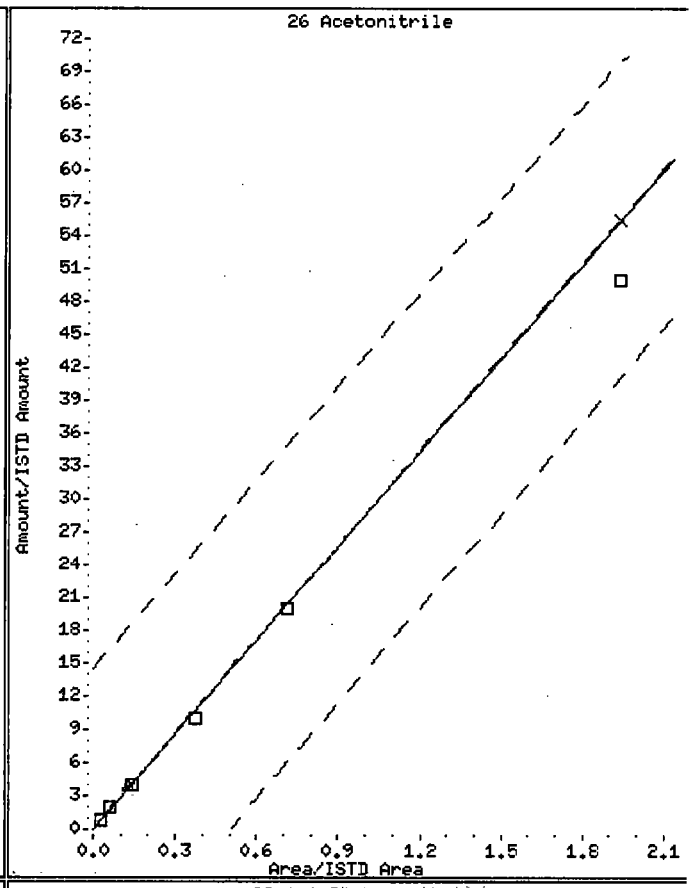

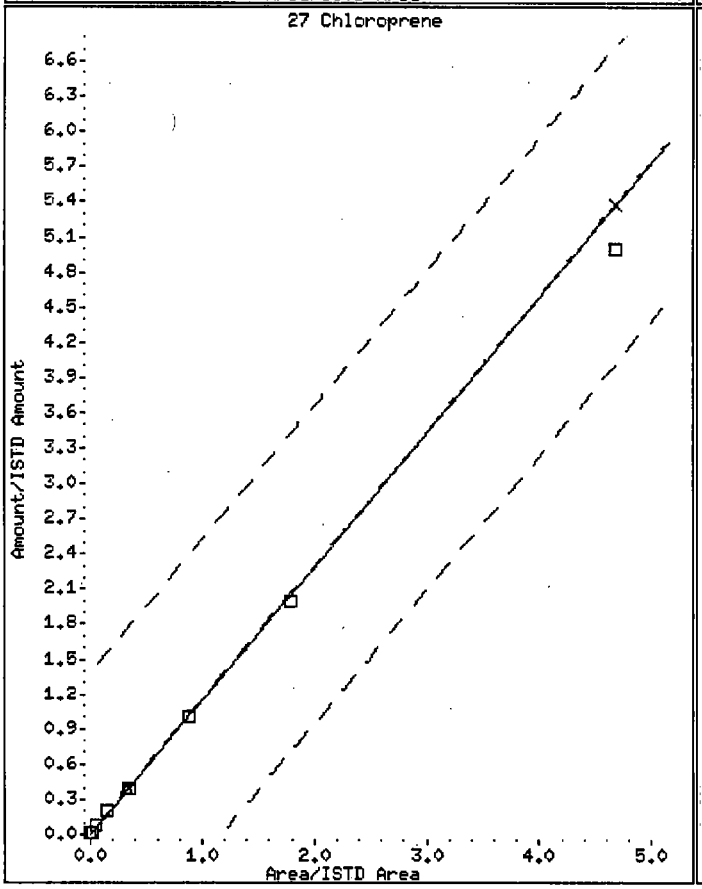

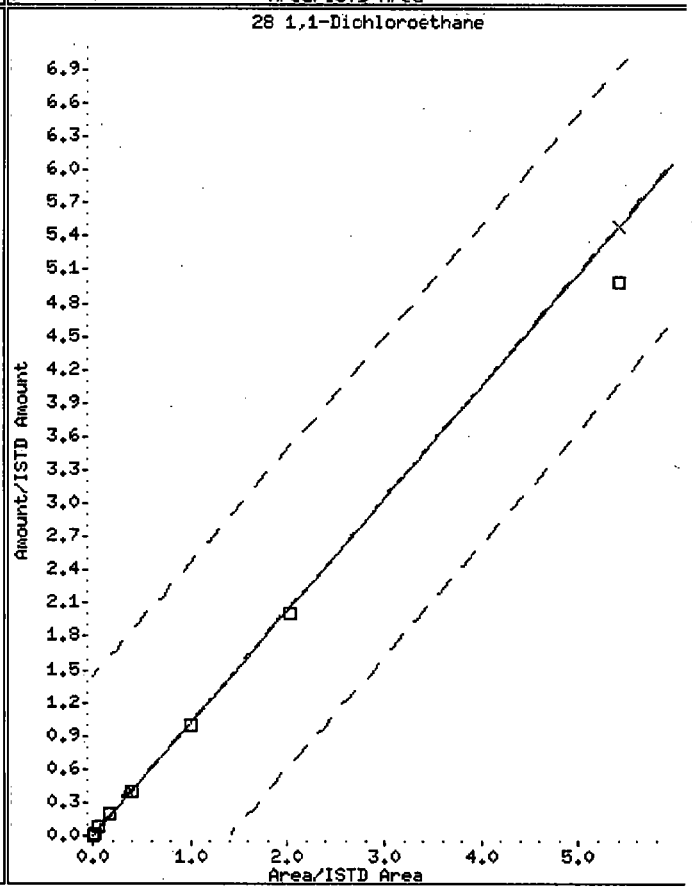

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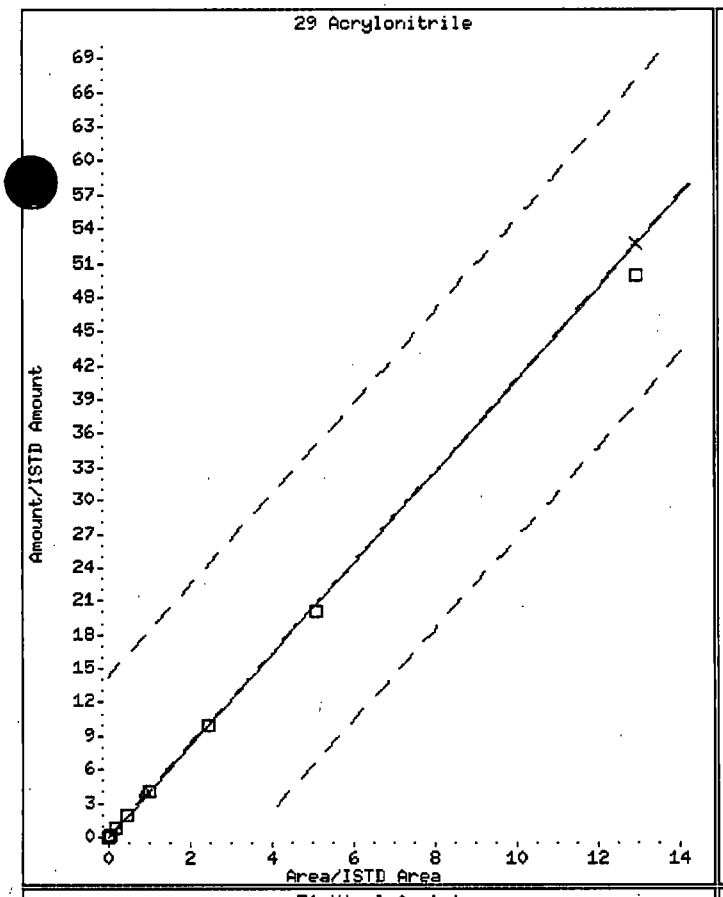

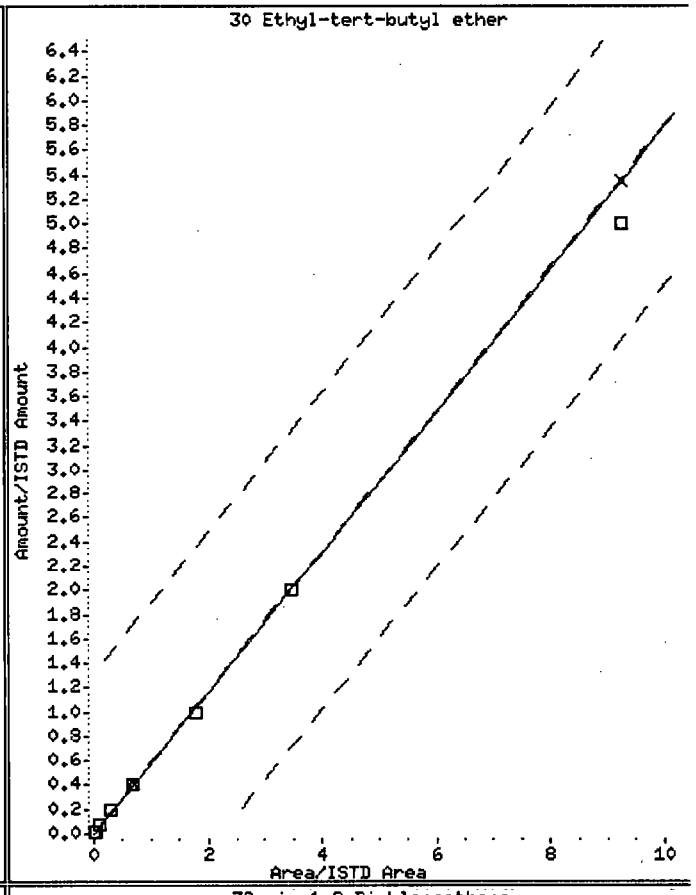

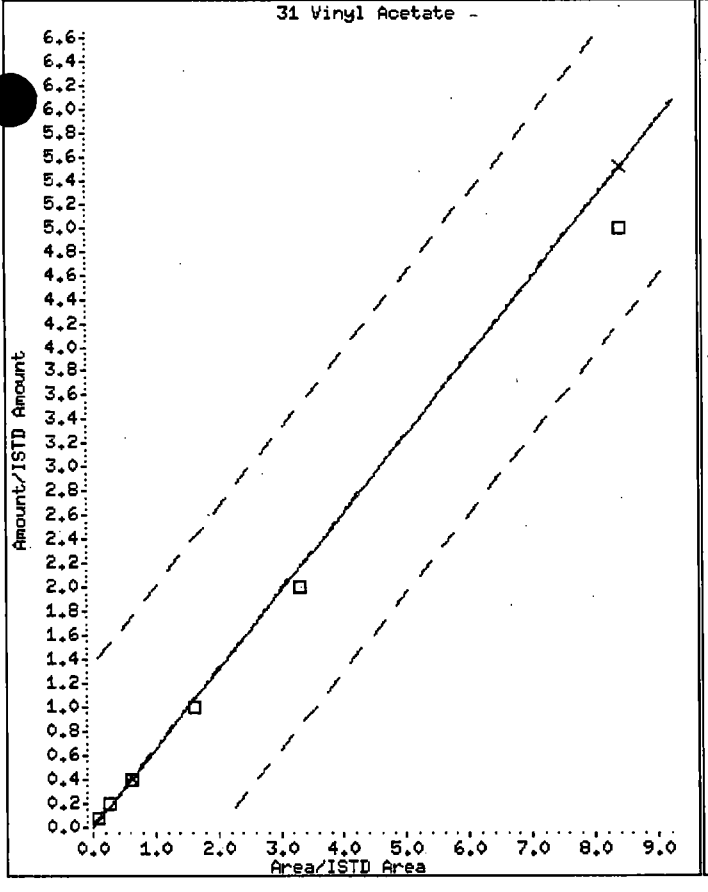

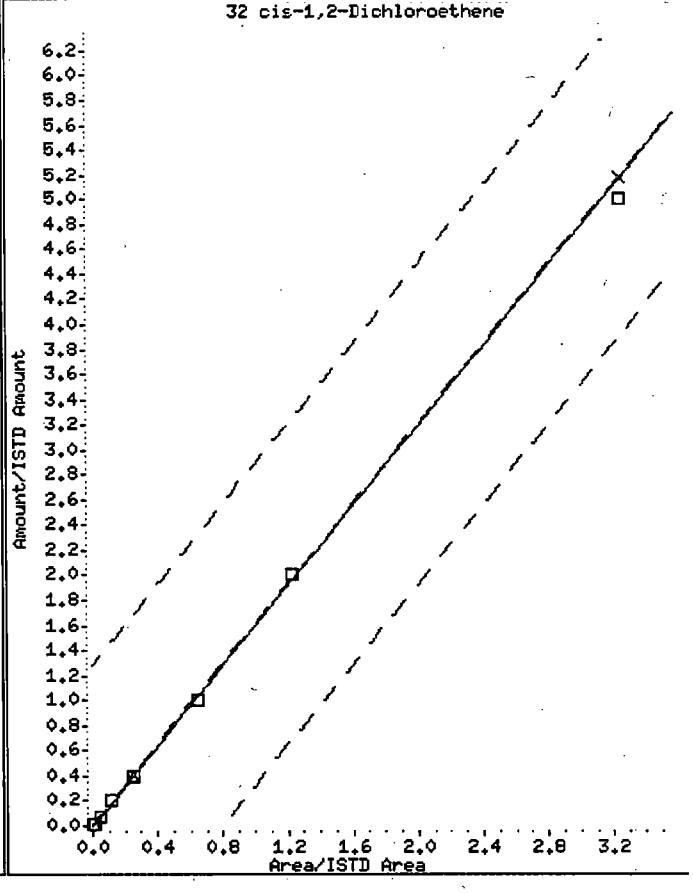

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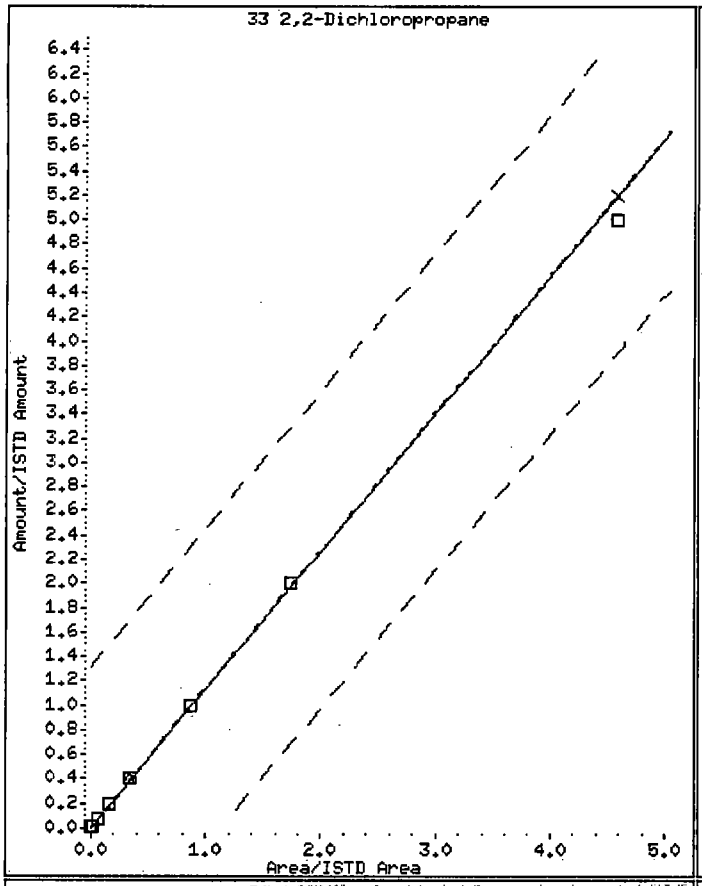

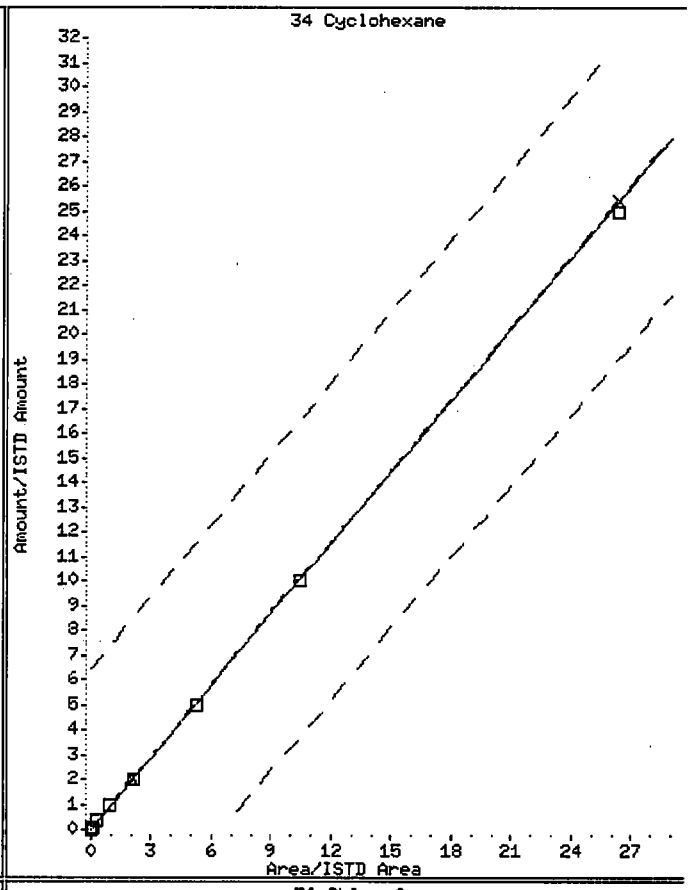

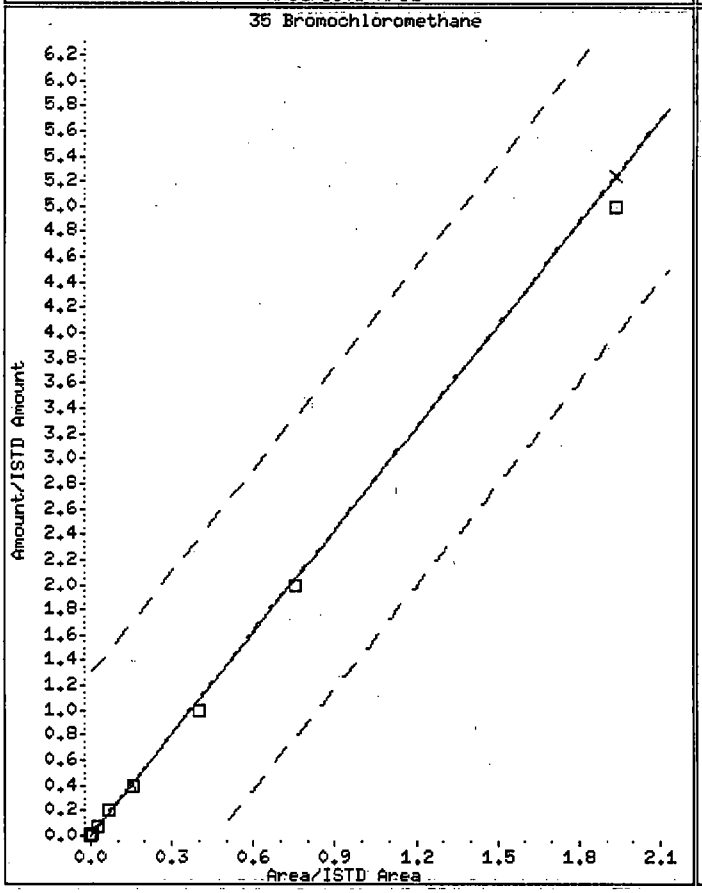

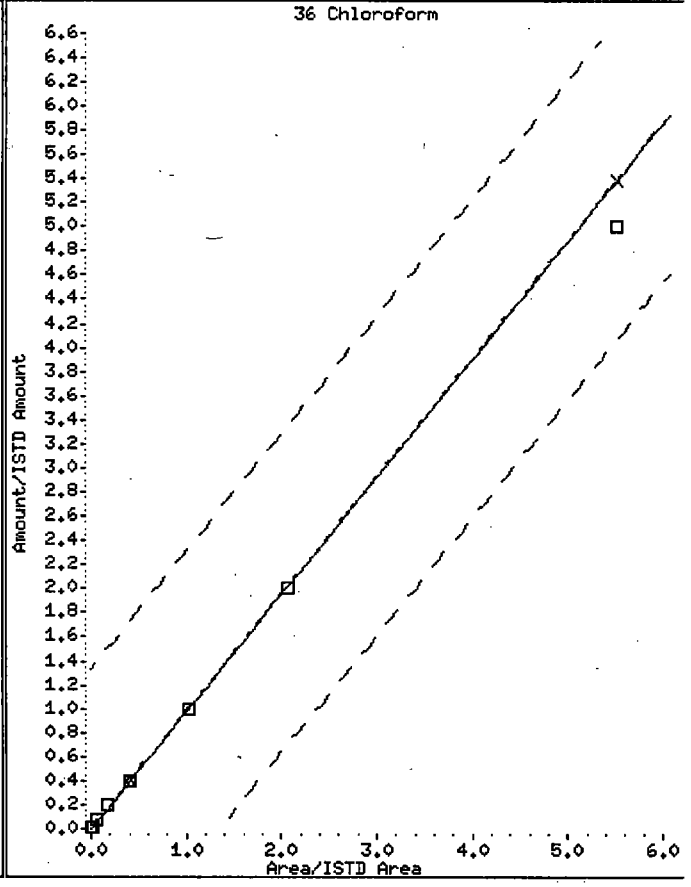

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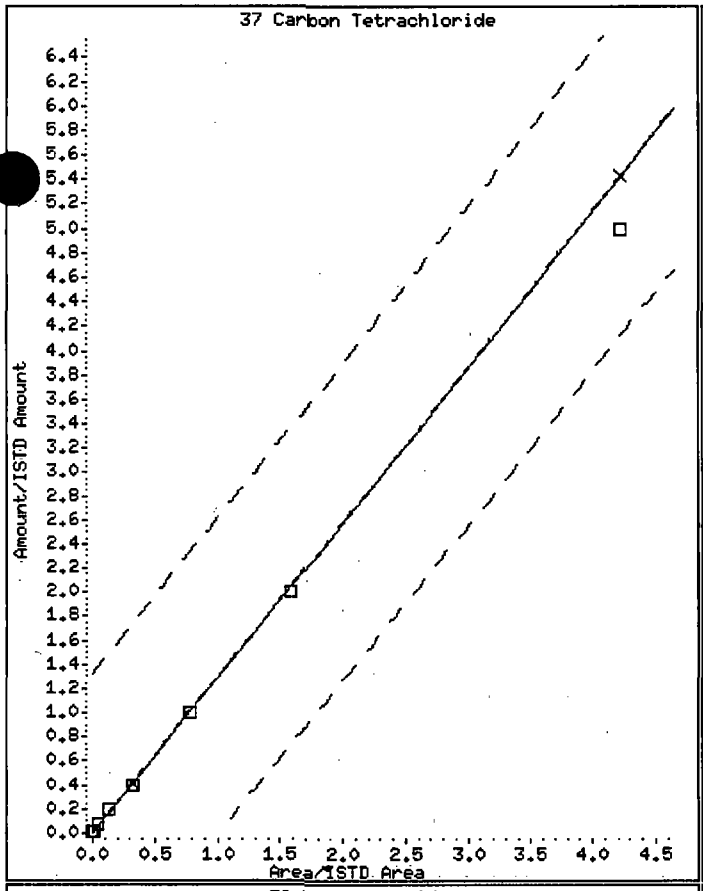

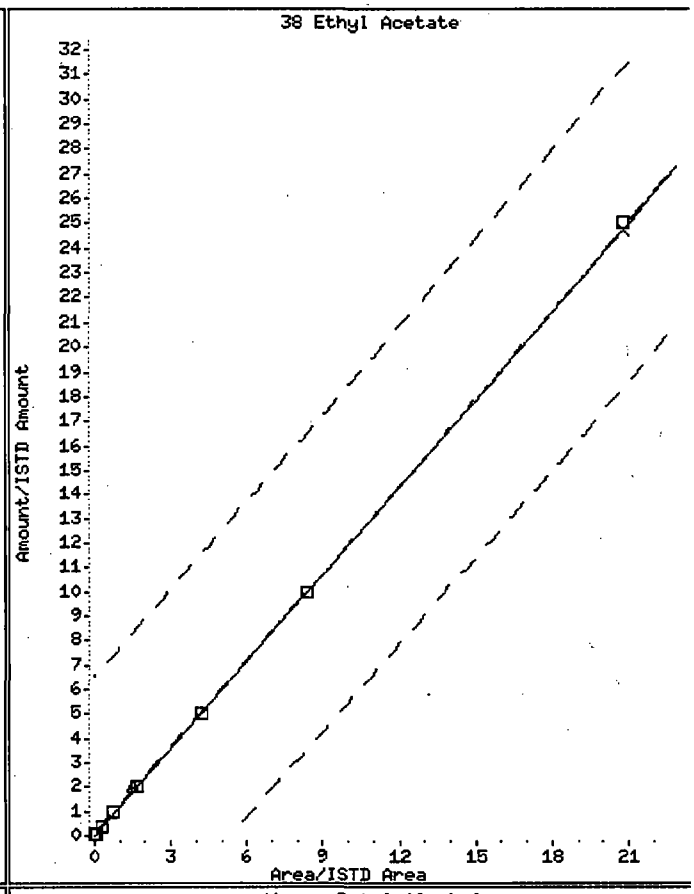

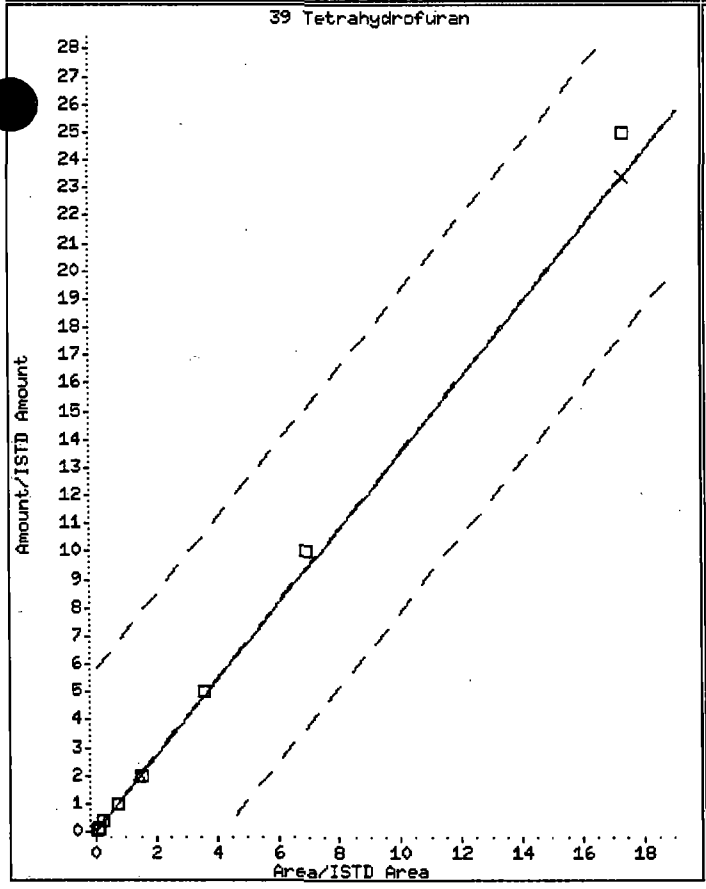

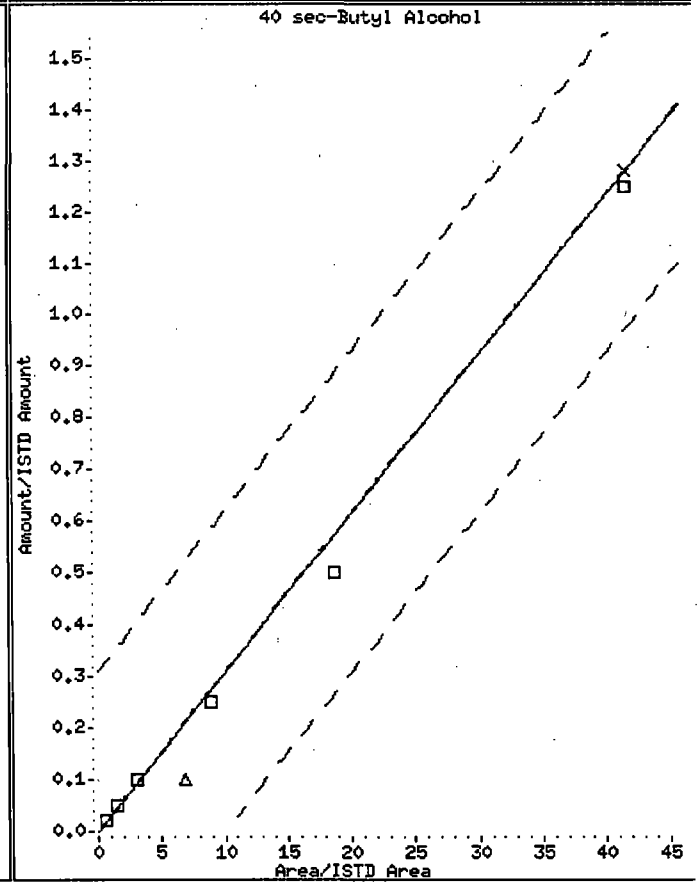

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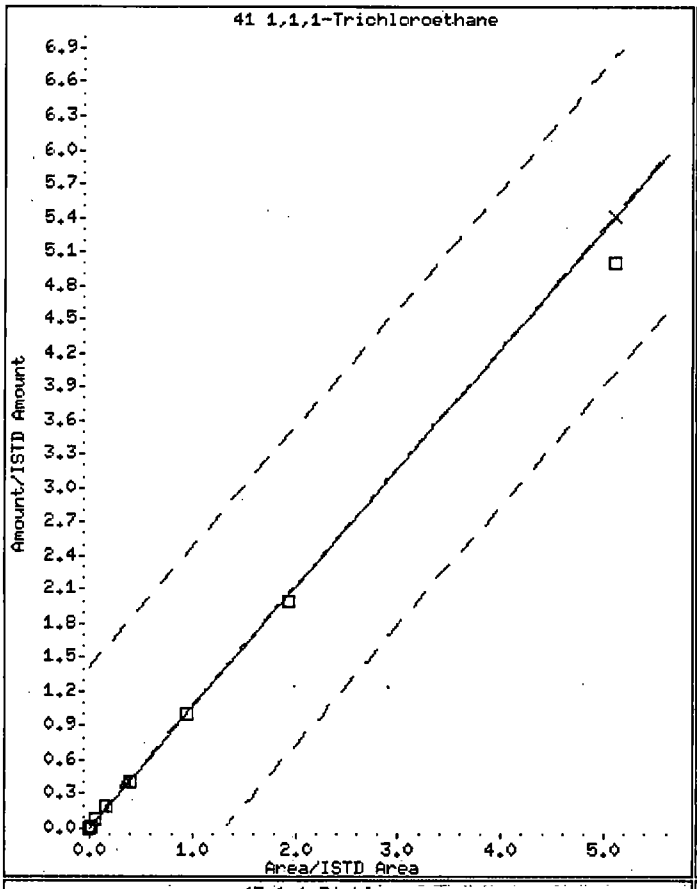

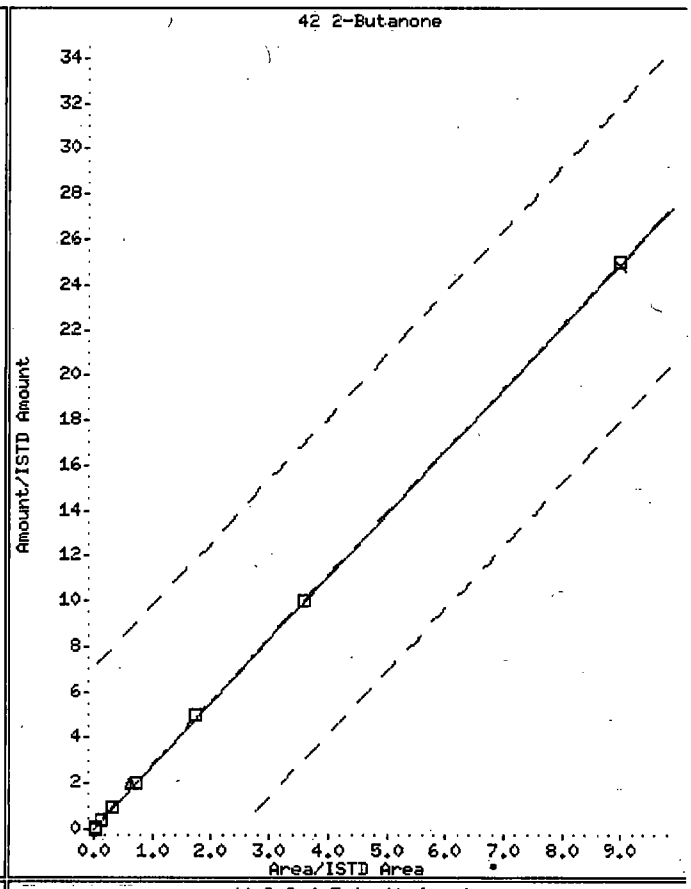

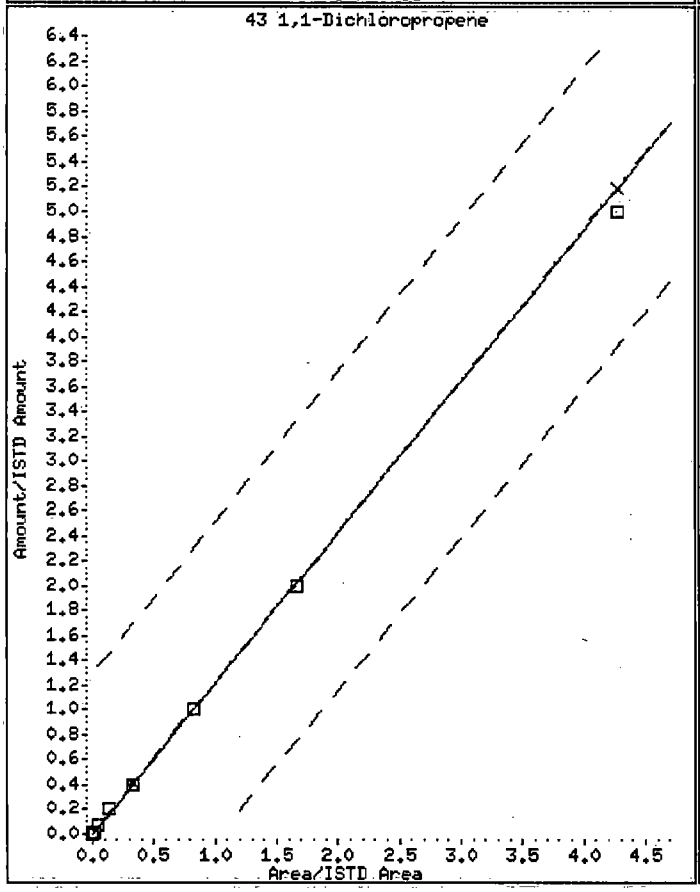

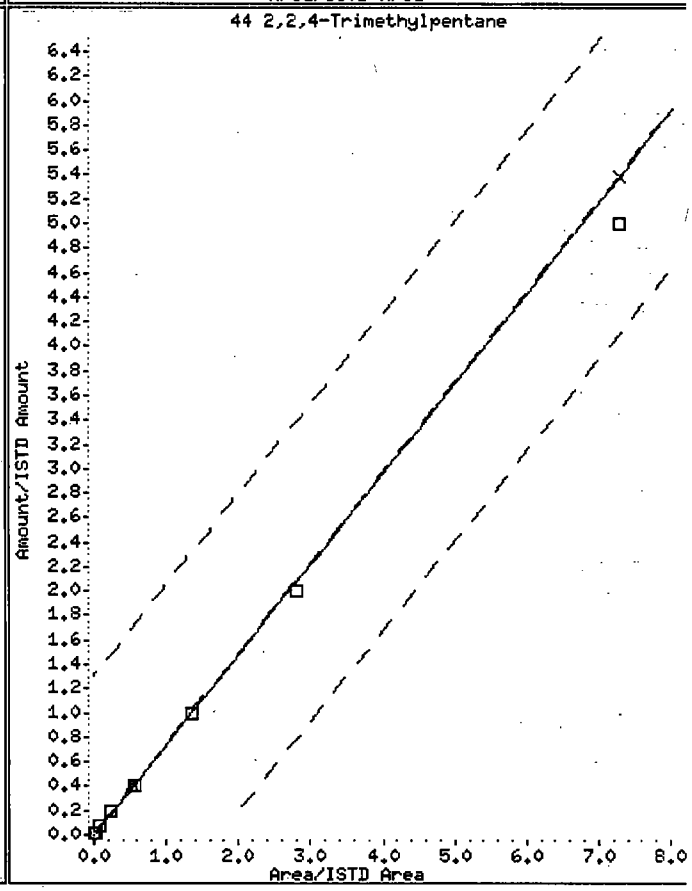

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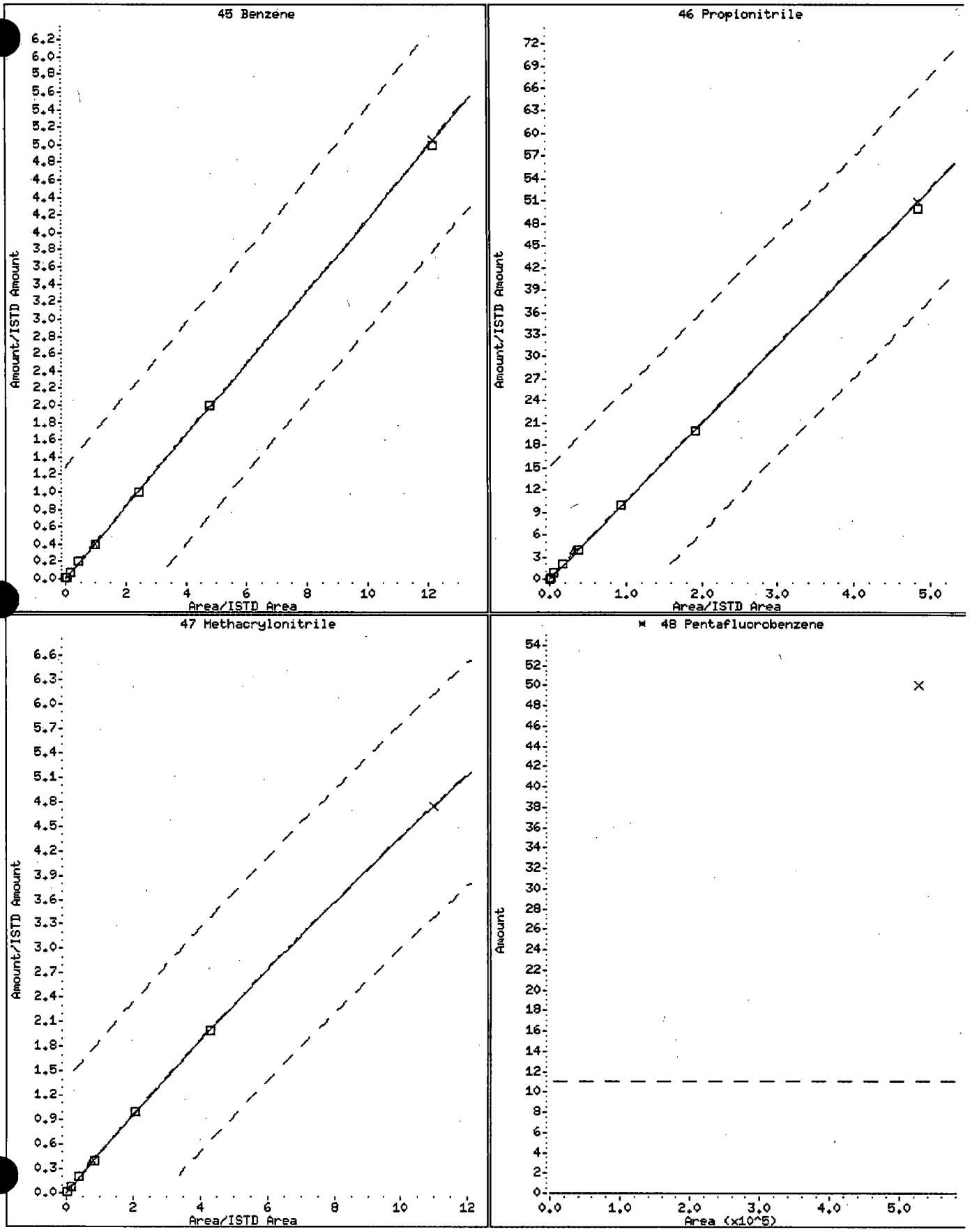

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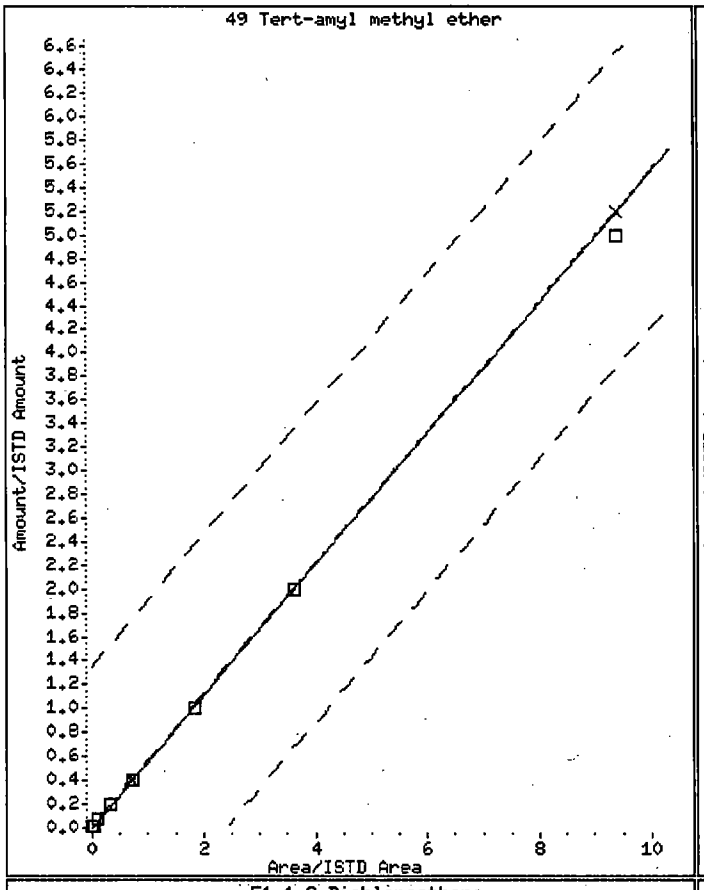

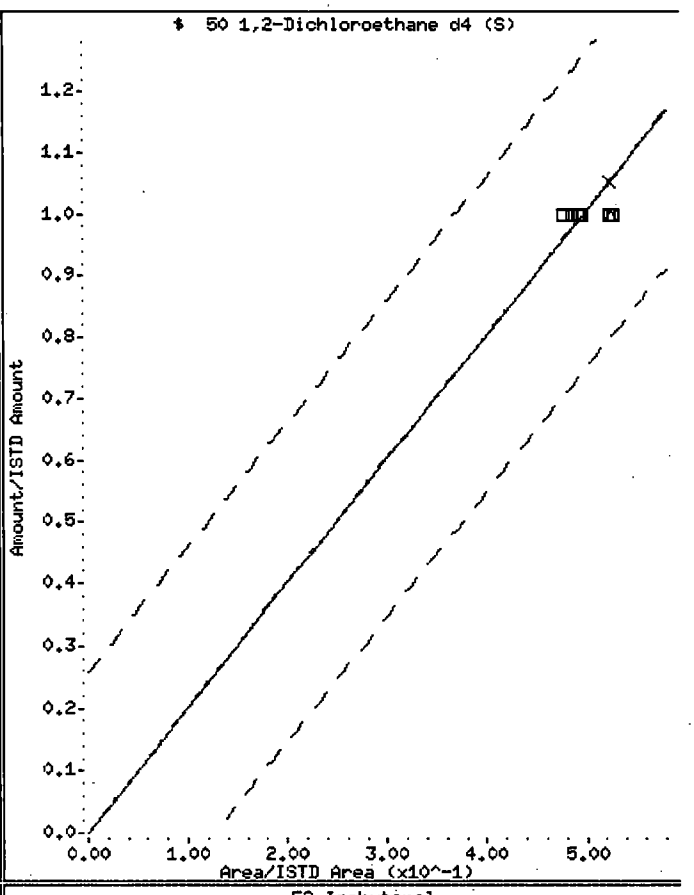

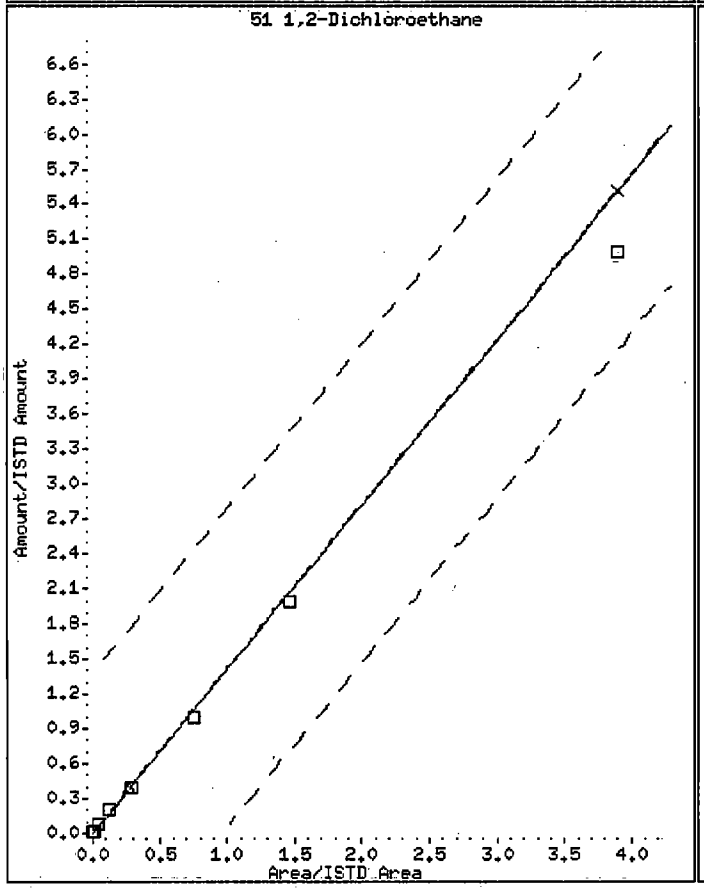

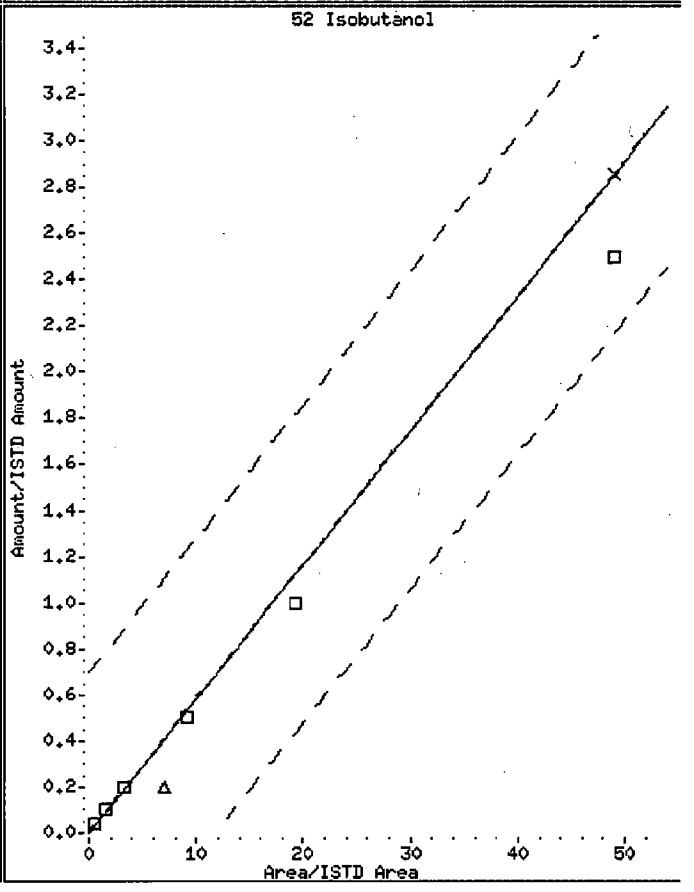

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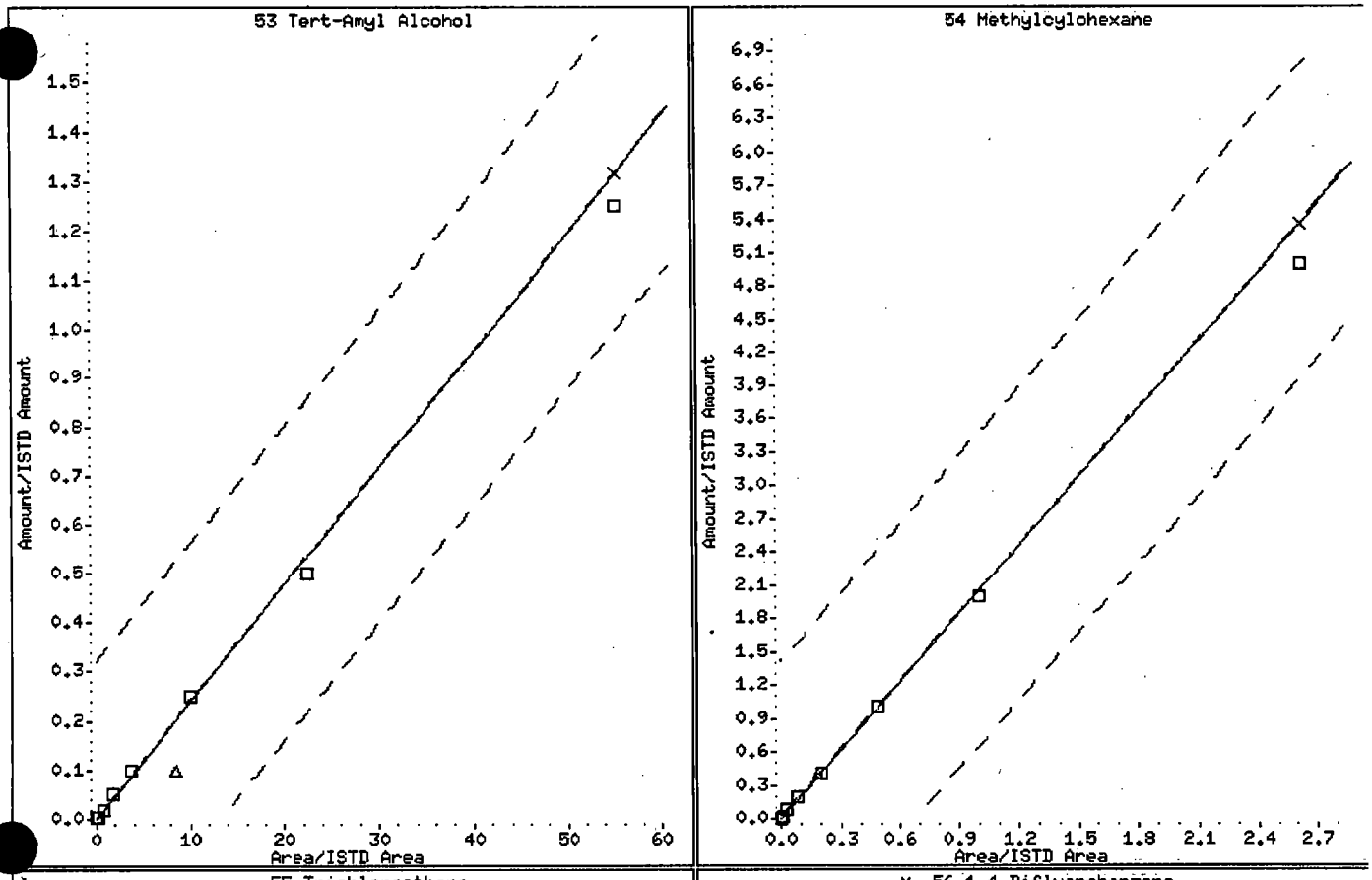

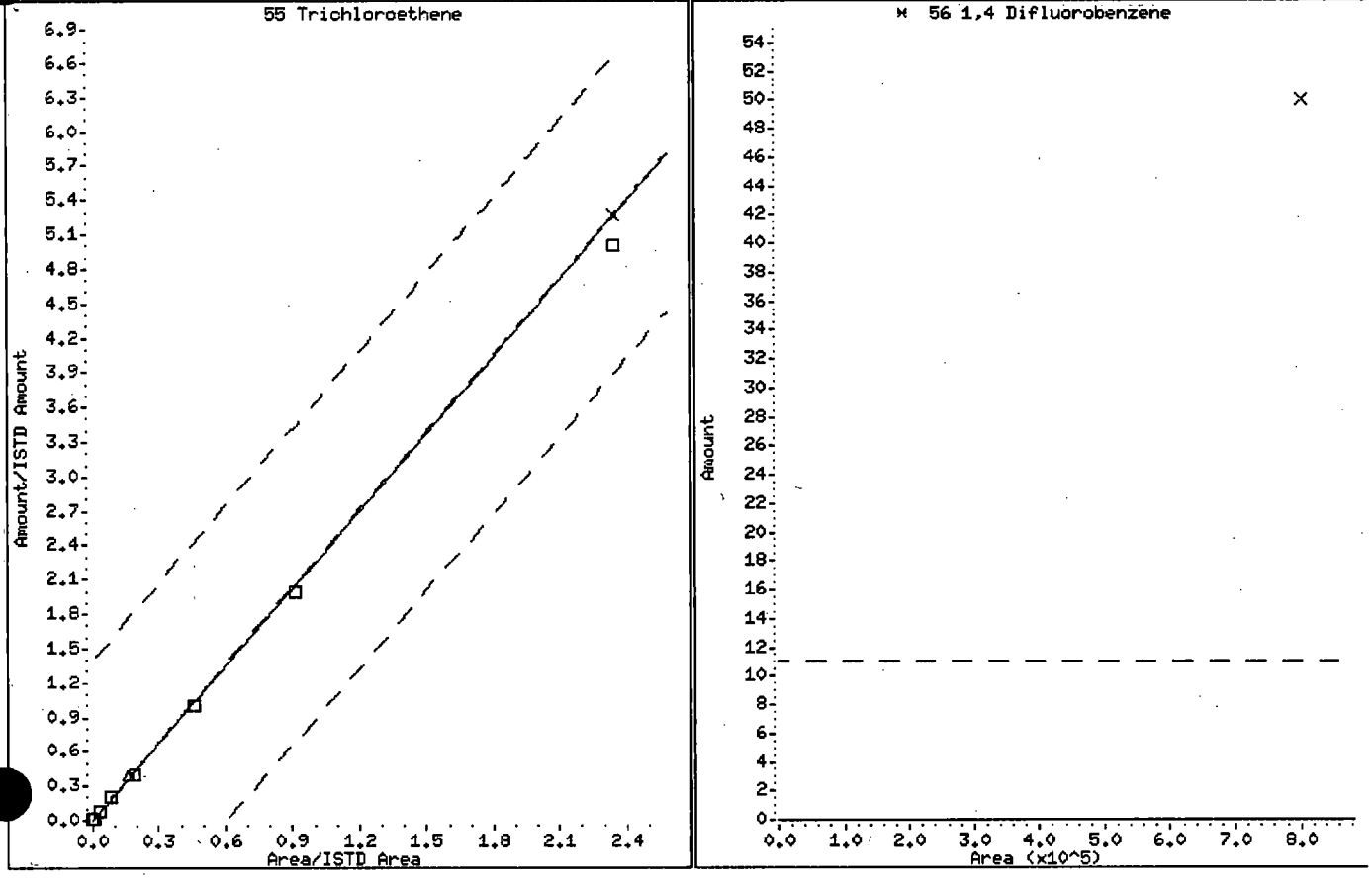

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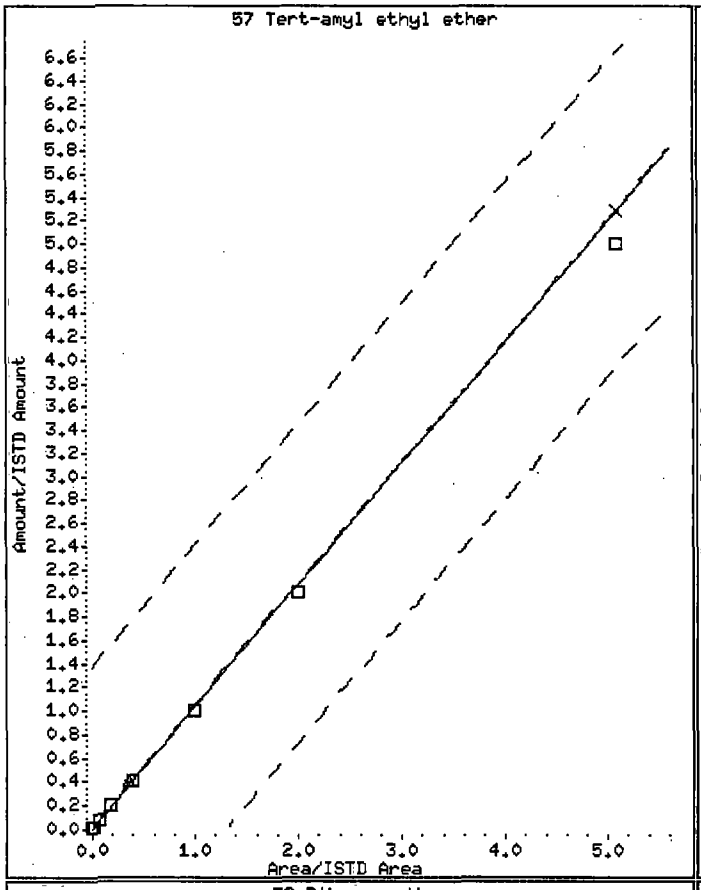

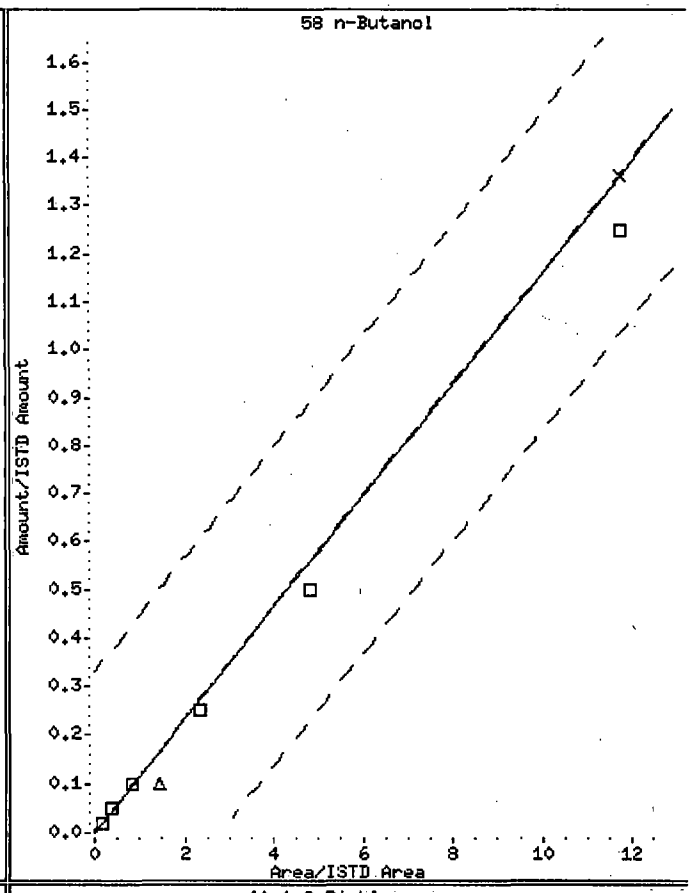

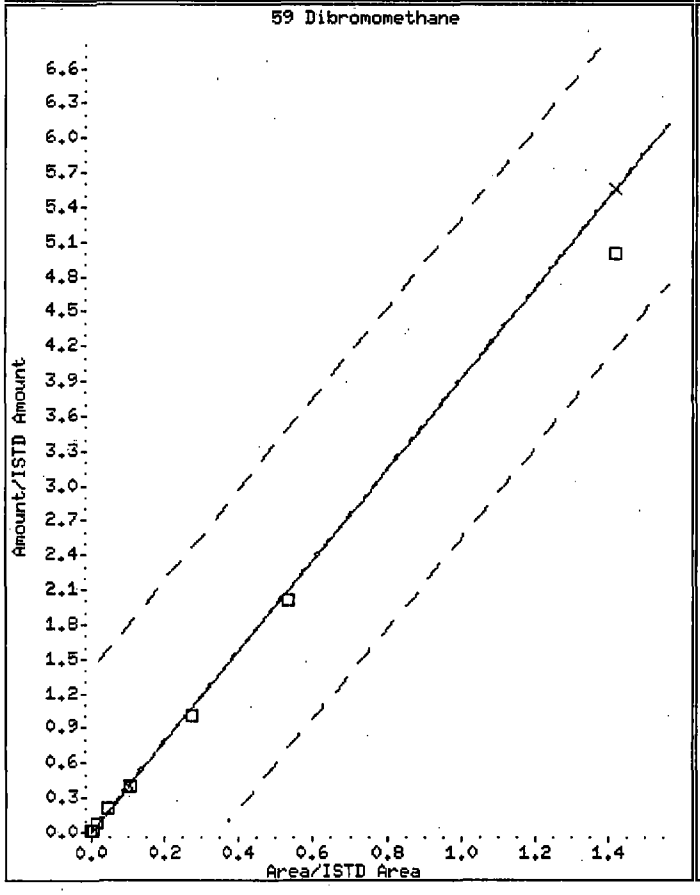

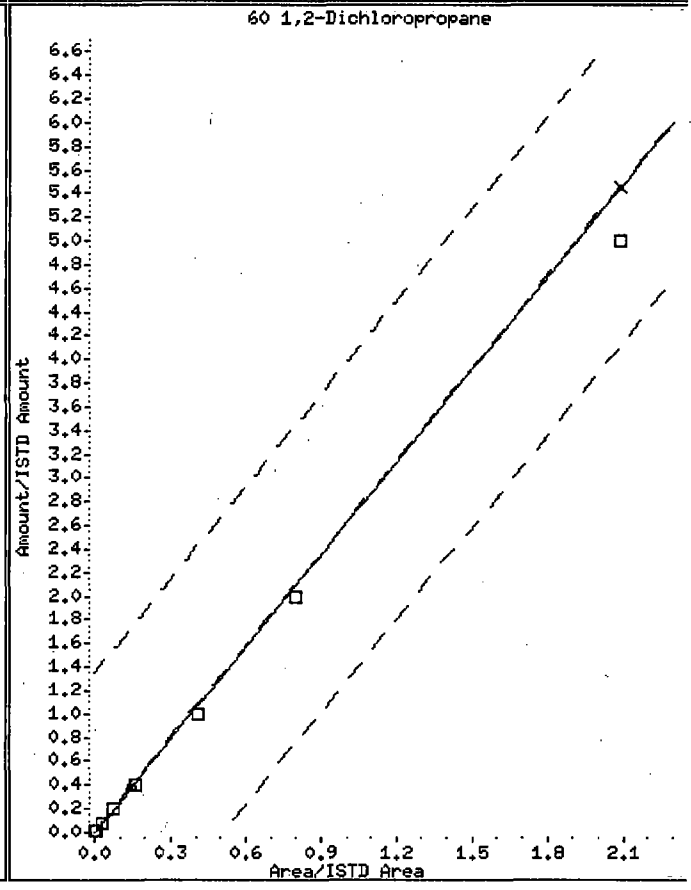

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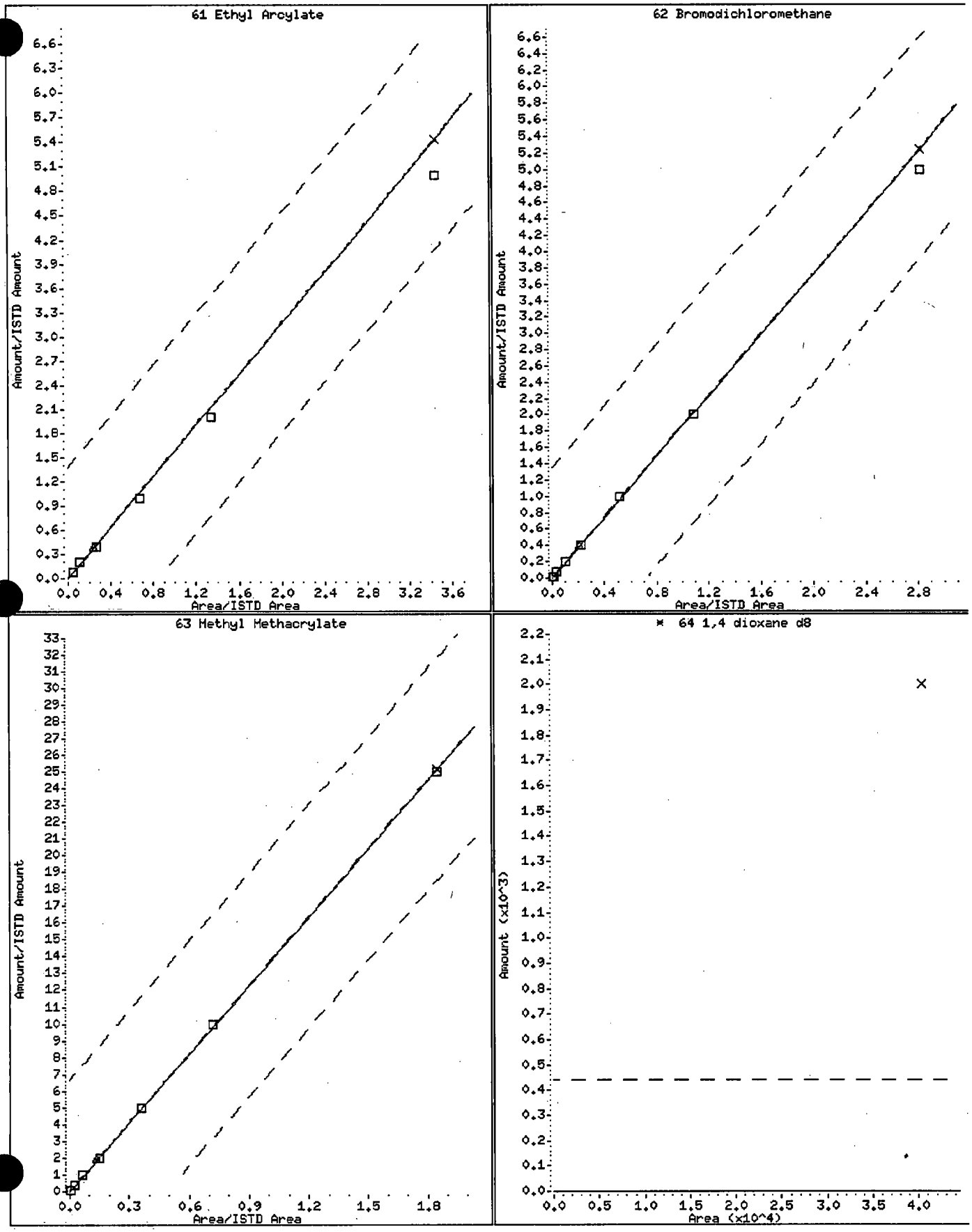

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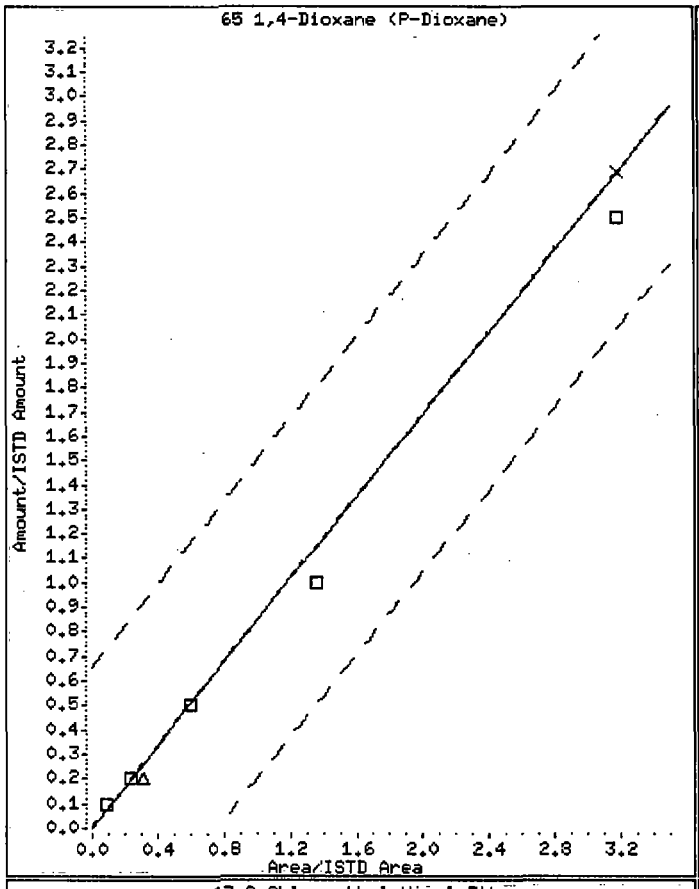

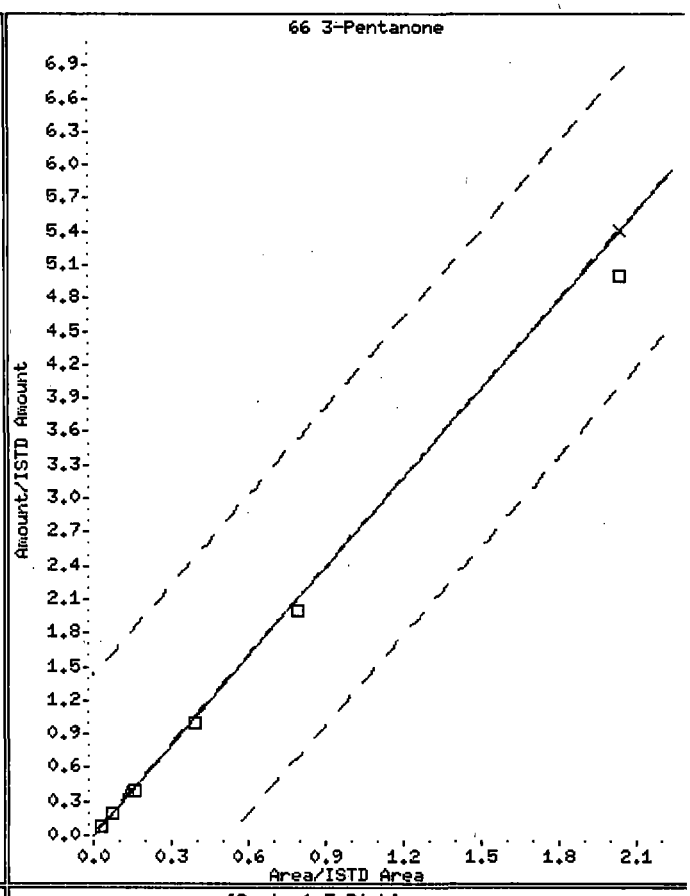

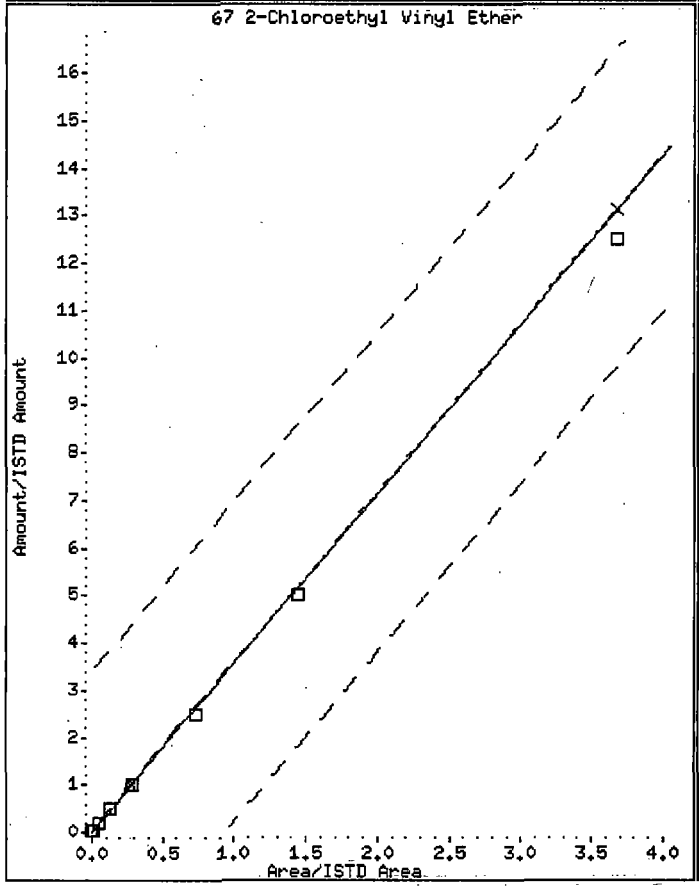

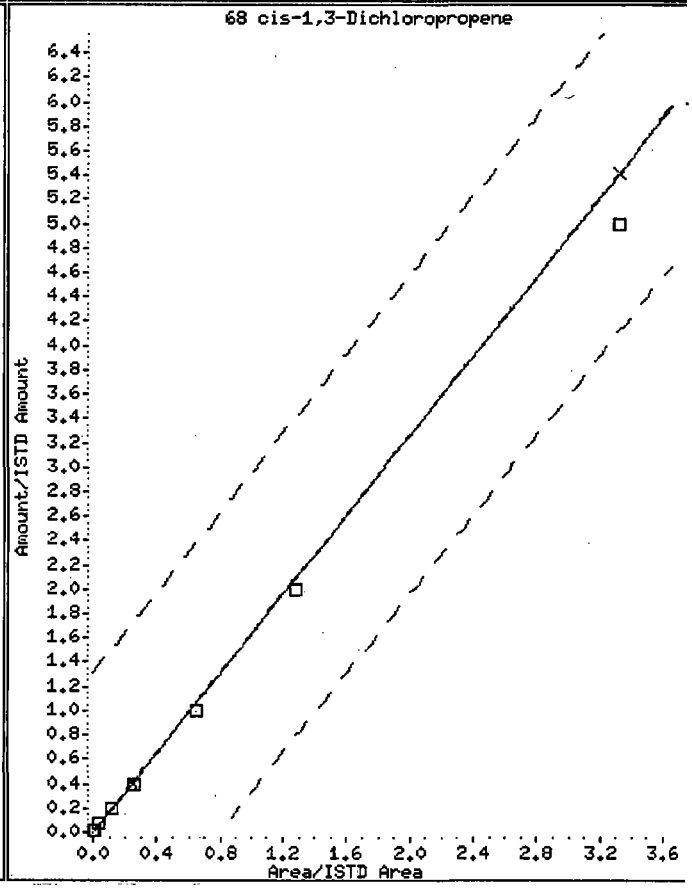

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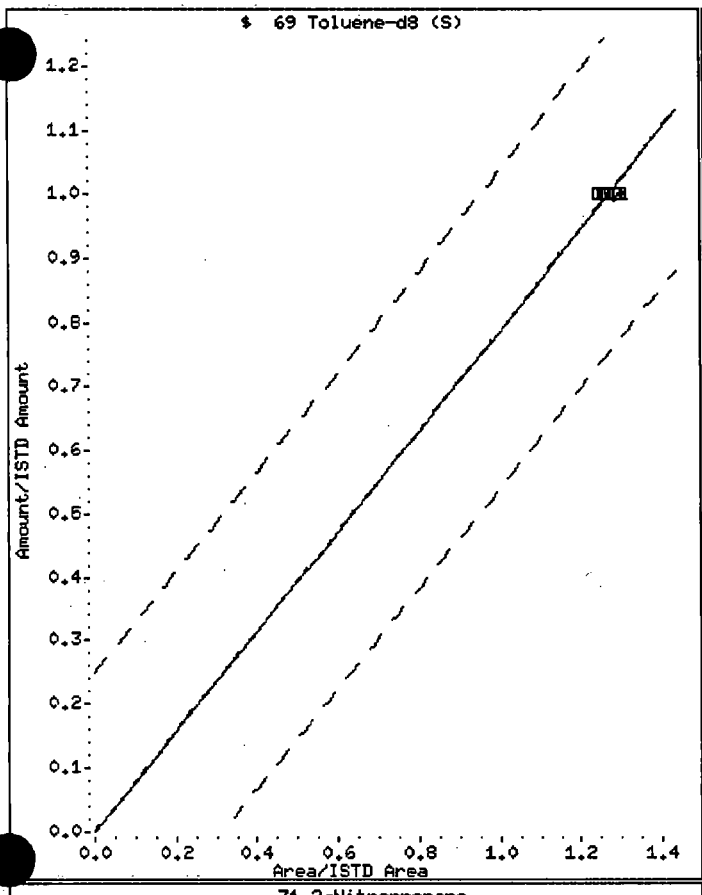

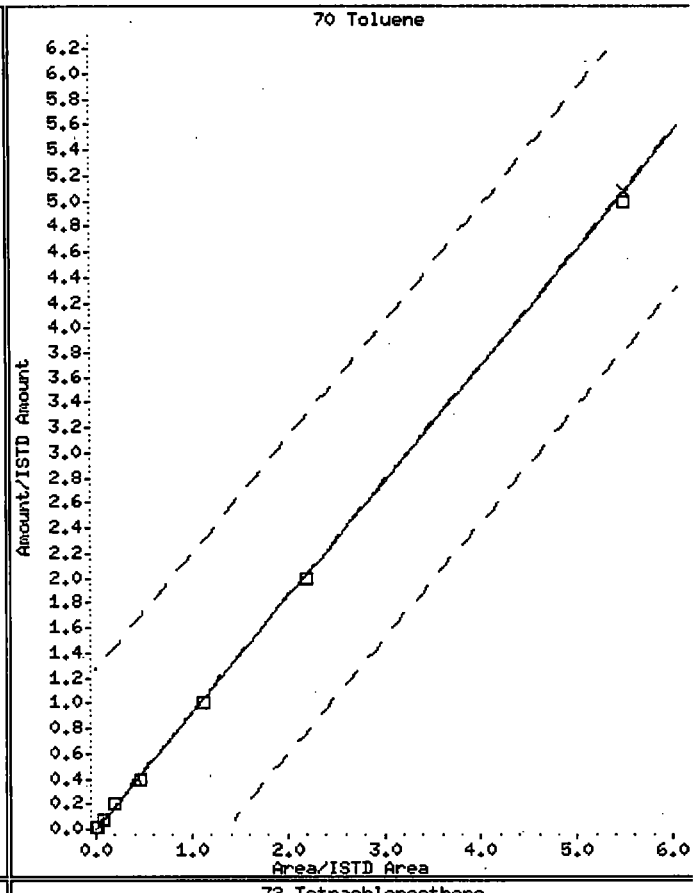

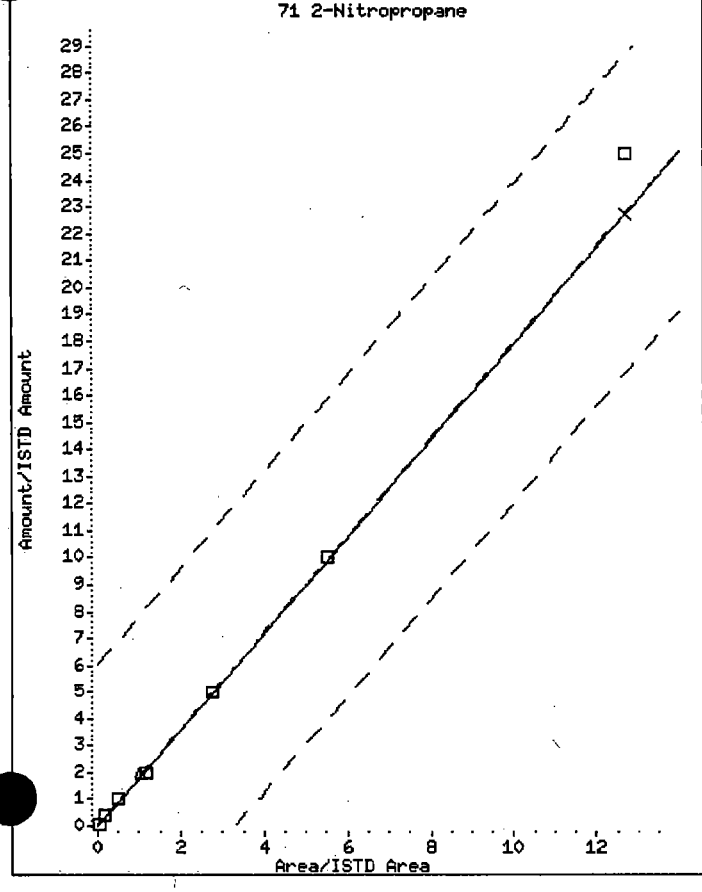

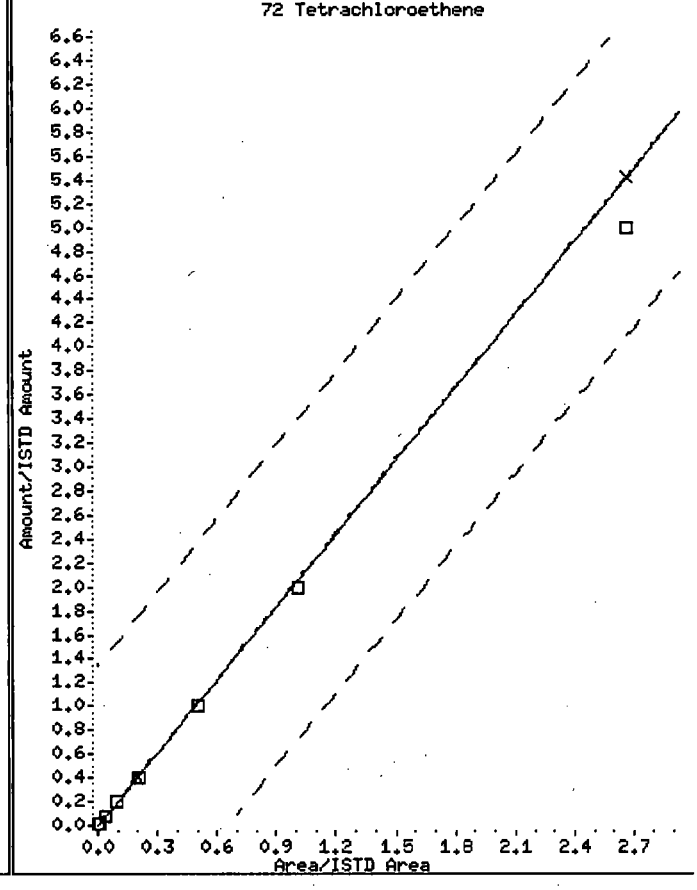

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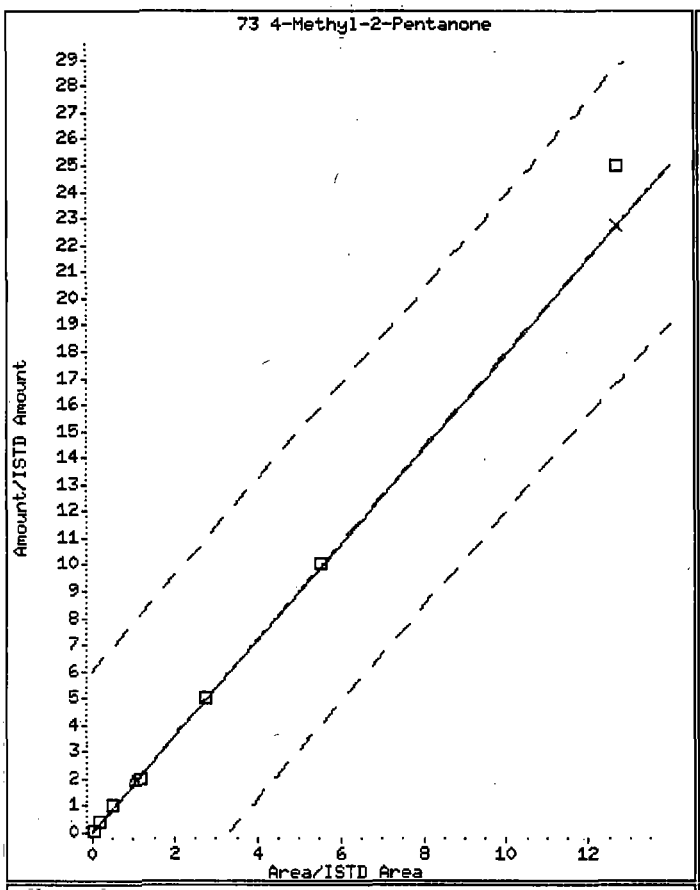

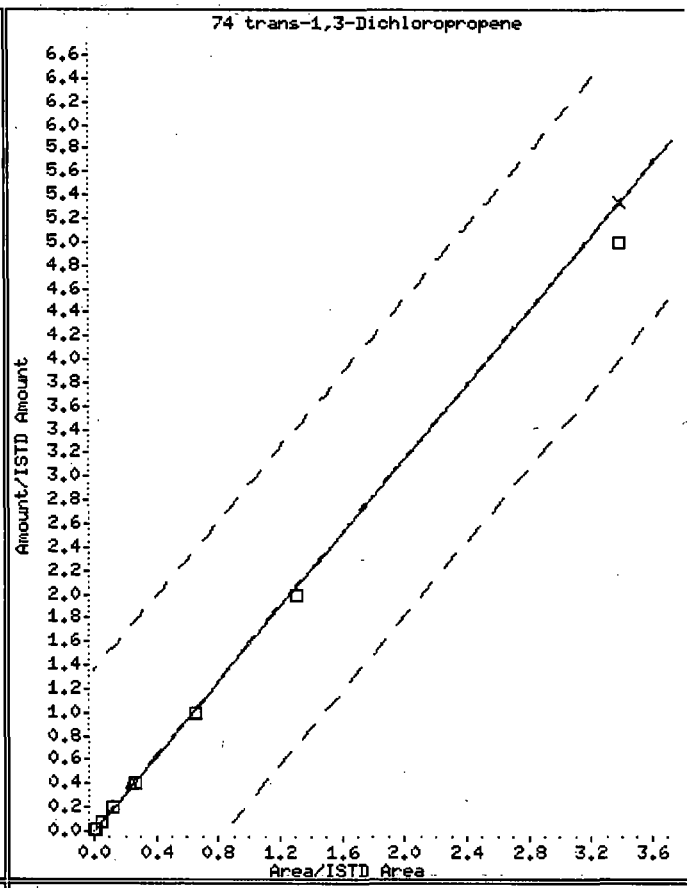

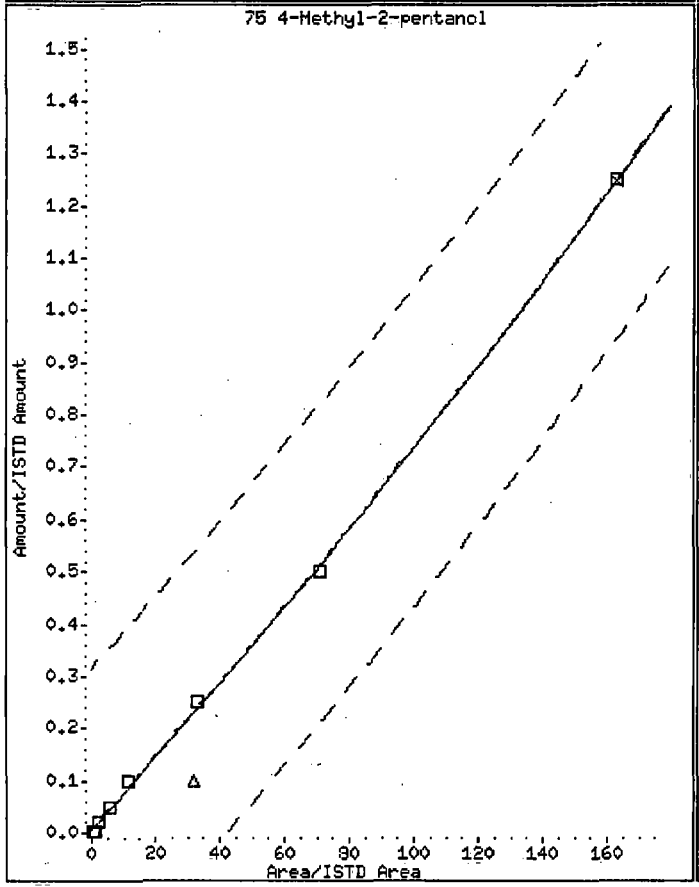

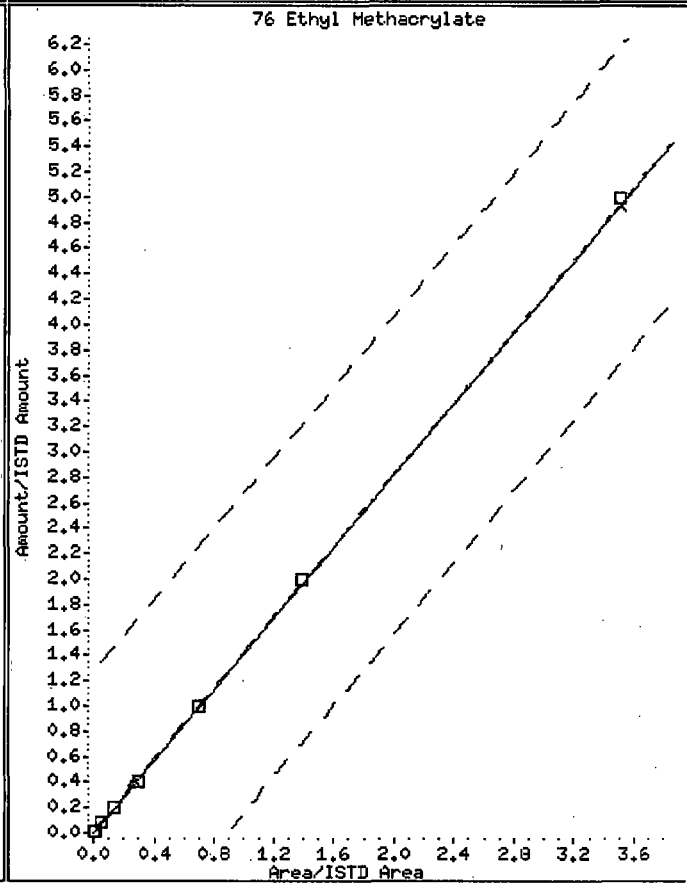

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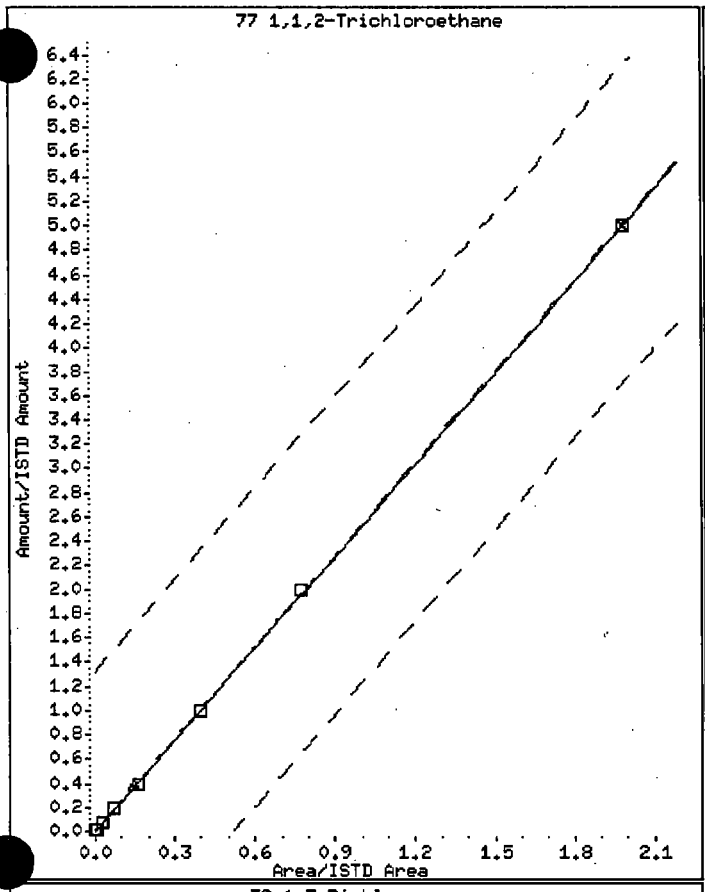

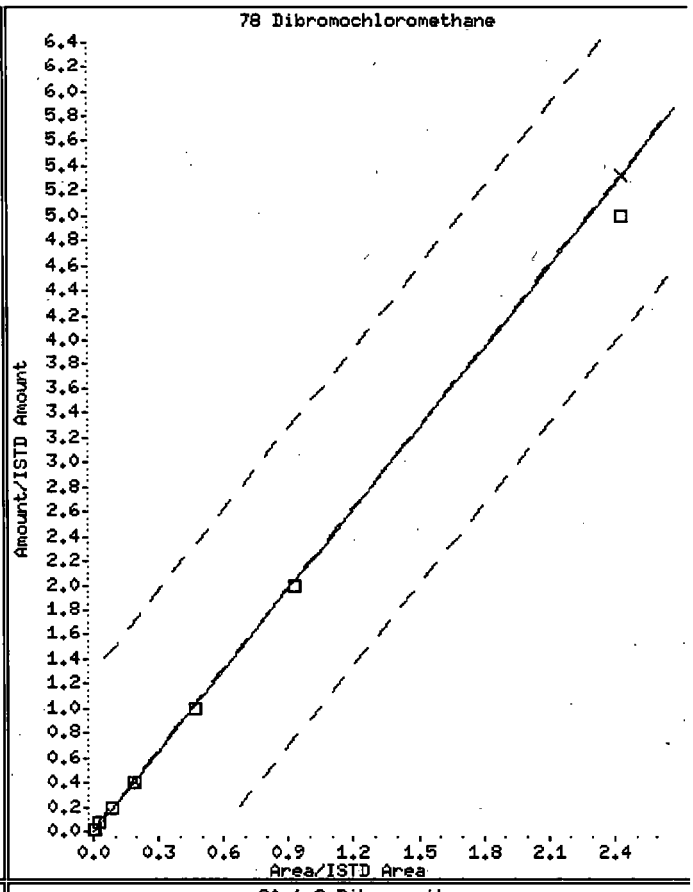

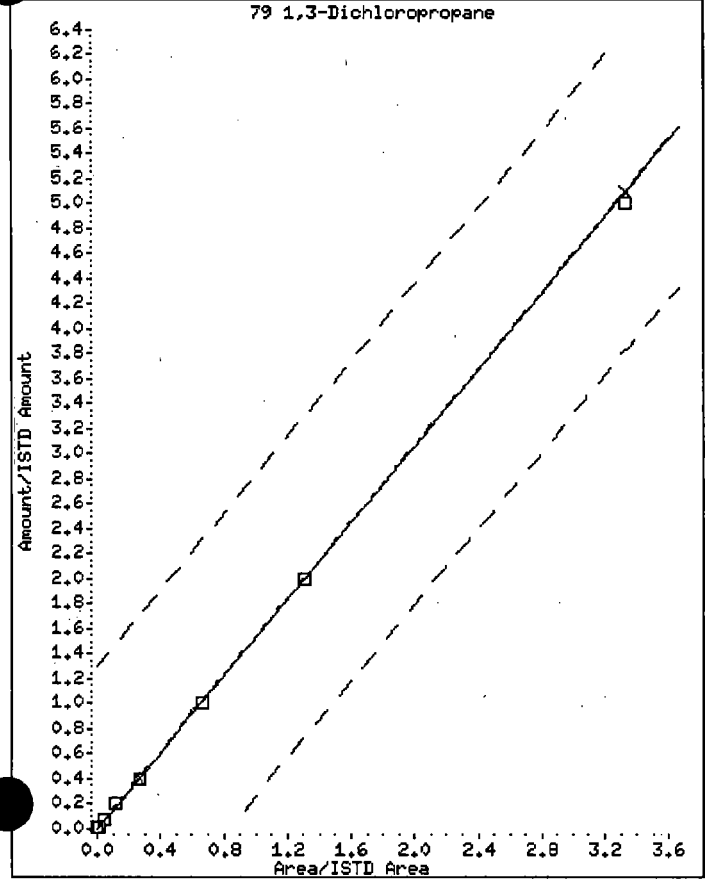

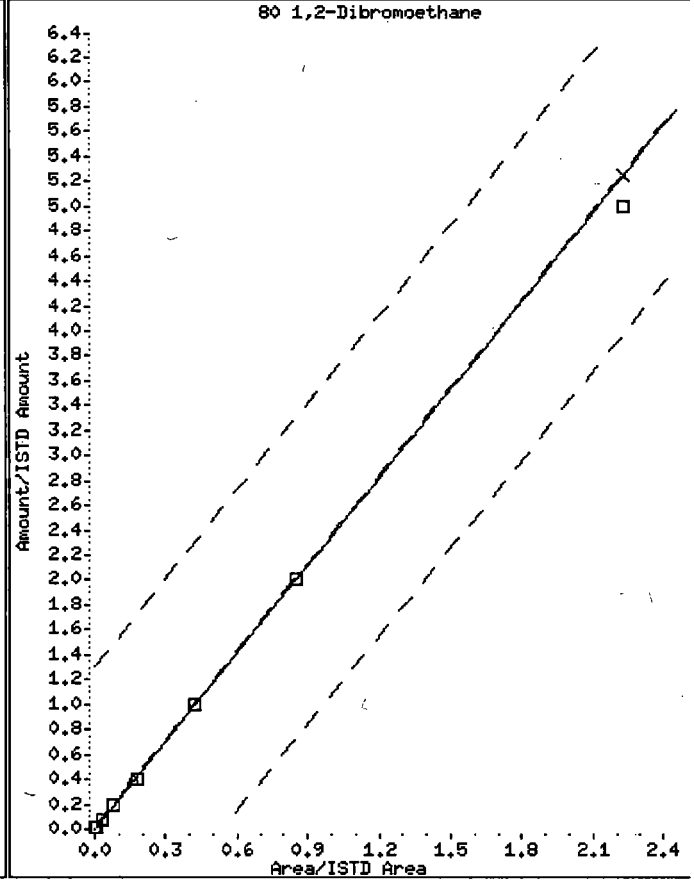

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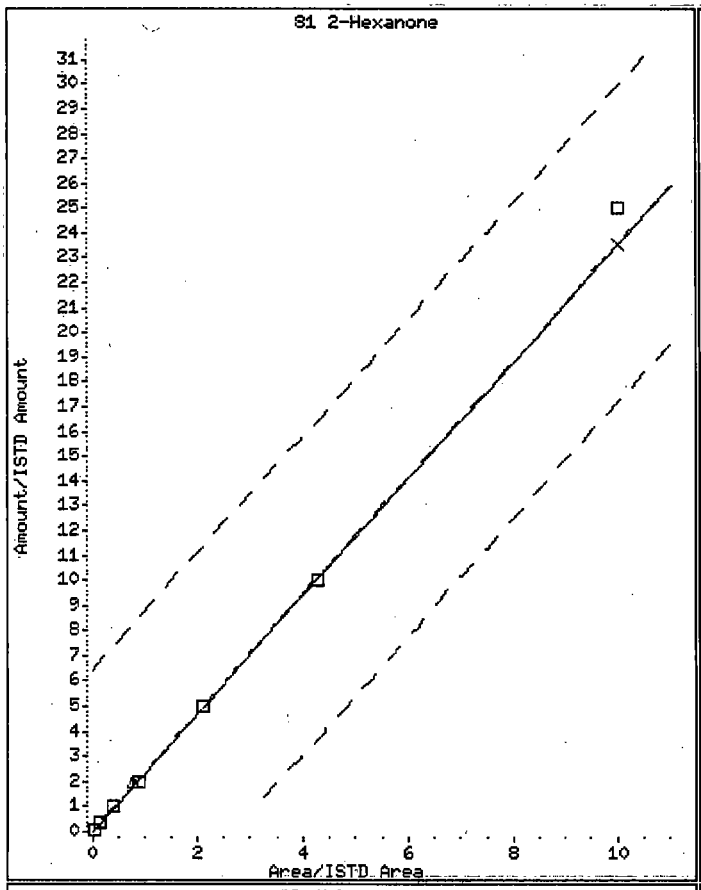

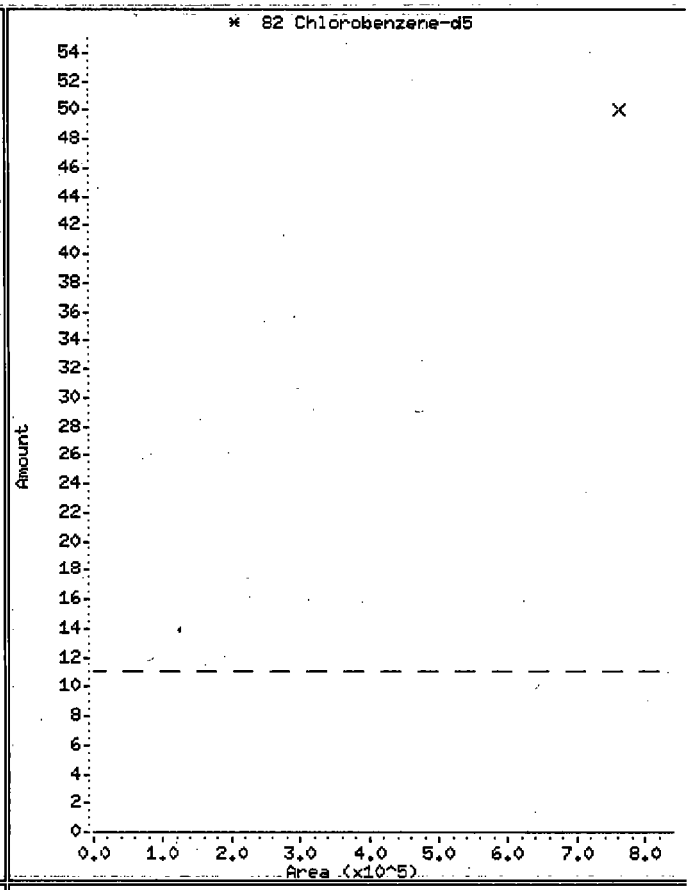

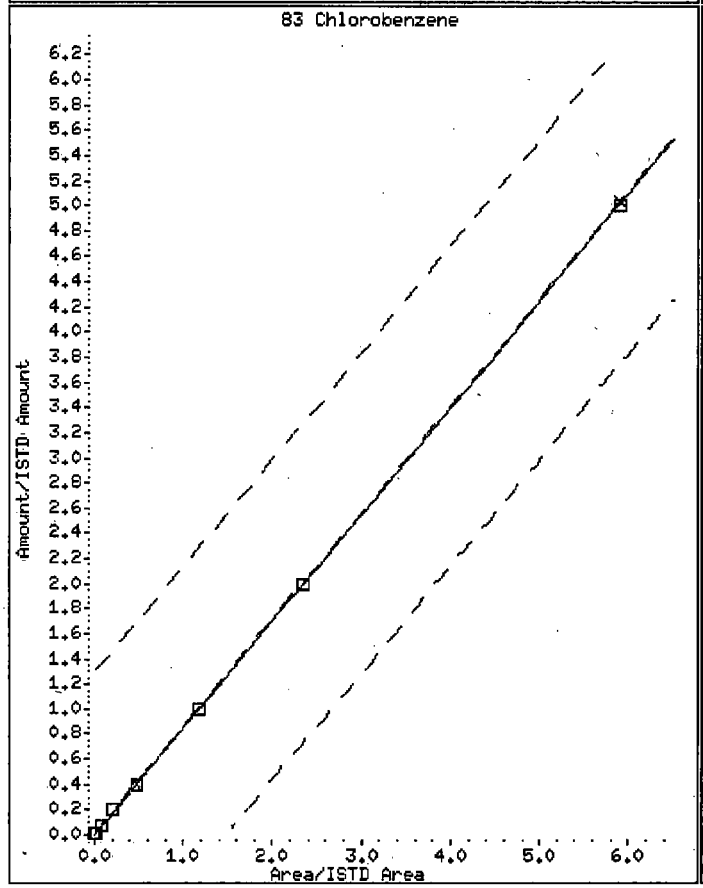

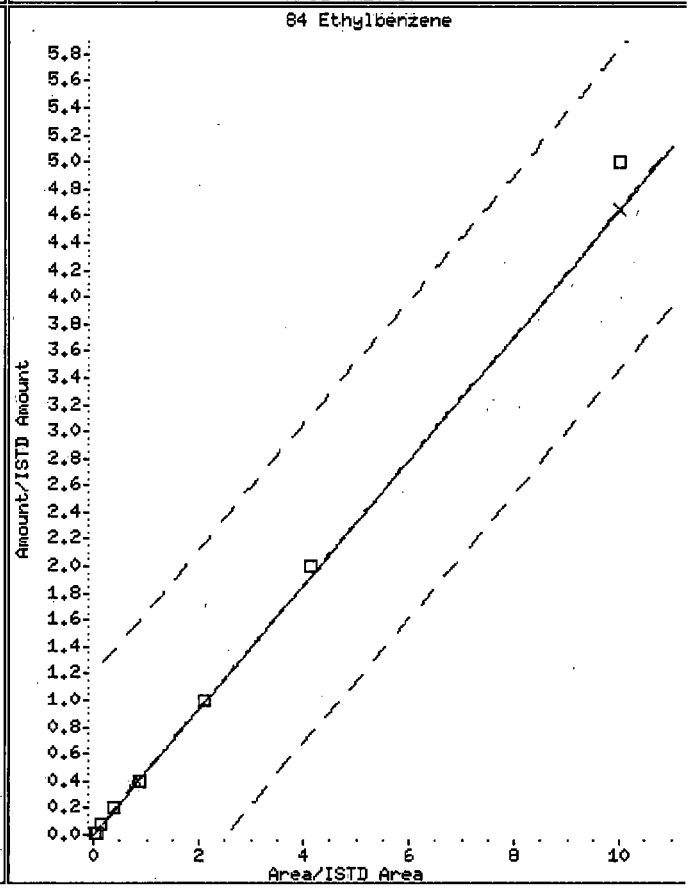

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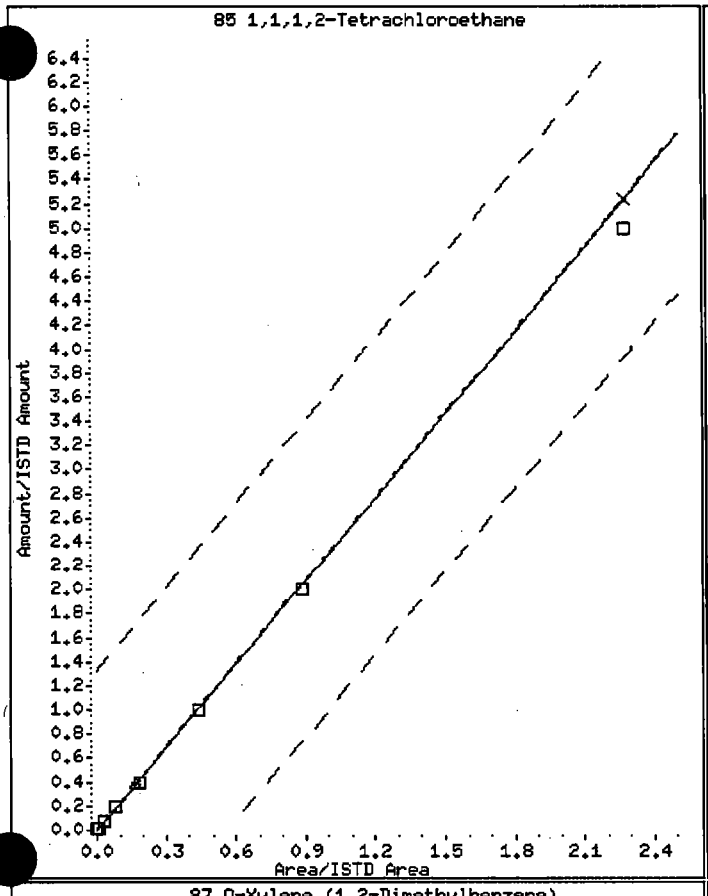

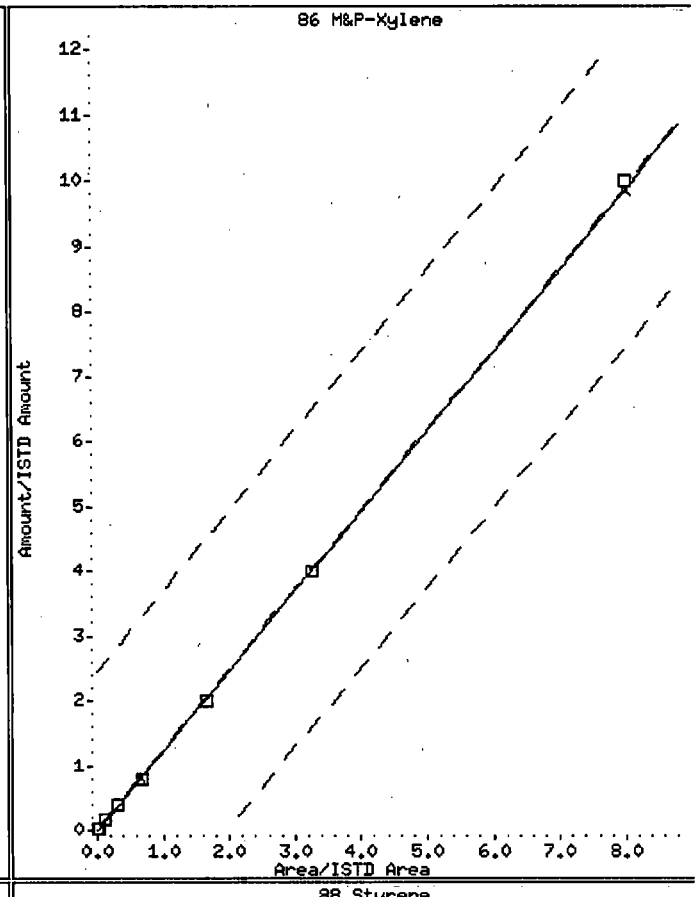

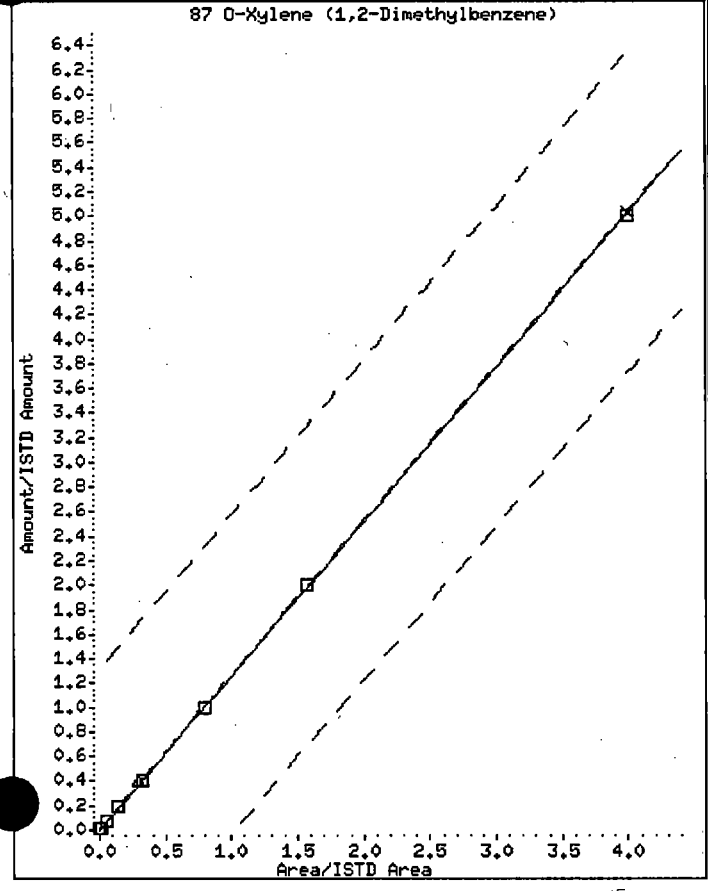

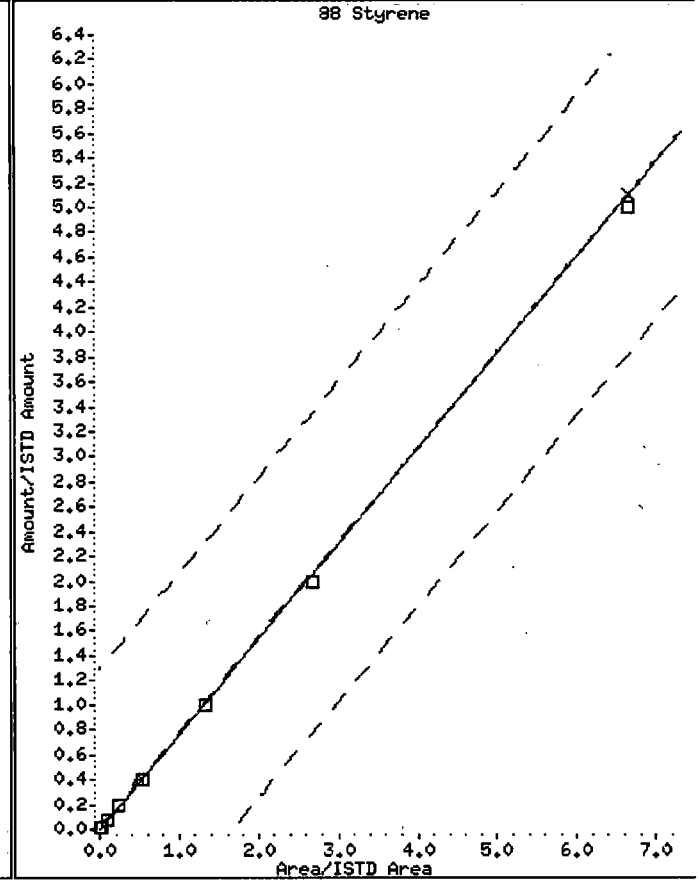

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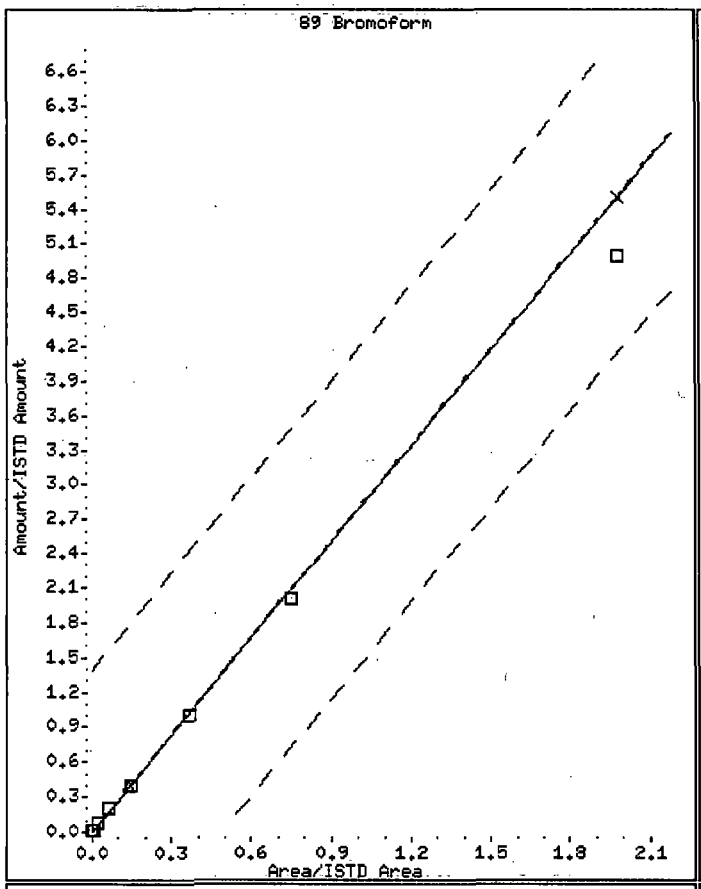

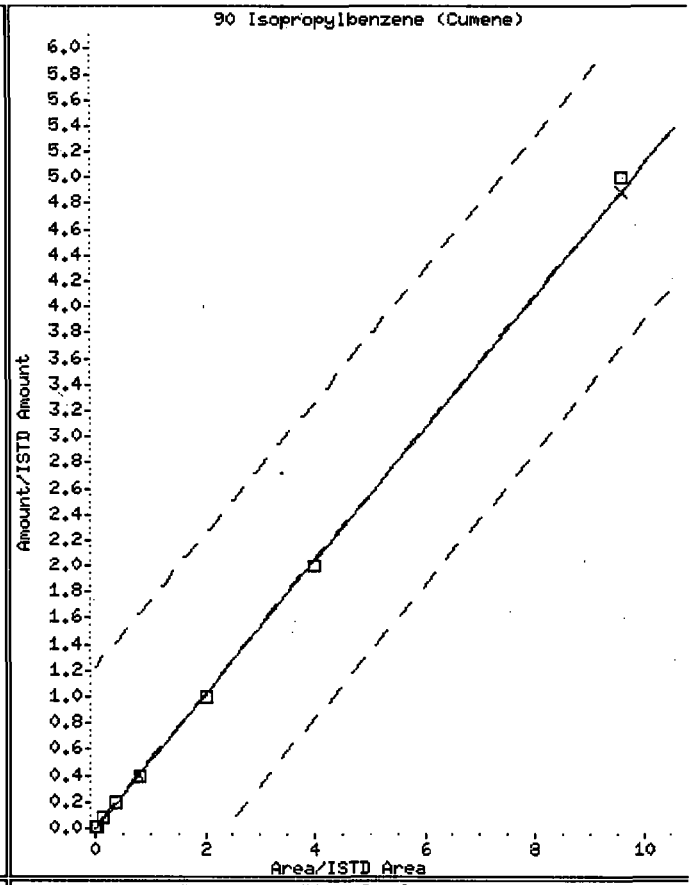

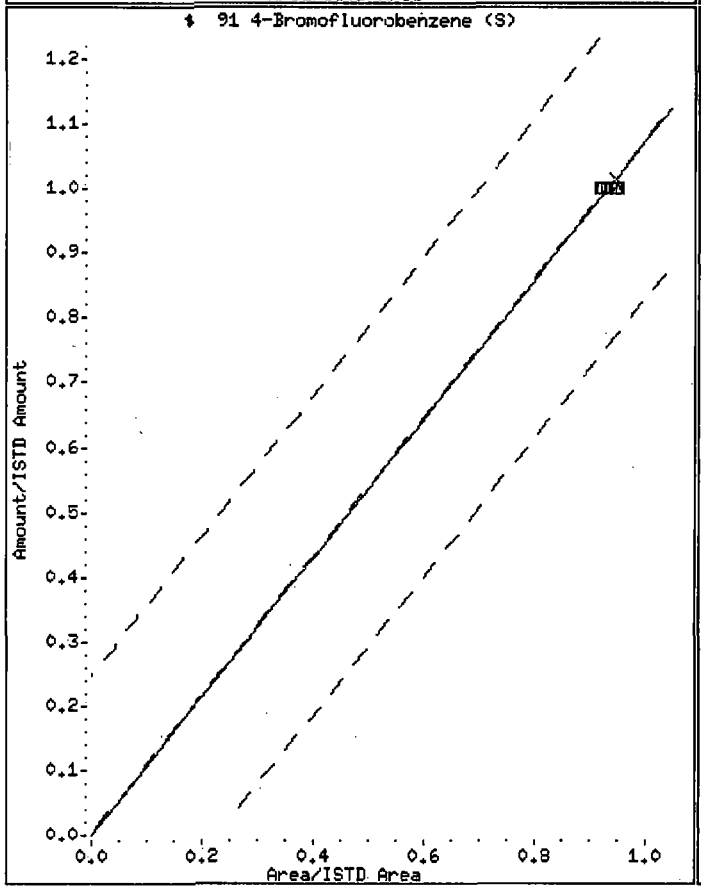

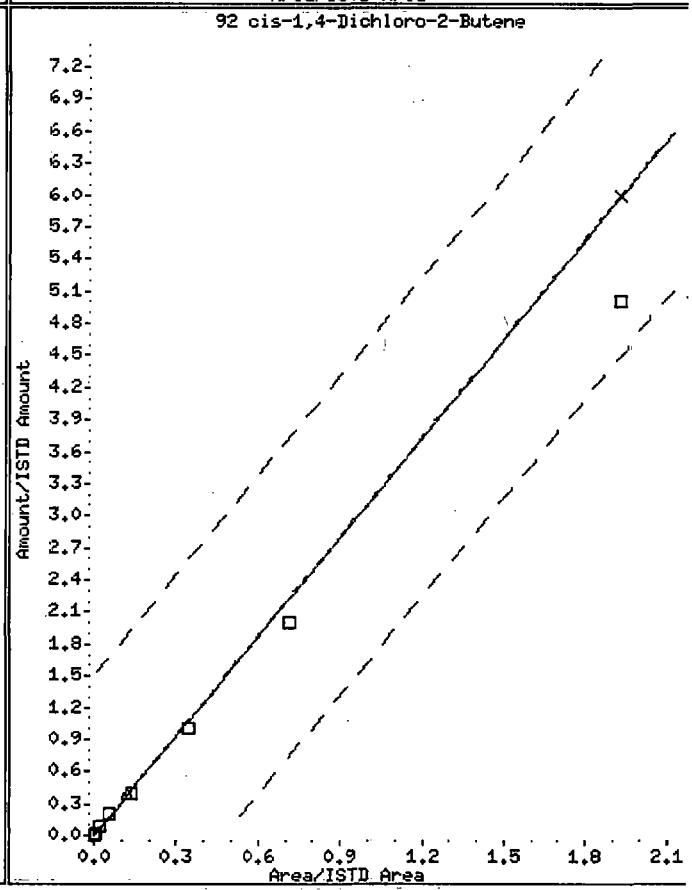

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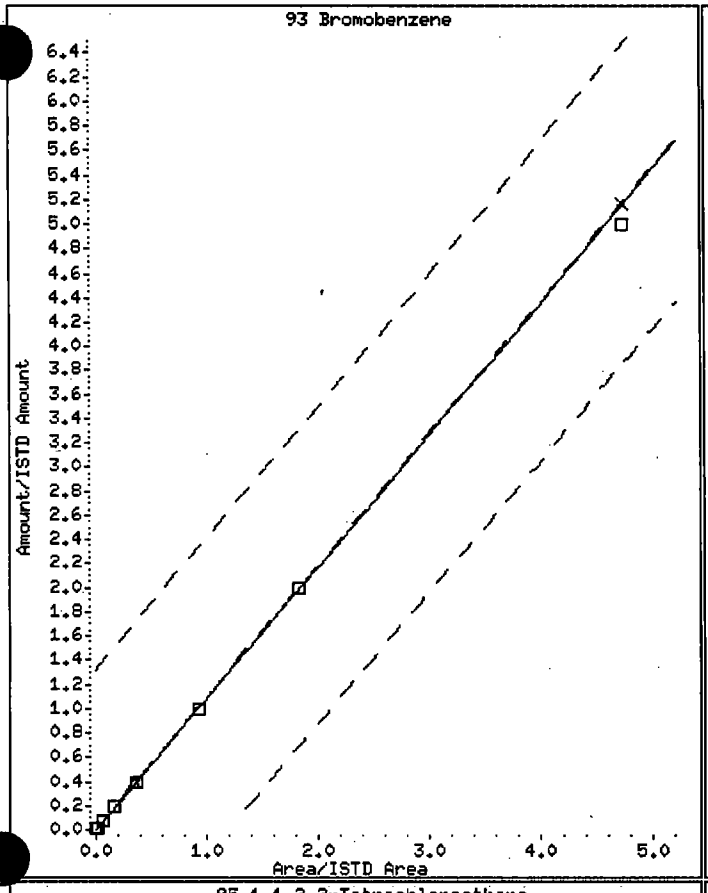

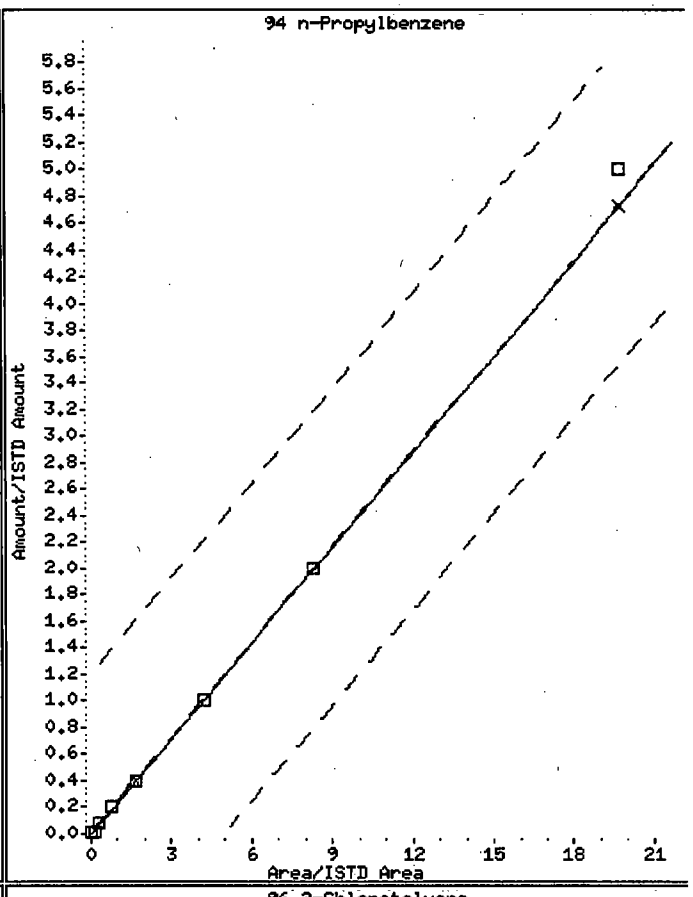

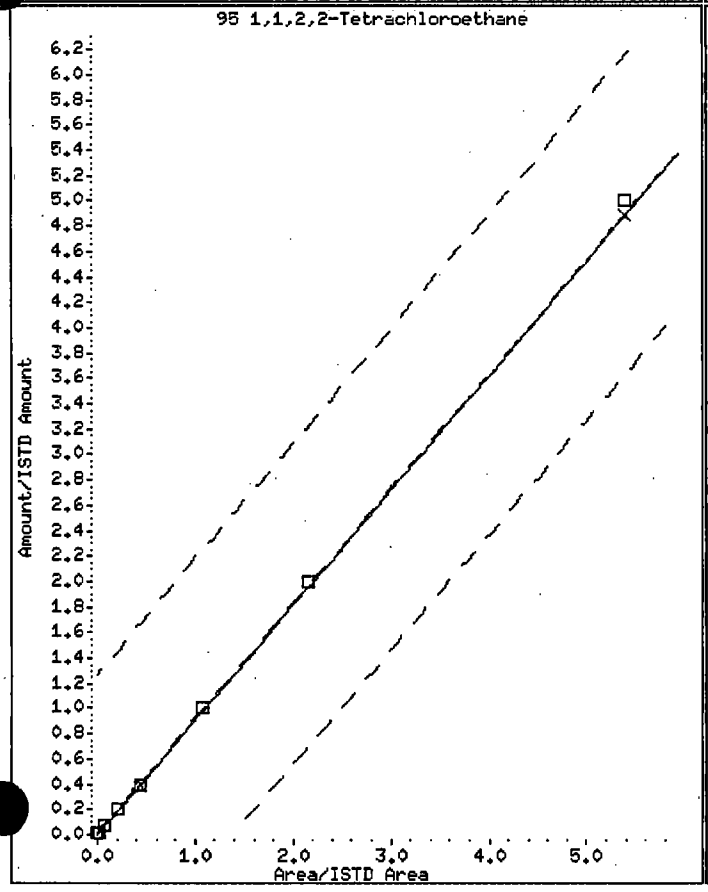

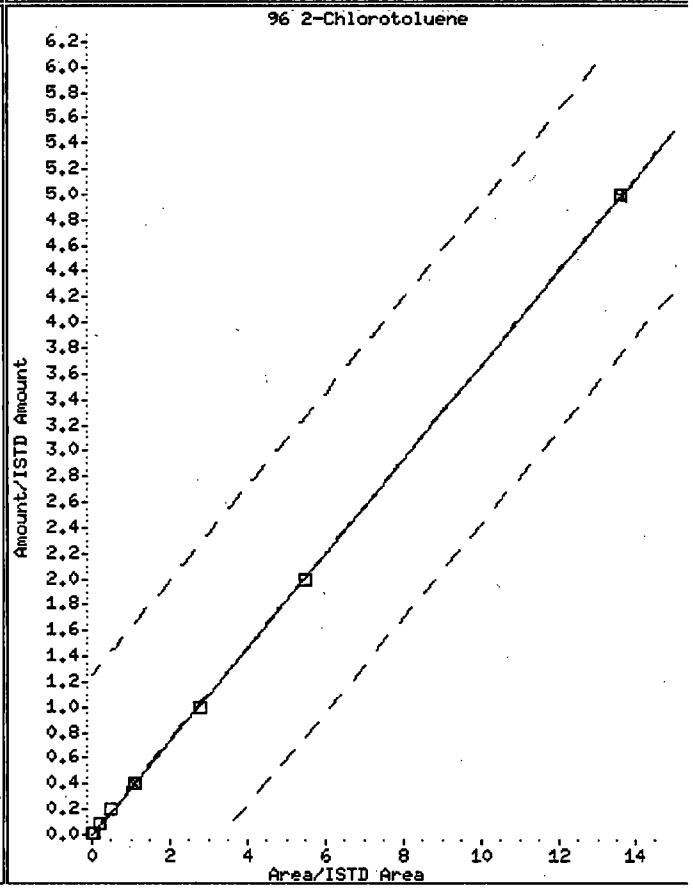

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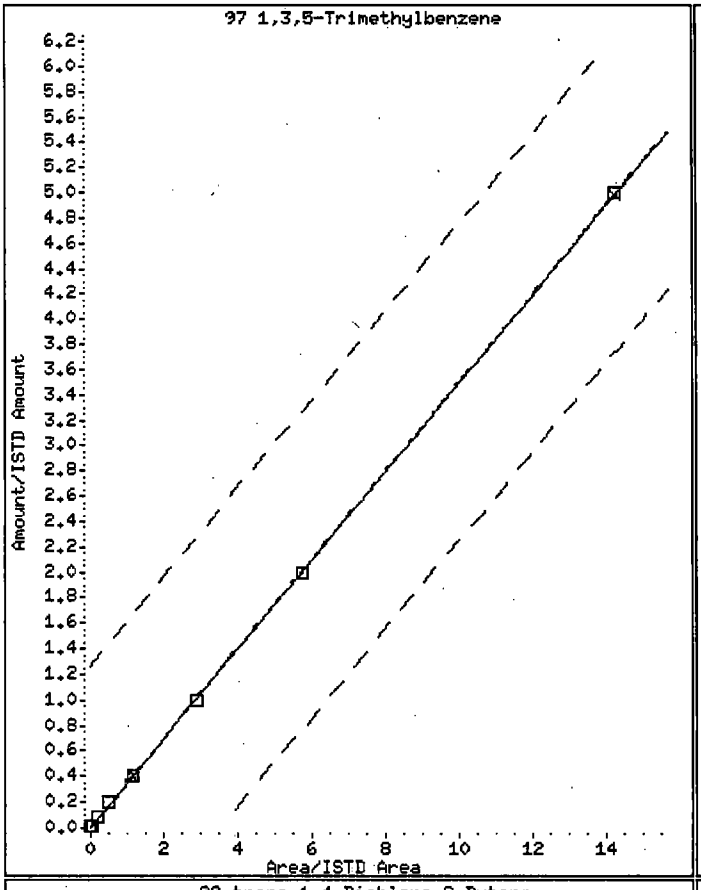

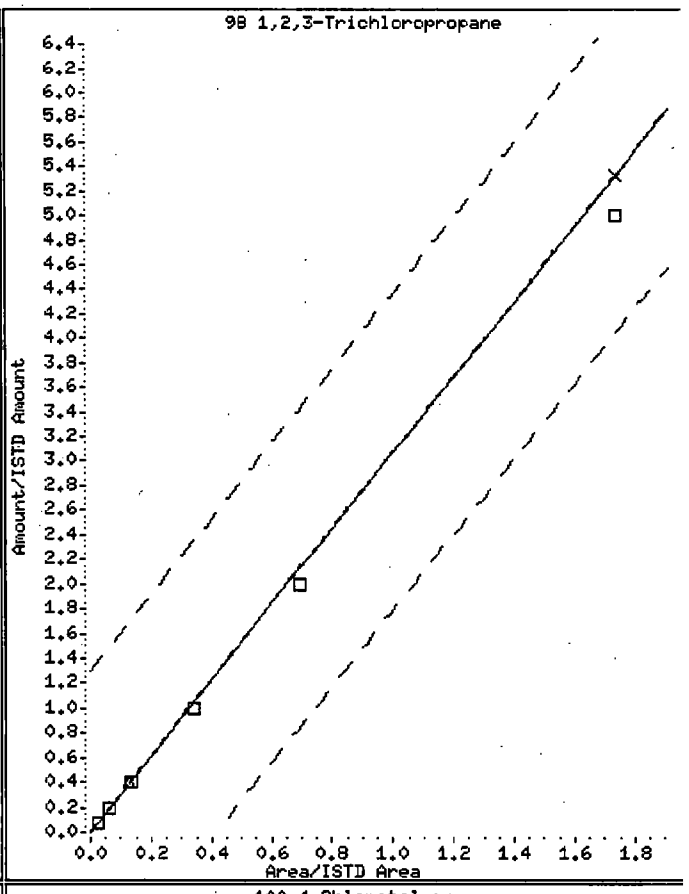

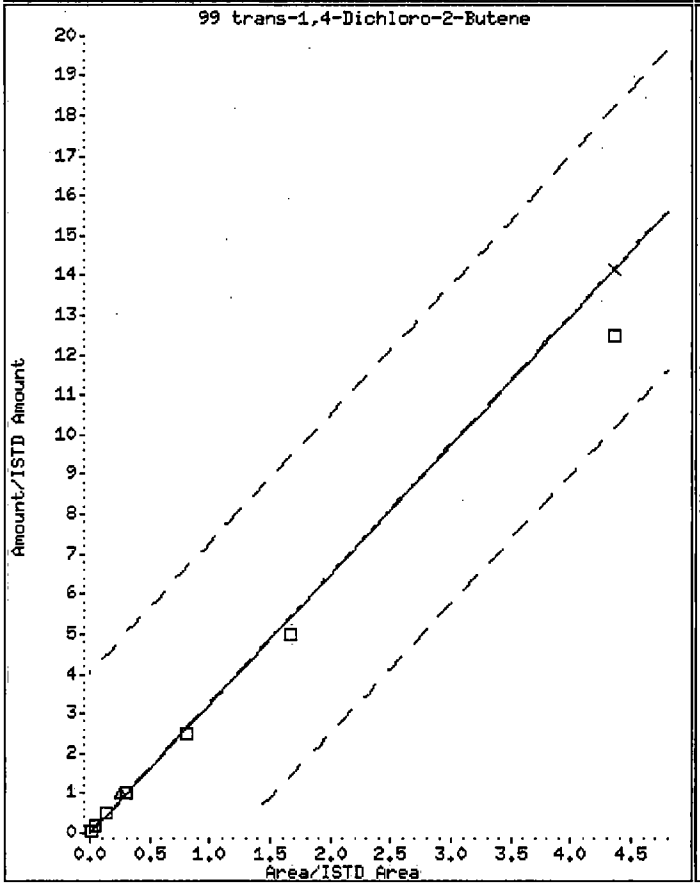

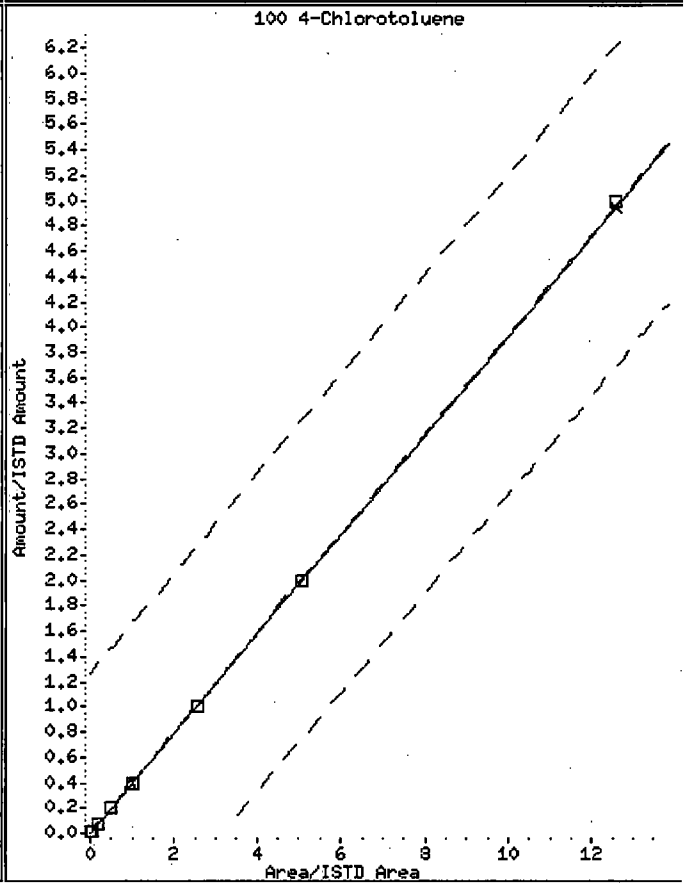

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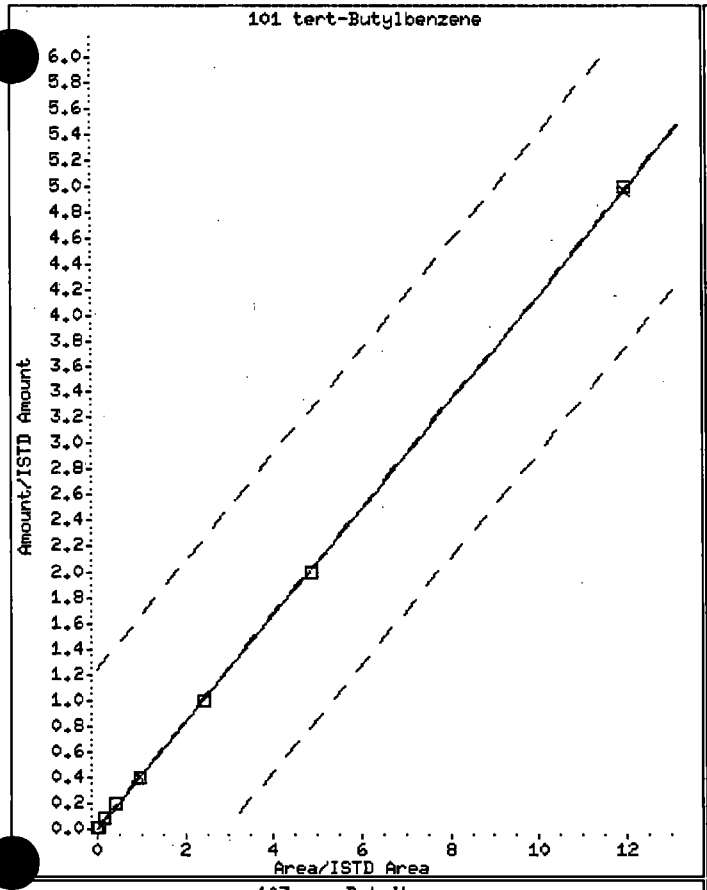

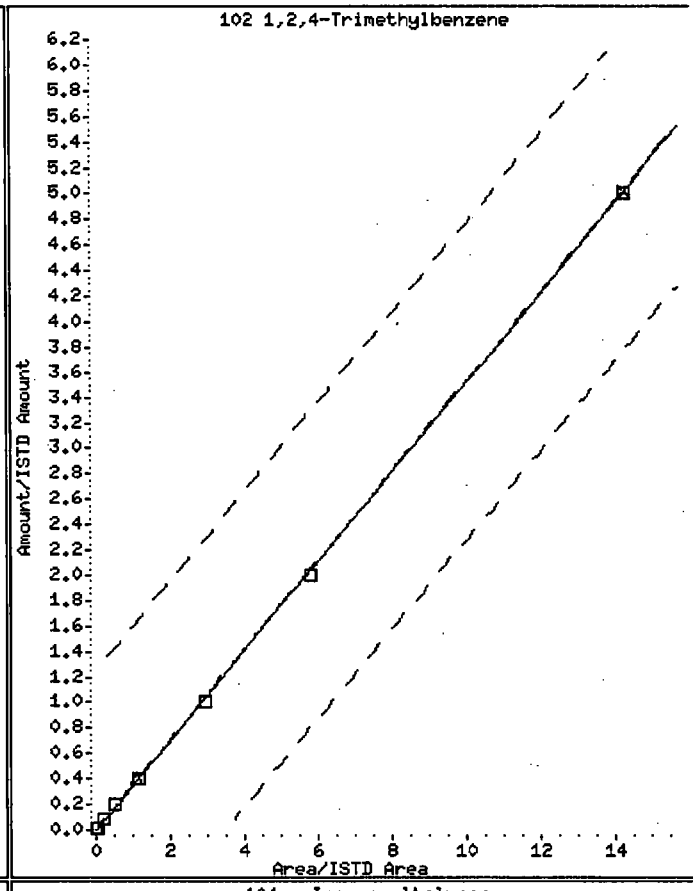

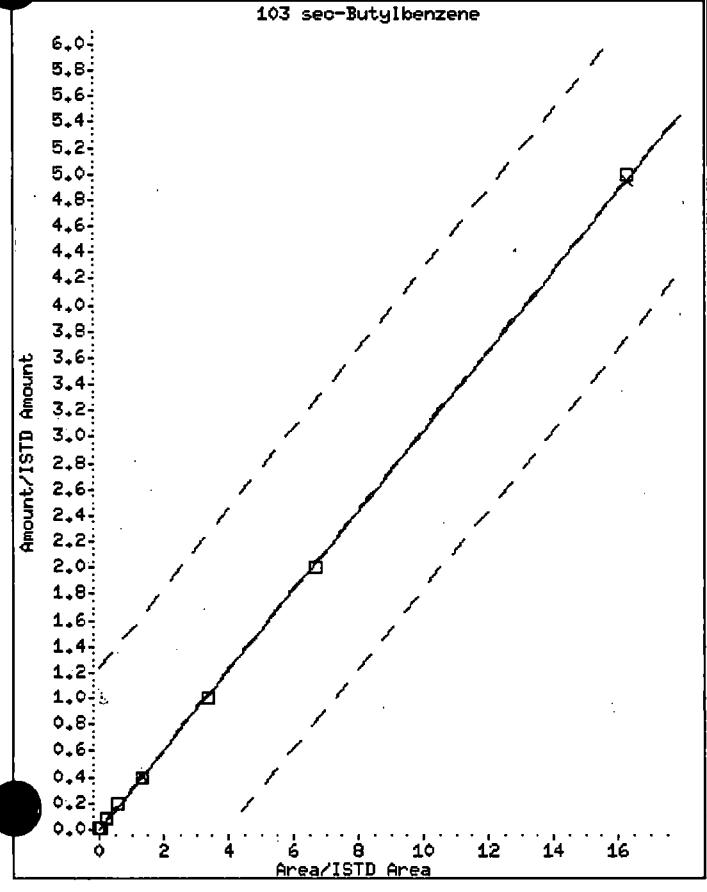

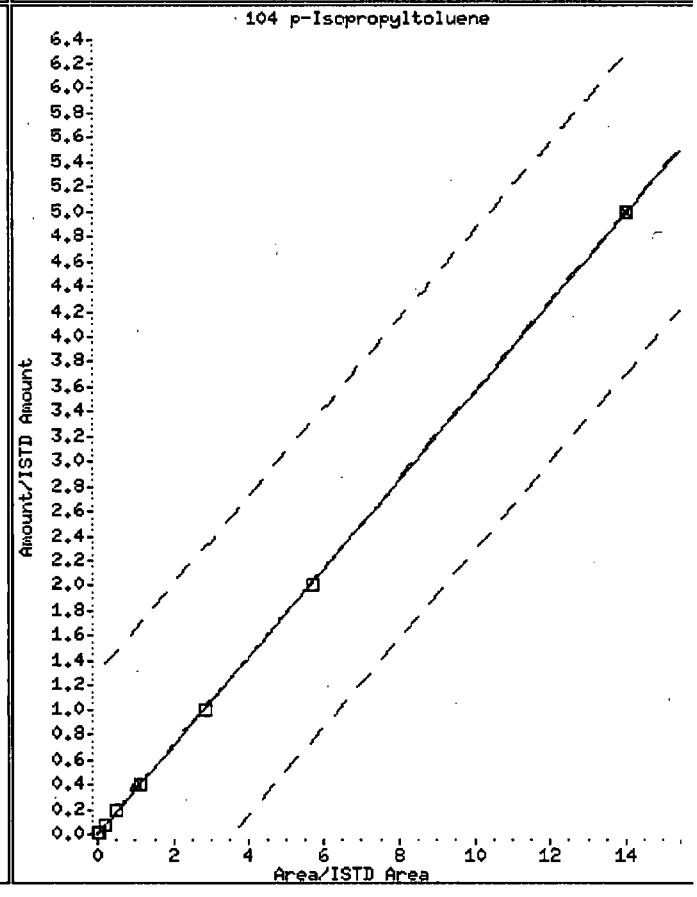

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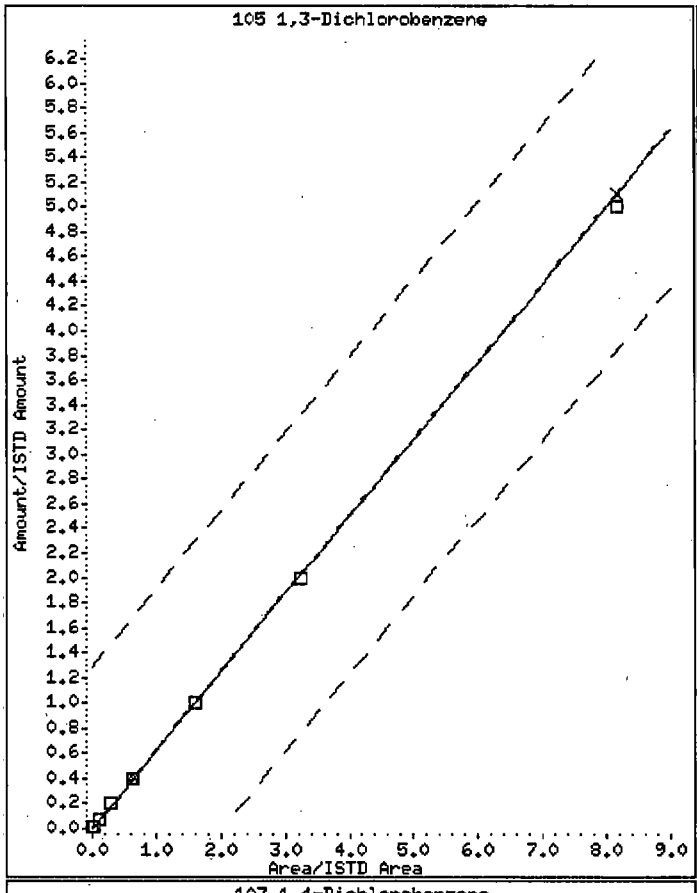

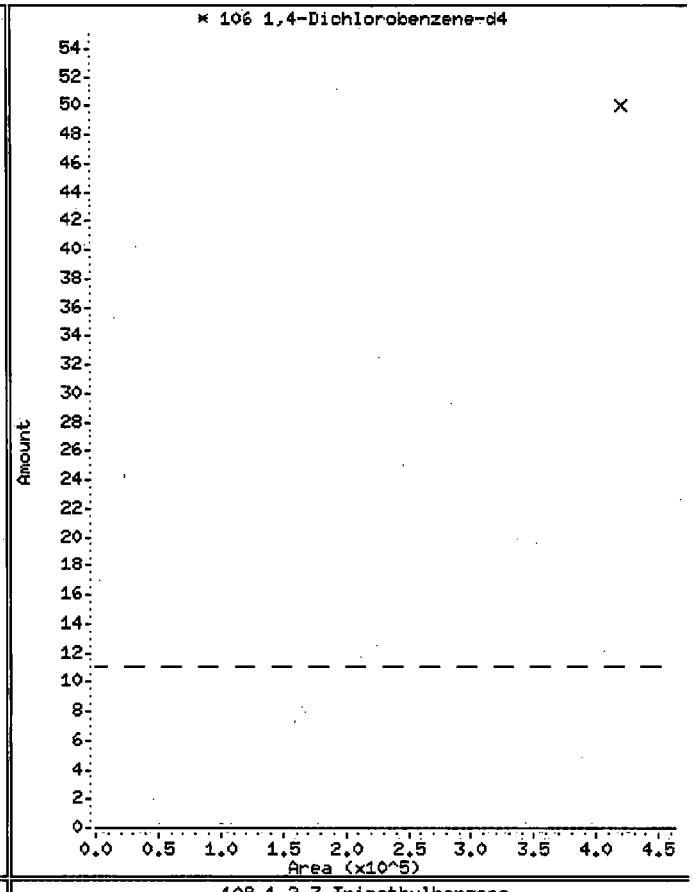

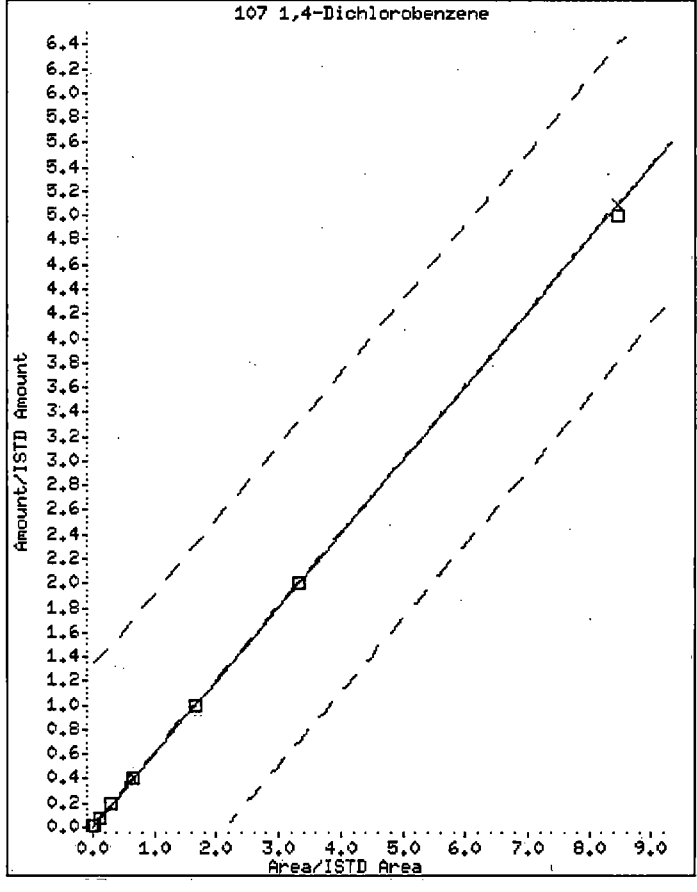

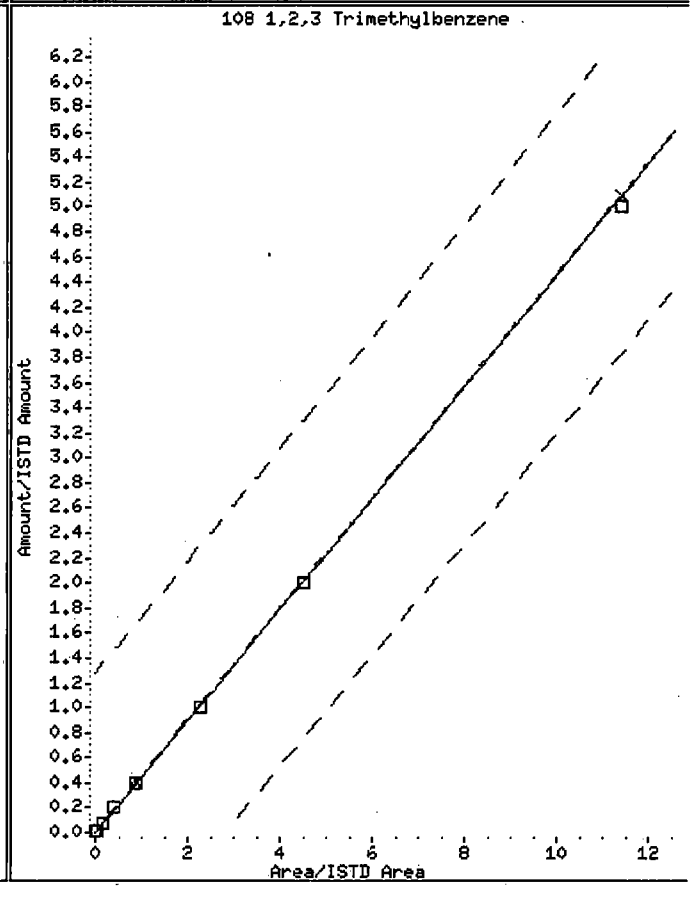

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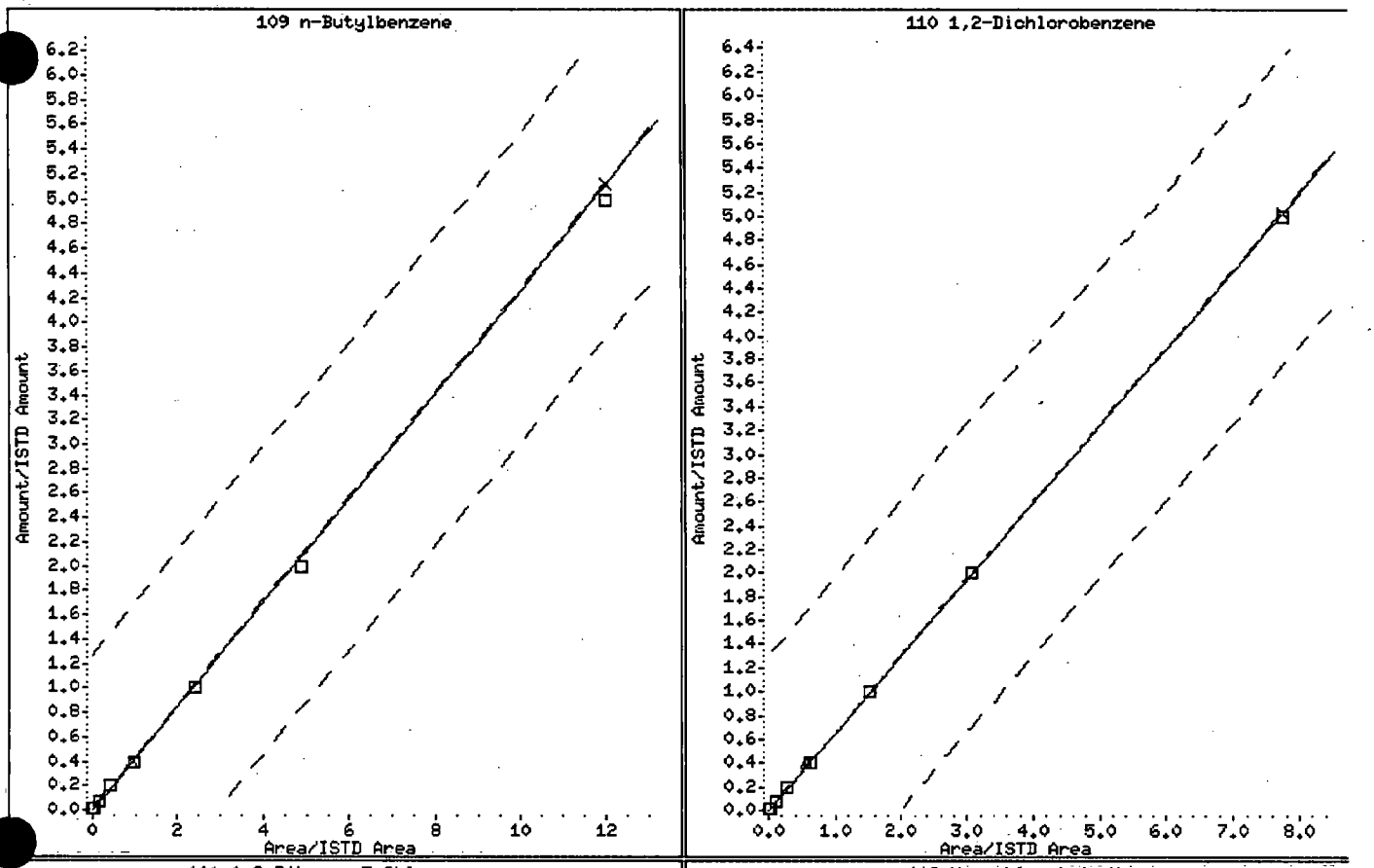

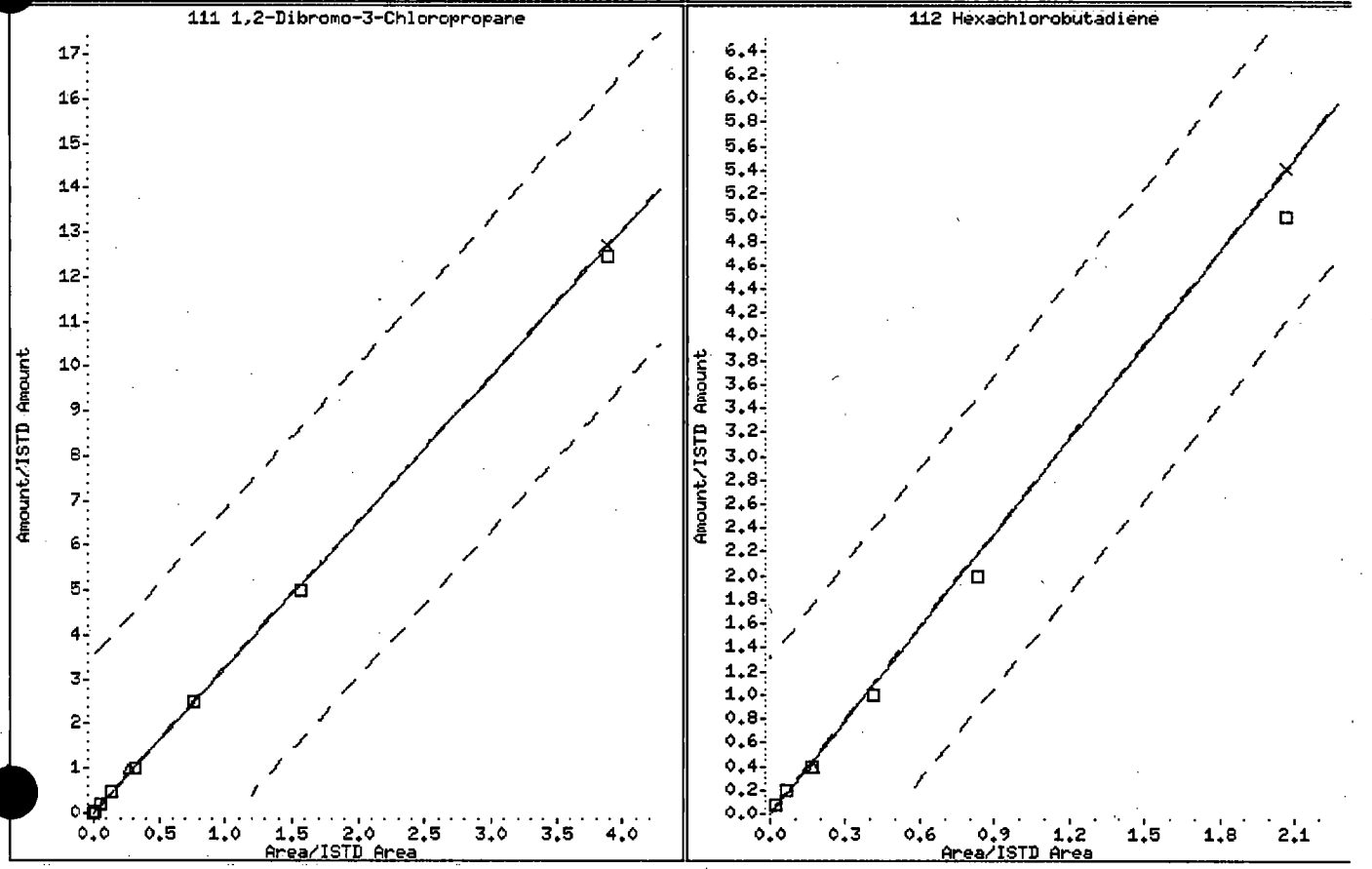

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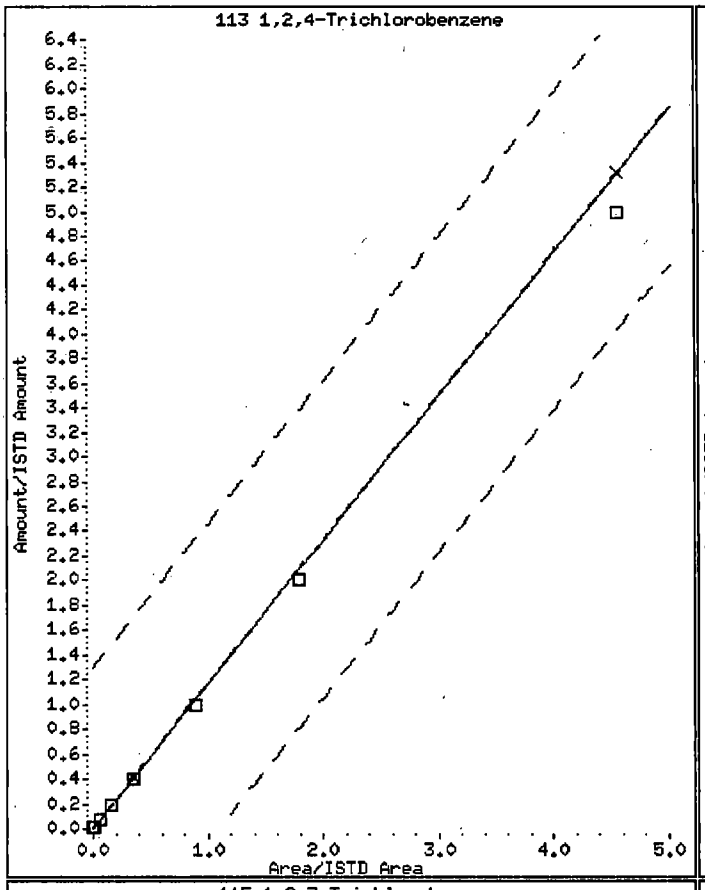

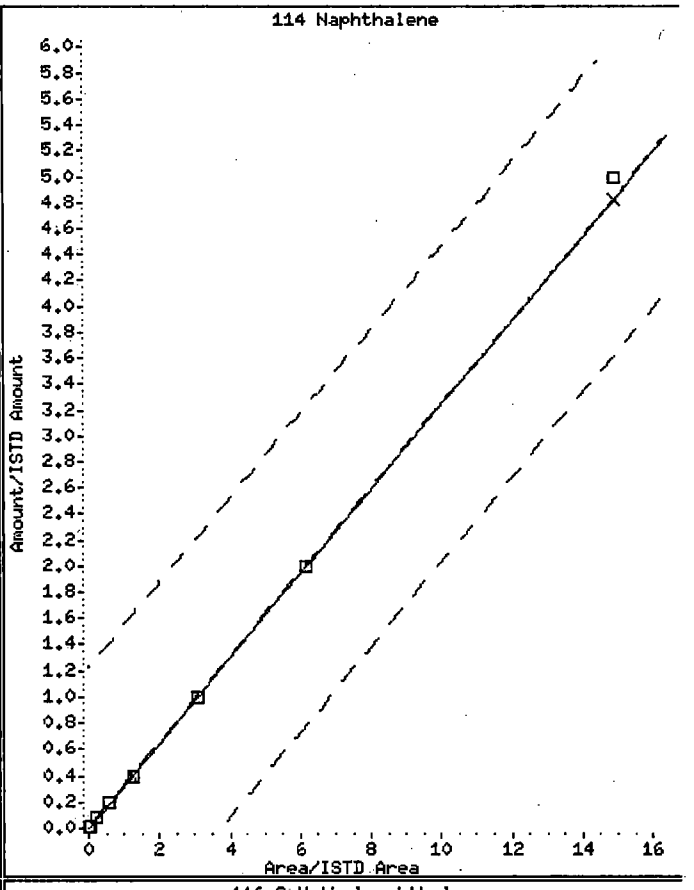

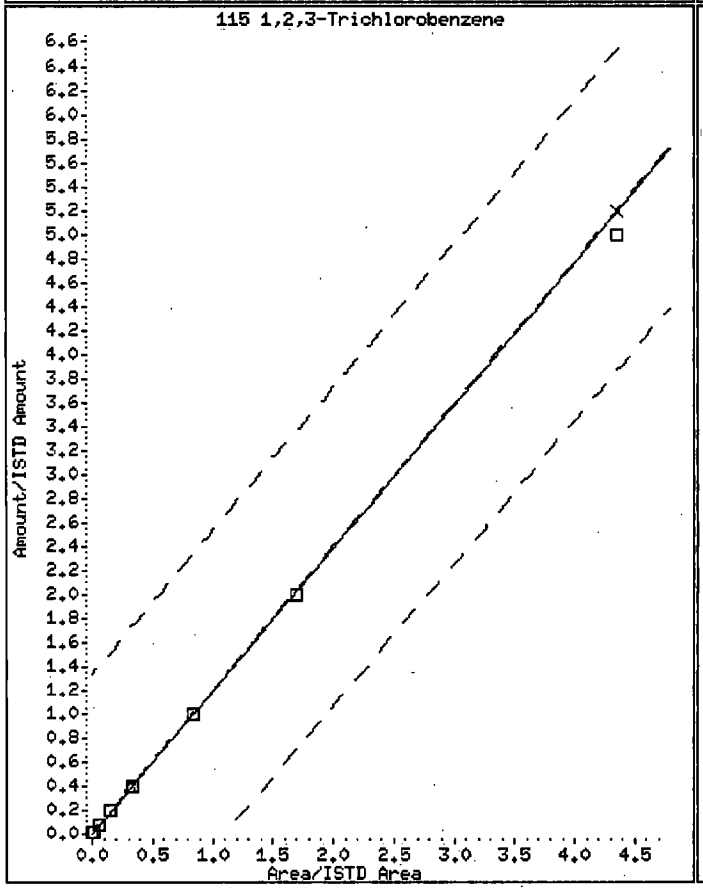

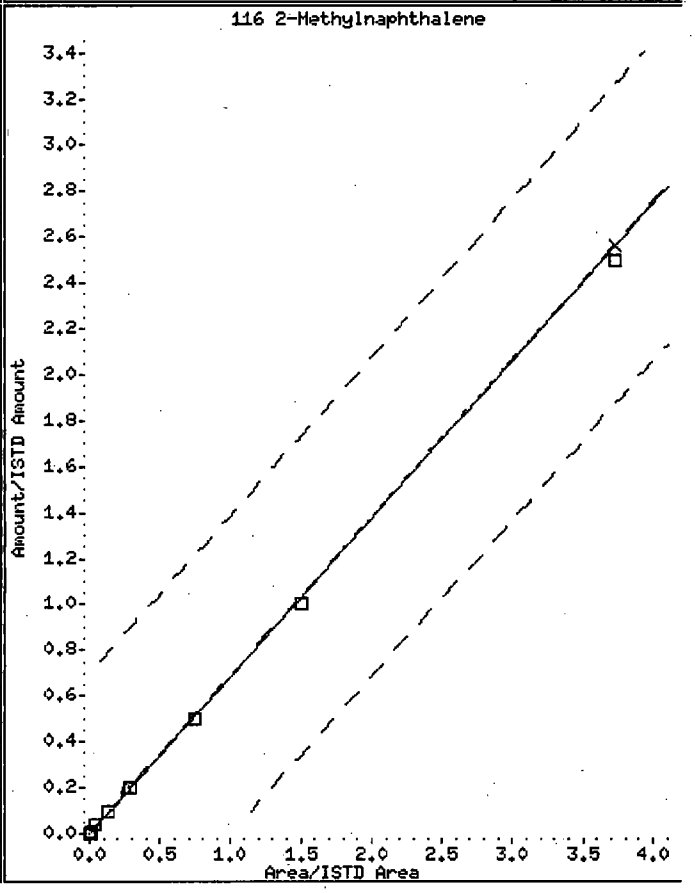

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-MAR-2014 11:15
End Cal Date : 10-MAR-2014 13:31
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Calibration File Names:
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Level 4: \\192.168.10.12\chem\10msv7.i\031014A.b\031014005.D
Level 5: \\192.168.10.12\chem\10msv7.i\031014A.b\031014006.D
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Level 9: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
1 Dichlorodifluoromethane	+++++	0.31385	0.40152	0.42298	0.44660	0.44081					
	0.42326	0.45654					AVRG		0.41508		11.61023
2 Chloromethane	+++++	0.43363	0.41224	0.43705	0.46527	0.49552					
	0.46558	0.50989					AVRG		0.45988		7.59143
3 Vinyl Chloride	+++++	0.44797	0.49917	0.50207	0.52953	0.52437					
	0.50126	0.55207					AVRG		0.50806		6.44596

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Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 250.0000 Level 9	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
4 Bromomethane	3298	3774	13495	19653	40847	94578					
	208878	592668					QUAD	-0.01163	5.05044	-1.61151	0.99979
5 Chloroethane	+++++	0.19995	0.23206	0.22539	0.23097	0.22790					
	0.20462	0.18022					AVRG		0.21444		9.25313
6 Trichlorofluoromethane	+++++	5158	21801	53527	120301	295414					
	531085	+++++					QUAD	0.01205	1.33599	0.80094	0.99955
7 Dichlorofluoromethane	0.60508	0.76120	0.78301	0.73891	0.76155	0.76720					
	0.74190	0.78000					AVRG		0.74236		7.76631
8 Diethyl ether (Ethyl Ether)	+++++	0.23286	0.27402	0.27171	0.29525	0.29782					
	0.29516	0.29683					AVRG		0.28052		8.47082
9 1,1-Dichloroethene	+++++	0.34656	0.36098	0.36674	0.38797	0.39293					
	0.37419	0.40671					AVRG		0.37658		5.47700
10 Carbon Disulfide	1.74806	1.47144	1.40239	1.31460	1.37917	1.37991					
	1.31575	1.43489					AVRG		1.43078		9.71062

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
11 Ethanol	+++++	+++++	1.29732	1.28063	1.32693	1.41637					
	1.58817	1.37766					AVRG		1.38118		8.20288
12 Trichlorotrifluoroethane	+++++	0.34501	0.35430	0.38737	0.40141	0.40296					
	0.39707	0.42870					AVRG		0.38812		7.53174
13 Iodomethane	+++++	924	7345	24179	66339	209320					
	508901	1548601					QUAD	0.03877	2.01188	-0.30433	0.99935
14 Acrolein	0.04152	0.04521	0.04822	0.04381	0.04689	0.05067					
	0.05388	0.05627					AVRG		0.04831		10.43461
15 Allyl Chloride	0.51767	0.51823	0.55408	0.53430	0.55192	0.56508					
	0.54271	0.57974					AVRG		0.54547		3.99336
16 Methylene Chloride	2995	5141	17543	41216	82651	202399					
	401681	1036029					QUAD	-0.00533	2.42556	-0.10337	0.99997
17 Isopropanol	+++++	26409	32935	49032	75489	144283					
	287385	683474					LINR	-0.02397	6.51155		0.99837

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
19 Acetone	1331	2135	5895	13530	28437	66125					
	136728	342103					QUAD	-0.01383	2.53893	0.13443	1.00000
20 trans-1,2-Dichloroethene	+++++	0.37678	0.41579	0.40116	0.43049	0.43715					
	0.41887	0.44890					AVRG		0.41845		5.74237
21 Hexane	+++++	1.38124	1.36867	1.50997	1.40762	1.54957					
	1.48759	1.50945					AVRG		1.45916		4.92674
22 Methyl-tert-butyl Ether	0.80426	1.00531	0.99316	1.01057	1.05638	1.07487					
	1.07570	1.08936					AVRG		1.01370		9.09484
23 tert-Butyl Alcohol	+++++	14.45038	10.97103	10.39099	10.88868	11.20947					
	12.44365	11.50824					AVRG		11.69463		11.73378
24 Acetonitrile	+++++	0.03442	0.03574	0.03709	0.04045	0.03732					
	0.03894	0.03864					AVRG		0.03751		5.42752
25 Isopropyl Ether	0.96792	1.25034	1.21224	1.15814	1.24429	1.27465					
	1.26120	1.30569					AVRG		1.20931		8.84329

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
26 Acrylonitrile	+++++	0.05463	0.05772	0.05555	0.05860	0.06025					
	0.05751	0.06223					AVRG		0.05807		4.50057
27 1,1-Dichloroethane	0.57110	0.64152	0.70714	0.67873	0.72649	0.73309					
	0.70769	0.74813					AVRG		0.68924		8.45707
28 Ethyl-tert-butyl ether	1.02057	1.09497	1.10322	1.09375	1.13617	1.16159					
	1.16309	1.20117					AVRG		1.12182		4.98542
29 Vinyl Acetate	+++++	0.67609	0.73372	0.73491	0.78216	0.80064					
	0.81257	0.82036					AVRG		0.76578		6.88481
30 cis-1,2-Dichloroethene	0.39993	0.41362	0.44659	0.45062	0.46748	0.46354					
	0.45558	0.47475					AVRG		0.44651		5.91224
31 2,2-Dichloropropane	0.48007	0.56022	0.60384	0.56481	0.59641	0.59714					
	0.57166	0.61698					AVRG		0.57389		7.47403
32 Cyclohexane	+++++	0.62345	0.65305	0.67684	0.71277	0.71330					
	0.70789	0.77287					AVRG		0.69431		6.97848

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
33 Bromochloromethane	+++++	0.24101	0.25701	0.25438	0.27196	0.27366					
	0.27244	0.26718					AVRG		0.26252		4.64660
34 Chloroform	0.61441	0.65390	0.70543	0.69849	0.72853	0.72479					
	0.71094	0.74554					AVRG		0.69775		6.19114
35 Carbon Tetrachloride	0.39785	0.49358	0.51536	0.51096	0.53556	0.54040					
	0.51854	0.55895					AVRG		0.50890		9.65910
36 Tetrahydrofuran	0.55073	0.72407	0.69883	0.67299	0.68579	0.69822					
	0.67913	0.62980					AVRG		0.66745		8.14401
37 1,1,1-Trichloroethane	+++++	0.58457	0.59472	0.59208	0.62555	0.63329					
	0.60451	0.64649					AVRG		0.61160		3.85129
38 2-Butanone	+++++	0.16567	0.15079	0.14650	0.15913	0.14828					
	0.15285	0.15258					AVRG		0.15369		4.32100
39 1,1-Dichloropropene	+++++	0.56157	0.56063	0.55821	0.58780	0.59118					
	0.57286	0.61575					AVRG		0.57828		3.65754

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Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
40 Benzene	1.55276	1.78447	1.70314	1.67800	1.75592	1.76821					
	1.71478	1.83834					AVRG		1.72445		4.98162
42 Tert-amyl methyl ether	1.12301	1.20010	1.09822	1.08065	1.12180	1.13511					
	1.14639	1.18168					AVRG		1.13587		3.51601
44 1,2-Dichloroethane	0.38903	0.45437	0.45767	0.44680	0.46350	0.46389					
	0.45403	0.46779					AVRG		0.44964		5.64644
45 Isobutanol	+++++	5.41964	4.12208	4.21659	4.38184	4.65163					
	5.27715	5.00702					AVRG		4.72514		10.96987
46 Tert-Amyl Alcohol	+++++	10.69220	8.64600	8.85538	9.38646	9.76674					
	10.91593	10.36737					AVRG		9.80430		9.08400
47 Trichloroethene	0.24548	0.32979	0.32793	0.31826	0.33012	0.33632					
	0.31784	0.34322					AVRG		0.31862		9.64555
49 Tert-amyl ethyl ether	0.53182	0.59814	0.58285	0.54805	0.57803	0.60489					
	0.60240	0.63959					AVRG		0.58572		5.80528

Report Date : 10-Mar-2014 16:46

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-MAR-2014 11:15
End Cal Date : 10-MAR-2014 13:31
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
50 Dibromomethane	+++++	0.17397	0.18828	0.17580	0.18514	0.18812					
	0.18644	0.18816					AVRG		0.18370		3.34939
51 1,2-Dichloropropane	0.22186	0.28334	0.27477	0.26643	0.27267	0.28466					
	0.27588	0.29046					AVRG		0.27126		7.87396
52 Bromodichloromethane	0.36610	0.34016	0.35644	0.33603	0.35021	0.36153					
	0.35632	0.37126					AVRG		0.35476		3.42999
54 1,4-Dioxane (P-Dioxane)	+++++	1.48286	1.23987	1.24806	1.27203	1.32917					
	1.54225	1.31083					AVRG		1.34644		8.84465
55 2-Chloroethyl Vinyl Ether	+++++	+++++	2041	6225	15679	40920					
	86062	249718					QUAD	0.03797	44.40821	-48.87742	0.99995
56 cis-1,3-Dichloropropene	0.40571	0.42165	0.44254	0.42118	0.43761	0.45299					
	0.45259	0.47967					AVRG		0.43924		5.28763
58 Toluene	0.81923	0.81788	0.75951	0.70455	0.73758	0.75353					
	0.71358	0.74706					AVRG		0.75661		5.63144

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Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
59 4-Methyl-2-Pentanone	0.20469	0.23275	0.22022	0.21530	0.23065	0.23241					
	0.23299	0.22695					AVRG		0.22450		4.58641
60 Tetrachloroethene	0.31499	0.37328	0.37178	0.35746	0.37261	0.38120					
	0.35684	0.35631					AVRG		0.36056		5.71986
61 trans-1,3-Dichloropropene	0.34474	0.38776	0.38607	0.37497	0.39121	0.41167					
	0.40523	0.40919					AVRG		0.38888		5.63808
62 1,1,2-Trichloroethane	0.20531	0.24547	0.23644	0.22406	0.23127	0.24057					
	0.23606	0.23270					AVRG		0.23148		5.32937
63 Dibromochloromethane	0.23104	0.26477	0.26947	0.26705	0.27058	0.28418					
	0.27900	0.28232					AVRG		0.26855		6.24894
64 1,3-Dichloropropane	0.36280	0.41068	0.40301	0.37802	0.39388	0.40854					
	0.40306	0.40426					AVRG		0.39553		4.23898
65 1,2-Dibromoethane	+++++	0.23206	0.24426	0.23386	0.24672	0.24832					
	0.24824	0.24789					AVRG		0.24305		2.90137

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Pace Analytical Services, Inc.

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Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
66 2-Hexanone	+++++	0.20915	0.17107	0.16266	0.17159	0.16929					
	0.17066	0.17100					AVRG		0.17506		8.76601
68 Chlorobenzene	0.86832	0.93199	0.83405	0.79223	0.82847	0.83778					
	0.81872	0.84709					AVRG		0.84483		4.90818
69 Ethylbenzene	+++++	1.59332	1.47004	1.34478	1.40764	1.41993					
	1.38769	1.46946					AVRG		1.44184		5.55618
70 1,1,1,2-Tetrachloroethane	0.27977	0.29316	0.28916	0.27787	0.29376	0.30825					
	0.30180	0.30699					AVRG		0.29385		3.89980
71 M&P-Xylene	0.57395	0.57227	0.57312	0.52901	0.54821	0.57144					
	0.54932	0.57509					AVRG		0.56155		3.06227
72 O-Xylene (1,2-Dimethylbenzene)	0.49785	0.54714	0.52114	0.50446	0.52037	0.54067					
	0.52403	0.55711					AVRG		0.52660		3.89365
73 Styrene	0.81668	0.86379	0.90433	0.85341	0.89965	0.94049					
	0.93399	0.96948					AVRG		0.89773		5.65235

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Pace Analytical Services, Inc.

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Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
74 Bromoform	0.18742	0.22638	0.21149	0.20340	0.21205	0.21897					
	0.21993	0.22481					AVRG		0.21306		6.01982
75 Isopropylbenzene (Cumene)	1.39428	1.48446	1.37182	1.32004	1.38755	1.43732					
	1.38395	1.49396					AVRG		1.40917		4.18226
77 cis-1,4-Dichloro-2-Butene	+++++	0.16606	0.15710	0.14419	0.15301	0.15405					
	0.15335	0.15759					AVRG		0.15505		4.22812
78 Bromobenzene	0.51415	0.63476	0.64076	0.60648	0.61958	0.64592					
	0.62001	0.63237					AVRG		0.61425		6.90620
79 n-Propylbenzene	2.73568	2.93640	2.73690	2.71045	2.77474	2.87886					
	2.75455	2.95000					AVRG		2.80970		3.44055
80 1,1,2,2-Tetrachloroethane	0.43777	0.53535	0.50770	0.50377	0.52041	0.52536					
	0.52570	0.52923					AVRG		0.51066		6.13094
81 2-Chlorotoluene	1.67647	1.74089	1.78076	1.67030	1.75721	1.80163					
	1.73314	1.84568					AVRG		1.75076		3.40932

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Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
82 1,3,5-Trimethylbenzene	1.93117	1.97792	1.99004	1.91051	1.98946	2.04985					
	1.95865	2.09795					AVRG		1.98819		3.07235
83 1,2,3-Trichloropropane	+++++	0.12154	0.14795	0.14079	0.14876	0.14754					
	0.14751	0.14663					AVRG		0.14296		6.85959
84 trans-1,4-Dichloro-2-Butene	+++++	0.12847	0.12291	0.12837	0.13550	0.13523					
	0.13741	0.13821					AVRG		0.13230		4.34228
85 4-Chlorotoluene	1.59326	1.71630	1.71115	1.59830	1.66073	1.72156					
	1.65102	1.74602					AVRG		1.67479		3.46451
86 tert-Butylbenzene	+++++	2082	57781	141375	300907	740204					
	1524071	4142926					QUAD	0.00005	0.60437	-0.01129	0.99990
87 1,2,4-Trimethylbenzene	1.96119	2.08175	2.00257	1.94368	2.01841	2.06123					
	2.00302	2.12158					AVRG		2.02418		2.98582
88 sec-Butylbenzene	2.33862	2.51001	2.46435	2.42190	2.54586	2.59114					
	2.52107	2.70500					AVRG		2.51224		4.39125

Pace Analytical Services, Inc.

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Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
89 p-Isopropyltoluene	2.02806	2.23149	2.13231	2.13175	2.23454	2.31622					
	2.24927	2.37184					AVRG		2.21193		4.99105
90 1,3-Dichlorobenzene	1.24257	1.30086	1.22301	1.18666	1.21492	1.22845					
	1.19912	1.23918					AVRG		1.22935		2.81294
92 1,4-Dichlorobenzene	1.35610	1.38779	1.26982	1.21764	1.25707	1.26800					
	1.22826	1.26482					AVRG		1.28119		4.66163
93 1,2,3 Trimethylbenzene	1.97085	1.95480	1.90959	1.79435	1.88116	1.90695					
	1.94034	2.05277					AVRG		1.92635		3.87929
94 n-Butylbenzene	1.97218	2.05972	2.02302	2.01468	2.08042	2.13475					
	2.06350	2.12789					AVRG		2.05952		2.70691
95 1,2-Dichlorobenzene	1.16025	1.21008	1.15999	1.11254	1.12101	1.16475					
	1.13769	1.15193					AVRG		1.15228		2.62182
96 1,2-Dibromo-3-Chloropropane	0.09284	0.10949	0.11526	0.11141	0.12000	0.11813					
	0.11813	0.11574					AVRG		0.11263		7.75643

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-MAR-2014 11:15
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Quant Method : ISTD
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Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
97 Hexachlorobutadiene	0.39230	0.49492	0.46080	0.44171	0.46404	0.45391					
	0.44739	0.42080					AVRG		0.44698		6.83393
98 1,2,4-Trichlorobenzene	0.74507	0.81247	0.76399	0.73331	0.75217	0.75438					
	0.74403	0.71148					AVRG		0.75211		3.86282
99 Naphthalene	1.50024	1.51551	1.45236	1.40099	1.45789	1.48967					
	1.45451	1.40822					AVRG		1.45993		2.81662
100 1,2,3-Trichlorobenzene	0.69841	0.73136	0.66397	0.65847	0.68812	0.68582					
	0.66704	0.63693					AVRG		0.67876		4.24368
101 2-Methylnaphthalene	0.62946	0.59362	0.53277	0.53570	0.55685	0.56150					
	0.55905	0.56621					AVRG		0.56690		5.56146
$ 43 1,2-Dichloroethane d4 (S)	0.37193	0.37942	0.38619	0.39507	0.39806	0.39223					
	0.38270	0.38240					AVRG		0.38600		2.25741
$ 57 Toluene-d8 ($)	1.19332	1.17036	1.15863	1.15729	1.17016	1.19161					
	1.18587	1.17244					AVRG		1.17496		1.18748

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
$ 76 4-Bromofluorobenzene (S)	0.80403	0.80265	0.79026	0.80298	0.79816	0.81261					
	0.80198	0.80555					AVRG		0.80228		0.79185

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Last Edit : 10-Mar-2014 16:45 hpham

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014003.D
Lab Smp Id: 0.4 ICAL 10098-65
Inj Date : 10-MAR-2014 11:15
Operator : HBP Inst ID: 10msv7.i
Smp Info : 0.4 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.058	1.052	(0.253)	458	0.40000	0.11 (TaQ)
2	Chloromethane	50	1.186	1.247	(0.283)	1355	0.40000	0.30 (TaQM)
3	Vinyl Chloride	62	1.247	1.247	(0.298)	1031	0.40000	0.21 (Ta)
4	Bromomethane	94	1.479	1.479	(0.353)	3298	0.40000	0.56 (aQ)
5	Chloroethane	64	1.570	1.570	(0.375)	389	0.40000	0.19 (TaQ)
6	Trichlorofluoromethane	101	1.674	1.668	(0.399)	1648	0.40000	1.4 (a)
7	Dichlorofluoromethane	67	1.735	1.729	(0.414)	2333	0.40000	0.33 (a)
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.466)	746	0.40000	0.28 (aQ)
9	1,1-Dichloroethene	96	2.095	2.088	(0.500)	791	0.40000	0.22 (TaQ)
10	Carbon Disulfide	76	2.101	2.095	(0.501)	6740	0.40000	0.49 (TaQ)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	2.143	2.137	(0.511)	679	0.40000	0.18 (TaQ)
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	2.412	2.412	(0.575)	1601	4.00000	3.4 (aQ)
15	Allyl Chloride	41	2.540	2.533	(0.606)	1996	0.40000	0.38 (TaQ)
16	Methylene Chloride	84	2.637	2.637	(0.629)	2995	0.40000	0.22 (a)
17	Isopropanol	45	2.655	2.649	(0.552)	21353	4.00000	(aQ)
* 18	Acetone d6	46	2.649	2.655	(1.000)	122111	200.000	
19	Acetone	58	2.698	2.698	(1.018)	1331	2.00000	2.8 (aQ)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.663)	1001	0.40000	0.25(a)
	21 Hexane	86	2.857	2.863	(1.078)	473	1.00000	0.53(aQ)
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.690)	3101	0.40000	0.32(aQ)
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	3.204	3.210	(0.764)	3732	0.40000	0.32(TaQ)
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	3.259	3.265	(0.778)	2202	0.40000	0.33(TaQ)
	28 Ethyl-tert-butyl ether	59	3.454	3.466	(0.824)	3935	0.40000	0.36(aQ)
	29 Vinyl Acetate	43	3.460	3.466	(0.825)	1721	0.40000	0.23(TaQ)
	30 cis-1,2-Dichloroethene	96	3.625	3.637	(0.865)	1542	0.40000	0.36(aQ)
	31 2,2-Dichloropropane	77	3.692	3.704	(0.881)	1851	0.40000	0.33(TaQ)
	32 Cyclohexane	56	3.747	3.759	(0.894)	10070	2.00000	1.5(a)
	33 Bromochloromethane	130	3.753	3.759	(0.895)	641	0.40000	0.25(TaQ)
	34 Chloroform	83	3.802	3.814	(0.907)	2369	0.40000	0.35(a)
	35 Carbon Tetrachloride	117	3.875	3.887	(0.924)	1534	0.40000	0.31(a)
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	1345	4.00000	3.3(aQ)
	37 1,1,1-Trichloroethane	97	3.924	3.930	(0.936)	1683	0.40000	0.28(aQ)
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.137	4.149	(0.987)	5987	0.40000	0.36(a)
*	41 Pentafluorobenzene	168	4.192	4.204	(1.000)	963926	100.000	
	42 Tert-amyl methyl ether	73	4.216	4.222	(1.006)	4330	0.40000	0.40(aQ)
$	43 1,2-Dichloroethane d4 (S)	65	4.210	4.222	(1.004)	358516	100.000	96.4
	44 1,2-Dichloroethane	62	4.247	4.259	(1.013)	1500	0.40000	0.35(TaQ)
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	4.338	4.350	(0.901)	566	4.00000	1.5(TaQ)
	47 Trichloroethene	130	4.454	4.466	(0.996)	1382	0.40000	0.31(aQ)
*	48 1,4 Difluorobenzene	114	4.472	4.478	(1.000)	1407420	100.000	
	49 Tert-amyl ethyl ether	59	4.576	4.588	(1.023)	2994	0.40000	0.36(a)
	50 Dibromomethane	174	4.661	4.667	(1.042)	736	0.40000	0.28(a)
	51 1,2-Dichloropropane	63	4.704	4.716	(1.052)	1249	0.40000	0.33(TaQ)
	52 Bromodichloromethane	83	4.734	4.746	(1.059)	2061	0.40000	0.41(TaQ)
*	53 1,4 dioxane d8	96	4.814	4.832	(1.000)	153323	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	5.015	5.027	(1.121)	2284	0.40000	0.37(a)
$	57 Toluene-d8 (S)	98	5.094	5.106	(0.883)	1634703	100.000	102
	58 Toluene	92	5.118	5.131	(0.887)	4489	0.40000	0.43(a)
	59 4-Methyl-2-Pentanone	43	5.271	5.289	(0.913)	5608	2.00000	1.8(a)
	60 Tetrachloroethene	166	5.277	5.295	(0.914)	1726	0.40000	0.35(a)
	61 trans-1,3-Dichloropropene	75	5.289	5.301	(0.917)	1889	0.40000	0.35(TaQ)
	62 1,1,2-Trichloroethane	97	5.356	5.374	(0.928)	1125	0.40000	0.35(a)
	63 Dibromochloromethane	129	5.435	5.454	(0.942)	1266	0.40000	0.34(a)
	64 1,3-Dichloropropane	76	5.472	5.490	(0.948)	1988	0.40000	0.37(a)
	65 1,2-Dibromoethane	107	5.545	5.557	(0.961)	869	0.40000	0.26(TaQ)
	66 2-Hexanone	43	5.630	5.649	(0.976)	6160	2.00000	2.6(a)
*	67 Chlorobenzene-d5	117	5.771	5.789	(1.000)	1369883	100.000	
	68 Chlorobenzene	112	5.777	5.795	(1.001)	4758	0.40000	0.41(aQ)
	69 Ethylbenzene	91	5.783	5.801	(1.002)	10261	0.40000	0.52(aQ)
	70 1,1,1,2-Tetrachloroethane	131	5.801	5.819	(1.005)	1533	0.40000	0.38(aQ)
	71 M&P-Xylene	106	5.850	5.868	(1.014)	6290	0.80000	0.82(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.057	6.075	(1.050)	2728	0.40000	0.38(a)
	73 Styrene	104	6.082	6.100	(1.054)	4475	0.40000	0.36(a)

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 Bromoform	173	6.106	6.124	(1.058)	1027	0.40000	0.35(TaQ)
	75 Isopropylbenzene (Cumene)	105	6.216	6.234	(1.077)	7640	0.40000	0.40(a)
$	76 4-Bromofluorobenzene (S)	95	6.368	6.386	(0.908)	676353	100.000	100
	77 cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78 Bromobenzene	156	6.429	6.453	(0.917)	1730	0.40000	0.33(a)
	79 n-Propylbenzene	91	6.429	6.453	(0.917)	9205	0.40000	0.39(a)
	80 1,1,2,2-Tetrachloroethane	83	6.466	6.490	(0.922)	1473	0.40000	0.34(TaQ)
	81 2-Chlorotoluene	91	6.527	6.551	(0.930)	5641	0.40000	0.38(a)
	82 1,3,5-Trimethylbenzene	105	6.533	6.557	(0.931)	6498	0.40000	0.39(a)
	83 1,2,3-Trichloropropane	110	Compound Not Detected.					
	84 trans-1,4-Dichloro-2-Butene	53	6.563	6.588	(0.936)	742	1.00000	0.67(TaQ)
	85 4-Chlorotoluene	91	6.618	6.642	(0.944)	5361	0.40000	0.38(a)
	86 tert-Butylbenzene	119	6.758	6.746	(0.963)	540	0.40000	0.044(aQ)
	87 1,2,4-Trimethylbenzene	105	6.758	6.789	(0.963)	6599	0.40000	0.39(a)
	88 sec-Butylbenzene	105	6.825	6.856	(0.973)	7869	0.40000	0.37(a)
	89 p-Isopropyltoluene	119	6.911	6.941	(0.985)	6824	0.40000	0.37(a)
	90 1,3-Dichlorobenzene	146	6.972	6.996	(0.994)	4181	0.40000	0.40(a)
*	91 1,4-Dichlorobenzene-d4	152	7.014	7.045	(1.000)	841200	100.000	
	92 1,4-Dichlorobenzene	146	7.027	7.057	(1.002)	4563	0.40000	0.42(aQ)
	93 1,2,3 Trimethylbenzene	105	7.033	7.063	(1.678)	7599	0.40000	0.41(a)
	94 n-Butylbenzene	91	7.185	7.215	(1.024)	6636	0.40000	0.38(a)
	95 1,2-Dichlorobenzene	146	7.307	7.331	(1.042)	3904	0.40000	0.40(a)
	96 1,2-Dibromo-3-Chloropropane	157	7.807	7.831	(1.113)	781	1.00000	0.82(a)
	97 Hexachlorobutadiene	225	8.167	8.191	(1.164)	1320	0.40000	0.35(a)
	98 1,2,4-Trichlorobenzene	180	8.185	8.209	(1.167)	2507	0.40000	0.40(a)
	99 Naphthalene	128	8.368	8.392	(1.193)	5048	0.40000	0.41(a)
	100 1,2,3-Trichlorobenzene	180	8.478	8.502	(1.209)	2350	0.40000	0.41(aQ)
	101 2-Methylnaphthalene	142	8.984	9.014	(1.281)	1059	0.20000	0.22(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014003.D
Lab Smp Id: 0.4 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	122111	-10.09
41 Pentafluorobenzen	944656	472328	1889312	963926	2.04
48 1,4 Difluorobenze	1423443	711722	2846886	1407420	-1.13
53 1,4 dioxane d8	156016	78008	312032	153323	-1.73
67 Chlorobenzene-d5	1400934	700467	2801868	1369883	-2.22
91 1,4-Dichlorobenze	853329	426665	1706658	841200	-1.42

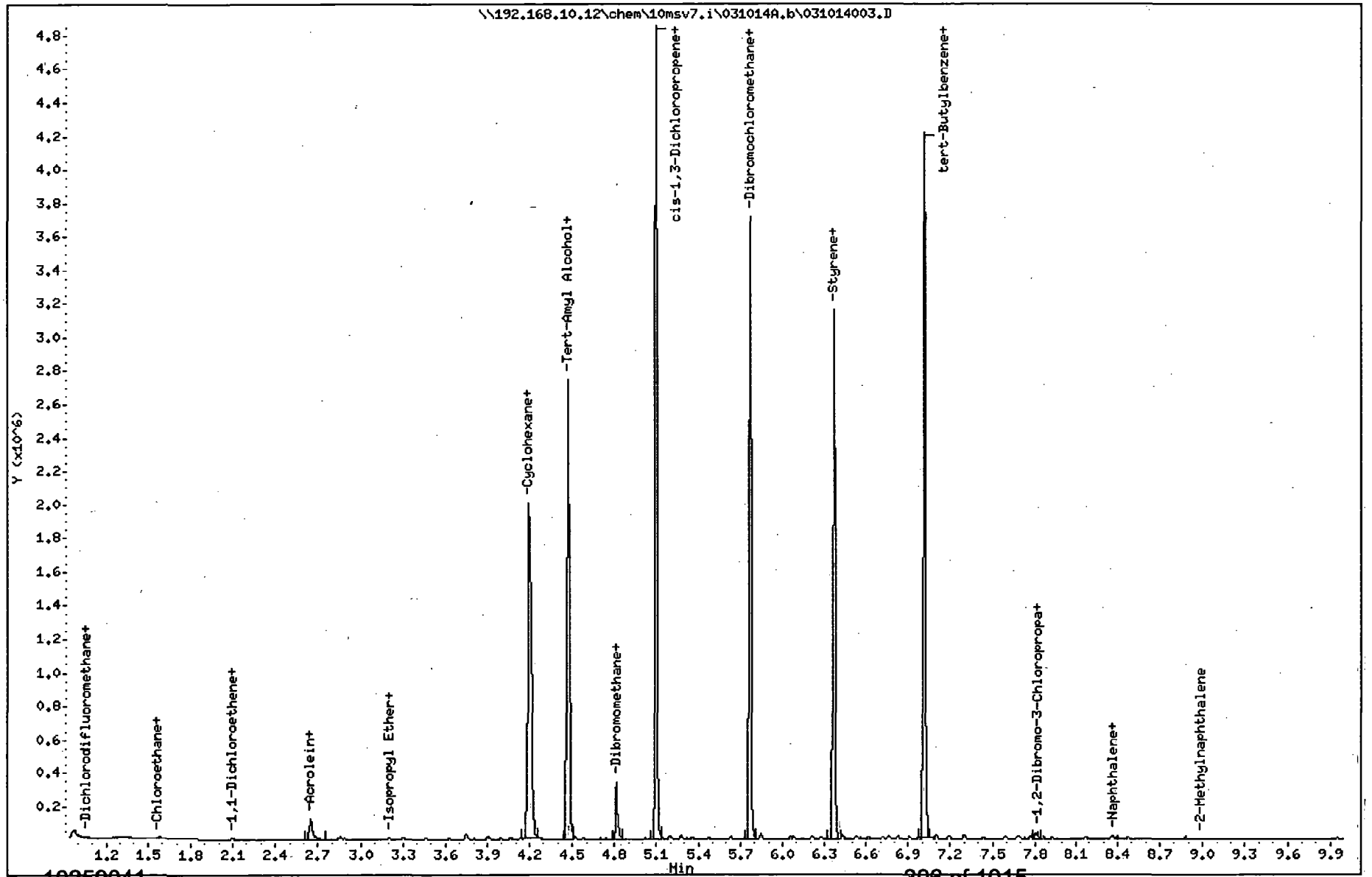
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.19	-0.29
48 1,4 Difluorobenze	4.48	3.98	4.98	4.47	-0.14
53 1,4 dioxane d8	4.83	4.33	5.33	4.81	-0.25
67 Chlorobenzene-d5	5.78	5.28	6.28	5.77	-0.21
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.01	-0.43

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014003.D
Date : 10-MAR-2014 11:15
Client ID:
Sample Info: 0.4 ICAL 10098-65

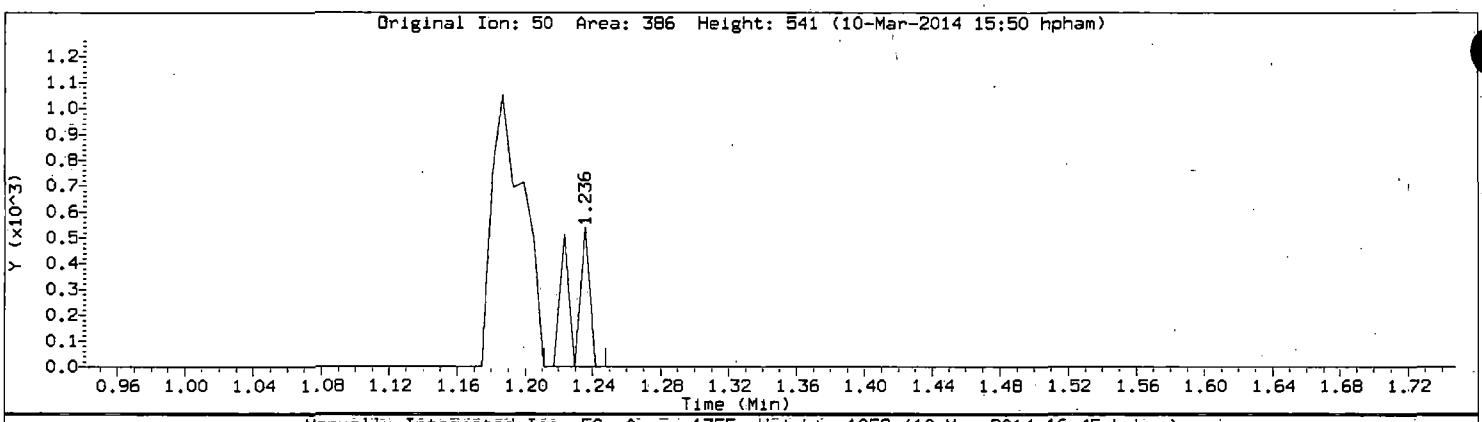
Instrument: 10msv7.i

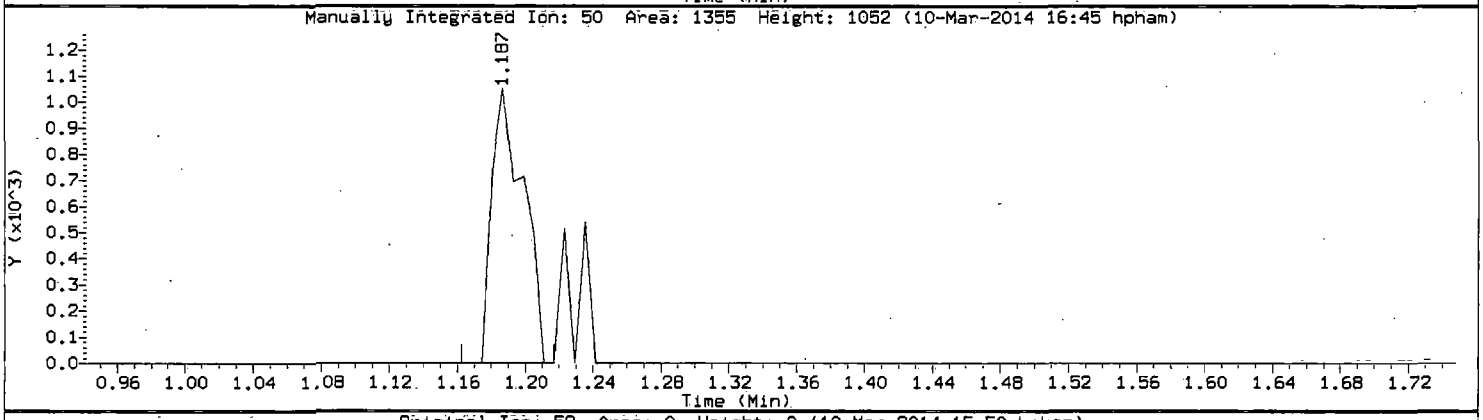
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18

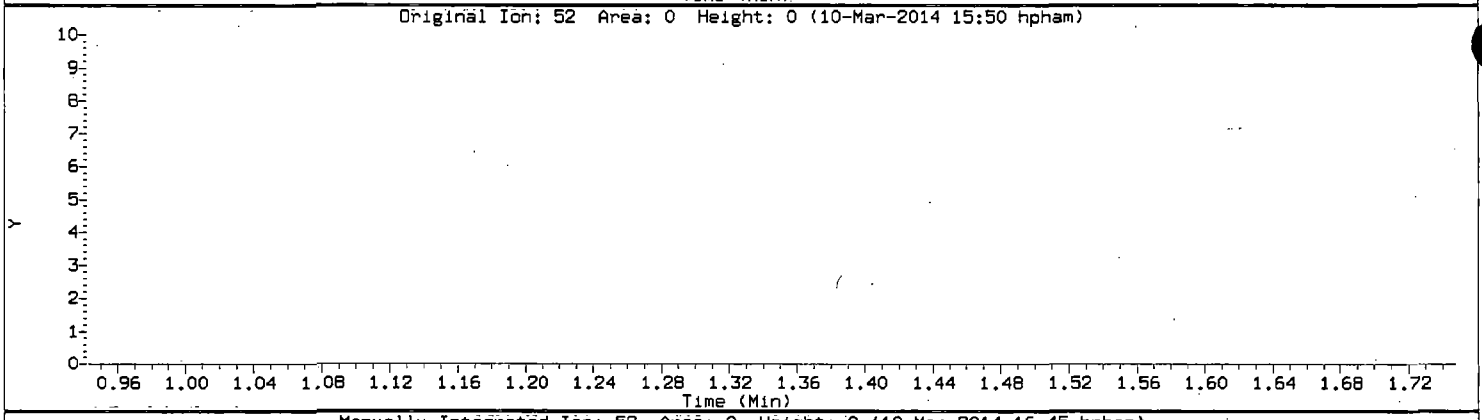


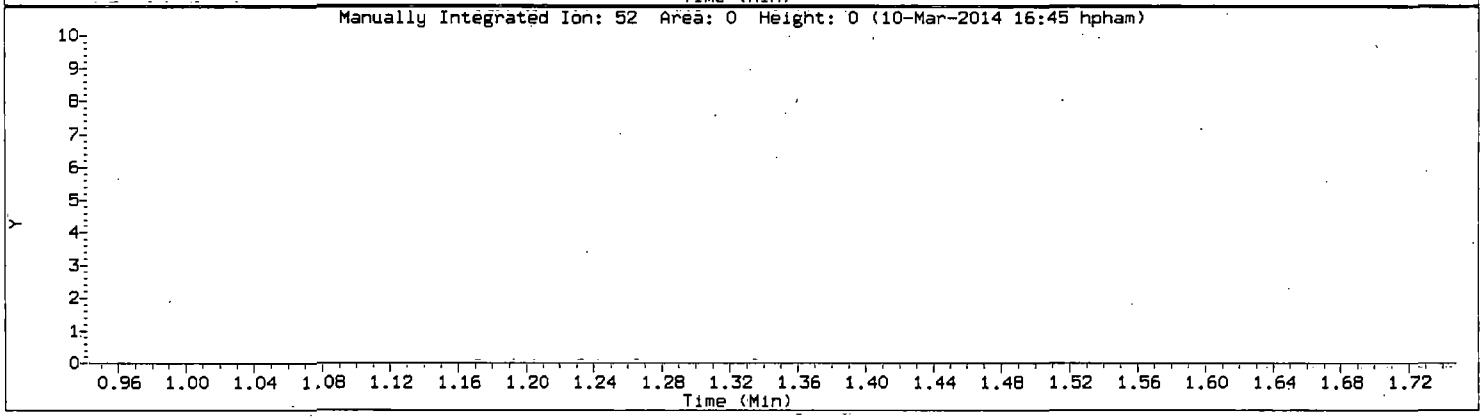
Injection Date: 10-MAR-2014 11:15
Instrument: 10msv7.i
Lab Sample ID: 0.4 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3









Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014004.D
Lab Smp Id: 1.0 ICAL 10098-65
Inj Date : 10-MAR-2014 11:34
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1.0 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.251)	3042	1.00000	0.76(aQ)
2	Chloromethane	50	1.186	1.247	(0.283)	4203	1.00000	0.94(TaQM)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	4342	1.00000	0.88(a)
4	Bromomethane	94	1.479	1.479	(0.352)	3774	1.00000	0.80(aQ)
5	Chloroethane	64	1.570	1.570	(0.374)	1938	1.00000	0.93(aQ)
6	Trichlorofluoromethane	101	1.680	1.668	(0.400)	5158	1.00000	1.9(a)
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	7378	1.00000	1.0(a)
8	Diethyl ether (Ethyl Ether)	59	1.955	1.960	(0.466)	2257	1.00000	0.83(aQ)
9	1,1-Dichloroethene	96	2.095	2.088	(0.499)	3359	1.00000	0.92(aQ)
10	Carbon Disulfide	76	2.101	2.095	(0.501)	14262	1.00000	1.0(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	2.144	2.137	(0.511)	3344	1.00000	0.89(a)
13	Iodomethane	142	2.204	2.210	(0.525)	924	1.00000	4.1(TaQ)
14	Acrolein	56	2.412	2.412	(0.575)	4382	10.0000	9.4
15	Allyl Chloride	41	2.534	2.533	(0.604)	5023	1.00000	0.95(a)
16	Methylene Chloride	84	2.637	2.637	(0.628)	5141	1.00000	0.75(a)
17	Isopropanol	45	2.662	2.649	(0.553)	26409	10.0000	25.9(Q)
* 18	Acetone d6	46	2.650	2.655	(1.000)	125568	200.000	
19	Acetone	58	2.698	2.698	(1.018)	2135	5.00000	5.9(Q)

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.778	2.777	(0.662)	3652	1.00000	0.90(a)
	21 Hexane	86	2.857	2.863	(1.078)	2168	2.50000	2.4(a)
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.689)	9744	1.00000	0.99(aQ)
	23 tert-Butyl Alcohol	59	3.009	3.021	(0.625)	4814	10.0000	12.4
	24 Acetonitrile	41	3.070	3.070	(0.731)	3336	10.0000	9.2(TQ)
	25 Isopropyl Ether	45	3.204	3.210	(0.763)	12119	1.00000	1.0(aQ)
	26 Acrylonitrile	53	3.241	3.247	(0.772)	5295	10.0000	9.4
	27 1,1-Dichloroethane	63	3.259	3.265	(0.776)	6218	1.00000	0.93(aQ)
	28 Ethyl-tert-butyl ether	59	3.454	3.466	(0.823)	10613	1.00000	0.98(a)
	29 Vinyl Acetate	43	3.466	3.466	(0.826)	6553	1.00000	0.88(TaQ)
	30 cis-1,2-Dichloroethene	96	3.631	3.637	(0.865)	4009	1.00000	0.93(a)
	31 2,2-Dichloropropane	77	3.698	3.704	(0.881)	5430	1.00000	0.98(a)
	32 Cyclohexane	56	3.747	3.759	(0.893)	30214	5.00000	4.5(a)
	33 Bromochloromethane	130	3.753	3.759	(0.894)	2336	1.00000	0.92(a)
	34 Chloroform	83	3.808	3.814	(0.907)	6338	1.00000	0.94(a)
	35 Carbon Tetrachloride	117	3.881	3.887	(0.924)	4784	1.00000	0.97(a)
	36 Tetrahydrofuran	72	3.899	3.905	(1.472)	4546	10.0000	10.8
	37 1,1,1-Trichloroethane	97	3.924	3.930	(0.935)	5666	1.00000	0.96(a)
	38 2-Butanone	43	3.991	4.003	(0.951)	8029	5.00000	5.4
	39 1,1-Dichloropropene	75	3.997	4.003	(0.952)	5443	1.00000	0.97(a)
	40 Benzene	78	4.137	4.149	(0.985)	17296	1.00000	1.0(a)
*	41 Pentafluorobenzene	168	4.198	4.204	(1.000)	969254	100.000	
	42 Tert-amyl methyl ether	73	4.216	4.222	(1.004)	11632	1.00000	1.0(aQ)
$	43 1,2-Dichloroethane d4 (S)	65	4.216	4.222	(1.004)	367753	100.000	98.3
	44 1,2-Dichloroethane	62	4.253	4.259	(1.013)	4404	1.00000	1.0(a)
	45 Isobutanol	43	4.283	4.301	(0.890)	3611	20.0000	22.9
	46 Tert-Amyl Alcohol	59	4.332	4.350	(0.900)	3562	10.0000	10.9
	47 Trichloroethene	130	4.454	4.466	(0.996)	4707	1.00000	1.0(aQ)
*	48 1,4 Difluorobenzene	114	4.472	4.478	(1.000)	1427257	100.000	
	49 Tert-amyl ethyl ether	59	4.576	4.588	(1.023)	8537	1.00000	1.0(a)
	50 Dibromomethane	174	4.661	4.667	(1.042)	2483	1.00000	0.95(a)
	51 1,2-Dichloropropane	63	4.704	4.716	(1.052)	4044	1.00000	1.0(TaQ)
	52 Bromodichloromethane	83	4.734	4.746	(1.059)	4855	1.00000	0.96(TaQ)
*	53 1,4 dioxane d8	96	4.814	4.832	(1.000)	133256	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.826	4.844	(1.003)	988	20.0000	22.0(TQ)
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	5.015	5.027	(1.121)	6018	1.00000	0.96(a)
$	57 Toluene-d8 (S)	98	5.094	5.106	(0.883)	1649196	100.000	99.6
	58 Toluene	92	5.119	5.131	(0.887)	11525	1.00000	1.1(a)
	59 4-Methyl-2-Pentanone	43	5.271	5.289	(0.913)	16399	5.00000	5.2
	60 Tetrachloroethene	166	5.277	5.295	(0.914)	5260	1.00000	1.0(a)
	61 trans-1,3-Dichloropropene	75	5.289	5.301	(0.917)	5464	1.00000	1.00(aQ)
	62 1,1,2-Trichloroethane	97	5.356	5.374	(0.928)	3459	1.00000	1.1(a)
	63 Dibromochloromethane	129	5.436	5.454	(0.942)	3731	1.00000	0.98(a)
	64 1,3-Dichloropropane	76	5.472	5.490	(0.948)	5787	1.00000	1.0(a)
	65 1,2-Dibromoethane	107	5.545	5.557	(0.961)	3270	1.00000	0.95(TaQ)
	66 2-Hexanone	43	5.631	5.649	(0.976)	14736	5.00000	6.0
*	67 Chlorobenzene-d5	117	5.771	5.789	(1.000)	1409133	100.000	
	68 Chlorobenzene	112	5.777	5.795	(1.001)	13133	1.00000	1.1(aQ)
	69 Ethylbenzene	91	5.783	5.801	(1.002)	22452	1.00000	1.1(a)
	70 1,1,1,2-Tetrachloroethane	131	5.801	5.819	(1.005)	4131	1.00000	1.00(aQ)
	71 M&P-Xylene	106	5.850	5.868	(1.014)	16128	2.00000	2.0(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.057	6.075	(1.050)	7710	1.00000	1.0(a)
	73 Styrene	104	6.082	6.100	(1.054)	12172	1.00000	0.96(a)

Report Date: 10-Mar-2014 16:45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	74 Bromoform	173	6.106	6.124	(1.058)	3190	1.00000	1.1(TaQ)
	75 Isopropylbenzene (Cumene)	105	6.216	6.234	(1.077)	20918	1.00000	1.0(a)
$	76 4-Bromofluorobenzene (S)	95	6.368	6.386	(0.908)	688773	100.000	100
	77 cis-1,4-Dichloro-2-Butene	53	6.393	6.417	(0.911)	1425	1.00000	1.1(aQ)
	78 Bromobenzene	156	6.429	6.453	(0.917)	5447	1.00000	1.0(a)
	79 n-Propylbenzene	91	6.429	6.453	(0.917)	25198	1.00000	1.0(a)
	80 1,1,2,2-Tetrachloroethane	83	6.466	6.490	(0.922)	4594	1.00000	1.0(aQM)
	81 2-Chlorotoluene	91	6.527	6.551	(0.930)	14939	1.00000	0.99(a)
	82 1,3,5-Trimethylbenzene	105	6.533	6.557	(0.931)	16973	1.00000	0.99(a)
	83 1,2,3-Trichloropropane	110	6.551	6.569	(0.934)	1043	1.00000	0.85(a)
	84 trans-1,4-Dichloro-2-Butene	53	6.563	6.588	(0.936)	2756	2.50000	2.4(a)
	85 4-Chlorotoluene	91	6.618	6.642	(0.944)	14728	1.00000	1.0(a)
	86 tert-Butylbenzene	119	6.765	6.746	(0.964)	2082	1.00000	0.15(aQ)
	87 1,2,4-Trimethylbenzene	105	6.758	6.789	(0.963)	17864	1.00000	1.0(a)
	88 sec-Butylbenzene	105	6.826	6.856	(0.973)	21539	1.00000	1.00(a)
	89 p-Isopropyltoluene	119	6.911	6.941	(0.985)	19149	1.00000	1.0(a)
	90 1,3-Dichlorobenzene	146	6.972	6.996	(0.994)	11163	1.00000	1.0(a)
*	91 1,4-Dichlorobenzene-d4	152	7.015	7.045	(1.000)	858125	100.000	
	92 1,4-Dichlorobenzene	146	7.027	7.057	(1.002)	11909	1.00000	1.1(aQ)
	93 1,2,3 Trimethylbenzene	105	7.033	7.063	(1.675)	18947	1.00000	1.0(a)
	94 n-Butylbenzene	91	7.185	7.215	(1.024)	17675	1.00000	1.0(a)
	95 1,2-Dichlorobenzene	146	7.301	7.331	(1.041)	10384	1.00000	1.0(a)
	96 1,2-Dibromo-3-Chloropropane	157	7.807	7.831	(1.113)	2349	2.50000	2.4(a)
	97 Hexachlorobutadiene	225	8.167	8.191	(1.164)	4247	1.00000	1.1(a)
	98 1,2,4-Trichlorobenzene	180	8.185	8.209	(1.167)	6972	1.00000	1.1(a)
	99 Naphthalene	128	8.368	8.392	(1.193)	13005	1.00000	1.0(a)
	100 1,2,3-Trichlorobenzene	180	8.478	8.502	(1.209)	6276	1.00000	1.1(a)
	101 2-Methylnaphthalene	142	8.990	9.014	(1.282)	2547	0.50000	0.52(a)

Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014004.D
Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014004.D
Lab Smp Id: 1.0 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	125568	-7.54
41 Pentafluorobenzen	944656	472328	1889312	969254	2.60
48 1,4 Difluorobenze	1423443	711722	2846886	1427257	0.27
53 1,4 dioxane d8	156016	78008	312032	133256	-14.59
67 Chlorobenzene-d5	1400934	700467	2801868	1409133	0.59
91 1,4-Dichlorobenze	853329	426665	1706658	858125	0.56

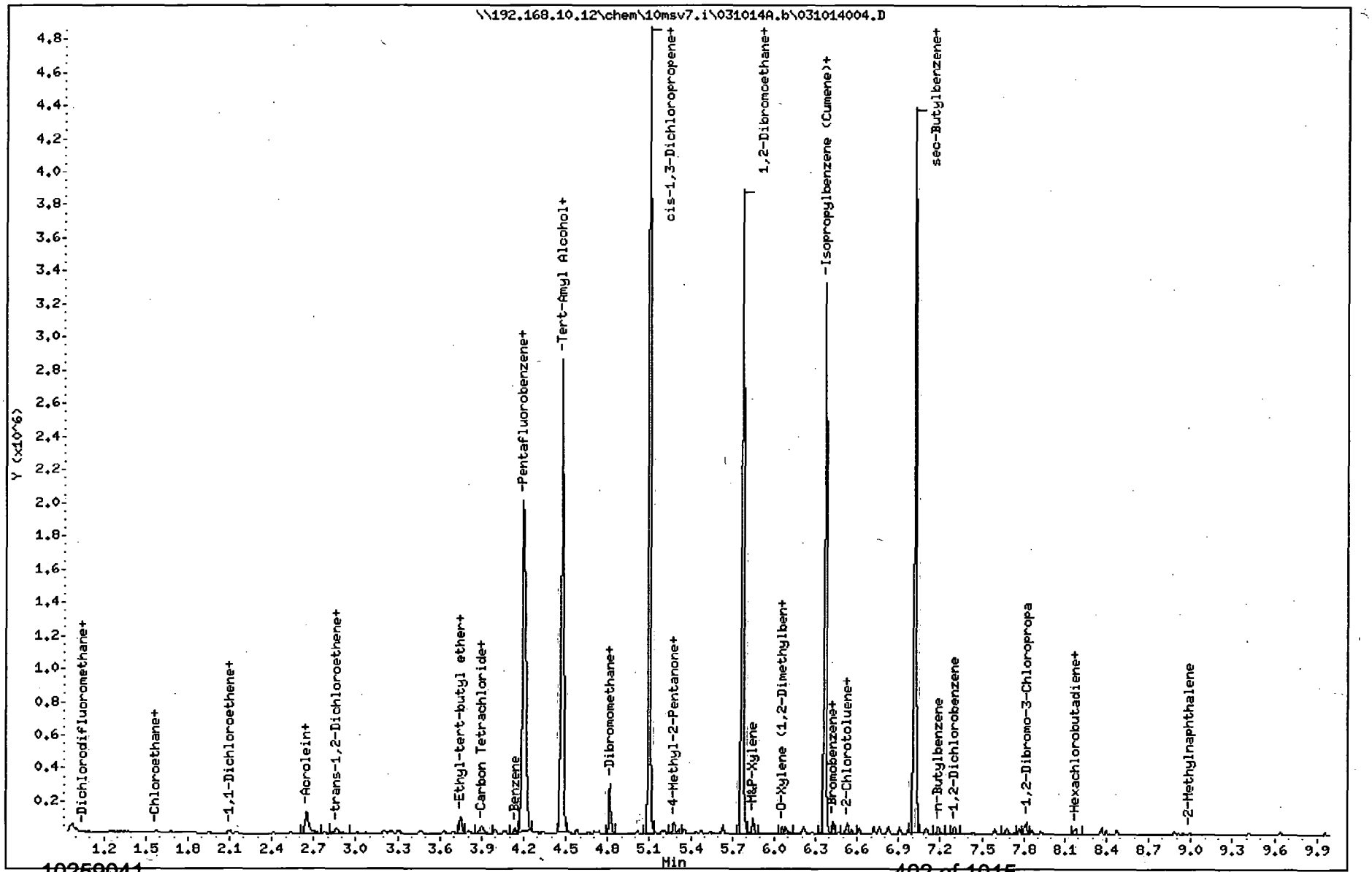
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.14
48 1,4 Difluorobenze	4.48	3.98	4.98	4.47	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.81	-0.25
67 Chlorobenzene-d5	5.78	5.28	6.28	5.77	-0.21
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.02	-0.43

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014004.D
Date : 10-MAR-2014 11:34
Client ID:
Sample Info: 1.0 ICAL 10098-65

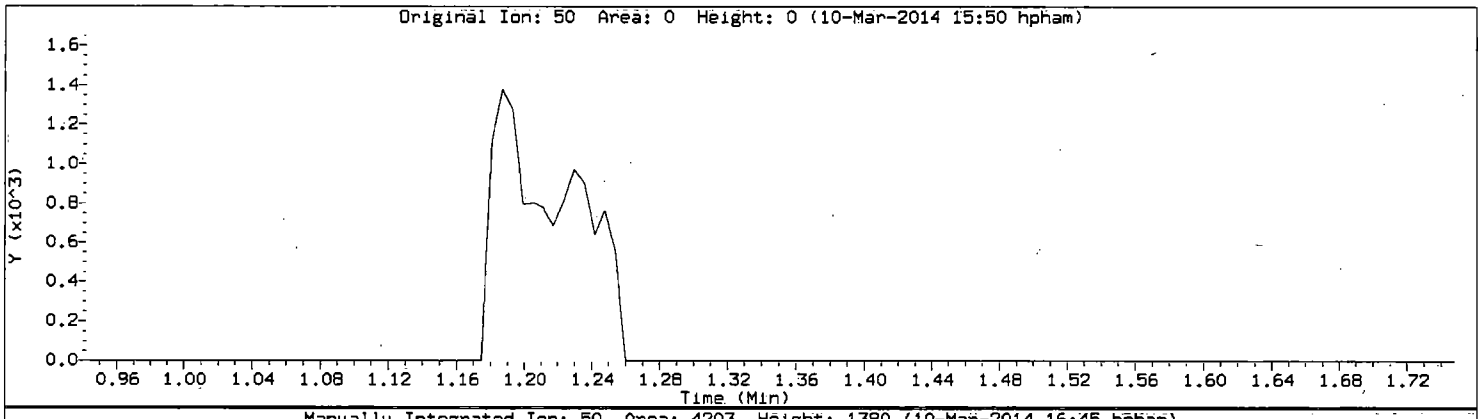
Instrument: 10msv7.i

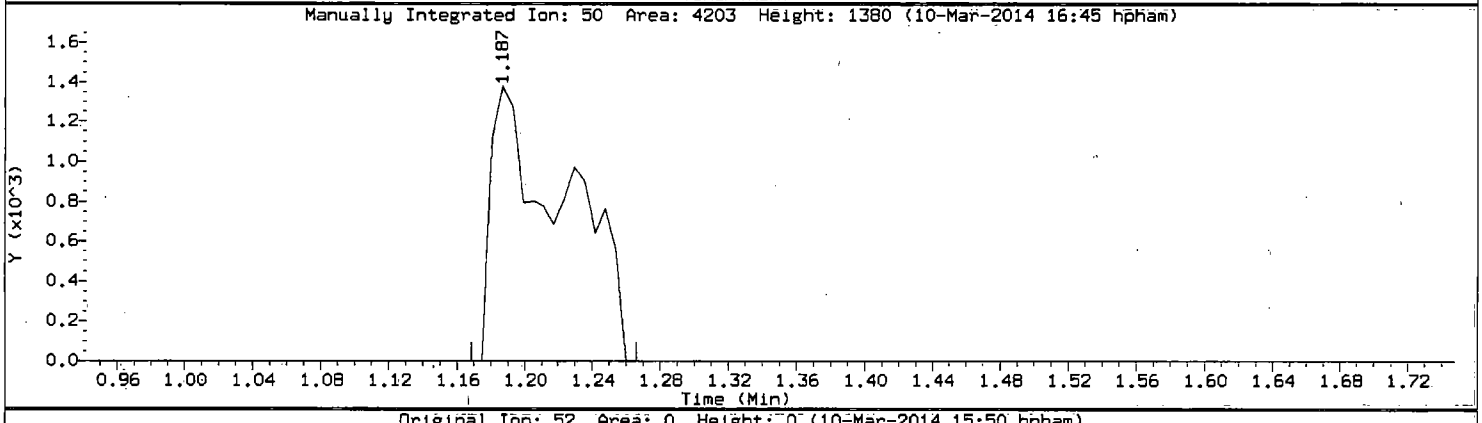
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18

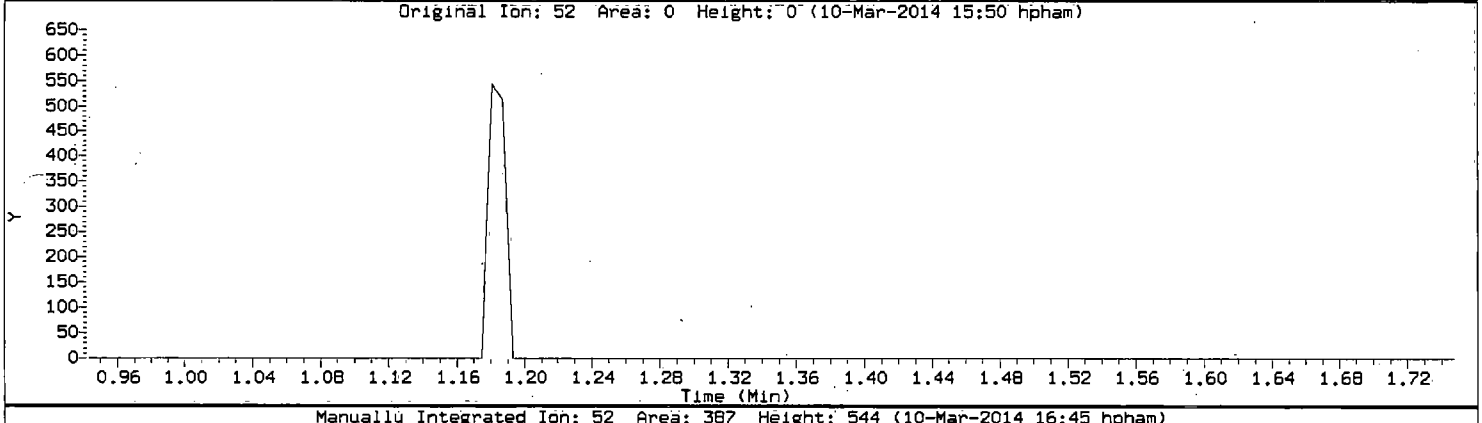


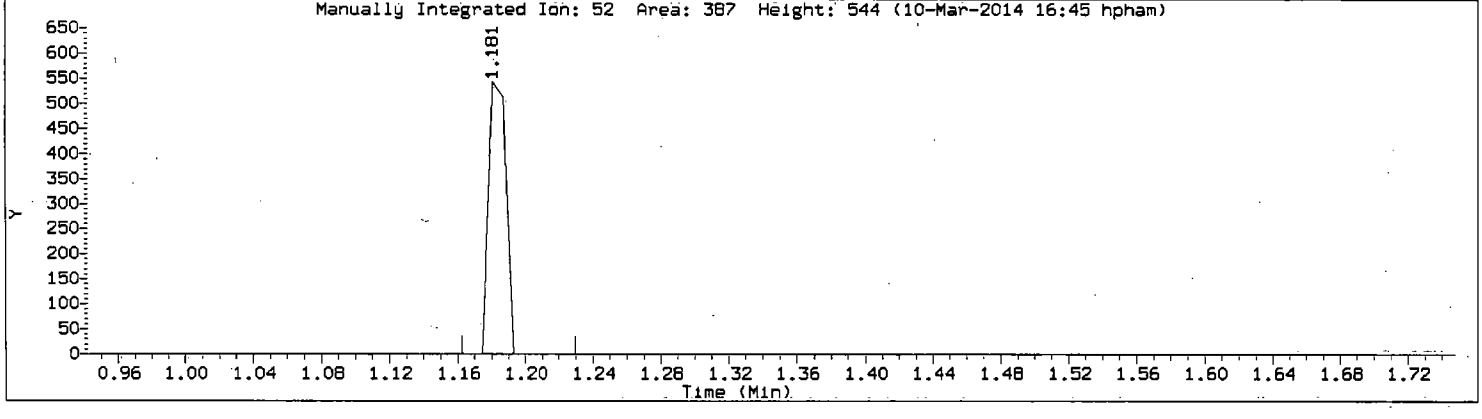
Injection Date: 10-Mar-2014 11:34
Instrument: 10msv7.i
Lab Sample ID: 1.0 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3



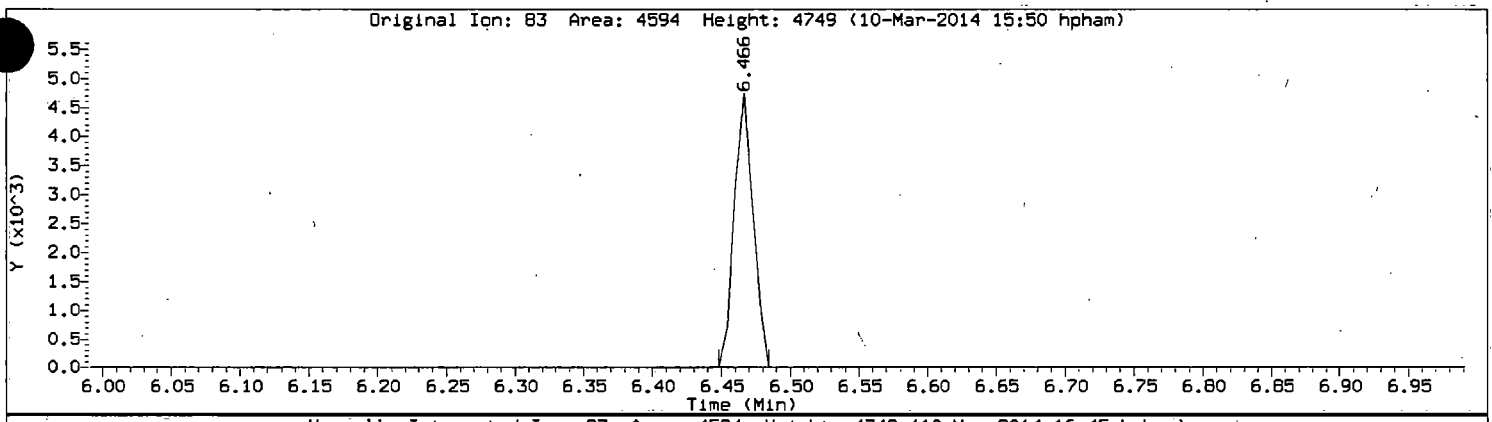


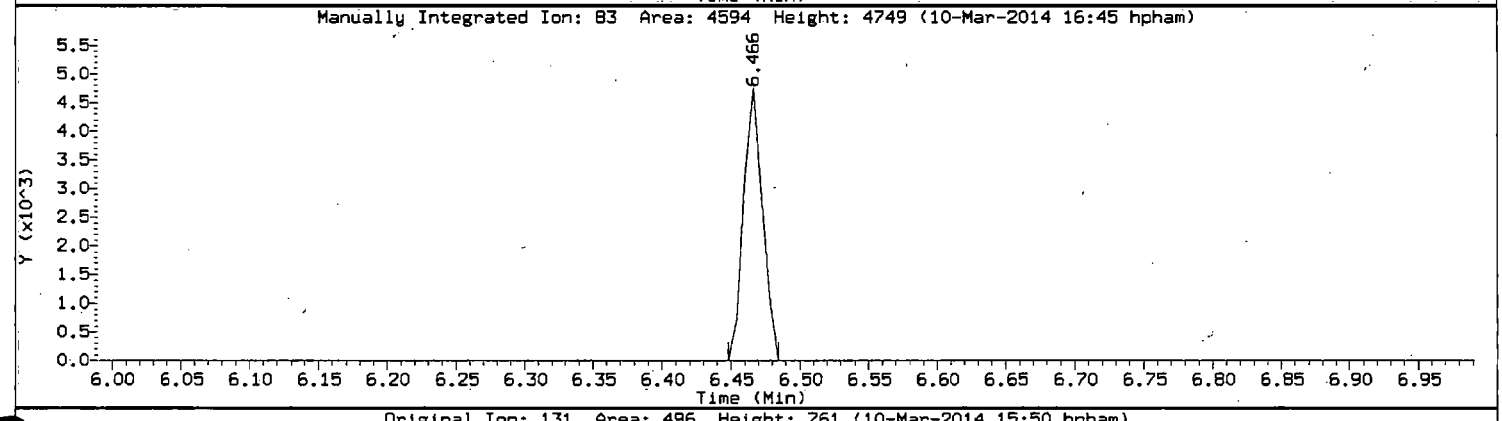


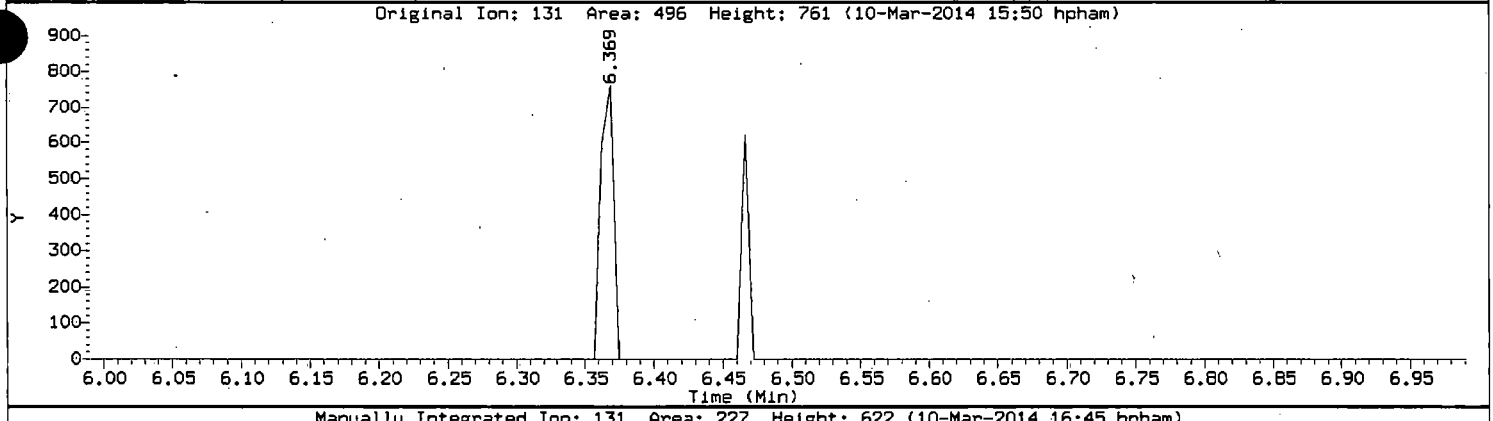


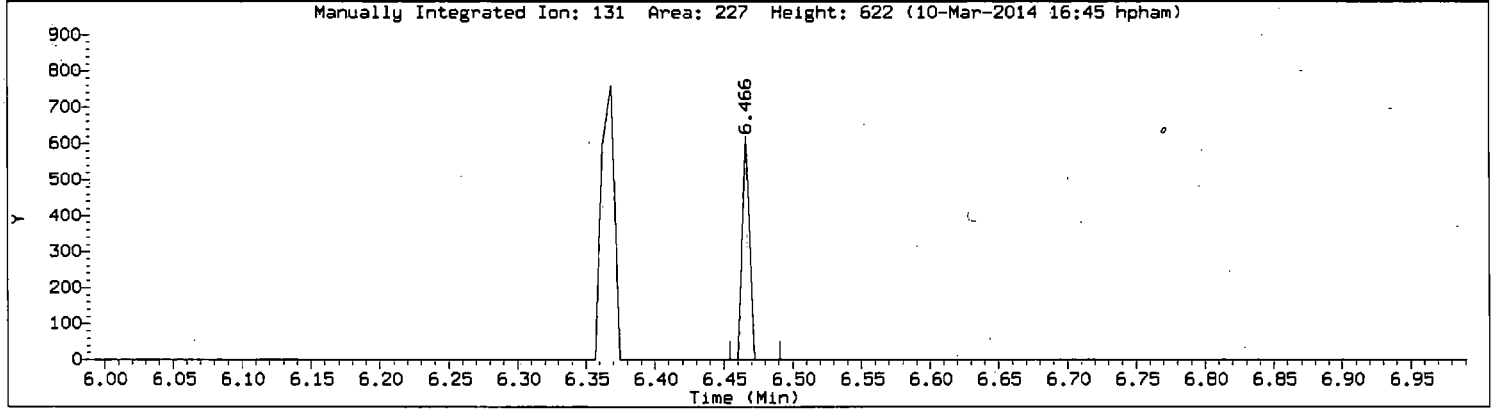
Instrument: 10msv7.i
Lab Sample ID: 1.0 ICAL 10098-65

Compound: 1,1,2,2-Tetrachloroethane
CAS Number: 79-34-5

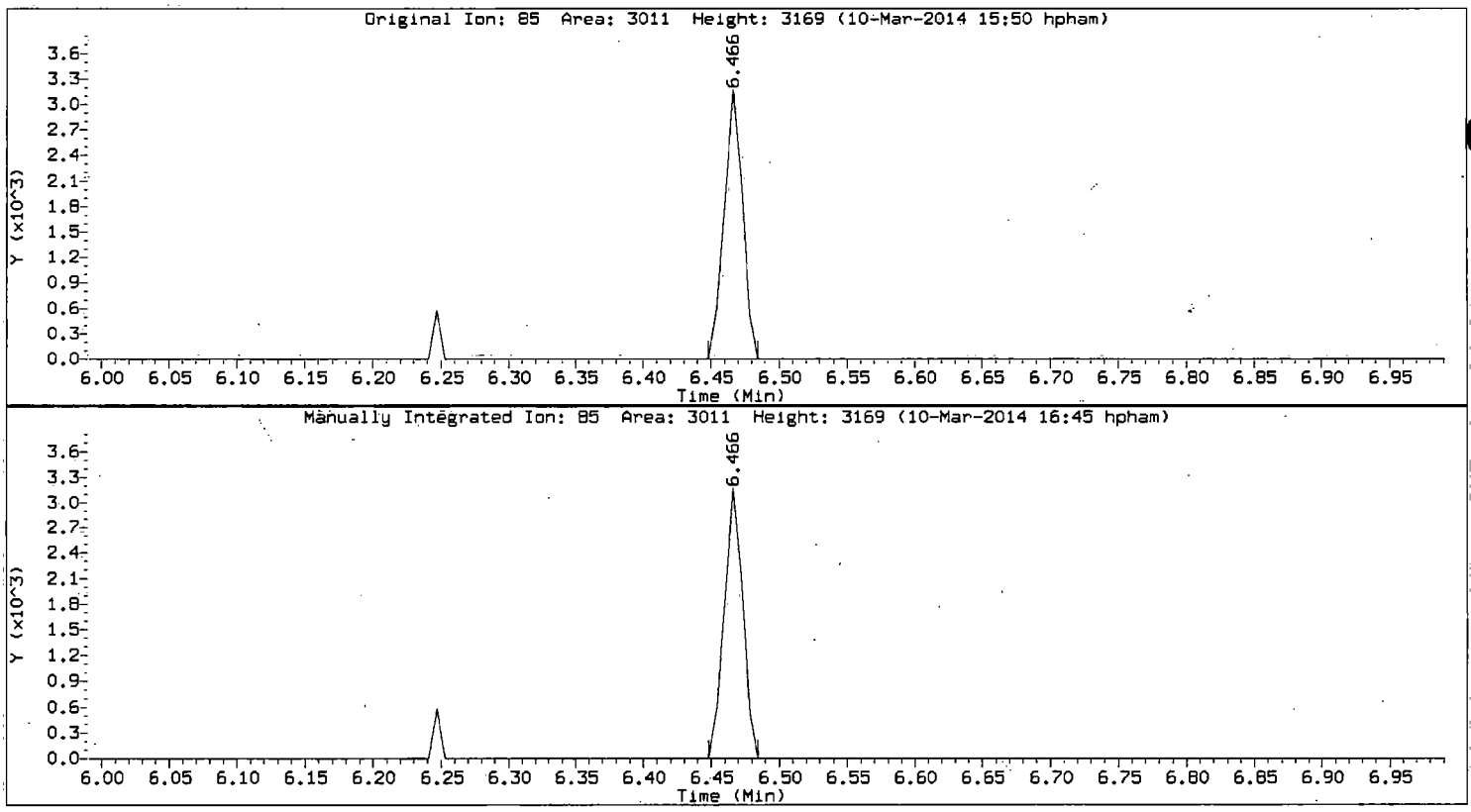








Injection Date: 10-MAR-2014 11:34
Instrument: 10msv7.i
Lab Sample ID: 1.0 ICAL 10098-65



Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014005.D
Lab Smp Id: 4.0 ICAL 10098-65
Inj Date : 10-MAR-2014 11:53
Operator : HBP Inst ID: 10msv7.i
Smp Info : 4.0 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.251)	15501	4.00000	3.9(aQ)
2	Chloromethane	50	1.186	1.247	(0.283)	15915	4.00000	3.6(TaM)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	19271	4.00000	3.9(a)
4	Bromomethane	94	1.479	1.479	(0.352)	13495	4.00000	5.9(Q)
5	Chloroethane	64	1.570	1.570	(0.374)	8959	4.00000	4.3(a)
6	Trichlorofluoromethane	101	1.680	1.668	(0.400)	21801	4.00000	4.3(a)
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	30229	4.00000	4.2(a)
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.466)	10579	4.00000	3.9(a)
9	1,1-Dichloroethene	96	2.095	2.088	(0.499)	13936	4.00000	3.8(a)
10	Carbon Disulfide	76	2.101	2.095	(0.500)	54141	4.00000	3.9(a)
11	Ethanol	45	2.119	2.137	(0.440)	4042	80.0000	75.1
12	Trichlorotrifluoroethane	101	2.143	2.137	(0.511)	13678	4.00000	3.6(a)
13	Iodomethane	142	2.211	2.210	(0.527)	7345	4.00000	5.4(Q)
14	Acrolein	56	2.412	2.412	(0.575)	18615	40.0000	39.9
15	Allyl Chloride	41	2.540	2.533	(0.605)	21391	4.00000	4.1(a)
16	Methylene Chloride	84	2.643	2.637	(0.630)	17543	4.00000	3.9(a)
17	Isopropanol	45	2.662	2.649	(0.553)	32935	40.0000	34.0(Q)
* 18	Acetone d6	46	2.656	2.655	(1.000)	130682	200.000	
19	Acetone	58	2.704	2.698	(1.018)	5895	20.0000	20.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
20	trans-1,2-Dichloroethene	96	2.784	2.777	(0.663)	16052	4.00000	4.0(a)
21	Hexane	86	2.863	2.863	(1.078)	8943	10.0000	9.4
22	Methyl-tert-butyl Ether	73	2.899	2.899	(0.691)	38342	4.00000	3.9(aQ)
23	tert-Butyl Alcohol	59	3.009	3.021	(0.625)	17091	40.0000	37.5
24	Acetonitrile	41	3.070	3.070	(0.731)	13797	40.0000	38.1
25	Isopropyl Ether	45	3.204	3.210	(0.763)	46800	4.00000	4.0(a)
26	Acrylonitrile	53	3.247	3.247	(0.773)	22285	40.0000	39.8
27	1,1-Dichloroethane	63	3.265	3.265	(0.778)	27300	4.00000	4.1(a)
28	Ethyl-tert-butyl ether	59	3.460	3.466	(0.824)	42591	4.00000	3.9(a)
29	Vinyl Acetate	43	3.460	3.466	(0.824)	28326	4.00000	3.8(aQ)
30	cis-1,2-Dichloroethene	96	3.631	3.637	(0.865)	17241	4.00000	4.0(a)
31	2,2-Dichloropropane	77	3.698	3.704	(0.881)	23312	4.00000	4.2(a)
32	Cyclohexane	56	3.753	3.759	(0.894)	126059	20.0000	18.8
33	Bromochloromethane	130	3.753	3.759	(0.894)	9922	4.00000	3.9(a)
34	Chloroform	83	3.808	3.814	(0.907)	27234	4.00000	4.0(a)
35	Carbon Tetrachloride	117	3.881	3.887	(0.924)	19896	4.00000	4.0(a)
36	Tetrahydrofuran	72	3.899	3.905	(1.468)	18265	40.0000	41.9
37	1,1,1-Trichloroethane	97	3.924	3.930	(0.935)	22960	4.00000	3.9(a)
38	2-Butanone	43	3.997	4.003	(0.952)	29108	20.0000	19.6
39	1,1-Dichloropropene	75	3.997	4.003	(0.952)	21644	4.00000	3.9(a)
40	Benzene	78	4.137	4.149	(0.985)	65752	4.00000	4.0(a)
* 41	Pentafluorobenzene	168	4.198	4.204	(1.000)	965156	100.000	
42	Tert-amyl methyl ether	73	4.216	4.222	(1.004)	42398	4.00000	3.9(aQ)
$ 43	1,2-Dichloroethane d4 (S)	65	4.216	4.222	(1.004)	372729	100.000	100
44	1,2-Dichloroethane	62	4.253	4.259	(1.013)	17669	4.00000	4.1(a)
45	Isobutanol	43	4.289	4.301	(0.891)	12843	80.0000	69.8
46	Tert-Amyl Alcohol	59	4.338	4.350	(0.901)	13469	40.0000	35.3
47	Trichloroethene	130	4.454	4.466	(0.996)	18624	4.00000	4.1(aQ)
* 48	1,4 Difluorobenzene	114	4.472	4.478	(1.000)	1419824	100.000	
49	Tert-amyl ethyl ether	59	4.582	4.588	(1.025)	33102	4.00000	4.0(a)
50	Dibromomethane	174	4.661	4.667	(1.042)	10693	4.00000	4.1(a)
51	1,2-Dichloropropane	63	4.704	4.716	(1.052)	15605	4.00000	4.0(TaQ)
52	Bromodichloromethane	83	4.734	4.746	(1.059)	20243	4.00000	4.0(a)
* 53	1,4 dioxane d8	96	4.814	4.832	(1.000)	155783	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.832	4.844	(1.004)	3863	80.0000	73.7
55	2-Chloroethyl Vinyl Ether	63	4.990	5.002	(1.116)	2041	10.0000	10.2(TQ)
56	cis-1,3-Dichloropropene	75	5.015	5.027	(1.121)	25133	4.00000	4.0(a)
$ 57	Toluene-d8 (S)	98	5.094	5.106	(0.883)	1656539	100.000	98.6
58	Toluene	92	5.119	5.131	(0.887)	43436	4.00000	4.0(a)
59	4-Methyl-2-Pentanone	43	5.271	5.289	(0.913)	62971	20.0000	19.6
60	Tetrachloroethene	166	5.283	5.295	(0.915)	21262	4.00000	4.1(a)
61	trans-1,3-Dichloropropene	75	5.289	5.301	(0.917)	22079	4.00000	4.0(a)
62	1,1,2-Trichloroethane	97	5.356	5.374	(0.928)	13522	4.00000	4.1(a)
63	Dibromochloromethane	129	5.442	5.454	(0.943)	15411	4.00000	4.0(a)
64	1,3-Dichloropropane	76	5.478	5.490	(0.949)	23048	4.00000	4.1(a)
65	1,2-Dibromoethane	107	5.545	5.557	(0.961)	13969	4.00000	4.0(TaQ)
66	2-Hexanone	43	5.631	5.649	(0.976)	48916	20.0000	19.5
* 67	Chlorobenzene-d5	117	5.771	5.789	(1.000)	1429738	100.000	
68	Chlorobenzene	112	5.777	5.795	(1.001)	47699	4.00000	3.9(aQ)
69	Ethylbenzene	91	5.783	5.801	(1.002)	84071	4.00000	4.1(a)
70	1,1,1,2-Tetrachloroethane	131	5.807	5.819	(1.006)	16537	4.00000	3.9(a)
71	M&P-Xylene	106	5.850	5.868	(1.014)	65553	8.00000	8.2
72	O-Xylene (1,2-Dimethylbenzene)	106	6.063	6.075	(1.051)	29804	4.00000	4.0(a)
73	Styrene	104	6.088	6.100	(1.055)	51718	4.00000	4.0(a)

Report Date: 10-Mar-2014 16:45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	74 Bromoform	173	6.106	6.124	(1.058)	12095	4.00000	4.0(a)
	75 Isopropylbenzene (Cumene)	105	6.216	6.234	(1.077)	78454	4.00000	3.9(a)
$	76 4-Bromofluorobenzene (S)	95	6.368	6.386	(0.907)	688776	100.000	98.5
	77 cis-1,4-Dichloro-2-Butene	53	6.399	6.417	(0.911)	5477	4.00000	4.0(aQ)
	78 Bromobenzene	156	6.435	6.453	(0.917)	22339	4.00000	4.2(a)
	79 n-Propylbenzene	91	6.435	6.453	(0.917)	95417	4.00000	3.9(a)
	80 1,1,2,2-Tetrachloroethane	83	6.472	6.490	(0.922)	17700	4.00000	4.0(a)
	81 2-Chlorotoluene	91	6.527	6.551	(0.930)	62083	4.00000	4.1(a)
	82 1,3,5-Trimethylbenzene	105	6.539	6.557	(0.931)	69379	4.00000	4.0(a)
	83 1,2,3-Trichloropropane	110	6.551	6.569	(0.933)	5158	4.00000	4.1(a)
	84 trans-1,4-Dichloro-2-Butene	53	6.569	6.588	(0.936)	10713	10.0000	9.3
	85 4-Chlorotoluene	91	6.618	6.642	(0.943)	59656	4.00000	4.1(a)
	86 tert-Butylbenzene	119	6.728	6.746	(0.958)	57781	4.00000	4.0(a)
	87 1,2,4-Trimethylbenzene	105	6.765	6.789	(0.964)	69816	4.00000	4.0(a)
	88 sec-Butylbenzene	105	6.832	6.856	(0.973)	85915	4.00000	3.9(a)
	89 p-Isopropyltoluene	119	6.917	6.941	(0.985)	74339	4.00000	3.8(a)
	90 1,3-Dichlorobenzene	146	6.978	6.996	(0.994)	42638	4.00000	4.0(a)
*	91 1,4-Dichlorobenzene-d4	152	7.021	7.045	(1.000)	871580	100.000	
	92 1,4-Dichlorobenzene	146	7.033	7.057	(1.002)	44270	4.00000	4.0(aQ)
	93 1,2,3 Trimethylbenzene	105	7.039	7.063	(1.677)	73722	4.00000	4.0(a)
	94 n-Butylbenzene	91	7.191	7.215	(1.024)	70529	4.00000	3.9(a)
	95 1,2-Dichlorobenzene	146	7.307	7.331	(1.041)	40441	4.00000	4.0(a)
	96 1,2-Dibromo-3-Chloropropane	157	7.813	7.831	(1.113)	10046	10.0000	10.2
	97 Hexachlorobutadiene	225	8.179	8.191	(1.165)	16065	4.00000	4.1(a)
	98 1,2,4-Trichlorobenzene	180	8.191	8.209	(1.167)	26635	4.00000	4.1(a)
	99 Naphthalene	128	8.380	8.392	(1.194)	50634	4.00000	4.0(a)
	100 1,2,3-Trichlorobenzene	180	8.484	8.502	(1.208)	23148	4.00000	3.9(a)
	101 2-Methylnaphthalene	142	8.996	9.014	(1.281)	9287	2.00000	1.9(a)

C Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014005.D
Lab Smp Id: 4.0 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	130682	-3.78
41 Pentafluorobenzen	944656	472328	1889312	965156	2.17
48 1,4 Difluorobenze	1423443	711722	2846886	1419824	-0.25
53 1,4 dioxane d8	156016	78008	312032	155783	-0.15
67 Chlorobenzene-d5	1400934	700467	2801868	1429738	2.06
91 1,4-Dichlorobenze	853329	426665	1706658	871580	2.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.66	0.23
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.14
48 1,4 Difluorobenze	4.48	3.98	4.98	4.47	-0.14
53 1,4 dioxane d8	4.83	4.33	5.33	4.81	-0.25
67 Chlorobenzene-d5	5.78	5.28	6.28	5.77	-0.21
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.02	-0.35

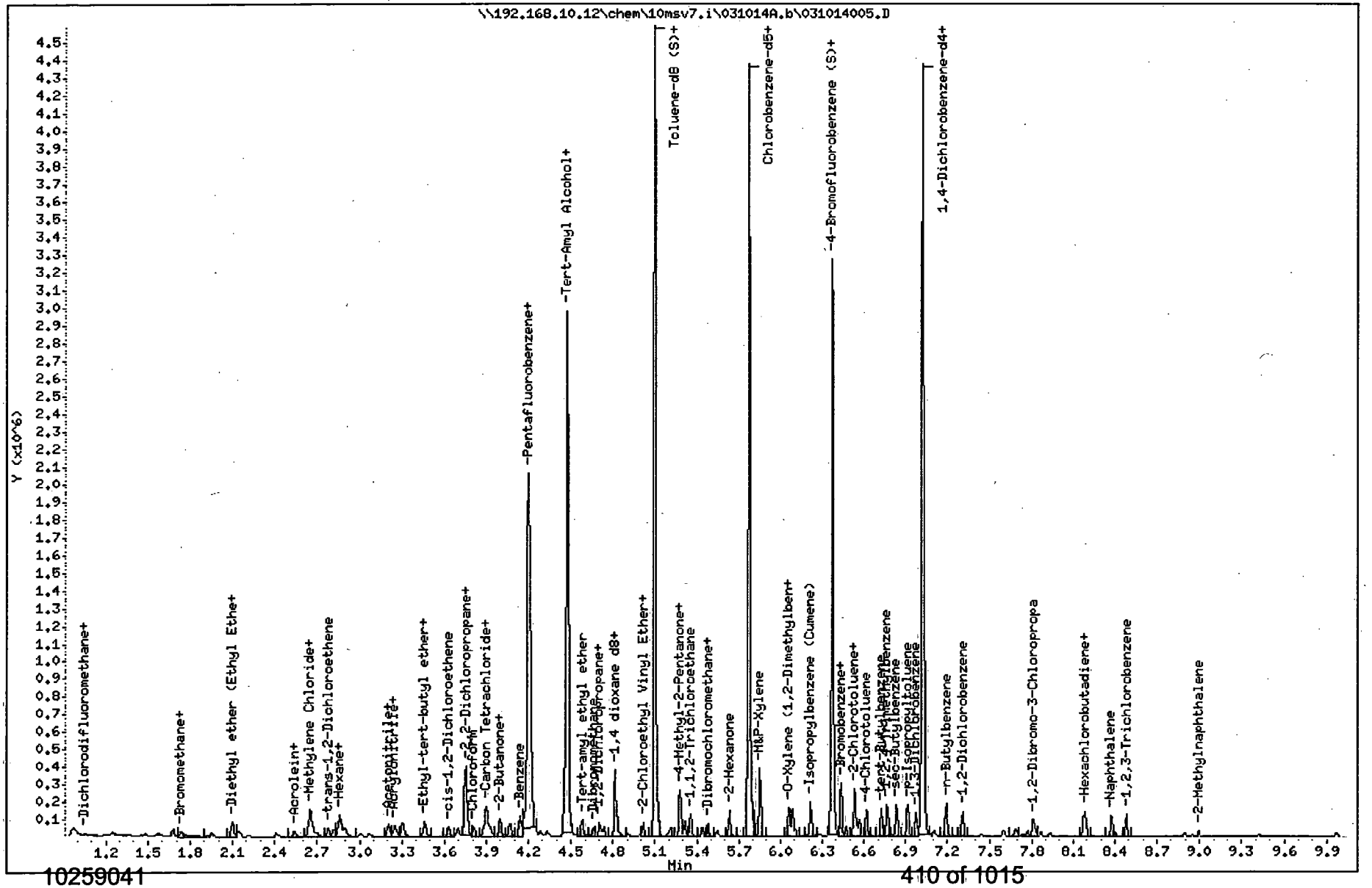
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014005.D
Date : 10-MAR-2014 11:53
Client ID:
Sample Info: 4.0 ICAL 10098-65

Instrument: 10msv7.i

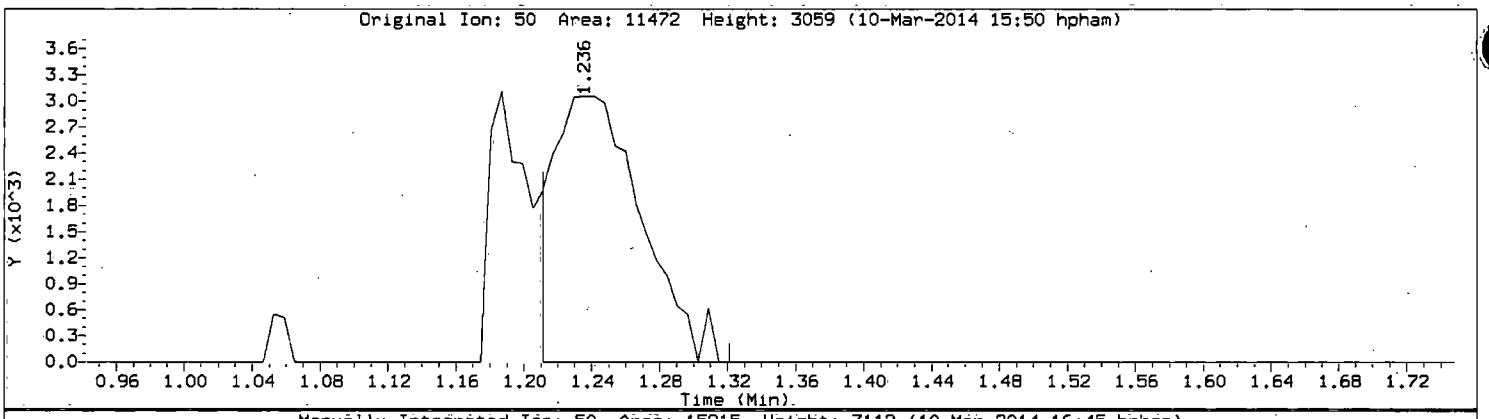
Operator: HBP
Column diameter: 0.18

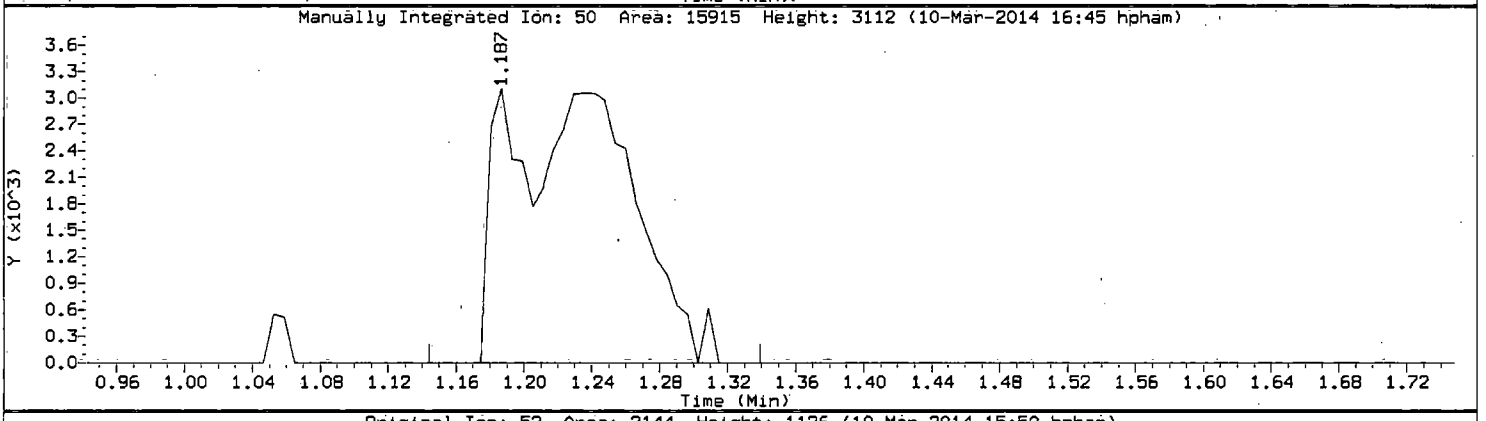
Column phase: Rtx-VMS

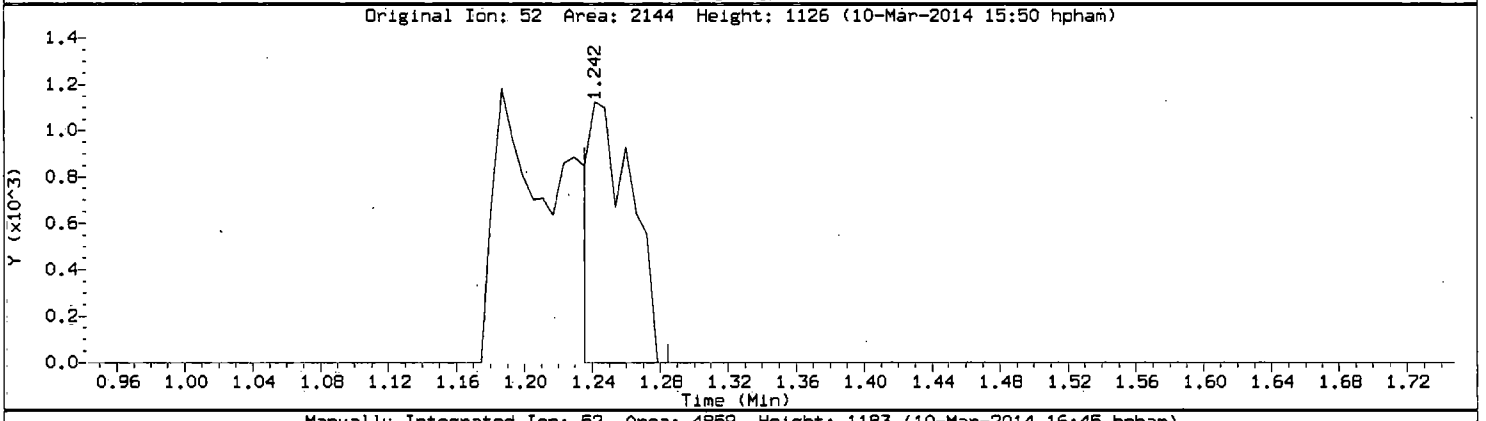


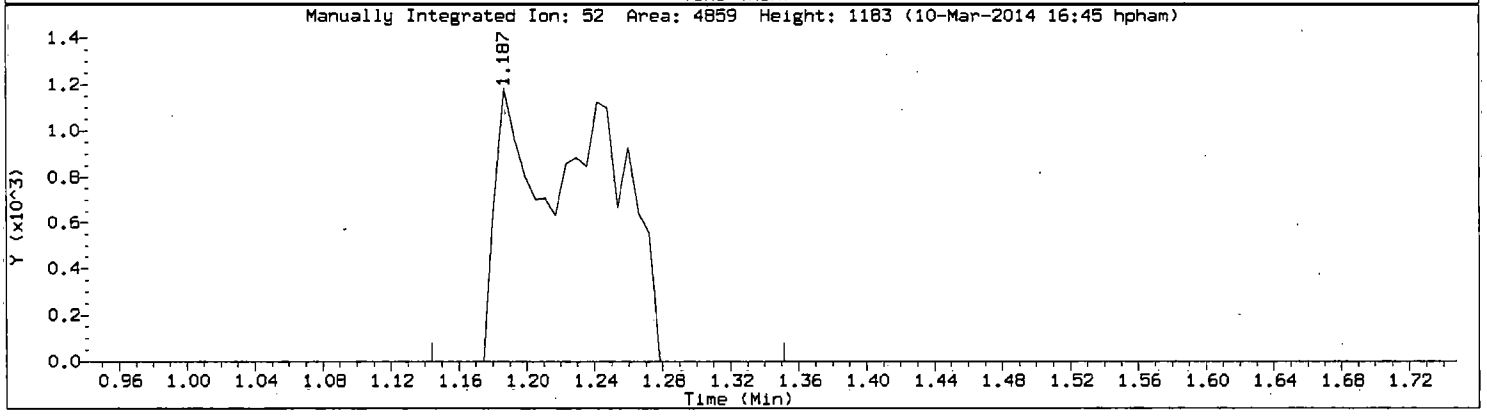
Injection Date: 10-MAR-2014 11:55
Instrument: 10msv7.i
Lab Sample ID: 4.0 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3









Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014006.D
Lab Smp Id: 10 ICAL 10098-65
Inj Date : 10-MAR-2014 12:13
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	40618	10.0000	10.2
2	Chloromethane	50	1.186	1.247	(0.282)	41970	10.0000	9.5(TM)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	48213	10.0000	9.9
4	Bromomethane	94	1.479	1.479	(0.352)	19653	10.0000	9.1(M)
5	Chloroethane	64	1.570	1.570	(0.374)	21644	10.0000	10.5
6	Trichlorofluoromethane	101	1.674	1.668	(0.398)	53527	10.0000	8.9
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	70957	10.0000	10
8	Diethyl ether (Ethyl Ether)	59	1.948	1.960	(0.464)	26092	10.0000	9.7
9	1,1-Dichloroethene	96	2.095	2.088	(0.498)	35218	10.0000	9.7
10	Carbon Disulfide	76	2.101	2.095	(0.500)	126240	10.0000	9.2
11	Ethanol	45	2.113	2.137	(0.438)	10301	200.000	185
12	Trichlorotrifluoroethane	101	2.137	2.137	(0.508)	37199	10.0000	10
13	Iodomethane	142	2.210	2.210	(0.526)	24179	10.0000	8.9
14	Acrolein	56	2.406	2.412	(0.572)	42074	100.000	90.7
15	Allyl Chloride	41	2.534	2.533	(0.603)	51308	10.0000	9.8
16	Methylene Chloride	84	2.637	2.637	(0.627)	41216	10.0000	9.8
17	Isopropanol	45	2.656	2.649	(0.551)	49032	100.000	91.4(M)
* 18	Acetone d6	46	2.649	2.655	(1.000)	135934	200.000	
19	Acetone	58	2.698	2.698	(1.018)	13530	50.0000	48.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	38523	10.0000	9.6
	21 Hexane	86	2.857	2.863	(1.078)	25657	25.0000	25.9
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.688)	97044	10.0000	10(Q)
	23 tert-Butyl Alcohol	59	3.003	3.021	(0.623)	41791	100.000	88.8(Q)
	24 Acetonitrile	41	3.064	3.070	(0.729)	35622	100.000	98.9
	25 Isopropyl Ether	45	3.204	3.210	(0.762)	111215	10.0000	9.6
	26 Acrylonitrile	53	3.247	3.247	(0.772)	53342	100.000	95.6
	27 1,1-Dichloroethane	63	3.259	3.265	(0.775)	65178	10.0000	9.8
	28 Ethyl-tert-butyl ether	59	3.460	3.466	(0.823)	105032	10.0000	9.7
	29 Vinyl Acetate	43	3.460	3.466	(0.823)	70573	10.0000	9.6
	30 cis-1,2-Dichloroethene	96	3.631	3.637	(0.864)	43273	10.0000	10.1
	31 2,2-Dichloropropane	77	3.698	3.704	(0.880)	54238	10.0000	9.8
	32 Cyclohexane	56	3.753	3.759	(0.893)	324983	50.0000	48.7
	33 Bromochloromethane	130	3.753	3.759	(0.893)	24428	10.0000	9.7
	34 Chloroform	83	3.808	3.814	(0.906)	67075	10.0000	10.0
	35 Carbon Tetrachloride	117	3.881	3.887	(0.923)	49067	10.0000	10.0
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	45741	100.000	101
	37 1,1,1-Trichloroethane	97	3.924	3.930	(0.933)	56857	10.0000	9.7
	38 2-Butanone	43	3.997	4.003	(0.951)	70341	50.0000	47.7
	39 1,1-Dichloropropene	75	3.997	4.003	(0.951)	53604	10.0000	9.6
	40 Benzene	78	4.143	4.149	(0.985)	161137	10.0000	9.7
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	960292	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	103774	10.0000	9.5(Q)
$	43 1,2-Dichloroethane d4 (S)	65	4.216	4.222	(1.003)	379379	100.000	102
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	42906	10.0000	9.9
	45 Isobutanol	43	4.289	4.301	(0.890)	33917	200.000	178
	46 Tert-Amyl Alcohol	59	4.338	4.350	(0.900)	35615	100.000	90.3
	47 Trichloroethene	130	4.460	4.466	(0.996)	46063	10.0000	10
*	48 1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1447329	100.000	
	49 Tert-amyl ethyl ether	59	4.582	4.588	(1.023)	79321	10.0000	9.4
	50 Dibromomethane	174	4.667	4.667	(1.042)	25444	10.0000	9.6
	51 1,2-Dichloropropane	63	4.710	4.716	(1.052)	38561	10.0000	9.8
	52 Bromodichloromethane	83	4.740	4.746	(1.059)	48635	10.0000	9.5
*	53 1,4 dioxane d8	96	4.820	4.832	(1.000)	160874	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.844	(1.004)	10039	200.000	185
	55 2-Chloroethyl Vinyl Ether	63	4.997	5.002	(1.116)	6225	25.0000	22.8
	56 cis-1,3-Dichloropropene	75	5.021	5.027	(1.121)	60958	10.0000	9.6
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1667081	100.000	98.5
	58 Toluene	92	5.125	5.131	(0.886)	101491	10.0000	9.3
	59 4-Methyl-2-Pentanone	43	5.283	5.289	(0.914)	155071	50.0000	48.0
	60 Tetrachloroethene	166	5.289	5.295	(0.915)	51492	10.0000	9.9
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	54015	10.0000	9.6
	62 1,1,2-Trichloroethane	97	5.368	5.374	(0.928)	32276	10.0000	9.7
	63 Dibromochloromethane	129	5.448	5.454	(0.942)	38469	10.0000	9.9
	64 1,3-Dichloropropane	76	5.484	5.490	(0.948)	54454	10.0000	9.6
	65 1,2-Dibromoethane	107	5.551	5.557	(0.960)	33688	10.0000	9.6
	66 2-Hexanone	43	5.643	5.649	(0.976)	117157	50.0000	46.4
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1440504	100.000	
	68 Chlorobenzene	112	5.789	5.795	(1.001)	114121	10.0000	9.4
	69 Ethylbenzene	91	5.795	5.801	(1.002)	193716	10.0000	9.3
	70 1,1,1,2-Tetrachloroethane	131	5.820	5.819	(1.006)	40028	10.0000	9.4
	71 M&P-Xylene	106	5.862	5.868	(1.014)	152409	20.0000	18.8
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	72667	10.0000	9.6
	73 Styrene	104	6.100	6.100	(1.055)	122934	10.0000	9.5

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	74	Bromoform	173	6.124	6.124	(1.059)	29300	10.0000	9.5
	75	Isopropylbenzene (Cumene)	105	6.228	6.234	(1.077)	190153	10.0000	9.4
$	76	4-Bromofluorobenzene (S)	95	6.387	6.386	(0.907)	699341	100.000	100
	77	cis-1,4-Dichloro-2-Butene	53	6.411	6.417	(0.911)	12558	10.0000	9.3
	78	Bromobenzene	156	6.447	6.453	(0.916)	52820	10.0000	9.9
	79	n-Propylbenzene	91	6.447	6.453	(0.916)	236062	10.0000	9.6
	80	1,1,2,2-Tetrachloroethane	83	6.484	6.490	(0.921)	43875	10.0000	9.9
	81	2-Chlorotoluene	91	6.545	6.551	(0.930)	145472	10.0000	9.5
	82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.932)	166392	10.0000	9.6
	83	1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	12262	10.0000	9.8(Q)
	84	trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.936)	27950	25.0000	24.2
	85	4-Chlorotoluene	91	6.636	6.642	(0.943)	139201	10.0000	9.5
	86	tert-Butylbenzene	119	6.746	6.746	(0.958)	141375	10.0000	9.8
	87	1,2,4-Trimethylbenzene	105	6.783	6.789	(0.964)	169281	10.0000	9.6
	88	sec-Butylbenzene	105	6.850	6.856	(0.973)	210931	10.0000	9.6
	89	p-Isopropyltoluene	119	6.935	6.941	(0.985)	185661	10.0000	9.6
	90	1,3-Dichlorobenzene	146	6.996	6.996	(0.994)	103350	10.0000	9.6
*	91	1,4-Dichlorobenzene-d4	152	7.039	7.045	(1.000)	870932	100.000	
	92	1,4-Dichlorobenzene	146	7.051	7.057	(1.002)	106048	10.0000	9.5
	93	1,2,3 Trimethylbenzene	105	7.057	7.063	(1.679)	172310	10.0000	9.3
	94	n-Butylbenzene	91	7.210	7.215	(1.024)	175465	10.0000	9.8
	95	1,2-Dichlorobenzene	146	7.331	7.331	(1.042)	96895	10.0000	9.6
	96	1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.112)	24258	25.0000	24.7
	97	Hexachlorobutadiene	225	8.191	8.191	(1.164)	38470	10.0000	9.9
	98	1,2,4-Trichlorobenzene	180	8.203	8.209	(1.165)	63866	10.0000	9.7
	99	Naphthalene	128	8.392	8.392	(1.192)	122017	10.0000	9.6
	100	1,2,3-Trichlorobenzene	180	8.496	8.502	(1.207)	57348	10.0000	9.7
	101	2-Methylnaphthalene	142	9.008	9.014	(1.280)	23328	5.00000	4.7(a)

Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014006.D
Lab Smp Id: 10 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	135934	0.09
41 Pentafluorobenzen	944656	472328	1889312	960292	1.66
48 1,4 Difluorobenze	1423443	711722	2846886	1447329	1.68
53 1,4 dioxane d8	156016	78008	312032	160874	3.11
67 Chlorobenzene-d5	1400934	700467	2801868	1440504	2.82
91 1,4-Dichlorobenze	853329	426665	1706658	870932	2.06

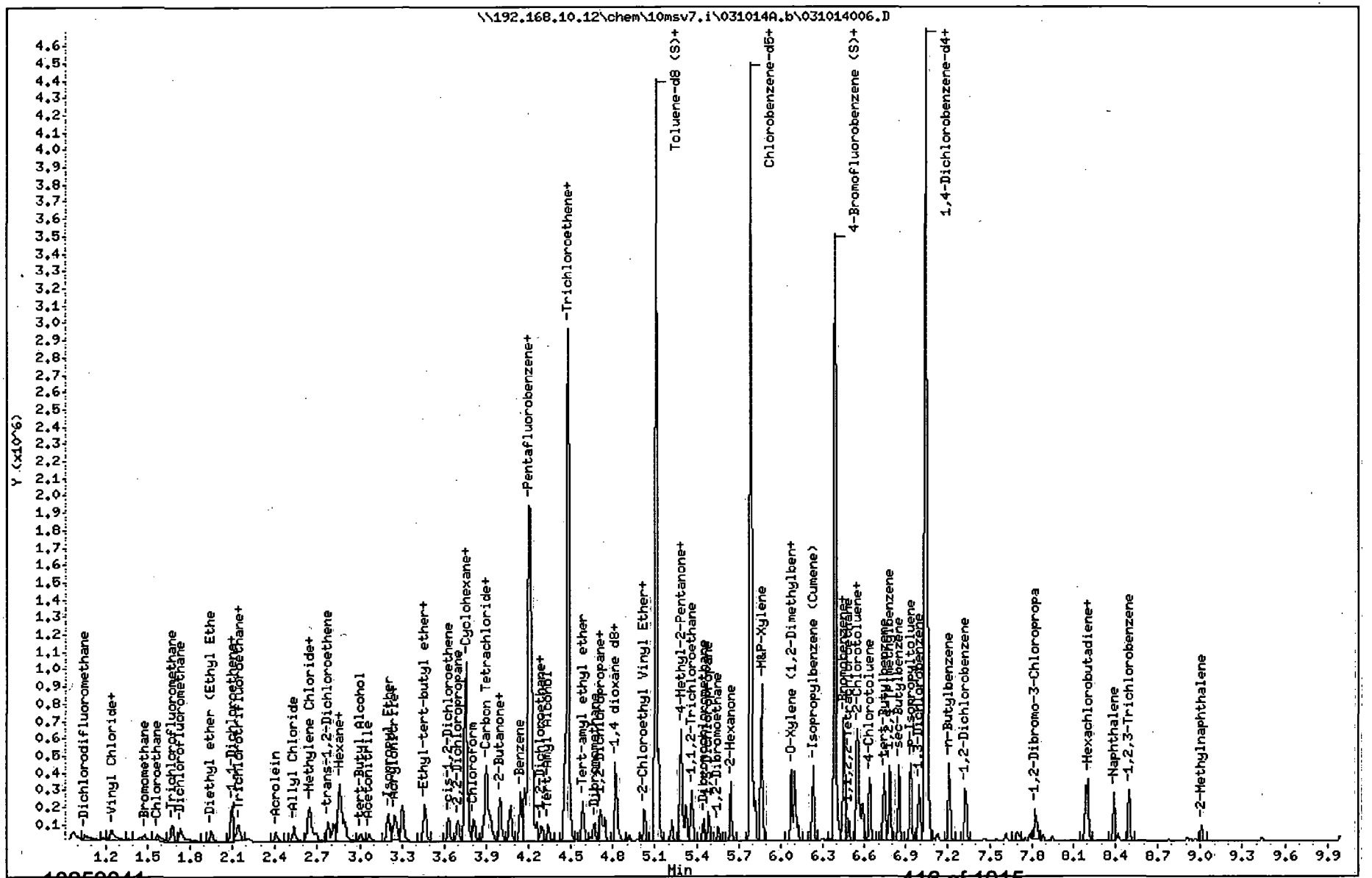
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.82	-0.13
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.04	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014006.D
Date : 10-MAR-2014 12:13
Client ID:
Sample Info: 10 ICAL 10098-65

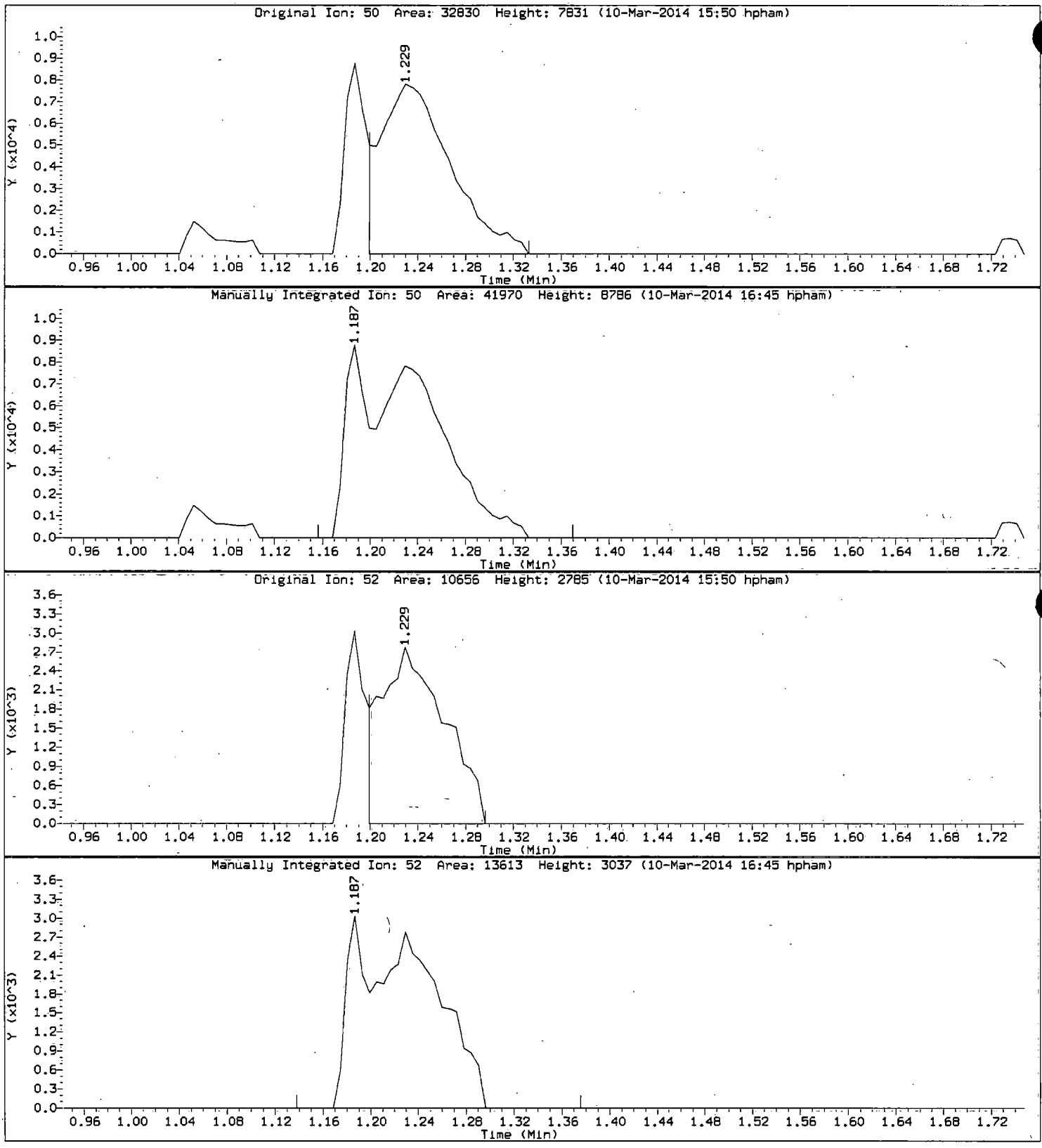
Instrument: 10msv7.i
Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



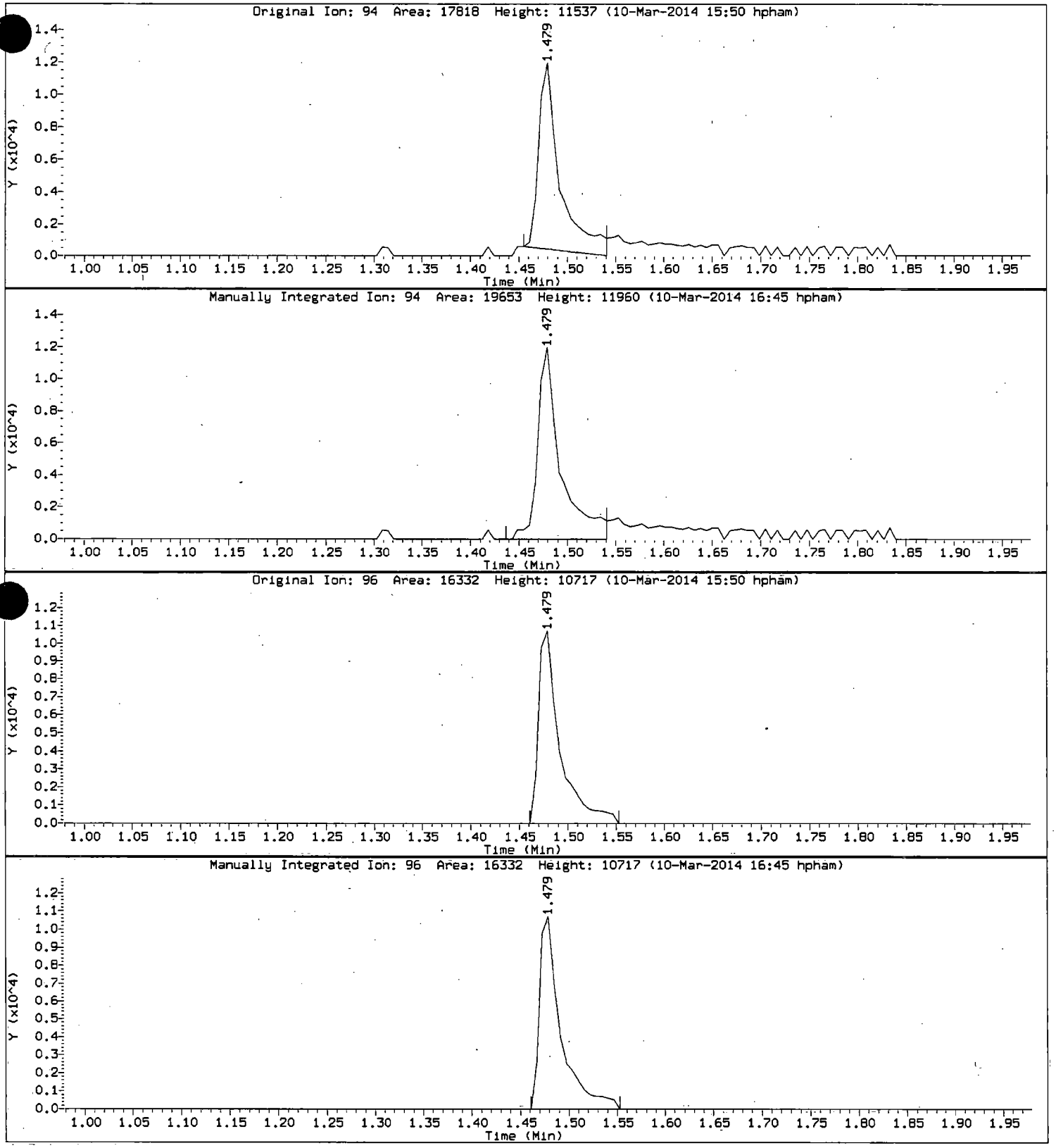
Instrument: 10msv7.i
Lab Sample ID: 10 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3



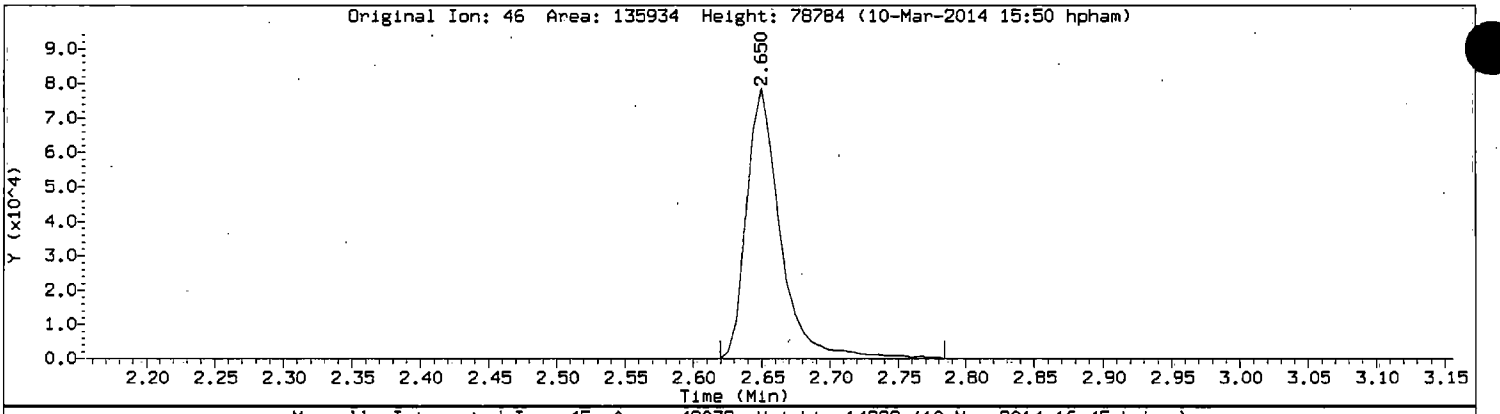
Instrument: 10msv7.i
Lab Sample ID: 10 ICAL 10098-65

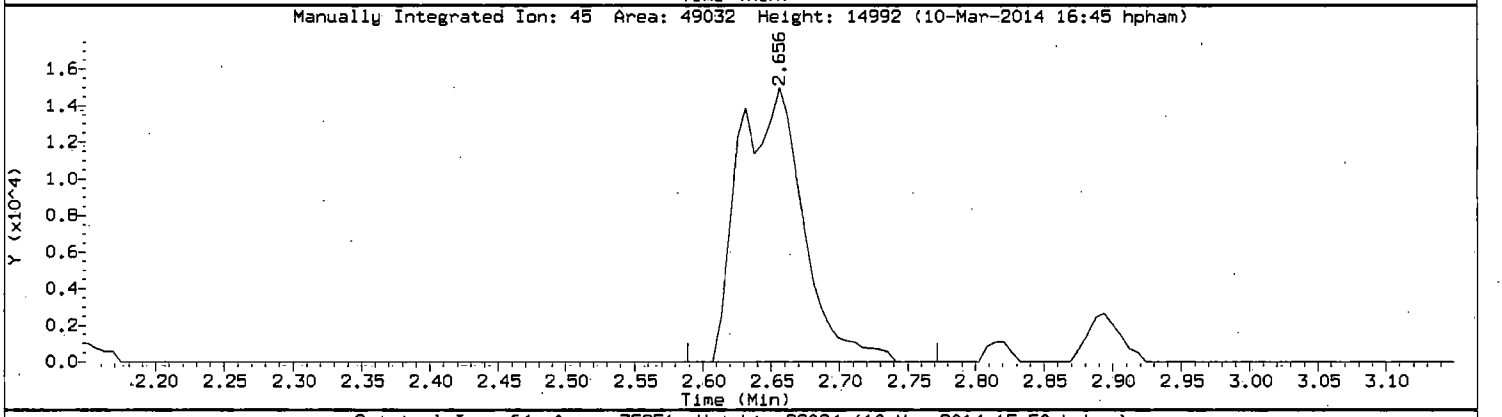
Compound: Bromomethane
CAS Number: 74-83-9

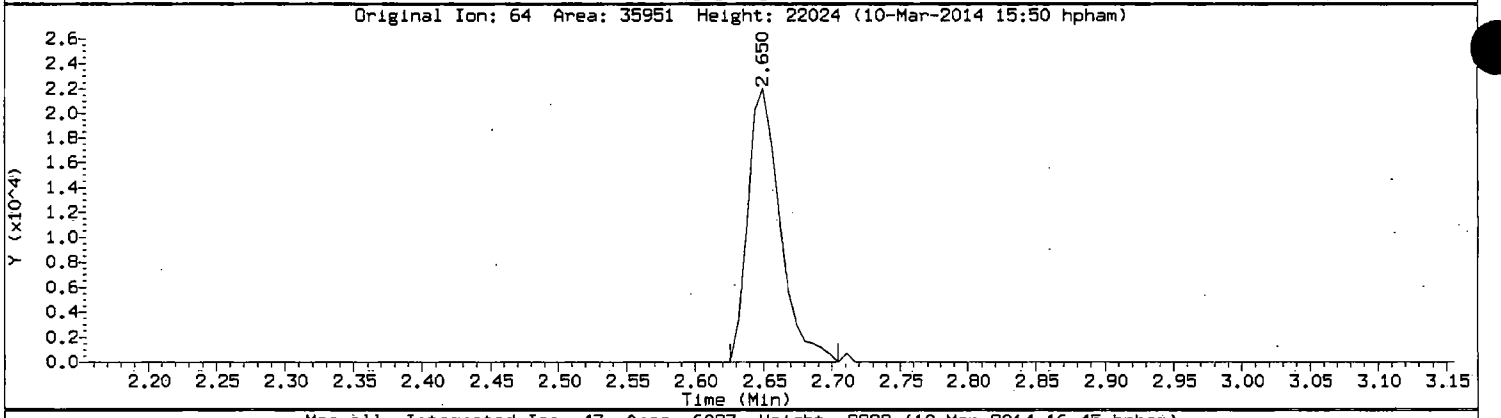


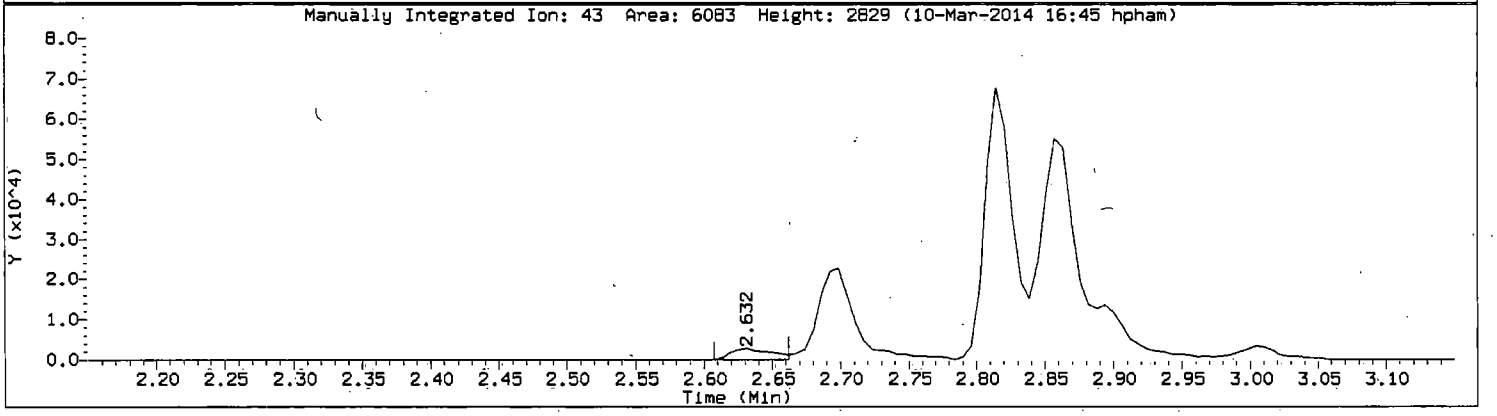
Instrument: 10msv7.i
Lab Sample ID: 10 ICAL 10098-65

Compound: Isopropanol
CAS Number: 67-63-0









Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014007.D
Lab Smp Id: 20 ICAL 10098-65
Inj Date : 10-MAR-2014 12:32
Operator : HBP Inst ID: 10msv7.i
Smp Info : 20 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	85255	20.0000	21.5
2	Chloromethane	50	1.241	1.247	(0.295)	88819	20.0000	20.2(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	101087	20.0000	20.8
4	Bromomethane	94	1.479	1.479	(0.352)	40847	20.0000	20.2
5	Chloroethane	64	1.570	1.570	(0.374)	44093	20.0000	21.5
6	Trichlorofluoromethane	101	1.674	1.668	(0.398)	120301	20.0000	19.3
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	145380	20.0000	20.5
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.465)	56364	20.0000	21.0
9	1,1-Dichloroethene	96	2.095	2.088	(0.498)	74064	20.0000	20.6
10	Carbon Disulfide	76	2.101	2.095	(0.500)	263283	20.0000	19.3
11	Ethanol	45	2.113	2.137	(0.438)	22551	400.000	384
12	Trichlorotrifluoroethane	101	2.143	2.137	(0.510)	76630	20.0000	20.7
13	Iodomethane	142	2.211	2.210	(0.526)	66339	20.0000	17.7
14	Acrolein	56	2.406	2.412	(0.572)	89522	200.000	194
15	Allyl Chloride	41	2.534	2.533	(0.603)	105361	20.0000	20.2
16	Methylene Chloride	84	2.637	2.637	(0.627)	82651	20.0000	20.4
17	Isopropanol	45	2.631	2.649	(0.546)	75489	200.000	177
* 18	Acetone d6	46	2.649	2.655	(1.000)	142834	200.000	
19	Acetone	58	2.698	2.698	(1.018)	28437	100.000	99.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	82181	20.0000	20.6
	21 Hexane	86	2.863	2.863	(1.081)	50264	50.0000	48.2
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.688)	201663	20.0000	20.8(Q)
	23 tert-Butyl Alcohol	59	3.003	3.021	(0.623)	92526	200.000	186
	24 Acetonitrile	41	3.064	3.070	(0.729)	77221	200.000	216
	25 Isopropyl Ether	45	3.204	3.210	(0.762)	237534	20.0000	20.6
	26 Acrylonitrile	53	3.247	3.247	(0.772)	111872	200.000	202
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	138687	20.0000	21.1
	28 Ethyl-tert-butyl ether	59	3.460	3.466	(0.823)	216895	20.0000	20.2
	29 Vinyl Acetate	43	3.460	3.466	(0.823)	149315	20.0000	20.4
	30 cis-1,2-Dichloroethene	96	3.631	3.637	(0.864)	89241	20.0000	20.9
	31 2,2-Dichloropropane	77	3.698	3.704	(0.880)	113855	20.0000	20.8
	32 Cyclohexane	56	3.753	3.759	(0.893)	680335	100.000	103
	33 Bromochloromethane	130	3.759	3.759	(0.894)	51918	20.0000	20.7
	34 Chloroform	83	3.814	3.814	(0.907)	139077	20.0000	20.9
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	102238	20.0000	21.0
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	97954	200.000	205
	37 1,1,1-Trichloroethane	97	3.924	3.930	(0.933)	119418	20.0000	20.4
	38 2-Butanone	43	3.997	4.003	(0.951)	151894	100.000	104
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	112211	20.0000	20.3
	40 Benzene	78	4.143	4.149	(0.985)	335204	20.0000	20.4
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	954499	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	214152	20.0000	19.8(Q)
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	379946	100.000	103
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	88483	20.0000	20.6
	45 Isobutanol	43	4.289	4.301	(0.890)	74469	400.000	371
	46 Tert-Amyl Alcohol	59	4.338	4.350	(0.900)	79761	200.000	191
	47 Trichloroethene	130	4.460	4.466	(0.996)	96191	20.0000	20.7(Q)
*	48 1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1456906	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	168426	20.0000	19.7
	50 Dibromomethane	174	4.667	4.667	(1.042)	53945	20.0000	20.2
	51 1,2-Dichloropropane	63	4.710	4.716	(1.052)	79451	20.0000	20.1
	52 Bromodichloromethane	83	4.747	4.746	(1.060)	102044	20.0000	19.7
*	53 1,4 dioxane d8	96	4.820	4.832	(1.000)	169949	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.844	(1.004)	21618	400.000	378
	55 2-Chloroethyl Vinyl Ether	63	4.997	5.002	(1.116)	15679	50.0000	51.0
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	127510	20.0000	19.9
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1688989	100.000	99.6
	58 Toluene	92	5.125	5.131	(0.886)	212922	20.0000	19.5
	59 4-Methyl-2-Pentanone	43	5.283	5.289	(0.914)	332911	100.000	103
	60 Tetrachloroethene	166	5.289	5.295	(0.915)	107564	20.0000	20.7
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	112934	20.0000	20.1
	62 1,1,2-Trichloroethane	97	5.368	5.374	(0.928)	66762	20.0000	20.0
	63 Dibromochloromethane	129	5.448	5.454	(0.942)	78111	20.0000	20.2
	64 1,3-Dichloropropane	76	5.484	5.490	(0.948)	113704	20.0000	19.9
	65 1,2-Dibromoethane	107	5.551	5.557	(0.960)	71223	20.0000	20.3
	66 2-Hexanone	43	5.643	5.649	(0.976)	247668	100.000	98.0
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1443378	100.000	
	68 Chlorobenzene	112	5.789	5.795	(1.001)	239160	20.0000	19.6
	69 Ethylbenzene	91	5.795	5.801	(1.002)	406352	20.0000	19.5
	70 1,1,1,2-Tetrachloroethane	131	5.820	5.819	(1.006)	84801	20.0000	20.0
	71 M&P-Xylene	106	5.862	5.868	(1.014)	316508	40.0000	39.0
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	150218	20.0000	19.8
	73 Styrene	104	6.100	6.100	(1.055)	259706	20.0000	20.0

Report Date: 10-Mar-2014 16:45

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
	74	Bromoform	173	6.124	6.124	(1.059)	61215	20.0000	19.9	
	75	Isopropylbenzene (Cumene)	105	6.228	6.234	(1.077)	400552	20.0000	19.7	
$	76	4-Bromofluorobenzene (S)	95	6.387	6.386	(0.907)	702050	100.000	99.5	
	77	cis-1,4-Dichloro-2-Butene	53	6.411	6.417	(0.911)	26917	20.0000	19.7	
	78	Bromobenzene	156	6.447	6.453	(0.916)	108995	20.0000	20.2	
	79	n-Propylbenzene	91	6.447	6.453	(0.916)	488123	20.0000	19.8	
	80	1,1,2,2-Tetrachloroethane	83	6.484	6.490	(0.921)	91549	20.0000	20.4	
	81	2-Chlorotoluene	91	6.545	6.551	(0.930)	309123	20.0000	20.1	
	82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.932)	349980	20.0000	20.0	
	83	1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	26169	20.0000	20.8	(Q)
	84	trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.936)	59590	50.0000	51.2	
	85	4-Chlorotoluene	91	6.636	6.642	(0.943)	292151	20.0000	19.8	
	86	tert-Butylbenzene	119	6.746	6.746	(0.958)	300907	20.0000	20.5	
	87	1,2,4-Trimethylbenzene	105	6.783	6.789	(0.964)	355073	20.0000	19.9	
	88	sec-Butylbenzene	105	6.850	6.856	(0.973)	447860	20.0000	20.3	
	89	p-Isopropyltoluene	119	6.935	6.941	(0.985)	393094	20.0000	20.2	
	90	1,3-Dichlorobenzene	146	6.996	6.996	(0.994)	213724	20.0000	19.8	
*	91	1,4-Dichlorobenzene-d4	152	7.039	7.045	(1.000)	879584	100.000		
	92	1,4-Dichlorobenzene	146	7.051	7.057	(1.002)	221139	20.0000	19.6	
	93	1,2,3 Trimethylbenzene	105	7.057	7.063	(1.679)	359114	20.0000	19.5	
	94	n-Butylbenzene	91	7.210	7.215	(1.024)	365981	20.0000	20.2	
	95	1,2-Dichlorobenzene	146	7.331	7.331	(1.042)	197205	20.0000	19.4	
	96	1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.112)	52774	50.0000	53.3	
	97	Hexachlorobutadiene	225	8.185	8.191	(1.163)	81632	20.0000	20.8	
	98	1,2,4-Trichlorobenzene	180	8.203	8.209	(1.165)	132319	20.0000	20.0	
	99	Naphthalene	128	8.386	8.392	(1.191)	256468	20.0000	20.0	
	100	1,2,3-Trichlorobenzene	180	8.496	8.502	(1.207)	121052	20.0000	20.3	
	101	2-Methylnaphthalene	142	9.008	9.014	(1.280)	48980	10.0000	9.8	

C Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014007.D
Lab Smp Id: 20 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	142834	5.17
41 Pentafluorobenzen	944656	472328	1889312	954499	1.04
48 1,4 Difluorobenze	1423443	711722	2846886	1456906	2.35
53 1,4 dioxane d8	156016	78008	312032	169949	8.93
67 Chlorobenzene-d5	1400934	700467	2801868	1443378	3.03
91 1,4-Dichlorobenze	853329	426665	1706658	879584	3.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.82	-0.13
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.04	-0.09

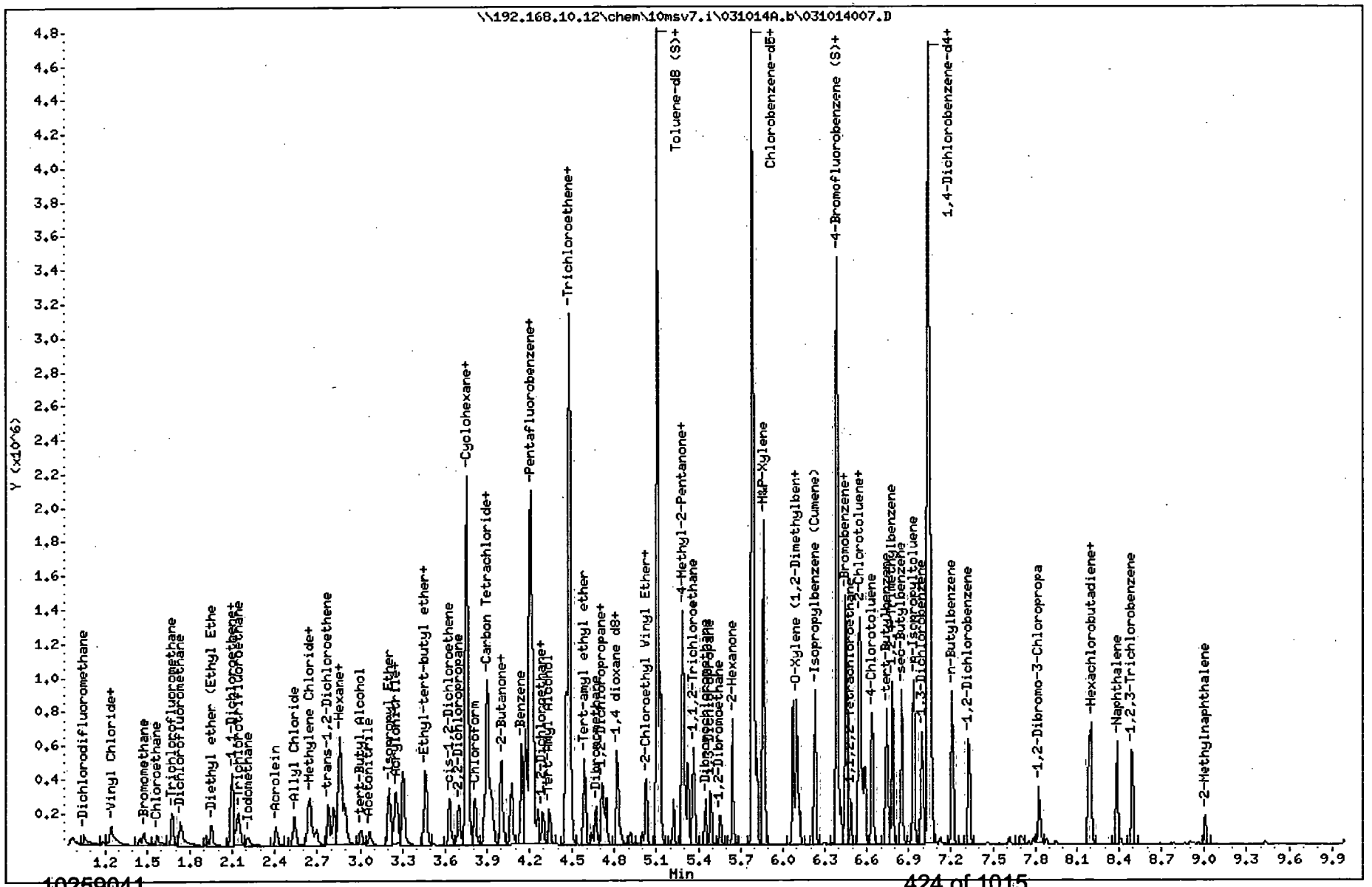
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014007.D
Date : 10-MAR-2014 12:32
Client ID:
Sample Info: 20 ICAL 10098-65

Instrument: 10msv7.i

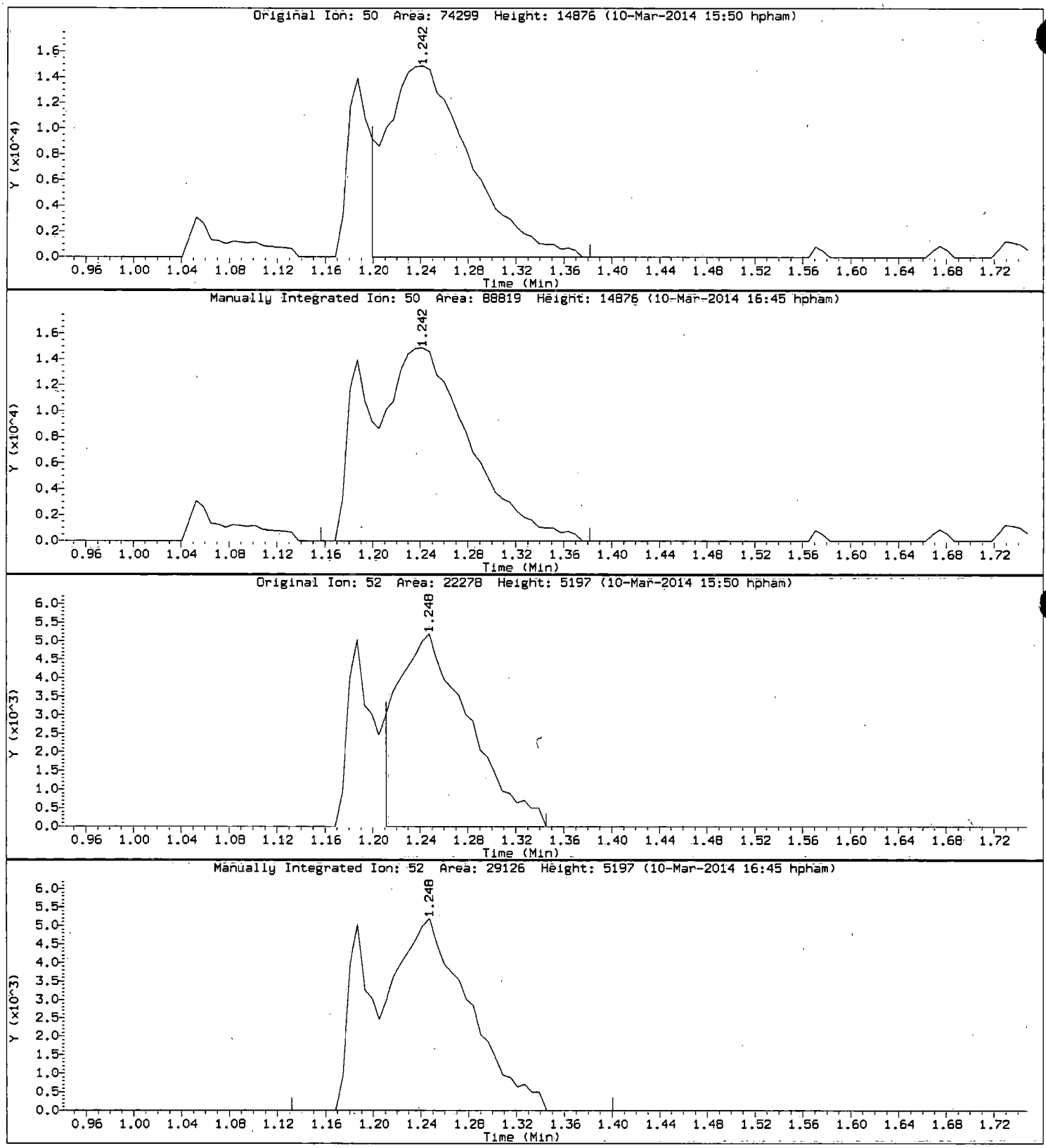
Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



Instrument: 10msv7.i
Lab Sample ID: 20 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3



Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014008.D
Lab Smp Id: 50 ICAL 10098-65
Inj Date : 10-MAR-2014 12:52
Operator : HBP Inst ID: 10msv7.i
Smp Info : 50 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	208205	50.0000	53.1
2	Chloromethane	50	1.241	1.247	(0.295)	234050	50.0000	53.9(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	247675	50.0000	51.6
4	Bromomethane	94	1.479	1.479	(0.352)	94578	50.0000	47.8
5	Chloroethane	64	1.570	1.570	(0.374)	107642	50.0000	53.1
6	Trichlorofluoromethane	101	1.674	1.668	(0.398)	295414	50.0000	50.8
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	362368	50.0000	51.7
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.465)	140670	50.0000	53.1
9	1,1-Dichloroethene	96	2.095	2.088	(0.498)	185593	50.0000	52.2
10	Carbon Disulfide	76	2.101	2.095	(0.500)	651768	50.0000	48.2
11	Ethanol	45	2.113	2.137	(0.438)	55244	1000.00	1020
12	Trichlorotrifluoroethane	101	2.143	2.137	(0.510)	190330	50.0000	51.9
13	Iodomethane	142	2.211	2.210	(0.526)	209320	50.0000	47.0
14	Acrolein	56	2.406	2.412	(0.572)	239326	500.000	524
15	Allyl Chloride	41	2.540	2.533	(0.604)	266902	50.0000	51.8
16	Methylene Chloride	84	2.637	2.637	(0.627)	202399	50.0000	51.0
17	Isopropanol	45	2.631	2.649	(0.545)	144283	500.000	472
* 18	Acetone d6	46	2.649	2.655	(1.000)	135813	200.000	
19	Acetone	58	2.698	2.698	(1.018)	66125	250.000	251

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
20	trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	206478	50.0000	52.2
21	Hexane	86	2.863	2.863	(1.081)	131532	125.000	133
22	Methyl-tert-butyl Ether	73	2.893	2.899	(0.688)	507693	50.0000	53.0(Q)
23	tert-Butyl Alcohol	59	3.009	3.021	(0.624)	218607	500.000	479
24	Acetonitrile	41	3.064	3.070	(0.729)	176262	500.000	497
25	Isopropyl Ether	45	3.204	3.210	(0.762)	602053	50.0000	52.7
26	Acrylonitrile	53	3.247	3.247	(0.772)	284581	500.000	519
27	1,1-Dichloroethane	63	3.265	3.265	(0.777)	346261	50.0000	53.2
28	Ethyl-tert-butyl ether	59	3.460	3.466	(0.823)	548653	50.0000	51.8
29	Vinyl Acetate	43	3.460	3.466	(0.823)	378165	50.0000	52.3
30	cis-1,2-Dichloroethene	96	3.631	3.637	(0.864)	218945	50.0000	51.9
31	2,2-Dichloropropane	77	3.698	3.704	(0.880)	282047	50.0000	52.0
32	Cyclohexane	56	3.753	3.759	(0.893)	1684547	250.000	257
33	Bromochloromethane	130	3.759	3.759	(0.894)	129257	50.0000	52.1
34	Chloroform	83	3.814	3.814	(0.907)	342339	50.0000	51.9
35	Carbon Tetrachloride	117	3.887	3.887	(0.925)	255246	50.0000	53.1
36	Tetrahydrofuran	72	3.905	3.905	(1.474)	237070	500.000	523
37	1,1,1-Trichloroethane	97	3.930	3.930	(0.935)	299120	50.0000	51.8
38	2-Butanone	43	3.997	4.003	(0.951)	350173	250.000	241
39	1,1-Dichloropropene	75	4.003	4.003	(0.952)	279230	50.0000	51.1
40	Benzene	78	4.143	4.149	(0.985)	835177	50.0000	51.3
* 41	Pentafluorobenzene	168	4.204	4.204	(1.000)	944656	100.000	
42	Tert-amyl methyl ether	73	4.222	4.222	(1.004)	536146	50.0000	50.0
$ 43	1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	370524	100.000	102
44	1,2-Dichloroethane	62	4.259	4.259	(1.013)	219106	50.0000	51.6
45	Isobutanol	43	4.295	4.301	(0.890)	181432	1000.00	984
46	Tert-Amyl Alcohol	59	4.344	4.350	(0.900)	190471	500.000	498
47	Trichloroethene	130	4.460	4.466	(0.996)	239363	50.0000	52.8
* 48	1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1423443	100.000	
49	Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	430510	50.0000	51.6
50	Dibromomethane	174	4.667	4.667	(1.042)	133891	50.0000	51.2
51	1,2-Dichloropropane	63	4.710	4.716	(1.052)	202598	50.0000	52.5
52	Bromodichloromethane	83	4.747	4.746	(1.060)	257310	50.0000	51.0
* 53	1,4 dioxane d8	96	4.826	4.832	(1.000)	156016	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.838	4.844	(1.003)	51843	1000.00	987
55	2-Chloroethyl Vinyl Ether	63	5.003	5.002	(1.117)	40920	125.000	127
56	cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	322400	50.0000	51.6
$ 57	Toluene-d8 (S)	98	5.106	5.106	(0.883)	1669369	100.000	101
58	Toluene	92	5.131	5.131	(0.887)	527821	50.0000	49.8
59	4-Methyl-2-Pentanone	43	5.283	5.289	(0.914)	813995	250.000	259
60	Tetrachloroethene	166	5.289	5.295	(0.915)	267021	50.0000	52.9
61	trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	288502	50.0000	53.0
62	1,1,2-Trichloroethane	97	5.368	5.374	(0.928)	168508	50.0000	52.0
63	Dibromochloromethane	129	5.454	5.454	(0.943)	199056	50.0000	52.9
64	1,3-Dichloropropane	76	5.490	5.490	(0.949)	286169	50.0000	51.6
65	1,2-Dibromoethane	107	5.557	5.557	(0.961)	173943	50.0000	51.1
66	2-Hexanone	43	5.643	5.649	(0.976)	592914	250.000	242
* 67	Chlorobenzene-d5	117	5.783	5.789	(1.000)	1400934	100.000	
68	Chlorobenzene	112	5.795	5.795	(1.002)	586840	50.0000	49.6
69	Ethylbenzene	91	5.801	5.801	(1.003)	994615	50.0000	49.2
70	1,1,1,2-Tetrachloroethane	131	5.820	5.819	(1.006)	215918	50.0000	52.4
71	M&P-Xylene	106	5.868	5.868	(1.015)	800546	100.000	102
72	O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	378724	50.0000	51.3
73	Styrene	104	6.100	6.100	(1.055)	658780	50.0000	52.4

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
Compounds								
	74 Bromoform	173	6.124	6.124	(1.059)	153381	50.0000	51.4
	75 Isopropylbenzene (Cumene)	105	6.234	6.234	(1.078)	1006794	50.0000	51.0
$	76 4-Bromofluorobenzene (S)	95	6.387	6.386	(0.907)	693420	100.000	101
	77 cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	65726	50.0000	49.7
	78 Bromobenzene	156	6.447	6.453	(0.915)	275590	50.0000	52.6
	79 n-Propylbenzene	91	6.454	6.453	(0.916)	1228307	50.0000	51.2
	80 1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	224153	50.0000	51.4
	81 2-Chlorotoluene	91	6.545	6.551	(0.929)	768690	50.0000	51.4
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	874598	50.0000	51.6
	83 1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	62950	50.0000	51.6
	84 trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.935)	144241	125.000	128
	85 4-Chlorotoluene	91	6.643	6.642	(0.943)	734530	50.0000	51.4
	86 tert-Butylbenzene	119	6.746	6.746	(0.958)	740204	50.0000	51.6
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	879452	50.0000	50.9
	88 sec-Butylbenzene	105	6.850	6.856	(0.972)	1105547	50.0000	51.6
	89 p-Isopropyltoluene	119	6.935	6.941	(0.984)	988247	50.0000	52.4
	90 1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	524138	50.0000	50.0
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	853329	100.000	
	92 1,4-Dichlorobenzene	146	7.051	7.057	(1.001)	541011	50.0000	49.5
	93 1,2,3 Trimethylbenzene	105	7.057	7.063	(1.679)	900704	50.0000	49.5
	94 n-Butylbenzene	91	7.210	7.215	(1.023)	910820	50.0000	51.8
	95 1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	496956	50.0000	50.5
	96 1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.111)	126003	125.000	131
	97 Hexachlorobutadiene	225	8.191	8.191	(1.163)	193668	50.0000	50.8
	98 1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	321867	50.0000	50.2
	99 Naphthalene	128	8.392	8.392	(1.191)	635588	50.0000	51.0
	100 1,2,3-Trichlorobenzene	180	8.496	8.502	(1.206)	292614	50.0000	50.5
	101 2-Methylnaphthalene	142	9.008	9.014	(1.279)	119786	25.0000	24.8

Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014008.D
Lab Smp Id: 50 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

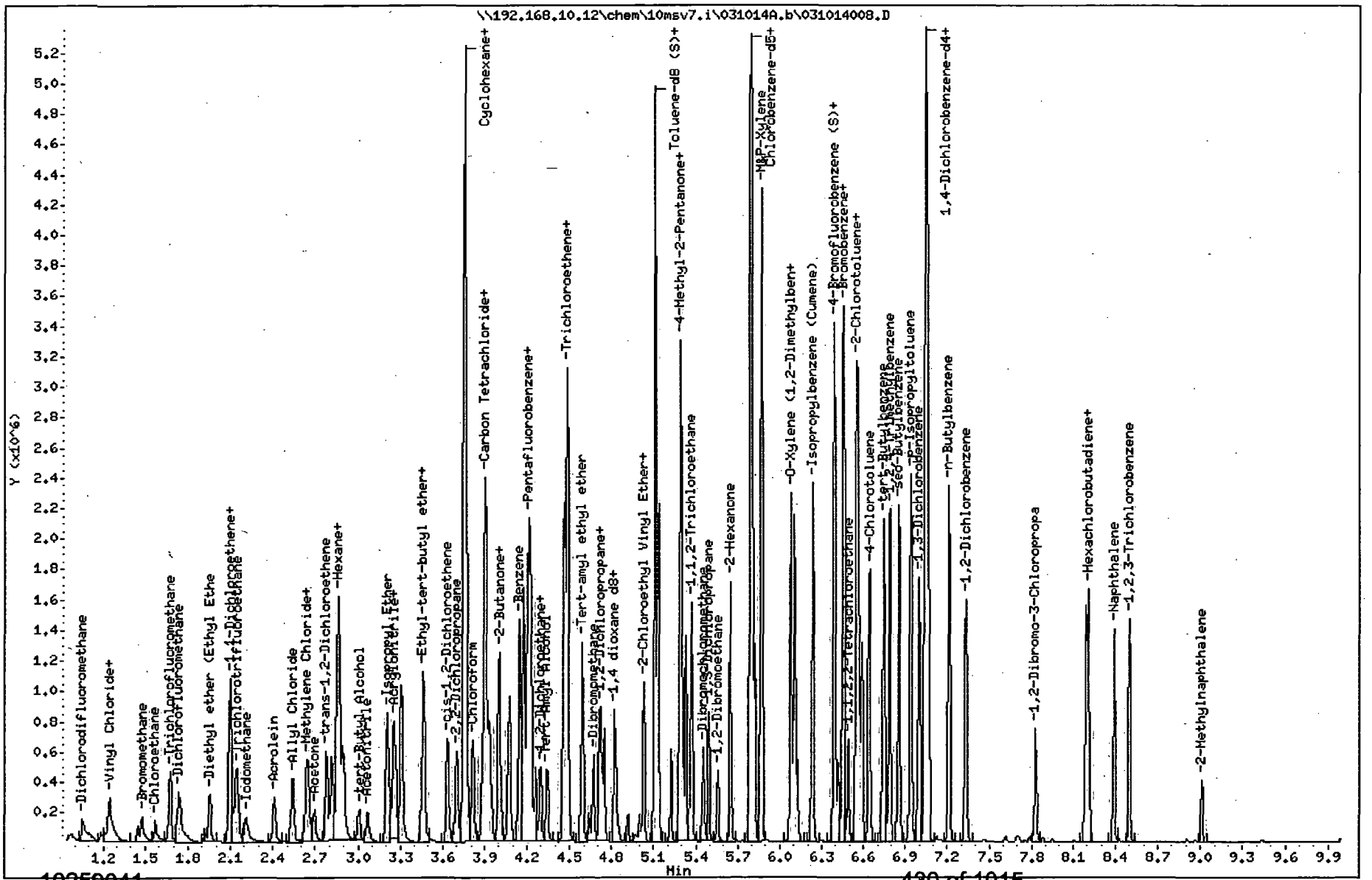
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	135813	0.00
41 Pentafluorobenzen	944656	472328	1889312	944656	0.00
48 1,4 Difluorobenze	1423443	711722	2846886	1423443	0.00
53 1,4 dioxane d8	156016	78008	312032	156016	0.00
67 Chlorobenzene-d5	1400934	700467	2801868	1400934	0.00
91 1,4-Dichlorobenze	853329	426665	1706658	853329	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

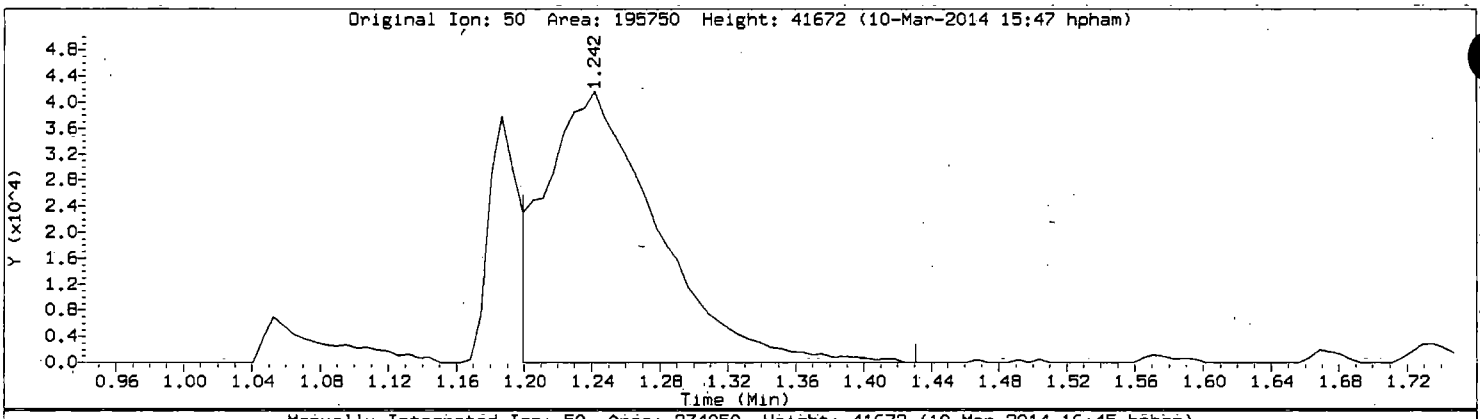
Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014008.D
Date : 10-MAR-2014 12:52
Client ID:
Sample Info: 50 ICAL 10098-65

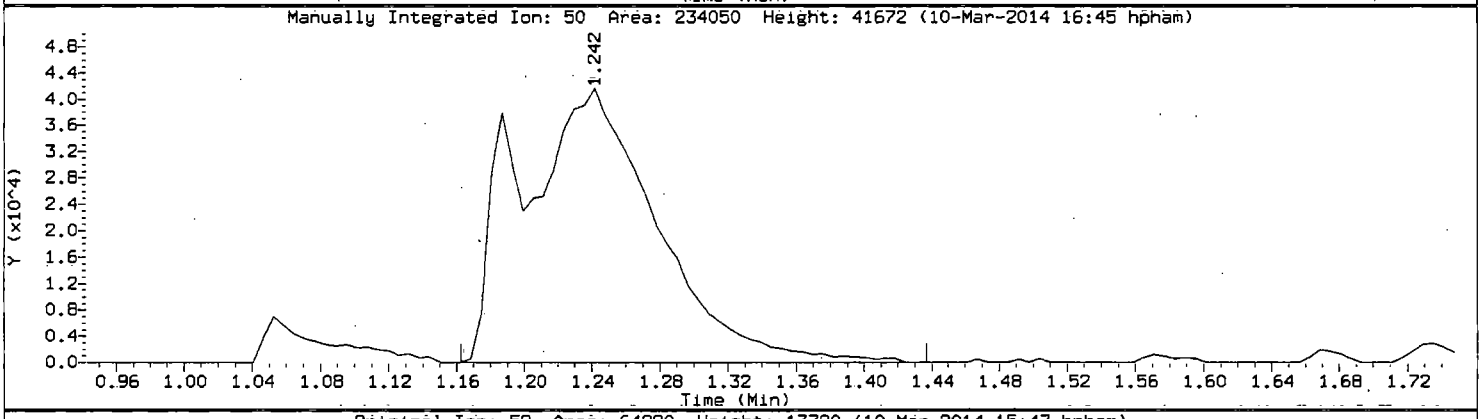
Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18

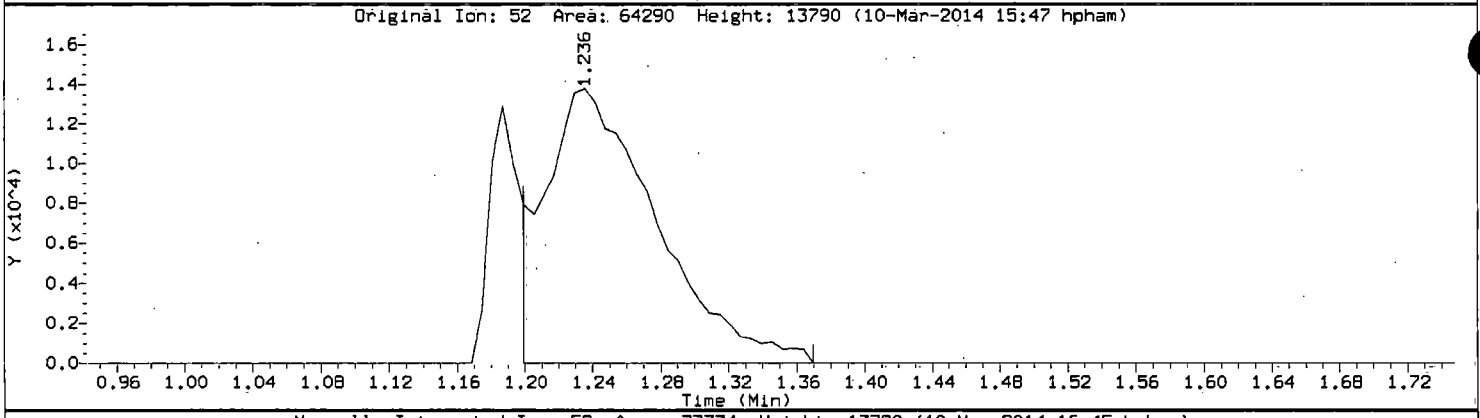


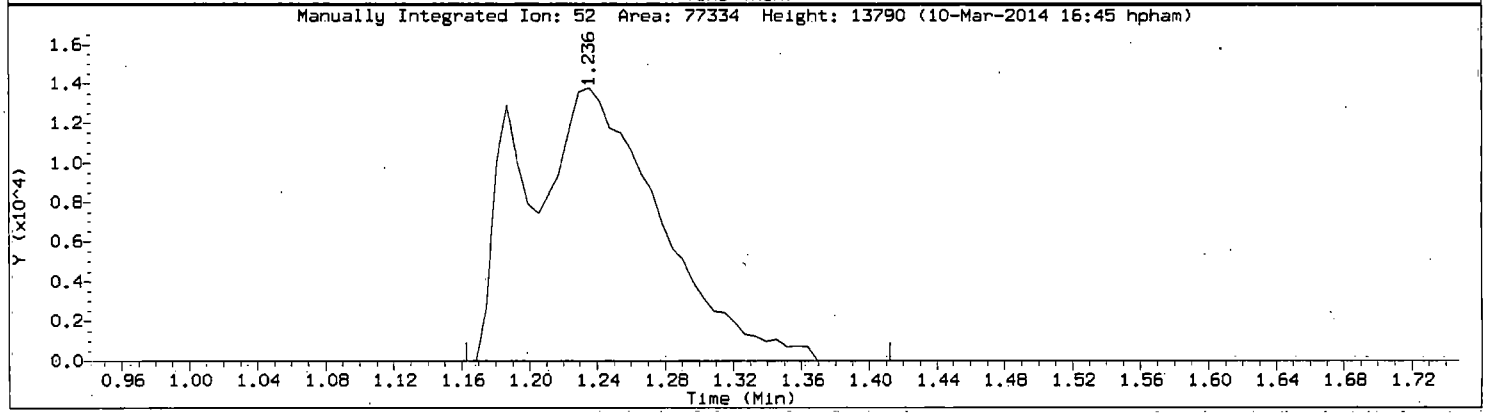
Instrument: 10msv7.i
Lab Sample ID: 50 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3









Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014009.D
Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014009.D
Lab Smp Id: 100 ICAL 10098-65
Inj Date : 10-MAR-2014 13:11
Operator : HBP Inst ID: 10msv7.i
Smp Info : 100 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	405804	100.000	102
2	Chloromethane	50	1.247	1.247	(0.297)	446374	100.000	101(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	480586	100.000	98.7
4	Bromomethane	94	1.479	1.479	(0.352)	208878	100.000	101
5	Chloroethane	64	1.570	1.570	(0.374)	196180	100.000	95.4
6	Trichlorofluoromethane	101	1.674	1.668	(0.398)	531085	100.000	99.8
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	711296	100.000	99.9
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.465)	282981	100.000	105
9	1,1-Dichloroethene	96	2.095	2.088	(0.498)	358758	100.000	99.4
10	Carbon Disulfide	76	2.101	2.095	(0.500)	1261476	100.000	92.0
11	Ethanol	45	2.119	2.137	(0.439)	119735	2000.00	2300
12	Trichlorotrifluoroethane	101	2.137	2.137	(0.508)	380696	100.000	102
13	Iodomethane	142	2.210	2.210	(0.526)	508901	100.000	102
14	Acrolein	56	2.412	2.412	(0.574)	516609	1000.00	1120
15	Allyl Chloride	41	2.540	2.533	(0.604)	520324	100.000	99.5
16	Methylene Chloride	84	2.637	2.637	(0.627)	401681	100.000	99.3
17	Isopropanol	45	2.637	2.649	(0.546)	287385	1000.00	1070
* 18	Acetone d6	46	2.649	2.655	(1.000)	145016	200.000	
19	Acetone	58	2.698	2.698	(1.018)	136728	500.000	500

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
20	trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	401597	100.000	100
21	Hexane	86	2.863	2.863	(1.081)	269655	250.000	255
22	Methyl-tert-butyl Ether	73	2.893	2.899	(0.688)	1031332	100.000	106(Q)
23	tert-Butyl Alcohol	59	3.009	3.021	(0.624)	469076	1000.00	1060
24	Acetonitrile	41	3.070	3.070	(0.730)	373325	1000.00	1040
25	Isopropyl Ether	45	3.204	3.210	(0.762)	1209183	100.000	104
26	Acrylonitrile	53	3.247	3.247	(0.772)	551384	1000.00	990
27	1,1-Dichloroethane	63	3.265	3.265	(0.777)	678501	100.000	103
28	Ethyl-tert-butyl ether	59	3.460	3.466	(0.823)	1115117	100.000	104
29	Vinyl Acetate	43	3.466	3.466	(0.825)	779055	100.000	106
30	cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	436788	100.000	102
31	2,2-Dichloropropane	77	3.698	3.704	(0.880)	548076	100.000	99.6
32	Cyclohexane	56	3.753	3.759	(0.893)	3393455	500.000	510
33	Bromochloromethane	130	3.759	3.759	(0.894)	261204	100.000	104
34	Chloroform	83	3.814	3.814	(0.907)	681613	100.000	102
35	Carbon Tetrachloride	117	3.887	3.887	(0.925)	497150	100.000	102
36	Tetrahydrofuran	72	3.905	3.905	(1.474)	492425	1000.00	1020
37	1,1,1-Trichloroethane	97	3.930	3.930	(0.935)	579579	100.000	98.8
38	2-Butanone	43	3.997	4.003	(0.951)	732746	500.000	497
39	1,1-Dichloropropene	75	4.003	4.003	(0.952)	549229	100.000	99.1
40	Benzene	78	4.143	4.149	(0.986)	1644046	100.000	99.4
* 41	Pentafluorobenzene	168	4.204	4.204	(1.000)	958753	100.000	
42	Tert-amyl methyl ether	73	4.222	4.222	(1.004)	1099102	100.000	101
$ 43	1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	366919	100.000	99.1
44	1,2-Dichloroethane	62	4.259	4.259	(1.013)	435304	100.000	101
45	Isobutanol	43	4.295	4.301	(0.890)	397855	2000.00	2230
46	Tert-Amyl Alcohol	59	4.344	4.350	(0.900)	411487	1000.00	1110
47	Trichloroethene	130	4.460	4.466	(0.996)	464276	100.000	99.8
* 48	1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1460730	100.000	
49	Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	879949	100.000	103
50	Dibromomethane	174	4.667	4.667	(1.042)	272344	100.000	101
51	1,2-Dichloropropane	63	4.716	4.716	(1.053)	402992	100.000	102
52	Bromodichloromethane	83	4.746	4.746	(1.060)	520488	100.000	100
* 53	1,4 dioxane d8	96	4.826	4.832	(1.000)	150784	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.838	4.844	(1.003)	116273	2000.00	2290
55	2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.117)	86062	250.000	248
56	cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	661110	100.000	103
$ 57	Toluene-d8 (S)	98	5.106	5.106	(0.883)	1730654	100.000	101
58	Toluene	92	5.131	5.131	(0.887)	1041387	100.000	94.3
59	4-Methyl-2-Pentanone	43	5.283	5.289	(0.914)	1700137	500.000	519
60	Tetrachloroethene	166	5.295	5.295	(0.916)	520765	100.000	99.0
61	trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	591395	100.000	104
62	1,1,2-Trichloroethane	97	5.374	5.374	(0.929)	344507	100.000	102
63	Dibromochloromethane	129	5.454	5.454	(0.943)	407174	100.000	104
64	1,3-Dichloropropane	76	5.490	5.490	(0.949)	588225	100.000	102
65	1,2-Dibromoethane	107	5.557	5.557	(0.961)	362274	100.000	102
66	2-Hexanone	43	5.643	5.649	(0.976)	1245324	500.000	487
* 67	Chlorobenzene-d5	117	5.783	5.789	(1.000)	1459391	100.000	
68	Chlorobenzene	112	5.795	5.795	(1.002)	1194834	100.000	96.9
69	Ethylbenzene	91	5.801	5.801	(1.003)	2025183	100.000	96.2
70	1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.006)	440446	100.000	103
71	M&P-Xylene	106	5.868	5.868	(1.015)	1603357	200.000	196
72	O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.051)	764761	100.000	99.5
73	Styrene	104	6.100	6.100	(1.055)	1363058	100.000	104

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014009.D
Report Date: 10-Mar-2014 16:45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	74 Bromoform	173	6.124	6.124	(1.059)	320967	100.000	103
	75 Isopropylbenzene (Cumene)	105	6.234	6.234	(1.078)	2019730	100.000	98.2
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	723982	100.000	100
	77 cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	138439	100.000	98.9
	78 Bromobenzene	156	6.453	6.453	(0.916)	559708	100.000	101
	79 n-Propylbenzene	91	6.453	6.453	(0.916)	2486659	100.000	98.0
	80 1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	474575	100.000	103
	81 2-Chlorotoluene	91	6.551	6.551	(0.930)	1564583	100.000	99.0
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	1768162	100.000	98.5
	83 1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	133166	100.000	103
	84 trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.935)	310112	250.000	260
	85 4-Chlorotoluene	91	6.642	6.642	(0.943)	1490449	100.000	98.6
	86 tert-Butylbenzene	119	6.746	6.746	(0.958)	1524071	100.000	98.8
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	1808215	100.000	99.0
	88 sec-Butylbenzene	105	6.856	6.856	(0.973)	2275889	100.000	100
	89 p-Isopropyltoluene	119	6.941	6.941	(0.985)	2030517	100.000	102
	90 1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	1082498	100.000	97.5
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	902746	100.000	
	92 1,4-Dichlorobenzene	146	7.051	7.057	(1.001)	1108808	100.000	95.9
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	1860303	100.000	101
	94 n-Butylbenzene	91	7.209	7.215	(1.023)	1862814	100.000	100
	95 1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	1027045	100.000	98.7
	96 1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.111)	266610	250.000	262
	97 Hexachlorobutadiene	225	8.191	8.191	(1.163)	403883	100.000	100
	98 1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	671673	100.000	98.9
	99 Naphthalene	128	8.392	8.392	(1.191)	1313053	100.000	99.6
	100 1,2,3-Trichlorobenzene	180	8.496	8.502	(1.206)	602169	100.000	98.3
	101 2-Methylnaphthalene	142	9.008	9.014	(1.279)	252339	50.0000	49.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014009.D
Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014009.D
Lab Smp Id: 100 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	145016	6.78
41 Pentafluorobenzen	944656	472328	1889312	958753	1.49
48 1,4 Difluorobenze	1423443	711722	2846886	1460730	2.62
53 1,4 dioxane d8	156016	78008	312032	150784	-3.35
67 Chlorobenzene-d5	1400934	700467	2801868	1459391	4.17
91 1,4-Dichlorobenze	853329	426665	1706658	902746	5.79

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	-0.00
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	-0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

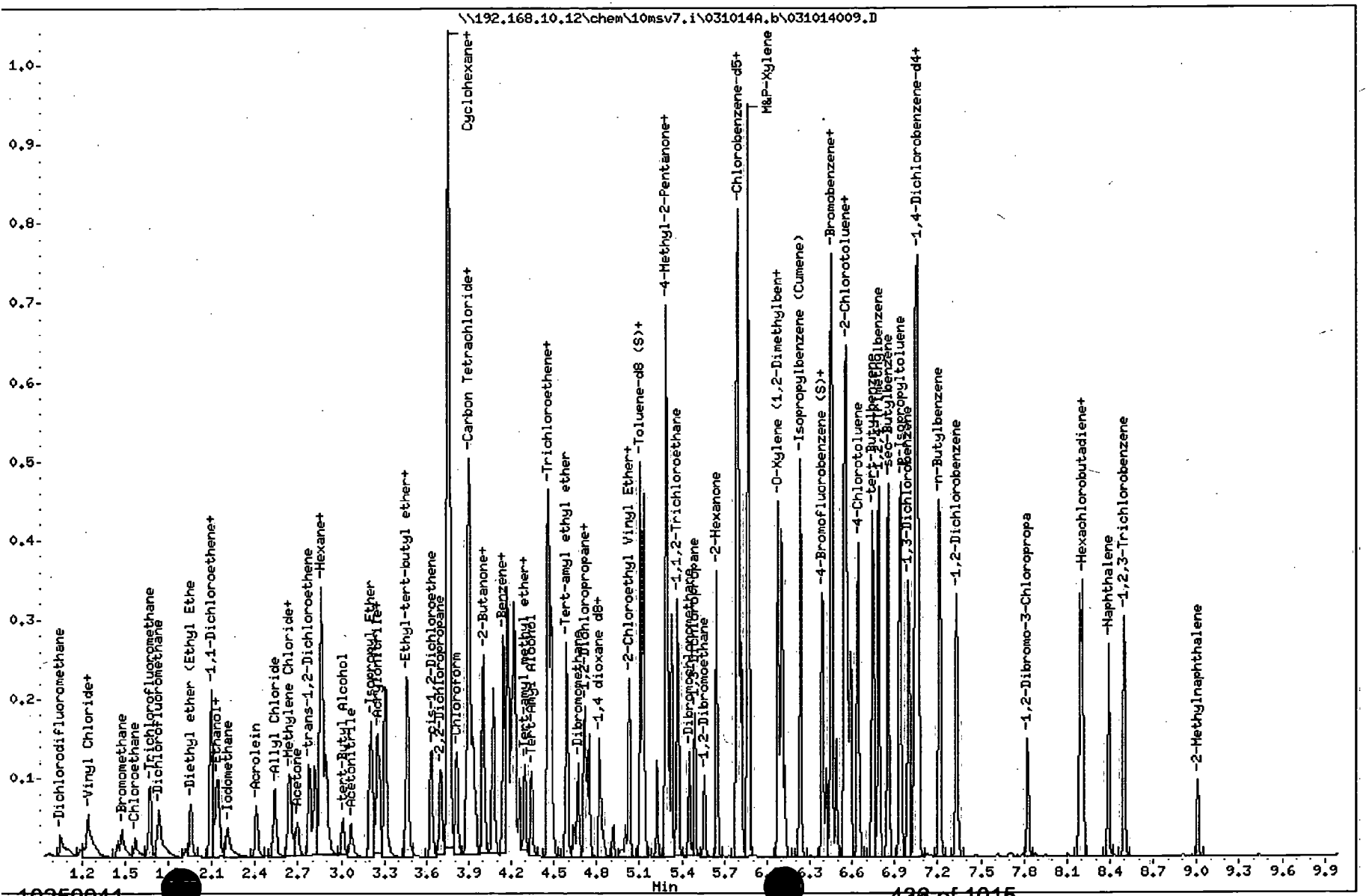
Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014009.D
Date : 10-MAR-2014 13:11
Client ID:
Sample Info: 100 ICAL 10098-65

Instrument: 10msv7.i

Operator: HBP

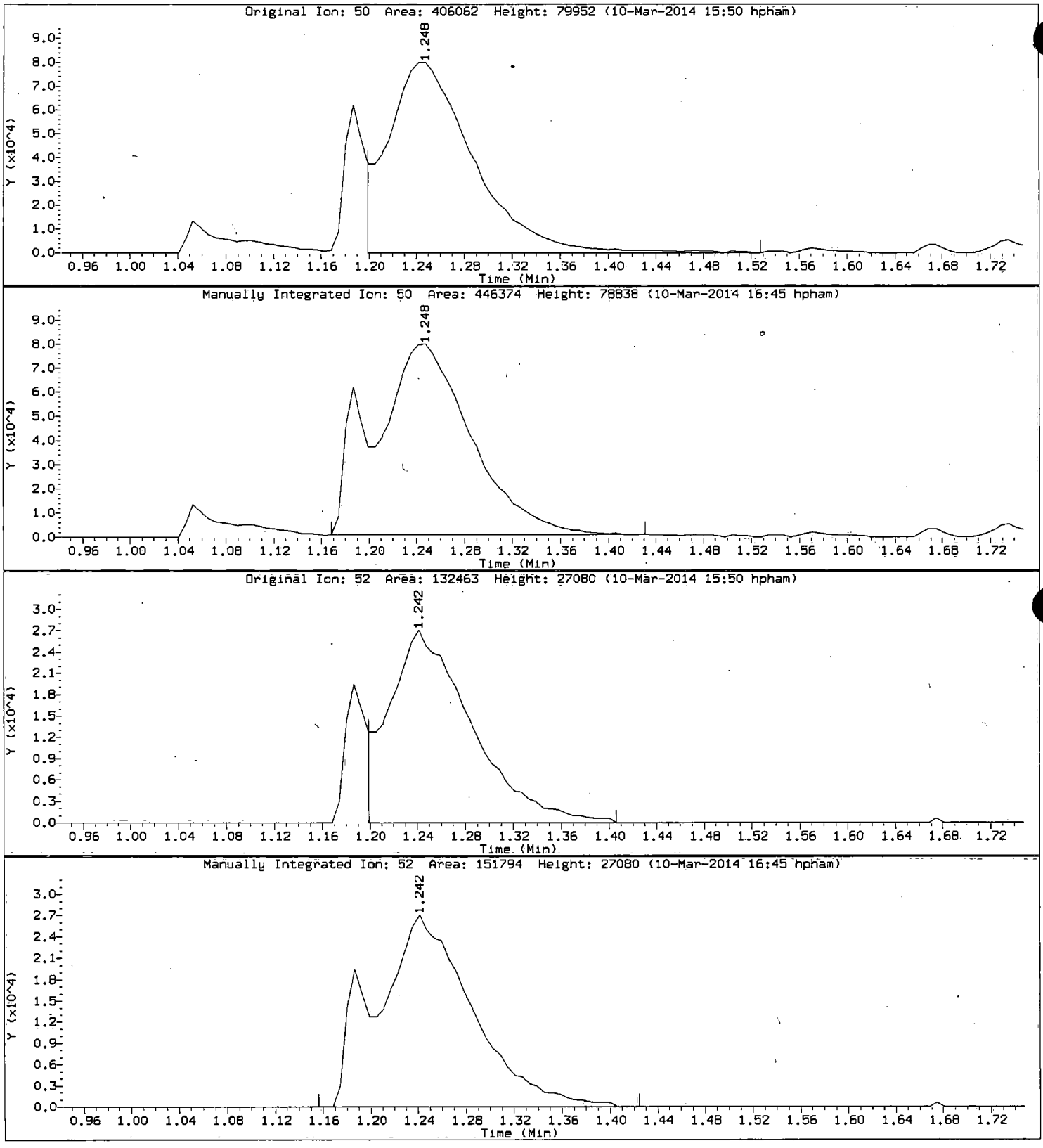
Column phase: Rtx-VMS

Column diameter: 0.18



Instrument: 10msv7.i
Lab Sample ID: 100 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3



Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D
Lab Smp Id: 250 ICAL 10098-65
Inj Date : 10-MAR-2014 13:31
Operator : HBP Inst ID: 10msv7.i
Smp Info : 250 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	1091664	250.000	275(A)
2	Chloromethane	50	1.247	1.247	(0.297)	1219255	250.000	277(AM)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	1320098	250.000	272(A)
4	Bromomethane	94	1.479	1.479	(0.352)	592668	250.000	250
5	Chloroethane	64	1.570	1.570	(0.374)	430938	250.000	210
6	Trichlorofluoromethane	101	1.668	1.668	(0.397)	773168	250.000	162
7	Dichlorofluoromethane	67	1.729	1.729	(0.411)	1865121	250.000	263(A)
8	Diethyl ether (Ethyl Ether)	59	1.960	1.960	(0.466)	709768	250.000	264(A)
9	1,1-Dichloroethene	96	2.088	2.088	(0.497)	972524	250.000	270(A)
10	Carbon Disulfide	76	2.095	2.095	(0.498)	3431109	250.000	251(A)
11	Ethanol	45	2.137	2.137	(0.442)	281275	5000.00	4990(H)
12	Trichlorotrifluoroethane	101	2.137	2.137	(0.508)	1025097	250.000	276(A)
13	Iodomethane	142	2.210	2.210	(0.526)	1548601	250.000	250
14	Acrolein	56	2.412	2.412	(0.574)	1345503	2500.00	2910(A)
15	Allyl Chloride	41	2.533	2.533	(0.603)	1386263	250.000	266(A)
16	Methylene Chloride	84	2.637	2.637	(0.627)	1036029	250.000	250(A)
17	Isopropanol	45	2.649	2.649	(0.548)	683474	2500.00	2470
* 18	Acetone d6	46	2.655	2.655	(1.000)	154884	200.000	
19	Acetone	58	2.698	2.698	(1.016)	342103	1250.00	1250

Data File: \\192.168.10.12\Chem\ICMSV7.1\[illegible]

Report Date: 10-Mar-2014 16:45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
20	trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	1073414	250.000	268(A)
21	Hexane	86	2.863	2.863	(1.078)	730591	625.000	646(A)
22	Methyl-tert-butyl Ether	73	2.899	2.899	(0.690)	2604871	250.000	269(A)
23	tert-Butyl Alcohol	59	3.021	3.021	(0.625)	1174811	2500.00	2460
24	Acetonitrile	41	3.070	3.070	(0.730)	923923	2500.00	2570(A)
25	Isopropyl Ether	45	3.210	3.210	(0.764)	3122165	250.000	270(A)
26	Acrylonitrile	53	3.247	3.247	(0.772)	1488060	2500.00	2680(A)
27	1,1-Dichloroethane	63	3.265	3.265	(0.777)	1788922	250.000	271(A)
28	Ethyl-tert-butyl ether	59	3.466	3.466	(0.825)	2872226	250.000	268(A)
29	Vinyl Acetate	43	3.466	3.466	(0.825)	1961639	250.000	268(A)
30	cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	1135218	250.000	266(A)
31	2,2-Dichloropropane	77	3.704	3.704	(0.881)	1475320	250.000	269(A)
32	Cyclohexane	56	3.759	3.759	(0.894)	9240377	1250.00	1390(A)
33	Bromochloromethane	130	3.759	3.759	(0.894)	638883	250.000	254(A)
34	Chloroform	83	3.814	3.814	(0.907)	1782721	250.000	267(A)
35	Carbon Tetrachloride	117	3.887	3.887	(0.925)	1336565	250.000	274(A)
36	Tetrahydrofuran	72	3.905	3.905	(1.471)	1219326	2500.00	2360
37	1,1,1-Trichloroethane	97	3.930	3.930	(0.935)	1545881	250.000	264(A)
38	2-Butanone	43	4.003	4.003	(0.952)	1824223	1250.00	1240
39	1,1-Dichloropropene	75	4.003	4.003	(0.952)	1472379	250.000	266(A)
40	Benzene	78	4.149	4.149	(0.987)	4395817	250.000	266(A)
* 41	Pentafluorobenzene	168	4.204	4.204	(1.000)	956477	100.000	
42	Tert-amyl methyl ether	73	4.222	4.222	(1.004)	2825617	250.000	260(A)
$ 43	1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	365755	100.000	99.1
44	1,2-Dichloroethane	62	4.259	4.259	(1.013)	1118584	250.000	260(A)
45	Isobutanol	43	4.301	4.301	(0.890)	1022277	5000.00	5300(A)
46	Tert-Amyl Alcohol	59	4.350	4.350	(0.900)	1058346	2500.00	2640(A)
47	Trichloroethene	130	4.466	4.466	(0.997)	1240288	250.000	269(A)
* 48	1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1445480	100.000	
49	Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	2311297	250.000	273(A)
50	Dibromomethane	174	4.667	4.667	(1.042)	679971	250.000	256(A)
51	1,2-Dichloropropane	63	4.716	4.716	(1.053)	1049622	250.000	268(A)
52	Bromodichloromethane	83	4.746	4.746	(1.060)	1341633	250.000	262(A)
* 53	1,4 dioxane d8	96	4.832	4.832	(1.000)	163335	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.844	4.844	(1.003)	267630	5000.00	4870
55	2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.117)	249718	625.000	625(A)
56	cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	1733401	250.000	273(A)
$ 57	Toluene-d8 (S)	98	5.106	5.106	(0.882)	1750118	100.000	99.8
58	Toluene	92	5.131	5.131	(0.886)	2787877	250.000	247
59	4-Methyl-2-Pentanone	43	5.289	5.289	(0.914)	4234636	1250.00	1260(A)
60	Tetrachloroethene	166	5.295	5.295	(0.915)	1329666	250.000	247
61	trans-1,3-Dichloropropene	75	5.301	5.301	(0.916)	1527007	250.000	263(A)
62	1,1,2-Trichloroethane	97	5.374	5.374	(0.928)	868387	250.000	251(A)
63	Dibromochloromethane	129	5.454	5.454	(0.942)	1053554	250.000	263(A)
64	1,3-Dichloropropane	76	5.490	5.490	(0.948)	1508601	250.000	256(A)
65	1,2-Dibromoethane	107	5.557	5.557	(0.960)	925087	250.000	255(A)
66	2-Hexanone	43	5.649	5.649	(0.976)	3190654	1250.00	1220
* 67	Chlorobenzene-d5	117	5.789	5.789	(1.000)	1492719	100.000	
68	Chlorobenzene	112	5.795	5.795	(1.001)	3161176	250.000	251(A)
69	Ethylbenzene	91	5.801	5.801	(1.002)	5483720	250.000	255(A)
70	1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.005)	1145633	250.000	261(A)
71	M&P-Xylene	106	5.868	5.868	(1.014)	4292270	500.000	512(A)
72	O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.049)	2079012	250.000	264(A)
73	Styrene	104	6.100	6.100	(1.054)	3617893	250.000	270(A)

		QUANT SIG					AMOUNTS	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	74 Bromoform	173	6.124	6.124	(1.058)	838930	250.000	264(A)
	75 Isopropylbenzene (Cumene)	105	6.234	6.234	(1.077)	5575169	250.000	265(A)
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	738381	100.000	100
	77 cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	361132	250.000	254(A)
	78 Bromobenzene	156	6.453	6.453	(0.916)	1449094	250.000	257(A)
	79 n-Propylbenzene	91	6.453	6.453	(0.916)	6760058	250.000	262(A)
	80 1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	1212747	250.000	259(A)
	81 2-Chlorotoluene	91	6.551	6.551	(0.930)	4229470	250.000	264(A)
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	4807550	250.000	264(A)
	83 1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	336004	250.000	256(A)
	84 trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.935)	791772	625.000	653(A)
	85 4-Chlorotoluene	91	6.642	6.642	(0.943)	4001082	250.000	261(A)
	86 tert-Butylbenzene	119	6.746	6.746	(0.958)	4142926	250.000	250(A)
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	4861686	250.000	262(A)
	88 sec-Butylbenzene	105	6.856	6.856	(0.973)	6198622	250.000	269(A)
	89 p-Isopropyltoluene	119	6.941	6.941	(0.985)	5435189	250.000	268(A)
	90 1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	2839632	250.000	252(A)
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	916618	100.000	
	92 1,4-Dichlorobenzene	146	7.057	7.057	(1.002)	2898395	250.000	247
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	4908573	250.000	266(A)
	94 n-Butylbenzene	91	7.215	7.215	(1.024)	4876145	250.000	258(A)
	95 1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	2639700	250.000	250
	96 1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	663039	625.000	642(A)
	97 Hexachlorobutadiene	225	8.191	8.191	(1.163)	964277	250.000	235
	98 1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	1630394	250.000	236
	99 Naphthalene	128	8.392	8.392	(1.191)	3227010	250.000	241
	100 1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	1459559	250.000	234
	101 2-Methylnaphthalene	142	9.014	9.014	(1.279)	648752	125.000	125

Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014010.D
Lab Smp Id: 250 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52

Level: LOW
Sample Type: SOIL

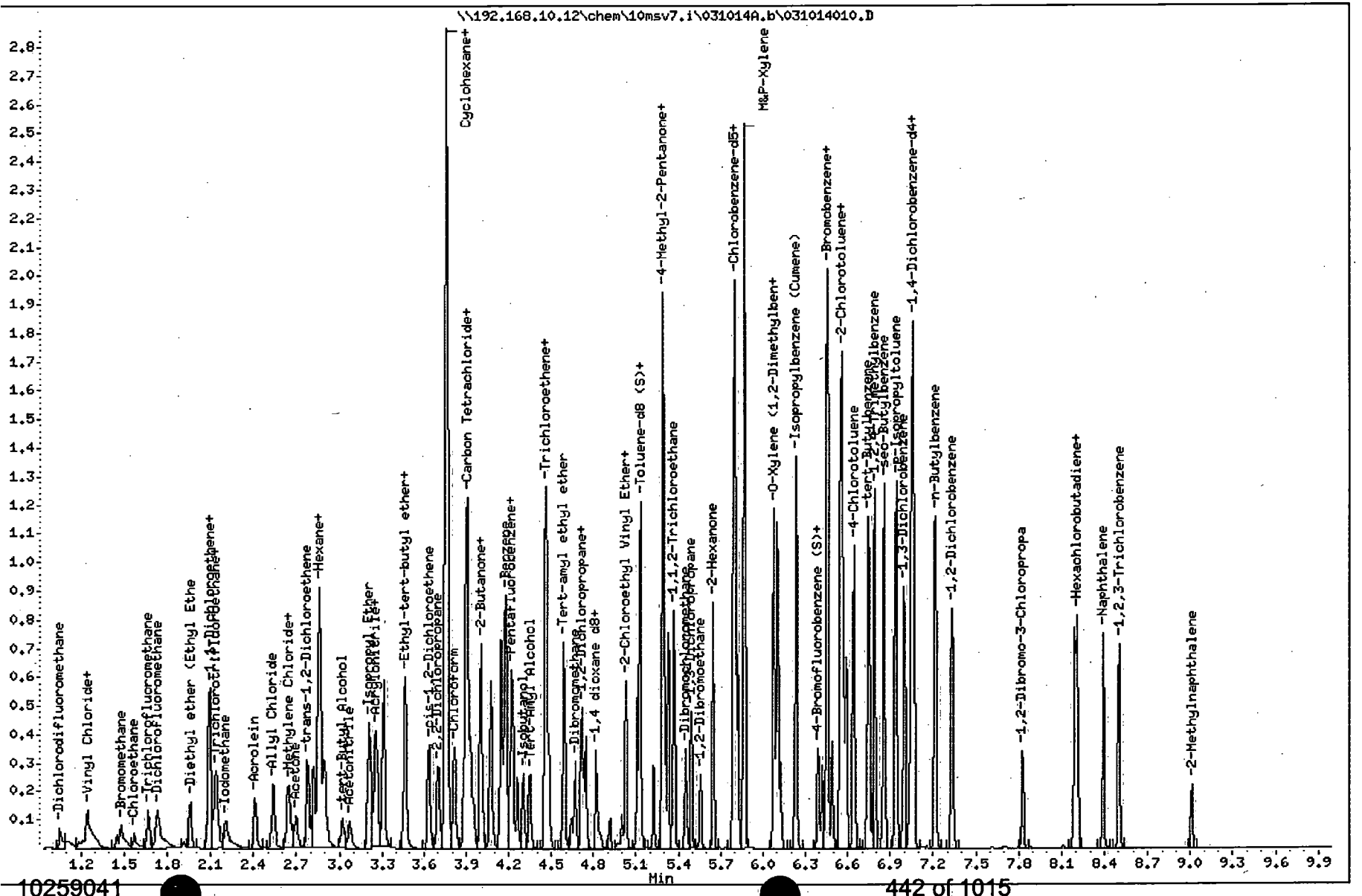
Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	154884	14.04
41 Pentafluorobenzen	944656	472328	1889312	956477	1.25
48 1,4 Difluorobenze	1423443	711722	2846886	1445480	1.55
53 1,4 dioxane d8	156016	78008	312032	163335	4.69
67 Chlorobenzene-d5	1400934	700467	2801868	1492719	6.55
91 1,4-Dichlorobenze	853329	426665	1706658	916618	7.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.66	0.22
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.12
67 Chlorobenzene-d5	5.78	5.28	6.28	5.79	0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

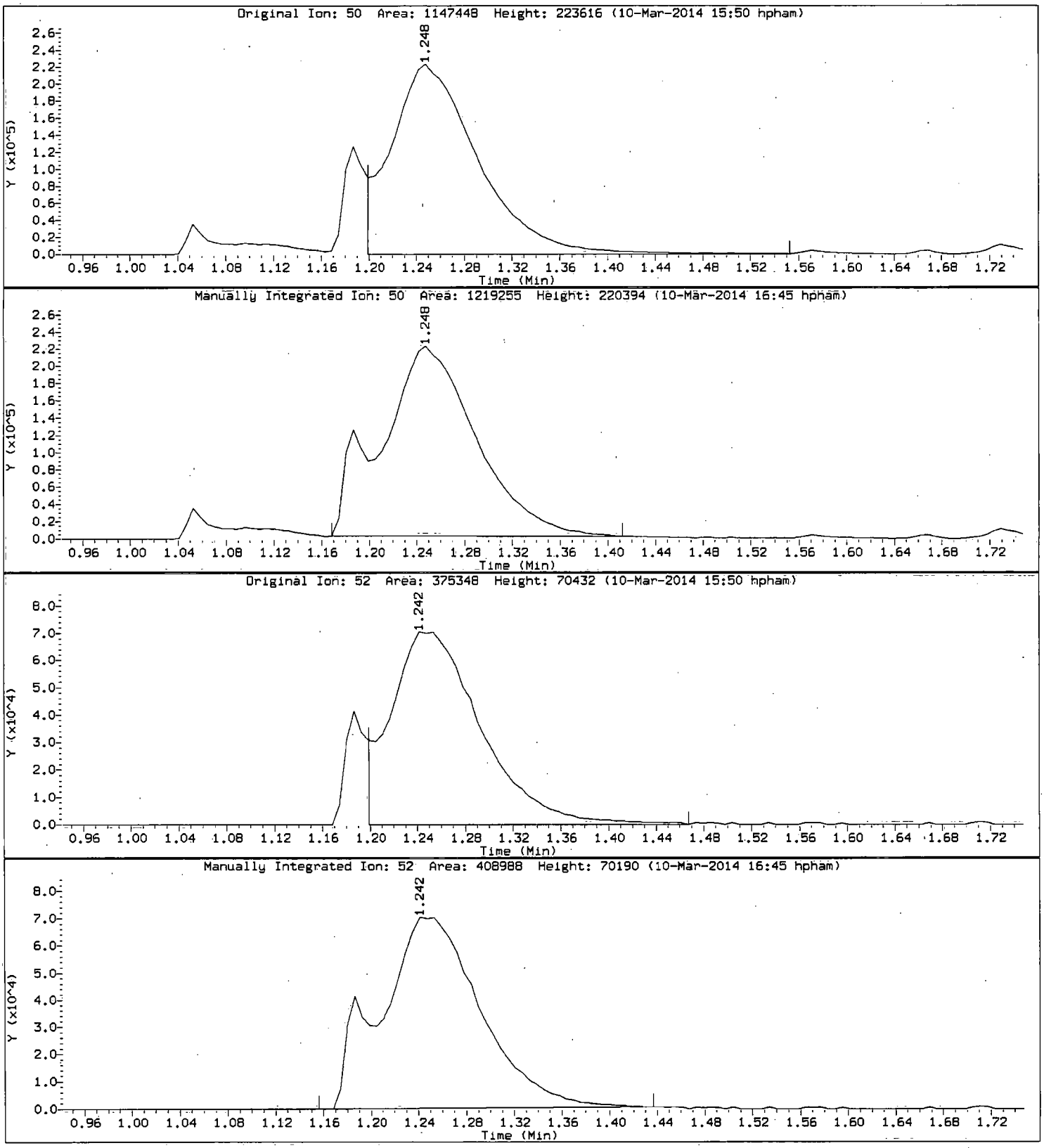
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D
Date : 10-MAR-2014 13:31
Client ID:
Instrument: 10msv7.i
Sample Info: 250 ICAL 10098-65
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Instrument: 10msv7.i
Lab Sample ID: 250 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3



Report Date: 11-Mar-2014 11:24

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 14:10
Lab File ID: 031014012.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 ICV 10098-66 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.41508	0.42565	0.42565	0.100	2.54717	40.00000	Averaged
2 Chloromethane	0.45988	0.51466	0.51466	0.100	11.91038	40.00000	Averaged
3 Vinyl Chloride	0.50806	0.53638	0.53638	0.100	5.57466	20.00000	Averaged
4 Bromomethane	50.00000	62.69954	0.26402	0.050	25.39909	40.00000	Quadratic
5 Chloroethane	0.21444	0.23046	0.23046	0.050	7.46943	40.00000	Averaged
6 Trichlorofluoromethane	50.00000	46.85054	0.58184	0.100	-6.29892	40.00000	Quadratic
7 Dichlorofluoromethane	0.74236	0.78742	0.78742	0.010	6.07068	40.00000	Averaged
8 Diethyl ether (Ethyl Ether)	0.28052	0.29831	0.29831	0.010	6.34189	40.00000	Averaged
9 1,1-Dichloroethene	0.37658	0.39301	0.39301	0.100	4.36283	20.00000	Averaged
10 Carbon Disulfide	1.43078	1.36856	1.36856	0.100	-4.34815	40.00000	Averaged
11 Ethanol	1.38118	1.45093	1.45093	0.050	5.05049	40.00000	Averaged
12 Trichlorotrifluoroethane	0.38812	0.39129	0.39129	0.010	0.81828	40.00000	Averaged
13 Iodomethane	50.00000	43.08508	0.40199	0.010	-13.82984	40.00000	Quadratic
14 Acrolein	0.04831	0.04913	0.04913	0.010	1.68682	40.00000	Averaged
15 Allyl Chloride	0.54547	0.55874	0.55874	0.010	2.43424	40.00000	Averaged
16 Methylene Chloride	50.00000	51.96562	0.43695	0.100	3.93123	40.00000	Quadratic
17 Isopropanol	500	478	7.47332	0.010	-4.40428	40.00000	Linear
19 Acetone	250	246	0.38241	0.010	-1.55853	40.00000	Quadratic
20 trans-1,2-Dichloroethene	0.41845	0.43664	0.43664	0.100	4.34708	20.00000	Averaged
21 Hexane	1.45916	1.29517	1.29517	0.010	-11.23839	40.00000	Averaged
22 Methyl-tert-butyl Ether	1.01370	1.07968	1.07968	0.300	6.50875	20.00000	Averaged
23 tert-Butyl Alcohol	11.69463	11.32679	11.32679	0.010	-3.14538	40.00000	Averaged
24 Acetonitrile	0.03751	0.03774	0.03774	0.010	0.59357	40.00000	Averaged
25 Isopropyl Ether	1.20931	1.27975	1.27975	0.010	5.82485	40.00000	Averaged
26 Acrylonitrile	0.05807	0.05969	0.05969	0.010	2.79022	40.00000	Averaged
27 1,1-Dichloroethane	0.68924	0.72923	0.72923	0.200	5.80203	20.00000	Averaged
28 Ethyl-tert-butyl ether	1.12182	1.17336	1.17336	0.010	4.59519	40.00000	Averaged
29 Vinyl Acetate	0.76578	0.80715	0.80715	0.010	5.40266	40.00000	Averaged
30 cis-1,2-Dichloroethene	0.44651	0.46789	0.46789	0.100	4.78825	20.00000	Averaged
31 2,2-Dichloropropane	0.57389	0.58744	0.58744	0.010	2.36125	40.00000	Averaged
32 Cyclohexane	0.69431	0.70122	0.70122	0.100	0.99569	40.00000	Averaged
33 Bromochloromethane	0.26252	0.27544	0.27544	0.010	4.92296	40.00000	Averaged
34 Chloroform	0.69775	0.73278	0.73278	0.200	5.02011	20.00000	Averaged
35 Carbon Tetrachloride	0.50890	0.53363	0.53363	0.100	4.86028	40.00000	Averaged
36 Tetrahydrofuran	0.66745	0.66852	0.66852	0.010	0.16072	40.00000	Averaged
37 1,1,1-Trichloroethane	0.61160	0.63012	0.63012	0.100	3.02815	20.00000	Averaged
38 2-Butanone	0.15369	0.15162	0.15162	0.050	-1.34241	40.00000	Averaged
39 1,1-Dichloropropene	0.57828	0.58844	0.58844	0.010	1.75627	40.00000	Averaged
40 Benzene	1.72445	1.77688	1.77688	0.500	3.04055	20.00000	Averaged
42 Tert-amyl methyl ether	1.13587	1.13890	1.13890	0.010	0.26679	40.00000	Averaged
$ 43 1,2-Dichloroethane d4 (S)	0.38600	0.39707	0.39707	0.200	2.86778	40.00000	Averaged
44 1,2-Dichloroethane	0.44964	0.46554	0.46554	0.100	3.53585	20.00000	Averaged

Report Date: 11-Mar-2014 11:24

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 14:10
Lab File ID: 031014012.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 ICV 10098-66 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 Isobutanol	4.72514	4.71676	4.71676	0.010	-0.17729	40.00000	Averaged
46 Tert-Amyl Alcohol	9.80430	9.95690	9.95690	0.010	1.55653	40.00000	Averaged
47 Trichloroethene	0.31862	0.32620	0.32620	0.200	2.38012	20.00000	Averaged
49 Tert-amyl ethyl ether	0.58572	0.60054	0.60054	0.010	2.52978	40.00000	Averaged
50 Dibromomethane	0.18370	0.18753	0.18753	0.010	2.08225	40.00000	Averaged
51 1,2-Dichloropropane	0.27126	0.28122	0.28122	0.100	3.67233	20.00000	Averaged
52 Bromodichloromethane	0.35476	0.36029	0.36029	0.050	1.55917	40.00000	Averaged
54 1,4-Dioxane (P-Dioxane)	1.34644	1.38013	1.38013	0.010	2.50243	40.00000	Averaged
55 2-Chloroethyl Vinyl Ether	125	128	0.02312	0.010	2.43744	40.00000	Quadratic
56 cis-1,3-Dichloropropene	0.43924	0.44997	0.44997	0.050	2.44364	40.00000	Averaged
$ 57 Toluene-d8 (S)	1.17496	1.17711	1.17711	0.200	0.18298	40.00000	Averaged
58 Toluene	0.75661	0.73685	0.73685	0.400	-2.61215	20.00000	Averaged
59 4-Methyl-2-Pentanone	0.22450	0.22840	0.22840	0.100	1.73932	40.00000	Averaged
60 Tetrachloroethene	0.36056	0.36253	0.36253	0.200	0.54596	20.00000	Averaged
61 trans-1,3-Dichloropropene	0.38888	0.40403	0.40403	0.100	3.89688	40.00000	Averaged
62 1,1,2-Trichloroethane	0.23148	0.23772	0.23772	0.100	2.69154	40.00000	Averaged
63 Dibromochloromethane	0.26855	0.27814	0.27814	0.100	3.56912	40.00000	Averaged
64 1,3-Dichloropropane	0.39553	0.40120	0.40120	0.010	1.43310	40.00000	Averaged
65 1,2-Dibromoethane	0.24305	0.24903	0.24903	0.100	2.45839	20.00000	Averaged
66 2-Hexanone	0.17506	0.16874	0.16874	0.050	-3.61001	40.00000	Averaged
68 Chlorobenzene	0.84483	0.82685	0.82685	0.500	-2.12867	40.00000	Averaged
69 Ethylbenzene	1.44184	1.39961	1.39961	0.300	-2.92907	20.00000	Averaged
70 1,1,1,2-Tetrachloroethane	0.29385	0.30227	0.30227	0.010	2.86829	40.00000	Averaged
71 M&P-Xylene	0.56155	0.55051	0.55051	0.300	-1.96654	20.00000	Averaged
72 O-Xylene (1,2-Dimethylbenze	0.52660	0.53067	0.53067	0.300	0.77324	20.00000	Averaged
73 Styrene	0.89773	0.93158	0.93158	0.300	3.77137	40.00000	Averaged
74 Bromoform	0.21306	0.21442	0.21442	0.100	0.64039	40.00000	Averaged
75 Isopropylbenzene (Cumene)	1.40917	1.38630	1.38630	0.100	-1.62331	20.00000	Averaged
$ 76 4-Bromofluorobenzene (S)	0.80228	0.80712	0.80712	0.200	0.60313	40.00000	Averaged
77 cis-1,4-Dichloro-2-Butene	0.15505	0.14970	0.14970	0.010	-3.45080	40.00000	Averaged
78 Bromobenzene	0.61425	0.62606	0.62606	0.010	1.92270	40.00000	Averaged
79 n-Propylbenzene	2.80970	2.76670	2.76670	0.010	-1.53017	20.00000	Averaged
80 1,1,2,2-Tetrachloroethane	0.51066	0.52242	0.52242	0.300	2.30171	40.00000	Averaged
81 2-Chlorotoluene	1.75076	1.75176	1.75176	0.010	0.05734	40.00000	Averaged
82 1,3,5-Trimethylbenzene	1.98819	1.98005	1.98005	0.300	-0.40944	20.00000	Averaged
83 1,2,3-Trichloropropane	0.14296	0.14704	0.14704	0.010	2.85456	40.00000	Averaged
84 trans-1,4-Dichloro-2-Butene	0.13230	0.13182	0.13182	0.010	-0.36303	40.00000	Averaged
85 4-Chlorotoluene	1.67479	1.65644	1.65644	0.010	-1.09592	40.00000	Averaged
86 tert-Butylbenzene	50.00000	50.74218	1.70618	0.010	1.48436	40.00000	Quadratic
87 1,2,4-Trimethylbenzene	2.02418	2.00349	2.00349	0.300	-1.02211	20.00000	Averaged
88 sec-Butylbenzene	2.51224	2.51708	2.51708	0.010	0.19270	40.00000	Averaged
89 p-Isopropyltoluene	2.21193	2.17650	2.17650	0.010	-1.60217	40.00000	Averaged

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 14:10
Lab File ID: 031014012.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 ICV 10098-66 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
90 1,3-Dichlorobenzene	1.22935	1.19479	1.19479	0.600	-2.81100	40.00000	Averaged
92 1,4-Dichlorobenzene	1.28119	1.21590	1.21590	0.500	-5.09564	40.00000	Averaged
93 1,2,3 Trimethylbenzene	1.92635	1.90290	1.90290	0.010	-1.21741	40.00000	Averaged
94 n-Butylbenzene	2.05952	1.98875	1.98875	0.010	-3.43611	40.00000	Averaged
95 1,2-Dichlorobenzene	1.15228	1.13029	1.13029	0.400	-1.90835	40.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.11263	0.11660	0.11660	0.010	3.52655	40.00000	Averaged
97 Hexachlorobutadiene	0.44698	0.42120	0.42120	0.010	-5.76810	40.00000	Averaged
98 1,2,4-Trichlorobenzene	0.75211	0.71450	0.71450	0.200	-5.00140	40.00000	Averaged
99 Naphthalene	1.45993	1.47132	1.47132	0.300	0.78042	20.00000	Averaged
100 1,2,3-Trichlorobenzene	0.67876	0.66577	0.66577	0.010	-1.91476	40.00000	Averaged
101 2-Methylnaphthalene	0.56690	0.54294	0.54294	0.100	-4.22518	20.00000	Averaged

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Lab Smp Id: V50 ICV 10098-66
Inj Date : 10-MAR-2014 14:10
Operator : HBP Inst ID: 10msv7.i
Smp Info : V50 ICV 10098-66
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:18 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	204174	50.0000	51.3
2	Chloromethane	50	1.247	1.247	(0.297)	246869	50.0000	56.0(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	257291	50.0000	52.8
4	Bromomethane	94	1.479	1.479	(0.352)	126645	50.0000	62.7
5	Chloroethane	64	1.570	1.570	(0.374)	110547	50.0000	53.7
6	Trichlorofluoromethane	101	1.674	1.674	(0.398)	279097	50.0000	46.8
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	377707	50.0000	53.0
8	Diethyl ether (Ethyl Ether)	59	1.954	1.954	(0.465)	143093	50.0000	53.2
9	1,1-Dichloroethene	96	2.094	2.094	(0.498)	188519	50.0000	52.2
10	Carbon Disulfide	76	2.101	2.101	(0.500)	656467	50.0000	47.8
11	Ethanol	45	2.113	2.113	(0.438)	57235	1000.00	1050
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	187694	50.0000	50.4
13	Iodomethane	142	2.210	2.210	(0.526)	192826	50.0000	43.1
14	Acrolein	56	2.412	2.412	(0.574)	235641	500.000	508
15	Allyl Chloride	41	2.540	2.540	(0.604)	268016	50.0000	51.2
16	Methylene Chloride	84	2.643	2.643	(0.629)	209594	50.0000	52.0
17	Isopropanol	45	2.631	2.631	(0.545)	147400	500.000	478
* 18	Acetone d6	46	2.649	2.649	(1.000)	141976	200.000	
19	Acetone	58	2.698	2.698	(1.018)	67866	250.000	246

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.783	2.783	(0.662)	209446	50.0000	52.2
	21 Hexane	86	2.863	2.863	(1.081)	114927	125.000	111
	22 Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	517897	50.0000	53.2(Q)
	23 tert-Butyl Alcohol	59	3.009	3.009	(0.624)	223404	500.000	484
	24 Acetonitrile	41	3.070	3.070	(0.730)	181013	500.000	503
	25 Isopropyl Ether	45	3.204	3.204	(0.762)	613865	50.0000	52.9
	26 Acrylonitrile	53	3.247	3.247	(0.772)	286324	500.000	514
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	349793	50.0000	52.9
	28 Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	562835	50.0000	52.3
	29 Vinyl Acetate	43	3.466	3.466	(0.825)	387171	50.0000	52.7
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	224437	50.0000	52.4
	31 2,2-Dichloropropane	77	3.698	3.698	(0.880)	281782	50.0000	51.2
	32 Cyclohexane	56	3.753	3.753	(0.893)	1681796	250.000	252
	33 Bromochloromethane	130	3.759	3.759	(0.894)	132124	50.0000	52.5
	34 Chloroform	83	3.814	3.814	(0.907)	351498	50.0000	52.5
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	255971	50.0000	52.4
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	237284	500.000	501
	37 1,1,1-Trichloroethane	97	3.930	3.930	(0.935)	302255	50.0000	51.5
	38 2-Butanone	43	3.997	3.997	(0.951)	363652	250.000	247
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	282261	50.0000	50.9
	40 Benzene	78	4.143	4.143	(0.985)	852329	50.0000	51.5
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	959352	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	546303	50.0000	50.1
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	380929	100.000	103
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	223306	50.0000	51.8
	45 Isobutanol	43	4.295	4.295	(0.890)	186062	1000.00	998
	46 Tert-Amyl Alcohol	59	4.344	4.344	(0.900)	196385	500.000	508
	47 Trichloroethene	130	4.466	4.466	(0.997)	238252	50.0000	51.2
*	48 1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1460756	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	438621	50.0000	51.3
	50 Dibromomethane	174	4.667	4.667	(1.042)	136966	50.0000	51.0
	51 1,2-Dichloropropane	63	4.716	4.716	(1.053)	205397	50.0000	51.8
	52 Bromodichloromethane	83	4.746	4.746	(1.060)	263146	50.0000	50.8
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	157788	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	54442	1000.00	1020
	55 2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.117)	42213	125.000	128
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	328651	50.0000	51.2
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1701159	100.000	100
	58 Toluene	92	5.130	5.130	(0.887)	532448	50.0000	48.7
	59 4-Methyl-2-Pentanone	43	5.283	5.283	(0.914)	825210	250.000	254
	60 Tetrachloroethene	166	5.295	5.295	(0.916)	261962	50.0000	50.3
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	291955	50.0000	51.9
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.929)	171773	50.0000	51.3
	63 Dibromochloromethane	129	5.454	5.454	(0.943)	200982	50.0000	51.8
	64 1,3-Dichloropropane	76	5.490	5.490	(0.949)	289907	50.0000	50.7
	65 1,2-Dibromoethane	107	5.557	5.557	(0.961)	179946	50.0000	51.2
	66 2-Hexanone	43	5.643	5.643	(0.976)	609658	250.000	241
*	67 Chlorobenzene-d5	117	5.783	5.783	(1.000)	1445199	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.002)	597481	50.0000	48.9
	69 Ethylbenzene	91	5.801	5.801	(1.003)	1011354	50.0000	48.5
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.006)	218423	50.0000	51.4
	71 M&P-Xylene	106	5.868	5.868	(1.015)	795595	100.000	98.0
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.051)	383461	50.0000	50.4
	73 Styrene	104	6.100	6.100	(1.055)	673161	50.0000	51.9

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
74	Bromoform	173	6.124	6.124	(1.059)	154941	50.0000	50.3
75	Isopropylbenzene (Cumene)	105	6.234	6.234	(1.078)	1001739	50.0000	49.2
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	712840	100.000	101
77	cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	66107	50.0000	48.3
78	Bromobenzene	156	6.453	6.453	(0.916)	276467	50.0000	51.0
79	n-Propylbenzene	91	6.453	6.453	(0.916)	1221768	50.0000	49.2
80	1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	230697	50.0000	51.2
81	2-Chlorotoluene	91	6.545	6.545	(0.929)	773574	50.0000	50.0
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	874385	50.0000	49.8
83	1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	64933	50.0000	51.4
84	trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.935)	145526	125.000	124
85	4-Chlorotoluene	91	6.642	6.642	(0.943)	731478	50.0000	49.4
86	tert-Butylbenzene	119	6.746	6.746	(0.958)	753444	50.0000	50.7
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	884734	50.0000	49.5
88	sec-Butylbenzene	105	6.856	6.856	(0.973)	1111537	50.0000	50.1
89	p-Isopropyltoluene	119	6.941	6.941	(0.985)	961134	50.0000	49.2
90	1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	527615	50.0000	48.6
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	883194	100.000	
92	1,4-Dichlorobenzene	146	7.051	7.051	(1.001)	536939	50.0000	47.4
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	912775	50.0000	49.4
94	n-Butylbenzene	91	7.209	7.209	(1.023)	878227	50.0000	48.3
95	1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	499133	50.0000	49.0
96	1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	128723	125.000	129
97	Hexachlorobutadiene	225	8.191	8.191	(1.163)	186001	50.0000	47.1
98	1,2,4-Trichlorobenzene	180	8.203	8.203	(1.164)	315519	50.0000	47.5
99	Naphthalene	128	8.392	8.392	(1.191)	649730	50.0000	50.4
100	1,2,3-Trichlorobenzene	180	8.496	8.496	(1.206)	294001	50.0000	49.0
101	2-Methylnaphthalene	142	9.008	9.008	(1.279)	119881	25.0000	23.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 11-Mar-2014 11:24

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014012.D
Lab Smp Id: V50 ICV 10098-66
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	141976	4.54
41 Pentafluorobenzen	944656	472328	1889312	959352	1.56
48 1,4 Difluorobenze	1423443	711722	2846886	1460756	2.62
53 1,4 dioxane d8	156016	78008	312032	157788	1.14
67 Chlorobenzene-d5	1400934	700467	2801868	1445199	3.16
91 1,4-Dichlorobenze	853329	426665	1706658	883194	3.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	-0.00
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	-0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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Instrument: 10msv7.i

Operator: HBP

Column phase: Rtx-VMS

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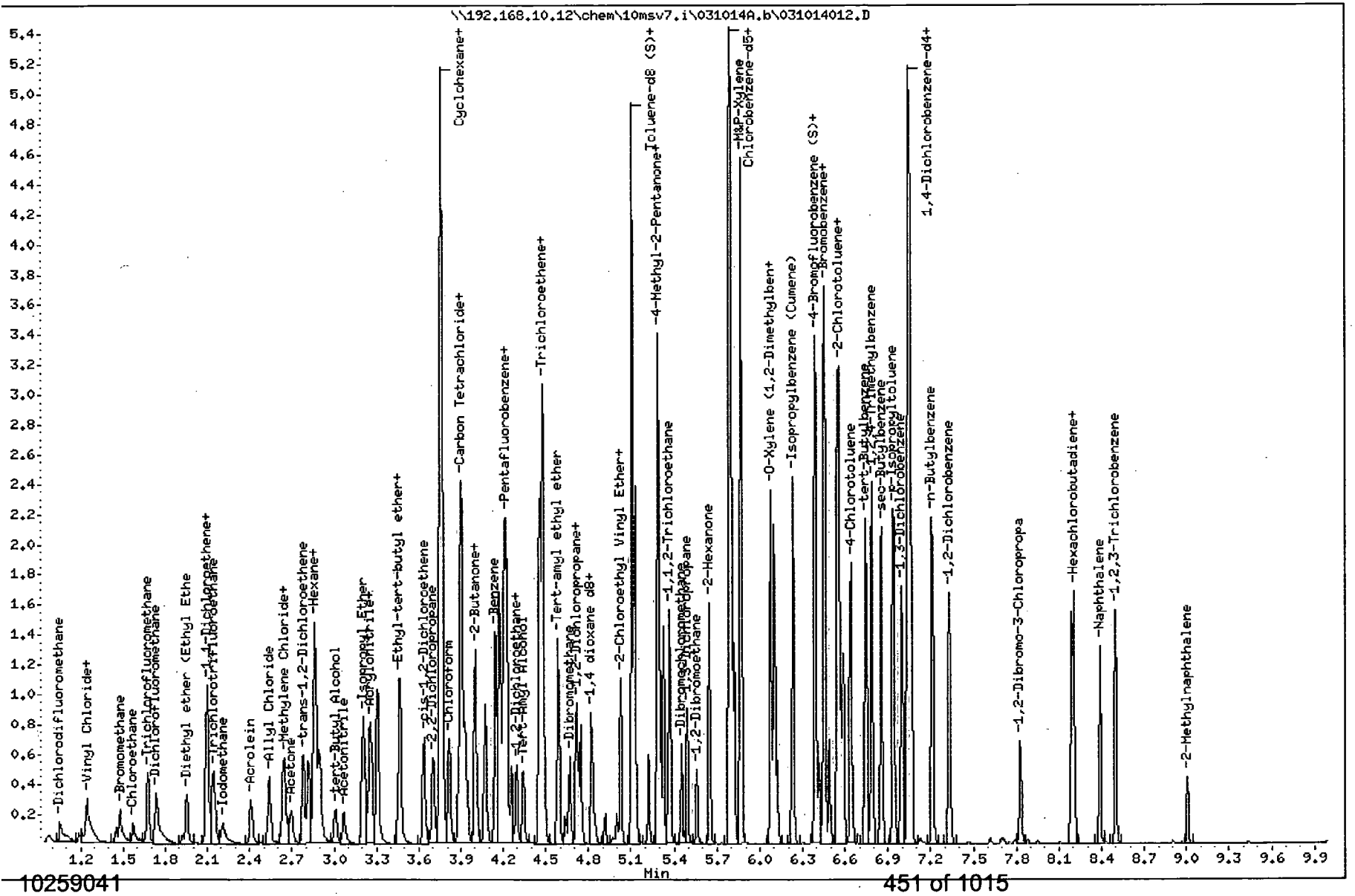

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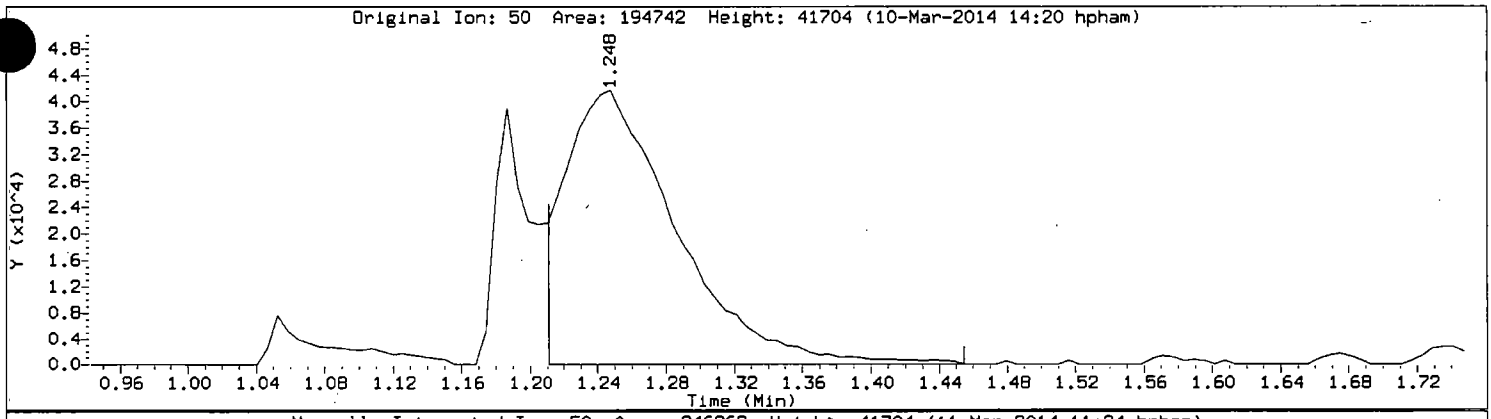
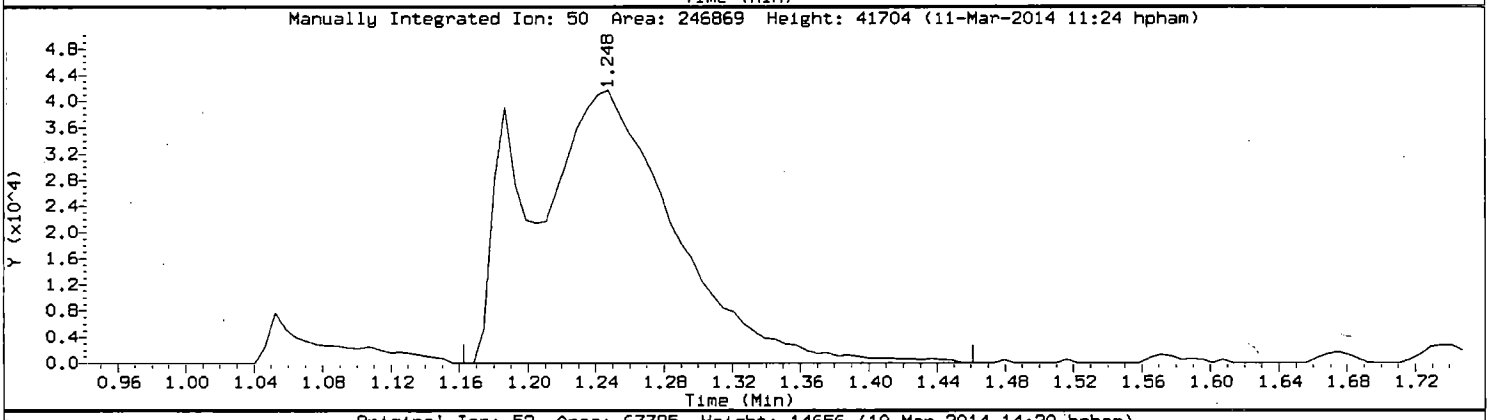
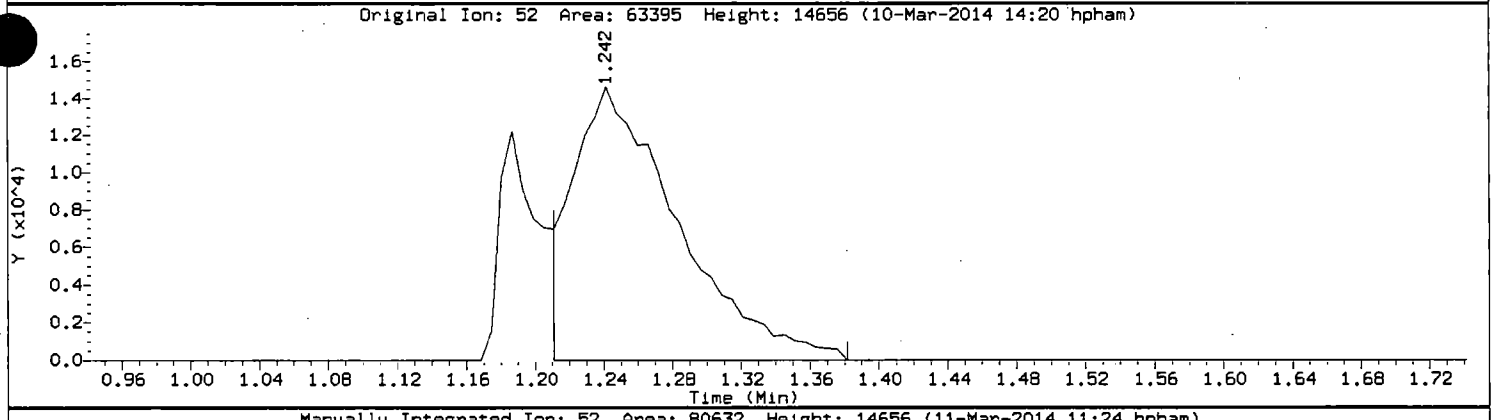
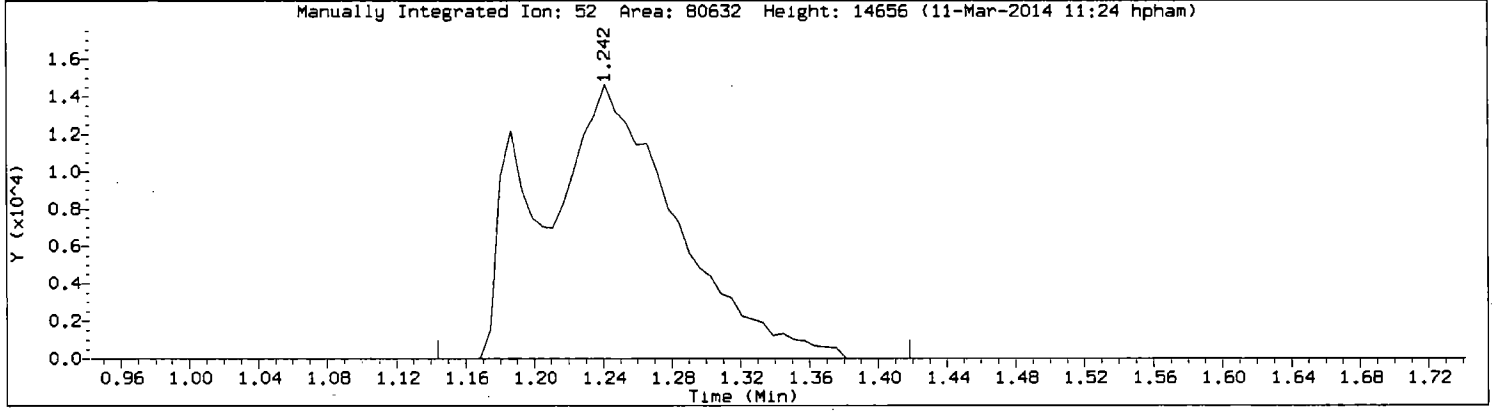
Lab Sample ID: V50 ICV 10098-66

Compound: Chloromethane
CAS Number: 74-87-3









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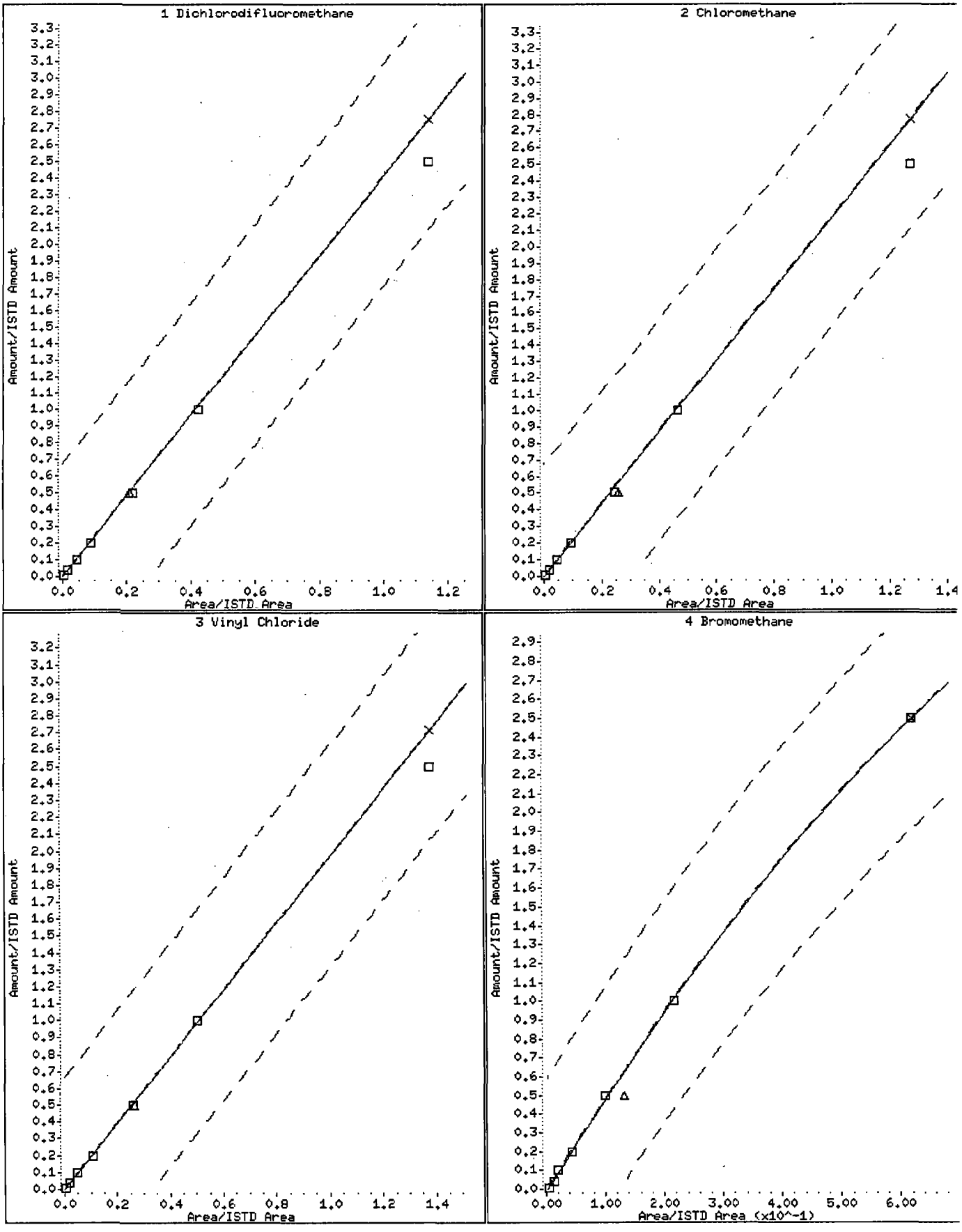

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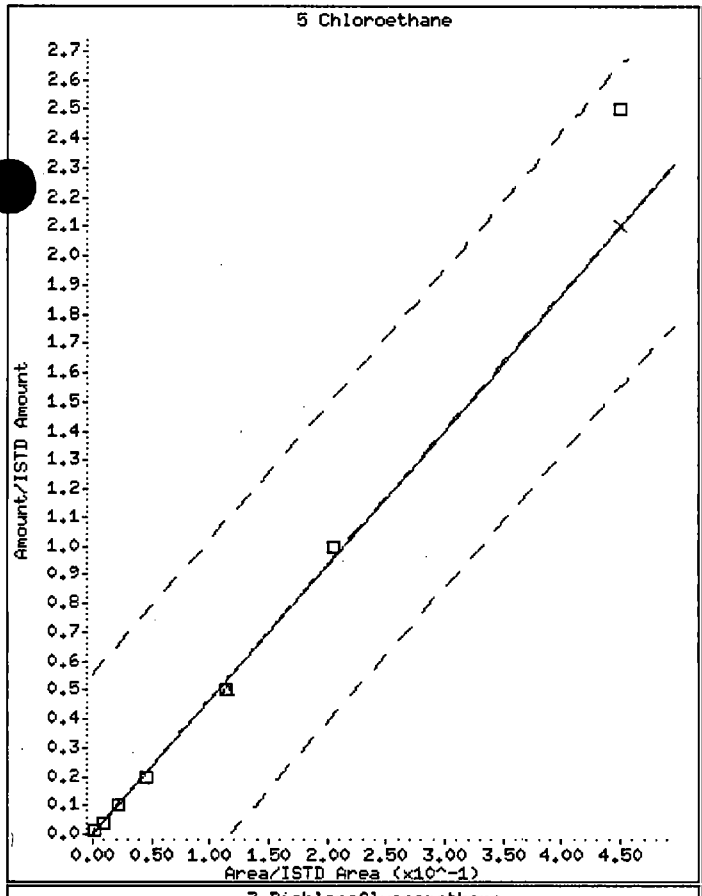

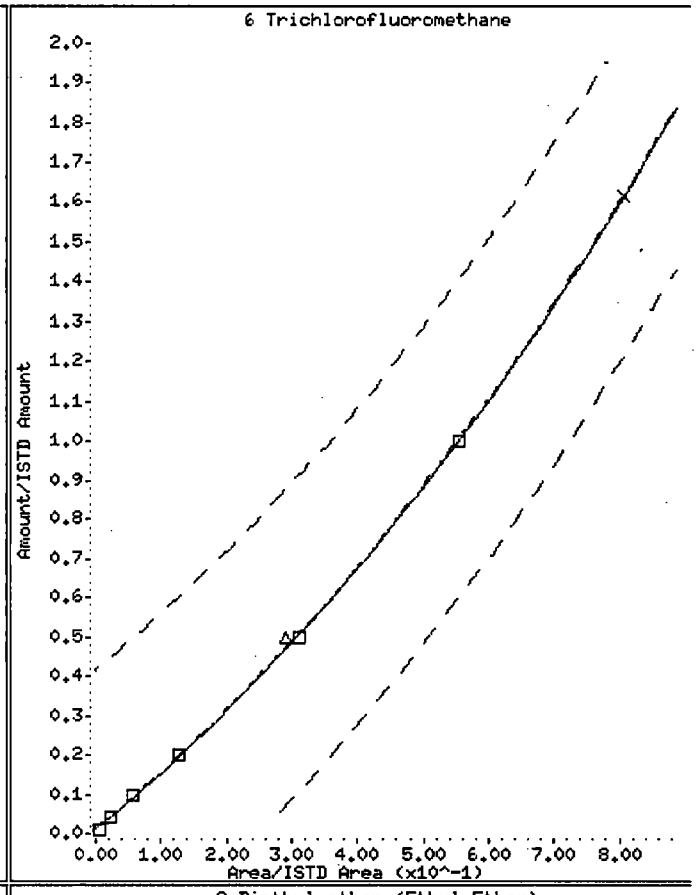

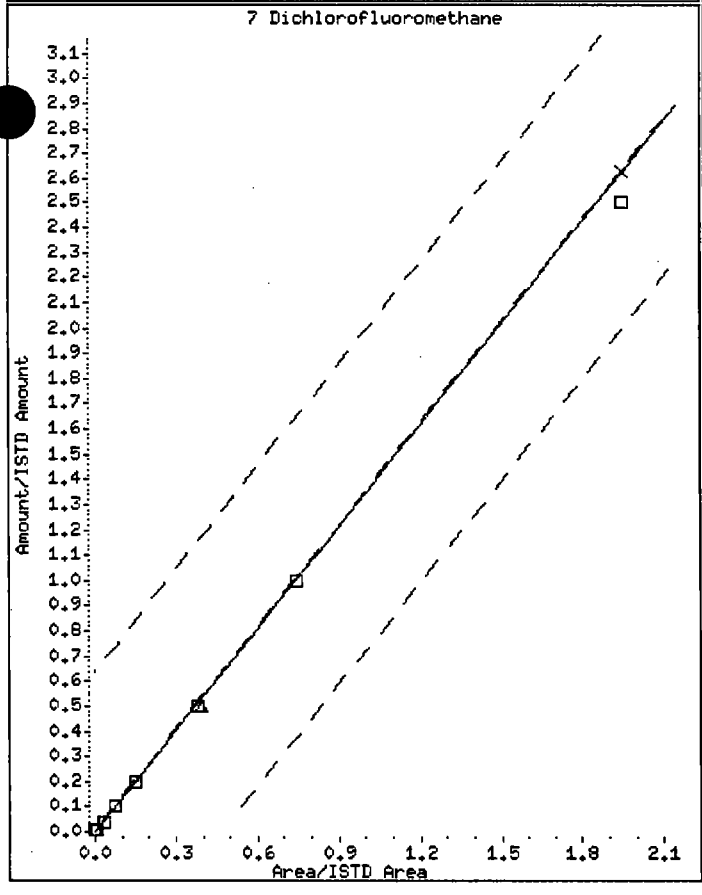

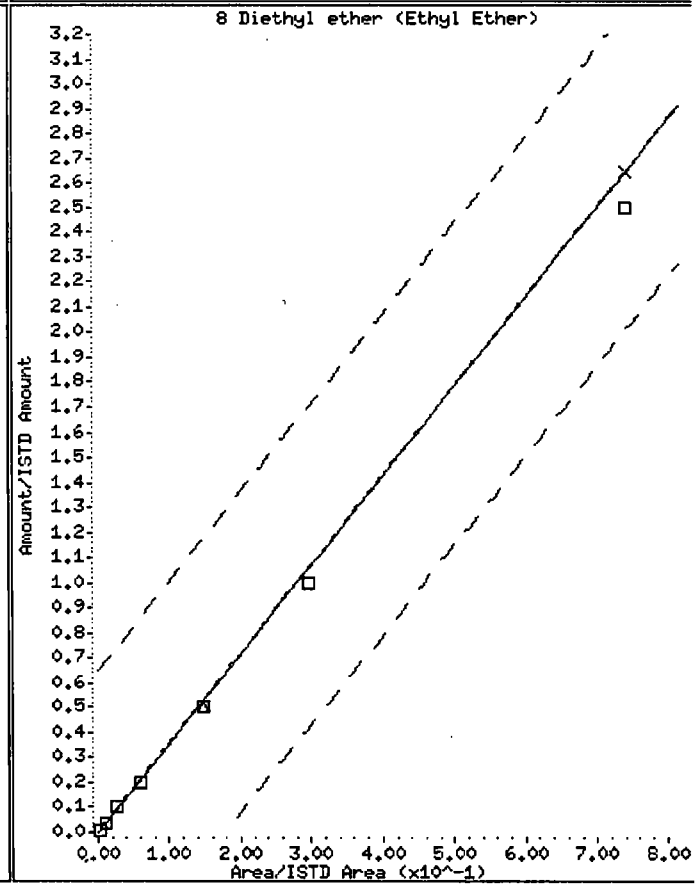

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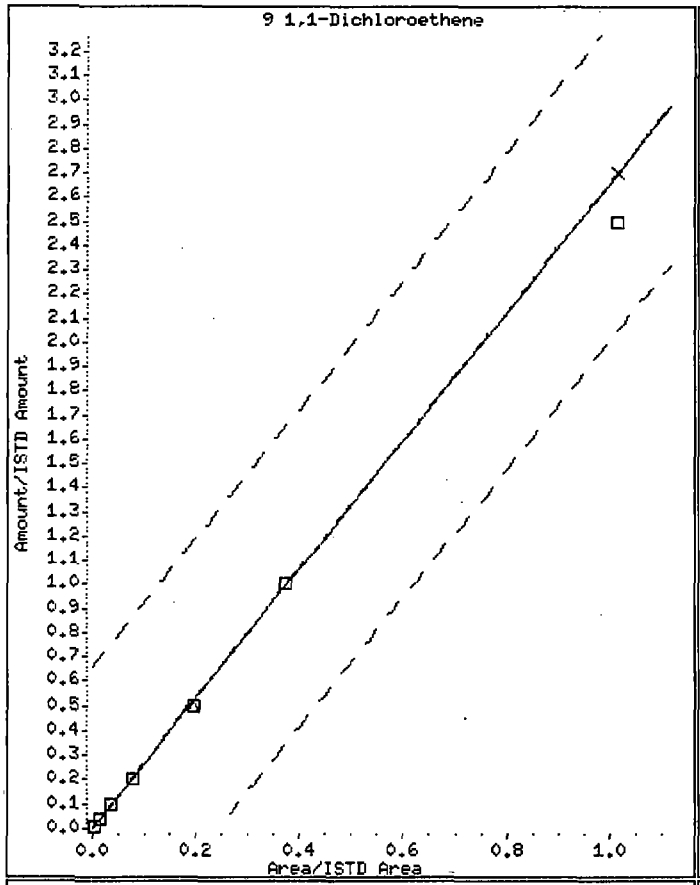

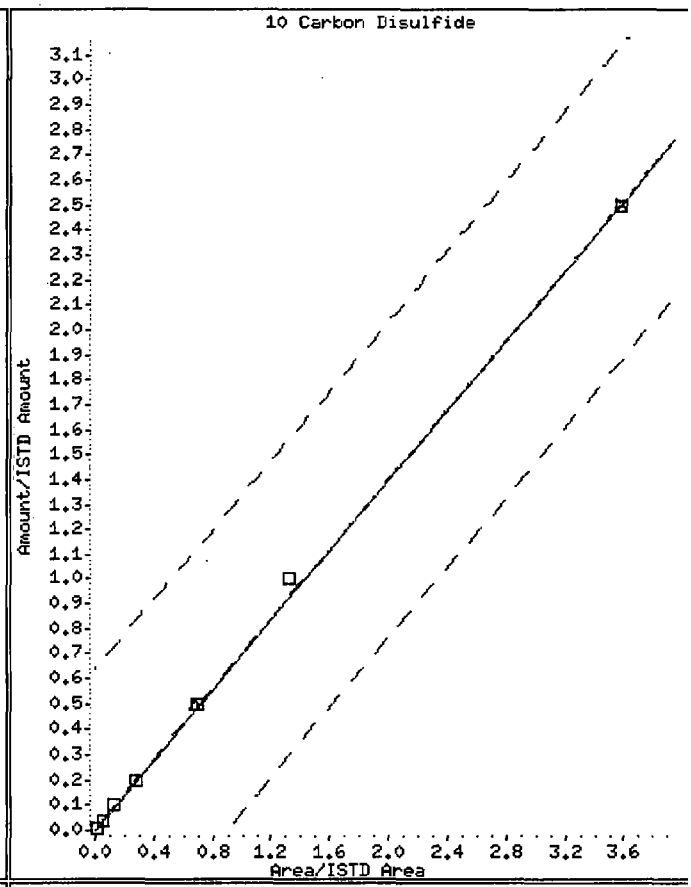

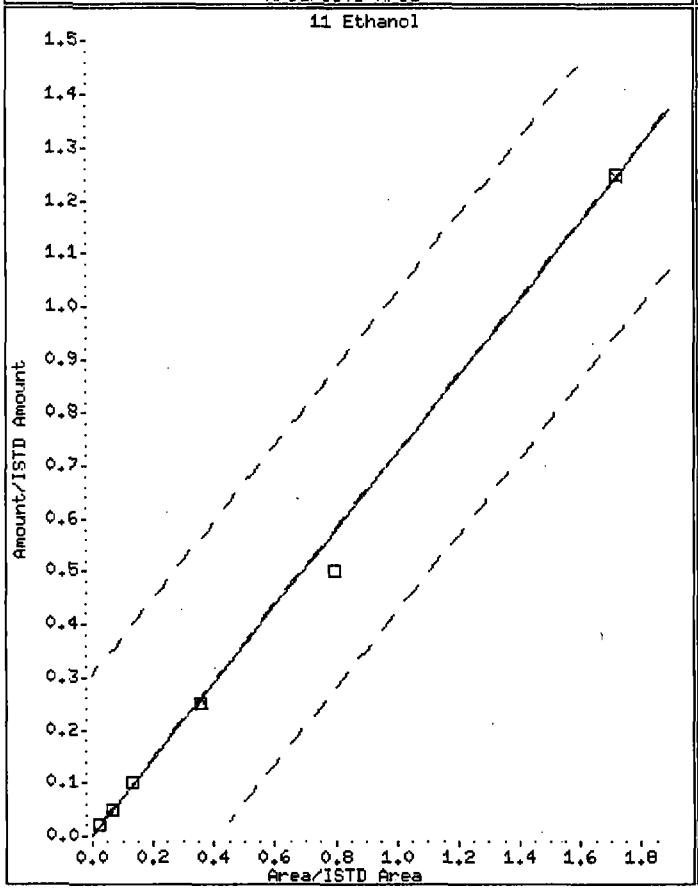

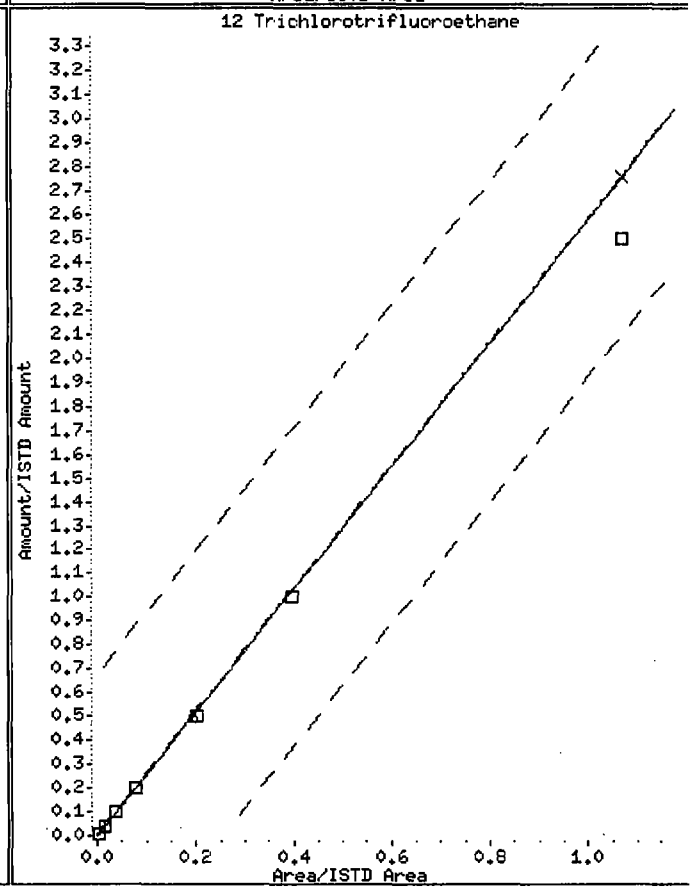

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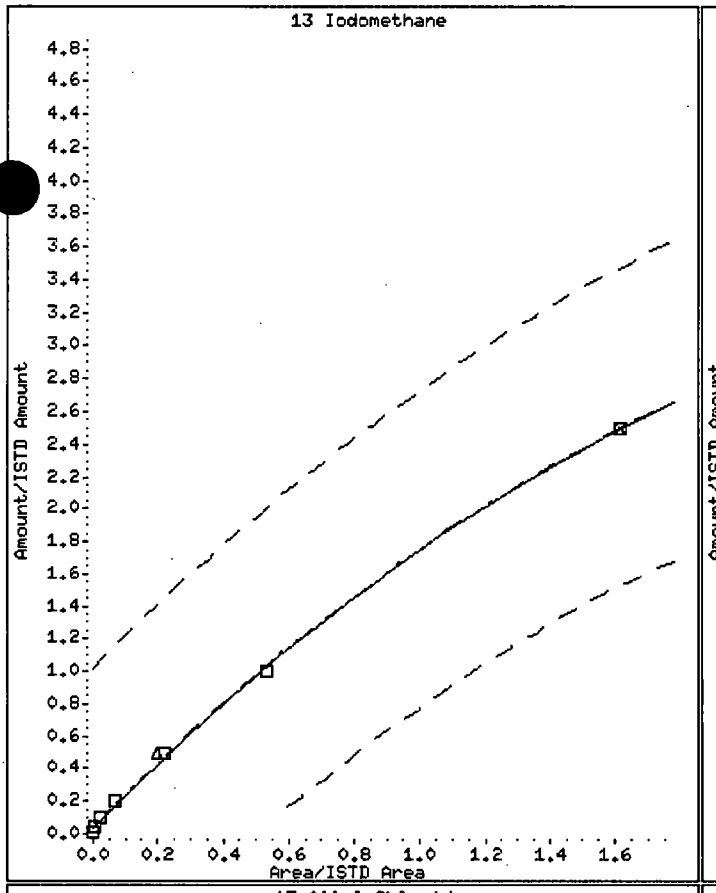

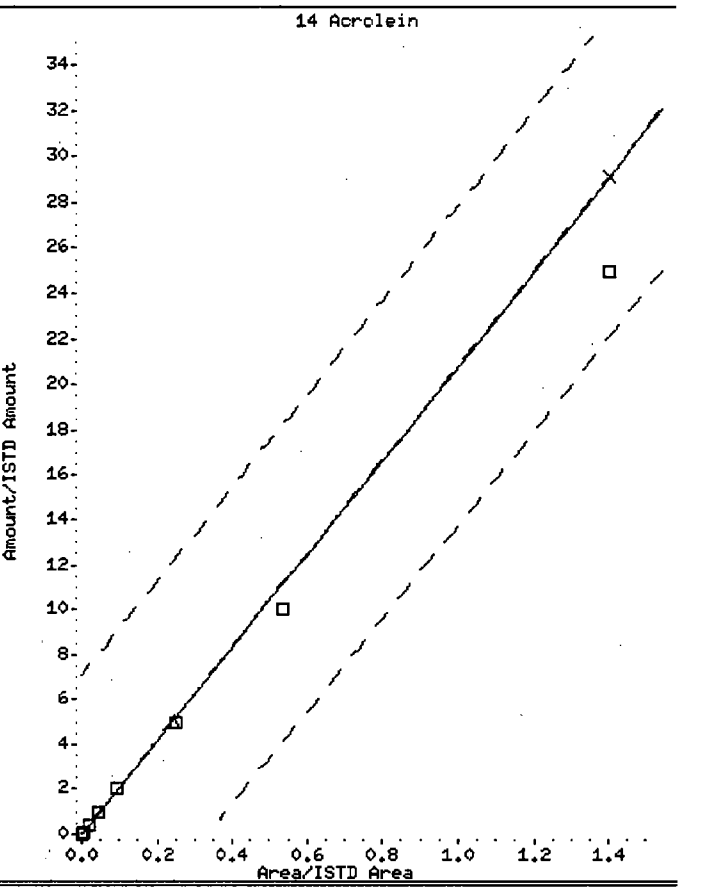

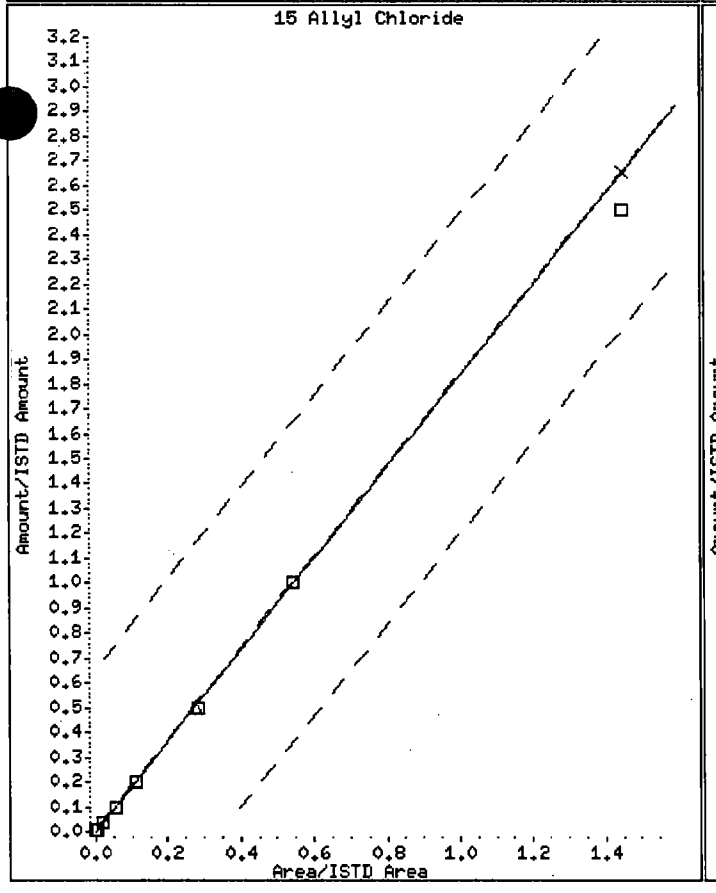

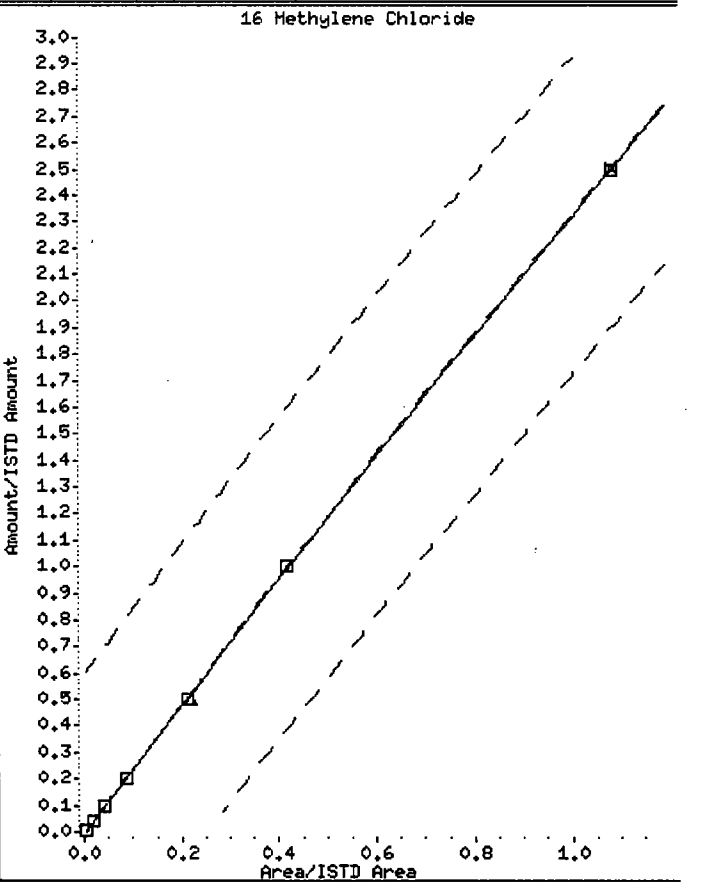

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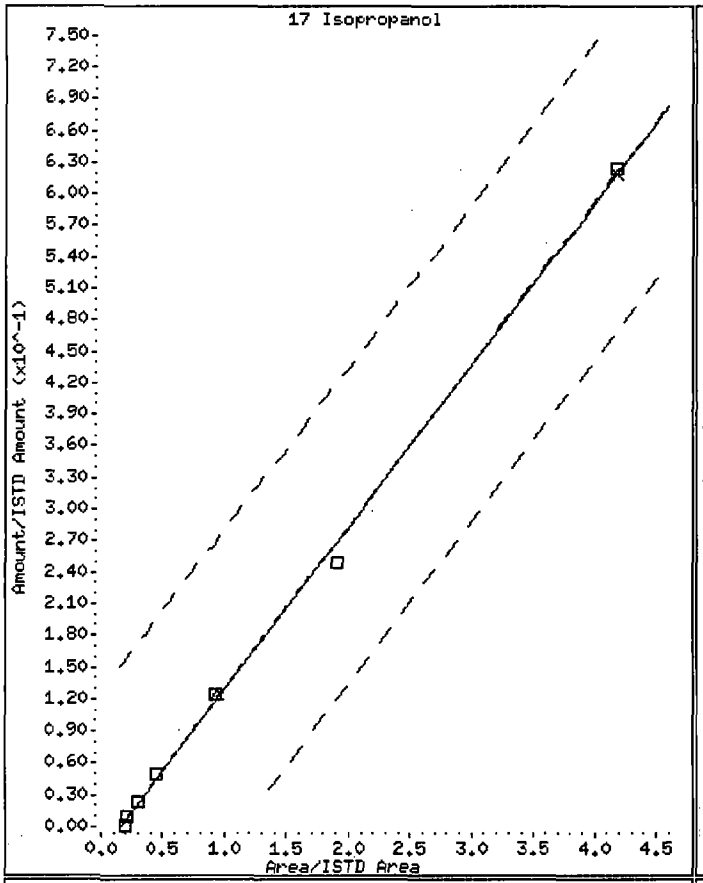

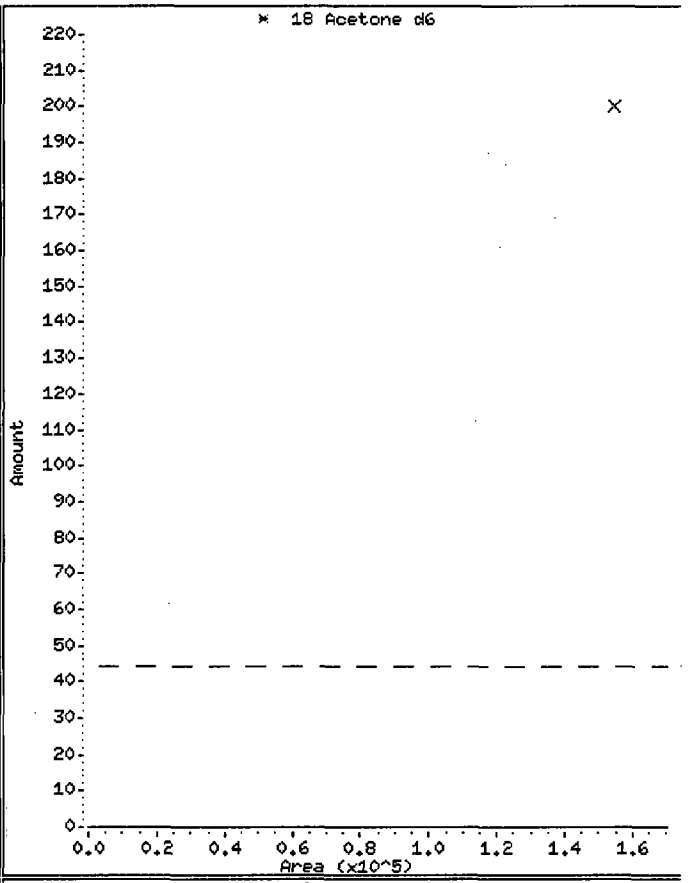

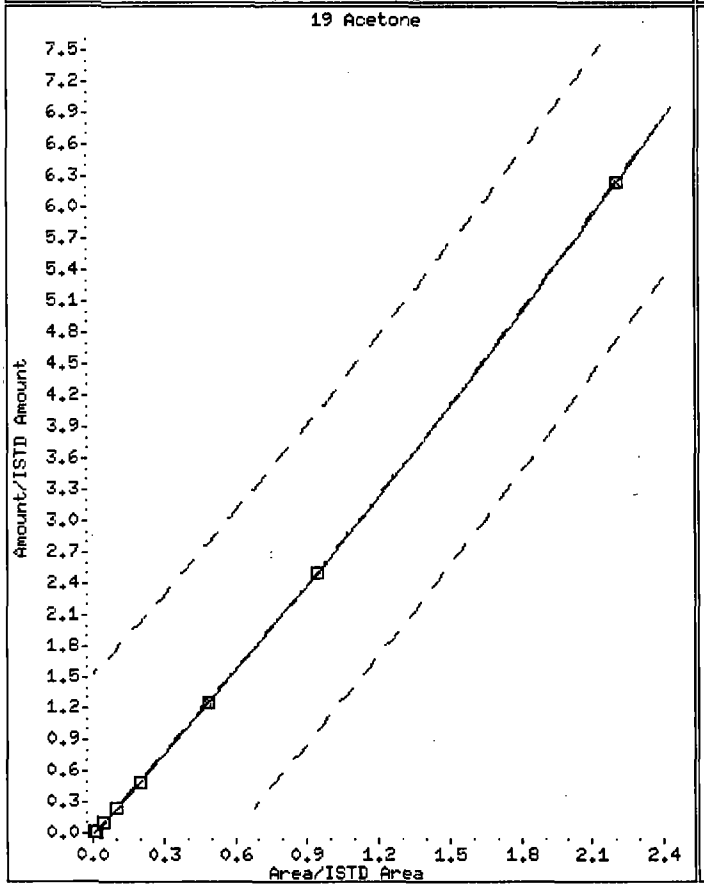

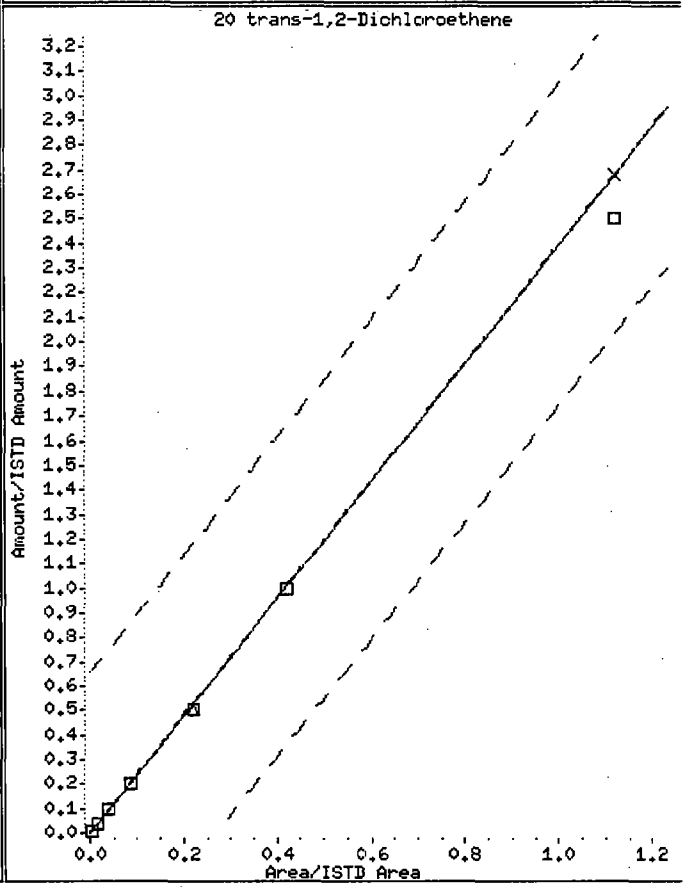

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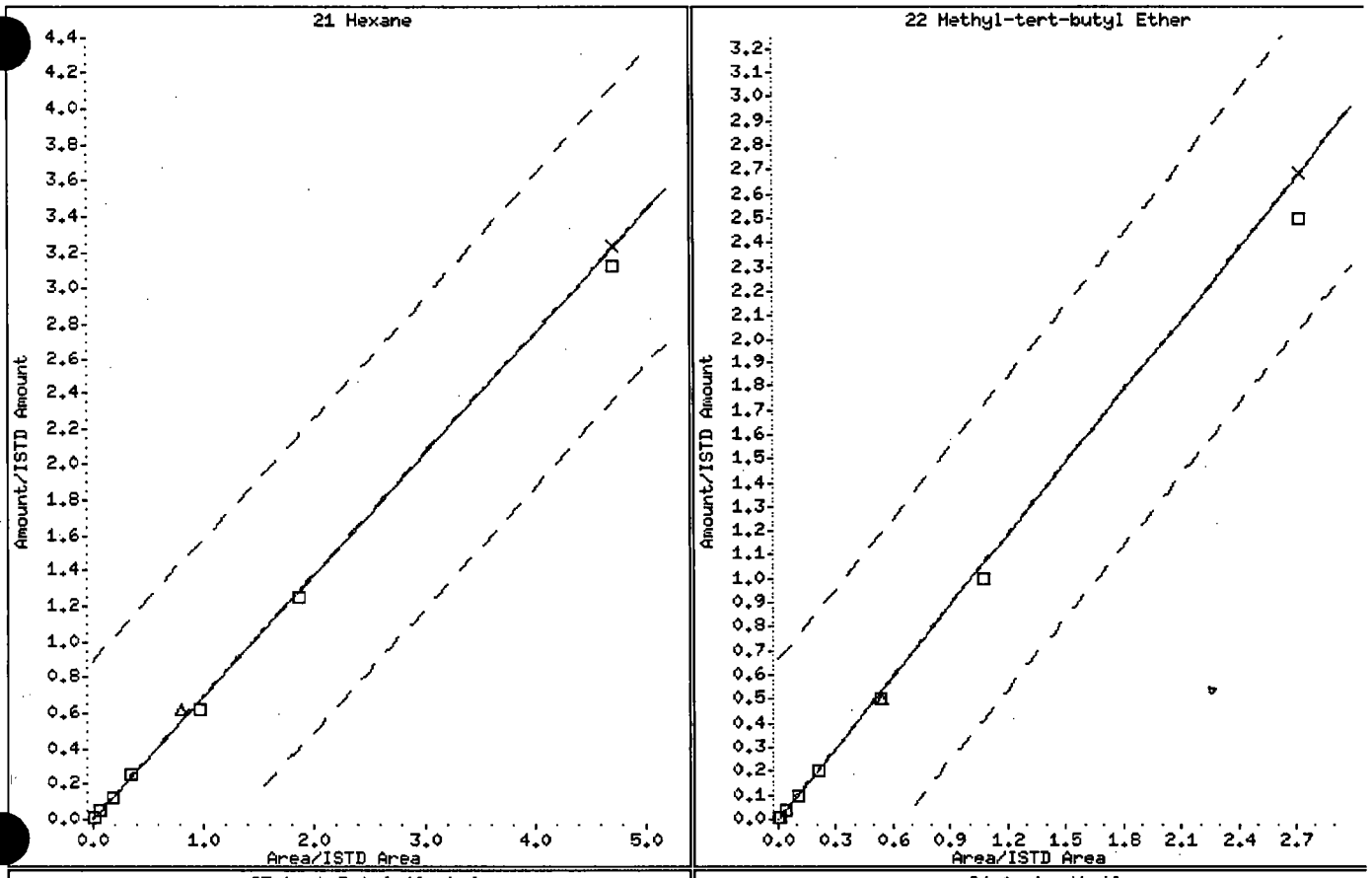

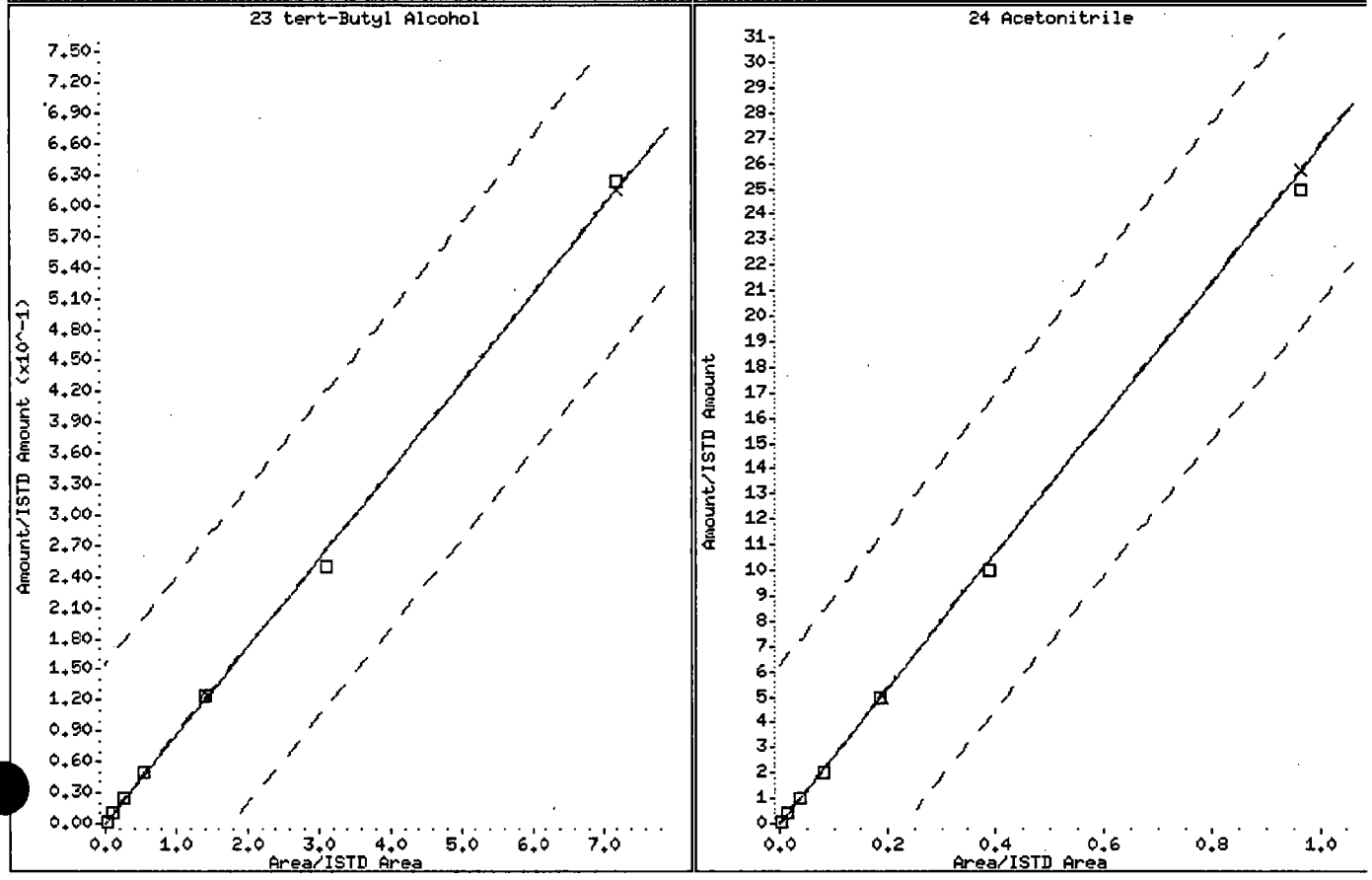

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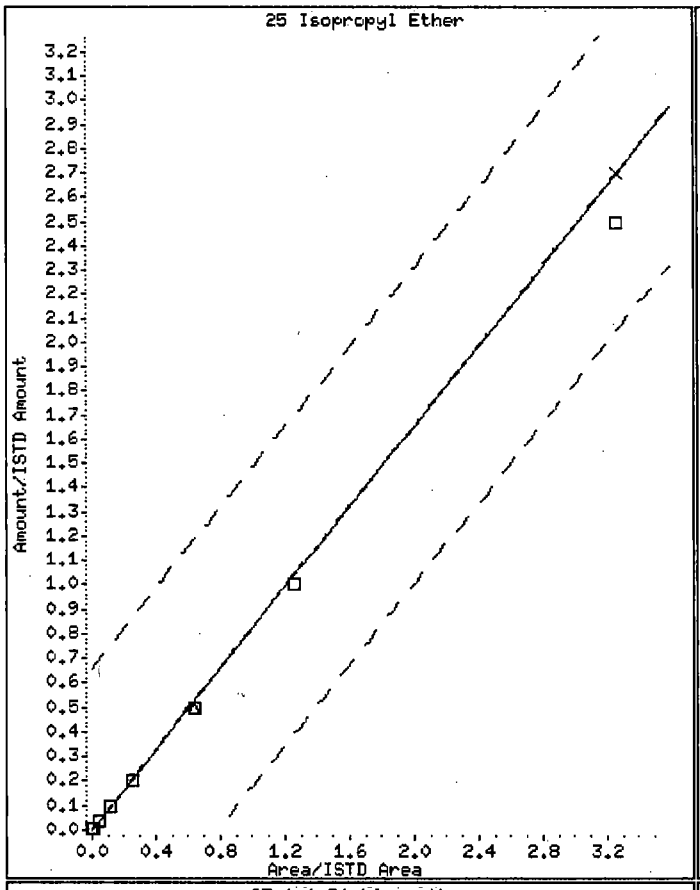

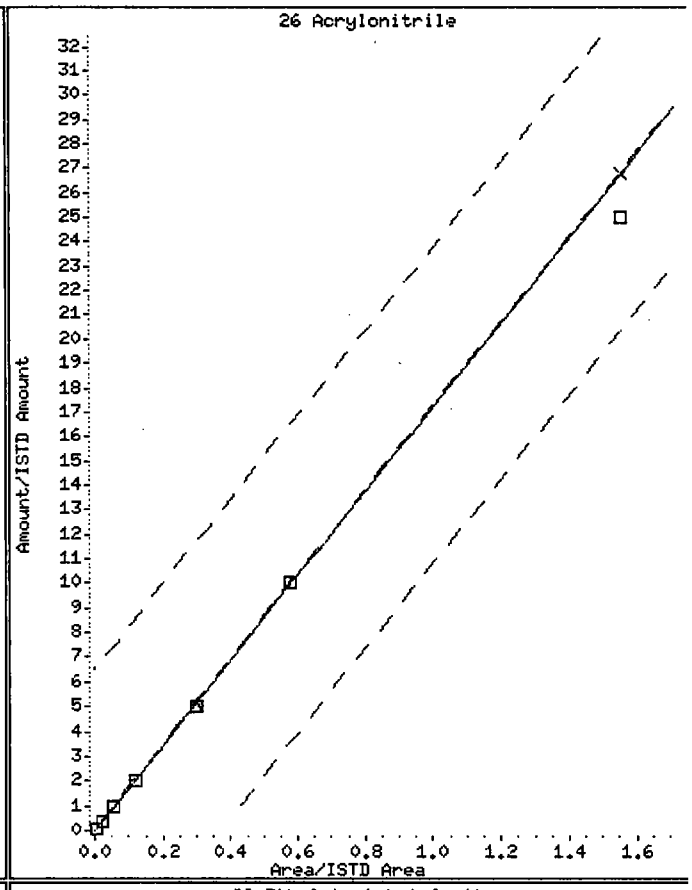

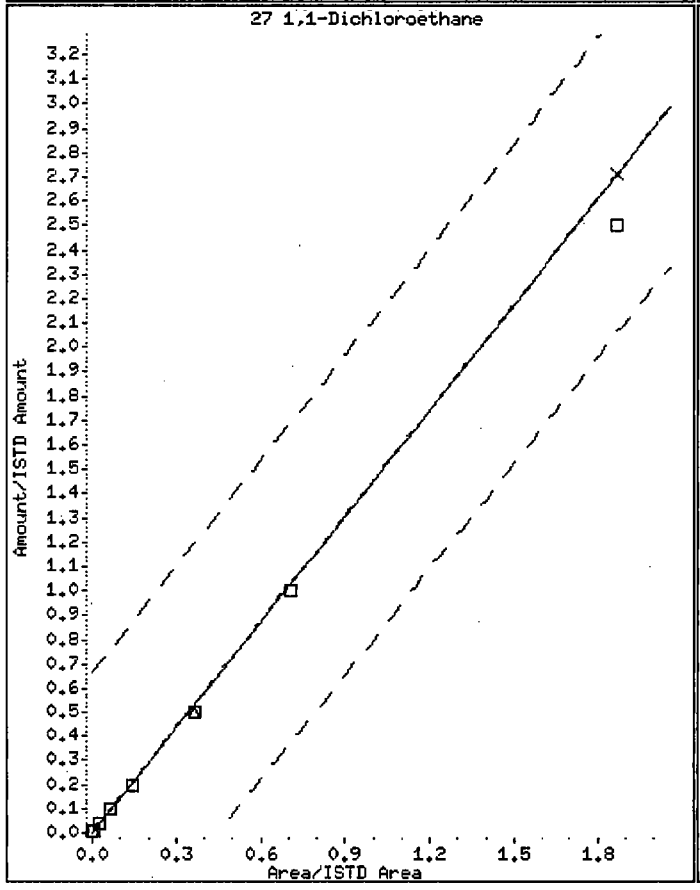

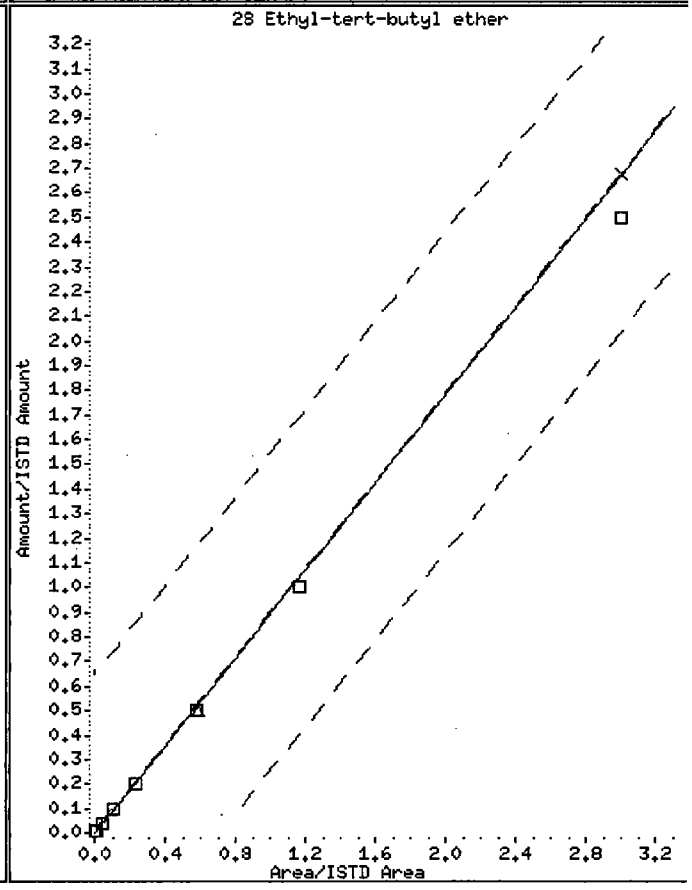

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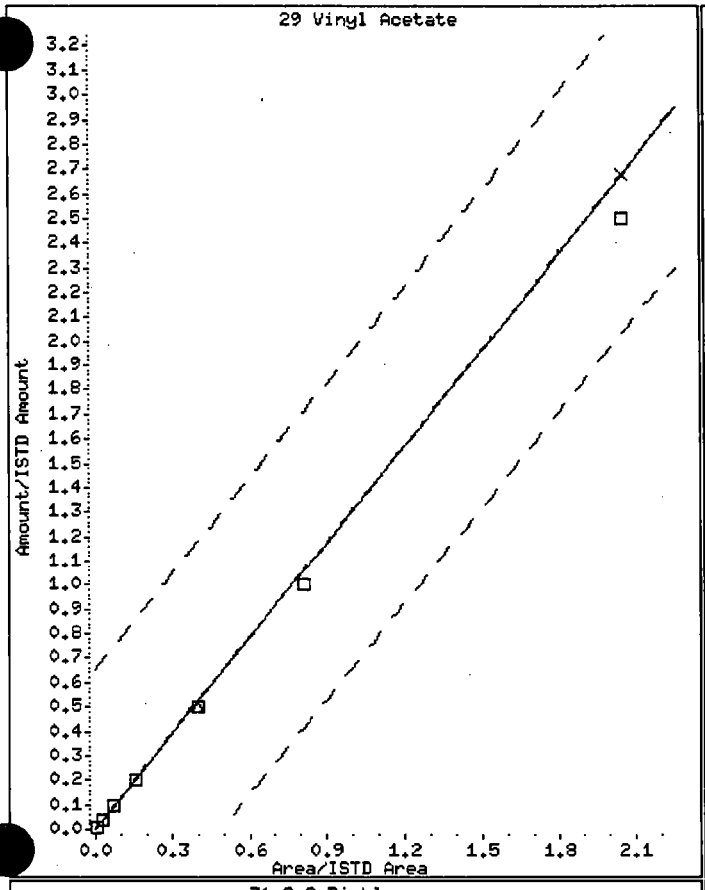

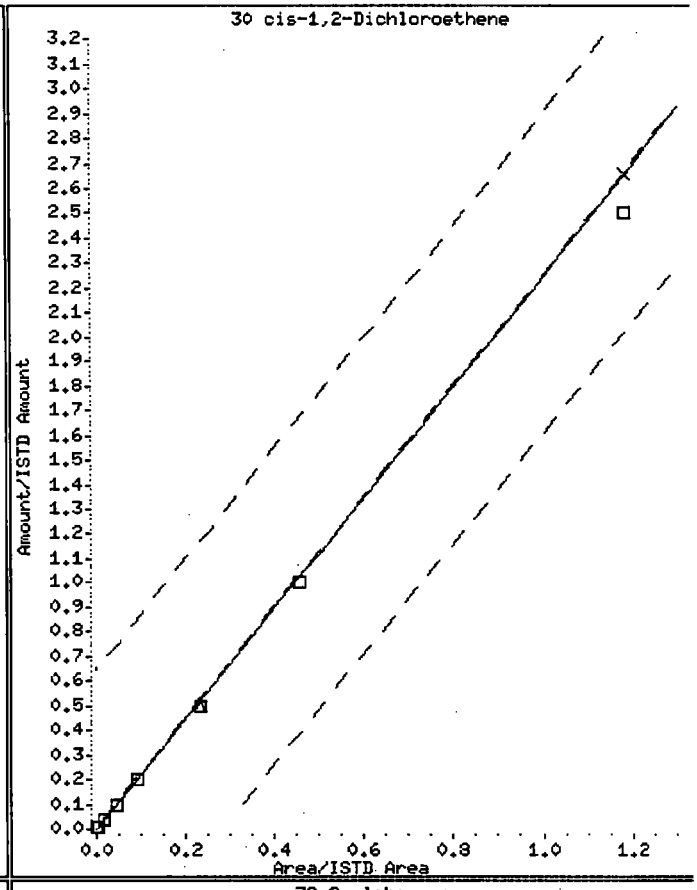

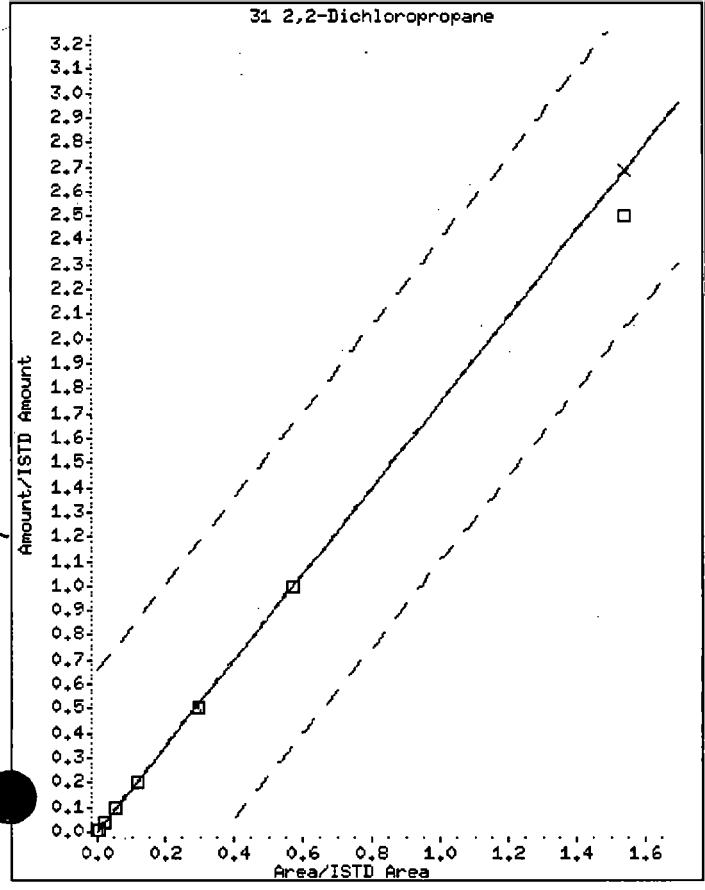

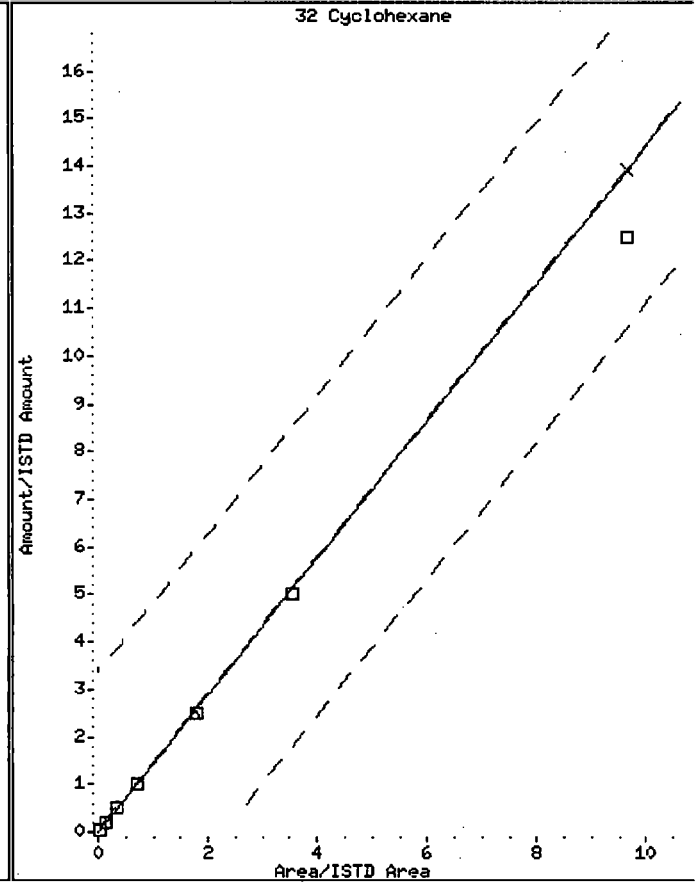

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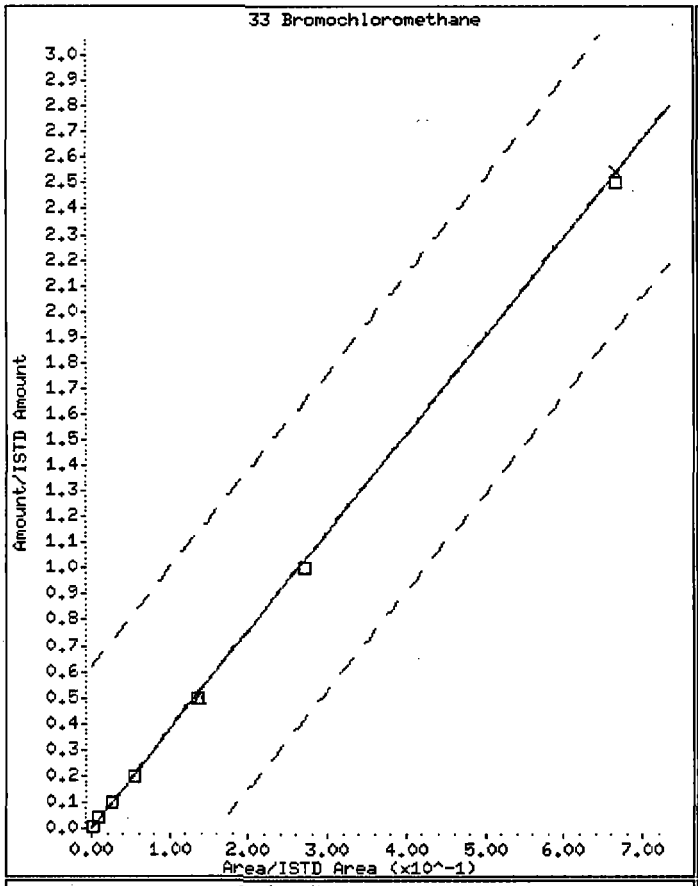

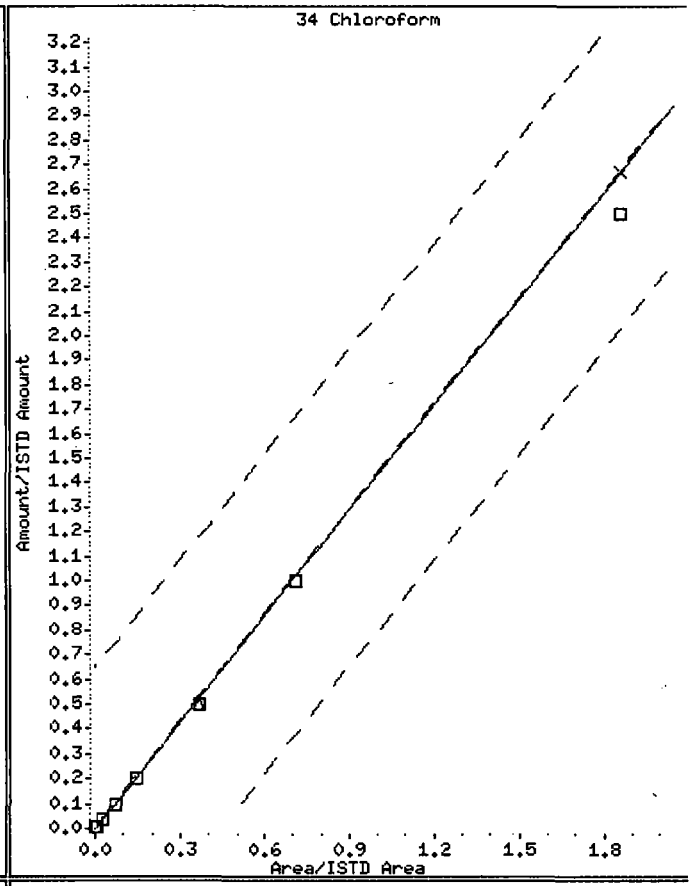

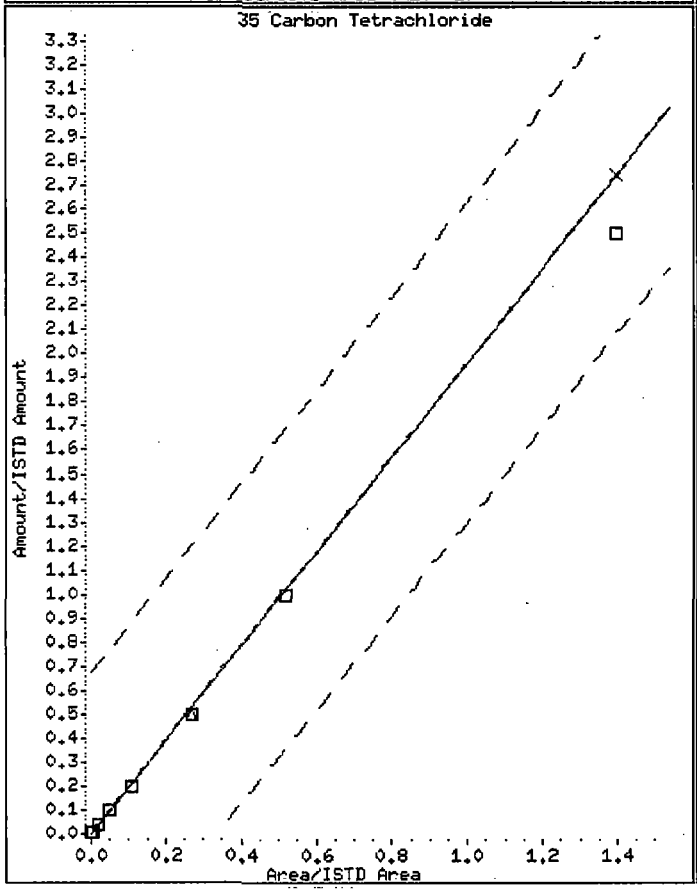

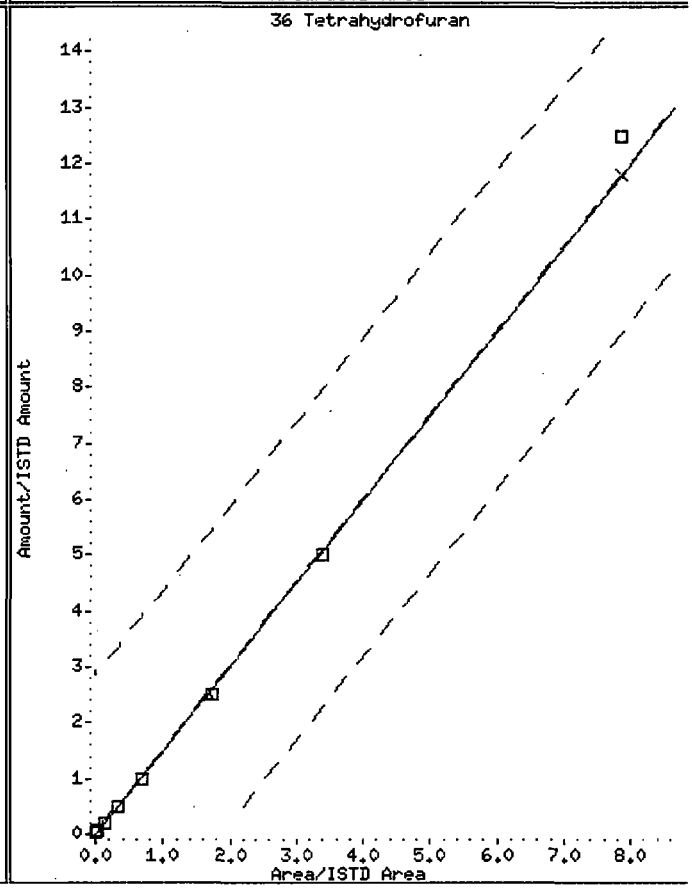

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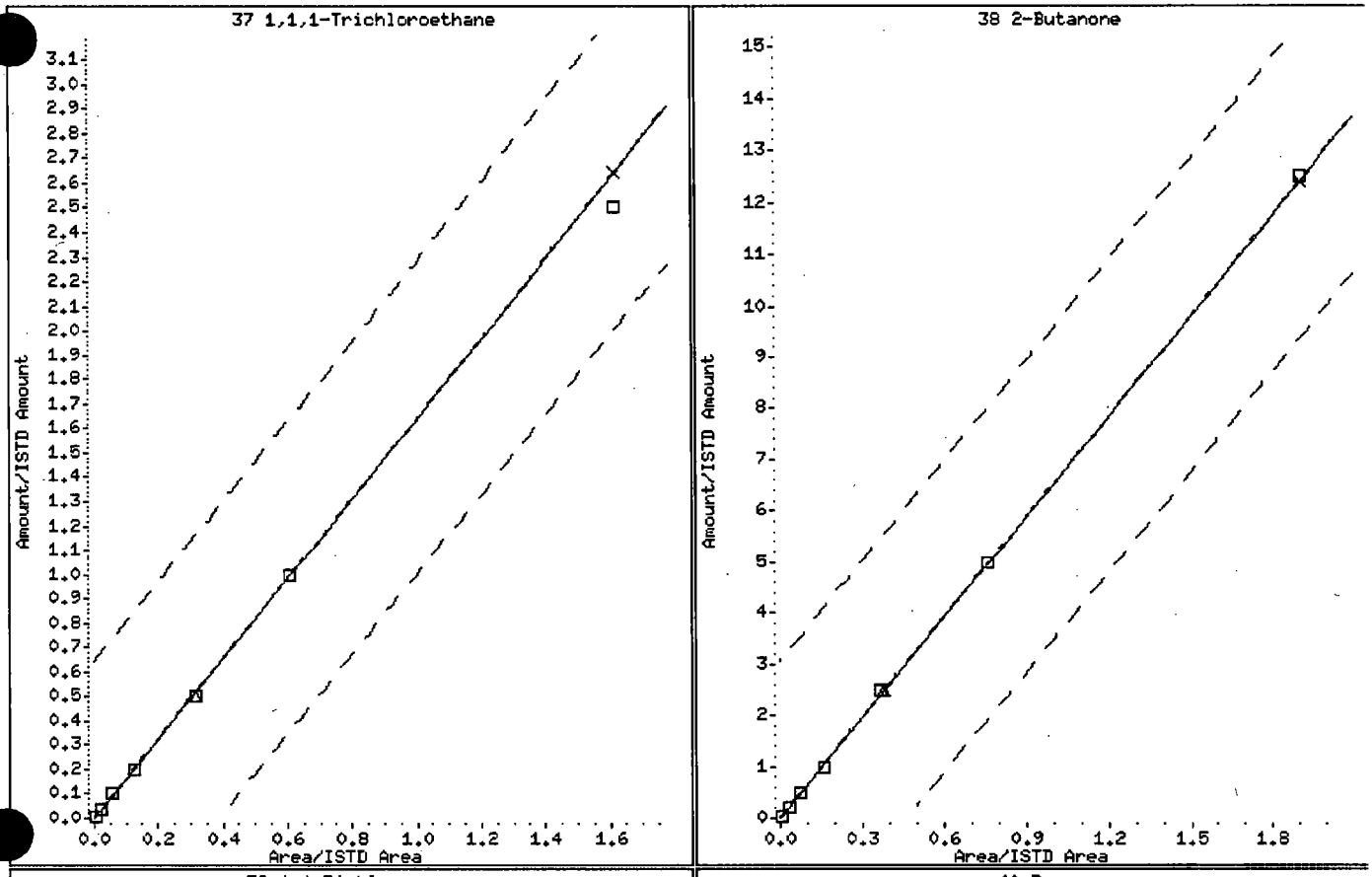

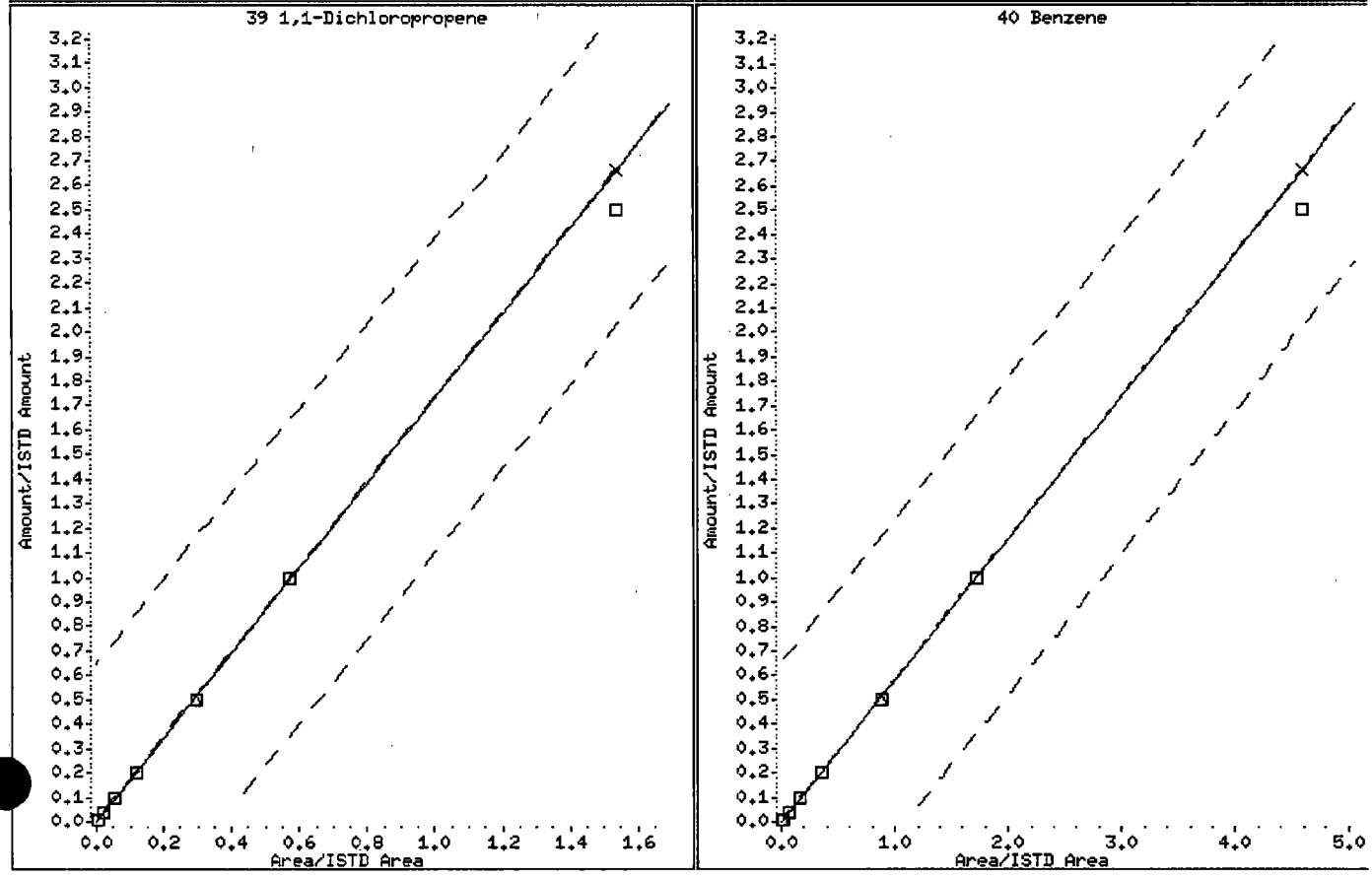

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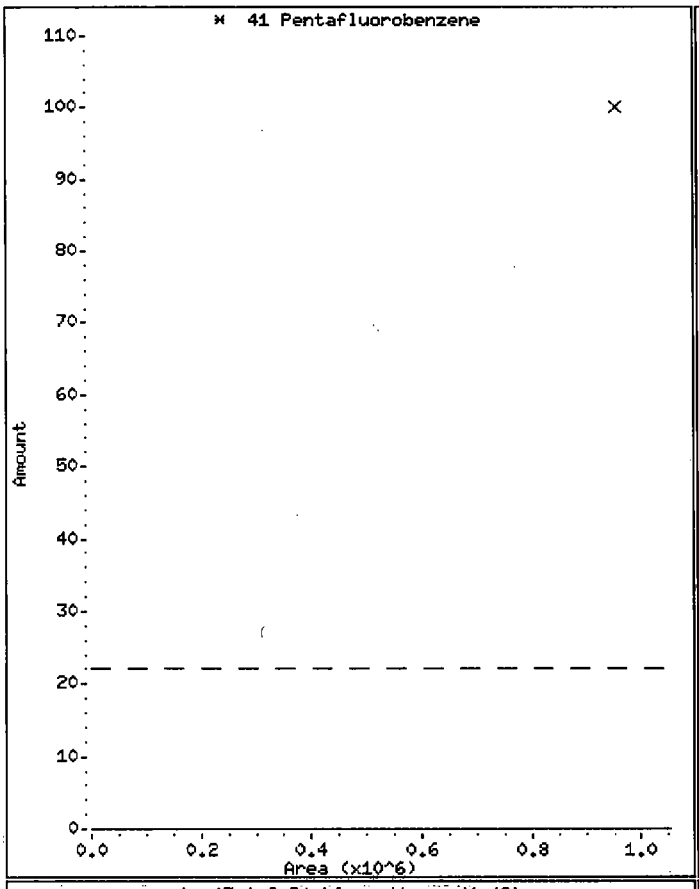

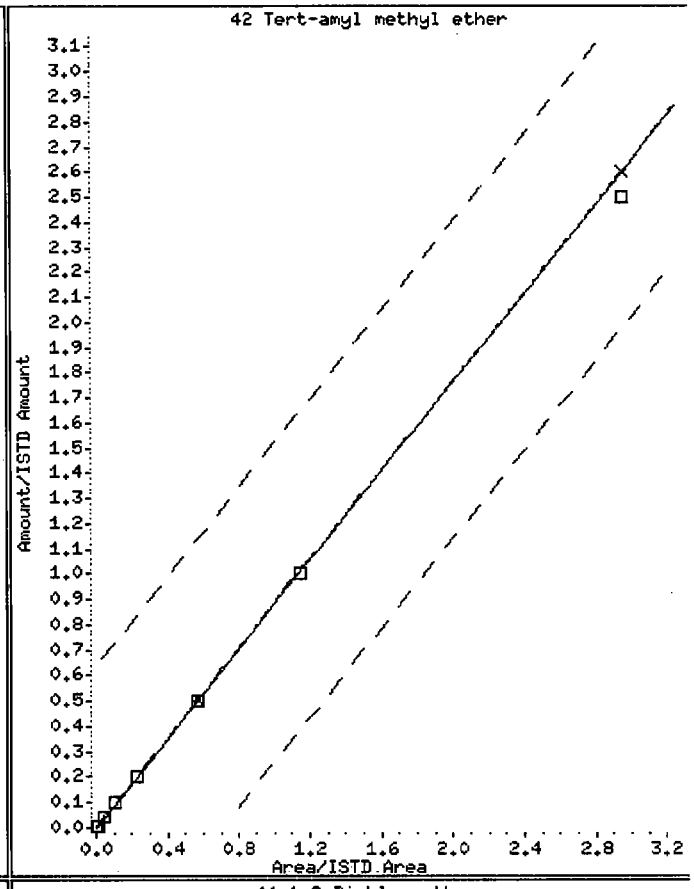

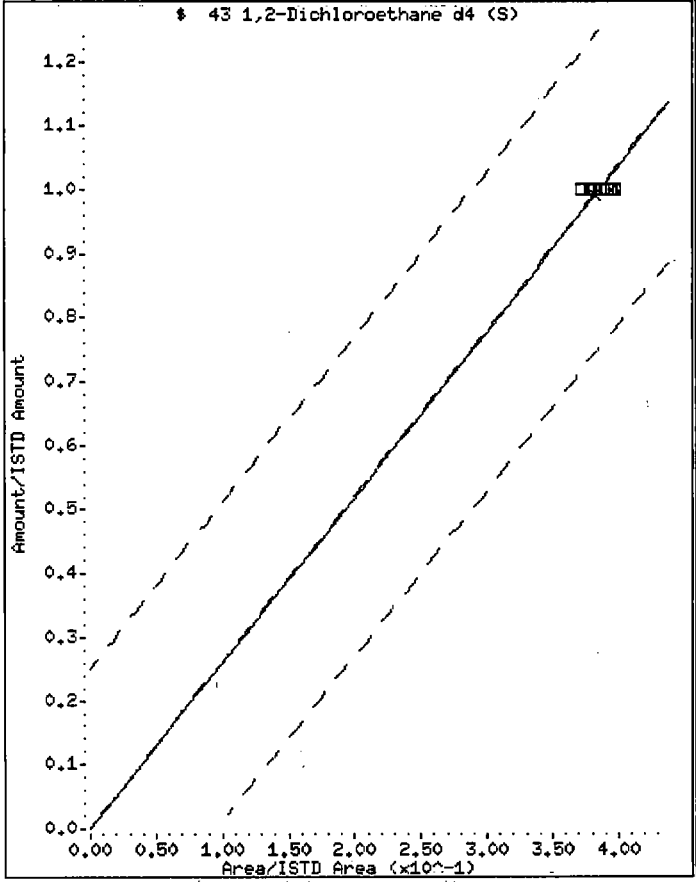

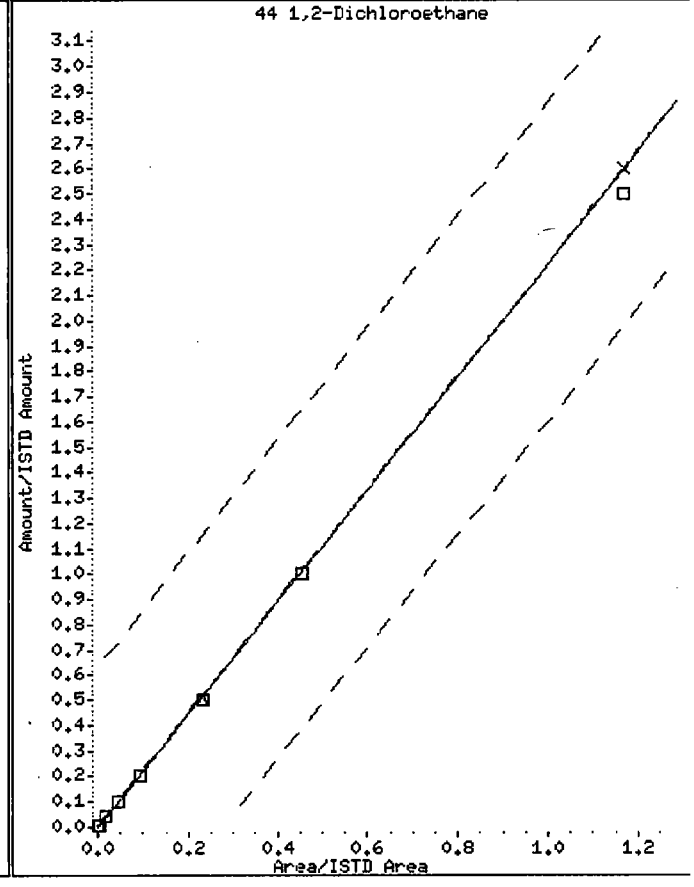

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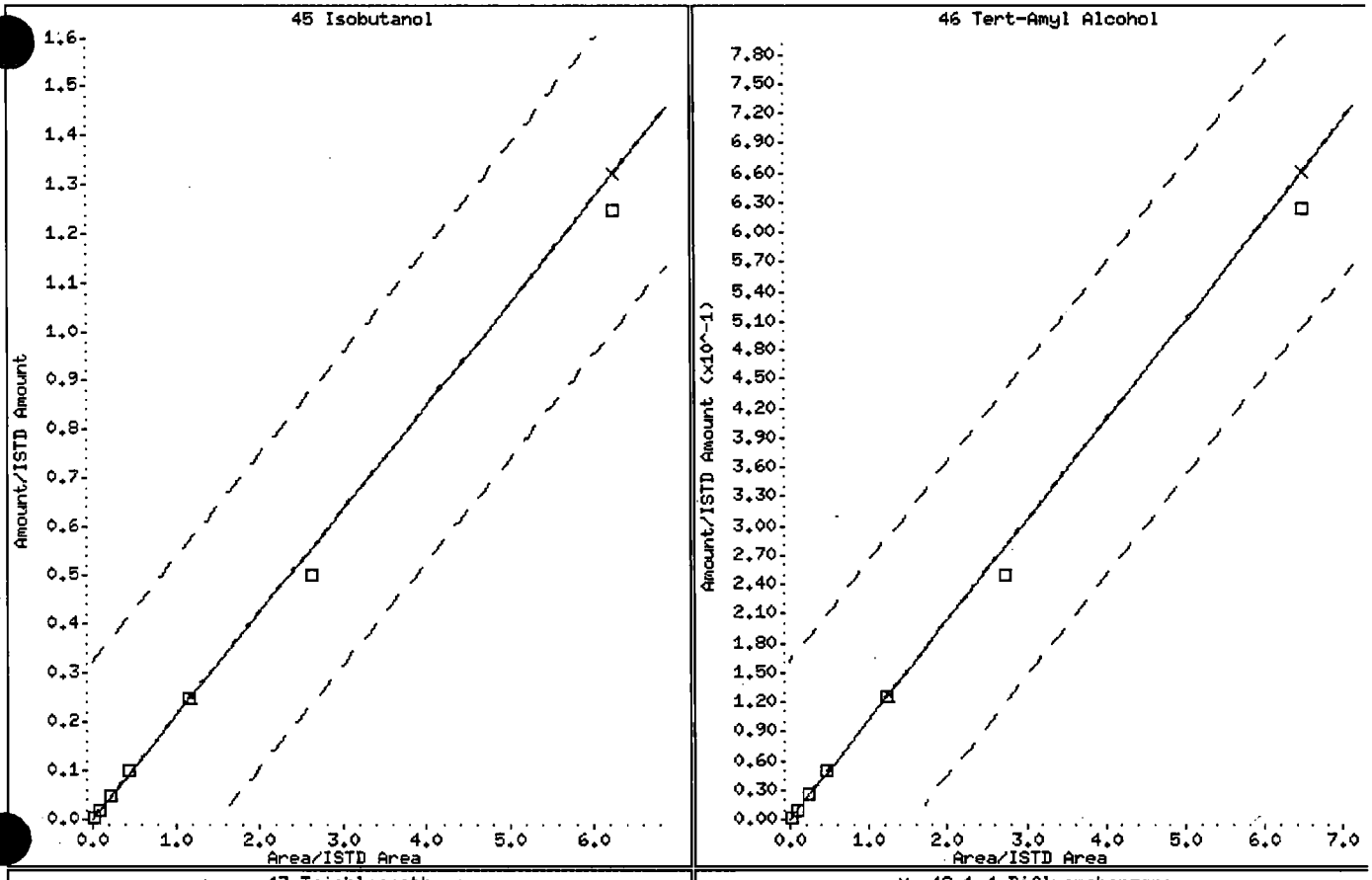

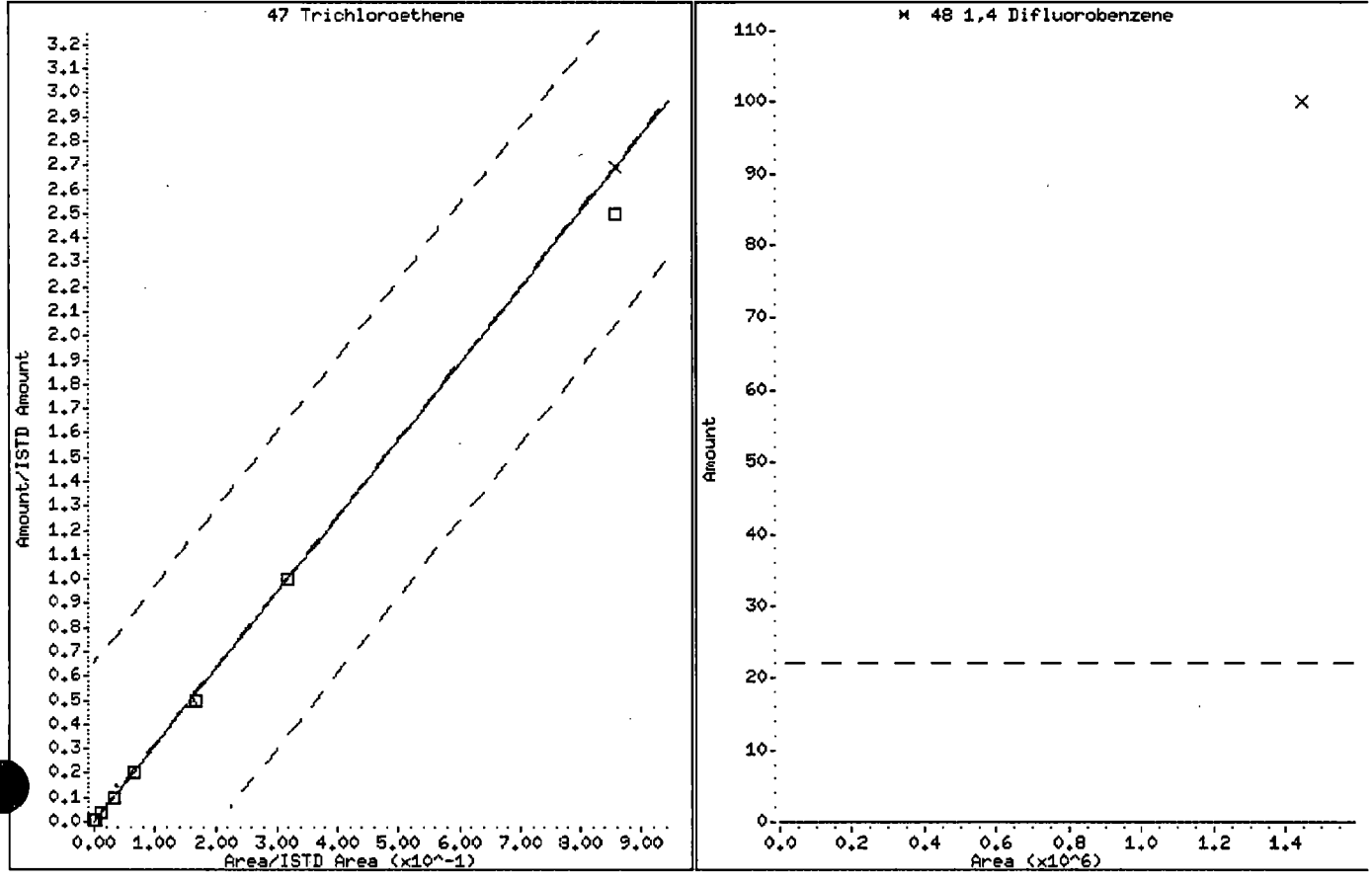

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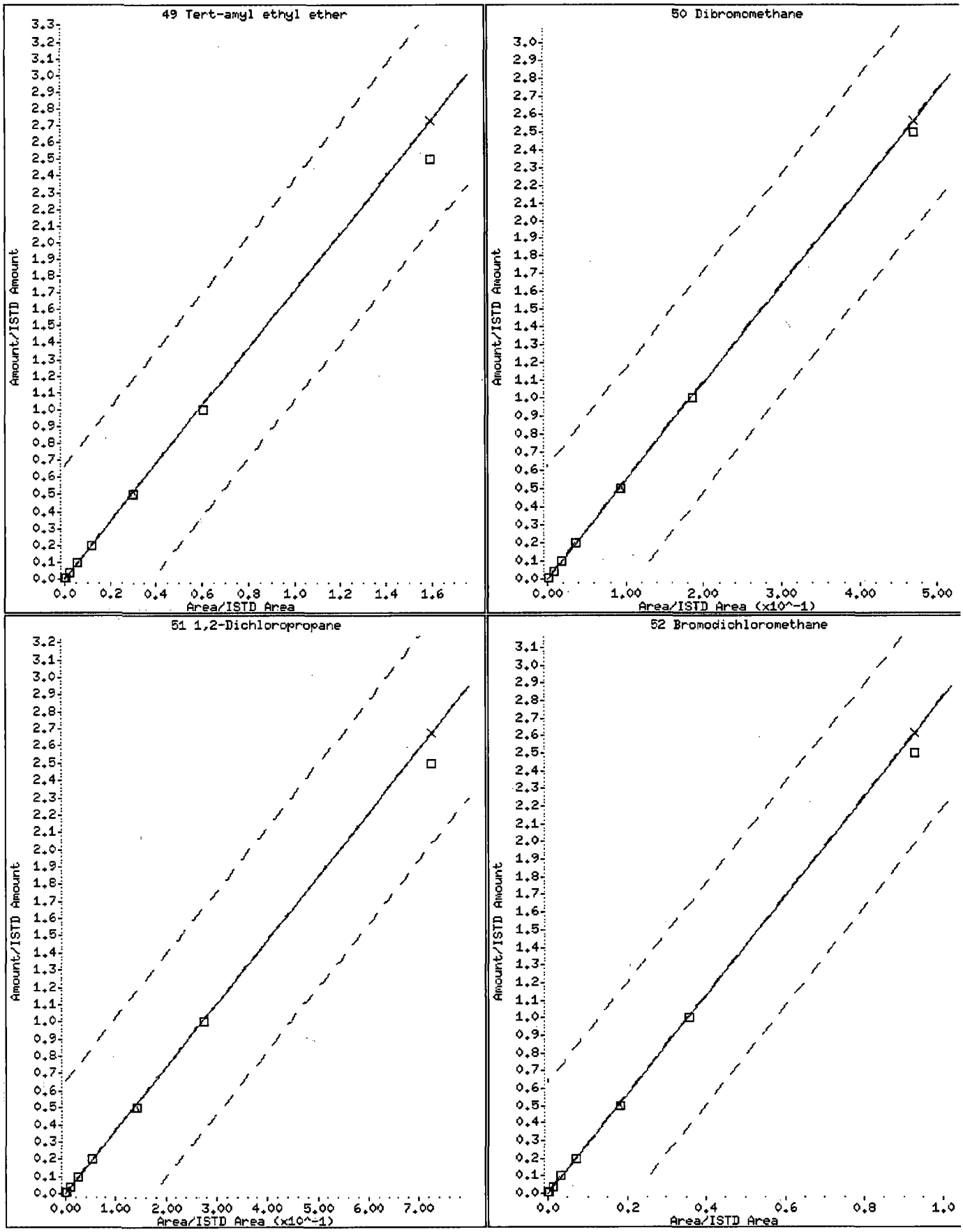

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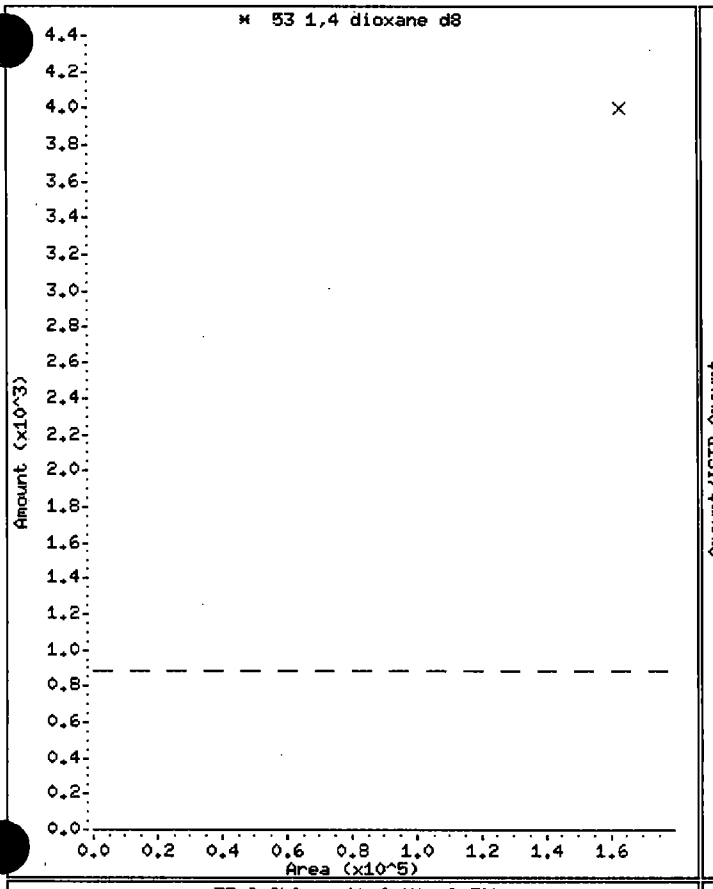

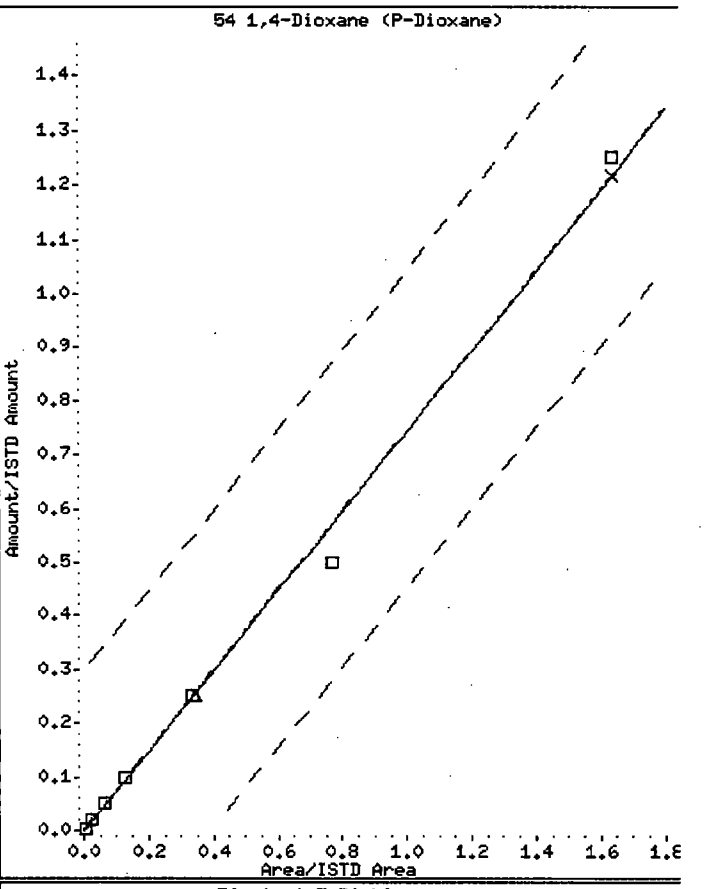

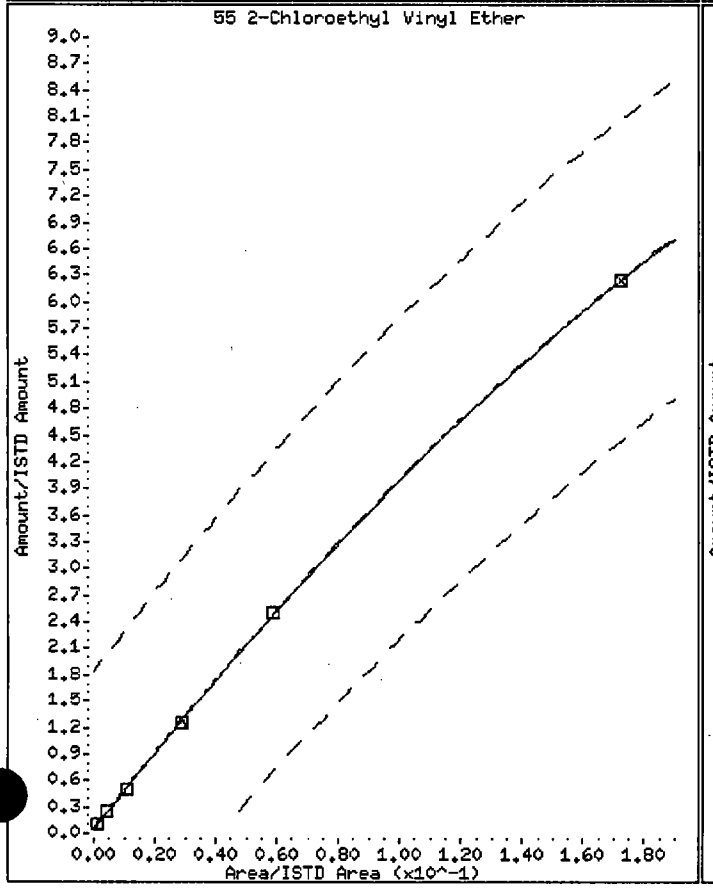

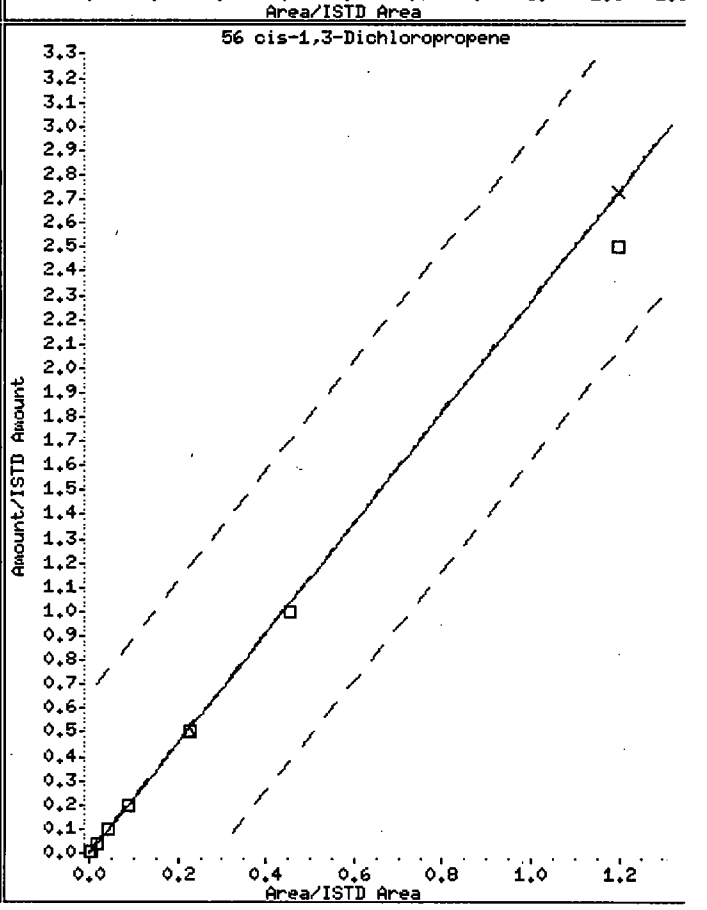

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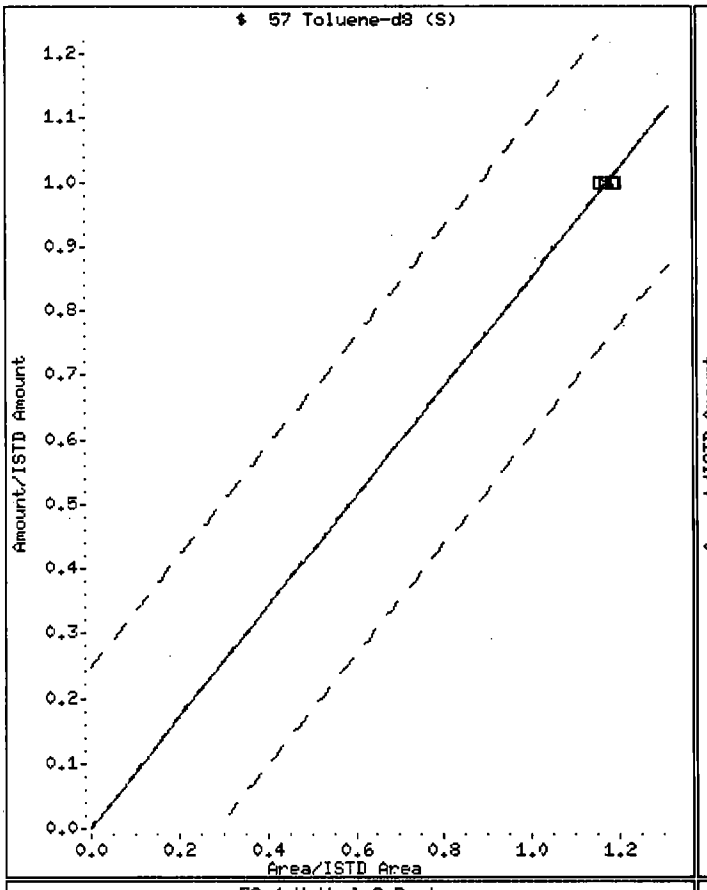

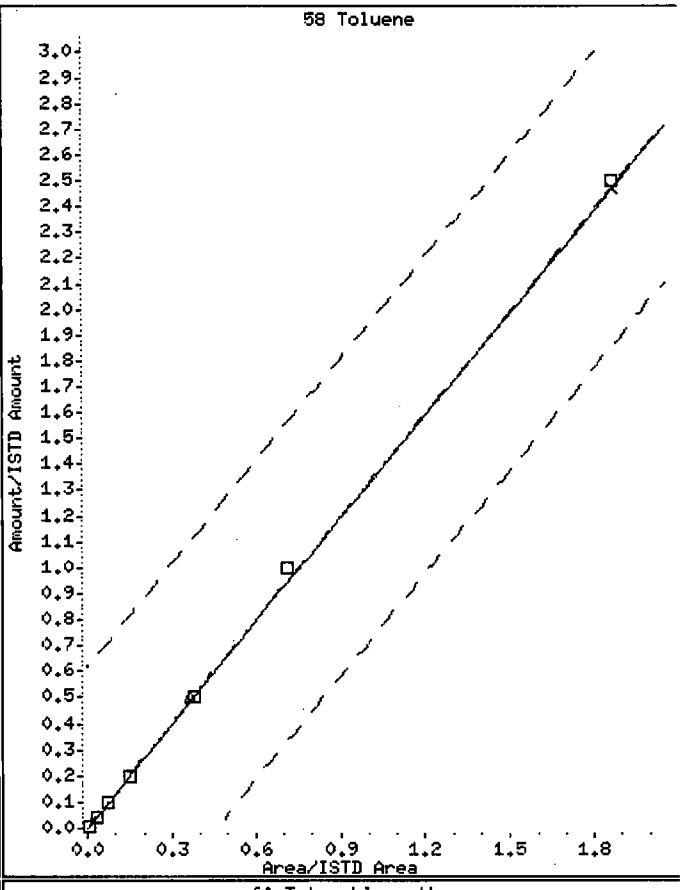

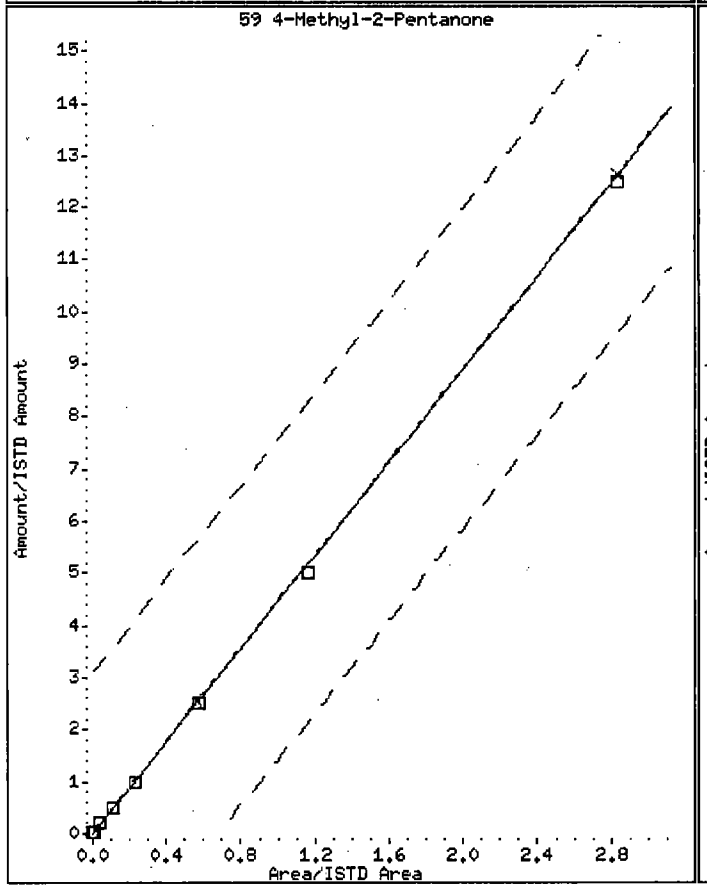

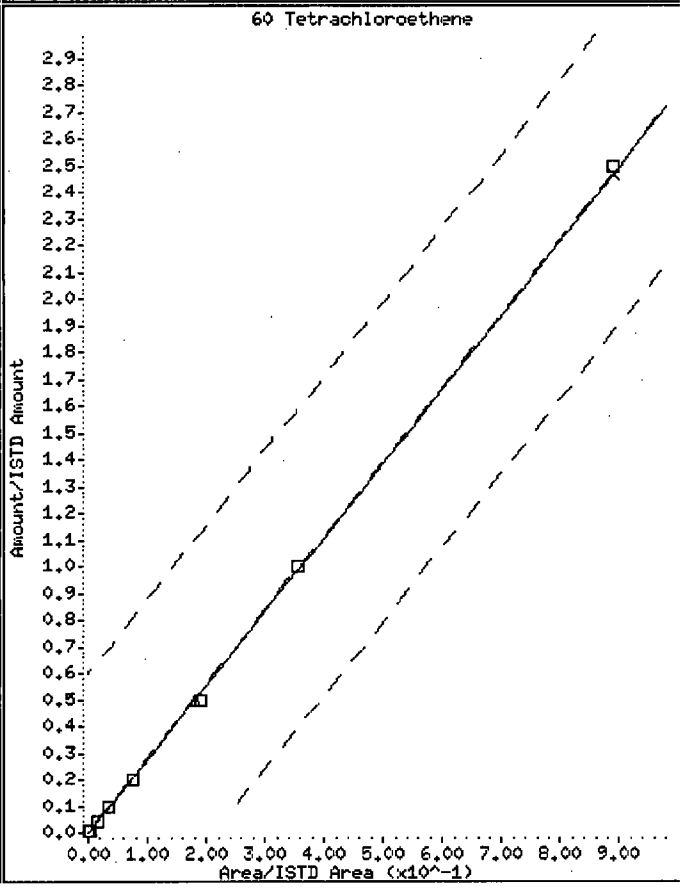

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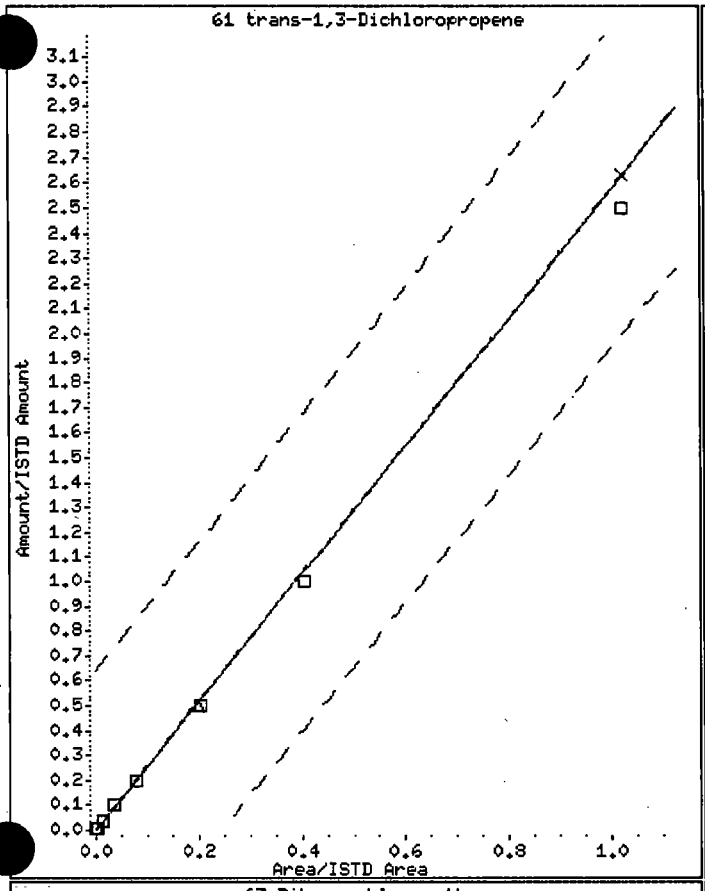

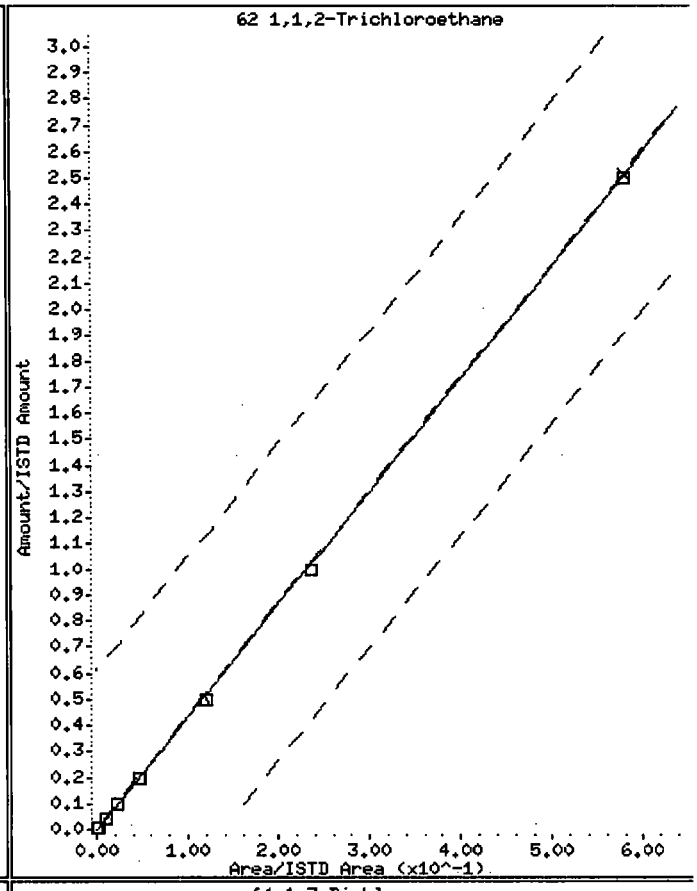

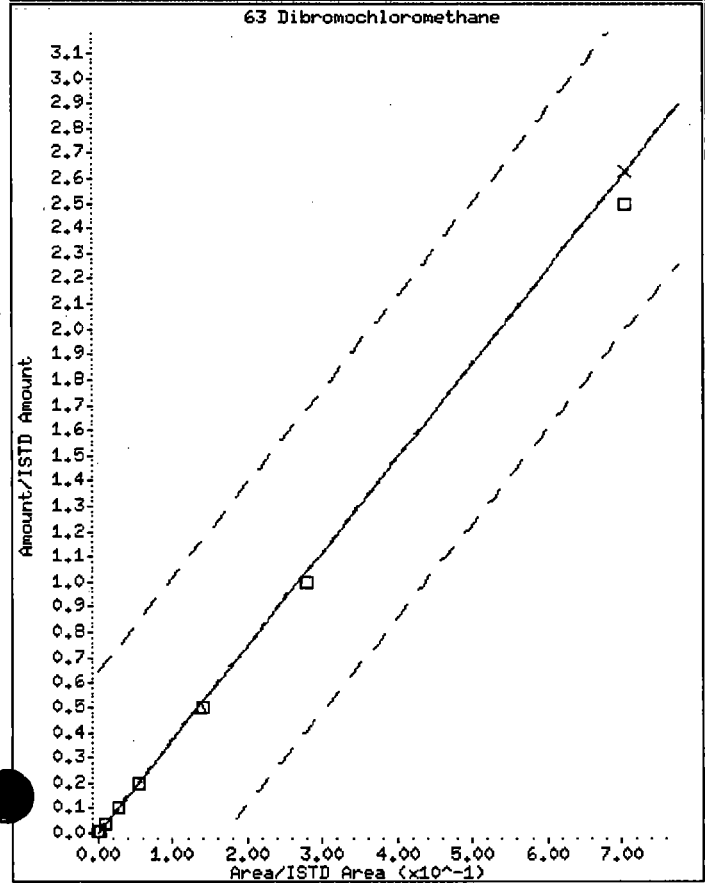

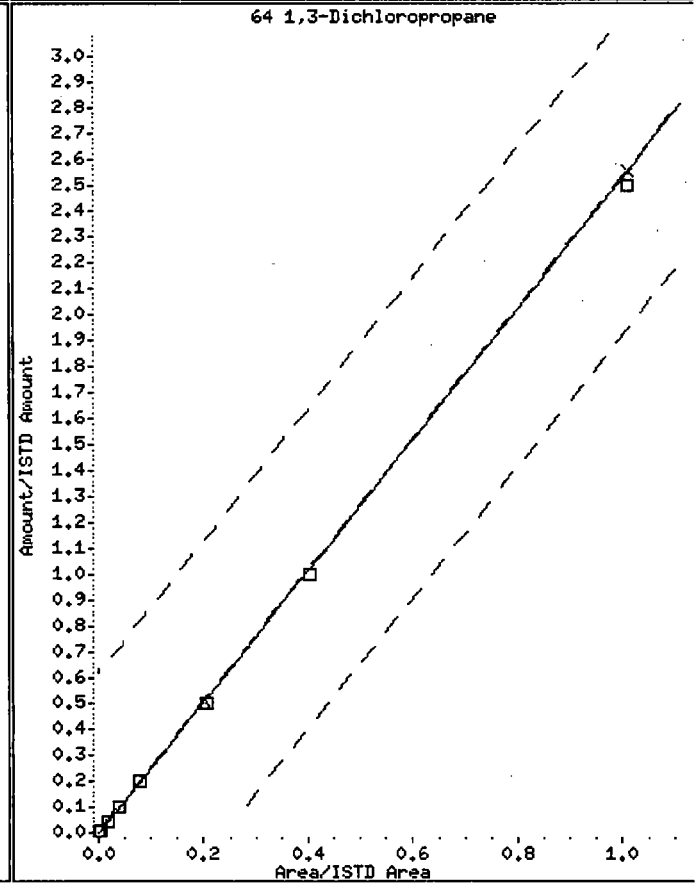

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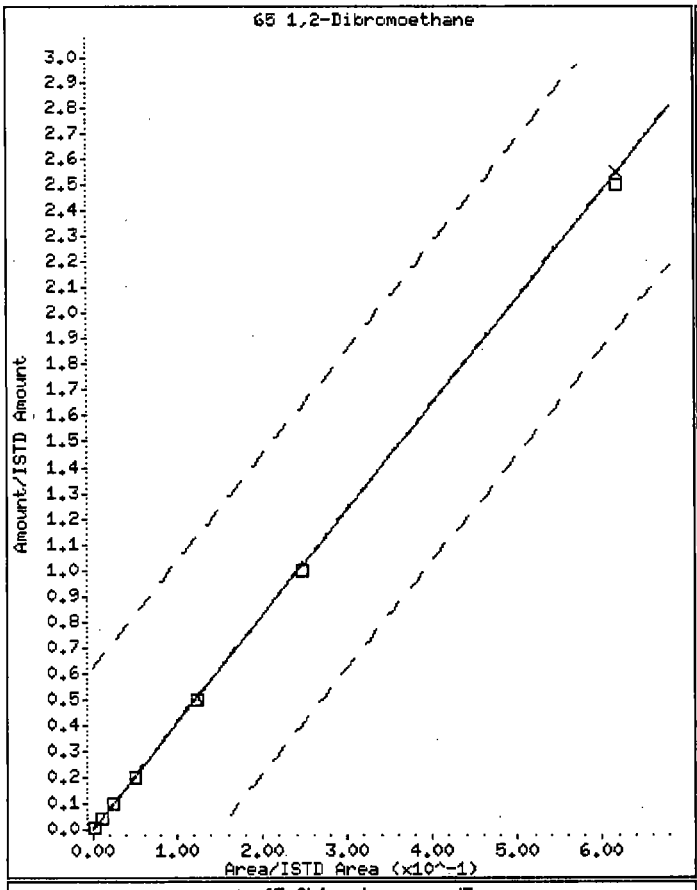
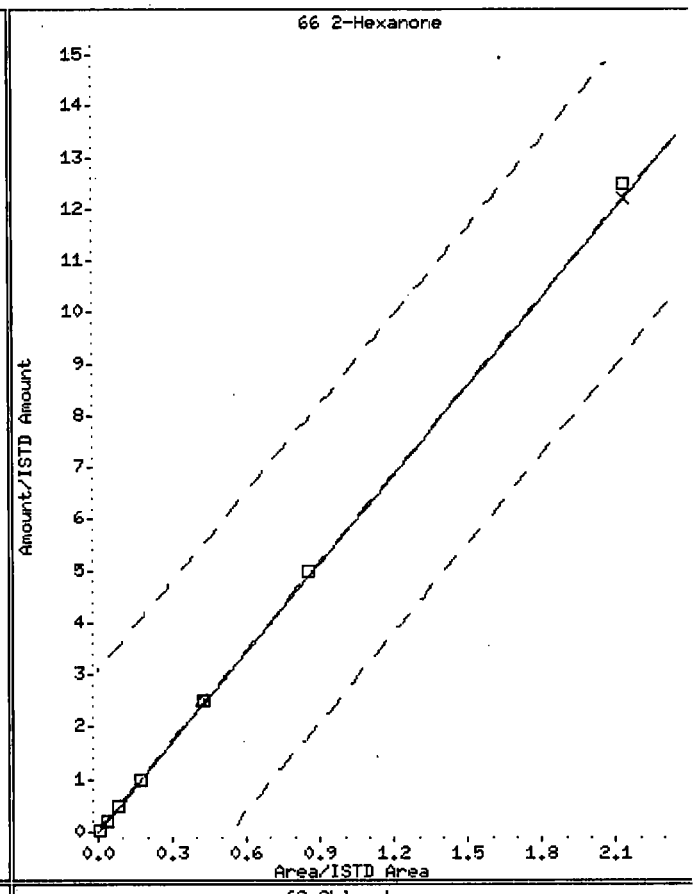
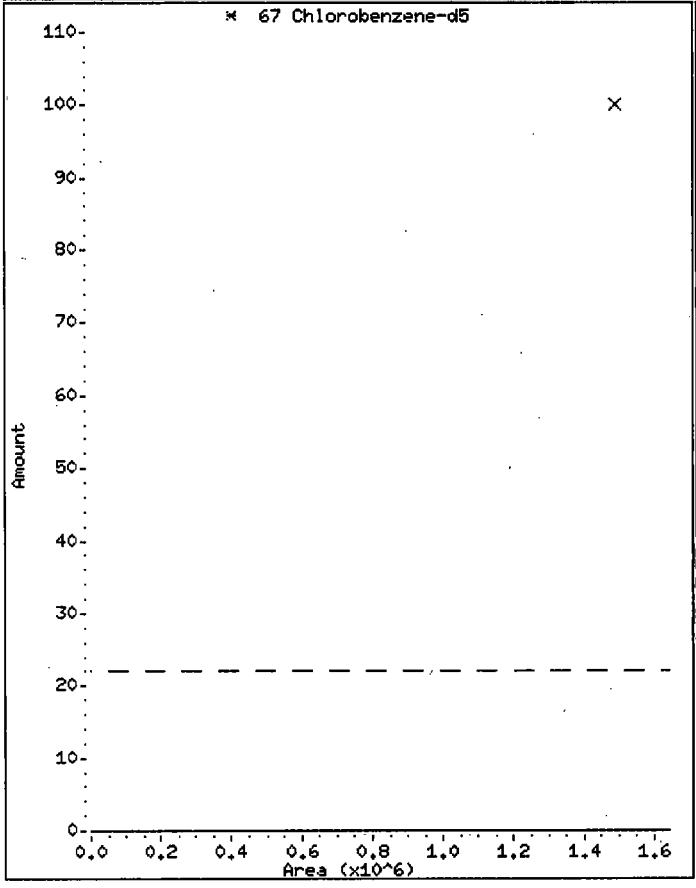
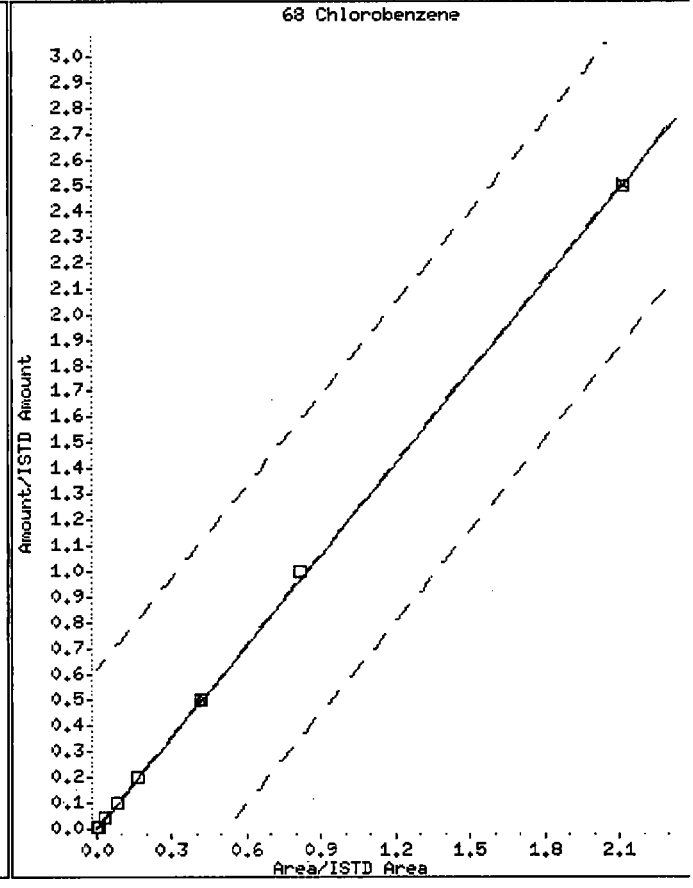
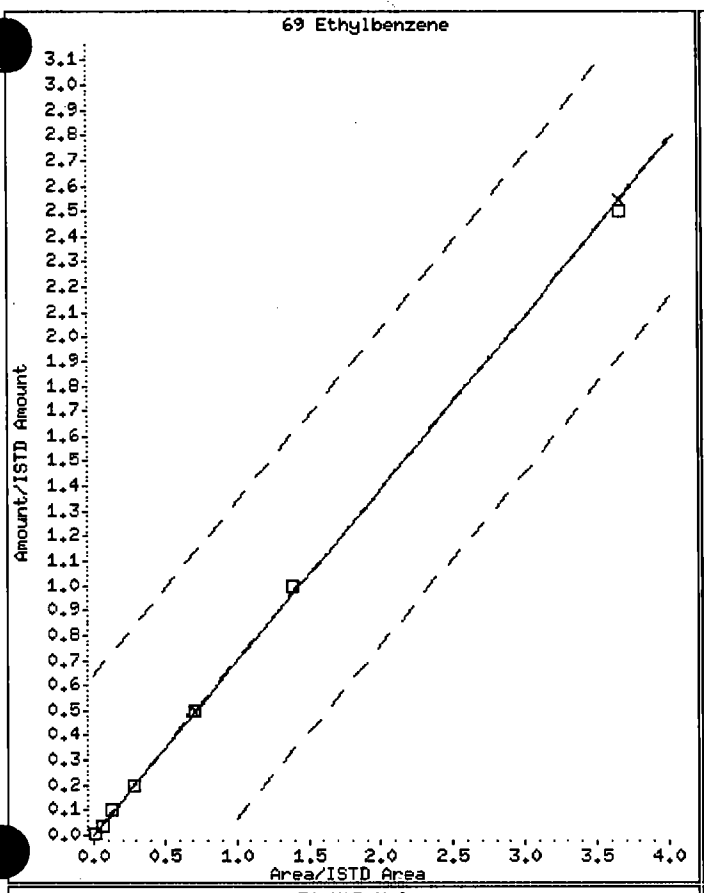


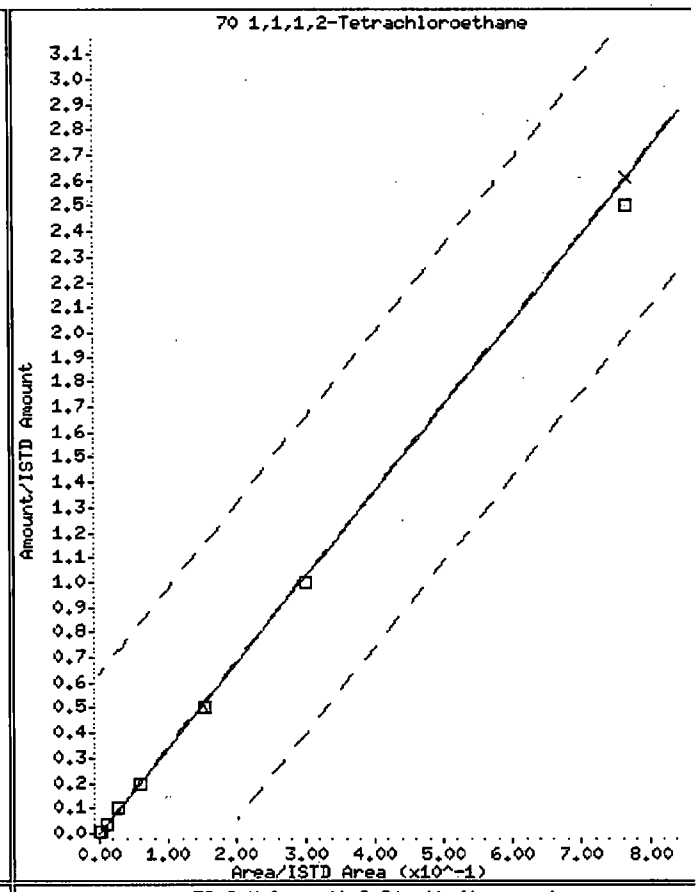


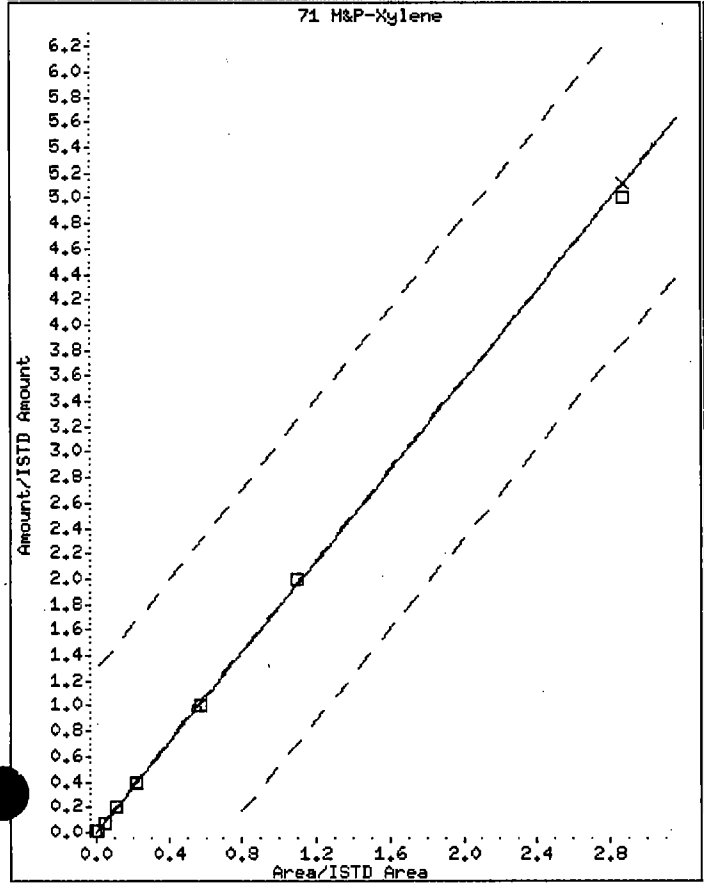


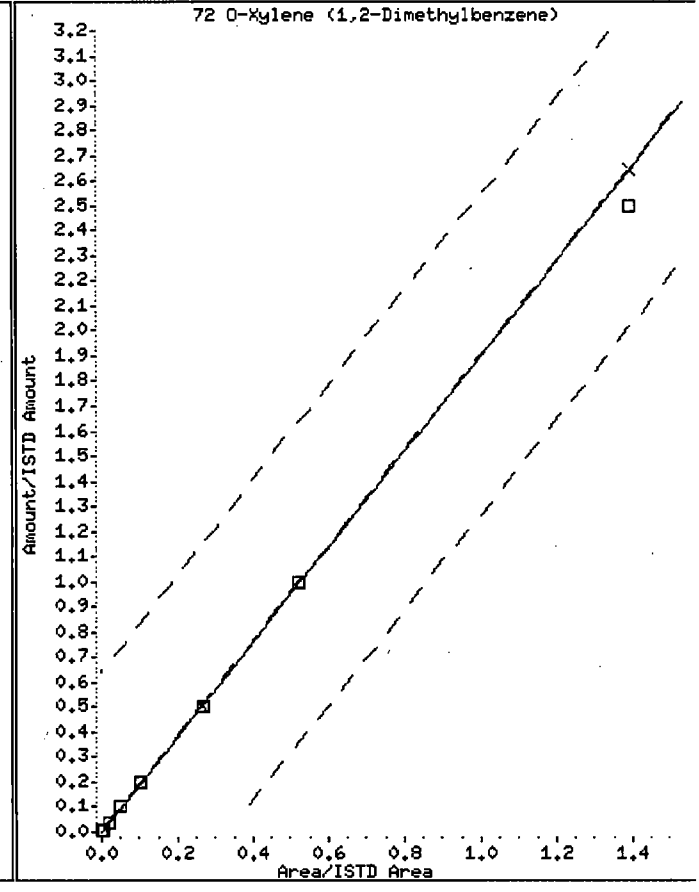


Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D

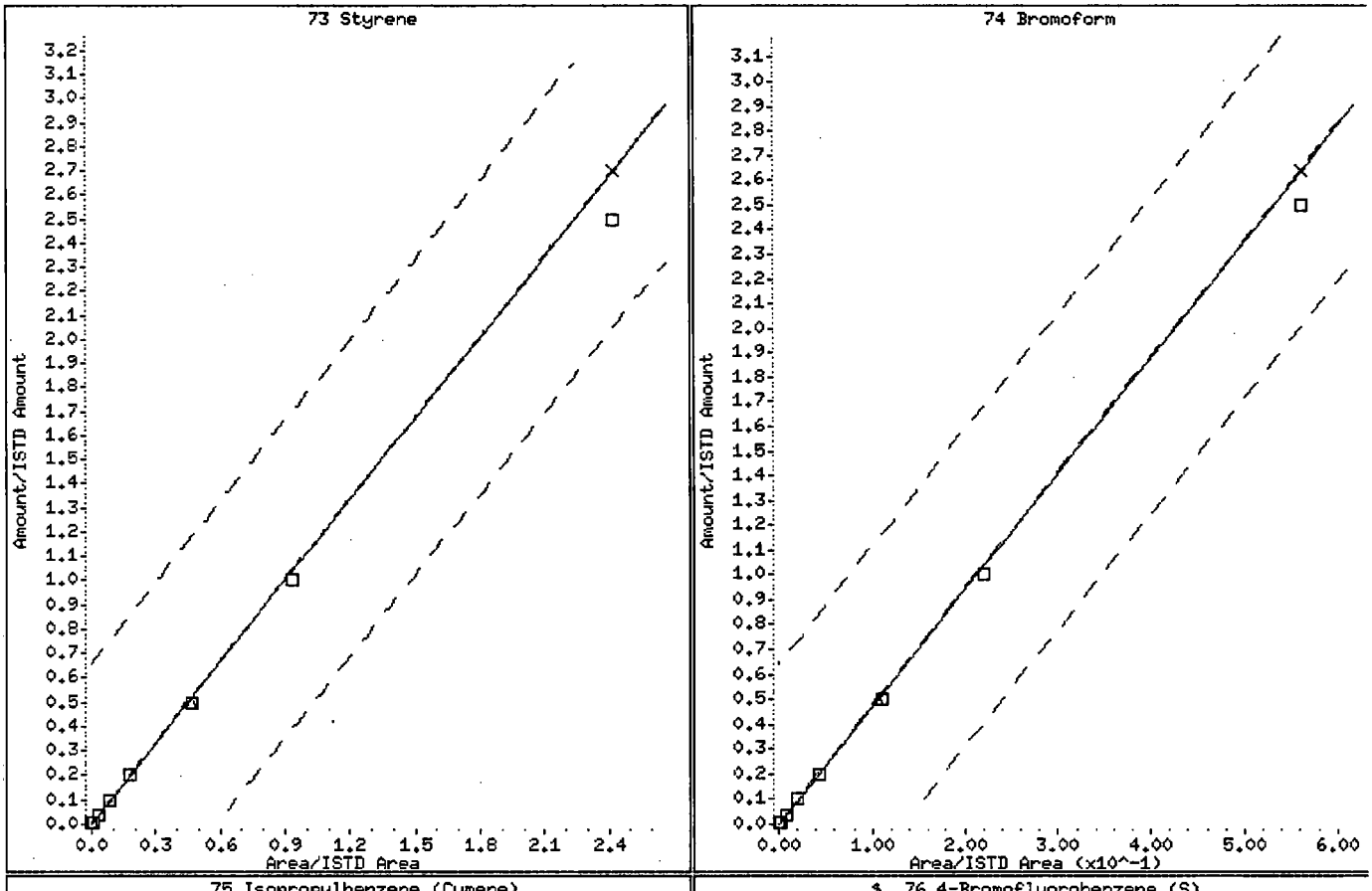


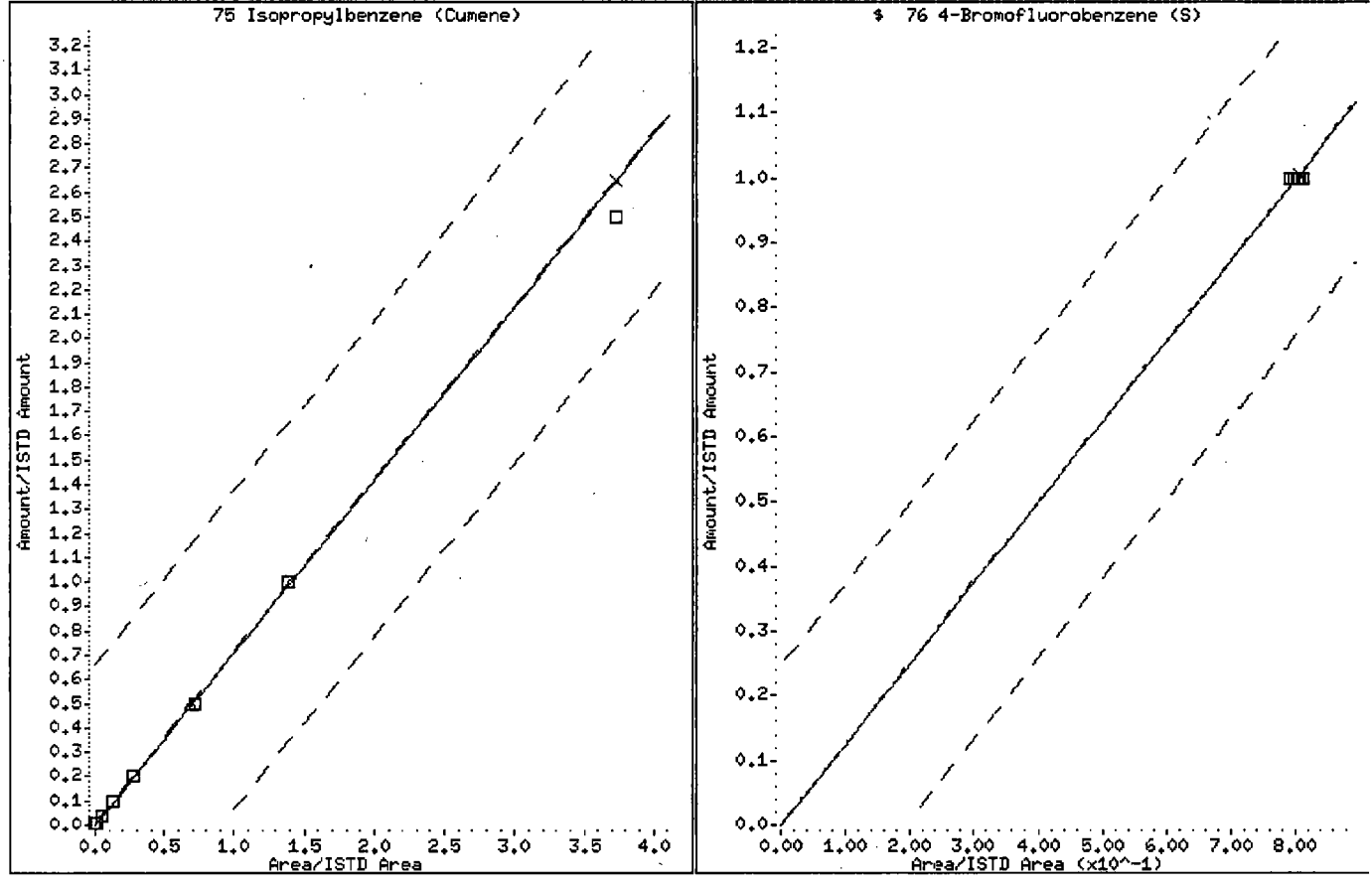




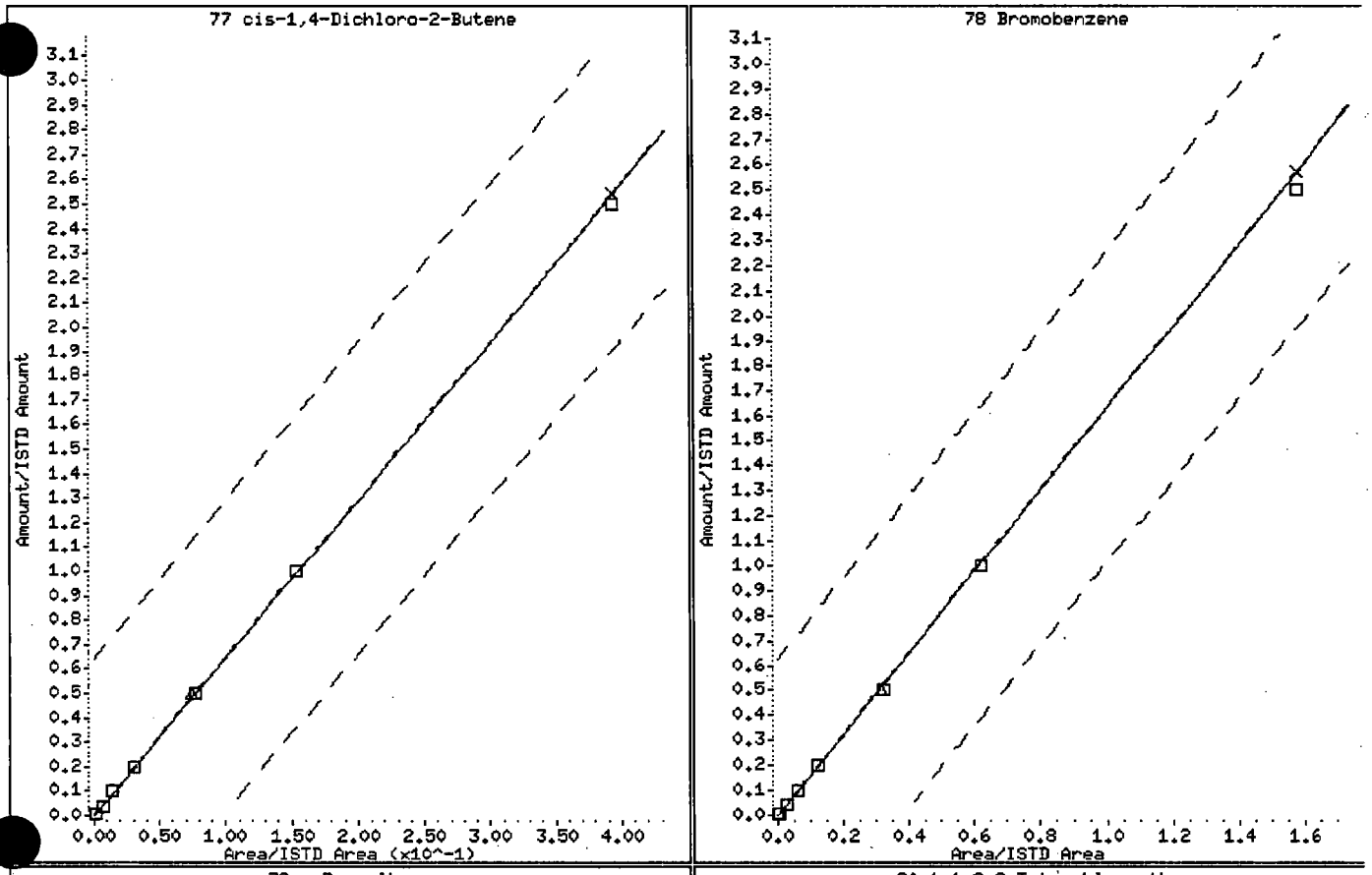


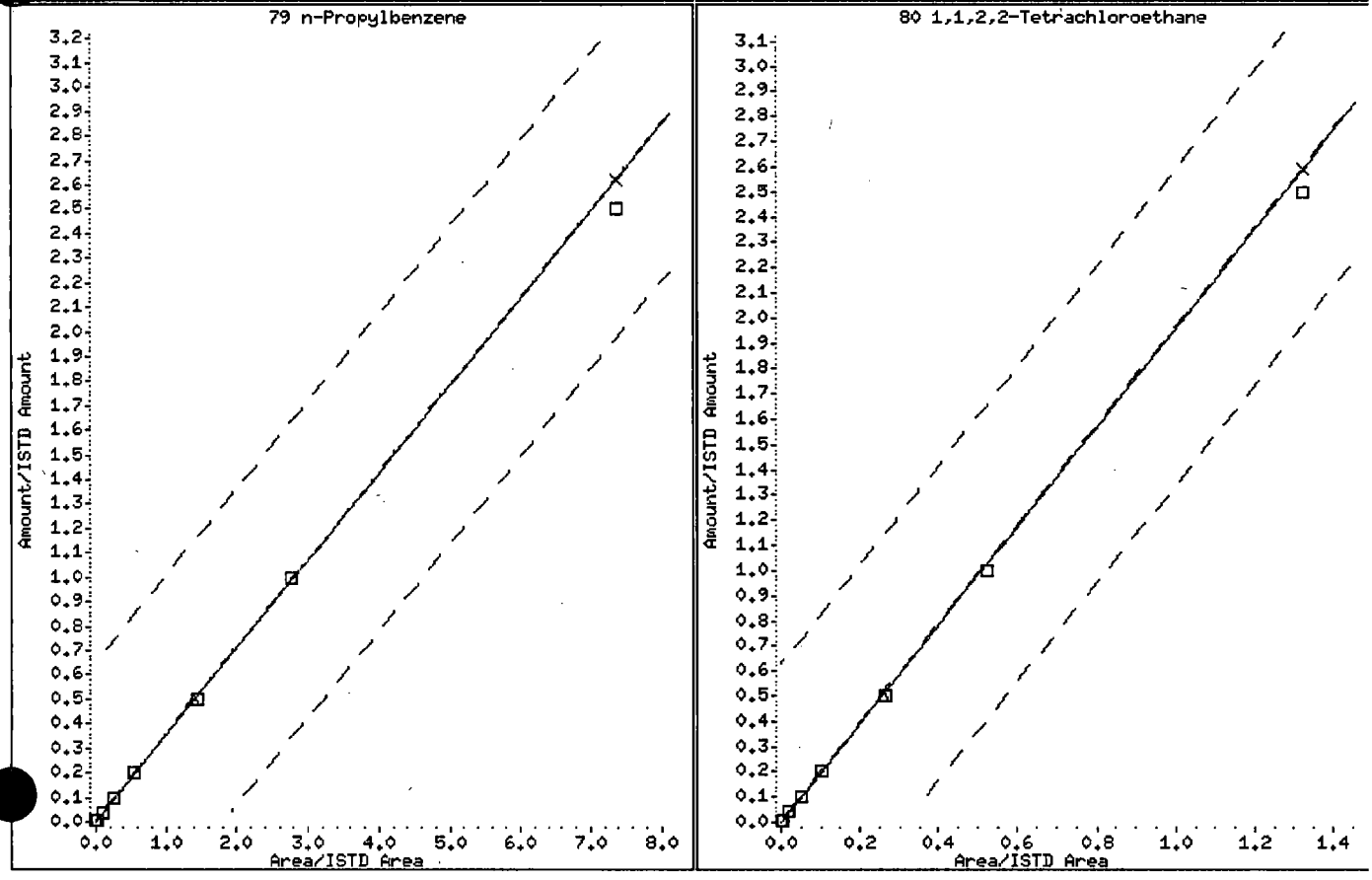
Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D





Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D





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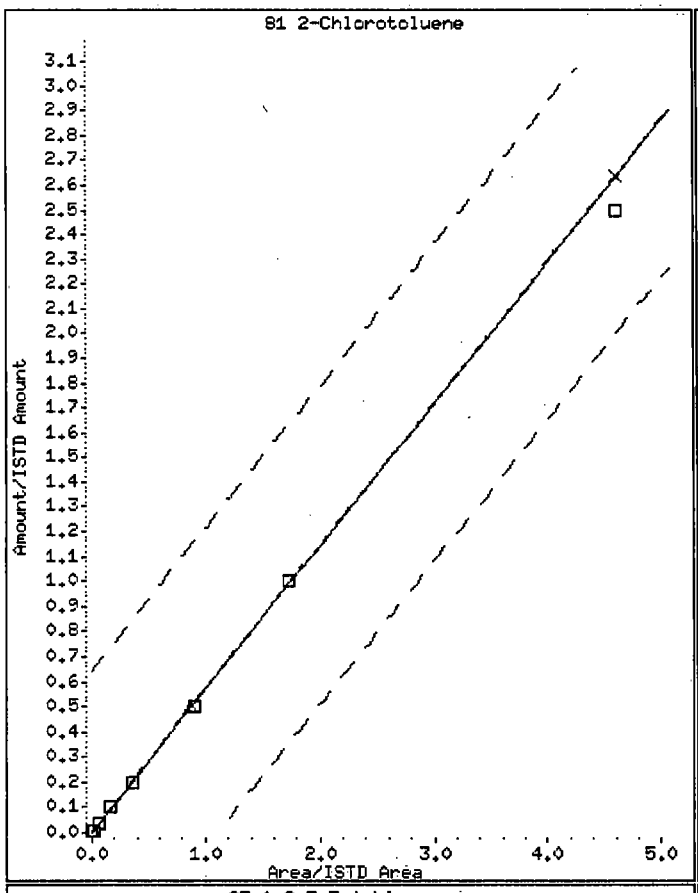

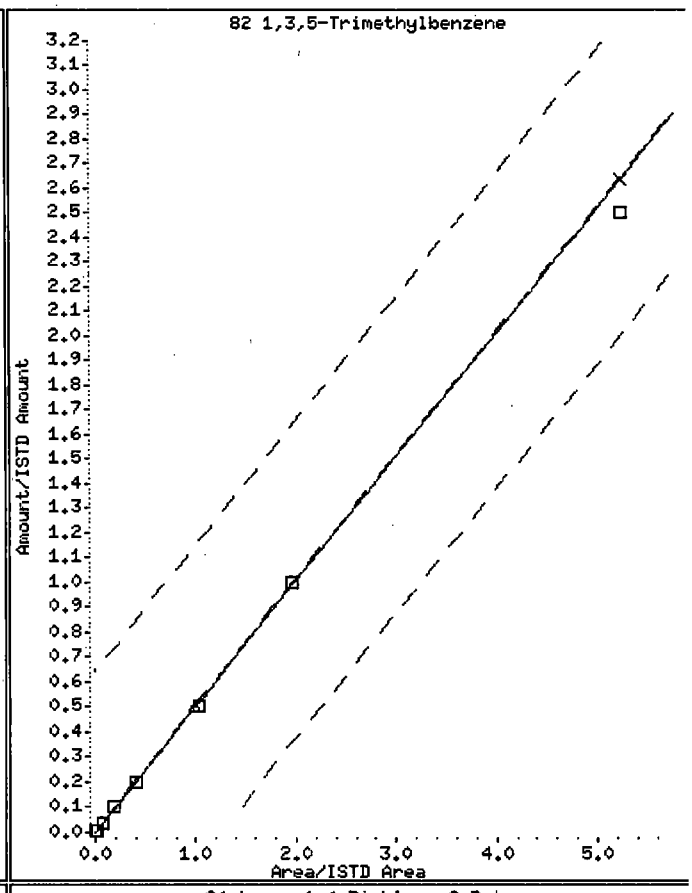

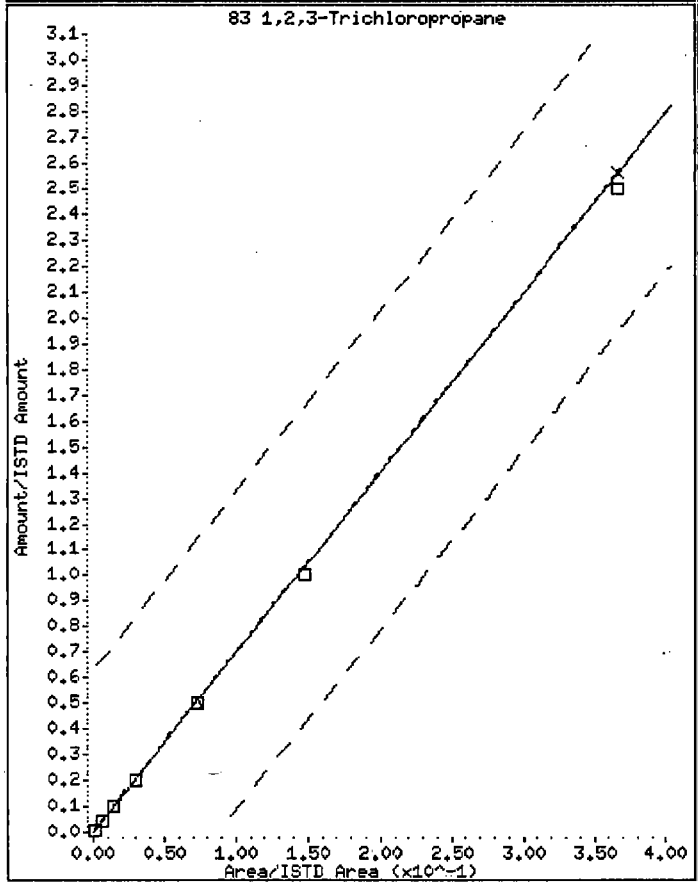

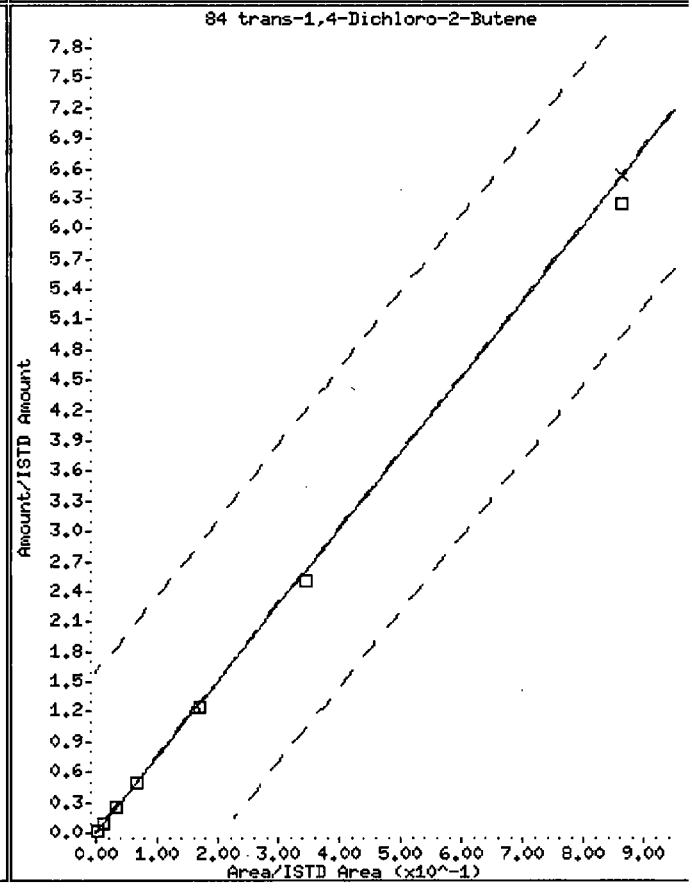

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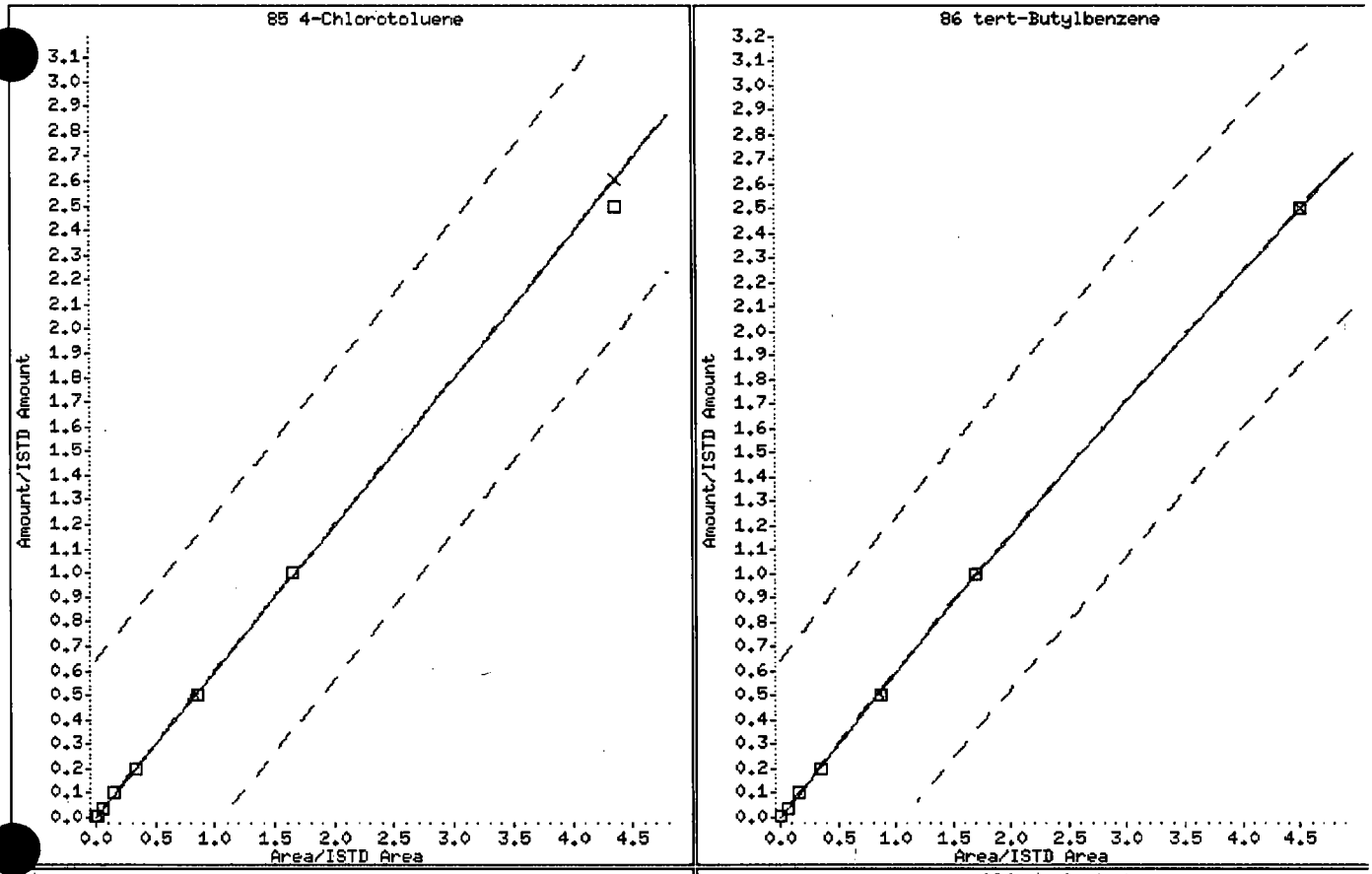

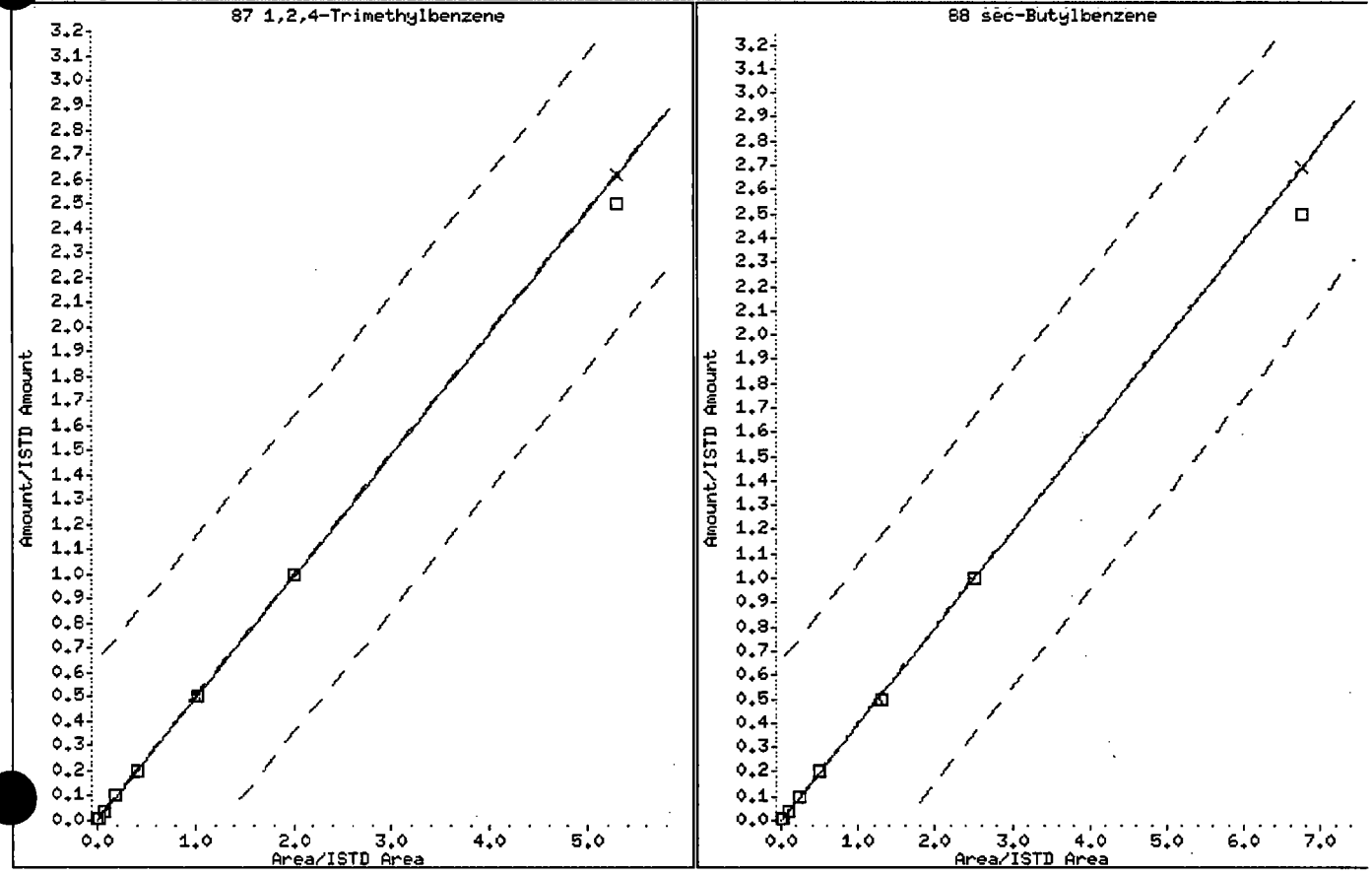

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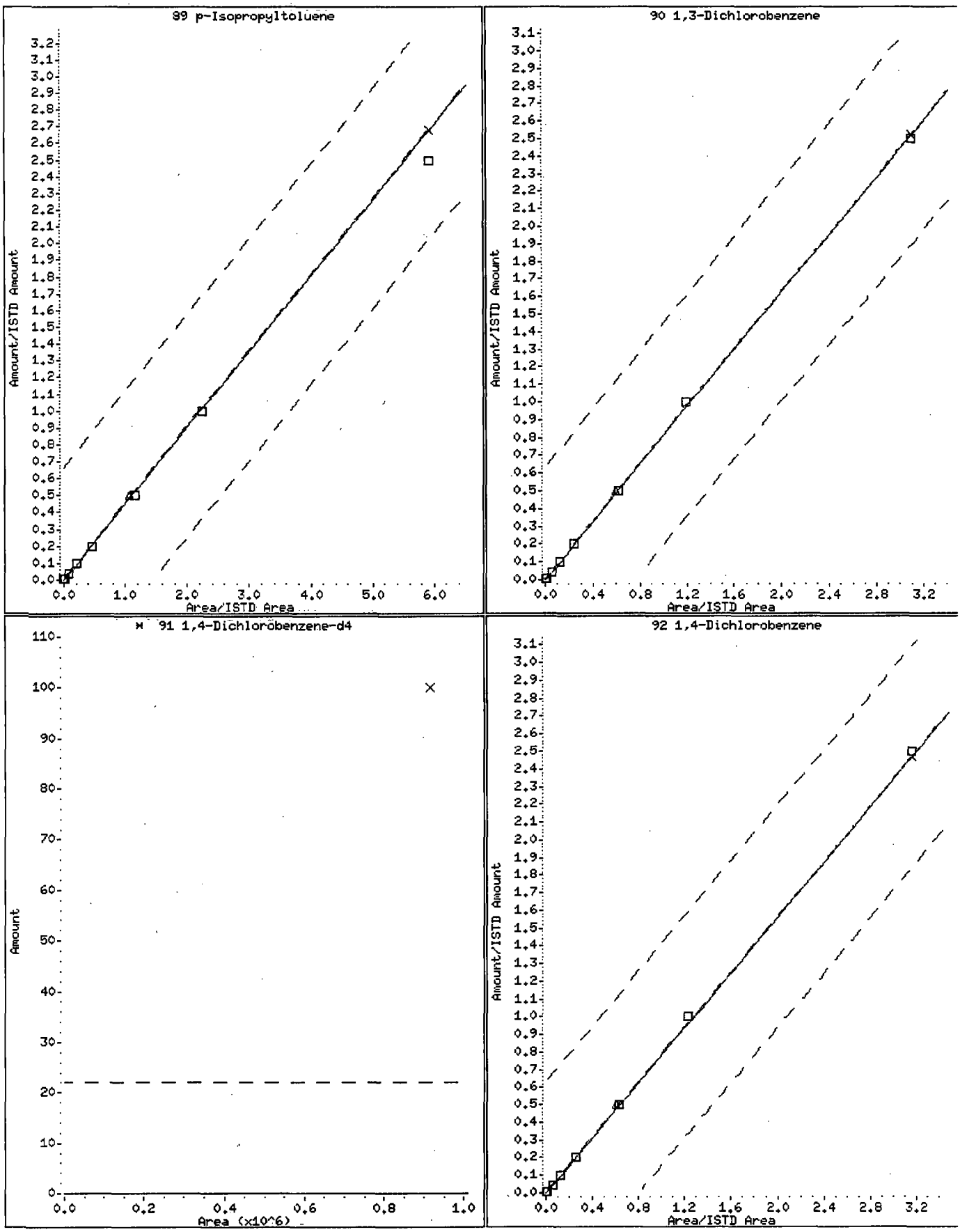

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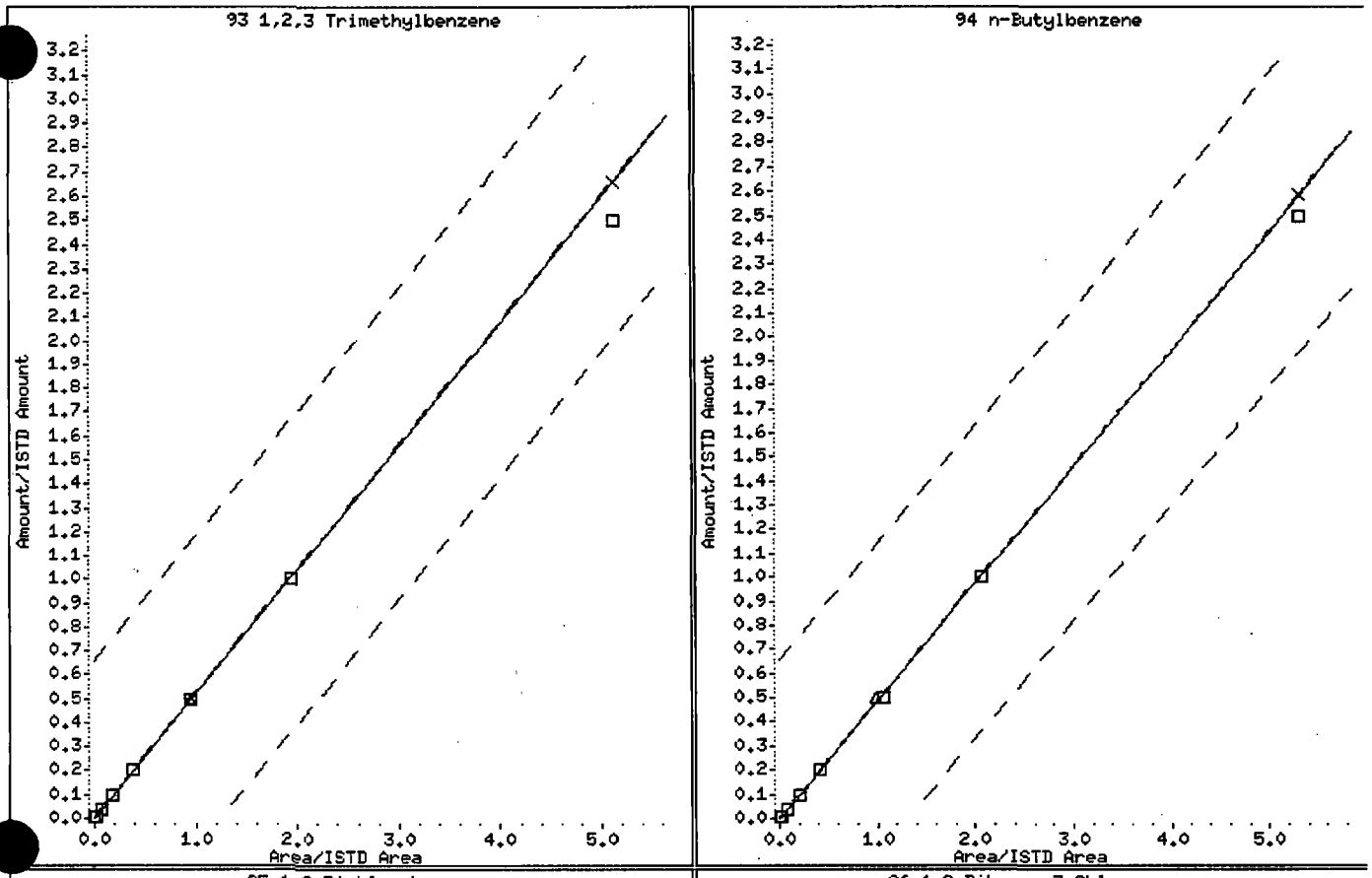
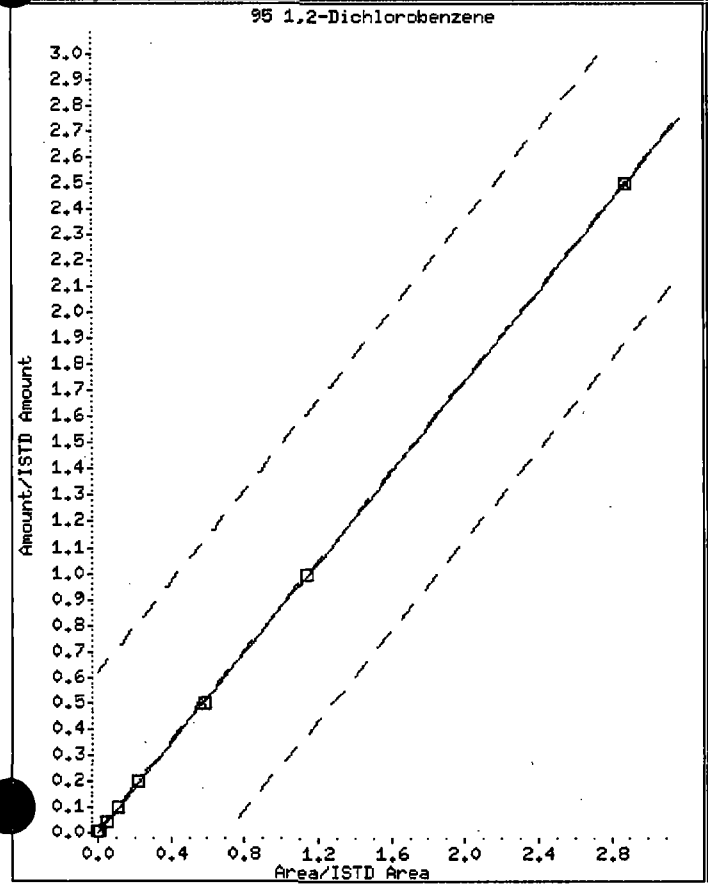
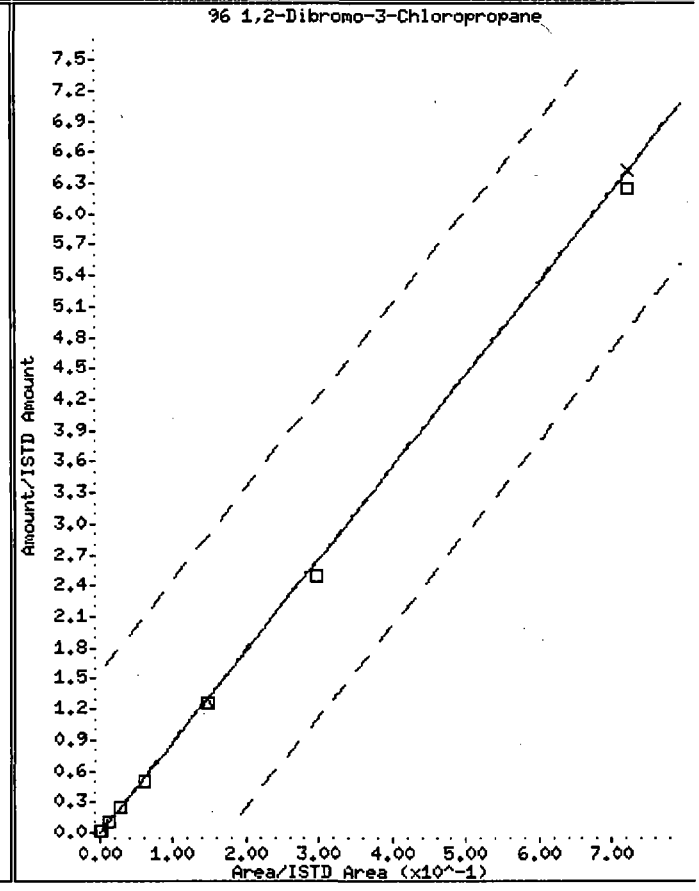
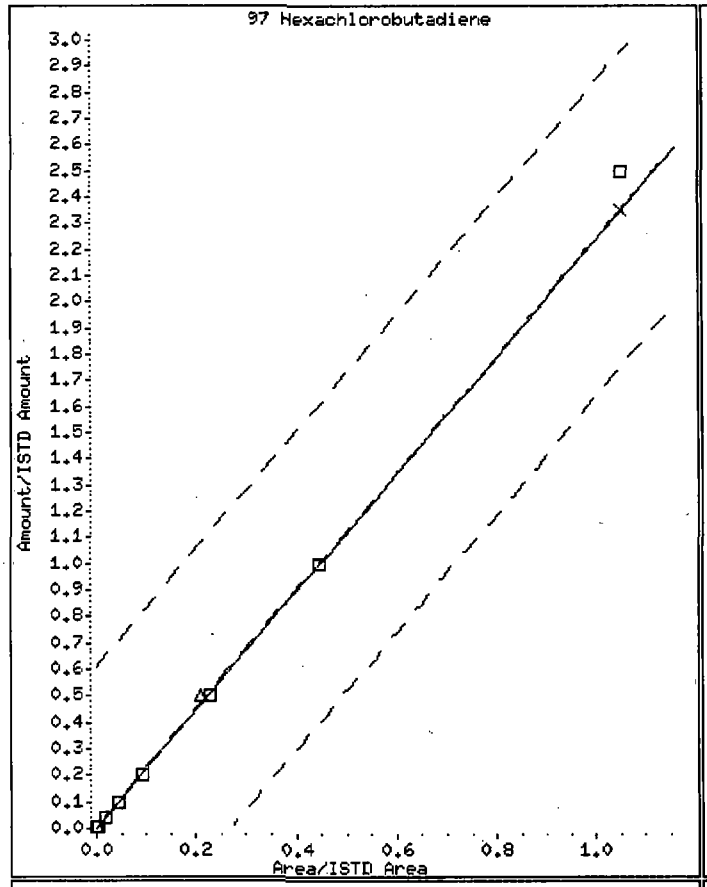
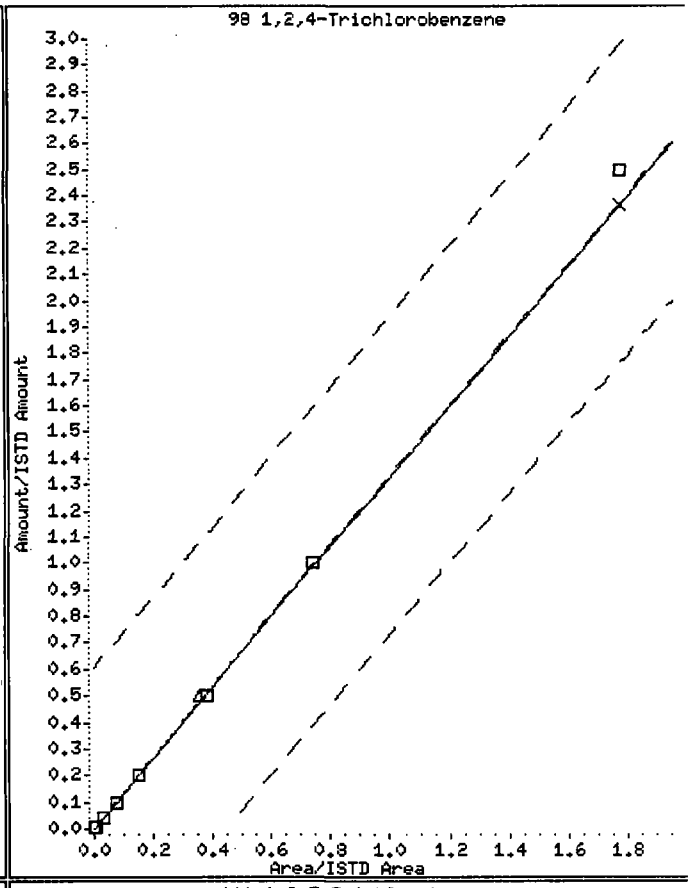


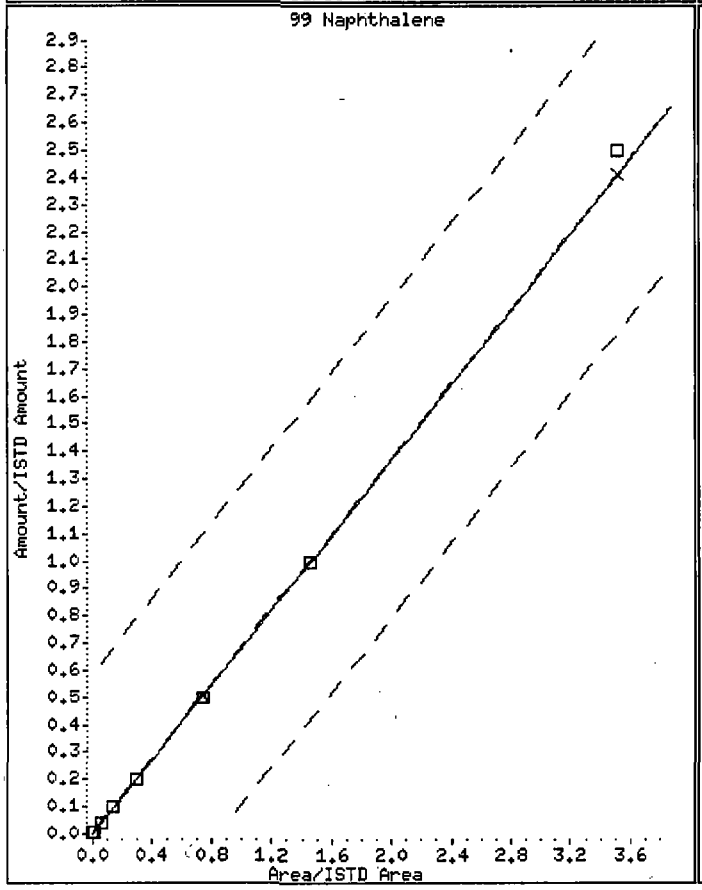


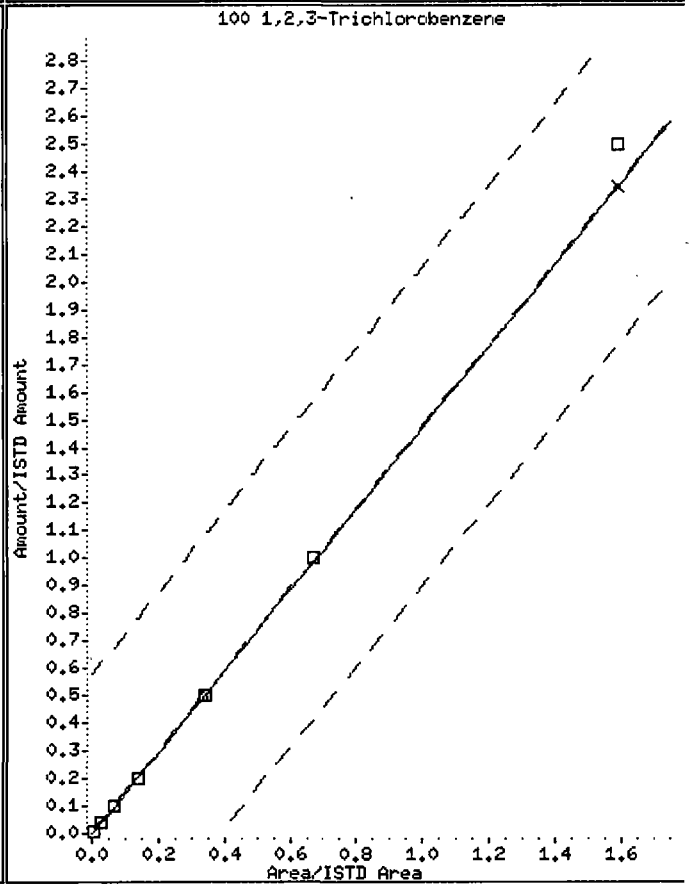


Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D

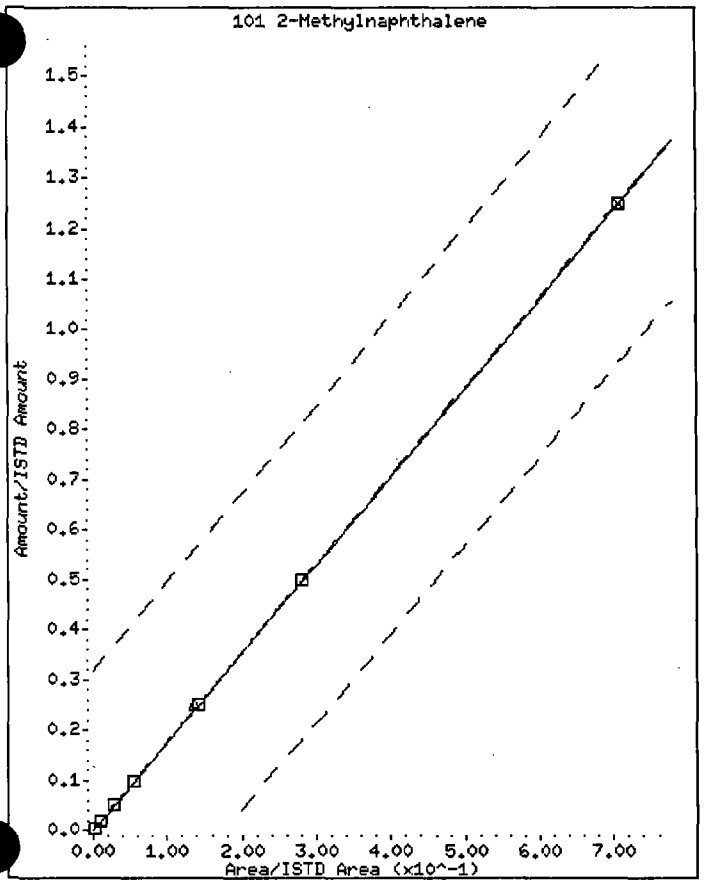








Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D



5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 02261401.D BFB Injection Date: 02/26/2014
Instrument ID: 10MSV5 BFB Injection Time: 10:24
GC Column: Restek Rtx-V ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	17.44	
75	30.00 - 66.00% of mass 95	47.42	
96	5.00 - 9.00% of mass 95	6.48	
173	Less than 2.00% of mass 174	0.00	(0.00)
174	50.00 - 120.00% of mass 95	87.82	
175	4.00 - 9.00% of mass 174	6.89	(7.85)
176	93.00 - 101.00% of mass 174	86.52	(98.52)
177	5.00 - 9.00% of mass 176	5.51	(6.37)

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	IC0.210098-49	IC0.210098-49	02261406.D	02/26/2014	12:09
2	IC0.410098-49	IC0.410098-49	02261407.D	02/26/2014	12:24
3	IC110098-49	IC110098-49	02261408.D	02/26/2014	12:39
4	IC410098-49	IC410098-49	02261409.D	02/26/2014	12:54
5	IC1010098-49	IC1010098-49	02261410.D	02/26/2014	13:08
6	IC2010098-49	IC2010098-49	02261411.D	02/26/2014	13:23
7	IC5010098-49	IC5010098-49	02261412.D	02/26/2014	13:38
8	IC10010098-49	IC10010098-49	02261413.D	02/26/2014	13:53
9	IC25010098-49	IC25010098-49	02261414.D	02/26/2014	14:08
10	ICV209525-595	ICV209525-595	02261418.D	02/26/2014	16:52

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261401.D

Date : 26-FEB-2014 10:24

Client ID: BFB

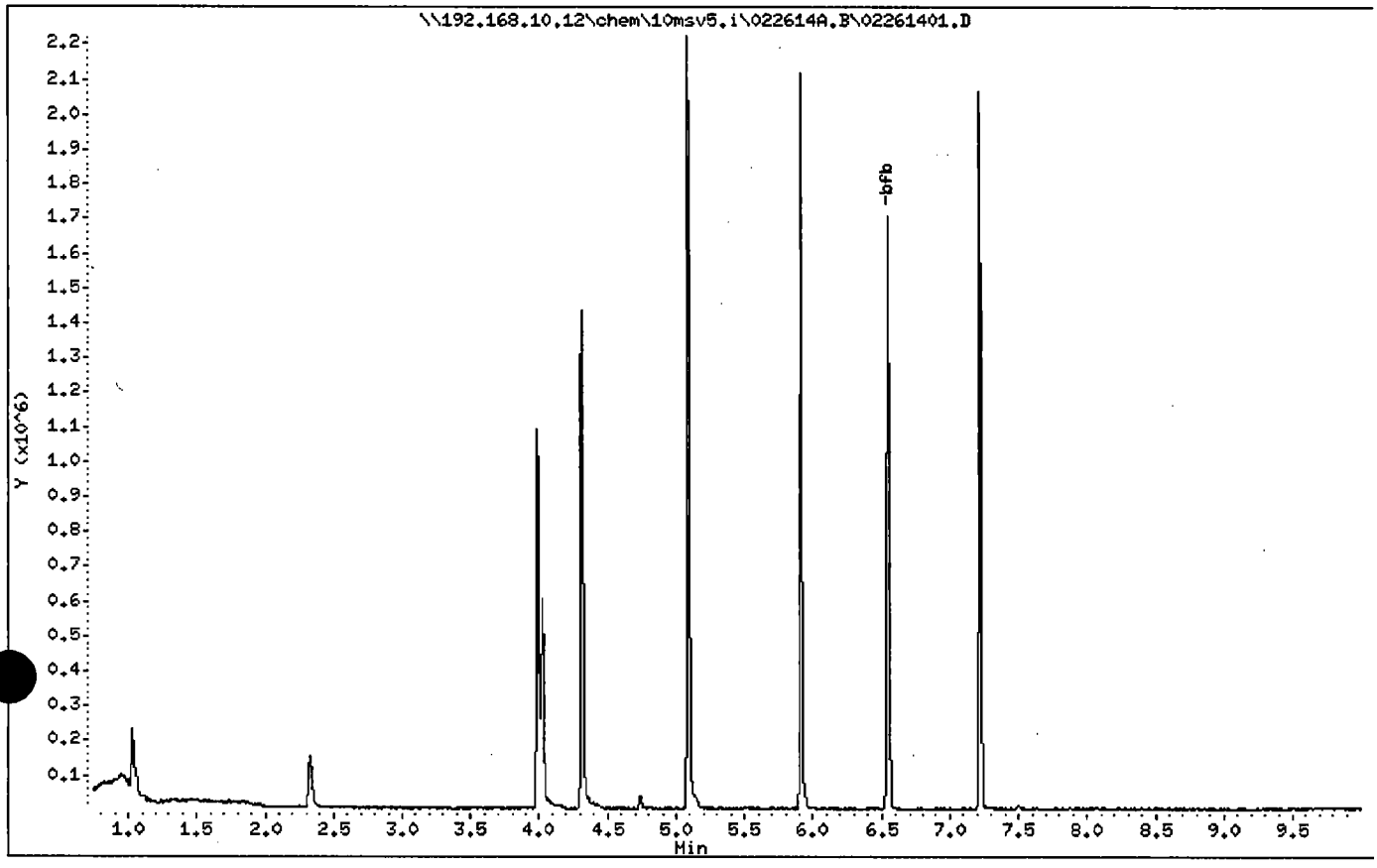
Instrument: 10msv5.i

Sample Info: TUNE

Operator: SH2

Column phase: Restek Rtx-VMS

Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261401.D

Date : 26-FEB-2014 10:24

Client ID: BFB

Instrument: 10msv5.i

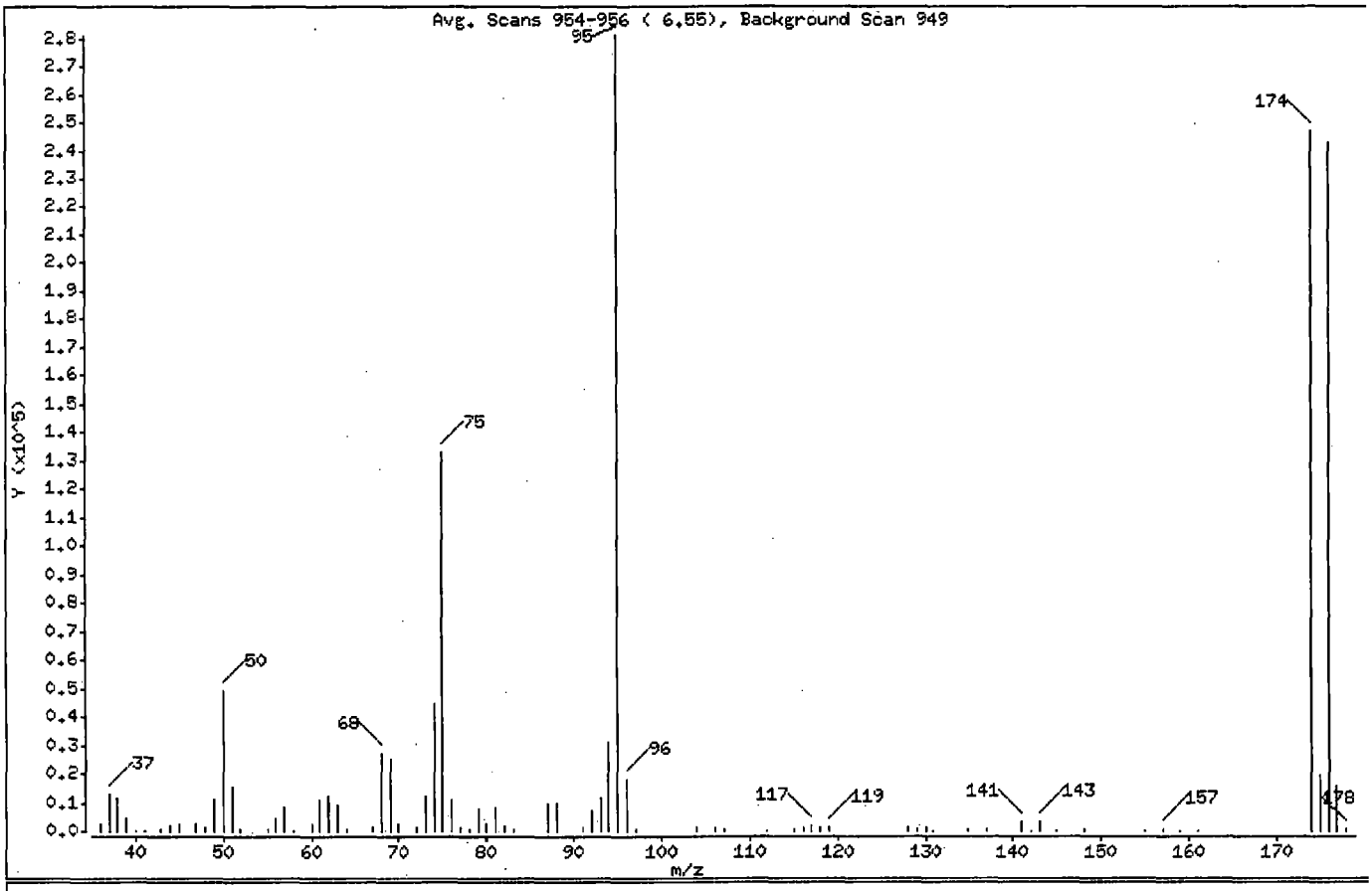
Sample Info: TUNE

Operator: SH2

Column phase: Restek Rtx-VMS

Column diameter: 0.18

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	17.44
75	30.00 - 66.00% of mass 95	47.42
96	5.00 - 9.00% of mass 95	6.48
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	87.82
175	4.00 - 9.00% of mass 174	6.89 (7.85)
176	93.00 - 101.00% of mass 174	86.52 (98.52)
177	5.00 - 9.00% of mass 176	5.51 (6.37)

Date : 26-FEB-2014 10:24

Client ID: BFB Instrument: 10msv5.i

Sample Info: TUNE

Operator: SH2

Column phase: Restek Rtx-VMS Column diameter: 0.18

Data File: 02261401.D

Spectrum: Avg. Scans 954-956 (6.55), Background Scan 949

Location of Maximum: 95.00

Number of points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2504	61.00	11202	87.00	9861	130.00	1305
37.00	13092	62.00	12114	88.00	9741	131.00	229
38.00	11730	63.00	9090	91.00	1276	135.00	353
39.00	4362	64.00	694	92.00	7392	137.00	416
40.00	238	67.00	1138	93.00	11352	141.00	2938
41.00	136	68.00	27368	94.00	30800	142.00	206
43.00	710	69.00	25296	95.00	281024	143.00	3273
44.00	1744	70.00	2464	96.00	18208	145.00	196
45.00	2283	72.00	1474	97.00	751	148.00	686
47.00	2574	73.00	12025	104.00	1339	155.00	237
48.00	1562	74.00	44744	106.00	1365	157.00	424
49.00	10736	75.00	133248	107.00	408	159.00	212
50.00	49024	76.00	10869	112.00	204	161.00	174
51.00	15295	77.00	1523	115.00	364	174.00	246784
52.00	781	78.00	648	116.00	1000	175.00	19376
55.00	805	79.00	7816	117.00	1631	176.00	243136
56.00	4385	80.00	2482	118.00	1044	177.00	15496
57.00	8250	81.00	8298	119.00	1562	178.00	587
58.00	204	82.00	1859	128.00	1176		
60.00	2423	83.00	433	129.00	657		

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 03031401.D BFB Injection Date: 03/03/2014
Instrument ID: 10MSV5 BFB Injection Time: 09:21
GC Column: Restek Rtx-V ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	17.78	
75	30.00 - 66.00% of mass 95	47.25	
96	5.00 - 9.00% of mass 95	6.83	
173	Less than 2.00% of mass 174	0.00	(0.00)
174	50.00 - 120.00% of mass 95	89.59	
175	4.00 - 9.00% of mass 174	6.80	(7.59)
176	93.00 - 101.00% of mass 174	86.20	(96.21)
177	5.00 - 9.00% of mass 176	5.79	(6.71)

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	V209525-609	V209525-609	03031402.D	03/03/2014	09:36
2	LCS for HBN 288099 [MSV/26462]	1632467	03031403.D	03/03/2014	10:14
3	BLANK for HBN 288099 [MSV/2646	1632466	03031405.D	03/03/2014	10:43
4	EQUIPMENT BLANK	10259041003	03031419.D	03/03/2014	14:27
5	MW-23(1630665MS)	1633048-MS	03031434.D	03/03/2014	18:08
6	MW-23(1630665MSD)	1633049-MSD	03031435.D	03/03/2014	18:23

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031401.D

Date : 03-MAR-2014 09:21

Client ID: BFB

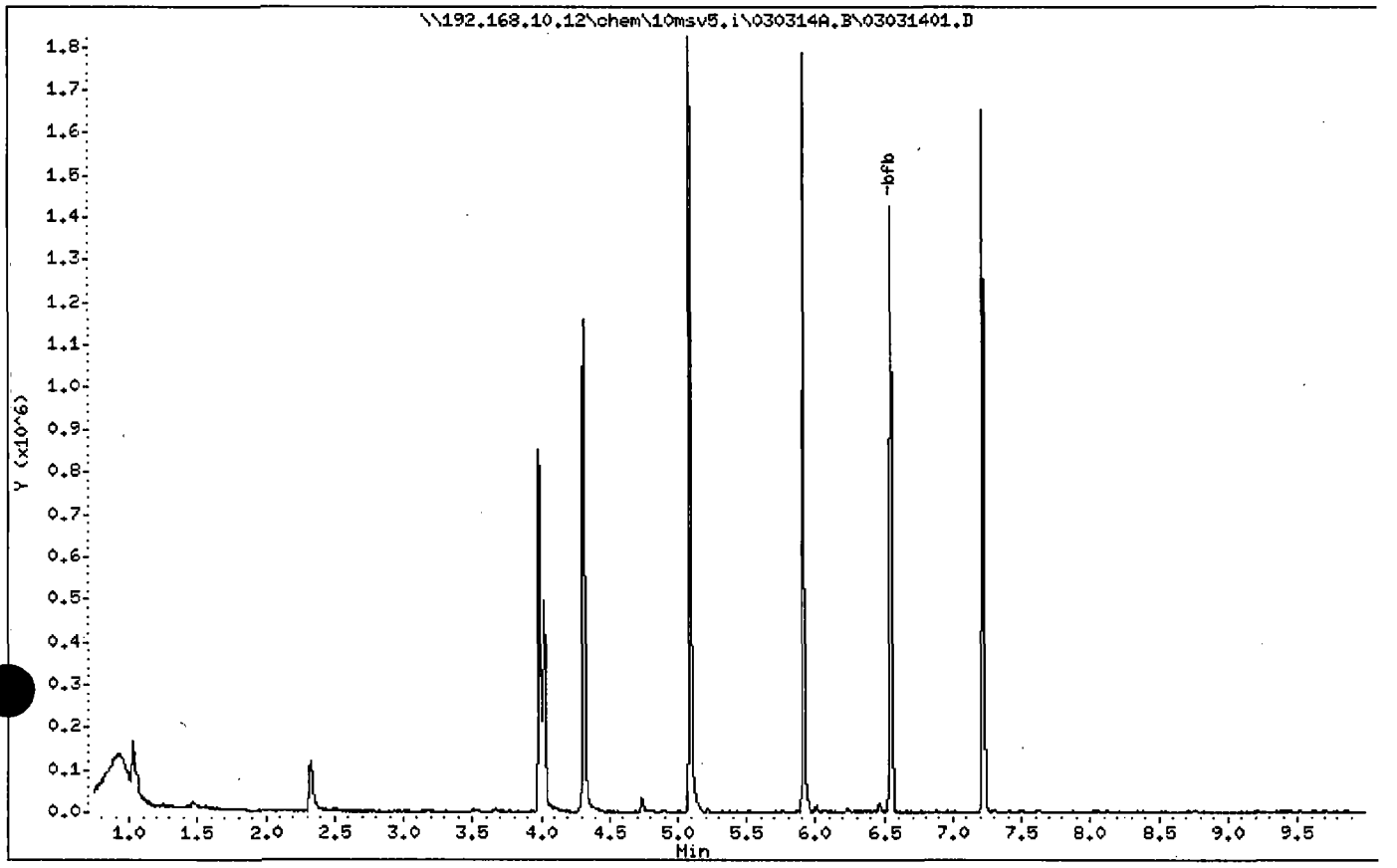
Instrument: 10msv5.i

Sample Info: TUNE

Operator: SH2

Column phase: Restek Rtx-VMS

Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031401.D

Date : 03-MAR-2014 09:21

Client ID: BFB

Instrument: 10msv5.i

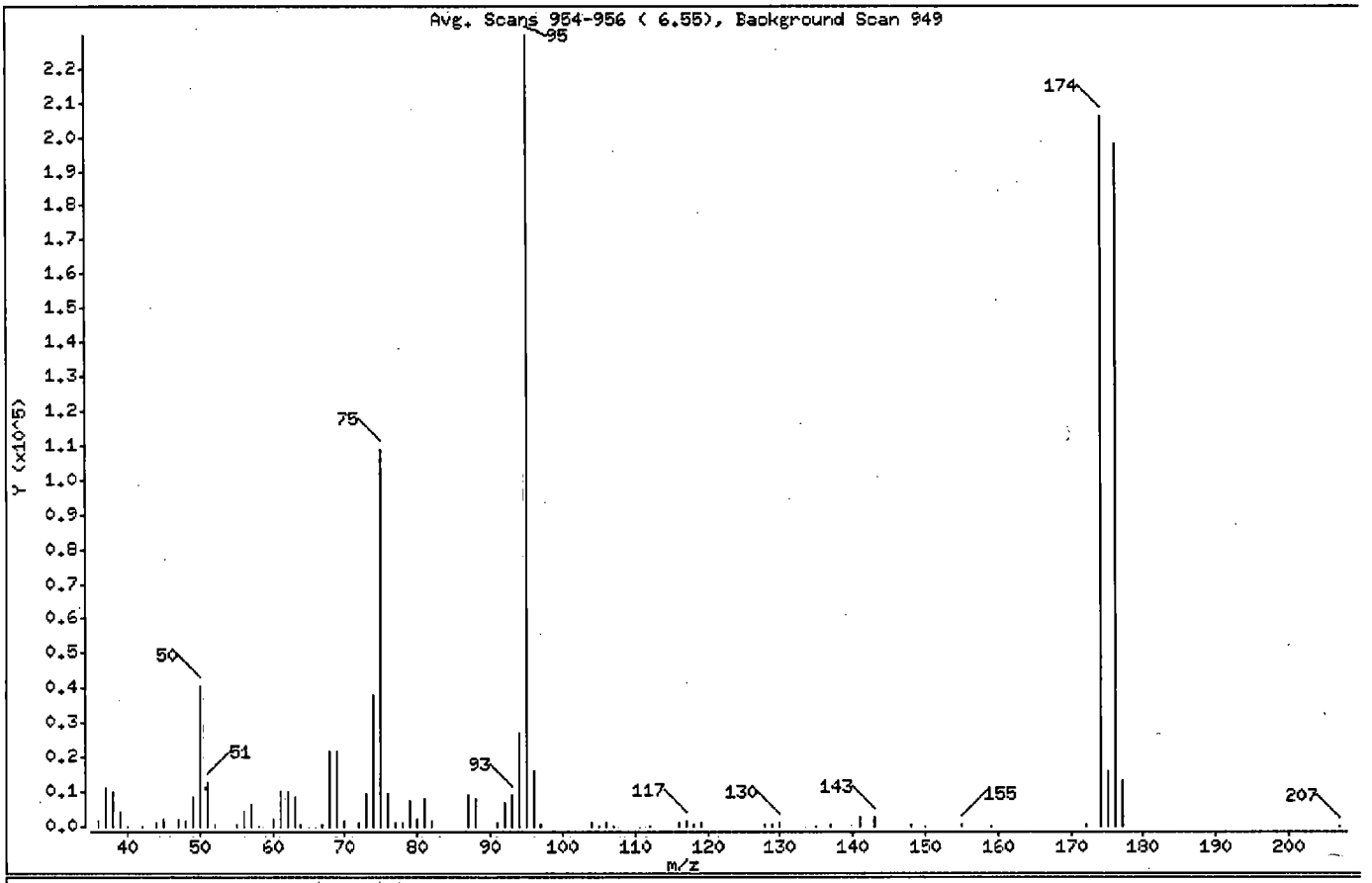
Sample Info: TUNE

Operator: SH2

Column phase: Restek Rtx-VMS

Column diameter: 0.18

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	17.78
75	30.00 - 66.00% of mass 95	47.25
96	5.00 - 9.00% of mass 95	6.83
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	89.59
175	4.00 - 9.00% of mass 174	6.80 (7.59)
176	93.00 - 101.00% of mass 174	86.20 (96.21)
177	5.00 - 9.00% of mass 176	5.79 (6.71)

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031401.D

Date : 03-MAR-2014 09:21

Client ID: BFB

Instrument: 10msv5.i

Sample Info: TUNE

Operator: SH2

Column phase: Restek Rtx-VMS

Column diameter: 0.18

Data File: 03031401.D
Spectrum: Avg. Scans 954-956 (6.55), Background Scan 949
Location of Maximum: 95.00
Number of points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1424	61.00	10228	87.00	8784	129.00	385
37.00	11292	62.00	10154	88.00	8134	130.00	825
38.00	9928	63.00	8240	91.00	889	135.00	174
39.00	4359	64.00	500	92.00	6819	137.00	388
40.00	169	67.00	536	93.00	9199	141.00	2711
42.00	191	68.00	21472	94.00	26912	143.00	2785
44.00	992	69.00	21520	95.00	229952	148.00	277
45.00	1871	70.00	1740	96.00	15698	150.00	167
47.00	2325	72.00	1121	97.00	551	155.00	543
48.00	1585	73.00	9698	104.00	1205	159.00	172
49.00	8597	74.00	37864	105.00	177	172.00	333
50.00	40880	75.00	108648	106.00	1015	174.00	206016
51.00	12513	76.00	9464	107.00	181	175.00	15635
52.00	335	77.00	1243	112.00	170	176.00	198203
55.00	704	78.00	885	116.00	855	177.00	13304
56.00	3995	79.00	7307	117.00	1533	207.00	199
57.00	6564	80.00	2351	118.00	741		
58.00	199	81.00	8057	119.00	899		
60.00	1980	82.00	1660	128.00	600		

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 031014002.D BFB Injection Date: 03/10/2014
Instrument ID: 10MSV7 BFB Injection Time: 10:56
GC Column: Rtx-VMS ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	15.21	
75	30.00 - 66.00% of mass 95	44.02	
96	5.00 - 9.00% of mass 95	6.61	
173	Less than 2.00% of mass 174	0.70	(0.69)
174	50.00 - 120.00% of mass 95	100.95	
175	4.00 - 9.00% of mass 174	6.89	(6.82)
176	93.00 - 101.00% of mass 174	98.65	(97.72)
177	5.00 - 9.00% of mass 176	6.29	(6.37)

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	0.4ICAL10098-65	0.4ICAL10098-	031014003.D	03/10/2014	11:15
2	1.0ICAL10098-65	1.0ICAL10098-	031014004.D	03/10/2014	11:34
3	4.0ICAL10098-65	4.0ICAL10098-	031014005.D	03/10/2014	11:53
4	10ICAL10098-65	10ICAL10098-6	031014006.D	03/10/2014	12:13
5	20ICAL10098-65	20ICAL10098-6	031014007.D	03/10/2014	12:32
6	50ICAL10098-65	50ICAL10098-6	031014008.D	03/10/2014	12:52
7	100ICAL10098-65	100ICAL10098-	031014009.D	03/10/2014	13:11
8	250ICAL10098-65	250ICAL10098-	031014010.D	03/10/2014	13:31
9	V50ICV10098-66	V50ICV10098-6	031014012.D	03/10/2014	14:10

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014002.D

Date : 10-MAR-2014 10:56

Client ID:

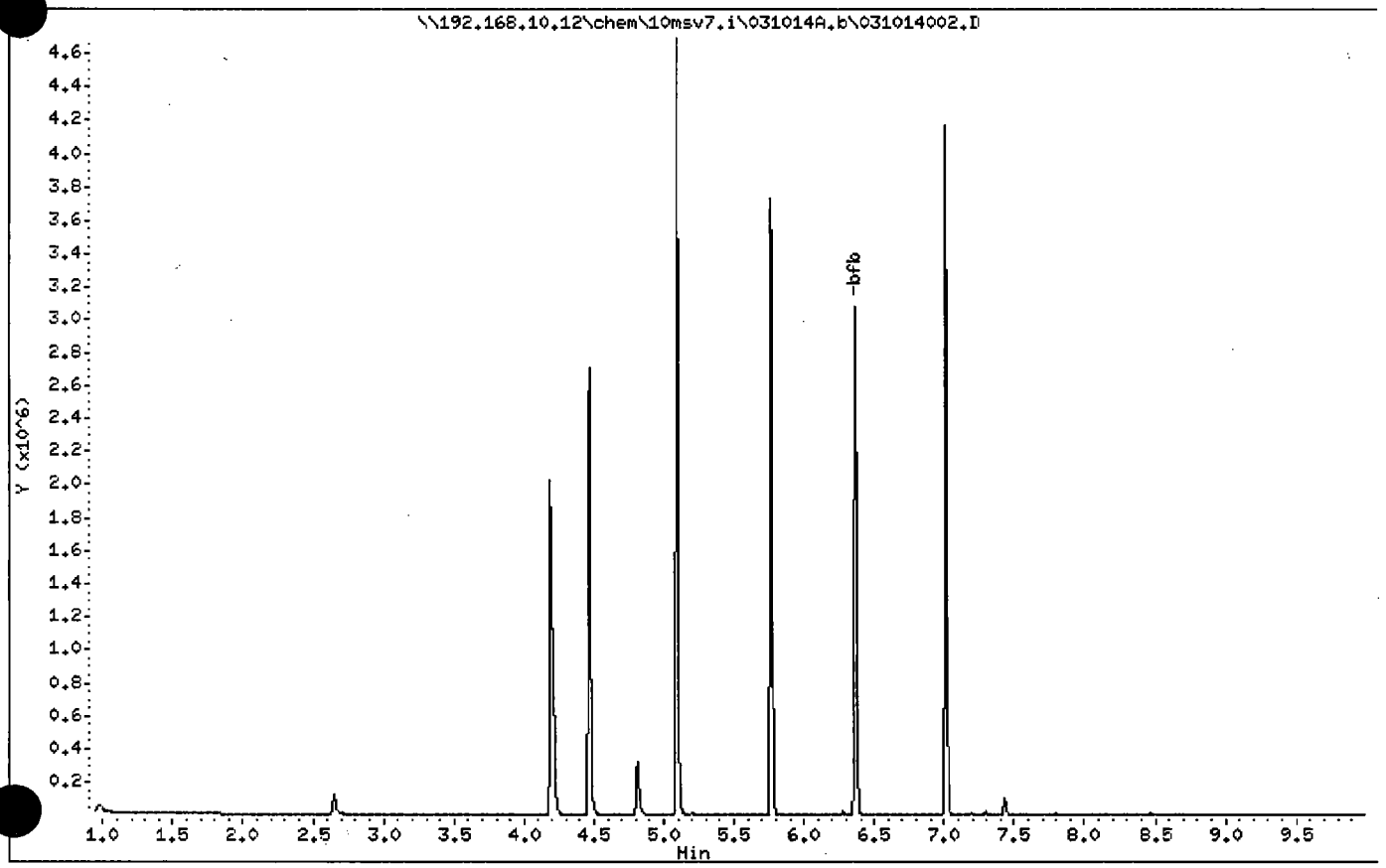
Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014002.D

Date : 10-MAR-2014 10:56

Client ID:

Instrument: 10msv7.i

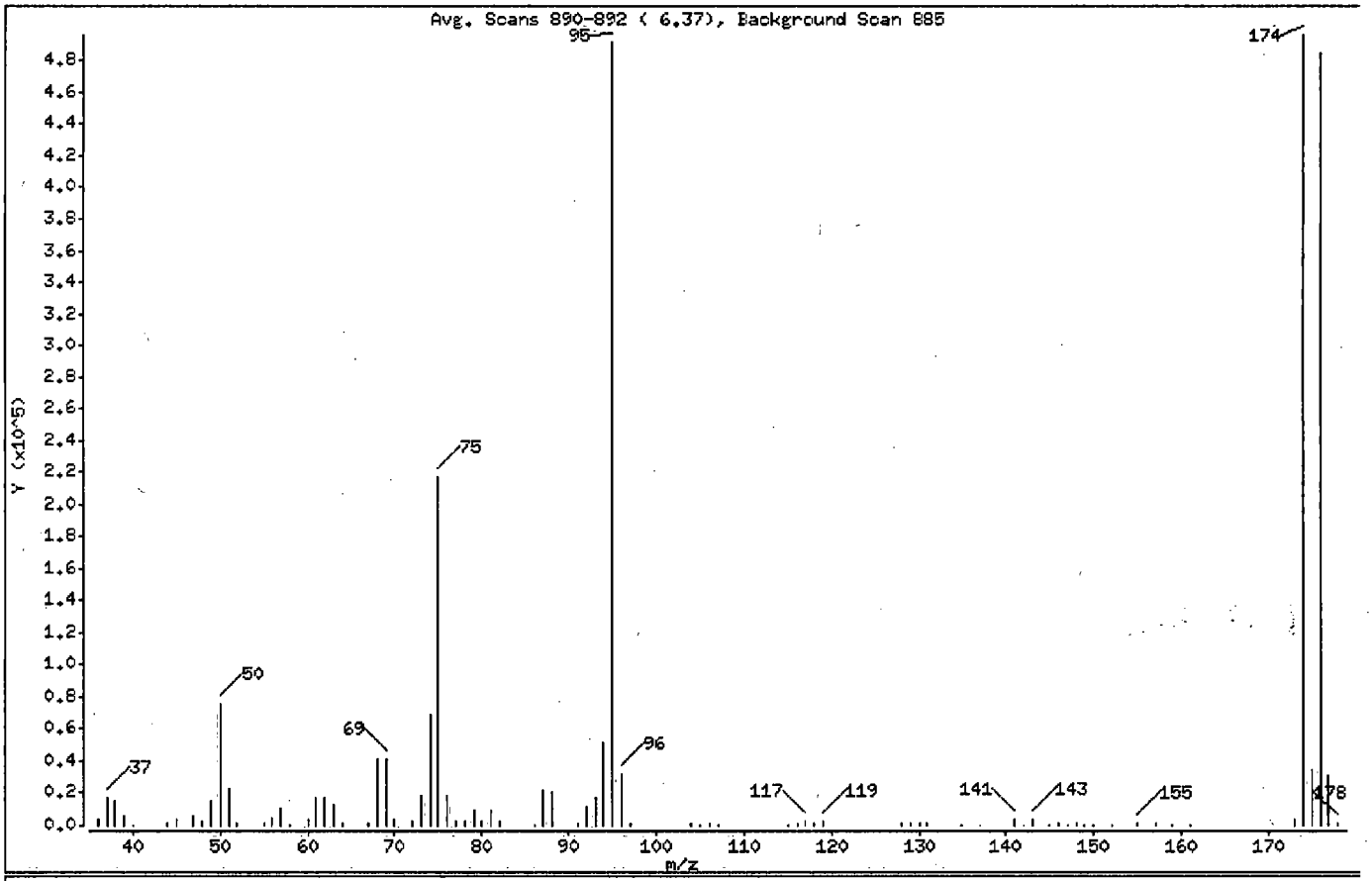
Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

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	15.21
75	30.00 - 66.00% of mass 95	44.02
96	5.00 - 9.00% of mass 95	6.61
173	Less than 2.00% of mass 174	0.70 (0.69)
174	50.00 - 120.00% of mass 95	100.95
175	4.00 - 9.00% of mass 174	6.89 (6.82)
176	93.00 - 101.00% of mass 174	98.65 (97.72)
177	5.00 - 9.00% of mass 176	6.29 (6.37)

Date : 10-MAR-2014 10:56

Client ID: Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS Column diameter: 0.18

Data File: 031014002.D

Spectrum: Avg. Scans 890-892 (6.37), Background Scan 885

Location of Maximum: 174.00

Number of points: 82

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2976	64.00	1064	93.00	17624	142.00	491
37.00	16760	67.00	1057	94.00	50912	143.00	3989
38.00	14728	68.00	40332	95.00	491712	145.00	190
39.00	6225	69.00	41136	96.00	32520	146.00	618
40.00	273	70.00	2994	97.00	964	147.00	192
44.00	1656	72.00	1993	104.00	1618	148.00	1124
45.00	2929	73.00	18192	105.00	414	149.00	191
47.00	5386	74.00	68592	106.00	1503	150.00	175
48.00	2316	75.00	216448	107.00	188	152.00	177
49.00	14924	76.00	18024	115.00	341	155.00	1215
50.00	74776	77.00	2562	116.00	1310	157.00	958
51.00	22728	78.00	1893	117.00	2468	159.00	400
52.00	785	79.00	8909	118.00	1462	161.00	445
55.00	801	80.00	2559	119.00	2106	173.00	3436
56.00	5132	81.00	9321	128.00	1418	174.00	496384
57.00	9720	82.00	1919	129.00	595	175.00	33864
58.00	183	86.00	180	130.00	1558	176.00	485056
60.00	3301	87.00	21872	131.00	579	177.00	30912
61.00	17648	88.00	21056	135.00	521	178.00	862
62.00	17592	91.00	1426	137.00	551		
63.00	12995	92.00	11252	141.00	3755		

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 031014014.D BFB Injection Date: 03/10/2014
Instrument ID: 10MSV7 BFB Injection Time: 14:49
GC Column: Rtx-VMS ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	15.67	
75	30.00 - 66.00% of mass 95	44.81	
96	5.00 - 9.00% of mass 95	6.65	
173	Less than 2.00% of mass 174	0.59	(0.64)
174	50.00 - 120.00% of mass 95	92.94	
175	4.00 - 9.00% of mass 174	6.67	(7.18)
176	93.00 - 101.00% of mass 174	90.39	(97.25)
177	5.00 - 9.00% of mass 176	6.01	(6.65)

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	LCS for HBN 288759 [MSV/26501]	1635951	031014016B.D	03/10/2014	15:30
2	V509525-630	V509525-630	031014016A.D	03/10/2014	15:30
3	SB-9 12-14'(1631878MS)	1635952-MS	031014017.D	03/10/2014	15:49
4	SB-9 12-14'(1631878MSD)	1635953-MSD	031014018.D	03/10/2014	16:09
5	BLANK for HBN 288759 [MSV/2650	1635950	031014020.D	03/10/2014	16:48
6	SB-9 3-4'	10259041001	031014031.D	03/10/2014	20:19
7	SB-9 12-14'	10259041002	031014032.D	03/10/2014	20:38

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014014.D

Date : 10-MAR-2014 14:49

Client ID:

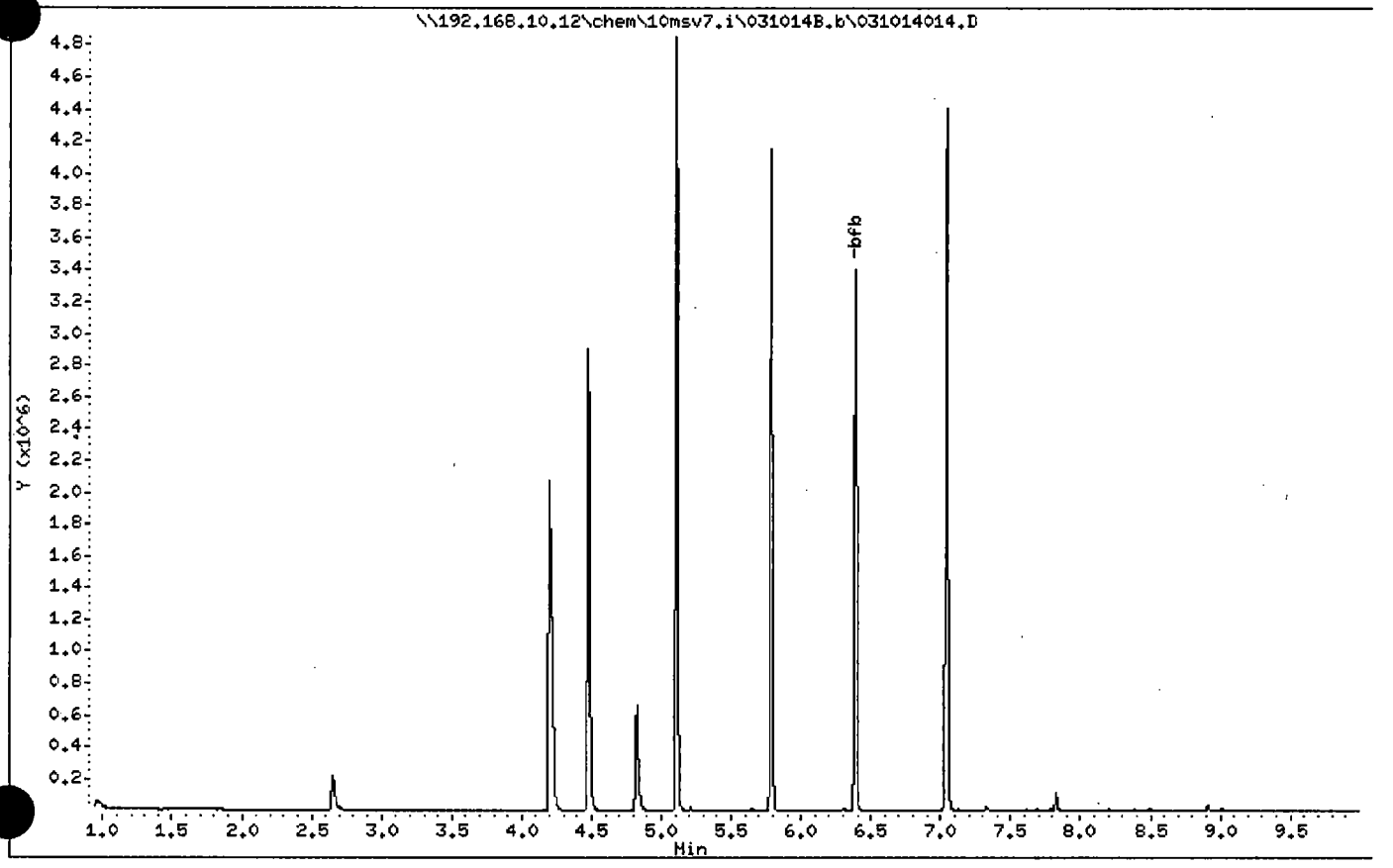
Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014014.D

Date : 10-MAR-2014 14:49

Client ID:

Instrument: 10msv7.i

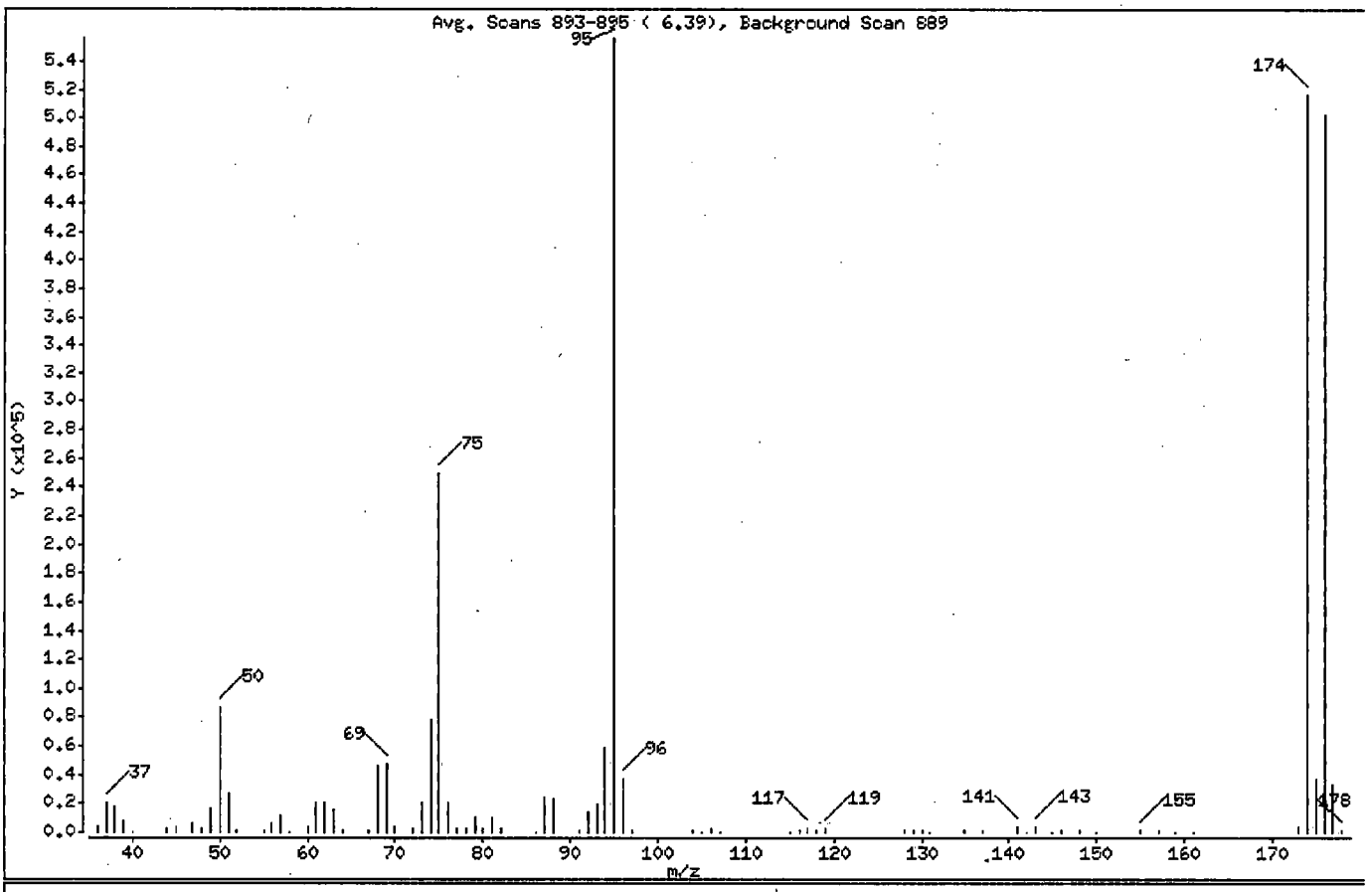
Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

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	15.67
75	30.00 - 66.00% of mass 95	44.81
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.59 (0.64)
174	50.00 - 120.00% of mass 95	92.94
175	4.00 - 9.00% of mass 174	6.67 (7.18)
176	93.00 - 101.00% of mass 174	90.39 (97.25)
177	5.00 - 9.00% of mass 176	6.01 (6.65)

Date : 10-MAR-2014 14:49

Client ID: Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS Column diameter: 0.18

Data File: 031014014.D

Spectrum: Avg. Scans 893-895 (6.39), Background Scan 889

Location of Maximum: 95.00

Number of points: 79

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3603	63.00	15106	91.00	1473	135.00	848
37.00	19968	64.00	1473	92.00	13612	137.00	805
38.00	18192	67.00	1166	93.00	19696	141.00	4187
39.00	7112	68.00	46288	94.00	58272	142.00	491
40.00	250	69.00	47952	95.00	556480	143.00	4032
44.00	2124	70.00	3835	96.00	36984	145.00	191
45.00	3594	72.00	2378	97.00	1047	146.00	654
47.00	6659	73.00	20368	104.00	1846	148.00	1182
48.00	2628	74.00	78312	105.00	530	150.00	413
49.00	17256	75.00	249344	106.00	2009	155.00	1380
50.00	87176	76.00	21064	107.00	214	157.00	1004
51.00	27096	77.00	2961	115.00	198	159.00	481
52.00	1129	78.00	2194	116.00	1451	161.00	487
55.00	1323	79.00	10239	117.00	2812	173.00	3311
56.00	6009	80.00	3158	118.00	1671	174.00	517184
57.00	11259	81.00	10321	119.00	2386	175.00	37128
58.00	398	82.00	2151	128.00	1682	176.00	502976
60.00	3977	86.00	543	129.00	778	177.00	33472
61.00	20744	87.00	23936	130.00	1735	178.00	797
62.00	19888	88.00	22928	131.00	621		

Data File: \\192.168.10.12\Chem\10msv5.i\030314A.B\03031402.D
Report Date: 03-Mar-2014 13:30

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv5.i Injection Date: 03-MAR-2014 09:36
Lab File ID: 03031402.D Init. Cal. Date(s): 26-FEB-2014 26-FEB-2014
Analysis Type: WATER Init. Cal. Times: 12:09 14:08
Lab Sample ID: V20 9525-609 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.74567	0.75675	0.75675	0.100	1.48583	30.00000	Averaged	
2 Chloromethane	0.76230	0.76166	0.76166	0.100	-0.08412	30.00000	Averaged	
3 Vinyl Chloride	20.00000	19.81781	0.77171	0.100	-0.91093	20.00000	Quadratic	
4 Bromomethane	20.00000	20.86447	0.24602	0.050	4.32235	30.00000	Quadratic	
5 Chloroethane	0.43600	0.42713	0.42713	0.050	-2.03411	30.00000	Averaged	
6 Trichlorofluoromethane	0.90429	0.95284	0.95284	0.100	5.36818	30.00000	Averaged	
7 Dichlorofluoromethane	1.16740	1.12681	1.12681	0.010	-3.47663	30.00000	Averaged	
8 Diethyl ether (Ethyl Ether)	0.41392	0.38213	0.38213	0.010	-7.68092	30.00000	Averaged	
9 Ethanol	400	578	2.04002	0.050	44.60673	30.00000	Quadratic	<-
10 1,1-Dichloroethene	0.52186	0.46447	0.46447	0.100	-10.99617	20.00000	Averaged	
11 Trichlorotrifluoroethane	20.00000	18.94144	0.50860	0.010	-5.29282	30.00000	Quadratic	
12 Carbon Disulfide	1.59905	1.18191	1.18191	0.100	-26.08665	30.00000	Averaged	
13 Iodomethane	20.00000	13.14747	0.22958	0.010	-34.26267	30.00000	Quadratic	<-
14 Acrolein	0.12086	0.11865	0.11865	0.010	-1.82803	30.00000	Averaged	
15 Allyl Chloride	0.82379	0.84633	0.84633	0.010	2.73596	30.00000	Averaged	
16 Isopropanol	15.11247	18.74599	18.74599	0.010	24.04318	30.00000	Averaged	
17 Methylene Chloride	0.55435	0.53243	0.53243	0.100	-3.95406	30.00000	Averaged	
19 Acetone	0.39085	0.40011	0.40011	0.010	2.36966	30.00000	Averaged	
20 trans-1,2-Dichloroethene	0.57337	0.50962	0.50962	0.100	-11.11818	20.00000	Averaged	
21 Methyl Acetate	0.10822	0.11082	0.11082	0.010	2.40328	30.00000	Averaged	
22 Hexane	0.87553	0.71797	0.71797	0.010	-17.99642	30.00000	Averaged	
23 Methyl-tert-butyl Ether	1.67998	1.59626	1.59626	0.300	-4.98315	20.00000	Averaged	
24 tert-Butyl Alcohol	39.59003	50.57137	50.57137	0.010	27.73762	20.00000	Averaged	<-
25 Isopropyl Ether	1.87834	1.74916	1.74916	0.010	-6.87732	30.00000	Averaged	
26 Acetonitrile	0.03502	0.03495	0.03495	0.010	-0.18389	30.00000	Averaged	
27 Chloroprene	0.87389	0.81818	0.81818	0.010	-6.37447	30.00000	Averaged	
28 1,1-Dichloroethane	0.98559	0.95875	0.95875	0.200	-2.72289	20.00000	Averaged	
29 Acrylonitrile	0.24610	0.24406	0.24406	0.010	-0.82797	30.00000	Averaged	
30 Ethyl-tert-butyl ether	1.73241	1.69476	1.69476	0.010	-2.17342	20.00000	Averaged	
31 Vinyl Acetate	1.52781	1.53699	1.53699	0.010	0.60056	30.00000	Averaged	
32 cis-1,2-Dichloroethene	0.62738	0.59353	0.59353	0.100	-5.39546	20.00000	Averaged	
33 2,2-Dichloropropane	0.88198	0.89887	0.89887	0.010	1.91486	30.00000	Averaged	
34 Cyclohexane	1.03672	0.89704	0.89704	0.100	-13.47353	30.00000	Averaged	
35 Bromochloromethane	0.36997	0.36094	0.36094	0.010	-2.43927	30.00000	Averaged	
36 Chloroform	1.02589	0.99308	0.99308	0.200	-3.19827	20.00000	Averaged	
37 Carbon Tetrachloride	0.77811	0.76089	0.76089	0.100	-2.21312	30.00000	Averaged	
38 Ethyl Acetate	0.84039	0.84369	0.84369	0.010	0.39250	30.00000	Averaged	
39 Tetrahydrofuran	0.74235	0.72307	0.72307	0.010	-2.59794	30.00000	Averaged	
40 sec-Butyl Alcohol	32.51462	43.76033	43.76033	0.010	34.58659	30.00000	Averaged	<-
41 1,1,1-Trichloroethane	0.94477	0.91557	0.91557	0.100	-3.09099	20.00000	Averaged	
42 2-Butanone	0.36156	0.35789	0.35789	0.050	-1.01461	30.00000	Averaged	
43 1,1-Dichloropropene	0.82423	0.78378	0.78378	0.010	-4.90717	30.00000	Averaged	
44 2,2,4-Trimethylpentane	1.35322	1.28732	1.28732	0.010	-4.86975	30.00000	Averaged	

Report Date: 03-Mar-2014 13:30

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv5.i Injection Date: 03-MAR-2014 09:36
Lab File ID: 03031402.D Init. Cal. Date(s): 26-FEB-2014 26-FEB-2014
Analysis Type: WATER Init. Cal. Times: 12:09 14:08
Lab Sample ID: V20 9525-609 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
45 Benzene	2.41315	2.24001	2.24001	0.500	-7.17488	20.00000	Averaged	
46 Propionitrile	0.09530	0.08868	0.08868	0.010	-6.94029	30.00000	Averaged	
47 Methacrylonitrile	20.00000	20.50379	2.11441	0.010	2.51896	30.00000	Quadratic	
49 Tert-amyl methyl ether	1.80738	1.77305	1.77305	0.010	-1.89951	20.00000	Averaged	
$ 50 1,2-Dichloroethane d4 (S)	0.49711	0.51234	0.51234	0.200	3.06518	30.00000	Averaged	
51 1,2-Dichloroethane	0.70734	0.70391	0.70391	0.100	-0.48476	20.00000	Averaged	
52 Isobutanol	17.17170	22.52900	22.52900	0.010	31.19840	30.00000	Averaged	<-
53 Tert-Amyl Alcohol	41.90977	50.41515	50.41515	0.010	20.29451	30.00000	Averaged	
54 Methylcylohexane	0.48816	0.41278	0.41278	0.010	-15.44021	40.00000	Averaged	
55 Trichloroethene	0.44553	0.41730	0.41730	0.200	-6.33479	20.00000	Averaged	
57 Tert-amyl ethyl ether	0.96313	0.95899	0.95899	0.010	-0.42999	20.00000	Averaged	
58 n-Butanol	8.63368	9.93109	9.93109	0.010	15.02738	30.00000	Averaged	
59 Dibromomethane	0.25575	0.26304	0.26304	0.010	2.85240	30.00000	Averaged	
60 1,2-Dichloropropane	0.38313	0.38711	0.38711	0.100	1.03925	20.00000	Averaged	
61 Ethyl Arcylate	0.63283	0.64458	0.64458	0.010	1.85708	30.00000	Averaged	
62 Bromodichloromethane	0.53761	0.52033	0.52033	0.050	-3.21526	30.00000	Averaged	
63 Methyl Methacrylate	0.07362	0.07088	0.07088	0.010	-3.72391	30.00000	Averaged	
65 1,4-Dioxane (P-Dioxane)	1.18450	1.10935	1.10935	0.010	-6.34406	30.00000	Averaged	
66 3-Pentanone	0.37692	0.38939	0.38939	0.010	3.30970	30.00000	Averaged	
67 2-Chloroethyl Vinyl Ether	0.28043	0.27389	0.27389	0.010	-2.33400	30.00000	Averaged	
68 cis-1,3-Dichloropropene	0.61400	0.64644	0.64644	0.050	5.28229	30.00000	Averaged	
$ 69 Toluene-d8 (S)	1.27128	1.28432	1.28432	0.200	1.02540	30.00000	Averaged	
70 Toluene	1.08438	1.06299	1.06299	0.400	-1.97258	20.00000	Averaged	
71 2-Nitropropane	0.55878	0.57073	0.57073	0.010	2.13868	30.00000	Averaged	
72 Tetrachloroethene	0.49173	0.48206	0.48206	0.200	-1.96737	20.00000	Averaged	
73 4-Methyl-2-Pentanone	0.55974	0.57073	0.57073	0.100	1.96367	30.00000	Averaged	
74 trans-1,3-Dichloropropene	0.63545	0.62677	0.62677	0.100	-1.36525	30.00000	Averaged	
75 4-Methyl-2-pentanol	200	245	168	0.010	22.42070	30.00000	Quadratic	
76 Ethyl Methacrylate	0.71080	0.68537	0.68537	0.010	-3.57814	30.00000	Averaged	
77 1,1,2-Trichloroethane	0.39650	0.39120	0.39120	0.100	-1.33785	30.00000	Averaged	
78 Dibromochloromethane	0.45844	0.45708	0.45708	0.100	-0.29692	30.00000	Averaged	
79 1,3-Dichloropropane	0.65381	0.66433	0.66433	0.010	1.60961	30.00000	Averaged	
80 1,2-Dibromoethane	0.42482	0.41596	0.41596	0.100	-2.08754	20.00000	Averaged	
81 2-Hexanone	0.42600	0.42915	0.42915	0.050	0.73942	30.00000	Averaged	
83 Chlorobenzene	1.17680	1.16470	1.16470	0.500	-1.02806	30.00000	Averaged	
84 Ethylbenzene	2.15497	2.08721	2.08721	0.300	-3.14456	20.00000	Averaged	
85 1,1,1,2-Tetrachloroethane	0.43438	0.42490	0.42490	0.010	-2.18350	30.00000	Averaged	
86 M&P-Xylene	0.81281	0.80388	0.80388	0.300	-1.09854	20.00000	Averaged	
87 O-Xylene (1,2-Dimethylbenze	0.79484	0.78381	0.78381	0.300	-1.38771	20.00000	Averaged	
88 Styrene	1.30424	1.29899	1.29899	0.300	-0.40240	30.00000	Averaged	
89 Bromoform	0.35964	0.34843	0.34843	0.100	-3.11658	30.00000	Averaged	
90 Isopropylbenzene (Cumene)	1.95960	1.96865	1.96865	0.100	0.46204	30.00000	Averaged	
$ 91 4-Bromofluorobenzene (S)	0.93110	0.93337	0.93337	0.200	0.24315	30.00000	Averaged	

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031402.D
Report Date: 03-Mar-2014 13:30

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv5.i Injection Date: 03-MAR-2014 09:36
Lab File ID: 03031402.D Init. Cal. Date(s): 26-FEB-2014 26-FEB-2014
Analysis Type: WATER Init. Cal. Times: 12:09 14:08
Lab Sample ID: V20 9525-609 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
92 cis-1,4-Dichloro-2-Butene	0.32227	0.28017	0.28017	0.010	-13.06433	30.00000	Averaged
93 Bromobenzene	0.91966	0.90915	0.90915	0.010	-1.14246	30.00000	Averaged
94 n-Propylbenzene	4.17862	4.13087	4.13087	0.010	-1.14284	30.00000	Averaged
95 1,1,2,2-Tetrachloroethane	1.10442	1.06650	1.06650	0.300	-3.43350	30.00000	Averaged
96 2-Chlorotoluene	2.73086	2.65179	2.65179	0.010	-2.89524	30.00000	Averaged
97 1,3,5-Trimethylbenzene	2.86846	2.81425	2.81425	0.300	-1.88985	20.00000	Averaged
98 1,2,3-Trichloropropane	0.32615	0.32650	0.32650	0.010	0.10738	30.00000	Averaged
99 trans-1,4-Dichloro-2-Butene	0.30805	0.28196	0.28196	0.010	-8.47149	30.00000	Averaged
100 4-Chlorotoluene	2.54156	2.51253	2.51253	0.010	-1.14211	30.00000	Averaged
101 tert-Butylbenzene	2.40902	2.42458	2.42458	0.010	0.64599	30.00000	Averaged
102 1,2,4-Trimethylbenzene	2.84616	2.80862	2.80862	0.300	-1.31901	20.00000	Averaged
103 sec-Butylbenzene	3.28976	3.28114	3.28114	0.010	-0.26198	30.00000	Averaged
104 p-Isopropyltoluene	2.80853	2.80759	2.80759	0.010	-0.03370	30.00000	Averaged
105 1,3-Dichlorobenzene	1.60187	1.56273	1.56273	0.600	-2.44313	30.00000	Averaged
107 1,4-Dichlorobenzene	1.66092	1.63578	1.63578	0.500	-1.51310	30.00000	Averaged
108 1,2,3 Trimethylbenzene	2.24070	2.15902	2.15902	0.010	-3.64526	40.00000	Averaged
109 n-Butylbenzene	2.34574	2.33711	2.33711	0.010	-0.36778	30.00000	Averaged
110 1,2-Dichlorobenzene	1.54316	1.51412	1.51412	0.400	-1.88205	30.00000	Averaged
111 1,2-Dibromo-3-Chloropropane	0.30610	0.29315	0.29315	0.010	-4.23124	30.00000	Averaged
112 Hexachlorobutadiene	0.38198	0.40945	0.40945	0.010	7.19127	30.00000	Averaged
113 1,2,4-Trichlorobenzene	0.85802	0.87111	0.87111	0.200	1.52547	30.00000	Averaged
114 Naphthalene	3.08826	2.98100	2.98100	0.300	-3.47329	20.00000	Averaged
115 1,2,3-Trichlorobenzene	0.83916	0.81948	0.81948	0.010	-2.34512	30.00000	Averaged
116 2-Methylnaphthalene	1.45576	1.26963	1.26963	0.100	-12.78572	20.00000	Averaged

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\030314A.B\03031402.D
Lab Smp Id: V20 9525-609
Inj Date : 03-MAR-2014 09:36
Operator : SH2 Inst ID: 10msv5.i
Smp Info : V20 9525-609,1,2
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Meth Date : 03-Mar-2014 10:22 10msv5.i Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.120	1.120	(0.281)	123992	20.0000	20.3
2	Chloromethane	50	1.229	1.229	(0.308)	124796	20.0000	20.0
3	Vinyl Chloride	62	1.278	1.278	(0.320)	126443	20.0000	19.8
4	Bromomethane	94	1.461	1.461	(0.366)	40310	20.0000	20.9
5	Chloroethane	64	1.540	1.540	(0.386)	69984	20.0000	19.6
6	Trichlorofluoromethane	101	1.619	1.619	(0.406)	156121	20.0000	21.1
7	Dichlorofluoromethane	67	1.649	1.649	(0.413)	184626	20.0000	19.3
8	Diethyl ether (Ethyl Ether)	59	1.795	1.795	(0.450)	62611	20.0000	18.5
9	Ethanol	45	1.886	1.886	(0.398)	9533	400.000	578
10	1,1-Dichloroethene	96	1.929	1.929	(0.483)	76103	20.0000	17.8
11	Trichlorotrifluoroethane	101	1.953	1.953	(0.489)	83333	20.0000	18.9
12	Carbon Disulfide	76	1.953	1.953	(0.489)	193654	20.0000	14.8
13	Iodomethane	142	2.032	2.032	(0.509)	37616	20.0000	13.1
14	Acrolein	56	2.154	2.154	(0.540)	194403	200.000	196
15	Allyl Chloride	41	2.251	2.251	(0.564)	138670	20.0000	20.5
16	Isopropanol	45	2.264	2.264	(0.478)	43800	200.000	248
17	Methylene Chloride	84	2.331	2.331	(0.584)	87238	20.0000	19.2
* 18	Acetone d6	46	2.331	2.331	(1.000)	114178	100.000	
19	Acetone	58	2.367	2.367	(1.016)	45684	100.000	102
20	trans-1,2-Dichloroethene	96	2.452	2.452	(0.614)	83501	20.0000	17.8
21	Methyl Acetate	74	2.458	2.458	(0.616)	90787	100.000	102
22	Hexane	86	2.507	2.507	(1.076)	40988	50.0000	41.0
23	Methyl-tert-butyl Ether	73	2.531	2.531	(0.634)	261545	20.0000	19.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24	tert-Butyl Alcohol	59	2.610	2.610	(0.551)	118160	200.000	255
25	Isopropyl Ether	45	2.854	2.854	(0.715)	286597	20.0000	18.6
26	Acetonitrile	41	2.854	2.854	(0.715)	57273	200.000	200
27	Chloroprene	53	2.939	2.939	(0.736)	134058	20.0000	18.7
28	1,1-Dichloroethane	63	2.957	2.957	(0.741)	157090	20.0000	19.4
29	Acrylonitrile	53	3.000	3.000	(0.752)	399891	200.000	198
30	Ethyl-tert-butyl ether	59	3.146	3.146	(0.788)	277684	20.0000	19.6
31	Vinyl Acetate	43	3.158	3.158	(0.791)	251833	20.0000	20.1
32	cis-1,2-Dichloroethene	96	3.365	3.365	(0.843)	97249	20.0000	18.9
33	2,2-Dichloropropane	77	3.444	3.444	(0.863)	147278	20.0000	20.4
34	Cyclohexane	56	3.505	3.505	(0.878)	734894	100.000	86.5
35	Bromochloromethane	130	3.505	3.505	(0.878)	59140	20.0000	19.5
36	Chloroform	83	3.559	3.559	(0.892)	162715	20.0000	19.4
37	Carbon Tetrachloride	117	3.651	3.651	(0.915)	124670	20.0000	19.6
38	Ethyl Acetate	43	3.645	3.645	(0.913)	691188	100.000	100
39	Tetrahydrofuran	72	3.669	3.669	(1.574)	165117	200.000	195
40	sec-Butyl Alcohol	45	3.681	3.681	(0.777)	102246	200.000	269
41	1,1,1-Trichloroethane	97	3.699	3.699	(0.927)	150014	20.0000	19.4
42	2-Butanone	43	3.772	3.772	(0.945)	293197	100.000	99.0
43	1,1-Dichloropropene	75	3.778	3.778	(0.947)	128421	20.0000	19.0
44	2,2,4-Trimethylpentane	57	3.845	3.845	(0.963)	210925	20.0000	19.0
45	Benzene	78	3.937	3.937	(0.986)	367022	20.0000	18.6
46	Propionitrile	54	3.961	3.961	(0.992)	145307	200.000	186
47	Methacrylonitrile	41	3.973	3.973	(0.995)	346443	20.0000	20.5
* 48	Pentafluorobenzene	168	3.991	3.991	(1.000)	409621	50.0000	
49	Tert-amyl methyl ether	73	4.016	4.016	(1.006)	290511	20.0000	19.6
$ 50	1,2-Dichloroethane d4 (S)	65	4.022	4.022	(1.008)	209867	50.0000	51.5(Q)
51	1,2-Dichloroethane	62	4.064	4.064	(1.018)	115334	20.0000	19.9
52	Isobutanol	43	4.083	4.083	(0.861)	105278	400.000	525
53	Tert-Amyl Alcohol	59	4.137	4.137	(0.873)	117795	200.000	240
54	Methylcylohexane	98	4.289	4.289	(1.075)	67634	20.0000	16.9
55	Trichloroethene	130	4.295	4.295	(0.994)	102142	20.0000	18.7
* 56	1,4 Difluorobenzene	114	4.320	4.320	(1.000)	611915	50.0000	
57	Tert-amyl ethyl ether	59	4.435	4.435	(1.027)	234728	20.0000	19.9
58	n-Butanol	56	4.502	4.502	(0.950)	23204	200.000	230
59	Dibromomethane	174	4.545	4.545	(1.052)	64384	20.0000	20.6
60	1,2-Dichloropropane	63	4.600	4.600	(1.065)	94751	20.0000	20.2
61	Ethyl Arcylate	55	4.612	4.612	(1.068)	157771	20.0000	20.4
62	Bromodichloromethane	83	4.636	4.636	(1.073)	127358	20.0000	19.4
63	Methyl Methacrylate	69	4.727	4.727	(1.094)	86744	100.000	96.3
* 64	1,4 dioxane d8	96	4.740	4.740	(1.000)	23365	2000.00	
65	1,4-Dioxane (P-Dioxane)	88	4.758	4.758	(1.004)	5184	400.000	375(Q)
66	3-Pentanone	57	4.849	4.849	(1.123)	95310	20.0000	20.7
67	2-Chloroethyl Vinyl Ether	63	4.959	4.959	(1.148)	167596	50.0000	48.8
68	cis-1,3-Dichloropropene	75	4.989	4.989	(1.155)	158226	20.0000	21.0
$ 69	Toluene-d8 (S)	98	5.092	5.092	(0.861)	738907	50.0000	50.5
70	Toluene	92	5.117	5.117	(0.865)	244629	20.0000	19.6
71	2-Nitropropane	43	5.324	5.324	(0.900)	656716	100.000	102
72	Tetrachloroethene	166	5.324	5.324	(0.900)	110937	20.0000	19.6
73	4-Methyl-2-Pentanone	43	5.324	5.324	(0.900)	656716	100.000	102
74	trans-1,3-Dichloropropene	75	5.342	5.342	(0.903)	144240	20.0000	19.7
75	4-Methyl-2-pentanol	45	5.372	5.372	(1.133)	391934	200.000	245
76	Ethyl Methacrylate	69	5.421	5.421	(0.917)	157725	20.0000	19.3
77	1,1,2-Trichloroethane	97	5.427	5.427	(0.918)	90027	20.0000	19.7

Data File: \\192.168.10.12\Chem\10MSV3.I\030514A.B\0305I402.D
Report Date: 03-Mar-2014 13:30

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
Compounds								
	78 Dibromochloromethane	129	5.524	5.524	(0.934)	105189	20.0000	19.9
	79 1,3-Dichloropropane	76	5.573	5.573	(0.942)	152884	20.0000	20.3
	80 1,2-Dibromoethane	107	5.652	5.652	(0.956)	95725	20.0000	19.6
	81 2-Hexanone	43	5.762	5.762	(0.974)	493803	100.000	101
*	82 Chlorobenzene-d5	117	5.914	5.914	(1.000)	575331	50.0000	
	83 Chlorobenzene	112	5.926	5.926	(1.002)	268036	20.0000	19.8
	84 Ethylbenzene	91	5.932	5.932	(1.003)	480334	20.0000	19.4
	85 1,1,1,2-Tetrachloroethane	131	5.956	5.956	(1.007)	97783	20.0000	19.6
	86 M&P-Xylene	106	6.005	6.005	(1.015)	369996	40.0000	39.6
	87 O-Xylene (1,2-Dimethylbenzene)	106	6.230	6.230	(1.053)	180381	20.0000	19.7
	88 Styrene	104	6.260	6.260	(1.059)	298940	20.0000	19.9
	89 Bromoform	173	6.279	6.279	(1.062)	80185	20.0000	19.4
	90 Isopropylbenzene (Cumene)	105	6.388	6.388	(1.080)	453051	20.0000	20.1
$	91 4-Bromofluorobenzene (S)	95	6.546	6.546	(0.907)	294801	50.0000	50.1
	92 cis-1,4-Dichloro-2-Butene	53	6.577	6.577	(0.911)	35396	20.0000	17.4
	93 Bromobenzene	156	6.607	6.607	(0.915)	114861	20.0000	19.8
	94 n-Propylbenzene	91	6.613	6.613	(0.916)	521889	20.0000	19.8
	95 1,1,2,2-Tetrachloroethane	83	6.656	6.656	(0.922)	134740	20.0000	19.3
	96 2-Chlorotoluene	91	6.705	6.705	(0.928)	335024	20.0000	19.4
	97 1,3,5-Trimethylbenzene	105	6.717	6.717	(0.930)	355549	20.0000	19.6
	98 1,2,3-Trichloropropane	110	6.735	6.735	(0.933)	41250	20.0000	20.0
	99 trans-1,4-Dichloro-2-Butene	53	6.753	6.753	(0.935)	89055	50.0000	45.8
	100 4-Chlorotoluene	91	6.802	6.802	(0.942)	317430	20.0000	19.8
	101 tert-Butylbenzene	119	6.911	6.911	(0.957)	306319	20.0000	20.1
	102 1,2,4-Trimethylbenzene	105	6.954	6.954	(0.963)	354838	20.0000	19.7
	103 sec-Butylbenzene	105	7.027	7.027	(0.973)	414535	20.0000	19.9
	104 p-Isopropyltoluene	119	7.112	7.112	(0.985)	354707	20.0000	20.0
	105 1,3-Dichlorobenzene	146	7.173	7.173	(0.993)	197434	20.0000	19.5
*	106 1,4-Dichlorobenzene-d4	152	7.222	7.222	(1.000)	315847	50.0000	
	107 1,4-Dichlorobenzene	146	7.228	7.228	(1.001)	206663	20.0000	19.7
	108 1,2,3 Trimethylbenzene	105	7.240	7.240	(1.814)	353752	20.0000	19.3
	109 n-Butylbenzene	91	7.386	7.386	(1.023)	295268	20.0000	19.9
	110 1,2-Dichlorobenzene	146	7.508	7.508	(1.040)	191292	20.0000	19.6
	111 1,2-Dibromo-3-Chloropropane	157	8.049	8.049	(1.115)	92591	50.0000	47.9
	112 Hexachlorobutadiene	225	8.493	8.493	(1.176)	51730	20.0000	21.4
	113 1,2,4-Trichlorobenzene	180	8.517	8.517	(1.179)	110055	20.0000	20.3
	114 Naphthalene	128	8.755	8.755	(1.212)	376616	20.0000	19.3
	115 1,2,3-Trichlorobenzene	180	8.888	8.888	(1.231)	103532	20.0000	19.5
	116 2-Methylnaphthalene	142	9.521	9.521	(1.318)	80202	10.0000	8.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031402.D
Report Date: 03-Mar-2014 13:30

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 03031402.D
Lab Smp Id: V20 9525-609
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 02:24
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

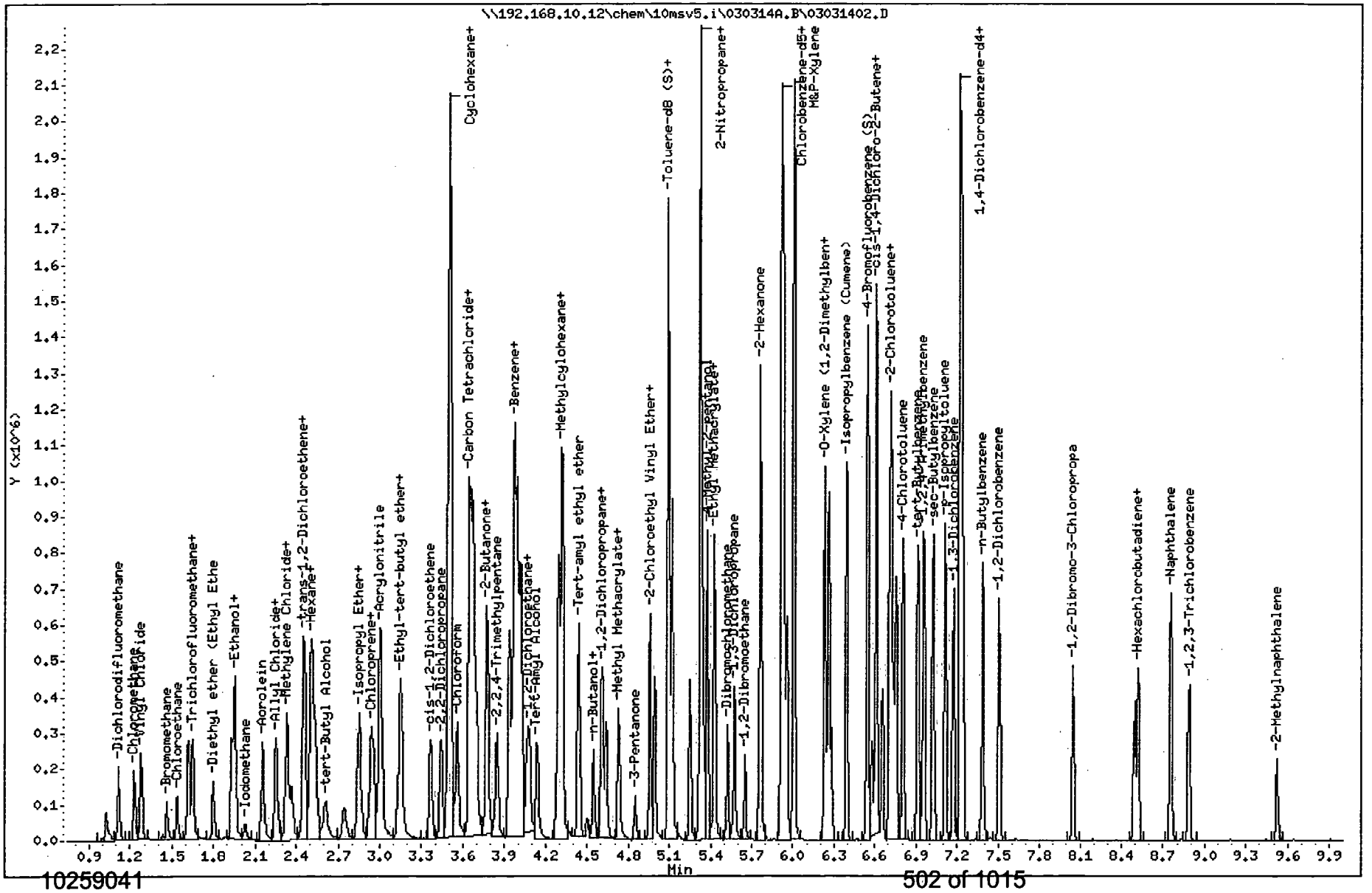
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	140988	70494	281976	114178	-19.02
48 Pentafluorobenzen	501238	250619	1002476	409621	-18.28
56 1,4 Difluorobenze	756645	378323	1513290	611915	-19.13
64 1,4 dioxane d8	44073	22037	88146	23365	-46.99
82 Chlorobenzene-d5	697174	348587	1394348	575331	-17.48
106 1,4-Dichlorobenze	389456	194728	778912	315847	-18.90

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.33	-0.12
48 Pentafluorobenzen	4.00	3.50	4.50	3.99	-0.22
56 1,4 Difluorobenze	4.32	3.82	4.82	4.32	-0.07
64 1,4 dioxane d8	4.74	4.24	5.24	4.74	-0.06
82 Chlorobenzene-d5	5.92	5.42	6.42	5.91	-0.05
106 1,4-Dichlorobenze	7.23	6.73	7.73	7.22	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031402.D
Date : 03-MAR-2014 09:36
Client ID:
Sample Info: V20 9525-609,1,2
Purge Volume: 10.0
Column phase: Rtx-VMS

Instrument: 10msv5.i
Operator: SH2
Column diameter: 0.18



Instrument: 10msv5.i
Lab Sample ID: V20 9525-609
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016a.D
Report Date: 11-Mar-2014 11:30

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 15:30
Lab File ID: 031014016a.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 9525-630 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF50	RRF50	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.41508	0.34273	0.34273	0.100	-17.42938	40.00000	Averaged
2 Chloromethane	0.45988	0.42745	0.42745	0.100	-7.05309	40.00000	Averaged
3 Vinyl Chloride	0.50806	0.45686	0.45686	0.100	-10.07880	20.00000	Averaged
4 Bromomethane	50.00000	53.92553	0.22633	0.050	7.85106	40.00000	Quadratic
5 Chloroethane	0.21444	0.19972	0.19972	0.050	-6.86546	40.00000	Averaged
6 Trichlorofluoromethane	50.00000	42.39371	0.53182	0.100	-15.21258	40.00000	Quadratic
7 Dichlorofluoromethane	0.74236	0.68687	0.68687	0.010	-7.47440	40.00000	Averaged
8 Diethyl ether (Ethyl Ether)	0.28052	0.27273	0.27273	0.010	-2.77677	40.00000	Averaged
9 1,1-Dichloroethene	0.37658	0.33961	0.33961	0.100	-9.81723	20.00000	Averaged
10 Carbon Disulfide	1.43078	1.19404	1.19404	0.100	-16.54587	40.00000	Averaged
11 Ethanol	1.38118	1.19953	1.19953	0.050	-13.15201	40.00000	Averaged
12 Trichlorotrifluoroethane	0.38812	0.34017	0.34017	0.010	-12.35436	40.00000	Averaged
13 Iodomethane	50.00000	40.75056	0.37733	0.010	-18.49888	40.00000	Quadratic
14 Acrolein	0.04831	0.05213	0.05213	0.010	7.90517	40.00000	Averaged
15 Allyl Chloride	0.54547	0.49906	0.49906	0.010	-8.50765	40.00000	Averaged
16 Methylene Chloride	50.00000	46.32357	0.38959	0.100	-7.35287	40.00000	Quadratic
17 Isopropanol	500	399	6.44632	0.010	-20.17618	40.00000	Linear
19 Acetone	250	233	0.36337	0.010	-6.63119	40.00000	Quadratic
20 trans-1,2-Dichloroethene	0.41845	0.38479	0.38479	0.100	-8.04284	20.00000	Averaged
21 Hexane	1.45916	1.10824	1.10824	0.010	-24.04954	40.00000	Averaged
22 Methyl-tert-butyl Ether	1.01370	1.00168	1.00168	0.300	-1.18630	20.00000	Averaged
23 tert-Butyl Alcohol	11.69463	9.76791	9.76791	0.010	-16.47528	40.00000	Averaged
24 Acetonitrile	0.03751	0.03546	0.03546	0.010	-5.48350	40.00000	Averaged
25 Isopropyl Ether	1.20931	1.16032	1.16032	0.010	-4.05069	40.00000	Averaged
26 Acrylonitrile	0.05807	0.05284	0.05284	0.010	-9.01530	40.00000	Averaged
27 1,1-Dichloroethane	0.68924	0.65597	0.65597	0.200	-4.82604	20.00000	Averaged
28 Ethyl-tert-butyl ether	1.12182	1.06742	1.06742	0.010	-4.84873	40.00000	Averaged
29 Vinyl Acetate	0.76578	0.75918	0.75918	0.010	-0.86121	40.00000	Averaged
30 cis-1,2-Dichloroethene	0.44651	0.42296	0.42296	0.100	-5.27582	20.00000	Averaged
31 2,2-Dichloropropane	0.57389	0.53565	0.53565	0.010	-6.66430	40.00000	Averaged
32 Cyclohexane	0.69431	0.61543	0.61543	0.100	-11.36058	40.00000	Averaged
33 Bromochloromethane	0.26252	0.25141	0.25141	0.010	-4.23039	40.00000	Averaged
34 Chloroform	0.69775	0.66242	0.66242	0.200	-5.06448	20.00000	Averaged
35 Carbon Tetrachloride	0.50890	0.46648	0.46648	0.100	-8.33597	40.00000	Averaged
36 Tetrahydrofuran	0.66745	0.65131	0.65131	0.010	-2.41741	40.00000	Averaged
37 1,1,1-Trichloroethane	0.61160	0.55732	0.55732	0.100	-8.87543	20.00000	Averaged
38 2-Butanone	0.15369	0.14459	0.14459	0.050	-5.91716	40.00000	Averaged
39 1,1-Dichloropropene	0.57828	0.51467	0.51467	0.010	-10.99992	40.00000	Averaged
40 Benzene	1.72445	1.56451	1.56451	0.500	-9.27500	20.00000	Averaged
42 Tert-amyl methyl ether	1.13587	1.05510	1.05510	0.010	-7.11052	40.00000	Averaged
$ 43 1,2-Dichloroethane d4 (S)	0.38600	0.39677	0.39677	0.200	2.79045	40.00000	Averaged
44 1,2-Dichloroethane	0.44964	0.42878	0.42878	0.100	-4.63799	20.00000	Averaged

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 15:30
Lab File ID: 031014016a.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 9525-630 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 Isobutanol	4.72514	4.12916	4.12916	0.010	-12.61291	40.00000	Averaged
46 Tert-Amyl Alcohol	9.80430	8.62233	8.62233	0.010	-12.05558	40.00000	Averaged
47 Trichloroethene	0.31862	0.29711	0.29711	0.200	-6.75140	20.00000	Averaged
49 Tert-amyl ethyl ether	0.58572	0.55975	0.55975	0.010	-4.43434	40.00000	Averaged
50 Dibromomethane	0.18370	0.17433	0.17433	0.010	-5.10445	40.00000	Averaged
51 1,2-Dichloropropane	0.27126	0.25650	0.25650	0.100	-5.44072	20.00000	Averaged
52 Bromodichloromethane	0.35476	0.32955	0.32955	0.050	-7.10570	40.00000	Averaged
54 1,4-Dioxane (P-Dioxane)	1.34644	1.13181	1.13181	0.010	-15.94001	40.00000	Averaged
55 2-Chloroethyl Vinyl Ether	125	128	0.02302	0.010	2.03817	40.00000	Quadratic
56 cis-1,3-Dichloropropene	0.43924	0.41653	0.41653	0.050	-5.17072	40.00000	Averaged
$ 57 Toluene-d8 (S)	1.17496	1.17796	1.17796	0.200	0.25520	40.00000	Averaged
58 Toluene	0.75661	0.66338	0.66338	0.400	-12.32307	20.00000	Averaged
59 4-Methyl-2-Pentanone	0.22450	0.21949	0.21949	0.100	-2.22756	40.00000	Averaged
60 Tetrachloroethene	0.36056	0.32924	0.32924	0.200	-8.68669	20.00000	Averaged
61 trans-1,3-Dichloropropene	0.38888	0.37480	0.37480	0.100	-3.62045	40.00000	Averaged
62 1,1,2-Trichloroethane	0.23148	0.21980	0.21980	0.100	-5.04655	40.00000	Averaged
63 Dibromochloromethane	0.26855	0.25916	0.25916	0.100	-3.49895	40.00000	Averaged
64 1,3-Dichloropropane	0.39553	0.37433	0.37433	0.010	-5.36084	40.00000	Averaged
65 1,2-Dibromoethane	0.24305	0.23279	0.23279	0.100	-4.22172	20.00000	Averaged
66 2-Hexanone	0.17506	0.16311	0.16311	0.050	-6.82820	40.00000	Averaged
68 Chlorobenzene	0.84483	0.76419	0.76419	0.500	-9.54525	40.00000	Averaged
69 Ethylbenzene	1.44184	1.27106	1.27106	0.300	-11.84469	20.00000	Averaged
70 1,1,1,2-Tetrachloroethane	0.29385	0.27702	0.27702	0.010	-5.72740	40.00000	Averaged
71 M&P-Xylene	0.56155	0.50299	0.50299	0.300	-10.42788	20.00000	Averaged
72 O-Xylene (1,2-Dimethylbenze	0.52660	0.48668	0.48668	0.300	-7.57975	20.00000	Averaged
73 Styrene	0.89773	0.86520	0.86520	0.300	-3.62266	40.00000	Averaged
74 Bromoform	0.21306	0.20448	0.20448	0.100	-4.02604	40.00000	Averaged
75 Isopropylbenzene (Cumene)	1.40917	1.24687	1.24687	0.100	-11.51738	20.00000	Averaged
$ 76 4-Bromofluorobenzene (S)	0.80228	0.80652	0.80652	0.200	0.52873	40.00000	Averaged
77 cis-1,4-Dichloro-2-Butene	0.15505	0.14815	0.14815	0.010	-4.44775	40.00000	Averaged
78 Bromobenzene	0.61425	0.58202	0.58202	0.010	-5.24747	40.00000	Averaged
79 n-Propylbenzene	2.80970	2.54135	2.54135	0.010	-9.55080	20.00000	Averaged
80 1,1,2,2-Tetrachloroethane	0.51066	0.49441	0.49441	0.300	-3.18253	40.00000	Averaged
81 2-Chlorotoluene	1.75076	1.61415	1.61415	0.010	-7.80270	40.00000	Averaged
82 1,3,5-Trimethylbenzene	1.98819	1.80923	1.80923	0.300	-9.00131	20.00000	Averaged
83 1,2,3-Trichloropropane	0.14296	0.13908	0.13908	0.010	-2.71439	40.00000	Averaged
84 trans-1,4-Dichloro-2-Butene	0.13230	0.13081	0.13081	0.010	-1.12767	40.00000	Averaged
85 4-Chlorotoluene	1.67479	1.51772	1.51772	0.010	-9.37873	40.00000	Averaged
86 tert-Butylbenzene	50.00000	45.92362	1.54173	0.010	-8.15277	40.00000	Quadratic
87 1,2,4-Trimethylbenzene	2.02418	1.86616	1.86616	0.300	-7.80634	20.00000	Averaged
88 sec-Butylbenzene	2.51224	2.27876	2.27876	0.010	-9.29398	40.00000	Averaged
89 p-Isopropyltoluene	2.21193	2.02695	2.02695	0.010	-8.36292	40.00000	Averaged

Report Date: 11-Mar-2014 11:30

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 15:30
Lab File ID: 031014016a.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 9525-630 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
90 1,3-Dichlorobenzene	1.22935	1.11766	1.11766	0.600	-9.08466	40.00000	Averaged
92 1,4-Dichlorobenzene	1.28119	1.15741	1.15741	0.500	-9.66120	40.00000	Averaged
93 1,2,3 Trimethylbenzene	1.92635	1.76307	1.76307	0.010	-8.47607	40.00000	Averaged
94 n-Butylbenzene	2.05952	1.83846	1.83846	0.010	-10.73373	40.00000	Averaged
95 1,2-Dichlorobenzene	1.15228	1.05488	1.05488	0.400	-8.45319	40.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.11263	0.11219	0.11219	0.010	-0.38702	40.00000	Averaged
97 Hexachlorobutadiene	0.44698	0.39640	0.39640	0.010	-11.31747	40.00000	Averaged
98 1,2,4-Trichlorobenzene	0.75211	0.70037	0.70037	0.200	-6.87982	40.00000	Averaged
99 Naphthalene	1.45993	1.39651	1.39651	0.300	-4.34376	20.00000	Averaged
100 1,2,3-Trichlorobenzene	0.67876	0.65391	0.65391	0.010	-3.66236	40.00000	Averaged
101 2-Methylnaphthalene	0.56690	0.52593	0.52593	0.100	-7.22679	20.00000	Averaged

Report Date: 11-Mar-2014 11:30

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014016a.D
Lab Smp Id: V50 9525-630
Inj Date : 10-MAR-2014 15:30
Operator : HBP Inst ID: 10msv7.i
Smp Info : V50 9525-630,5,2
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:30 10msv7.i Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	165633	50.0000	41.3
2	Chloromethane	50	1.241	1.241	(0.295)	206574	50.0000	46.5(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	220786	50.0000	45.0
4	Bromomethane	94	1.479	1.479	(0.352)	109378	50.0000	53.9
5	Chloroethane	64	1.570	1.570	(0.374)	96520	50.0000	46.6
6	Trichlorofluoromethane	101	1.674	1.674	(0.398)	257016	50.0000	42.4
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	331945	50.0000	46.3
8	Diethyl ether (Ethyl Ether)	59	1.954	1.954	(0.465)	131804	50.0000	48.6
9	1,1-Dichloroethene	96	2.094	2.094	(0.498)	164126	50.0000	45.1
10	Carbon Disulfide	76	2.101	2.101	(0.500)	577048	50.0000	41.7
11	Ethanol	45	2.113	2.113	(0.438)	52296	1000.00	868
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	164394	50.0000	43.8
13	Iodomethane	142	2.210	2.210	(0.526)	182354	50.0000	40.8
14	Acrolein	56	2.411	2.411	(0.574)	251926	500.000	540
15	Allyl Chloride	41	2.539	2.539	(0.604)	241182	50.0000	45.7
16	Methylene Chloride	84	2.637	2.637	(0.627)	188280	50.0000	46.3
17	Isopropanol	45	2.631	2.631	(0.545)	140521	500.000	399
* 18	Acetone d6	46	2.649	2.649	(1.000)	143669	200.000	
19	Acetone	58	2.698	2.698	(1.018)	65256	250.000	233

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	185961	50.0000	46.0
	21 Hexane	86	2.863	2.863	(1.081)	99512	125.000	94.9
	22 Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	484083	50.0000	49.4(Q)
	23 tert-Butyl Alcohol	59	3.009	3.009	(0.624)	212927	500.000	418
	24 Acetonitrile	41	3.070	3.070	(0.730)	171353	500.000	472
	25 Isopropyl Ether	45	3.204	3.204	(0.762)	560753	50.0000	48.0
	26 Acrylonitrile	53	3.247	3.247	(0.772)	255340	500.000	455
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	317015	50.0000	47.6
	28 Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	515856	50.0000	47.6
	29 Vinyl Acetate	43	3.466	3.466	(0.825)	366893	50.0000	49.6
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	204403	50.0000	47.4
	31 2,2-Dichloropropane	77	3.698	3.698	(0.880)	258863	50.0000	46.7
	32 Cyclohexane	56	3.753	3.753	(0.893)	1487106	250.000	222
	33 Bromochloromethane	130	3.759	3.759	(0.894)	121502	50.0000	47.9
	34 Chloroform	83	3.814	3.814	(0.907)	320128	50.0000	47.5
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	225436	50.0000	45.8
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	233933	500.000	488
	37 1,1,1-Trichloroethane	97	3.929	3.929	(0.935)	269338	50.0000	45.6
	38 2-Butanone	43	3.997	3.997	(0.951)	349390	250.000	235
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	248728	50.0000	44.5
	40 Benzene	78	4.143	4.143	(0.985)	756085	50.0000	45.4
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	966546	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	509903	50.0000	46.4
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	383497	100.000	103
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	207219	50.0000	47.7
	45 Isobutanol	43	4.295	4.295	(0.890)	180020	1000.00	874
	46 Tert-Amyl Alcohol	59	4.344	4.344	(0.900)	187955	500.000	440
	47 Trichloroethene	130	4.460	4.460	(0.995)	216580	50.0000	46.6
*	48 1,4 Difluorobenzene	114	4.484	4.484	(1.000)	1457917	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.023)	408034	50.0000	47.8
	50 Dibromomethane	174	4.667	4.667	(1.041)	127076	50.0000	47.4
	51 1,2-Dichloropropane	63	4.716	4.716	(1.052)	186978	50.0000	47.3
	52 Bromodichloromethane	83	4.746	4.746	(1.058)	240227	50.0000	46.4
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	174389	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	49344	1000.00	840
	55 2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.116)	41956	125.000	128
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.121)	303632	50.0000	47.4
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.882)	1718276	100.000	100
	58 Toluene	92	5.130	5.130	(0.886)	483830	50.0000	43.8
	59 4-Methyl-2-Pentanone	43	5.283	5.283	(0.913)	800437	250.000	244
	60 Tetrachloroethene	166	5.295	5.295	(0.915)	240128	50.0000	45.6
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.916)	273359	50.0000	48.2
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.928)	160312	50.0000	47.5
	63 Dibromochloromethane	129	5.454	5.454	(0.942)	189014	50.0000	48.2
	64 1,3-Dichloropropane	76	5.490	5.490	(0.948)	273014	50.0000	47.3
	65 1,2-Dibromoethane	107	5.557	5.557	(0.960)	169784	50.0000	47.9
	66 2-Hexanone	43	5.649	5.649	(0.976)	594804	250.000	233
*	67 Chlorobenzene-d5	117	5.789	5.789	(1.000)	1458689	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.001)	557359	50.0000	45.2
	69 Ethylbenzene	91	5.801	5.801	(1.002)	927038	50.0000	44.1
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.005)	202040	50.0000	47.1
	71 M&P-Xylene	106	5.868	5.868	(1.014)	733712	100.000	89.6
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.049)	354959	50.0000	46.2
	73 Styrene	104	6.106	6.106	(1.055)	631032	50.0000	48.2

Report Date: 11-Mar-2014 11:30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
74	Bromoform	173	6.124	6.124	(1.058)	149136	50.0000	48.0
75	Isopropylbenzene (Cumene)	105	6.234	6.234	(1.077)	909401	50.0000	44.2
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	716914	100.000	100
77	cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	65847	50.0000	47.8
78	Bromobenzene	156	6.453	6.453	(0.916)	258678	50.0000	47.4
79	n-Propylbenzene	91	6.453	6.453	(0.916)	1129501	50.0000	45.2
80	1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	219740	50.0000	48.4
81	2-Chlorotoluene	91	6.551	6.551	(0.930)	717410	50.0000	46.1
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	804111	50.0000	45.5
83	1,2,3-Trichloropropane	110	6.575	6.575	(0.933)	61814	50.0000	48.6(Q)
84	trans-1,4-Dichloro-2-Butene	53	6.587	6.587	(0.935)	145342	125.000	124
85	4-Chlorotoluene	91	6.642	6.642	(0.943)	674549	50.0000	45.3
86	tert-Butylbenzene	119	6.746	6.746	(0.958)	685223	50.0000	45.9
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	829415	50.0000	46.1
88	sec-Butylbenzene	105	6.856	6.856	(0.973)	1012792	50.0000	45.4
89	p-Isopropyltoluene	119	6.941	6.941	(0.985)	900878	50.0000	45.8
90	1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	496745	50.0000	45.4
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	888899	100.000	
92	1,4-Dichlorobenzene	146	7.057	7.057	(1.002)	514410	50.0000	45.2
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	852045	50.0000	45.8
94	n-Butylbenzene	91	7.215	7.215	(1.024)	817101	50.0000	44.6
95	1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	468839	50.0000	45.8
96	1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	124657	125.000	124
97	Hexachlorobutadiene	225	8.191	8.191	(1.163)	176178	50.0000	44.3
98	1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	311278	50.0000	46.6
99	Naphthalene	128	8.392	8.392	(1.191)	620678	50.0000	47.8
100	1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	290628	50.0000	48.2
101	2-Methylnaphthalene	142	9.014	9.014	(1.279)	116874	25.0000	23.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 11-Mar-2014 11:30

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014016a.D
Lab Smp Id: V50 9525-630
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 14:10
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	143669	5.78
41 Pentafluorobenzen	944656	472328	1889312	966546	2.32
48 1,4 Difluorobenze	1423443	711722	2846886	1457917	2.42
53 1,4 dioxane d8	156016	78008	312032	174389	11.78
67 Chlorobenzene-d5	1400934	700467	2801868	1458689	4.12
91 1,4-Dichlorobenze	853329	426665	1706658	888899	4.17

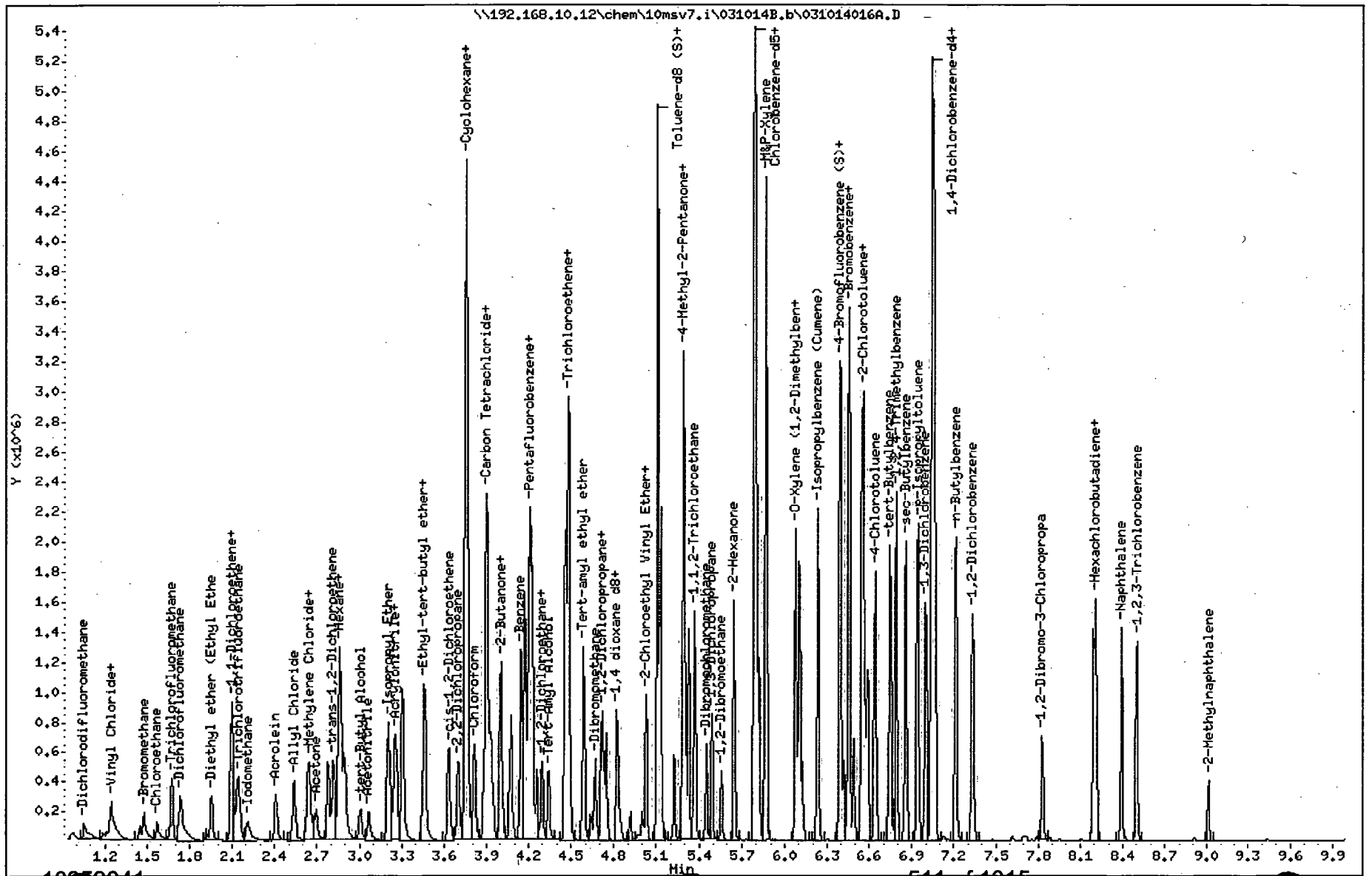
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.01
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	-0.00
67 Chlorobenzene-d5	5.78	5.28	6.28	5.79	0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016A.D
Date : 10-MAR-2014 15:30
Client ID:
Sample Info: V50 9525-630,5,2

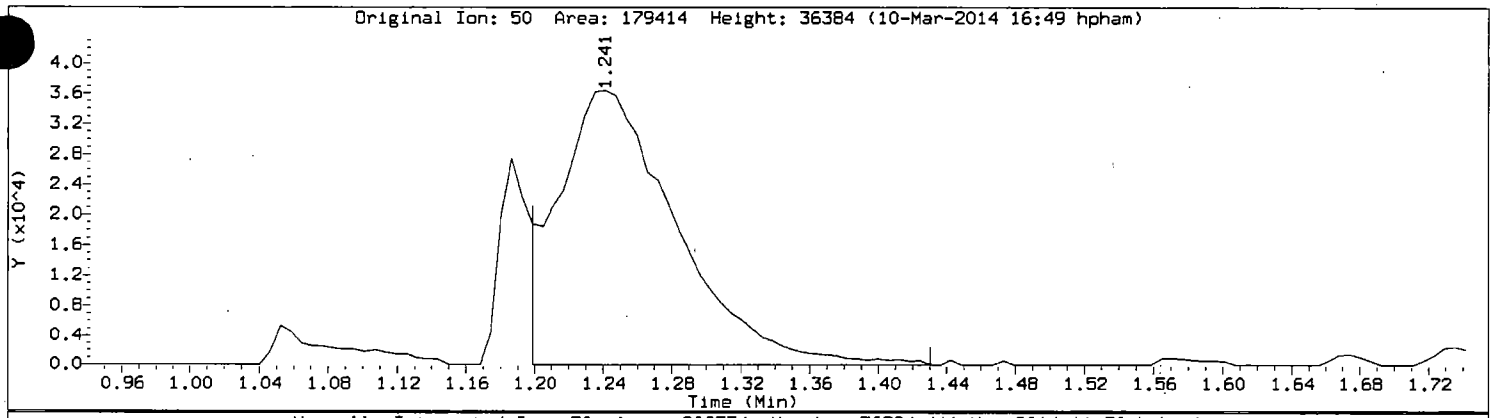
Instrument: 10msv7.i

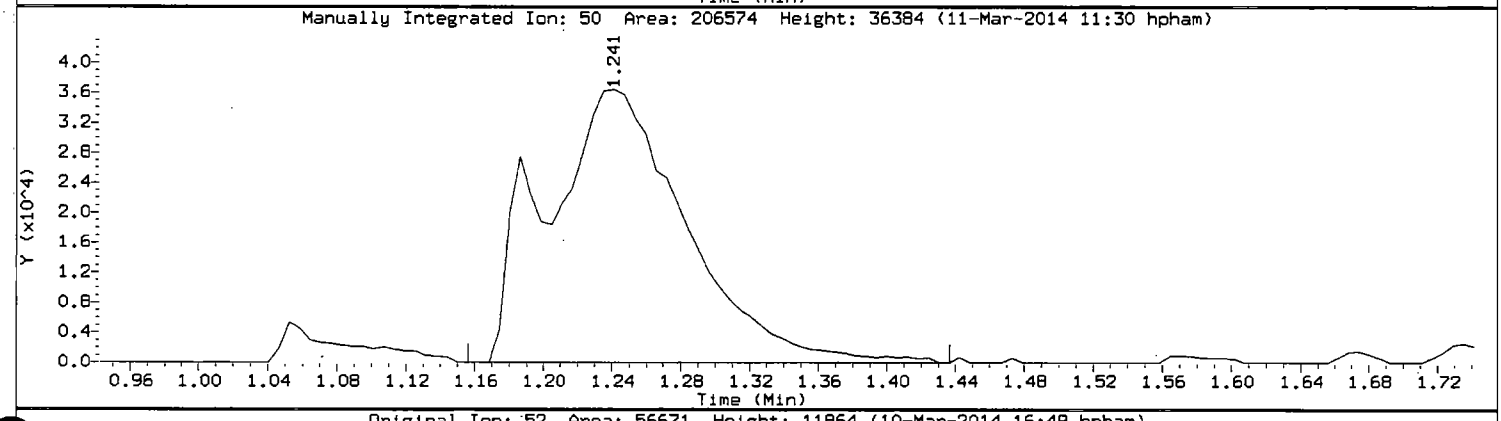
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18

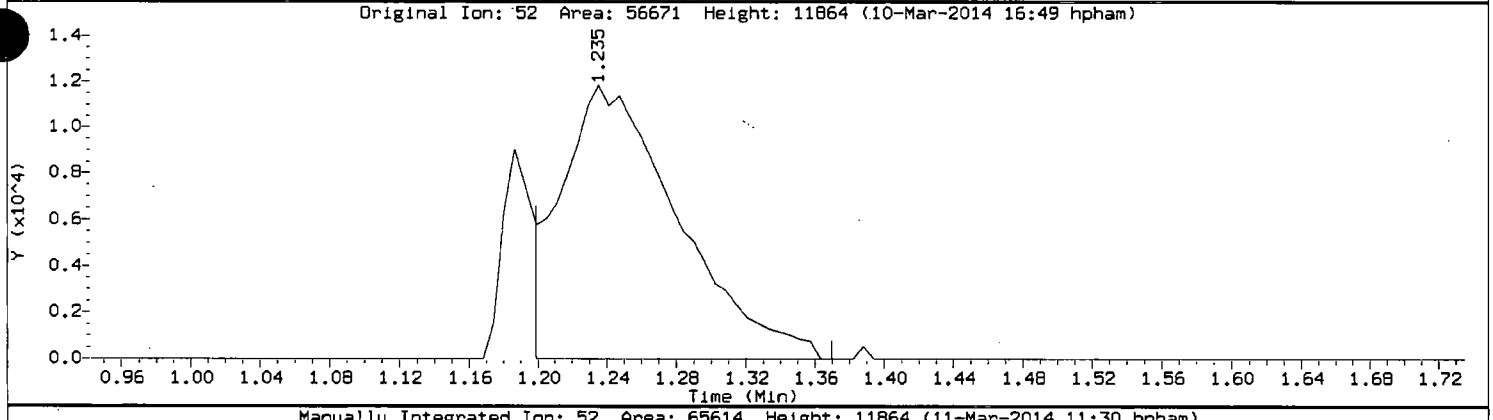


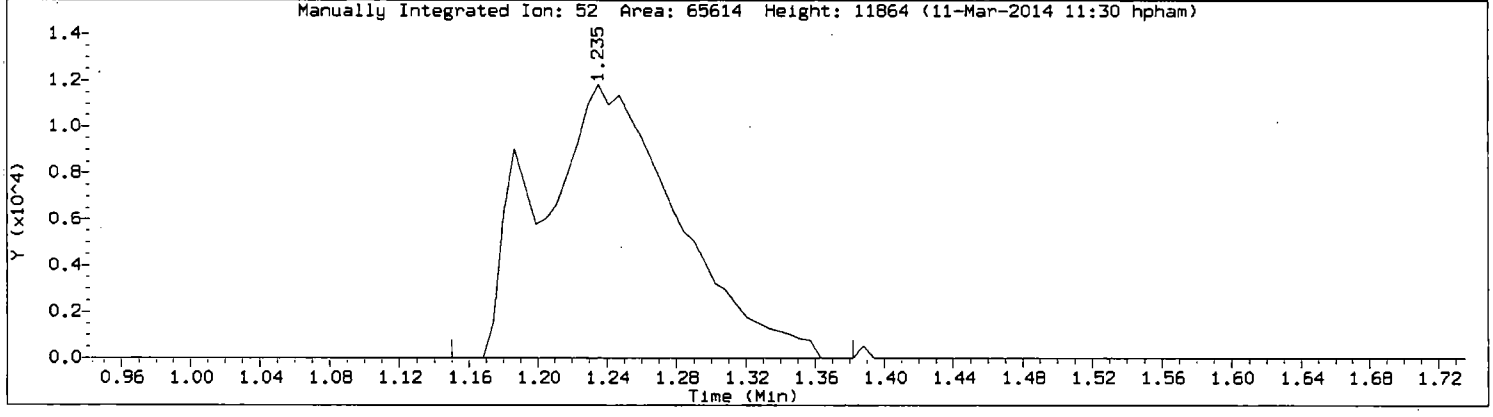
Instrument: 10msv7.i
Lab Sample ID: V50 9525-630

Compound: Chloromethane
CAS Number: 74-87-3









Report Date: 04-Mar-2014 13:22

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\030314A.B\03031405.D
Lab Smp Id: 1632466
Inj Date : 03-MAR-2014 10:43
Operator : LPM Inst ID: 10msv5.i
Smp Info : 1632466,1,3,BLANK
Misc Info : 26462
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Meth Date : 03-Mar-2014 10:22 10msv5.i Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 465W.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
10	1,1-Dichloroethene	96	Compound Not Detected.					
11	Trichlorotrifluoroethane	101	Compound Not Detected.					
12	Carbon Disulfide	76	1.954	1.953	(0.489)	301	0.02354	0.024(aR)
15	Allyl Chloride	41	Compound Not Detected.					
17	Methylene Chloride	84	Compound Not Detected.					
* 18	Acetone d6	46	2.337	2.331	(1.000)	92965	100.000	
19	Acetone	58	Compound Not Detected.					
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					
23	Methyl-tert-butyl Ether	73	Compound Not Detected.					
25	Isopropyl Ether	45	Compound Not Detected.					
28	1,1-Dichloroethane	63	Compound Not Detected.					
32	cis-1,2-Dichloroethene	96	Compound Not Detected.					
33	2,2-Dichloropropane	77	Compound Not Detected.					
34	Cyclohexane	56	Compound Not Detected.					
35	Bromochloromethane	130	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	36	Chloroform	83	Compound Not Detected.					
	37	Carbon Tetrachloride	117	Compound Not Detected.					
	39	Tetrahydrofuran	72	Compound Not Detected.					
	41	1,1,1-Trichloroethane	97	Compound Not Detected.					
	42	2-Butanone	43	Compound Not Detected.					
	43	1,1-Dichloropropene	75	Compound Not Detected.					
	45	Benzene	78	Compound Not Detected.					
*	48	Pentafluorobenzene	168	3.998	3.991	(1.000)	399898	50.0000	
$	50	1,2-Dichloroethane d4 (S)	65	4.028	4.022	(1.008)	194835	49.0047	49.0(Q)
	51	1,2-Dichloroethane	62	Compound Not Detected.					
	55	Trichloroethene	130	Compound Not Detected.					
*	56	1,4 Difluorobenzene	114	4.320	4.320	(1.000)	599724	50.0000	
	59	Dibromomethane	174	Compound Not Detected.					
	60	1,2-Dichloropropane	63	Compound Not Detected.					
	62	Bromodichloromethane	83	Compound Not Detected.					
*	64	1,4 dioxane d8	96	4.746	4.740	(1.000)	22571	2000.00	
	68	cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	69	Toluene-d8 (S)	98	5.093	5.092	(0.861)	720086	49.5631	49.6
	70	Toluene	92	Compound Not Detected.					
	72	Tetrachloroethene	166	Compound Not Detected.					
	73	4-Methyl-2-Pentanone	43	Compound Not Detected.					
	74	trans-1,3-Dichloropropene	75	Compound Not Detected.					
	77	1,1,2-Trichloroethane	97	Compound Not Detected.					
	78	Dibromochloromethane	129	Compound Not Detected.					
	79	1,3-Dichloropropane	76	Compound Not Detected.					
	80	1,2-Dibromoethane	107	Compound Not Detected.					
	81	2-Hexanone	43	Compound Not Detected.					
*	82	Chlorobenzene-d5	117	5.914	5.914	(1.000)	571419	50.0000	
	83	Chlorobenzene	112	Compound Not Detected.					
	84	Ethylbenzene	91	Compound Not Detected.					
	85	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	86	M&P-Xylene	106	Compound Not Detected.					
	87	O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
	88	Styrene	104	Compound Not Detected.					
	89	Bromoform	173	Compound Not Detected.					
	90	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	91	4-Bromofluorobenzene (S)	95	6.547	6.546	(0.907)	274789	49.9435	49.9
	93	Bromobenzene	156	Compound Not Detected.					
	94	n-Propylbenzene	91	Compound Not Detected.					
	95	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	96	2-Chlorotoluene	91	Compound Not Detected.					
	97	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
	98	1,2,3-Trichloropropane	110	Compound Not Detected.					
	100	4-Chlorotoluene	91	Compound Not Detected.					
	101	tert-Butylbenzene	119	Compound Not Detected.					
	102	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	103	sec-Butylbenzene	105	Compound Not Detected.					
	104	p-Isopropyltoluene	119	Compound Not Detected.					
	105	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	106	1,4-Dichlorobenzene-d4	152	7.222	7.222	(1.000)	295456	50.0000	
	107	1,4-Dichlorobenzene	146	Compound Not Detected.					
	109	n-Butylbenzene	91	Compound Not Detected.					
	110	1,2-Dichlorobenzene	146	Compound Not Detected.					
	111	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					

Data File: \\192.168.10.12\Chem\10msv5.1\030514A.B\030514A5.D
Report Date: 04-Mar-2014 13:22

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
112 Hexachlorobutadiene	225	Compound Not Detected.					
113 1,2,4-Trichlorobenzene	180	8.530	8.517	(1.181)	458	0.09033	0.090(aR)
114 Naphthalene	128	8.755	8.755	(1.212)	3240	0.17754	0.18(aR)
115 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Report Date: 04-Mar-2014 13:22

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 03031405.D
Lab Smp Id: 1632466
Analysis Type: VOA
Quant Type: ISTD
Operator: LPM
Method File: \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Misc Info: 26462

Calibration Date: 03-MAR-2014
Calibration Time: 09:36
Level: LOW
Sample Type: WATER

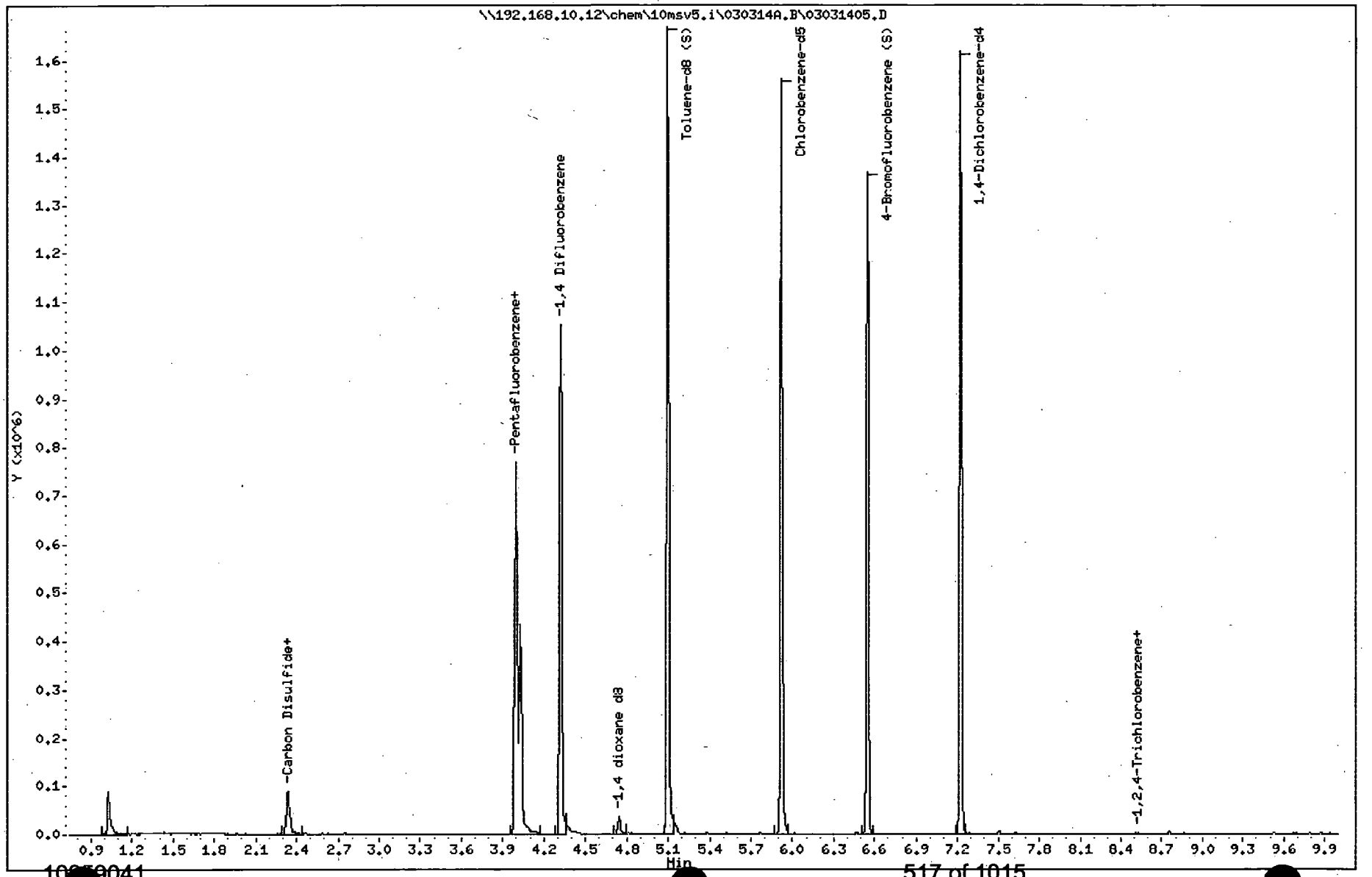
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	114178	57089	228356	92965	-18.58
48 Pentafluorobenzen	409621	204811	819242	399898	-2.37
56 1,4 Difluorobenze	611915	305958	1223830	599724	-1.99
64 1,4 dioxane d8	23365	11683	46730	22571	-3.40
82 Chlorobenzene-d5	575331	287666	1150662	571419	-0.68
106 1,4-Dichlorobenze	315847	157924	631694	295456	-6.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.34	0.29
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.17
56 1,4 Difluorobenze	4.32	3.82	4.82	4.32	0.02
64 1,4 dioxane d8	4.74	4.24	5.24	4.75	0.14
82 Chlorobenzene-d5	5.91	5.41	6.41	5.91	0.01
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031405.D
Date : 03-MAR-2014 10:43
Client ID:
Instrument: 10msv5.i
Sample Info: 1632466,1,3,BLANK
Purge Volume: 10.0
Operator: LPH
Column phase: Rtx-VMS
Column diameter: 0.18



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Date : 03-MAR-2014 10:43

Client ID:

Instrument: 10msv5.i

Sample Info: 1632466,1,3,BLANK

Purge Volume: 10.0

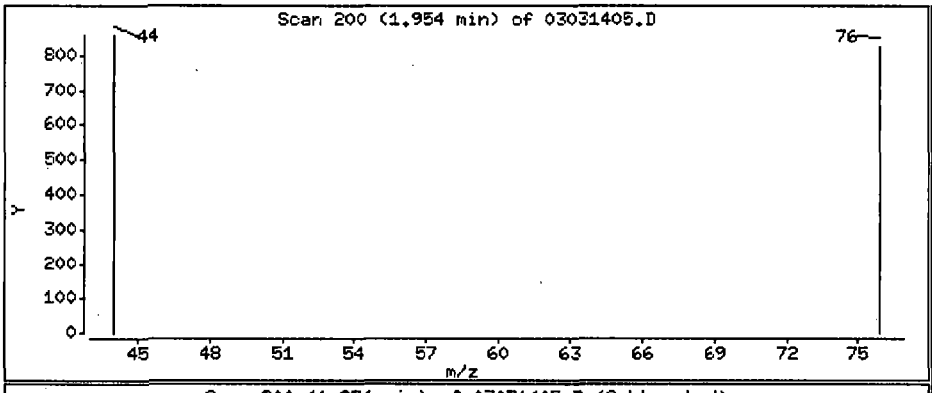
Operator: LPM

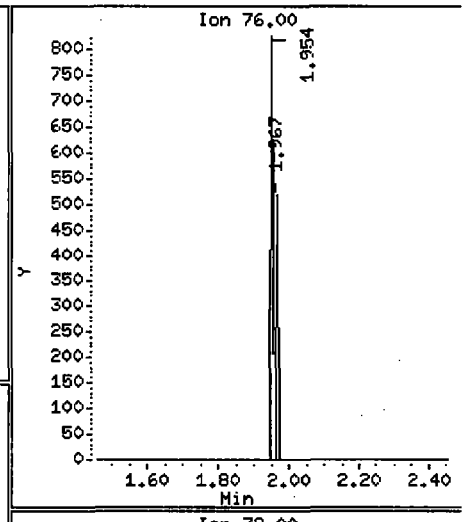
Column phase: Rtx-VMS

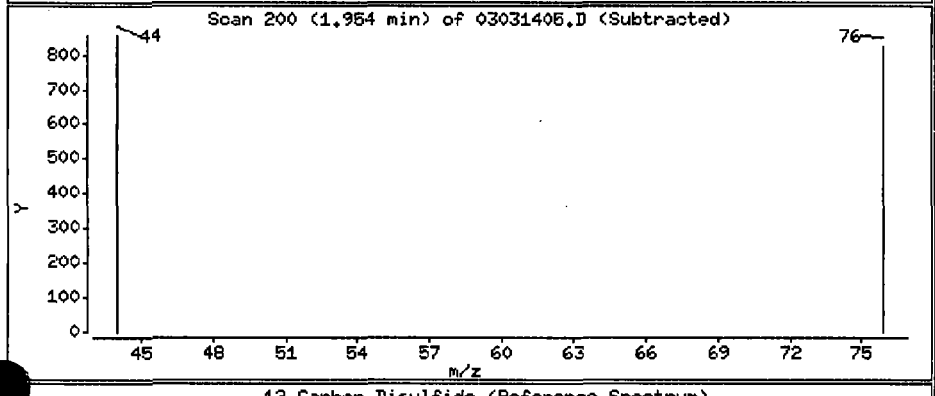
Column diameter: 0.18

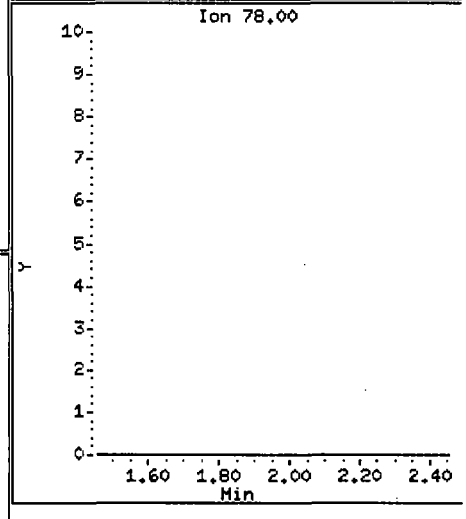
12 Carbon Disulfide

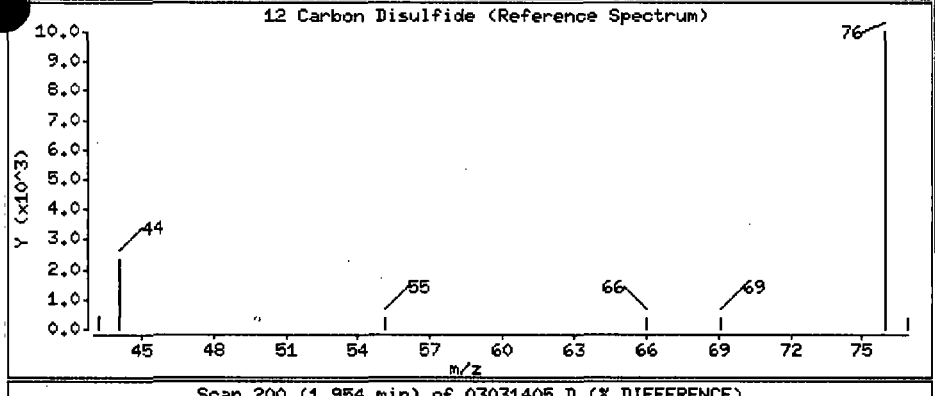
Concentration: 0.024 ug/L

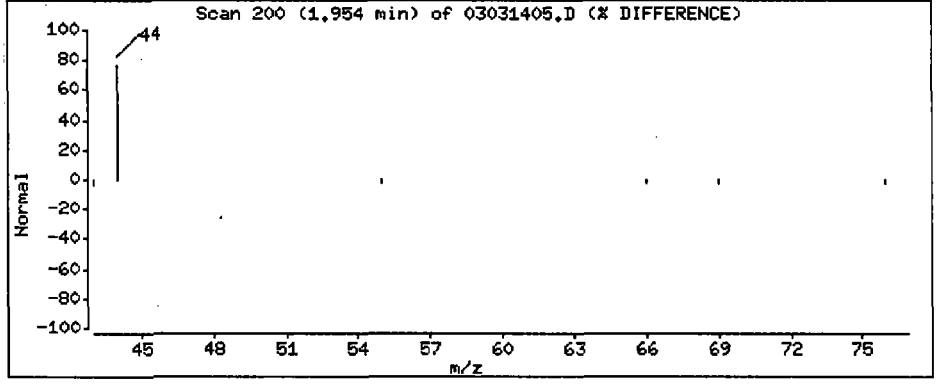












Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031405.D

Date : 03-MAR-2014 10:43

Client ID:

Instrument: 10msv5.i

Sample Info: 1632466,1,3,BLANK

Purge Volume: 10.0

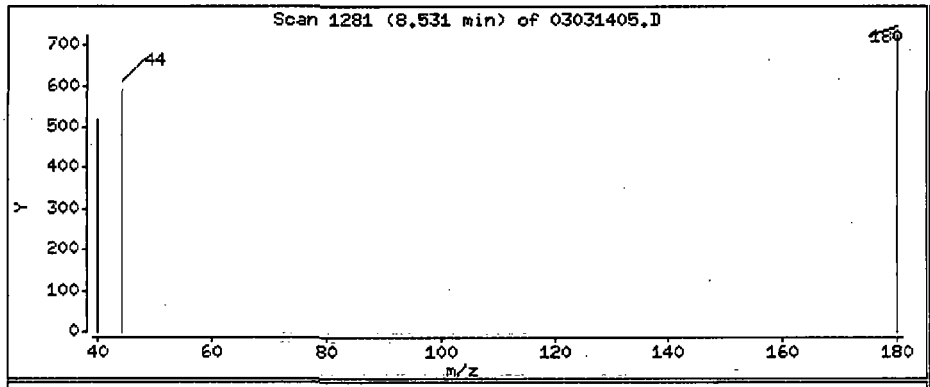
Operator: LPM

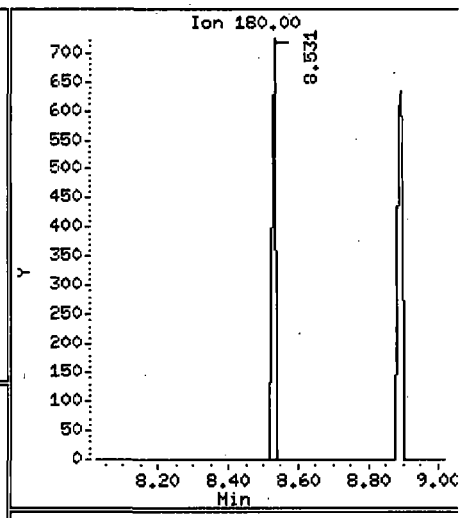
Column phase: Rtx-VMS

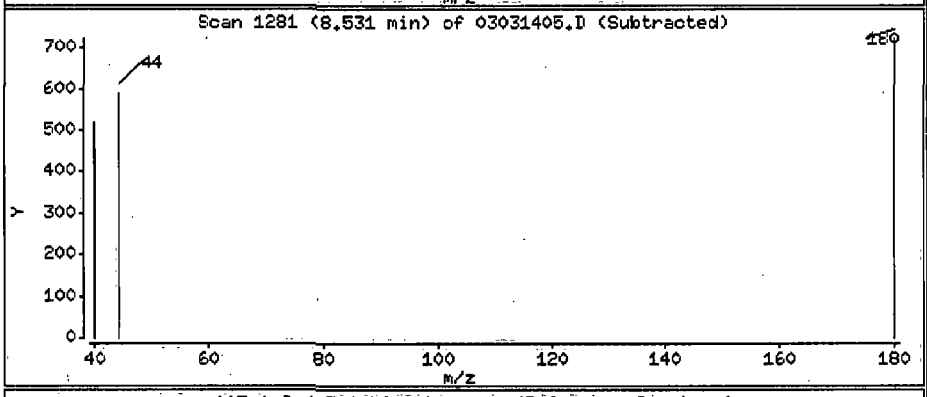
Column diameter: 0.18

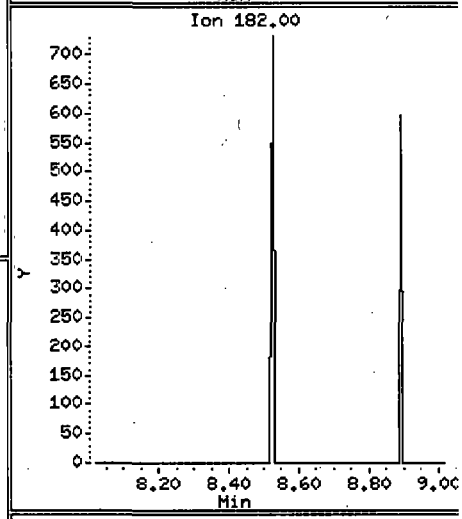
113 1,2,4-Trichlorobenzene

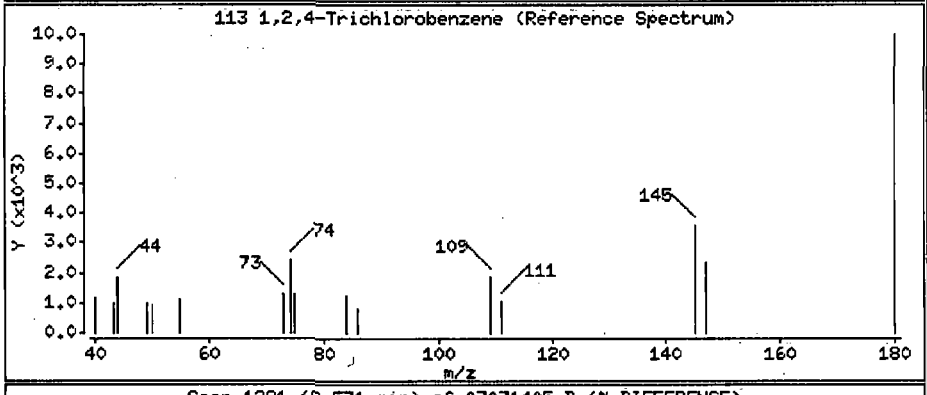
Concentration: 0.090 ug/L

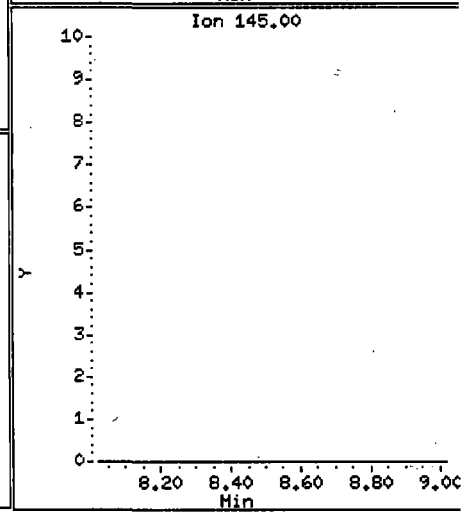


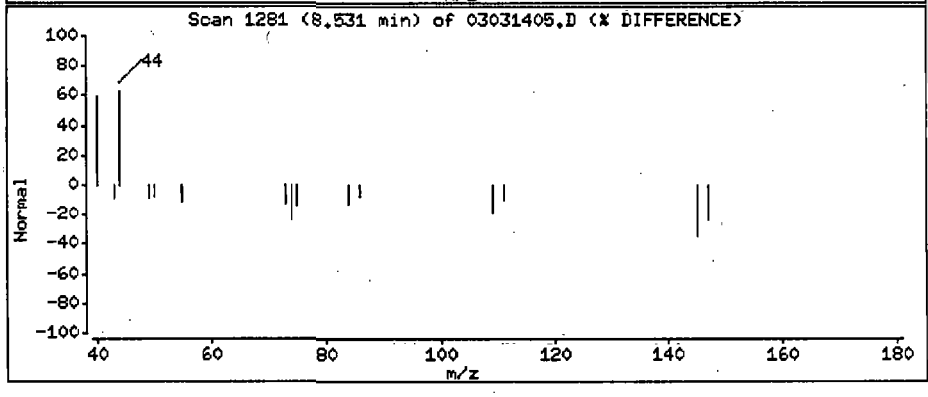












Data File: \\192.168.10.12\ohem\10msv5.i\030314A.B\03031405.D

Date : 03-MAR-2014 10:43

Client ID:

Instrument: 10msv5.i

Sample Info: 1632466,1,3,BLANK

Purge Volume: 10.0

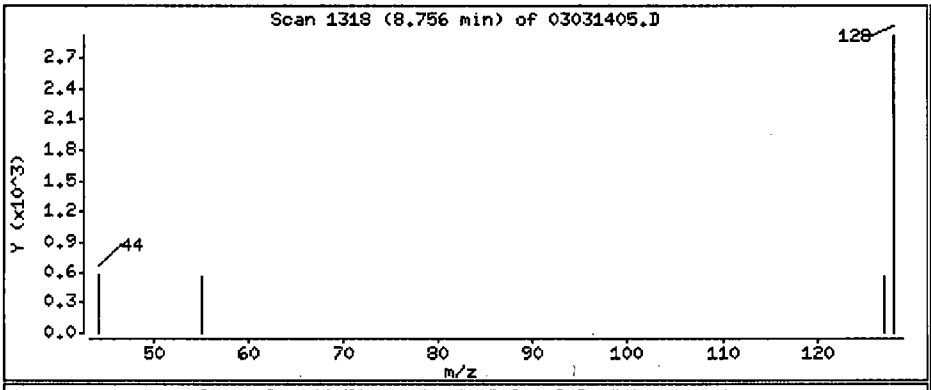
Operator: LPM

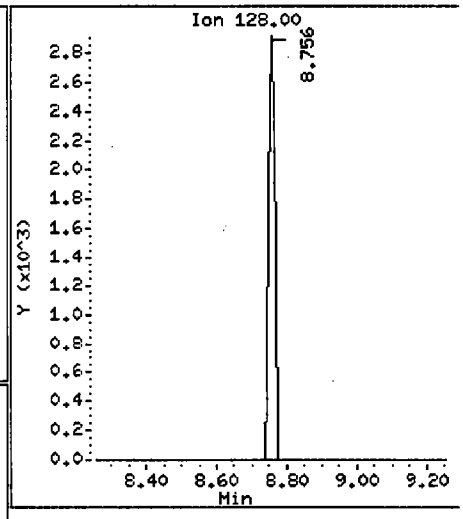
Column phase: Rtx-VMS

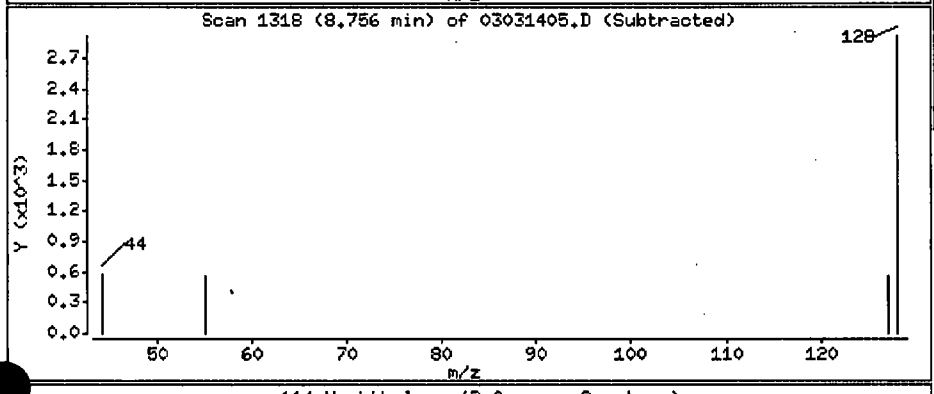
Column diameter: 0.18

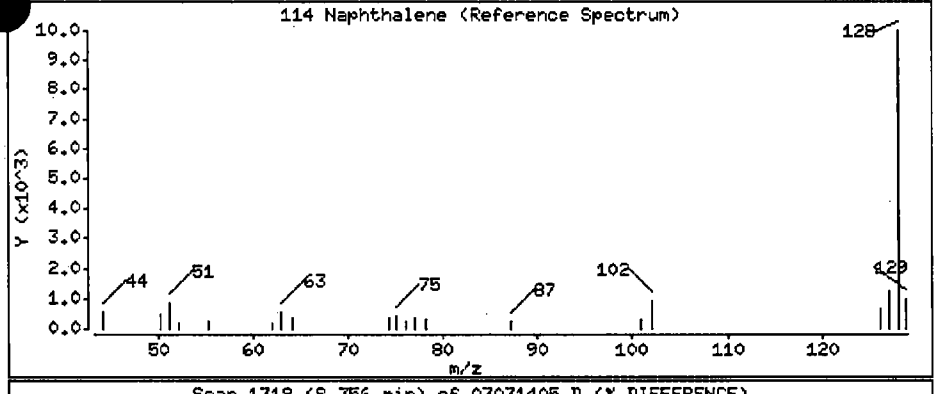
114 Naphthalene

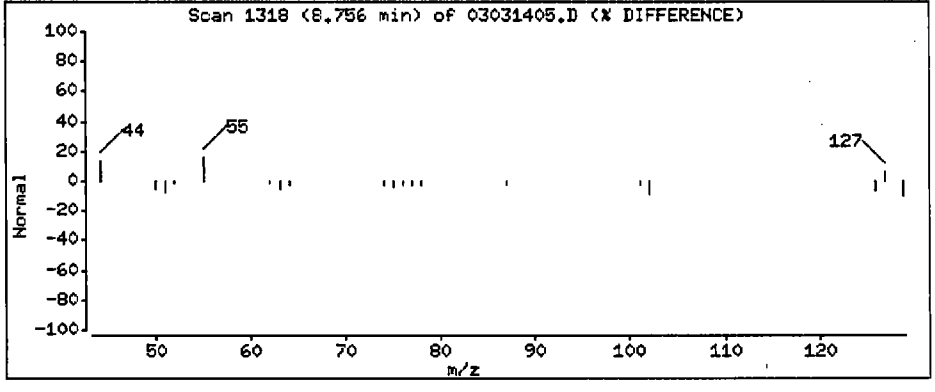
Concentration: 0.18 ug/L











Injection Date: 05-MAR-2014 10:45
Instrument: 10msv5.i
Lab Sample ID: 1632466
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D
Lab Smp Id: 1635950
Inj Date : 10-MAR-2014 16:48
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1635950,5,3,BLANK
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 20 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.101	2.101	(0.500)	2361	0.16986	0.17(aR)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	121103	200.000	
19	Acetone	58	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014b.b\031014020.b
Report Date: 11-Mar-2014 15:39

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20	trans-1,2-Dichloroethene	96	Compound Not Detected.					
	21	Hexane	86	Compound Not Detected.					
	22	Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23	tert-Butyl Alcohol	59	Compound Not Detected.					
	24	Acetonitrile	41	Compound Not Detected.					
	25	Isopropyl Ether	45	Compound Not Detected.					
	26	Acrylonitrile	53	Compound Not Detected.					
	27	1,1-Dichloroethane	63	Compound Not Detected.					
	28	Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29	Vinyl Acetate	43	Compound Not Detected.					
	30	cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31	2,2-Dichloropropane	77	Compound Not Detected.					
	32	Cyclohexane	56	Compound Not Detected.					
	33	Bromochloromethane	130	Compound Not Detected.					
	34	Chloroform	83	Compound Not Detected.					
	35	Carbon Tetrachloride	117	Compound Not Detected.					
	36	Tetrahydrofuran	72	Compound Not Detected.					
	37	1,1,1-Trichloroethane	97	Compound Not Detected.					
	38	2-Butanone	43	Compound Not Detected.					
	39	1,1-Dichloropropene	75	Compound Not Detected.					
	40	Benzene	78	Compound Not Detected.					
*	41	Pentafluorobenzene	168	4.204	4.204	(1.000)	971464	100.000	
	42	Tert-amyl methyl ether	73	Compound Not Detected.					
$	43	1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	359737	95.9338	95.9
	44	1,2-Dichloroethane	62	Compound Not Detected.					
	45	Isobutanol	43	Compound Not Detected.					
	46	Tert-Amyl Alcohol	59	Compound Not Detected.					
	47	Trichloroethene	130	Compound Not Detected.					
*	48	1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1431301	100.000	
	49	Tert-amyl ethyl ether	59	Compound Not Detected.					
	50	Dibromomethane	174	Compound Not Detected.					
	51	1,2-Dichloropropane	63	Compound Not Detected.					
	52	Bromodichloromethane	83	Compound Not Detected.					
*	53	1,4 dioxane d8	96	4.826	4.826	(1.000)	155713	4000.00	
	54	1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56	cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57	Toluene-d8 (S)	98	5.106	5.106	(0.883)	1675218	102.123	102
	58	Toluene	92	5.131	5.130	(0.887)	1051	0.09950	0.099(aR)
	59	4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60	Tetrachloroethene	166	Compound Not Detected.					
	61	trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62	1,1,2-Trichloroethane	97	Compound Not Detected.					
	63	Dibromochloromethane	129	Compound Not Detected.					
	64	1,3-Dichloropropane	76	Compound Not Detected.					
	65	1,2-Dibromoethane	107	Compound Not Detected.					
	66	2-Hexanone	43	5.649	5.649	(0.977)	787	0.32200	0.32(aQR)
*	67	Chlorobenzene-d5	117	5.783	5.789	(1.000)	1396129	100.000	
	68	Chlorobenzene	112	Compound Not Detected.					
	69	Ethylbenzene	91	Compound Not Detected.					
	70	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71	M&P-Xylene	106	Compound Not Detected.					
	72	O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
	73	Styrene	104	Compound Not Detected.					

Report Date: 11-Mar-2014 15:39

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	74	Bromoform	173	Compound Not Detected.					
	75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	681704	100.278	100
	77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78	Bromobenzene	156	Compound Not Detected.					
	79	n-Propylbenzene	91	Compound Not Detected.					
	80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81	2-Chlorotoluene	91	Compound Not Detected.					
	82	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
	83	1,2,3-Trichloropropane	110	Compound Not Detected.					
	84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85	4-Chlorotoluene	91	Compound Not Detected.					
	86	tert-Butylbenzene	119	Compound Not Detected.					
	87	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	88	sec-Butylbenzene	105	Compound Not Detected.					
	89	p-Isopropyltoluene	119	Compound Not Detected.					
	90	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	847359	100.000	
	92	1,4-Dichlorobenzene	146	Compound Not Detected.					
	93	1,2,3 Trimethylbenzene	105	Compound Not Detected.					
	94	n-Butylbenzene	91	Compound Not Detected.					
	95	1,2-Dichlorobenzene	146	Compound Not Detected.					
	96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97	Hexachlorobutadiene	225	Compound Not Detected.					
	98	1,2,4-Trichlorobenzene	180	8.203	8.209	(1.164)	507	0.07955	0.080(aR)
	99	Naphthalene	128	8.392	8.392	(1.191)	2136	0.17266	0.17(aR)
	100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
	101	2-Methylnaphthalene	142	9.008	9.014	(1.279)	866	0.18028	0.18(aQR)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014020.D
Lab Smp Id: 1635950
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

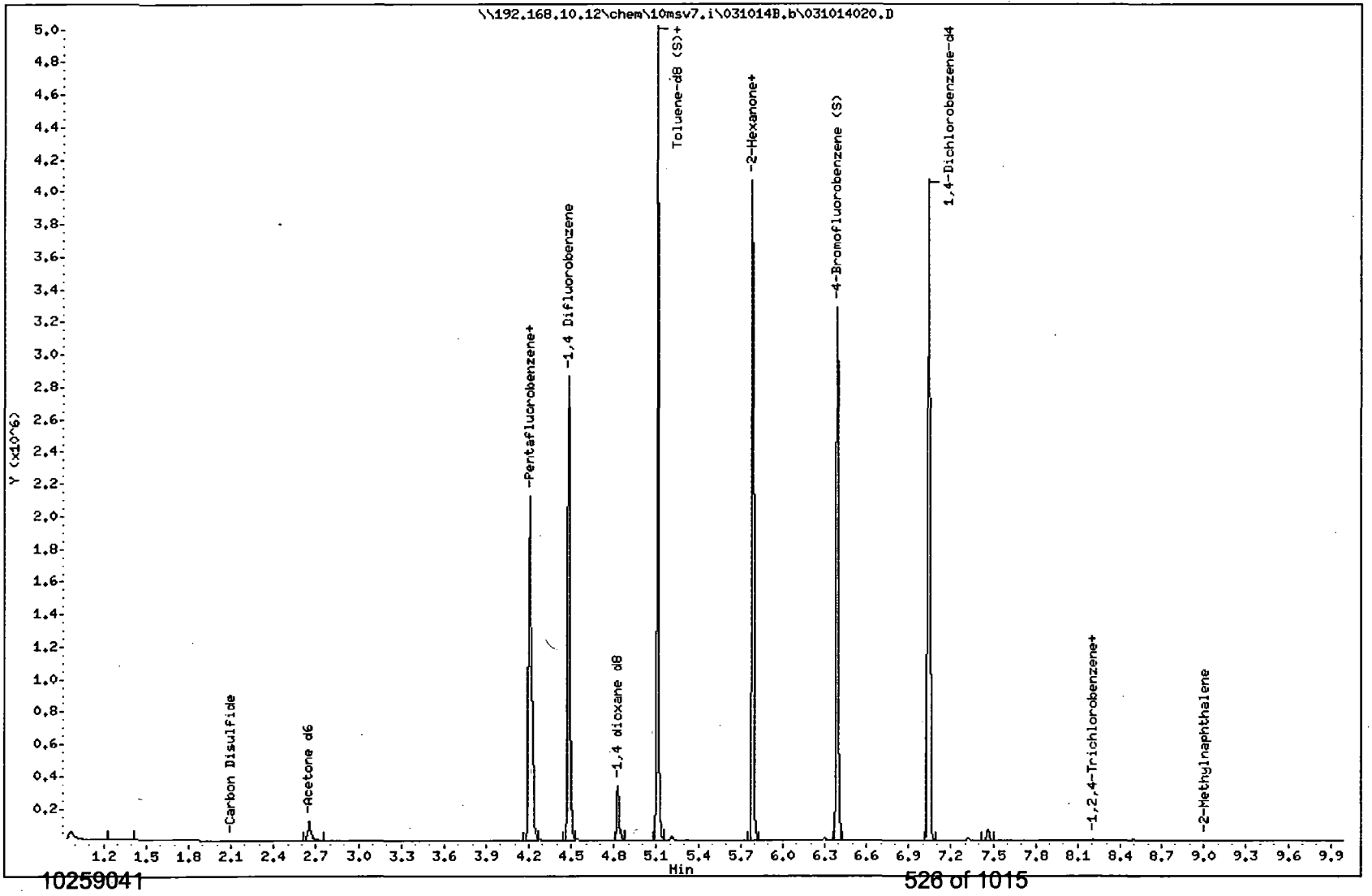
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	121103	-15.71
41 Pentafluorobenzen	966546	483273	1933092	971464	0.51
48 1,4 Difluorobenze	1457917	728959	2915834	1431301	-1.83
53 1,4 dioxane d8	174389	87195	348778	155713	-10.71
67 Chlorobenzene-d5	1458689	729345	2917378	1396129	-4.29
91 1,4-Dichlorobenze	888899	444450	1777798	847359	-4.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D
Date : 10-MAR-2014 16:48
Client ID:
Sample Info: 1635950,5,3,BLANK

Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

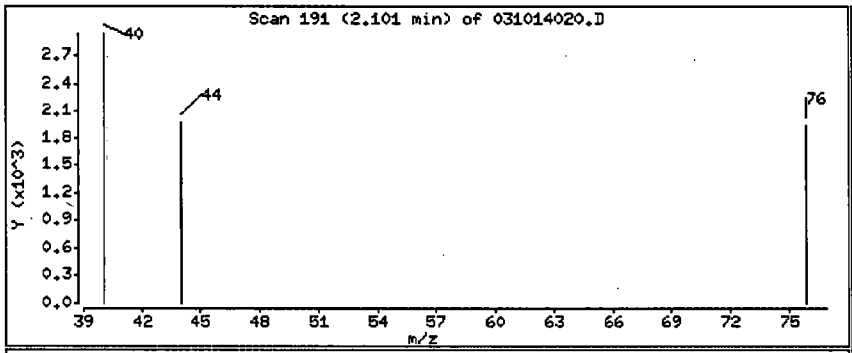
Operator: HBP

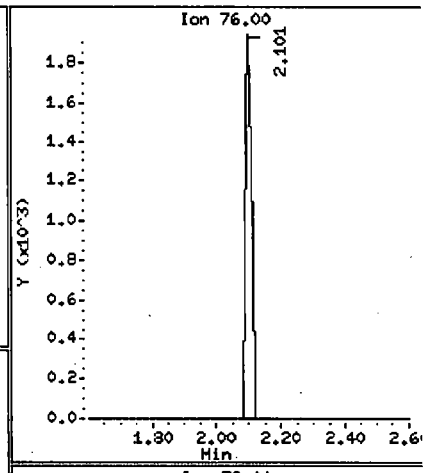
Column phase: Rtx-VMS

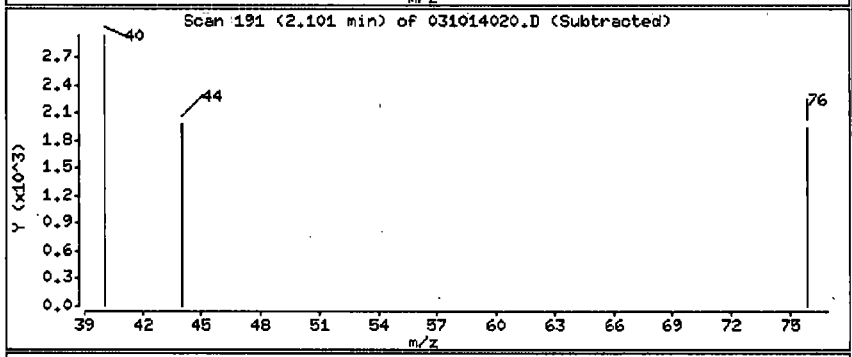
Column diameter: 0.18

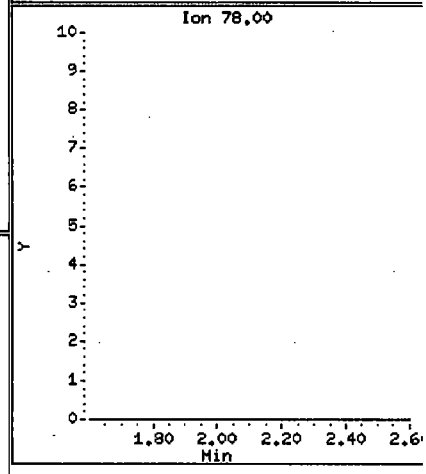
10 Carbon Disulfide

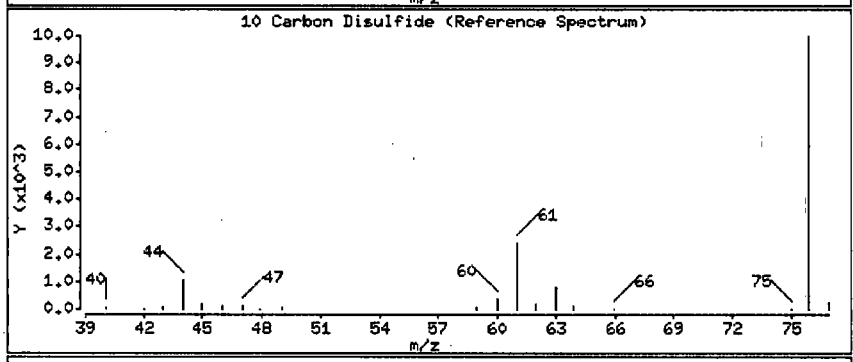
Concentration: 0.17 ug/Kg

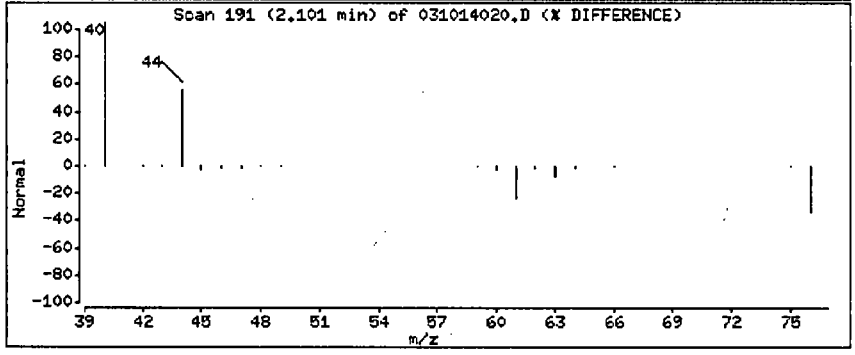












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Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

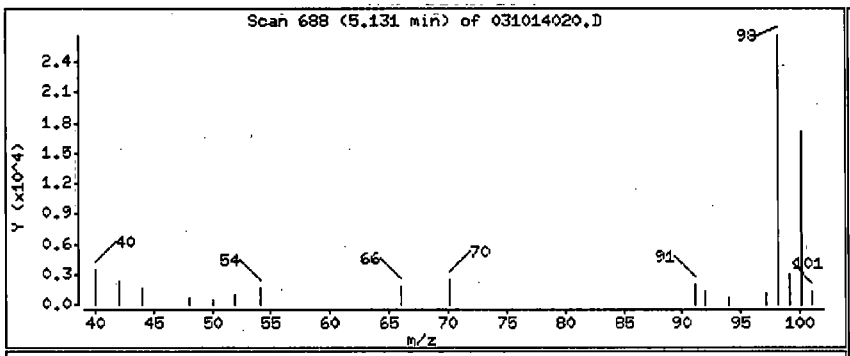
Operator: HBP

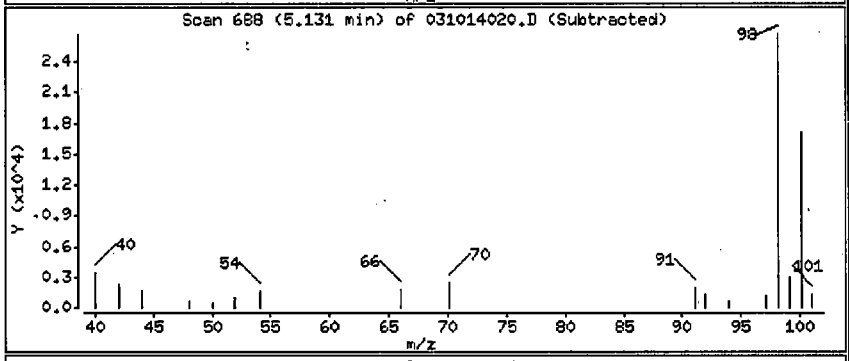
Column phase: Rtx-VMS

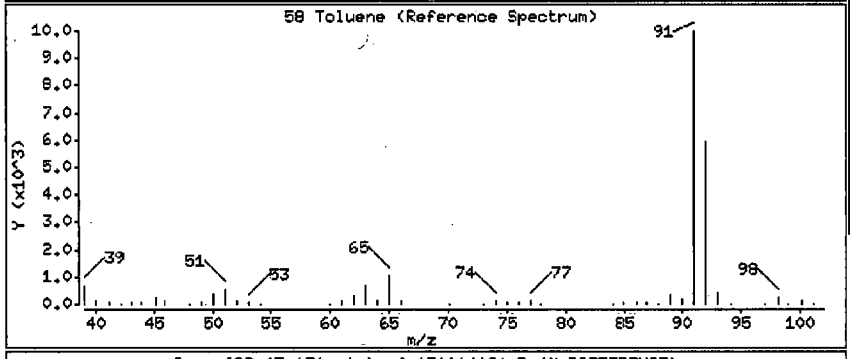
Column diameter: 0.18

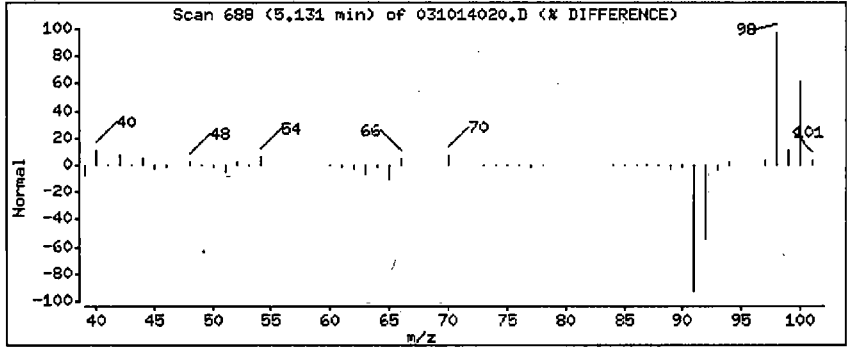
58 Toluene

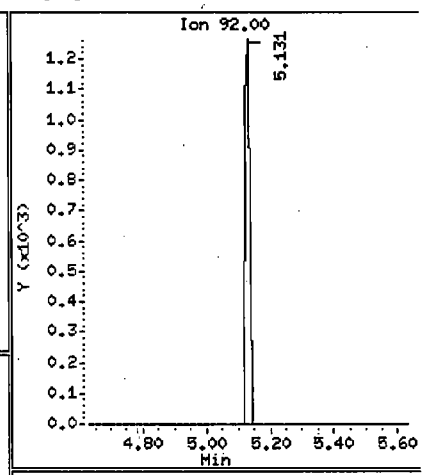
Concentration: 0.099 ug/Kg

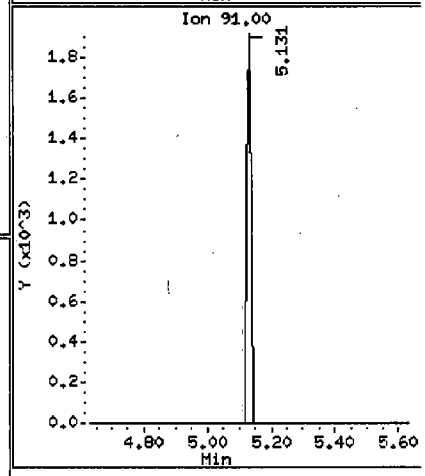












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Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

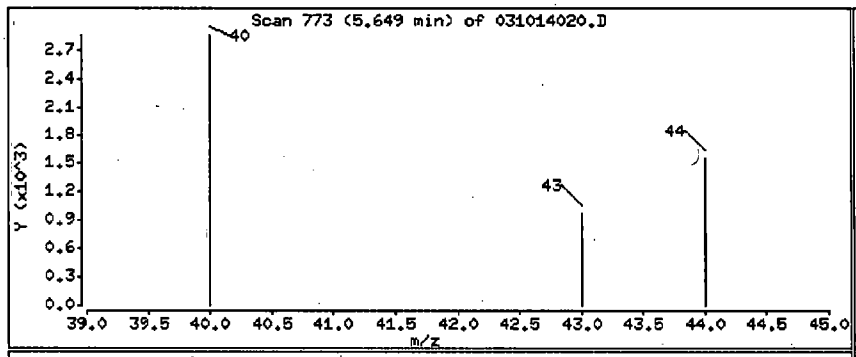
Operator: HBP

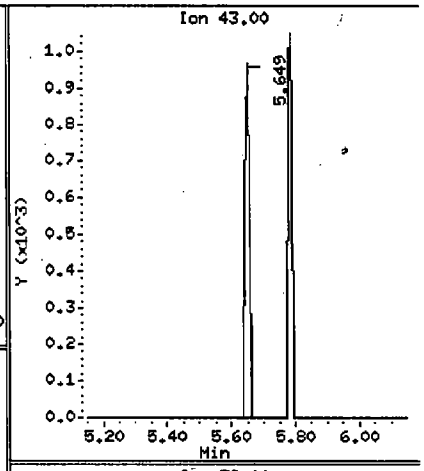
Column phase: Rtx-VMS

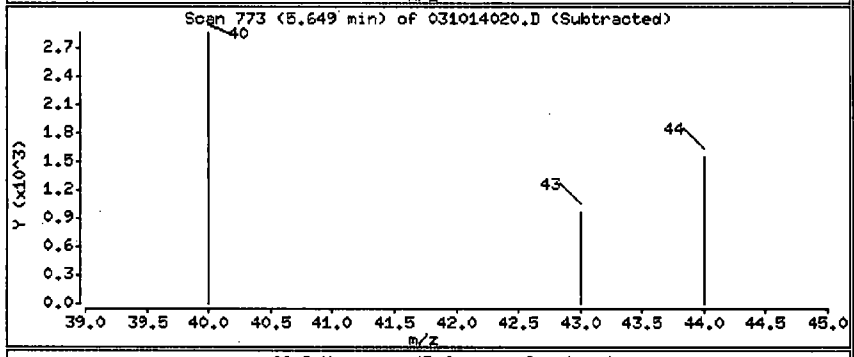
Column diameter: 0.18

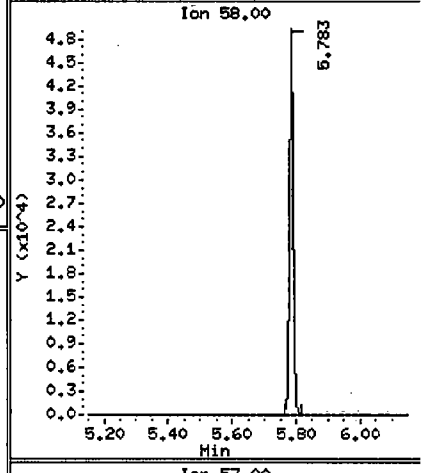
66 2-Hexanone

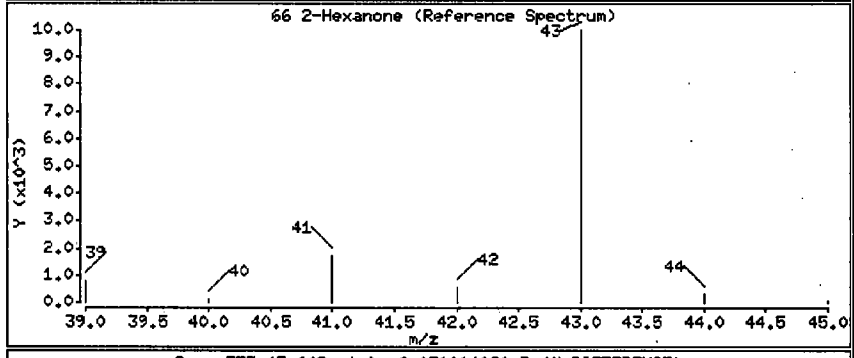
Concentration: 0.32 ug/Kg

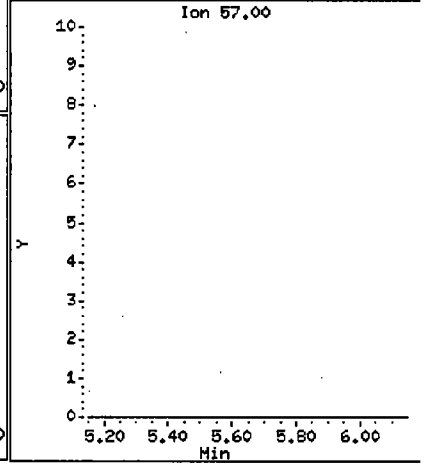


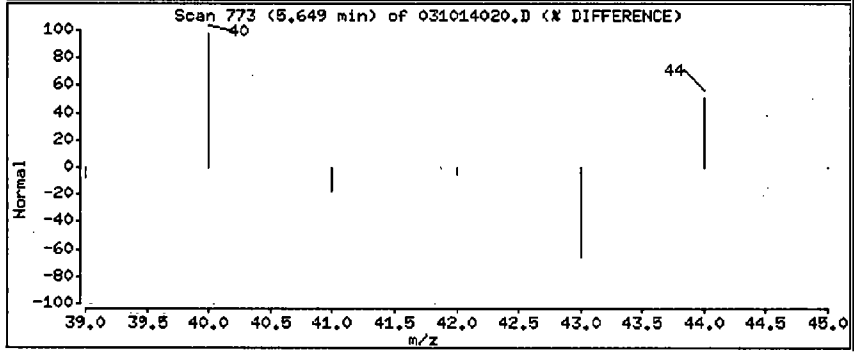












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Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

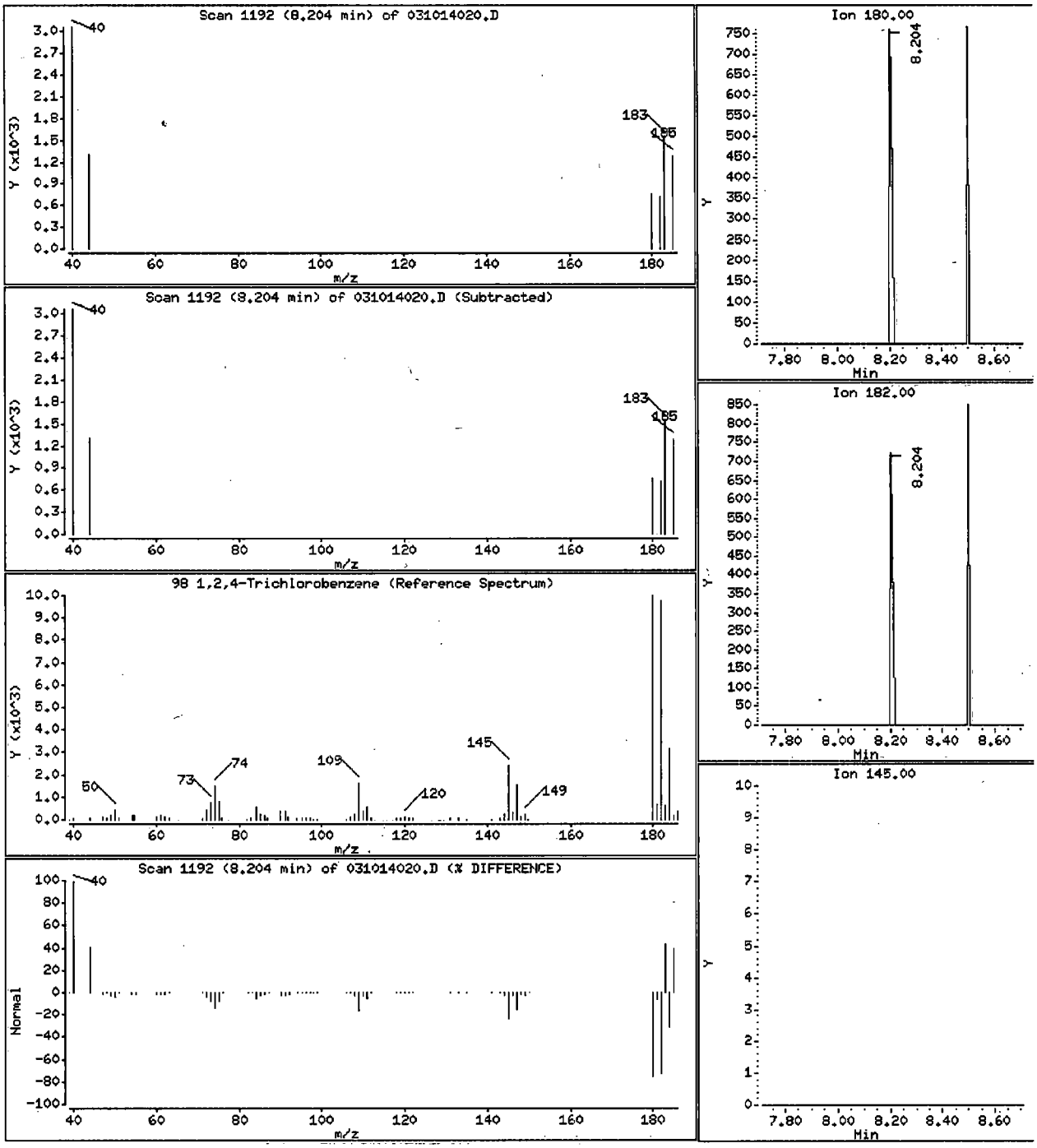
Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

98 1,2,4-Trichlorobenzene

Concentration: 0.080 ug/Kg



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Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

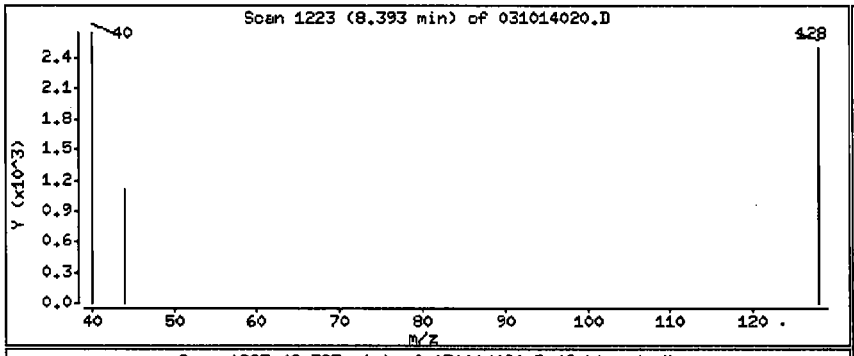
Operator: HBP

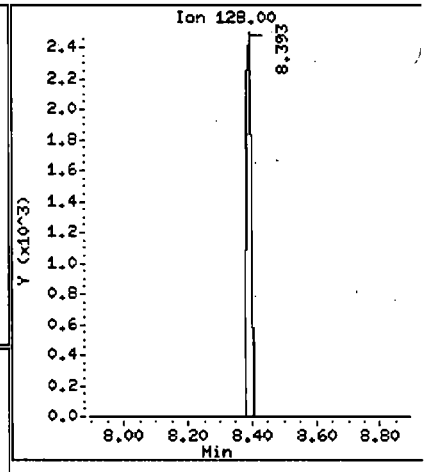
Column phase: Rtx-VMS

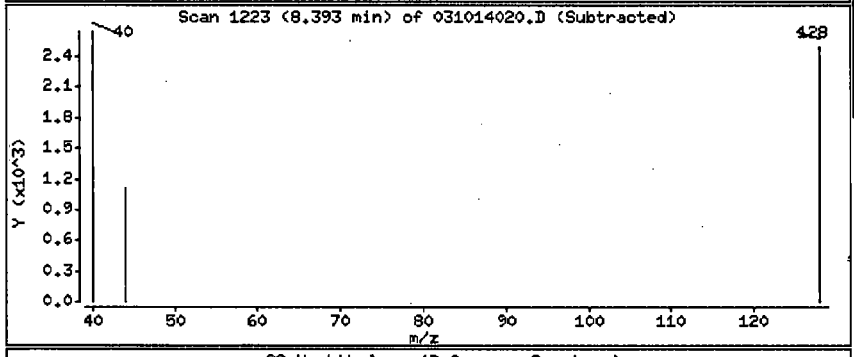
Column diameter: 0.18

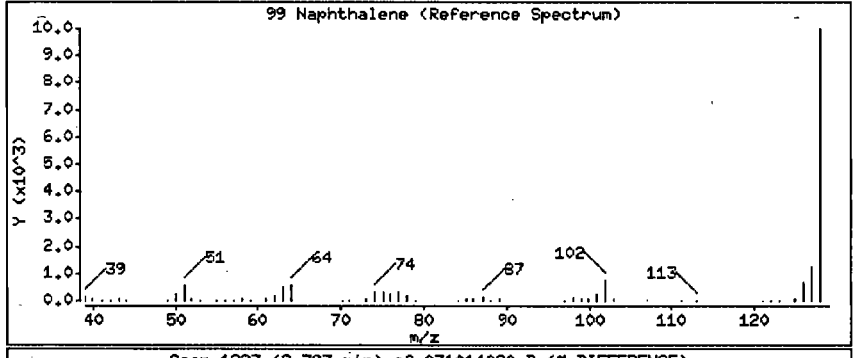
99 Naphthalene

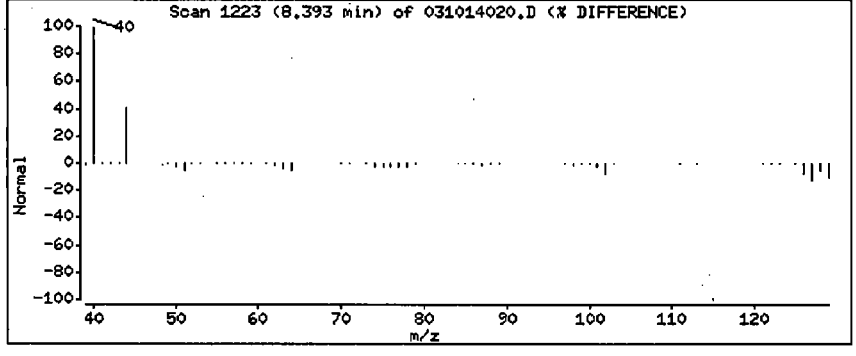
Concentration: 0.17 ug/Kg











Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D

Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

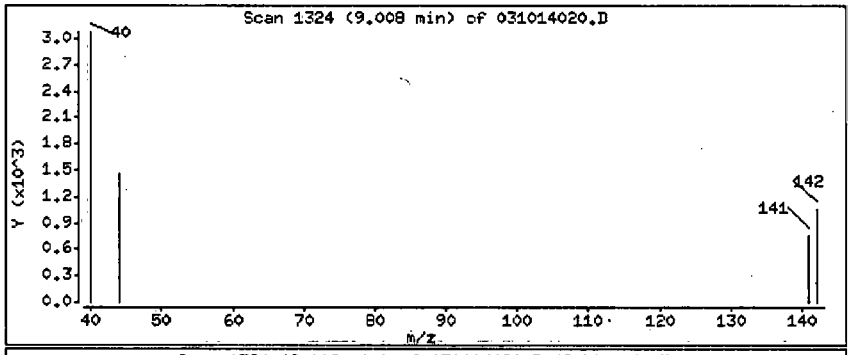
Operator: HBP

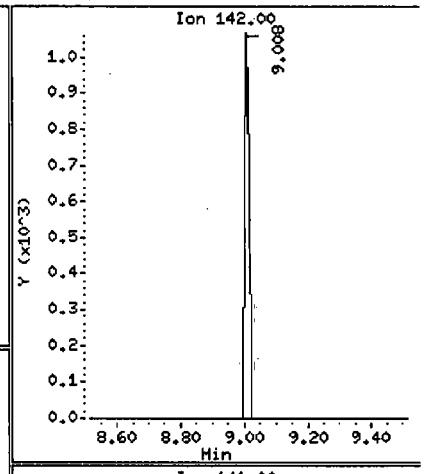
Column phase: Rtx-VMS

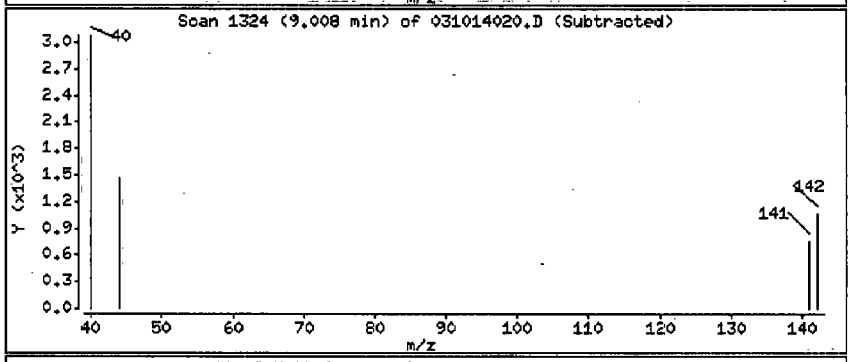
Column diameter: 0.18

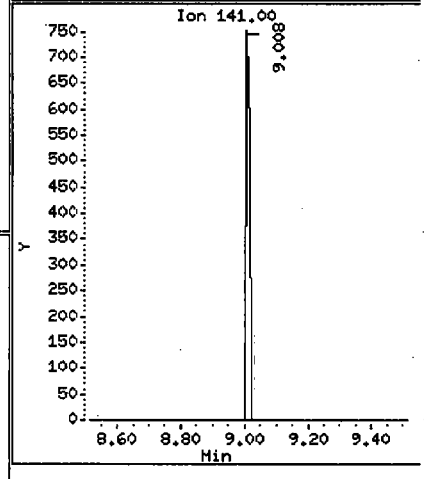
101 2-Methylnaphthalene

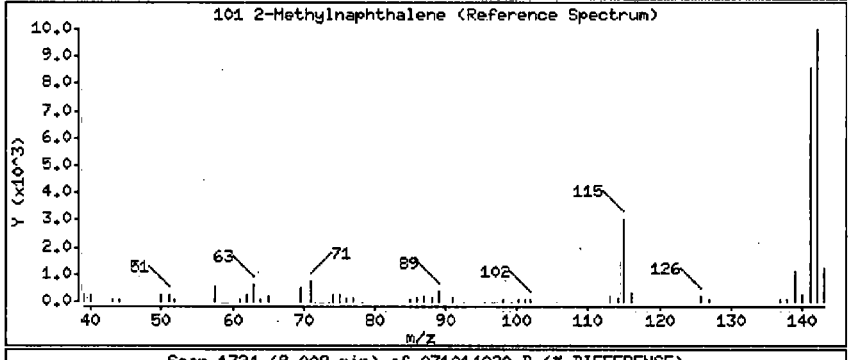
Concentration: 0.18 ug/Kg

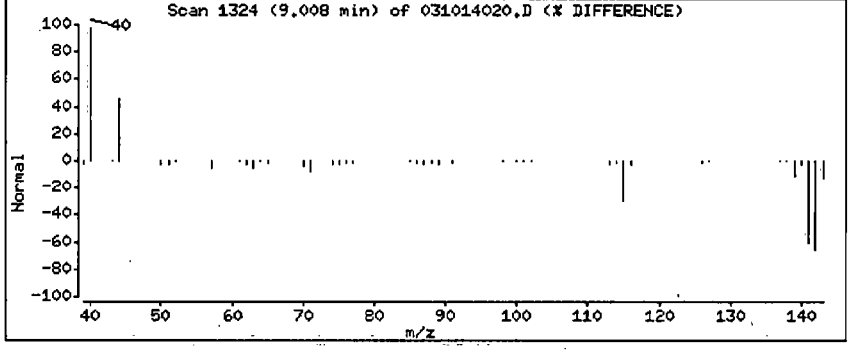












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b/031014020.D
Injection Date: 10-MAR-2014 16:48
Instrument: 10msv7.i
Lab Sample ID: 1635950
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031434.D
Report Date: 04-Mar-2014 12:08

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\030314A.B\03031434.D
Lab Smp Id: 1633048
Inj Date : 03-MAR-2014 18:08
Operator : LPM Inst ID: 10msv5.i
Smp Info : 1633048,5,3,MS,10258825016
Misc Info : 26462
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Meth Date : 03-Mar-2014 10:22 10msv5.i Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 34 QC Sample: MS
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 465W.sub
Target Version: 4.14
Processing Host: 10DEROLA

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	1.120	1.120	(0.280)	103239	22.6077	113(R)
2	Chloromethane	50	1.230	1.229	(0.308)	100497	21.5272	108(R)
3	Vinyl Chloride	62	1.278	1.278	(0.320)	96966	20.3264	102(R)
4	Bromomethane	94	1.467	1.461	(0.367)	9140	7.86791	39.3(R)
5	Chloroethane	64	1.540	1.540	(0.385)	58828	22.0324	110(R)
6	Trichlorofluoromethane	101	1.619	1.619	(0.405)	123826	22.3595	112(R)
7	Dichlorofluoromethane	67	1.649	1.649	(0.413)	143860	20.1225	101(R)
8	Diethyl ether (Ethyl Ether)	59	1.801	1.795	(0.451)	49665	19.5926	98.0(R)
10	1,1-Dichloroethene	96	1.929	1.929	(0.483)	58080	18.1733	90.9(R)
11	Trichlorotrifluoroethane	101	1.953	1.953	(0.489)	68320	20.6743	103(R)
12	Carbon Disulfide	76	1.953	1.953	(0.489)	148934	15.2087	76.0(R)
15	Allyl Chloride	41	2.252	2.251	(0.563)	90379	17.9147	89.6(R)
17	Methylene Chloride	84	2.331	2.331	(0.583)	68610	20.2098	101(R)
* 18	Acetone d6	46	2.343	2.331	(1.000)	71687	100.000	
19	Acetone	58	2.379	2.367	(1.016)	32106	114.587	573(R)
20	trans-1,2-Dichloroethene	96	2.452	2.452	(0.614)	64021	18.2325	91.2(R)
23	Methyl-tert-butyl Ether	73	2.537	2.531	(0.635)	940018	91.3675	457(QR)
25	Isopropyl Ether	45	2.860	2.854	(0.715)	253314	22.0214	110(R)
28	1,1-Dichloroethane	63	2.963	2.957	(0.741)	122654	20.3210	102(R)
32	cis-1,2-Dichloroethene	96	3.371	3.365	(0.843)	75795	19.7273	98.6(R)
33	2,2-Dichloropropane	77	3.444	3.444	(0.862)	109116	20.2018	101(R)
34	Cyclohexane	56	3.505	3.505	(0.877)	640476	100.878	504(R)

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031434.D
Report Date: 04-Mar-2014 12:08

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	35	Bromochloromethane	130	3.511	3.505	(0.878)	45948	20.2797	101(R)
	36	Chloroform	83	3.566	3.559	(0.892)	138854	22.1012	110(R)
	37	Carbon Tetrachloride	117	3.651	3.651	(0.913)	98140	20.5952	103(R)
	39	Tetrahydrofuran	72	3.681	3.669	(1.571)	124722	234.364	1170(R)
	41	1,1,1-Trichloroethane	97	3.699	3.699	(0.925)	126039	21.7841	109(R)
	42	2-Butanone	43	3.778	3.772	(0.945)	215455	97.3060	486(R)
	43	1,1-Dichloropropene	75	3.778	3.778	(0.945)	104202	20.6438	103(R)
	45	Benzene	78	3.943	3.937	(0.986)	2588151	175.132	876(R)
*	48	Pentafluorobenzene	168	3.997	3.991	(1.000)	306204	50.0000	
$	50	1,2-Dichloroethane d4 (S)	65	4.028	4.022	(1.008)	173249	56.9089	56.9(Q)
	51	1,2-Dichloroethane	62	4.070	4.064	(1.018)	103363	23.8616	119(R)
	55	Trichloroethene	130	4.302	4.295	(0.996)	81883	18.3054	91.5(R)
*	56	1,4 Difluorobenzene	114	4.320	4.320	(1.000)	502006	50.0000	
	59	Dibromomethane	174	4.551	4.545	(1.054)	47675	18.5669	92.8(R)
	60	1,2-Dichloropropane	63	4.606	4.600	(1.066)	76410	19.8641	99.3(R)
	62	Bromodichloromethane	83	4.642	4.636	(1.075)	106376	19.7077	98.5(R)
*	64	1,4 dioxane d8	96	4.758	4.740	(1.000)	17954	2000.00	
	68	cis-1,3-Dichloropropene	75	4.995	4.989	(1.156)	119155	19.3287	96.6(R)
$	69	Toluene-d8 (S)	98	5.093	5.092	(0.860)	605808	50.7456	50.7
	70	Toluene	92	5.123	5.117	(0.865)	298512	29.3146	146(R)
	72	Tetrachloroethene	166	5.330	5.324	(0.900)	86645	18.7638	93.8(R)
	73	4-Methyl-2-Pentanone	43	5.330	5.324	(0.900)	485843	92.4307	462(R)
	74	trans-1,3-Dichloropropene	75	5.348	5.342	(0.903)	113721	19.0576	95.3(QR)
	77	1,1,2-Trichloroethane	97	5.433	5.427	(0.918)	71542	19.2142	96.1(R)
	78	Dibromochloromethane	129	5.531	5.524	(0.934)	79804	18.5373	92.7(R)
	79	1,3-Dichloropropane	76	5.579	5.573	(0.942)	121020	19.7112	98.6(R)
	80	1,2-Dibromoethane	107	5.658	5.652	(0.956)	78824	19.7585	98.8(R)
	81	2-Hexanone	43	5.768	5.762	(0.974)	361988	90.4883	452(R)
*	82	Chlorobenzene-d5	117	5.920	5.914	(1.000)	469532	50.0000	
	83	Chlorobenzene	112	5.926	5.926	(1.001)	219212	19.8365	99.2(R)
	84	Ethylbenzene	91	5.932	5.932	(1.002)	526228	26.0038	130(R)
	85	1,1,1,2-Tetrachloroethane	131	5.956	5.956	(1.006)	78949	19.3543	96.8(R)
	86	M&P-Xylene	106	6.011	6.005	(1.015)	338551	44.3550	222(R)
	87	O-Xylene (1,2-Dimethylbenzene)	106	6.236	6.230	(1.053)	166176	22.2634	111(R)
	88	Styrene	104	6.261	6.260	(1.058)	239511	19.5557	97.8(R)
	89	Bromoform	173	6.285	6.279	(1.062)	56325	16.6779	83.4(R)
	90	Isopropylbenzene (Cumene)	105	6.394	6.388	(1.080)	380191	20.6604	103(R)
$	91	4-Bromofluorobenzene (S)	95	6.546	6.546	(0.907)	235665	50.5123	50.5
	93	Bromobenzene	156	6.613	6.607	(0.916)	88648	19.2372	96.2(R)
	94	n-Propylbenzene	91	6.613	6.613	(0.916)	440745	21.0501	105(R)
	95	1,1,2,2-Tetrachloroethane	83	6.656	6.656	(0.922)	107077	19.3492	96.7(R)
	96	2-Chlorotoluene	91	6.711	6.705	(0.929)	286058	20.9052	104(R)
	97	1,3,5-Trimethylbenzene	105	6.723	6.717	(0.931)	399039	27.7630	139(R)
	98	1,2,3-Trichloropropane	110	6.741	6.735	(0.933)	34973	21.3999	107(R)
	100	4-Chlorotoluene	91	6.808	6.802	(0.943)	259790	20.3996	102(R)
	101	tert-Butylbenzene	119	6.918	6.911	(0.958)	244765	20.2772	101(R)
	102	1,2,4-Trimethylbenzene	105	6.960	6.954	(0.964)	621190	43.5577	218(R)
	103	sec-Butylbenzene	105	7.027	7.027	(0.973)	337435	20.4704	102(R)
	104	p-Isopropyltoluene	119	7.118	7.112	(0.986)	287499	20.4295	102(R)
	105	1,3-Dichlorobenzene	146	7.179	7.173	(0.994)	155592	19.3847	96.9(R)
*	106	1,4-Dichlorobenzene-d4	152	7.222	7.222	(1.000)	250536	50.0000	
	107	1,4-Dichlorobenzene	146	7.234	7.228	(1.002)	162678	19.5470	97.7(R)
	109	n-Butylbenzene	91	7.392	7.386	(1.024)	243049	20.6783	103(R)
	110	1,2-Dichlorobenzene	146	7.514	7.508	(1.040)	151082	19.5389	97.7(R)

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031434.D
Report Date: 04-Mar-2014 12:08

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
111 1,2-Dibromo-3-Chloropropane	157	8.055	8.049	(1.115)	73565	47.9626	240(R)
112 Hexachlorobutadiene	225	8.499	8.493	(1.177)	35180	18.3802	91.9(R)
113 1,2,4-Trichlorobenzene	180	8.524	8.517	(1.180)	84331	19.6150	98.1(R)
114 Naphthalene	128	8.755	8.755	(1.212)	528397	34.1465	171(R)
115 1,2,3-Trichlorobenzene	180	8.889	8.888	(1.231)	80681	19.1879	95.9(R)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031434.D
Report Date: 04-Mar-2014 12:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 03031434.D
Lab Smp Id: 1633048
Analysis Type: VOA
Quant Type: ISTD
Operator: LPM
Calibration Date: 03-MAR-2014
Calibration Time: 09:36
Level: LOW
Sample Type: WATER
Method File: \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Misc Info: 26462

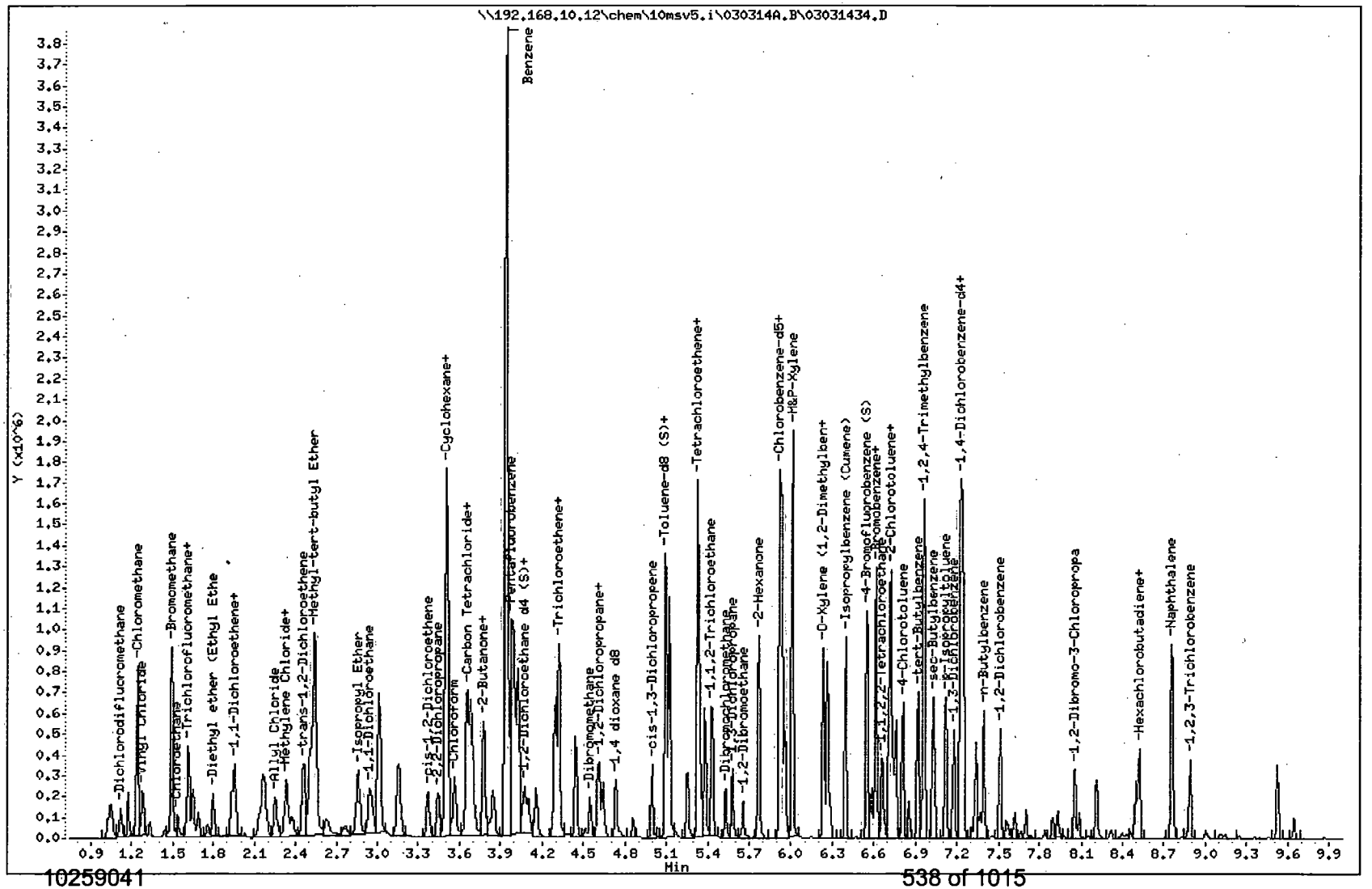
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	114178	57089	228356	71687	-37.21
48 Pentafluorobenzen	409621	204811	819242	306204	-25.25
56 1,4 Difluorobenze	611915	305958	1223830	502006	-17.96
64 1,4 dioxane d8	23365	11683	46730	17954	-23.16
82 Chlorobenzene-d5	575331	287666	1150662	469532	-18.39
106 1,4-Dichlorobenze	315847	157924	631694	250536	-20.68

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.34	0.53
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.15
56 1,4 Difluorobenze	4.32	3.82	4.82	4.32	0.00
64 1,4 dioxane d8	4.74	4.24	5.24	4.76	0.39
82 Chlorobenzene-d5	5.91	5.41	6.41	5.92	0.10
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031434.D
Date : 03-MAR-2014 18:08
Client ID:
Instrument: 10msv5.i
Sample Info: 1633048,5,3,MS,10258825016
Purge Volume: 10.0
Operator: LPM
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv5.i\030314A.B/03031434.D
Injection Date: 03-MAR-2014 18:08
Instrument: 10msv5.i
Lab Sample ID: 1633048
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Lab Smp Id: 1635952
Inj Date : 10-MAR-2014 15:49
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1635952,6.05,3,MS,10259041002
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.050	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.058	1.052	(0.252)	162699	41.6418	50.4
2	Chloromethane	50	1.229	1.241	(0.292)	206296	47.6558	57.7(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	216166	45.2006	54.7
4	Bromomethane	94	1.479	1.479	(0.352)	106221	53.7763	65.1
5	Chloroethane	64	1.570	1.570	(0.374)	101676	50.3707	60.9
6	Trichlorofluoromethane	101	1.680	1.674	(0.400)	220836	36.9567	44.7
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	323964	46.3616	56.1
8	Diethyl ether (Ethyl Ether)	59	1.948	1.954	(0.463)	123566	46.7957	56.6
9	1,1-Dichloroethene	96	2.094	2.094	(0.498)	147828	41.7031	50.5
10	Carbon Disulfide	76	2.101	2.101	(0.500)	522692	38.8104	47.0
11	Ethanol	45	2.107	2.113	(0.437)	38690	951.449	1150
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	144589	39.5772	47.9
13	Iodomethane	142	2.210	2.210	(0.526)	172511	39.7260	48.1
14	Acrolein	56	2.405	2.411	(0.572)	198310	436.094	528
15	Allyl Chloride	41	2.539	2.539	(0.604)	223173	43.4658	52.6
16	Methylene Chloride	84	2.637	2.637	(0.627)	177757	44.9030	54.3
17	Isopropanol	45	2.625	2.631	(0.544)	105456	454.204	550
* 18	Acetone d6	46	2.649	2.649	(1.000)	105481	200.000	
19	Acetone	58	2.692	2.698	(1.016)	50762	247.829	300

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Report Date: 11-Mar-2014 15:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
20	trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	170553	43.3001	52.4
21	Hexane	86	2.863	2.863	(1.081)	51462	66.8714	80.9
22	Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	444770	46.6121	56.4
23	tert-Butyl Alcohol	59	3.003	3.009	(0.622)	152703	443.504	537
24	Acetonitrile	41	3.064	3.070	(0.729)	129564	366.916	444
25	Isopropyl Ether	45	3.204	3.204	(0.762)	549724	48.2926	58.4
26	Acrylonitrile	53	3.247	3.247	(0.772)	203264	371.857	450
27	1,1-Dichloroethane	63	3.265	3.265	(0.777)	286016	44.0854	53.3
28	Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	506011	47.9195	58.0
29	Vinyl Acetate	43	3.460	3.466	(0.823)	313762	43.5282	52.7
30	cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	179207	42.6378	51.6
31	2,2-Dichloropropane	77	3.698	3.698	(0.880)	232283	42.9993	52.0
32	Cyclohexane	56	3.753	3.753	(0.893)	1107237	169.419	205
33	Bromochloromethane	130	3.759	3.759	(0.894)	104097	42.1258	51.0
34	Chloroform	83	3.814	3.814	(0.907)	275377	41.9275	50.7
35	Carbon Tetrachloride	117	3.887	3.887	(0.925)	186756	38.9867	47.2
36	Tetrahydrofuran	72	3.905	3.905	(1.474)	177618	504.576	610
37	1,1,1-Trichloroethane	97	3.929	3.929	(0.935)	236306	41.0467	49.7
38	2-Butanone	43	3.997	3.997	(0.951)	266000	183.873	222
39	1,1-Dichloropropene	75	4.003	4.003	(0.952)	182342	33.4980	40.5
40	Benzene	78	4.143	4.143	(0.985)	639861	39.4192	47.7
* 41	Pentafluorobenzene	168	4.204	4.204	(1.000)	941297	100.000	
42	Tert-amyl methyl ether	73	4.222	4.222	(1.004)	479317	44.8299	54.2
$ 43	1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	353367	97.2552	97.2
44	1,2-Dichloroethane	62	4.259	4.259	(1.013)	176154	41.6202	50.4
45	Isobutanol	43	4.295	4.295	(0.890)	125834	904.524	1090
46	Tert-Amyl Alcohol	59	4.338	4.344	(0.899)	136864	474.143	574(R)
47	Trichloroethene	130	4.460	4.460	(0.996)	153928	34.1244	41.3
* 48	1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1415725	100.000	
49	Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	382547	46.1333	55.8
50	Dibromomethane	174	4.667	4.667	(1.042)	100085	38.4836	46.6
51	1,2-Dichloropropane	63	4.716	4.716	(1.053)	154752	40.2971	48.8
52	Bromodichloromethane	83	4.746	4.746	(1.060)	186846	37.2027	45.0
* 53	1,4 dioxane d8	96	4.826	4.826	(1.000)	117767	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	35604	898.151	1090
55	2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.117)	24718	79.8425	96.6
56	cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	223387	35.9233	43.5
$ 57	Toluene-d8 (S)	98	5.106	5.106	(0.883)	1615832	113.061	113
58	Toluene	92	5.130	5.130	(0.887)	361026	39.2285	47.5
59	4-Methyl-2-Pentanone	43	5.283	5.283	(0.914)	606710	222.183	269
60	Tetrachloroethene	166	5.295	5.295	(0.916)	134653	30.7028	37.2(R)
61	trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	181405	38.3506	46.4
62	1,1,2-Trichloroethane	97	5.374	5.374	(0.929)	113548	40.3269	48.8
63	Dibromochloromethane	129	5.454	5.454	(0.943)	122757	37.5799	45.5
64	1,3-Dichloropropane	76	5.490	5.490	(0.949)	189067	39.2982	47.6
65	1,2-Dibromoethane	107	5.557	5.557	(0.961)	107424	36.3365	44.0
66	2-Hexanone	43	5.643	5.649	(0.976)	396402	186.160	225
* 67	Chlorobenzene-d5	117	5.783	5.789	(1.000)	1216359	100.000	
68	Chlorobenzene	112	5.795	5.795	(1.002)	304176	29.6000	35.8(R)
69	Ethylbenzene	91	5.801	5.801	(1.003)	518369	29.5570	35.8(R)
70	1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.006)	144681	40.4791	49.0
71	M&P-Xylene	106	5.868	5.868	(1.015)	391828	57.3646	69.4(R)
72	O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.051)	203223	31.7273	38.4
73	Styrene	104	6.100	6.106	(1.055)	301164	27.5802	33.4(R)

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Report Date: 11-Mar-2014 15:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
74	Bromoform	173	6.124	6.124	(1.059)	76134	29.3779	35.5
75	Isopropylbenzene (Cumene)	105	6.234	6.234	(1.078)	465160	27.1379	32.8(R)
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	503548	133.807	134
77	cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	33044	45.4341	55.0
78	Bromobenzene	156	6.447	6.453	(0.915)	108006	37.4856	45.4
79	n-Propylbenzene	91	6.453	6.453	(0.916)	460343	34.9289	42.3
80	1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	122814	51.2716	62.0
81	2-Chlorotoluene	91	6.545	6.551	(0.929)	314843	38.3380	46.4
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	363728	39.0014	47.2
83	1,2,3-Trichloropropane	110	6.569	6.575	(0.933)	36110	53.8485	65.2(R)
84	trans-1,4-Dichloro-2-Butene	53	6.587	6.587	(0.935)	64322	103.650	125
85	4-Chlorotoluene	91	6.642	6.642	(0.943)	256733	32.6801	39.5
86	tert-Butylbenzene	119	6.746	6.746	(0.958)	361557	45.9194	55.6
87	1,2,4-Trimethylbenzene	105	6.783	6.789	(0.963)	351501	37.0203	44.8
88	sec-Butylbenzene	105	6.850	6.856	(0.972)	399940	33.9387	41.1
89	p-Isopropyltoluene	119	6.935	6.941	(0.984)	328919	31.7014	38.4
90	1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	149544	25.9333	31.4(R)
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	469070	100.000	
92	1,4-Dichlorobenzene	146	7.051	7.057	(1.001)	149101	24.8102	30.0(R)
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	377486	20.8180	25.2
94	n-Butylbenzene	91	7.209	7.215	(1.023)	203876	21.1039	25.5(R)
95	1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	138622	25.6470	31.0(R)
96	1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.111)	52090	98.6003	119
97	Hexachlorobutadiene	225	8.191	8.191	(1.163)	45321	21.6158	26.2(R)
98	1,2,4-Trichlorobenzene	180	8.203	8.209	(1.164)	43275	12.2664	14.8(R)
99	Naphthalene	128	8.392	8.392	(1.191)	112988	16.4992	20.0(R)
100	1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	39131	12.2904	14.9(R)
101	2-Methylnaphthalene	142	9.014	9.014	(1.280)	15473	5.81881	7.0(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014017.D
Lab Smp Id: 1635952
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	105481	-26.58
41 Pentafluorobenzen	966546	483273	1933092	941297	-2.61
48 1,4 Difluorobenze	1457917	728959	2915834	1415725	-2.89
53 1,4 dioxane d8	174389	87195	348778	117767	-32.47
67 Chlorobenzene-d5	1458689	729345	2917378	1216359	-16.61
91 1,4-Dichlorobenze	888899	444450	1777798	469070	-47.23

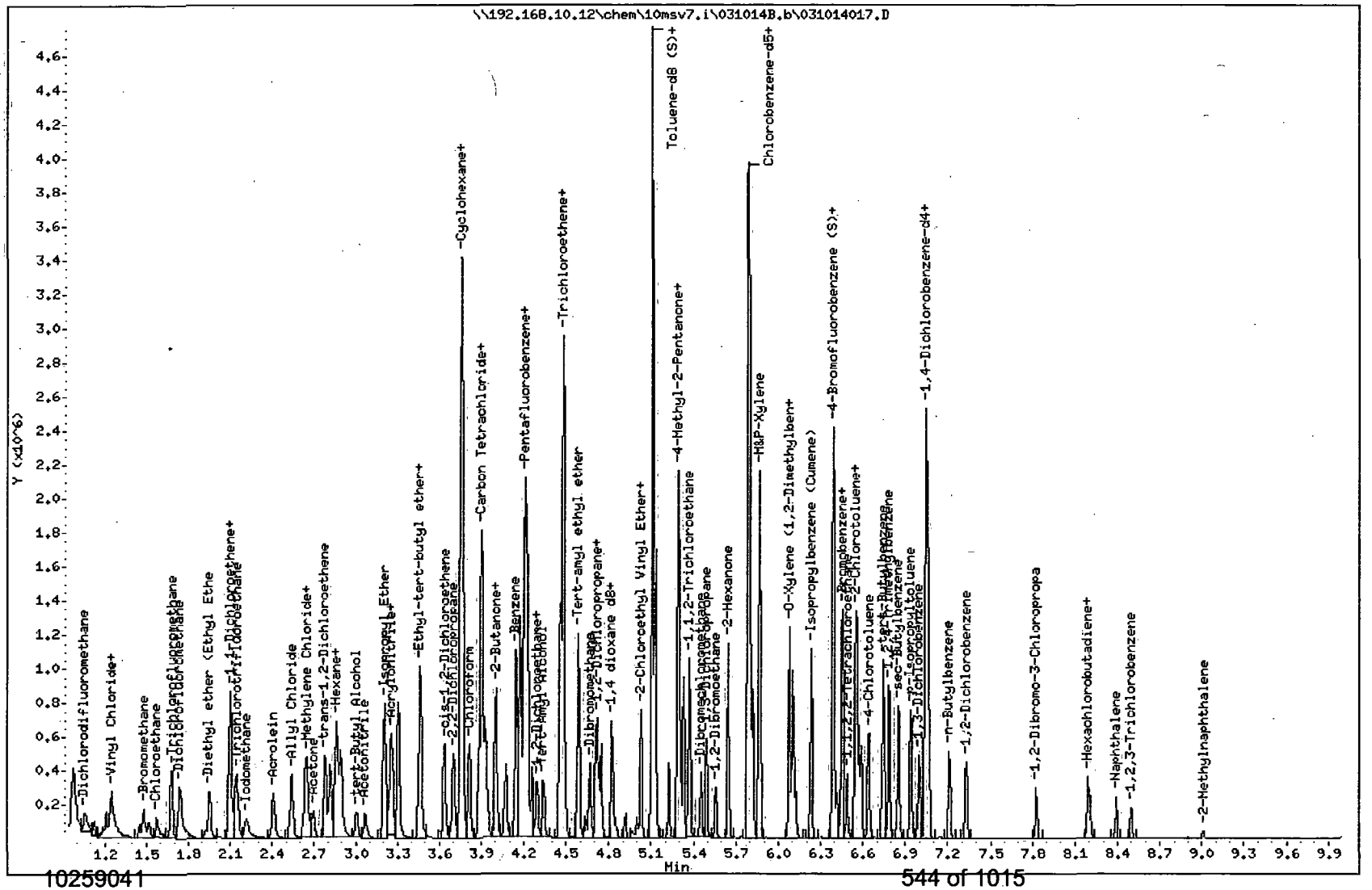
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.14
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	-0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.11
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Date : 10-MAR-2014 15:49
Client ID:
Sample Info: 1636952,6.05,3,MS,10259041002

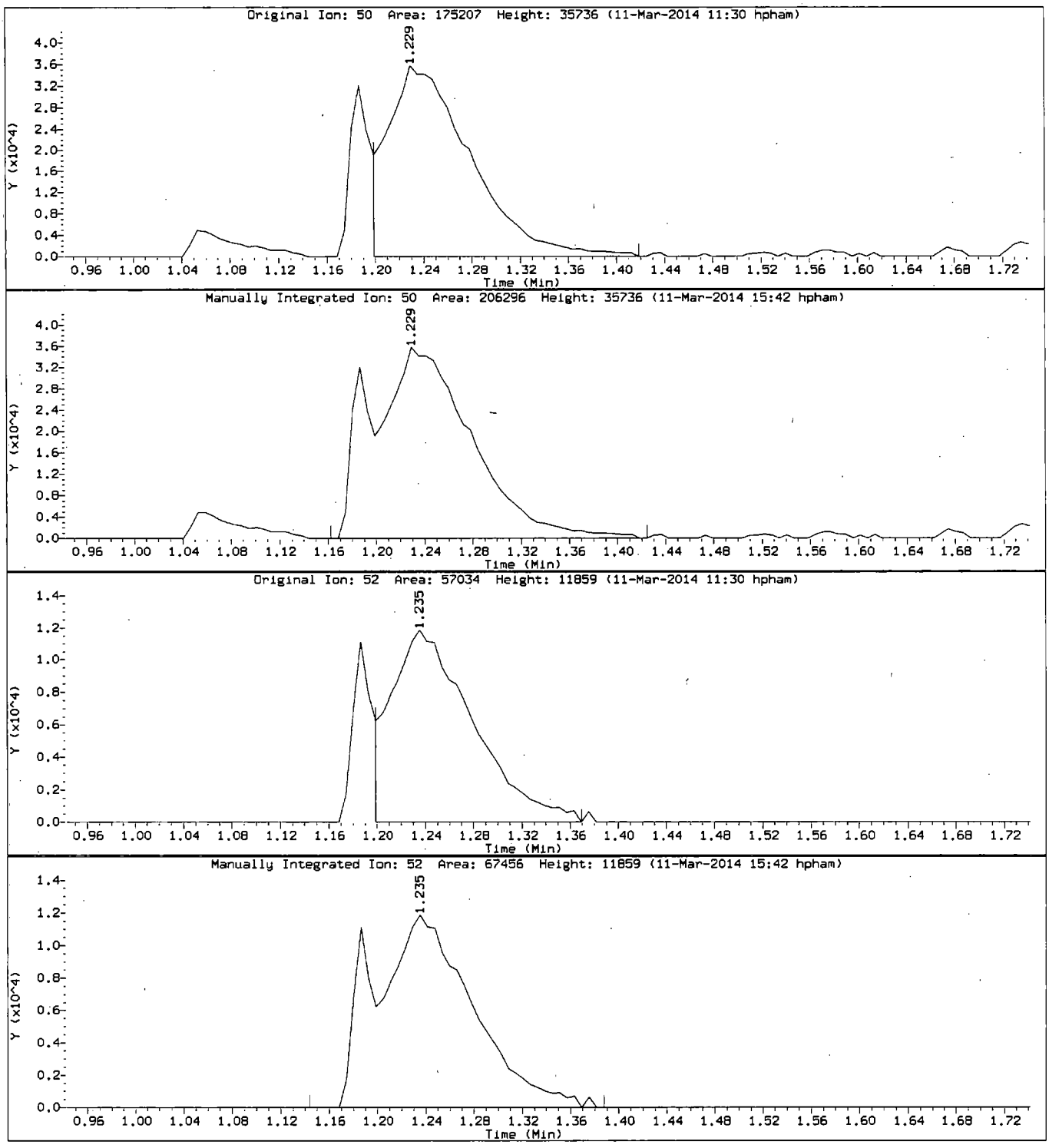
Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\031014B.b/031014017.D
Injection Date: 10-MAR-2014 15:49
Instrument: 10msv7.i
Lab Sample ID: 1635952

Compound: Chloromethane
CAS Number: 74-87-3



Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031435.D
Report Date: 04-Mar-2014 12:08

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\030314A.B\03031435.D
Lab Smp Id: 1633049
Inj Date : 03-MAR-2014 18:23
Operator : SH2 Inst ID: 10msv5.i
Smp Info : 1633049,5,3,MSD,10258825016
Misc Info : 26462
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Meth Date : 03-Mar-2014 10:22 10msv5.i Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 35 QC Sample: MSD
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 465W.sub
Target Version: 4.14
Processing Host: 10DEROLA

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	1.120	1.120	(0.280)	99227	21.4713	107(R)
2	Chloromethane	50	1.230	1.229	(0.308)	92764	19.6349	98.2(R)
3	Vinyl Chloride	62	1.272	1.278	(0.318)	93462	19.3671	96.8(R)
4	Bromomethane	94	1.461	1.461	(0.365)	14195	10.9626	54.8(R)
5	Chloroethane	64	1.540	1.540	(0.385)	57250	21.1869	106(R)
6	Trichlorofluoromethane	101	1.619	1.619	(0.405)	123290	21.9984	110(R)
7	Dichlorofluoromethane	67	1.649	1.649	(0.413)	142098	19.6401	98.2(R)
8	Diethyl ether (Ethyl Ether)	59	1.801	1.795	(0.451)	47683	18.5875	92.9(R)
10	1,1-Dichloroethene	96	1.929	1.929	(0.483)	58429	18.0656	90.3(R)
11	Trichlorotrifluoroethane	101	1.953	1.953	(0.489)	70025	20.9254	105(R)
12	Carbon Disulfide	76	1.953	1.953	(0.489)	144608	14.5917	73.0(R)
15	Allyl Chloride	41	2.252	2.251	(0.563)	88431	17.3205	86.6(R)
17	Methylene Chloride	84	2.331	2.331	(0.583)	68309	19.8823	99.4(R)
* 18	Acetone d6	46	2.349	2.331	(1.000)	64037	100.000	
19	Acetone	58	2.385	2.367	(1.016)	30603	122.271	611(R)
20	trans-1,2-Dichloroethene	96	2.452	2.452	(0.614)	66492	18.7114	93.6(R)
23	Methyl-tert-butyl Ether	73	2.537	2.531	(0.635)	993963	95.4641	477(QR)
25	Isopropyl Ether	45	2.860	2.854	(0.715)	261607	22.4724	112(R)
28	1,1-Dichloroethane	63	2.957	2.957	(0.740)	117697	19.2683	96.3(R)
32	cis-1,2-Dichloroethene	96	3.371	3.365	(0.843)	75556	19.4317	97.2(R)
33	2,2-Dichloropropane	77	3.444	3.444	(0.862)	105402	19.2825	96.4(R)
34	Cyclohexane	56	3.505	3.505	(0.877)	578464	90.0298	450(R)

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031435.D
Report Date: 04-Mar-2014 12:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
35	Bromochloromethane	130	3.511	3.505	(0.878)	46357	20.2174	101(R)
36	Chloroform	83	3.566	3.559	(0.892)	133643	21.0193	105(R)
37	Carbon Tetrachloride	117	3.651	3.651	(0.913)	94103	19.5136	97.6(R)
39	Tetrahydrofuran	72	3.681	3.669	(1.567)	115680	243.341	1220(R)
41	1,1,1-Trichloroethane	97	3.699	3.699	(0.925)	116835	19.9536	99.8(R)
42	2-Butanone	43	3.785	3.772	(0.947)	195457	87.2265	436(R)
43	1,1-Dichloropropene	75	3.779	3.778	(0.945)	95644	18.7234	93.6(R)
45	Benzene	78	3.943	3.937	(0.986)	2436514	162.914	814(R)
* 48	Pentafluorobenzene	168	3.998	3.991	(1.000)	309882	50.0000	
$ 50	1,2-Dichloroethane d4 (S)	65	4.028	4.022	(1.008)	152763	49.5840	49.6
51	1,2-Dichloroethane	62	4.071	4.064	(1.018)	100089	22.8315	114(R)
55	Trichloroethene	130	4.302	4.295	(0.996)	81382	18.9087	94.5(R)
* 56	1,4 Difluorobenzene	114	4.320	4.320	(1.000)	483016	50.0000	
59	Dibromomethane	174	4.551	4.545	(1.054)	46520	18.8294	94.1(R)
60	1,2-Dichloropropane	63	4.606	4.600	(1.066)	70527	19.0555	95.3(R)
62	Bromodichloromethane	83	4.642	4.636	(1.075)	101033	19.4538	97.3(R)
* 64	1,4 dioxane d8	96	4.770	4.740	(1.000)	20131	2000.00	(Q)
68	cis-1,3-Dichloropropene	75	4.995	4.989	(1.156)	118192	19.9262	99.6(R)
$ 69	Toluene-d8 (S)	98	5.093	5.092	(0.860)	571487	49.8395	49.8
70	Toluene	92	5.123	5.117	(0.865)	281443	28.7751	144(R)
72	Tetrachloroethene	166	5.330	5.324	(0.900)	82765	18.6607	93.3(R)
73	4-Methyl-2-Pentanone	43	5.330	5.324	(0.900)	462777	91.6635	458(R)
74	trans-1,3-Dichloropropene	75	5.348	5.342	(0.903)	111493	19.4526	97.3(QR)
77	1,1,2-Trichloroethane	97	5.433	5.427	(0.918)	68365	19.1161	95.6(R)
78	Dibromochloromethane	129	5.531	5.524	(0.934)	77665	18.7824	93.9(R)
79	1,3-Dichloropropane	76	5.579	5.573	(0.942)	115995	19.6697	98.3(R)
80	1,2-Dibromoethane	107	5.658	5.652	(0.956)	75547	19.7159	98.6(R)
81	2-Hexanone	43	5.768	5.762	(0.974)	348730	90.7594	454(R)
* 82	Chlorobenzene-d5	117	5.920	5.914	(1.000)	450984	50.0000	
83	Chlorobenzene	112	5.926	5.926	(1.001)	211393	19.9157	99.6(R)
84	Ethylbenzene	91	5.938	5.932	(1.003)	509391	26.2071	131(R)
85	1,1,1,2-Tetrachloroethane	131	5.956	5.956	(1.006)	73154	18.6713	93.4(R)
86	M&P-Xylene	106	6.011	6.005	(1.015)	326112	44.4825	222(R)
87	O-Xylene (1,2-Dimethylbenzene)	106	6.236	6.230	(1.053)	158112	22.0542	110(R)
88	Styrene	104	6.261	6.260	(1.058)	234803	19.9598	99.8(R)
89	Bromoform	173	6.285	6.279	(1.062)	54021	16.6535	83.3(R)
90	Isopropylbenzene (Cumene)	105	6.394	6.388	(1.080)	364145	20.6023	103(R)
$ 91	4-Bromofluorobenzene (S)	95	6.553	6.546	(0.907)	229837	51.6403	51.6
93	Bromobenzene	156	6.613	6.607	(0.915)	83775	19.0570	95.3(R)
94	n-Propylbenzene	91	6.613	6.613	(0.915)	420317	21.0431	105(R)
95	1,1,2,2-Tetrachloroethane	83	6.656	6.656	(0.921)	103474	19.6004	98.0(R)
96	2-Chlorotoluene	91	6.711	6.705	(0.928)	276396	21.1738	106(R)
97	1,3,5-Trimethylbenzene	105	6.723	6.717	(0.930)	391412	28.5464	143(R)
98	1,2,3-Trichloropropane	110	6.741	6.735	(0.933)	33732	21.6365	108(R)
100	4-Chlorotoluene	91	6.808	6.802	(0.942)	251218	20.6784	103(R)
101	tert-Butylbenzene	119	6.918	6.911	(0.957)	233754	20.2995	101(R)
102	1,2,4-Trimethylbenzene	105	6.960	6.954	(0.963)	594472	43.6956	218(R)
103	sec-Butylbenzene	105	7.033	7.027	(0.973)	322242	20.4920	102(R)
104	p-Isopropyltoluene	119	7.118	7.112	(0.985)	275914	20.5523	103(R)
105	1,3-Dichlorobenzene	146	7.179	7.173	(0.993)	152369	19.8992	99.5(R)
* 106	1,4-Dichlorobenzene-d4	152	7.228	7.222	(1.000)	239003	50.0000	
107	1,4-Dichlorobenzene	146	7.234	7.228	(1.001)	158554	19.9708	99.8(R)
109	n-Butylbenzene	91	7.392	7.386	(1.023)	238197	21.2434	106(R)
110	1,2-Dichlorobenzene	146	7.514	7.508	(1.040)	144995	19.6566	98.3(R)

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031435.D
Report Date: 04-Mar-2014 12:08

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
111 1,2-Dibromo-3-Chloropropane	157	8.055	8.049	(1.114)	65786	44.9606	225(R)
112 Hexachlorobutadiene	225	8.499	8.493	(1.176)	32875	18.0047	90.0(R)
113 1,2,4-Trichlorobenzene	180	8.524	8.517	(1.179)	83005	20.2382	101(R)
114 Naphthalene	128	8.761	8.755	(1.212)	503543	34.1105	170(R)
115 1,2,3-Trichlorobenzene	180	8.895	8.888	(1.231)	76711	19.1241	95.6(R)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031435.D
Report Date: 04-Mar-2014 12:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 03031435.D
Lab Smp Id: 1633049
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Misc Info: 26462

Calibration Date: 03-MAR-2014
Calibration Time: 09:36
Level: LOW
Sample Type: WATER

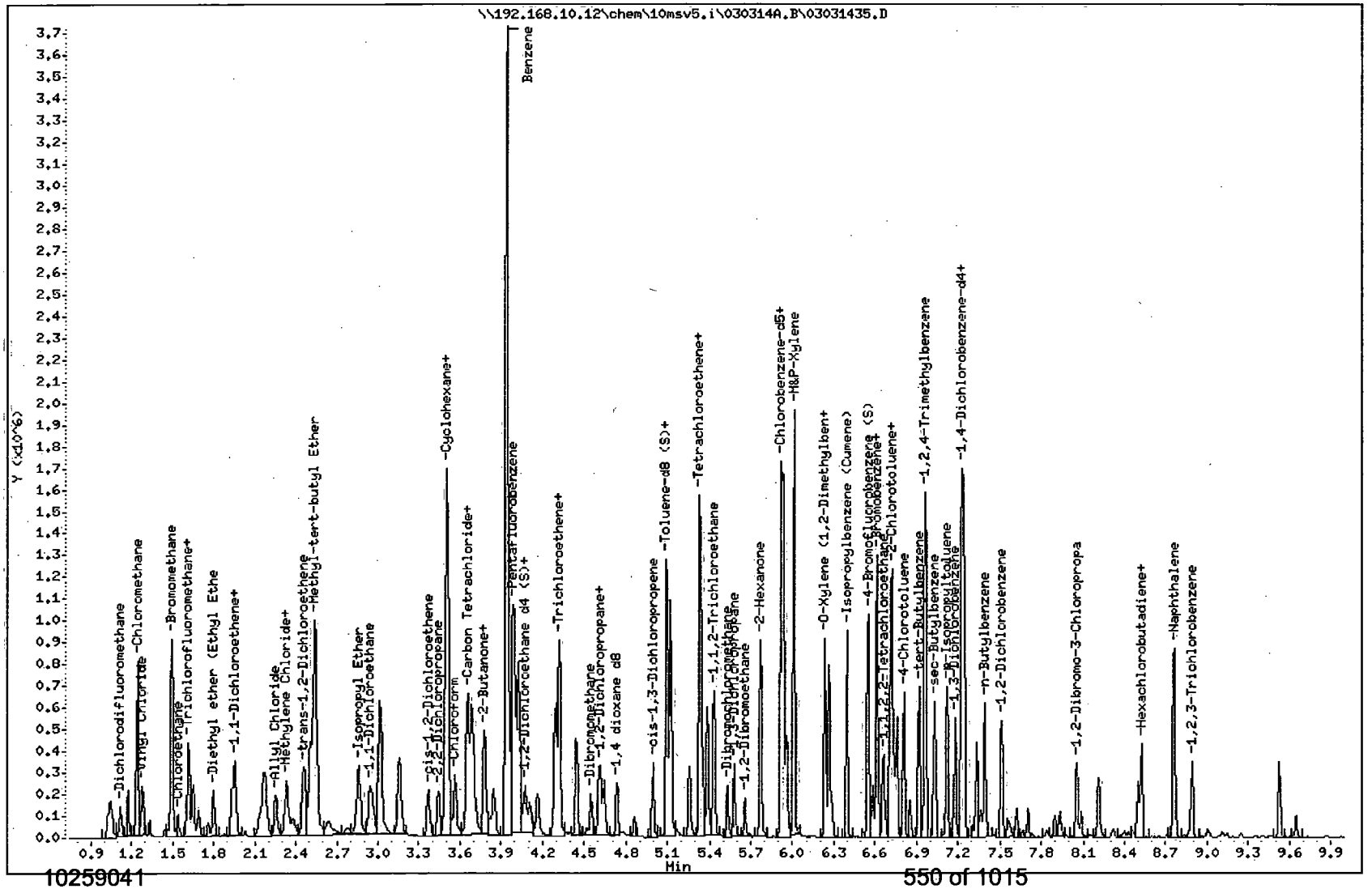
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	114178	57089	228356	64037	-43.91
48 Pentafluorobenzen	409621	204811	819242	309882	-24.35
56 1,4 Difluorobenze	611915	305958	1223830	483016	-21.06
64 1,4 dioxane d8	23365	11683	46730	20131	-13.84
82 Chlorobenzene-d5	575331	287666	1150662	450984	-21.61
106 1,4-Dichlorobenze	315847	157924	631694	239003	-24.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.35	0.79
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.16
56 1,4 Difluorobenze	4.32	3.82	4.82	4.32	0.00
64 1,4 dioxane d8	4.74	4.24	5.24	4.77	0.64
82 Chlorobenzene-d5	5.91	5.41	6.41	5.92	0.11
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.23	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031435.D
Date : 03-MAR-2014 18:23
Client ID:
Instrument: 10msv5.i
Sample Info: 1633049,5,3,MSD,10258825016
Purge Volume: 10.0
Operator: SH2
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv5.i\030314A.B/03031435.D
Injection Date: 03-MAR-2014 18:23
Instrument: 10msv5.i
Lab Sample ID: 1633049
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014018.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014018.D
Lab Smp Id: 1635953
Inj Date : 10-MAR-2014 16:09
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1635953,5.97,3,MSD,10259041002
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.970	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.058	1.052	(0.252)	155966	40.4175	48.2
2	Chloromethane	50	1.229	1.241	(0.292)	202632	47.3945	56.6(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	208824	44.2112	52.8
4	Bromomethane	94	1.479	1.479	(0.352)	88851	45.6327	54.5
5	Chloroethane	64	1.570	1.570	(0.374)	95357	47.8307	57.1
6	Trichlorofluoromethane	101	1.674	1.674	(0.398)	209909	35.4529	42.3
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	309389	44.8293	53.5
8	Diethyl ether (Ethyl Ether)	59	1.948	1.954	(0.464)	121504	46.5900	55.6
9	1,1-Dichloroethene	96	2.095	2.094	(0.498)	138319	39.5084	47.2
10	Carbon Disulfide	76	2.101	2.101	(0.500)	503788	37.8743	45.2
11	Ethanol	45	2.107	2.113	(0.437)	39049	917.067	1090
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	143045	39.6440	47.3
13	Iodomethane	142	2.210	2.210	(0.526)	138797	33.2348	39.7
14	Acrolein	56	2.405	2.411	(0.572)	180339	401.532	479
15	Allyl Chloride	41	2.540	2.539	(0.604)	188160	37.1046	44.3
16	Methylene Chloride	84	2.643	2.637	(0.629)	175811	44.9668	53.7
17	Isopropanol	45	2.631	2.631	(0.545)	108542	444.825	531
* 18	Acetone d6	46	2.649	2.649	(1.000)	106982	200.000	
19	Acetone	58	2.692	2.698	(1.016)	56050	270.653	323

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014018.D
Report Date: 11-Mar-2014 15:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	156618	40.2593	48.1
	21 Hexane	86	2.863	2.863	(1.081)	47869	61.3298	73.2
	22 Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	446285	47.3555	56.5
	23 tert-Butyl Alcohol	59	3.003	3.009	(0.622)	154389	428.223	511
	24 Acetonitrile	41	3.070	3.070	(0.730)	132572	380.127	454
	25 Isopropyl Ether	45	3.204	3.204	(0.762)	529957	47.1381	56.3
	26 Acrylonitrile	53	3.247	3.247	(0.772)	162171	300.389	359(R)
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	262515	40.9688	48.9
	28 Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	494152	47.3814	56.6
	29 Vinyl Acetate	43	3.460	3.466	(0.823)	304666	42.7946	51.1
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	164670	39.6688	47.4
	31 2,2-Dichloropropane	77	3.698	3.698	(0.880)	222178	41.6428	49.7
	32 Cyclohexane	56	3.753	3.753	(0.893)	1043362	161.641	193
	33 Bromochloromethane	130	3.759	3.759	(0.894)	98188	40.2313	48.0
	34 Chloroform	83	3.814	3.814	(0.907)	252158	38.8722	46.4
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	168009	35.5115	42.4
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	176994	495.749	592
	37 1,1,1-Trichloroethane	97	3.930	3.929	(0.935)	220297	38.7443	46.3
	38 2-Butanone	43	3.997	3.997	(0.951)	275392	192.745	230
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	156508	29.1114	34.8(R)
	40 Benzene	78	4.143	4.143	(0.985)	569354	35.5140	42.4
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	929676	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	473807	44.8685	53.6
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	355345	99.0221	99.0
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	164190	39.2784	46.9
	45 Isobutanol	43	4.295	4.295	(0.890)	123438	847.374	1010
	46 Tert-Amyl Alcohol	59	4.338	4.344	(0.899)	136466	451.490	539(R)
	47 Trichloroethene	130	4.460	4.460	(0.996)	131826	29.5834	35.3(R)
*	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1398554	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	373072	45.5430	54.4
	50 Dibromomethane	174	4.667	4.667	(1.042)	91820	35.7391	42.7
	51 1,2-Dichloropropane	63	4.716	4.716	(1.053)	139488	36.7683	43.9
	52 Bromodichloromethane	83	4.747	4.746	(1.060)	164610	33.1778	39.6
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	123316	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	36098	869.637	1040
	55 2-Chloroethyl Vinyl Ether	63	5.003	5.002	(1.117)	21153	69.8463	83.4(R)
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	184693	30.0655	35.9(R)
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.882)	1565363	113.974	114
	58 Toluene	92	5.131	5.130	(0.886)	297216	33.6055	40.1
	59 4-Methyl-2-Pentanone	43	5.283	5.283	(0.913)	593326	226.099	270
	60 Tetrachloroethene	166	5.295	5.295	(0.915)	110091	26.1209	31.2(R)
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.916)	148181	32.5979	38.9
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.928)	102056	37.7163	45.0
	63 Dibromochloromethane	129	5.454	5.454	(0.942)	104146	33.1761	39.6
	64 1,3-Dichloropropane	76	5.490	5.490	(0.948)	163587	35.3818	42.2
	65 1,2-Dibromoethane	107	5.557	5.557	(0.960)	91066	32.0532	38.3
	66 2-Hexanone	43	5.643	5.649	(0.975)	371760	181.672	217
*	67 Chlorobenzene-d5	117	5.789	5.789	(1.000)	1168927	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.001)	242493	24.5551	29.3(R)
	69 Ethylbenzene	91	5.801	5.801	(1.002)	415389	24.6463	29.4(R)
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.005)	134932	39.2833	46.9
	71 M&P-Xylene	106	5.868	5.868	(1.014)	319795	48.7185	58.2(R)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.049)	173885	28.2486	33.7(R)
	73 Styrene	104	6.100	6.106	(1.054)	229246	21.8459	26.1(R)

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014018.D
Report Date: 11-Mar-2014 15:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
74	Bromoform	173	6.124	6.124	(1.058)	65904	26.4623	31.6(R)
75	Isopropylbenzene (Cumene)	105	6.234	6.234	(1.077)	411813	25.0005	29.8(R)
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	479931	137.262	137
77	cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	24276	35.9252	42.9
78	Bromobenzene	156	6.453	6.453	(0.916)	82418	30.7872	36.8(R)
79	n-Propylbenzene	91	6.453	6.453	(0.916)	374340	30.5704	36.5(R)
80	1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	115052	51.6959	61.7
81	2-Chlorotoluene	91	6.551	6.551	(0.930)	263498	34.5339	41.2
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	328854	37.9524	45.3
83	1,2,3-Trichloropropane	110	6.575	6.575	(0.933)	32840	52.7087	62.9(Q)
84	trans-1,4-Dichloro-2-Butene	53	6.588	6.587	(0.935)	46866	81.2828	97.0
85	4-Chlorotoluene	91	6.642	6.642	(0.943)	197426	27.0482	32.3(R)
86	tert-Butylbenzene	119	6.746	6.746	(0.958)	348334	47.5896	56.8
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	298201	33.8030	40.4
88	sec-Butylbenzene	105	6.856	6.856	(0.973)	374942	34.2450	40.9
89	p-Isopropyltoluene	119	6.941	6.941	(0.985)	291669	30.2561	36.1(R)
90	1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	113217	21.1316	25.2(R)
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	435818	100.000	
92	1,4-Dichlorobenzene	146	7.057	7.057	(1.002)	108599	19.4495	23.2(R)
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	338791	18.9176	22.6
94	n-Butylbenzene	91	7.216	7.215	(1.024)	169832	18.9212	22.6(R)
95	1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	108907	21.6867	25.9(R)
96	1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	47074	95.9042	114
97	Hexachlorobutadiene	225	8.191	8.191	(1.163)	45648	23.4329	28.0(R)
98	1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	32250	9.83881	11.7(R)
99	Naphthalene	128	8.392	8.392	(1.191)	84713	13.3142	15.9(R)
100	1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	30836	10.4240	12.4(R)
101	2-Methylnaphthalene	142	9.014	9.014	(1.279)	8544	3.45822	4.1(aR)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014018.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014018.D
Lab Smp Id: 1635953
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

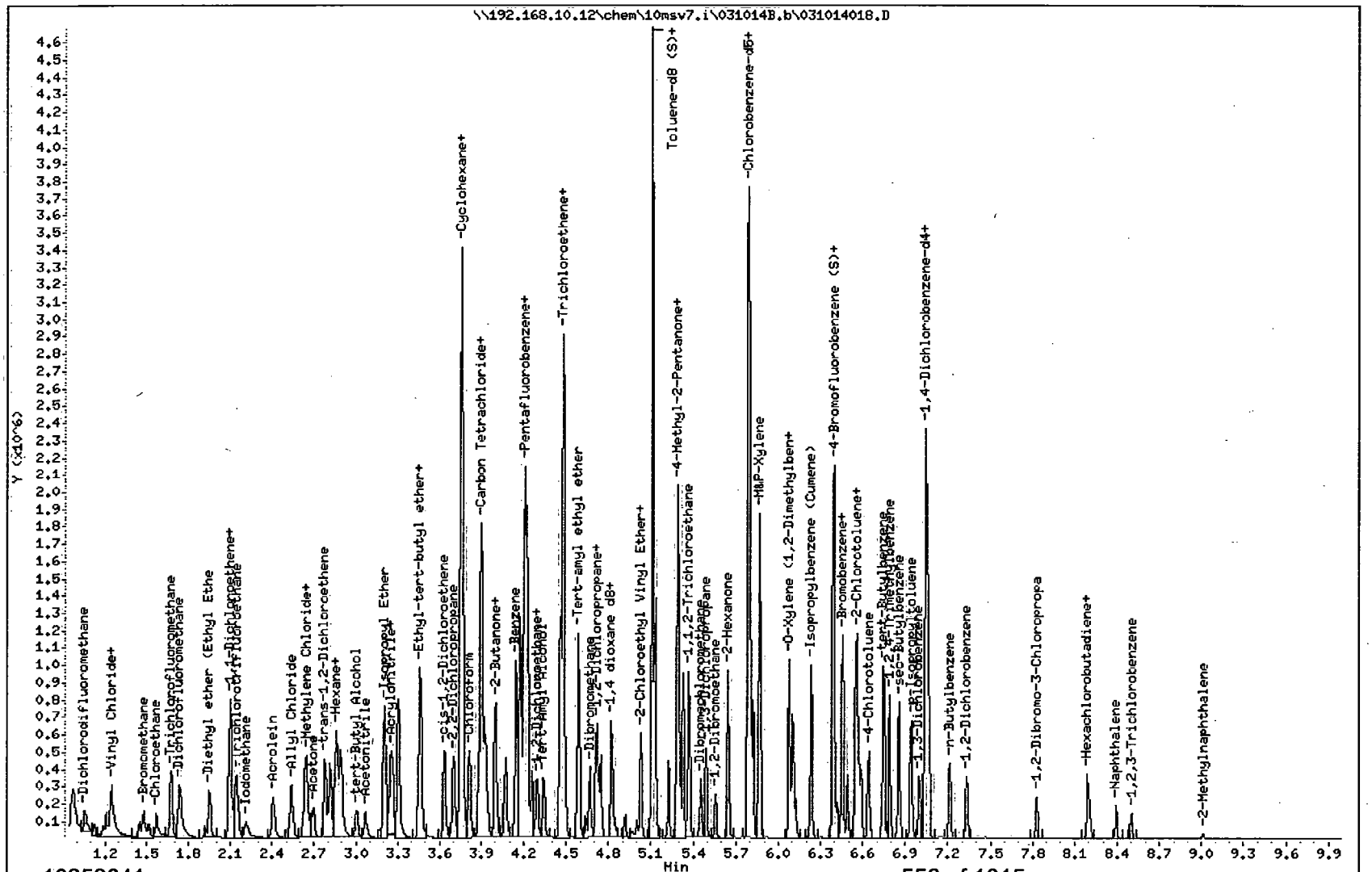
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
18 Acetone d6	143669	71835	287338	106982	-25.54	
41 Pentafluorobenzen	966546	483273	1933092	929676	-3.81	
48 1,4 Difluorobenze	1457917	728959	2915834	1398554	-4.07	
53 1,4 dioxane d8	174389	87195	348778	123316	-29.29	
67 Chlorobenzene-d5	1458689	729345	2917378	1168927	-19.86	
91 1,4-Dichlorobenze	888899	444450	1777798	435818	-50.97	<-

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.79	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

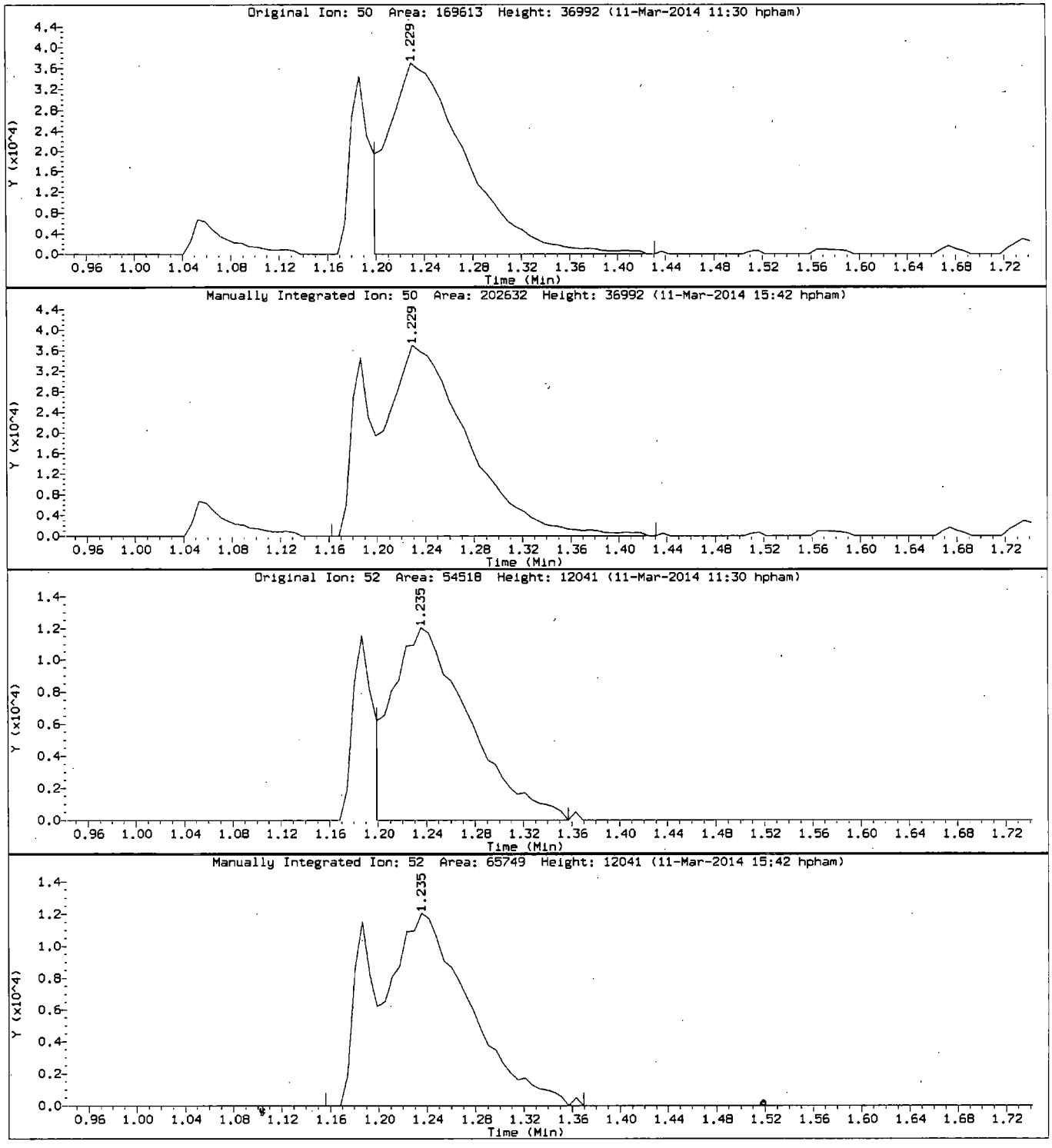
Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014018.D
Date : 10-MAR-2014 16:09
Client ID:
Sample Info: 1635953,5,97,3,MSD,10259041002

Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\031014B.b/031014018.D
Injection Date: 10-MAR-2014 16:09
Instrument: 10msv7.i
Lab Sample ID: 1635953

Compound: Chloromethane
CAS Number: 74-87-3



Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031403.D
Report Date: 04-Mar-2014 12:08

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\030314A.B\03031403.D
Lab Smp Id: 1632467
Inj Date : 03-MAR-2014 10:14
Operator : LPM Inst ID: 10msv5.i
Smp Info : 1632467,1,3,LCS,9525-609
Misc Info : 26462
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Meth Date : 03-Mar-2014 10:22 10msv5.i Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 465W.sub
Target Version: 4.14
Processing Host: 10DEROLA

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	1.120	1.120	(0.281)	118731	18.1570	18.2
2	Chloromethane	50	1.230	1.229	(0.308)	116954	17.4952	17.5
3	Vinyl Chloride	62	1.279	1.278	(0.320)	124410	18.2285	18.2
4	Bromomethane	94	1.467	1.461	(0.368)	41964	20.3668	20.4
5	Chloroethane	64	1.540	1.540	(0.386)	72333	18.9183	18.9
6	Trichlorofluoromethane	101	1.619	1.619	(0.406)	151018	19.0435	19.0
7	Dichlorofluoromethane	67	1.650	1.649	(0.413)	179443	17.5281	17.5
8	Diethyl ether (Ethyl Ether)	59	1.796	1.795	(0.450)	60606	16.6965	16.7
10	1,1-Dichloroethene	96	1.930	1.929	(0.483)	71466	15.6162	15.6
11	Trichlorotrifluoroethane	101	1.954	1.953	(0.490)	80221	17.1361	17.1
12	Carbon Disulfide	76	1.954	1.953	(0.490)	183036	13.0528	13.0(R)
15	Allyl Chloride	41	2.246	2.251	(0.563)	128344	17.7658	17.8
17	Methylene Chloride	84	2.331	2.331	(0.584)	84586	17.3997	17.4
* 18	Acetone d6	46	2.331	2.331	(1.000)	109454	100.000	
19	Acetone	58	2.362	2.367	(1.013)	40362	94.3475	94.3
20	trans-1,2-Dichloroethene	96	2.447	2.452	(0.613)	80169	15.9440	15.9
23	Methyl-tert-butyl Ether	73	2.532	2.531	(0.634)	254549	17.2781	17.3
25	Isopropyl Ether	45	2.848	2.854	(0.714)	271614	16.4894	16.5
28	1,1-Dichloroethane	63	2.958	2.957	(0.741)	148875	17.2248	17.2
32	cis-1,2-Dichloroethene	96	3.365	3.365	(0.843)	92020	16.7255	16.7
33	2,2-Dichloropropane	77	3.438	3.444	(0.861)	139527	18.0396	18.0
34	Cyclohexane	56	3.499	3.505	(0.877)	702998	77.3246	77.3

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031403.D
Report Date: 04-Mar-2014 12:08

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	35	Bromochloromethane	130	3.505	3.505	(0.878)	57847	17.8297	17.8
	36	Chloroform	83	3.560	3.559	(0.892)	154509	17.1743	17.2
	37	Carbon Tetrachloride	117	3.645	3.651	(0.913)	118772	17.4061	17.4
	39	Tetrahydrofuran	72	3.663	3.669	(1.571)	152107	187.200	187
	41	1,1,1-Trichloroethane	97	3.694	3.699	(0.925)	144140	17.3975	17.4
	42	2-Butanone	43	3.767	3.772	(0.944)	263744	83.1828	83.2
	43	1,1-Dichloropropene	75	3.773	3.778	(0.945)	121226	16.7717	16.8
	45	Benzene	78	3.937	3.937	(0.986)	351582	16.6138	16.6
*	48	Pentafluorobenzene	168	3.992	3.991	(1.000)	438473	50.0000	
$	50	1,2-Dichloroethane d4 (S)	65	4.022	4.022	(1.008)	218359	50.0897	50.1(Q)
	51	1,2-Dichloroethane	62	4.065	4.064	(1.018)	112665	18.1631	18.2
	55	Trichloroethene	130	4.296	4.295	(0.996)	103072	18.0385	18.0
*	56	1,4 Difluorobenzene	114	4.314	4.320	(1.000)	641262	50.0000	
	59	Dibromomethane	174	4.545	4.545	(1.054)	62143	18.9459	18.9
	60	1,2-Dichloropropane	63	4.600	4.600	(1.066)	91377	18.5964	18.6
	62	Bromodichloromethane	83	4.637	4.636	(1.075)	121513	17.6234	17.6
*	64	1,4 dioxane d8	96	4.740	4.740	(1.000)	11675	2000.00	
	68	cis-1,3-Dichloropropene	75	4.990	4.989	(1.157)	148389	18.8436	18.8
$	69	Toluene-d8 (S)	98	5.093	5.092	(0.861)	777709	51.0894	51.1
	70	Toluene	92	5.117	5.117	(0.865)	233395	17.9748	18.0
	72	Tetrachloroethene	166	5.324	5.324	(0.900)	109045	18.5196	18.5
	73	4-Methyl-2-Pentanone	43	5.324	5.324	(0.900)	614882	91.7408	91.7
	74	trans-1,3-Dichloropropene	75	5.342	5.342	(0.903)	141425	18.5867	18.6
	77	1,1,2-Trichloroethane	97	5.428	5.427	(0.918)	85381	17.9834	18.0
	78	Dibromochloromethane	129	5.525	5.524	(0.934)	101355	18.4636	18.5
	79	1,3-Dichloropropane	76	5.574	5.573	(0.942)	147047	18.7829	18.8
	80	1,2-Dibromoethane	107	5.653	5.652	(0.956)	91893	18.0646	18.1
	81	2-Hexanone	43	5.762	5.762	(0.974)	458569	89.8986	89.9
*	82	Chlorobenzene-d5	117	5.914	5.914	(1.000)	598708	50.0000	
	83	Chlorobenzene	112	5.920	5.926	(1.001)	254143	18.0356	18.0
	84	Ethylbenzene	91	5.933	5.932	(1.003)	456457	17.6894	17.7
	85	1,1,1,2-Tetrachloroethane	131	5.957	5.956	(1.007)	94171	18.1050	18.1
	86	M&P-Xylene	106	6.005	6.005	(1.015)	352968	36.2663	36.3
	87	O-Xylene (1,2-Dimethylbenzene)	106	6.231	6.230	(1.053)	165673	17.4070	17.4
	88	Styrene	104	6.261	6.260	(1.059)	283902	18.1788	18.2
	89	Bromoform	173	6.279	6.279	(1.062)	78572	18.2455	18.2
	90	Isopropylbenzene (Cumene)	105	6.389	6.388	(1.080)	427434	18.2162	18.2
$	91	4-Bromofluorobenzene (S)	95	6.547	6.546	(0.907)	303786	49.4813	49.5
	93	Bromobenzene	156	6.608	6.607	(0.915)	107187	17.6761	17.7
	94	n-Propylbenzene	91	6.614	6.613	(0.916)	496839	18.0324	18.0
	95	1,1,2,2-Tetrachloroethane	83	6.656	6.656	(0.922)	126627	17.3886	17.4
	96	2-Chlorotoluene	91	6.705	6.705	(0.928)	317737	17.6457	17.6
	97	1,3,5-Trimethylbenzene	105	6.717	6.717	(0.930)	340874	18.0225	18.0
	98	1,2,3-Trichloropropane	110	6.736	6.735	(0.933)	41494	19.2946	19.3
	100	4-Chlorotoluene	91	6.802	6.802	(0.942)	299229	17.8556	17.8
	101	tert-Butylbenzene	119	6.912	6.911	(0.957)	283394	17.8411	17.8
	102	1,2,4-Trimethylbenzene	105	6.955	6.954	(0.963)	333491	17.7703	17.8
	103	sec-Butylbenzene	105	7.028	7.027	(0.973)	393258	18.1295	18.1
	104	p-Isopropyltoluene	119	7.113	7.112	(0.985)	334753	18.0766	18.1
	105	1,3-Dichlorobenzene	146	7.174	7.173	(0.993)	191254	18.1073	18.1
*	106	1,4-Dichlorobenzene-d4	152	7.222	7.222	(1.000)	329685	50.0000	
	107	1,4-Dichlorobenzene	146	7.234	7.228	(1.002)	201964	18.4415	18.4
	109	n-Butylbenzene	91	7.386	7.386	(1.023)	282887	18.2896	18.3
	110	1,2-Dichlorobenzene	146	7.508	7.508	(1.040)	180099	17.6999	17.7

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031403.D
Report Date: 04-Mar-2014 12:08

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
111 1,2-Dibromo-3-Chloropropane	157	8.050	8.049	(1.115)	89545	44.3654	44.4
112 Hexachlorobutadiene	225	8.494	8.493	(1.176)	51316	20.3740	20.4
113 1,2,4-Trichlorobenzene	180	8.524	8.517	(1.180)	110350	19.5050	19.5
114 Naphthalene	128	8.755	8.755	(1.212)	368280	18.0857	18.1
115 1,2,3-Trichlorobenzene	180	8.889	8.888	(1.231)	101160	18.2825	18.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031403.D
Report Date: 04-Mar-2014 12:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 03031403.D
Lab Smp Id: 1632467
Analysis Type: VOA
Quant Type: ISTD
Operator: LPM
Method File: \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Misc Info: 26462

Calibration Date: 03-MAR-2014
Calibration Time: 09:36
Level: LOW
Sample Type: WATER

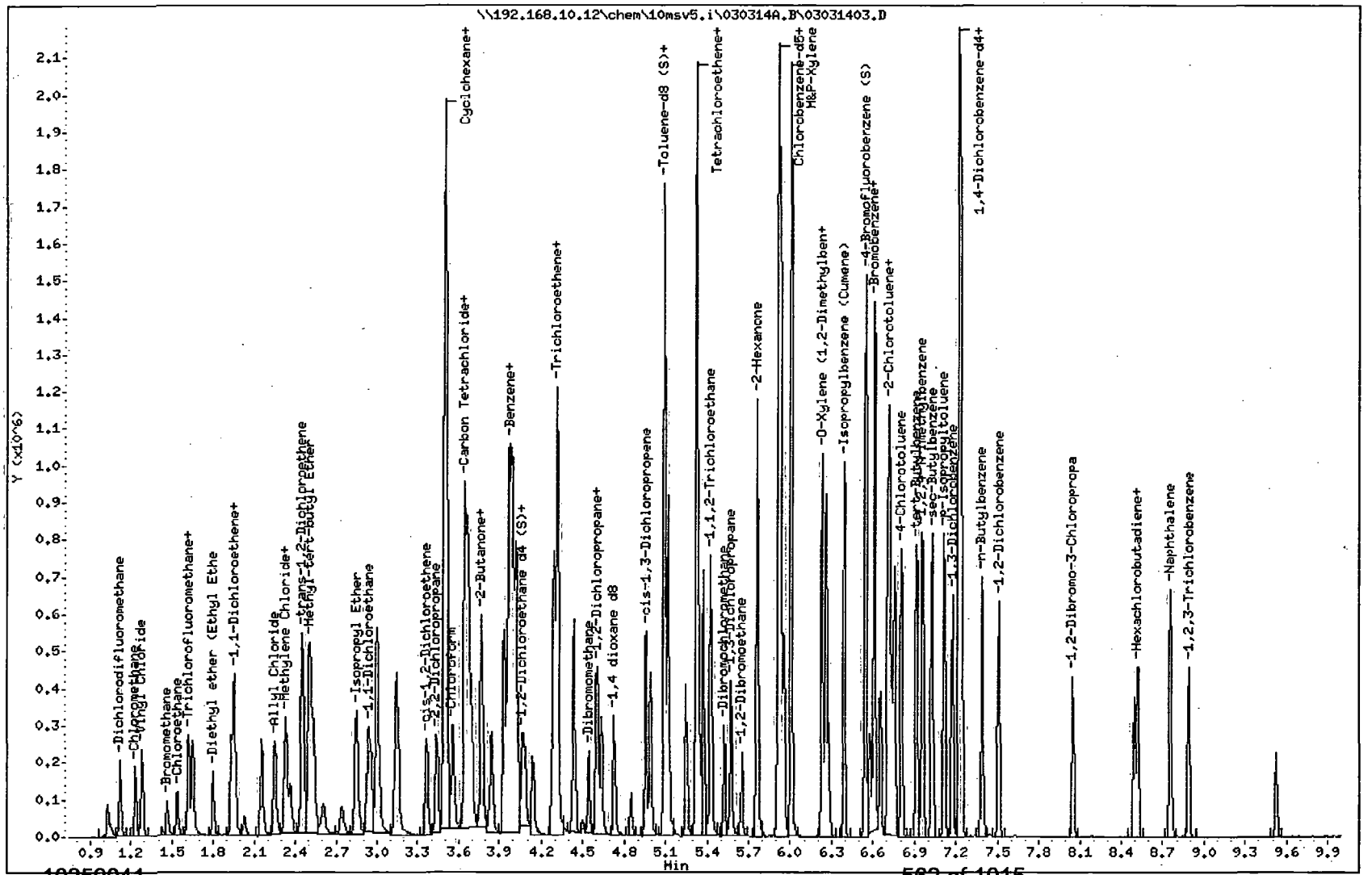
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	114178	57089	228356	109454	-4.14
48 Pentafluorobenzen	409621	204811	819242	438473	7.04
56 1,4 Difluorobenze	611915	305958	1223830	641262	4.80
64 1,4 dioxane d8	23365	11683	46730	11675	-50.03 <-
82 Chlorobenzene-d5	575331	287666	1150662	598708	4.06
106 1,4-Dichlorobenze	315847	157924	631694	329685	4.38

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.33	0.03
48 Pentafluorobenzen	3.99	3.49	4.49	3.99	0.01
56 1,4 Difluorobenze	4.32	3.82	4.82	4.31	-0.13
64 1,4 dioxane d8	4.74	4.24	5.24	4.74	0.01
82 Chlorobenzene-d5	5.91	5.41	6.41	5.91	0.01
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031403.D
Date : 03-MAR-2014 10:14
Client ID:
Instrument: 10msv5.i
Sample Info: 1632467,1,3,LCS,9525-609
Purge Volume: 10.0
Operator: LPM
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv5.i\030314A.B/03031403.D
Injection Date: 03-MAR-2014 10:14
Instrument: 10msv5.i
Lab Sample ID: 1632467
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016b.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014016b.D
Lab Smp Id: 1635951
Inj Date : 10-MAR-2014 15:30
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1635951,5,3,LCS
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 16 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	165633	41.2853	41.3
2	Chloromethane	50	1.241	1.241	(0.295)	206571	46.4728	46.5(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	220786	44.9606	45.0
4	Bromomethane	94	1.479	1.479	(0.352)	109378	53.9255	53.9
5	Chloroethane	64	1.570	1.570	(0.374)	96520	46.5673	46.6
6	Trichlorofluoromethane	101	1.674	1.674	(0.398)	257016	42.3937	42.4
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	331945	46.2628	46.3
8	Diethyl ether (Ethyl Ether)	59	1.954	1.954	(0.465)	131804	48.6116	48.6
9	1,1-Dichloroethene	96	2.094	2.094	(0.498)	164126	45.0914	45.1
10	Carbon Disulfide	76	2.101	2.101	(0.500)	577048	41.7271	41.7
11	Ethanol	45	2.113	2.113	(0.438)	52296	868.480	868
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	164394	43.8228	43.8
13	Iodomethane	142	2.210	2.210	(0.526)	182354	40.7506	40.8
14	Acrolein	56	2.411	2.411	(0.574)	251926	539.526	540
15	Allyl Chloride	41	2.539	2.539	(0.604)	241182	45.7462	45.7
16	Methylene Chloride	84	2.637	2.637	(0.627)	188280	46.3236	46.3
17	Isopropanol	45	2.631	2.631	(0.545)	140521	399.119	399
* 18	Acetone d6	46	2.649	2.649	(1.000)	143669	200.000	
19	Acetone	58	2.698	2.698	(1.018)	65256	233.422	233

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016b.D
Report Date: 11-Mar-2014 15:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	185961	45.9786	46.0
	21 Hexane	86	2.863	2.863	(1.081)	99512	94.9381	94.9
	22 Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	484083	49.4069	49.4(Q)
	23 tert-Butyl Alcohol	59	3.009	3.009	(0.624)	212927	417.624	418
	24 Acetonitrile	41	3.070	3.070	(0.730)	171353	472.582	472
	25 Isopropyl Ether	45	3.204	3.204	(0.762)	560753	47.9747	48.0
	26 Acrylonitrile	53	3.247	3.247	(0.772)	255340	454.923	455
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	317015	47.5870	47.6
	28 Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	515856	47.5756	47.6
	29 Vinyl Acetate	43	3.466	3.466	(0.825)	366893	49.5694	49.6
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	204403	47.3621	47.4
	31 2,2-Dichloropropane	77	3.698	3.698	(0.880)	258863	46.6678	46.7
	32 Cyclohexane	56	3.753	3.753	(0.893)	1487106	221.599	222
	33 Bromochloromethane	130	3.759	3.759	(0.894)	121502	47.8848	47.9
	34 Chloroform	83	3.814	3.814	(0.907)	320128	47.4678	47.5
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	225436	45.8320	45.8
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	233933	487.913	488
	37 1,1,1-Trichloroethane	97	3.929	3.929	(0.935)	269338	45.5623	45.6
	38 2-Butanone	43	3.997	3.997	(0.951)	349390	235.207	235
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	248728	44.5000	44.5
	40 Benzene	78	4.143	4.143	(0.985)	756085	45.3625	45.4
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	966546	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	509903	46.4447	46.4
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	383497	102.790	103
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	207219	47.6810	47.7
	45 Isobutanol	43	4.295	4.295	(0.890)	180020	873.871	874
	46 Tert-Amyl Alcohol	59	4.344	4.344	(0.900)	187955	439.722	440(R)
	47 Trichloroethene	130	4.460	4.460	(0.995)	216580	46.6243	46.6
*	48 1,4 Difluorobenzene	114	4.484	4.484	(1.000)	1457917	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.023)	408034	47.7828	47.8
	50 Dibromomethane	174	4.667	4.667	(1.041)	127076	47.4478	47.4
	51 1,2-Dichloropropane	63	4.716	4.716	(1.052)	186978	47.2796	47.3
	52 Bromodichloromethane	83	4.746	4.746	(1.058)	240227	46.4471	46.4
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	174389	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	49344	840.600	840
	55 2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.116)	41956	127.548	128
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.121)	303632	47.4146	47.4
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.882)	1718276	100.255	100
	58 Toluene	92	5.130	5.130	(0.886)	483830	43.8385	43.8
	59 4-Methyl-2-Pentanone	43	5.283	5.283	(0.913)	800437	244.431	244
	60 Tetrachloroethene	166	5.295	5.295	(0.915)	240128	45.6567	45.6
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.916)	273359	48.1898	48.2
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.928)	160312	47.4767	47.5
	63 Dibromochloromethane	129	5.454	5.454	(0.942)	189014	48.2505	48.2
	64 1,3-Dichloropropane	76	5.490	5.490	(0.948)	273014	47.3196	47.3
	65 1,2-Dibromoethane	107	5.557	5.557	(0.960)	169784	47.8891	47.9
	66 2-Hexanone	43	5.649	5.649	(0.976)	594804	232.930	233
*	67 Chlorobenzene-d5	117	5.789	5.789	(1.000)	1458689	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.001)	557359	45.2274	45.2
	69 Ethylbenzene	91	5.801	5.801	(1.002)	927038	44.0777	44.1
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.005)	202040	47.1363	47.1
	71 M&P-Xylene	106	5.868	5.868	(1.014)	733712	89.5721	89.6
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.049)	354959	46.2101	46.2
	73 Styrene	104	6.106	6.106	(1.055)	631032	48.1887	48.2

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016b.D
Report Date: 11-Mar-2014 15:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
74	Bromoform	173	6.124	6.124	(1.058)	149136	47.9870	48.0
75	Isopropylbenzene (Cumene)	105	6.234	6.234	(1.077)	909401	44.2413	44.2
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	716914	100.529	100
77	cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	65847	47.7761	47.8
78	Bromobenzene	156	6.453	6.453	(0.916)	258678	47.3763	47.4
79	n-Propylbenzene	91	6.453	6.453	(0.916)	1129501	45.2246	45.2
80	1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	219740	48.4087	48.4
81	2-Chlorotoluene	91	6.551	6.551	(0.930)	717410	46.0987	46.1
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	804111	45.4993	45.5
83	1,2,3-Trichloropropane	110	6.575	6.575	(0.933)	61814	48.6428	48.6(Q)
84	trans-1,4-Dichloro-2-Butene	53	6.587	6.587	(0.935)	145342	123.590	124
85	4-Chlorotoluene	91	6.642	6.642	(0.943)	674549	45.3106	45.3
86	tert-Butylbenzene	119	6.746	6.746	(0.958)	685223	45.9236	45.9
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	829415	46.0968	46.1
88	sec-Butylbenzene	105	6.856	6.856	(0.973)	1012792	45.3530	45.4
89	p-Isopropyltoluene	119	6.941	6.941	(0.985)	900878	45.8185	45.8
90	1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	496745	45.4577	45.4
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	888899	100.000	
92	1,4-Dichlorobenzene	146	7.057	7.057	(1.002)	514410	45.1694	45.2
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	852045	45.7620	45.8
94	n-Butylbenzene	91	7.215	7.215	(1.024)	817101	44.6331	44.6
95	1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	468839	45.7734	45.8
96	1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	124657	124.516	124
97	Hexachlorobutadiene	225	8.191	8.191	(1.163)	176178	44.3413	44.3
98	1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	311278	46.5601	46.6
99	Naphthalene	128	8.392	8.392	(1.191)	620678	47.8281	47.8
100	1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	290628	48.1688	48.2
101	2-Methylnaphthalene	142	9.014	9.014	(1.279)	116874	23.1933	23.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016b.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014016b.D
Lab Smp Id: 1635951
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

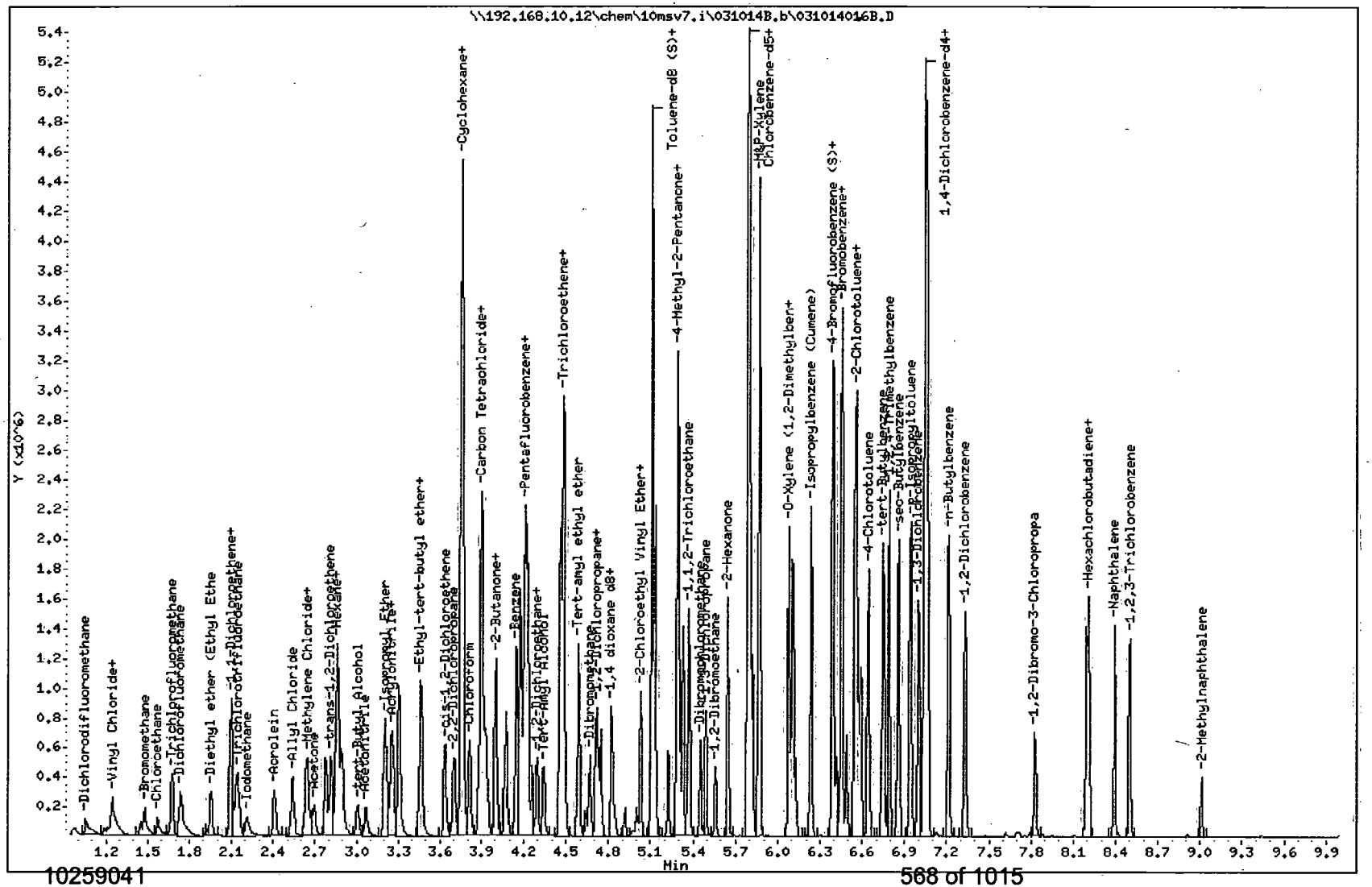
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	143669	0.00
41 Pentafluorobenzen	966546	483273	1933092	966546	0.00
48 1,4 Difluorobenze	1457917	728959	2915834	1457917	0.00
53 1,4 dioxane d8	174389	87195	348778	174389	0.00
67 Chlorobenzene-d5	1458689	729345	2917378	1458689	0.00
91 1,4-Dichlorobenze	888899	444450	1777798	888899	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.79	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

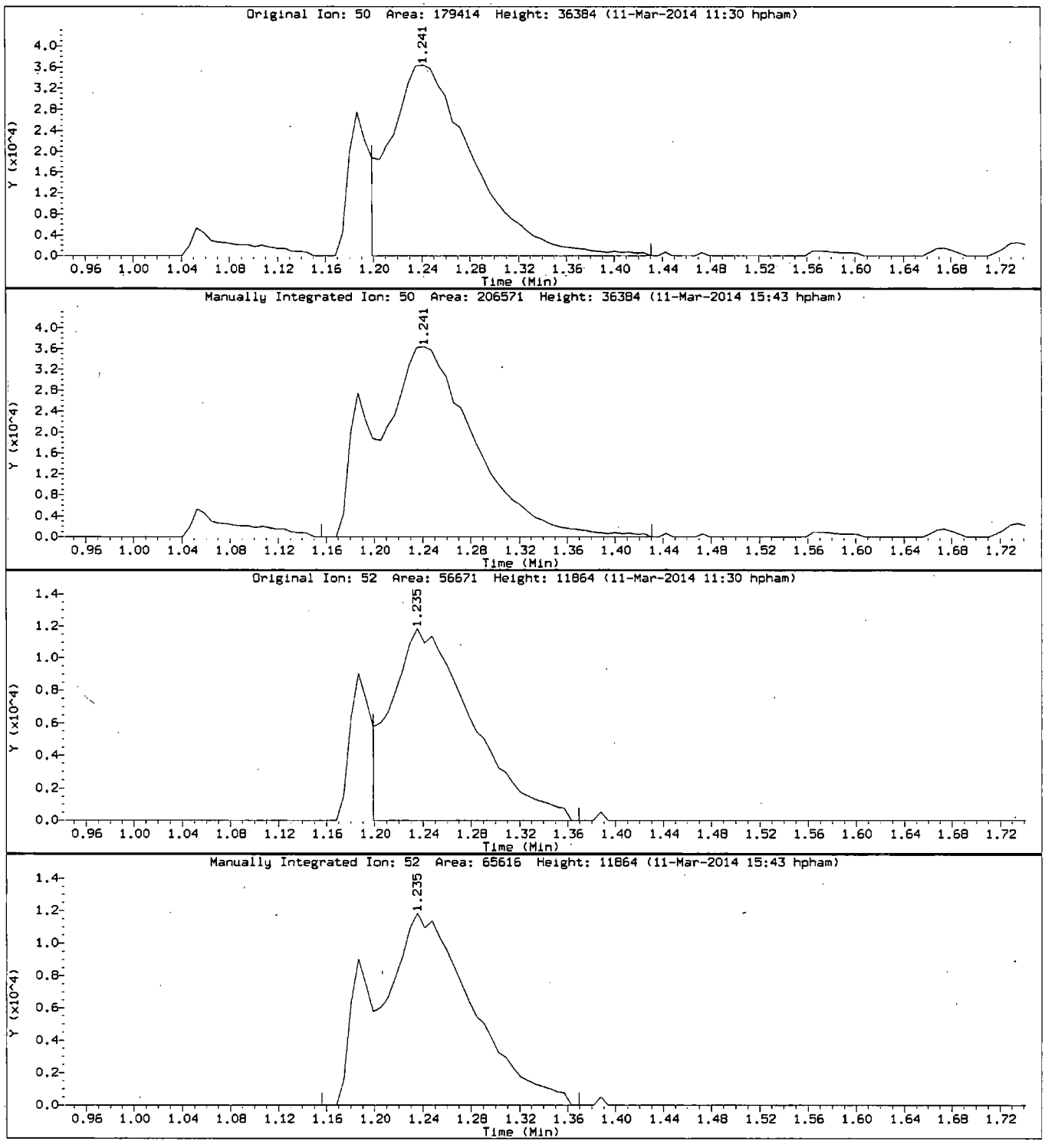
Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016B.D
Date : 10-MAR-2014 15:30
Client ID:
Sample Info: 1635951,6,3,LCS

Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\031014B.b/031014016b.D
Injection Date: 10-MAR-2014 15:30
Instrument: 10msv7.i
Lab Sample ID: 1635951

Compound: Chloromethane
CAS Number: 74-87-3



Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014031.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014031.D
Lab Smp Id: 10259041001
Inj Date : 10-MAR-2014 20:19
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259041001,7.50
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	7.500	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.101	2.101	(0.500)	2754	0.19301	0.29(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	145784	200.000	
19	Acetone	58	2.698	2.698	(1.018)	1819	3.57304	5.4(aQ)
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014031.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	21 Hexane	86	2.857	2.863	(1.078)	3622	3.40539	5.1(a)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	3.753	3.753	(0.893)	11558	1.66928	2.5(aQ)
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.143	4.143	(0.985)	21810	1.26824	1.9(a)
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	997246	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	407675	105.907	106
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1474997	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	166618	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1724744	98.7561	98.8
	58 Toluene	92	5.131	5.130	(0.887)	39406	3.50389	5.2(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	Compound Not Detected.					
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1486406	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.801	5.801	(1.003)	20599	0.96115	1.4(a)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.868	5.868	(1.015)	10051	1.20415	1.8(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.051)	3772	0.48190	0.72(a)
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014031.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	738081	102.115	102
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	6.453	6.453	(0.916)	3712	0.14664	0.22(aQ)
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	3670	0.20489	0.31(a)
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	12186	0.66822	1.0(a)
88	sec-Butylbenzene	105	Compound Not Detected.					
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	900928	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	4337	0.22576	0.34(aH)
94	n-Butylbenzene	91	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
99	Naphthalene	128	8.392	8.392	(1.191)	2225	0.16916	0.25(a)
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
101	2-Methylnaphthalene	142	9.008	9.014	(1.279)	704	0.13784	0.21(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014031.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014031.D
Lab Smp Id: 10259041001
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	145784	1.47
41 Pentafluorobenzen	966546	483273	1933092	997246	3.18
48 1,4 Difluorobenze	1457917	728959	2915834	1474997	1.17
53 1,4 dioxane d8	174389	87195	348778	166618	-4.46
67 Chlorobenzene-d5	1458689	729345	2917378	1486406	1.90
91 1,4-Dichlorobenze	888899	444450	1777798	900928	1.35

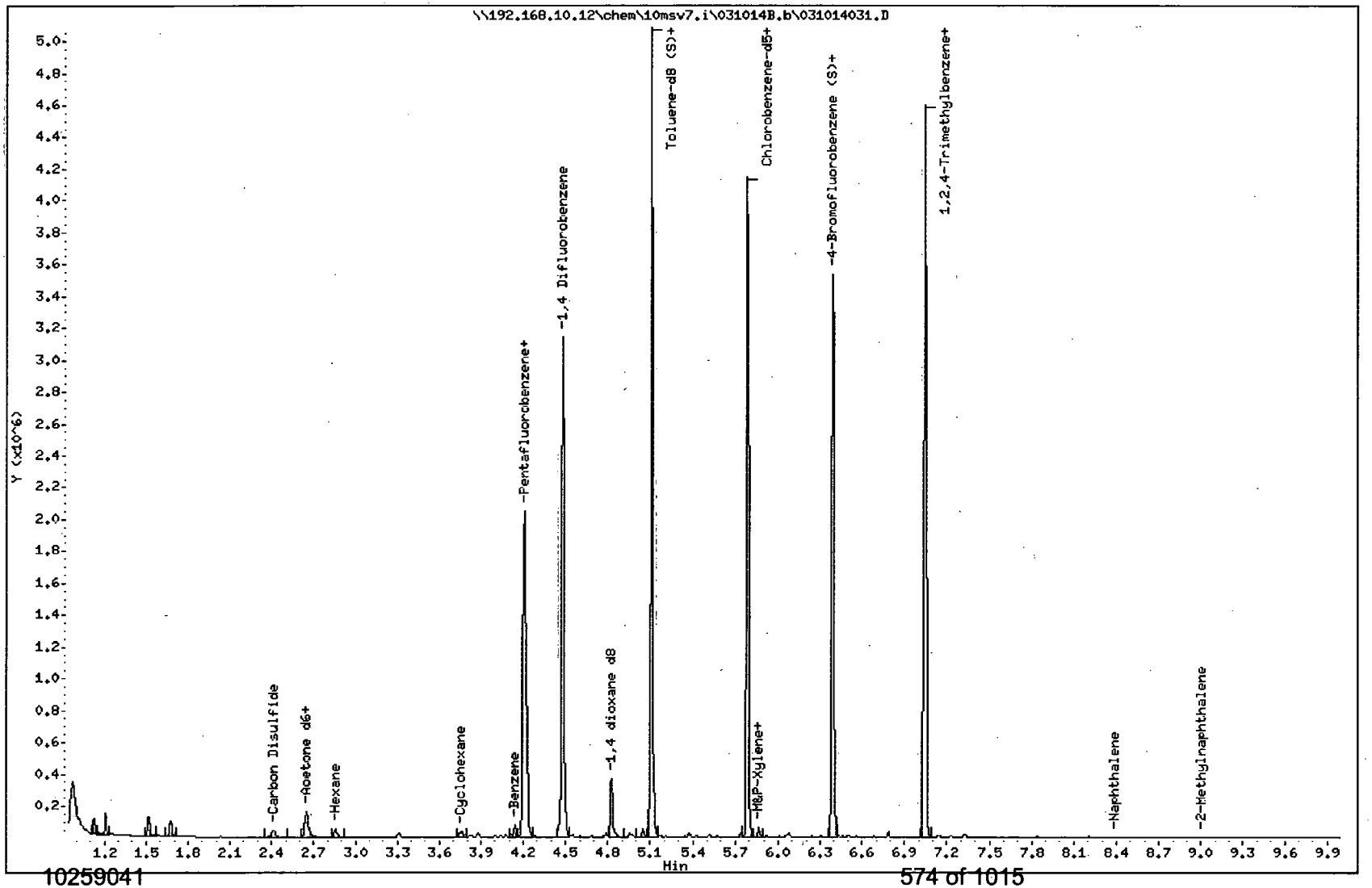
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014031.D
Date : 10-MAR-2014 20:19
Client ID:
Sample Info: 10259041001,7.50

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

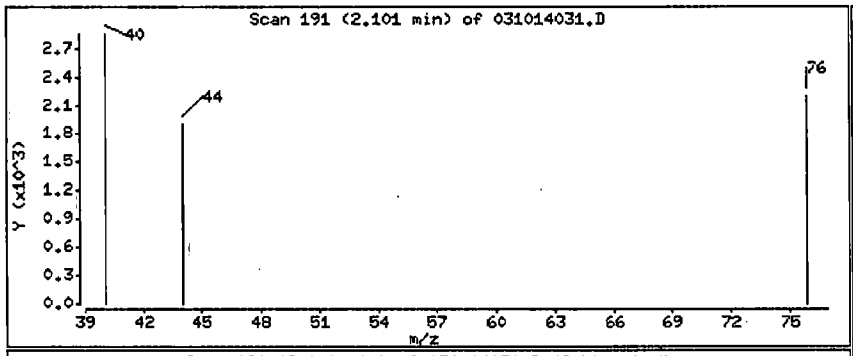
Operator: HBP

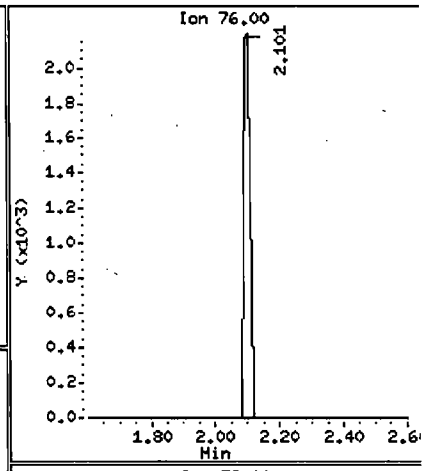
Column phase: Rtx-VMS

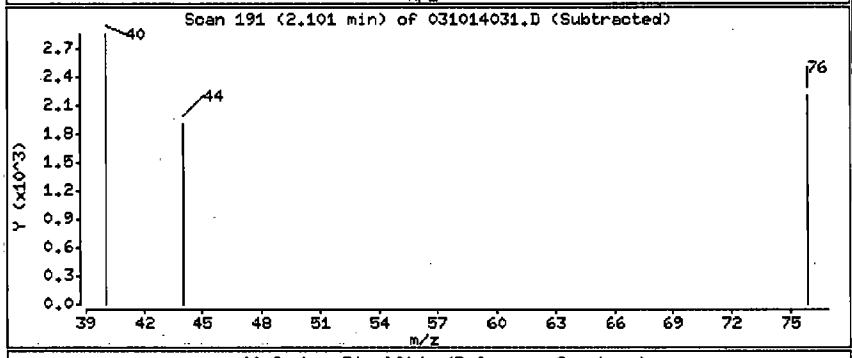
Column diameter: 0.18

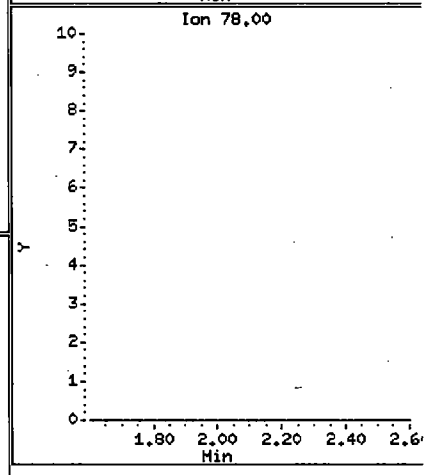
10 Carbon Disulfide

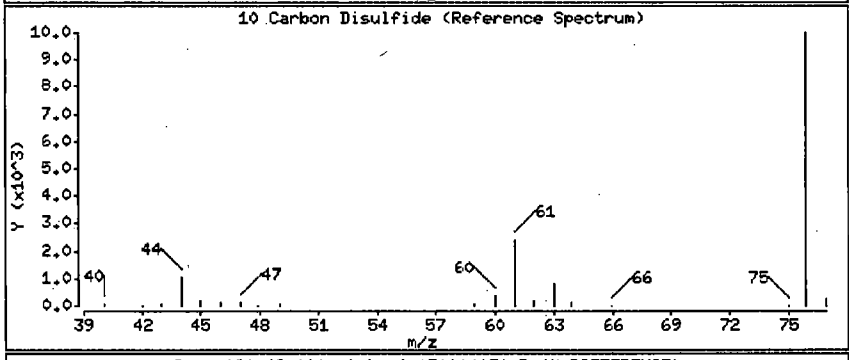
Concentration: 0.29 ug/Kg

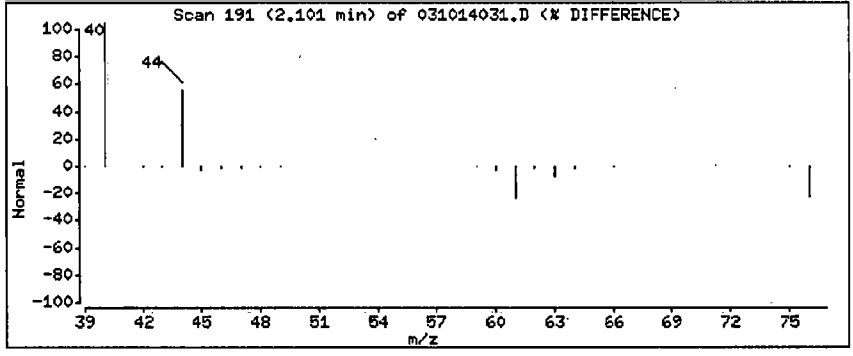












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014031.D

Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

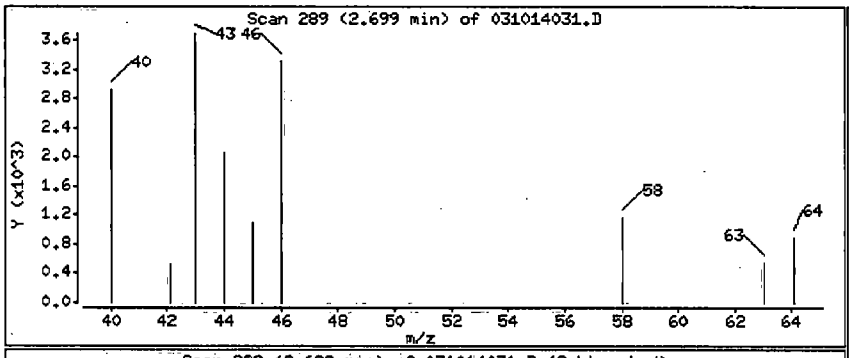
Operator: HBP

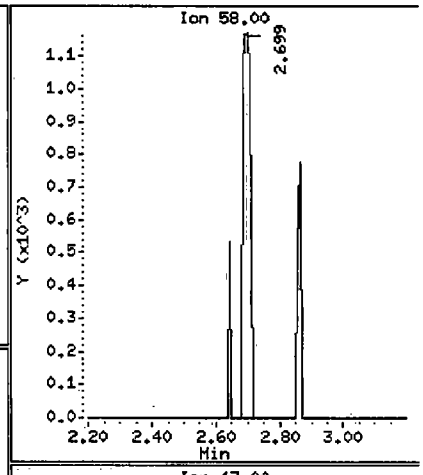
Column phase: Rtx-VMS

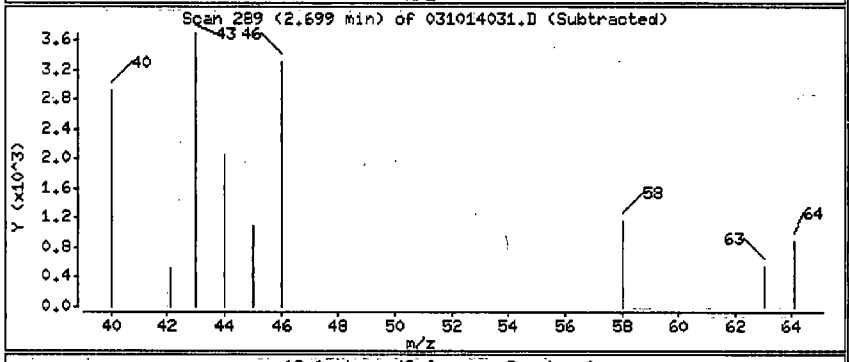
Column diameter: 0.18

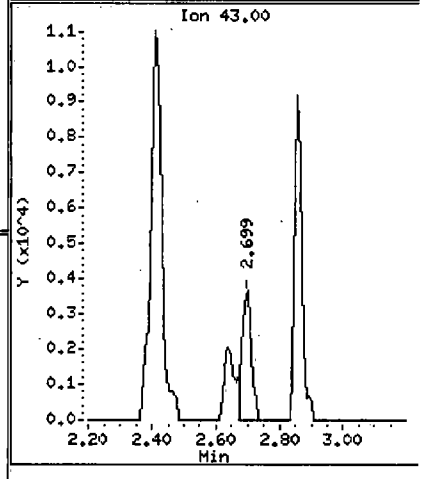
19 Acetone

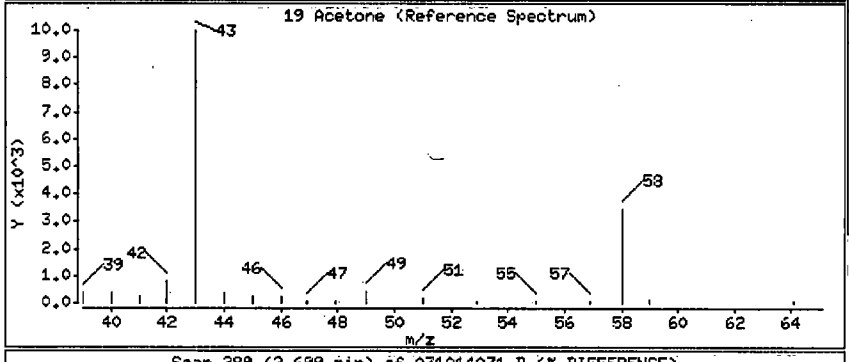
Concentration: 5.4 ug/Kg

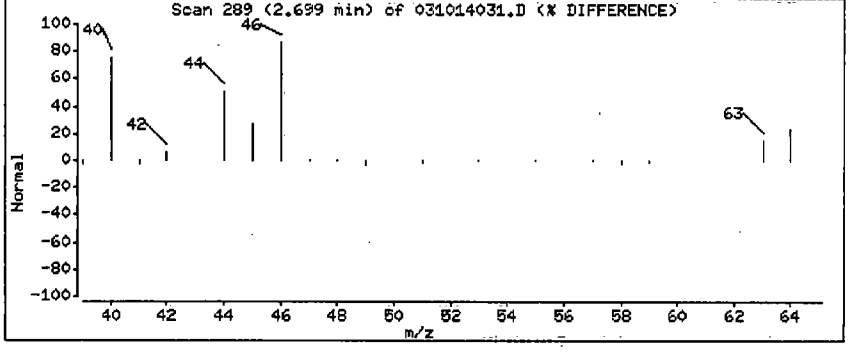












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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

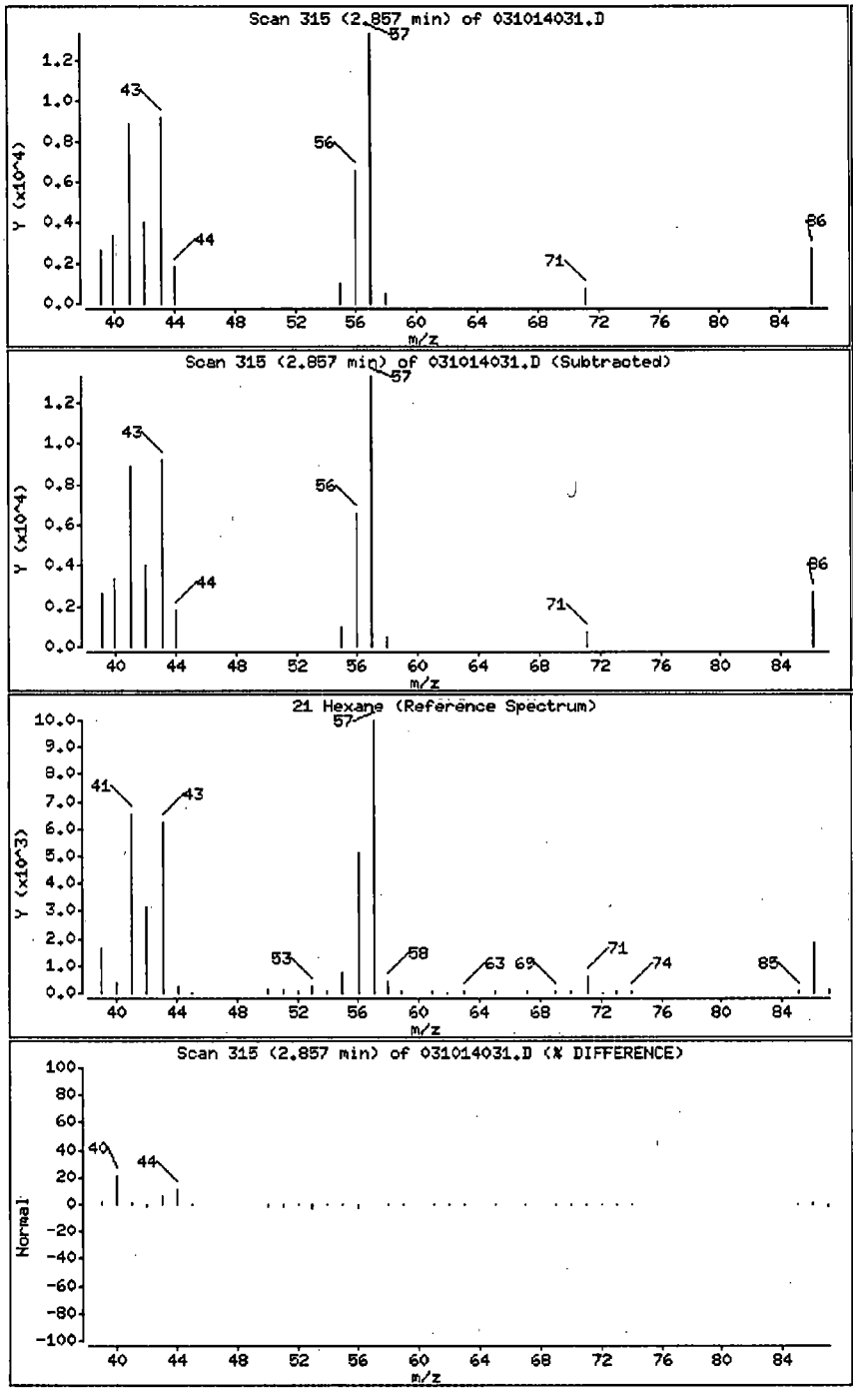
Operator: HBP

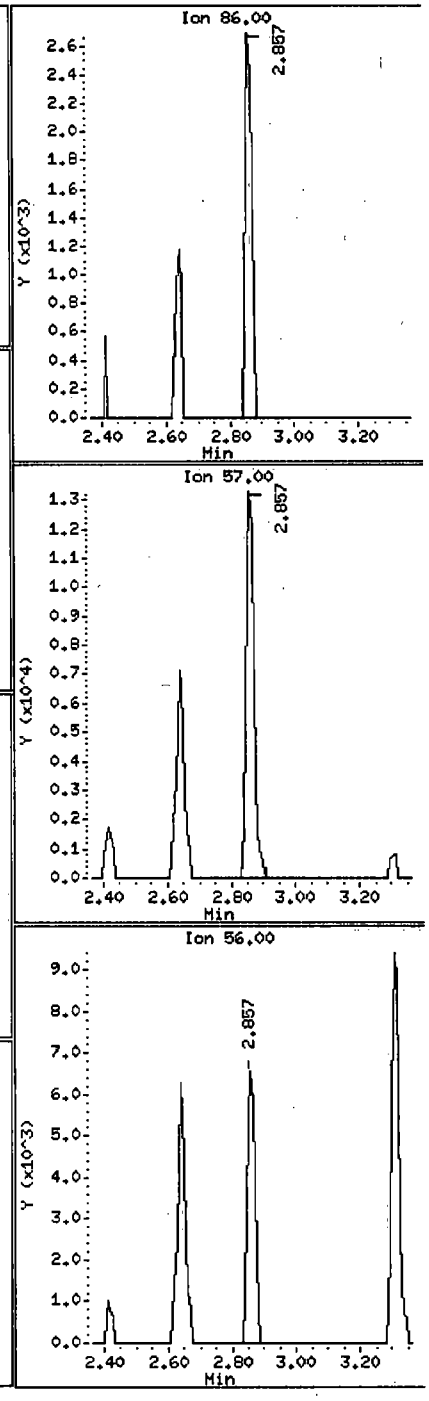
Column phase: Rtx-VMS

Column diameter: 0.18

21 Hexane

Concentration: 5.1 ug/Kg





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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

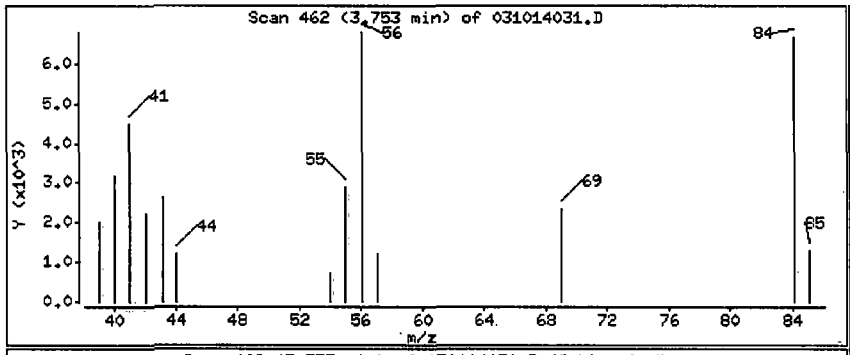
Operator: HBP

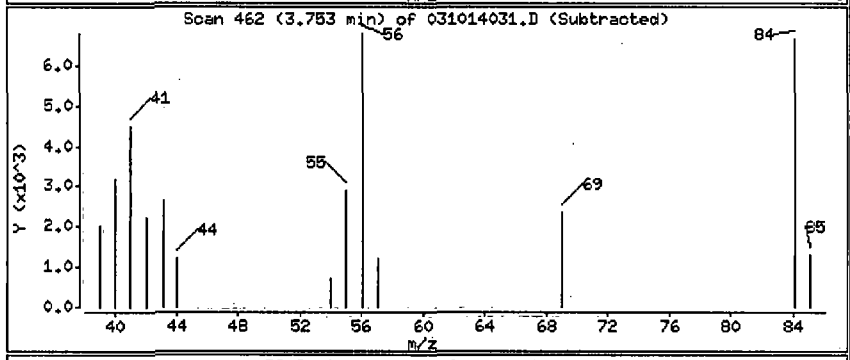
Column phase: Rtx-VMS

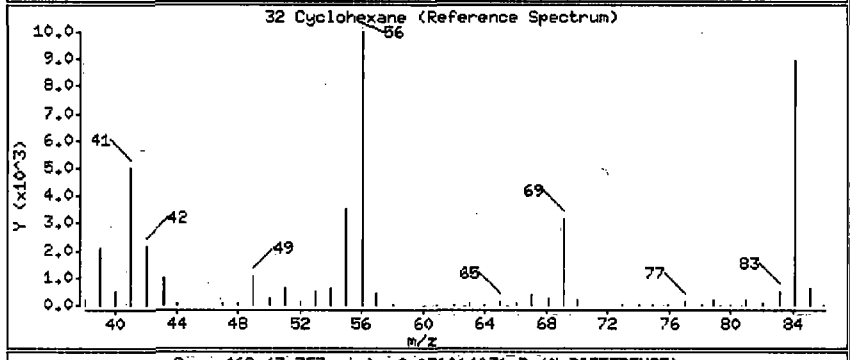
Column diameter: 0.18

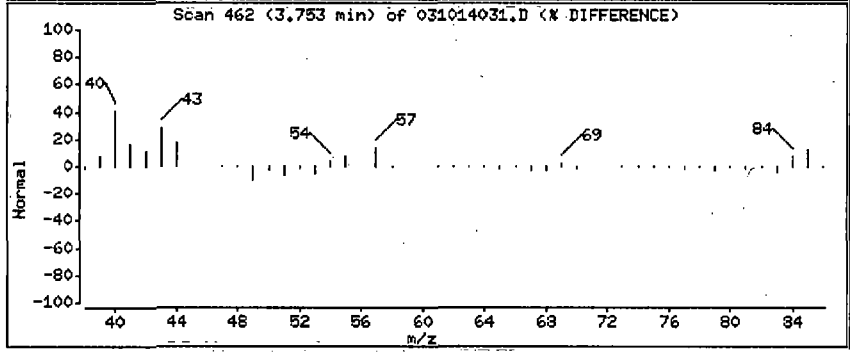
32 Cyclohexane

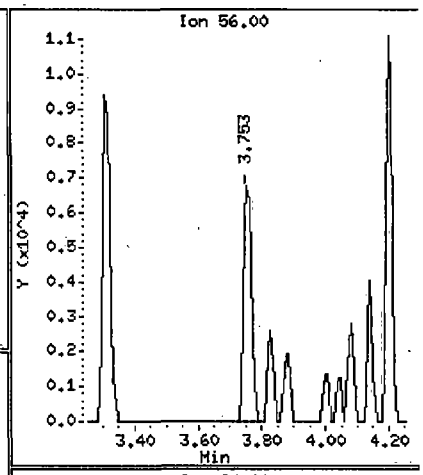
Concentration: 2.5 ug/Kg

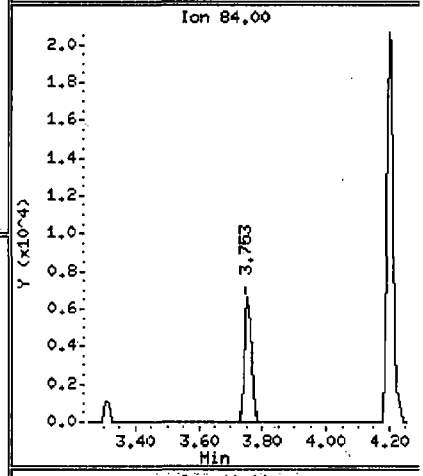


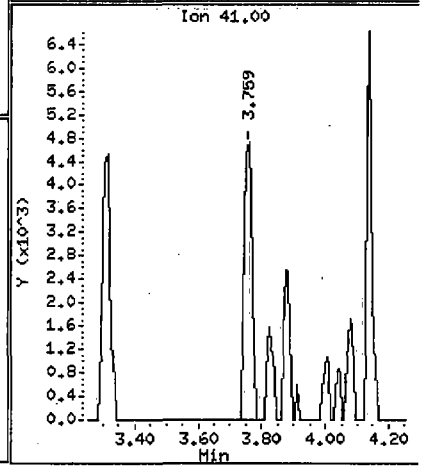












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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

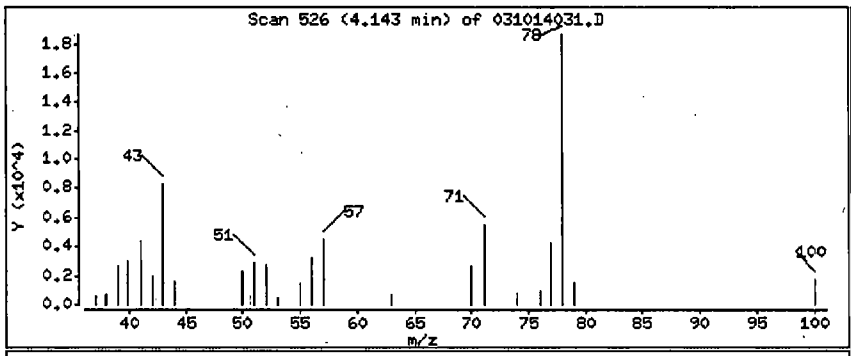
Operator: HBP

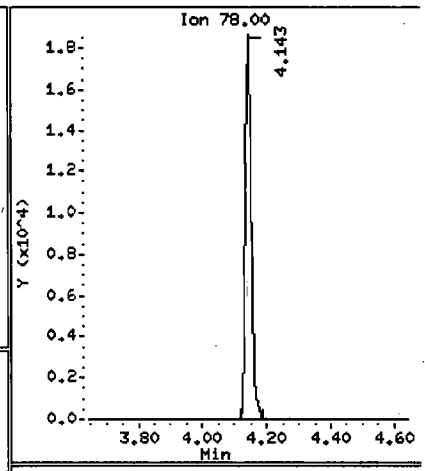
Column phase: Rtx-VMS

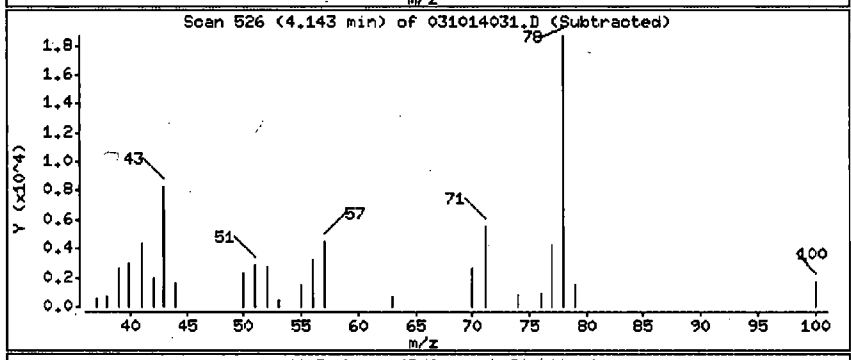
Column diameter: 0.18

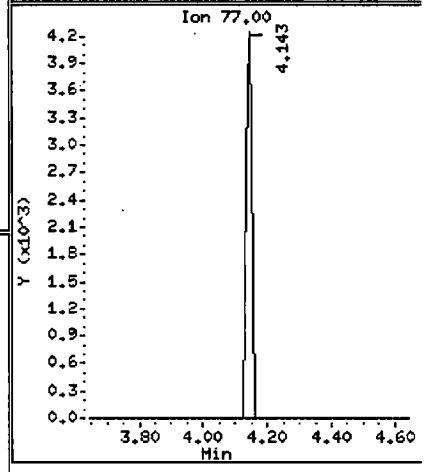
40 Benzene

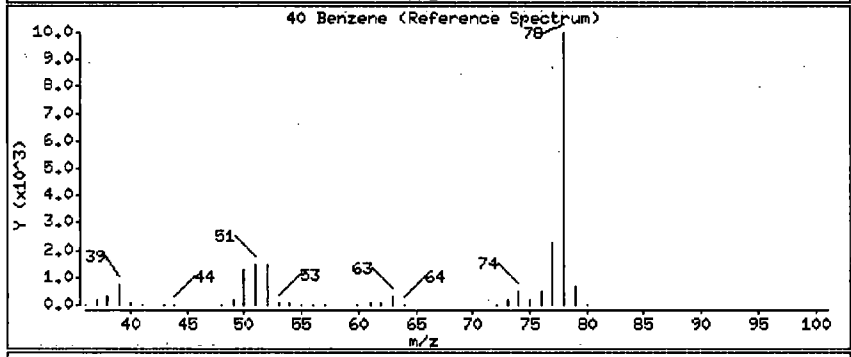
Concentration: 1.9 ug/Kg

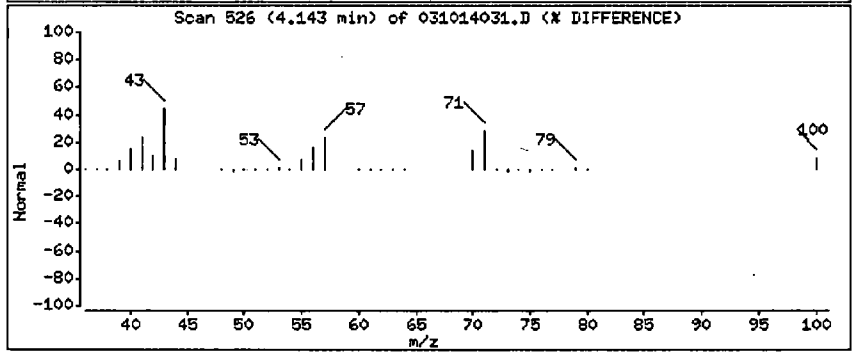












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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

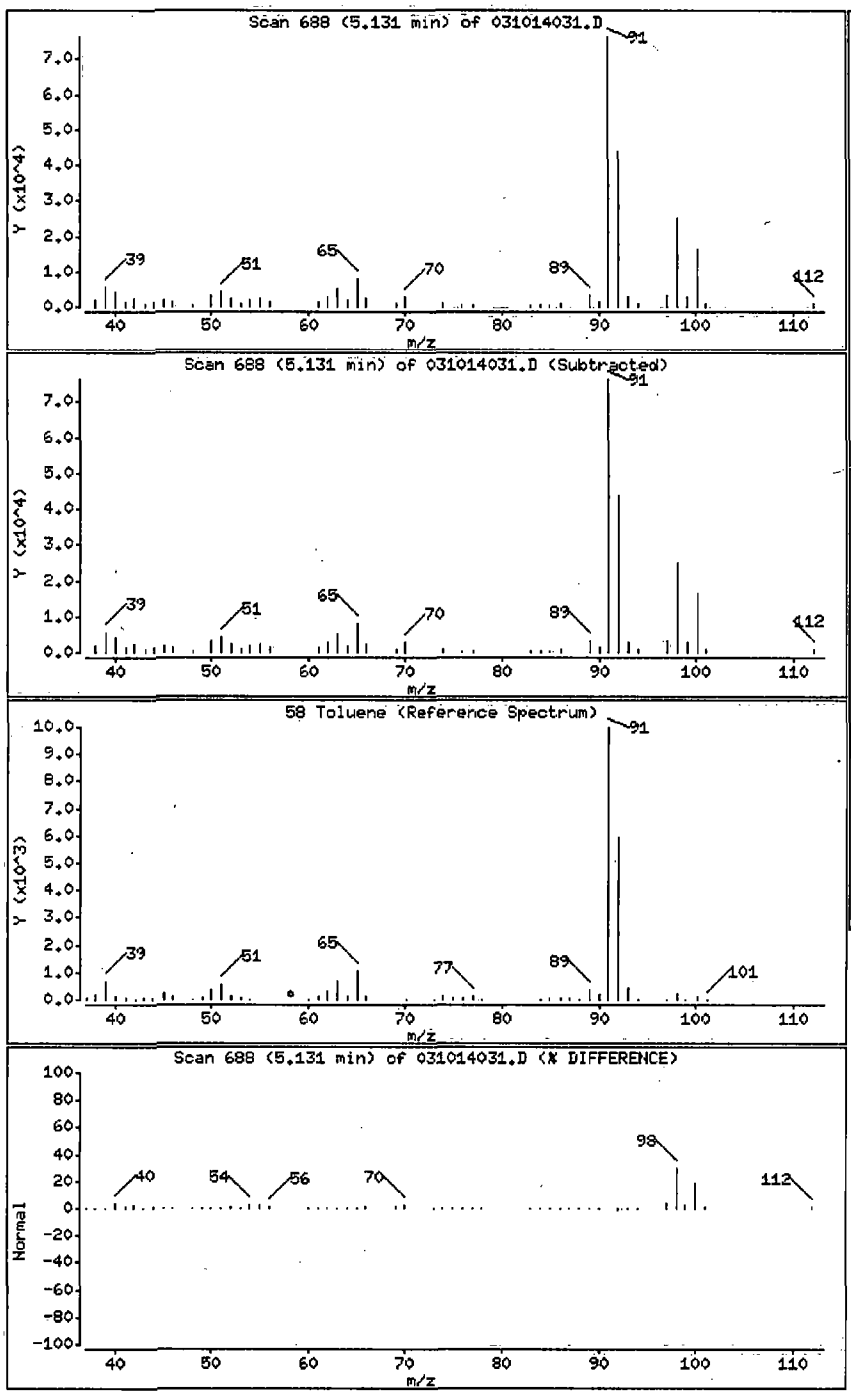
Operator: HBP

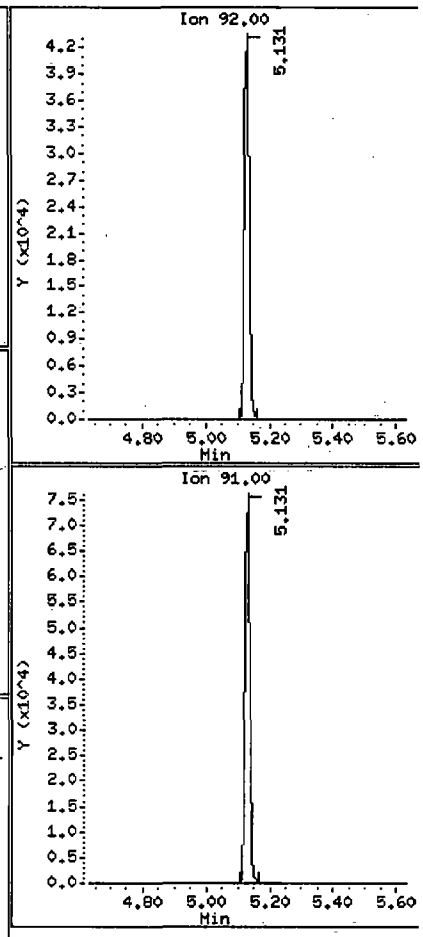
Column phase: Rtx-VMS

Column diameter: 0.18

58 Toluene

Concentration: 5.2 ug/Kg





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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

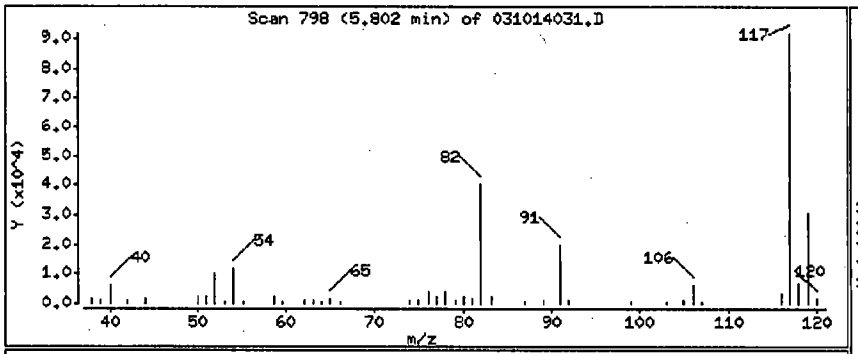
Operator: HBP

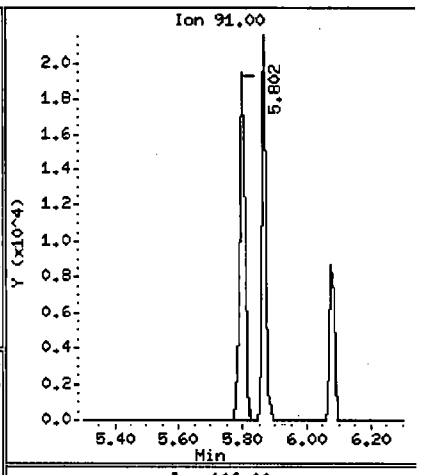
Column phase: Rtx-VMS

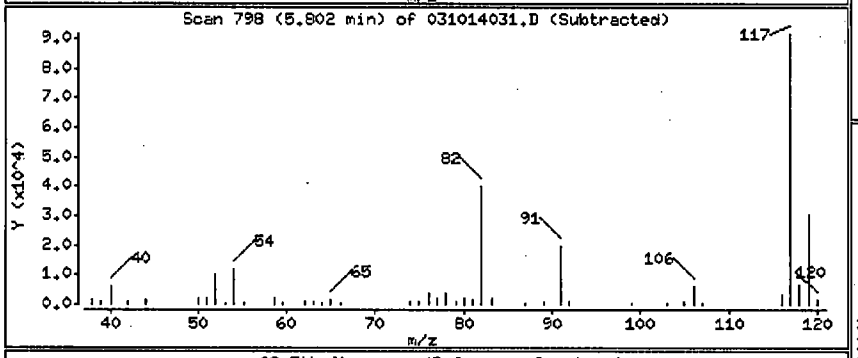
Column diameter: 0.18

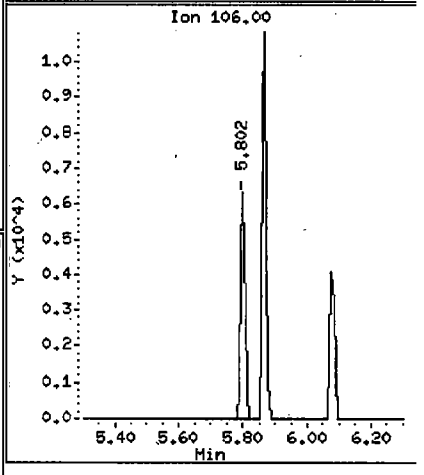
69 Ethylbenzene

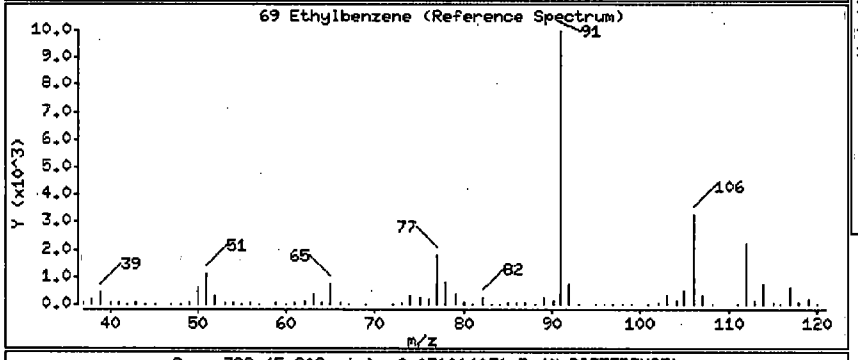
Concentration: 1.4 ug/Kg

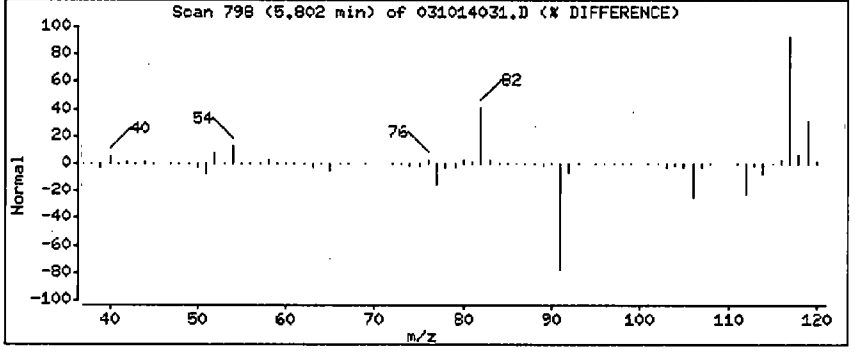












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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

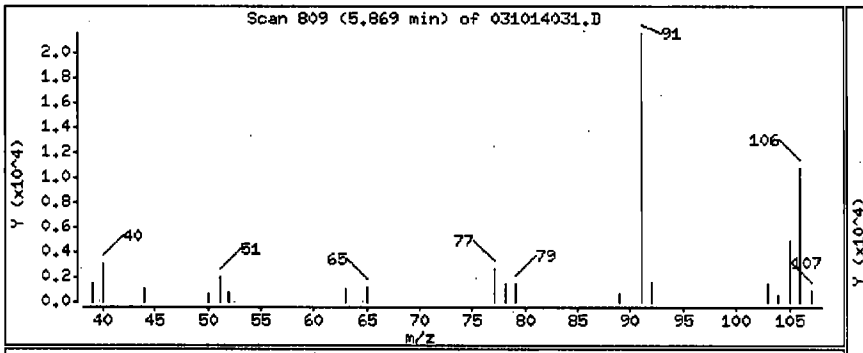
Operator: HBP

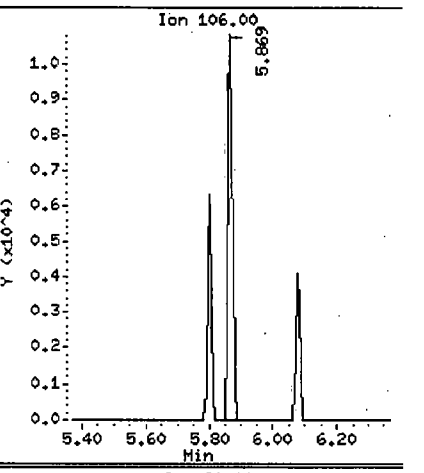
Column phase: Rtx-VMS

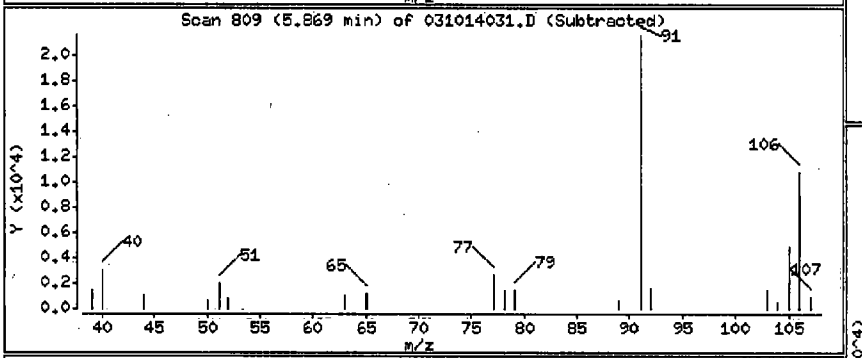
Column diameter: 0.18

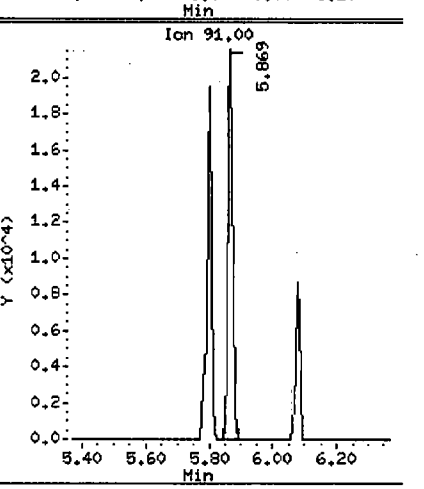
71 M&P-Xylene

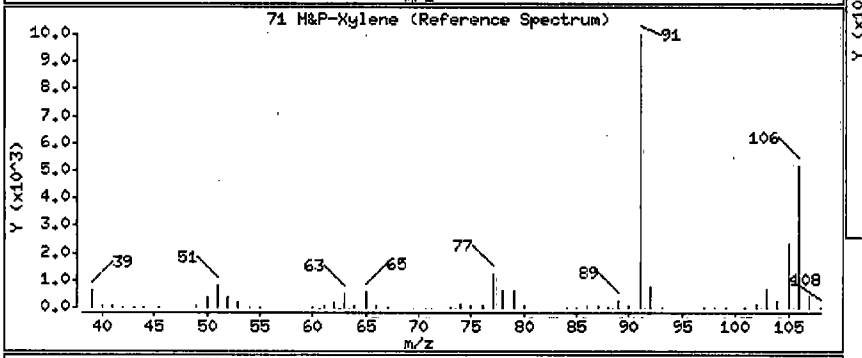
Concentration: 1.8 ug/Kg

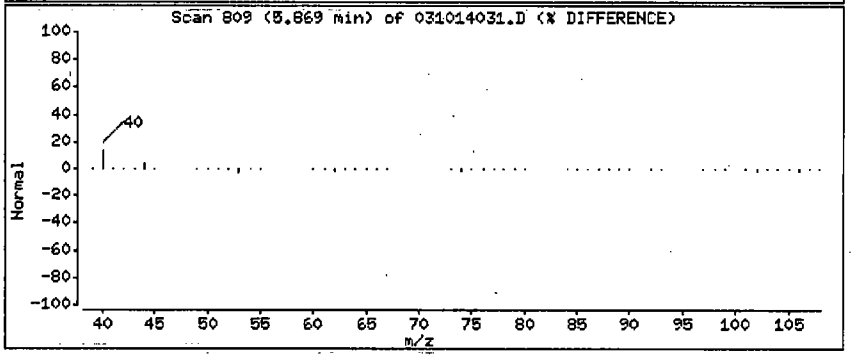












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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

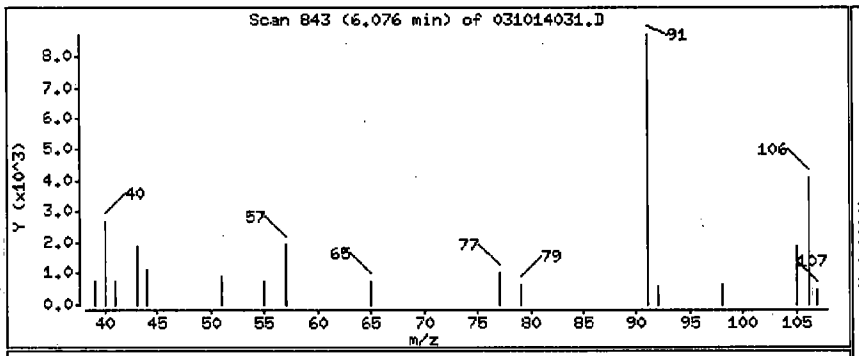
Operator: HBP

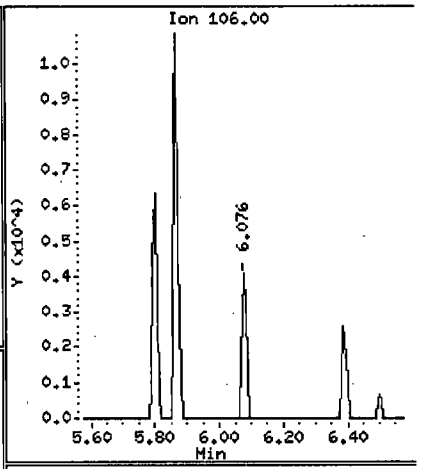
Column phase: Rtx-VMS

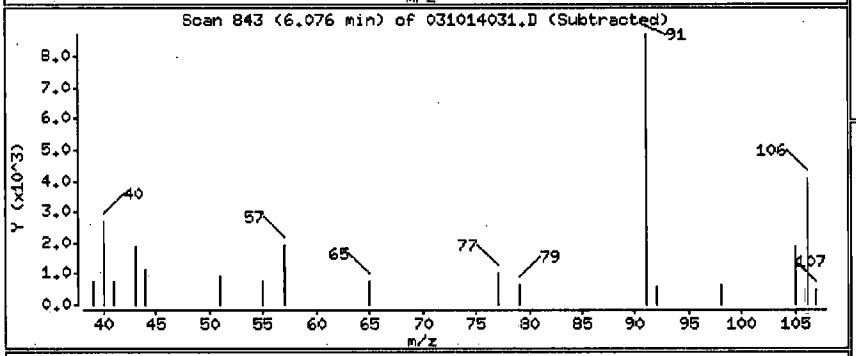
Column diameter: 0.18

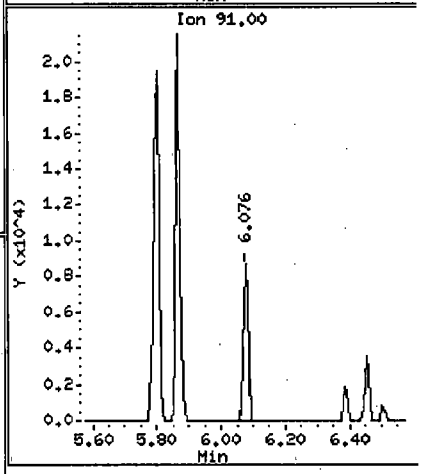
72 O-Xylene (1,2-Dimethylbenzene)

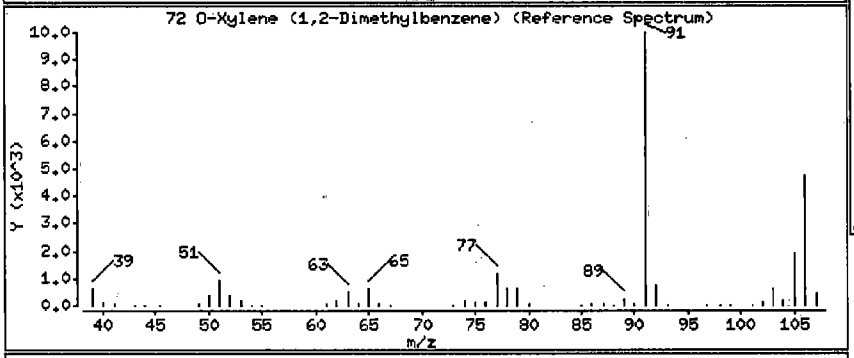
Concentration: 0.72 ug/Kg

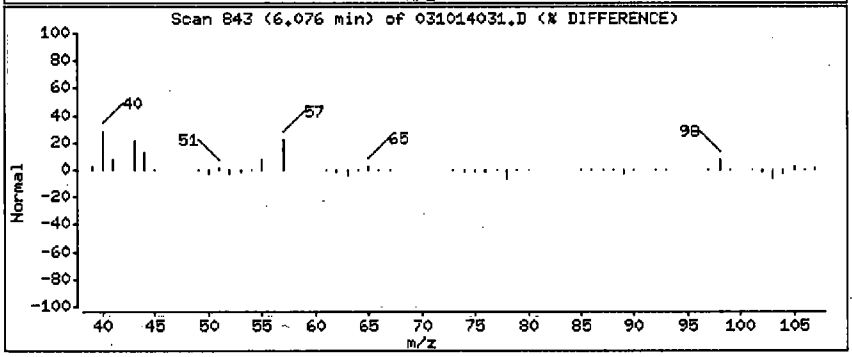












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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

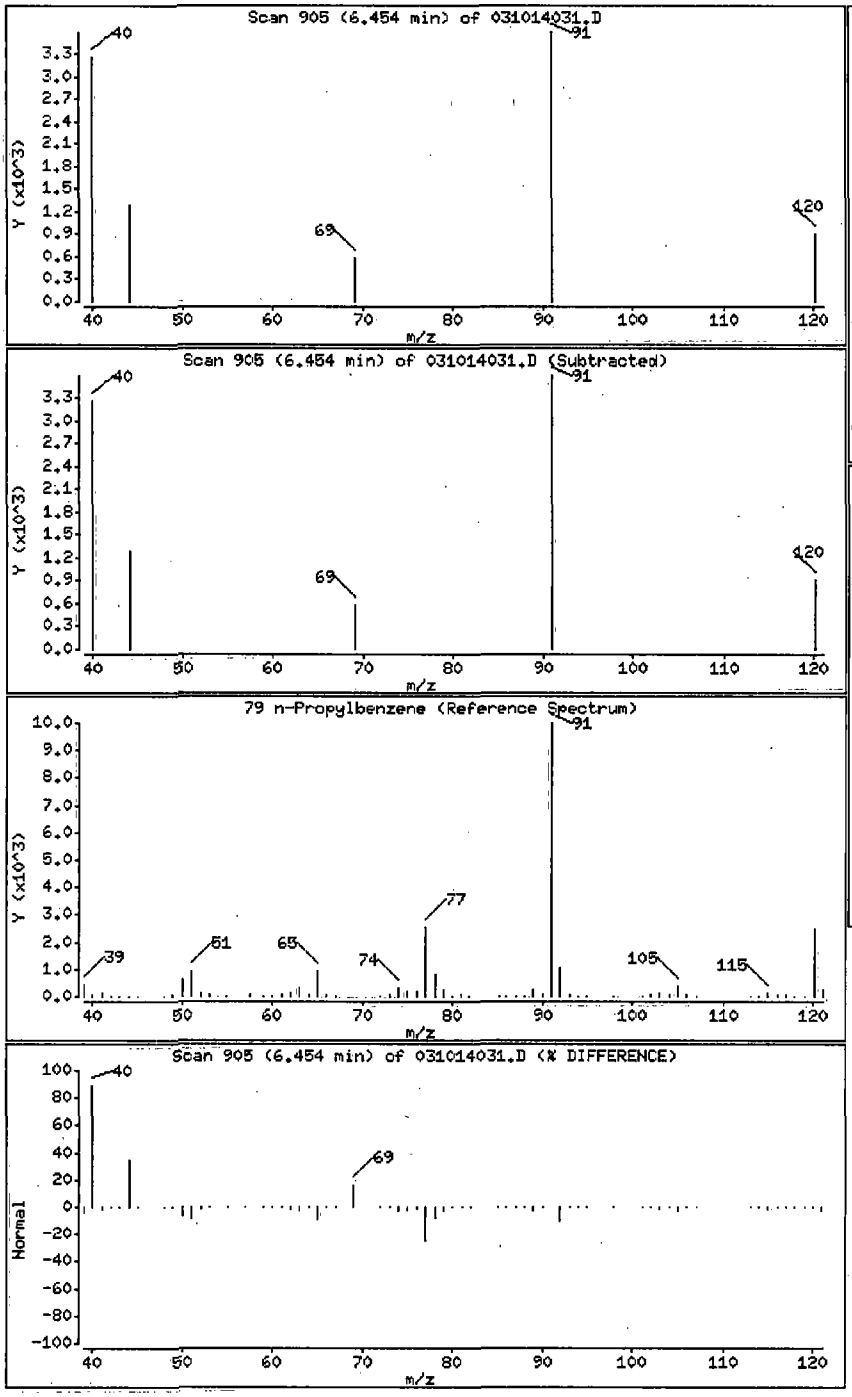
Operator: HBP

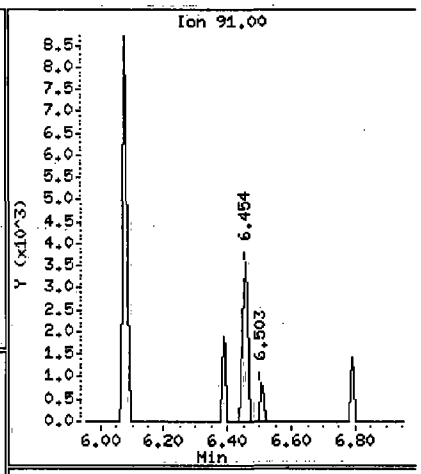
Column phase: Rtx-VMS

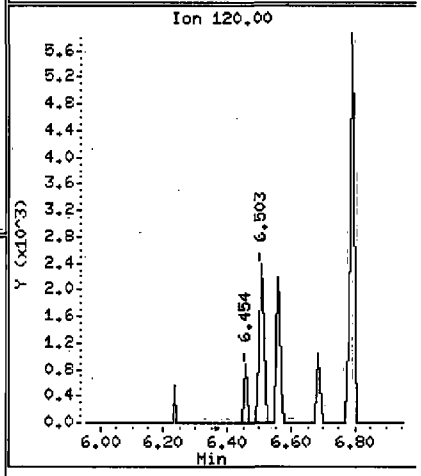
Column diameter: 0.18

79 n-Propylbenzene

Concentration: 0.22 ug/Kg







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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

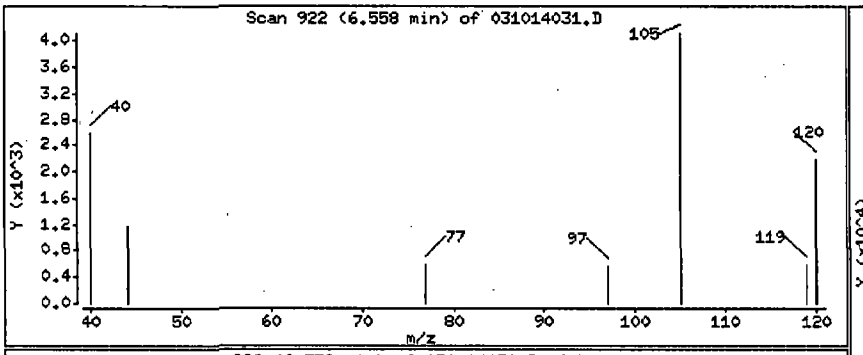
Operator: HBP

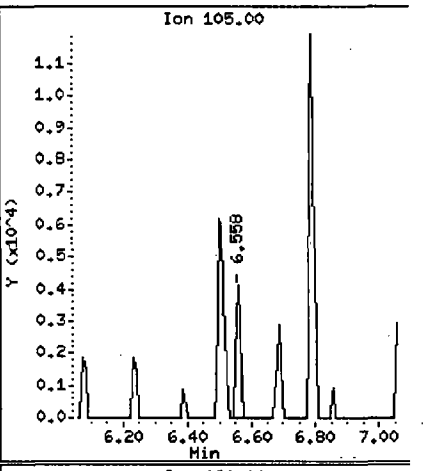
Column phase: Rtx-VMS

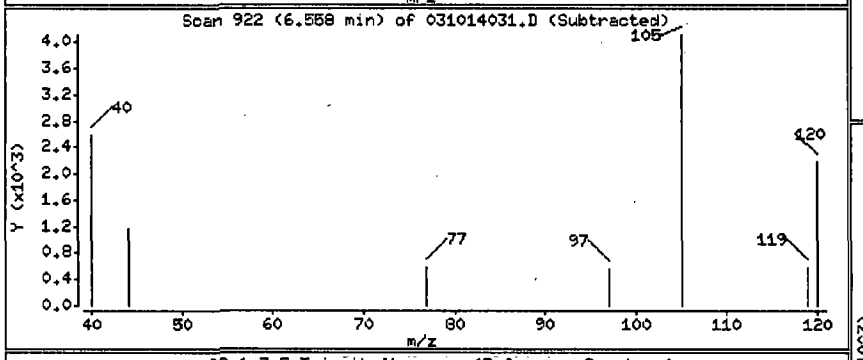
Column diameter: 0.18

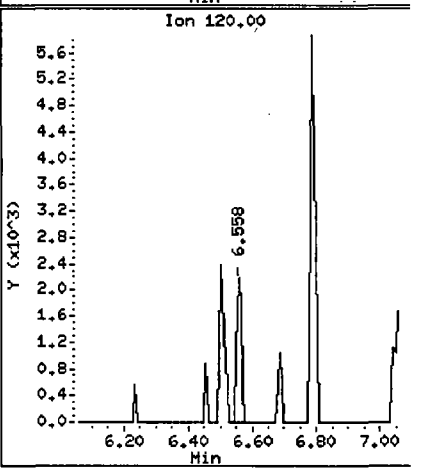
82 1,3,5-Trimethylbenzene

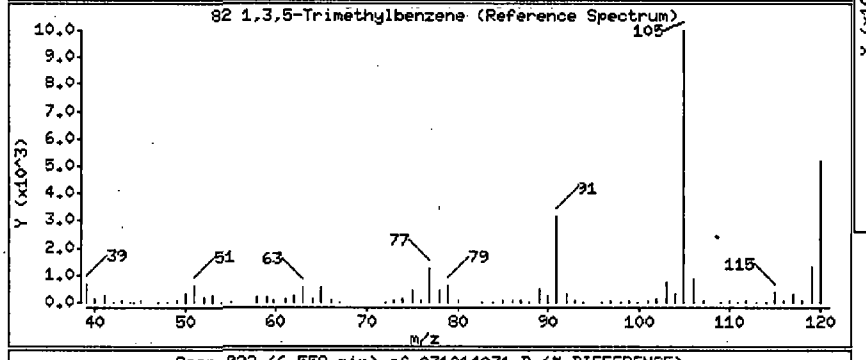
Concentration: 0.31 ug/Kg

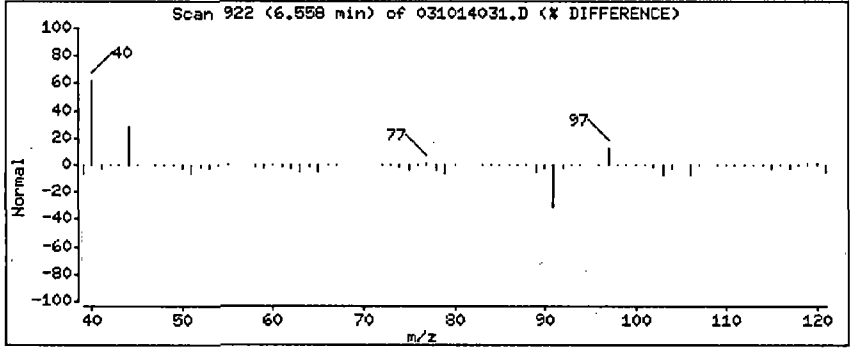












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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

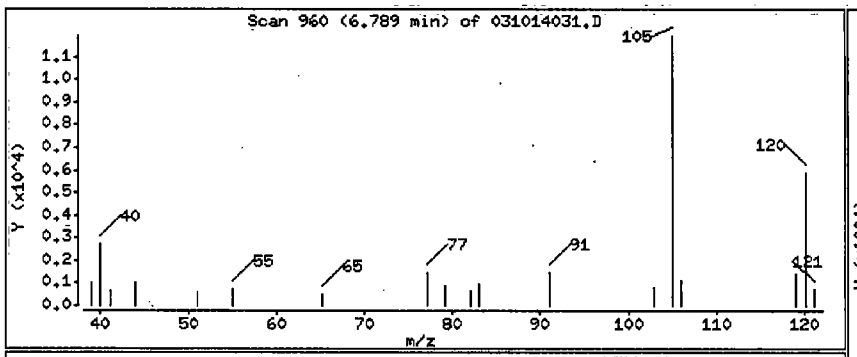
Operator: HBP

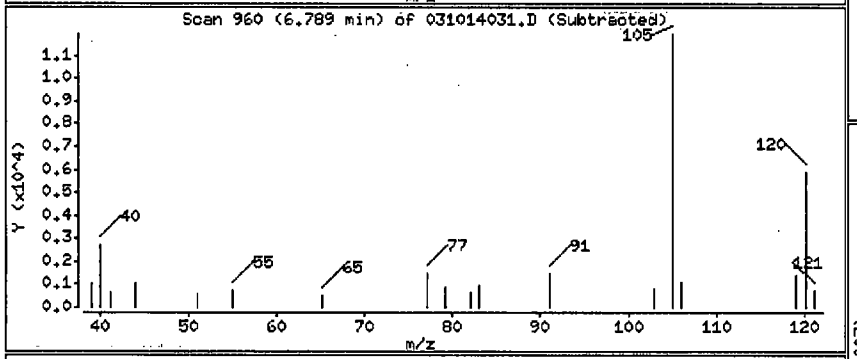
Column phase: Rtx-VMS

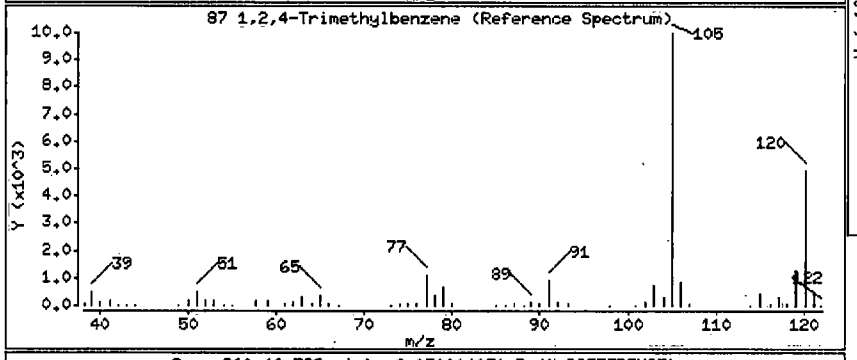
Column diameter: 0.18

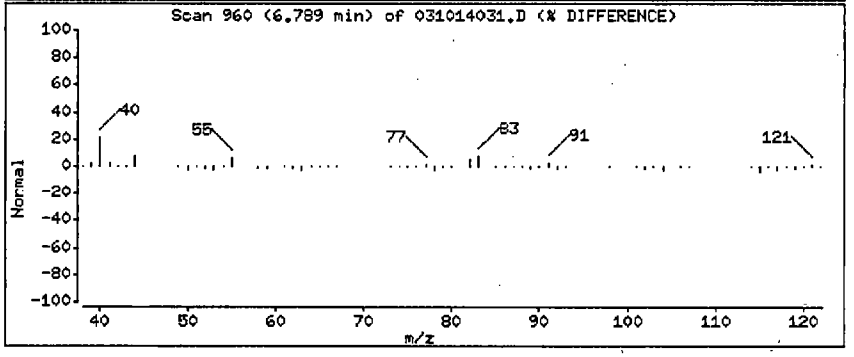
87 1,2,4-Trimethylbenzene

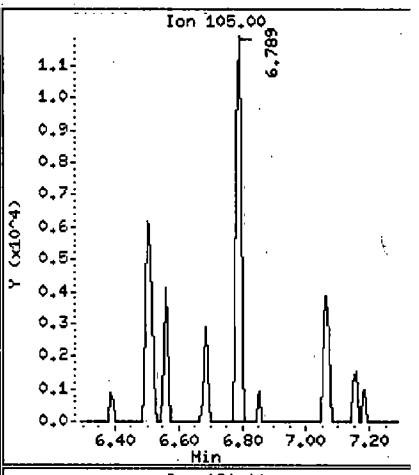
Concentration: 1.0 ug/Kg

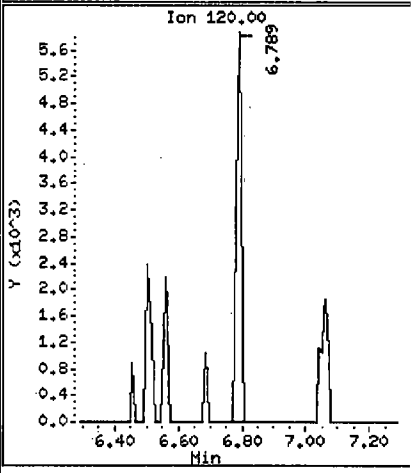












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014031.D

Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

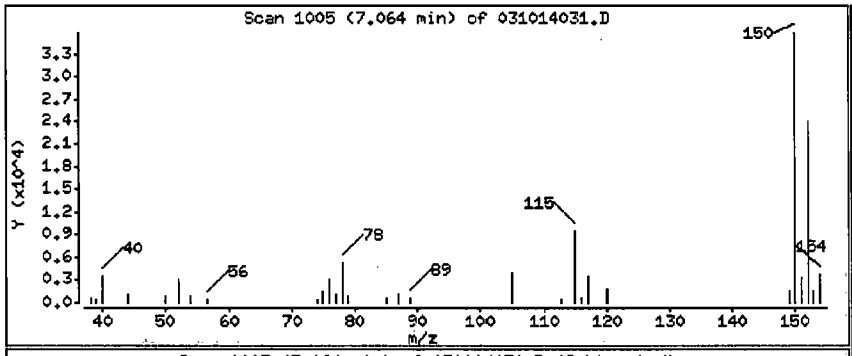
Operator: HBP

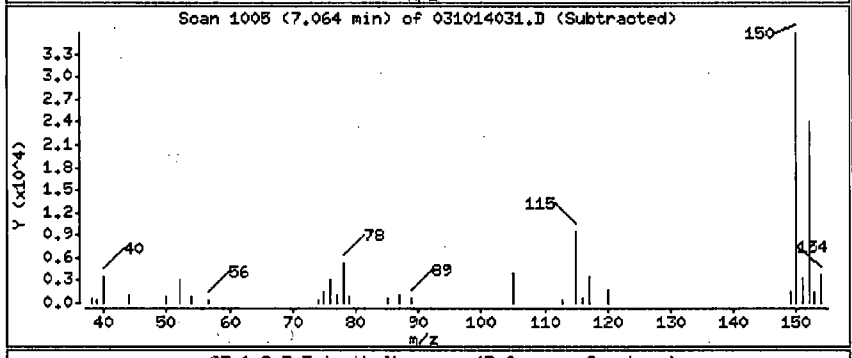
Column phase: Rtx-VMS

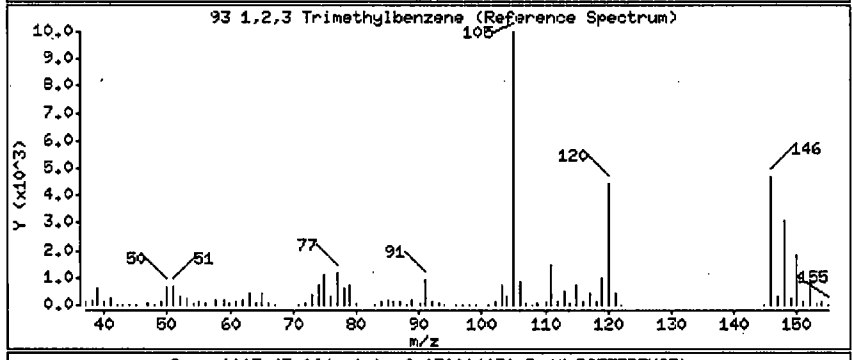
Column diameter: 0.18

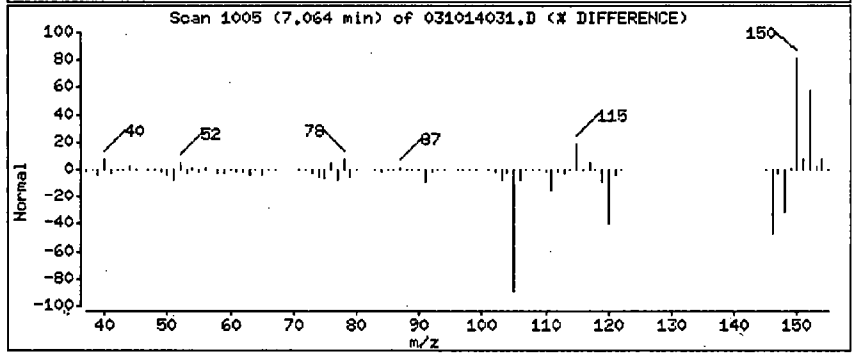
93 1,2,3 Trimethylbenzene

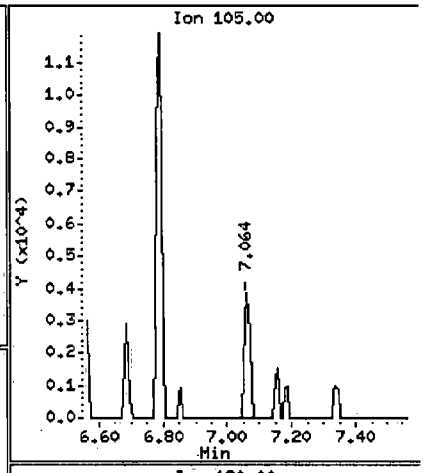
Concentration: 0.34 ug/Kg

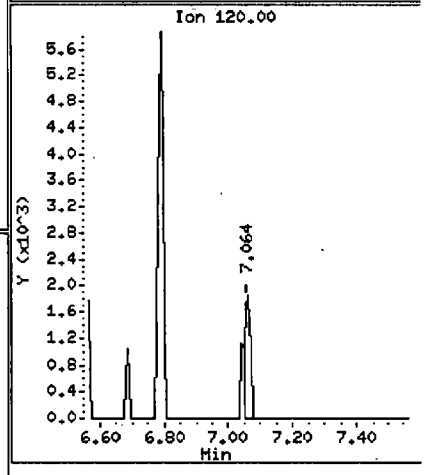












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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

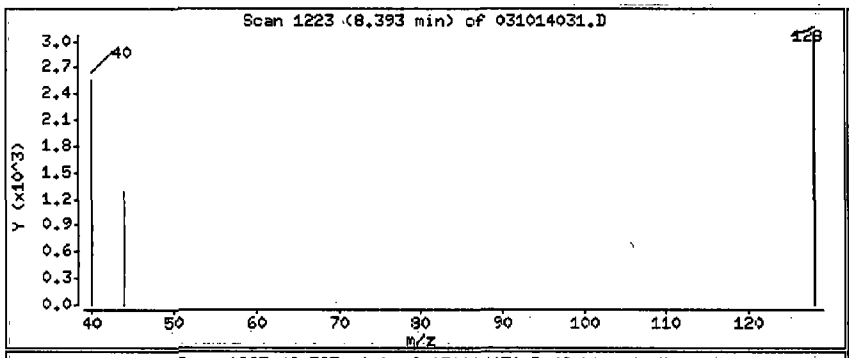
Operator: HBP

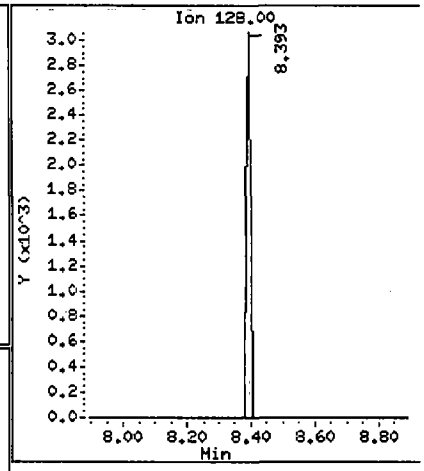
Column phase: Rtx-VMS

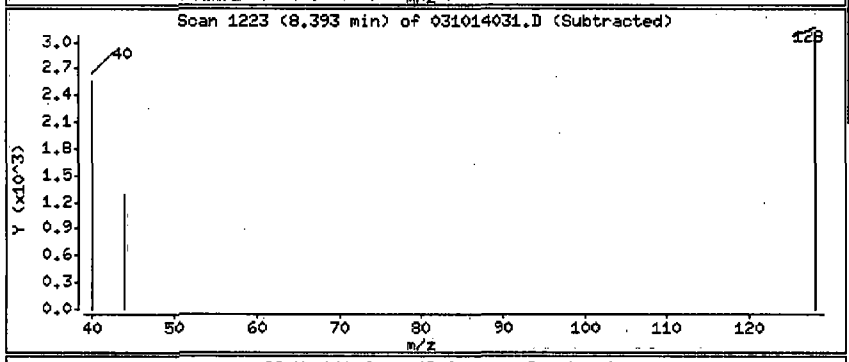
Column diameter: 0.18

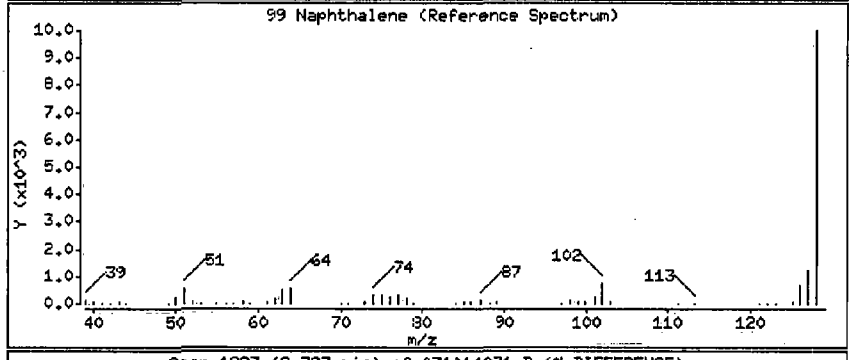
99 Naphthalene

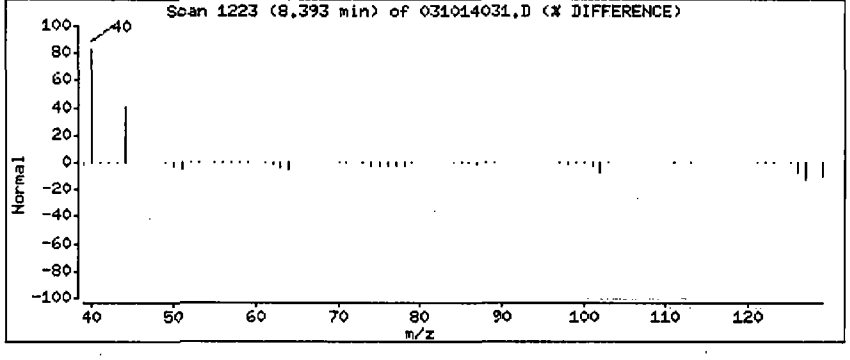
Concentration: 0.25 ug/Kg











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Date : 10-MAR-2014 20:19

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041001,7.50

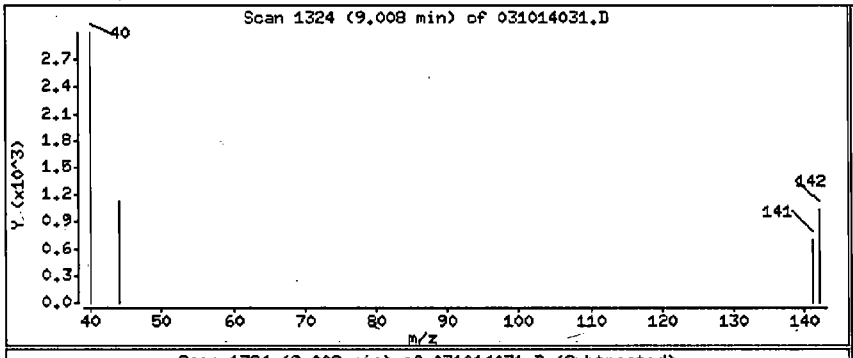
Operator: HBP

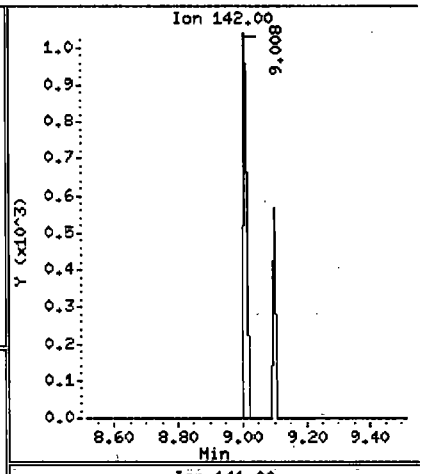
Column phase: Rtx-VMS

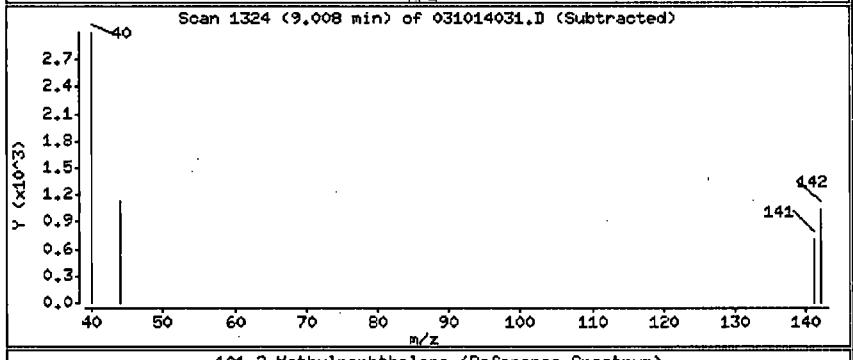
Column diameter: 0.18

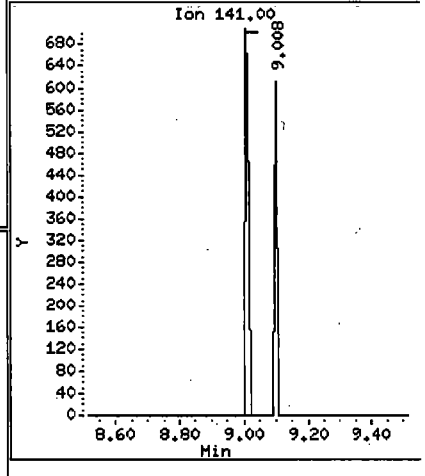
101 2-Methylnaphthalene

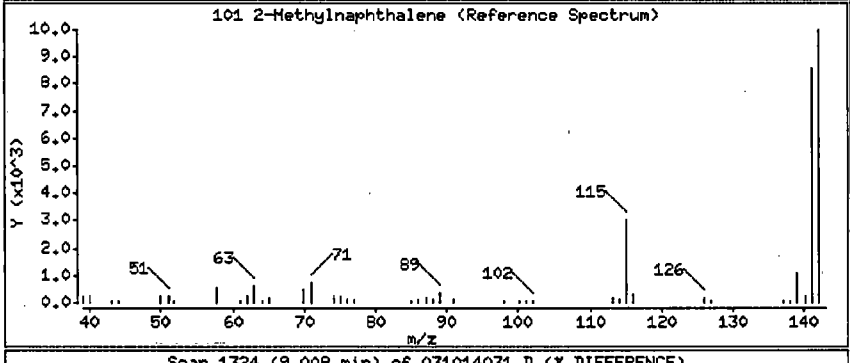
Concentration: 0.21 ug/Kg

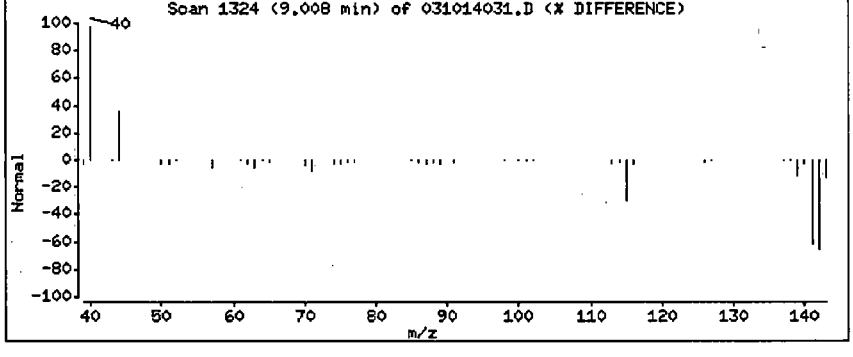












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Injection Date: 10-MAR-2014 20:19
Instrument: 10msv7.i
Lab Sample ID: 10259041001
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014032.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014032.D
Lab Smp Id: 10259041002
Inj Date : 10-MAR-2014 20:38
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259041002,6.41
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.410	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.095	2.101	(0.498)	5379	0.38086	0.49(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.643	2.649	(1.000)	160631	200.000	
19	Acetone	58	2.692	2.698	(1.018)	3807	9.28281	11.9(Q)
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014032.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
21	Hexane	86	2.857	2.863	(1.081)	1007	0.85927	1.1(a)
22	Methyl-tert-butyl Ether	73	Compound Not Detected.					
23	tert-Butyl Alcohol	59	Compound Not Detected.					
24	Acetonitrile	41	Compound Not Detected.					
25	Isopropyl Ether	45	Compound Not Detected.					
26	Acrylonitrile	53	Compound Not Detected.					
27	1,1-Dichloroethane	63	Compound Not Detected.					
28	Ethyl-tert-butyl ether	59	Compound Not Detected.					
29	Vinyl Acetate	43	Compound Not Detected.					
30	cis-1,2-Dichloroethene	96	Compound Not Detected.					
31	2,2-Dichloropropane	77	Compound Not Detected.					
32	Cyclohexane	56	3.753	3.753	(0.893)	4376	0.63850	0.82(aQ)
33	Bromochloromethane	130	Compound Not Detected.					
34	Chloroform	83	Compound Not Detected.					
35	Carbon Tetrachloride	117	Compound Not Detected.					
36	Tetrahydrofuran	72	Compound Not Detected.					
37	1,1,1-Trichloroethane	97	Compound Not Detected.					
38	2-Butanone	43	Compound Not Detected.					
39	1,1-Dichloropropene	75	Compound Not Detected.					
40	Benzene	78	4.143	4.143	(0.985)	5432	0.31912	0.41(a)
* 41	Pentafluorobenzene	168	4.204	4.204	(1.000)	987099	100.000	
42	Tert-amyl methyl ether	73	Compound Not Detected.					
$ 43	1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	412016	108.135	108
44	1,2-Dichloroethane	62	Compound Not Detected.					
45	Isobutanol	43	Compound Not Detected.					
46	Tert-Amyl Alcohol	59	Compound Not Detected.					
47	Trichloroethene	130	Compound Not Detected.					
* 48	1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1460500	100.000	
49	Tert-amyl ethyl ether	59	Compound Not Detected.					
50	Dibromomethane	174	Compound Not Detected.					
51	1,2-Dichloropropane	63	Compound Not Detected.					
52	Bromodichloromethane	83	Compound Not Detected.					
* 53	1,4 dioxane d8	96	4.826	4.826	(1.000)	188830	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
55	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
56	cis-1,3-Dichloropropene	75	Compound Not Detected.					
$ 57	Toluene-d8 (S)	98	5.106	5.106	(0.883)	1695995	102.999	103
58	Toluene	92	5.131	5.130	(0.887)	13087	1.23423	1.6(a)
59	4-Methyl-2-Pentanone	43	Compound Not Detected.					
60	Tetrachloroethene	166	Compound Not Detected.					
61	trans-1,3-Dichloropropene	75	Compound Not Detected.					
62	1,1,2-Trichloroethane	97	Compound Not Detected.					
63	Dibromochloromethane	129	Compound Not Detected.					
64	1,3-Dichloropropane	76	Compound Not Detected.					
65	1,2-Dibromoethane	107	Compound Not Detected.					
66	2-Hexanone	43	Compound Not Detected.					
* 67	Chlorobenzene-d5	117	5.783	5.789	(1.000)	1401418	100.000	
68	Chlorobenzene	112	Compound Not Detected.					
69	Ethylbenzene	91	5.801	5.801	(1.003)	3951	0.19553	0.25(aQ)
70	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
71	M&P-Xylene	106	5.868	5.868	(1.015)	1603	0.20369	0.26(a)
72	O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	552	0.07480	0.096(aQ)
73	Styrene	104	Compound Not Detected.					
74	Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014032.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	660115	113.687	114
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	Compound Not Detected.					
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	2711	0.18505	0.24(a)
88	sec-Butylbenzene	105	Compound Not Detected.					
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	723742	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	Compound Not Detected.					
94	n-Butylbenzene	91	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
99	Naphthalene	128	8.392	8.392	(1.191)	820	0.07761	0.099(a)
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
101	2-Methylnaphthalene	142	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014032.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014032.D
Lab Smp Id: 10259041002
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30

Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	160631	11.81
41 Pentafluorobenzen	966546	483273	1933092	987099	2.13
48 1,4 Difluorobenze	1457917	728959	2915834	1460500	0.18
53 1,4 dioxane d8	174389	87195	348778	188830	8.28
67 Chlorobenzene-d5	1458689	729345	2917378	1401418	-3.93
91 1,4-Dichlorobenze	888899	444450	1777798	723742	-18.58

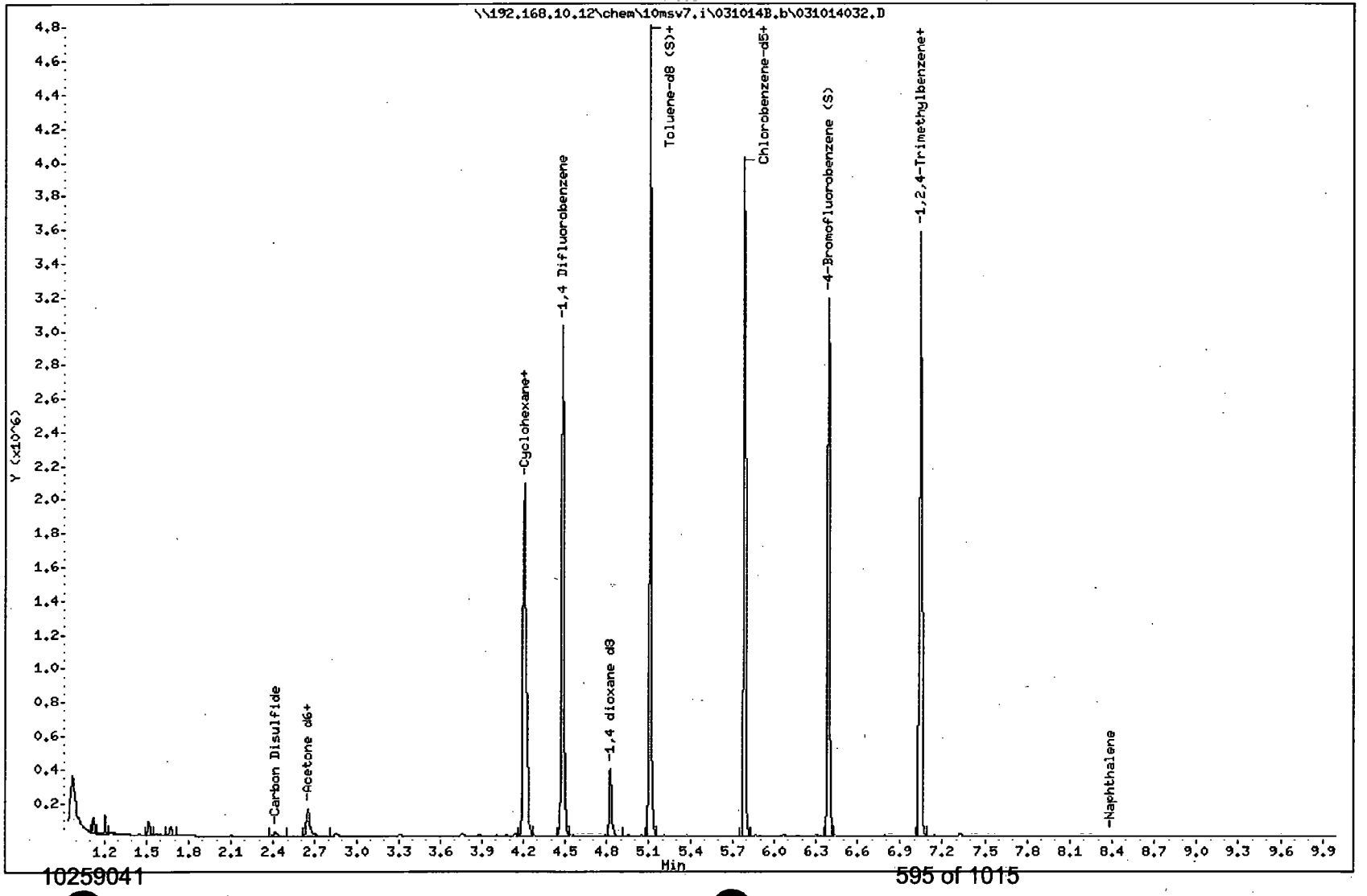
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.64	-0.23
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014032.D
Date : 10-MAR-2014 20:38
Client ID:
Sample Info: 10259041002,6.41

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

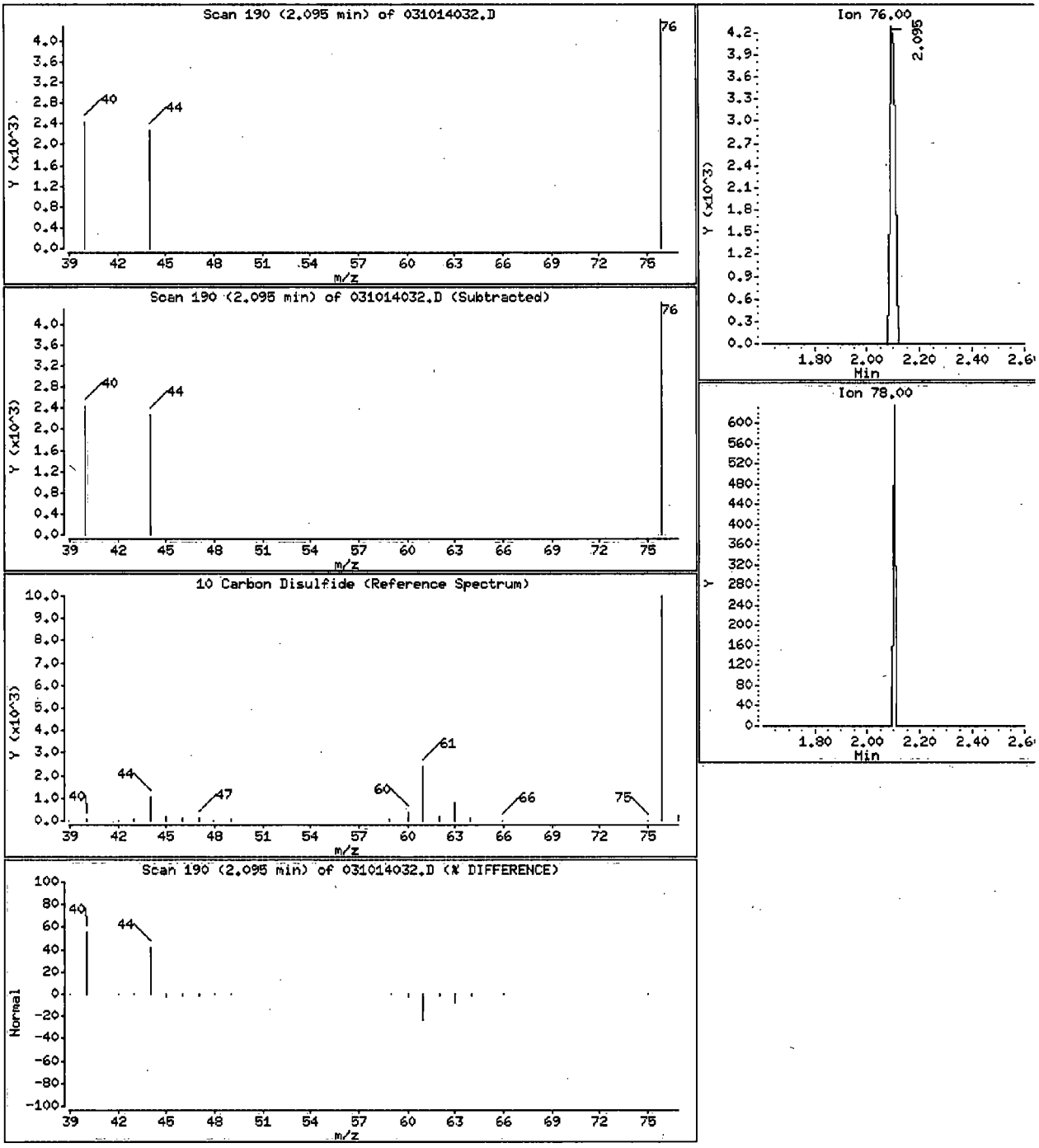
Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

10 Carbon Disulfide

Concentration: 0.49 ug/Kg



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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

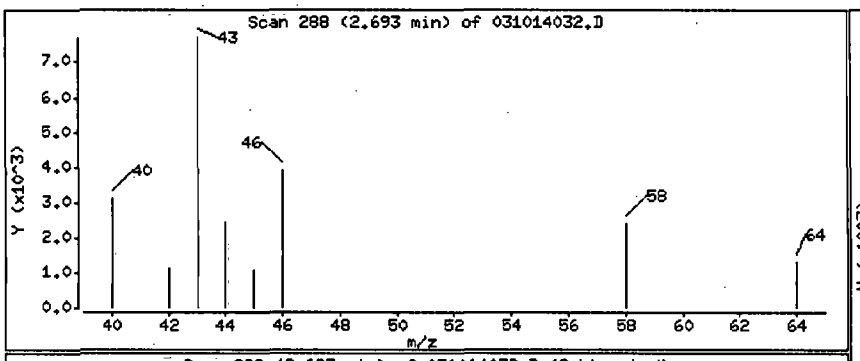
Operator: HBP

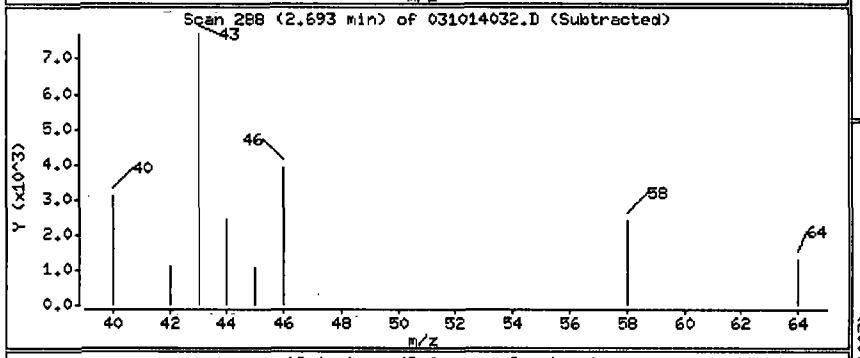
Column phase: Rtx-VMS

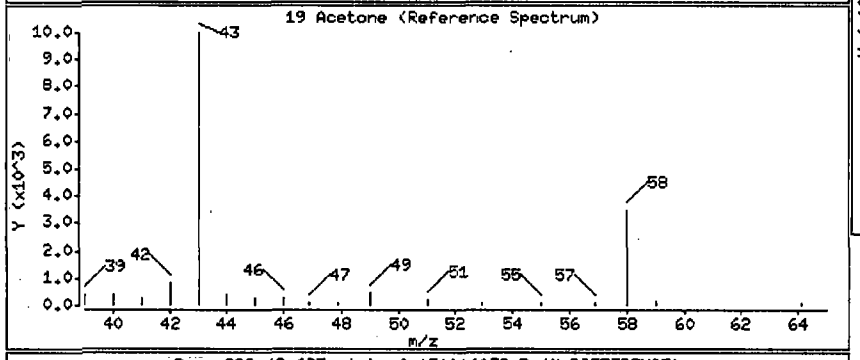
Column diameter: 0.18

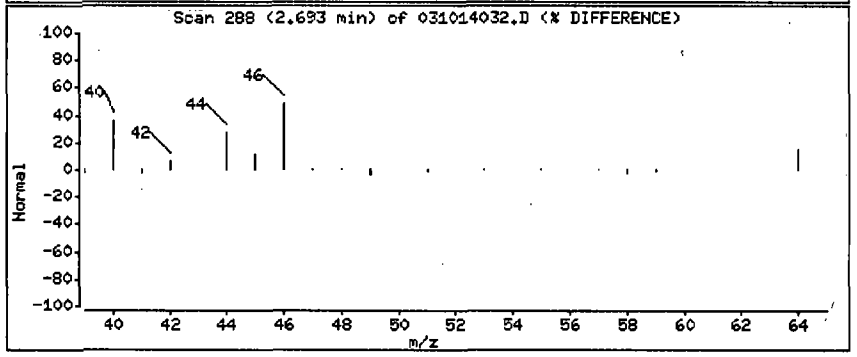
19 Acetone

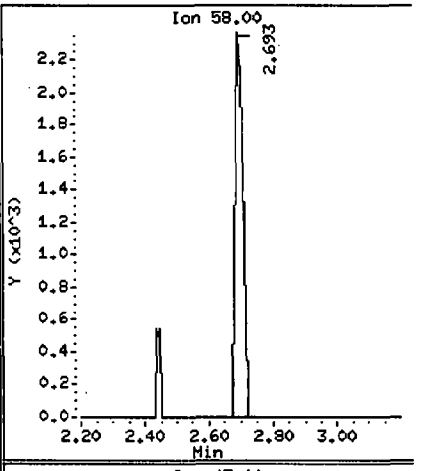
Concentration: 11.9 ug/Kg

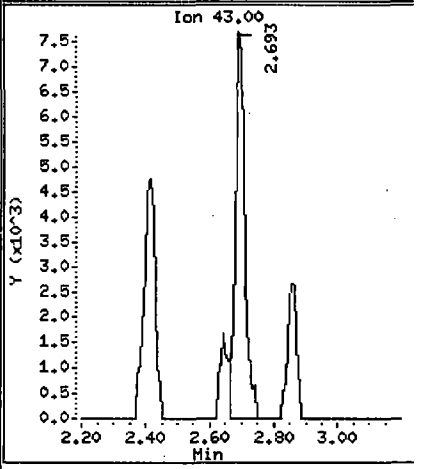












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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

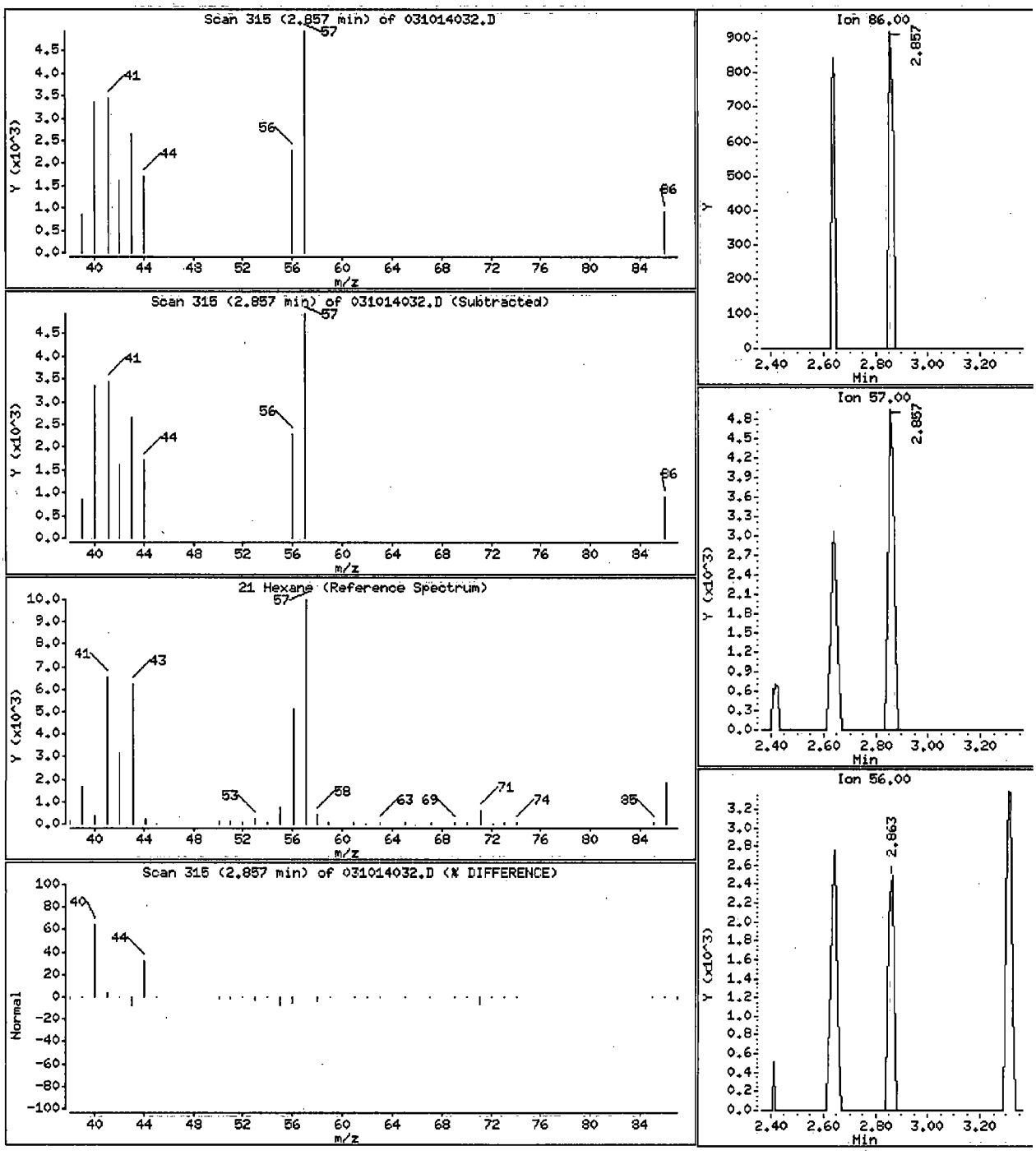
Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

21 Hexane

Concentration: 1.1 ug/Kg



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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

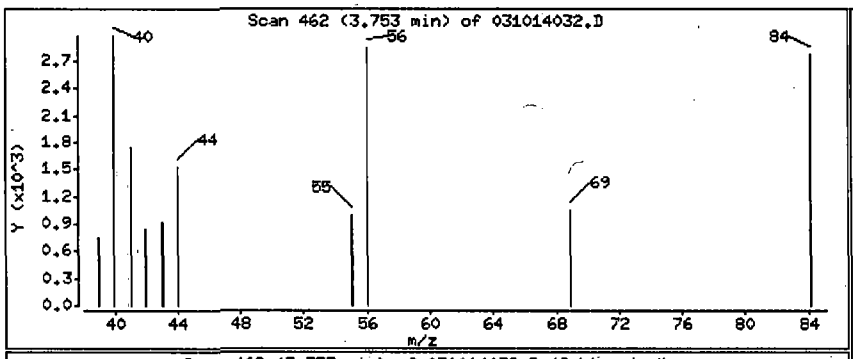
Operator: HBP

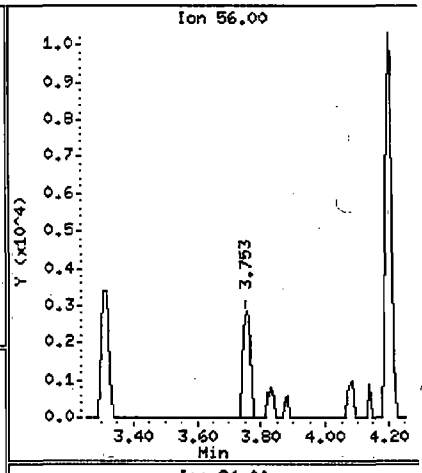
Column phase: Rtx-VMS

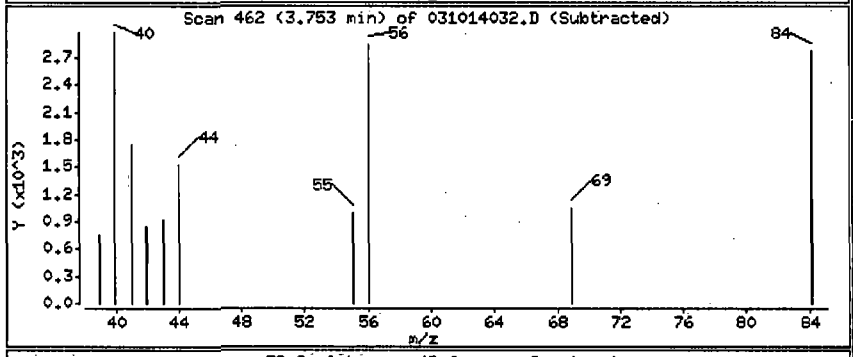
Column diameter: 0.18

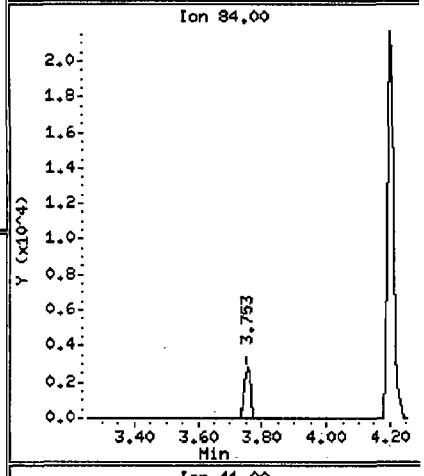
32 Cyclohexane

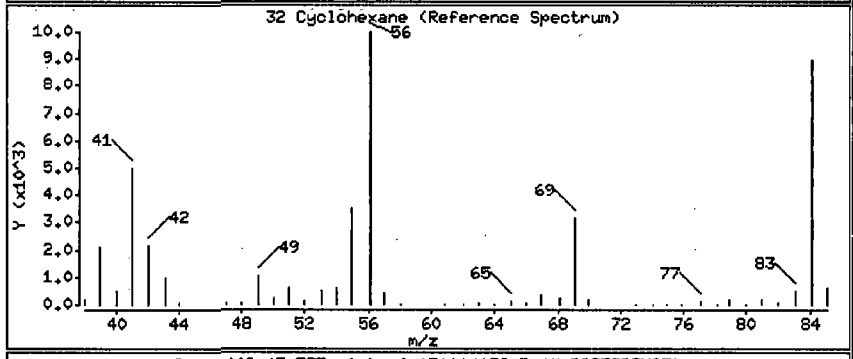
Concentration: 0.82 ug/Kg

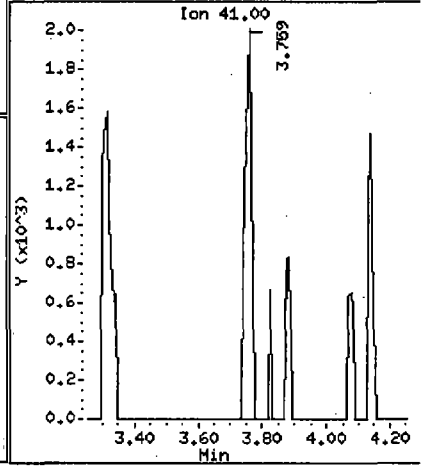


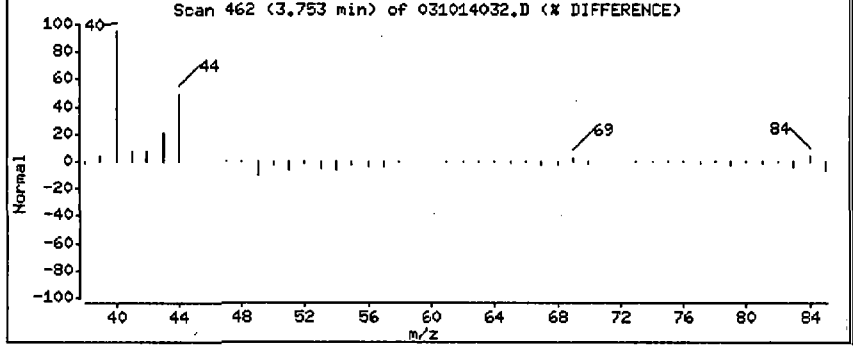












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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

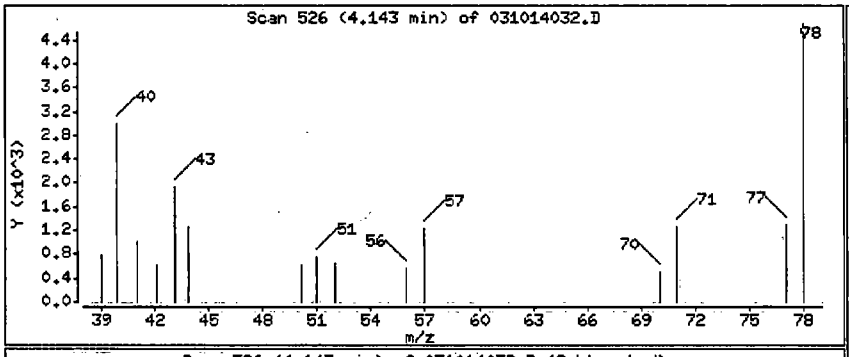
Operator: HBP

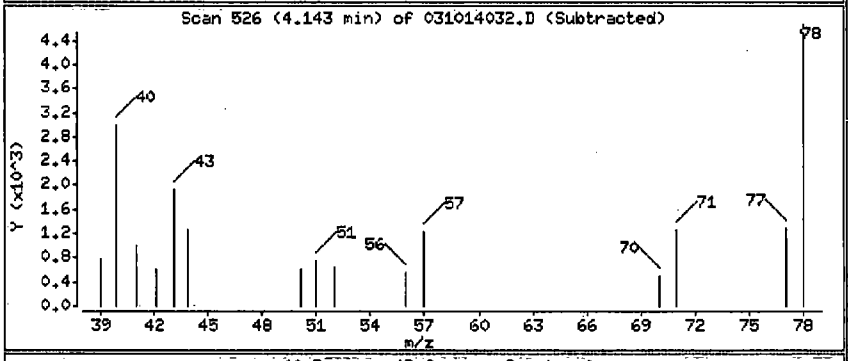
Column phase: Rtx-VMS

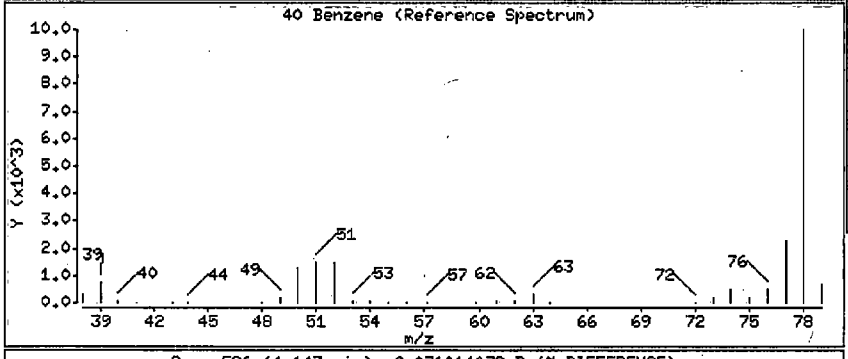
Column diameter: 0.18

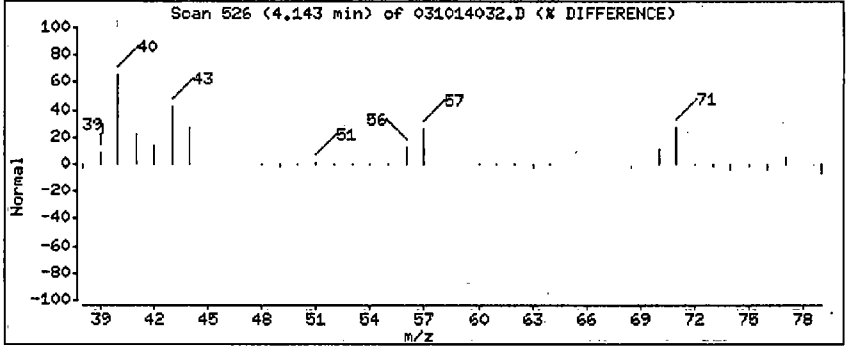
40 Benzene

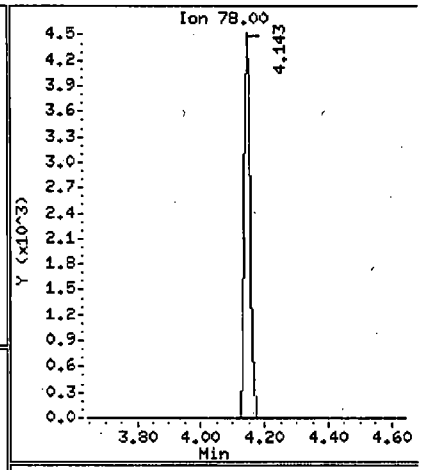
Concentration: 0.41 ug/Kg

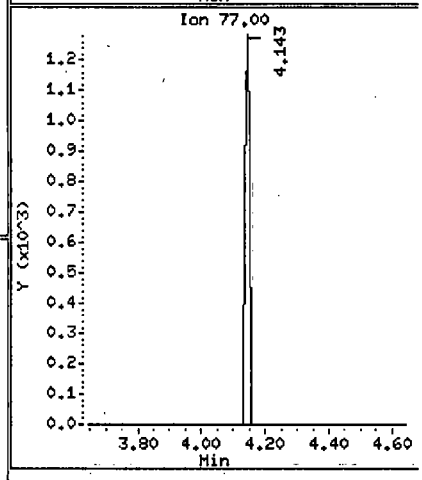












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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

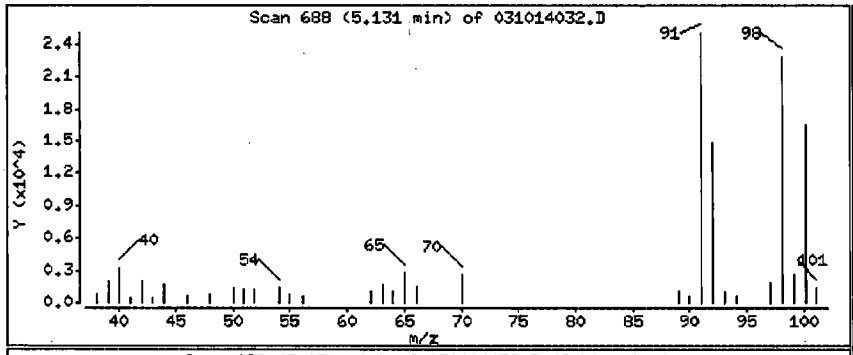
Operator: HBP

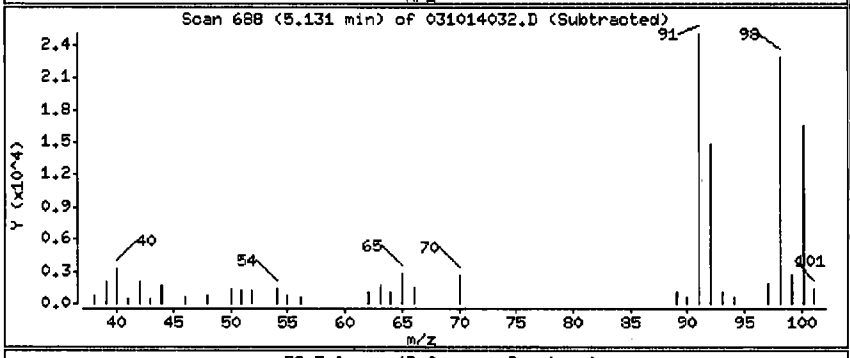
Column phase: Rtx-VMS

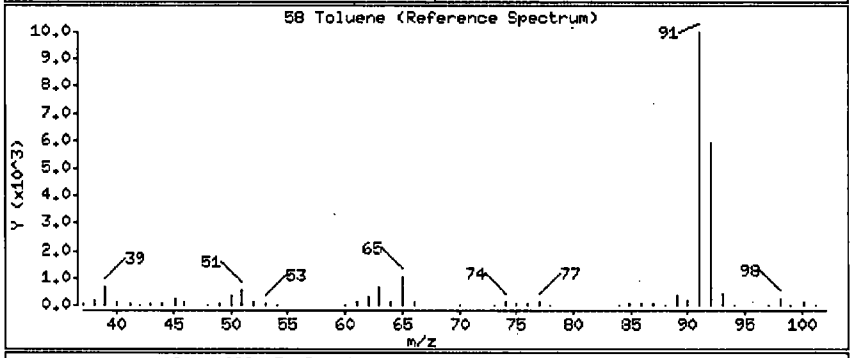
Column diameter: 0.18

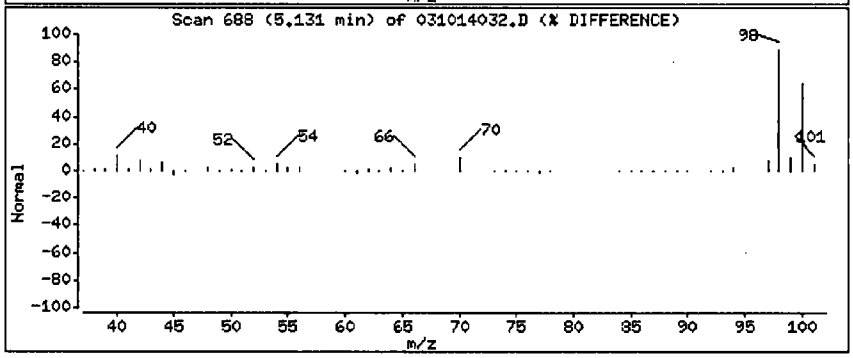
58 Toluene

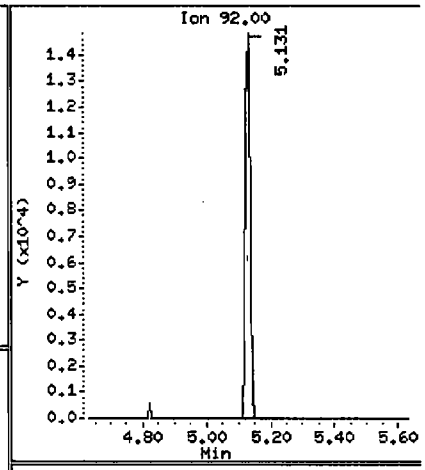
Concentration: 1.6 ug/Kg

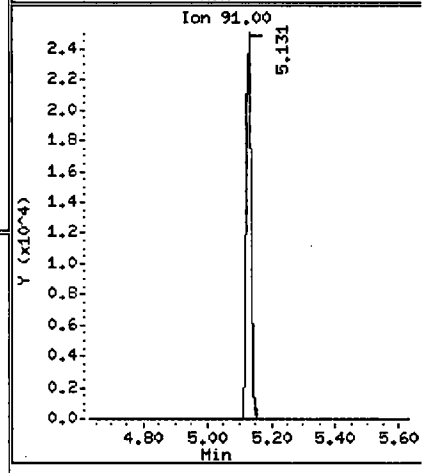












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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

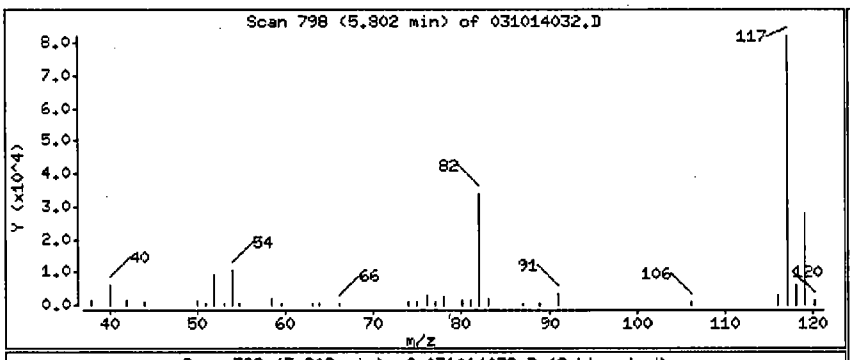
Operator: HBP

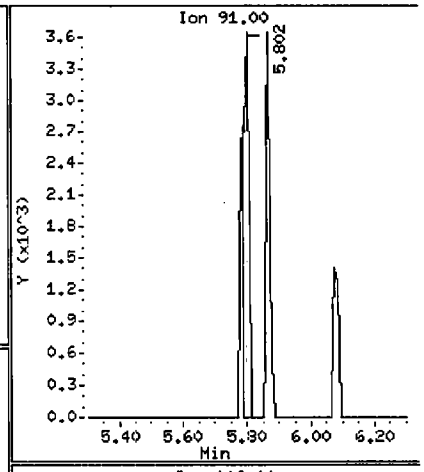
Column phase: Rtx-VMS

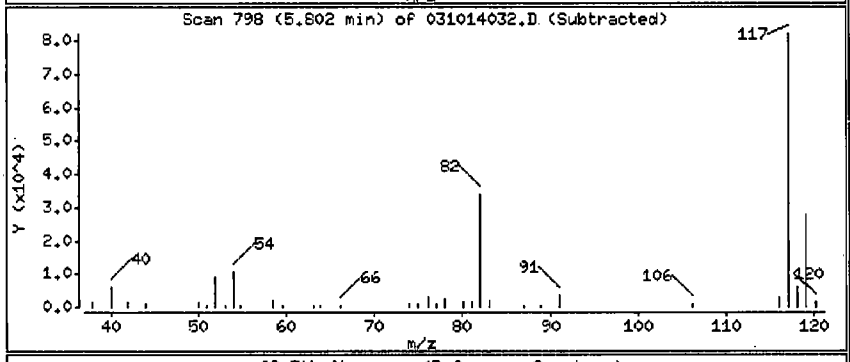
Column diameter: 0.18

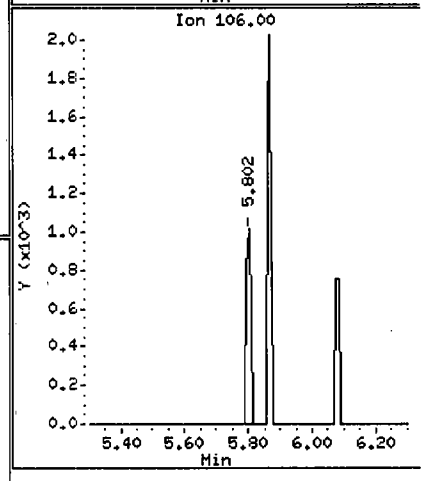
69 Ethylbenzene

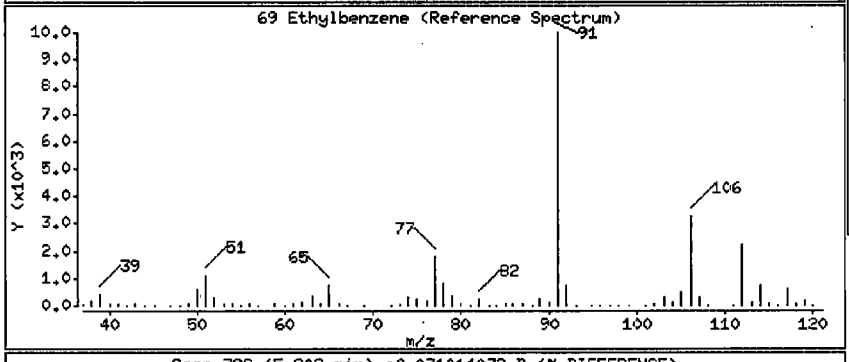
Concentration: 0.25 ug/Kg

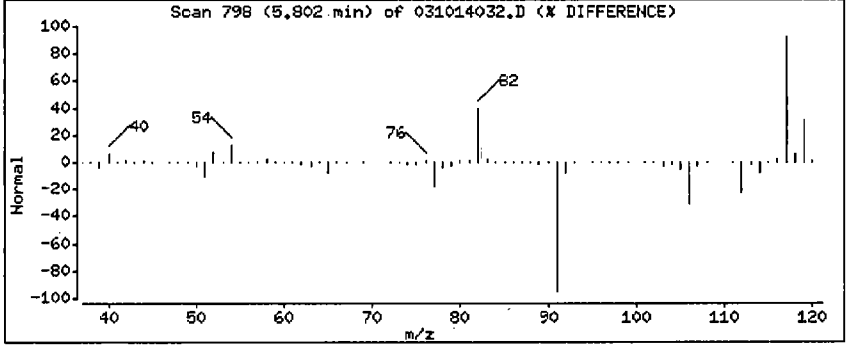












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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

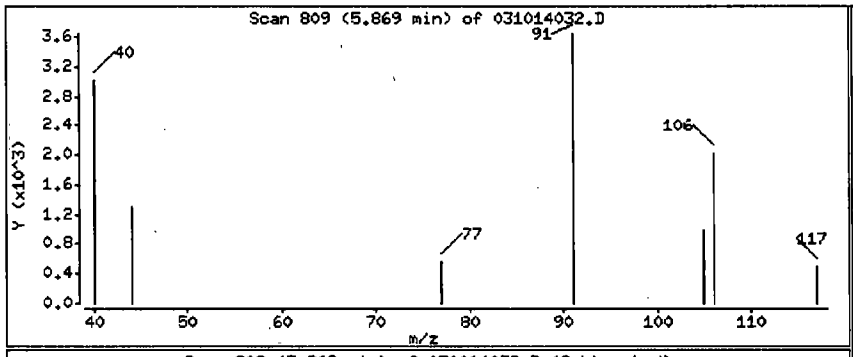
Operator: HBP

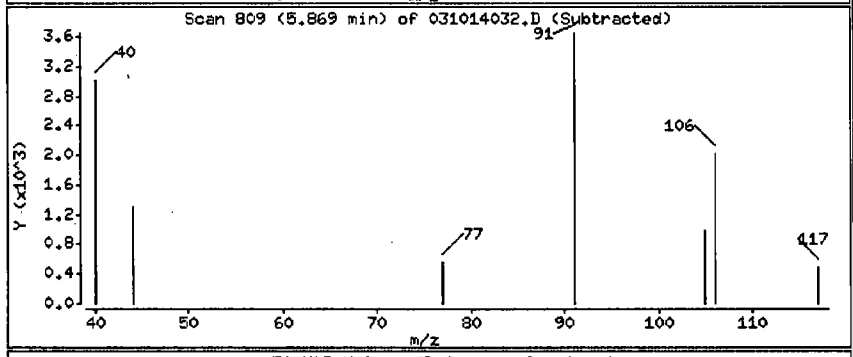
Column phase: Rtx-VMS

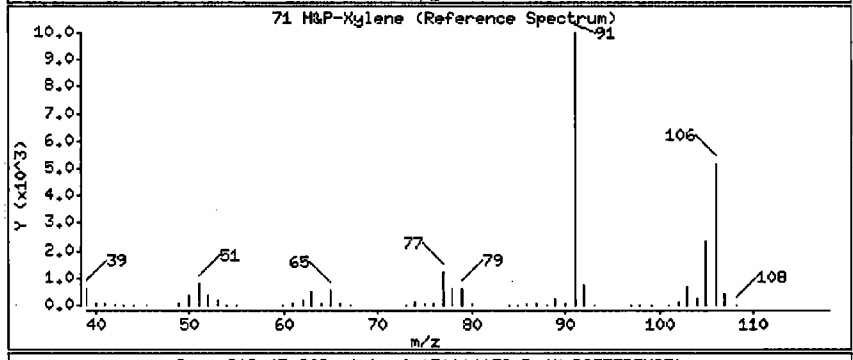
Column diameter: 0.18

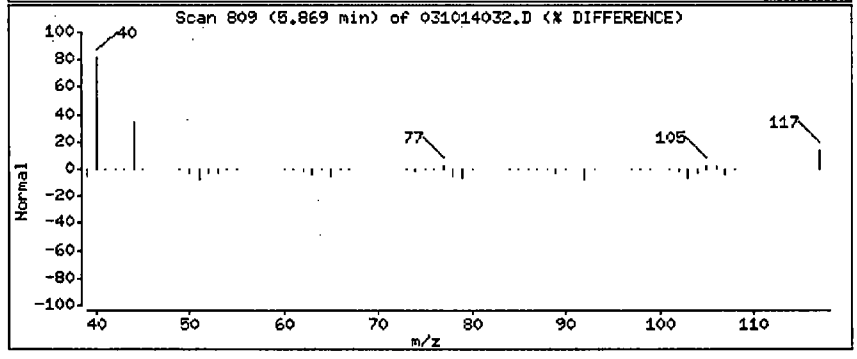
71 M&P-Xylene

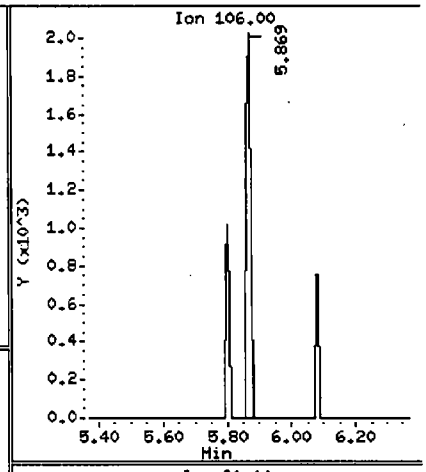
Concentration: 0.26 ug/Kg

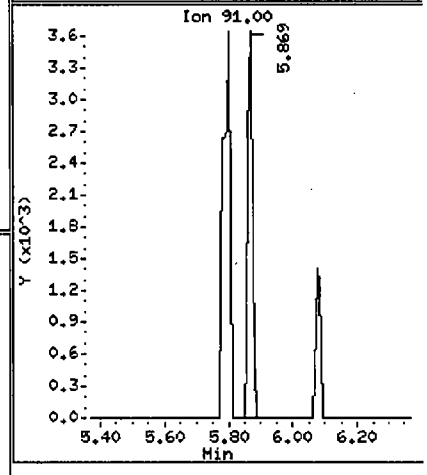












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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

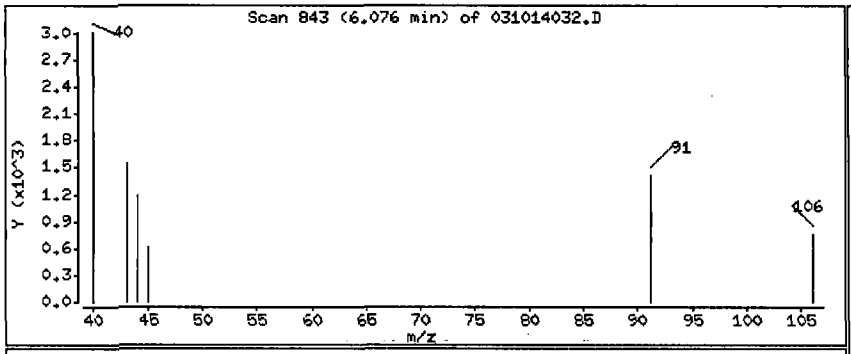
Operator: HBP

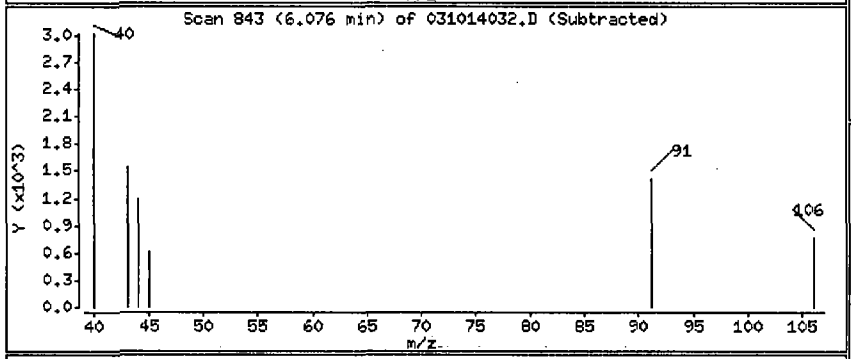
Column phase: Rtx-VMS

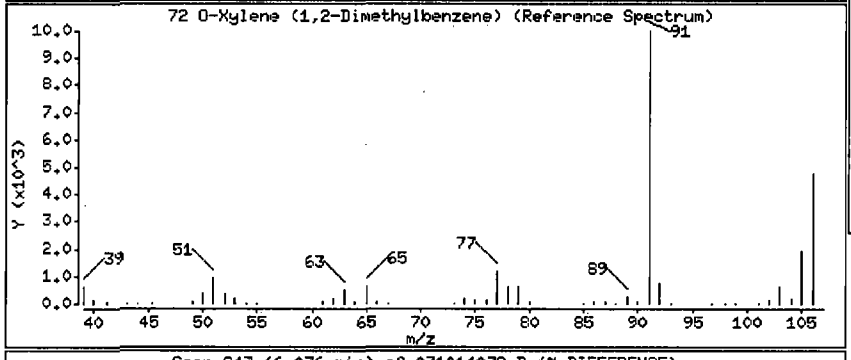
Column diameter: 0.18

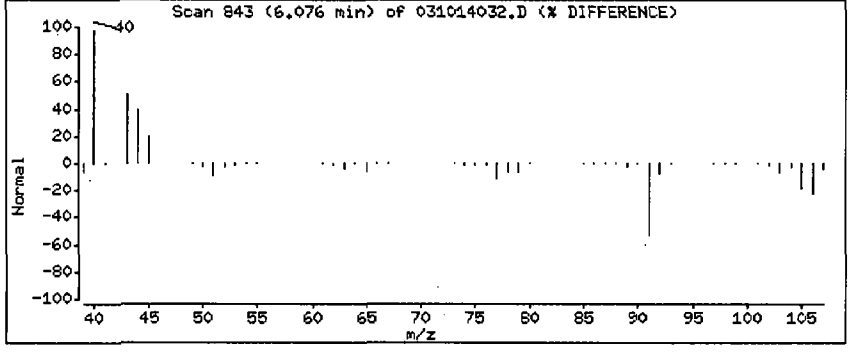
72 O-Xylene (1,2-Dimethylbenzene)

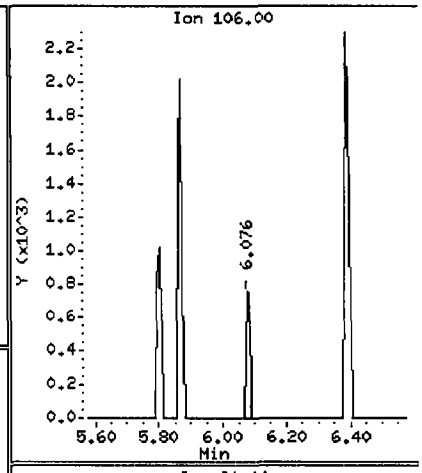
Concentration: 0.096 ug/Kg

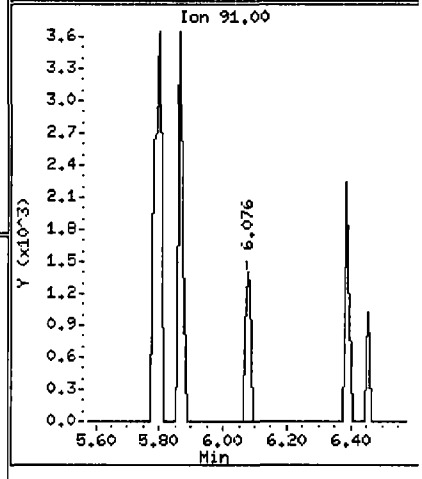












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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

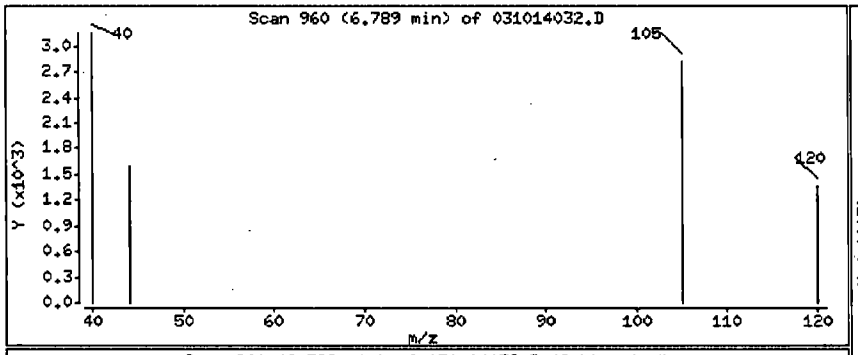
Operator: HBP

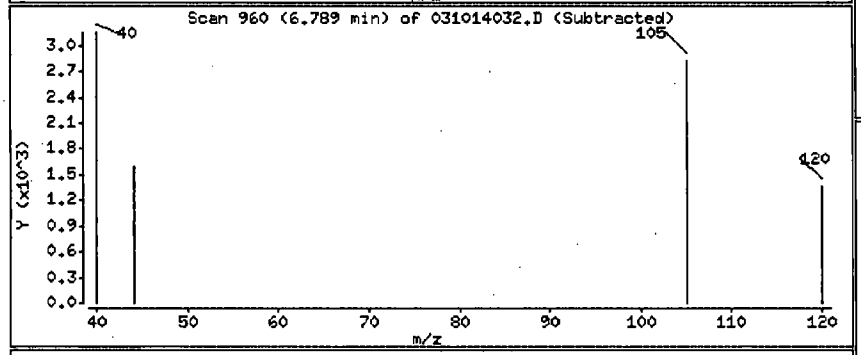
Column phase: Rtx-VMS

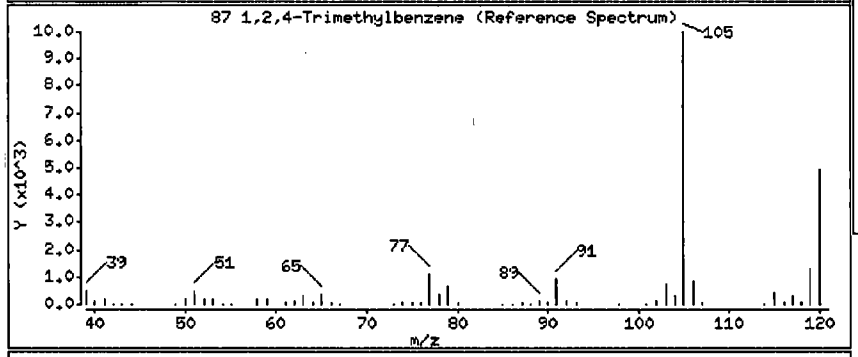
Column diameter: 0.18

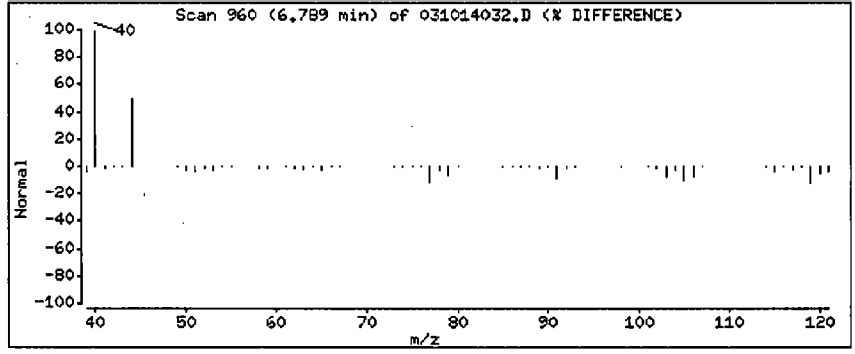
87 1,2,4-Trimethylbenzene

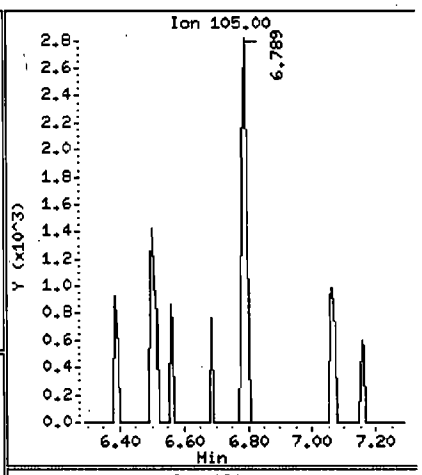
Concentration: 0.24 ug/Kg

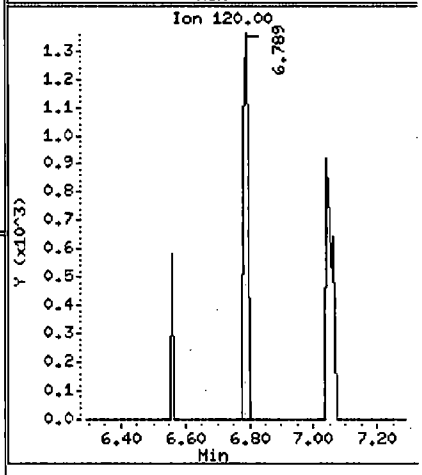












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Date : 10-MAR-2014 20:38

Client ID:

Instrument: 10msv7.i

Sample Info: 10259041002,6.41

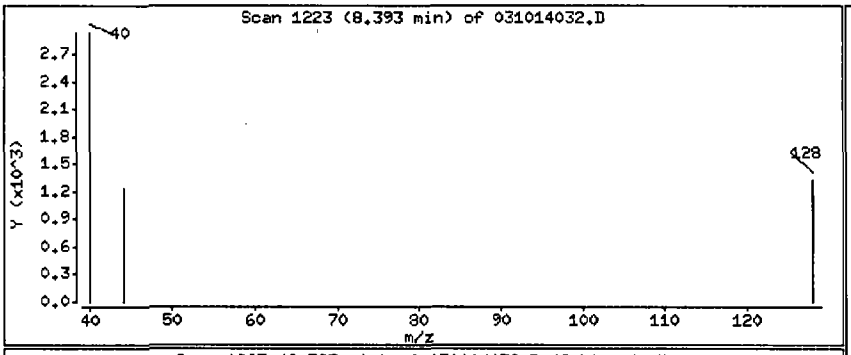
Operator: HBP

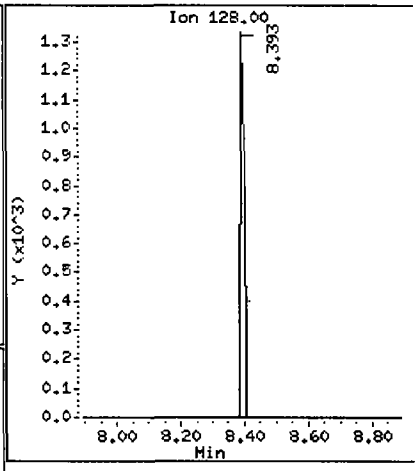
Column phase: Rtx-VMS

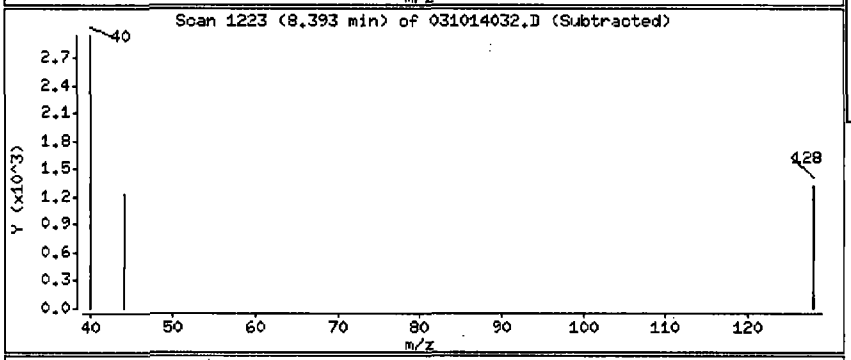
Column diameter: 0.18

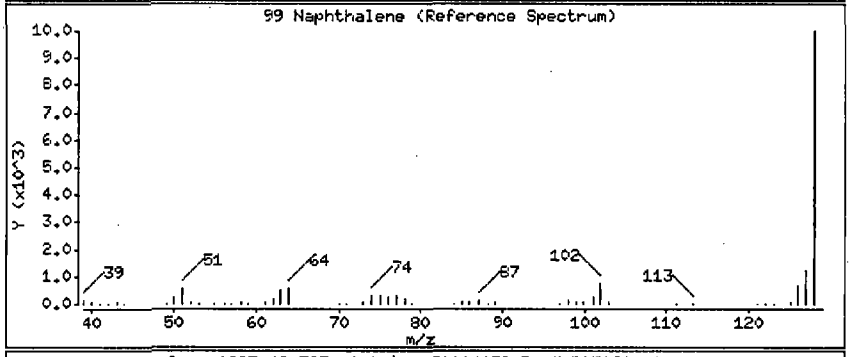
99 Naphthalene

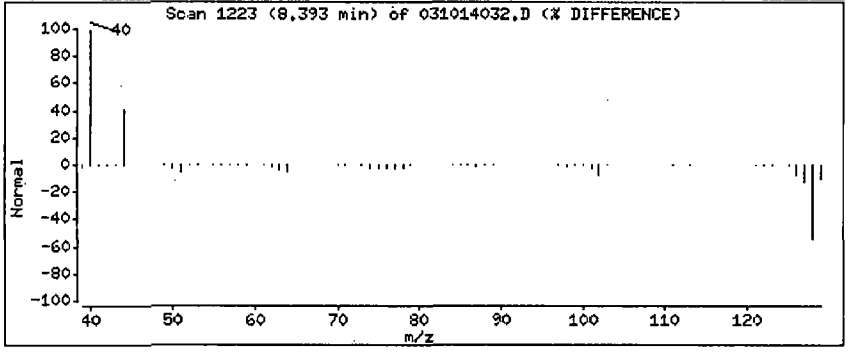
Concentration: 0.099 ug/Kg











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Injection Date: 10-MAR-2014 20:38
Instrument: 10msv7.i
Lab Sample ID: 10259041002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031419.D
Report Date: 04-Mar-2014 13:23

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

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Inj Date : 03-MAR-2014 14:27
Operator : LPM Inst ID: 10msv5.i
Smp Info : 10259041003,EB
Misc Info : 26462
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Meth Date : 03-Mar-2014 10:22 10msv5.i Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 465W.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
10	1,1-Dichloroethene	96	Compound Not Detected.					
11	Trichlorotrifluoroethane	101	Compound Not Detected.					
12	Carbon Disulfide	76	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
17	Methylene Chloride	84	Compound Not Detected.					
* 18	Acetone d6	46	2.339	2.331	(1.000)	81105	100.000	
19	Acetone	58	Compound Not Detected.					
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					
23	Methyl-tert-butyl Ether	73	Compound Not Detected.					
25	Isopropyl Ether	45	Compound Not Detected.					
28	1,1-Dichloroethane	63	Compound Not Detected.					
32	cis-1,2-Dichloroethene	96	Compound Not Detected.					
33	2,2-Dichloropropane	77	Compound Not Detected.					
34	Cyclohexane	56	Compound Not Detected.					
35	Bromochloromethane	130	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031419.D
Report Date: 04-Mar-2014 13:23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	36 Chloroform	83	Compound Not Detected.					
	37 Carbon Tetrachloride	117	Compound Not Detected.					
	39 Tetrahydrofuran	72	Compound Not Detected.					
	41 1,1,1-Trichloroethane	97	Compound Not Detected.					
	42 2-Butanone	43	Compound Not Detected.					
	43 1,1-Dichloropropene	75	Compound Not Detected.					
	45 Benzene	78	Compound Not Detected.					
*	48 Pentafluorobenzene	168	4.000	3.991	(1.000)	344887	50.0000	
$	50 1,2-Dichloroethane d4 (S)	65	4.030	4.022	(1.008)	181812	53.0232	53.0(Q)
	51 1,2-Dichloroethane	62	Compound Not Detected.					
	55 Trichloroethene	130	Compound Not Detected.					
*	56 1,4 Difluorobenzene	114	4.322	4.320	(1.000)	535812	50.0000	
	59 Dibromomethane	174	Compound Not Detected.					
	60 1,2-Dichloropropane	63	Compound Not Detected.					
	62 Bromodichloromethane	83	Compound Not Detected.					
*	64 1,4 dioxane d8	96	4.760	4.740	(1.000)	21726	2000.00	
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	69 Toluene-d8 (S)	98	5.095	5.092	(0.861)	640008	49.8967	49.9
	70 Toluene	92	5.125	5.117	(0.866)	5334	0.48753	0.49(a)
	72 Tetrachloroethene	166	Compound Not Detected.					
	73 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	77 1,1,2-Trichloroethane	97	Compound Not Detected.					
	78 Dibromochloromethane	129	Compound Not Detected.					
	79 1,3-Dichloropropane	76	Compound Not Detected.					
	80 1,2-Dibromoethane	107	Compound Not Detected.					
	81 2-Hexanone	43	Compound Not Detected.					
*	82 Chlorobenzene-d5	117	5.916	5.914	(1.000)	504478	50.0000	
	83 Chlorobenzene	112	Compound Not Detected.					
	84 Ethylbenzene	91	Compound Not Detected.					
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	86 M&P-Xylene	106	Compound Not Detected.					
	87 O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
	88 Styrene	104	Compound Not Detected.					
	89 Bromoform	173	Compound Not Detected.					
	90 Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	91 4-Bromofluorobenzene (S)	95	6.549	6.546	(0.907)	250871	50.9070	50.9
	93 Bromobenzene	156	Compound Not Detected.					
	94 n-Propylbenzene	91	Compound Not Detected.					
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	96 2-Chlorotoluene	91	Compound Not Detected.					
	97 1,3,5-Trimethylbenzene	105	Compound Not Detected.					
	98 1,2,3-Trichloropropane	110	Compound Not Detected.					
	100 4-Chlorotoluene	91	Compound Not Detected.					
	101 tert-Butylbenzene	119	Compound Not Detected.					
	102 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	103 sec-Butylbenzene	105	Compound Not Detected.					
	104 p-Isopropyltoluene	119	Compound Not Detected.					
	105 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	106 1,4-Dichlorobenzene-d4	152	7.224	7.222	(1.000)	264634	50.0000	
	107 1,4-Dichlorobenzene	146	Compound Not Detected.					
	109 n-Butylbenzene	91	Compound Not Detected.					
	110 1,2-Dichlorobenzene	146	Compound Not Detected.					
	111 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031419.D
Report Date: 04-Mar-2014 13:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
112 Hexachlorobutadiene	225	Compound Not Detected.					
113 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
114 Naphthalene	128	Compound Not Detected.					
115 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031419.D
Report Date: 04-Mar-2014 13:23

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 03031419.D
Lab Smp Id: 10259041003
Analysis Type: VOA
Quant Type: ISTD
Operator: LPM
Method File: \\192.168.10.12\chem\10msv5.i\030314A.B\v514-022614.m
Misc Info: 26462

Calibration Date: 03-MAR-2014
Calibration Time: 09:36
Level: LOW
Sample Type: WATER

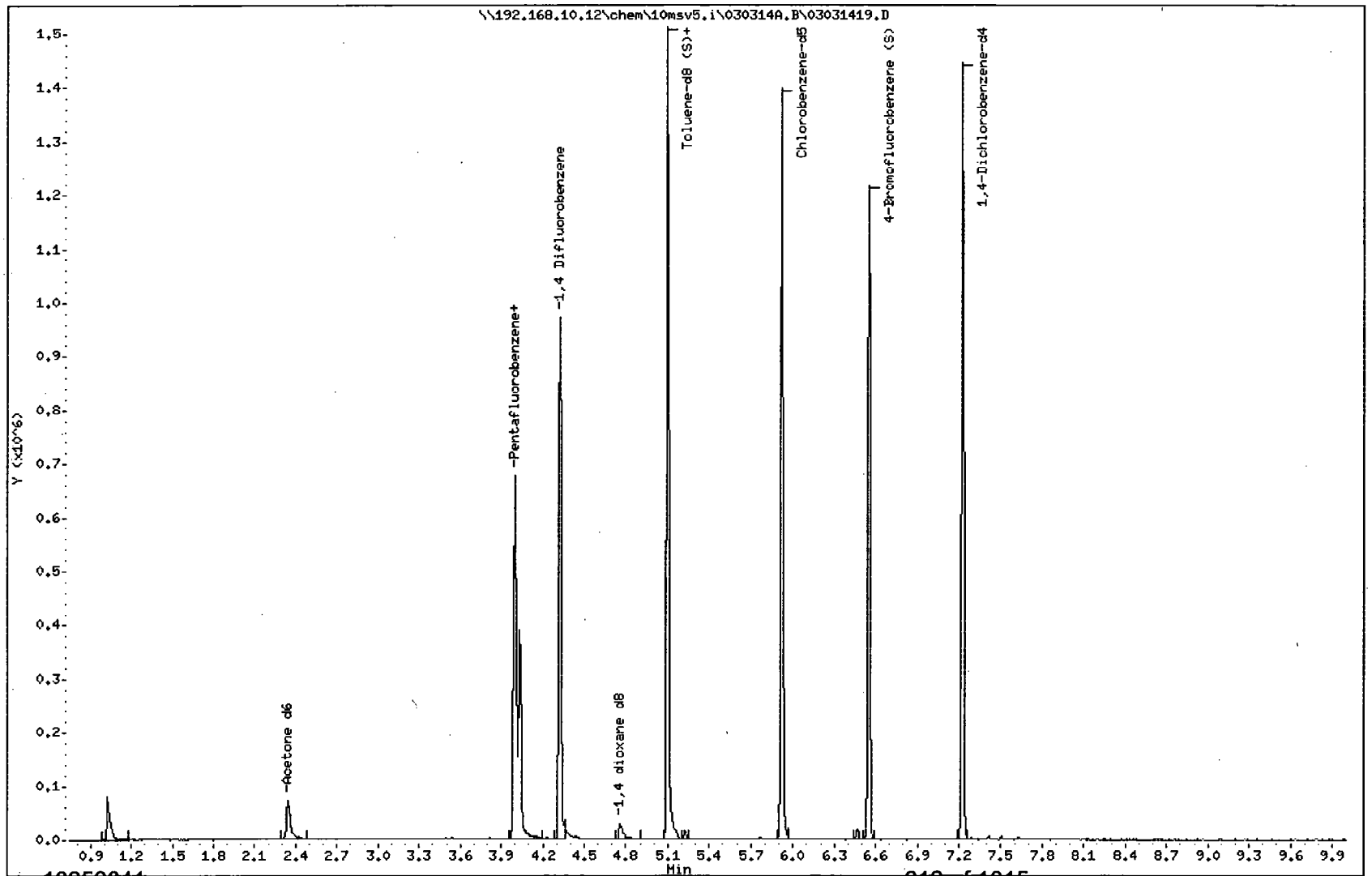
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	114178	57089	228356	81105	-28.97
48 Pentafluorobenzen	409621	204811	819242	344887	-15.80
56 1,4 Difluorobenze	611915	305958	1223830	535812	-12.44
64 1,4 dioxane d8	23365	11683	46730	21726	-7.01
82 Chlorobenzene-d5	575331	287666	1150662	504478	-12.32
106 1,4-Dichlorobenze	315847	157924	631694	264634	-16.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.34	0.36
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.21
56 1,4 Difluorobenze	4.32	3.82	4.82	4.32	0.05
64 1,4 dioxane d8	4.74	4.24	5.24	4.76	0.43
82 Chlorobenzene-d5	5.91	5.41	6.41	5.92	0.04
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031419.D
Date : 03-MAR-2014 14:27
Client ID:
Instrument: 10msv5.i
Sample Info: 10259041003,EB
Purge Volume: 10.0
Operator: LPM
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv5.i\030314A.B\03031419.D

Date : 03-MAR-2014 14:27

Client ID:

Instrument: 10msv5.i

Sample Info: 10259041003,EB

Purge Volume: 10.0

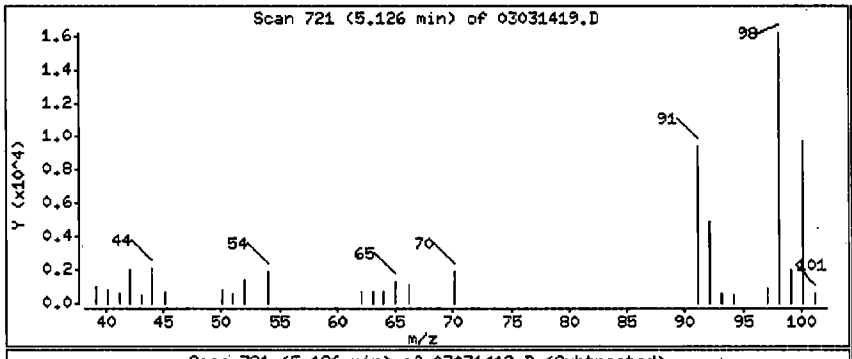
Operator: LPM

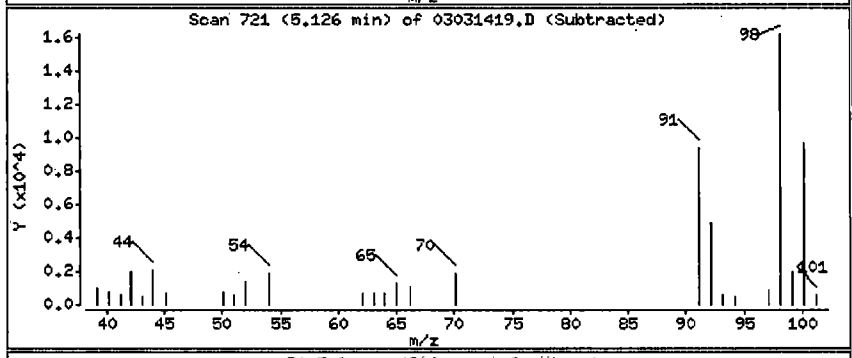
Column phase: Rtx-VMS

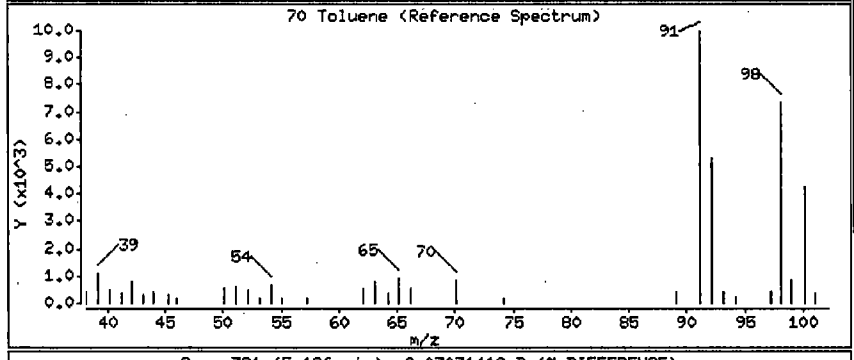
Column diameter: 0.18

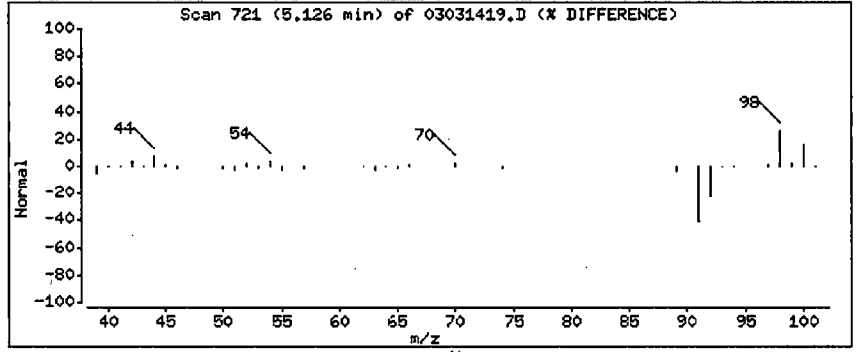
70 Toluene

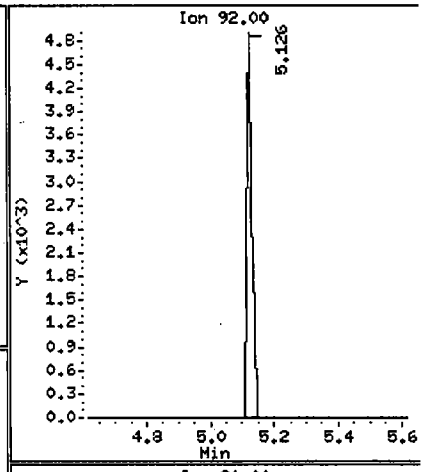
Concentration: 0.49 ug/L

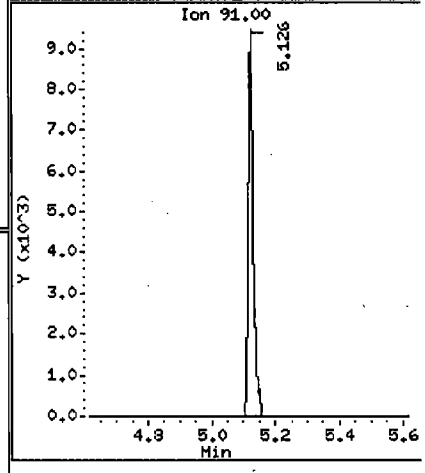












Data File: \\192.168.10.12\chem\10msv5.i\030314A.B/03031419.D
Injection Date: 03-MAR-2014 14:27
Instrument: 10msv5.i
Lab Sample ID: 10259041003
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical	Document Name: MSV LL Soil Prep Batch Worklist	Document Revised: 29Mar2012 Page 1 of 1		
	Document Number: F-MN-O-234-rev.01	Issuing Authority: Pace Minnesota Quality Office		

Prep Date 3/10/2014

Prep Analyst MS

Queue	MSV	GC/MS Volatiles	QC Rule	8260 SLL: 8260 MSV 5035 Low Prep
Batch	26501	HBN 268759	Created	3/10/14 9:44
*Weight of Pace label subtracted from soil weight=	0.18	grams	Analyst	Henrik Pham

Balance ID	Sand Lot #	MeOH Lot #	Surr. Lot #	Standard Traceability #
6304905	113854	NA	NA	10233-72B 10233-74B

Has the balance been calibrated before use? yes

Lab ID	Type	Client	Sample ID	**	***	Comments	Soil & Vial Wt (g)	Vial Wt (g)	Soil Wt (g)*	DI Water Added (mL)	Surr. Added (uL)	Standard Added (mL)
1635950	BLANK	Quality Control					-----	-----	5	5	-----	-----
1635951	LCS	Quality Control					-----	-----	5	-----	-----	5
~~[illegible]~~	~~PS~~						-----	-----	5	-----	-----	5
10259055001	PS		SB-6 1.5-3'	5			41.80	34.89	6.73	-----	-----	-----
10259055002	PS		SB-6 15-16.5'	5			40.70	35.13	5.39	-----	-----	-----
10259055003	PS		SB-7 1.5-3'	5			40.50	34.33	5.99	-----	-----	-----
10259055004	PS		SB-7 17-18'	5			43.10	35.43	7.49	-----	-----	-----
10259055005	PS		SB-8 1.5-2.5"	5			42.60	35.32	7.10	-----	-----	-----
10259055006	PS		SB-8 14-15"	5			41.30	35.61	5.51	-----	-----	-----
10259055007	PS		DUP-002	5			40.80	35.18	5.44	-----	-----	-----
10259055008	PS		TRIP BLANK	tb			35.30	35.12	5	-----	-----	-----
10259353005	PS		BH1Ea-0228-14	1	5.30	Preserved from jar w/HS outside 48 hrs			5.30	-----	-----	-----
10259353006	PS		BH1Ca-0228-16 1/2	1	5.00	Preserved from jar w/HS outside 48 hrs			5.00	-----	-----	-----
10259353007	PS		BH1Wa-0228-12 1/2	1	5.30	Preserved from jar w/HS outside 48 hrs			5.30	-----	-----	-----
10259353008	PS		BH2Wa-0228-14	1	5.00	Preserved from jar w/HS outside 48 hrs			5.00	-----	-----	-----
10259041001	PS		SB-9 3-4'	5			43.30	35.62	7.50	-----	-----	-----
10259041002	RQS		SB-9 12-14'	5			42.10	35.51	6.41	-----	-----	-----
1635952	MS		SB-8 12-14'(1631878MS)	5			41.90	35.67	6.05	-----	-----	5
1635953	MSD		SB-8 12-14'(1631878MSD)	5			41.80	35.65	5.97	-----	-----	5
10259308001	PS		V5 lot# 02/18/2014	tb			34.70	34.46	5	-----	-----	-----
10259308002	PS		V3 lot# 02/18/2014	tb			34.80	34.44	5	-----	-----	-----
10259316001	PS		SS-1	5			41.90	35.29	6.43	-----	-----	-----
											-----	-----
											-----	-----
											-----	-----
											-----	-----
											-----	-----

(1) hp - 3/12/14

**If 1=manually entered; 5=5g/5mL; TB=trip blank ***Weight for jars--manually entering

Date/Initials Reviewed

Fraction: 8270

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 288053 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 03061404.D Lab Sample ID: 1632345
GC Column: DB-5MS ID: 0.25 (mm) Time Analyzed: 08:16
Instrument ID: 10MSSD

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-9 3-4'	10259041001	03051412.D	18:17
02	SB-9 12-14'	10259041002	03051413.D	18:44
03	SB-9 12-14'(1631878MS)	1632347-MS	03051414.D	19:11
04	SB-9 12-14'(1631878MSD)	1632348-MSD	03051415.D	19:38
05	BLANK for HBN 288053 [OEXT/244	1632345	03061404.D	08:16
06	LCS for HBN 288053 [OEXT/24489	1632346	03061405.D	08:44

Pace Analytical
www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259041

QB Batch: OEXT / 24489
Method(s): EPA 3550 / EPA 8270

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10259041001		SB-9 3-4'	1	81		80		81		80		82		95	
1632345	BLANK		1	71		67		63		63		65		79	
10259041002	OQS	SB-9 12-14'	1	81		77		77		79		80		92	
1632346	LCS		1	108		92		87		80		87		98	
1632347	MS		1	85		80		74		76		77		83	
1632348	MSD		1	94		81		79		79		80		86	
		QC Limits:		41-125		46-125		31-125		30-125		38-125		64-125	
		Sample Limits:		41-125		46-125		31-125		30-125		38-125		64-125	

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d6 (S)
Sur 6: Terphenyl-d14 (S)

REPORT OF LABORATORY ANALYSIS

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Pace Analytical™

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 03/05/2014

Lab File ID (Standard): 03051406.D Time Analyzed: 15:31

Instrument ID: 10MSS9

	EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STANDARD	110277	4.713	419805	6.156	204219	8.293
	UPPER LIMIT	220554	5.213	839610	6.656	408438	8.793
	LOWER LIMIT	55138	4.213	209902	5.656	102110	7.793
	EPA SAMPLE NO.						
01	SB-9 3-4'	80068	4.708	313211	6.151	152556	8.288
02	SB-9 12-14'	79879	4.708	301497	6.150	150535	8.287
03	SB-9 12-14'(1631878MS)	79750	4.714	305032	6.151	148452	8.287
04	SB-9 12-14'(1631878MSD)	72932	4.708	278217	6.151	134875	8.288

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 03/05/2014

Lab File ID (Standard): 03051406.D Time Analyzed: 15:31

Instrument ID: 10MSS9

	EPA SAMPLE NO.	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STANDARD	329340	10.136	323408	13.416	312096	15.168
	UPPER LIMIT	658680	10.636	646816	13.916	624192	15.668
	LOWER LIMIT	164670	9.636	161704	12.916	156048	14.668
	EPA SAMPLE NO.						
01	SB-9 3-4'	245797	10.131	216179	13.405	207345	15.158
02	SB-9 12-14'	237103	10.130	211984	13.405	198969	15.158
03	SB-9 12-14'(1631878MS)	236350	10.131	220812	13.411	200437	15.158
04	SB-9 12-14'(1631878MSD)	220095	10.131	206059	13.411	187305	15.158

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 03/06/2014

Lab File ID (Standard): 03061403.D Time Analyzed: 07:48

Instrument ID: 10MSSD

	EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STANDARD	142387	5.066	559471	6.532	296387	8.688
	UPPER LIMIT	284774	5.566	1118942	7.032	592774	9.188
	LOWER LIMIT	71194	4.566	279736	6.032	148194	8.188
	EPA SAMPLE NO.						
01	BLANK for HBN 288053 [OEXT/244	115896	5.061	442932	6.532	235255	8.682
02	LCS for HBN 288053 [OEXT/24489	116788	5.067	460743	6.532	239411	8.682

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 03/06/2014

Lab File ID (Standard): 03061403.D Time Analyzed: 07:48

Instrument ID: 10MSSD

	EPA SAMPLE NO.	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STANDARD	500615	10.538	467805	13.833	505479	15.737
	UPPER LIMIT	1001230	11.038	935610	14.333	1010958	16.237
	LOWER LIMIT	250308	10.038	233902	13.333	252740	15.237
	EPA SAMPLE NO.						
01	BLANK for HBN 288053 [OEXT/244	407483	10.533	386994	13.822	387288	15.726
02	LCS for HBN 288053 [OEXT/24489	405527	10.533	389918	13.828	387603	15.732

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Instrument Run Log

Instrument: 10MSS9 Method: 8270 Misc. Prep. Info: Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium Tune Standard: 10328-111 ISTD Lot: 10362-11 Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02281409.D	MECL2 RINSE	Gas	Tune	1		sw846tun	2/28/14 12:02	JLR	
02281410.D	TUNE	Gas	Tune	1		sw846tun	2/28/14 12:20	JLR	fail mass
02281411.D	TUNE	Gas	Tune	1		sw846tun	2/28/14 12:45	JLR	adjusted target tune, fail mass
02281412.D	TUNE	Gas	Tune	1		sw846tun	2/28/14 13:06	JLR	adjusted target tune again, pass
02281413.D	ICAL 10328-96 8	Liquid	Ical	1		022814-8270MSS9	2/28/14 13:25	JLR	pass
02281414.D	ICAL 10328-96 7	Liquid	Ical	1		022814-8270MSS9	2/28/14 13:52	JLR	pass
02281415.D	ICAL 10328-96 6	Liquid	Ical	1		022814-8270MSS9	2/28/14 14:19	JLR	pass
02281416.D	ICAL 10328-96 5	Liquid	Ical	1		022814-8270MSS9	2/28/14 14:46	JLR	pass
02281417.D	ICAL 10328-96 4	Liquid	Ical	1		022814-8270MSS9	2/28/14 15:13	JLR	pass
02281418.D	ICAL 10328-96 3	Liquid	Ical	1		022814-8270MSS9	2/28/14 15:40	JLR	pass
02281419.D	ICAL 10328-96 2	Liquid	Ical	1		022814-8270MSS9	2/28/14 16:07	JLR	pass
02281420.D	ICV 10328-98	Liquid	CCal	1		022814-8270MSS9	2/28/14 16:34	JLR	pass
02281421.D	ICV2 10328-47	Liquid	CCal	1		022814-8270MSS9	2/28/14 17:01	JLR	pass

Check Maintenance Items Performed:

- Changed septum
- x Cleaned liner
- x Replaced/Cleaned gold seal
- x Clipped column
- Changed trap - Lot #
- Cleaned MS Source
- Changed column - Lot #
- Other minor parts replaced
- No maintenance performed today

Additional Comments:

File Path 1: U:\10MSS9.I\022814B.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 03/03/2014 07:20
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSS9 Method: 8270 Misc. Prep. Info: Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium Tune Standard: 10328-111 ISTD Lot: 5303 Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
03051401.D	MECL2 RINSE	G/	Tune	1		SW846TUN	3/05/14 09:08	JLR	
03051402.D	TUNE	G/	Tune	1		SW846TUN	3/05/14 09:24	JLR	PCP peak small
03051403.D	TUNE	G/	Tune	1		SW846TUN	3/05/14 11:45	JLR	baked injection port, PCP peak still small
03051404.D	MECL2 RINSE	G/	Tune	1		SW846TUN	3/05/14 14:00	JLR	cleaned split lines
03051405.D	TUNE	G/	Tune	1		SW846TUN	3/05/14 14:59	JLR	pass
03051406.D	CCAL 6 10328-96	L/	CCal	1		022814-8270MSS9	3/05/14 15:31	JLR	pass
03051407.D	1632345	S/10357	Blank	1		022814-8270MSS9	3/05/14 16:02	JLR	IS low, RR
03051408.D	1632346	S/10357	LCS	1		022814-8270MSS9	3/05/14 16:29	JLR	IS low, RR
03051409.D	1632642	L/10356	Blank	1		022814-8270MSS9	3/05/14 16:56	JLR	IS good
03051410.D	1632643	L/10356	LCS	1		022814-8270MSS9	3/05/14 17:23	JLR	IS low, RR
03051411.D	1632644	L/10356	LCSD	1		022814-8270MSS9	3/05/14 17:50	JLR	IS low, RR
03051412.D	10259041001	S/10357	Sample	1		022814-8270MSS9	3/05/14 18:17	JLR	IS good
03051413.D	10259041002	S/10357	Sample	1		022814-8270MSS9	3/05/14 18:44	JLR	IS good
03051414.D	1632347	S/10357	MS	1		022814-8270MSS9	3/05/14 19:11	JLR	IS good
03051415.D	1632348	S/10357	MSD	1		022814-8270MSS9	3/05/14 19:38	JLR	IS good
03051416.D	10259055001	S/10357	Sample	1		022814-8270MSS9	3/05/14 20:05	JLR	IS low, RR
03051417.D	10259055002	S/10357	Sample	1		022814-8270MSS9	3/05/14 20:32	JLR	IS low, RR
03051418.D	10259055003	S/10357	Sample	1		022814-8270MSS9	3/05/14 20:59	JLR	IS good
03051419.D	10259055004	S/10357	Sample	1		022814-8270MSS9	3/05/14 21:26	JLR	IS good
03051420.D	10259055005	S/10357	Sample	1		022814-8270MSS9	3/05/14 21:53	JLR	IS low, RR
03051421.D	10259055006	S/10357	Sample	1		022814-8270MSS9	3/05/14 22:19	JLR	IS good
03051422.D	10259055007	S/10357	Sample	1		022814-8270MSS9	3/05/14 22:46	JLR	IS low, RR
03051423.D	10259067001	S/10357	Sample	1		022814-8270MSS9	3/05/14 23:13	JLR	perylene IS low, sample ND for assoc compounds
03051424.D	10259142001	S/10357	Sample	1		022814-8270MSS9	3/05/14 23:40	JLR	IS low, RR
03051425.D	10259142002	S/10357	Sample	1		022814-8270MSS9	3/06/14 00:06	JLR	perylene IS low, sample ND for assoc compounds
03051426.D	10259022001	S/10356	Sample	50		022814-8270MSS9	3/06/14 00:33	JLR	IS low, RR
03051427.D	10259061001	S/10356	Sample	50		022814-8270MSS9	3/06/14 01:00	JLR	IS low, RR

Check Maintenance Items Performed:

Changed septum	x Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
x Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10MSS9.I\030514.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 03/06/2014 08:00
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSSD | Method: 8270 | Misc. Prep. Info: | Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium | Tune Standard: 10328-111 | ISTD Lot: 10328-11 | Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02281406.D	MECL2 RINSE	G/	Tune	1		SW846TUN	2/28/14 08:26	JLR	
02281407.D	TUNE	G/	Tune	1		SW846TUN	2/28/14 08:48	JLR	
02281408.D	ICAL 8 10328-96	S/	Ical	1		8270D-022814	2/28/14 09:10	JLR	Pass
02281409.D	ICAL 7 10328-96	S/	Ical	1		8270D-022814	2/28/14 09:39	JLR	Pass
02281410.D	ICAL 6 10328-96	S/	Ical	1		8270D-022814	2/28/14 10:07	JLR	Pass
02281411.D	ICAL 5 10328-96	S/	Ical	1		8270D-022814	2/28/14 10:35	JLR	Pass
02281412.D	ICAL 4 10328-96	S/	Ical	1		8270D-022814	2/28/14 11:03	JLR	Pass
02281413.D	ICAL 3 10328-96	S/	Ical	1		8270D-022814	2/28/14 11:31	JLR	Pass
02281414.D	ICAL 2 10328-96	S/	Ical	1		8270D-022814	2/28/14 11:59	JLR	Pass
02281415.D	ICV 10328-98	S/	CCal	1		8270D-022814	2/28/14 12:27	JLR	Pass
02281416.D	ICV2 10328-47	S/	CCal	1		8270D-022814	2/28/14 12:55	JLR	Pass
02281417.D	1630787	L/10346	Blank	1		8270D-022814	2/28/14 13:23	JLR	pass
02281418.D	1631004	L/10346	Blank	1		8270D-022814	2/28/14 13:51	JLR	pass
02281419.D	1630788	L/10346	LCS	1		8270D-022814	2/28/14 14:19	JLR	
02281420.D	10258626001	L/10346	Sample	1		8270D-022814	2/28/14 14:47	JLR	
02281421.D	1630789	L/10346	MS	1		8270D-022814	2/28/14 15:15	ACH1	
02281422.D	1630790	L/10346	MSD	1		8270D-022814	2/28/14 15:43	ACH1	
02281423.D	10258332001	L/10346	Sample	1		8270D-022814	2/28/14 16:12	ACH1	
02281424.D	10258078001	L/	Sample	1		8270D-022814	2/28/14 16:40	JLR	
02281425.D	10258237001	L/	Sample	1		8270D-022814	2/28/14 17:08	JLR	
02281426.D	10258342001	L/	Sample	1		8270D-022814	2/28/14 17:36	JLR	
02281427.D	10258506002	L/	Sample	1		8270D-022814	2/28/14 18:04	JLR	
02281428.D	10258506003	L/	Sample	1		8270D-022814	2/28/14 18:32	JLR	
02281429.D	10258506001	L/	Sample	5		8270D-022814	2/28/14 19:00	JLR	
02281430.D	10258506001	L/	Sample	50		8270D-022814	2/28/14 19:28	JLR	2x=100x
02281431.D	10258506004	L/	Sample	2		8270D-022814	2/28/14 19:56	JLR	

Check Maintenance Items Performed:

Changed septum	x Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
x Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10MSSD.I\022814B.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 02/28/2014 16:55
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSSD | Method: TCLP | Misc. Prep. Info: | Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium | Tune Standard: 10328-111 | ISTD Lot: 5303 | Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
03061401.D	MECL2 RINSE	G/	Tune	1		SW846TUN	3/06/14 06:58	JLR	
03061402.D	TUNE	G/	Tune	1		SW846TUN	3/06/14 07:20	JLR	pass
03061403.D	CCAL 6 10328-96	L/	CCal	1		8270D-022814	3/06/14 07:48	JLR	pass
03061404.D	1632345	S/10357	Blank	1		8270D-022814	3/06/14 08:16	JLR	pass
03061405.D	1632346	S/10357	LCS	1		8270D-022814	3/06/14 08:44	JLR	pass
03061406.D	1632643	L/10356	LCS	1		8270D-022814	3/06/14 09:12	JLR	pass
03061407.D	1632644	L/10356	LCSD	1		8270D-022814	3/06/14 09:40	JLR	pass
03061408.D	10259055001	S/10357	Sample	1		8270D-022814	3/06/14 10:09	JLR	
03061409.D	10259055002	S/10357	Sample	1		8270D-022814	3/06/14 10:37	JLR	
03061410.D	10259055005	S/10357	Sample	1		8270D-022814	3/06/14 11:05	JLR	
03061411.D	10259142001	S/10357	Sample	1		8270D-022814	3/06/14 11:33	JLR	
03061412.D	1633777	L/10358	Blank	1		8270D-022814	3/06/14 12:02	JLR	pass
03061413.D	1633778	L/10358	LCS	1		8270D-022814	3/06/14 12:30	JLR	pass
03061414.D	10258914001	L/10358	Sample	1		8270D-022814	3/06/14 12:59	JLR	
03061415.D	10259055007	S/10357	Sample	1		8270D-022814	3/06/14 13:27	JLR	
03061416.D	1633779	L/10358	MS	1		8270D-022814	3/06/14 13:55	JLR	
03061417.D	1633780	L/10358	MSD	1		8270D-022814	3/06/14 14:24	JLR	
03061418.D	10258916001	L/10358	Sample	1		8270D-022814	3/06/14 14:52	JLR	
03061419.D	10259022001	L/10356	Sample	1		8270D-022814	3/06/14 15:21	JLR	
03061420.D	10259061001	L/10356	Sample	50		8270D-022814	3/06/14 15:49	JLR	

Check Maintenance Items Performed:

- Changed septum
- x Cleaned liner
- x Replaced/Cleaned gold seal
- x Clipped column
- Changed trap - Lot #
- Cleaned MS Source
- Changed column - Lot #
- Other minor parts replaced
- No maintenance performed today

Additional Comments:

File Path 1: U:\10MSSD.I\030614.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 03/07/2014 10:01
Reviewed By/Date:

Report Date : 03-Mar-2014 07:24

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Calibration File Names:
Level 2: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Level 3: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Level 4: \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Level 5: \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Level 6: \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Level 7: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Level 8: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
1 N-Nitrosodimethylamine	0.72789	0.78804	0.81929	0.85961	0.84614	0.89461					
	0.81454						AVRG		0.82144		6.54456
2 Pyridine	1.36163	1.52328	1.49246	1.54232	1.48974	1.58077					
	1.47591						AVRG		1.49516		4.61624
5 Phenol	1.69120	1.73652	1.79306	1.68350	1.68141	1.78366					
	1.60733						AVRG		1.71095		3.80552
6 bis(2-Chloroethyl)ether	1.29559	1.26816	1.34372	1.27881	1.23915	1.29964					
	1.20020						AVRG		1.27504		3.60753

Report Date : 03-Mar-2014 07:24

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
7 2-Chlorophenol	1.53875	1.38668	1.48745	1.42656	1.38550	1.49802					
	1.34533						AVRG		1.43833		4.94115
8 1,3-Dichlorobenzene	1.63535	1.66842	1.70034	1.61620	1.55482	1.66971					
	1.50310						AVRG		1.62113		4.31992
10 1,4-Dichlorobenzene	1.73416	1.64816	1.71291	1.62159	1.57644	1.69132					
	1.52584						AVRG		1.64435		4.58882
11 Benzyl alcohol	0.93263	0.89074	1.02948	1.01018	1.00403	1.05846					
	0.95734						AVRG		0.98327		5.97986
12 1,2-Dichlorobenzene	1.58294	1.49110	1.64696	1.52077	1.48755	1.60005					
	1.43390						AVRG		1.53761		4.86836
13 2-Methylphenol	1.11748	1.07948	1.11180	1.10368	1.05730	1.16308					
	1.05115						AVRG		1.09771		3.53457
14 bis(2-Chloroisopropyl) ether	3.34631	3.24859	3.47054	3.25957	3.13606	3.38434					
	3.01630						AVRG		3.26596		4.70824

Report Date : 03-Mar-2014 07:24

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	160.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2	
15 3 & 4-Methylphenol	1.45737	1.43361	1.50789	1.40955	1.38234	1.52934	1.33332	AVRG		1.43620		4.79581	
16 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
17 N-Nitroso-di-n-propylamine	0.84290	0.80673	0.90133	0.83706	0.79902	0.85349	0.76485	AVRG		0.82934		5.30152	
18 Hexachloroethane	0.61177	0.57066	0.63081	0.59419	0.58011	0.63344	0.55926	AVRG		0.59718		4.88230	
20 Nitrobenzene	0.32667	0.33126	0.34280	0.32178	0.32291	0.34288	0.31394	AVRG		0.32889		3.30637	
21 Isophorone	0.58272	0.59171	0.62630	0.57605	0.57748	0.61165	0.56964	AVRG		0.59079		3.52622	
22 2-Nitrophenol	0.19485	0.18640	0.19299	0.18322	0.19492	0.20575	0.19070	AVRG		0.19269		3.75192	

Report Date : 03-Mar-2014 07:24

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
23 2,4-Dimethylphenol	0.34270	0.33630	0.35674	0.32454	0.33014	0.33947					
	0.31949						AVRG		0.33563		3.69854
24 Benzoic acid	0.13603	0.16959	0.17781	0.17714	0.18340	0.19137					
	0.17286						AVRG		0.17260		10.20852
25 bis(2-Chloroethoxy)methane	0.34329	0.35337	0.36850	0.34530	0.34080	0.36620					
	0.32958						AVRG		0.34958		4.01797
26 2,4-Dichlorophenol	0.27988	0.29290	0.30072	0.28026	0.28723	0.30543					
	0.28284						AVRG		0.28989		3.49929
27 1,2,4-Trichlorobenzene	0.31767	0.30484	0.31457	0.29821	0.29839	0.30705					
	0.28839						AVRG		0.30416		3.33483
29 Naphthalene	1.04786	1.04560	1.06352	1.00184	0.97770	1.03046					
	0.93241						AVRG		1.01420		4.58787
30 4-Chloroaniline	0.41167	0.42253	0.41778	0.37617	0.33189	0.32875					
	0.29075						AVRG		0.36851		14.11588

Report Date : 03-Mar-2014 07:24

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
31 Hexachlorobutadiene	0.16558	0.16459	0.17487	0.16272	0.16518	0.17406					
	0.15855						AVRG		0.16651		3.56026
32 4-Chloro-3-methylphenol	0.26748	0.28288	0.28675	0.26965	0.27408	0.28582					
	0.26259						AVRG		0.27561		3.48891
33 2-Methylnaphthalene	0.65715	0.69741	0.68306	0.65812	0.65838	0.70050					
	0.63115						AVRG		0.66940		3.75958
34 1-Methylnaphthalene	0.60614	0.64203	0.65610	0.60179	0.61118	0.64160					
	0.58592						AVRG		0.62068		4.16731
35 Hexachlorocyclopentadiene	2384	8113	15640	34429	72646	106697					
	149972						QUAD	0.09239	3.23289	-0.04604	0.99779
36 2,4,6-Trichlorophenol	0.37411	0.36621	0.37858	0.36261	0.36937	0.39693					
	0.36754						AVRG		0.37362		3.08960
37 2,4,5-Trichlorophenol	0.38078	0.40886	0.40096	0.38155	0.39938	0.42087					
	0.38667						AVRG		0.39701		3.76440

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
39 2-Chloronaphthalene	1.27008	1.25257	1.26458	1.16752	1.19463	1.24582					
	1.14649						AVRG		1.22024		4.10084
40 2-Nitroaniline	0.38065	0.41830	0.39990	0.39794	0.38903	0.41658					
	0.38400						AVRG		0.39806		3.75195
41 Dimethylphthalate	1.31489	1.34506	1.40449	1.28568	1.29891	1.35519					
	1.25871						AVRG		1.32327		3.69368
42 2,6-Dinitrotoluene	0.29027	0.30572	0.33084	0.29540	0.31043	0.32274					
	0.30097						AVRG		0.30805		4.72732
43 Acenaphthylene	1.86411	1.94855	1.97823	1.86316	1.86109	1.95806					
	1.74174						AVRG		1.88785		4.32605
44 3-Nitroaniline	0.36428	0.37498	0.38760	0.33487	0.30434	0.29372					
	0.25845						AVRG		0.33118		14.38912
46 Acenaphthene	1.13682	1.14672	1.14550	1.09150	1.09588	1.15100					
	1.03503						AVRG		1.11464		3.84489

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
47 2,4-Dinitrophenol	786	2701	6442	16083	37043	53931					
	76892						QUAD	0.14925	6.27339	-0.25221	0.99787
48 4-Nitrophenol	0.21915	0.24861	0.26143	0.25162	0.26516	0.27710					
	0.25651						AVRG		0.25423		7.12556
49 2,4-Dinitrotoluene	0.36512	0.39931	0.41769	0.39562	0.41004	0.41934					
	0.38864						AVRG		0.39940		4.74036
50 Dibenzofuran	1.73008	1.73039	1.77022	1.60911	1.61860	1.68241					
	1.52721						AVRG		1.66686		5.14474
51 Diethylphthalate	1.31072	1.32459	1.32095	1.23741	1.26582	1.29927					
	1.19364						AVRG		1.27891		3.83650
52 4-Chlorophenylphenyl ether	0.59120	0.62318	0.62438	0.61055	0.60810	0.63425					
	0.57911						AVRG		0.61011		3.19518
53 4-Nitroaniline	0.34836	0.37407	0.38270	0.35587	0.37300	0.38100					
	0.36124						AVRG		0.36803		3.55196

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INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
54 Fluorene	1.37696	1.36027	1.43218	1.34042	1.32188	1.37352					
	1.26134						AVRG		1.35237		3.91772
55 4,6-Dinitro-2-methylphenol	2141	5757	11832	26289	53975	78965					
	109808						QUAD	0.08641	6.98532	-0.29082	0.99760
56 N-Nitrosodiphenylamine	0.67901	0.68957	0.73178	0.68001	0.68105	0.71068					
	0.66220						AVRG		0.69061		3.36705
57 Azobenzene	1.21989	1.30308	1.28862	1.19271	1.19221	1.24210					
	1.12946						AVRG		1.22401		4.91325
58 1,2-Diphenylhydrazine	1.21989	1.30308	1.28862	1.19271	1.19221	1.24210					
	1.12946						AVRG		1.22401		4.91325
60 4-Bromophenylphenyl ether	0.19264	0.20445	0.21194	0.18818	0.19992	0.21414					
	0.19876						AVRG		0.20143		4.72347
61 Hexachlorobenzene	0.22195	0.22017	0.22290	0.20347	0.20335	0.21659					
	0.20807						AVRG		0.21379		4.03316

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
62 Pentachlorophenol	1584	4699	8649	20378	44762	64043					
	94832						QUAD	0.09149	9.01386	-2.14926	0.99920
64 Phenanthrene	1.19952	1.16863	1.18193	1.10744	1.11062	1.15891					
	1.07093						AVRG		1.14257		4.09357
65 Anthracene	1.16134	1.16087	1.20884	1.13892	1.14007	1.19774					
	1.10713						AVRG		1.15927		3.03851
66 Carbazole	1.11366	1.13737	1.17698	1.10317	1.11417	1.15655					
	1.07940						AVRG		1.12590		2.95605
67 di-n-Butylphthalate	1.37736	1.35427	1.40106	1.32435	1.36755	1.41827					
	1.31297						AVRG		1.36512		2.80091
68 Fluoranthene	1.22044	1.23773	1.29974	1.20763	1.22916	1.28908					
	1.20315						AVRG		1.24099		3.10019
69 Benzidine	16897	42637	66277	120421	208073	277317					
	367344						QUAD	-0.02985	1.51306	0.32510	0.99620

Report Date : 03-Mar-2014 07:24

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INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
70 Pyrene	1.42756	1.41002	1.43032	1.32162	1.30286	1.35869					
	1.23469						AVRG		1.35511		5.41322
72 Butylbenzylphthalate	0.63499	0.61807	0.65999	0.62145	0.60566	0.65465					
	0.59343						AVRG		0.62689		3.91258
73 bis(2-Ethylhexyl)phthalate	0.87514	0.90466	0.95091	0.89260	0.84056	0.87986					
	0.79115						AVRG		0.87641		5.73909
74 3,3'-Dichlorobenzidine	0.42011	0.41255	0.39163	0.35747	0.31750	0.31913					
	+++++						AVRG		0.36973		12.26979
75 Benzo(a)anthracene	1.28238	1.24682	1.27640	1.21255	1.19129	1.24579					
	1.14509						AVRG		1.22862		3.99135
77 Chrysene	1.15772	1.13013	1.17387	1.10334	1.08504	1.15286					
	1.04777						AVRG		1.12153		4.02196
78 di-n-Octylphthalate	1.56072	1.57736	1.62570	1.54566	1.52951	1.59447					
	1.44766						AVRG		1.55444		3.65289

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INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
79 Benzo(b)fluoranthene	1.10373	1.26676	1.24017	1.14539	1.16861	1.21993					
	1.17108						AVRG		1.18796		4.80185
80 Benzo(k)fluoranthene	1.19187	1.24747	1.25159	1.19461	1.21722	1.24334					
	1.16294						AVRG		1.21558		2.78142
81 Benzo(a)pyrene	1.10421	1.13918	1.19922	1.12176	1.12178	1.15656					
	1.10116						AVRG		1.13484		3.02058
83 Indeno(1,2,3-cd)pyrene	1.20427	1.23953	1.25839	1.20068	1.24348	1.26681					
	1.15901						AVRG		1.22460		3.12548
84 Dibenzo(a,h)anthracene	1.02921	1.05579	1.07033	1.02084	1.05799	1.07836					
	0.97330						AVRG		1.04083		3.48439
85 Benzo(g,h,i)perylene	1.05132	1.05071	1.07835	1.02299	1.04221	1.07015					
	0.95413						AVRG		1.03855		3.98468
$ 3 2-Fluorophenol (S)	1.36175	1.40830	1.47359	1.43414	1.38432	1.49121					
	1.36692						AVRG		1.41718		3.61049

Report Date : 03-Mar-2014 07:24

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
$ 4 Phenol-d6 (S)	1.57656	1.61174	1.68872	1.62466	1.62194	1.72293					
	1.56085						AVRG		1.62963		3.55598
$ 19 Nitrobenzene-d5 (S)	0.33994	0.34616	0.36116	0.33866	0.34532	0.35840					
	0.33264						AVRG		0.34604		3.01517
$ 38 2-Fluorobiphenyl (S)	1.41717	1.42305	1.44440	1.35072	1.38823	1.44266					
	1.32339						AVRG		1.39852		3.33316
$ 59 2,4,6-Tribromophenol (S)	0.12421	0.15164	0.15764	0.15481	0.16169	0.16446					
	0.15459						AVRG		0.15272		8.72105
$ 71 Terphenyl-d14 (S)	0.84061	0.87705	0.89446	0.84708	0.84038	0.87122					
	0.81069						AVRG		0.85450		3.29352

Report Date : 03-Mar-2014 07:24

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Average %RSD Results. .
Calculated Average %RSD = 4.60802
Maximun Average %RSD = 15.00000
* Passed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Lab Smp Id: ICAL 10328-96 8
Inj Date : 28-FEB-2014 13:25
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 8
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	211126	160.000	159(Q)
	2 Pyridine	79	2.416	2.416	(0.512)	382550	160.000	158
$	3 2-Fluorophenol (S)	112	3.436	3.436	(0.728)	354301	160.000	154
$	4 Phenol-d6 (S)	99	4.307	4.307	(0.913)	404566	160.000	153
	5 Phenol	94	4.318	4.318	(0.915)	416613	160.000	150
	6 bis(2-Chloroethyl)ether	63	4.419	4.419	(0.937)	311086	160.000	151
	7 2-Chlorophenol	128	4.505	4.505	(0.955)	348704	160.000	150
	8 1,3-Dichlorobenzene	146	4.665	4.665	(0.989)	389597	160.000	148
*	9 1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	64799	40.0000	
	10 1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	395491	160.000	148
	11 Benzyl alcohol	79	4.852	4.852	(1.028)	248138	160.000	156
	12 1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	371660	160.000	149
	13 2-Methylphenol	107	4.964	4.964	(1.052)	272454	160.000	153
	14 bis(2-Chloroisopropyl) ether	45	4.996	4.996	(1.059)	781813	160.000	148
	15 3 & 4-Methylphenol	107	5.135	5.135	(1.088)	345590	160.000	148
	17 N-Nitroso-di-n-propylamine	70	5.146	5.146	(1.091)	198246	160.000	148
	18 Hexachloroethane	117	5.285	5.285	(1.120)	144958	160.000	150
$	19 Nitrobenzene-d5 (S)	82	5.327	5.327	(0.864)	247398	120.000	115
	20 Nitrobenzene	77	5.349	5.349	(0.867)	311323	160.000	153
	21 Isophorone	82	5.616	5.616	(0.911)	564392	160.000	154
	22 2-Nitrophenol	139	5.712	5.712	(0.926)	189105	160.000	158
	23 2,4-Dimethylphenol	107	5.744	5.744	(0.932)	316824	160.000	152

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Report Date: 03-Mar-2014 07:18

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24	Benzoic acid	105	5.872	5.872	(0.952)	171420	160.000	160(A)
	25	bis(2-Chloroethoxy)methane	93	5.851	5.851	(0.949)	326828	160.000	151
	26	2,4-Dichlorophenol	162	5.995	5.995	(0.972)	280479	160.000	156
	27	1,2,4-Trichlorobenzene	180	6.091	6.091	(0.988)	285985	160.000	152
*	28	Naphthalene-d8	136	6.166	6.166	(1.000)	247915	40.0000	(Q)
	29	Naphthalene	128	6.193	6.193	(1.004)	924634	160.000	147
	30	4-Chloroaniline	127	6.241	6.241	(1.012)	288327	160.000	126(A)
	31	Hexachlorobutadiene	225	6.332	6.332	(1.027)	157229	160.000	152
	32	4-Chloro-3-methylphenol	107	6.818	6.818	(1.106)	260400	160.000	152
	33	2-Methylnaphthalene	142	7.021	7.021	(1.139)	625886	160.000	151
	34	1-Methylnaphthalene	142	7.144	7.144	(1.159)	581034	160.000	151
	35	Hexachlorocyclopentadiene	237	7.208	7.208	(0.868)	149972	160.000	157
	36	2,4,6-Trichlorophenol	196	7.358	7.358	(0.886)	182437	160.000	157
	37	2,4,5-Trichlorophenol	196	7.406	7.406	(0.892)	191930	160.000	156
$	38	2-Fluorobiphenyl (S)	172	7.459	7.459	(0.898)	492672	120.000	114
	39	2-Chloronaphthalene	162	7.619	7.619	(0.918)	569085	160.000	150
	40	2-Nitroaniline	65	7.737	7.737	(0.932)	190607	160.000	154
	41	Dimethylphthalate	163	7.967	7.967	(0.959)	624789	160.000	152
	42	2,6-Dinitrotoluene	165	8.036	8.036	(0.968)	149392	160.000	156
	43	Acenaphthylene	152	8.132	8.132	(0.979)	864552	160.000	148(M)
	44	3-Nitroaniline	138	8.244	8.244	(0.993)	128285	160.000	125(A)
*	45	Acenaphthene-d10	164	8.303	8.303	(1.000)	124093	40.0000	
	46	Acenaphthene	154	8.346	8.346	(1.005)	513760	160.000	148
	47	2,4-Dinitrophenol	184	8.373	8.373	(1.008)	76892	160.000	158(Q)
	48	4-Nitrophenol	65	8.458	8.458	(1.019)	127325	160.000	161(A)
	49	2,4-Dinitrotoluene	165	8.538	8.538	(1.028)	192912	160.000	156
	50	Dibenzofuran	168	8.560	8.560	(1.031)	758062	160.000	146
	51	Diethylphthalate	149	8.832	8.832	(1.064)	592488	160.000	149
	52	4-Chlorophenylphenyl ether	204	8.976	8.976	(1.081)	287455	160.000	152
	53	4-Nitroaniline	138	9.014	9.014	(1.086)	179308	160.000	157
	54	Fluorene	166	8.982	8.982	(1.082)	626094	160.000	149
	55	4,6-Dinitro-2-methylphenol	198	9.046	9.046	(0.892)	109808	160.000	157
	56	N-Nitrosodiphenylamine	169	9.120	9.120	(0.899)	516254	160.000	153
	57	Azobenzene	77	9.174	9.174	(1.105)	560634	160.000	148
	58	1,2-Diphenylhydrazine	77	9.174	9.174	(1.105)	560634	160.000	148
$	59	2,4,6-Tribromophenol (S)	330	9.281	9.281	(1.118)	76732	160.000	162(A)
	60	4-Bromophenylphenyl ether	248	9.580	9.580	(0.945)	154955	160.000	158
	61	Hexachlorobenzene	284	9.665	9.665	(0.953)	162214	160.000	156
	62	Pentachlorophenol	266	9.906	9.906	(0.977)	94832	160.000	159
*	63	Phenanthrene-d10	188	10.141	10.141	(1.000)	194902	40.0000	
	64	Phenanthrene	178	10.178	10.178	(1.004)	834909	160.000	150
	65	Anthracene	178	10.242	10.242	(1.010)	863130	160.000	153
	66	Carbazole	167	10.440	10.440	(1.029)	841510	160.000	153
	67	di-n-Butylphthalate	149	10.851	10.851	(1.070)	1023605	160.000	154
	68	Fluoranthene	202	11.658	11.658	(1.150)	937986	160.000	155
	69	Benzidine	184	11.808	11.808	(0.879)	367344	160.000	156(A)
	70	Pyrene	202	11.941	11.941	(0.889)	974651	160.000	146
$	71	Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	479959	120.000	114
	72	Butylbenzylphthalate	149	12.716	12.716	(0.947)	468449	160.000	151
	73	bis(2-Ethylhexyl)phthalate	149	13.410	13.410	(0.998)	624522	160.000	144
	74	3,3'-Dichlorobenzidine	252	13.378	13.378	(0.996)	221928	160.000	122(A)
	75	Benzo(a)anthracene	228	13.421	13.421	(0.999)	903917	160.000	149
*	76	Chrysene-d12	240	13.432	13.432	(1.000)	197347	40.0000	(Q)
	77	Chrysene	228	13.469	13.469	(1.003)	827096	160.000	149

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.174	14.174	(1.055)	1142764	160.000	149
79	Benzo(b)fluoranthene	252	14.692	14.692	(0.968)	867047	160.000	158
80	Benzo(k)fluoranthene	252	14.730	14.730	(0.970)	861019	160.000	153
81	Benzo(a)pyrene	252	15.120	15.120	(0.996)	815274	160.000	155
* 82	Perylene-d12	264	15.184	15.184	(1.000)	185095	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.888	16.888	(1.112)	858110	160.000	151
84	Dibenzo(a,h)anthracene	278	16.915	16.915	(1.114)	720613	160.000	150
85	Benzo(g,h,i)perylene	276	17.412	17.412	(1.147)	706421	160.000	147

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281413.D
Lab Smp Id: ICAL 10328-96 8
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 16:34
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	64799	-1.42
28 Naphthalene-d8	256733	128367	513466	247915	-3.43
45 Acenaphthene-d10	126640	63320	253280	124093	-2.01
63 Phenanthrene-d10	206748	103374	413496	194902	-5.73
76 Chrysene-d12	194855	97428	389710	197347	1.28
82 Perylene-d12	186487	93244	372974	185095	-0.75

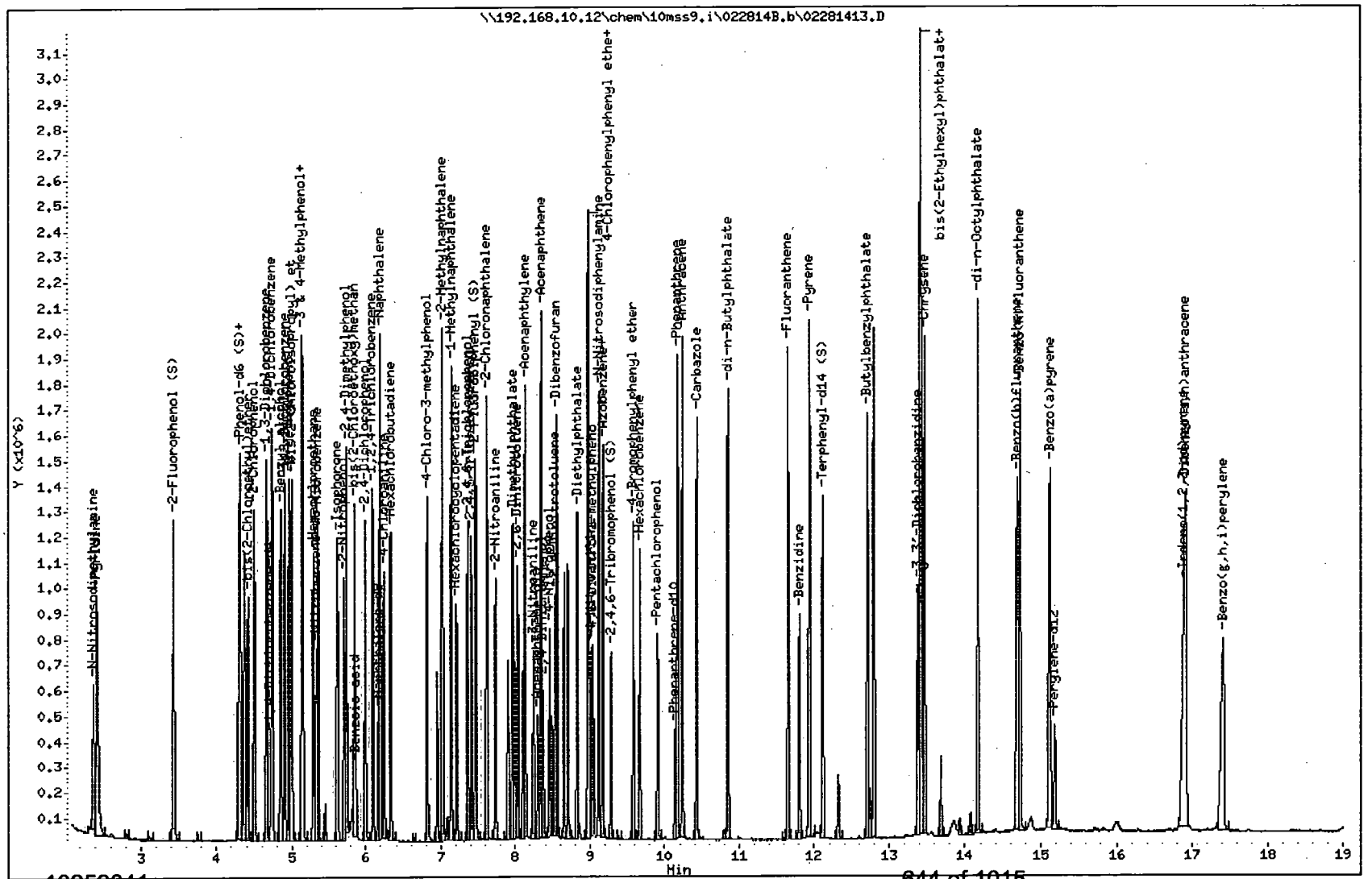
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.17	0.09
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	0.07
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	0.00
76 Chrysene-d12	13.43	12.93	13.93	13.43	0.04
82 Perylene-d12	15.18	14.68	15.68	15.18	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Date : 28-FEB-2014 13:25
Client ID:
Sample Info: ICAL 10328-96 8
Purge Volume: 1.0
Column phase: DB-5MS

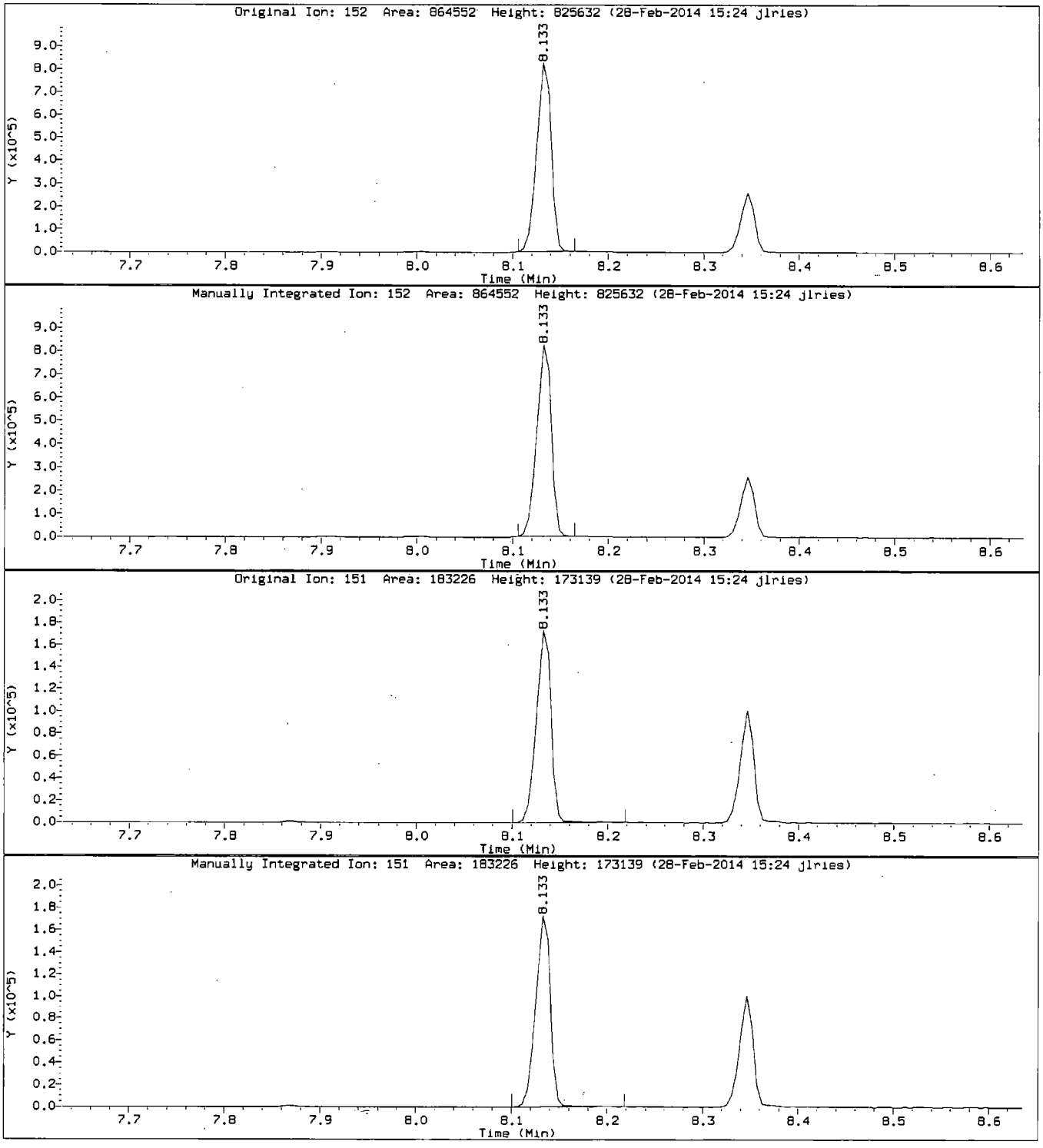
Instrument: 10mss9.i

Operator: JLR
Column diameter: 0.25

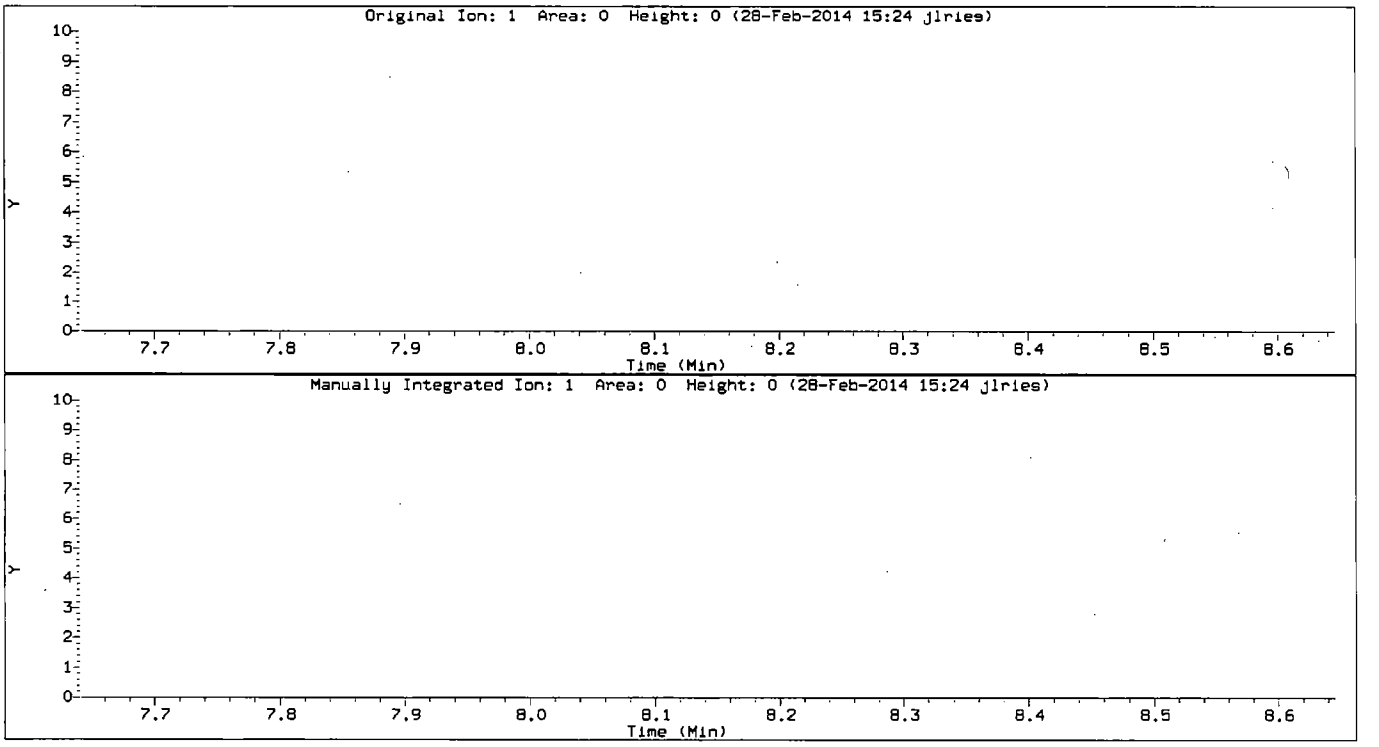


Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281413.D
Injection Date: 28-FEB-2014 13:25
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 8

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281413.D
Injection Date: 28-FEB-2014 13:25
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 8



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Lab Smp Id: ICAL 10328-96 7
Inj Date : 28-FEB-2014 13:52
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 7
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 13:25 Cal File: 02281413.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	153354	120.000	131
	2 Pyridine	79	2.416	2.416	(0.512)	270976	120.000	127
$	3 2-Fluorophenol (S)	112	3.436	3.436	(0.728)	255624	120.000	126
$	4 Phenol-d6 (S)	99	4.302	4.302	(0.912)	295345	120.000	127
	5 Phenol	94	4.318	4.318	(0.915)	305755	120.000	125
	6 bis(2-Chloroethyl)ether	63	4.414	4.414	(0.935)	222784	120.000	122
	7 2-Chlorophenol	128	4.499	4.499	(0.954)	256790	120.000	125
	8 1,3-Dichlorobenzene	146	4.665	4.665	(0.989)	286222	120.000	124
*	9 1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	57140	40.0000	
	10 1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	289926	120.000	123
	11 Benzyl alcohol	79	4.846	4.846	(1.027)	181442	120.000	129
	12 1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	274291	120.000	125
	13 2-Methylphenol	107	4.959	4.959	(1.051)	199376	120.000	127
	14 bis(2-Chloroisopropyl) ether	45	4.996	4.996	(1.059)	580144	120.000	124
	15 3 & 4-Methylphenol	107	5.130	5.130	(1.087)	262159	120.000	128
	17 N-Nitroso-di-n-propylamine	70	5.140	5.140	(1.089)	146305	120.000	123
	18 Hexachloroethane	117	5.285	5.285	(1.120)	108585	120.000	127
$	19 Nitrobenzene-d5 (S)	82	5.322	5.322	(0.864)	180858	90.0000	93.2
	20 Nitrobenzene	77	5.343	5.343	(0.867)	230704	120.000	125
	21 Isophorone	82	5.616	5.616	(0.912)	411544	120.000	124
	22 2-Nitrophenol	139	5.707	5.707	(0.926)	138437	120.000	128
	23 2,4-Dimethylphenol	107	5.739	5.739	(0.931)	228411	120.000	121

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	5.856	5.856	(0.951)	128759	120.000	133
	25 bis(2-Chloroethoxy)methane	93	5.851	5.851	(0.950)	246396	120.000	126
	26 2,4-Dichlorophenol	162	5.990	5.990	(0.972)	205503	120.000	126
	27 1,2,4-Trichlorobenzene	180	6.091	6.091	(0.989)	206596	120.000	121
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	224279	40.0000	(Q)
	29 Naphthalene	128	6.187	6.187	(1.004)	693331	120.000	122
	30 4-Chloroaniline	127	6.235	6.235	(1.012)	221194	120.000	107(A)
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	117112	120.000	125
	32 4-Chloro-3-methylphenol	107	6.812	6.812	(1.106)	192313	120.000	124
	33 2-Methylnaphthalene	142	7.015	7.015	(1.139)	471321	120.000	126
	34 1-Methylnaphthalene	142	7.138	7.138	(1.159)	431692	120.000	124
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	106697	120.000	125
	36 2,4,6-Trichlorophenol	196	7.357	7.357	(0.887)	133247	120.000	127
	37 2,4,5-Trichlorophenol	196	7.405	7.405	(0.892)	141282	120.000	127
$	38 2-Fluorobiphenyl (S)	172	7.459	7.459	(0.899)	363217	90.0000	92.8
	39 2-Chloronaphthalene	162	7.614	7.614	(0.918)	418211	120.000	122
	40 2-Nitroaniline	65	7.731	7.731	(0.932)	139842	120.000	126
	41 Dimethylphthalate	163	7.956	7.956	(0.959)	454925	120.000	123
	42 2,6-Dinitrotoluene	165	8.030	8.030	(0.968)	108342	120.000	126
	43 Acenaphthylene	152	8.132	8.132	(0.980)	657304	120.000	124(M)
	44 3-Nitroaniline	138	8.239	8.239	(0.993)	98600	120.000	106(A)
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	111897	40.0000	
	46 Acenaphthene	154	8.340	8.340	(1.005)	386380	120.000	124
	47 2,4-Dinitrophenol	184	8.367	8.367	(1.008)	53931	120.000	124(Q)
	48 4-Nitrophenol	65	8.452	8.452	(1.019)	93021	120.000	131
	49 2,4-Dinitrotoluene	165	8.527	8.527	(1.028)	140770	120.000	126
	50 Dibenzofuran	168	8.554	8.554	(1.031)	564769	120.000	121
	51 Diethylphthalate	149	8.826	8.826	(1.064)	436154	120.000	122
	52 4-Chlorophenylphenyl ether	204	8.971	8.971	(1.081)	212913	120.000	125
	53 4-Nitroaniline	138	9.003	9.003	(1.085)	127898	120.000	124
	54 Fluorene	166	8.981	8.981	(1.082)	461079	120.000	122
	55 4,6-Dinitro-2-methylphenol	198	9.035	9.035	(0.891)	78965	120.000	126
	56 N-Nitrosodiphenylamine	169	9.120	9.120	(0.899)	377980	120.000	123
	57 Azobenzene	77	9.168	9.168	(1.105)	416961	120.000	122
	58 1,2-Diphenylhydrazine	77	9.168	9.168	(1.105)	416961	120.000	122
$	59 2,4,6-Tribromophenol (S)	330	9.275	9.275	(1.118)	55207	120.000	129
	60 4-Bromophenylphenyl ether	248	9.580	9.580	(0.945)	113890	120.000	128
	61 Hexachlorobenzene	284	9.665	9.665	(0.953)	115195	120.000	122
	62 Pentachlorophenol	266	9.906	9.906	(0.977)	64043	120.000	123
*	63 Phenanthrene-d10	188	10.141	10.141	(1.000)	177286	40.0000	
	64 Phenanthrene	178	10.173	10.173	(1.003)	616373	120.000	122
	65 Anthracene	178	10.237	10.237	(1.009)	637026	120.000	124
	66 Carbazole	167	10.429	10.429	(1.028)	615119	120.000	123
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	754320	120.000	125
	68 Fluoranthene	202	11.653	11.653	(1.149)	685606	120.000	125
	69 Benzidine	184	11.802	11.802	(0.879)	277317	120.000	127(A)
	70 Pyrene	202	11.936	11.936	(0.889)	716184	120.000	120
$	71 Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	344422	90.0000	91.8
	72 Butylbenzylphthalate	149	12.710	12.710	(0.947)	345073	120.000	125
	73 bis(2-Ethylhexyl)phthalate	149	13.410	13.410	(0.999)	463787	120.000	120
	74 3,3'-Dichlorobenzidine	252	13.373	13.373	(0.996)	168216	120.000	104(A)
	75 Benzo(a)anthracene	228	13.415	13.415	(0.999)	656670	120.000	122
*	76 Chrysene-d12	240	13.426	13.426	(1.000)	175704	40.0000	(Q)
	77 Chrysene	228	13.464	13.464	(1.003)	607686	120.000	123

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.169	14.169	(1.055)	840462	120.000	123
79	Benzo(b)fluoranthene	252	14.687	14.687	(0.968)	631609	120.000	123
80	Benzo(k)fluoranthene	252	14.724	14.724	(0.970)	643726	120.000	123
81	Benzo(a)pyrene	252	15.114	15.114	(0.996)	598797	120.000	122
* 82	Perylene-d12	264	15.178	15.178	(1.000)	172580	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.877	16.877	(1.112)	655877	120.000	124
84	Dibenzo(a,h)anthracene	278	16.904	16.904	(1.114)	558311	120.000	124
85	Benzo(g,h,i)perylene	276	17.395	17.395	(1.146)	554058	120.000	124

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281414.D
Lab Smp Id: ICAL 10328-96 7
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 16:34
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

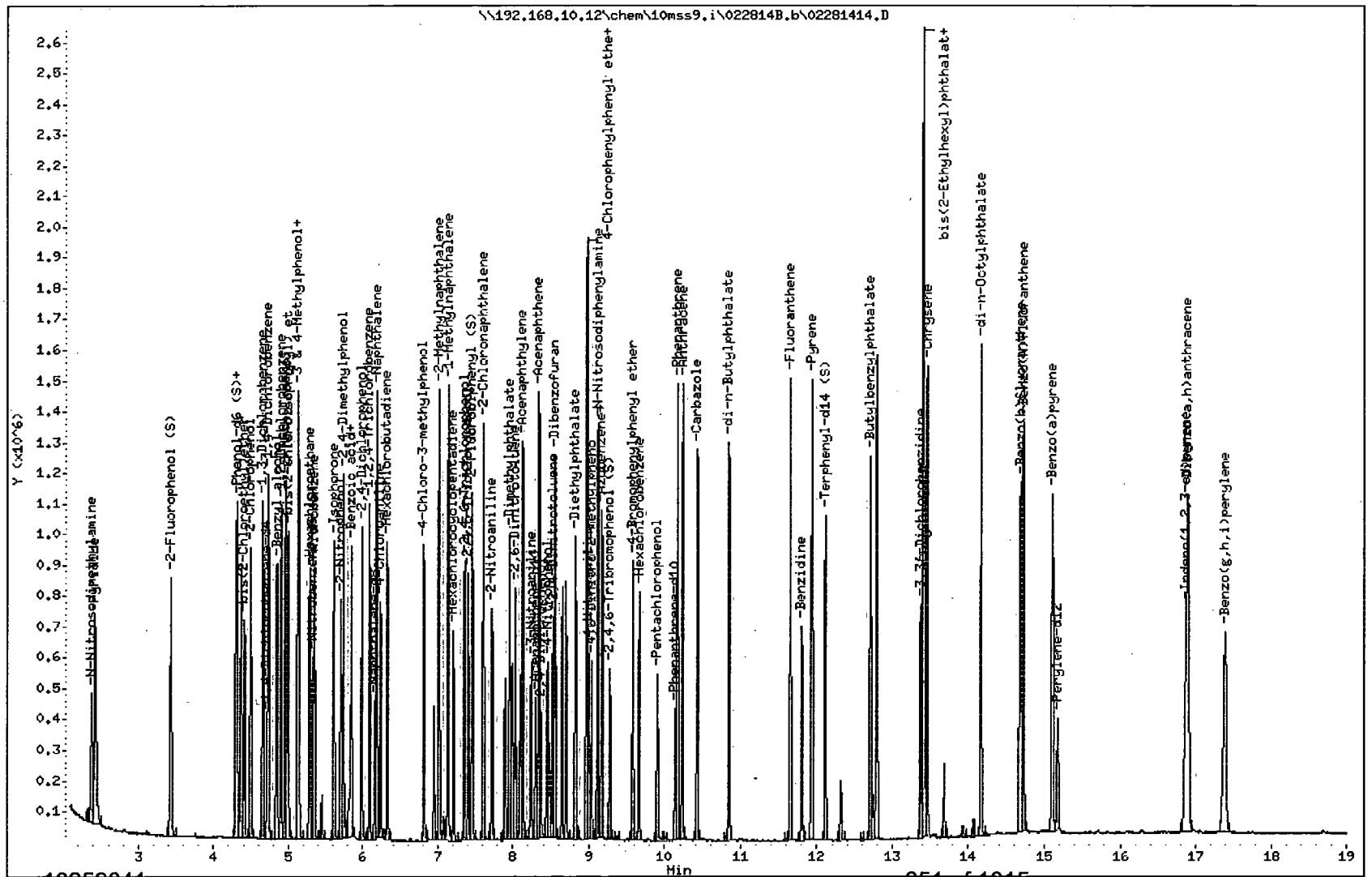
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	57140	-13.07
28 Naphthalene-d8	256733	128367	513466	224279	-12.64
45 Acenaphthene-d10	126640	63320	253280	111897	-11.64
63 Phenanthrene-d10	206748	103374	413496	177286	-14.25
76 Chrysene-d12	194855	97428	389710	175704	-9.83
82 Perylene-d12	186487	93244	372974	172580	-7.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.00
76 Chrysene-d12	13.43	12.93	13.93	13.43	-0.00
82 Perylene-d12	15.18	14.68	15.68	15.18	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

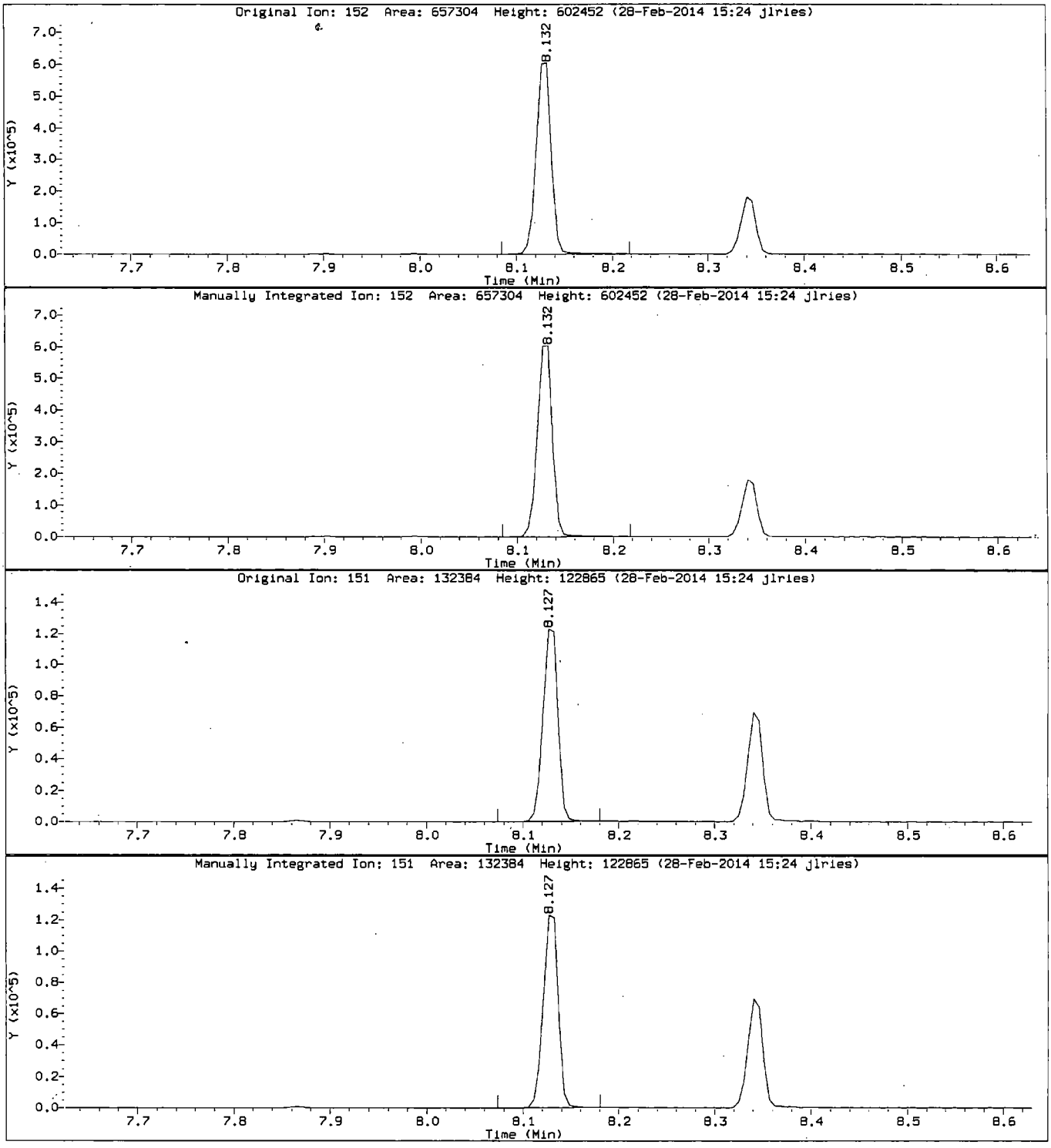
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Date : 28-FEB-2014 13:52
Client ID:
Sample Info: ICAL 10328-96 7
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

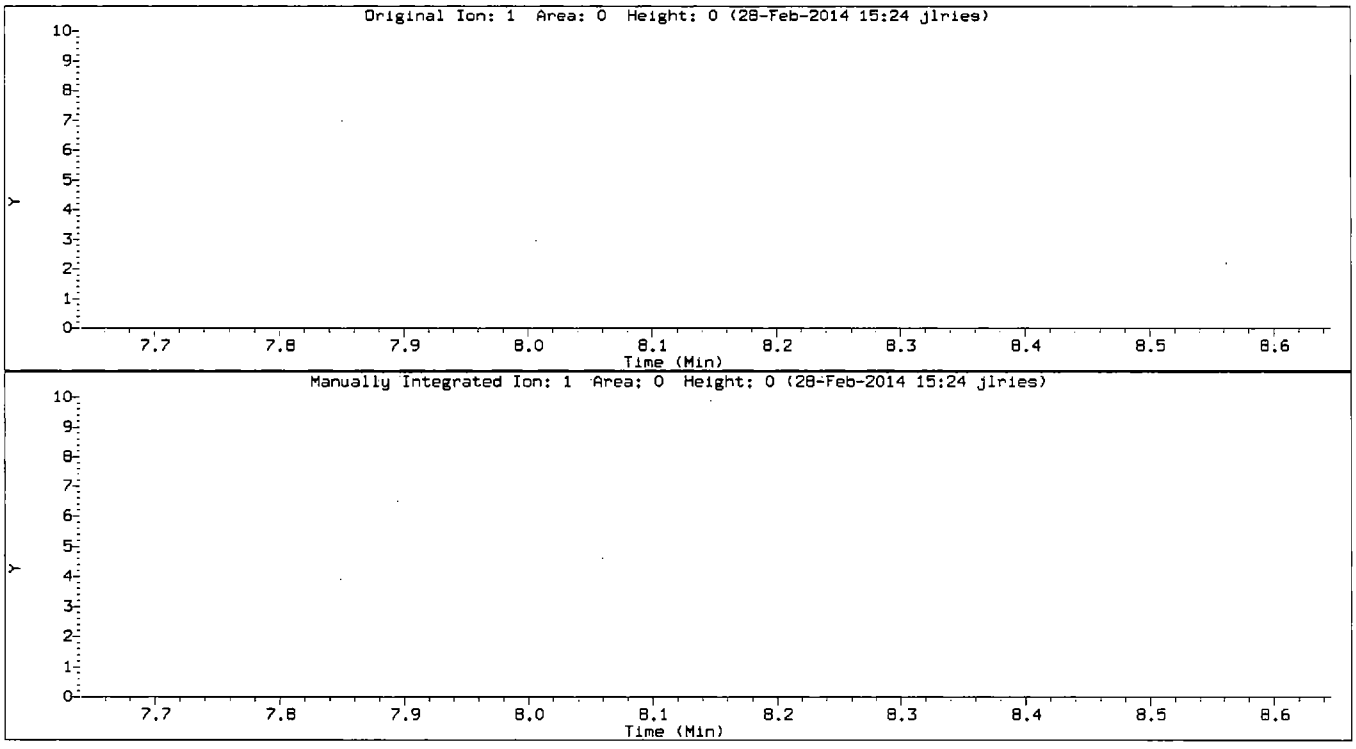


Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281414.D
Injection Date: 28-FEB-2014 13:52
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 7

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281414.D
Injection Date: 28-FEB-2014 13:52
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 7



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Lab Smp Id: ICAL 10328-96 6
Inj Date : 28-FEB-2014 14:19
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 6
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 13:52 Cal File: 02281414.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	111951	80.0000	82.4(Q)
2	Pyridine	79	2.421	2.421	(0.513)	197105	80.0000	79.7
$ 3	2-Fluorophenol (S)	112	3.436	3.436	(0.728)	183156	80.0000	78.1
$ 4	Phenol-d6 (S)	99	4.296	4.296	(0.911)	214596	80.0000	79.6
5	Phenol	94	4.312	4.312	(0.914)	222464	80.0000	78.6
6	bis(2-Chloroethyl)ether	63	4.414	4.414	(0.935)	163950	80.0000	77.7
7	2-Chlorophenol	128	4.499	4.499	(0.954)	183313	80.0000	77.1
8	1,3-Dichlorobenzene	146	4.665	4.665	(0.989)	205715	80.0000	76.7
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	66154	40.0000	
10	1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	208576	80.0000	76.7
11	Benzyl alcohol	79	4.846	4.846	(1.027)	132841	80.0000	81.7
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	196815	80.0000	77.4
13	2-Methylphenol	107	4.959	4.959	(1.051)	139889	80.0000	77.0
14	bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	414926	80.0000	76.8
15	3 & 4-Methylphenol	107	5.124	5.124	(1.086)	182895	80.0000	77.0
17	N-Nitroso-di-n-propylamine	70	5.135	5.135	(1.088)	105717	80.0000	77.1
18	Hexachloroethane	117	5.284	5.284	(1.120)	76753	80.0000	77.7
$ 19	Nitrobenzene-d5 (S)	82	5.322	5.322	(0.864)	132315	60.0000	59.9
20	Nitrobenzene	77	5.343	5.343	(0.867)	164971	80.0000	78.5
21	Isophorone	82	5.610	5.610	(0.911)	295025	80.0000	78.2
22	2-Nitrophenol	139	5.706	5.706	(0.926)	99583	80.0000	80.9
23	2,4-Dimethylphenol	107	5.739	5.739	(0.931)	168665	80.0000	78.7

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	
	24 Benzoic acid	105	5.840	5.840	(0.948)	93698	80.0000	85.0	
	25 bis(2-Chloroethoxy)methane	93	5.845	5.845	(0.949)	174111	80.0000	78.0	
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	146739	80.0000	79.3	
	27 1,2,4-Trichlorobenzene	180	6.091	6.091	(0.989)	152438	80.0000	78.5	
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	255442	40.0000		(Q)
	29 Naphthalene	128	6.187	6.187	(1.004)	499490	80.0000	77.1	
	30 4-Chloroaniline	127	6.235	6.235	(1.012)	169558	80.0000	72.0	
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	84386	80.0000	79.4	
	32 4-Chloro-3-methylphenol	107	6.812	6.812	(1.106)	140023	80.0000	79.6	
	33 2-Methylnaphthalene	142	7.015	7.015	(1.139)	336356	80.0000	78.7	
	34 1-Methylnaphthalene	142	7.138	7.138	(1.159)	312242	80.0000	78.8	
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	72646	80.0000	77.8	
	36 2,4,6-Trichlorophenol	196	7.357	7.357	(0.887)	92851	80.0000	79.1	
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	100395	80.0000	80.5	
$	38 2-Fluorobiphenyl (S)	172	7.459	7.459	(0.899)	261726	60.0000	59.6	
	39 2-Chloronaphthalene	162	7.614	7.614	(0.918)	300302	80.0000	78.3	
	40 2-Nitroaniline	65	7.731	7.731	(0.932)	97792	80.0000	78.2	
	41 Dimethylphthalate	163	7.956	7.956	(0.959)	326514	80.0000	78.5	
	42 2,6-Dinitrotoluene	165	8.025	8.025	(0.967)	78034	80.0000	80.6	
	43 Acenaphthylene	152	8.127	8.127	(0.979)	467834	80.0000	78.9	(M)
	44 3-Nitroaniline	138	8.239	8.239	(0.993)	76503	80.0000	73.5	
*	45 Acenaphthene-d10	164	8.297	8.297	(1.000)	125688	40.0000		
	46 Acenaphthene	154	8.340	8.340	(1.005)	275479	80.0000	78.6	
	47 2,4-Dinitrophenol	184	8.362	8.362	(1.008)	37043	80.0000	79.0	(Q)
	48 4-Nitrophenol	65	8.447	8.447	(1.018)	66656	80.0000	83.4	
	49 2,4-Dinitrotoluene	165	8.527	8.527	(1.028)	103075	80.0000	82.1	
	50 Dibenzofuran	168	8.554	8.554	(1.031)	406877	80.0000	77.7	
	51 Diethylphthalate	149	8.821	8.821	(1.063)	318198	80.0000	79.2	
	52 4-Chlorophenylphenyl ether	204	8.971	8.971	(1.081)	152862	80.0000	79.7	
	53 4-Nitroaniline	138	8.997	8.997	(1.084)	93764	80.0000	81.1	
	54 Fluorene	166	8.976	8.976	(1.082)	332290	80.0000	78.2	
	55 4,6-Dinitro-2-methylphenol	198	9.029	9.029	(0.890)	53975	80.0000	77.3	
	56 N-Nitrosodiphenylamine	169	9.115	9.115	(0.899)	275008	80.0000	78.9	
	57 Azobenzene	77	9.168	9.168	(1.105)	299694	80.0000	77.9	
	58 1,2-Diphenylhydrazine	77	9.168	9.168	(1.105)	299694	80.0000	77.9	
$	59 2,4,6-Tribromophenol (S)	330	9.275	9.275	(1.118)	40645	80.0000	84.7	
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.944)	80729	80.0000	79.4	
	61 Hexachlorobenzene	284	9.660	9.660	(0.953)	82114	80.0000	76.1	
	62 Pentachlorophenol	266	9.900	9.900	(0.976)	44762	80.0000	79.4	
*	63 Phenanthrene-d10	188	10.141	10.141	(1.000)	201900	40.0000		
	64 Phenanthrene	178	10.173	10.173	(1.003)	448467	80.0000	77.8	
	65 Anthracene	178	10.231	10.231	(1.009)	460362	80.0000	78.7	
	66 Carbazole	167	10.429	10.429	(1.028)	449902	80.0000	79.2	
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	552218	80.0000	80.1	
	68 Fluoranthene	202	11.647	11.647	(1.149)	496336	80.0000	79.2	
	69 Benzidine	184	11.802	11.802	(0.879)	208073	80.0000	75.4	
	70 Pyrene	202	11.936	11.936	(0.889)	523886	80.0000	76.9	
$	71 Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	253442	60.0000	59.0	
	72 Butylbenzylphthalate	149	12.710	12.710	(0.947)	243538	80.0000	77.3	
	73 bis(2-Ethylhexyl)phthalate	149	13.410	13.410	(0.999)	337993	80.0000	76.7	
	74 3,3'-Dichlorobenzidine	252	13.367	13.367	(0.996)	127669	80.0000	68.7	
	75 Benzo(a)anthracene	228	13.410	13.410	(0.999)	479026	80.0000	77.6	
*	76 Chrysene-d12	240	13.426	13.426	(1.000)	201053	40.0000		(Q)
	77 Chrysene	228	13.458	13.458	(1.002)	436301	80.0000	77.4	

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.169	14.169	(1.055)	615027	80.0000	78.7
79	Benzo(b)fluoranthene	252	14.681	14.681	(0.967)	449310	80.0000	78.7
80	Benzo(k)fluoranthene	252	14.719	14.719	(0.970)	467999	80.0000	80.1
81	Benzo(a)pyrene	252	15.109	15.109	(0.995)	431306	80.0000	79.1
* 82	Perylene-d12	264	15.178	15.178	(1.000)	192241	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.877	16.877	(1.112)	478094	80.0000	81.2
84	Dibenzo(a,h)anthracene	278	16.893	16.893	(1.113)	406777	80.0000	81.3
85	Benzo(g,h,i)perylene	276	17.385	17.385	(1.145)	400711	80.0000	80.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281415.D
Lab Smp Id: ICAL 10328-96 6
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

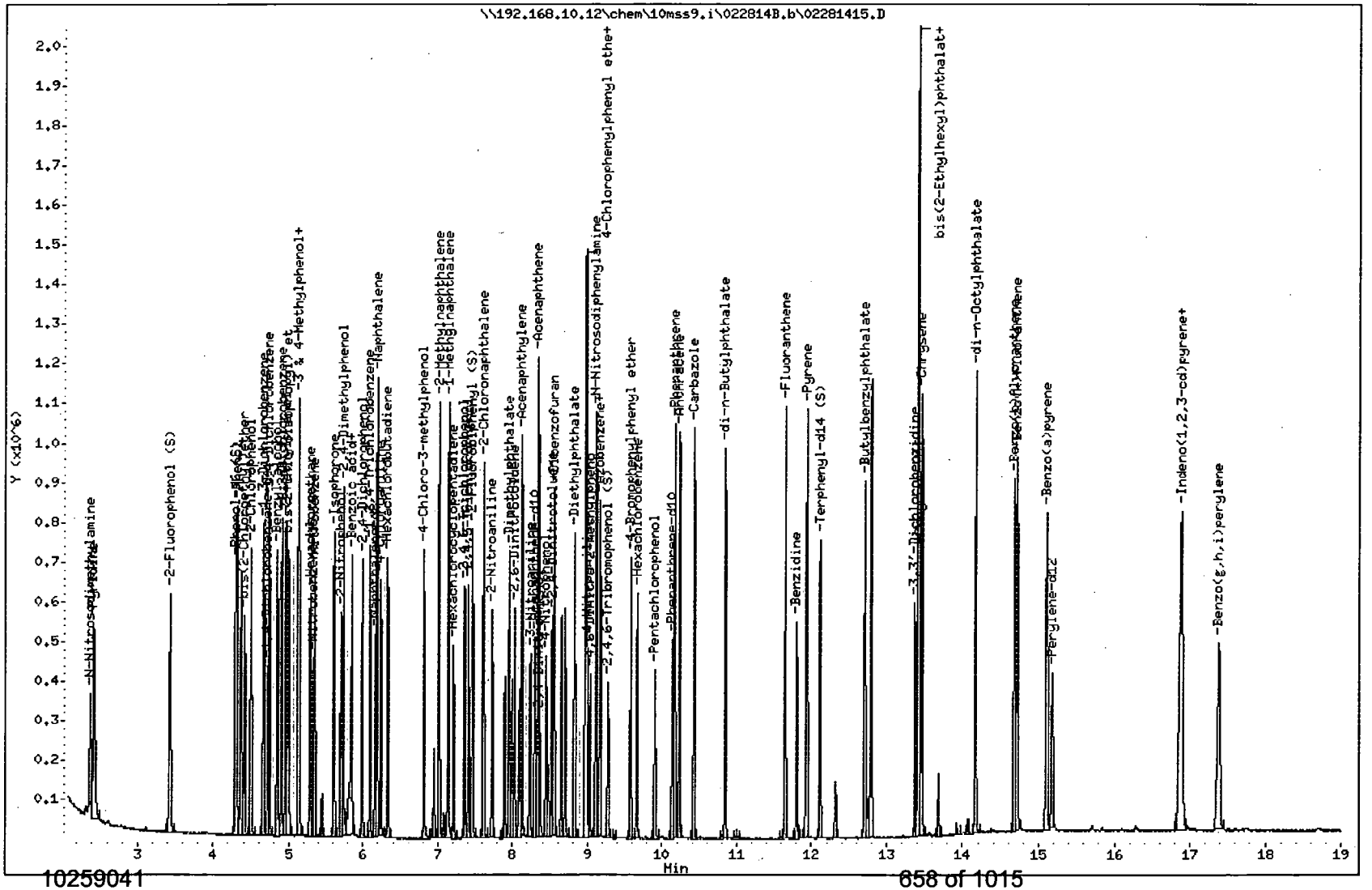
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	66154	0.64
28 Naphthalene-d8	256733	128367	513466	255442	-0.50
45 Acenaphthene-d10	126640	63320	253280	125688	-0.75
63 Phenanthrene-d10	206748	103374	413496	201900	-2.34
76 Chrysene-d12	194855	97428	389710	201053	3.18
82 Perylene-d12	186487	93244	372974	192241	3.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.00
76 Chrysene-d12	13.43	12.93	13.93	13.43	-0.00
82 Perylene-d12	15.18	14.68	15.68	15.18	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

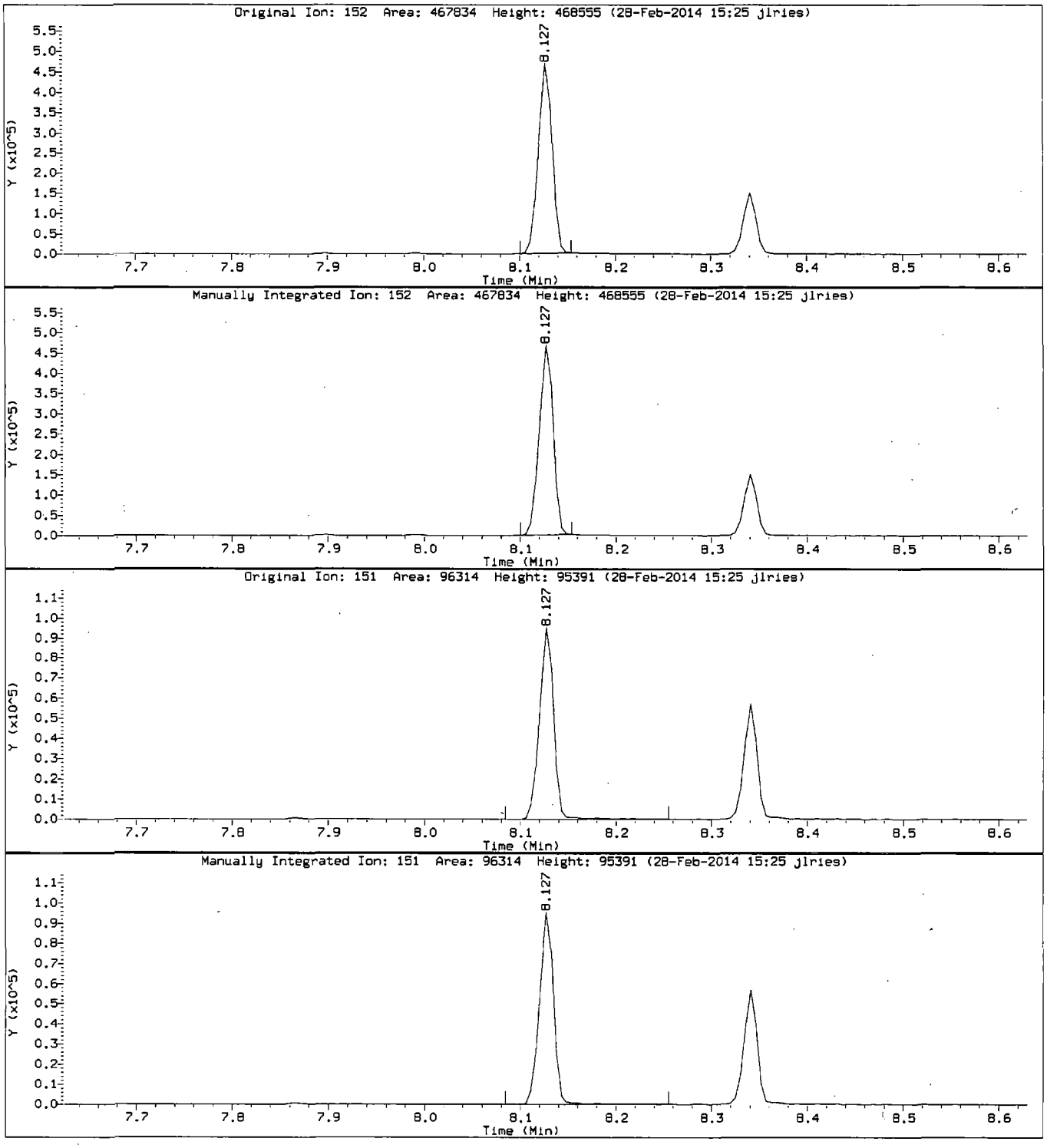
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Date : 28-FEB-2014 14:19
Client ID:
Sample Info: ICAL 10328-96 6
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

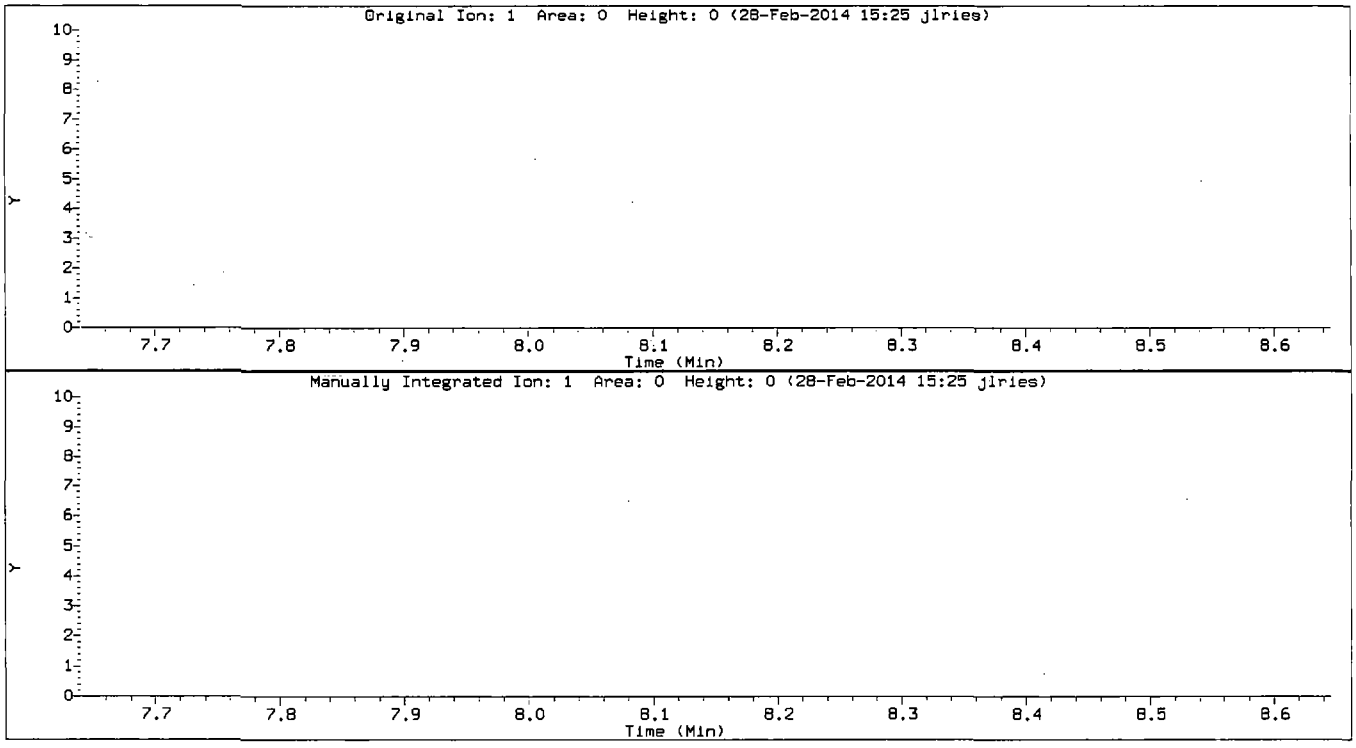


Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281415.D
Injection Date: 28-FEB-2014 14:19
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 6

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281415.D
Injection Date: 28-FEB-2014 14:19
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 6



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Lab Smp Id: ICAL 10328-96 5
Inj Date : 28-FEB-2014 14:46
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 5
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 14:19 Cal File: 02281415.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	56918	40.0000	41.8(Q)
	2 Pyridine	79	2.416	2.416	(0.512)	102123	40.0000	41.3
$	3 2-Fluorophenol (S)	112	3.431	3.431	(0.727)	94960	40.0000	40.5
$	4 Phenol-d6 (S)	99	4.291	4.291	(0.909)	107575	40.0000	39.9
	5 Phenol	94	4.307	4.307	(0.913)	111471	40.0000	39.4
	6 bis(2-Chloroethyl)ether	63	4.408	4.408	(0.934)	84675	40.0000	40.1
	7 2-Chlorophenol	128	4.499	4.499	(0.954)	94458	40.0000	39.7
	8 1,3-Dichlorobenzene	146	4.659	4.659	(0.988)	107015	40.0000	39.9
*	9 1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	66214	40.0000	
	10 1,4-Dichlorobenzene	146	4.734	4.734	(1.003)	107372	40.0000	39.4
	11 Benzyl alcohol	79	4.841	4.841	(1.026)	66888	40.0000	41.1
	12 1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	100696	40.0000	39.6
	13 2-Methylphenol	107	4.953	4.953	(1.050)	73079	40.0000	40.2
	14 bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	215829	40.0000	39.9
	15 3 & 4-Methylphenol	107	5.124	5.124	(1.086)	93332	40.0000	39.2
	17 N-Nitroso-di-n-propylamine	70	5.130	5.130	(1.087)	55425	40.0000	40.4
	18 Hexachloroethane	117	5.279	5.279	(1.119)	39344	40.0000	39.8
$	19 Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	66651	30.0000	29.4
	20 Nitrobenzene	77	5.338	5.338	(0.866)	84437	40.0000	39.1
	21 Isophorone	82	5.605	5.605	(0.910)	151162	40.0000	39.0
	22 2-Nitrophenol	139	5.707	5.707	(0.926)	48079	40.0000	38.0
	23 2,4-Dimethylphenol	107	5.733	5.733	(0.931)	85161	40.0000	38.7

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	5.819	5.819	(0.945)	46483	40.0000	41.0
	25 bis(2-Chloroethoxy)methane	93	5.845	5.845	(0.949)	90610	40.0000	39.5
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	73544	40.0000	38.7
	27 1,2,4-Trichlorobenzene	180	6.086	6.086	(0.988)	78252	40.0000	39.2
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	262409	40.0000	
	29 Naphthalene	128	6.187	6.187	(1.004)	262892	40.0000	39.5
	30 4-Chloroaniline	127	6.235	6.235	(1.012)	98710	40.0000	40.8
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	42698	40.0000	39.1
	32 4-Chloro-3-methylphenol	107	6.812	6.812	(1.106)	70759	40.0000	39.1
	33 2-Methylnaphthalene	142	7.015	7.015	(1.139)	172696	40.0000	39.3
	34 1-Methylnaphthalene	142	7.138	7.138	(1.159)	157915	40.0000	38.8
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	34429	40.0000	37.7
	36 2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	47244	40.0000	38.8
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	49712	40.0000	38.4
$	38 2-Fluorobiphenyl (S)	172	7.453	7.453	(0.898)	131987	30.0000	29.0
	39 2-Chloronaphthalene	162	7.608	7.608	(0.917)	152114	40.0000	38.3
	40 2-Nitroaniline	65	7.726	7.726	(0.931)	51847	40.0000	40.0
	41 Dimethylphthalate	163	7.945	7.945	(0.958)	167509	40.0000	38.9
	42 2,6-Dinitrotoluene	165	8.025	8.025	(0.967)	38487	40.0000	38.4
	43 Acenaphthylene	152	8.121	8.121	(0.979)	242747	40.0000	39.5(M)
	44 3-Nitroaniline	138	8.233	8.233	(0.992)	43630	40.0000	40.4
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	130288	40.0000	
	46 Acenaphthene	154	8.335	8.335	(1.004)	142210	40.0000	39.2
	47 2,4-Dinitrophenol	184	8.362	8.362	(1.008)	16083	40.0000	36.8(Q)
	48 4-Nitrophenol	65	8.442	8.442	(1.017)	32783	40.0000	39.6
	49 2,4-Dinitrotoluene	165	8.522	8.522	(1.027)	51545	40.0000	39.6
	50 Dibenzofuran	168	8.549	8.549	(1.030)	209648	40.0000	38.6
	51 Diethylphthalate	149	8.816	8.816	(1.062)	161220	40.0000	38.7
	52 4-Chlorophenylphenyl ether	204	8.965	8.965	(1.080)	79547	40.0000	40.0
	53 4-Nitroaniline	138	8.987	8.987	(1.083)	46365	40.0000	38.7
	54 Fluorene	166	8.976	8.976	(1.082)	174640	40.0000	39.6
	55 4,6-Dinitro-2-methylphenol	198	9.029	9.029	(0.891)	26289	40.0000	38.3
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	142661	40.0000	39.4
	57 Azobenzene	77	9.163	9.163	(1.104)	155396	40.0000	39.0
	58 1,2-Diphenylhydrazine	77	9.163	9.163	(1.104)	155396	40.0000	39.0
$	59 2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.117)	20170	40.0000	40.5
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.945)	39479	40.0000	37.4
	61 Hexachlorobenzene	284	9.660	9.660	(0.953)	42687	40.0000	38.1
	62 Pentachlorophenol	266	9.900	9.900	(0.977)	20378	40.0000	37.9
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	209792	40.0000	
	64 Phenanthrene	178	10.167	10.167	(1.003)	232332	40.0000	38.8
	65 Anthracene	178	10.231	10.231	(1.009)	238937	40.0000	39.3
	66 Carbazole	167	10.429	10.429	(1.029)	231437	40.0000	39.2
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	277838	40.0000	38.8
	68 Fluoranthene	202	11.647	11.647	(1.149)	253351	40.0000	38.9
	69 Benzidine	184	11.802	11.802	(0.879)	120421	40.0000	40.2
	70 Pyrene	202	11.930	11.930	(0.889)	262918	40.0000	39.0
$	71 Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	126386	30.0000	29.7
	72 Butylbenzylphthalate	149	12.710	12.710	(0.947)	123628	40.0000	39.6
	73 bis(2-Ethylhexyl)phthalate	149	13.405	13.405	(0.999)	177570	40.0000	40.7
	74 3,3'-Dichlorobenzidine	252	13.367	13.367	(0.996)	71113	40.0000	38.7
	75 Benzo(a)anthracene	228	13.410	13.410	(0.999)	241219	40.0000	39.5
*	76 Chrysene-d12	240	13.421	13.421	(1.000)	198936	40.0000	
	77 Chrysene	228	13.453	13.453	(1.002)	219495	40.0000	39.4

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.163	14.163	(1.055)	307488	40.0000	39.8
79	Benzo(b)fluoranthene	252	14.676	14.676	(0.967)	220798	40.0000	38.6
80	Benzo(k)fluoranthene	252	14.708	14.708	(0.969)	230287	40.0000	39.3
81	Benzo(a)pyrene	252	15.098	15.098	(0.995)	216242	40.0000	39.5
* 82	Perylene-d12	264	15.178	15.178	(1.000)	192771	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.861	16.861	(1.111)	231456	40.0000	39.2
84	Dibenzo(a,h)anthracene	278	16.883	16.883	(1.112)	196789	40.0000	39.2
85	Benzo(g,h,i)perylene	276	17.369	17.369	(1.144)	197203	40.0000	39.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281416.D
Lab Smp Id: ICAL 10328-96 5
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

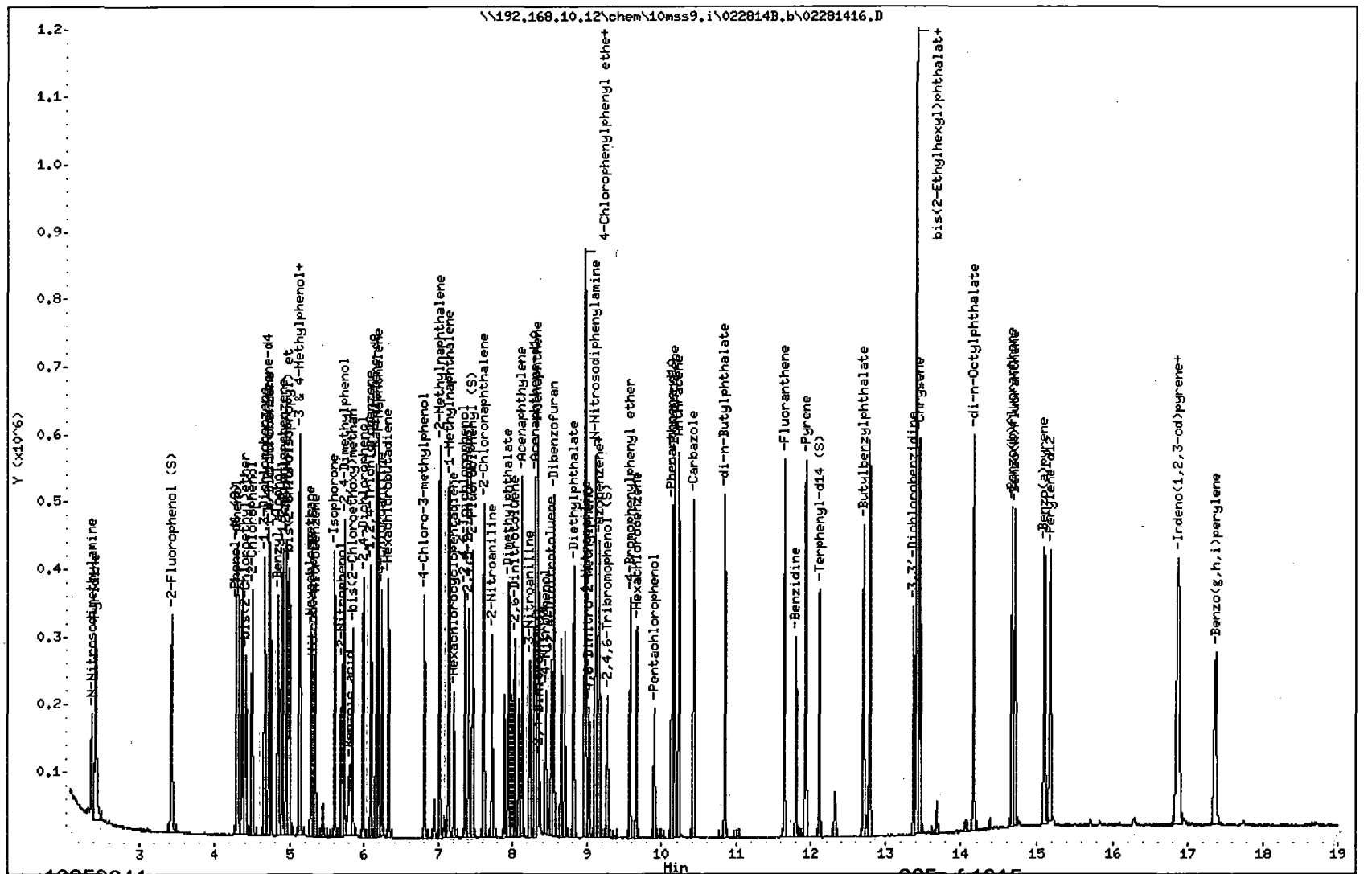
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	66214	0.73
28 Naphthalene-d8	256733	128367	513466	262409	2.21
45 Acenaphthene-d10	126640	63320	253280	130288	2.88
63 Phenanthrene-d10	206748	103374	413496	209792	1.47
76 Chrysene-d12	194855	97428	389710	198936	2.09
82 Perylene-d12	186487	93244	372974	192771	3.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.18	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

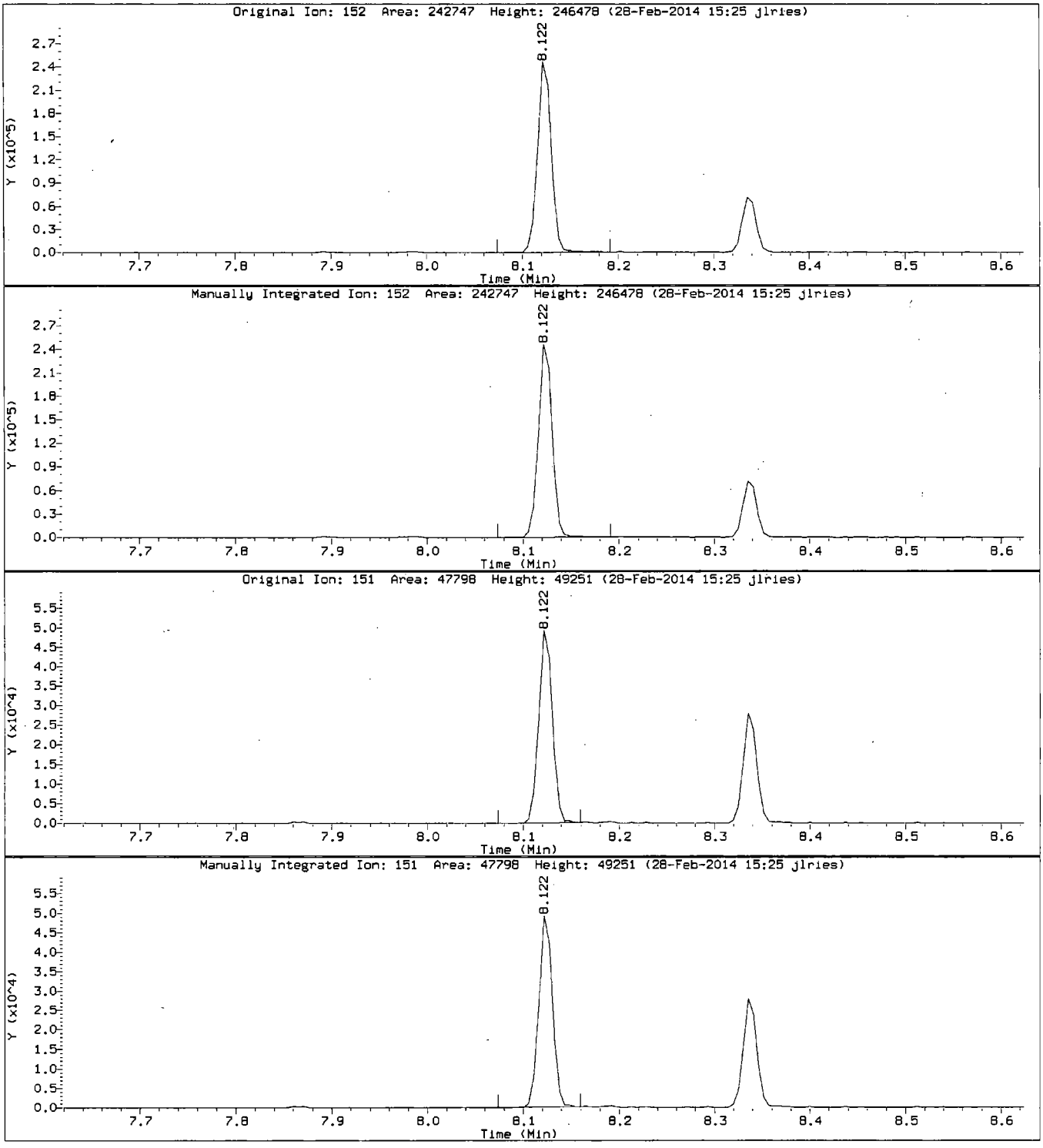
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Date : 28-FEB-2014 14:46
Client ID:
Sample Info: ICAL 10328-96 5
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

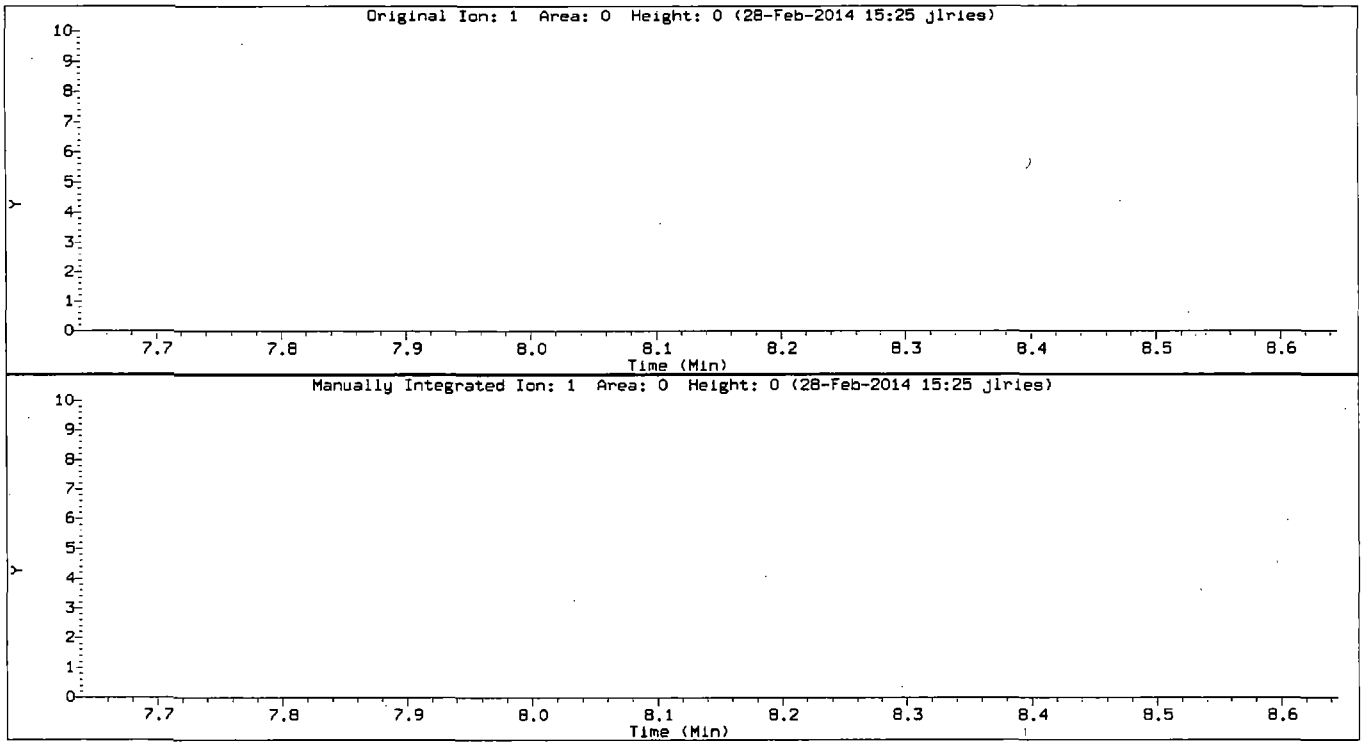


Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281416.D
Injection Date: 28-FEB-2014 14:46
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 5

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281416.D
Injection Date: 28-FEB-2014 14:46
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 5



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Lab Smp Id: ICAL 10328-96 4
Inj Date : 28-FEB-2014 15:13
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 4
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 14:46 Cal File: 02281416.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	26015	20.0000	19.9
2	Pyridine	79	2.421	2.421	(0.513)	47390	20.0000	20.0
$ 3	2-Fluorophenol (S)	112	3.431	3.431	(0.727)	46791	20.0000	20.8(M)
$ 4	Phenol-d6 (S)	99	4.291	4.291	(0.909)	53622	20.0000	20.7
5	Phenol	94	4.307	4.307	(0.913)	56935	20.0000	21.0
6	bis(2-Chloroethyl)ether	63	4.408	4.408	(0.934)	42667	20.0000	21.1
7	2-Chlorophenol	128	4.499	4.499	(0.954)	47231	20.0000	20.7
8	1,3-Dichlorobenzene	146	4.660	4.660	(0.988)	53991	20.0000	21.0
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	63506	40.0000	
10	1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	54390	20.0000	20.8
11	Benzyl alcohol	79	4.841	4.841	(1.026)	32689	20.0000	20.9
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	52296	20.0000	21.4
13	2-Methylphenol	107	4.953	4.953	(1.050)	35303	20.0000	20.2
14	bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	110200	20.0000	21.2
15	3 & 4-Methylphenol	107	5.119	5.119	(1.085)	47880	20.0000	21.0
17	N-Nitroso-di-n-propylamine	70	5.130	5.130	(1.087)	28620	20.0000	21.7
18	Hexachloroethane	117	5.279	5.279	(1.119)	20030	20.0000	21.1
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	33976	15.0000	15.6
20	Nitrobenzene	77	5.338	5.338	(0.866)	42998	20.0000	20.8
21	Isophorone	82	5.605	5.605	(0.910)	78559	20.0000	21.2
22	2-Nitrophenol	139	5.701	5.701	(0.925)	24207	20.0000	20.0
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	44747	20.0000	21.2

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	5.797	5.797	(0.941)	22303	20.0000	20.6
	25 bis(2-Chloroethoxy)methane	93	5.840	5.840	(0.948)	46222	20.0000	21.1
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	37720	20.0000	20.7
	27 1,2,4-Trichlorobenzene	180	6.086	6.086	(0.988)	39457	20.0000	20.7
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	250866	40.0000	(Q)
	29 Naphthalene	128	6.182	6.182	(1.003)	133400	20.0000	21.0
	30 4-Chloroaniline	127	6.235	6.235	(1.012)	52404	20.0000	22.7
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	21934	20.0000	21.0
	32 4-Chloro-3-methylphenol	107	6.807	6.807	(1.105)	35968	20.0000	20.8
	33 2-Methylnaphthalene	142	7.015	7.015	(1.139)	85678	20.0000	20.4
	34 1-Methylnaphthalene	142	7.133	7.133	(1.158)	82296	20.0000	21.1
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	15640	20.0000	19.9
	36 2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	23542	20.0000	20.3
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	24934	20.0000	20.2
$	38 2-Fluorobiphenyl (S)	172	7.454	7.454	(0.898)	67365	15.0000	15.5
	39 2-Chloronaphthalene	162	7.608	7.608	(0.917)	78638	20.0000	20.7
	40 2-Nitroaniline	65	7.726	7.726	(0.931)	24868	20.0000	20.1
	41 Dimethylphthalate	163	7.945	7.945	(0.958)	87338	20.0000	21.2
	42 2,6-Dinitrotoluene	165	8.020	8.020	(0.967)	20573	20.0000	21.5
	43 Acenaphthylene	152	8.121	8.121	(0.979)	123016	20.0000	21.0 (M)
	44 3-Nitroaniline	138	8.228	8.228	(0.992)	24103	20.0000	23.4
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	124370	40.0000	
	46 Acenaphthene	154	8.335	8.335	(1.004)	71233	20.0000	20.6
	47 2,4-Dinitrophenol	184	8.356	8.356	(1.007)	6442	20.0000	18.9 (Q)
	48 4-Nitrophenol	65	8.436	8.436	(1.017)	16257	20.0000	20.6
	49 2,4-Dinitrotoluene	165	8.517	8.517	(1.026)	25974	20.0000	20.9
	50 Dibenzofuran	168	8.549	8.549	(1.030)	110081	20.0000	21.2
	51 Diethylphthalate	149	8.816	8.816	(1.062)	82143	20.0000	20.6
	52 4-Chlorophenylphenyl ether	204	8.965	8.965	(1.080)	38827	20.0000	20.5
	53 4-Nitroaniline	138	8.981	8.981	(1.082)	23798	20.0000	20.8
	54 Fluorene	166	8.971	8.971	(1.081)	89060	20.0000	21.2
	55 4,6-Dinitro-2-methylphenol	198	9.024	9.024	(0.890)	11832	20.0000	20.1
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	72627	20.0000	21.2
	57 Azobenzene	77	9.163	9.163	(1.104)	80133	20.0000	21.0
	58 1,2-Diphenylhydrazine	77	9.163	9.163	(1.104)	80133	20.0000	21.0
$	59 2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.117)	9803	20.0000	20.6
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.945)	21034	20.0000	21.0
	61 Hexachlorobenzene	284	9.660	9.660	(0.953)	22122	20.0000	20.8
	62 Pentachlorophenol	266	9.900	9.900	(0.977)	8649	20.0000	19.2
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	198494	40.0000	
	64 Phenanthrene	178	10.167	10.167	(1.003)	117303	20.0000	20.7
	65 Anthracene	178	10.231	10.231	(1.009)	119974	20.0000	20.8
	66 Carbazole	167	10.424	10.424	(1.028)	116812	20.0000	20.9
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	139051	20.0000	20.5
	68 Fluoranthene	202	11.647	11.647	(1.149)	128995	20.0000	20.9
	69 Benzidine	184	11.797	11.797	(0.879)	66277	20.0000	21.5
	70 Pyrene	202	11.930	11.930	(0.889)	135762	20.0000	21.1
$	71 Terphenyl-d14 (S)	244	12.107	12.107	(0.902)	63675	15.0000	15.7
	72 Butylbenzylphthalate	149	12.705	12.705	(0.947)	62645	20.0000	21.0
	73 bis(2-Ethylhexyl)phthalate	149	13.405	13.405	(0.999)	90258	20.0000	21.7
	74 3,3'-Dichlorobenzidine	252	13.362	13.362	(0.996)	37173	20.0000	21.2
	75 Benzo(a)anthracene	228	13.405	13.405	(0.999)	121153	20.0000	20.8
*	76 Chrysene-d12	240	13.421	13.421	(1.000)	189835	40.0000	(Q)
	77 Chrysene	228	13.453	13.453	(1.002)	111421	20.0000	20.9

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.163	14.163	(1.055)	154307	20.0000	20.9
79	Benzo(b)fluoranthene	252	14.676	14.676	(0.967)	113872	20.0000	20.9
80	Benzo(k)fluoranthene	252	14.708	14.708	(0.969)	114920	20.0000	20.6
81	Benzo(a)pyrene	252	15.098	15.098	(0.995)	110112	20.0000	21.1
* 82	Perylene-d12	264	15.173	15.173	(1.000)	183639	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.851	16.851	(1.111)	115545	20.0000	20.6
84	Dibenzo(a,h)anthracene	278	16.872	16.872	(1.112)	98277	20.0000	20.6
85	Benzo(g,h,i)perylene	276	17.363	17.363	(1.144)	99014	20.0000	20.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281417.D
Lab Smp Id: ICAL 10328-96 4
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19
Level: LOW
Sample Type: WATER

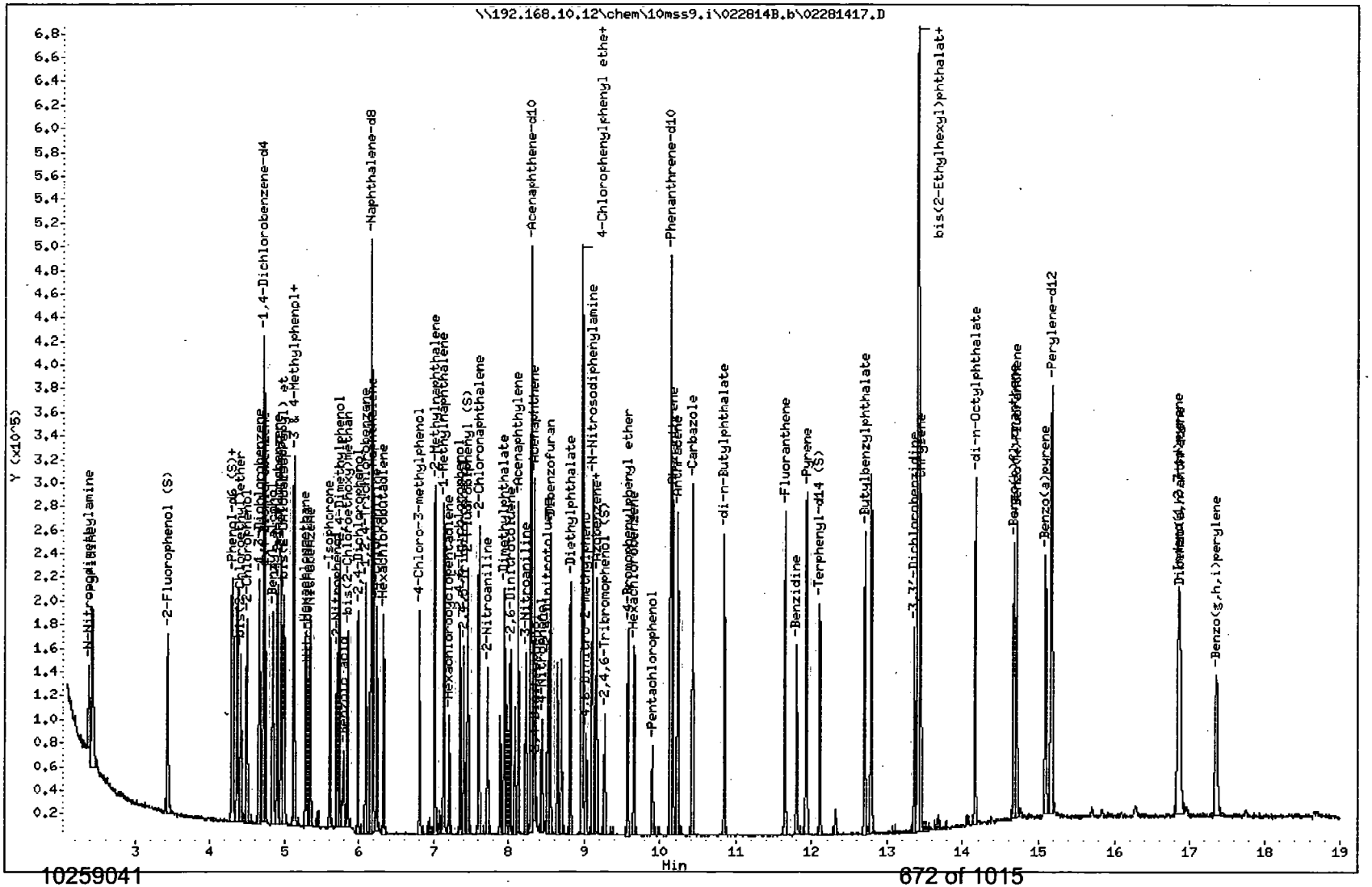
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	63506	-3.39
28 Naphthalene-d8	256733	128367	513466	250866	-2.29
45 Acenaphthene-d10	126640	63320	253280	124370	-1.79
63 Phenanthrene-d10	206748	103374	413496	198494	-3.99
76 Chrysene-d12	194855	97428	389710	189835	-2.58
82 Perylene-d12	186487	93244	372974	183639	-1.53

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.04

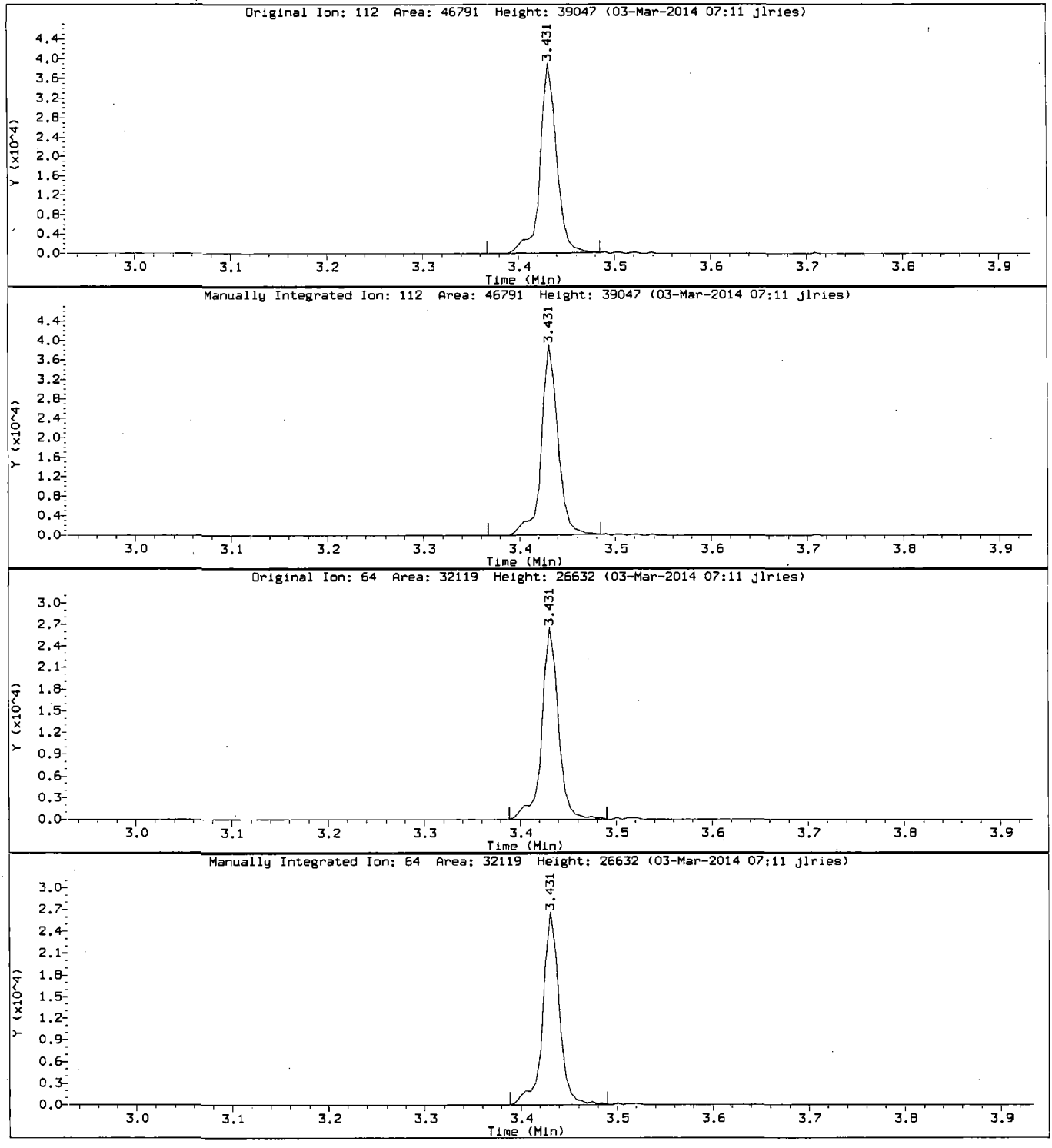
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Date : 28-FEB-2014 15:13
Client ID:
Instrument: 10mss9.i
Sample Info: ICAL 10328-96 4
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



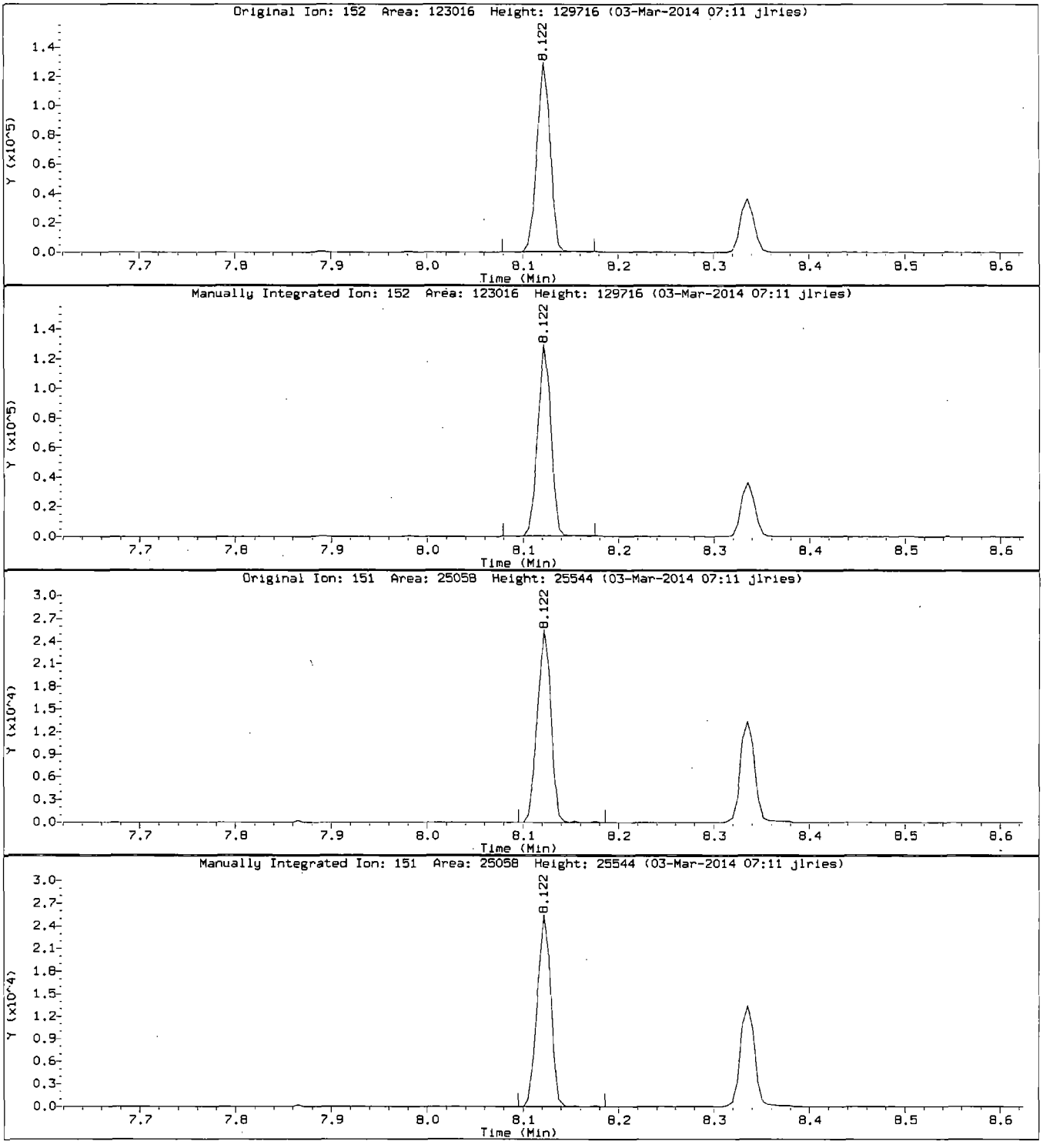
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281417.D
Injection Date: 28-FEB-2014 15:13
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 4

Compound: 2-Fluorophenol (S)
CAS Number: 367-12-4

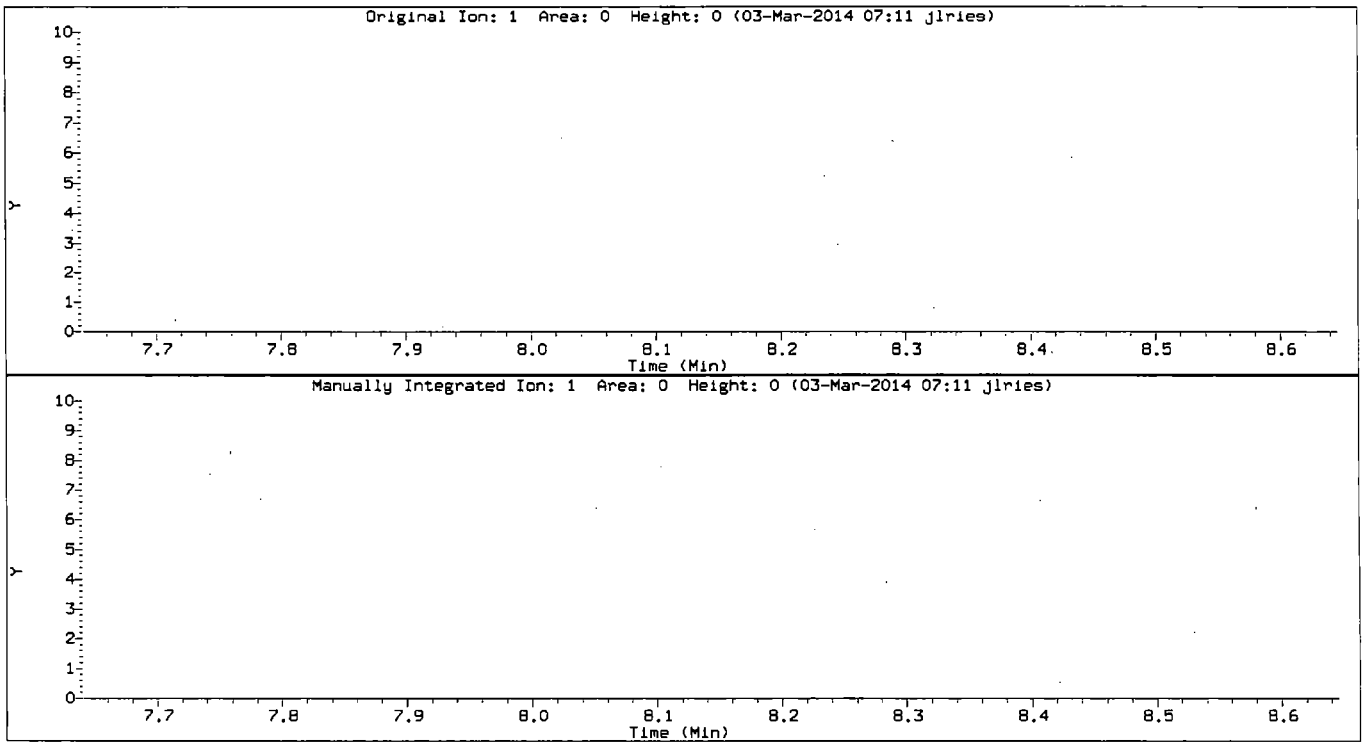


Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281417.D
Injection Date: 28-FEB-2014 15:13
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 4

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281417.D
Injection Date: 28-FEB-2014 15:13
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 4



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Lab Smp Id: ICAL 10328-96 3
Inj Date : 28-FEB-2014 15:40
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 3
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 15:13 Cal File: 02281417.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.378	2.378	(0.504)	15599	10.0000	9.6(a)
2	Pyridine	79	2.421	2.421	(0.513)	30153	10.0000	10.2
$ 3	2-Fluorophenol (S)	112	3.431	3.431	(0.727)	27877	10.0000	9.9(aM)
$ 4	Phenol-d6 (S)	99	4.291	4.291	(0.909)	31904	10.0000	9.9(a)
5	Phenol	94	4.307	4.307	(0.913)	34374	10.0000	10.1
6	bis(2-Chloroethyl)ether	63	4.408	4.408	(0.934)	25103	10.0000	9.9(a)
7	2-Chlorophenol	128	4.499	4.499	(0.954)	27449	10.0000	9.6(a)
8	1,3-Dichlorobenzene	146	4.660	4.660	(0.988)	33026	10.0000	10.3
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	79179	40.0000	
10	1,4-Dichlorobenzene	146	4.734	4.734	(1.003)	32625	10.0000	10.0
11	Benzyl alcohol	79	4.841	4.841	(1.026)	17632	10.0000	9.0(a)
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	29516	10.0000	9.7(a)
13	2-Methylphenol	107	4.953	4.953	(1.050)	21368	10.0000	9.8(a)
14	bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	64305	10.0000	9.9(a)
15	3 & 4-Methylphenol	107	5.119	5.119	(1.085)	28378	10.0000	10
17	N-Nitroso-di-n-propylamine	70	5.130	5.130	(1.087)	15969	10.0000	9.7(a)
18	Hexachloroethane	117	5.279	5.279	(1.119)	11296	10.0000	9.6(a)
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	19716	7.50000	7.5(a)
20	Nitrobenzene	77	5.338	5.338	(0.866)	25156	10.0000	10.1
21	Isophorone	82	5.605	5.605	(0.910)	44935	10.0000	10.0
22	2-Nitrophenol	139	5.701	5.701	(0.925)	14155	10.0000	9.7(a)
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	25539	10.0000	10.0

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	5.781	5.781	(0.938)	12879	10.0000	9.8(aM)
	25 bis(2-Chloroethoxy)methane	93	5.840	5.840	(0.948)	26835	10.0000	10.1
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	22243	10.0000	10.1
	27 1,2,4-Trichlorobenzene	180	6.086	6.086	(0.988)	23150	10.0000	10.0
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	303763	40.0000	(Q)
	29 Naphthalene	128	6.182	6.182	(1.003)	79404	10.0000	10.3
	30 4-Chloroaniline	127	6.230	6.230	(1.011)	32087	10.0000	11.5
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	12499	10.0000	9.9(a)
	32 4-Chloro-3-methylphenol	107	6.807	6.807	(1.105)	21482	10.0000	10.3
	33 2-Methylnaphthalene	142	7.016	7.016	(1.139)	52962	10.0000	10.4
	34 1-Methylnaphthalene	142	7.133	7.133	(1.158)	48756	10.0000	10.3
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	8113	10.0000	10.7
	36 2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	13652	10.0000	9.8(a)
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	15242	10.0000	10.3
$	38 2-Fluorobiphenyl (S)	172	7.454	7.454	(0.898)	39788	7.50000	7.6(a)
	39 2-Chloronaphthalene	162	7.608	7.608	(0.917)	46695	10.0000	10.3
	40 2-Nitroaniline	65	7.721	7.721	(0.930)	15594	10.0000	10.5
	41 Dimethylphthalate	163	7.945	7.945	(0.958)	50143	10.0000	10.2
	42 2,6-Dinitrotoluene	165	8.020	8.020	(0.967)	11397	10.0000	9.9(a)
	43 Acenaphthylene	152	8.121	8.121	(0.979)	72641	10.0000	10.3(M)
	44 3-Nitroaniline	138	8.228	8.228	(0.992)	13979	10.0000	11.3
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	149118	40.0000	
	46 Acenaphthene	154	8.335	8.335	(1.004)	42749	10.0000	10.3
	47 2,4-Dinitrophenol	184	8.362	8.362	(1.008)	2701	10.0000	10.5(Q)
	48 4-Nitrophenol	65	8.437	8.437	(1.017)	9268	10.0000	9.8(a)
	49 2,4-Dinitrotoluene	165	8.517	8.517	(1.026)	14886	10.0000	10
	50 Dibenzofuran	168	8.549	8.549	(1.030)	64508	10.0000	10.4
	51 Diethylphthalate	149	8.816	8.816	(1.062)	49380	10.0000	10.4
	52 4-Chlorophenylphenyl ether	204	8.965	8.965	(1.080)	23232	10.0000	10.2
	53 4-Nitroaniline	138	8.976	8.976	(1.082)	13945	10.0000	10.2(Q)
	54 Fluorene	166	8.971	8.971	(1.081)	50710	10.0000	10.0
	55 4,6-Dinitro-2-methylphenol	198	9.019	9.019	(0.890)	5757	10.0000	10.0
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	42029	10.0000	10
	57 Azobenzene	77	9.158	9.158	(1.104)	48578	10.0000	10.6
	58 1,2-Diphenylhydrazine	77	9.158	9.158	(1.104)	48578	10.0000	10.6
$	59 2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.117)	5653	10.0000	9.9(a)
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.945)	12461	10.0000	10.1
	61 Hexachlorobenzene	284	9.655	9.655	(0.953)	13419	10.0000	10.3
	62 Pentachlorophenol	266	9.900	9.900	(0.977)	4699	10.0000	10.6
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	243797	40.0000	
	64 Phenanthrene	178	10.167	10.167	(1.003)	71227	10.0000	10.2
	65 Anthracene	178	10.232	10.232	(1.009)	70754	10.0000	10.0
	66 Carbazole	167	10.424	10.424	(1.028)	69322	10.0000	10.1
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	82542	10.0000	9.9(a)
	68 Fluoranthene	202	11.642	11.642	(1.149)	75439	10.0000	10
	69 Benzidine	184	11.797	11.797	(0.879)	42637	10.0000	10.3
	70 Pyrene	202	11.925	11.925	(0.889)	82000	10.0000	10.4
$	71 Terphenyl-d14 (S)	244	12.107	12.107	(0.902)	38254	7.50000	7.7(a)
	72 Butylbenzylphthalate	149	12.705	12.705	(0.947)	35944	10.0000	9.8(a)
	73 bis(2-Ethylhexyl)phthalate	149	13.405	13.405	(0.999)	52611	10.0000	10.3
	74 3,3'-Dichlorobenzidine	252	13.362	13.362	(0.996)	23992	10.0000	11.2
	75 Benzo(a)anthracene	228	13.405	13.405	(0.999)	72509	10.0000	10.1
*	76 Chrysene-d12	240	13.421	13.421	(1.000)	232621	40.0000	(Q)
	77 Chrysene	228	13.448	13.448	(1.002)	65723	10.0000	10.1

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.163	14.163	(1.055)	91732	10.0000	10.1
79	Benzo(b)fluoranthene	252	14.676	14.676	(0.967)	69068	10.0000	10.7
80	Benzo(k)fluoranthene	252	14.708	14.708	(0.969)	68016	10.0000	10.3
81	Benzo(a)pyrene	252	15.098	15.098	(0.995)	62112	10.0000	10.0
* 82	Perylene-d12	264	15.173	15.173	(1.000)	218093	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.851	16.851	(1.111)	67583	10.0000	10.1(M)
84	Dibenzo(a,h)anthracene	278	16.872	16.872	(1.112)	57565	10.0000	10.1
85	Benzo(g,h,i)perylene	276	17.358	17.358	(1.144)	57288	10.0000	10.1

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281418.D
Lab Smp Id: ICAL 10328-96 3
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19
Level: LOW
Sample Type: WATER

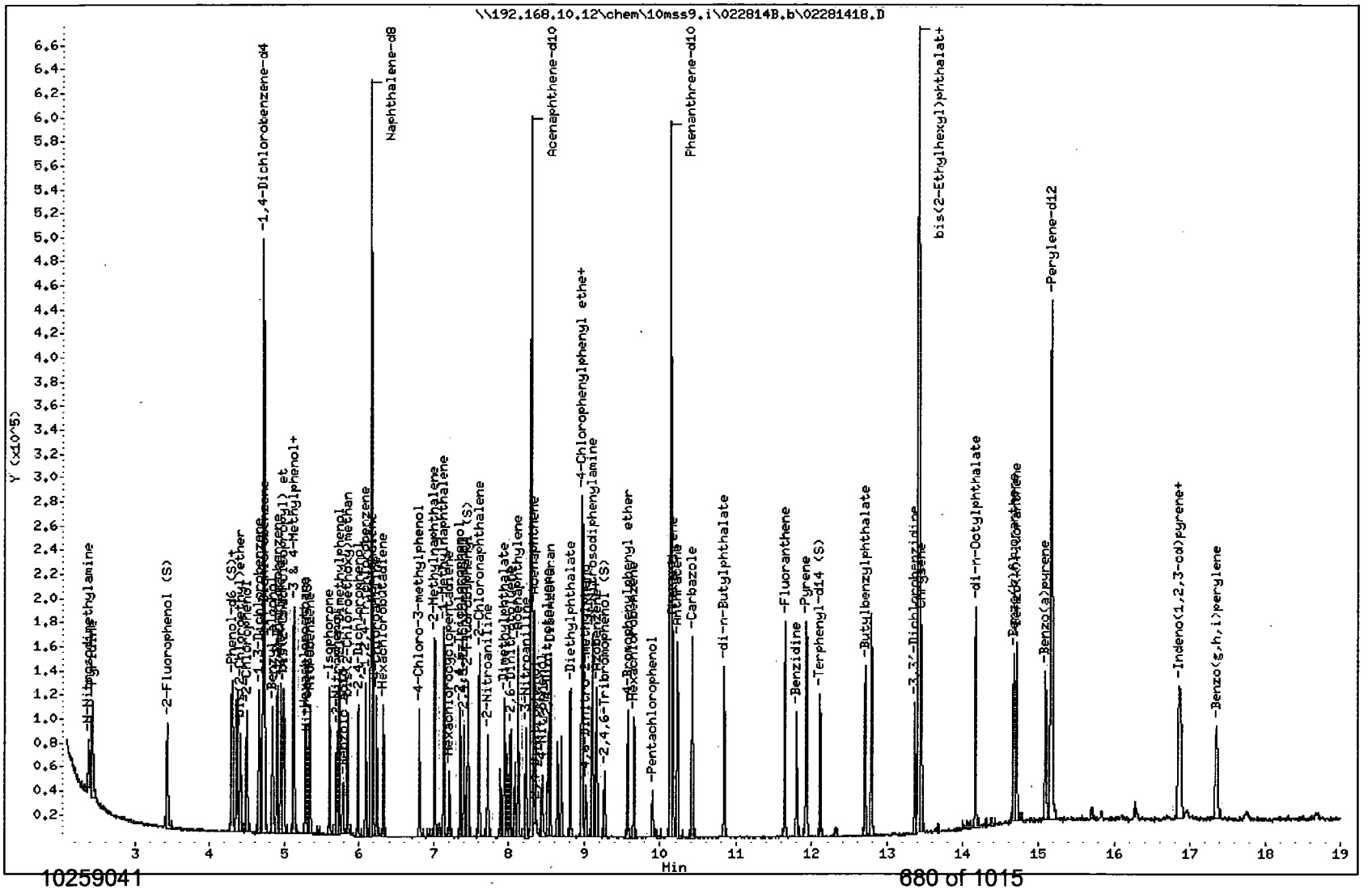
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	79179	20.46
28 Naphthalene-d8	256733	128367	513466	303763	18.32
45 Acenaphthene-d10	126640	63320	253280	149118	17.75
63 Phenanthrene-d10	206748	103374	413496	243797	17.92
76 Chrysene-d12	194855	97428	389710	232621	19.38
82 Perylene-d12	186487	93244	372974	218093	16.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Date : 28-FEB-2014 15:40
Client ID:
Instrument: 10mss9.i
Sample Info: ICAL 10328-96 3
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



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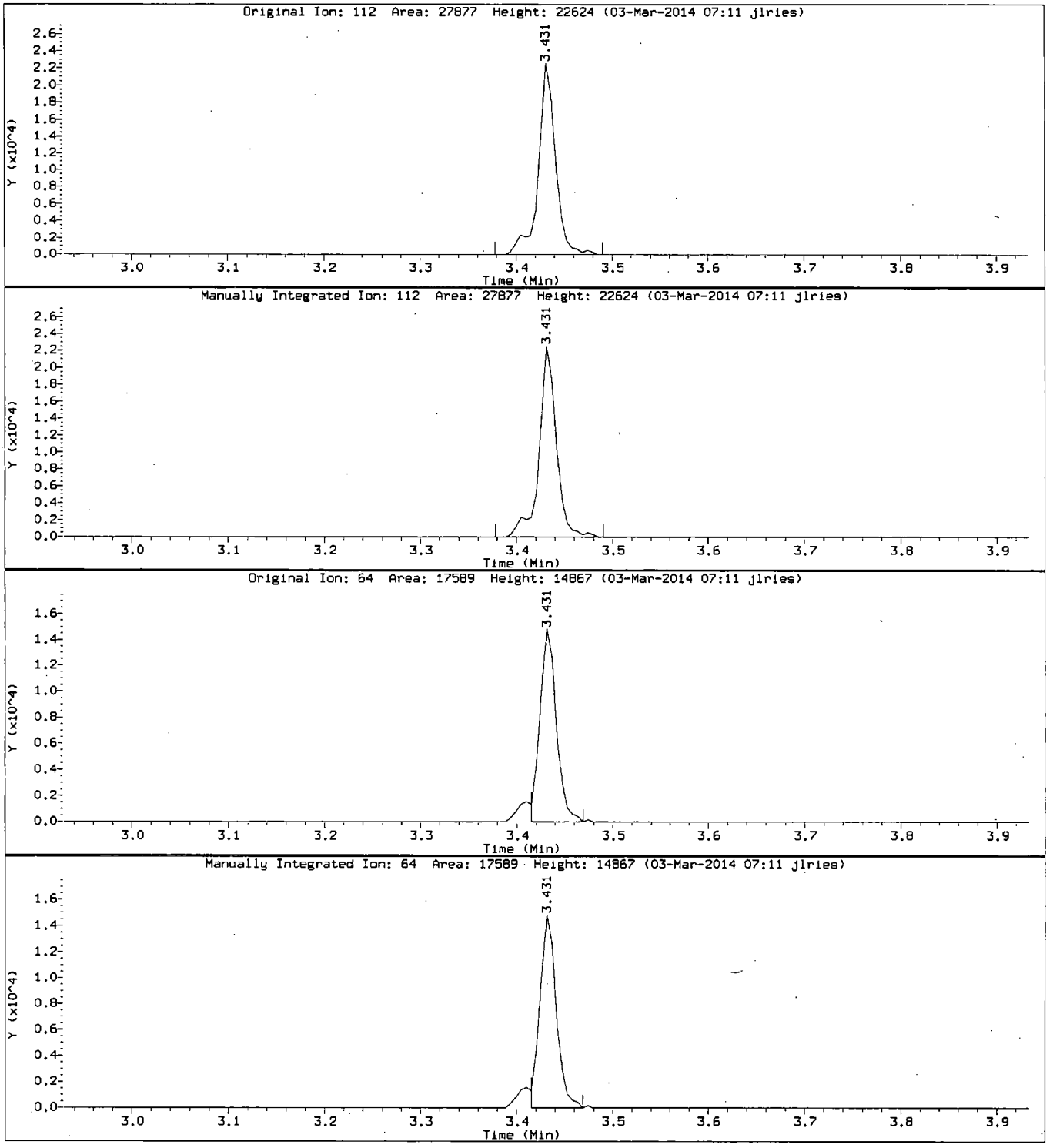
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: 2-Fluorophenol (S)
CAS Number: 367-12-4



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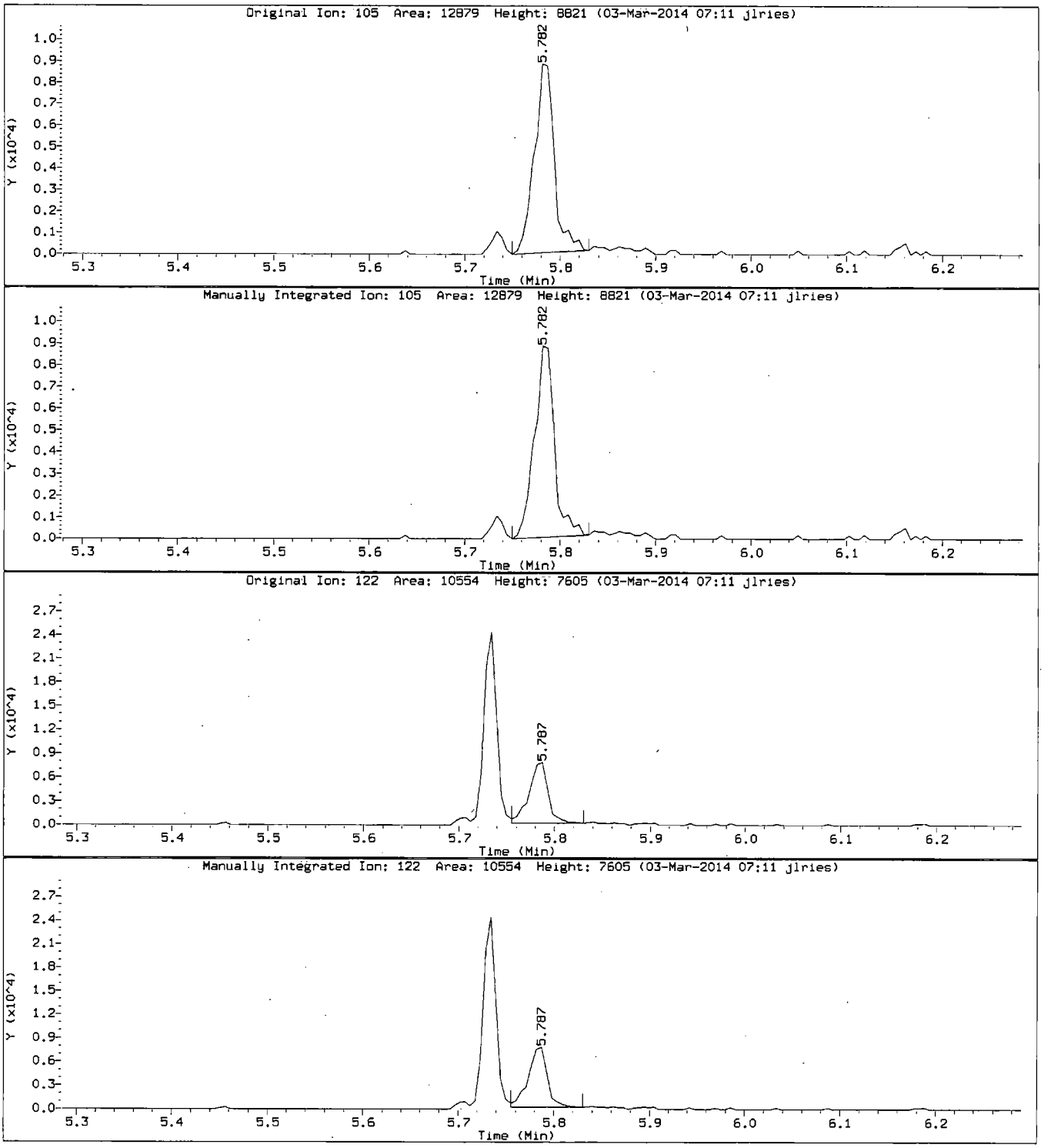
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: Benzoic acid
CAS Number: 65-85-0



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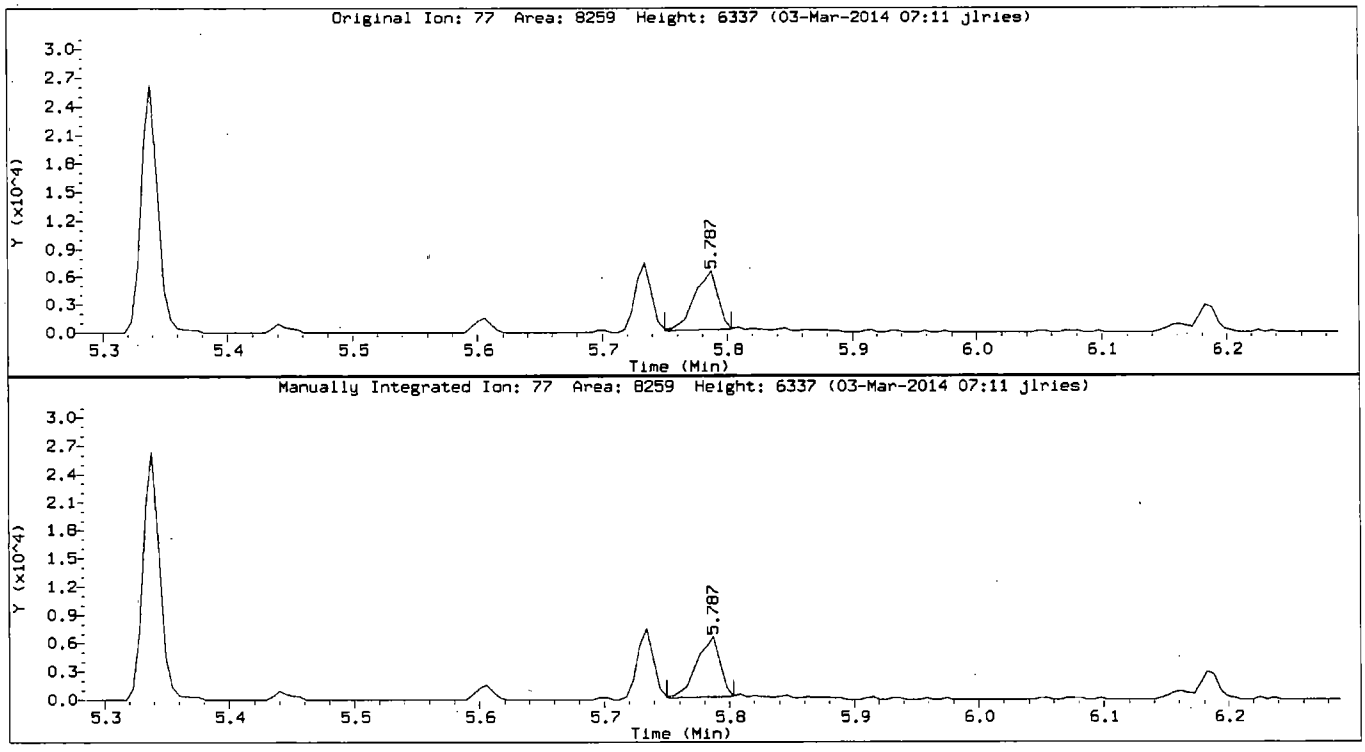
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3



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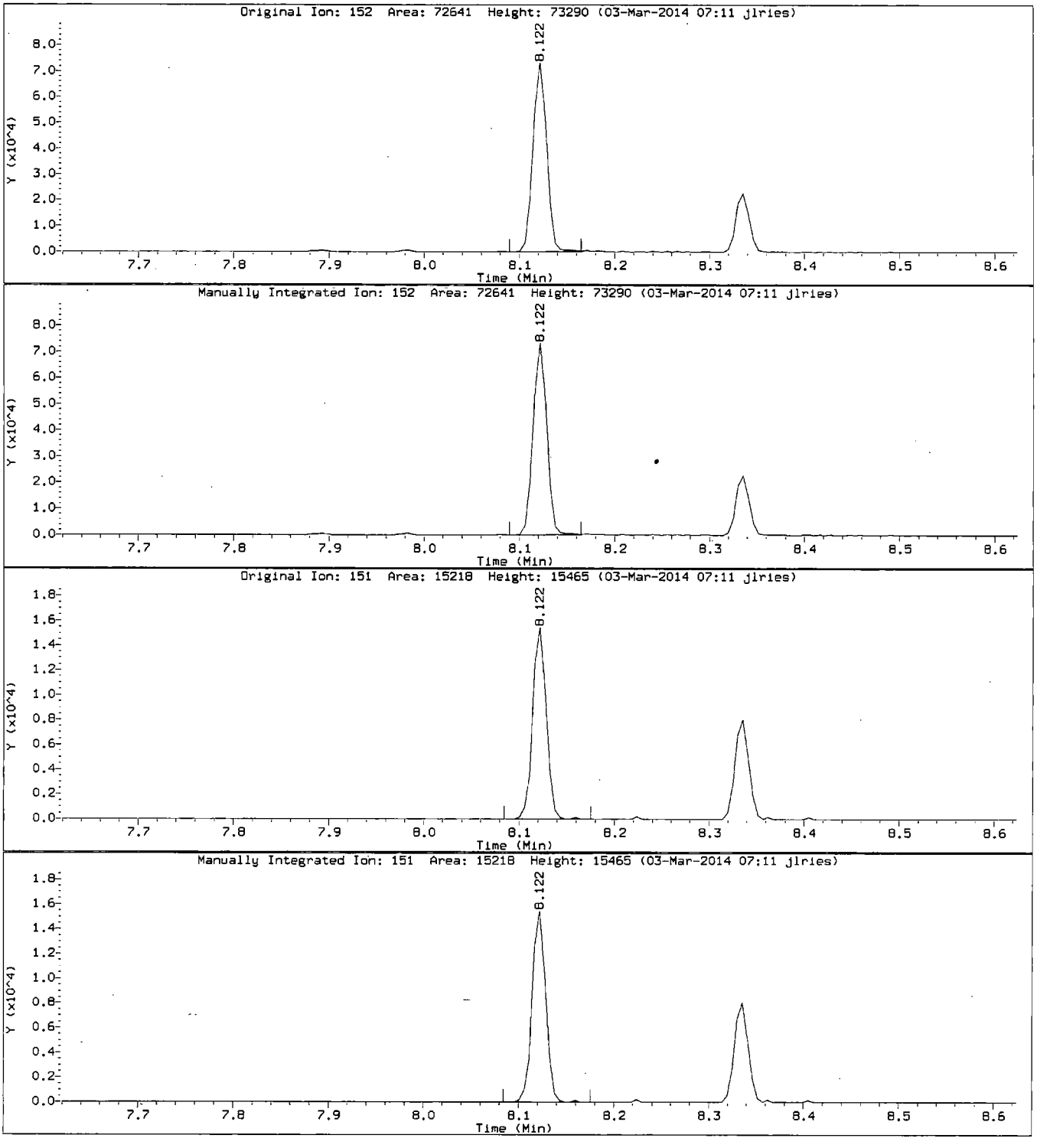
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: Acenaphthylene
CAS Number: 208-96-8



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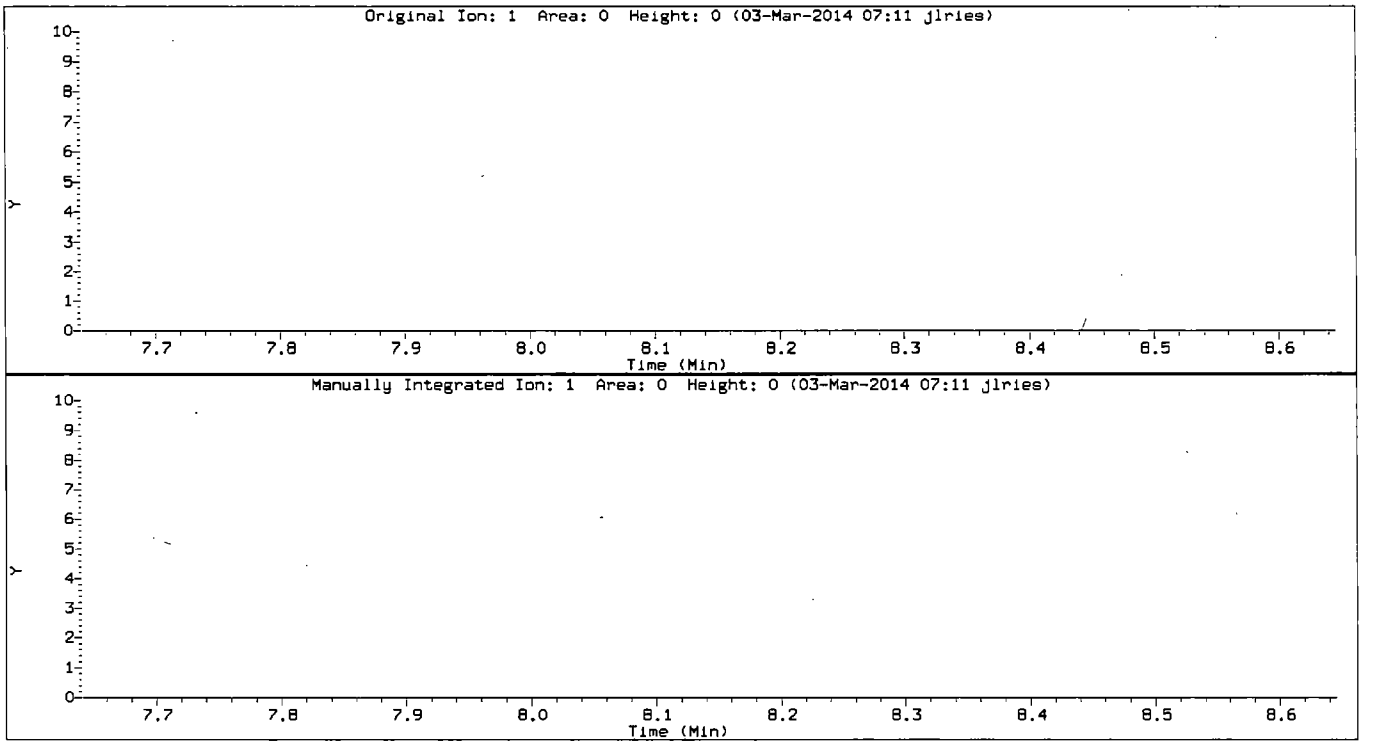
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3



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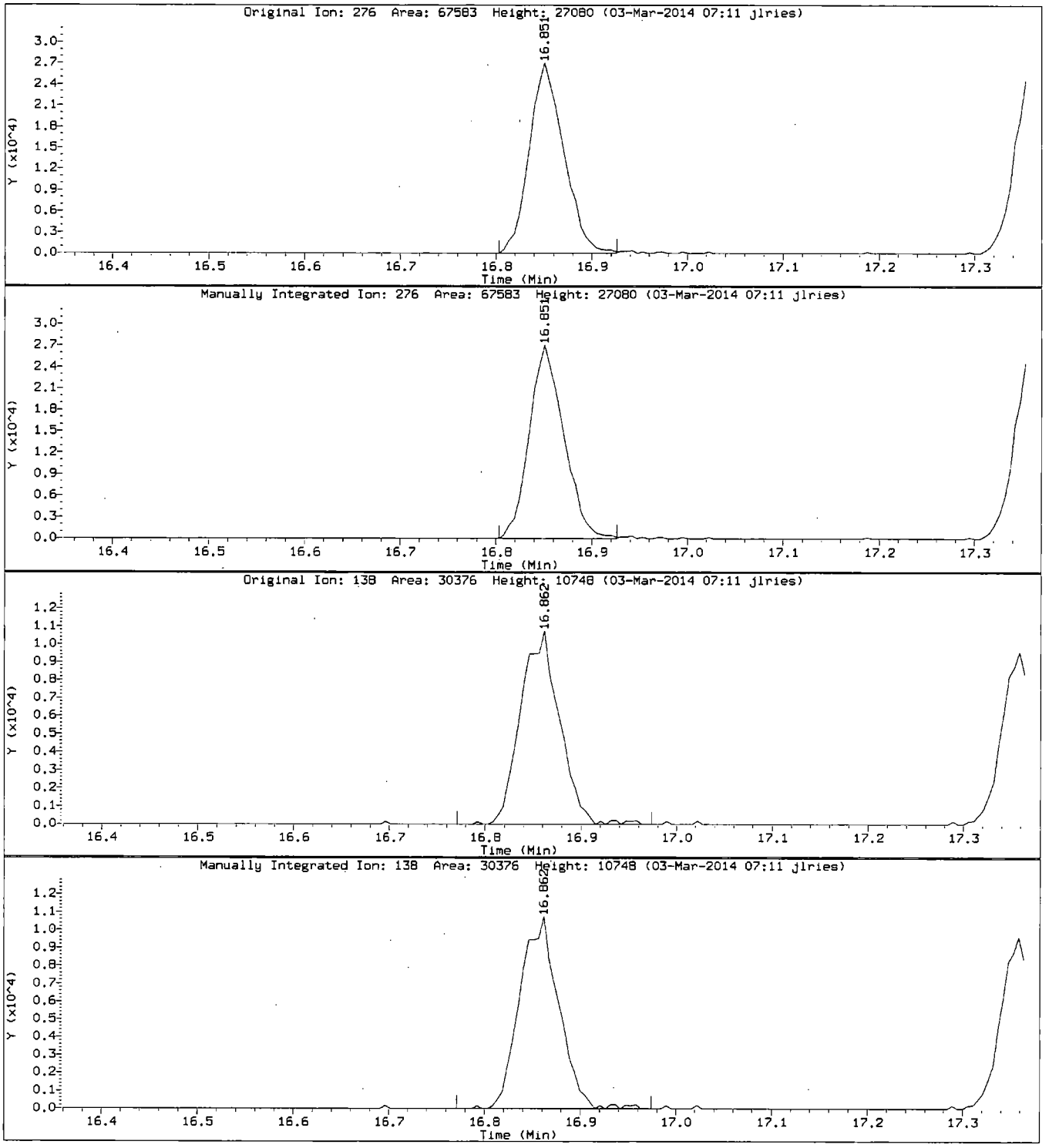
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5



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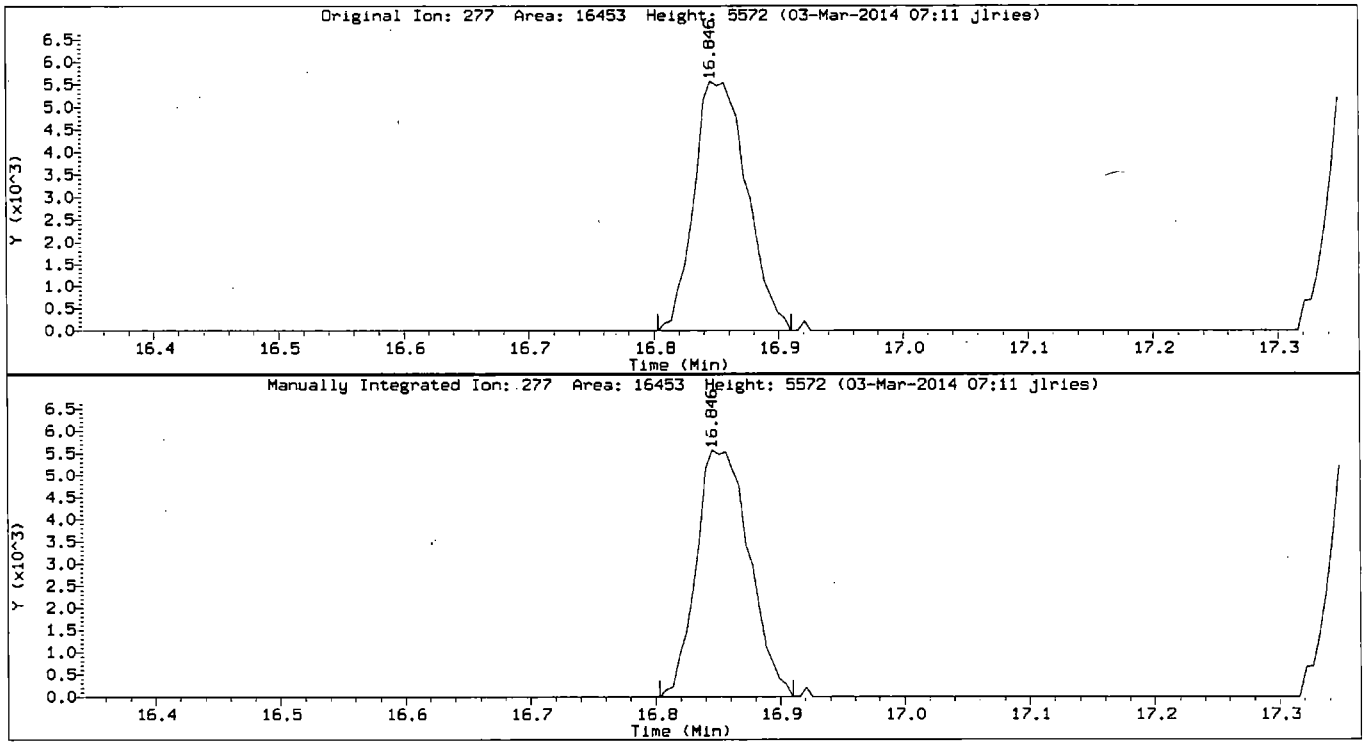
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Lab Smp Id: ICAL 10328-96 2
Inj Date : 28-FEB-2014 16:07
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 2
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 15:40 Cal File: 02281418.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	5930	5.00000	4.4(aQ)
2	Pyridine	79	2.421	2.421	(0.513)	11093	5.00000	4.6(a)
$ 3	2-Fluorophenol (S)	112	3.431	3.431	(0.727)	11094	5.00000	4.8(a)
$ 4	Phenol-d6 (S)	99	4.291	4.291	(0.909)	12844	5.00000	4.8(a)
5	Phenol	94	4.307	4.307	(0.913)	13778	5.00000	4.9(a)
6	bis(2-Chloroethyl)ether	63	4.408	4.408	(0.934)	10555	5.00000	5.1(a)
7	2-Chlorophenol	128	4.494	4.494	(0.952)	12536	5.00000	5.3(a)
8	1,3-Dichlorobenzene	146	4.660	4.660	(0.988)	13323	5.00000	5.0(a)
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	65175	40.0000	
10	1,4-Dichlorobenzene	146	4.734	4.734	(1.003)	14128	5.00000	5.3(a)
11	Benzyl alcohol	79	4.841	4.841	(1.026)	7598	5.00000	4.7(a)
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	12896	5.00000	5.1(a)
13	2-Methylphenol	107	4.953	4.953	(1.050)	9104	5.00000	5.1(a)
14	bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	27262	5.00000	5.1(a)
15	3 & 4-Methylphenol	107	5.119	5.119	(1.085)	11873	5.00000	5.1(a)
17	N-Nitroso-di-n-propylamine	70	5.124	5.124	(1.086)	6867	5.00000	5.1(aQM)
18	Hexachloroethane	117	5.279	5.279	(1.119)	4984	5.00000	5.1(a)
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	8162	3.75000	3.7(a)
20	Nitrobenzene	77	5.338	5.338	(0.866)	10458	5.00000	5.0(a)
21	Isophorone	82	5.605	5.605	(0.910)	18655	5.00000	4.9(a)
22	2-Nitrophenol	139	5.701	5.701	(0.925)	6238	5.00000	5.0(a)
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	10971	5.00000	5.1(a)

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Report Date: 03-Mar-2014 07:18

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24	Benzoic acid	105	5.776	5.776	(0.938)	4355	5.00000	3.9(a)
	25	bis(2-Chloroethoxy)methane	93	5.840	5.840	(0.948)	10990	5.00000	4.9(a)
	26	2,4-Dichlorophenol	162	5.984	5.984	(0.971)	8960	5.00000	4.8(a)
	27	1,2,4-Trichlorobenzene	180	6.086	6.086	(0.988)	10170	5.00000	5.2(a)
*	28	Naphthalene-d8	136	6.161	6.161	(1.000)	256111	40.0000	(Q)
	29	Naphthalene	128	6.182	6.182	(1.003)	33546	5.00000	5.2(a)
	30	4-Chloroaniline	127	6.230	6.230	(1.011)	13179	5.00000	5.6(a)
	31	Hexachlorobutadiene	225	6.326	6.326	(1.027)	5301	5.00000	5.0(a)
	32	4-Chloro-3-methylphenol	107	6.807	6.807	(1.105)	8563	5.00000	4.8(a)
	33	2-Methylnaphthalene	142	7.015	7.015	(1.139)	21038	5.00000	4.9(a)
	34	1-Methylnaphthalene	142	7.133	7.133	(1.158)	19405	5.00000	4.9(a)
	35	Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	2384	5.00000	6.2(aQM)
	36	2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	5828	5.00000	5.0(a)
	37	2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	5932	5.00000	4.8(a)
$	38	2-Fluorobiphenyl (S)	172	7.454	7.454	(0.898)	16558	3.75000	3.8(a)
	39	2-Chloronaphthalene	162	7.608	7.608	(0.917)	19786	5.00000	5.2(a)
	40	2-Nitroaniline	65	7.721	7.721	(0.930)	5930	5.00000	4.8(a)
	41	Dimethylphthalate	163	7.940	7.940	(0.957)	20484	5.00000	5.0(aM)
	42	2,6-Dinitrotoluene	165	8.014	8.014	(0.966)	4522	5.00000	4.7(a)
	43	Acenaphthylene	152	8.121	8.121	(0.979)	29040	5.00000	4.9(aM)
	44	3-Nitroaniline	138	8.228	8.228	(0.992)	5675	5.00000	5.5(aQM)
*	45	Acenaphthene-d10	164	8.298	8.298	(1.000)	124628	40.0000	
	46	Acenaphthene	154	8.335	8.335	(1.004)	17710	5.00000	5.1(a)
	47	2,4-Dinitrophenol	184	8.362	8.362	(1.008)	786	5.00000	7.6(aQM)
	48	4-Nitrophenol	65	8.442	8.442	(1.017)	3414	5.00000	4.3(a)
	49	2,4-Dinitrotoluene	165	8.517	8.517	(1.026)	5688	5.00000	4.6(a)
	50	Dibenzofuran	168	8.549	8.549	(1.030)	26952	5.00000	5.2(a)
	51	Diethylphthalate	149	8.816	8.816	(1.062)	20419	5.00000	5.1(a)
	52	4-Chlorophenylphenyl ether	204	8.965	8.965	(1.080)	9210	5.00000	4.8(a)
	53	4-Nitroaniline	138	8.981	8.981	(1.082)	5427	5.00000	4.7(aQ)
	54	Fluorene	166	8.971	8.971	(1.081)	21451	5.00000	5.1(a)
	55	4,6-Dinitro-2-methylphenol	198	9.019	9.019	(0.890)	2141	5.00000	6.5(aM)
	56	N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	16750	5.00000	4.9(a)
	57	Azobenzene	77	9.163	9.163	(1.104)	19004	5.00000	5.0(a)
	58	1,2-Diphenylhydrazine	77	9.163	9.163	(1.104)	19004	5.00000	5.0(a)
$	59	2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.117)	1935	5.00000	4.1(aQ)
	60	4-Bromophenylphenyl ether	248	9.574	9.574	(0.945)	4752	5.00000	4.8(a)
	61	Hexachlorobenzene	284	9.655	9.655	(0.953)	5475	5.00000	5.2(a)
	62	Pentachlorophenol	266	9.900	9.900	(0.977)	1584	5.00000	6.5(aM)
*	63	Phenanthrene-d10	188	10.135	10.135	(1.000)	197345	40.0000	
	64	Phenanthrene	178	10.162	10.162	(1.003)	29590	5.00000	5.2(a)
	65	Anthracene	178	10.226	10.226	(1.009)	28648	5.00000	5.0(a)
	66	Carbazole	167	10.424	10.424	(1.028)	27472	5.00000	4.9(a)
	67	di-n-Butylphthalate	149	10.841	10.841	(1.070)	33977	5.00000	5.0(a)
	68	Fluoranthene	202	11.642	11.642	(1.149)	30106	5.00000	4.9(a)
	69	Benzidine	184	11.797	11.797	(0.879)	16897	5.00000	4.3(a)
	70	Pyrene	202	11.930	11.930	(0.889)	33716	5.00000	5.3(a)
$	71	Terphenyl-d14 (S)	244	12.107	12.107	(0.902)	14890	3.75000	3.7(a)
	72	Butylbenzylphthalate	149	12.705	12.705	(0.947)	14997	5.00000	5.1(a)
	73	bis(2-Ethylhexyl)phthalate	149	13.405	13.405	(0.999)	20669	5.00000	5.0(aM)
	74	3,3'-Dichlorobenzidine	252	13.362	13.362	(0.996)	9922	5.00000	5.7(a)
	75	Benzo(a)anthracene	228	13.405	13.405	(0.999)	30287	5.00000	5.2(a)
*	76	Chrysene-d12	240	13.421	13.421	(1.000)	188943	40.0000	(Q)
	77	Chrysene	228	13.448	13.448	(1.002)	27343	5.00000	5.2(a)

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.163	14.163	(1.055)	36861	5.00000	5.0(aM)
79	Benzo(b)fluoranthene	252	14.671	14.671	(0.967)	25458	5.00000	4.6(a)
80	Benzo(k)fluoranthene	252	14.703	14.703	(0.969)	27491	5.00000	4.9(a)
81	Benzo(a)pyrene	252	15.098	15.098	(0.995)	25469	5.00000	4.9(a)
* 82	Perylene-d12	264	15.173	15.173	(1.000)	184523	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.851	16.851	(1.111)	27777	5.00000	4.9(a)
84	Dibenzo(a,h)anthracene	278	16.872	16.872	(1.112)	23739	5.00000	4.9(aM)
85	Benzo(g,h,i)perylene	276	17.358	17.358	(1.144)	24249	5.00000	5.1(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281419.D
Lab Smp Id: ICAL 10328-96 2
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19

Level: LOW
Sample Type: WATER

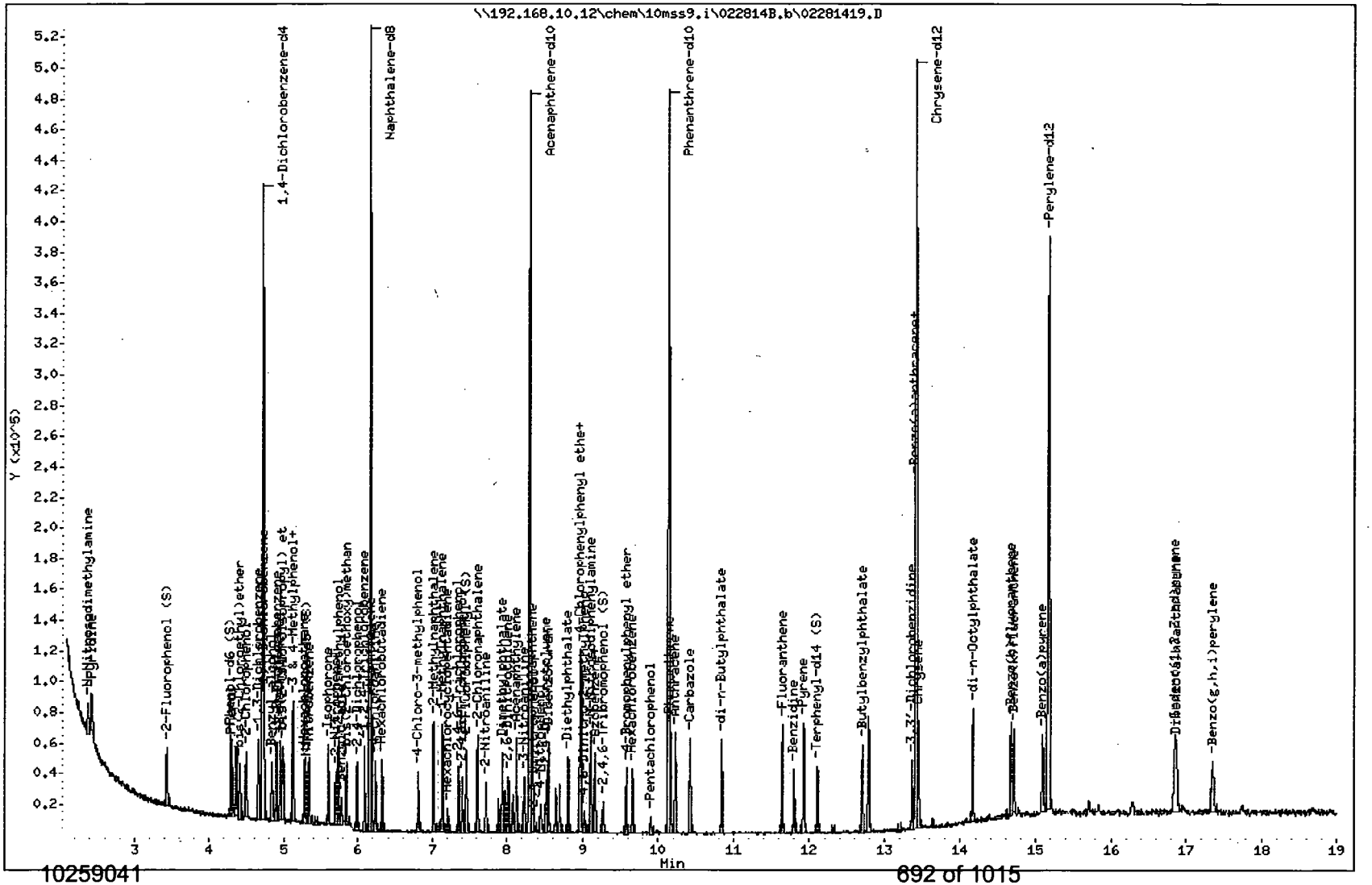
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	65175	-0.85
28 Naphthalene-d8	256733	128367	513466	256111	-0.24
45 Acenaphthene-d10	126640	63320	253280	124628	-1.59
63 Phenanthrene-d10	206748	103374	413496	197345	-4.55
76 Chrysene-d12	194855	97428	389710	188943	-3.03
82 Perylene-d12	186487	93244	372974	184523	-1.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Date : 28-FEB-2014 16:07
Client ID:
Instrument: 10mss9.i
Sample Info: ICAL 10328-96 2
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



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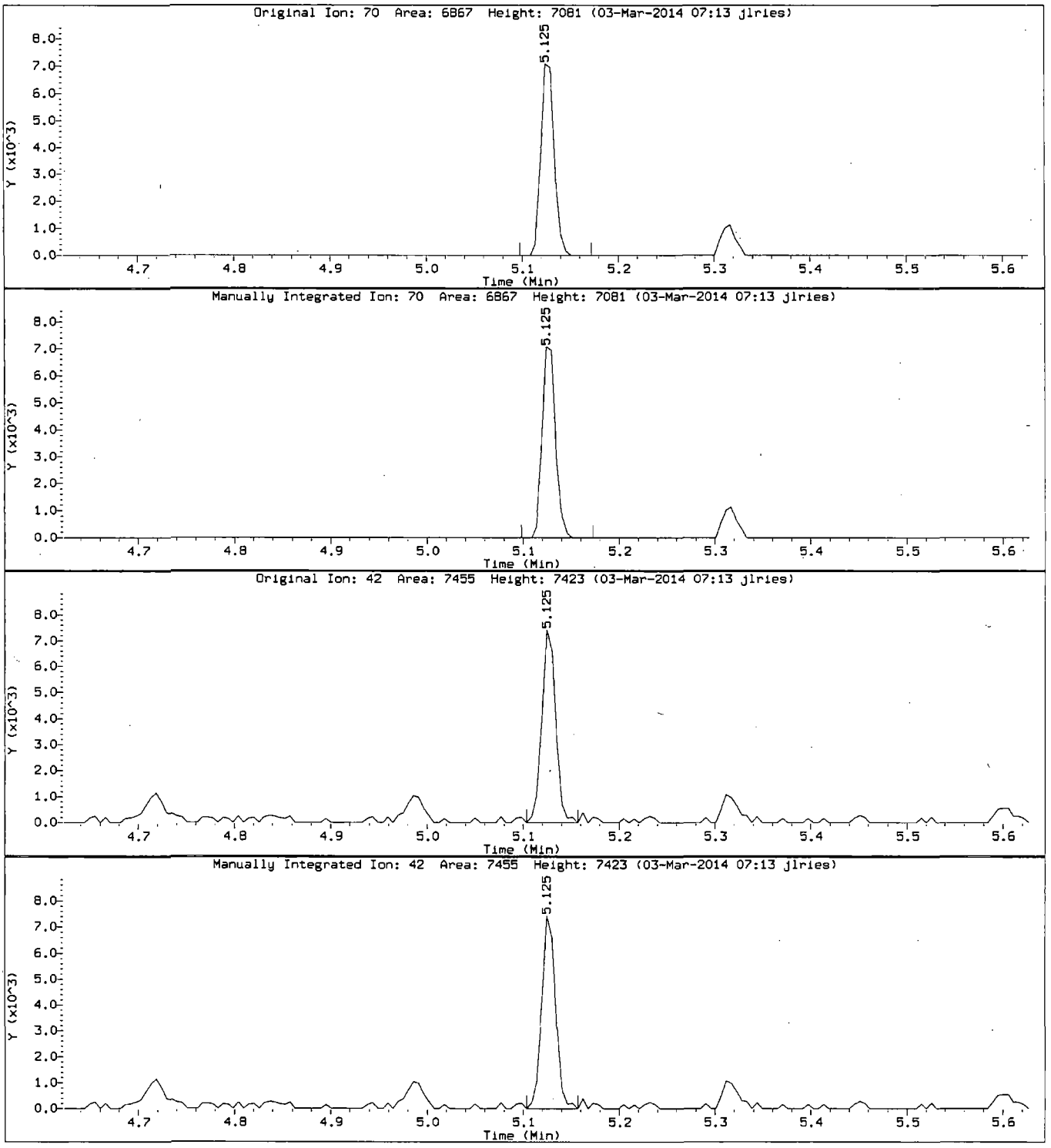
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: N-Nitroso-di-n-propylamine
CAS Number: 621-64-7



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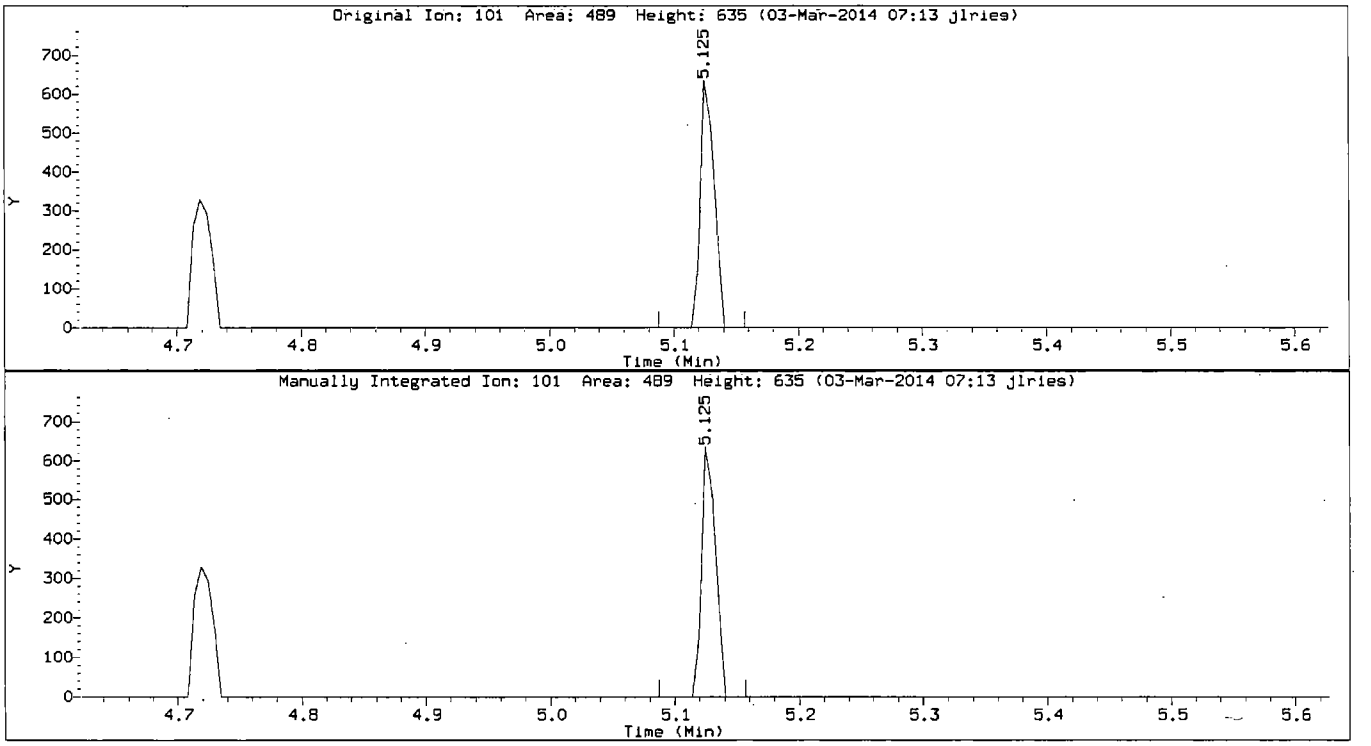
Lab Sample ID: ICAL 10328-96 2



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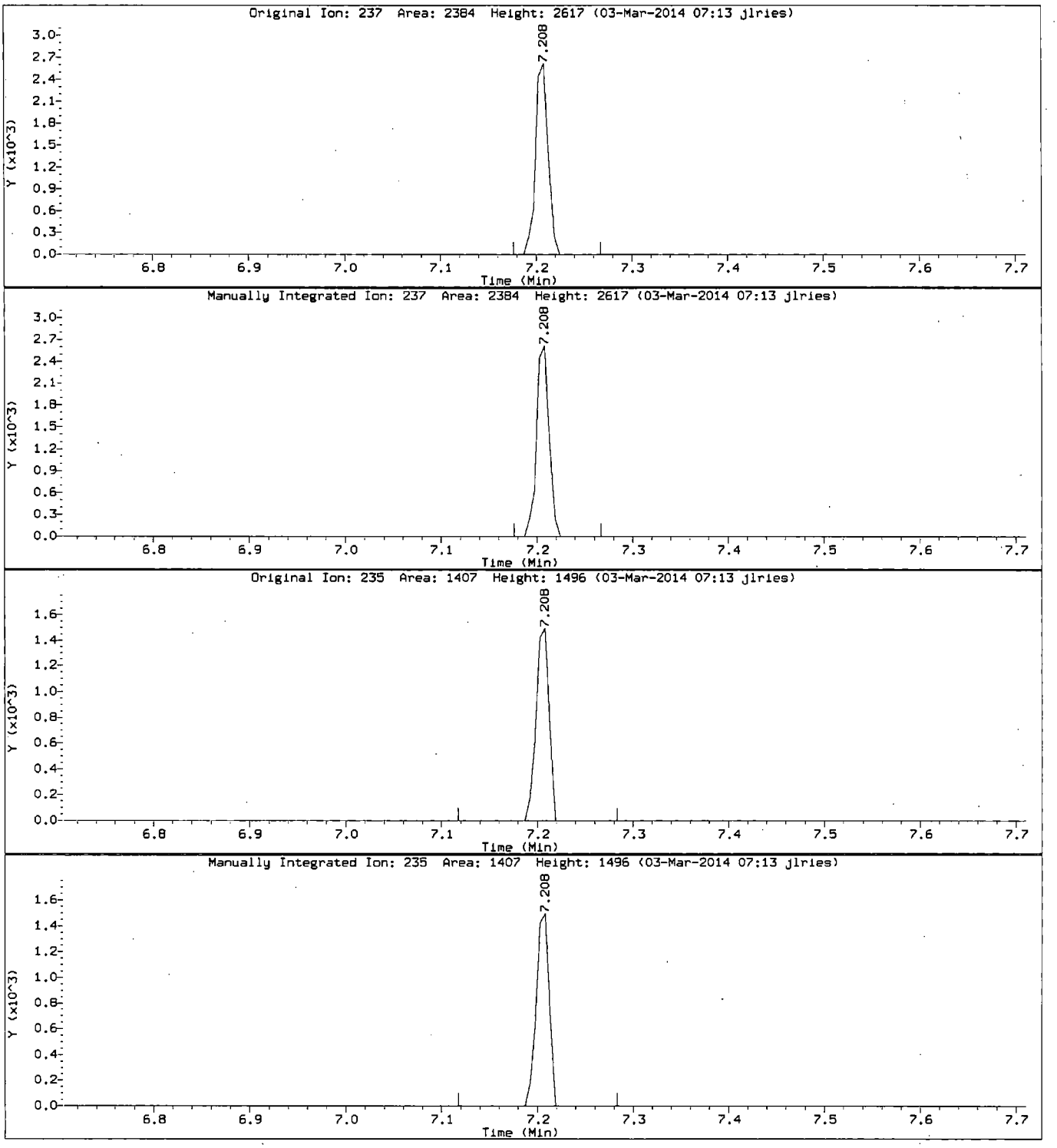
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Hexachlorocyclopentadiene
CAS Number: 77-47-4



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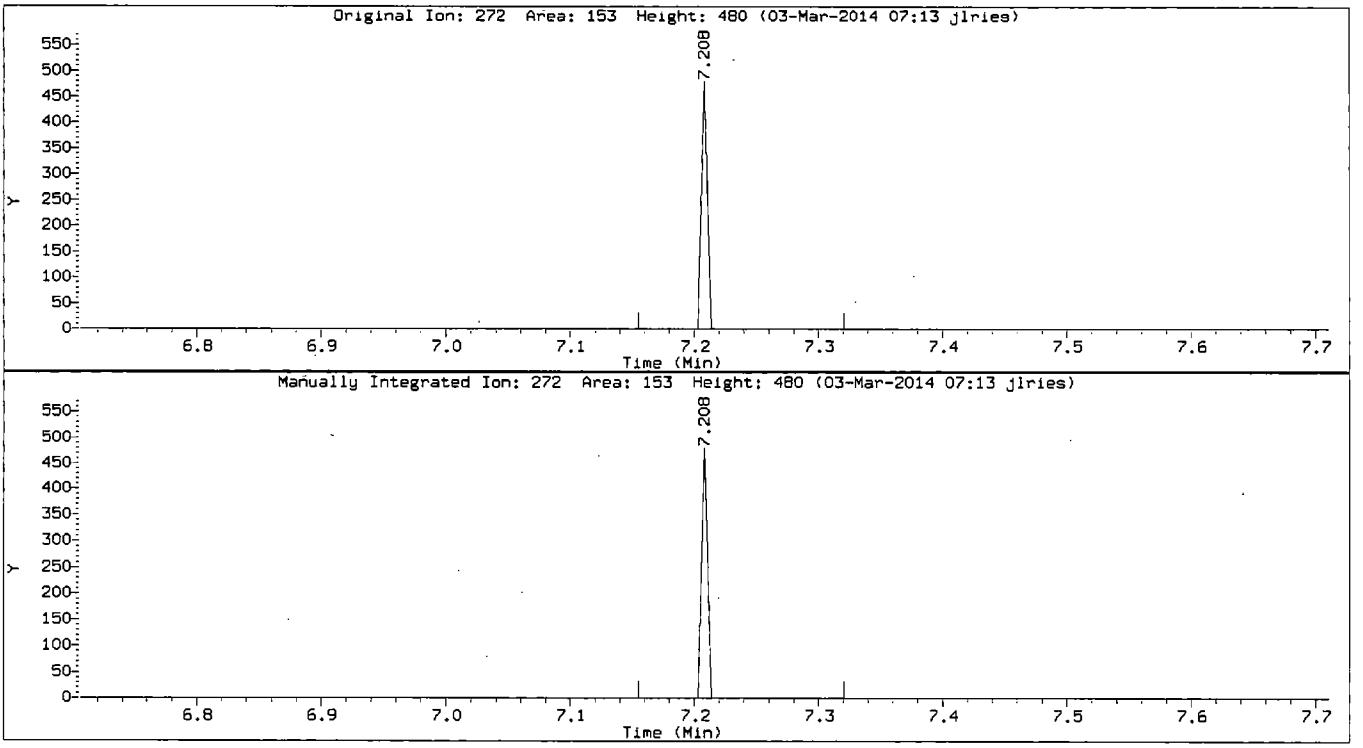

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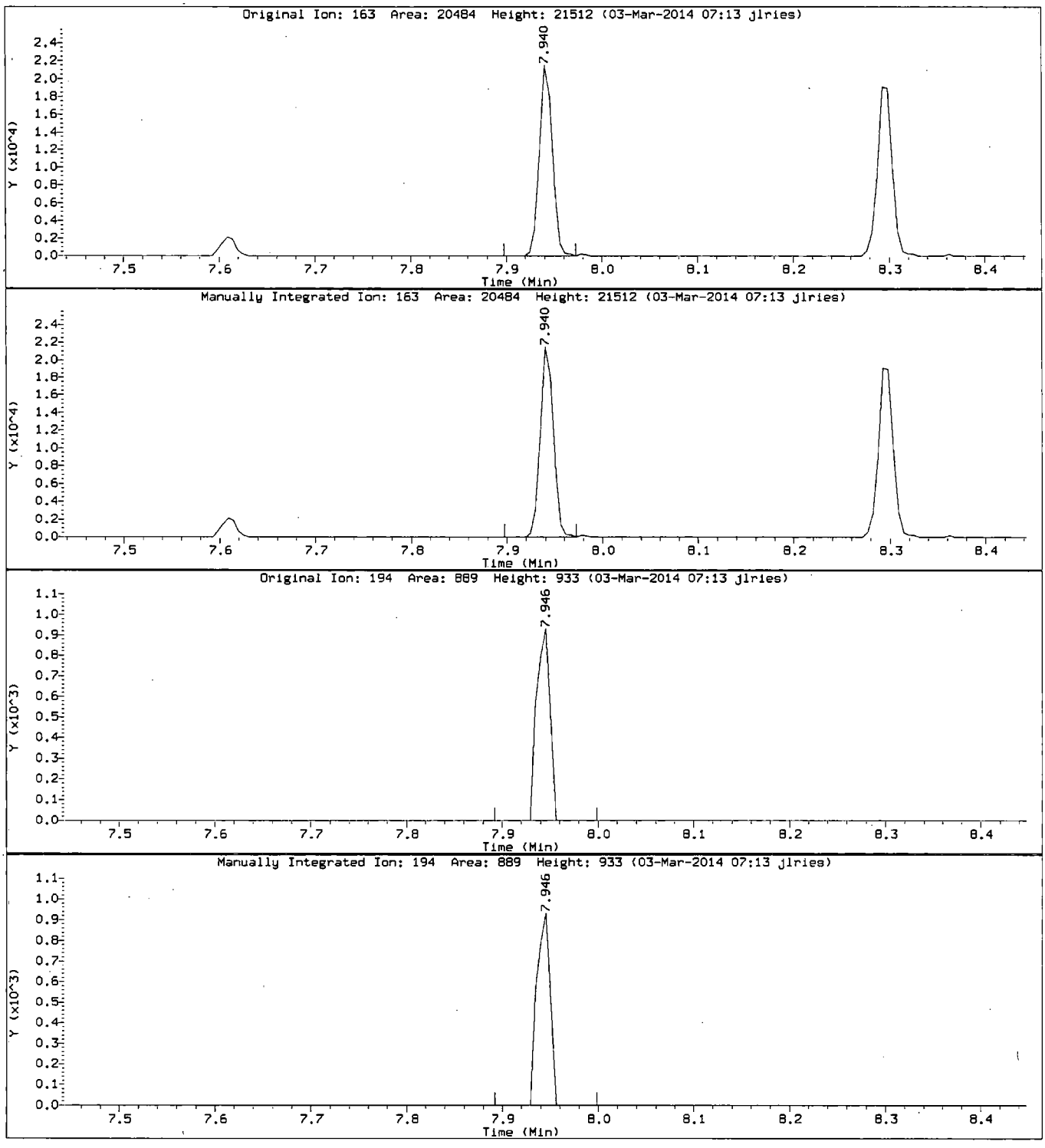
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Dimethylphthalate
CAS Number: 131-11-3



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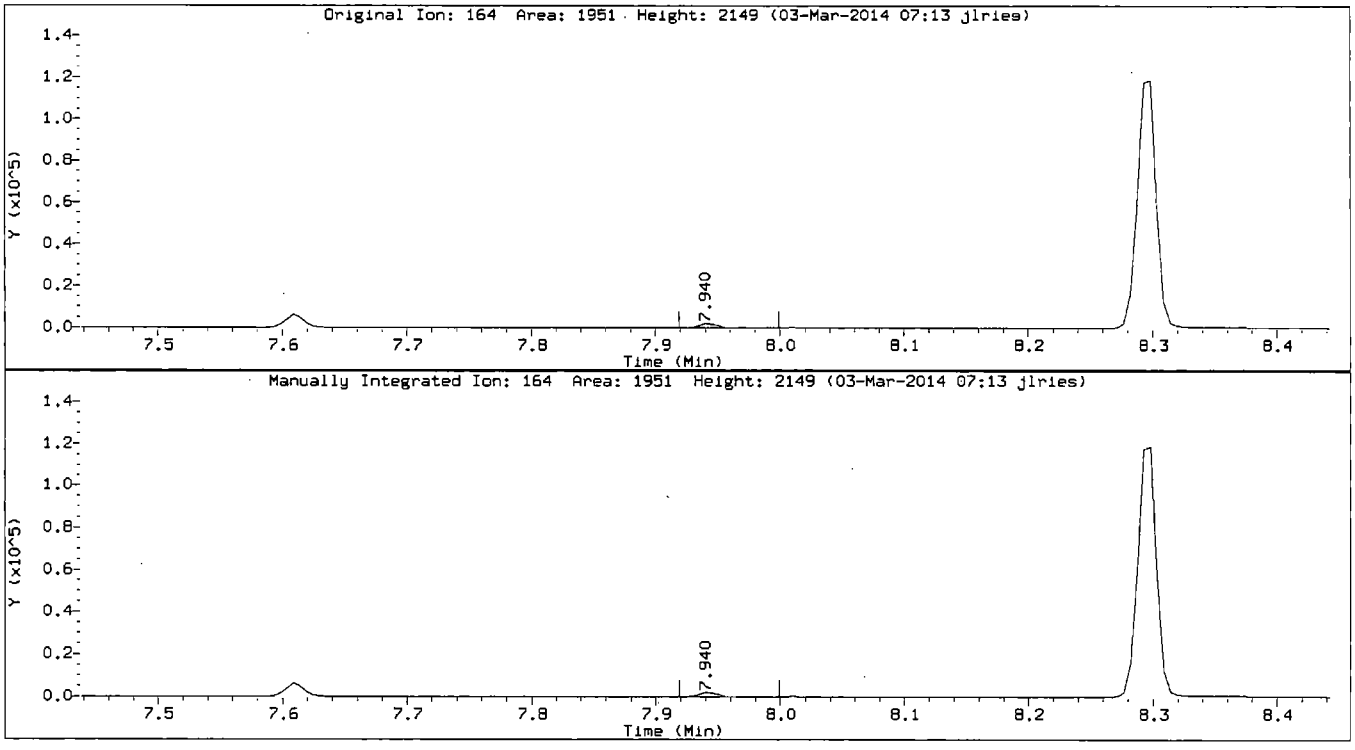
Lab Sample ID: ICAL 10328-96 2



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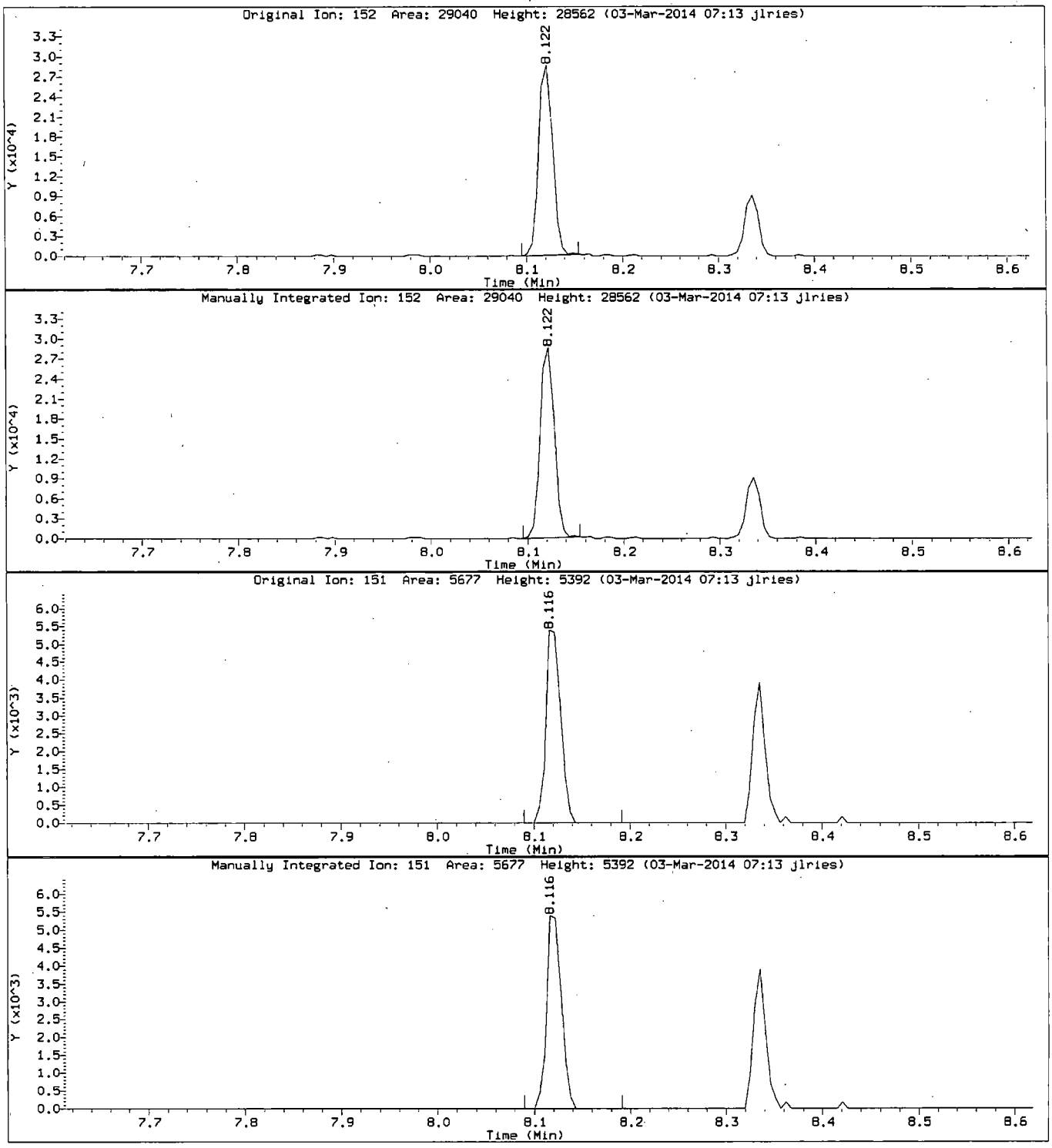
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Acenaphthylene
CAS Number: 208-96-8



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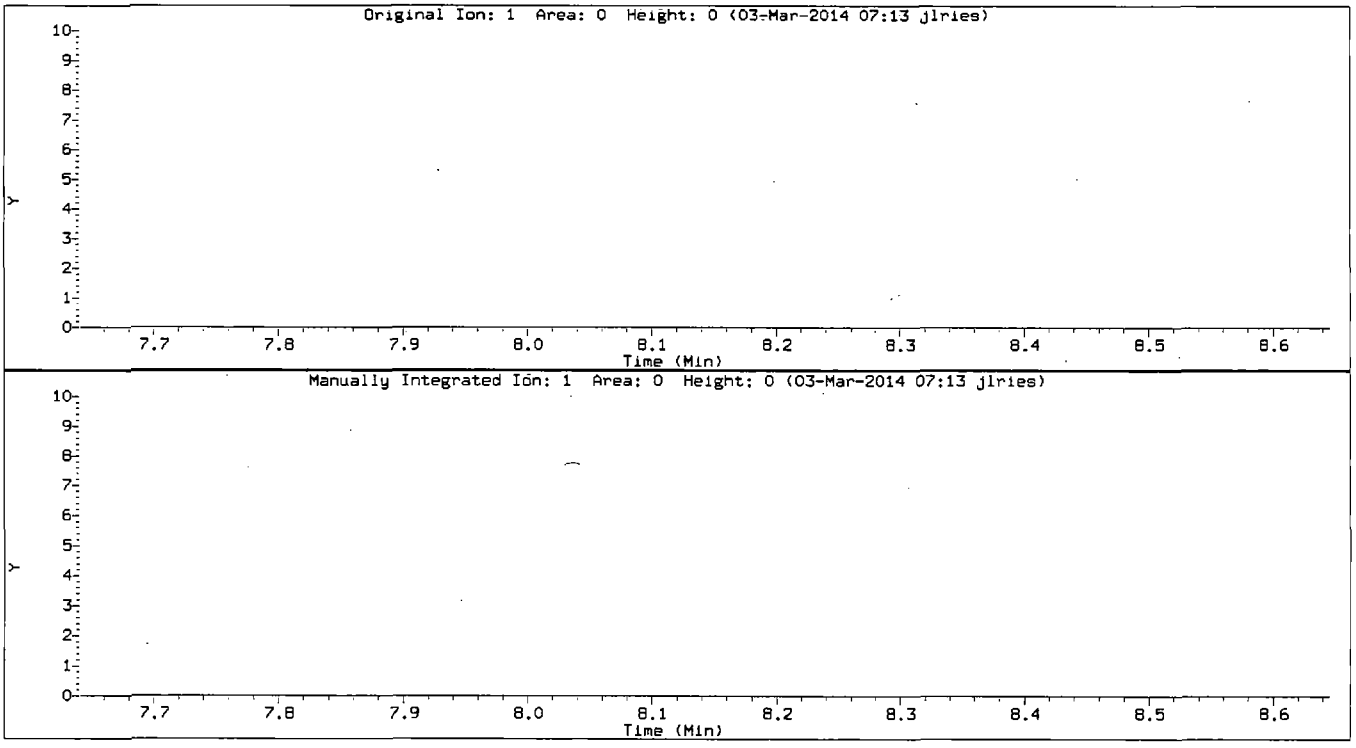
Lab Sample ID: ICAL 10328-96 2



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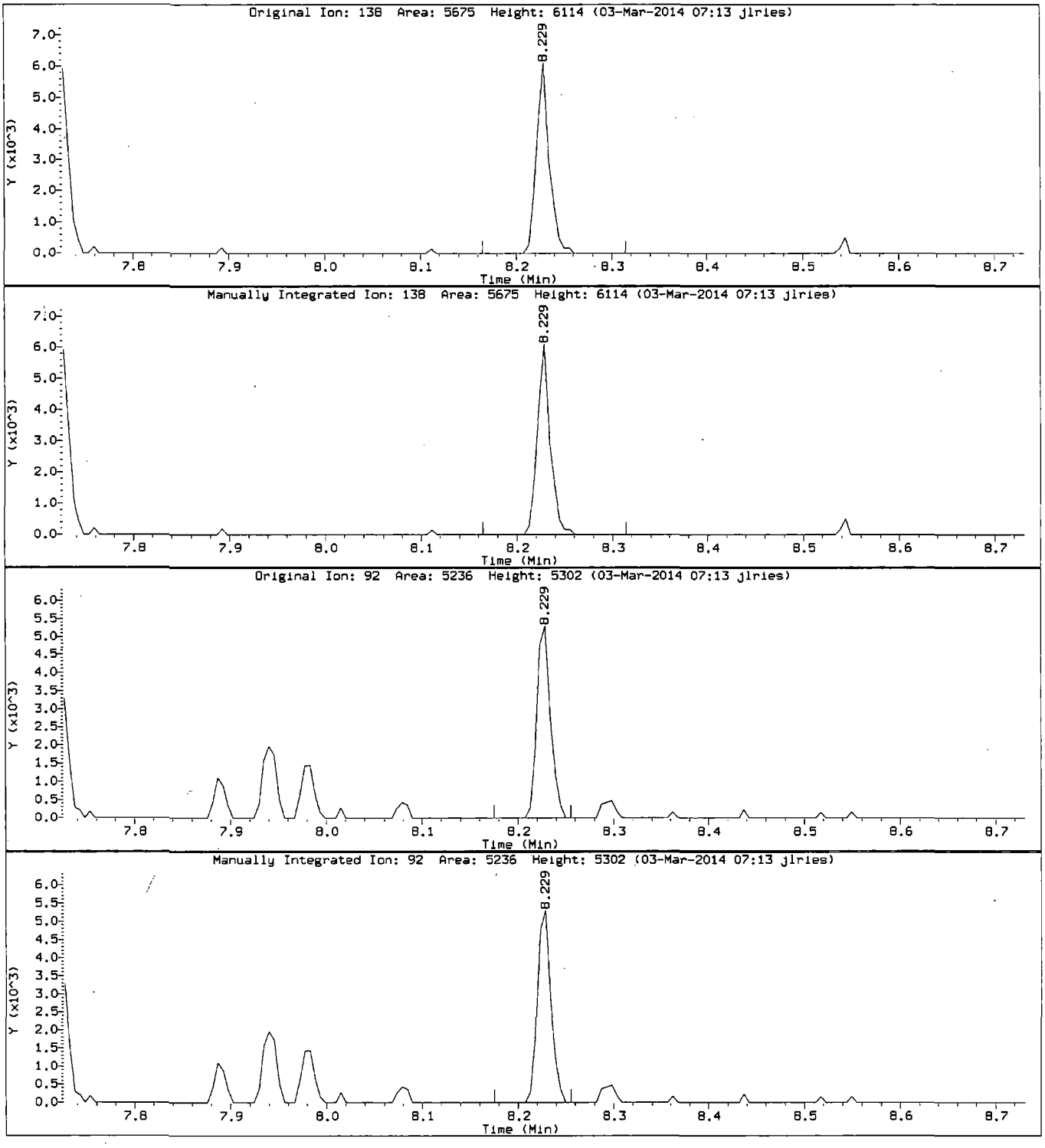
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: 3-Nitroaniline
CAS Number: 99-09-2



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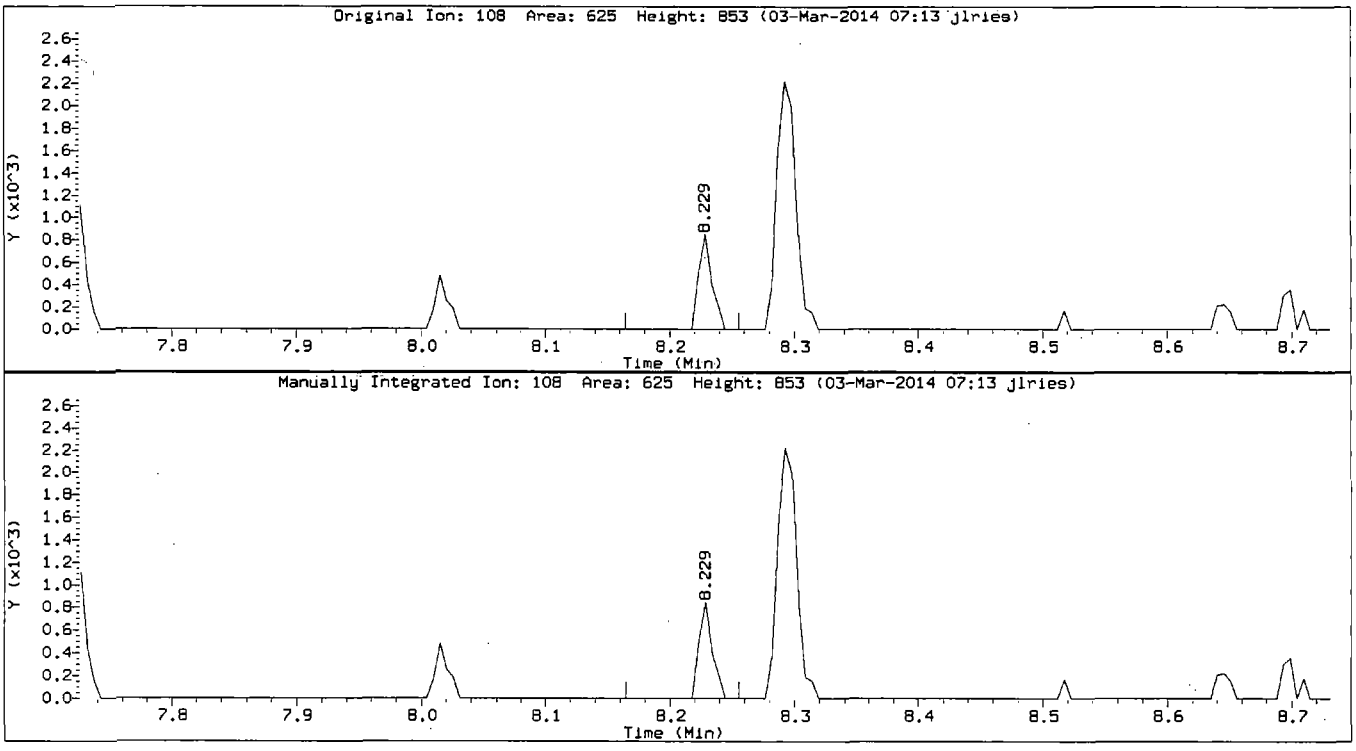

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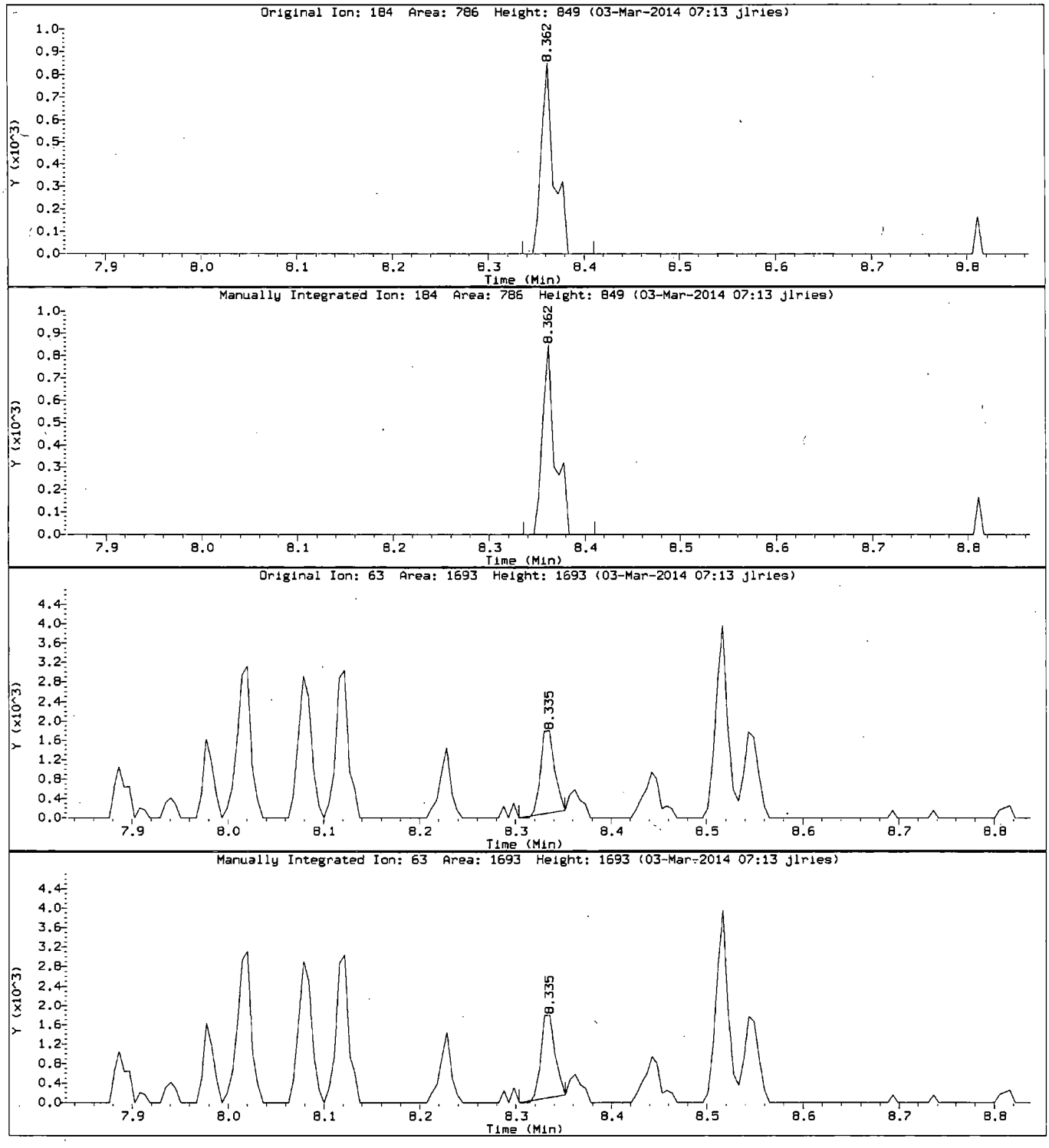
Lab Sample ID: ICAL 10328-96 2

Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5



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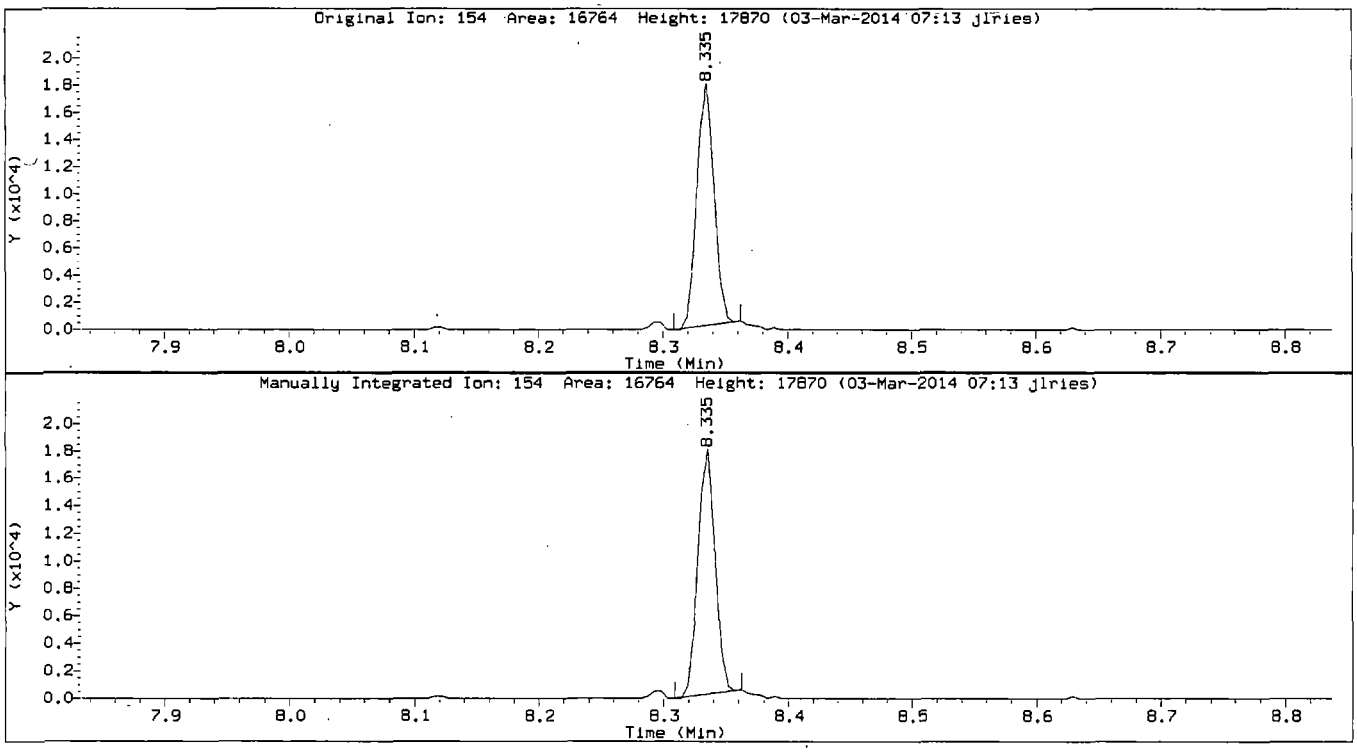

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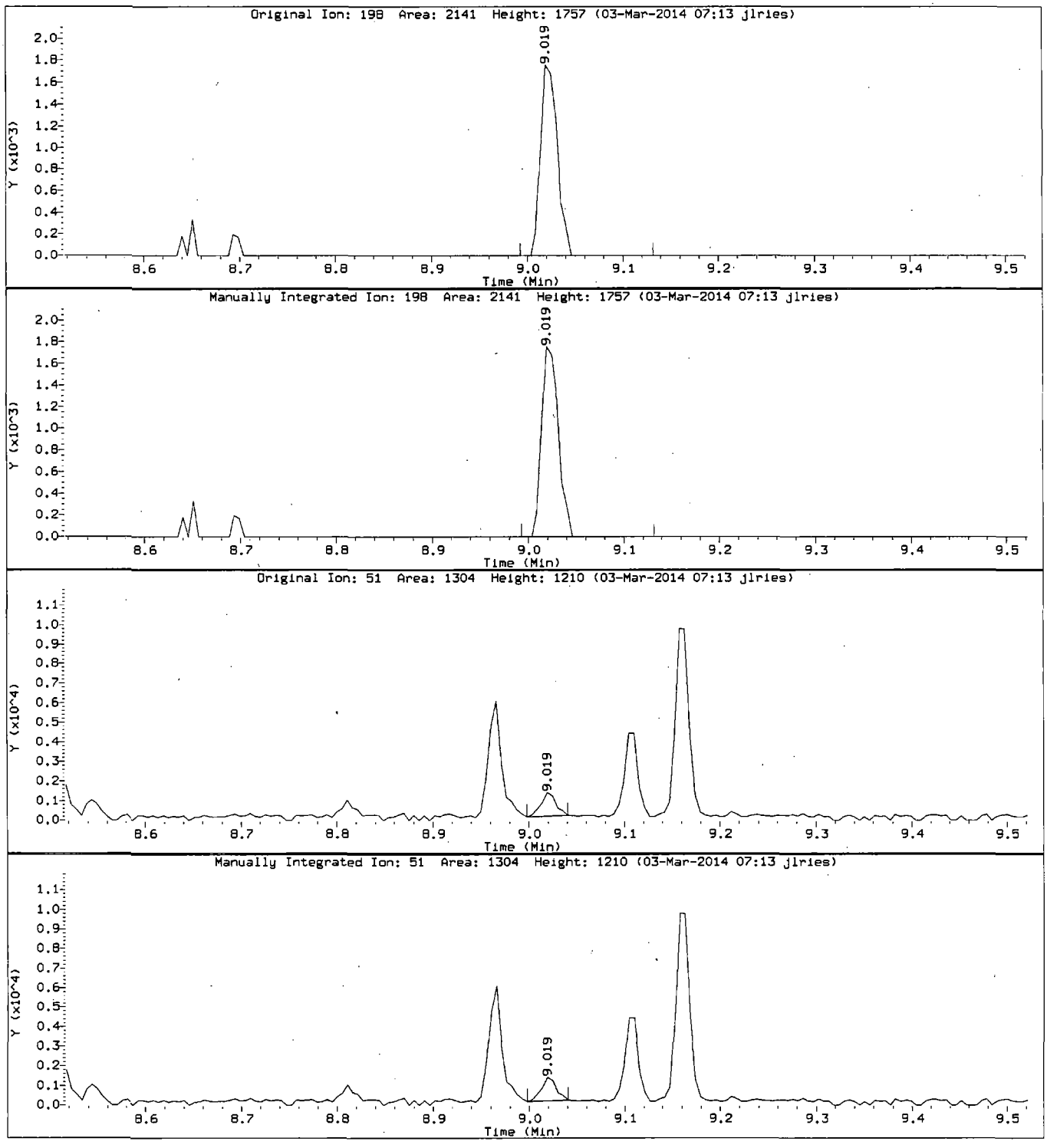
Lab Sample ID: ICAL 10328-96 2

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



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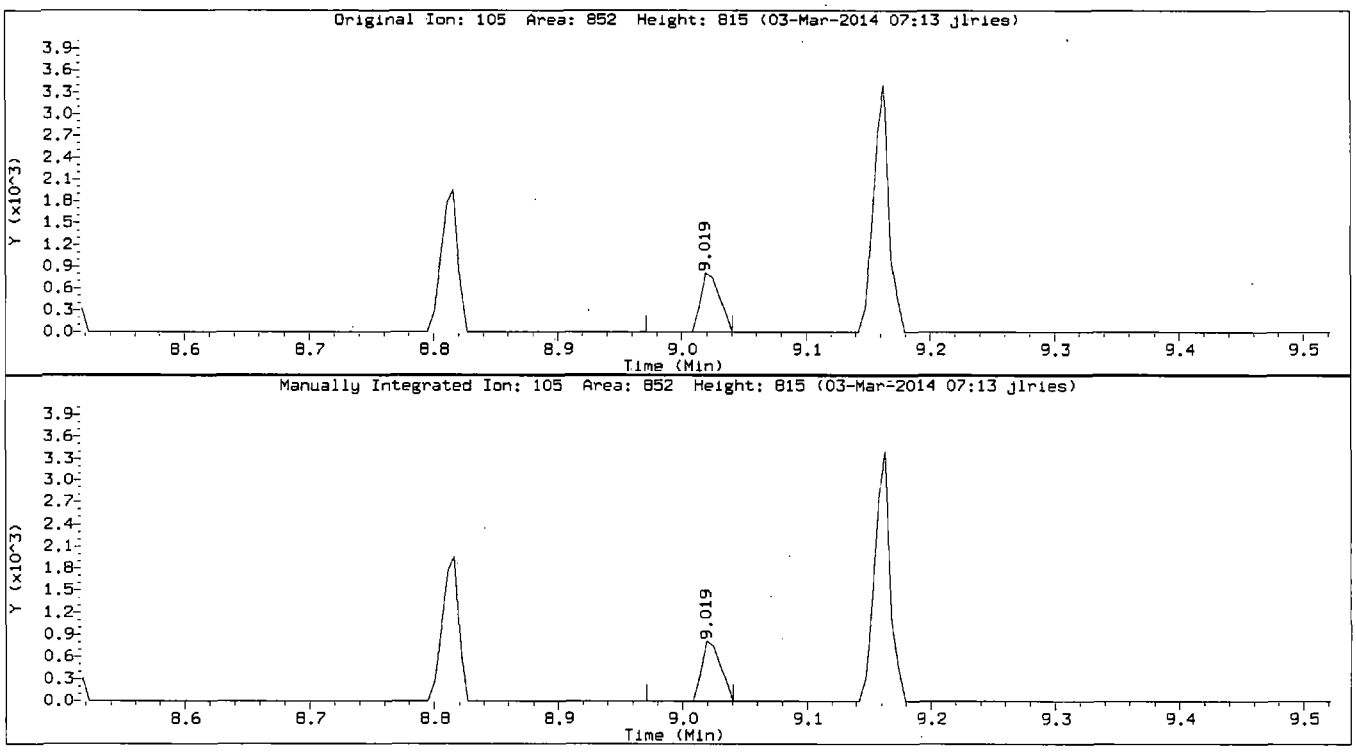

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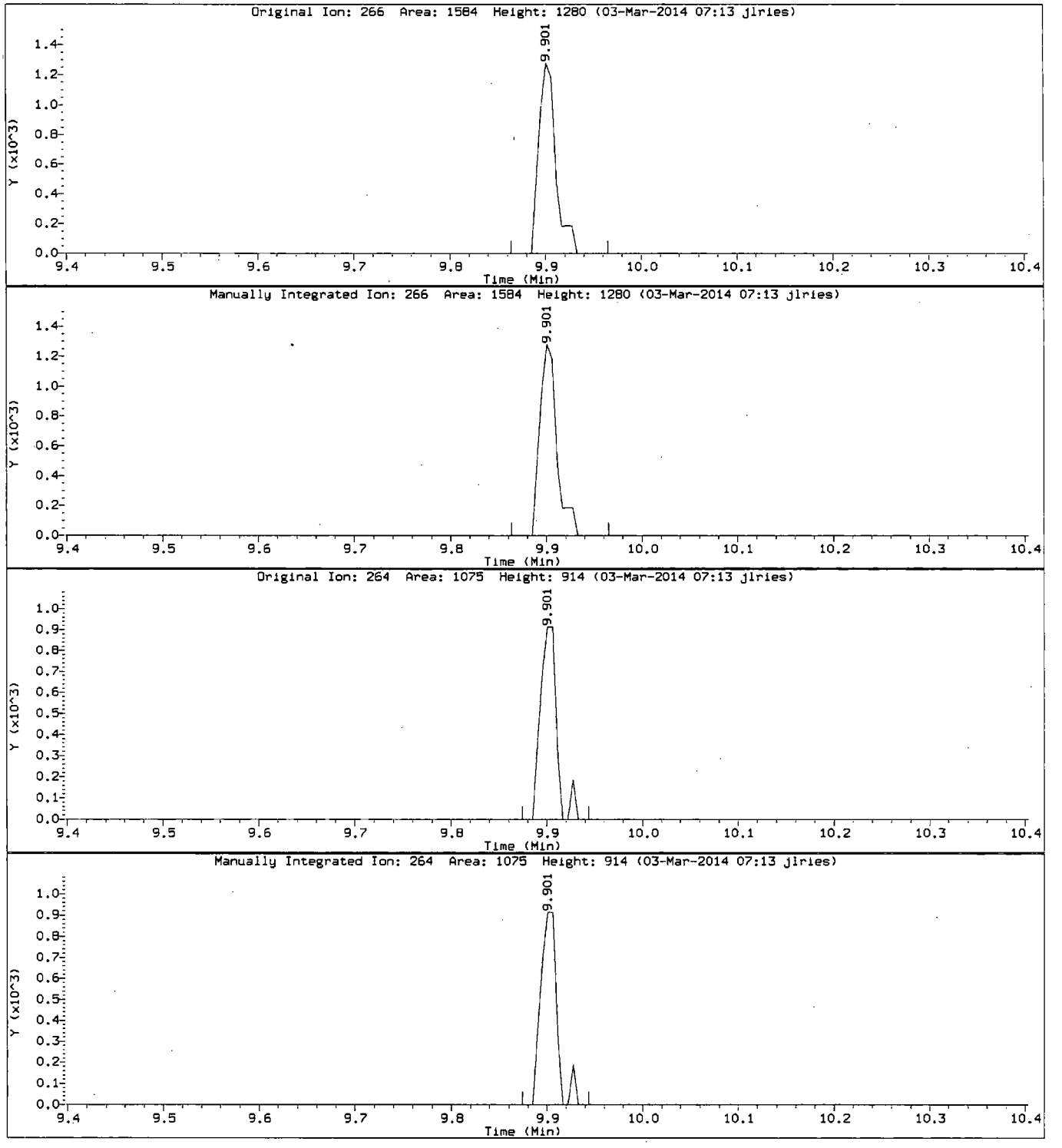
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Pentachlorophenol
CAS Number: 87-86-5



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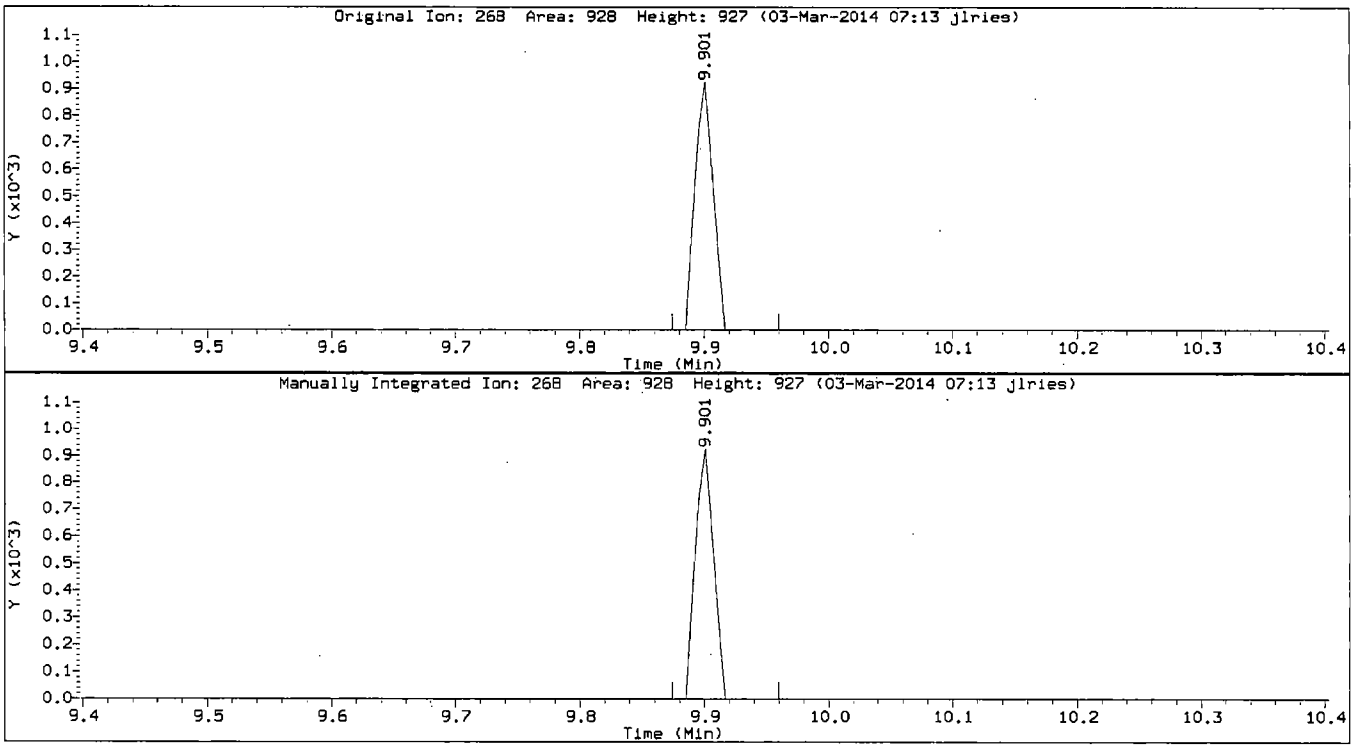

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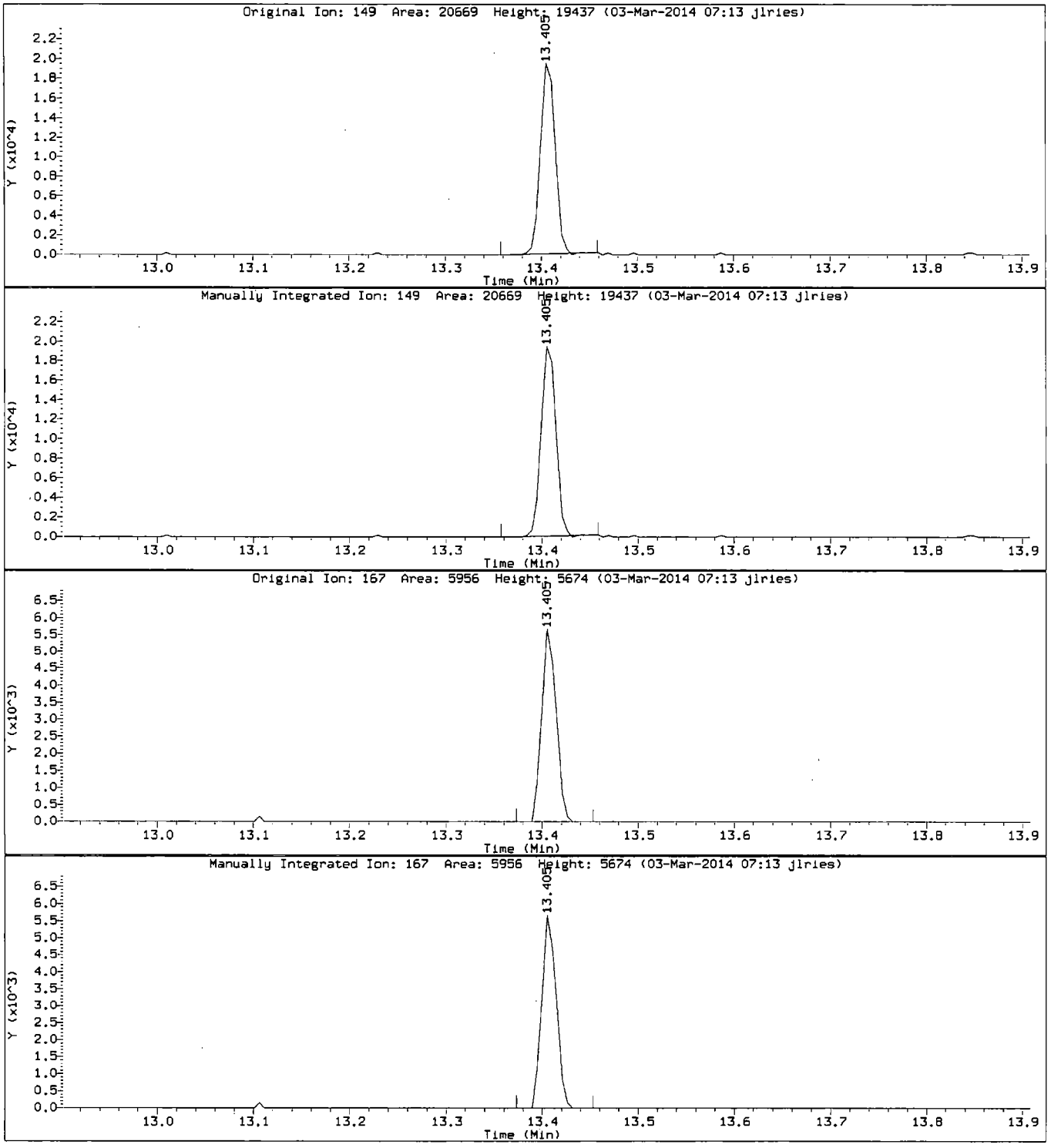
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: bis(2-Ethylhexyl)phthalate
CAS Number: 117-81-7



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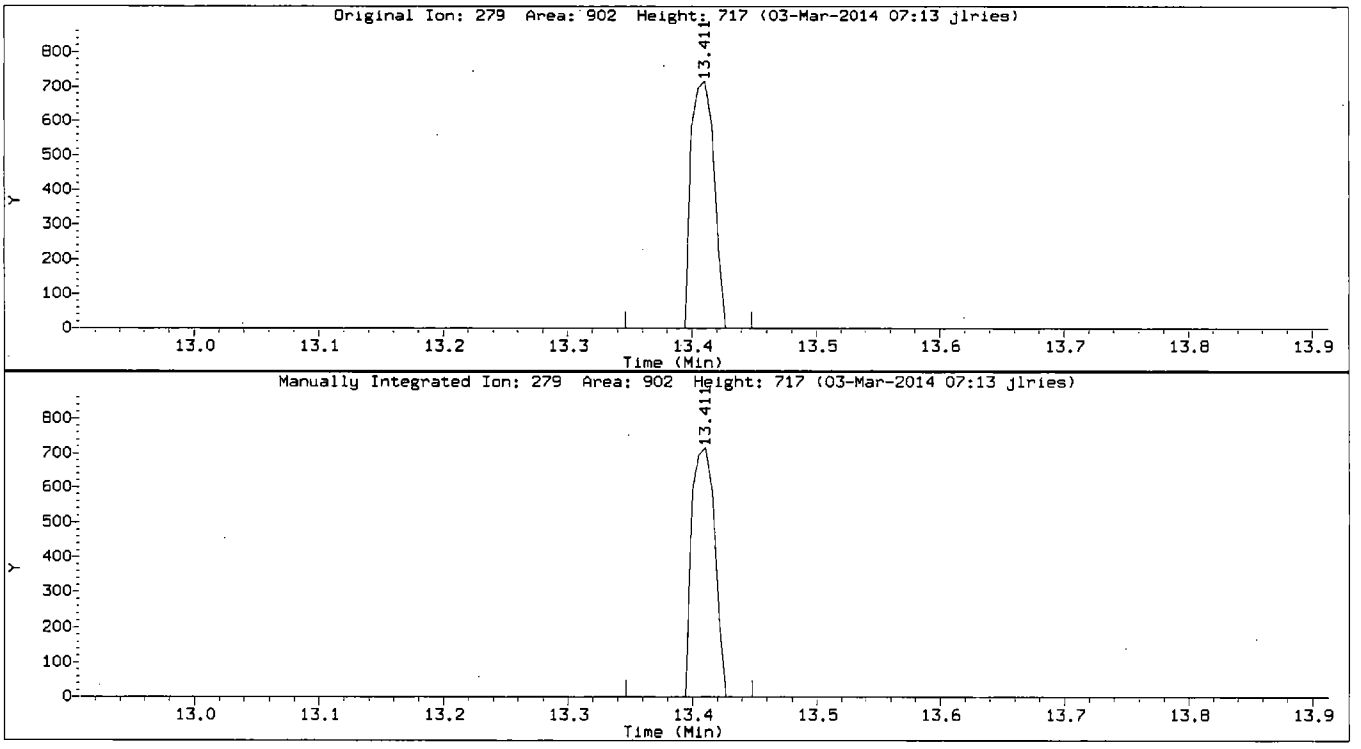

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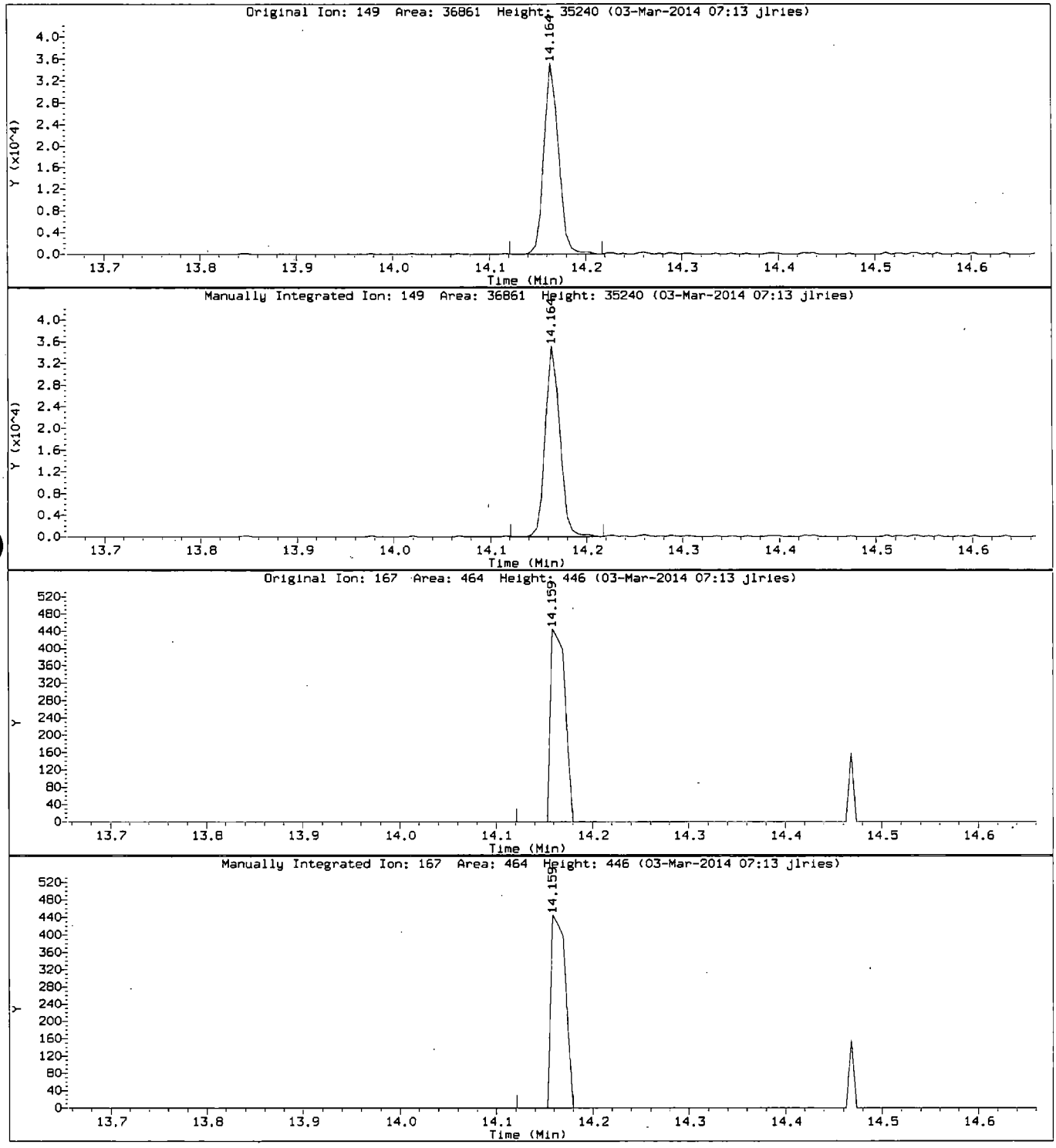
Lab Sample ID: ICAL 10328-96 2

Compound: di-n-Octylphthalate
CAS Number: 117-84-0



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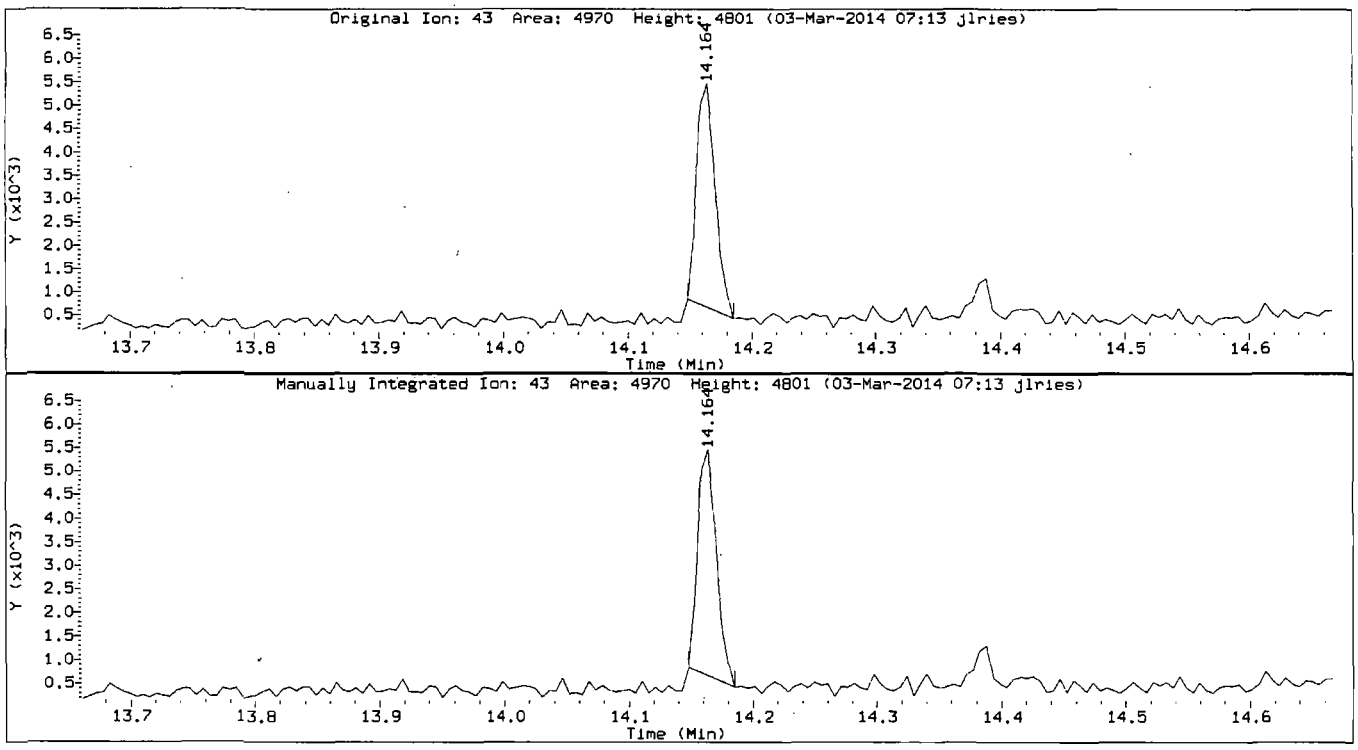

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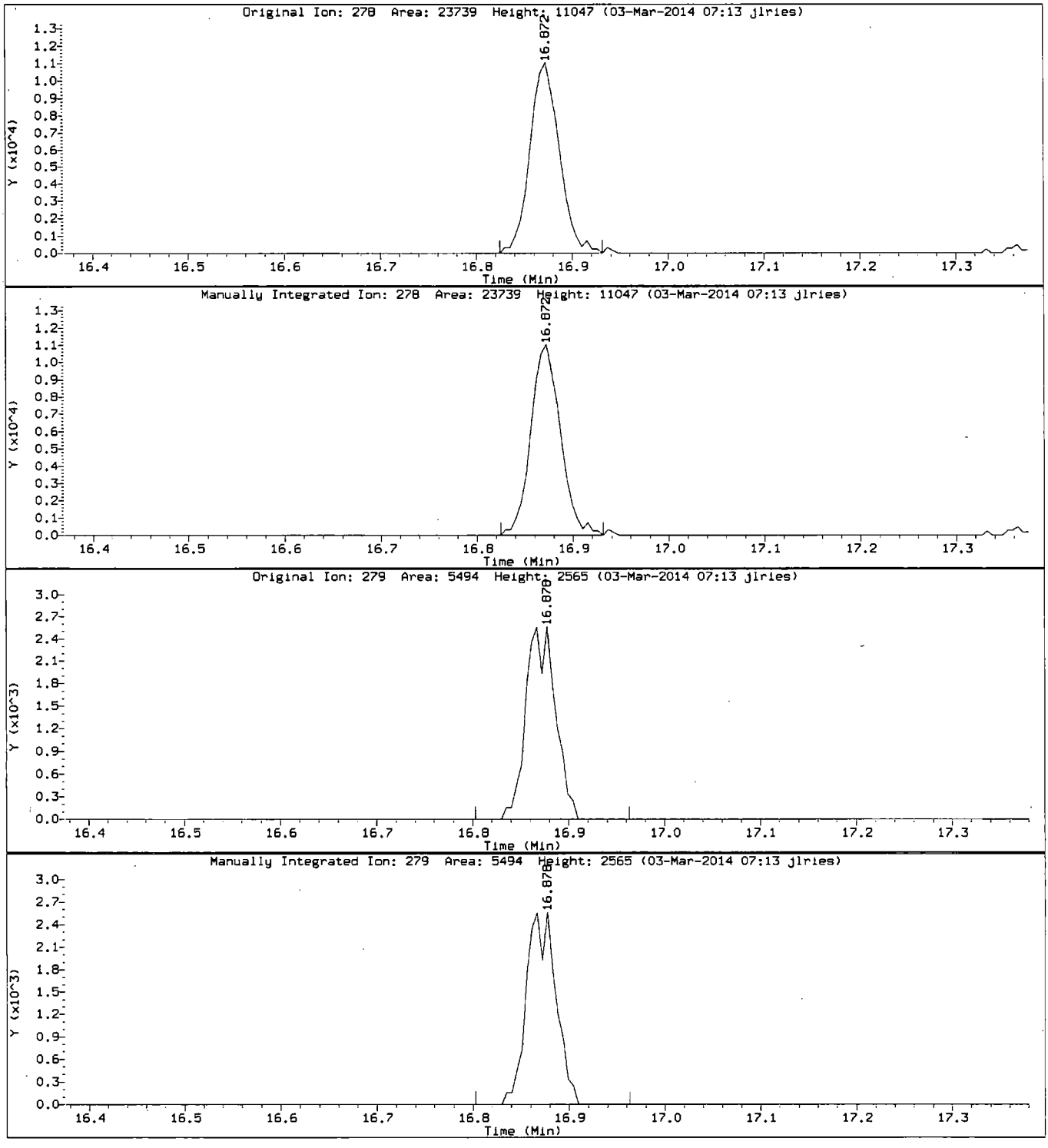
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3



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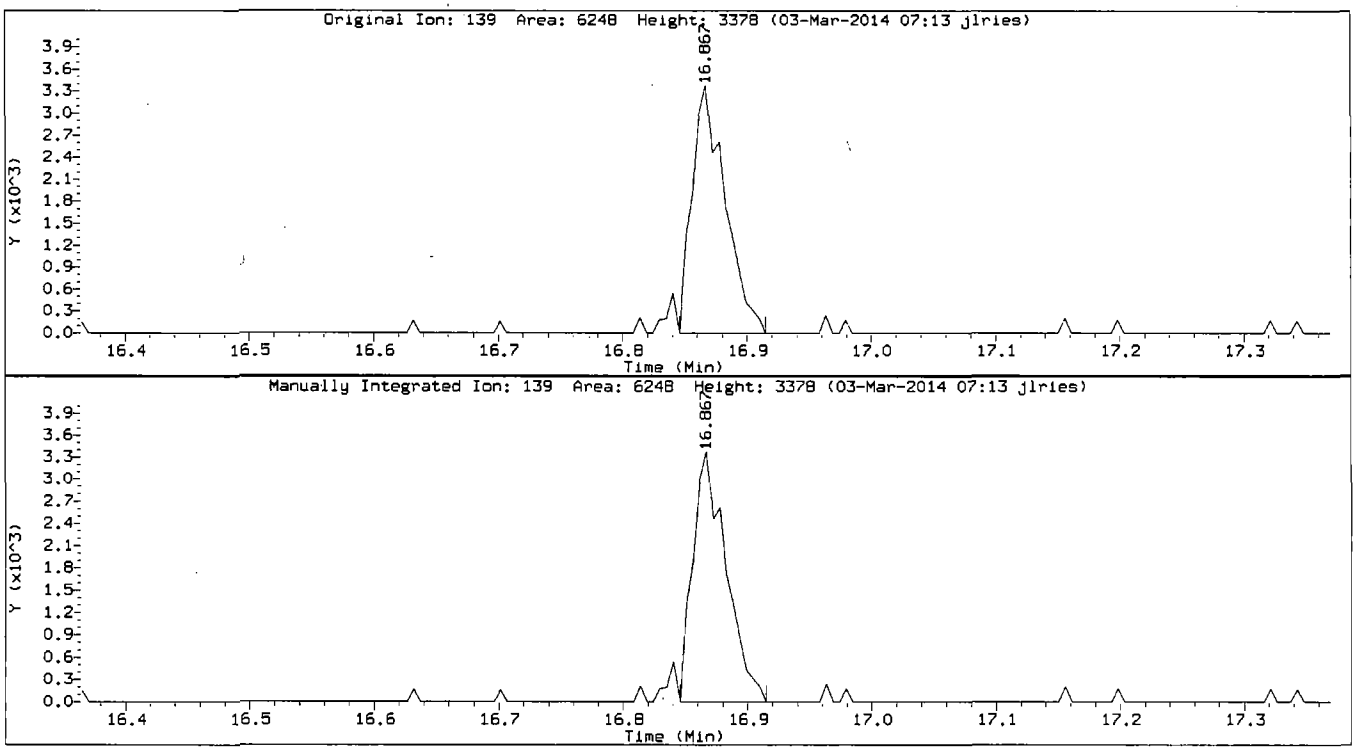
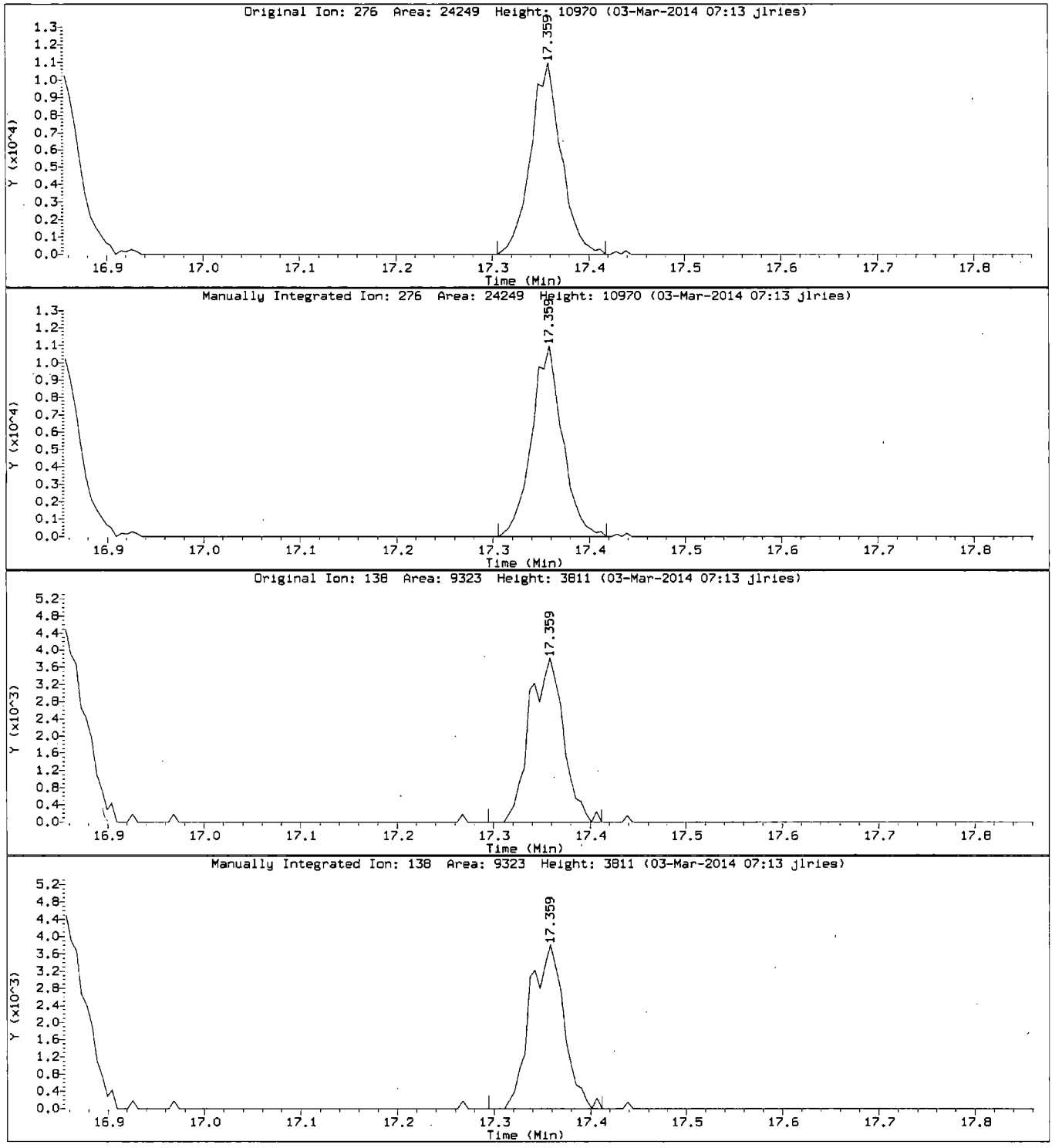
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

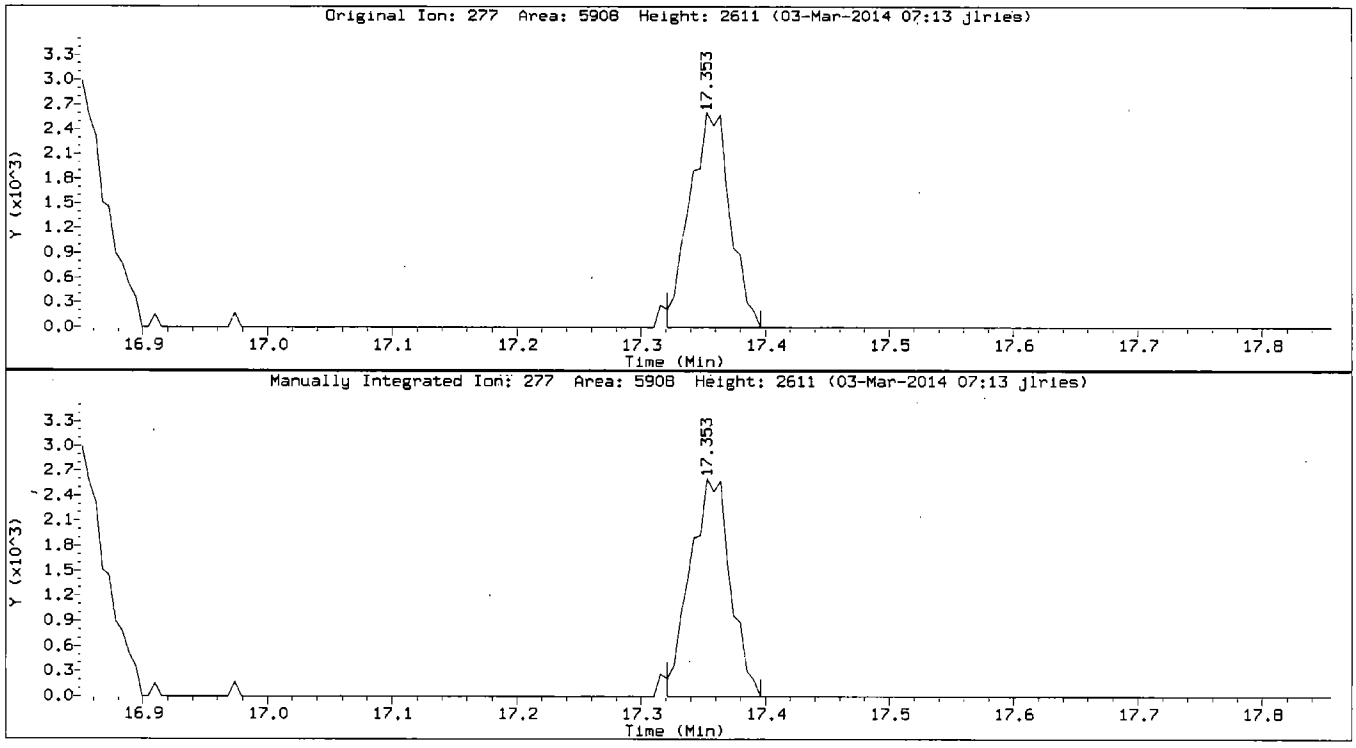


Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281419.D
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281419.D
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 28-FEB-2014 16:34
Lab File ID: 02281420.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.82144	0.79148	0.79148	0.000	-3.64755	40.00000	Averaged
2 Pyridine	1.49516	1.35527	1.35527	0.000	-9.35606	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.41718	1.34262	1.34262	0.000	-5.26086	20.00000	Averaged
$ 4 Phenol-d6 (S)	1.62963	1.54456	1.54456	0.000	-5.22017	20.00000	Averaged
5 Phenol	1.71095	1.64148	1.64148	0.800	-4.06043	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.27504	1.09188	1.09188	0.700	-14.36496	40.00000	Averaged
7 2-Chlorophenol	1.43833	1.32686	1.32686	0.800	-7.74972	40.00000	Averaged
8 1,3-Dichlorobenzene	1.62113	1.39354	1.39354	0.000	-14.03929	40.00000	Averaged
10 1,4-Dichlorobenzene	1.64435	1.45393	1.45393	0.000	-11.57978	20.00000	Averaged
11 Benzyl alcohol	0.98327	0.89225	0.89225	0.000	-9.25606	40.00000	Averaged
12 1,2-Dichlorobenzene	1.53761	1.33578	1.33578	0.000	-13.12653	40.00000	Averaged
13 2-Methylphenol	1.09771	1.02180	1.02180	0.700	-6.91533	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	3.26596	2.44732	2.44732	0.000	-25.06589	40.00000	Averaged
15 3 & 4-Methylphenol	1.43620	1.49654	1.49654	0.600	4.20113	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	0.82934	0.69001	0.69001	0.500	-16.79997	40.00000	Averaged
18 Hexachloroethane	0.59718	0.51700	0.51700	0.300	-13.42590	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.34604	0.32772	0.32772	0.000	-5.29564	20.00000	Averaged
20 Nitrobenzene	0.32889	0.28438	0.28438	0.200	-13.53518	40.00000	Averaged
21 Isophorone	0.59079	0.53224	0.53224	0.400	-9.91087	40.00000	Averaged
22 2-Nitrophenol	0.19269	0.18402	0.18402	0.100	-4.49925	20.00000	Averaged
23 2,4-Dimethylphenol	0.33563	0.31204	0.31204	0.200	-7.02846	40.00000	Averaged
24 Benzoic acid	0.17260	0.18564	0.18564	0.000	7.55568	40.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.34958	0.31103	0.31103	0.300	-11.02813	40.00000	Averaged
26 2,4-Dichlorophenol	0.28989	0.26636	0.26636	0.200	-8.11842	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.30416	0.26307	0.26307	0.000	-13.51067	40.00000	Averaged
29 Naphthalene	1.01420	0.87951	0.87951	0.700	-13.28034	40.00000	Averaged
30 4-Chloroaniline	0.36851	0.30809	0.30809	0.010	-16.39507	40.00000	Averaged
31 Hexachlorobutadiene	0.16651	0.14296	0.14296	0.010	-14.13885	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.27561	0.24908	0.24908	0.200	-9.62659	20.00000	Averaged
33 2-Methylnaphthalene	0.66940	0.58971	0.58971	0.040	-11.90353	40.00000	Averaged
34 1-Methylnaphthalene	0.62068	0.55480	0.55480	0.000	-10.61342	40.00000	Averaged
35 Hexachlorocyclopentadiene	80.00000	65.95769	0.24241	0.050	-17.55289	40.00000	Quadratic
36 2,4,6-Trichlorophenol	0.37362	0.35911	0.35911	0.200	-3.88437	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.39701	0.38874	0.38874	0.200	-2.08430	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.39852	1.33856	1.33856	0.000	-4.28760	20.00000	Averaged
39 2-Chloronaphthalene	1.22024	1.04947	1.04947	0.800	-13.99453	40.00000	Averaged
40 2-Nitroaniline	0.39806	0.34783	0.34783	0.010	-12.61759	40.00000	Averaged
41 Dimethylphthalate	1.32327	1.16239	1.16239	0.010	-12.15810	40.00000	Averaged
42 2,6-Dinitrotoluene	0.30805	0.27423	0.27423	0.200	-10.97923	40.00000	Averaged
43 Acenaphthylene	1.88785	1.58375	1.58375	0.900	-16.10824	40.00000	Averaged
44 3-Nitroaniline	0.33118	0.27578	0.27578	0.010	-16.72689	40.00000	Averaged
46 Acenaphthene	1.11464	1.00883	1.00883	0.900	-9.49232	20.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 28-FEB-2014 16:34
Lab File ID: 02281420.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m

	COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
47	2,4-Dinitrophenol	80.00000	69.10209	0.12709	0.050	-13.62238	40.00000	Quadratic	
48	4-Nitrophenol	0.25423	0.25133	0.25133	0.050	-1.13907	40.00000	Averaged	
49	2,4-Dinitrotoluene	0.39940	0.34820	0.34820	0.200	-12.81840	40.00000	Averaged	
50	Dibenzofuran	1.66686	1.48277	1.48277	0.800	-11.04378	40.00000	Averaged	
51	Diethylphthalate	1.27891	1.09872	1.09872	0.010	-14.08985	40.00000	Averaged	
52	4-Chlorophenylphenyl ether	0.61011	0.55275	0.55275	0.400	-9.40140	40.00000	Averaged	
53	4-Nitroaniline	0.36803	0.34911	0.34911	0.010	-5.14126	40.00000	Averaged	
54	Fluorene	1.35237	1.17348	1.17348	0.900	-13.22739	40.00000	Averaged	
55	4,6-Dinitro-2-methylphenol	80.00000	70.01544	0.12031	0.010	-12.48070	40.00000	Quadratic	
56	N-Nitrosodiphenylamine	0.69061	0.49678	0.49678	0.010	-28.06685	20.00000	Averaged	<-
57	Azobenzene	1.22401	1.06396	1.06396	0.000	-13.07582	40.00000	Averaged	
58	1,2-Diphenylhydrazine	1.22401	1.06396	1.06396	0.000	-13.07582	40.00000	Averaged	
$	59 2,4,6-Tribromophenol (S)	0.15272	0.15151	0.15151	0.000	-0.79299	20.00000	Averaged	
60	4-Bromophenylphenyl ether	0.20143	0.17896	0.17896	0.100	-11.15515	40.00000	Averaged	
61	Hexachlorobenzene	0.21379	0.17668	0.17668	0.100	-17.35583	40.00000	Averaged	
62	Pentachlorophenol	80.00000	87.95026	0.12425	0.050	9.93783	20.00000	Quadratic	
64	Phenanthrene	1.14257	0.97081	0.97081	0.700	-15.03223	40.00000	Averaged	
65	Anthracene	1.15927	0.98695	0.98695	0.700	-14.86455	40.00000	Averaged	
66	Carbazole	1.12590	0.99495	0.99495	0.010	-11.63080	40.00000	Averaged	
67	di-n-Butylphthalate	1.36512	1.22230	1.22230	0.010	-10.46220	40.00000	Averaged	
68	Fluoranthene	1.24099	1.05212	1.05212	0.600	-15.21922	20.00000	Averaged	
69	Benzidine	80.00000	18.15993	0.15020	0.000	-77.30008	40.00000	Quadratic	<-
70	Pyrene	1.35511	1.17512	1.17512	0.600	-13.28242	40.00000	Averaged	
$	71 Terphenyl-d14 (S)	0.85450	0.83364	0.83364	0.000	-2.44073	20.00000	Averaged	
72	Butylbenzylphthalate	0.62689	0.56298	0.56298	0.010	-10.19521	40.00000	Averaged	
73	bis(2-Ethylhexyl)phthalate	0.87641	0.78979	0.78979	0.010	-9.88314	40.00000	Averaged	
74	3,3'-Dichlorobenzidine	0.36973	0.34108	0.34108	0.010	-7.74798	40.00000	Averaged	
75	Benzo(a)anthracene	1.22862	1.01792	1.01792	0.800	-17.14937	40.00000	Averaged	
77	Chrysene	1.12153	0.61175	0.61175	0.700	-45.45375	40.00000	Averaged	<-
78	di-n-Octylphthalate	1.55444	1.40057	1.40057	0.010	-9.89898	20.00000	Averaged	
79	Benzo(b)fluoranthene	1.18796	1.04745	1.04745	0.700	-11.82763	40.00000	Averaged	
80	Benzo(k)fluoranthene	1.21558	1.10290	1.10290	0.700	-9.26967	40.00000	Averaged	
81	Benzo(a)pyrene	1.13484	0.96774	0.96774	0.700	-14.72418	20.00000	Averaged	
83	Indeno(1,2,3-cd)pyrene	1.22460	1.04176	1.04176	0.500	-14.93012	40.00000	Averaged	
84	Dibenzo(a,h)anthracene	1.04083	0.61562	0.61562	0.400	-40.85334	40.00000	Averaged	<-
85	Benzo(g,h,i)perylene	1.03855	0.94672	0.94672	0.500	-8.84250	40.00000	Averaged	

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 28-FEB-2014 16:34
Lab File ID: 02281420.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	12.66447
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Lab Smp Id: ICV 10328-98
Inj Date : 28-FEB-2014 16:34
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICV 10328-98
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	104053	80.0000	77.1
2	Pyridine	79	2.416	2.416	(0.512)	178172	80.0000	72.5
$ 3	2-Fluorophenol (S)	112	3.431	3.431	(0.727)	176509	80.0000	75.8
$ 4	Phenol-d6 (S)	99	4.296	4.296	(0.911)	203057	80.0000	75.8
5	Phenol	94	4.312	4.312	(0.914)	215799	80.0000	76.8
6	bis(2-Chloroethyl)ether	63	4.414	4.414	(0.935)	143545	80.0000	68.5
7	2-Chlorophenol	128	4.499	4.499	(0.954)	174437	80.0000	73.8
8	1,3-Dichlorobenzene	146	4.665	4.665	(0.989)	183203	80.0000	68.8
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	65733	40.0000	
10	1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	191143	80.0000	70.7
11	Benzyl alcohol	79	4.847	4.847	(1.027)	117301	80.0000	72.6
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	175609	80.0000	69.5
13	2-Methylphenol	107	4.953	4.953	(1.050)	134332	80.0000	74.5
14	bis(2-Chloroisopropyl) ether	45	4.985	4.985	(1.057)	321739	80.0000	59.9(M)
15	3 & 4-Methylphenol	107	5.124	5.124	(1.086)	196744	80.0000	83.4
17	N-Nitroso-di-n-propylamine	70	5.135	5.135	(1.088)	90713	80.0000	66.6
18	Hexachloroethane	117	5.279	5.279	(1.119)	67968	80.0000	69.2
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	126203	60.0000	56.8
20	Nitrobenzene	77	5.343	5.343	(0.867)	146017	80.0000	69.2
21	Isophorone	82	5.611	5.611	(0.911)	273288	80.0000	72.1
22	2-Nitrophenol	139	5.707	5.707	(0.926)	94488	80.0000	76.4
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	160220	80.0000	74.4

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	5.840	5.840	(0.948)	95321	80.0000	86.0(H)
	25 bis(2-Chloroethoxy)methane	93	5.846	5.846	(0.949)	159701	80.0000	71.2
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	136766	80.0000	73.5
	27 1,2,4-Trichlorobenzene	180	6.091	6.091	(0.989)	135075	80.0000	69.2
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	256733	40.0000	(Q)
	29 Naphthalene	128	6.187	6.187	(1.004)	451598	80.0000	69.4
	30 4-Chloroaniline	127	6.236	6.236	(1.012)	158193	80.0000	66.9
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	73407	80.0000	68.7
	32 4-Chloro-3-methylphenol	107	6.813	6.813	(1.106)	127892	80.0000	72.3
	33 2-Methylnaphthalene	142	7.016	7.016	(1.139)	302798	80.0000	70.5
	34 1-Methylnaphthalene	142	7.138	7.138	(1.159)	284873	80.0000	71.5
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	61398	80.0000	66.0
	36 2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	90955	80.0000	76.9
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	98459	80.0000	78.3
$	38 2-Fluorobiphenyl (S)	172	7.459	7.459	(0.899)	254272	60.0000	57.4
	39 2-Chloronaphthalene	162	7.614	7.614	(0.918)	265811	80.0000	68.8
	40 2-Nitroaniline	65	7.726	7.726	(0.931)	88099	80.0000	69.9
	41 Dimethylphthalate	163	7.945	7.945	(0.958)	294410	80.0000	70.3
	42 2,6-Dinitrotoluene	165	8.025	8.025	(0.967)	69457	80.0000	71.2
	43 Acenaphthylene	152	8.121	8.121	(0.979)	401132	80.0000	67.1(M)
	44 3-Nitroaniline	138	8.234	8.234	(0.992)	69850	80.0000	66.6
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	126640	40.0000	
	46 Acenaphthene	154	8.340	8.340	(1.005)	255517	80.0000	72.4
	47 2,4-Dinitrophenol	184	8.362	8.362	(1.008)	32190	80.0000	69.1(Q)
	48 4-Nitrophenol	65	8.442	8.442	(1.017)	63657	80.0000	79.1
	49 2,4-Dinitrotoluene	165	8.522	8.522	(1.027)	88192	80.0000	69.7
	50 Dibenzofuran	168	8.549	8.549	(1.030)	375557	80.0000	71.2
	51 Diethylphthalate	149	8.821	8.821	(1.063)	278283	80.0000	68.7
	52 4-Chlorophenylphenyl ether	204	8.971	8.971	(1.081)	140001	80.0000	72.5
	53 4-Nitroaniline	138	8.992	8.992	(1.084)	88423	80.0000	75.9
	54 Fluorene	166	8.976	8.976	(1.082)	297220	80.0000	69.4
	55 4,6-Dinitro-2-methylphenol	198	9.030	9.030	(0.890)	49748	80.0000	70.0
	56 N-Nitrosodiphenylamine	169	9.115	9.115	(0.899)	205417	80.0000	57.5
	57 Azobenzene	77	9.163	9.163	(1.104)	269480	80.0000	69.5
	58 1,2-Diphenylhydrazine	77	9.163	9.163	(1.104)	269480	80.0000	69.5
$	59 2,4,6-Tribromophenol (S)	330	9.275	9.275	(1.118)	38374	80.0000	79.4
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.944)	74000	80.0000	71.1
	61 Hexachlorobenzene	284	9.660	9.660	(0.953)	73057	80.0000	66.1
	62 Pentachlorophenol	266	9.900	9.900	(0.976)	51378	80.0000	88.0
*	63 Phenanthrene-d10	188	10.141	10.141	(1.000)	206748	40.0000	
	64 Phenanthrene	178	10.173	10.173	(1.003)	401428	80.0000	68.0
	65 Anthracene	178	10.232	10.232	(1.009)	408101	80.0000	68.1
	66 Carbazole	167	10.429	10.429	(1.028)	411408	80.0000	70.7
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	505416	80.0000	71.6
	68 Fluoranthene	202	11.647	11.647	(1.149)	435048	80.0000	67.8
	69 Benzidine	184	11.802	11.802	(0.879)	58533	80.0000	18.2
	70 Pyrene	202	11.930	11.930	(0.889)	457955	80.0000	69.4
$	71 Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	243659	60.0000	58.5
	72 Butylbenzylphthalate	149	12.710	12.710	(0.947)	219398	80.0000	71.8
	73 bis(2-Ethylhexyl)phthalate	149	13.410	13.410	(0.999)	307791	80.0000	72.1
	74 3,3'-Dichlorobenzidine	252	13.367	13.367	(0.996)	132924	80.0000	73.8
	75 Benzo(a)anthracene	228	13.410	13.410	(0.999)	396692	80.0000	66.3
*	76 Chrysene-d12	240	13.426	13.426	(1.000)	194855	40.0000	(Q)
	77 Chrysene	228	13.458	13.458	(1.002)	238407	80.0000	43.6

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.169	14.169	(1.055)	545815	80.0000	72.1
79	Benzo(b)fluoranthene	252	14.682	14.682	(0.967)	390671	80.0000	70.5
80	Benzo(k)fluoranthene	252	14.719	14.719	(0.970)	411352	80.0000	72.6
81	Benzo(a)pyrene	252	15.104	15.104	(0.995)	360943	80.0000	68.2
* 82	Perylene-d12	264	15.178	15.178	(1.000)	186487	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.872	16.872	(1.112)	388550	80.0000	68.0
84	Dibenzo(a,h)anthracene	278	16.888	16.888	(1.113)	229609	80.0000	47.3
85	Benzo(g,h,i)perylene	276	17.385	17.385	(1.145)	353101	80.0000	72.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281420.D
Lab Smp Id: ICV 10328-98
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

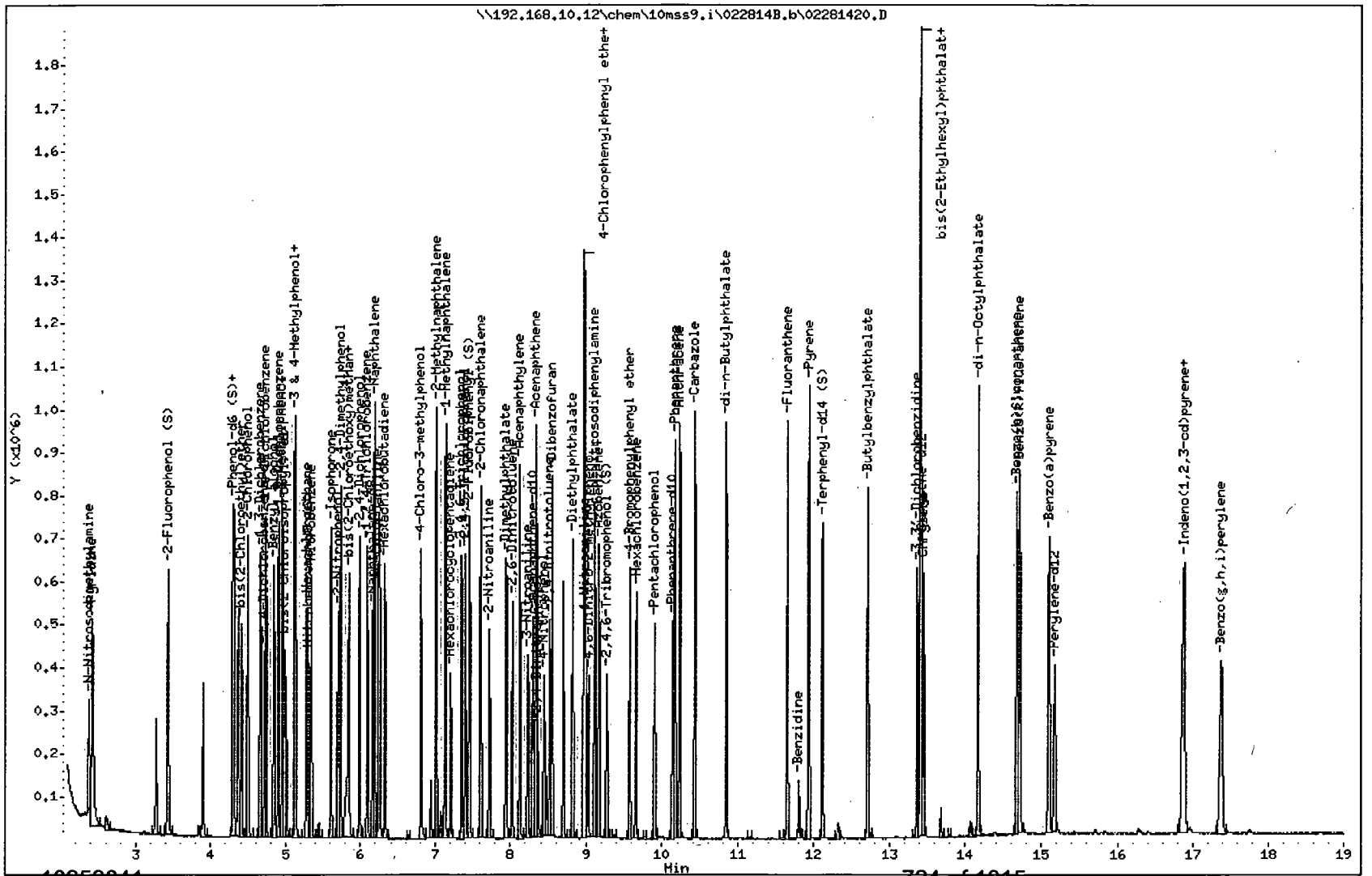
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	66154	33077	132308	65733	-0.64
28 Naphthalene-d8	255442	127721	510884	256733	0.51
45 Acenaphthene-d10	125688	62844	251376	126640	0.76
63 Phenanthrene-d10	201900	100950	403800	206748	2.40
76 Chrysene-d12	201053	100527	402106	194855	-3.08
82 Perylene-d12	192241	96121	384482	186487	-2.99

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	0.00
76 Chrysene-d12	13.43	12.93	13.93	13.43	0.00
82 Perylene-d12	15.18	14.68	15.68	15.18	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

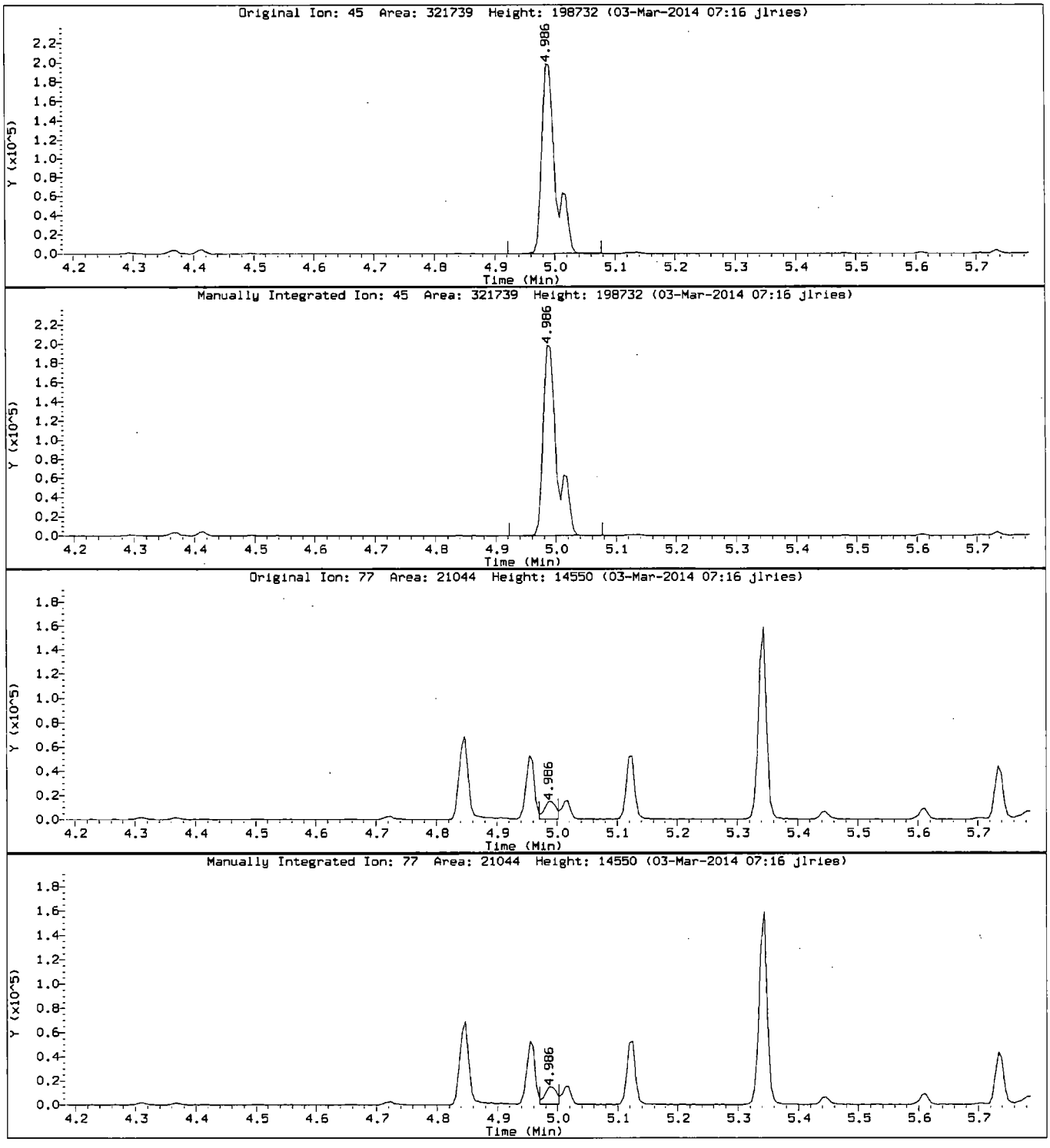
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Date : 28-FEB-2014 16:34
Client ID:
Sample Info: ICV 10328-98
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

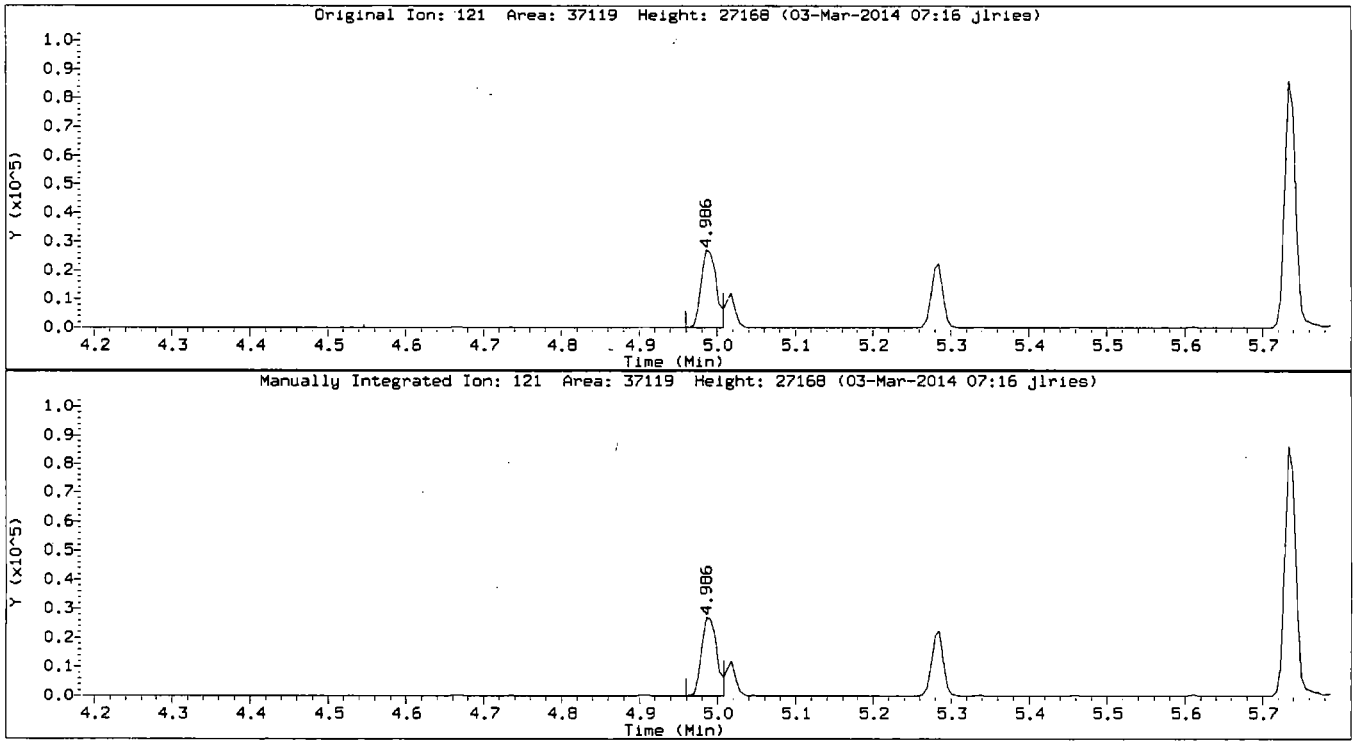


Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281420.D
Injection Date: 28-FEB-2014 16:34
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98

Compound: bis(2-Chloroisopropyl) ether
CAS Number: 108-60-1

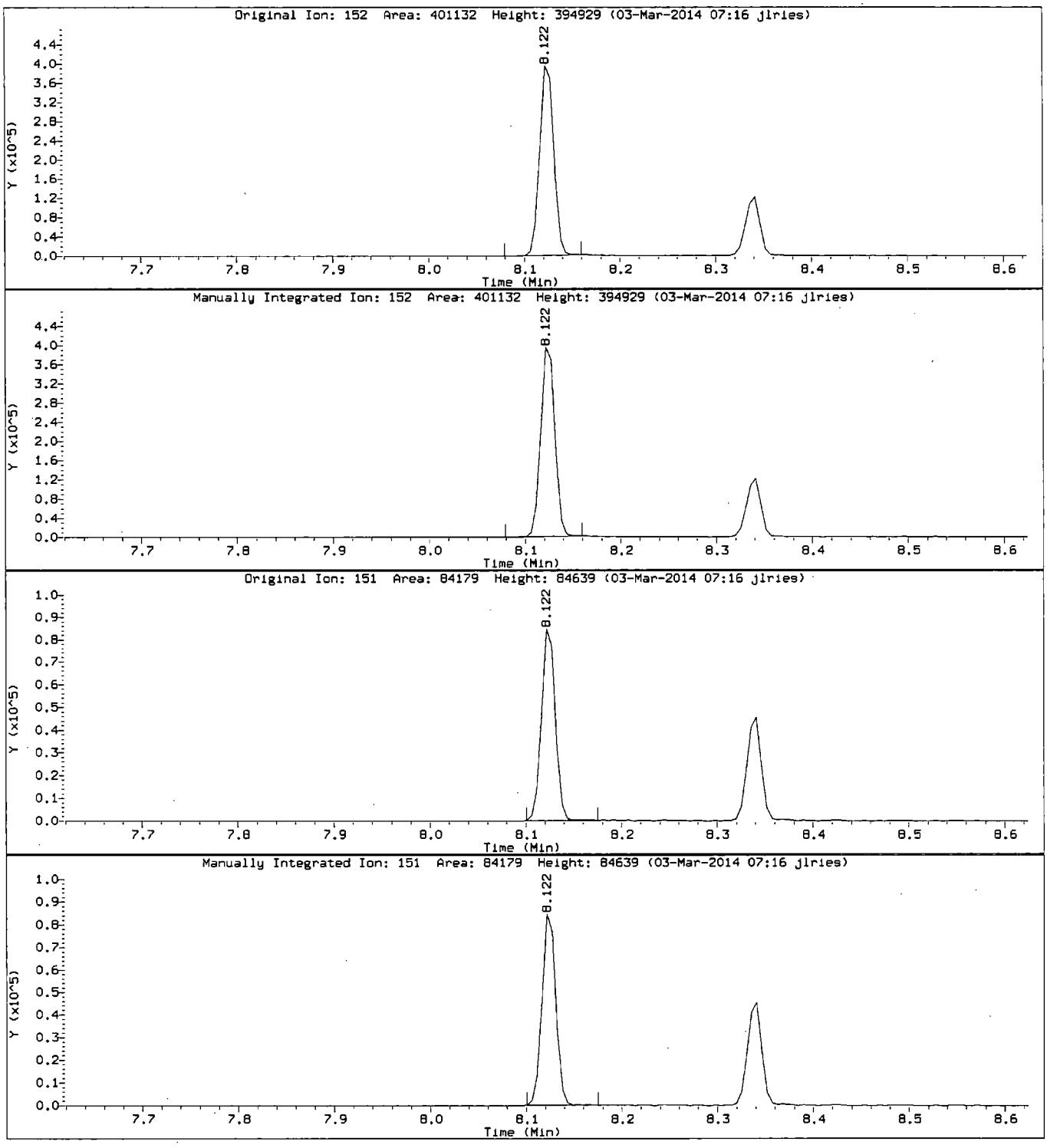


Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281420.D
Injection Date: 28-FEB-2014 16:34
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281420.D
Injection Date: 28-FEB-2014 16:34
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98

Compound: Acenaphthylene
CAS Number: 208-96-8



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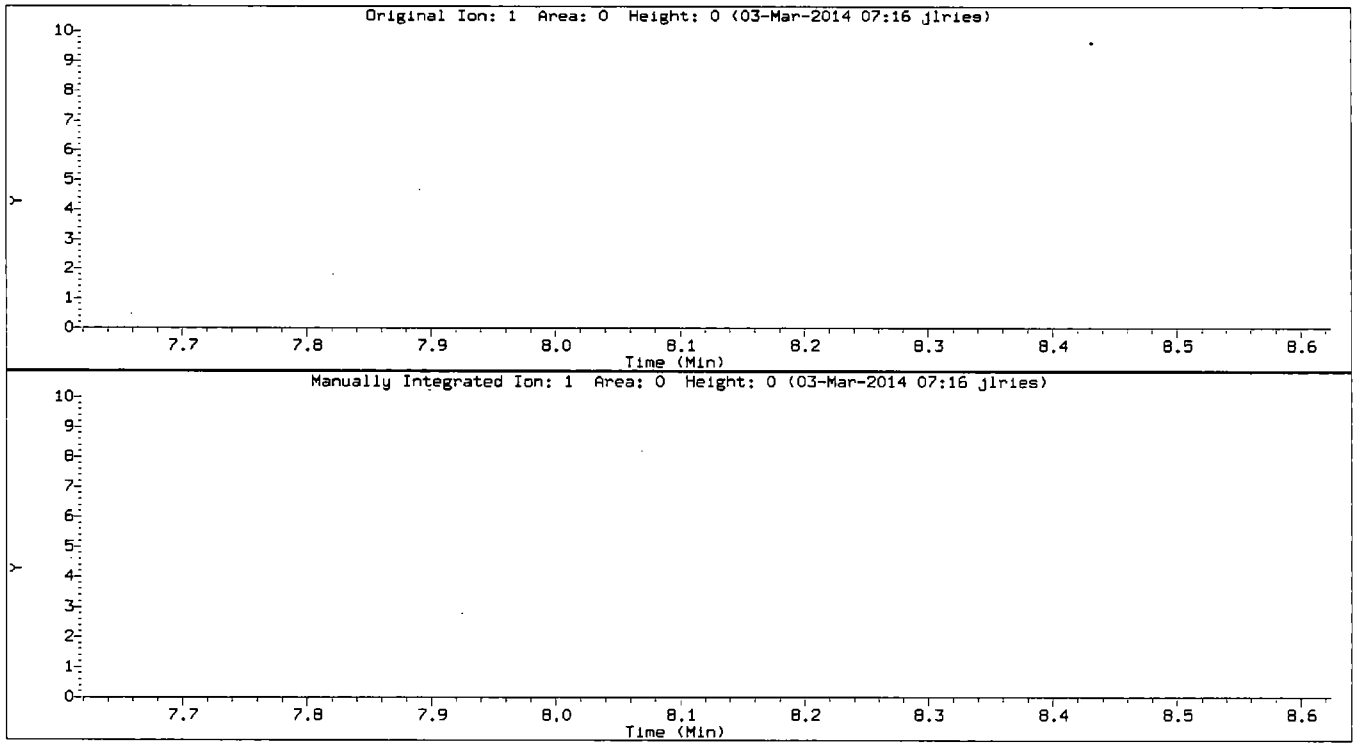
Injection Date: 28-FEB-2014 16:34
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281421.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 28-FEB-2014 17:01
Lab File ID: 02281421.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: ICV2 10328-47 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 Hexachlorocyclopentadiene	80.00000	71.71653	0.26500	0.050	-10.35434	40.00000	Quadratic
56 N-Nitrosodiphenylamine	0.69061	0.68671	0.68671	0.010	-0.56558	20.00000	Averaged
77 Chrysene	1.12153	1.09155	1.09155	0.700	-2.67334	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.04083	1.03824	1.03824	0.400	-0.24884	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.46052
Maximun Average %D/Drift = 40.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281421.D
Lab Smp Id: ICV2 10328-47
Inj Date : 28-FEB-2014 17:01
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICV2 10328-47
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ChrysDIPDIB.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	
*	9 1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	66581	40.0000		
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	257430	40.0000		(Q)
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	66345	80.0000	71.7	
*	45 Acenaphthene-d10	164	8.292	8.292	(1.000)	125177	40.0000		
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	279426	80.0000	79.5	
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	203453	40.0000		
*	76 Chrysene-d12	240	13.421	13.421	(1.000)	196031	40.0000		(Q)
	77 Chrysene	228	13.458	13.458	(1.003)	427956	80.0000	77.9	
*	82 Perylene-d12	264	15.173	15.173	(1.000)	188111	40.0000		
	84 Dibenzo(a,h)anthracene	278	16.893	16.893	(1.113)	390609	80.0000	79.8	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281421.D
Lab Smp Id: ICV2 10328-47
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 16:34

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

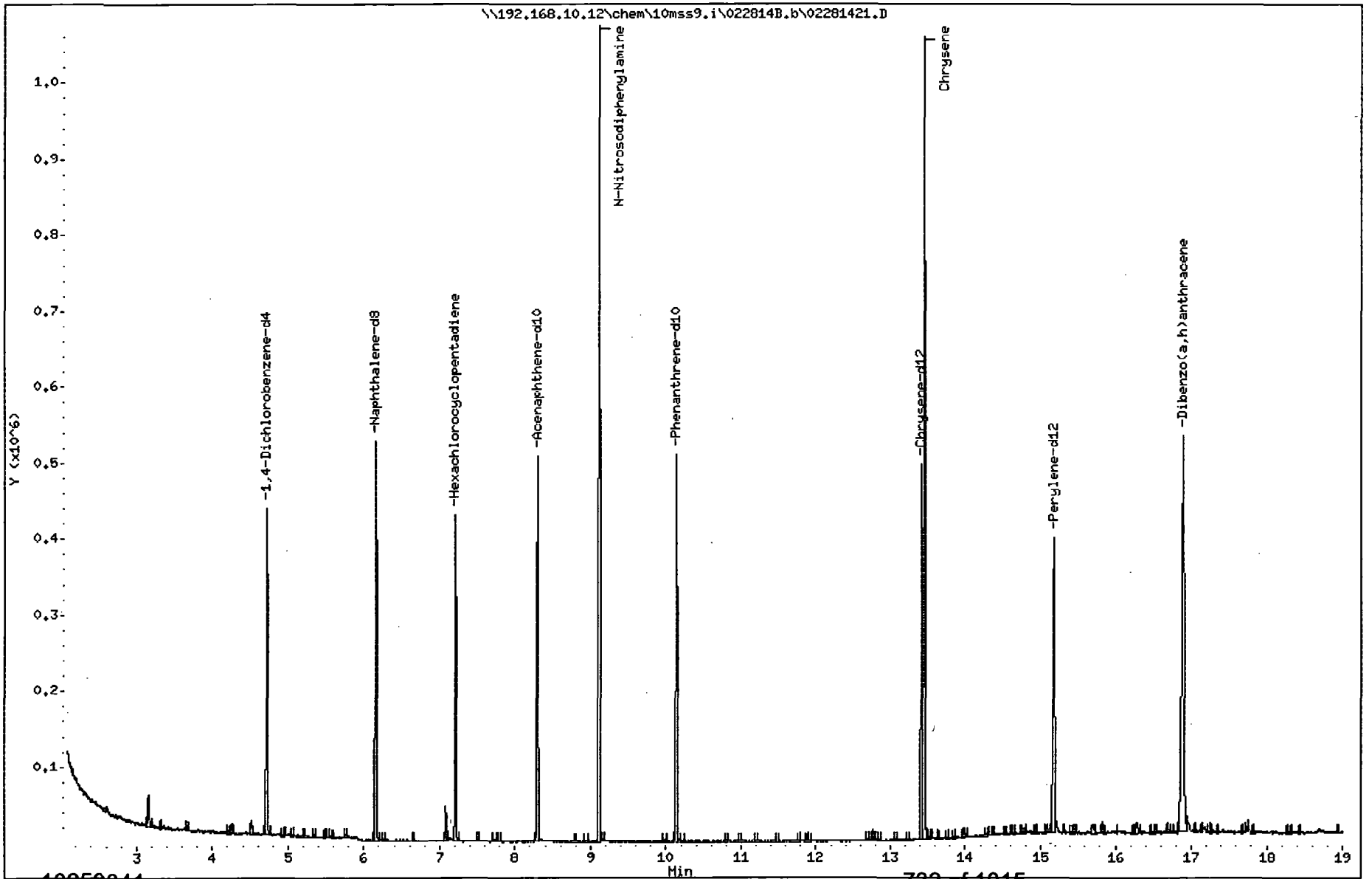
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	66154	33077	132308	66581	0.65
28 Naphthalene-d8	255442	127721	510884	257430	0.78
45 Acenaphthene-d10	125688	62844	251376	125177	-0.41
63 Phenanthrene-d10	201900	100950	403800	203453	0.77
76 Chrysene-d12	201053	100527	402106	196031	-2.50
82 Perylene-d12	192241	96121	384482	188111	-2.15

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

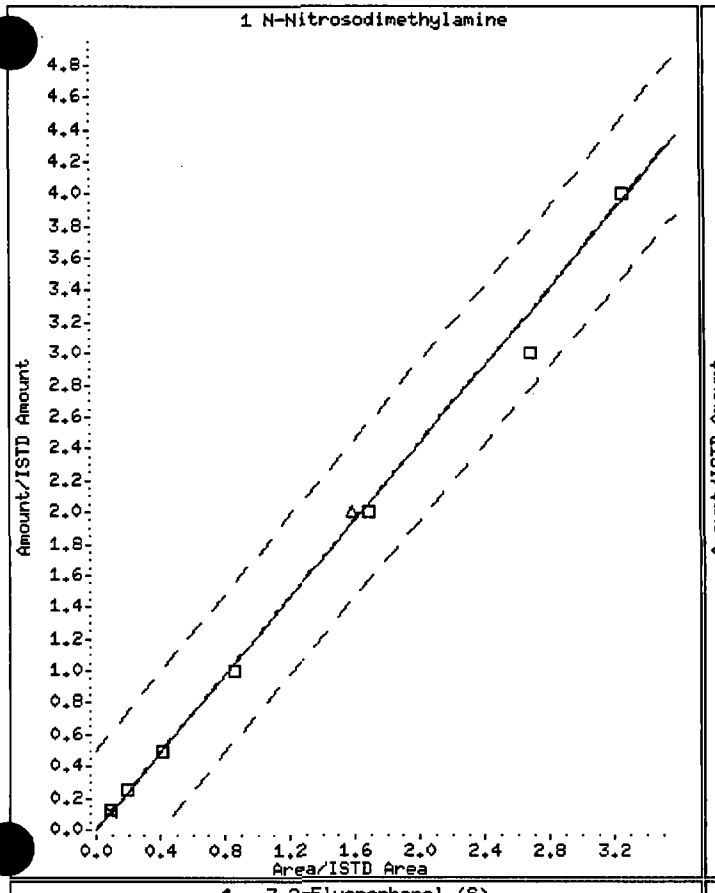
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281421.D
Date : 28-FEB-2014 17:01
Client ID:
Sample Info: ICV2 10328-47
Purge Volume: 1.0
Column phase: DB-5MS

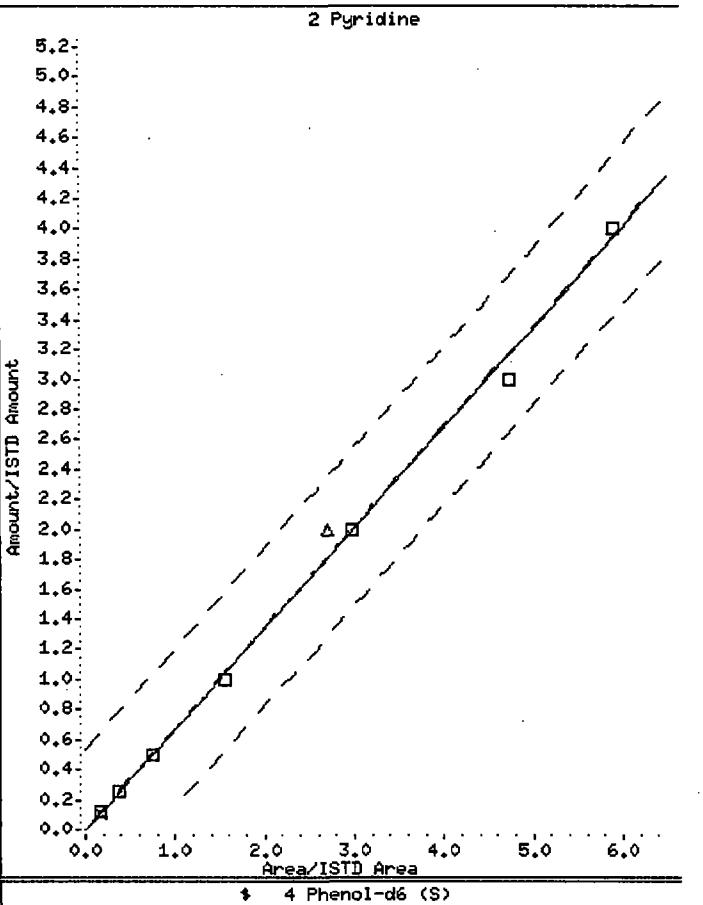
Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

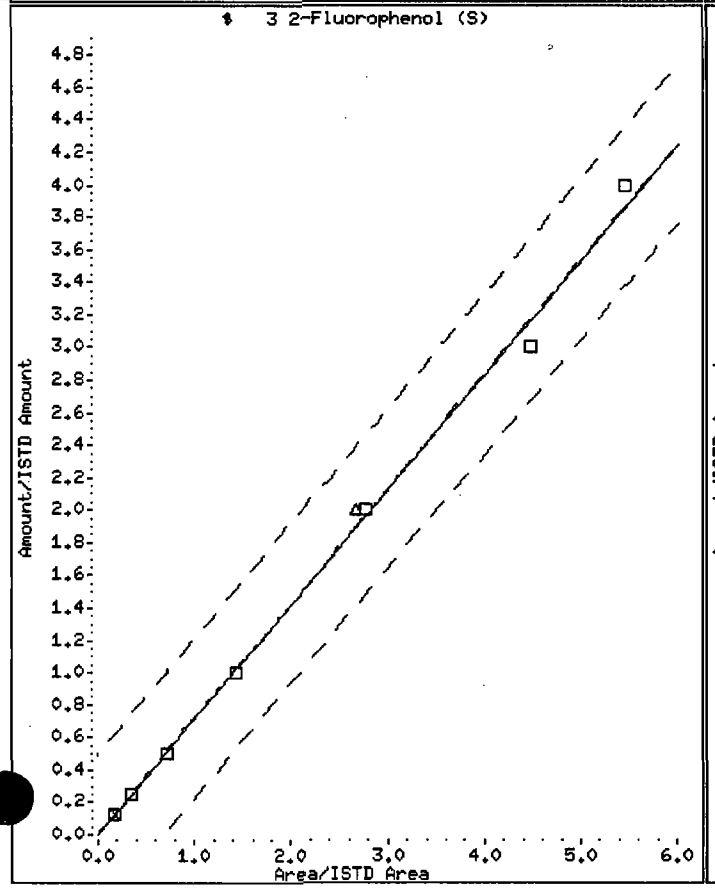


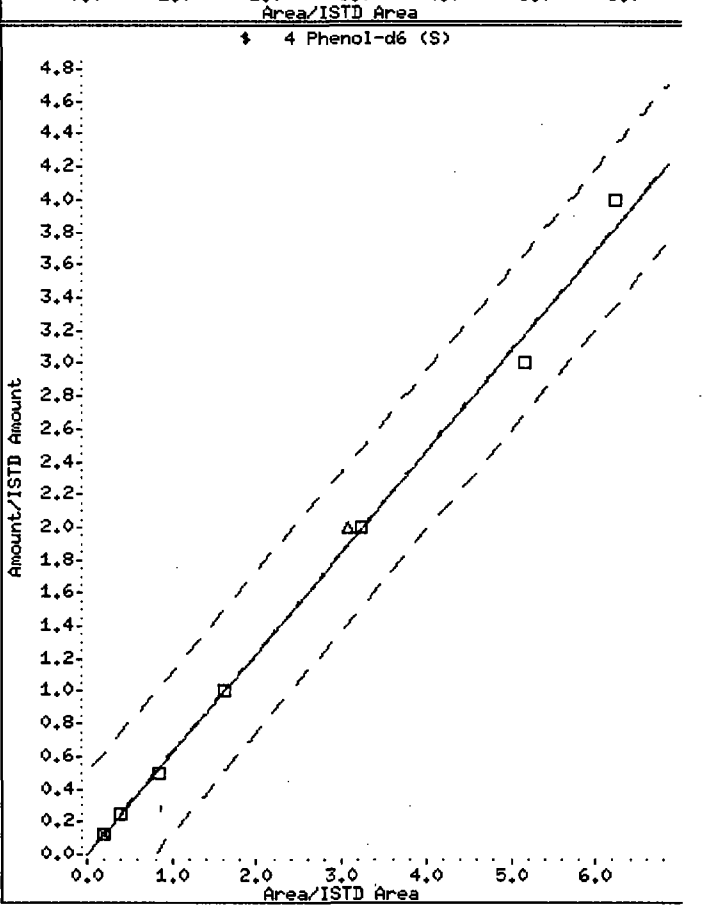
Instrument: 10mss9.i
Lab Sample ID: ICV2 10328-47
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D

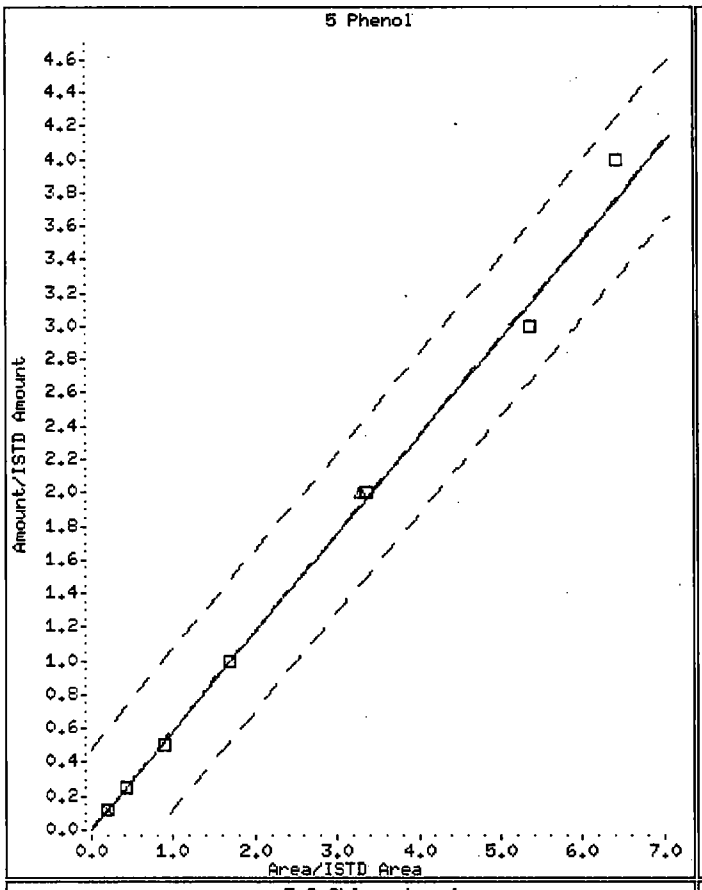


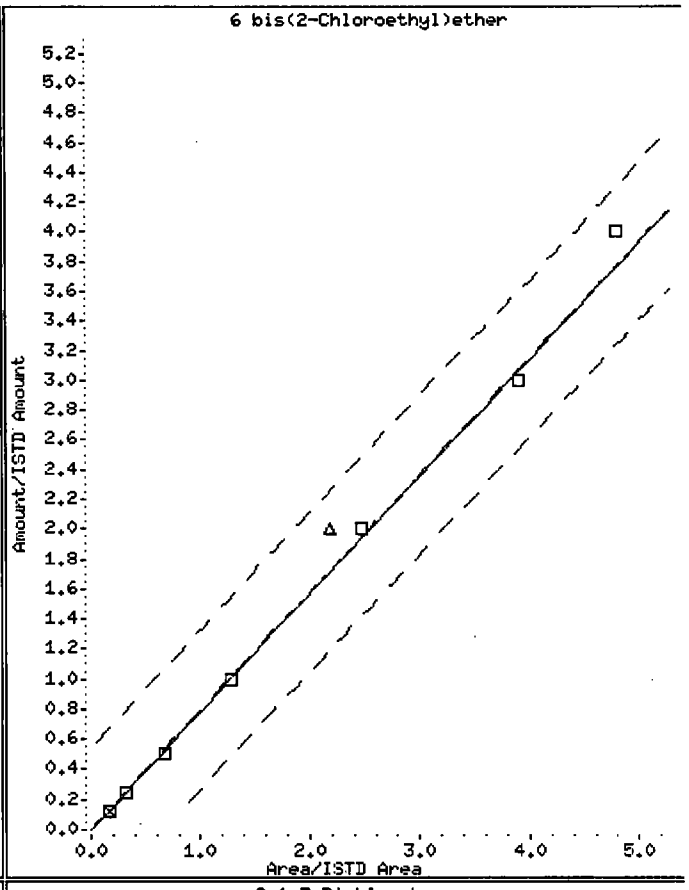


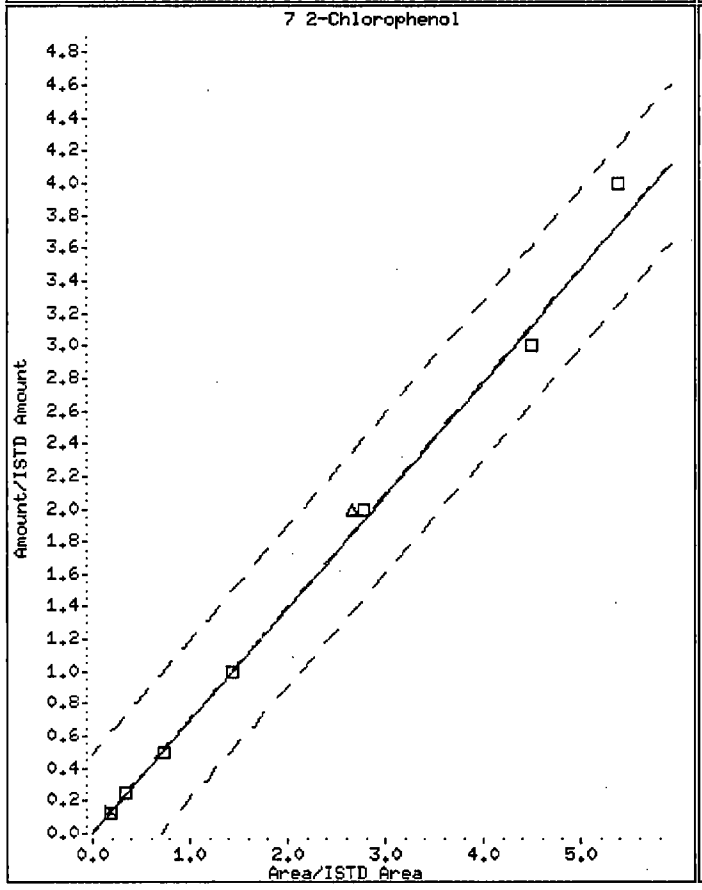


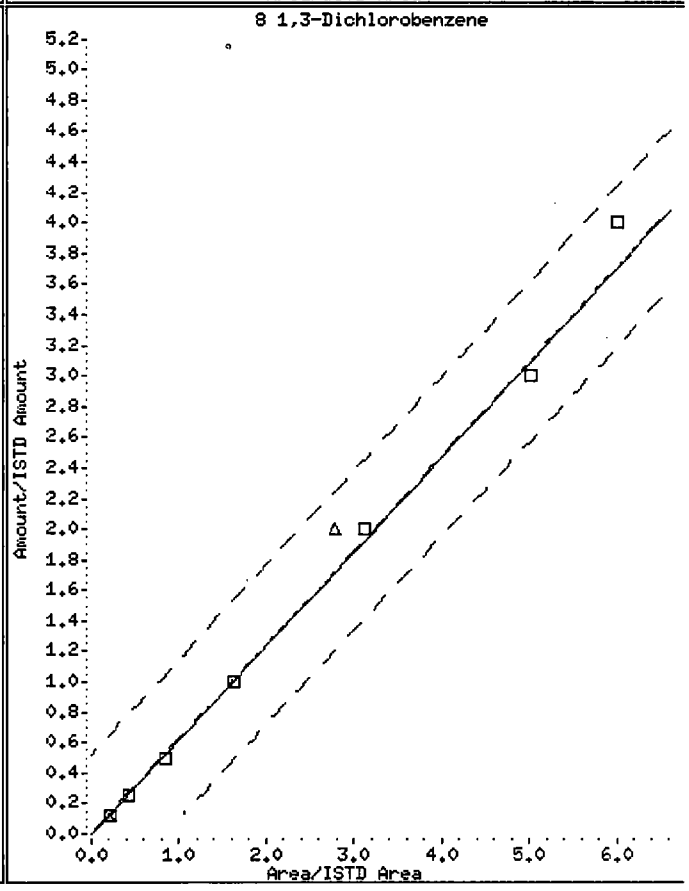


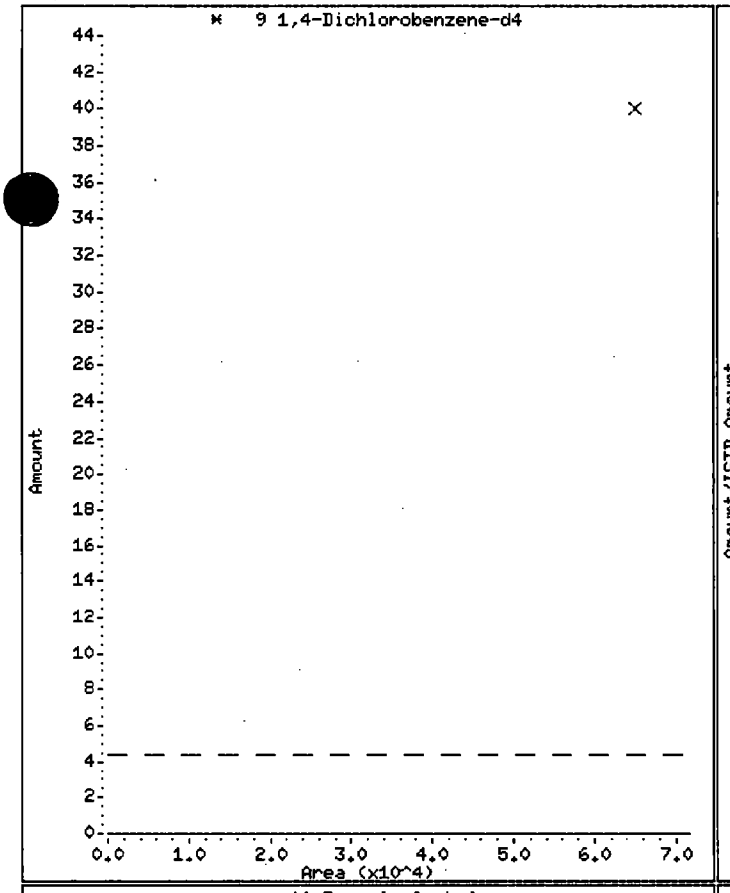
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D

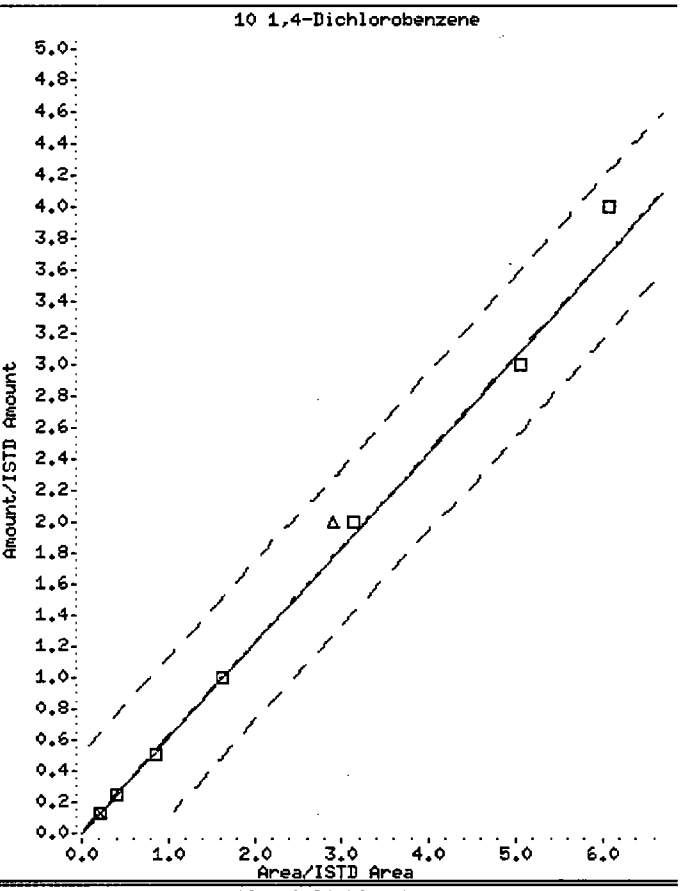


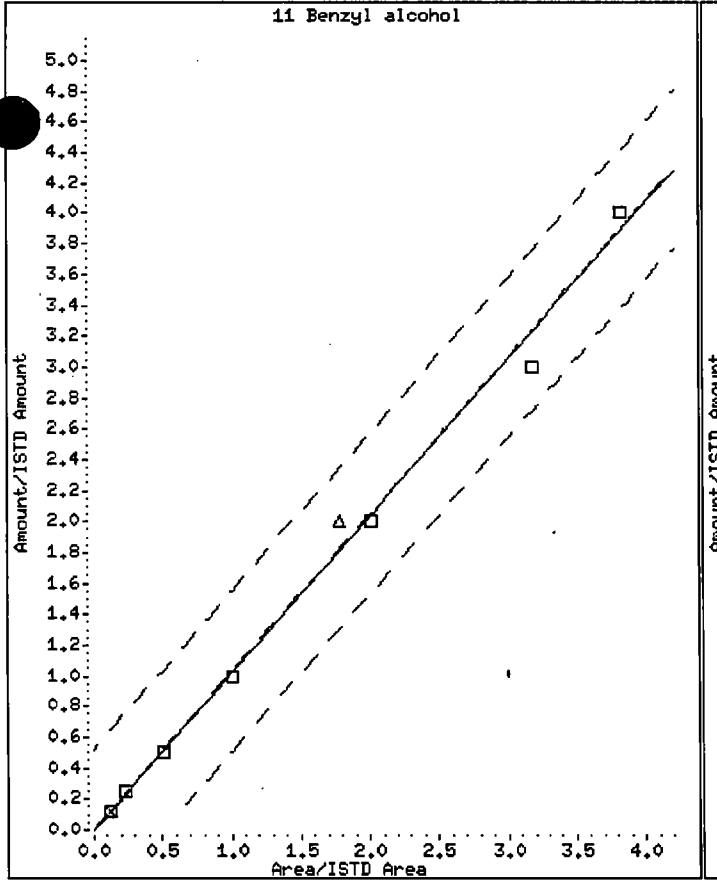


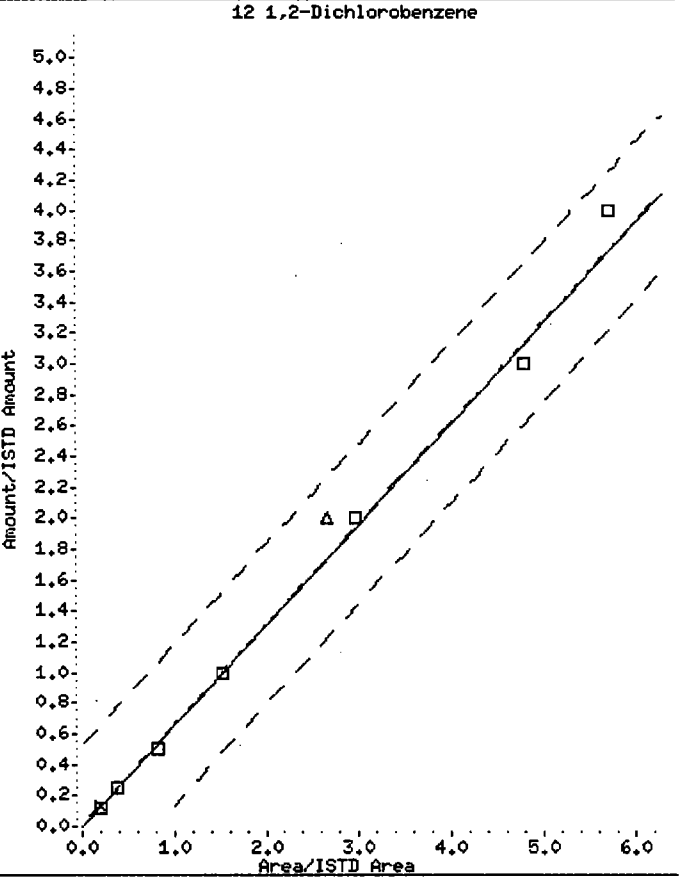


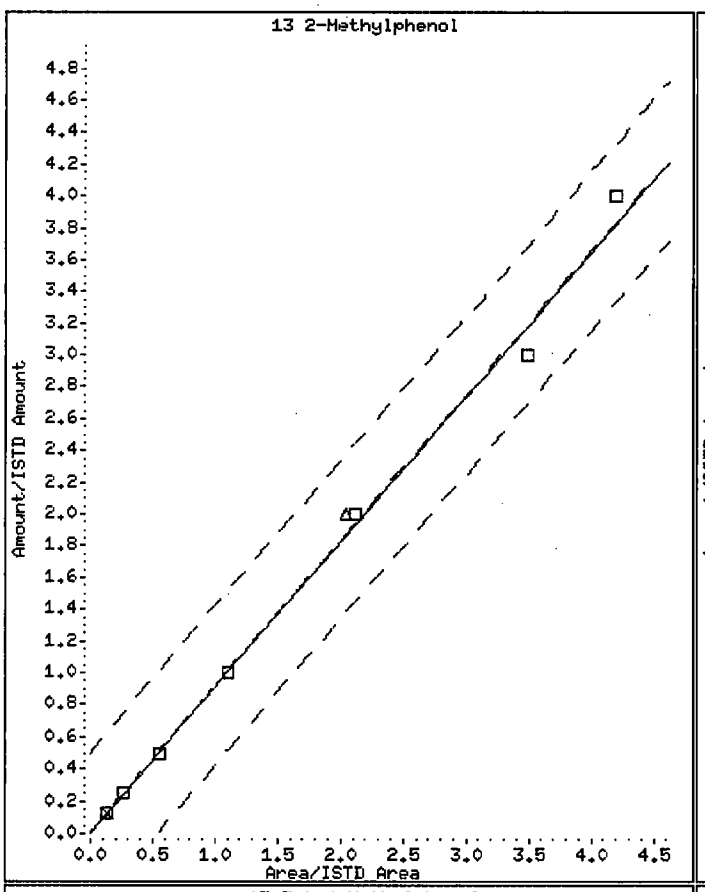


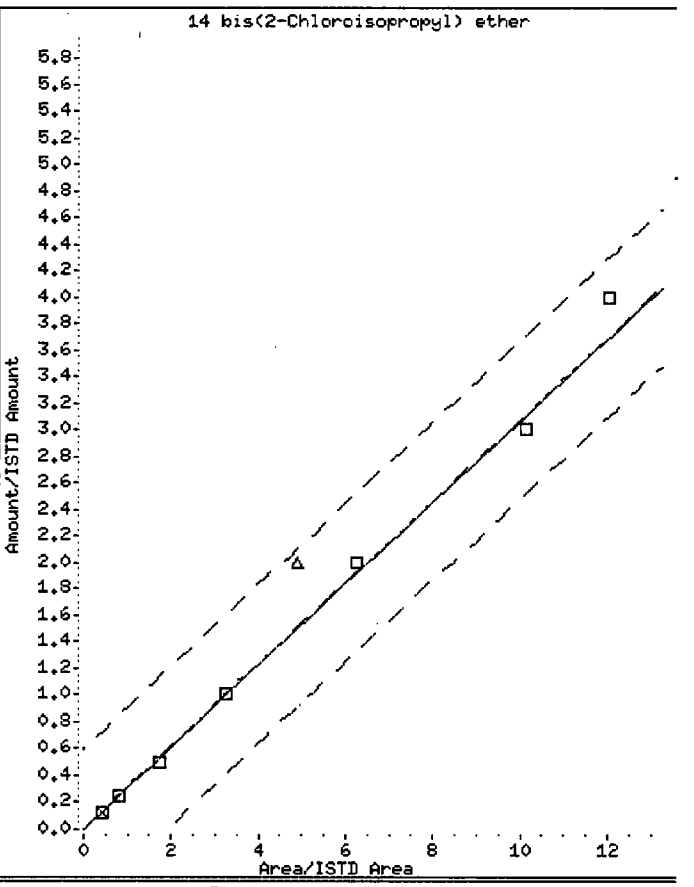

9 1,4-Dichlorobenzene-d4
Amount
Area (x10^4)

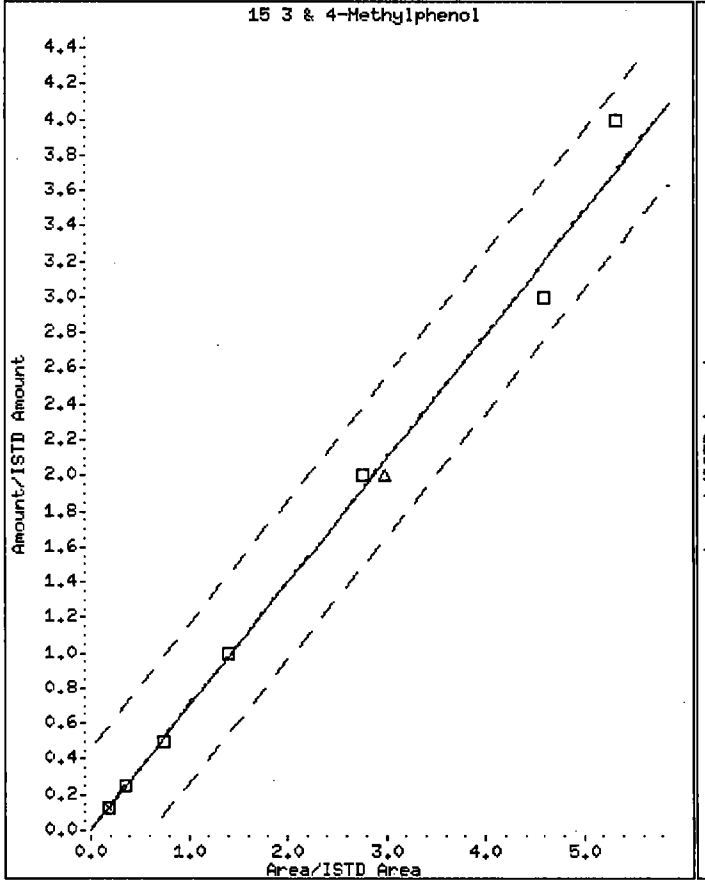

10 1,4-Dichlorobenzene
Amount/ISTD Amount
Area/ISTD Area

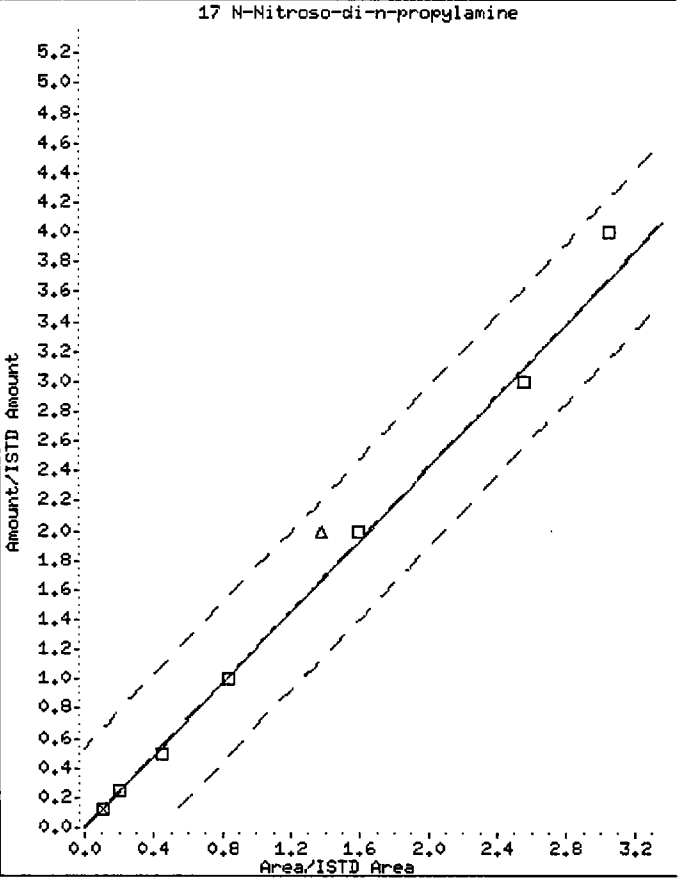

11 Benzyl alcohol
Amount/ISTD Amount
Area/ISTD Area

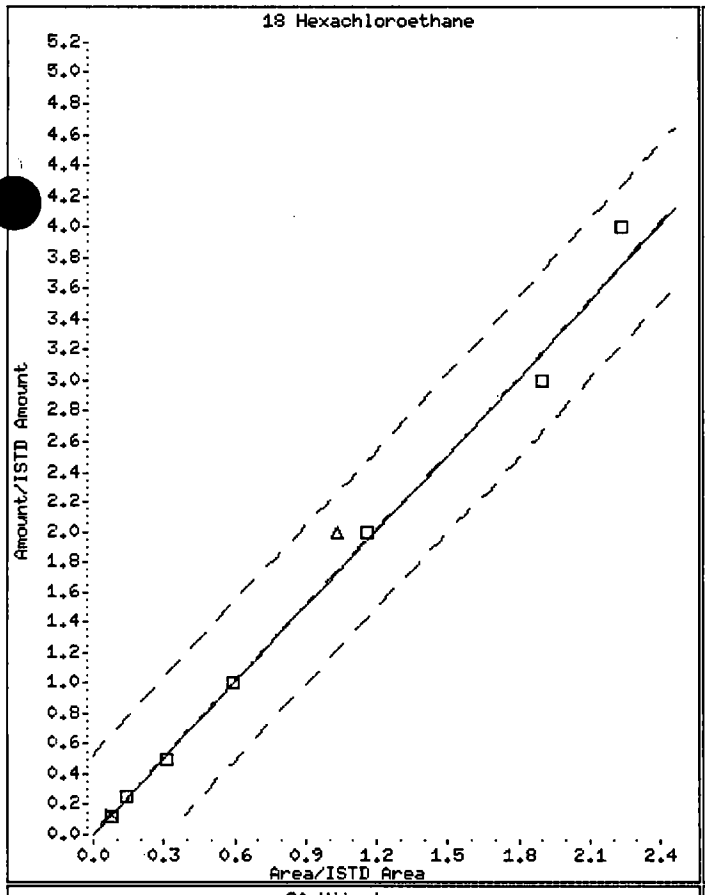

12 1,2-Dichlorobenzene
Amount/ISTD Amount
Area/ISTD Area

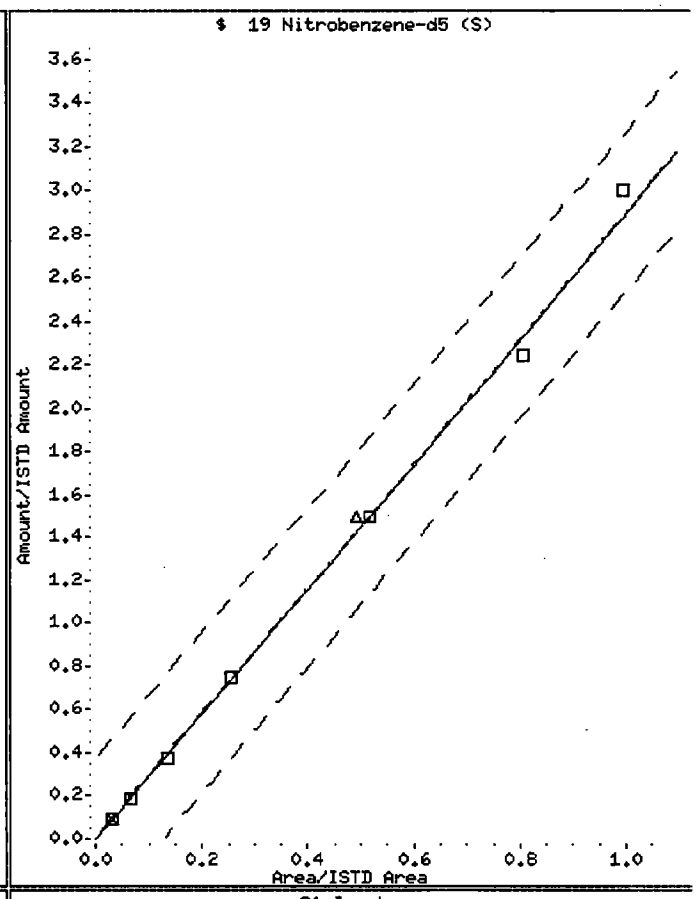

13 2-Methylphenol
Amount/ISTD Amount
Area/ISTD Area

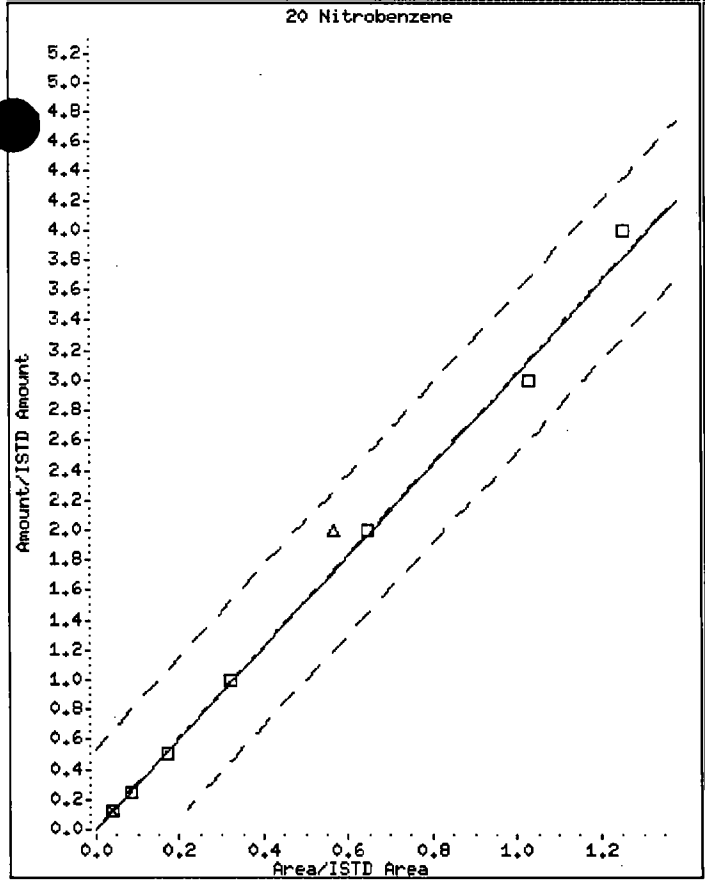

14 bis(2-Chloroisopropyl) ether
Amount/ISTD Amount
Area/ISTD Area

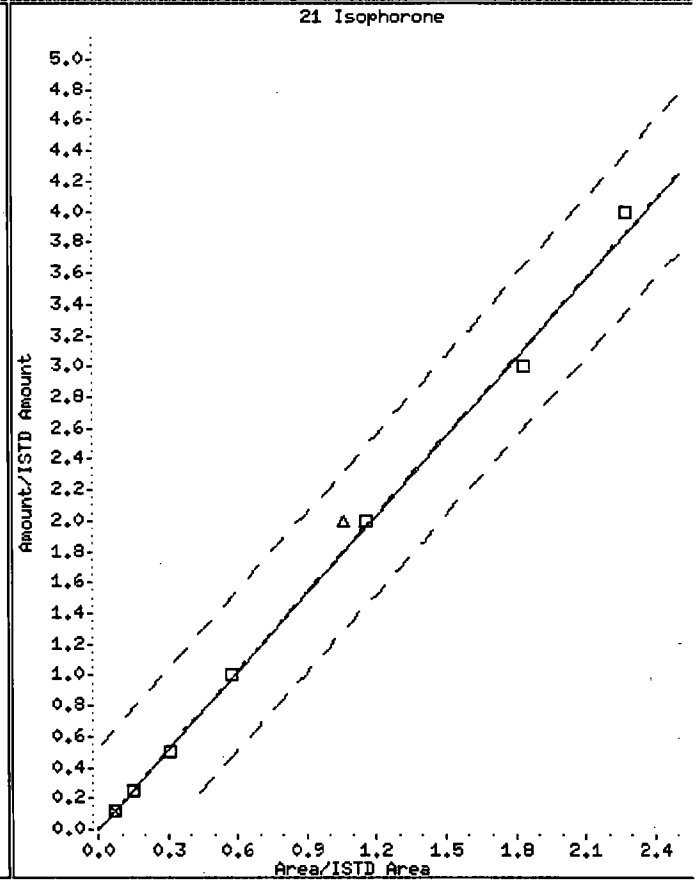

15 3 & 4-Methylphenol
Amount/ISTD Amount
Area/ISTD Area

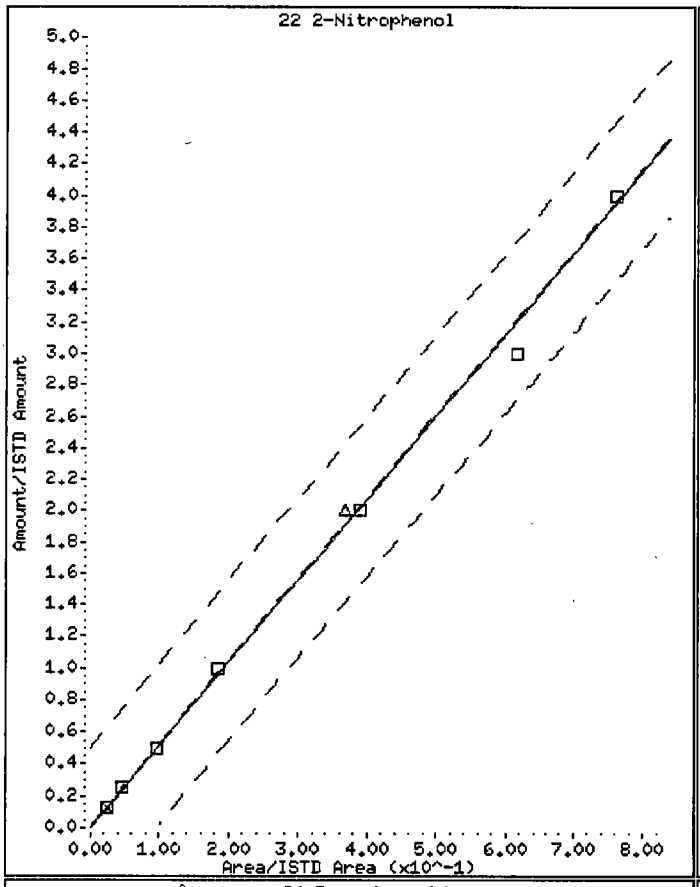

17 N-Nitroso-di-n-propylamine
Amount/ISTD Amount
Area/ISTD Area

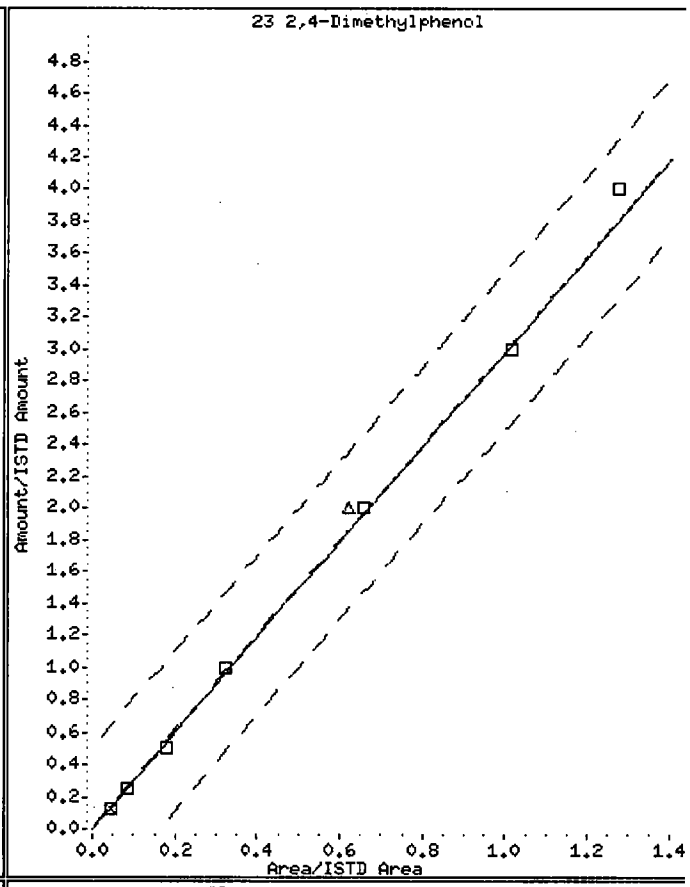

18 Hexachloroethane
Amount/ISTD Amount
Area/ISTD Area

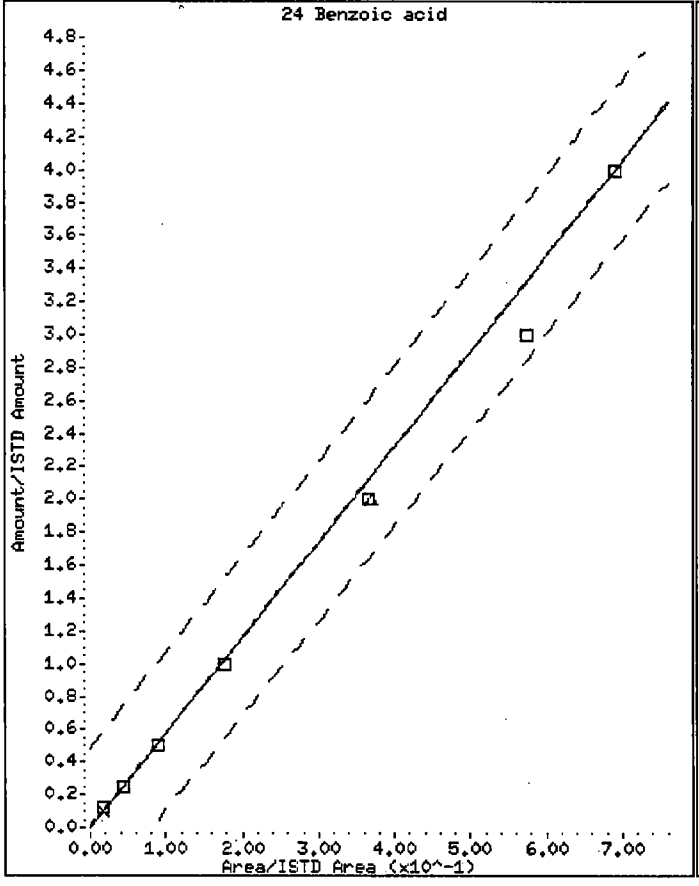

$ 19 Nitrobenzene-d5 (S)
Amount/ISTD Amount
Area/ISTD Area

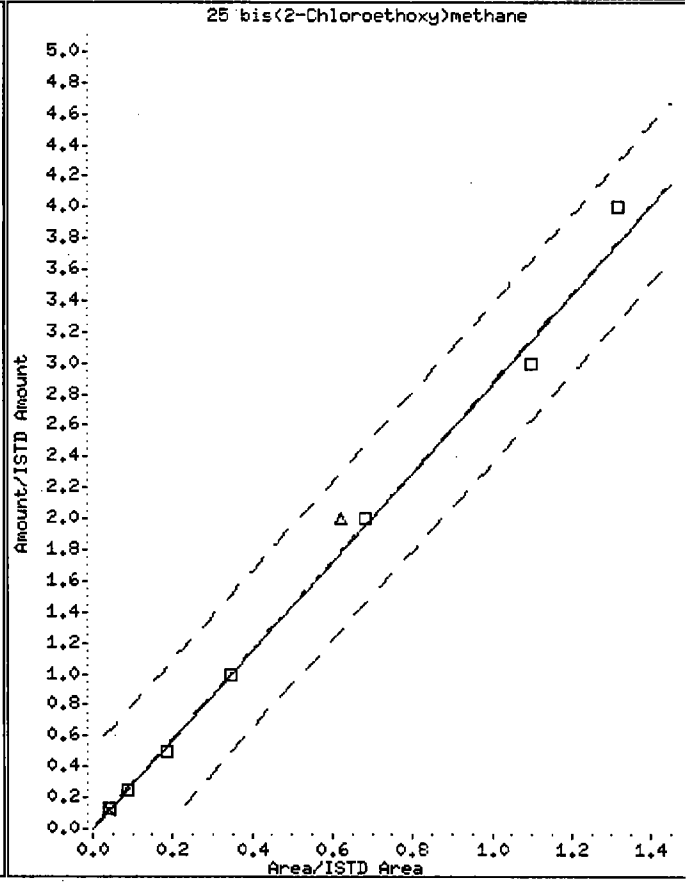

20 Nitrobenzene
Amount/ISTD Amount
Area/ISTD Area

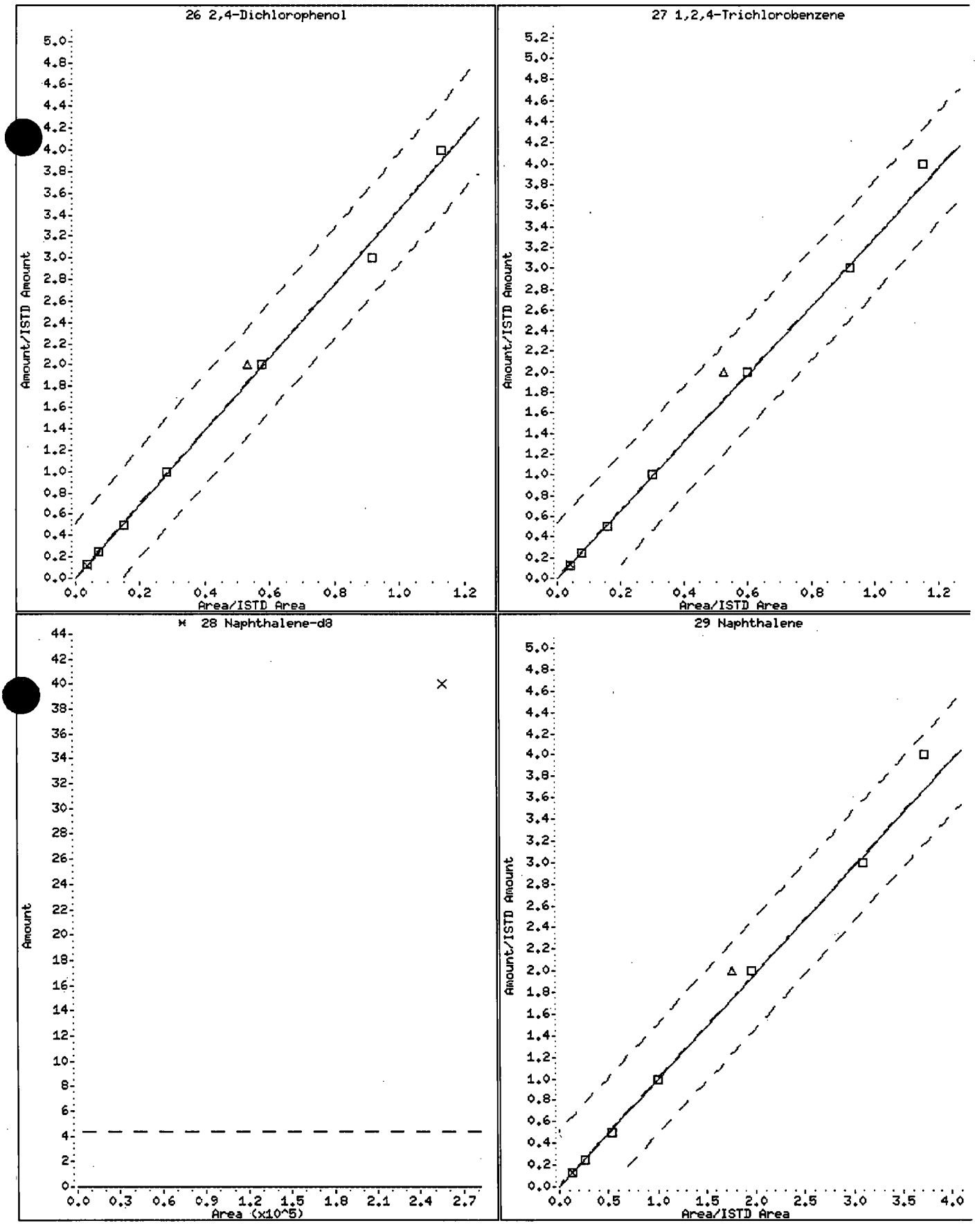

21 Isophorone
Amount/ISTD Amount
Area/ISTD Area

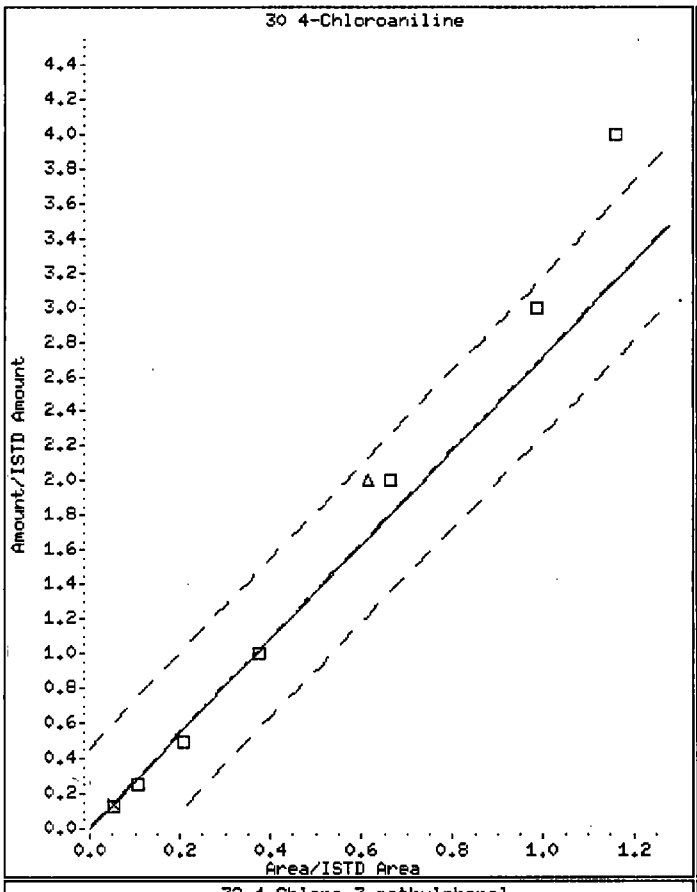

22 2-Nitrophenol
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

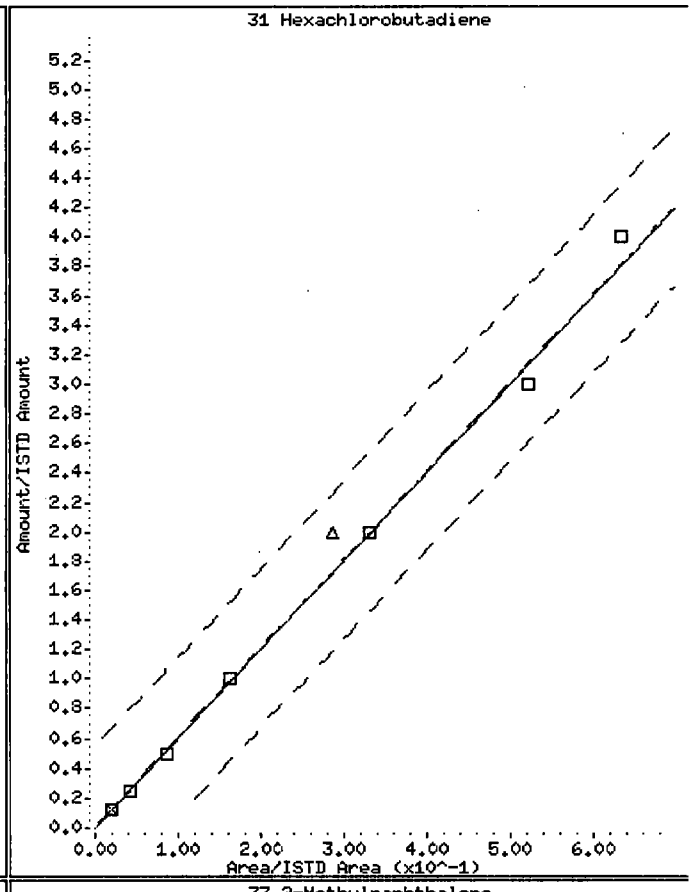

23 2,4-Dimethylphenol
Amount/ISTD Amount
Area/ISTD Area

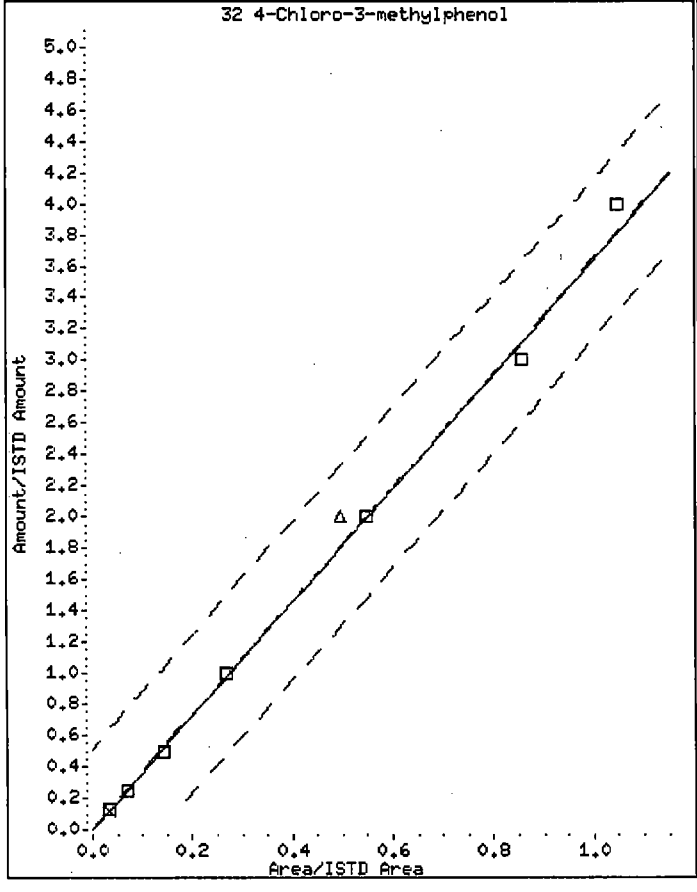

24 Benzoic acid
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

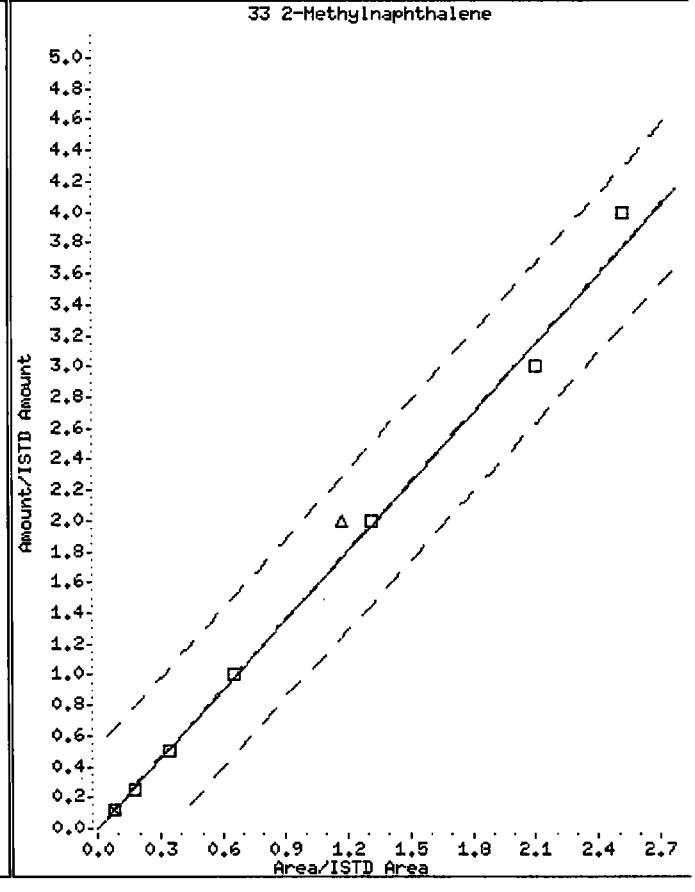

25 bis(2-Chloroethoxy)methane
Amount/ISTD Amount
Area/ISTD Area

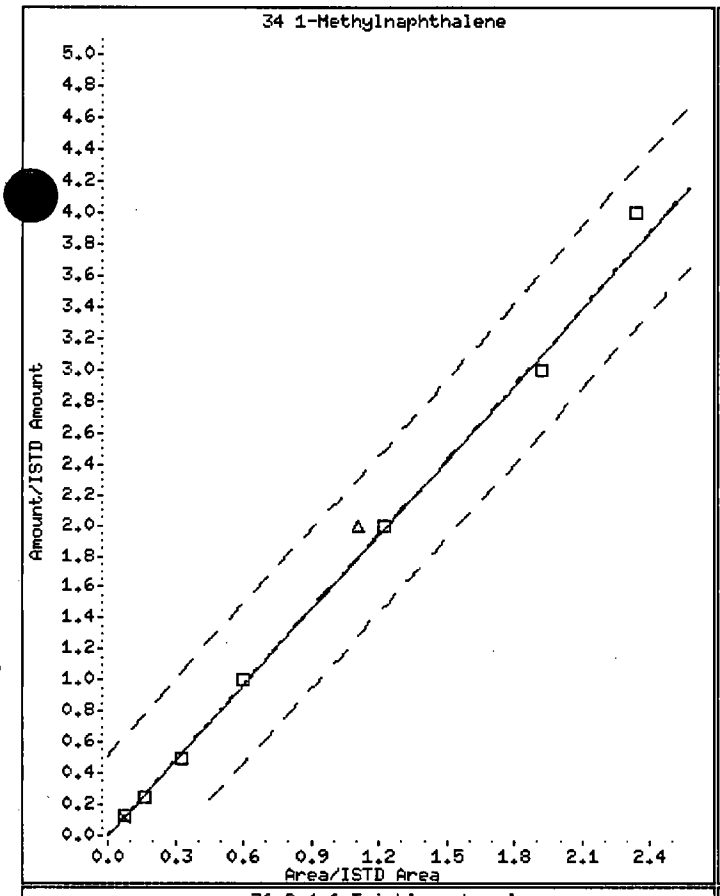

26 2,4-Dichlorophenol
Amount/ISTD Amount
Area/ISTD Area
27 1,2,4-Trichlorobenzene
Amount/ISTD Amount
Area/ISTD Area
28 Naphthalene-d8
Amount
Area (x10^5)
29 Naphthalene
Amount/ISTD Amount
Area/ISTD Area

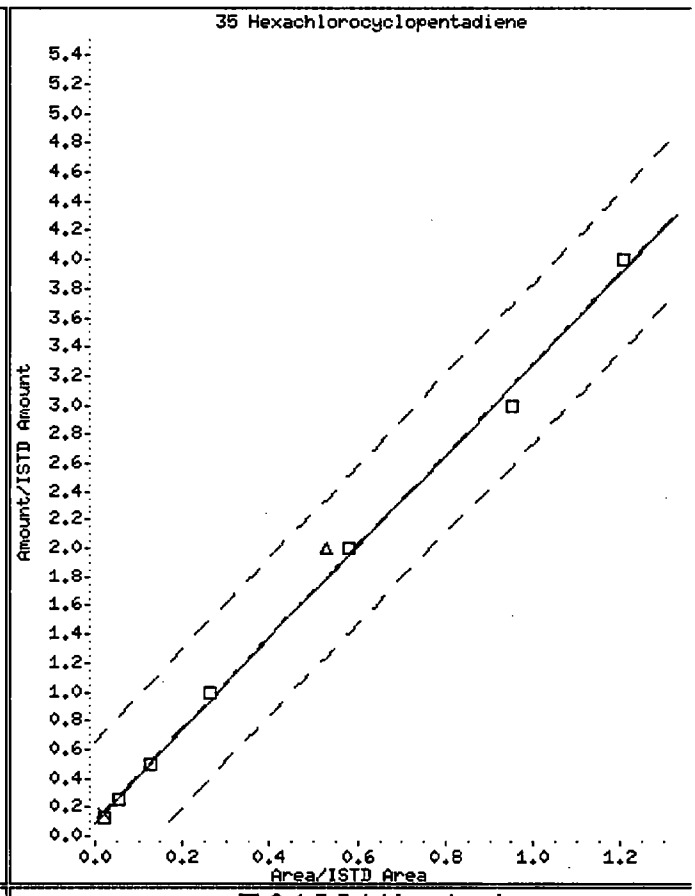

30 4-Chloroaniline
Amount/ISTD Amount
Area/ISTD Area

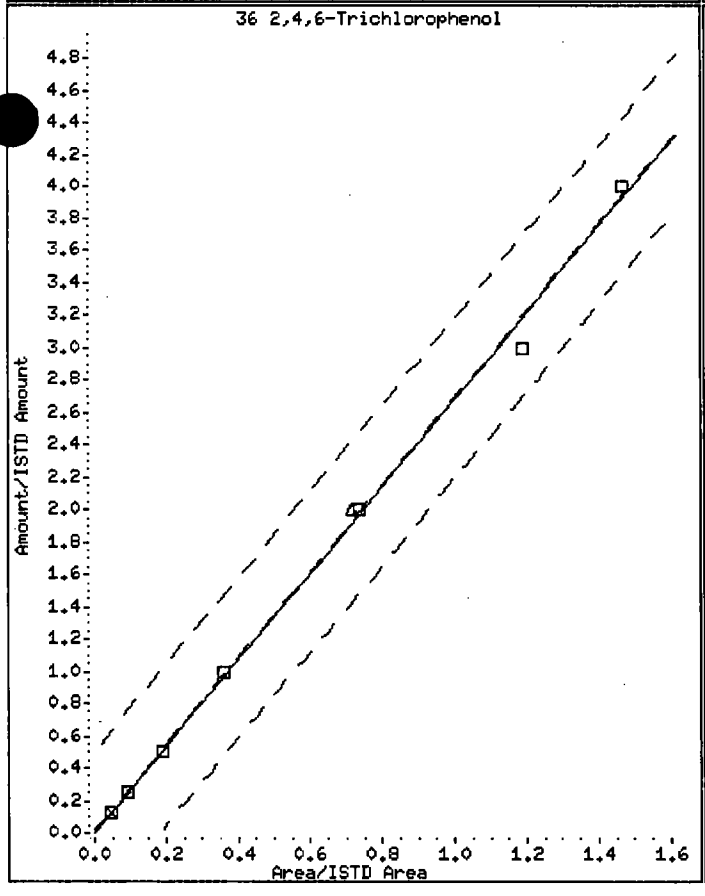

31 Hexachlorobutadiene
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

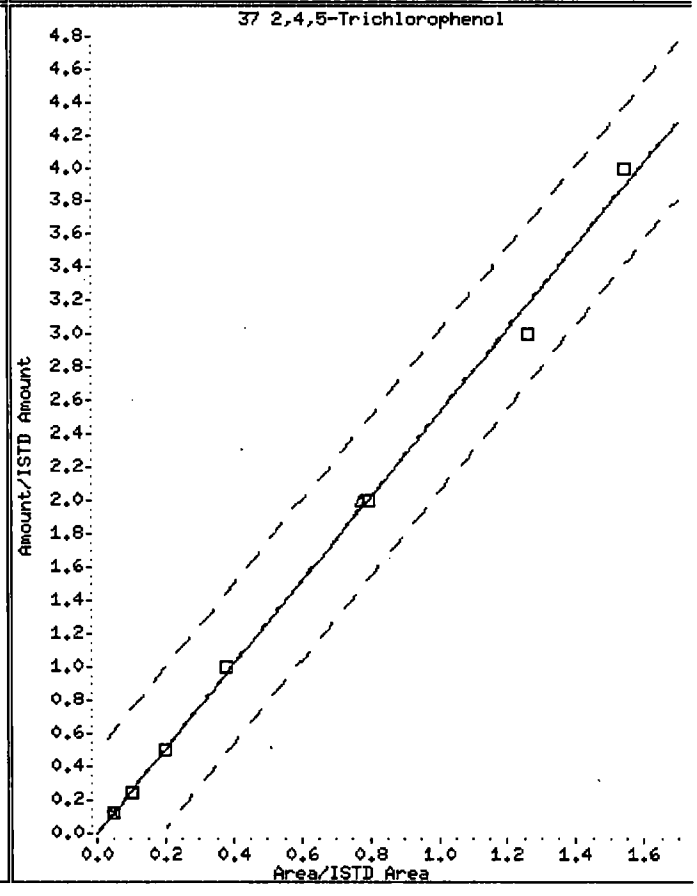

32 4-Chloro-3-methylphenol
Amount/ISTD Amount
Area/ISTD Area


33 2-Methylnaphthalene
Amount/ISTD Amount
Area/ISTD Area


34 1-Methylnaphthalene
Amount/ISTD Amount
Area/ISTD Area


35 Hexachlorocyclopentadiene
Amount/ISTD Amount
Area/ISTD Area


36 2,4,6-Trichlorophenol
Amount/ISTD Amount
Area/ISTD Area


37 2,4,5-Trichlorophenol
Amount/ISTD Amount
Area/ISTD Area

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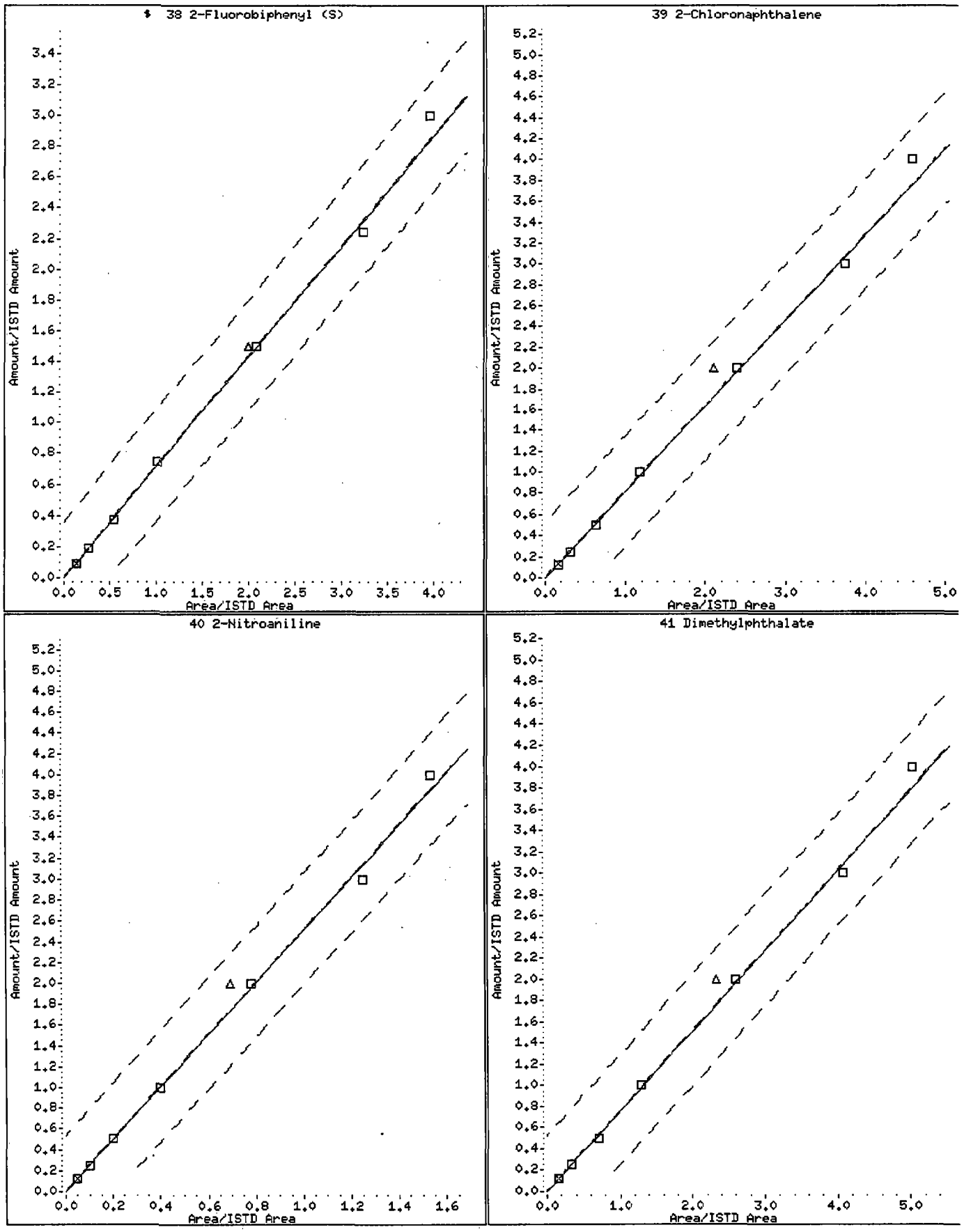
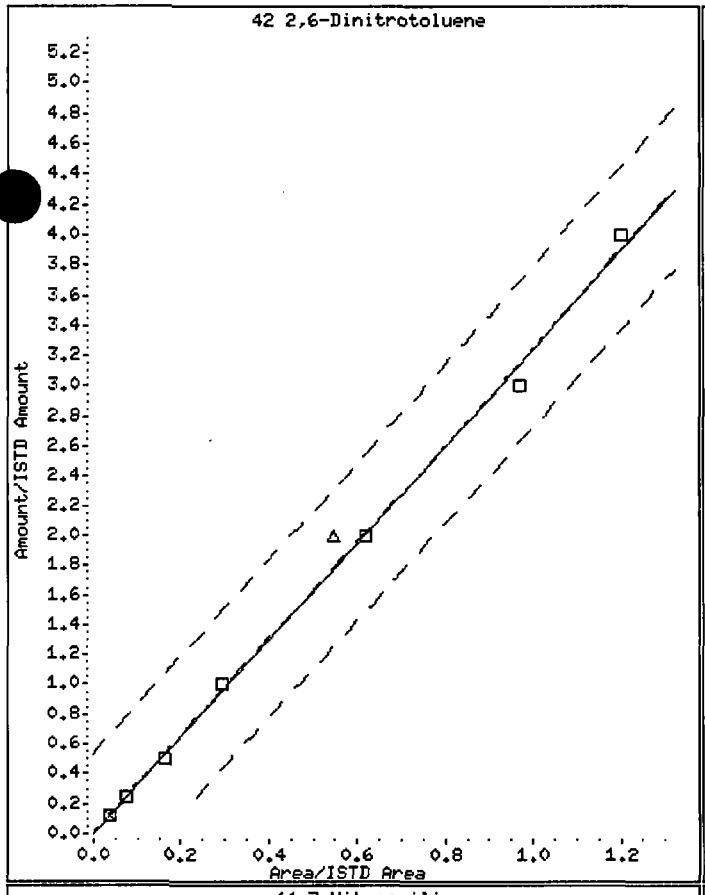
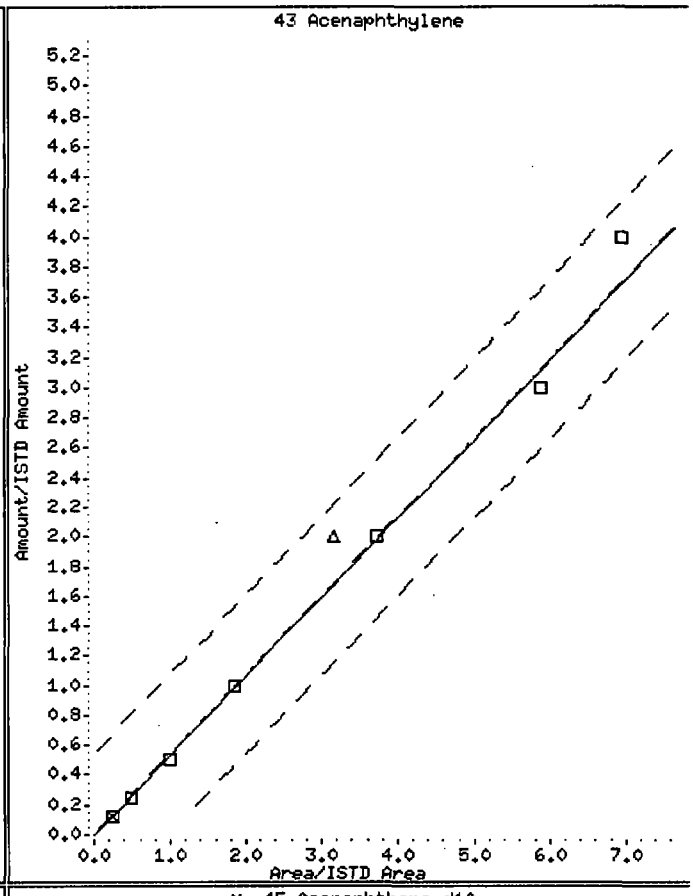
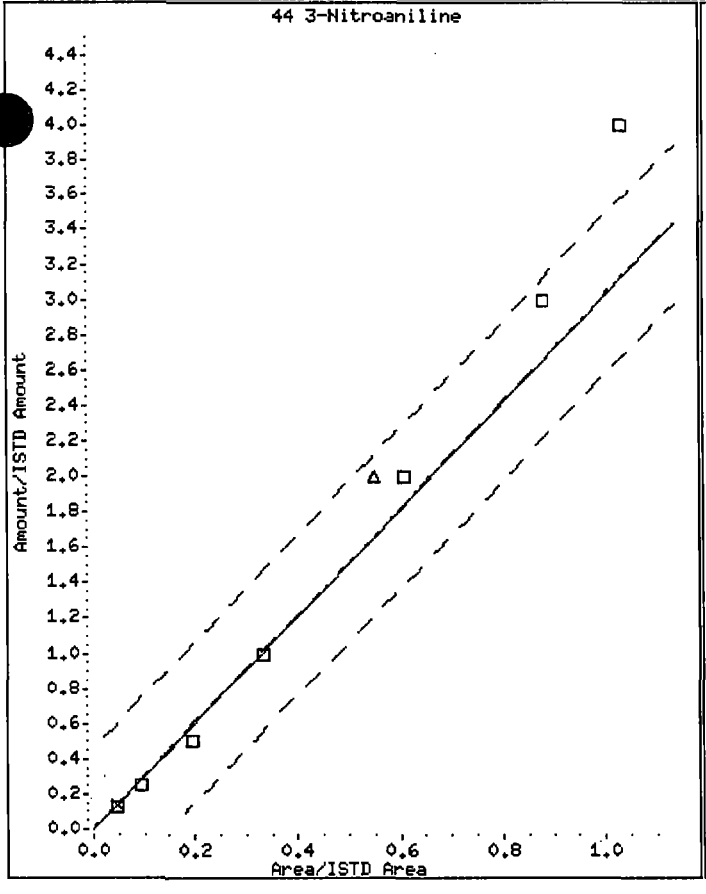
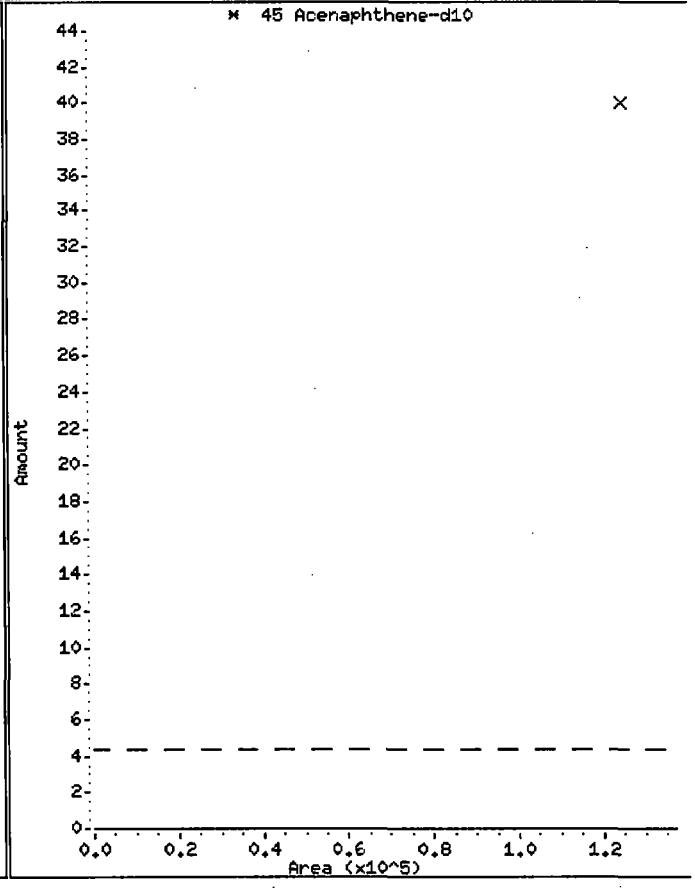
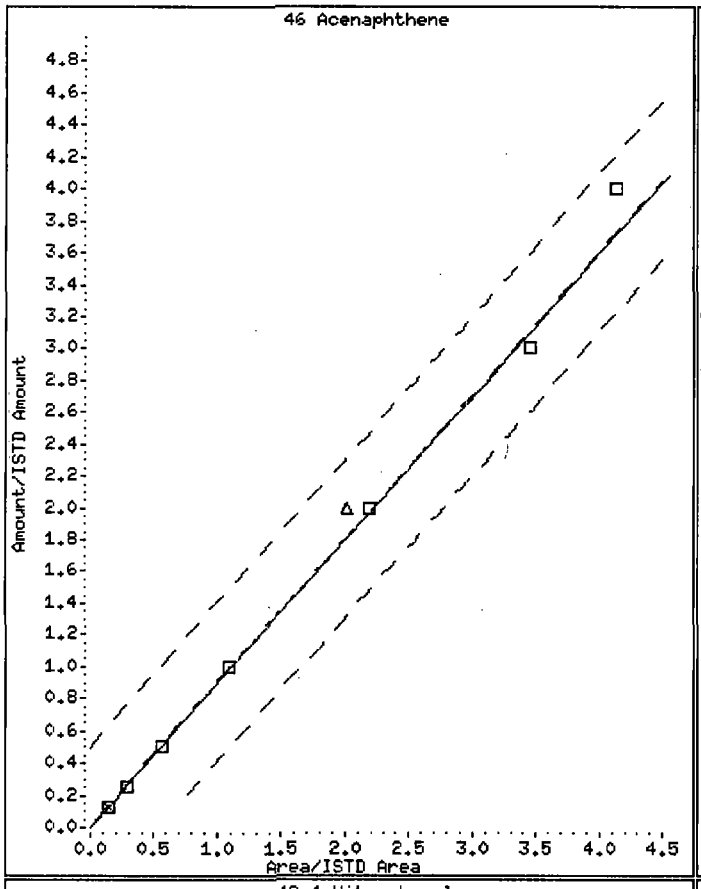


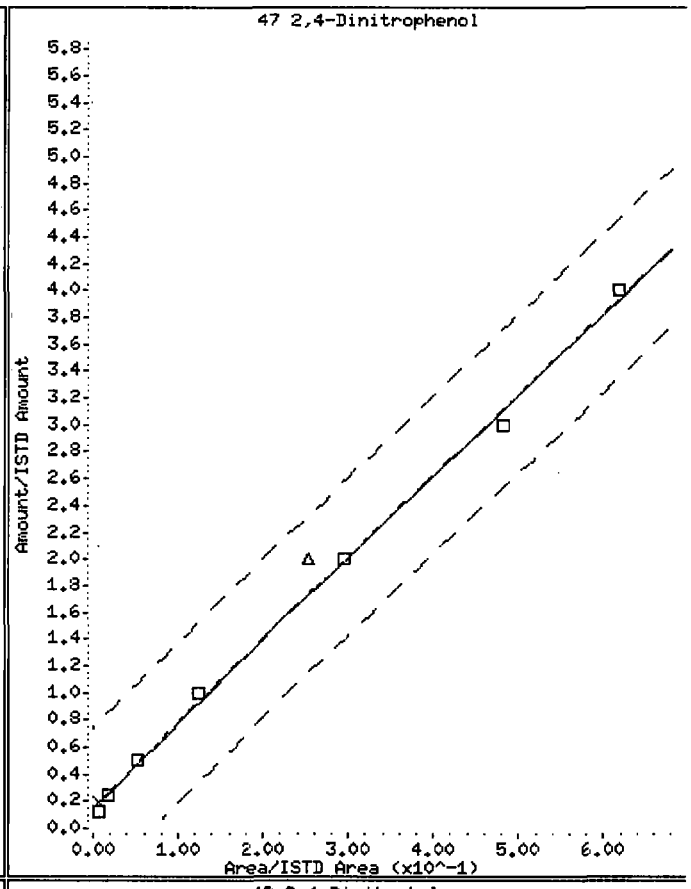

42 2,6-Dinitrotoluene
Amount/ISTD Amount
Area/ISTD Area

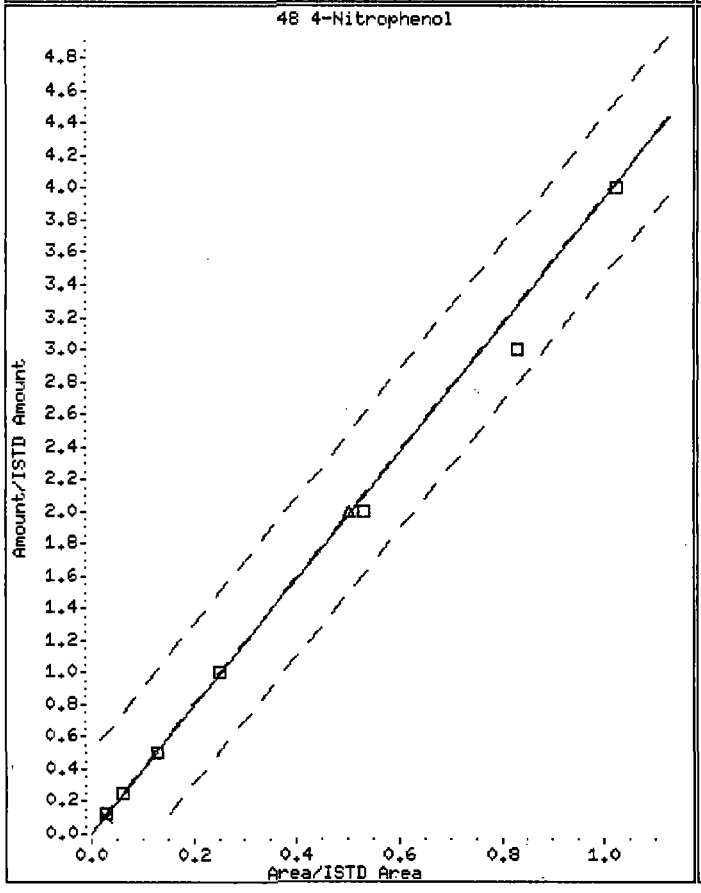

43 Acenaphthylene
Amount/ISTD Amount
Area/ISTD Area

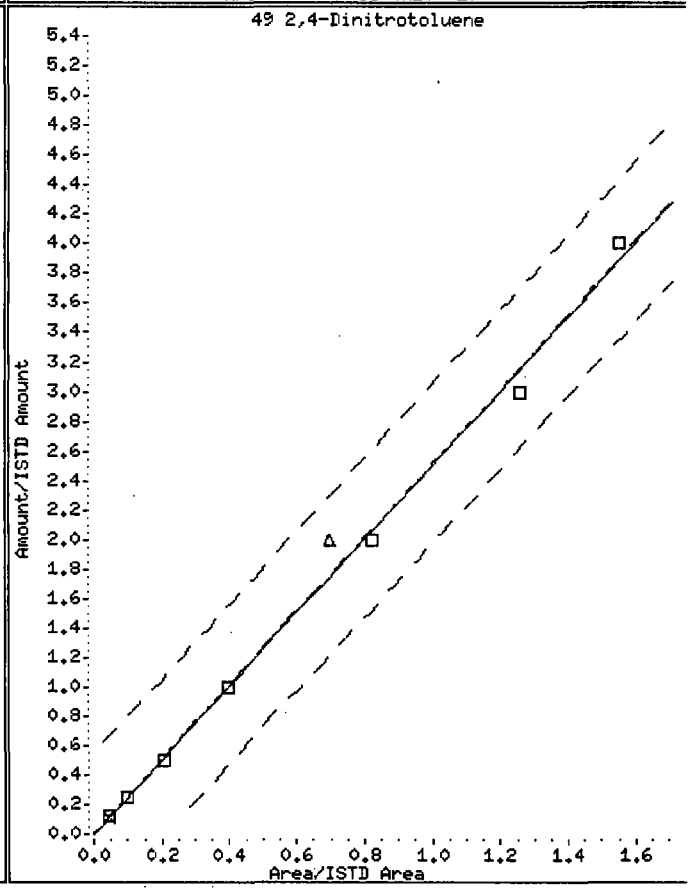

44 3-Nitroaniline
Amount/ISTD Amount
Area/ISTD Area

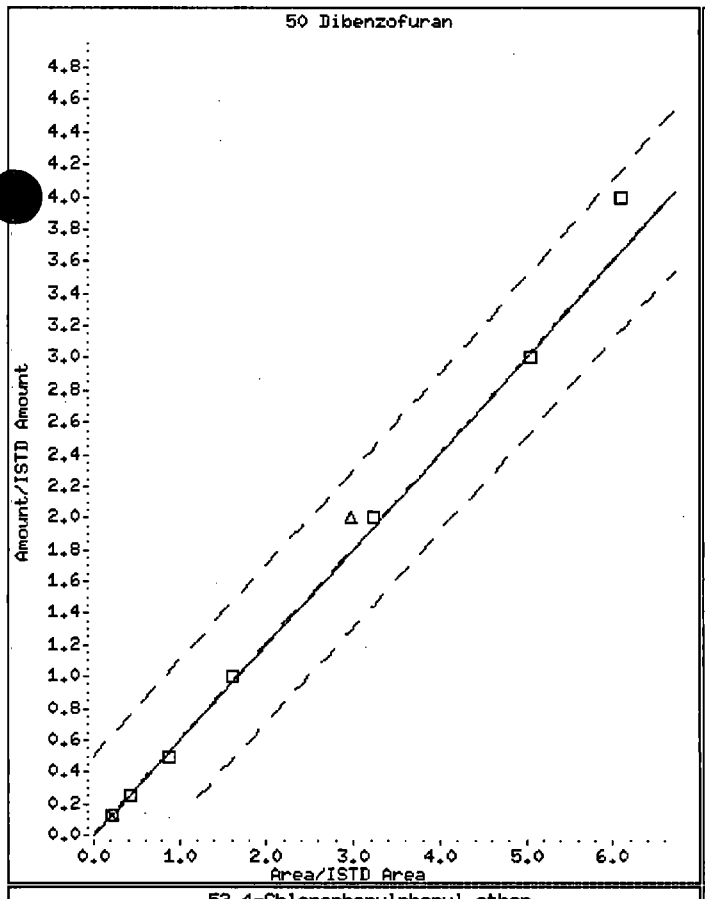

45 Acenaphthene-d10
Amount
Area (x10^5)

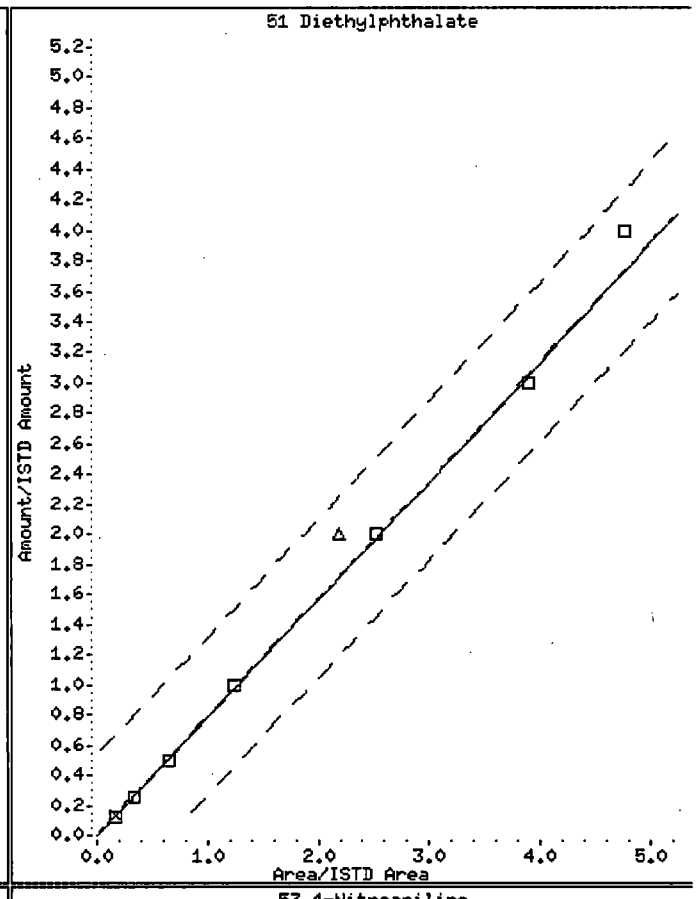

46 Acenaphthene
Amount/ISTD Amount
Area/ISTD Area

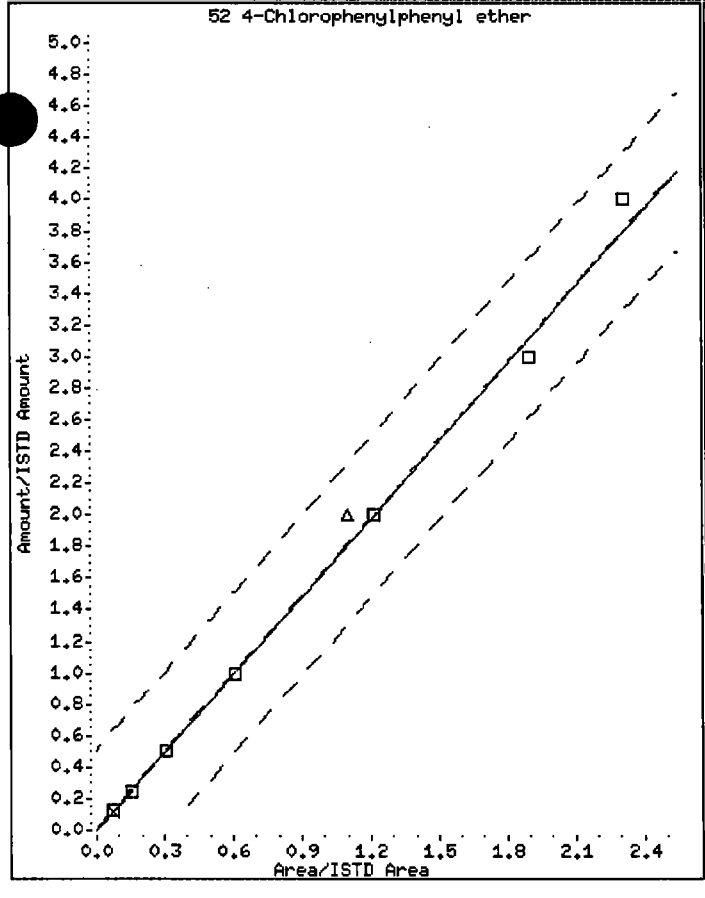

47 2,4-Dinitrophenol
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

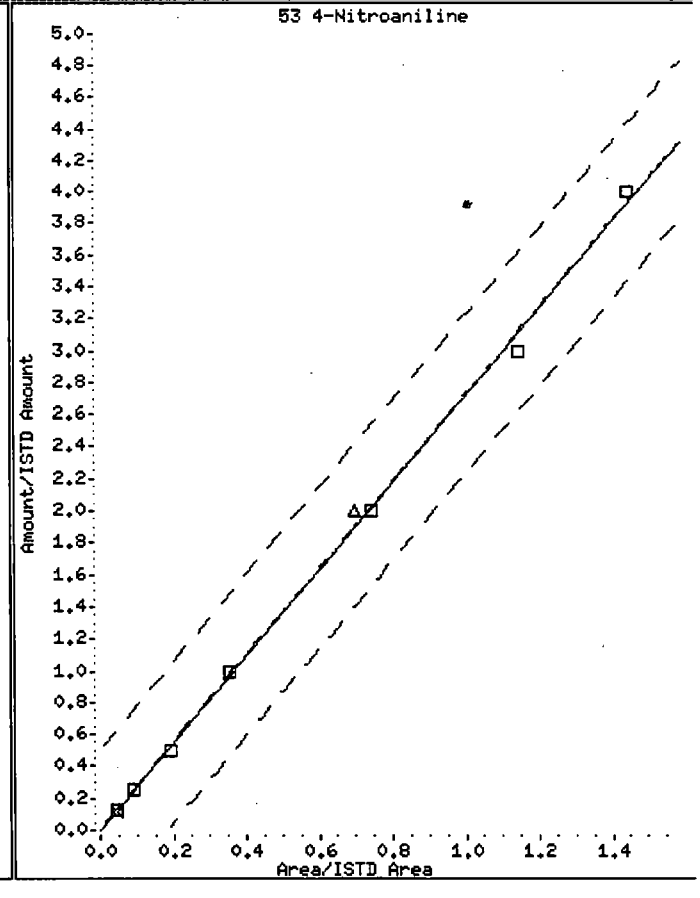

48 4-Nitrophenol
Amount/ISTD Amount
Area/ISTD Area

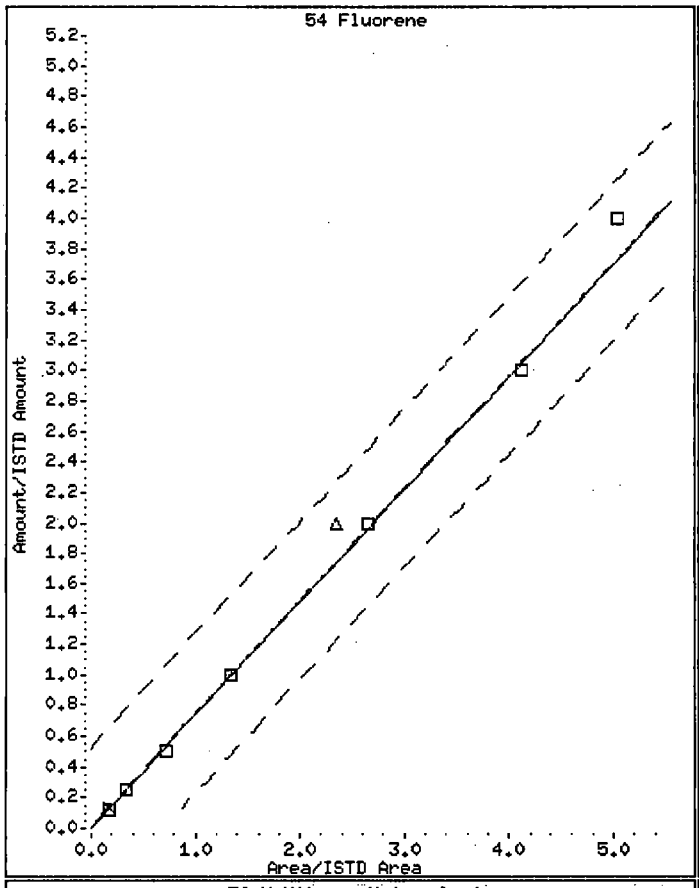

49 2,4-Dinitrotoluene
Amount/ISTD Amount
Area/ISTD Area

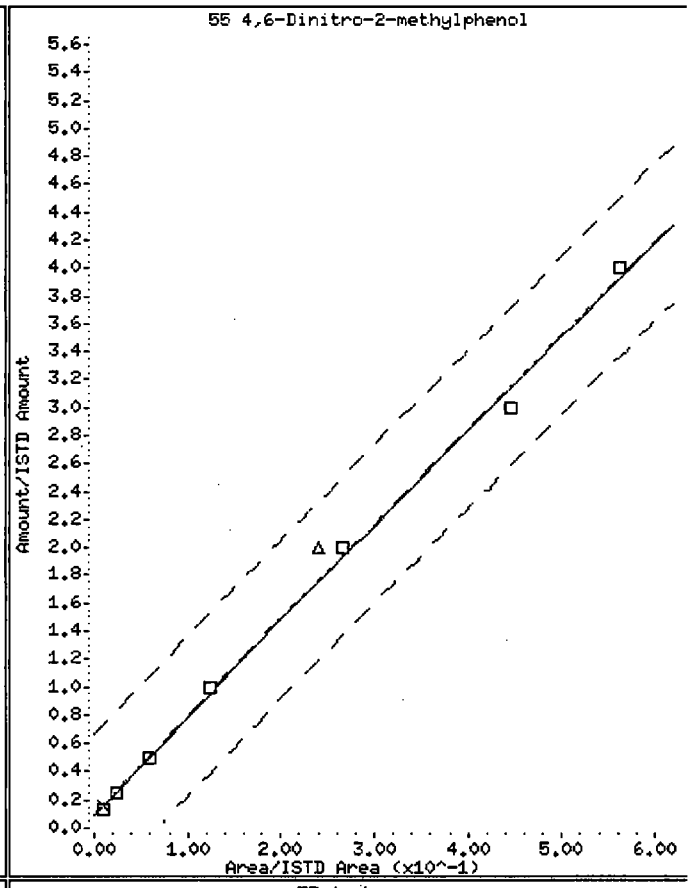

50 Dibenzofuran
Amount/ISTD Amount
Area/ISTD Area

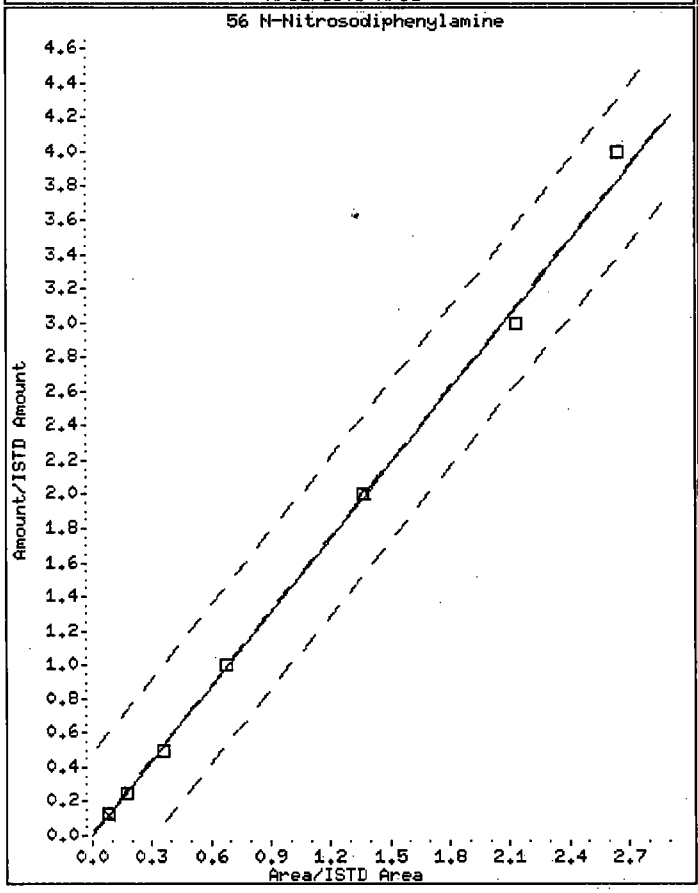

51 Diethylphthalate
Amount/ISTD Amount
Area/ISTD Area

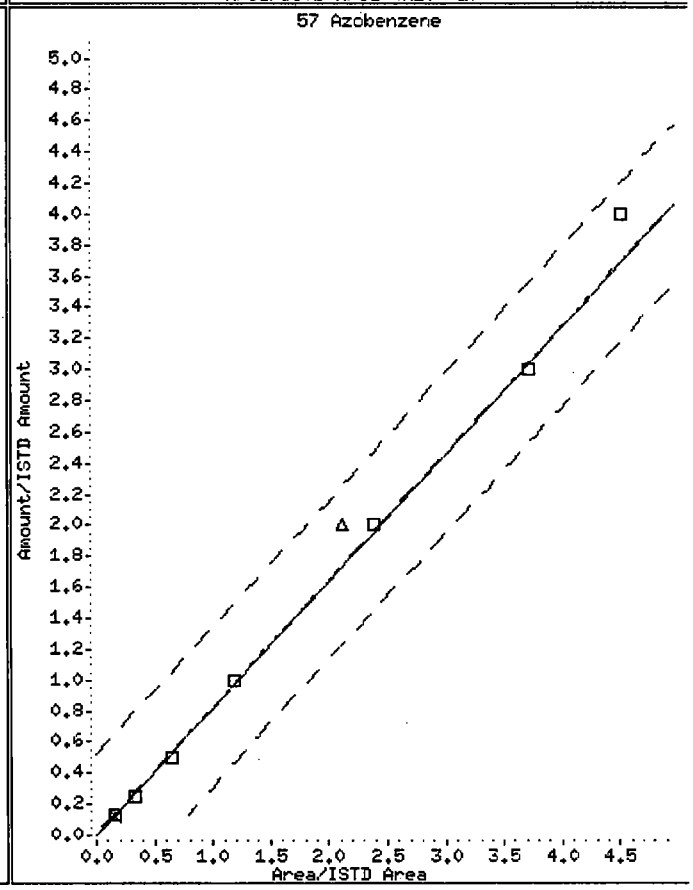

52 4-Chlorophenylphenyl ether
Amount/ISTD Amount
Area/ISTD Area

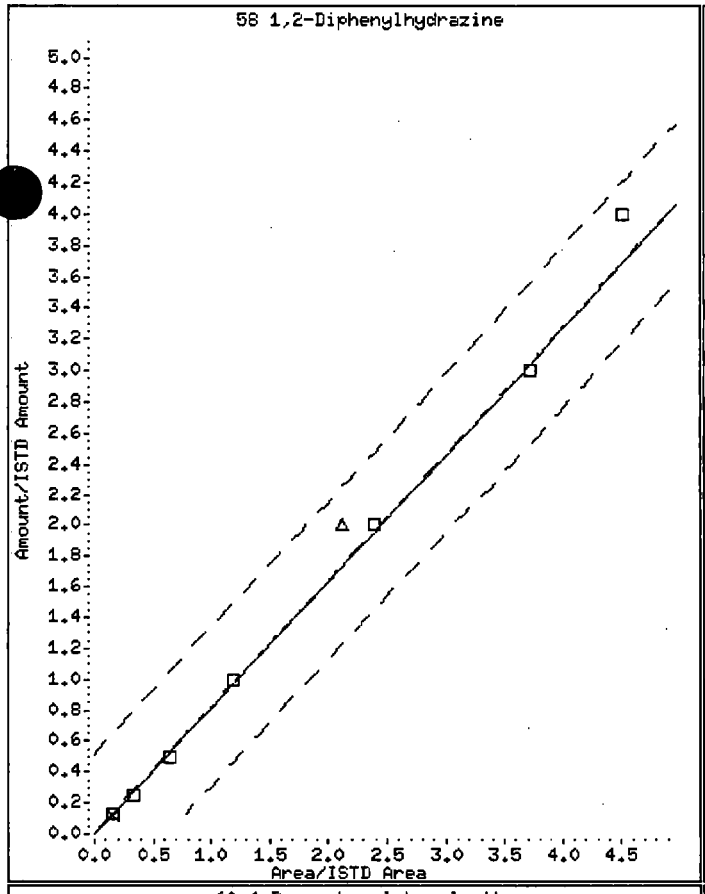

53 4-Nitroaniline
Amount/ISTD Amount
Area/ISTD Area

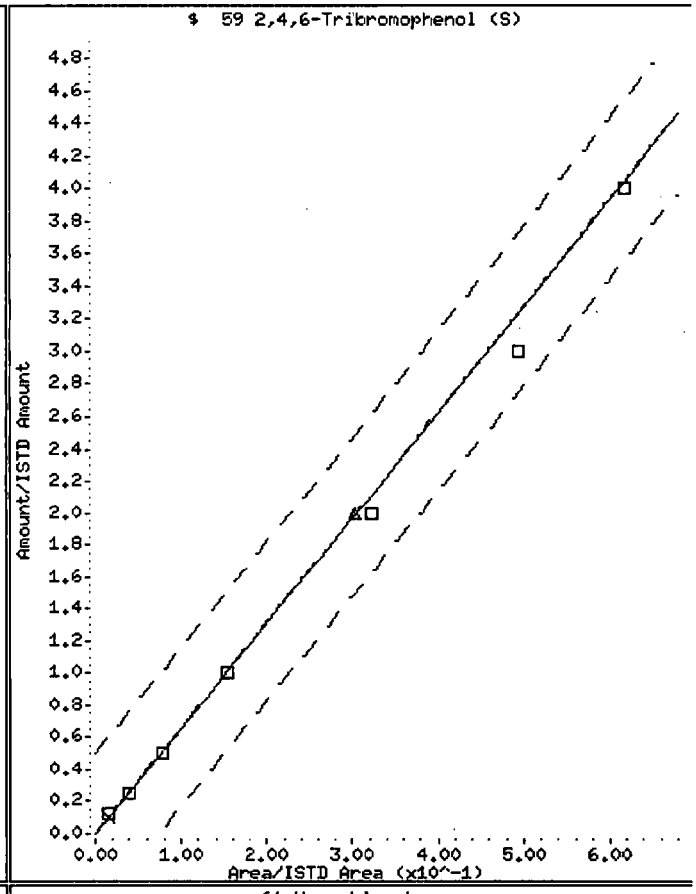

54 Fluorene
Amount/ISTD Amount
Area/ISTD Area

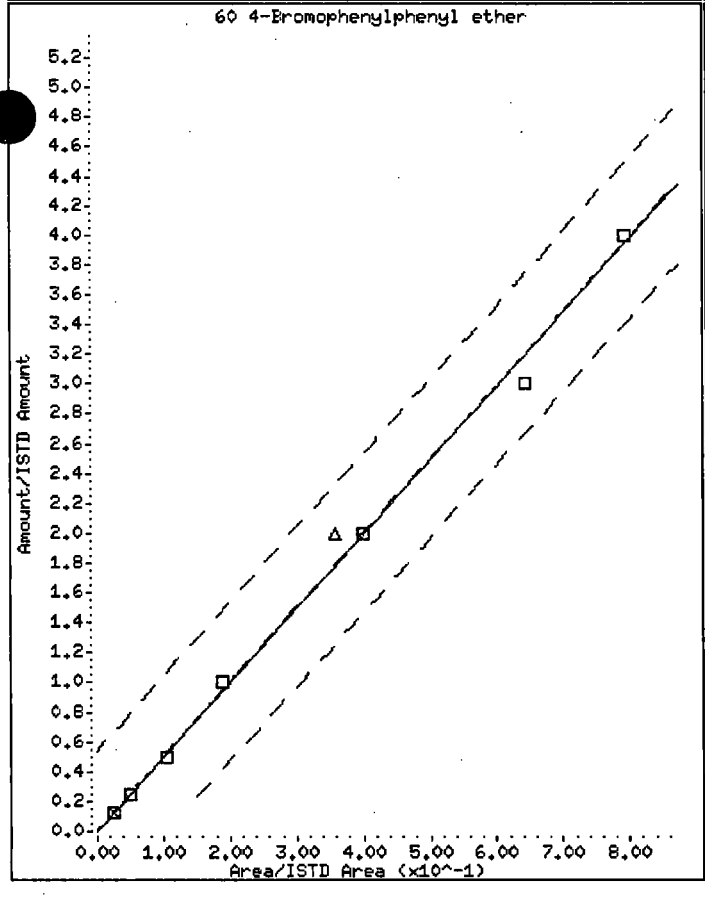

55 4,6-Dinitro-2-methylphenol
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

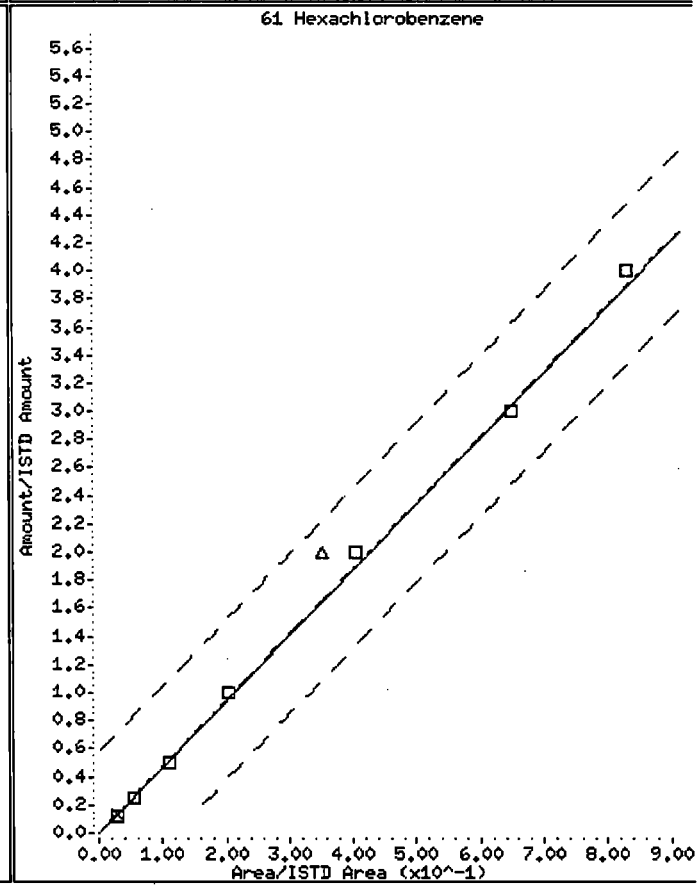

56 N-Nitrosodiphenylamine
Amount/ISTD Amount
Area/ISTD Area

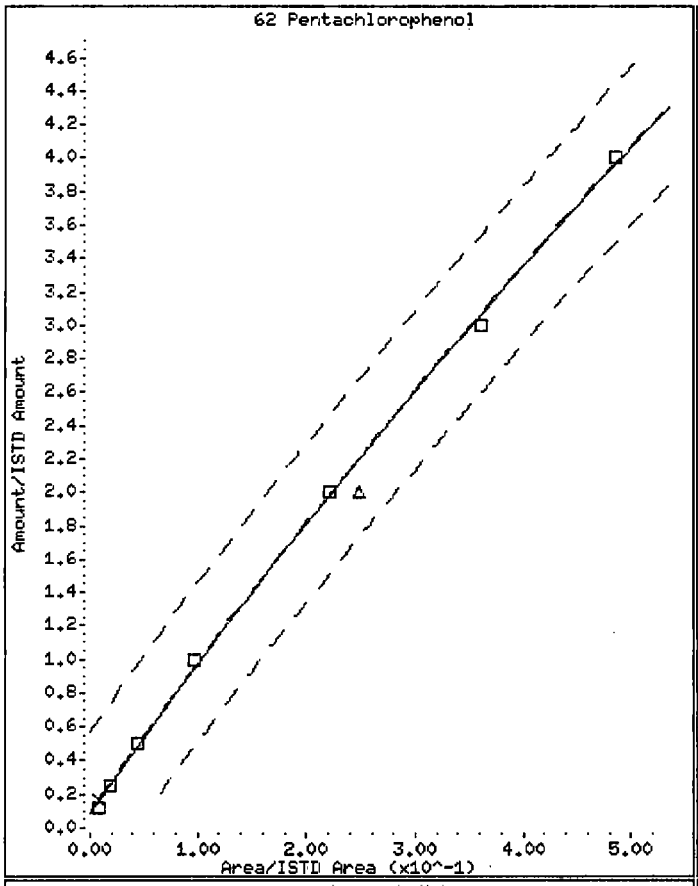

57 Azobenzene
Amount/ISTD Amount
Area/ISTD Area

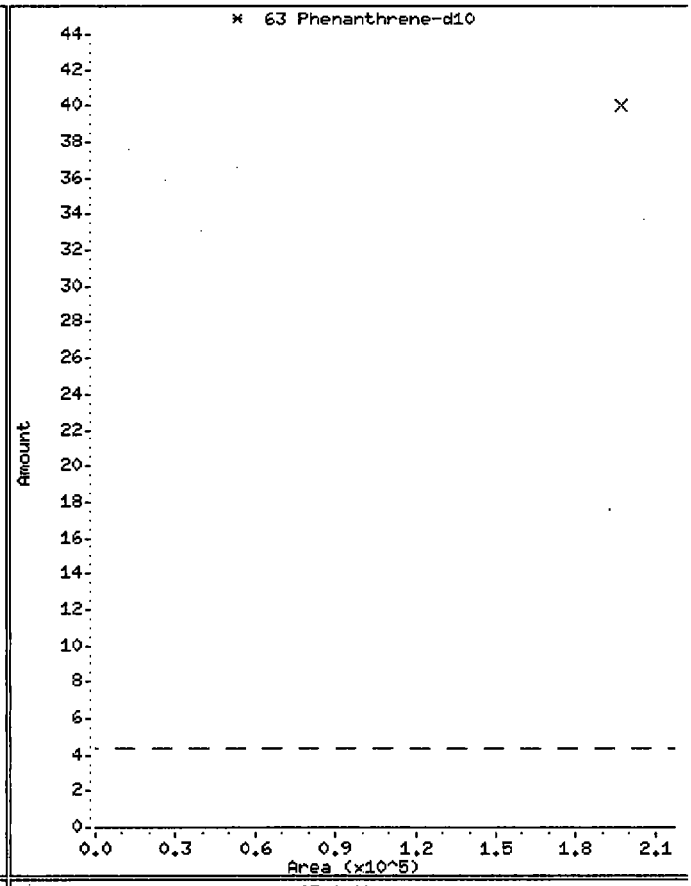

58 1,2-Diphenylhydrazine
Amount/ISTD Amount
Area/ISTD Area

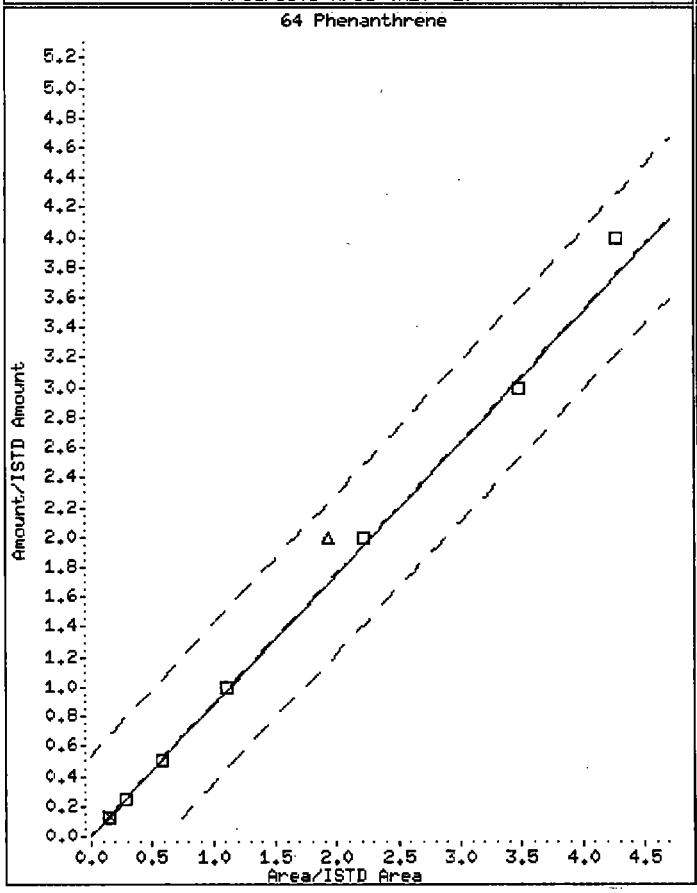

$ 59 2,4,6-Tribromophenol (S)
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

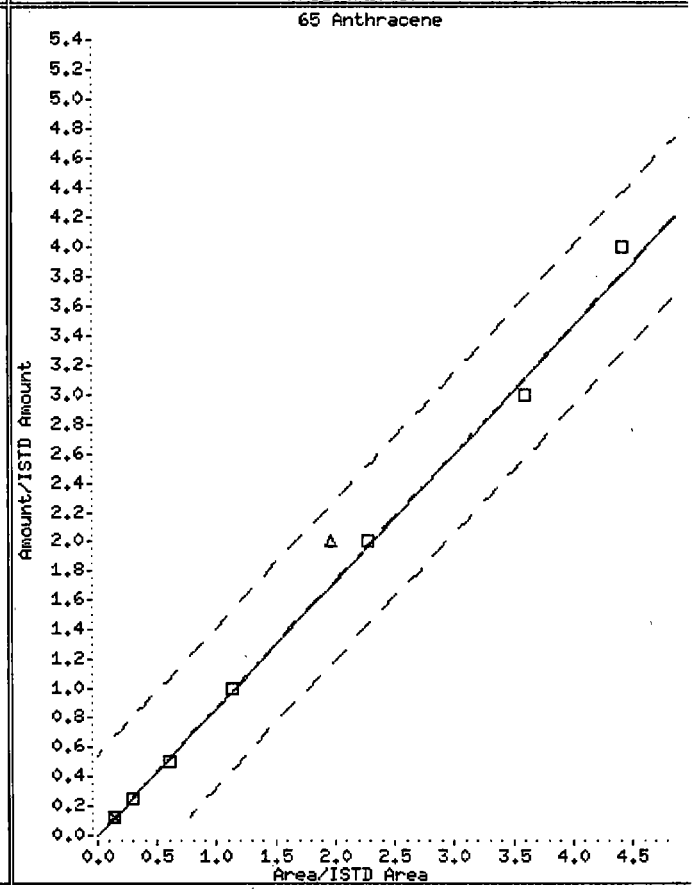

60 4-Bromophenylphenyl ether
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

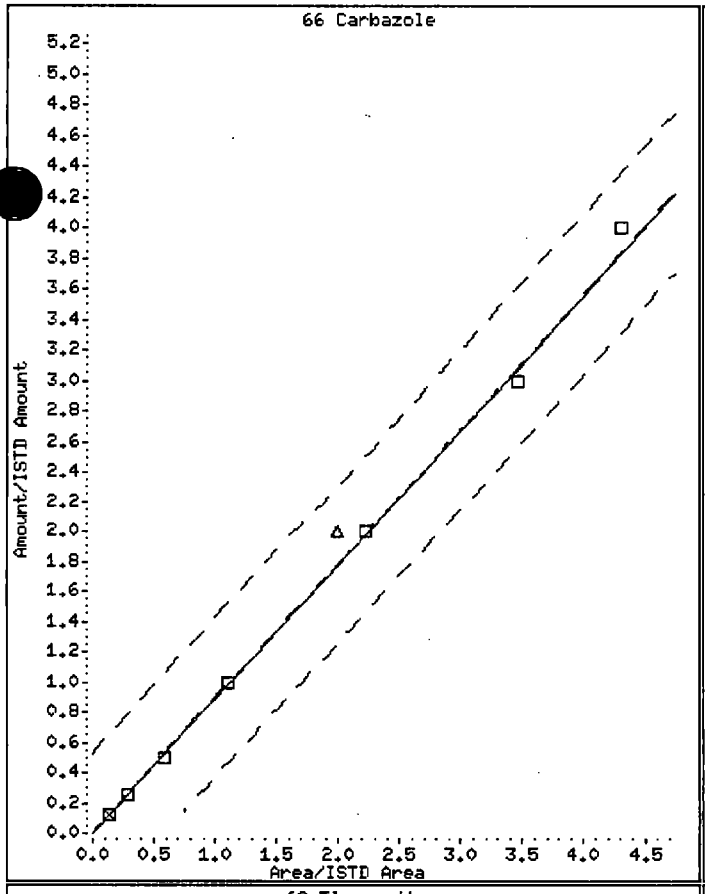

61 Hexachlorobenzene
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

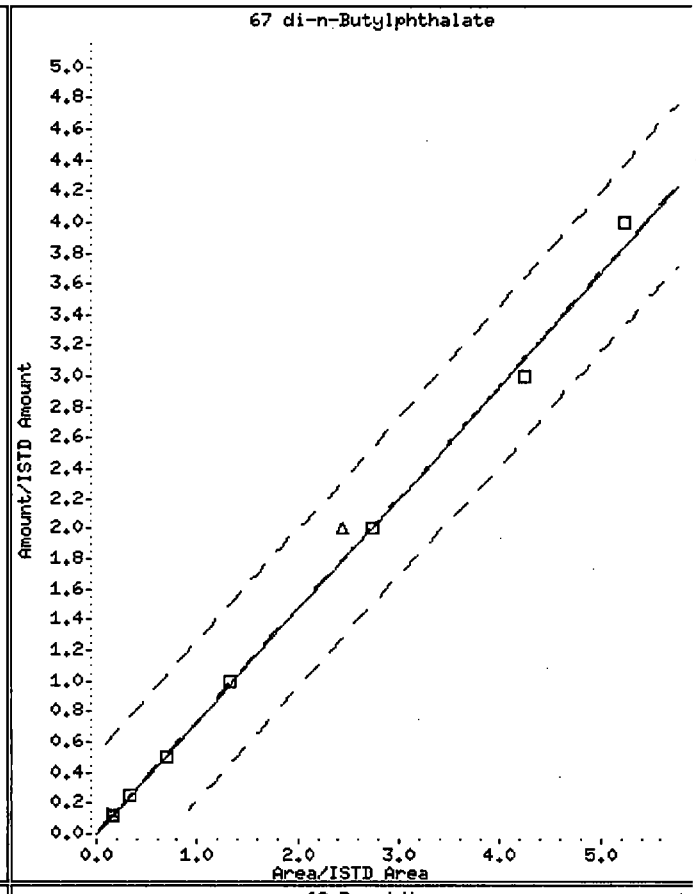

62 Pentachlorophenol
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

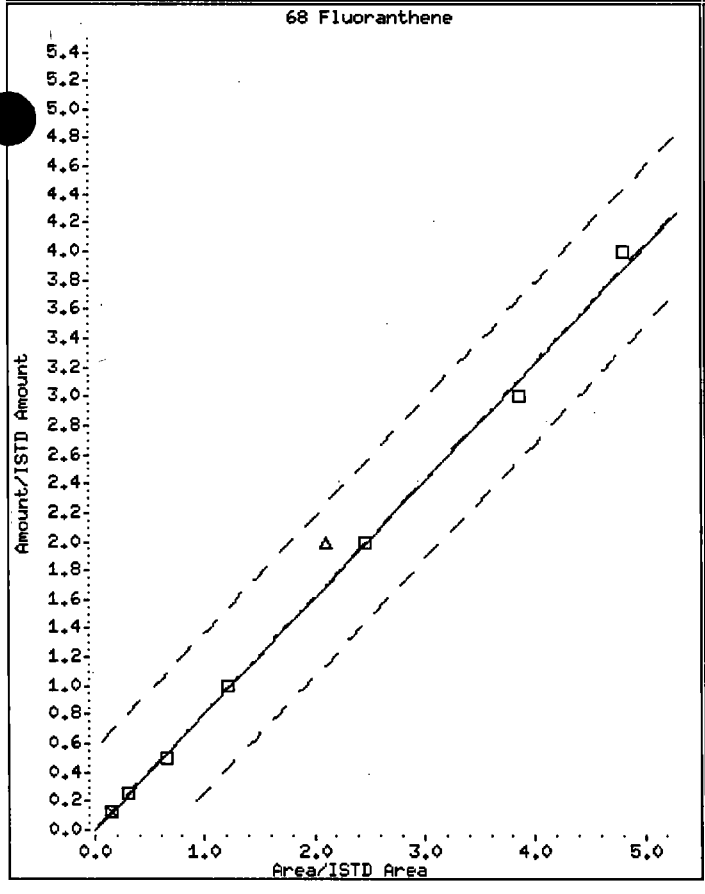

63 Phenanthrene-d10
Amount
Area (x10^5)

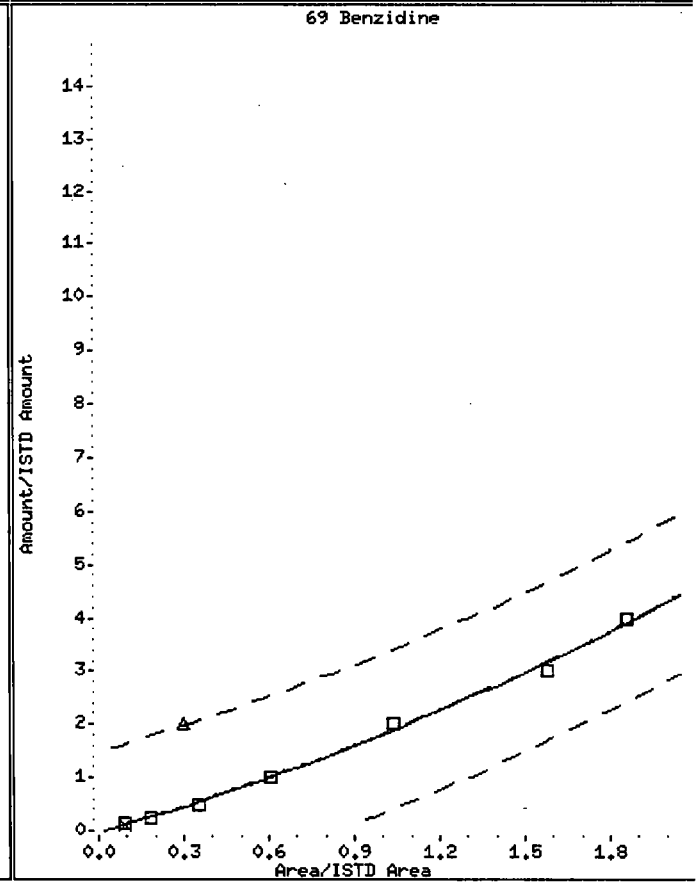

64 Phenanthrene
Amount/ISTD Amount
Area/ISTD Area

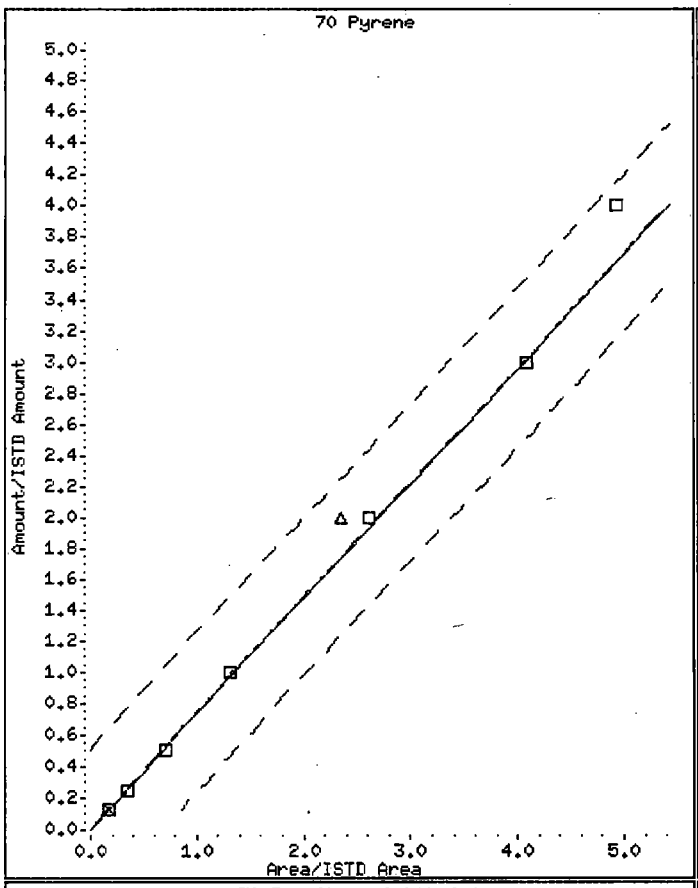

65 Anthracene
Amount/ISTD Amount
Area/ISTD Area

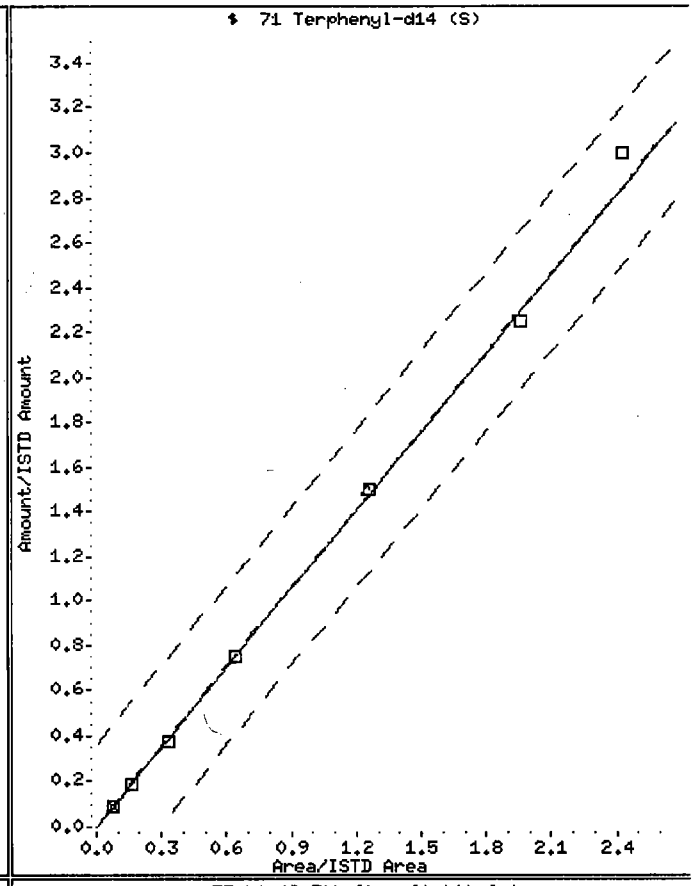

66 Carbazole
Amount/ISTD Amount
Area/ISTD Area

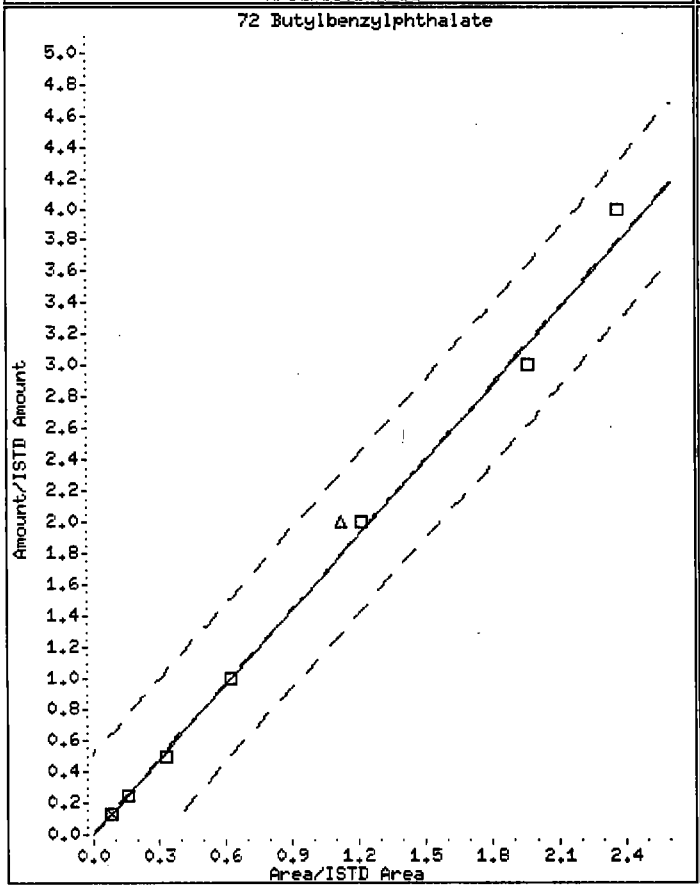

67 di-n-Butylphthalate
Amount/ISTD Amount
Area/ISTD Area

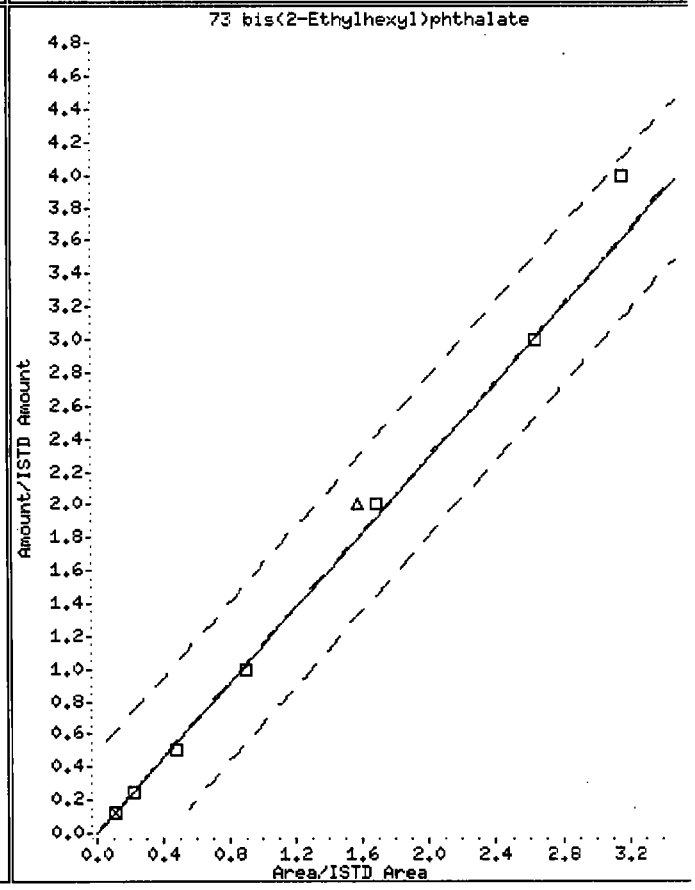

68 Fluoranthene
Amount/ISTD Amount
Area/ISTD Area

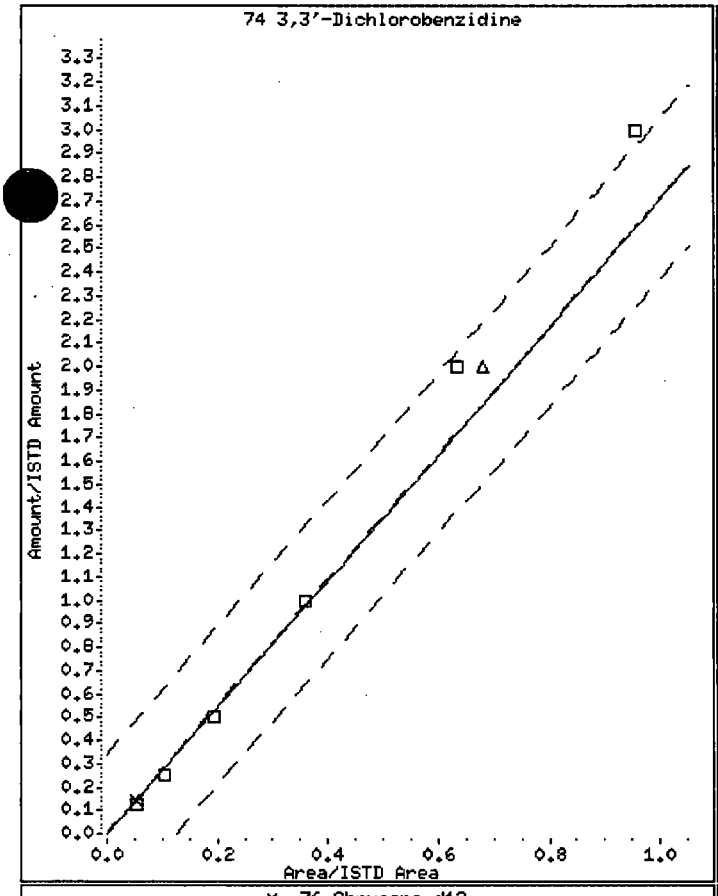

69 Benzidine
Amount/ISTD Amount
Area/ISTD Area

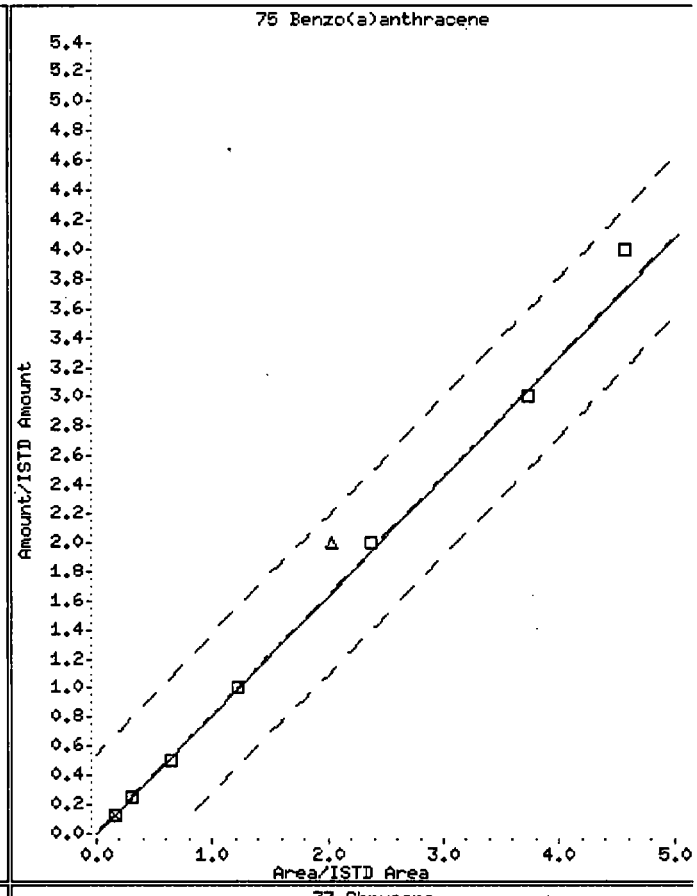

70 Pyrene
Amount/ISTD Amount
Area/ISTD Area

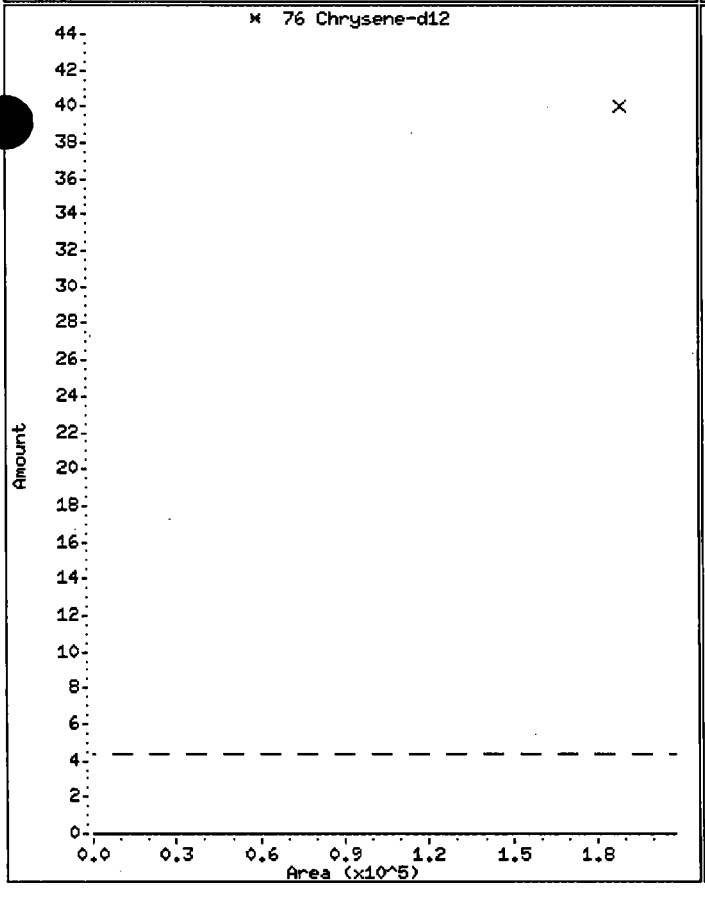

$ 71 Terphenyl-d14 (S)
Amount/ISTD Amount
Area/ISTD Area

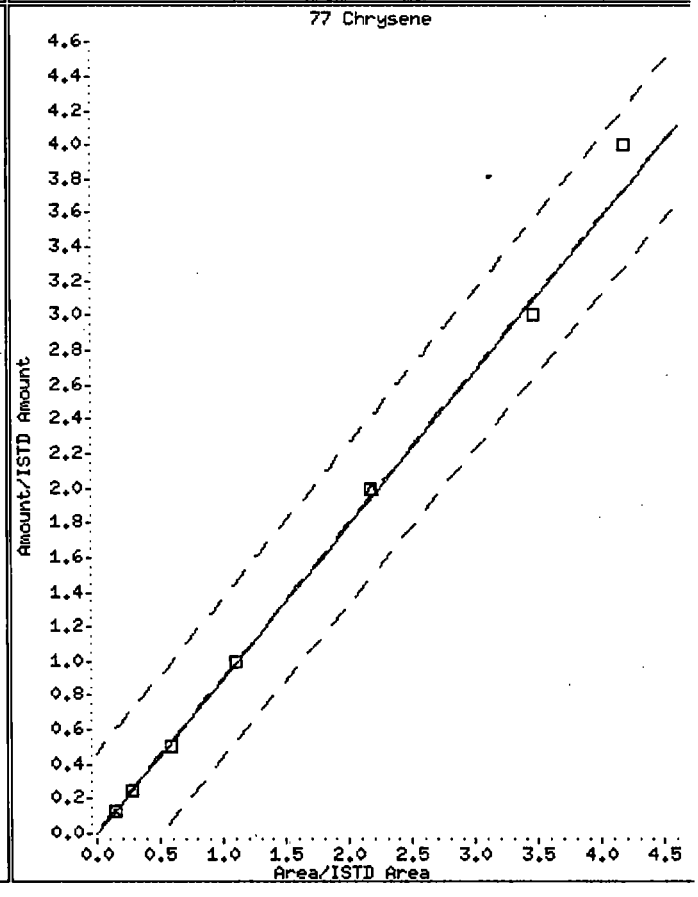

72 Butylbenzylphthalate
Amount/ISTD Amount
Area/ISTD Area

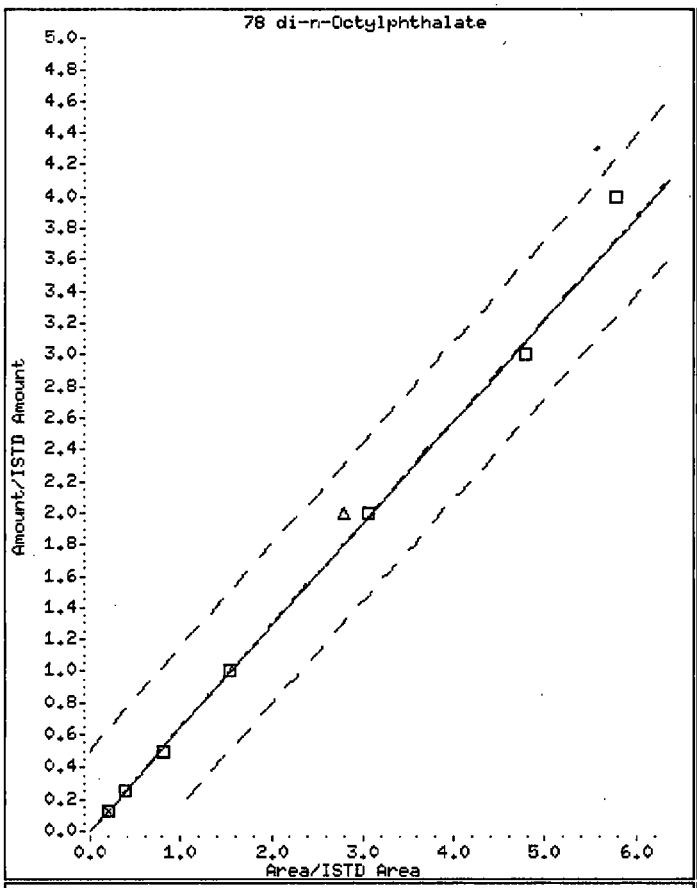

73 bis(2-Ethylhexyl)phthalate
Amount/ISTD Amount
Area/ISTD Area

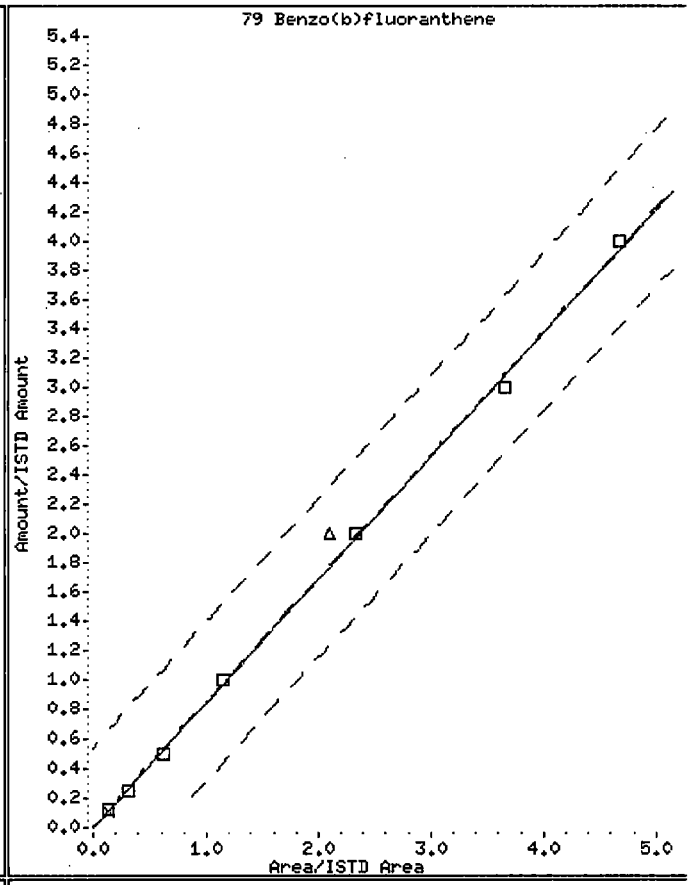

74 3,3'-Dichlorobenzidine
Amount/ISTD Amount
Area/ISTD Area

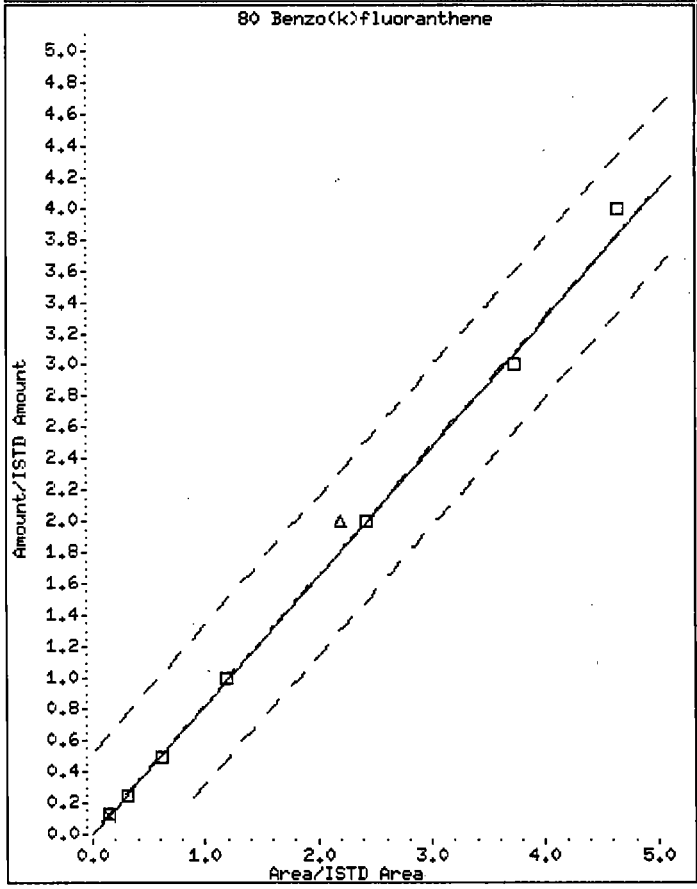

75 Benzo(a)anthracene
Amount/ISTD Amount
Area/ISTD Area

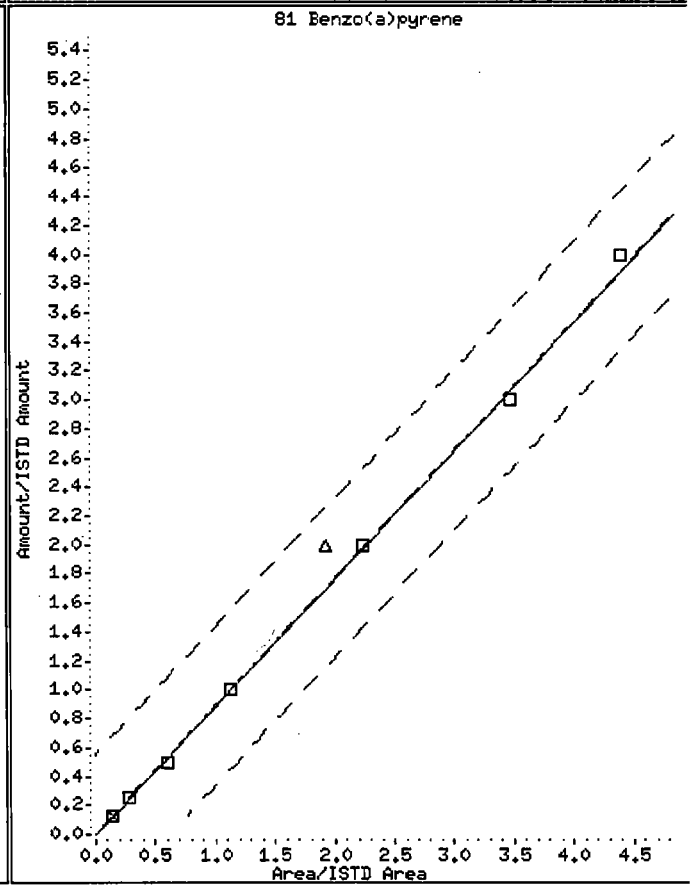

76 Chrysene-d12
Amount
Area (x10^5)

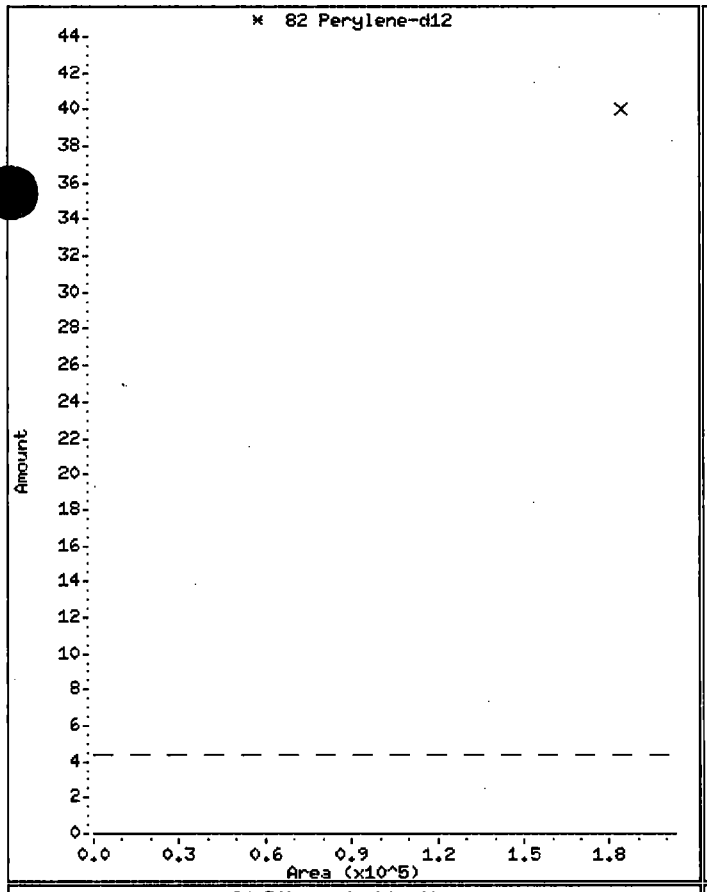

77 Chrysene
Amount/ISTD Amount
Area/ISTD Area

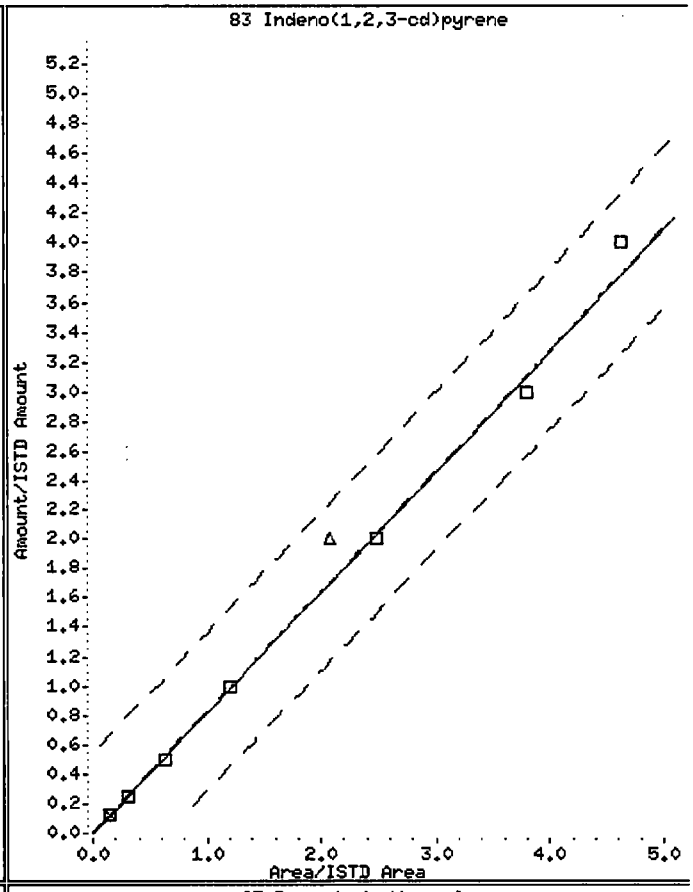

78 di-n-Octylphthalate
Amount/ISTD Amount
Area/ISTD Area

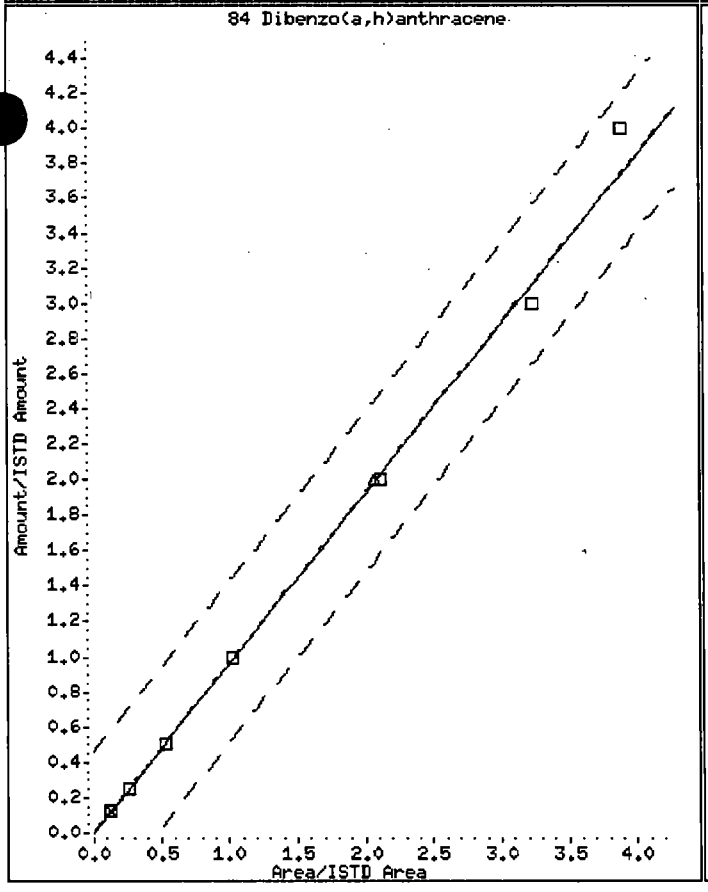

79 Benzo(b)fluoranthene
Amount/ISTD Amount
Area/ISTD Area

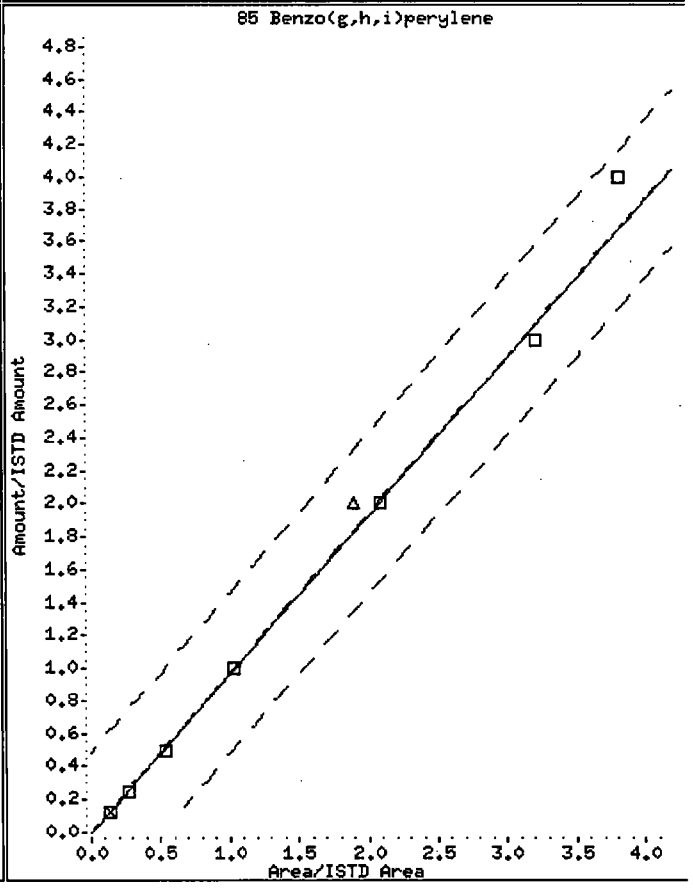

80 Benzo(k)fluoranthene
Amount/ISTD Amount
Area/ISTD Area


81 Benzo(a)pyrene
Amount/ISTD Amount
Area/ISTD Area


82 Perylene-d12
Amount
Area (x10^5)


83 Indeno(1,2,3-cd)pyrene
Amount/ISTD Amount
Area/ISTD Area


84 Dibenzo(a,h)anthracene
Amount/ISTD Amount
Area/ISTD Area


85 Benzo(g,h,i)perylene
Amount/ISTD Amount
Area/ISTD Area

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 09:10
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Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
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Calibration File Names:
Level 2: \\192.168.10.12\chem\10mssD.i\022814B.b\02281414.D
Level 3: \\192.168.10.12\chem\10mssD.i\022814B.b\02281413.D
Level 4: \\192.168.10.12\chem\10mssD.i\022814B.b\02281412.D
Level 5: \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Level 6: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Level 7: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Level 8: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	160.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
1 N-Nitrosodimethylamine	0.86290	0.88180	0.96623	0.91991	0.94180	0.98779						
	0.92906							AVRG		0.92707		4.75508
2 Pyridine	1.59299	1.66798	1.74209	1.62793	1.64678	1.74346						
	1.62349							AVRG		1.66353		3.53145
5 Phenol	1.76905	1.77955	1.90469	1.77426	1.79082	1.88786						
	1.77320							AVRG		1.81135		3.23638
6 bis(2-Chloroethyl)ether	1.06611	1.06920	1.13728	1.04453	1.06425	1.11570						
	1.04538							AVRG		1.07749		3.28679

Pace Analytical Services, Inc.

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Integrator : HP RTE
[redacted]od file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
7 2-Chlorophenol	1.42817	1.45079	1.55902	1.45081	1.48874	1.55755					
	1.44370						AVRG		1.48268		3.69343
8 1,3-Dichlorobenzene	1.51301	1.54609	1.62505	1.50948	1.53545	1.61616					
	1.48677						AVRG		1.54743		3.45982
10 1,4-Dichlorobenzene	1.58695	1.58361	1.66534	1.54046	1.56586	1.62912					
	1.52653						AVRG		1.58541		3.06575
11 Benzyl alcohol	1.19490	1.22430	1.30039	1.21418	1.22758	1.27635					
	1.20404						AVRG		1.23453		3.16392
12 1,2-Dichlorobenzene	1.46795	1.50882	1.60944	1.46437	1.46926	1.53762					
	1.44531						AVRG		1.50040		3.81924
13 2-Methylphenol	1.08791	1.12434	1.19217	1.10227	1.10465	1.15693					
	1.09239						AVRG		1.12295		3.42441
14 bis(2-Chloroisopropyl) ether	2.11070	2.14113	2.22367	2.04576	2.03758	2.12488					
	2.00340						AVRG		2.09816		3.58063

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
	160.0000 Level 8											
15 3 & 4-Methylphenol	1.39873	1.45146	1.55958	1.44244	1.45241	1.51950						
	1.41598						AVRG		1.46287		3.89997	
16 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
17 N-Nitroso-di-n-propylamine	1.01376	1.01420	1.08462	0.99957	1.01376	1.06474						
	1.00020						AVRG		1.02726		3.25980	
18 Hexachloroethane	0.61692	0.61637	0.64704	0.60116	0.60981	0.62877						
	0.59221						AVRG		0.61604		2.92820	
20 Nitrobenzene	0.37556	0.38323	0.40016	0.37672	0.38073	0.40211						
	0.37398						AVRG		0.38464		3.04320	
21 Isophorone	0.64710	0.67337	0.70751	0.67433	0.67891	0.71074						
	0.67402						AVRG		0.68084		3.22487	
22 2,4-Dimethylphenol	0.34751	0.34818	0.37123	0.35478	0.35334	0.37653						
	0.34191						AVRG		0.35621		3.61206	

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	160.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
23 2-Nitrophenol	0.17816	0.18616	0.20208	0.19445	0.19780	0.20765	0.19822	AVRG		0.19493		5.08907
24 Benzoic acid	0.19898	0.23289	0.25202	0.25712	0.28173	0.29861	0.28014	AVRG		0.25736		13.12941
25 bis(2-Chloroethoxy)methane	0.40655	0.41876	0.43958	0.42052	0.41998	0.43245	0.40734	AVRG		0.42074		2.87434
26 2,4-Dichlorophenol	0.25950	0.26749	0.28381	0.27706	0.28030	0.29441	0.27510	AVRG		0.27681		4.06739
27 1,2,4-Trichlorobenzene	0.29205	0.29833	0.30499	0.28970	0.28911	0.30522	0.28623	AVRG		0.29509		2.63805
29 Naphthalene	1.09413	1.09443	1.12759	1.06164	1.05011	1.08578	1.01976	AVRG		1.07621		3.27740
30 4-Chloroaniline	0.45108	0.46009	0.46306	0.41544	0.37460	0.35790	0.31540	AVRG		0.40537		14.17419

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
31 Hexachlorobutadiene	0.14852	0.14543	0.15266	0.14373	0.14692	0.15505					
	0.14776						AVRG		0.14858		2.68257
32 4-Chloro-3-methylphenol	0.27845	0.29131	0.31001	0.29736	0.29991	0.31938					
	0.30121						AVRG		0.29966		4.35886
33 2-Methylnaphthalene	0.67623	0.69178	0.73032	0.69966	0.69746	0.73465					
	0.68886						AVRG		0.70271		3.09132
34 1-Methylnaphthalene	0.64055	0.64700	0.68692	0.64294	0.65500	0.68002					
	0.63693						AVRG		0.65562		3.04205
35 Hexachlorocyclopentadiene	0.28834	0.30148	0.32508	0.33109	0.34563	0.37487					
	0.33721						AVRG		0.32910		8.66468
36 2,4,6-Trichlorophenol	0.32133	0.34585	0.36497	0.35583	0.36220	0.38782					
	0.35986						AVRG		0.35684		5.65852
37 2,4,5-Trichlorophenol	0.35564	0.37504	0.39530	0.38128	0.38644	0.42008					
	0.37472						AVRG		0.38407		5.22190

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
39 2-Chloronaphthalene	1.15462	1.19843	1.22260	1.17679	1.17975	1.24260					
	1.12287						AVRG		1.18538		3.40753
40 2-Nitroaniline	0.36221	0.39812	0.40979	0.40082	0.40082	0.42569					
	0.38490						AVRG		0.39748		5.00222
41 Dimethylphthalate	1.30620	1.34087	1.38429	1.31741	1.30752	1.38436					
	1.27419						AVRG		1.33069		3.12299
42 2,6-Dinitrotoluene	0.30071	0.32418	0.33052	0.31485	0.32040	0.34423					
	0.31521						AVRG		0.32144		4.25491
43 Acenaphthylene	1.89830	1.97124	2.05856	1.94680	1.98241	2.06646					
	1.89283						AVRG		1.97380		3.51236
44 3-Nitroaniline	0.35712	0.36964	0.38552	0.34982	0.30093	0.29299					
	0.25792						AVRG		0.33056		14.18353
46 Acenaphthene	1.21508	1.23662	1.29430	1.22468	1.21046	1.30970					
	1.17755						AVRG		1.23834		3.81987

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
47 2,4-Dinitrophenol	2813	6833	17932	42942	94767	153763					
	202211						QUAD	0.12678	4.63679	-0.03462	0.99342
48 4-Nitrophenol	0.27569	0.29563	0.31319	0.30139	0.30264	0.31946					
	0.29325						AVRG		0.30018		4.74378
49 2,4-Dinitrotoluene	0.38324	0.42216	0.44267	0.42371	0.42972	0.45361					
	0.41588						AVRG		0.42443		5.25727
50 Dibenzofuran	1.67918	1.70893	1.72716	1.64142	1.66857	1.72222					
	1.56795						AVRG		1.67363		3.33874
51 Diethylphthalate	1.36247	1.39438	1.44710	1.37156	1.37789	1.46087					
	1.32905						AVRG		1.39190		3.37450
52 4-Chlorophenylphenyl ether	0.59726	0.61005	0.63422	0.59751	0.60787	0.64127					
	0.58298						AVRG		0.61017		3.42252
53 Fluorene	1.39258	1.45162	1.47743	1.41235	1.35952	1.47033					
	1.31432						AVRG		1.41116		4.28325

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	160.0000 Level 8										
54 4-Nitroaniline	0.34736	0.38994	0.40485	0.38558	0.37484	0.39282					
	0.35556						AVRG		0.37871		5.48562
55 4,6-Dinitro-2-methylphenol	4513	10363	24904	54689	118979	178803					
	243881						QUAD	0.08912	6.32613	0.16766	0.99787
56 N-Nitrosodiphenylamine	0.67438	0.70966	0.74858	0.69857	0.71079	0.75789					
	0.69285						AVRG		0.71324		4.20692
57 Azobenzene	1.46740	1.51955	1.58440	1.49731	1.44751	1.50062					
	1.35063						AVRG		1.48106		4.86350
58 1,2-Diphenylhydrazine	1.46740	1.51955	1.58440	1.49731	1.44751	1.50062					
	1.35063						AVRG		1.48106		4.86350
60 4-Bromophenylphenyl ether	0.18644	0.19549	0.20434	0.19598	0.20253	0.22224					
	0.20691						AVRG		0.20199		5.57159
61 Hexachlorobenzene	0.21391	0.21485	0.22956	0.21476	0.22431	0.23700					
	0.22172						AVRG		0.22230		3.92120

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	160.0000 Level 8										
62 Pentachlorophenol	+++++	0.10939	0.12854	0.12879	0.13908	0.15446					
	0.14823						AVRG		0.13475		11.99323
64 Phenanthrene	1.10786	1.15481	1.21176	1.11071	1.11948	1.18757					
	1.08264						AVRG		1.13926		4.12150
65 Anthracene	1.10857	1.12812	1.22275	1.12852	1.16393	1.21440					
	1.16364						AVRG		1.16142		3.77991
66 Carbazole	1.06937	1.11727	1.19805	1.09132	1.11277	1.17709					
	1.10994						AVRG		1.12512		4.09153
67 di-n-Butylphthalate	1.21834	1.33010	1.46374	1.38950	1.40768	1.52074					
	1.37868						AVRG		1.38697		6.96324
68 Fluoranthene	1.03062	1.06906	1.17944	1.11135	1.13960	1.25144					
	1.17788						AVRG		1.13706		6.53872
69 Benzidine	0.68615	0.70682	0.72685	0.64583	0.54631	0.55931					
	0.49322						AVRG		0.62350		14.50841

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
70 Pyrene	1.19608	1.23884	1.31712	1.21255	1.18574	1.28639					
	1.18311						AVRG		1.23141		4.25161
72 Butylbenzylphthalate	0.54285	0.58810	0.64282	0.61231	0.59209	0.64055					
	0.57886						AVRG		0.59965		5.91389
73 bis(2-Ethylhexyl)phthalate	0.79511	0.83988	0.92922	0.89406	0.85208	0.90120					
	0.81073						AVRG		0.86033		5.76370
74 3,3'-Dichlorobenzidine	0.35073	0.36998	0.38434	0.33046	0.29416	0.31529					
	0.28794						AVRG		0.33327		11.07575
75 Benzo(a)anthracene	1.12690	1.13818	1.20355	1.12024	1.12532	1.18848					
	1.08152						AVRG		1.14060		3.68273
77 Chrysene	1.07474	1.07000	1.12016	1.05141	1.04529	1.08919					
	0.95720						AVRG		1.05828		4.82233
78 di-n-Octylphthalate	1.23053	1.39334	1.52688	1.47631	1.45775	1.52765					
	1.41751						AVRG		1.43288		7.15734

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	160.0000 Level 8										
79 Benzo(b)fluoranthene	1.00943	1.05743	1.11332	1.09317	1.10418	1.15176					
	1.10749						AVRG		1.09097		4.17048
80 Benzo(k)fluoranthene	1.09004	1.16760	1.25448	1.14099	1.21317	1.22386					
	1.09494						AVRG		1.16930		5.49520
81 Benzo(a)pyrene	0.93922	1.02075	1.08200	1.04378	1.08164	1.12251					
	1.04029						AVRG		1.04717		5.58034
83 Indeno(1,2,3-cd)pyrene	1.09938	1.17285	1.26784	1.21240	1.20738	1.28883					
	1.22095						AVRG		1.20995		5.15129
84 Dibenzo(a,h)anthracene	0.93875	1.00799	1.07166	1.02681	1.06173	1.12210					
	1.04187						AVRG		1.03870		5.51059
85 Benzo(g,h,i)perylene	0.94584	0.99157	1.06036	1.00719	1.01547	1.09334					
	1.04825						AVRG		1.02315		4.75947
$ 3 2-Fluorophenol (S)	1.32660	1.39500	1.46473	1.35525	1.38391	1.45628					
	1.38143						AVRG		1.39474		3.60664

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Compound	5.0000 Level 2 / 160.0000 Level 8	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
$ 4 Phenol-d6 (S)	1.65117	1.71398	1.81026	1.68971	1.74192	1.82432					
	1.73382						AVRG		1.73788		3.57464
$ 19 Nitrobenzene-d5 (S)	0.38169	0.39233	0.41254	0.39472	0.39564	0.41624					
	0.38795						AVRG		0.39730		3.17677
$ 38 2-Fluorobiphenyl (S)	1.36399	1.39839	1.44041	1.38175	1.39448	1.45022					
	1.35600						AVRG		1.39789		2.56653
$ 59 2,4,6-Tribromophenol (S)	0.16902	0.17578	0.18458	0.18494	0.19462	0.21209					
	0.19686						AVRG		0.18827		7.61285
$ 71 Terphenyl-d14 (S)	0.82092	0.86552	0.90619	0.85281	0.85085	0.92466					
	0.86345						AVRG		0.86920		4.04769

Report Date : 28-Feb-2014 13:30

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 09:10
End Cal Date : 28-FEB-2014 11:59
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Last Edit : 28-Feb-2014 13:29 jlries

Average %RSD Results.	
Calculated Average %RSD =	4.96720
Maximun Average %RSD =	15.00000
* Passed Average %RSD Test.	

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Lab Smp Id: ICAL 8 10328-96
Inj Date : 28-FEB-2014 09:10
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 8 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
CpndVariable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.595	2.595	(0.512)	440555	160.000	160(A)
2	Pyridine	79	2.643	2.643	(0.521)	769845	160.000	156
$ 3	2-Fluorophenol (S)	112	3.729	3.729	(0.735)	655063	160.000	158
$ 4	Phenol-d6 (S)	99	4.622	4.622	(0.911)	822163	160.000	160
5	Phenol	94	4.638	4.638	(0.915)	840835	160.000	157
6	bis(2-Chloroethyl)ether	63	4.756	4.756	(0.938)	495711	160.000	155
7	2-Chlorophenol	128	4.847	4.847	(0.956)	684592	160.000	156
8	1,3-Dichlorobenzene	146	5.018	5.018	(0.989)	705014	160.000	154
* 9	1,4-Dichlorobenzene-d4	152	5.072	5.072	(1.000)	118548	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	723868	160.000	154
11	Benzyl alcchol	79	5.200	5.200	(1.025)	570946	160.000	156
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	685353	160.000	154
13	2-Methylphenol	107	5.302	5.302	(1.045)	518001	160.000	156
14	bis(2-Chloroisopropyl) ether	45	5.344	5.344	(1.054)	949997	160.000	153
15	3 & 4-Methylphenol	107	5.473	5.473	(1.079)	671445	160.000	155
17	N-Nitroso-di-n-propylamine	70	5.499	5.499	(1.084)	474289	160.000	156
18	Hexachloroethane	117	5.655	5.655	(1.115)	280819	160.000	154
$ 19	Nitrobenzene-d5 (S)	82	5.687	5.687	(0.869)	541078	120.000	117
20	Nitrobenzene	77	5.713	5.713	(0.873)	695467	160.000	156
21	Isophorone	82	5.986	5.986	(0.915)	1253420	160.000	158
23	2-Nitrophenol	139	6.077	6.077	(0.929)	368608	160.000	163(A)
22	2,4-Dimethylphenol	107	6.093	6.093	(0.931)	635820	160.000	154

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	6.221	6.221	(0.951)	520962	160.000	174(AM)
	25 bis(2-Chloroethoxy)methane	93	6.211	6.211	(0.949)	757500	160.000	155(Q)
	26 2,4-Dichlorophenol	162	6.361	6.361	(0.972)	511582	160.000	159
	27 1,2,4-Trichlorobenzene	180	6.468	6.468	(0.989)	532285	160.000	155
*	28 Naphthalene-d8	136	6.542	6.542	(1.000)	464907	40.0000	(Q)
	29 Naphthalene	128	6.574	6.574	(1.005)	1896383	160.000	152
	30 4-Chloroaniline	127	6.612	6.612	(1.011)	586524	160.000	124(A)
	31 Hexachlorobutadiene	225	6.708	6.708	(1.025)	274775	160.000	159
	32 4-Chloro-3-methylphenol	107	7.174	7.174	(1.096)	560144	160.000	161(A)
	33 2-Methylnaphthalene	142	7.409	7.409	(1.132)	1281032	160.000	157
	34 1-Methylnaphthalene	142	7.532	7.532	(1.151)	1184455	160.000	155
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	336463	160.000	164(A)
	36 2,4,6-Trichlorophenol	196	7.740	7.740	(0.890)	359064	160.000	161(A)
	37 2,4,5-Trichlorophenol	196	7.783	7.783	(0.895)	373888	160.000	156
$	38 2-Fluorobiphenyl (S)	172	7.847	7.847	(0.902)	1014740	120.000	116
	39 2-Chloronaphthalene	162	8.008	8.008	(0.921)	1120376	160.000	152
	40 2-Nitroaniline	65	8.115	8.115	(0.933)	384044	160.000	155
	41 Dimethylphthalate	163	8.345	8.345	(0.959)	1271354	160.000	153
	42 2,6-Dinitrotoluene	165	8.414	8.414	(0.967)	314507	160.000	157
	43 Acenaphthylene	152	8.532	8.532	(0.981)	1888618	160.000	153(TM)
	44 3-Nitroaniline	138	8.628	8.628	(0.992)	257348	160.000	125(A)
*	45 Acenaphthene-d10	164	8.698	8.698	(1.000)	249444	40.0000	
	46 Acenaphthene	154	8.746	8.746	(1.006)	1174934	160.000	152
	47 2,4-Dinitrophenol	184	8.751	8.751	(1.006)	202211	160.000	154
	48 4-Nitrophenol	65	8.810	8.810	(1.013)	292601	160.000	156
	49 2,4-Dinitrotoluene	165	8.917	8.917	(1.025)	414959	160.000	157
	50 Dibenzofuran	168	8.955	8.955	(1.030)	1564465	160.000	150
	51 Diethylphthalate	149	9.211	9.211	(1.059)	1326091	160.000	153
	52 4-Chlorophenylphenyl ether	204	9.366	9.366	(1.077)	581688	160.000	153
	54 4-Nitroaniline	138	9.399	9.399	(1.081)	354768	160.000	150
	53 Fluorene	166	9.388	9.388	(1.079)	1311397	160.000	149
	55 4,6-Dinitro-2-methylphenol	198	9.431	9.431	(0.894)	243881	160.000	157
	56 N-Nitrosodiphenylamine	169	9.516	9.516	(0.902)	1129761	160.000	155
	57 Azobenzene	77	9.570	9.570	(1.100)	1347627	160.000	146
	58 1,2-Diphenylhydrazine	77	9.570	9.570	(1.100)	1347627	160.000	146
$	59 2,4,6-Tribromophenol (S)	330	9.682	9.682	(1.113)	196420	160.000	167(A)
	60 4-Bromophenylphenyl ether	248	9.982	9.982	(0.946)	337383	160.000	164(A)
	61 Hexachlorobenzene	284	10.072	10.072	(0.954)	361542	160.000	160
	62 Pentachlorophenol	266	10.302	10.302	(0.976)	241699	160.000	176(A)
*	63 Phenanthrene-d10	188	10.554	10.554	(1.000)	407651	40.0000	
	64 Phenanthrene	178	10.586	10.586	(1.003)	1765365	160.000	152
	65 Anthracene	178	10.650	10.650	(1.009)	1897442	160.000	160(A)
	66 Carbazole	167	10.837	10.837	(1.027)	1809872	160.000	158
	67 di-n-Butylphthalate	149	11.244	11.244	(1.065)	2248080	160.000	159
	68 Fluoranthene	202	12.073	12.073	(1.144)	1920654	160.000	166(A)
	69 Benzidine	184	12.212	12.212	(0.881)	848666	160.000	126(A)
	70 Pyrene	202	12.362	12.362	(0.892)	2035741	160.000	154
$	71 Terphenyl-d14 (S)	244	12.528	12.528	(0.904)	1114275	120.000	119
	72 Butylbenzylphthalate	149	13.116	13.116	(0.947)	996017	160.000	154
	73 bis(2-Ethylhexyl)phthalate	149	13.811	13.811	(0.997)	1394994	160.000	151
	74 3,3'-Dichlorobenzidine	252	13.790	13.790	(0.995)	495456	160.000	138(A)
	75 Benzo(a)anthracene	228	13.843	13.843	(0.999)	1860935	160.000	152
*	76 Chrysene-d12	240	13.854	13.854	(1.000)	430166	40.0000	(Q)
	77 Chrysene	228	13.891	13.891	(1.003)	1647014	160.000	145

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.587	14.587	(1.053)	2439054	160.000	158
79	Benzo(b)fluoranthene	252	15.207	15.207	(0.964)	1967626	160.000	162(A)
80	Benzo(k)fluoranthene	252	15.250	15.250	(0.967)	1945336	160.000	150
81	Benzo(a)pyrene	252	15.694	15.694	(0.995)	1848244	160.000	159
* 82	Perylene-d12	264	15.769	15.769	(1.000)	444164	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.753	17.753	(1.126)	2169203	160.000	161(A)
84	Dibenzo(a,h)anthracene	278	17.785	17.785	(1.128)	1851045	160.000	160(A)
85	Benzo(g,h,i)perylene	276	18.363	18.363	(1.165)	1862386	160.000	164(A)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281408.D
Lab Smp Id: ICAL 8 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	118548	0.32
28 Naphthalene-d8	466266	233133	932532	464907	-0.29
45 Acenaphthene-d10	245325	122663	490650	249444	1.68
63 Phenanthrene-d10	405966	202983	811932	407651	0.42
76 Chrysene-d12	427978	213989	855956	430166	0.51
82 Perylene-d12	418836	209418	837672	444164	6.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.05
76 Chrysene-d12	13.85	13.35	14.35	13.85	0.04
82 Perylene-d12	15.76	15.26	16.26	15.77	0.03

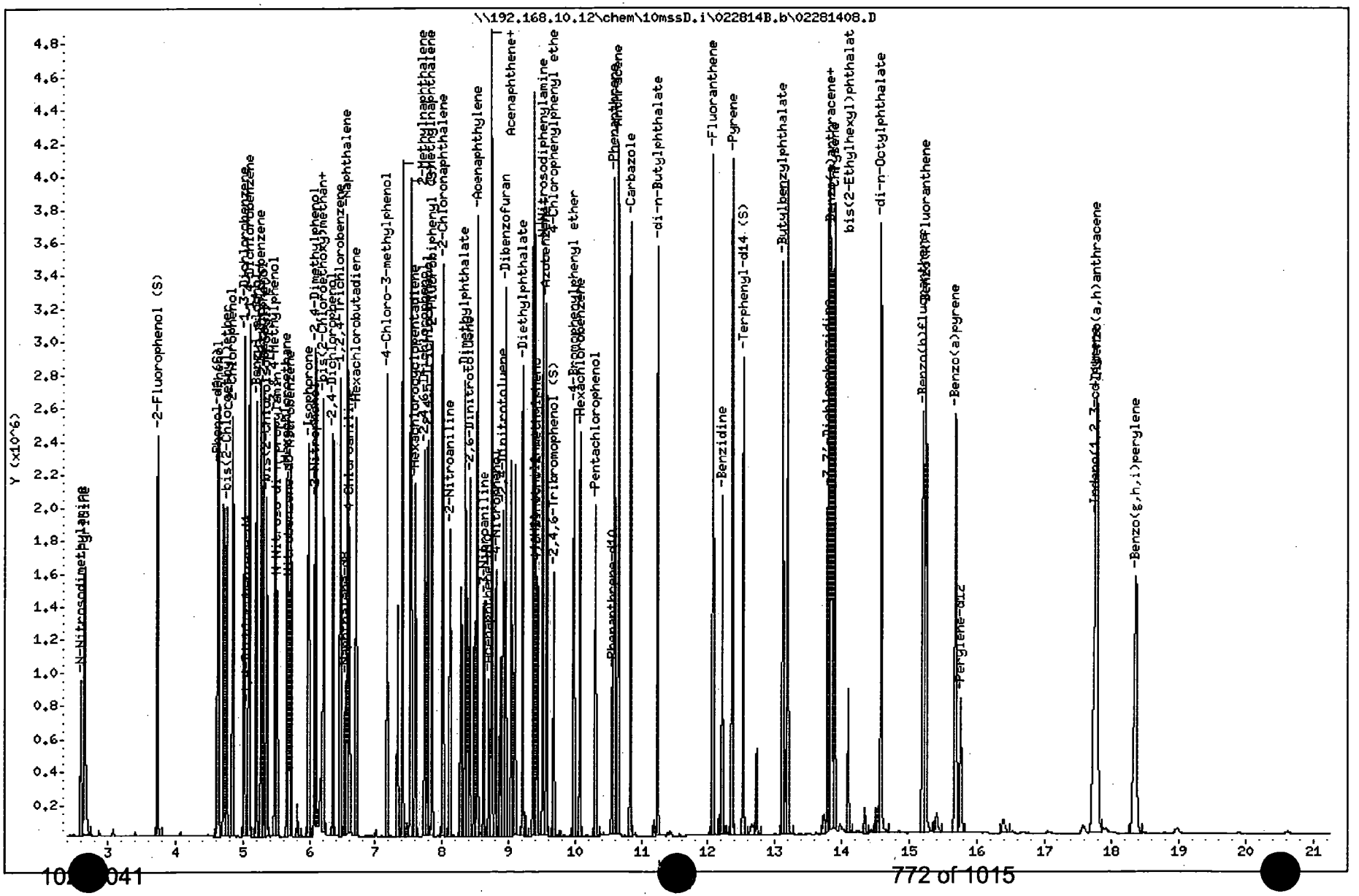
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Date : 28-FEB-2014 09:10
Client ID:
Sample Info: ICAL 8 10328-96

Instrument: 10mssD.i

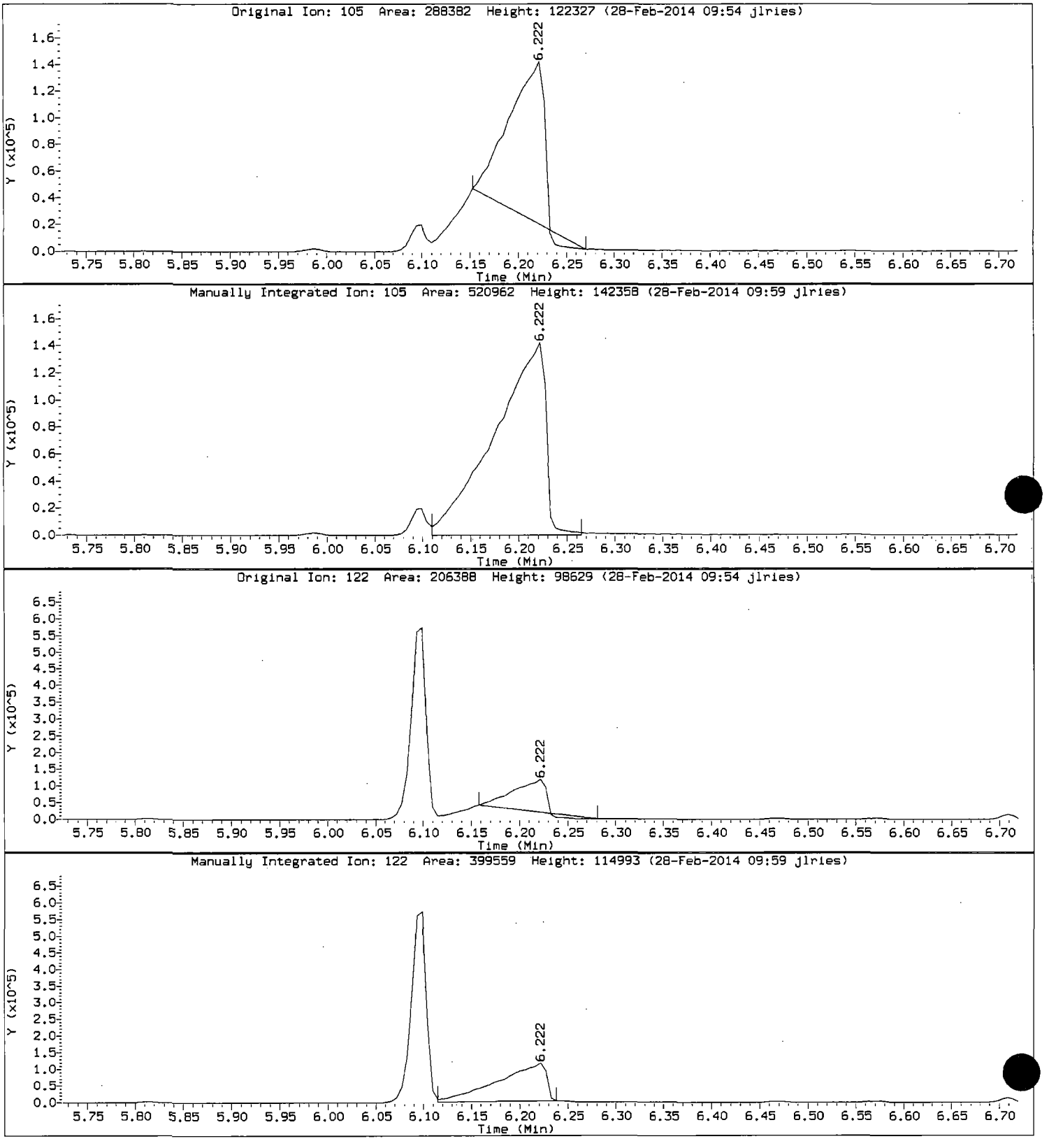
Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS

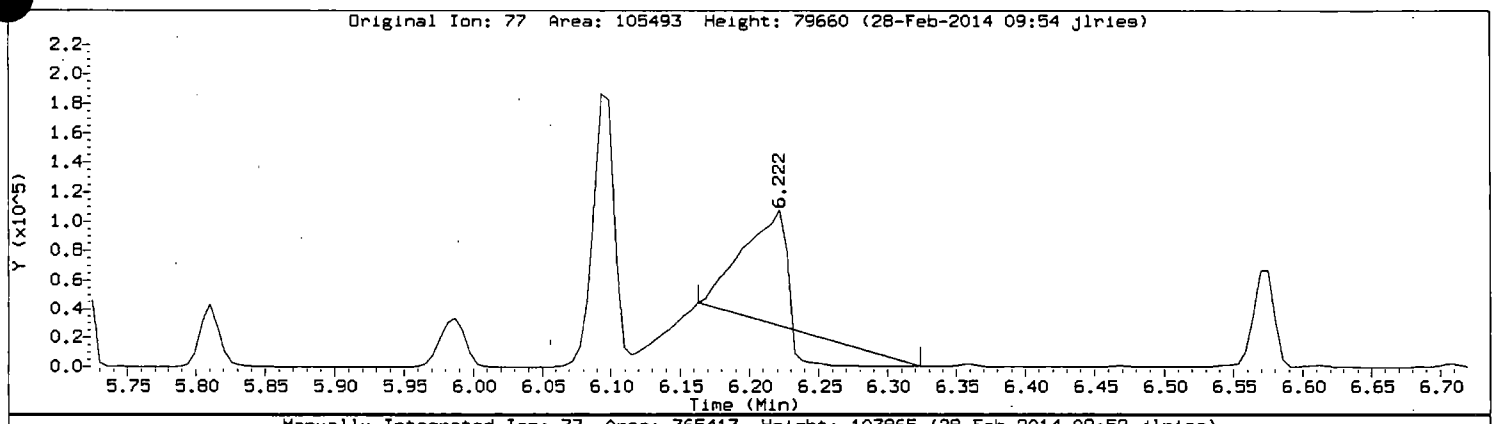


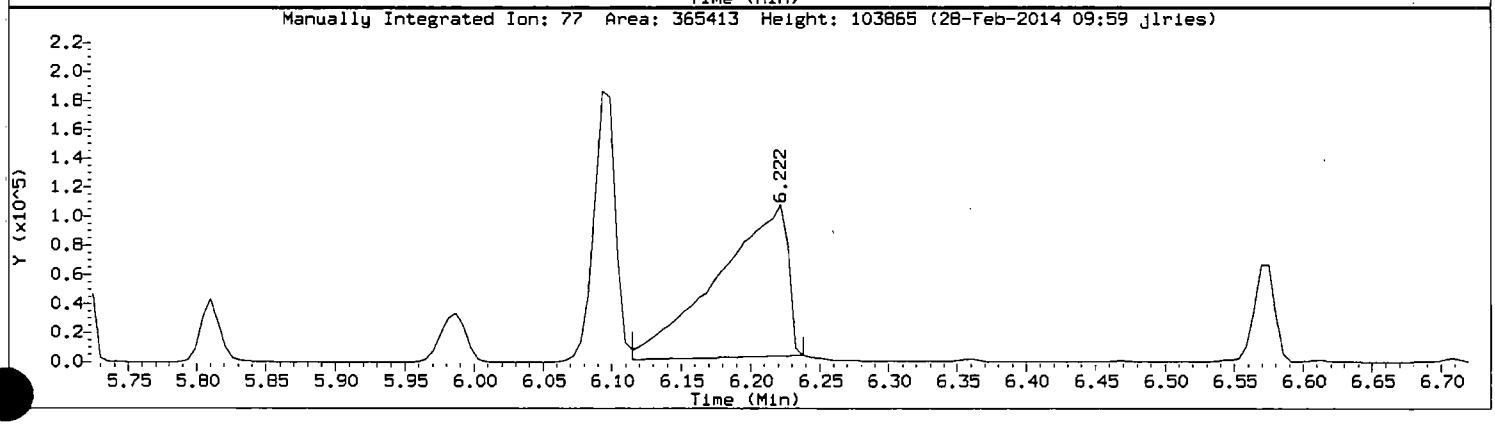
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281408.D
Injection Date: 28-FEB-2014 09:10
Instrument: 10mssD.i
Lab Sample ID: ICAL 8 10328-96

Compound: Benzoic acid
CAS Number: 65-85-0



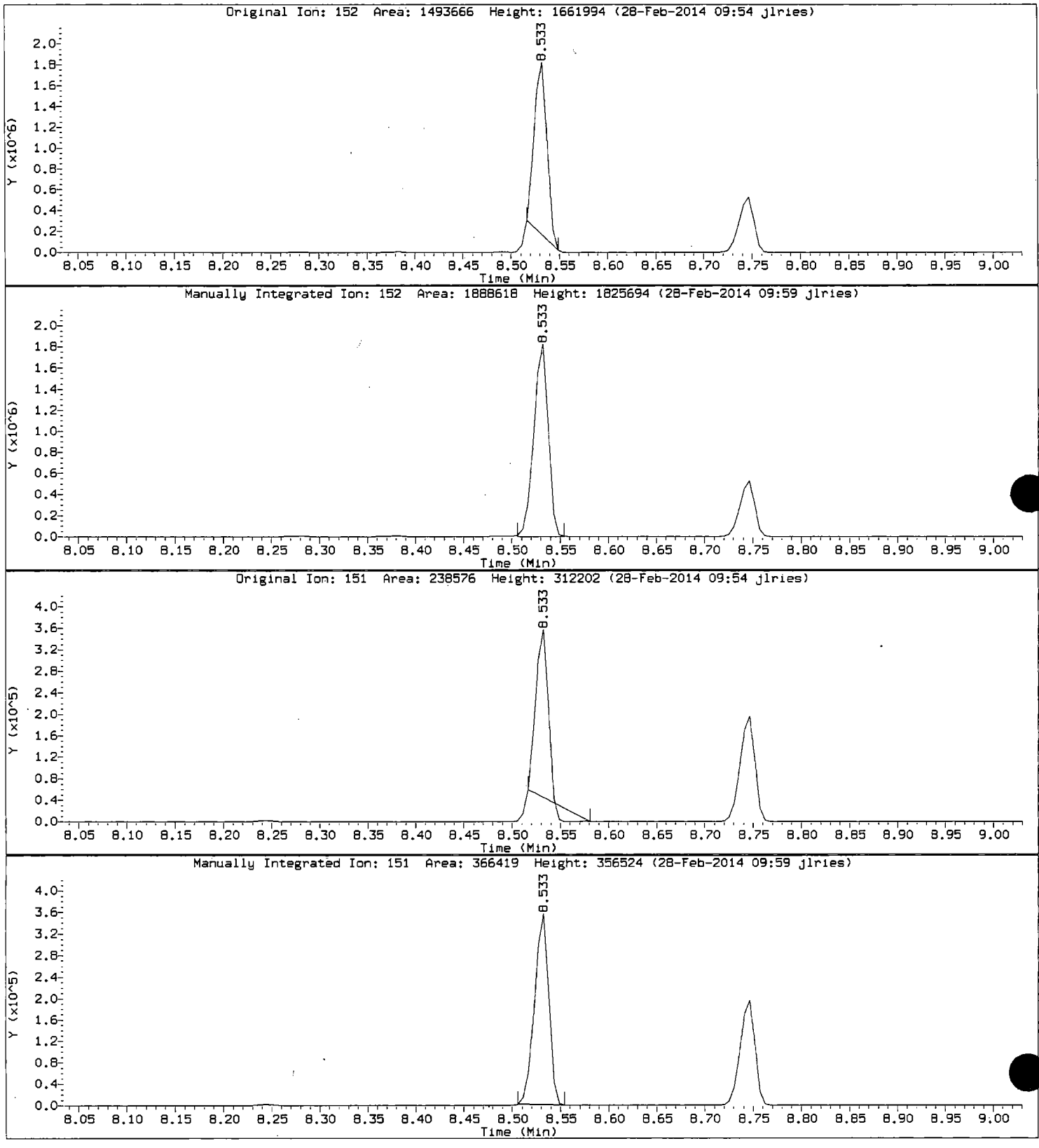
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281408.D
Injection Date: 28-FEB-2014 09:10
Instrument: 10mssD.i
Lab Sample ID: ICAL 8 10328-96



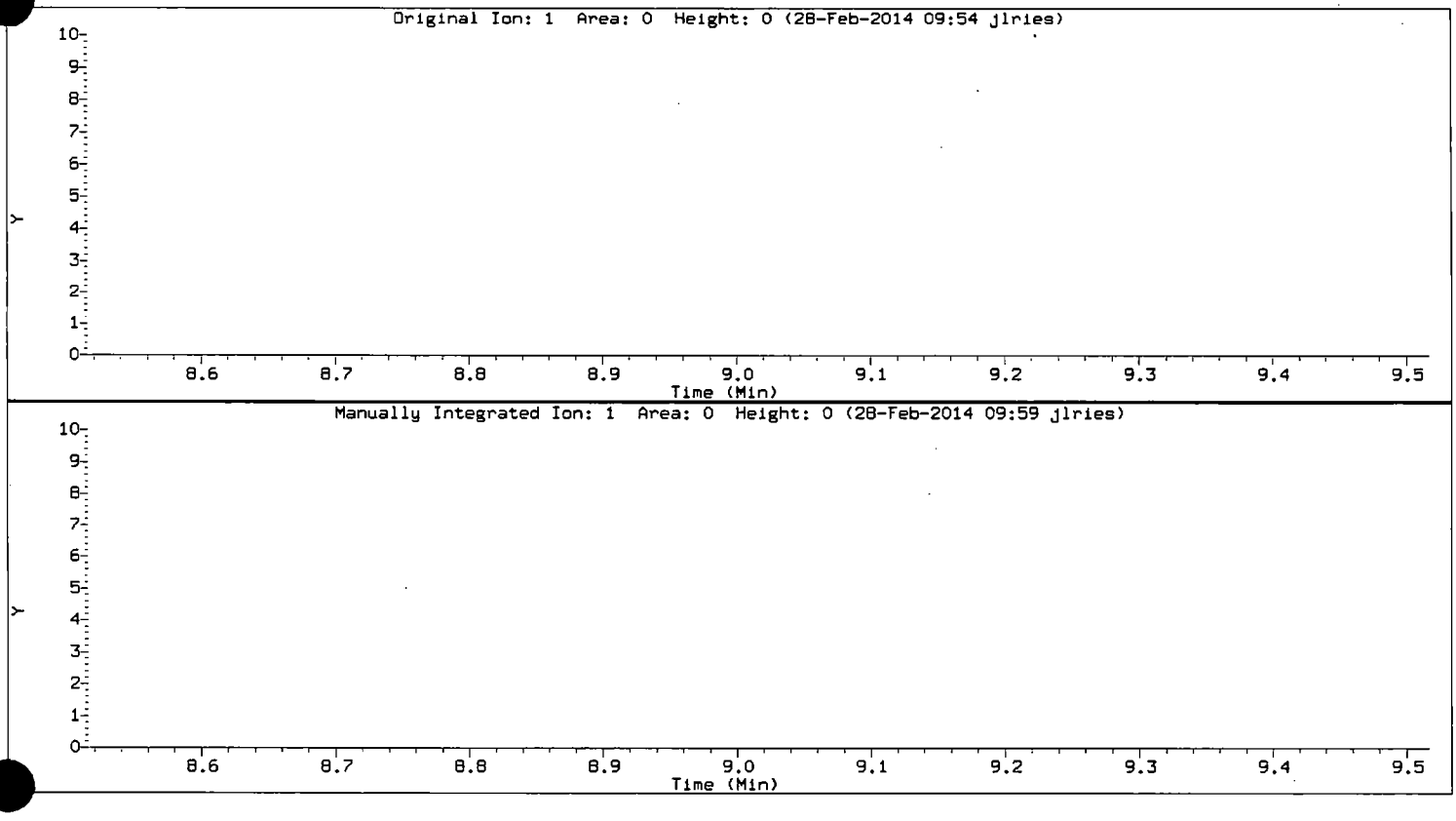


Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281408.D
Injection Date: 28-FEB-2014 09:10
Instrument: 10mssD.i
Lab Sample ID: ICAL 8 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281408.D
Injection Date: 28-FEB-2014 09:10
Instrument: 10mssD.i
Lab Sample ID: ICAL 8 10328-96



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Lab Smp Id: ICAL 7 10328-96
Inj Date : 28-FEB-2014 09:39
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 7 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 09:10 Cal File: 02281408.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	329098	120.000	128
	2 Pyridine	79	2.643	2.643	(0.521)	580859	120.000	126
$	3 2-Fluorophenol (S)	112	3.729	3.729	(0.735)	485182	120.000	125
$	4 Phenol-d6 (S)	99	4.617	4.617	(0.910)	607801	120.000	126
	5 Phenol	94	4.633	4.633	(0.914)	628970	120.000	125
	6 bis(2-Chloroethyl)ether	63	4.750	4.750	(0.937)	371712	120.000	124
	7 2-Chlorophenol	128	4.847	4.847	(0.956)	518920	120.000	126
	8 1,3-Dichlorobenzene	146	5.018	5.018	(0.989)	538447	120.000	125
*	9 1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	111055	40.0000	
	10 1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	542767	120.000	123
	11 Benzyl alcohol	79	5.194	5.194	(1.024)	425235	120.000	124
	12 1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	512281	120.000	123
	13 2-Methylphenol	107	5.296	5.296	(1.044)	385447	120.000	124
	14 bis(2-Chloroisopropyl) ether	45	5.344	5.344	(1.054)	707936	120.000	122
	15 3 & 4-Methylphenol	107	5.473	5.473	(1.079)	506245	120.000	125
	17 N-Nitroso-di-n-propylamine	70	5.494	5.494	(1.083)	354733	120.000	124
	18 Hexachloroethane	117	5.654	5.654	(1.115)	209485	120.000	122
$	19 Nitrobenzene-d5 (S)	82	5.686	5.686	(0.869)	408426	90.0000	94.3
	20 Nitrobenzene	77	5.708	5.708	(0.872)	526092	120.000	125
	21 Isophorone	82	5.981	5.981	(0.914)	929873	120.000	125
	23 2-Nitrophenol	139	6.077	6.077	(0.929)	271676	120.000	128
	22 2,4-Dimethylphenol	107	6.093	6.093	(0.931)	492619	120.000	127

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	6.205	6.205	(0.948)	390676	120.000	139(M)
	25 bis(2-Chloroethoxy)methane	93	6.211	6.211	(0.949)	565784	120.000	123(Q)
	26 2,4-Dichlorophenol	162	6.355	6.355	(0.971)	385187	120.000	128
	27 1,2,4-Trichlorobenzene	180	6.467	6.467	(0.989)	399321	120.000	124
*	28 Naphthalene-d8	136	6.542	6.542	(1.000)	436106	40.0000	(Q)
	29 Naphthalene	128	6.569	6.569	(1.004)	1420551	120.000	121
	30 4-Chloroaniline	127	6.606	6.606	(1.010)	468242	120.000	106(A)
	31 Hexachlorobutadiene	225	6.708	6.708	(1.025)	202851	120.000	125
	32 4-Chloro-3-methylphenol	107	7.168	7.168	(1.096)	417856	120.000	128
	33 2-Methylnaphthalene	142	7.403	7.403	(1.132)	961154	120.000	125
	34 1-Methylnaphthalene	142	7.526	7.526	(1.150)	889681	120.000	124
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	256897	120.000	137
	36 2,4,6-Trichlorophenol	196	7.735	7.735	(0.889)	265771	120.000	130
	37 2,4,5-Trichlorophenol	196	7.778	7.778	(0.894)	287877	120.000	131
$	38 2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	745368	90.0000	93.4
	39 2-Chloronaphthalene	162	8.008	8.008	(0.921)	851543	120.000	126
	40 2-Nitroaniline	65	8.115	8.115	(0.933)	291722	120.000	128
	41 Dimethylphthalate	163	8.339	8.339	(0.959)	948686	120.000	125
	42 2,6-Dinitrotoluene	165	8.414	8.414	(0.967)	235898	120.000	128
	43 Acenaphthylene	152	8.527	8.527	(0.980)	1416125	120.000	126(M)
	44 3-Nitroaniline	138	8.623	8.623	(0.991)	200782	120.000	106(A)
*	45 Acenaphthene-d10	164	8.698	8.698	(1.000)	228430	40.0000	
	46 Acenaphthene	154	8.741	8.741	(1.005)	897521	120.000	127
	47 2,4-Dinitrophenol	184	8.746	8.746	(1.006)	153763	120.000	129
	48 4-Nitrophenol	65	8.805	8.805	(1.012)	218921	120.000	128
	49 2,4-Dinitrotoluene	165	8.912	8.912	(1.025)	310854	120.000	128
	50 Dibenzofuran	168	8.954	8.954	(1.030)	1180219	120.000	123
	51 Diethylphthalate	149	9.206	9.206	(1.058)	1001119	120.000	126
	52 4-Chlorophenylphenyl ether	204	9.366	9.366	(1.077)	439456	120.000	126
	54 4-Nitroaniline	138	9.388	9.388	(1.079)	269195	120.000	124
	53 Fluorene	166	9.382	9.382	(1.079)	1007602	120.000	125
	55 4,6-Dinitro-2-methylphenol	198	9.425	9.425	(0.893)	178803	120.000	125
	56 N-Nitrosodiphenylamine	169	9.511	9.511	(0.901)	857266	120.000	128
	57 Azobenzene	77	9.564	9.564	(1.100)	1028361	120.000	122
	58 1,2-Diphenylhydrazine	77	9.564	9.564	(1.100)	1028361	120.000	122
$	59 2,4,6-Tribromophenol (S)	330	9.677	9.677	(1.113)	145341	120.000	135
	60 4-Bromophenylphenyl ether	248	9.976	9.976	(0.945)	251378	120.000	132
	61 Hexachlorobenzene	284	10.072	10.072	(0.954)	268072	120.000	128
	62 Pentachlorophenol	266	10.302	10.302	(0.976)	174709	120.000	138
*	63 Phenanthrene-d10	188	10.554	10.554	(1.000)	377042	40.0000	
	64 Phenanthrene	178	10.586	10.586	(1.003)	1343286	120.000	125
	65 Anthracene	178	10.650	10.650	(1.009)	1373644	120.000	125
	66 Carbazole	167	10.832	10.832	(1.026)	1331441	120.000	126
	67 di-n-Butylphthalate	149	11.238	11.238	(1.065)	1720146	120.000	132
	68 Fluoranthene	202	12.073	12.073	(1.144)	1415539	120.000	132
	69 Benzidine	184	12.206	12.206	(0.881)	665613	120.000	108
	70 Pyrene	202	12.356	12.356	(0.892)	1530870	120.000	125
$	71 Terphenyl-d14 (S)	244	12.522	12.522	(0.904)	825291	90.0000	95.7
	72 Butylbenzylphthalate	149	13.116	13.116	(0.947)	762293	120.000	128
	73 bis(2-Ethylhexyl)phthalate	149	13.811	13.811	(0.997)	1072476	120.000	126
	74 3,3'-Dichlorobenzidine	252	13.784	13.784	(0.995)	375216	120.000	114(A)
	75 Benzo(a)anthracene	228	13.838	13.838	(0.999)	1414348	120.000	125
*	76 Chrysene-d12	240	13.854	13.854	(1.000)	396684	40.0000	(Q)
	77 Chrysene	228	13.886	13.886	(1.002)	1296190	120.000	124

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.587	14.587	(1.053)	1818223	120.000	128
79	Benzo(b)fluoranthene	252	15.202	15.202	(0.964)	1415992	120.000	127
80	Benzo(k)fluoranthene	252	15.239	15.239	(0.966)	1504640	120.000	126
81	Benzo(a)pyrene	252	15.688	15.688	(0.995)	1380042	120.000	129
* 82	Perylene-d12	264	15.769	15.769	(1.000)	409807	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.742	17.742	(1.125)	1584516	120.000	128
84	Dibenzo(a,h)anthracene	278	17.769	17.769	(1.127)	1379534	120.000	130
85	Benzo(g,h,i)perylene	276	18.347	18.347	(1.163)	1344170	120.000	128

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281409.D
Lab Smp Id: ICAL 7 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	111055	-6.02
28 Naphthalene-d8	466266	233133	932532	436106	-6.47
45 Acenaphthene-d10	245325	122663	490650	228430	-6.89
63 Phenanthrene-d10	405966	202983	811932	377042	-7.12
76 Chrysene-d12	427978	213989	855956	396684	-7.31
82 Perylene-d12	418836	209418	837672	409807	-2.16

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.05
76 Chrysene-d12	13.85	13.35	14.35	13.85	0.04
82 Perylene-d12	15.76	15.26	16.26	15.77	0.03

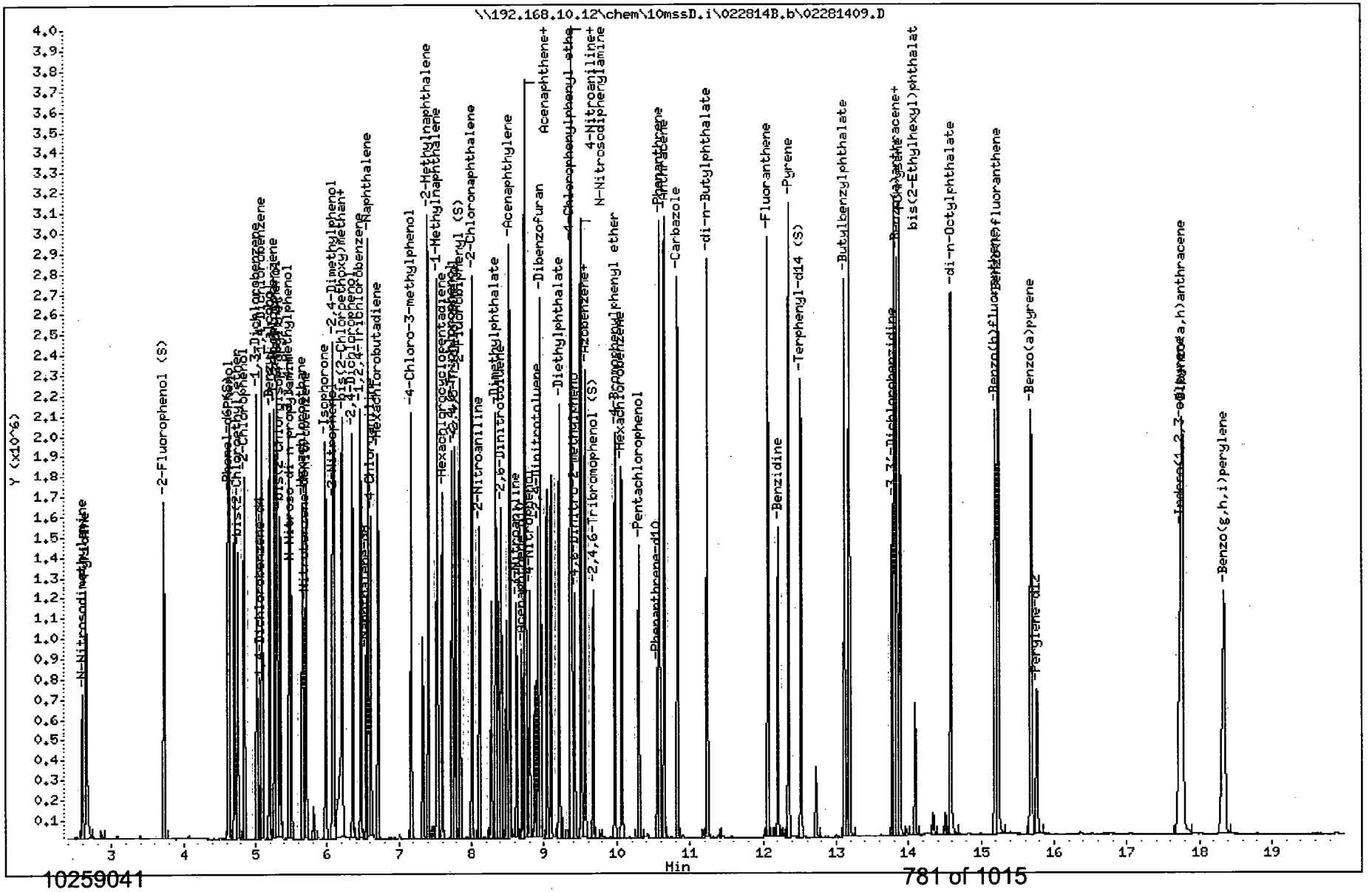
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Date : 28-FEB-2014 09:39
Client ID:
Sample Info: ICAL 7 10328-96

Instrument: 10mssD.i

Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS



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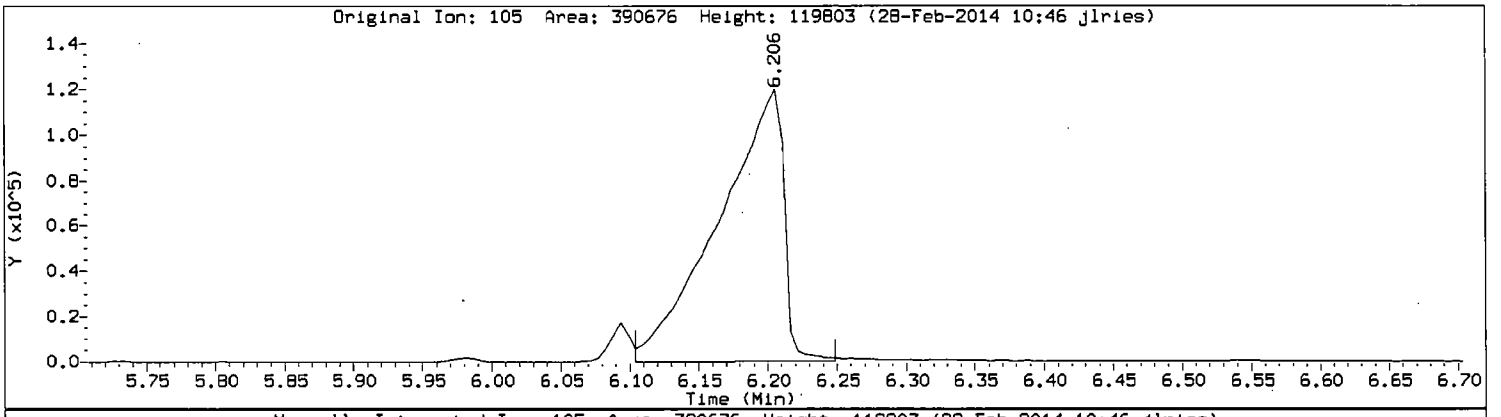
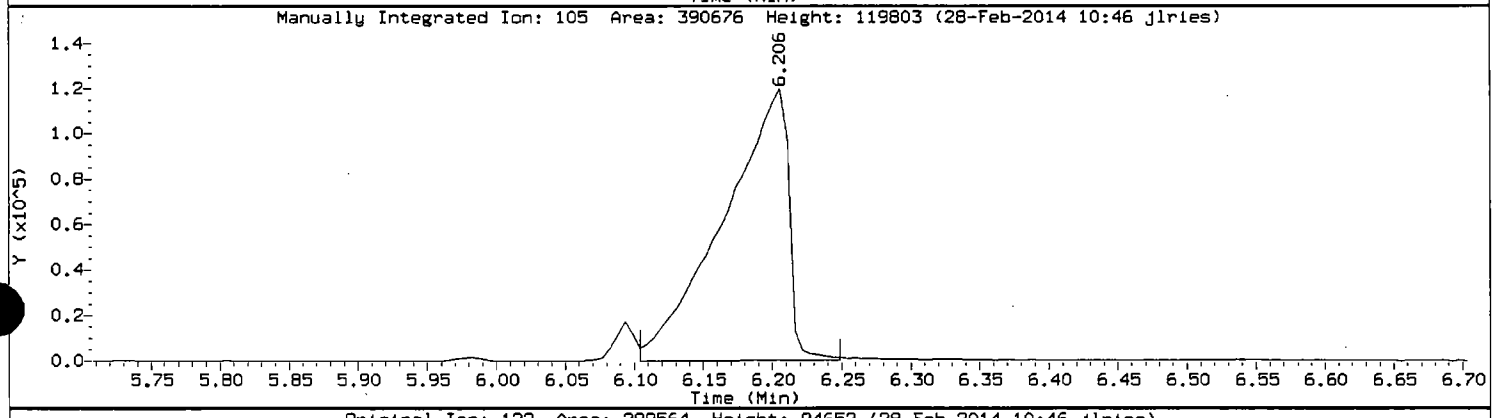
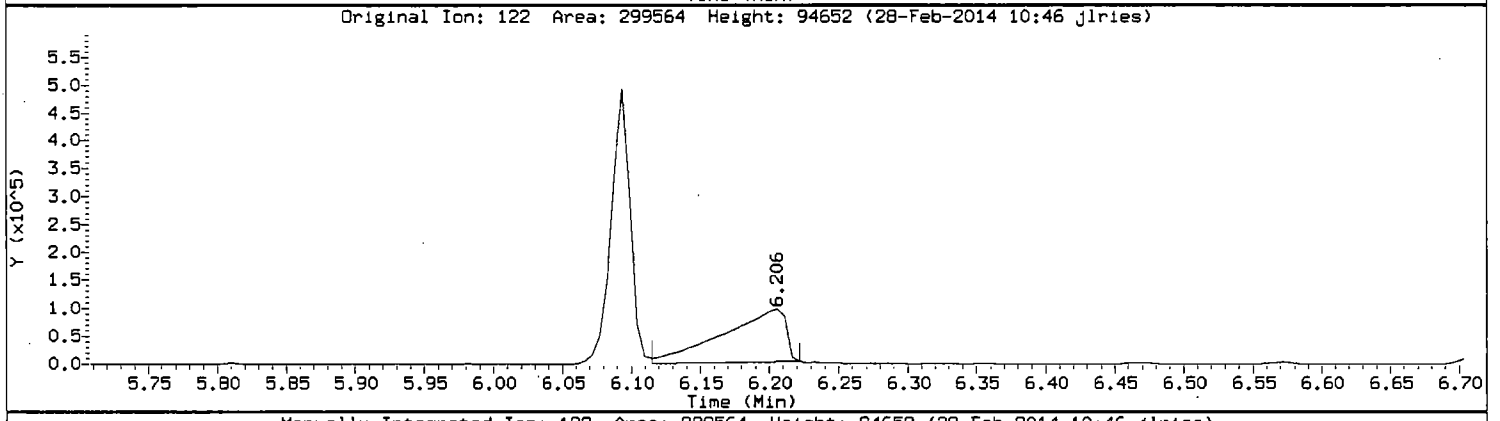
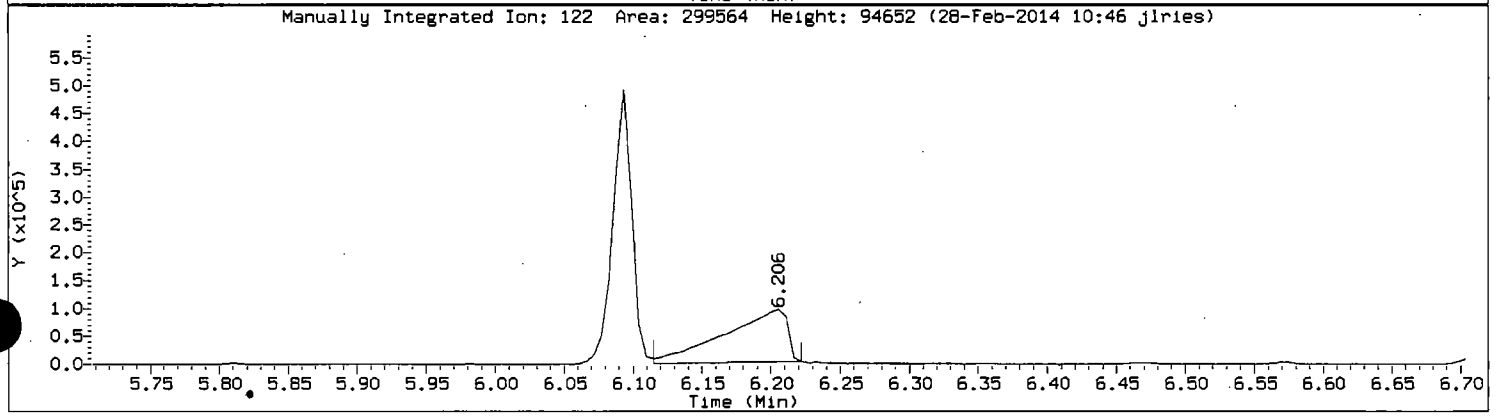
Injection Date: 28-FEB-2014 09:39
Instrument: 10mssD.i
Lab Sample ID: ICAL 7 10328-96

Compound: Benzoic acid
CAS Number: 65-85-0

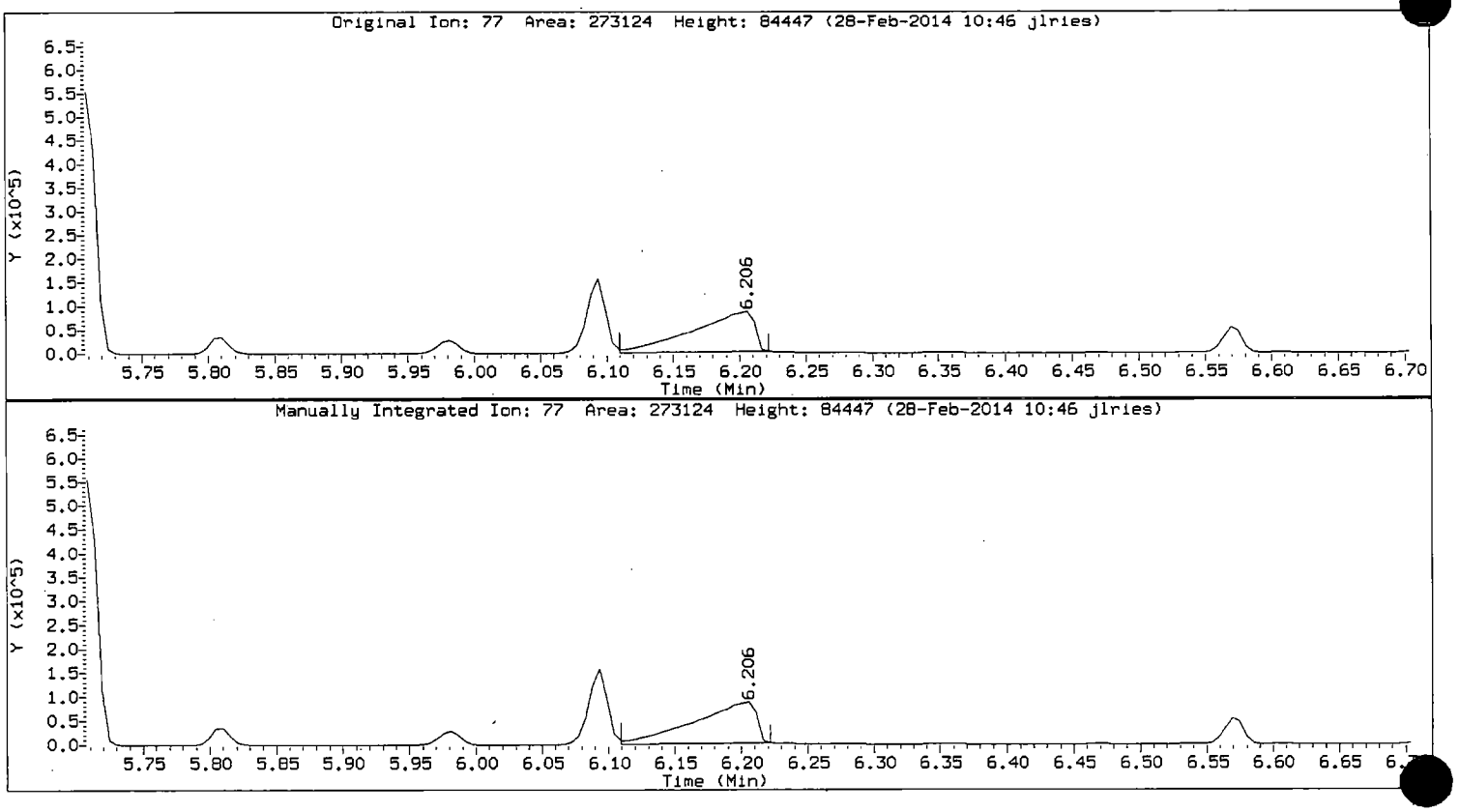






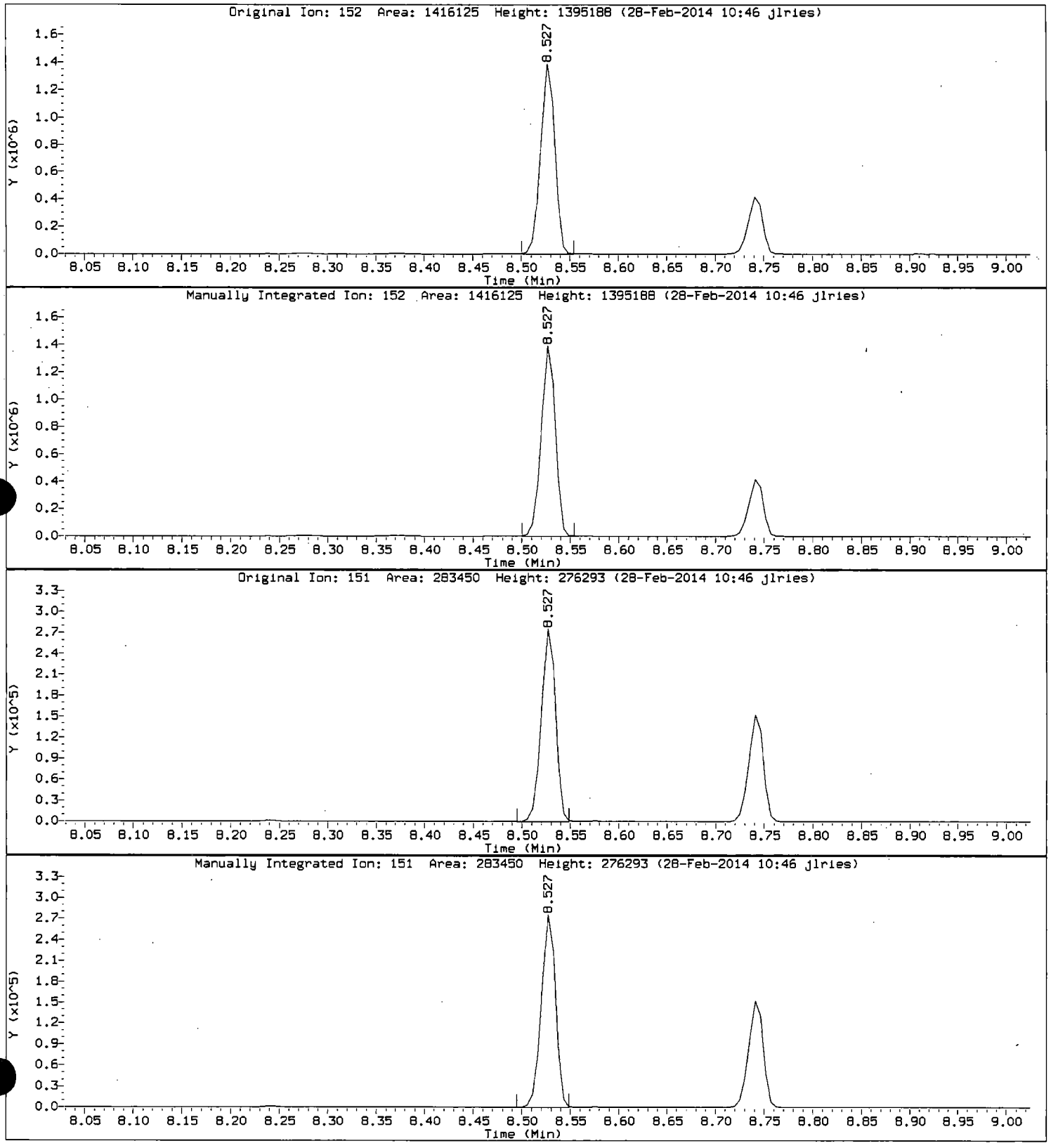


Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281409.D
Injection Date: 28-FEB-2014 09:39
Instrument: 10mssD.i
Lab Sample ID: ICAL 7 10328-96



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281409.D
Injection Date: 28-FEB-2014 09:39
Instrument: 10mssD.i
Lab Sample ID: ICAL 7 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



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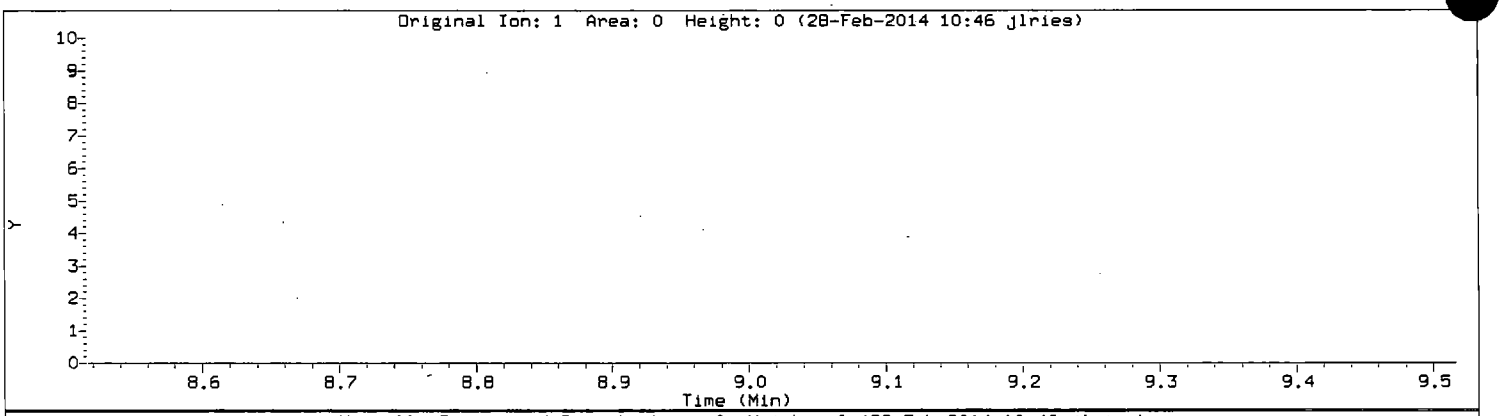
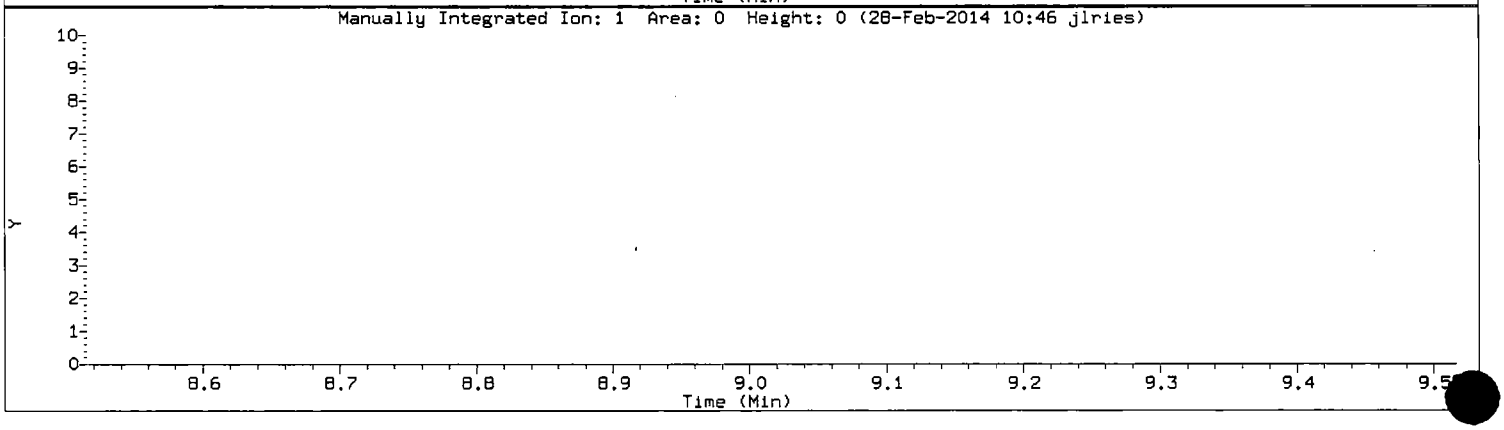
Injection Date: 28-FEB-2014 09:39
Instrument: 10mssD.i
Lab Sample ID: ICAL 7 10328-96





Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Lab Smp Id: ICAL 6 10328-96
Inj Date : 28-FEB-2014 10:07
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 6 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 09:39 Cal File: 02281409.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
CpndVariable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	222579	80.0000	81.3
2	Pyridine	79	2.643	2.643	(0.521)	389191	80.0000	79.2
$ 3	2-Fluorophenol (S)	112	3.724	3.724	(0.734)	327064	80.0000	79.4
$ 4	Phenol-d6 (S)	99	4.611	4.611	(0.909)	411674	80.0000	80.2
5	Phenol	94	4.627	4.627	(0.912)	423232	80.0000	79.1
6	bis(2-Chloroethyl)ether	63	4.750	4.750	(0.937)	251518	80.0000	79.0
7	2-Chlorophenol	128	4.841	4.841	(0.955)	351841	80.0000	80.3
8	1,3-Dichlorobenzene	146	5.018	5.018	(0.989)	362880	80.0000	79.4
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	118167	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	370066	80.0000	79.0
11	Benzyl alcohol	79	5.194	5.194	(1.024)	290120	80.0000	79.5
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	347237	80.0000	78.3
13	2-Methylphenol	107	5.296	5.296	(1.044)	261066	80.0000	78.7
14	bis(2-Chloroisopropyl) ether	45	5.344	5.344	(1.054)	481550	80.0000	77.7
15	3 & 4-Methylphenol	107	5.467	5.467	(1.078)	343254	80.0000	79.4
17	N-Nitroso-di-n-propylamine	70	5.489	5.489	(1.082)	239585	80.0000	78.9
18	Hexachloroethane	117	5.654	5.654	(1.115)	144118	80.0000	79.2
$ 19	Nitrobenzene-d5 (S)	82	5.681	5.681	(0.868)	276709	60.0000	59.7
20	Nitrobenzene	77	5.708	5.708	(0.872)	355044	80.0000	79.2
21	Isophorone	82	5.975	5.975	(0.913)	633011	80.0000	79.8
23	2-Nitrophenol	139	6.077	6.077	(0.929)	184451	80.0000	81.2
22	2,4-Dimethylphenol	107	6.088	6.088	(0.930)	329502	80.0000	79.4

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	6.184	6.184	(0.945)	262721	80.0000	87.6(M)
	25 bis(2-Chloroethoxy)methane	93	6.211	6.211	(0.949)	391643	80.0000	79.8
	26 2,4-Dichlorophenol	162	6.350	6.350	(0.971)	261390	80.0000	81.0
	27 1,2,4-Trichlorobenzene	180	6.467	6.467	(0.989)	269603	80.0000	78.4
*	28 Naphthalene-d8	136	6.542	6.542	(1.000)	466266	40.0000	(Q)
	29 Naphthalene	128	6.569	6.569	(1.004)	979257	80.0000	78.0
	30 4-Chloroaniline	127	6.606	6.606	(1.010)	349330	80.0000	73.9
	31 Hexachlorobutadiene	225	6.708	6.708	(1.025)	137005	80.0000	79.1
	32 4-Chloro-3-methylphenol	107	7.168	7.168	(1.096)	279677	80.0000	80.1
	33 2-Methylnaphthalene	142	7.403	7.403	(1.132)	650402	80.0000	79.4
	34 1-Methylnaphthalene	142	7.526	7.526	(1.150)	610812	80.0000	79.9
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	169584	80.0000	84.0
	36 2,4,6-Trichlorophenol	196	7.735	7.735	(0.889)	177711	80.0000	81.2
	37 2,4,5-Trichlorophenol	196	7.778	7.778	(0.894)	189606	80.0000	80.5
$	38 2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	513151	60.0000	59.8
	39 2-Chloronaphthalene	162	8.008	8.008	(0.921)	578843	80.0000	79.6
	40 2-Nitroaniline	65	8.109	8.109	(0.932)	196662	80.0000	80.7
	41 Dimethylphthalate	163	8.334	8.334	(0.958)	641533	80.0000	78.6
	42 2,6-Dinitrotoluene	165	8.409	8.409	(0.967)	157202	80.0000	79.7
	43 Acenaphthylene	152	8.527	8.527	(0.980)	972670	80.0000	80.3(M)
	44 3-Nitroaniline	138	8.618	8.618	(0.991)	147651	80.0000	72.8
*	45 Acenaphthene-d10	164	8.698	8.698	(1.000)	245325	40.0000	
	46 Acenaphthene	154	8.741	8.741	(1.005)	593913	80.0000	78.2
	47 2,4-Dinitrophenol	184	8.746	8.746	(1.006)	94767	80.0000	76.5
	48 4-Nitrophenol	65	8.794	8.794	(1.011)	148489	80.0000	80.6
	49 2,4-Dinitrotoluene	165	8.906	8.906	(1.024)	210841	80.0000	81.0
	50 Dibenzofuran	168	8.954	8.954	(1.030)	818682	80.0000	79.8
	51 Diethylphthalate	149	9.206	9.206	(1.058)	676063	80.0000	79.2
	52 4-Chlorophenylphenyl ether	204	9.366	9.366	(1.077)	298253	80.0000	79.7
	54 4-Nitroaniline	138	9.382	9.382	(1.079)	183917	80.0000	79.2
	53 Fluorene	166	9.377	9.377	(1.078)	667048	80.0000	77.1
	55 4,6-Dinitro-2-methylphenol	198	9.420	9.420	(0.893)	118979	80.0000	78.3
	56 N-Nitrosodiphenylamine	169	9.505	9.505	(0.901)	577115	80.0000	79.7
	57 Azobenzene	77	9.564	9.564	(1.100)	710220	80.0000	78.2
	58 1,2-Diphenylhydrazine	77	9.564	9.564	(1.100)	710220	80.0000	78.2
$	59 2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.112)	95488	80.0000	82.7
	60 4-Bromophenylphenyl ether	248	9.976	9.976	(0.946)	164438	80.0000	80.2
	61 Hexachlorobenzene	284	10.067	10.067	(0.954)	182127	80.0000	80.7
	62 Pentachlorophenol	266	10.297	10.297	(0.976)	112926	80.0000	82.6
*	63 Phenanthrene-d10	188	10.548	10.548	(1.000)	405966	40.0000	
	64 Phenanthrene	178	10.580	10.580	(1.003)	908943	80.0000	78.6
	65 Anthracene	178	10.645	10.645	(1.009)	945032	80.0000	80.2
	66 Carbazole	167	10.832	10.832	(1.027)	903494	80.0000	79.1
	67 di-n-Butylphthalate	149	11.238	11.238	(1.065)	1142937	80.0000	81.2
	68 Fluoranthene	202	12.067	12.067	(1.144)	925281	80.0000	80.2
	69 Benzidine	184	12.206	12.206	(0.881)	467617	80.0000	70.1
	70 Pyrene	202	12.356	12.356	(0.892)	1014944	80.0000	77.0
$	71 Terphenyl-d14 (S)	244	12.522	12.522	(0.904)	546217	60.0000	58.7
	72 Butylbenzylphthalate	149	13.110	13.110	(0.947)	506807	80.0000	79.0
	73 bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	729347	80.0000	79.2
	74 3,3'-Dichlorobenzidine	252	13.784	13.784	(0.995)	251786	80.0000	70.6
	75 Benzo(a)anthracene	228	13.838	13.838	(0.999)	963226	80.0000	78.9
*	76 Chrysene-d12	240	13.848	13.848	(1.000)	427978	40.0000	(Q)
	77 Chrysene	228	13.886	13.886	(1.003)	894722	80.0000	79.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.581	14.581	(1.053)	1247772	80.0000	81.4
79	Benzo(b)fluoranthene	252	15.196	15.196	(0.964)	924937	80.0000	81.0
80	Benzo(k)fluoranthene	252	15.234	15.234	(0.966)	1016239	80.0000	83.0
81	Benzo(a)pyrene	252	15.683	15.683	(0.995)	906061	80.0000	82.6
* 82	Perylene-d12	264	15.763	15.763	(1.000)	418836	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.737	17.737	(1.125)	1011387	80.0000	79.8
84	Dibenzo(a,h)anthracene	278	17.758	17.758	(1.127)	889380	80.0000	81.8
85	Benzo(g,h,i)perylene	276	18.336	18.336	(1.163)	850631	80.0000	79.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281410.D
Lab Smp Id: ICAL 6 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

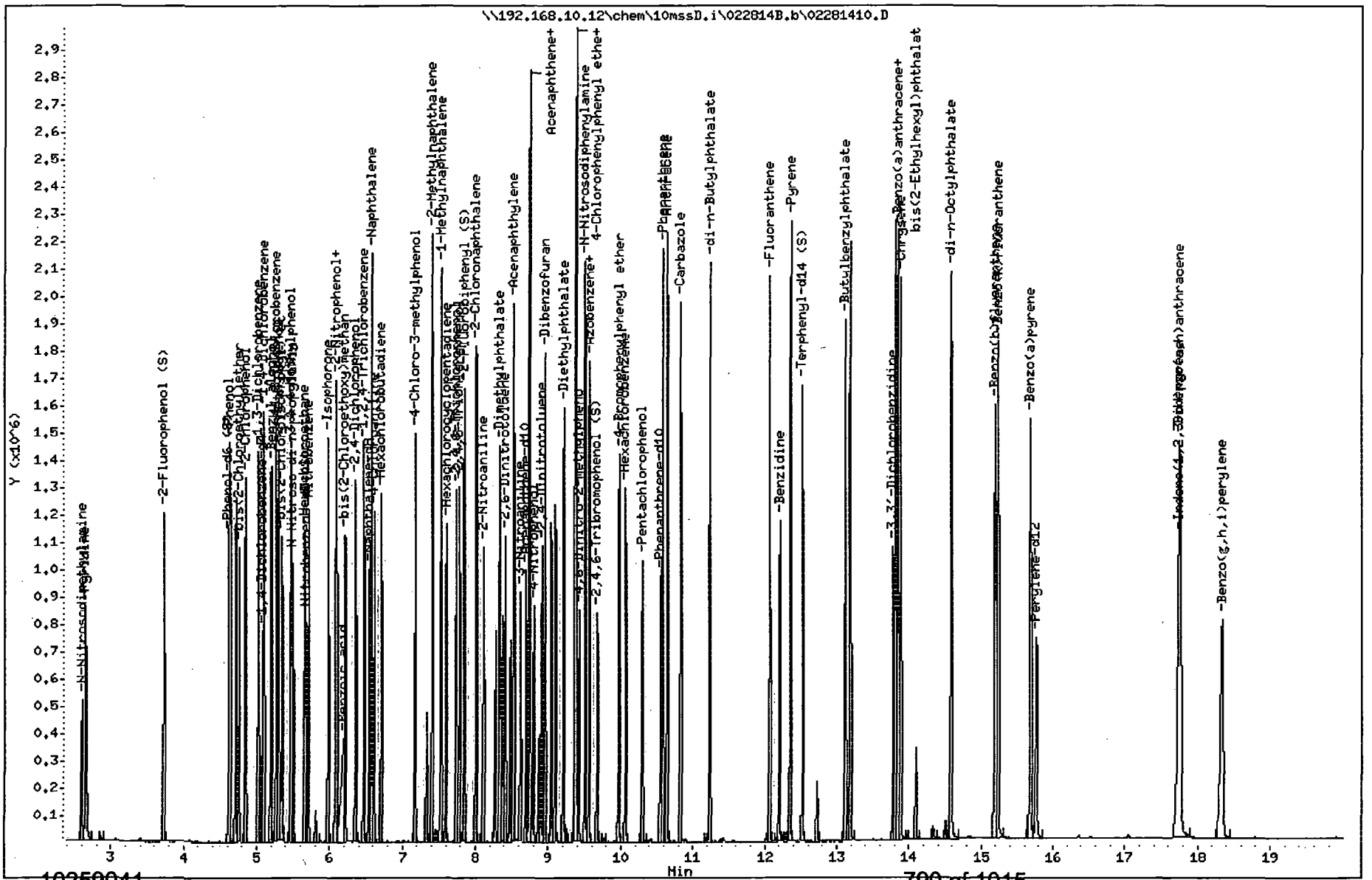
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	118167	0.00
28 Naphthalene-d8	466266	233133	932532	466266	0.00
45 Acenaphthene-d10	245325	122663	490650	245325	0.00
63 Phenanthrene-d10	405966	202983	811932	405966	0.00
76 Chrysene-d12	427978	213989	855956	427978	0.00
82 Perylene-d12	418836	209418	837672	418836	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.00
76 Chrysene-d12	13.85	13.35	14.35	13.85	0.00
82 Perylene-d12	15.76	15.26	16.26	15.76	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

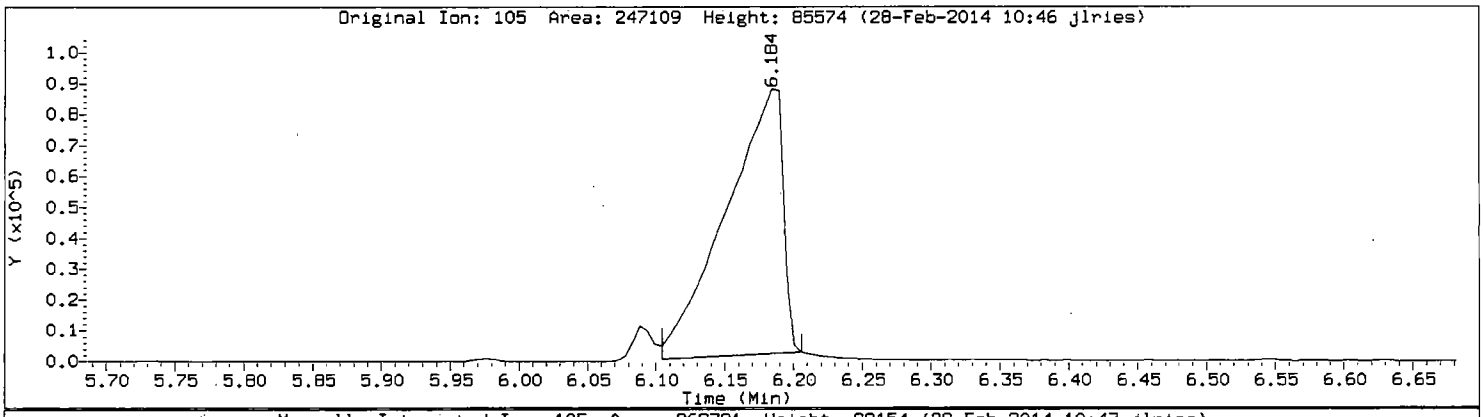
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Date : 28-FEB-2014 10:07
Client ID:
Sample Info: ICAL 6 10328-96

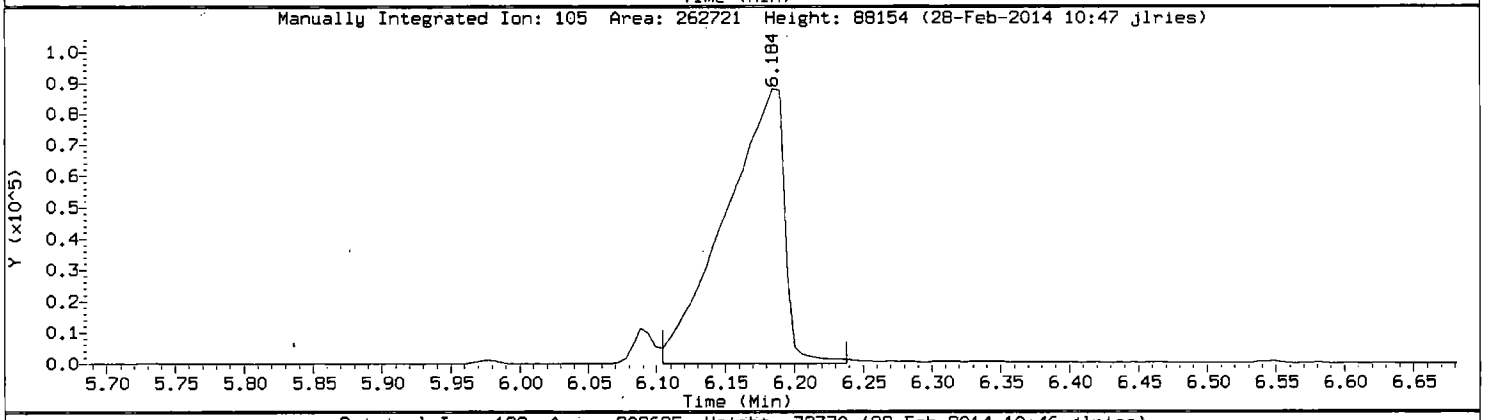
Instrument: 10mssD.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

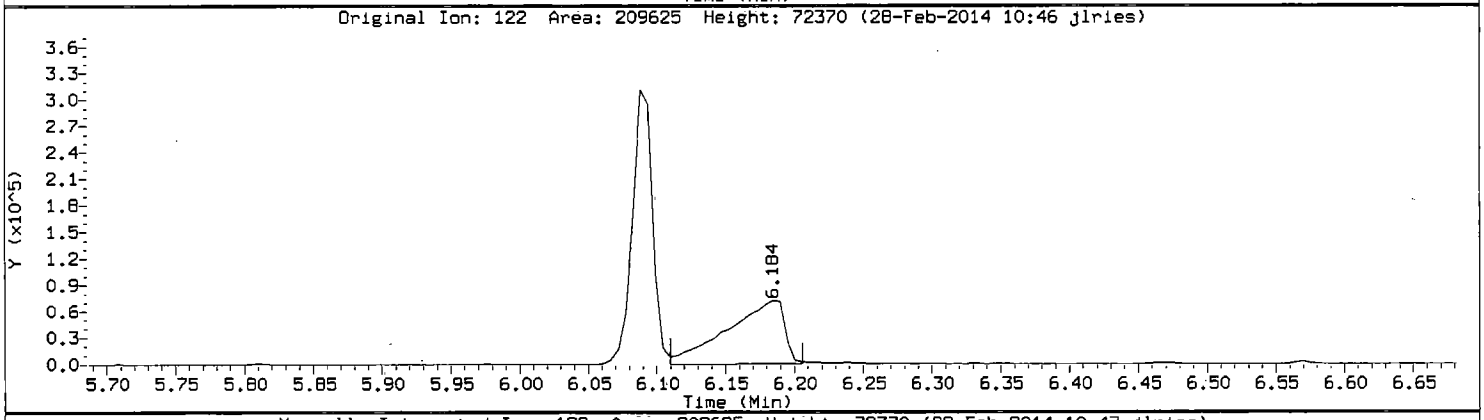


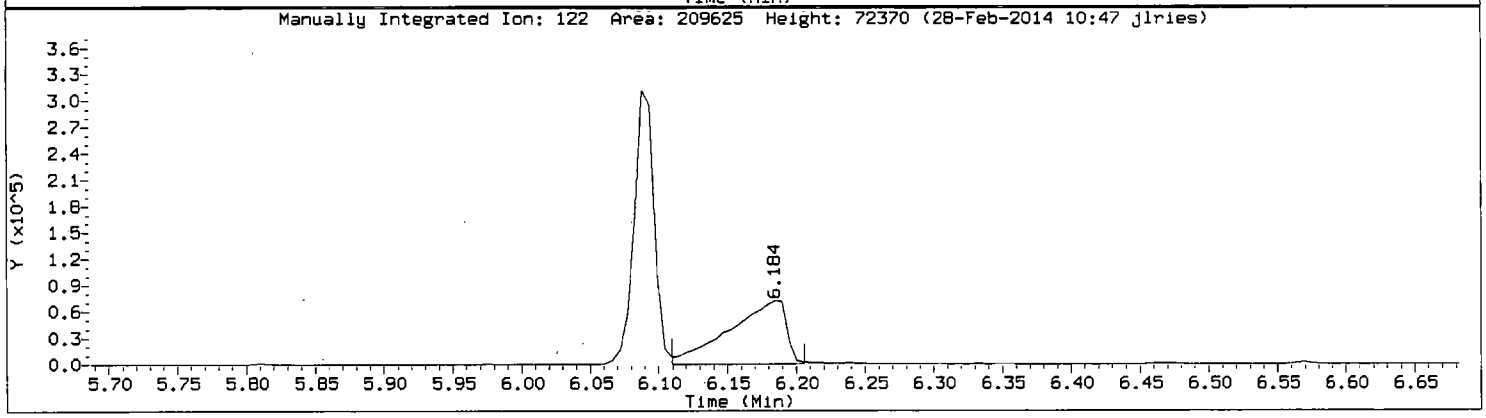
Instrument: 10mssD.i
Lab Sample ID: ICAL 6 10328-96

Compound: Benzoic acid
CAS Number: 65-85-0

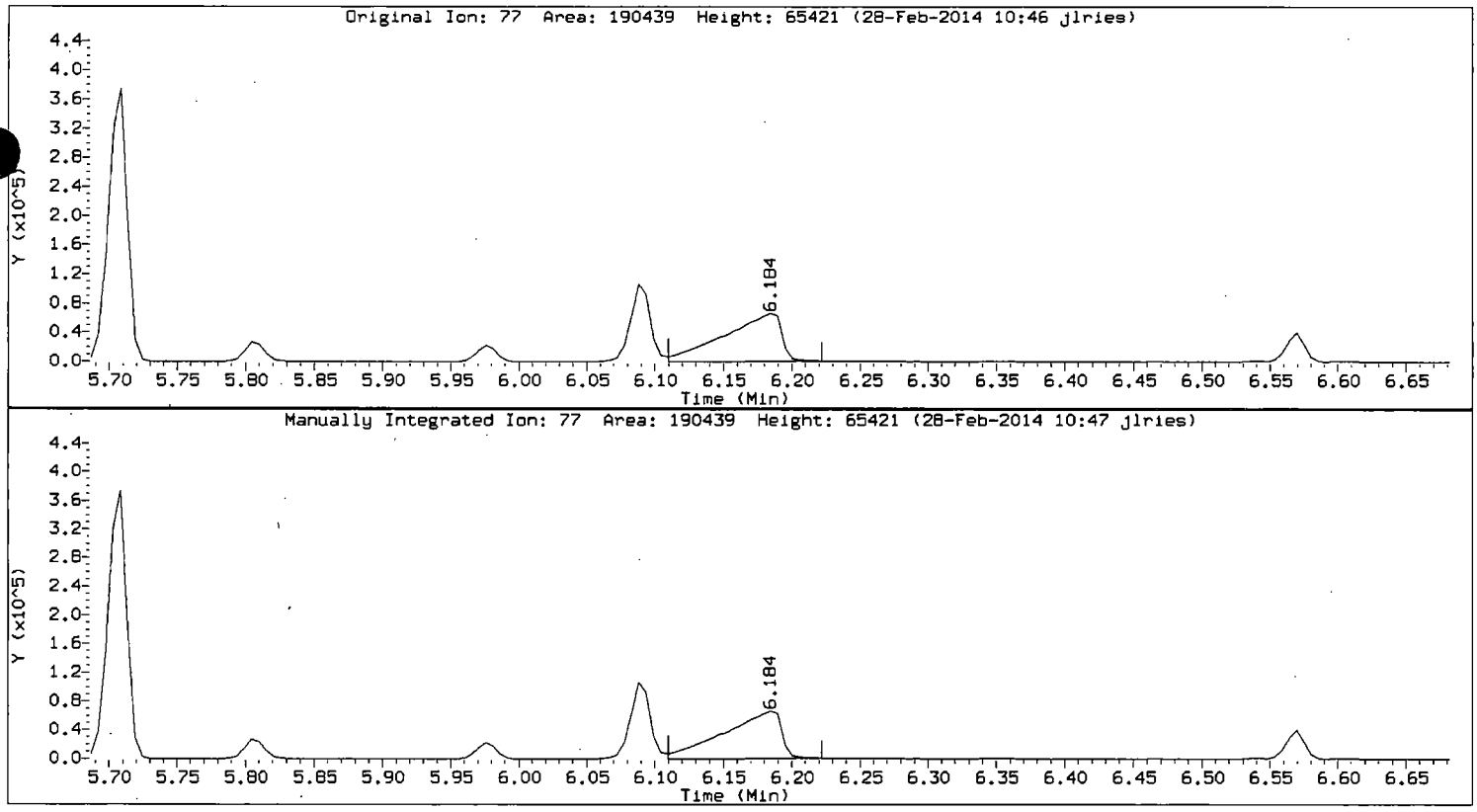






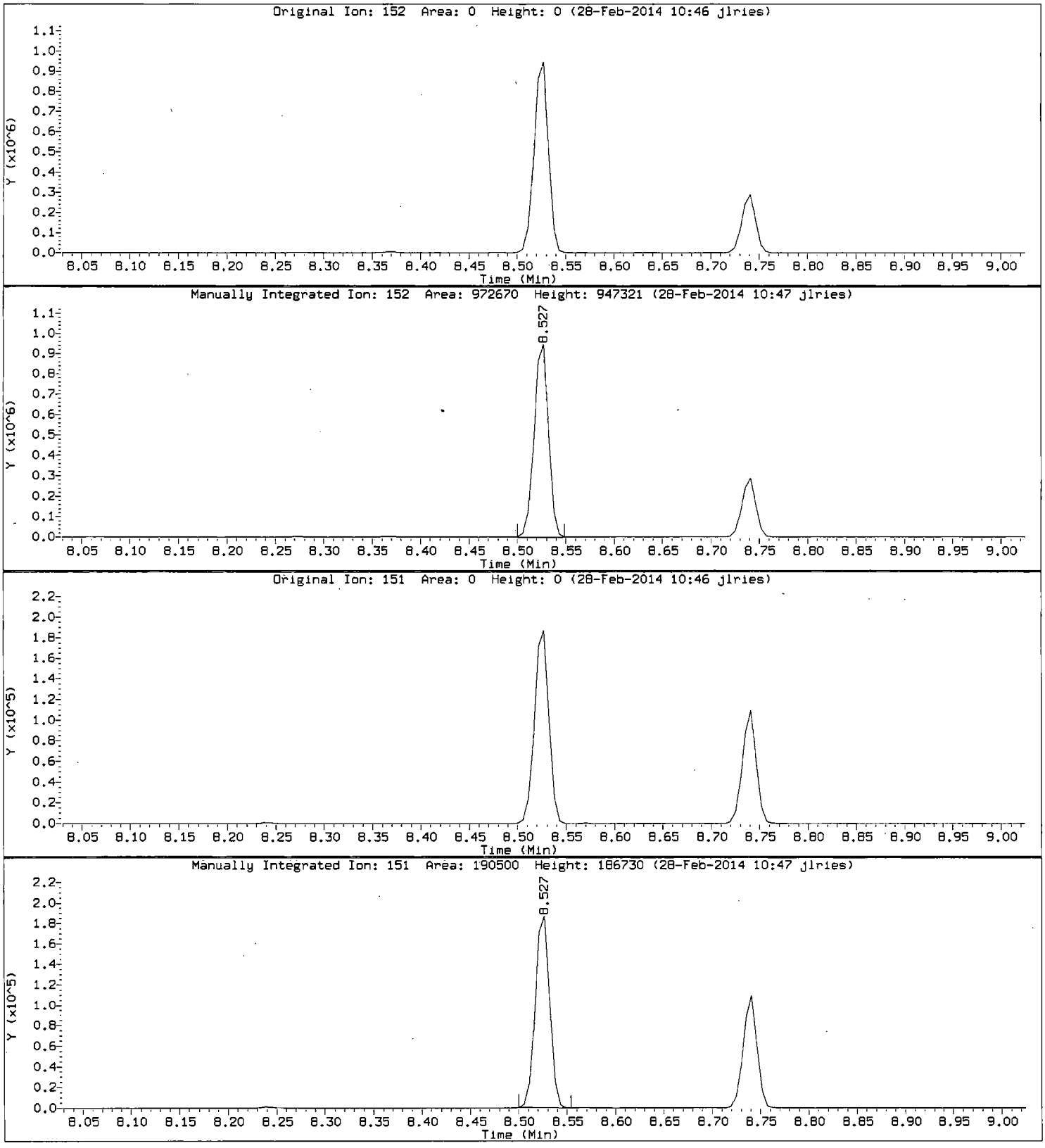


Instrument: 10mssD.i
Lab Sample ID: ICAL 6 10328-96

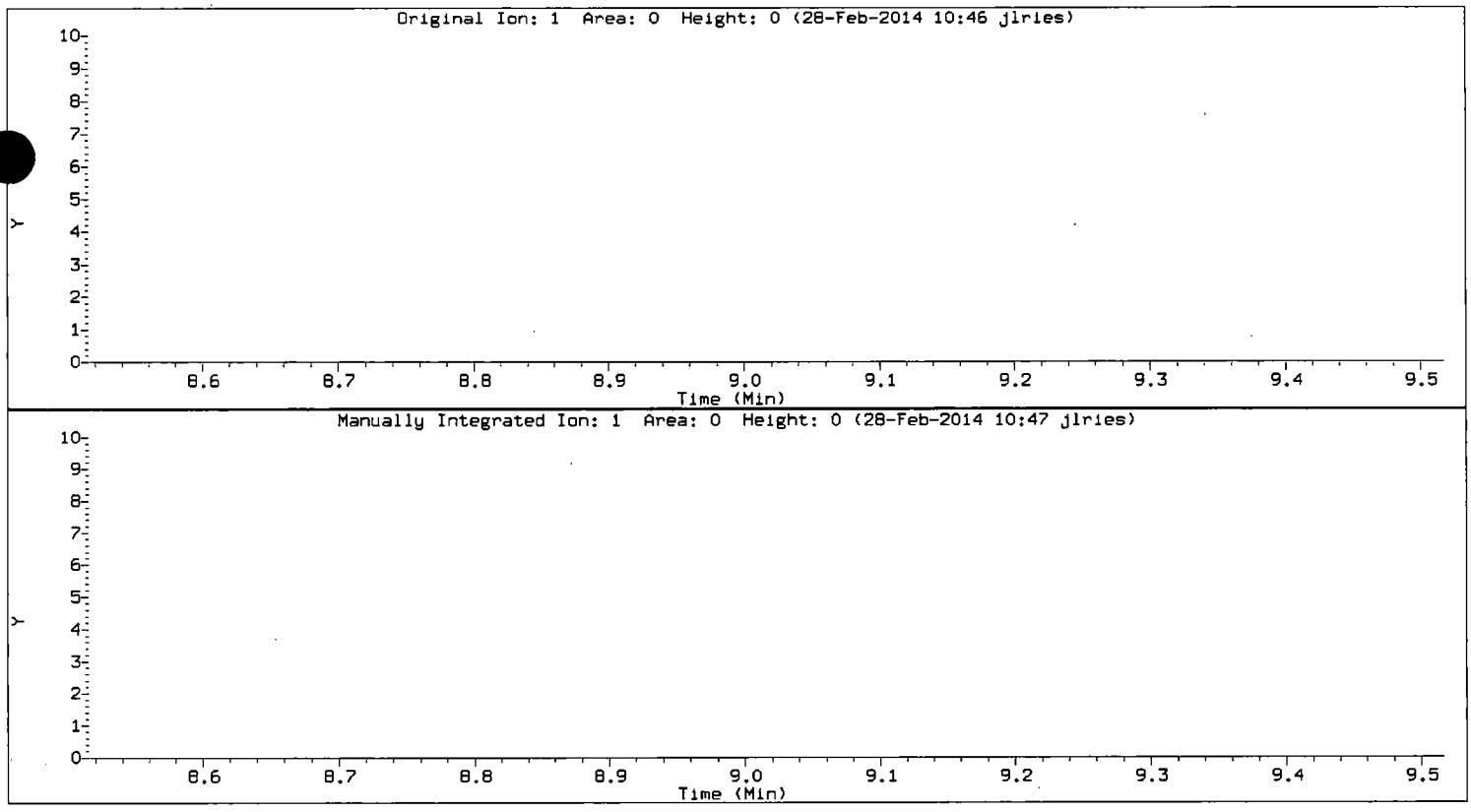


Instrument: 10mssD.i
Lab Sample ID: ICAL 6 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Instrument: 10mssD.i
Lab Sample ID: ICAL 6 10328-96



Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Lab Smp Id: ICAL 5 10328-96
Inj Date : 28-FEB-2014 10:35
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 5 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 10:07 Cal File: 02281410.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	109778	40.0000	39.7
2	Pyridine	79	2.643	2.643	(0.521)	194269	40.0000	39.1
$ 3	2-Fluorophenol (S)	112	3.724	3.724	(0.734)	161729	40.0000	38.9
$ 4	Phenol-d6 (S)	99	4.606	4.606	(0.908)	201641	40.0000	38.9
5	Phenol	94	4.622	4.622	(0.911)	211731	40.0000	39.2
6	bis(2-Chloroethyl)ether	63	4.750	4.750	(0.937)	124649	40.0000	38.8
7	2-Chlorophenol	128	4.841	4.841	(0.955)	173133	40.0000	39.1
8	1,3-Dichlorobenzene	146	5.013	5.013	(0.988)	180134	40.0000	39.0
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	119335	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	183831	40.0000	38.9
11	Benzyl alcohol	79	5.189	5.189	(1.023)	144894	40.0000	39.3
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	174751	40.0000	39.0
13	2-Methylphenol	107	5.291	5.291	(1.043)	131539	40.0000	39.3
14	bis(2-Chloroisopropyl) ether	45	5.344	5.344	(1.054)	244131	40.0000	39.0
15	3 & 4-Methylphenol	107	5.462	5.462	(1.077)	172133	40.0000	39.4
17	N-Nitroso-di-n-propylamine	70	5.483	5.483	(1.081)	119284	40.0000	38.9
18	Hexachloroethane	117	5.654	5.654	(1.115)	71740	40.0000	39.0
$ 19	Nitrobenzene-d5 (S)	82	5.681	5.681	(0.868)	139243	30.0000	29.8
20	Nitrobenzene	77	5.703	5.703	(0.872)	177191	40.0000	39.2
21	Isophorone	82	5.970	5.970	(0.913)	317172	40.0000	39.6
23	2-Nitrophenol	139	6.072	6.072	(0.928)	91458	40.0000	39.9
22	2,4-Dimethylphenol	107	6.088	6.088	(0.930)	166871	40.0000	39.8

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	6.157	6.157	(0.941)	120934	40.0000	40.0
	25 bis(2-Chloroethoxy)methane	93	6.205	6.205	(0.948)	197790	40.0000	40.0
	26 2,4-Dichlorophenol	162	6.350	6.350	(0.971)	130317	40.0000	40.0
	27 1,2,4-Trichlorobenzene	180	6.462	6.462	(0.988)	136258	40.0000	39.3
*	28 Naphthalene-d8	136	6.542	6.542	(1.000)	470349	40.0000	
	29 Naphthalene	128	6.569	6.569	(1.004)	499340	40.0000	39.4
	30 4-Chloroaniline	127	6.601	6.601	(1.009)	195404	40.0000	41.0
	31 Hexachlorobutadiene	225	6.708	6.708	(1.025)	67604	40.0000	38.7
	32 4-Chloro-3-methylphenol	107	7.163	7.163	(1.095)	139863	40.0000	39.7
	33 2-Methylnaphthalene	142	7.403	7.403	(1.132)	329085	40.0000	39.8
	34 1-Methylnaphthalene	142	7.526	7.526	(1.150)	302404	40.0000	39.2
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	81630	40.0000	40.2
	36 2,4,6-Trichlorophenol	196	7.730	7.730	(0.889)	87730	40.0000	39.9
	37 2,4,5-Trichlorophenol	196	7.772	7.772	(0.894)	94004	40.0000	39.7
$	38 2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	255500	30.0000	29.6
	39 2-Chloronaphthalene	162	8.002	8.002	(0.920)	290134	40.0000	39.7
	40 2-Nitroaniline	65	8.109	8.109	(0.932)	98821	40.0000	40.3
	41 Dimethylphthalate	163	8.329	8.329	(0.958)	324805	40.0000	39.6
	42 2,6-Dinitrotoluene	165	8.404	8.404	(0.966)	77626	40.0000	39.2
	43 Acenaphthylene	152	8.521	8.521	(0.980)	479980	40.0000	39.4 (M)
	44 3-Nitroaniline	138	8.612	8.612	(0.990)	86247	40.0000	42.3
*	45 Acenaphthene-d10	164	8.698	8.698	(1.000)	246548	40.0000	
	46 Acenaphthene	154	8.735	8.735	(1.004)	301942	40.0000	39.6
	47 2,4-Dinitrophenol	184	8.741	8.741	(1.005)	42942	40.0000	37.3
	48 4-Nitrophenol	65	8.789	8.789	(1.010)	74308	40.0000	40.2
	49 2,4-Dinitrotoluene	165	8.901	8.901	(1.023)	104466	40.0000	39.9
	50 Dibenzofuran	168	8.949	8.949	(1.029)	404689	40.0000	39.2
	51 Diethylphthalate	149	9.201	9.201	(1.058)	338155	40.0000	39.4
	52 4-Chlorophenylphenyl ether	204	9.361	9.361	(1.076)	147316	40.0000	39.2
	54 4-Nitroaniline	138	9.372	9.372	(1.077)	95063	40.0000	40.7
	53 Fluorene	166	9.377	9.377	(1.078)	348212	40.0000	40.0
	55 4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.892)	54689	40.0000	37.2
	56 N-Nitrosodiphenylamine	169	9.500	9.500	(0.901)	288606	40.0000	39.2
	57 Azobenzene	77	9.559	9.559	(1.099)	369158	40.0000	40.4
	58 1,2-Diphenylhydrazine	77	9.559	9.559	(1.099)	369158	40.0000	40.4
$	59 2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.112)	45597	40.0000	39.3
	60 4-Bromophenylphenyl ether	248	9.976	9.976	(0.946)	80969	40.0000	38.8
	61 Hexachlorobenzene	284	10.067	10.067	(0.954)	88726	40.0000	38.6
	62 Pentachlorophenol	266	10.297	10.297	(0.976)	53207	40.0000	38.2
*	63 Phenanthrene-d10	188	10.548	10.548	(1.000)	413141	40.0000	
	64 Phenanthrene	178	10.580	10.580	(1.003)	458881	40.0000	39.0
	65 Anthracene	178	10.645	10.645	(1.009)	466237	40.0000	38.9
	66 Carbazole	167	10.827	10.827	(1.026)	450869	40.0000	38.8
	67 di-n-Butylphthalate	149	11.233	11.233	(1.065)	574058	40.0000	40.1
	68 Fluoranthene	202	12.062	12.062	(1.143)	459144	40.0000	39.1
	69 Benzidine	184	12.201	12.201	(0.881)	258766	40.0000	41.4
	70 Pyrene	202	12.351	12.351	(0.892)	485834	40.0000	39.4
$	71 Terphenyl-d14 (S)	244	12.517	12.517	(0.904)	256274	30.0000	29.4
	72 Butylbenzylphthalate	149	13.110	13.110	(0.947)	245334	40.0000	40.8
	73 bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	358223	40.0000	41.6
	74 3,3'-Dichlorobenzidine	252	13.779	13.779	(0.995)	132408	40.0000	39.7
	75 Benzo(a)anthracene	228	13.832	13.832	(0.999)	448850	40.0000	39.3
*	76 Chrysene-d12	240	13.848	13.848	(1.000)	400672	40.0000	
	77 Chrysene	228	13.881	13.881	(1.002)	421271	40.0000	39.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.581	14.581	(1.053)	591518	40.0000	41.2
79	Benzo(b)fluoranthene	252	15.186	15.186	(0.963)	431732	40.0000	40.1
80	Benzo(k)fluoranthene	252	15.228	15.228	(0.966)	450618	40.0000	39.0
81	Benzo(a)pyrene	252	15.678	15.678	(0.995)	412227	40.0000	39.9
* 82	Perylene-d12	264	15.763	15.763	(1.000)	394937	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.721	17.721	(1.124)	478822	40.0000	40.1
84	Dibenzo(a,h)anthracene	278	17.742	17.742	(1.126)	405524	40.0000	39.5
85	Benzo(g,h,i)perylene	276	18.320	18.320	(1.162)	397778	40.0000	39.4

QC Flag Legend

M - Compound response manually integrated.

Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281411.D
Lab Smp Id: ICAL 5 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	119335	0.99
28 Naphthalene-d8	466266	233133	932532	470349	0.88
45 Acenaphthene-d10	245325	122663	490650	246548	0.50
63 Phenanthrene-d10	405966	202983	811932	413141	1.77
76 Chrysene-d12	427978	213989	855956	400672	-6.38
82 Perylene-d12	418836	209418	837672	394937	-5.71

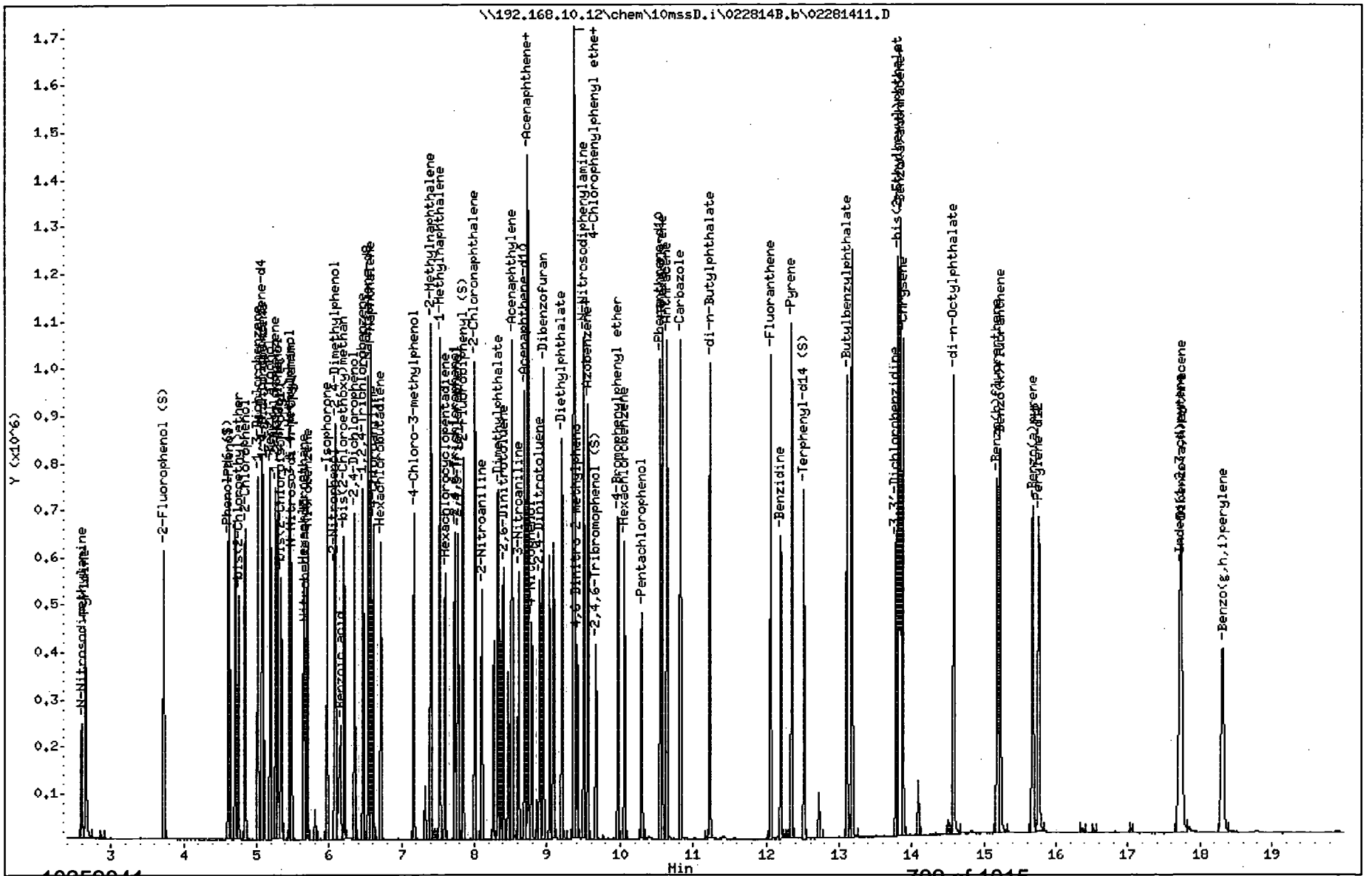
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.00
76 Chrysene-d12	13.85	13.35	14.35	13.85	0.00
82 Perylene-d12	15.76	15.26	16.26	15.76	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Date : 28-FEB-2014 10:35
Client ID:
Sample Info: ICAL 5 10328-96

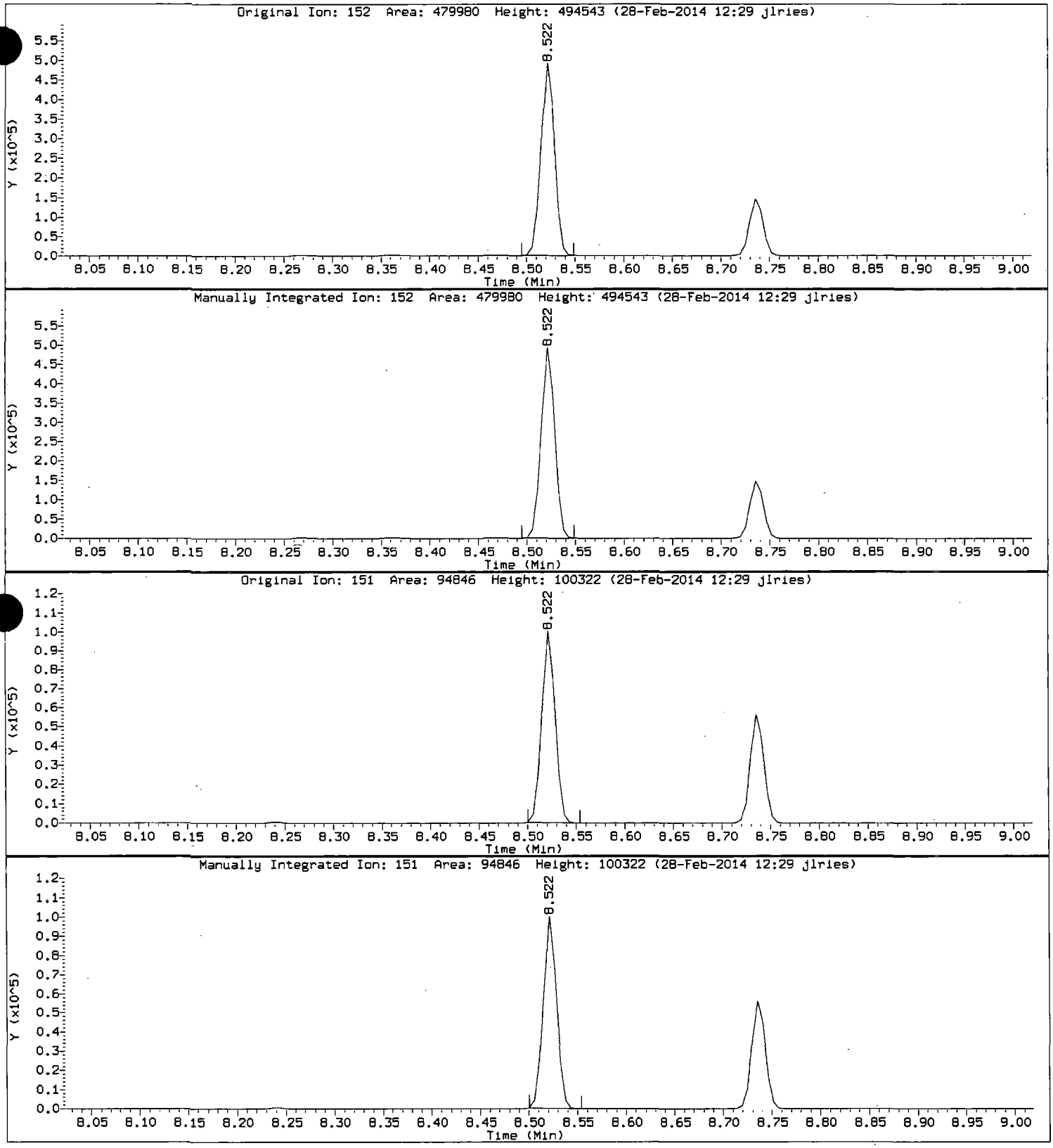
Instrument: 10mssD.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

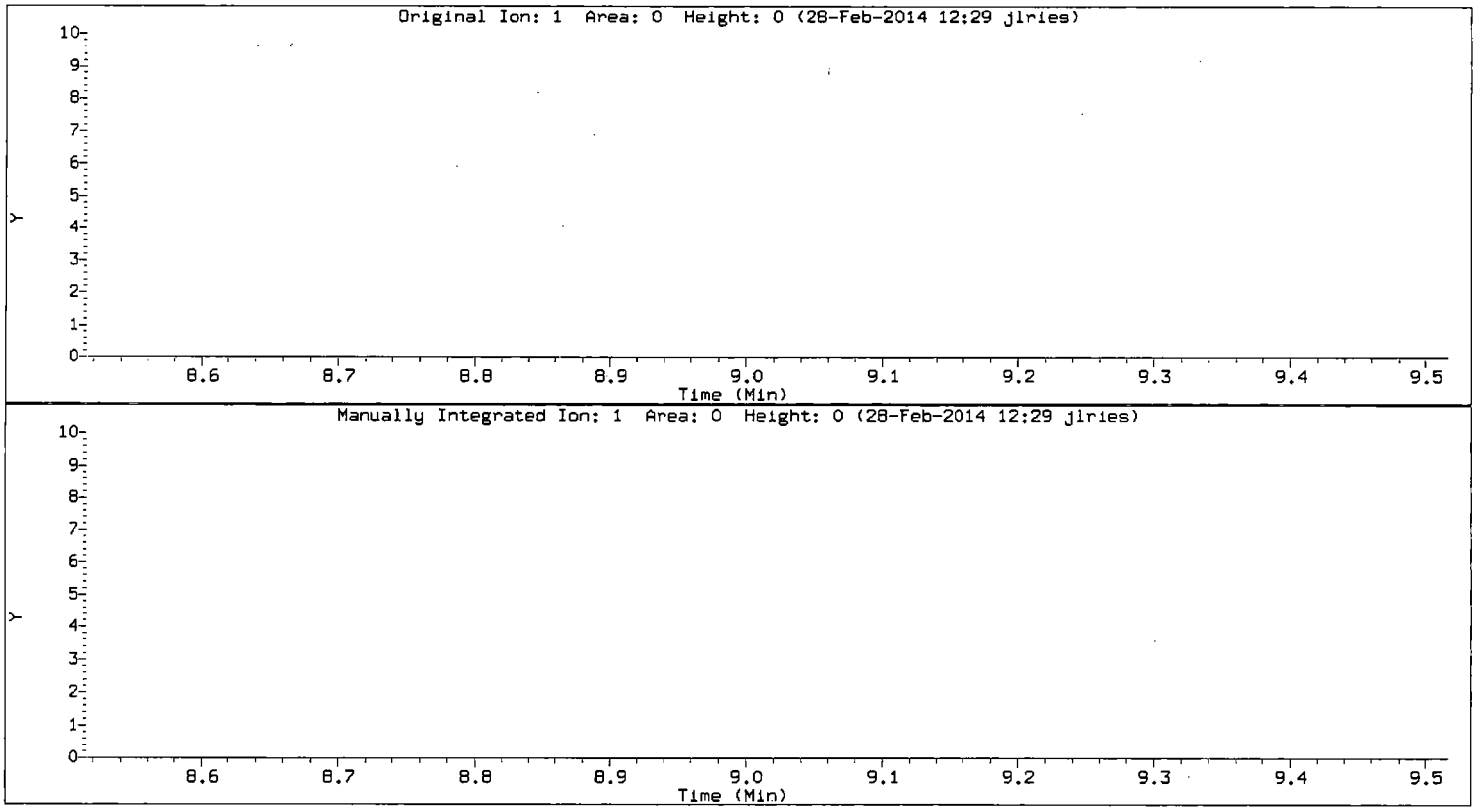


Instrument: 10mssD.i
Lab Sample ID: ICAL 5 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Instrument: 10mssD.i
Lab Sample ID: ICAL 5 10328-96



Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281412.D
Lab Smp Id: ICAL 4 10328-96
Inj Date : 28-FEB-2014 11:03
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 4 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 10:35 Cal File: 02281411.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	52258	20.0000	20.8
2	Pyridine	79	2.643	2.643	(0.521)	94220	20.0000	20.9
$ 3	2-Fluorophenol (S)	112	3.723	3.723	(0.734)	79219	20.0000	21.0
$ 4	Phenol-d6 (S)	99	4.606	4.606	(0.908)	97907	20.0000	20.8
5	Phenol	94	4.622	4.622	(0.911)	103014	20.0000	21.0
6	bis(2-Chloroethyl)ether	63	4.745	4.745	(0.936)	61509	20.0000	21.1
7	2-Chlorophenol	128	4.841	4.841	(0.955)	84319	20.0000	21.0
8	1,3-Dichlorobenzene	146	5.012	5.012	(0.988)	87890	20.0000	21.0
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	108169	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	90069	20.0000	21.0
11	Benzyl alcohol	79	5.189	5.189	(1.023)	70331	20.0000	21.1
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	87046	20.0000	21.4
13	2-Methylphenol	107	5.291	5.291	(1.043)	64478	20.0000	21.2
14	bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.053)	120266	20.0000	21.2
15	3 & 4-Methylphenol	107	5.456	5.456	(1.076)	84349	20.0000	21.3
17	N-Nitroso-di-n-propylamine	70	5.483	5.483	(1.081)	58661	20.0000	21.1
18	Hexachloroethane	117	5.654	5.654	(1.115)	34995	20.0000	21.0
$ 19	Nitrobenzene-d5 (S)	82	5.676	5.676	(0.868)	67377	15.0000	15.6
20	Nitrobenzene	77	5.702	5.702	(0.872)	87140	20.0000	20.8
21	Isophorone	82	5.970	5.970	(0.913)	154070	20.0000	20.8
23	2-Nitrophenol	139	6.071	6.071	(0.928)	44005	20.0000	20.7
22	2,4-Dimethylphenol	107	6.082	6.082	(0.930)	80840	20.0000	20.8

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
	24	Benzoic acid	105	6.136	6.136	(0.938)	54882	20.0000	19.6	
	25	bis(2-Chloroethoxy)methane	93	6.205	6.205	(0.948)	95724	20.0000	20.9	
	26	2,4-Dichlorophenol	162	6.350	6.350	(0.971)	61804	20.0000	20.5	
	27	1,2,4-Trichlorobenzene	180	6.462	6.462	(0.988)	66415	20.0000	20.7	
*	28	Naphthalene-d8	136	6.542	6.542	(1.000)	435529	40.0000		(Q)
	29	Naphthalene	128	6.564	6.564	(1.003)	245549	20.0000	21.0	
	30	4-Chloroaniline	127	6.601	6.601	(1.009)	100839	20.0000	22.8	
	31	Hexachlorobutadiene	225	6.708	6.708	(1.025)	33243	20.0000	20.5	
	32	4-Chloro-3-methylphenol	107	7.163	7.163	(1.095)	67510	20.0000	20.7	
	33	2-Methylnaphthalene	142	7.403	7.403	(1.132)	159037	20.0000	20.8	
	34	1-Methylnaphthalene	142	7.526	7.526	(1.150)	149586	20.0000	21.0	
	35	Hexachlorocyclopentadiene	237	7.596	7.596	(0.874)	37348	20.0000	19.8	
	36	2,4,6-Trichlorophenol	196	7.730	7.730	(0.889)	41931	20.0000	20.4	
	37	2,4,5-Trichlorophenol	196	7.772	7.772	(0.894)	45416	20.0000	20.6	
$	38	2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	124116	15.0000	15.4	
	39	2-Chloronaphthalene	162	8.002	8.002	(0.921)	140464	20.0000	20.6	
	40	2-Nitroaniline	65	8.104	8.104	(0.932)	47080	20.0000	20.6	
	41	Dimethylphthalate	163	8.323	8.323	(0.958)	159040	20.0000	20.8	
	42	2,6-Dinitrotoluene	165	8.398	8.398	(0.966)	37973	20.0000	20.6	
	43	Acenaphthylene	152	8.521	8.521	(0.980)	236507	20.0000	20.8	(M)
	44	3-Nitroaniline	138	8.612	8.612	(0.991)	44292	20.0000	23.3	
*	45	Acenaphthene-d10	164	8.692	8.692	(1.000)	229779	40.0000		
	46	Acenaphthene	154	8.735	8.735	(1.005)	148701	20.0000	20.9	
	47	2,4-Dinitrophenol	184	8.735	8.735	(1.005)	17932	20.0000	19.5	(Q)
	48	4-Nitrophenol	65	8.789	8.789	(1.011)	35982	20.0000	20.9	
	49	2,4-Dinitrotoluene	165	8.901	8.901	(1.024)	50858	20.0000	20.8	
	50	Dibenzofuran	168	8.949	8.949	(1.030)	198433	20.0000	20.6	
	51	Diethylphthalate	149	9.200	9.200	(1.058)	166257	20.0000	20.8	
	52	4-Chlorophenylphenyl ether	204	9.361	9.361	(1.077)	72865	20.0000	20.8	
	54	4-Nitroaniline	138	9.366	9.366	(1.078)	46513	20.0000	21.4	
	53	Fluorene	166	9.377	9.377	(1.079)	169741	20.0000	20.9	
	55	4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.892)	24904	20.0000	20.4	
	56	N-Nitrosodiphenylamine	169	9.500	9.500	(0.901)	140519	20.0000	21.0	
	57	Azobenzene	77	9.559	9.559	(1.100)	182031	20.0000	21.4	
	58	1,2-Diphenylhydrazine	77	9.559	9.559	(1.100)	182031	20.0000	21.4	
$	59	2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.113)	21206	20.0000	19.6	
	60	4-Bromophenylphenyl ether	248	9.976	9.976	(0.946)	38357	20.0000	20.2	
	61	Hexachlorobenzene	284	10.062	10.062	(0.954)	43092	20.0000	20.6	
	62	Pentachlorophenol	266	10.297	10.297	(0.976)	24128	20.0000	19.1	
*	63	Phenanthrene-d10	188	10.548	10.548	(1.000)	375429	40.0000		
	64	Phenanthrene	178	10.575	10.575	(1.003)	227464	20.0000	21.3	
	65	Anthracene	178	10.639	10.639	(1.009)	229527	20.0000	21.0	
	66	Carbazole	167	10.826	10.826	(1.026)	224891	20.0000	21.3	
	67	di-n-Butylphthalate	149	11.233	11.233	(1.065)	274766	20.0000	21.1	
	68	Fluoranthene	202	12.062	12.062	(1.143)	221398	20.0000	20.7	
	69	Benzidine	184	12.201	12.201	(0.881)	132834	20.0000	23.3	
	70	Pyrene	202	12.351	12.351	(0.892)	240709	20.0000	21.4	
$	71	Terphenyl-d14 (S)	244	12.517	12.517	(0.904)	124208	15.0000	15.6	
	72	Butylbenzylphthalate	149	13.110	13.110	(0.947)	117478	20.0000	21.4	
	73	bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	169818	20.0000	21.6	
	74	3,3'-Dichlorobenzidine	252	13.779	13.779	(0.995)	70239	20.0000	23.1	
	75	Benzo(a)anthracene	228	13.832	13.832	(0.999)	219954	20.0000	21.1	
*	76	Chrysene-d12	240	13.843	13.843	(1.000)	365508	40.0000		(Q)
	77	Chrysene	228	13.875	13.875	(1.002)	204714	20.0000	21.2	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.576	14.576	(1.053)	279044	20.0000	21.3
79	Benzo(b)fluoranthene	252	15.186	15.186	(0.964)	201048	20.0000	20.4
80	Benzo(k)fluoranthene	252	15.223	15.223	(0.966)	226539	20.0000	21.4
81	Benzo(a)pyrene	252	15.672	15.672	(0.995)	195391	20.0000	20.7
* 82	Perylene-d12	264	15.758	15.758	(1.000)	361168	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.710	17.710	(1.124)	228951	20.0000	21.0
84	Dibenzo(a,h)anthracene	278	17.737	17.737	(1.126)	193525	20.0000	20.6
85	Benzo(g,h,i)perylene	276	18.309	18.309	(1.162)	191484	20.0000	20.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281412.D
Lab Smp Id: ICAL 4 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	108169	-8.46
28 Naphthalene-d8	466266	233133	932532	435529	-6.59
45 Acenaphthene-d10	245325	122663	490650	229779	-6.34
63 Phenanthrene-d10	405966	202983	811932	375429	-7.52
76 Chrysene-d12	427978	213989	855956	365508	-14.60
82 Perylene-d12	418836	209418	837672	361168	-13.77

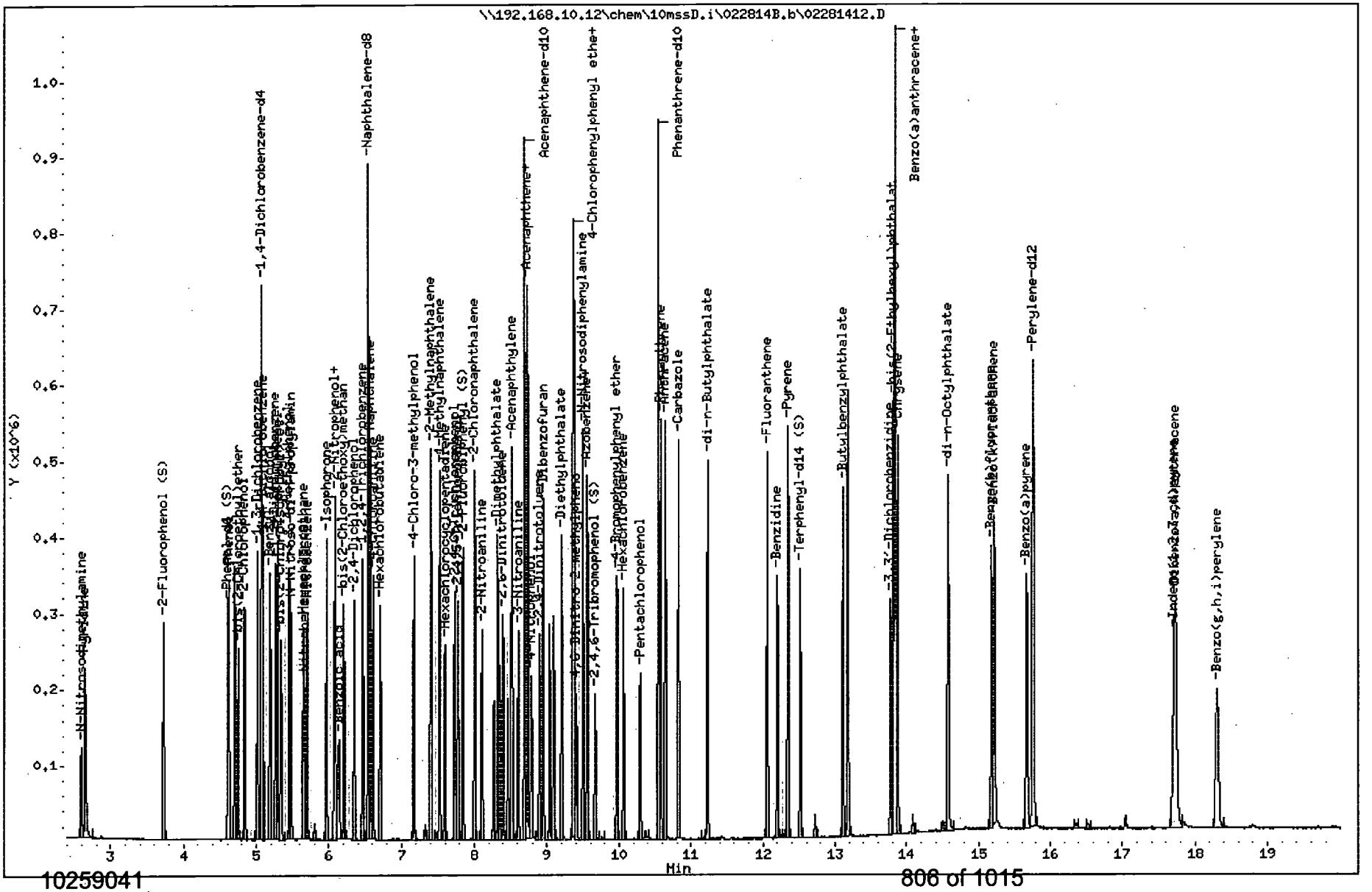
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	-0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.06
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	-0.00
76 Chrysene-d12	13.85	13.35	14.35	13.84	-0.04
82 Perylene-d12	15.76	15.26	16.26	15.76	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281412.D
Date : 28-FEB-2014 11:03
Client ID:
Sample Info: ICAL 4 10328-96

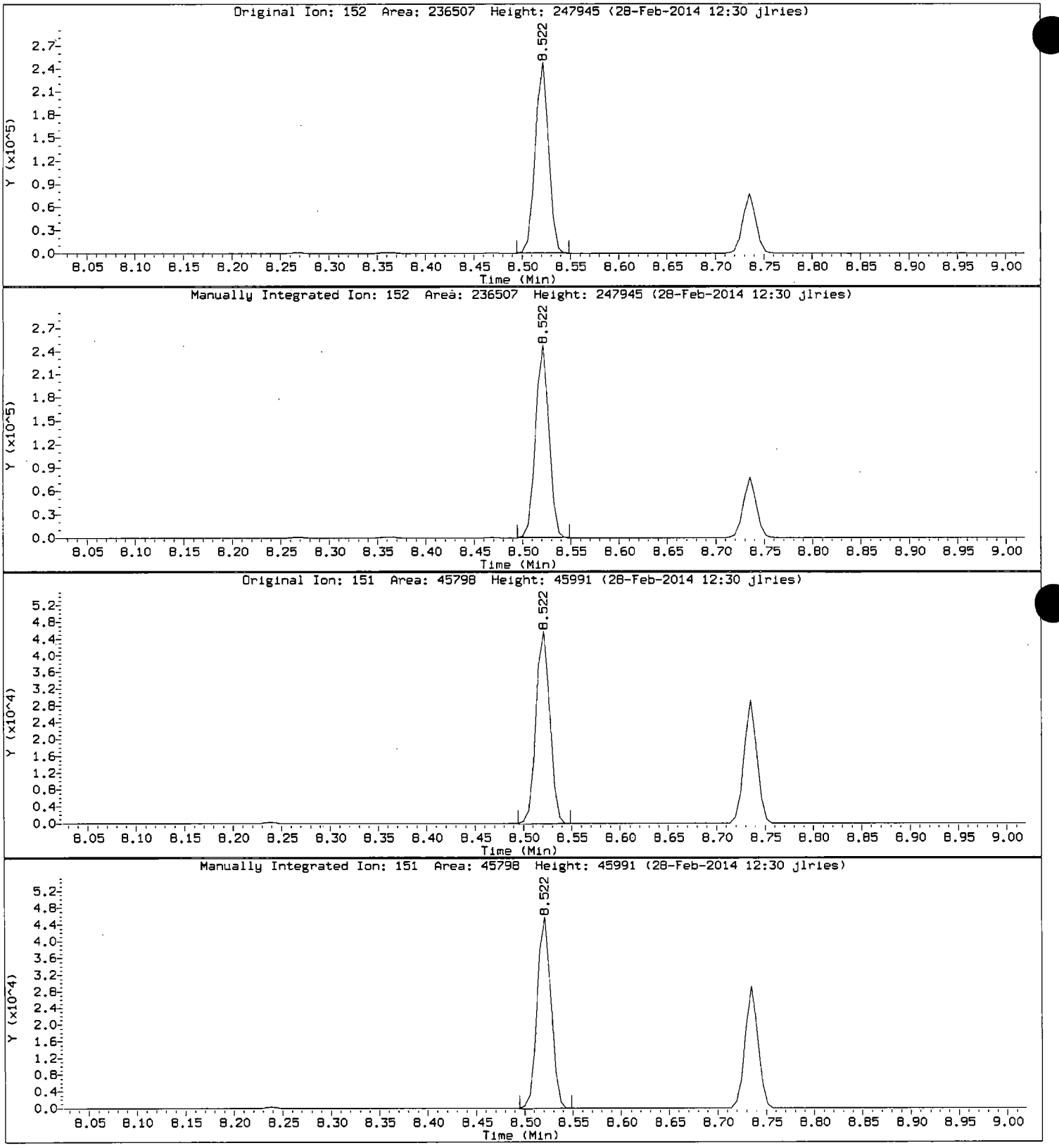
Instrument: 10mssD.i
Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS

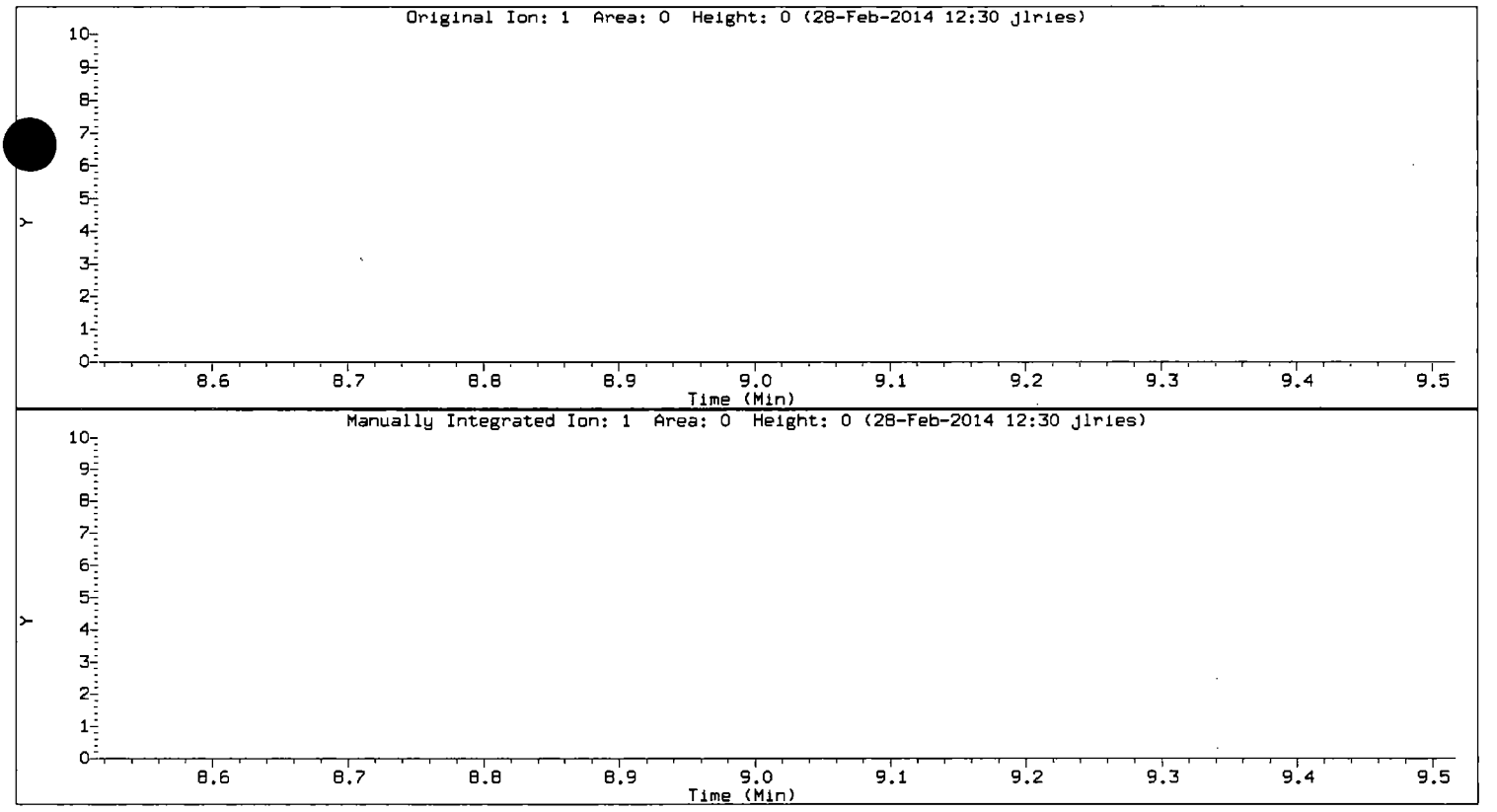


Instrument: 10mssD.i
Lab Sample ID: ICAL 4 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Instrument: 10mssD.i
Lab Sample ID: ICAL 4 10328-96



Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281413.D
Lab Smp Id: ICAL 3 10328-96
Inj Date : 28-FEB-2014 11:31
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 3 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 11:03 Cal File: 02281412.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	24770	10.0000	9.5(aQ)
2	Pyridine	79	2.643	2.643	(0.521)	46854	10.0000	10.0
$ 3	2-Fluorophenol (S)	112	3.724	3.724	(0.734)	39186	10.0000	10.0
$ 4	Phenol-d6 (S)	99	4.606	4.606	(0.908)	48146	10.0000	9.9(a)
5	Phenol	94	4.622	4.622	(0.911)	49988	10.0000	9.8(a)
6	bis(2-Chloroethyl)ether	63	4.745	4.745	(0.936)	30034	10.0000	9.9(a)
7	2-Chlorophenol	128	4.836	4.836	(0.954)	40753	10.0000	9.8(a)
8	1,3-Dichlorobenzene	146	5.013	5.013	(0.988)	43430	10.0000	10
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	112361	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	44484	10.0000	10
11	Benzyl alcohol	79	5.184	5.184	(1.022)	34391	10.0000	9.9(a)
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	42383	10.0000	10.0
13	2-Methylphenol	107	5.291	5.291	(1.043)	31583	10.0000	10.0
14	bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.053)	60145	10.0000	10.2
15	3 & 4-Methylphenol	107	5.457	5.457	(1.076)	40772	10.0000	9.9(a)
17	N-Nitroso-di-n-propylamine	70	5.478	5.478	(1.080)	28489	10.0000	9.9(a)
18	Hexachloroethane	117	5.649	5.649	(1.114)	17314	10.0000	10.0
$ 19	Nitrobenzene-d5 (S)	82	5.676	5.676	(0.868)	32877	7.50000	7.4(a)
20	Nitrobenzene	77	5.703	5.703	(0.872)	42819	10.0000	10
21	Isophorone	82	5.970	5.970	(0.913)	75237	10.0000	9.9(a)
23	2-Nitrophenol	139	6.072	6.072	(0.929)	20800	10.0000	9.6(a)
22	2,4-Dimethylphenol	107	6.082	6.082	(0.930)	38903	10.0000	9.8(a)

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24	Benzoic acid	105	6.120	6.120	(0.936)	26021	10.0000	9.0(a)
	25	bis(2-Chloroethoxy)methane	93	6.205	6.205	(0.949)	46789	10.0000	10
	26	2,4-Dichlorophenol	162	6.350	6.350	(0.971)	29887	10.0000	9.7(a)
	27	1,2,4-Trichlorobenzene	180	6.462	6.462	(0.989)	33333	10.0000	10.1
*	28	Naphthalene-d8	136	6.537	6.537	(1.000)	446926	40.0000	(Q)
	29	Naphthalene	128	6.564	6.564	(1.004)	122282	10.0000	10.2
	30	4-Chloroaniline	127	6.601	6.601	(1.010)	51406	10.0000	11.3
	31	Hexachlorobutadiene	225	6.708	6.708	(1.026)	16249	10.0000	9.8(a)
	32	4-Chloro-3-methylphenol	107	7.163	7.163	(1.096)	32548	10.0000	9.7(a)
	33	2-Methylnaphthalene	142	7.398	7.398	(1.132)	77294	10.0000	9.8(a)
	34	1-Methylnaphthalene	142	7.526	7.526	(1.151)	72290	10.0000	9.9(a)
	35	Hexachlorocyclopentadiene	237	7.596	7.596	(0.874)	17403	10.0000	9.2(a)
	36	2,4,6-Trichlorophenol	196	7.730	7.730	(0.889)	19964	10.0000	9.7(a)
	37	2,4,5-Trichlorophenol	196	7.773	7.773	(0.894)	21649	10.0000	9.8(a)
$	38	2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	60541	7.50000	7.5(a)
	39	2-Chloronaphthalene	162	8.003	8.003	(0.921)	69179	10.0000	10.1
	40	2-Nitroaniline	65	8.104	8.104	(0.932)	22981	10.0000	10.0
	41	Dimethylphthalate	163	8.323	8.323	(0.958)	77401	10.0000	10.1
	42	2,6-Dinitrotoluene	165	8.398	8.398	(0.966)	18713	10.0000	10.1
	43	Acenaphthylene	152	8.521	8.521	(0.980)	113789	10.0000	10(M)
	44	3-Nitroaniline	138	8.607	8.607	(0.990)	21337	10.0000	11.2
*	45	Acenaphthene-d10	164	8.692	8.692	(1.000)	230898	40.0000	
	46	Acenaphthene	154	8.735	8.735	(1.005)	71383	10.0000	10
	47	2,4-Dinitrophenol	184	8.735	8.735	(1.005)	6833	10.0000	10.6(Q)
	48	4-Nitrophenol	65	8.783	8.783	(1.010)	17065	10.0000	9.8(a)
	49	2,4-Dinitrotoluene	165	8.901	8.901	(1.024)	24369	10.0000	9.9(a)
	50	Dibenzofuran	168	8.949	8.949	(1.030)	98647	10.0000	10.2
	51	Diethylphthalate	149	9.195	9.195	(1.058)	80490	10.0000	10.0
	52	4-Chlorophenylphenyl ether	204	9.361	9.361	(1.077)	35215	10.0000	10
	54	4-Nitroaniline	138	9.366	9.366	(1.078)	22509	10.0000	10.3
	53	Fluorene	166	9.372	9.372	(1.078)	83794	10.0000	10.3
	55	4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.892)	10363	10.0000	10.3
	56	N-Nitrosodiphenylamine	169	9.500	9.500	(0.901)	69017	10.0000	9.9(a)
	57	Azobenzene	77	9.559	9.559	(1.100)	87715	10.0000	10.2
	58	1,2-Diphenylhydrazine	77	9.559	9.559	(1.100)	87715	10.0000	10.2
$	59	2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.113)	10147	10.0000	9.3(a)
	60	4-Bromophenylphenyl ether	248	9.971	9.971	(0.945)	19012	10.0000	9.7(a)
	61	Hexachlorobenzene	284	10.062	10.062	(0.954)	20895	10.0000	9.7(a)
	62	Pentachlorophenol	266	10.297	10.297	(0.976)	10639	10.0000	8.1(a)
*	63	Phenanthrene-d10	188	10.548	10.548	(1.000)	389015	40.0000	
	64	Phenanthrene	178	10.575	10.575	(1.003)	112310	10.0000	10.1
	65	Anthracene	178	10.639	10.639	(1.009)	109714	10.0000	9.7(a)
	66	Carbazole	167	10.827	10.827	(1.026)	108659	10.0000	9.9(a)
	67	di-n-Butylphthalate	149	11.233	11.233	(1.065)	129357	10.0000	9.6(a)
	68	Fluoranthene	202	12.062	12.062	(1.143)	103970	10.0000	9.4(a)
	69	Benzidine	184	12.201	12.201	(0.881)	64785	10.0000	11.3
	70	Pyrene	202	12.351	12.351	(0.892)	113548	10.0000	10.1
$	71	Terphenyl-d14 (S)	244	12.517	12.517	(0.904)	59498	7.50000	7.5(a)
	72	Butylbenzylphthalate	149	13.110	13.110	(0.947)	53903	10.0000	9.8(a)
	73	bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	76981	10.0000	9.8(a)
	74	3,3'-Dichlorobenzidine	252	13.774	13.774	(0.995)	33911	10.0000	11.1
	75	Benzo(a)anthracene	228	13.833	13.833	(0.999)	104322	10.0000	10
*	76	Chrysene-d12	240	13.843	13.843	(1.000)	366627	40.0000	(Q)
	77	Chrysene	228	13.875	13.875	(1.002)	98073	10.0000	10.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.576	14.576	(1.053)	127709	10.0000	9.7(aQ)
79	Benzo(b)fluoranthene	252	15.186	15.186	(0.964)	95306	10.0000	9.7(a)
80	Benzo(k)fluoranthene	252	15.223	15.223	(0.966)	105235	10.0000	10
81	Benzo(a)pyrene	252	15.672	15.672	(0.995)	92000	10.0000	9.7(a)
* 82	Perylene-d12	264	15.758	15.758	(1.000)	360518	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.710	17.710	(1.124)	105708	10.0000	9.7(a)
84	Dibenzo(a,h)anthracene	278	17.737	17.737	(1.126)	90850	10.0000	9.7(a)
85	Benzo(g,h,i)perylene	276	18.304	18.304	(1.162)	89370	10.0000	9.7(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281413.D
Lab Smp Id: ICAL 3 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07

Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

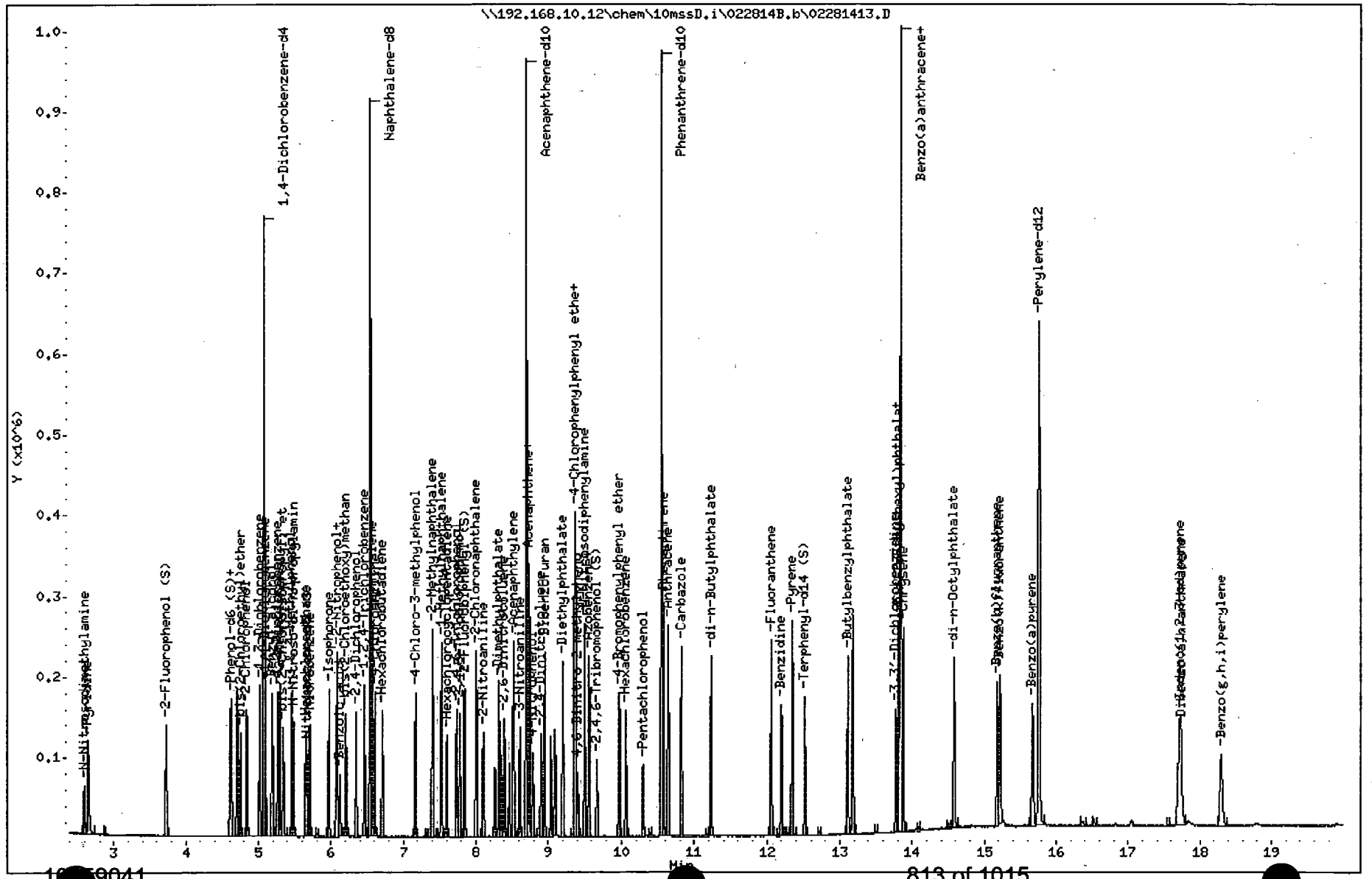
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	112361	-4.91
28 Naphthalene-d8	466266	233133	932532	446926	-4.15
45 Acenaphthene-d10	245325	122663	490650	230898	-5.88
63 Phenanthrene-d10	405966	202983	811932	389015	-4.18
76 Chrysene-d12	427978	213989	855956	366627	-14.34
82 Perylene-d12	418836	209418	837672	360518	-13.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.08
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.06
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.00
76 Chrysene-d12	13.85	13.35	14.35	13.84	-0.04
82 Perylene-d12	15.76	15.26	16.26	15.76	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

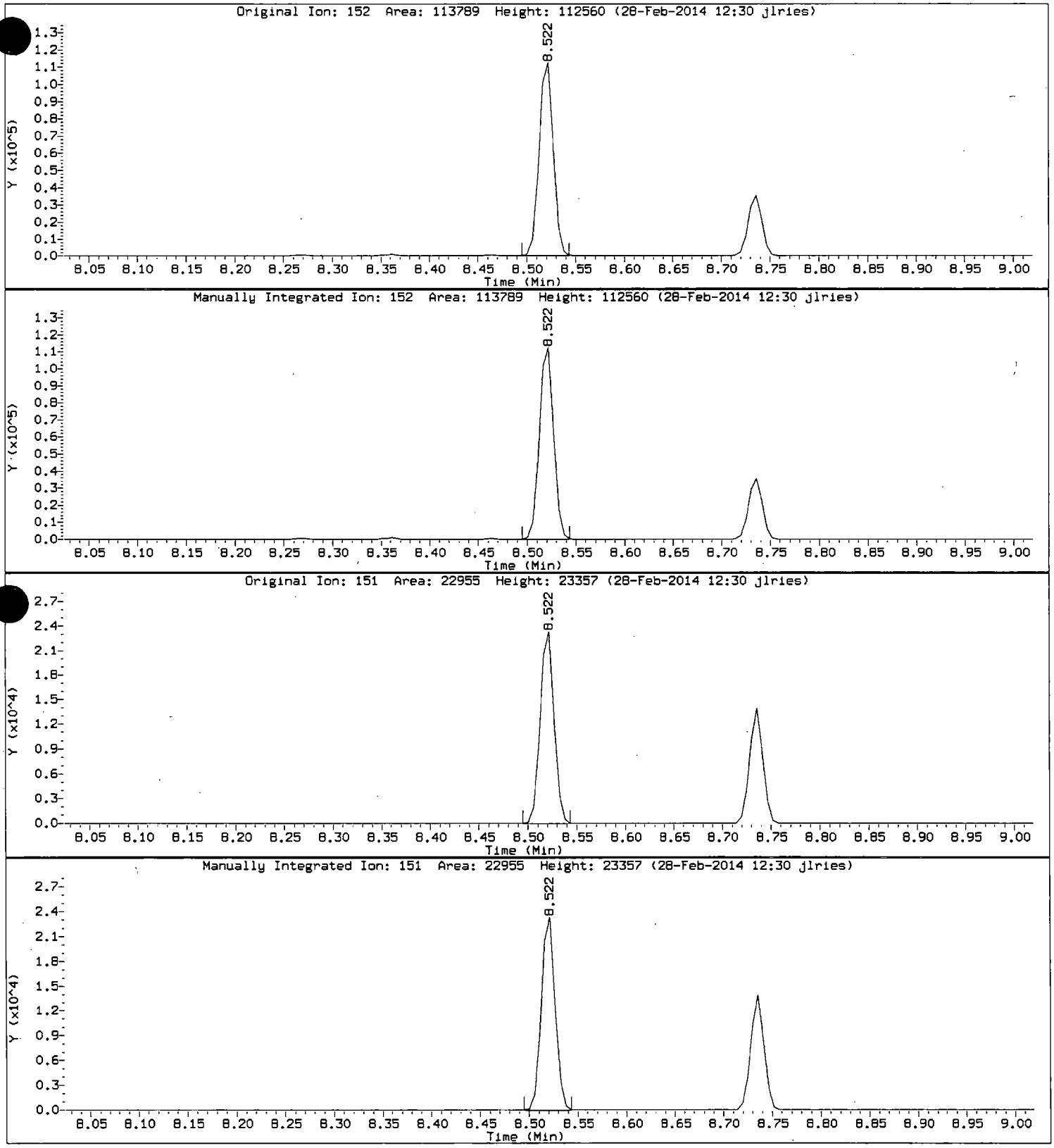
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281413.D
Date : 28-FEB-2014 11:31
Client ID:
Sample Info: ICAL 3 10328-96

Instrument: 10mssD.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

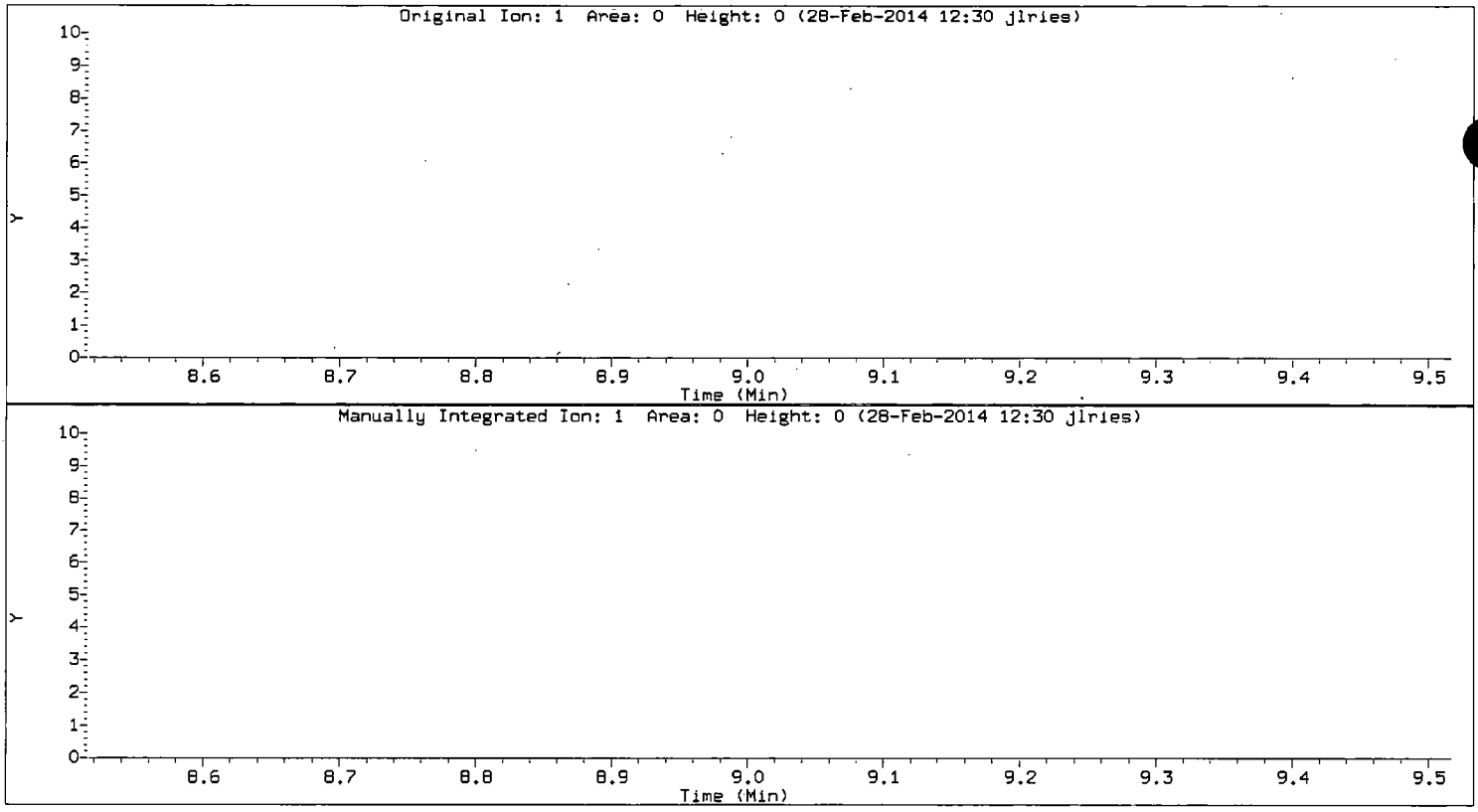


Instrument: 10mssD.i
Lab Sample ID: ICAL 3 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Instrument: 10mssD.i
Lab Sample ID: ICAL 3 10328-96



Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281414.D
Lab Smp Id: ICAL 2 10328-96
Inj Date : 28-FEB-2014 11:59
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 2 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 11:31 Cal File: 02281413.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	12429	5.00000	4.6(aQM)
2	Pyridine	79	2.643	2.643	(0.521)	22945	5.00000	4.8(a)
$ 3	2-Fluorophenol (S)	112	3.724	3.724	(0.734)	19108	5.00000	4.8(a)
$ 4	Phenol-d6 (S)	99	4.606	4.606	(0.908)	23783	5.00000	4.8(a)
5	Phenol	94	4.622	4.622	(0.911)	25481	5.00000	4.9(a)
6	bis(2-Chloroethyl)ether	63	4.745	4.745	(0.936)	15356	5.00000	4.9(a)
7	2-Chlorophenol	128	4.836	4.836	(0.954)	20571	5.00000	4.8(a)
8	1,3-Dichlorobenzene	146	5.013	5.013	(0.988)	21793	5.00000	4.9(a)
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	115230	40.0000	
10	1,4-Dichlorobenzene	146	5.087	5.087	(1.003)	22858	5.00000	5.0(a)
11	Benzyl alcohol	79	5.184	5.184	(1.022)	17211	5.00000	4.8(a)
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	21144	5.00000	4.9(a)
13	2-Methylphenol	107	5.291	5.291	(1.043)	15670	5.00000	4.8(a)
14	bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.053)	30402	5.00000	5.0(a)
15	3 & 4-Methylphenol	107	5.457	5.457	(1.076)	20147	5.00000	4.8(a)
17	N-Nitroso-di-n-propylamine	70	5.478	5.478	(1.080)	14602	5.00000	4.9(a)
18	Hexachloroethane	117	5.654	5.654	(1.115)	8886	5.00000	5.0(a)
$ 19	Nitrobenzene-d5 (S)	82	5.676	5.676	(0.868)	16361	3.75000	3.6(a)
20	Nitrobenzene	77	5.697	5.697	(0.872)	21464	5.00000	4.9(a)
21	Isophorone	82	5.970	5.970	(0.913)	36983	5.00000	4.8(a)
23	2-Nitrophenol	139	6.072	6.072	(0.929)	10182	5.00000	4.6(a)
22	2,4-Dimethylphenol	107	6.082	6.082	(0.930)	19861	5.00000	4.9(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	6.109	6.109	(0.935)	11372	5.00000	3.9(a)
	25 bis(2-Chloroethoxy)methane	93	6.205	6.205	(0.949)	23235	5.00000	4.8(a)
	26 2,4-Dichlorophenol	162	6.344	6.344	(0.971)	14831	5.00000	4.7(a)
	27 1,2,4-Trichlorobenzene	180	6.462	6.462	(0.989)	16691	5.00000	4.9(a)
*	28 Naphthalene-d8	136	6.537	6.537	(1.000)	457217	40.0000	(Q)
	29 Naphthalene	128	6.564	6.564	(1.004)	62532	5.00000	5.1(a)
	30 4-Chloroaniline	127	6.601	6.601	(1.010)	25780	5.00000	5.6(a)
	31 Hexachlorobutadiene	225	6.703	6.703	(1.025)	8488	5.00000	5.0(a)
	32 4-Chloro-3-methylphenol	107	7.163	7.163	(1.096)	15914	5.00000	4.6(a)
	33 2-Methylnaphthalene	142	7.398	7.398	(1.132)	38648	5.00000	4.8(a)
	34 1-Methylnaphthalene	142	7.526	7.526	(1.151)	36609	5.00000	4.9(a)
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.874)	8598	5.00000	4.4(a)
	36 2,4,6-Trichlorophenol	196	7.730	7.730	(0.889)	9582	5.00000	4.5(a)
	37 2,4,5-Trichlorophenol	196	7.773	7.773	(0.894)	10605	5.00000	4.6(a)
$	38 2-Fluorobiphenyl (S)	172	7.837	7.837	(0.902)	30505	3.75000	3.6(a)
	39 2-Chloronaphthalene	162	8.002	8.002	(0.921)	34430	5.00000	4.9(a)
	40 2-Nitroaniline	65	8.104	8.104	(0.932)	10801	5.00000	4.6(a)
	41 Dimethylphthalate	163	8.323	8.323	(0.958)	38950	5.00000	4.9(a)
	42 2,6-Dinitrotoluene	165	8.398	8.398	(0.966)	8967	5.00000	4.7(a)
	43 Acenaphthylene	152	8.521	8.521	(0.980)	56606	5.00000	4.8(aM)
	44 3-Nitroaniline	138	8.607	8.607	(0.990)	10649	5.00000	5.4(a)
*	45 Acenaphthene-d10	164	8.692	8.692	(1.000)	238555	40.0000	
	46 Acenaphthene	154	8.735	8.735	(1.005)	36233	5.00000	4.9(a)
	47 2,4-Dinitrophenol	184	8.735	8.735	(1.005)	2813	5.00000	7.2(aQ)
	48 4-Nitrophenol	65	8.783	8.783	(1.010)	8221	5.00000	4.6(a)
	49 2,4-Dinitrotoluene	165	8.901	8.901	(1.024)	11428	5.00000	4.5(a)
	50 Dibenzofuran	168	8.944	8.944	(1.029)	50072	5.00000	5.0(a)
	51 Diethylphthalate	149	9.195	9.195	(1.058)	40628	5.00000	4.9(a)
	52 4-Chlorophenylphenyl ether	204	9.361	9.361	(1.077)	17810	5.00000	4.9(a)
	54 4-Nitroaniline	138	9.361	9.361	(1.077)	10358	5.00000	4.6(a)
	53 Fluorene	166	9.372	9.372	(1.078)	41526	5.00000	4.9(a)
	55 4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.892)	4513	5.00000	6.4(aQ)
	56 N-Nitrosodiphenylamine	169	9.500	9.500	(0.901)	33939	5.00000	4.7(a)
	57 Azobenzene	77	9.559	9.559	(1.100)	43757	5.00000	5.0(a)
	58 1,2-Diphenylhydrazine	77	9.559	9.559	(1.100)	43757	5.00000	5.0(a)
$	59 2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.113)	5040	5.00000	4.5(a)
	60 4-Bromophenylphenyl ether	248	9.971	9.971	(0.945)	9383	5.00000	4.6(a)
	61 Hexachlorobenzene	284	10.062	10.062	(0.954)	10765	5.00000	4.8(a)
	62 Pentachlorophenol	266	10.297	10.297	(0.976)	4633	5.00000	3.4(a)
*	63 Phenanthrene-d10	188	10.548	10.548	(1.000)	402608	40.0000	
	64 Phenanthrene	178	10.575	10.575	(1.003)	55754	5.00000	4.9(a)
	65 Anthracene	178	10.639	10.639	(1.009)	55790	5.00000	4.8(a)
	66 Carbazole	167	10.827	10.827	(1.026)	53817	5.00000	4.8(a)
	67 di-n-Butylphthalate	149	11.233	11.233	(1.065)	61314	5.00000	4.4(a)
	68 Fluoranthene	202	12.062	12.062	(1.143)	51867	5.00000	4.5(a)
	69 Benzidine	184	12.201	12.201	(0.881)	31531	5.00000	5.5(a)
	70 Pyrene	202	12.351	12.351	(0.892)	54964	5.00000	4.8(a)
$	71 Terphenyl-d14 (S)	244	12.517	12.517	(0.904)	28293	3.75000	3.5(a)
	72 Butylbenzylphthalate	149	13.110	13.110	(0.947)	24946	5.00000	4.5(a)
	73 bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	36538	5.00000	4.6(aQ)
	74 3,3'-Dichlorobenzidine	252	13.774	13.774	(0.995)	16117	5.00000	5.3(a)
	75 Benzo(a)anthracene	228	13.833	13.833	(0.999)	51785	5.00000	4.9(a)
*	76 Chrysene-d12	240	13.843	13.843	(1.000)	367627	40.0000	(Q)
	77 Chrysene	228	13.875	13.875	(1.002)	49388	5.00000	5.1(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.576	14.576	(1.053)	56547	5.00000	4.3(aQM)
	79 Benzo(b)fluoranthene	252	15.180	15.180	(0.963)	47230	5.00000	4.6(a)
	80 Benzo(k)fluoranthene	252	15.218	15.218	(0.965)	51002	5.00000	4.7(a)
	81 Benzo(a)pyrene	252	15.667	15.667	(0.994)	43945	5.00000	4.5(a)
*	82 Perylene-d12	264	15.763	15.763	(1.000)	374312	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	17.705	17.705	(1.123)	51439	5.00000	4.5(a)
	84 Dibenzo(a,h)anthracene	278	17.737	17.737	(1.125)	43923	5.00000	4.5(a)
	85 Benzo(g,h,i)perylene	276	18.304	18.304	(1.161)	44255	5.00000	4.6(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281414.D
Lab Smp Id: ICAL 2 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07

Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	115230	-2.49
28 Naphthalene-d8	466266	233133	932532	457217	-1.94
45 Acenaphthene-d10	245325	122663	490650	238555	-2.76
63 Phenanthrene-d10	405966	202983	811932	402608	-0.83
76 Chrysene-d12	427978	213989	855956	367627	-14.10
82 Perylene-d12	418836	209418	837672	374312	-10.63

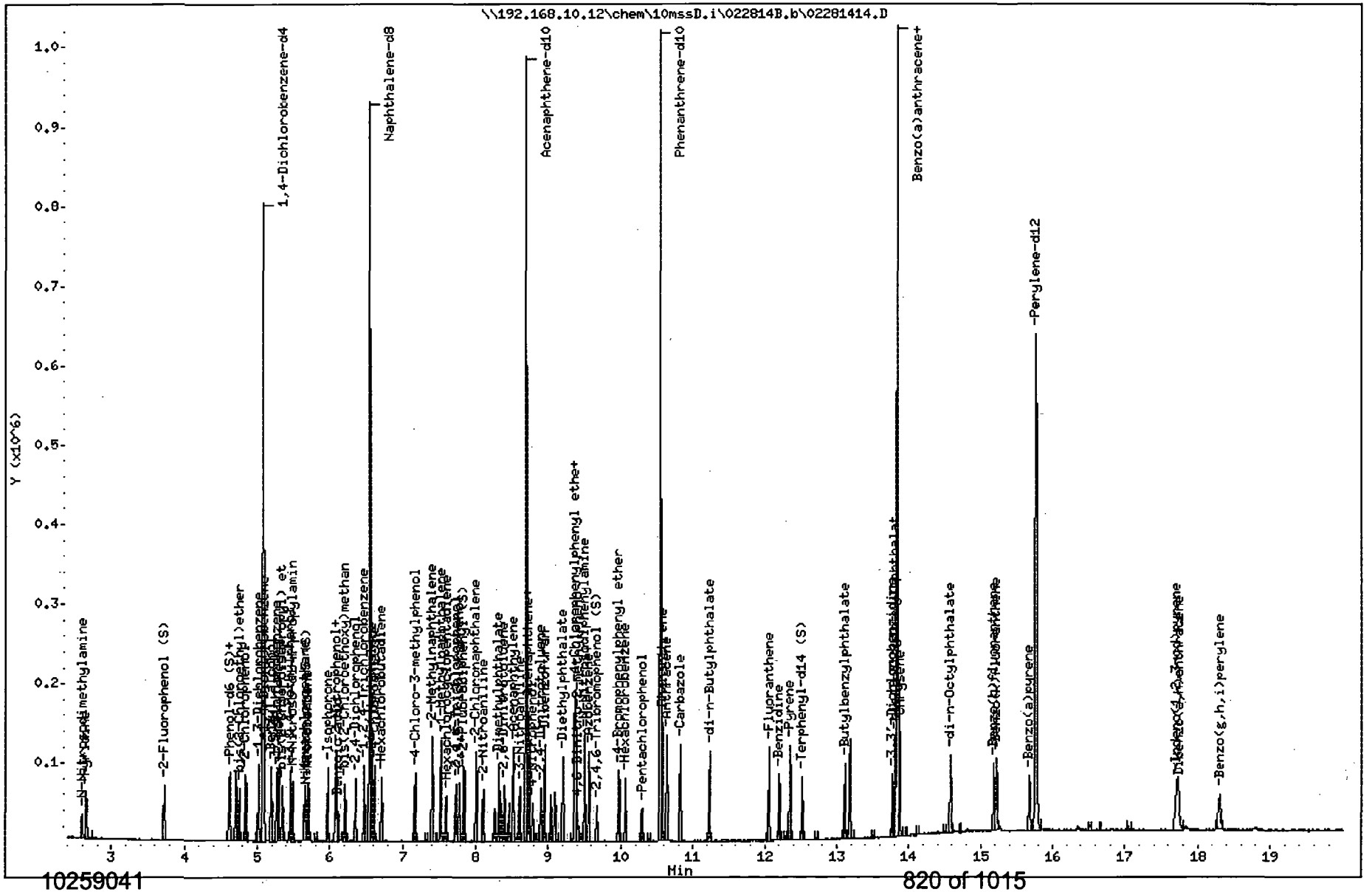
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.08
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.06
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.00
76 Chrysene-d12	13.85	13.35	14.35	13.84	-0.04
82 Perylene-d12	15.76	15.26	16.26	15.76	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281414.D
Date : 28-FEB-2014 11:59
Client ID:
Sample Info: ICAL 2 10328-96

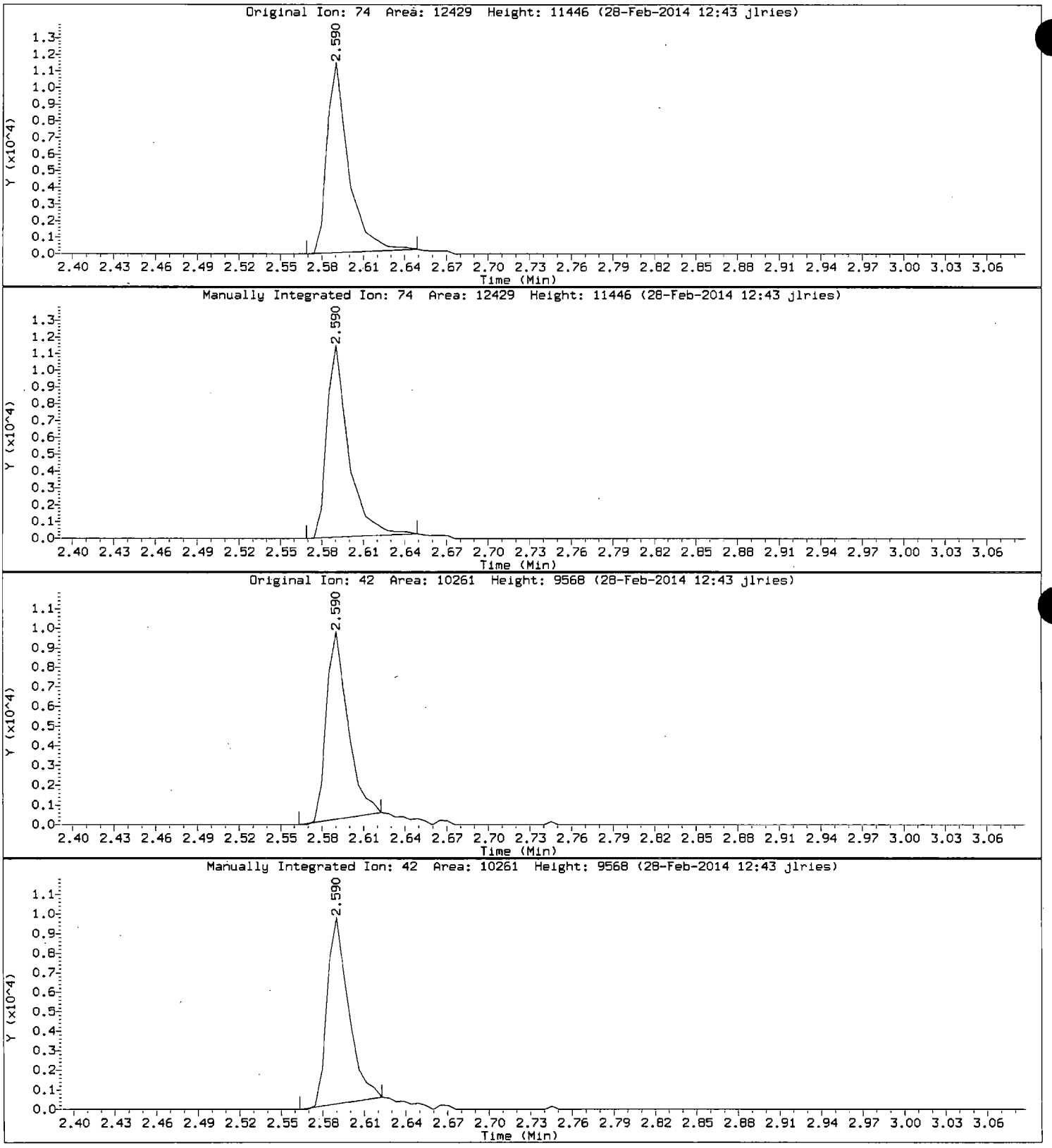
Instrument: 10mssD.i
Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS

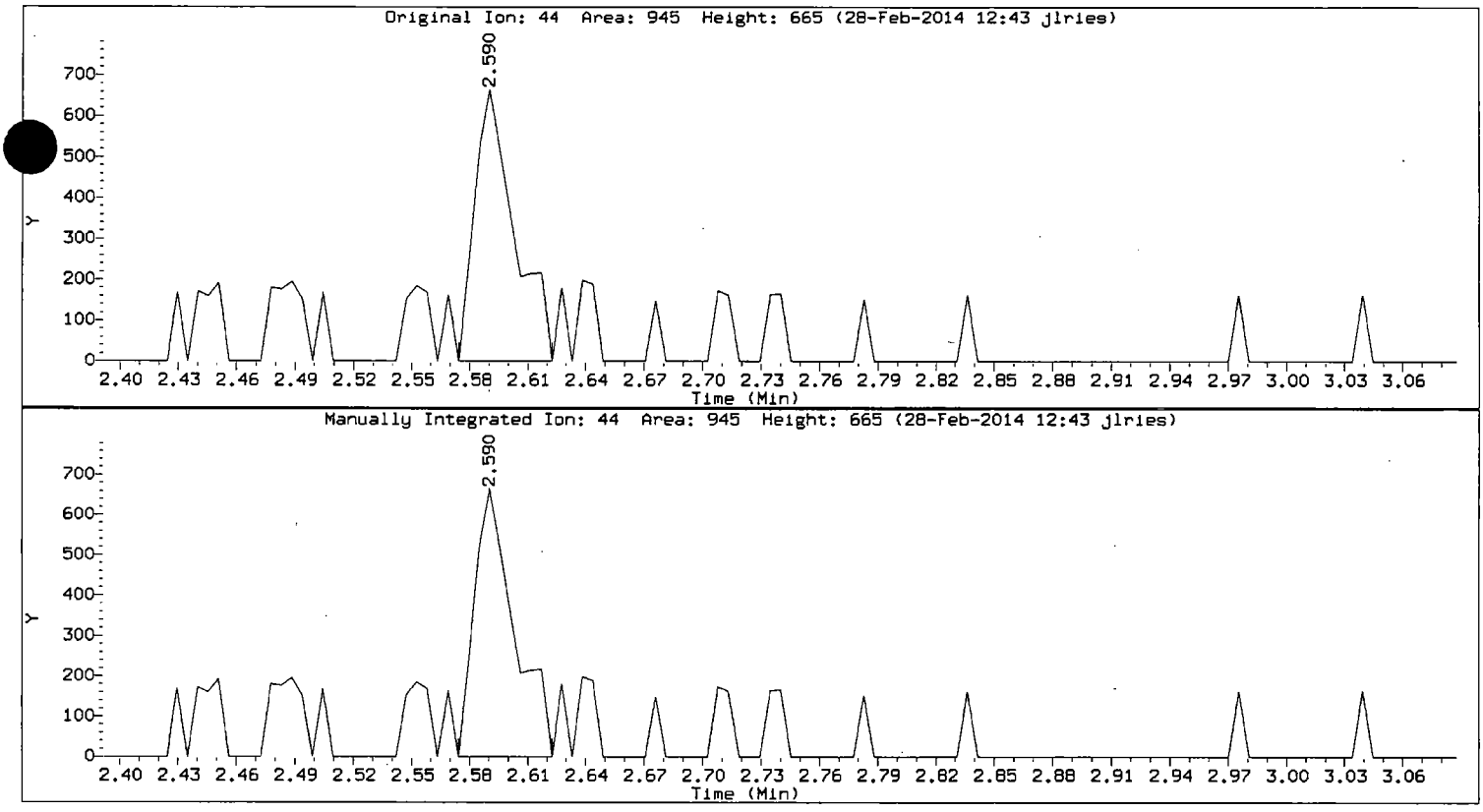


Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

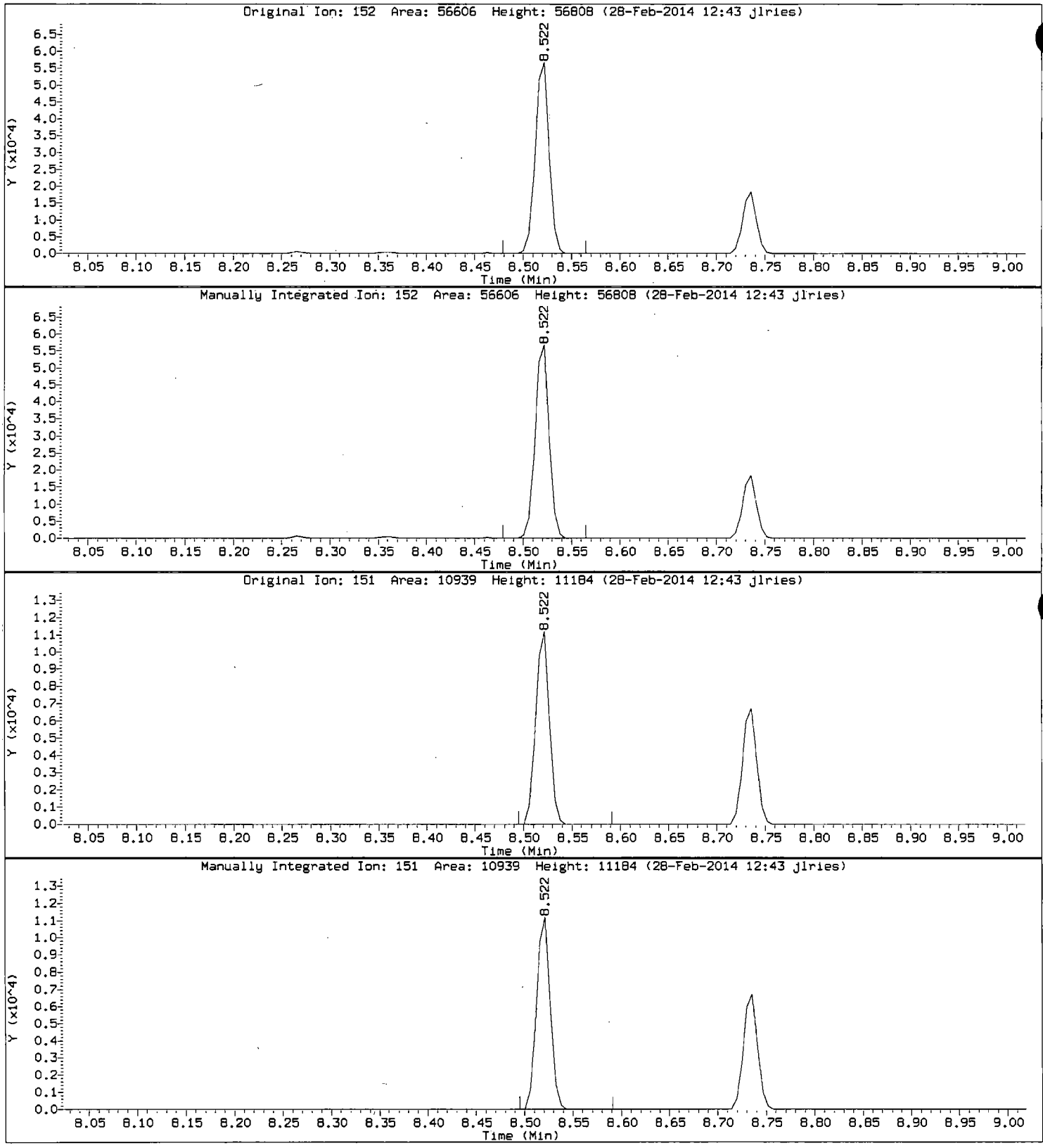


Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

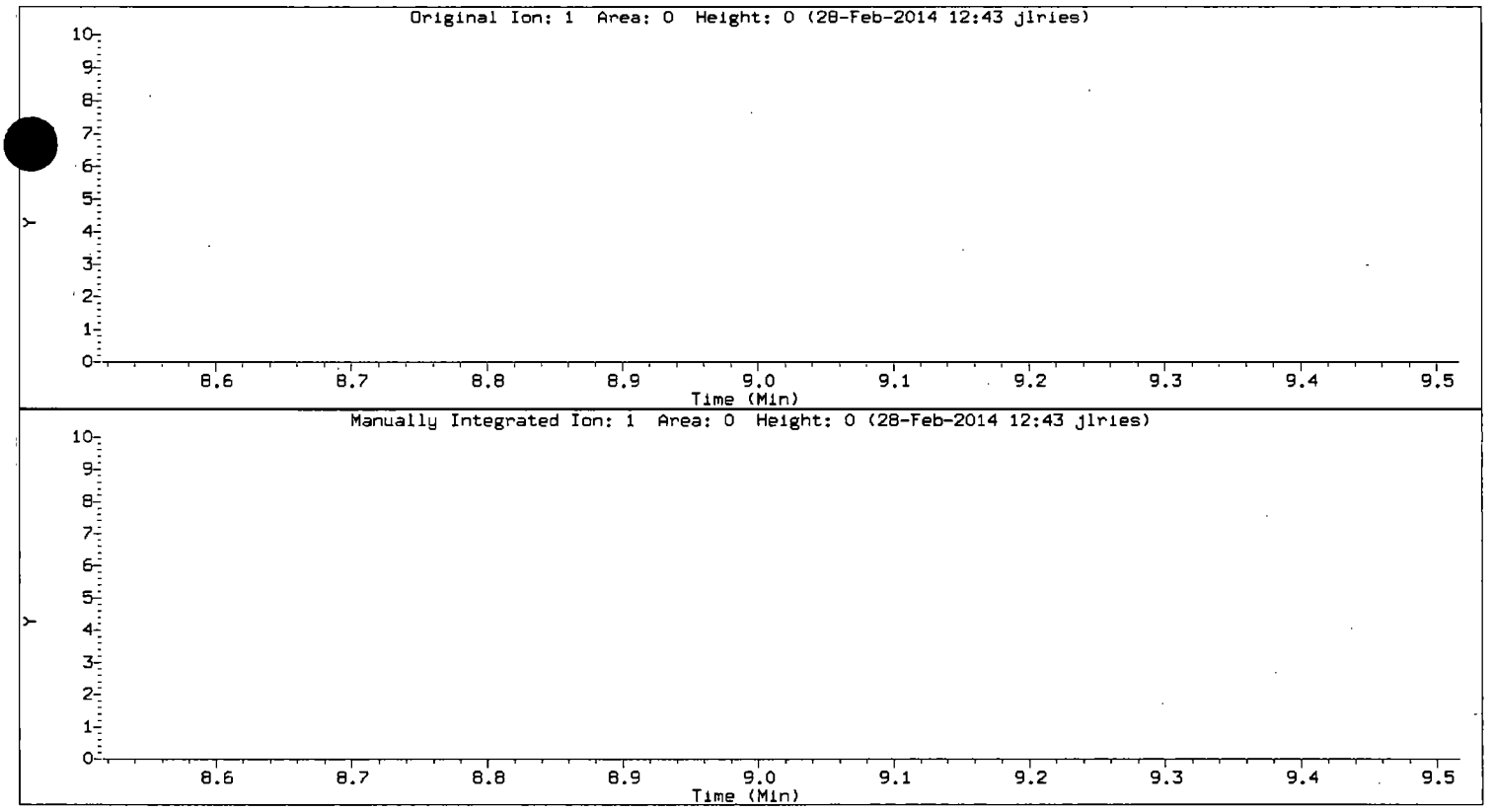


Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8

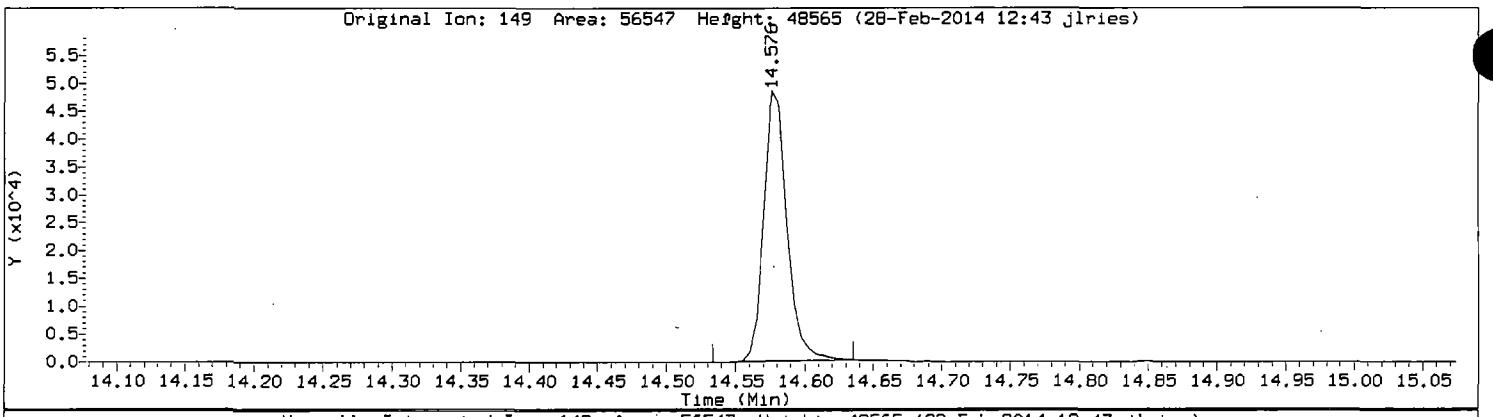


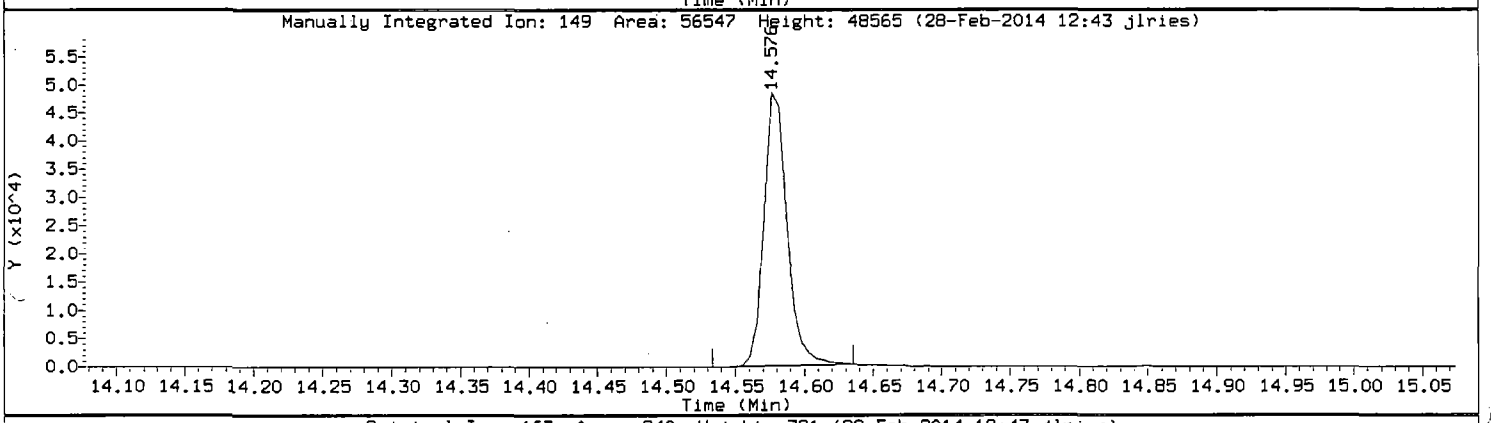
Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

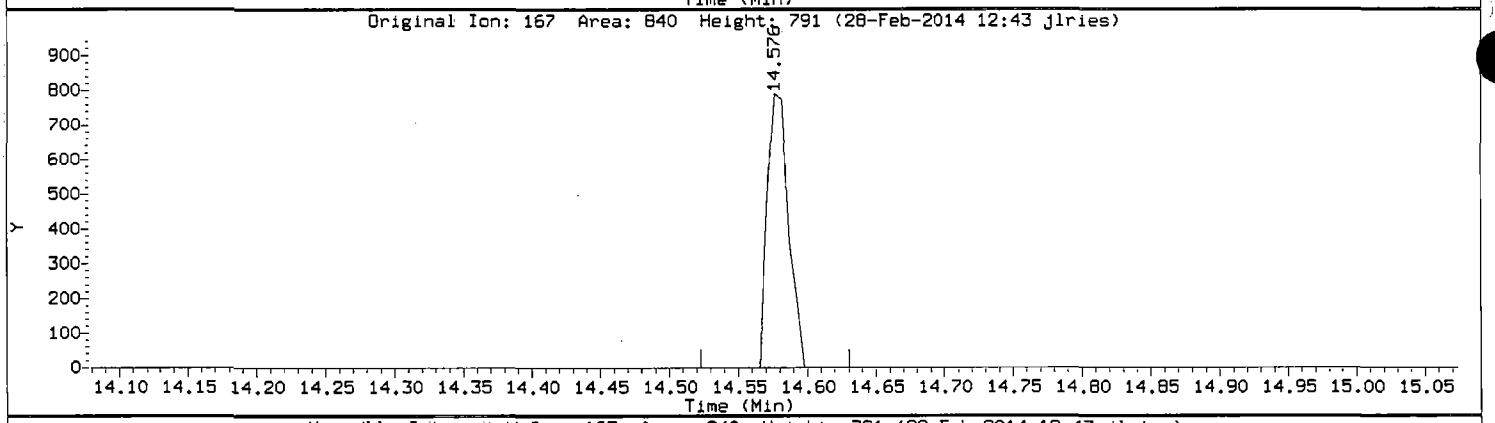


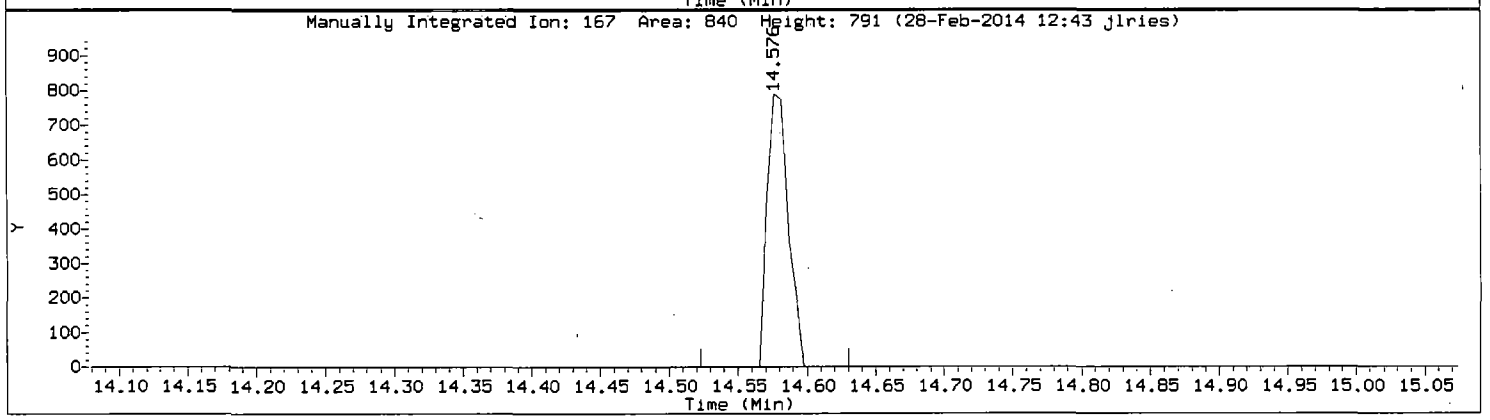
Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

Compound: di-n-Octylphthalate
CAS Number: 117-84-0

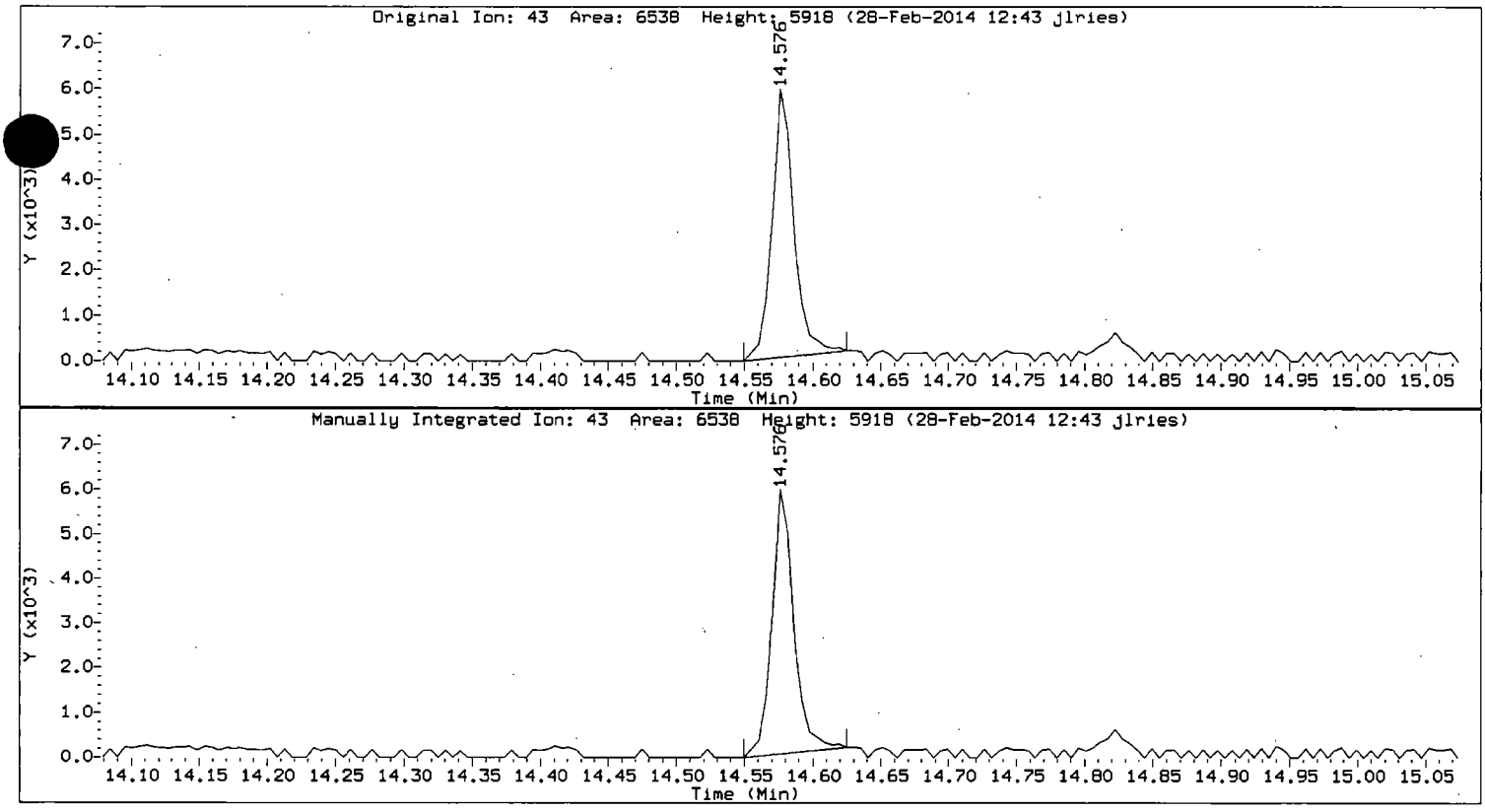








Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 28-FEB-2014 12:27
Lab File ID: 02281415.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 09:10 11:59
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.92707	0.83086	0.83086	0.000	-10.37779	40.00000	Averaged
2 Pyridine	1.66353	1.47367	1.47367	0.000	-11.41322	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.39474	1.33118	1.33118	0.000	-4.55721	40.00000	Averaged
$ 4 Phenol-d6 (S)	1.73788	1.65548	1.65548	0.000	-4.74168	40.00000	Averaged
5 Phenol	1.81135	1.73708	1.73708	0.800	-4.10001	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.07749	0.92825	0.92825	0.700	-13.85049	40.00000	Averaged
7 2-Chlorophenol	1.48268	1.38281	1.38281	0.800	-6.73580	40.00000	Averaged
8 1,3-Dichlorobenzene	1.54743	1.35379	1.35379	0.000	-12.51332	40.00000	Averaged
10 1,4-Dichlorobenzene	1.58541	1.38539	1.38539	0.000	-12.61656	20.00000	Averaged
11 Benzyl alcohol	1.23453	1.10637	1.10637	0.000	-10.38135	40.00000	Averaged
12 1,2-Dichlorobenzene	1.50040	1.28939	1.28939	0.000	-14.06361	40.00000	Averaged
13 2-Methylphenol	1.12295	1.05920	1.05920	0.700	-5.67701	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	2.09816	1.57669	1.57669	0.000	-24.85351	40.00000	Averaged
15 3 & 4-Methylphenol	1.46287	1.54800	1.54800	0.600	5.81925	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	1.02726	0.84022	0.84022	0.500	-18.20772	40.00000	Averaged
18 Hexachloroethane	0.61604	0.54242	0.54242	0.300	-11.95119	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.39730	0.37676	0.37676	0.000	-5.17107	40.00000	Averaged
20 Nitrobenzene	0.38464	0.34209	0.34209	0.200	-11.06254	40.00000	Averaged
21 Isophorone	0.68084	0.62089	0.62089	0.400	-8.80571	40.00000	Averaged
23 2-Nitrophenol	0.19493	0.18718	0.18718	0.100	-3.97383	20.00000	Averaged
22 2,4-Dimethylphenol	0.35621	0.33528	0.33528	0.200	-5.87745	40.00000	Averaged
24 Benzoic acid	0.25736	0.26840	0.26840	0.000	4.29059	40.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.42074	0.38037	0.38037	0.300	-9.59419	50.00000	Averaged
26 2,4-Dichlorophenol	0.27681	0.25976	0.25976	0.200	-6.16012	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.29509	0.25866	0.25866	0.000	-12.34636	40.00000	Averaged
29 Naphthalene	1.07621	0.94273	0.94273	0.700	-12.40263	40.00000	Averaged
30 4-Chloroaniline	0.40537	0.35960	0.35960	0.010	-11.28929	40.00000	Averaged
31 Hexachlorobutadiene	0.14858	0.12768	0.12768	0.010	-14.06682	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.29966	0.28720	0.28720	0.200	-4.15894	20.00000	Averaged
33 2-Methylnaphthalene	0.70271	0.62446	0.62446	0.040	-11.13575	40.00000	Averaged
34 1-Methylnaphthalene	0.65562	0.59404	0.59404	0.000	-9.39317	40.00000	Averaged
35 Hexachlorocyclopentadiene	0.32910	0.29089	0.29089	0.050	-11.60957	40.00000	Averaged
36 2,4,6-Trichlorophenol	0.35684	0.35217	0.35217	0.200	-1.30782	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.38407	0.38481	0.38481	0.200	0.19305	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.39789	1.32820	1.32820	0.000	-4.98563	40.00000	Averaged
39 2-Chloronaphthalene	1.18538	1.03181	1.03181	0.800	-12.95530	40.00000	Averaged
40 2-Nitroaniline	0.39748	0.36671	0.36671	0.010	-7.74149	40.00000	Averaged
41 Dimethylphthalate	1.33069	1.17421	1.17421	0.010	-11.75931	40.00000	Averaged
42 2,6-Dinitrotoluene	0.32144	0.28695	0.28695	0.200	-10.72921	40.00000	Averaged
43 Acenaphthylene	1.97380	1.72036	1.72036	0.900	-12.84033	40.00000	Averaged
44 3-Nitroaniline	0.33056	0.27439	0.27439	0.010	-16.99197	40.00000	Averaged
46 Acenaphthene	1.23834	1.07219	1.07219	0.900	-13.41695	20.00000	Averaged

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 28-FEB-2014 12:27
Lab File ID: 02281415.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 09:10 11:59
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
47 2,4-Dinitrophenol	80.00000	70.32784	0.17639	0.010	-12.09020	40.00000	Quadratic	
48 4-Nitrophenol	0.30018	0.29502	0.29502	0.010	-1.71936	40.00000	Averaged	
49 2,4-Dinitrotoluene	0.42443	0.37316	0.37316	0.200	-12.07983	40.00000	Averaged	
50 Dibenzofuran	1.67363	1.49119	1.49119	0.800	-10.90103	40.00000	Averaged	
51 Diethylphthalate	1.39190	1.21869	1.21869	0.010	-12.44444	40.00000	Averaged	
52 4-Chlorophenylphenyl ether	0.61017	0.54782	0.54782	0.400	-10.21866	40.00000	Averaged	
54 4-Nitroaniline	0.37871	0.34752	0.34752	0.010	-8.23507	40.00000	Averaged	
53 Fluorene	1.41116	1.22128	1.22128	0.900	-13.45603	40.00000	Averaged	
55 4,6-Dinitro-2-methylphenol	80.00000	73.02488	0.13626	0.010	-8.71890	40.00000	Quadratic	
56 N-Nitrosodiphenylamine	0.71324	0.53265	0.53265	0.010	-25.32046	20.00000	Averaged	<-
57 Azobenzene	1.48106	1.32632	1.32632	0.000	-10.44770	40.00000	Averaged	
58 1,2-Diphenylhydrazine	1.48106	1.32632	1.32632	0.000	-10.44770	40.00000	Averaged	
$ 59 2,4,6-Tribromophenol (S)	0.18827	0.18838	0.18838	0.000	0.05692	40.00000	Averaged	
60 4-Bromophenylphenyl ether	0.20199	0.17841	0.17841	0.100	-11.67559	40.00000	Averaged	
61 Hexachlorobenzene	0.22230	0.19751	0.19751	0.100	-11.15185	40.00000	Averaged	
62 Pentachlorophenol	0.13475	0.15799	0.15799	0.050	17.24585	20.00000	Averaged	
64 Phenanthrene	1.13926	1.01063	1.01063	0.700	-11.29095	40.00000	Averaged	
65 Anthracene	1.16142	1.02555	1.02555	0.700	-11.69818	40.00000	Averaged	
66 Carbazole	1.12512	1.02170	1.02170	0.010	-9.19168	40.00000	Averaged	
67 di-n-Butylphthalate	1.38697	1.30205	1.30205	0.010	-6.12254	40.00000	Averaged	
68 Fluoranthene	1.13706	0.98993	0.98993	0.600	-12.93909	20.00000	Averaged	
69 Benzidine	0.62350	0.16314	0.16314	0.000	-73.83479	40.00000	Averaged	<-
70 Pyrene	1.23141	1.09812	1.09812	0.600	-10.82344	40.00000	Averaged	
$ 71 Terphenyl-d14 (S)	0.86920	0.84911	0.84911	0.000	-2.31157	40.00000	Averaged	
72 Butylbenzylphthalate	0.59965	0.56432	0.56432	0.010	-5.89292	40.00000	Averaged	
73 bis(2-Ethylhexyl)phthalate	0.86033	0.80560	0.80560	0.010	-6.36064	40.00000	Averaged	
74 3,3'-Dichlorobenzidine	0.33327	0.32896	0.32896	0.010	-1.29314	40.00000	Averaged	
75 Benzo(a)anthracene	1.14060	0.95910	0.95910	0.800	-15.91228	40.00000	Averaged	
77 Chrysene	1.05828	0.58508	0.58508	0.700	-44.71402	40.00000	Averaged	<-
78 di-n-Octylphthalate	1.43288	1.37381	1.37381	0.010	-4.12267	20.00000	Averaged	
79 Benzo(b)fluoranthene	1.09097	0.98413	0.98413	0.700	-9.79281	40.00000	Averaged	
80 Benzo(k)fluoranthene	1.16930	1.09116	1.09116	0.700	-6.68200	40.00000	Averaged	
81 Benzo(a)pyrene	1.04717	0.92282	0.92282	0.700	-11.87485	20.00000	Averaged	
83 Indeno(1,2,3-cd)pyrene	1.20995	1.05823	1.05823	0.500	-12.53920	40.00000	Averaged	
84 Dibenzo(a,h)anthracene	1.03870	0.61596	0.61596	0.400	-40.69939	40.00000	Averaged	<-
85 Benzo(g,h,i)perylene	1.02315	0.95538	0.95538	0.500	-6.62359	40.00000	Averaged	

Report Date: 28-Feb-2014 13:14

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 28-FEB-2014 12:27
Lab File ID: 02281415.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 09:10 11:59
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	11.37241
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281415.D
Lab Smp Id: ICV 10328-98
Inj Date : 28-FEB-2014 12:27
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICV 10328-98
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 13:13 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
	1	N-Nitrosodimethylamine	74	2.589	2.589	(0.511)	195098	80.0000	71.7	
	2	Pyridine	79	2.643	2.643	(0.521)	346038	80.0000	70.9	
$	3	2-Fluorophenol (S)	112	3.723	3.723	(0.734)	312580	80.0000	76.4	
$	4	Phenol-d6 (S)	99	4.617	4.617	(0.910)	388729	80.0000	76.2	
	5	Phenol	94	4.633	4.633	(0.914)	407891	80.0000	76.7	
	6	bis(2-Chloroethyl)ether	63	4.750	4.750	(0.937)	217967	80.0000	68.9	
	7	2-Chlorophenol	128	4.841	4.841	(0.955)	324704	80.0000	74.6	
	8	1,3-Dichlorobenzene	146	5.018	5.018	(0.989)	317890	80.0000	70.0	
*	9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	117407	40.0000		
	10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	325308	80.0000	69.9	
	11	Benzyl alcohol	79	5.194	5.194	(1.024)	259792	80.0000	71.7	
	12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	302766	80.0000	68.7	
	13	2-Methylphenol	107	5.296	5.296	(1.044)	248715	80.0000	75.4	
	14	bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.053)	370230	80.0000	60.1	(M)
	15	3 & 4-Methylphenol	107	5.462	5.462	(1.077)	363492	80.0000	84.6	
	17	N-Nitroso-di-n-propylamine	70	5.488	5.488	(1.082)	197296	80.0000	65.4	
	18	Hexachloroethane	117	5.654	5.654	(1.115)	127367	80.0000	70.4	
$	19	Nitrobenzene-d5 (S)	82	5.681	5.681	(0.868)	261012	60.0000	56.9	
	20	Nitrobenzene	77	5.708	5.708	(0.872)	315995	80.0000	71.1	
	21	Isophorone	82	5.975	5.975	(0.913)	573523	80.0000	73.0	
	23	2-Nitrophenol	139	6.077	6.077	(0.929)	172904	80.0000	76.8	
	22	2,4-Dimethylphenol	107	6.088	6.088	(0.930)	309699	80.0000	75.3	

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	
	24	Benzoic acid	105	6.189	6.189	(0.946)	247923	80.0000	83.4	(MH)
	25	bis(2-Chloroethoxy)methane	93	6.211	6.211	(0.949)	351356	80.0000	72.3	
	26	2,4-Dichlorophenol	162	6.355	6.355	(0.971)	239944	80.0000	75.1	
	27	1,2,4-Trichlorobenzene	180	6.467	6.467	(0.989)	238924	80.0000	70.1	
*	28	Naphthalene-d8	136	6.542	6.542	(1.000)	461858	40.0000		(Q)
	29	Naphthalene	128	6.569	6.569	(1.004)	870813	80.0000	70.1	
	30	4-Chloroaniline	127	6.606	6.606	(1.010)	332172	80.0000	71.0	
	31	Hexachlorobutadiene	225	6.708	6.708	(1.025)	117939	80.0000	68.7	
	32	4-Chloro-3-methylphenol	107	7.168	7.168	(1.096)	265291	80.0000	76.7	
	33	2-Methylnaphthalene	142	7.403	7.403	(1.132)	576821	80.0000	71.1	
	34	1-Methylnaphthalene	142	7.526	7.526	(1.150)	548723	80.0000	72.5	
	35	Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	141009	80.0000	70.7	
	36	2,4,6-Trichlorophenol	196	7.735	7.735	(0.889)	170713	80.0000	79.0	
	37	2,4,5-Trichlorophenol	196	7.778	7.778	(0.894)	186536	80.0000	80.2	
$	38	2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	482877	60.0000	57.0	
	39	2-Chloronaphthalene	162	8.008	8.008	(0.921)	500164	80.0000	69.6	
	40	2-Nitroaniline	65	8.109	8.109	(0.932)	177759	80.0000	73.8	
	41	Dimethylphthalate	163	8.329	8.329	(0.958)	569191	80.0000	70.6	
	42	2,6-Dinitrotoluene	165	8.403	8.403	(0.966)	139099	80.0000	71.4	
	43	Acenaphthylene	152	8.521	8.521	(0.980)	833933	80.0000	69.7	(M)
	44	3-Nitroaniline	138	8.617	8.617	(0.991)	133010	80.0000	66.4	
*	45	Acenaphthene-d10	164	8.698	8.698	(1.000)	242372	40.0000		
	46	Acenaphthene	154	8.740	8.740	(1.005)	519739	80.0000	69.3	
	47	2,4-Dinitrophenol	184	8.740	8.740	(1.005)	85502	80.0000	70.3	
	48	4-Nitrophenol	65	8.794	8.794	(1.011)	143008	80.0000	78.6	
	49	2,4-Dinitrotoluene	165	8.906	8.906	(1.024)	180886	80.0000	70.3	
	50	Dibenzofuran	168	8.949	8.949	(1.029)	722845	80.0000	71.3	
	51	Diethylphthalate	149	9.206	9.206	(1.058)	590752	80.0000	70.0	
	52	4-Chlorophenylphenyl ether	204	9.366	9.366	(1.077)	265551	80.0000	71.8	
	54	4-Nitroaniline	138	9.382	9.382	(1.079)	168458	80.0000	73.4	
	53	Fluorene	166	9.377	9.377	(1.078)	592007	80.0000	69.2	
	55	4,6-Dinitro-2-methylphenol	198	9.414	9.414	(0.893)	109569	80.0000	73.0	
	56	N-Nitrosodiphenylamine	169	9.505	9.505	(0.901)	428299	80.0000	59.7	
	57	Azobenzene	77	9.564	9.564	(1.100)	642927	80.0000	71.6	
	58	1,2-Diphenylhydrazine	77	9.564	9.564	(1.100)	642927	80.0000	71.6	
$	59	2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.112)	91314	80.0000	80.0	
	60	4-Bromophenylphenyl ether	248	9.976	9.976	(0.946)	143455	80.0000	70.6	
	61	Hexachlorobenzene	284	10.067	10.067	(0.954)	158817	80.0000	71.1	
	62	Pentachlorophenol	266	10.297	10.297	(0.976)	127035	80.0000	93.8	
*	63	Phenanthrene-d10	188	10.548	10.548	(1.000)	402047	40.0000		
	64	Phenanthrene	178	10.580	10.580	(1.003)	812640	80.0000	71.0	
	65	Anthracene	178	10.645	10.645	(1.009)	824642	80.0000	70.6	
	66	Carbazole	167	10.832	10.832	(1.027)	821542	80.0000	72.6	
	67	di-n-Butylphthalate	149	11.238	11.238	(1.065)	1046970	80.0000	75.1	
	68	Fluoranthene	202	12.067	12.067	(1.144)	795998	80.0000	69.6	
	69	Benzidine	184	12.201	12.201	(0.881)	127917	80.0000	20.9	
	70	Pyrene	202	12.356	12.356	(0.892)	861033	80.0000	71.3	
$	71	Terphenyl-d14 (S)	244	12.522	12.522	(0.904)	499335	60.0000	58.6	
	72	Butylbenzylphthalate	149	13.110	13.110	(0.947)	442478	80.0000	75.3	
	73	bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	631669	80.0000	74.9	
	74	3,3'-Dichlorobenzidine	252	13.779	13.779	(0.995)	257937	80.0000	79.0	
	75	Benzo(a)anthracene	228	13.838	13.838	(0.999)	752028	80.0000	67.3	
*	76	Chrysene-d12	240	13.848	13.848	(1.000)	392047	40.0000		(Q)
	77	Chrysene	228	13.880	13.880	(1.002)	458760	80.0000	44.2	

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281415.D
Report Date: 28-Feb-2014 13:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.581	14.581	(1.053)	1077196	80.0000	76.7
79	Benzo(b)fluoranthene	252	15.196	15.196	(0.964)	760469	80.0000	72.2
80	Benzo(k)fluoranthene	252	15.234	15.234	(0.966)	843178	80.0000	74.6
81	Benzo(a)pyrene	252	15.683	15.683	(0.995)	713093	80.0000	70.5
* 82	Perylene-d12	264	15.763	15.763	(1.000)	386366	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.737	17.737	(1.125)	817727	80.0000	70.0
84	Dibenzo(a,h)anthracene	278	17.748	17.748	(1.126)	475969	80.0000	47.4
85	Benzo(g,h,i)perylene	276	18.336	18.336	(1.163)	738251	80.0000	74.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 28-Feb-2014 13:14

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281415.D
Lab Smp Id: ICV 10328-98
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07

Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

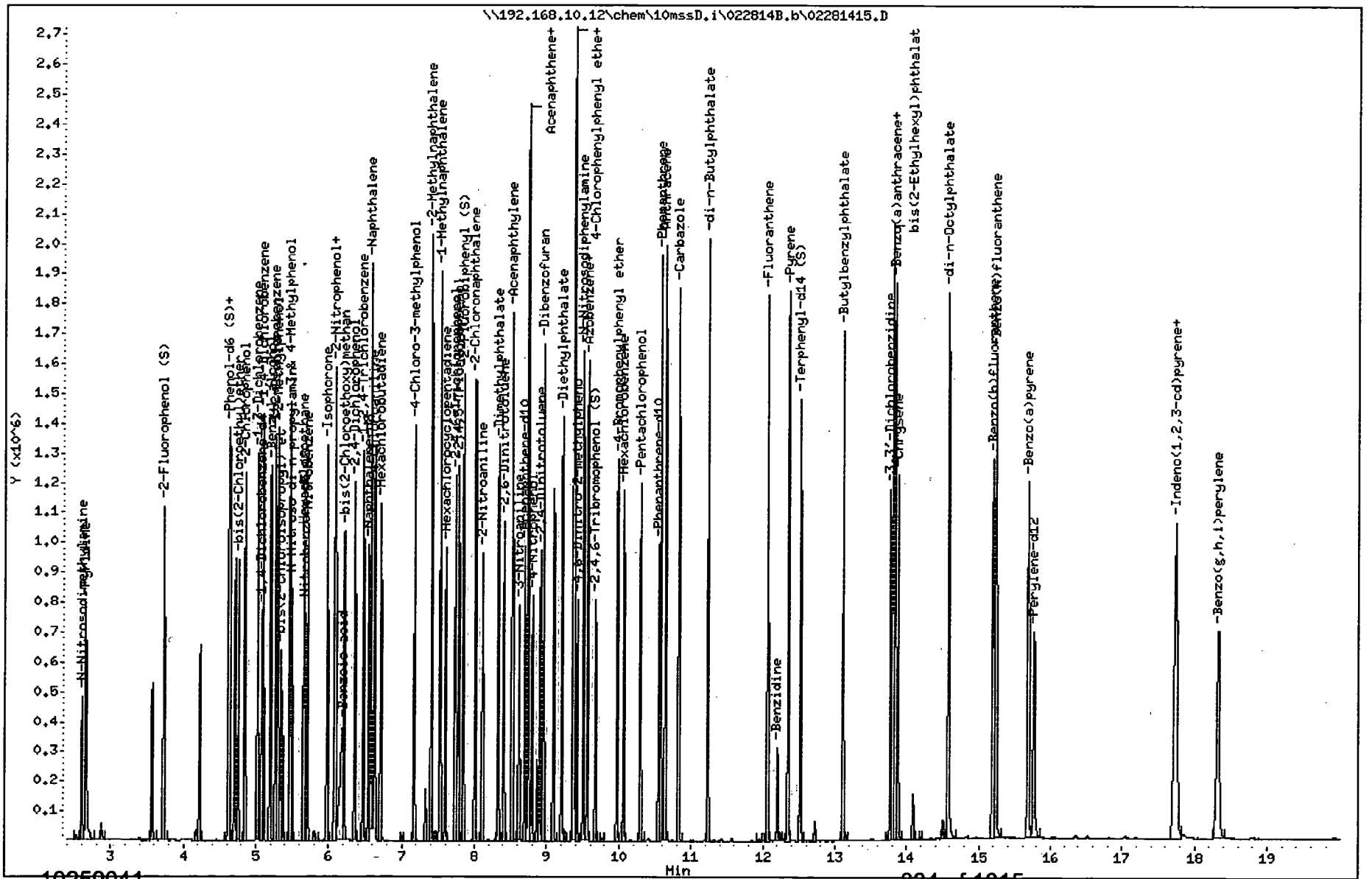
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	117407	-0.64
28 Naphthalene-d8	466266	233133	932532	461858	-0.95
45 Acenaphthene-d10	245325	122663	490650	242372	-1.20
63 Phenanthrene-d10	405966	202983	811932	402047	-0.97
76 Chrysene-d12	427978	213989	855956	392047	-8.40
82 Perylene-d12	418836	209418	837672	386366	-7.75

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	-0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	-0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	-0.00
76 Chrysene-d12	13.85	13.35	14.35	13.85	-0.00
82 Perylene-d12	15.76	15.26	16.26	15.76	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

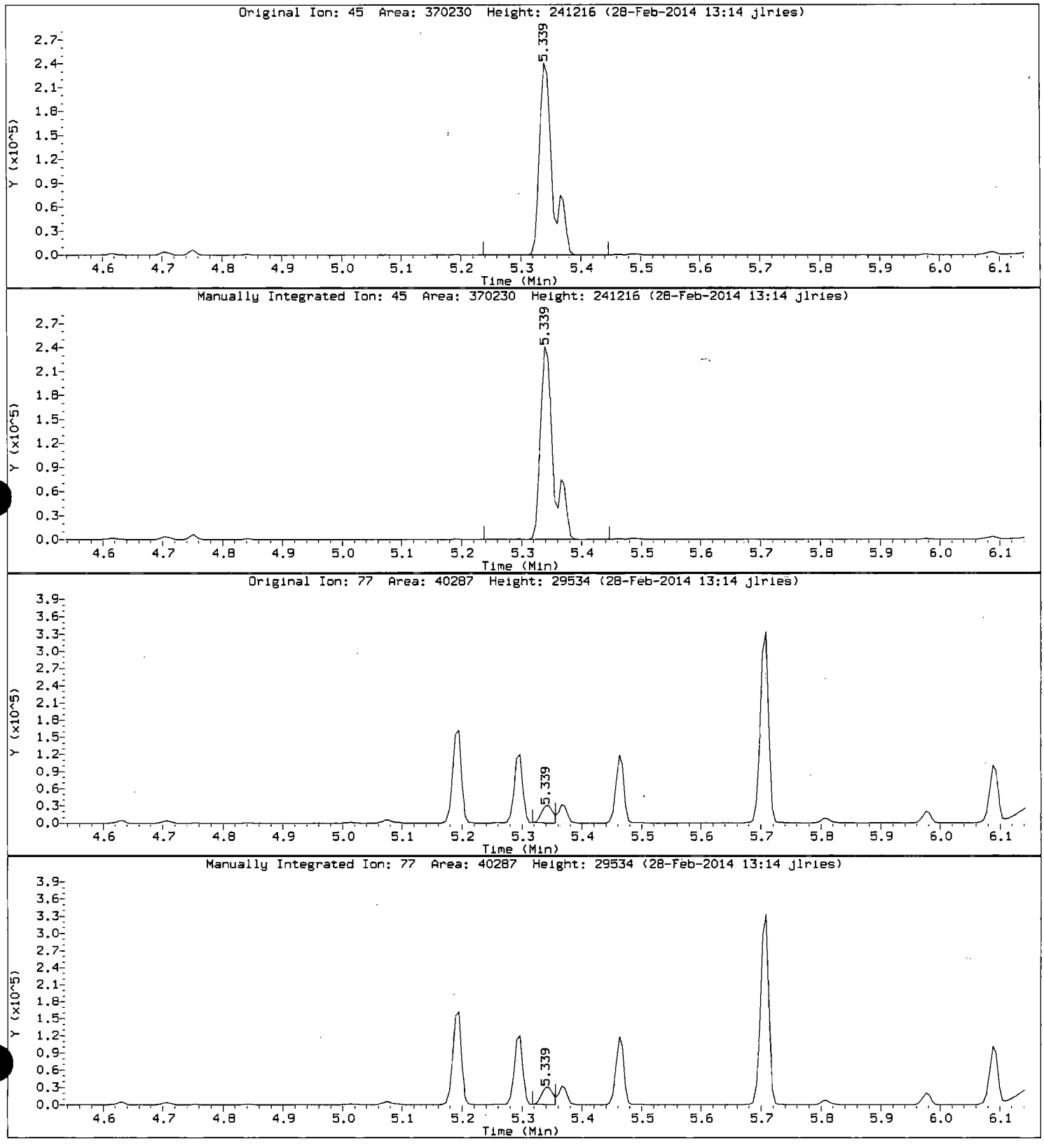
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281415.D
Date : 28-FEB-2014 12:27
Client ID:
Sample Info: ICV 10328-98

Instrument: 10mssD.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

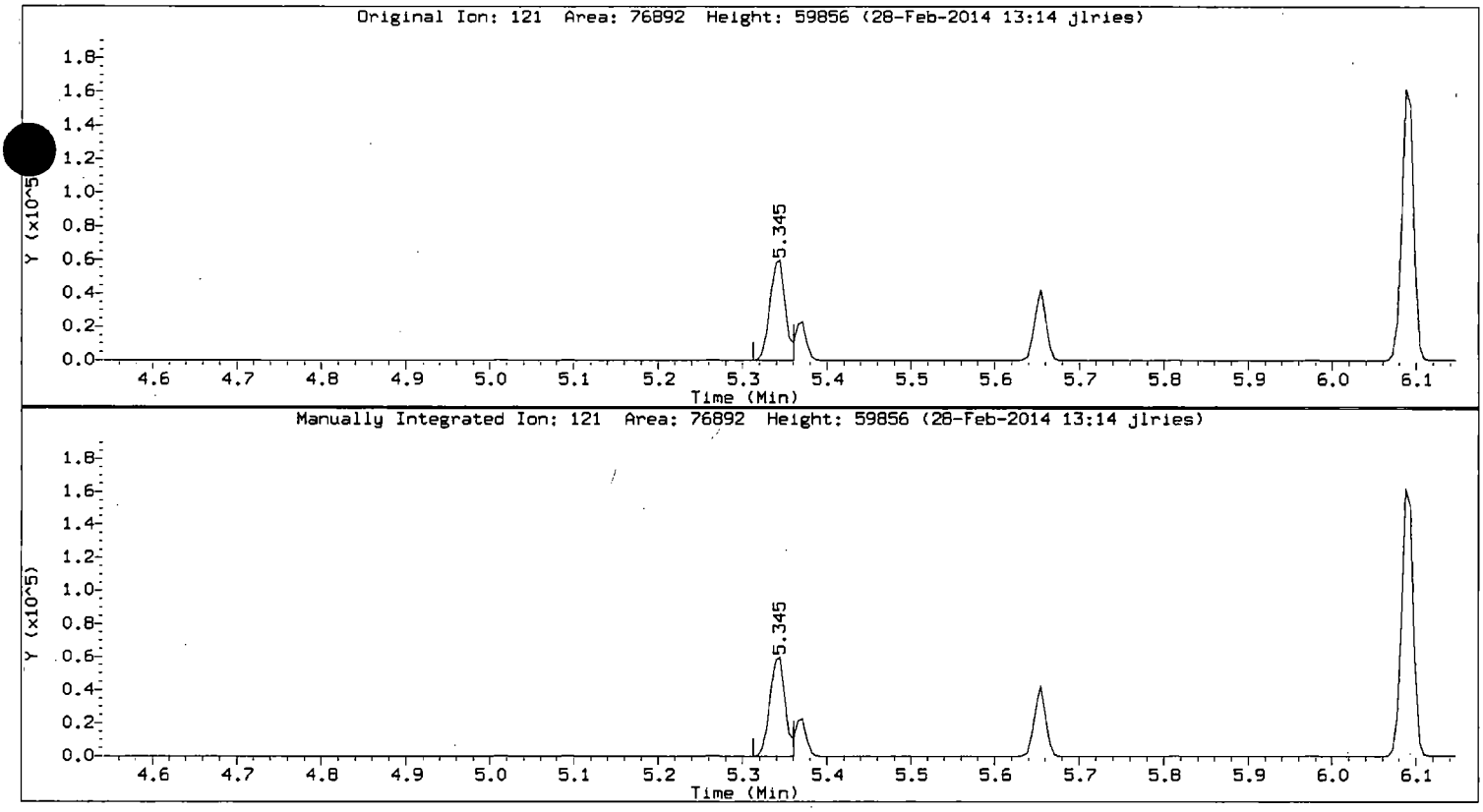


Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281415.D
Injection Date: 28-FEB-2014 12:27
Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

Compound: bis(2-Chloroisopropyl) ether
CAS Number: 108-60-1

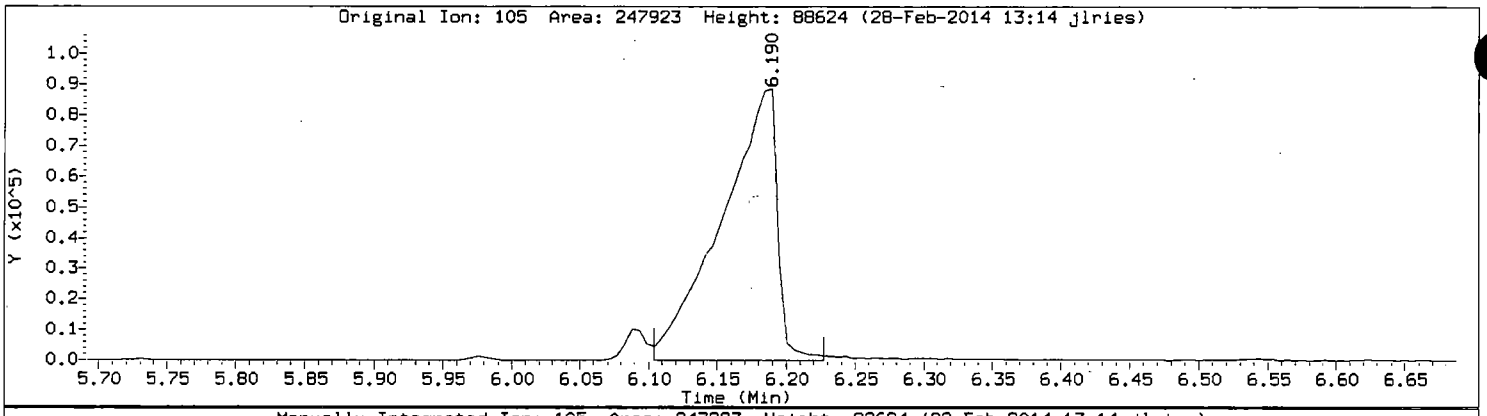


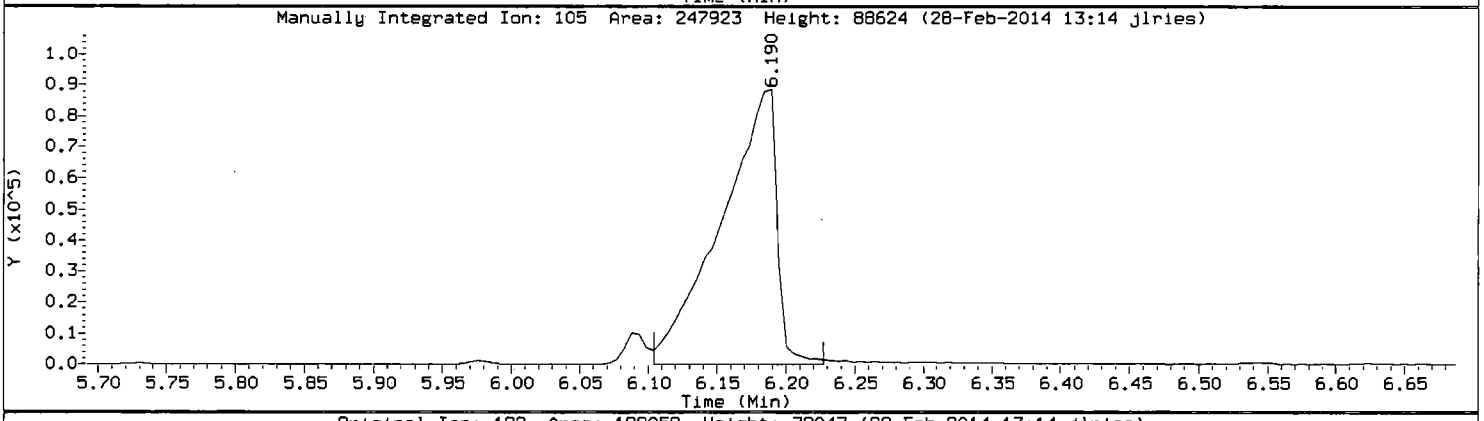
Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

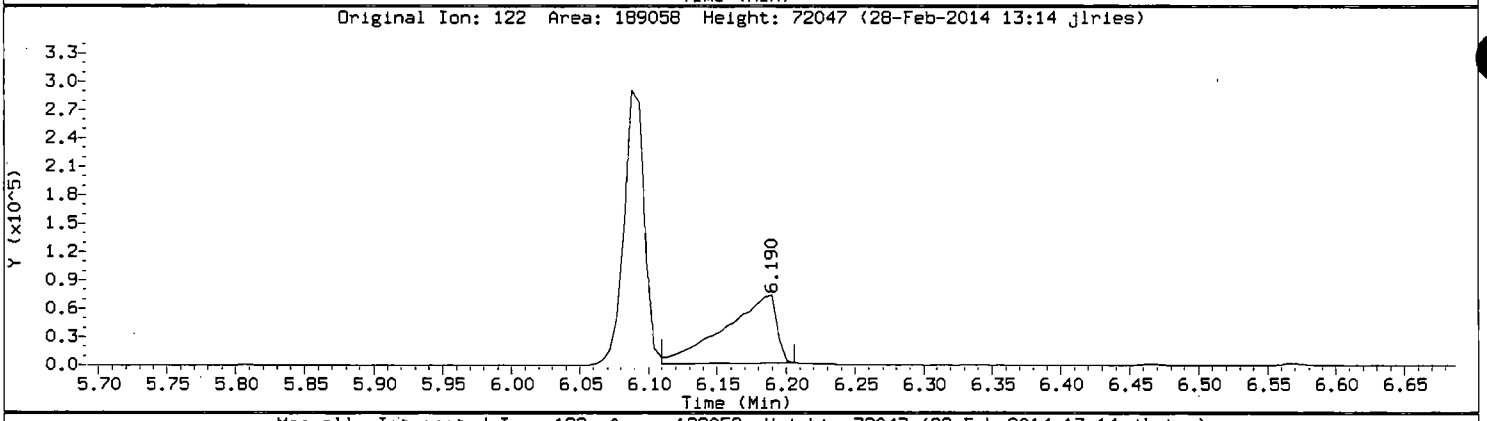


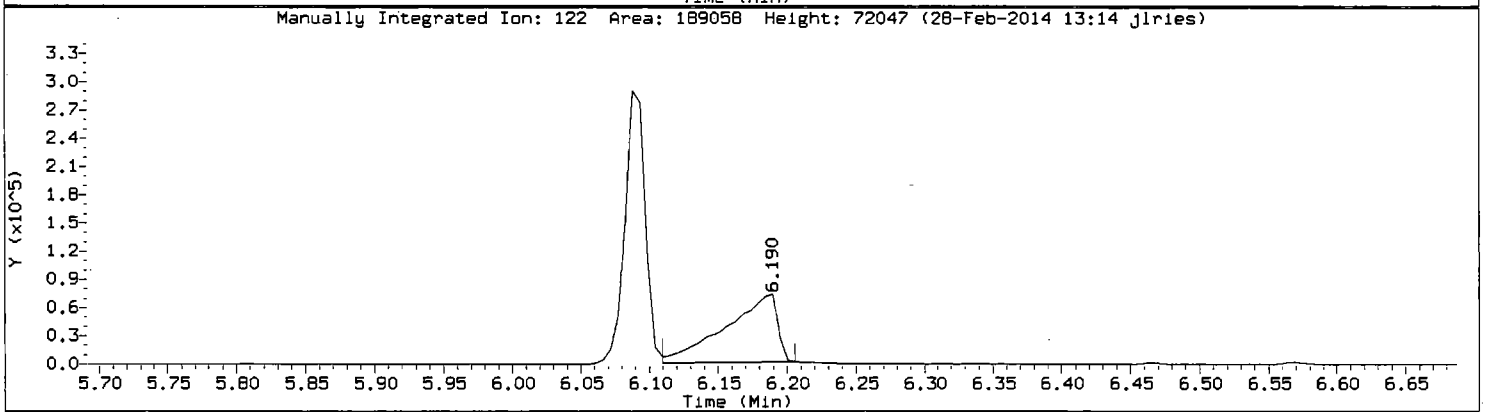
Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

Compound: Benzoic acid
CAS Number: 65-85-0

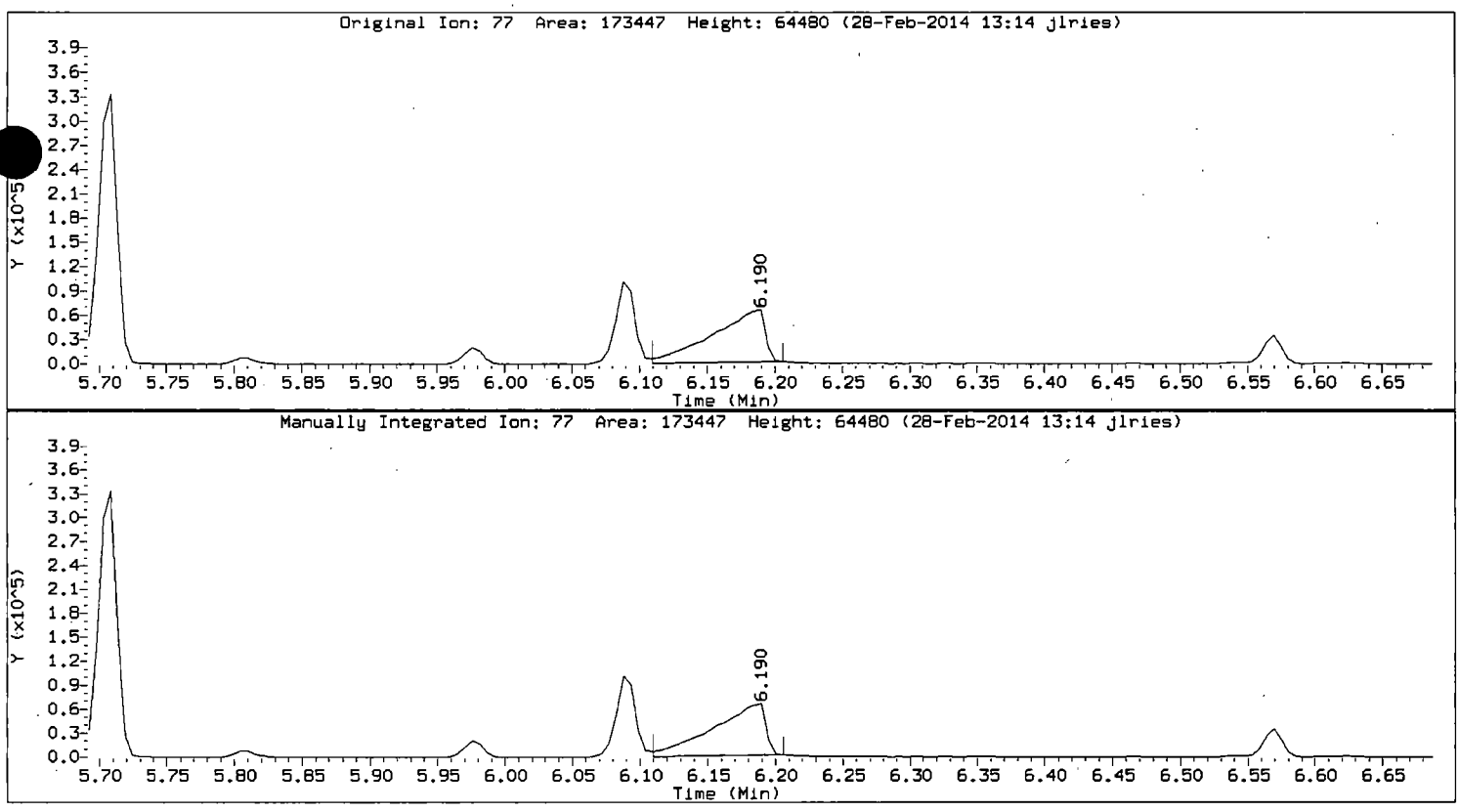






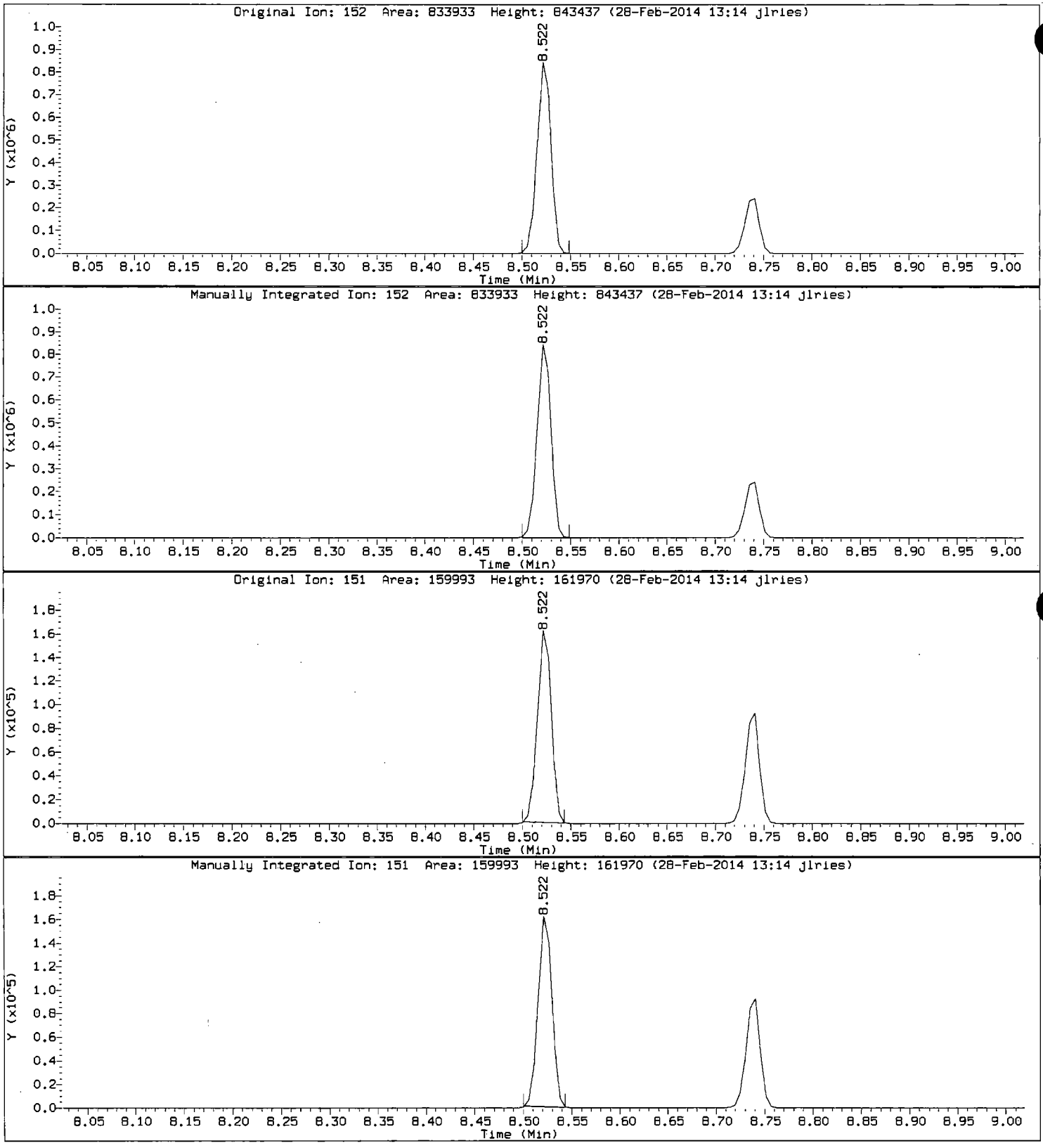


Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

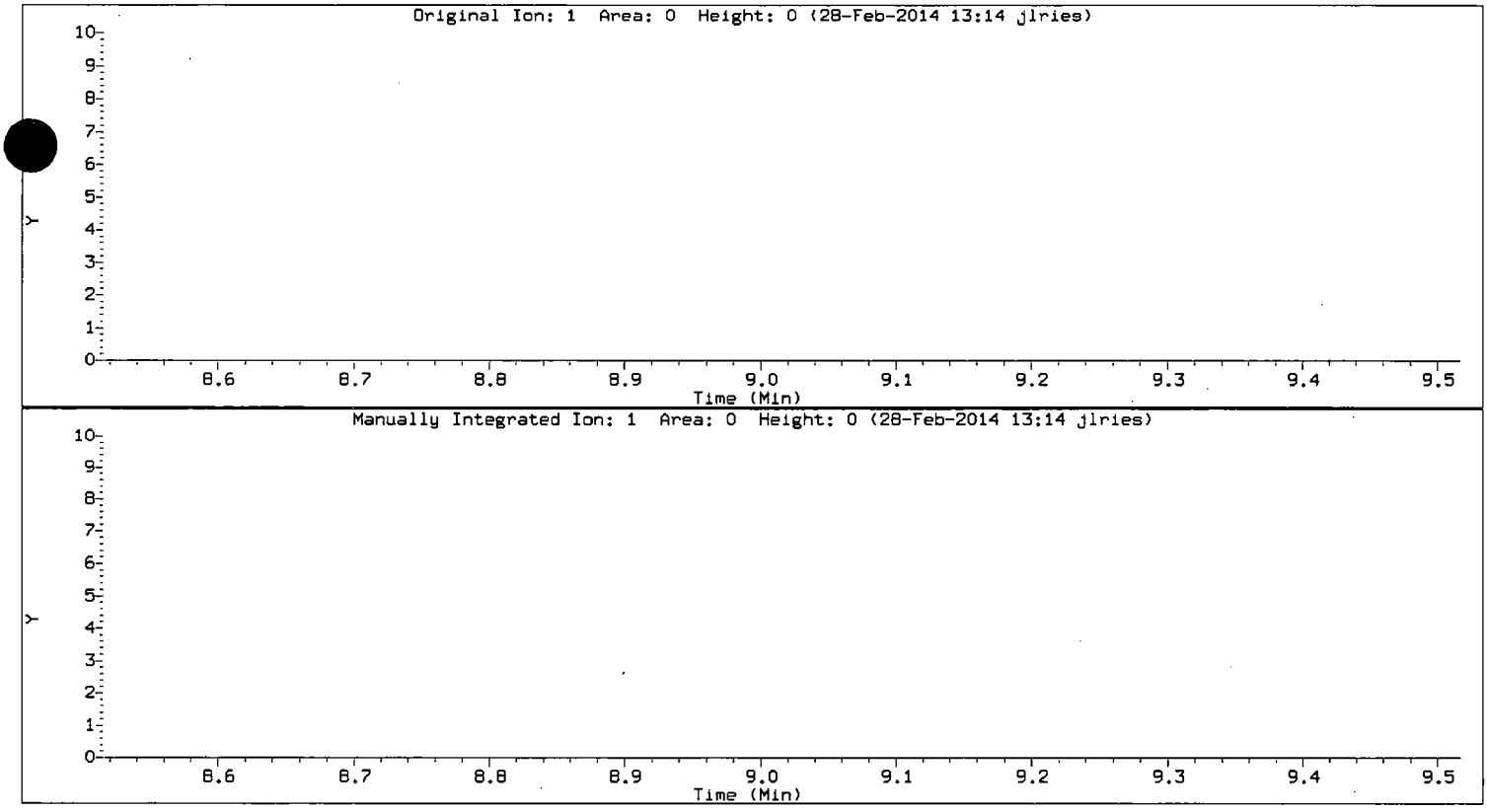


Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

Compound: Acenaphthylene
CAS Number: 208-96-8



Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98



Report Date: 28-Feb-2014 13:29

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 28-FEB-2014 12:55
Lab File ID: 02281416.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 09:10 11:59
Lab Sample ID: ICV2 10328-47 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 Hexachlorocyclopentadiene	0.32910	0.32297	0.32297	0.050	-1.86326	40.00000	Averaged
56 N-Nitrosodiphenylamine	0.71324	0.70058	0.70058	0.010	-1.77503	20.00000	Averaged
77 Chrysene	1.05828	1.12380	1.12380	0.700	6.19030	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.03870	1.08970	1.08970	0.400	4.91029	40.00000	Averaged

Average %D / Drift Results.
Calculated Average %D/Drift = 3.68472
Maximun Average %D/Drift = 40.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281416.D
Lab Smp Id: ICV2 10328-47
Inj Date : 28-FEB-2014 12:55
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICV2 10328-47
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 13:29 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ChrysDIPDIB.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
*	9 1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	109209	40.0000		
*	28 Naphthalene-d8	136	6.537	6.537	(1.000)	429195	40.0000		(Q)
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.874)	143831	80.0000	78.5	
*	45 Acenaphthene-d10	164	8.692	8.692	(1.000)	222670	40.0000		
	56 N-Nitrosodiphenylamine	169	9.505	9.505	(0.901)	543016	80.0000	78.6	
*	63 Phenanthrene-d10	188	10.548	10.548	(1.000)	387545	40.0000		
*	76 Chrysene-d12	240	13.843	13.843	(1.000)	344625	40.0000		(Q)
	77 Chrysene	228	13.881	13.881	(1.003)	774576	80.0000	85.0	
*	82 Perylene-d12	264	15.763	15.763	(1.000)	356532	40.0000		
	84 Dibenzo(a,h)anthracene	278	17.753	17.753	(1.126)	777029	80.0000	83.9	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Report Date: 28-Feb-2014 13:29

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281416.D
Lab Smp Id: ICV2 10328-47
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 12:27
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	109209	-7.58
28 Naphthalene-d8	466266	233133	932532	429195	-7.95
45 Acenaphthene-d10	245325	122663	490650	222670	-9.23
63 Phenanthrene-d10	405966	202983	811932	387545	-4.54
76 Chrysene-d12	427978	213989	855956	344625	-19.48
82 Perylene-d12	418836	209418	837672	356532	-14.88

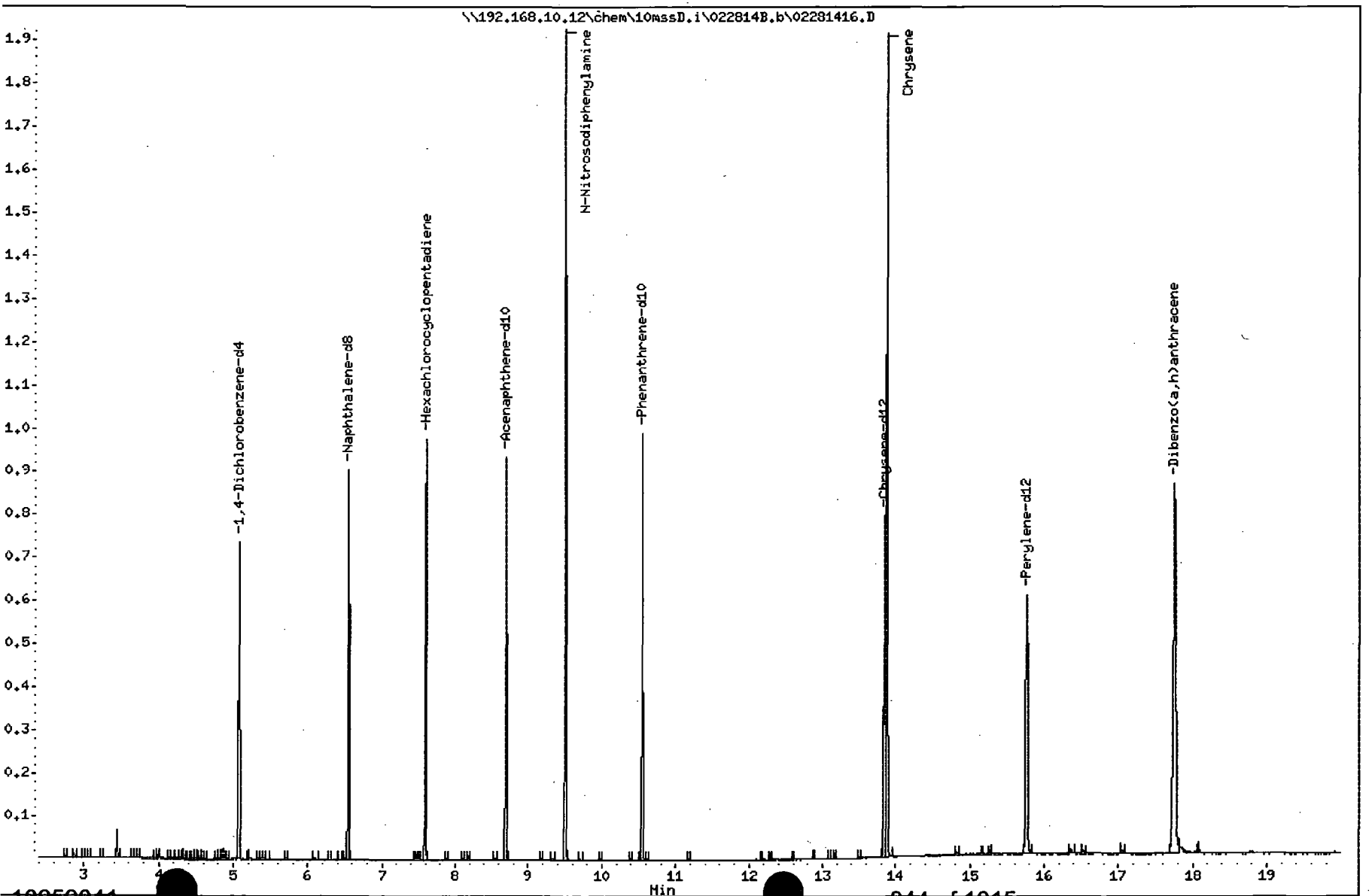
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	-0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.08
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.06
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	-0.00
76 Chrysene-d12	13.85	13.35	14.35	13.84	-0.04
82 Perylene-d12	15.76	15.26	16.26	15.76	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

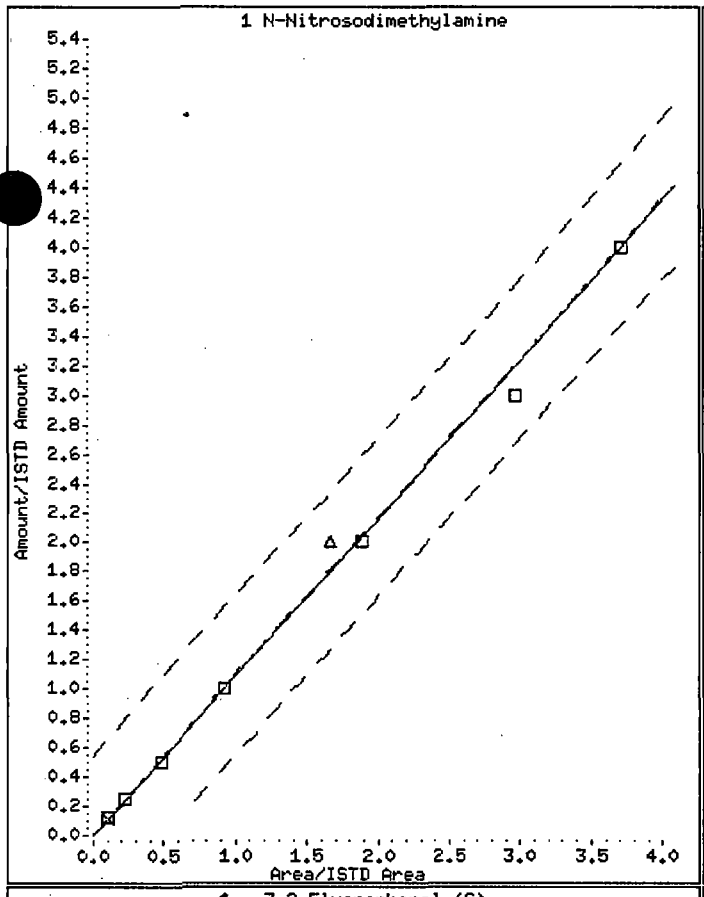
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281416.D
Date : 28-FEB-2014 12:55
Client ID:
Sample Info: ICV2 10328-47

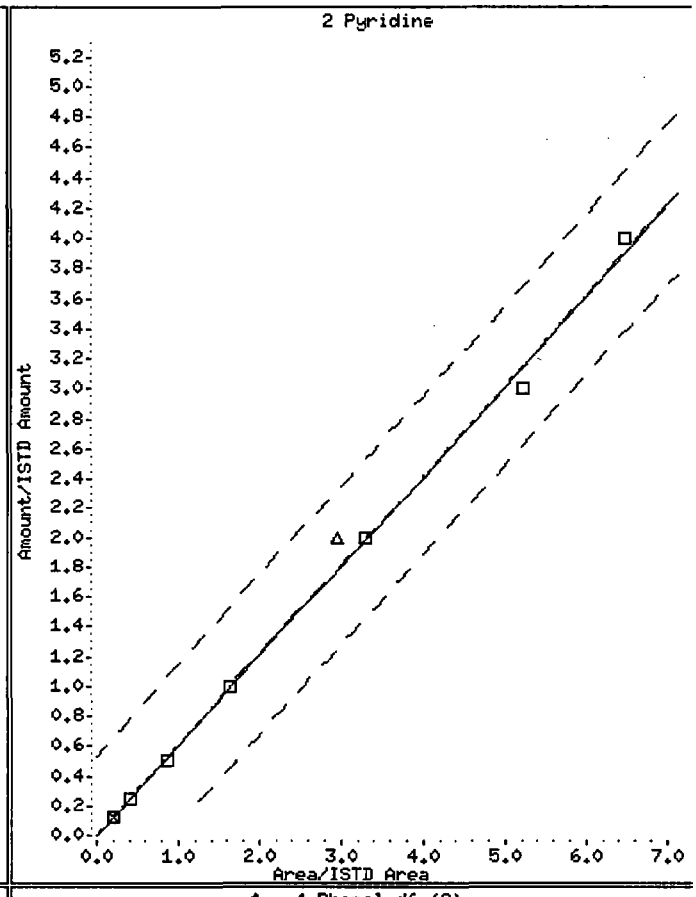
Instrument: 10mssD.i

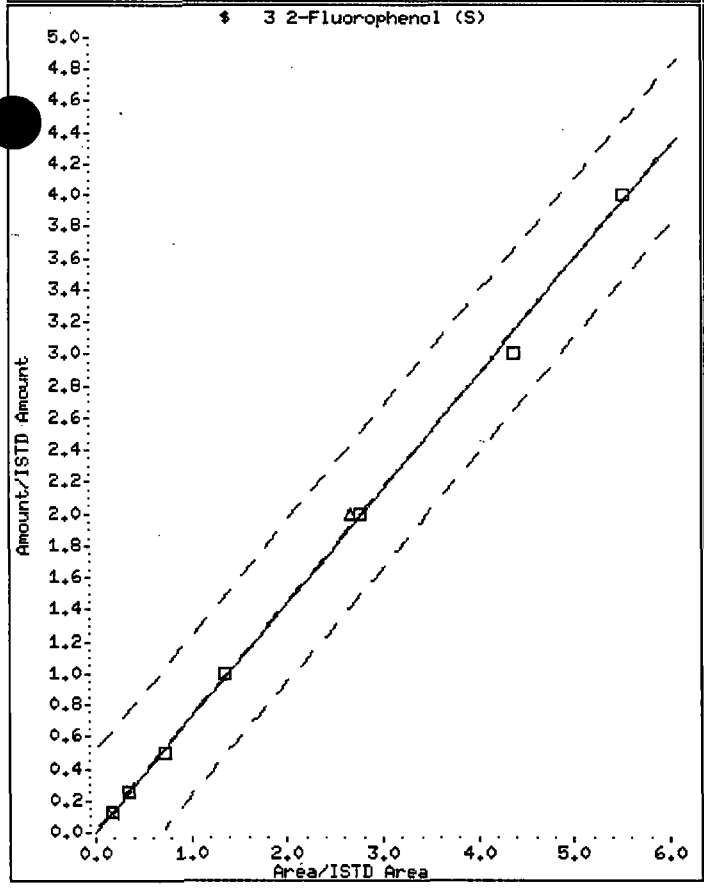
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

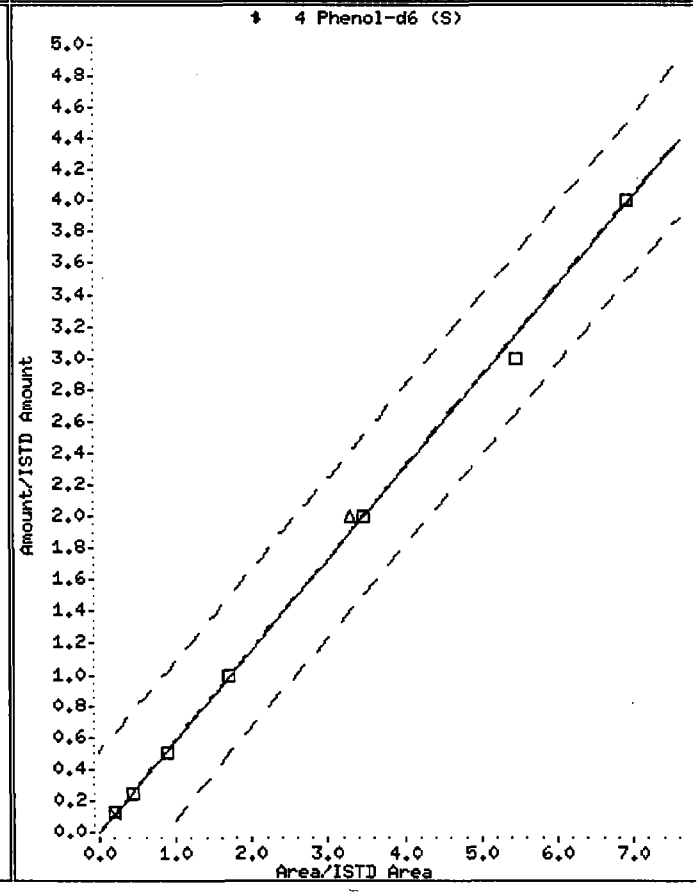


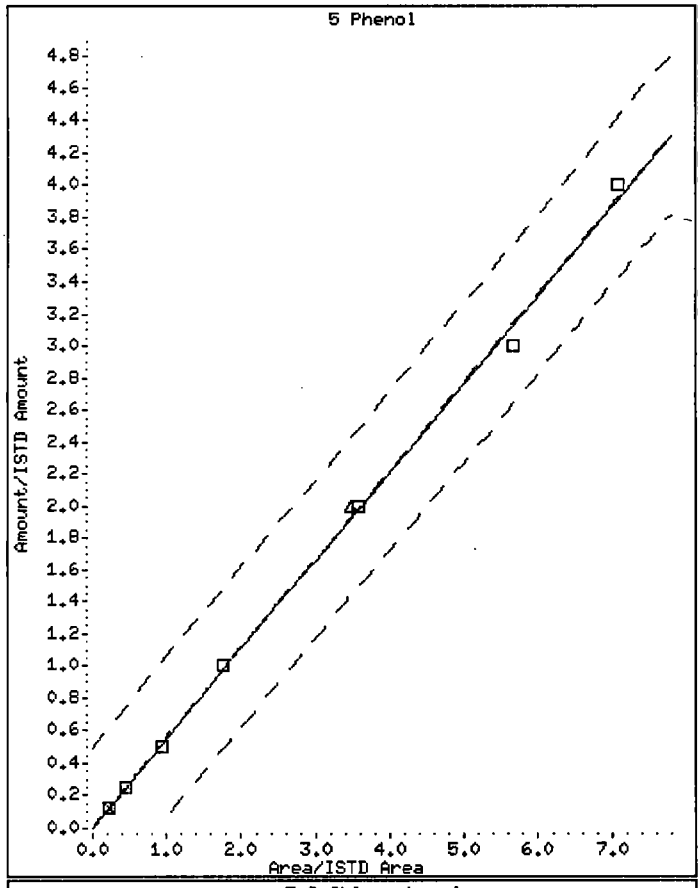
Instrument: 10mssD.i
Lab Sample ID: ICV2 10328-47
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

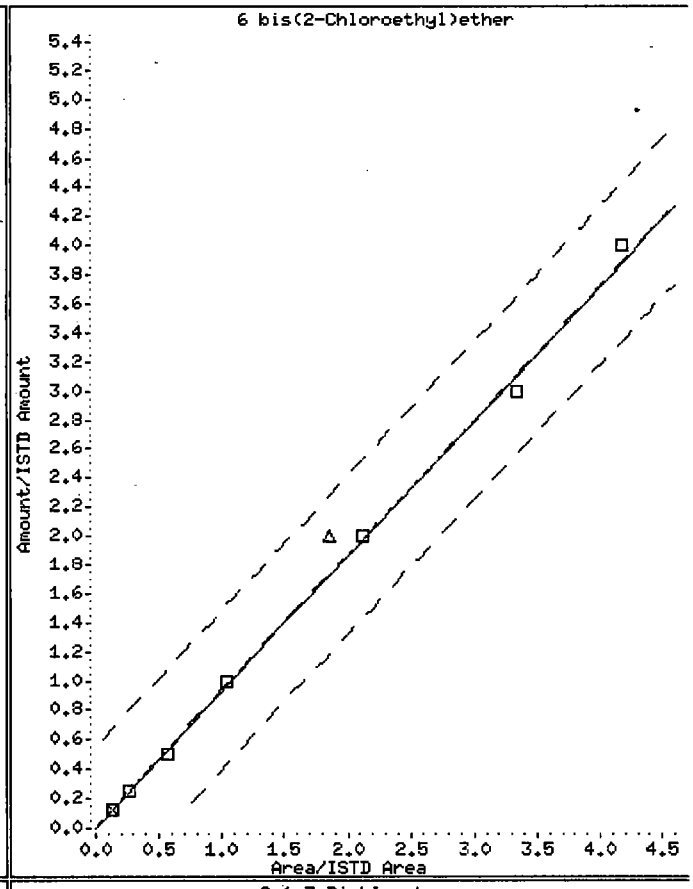

1 N-Nitrosodimethylamine
Amount/ISTD Amount
Area/ISTD Area

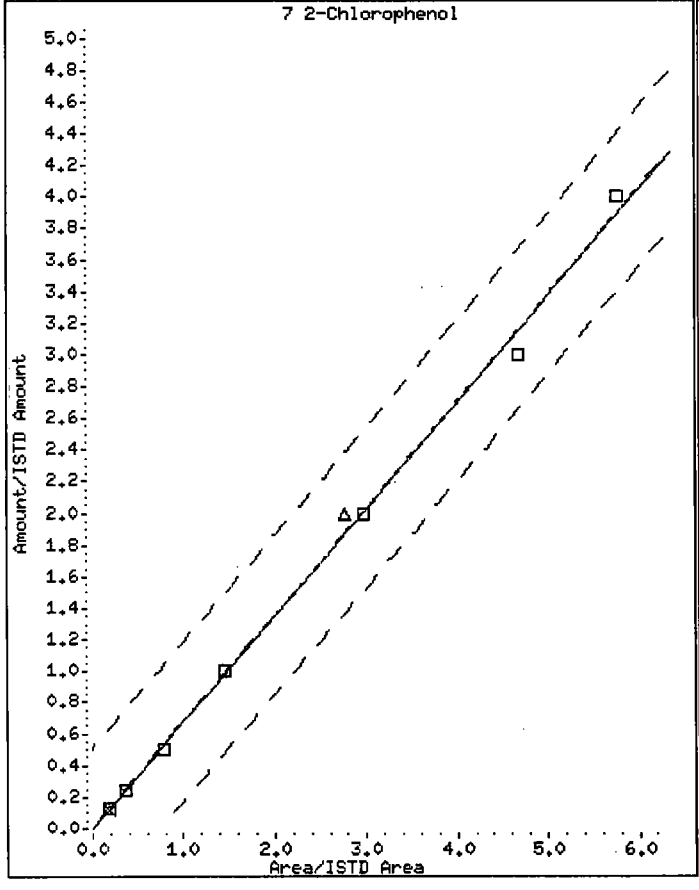

2 Pyridine
Amount/ISTD Amount
Area/ISTD Area

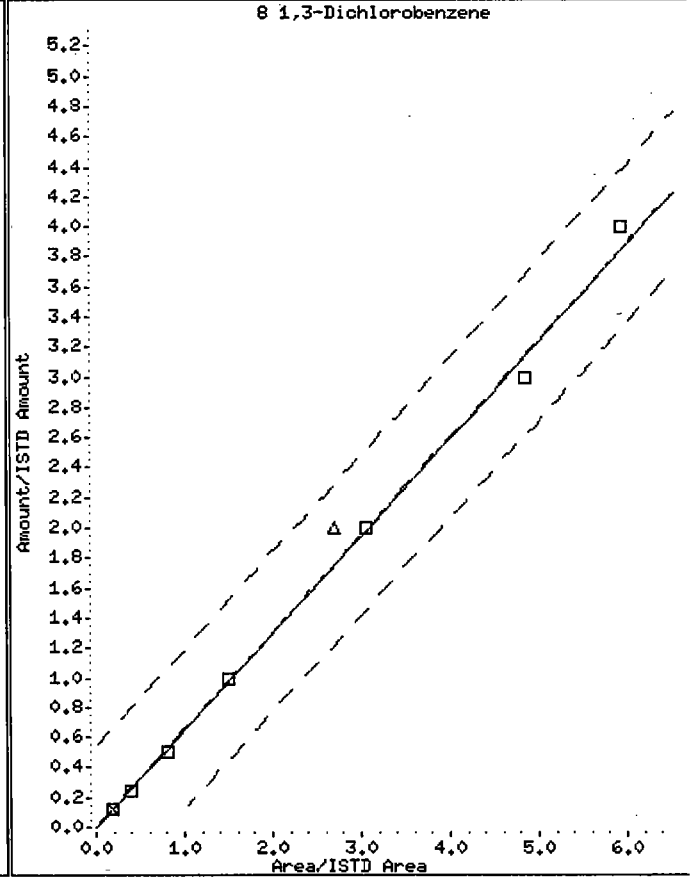

3 2-Fluorophenol (S)
Amount/ISTD Amount
Area/ISTD Area

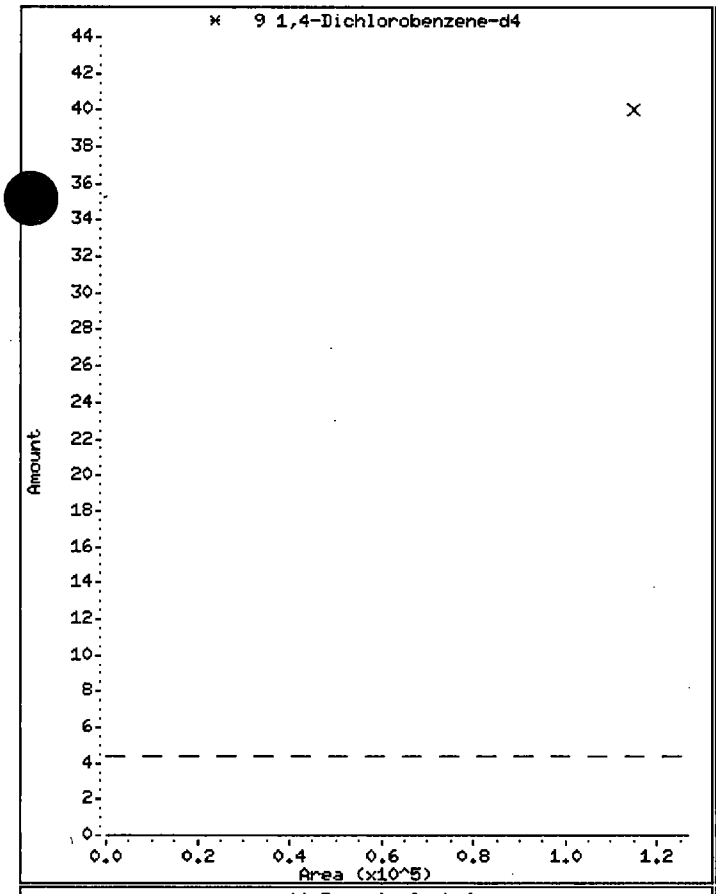

4 Phenol-d6 (S)
Amount/ISTD Amount
Area/ISTD Area

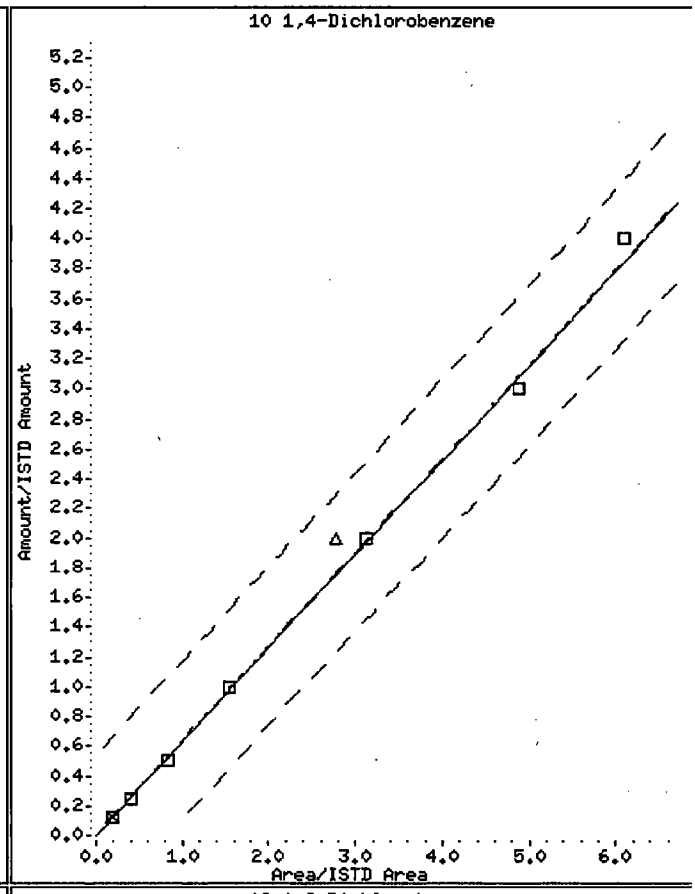

5 Phenol
Amount/ISTD Amount
Area/ISTD Area

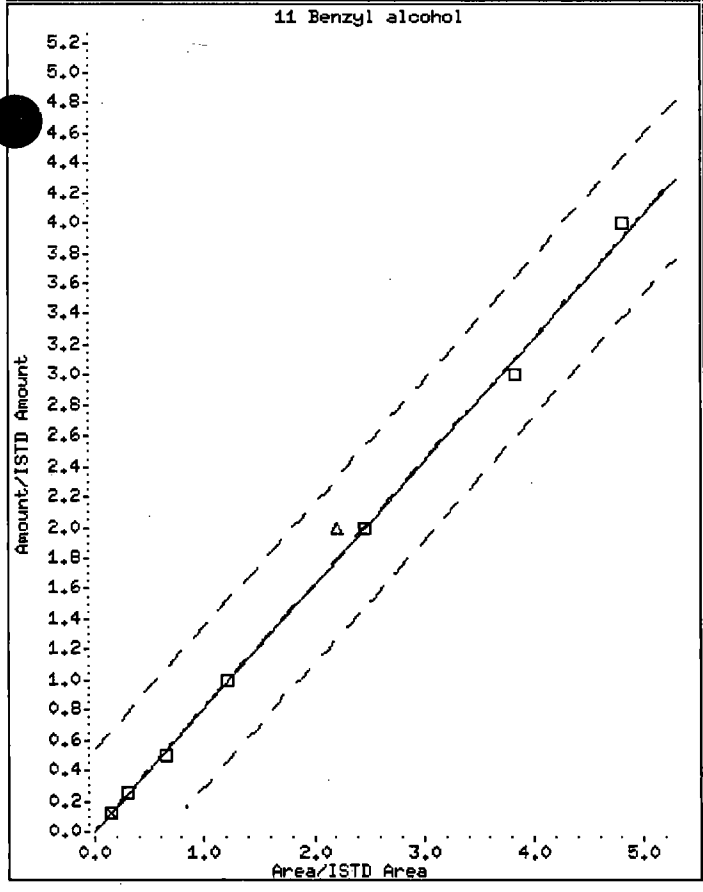

6 bis(2-Chloroethyl)ether
Amount/ISTD Amount
Area/ISTD Area

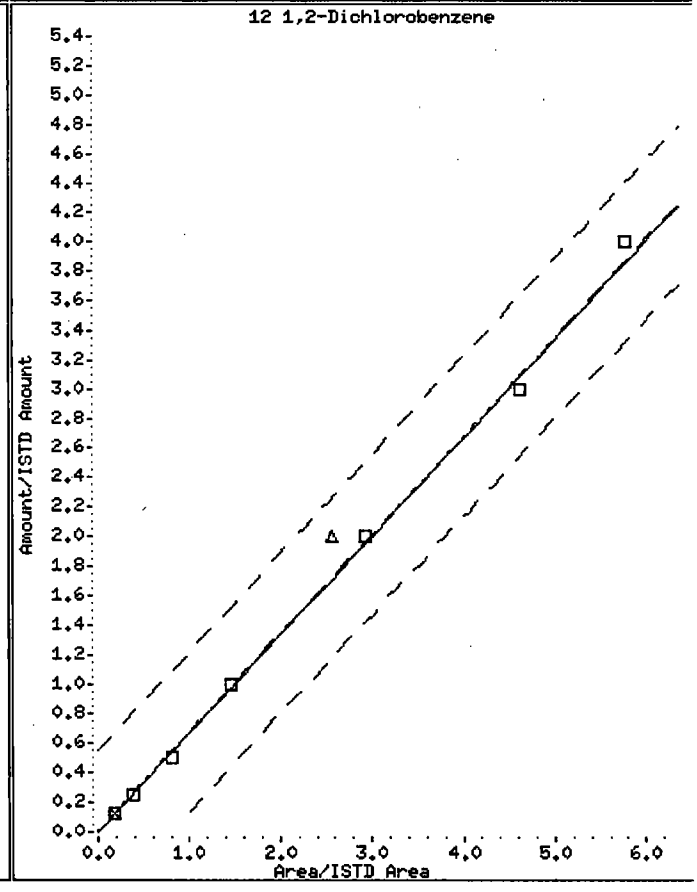

7 2-Chlorophenol
Amount/ISTD Amount
Area/ISTD Area

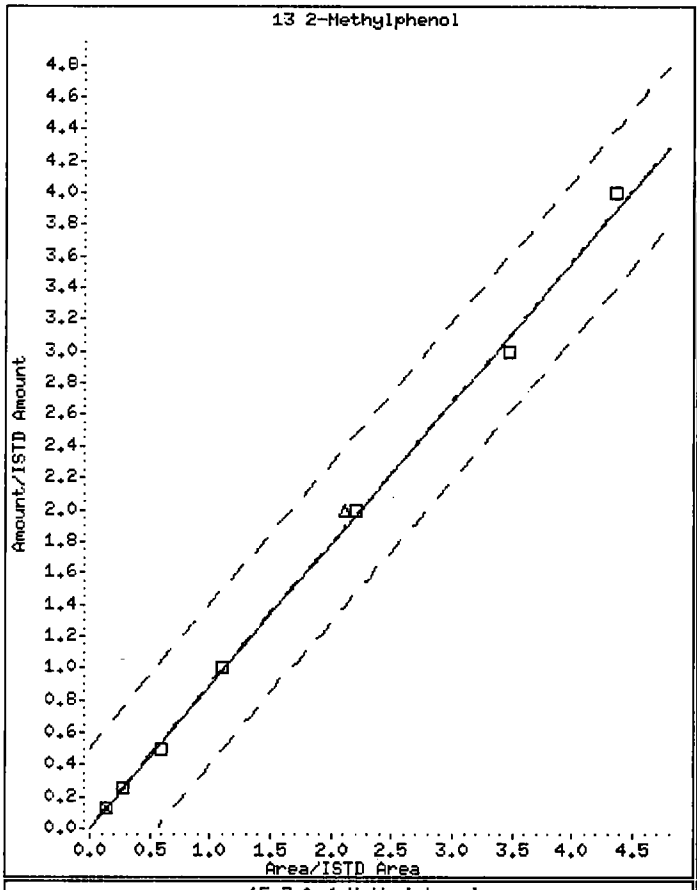

8 1,3-Dichlorobenzene
Amount/ISTD Amount
Area/ISTD Area

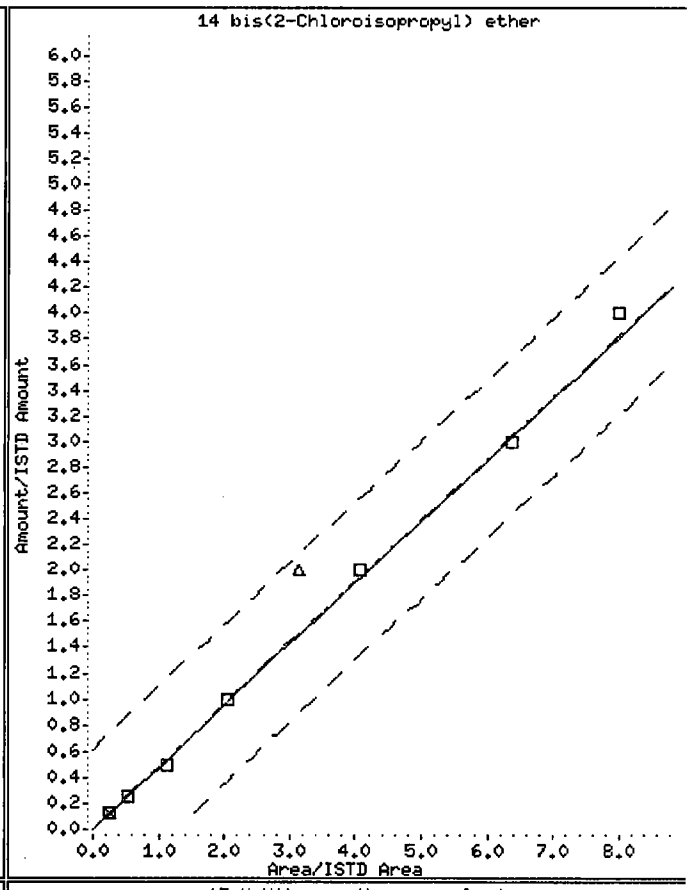

9 1,4-Dichlorobenzene-d4
Amount
Area (x10^5)

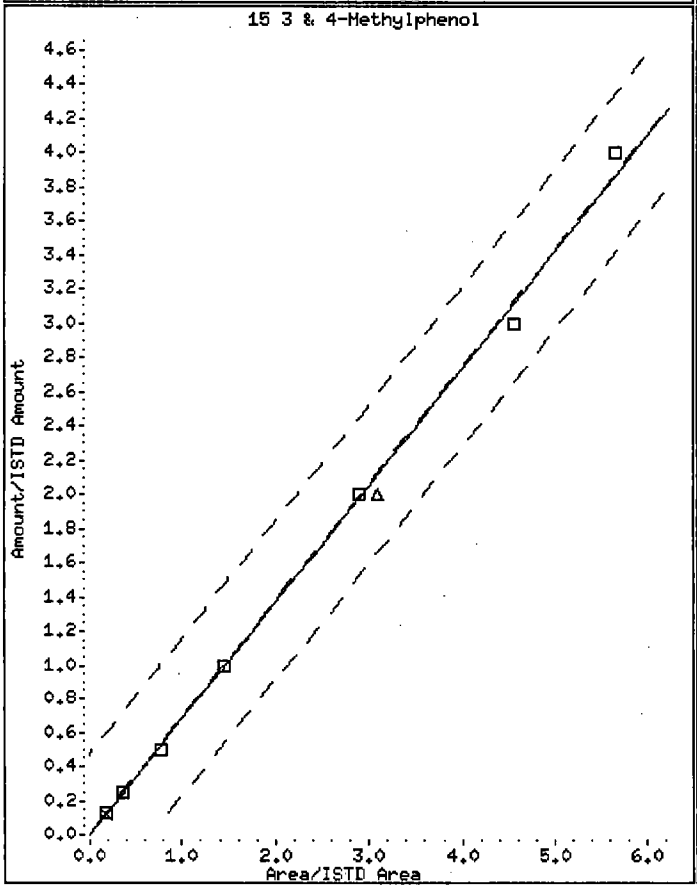

10 1,4-Dichlorobenzene
Amount/ISTD Amount
Area/ISTD Area

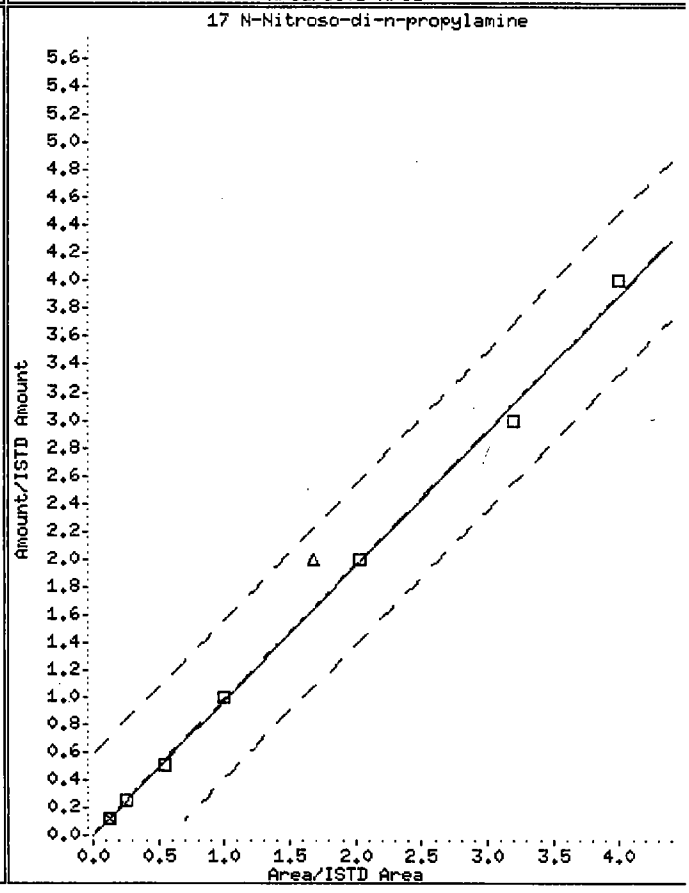

11 Benzyl alcohol
Amount/ISTD Amount
Area/ISTD Area

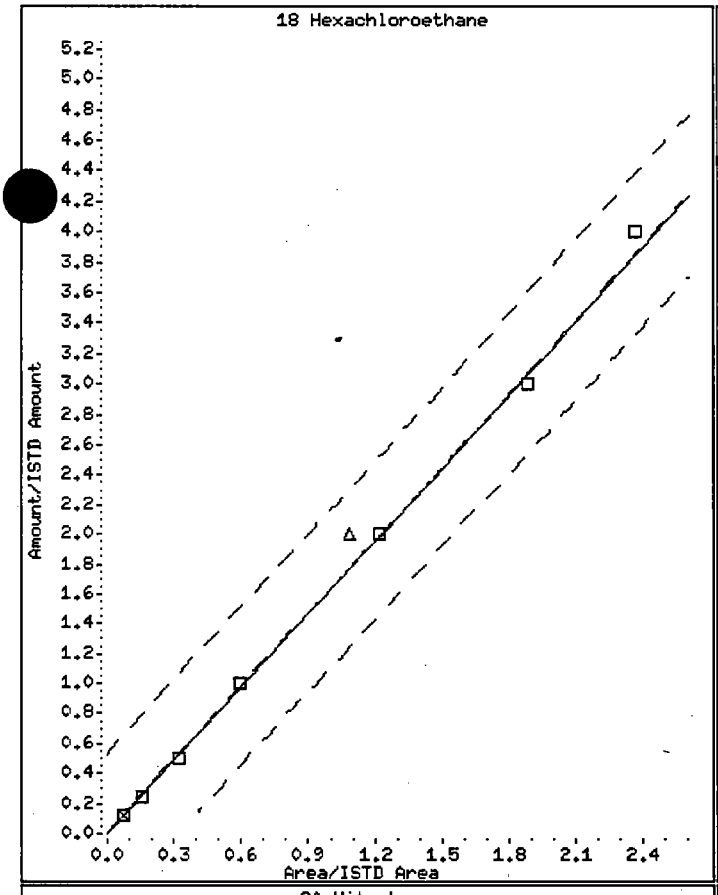

12 1,2-Dichlorobenzene
Amount/ISTD Amount
Area/ISTD Area

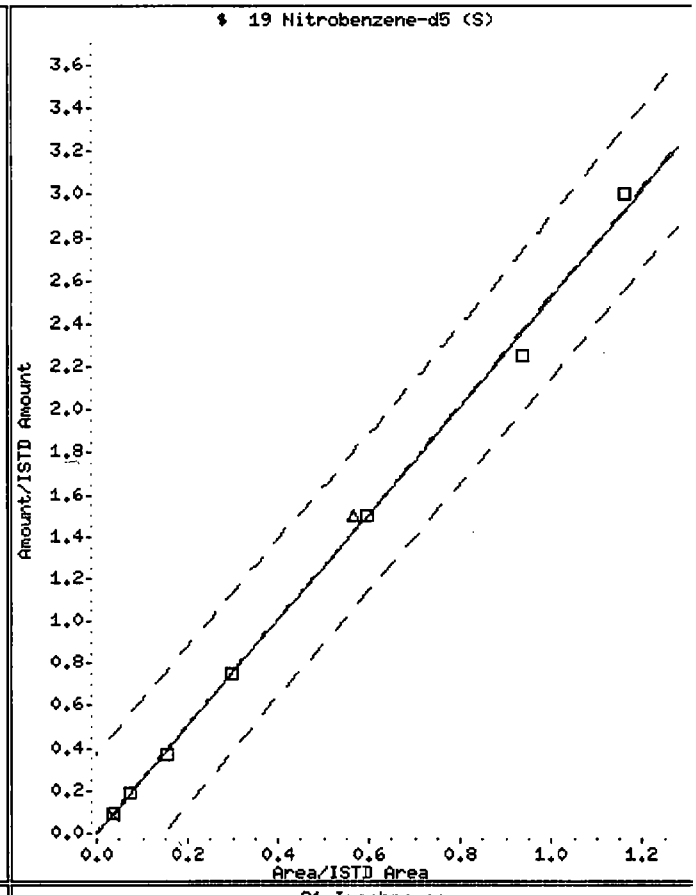

13 2-Methylphenol
Amount/ISTD Amount
Area/ISTD Area

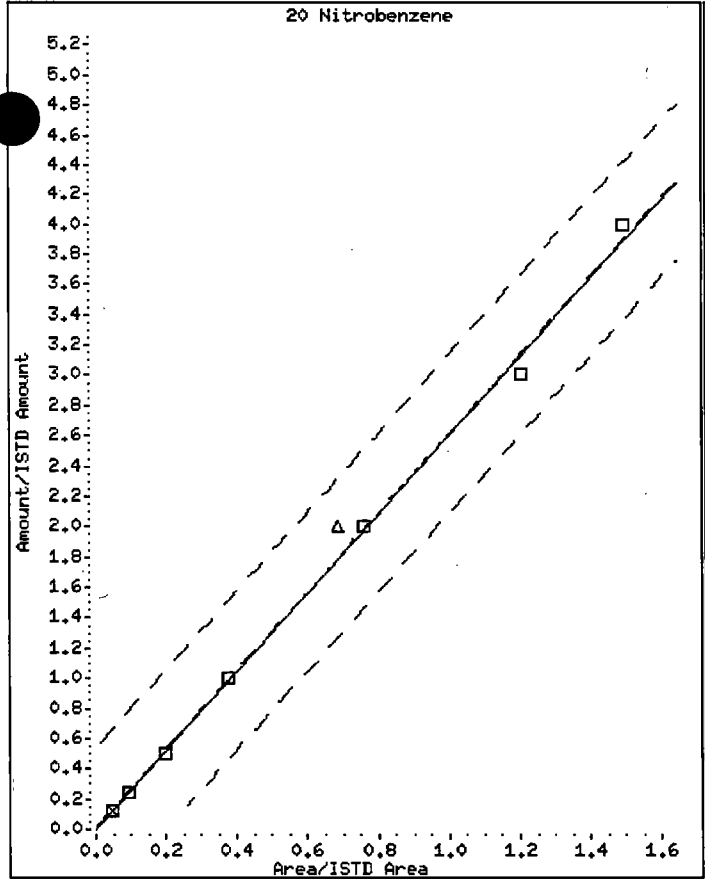

14 bis(2-Chloroisopropyl) ether
Amount/ISTD Amount
Area/ISTD Area

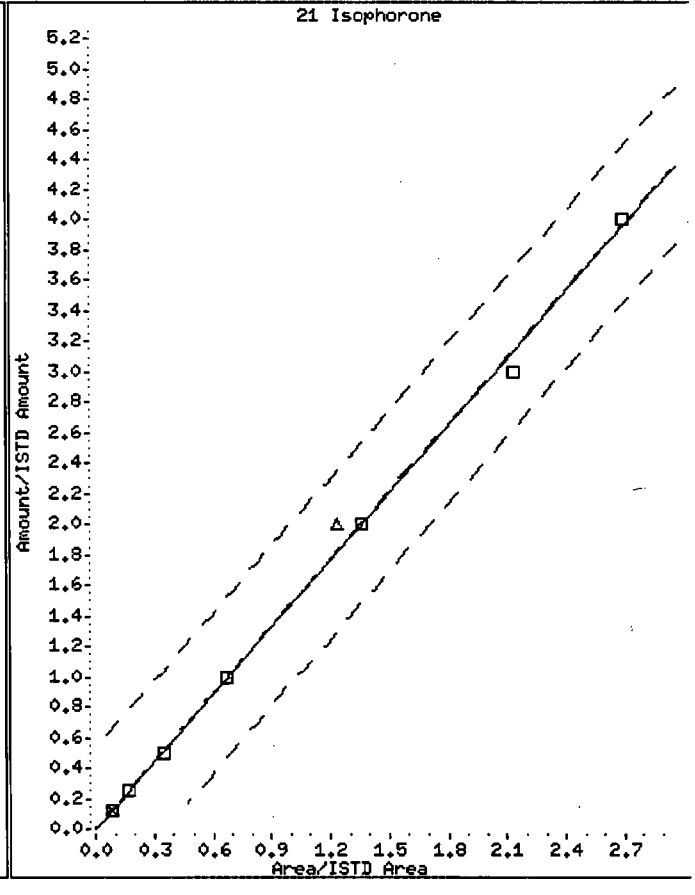

15 3 & 4-Methylphenol
Amount/ISTD Amount
Area/ISTD Area

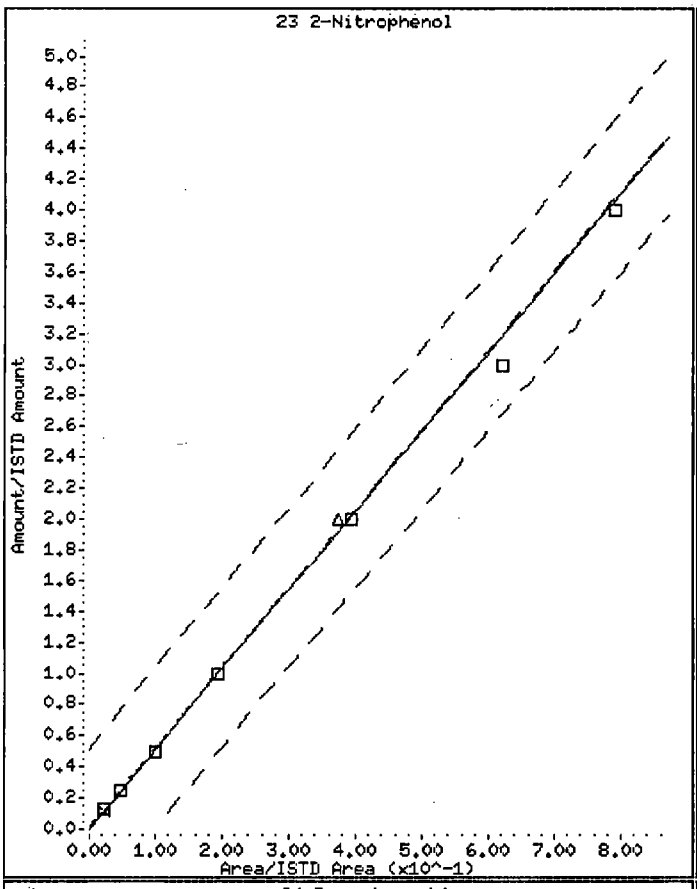

17 N-Nitroso-di-n-propylamine
Amount/ISTD Amount
Area/ISTD Area

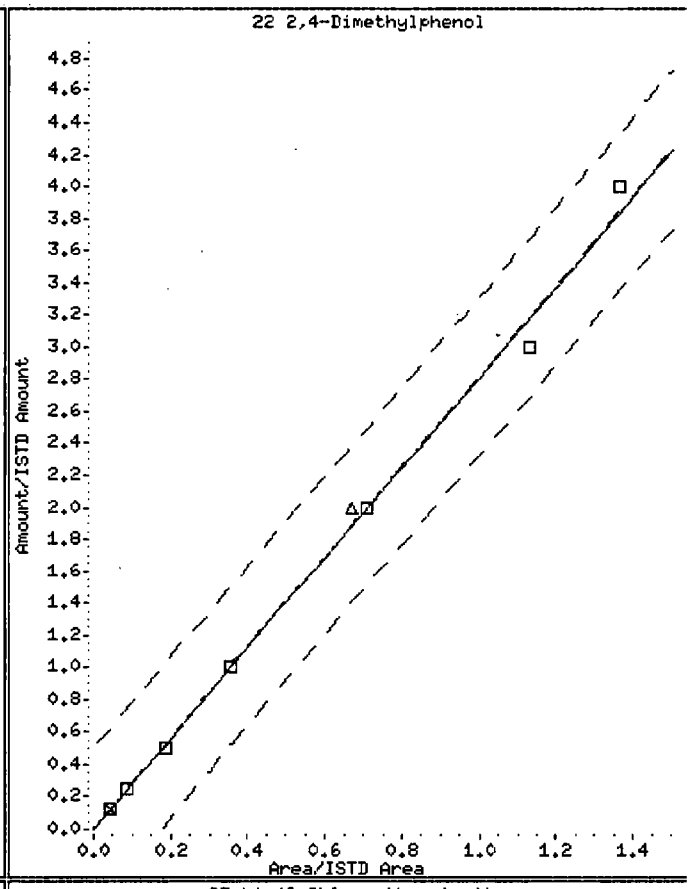

18 Hexachloroethane
Amount/ISTD Amount
Area/ISTD Area

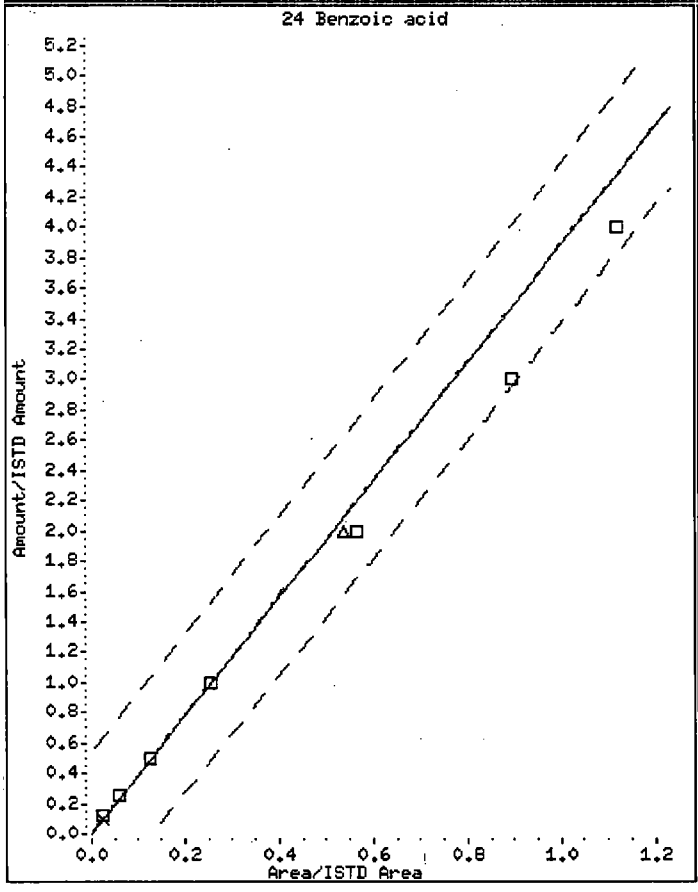

$ 19 Nitrobenzene-d5 (S)
Amount/ISTD Amount
Area/ISTD Area

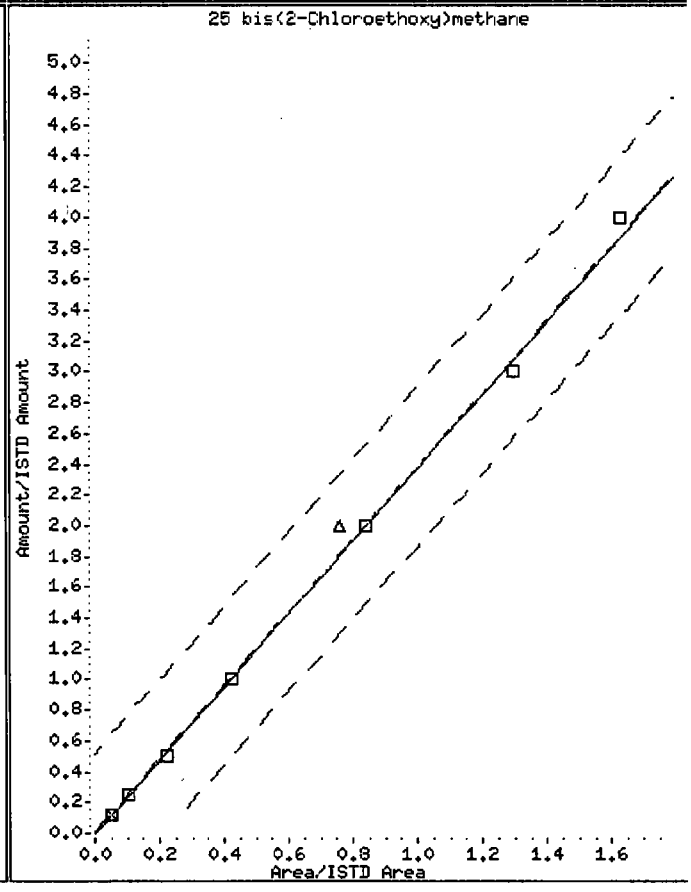

20 Nitrobenzene
Amount/ISTD Amount
Area/ISTD Area

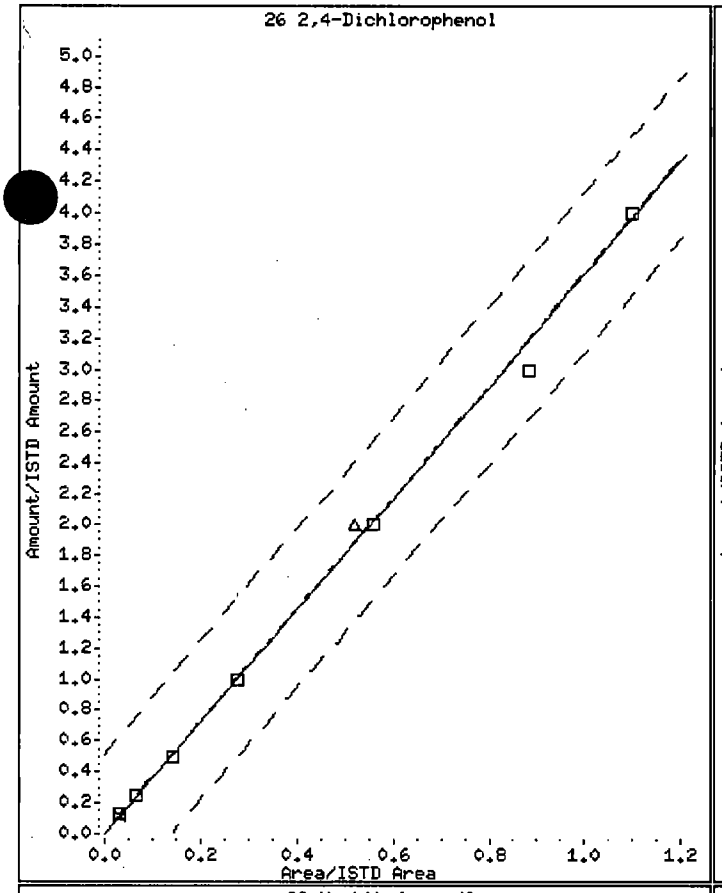

21 Isophorone
Amount/ISTD Amount
Area/ISTD Area

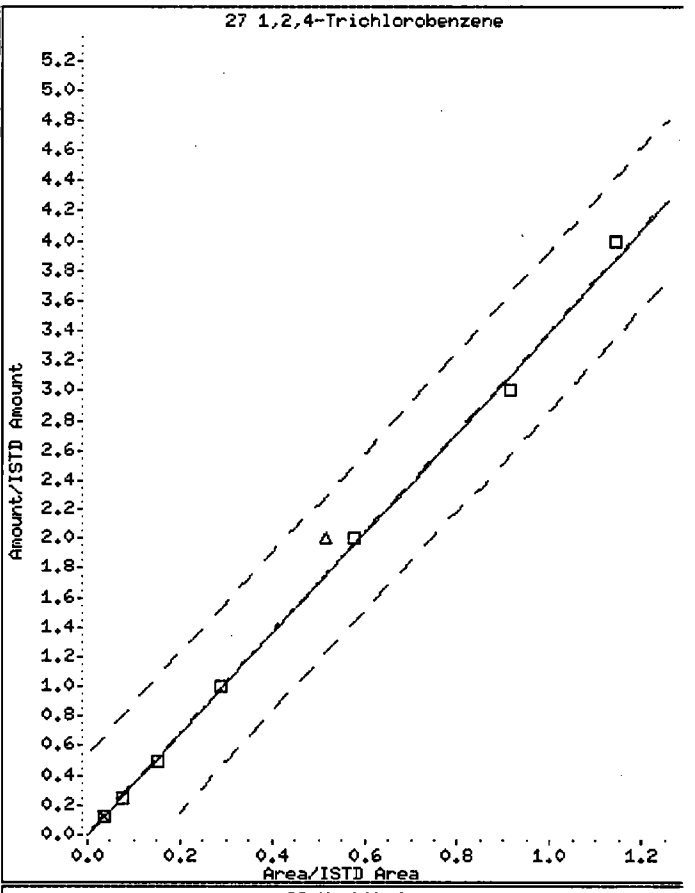

23 2-Nitrophenol
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

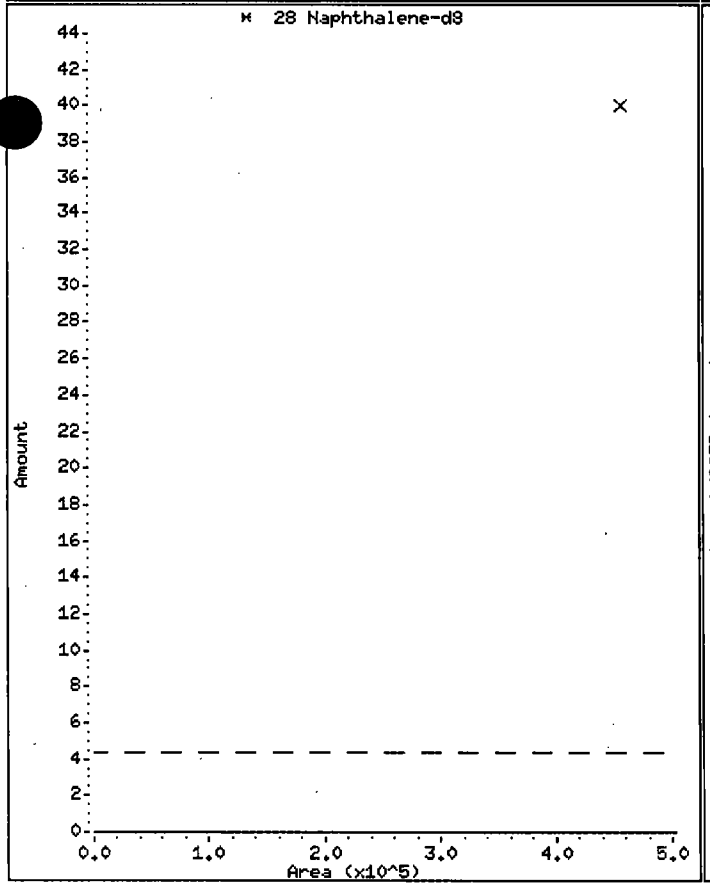

22 2,4-Dimethylphenol
Amount/ISTD Amount
Area/ISTD Area

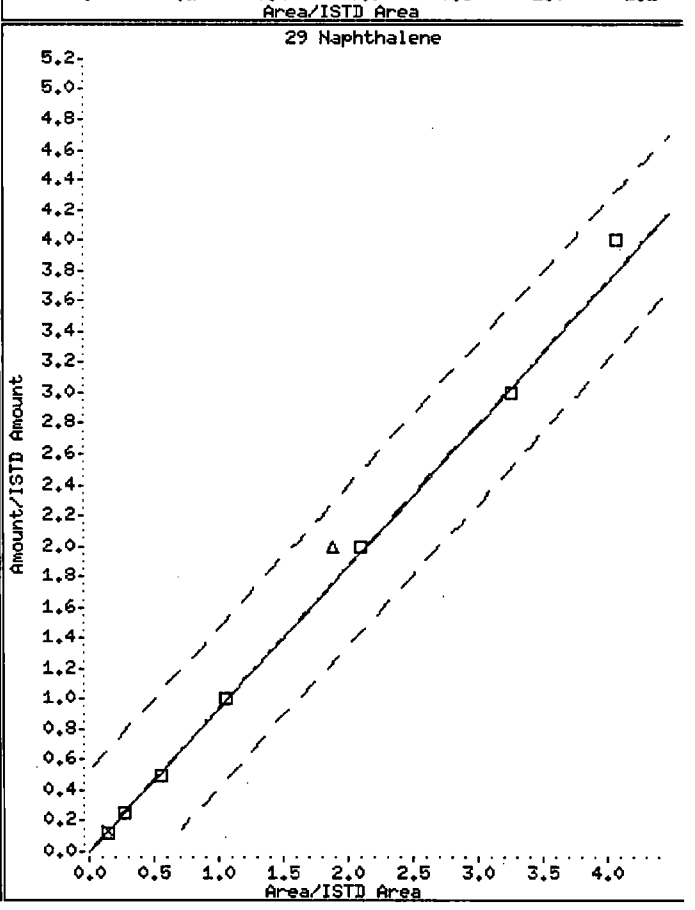

24 Benzoic acid
Amount/ISTD Amount
Area/ISTD Area

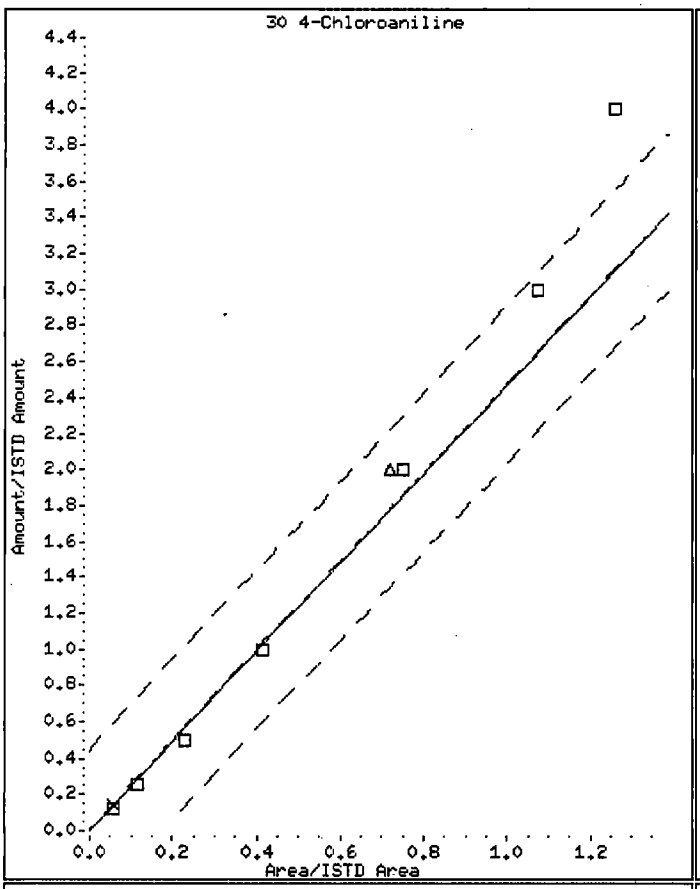

25 bis(2-Chloroethoxy)methane
Amount/ISTD Amount
Area/ISTD Area

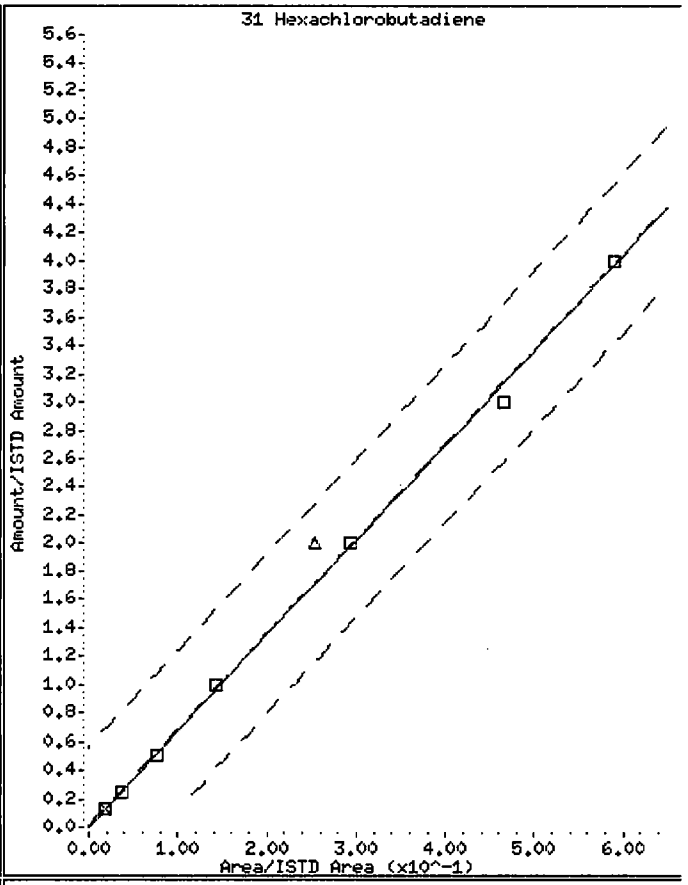

26 2,4-Dichlorophenol
Amount/ISTD Amount
Area/ISTD Area

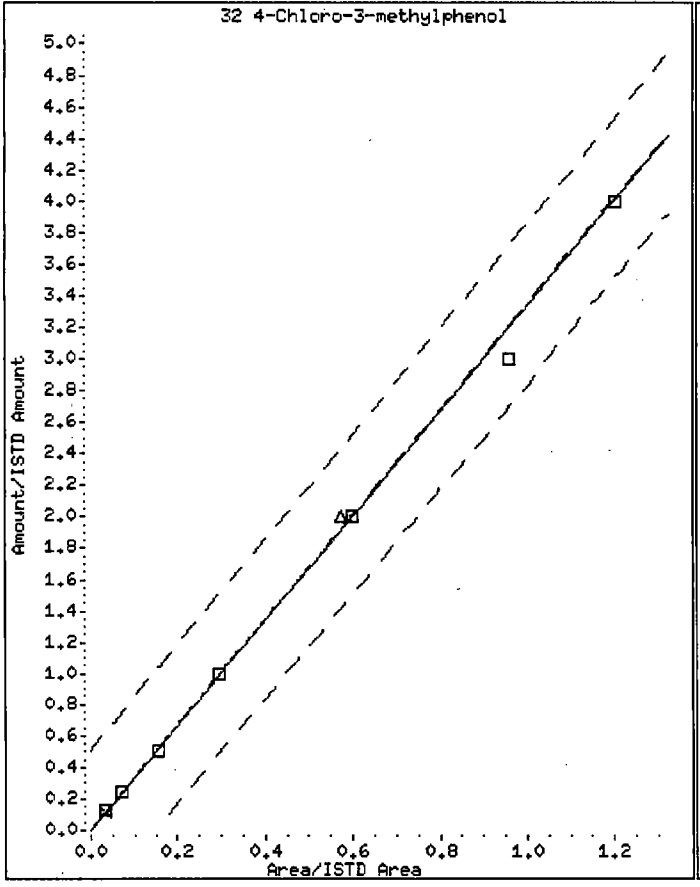

27 1,2,4-Trichlorobenzene
Amount/ISTD Amount
Area/ISTD Area

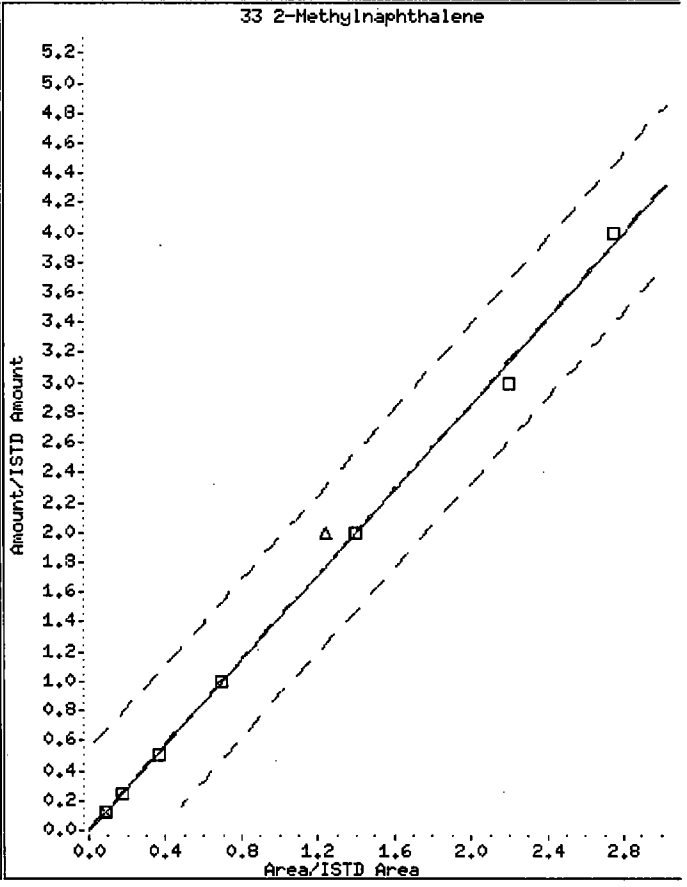

28 Naphthalene-d8
Amount
Area (x10^5)

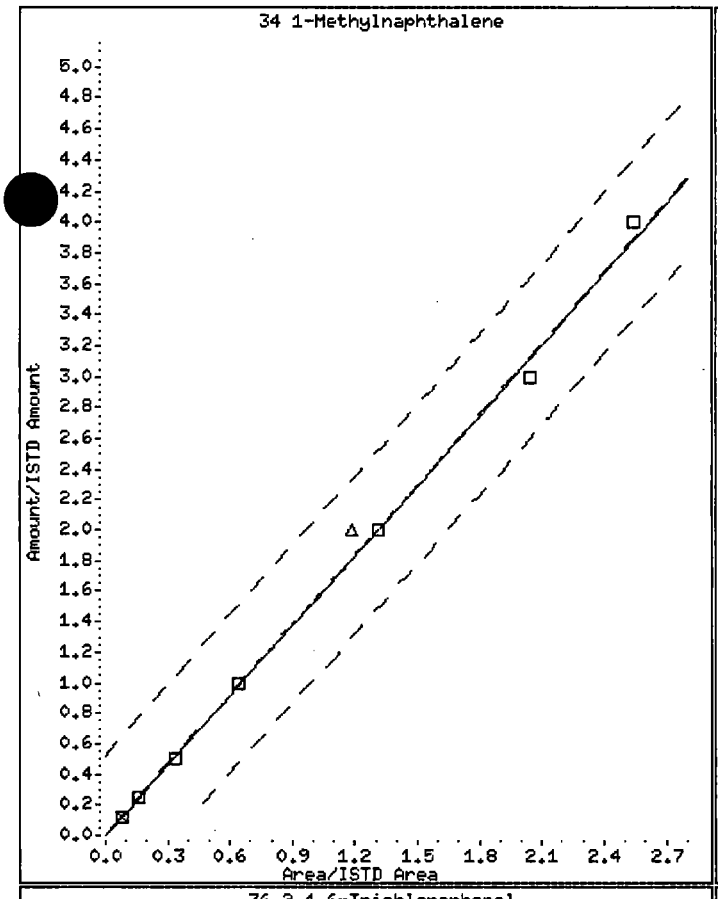

29 Naphthalene
Amount/ISTD Amount
Area/ISTD Area

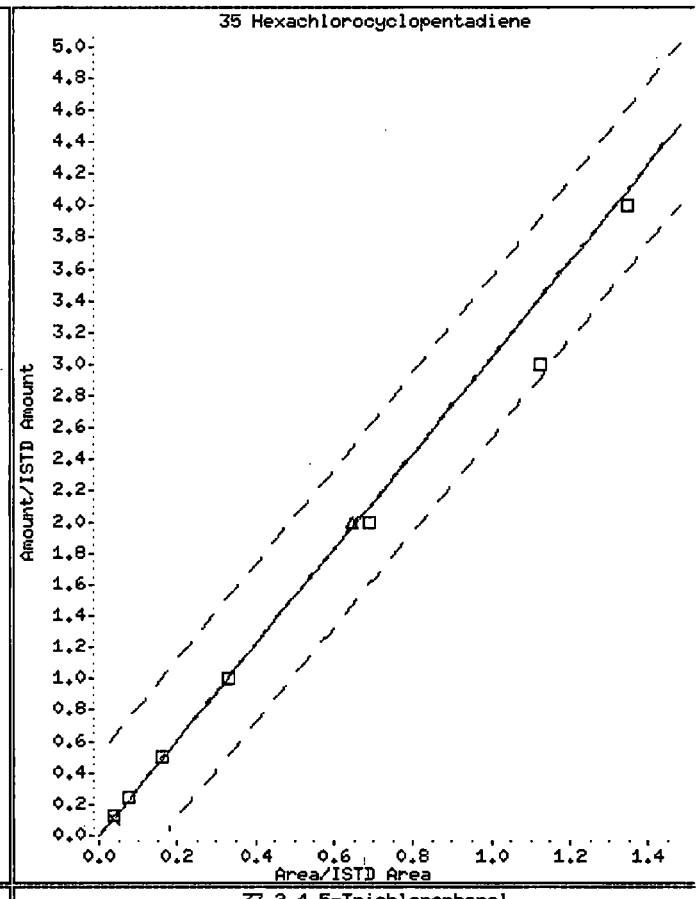

30 4-Chloroaniline
Amount/ISTD Amount
Area/ISTD Area

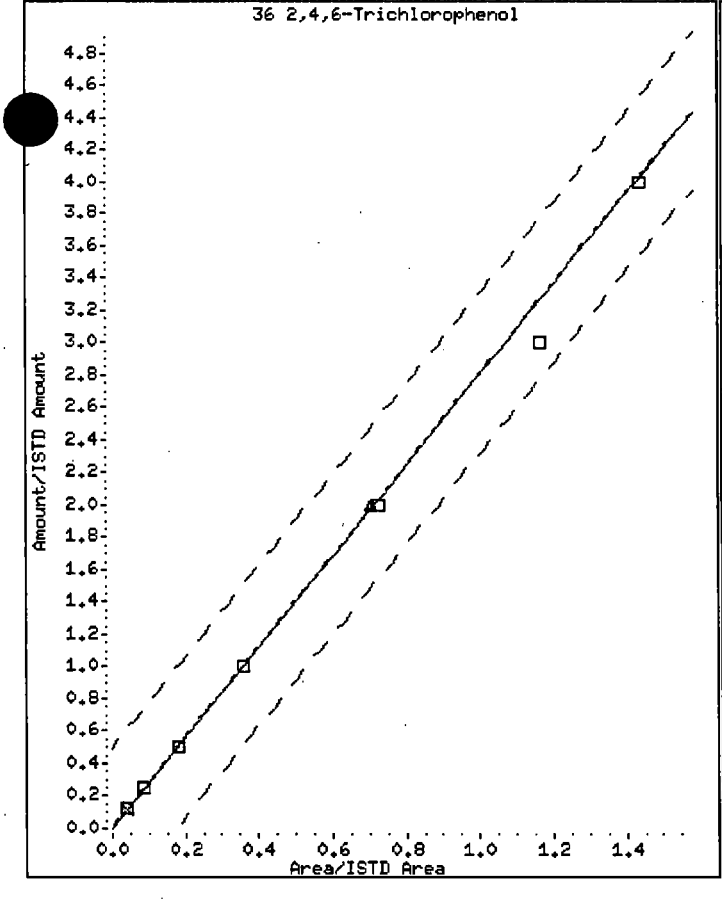

31 Hexachlorobutadiene
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

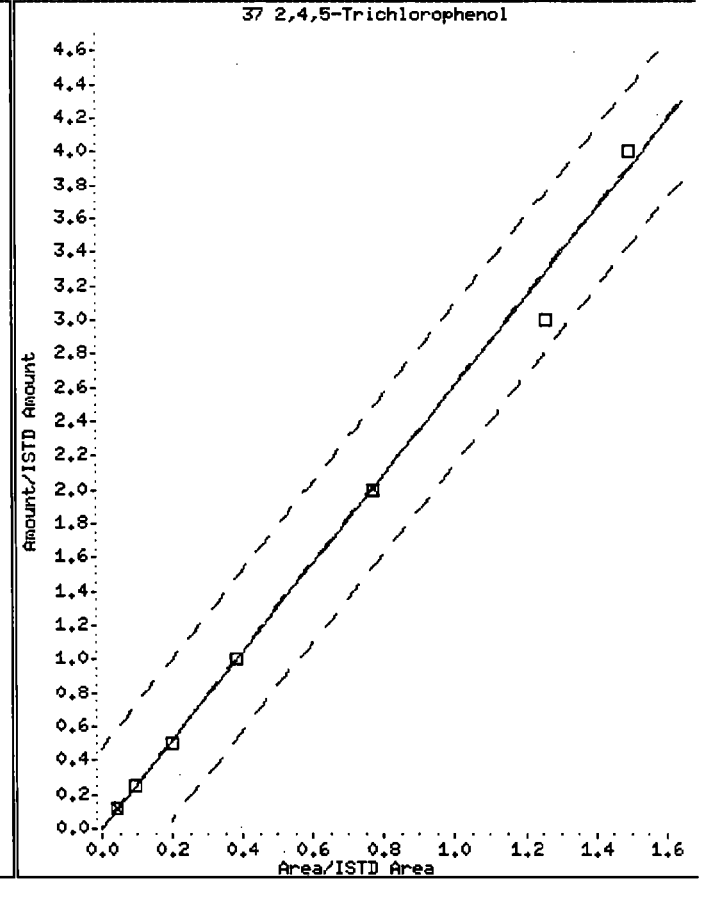

32 4-Chloro-3-methylphenol
Amount/ISTD Amount
Area/ISTD Area

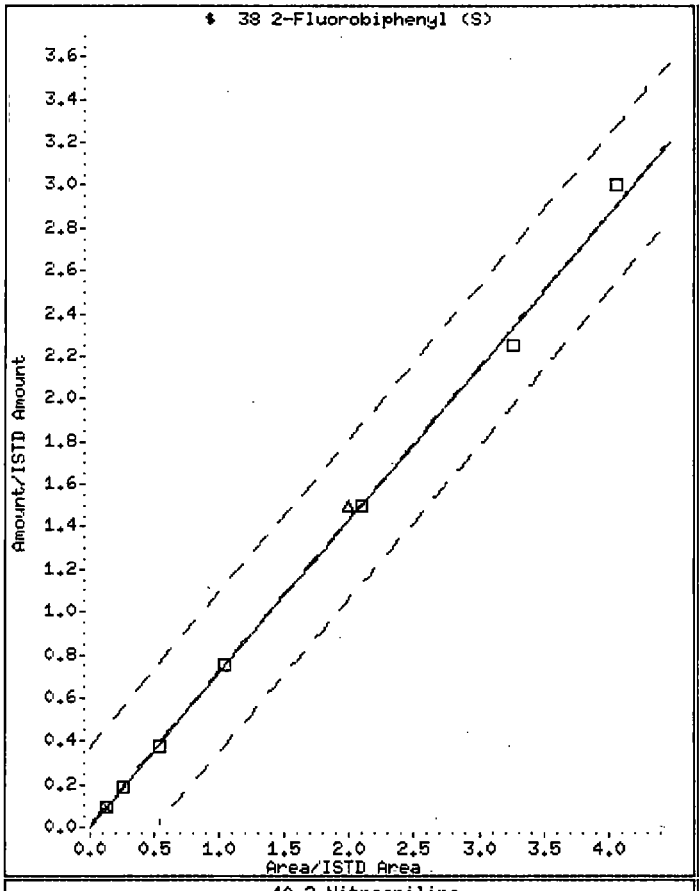

33 2-Methylnaphthalene
Amount/ISTD Amount
Area/ISTD Area

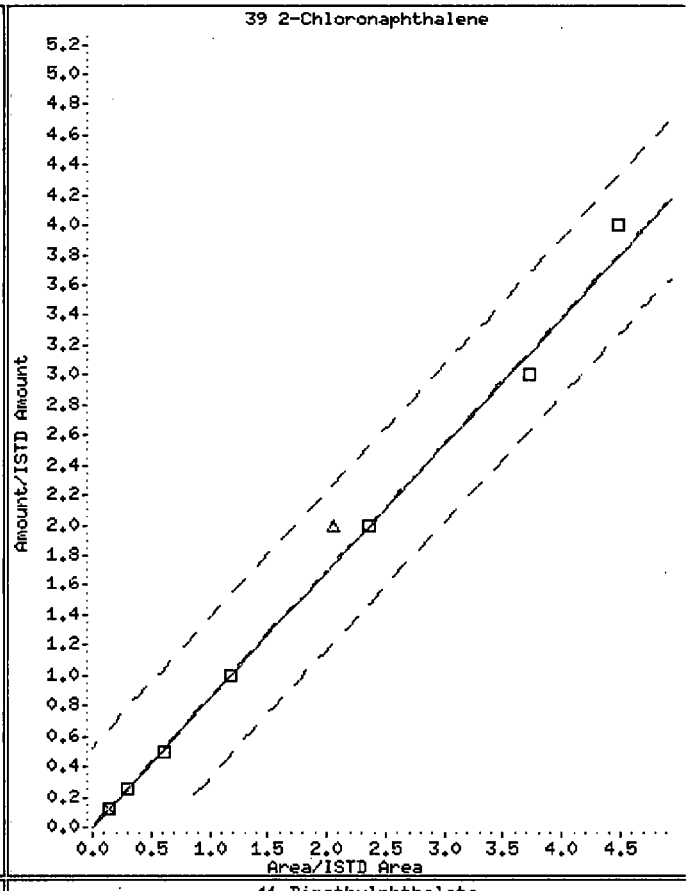

34 1-Methylnaphthalene
Amount/ISTD Amount
Area/ISTD Area

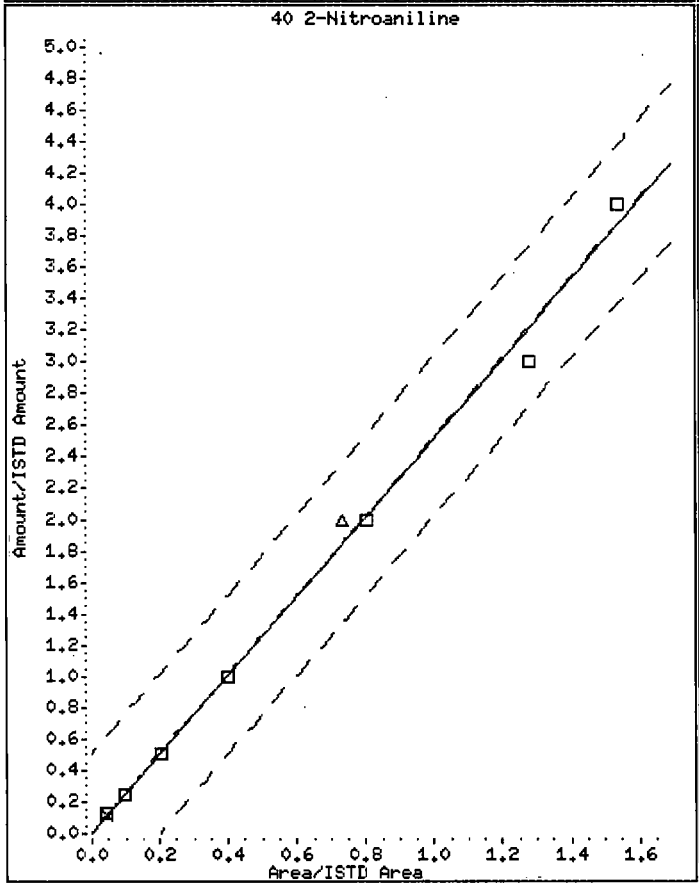

35 Hexachlorocyclopentadiene
Amount/ISTD Amount
Area/ISTD Area

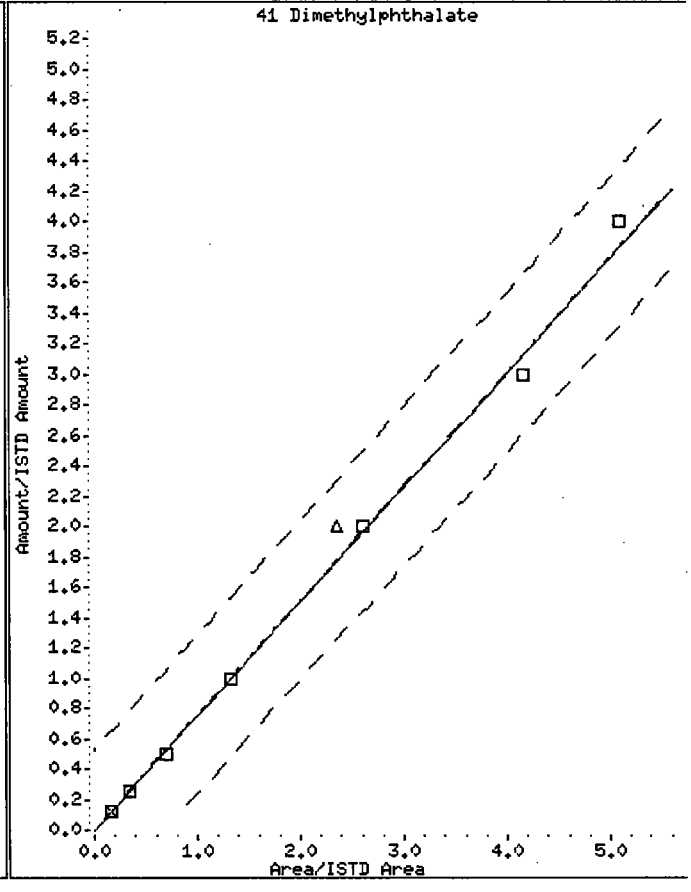

36 2,4,6-Trichlorophenol
Amount/ISTD Amount
Area/ISTD Area

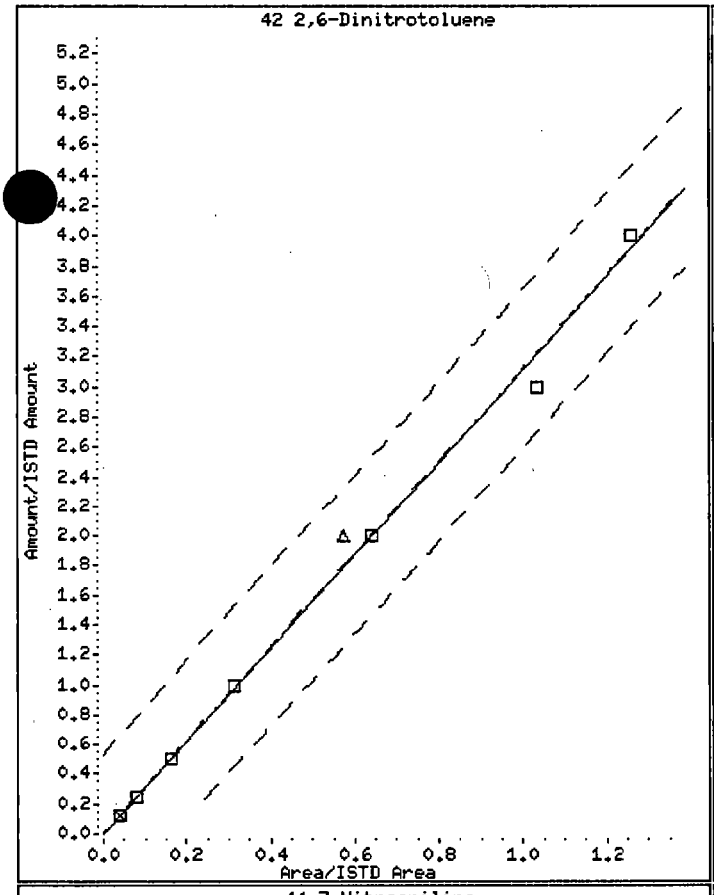

37 2,4,5-Trichlorophenol
Amount/ISTD Amount
Area/ISTD Area

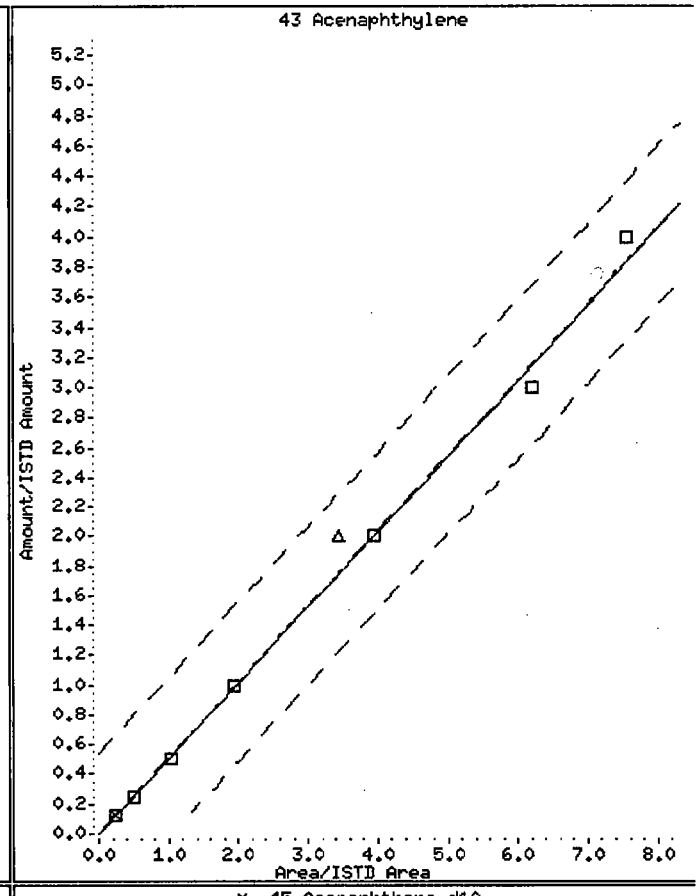

$ 38 2-Fluorobiphenyl (S)
Amount/ISTD Amount
Area/ISTD Area

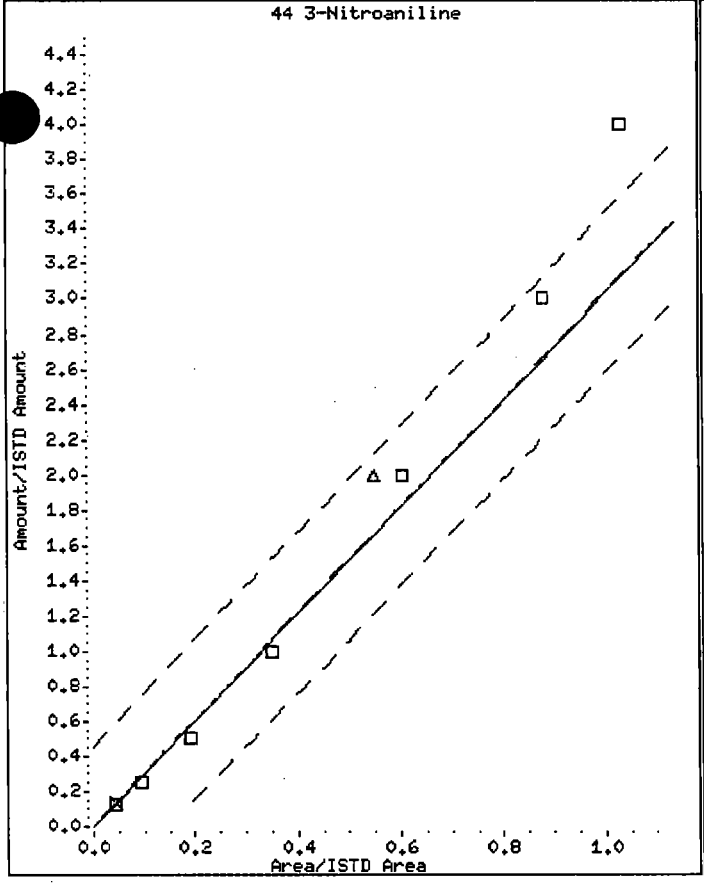

39 2-Chloronaphthalene
Amount/ISTD Amount
Area/ISTD Area

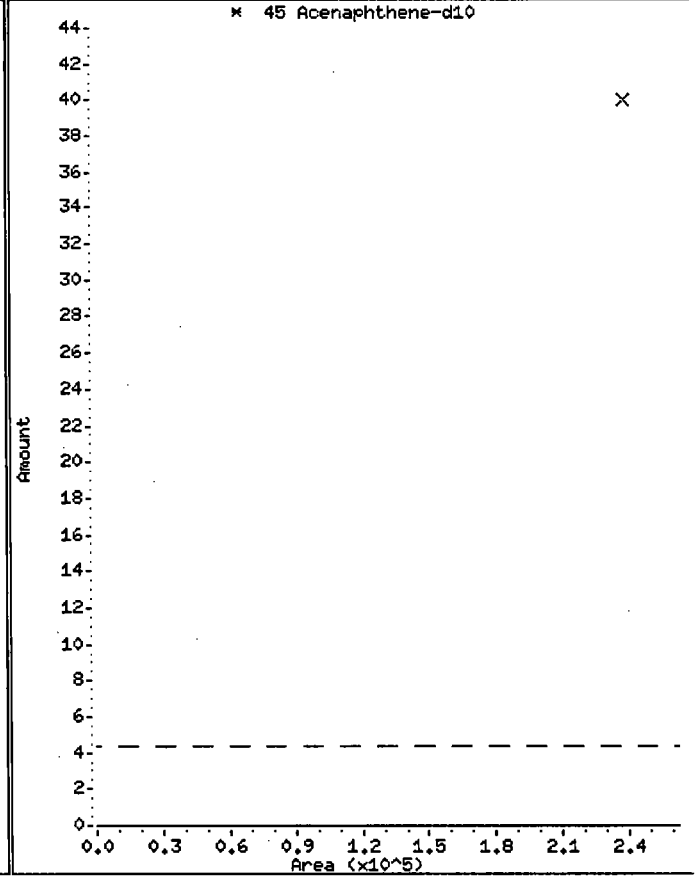

40 2-Nitroaniline
Amount/ISTD Amount
Area/ISTD Area

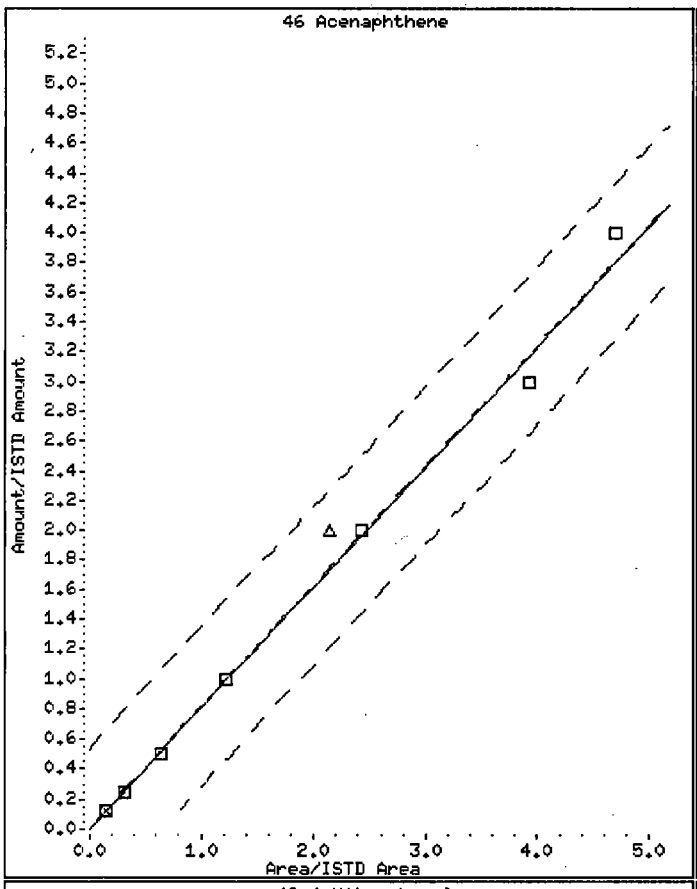

41 Dimethylphthalate
Amount/ISTD Amount
Area/ISTD Area

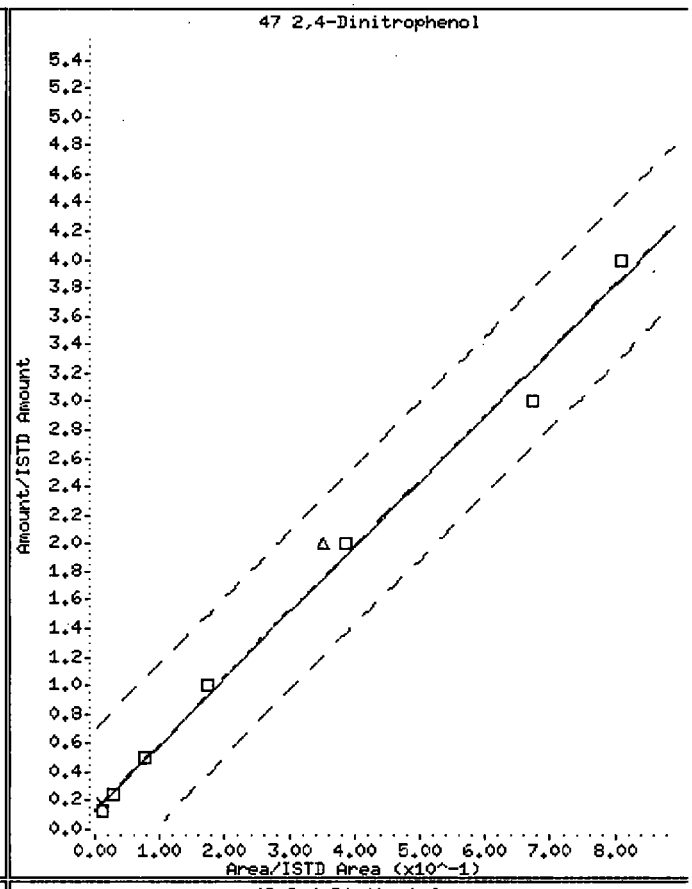

42 2,6-Dinitrotoluene
Amount/ISTD Amount
Area/ISTD Area

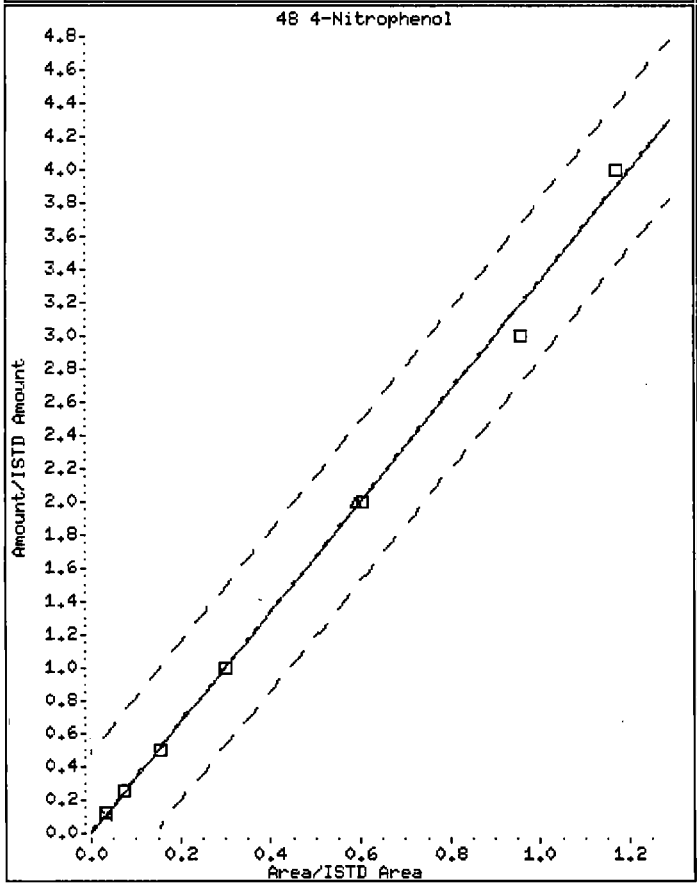

43 Acenaphthylene
Amount/ISTD Amount
Area/ISTD Area

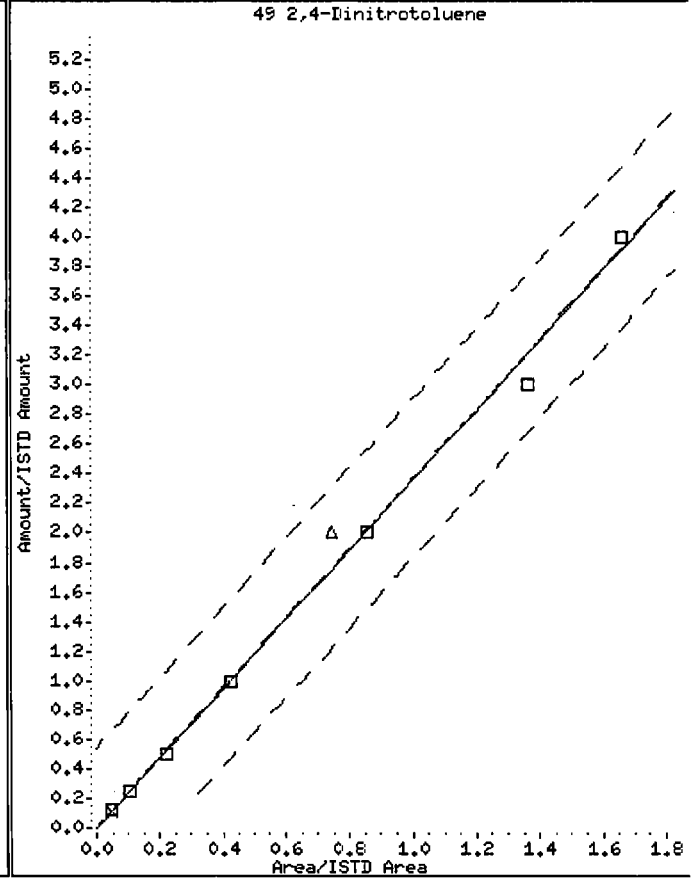

44 3-Nitroaniline
Amount/ISTD Amount
Area/ISTD Area


45 Acenaphthene-d10
Amount
Area (x10^5)


46 Acenaphthene
Amount/ISTD Amount
Area/ISTD Area


47 2,4-Dinitrophenol
Amount/ISTD Amount
Area/ISTD Area (x10^-1)


48 4-Nitrophenol
Amount/ISTD Amount
Area/ISTD Area


49 2,4-Dinitrotoluene
Amount/ISTD Amount
Area/ISTD Area

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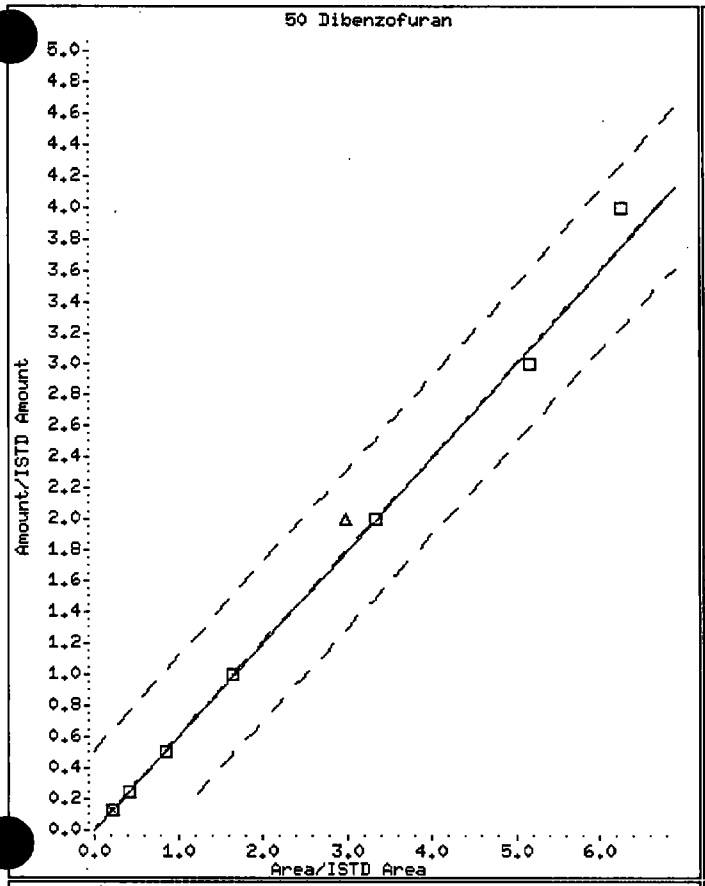

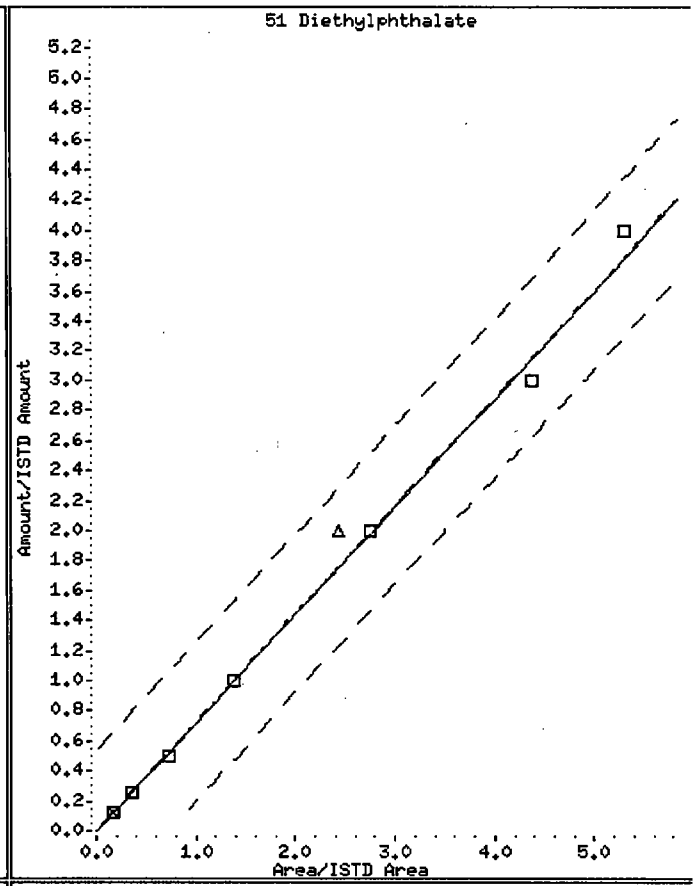

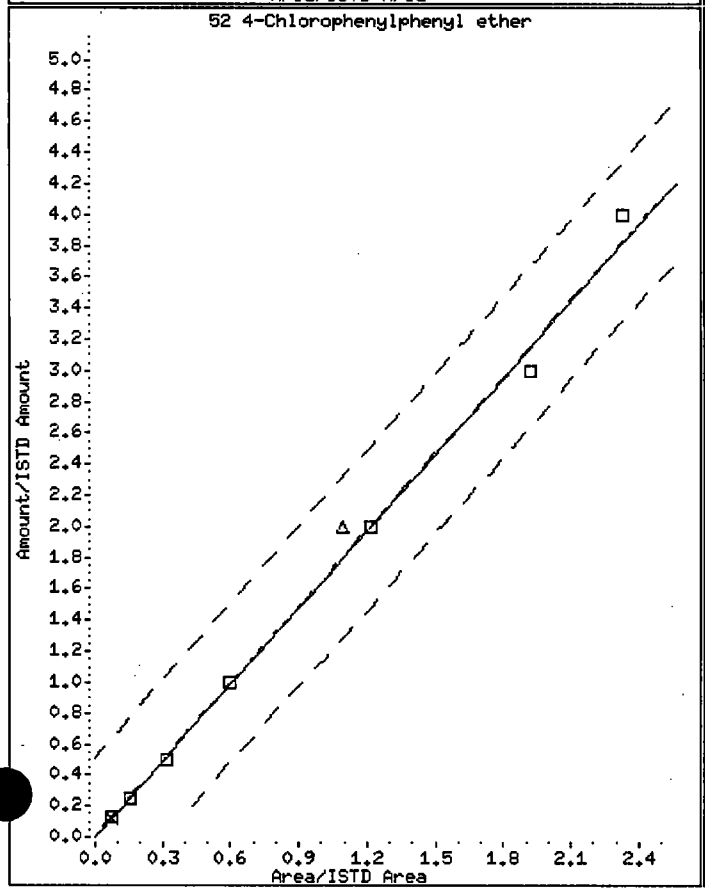

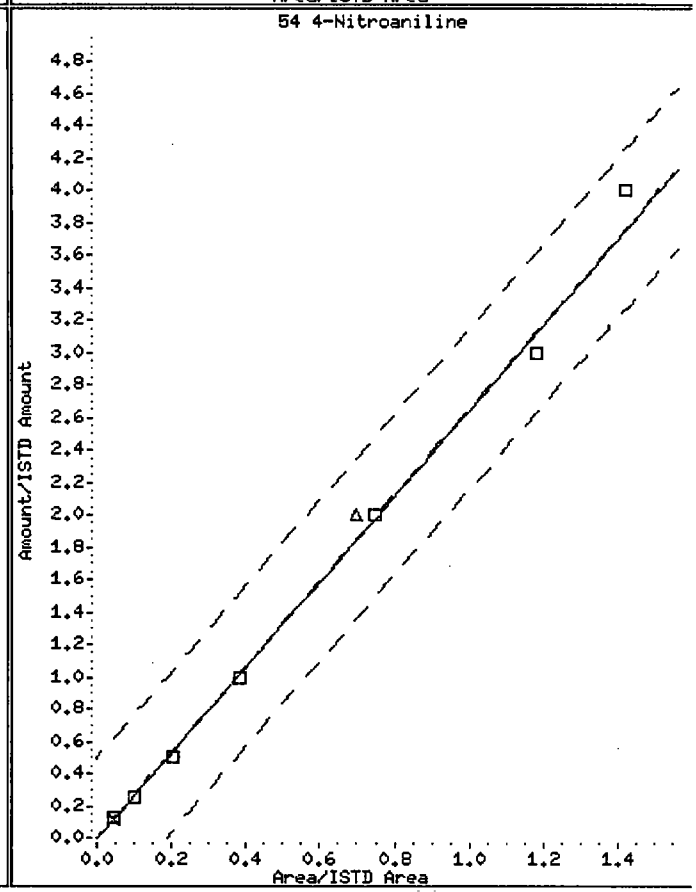

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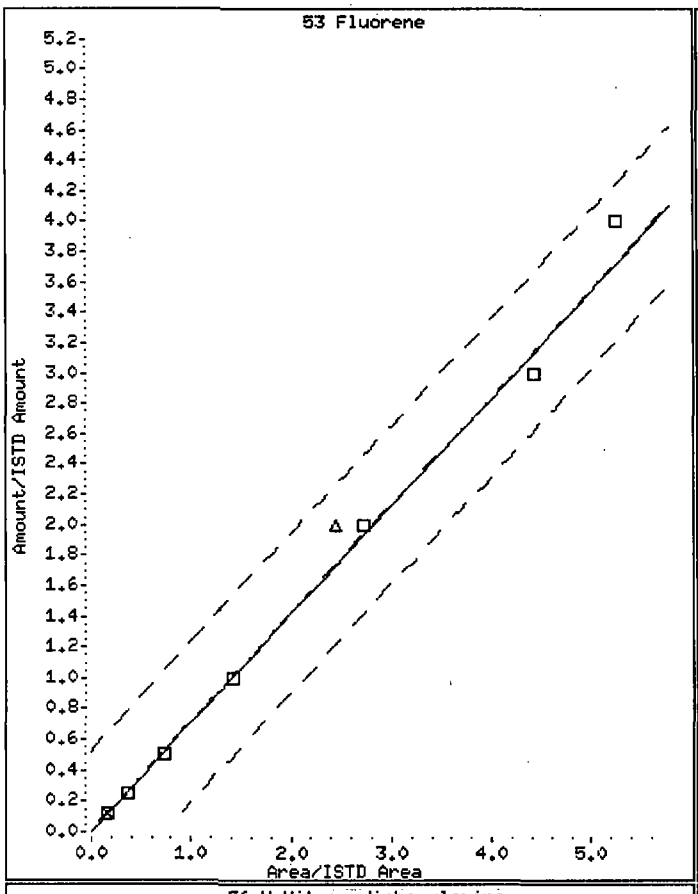

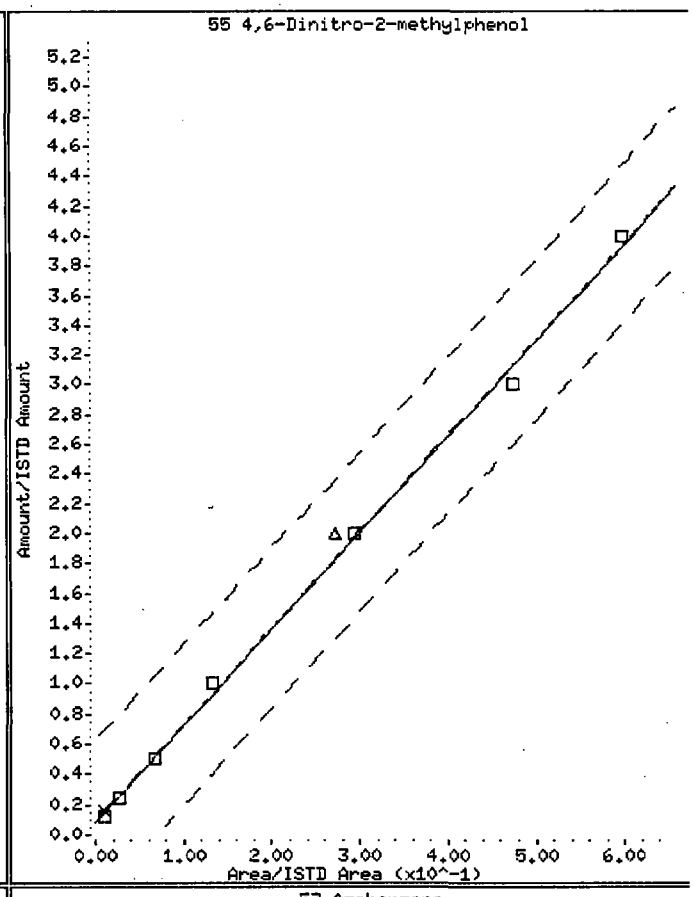

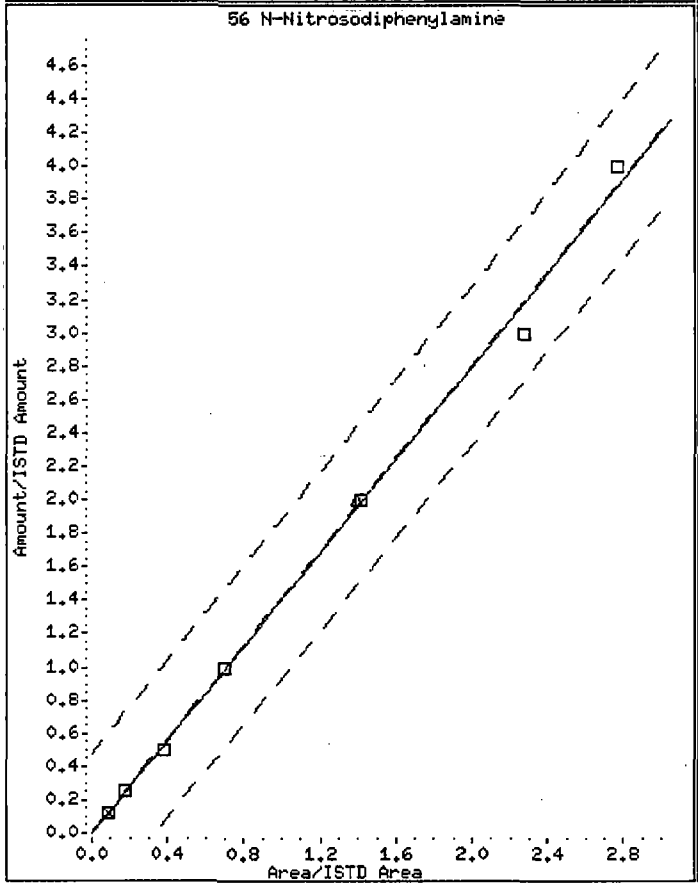

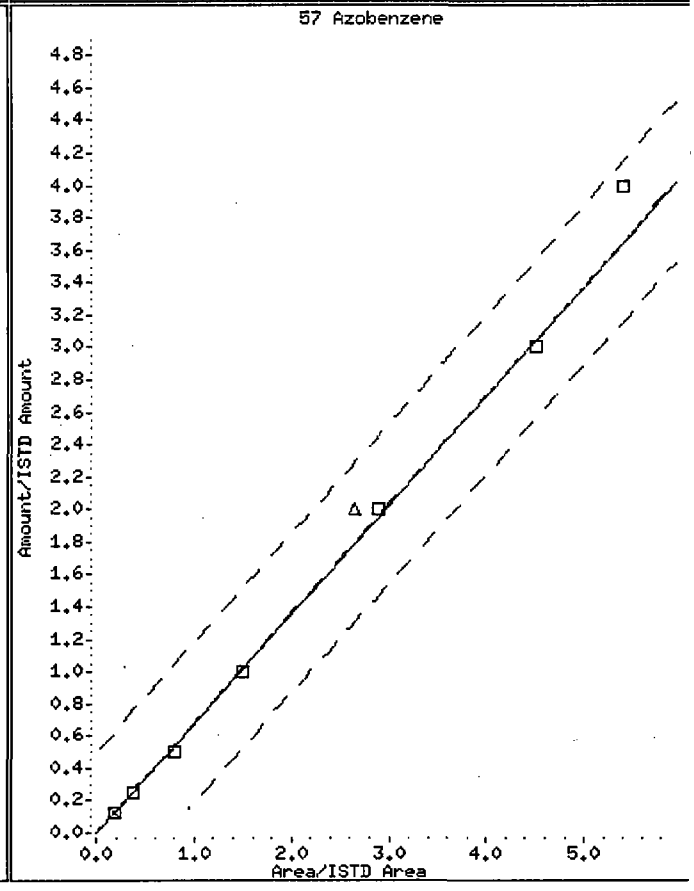

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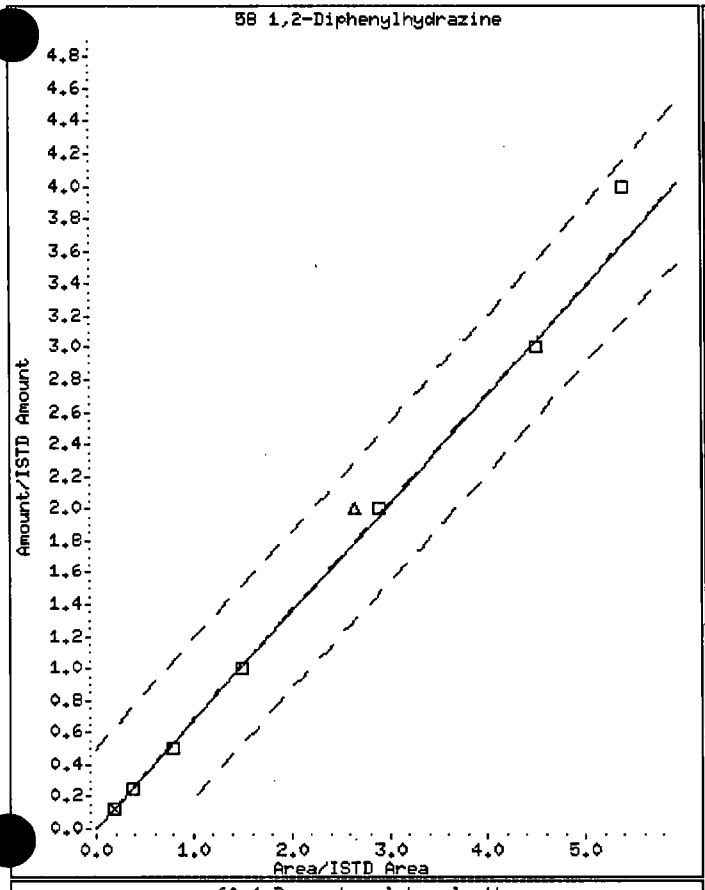

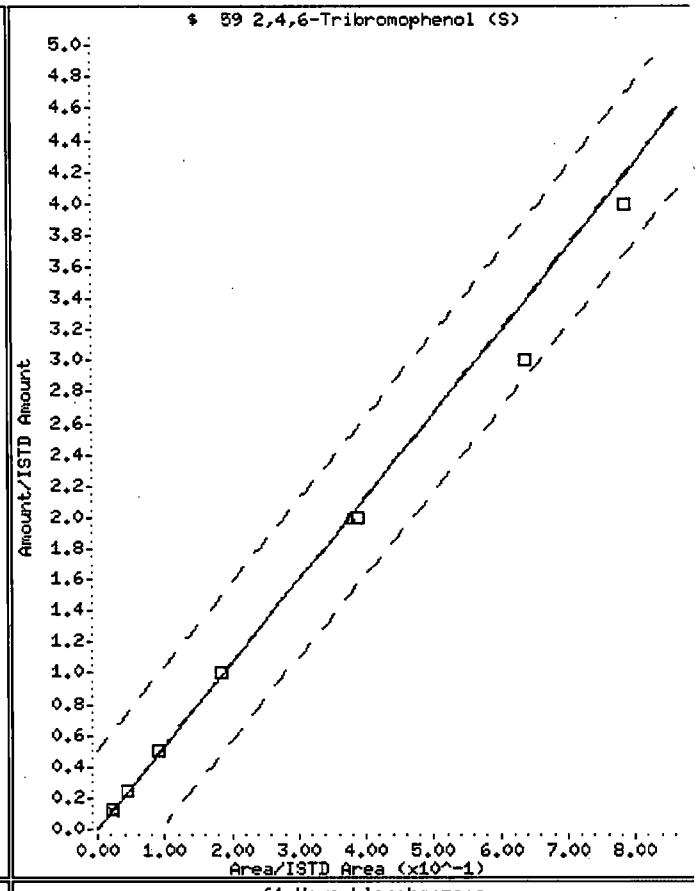

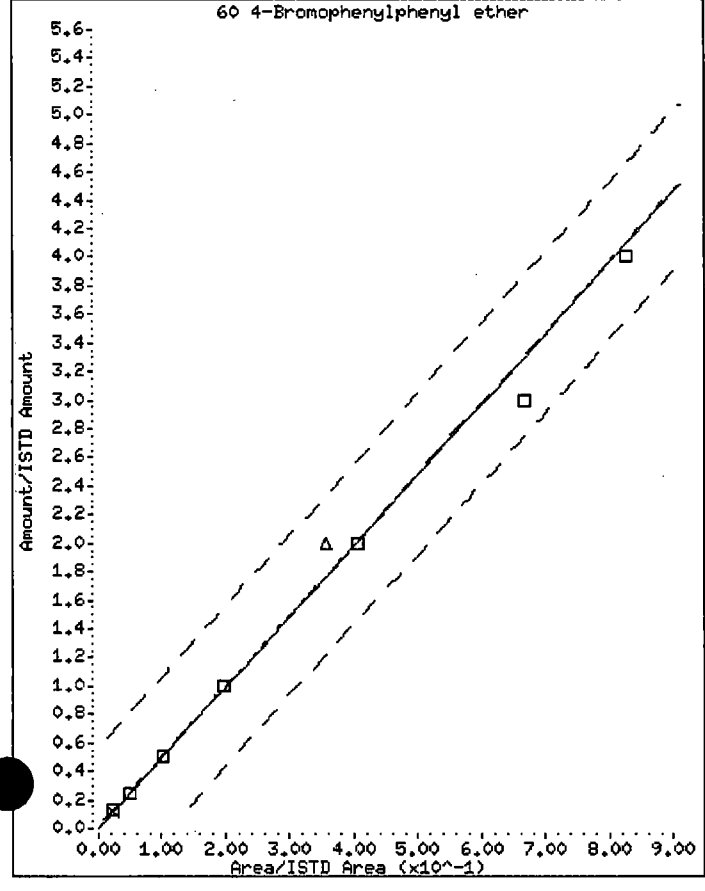

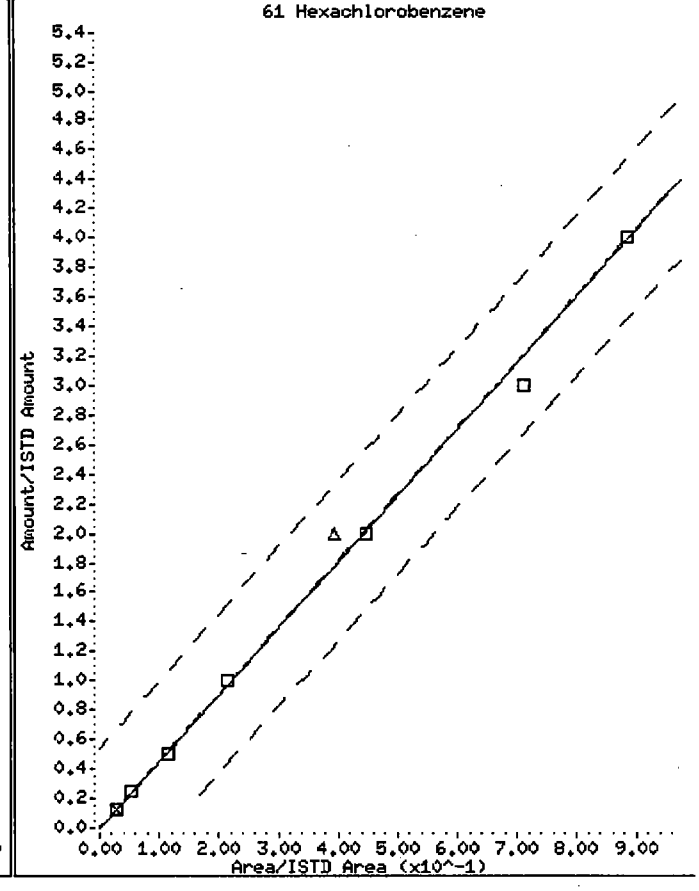

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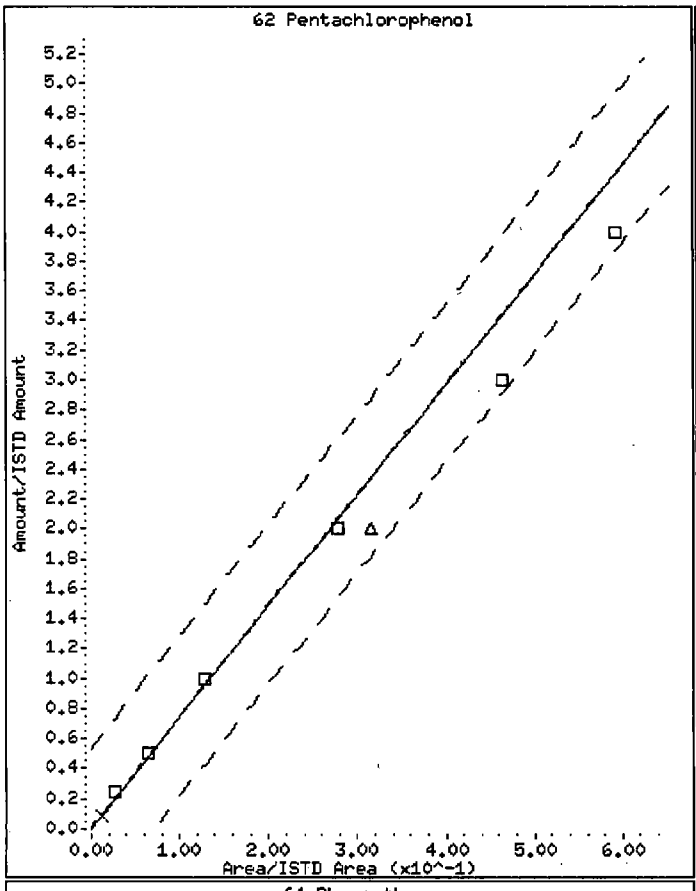

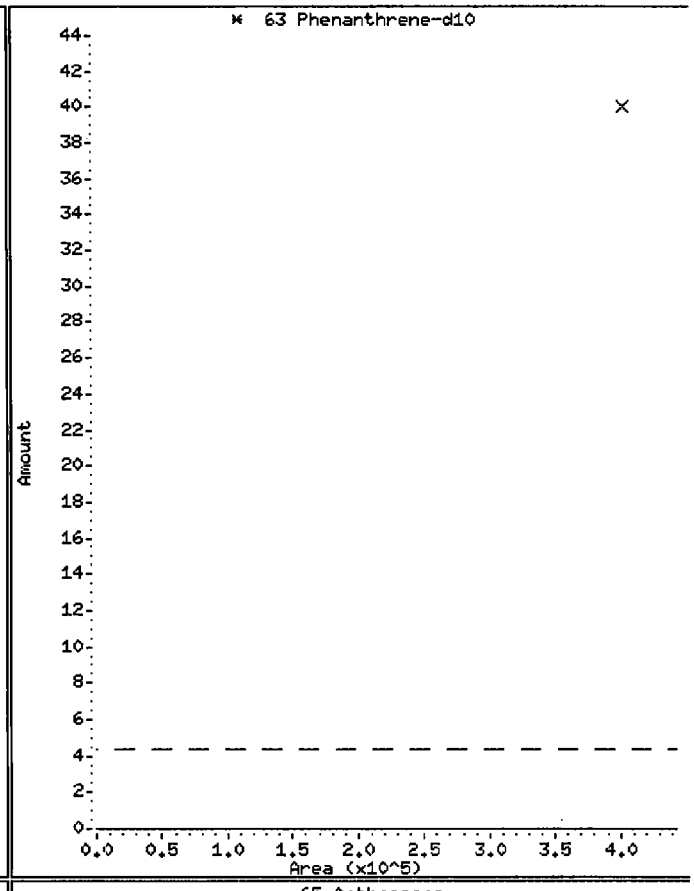

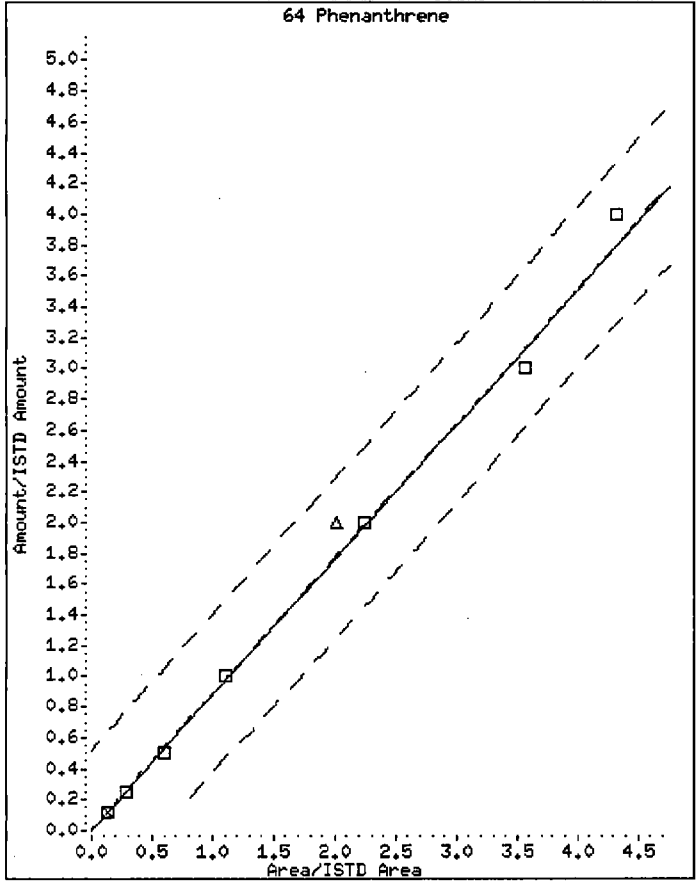

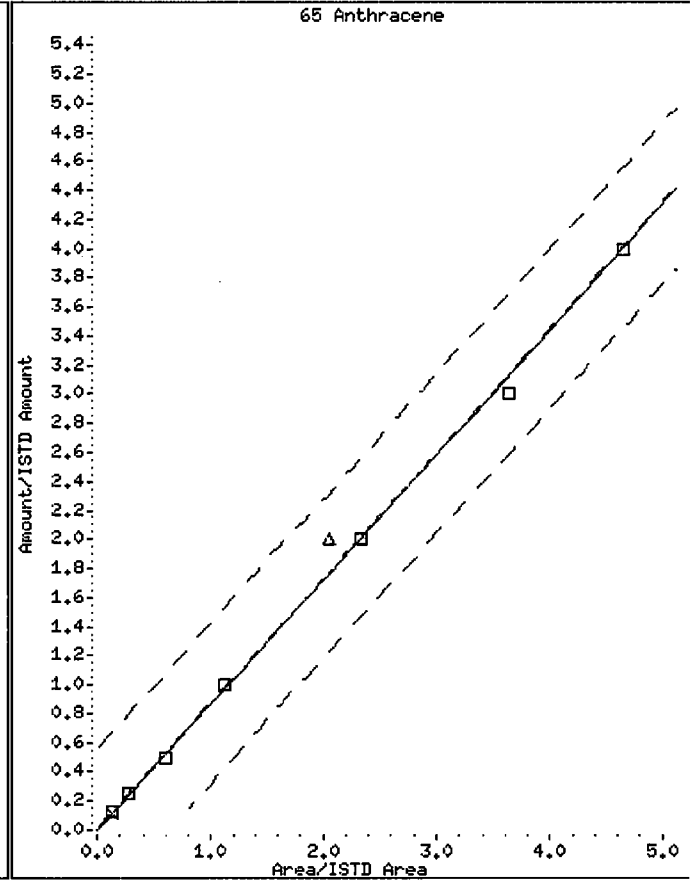

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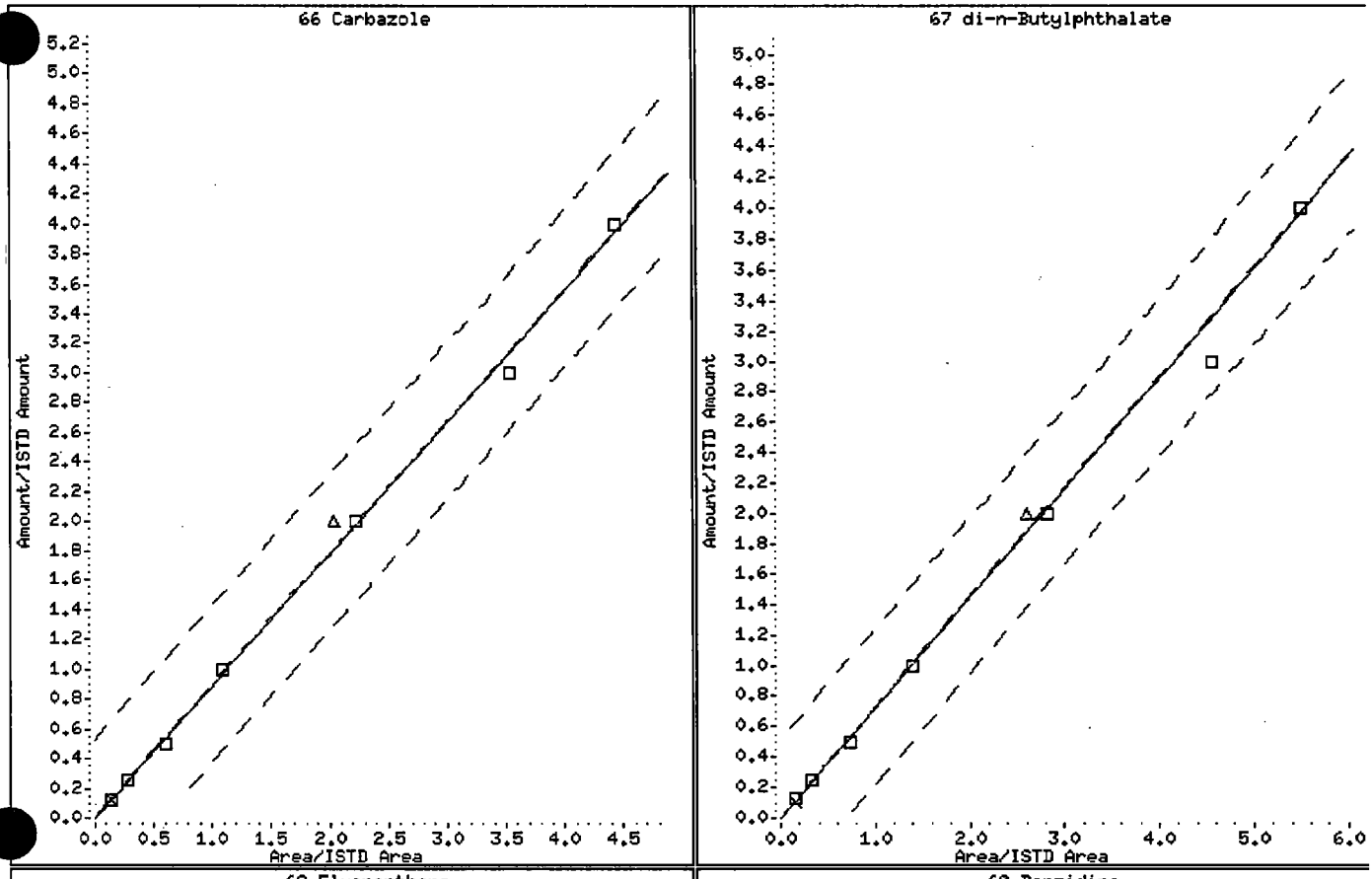

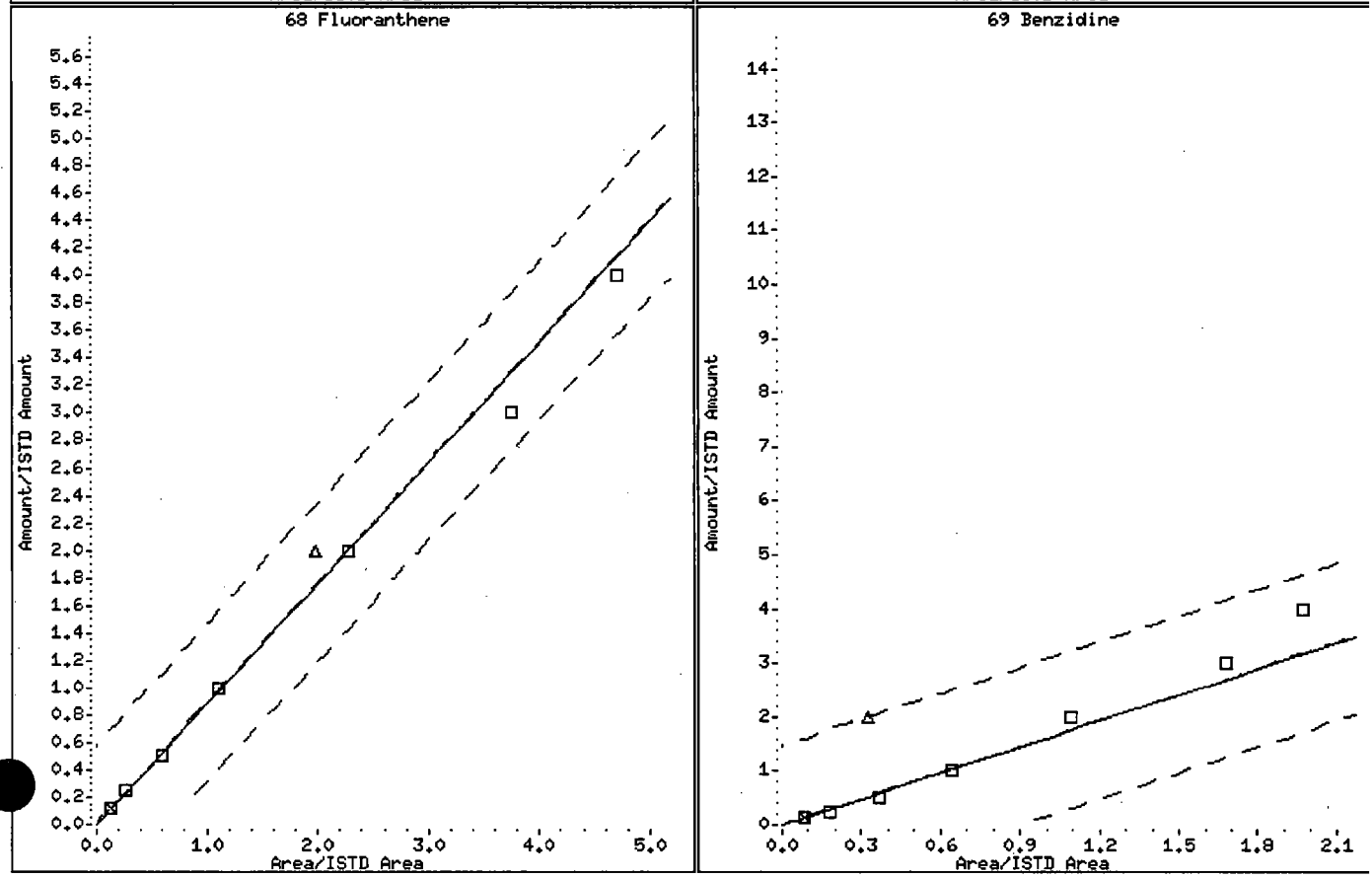

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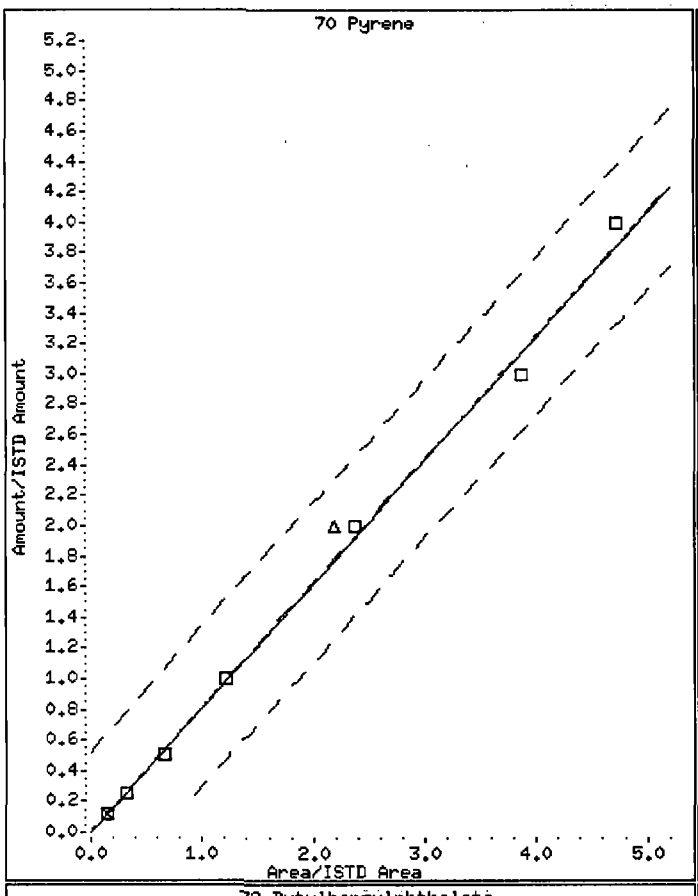

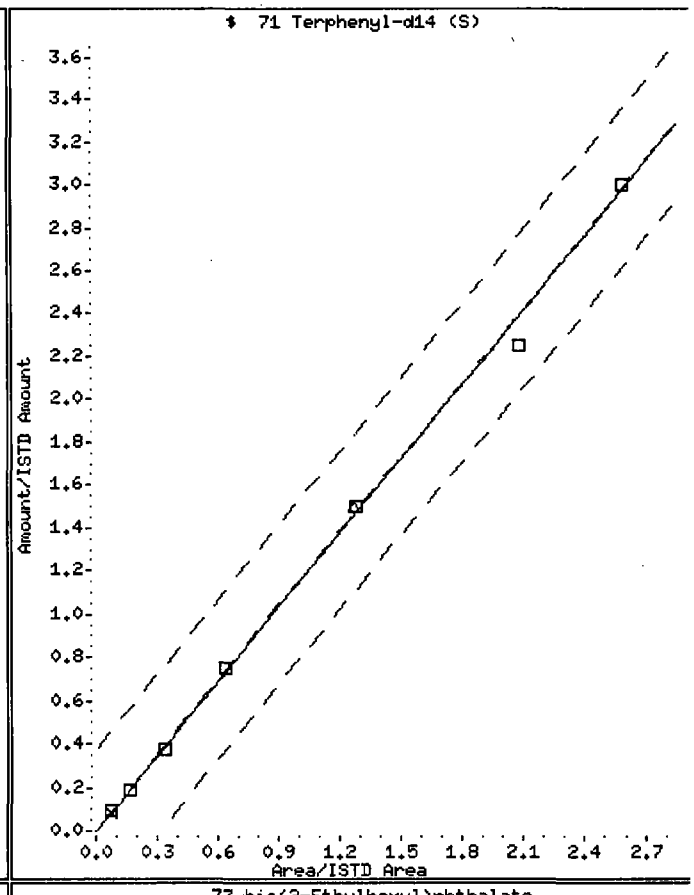

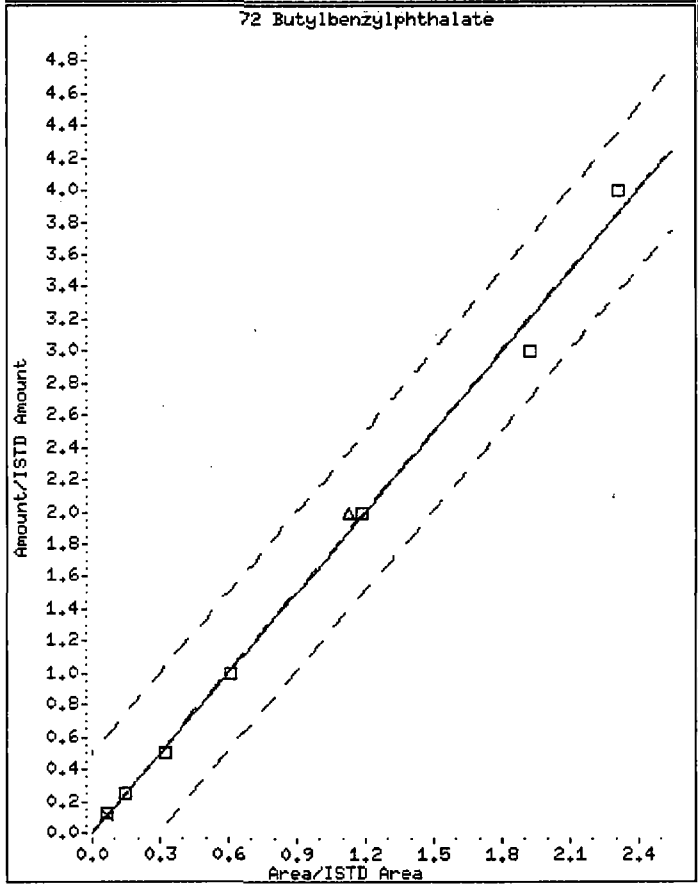

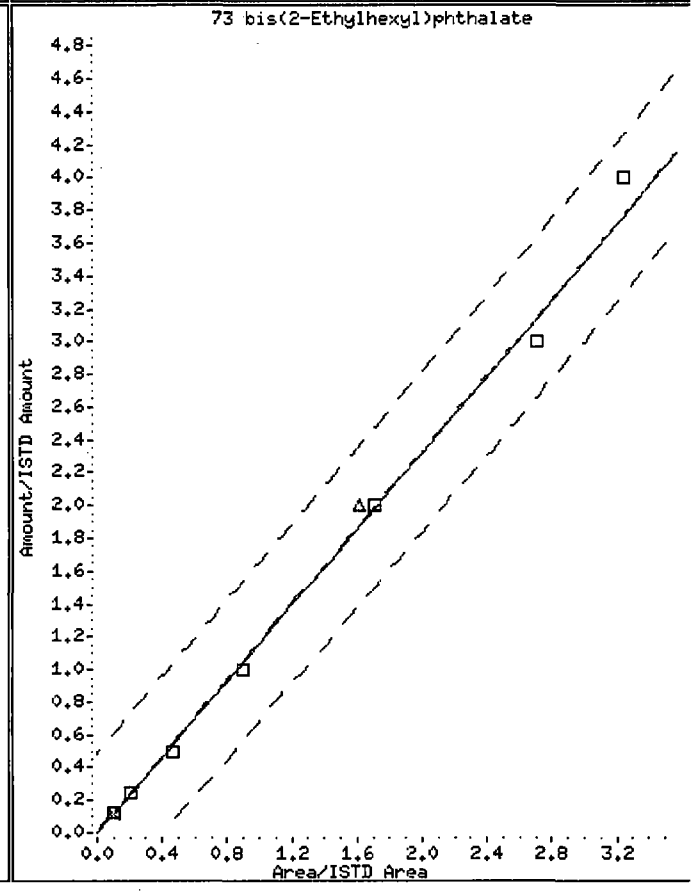

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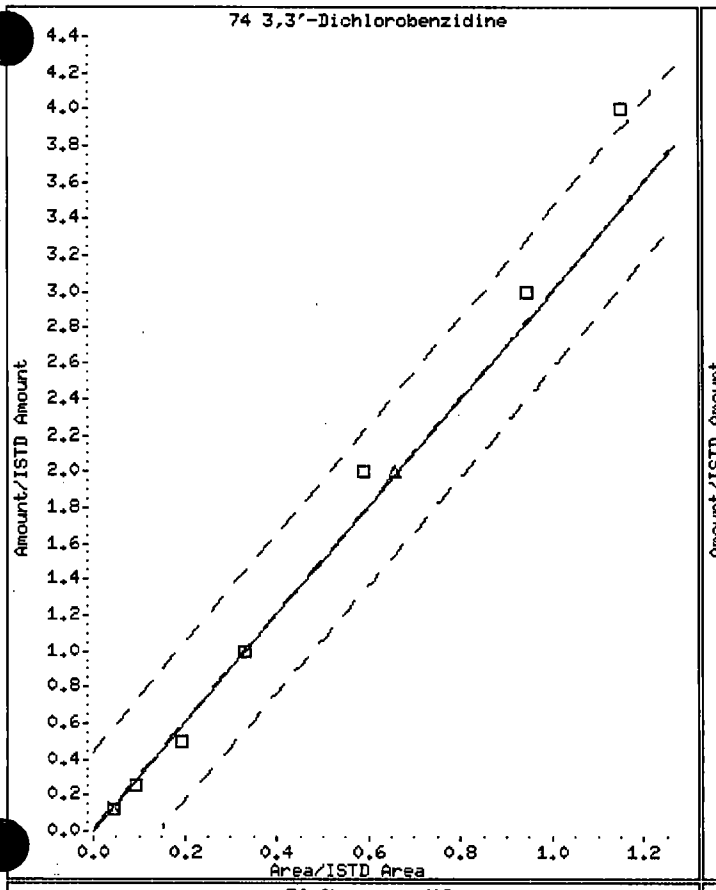

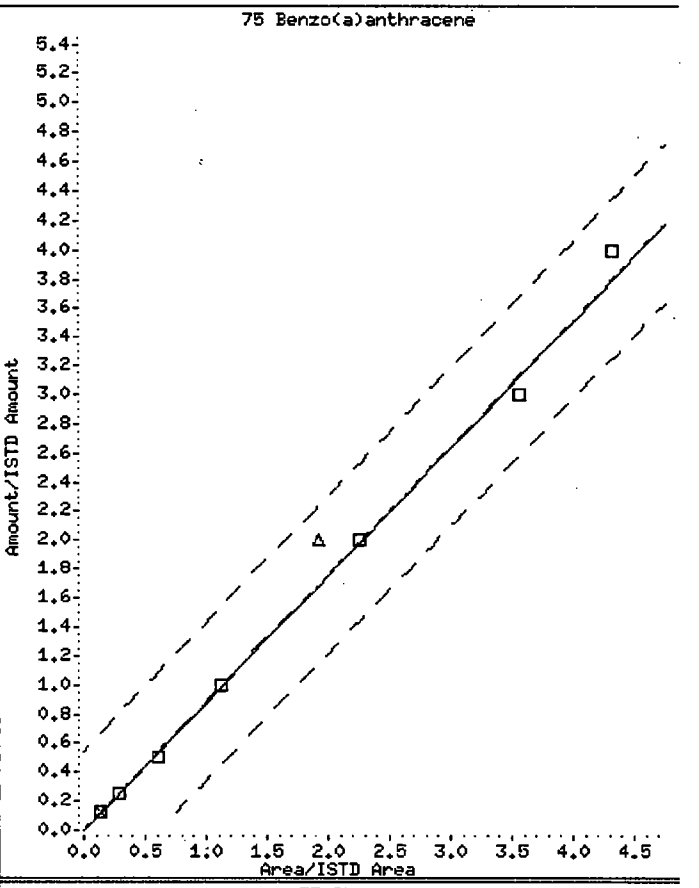

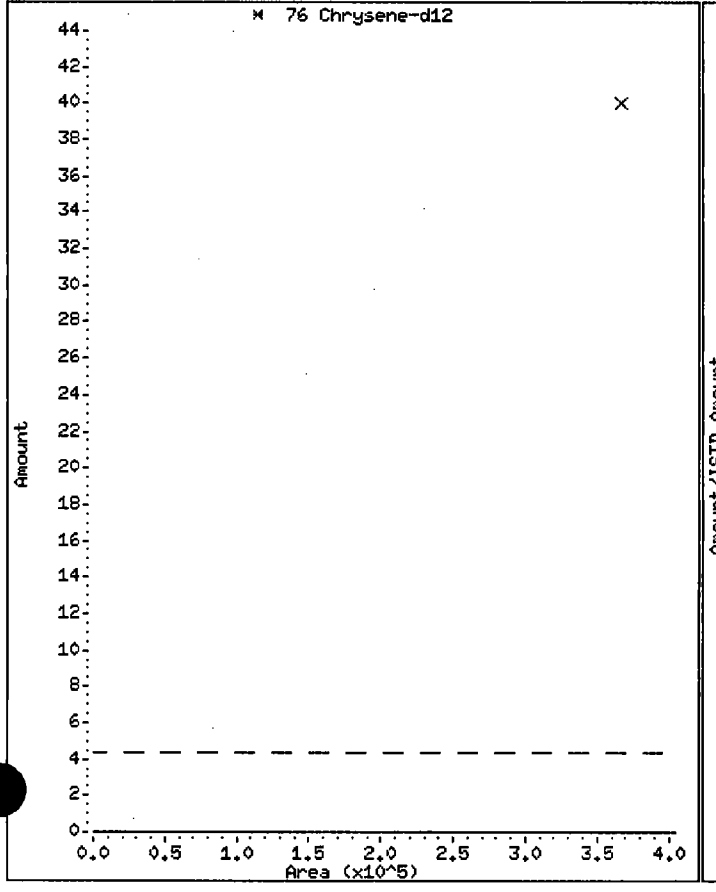

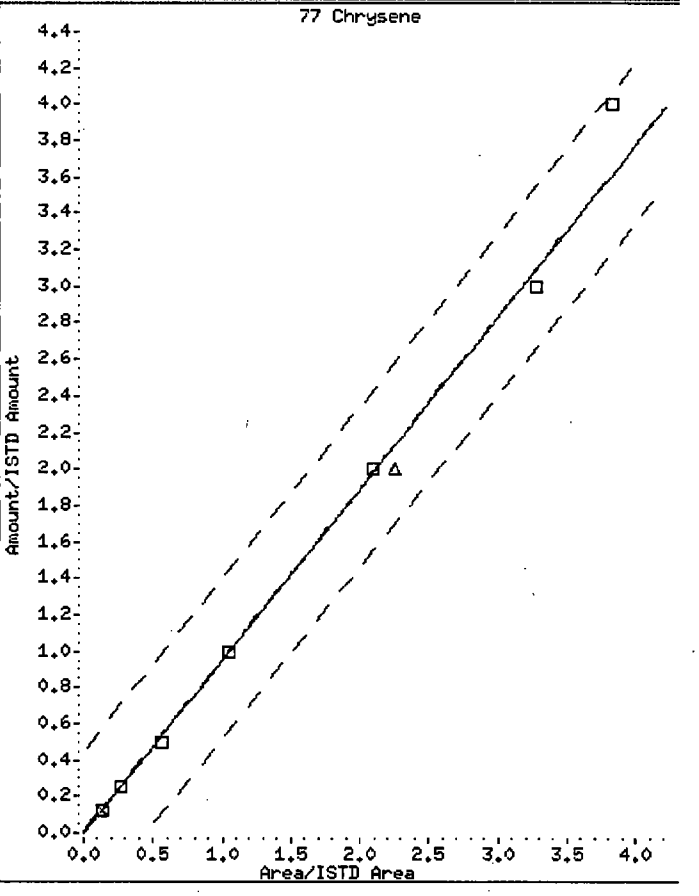

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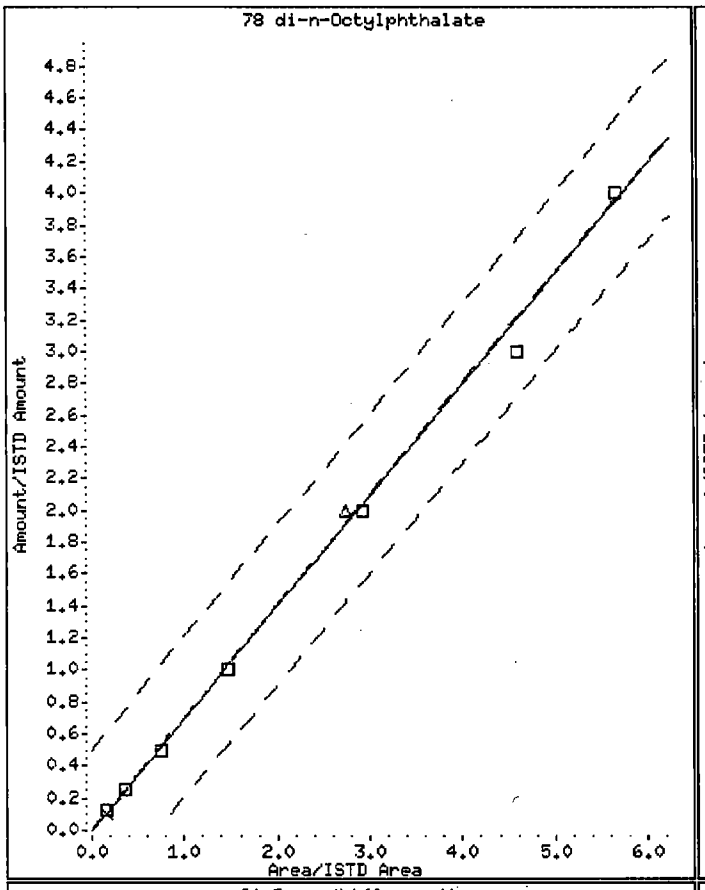

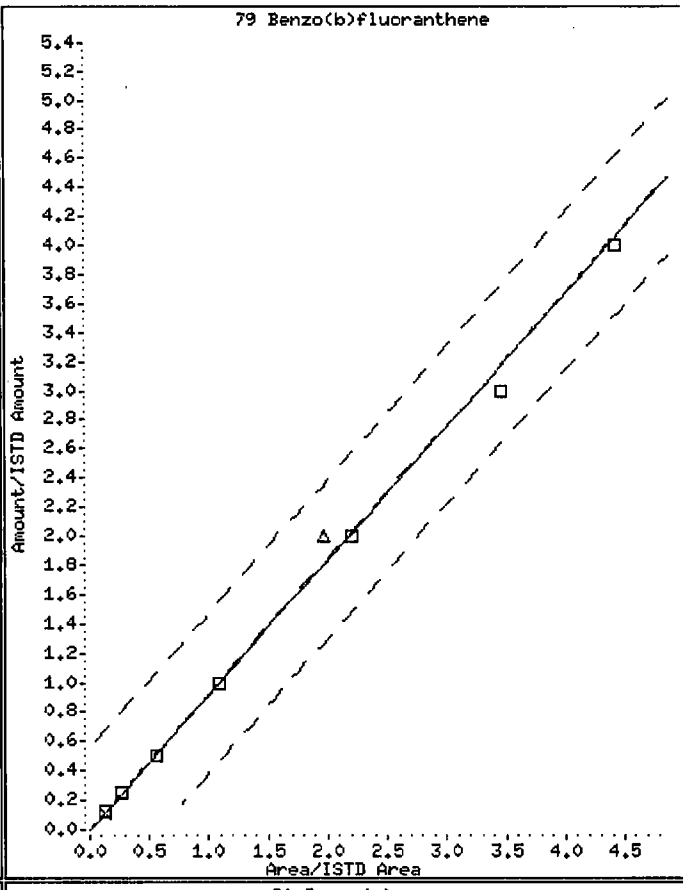

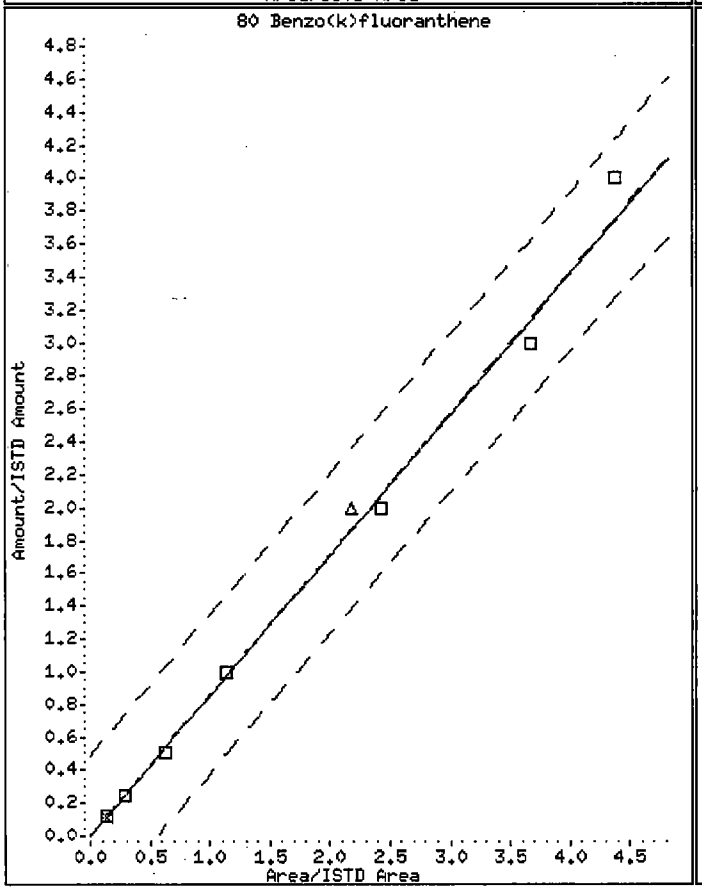

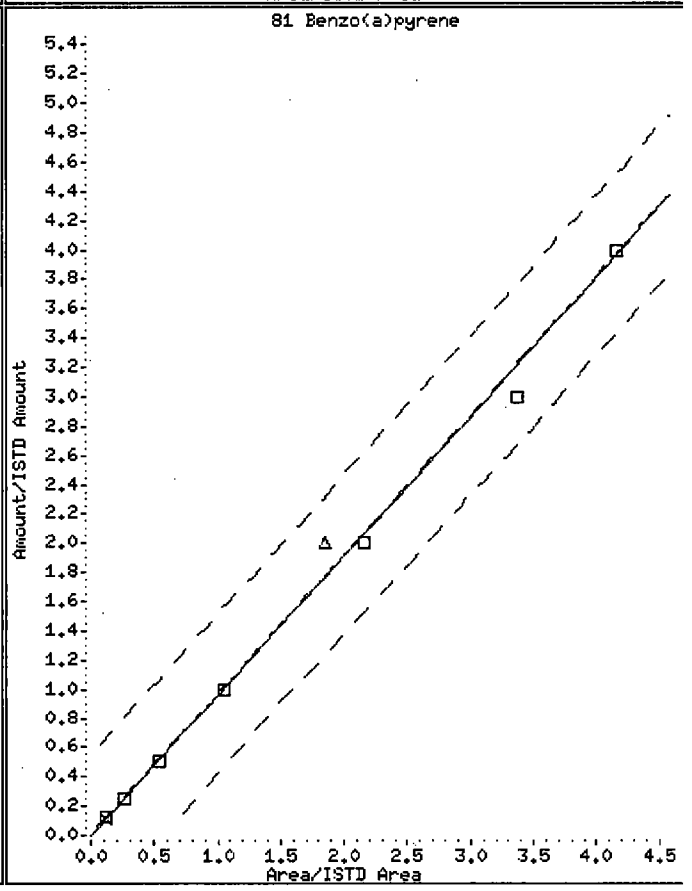

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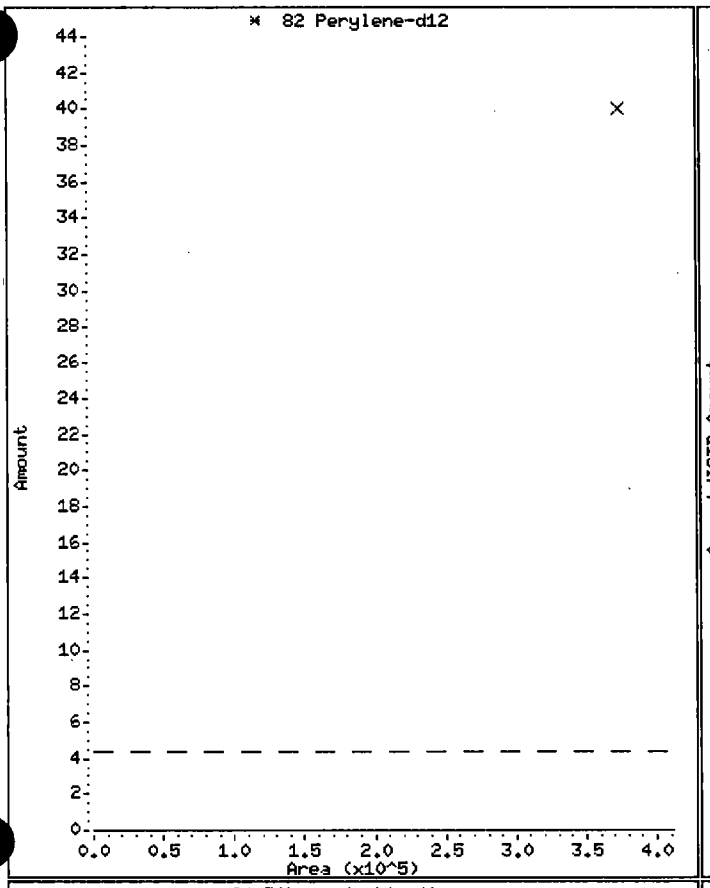
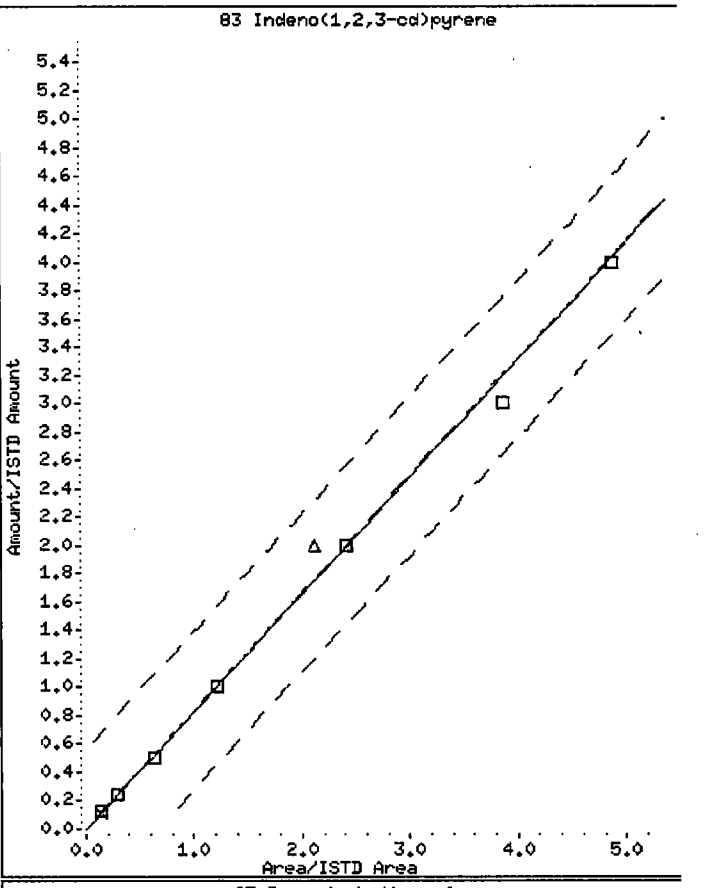
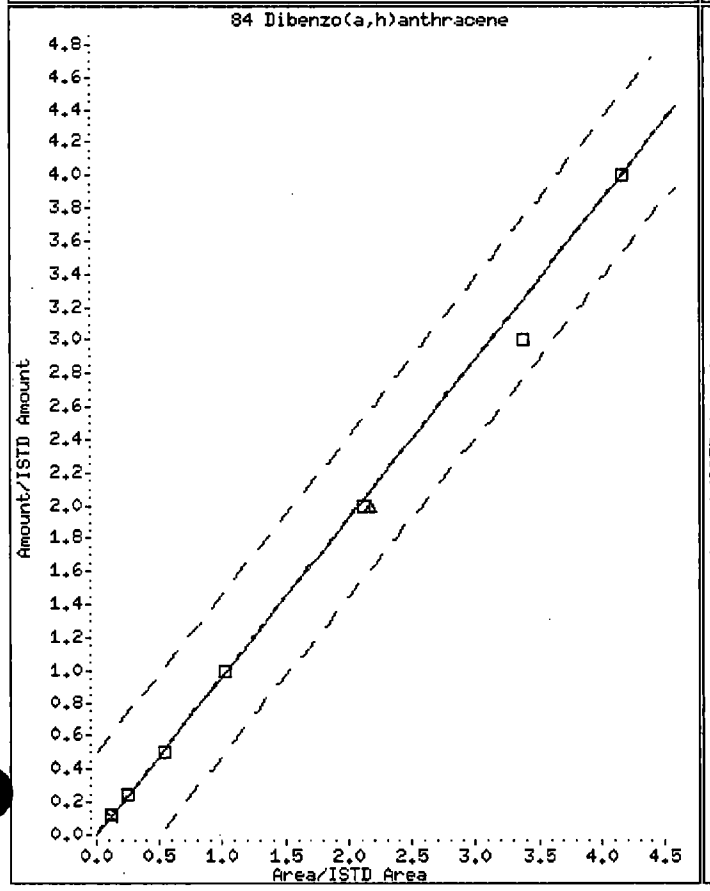
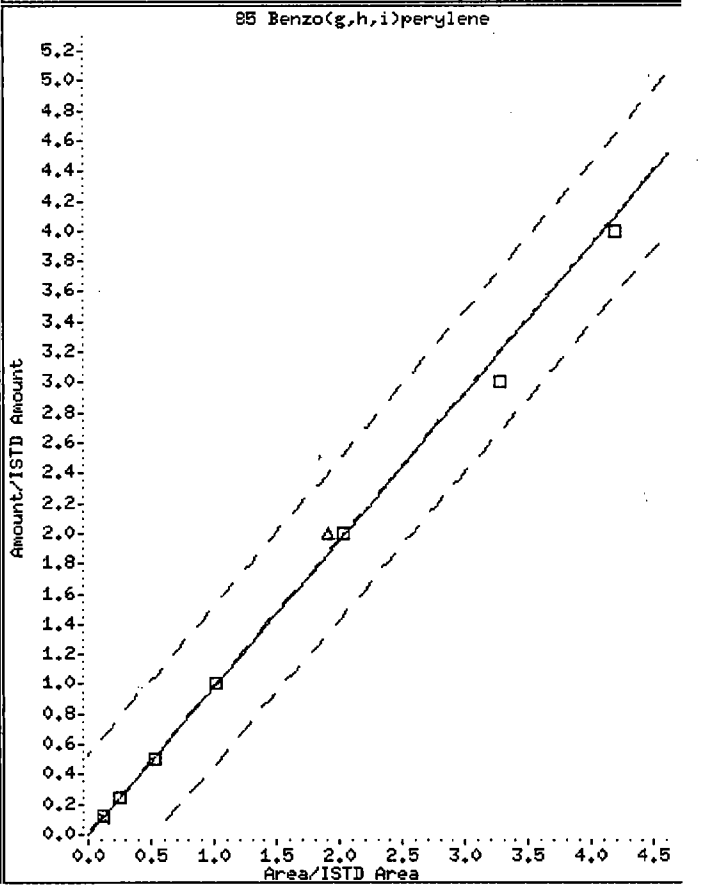








5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 02281412.D DFTPP Injection Date: 02/28/2014
Instrument ID: 10MSS9 DFTPP Injection Time: 13:06
GC Column: ID: 9999 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	46.45	
68	Less than 2.00% of mass 69	0.00	(0.00)
69	Mass 69 relative abundance	28.58	
70	Less than 2.00% of mass 69	0.14	(0.50)
127	40.00 - 60.00% of mass 198	42.93	
197	Less than 1.00% of mass 198	0.00	
199	5.00 - 9.00% of mass 198	6.70	
275	10.00 - 30.00% of mass 198	21.66	
365	Greater than 1.00% of mass 198	2.72	
441	Present, but less than mass 443	15.28	
442	Greater than 40.00% of mass 198	99.88	
443	17.00 - 23.00% of mass 442	19.57	(19.60)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	ICAL10328-968	ICAL10328-968	02281413.D	02/28/2014	13:25
2	ICAL10328-967	ICAL10328-967	02281414.D	02/28/2014	13:52
3	ICAL10328-966	ICAL10328-966	02281415.D	02/28/2014	14:19
4	ICAL10328-965	ICAL10328-965	02281416.D	02/28/2014	14:46
5	ICAL10328-964	ICAL10328-964	02281417.D	02/28/2014	15:13
6	ICAL10328-963	ICAL10328-963	02281418.D	02/28/2014	15:40
7	ICAL10328-962	ICAL10328-962	02281419.D	02/28/2014	16:07
8	ICV10328-98	ICV10328-98	02281420.D	02/28/2014	16:34
9	ICV210328-47	ICV210328-47	02281421.D	02/28/2014	17:01

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.45		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	28.58		PASS
70	Less than 2% of mass 69	0.14	(0.50)	PASS
127	40 - 60% of mass 198	42.93		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.70		PASS
275	10 - 30% of mass 198	21.66		PASS
365	Greater than 1% of mass 198	2.72		PASS
441	Present, but less than mass 443	15.28	(78.04)	PASS
442	Greater than 40% of mass 198	99.88		PASS
443	17 - 23% of mass 442	19.57	(19.60)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7963738	5.000	PASS
Benzidine	0.6912243	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	456254			N/A
4,4-DDE	751	0.2	15.0	PASS
4,4-DDD	29821	6.1	15.0	PASS
4,4-DDD + DDE	30572	6.3	15.0	PASS

****

Tuning Sample, //192.168.10.12/chem/10mss9.i/022814B.b/02281412.D/02281412.D,***

****

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281412.D

Date : 28-FEB-2014 13:06

Client ID:

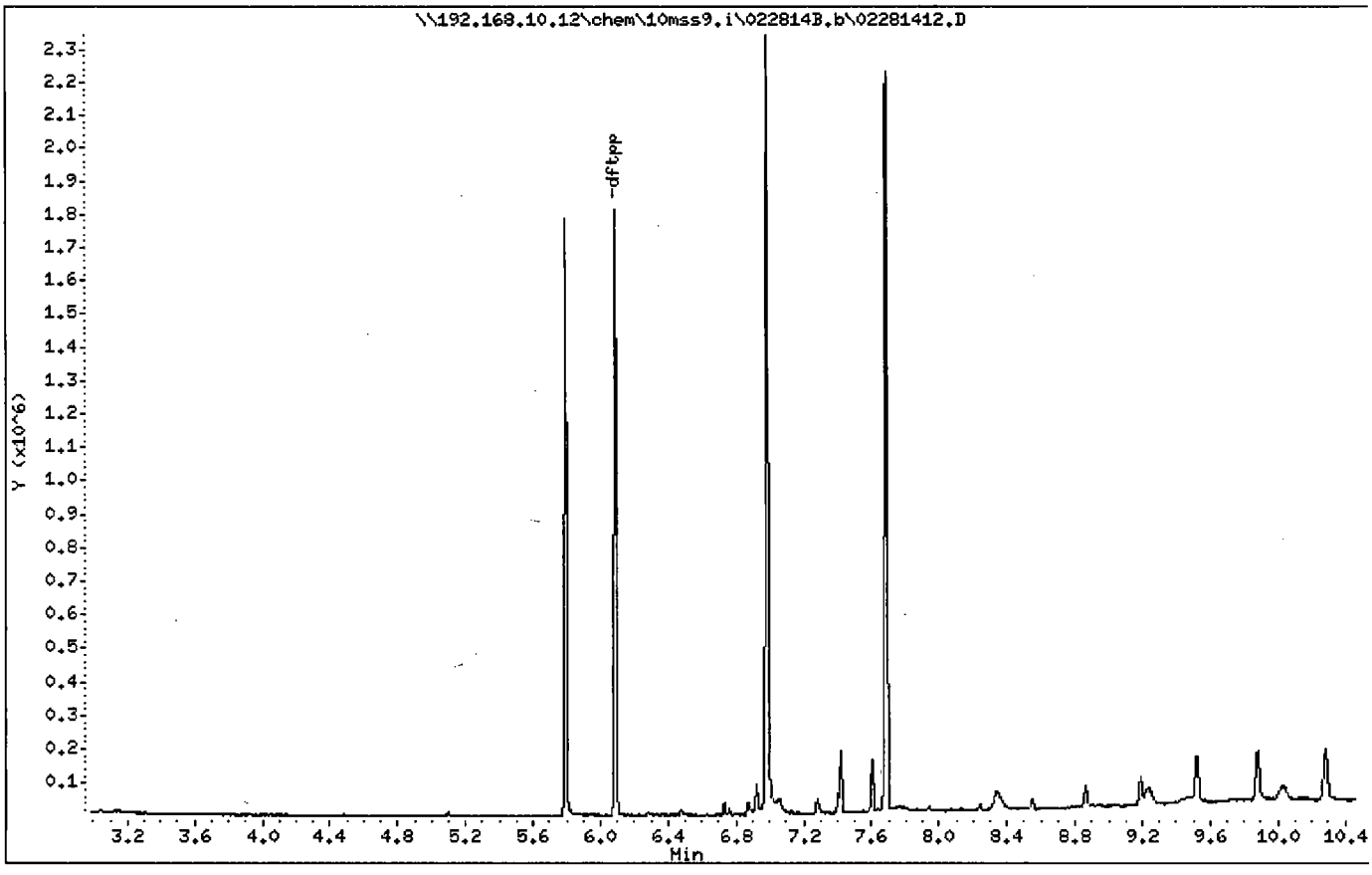
Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281412.D

Date : 28-FEB-2014 13:06

Client ID:

Instrument: 10mss9.i

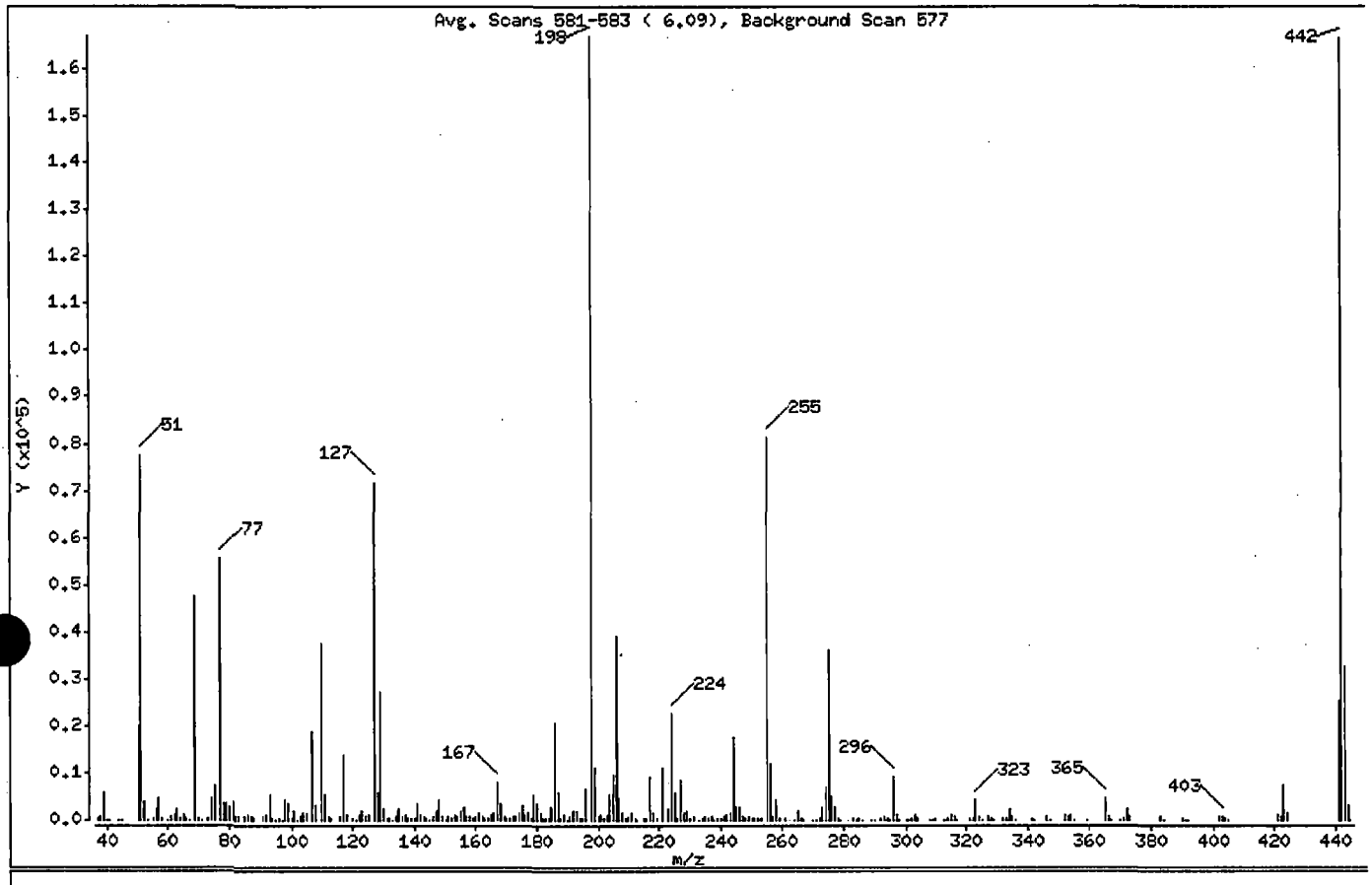
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	46.45
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	28.58
70	Less than 2.00% of mass 69	0.14 (0.50)
127	40.00 - 60.00% of mass 198	42.93
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.70
275	10.00 - 30.00% of mass 198	21.66
365	Greater than 1.00% of mass 198	2.72
441	Present, but less than mass 443	15.28
442	Greater than 40.00% of mass 198	99.88
443	17.00 - 23.00% of mass 442	19.57 (19.60)

Date : 28-FEB-2014 13:06

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 02281412.D

Spectrum: Avg. Scans 581-583 (6.09), Background Scan 577

Location of Maximum: 198.00

Number of points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	336	129.00	27056	202.00	386	286.00	141
38.00	936	130.00	2173	203.00	1061	289.00	50
39.00	5684	131.00	413	204.00	5548	290.00	59
40.00	176	132.00	430	205.00	9725	292.00	215
41.00	153	133.00	71	206.00	39296	293.00	592
44.00	183	134.00	883	207.00	4709	294.00	236
45.00	71	135.00	2325	208.00	1516	295.00	101
50.00	19992	136.00	885	209.00	394	296.00	9091
51.00	77536	137.00	1094	210.00	814	297.00	1306
52.00	3803	138.00	257	211.00	1553	298.00	129
53.00	129	139.00	247	212.00	198	300.00	56
55.00	215	140.00	214	213.00	109	301.00	78
56.00	2127	141.00	3443	215.00	483	302.00	240
57.00	4644	142.00	1228	216.00	205	303.00	1308
58.00	249	143.00	784	217.00	9067	304.00	435
60.00	56	144.00	283	218.00	1417	308.00	64
61.00	735	145.00	175	219.00	238	309.00	59
62.00	1022	146.00	719	221.00	11209	310.00	194
63.00	2398	147.00	1800	223.00	2455	313.00	117
64.00	297	148.00	4075	224.00	22824	314.00	528
65.00	1045	149.00	690	225.00	5922	315.00	1221
66.00	201	150.00	187	226.00	220	316.00	633
67.00	132	151.00	644	227.00	8310	317.00	84
69.00	47704	152.00	237	228.00	1367	321.00	426
70.00	240	153.00	979	229.00	1751	322.00	201
71.00	63	154.00	770	230.00	344	323.00	4111
73.00	507	155.00	2030	231.00	820	324.00	699
74.00	4774	156.00	2820	233.00	106	325.00	103
75.00	7220	157.00	704	234.00	471	327.00	596
77.00	55824	158.00	891	235.00	806	328.00	256
78.00	3460	159.00	573	236.00	559	329.00	54
79.00	3309	160.00	899	237.00	620	332.00	231
80.00	2612	161.00	1677	238.00	123	333.00	299
81.00	3951	162.00	598	239.00	209	334.00	2291
82.00	931	163.00	210	240.00	229	335.00	663

Date : 28-FEB-2014 13:06

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 02281412.D
Spectrum: Avg. Scans 581-583 (6.09), Background Scan 577
Location of Maximum: 198.00
Number of points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	813	164.00	297	241.00	583	336.00	51
85.00	670	165.00	1276	242.00	1256	341.00	499
86.00	1011	166.00	1403	243.00	1351	342.00	76
87.00	586	167.00	7911	244.00	17688	346.00	657
88.00	242	168.00	3402	245.00	2642	347.00	53
91.00	913	169.00	712	246.00	2771	352.00	1027
92.00	1084	170.00	302	247.00	672	353.00	791
93.00	5350	171.00	313	248.00	324	354.00	1179
94.00	415	172.00	737	249.00	801	355.00	160
95.00	106	173.00	886	250.00	288	359.00	87
96.00	406	174.00	1569	251.00	437	365.00	4541
97.00	60	175.00	3142	252.00	393	366.00	670
98.00	4350	176.00	1145	253.00	556	367.00	51
99.00	3431	177.00	1465	255.00	81464	370.00	114
100.00	411	178.00	194	256.00	12072	371.00	386
101.00	2011	179.00	5261	257.00	836	372.00	2148
102.00	95	180.00	3535	258.00	4164	373.00	593
103.00	847	181.00	1691	259.00	566	383.00	583
104.00	1381	182.00	287	261.00	218	384.00	76
105.00	1360	183.00	324	264.00	83	390.00	269
107.00	18944	184.00	445	265.00	1913	391.00	175
108.00	3138	185.00	2733	266.00	246	392.00	148
110.00	37728	186.00	20816	267.00	174	402.00	799
111.00	5185	187.00	5805	270.00	138	403.00	949
112.00	759	188.00	511	271.00	184	404.00	453
113.00	235	189.00	1204	272.00	388	405.00	55
116.00	796	190.00	177	273.00	2519	421.00	962
117.00	13930	191.00	917	274.00	6733	422.00	820
118.00	1099	192.00	1993	275.00	36152	423.00	7118
120.00	243	193.00	2000	276.00	5011	424.00	1388
121.00	51	194.00	511	277.00	2673	441.00	25496
122.00	1255	195.00	394	278.00	505	442.00	166720
123.00	1962	196.00	6540	279.00	57	443.00	32672
124.00	955	198.00	166912	281.00	66	444.00	3062
125.00	1018	199.00	11181	283.00	380	445.00	85

Date : 28-FEB-2014 13:06

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 02281412.D
Spectrum: Avg. Scans 581-583 (6.09), Background Scan 577
Location of Maximum: 198.00
Number of points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
127.00	71656	200.00	817	284.00	136		
128.00	5817	201.00	1095	285.00	440		

5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 03051405.D DFTPP Injection Date: 03/05/2014
Instrument ID: 10MSS9 DFTPP Injection Time: 14:59
GC Column: ID: 9999 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	55.99	
68	Less than 2.00% of mass 69	0.00	(0.00)
69	Mass 69 relative abundance	34.70	
70	Less than 2.00% of mass 69	0.09	(0.27)
127	40.00 - 60.00% of mass 198	48.20	
197	Less than 1.00% of mass 198	0.00	
199	5.00 - 9.00% of mass 198	7.00	
275	10.00 - 30.00% of mass 198	20.68	
365	Greater than 1.00% of mass 198	2.28	
441	Present, but less than mass 443	11.29	
442	Greater than 40.00% of mass 198	74.32	
443	17.00 - 23.00% of mass 442	15.01	(20.20)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCAL610328-96	CCAL610328-9	03051406.D	03/05/2014	15:31
2	SB-9 3-4'	10259041001	03051412.D	03/05/2014	18:17
3	SB-9 12-14'	10259041002	03051413.D	03/05/2014	18:44
4	SB-9 12-14'(1631878MS)	1632347-MS	03051414.D	03/05/2014	19:11
5	SB-9 12-14'(1631878MSD)	1632348-MSD	03051415.D	03/05/2014	19:38

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	55.99		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	34.70		PASS
70	Less than 2% of mass 69	0.09	(0.27)	PASS
127	40 - 60% of mass 198	48.20		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	7.00		PASS
275	10 - 30% of mass 198	20.68		PASS
365	Greater than 1% of mass 198	2.28		PASS
441	Present, but less than mass 443	11.29	(75.21)	PASS
442	Greater than 40% of mass 198	74.32		PASS
443	17 - 23% of mass 442	15.01	(20.20)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.8992126	5.000	PASS
Benzidine	1.2092308	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	96416			N/A
4,4-DDE	1261	1.3	15.0	PASS
4,4-DDD	7991	7.7	15.0	PASS
4,4-DDD + DDE	9252	8.8	15.0	PASS

*****
Tuning Sample, //192.168.10.12/chem/10mss9.i/030514.b/03051405.D/03051405.D,***
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Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051405.D

Date : 05-MAR-2014 14:59

Client ID:

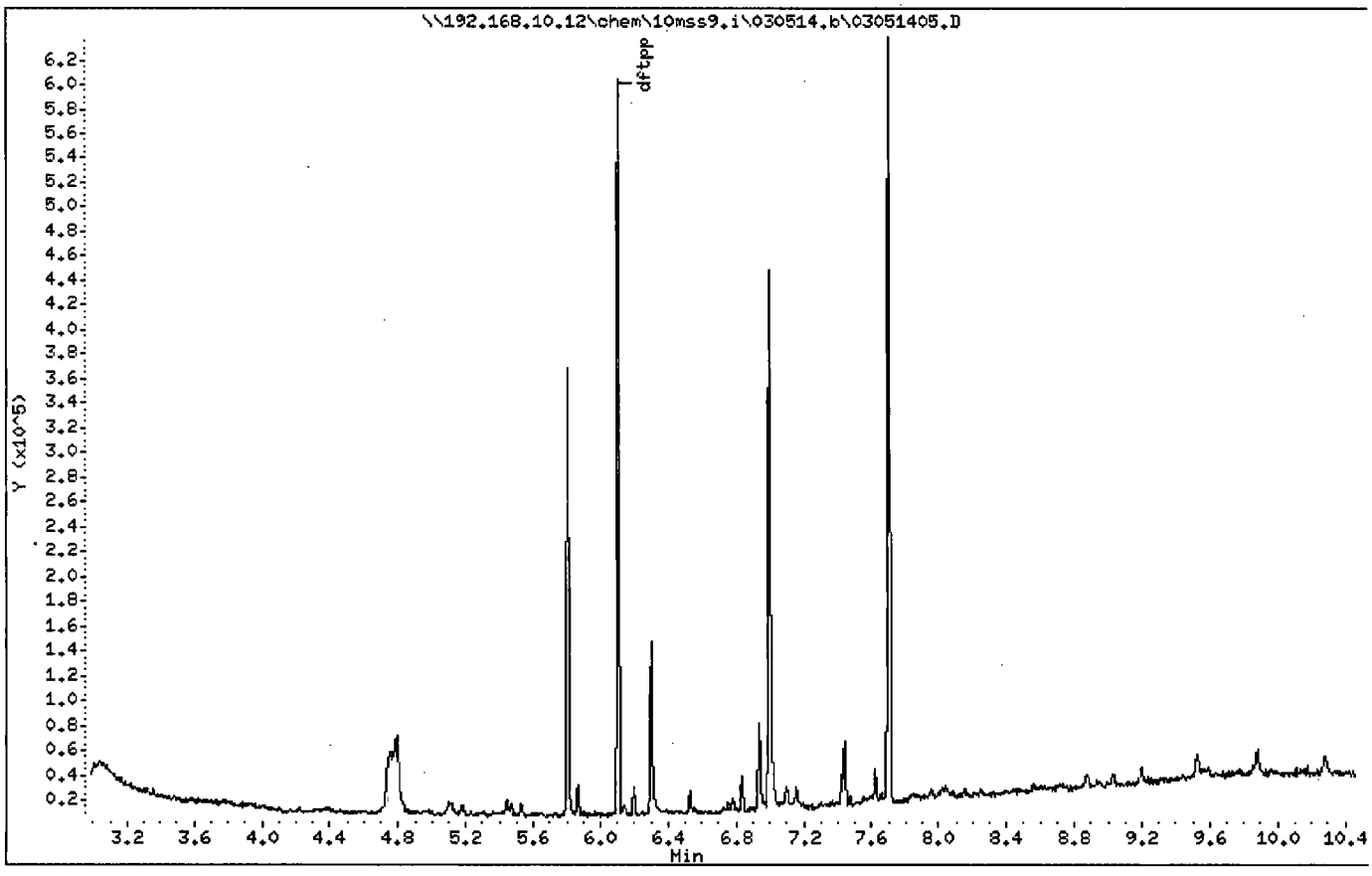
Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99



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Date : 05-MAR-2014 14:59

Client ID:

Instrument: 10mss9.i

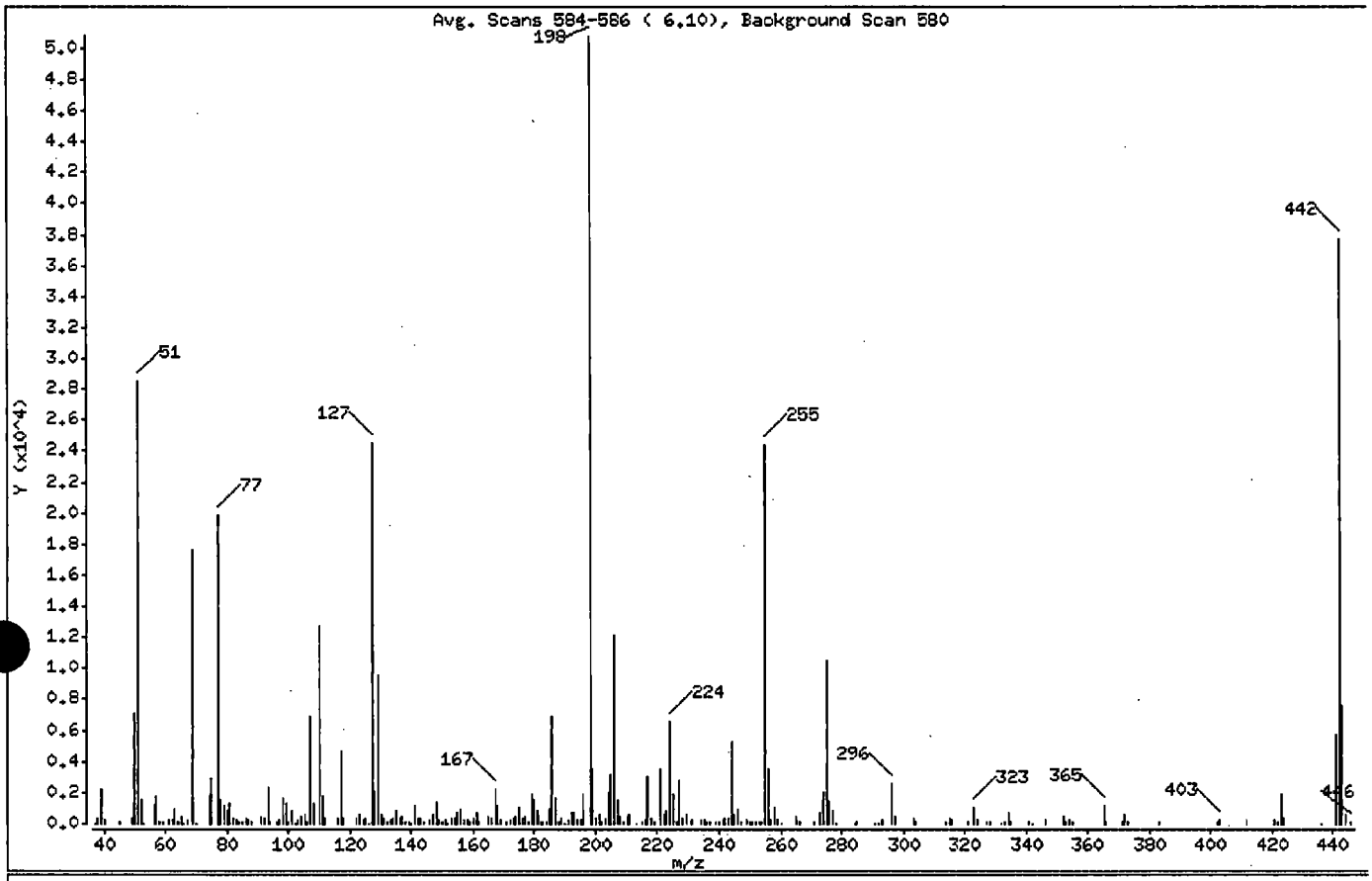
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	55.99
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	34.70
70	Less than 2.00% of mass 69	0.09 (0.27)
127	40.00 - 60.00% of mass 198	48.20
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.00
275	10.00 - 30.00% of mass 198	20.68
365	Greater than 1.00% of mass 198	2.28
441	Present, but less than mass 443	11.29
442	Greater than 40.00% of mass 198	74.32
443	17.00 - 23.00% of mass 442	15.01 (20.20)

Date : 05-MAR-2014 14:59

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 03051405.D

Spectrum: Avg. Scans 584-586 (6.10), Background Scan 580

Location of Maximum: 198.00

Number of points: 241

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	56	123.00	536	188.00	152	258.00	1081
38.00	304	124.00	286	189.00	385	259.00	274
39.00	2163	125.00	402	190.00	56	260.00	51
40.00	201	126.00	51	191.00	247	265.00	510
45.00	172	127.00	24480	192.00	679	266.00	91
49.00	313	128.00	2074	193.00	721	271.00	63
50.00	7112	129.00	9543	194.00	287	273.00	720
51.00	28432	130.00	605	195.00	191	274.00	1979
52.00	1479	131.00	292	196.00	1817	275.00	10500
53.00	37	132.00	63	198.00	50784	276.00	1430
56.00	1172	133.00	186	199.00	3553	277.00	827
57.00	1798	134.00	349	200.00	356	278.00	53
58.00	158	135.00	833	201.00	604	284.00	55
59.00	60	136.00	366	202.00	60	285.00	143
61.00	213	137.00	436	203.00	387	291.00	52
62.00	256	138.00	64	204.00	2012	292.00	51
63.00	985	139.00	173	205.00	3152	293.00	241
64.00	60	140.00	57	206.00	12180	296.00	2515
65.00	435	141.00	1188	207.00	1476	297.00	416
66.00	56	142.00	373	208.00	501	303.00	340
67.00	254	143.00	309	209.00	169	304.00	79
69.00	17624	144.00	75	210.00	498	314.00	102
70.00	48	146.00	231	211.00	561	315.00	389
74.00	1776	147.00	528	213.00	52	316.00	208
75.00	2892	148.00	1438	215.00	104	321.00	127
77.00	19904	149.00	284	216.00	200	323.00	1050
78.00	1509	150.00	88	217.00	3075	324.00	204
79.00	1196	151.00	252	218.00	379	327.00	109
80.00	848	152.00	50	219.00	68	328.00	95
81.00	1299	153.00	347	221.00	3506	332.00	57
82.00	382	154.00	304	222.00	534	333.00	66
83.00	179	155.00	701	223.00	865	334.00	720
84.00	91	156.00	936	224.00	6569	335.00	99
85.00	100	157.00	225	225.00	1922	341.00	126
86.00	301	158.00	260	226.00	64	342.00	51

Date : 05-MAR-2014 14:59

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 03051405.D
Spectrum: Avg. Scans 584-586 (6.10), Background Scan 580
Location of Maximum: 198.00
Number of points: 241

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	224	159.00	110	227.00	2785	346.00	230
88.00	113	160.00	299	228.00	372	352.00	446
91.00	415	161.00	662	229.00	595	353.00	171
92.00	389	162.00	148	231.00	229	354.00	221
93.00	2290	165.00	517	234.00	190	355.00	73
94.00	171	166.00	389	235.00	177	365.00	1160
96.00	146	167.00	2214	236.00	72	366.00	162
97.00	243	168.00	1198	237.00	158	371.00	68
98.00	1634	169.00	287	239.00	63	372.00	576
99.00	1315	171.00	140	240.00	117	373.00	133
100.00	69	172.00	256	241.00	210	383.00	110
101.00	828	173.00	321	242.00	386	402.00	138
102.00	51	174.00	472	243.00	392	403.00	287
103.00	219	175.00	1039	244.00	5260	421.00	192
104.00	515	176.00	349	245.00	637	422.00	170
105.00	539	177.00	477	246.00	884	423.00	1899
106.00	103	178.00	164	247.00	173	424.00	399
107.00	6938	179.00	1861	249.00	213	436.00	50
108.00	1268	180.00	1464	250.00	140	441.00	5733
110.00	12732	181.00	760	251.00	134	442.00	37744
111.00	1795	182.00	69	252.00	144	443.00	7623
112.00	347	183.00	107	253.00	159	444.00	634
116.00	331	184.00	140	254.00	90	446.00	66
117.00	4717	185.00	885	255.00	24408		
118.00	384	186.00	6881	256.00	3547		
122.00	396	187.00	1586	257.00	252		

5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 02281407.D DFTPP Injection Date: 02/28/2014
Instrument ID: 10MSSD DFTPP Injection Time: 08:48
GC Column: ID: 2 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	44.72	
68	Less than 2.00% of mass 69	0.70	(1.77)
69	Mass 69 relative abundance	39.56	
70	Less than 2.00% of mass 69	0.25	(0.64)
127	40.00 - 60.00% of mass 198	55.01	
197	Less than 1.00% of mass 198	0.40	
199	5.00 - 9.00% of mass 198	6.78	
275	10.00 - 30.00% of mass 198	26.51	
365	Greater than 1.00% of mass 198	3.35	
441	Present, but less than mass 443	12.52	
442	Greater than 40.00% of mass 198	88.32	
443	17.00 - 23.00% of mass 442	16.57	(18.76)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	ICAL810328-96	ICAL810328-96	02281408.D	02/28/2014	09:10
2	ICAL710328-96	ICAL710328-96	02281409.D	02/28/2014	09:39
3	ICAL610328-96	ICAL610328-96	02281410.D	02/28/2014	10:07
4	ICAL510328-96	ICAL510328-96	02281411.D	02/28/2014	10:35
5	ICAL410328-96	ICAL410328-96	02281412.D	02/28/2014	11:03
6	ICAL310328-96	ICAL310328-96	02281413.D	02/28/2014	11:31
7	ICAL210328-96	ICAL210328-96	02281414.D	02/28/2014	11:59
8	ICV10328-98	ICV10328-98	02281415.D	02/28/2014	12:27
9	ICV210328-47	ICV210328-47	02281416.D	02/28/2014	12:55

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	44.72		PASS
68	Less than 2% of mass 69	0.70	(1.77)	PASS
69	Mass 69 relative abundance	39.56		PASS
70	Less than 2% of mass 69	0.25	(0.64)	PASS
127	40 - 60% of mass 198	55.01		PASS
197	0 - 1% of mass 198	0.40		PASS
199	5 - 9% of mass 198	6.78		PASS
275	10 - 30% of mass 198	26.51		PASS
365	Greater than 1% of mass 198	3.35		PASS
441	Present, but less than mass 443	12.52	(75.56)	PASS
442	Greater than 40% of mass 198	88.32		PASS
443	17 - 23% of mass 442	16.57	(18.76)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7583131	5.000	PASS
Benzidine	1.0039809	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	1199609			N/A
4,4-DDE	3595	0.3	15.0	PASS
4,4-DDD	50728	4.1	15.0	PASS
4,4-DDD + DDE	54323	4.3	15.0	PASS

****

Tuning Sample, //192.168.10.12/chem/10mssD.i/022814B.b/02281407.D/02281407.D,***

****

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281407.D

Date : 28-FEB-2014 08:48

Client ID:

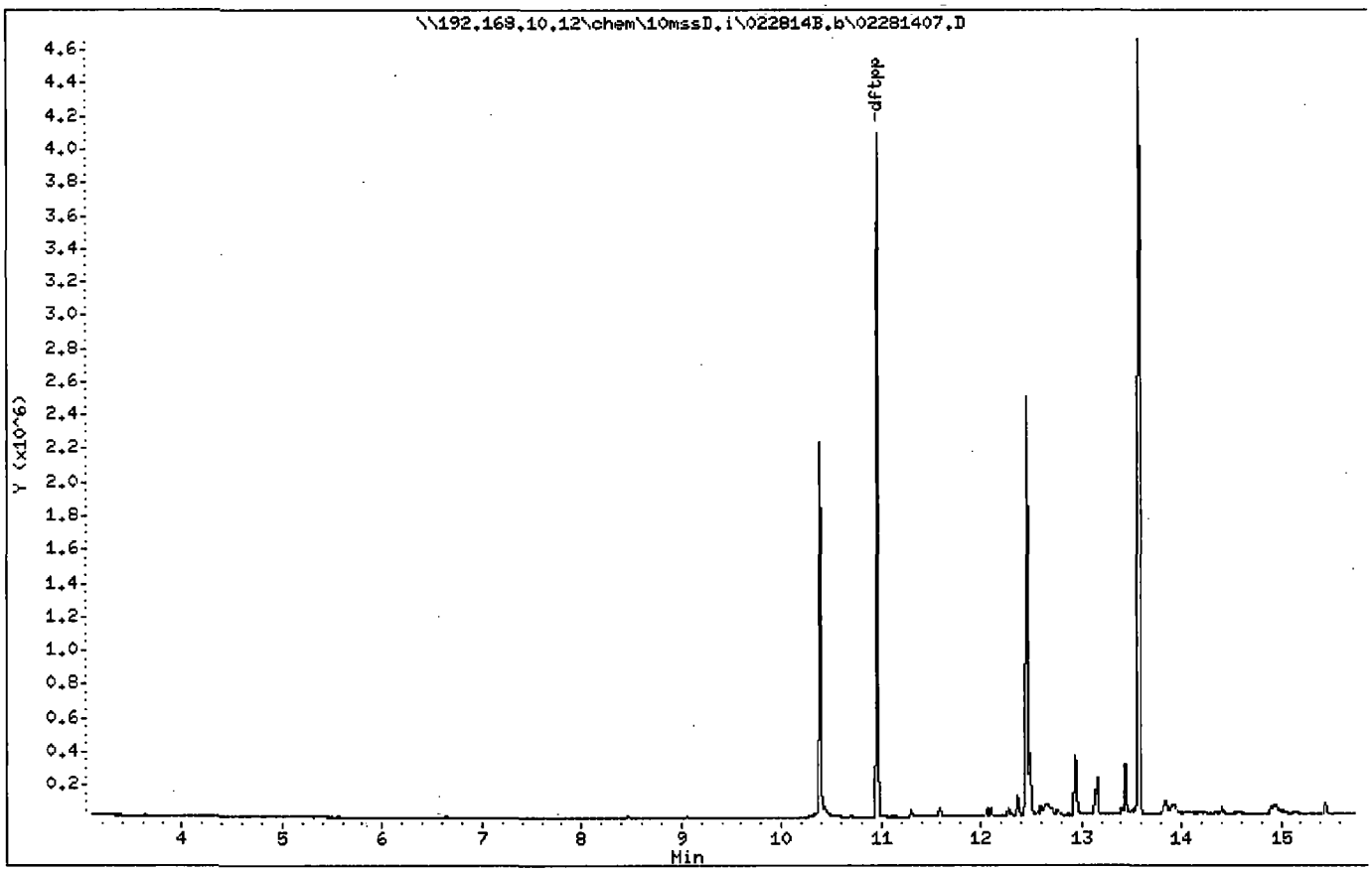
Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281407.D

Date : 28-FEB-2014 08:48

Client ID:

Instrument: 10mssD.i

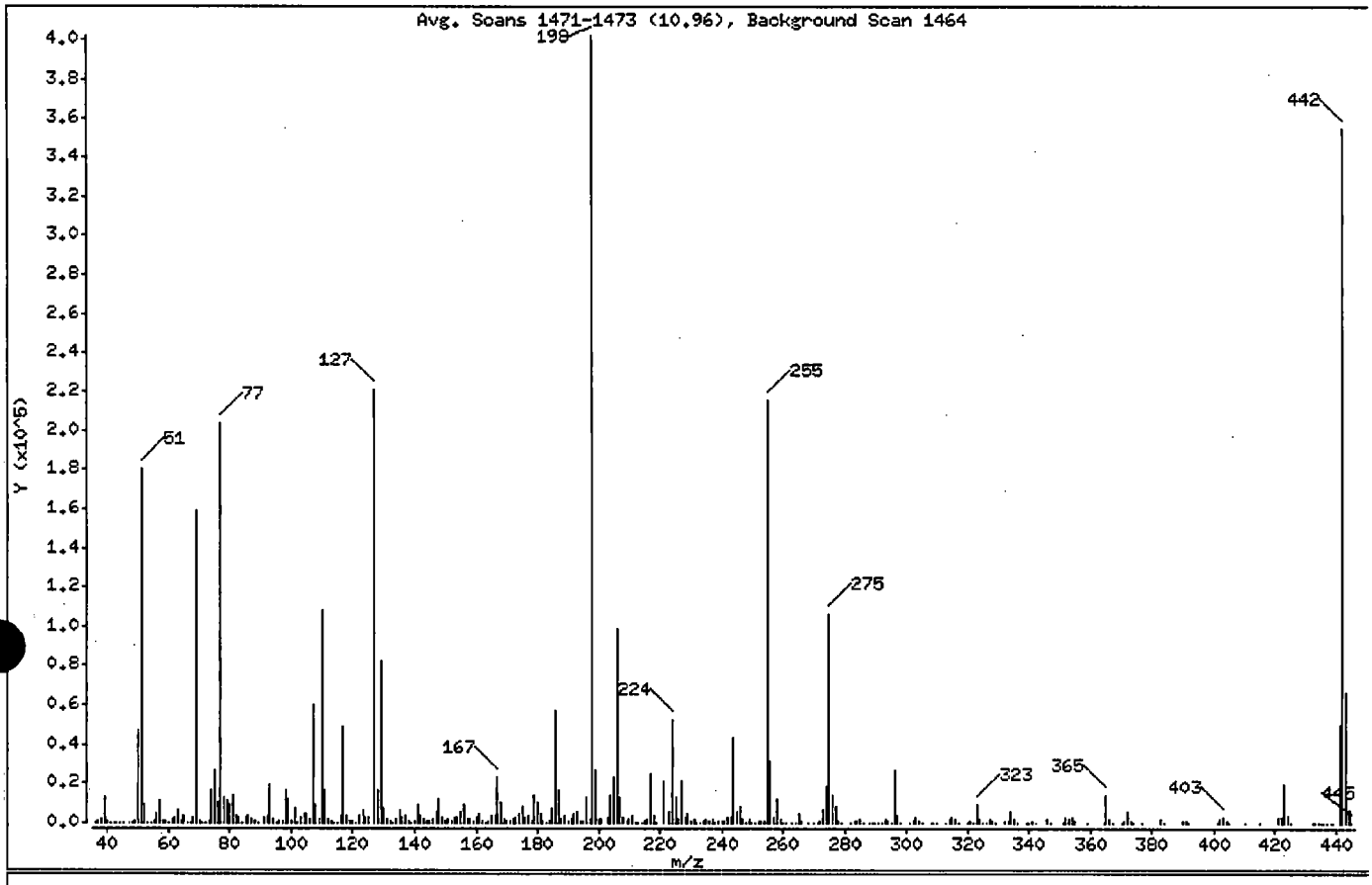
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.72
68	Less than 2.00% of mass 69	0.70 (1.77)
69	Mass 69 relative abundance	39.56
70	Less than 2.00% of mass 69	0.25 (0.64)
127	40.00 - 60.00% of mass 198	55.01
197	Less than 1.00% of mass 198	0.40
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 30.00% of mass 198	26.51
365	Greater than 1.00% of mass 198	3.35
441	Present, but less than mass 443	12.52
442	Greater than 40.00% of mass 198	88.32
443	17.00 - 23.00% of mass 442	16.57 (18.76)

Date : 28-FEB-2014 08:49

Client ID: Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 2.00

Data File: 02281407.D

Spectrum: Avg. Scans 1471-1473 (10.96), Background Scan 1464

Location of Maximum: 198.00

Number of points: 331

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	209	121.00	183	206.00	99296	297.00	3995
37.00	708	122.00	3807	207.00	12760	298.00	288
38.00	1978	123.00	6090	208.00	3196	301.00	383
39.00	12750	124.00	2737	209.00	998	302.00	542
40.00	647	125.00	2678	210.00	1481	303.00	3216
41.00	443	127.00	221184	211.00	3789	304.00	845
42.00	233	128.00	16784	212.00	176	305.00	50
43.00	423	129.00	81976	213.00	257	308.00	388
44.00	154	130.00	7155	214.00	134	309.00	283
45.00	345	131.00	1423	215.00	1013	310.00	342
47.00	4	132.00	803	216.00	2154	313.00	252
48.00	18	133.00	302	217.00	25240	314.00	1396
49.00	1125	134.00	2128	218.00	3472	315.00	3031
50.00	47464	135.00	6452	219.00	314	316.00	1820
51.00	179776	136.00	2614	221.00	21272	317.00	354
52.00	8914	137.00	3294	223.00	5610	320.00	107
53.00	441	138.00	861	224.00	52768	321.00	927
54.00	57	139.00	416	225.00	13020	322.00	423
55.00	815	140.00	854	226.00	1458	323.00	9132
56.00	4825	141.00	9653	227.00	21288	324.00	1705
57.00	11374	142.00	3536	228.00	3012	325.00	181
58.00	509	143.00	2289	229.00	4460	326.00	154
59.00	914	144.00	678	230.00	660	327.00	1662
60.00	57	145.00	568	231.00	2004	328.00	863
61.00	2051	146.00	1840	232.00	339	329.00	146
62.00	2586	147.00	5220	233.00	422	332.00	742
63.00	6591	148.00	12083	234.00	1334	333.00	1005
64.00	968	149.00	2447	235.00	1606	334.00	5926
65.00	3384	150.00	667	236.00	1230	335.00	1534
66.00	300	151.00	1698	237.00	1793	336.00	170
67.00	407	152.00	619	238.00	241	339.00	127
68.00	2812	153.00	3157	239.00	804	340.00	62
69.00	159040	154.00	2352	240.00	622	341.00	1019
70.00	1017	155.00	5781	241.00	1296	342.00	223
71.00	168	156.00	8993	242.00	2847	346.00	1831

Date : 28-FEB-2014 08:48

Client ID: Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 2.00

Data File: 02281407.D

Spectrum: Avg. Scans 1471-1473 (10.96), Background Scan 1464

Location of Maximum: 198.00

Number of points: 331

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	272	157.00	1656	243.00	3227	347.00	385
73.00	1305	158.00	1731	244.00	43704	351.00	159
74.00	16776	159.00	1312	245.00	5784	352.00	2834
75.00	26672	160.00	2976	246.00	8292	353.00	2024
76.00	10431	161.00	4695	247.00	1699	354.00	2936
77.00	203008	162.00	1201	248.00	365	355.00	546
78.00	13383	163.00	320	249.00	1611	359.00	170
79.00	11161	164.00	609	250.00	368	364.00	70
80.00	8841	165.00	3510	251.00	377	365.00	13475
81.00	13547	166.00	3431	252.00	491	366.00	1967
82.00	3499	167.00	23064	253.00	1141	367.00	56
83.00	3107	168.00	9785	254.00	601	370.00	284
84.00	351	169.00	1761	255.00	215616	371.00	775
85.00	2494	170.00	645	256.00	31840	372.00	5161
86.00	3649	171.00	718	257.00	2395	373.00	1248
87.00	1723	172.00	1770	258.00	11971	374.00	132
88.00	688	173.00	2404	259.00	1925	377.00	64
89.00	319	174.00	4320	260.00	343	383.00	1413
91.00	2744	175.00	8504	261.00	372	384.00	357
92.00	3390	176.00	2416	263.00	140	390.00	673
93.00	19840	177.00	3494	264.00	421	391.00	468
94.00	1440	178.00	1238	265.00	5017	392.00	407
95.00	447	179.00	13470	266.00	701	401.00	259
96.00	1185	180.00	9890	268.00	50	402.00	2103
97.00	506	181.00	4854	270.00	230	403.00	2955
98.00	16364	182.00	763	271.00	460	404.00	1087
99.00	12009	183.00	449	272.00	701	405.00	153
100.00	1124	184.00	1233	273.00	6791	410.00	56
101.00	7813	185.00	7538	274.00	18472	415.00	132
102.00	434	186.00	57496	275.00	106592	421.00	2600
103.00	2348	187.00	16330	276.00	13857	422.00	2395
104.00	4179	188.00	1720	277.00	8324	423.00	19784
105.00	4406	189.00	3292	278.00	1281	424.00	3890
106.00	1566	190.00	563	279.00	288	425.00	389
107.00	60152	191.00	1698	282.00	169	432.00	56

Date : 28-FEB-2014 08:48

Client ID: Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 2.00

Data File: 02281407.D
Spectrum: Avg. Scans 1471-1473 (10,96), Background Scan 1464
Location of Maximum: 198.00
Number of points: 331

m/z	Y	m/z	Y	m/z	Y	m/z	Y
108.00	9310	192.00	4823	283.00	942	433.00	122
109.00	1907	193.00	5174	284.00	678	434.00	56
110.00	108376	194.00	1133	285.00	1531	435.00	144
111.00	16736	195.00	770	286.00	260	436.00	104
112.00	2017	196.00	13055	288.00	64	437.00	142
113.00	688	197.00	1617	289.00	348	438.00	77
114.00	202	198.00	402048	290.00	339	439.00	245
115.00	199	199.00	27248	291.00	140	441.00	50344
116.00	3370	200.00	1994	292.00	412	442.00	355072
117.00	49416	201.00	2084	293.00	1961	443.00	66624
118.00	3440	203.00	2609	294.00	506	444.00	6363
119.00	465	204.00	14077	295.00	244	445.00	343
120.00	737	205.00	23456	296.00	26800		

5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 03061402.D DFTPP Injection Date: 03/06/2014
Instrument ID: 10MSSD DFTPP Injection Time: 07:20
GC Column: ID: 2 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	44.34	
68	Less than 2.00% of mass 69	0.76	(1.93)
69	Mass 69 relative abundance	39.64	
70	Less than 2.00% of mass 69	0.22	(0.56)
127	40.00 - 60.00% of mass 198	53.72	
197	Less than 1.00% of mass 198	0.51	
199	5.00 - 9.00% of mass 198	6.74	
275	10.00 - 30.00% of mass 198	28.32	
365	Greater than 1.00% of mass 198	3.82	
441	Present, but less than mass 443	15.43	
442	Greater than 40.00% of mass 198	110.50	
443	17.00 - 23.00% of mass 442	21.31	(19.28)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCAL610328-96	CCAL610328-9	03061403.D	03/06/2014	07:48
2	BLANK for HBN 288053 [OEXT/244	1632345	03061404.D	03/06/2014	08:16
3	LCS for HBN 288053 [OEXT/24489	1632346	03061405.D	03/06/2014	08:44

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	90.50		PASS
51	30 - 60% of mass 198	44.34		PASS
68	Less than 2% of mass 69	0.76	(1.93)	PASS
69	Mass 69 relative abundance	39.64		PASS
70	Less than 2% of mass 69	0.22	(0.56)	PASS
127	40 - 60% of mass 198	53.72		PASS
197	0 - 1% of mass 198	0.51		PASS
199	5 - 9% of mass 198	6.74		PASS
275	10 - 30% of mass 198	28.32		PASS
365	Greater than 1% of mass 198	3.82		PASS
441	Present, but less than mass 443	15.43	(72.39)	PASS
442	Greater than 40% of mass 198	110.50		PASS
443	17 - 23% of mass 442	21.31	(19.28)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1450677	5.000	PASS
Benzidine	0.9762658	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	887844			N/A
4,4-DDE	8272	0.9	15.0	PASS
4,4-DDD	52378	5.6	15.0	PASS
4,4-DDD + DDE	60650	6.4	15.0	PASS

*****
Tuning Sample, //192.168.10.12/chem/10mssD.i/030614.b/03061402.D/03061402.D,***
*****

Date : 06-MAR-2014 07:20

Client ID:

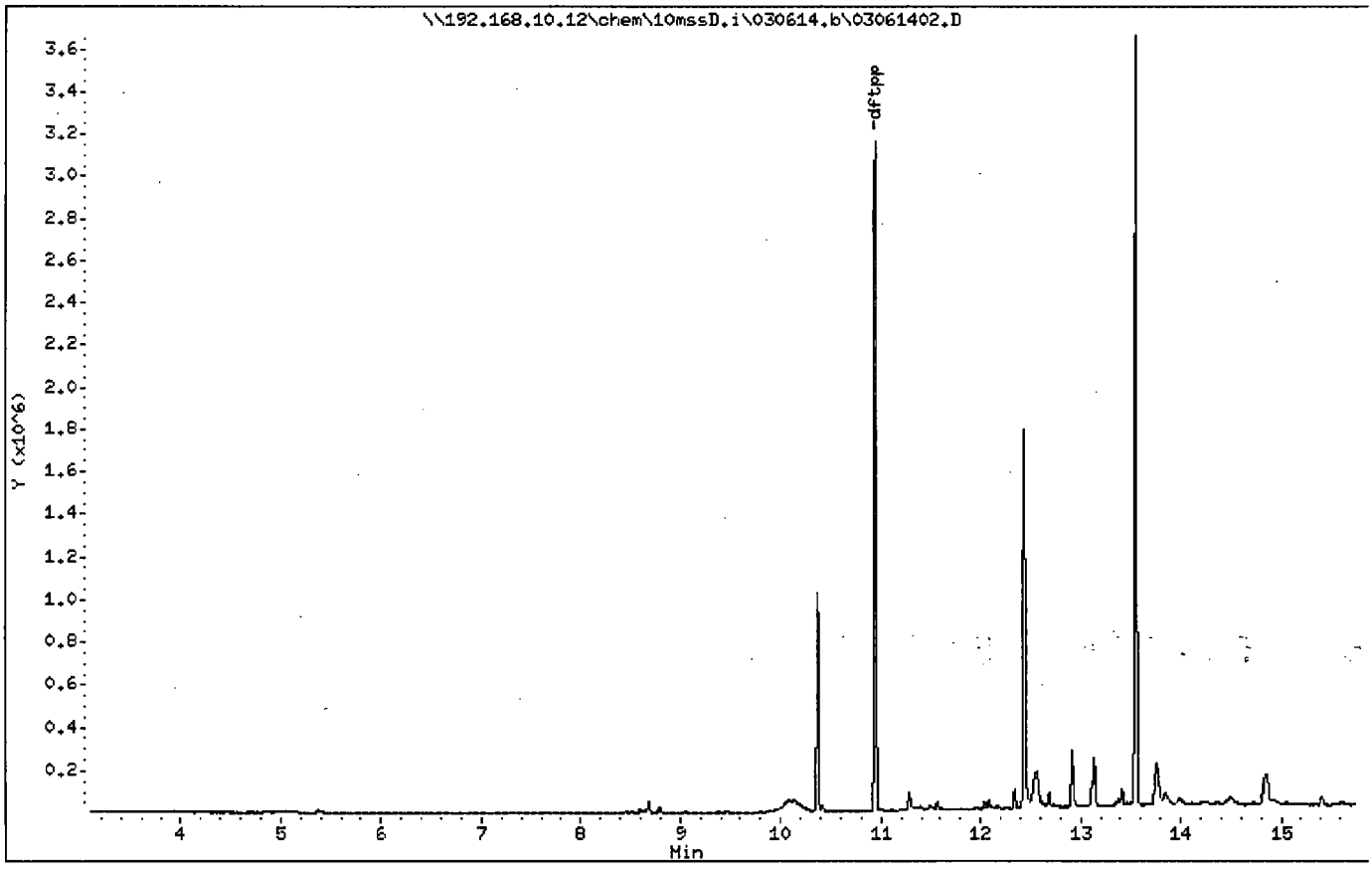
Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00



Date : 06-MAR-2014 07:20

Client ID:

Instrument: 10mssD.i

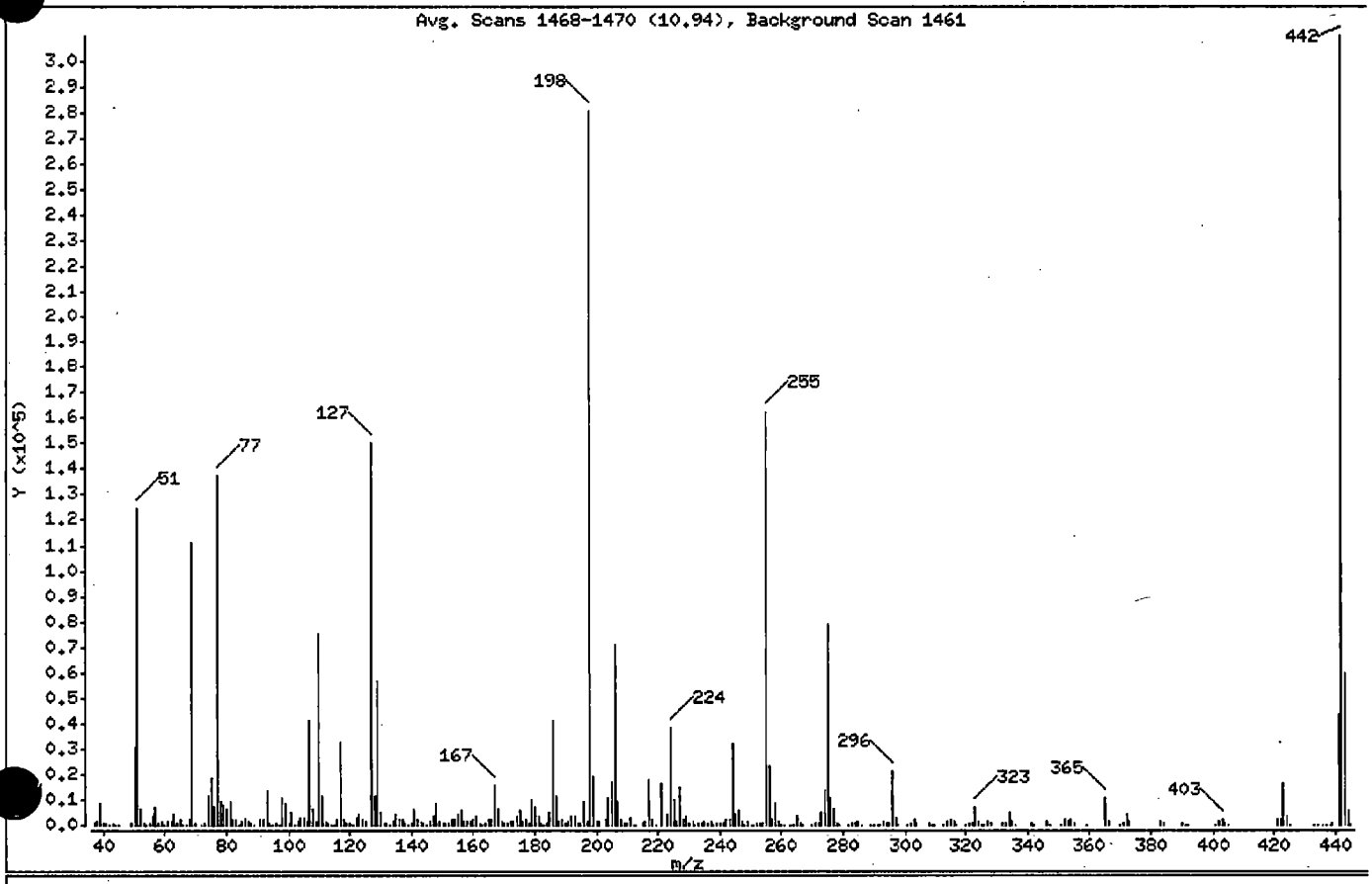
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.34
68	Less than 2.00% of mass 69	0.76 (1.93)
69	Mass 69 relative abundance	39.64
70	Less than 2.00% of mass 69	0.22 (0.56)
127	40.00 - 60.00% of mass 198	53.72
197	Less than 1.00% of mass 198	0.51
199	5.00 - 9.00% of mass 198	6.74
275	10.00 - 30.00% of mass 198	28.32
365	Greater than 1.00% of mass 198	3.82
441	Present, but less than mass 443	15.43
442	Greater than 40.00% of mass 198	110.50
443	17.00 - 23.00% of mass 442	21.31 (19.28)

Date : 06-MAR-2014 07:20

Client ID:

Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00

Data File: 03061402.D

Spectrum: Avg. Scans 1468-1470 (10.94), Background Scan 1461

Location of Maximum: 442.00

Number of points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	466	121.00	233	201.00	1461	291.00	195
38.00	1353	122.00	2563	203.00	1837	292.00	310
39.00	8567	123.00	4103	204.00	10522	293.00	1611
40.00	439	124.00	1907	205.00	16968	294.00	477
41.00	456	125.00	1562	206.00	71072	295.00	545
42.00	87	127.00	150592	207.00	9209	296.00	21152
43.00	560	128.00	11567	208.00	2304	297.00	2970
44.00	30	129.00	56616	209.00	715	298.00	190
45.00	239	130.00	4669	210.00	729	301.00	279
49.00	772	131.00	899	211.00	2880	302.00	369
50.00	30592	132.00	531	212.00	310	303.00	2416
51.00	124296	133.00	204	213.00	156	304.00	678
52.00	6224	134.00	1388	215.00	831	308.00	417
53.00	379	135.00	4446	216.00	1746	309.00	155
54.00	257	136.00	1874	217.00	18040	310.00	290
55.00	841	137.00	2266	218.00	2289	313.00	174
56.00	3323	138.00	614	219.00	183	314.00	1118
57.00	7412	139.00	329	221.00	16528	315.00	2343
58.00	417	140.00	675	223.00	4248	316.00	1342
59.00	1401	141.00	6653	224.00	38168	317.00	235
60.00	69	142.00	2433	225.00	9981	320.00	50
61.00	1370	143.00	1716	226.00	1109	321.00	762
62.00	1592	144.00	532	227.00	15099	322.00	428
63.00	4604	145.00	342	228.00	2220	323.00	7346
64.00	796	146.00	1135	229.00	3476	324.00	1413
65.00	2359	147.00	3725	230.00	460	325.00	127
66.00	134	148.00	8248	231.00	1358	326.00	77
67.00	187	149.00	1727	232.00	275	327.00	1249
68.00	2143	150.00	471	233.00	373	328.00	762
69.00	111128	151.00	1028	234.00	920	332.00	478
70.00	617	152.00	404	235.00	1170	333.00	739
72.00	350	153.00	2250	236.00	803	334.00	5020
73.00	817	154.00	1801	237.00	1240	335.00	1238
74.00	11603	155.00	3960	238.00	167	336.00	65
75.00	18608	156.00	5877	239.00	644	341.00	830

Date : 06-MAR-2014 07:20

Client ID:

Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00

Data File: 03061402.D

Spectrum: Avg. Scans 1468-1470 (10.94), Background Scan 1461

Location of Maximum: 442.00

Number of points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	7201	157.00	1314	240.00	525	342.00	230
77.00	137408	158.00	1291	241.00	944	346.00	1643
78.00	9492	159.00	1102	242.00	2158	347.00	212
79.00	7811	160.00	2259	243.00	2321	351.00	64
80.00	6110	161.00	3361	244.00	32080	352.00	2292
81.00	9140	162.00	1066	245.00	4186	353.00	1697
82.00	2429	163.00	191	246.00	6033	354.00	2470
83.00	2251	164.00	452	247.00	1267	355.00	488
84.00	301	165.00	2441	248.00	347	359.00	117
85.00	1513	166.00	2323	249.00	1172	365.00	10695
86.00	2493	167.00	15567	250.00	274	366.00	1373
87.00	1296	168.00	6459	251.00	286	370.00	171
88.00	437	169.00	1237	252.00	367	371.00	618
89.00	206	170.00	481	253.00	1009	372.00	4292
91.00	1985	171.00	615	254.00	511	373.00	1111
92.00	2149	172.00	1205	255.00	162688	383.00	1108
93.00	13348	173.00	1548	256.00	23520	384.00	357
94.00	996	174.00	3421	257.00	1784	390.00	622
95.00	255	175.00	5500	258.00	8718	391.00	345
96.00	833	176.00	1665	259.00	1480	392.00	298
97.00	90	177.00	2354	260.00	177	401.00	250
98.00	10597	178.00	969	261.00	309	402.00	1622
99.00	8559	179.00	9747	263.00	51	403.00	2418
100.00	853	180.00	6989	264.00	307	404.00	844
101.00	5229	181.00	3384	265.00	3673	405.00	52
102.00	324	182.00	557	266.00	568	421.00	2201
103.00	1667	183.00	294	267.00	55	422.00	2152
104.00	3140	184.00	808	270.00	140	423.00	16384
105.00	3099	185.00	5249	271.00	367	424.00	3299
106.00	1072	186.00	41184	272.00	532	425.00	289
107.00	41624	187.00	11295	273.00	5209	433.00	51
108.00	6463	188.00	1198	274.00	13719	434.00	127
109.00	1192	189.00	2400	275.00	79376	436.00	175
110.00	75192	190.00	394	276.00	10643	437.00	170
111.00	11071	191.00	1163	277.00	6411	438.00	171

Date : 06-MAR-2014 07:20

Client ID:

Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00

Data File: 03061402.D

Spectrum: Avg. Scans 1468-1470 (10.94), Background Scan 1461

Location of Maximum: 442.00

Number of points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	1493	192.00	3297	278.00	933	439.00	357
113.00	554	193.00	3719	279.00	143	441.00	43240
114.00	126	194.00	845	282.00	119	442.00	309760
115.00	177	195.00	551	283.00	703	443.00	59728
116.00	2377	196.00	9281	284.00	500	444.00	5342
117.00	32584	197.00	1428	285.00	1112	445.00	314
118.00	2397	198.00	230320	286.00	215		
119.00	365	199.00	18896	289.00	192		
120.00	549	200.00	1502	290.00	247		

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 05-MAR-2014 15:31
Lab File ID: 03051406.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.82144	0.85739	0.85739	0.000	4.37596	40.00000	Averaged
2 Pyridine	1.49516	1.51663	1.51663	0.000	1.43582	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.41718	1.40485	1.40485	0.000	-0.86957	20.00000	Averaged
$ 4 Phenol-d6 (S)	1.62963	1.57881	1.57881	0.000	-3.11837	20.00000	Averaged
5 Phenol	1.71095	1.61900	1.61900	0.800	-5.37412	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.27504	1.15571	1.15571	0.700	-9.35894	40.00000	Averaged
7 2-Chlorophenol	1.43833	1.38863	1.38863	0.800	-3.45512	40.00000	Averaged
8 1,3-Dichlorobenzene	1.62113	1.57158	1.57158	0.000	-3.05687	40.00000	Averaged
10 1,4-Dichlorobenzene	1.64435	1.56250	1.56250	0.000	-4.97762	20.00000	Averaged
11 Benzyl alcohol	0.98327	0.97185	0.97185	0.000	-1.16113	40.00000	Averaged
12 1,2-Dichlorobenzene	1.53761	1.48083	1.48083	0.000	-3.69302	40.00000	Averaged
13 2-Methylphenol	1.09771	1.04548	1.04548	0.700	-4.75847	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	3.26596	2.97321	2.97321	0.000	-8.96369	40.00000	Averaged
15 3 & 4-Methylphenol	1.43620	1.34343	1.34343	0.600	-6.45951	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	0.82934	0.76415	0.76415	0.500	-7.86011	40.00000	Averaged
18 Hexachloroethane	0.59718	0.57156	0.57156	0.300	-4.29032	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.34604	0.33490	0.33490	0.000	-3.22077	20.00000	Averaged
20 Nitrobenzene	0.32889	0.31833	0.31833	0.200	-3.20973	40.00000	Averaged
21 Isophorone	0.59079	0.56475	0.56475	0.400	-4.40915	40.00000	Averaged
22 2-Nitrophenol	0.19269	0.19568	0.19568	0.100	1.55078	20.00000	Averaged
23 2,4-Dimethylphenol	0.33563	0.32025	0.32025	0.200	-4.58226	40.00000	Averaged
24 Benzoic acid	0.17260	0.18006	0.18006	0.000	4.32065	40.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.34958	0.33826	0.33826	0.300	-3.23861	40.00000	Averaged
26 2,4-Dichlorophenol	0.28989	0.28481	0.28481	0.200	-1.75278	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.30416	0.29703	0.29703	0.000	-2.34360	40.00000	Averaged
29 Naphthalene	1.01420	0.96221	0.96221	0.700	-5.12592	40.00000	Averaged
30 4-Chloroaniline	0.36851	0.32408	0.32408	0.010	-12.05418	40.00000	Averaged
31 Hexachlorobutadiene	0.16651	0.16249	0.16249	0.010	-2.40976	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.27561	0.26175	0.26175	0.200	-5.02924	20.00000	Averaged
33 2-Methylnaphthalene	0.66940	0.64264	0.64264	0.040	-3.99749	40.00000	Averaged
34 1-Methylnaphthalene	0.62068	0.59864	0.59864	0.000	-3.55010	40.00000	Averaged
35 Hexachlorocyclopentadiene	80.00000	73.12764	0.27055	0.050	-8.59045	40.00000	Quadratic
36 2,4,6-Trichlorophenol	0.37362	0.37639	0.37639	0.200	0.74039	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.39701	0.39855	0.39855	0.200	0.38713	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.39852	1.38894	1.38894	0.000	-0.68511	20.00000	Averaged
39 2-Chloronaphthalene	1.22024	1.17193	1.17193	0.800	-3.95897	40.00000	Averaged
40 2-Nitroaniline	0.39806	0.38085	0.38085	0.010	-4.32207	40.00000	Averaged
41 Dimethylphthalate	1.32327	1.27302	1.27302	0.010	-3.79769	40.00000	Averaged
42 2,6-Dinitrotoluene	0.30805	0.30628	0.30628	0.200	-0.57469	40.00000	Averaged
43 Acenaphthylene	1.88785	1.81898	1.81898	0.900	-3.64780	40.00000	Averaged
44 3-Nitroaniline	0.33118	0.29110	0.29110	0.010	-12.10172	40.00000	Averaged
46 Acenaphthene	1.11464	1.06507	1.06507	0.900	-4.44693	20.00000	Averaged

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 05-MAR-2014 15:31
Lab File ID: 03051406.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
47 2,4-Dinitrophenol	80.00000	82.54606	0.15450	0.050	3.18258	40.00000	Quadratic
48 4-Nitrophenol	0.25423	0.25260	0.25260	0.050	-0.64016	40.00000	Averaged
49 2,4-Dinitrotoluene	0.39940	0.39768	0.39768	0.200	-0.42997	40.00000	Averaged
50 Dibenzofuran	1.66686	1.59158	1.59158	0.800	-4.51642	40.00000	Averaged
51 Diethylphthalate	1.27891	1.22194	1.22194	0.010	-4.45501	40.00000	Averaged
52 4-Chlorophenylphenyl ether	0.61011	0.60120	0.60120	0.400	-1.46090	40.00000	Averaged
53 4-Nitroaniline	0.36803	0.35696	0.35696	0.010	-3.00944	40.00000	Averaged
54 Fluorene	1.35237	1.31316	1.31316	0.900	-2.89920	40.00000	Averaged
55 4,6-Dinitro-2-methylphenol	80.00000	82.87456	0.14384	0.010	3.59320	40.00000	Quadratic
56 N-Nitrosodiphenylamine	0.69061	0.67660	0.67660	0.010	-2.02976	20.00000	Averaged
57 Azobenzene	1.22401	1.14825	1.14825	0.000	-6.18969	40.00000	Averaged
58 1,2-Diphenylhydrazine	1.22401	1.14825	1.14825	0.000	-6.18969	40.00000	Averaged
$ 59 2,4,6-Tribromophenol (S)	0.15272	0.16133	0.16133	0.000	5.63619	20.00000	Averaged
60 4-Bromophenylphenyl ether	0.20143	0.20254	0.20254	0.100	0.55160	40.00000	Averaged
61 Hexachlorobenzene	0.21379	0.20538	0.20538	0.100	-3.93083	40.00000	Averaged
62 Pentachlorophenol	80.00000	88.30358	0.12481	0.050	10.37947	20.00000	Quadratic
64 Phenanthrene	1.14257	1.07558	1.07558	0.700	-5.86335	40.00000	Averaged
65 Anthracene	1.15927	1.09707	1.09707	0.700	-5.36587	40.00000	Averaged
66 Carbazole	1.12590	1.07782	1.07782	0.010	-4.27044	40.00000	Averaged
67 di-n-Butylphthalate	1.36512	1.27356	1.27356	0.010	-6.70747	40.00000	Averaged
68 Fluoranthene	1.24099	1.19624	1.19624	0.600	-3.60571	20.00000	Averaged
69 Benzidine	80.00000	66.73759	0.46735	0.000	-16.57801	40.00000	Quadratic
70 Pyrene	1.35511	1.28344	1.28344	0.600	-5.28849	40.00000	Averaged
$ 71 Terphenyl-d14 (S)	0.85450	0.82516	0.82516	0.000	-3.43314	20.00000	Averaged
72 Butylbenzylphthalate	0.62689	0.59051	0.59051	0.010	-5.80314	40.00000	Averaged
73 bis(2-Ethylhexyl)phthalate	0.87641	0.80212	0.80212	0.010	-8.47649	40.00000	Averaged
74 3,3'-Dichlorobenzidine	0.36973	0.32182	0.32182	0.010	-12.95766	40.00000	Averaged
75 Benzo(a)anthracene	1.22862	1.15404	1.15404	0.800	-6.06984	40.00000	Averaged
77 Chrysene	1.12153	1.05869	1.05869	0.700	-5.60364	40.00000	Averaged
78 di-n-Octylphthalate	1.55444	1.44241	1.44241	0.010	-7.20733	20.00000	Averaged
79 Benzo(b)fluoranthene	1.18796	1.13583	1.13583	0.700	-4.38768	40.00000	Averaged
80 Benzo(k)fluoranthene	1.21558	1.18390	1.18390	0.700	-2.60620	40.00000	Averaged
81 Benzo(a)pyrene	1.13484	1.09403	1.09403	0.700	-3.59611	20.00000	Averaged
83 Indeno(1,2,3-cd)pyrene	1.22460	1.21030	1.21030	0.500	-1.16716	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.04083	1.01246	1.01246	0.400	-2.72584	40.00000	Averaged
85 Benzo(g,h,i)perylene	1.03855	1.00245	1.00245	0.500	-3.47633	40.00000	Averaged

Report Date: 05-Mar-2014 16:08

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 05-MAR-2014 15:31
Lab File ID: 03051406.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	4.50693
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Lab Smp Id: CCAL 6 10328-96
Inj Date : 05-MAR-2014 15:31
Operator : JLR Inst ID: 10mss9.i
Smp Info : CCAL 6 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 05-Mar-2014 16:08 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.368	2.368	(0.502)	189101	80.0000	83.5
2	Pyridine	79	2.410	2.410	(0.512)	334498	80.0000	81.1
$ 3	2-Fluorophenol (S)	112	3.425	3.425	(0.727)	309846	80.0000	79.3(M)
$ 4	Phenol-d6 (S)	99	4.291	4.291	(0.910)	348213	80.0000	77.5
5	Phenol	94	4.302	4.302	(0.913)	357078	80.0000	75.7
6	bis(2-Chloroethyl)ether	63	4.408	4.408	(0.935)	254896	80.0000	72.5
7	2-Chlorophenol	128	4.494	4.494	(0.954)	306268	80.0000	77.2
8	1,3-Dichlorobenzene	146	4.660	4.660	(0.989)	346618	80.0000	77.6
* 9	1,4-Dichlorobenzene-d4	152	4.713	4.713	(1.000)	110277	40.0000	
10	1,4-Dichlorobenzene	146	4.734	4.734	(1.005)	344615	80.0000	76.0
11	Benzyl alcohol	79	4.841	4.841	(1.027)	214345	80.0000	79.1
12	1,2-Dichlorobenzene	146	4.900	4.900	(1.040)	326602	80.0000	77.0
13	2-Methylphenol	107	4.948	4.948	(1.050)	230584	80.0000	76.2
14	bis(2-Chloroisopropyl) ether	45	4.985	4.985	(1.058)	655753	80.0000	72.8
15	3 & 4-Methylphenol	107	5.119	5.119	(1.086)	296299	80.0000	74.8
17	N-Nitroso-di-n-propylamine	70	5.130	5.130	(1.088)	168537	80.0000	73.7
18	Hexachloroethane	117	5.279	5.279	(1.120)	126059	80.0000	76.6
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.864)	210886	60.0000	58.1
20	Nitrobenzene	77	5.338	5.338	(0.867)	267277	80.0000	77.4
21	Isophorone	82	5.605	5.605	(0.911)	474166	80.0000	76.5
22	2-Nitrophenol	139	5.701	5.701	(0.926)	164293	80.0000	81.2
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	268882	80.0000	76.3

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	
	24	Benzoic acid	105	5.835	5.835	(0.948)	151179	80.0000	83.4	
	25	bis(2-Chloroethoxy)methane	93	5.840	5.840	(0.949)	284003	80.0000	77.4	
	26	2,4-Dichlorophenol	162	5.979	5.979	(0.971)	239131	80.0000	78.6	
	27	1,2,4-Trichlorobenzene	180	6.086	6.086	(0.989)	249390	80.0000	78.1	
*	28	Naphthalene-d8	136	6.155	6.155	(1.000)	419805	40.0000		(Q)
	29	Naphthalene	128	6.182	6.182	(1.004)	807882	80.0000	75.9	
	30	4-Chloroaniline	127	6.230	6.230	(1.012)	272105	80.0000	70.4	
	31	Hexachlorobutadiene	225	6.321	6.321	(1.027)	136431	80.0000	78.1	
	32	4-Chloro-3-methylphenol	107	6.807	6.807	(1.106)	219765	80.0000	76.0	
	33	2-Methylnaphthalene	142	7.010	7.010	(1.139)	539564	80.0000	76.8	
	34	1-Methylnaphthalene	142	7.133	7.133	(1.159)	502628	80.0000	77.2	
	35	Hexachlorocyclopentadiene	237	7.202	7.202	(0.869)	110501	80.0000	73.1	
	36	2,4,6-Trichlorophenol	196	7.347	7.347	(0.886)	153731	80.0000	80.6	
	37	2,4,5-Trichlorophenol	196	7.395	7.395	(0.892)	162782	80.0000	80.3	
$	38	2-Fluorobiphenyl (S)	172	7.453	7.453	(0.899)	425471	60.0000	59.6	
	39	2-Chloronaphthalene	162	7.608	7.608	(0.918)	478662	80.0000	76.8	
	40	2-Nitroaniline	65	7.726	7.726	(0.932)	155555	80.0000	76.5	
	41	Dimethylphthalate	163	7.950	7.950	(0.959)	519950	80.0000	77.0	
	42	2,6-Dinitrotoluene	165	8.025	8.025	(0.968)	125097	80.0000	79.5	
	43	Acenaphthylene	152	8.121	8.121	(0.979)	742942	80.0000	77.1	(M)
	44	3-Nitroaniline	138	8.233	8.233	(0.993)	118896	80.0000	70.3	
*	45	Acenaphthene-d10	164	8.292	8.292	(1.000)	204219	40.0000		
	46	Acenaphthene	154	8.335	8.335	(1.005)	435015	80.0000	76.4	
	47	2,4-Dinitrophenol	184	8.362	8.362	(1.008)	63104	80.0000	82.5	
	48	4-Nitrophenol	65	8.436	8.436	(1.017)	103171	80.0000	79.5	
	49	2,4-Dinitrotoluene	165	8.522	8.522	(1.028)	162427	80.0000	79.6	
	50	Dibenzofuran	168	8.549	8.549	(1.031)	650060	80.0000	76.4	
	51	Diethylphthalate	149	8.816	8.816	(1.063)	499086	80.0000	76.4	
	52	4-Chlorophenylphenyl ether	204	8.965	8.965	(1.081)	245552	80.0000	78.8	
	53	4-Nitroaniline	138	8.992	8.992	(1.084)	145795	80.0000	77.6	
	54	Fluorene	166	8.971	8.971	(1.082)	536344	80.0000	77.7	
	55	4,6-Dinitro-2-methylphenol	198	9.024	9.024	(0.890)	94744	80.0000	82.9	
	56	N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	445661	80.0000	78.4	
	57	Azobenzene	77	9.163	9.163	(1.105)	468988	80.0000	75.0	
	58	1,2-Diphenylhydrazine	77	9.163	9.163	(1.105)	468988	80.0000	75.0	
$	59	2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.118)	65892	80.0000	84.5	
	60	4-Bromophenylphenyl ether	248	9.569	9.569	(0.944)	133411	80.0000	80.4	
	61	Hexachlorobenzene	284	9.655	9.655	(0.953)	135281	80.0000	76.8	
	62	Pentachlorophenol	266	9.895	9.895	(0.976)	82209	80.0000	88.3	
*	63	Phenanthrene-d10	188	10.135	10.135	(1.000)	329340	40.0000		
	64	Phenanthrene	178	10.167	10.167	(1.003)	708460	80.0000	75.3	
	65	Anthracene	178	10.226	10.226	(1.009)	722617	80.0000	75.7	
	66	Carbazole	167	10.424	10.424	(1.028)	709939	80.0000	76.6	
	67	di-n-Butylphthalate	149	10.840	10.840	(1.070)	838866	80.0000	74.6	
	68	Fluoranthene	202	11.642	11.642	(1.149)	787942	80.0000	77.1	
	69	Benzidine	184	11.791	11.791	(0.879)	302290	80.0000	66.7	
	70	Pyrene	202	11.925	11.925	(0.889)	830152	80.0000	75.8	
$	71	Terphenyl-d14 (S)	244	12.101	12.101	(0.902)	400296	60.0000	57.9	
	72	Butylbenzylphthalate	149	12.700	12.700	(0.947)	381952	80.0000	75.4	
	73	bis(2-Ethylhexyl)phthalate	149	13.399	13.399	(0.999)	518826	80.0000	73.2	
	74	3,3'-Dichlorobenzidine	252	13.362	13.362	(0.996)	208160	80.0000	69.6	
	75	Benzo(a)anthracene	228	13.405	13.405	(0.999)	746452	80.0000	75.1	
*	76	Chrysene-d12	240	13.415	13.415	(1.000)	323408	40.0000		(Q)
	77	Chrysene	228	13.453	13.453	(1.003)	684776	80.0000	75.5	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.158	14.158	(1.055)	932972	80.0000	74.2
79	Benzo(b)fluoranthene	252	14.676	14.676	(0.968)	708977	80.0000	76.5
80	Benzo(k)fluoranthene	252	14.708	14.708	(0.970)	738979	80.0000	77.9
81	Benzo(a)pyrene	252	15.098	15.098	(0.995)	682884	80.0000	77.1
* 82	Perylene-d12	264	15.168	15.168	(1.000)	312096	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.856	16.856	(1.111)	755461	80.0000	79.1
84	Dibenzo(a,h)anthracene	278	16.877	16.877	(1.113)	631969	80.0000	77.8
85	Benzo(g,h,i)perylene	276	17.369	17.369	(1.145)	625720	80.0000	77.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 05-Mar-2014 16:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051406.D
Lab Smp Id: CCAL 6 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 04-MAR-2014
Calibration Time: 07:46

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

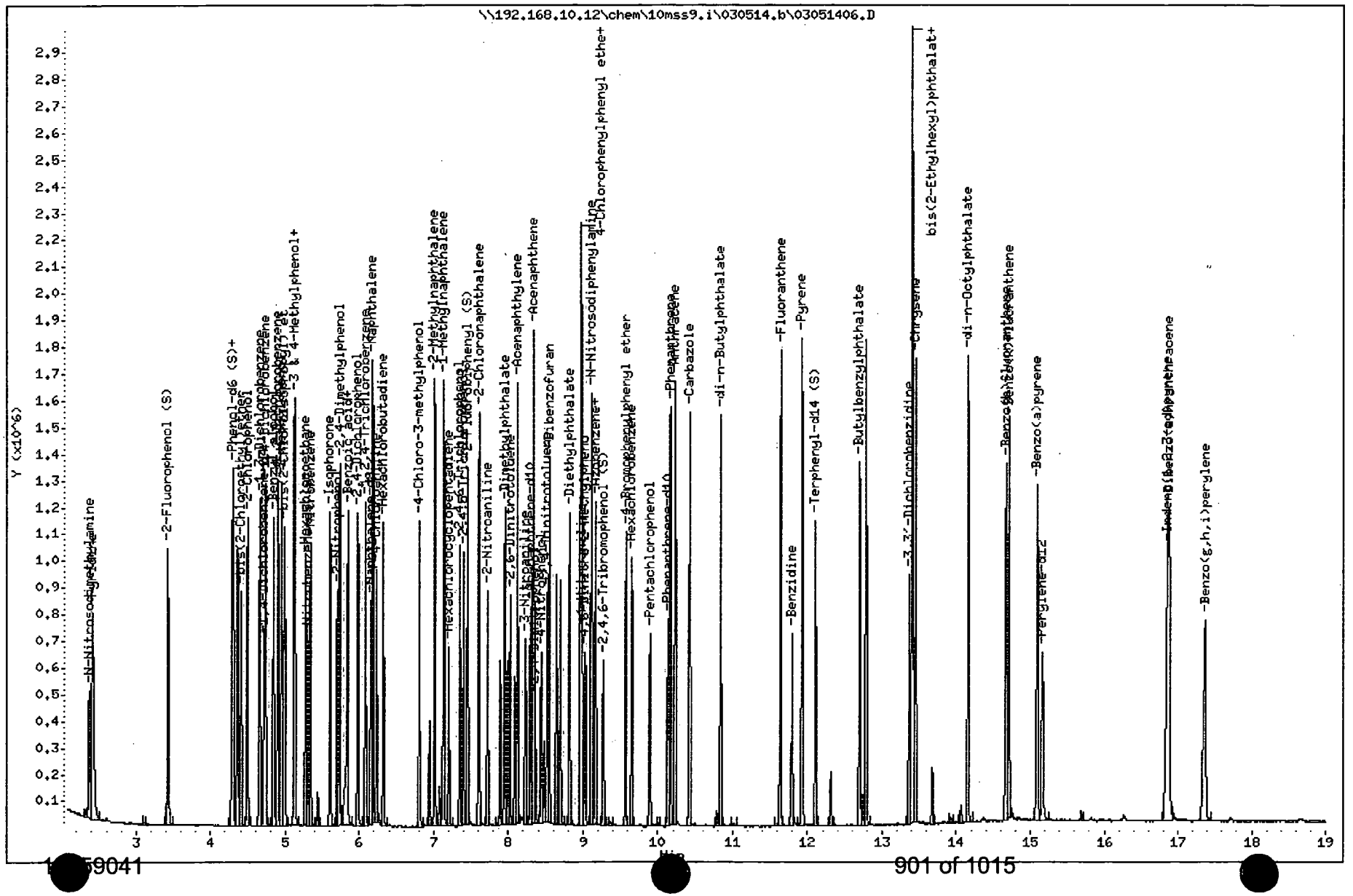
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	66154	33077	132308	110277	66.70
28 Naphthalene-d8	255442	127721	510884	419805	64.34
45 Acenaphthene-d10	125688	62844	251376	204219	62.48
63 Phenanthrene-d10	201900	100950	403800	329340	63.12
76 Chrysene-d12	201053	100527	402106	323408	60.86
82 Perylene-d12	192241	96121	384482	312096	62.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.71	-0.11
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.09
45 Acenaphthene-d10	8.30	7.80	8.80	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.08
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

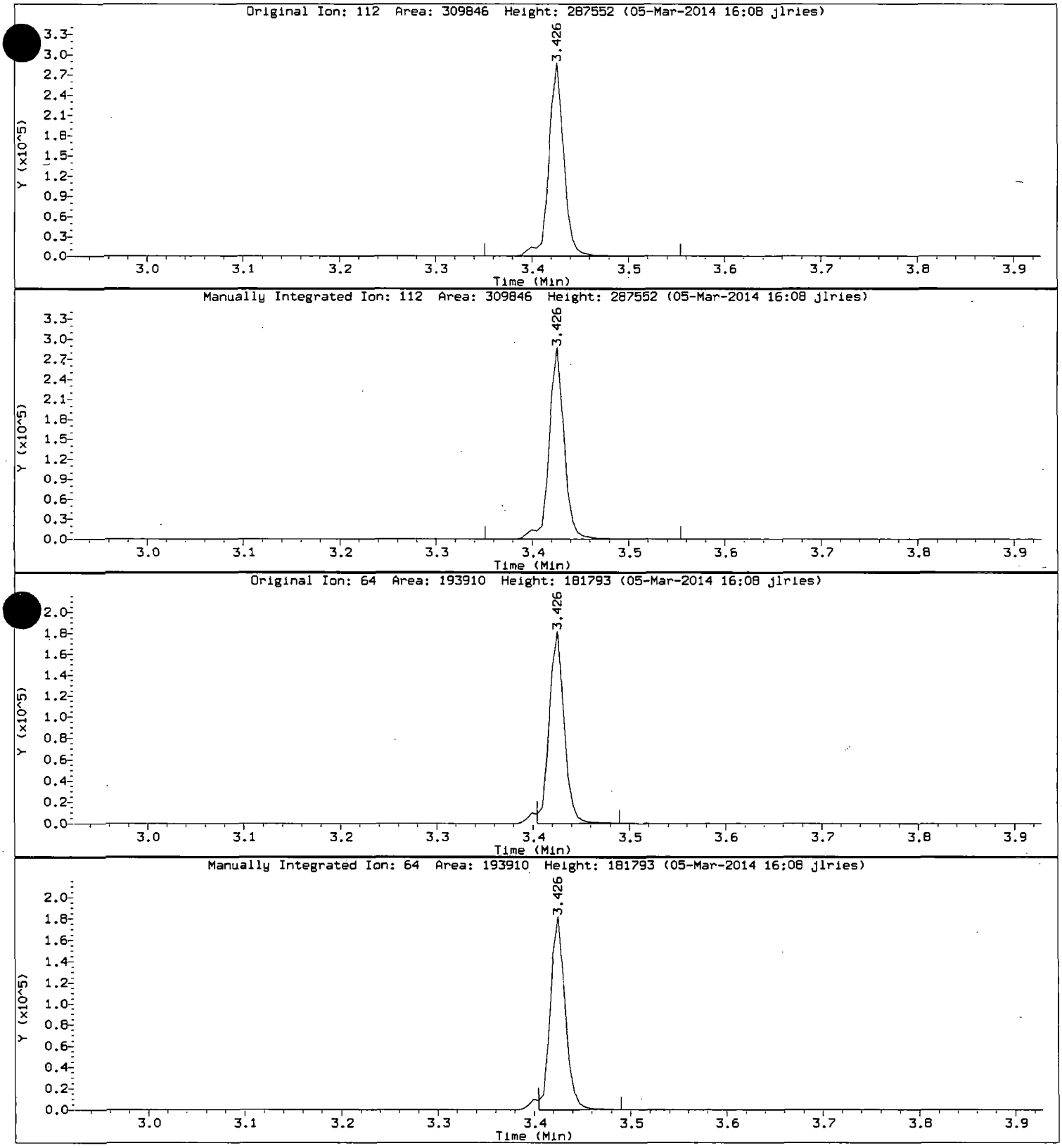
Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Date : 05-MAR-2014 15:31
Client ID:
Sample Info: CCAL 6 10328-96
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25



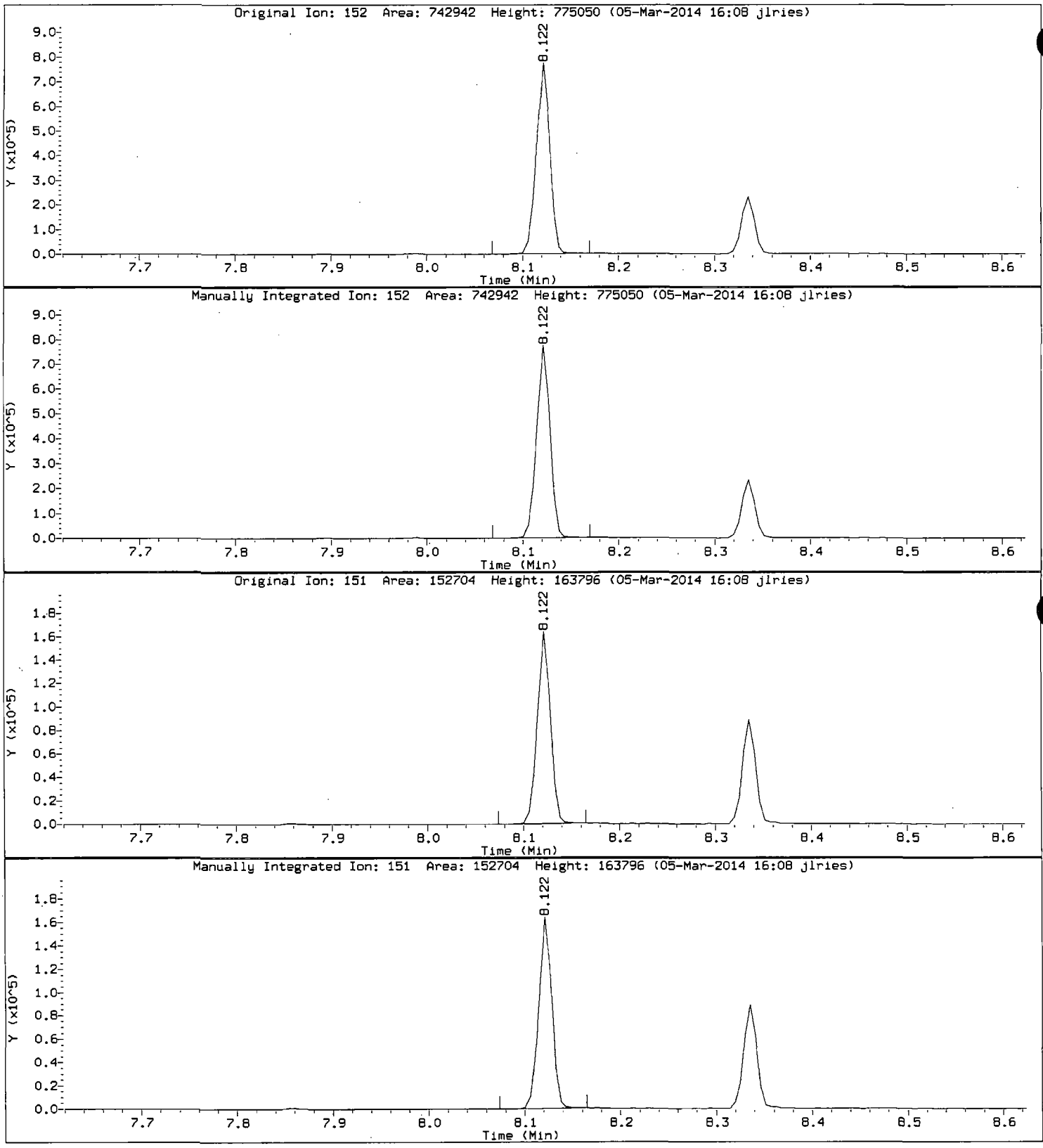
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96

Compound: 2-Fluorophenol (S)
CAS Number: 367-12-4

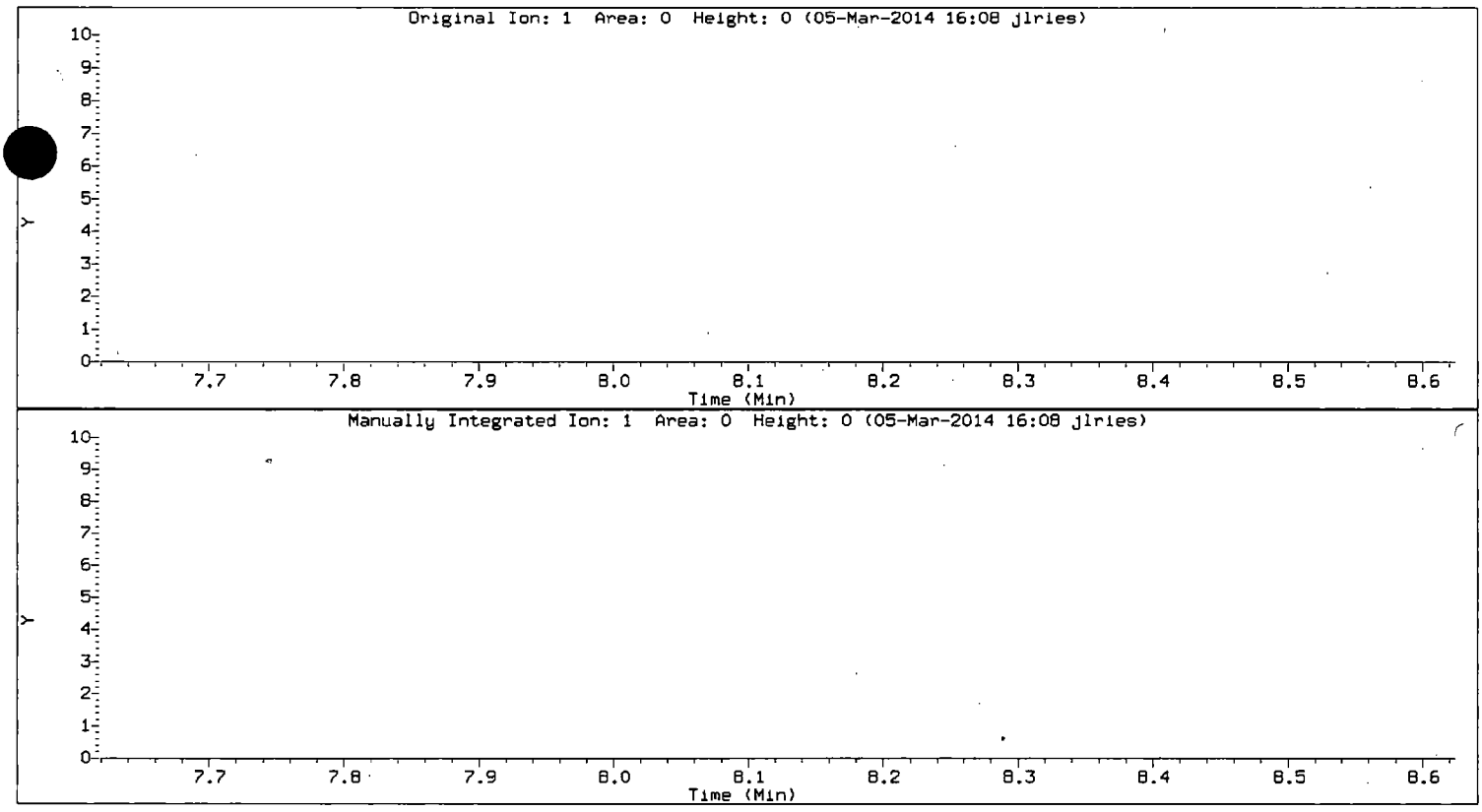


Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 06-MAR-2014 07:48
Lab File ID: 03061403.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 09:10 11:59
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.92707	0.81938	0.81938	0.000	-11.61635	40.00000	Averaged
2 Pyridine	1.66353	1.45364	1.45364	0.000	-12.61696	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.39474	1.34962	1.34962	0.000	-3.23486	40.00000	Averaged
$ 4 Phenol-d6 (S)	1.73788	1.66279	1.66279	0.000	-4.32111	40.00000	Averaged
5 Phenol	1.81135	1.71495	1.71495	0.800	-5.32186	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.07749	0.95935	0.95935	0.700	-10.96481	40.00000	Averaged
7 2-Chlorophenol	1.48268	1.45130	1.45130	0.800	-2.11684	40.00000	Averaged
8 1,3-Dichlorobenzene	1.54743	1.48622	1.48622	0.000	-3.95576	40.00000	Averaged
10 1,4-Dichlorobenzene	1.58541	1.53563	1.53563	0.000	-3.14000	20.00000	Averaged
11 Benzyl alcohol	1.23453	1.15344	1.15344	0.000	-6.56879	40.00000	Averaged
12 1,2-Dichlorobenzene	1.50040	1.43295	1.43295	0.000	-4.49521	40.00000	Averaged
13 2-Methylphenol	1.12295	1.08684	1.08684	0.700	-3.21525	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	2.09816	1.89681	1.89681	0.000	-9.59676	40.00000	Averaged
15 3 & 4-Methylphenol	1.46287	1.41817	1.41817	0.600	-3.05572	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	1.02726	0.95494	0.95494	0.500	-7.04080	40.00000	Averaged
18 Hexachloroethane	0.61604	0.57193	0.57193	0.300	-7.16081	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.39730	0.37590	0.37590	0.000	-5.38597	40.00000	Averaged
20 Nitrobenzene	0.38464	0.36444	0.36444	0.200	-5.25251	40.00000	Averaged
21 Isophorone	0.68084	0.63819	0.63819	0.400	-6.26406	40.00000	Averaged
23 2-Nitrophenol	0.19493	0.19442	0.19442	0.100	-0.25973	20.00000	Averaged
22 2,4-Dimethylphenol	0.35621	0.33427	0.33427	0.200	-6.16056	40.00000	Averaged
24 Benzoic acid	0.25736	0.23766	0.23766	0.000	-7.65116	40.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.42074	0.39340	0.39340	0.300	-6.49798	50.00000	Averaged
26 2,4-Dichlorophenol	0.27681	0.28011	0.28011	0.200	1.19330	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.29509	0.29077	0.29077	0.000	-1.46287	40.00000	Averaged
29 Naphthalene	1.07621	1.01418	1.01418	0.700	-5.76360	40.00000	Averaged
30 4-Chloroaniline	0.40537	0.36420	0.36420	0.010	-10.15455	40.00000	Averaged
31 Hexachlorobutadiene	0.14858	0.15203	0.15203	0.010	2.32206	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.29966	0.29684	0.29684	0.200	-0.94332	20.00000	Averaged
33 2-Methylnaphthalene	0.70271	0.68773	0.68773	0.040	-2.13199	40.00000	Averaged
34 1-Methylnaphthalene	0.65562	0.62689	0.62689	0.000	-4.38253	40.00000	Averaged
35 Hexachlorocyclopentadiene	0.32910	0.33159	0.33159	0.050	0.75532	40.00000	Averaged
36 2,4,6-Trichlorophenol	0.35684	0.36703	0.36703	0.200	2.85525	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.38407	0.39135	0.39135	0.200	1.89623	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.39789	1.37443	1.37443	0.000	-1.67816	40.00000	Averaged
39 2-Chloronaphthalene	1.18538	1.14636	1.14636	0.800	-3.29199	40.00000	Averaged
40 2-Nitroaniline	0.39748	0.38620	0.38620	0.010	-2.83702	40.00000	Averaged
41 Dimethylphthalate	1.33069	1.30881	1.30881	0.010	-1.64441	40.00000	Averaged
42 2,6-Dinitrotoluene	0.32144	0.31853	0.31853	0.200	-0.90492	40.00000	Averaged
43 Acenaphthylene	1.97380	1.89355	1.89355	0.900	-4.06561	40.00000	Averaged
44 3-Nitroaniline	0.33056	0.30168	0.30168	0.010	-8.73601	40.00000	Averaged
46 Acenaphthene	1.23834	1.15504	1.15504	0.900	-6.72672	20.00000	Averaged

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 06-MAR-2014 07:48
Lab File ID: 03061403.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 09:10 11:59
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
47 2,4-Dinitrophenol	80.00000	72.26798	0.18164	0.010	-9.66503	40.00000	Quadratic
48 4-Nitrophenol	0.30018	0.28009	0.28009	0.010	-6.69173	40.00000	Averaged
49 2,4-Dinitrotoluene	0.42443	0.42729	0.42729	0.200	0.67496	40.00000	Averaged
50 Dibenzofuran	1.67363	1.61051	1.61051	0.800	-3.77152	40.00000	Averaged
51 Diethylphthalate	1.39190	1.33368	1.33368	0.010	-4.18321	40.00000	Averaged
52 4-Chlorophenylphenyl ether	0.61017	0.61236	0.61236	0.400	0.35950	40.00000	Averaged
54 4-Nitroaniline	0.37871	0.35842	0.35842	0.010	-5.35720	40.00000	Averaged
53 Fluorene	1.41116	1.34789	1.34789	0.900	-4.48350	40.00000	Averaged
55 4,6-Dinitro-2-methylphenol	80.00000	73.99487	0.13815	0.010	-7.50641	40.00000	Quadratic
56 N-Nitrosodiphenylamine	0.71324	0.69923	0.69923	0.010	-1.96550	20.00000	Averaged
57 Azobenzene	1.48106	1.35014	1.35014	0.000	-8.83956	40.00000	Averaged
58 1,2-Diphenylhydrazine	1.48106	1.35014	1.35014	0.000	-8.83956	40.00000	Averaged
$ 59 2,4,6-Tribromophenol (S)	0.18827	0.20933	0.20933	0.000	11.18658	40.00000	Averaged
60 4-Bromophenylphenyl ether	0.20199	0.20902	0.20902	0.100	3.48123	40.00000	Averaged
61 Hexachlorobenzene	0.22230	0.22677	0.22677	0.100	2.00849	40.00000	Averaged
62 Pentachlorophenol	0.13475	0.14780	0.14780	0.050	9.68572	20.00000	Averaged
64 Phenanthrene	1.13926	1.08910	1.08910	0.700	-4.40312	40.00000	Averaged
65 Anthracene	1.16142	1.12728	1.12728	0.700	-2.93905	40.00000	Averaged
66 Carbazole	1.12512	1.09110	1.09110	0.010	-3.02352	40.00000	Averaged
67 di-n-Butylphthalate	1.38697	1.32568	1.32568	0.010	-4.41895	40.00000	Averaged
68 Fluoranthene	1.13706	1.14140	1.14140	0.600	0.38237	20.00000	Averaged
69 Benzidine	0.62350	0.55656	0.55656	0.000	-10.73623	40.00000	Averaged
70 Pyrene	1.23141	1.23035	1.23035	0.600	-0.08549	40.00000	Averaged
$ 71 Terphenyl-d14 (S)	0.86920	0.91247	0.91247	0.000	4.97786	40.00000	Averaged
72 Butylbenzylphthalate	0.59965	0.60260	0.60260	0.010	0.49106	40.00000	Averaged
73 bis(2-Ethylhexyl)phthalate	0.86033	0.81994	0.81994	0.010	-4.69402	40.00000	Averaged
74 3,3'-Dichlorobenzidine	0.33327	0.34395	0.34395	0.010	3.20509	40.00000	Averaged
75 Benzo(a)anthracene	1.14060	1.08859	1.08859	0.800	-4.55946	40.00000	Averaged
77 Chrysene	1.05828	1.00726	1.00726	0.700	-4.82098	40.00000	Averaged
78 di-n-Octylphthalate	1.43288	1.44407	1.44407	0.010	0.78080	20.00000	Averaged
79 Benzo(b)fluoranthene	1.09097	1.09053	1.09053	0.700	-0.04021	40.00000	Averaged
80 Benzo(k)fluoranthene	1.16930	1.05491	1.05491	0.700	-9.78262	40.00000	Averaged
81 Benzo(a)pyrene	1.04717	1.02123	1.02123	0.700	-2.47726	20.00000	Averaged
83 Indeno(1,2,3-cd)pyrene	1.20995	1.21758	1.21758	0.500	0.63116	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.03870	1.00627	1.00627	0.400	-3.12244	40.00000	Averaged
85 Benzo(g,h,i)perylene	1.02315	1.03539	1.03539	0.500	1.19634	40.00000	Averaged

Report Date: 06-Mar-2014 08:23

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 06-MAR-2014 07:48
Lab File ID: 03061403.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 09:10 11:59
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	4.55266
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061403.D
Lab Smp Id: CCAL 6 10328-96
Inj Date : 06-MAR-2014 07:48
Operator : JLR Inst ID: 10mssD.i
Smp Info : CCAL 6 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	233338	80.0000	70.7
2	Pyridine	79	2.638	2.638	(0.521)	413960	80.0000	69.9
$ 3	2-Fluorophenol (S)	112	3.718	3.718	(0.734)	384338	80.0000	77.4
$ 4	Phenol-d6 (S)	99	4.611	4.611	(0.910)	473518	80.0000	76.5
5	Phenol	94	4.627	4.627	(0.913)	488373	80.0000	75.7
6	bis(2-Chloroethyl)ether	63	4.745	4.745	(0.937)	273197	80.0000	71.2
7	2-Chlorophenol	128	4.836	4.836	(0.955)	413292	80.0000	78.3
8	1,3-Dichlorobenzene	146	5.007	5.007	(0.988)	423236	80.0000	76.8
* 9	1,4-Dichlorobenzene-d4	152	5.066	5.066	(1.000)	142387	40.0000	
10	1,4-Dichlorobenzene	146	5.082	5.082	(1.003)	437307	80.0000	77.5
11	Benzyl alcohol	79	5.184	5.184	(1.023)	328470	80.0000	74.7
12	1,2-Dichlorobenzene	146	5.259	5.259	(1.038)	408067	80.0000	76.4
13	2-Methylphenol	107	5.291	5.291	(1.044)	309505	80.0000	77.4
14	bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.054)	540161	80.0000	72.3
15	3 & 4-Methylphenol	107	5.462	5.462	(1.078)	403858	80.0000	77.6
17	N-Nitroso-di-n-propylamine	70	5.483	5.483	(1.082)	271941	80.0000	74.4
18	Hexachloroethane	117	5.644	5.644	(1.114)	162870	80.0000	74.3
$ 19	Nitrobenzene-d5 (S)	82	5.676	5.676	(0.869)	315460	60.0000	56.8
20	Nitrobenzene	77	5.697	5.697	(0.872)	407786	80.0000	75.8
21	Isophorone	82	5.970	5.970	(0.914)	714099	80.0000	75.0
23	2-Nitrophenol	139	6.066	6.066	(0.929)	217548	80.0000	79.8
22	2,4-Dimethylphenol	107	6.082	6.082	(0.931)	374025	80.0000	75.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	
	24 Benzoic acid	105	6.178	6.178	(0.946)	265933	80.0000	73.9	
	25 bis(2-Chloroethoxy)methane	93	6.200	6.200	(0.949)	440191	80.0000	74.8	
	26 2,4-Dichlorophenol	162	6.344	6.344	(0.971)	313432	80.0000	81.0	
	27 1,2,4-Trichlorobenzene	180	6.457	6.457	(0.989)	325356	80.0000	78.8	
*	28 Naphthalene-d8	136	6.532	6.532	(1.000)	559471	40.0000		(Q)
	29 Naphthalene	128	6.564	6.564	(1.005)	1134806	80.0000	75.4	
	30 4-Chloroaniline	127	6.601	6.601	(1.011)	407523	80.0000	71.9	
	31 Hexachlorobutadiene	225	6.697	6.697	(1.025)	170112	80.0000	81.8	
	32 4-Chloro-3-methylphenol	107	7.163	7.163	(1.097)	332142	80.0000	79.2	
	33 2-Methylnaphthalene	142	7.393	7.393	(1.132)	769527	80.0000	78.3	
	34 1-Methylnaphthalene	142	7.516	7.516	(1.151)	701453	80.0000	76.5	
	35 Hexachlorocyclopentadiene	237	7.585	7.585	(0.873)	196556	80.0000	80.6	
	36 2,4,6-Trichlorophenol	196	7.724	7.724	(0.889)	217564	80.0000	82.3	
	37 2,4,5-Trichlorophenol	196	7.767	7.767	(0.894)	231985	80.0000	81.5	
$	38 2-Fluorobiphenyl (S)	172	7.831	7.831	(0.901)	611046	60.0000	59.0	
	39 2-Chloronaphthalene	162	7.997	7.997	(0.921)	679531	80.0000	77.4	
	40 2-Nitroaniline	65	8.104	8.104	(0.933)	228930	80.0000	77.7	
	41 Dimethylphthalate	163	8.323	8.323	(0.958)	775827	80.0000	78.7	
	42 2,6-Dinitrotoluene	165	8.398	8.398	(0.967)	188818	80.0000	79.3	
	43 Acenaphthylene	152	8.516	8.516	(0.980)	1122449	80.0000	76.7	(M)
	44 3-Nitroaniline	138	8.612	8.612	(0.991)	178830	80.0000	73.0	
*	45 Acenaphthene-d10	164	8.687	8.687	(1.000)	296387	40.0000		
	46 Acenaphthene	154	8.730	8.730	(1.005)	684678	80.0000	74.6	
	47 2,4-Dinitrophenol	184	8.735	8.735	(1.006)	107674	80.0000	72.3	
	48 4-Nitrophenol	65	8.789	8.789	(1.012)	166031	80.0000	74.6	
	49 2,4-Dinitrotoluene	165	8.901	8.901	(1.025)	253288	80.0000	80.5	
	50 Dibenzofuran	168	8.944	8.944	(1.030)	954669	80.0000	77.0	
	51 Diethylphthalate	149	9.195	9.195	(1.058)	790569	80.0000	76.6	
	52 4-Chlorophenylphenyl ether	204	9.356	9.356	(1.077)	362992	80.0000	80.3	
	54 4-Nitroaniline	138	9.372	9.372	(1.079)	212461	80.0000	75.7	
	53 Fluorene	166	9.366	9.366	(1.078)	798997	80.0000	76.4	
	55 4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.893)	138323	80.0000	74.0	
	56 N-Nitrosodiphenylamine	169	9.495	9.495	(0.901)	700086	80.0000	78.4	
	57 Azobenzene	77	9.553	9.553	(1.100)	800328	80.0000	72.9	
	58 1,2-Diphenylhydrazine	77	9.553	9.553	(1.100)	800328	80.0000	72.9	
$	59 2,4,6-Tribromophenol (S)	330	9.666	9.666	(1.113)	124085	80.0000	88.9	
	60 4-Bromophenylphenyl ether	248	9.965	9.965	(0.946)	209278	80.0000	82.8	
	61 Hexachlorobenzene	284	10.056	10.056	(0.954)	227045	80.0000	81.6	
	62 Pentachlorophenol	266	10.286	10.286	(0.976)	147980	80.0000	87.7	
*	63 Phenanthrene-d10	188	10.538	10.538	(1.000)	500615	40.0000		
	64 Phenanthrene	178	10.570	10.570	(1.003)	1090438	80.0000	76.5	
	65 Anthracene	178	10.634	10.634	(1.009)	1128671	80.0000	77.6	
	66 Carbazole	167	10.816	10.816	(1.026)	1092440	80.0000	77.6	
	67 di-n-Butylphthalate	149	11.222	11.222	(1.065)	1327308	80.0000	76.5	
	68 Fluoranthene	202	12.051	12.051	(1.144)	1142808	80.0000	80.3	
	69 Benzidine	184	12.190	12.190	(0.881)	520722	80.0000	71.4	
	70 Pyrene	202	12.340	12.340	(0.892)	1151130	80.0000	79.9	
$	71 Terphenyl-d14 (S)	244	12.506	12.506	(0.904)	640285	60.0000	63.0	
	72 Butylbenzylphthalate	149	13.094	13.094	(0.947)	563798	80.0000	80.4	
	73 bis(2-Ethylhexyl)phthalate	149	13.790	13.790	(0.997)	767146	80.0000	76.2	
	74 3,3'-Dichlorobenzidine	252	13.763	13.763	(0.995)	321806	80.0000	82.6	(A)
	75 Benzo(a)anthracene	228	13.822	13.822	(0.999)	1018500	80.0000	76.4	
*	76 Chrysene-d12	240	13.832	13.832	(1.000)	467805	40.0000		(Q)
	77 Chrysene	228	13.864	13.864	(1.002)	942407	80.0000	76.1	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.560	14.560	(1.053)	1351087	80.0000	80.6
79	Benzo(b)fluoranthene	252	15.170	15.170	(0.964)	1102478	80.0000	80.0
80	Benzo(k)fluoranthene	252	15.212	15.212	(0.967)	1066469	80.0000	72.2
81	Benzo(a)pyrene	252	15.656	15.656	(0.995)	1032420	80.0000	78.0
* 82	Perylene-d12	264	15.737	15.737	(1.000)	505479	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.694	17.694	(1.124)	1230925	80.0000	80.5
84	Dibenzo(a,h)anthracene	278	17.716	17.716	(1.126)	1017295	80.0000	77.5
85	Benzo(g,h,i)perylene	276	18.293	18.293	(1.162)	1046733	80.0000	81.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 06-Mar-2014 08:23

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061403.D
Lab Smp Id: CCAL 6 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info:

Calibration Date: 05-MAR-2014
Calibration Time: 10:08

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

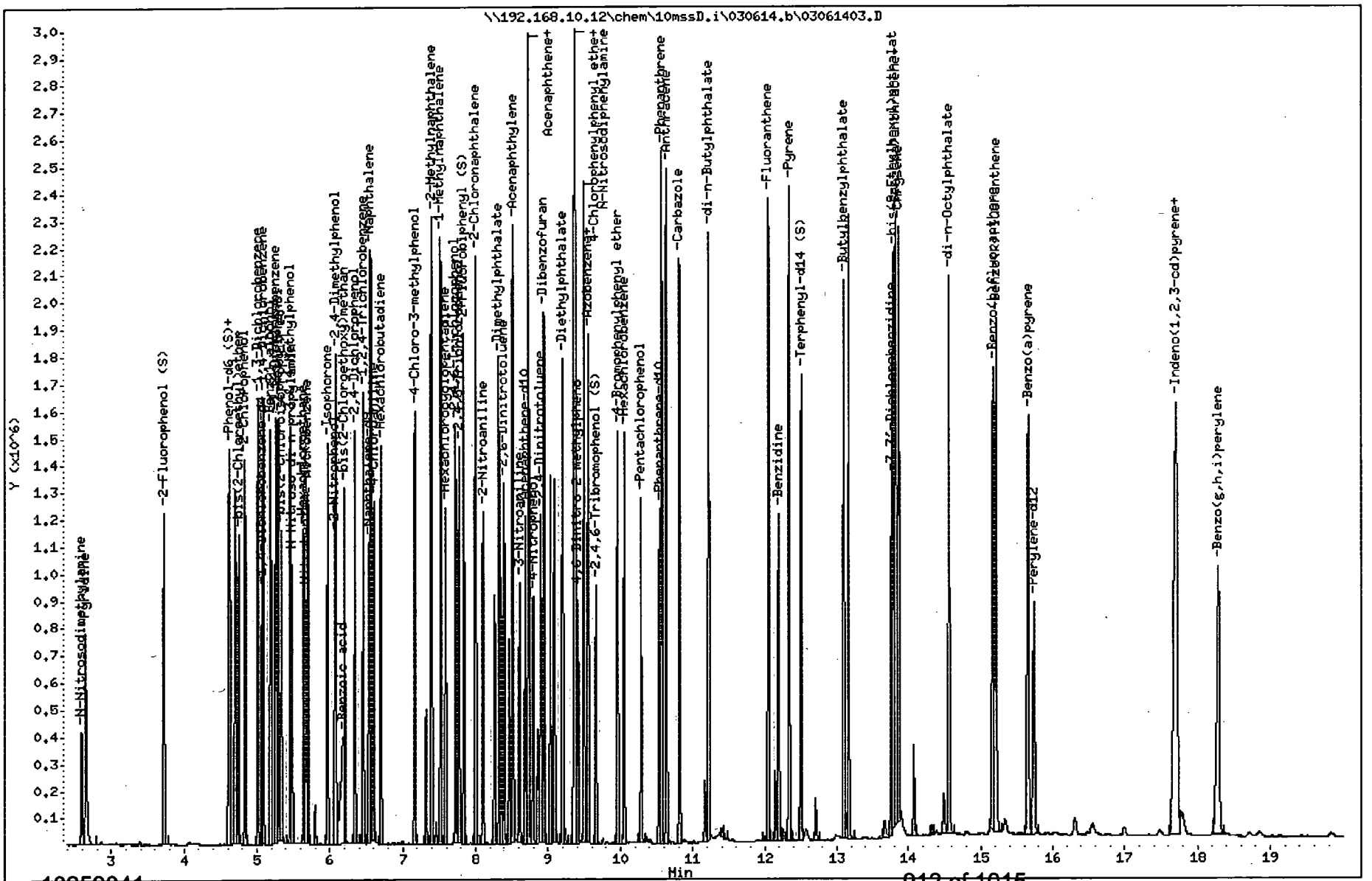
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	142387	20.50
28 Naphthalene-d8	466266	233133	932532	559471	19.99
45 Acenaphthene-d10	245325	122663	490650	296387	20.81
63 Phenanthrene-d10	405966	202983	811932	500615	23.31
76 Chrysene-d12	427978	213989	855956	467805	9.31
82 Perylene-d12	418836	209418	837672	505479	20.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	-0.11
28 Naphthalene-d8	6.54	6.04	7.04	6.53	-0.16
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.12
63 Phenanthrene-d10	10.55	10.05	11.05	10.54	-0.10
76 Chrysene-d12	13.85	13.35	14.35	13.83	-0.12
82 Perylene-d12	15.76	15.26	16.26	15.74	-0.17

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

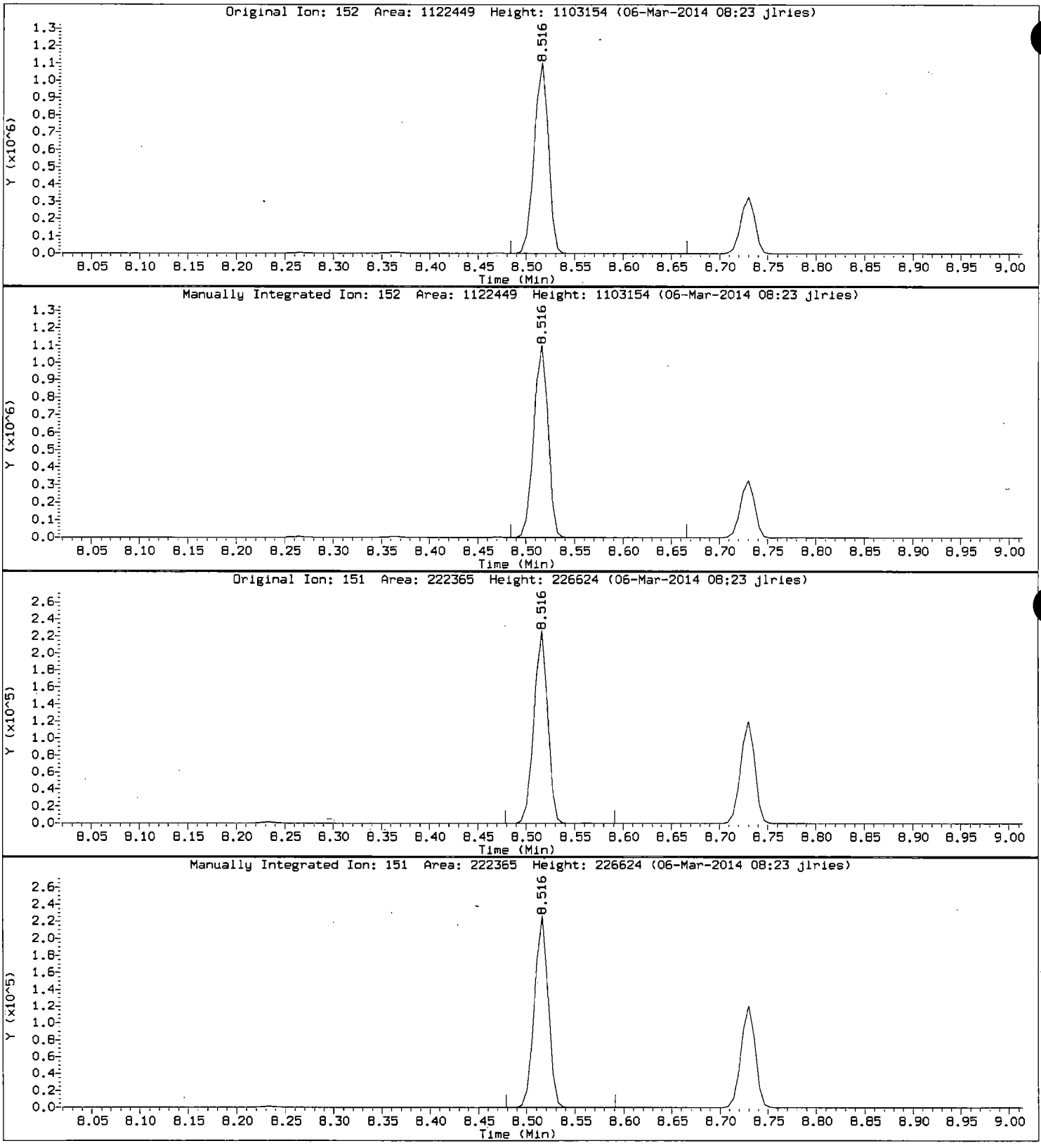
Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061403.D
Date : 06-MAR-2014 07:48
Client ID:
Sample Info: CCAL 6 10328-96
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mssD.i
Operator: JLR
Column diameter: 0.25

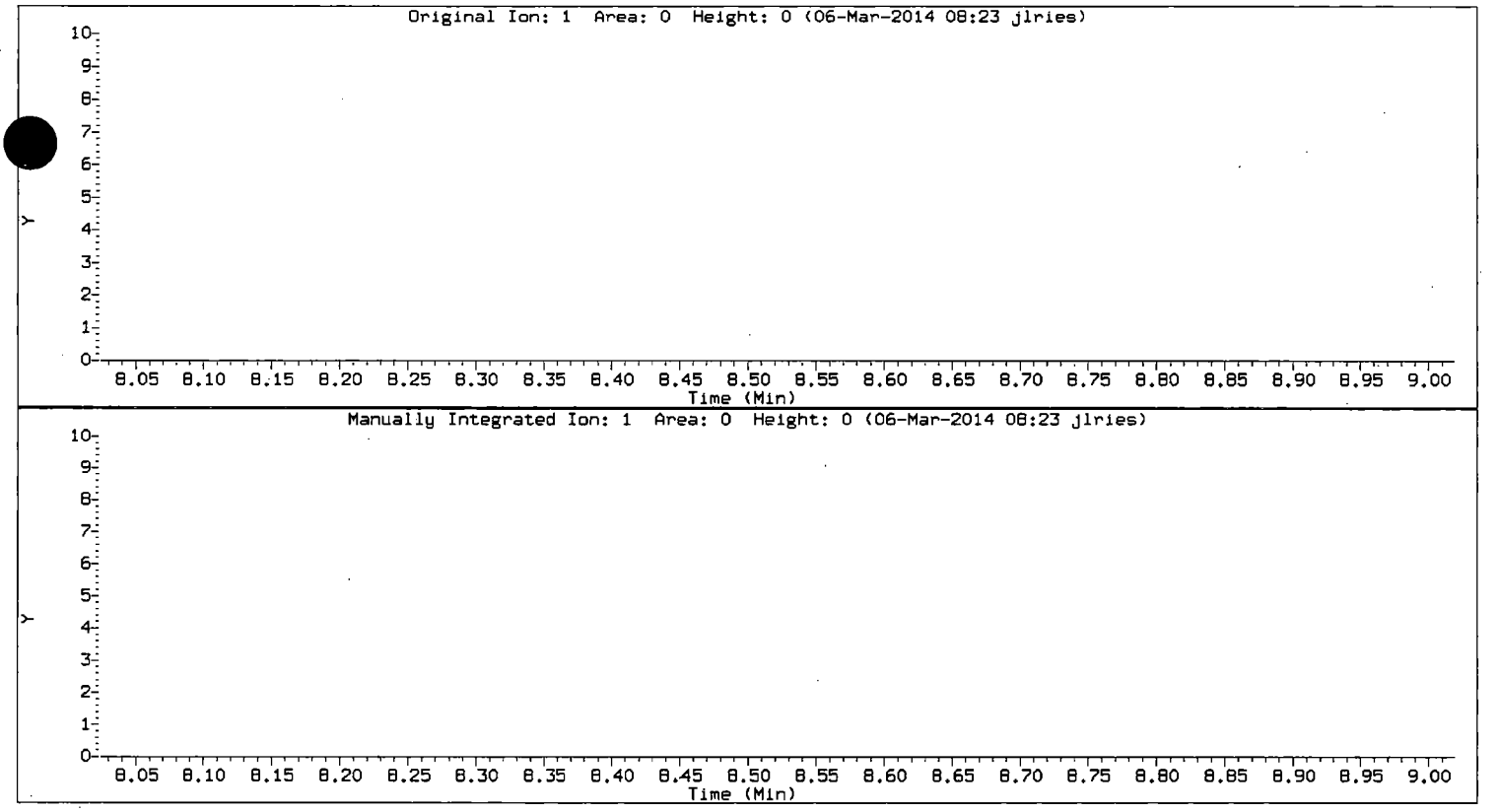


Instrument: 10mssD.i
Lab Sample ID: CCAL 6 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Instrument: 10mssD.i
Lab Sample ID: CCAL 6 10328-96



Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061404.D
Lab Smp Id: 1632345
Inj Date : 06-MAR-2014 08:16
Operator : JLR Inst ID: 10mssD.i
Smp Info : 1632345,MB
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.724	3.718	(0.736)	254371	62.9456	2100
$ 4	Phenol-d6 (S)	99	4.606	4.611	(0.910)	324952	64.5343	2150(Q)
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.061	5.066	(1.000)	115896	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.671	5.676	(0.868)	206990	47.0492	1570
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
23	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24	Benzoic acid	105	Compound Not Detected.						
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26	2,4-Dichlorophenol	162	Compound Not Detected.						
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28	Naphthalene-d8	136	6.532	6.532	(1.000)	442932	40.0000		(Q)
	29	Naphthalene	128	Compound Not Detected.						
	30	4-Chloroaniline	127	Compound Not Detected.						
	31	Hexachlorobutadiene	225	Compound Not Detected.						
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33	2-Methylnaphthalene	142	Compound Not Detected.						
	34	1-Methylnaphthalene	142	Compound Not Detected.						
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38	2-Fluorobiphenyl (S)	172	7.831	7.831	(0.902)	414794	50.4522	1680	
	39	2-Chloronaphthalene	162	Compound Not Detected.						
	40	2-Nitroaniline	65	Compound Not Detected.						
	41	Dimethylphthalate	163	Compound Not Detected.						
	42	2,6-Dinitrotoluene	165	Compound Not Detected.						
	43	Acenaphthylene	152	Compound Not Detected.						
	44	3-Nitroaniline	138	Compound Not Detected.						
*	45	Acenaphthene-d10	164	8.682	8.687	(1.000)	235255	40.0000		
	46	Acenaphthene	154	Compound Not Detected.						
	47	2,4-Dinitrophenol	184	Compound Not Detected.						
	48	4-Nitrophenol	65	Compound Not Detected.						
	49	2,4-Dinitrotoluene	165	Compound Not Detected.						
	50	Dibenzofuran	168	Compound Not Detected.						
	51	Diethylphthalate	149	Compound Not Detected.						
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	54	4-Nitroaniline	138	Compound Not Detected.						
	53	Fluorene	166	Compound Not Detected.						
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Azobenzene	77	Compound Not Detected.						
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59	2,4,6-Tribromophenol (S)	330	9.655	9.666	(1.112)	78575	70.9623	2360	
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61	Hexachlorobenzene	284	Compound Not Detected.						
	62	Pentachlorophenol	266	Compound Not Detected.						
*	63	Phenanthrene-d10	188	10.532	10.538	(1.000)	407483	40.0000		
	64	Phenanthrene	178	Compound Not Detected.						
	65	Anthracene	178	Compound Not Detected.						
	66	Carbazole	167	Compound Not Detected.						
	67	di-n-Butylphthalate	149	Compound Not Detected.						
	68	Fluoranthene	202	Compound Not Detected.						
	69	Benzidine	184	Compound Not Detected.						
	70	Pyrene	202	Compound Not Detected.						
$	71	Terphenyl-d14 (S)	244	12.501	12.506	(0.904)	496977	59.0980	1970	
	72	Butylbenzylphthalate	149	Compound Not Detected.						
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75	Benzo(a)anthracene	228	Compound Not Detected.						
*	76	Chrysene-d12	240	13.822	13.832	(1.000)	386994	40.0000		(Q)
	77	Chrysene	228	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.726	15.737	(1.000)	387288	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Report Date: 06-Mar-2014 09:01

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061404.D
Lab Smp Id: 1632345
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info: 10357

Calibration Date: 06-MAR-2014
Calibration Time: 07:48
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	142387	71194	284774	115896	-18.60
28 Naphthalene-d8	559471	279736	1118942	442932	-20.83
45 Acenaphthene-d10	296387	148194	592774	235255	-20.63
63 Phenanthrene-d10	500615	250308	1001230	407483	-18.60
76 Chrysene-d12	467805	233903	935610	386994	-17.27
82 Perylene-d12	505479	252740	1010958	387288	-23.38

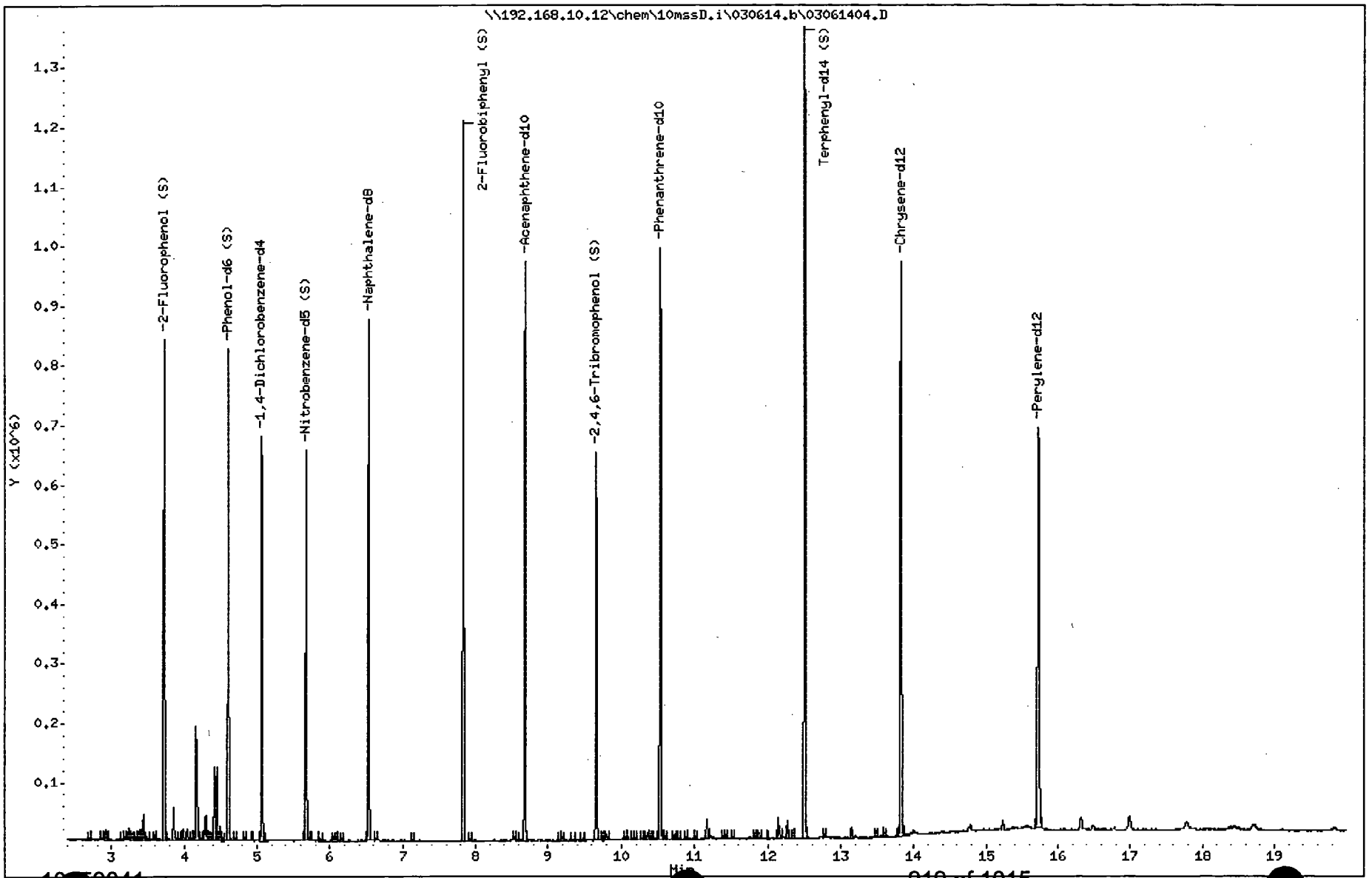
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.06	-0.10
28 Naphthalene-d8	6.53	6.03	7.03	6.53	0.00
45 Acenaphthene-d10	8.69	8.19	9.19	8.68	-0.06
63 Phenanthrene-d10	10.54	10.04	11.04	10.53	-0.05
76 Chrysene-d12	13.83	13.33	14.33	13.82	-0.08
82 Perylene-d12	15.74	15.24	16.24	15.73	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061404.D
Date : 06-MAR-2014 08:16
Client ID:
Sample Info: 1632345,MB

Instrument: 10mssD.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Instrument: 10mssD.i
Lab Sample ID: 1632345
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051414.D
Lab Smp Id: 1632347
Inj Date : 05-MAR-2014 19:11
Operator : JLR Inst ID: 10mss9.i
Smp Info : 1632347,MS
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 06-Mar-2014 07:20 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 11 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	2.352	2.368	(0.499)	63009	38.4728	1280
	2 Pyridine	79	2.400	2.410	(0.509)	91051	30.5441	1020
$	3 2-Fluorophenol (S)	112	3.426	3.425	(0.727)	209986	74.3183	2480
$	4 Phenol-d6 (S)	99	4.286	4.291	(0.909)	250507	77.1011	2570
	5 Phenol	94	4.296	4.302	(0.912)	124477	36.4905	1220
	6 bis(2-Chloroethyl)ether	63	4.403	4.408	(0.934)	89072	35.0387	1170
	7 2-Chlorophenol	128	4.489	4.494	(0.952)	102966	35.9059	1200
	8 1,3-Dichlorobenzene	146	4.654	4.660	(0.988)	111744	34.5728	1150
*	9 1,4-Dichlorobenzene-d4	152	4.713	4.713	(1.000)	79750	40.0000	
	10 1,4-Dichlorobenzene	146	4.729	4.734	(1.003)	116560	35.5538	1180
	11 Benzyl alcohol	79	4.836	4.841	(1.026)	73392	37.4375	1250
	12 1,2-Dichlorobenzene	146	4.895	4.900	(1.039)	109192	35.6184	1190
	13 2-Methylphenol	107	4.943	4.948	(1.049)	83766	38.2745	1280
	14 bis(2-Chloroisopropyl) ether	45	4.986	4.985	(1.058)	224074	34.4120	1150
	15 3 & 4-Methylphenol	107	5.114	5.119	(1.085)	107585	37.5721	1250
	17 N-Nitroso-di-n-propylamine	70	5.124	5.130	(1.087)	59923	36.2402	1210
	18 Hexachloroethane	117	5.274	5.279	(1.119)	41007	34.4417	1150
$	19 Nitrobenzene-d5 (S)	82	5.311	5.317	(0.864)	150304	56.9585	1900
	20 Nitrobenzene	77	5.333	5.338	(0.867)	90196	35.9625	1200
	21 Isophorone	82	5.600	5.605	(0.911)	170828	37.9173	1260
	22 2-Nitrophenol	139	5.696	5.701	(0.926)	54619	37.1706	1240
	23 2,4-Dimethylphenol	107	5.723	5.733	(0.930)	92737	36.2337	1210

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24	Benzoic acid	105	5.798	5.835	(0.943)	41455	31.4955	1050	
	25	bis(2-Chloroethoxy)methane	93	5.835	5.840	(0.949)	100513	37.7045	1260	
	26	2,4-Dichlorophenol	162	5.974	5.979	(0.971)	87592	39.6224	1320	
	27	1,2,4-Trichlorobenzene	180	6.081	6.086	(0.989)	85541	36.8798	1230	
*	28	Naphthalene-d8	136	6.150	6.155	(1.000)	305032	40.0000		(Q)
	29	Naphthalene	128	6.177	6.182	(1.004)	284105	36.7342	1220	
	30	4-Chloroaniline	127	6.225	6.230	(1.012)	56379	20.0626	669	
	31	Hexachlorobutadiene	225	6.321	6.321	(1.028)	45723	36.0098	1200	
	32	4-Chloro-3-methylphenol	107	6.802	6.807	(1.106)	81315	38.6896	1290	
	33	2-Methylnaphthalene	142	7.005	7.010	(1.139)	195174	38.2344	1270	
	34	1-Methylnaphthalene	142	7.128	7.133	(1.159)	176589	37.3088	1240	
	35	Hexachlorocyclopentadiene	237	7.197	7.202	(0.868)	29426	29.2559	975	
	36	2,4,6-Trichlorophenol	196	7.347	7.347	(0.887)	54531	39.3265	1310	
	37	2,4,5-Trichlorophenol	196	7.390	7.395	(0.892)	56680	38.4682	1280	
$	38	2-Fluorobiphenyl (S)	172	7.448	7.453	(0.899)	312539	60.2157	2010	
	39	2-Chloronaphthalene	162	7.603	7.608	(0.917)	179444	39.6239	1320	
	40	2-Nitroaniline	65	7.715	7.726	(0.931)	58594	39.6626	1320	
	41	Dimethylphthalate	163	7.940	7.950	(0.958)	190933	38.8781	1300	
	42	2,6-Dinitrotoluene	165	8.015	8.025	(0.967)	45463	39.7657	1320	
	43	Acenaphthylene	152	8.116	8.121	(0.979)	276230	39.4255	1310	(M)
	44	3-Nitroaniline	138	8.223	8.233	(0.992)	34174	27.8041	927	
*	45	Acenaphthene-d10	164	8.287	8.292	(1.000)	148452	40.0000		
	46	Acenaphthene	154	8.330	8.335	(1.005)	169375	40.9440	1360	
	47	2,4-Dinitrophenol	184	8.351	8.362	(1.008)	15359	31.8239	1060	(Q)
	48	4-Nitrophenol	65	8.426	8.436	(1.017)	36992	39.2068	1310	
	49	2,4-Dinitrotoluene	165	8.511	8.522	(1.027)	59187	39.9298	1330	
	50	Dibenzofuran	168	8.543	8.549	(1.031)	241666	39.0653	1300	
	51	Diethylphthalate	149	8.811	8.816	(1.063)	187583	39.5208	1320	
	52	4-Chlorophenylphenyl ether	204	8.960	8.965	(1.081)	87854	38.7996	1290	
	53	4-Nitroaniline	138	8.976	8.992	(1.083)	49357	36.1356	1200	
	54	Fluorene	166	8.965	8.971	(1.082)	201195	40.0864	1340	
	55	4,6-Dinitro-2-methylphenol	198	9.014	9.024	(0.890)	27948	36.3337	1210	
	56	N-Nitrosodiphenylamine	169	9.104	9.110	(0.899)	159716	39.1396	1300	
	57	Azobenzene	77	9.152	9.163	(1.104)	178689	39.3357	1310	
	58	1,2-Diphenylhydrazine	77	9.152	9.163	(1.104)	178689	39.3357	1310	
$	59	2,4,6-Tribromophenol (S)	330	9.265	9.270	(1.118)	48111	84.8837	2830	
	60	4-Bromophenylphenyl ether	248	9.564	9.569	(0.944)	47577	39.9736	1330	
	61	Hexachlorobenzene	284	9.649	9.655	(0.953)	50089	39.6523	1320	
	62	Pentachlorophenol	266	9.890	9.895	(0.976)	22548	37.2744	1240	
*	63	Phenanthrene-d10	188	10.130	10.135	(1.000)	236350	40.0000		
	64	Phenanthrene	178	10.157	10.167	(1.003)	263001	38.9565	1300	
	65	Anthracene	178	10.221	10.226	(1.009)	270066	39.4265	1310	
	66	Carbazole	167	10.419	10.424	(1.028)	260129	39.1014	1300	
	67	di-n-Butylphthalate	149	10.835	10.840	(1.070)	308490	38.2450	1270	
	68	Fluoranthene	202	11.637	11.642	(1.149)	287029	39.1437	1300	
	69	Benzidine	184	11.786	11.791	(0.879)	17490	3.68145	123	(aR)
	70	Pyrene	202	11.920	11.925	(0.889)	300448	40.1636	1340	
$	71	Terphenyl-d14 (S)	244	12.101	12.101	(0.902)	294524	62.4377	2080	
	72	Butylbenzylphthalate	149	12.694	12.700	(0.947)	137312	39.6784	1320	
	73	bis(2-Ethylhexyl)phthalate	149	13.394	13.399	(0.999)	189376	39.1430	1300	
	74	3,3'-Dichlorobenzidine	252	13.351	13.362	(0.996)	51556	25.2598	842	
	75	Benzo(a)anthracene	228	13.400	13.405	(0.999)	269175	39.6877	1320	
*	76	Chrysene-d12	240	13.410	13.415	(1.000)	220812	40.0000		(Q)
	77	Chrysene	228	13.442	13.453	(1.002)	247100	39.9115	1330	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
78	di-n-Octylphthalate	149	14.153	14.158	(1.055)	330570	38.5236	1280
79	Benzo(b)fluoranthene	252	14.666	14.676	(0.968)	249080	41.8428	1390
80	Benzo(k)fluoranthene	252	14.698	14.708	(0.970)	237976	39.0690	1300
81	Benzo(a)pyrene	252	15.082	15.098	(0.995)	229376	40.3363	1340
* 82	Perylene-d12	264	15.157	15.168	(1.000)	200437	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.835	16.856	(1.111)	245911	40.0744	1340
84	Dibenzo(a,h)anthracene	278	16.856	16.877	(1.112)	209521	40.1726	1340
85	Benzo(g,h,i)perylene	276	17.337	17.369	(1.144)	206950	39.7667	1320

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Report Date: 06-Mar-2014 08:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051414.D
Lab Smp Id: 1632347
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info: 10357

Calibration Date: 05-MAR-2014
Calibration Time: 15:31

Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	110277	55139	220554	79750	-27.68
28 Naphthalene-d8	419805	209903	839610	305032	-27.34
45 Acenaphthene-d10	204219	102110	408438	148452	-27.31
63 Phenanthrene-d10	329340	164670	658680	236350	-28.24
76 Chrysene-d12	323408	161704	646816	220812	-31.72
82 Perylene-d12	312096	156048	624192	200437	-35.78

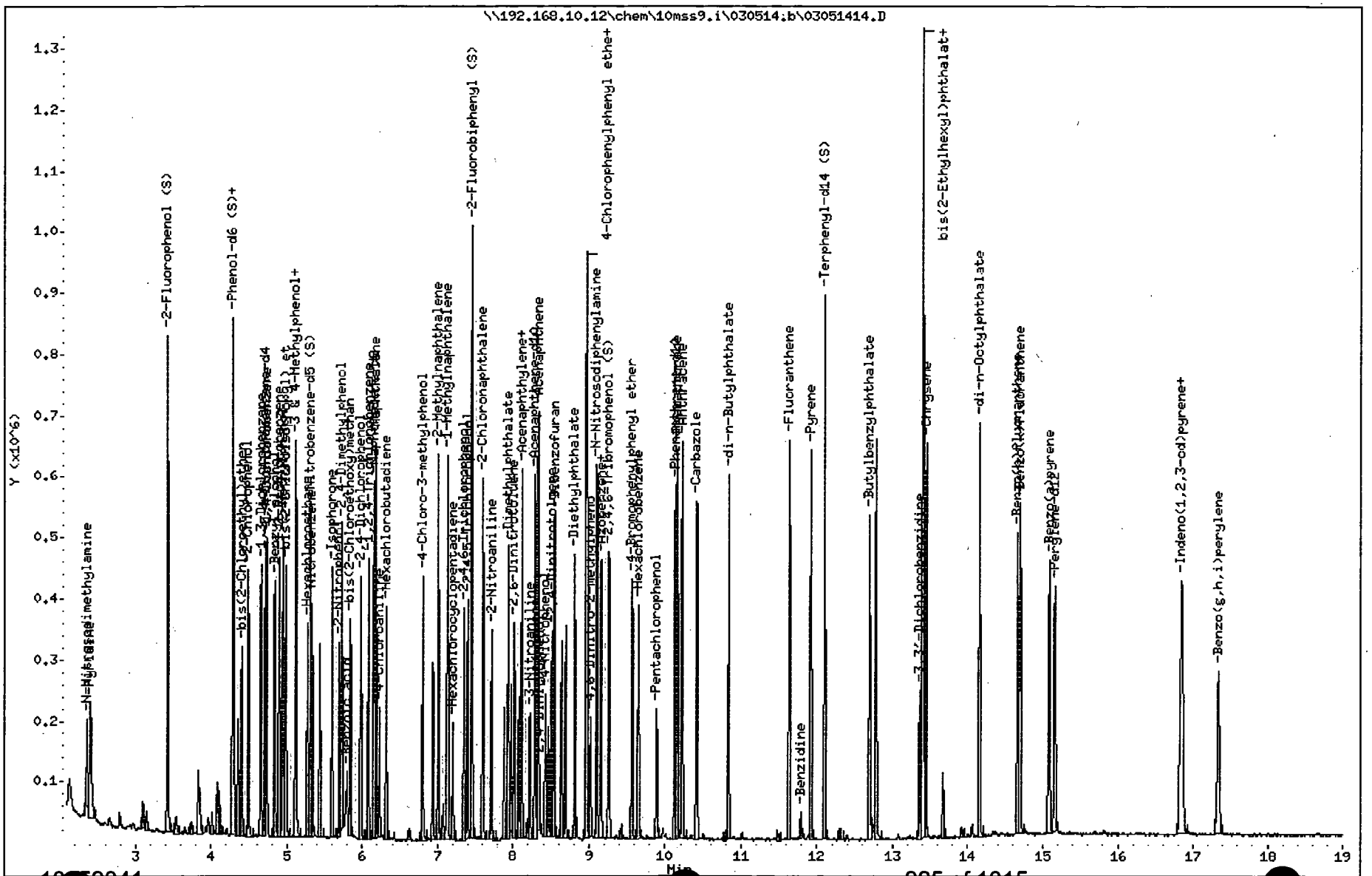
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.71	4.21	5.21	4.71	0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.15	-0.08
45 Acenaphthene-d10	8.29	7.79	8.79	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.13	-0.05
76 Chrysene-d12	13.42	12.92	13.92	13.41	-0.04
82 Perylene-d12	15.17	14.67	15.67	15.16	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051414.D
Date : 05-MAR-2014 19:11
Client ID:
Sample Info: 1632347,MS

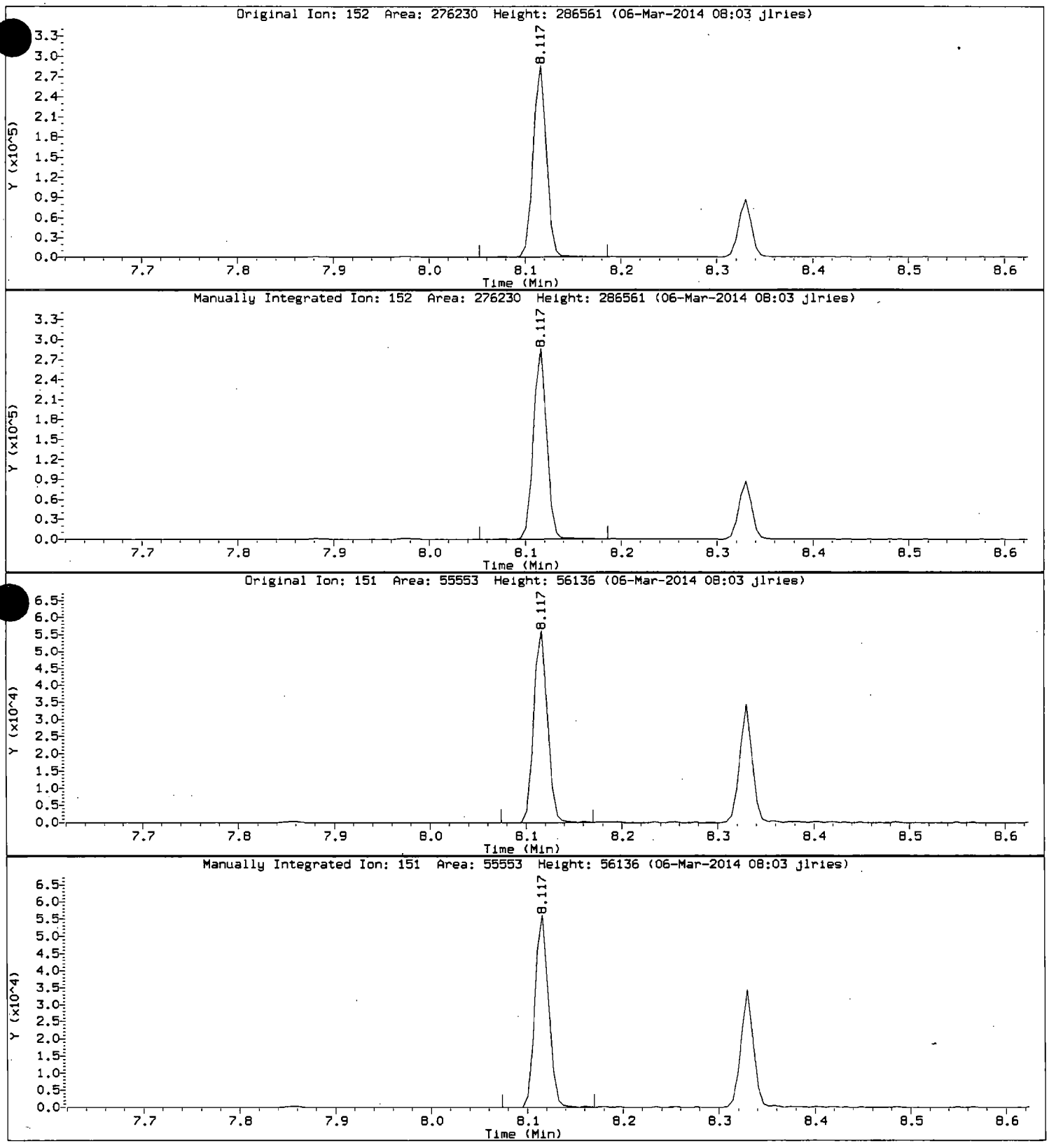
Instrument: 10mss9.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

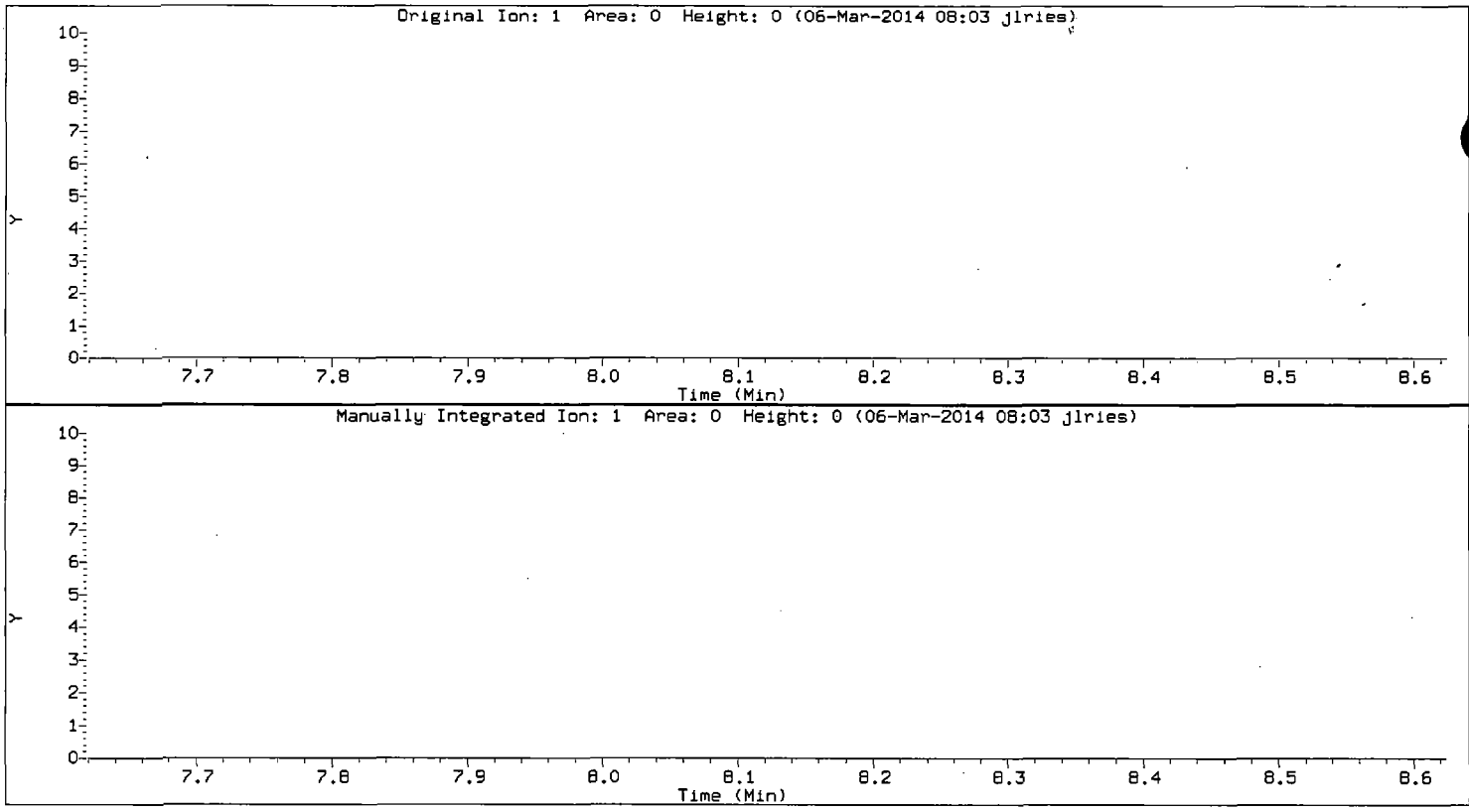


Instrument: 10mss9.i
Lab Sample ID: 1632347

Compound: Acenaphthylene
CAS Number: 208-96-8



Instrument: 10mss9.i
Lab Sample ID: 1632347



Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051415.D
Lab Smp Id: 1632348
Inj Date : 05-MAR-2014 19:38
Operator : JLR Inst ID: 10mss9.i
Smp Info : 1632348,MSD
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 06-Mar-2014 07:20 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	2.352	2.368	(0.500)	58579	39.1116	1300(Q)
	2 Pyridine	79	2.395	2.410	(0.509)	80100	29.3824	979
$	3 2-Fluorophenol (S)	112	3.426	3.425	(0.728)	203193	78.6369	2620
$	4 Phenol-d6 (S)	99	4.286	4.291	(0.910)	237023	79.7708	2660
	5 Phenol	94	4.296	4.302	(0.913)	123216	39.4976	1320
	6 bis(2-Chloroethyl)ether	63	4.403	4.408	(0.935)	85324	36.7020	1220
	7 2-Chlorophenol	128	4.489	4.494	(0.953)	100459	38.3066	1280
	8 1,3-Dichlorobenzene	146	4.654	4.660	(0.989)	107544	36.3839	1210
*	9 1,4-Dichlorobenzene-d4	152	4.708	4.713	(1.000)	72932	40.0000	
	10 1,4-Dichlorobenzene	146	4.729	4.734	(1.005)	109616	36.5614	1220
	11 Benzyl alcohol	79	4.836	4.841	(1.027)	69756	38.9092	1300
	12 1,2-Dichlorobenzene	146	4.895	4.900	(1.040)	103978	37.0883	1240
	13 2-Methylphenol	107	4.943	4.948	(1.050)	77761	38.8522	1300
	14 bis(2-Chloroisopropyl) ether	45	4.986	4.985	(1.059)	220539	37.0354	1230
	15 3 & 4-Methylphenol	107	5.114	5.119	(1.086)	102312	39.0708	1300
	17 N-Nitroso-di-n-propylamine	70	5.119	5.130	(1.087)	57237	37.8518	1260
	18 Hexachloroethane	117	5.274	5.279	(1.120)	40602	37.2895	1240
$	19 Nitrobenzene-d5 (S)	82	5.311	5.317	(0.864)	142942	59.3895	1980
	20 Nitrobenzene	77	5.333	5.338	(0.867)	89501	39.1248	1300
	21 Isophorone	82	5.595	5.605	(0.910)	163064	39.6824	1320
	22 2-Nitrophenol	139	5.696	5.701	(0.926)	52474	39.1528	1300
	23 2,4-Dimethylphenol	107	5.723	5.733	(0.930)	87327	37.4085	1250

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24	Benzoic acid	105	5.787	5.835	(0.941)	30007	24.9951	833	
	25	bis(2-Chloroethoxy)methane	93	5.835	5.840	(0.949)	95756	39.3821	1310	(Q)
	26	2,4-Dichlorophenol	162	5.974	5.979	(0.971)	81016	40.1799	1340	
	27	1,2,4-Trichlorobenzene	180	6.081	6.086	(0.989)	83077	39.2696	1310	
*	28	Naphthalene-d8	136	6.150	6.155	(1.000)	278217	40.0000		(Q)
	29	Naphthalene	128	6.177	6.182	(1.004)	274416	38.9012	1300	
	30	4-Chloroaniline	127	6.225	6.230	(1.012)	51842	20.2262	674	
	31	Hexachlorobutadiene	225	6.321	6.321	(1.028)	44173	38.1421	1270	
	32	4-Chloro-3-methylphenol	107	6.802	6.807	(1.106)	81354	42.4389	1410	
	33	2-Methylnaphthalene	142	7.005	7.010	(1.139)	185618	39.8670	1330	
	34	1-Methylnaphthalene	142	7.128	7.133	(1.159)	170928	39.5934	1320	
	35	Hexachlorocyclopentadiene	237	7.197	7.202	(0.868)	26262	28.8051	960	
	36	2,4,6-Trichlorophenol	196	7.347	7.347	(0.887)	53365	42.3597	1410	
	37	2,4,5-Trichlorophenol	196	7.390	7.395	(0.892)	56634	42.3062	1410	
$	38	2-Fluorobiphenyl (S)	172	7.448	7.453	(0.899)	286583	60.7730	2020	
	39	2-Chloronaphthalene	162	7.603	7.608	(0.917)	166457	40.4562	1350	
	40	2-Nitroaniline	65	7.715	7.726	(0.931)	57609	42.9213	1430	
	41	Dimethylphthalate	163	7.940	7.950	(0.958)	187677	42.0620	1400	
	42	2,6-Dinitrotoluene	165	8.015	8.025	(0.967)	43893	42.2571	1410	
	43	Acenaphthylene	152	8.116	8.121	(0.979)	263682	41.4230	1380	(M)
	44	3-Nitroaniline	138	8.218	8.233	(0.992)	33057	29.6027	987	
*	45	Acenaphthene-d10	164	8.287	8.292	(1.000)	134875	40.0000		
	46	Acenaphthene	154	8.330	8.335	(1.005)	161899	43.0764	1440	
	47	2,4-Dinitrophenol	184	8.351	8.362	(1.008)	13577	31.1277	1040	(Q)
	48	4-Nitrophenol	65	8.426	8.436	(1.017)	35956	41.9449	1400	
	49	2,4-Dinitrotoluene	165	8.511	8.522	(1.027)	58554	43.4792	1450	
	50	Dibenzofuran	168	8.538	8.549	(1.030)	233194	41.4904	1380	
	51	Diethylphthalate	149	8.811	8.816	(1.063)	178801	41.4627	1380	
	52	4-Chlorophenylphenyl ether	204	8.960	8.965	(1.081)	87356	42.4632	1420	
	53	4-Nitroaniline	138	8.976	8.992	(1.083)	47551	38.3179	1280	
	54	Fluorene	166	8.965	8.971	(1.082)	192757	42.2712	1410	
	55	4,6-Dinitro-2-methylphenol	198	9.014	9.024	(0.890)	26119	36.4508	1220	
	56	N-Nitrosodiphenylamine	169	9.104	9.110	(0.899)	156154	41.0929	1370	
	57	Azobenzene	77	9.152	9.163	(1.104)	172227	41.7297	1390	
	58	1,2-Diphenylhydrazine	77	9.152	9.163	(1.104)	172227	41.7297	1390	
$	59	2,4,6-Tribromophenol (S)	330	9.265	9.270	(1.118)	48176	93.5547	3120	
	60	4-Bromophenylphenyl ether	248	9.564	9.569	(0.944)	46579	42.0254	1400	
	61	Hexachlorobenzene	284	9.649	9.655	(0.953)	48292	41.0532	1370	
	62	Pentachlorophenol	266	9.890	9.895	(0.976)	21256	37.6789	1260	
*	63	Phenanthrene-d10	188	10.130	10.135	(1.000)	220095	40.0000		
	64	Phenanthrene	178	10.157	10.167	(1.003)	253102	40.2590	1340	
	65	Anthracene	178	10.221	10.226	(1.009)	260012	40.7622	1360	
	66	Carbazole	167	10.419	10.424	(1.028)	258448	41.7179	1390	
	67	di-n-Butylphthalate	149	10.835	10.840	(1.070)	304735	40.5696	1350	
	68	Fluoranthene	202	11.637	11.642	(1.149)	282246	41.3342	1380	
	69	Benzidine	184	11.786	11.791	(0.879)	21710	5.32690	178	(aR)
	70	Pyrene	202	11.920	11.925	(0.889)	295588	42.3429	1410	
$	71	Terphenyl-d14 (S)	244	12.101	12.101	(0.902)	282312	64.1337	2140	
	72	Butylbenzylphthalate	149	12.694	12.700	(0.947)	134786	41.7370	1390	
	73	bis(2-Ethylhexyl)phthalate	149	13.394	13.399	(0.999)	190080	42.1014	1400	
	74	3,3'-Dichlorobenzidine	252	13.351	13.362	(0.996)	50315	26.4168	880	
	75	Benzo(a)anthracene	228	13.394	13.405	(0.999)	263992	41.7103	1390	
*	76	Chrysene-d12	240	13.410	13.415	(1.000)	206059	40.0000		(Q)
	77	Chrysene	228	13.442	13.453	(1.002)	238783	41.3294	1380	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	14.153	14.158	(1.055)	320375	40.0086	1330
	79 Benzo(b)fluoranthene	252	14.660	14.676	(0.967)	235257	42.2915	1410
	80 Benzo(k)fluoranthene	252	14.698	14.708	(0.970)	250832	44.0667	1470
	81 Benzo(a)pyrene	252	15.082	15.098	(0.995)	226537	42.6300	1420
*	82 Perylene-d12	264	15.157	15.168	(1.000)	187305	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	16.835	16.856	(1.111)	242207	42.2381	1410
	84 Dibenzo(a,h)anthracene	278	16.851	16.877	(1.112)	205948	42.2560	1410
	85 Benzo(g,h,i)perylene	276	17.342	17.369	(1.144)	207744	42.7180	1420

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Report Date: 06-Mar-2014 08:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051415.D
Lab Smp Id: 1632348
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info: 10357

Calibration Date: 05-MAR-2014
Calibration Time: 15:31
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	110277	55139	220554	72932	-33.86
28 Naphthalene-d8	419805	209903	839610	278217	-33.73
45 Acenaphthene-d10	204219	102110	408438	134875	-33.96
63 Phenanthrene-d10	329340	164670	658680	220095	-33.17
76 Chrysene-d12	323408	161704	646816	206059	-36.29
82 Perylene-d12	312096	156048	624192	187305	-39.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.71	4.21	5.21	4.71	-0.11
28 Naphthalene-d8	6.16	5.66	6.66	6.15	-0.08
45 Acenaphthene-d10	8.29	7.79	8.79	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.13	-0.05
76 Chrysene-d12	13.42	12.92	13.92	13.41	-0.04
82 Perylene-d12	15.17	14.67	15.67	15.16	-0.07

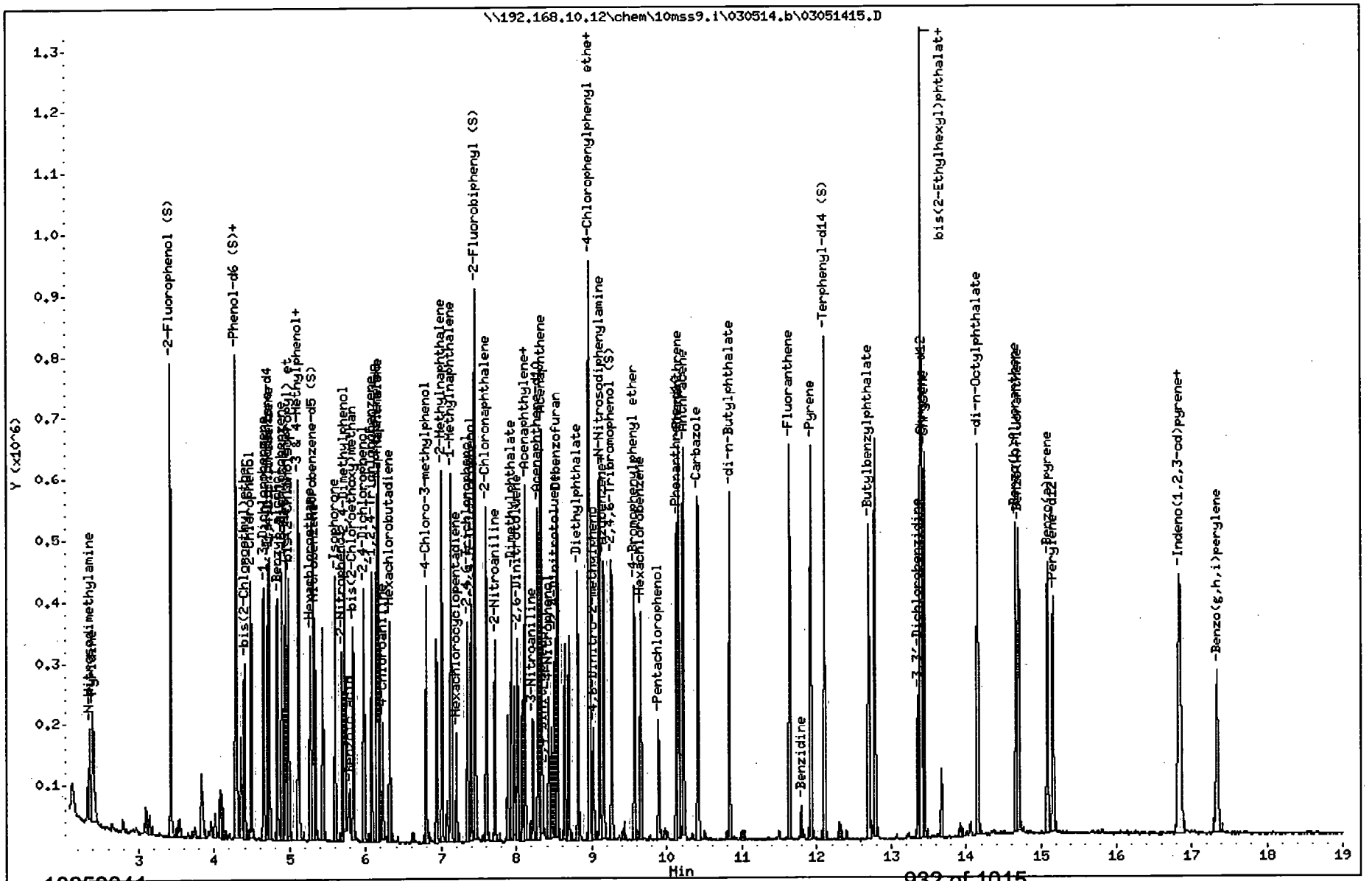
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051415.D
Date : 05-MAR-2014 19:38
Client ID:
Sample Info: 1632348,MSD

Instrument: 10mss9.i

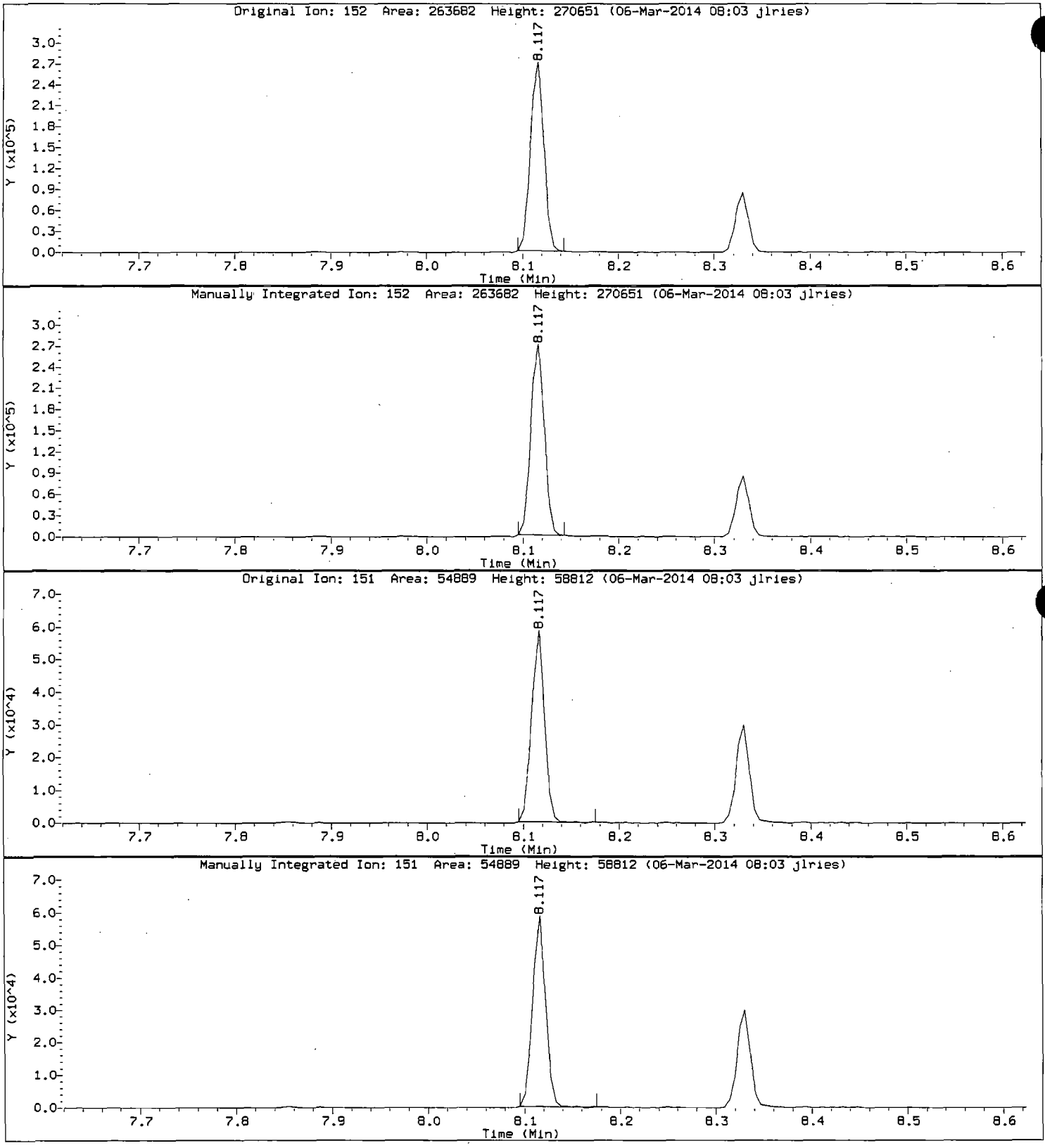
Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS

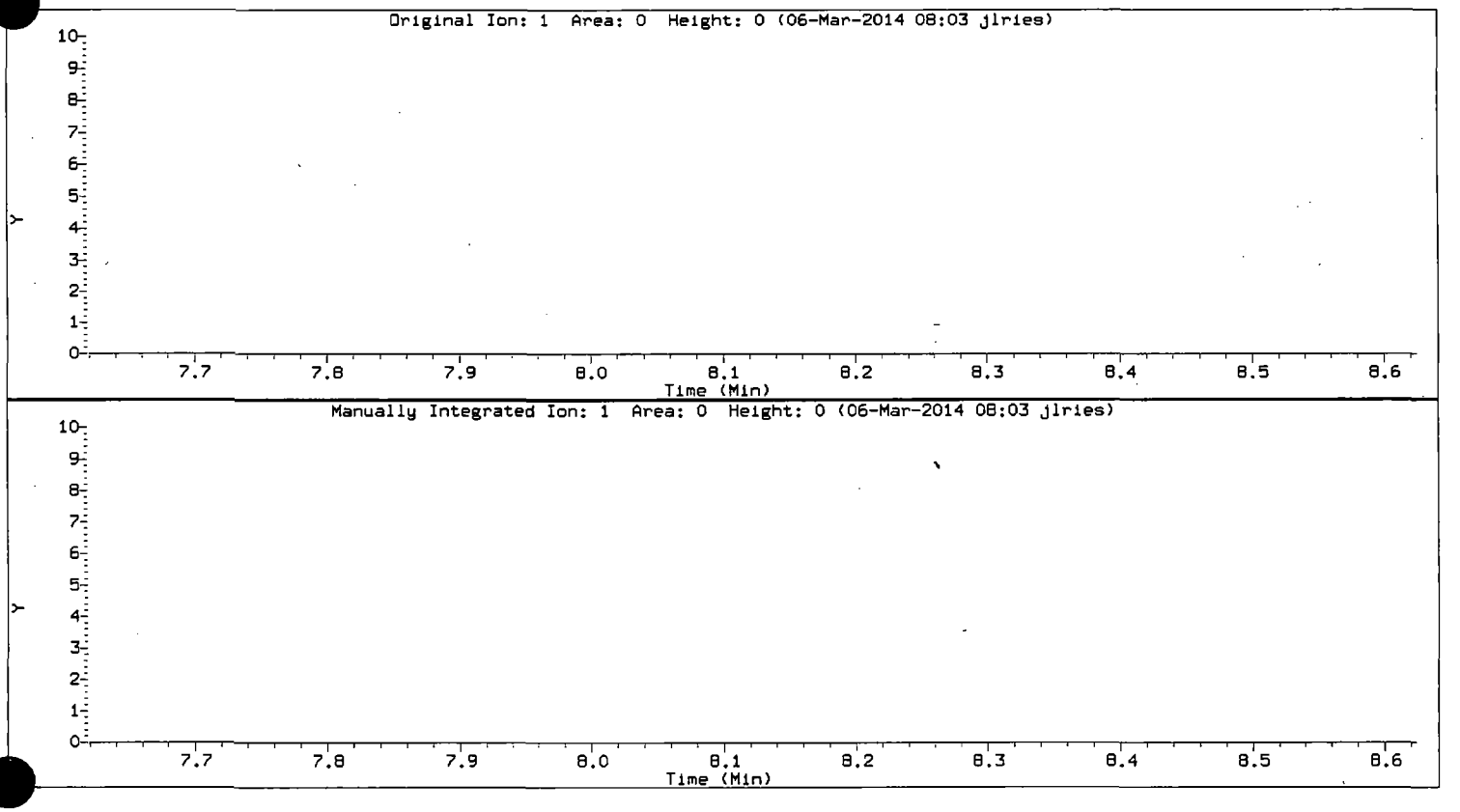


Instrument: 10mss9.i
Lab Sample ID: 1632348

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mss9.i\030514.b/03051415.D
Injection Date: 05-MAR-2014 19:38
Instrument: 10mss9.i
Lab Sample ID: 1632348



Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061405.D
Report Date: 06-Mar-2014 10:38

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061405.D
Lab Smp Id: 1632346
Inj Date : 06-MAR-2014 08:44
Operator : JLR Inst ID: 10mssD.i
Smp Info : 1632346,LCS
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	2.584	2.590	(0.510)	93747	34.6343	1150
	2 Pyridine	79	2.632	2.638	(0.520)	127408	26.2318	874
$	3 2-Fluorophenol (S)	112	3.724	3.718	(0.735)	353294	86.7569	2890
$	4 Phenol-d6 (S)	99	4.606	4.611	(0.909)	439622	86.6405	2890
	5 Phenol	94	4.622	4.627	(0.912)	211937	40.0744	1340
	6 bis(2-Chloroethyl)ether	63	4.740	4.745	(0.936)	116371	36.9907	1230
	7 2-Chlorophenol	128	4.836	4.836	(0.955)	175232	40.4787	1350
	8 1,3-Dichlorobenzene	146	5.007	5.007	(0.988)	175099	38.7556	1290
*	9 1,4-Dichlorobenzene-d4	152	5.066	5.066	(1.000)	116788	40.0000	
	10 1,4-Dichlorobenzene	146	5.082	5.082	(1.003)	181107	39.1251	1300
	11 Benzyl alcohol	79	5.184	5.184	(1.023)	139165	38.6090	1290
	12 1,2-Dichlorobenzene	146	5.253	5.259	(1.037)	171958	39.2535	1310
	13 2-Methylphenol	107	5.285	5.291	(1.043)	132670	40.4645	1350
	14 bis(2-Chloroisopropyl) ether	45	5.333	5.339	(1.053)	223308	36.4525	1220
	15 3 & 4-Methylphenol	107	5.456	5.462	(1.077)	176664	41.3622	1380
	17 N-Nitroso-di-n-propylamine	70	5.478	5.483	(1.081)	114792	38.2729	1280
	18 Hexachloroethane	117	5.644	5.644	(1.114)	68212	37.9239	1260
$	19 Nitrobenzene-d5 (S)	82	5.670	5.676	(0.868)	274637	60.0123	2000
	20 Nitrobenzene	77	5.697	5.697	(0.872)	171804	38.7773	1290
	21 Isophorone	82	5.965	5.970	(0.913)	313653	39.9950	1330
	23 2-Nitrophenol	139	6.066	6.066	(0.929)	94071	41.8967	1400
	22 2,4-Dimethylphenol	107	6.077	6.082	(0.930)	148237	36.1285	1200

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24	Benzoic acid	105	6.146	6.178	(0.941)	99537	33.5778	1120	
	25	bis(2-Chloroethoxy)methane	93	6.195	6.200	(0.948)	197222	40.6953	1360	(Q)
	26	2,4-Dichlorophenol	162	6.339	6.344	(0.971)	135332	42.4441	1410	
	27	1,2,4-Trichlorobenzene	180	6.457	6.457	(0.989)	137329	40.4029	1350	
*	28	Naphthalene-d8	136	6.532	6.532	(1.000)	460743	40.0000		(Q)
	29	Naphthalene	128	6.558	6.564	(1.004)	495112	39.9401	1330	
	30	4-Chloroaniline	127	6.596	6.601	(1.010)	96429	20.6519	688	
	31	Hexachlorobutadiene	225	6.697	6.697	(1.025)	70829	41.3861	1380	
	32	4-Chloro-3-methylphenol	107	7.157	7.163	(1.096)	149269	43.2453	1440	
	33	2-Methylnaphthalene	142	7.393	7.393	(1.132)	335962	41.5065	1380	
	34	1-Methylnaphthalene	142	7.516	7.516	(1.151)	311461	41.2431	1370	
	35	Hexachlorocyclopentadiene	237	7.585	7.585	(0.874)	77049	39.1159	1300	
	36	2,4,6-Trichlorophenol	196	7.724	7.724	(0.890)	96293	45.0857	1500	
	37	2,4,5-Trichlorophenol	196	7.767	7.767	(0.895)	103325	44.9478	1500	
$	38	2-Fluorobiphenyl (S)	172	7.831	7.831	(0.902)	574366	68.6485	2290	
	39	2-Chloronaphthalene	162	7.992	7.997	(0.921)	303455	42.7713	1420	
	40	2-Nitroaniline	65	8.099	8.104	(0.933)	101706	42.7513	1420	
	41	Dimethylphthalate	163	8.318	8.323	(0.958)	349424	43.8725	1460	
	42	2,6-Dinitrotoluene	165	8.393	8.398	(0.967)	82745	43.0086	1430	
	43	Acenaphthylene	152	8.511	8.516	(0.980)	506173	42.8461	1430	(M)
	44	3-Nitroaniline	138	8.601	8.612	(0.991)	61317	30.9917	1030	
*	45	Acenaphthene-d10	164	8.682	8.687	(1.000)	239411	40.0000		
	46	Acenaphthene	154	8.724	8.730	(1.005)	312733	42.1939	1410	
	47	2,4-Dinitrophenol	184	8.730	8.735	(1.006)	37389	34.0025	1130	(Q)
	48	4-Nitrophenol	65	8.783	8.789	(1.012)	72730	40.4808	1350	
	49	2,4-Dinitrotoluene	165	8.890	8.901	(1.024)	112445	44.2641	1480	
	50	Dibenzofuran	168	8.938	8.944	(1.030)	438522	43.7771	1460	
	51	Diethylphthalate	149	9.190	9.195	(1.059)	355382	42.6582	1420	
	52	4-Chlorophenylphenyl ether	204	9.350	9.356	(1.077)	160008	43.8135	1460	
	54	4-Nitroaniline	138	9.361	9.372	(1.078)	92051	40.6108	1350	
	53	Fluorene	166	9.366	9.366	(1.079)	366119	43.3472	1440	
	55	4,6-Dinitro-2-methylphenol	198	9.398	9.409	(0.892)	54578	37.7426	1260	
	56	N-Nitrosodiphenylamine	169	9.489	9.495	(0.901)	315808	43.6742	1460	
	57	Azobenzene	77	9.548	9.553	(1.100)	372848	42.0606	1400	
	58	1,2-Diphenylhydrazine	77	9.548	9.553	(1.100)	372848	42.0606	1400	
$	59	2,4,6-Tribromophenol (S)	330	9.661	9.666	(1.113)	121159	107.521	3580	
	60	4-Bromophenylphenyl ether	248	9.960	9.965	(0.946)	91187	44.5292	1480	
	61	Hexachlorobenzene	284	10.051	10.056	(0.954)	99714	44.2440	1470	
	62	Pentachlorophenol	266	10.286	10.286	(0.977)	56905	41.6554	1390	
*	63	Phenanthrene-d10	188	10.532	10.538	(1.000)	405527	40.0000		
	64	Phenanthrene	178	10.564	10.570	(1.003)	491905	42.5891	1420	
	65	Anthracene	178	10.629	10.634	(1.009)	503317	42.7457	1420	
	66	Carbazole	167	10.816	10.816	(1.027)	495684	43.4558	1450	
	67	di-n-Butylphthalate	149	11.222	11.222	(1.066)	612928	43.5897	1450	
	68	Fluoranthene	202	12.046	12.051	(1.144)	510493	44.2841	1480	
	69	Benzidine	184	12.185	12.190	(0.881)	11103	1.82680	60.9	(aR)
	70	Pyrene	202	12.335	12.340	(0.892)	532586	44.3686	1480	
$	71	Terphenyl-d14 (S)	244	12.506	12.506	(0.904)	619924	73.1654	2440	
	72	Butylbenzylphthalate	149	13.089	13.094	(0.947)	264903	45.3182	1510	
	73	bis(2-Ethylhexyl)phthalate	149	13.784	13.790	(0.997)	364521	43.4657	1450	
	74	3,3'-Dichlorobenzidine	252	13.758	13.763	(0.995)	116139	35.7492	1190	
	75	Benzo(a)anthracene	228	13.811	13.822	(0.999)	489816	44.0541	1470	
*	76	Chrysene-d12	240	13.827	13.832	(1.000)	389918	40.0000		(Q)
	77	Chrysene	228	13.859	13.864	(1.002)	452361	43.8500	1460	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
78	di-n-Octylphthalate	149	14.555	14.560	(1.053)	610790	43.7288	1460
79	Benzo(b)fluoranthene	252	15.164	15.170	(0.964)	483353	45.7221	1520
80	Benzo(k)fluoranthene	252	15.202	15.212	(0.966)	510247	45.0327	1500
81	Benzo(a)pyrene	252	15.646	15.656	(0.995)	457431	45.0797	1500
* 82	Perylene-d12	264	15.731	15.737	(1.000)	387603	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.673	17.694	(1.123)	545412	46.5191	1550
84	Dibenzo(a,h)anthracene	278	17.694	17.716	(1.125)	468008	46.4981	1550
85	Benzo(g,h,i)perylene	276	18.266	18.293	(1.161)	460268	46.4243	1550

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Report Date: 06-Mar-2014 10:38

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061405.D
Lab Smp Id: 1632346
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info: 10357

Calibration Date: 06-MAR-2014
Calibration Time: 07:48

Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	142387	71194	284774	116788	-17.98
28 Naphthalene-d8	559471	279736	1118942	460743	-17.65
45 Acenaphthene-d10	296387	148194	592774	239411	-19.22
63 Phenanthrene-d10	500615	250308	1001230	405527	-18.99
76 Chrysene-d12	467805	233903	935610	389918	-16.65
82 Perylene-d12	505479	252740	1010958	387603	-23.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.53	6.03	7.03	6.53	0.00
45 Acenaphthene-d10	8.69	8.19	9.19	8.68	-0.06
63 Phenanthrene-d10	10.54	10.04	11.04	10.53	-0.05
76 Chrysene-d12	13.83	13.33	14.33	13.83	-0.04
82 Perylene-d12	15.74	15.24	16.24	15.73	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

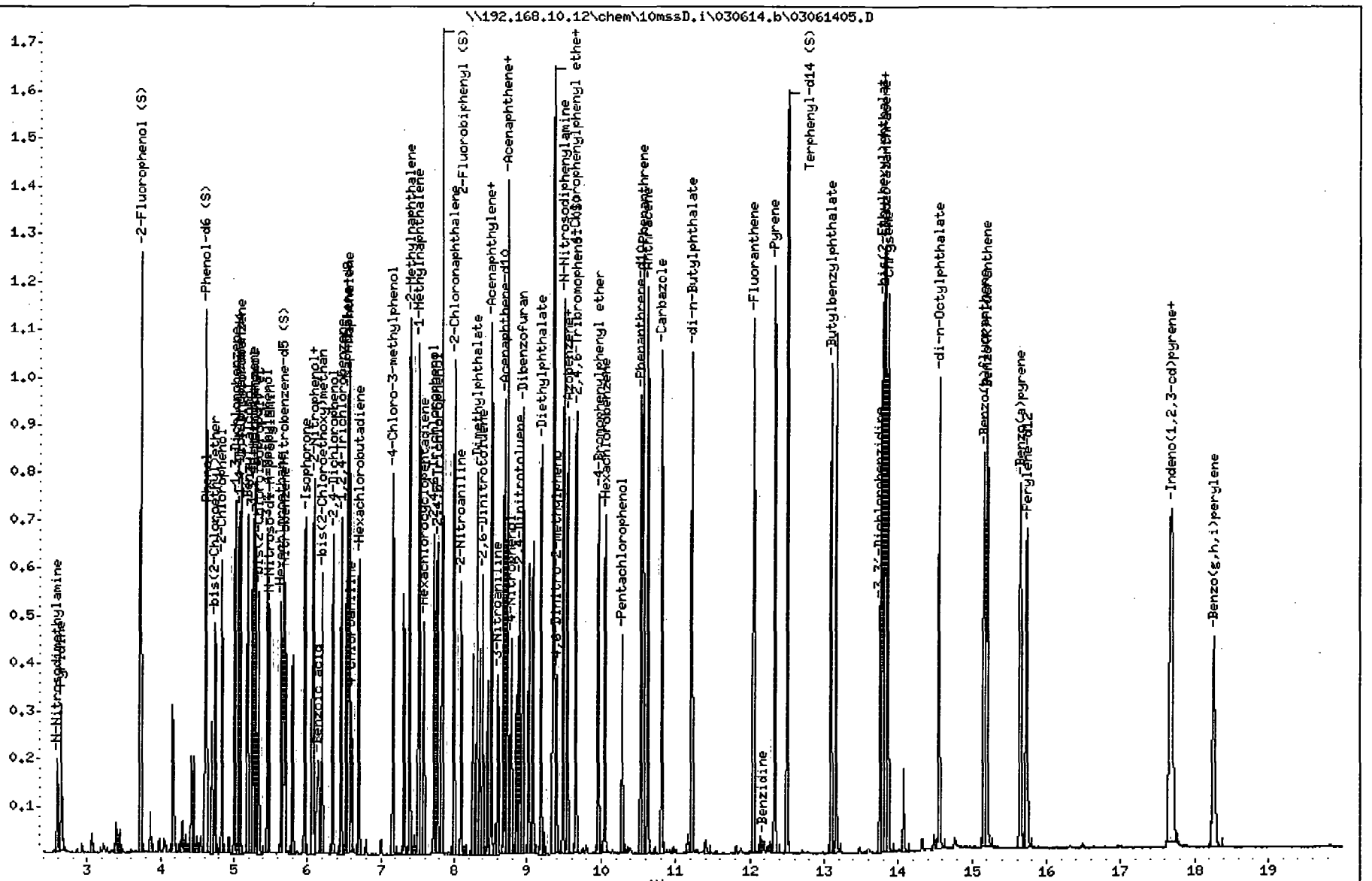
Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061405.D
Date : 06-MAR-2014 08:44
Client ID:
Sample Info: 1632346,LCS

Instrument: 10mssD.i

Operator: JLR

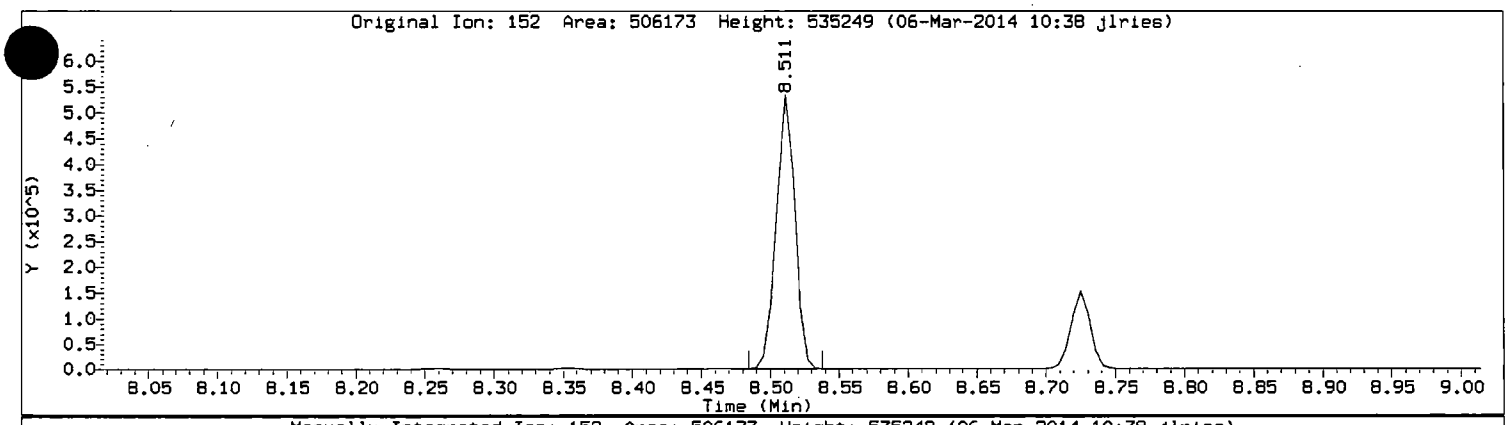
Column phase: DB-5MS

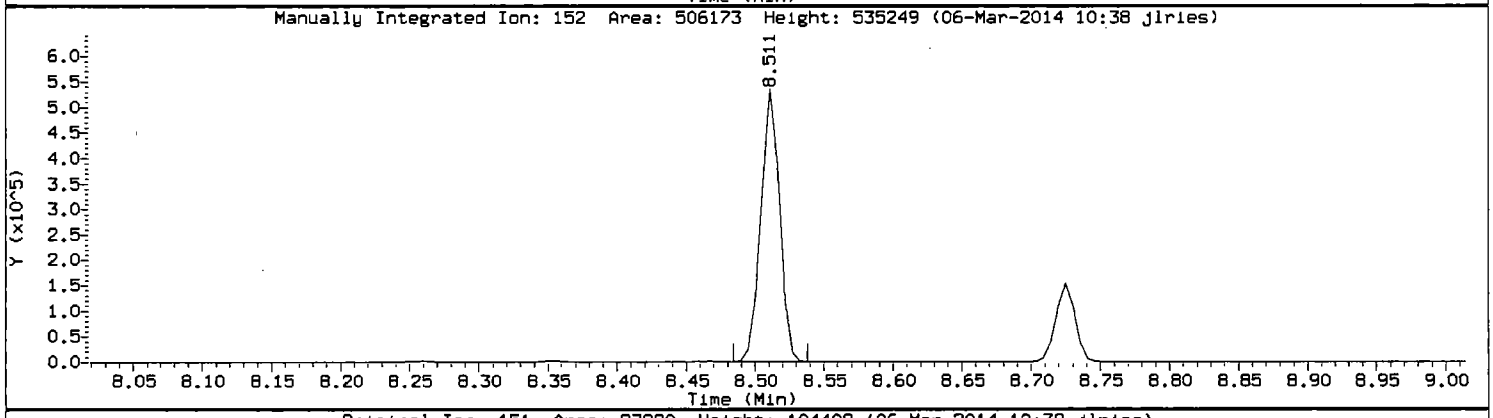
Column diameter: 0.25

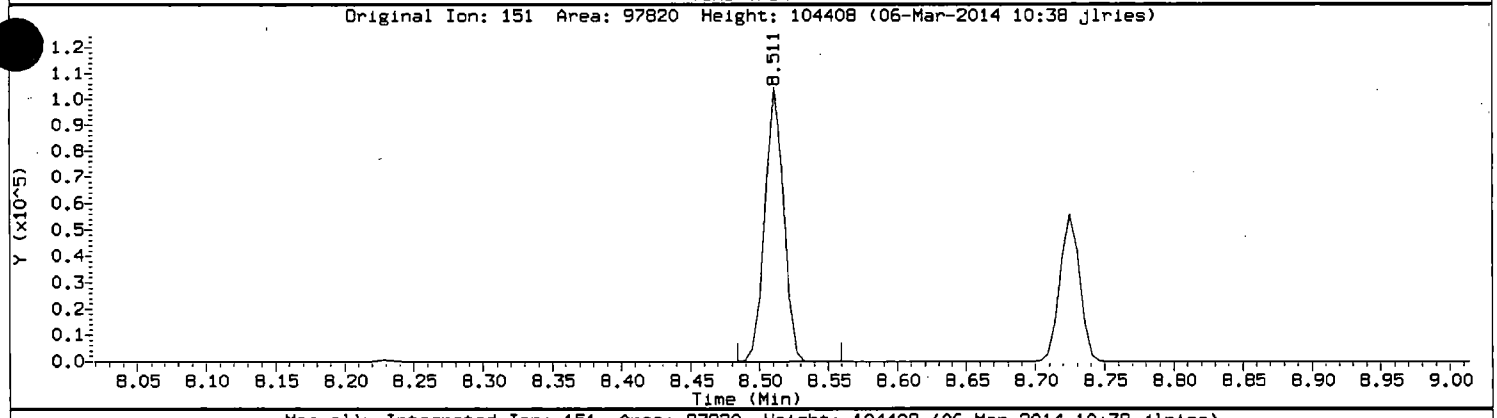


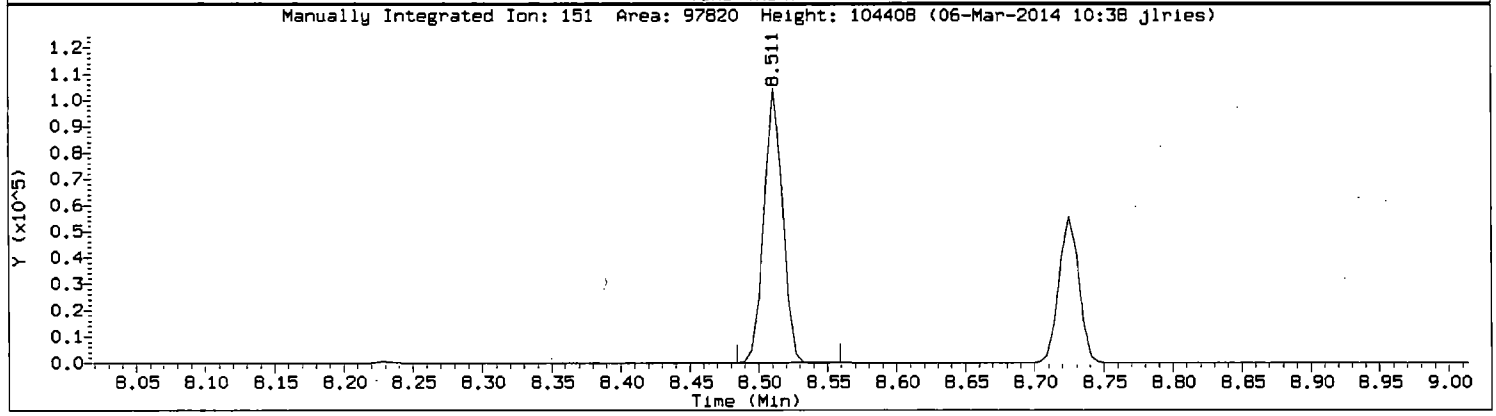
Instrument: 10mssD.i
Lab Sample ID: 1632346

Compound: Acenaphthylene
CAS Number: 208-96-8

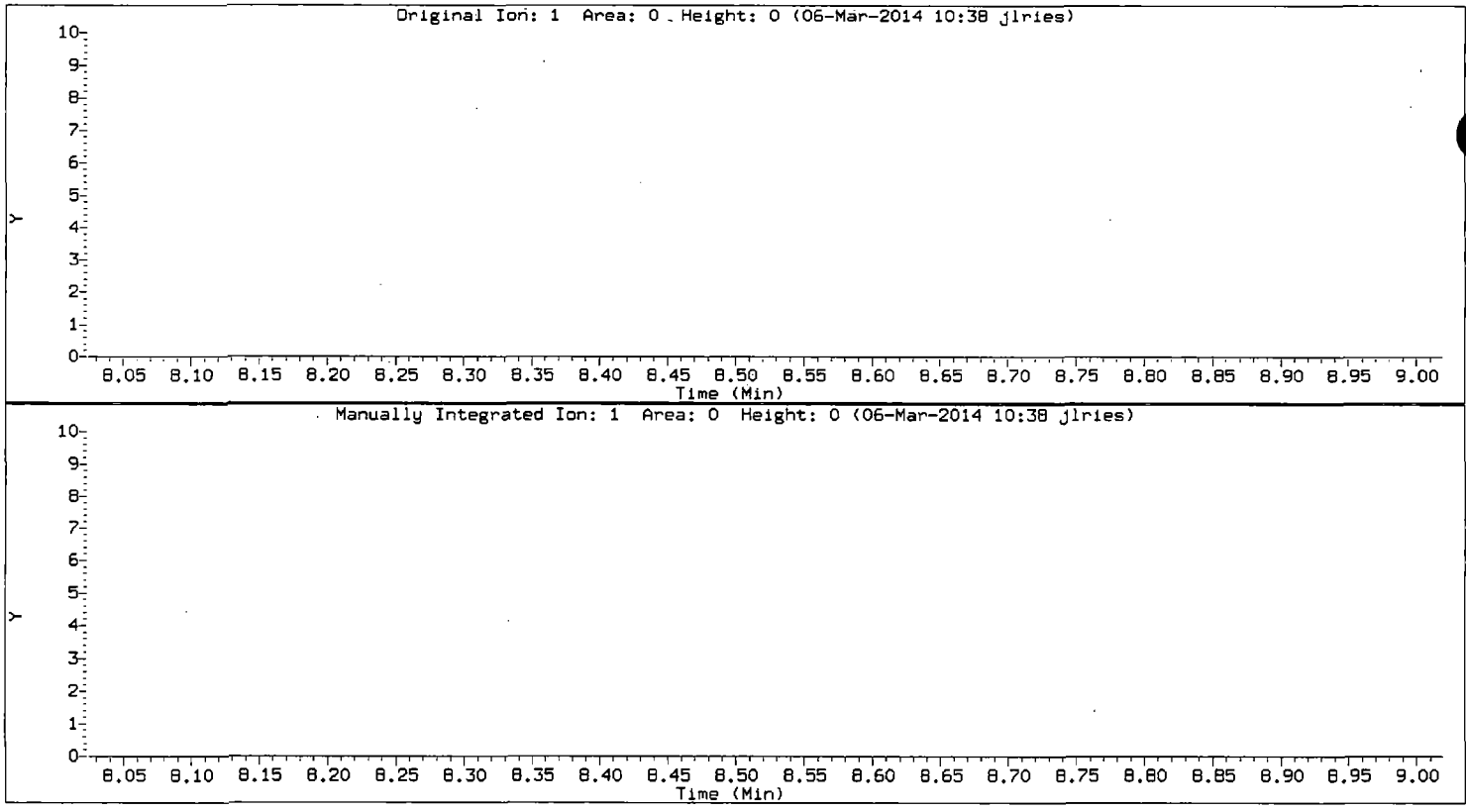








Instrument: 10mssD.i
Lab Sample ID: 1632346



Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051412.D
Lab Smp Id: 10259041001
Inj Date : 05-MAR-2014 18:17
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10259041001
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 06-Mar-2014 07:20 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	Compound Not Detected.					
	2 Pyridine	79	Compound Not Detected.					
$	3 2-Fluorophenol (S)	112	3.426	3.425	(0.728)	229514	80.9070	2700
$	4 Phenol-d6 (S)	99	4.286	4.291	(0.910)	267097	81.8807	2730
	5 Phenol	94	Compound Not Detected.					
	6 bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7 2-Chlorophenol	128	Compound Not Detected.					
	8 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9 1,4-Dichlorobenzene-d4	152	4.708	4.713	(1.000)	80068	40.0000	
	10 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	107	Compound Not Detected.					
	14 bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15 3 & 4-Methylphenol	107	Compound Not Detected.					
	17 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18 Hexachloroethane	117	Compound Not Detected.					
$	19 Nitrobenzene-d5 (S)	82	5.311	5.317	(0.864)	162289	59.8943	2000
	20 Nitrobenzene	77	Compound Not Detected.					
	21 Isophorone	82	Compound Not Detected.					
	22 2-Nitrophenol	139	Compound Not Detected.					
	23 2,4-Dimethylphenol	107	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24	Benzoic acid	105	Compound Not Detected.						
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26	2,4-Dichlorophenol	162	Compound Not Detected.						
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28	Naphthalene-d8	136	6.150	6.155	(1.000)	313211	40.0000		(Q)
	29	Naphthalene	128	Compound Not Detected.						
	30	4-Chloroaniline	127	Compound Not Detected.						
	31	Hexachlorobutadiene	225	Compound Not Detected.						
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33	2-Methylnaphthalene	142	Compound Not Detected.						
	34	1-Methylnaphthalene	142	Compound Not Detected.						
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38	2-Fluorobiphenyl (S)	172	7.448	7.453	(0.899)	321994	60.3685	2010	
	39	2-Chloronaphthalene	162	Compound Not Detected.						
	40	2-Nitroaniline	65	Compound Not Detected.						
	41	Dimethylphthalate	163	Compound Not Detected.						
	42	2,6-Dinitrotoluene	165	Compound Not Detected.						
	43	Acenaphthylene	152	Compound Not Detected.						
	44	3-Nitroaniline	138	Compound Not Detected.						
*	45	Acenaphthene-d10	164	8.287	8.292	(1.000)	152556	40.0000		
	46	Acenaphthene	154	Compound Not Detected.						
	47	2,4-Dinitrophenol	184	Compound Not Detected.						
	48	4-Nitrophenol	65	Compound Not Detected.						
	49	2,4-Dinitrotoluene	165	Compound Not Detected.						
	50	Dibenzofuran	168	Compound Not Detected.						
	51	Diethylphthalate	149	Compound Not Detected.						
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53	4-Nitroaniline	138	Compound Not Detected.						
	54	Fluorene	166	Compound Not Detected.						
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Azobenzene	77	Compound Not Detected.						
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59	2,4,6-Tribromophenol (S)	330	9.259	9.270	(1.117)	47263	81.1443	2700	
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61	Hexachlorobenzene	284	Compound Not Detected.						
	62	Pentachlorophenol	266	Compound Not Detected.						
*	63	Phenanthrene-d10	188	10.130	10.135	(1.000)	245797	40.0000		
	64	Phenanthrene	178	Compound Not Detected.						
	65	Anthracene	178	Compound Not Detected.						
	66	Carbazole	167	Compound Not Detected.						
	67	di-n-Butylphthalate	149	Compound Not Detected.						
	68	Fluoranthene	202	Compound Not Detected.						
	69	Benzidine	184	Compound Not Detected.						
	70	Pyrene	202	Compound Not Detected.						
$	71	Terphenyl-d14 (S)	244	12.101	12.101	(0.903)	329357	71.3185	2380	
	72	Butylbenzylphthalate	149	Compound Not Detected.						
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75	Benzo(a)anthracene	228	Compound Not Detected.						
*	76	Chrysene-d12	240	13.405	13.415	(1.000)	216179	40.0000		(Q)
	77	Chrysene	228	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252	Compound Not Detected.					
	81 Benzo(a)pyrene	252	Compound Not Detected.					
*	82 Perylene-d12	264	15.157	15.168	(1.000)	207345	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Report Date: 06-Mar-2014 08:02

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051412.D
Lab Smp Id: 10259041001
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info: 10357

Calibration Date: 05-MAR-2014
Calibration Time: 15:31

Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

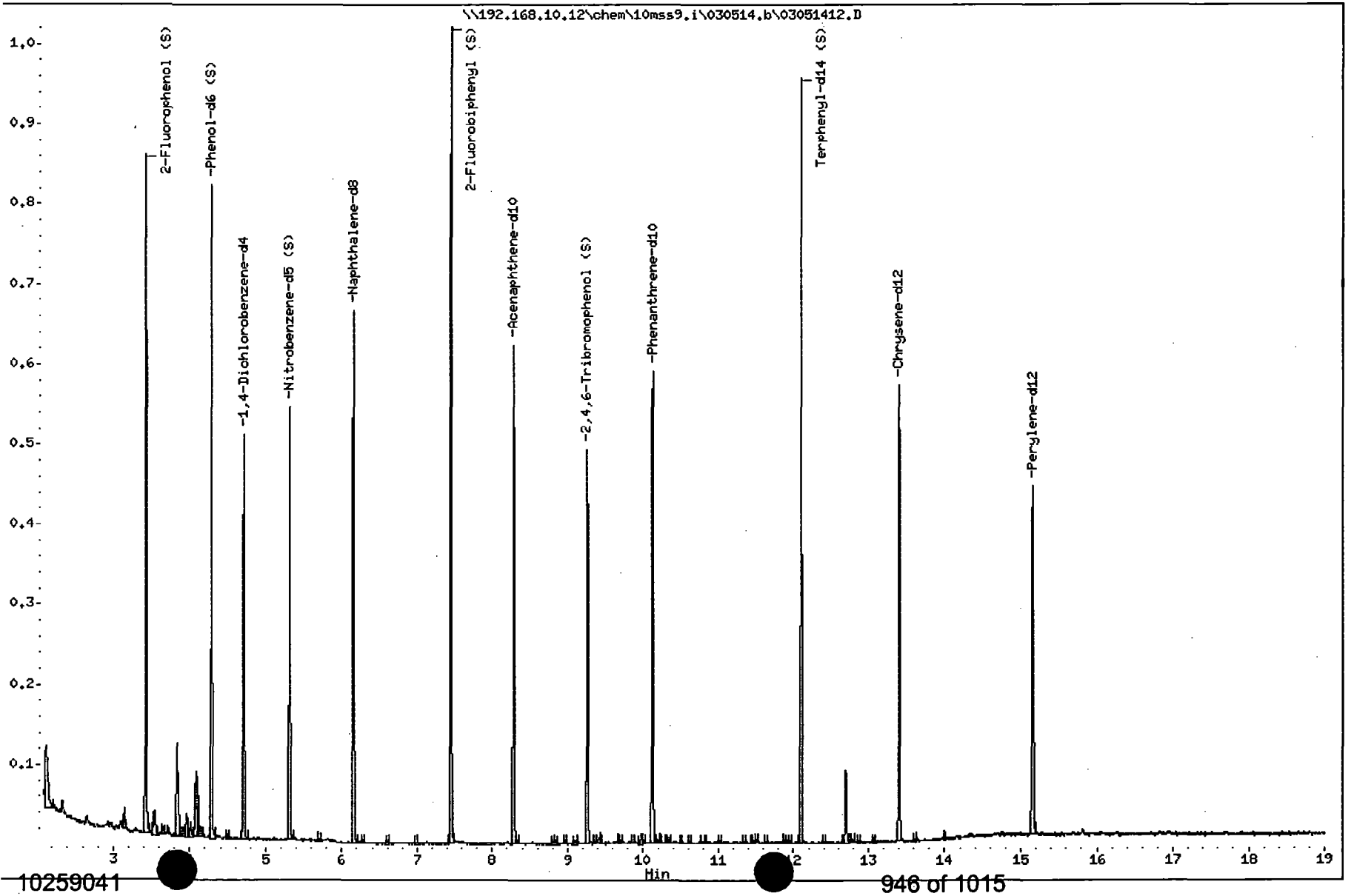
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	110277	55139	220554	80068	-27.39
28 Naphthalene-d8	419805	209903	839610	313211	-25.39
45 Acenaphthene-d10	204219	102110	408438	152556	-25.30
63 Phenanthrene-d10	329340	164670	658680	245797	-25.37
76 Chrysene-d12	323408	161704	646816	216179	-33.16
82 Perylene-d12	312096	156048	624192	207345	-33.56

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.71	4.21	5.21	4.71	-0.11
28 Naphthalene-d8	6.16	5.66	6.66	6.15	-0.08
45 Acenaphthene-d10	8.29	7.79	8.79	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.13	-0.05
76 Chrysene-d12	13.42	12.92	13.92	13.41	-0.08
82 Perylene-d12	15.17	14.67	15.67	15.16	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051412.D
Date : 05-MAR-2014 18:17
Client ID:
Sample Info: 10259041001

Instrument: 10mss9.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Instrument: 10mss9.i
Lab Sample ID: 10259041001
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051413.D
Lab Smp Id: 10259041002
Inj Date : 05-MAR-2014 18:44
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10259041002
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 06-Mar-2014 07:20 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1	N-Nitrosodimethylamine	74	Compound Not Detected.					
	2	Pyridine	79	Compound Not Detected.					
$	3	2-Fluorophenol (S)	112	3.425	3.425	(0.728)	218000	77.0300	2570
$	4	Phenol-d6 (S)	99	4.286	4.291	(0.910)	259208	79.6503	2660
	5	Phenol	94	Compound Not Detected.					
	6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7	2-Chlorophenol	128	Compound Not Detected.					
	8	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9	1,4-Dichlorobenzene-d4	152	4.708	4.713	(1.000)	79879	40.0000	
	10	1,4-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	79	Compound Not Detected.					
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	107	Compound Not Detected.					
	14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15	3 & 4-Methylphenol	107	Compound Not Detected.					
	17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18	Hexachloroethane	117	Compound Not Detected.					
$	19	Nitrobenzene-d5 (S)	82	5.311	5.317	(0.864)	154542	59.2512	1980
	20	Nitrobenzene	77	Compound Not Detected.					
	21	Isophorone	82	Compound Not Detected.					
	22	2-Nitrophenol	139	Compound Not Detected.					
	23	2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.150	6.155	(1.000)	301497	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.448	7.453	(0.899)	303093	57.5878	1920	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.287	8.292	(1.000)	150535	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53 4-Nitroaniline	138	Compound Not Detected.						
	54 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.259	9.270	(1.117)	46637	81.1445	2700	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.130	10.135	(1.000)	237103	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.101	12.101	(0.903)	312325	68.9688	2300	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.405	13.415	(1.000)	211984	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252	Compound Not Detected.					
	81 Benzo(a)pyrene	252	Compound Not Detected.					
*	82 Perylene-d12	264	15.157	15.168	(1.000)	198969	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Report Date: 06-Mar-2014 08:02

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051413.D
Lab Smp Id: 10259041002
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info: 10357

Calibration Date: 05-MAR-2014
Calibration Time: 15:31

Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

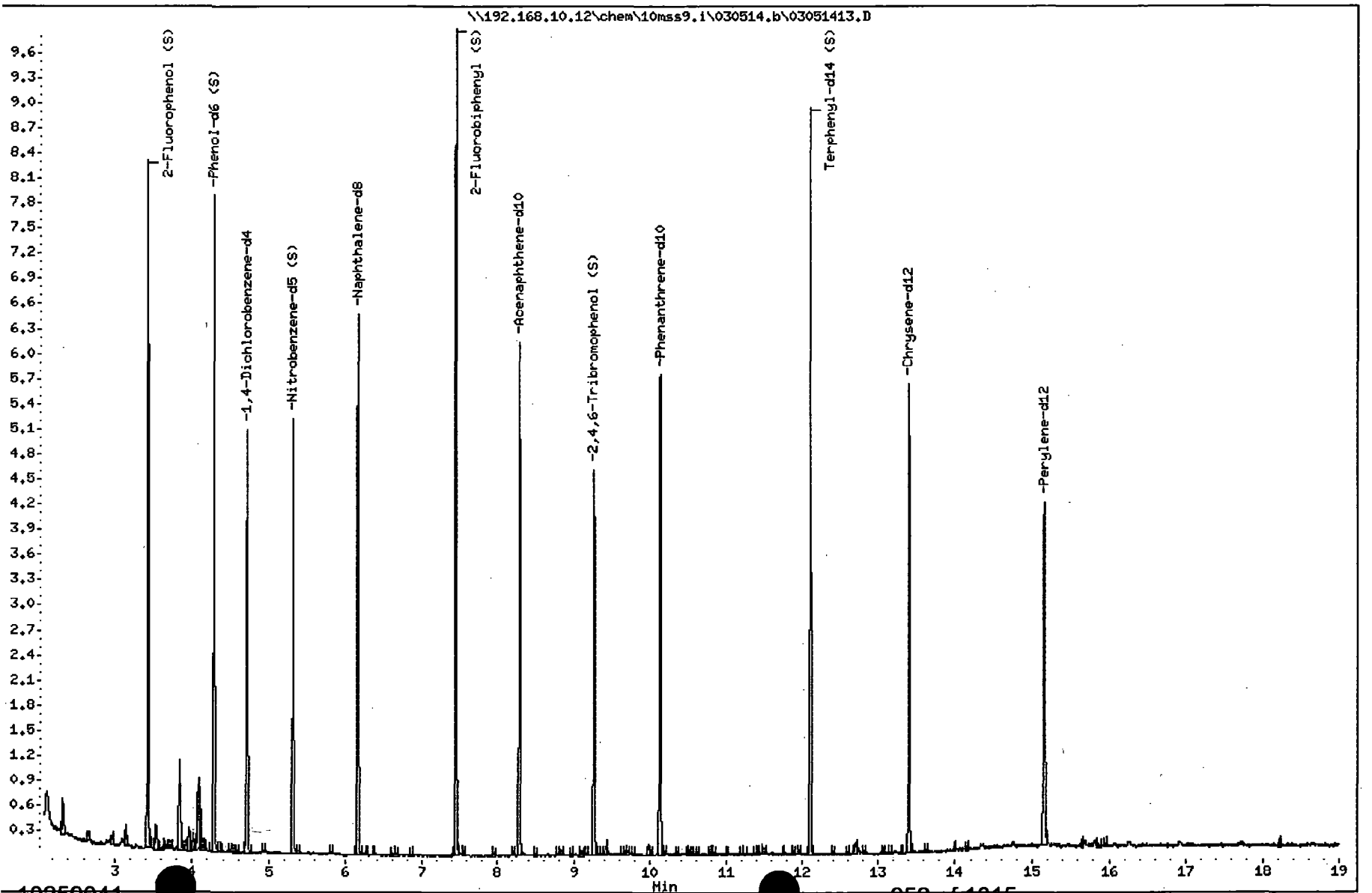
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	110277	55139	220554	79879	-27.57
28 Naphthalene-d8	419805	209903	839610	301497	-28.18
45 Acenaphthene-d10	204219	102110	408438	150535	-26.29
63 Phenanthrene-d10	329340	164670	658680	237103	-28.01
76 Chrysene-d12	323408	161704	646816	211984	-34.45
82 Perylene-d12	312096	156048	624192	198969	-36.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.71	4.21	5.21	4.71	-0.11
28 Naphthalene-d8	6.16	5.66	6.66	6.15	-0.09
45 Acenaphthene-d10	8.29	7.79	8.79	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.13	-0.05
76 Chrysene-d12	13.42	12.92	13.92	13.41	-0.08
82 Perylene-d12	15.17	14.67	15.67	15.16	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051413.D
Date : 05-MAR-2014 18:44
Client ID:
Sample Info: 10259041002

Instrument: 10mss9.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Instrument: 10mss9.i
Lab Sample ID: 10259041002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

10357/288445

Pace Analytical	Document Name: Extraction Sheet – 8270C Soil Sonication	Document Revised: 17 Aug 2011 Page 1 of 1
	Document No.: O-108 Rev.06	Issuing Authority: Pace Minnesota Quality Office

SS:	10328-113	Amt: 100 µL	Analyst: SR	Ext. Date/By:	3/3/14 SR
MS:	10328-97	Amt: 500 µL	Analyst: SR	Batch:	24489 288053
BNA SS	750/1000 µg/mL	BNA MS	100 µg/mL	Pipettor ID:	PP1-35

	Sample ID	I.W. 30g	Spike Ver.		F.V. 1.0 mL (amber)	Comments
1	MB- 1632345	30.0	①		1.0	Solid Lot #: 116733
2	LCS- 1632346	30.0	①	①	1.0	Solid Lot #: 116733
3	~~LCSD~~	~~30.0~~				~~Solid Lot #:~~ 3/3/14 SR
4	10259041001	30.0	①		1.0	
5	41002	30.0	①		1.0	
6	MS 1632347	30.1	①	①	1.0	
7	MSD 1632348	30.0	①	①	1.0	
8	10259055001	30.1	①		1.0	
9	55002	30.0	①		1.0	
10	55003	30.0	①		1.0	
11	55004	30.1	①		1.0	
12	55005	30.0	①		1.0	
13	55006	30.0	①		1.0	
14	55007	30.1	①		1.0	
15	10259067001	30.1	①		1.0	
16	10259142001	30.0	①		1.0	
17	42002	30.1	①		1.0	
18						
19						
20					ICR	3-4-14
21						
22						
23						
24						
25						

Sample ID Verified by: ①

Filter Paper Lot: 65839138

Date Conc./By: AD 3-4-14

Balance ID: 1888067 ☒ Calibrated.

$MeCl_2$/Acetone (Ext): 9222-481

$MeCl_2$ (F.V.): 137829

Sonicator ID: P1-4 ☒ Tuned @ 800

Na_2SO_4 Lot: 136130-11

Bath Temp (95°): 97

Comments: ① No one to verify

8270C – Soil (Sonication)

Posted by/Date: AD 3-4-14	Validated by/Date: KR 3-4-14

Moisture Data

Work Order

10259041

WorkSheet Samples Security Options Window Help

Test America Analytical Services
Minneapolis, MN

Date = MM/DD/YY >>

1	1230865001	1	0.97	9.82	8.70	12.64	PASI-VM	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
2	1632425	2	1.01	9.62	8.50	13.02	Quality Control	DUP	44616	MPRP	RY WEIGH	JDL	03/03/2014
3	10259021001	3	1.02	9.55	9.05	5.88	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
4	10259021002	4	0.99	8.29	7.01	17.53		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
5	10259021003	5	1.03	8.62	6.55	27.24		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
6	10259023001	6	1.02	8.76	7.75	13.01		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
7	10259024001	7	1.00	9.39	8.71	8.16		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
8	10259024002	8	1.04	9.48	9.19	3.42		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
9	10258967001	9	1.04	9.89	8.29	18.07		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
10	10258967002	10	1.00	8.78	7.93	10.95		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
11	1230845001	11	1.01	9.22	8.74	5.83		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
12	10258999001	12	1.01	9.60	8.63	11.31		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
13	10259041001	13	1.02	8.35	6.95	19.05	BP-STANTEC-IL	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
14	10259041002	14	1.01	9.59	7.94	19.23	BP-STANTEC-IL	RQS	44616	MPRP	RY WEIGH	JDL	03/03/2014
15	1632426	15	1.01	9.75	8.05	19.44	Quality Control	DUP	44616	MPRP	RY WEIGH	JDL	03/03/2014
16	10259055001	16	1.01	8.56	7.78	10.27		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
17	10259055002	17	0.99	8.85	7.28	19.96		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
18	10259055003	18	1.02	9.83	8.60	13.95		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
19	10259055004	19	1.04	9.89	8.38	17.07		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
20	10259055005	20	1.06	9.72	8.47	14.50		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
21	10259055006	21	1.00	8.36	6.84	20.74		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
22	10259055007	22	1.00	8.68	7.20	19.31		PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
23	oven @ 1100 3/3	23				100.00						JDL	
24	f oven @ 0700 3	24				100.00						JDL	
25	f dess. @ 0810 3	25				100.00						JDL	
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
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39													
40													

Start an instrument for the current WorkSheet.

Collecting: Off

start

Tuesday, Mar 04, 2014 08:13 AM

ICP-AES

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259041

Initial Calibration Verification Source: 14578 Instrument ID: 10ICP2

Continuing Calibration Verification Source: 14579

Concentration Units: ug/L

	Initial Calibration Verification 03/13/14 07:33			Continuing Calibration Verification 03/13/14 08:22			03/13/14 09:19		M
Analyte	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Lead	2000.0	2011.60	101	2000.0	1955.40	98	1915.96	96	P

(1) Control Limits: 90-110

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259041

Initial Calibration Verification Source: 14578 Instrument ID: 10ICP2

Continuing Calibration Verification Source: 14579

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification 03/13/14 10:44					M
Analyte	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Lead				2000.0	1983.58	99			P

(1) Control Limits: 90-110

2B-IN
CRQL CHECK STANDARD

Lab Name: Pace Analytical

SDG No.: 10259041

Lab Code: PASI

Instrument ID: 10ICP2

CRQL Check Standard Source: 14581

Concentration Units: ug/L

Analyte		03/13/14 08:18		03/13/14 10:35	
		CRQL Check Standard Initial		CRQL Check Standard Final	
	True	Found	%R (1)	Found	%R (1)
Lead	10.00	8.15J	82	8.58J	86

(1) Control Limits: 60-140

Flags:
J = Estimated value
U = Target element not detected

3-IN
BLANKS

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259041

Preparation Blank Matrix (soil/water):Solid

Instrument ID: 10ICP2

Preparation Blank Concentration Units (ug/L or mg/kg): mg/kg

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)					
	03/13/14 07:37		03/13/14 08:27		03/13/14 09:23		03/13/14 10:48	
Analyte		C	1	C	2	C	3	C
Lead	1.440	U	-1.926	J	1.440	U	1.440	U

Flags:
J = Estimated value
U = Target element not detected

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259041

ICP-AES Instrument ID: 10ICP2 ICS Source: 14582

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
			03/13/14 07:55		03/13/14 08:02		03/13/14 10:31		03/13/14 10:26	
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	500000	500000	539000	108	561000	112	560000	112	586000	117
Calcium	500000	500000	485000	97	519000	104	511000	102	540000	108
Iron	200000	200000	189000	94	200000	100	188000	94	202000	101
Lead	0	100	14.3		110	110	24.9		114	114
Magnesium	500000	500000	476000	95	505000	101	478000	96	515000	103

SAMPLE NO.

1635277SD

FORM VIII INORGANIC-1
SERIAL DILUTIONS

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Matrix: Solid Parent Sample ID: SB-9 12-14'

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Lead	ug/L	312	347	11.0*	10

% Difference not evaluated for parent results less than 50 times the reporting limit.

9-IN
METHOD DETECTION LIMITS

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259041

Instrument Type:

Concentration Units (ug/L or mg/Kg): mg/kg

Analyte	Wavelength /Mass	CRQL	MDL
Lead	208.00	0.95	0.072

12-IN
PREPARATION LOG

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259041

Preparation Method: HW2

Client Sample ID	Lab Sample ID	Preparation Date	Weight (gram)	Volume (mL)
SB-9 3-4'	10259041001	03/07/2014	1.08	50
SB-9 12-14'	10259041002	03/07/2014	1.40	50
1632332 (BLK)	1632332 (BLK)	03/07/2014	1.05	50
1632333 (LCS)	1632333 (LCS)	03/07/2014	1.04	50
1632334 (MS)	1632334 (MS)	03/07/2014	1.31	50
1632335 (MSD)	1632335 (MSD)	03/07/2014	1.09	50

Form 13 Equivalent
ANALYSIS RUN LOG

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259041

Instrument ID: 10ICP2

Analysis Method: P

Start Date: 03/13/2014

End Date: 03/13/2014

Lab Sample ID	Client Sample ID	D/F	Time	Analytes				
				Al	Ca	Fe	Mg	Pb
CAL0	CAL0	1	07:25					x
CAL1	CAL1	1	07:30					x
ICV	ICV	1	07:33					x
ICB	ICB	1	07:37					x
ICSA	ICSA	1	07:42					
AL 500 PPM	AL 500 PPM	1	07:47					
ICSA	ICSA	1	07:55	x	x	x	x	x
ICSAB	ICSAB	1	08:02	x	x	x	x	x
CRDLA	CRDLA	1	08:09					
CRDLB	CRDLB	1	08:14					
CRDLA	CRDLA	1	08:18					x
CCV	CCV	1	08:22					x
CCB	CCB	1	08:27					x
1632332 (BLK)	1632332 (BLK)	1	08:31					x
1632333 (LCS)	1632333 (LCS)	1	08:36					x
10259041001	SB-9 3-4'	1	08:41					x
10259041002	SB-9 12-14'	1	08:47					x
1635277	1635277	5	08:53					x
TEST	TEST	1	08:59					
1635278	1635278	1	09:04					
1632334 (MS)	1632334 (MS)	1	09:09					x
1632335 (MSD)	1632335 (MSD)	1	09:14					x
CCV	CCV	1	09:19					x
CCB	CCB	1	09:23					x
10259055001	ZZZZZZ	1	09:28					
10259055002	ZZZZZZ	1	09:35					
10259055003	ZZZZZZ	1	09:41					
10259055004	ZZZZZZ	1	09:47					
10259055002	ZZZZZZ	5	09:53					
10259055005	ZZZZZZ	1	10:00					
10259055006	ZZZZZZ	1	10:07					
10259055007	ZZZZZZ	1	10:13					
ICSA	ICSA	1	10:19					
ICSAB	ICSAB	1	10:26	x	x	x	x	x

Form 13 Equivalent
ANALYSIS RUN LOG

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259041

Instrument ID: 10ICP2

Analysis Method: P

Start Date: 03/13/2014

End Date: 03/13/2014

Lab Sample ID	Client Sample ID	D/F	Time	Analytes																																
				Al	Ca	Fe	Mg	Pb																														
ICSA	ICSA	1	10:31	x	x	x	x	x																														
CRDLA	CRDLA	1	10:35					x																														
CRDLB	CRDLB	1	10:39																																			
CCV	CCV	1	10:44					x																														
CCB	CCB	1	10:48					x																														

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259041

Instrument: 10ICP2 **Chart Number: 031314ICP2**

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
CAL0	CAL0		03/13/2014	07:25
CAL1	CAL1		03/13/2014	07:30
ICV	ICV		03/13/2014	07:33
ICB	ICB		03/13/2014	07:37
ICSA	ICSA		03/13/2014	07:42
AL 500 PPM	AL 500 PPM		03/13/2014	07:47
ICSA	ICSA		03/13/2014	07:55
ICSAB	ICSAB		03/13/2014	08:02
CRDLA	CRDLA		03/13/2014	08:09
CRDLB	CRDLB		03/13/2014	08:14
CRDLA	CRDLA		03/13/2014	08:18
CCV	CCV		03/13/2014	08:22
CCB	CCB		03/13/2014	08:27
1632332 (BLK)	1632332 (BLK)	6010	03/13/2014	08:31
1632333 (LCS)	1632333 (LCS)	6010	03/13/2014	08:36
10259041001	SB-9 3-4'	6010	03/13/2014	08:41
10259041002	SB-9 12-14'	6010	03/13/2014	08:47
1635277	1635277	6010	03/13/2014	08:53
TEST	TEST		03/13/2014	08:59
1635278	1635278	6010	03/13/2014	09:04
1632334 (MS)	1632334 (MS)	6010	03/13/2014	09:09
1632335 (MSD)	1632335 (MSD)	6010	03/13/2014	09:14
CCV	CCV		03/13/2014	09:19
CCB	CCB		03/13/2014	09:23
ZZZZZZ	ZZZZZZ	6010	03/13/2014	09:28
ZZZZZZ	ZZZZZZ	6010	03/13/2014	09:35
ZZZZZZ	ZZZZZZ	6010	03/13/2014	09:41
ZZZZZZ	ZZZZZZ	6010	03/13/2014	09:47
ZZZZZZ	ZZZZZZ	6010	03/13/2014	09:53
ZZZZZZ	ZZZZZZ	6010	03/13/2014	10:00
ZZZZZZ	ZZZZZZ	6010	03/13/2014	10:07
ZZZZZZ	ZZZZZZ	6010	03/13/2014	10:13
ICSA	ICSA		03/13/2014	10:19
ICSAB	ICSAB		03/13/2014	10:26
ICSA	ICSA		03/13/2014	10:31
CRDLA	CRDLA		03/13/2014	10:35
CRDLB	CRDLB		03/13/2014	10:39
CCV	CCV		03/13/2014	10:44
CCB	CCB		03/13/2014	10:48
ZZZZZZ	ZZZZZZ	6010	03/13/2014	10:53
ZZZZZZ	ZZZZZZ	6010	03/13/2014	10:58
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:02

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259041

Instrument: 10ICP2

Chart Number: 031314ICP2

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:09
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:14
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:21
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:28
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:35
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:42
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:48
CRDLA	CRDLA		03/13/2014	11:55
CCV	CCV		03/13/2014	11:59
CCB	CCB		03/13/2014	12:03
1638112 (BLK)	1638112 (BLK)	200.7	03/13/2014	12:08
1638113 (LCS)	1638113 (LCS)	200.7	03/13/2014	12:13
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	12:18
1638114 (MS)	1638114 (MS)	200.7	03/13/2014	12:25
1638115 (MSD)	1638115 (MSD)	200.7	03/13/2014	12:31
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	12:36
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	12:43
TEST	TEST		03/13/2014	12:50
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	12:55
CCV	CCV		03/13/2014	13:02
CCB	CCB		03/13/2014	13:06
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:10
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:17
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:22
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:29
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:35
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:42
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:49
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:56
1638116 (MS)	1638116 (MS)	200.7	03/13/2014	14:03
CCV	CCV		03/13/2014	14:06
CCB	CCB		03/13/2014	14:10
1637308 (BLK)	1637308 (BLK)	6010	03/13/2014	14:15
1637309 (LCS)	1637309 (LCS)	6010	03/13/2014	14:20
ZZZZZZ	ZZZZZZ	6010	03/13/2014	14:24
1638244	1638244	6010	03/13/2014	14:30
1638245	1638245	6010	03/13/2014	14:36
ZZZZZZ	ZZZZZZ	6010	03/13/2014	14:41
1637310 (MS)	1637310 (MS)	6010	03/13/2014	14:48
CCV	CCV		03/13/2014	14:53
CCB	CCB		03/13/2014	14:58
1637311 (MSD)	1637311 (MSD)	6010	03/13/2014	15:02

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259041

Instrument: 10ICP2

Chart Number: 031314ICP2

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:07
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:13
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:20
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:27
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:34
CRDLA	CRDLA		03/13/2014	15:41
CRDLB	CRDLB		03/13/2014	15:45
CCV	CCV		03/13/2014	15:50
CCB	CCB		03/13/2014	15:55
1636452 (BLK)	1636452 (BLK)	6010	03/13/2014	15:59
1636453 (LCS)	1636453 (LCS)	6010	03/13/2014	16:04
ZZZZZZ	ZZZZZZ	6010	03/13/2014	16:09
1637341	1637341	6010	03/13/2014	16:16
1637342	1637342	6010	03/13/2014	16:21
1636454 (MS)	1636454 (MS)	6010	03/13/2014	16:27
CCV	CCV		03/13/2014	16:33
CCB	CCB		03/13/2014	16:38
1636455 (MSD)	1636455 (MSD)	6010	03/13/2014	16:43
ZZZZZZ	ZZZZZZ	6010	03/13/2014	16:49
ZZZZZZ	ZZZZZZ	6010	03/13/2014	16:55
ZZZZZZ	ZZZZZZ	6010	03/13/2014	17:02
ZZZZZZ	ZZZZZZ	6010	03/13/2014	17:09
CRDLA	CRDLA		03/13/2014	17:16
CRDLB	CRDLB		03/13/2014	17:21
CCV	CCV		03/13/2014	17:25
CCB	CCB		03/13/2014	17:30
1637856 (BLK)	1637856 (BLK)	6010	03/13/2014	17:35
1637857 (LCS)	1637857 (LCS)	6010	03/13/2014	17:40
1636495	1636495	6010	03/13/2014	17:44
1636496	1636496	6010	03/13/2014	17:51
ZZZZZZ	ZZZZZZ	6010	03/13/2014	17:56
ZZZZZZ	ZZZZZZ	6010	03/13/2014	18:01
ZZZZZZ	ZZZZZZ	6010	03/13/2014	18:08
CCV	CCV		03/13/2014	18:13
CCB	CCB		03/13/2014	18:17
ZZZZZZ	ZZZZZZ	6010	03/13/2014	18:21
ZZZZZZ	ZZZZZZ	6010	03/13/2014	18:28
1638246	1638246	6010	03/13/2014	18:35
1638247	1638247	6010	03/13/2014	18:40
1637858 (MS)	1637858 (MS)	6010	03/13/2014	18:47
1637859 (MSD)	1637859 (MSD)	6010	03/13/2014	18:54
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:01

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259041

Instrument: 10ICP2

Chart Number: 031314ICP2

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:08
CCV	CCV		03/13/2014	19:15
CCB	CCB		03/13/2014	19:18
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:23
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:30
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:37
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:44
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:51
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:58
CRDLA	CRDLA		03/13/2014	20:04
CRDLB	CRDLB		03/13/2014	20:09
CCV	CCV		03/13/2014	20:14
CCB	CCB		03/13/2014	20:18
1637317 (BLK)	1637317 (BLK)	6010	03/13/2014	20:22
1637318 (LCS)	1637318 (LCS)	6010	03/13/2014	20:27
ZZZZZZ	ZZZZZZ	6010	03/13/2014	20:32
1638248	1638248	6010	03/13/2014	20:39
1638249	1638249	6010	03/13/2014	20:44
1637319 (MS)	1637319 (MS)	6010	03/13/2014	20:51
1637320 (MSD)	1637320 (MSD)	6010	03/13/2014	20:58
CCV	CCV		03/13/2014	21:05
CCB	CCB		03/13/2014	21:09
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:13
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:18
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:25
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:32
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:39
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:46
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:53
CCV	CCV		03/13/2014	22:00
CCB	CCB		03/13/2014	22:04
1637905 (BLK)	1637905 (BLK)	6010	03/13/2014	22:08
1637906 (LCS)	1637906 (LCS)	6010	03/13/2014	22:13
ZZZZZZ	ZZZZZZ	6010	03/13/2014	22:18
1638242	1638242	6010	03/13/2014	22:23
1638243	1638243	6010	03/13/2014	22:27
1637907 (MS)	1637907 (MS)	6010	03/13/2014	22:31
1637908 (MSD)	1637908 (MSD)	6010	03/13/2014	22:35
ICSA	ICSA		03/13/2014	22:39
ICSAB	ICSAB		03/13/2014	22:46
CRDLA	CRDLA		03/13/2014	22:52
CRDLB	CRDLB		03/13/2014	22:57

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259041

Instrument: 10ICP2

Chart Number: 031314ICP2

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
CCV	CCV		03/13/2014	23:02
CCB	CCB		03/13/2014	23:06

Sequence No.: 1
Sample ID: CAL0
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/13/2014 7:25:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CAL0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ar 363.268	7123.0	32.74	0.46%	1.00	mg/L
Y 371.029	8456765.1	101421.52	1.20%	5.00	mg/L
Ag 328.068†	-975.7	147.93	15.16%	[0.00]	ug/L
Al†	62.0	32.98	53.19%	[0.00]	ug/L
As 193.696†	9.8	3.67	37.40%	[0.00]	ug/L
B 249.677†	11.7	4.49	38.42%	[0.00]	ug/L
Ba 233.527†	-122.9	7.22	5.88%	[0.00]	ug/L
Be†	0.0	4.72	>999.9%	[0.00]	ug/L
Ca 317.933†	13.7	9.47	69.31%	[0.00]	ug/L
Cd 228.802†	94.0	12.28	13.06%	[0.00]	ug/L
Co 228.616†	-249.7	5.50	2.20%	[0.00]	ug/L
Cr 267.716†	131.5	24.62	18.72%	[0.00]	ug/L
Cu 327.393†	127.2	42.38	33.31%	[0.00]	ug/L
Fe†	11.6	2.94	25.23%	[0.00]	ug/L
K†	1691.6	5.34	0.32%	[0.00]	ug/L
Mg 279.077†	3.2	1.37	43.04%	[0.00]	ug/L
Mn 257.610†	1409.5	99.01	7.02%	[0.00]	ug/L
Mo 202.031†	137.3	9.28	6.76%	[0.00]	ug/L
Na 589.592†	454.6	47.83	10.52%	[0.00]	ug/L
Ni 231.604†	-624.4	45.82	7.34%	[0.00]	ug/L
Pb 220.353†	-241.7	10.12	4.19%	[0.00]	ug/L
Sb 217.582†	-66.1	7.69	11.64%	[0.00]	ug/L
Se 196.026†	-4.4	1.59	36.53%	[0.00]	ug/L
Sn 189.927†	1.1	1.60	144.13%	[0.00]	ug/L
Ti 334.940†	1472.8	34.70	2.36%	[0.00]	ug/L
Tl 190.801†	-25.6	1.09	4.28%	[0.00]	ug/L
V 290.880†	2286.5	58.84	2.57%	[0.00]	ug/L
Zn 206.200†	201.4	12.08	6.00%	[0.00]	ug/L

Sequence No.: 2
Sample ID: CAL1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/13/2014 7:30:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CAL1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ar 363.268	6796.9	150.69	2.22%	0.954	mg/L
Y 371.029	8346134.6	59580.15	0.71%	4.93	mg/L
Ag 328.068†	438376.9	4162.17	0.95%	[2000]	ug/L
Al†	26572.7	148.21	0.56%	[20000]	ug/L
As 193.696†	5362.7	69.26	1.29%	[4000]	ug/L
B 249.677†	3328.1	19.54	0.59%	[4000]	ug/L
Ba 233.527†	749210.1	2397.79	0.32%	[4000]	ug/L
Be†	191115.3	3366.78	1.76%	[4000]	ug/L
Ca 317.933†	33414.6	495.43	1.48%	[20000]	ug/L
Cd 228.802†	249401.1	2910.43	1.17%	[4000]	ug/L
Co 228.616†	227163.5	3387.33	1.49%	[4000]	ug/L
Cr 267.716†	448451.6	2048.22	0.46%	[4000]	ug/L
Cu 327.393†	396502.1	5619.45	1.42%	[4000]	ug/L
Fe†	43355.6	275.40	0.64%	[20000]	ug/L
K†	39469.2	356.34	0.90%	[20000]	ug/L
Mg 279.077†	6163.4	47.58	0.77%	[20000]	ug/L
Mn 257.610†	4345099.9	17401.03	0.40%	[4000]	ug/L
Mo 202.031†	81752.7	1286.08	1.57%	[4000]	ug/L
Na 589.592†	98240.3	1002.36	1.02%	[20000]	ug/L
Ni 231.604†	258173.1	3067.87	1.19%	[4000]	ug/L
Pb 220.353†	47560.5	1051.06	2.21%	[4000]	ug/L
Sb 217.582†	11066.1	26.26	0.24%	[4000]	ug/L
Se 196.026†	2800.6	3.17	0.11%	[4000]	ug/L
Sn 189.927†	21635.3	254.91	1.18%	[4000]	ug/L
Ti 334.940†	2935568.1	4689.99	0.16%	[4000]	ug/L
Tl 190.801†	6583.8	8.07	0.12%	[4000]	ug/L
V 290.880†	522455.0	4494.26	0.86%	[4000]	ug/L
Zn 206.200†	223438.5	3691.75	1.65%	[4000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	219.2	0.00000	1.000000	
Al	1	Lin Thru 0	0.0	1.329	0.00000	1.000000	
As 193.696	1	Lin Thru 0	0.0	1.341	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	0.8320	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	187.3	0.00000	1.000000	
Be	1	Lin Thru 0	0.0	47.78	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	1.671	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	62.35	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	56.79	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	112.1	0.00000	1.000000	
Cu 327.393	1	Lin Thru 0	0.0	99.13	0.00000	1.000000	
Fe	1	Lin Thru 0	0.0	2.168	0.00000	1.000000	
K	1	Lin Thru 0	0.0	1.973	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	0.3082	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	1086	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	20.44	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	4.912	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	64.54	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	11.89	0.00000	1.000000	
Sb 217.582	1	Lin Thru 0	0.0	2.767	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	0.7002	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	5.409	0.00000	1.000000	
Ti 334.940	1	Lin Thru 0	0.0	733.9	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	1.646	0.00000	1.000000	
V 290.880	1	Lin Thru 0	0.0	130.6	0.00000	1.000000	

Zn 206.200	1	Lin Thru 0	0.0	55.86	0.00000	1.000000

Sequence No.: 3
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/13/2014 7:33:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	7119.3	0.999	mg/L	0.0346				3.46%
Y 371.029	8349283.5	4.94	mg/L	0.033				0.66%
Ag 328.068†	224694.9	1030	ug/L	12.7	1030	µg/L	12.7	1.23%
QC value within limits for Ag 328.068 Recovery = 102.58%								
Al†	13591.6	10200	ug/L	166.5	10200	µg/L	166.5	1.63%
QC value within limits for Al Recovery = 102.31%								
As 193.696†	2718.1	2030	ug/L	26.0	2030	µg/L	26.0	1.28%
QC value within limits for As 193.696 Recovery = 101.54%								
B 249.677†	1635.3	1970	ug/L	3.9	1970	µg/L	3.9	0.20%
QC value within limits for B 249.677 Recovery = 98.31%								
Ba 233.527†	375591.0	2010	ug/L	34.8	2010	µg/L	34.8	1.74%
QC value within limits for Ba 233.527 Recovery = 100.25%								
Be†	97695.6	2040	ug/L	13.5	2040	µg/L	13.5	0.66%
QC value within limits for Be Recovery = 102.24%								
Ca 317.933†	17051.0	10200	ug/L	244.3	10200	µg/L	244.3	2.39%
QC value within limits for Ca 317.933 Recovery = 102.06%								
Cd 228.802†	126704.1	2030	ug/L	39.7	2030	µg/L	39.7	1.95%
QC value within limits for Cd 228.802 Recovery = 101.62%								
Co 228.616†	116519.0	2050	ug/L	34.1	2050	µg/L	34.1	1.66%
QC value within limits for Co 228.616 Recovery = 102.59%								
Cr 267.716†	228679.9	2040	ug/L	49.2	2040	µg/L	49.2	2.41%
QC value within limits for Cr 267.716 Recovery = 101.99%								
Cu 327.393†	203206.6	2050	ug/L	74.9	2050	µg/L	74.9	3.65%
QC value within limits for Cu 327.393 Recovery = 102.53%								
Fe†	22257.4	10300	ug/L	165.5	10300	µg/L	165.5	1.61%
QC value within limits for Fe Recovery = 102.67%								
K†	20389.1	10300	ug/L	138.2	10300	µg/L	138.2	1.34%
QC value within limits for K Recovery = 103.32%								
Mg 279.077†	3127.2	10100	ug/L	109.0	10100	µg/L	109.0	1.07%
QC value within limits for Mg 279.077 Recovery = 101.45%								
Mn 257.610†	2228498.1	2050	ug/L	8.6	2050	µg/L	8.6	0.42%
QC value within limits for Mn 257.610 Recovery = 102.58%								
Mo 202.031†	41246.5	2020	ug/L	34.8	2020	µg/L	34.8	1.72%
QC value within limits for Mo 202.031 Recovery = 100.93%								
Na 589.592†	50385.0	10300	ug/L	51.8	10300	µg/L	51.8	0.50%
QC value within limits for Na 589.592 Recovery = 102.57%								
Ni 231.604†	132483.2	2050	ug/L	34.2	2050	µg/L	34.2	1.67%
QC value within limits for Ni 231.604 Recovery = 102.63%								
Pb 220.353†	23884.9	2010	ug/L	10.6	2010	µg/L	10.6	0.53%
QC value within limits for Pb 220.353 Recovery = 100.58%								
Sb 217.582†	5582.4	2020	ug/L	47.2	2020	µg/L	47.2	2.33%
QC value within limits for Sb 217.582 Recovery = 101.06%								
Se 196.026†	1431.9	2050	ug/L	59.2	2050	µg/L	59.2	2.89%
QC value within limits for Se 196.026 Recovery = 102.41%								
Sn 189.927†	10627.4	1970	ug/L	25.1	1970	µg/L	25.1	1.28%
QC value within limits for Sn 189.927 Recovery = 98.30%								
Ti 334.940†	1452478.4	1980	ug/L	6.2	1980	µg/L	6.2	0.31%
QC value within limits for Ti 334.940 Recovery = 98.95%								
Tl 190.801†	3499.4	2130	ug/L	50.7	2130	µg/L	50.7	2.38%
QC value within limits for Tl 190.801 Recovery = 106.35%								
V 290.880†	263683.2	2020	ug/L	43.2	2020	µg/L	43.2	2.14%
QC value within limits for V 290.880 Recovery = 100.91%								
Zn 206.200†	114607.3	2050	ug/L	37.9	2050	µg/L	37.9	1.85%
QC value within limits for Zn 206.200 Recovery = 102.59%								

All analyte(s) passed QC.

Sequence No.: 4
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/13/2014 7:37:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	6933.8	0.973	mg/L	0.0145				1.49%
Y 371.029	8222836.2	4.86	mg/L	0.008				0.16%
Ag 328.068†	-16.7	-0.076	ug/L	0.4457	-0.076	µg/L	0.4457	588.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	-11.0	-8.28	ug/L	13.287	-8.28	µg/L	13.287	160.40%
QC value within limits for Al Recovery = Not calculated								
As 193.696†	2.2	1.61	ug/L	0.528	1.61	µg/L	0.528	32.88%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	3.1	3.68	ug/L	3.770	3.68	µg/L	3.770	102.45%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-14.5	-0.078	ug/L	0.0936	-0.078	µg/L	0.0936	120.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	0.1	0.002	ug/L	0.0323	0.002	µg/L	0.0323	>999.9%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	12.0	7.19	ug/L	4.532	7.19	µg/L	4.532	63.03%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	6.3	0.101	ug/L	0.0695	0.101	µg/L	0.0695	69.16%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-13.5	-0.238	ug/L	0.1265	-0.238	µg/L	0.1265	53.20%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	20.9	0.186	ug/L	0.7994	0.186	µg/L	0.7994	429.28%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	21.8	0.220	ug/L	0.0952	0.220	µg/L	0.0952	43.23%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	8.6	3.98	ug/L	1.204	3.98	µg/L	1.204	30.28%
QC value within limits for Fe Recovery = Not calculated								
K†	70.0	35.5	ug/L	14.58	35.5	µg/L	14.58	41.10%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	-2.3	-7.56	ug/L	14.777	-7.56	µg/L	14.777	195.45%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	4.7	0.005	ug/L	0.0384	0.005	µg/L	0.0384	770.54%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	246.4	12.1	ug/L	1.26	12.1	µg/L	1.26	10.42%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	57.7	11.7	ug/L	6.25	11.7	µg/L	6.25	53.20%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	42.8	0.663	ug/L	0.2604	0.663	µg/L	0.2604	39.31%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-4.6	-0.386	ug/L	0.7330	-0.386	µg/L	0.7330	189.94%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	5.6	2.04	ug/L	2.055	2.04	µg/L	2.055	100.79%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	-2.0	-2.86	ug/L	2.470	-2.86	µg/L	2.470	86.32%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	6.4	1.19	ug/L	0.393	1.19	µg/L	0.393	33.07%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	59.8	0.081	ug/L	0.0529	0.081	µg/L	0.0529	64.97%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.5	1.54	ug/L	2.585	1.54	µg/L	2.585	168.33%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-4.2	-0.033	ug/L	0.2429	-0.033	µg/L	0.2429	744.91%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-40.9	-0.731	ug/L	0.2004	-0.731	µg/L	0.2004	27.40%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

User canceled analysis.

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quence No.: 3 **Autosampler Location: 6**
Sample ID: ICSA **Date Collected: 3/13/2014 7:55:55 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	1622.9	0.228	mg/L	0.0050				2.19%
Y 371.029	7408916.7	4.38	mg/L	0.031				0.70%
Ag 328.068†	-2336.9	2.60	ug/L	0.481	2.60	µg/L	0.481	18.48%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	715702.4	539000	ug/L	9731.4	539000	µg/L	9731.4	1.81%
QC value within limits for Al Recovery = 107.74%								
As 193.696†	-219.9	-8.06	ug/L	2.341	-8.06	µg/L	2.341	29.05%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	-18.8	-8.92	ug/L	2.090	-8.92	µg/L	2.090	23.42%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1238.1	2.16	ug/L	0.036	2.16	µg/L	0.036	1.66%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	-13.9	-0.292	ug/L	0.0608	-0.292	µg/L	0.0608	20.82%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	810757.2	485000	ug/L	9564.3	485000	µg/L	9564.3	1.97%
QC value within limits for Ca 317.933 Recovery = 97.05%								
Cd 228.802†	-41.0	2.95	ug/L	0.234	2.95	µg/L	0.234	7.92%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	44.0	0.774	ug/L	0.2288	0.774	µg/L	0.2288	29.55%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	355.7	3.17	ug/L	0.174	3.17	µg/L	0.174	5.49%
QC value within limits for Cr 267.716 Recovery = Not calculated								
u 327.393†	-1467.3	-4.47	ug/L	0.915	-4.47	µg/L	0.915	20.48%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	410733.7	189000	ug/L	1013.1	189000	µg/L	1013.1	0.53%
QC value within limits for Fe Recovery = 94.73%								
K†	452.4	229	ug/L	54.7	229	µg/L	54.7	23.86%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	146618.1	476000	ug/L	5833.0	476000	µg/L	5833.0	1.23%
QC value within limits for Mg 279.077 Recovery = 95.15%								
Mn 257.610†	19105.9	1.39	ug/L	0.139	1.39	µg/L	0.139	10.02%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-266.5	-2.64	ug/L	0.365	-2.64	µg/L	0.365	13.84%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	201.2	6.18	ug/L	8.704	6.18	µg/L	8.704	140.75%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	127.7	1.98	ug/L	0.266	1.98	µg/L	0.266	13.42%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1512.0	14.3	ug/L	3.81	14.3	µg/L	3.81	26.59%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	-255.5	-4.07	ug/L	0.770	-4.07	µg/L	0.770	18.91%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	0.5	35.6	ug/L	4.91	35.6	µg/L	4.91	13.78%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-401.2	-22.3	ug/L	1.00	-22.3	µg/L	1.00	4.51%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	9454.3	3.67	ug/L	0.333	3.67	µg/L	0.333	9.09%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-16.4	9.01	ug/L	2.913	9.01	µg/L	2.913	32.33%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-1272.2	-22.7	ug/L	1.77	-22.7	µg/L	1.77	7.81%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	305.4	5.47	ug/L	0.362	5.47	µg/L	0.362	6.61%
QC value within limits for Zn 206.200 Recovery = Not calculated								

ll analyte(s) passed QC.

Sequence No.: 4
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 3/13/2014 8:02:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	1514.0	0.213	mg/L	0.0030				1.43%
Y 371.029	7360825.5	4.35	mg/L	0.042				0.95%
Ag 328.068†	9525.8	57.5	ug/L	0.36	57.5	µg/L	0.36	0.62%
QC value within limits for Ag 328.068 Recovery = 114.94%								
Al†	744968.6	561000	ug/L	19651.4	561000	µg/L	19651.4	3.50%
QC value within limits for Al Recovery = 112.14%								
As 193.696†	-81.2	102	ug/L	9.6	102	µg/L	9.6	9.39%
QC value within limits for As 193.696 Recovery = 101.70%								
B 249.677†	828.1	1010	ug/L	10.5	1010	µg/L	10.5	1.04%
QC value within limits for B 249.677 Recovery = 100.98%								
Ba 233.527†	19421.1	99.0	ug/L	1.47	99.0	µg/L	1.47	1.48%
QC value within limits for Ba 233.527 Recovery = 98.98%								
Be†	2745.7	57.5	ug/L	1.05	57.5	µg/L	1.05	1.82%
QC value within limits for Be Recovery = 114.93%								
Ca 317.933†	866594.4	519000	ug/L	21076.7	519000	µg/L	21076.7	4.06%
QC value within limits for Ca 317.933 Recovery = 103.74%								
Cd 228.802†	6248.3	104	ug/L	1.5	104	µg/L	1.5	1.46%
QC value within limits for Cd 228.802 Recovery = 104.03%								
Co 228.616†	5195.2	91.5	ug/L	1.41	91.5	µg/L	1.41	1.54%
QC value within limits for Co 228.616 Recovery = 91.48%								
Cr 267.716†	11198.3	99.9	ug/L	1.49	99.9	µg/L	1.49	1.50%
QC value within limits for Cr 267.716 Recovery = 99.88%								
Cu 327.393†	9062.2	102	ug/L	1.1	102	µg/L	1.1	1.04%
QC value within limits for Cu 327.393 Recovery = 102.34%								
Fe†	433886.7	200000	ug/L	4334.8	200000	µg/L	4334.8	2.17%
QC value within limits for Fe Recovery = 100.07%								
K†	10726.5	5440	ug/L	132.7	5440	µg/L	132.7	2.44%
QC value within limits for K Recovery = 108.71%								
Mg 279.077†	155757.1	505000	ug/L	10141.8	505000	µg/L	10141.8	2.01%
QC value within limits for Mg 279.077 Recovery = 101.08%								
Mn 257.610†	128085.9	101	ug/L	1.6	101	µg/L	1.6	1.55%
QC value within limits for Mn 257.610 Recovery = 100.63%								
Mo 202.031†	1733.1	95.8	ug/L	1.85	95.8	µg/L	1.85	1.93%
QC value within limits for Mo 202.031 Recovery = 95.78%								
Na 589.592†	20370.9	4110	ug/L	67.4	4110	µg/L	67.4	1.64%
QC value within limits for Na 589.592 Recovery = 117.46%								
Ni 231.604†	5657.6	87.7	ug/L	1.19	87.7	µg/L	1.19	1.35%
QC value within limits for Ni 231.604 Recovery = 87.66%								
Pb 220.353†	-446.9	110	ug/L	4.4	110	µg/L	4.4	3.99%
QC value within limits for Pb 220.353 Recovery = 109.66%								
Sb 217.582†	311.3	206	ug/L	10.5	206	µg/L	10.5	5.11%
QC value within limits for Sb 217.582 Recovery = 102.77%								
Se 196.026†	117.4	204	ug/L	14.0	204	µg/L	14.0	6.85%
QC value within limits for Se 196.026 Recovery = 101.90%								
Sn 189.927†	2125.2	448	ug/L	8.2	448	µg/L	8.2	1.83%
QC value within limits for Sn 189.927 Recovery = 89.61%								
Ti 334.940†	84271.2	105	ug/L	1.2	105	µg/L	1.2	1.18%
QC value within limits for Ti 334.940 Recovery = 104.98%								
Tl 190.801†	128.8	98.3	ug/L	3.49	98.3	µg/L	3.49	3.55%
QC value within limits for Tl 190.801 Recovery = 98.26%								
V 290.880†	12630.9	83.1	ug/L	2.52	83.1	µg/L	2.52	3.04%
QC value within limits for V 290.880 Recovery = 83.06%								
Zn 206.200†	5593.3	100	ug/L	1.8	100	µg/L	1.8	1.80%
QC value within limits for Zn 206.200 Recovery = 100.13%								

All analyte(s) passed QC.

User canceled analysis.

[redacted]quence No.: 5 **Autosampler Location: 7**
Sample ID: CRDLA **Date Collected: 3/13/2014 8:18:06 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CRDLA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	7033.2	0.987	mg/L	0.0151				1.53%
Y 371.029	8217586.7	4.86	mg/L	0.079				1.64%
Ag 328.068†	2003.4	9.14	ug/L	0.496	9.14	µg/L	0.496	5.43%
QC value within limits for Ag 328.068 Recovery = 91.43%								
Al†	249.4	188	ug/L	28.7	188	µg/L	28.7	15.28%
QC value within limits for Al Recovery = 93.87%								
As 193.696†	22.0	16.5	ug/L	0.81	16.5	µg/L	0.81	4.89%
QC value within limits for As 193.696 Recovery = 82.46%								
B 249.677†	104.9	126	ug/L	4.0	126	µg/L	4.0	3.14%
QC value within limits for B 249.677 Recovery = 84.09%								
Ba 233.527†	1733.2	9.25	ug/L	0.159	9.25	µg/L	0.159	1.71%
QC value within limits for Ba 233.527 Recovery = 92.53%								
Be†	224.8	4.70	ug/L	0.142	4.70	µg/L	0.142	3.02%
QC value within limits for Be Recovery = 94.10%								
Ca 317.933†	784.2	469	ug/L	22.8	469	µg/L	22.8	4.87%
QC value within limits for Ca 317.933 Recovery = 93.88%								
Cd 228.802†	188.4	3.02	ug/L	0.189	3.02	µg/L	0.189	6.26%
QC value within limits for Cd 228.802 Recovery = 100.75%								
Co 228.616†	527.7	9.29	ug/L	0.089	9.29	µg/L	0.089	0.95%
QC value within limits for Co 228.616 Recovery = 92.93%								
Cr 267.716†	1048.2	9.35	ug/L	0.282	9.35	µg/L	0.282	3.02%
QC value within limits for Cr 267.716 Recovery = 93.50%								
[redacted] 327.393†	1027.9	10.4	ug/L	0.52	10.4	µg/L	0.52	5.02%
QC value within limits for Cu 327.393 Recovery = 103.72%								
Fe†	104.5	48.2	ug/L	1.42	48.2	µg/L	1.42	2.94%
QC value within limits for Fe Recovery = 96.38%								
K†	4887.5	2480	ug/L	23.0	2480	µg/L	23.0	0.93%
QC value within limits for K Recovery = 99.06%								
Mg 279.077†	145.4	472	ug/L	16.6	472	µg/L	16.6	3.52%
QC value within limits for Mg 279.077 Recovery = 94.37%								
Mn 257.610†	5255.3	4.81	ug/L	0.121	4.81	µg/L	0.121	2.51%
QC value within limits for Mn 257.610 Recovery = 96.27%								
Mo 202.031†	205.8	10.1	ug/L	0.28	10.1	µg/L	0.28	2.79%
QC value less than the lower limit for Mo 202.031 Recovery = 67.14%								
Na 589.592†	4832.9	984	ug/L	15.1	984	µg/L	15.1	1.53%
QC value within limits for Na 589.592 Recovery = 98.39%								
Ni 231.604†	1256.7	19.5	ug/L	0.42	19.5	µg/L	0.42	2.17%
QC value within limits for Ni 231.604 Recovery = 97.35%								
Pb 220.353†	96.3	8.15	ug/L	0.158	8.15	µg/L	0.158	1.94%
QC value within limits for Pb 220.353 Recovery = 81.49%								
Sb 217.582†	42.7	15.5	ug/L	2.88	15.5	µg/L	2.88	18.67%
QC value within limits for Sb 217.582 Recovery = 77.27%								
Se 196.026†	17.2	24.6	ug/L	1.85	24.6	µg/L	1.85	7.53%
QC value within limits for Se 196.026 Recovery = 123.04%								
Sn 189.927†	359.8	66.6	ug/L	1.62	66.6	µg/L	1.62	2.44%
QC value within limits for Sn 189.927 Recovery = 88.75%								
Ti 334.940†	17290.0	23.6	ug/L	0.53	23.6	µg/L	0.53	2.24%
QC value within limits for Ti 334.940 Recovery = 94.20%								
Tl 190.801†	27.8	16.9	ug/L	0.33	16.9	µg/L	0.33	1.94%
QC value within limits for Tl 190.801 Recovery = 84.53%								
V 290.880†	1954.4	15.0	ug/L	0.75	15.0	µg/L	0.75	4.99%
QC value within limits for V 290.880 Recovery = 99.73%								
Zn 206.200†	1056.3	18.9	ug/L	0.57	18.9	µg/L	0.57	3.00%
QC value within limits for Zn 206.200 Recovery = 94.55%								

[redacted]C Failed. Continue with analysis.

Sequence No.: 1
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 4
Date Collected: 3/13/2014 8:22:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/13/2014 8:22:24 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	6604.7	0.927	mg/L	0.0124				1.34%
Y 371.029	8136029.9	4.81	mg/L	0.031				0.65%
Ag 328.068†	226277.3	1030	ug/L	16.8	1030	µg/L	16.8	1.63%
QC value within limits for Ag 328.068 Recovery = 103.30%								
Al†	13712.9	10300	ug/L	133.1	10300	µg/L	133.1	1.29%
QC value within limits for Al Recovery = 103.22%								
As 193.696†	2627.2	1960	ug/L	11.9	1960	µg/L	11.9	0.60%
QC value within limits for As 193.696 Recovery = 98.15%								
B 249.677†	1630.9	1960	ug/L	37.9	1960	µg/L	37.9	1.93%
QC value within limits for B 249.677 Recovery = 98.04%								
Ba 233.527†	367558.9	1960	ug/L	37.3	1960	µg/L	37.3	1.90%
QC value within limits for Ba 233.527 Recovery = 98.11%								
Be†	95965.7	2010	ug/L	49.5	2010	µg/L	49.5	2.46%
QC value within limits for Be Recovery = 100.43%								
Ca 317.933†	16128.2	9650	ug/L	388.4	9650	µg/L	388.4	4.02%
QC value within limits for Ca 317.933 Recovery = 96.53%								
Cd 228.802†	124998.1	2000	ug/L	36.7	2000	µg/L	36.7	1.83%
QC value within limits for Cd 228.802 Recovery = 100.25%								
Co 228.616†	113461.5	2000	ug/L	37.6	2000	µg/L	37.6	1.88%
QC value within limits for Co 228.616 Recovery = 99.89%								
Cr 267.716†	224292.7	2000	ug/L	42.0	2000	µg/L	42.0	2.10%
QC value within limits for Cr 267.716 Recovery = 100.03%								
Cu 327.393†	203832.1	2060	ug/L	45.9	2060	µg/L	45.9	2.23%
QC value within limits for Cu 327.393 Recovery = 102.84%								
Fe†	21467.5	9900	ug/L	195.8	9900	µg/L	195.8	1.98%
QC value within limits for Fe Recovery = 99.03%								
K†	20467.9	10400	ug/L	213.9	10400	µg/L	213.9	2.06%
QC value within limits for K Recovery = 103.72%								
Mg 279.077†	3047.3	9890	ug/L	172.1	9890	µg/L	172.1	1.74%
QC value within limits for Mg 279.077 Recovery = 98.86%								
Mn 257.610†	2200188.9	2030	ug/L	10.2	2030	µg/L	10.2	0.51%
QC value within limits for Mn 257.610 Recovery = 101.27%								
Mo 202.031†	40063.7	1960	ug/L	31.0	1960	µg/L	31.0	1.58%
QC value within limits for Mo 202.031 Recovery = 98.04%								
Na 589.592†	50465.3	10300	ug/L	195.2	10300	µg/L	195.2	1.90%
QC value within limits for Na 589.592 Recovery = 102.73%								
Ni 231.604†	129019.1	2000	ug/L	38.8	2000	µg/L	38.8	1.94%
QC value within limits for Ni 231.604 Recovery = 99.95%								
Pb 220.353†	23220.2	1960	ug/L	20.6	1960	µg/L	20.6	1.05%
QC value within limits for Pb 220.353 Recovery = 97.77%								
Sb 217.582†	5470.8	1980	ug/L	0.4	1980	µg/L	0.4	0.02%
QC value within limits for Sb 217.582 Recovery = 99.04%								
Se 196.026†	1368.4	1960	ug/L	11.4	1960	µg/L	11.4	0.58%
QC value within limits for Se 196.026 Recovery = 97.88%								
Sn 189.927†	10203.9	1890	ug/L	10.9	1890	µg/L	10.9	0.58%
QC value within limits for Sn 189.927 Recovery = 94.38%								
Ti 334.940†	1446775.8	1970	ug/L	11.3	1970	µg/L	11.3	0.58%
QC value within limits for Ti 334.940 Recovery = 98.56%								
Tl 190.801†	3387.2	2060	ug/L	10.2	2060	µg/L	10.2	0.50%
QC value within limits for Tl 190.801 Recovery = 102.94%								

V 290.880†	260426.0	1990 ug/L	39.0	1990 µg/L	39.0	1.96%
QC value within limits for V 290.880 Recovery = 99.66%						
Zn 206.200†	108987.8	1950 ug/L	36.5	1950 µg/L	36.5	1.87%
QC value within limits for Zn 206.200 Recovery = 97.56%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/13/2014 8:27:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	7210.8	1.01	mg/L	0.010				1.01%
Y 371.029	8352022.5	4.94	mg/L	0.030				0.61%
Ag 328.068†	185.5	0.847	ug/L	0.2970	0.847	µg/L	0.2970	35.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	17.2	12.9	ug/L	9.32	12.9	µg/L	9.32	72.01%
QC value within limits for Al Recovery = Not calculated								
As 193.696†	0.6	0.473	ug/L	1.2330	0.473	µg/L	1.2330	260.69%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	0.4	0.537	ug/L	2.3968	0.537	µg/L	2.3968	446.21%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.0	0.064	ug/L	0.1012	0.064	µg/L	0.1012	158.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	-1.9	-0.040	ug/L	0.0758	-0.040	µg/L	0.0758	189.65%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	8.4	5.02	ug/L	3.621	5.02	µg/L	3.621	72.17%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	7.2	0.115	ug/L	0.0315	0.115	µg/L	0.0315	27.37%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-1.8	-0.031	ug/L	0.1136	-0.031	µg/L	0.1136	367.89%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.7	0.007	ug/L	0.2866	0.007	µg/L	0.2866	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	78.7	0.794	ug/L	0.6005	0.794	µg/L	0.6005	75.67%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	6.3	2.92	ug/L	4.739	2.92	µg/L	4.739	162.11%
QC value within limits for Fe Recovery = Not calculated								
K†	175.6	89.0	ug/L	19.50	89.0	µg/L	19.50	21.92%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	0.8	2.62	ug/L	19.463	2.62	µg/L	19.463	742.47%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	41.4	0.038	ug/L	0.0235	0.038	µg/L	0.0235	61.55%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	140.0	6.85	ug/L	1.793	6.85	µg/L	1.793	26.17%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	34.8	7.08	ug/L	2.791	7.08	µg/L	2.791	39.40%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	56.1	0.869	ug/L	0.3438	0.869	µg/L	0.3438	39.55%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-22.9	-1.93	ug/L	0.408	-1.93	µg/L	0.408	21.17%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	-1.4	-0.515	ug/L	0.4845	-0.515	µg/L	0.4845	94.14%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	4.4	6.33	ug/L	2.603	6.33	µg/L	2.603	41.12%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	6.1	1.12	ug/L	0.692	1.12	µg/L	0.692	61.80%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	248.1	0.338	ug/L	0.2544	0.338	µg/L	0.2544	75.27%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-3.3	-2.02	ug/L	0.676	-2.02	µg/L	0.676	33.43%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	117.3	0.898	ug/L	0.2661	0.898	µg/L	0.2661	29.63%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-62.0	-1.11	ug/L	0.163	-1.11	µg/L	0.163	14.67%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: 1632332_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 128
Date Collected: 3/13/2014 8:31:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1632332_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	6599.6	0.927	mg/L	0.0182				1.97%
Y 371.029	7554907.8	4.47	mg/L	0.055				1.24%
Ag 328.068†	99.6	0.458	ug/L	0.2038	0.458	µg/L	0.2038	44.52%
Al†	34.1	25.6	ug/L	19.02	25.6	µg/L	19.02	74.16%
As 193.696†	4.6	3.43	ug/L	2.169	3.43	µg/L	2.169	63.30%
B 249.677†	0.2	0.268	ug/L	3.6296	0.268	µg/L	3.6296	>999.9%
Ba 233.527†	72.6	0.386	ug/L	0.0548	0.386	µg/L	0.0548	14.18%
Be†	1.4	0.029	ug/L	0.0500	0.029	µg/L	0.0500	171.56%
Ca 317.933†	217.5	130	ug/L	5.9	130	µg/L	5.9	4.52%
Cd 228.802†	22.2	0.358	ug/L	0.0796	0.358	µg/L	0.0796	22.25%
Co 228.616†	-21.0	-0.370	ug/L	0.1940	-0.370	µg/L	0.1940	52.39%
Cr 267.716†	113.8	1.02	ug/L	0.383	1.02	µg/L	0.383	37.74%
Cu 327.393†	279.1	2.82	ug/L	0.349	2.82	µg/L	0.349	12.38%
Fe†	99.1	45.7	ug/L	2.31	45.7	µg/L	2.31	5.05%
K†	266.4	135	ug/L	30.7	135	µg/L	30.7	22.74%
Mg 279.077†	11.3	36.8	ug/L	12.07	36.8	µg/L	12.07	32.82%
Mn 257.610†	968.4	0.892	ug/L	0.0141	0.892	µg/L	0.0141	1.59%
Mo 202.031†	3.1	0.156	ug/L	0.7618	0.156	µg/L	0.7618	488.09%
Na 589.592†	204.7	41.7	ug/L	6.97	41.7	µg/L	6.97	16.74%
Ni 231.604†	-22.8	-0.353	ug/L	0.7327	-0.353	µg/L	0.7327	207.67%
Pb 220.353†	-41.4	-3.48	ug/L	0.595	-3.48	µg/L	0.595	17.12%
Sb 217.582†	-2.8	-0.990	ug/L	2.6359	-0.990	µg/L	2.6359	266.15%
[illegible] 196.026†	8.3	11.8	ug/L	4.59	11.8	µg/L	4.59	38.83%
[illegible] 189.927†	106.5	19.7	ug/L	0.45	19.7	µg/L	0.45	2.29%
Ti 334.940†	325.4	0.441	ug/L	0.1933	0.441	µg/L	0.1933	43.84%
Tl 190.801†	-5.6	-3.38	ug/L	1.829	-3.38	µg/L	1.829	54.17%
V 290.880†	96.2	0.734	ug/L	0.5226	0.734	µg/L	0.5226	71.22%
Zn 206.200†	422.6	7.57	ug/L	0.166	7.57	µg/L	0.166	2.20%

Sequence No.: 11
Sample ID: 1632333_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 129
Date Collected: 3/13/2014 8:36:36 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1632333_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	6257.9	0.879	mg/L	0.0035				0.40%
Y 371.029	7544607.7	4.46	mg/L	0.017				0.39%
Ag 328.068†	112297.8	513	ug/L	4.0	513	µg/L	4.0	0.77%
Al†	14521.8	10900	ug/L	249.6	10900	µg/L	249.6	2.28%
As 193.696†	1280.6	959	ug/L	3.1	959	µg/L	3.1	0.32%
B 249.677†	807.4	971	ug/L	1.8	971	µg/L	1.8	0.18%
Ba 233.527†	190907.1	1020	ug/L	9.9	1020	µg/L	9.9	0.97%
Be†	49450.4	1030	ug/L	16.9	1030	µg/L	16.9	1.64%
Ca 317.933†	17074.8	10200	ug/L	389.5	10200	µg/L	389.5	3.81%
Cd 228.802†	61161.0	981	ug/L	10.3	981	µg/L	10.3	1.05%
Co 228.616†	57801.6	1020	ug/L	9.3	1020	µg/L	9.3	0.91%
Cr 267.716†	117861.0	1050	ug/L	10.6	1050	µg/L	10.6	1.01%
Cu 327.393†	105280.5	1060	ug/L	13.7	1060	µg/L	13.7	1.29%
Fe†	22262.1	10300	ug/L	89.2	10300	µg/L	89.2	0.87%
K†	21492.8	10900	ug/L	115.2	10900	µg/L	115.2	1.06%
Mg 279.077†	3147.9	10200	ug/L	32.0	10200	µg/L	32.0	0.31%
Mn 257.610†	1127085.9	1040	ug/L	1.9	1040	µg/L	1.9	0.18%
Mo 202.031†	21482.4	1050	ug/L	10.4	1050	µg/L	10.4	0.99%
Na 589.592†	52939.2	10800	ug/L	102.8	10800	µg/L	102.8	0.95%
Ni 231.604†	65049.9	1010	ug/L	8.1	1010	µg/L	8.1	0.80%
Pb 220.353†	11829.8	998	ug/L	13.7	998	µg/L	13.7	1.37%
Sb 217.582†	2752.9	998	ug/L	4.9	998	µg/L	4.9	0.49%
Se 196.026†	627.7	900	ug/L	7.5	900	µg/L	7.5	0.84%
Sn 189.927†	5403.5	1000	ug/L	4.9	1000	µg/L	4.9	0.49%
Ti 334.940†	757468.7	1030	ug/L	1.1	1030	µg/L	1.1	0.11%
Tl 190.801†	1634.0	994	ug/L	8.3	994	µg/L	8.3	0.83%
V 290.880†	137599.8	1050	ug/L	8.8	1050	µg/L	8.8	0.83%
Zn 206.200†	52442.9	939	ug/L	10.4	939	µg/L	10.4	1.11%

Sequence No.: 12
Sample ID: 10259041001_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 130
Date Collected: 3/13/2014 8:41:24 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259041001_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-486.3	-0.0683	mg/L	0.00385				5.63%
Y 371.029	7113936.0	4.21	mg/L	0.029				0.70%
Ag 328.068†	-4256.6	-2.04	ug/L	0.499	-2.04	µg/L	0.499	24.51%
Al†	287160.3	216000	ug/L	4103.5	216000	µg/L	4103.5	1.90%
As 193.696†	-48.4	15.9	ug/L	3.07	15.9	µg/L	3.07	19.31%
B 249.677†	163.8	215	ug/L	3.4	215	µg/L	3.4	1.59%
Ba 233.527†	146536.0	777	ug/L	2.0	777	µg/L	2.0	0.26%
Be†	528.8	11.1	ug/L	0.12	11.1	µg/L	0.12	1.07%
Ca 317.933†	1729873.9	1040000	ug/L	32428.8	1040000	µg/L	32428.8	3.13%
Cd 228.802†	106.8	6.45	ug/L	0.458	6.45	µg/L	0.458	7.11%
Co 228.616†	6593.3	116	ug/L	1.0	116	µg/L	1.0	0.85%
Cr 267.716†	31705.5	283	ug/L	1.5	283	µg/L	1.5	0.55%
Cu 327.393†	23594.3	252	ug/L	2.8	252	µg/L	2.8	1.11%
Fe†	538309.0	248000	ug/L	1391.9	248000	µg/L	1391.9	0.56%
K†	94471.2	47900	ug/L	144.6	47900	µg/L	144.6	0.30%
Mg 279.077†	171378.0	556000	ug/L	1797.7	556000	µg/L	1797.7	0.32%
Mn 257.610†	5553811.9	5100	ug/L	14.6	5100	µg/L	14.6	0.29%
Mo 202.031†	-194.0	4.14	ug/L	1.282	4.14	µg/L	1.282	30.97%
Na 589.592†	18215.5	3690	ug/L	6.6	3690	µg/L	6.6	0.18%
Ni 231.604†	15239.2	236	ug/L	0.7	236	µg/L	0.7	0.28%
Pb 220.353†	1106.6	147	ug/L	4.9	147	µg/L	4.9	3.32%
Sb 217.582†	-288.8	-1.06	ug/L	9.618	-1.06	µg/L	9.618	905.30%
[illegible] 196.026†	-5.1	-10.0	ug/L	4.97	-10.0	µg/L	4.97	49.49%
[illegible] 189.927†	-299.9	5.20	ug/L	3.895	5.20	µg/L	3.895	74.89%
Ti 334.940†	2913483.3	3950	ug/L	6.6	3950	µg/L	6.6	0.17%
Tl 190.801†	-20.8	12.2	ug/L	8.98	12.2	µg/L	8.98	73.77%
V 290.880†	51667.9	379	ug/L	1.4	379	µg/L	1.4	0.37%
Zn 206.200†	36570.8	655	ug/L	2.5	655	µg/L	2.5	0.38%

Sequence No.: 13
Sample ID: 10259041002_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 131
Date Collected: 3/13/2014 8:47:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259041002_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-5668.1	-0.796	mg/L	0.0024				0.30%
Y 371.029	6855443.7	4.05	mg/L	0.029				0.70%
Ag 328.068†	-6726.7	1.96	ug/L	0.547	1.96	µg/L	0.547	27.99%
Al†	549344.0	414000	ug/L	1882.0	414000	µg/L	1882.0	0.46%
As 193.696†	-28.2	86.8	ug/L	44.69	86.8	µg/L	44.69	51.49%
B 249.677†	309.9	406	ug/L	9.4	406	µg/L	9.4	2.32%
Ba 233.527†	227886.8	1210	ug/L	3.1	1210	µg/L	3.1	0.26%
Be†	1036.8	21.7	ug/L	0.05	21.7	µg/L	0.05	0.21%
Ca 317.933†	2543613.1	1520000	ug/L	57048.2	1520000	µg/L	57048.2	3.75%
Cd 228.802†	218.6	12.4	ug/L	0.49	12.4	µg/L	0.49	3.92%
Co 228.616†	11311.7	199	ug/L	0.5	199	µg/L	0.5	0.27%
Cr 267.716†	62956.0	562	ug/L	2.3	562	µg/L	2.3	0.41%
Cu 327.393†	64278.1	674	ug/L	1.2	674	µg/L	1.2	0.18%
Fe†	1010957.4	466000	ug/L	4689.7	466000	µg/L	4689.7	1.01%
K†	189992.3	96300	ug/L	814.0	96300	µg/L	814.0	0.85%
Mg 279.077†	225800.8	733000	ug/L	7073.9	733000	µg/L	7073.9	0.97%
Mn 257.610†	7726155.9	7100	ug/L	13.4	7100	µg/L	13.4	0.19%
Mo 202.031†	-27.1	24.3	ug/L	0.38	24.3	µg/L	0.38	1.59%
Na 589.592†	29378.2	5950	ug/L	65.4	5950	µg/L	65.4	1.10%
Ni 231.604†	37644.5	583	ug/L	2.5	583	µg/L	2.5	0.42%
Pb 220.353†	2503.3	312	ug/L	12.4	312	µg/L	12.4	3.97%
Sb 217.582†	-535.0	-12.3	ug/L	2.09	-12.3	µg/L	2.09	16.99%
Se 196.026†	-49.0	-34.7	ug/L	32.76	-34.7	µg/L	32.76	94.50%
Sn 189.927†	-414.7	3.25	ug/L	5.646	3.25	µg/L	5.646	173.96%
Ti 334.940†	3310023.8	4480	ug/L	4.2	4480	µg/L	4.2	0.09%
Tl 190.801†	-21.6	33.5	ug/L	13.07	33.5	µg/L	13.07	39.04%
V 290.880†	102330.2	753	ug/L	0.5	753	µg/L	0.5	0.07%
Zn 206.200†	79315.6	1420	ug/L	5.9	1420	µg/L	5.9	0.42%

Sequence No.: 14
Sample ID: 1635277_B18873Dx5
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 132
Date Collected: 3/13/2014 8:53:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1635277_B18873Dx5

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	4040.1	0.567	mg/L	0.0043				0.76%
Y 371.029	7764254.4	4.59	mg/L	0.002				0.05%
Ag 328.068†	-1448.7	0.001	ug/L	0.4979	0.001	µg/L	0.4979	>999.9%
Al†	102046.9	76800	ug/L	2137.3	76800	µg/L	2137.3	2.78%
As 193.696†	-13.8	9.69	ug/L	5.190	9.69	µg/L	5.190	53.54%
B 249.677†	53.6	71.3	ug/L	1.93	71.3	µg/L	1.93	2.71%
Ba 233.527†	48175.7	255	ug/L	2.4	255	µg/L	2.4	0.94%
Be†	199.9	4.18	ug/L	0.174	4.18	µg/L	0.174	4.16%
Ca 317.933†	504134.2	302000	ug/L	9399.6	302000	µg/L	9399.6	3.12%
Cd 228.802†	46.0	2.54	ug/L	0.281	2.54	µg/L	0.281	11.07%
Co 228.616†	2477.8	43.6	ug/L	0.15	43.6	µg/L	0.15	0.34%
Cr 267.716†	13478.8	120	ug/L	0.9	120	µg/L	0.9	0.77%
Cu 327.393†	12598.1	132	ug/L	1.2	132	µg/L	1.2	0.88%
Fe†	204711.0	94400	ug/L	1208.6	94400	µg/L	1208.6	1.28%
K†	34548.4	17500	ug/L	149.5	17500	µg/L	149.5	0.85%
Mg 279.077†	44071.0	143000	ug/L	1397.0	143000	µg/L	1397.0	0.98%
Mn 257.610†	1657940.8	1520	ug/L	2.5	1520	µg/L	2.5	0.17%
Mo 202.031†	-77.6	1.39	ug/L	0.410	1.39	µg/L	0.410	29.61%
Na 589.592†	5545.7	1120	ug/L	8.3	1120	µg/L	8.3	0.74%
Ni 231.604†	8474.5	131	ug/L	0.9	131	µg/L	0.9	0.69%
Pb 220.353†	601.9	69.4	ug/L	0.93	69.4	µg/L	0.93	1.35%
Sb 217.582†	-104.5	-1.67	ug/L	2.354	-1.67	µg/L	2.354	140.74%
Se 196.026†	35.0	57.7	ug/L	1.80	57.7	µg/L	1.80	3.13%
Sn 189.927†	-303.5	-40.5	ug/L	1.26	-40.5	µg/L	1.26	3.11%
Ti 334.940†	675867.8	915	ug/L	2.5	915	µg/L	2.5	0.27%
Tl 190.801†	-10.4	3.12	ug/L	2.980	3.12	µg/L	2.980	95.39%
V 290.880†	19183.0	141	ug/L	2.9	141	µg/L	2.9	2.05%
Zn 206.200†	18077.2	324	ug/L	3.1	324	µg/L	3.1	0.95%

Sequence No.: 17
Sample ID: 1632334_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 134
Date Collected: 3/13/2014 9:09:44 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1632334_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	-8521.6	-1.20	mg/L	0.032				2.71%
Y 371.029	6808604.6	4.03	mg/L	0.014				0.35%
Ag 328.068†	114853.3	565	ug/L	6.3	565	µg/L	6.3	1.12%
Al†	733742.5	552000	ug/L	4441.7	552000	µg/L	4441.7	0.80%
As 193.696†	1344.3	1160	ug/L	22.0	1160	µg/L	22.0	1.90%
B 249.677†	1287.5	1590	ug/L	55.3	1590	µg/L	55.3	3.48%
Ba 233.527†	506650.6	2690	ug/L	33.9	2690	µg/L	33.9	1.26%
Be†	55591.1	1160	ug/L	24.1	1160	µg/L	24.1	2.07%
Ca 317.933†	2528712.7	1510000	ug/L	20582.4	1510000	µg/L	20582.4	1.36%
Cd 228.802†	64620.2	1050	ug/L	1.8	1050	µg/L	1.8	0.17%
Co 228.616†	66029.1	1160	ug/L	3.4	1160	µg/L	3.4	0.29%
Cr 267.716†	203597.3	1820	ug/L	39.1	1820	µg/L	39.1	2.15%
Cu 327.393†	182657.2	1870	ug/L	65.9	1870	µg/L	65.9	3.52%
Fe†	1283268.6	592000	ug/L	5008.7	592000	µg/L	5008.7	0.85%
K†	287616.8	146000	ug/L	916.6	146000	µg/L	916.6	0.63%
Mg 279.077†	225631.6	732000	ug/L	8308.5	732000	µg/L	8308.5	1.14%
Mn 257.610†	13979516.3	12900	ug/L	46.4	12900	µg/L	46.4	0.36%
Mo 202.031†	19033.8	964	ug/L	3.3	964	µg/L	3.3	0.34%
Na 589.592†	93990.5	19100	ug/L	172.3	19100	µg/L	172.3	0.90%
Ni 231.604†	101842.9	1580	ug/L	26.3	1580	µg/L	26.3	1.67%
Pb 220.353†	12523.8	1190	ug/L	5.2	1190	µg/L	5.2	0.44%
Sb 217.582†	273.0	317	ug/L	10.8	317	µg/L	10.8	3.42%
Se 196.026†	575.0	908	ug/L	12.2	908	µg/L	12.2	1.34%
Sn 189.927†	4396.9	893	ug/L	2.1	893	µg/L	2.1	0.23%
Ti 334.940†	4473715.4	6070	ug/L	90.8	6070	µg/L	90.8	1.50%
Tl 190.801†	1369.7	891	ug/L	23.0	891	µg/L	23.0	2.58%
V 290.880†	264663.4	1990	ug/L	38.4	1990	µg/L	38.4	1.93%
Zn 206.200†	126190.0	2260	ug/L	30.5	2260	µg/L	30.5	1.35%

Sequence No.: 18
Sample ID: 1632335_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 135
Date Collected: 3/13/2014 9:14:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1632335_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-4475.7	-0.628	mg/L	0.0186				2.96%
Y 371.029	6921410.1	4.09	mg/L	0.015				0.36%
Ag 328.068†	114066.3	551	ug/L	2.4	551	µg/L	2.4	0.44%
Al†	594496.0	447000	ug/L	3884.7	447000	µg/L	3884.7	0.87%
As 193.696†	1395.6	1160	ug/L	11.5	1160	µg/L	11.5	0.99%
B 249.677†	1251.7	1540	ug/L	34.8	1540	µg/L	34.8	2.26%
Ba 233.527†	410766.2	2180	ug/L	5.8	2180	µg/L	5.8	0.27%
Be†	55410.4	1160	ug/L	4.0	1160	µg/L	4.0	0.35%
Ca 317.933†	2132007.4	1280000	ug/L	26094.2	1280000	µg/L	26094.2	2.04%
Cd 228.802†	63833.0	1030	ug/L	8.7	1030	µg/L	8.7	0.85%
Co 228.616†	62331.0	1100	ug/L	11.7	1100	µg/L	11.7	1.07%
Cr 267.716†	179069.1	1600	ug/L	3.0	1600	µg/L	3.0	0.19%
Cu 327.393†	169510.5	1730	ug/L	18.0	1730	µg/L	18.0	1.04%
Fe†	934036.6	431000	ug/L	2386.7	431000	µg/L	2386.7	0.55%
K†	238512.0	121000	ug/L	237.1	121000	µg/L	237.1	0.20%
Mg 279.077†	187635.8	609000	ug/L	2372.0	609000	µg/L	2372.0	0.39%
Mn 257.610†	8376777.1	7700	ug/L	19.1	7700	µg/L	19.1	0.25%
Mo 202.031†	19156.9	961	ug/L	2.6	961	µg/L	2.6	0.27%
Na 589.592†	84310.4	17100	ug/L	30.7	17100	µg/L	30.7	0.18%
Ni 231.604†	90979.9	1410	ug/L	5.5	1410	µg/L	5.5	0.39%
Pb 220.353†	12337.0	1150	ug/L	9.5	1150	µg/L	9.5	0.83%
Sb 217.582†	482.8	341	ug/L	11.8	341	µg/L	11.8	3.45%
Se 196.026†	619.9	932	ug/L	52.0	932	µg/L	52.0	5.58%
Sn 189.927†	4443.2	888	ug/L	9.7	888	µg/L	9.7	1.10%
Ti 334.940†	4091245.3	5550	ug/L	7.8	5550	µg/L	7.8	0.14%
Tl 190.801†	1434.1	914	ug/L	6.8	914	µg/L	6.8	0.75%
V 290.880†	243327.4	1830	ug/L	9.7	1830	µg/L	9.7	0.53%
Zn 206.200†	120186.9	2150	ug/L	4.6	2150	µg/L	4.6	0.21%

Sequence No.: 19
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/13/2014 9:19:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	6839.1	0.960	mg/L	0.0199				2.08%
Y 371.029	8264212.7	4.89	mg/L	0.066				1.36%
Ag 328.068†	227281.9	1040	ug/L	16.0	1040	µg/L	16.0	1.54%
QC value within limits for Ag 328.068 Recovery = 103.76%								
Al†	14225.2	10700	ug/L	108.0	10700	µg/L	108.0	1.01%
QC value within limits for Al Recovery = 107.08%								
As 193.696†	2615.8	1950	ug/L	31.3	1950	µg/L	31.3	1.60%
QC value within limits for As 193.696 Recovery = 97.73%								
B 249.677†	1631.2	1960	ug/L	57.1	1960	µg/L	57.1	2.91%
QC value within limits for B 249.677 Recovery = 98.06%								
Ba 233.527†	373295.6	1990	ug/L	32.5	1990	µg/L	32.5	1.63%
QC value within limits for Ba 233.527 Recovery = 99.64%								
Be†	97935.6	2050	ug/L	26.6	2050	µg/L	26.6	1.30%
QC value within limits for Be Recovery = 102.49%								
Ca 317.933†	17628.9	10600	ug/L	38.3	10600	µg/L	38.3	0.36%
QC value within limits for Ca 317.933 Recovery = 105.52%								
Cd 228.802†	125720.5	2020	ug/L	34.4	2020	µg/L	34.4	1.71%
QC value within limits for Cd 228.802 Recovery = 100.83%								
Co 228.616†	113956.8	2010	ug/L	38.7	2010	µg/L	38.7	1.93%
QC value within limits for Co 228.616 Recovery = 100.33%								
Cr 267.716†	227353.7	2030	ug/L	18.3	2030	µg/L	18.3	0.90%
QC value within limits for Cr 267.716 Recovery = 101.39%								
Cu 327.393†	212361.5	2140	ug/L	14.1	2140	µg/L	14.1	0.66%
QC value within limits for Cu 327.393 Recovery = 107.15%								
Fe†	22005.5	10200	ug/L	87.2	10200	µg/L	87.2	0.86%
QC value within limits for Fe Recovery = 101.51%								
K†	20740.9	10500	ug/L	130.5	10500	µg/L	130.5	1.24%
QC value within limits for K Recovery = 105.10%								
Mg 279.077†	3095.8	10000	ug/L	110.8	10000	µg/L	110.8	1.10%
QC value within limits for Mg 279.077 Recovery = 100.43%								
Mn 257.610†	2187555.6	2010	ug/L	32.4	2010	µg/L	32.4	1.61%
QC value within limits for Mn 257.610 Recovery = 100.69%								
Mo 202.031†	39825.8	1950	ug/L	43.3	1950	µg/L	43.3	2.22%
QC value within limits for Mo 202.031 Recovery = 97.46%								
Na 589.592†	50142.8	10200	ug/L	104.0	10200	µg/L	104.0	1.02%
QC value within limits for Na 589.592 Recovery = 102.08%								
Ni 231.604†	129754.6	2010	ug/L	29.0	2010	µg/L	29.0	1.44%
QC value within limits for Ni 231.604 Recovery = 100.52%								
Pb 220.353†	22750.1	1920	ug/L	47.2	1920	µg/L	47.2	2.47%
QC value within limits for Pb 220.353 Recovery = 95.80%								
Sb 217.582†	5535.2	2000	ug/L	34.9	2000	µg/L	34.9	1.74%
QC value within limits for Sb 217.582 Recovery = 100.21%								
Se 196.026†	1400.8	2000	ug/L	40.5	2000	µg/L	40.5	2.02%
QC value within limits for Se 196.026 Recovery = 100.19%								
Sn 189.927†	10047.6	1860	ug/L	25.8	1860	µg/L	25.8	1.39%
QC value within limits for Sn 189.927 Recovery = 92.94%								
Ti 334.940†	1447048.5	1970	ug/L	28.4	1970	µg/L	28.4	1.44%
QC value within limits for Ti 334.940 Recovery = 98.58%								
Tl 190.801†	3476.4	2110	ug/L	33.0	2110	µg/L	33.0	1.56%
QC value within limits for Tl 190.801 Recovery = 105.66%								
V 290.880†	265304.2	2030	ug/L	26.0	2030	µg/L	26.0	1.28%
QC value within limits for V 290.880 Recovery = 101.53%								
Zn 206.200†	109152.2	1950	ug/L	33.9	1950	µg/L	33.9	1.74%
QC value within limits for Zn 206.200 Recovery = 97.70%								

All analyte(s) passed QC.

Sequence No.: 20 **Autosampler Location: 10**
Sample ID: CCB **Date Collected: 3/13/2014 9:23:49 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	7242.6	1.02	mg/L	0.004				0.43%
Y 371.029	8445551.5	4.99	mg/L	0.060				1.20%
Ag 328.068†	165.7	0.756	ug/L	0.2589	0.756	µg/L	0.2589	34.23%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	-1.4	-1.07	ug/L	12.165	-1.07	µg/L	12.165	>999.9%
QC value within limits for Al Recovery = Not calculated								
As 193.696†	-0.2	-0.132	ug/L	3.5026	-0.132	µg/L	3.5026	>999.9%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	0.1	0.072	ug/L	2.1072	0.072	µg/L	2.1072	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	17.2	0.092	ug/L	0.0601	0.092	µg/L	0.0601	65.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	2.2	0.046	ug/L	0.1066	0.046	µg/L	0.1066	232.83%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	14.0	8.41	ug/L	6.745	8.41	µg/L	6.745	80.21%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	10.1	0.162	ug/L	0.0132	0.162	µg/L	0.0132	8.12%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.8	0.032	ug/L	0.1453	0.032	µg/L	0.1453	458.40%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-5.8	-0.052	ug/L	0.1851	-0.052	µg/L	0.1851	355.27%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	55.5	0.560	ug/L	0.3449	0.560	µg/L	0.3449	61.60%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	11.0	5.07	ug/L	1.055	5.07	µg/L	1.055	20.80%
QC value within limits for Fe Recovery = Not calculated								
K†	171.7	87.0	ug/L	42.19	87.0	µg/L	42.19	48.50%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	-2.3	-7.44	ug/L	7.927	-7.44	µg/L	7.927	106.57%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	113.7	0.105	ug/L	0.1002	0.105	µg/L	0.1002	95.03%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	132.9	6.50	ug/L	2.060	6.50	µg/L	2.060	31.67%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	22.2	4.53	ug/L	3.469	4.53	µg/L	3.469	76.64%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	81.8	1.27	ug/L	0.614	1.27	µg/L	0.614	48.45%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-9.3	-0.779	ug/L	0.6943	-0.779	µg/L	0.6943	89.11%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	0.7	0.255	ug/L	1.2387	0.255	µg/L	1.2387	485.21%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	3.9	5.60	ug/L	6.204	5.60	µg/L	6.204	110.74%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	7.1	1.31	ug/L	0.353	1.31	µg/L	0.353	26.89%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	192.6	0.262	ug/L	0.1019	0.262	µg/L	0.1019	38.83%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.4	-0.832	ug/L	0.1896	-0.832	µg/L	0.1896	22.79%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	21.3	0.163	ug/L	0.2731	0.163	µg/L	0.2731	167.40%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-24.3	-0.435	ug/L	0.1137	-0.435	µg/L	0.1137	26.16%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 30
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 3/13/2014 10:26:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	1265.1	0.178	mg/L	0.0085				4.77%
Y 371.029	7365477.0	4.35	mg/L	0.074				1.70%
Ag 328.068†	9667.9	58.3	ug/L	1.10	58.3	µg/L	1.10	1.90%
QC value within limits for Ag 328.068 Recovery = 116.54%								
Al†	778864.3	586000	ug/L	5592.5	586000	µg/L	5592.5	0.95%
QC value within limits for Al Recovery = 117.25%								
As 193.696†	-74.9	113	ug/L	2.1	113	µg/L	2.1	1.86%
QC value within limits for As 193.696 Recovery = 113.19%								
B 249.677†	837.0	1020	ug/L	23.4	1020	µg/L	23.4	2.29%
QC value within limits for B 249.677 Recovery = 102.06%								
Ba 233.527†	19576.1	99.8	ug/L	1.06	99.8	µg/L	1.06	1.06%
QC value within limits for Ba 233.527 Recovery = 99.76%								
Be†	2834.4	59.3	ug/L	0.56	59.3	µg/L	0.56	0.94%
QC value within limits for Be Recovery = 118.65%								
Ca 317.933†	901545.5	540000	ug/L	11947.7	540000	µg/L	11947.7	2.21%
QC value within limits for Ca 317.933 Recovery = 107.92%								
Cd 228.802†	6313.2	105	ug/L	0.8	105	µg/L	0.8	0.77%
QC value within limits for Cd 228.802 Recovery = 105.11%								
Co 228.616†	5225.5	92.0	ug/L	1.04	92.0	µg/L	1.04	1.13%
QC value within limits for Co 228.616 Recovery = 92.01%								
Cr 267.716†	11349.6	101	ug/L	1.0	101	µg/L	1.0	0.96%
QC value within limits for Cr 267.716 Recovery = 101.23%								
Cu 327.393†	9233.9	104	ug/L	1.6	104	µg/L	1.6	1.50%
QC value within limits for Cu 327.393 Recovery = 104.19%								
Fe†	438563.1	202000	ug/L	1325.7	202000	µg/L	1325.7	0.66%
QC value within limits for Fe Recovery = 101.15%								
K†	11367.7	5760	ug/L	80.5	5760	µg/L	80.5	1.40%
QC value within limits for K Recovery = 115.21%								
Mg 279.077†	158805.8	515000	ug/L	5822.6	515000	µg/L	5822.6	1.13%
QC value within limits for Mg 279.077 Recovery = 103.05%								
Mn 257.610†	129724.0	102	ug/L	3.0	102	µg/L	3.0	2.93%
QC value within limits for Mn 257.610 Recovery = 101.70%								
Mo 202.031†	1746.6	96.6	ug/L	1.00	96.6	µg/L	1.00	1.04%
QC value within limits for Mo 202.031 Recovery = 96.56%								
Na 589.592†	20789.4	4190	ug/L	43.5	4190	µg/L	43.5	1.04%
QC value within limits for Na 589.592 Recovery = 119.84%								
Ni 231.604†	5709.3	88.5	ug/L	0.60	88.5	µg/L	0.60	0.67%
QC value within limits for Ni 231.604 Recovery = 88.46%								
Pb 220.353†	-478.2	114	ug/L	1.5	114	µg/L	1.5	1.32%
QC value within limits for Pb 220.353 Recovery = 113.95%								
Sb 217.582†	325.0	213	ug/L	4.2	213	µg/L	4.2	1.99%
QC value within limits for Sb 217.582 Recovery = 106.49%								
Se 196.026†	129.7	220	ug/L	13.3	220	µg/L	13.3	6.05%
QC value within limits for Se 196.026 Recovery = 110.16%								
Sn 189.927†	2113.3	447	ug/L	3.9	447	µg/L	3.9	0.86%
QC value within limits for Sn 189.927 Recovery = 89.38%								
Ti 334.940†	85392.1	106	ug/L	2.8	106	µg/L	2.8	2.61%
QC value within limits for Ti 334.940 Recovery = 106.13%								
Tl 190.801†	129.0	98.6	ug/L	4.41	98.6	µg/L	4.41	4.47%
QC value within limits for Tl 190.801 Recovery = 98.59%								
V 290.880†	13452.5	89.2	ug/L	2.38	89.2	µg/L	2.38	2.67%
QC value within limits for V 290.880 Recovery = 89.17%								
Zn 206.200†	5670.0	102	ug/L	0.9	102	µg/L	0.9	0.86%
QC value within limits for Zn 206.200 Recovery = 101.50%								

All analyte(s) passed QC.

Sequence No.: 1
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 4
Date Collected: 3/13/2014 10:30:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Sequence No.: 26
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/13/2014 10:31:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	1443.8	0.203	mg/L	0.0063				3.10%
Y 371.029	7343262.7	4.34	mg/L	0.030				0.70%
Ag 328.068†	-2090.8	3.65	ug/L	0.724	3.65	µg/L	0.724	19.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	744219.0	560000	ug/L	10290.6	560000	µg/L	10290.6	1.84%
QC value within limits for Al Recovery = 112.03%								
As 193.696†	-197.7	13.6	ug/L	11.70	13.6	µg/L	11.70	85.73%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	-16.7	-6.48	ug/L	6.173	-6.48	µg/L	6.173	95.19%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1222.4	2.10	ug/L	0.042	2.10	µg/L	0.042	2.02%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	-20.6	-0.430	ug/L	0.0537	-0.430	µg/L	0.0537	12.48%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	853725.0	511000	ug/L	21058.4	511000	µg/L	21058.4	4.12%
QC value within limits for Ca 317.933 Recovery = 102.20%								
Cd 228.802†	-44.4	2.88	ug/L	0.084	2.88	µg/L	0.084	2.92%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	73.6	1.30	ug/L	0.295	1.30	µg/L	0.295	22.80%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	351.8	3.14	ug/L	0.325	3.14	µg/L	0.325	10.36%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1387.5	-3.72	ug/L	0.360	-3.72	µg/L	0.360	9.67%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	408424.2	188000	ug/L	735.1	188000	µg/L	735.1	0.39%
QC value within limits for Fe Recovery = 94.20%								
K†	431.9	219	ug/L	21.1	219	µg/L	21.1	9.63%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	147427.1	478000	ug/L	1648.6	478000	µg/L	1648.6	0.34%
QC value within limits for Mg 279.077 Recovery = 95.67%								
Mn 257.610†	18591.5	0.697	ug/L	0.5850	0.697	µg/L	0.5850	83.95%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-267.5	-2.75	ug/L	0.875	-2.75	µg/L	0.875	31.85%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	223.1	9.27	ug/L	9.120	9.27	µg/L	9.120	98.32%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	119.7	1.86	ug/L	0.121	1.86	µg/L	0.121	6.54%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1457.3	24.9	ug/L	5.63	24.9	µg/L	5.63	22.61%
QC value greater than the upper limit for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	-240.5	2.97	ug/L	7.371	2.97	µg/L	7.371	248.51%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	-8.0	20.4	ug/L	7.18	20.4	µg/L	7.18	35.15%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-392.9	-20.5	ug/L	1.49	-20.5	µg/L	1.49	7.28%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	9195.2	2.85	ug/L	0.700	2.85	µg/L	0.700	24.54%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-16.7	8.70	ug/L	3.408	8.70	µg/L	3.408	39.17%
QC value within limits for Tl 190.801 Recovery = Not calculated								

V 290.880†	-1169.2	-21.9 ug/L	1.64	-21.9 µg/L	1.64	7.49%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	336.3	6.02 ug/L	0.340	6.02 µg/L	0.340	5.65%
QC value within limits for Zn 206.200 Recovery = Not calculated						

QC Failed. Continue with analysis.

User canceled analysis.

Sequence No.: 28 **Autosampler Location: 7**
Sample ID: CRDLA **Date Collected: 3/13/2014 10:35:12 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CRDLA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	7207.4	1.01	mg/L	0.002				0.21%
Y 371.029	8272272.6	4.89	mg/L	0.036				0.74%
Ag 328.068†	1982.4	9.05	ug/L	0.131	9.05	µg/L	0.131	1.45%
QC value within limits for Ag 328.068 Recovery = 90.50%								
Al†	278.9	210	ug/L	4.5	210	µg/L	4.5	2.16%
QC value within limits for Al Recovery = 104.96%								
As 193.696†	21.5	16.1	ug/L	2.83	16.1	µg/L	2.83	17.60%
QC value within limits for As 193.696 Recovery = 80.54%								
B 249.677†	102.2	123	ug/L	1.6	123	µg/L	1.6	1.32%
QC value within limits for B 249.677 Recovery = 81.90%								
Ba 233.527†	1793.7	9.57	ug/L	0.100	9.57	µg/L	0.100	1.05%
QC value within limits for Ba 233.527 Recovery = 95.75%								
Be†	233.3	4.88	ug/L	0.150	4.88	µg/L	0.150	3.08%
QC value within limits for Be Recovery = 97.66%								
Ca 317.933†	833.8	499	ug/L	16.1	499	µg/L	16.1	3.22%
QC value within limits for Ca 317.933 Recovery = 99.81%								
Cd 228.802†	186.5	2.99	ug/L	0.038	2.99	µg/L	0.038	1.25%
QC value within limits for Cd 228.802 Recovery = 99.76%								
Co 228.616†	546.4	9.62	ug/L	0.141	9.62	µg/L	0.141	1.46%
QC value within limits for Co 228.616 Recovery = 96.21%								
Cr 267.716†	1072.7	9.57	ug/L	0.082	9.57	µg/L	0.082	0.85%
QC value within limits for Cr 267.716 Recovery = 95.68%								
Cu 327.393†	959.1	9.68	ug/L	0.845	9.68	µg/L	0.845	8.73%
QC value within limits for Cu 327.393 Recovery = 96.80%								
Fe†	166.8	76.9	ug/L	11.34	76.9	µg/L	11.34	14.74%
QC value greater than the upper limit for Fe Recovery = 153.87%								
K†	5129.4	2600	ug/L	16.4	2600	µg/L	16.4	0.63%
QC value within limits for K Recovery = 103.97%								
Mg 279.077†	153.1	497	ug/L	2.1	497	µg/L	2.1	0.43%
QC value within limits for Mg 279.077 Recovery = 99.34%								
Mn 257.610†	5500.6	5.04	ug/L	0.045	5.04	µg/L	0.045	0.89%
QC value within limits for Mn 257.610 Recovery = 100.79%								
Mo 202.031†	204.0	9.99	ug/L	0.486	9.99	µg/L	0.486	4.87%
QC value less than the lower limit for Mo 202.031 Recovery = 66.58%								
Na 589.592†	4859.8	989	ug/L	17.3	989	µg/L	17.3	1.75%
QC value within limits for Na 589.592 Recovery = 98.93%								
Ni 231.604†	1303.6	20.2	ug/L	0.21	20.2	µg/L	0.21	1.03%
QC value within limits for Ni 231.604 Recovery = 100.99%								
Pb 220.353†	101.4	8.58	ug/L	0.179	8.58	µg/L	0.179	2.08%
QC value within limits for Pb 220.353 Recovery = 85.81%								
Sb 217.582†	38.4	13.9	ug/L	1.14	13.9	µg/L	1.14	8.23%
QC value less than the lower limit for Sb 217.582 Recovery = 69.56%								
Se 196.026†	18.3	26.1	ug/L	1.00	26.1	µg/L	1.00	3.84%
QC value greater than the upper limit for Se 196.026 Recovery = 130.52%								
Sn 189.927†	355.3	65.7	ug/L	0.77	65.7	µg/L	0.77	1.17%
QC value within limits for Sn 189.927 Recovery = 87.65%								
Ti 334.940†	17599.1	24.0	ug/L	0.35	24.0	µg/L	0.35	1.44%
QC value within limits for Ti 334.940 Recovery = 95.89%								
Tl 190.801†	30.4	18.5	ug/L	0.26	18.5	µg/L	0.26	1.43%
QC value within limits for Tl 190.801 Recovery = 92.39%								
V 290.880†	2043.0	15.6	ug/L	0.85	15.6	µg/L	0.85	5.41%
QC value within limits for V 290.880 Recovery = 104.24%								
Zn 206.200†	1177.7	21.1	ug/L	0.21	21.1	µg/L	0.21	1.01%
QC value within limits for Zn 206.200 Recovery = 105.42%								

QC Failed. Continue with analysis.

Sequence No.: 30
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/13/2014 10:44:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	6804.6	0.955	mg/L	0.0192				2.01%
Y 371.029	8102570.3	4.79	mg/L	0.064				1.34%
Ag 328.068†	228324.3	1040	ug/L	12.5	1040	µg/L	12.5	1.20%
QC value within limits for Ag 328.068 Recovery = 104.24%								
Al†	14439.8	10900	ug/L	160.7	10900	µg/L	160.7	1.48%
QC value within limits for Al Recovery = 108.69%								
As 193.696†	2696.9	2020	ug/L	33.9	2020	µg/L	33.9	1.68%
QC value within limits for As 193.696 Recovery = 100.76%								
B 249.677†	1619.6	1950	ug/L	20.6	1950	µg/L	20.6	1.06%
QC value within limits for B 249.677 Recovery = 97.37%								
Ba 233.527†	375640.7	2010	ug/L	32.4	2010	µg/L	32.4	1.62%
QC value within limits for Ba 233.527 Recovery = 100.26%								
Be†	100569.6	2100	ug/L	54.7	2100	µg/L	54.7	2.60%
QC value within limits for Be Recovery = 105.24%								
Ca 317.933†	17658.1	10600	ug/L	119.6	10600	µg/L	119.6	1.13%
QC value within limits for Ca 317.933 Recovery = 105.69%								
Cd 228.802†	127239.2	2040	ug/L	33.8	2040	µg/L	33.8	1.66%
QC value within limits for Cd 228.802 Recovery = 102.05%								
Co 228.616†	115758.7	2040	ug/L	34.7	2040	µg/L	34.7	1.70%
QC value within limits for Co 228.616 Recovery = 101.92%								
Cr 267.716†	229217.4	2040	ug/L	30.8	2040	µg/L	30.8	1.51%
QC value within limits for Cr 267.716 Recovery = 102.23%								
Cu 327.393†	212078.1	2140	ug/L	39.8	2140	µg/L	39.8	1.86%
QC value within limits for Cu 327.393 Recovery = 107.00%								
Fe†	22068.8	10200	ug/L	76.6	10200	µg/L	76.6	0.75%
QC value within limits for Fe Recovery = 101.80%								
K†	21429.3	10900	ug/L	277.9	10900	µg/L	277.9	2.56%
QC value within limits for K Recovery = 108.59%								
Mg 279.077†	3166.1	10300	ug/L	110.8	10300	µg/L	110.8	1.08%
QC value within limits for Mg 279.077 Recovery = 102.71%								
Mn 257.610†	2226857.2	2050	ug/L	9.8	2050	µg/L	9.8	0.48%
QC value within limits for Mn 257.610 Recovery = 102.50%								
Mo 202.031†	40482.3	1980	ug/L	32.0	1980	µg/L	32.0	1.61%
QC value within limits for Mo 202.031 Recovery = 99.06%								
Na 589.592†	51228.8	10400	ug/L	270.9	10400	µg/L	270.9	2.60%
QC value within limits for Na 589.592 Recovery = 104.29%								
Ni 231.604†	131734.8	2040	ug/L	35.4	2040	µg/L	35.4	1.74%
QC value within limits for Ni 231.604 Recovery = 102.05%								
Pb 220.353†	23553.6	1980	ug/L	22.0	1980	µg/L	22.0	1.11%
QC value within limits for Pb 220.353 Recovery = 99.18%								
Sb 217.582†	5642.3	2040	ug/L	38.6	2040	µg/L	38.6	1.89%
QC value within limits for Sb 217.582 Recovery = 102.14%								
Se 196.026†	1439.6	2060	ug/L	51.9	2060	µg/L	51.9	2.52%
QC value within limits for Se 196.026 Recovery = 102.96%								
Sn 189.927†	10244.7	1900	ug/L	28.9	1900	µg/L	28.9	1.53%
QC value within limits for Sn 189.927 Recovery = 94.76%								
Ti 334.940†	1466067.8	2000	ug/L	2.6	2000	µg/L	2.6	0.13%
QC value within limits for Ti 334.940 Recovery = 99.87%								
Tl 190.801†	3542.7	2150	ug/L	57.9	2150	µg/L	57.9	2.69%
QC value within limits for Tl 190.801 Recovery = 107.67%								
V 290.880†	266896.8	2040	ug/L	34.7	2040	µg/L	34.7	1.70%
QC value within limits for V 290.880 Recovery = 102.14%								
Zn 206.200†	111304.0	1990	ug/L	30.1	1990	µg/L	30.1	1.51%
QC value within limits for Zn 206.200 Recovery = 99.63%								

All analyte(s) passed QC.

Sequence No.: 31 **Autosampler Location: 10**
Sample ID: CCB **Date Collected: 3/13/2014 10:48:25 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	7302.3	1.03	mg/L	0.009				0.91%
Y 371.029	8363072.2	4.94	mg/L	0.044				0.88%
Ag 328.068†	122.3	0.558	ug/L	0.4652	0.558	µg/L	0.4652	83.32%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	32.6	24.6	ug/L	6.55	24.6	µg/L	6.55	26.64%
QC value within limits for Al Recovery = Not calculated								
As 193.696†	-1.0	-0.724	ug/L	1.7208	-0.724	µg/L	1.7208	237.60%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	1.9	2.32	ug/L	2.691	2.32	µg/L	2.691	116.03%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.2	0.049	ug/L	0.0485	0.049	µg/L	0.0485	98.86%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	0.4	0.008	ug/L	0.0774	0.008	µg/L	0.0774	922.82%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	9.7	5.81	ug/L	6.634	5.81	µg/L	6.634	114.15%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	16.6	0.267	ug/L	0.0507	0.267	µg/L	0.0507	18.97%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	7.1	0.126	ug/L	0.1383	0.126	µg/L	0.1383	109.85%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-14.7	-0.131	ug/L	0.1869	-0.131	µg/L	0.1869	142.59%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-8.6	-0.086	ug/L	0.7696	-0.086	µg/L	0.7696	891.71%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	8.8	4.07	ug/L	2.181	4.07	µg/L	2.181	53.57%
QC value within limits for Fe Recovery = Not calculated								
K†	135.8	68.8	ug/L	88.61	68.8	µg/L	88.61	128.74%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	-0.4	-1.34	ug/L	7.608	-1.34	µg/L	7.608	567.02%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	168.4	0.155	ug/L	0.0364	0.155	µg/L	0.0364	23.40%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	115.4	5.65	ug/L	1.324	5.65	µg/L	1.324	23.44%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	93.4	19.0	ug/L	7.37	19.0	µg/L	7.37	38.78%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	61.8	0.958	ug/L	0.2473	0.958	µg/L	0.2473	25.82%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-10.3	-0.860	ug/L	0.4140	-0.860	µg/L	0.4140	48.15%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	-4.7	-1.71	ug/L	1.255	-1.71	µg/L	1.255	73.42%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	2.7	3.84	ug/L	5.853	3.84	µg/L	5.853	152.46%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.0	0.551	ug/L	0.4769	0.551	µg/L	0.4769	86.59%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	191.2	0.260	ug/L	0.0476	0.260	µg/L	0.0476	18.27%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-2.3	-1.39	ug/L	0.878	-1.39	µg/L	0.878	63.05%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	67.8	0.519	ug/L	0.3526	0.519	µg/L	0.3526	67.97%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-3.0	-0.054	ug/L	0.0746	-0.054	µg/L	0.0746	136.99%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Pace Analytical®

Analytical Data Package

Prepared by:

Pace Analytical Services - Minnesota

Pace Project No.: 10259041

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InOrganic

Wet Chemistry

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SAMPLE NO.

SB-9 3-4'

FORM I INORGANIC-1
INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Lab Sample ID: 10259041001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	pH at 25 Degrees C	8.0		Std. Units	1	03/10/2014 14:44

SAMPLE NO.

SB-9 12-14'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Lab Sample ID: 10259041002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	pH at 25 Degrees C	8.0		Std. Units	1	03/10/2014 14:46

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Initial Calibration Verification Source: 4761

Continuing Calibration Verification Source:

Concentration Units: mg/L Instrument ID: 10WT53

	Initial Calibration Verification			
	03/10/2014 14:13			
Analyte	True	Found	%R	Control Limit
pH at 25 Degrees C	2.0	2.1	105.0	95-105

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Initial Calibration Verification Source: 11717

Continuing Calibration Verification Source:

Concentration Units: mg/L Instrument ID: 10WT53

	Initial Calibration Verification			
	03/10/2014 14:15			
Analyte	True	Found	%R	Control Limit
pH at 25 Degrees C	12.45	12.4	99.5	99-101

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Initial Calibration Verification Source: 10343

Continuing Calibration Verification Source: 10343

Concentration Units: mg/L Instrument ID: 10WT53

	Initial Calibration Verification				Continuing Calibration Verification						
	03/10/2014 14:16				03/10/2014 14:39			03/10/2014 15:02			
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	Control Limit
pH at 25 Degrees C	5.0	5.0	100.4	98-102	5.0	5.0	100.6	5.0	5.0	99.2	98-102

SAMPLE NO.

1635853DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Matrix: Solid Concentration Units: Std. Units

Percent Moisture: _____ Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
pH at 25 Degrees C	3	7.6	7.6	0.3

SAMPLE NO.

1635854DUP

FORM VI INORGANIC-2
DUPLICATES

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Matrix: Solid Concentration Units: Std. Units

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
pH at 25 Degrees C	3	8.0	8.0	0.9

SAMPLE NO.

1635852LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
pH at 25 Degrees C	Std. Units	5.0	5.0	100	98	102

FORM IX INORGANIC-1
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Preparation Method: EPA 9045 Instrument ID: 10WT53

Concentration Units: Std. Units

Analyte	PQL	MDL	MDL Date
pH at 25 Degrees C	0.10	0.10	06/20/2013

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Preparation Method: EPA 9045 Batch: WET 34603

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
1635852	1635852	03/10/2014	1	1
1635853	1635853	03/10/2014	1	1
1635854	1635854	03/10/2014	1	1
10259041001	SB-9 3-4'	03/10/2014	1	1
10259041002	SB-9 12-14'	03/10/2014	1	1

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10259041 Contract: BP-IL SS#5482

Instrument ID: 10WT53 Analysis Method: EPA 9045

Start Date: 03/10/2014 13:47 End Date: 03/10/2014 15:02

Sample Name	Lab Sample ID	D/F	Date	Time	pH 25
10422529CAL1	10422529CAL1	1	03/10/2014	13:47	X
10422534CAL2	10422534CAL2	1	03/10/2014	13:48	X
10422531CAL3	10422531CAL3	1	03/10/2014	13:49	X
10422532ICVA	10422532ICVA	1	03/10/2014	14:13	X
10422533ICVB	10422533ICVB	1	03/10/2014	14:15	X
10422530ICV	10422530ICV	1	03/10/2014	14:16	X
1635852LCS	1635852	1	03/10/2014	14:16	X
10256148009	10256148009	1	03/10/2014	14:25	X
1635853DUP	1635853	1	03/10/2014	14:26	X
10422526CCV	10422526CCV	1	03/10/2014	14:39	X
SB-9 3-4'	10259041001	1	03/10/2014	14:44	X
SB-9 12-14'	10259041002	1	03/10/2014	14:46	X
1635854DUP	1635854	1	03/10/2014	14:47	X
10422527CCV	10422527CCV	1	03/10/2014	15:02	X

Pace Analytical Prep Log Report

Batch Information: WET 34603 Soil pH Prep

Template Version: F-MN-I-351-Rev.00 (13Dec2013)

Extracted By	HNKH	Instrument	10BALB	Batch Notes		Reviewed By	KEO
Reviewed By Date	03/11/2014 11:33:08:028						

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Initial Weight (g)	Extraction Start Date/Time	Extraction End Date/Time	DI Water (mL)	Sample Notes
9045 S	PS	**10256148011**	20.02	03/10/2014 08:49:31	03/10/2014 10:31:08	10953 (20)	
9045 S	RQS	**10256148009**	20.07	03/10/2014 08:57:42	03/10/2014 10:31:11	10953 (20)	
9045 S	DUP	**1635853**	20.09	03/10/2014 09:00:48	03/10/2014 10:31:13	10953 (20)	
9045 S	PS	**10256148010**	20.03	03/10/2014 09:04:02	03/10/2014 10:31:15	10953 (20)	
9045 S	PS	**10259055007**	20.01	03/10/2014 09:08:30	03/10/2014 10:31:17	10953 (20)	
9045 S	PS	**10259055001**	20.06	03/10/2014 09:10:17	03/10/2014 10:31:19	10953 (20)	
9045 S	PS	**10259055002**	20.03	03/10/2014 09:15:45	03/10/2014 10:31:21	10953 (20)	
9045 S	PS	**10259055003**	20.02	03/10/2014 09:22:43	03/10/2014 10:31:23	10953 (20)	
9045 S	PS	**10259055004**	20.04	03/10/2014 09:26:54	03/10/2014 10:31:25	10953 (20)	
9045 S	PS	**10259055005**	20.01	03/10/2014 09:30:44	03/10/2014 10:31:27	10953 (20)	
9045 S	PS	**10259055006**	20.05	03/10/2014 09:35:38	03/10/2014 10:31:30	10953 (20)	
9045 S	PS	**10259041001**	20.04	03/10/2014 09:38:59	03/10/2014 10:31:32	10953 (20)	
9045 S	RQS	**10259041002**	20.02	03/10/2014 09:42:45	03/10/2014 10:31:34	10953 (20)	
9045 S	DUP	**1635854**	20.04	03/10/2014 09:46:32	03/10/2014 10:31:36	10953 (20)	
9045 S	PS	**10259453001**	20.02	03/10/2014 09:48:50	03/10/2014 10:31:38	10953 (20)	
9045 S	PS	**10259480002**	20.04	03/10/2014 09:51:04	03/10/2014 10:31:40	10953 (20)	
9045 S	PS	**10259480004**	20.06	03/10/2014 09:58:59	03/10/2014 10:31:42	10953 (20)	
9045 S	PS	**10259480005**	20.07	03/10/2014 10:00:32	03/10/2014 10:31:44	10953 (20)	
9045 S	PS	**10259480006**	20.06	03/10/2014 10:02:13	03/10/2014 10:31:47	10953 (20)	

Pace Analytical Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Initial Weight (g)	Extraction Start Date/Time	Extraction End Date/Time	DI Water (mL)	Sample Notes
9045 S	PS	**10259552001**	20.07	03/10/2014 10:03:45	03/10/2014 10:31:49	10953 (20)	
9045 S	PS	**10259721001**	20.02	03/10/2014 09:19:23	03/10/2014 10:31:51	10953 (20)	

Pace Analytical: Prep Log Report

Batch Information: WET 34603 Soil pH **Template Version: F-MN-I-362-Rev.00 (13Dec2013)**

Daily Cal Slope	100	Cal Date	3/10/14	Instrument	10WT53
Batch Notes		Reviewed By	KEO	Reviewed By Date	03/11/2014 11:36:11:268

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Run Date/Time	Matrix	pH @ 25 deg C	Sample Temp (C)	Analyzed By	Sample Notes	PH-SPK (mL)	CAL-STD
WET pH_Q	CAL1	**CAL1**	Y	03/10/2014 13:47:38	Water	7.01	21.8	HNKH			10170 (1)
WET pH_Q	CAL2	**CAL2**	Y	03/10/2014 13:48:20	Water	4.00	21.5	HNKH			10168 (1)
WET pH_Q	CAL3	**CAL3**	Y	03/10/2014 13:49:05	Water	10.06	21.5	HNKH			10171 (1)
WET pH_Q	ICVA	**ICVA**	Y	03/10/2014 14:13:33	Water	2.10	21.7	HNKH	E		4761 (1)
WET pH_Q	ICVB	**ICVB**	Y	03/10/2014 14:15:10	Water	12.39	21.7	HNKH	B		11717 (1)
WET pH_Q	ICV	**ICV**	Y	03/10/2014 14:16:03	Water	5.02	21.5	HNKH	D		10343 (1)
9045 S	LCS	**1635852**	Y	03/10/2014 14:16:44	Solid	5.02	21.7	HNKH	D	10343 (1)	
9045 S	PS	**10256148011**	Y	03/10/2014 14:24:59	Solid	7.90	21.5	HNKH			
9045 S	RQS	**10256148009**	Y	03/10/2014 14:25:33	Solid	7.57	21.8	HNKH			
9045 S	DUP	**1635853**	Y	03/10/2014 14:26:16	Solid	7.55	21.9	HNKH			
9045 S	PS	**10256148010**	Y	03/10/2014 14:32:26	Solid	8.40	21.8	HNKH			
9045 S	PS	**10259055007**	Y	03/10/2014 14:33:34	Solid	7.83	21.8	HNKH			
9045 S	PS	**10259055001**	Y	03/10/2014 14:35:01	Solid	8.64	21.8	HNKH			
9045 S	PS	**10259055002**	Y	03/10/2014 14:36:24	Solid	8.03	21.8	HNKH			
9045 S	PS	**10259055003**	Y	03/10/2014 14:37:37	Solid	8.27	21.8	HNKH			
9045 S	PS	**10259055004**	Y	03/10/2014 14:38:42	Solid	8.02	21.7	HNKH			
WET pH_Q	CCV	**CCV**	Y	03/10/2014 14:39:31	Water	5.03	21.3	HNKH	D	10343 (1)	10343 (1)
9045 S	PS	**10259055005**	Y	03/10/2014 14:43:38	Solid	8.79	21.7	HNKH			
9045 S	PS	**10259055006**	Y	03/10/2014 14:44:09	Solid	7.88	21.9	HNKH			

Pace Analytical Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Select	Run Date/Time	Matrix	pH @ 25 deg C	Sample Temp (C)	Analyzed By	Sample Notes	PH-SPK (mL)	CAL-STD
9045 S	PS	**10259041001**	Y	03/10/2014 14:44:58	Solid	7.98	22	HNKH			
9045 S	RQS	**10259041002**	Y	03/10/2014 14:46:29	Solid	8.02	21.8	HNKH			
9045 S	DUP	**1635854**	Y	03/10/2014 14:47:56	Solid	7.95	22.6	HNKH			
9045 S	PS	**10259453001**	Y	03/10/2014 14:49:46	Solid	6.25	21.9	HNKH			
9045 S	PS	**10259480002**	Y	03/10/2014 14:58:54	Solid	9.89	22	HNKH			
9045 S	PS	**10259480004**	Y	03/10/2014 14:59:47	Solid	9.67	22	HNKH			
9045 S	PS	**10259480005**	Y	03/10/2014 15:00:31	Solid	9.66	22.2	HNKH			
9045 S	PS	**10259480006**	Y	03/10/2014 15:01:07	Solid	9.65	22.2	HNKH			
WET pH_Q	CCV	**CCV**	Y	03/10/2014 15:02:41	Water	4.96	21.8	HNKH	D	10343 (1)	10343 (1)
9045 S	PS	**10259552001**	Y	03/10/2014 15:04:53	Solid	6.27	21.9	HNKH			
9045 S	PS	**10259721001**	Y	03/10/2014 15:06:33	Solid	8.39	21.9	HNKH			
WET pH_Q	CCV	**CCV**	Y	03/10/2014 15:07:29	Water	5.03	21.7	HNKH	D	10343 (1)	10343 (1)

Standard Notes:

10168: pH 4.00 Buffer 10074-508
10170: pH 7.00 Buffer 10074-507
10171: pH 10.00 buffer 10074-509
10343: pH 5.00 Buffer 10074-413
11717: pH 12.45 Buffer - 2 bottles marked A-B
4761: pH 2.00 Buffer 9726-557 - 6 bottles marked A-

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March 13, 2014

Luisa Price
STANTEC
446 Eisenhower Lane N
Lombard, IL 60148

RE: Project: BP-IL SS#5482
Pace Project No.: 10259055

Dear Luisa Price:
Enclosed are the analytical results for sample(s) received by the laboratory on February 28, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lori Castille
lori.castille@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Minnesota Certification IDs
1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alabama Certification #40770
Alabama Certification #40770
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #: Pace
Georgia Certification #: 959
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nebraska Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
Wisconsin Certification #: 999407970
West Virginia Certification #: 382
West Virginia TO-15 Approval
West Virginia DHHR #:9952C

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SAMPLE SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259055

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10259055001	SB-6 1.5-3'	Solid	02/25/14 10:26	02/28/14 09:30
10259055002	SB-6 15-16.5'	Solid	02/25/14 10:55	02/28/14 09:30
10259055003	SB-7 1.5-3'	Solid	02/25/14 11:40	02/28/14 09:30
10259055004	SB-7 17-18'	Solid	02/25/14 12:15	02/28/14 09:30
10259055005	SB-8 1.5-2.5"	Solid	02/25/14 13:05	02/28/14 09:30
10259055006	SB-8 14-15"	Solid	02/25/14 13:25	02/28/14 09:30
10259055007	DUP-002	Solid	02/25/14 00:00	02/28/14 09:30
10259055008	TRIP BLANK	Solid	02/25/14 00:00	02/28/14 09:30

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SAMPLE ANALYTE COUNT

Project: BP-IL SS#5482
Pace Project No.: 10259055

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10259055001	SB-6 1.5-3'	EPA 8015 Modified	MT	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10259055002	SB-6 15-16.5'	EPA 8015 Modified	MT	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10259055003	SB-7 1.5-3'	EPA 8015 Modified	MT	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10259055004	SB-7 17-18'	EPA 8015 Modified	MT	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10259055005	SB-8 1.5-2.5"	EPA 8015 Modified	MT	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10259055006	SB-8 14-15"	EPA 8015 Modified	MT	3
		EPA 8015/8021	LLC	2

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: BP-IL SS#5482
Pace Project No.: 10259055

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10259055007	DUP-002	EPA 8015 Modified	MT	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10259055008	TRIP BLANK	EPA 8260	HBP	70

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BP-IL SS#5482
Pace Project No.: 10259055

Method: **EPA 8015 Modified**
Description: 8015 GCS THC-Diesel
Client: BP-STANTEC-IL
Date: March 13, 2014

General Information:
7 samples were analyzed for EPA 8015 Modified. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3550 Sonication with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BP-IL SS#5482
Pace Project No.: 10259055

Method: **EPA 8015/8021**
Description: 8015/8021 GCV GRO/BTEX
Client: BP-STANTEC-IL
Date: March 13, 2014

General Information:
7 samples were analyzed for EPA 8015/8021. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5030 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: GCV/11739

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10259041002

R1: RPD value was outside control limits.

- MSD (Lab ID: 1632559)
  - Gasoline Range Organics

Additional Comments:

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PROJECT NARRATIVE

Project: BP-IL SS#5482
Pace Project No.: 10259055

Method: EPA 6010
Description: 6010 MET ICP
Client: BP-STANTEC-IL
Date: March 13, 2014

General Information:
7 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BP-IL SS#5482
Pace Project No.: 10259055

Method: **EPA 8270**
Description: 8270 MSSV
Client: BP-STANTEC-IL
Date: March 13, 2014

General Information:
7 samples were analyzed for EPA 8270. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BP-IL SS#5482
Pace Project No.: 10259055

Method: EPA 8260
Description: 8260 MSV 5035 Low Level
Client: BP-STANTEC-IL
Date: March 13, 2014

General Information:
8 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

QC Batch: MSV/26501

IS: The internal standard recovery associated with this result exceeds the lower control limit. The reported result should be considered an estimated value.

- MSD (Lab ID: 1635953)
  - 1,2-Dichloroethane-d4 (S)

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/26501

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10259041002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1635952)
  - 1,2,3-Trichlorobenzene
  - 1,2,4-Trichlorobenzene
- MSD (Lab ID: 1635953)
  - 1,2,3-Trichlorobenzene

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PROJECT NARRATIVE

Project: BP-IL SS#5482
Pace Project No.: 10259055

Method: **EPA 8260**
Description: 8260 MSV 5035 Low Level
Client: BP-STANTEC-IL
Date: March 13, 2014

QC Batch: MSV/26501

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10259041002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- 1,2,4-Trichlorobenzene
- Naphthalene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BP-IL SS#5482
Pace Project No.: 10259055

Method: EPA 9045
Description: 9045 pH
Client: BP-STANTEC-IL
Date: March 13, 2014

General Information:
7 samples were analyzed for EPA 9045. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-6 1.5-3' **Lab ID: 10259055001** Collected: 02/25/14 10:26 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication							
TPH-DRO (C10-C28)	ND	mg/kg	11.0	1	03/03/14 08:32	03/05/14 16:51		
Surrogates								
o-Terphenyl (S)	103	%.	30-150	1	03/03/14 08:32	03/05/14 16:51	84-15-1	
n-Triacontane (S)	99	%.	30-147	1	03/03/14 08:32	03/05/14 16:51	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030							
Gasoline Range Organics	ND	mg/kg	19.8	1	03/03/14 11:28	03/03/14 21:25		
Surrogates								
a,a,a-Trifluorotoluene (S)	93	%.	68-135	1	03/03/14 11:28	03/03/14 21:25	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Lead	**2.8**	mg/kg	0.78	1	03/07/14 09:11	03/13/14 09:28	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**10.3**	%	0.10	1		03/03/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
Acenaphthene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	83-32-9	
Acenaphthylene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	208-96-8	
Anthracene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	120-12-7	
Benzo(a)anthracene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	56-55-3	
Benzo(a)pyrene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	101-55-3	
Butylbenzylphthalate	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	85-68-7	
Carbazole	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	59-50-7	
4-Chloroaniline	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	108-60-1	
2-Chloronaphthalene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	91-58-7	
2-Chlorophenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	7005-72-3	
Chrysene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	53-70-3	
Dibenzofuran	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	120-83-2	
Diethylphthalate	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	84-66-2	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-6 1.5-3' **Lab ID: 10259055001** Collected: 02/25/14 10:26 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
2,4-Dimethylphenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	105-67-9	
Dimethylphthalate	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	131-11-3	
Di-n-butylphthalate	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1890	1	03/04/14 07:00	03/06/14 10:09	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	606-20-2	
Di-n-octylphthalate	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	117-81-7	
Fluoranthene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	206-44-0	
Fluorene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	87-68-3	
Hexachlorobenzene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	118-74-1	
Hexachloroethane	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	193-39-5	
Isophorone	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	78-59-1	
1-Methylnaphthalene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	90-12-0	
2-Methylnaphthalene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	95-48-7	
3&4-Methylphenol	ND	ug/kg	733	1	03/04/14 07:00	03/06/14 10:09		
Naphthalene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	91-20-3	
2-Nitroaniline	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	88-74-4	
3-Nitroaniline	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	99-09-2	
4-Nitroaniline	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	100-01-6	
Nitrobenzene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	98-95-3	
2-Nitrophenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	88-75-5	
4-Nitrophenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	86-30-6	
Pentachlorophenol	ND	ug/kg	744	1	03/04/14 07:00	03/06/14 10:09	87-86-5	
Phenanthrene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	85-01-8	
Phenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	108-95-2	
Pyrene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	367	1	03/04/14 07:00	03/06/14 10:09	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	79	%.	30-125	1	03/04/14 07:00	03/06/14 10:09	4165-60-0	
2-Fluorobiphenyl (S)	84	%.	46-125	1	03/04/14 07:00	03/06/14 10:09	321-60-8	
Terphenyl-d14 (S)	92	%.	64-125	1	03/04/14 07:00	03/06/14 10:09	1718-51-0	
Phenol-d6 (S)	80	%.	38-125	1	03/04/14 07:00	03/06/14 10:09	13127-88-3	
2-Fluorophenol (S)	77	%.	31-125	1	03/04/14 07:00	03/06/14 10:09	367-12-4	
2,4,6-Tribromophenol (S)	77	%.	41-125	1	03/04/14 07:00	03/06/14 10:09	118-79-6	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-6 1.5-3' **Lab ID: 10259055001** Collected: 02/25/14 10:26 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Acetone	ND	ug/kg	16.6	1	03/03/14 09:46	03/10/14 18:06	67-64-1	
Allyl chloride	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	107-05-1	
Benzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	71-43-2	
Bromobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	108-86-1	
Bromochloromethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	74-97-5	
Bromodichloromethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	75-27-4	
Bromoform	ND	ug/kg	16.6	1	03/03/14 09:46	03/10/14 18:06	75-25-2	
Bromomethane	ND	ug/kg	16.6	1	03/03/14 09:46	03/10/14 18:06	74-83-9	
2-Butanone (MEK)	ND	ug/kg	16.6	1	03/03/14 09:46	03/10/14 18:06	78-93-3	
n-Butylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	56-23-5	
Chlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	108-90-7	
Chloroethane	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	75-00-3	
Chloroform	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	67-66-3	
Chloromethane	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	96-12-8	
Dibromochloromethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	106-93-4	
Dibromomethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	75-43-4	
1,2-Dichloropropane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	142-28-9	
2,2-Dichloropropane	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	60-29-7	
Ethylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	99-87-6	
Methylene Chloride	ND	ug/kg	16.6	1	03/03/14 09:46	03/10/14 18:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	16.6	1	03/03/14 09:46	03/10/14 18:06	108-10-1	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-6 1.5-3' **Lab ID: 10259055001** Collected: 02/25/14 10:26 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Methyl-tert-butyl ether	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	1634-04-4	
Naphthalene	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	91-20-3	
n-Propylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	103-65-1	
Styrene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	79-34-5	
Tetrachloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	127-18-4	
Tetrahydrofuran	ND	ug/kg	33.1	1	03/03/14 09:46	03/10/14 18:06	109-99-9	
Toluene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	79-00-5	
Trichloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	79-01-6	
Trichlorofluoromethane	ND	ug/kg	8.3	1	03/03/14 09:46	03/10/14 18:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	108-67-8	
Vinyl chloride	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 18:06	75-01-4	
Xylene (Total)	ND	ug/kg	9.9	1	03/03/14 09:46	03/10/14 18:06	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	104	%.	30-150	1	03/03/14 09:46	03/10/14 18:06	17060-07-0	
Toluene-d8 (S)	99	%.	30-150	1	03/03/14 09:46	03/10/14 18:06	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	30-150	1	03/03/14 09:46	03/10/14 18:06	460-00-4	
9045 pH	Analytical Method: EPA 9045							
pH at 25 Degrees C	**8.6**	Std. Units	0.10	1		03/10/14 14:35		

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-6 15-16.5' **Lab ID: 10259055002** Collected: 02/25/14 10:55 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication							
TPH-DRO (C10-C28)	**16.3**	mg/kg	12.5	1	03/03/14 08:32	03/05/14 16:04		
Surrogates								
o-Terphenyl (S)	105	%.	30-150	1	03/03/14 08:32	03/05/14 16:04	84-15-1	
n-Triacontane (S)	106	%.	30-147	1	03/03/14 08:32	03/05/14 16:04	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030							
Gasoline Range Organics	ND	mg/kg	9.9	1	03/03/14 11:28	03/03/14 17:17		
Surrogates								
a,a,a-Trifluorotoluene (S)	96	%.	68-135	1	03/03/14 11:28	03/03/14 17:17	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Lead	**13.6**	mg/kg	4.2	5	03/07/14 09:11	03/13/14 09:53	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**20.0**	%	0.10	1		03/03/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
Acenaphthene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	83-32-9	
Acenaphthylene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	208-96-8	
Anthracene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	120-12-7	
Benzo(a)anthracene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	56-55-3	
Benzo(a)pyrene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	101-55-3	
Butylbenzylphthalate	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	85-68-7	
Carbazole	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	59-50-7	
4-Chloroaniline	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	108-60-1	
2-Chloronaphthalene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	91-58-7	
2-Chlorophenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	7005-72-3	
Chrysene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	53-70-3	
Dibenzofuran	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	120-83-2	
Diethylphthalate	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	84-66-2	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-6 15-16.5' **Lab ID: 10259055002** Collected: 02/25/14 10:55 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
2,4-Dimethylphenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	105-67-9	
Dimethylphthalate	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	131-11-3	
Di-n-butylphthalate	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2120	1	03/04/14 07:00	03/06/14 10:37	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	606-20-2	
Di-n-octylphthalate	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	117-81-7	
Fluoranthene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	206-44-0	
Fluorene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	87-68-3	
Hexachlorobenzene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	118-74-1	
Hexachloroethane	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	193-39-5	
Isophorone	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	78-59-1	
1-Methylnaphthalene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	90-12-0	
2-Methylnaphthalene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	95-48-7	
3&4-Methylphenol	ND	ug/kg	825	1	03/04/14 07:00	03/06/14 10:37		
Naphthalene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	91-20-3	
2-Nitroaniline	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	88-74-4	
3-Nitroaniline	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	99-09-2	
4-Nitroaniline	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	100-01-6	
Nitrobenzene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	98-95-3	
2-Nitrophenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	88-75-5	
4-Nitrophenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	86-30-6	
Pentachlorophenol	ND	ug/kg	837	1	03/04/14 07:00	03/06/14 10:37	87-86-5	
Phenanthrene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	85-01-8	
Phenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	108-95-2	
Pyrene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	412	1	03/04/14 07:00	03/06/14 10:37	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	81	%.	30-125	1	03/04/14 07:00	03/06/14 10:37	4165-60-0	
2-Fluorobiphenyl (S)	86	%.	46-125	1	03/04/14 07:00	03/06/14 10:37	321-60-8	
Terphenyl-d14 (S)	92	%.	64-125	1	03/04/14 07:00	03/06/14 10:37	1718-51-0	
Phenol-d6 (S)	85	%.	38-125	1	03/04/14 07:00	03/06/14 10:37	13127-88-3	
2-Fluorophenol (S)	83	%.	31-125	1	03/04/14 07:00	03/06/14 10:37	367-12-4	
2,4,6-Tribromophenol (S)	84	%.	41-125	1	03/04/14 07:00	03/06/14 10:37	118-79-6	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-6 15-16.5' **Lab ID: 10259055002** Collected: 02/25/14 10:55 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Acetone	33.2	ug/kg	23.2	1	03/03/14 09:46	03/10/14 18:26	67-64-1	
Allyl chloride	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	107-05-1	
Benzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	71-43-2	
Bromobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	108-86-1	
Bromochloromethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	74-97-5	
Bromodichloromethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	75-27-4	
Bromoform	ND	ug/kg	23.2	1	03/03/14 09:46	03/10/14 18:26	75-25-2	
Bromomethane	ND	ug/kg	23.2	1	03/03/14 09:46	03/10/14 18:26	74-83-9	
2-Butanone (MEK)	ND	ug/kg	23.2	1	03/03/14 09:46	03/10/14 18:26	78-93-3	
n-Butylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	56-23-5	
Chlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	108-90-7	
Chloroethane	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	75-00-3	
Chloroform	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	67-66-3	
Chloromethane	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	96-12-8	
Dibromochloromethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	106-93-4	
Dibromomethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	142-28-9	
2,2-Dichloropropane	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	60-29-7	
Ethylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	99-87-6	
Methylene Chloride	ND	ug/kg	23.2	1	03/03/14 09:46	03/10/14 18:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	23.2	1	03/03/14 09:46	03/10/14 18:26	108-10-1	

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(612)607-1700

ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-6 15-16.5' **Lab ID: 10259055002** Collected: 02/25/14 10:55 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Methyl-tert-butyl ether	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	1634-04-4	
Naphthalene	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	91-20-3	
n-Propylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	103-65-1	
Styrene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	79-34-5	
Tetrachloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	127-18-4	
Tetrahydrofuran	ND	ug/kg	46.4	1	03/03/14 09:46	03/10/14 18:26	109-99-9	
Toluene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	79-00-5	
Trichloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	79-01-6	
Trichlorofluoromethane	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:26	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	108-67-8	
Vinyl chloride	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 18:26	75-01-4	
Xylene (Total)	ND	ug/kg	13.9	1	03/03/14 09:46	03/10/14 18:26	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	107	%.	30-150	1	03/03/14 09:46	03/10/14 18:26	17060-07-0	
Toluene-d8 (S)	102	%.	30-150	1	03/03/14 09:46	03/10/14 18:26	2037-26-5	
4-Bromofluorobenzene (S)	110	%.	30-150	1	03/03/14 09:46	03/10/14 18:26	460-00-4	
9045 pH	Analytical Method: EPA 9045							
pH at 25 Degrees C	**8.0**	Std. Units	0.10	1		03/10/14 14:36		

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-7 1.5-3' **Lab ID: 10259055003** Collected: 02/25/14 11:40 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication							
TPH-DRO (C10-C28)	ND	mg/kg	11.5	1	03/03/14 08:32	03/05/14 18:47		
Surrogates								
o-Terphenyl (S)	104	%.	30-150	1	03/03/14 08:32	03/05/14 18:47	84-15-1	
n-Triacontane (S)	100	%.	30-147	1	03/03/14 08:32	03/05/14 18:47	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030							
Gasoline Range Organics	ND	mg/kg	8.9	1	03/03/14 11:28	03/03/14 17:40		
Surrogates								
a,a,a-Trifluorotoluene (S)	96	%.	68-135	1	03/03/14 11:28	03/03/14 17:40	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Lead	**6.2**	mg/kg	0.82	1	03/07/14 09:11	03/13/14 09:41	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**14.0**	%	0.10	1		03/03/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
Acenaphthene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	83-32-9	
Acenaphthylene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	208-96-8	
Anthracene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	120-12-7	
Benzo(a)anthracene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	56-55-3	
Benzo(a)pyrene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	101-55-3	
Butylbenzylphthalate	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	85-68-7	
Carbazole	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	59-50-7	
4-Chloroaniline	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	108-60-1	
2-Chloronaphthalene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	91-58-7	
2-Chlorophenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	7005-72-3	
Chrysene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	53-70-3	
Dibenzofuran	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	120-83-2	
Diethylphthalate	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	84-66-2	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-7 1.5-3' **Lab ID: 10259055003** Collected: 02/25/14 11:40 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
2,4-Dimethylphenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	105-67-9	
Dimethylphthalate	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	131-11-3	
Di-n-butylphthalate	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1980	1	03/04/14 07:00	03/05/14 20:59	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	606-20-2	
Di-n-octylphthalate	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	117-81-7	
Fluoranthene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	206-44-0	
Fluorene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	87-68-3	
Hexachlorobenzene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	118-74-1	
Hexachloroethane	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	193-39-5	
Isophorone	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	78-59-1	
1-Methylnaphthalene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	90-12-0	
2-Methylnaphthalene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	95-48-7	
3&4-Methylphenol	ND	ug/kg	767	1	03/04/14 07:00	03/05/14 20:59		
Naphthalene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	91-20-3	
2-Nitroaniline	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	88-74-4	
3-Nitroaniline	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	99-09-2	
4-Nitroaniline	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	100-01-6	
Nitrobenzene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	98-95-3	
2-Nitrophenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	88-75-5	
4-Nitrophenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	86-30-6	
Pentachlorophenol	ND	ug/kg	779	1	03/04/14 07:00	03/05/14 20:59	87-86-5	
Phenanthrene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	85-01-8	
Phenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	108-95-2	
Pyrene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	384	1	03/04/14 07:00	03/05/14 20:59	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	79	%.	30-125	1	03/04/14 07:00	03/05/14 20:59	4165-60-0	
2-Fluorobiphenyl (S)	82	%.	46-125	1	03/04/14 07:00	03/05/14 20:59	321-60-8	
Terphenyl-d14 (S)	88	%.	64-125	1	03/04/14 07:00	03/05/14 20:59	1718-51-0	
Phenol-d6 (S)	77	%.	38-125	1	03/04/14 07:00	03/05/14 20:59	13127-88-3	
2-Fluorophenol (S)	71	%.	31-125	1	03/04/14 07:00	03/05/14 20:59	367-12-4	
2,4,6-Tribromophenol (S)	71	%.	41-125	1	03/04/14 07:00	03/05/14 20:59	118-79-6	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-7 1.5-3' **Lab ID: 10259055003** Collected: 02/25/14 11:40 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Acetone	ND	ug/kg	19.4	1	03/03/14 09:46	03/10/14 18:45	67-64-1	
Allyl chloride	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	107-05-1	
Benzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	71-43-2	
Bromobenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	108-86-1	
Bromochloromethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	74-97-5	
Bromodichloromethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	75-27-4	
Bromoform	ND	ug/kg	19.4	1	03/03/14 09:46	03/10/14 18:45	75-25-2	
Bromomethane	ND	ug/kg	19.4	1	03/03/14 09:46	03/10/14 18:45	74-83-9	
2-Butanone (MEK)	ND	ug/kg	19.4	1	03/03/14 09:46	03/10/14 18:45	78-93-3	
n-Butylbenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	56-23-5	
Chlorobenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	108-90-7	
Chloroethane	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	75-00-3	
Chloroform	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	67-66-3	
Chloromethane	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	96-12-8	
Dibromochloromethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	106-93-4	
Dibromomethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	75-43-4	
1,2-Dichloropropane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	142-28-9	
2,2-Dichloropropane	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	60-29-7	
Ethylbenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	99-87-6	
Methylene Chloride	ND	ug/kg	19.4	1	03/03/14 09:46	03/10/14 18:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	19.4	1	03/03/14 09:46	03/10/14 18:45	108-10-1	

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(612)607-1700

ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-7 1.5-3' **Lab ID: 10259055003** Collected: 02/25/14 11:40 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Methyl-tert-butyl ether	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	1634-04-4	
Naphthalene	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	91-20-3	
n-Propylbenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	103-65-1	
Styrene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	79-34-5	
Tetrachloroethene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	127-18-4	
Tetrahydrofuran	ND	ug/kg	38.8	1	03/03/14 09:46	03/10/14 18:45	109-99-9	
Toluene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	79-00-5	
Trichloroethene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	79-01-6	
Trichlorofluoromethane	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 18:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	108-67-8	
Vinyl chloride	ND	ug/kg	3.9	1	03/03/14 09:46	03/10/14 18:45	75-01-4	
Xylene (Total)	ND	ug/kg	11.6	1	03/03/14 09:46	03/10/14 18:45	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%.	30-150	1	03/03/14 09:46	03/10/14 18:45	17060-07-0	
Toluene-d8 (S)	99	%.	30-150	1	03/03/14 09:46	03/10/14 18:45	2037-26-5	
4-Bromofluorobenzene (S)	102	%.	30-150	1	03/03/14 09:46	03/10/14 18:45	460-00-4	
9045 pH	Analytical Method: EPA 9045							
pH at 25 Degrees C	**8.3**	Std. Units	0.10	1		03/10/14 14:37		

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-7 17-18' **Lab ID: 10259055004** Collected: 02/25/14 12:15 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication							
TPH-DRO (C10-C28)	ND	mg/kg	12.1	1	03/03/14 08:32	03/05/14 19:10		
Surrogates								
o-Terphenyl (S)	103	%.	30-150	1	03/03/14 08:32	03/05/14 19:10	84-15-1	
n-Triacontane (S)	106	%.	30-147	1	03/03/14 08:32	03/05/14 19:10	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030							
Gasoline Range Organics	ND	mg/kg	9.3	1	03/03/14 11:28	03/03/14 18:25		
Surrogates								
a,a,a-Trifluorotoluene (S)	96	%.	68-135	1	03/03/14 11:28	03/03/14 18:25	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Lead	**12.4**	mg/kg	1.0	1	03/07/14 09:11	03/13/14 09:47	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**17.1**	%	0.10	1		03/03/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
Acenaphthene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	83-32-9	
Acenaphthylene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	208-96-8	
Anthracene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	120-12-7	
Benzo(a)anthracene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	56-55-3	
Benzo(a)pyrene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	101-55-3	
Butylbenzylphthalate	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	85-68-7	
Carbazole	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	59-50-7	
4-Chloroaniline	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	108-60-1	
2-Chloronaphthalene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	91-58-7	
2-Chlorophenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	7005-72-3	
Chrysene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	53-70-3	
Dibenzofuran	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	120-83-2	
Diethylphthalate	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	84-66-2	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-7 17-18' **Lab ID: 10259055004** Collected: 02/25/14 12:15 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
2,4-Dimethylphenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	105-67-9	
Dimethylphthalate	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	131-11-3	
Di-n-butylphthalate	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2040	1	03/04/14 07:00	03/05/14 21:26	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	606-20-2	
Di-n-octylphthalate	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	117-81-7	
Fluoranthene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	206-44-0	
Fluorene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	87-68-3	
Hexachlorobenzene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	118-74-1	
Hexachloroethane	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	193-39-5	
Isophorone	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	78-59-1	
1-Methylnaphthalene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	90-12-0	
2-Methylnaphthalene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	95-48-7	
3&4-Methylphenol	ND	ug/kg	793	1	03/04/14 07:00	03/05/14 21:26		
Naphthalene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	91-20-3	
2-Nitroaniline	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	88-74-4	
3-Nitroaniline	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	99-09-2	
4-Nitroaniline	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	100-01-6	
Nitrobenzene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	98-95-3	
2-Nitrophenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	88-75-5	
4-Nitrophenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	86-30-6	
Pentachlorophenol	ND	ug/kg	805	1	03/04/14 07:00	03/05/14 21:26	87-86-5	
Phenanthrene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	85-01-8	
Phenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	108-95-2	
Pyrene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	397	1	03/04/14 07:00	03/05/14 21:26	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	80	%.	30-125	1	03/04/14 07:00	03/05/14 21:26	4165-60-0	
2-Fluorobiphenyl (S)	84	%.	46-125	1	03/04/14 07:00	03/05/14 21:26	321-60-8	
Terphenyl-d14 (S)	96	%.	64-125	1	03/04/14 07:00	03/05/14 21:26	1718-51-0	
Phenol-d6 (S)	79	%.	38-125	1	03/04/14 07:00	03/05/14 21:26	13127-88-3	
2-Fluorophenol (S)	72	%.	31-125	1	03/04/14 07:00	03/05/14 21:26	367-12-4	
2,4,6-Tribromophenol (S)	68	%.	41-125	1	03/04/14 07:00	03/05/14 21:26	118-79-6	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-7 17-18' **Lab ID: 10259055004** Collected: 02/25/14 12:15 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Acetone	**18.6**	ug/kg	16.1	1	03/03/14 09:46	03/10/14 19:04	67-64-1	
Allyl chloride	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	107-05-1	
Benzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	71-43-2	
Bromobenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	108-86-1	
Bromochloromethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	74-97-5	
Bromodichloromethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	75-27-4	
Bromoform	ND	ug/kg	16.1	1	03/03/14 09:46	03/10/14 19:04	75-25-2	
Bromomethane	ND	ug/kg	16.1	1	03/03/14 09:46	03/10/14 19:04	74-83-9	
2-Butanone (MEK)	ND	ug/kg	16.1	1	03/03/14 09:46	03/10/14 19:04	78-93-3	
n-Butylbenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	56-23-5	
Chlorobenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	108-90-7	
Chloroethane	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	75-00-3	
Chloroform	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	67-66-3	
Chloromethane	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	96-12-8	
Dibromochloromethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	106-93-4	
Dibromomethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	75-43-4	
1,2-Dichloropropane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	142-28-9	
2,2-Dichloropropane	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	60-29-7	
Ethylbenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	99-87-6	
Methylene Chloride	ND	ug/kg	16.1	1	03/03/14 09:46	03/10/14 19:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	16.1	1	03/03/14 09:46	03/10/14 19:04	108-10-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-7 17-18' **Lab ID: 10259055004** Collected: 02/25/14 12:15 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Methyl-tert-butyl ether	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	1634-04-4	
Naphthalene	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	91-20-3	
n-Propylbenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	103-65-1	
Styrene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	79-34-5	
Tetrachloroethene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	127-18-4	
Tetrahydrofuran	ND	ug/kg	32.2	1	03/03/14 09:46	03/10/14 19:04	109-99-9	
Toluene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	79-00-5	
Trichloroethene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	79-01-6	
Trichlorofluoromethane	ND	ug/kg	8.1	1	03/03/14 09:46	03/10/14 19:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	108-67-8	
Vinyl chloride	ND	ug/kg	3.2	1	03/03/14 09:46	03/10/14 19:04	75-01-4	
Xylene (Total)	ND	ug/kg	9.7	1	03/03/14 09:46	03/10/14 19:04	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	105	%.	30-150	1	03/03/14 09:46	03/10/14 19:04	17060-07-0	
Toluene-d8 (S)	102	%.	30-150	1	03/03/14 09:46	03/10/14 19:04	2037-26-5	
4-Bromofluorobenzene (S)	108	%.	30-150	1	03/03/14 09:46	03/10/14 19:04	460-00-4	
9045 pH	Analytical Method: EPA 9045							
pH at 25 Degrees C	**8.0**	Std. Units	0.10	1		03/10/14 14:38		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-8 1.5-2.5" **Lab ID: 10259055005** Collected: 02/25/14 13:05 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication							
TPH-DRO (C10-C28)	ND	mg/kg	11.7	1	03/03/14 08:32	03/05/14 19:56		
Surrogates								
o-Terphenyl (S)	101	%.	30-150	1	03/03/14 08:32	03/05/14 19:56	84-15-1	
n-Triacontane (S)	94	%.	30-147	1	03/03/14 08:32	03/05/14 19:56	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030							
Gasoline Range Organics	ND	mg/kg	7.5	1	03/03/14 11:28	03/03/14 18:02		
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%.	68-135	1	03/03/14 11:28	03/03/14 18:02	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Lead	**5.5**	mg/kg	1.1	1	03/07/14 09:11	03/13/14 10:00	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**14.5**	%	0.10	1		03/03/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
Acenaphthene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	83-32-9	
Acenaphthylene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	208-96-8	
Anthracene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	120-12-7	
Benzo(a)anthracene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	56-55-3	
Benzo(a)pyrene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	101-55-3	
Butylbenzylphthalate	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	85-68-7	
Carbazole	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	59-50-7	
4-Chloroaniline	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	108-60-1	
2-Chloronaphthalene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	91-58-7	
2-Chlorophenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	7005-72-3	
Chrysene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	53-70-3	
Dibenzofuran	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	120-83-2	
Diethylphthalate	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	84-66-2	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-8 1.5-2.5" **Lab ID: 10259055005** Collected: 02/25/14 13:05 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
2,4-Dimethylphenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	105-67-9	
Dimethylphthalate	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	131-11-3	
Di-n-butylphthalate	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1990	1	03/04/14 07:00	03/06/14 11:05	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	606-20-2	
Di-n-octylphthalate	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	117-81-7	
Fluoranthene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	206-44-0	
Fluorene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	87-68-3	
Hexachlorobenzene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	118-74-1	
Hexachloroethane	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	193-39-5	
Isophorone	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	78-59-1	
1-Methylnaphthalene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	90-12-0	
2-Methylnaphthalene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	95-48-7	
3&4-Methylphenol	ND	ug/kg	772	1	03/04/14 07:00	03/06/14 11:05		
Naphthalene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	91-20-3	
2-Nitroaniline	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	88-74-4	
3-Nitroaniline	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	99-09-2	
4-Nitroaniline	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	100-01-6	
Nitrobenzene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	98-95-3	
2-Nitrophenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	88-75-5	
4-Nitrophenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	86-30-6	
Pentachlorophenol	ND	ug/kg	784	1	03/04/14 07:00	03/06/14 11:05	87-86-5	
Phenanthrene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	85-01-8	
Phenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	108-95-2	
Pyrene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	386	1	03/04/14 07:00	03/06/14 11:05	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	80	%.	30-125	1	03/04/14 07:00	03/06/14 11:05	4165-60-0	
2-Fluorobiphenyl (S)	83	%.	46-125	1	03/04/14 07:00	03/06/14 11:05	321-60-8	
Terphenyl-d14 (S)	100	%.	64-125	1	03/04/14 07:00	03/06/14 11:05	1718-51-0	
Phenol-d6 (S)	83	%.	38-125	1	03/04/14 07:00	03/06/14 11:05	13127-88-3	
2-Fluorophenol (S)	81	%.	31-125	1	03/04/14 07:00	03/06/14 11:05	367-12-4	
2,4,6-Tribromophenol (S)	86	%.	41-125	1	03/04/14 07:00	03/06/14 11:05	118-79-6	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-8 1.5-2.5" **Lab ID: 10259055005** Collected: 02/25/14 13:05 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Acetone	ND	ug/kg	16.5	1	03/03/14 09:46	03/10/14 19:23	67-64-1	
Allyl chloride	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	107-05-1	
Benzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	71-43-2	
Bromobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	108-86-1	
Bromochloromethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	74-97-5	
Bromodichloromethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	75-27-4	
Bromoform	ND	ug/kg	16.5	1	03/03/14 09:46	03/10/14 19:23	75-25-2	
Bromomethane	ND	ug/kg	16.5	1	03/03/14 09:46	03/10/14 19:23	74-83-9	
2-Butanone (MEK)	ND	ug/kg	16.5	1	03/03/14 09:46	03/10/14 19:23	78-93-3	
n-Butylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	56-23-5	
Chlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	108-90-7	
Chloroethane	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	75-00-3	
Chloroform	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	67-66-3	
Chloromethane	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	96-12-8	
Dibromochloromethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	106-93-4	
Dibromomethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	75-43-4	
1,2-Dichloropropane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	142-28-9	
2,2-Dichloropropane	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	60-29-7	
Ethylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	99-87-6	
Methylene Chloride	ND	ug/kg	16.5	1	03/03/14 09:46	03/10/14 19:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	16.5	1	03/03/14 09:46	03/10/14 19:23	108-10-1	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-8 1.5-2.5" **Lab ID: 10259055005** Collected: 02/25/14 13:05 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Methyl-tert-butyl ether	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	1634-04-4	
Naphthalene	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	91-20-3	
n-Propylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	103-65-1	
Styrene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	79-34-5	
Tetrachloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	127-18-4	
Tetrahydrofuran	ND	ug/kg	32.9	1	03/03/14 09:46	03/10/14 19:23	109-99-9	
Toluene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	79-00-5	
Trichloroethene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	79-01-6	
Trichlorofluoromethane	ND	ug/kg	8.2	1	03/03/14 09:46	03/10/14 19:23	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	108-67-8	
Vinyl chloride	ND	ug/kg	3.3	1	03/03/14 09:46	03/10/14 19:23	75-01-4	
Xylene (Total)	ND	ug/kg	9.9	1	03/03/14 09:46	03/10/14 19:23	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%.	30-150	1	03/03/14 09:46	03/10/14 19:23	17060-07-0	
Toluene-d8 (S)	98	%.	30-150	1	03/03/14 09:46	03/10/14 19:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	30-150	1	03/03/14 09:46	03/10/14 19:23	460-00-4	
9045 pH	Analytical Method: EPA 9045							
pH at 25 Degrees C	**8.8**	Std. Units	0.10	1		03/10/14 14:43		

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-8 14-15" **Lab ID: 10259055006** Collected: 02/25/14 13:25 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication							
TPH-DRO (C10-C28)	ND	mg/kg	12.6	1	03/03/14 08:32	03/05/14 19:33		
Surrogates								
o-Terphenyl (S)	107	%.	30-150	1	03/03/14 08:32	03/05/14 19:33	84-15-1	
n-Triacontane (S)	102	%.	30-147	1	03/03/14 08:32	03/05/14 19:33	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030							
Gasoline Range Organics	ND	mg/kg	10	1	03/03/14 11:28	03/03/14 21:02		
Surrogates								
a,a,a-Trifluorotoluene (S)	94	%.	68-135	1	03/03/14 11:28	03/03/14 21:02	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Lead	**12.9**	mg/kg	1.1	1	03/07/14 09:11	03/13/14 10:07	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**20.7**	%	0.10	1		03/03/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
Acenaphthene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	83-32-9	
Acenaphthylene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	208-96-8	
Anthracene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	120-12-7	
Benzo(a)anthracene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	56-55-3	
Benzo(a)pyrene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	101-55-3	
Butylbenzylphthalate	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	85-68-7	
Carbazole	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	59-50-7	
4-Chloroaniline	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	108-60-1	
2-Chloronaphthalene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	91-58-7	
2-Chlorophenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	7005-72-3	
Chrysene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	53-70-3	
Dibenzofuran	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	120-83-2	
Diethylphthalate	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	84-66-2	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-8 14-15" **Lab ID: 10259055006** Collected: 02/25/14 13:25 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
2,4-Dimethylphenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	105-67-9	
Dimethylphthalate	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	131-11-3	
Di-n-butylphthalate	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2140	1	03/04/14 07:00	03/05/14 22:19	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	606-20-2	
Di-n-octylphthalate	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	117-81-7	
Fluoranthene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	206-44-0	
Fluorene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	87-68-3	
Hexachlorobenzene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	118-74-1	
Hexachloroethane	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	193-39-5	
Isophorone	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	78-59-1	
1-Methylnaphthalene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	90-12-0	
2-Methylnaphthalene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	95-48-7	
3&4-Methylphenol	ND	ug/kg	833	1	03/04/14 07:00	03/05/14 22:19		
Naphthalene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	91-20-3	
2-Nitroaniline	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	88-74-4	
3-Nitroaniline	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	99-09-2	
4-Nitroaniline	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	100-01-6	
Nitrobenzene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	98-95-3	
2-Nitrophenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	88-75-5	
4-Nitrophenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	86-30-6	
Pentachlorophenol	ND	ug/kg	845	1	03/04/14 07:00	03/05/14 22:19	87-86-5	
Phenanthrene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	85-01-8	
Phenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	108-95-2	
Pyrene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	416	1	03/04/14 07:00	03/05/14 22:19	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	86	%.	30-125	1	03/04/14 07:00	03/05/14 22:19	4165-60-0	
2-Fluorobiphenyl (S)	87	%.	46-125	1	03/04/14 07:00	03/05/14 22:19	321-60-8	
Terphenyl-d14 (S)	93	%.	64-125	1	03/04/14 07:00	03/05/14 22:19	1718-51-0	
Phenol-d6 (S)	88	%.	38-125	1	03/04/14 07:00	03/05/14 22:19	13127-88-3	
2-Fluorophenol (S)	86	%.	31-125	1	03/04/14 07:00	03/05/14 22:19	367-12-4	
2,4,6-Tribromophenol (S)	84	%.	41-125	1	03/04/14 07:00	03/05/14 22:19	118-79-6	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-8 14-15" **Lab ID: 10259055006** Collected: 02/25/14 13:25 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Acetone	ND	ug/kg	22.9	1	03/03/14 09:47	03/10/14 19:41	67-64-1	
Allyl chloride	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	107-05-1	
Benzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	71-43-2	
Bromobenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	108-86-1	
Bromochloromethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	74-97-5	
Bromodichloromethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	75-27-4	
Bromoform	ND	ug/kg	22.9	1	03/03/14 09:47	03/10/14 19:41	75-25-2	
Bromomethane	ND	ug/kg	22.9	1	03/03/14 09:47	03/10/14 19:41	74-83-9	
2-Butanone (MEK)	ND	ug/kg	22.9	1	03/03/14 09:47	03/10/14 19:41	78-93-3	
n-Butylbenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	56-23-5	
Chlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	108-90-7	
Chloroethane	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	75-00-3	
Chloroform	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	67-66-3	
Chloromethane	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	96-12-8	
Dibromochloromethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	106-93-4	
Dibromomethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	142-28-9	
2,2-Dichloropropane	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	60-29-7	
Ethylbenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	99-87-6	
Methylene Chloride	ND	ug/kg	22.9	1	03/03/14 09:47	03/10/14 19:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	22.9	1	03/03/14 09:47	03/10/14 19:41	108-10-1	

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(612)607-1700

ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: SB-8 14-15" **Lab ID: 10259055006** Collected: 02/25/14 13:25 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Methyl-tert-butyl ether	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	1634-04-4	
Naphthalene	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	91-20-3	
n-Propylbenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	103-65-1	
Styrene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	79-34-5	
Tetrachloroethene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	127-18-4	
Tetrahydrofuran	ND	ug/kg	45.8	1	03/03/14 09:47	03/10/14 19:41	109-99-9	
Toluene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	79-00-5	
Trichloroethene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	79-01-6	
Trichlorofluoromethane	ND	ug/kg	11.4	1	03/03/14 09:47	03/10/14 19:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	108-67-8	
Vinyl chloride	ND	ug/kg	4.6	1	03/03/14 09:47	03/10/14 19:41	75-01-4	
Xylene (Total)	ND	ug/kg	13.7	1	03/03/14 09:47	03/10/14 19:41	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	107	%.	30-150	1	03/03/14 09:47	03/10/14 19:41	17060-07-0	
Toluene-d8 (S)	103	%.	30-150	1	03/03/14 09:47	03/10/14 19:41	2037-26-5	
4-Bromofluorobenzene (S)	114	%.	30-150	1	03/03/14 09:47	03/10/14 19:41	460-00-4	
9045 pH	Analytical Method: EPA 9045							
pH at 25 Degrees C	**7.9**	Std. Units	0.10	1		03/10/14 14:44		

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: DUP-002 **Lab ID: 10259055007** Collected: 02/25/14 00:00 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication							
TPH-DRO (C10-C28)	ND	mg/kg	12.4	1	03/03/14 08:32	03/05/14 16:28		
Surrogates								
o-Terphenyl (S)	107	%.	30-150	1	03/03/14 08:32	03/05/14 16:28	84-15-1	
n-Triacontane (S)	102	%.	30-147	1	03/03/14 08:32	03/05/14 16:28	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030							
Gasoline Range Organics	ND	mg/kg	10.4	1	03/03/14 11:28	03/03/14 20:40		
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%.	68-135	1	03/03/14 11:28	03/03/14 20:40	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Lead	**12.3**	mg/kg	1.0	1	03/07/14 09:11	03/13/14 10:13	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974							
Percent Moisture	**19.3**	%	0.10	1		03/03/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
Acenaphthene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	83-32-9	
Acenaphthylene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	208-96-8	
Anthracene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	120-12-7	
Benzo(a)anthracene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	56-55-3	
Benzo(a)pyrene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	101-55-3	
Butylbenzylphthalate	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	85-68-7	
Carbazole	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	59-50-7	
4-Chloroaniline	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	108-60-1	
2-Chloronaphthalene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	91-58-7	
2-Chlorophenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	7005-72-3	
Chrysene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	53-70-3	
Dibenzofuran	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	120-83-2	
Diethylphthalate	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	84-66-2	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: DUP-002 **Lab ID: 10259055007** Collected: 02/25/14 00:00 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550							
2,4-Dimethylphenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	105-67-9	
Dimethylphthalate	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	131-11-3	
Di-n-butylphthalate	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2100	1	03/04/14 07:00	03/06/14 13:27	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	606-20-2	
Di-n-octylphthalate	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	117-81-7	
Fluoranthene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	206-44-0	
Fluorene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	87-68-3	
Hexachlorobenzene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	118-74-1	
Hexachloroethane	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	193-39-5	
Isophorone	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	78-59-1	
1-Methylnaphthalene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	90-12-0	
2-Methylnaphthalene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	95-48-7	
3&4-Methylphenol	ND	ug/kg	815	1	03/04/14 07:00	03/06/14 13:27		
Naphthalene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	91-20-3	
2-Nitroaniline	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	88-74-4	
3-Nitroaniline	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	99-09-2	
4-Nitroaniline	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	100-01-6	
Nitrobenzene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	98-95-3	
2-Nitrophenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	88-75-5	
4-Nitrophenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	86-30-6	
Pentachlorophenol	ND	ug/kg	828	1	03/04/14 07:00	03/06/14 13:27	87-86-5	
Phenanthrene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	85-01-8	
Phenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	108-95-2	
Pyrene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	408	1	03/04/14 07:00	03/06/14 13:27	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	75	%.	30-125	1	03/04/14 07:00	03/06/14 13:27	4165-60-0	
2-Fluorobiphenyl (S)	79	%.	46-125	1	03/04/14 07:00	03/06/14 13:27	321-60-8	
Terphenyl-d14 (S)	92	%.	64-125	1	03/04/14 07:00	03/06/14 13:27	1718-51-0	
Phenol-d6 (S)	78	%.	38-125	1	03/04/14 07:00	03/06/14 13:27	13127-88-3	
2-Fluorophenol (S)	77	%.	31-125	1	03/04/14 07:00	03/06/14 13:27	367-12-4	
2,4,6-Tribromophenol (S)	80	%.	41-125	1	03/04/14 07:00	03/06/14 13:27	118-79-6	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: DUP-002 **Lab ID: 10259055007** Collected: 02/25/14 00:00 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Acetone	**26.0**	ug/kg	22.8	1	03/03/14 09:46	03/10/14 20:00	67-64-1	
Allyl chloride	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	107-05-1	
Benzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	71-43-2	
Bromobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	108-86-1	
Bromochloromethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	74-97-5	
Bromodichloromethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	75-27-4	
Bromoform	ND	ug/kg	22.8	1	03/03/14 09:46	03/10/14 20:00	75-25-2	
Bromomethane	ND	ug/kg	22.8	1	03/03/14 09:46	03/10/14 20:00	74-83-9	
2-Butanone (MEK)	ND	ug/kg	22.8	1	03/03/14 09:46	03/10/14 20:00	78-93-3	
n-Butylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	56-23-5	
Chlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	108-90-7	
Chloroethane	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	75-00-3	
Chloroform	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	67-66-3	
Chloromethane	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	96-12-8	
Dibromochloromethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	106-93-4	
Dibromomethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	142-28-9	
2,2-Dichloropropane	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	60-29-7	
Ethylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	99-87-6	
Methylene Chloride	ND	ug/kg	22.8	1	03/03/14 09:46	03/10/14 20:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	22.8	1	03/03/14 09:46	03/10/14 20:00	108-10-1	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: DUP-002 **Lab ID: 10259055007** Collected: 02/25/14 00:00 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Methyl-tert-butyl ether	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	1634-04-4	
Naphthalene	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	91-20-3	
n-Propylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	103-65-1	
Styrene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	79-34-5	
Tetrachloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	127-18-4	
Tetrahydrofuran	ND	ug/kg	45.6	1	03/03/14 09:46	03/10/14 20:00	109-99-9	
Toluene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	79-00-5	
Trichloroethene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	79-01-6	
Trichlorofluoromethane	ND	ug/kg	11.4	1	03/03/14 09:46	03/10/14 20:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	108-67-8	
Vinyl chloride	ND	ug/kg	4.6	1	03/03/14 09:46	03/10/14 20:00	75-01-4	
Xylene (Total)	ND	ug/kg	13.7	1	03/03/14 09:46	03/10/14 20:00	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	107	%.	30-150	1	03/03/14 09:46	03/10/14 20:00	17060-07-0	
Toluene-d8 (S)	103	%.	30-150	1	03/03/14 09:46	03/10/14 20:00	2037-26-5	
4-Bromofluorobenzene (S)	111	%.	30-150	1	03/03/14 09:46	03/10/14 20:00	460-00-4	
9045 pH	Analytical Method: EPA 9045							
pH at 25 Degrees C	**7.8**	Std. Units	0.10	1		03/10/14 14:33		

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: TRIP BLANK **Lab ID: 10259055008** Collected: 02/25/14 00:00 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Acetone	ND	ug/kg	20.0	1	03/03/14 09:46	03/10/14 17:47	67-64-1	
Allyl chloride	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	107-05-1	
Benzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	71-43-2	
Bromobenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	108-86-1	
Bromochloromethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	74-97-5	
Bromodichloromethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	75-27-4	
Bromoform	ND	ug/kg	20.0	1	03/03/14 09:46	03/10/14 17:47	75-25-2	
Bromomethane	ND	ug/kg	20.0	1	03/03/14 09:46	03/10/14 17:47	74-83-9	
2-Butanone (MEK)	ND	ug/kg	20.0	1	03/03/14 09:46	03/10/14 17:47	78-93-3	
n-Butylbenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	56-23-5	
Chlorobenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	108-90-7	
Chloroethane	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	75-00-3	
Chloroform	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	67-66-3	
Chloromethane	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	96-12-8	
Dibromochloromethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	106-93-4	
Dibromomethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	142-28-9	
2,2-Dichloropropane	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	60-29-7	
Ethylbenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	99-87-6	
Methylene Chloride	ND	ug/kg	20.0	1	03/03/14 09:46	03/10/14 17:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	20.0	1	03/03/14 09:46	03/10/14 17:47	108-10-1	

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ANALYTICAL RESULTS

Project: BP-IL SS#5482
Pace Project No.: 10259055

Sample: TRIP BLANK **Lab ID: 10259055008** Collected: 02/25/14 00:00 Received: 02/28/14 09:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A							
Methyl-tert-butyl ether	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	1634-04-4	
Naphthalene	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	91-20-3	
n-Propylbenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	103-65-1	
Styrene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	79-34-5	
Tetrachloroethene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	127-18-4	
Tetrahydrofuran	ND	ug/kg	40.0	1	03/03/14 09:46	03/10/14 17:47	109-99-9	
Toluene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	79-00-5	
Trichloroethene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	79-01-6	
Trichlorofluoromethane	ND	ug/kg	10.0	1	03/03/14 09:46	03/10/14 17:47	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	108-67-8	
Vinyl chloride	ND	ug/kg	4.0	1	03/03/14 09:46	03/10/14 17:47	75-01-4	
Xylene (Total)	ND	ug/kg	12.0	1	03/03/14 09:46	03/10/14 17:47	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%	30-150	1	03/03/14 09:46	03/10/14 17:47	17060-07-0	
Toluene-d8 (S)	100	%	30-150	1	03/03/14 09:46	03/10/14 17:47	2037-26-5	
4-Bromofluorobenzene (S)	100	%	30-150	1	03/03/14 09:46	03/10/14 17:47	460-00-4	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

QC Batch: GCV/11739 Analysis Method: EPA 8015/8021
QC Batch Method: EPA 5030 Analysis Description: 8015/8021 Solid
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

METHOD BLANK: 1632555 Matrix: Solid
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.0	03/03/14 16:55	
a,a,a-Trifluorotoluene (S)	%.	96	68-135	03/03/14 16:55	

LABORATORY CONTROL SAMPLE & LCSD: 1632556 1632557

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/kg	50	55.4	53.5	111	107	75-132	3	20	
a,a,a-Trifluorotoluene (S)	%.				118	119	68-135			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1632558 1632559

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Gasoline Range Organics	mg/kg	ND	94.5	86.3	141	111	146	125	30-150	24	20	R1
a,a,a-Trifluorotoluene (S)	%.						127	121	68-135			

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

QC Batch: MPRP/44612 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

METHOD BLANK: 1632332 Matrix: Solid
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	ND	0.95	03/13/14 08:31	

LABORATORY CONTROL SAMPLE: 1632333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	48.1	48.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1632334 1632335

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	13.8	47.3	56.8	56.2	65.3	90	91	75-125	15	30	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

QC Batch: MPRP/44616 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

SAMPLE DUPLICATE: 1632425

Parameter	Units	1230865001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.6	13.0	3	30	

SAMPLE DUPLICATE: 1632426

Parameter	Units	10259041002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.2	19.4	1	30	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

QC Batch: MSV/26501 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035 Low Level
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007, 10259055008

METHOD BLANK: 1635950 Matrix: Solid
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007, 10259055008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1,1-Trichloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1,2,2-Tetrachloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1,2-Trichloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1-Dichloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1-Dichloroethene	ug/kg	ND	4.0	03/10/14 16:48	
1,1-Dichloropropene	ug/kg	ND	4.0	03/10/14 16:48	
1,2,3-Trichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,2,3-Trichloropropane	ug/kg	ND	4.0	03/10/14 16:48	
1,2,4-Trichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,2,4-Trimethylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	03/10/14 16:48	
1,2-Dibromoethane (EDB)	ug/kg	ND	4.0	03/10/14 16:48	
1,2-Dichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,2-Dichloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,2-Dichloropropane	ug/kg	ND	4.0	03/10/14 16:48	
1,3,5-Trimethylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,3-Dichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,3-Dichloropropane	ug/kg	ND	4.0	03/10/14 16:48	
1,4-Dichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
2,2-Dichloropropane	ug/kg	ND	10.0	03/10/14 16:48	
2-Butanone (MEK)	ug/kg	ND	20.0	03/10/14 16:48	
2-Chlorotoluene	ug/kg	ND	4.0	03/10/14 16:48	
4-Chlorotoluene	ug/kg	ND	4.0	03/10/14 16:48	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	20.0	03/10/14 16:48	
Acetone	ug/kg	ND	20.0	03/10/14 16:48	
Allyl chloride	ug/kg	ND	10.0	03/10/14 16:48	
Benzene	ug/kg	ND	4.0	03/10/14 16:48	
Bromobenzene	ug/kg	ND	4.0	03/10/14 16:48	
Bromochloromethane	ug/kg	ND	4.0	03/10/14 16:48	
Bromodichloromethane	ug/kg	ND	4.0	03/10/14 16:48	
Bromoform	ug/kg	ND	20.0	03/10/14 16:48	
Bromomethane	ug/kg	ND	20.0	03/10/14 16:48	
Carbon tetrachloride	ug/kg	ND	4.0	03/10/14 16:48	
Chlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
Chloroethane	ug/kg	ND	10.0	03/10/14 16:48	
Chloroform	ug/kg	ND	4.0	03/10/14 16:48	
Chloromethane	ug/kg	ND	10.0	03/10/14 16:48	
cis-1,2-Dichloroethene	ug/kg	ND	4.0	03/10/14 16:48	
cis-1,3-Dichloropropene	ug/kg	ND	4.0	03/10/14 16:48	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

METHOD BLANK: 1635950 Matrix: Solid
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007, 10259055008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	ND	4.0	03/10/14 16:48	
Dibromomethane	ug/kg	ND	4.0	03/10/14 16:48	
Dichlorodifluoromethane	ug/kg	ND	10.0	03/10/14 16:48	
Dichlorofluoromethane	ug/kg	ND	4.0	03/10/14 16:48	
Diethyl ether (Ethyl ether)	ug/kg	ND	10.0	03/10/14 16:48	
Ethylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
Hexachloro-1,3-butadiene	ug/kg	ND	10.0	03/10/14 16:48	
Isopropylbenzene (Cumene)	ug/kg	ND	4.0	03/10/14 16:48	
Methyl-tert-butyl ether	ug/kg	ND	4.0	03/10/14 16:48	
Methylene Chloride	ug/kg	ND	20.0	03/10/14 16:48	
n-Butylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
n-Propylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
Naphthalene	ug/kg	ND	10.0	03/10/14 16:48	
p-Isopropyltoluene	ug/kg	ND	4.0	03/10/14 16:48	
sec-Butylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
Styrene	ug/kg	ND	4.0	03/10/14 16:48	
tert-Butylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
[illegible]achloroethene	ug/kg	ND	4.0	03/10/14 16:48	
[illegible]ahydrofuran	ug/kg	ND	40.0	03/10/14 16:48	
Toluene	ug/kg	ND	4.0	03/10/14 16:48	
trans-1,2-Dichloroethene	ug/kg	ND	4.0	03/10/14 16:48	
trans-1,3-Dichloropropene	ug/kg	ND	4.0	03/10/14 16:48	
Trichloroethene	ug/kg	ND	4.0	03/10/14 16:48	
Trichlorofluoromethane	ug/kg	ND	10.0	03/10/14 16:48	
Vinyl chloride	ug/kg	ND	4.0	03/10/14 16:48	
Xylene (Total)	ug/kg	ND	12.0	03/10/14 16:48	
1,2-Dichloroethane-d4 (S)	%.	96	30-150	03/10/14 16:48	
4-Bromofluorobenzene (S)	%.	100	30-150	03/10/14 16:48	
Toluene-d8 (S)	%.	102	30-150	03/10/14 16:48	

LABORATORY CONTROL SAMPLE: 1635951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	47.1	94	75-125	
1,1,1-Trichloroethane	ug/kg	50	45.6	91	71-128	
1,1,2,2-Tetrachloroethane	ug/kg	50	48.4	97	69-125	
1,1,2-Trichloroethane	ug/kg	50	47.5	95	75-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	50	43.8	88	69-137	
1,1-Dichloroethane	ug/kg	50	47.6	95	69-127	
1,1-Dichloroethene	ug/kg	50	45.1	90	71-125	
1,1-Dichloropropene	ug/kg	50	44.5	89	71-127	
1,2,3-Trichlorobenzene	ug/kg	50	48.2	96	68-126	
1,2,3-Trichloropropane	ug/kg	50	48.6	97	70-126	
1,2,4-Trichlorobenzene	ug/kg	50	46.6	93	65-130	

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

LABORATORY CONTROL SAMPLE: 1635951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	50	46.1	92	68-125	
1,2-Dibromo-3-chloropropane	ug/kg	125	125	100	63-131	
1,2-Dibromoethane (EDB)	ug/kg	50	47.9	96	75-125	
1,2-Dichlorobenzene	ug/kg	50	45.8	92	74-125	
1,2-Dichloroethane	ug/kg	50	47.7	95	70-129	
1,2-Dichloropropane	ug/kg	50	47.3	95	75-125	
1,3,5-Trimethylbenzene	ug/kg	50	45.5	91	69-125	
1,3-Dichlorobenzene	ug/kg	50	45.5	91	72-125	
1,3-Dichloropropane	ug/kg	50	47.3	95	75-125	
1,4-Dichlorobenzene	ug/kg	50	45.2	90	70-125	
2,2-Dichloropropane	ug/kg	50	46.7	93	58-135	
2-Butanone (MEK)	ug/kg	250	235	94	57-129	
2-Chlorotoluene	ug/kg	50	46.1	92	69-125	
4-Chlorotoluene	ug/kg	50	45.3	91	70-125	
4-Methyl-2-pentanone (MIBK)	ug/kg	250	244	98	62-127	
Acetone	ug/kg	250	233	93	56-144	
Allyl chloride	ug/kg	50	45.7	91	60-132	
Benzene	ug/kg	50	45.4	91	67-125	
Bromobenzene	ug/kg	50	47.4	95	72-125	
Bromochloromethane	ug/kg	50	47.9	96	74-125	
Bromodichloromethane	ug/kg	50	46.4	93	75-125	
Bromoform	ug/kg	50	48.0	96	70-125	
Bromomethane	ug/kg	50	53.9	108	60-142	
Carbon tetrachloride	ug/kg	50	45.8	92	71-126	
Chlorobenzene	ug/kg	50	45.2	90	73-125	
Chloroethane	ug/kg	50	46.6	93	64-143	
Chloroform	ug/kg	50	47.5	95	72-125	
Chloromethane	ug/kg	50	46.5	93	48-143	
cis-1,2-Dichloroethene	ug/kg	50	47.4	95	74-125	
cis-1,3-Dichloropropene	ug/kg	50	47.4	95	71-125	
Dibromochloromethane	ug/kg	50	48.3	97	74-125	
Dibromomethane	ug/kg	50	47.4	95	75-125	
Dichlorodifluoromethane	ug/kg	50	41.3	83	39-150	
Dichlorofluoromethane	ug/kg	50	46.3	93	50-150	
Diethyl ether (Ethyl ether)	ug/kg	50	48.6	97	63-129	
Ethylbenzene	ug/kg	50	44.1	88	72-125	
Hexachloro-1,3-butadiene	ug/kg	50	44.3	89	65-133	
Isopropylbenzene (Cumene)	ug/kg	50	44.2	88	72-125	
Methyl-tert-butyl ether	ug/kg	50	49.4	99	71-125	
Methylene Chloride	ug/kg	50	46.3	93	65-125	
n-Butylbenzene	ug/kg	50	44.6	89	63-132	
n-Propylbenzene	ug/kg	50	45.2	90	68-125	
Naphthalene	ug/kg	50	47.8	96	65-127	
p-Isopropyltoluene	ug/kg	50	45.8	92	68-126	
sec-Butylbenzene	ug/kg	50	45.4	91	69-125	
Styrene	ug/kg	50	48.2	96	75-125	
tert-Butylbenzene	ug/kg	50	45.9	92	70-125	
Tetrachloroethene	ug/kg	50	45.7	91	68-125	

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(612)607-1700

QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

LABORATORY CONTROL SAMPLE: 1635951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrahydrofuran	ug/kg	500	488	98	69-129	
Toluene	ug/kg	50	43.8	88	71-125	
trans-1,2-Dichloroethene	ug/kg	50	46.0	92	71-125	
trans-1,3-Dichloropropene	ug/kg	50	48.2	96	71-127	
Trichloroethene	ug/kg	50	46.6	93	75-125	
Trichlorofluoromethane	ug/kg	50	42.4	85	61-145	
Vinyl chloride	ug/kg	50	45.0	90	60-134	
Xylene (Total)	ug/kg	150	136	91	74-125	
1,2-Dichloroethane-d4 (S)	%.			103	30-150	
4-Bromofluorobenzene (S)	%.			101	30-150	
Toluene-d8 (S)	%.			100	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1635952 1635953

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	ND	51.1	51.9	41.4	40.7	81	79	39-150	2	30	
1,1,1-Trichloroethane	ug/kg	ND	51.1	51.9	42.0	40.2	82	77	49-150	4	30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	51.1	51.9	52.5	53.6	103	103	30-150	2	30	
1,1,2-Trichloroethane	ug/kg	ND	51.1	51.9	41.3	39.1	81	75	46-150	5	30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	51.1	51.9	40.5	41.1	79	79	30-150	1	30	
1,1-Dichloroethane	ug/kg	ND	51.1	51.9	45.1	42.5	88	82	56-150	6	30	
1,1-Dichloroethene	ug/kg	ND	51.1	51.9	42.7	41.0	83	79	44-150	4	30	
1,1-Dichloropropene	ug/kg	ND	51.1	51.9	34.3	30.2	67	58	48-150	13	30	
1,2,3-Trichlorobenzene	ug/kg	ND	51.1	51.9	12.6	10.8	25	21	30-150	15	30	M1
1,2,3-Trichloropropane	ug/kg	ND	51.1	51.9	55.1	54.7	108	105	33-150	8	30	
1,2,4-Trichlorobenzene	ug/kg	ND	51.1	51.9	12.6	10.2	25	20	30-150	21	30	M1
1,2,4-Trimethylbenzene	ug/kg	ND	51.1	51.9	37.9	35.0	74	67	34-150	8	30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	128	130	101	99.4	79	77	30-150	1	30	
1,2-Dibromoethane (EDB)	ug/kg	ND	51.1	51.9	37.2	33.2	73	64	55-145	11	30	
1,2-Dichlorobenzene	ug/kg	ND	51.1	51.9	26.2	22.5	51	43	30-150	15	30	
1,2-Dichloroethane	ug/kg	ND	51.1	51.9	42.6	40.7	83	79	49-150	4	30	
1,2-Dichloropropane	ug/kg	ND	51.1	51.9	41.2	38.1	81	74	59-146	8	30	
1,3,5-Trimethylbenzene	ug/kg	ND	51.1	51.9	39.9	39.4	78	76	34-150	1	30	
1,3-Dichlorobenzene	ug/kg	ND	51.1	51.9	26.5	21.9	52	42	30-150	19	30	
1,3-Dichloropropane	ug/kg	ND	51.1	51.9	40.2	36.7	79	71	57-145	9	30	
1,4-Dichlorobenzene	ug/kg	ND	51.1	51.9	25.4	20.2	50	39	30-150	23	30	
2,2-Dichloropropane	ug/kg	ND	51.1	51.9	44.0	43.2	86	83	43-150	2	30	
2-Butanone (MEK)	ug/kg	ND	256	259	188	200	74	77	43-150	6	30	
2-Chlorotoluene	ug/kg	ND	51.1	51.9	39.2	35.8	77	69	33-150	9	30	
4-Chlorotoluene	ug/kg	ND	51.1	51.9	33.4	28.0	65	54	33-150	18	30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	256	259	227	234	89	90	43-150	3	30	
Acetone	ug/kg	ND	256	259	254	281	96	105	43-150	10	30	
Allyl chloride	ug/kg	ND	51.1	51.9	44.5	38.5	87	74	46-150	14	30	
Benzene	ug/kg	ND	51.1	51.9	40.3	36.8	78	70	49-145	9	30	
Bromobenzene	ug/kg	ND	51.1	51.9	38.4	31.9	75	62	35-150	18	30	
Bromochloromethane	ug/kg	ND	51.1	51.9	43.1	41.7	84	80	60-142	3	30	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1635952 1635953

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Bromodichloromethane	ug/kg	ND	51.1	51.9	38.1	34.4	74	66	43-150	10	30	
Bromoform	ug/kg	ND	51.1	51.9	30.1	27.4	59	53	32-150	9	30	
Bromomethane	ug/kg	ND	51.1	51.9	55.0	47.3	108	91	46-150	15	30	
Carbon tetrachloride	ug/kg	ND	51.1	51.9	39.9	36.8	78	71	38-150	8	30	
Chlorobenzene	ug/kg	ND	51.1	51.9	30.3	25.5	59	49	40-150	17	30	
Chloroethane	ug/kg	ND	51.1	51.9	51.5	49.6	101	96	41-150	4	30	
Chloroform	ug/kg	ND	51.1	51.9	42.9	40.3	84	78	55-148	6	30	
Chloromethane	ug/kg	ND	51.1	51.9	48.8	49.1	95	95	30-150	.8	30	
cis-1,2-Dichloroethene	ug/kg	ND	51.1	51.9	43.6	41.1	85	79	61-142	6	30	
cis-1,3-Dichloropropene	ug/kg	ND	51.1	51.9	36.8	31.2	72	60	47-148	16	30	
Dibromochloromethane	ug/kg	ND	51.1	51.9	38.5	34.4	75	66	36-150	11	30	
Dibromomethane	ug/kg	ND	51.1	51.9	39.4	37.1	77	71	60-140	6	30	
Dichlorodifluoromethane	ug/kg	ND	51.1	51.9	42.6	41.9	83	81	30-150	2	30	
Dichlorofluoromethane	ug/kg	ND	51.1	51.9	47.4	46.5	93	90	34-150	2	30	
Diethyl ether (Ethyl ether)	ug/kg	ND	51.1	51.9	47.9	48.3	94	93	56-143	.9	30	
Ethylbenzene	ug/kg	ND	51.1	51.9	30.2	25.6	59	49	42-148	17	30	
Hexachloro-1,3-butadiene	ug/kg	ND	51.1	51.9	22.1	24.3	43	47	30-150	9	30	
Isopropylbenzene (Cumene)	ug/kg	ND	51.1	51.9	27.8	25.9	54	50	30-150	7	30	
Methyl-tert-butyl ether	ug/kg	ND	51.1	51.9	47.7	49.1	93	95	58-147	3	30	
Methylene Chloride	ug/kg	ND	51.1	51.9	45.9	46.6	90	90	53-135	1	30	
n-Butylbenzene	ug/kg	ND	51.1	51.9	21.6	19.6	42	38	30-150	10	30	
n-Propylbenzene	ug/kg	ND	51.1	51.9	35.7	31.7	70	61	31-150	12	30	
Naphthalene	ug/kg	ND	51.1	51.9	16.9	13.8	33	26	30-150	20	30	M1
p-Isopropyltoluene	ug/kg	ND	51.1	51.9	32.4	31.4	63	61	30-150	3	30	
sec-Butylbenzene	ug/kg	ND	51.1	51.9	34.7	35.5	68	68	30-150	2	30	
Styrene	ug/kg	ND	51.1	51.9	28.2	22.7	55	44	33-150	22	30	
tert-Butylbenzene	ug/kg	ND	51.1	51.9	47.0	49.3	92	95	30-150	5	30	
Tetrachloroethene	ug/kg	ND	51.1	51.9	31.4	27.1	61	52	38-150	15	30	
Tetrahydrofuran	ug/kg	ND	511	519	516	514	101	99	51-150	.4	30	
Toluene	ug/kg	ND	51.1	51.9	40.1	34.8	76	65	44-150	14	30	
trans-1,2-Dichloroethene	ug/kg	ND	51.1	51.9	44.3	41.7	87	81	59-142	6	30	
trans-1,3-Dichloropropene	ug/kg	ND	51.1	51.9	39.2	33.8	77	65	45-150	15	30	
Trichloroethene	ug/kg	ND	51.1	51.9	34.9	30.7	68	59	48-150	13	30	
Trichlorofluoromethane	ug/kg	ND	51.1	51.9	37.8	36.8	74	71	32-150	3	30	
Vinyl chloride	ug/kg	ND	51.1	51.9	46.2	45.8	90	88	34-150	.9	30	
Xylene (Total)	ug/kg	ND	154	156	91.2	79.8	59	51	42-150	13	30	
1,2-Dichloroethane-d4 (S)	%.						97	99	30-150			IS
4-Bromofluorobenzene (S)	%.						134	137	30-150			
Toluene-d8 (S)	%.						113	114	30-150			

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

QC Batch: OEXT/24492 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3550 Sonication Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

METHOD BLANK: 1632388 Matrix: Solid
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C28)	mg/kg	ND	10.0	03/05/14 13:46	
n-Triacontane (S)	%.	99	30-147	03/05/14 13:46	
o-Terphenyl (S)	%.	104	30-150	03/05/14 13:46	

LABORATORY CONTROL SAMPLE: 1632389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C28)	mg/kg	50	54.4	109	70-125	
n-Triacontane (S)	%.			102	30-147	
o-Terphenyl (S)	%.			109	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1632390 1632391

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO (C10-C28)	mg/kg	ND	61.9	61.9	66.1	65.5	92	91	30-150	1	30	
n-Triacontane (S)	%.						99	94	30-147			
o-Terphenyl (S)	%.						102	97	30-150			

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

QC Batch: OEXT/24489 Analysis Method: EPA 8270
QC Batch Method: EPA 3550 Analysis Description: 8270 Solid MSSV
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

METHOD BLANK: 1632345 Matrix: Solid
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	03/06/14 08:16	
1,2-Dichlorobenzene	ug/kg	ND	330	03/06/14 08:16	
1,2-Diphenylhydrazine	ug/kg	ND	330	03/06/14 08:16	
1,3-Dichlorobenzene	ug/kg	ND	330	03/06/14 08:16	
1,4-Dichlorobenzene	ug/kg	ND	330	03/06/14 08:16	
1-Methylnaphthalene	ug/kg	ND	330	03/06/14 08:16	
2,4,5-Trichlorophenol	ug/kg	ND	330	03/06/14 08:16	
2,4,6-Trichlorophenol	ug/kg	ND	330	03/06/14 08:16	
2,4-Dichlorophenol	ug/kg	ND	330	03/06/14 08:16	
2,4-Dimethylphenol	ug/kg	ND	330	03/06/14 08:16	
2,4-Dinitrophenol	ug/kg	ND	330	03/06/14 08:16	
2,4-Dinitrotoluene	ug/kg	ND	330	03/06/14 08:16	
2,6-Dinitrotoluene	ug/kg	ND	330	03/06/14 08:16	
2-Chloronaphthalene	ug/kg	ND	330	03/06/14 08:16	
2-Chlorophenol	ug/kg	ND	330	03/06/14 08:16	
2-Methylnaphthalene	ug/kg	ND	330	03/06/14 08:16	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	03/06/14 08:16	
2-Nitroaniline	ug/kg	ND	330	03/06/14 08:16	
2-Nitrophenol	ug/kg	ND	330	03/06/14 08:16	
3&4-Methylphenol	ug/kg	ND	660	03/06/14 08:16	
3,3'-Dichlorobenzidine	ug/kg	ND	330	03/06/14 08:16	
3-Nitroaniline	ug/kg	ND	330	03/06/14 08:16	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	03/06/14 08:16	
4-Bromophenylphenyl ether	ug/kg	ND	330	03/06/14 08:16	
4-Chloro-3-methylphenol	ug/kg	ND	330	03/06/14 08:16	
4-Chloroaniline	ug/kg	ND	330	03/06/14 08:16	
4-Chlorophenylphenyl ether	ug/kg	ND	330	03/06/14 08:16	
4-Nitroaniline	ug/kg	ND	330	03/06/14 08:16	
4-Nitrophenol	ug/kg	ND	330	03/06/14 08:16	
Acenaphthene	ug/kg	ND	330	03/06/14 08:16	
Acenaphthylene	ug/kg	ND	330	03/06/14 08:16	
Anthracene	ug/kg	ND	330	03/06/14 08:16	
Benzo(a)anthracene	ug/kg	ND	330	03/06/14 08:16	
Benzo(a)pyrene	ug/kg	ND	330	03/06/14 08:16	
Benzo(b)fluoranthene	ug/kg	ND	330	03/06/14 08:16	
Benzo(g,h,i)perylene	ug/kg	ND	330	03/06/14 08:16	
Benzo(k)fluoranthene	ug/kg	ND	330	03/06/14 08:16	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	03/06/14 08:16	
bis(2-Chloroethyl) ether	ug/kg	ND	330	03/06/14 08:16	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	03/06/14 08:16	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	03/06/14 08:16	
Butylbenzylphthalate	ug/kg	ND	330	03/06/14 08:16	
Carbazole	ug/kg	ND	330	03/06/14 08:16	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

METHOD BLANK: 1632345 Matrix: Solid
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chrysene	ug/kg	ND	330	03/06/14 08:16	
Di-n-butylphthalate	ug/kg	ND	330	03/06/14 08:16	
Di-n-octylphthalate	ug/kg	ND	330	03/06/14 08:16	
Dibenz(a,h)anthracene	ug/kg	ND	330	03/06/14 08:16	
Dibenzofuran	ug/kg	ND	330	03/06/14 08:16	
Diethylphthalate	ug/kg	ND	330	03/06/14 08:16	
Dimethylphthalate	ug/kg	ND	330	03/06/14 08:16	
Fluoranthene	ug/kg	ND	330	03/06/14 08:16	
Fluorene	ug/kg	ND	330	03/06/14 08:16	
Hexachloro-1,3-butadiene	ug/kg	ND	330	03/06/14 08:16	
Hexachlorobenzene	ug/kg	ND	330	03/06/14 08:16	
Hexachloroethane	ug/kg	ND	330	03/06/14 08:16	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	03/06/14 08:16	
Isophorone	ug/kg	ND	330	03/06/14 08:16	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	03/06/14 08:16	
N-Nitrosodimethylamine	ug/kg	ND	330	03/06/14 08:16	
N-Nitrosodiphenylamine	ug/kg	ND	330	03/06/14 08:16	
Naphthalene	ug/kg	ND	330	03/06/14 08:16	
[illegible]benzene	ug/kg	ND	330	03/06/14 08:16	
Pentachlorophenol	ug/kg	ND	670	03/06/14 08:16	
Phenanthrene	ug/kg	ND	330	03/06/14 08:16	
Phenol	ug/kg	ND	330	03/06/14 08:16	
Pyrene	ug/kg	ND	330	03/06/14 08:16	
2,4,6-Tribromophenol (S)	%.	71	41-125	03/06/14 08:16	
2-Fluorobiphenyl (S)	%.	67	46-125	03/06/14 08:16	
2-Fluorophenol (S)	%.	63	31-125	03/06/14 08:16	
Nitrobenzene-d5 (S)	%.	63	30-125	03/06/14 08:16	
Phenol-d6 (S)	%.	65	38-125	03/06/14 08:16	
Terphenyl-d14 (S)	%.	79	64-125	03/06/14 08:16	

LABORATORY CONTROL SAMPLE: 1632346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1350	81	40-125	
1,2-Dichlorobenzene	ug/kg	1670	1310	79	32-125	
1,2-Diphenylhydrazine	ug/kg	1670	1400	84	63-125	
1,3-Dichlorobenzene	ug/kg	1670	1290	78	31-125	
1,4-Dichlorobenzene	ug/kg	1670	1300	78	30-125	
1-Methylnaphthalene	ug/kg	1670	1370	82	54-125	
2,4,5-Trichlorophenol	ug/kg	1670	1500	90	63-125	
2,4,6-Trichlorophenol	ug/kg	1670	1500	90	62-125	
2,4-Dichlorophenol	ug/kg	1670	1410	85	56-125	
2,4-Dimethylphenol	ug/kg	1670	1200	72	55-125	
2,4-Dinitrophenol	ug/kg	1670	1130	68	30-129	
2,4-Dinitrotoluene	ug/kg	1670	1480	89	61-125	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

LABORATORY CONTROL SAMPLE: 1632346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,6-Dinitrotoluene	ug/kg	1670	1430	86	63-125	
2-Chloronaphthalene	ug/kg	1670	1430	86	60-125	
2-Chlorophenol	ug/kg	1670	1350	81	37-125	
2-Methylnaphthalene	ug/kg	1670	1380	83	56-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1350	81	45-125	
2-Nitroaniline	ug/kg	1670	1430	86	63-125	
2-Nitrophenol	ug/kg	1670	1400	84	47-125	
3&4-Methylphenol	ug/kg	1670	1380	83	50-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1190	71	49-125	
3-Nitroaniline	ug/kg	1670	1030	62	48-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1260J	75	39-125	
4-Bromophenylphenyl ether	ug/kg	1670	1480	89	65-125	
4-Chloro-3-methylphenol	ug/kg	1670	1440	86	63-125	
4-Chloroaniline	ug/kg	1670	688	41	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1460	88	66-125	
4-Nitroaniline	ug/kg	1670	1350	81	60-125	
4-Nitrophenol	ug/kg	1670	1350	81	59-125	
Acenaphthene	ug/kg	1670	1410	84	62-125	
Acenaphthylene	ug/kg	1670	1430	86	64-125	
Anthracene	ug/kg	1670	1420	85	66-125	
Benzo(a)anthracene	ug/kg	1670	1470	88	66-125	
Benzo(a)pyrene	ug/kg	1670	1500	90	66-125	
Benzo(b)fluoranthene	ug/kg	1670	1520	91	65-125	
Benzo(g,h,i)perylene	ug/kg	1670	1550	93	67-125	
Benzo(k)fluoranthene	ug/kg	1670	1500	90	66-125	
bis(2-Chloroethoxy)methane	ug/kg	1670	1360	81	51-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1230	74	30-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1220	73	30-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1450	87	68-125	
Butylbenzylphthalate	ug/kg	1670	1510	91	67-125	
Carbazole	ug/kg	1670	1450	87	63-125	
Chrysene	ug/kg	1670	1460	88	67-125	
Di-n-butylphthalate	ug/kg	1670	1450	87	68-125	
Di-n-octylphthalate	ug/kg	1670	1460	87	65-125	
Dibenz(a,h)anthracene	ug/kg	1670	1550	93	67-125	
Dibenzofuran	ug/kg	1670	1460	88	64-125	
Diethylphthalate	ug/kg	1670	1420	85	65-125	
Dimethylphthalate	ug/kg	1670	1460	88	66-125	
Fluoranthene	ug/kg	1670	1480	89	66-125	
Fluorene	ug/kg	1670	1440	87	64-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1380	83	33-125	
Hexachlorobenzene	ug/kg	1670	1470	88	65-125	
Hexachloroethane	ug/kg	1670	1260	76	30-125	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1550	93	67-125	
Isophorone	ug/kg	1670	1330	80	56-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1280	77	45-125	
N-Nitrosodimethylamine	ug/kg	1670	1150	69	30-125	
N-Nitrosodiphenylamine	ug/kg	1670	1460	87	65-125	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

LABORATORY CONTROL SAMPLE: 1632346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	1670	1330	80	44-125	
Nitrobenzene	ug/kg	1670	1290	78	39-125	
Pentachlorophenol	ug/kg	1670	1390	83	45-125	
Phenanthrene	ug/kg	1670	1420	85	66-125	
Phenol	ug/kg	1670	1340	80	44-125	
Pyrene	ug/kg	1670	1480	89	67-125	
2,4,6-Tribromophenol (S)	%.			108	41-125	
2-Fluorobiphenyl (S)	%.			92	46-125	
2-Fluorophenol (S)	%.			87	31-125	
Nitrobenzene-d5 (S)	%.			80	30-125	
Phenol-d6 (S)	%.			87	38-125	
Terphenyl-d14 (S)	%.			98	64-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1632347 1632348

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	2060	2070	1520	1620	74	79	38-125	7	30	
1,2-Dichlorobenzene	ug/kg	ND	2060	2070	1460	1530	71	74	42-125	4	30	
1,2-Diphenylhydrazine	ug/kg	ND	2060	2070	1620	1720	79	83	58-125	6	30	
1,3-Dichlorobenzene	ug/kg	ND	2060	2070	1420	1500	69	73	32-125	5	30	
1,4-Dichlorobenzene	ug/kg	ND	2060	2070	1460	1510	71	73	31-125	3	30	
1-Methylnaphthalene	ug/kg	ND	2060	2070	1530	1630	75	79	56-125	6	30	
2,4,5-Trichlorophenol	ug/kg	ND	2060	2070	1580	1750	77	85	56-125	10	30	
2,4,6-Trichlorophenol	ug/kg	ND	2060	2070	1620	1750	79	85	57-125	8	30	
2,4-Dichlorophenol	ug/kg	ND	2060	2070	1630	1660	79	80	55-125	2	30	
2,4-Dimethylphenol	ug/kg	ND	2060	2070	1490	1540	72	75	55-125	4	30	
2,4-Dinitrophenol	ug/kg	ND	2060	2070	1310	1280	64	62	30-127	2	30	
2,4-Dinitrotoluene	ug/kg	ND	2060	2070	1640	1790	80	87	36-129	9	30	
2,6-Dinitrotoluene	ug/kg	ND	2060	2070	1640	1740	80	85	37-127	6	30	
2-Chloronaphthalene	ug/kg	ND	2060	2070	1630	1670	79	81	56-125	2	30	
2-Chlorophenol	ug/kg	ND	2060	2070	1480	1580	72	77	46-125	7	30	
2-Methylnaphthalene	ug/kg	ND	2060	2070	1570	1650	76	80	54-125	5	30	
2-Methylphenol(o-Cresol)	ug/kg	ND	2060	2070	1570	1600	77	78	53-125	2	30	
2-Nitroaniline	ug/kg	ND	2060	2070	1630	1770	79	86	59-125	8	30	
2-Nitrophenol	ug/kg	ND	2060	2070	1530	1620	74	78	30-125	6	30	
3&4-Methylphenol	ug/kg	ND	2060	2070	1550	1610	75	78	54-125	4	30	
3,3'-Dichlorobenzidine	ug/kg	ND	2060	2070	1040	1090	51	53	30-148	5	30	
3-Nitroaniline	ug/kg	ND	2060	2070	1140	1220	56	59	31-125	7	30	
4,6-Dinitro-2-methylphenol	ug/kg	ND	2060	2070	1490J	1500J	73	73	30-150		30	
4-Bromophenylphenyl ether	ug/kg	ND	2060	2070	1640	1730	80	84	59-125	5	30	
4-Chloro-3-methylphenol	ug/kg	ND	2060	2070	1590	1750	77	85	62-125	10	30	
4-Chloroaniline	ug/kg	ND	2060	2070	825	835	40	40	30-125	1	30	
4-Chlorophenylphenyl ether	ug/kg	ND	2060	2070	1600	1750	78	85	61-125	9	30	
4-Nitroaniline	ug/kg	ND	2060	2070	1490	1580	72	77	53-125	6	30	
4-Nitrophenol	ug/kg	ND	2060	2070	1610	1730	78	84	45-125	7	30	
Acenaphthene	ug/kg	ND	2060	2070	1680	1780	82	86	58-125	5	30	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1632347 1632348

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthylene	ug/kg	ND	2060	2070	1620	1710	79	83	59-125	5	30	
Anthracene	ug/kg	ND	2060	2070	1620	1680	79	82	54-125	4	30	
Benzo(a)anthracene	ug/kg	ND	2060	2070	1630	1720	79	83	61-125	5	30	
Benzo(a)pyrene	ug/kg	ND	2060	2070	1660	1760	81	85	41-129	6	30	
Benzo(b)fluoranthene	ug/kg	ND	2060	2070	1720	1750	84	85	43-129	1	30	
Benzo(g,h,i)perylene	ug/kg	ND	2060	2070	1640	1760	80	85	55-125	7	30	
Benzo(k)fluoranthene	ug/kg	ND	2060	2070	1610	1820	78	88	53-125	12	30	
bis(2-Chloroethoxy)methane	ug/kg	ND	2060	2070	1550	1630	75	79	52-125	5	30	
bis(2-Chloroethyl) ether	ug/kg	ND	2060	2070	1440	1510	70	73	30-125	5	30	
bis(2-Chloroisopropyl) ether	ug/kg	ND	2060	2070	1420	1530	69	74	30-127	8	30	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	2060	2070	1610	1740	78	84	67-125	8	30	
Butylbenzylphthalate	ug/kg	ND	2060	2070	1630	1720	79	83	63-125	5	30	
Carbazole	ug/kg	ND	2060	2070	1610	1720	78	83	58-125	7	30	
Chrysene	ug/kg	ND	2060	2070	1640	1710	80	83	39-133	4	30	
Di-n-butylphthalate	ug/kg	ND	2060	2070	1570	1670	76	81	64-125	6	30	
Di-n-octylphthalate	ug/kg	ND	2060	2070	1580	1650	77	80	64-125	4	30	
Dibenz(a,h)anthracene	ug/kg	ND	2060	2070	1650	1740	80	85	58-125	5	30	
Dibenzofuran	ug/kg	ND	2060	2070	1610	1710	78	83	60-125	6	30	
Diethylphthalate	ug/kg	ND	2060	2070	1630	1710	79	83	63-125	5	30	
Dimethylphthalate	ug/kg	ND	2060	2070	1600	1740	78	84	63-125	8	30	
Fluoranthene	ug/kg	ND	2060	2070	1610	1710	78	83	54-125	6	30	
Fluorene	ug/kg	ND	2060	2070	1650	1740	80	85	60-125	6	30	
Hexachloro-1,3-butadiene	ug/kg	ND	2060	2070	1480	1570	72	76	35-125	6	30	
Hexachlorobenzene	ug/kg	ND	2060	2070	1630	1690	79	82	58-125	4	30	
Hexachloroethane	ug/kg	ND	2060	2070	1420	1540	69	75	30-125	8	30	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	2060	2070	1650	1740	80	84	51-125	6	30	
Isophorone	ug/kg	ND	2060	2070	1560	1640	76	79	54-125	5	30	
N-Nitroso-di-n-propylamine	ug/kg	ND	2060	2070	1490	1560	72	76	51-125	5	30	
N-Nitrosodimethylamine	ug/kg	ND	2060	2070	1580	1610	77	78	30-130	2	30	
N-Nitrosodiphenylamine	ug/kg	ND	2060	2070	1610	1700	78	82	61-125	5	30	
Naphthalene	ug/kg	ND	2060	2070	1510	1610	73	78	46-125	6	30	
Nitrobenzene	ug/kg	ND	2060	2070	1480	1610	72	78	41-125	9	30	
Pentachlorophenol	ug/kg	ND	2060	2070	1530	1550	75	75	30-136	1	30	
Phenanthrene	ug/kg	ND	2060	2070	1600	1660	78	81	55-125	4	30	
Phenol	ug/kg	ND	2060	2070	1500	1630	73	79	49-125	8	30	
Pyrene	ug/kg	ND	2060	2070	1650	1750	80	85	43-129	6	30	
2,4,6-Tribromophenol (S)	%.						85	94	41-125			
2-Fluorobiphenyl (S)	%.						80	81	46-125			
2-Fluorophenol (S)	%.						74	79	31-125			
Nitrobenzene-d5 (S)	%.						76	79	30-125			
Phenol-d6 (S)	%.						77	80	38-125			
Terphenyl-d14 (S)	%.						83	86	64-125			

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259055

QC Batch: WET/34603 Analysis Method: EPA 9045
QC Batch Method: EPA 9045 Analysis Description: 9045 pH
Associated Lab Samples: 10259055001, 10259055002, 10259055003, 10259055004, 10259055005, 10259055006, 10259055007

LABORATORY CONTROL SAMPLE: 1635852

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	5	5.0	100	98-102	

SAMPLE DUPLICATE: 1635853

Parameter	Units	10256148009 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.6	7.6	.3	3	

SAMPLE DUPLICATE: 1635854

Parameter	Units	10259041002 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.0	8.0	.9	3	

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QUALIFIERS

Project: BP-IL SS#5482
Pace Project No.: 10259055

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The NELAC Institute.

ANALYTE QUALIFIERS

IS	The internal standard recovery associated with this result exceeds the lower control limit. The reported result should be considered an estimated value.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BP-IL SS#5482
Pace Project No.: 10259055

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10259055001	SB-6 1.5-3'	EPA 3550 Sonication	OEXT/24492	EPA 8015 Modified	GCSV/12910
10259055002	SB-6 15-16.5'	EPA 3550 Sonication	OEXT/24492	EPA 8015 Modified	GCSV/12910
10259055003	SB-7 1.5-3'	EPA 3550 Sonication	OEXT/24492	EPA 8015 Modified	GCSV/12910
10259055004	SB-7 17-18'	EPA 3550 Sonication	OEXT/24492	EPA 8015 Modified	GCSV/12910
10259055005	SB-8 1.5-2.5"	EPA 3550 Sonication	OEXT/24492	EPA 8015 Modified	GCSV/12910
10259055006	SB-8 14-15"	EPA 3550 Sonication	OEXT/24492	EPA 8015 Modified	GCSV/12910
10259055007	DUP-002	EPA 3550 Sonication	OEXT/24492	EPA 8015 Modified	GCSV/12910
10259055001	SB-6 1.5-3'	EPA 5030	GCV/11739	EPA 8015/8021	GCV/11740
10259055002	SB-6 15-16.5'	EPA 5030	GCV/11739	EPA 8015/8021	GCV/11740
10259055003	SB-7 1.5-3'	EPA 5030	GCV/11739	EPA 8015/8021	GCV/11740
10259055004	SB-7 17-18'	EPA 5030	GCV/11739	EPA 8015/8021	GCV/11740
10259055005	SB-8 1.5-2.5"	EPA 5030	GCV/11739	EPA 8015/8021	GCV/11740
10259055006	SB-8 14-15"	EPA 5030	GCV/11739	EPA 8015/8021	GCV/11740
10259055007	DUP-002	EPA 5030	GCV/11739	EPA 8015/8021	GCV/11740
10259055001	SB-6 1.5-3'	EPA 3050	MPRP/44612	EPA 6010	ICP/18873
10259055002	SB-6 15-16.5'	EPA 3050	MPRP/44612	EPA 6010	ICP/18873
10259055003	SB-7 1.5-3'	EPA 3050	MPRP/44612	EPA 6010	ICP/18873
10259055004	SB-7 17-18'	EPA 3050	MPRP/44612	EPA 6010	ICP/18873
10259055005	SB-8 1.5-2.5"	EPA 3050	MPRP/44612	EPA 6010	ICP/18873
10259055006	SB-8 14-15"	EPA 3050	MPRP/44612	EPA 6010	ICP/18873
10259055007	DUP-002	EPA 3050	MPRP/44612	EPA 6010	ICP/18873
10259055001	SB-6 1.5-3'	ASTM D2974	MPRP/44616		
10259055002	SB-6 15-16.5'	ASTM D2974	MPRP/44616		
10259055003	SB-7 1.5-3'	ASTM D2974	MPRP/44616		
10259055004	SB-7 17-18'	ASTM D2974	MPRP/44616		
10259055005	SB-8 1.5-2.5"	ASTM D2974	MPRP/44616		
10259055006	SB-8 14-15"	ASTM D2974	MPRP/44616		
10259055007	DUP-002	ASTM D2974	MPRP/44616		
10259055001	SB-6 1.5-3'	EPA 3550	OEXT/24489	EPA 8270	MSSV/10357
10259055002	SB-6 15-16.5'	EPA 3550	OEXT/24489	EPA 8270	MSSV/10357
10259055003	SB-7 1.5-3'	EPA 3550	OEXT/24489	EPA 8270	MSSV/10357
10259055004	SB-7 17-18'	EPA 3550	OEXT/24489	EPA 8270	MSSV/10357
10259055005	SB-8 1.5-2.5"	EPA 3550	OEXT/24489	EPA 8270	MSSV/10357
10259055006	SB-8 14-15"	EPA 3550	OEXT/24489	EPA 8270	MSSV/10357
10259055007	DUP-002	EPA 3550	OEXT/24489	EPA 8270	MSSV/10357
10259055001	SB-6 1.5-3'	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259055002	SB-6 15-16.5'	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259055003	SB-7 1.5-3'	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259055004	SB-7 17-18'	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259055005	SB-8 1.5-2.5"	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259055006	SB-8 14-15"	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259055007	DUP-002	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259055008	TRIP BLANK	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259055001	SB-6 1.5-3'	EPA 9045	WET/34603		
10259055002	SB-6 15-16.5'	EPA 9045	WET/34603		
10259055003	SB-7 1.5-3'	EPA 9045	WET/34603		

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BP-IL SS#5482
Pace Project No.: 10259055

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10259055004	SB-7 17-18'	EPA 9045	WET/34603		
10259055005	SB-8 1.5-2.5"	EPA 9045	WET/34603		
10259055006	SB-8 14-15"	EPA 9045	WET/34603		
10259055007	DUP-002	EPA 9045	WET/34603		

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10259055

Laboratory Management Program Lab - Chain of Custody Record

BP Site Node Path: BP>USA>IL>LOSALLE>05482>ASSESSMENT FIELD WORK>AOC SITE INV[illegible]ATION

Req Due Date (mm/dd/yy): 03/16/14 Rush [illegible]: Yes X No ___

BP Facility No: 5482

Lab Work Order Number: 1025[illegible]055

Lab Name:	Pace Analytical	Facility Address:	E 2153rd Road/Route 11	Consultant/Contractor:	Stantec
Lab Address:	1700 Elm St SE, Minneapolis, MN 55414	City, State, ZIP Code:	Wedron, IL 61350	Consultant/Contractor Project No:	18263000
Lab PM:	Lori Castille	Lead Regulatory Agency:	USEPA	Address:	446 Eisenhower Lane North, Lombard, IL 60148
Lab Phone:	612-607-1700	California Global ID No.:		Consultant/Contractor PM:	Luisa Price
Lab Shipping Accnt:	1797 5692 7	Enfos Proposal No:	008x9-0004	Phone: 630.792.1680	Email: luisa.price@stantec.com
Lab Bottle Order No:	69417; 69429	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email EDD To:	and to lab.enfosdoc@bp.com
Other Info:		Stage: 4_Execute (40)	Activity: Project Spend (80)	Invoice To:	BP X Contractor ___

BP Project Manager (PM): Mary Wojciechowski

BP PM Phone: 630.420.5149

BP PM Email: mary.wojciechowski@bp.com

Report Type & QC Level: Standard ___ Full Data Package X

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	SBS	Requested Analyses: VOC 8260	TPH as GAS 8015	TPH DIESEL 8015	SVOC 8270C	TOTAL Pb 6010	Comments (Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.)
	SB-6 1.5-3'	2-25-14	1026	X			N	9	3				4	2	X	X	X	X	X	001
	SB-6 15-16.5'		1055	X				9	3				4	2	X	X	X	X	X	002
	SB-7 1.5-3'		1140	X				9	3				4	2	X	X	X	X	X	003
	SB-7 17-18'		1215	X				9	3				4	2	X	X	X	X	X	004
	SB-8 1.5-2.5'		1305	X				9	3				4	2	X	X	X	X	X	005
	SB-8 14-15'		1325	X				9	3				4	2	X	X	X	X	X	006
	DUP-002		—	X				9	3				4	2	X	X	X	X	X	007
	TRIP BLANKS	—	—		X			4					2	2	X					008

		Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name:	Craig A. Varland	[signature] - STANTEC	2-27-14	1700	[signature] Pace	8/28/14	09:3[illegible]
Sampler's Company:	Stantec						
Shipment Method:	Fed Ex Ship Date: 2-27-14						
Shipment Tracking No:	5753 4197 6216; 5753 4197 6227						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 1.1, 0.4 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

bp rm

Laboratory Management Program Lam - Chain of Custody Record

BP Site Node Path: BP>USA>IL>LaSalle>5482>ASSESSMENT FIELD WORK>AOC SITE INVESTIGATION

Req Due Date (mm/dd/yy): 03/16/14 Rush TAT: Yes X No ___

BP Facility No: 5482

Lab Work Order Number:

Lab Name:	Pace Analytical	Facility Address:	E 2153rd Road/Route 11	Consultant/Contractor:	Stantec
Lab Address:	1700 Elm St SE, Minneapolis, MN 55414	City, State, ZIP Code:	Wedron, IL 61350	Consultant/Contractor Project No:	182630000
Lab PM:	Lori Castille	Lead Regulatory Agency:	USEPA	Address:	446 Eisenhower Lane North, Lombard, IL 60148
Lab Phone:	612-607-1700	California Global ID No.:		Consultant/Contractor PM:	Luisa Price
Lab Shipping Accnt:	1797 5692 7	Enfos Proposal No:	008x9-0004	Phone: 630.792.1680	Email: luisa.price@stantec.com
Lab Bottle Order No:	69417; 69429	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email EDD To:	and to lab.enfosdoc@bp.com
Other Info:		Stage: 4_Execute (40)	Activity: Project Spend (80)	Invoice To:	BP X Contractor ___

BP Project Manager (PM): Mary Wojciechowski

BP PM Phone: 630.420.5149

BP PM Email: mary.wojciechowski@bp.com

Report Type & QC Level: Standard ___ Full Data Package X

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Container	Unpreserved	H2SO4	HNO3	HCl	Methanol	SBS	Requested Analyses: VOC 8260	TPH as GAS 8015	TPH DIESEL 8015	SVOC 8270C	TOTAL Pb 6010						Comments (Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.)
	SB-6 1.5-3'	2-25-14	1026	X			N	9	3				4	2	X	X	X	X	X						
	SB-6 15-16.5'		1055	X				9	3				4	2	X	X	X	X	X						
	SB-7 1.5-3'		1140	X				9	3				4	2	X	X	X	X	X						
	SB-7 17-18'		1215	X				9	3				4	2	X	X	X	X	X						
	SB-8 1.5-2.5'		1305	X				9	3				4	2	X	X	X	X	X						
	SB-8 14-15'		1325	X				9	3				4	2	X	X	X	X	X						
	DUP-002		—	X				9	3				4	2	X	X	X	X	X						
	TRIP BLANKS	—	—		X			4					2	2	X										

		Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name:	Craig A. Varland	[signature] - STANTEC	2-27-14	1700			
Sampler's Company:	Stantec						
Shipment Method:	Fed Ex Ship Date: 2-27-14						
Shipment Tracking No:	5753 4197 6216; 5753 4197 6227						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: ___ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP Remediat[illegible]anagement COC - Effective Date: starting August 16, 2011.

BP [illegible] COC Rev. 8, 24 June 2

10259055

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form - ESI**	Document Revised: 28Jan2013 Page 1 of 1
	Document No.: **F-MN-L-210-rev.09**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt – ESI [illegible]h Specs

Client Name: BP - Stantec - IL

Project #: WO#: 10259055

10259055

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 5753 4197 6216, 6227

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No **Seals Intact?** ☒ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☒ Yes ☐ No

Thermom. Used: ☒ B88A912167504 ☐ 80512447 ☐ 72337080 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 1.5, 0.8 **Cooler Temp Corrected (°C):** 1.1, 0.4 **Biological Tissue Frozen?** ☐ Yes ☐ No

Temp should be above freezing to 6°C **Correction Factor:** SUB 0.4 **Date and Initials of Person Examining Contents:** 2-28-14 [illegible]

				Comments:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume (triple volume provided for MS/MSD)?	☐ Yes	☐ No	☒ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
[illegible]ainers Intact?	☒ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: SL	☒ Yes	☐ No	☐ N/A	12.
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12)	☐ Yes	☐ No	☒ N/A	Sample #
Per method, VOA pH is checked after analysis				Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☒ N/A	14.
3 Trip Blanks Present?	☒ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present?	☒ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if purchased): 010614-3(meOH) 100713-3(BS)				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Temp Log: Temp must be maintained at <6°C during login, record temp every 20 mins		
Opened Time: 11:20 1.5, 0.8 Temp: 1.1, 0.4	Corrected Temp:	per Rochelle 3/5 add pH to all samples
Time: 11:30 put in cooler		
Time: Temp:	Corrected Temp:	

Project Manager Review: [signature] **Date:** 3/3/14

N[illegible] Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Fraction: 8015-DRO

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 288068 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 0305R017.D Lab Sample ID: 1632388
GC Column: DB-5MS ID: 0.25 (mm) Time Analyzed: 13:46
Instrument ID: 10GCS8

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BLANK for HBN 288068 [OEXT/244	1632388	0305R017.D	13:46
02	LCS for HBN 288068 [OEXT/24492	1632389	0305R018.D	14:09
03	SB-9 12-14'(1631878MS)	1632390-MS	0305R021.D	15:18
04	SB-9 12-14'(1631878MSD)	1632391-MSD	0305R022.D	15:41
05	SB-6 15-16.5'	10259055002	0305R023.D	16:04
06	DUP-002	10259055007	0305R024.D	16:28
07	SB-6 1.5-3'	10259055001	0305R025.D	16:51
08	SB-7 1.5-3'	10259055003	0305R030.D	18:47
09	SB-7 17-18'	10259055004	0305R031.D	19:10
10	SB-8 14-15"	10259055006	0305R032.D	19:33
11	SB-8 1.5-2.5"	10259055005	0305R033.D	19:56

Pace Analytical Services, Inc.
1700 E[illegible]eet - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259055

QB Batch: OEXT / 24492
Method(s): EPA 3550 Sonication / EPA 8015

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10259055001		SB-6 1.5-3'	1	99		103									
1632388	BLANK		1	99		104									
10259055002		SB-6 15-16.5'	1	106		105									
1632389	LCS		1	102		109									
10259055003		SB-7 1.5-3'	1	100		104									
1632390	MS		1	99		102									
10259055004		SB-7 17-18'	1	106		103									
1632391	MSD		1	94		97									
10259055005		SB-8 1.5-2.5"	1	94		101									
10259055006		SB-8 14-15"	1	102		107									
10259055007		DUP-002	1	102		107									
		QC Limits:		30-147		30-150									
		Sample Limits:		30-147		30-150									

Sur 1: n-Triacontane (S)
Sur 2: o-Terphenyl (S)

REPORT OF LABORATORY ANALYSIS

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Instrument Run Log

Instrument: 10GCS8 Method: 8015/NWTPH/AK102/103 Misc. Prep. Info: Surrogate Lot: See extract sheet
Column: DB-5MS 0.25mm HydrogenTune Standard: NA ISTD Lot: NA Cal. Standard: 10528-027

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
0305R001.D	MECL2 RINSE	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 07:35	MT	
0305R002.D	MECL2 RINSE	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 07:58	MT	
0305R003.D	MECL2 RINSE	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 08:21	MT	
0305R004.D	RTMARK 10328-153	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 08:45	MT	
0305R005.D	D/MOICAL1		Ical	1		GCS8AKNW8015-030514R	3/05/14 09:08	MT	All levels 10528-027
0305R006.D	D/MOICAL2		Ical	1		GCS8AKNW8015-030514R	3/05/14 09:31	MT	
0305R007.D	D/MOICAL3		Ical	1		GCS8AKNW8015-030514R	3/05/14 09:54	MT	passes 40% rule
0305R008.D	D/MOICAL4		Ical	1		GCS8AKNW8015-030514R	3/05/14 10:17	MT	passes 40% rule
0305R009.D	D/MOICAL5		Ical	1		GCS8AKNW8015-030514R	3/05/14 10:40	MT	passes 40% rule
0305R010.D	D/MOICAL6		Ical	1		GCS8AKNW8015-030514R	3/05/14 11:04	MT	
0305R011.D	D/MOICAL7		Ical	1		GCS8AKNW8015-030514R	3/05/14 11:27	MT	
0305R012.D	D/MOICAL8		Ical	1		GCS8AKNW8015-030514R	3/05/14 11:50	MT	
0305R013.D	D/MOICAL9		Ical	1		GCS8AKNW8015-030514R	3/05/14 12:13	MT	
0305R014.D	D/MOICAL10		Ical	1		GCS8AKNW8015-030514R	3/05/14 12:36	MT	ICAL passes
0305R015.D	MECL2 RINSE	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 12:59	MT	rinse ran for carryover, carryover present.
0305R016.D	D/MOICV		CCal	1		GCS8AKNW8015-030514R	3/05/14 13:22	MT	passes all 15%
0305R017.D	1632388	SOLID	Blank	1		GCS8AKNW8015-030514R	3/05/14 13:46	MT	ok
0305R018.D	1632389	SOLID	LCS	1		GCS8AKNW8015-030514R	3/05/14 14:09	MT	pass
0305R019.D	10258121002	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 14:32	MT	
0305R020.D	10259041002	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 14:55	MT	
0305R021.D	1632390	SOLID	MS	1		GCS8AKNW8015-030514R	3/05/14 15:18	MT	
0305R022.D	1632391	SOLID	MSD	1		GCS8AKNW8015-030514R	3/05/14 15:41	MT	
0305R023.D	10259055002	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 16:04	MT	
0305R024.D	10259055007	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 16:28	MT	
0305R025.D	10259055001	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 16:51	MT	
0305R026.D	10259041001	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 17:14	MT	
0305R027.D	D/MO7 10528-020		CCal	1		GCS8AKNW8015-030514R	3/05/14 17:37	MT	pass 8015
0305R028.D	1632388	SOLID	Blank	1		GCS8AKNW8015-030514R	3/05/14 18:01	MT	ok
0305R029.D	10258999001	SOLID	Sample	20		GCS8AKNW8015-030514R	3/05/14 18:24	MT	
0305R030.D	10259055003	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 18:47	MT	
0305R031.D	10259055004	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 19:10	MT	
0305R032.D	10259055006	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 19:33	MT	
0305R033.D	10259055005	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 19:56	MT	
0305R034.D	D/MO7 10528-020		CCal	1		GCS8AKNW8015-030514R	3/05/14 20:19	MT	pass 8015/NW
0305R035.D	1632638	SOLID	Blank	1		GCS8AKNW8015-030514R	3/05/14 20:43	MT	ok
0305R036.D	1632639	SOLID	LCS	1		GCS8AKNW8015-030514R	3/05/14 21:06	MT	pass
0305R037.D	10258597003	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 21:29	MT	surr's low
0305R038.D	1632640	SOLID	MS	1		GCS8AKNW8015-030514R	3/05/14 21:52	MT	
0305R039.D	1632641	SOLID	MSD	1		GCS8AKNW8015-030514R	3/05/14 22:15	MT	
0305R040.D	D/MO7 10528-020		CCal	1		GCS8AKNW8015-030514R	3/05/14 22:39	MT	pass NW

Pace Analytical™

Instrument Run Log

Instrument: 10GCS8 Method: 8015/NWTPH/AK102/103 Misc. Prep. Info: Surrogate Lot: See extract sheet
Column: DB-5MS 0.25mm HydrogenTune Standard: NA ISTD Lot: NA Cal. Standard: 10528-027

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments

Check Maintenance Items Performed:

x Changed septum	Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10GCS8.I\030514RLL.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: MT

Report Date: 03/05/2014 13:52
Reviewed By/Date:

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAR-2014 09:08
End Cal Date : 05-MAR-2014 12:36
Quant Method : ESTD
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Last Edit : 05-Mar-2014 13:42 10gcs8.i

Calibration File Names:
Level 1: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R005.d
Level 2: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R006.d
Level 3: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R007.d
Level 4: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R008.d
Level 5: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R009.d
Level 6: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R010.d
Level 7: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R011.d
Level 8: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R012.d
Level 9: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R013.d
Level 10: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R014.d

Compound	6.0000 Level 1	10.0000 Level 2	25.0000 Level 3	50.0000 Level 4	100.0000 Level 5	250.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	500.0000 Level 7	1000.0000 Level 8	2000.0000 Level 9	4000.0000 Level 10							
S 1 DRO by AK 102	1222812	1564354	2302123	3535080	5828784	12362195					
	23371921	45607763	95868241	204157857			QUAD	-25.26407	0.00002	-1.452e-01	0.99995
S 4 Residual Range Organics AK103	425447	553385	793240	1420317	2525253	5578314					
	11073935	21800816	44313144	93502939			QUAD	-16.61745	0.00005	-5.093e-01	1.00000
S 5 TPH-DRO (C10-C28)	1283528	1654368	2459003	3853467	6423849	13727647					
	26060136	51171886	108109532	229512672			QUAD	-21.83078	0.00002	-1.115e-01	0.99993

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAR-2014 09:08
End Cal Date : 05-MAR-2014 12:36
Quant Method : ESTD
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Last Edit : 05-Mar-2014 13:42 10gcs8.i

Compound	6.0000 Level 1	10.0000 Level 2	25.0000 Level 3	50.0000 Level 4	100.0000 Level 5	250.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	500.0000 Level 7	1000.0000 Level 8	2000.0000 Level 9	4000.0000 Level 10							
\$ 6 Motor Oil Range (C24-C36)	443053	574881	822608	1486290	2648617	5853491					
	11616686	22907863	46840333	98651105			QUAD	-15.39890	0.00005	-4.554e-01	1.00000
\$ 7 DRO (C12-C24)	825044	1065889	1660974	2738379	4694494	10291210					
	19788324	38870475	82359076	178742732			QUAD	-18.29416	0.00003	-2.283e-01	0.99995
\$ 8 Diesel Fuel Range	825044	1065889	1660974	2738379	4694494	10291210					
	19788324	38870475	82359076	178742732			QUAD	-18.29416	0.00003	-2.283e-01	0.99995
\$ 9 ORO (C24-C40)	834868	961465	1290912	2101889	3515110	7513433					
	14561250	27094880	52906643	114323573			QUAD	-39.49793	0.00004	-4.212e-01	0.99978
\$ 10 Motor Oil Range	834868	961465	1290912	2101889	3515110	7513433					
	14561250	27094880	52906643	114323573			QUAD	-39.49793	0.00004	-4.212e-01	0.99978
\$ 2 o-Terphenyl (S)	25084	42895	105133	237121	456676	1090121					
	2180779	4574739	9707361	20893356			LINR	3.61445	51869		0.99825
\$ 3 n-Triacontane (S)	19091	32336	78027	175290	344161	815604					
	1652499	3272748	6783709	14264426			LINR	1.98277	35437		0.99924

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAR-2014 09:08
End Cal Date : 05-MAR-2014 12:36
Quant Method : ESTD
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Last Edit : 05-Mar-2014 13:42 10gcs8.i

Average %RSD Results.
Calculated Average %RSD = 0.000e+000
Maximun Average %RSD = 25.00000
* Passed Average %RSD Test.

Curve	Formula	Units
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R005.d
Lab Smp Id: D/MOICAL1
Inj Date : 05-MAR-2014 09:08
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL1
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			1222812	6.00000	2.44 (M)
S	2 o-Terphenyl (S)	6.736	6.736	0.000	25084	0.60000	4.10 (M)
S	3 n-Triacontane (S)	9.768	9.768	0.000	19091	0.60000	2.52 (M)
S	4 Residual Range Organics AK103	8.240-11.450			425447	6.00000	3.68 (M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			1283528	6.00000	3.91 (M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			443053	6.00000	4.62 (M)
S	7 DRO (C12-C24)	4.240-8.210			825044	6.00000	3.60 (M)
S	8 Diesel Fuel Range	4.240-8.210			825044	6.00000	3.60 (M)
S	9 ORO (C24-C40)	8.220-13.070			834868	6.00000	(M)
S	10 Motor Oil Range	8.220-13.070			834868	6.00000	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R005.D

Page 1

Date : 05-MAR-2014 09:08

Client ID:

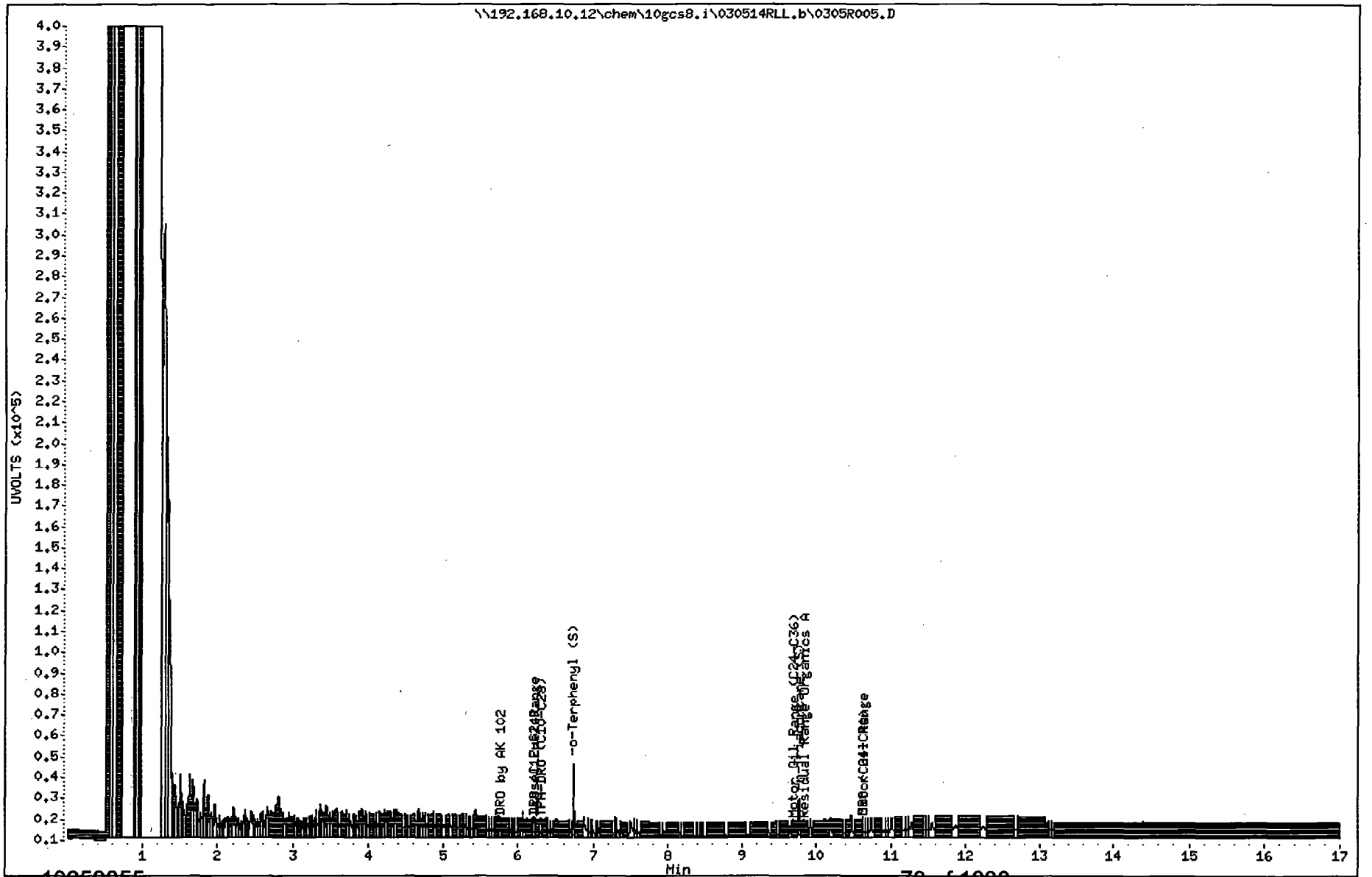
Instrument: 10gcs8.i

Sample Info: D/MOICAL1

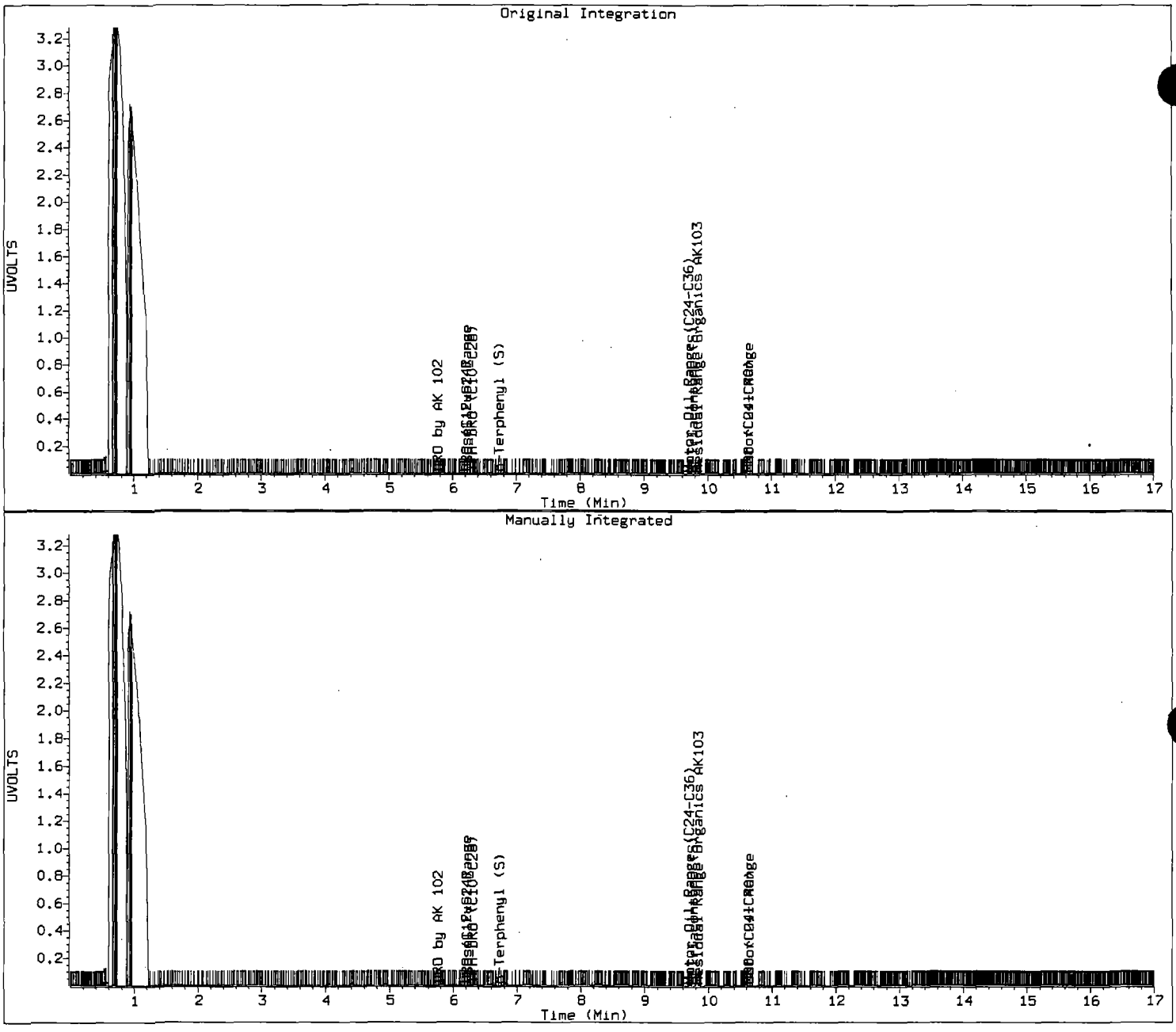
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL1



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	425447	425447	
DRO by AK 102	1222812	1222812	
TPH-DRO (C10-C28)	1283528	1283528	
Motor Oil Range (C24-C36)	443053	443053	
DRO (C12-C24)	825044	825044	
ORO (C24-C40)	834868	834868	
Diesel Fuel Range	825044	825044	
Motor Oil Range	834868	834868	

3-Heptenyl (3)	25064	25064

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R006.d
Lab Smp Id: D/MOICAL2
Inj Date : 05-MAR-2014 09:31
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL2
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 09:08 Cal File: 0305R005.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			1564354	10.0000	10.2(M)
$	2 o-Terphenyl (S)	6.696	6.696	0.000	42895	1.00000	4.44(M)
$	3 n-Triacontane (S)	9.599	9.599	0.000	32336	1.00000	2.90(M)
S	4 Residual Range Organics AK103	8.240-11.450			553385	10.0000	9.78(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			1654368	10.0000	11.3(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			574881	10.0000	10.6(M)
S	7 DRO (C12-C24)	4.240-8.210			1065889	10.0000	9.98(M)
S	8 Diesel Fuel Range	4.240-8.210			1065889	10.0000	9.98(M)
S	9 ORO (C24-C40)	8.220-13.070			961465	10.0000	(M)
S	10 Motor Oil Range	8.220-13.070			961465	10.0000	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R006.D

Page 1

Date : 05-MAR-2014 09:31

Client ID:

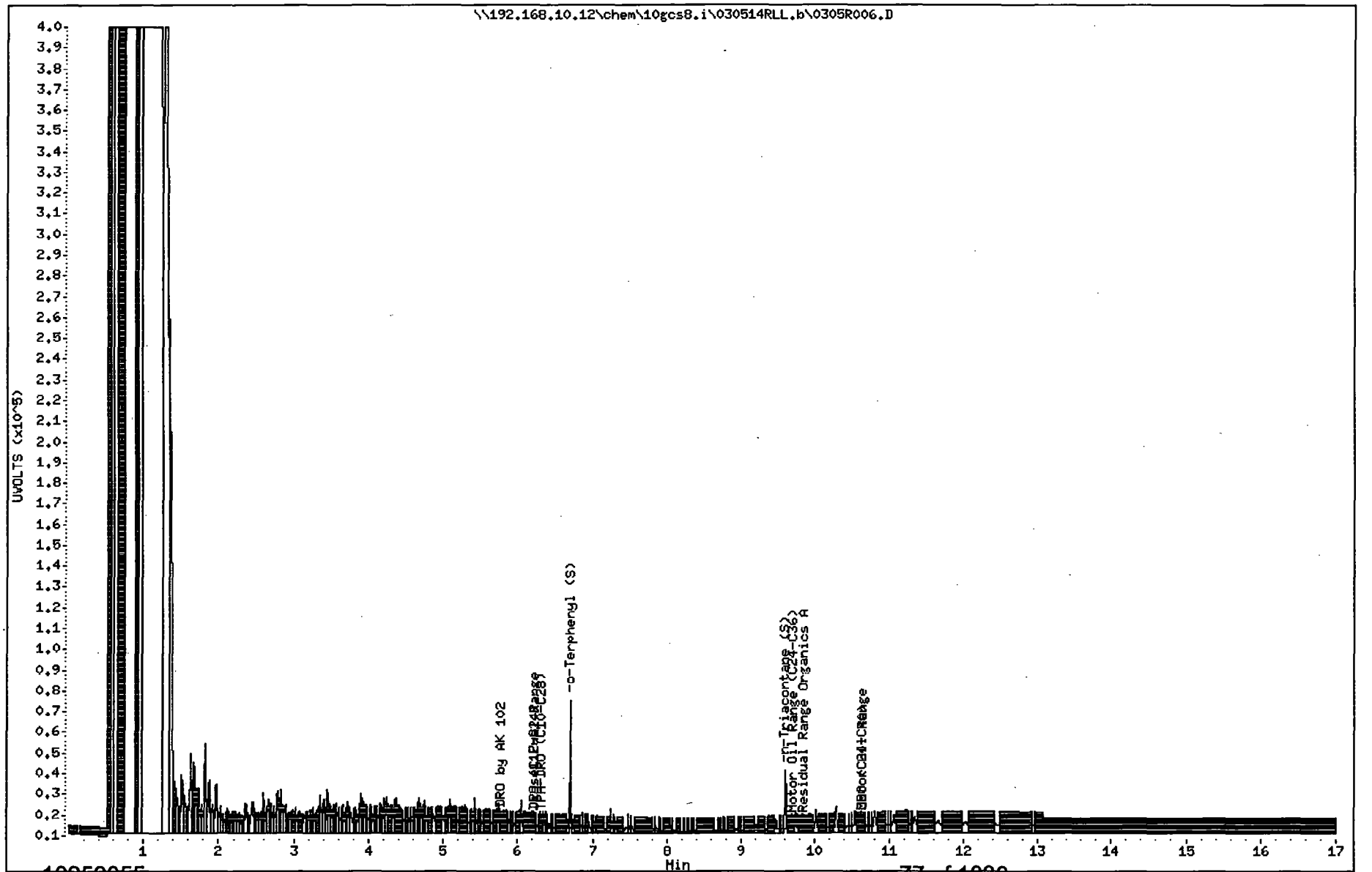
Instrument: 10gcs8.i

Sample Info: D/MOICAL2

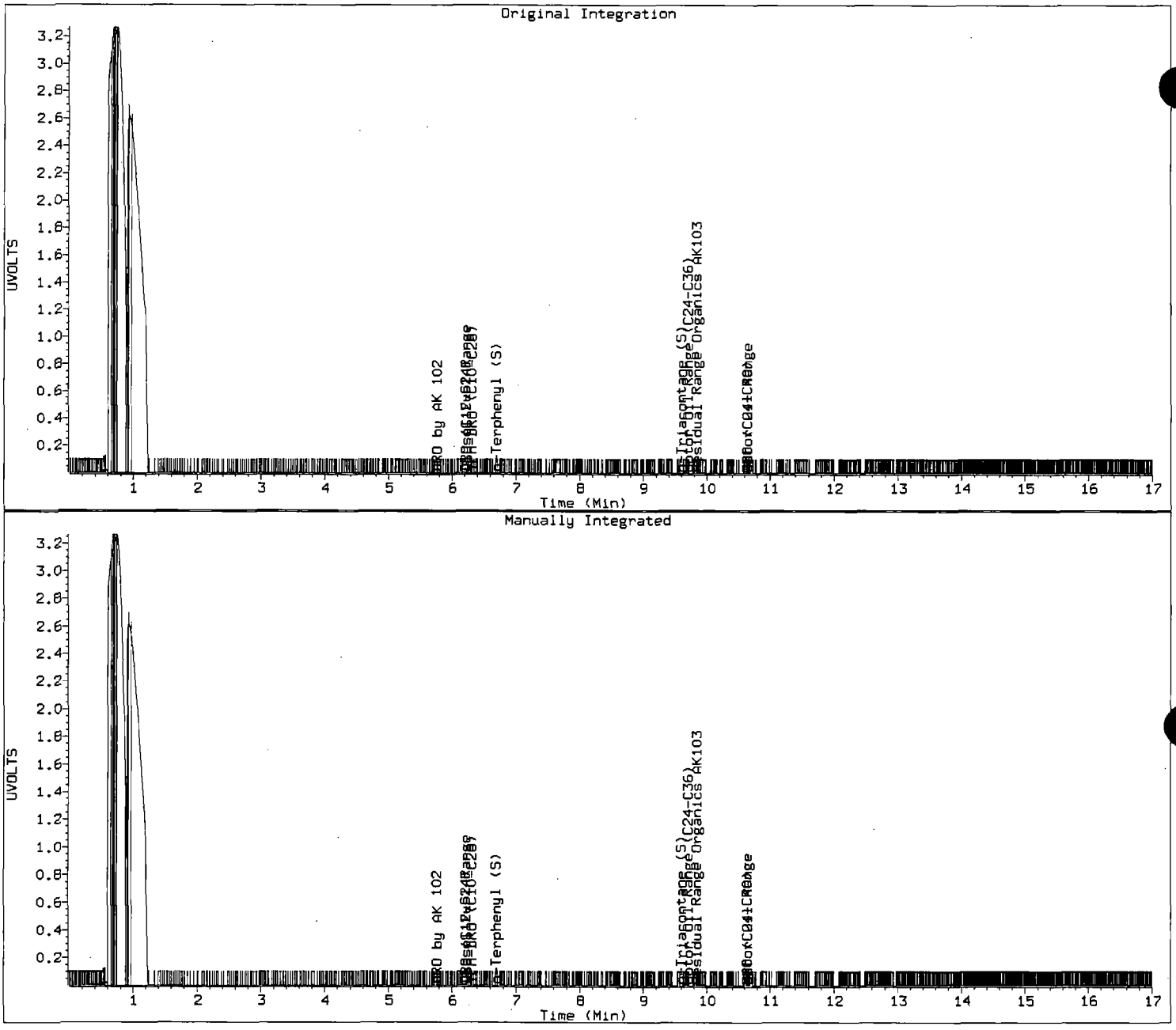
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 09:31
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL2



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	553385	553385	
DRO by AK 102	1564354	1564354	
TPH-DRO (C10-C28)	1654368	1654368	
Motor Oil Range (C24-C36)	574881	574881	
DRO (C12-C24)	1065889	1065889	
ORO (C24-C40)	961465	961465	
Diesel Fuel Range	1065889	1065889	
Motor Oil Range	961465	961465	

3-Terphenyl (3)	42695	42695

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R007.d
Lab Smp Id: D/MOICAL3
Inj Date : 05-MAR-2014 09:54
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL3
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 09:31 Cal File: 0305R006.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			2302123	25.0000	26.8(M)
$	2 o-Terphenyl (S)	6.704	6.704	0.000	105133	2.50000	5.64(M)
$	3 n-Triacontane (S)	9.691	9.691	0.000	78027	2.50000	4.18(M)
S	4 Residual Range Organics AK103	8.240-11.450			793240	25.0000	21.2(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			2459003	25.0000	27.4(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			822608	25.0000	21.7(M)
S	7 DRO (C12-C24)	4.240-8.210			1660974	25.0000	25.7(M)
S	8 Diesel Fuel Range	4.240-8.210			1660974	25.0000	25.7(M)
S	9 ORO (C24-C40)	8.220-13.070			1290912	25.0000	12.3(M)
S	10 Motor Oil Range	8.220-13.070			1290912	25.0000	12.3(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R007.D

Page 1

Date : 05-MAR-2014 09:54

Client ID:

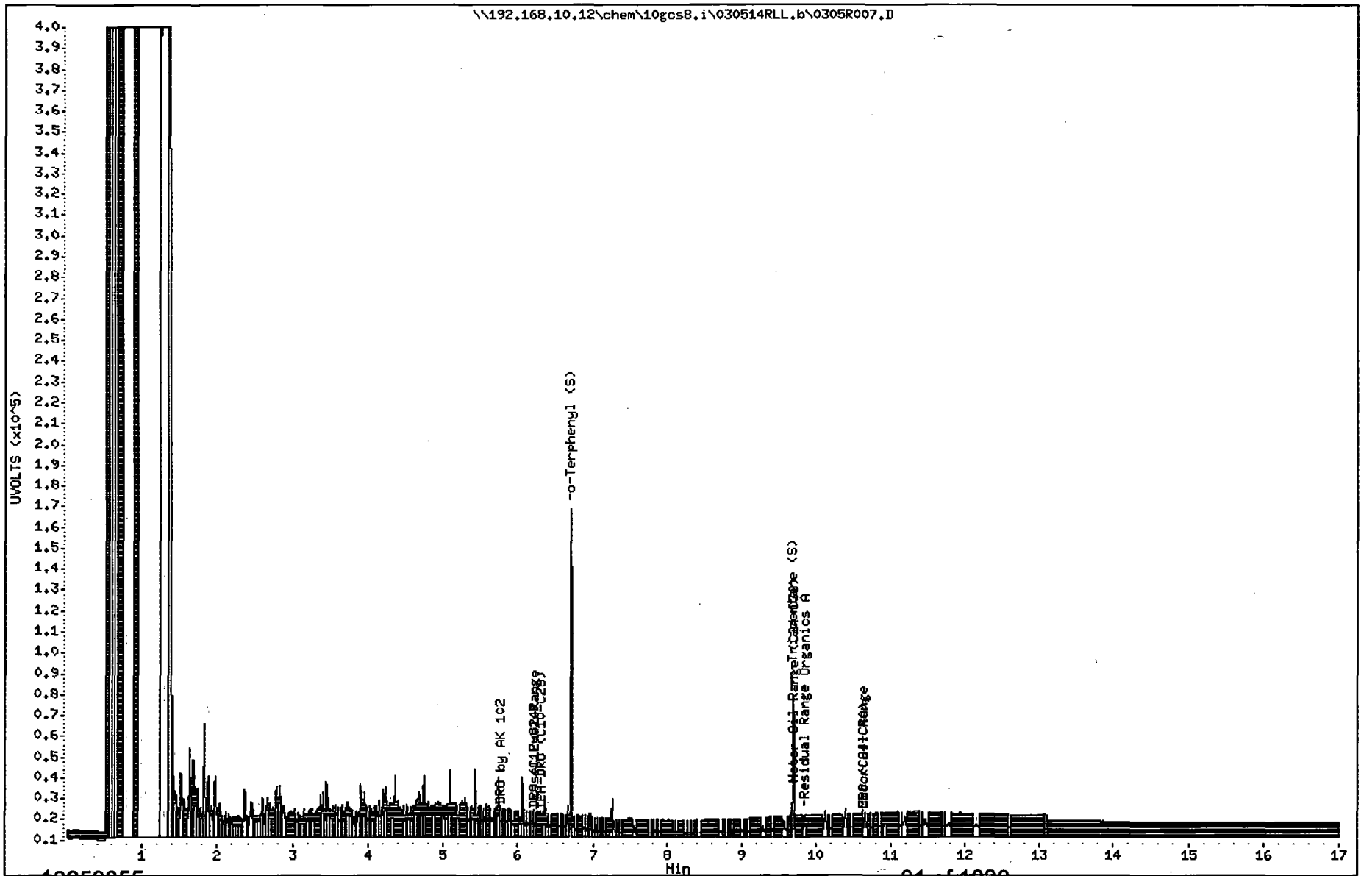
Instrument: 10gcs8.i

Sample Info: D/MOICAL3

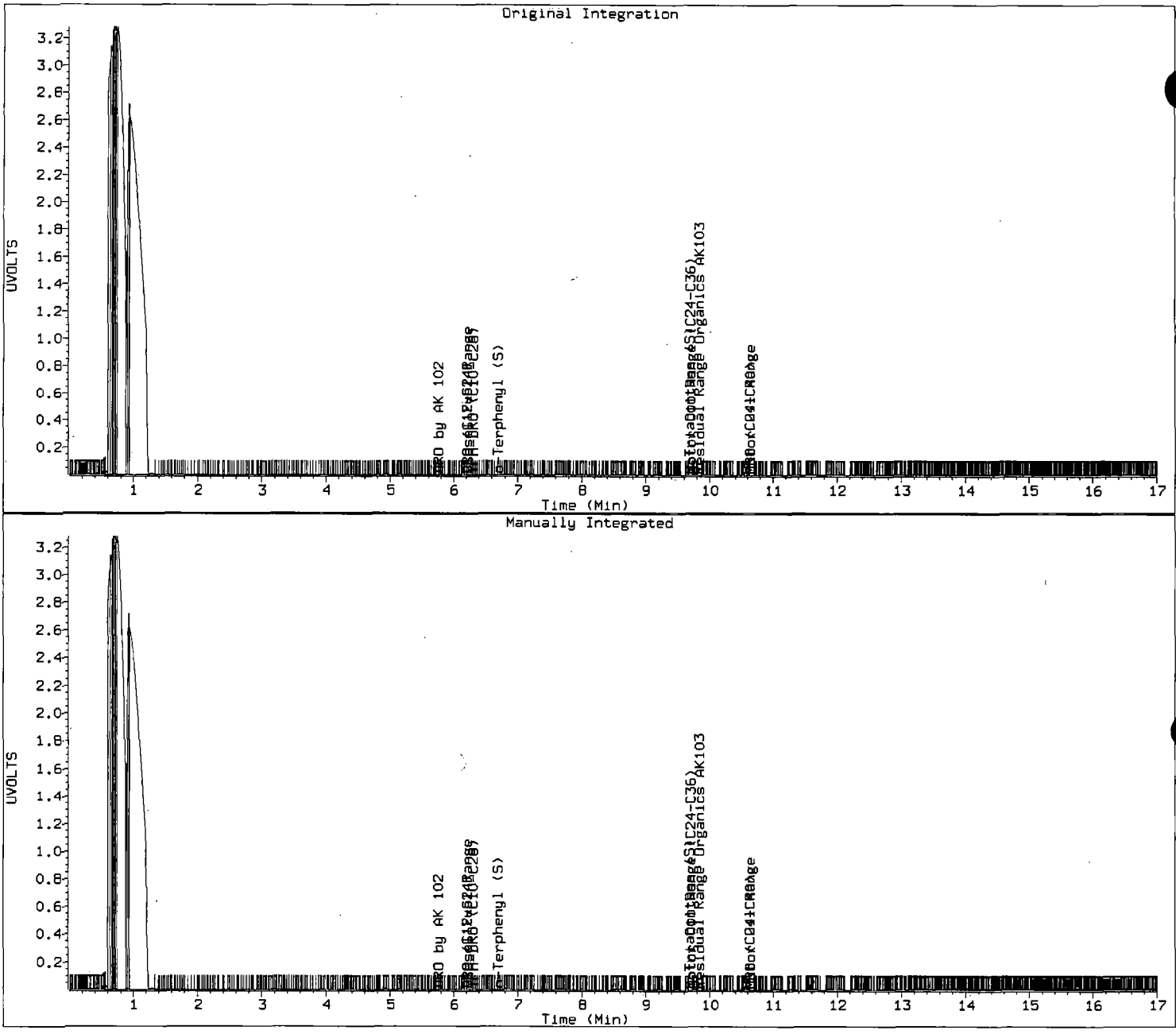
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL3



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	793240	793240	
DRO by AK 102	2302123	2302123	
TPH-DRO (C10-C28)	2459003	2459003	
Motor Oil Range (C24-C36)	822608	822608	
DRO (C12-C24)	1660974	1660974	
ORO (C24-C40)	1290912	1290912	
Diesel Fuel Range	1660974	1660974	
Motor Oil Range	1290912	1290912	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R008.d
Lab Smp Id: D/MOICAL4
Inj Date : 05-MAR-2014 10:17
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL4
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 09:54 Cal File: 0305R007.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			3535080	50.0000	54.7(M)
$	2 o-Terphenyl (S)	6.710	6.710	0.000	237121	5.00000	8.19(M)
$	3 n-Triacontane (S)	9.681	9.681	0.000	175290	5.00000	6.93(M)
S	4 Residual Range Organics AK103	8.240-11.450			1420317	50.0000	51.1(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			3853467	50.0000	55.3(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			1486290	50.0000	51.7(M)
S	7 DRO (C12-C24)	4.240-8.210			2738379	50.0000	54.2(M)
S	8 Diesel Fuel Range	4.240-8.210			2738379	50.0000	54.2(M)
S	9 ORO (C24-C40)	8.220-13.070			2101889	50.0000	44.8(M)
S	10 Motor Oil Range	8.220-13.070			2101889	50.0000	44.8(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R008.D

Page 1

Date : 05-MAR-2014 10:17

Client ID:

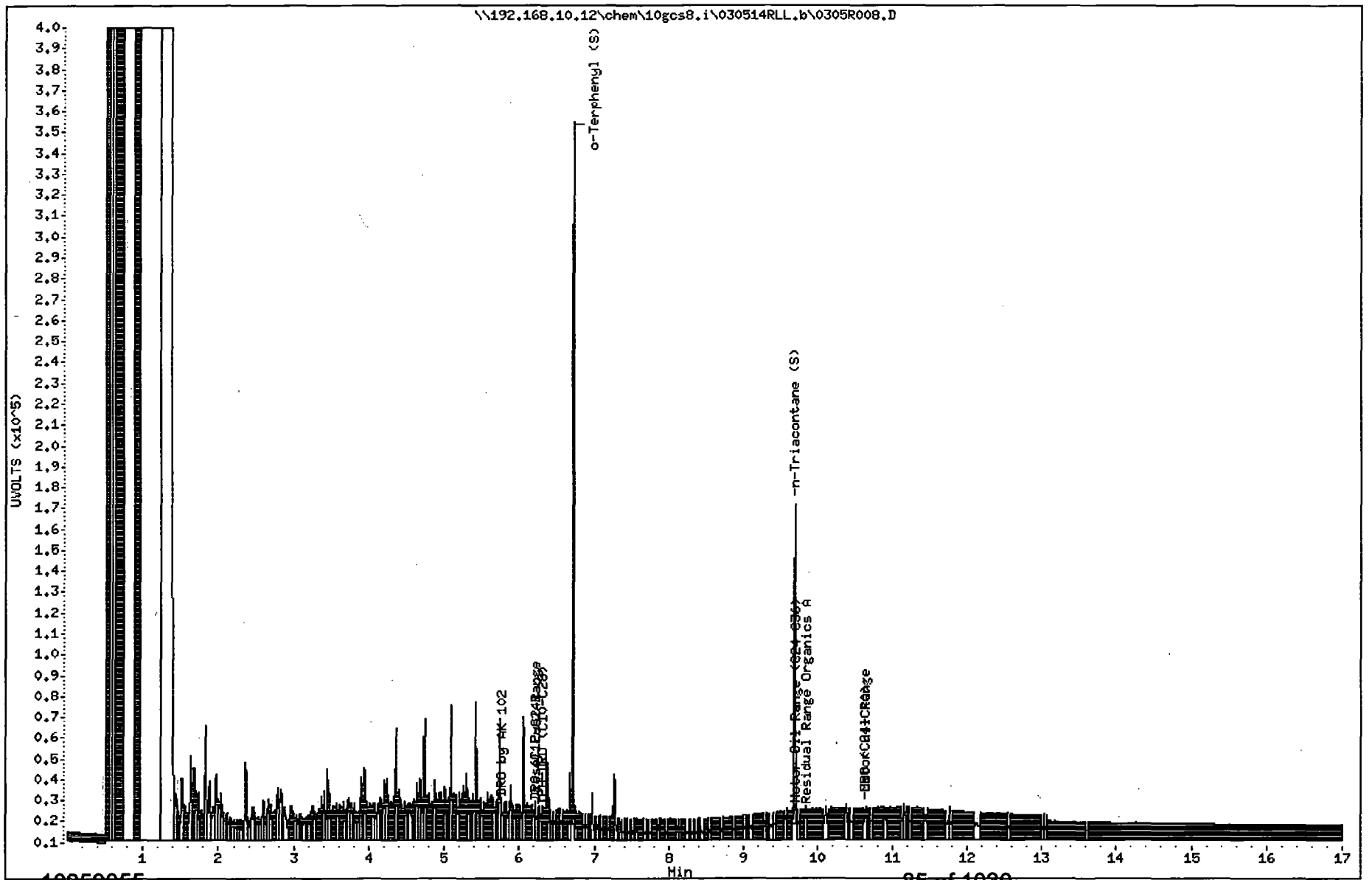
Instrument: 10gcs8.i

Sample Info: D/MDICAL4

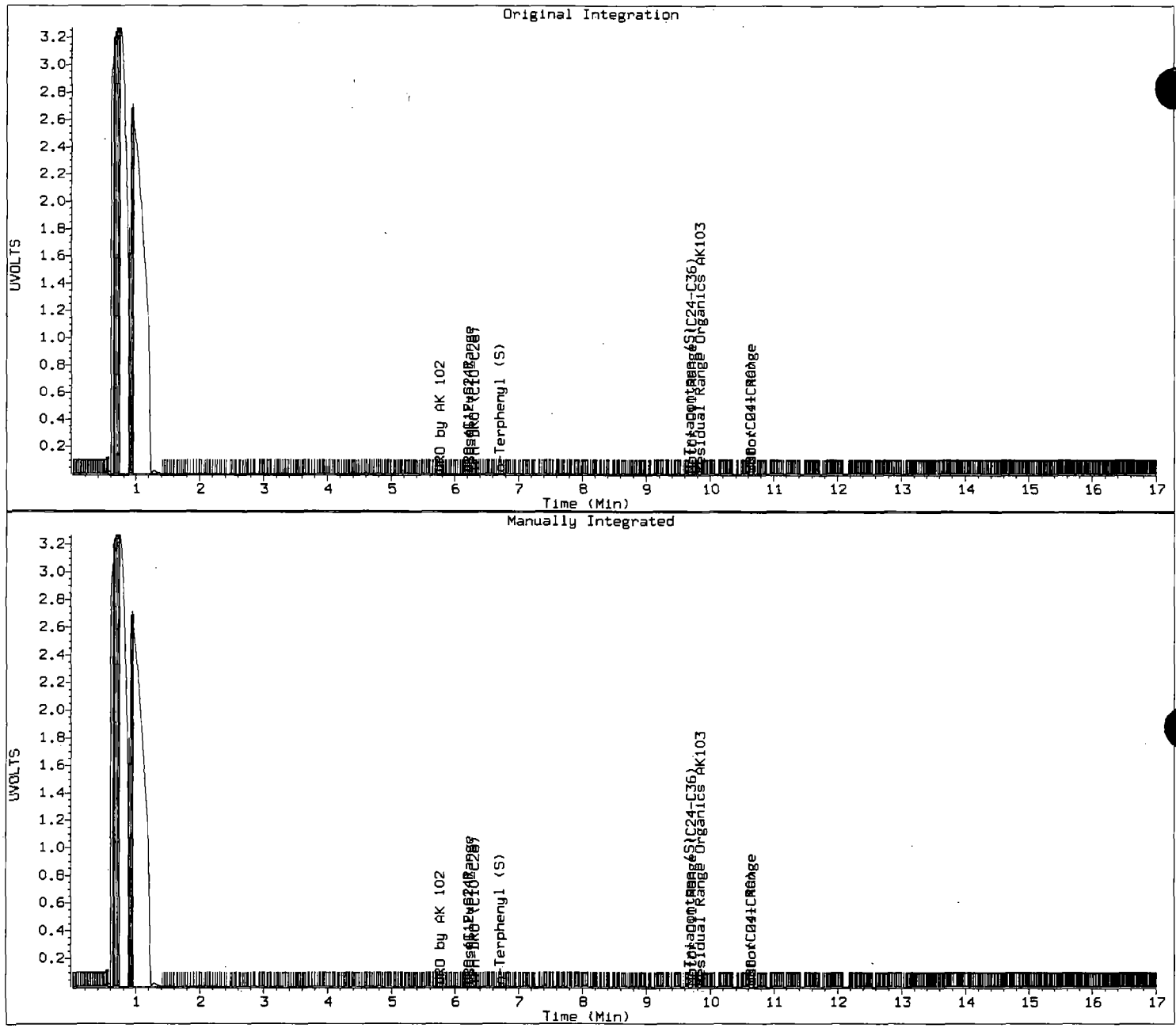
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL4



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	1420317	1420317	
DRO by AK 102	3535080	3535080	
TPH-DRO (C10-C28)	3853467	3853467	
Motor Oil Range (C24-C36)	1486290	1486290	
DRO (C12-C24)	2738379	2738379	
ORO (C24-C40)	2101889	2101889	
Diesel Fuel Range	2738379	2738379	
Motor Oil Range	2101889	2101889	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R009.d
Lab Smp Id: D/MOICAL5
Inj Date : 05-MAR-2014 10:40
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL5
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 10:17 Cal File: 0305R008.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			5828784	100.000	106(M)
$	2 o-Terphenyl (S)	6.715	6.715	0.000	456676	10.0000	12.4(M)
$	3 n-Triacontane (S)	9.692	9.692	0.000	344161	10.0000	11.7(M)
S	4 Residual Range Organics AK103	8.240-11.450			2525253	100.000	104(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			6423849	100.000	107(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			2648617	100.000	104(M)
S	7 DRO (C12-C24)	4.240-8.210			4694494	100.000	106(M)
S	8 Diesel Fuel Range	4.240-8.210			4694494	100.000	106(M)
S	9 ORO (C24-C40)	8.220-13.070			3515110	100.000	101(M)
S	10 Motor Oil Range	8.220-13.070			3515110	100.000	101(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R009.D

Date : 05-MAR-2014 10:40

Client ID:

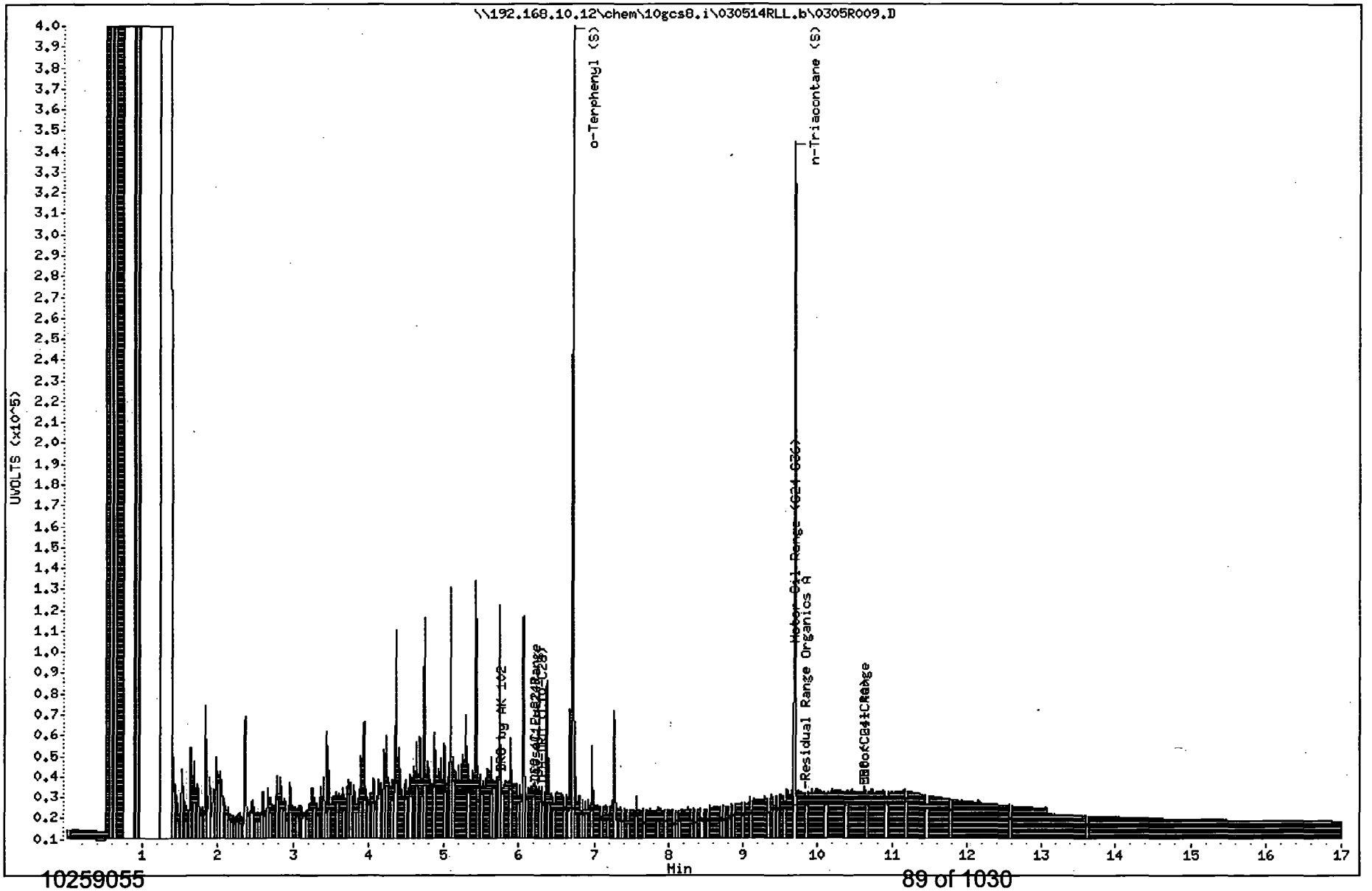
Instrument: 10gcs8.i

Sample Info: D/MOICAL5

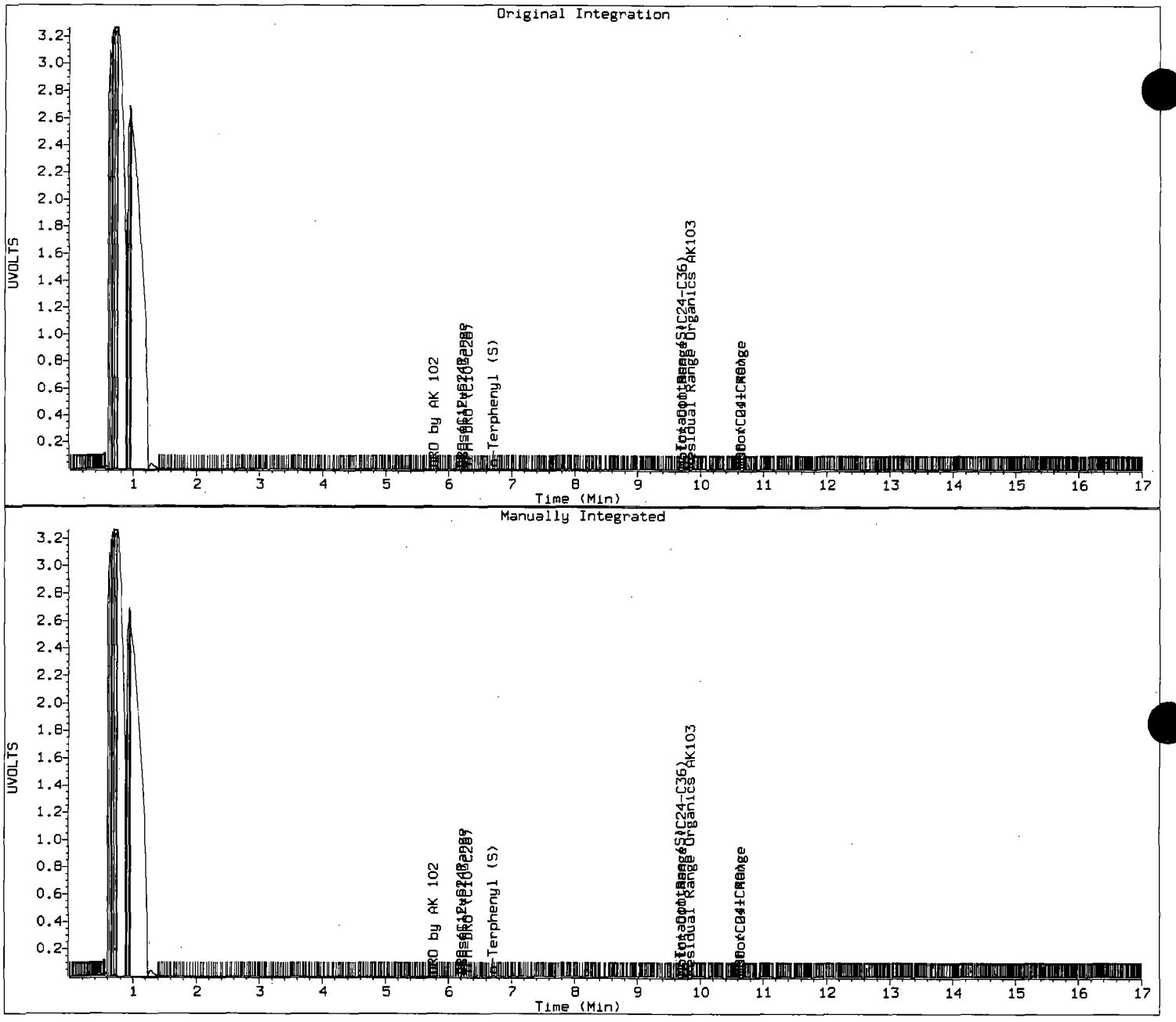
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL5



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	2525253	2525253	
DRO by AK 102	5828784	5828784	
TPH-DRO (C10-C28)	6423849	6423849	
Motor Oil Range (C24-C36)	2648617	2648617	
DRO (C12-C24)	4694494	4694494	
ORO (C24-C40)	3515110	3515110	
Diesel Fuel Range	4694494	4694494	
Motor Oil Range	3515110	3515110	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R010.d
Lab Smp Id: D/MOICAL6
Inj Date : 05-MAR-2014 11:04
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL6
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 10:40 Cal File: 0305R009.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			12362195	250.000	253(M)
$	2 o-Terphenyl (S)	6.729	6.729	0.000	1090121	25.0000	24.6(M)
$	3 n-Triacontane (S)	9.724	9.724	0.000	815604	25.0000	25.0(M)
S	4 Residual Range Organics AK103	8.240-11.450			5578314	250.000	248(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			13727647	250.000	252(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			5853491	250.000	248(M)
S	7 DRO (C12-C24)	4.240-8.210			10291210	250.000	252(M)
S	8 Diesel Fuel Range	4.240-8.210			10291210	250.000	252(M)
S	9 ORO (C24-C40)	8.220-13.070			7513433	250.000	260(M)
S	10 Motor Oil Range	8.220-13.070			7513433	250.000	260(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R010.D

Page 1

Date : 05-MAR-2014 11:04

Client ID:

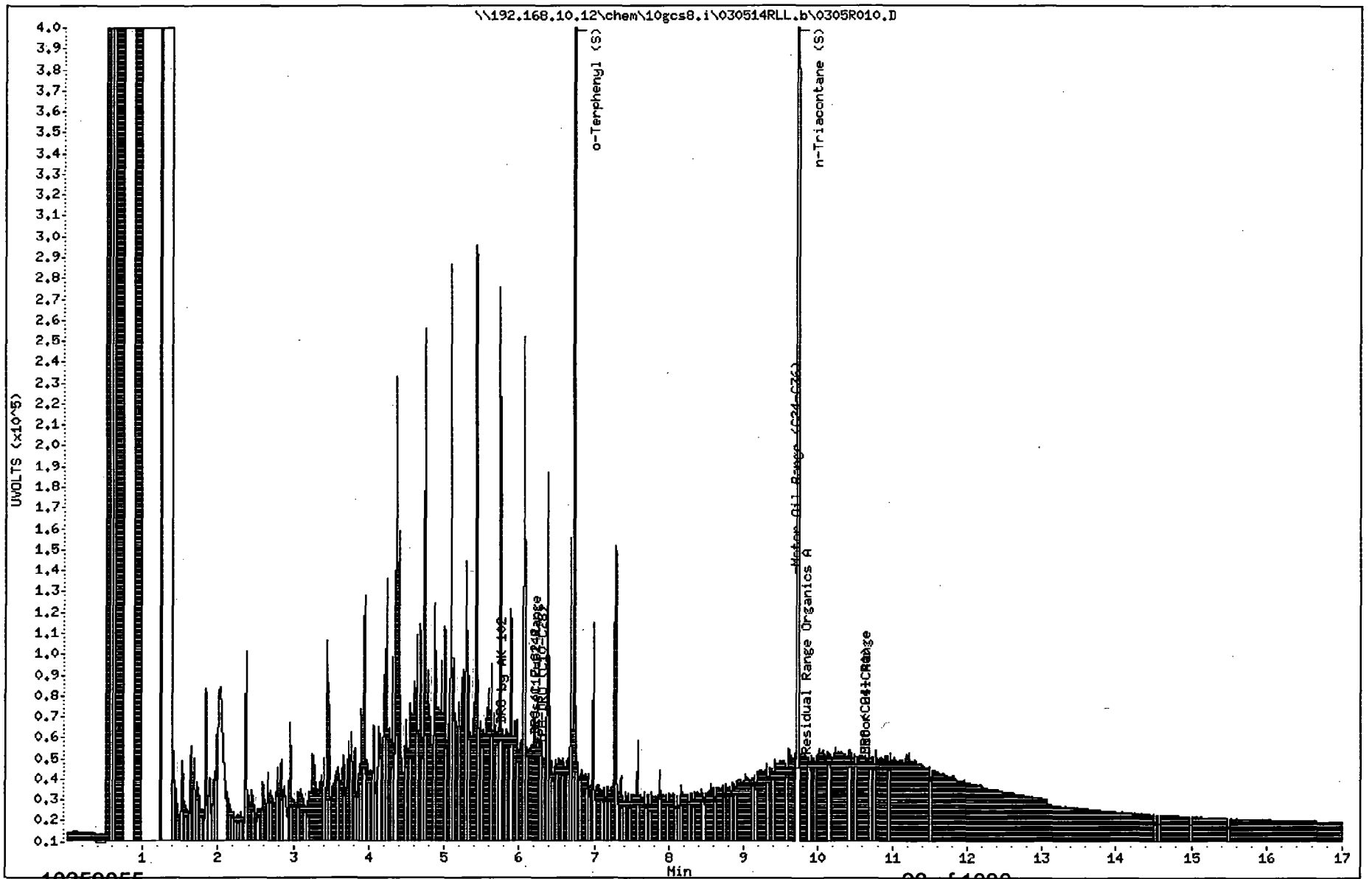
Instrument: 10gcs8.i

Sample Info: D/MOICAL6

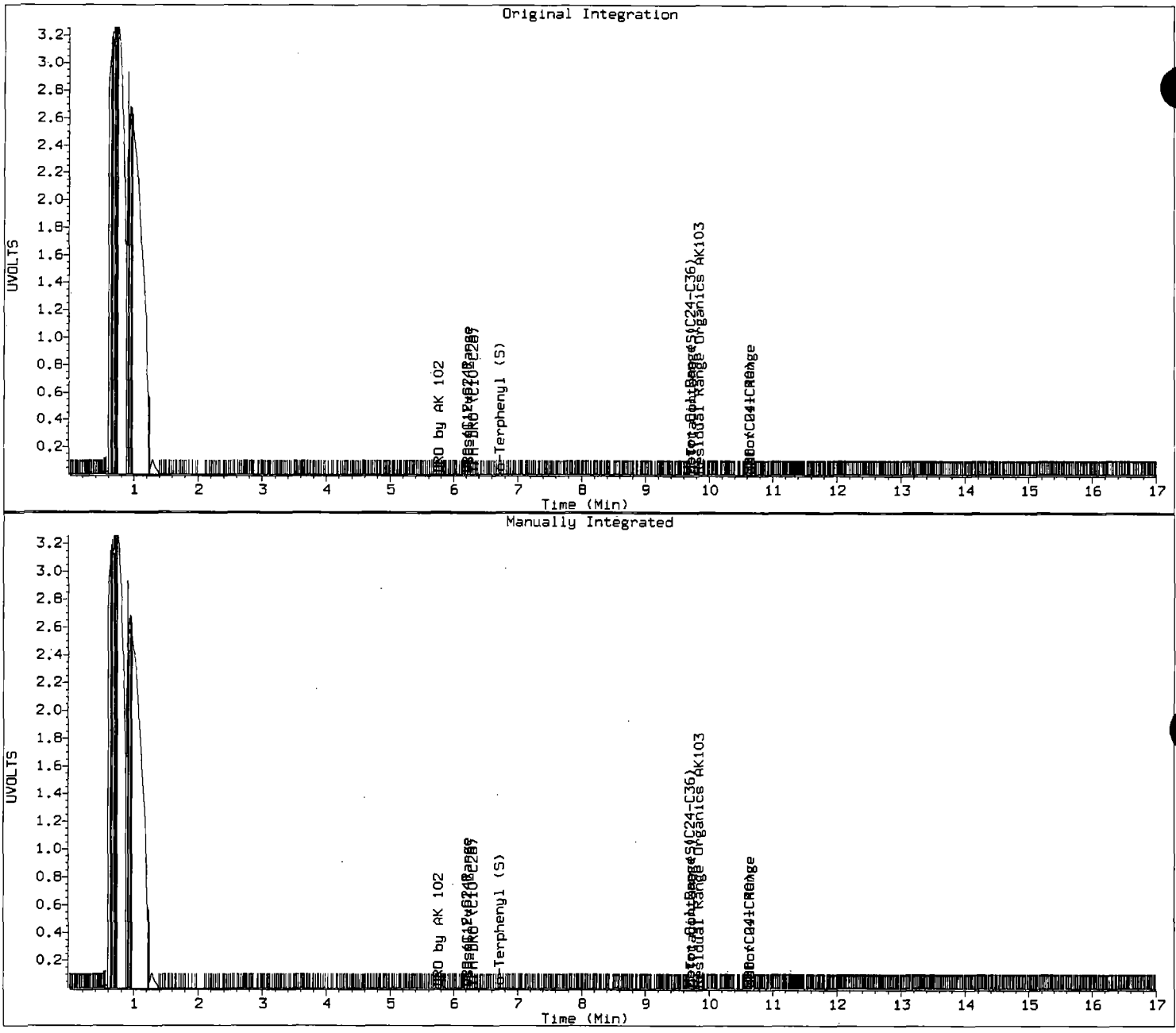
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL6



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	5578314	5578314	
DRO by AK 102	12362195	12362195	
TPH-DRO (C10-C28)	13727647	13727647	
Motor Oil Range (C24-C36)	5853491	5853491	
DRO (C12-C24)	10291210	10291210	
ORO (C24-C40)	7513433	7513433	
Diesel Fuel Range	10291210	10291210	
Motor Oil Range	7513433	7513433	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R011.d
Lab Smp Id: D/MOICAL7
Inj Date : 05-MAR-2014 11:27
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL7
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 11:04 Cal File: 0305R010.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			23371921	500.000	497(M)
$	2 o-Terphenyl (S)	6.741	6.741	0.000	2180779	50.0000	45.6(M)
$	3 n-Triacontane (S)	9.755	9.755	0.000	1652499	50.0000	48.6(M)
S	4 Residual Range Organics AK103	8.240-11.450			11073935	500.000	506(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			26060136	500.000	494(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			11616686	500.000	503(M)
S	7 DRO (C12-C24)	4.240-8.210			19788324	500.000	498(M)
S	8 Diesel Fuel Range	4.240-8.210			19788324	500.000	498(M)
S	9 ORO (C24-C40)	8.220-13.070			14561250	500.000	537(M)
S	10 Motor Oil Range	8.220-13.070			14561250	500.000	537(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R011.D

Page 1

Date : 05-MAR-2014 11:27

Client ID:

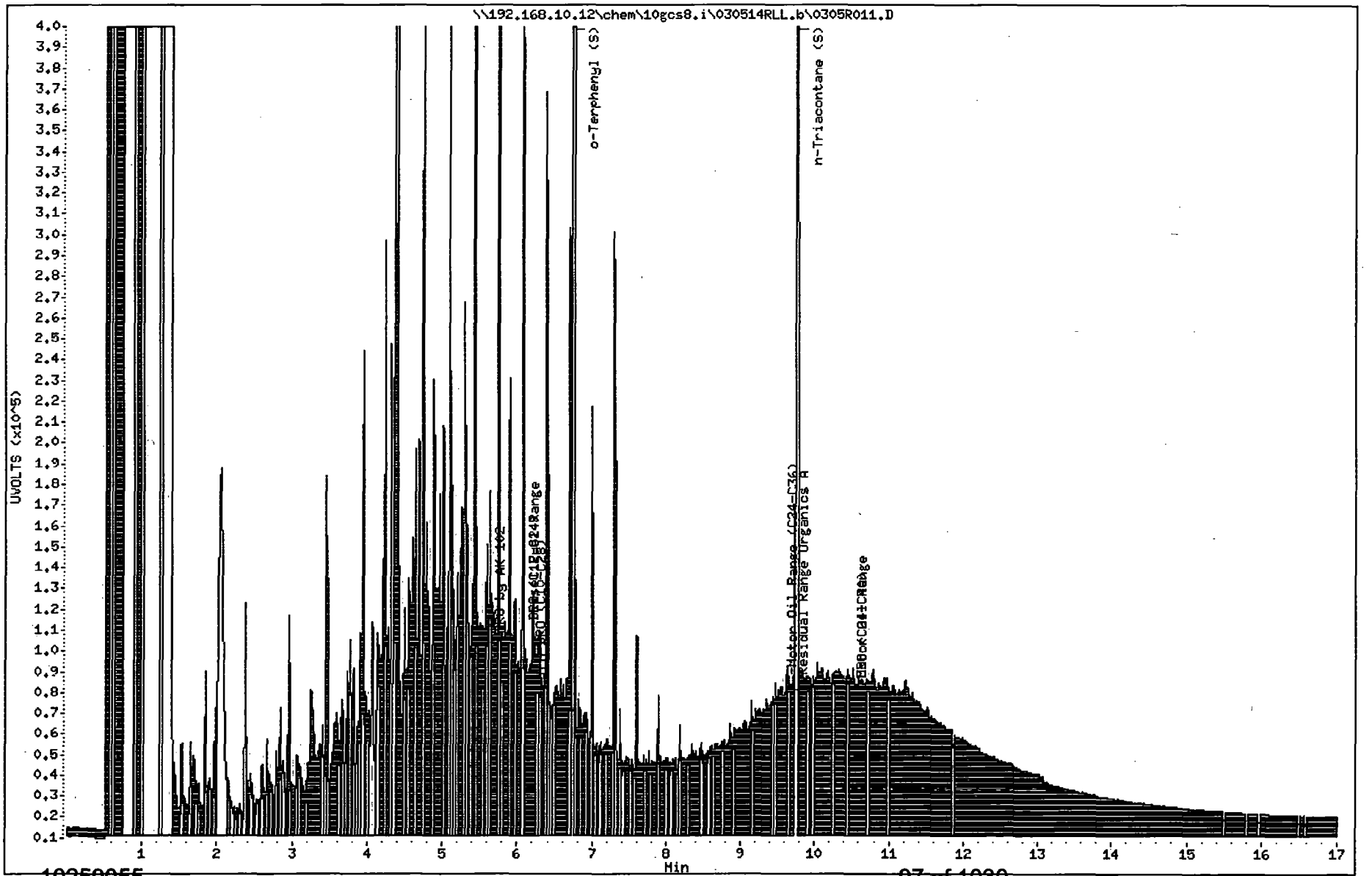
Instrument: 10gcs8.i

Sample Info: D/MOICAL7

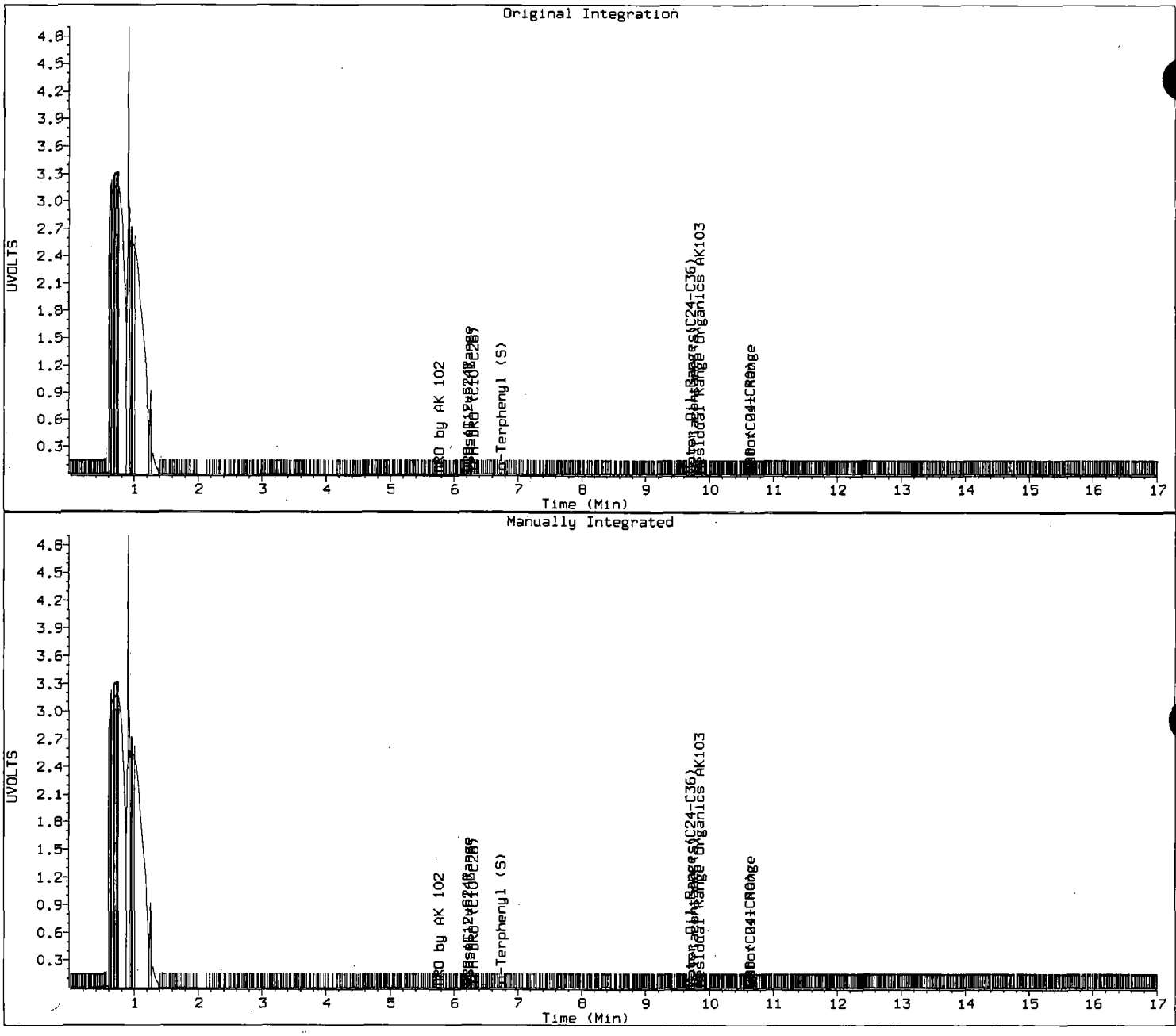
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL7



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	11073935	11073935	
DRO by AK 102	23371921	23371921	
TPH-DRO (C10-C28)	26060136	26060136	
Motor Oil Range (C24-C36)	11616686	11616686	
DRO (C12-C24)	19788324	19788324	
ORO (C24-C40)	14561250	14561250	
Diesel Fuel Range	19788324	19788324	
Motor Oil Range	14561250	14561250	

o-Terphenyl (S)	2180779	2180779

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R012.d
Lab Smp Id: D/MOICAL8
Inj Date : 05-MAR-2014 11:50
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL8
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 11:27 Cal File: 0305R011.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			45607763	1000.00	978(M)
$	2 o-Terphenyl (S)	6.743	6.743	0.000	4574739	100.000	91.8(M)
$	3 n-Triacontane (S)	9.728	9.728	0.000	3272748	100.000	94.3(M)
S	4 Residual Range Organics AK103	8.240-11.450			21800816	1000.00	1000(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			51171886	1000.00	976(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			22907863	1000.00	996(M)
S	7 DRO (C12-C24)	4.240-8.210			38870475	1000.00	979(M)
S	8 Diesel Fuel Range	4.240-8.210			38870475	1000.00	979(M)
S	9 ORO (C24-C40)	8.220-13.070			27094880	1000.00	1020(M)
S	10 Motor Oil Range	8.220-13.070			27094880	1000.00	1020(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R012.D

Page 1

Date : 05-MAR-2014 11:50

Client ID:

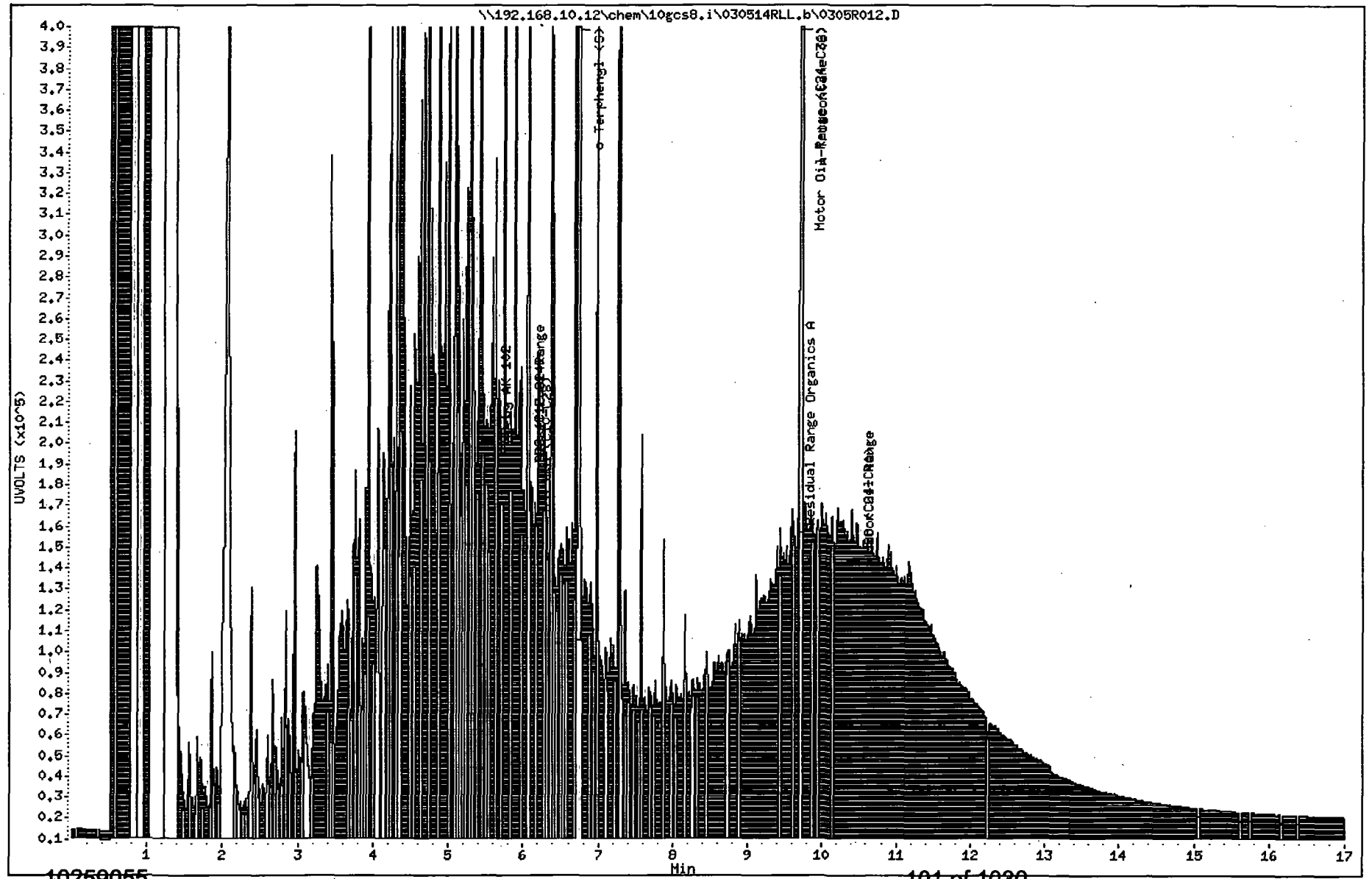
Instrument: 10gcs8.i

Sample Info: D/MOICAL8

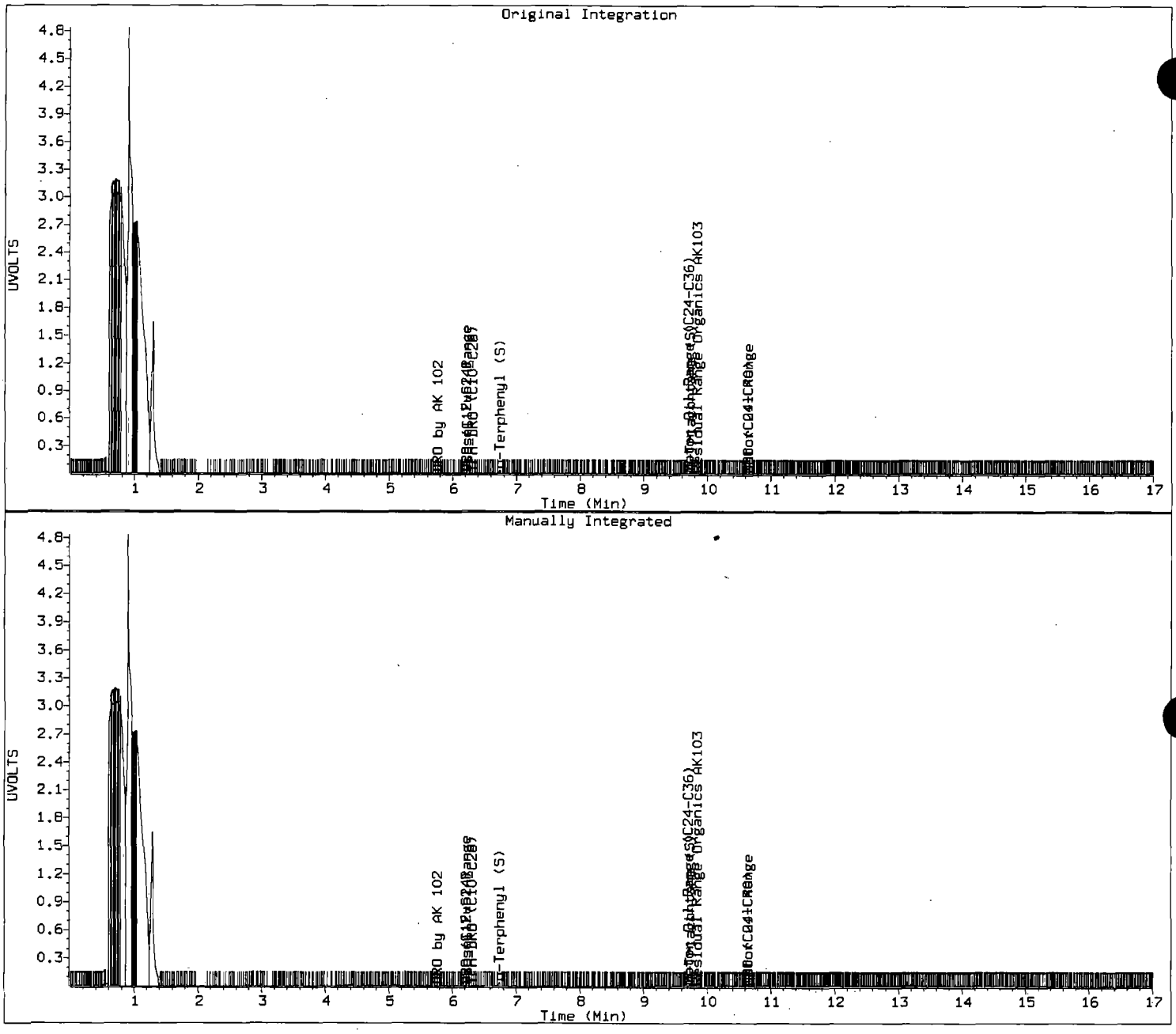
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 11:50
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL8



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	21800816	21800816	
DRO by AK 102	45607763	45607763	
TPH-DRO (C10-C28)	51171886	51171886	
Motor Oil Range (C24-C36)	22907863	22907863	
DRO (C12-C24)	38870475	38870475	
ORO (C24-C40)	27094880	27094880	
Diesel Fuel Range	38870475	38870475	
Motor Oil Range	27094880	27094880	

8-Terphenyl (s)	4574739	4574739

Report Date: 05-Mar-2014 13:18

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R013.d
Lab Smp Id: D/MOICAL9
Inj Date : 05-MAR-2014 12:13
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL9
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 11:50 Cal File: 0305R012.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

						AMOUNTS	
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			95868241	2000.00	2010 (M)
$	2 o-Terphenyl (S)	6.744	6.744	0.000	9707361	200.000	191 (M)
$	3 n-Triacontane (S)	9.702	9.702	0.000	6783709	200.000	193 (M)
S	4 Residual Range Organics AK103	8.240-11.450			44313144	2000.00	2000 (M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			108109532	2000.00	2020 (M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			46840333	2000.00	2000 (M)
S	7 DRO (C12-C24)	4.240-8.210			82359076	2000.00	2010 (M)
S	8 Diesel Fuel Range	4.240-8.210			82359076	2000.00	2010 (M)
S	9 ORO (C24-C40)	8.220-13.070			52906643	2000.00	1970 (M)
S	10 Motor Oil Range	8.220-13.070			52906643	2000.00	1970 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R013.D

Page 1

Date : 05-MAR-2014 12:13

Client ID:

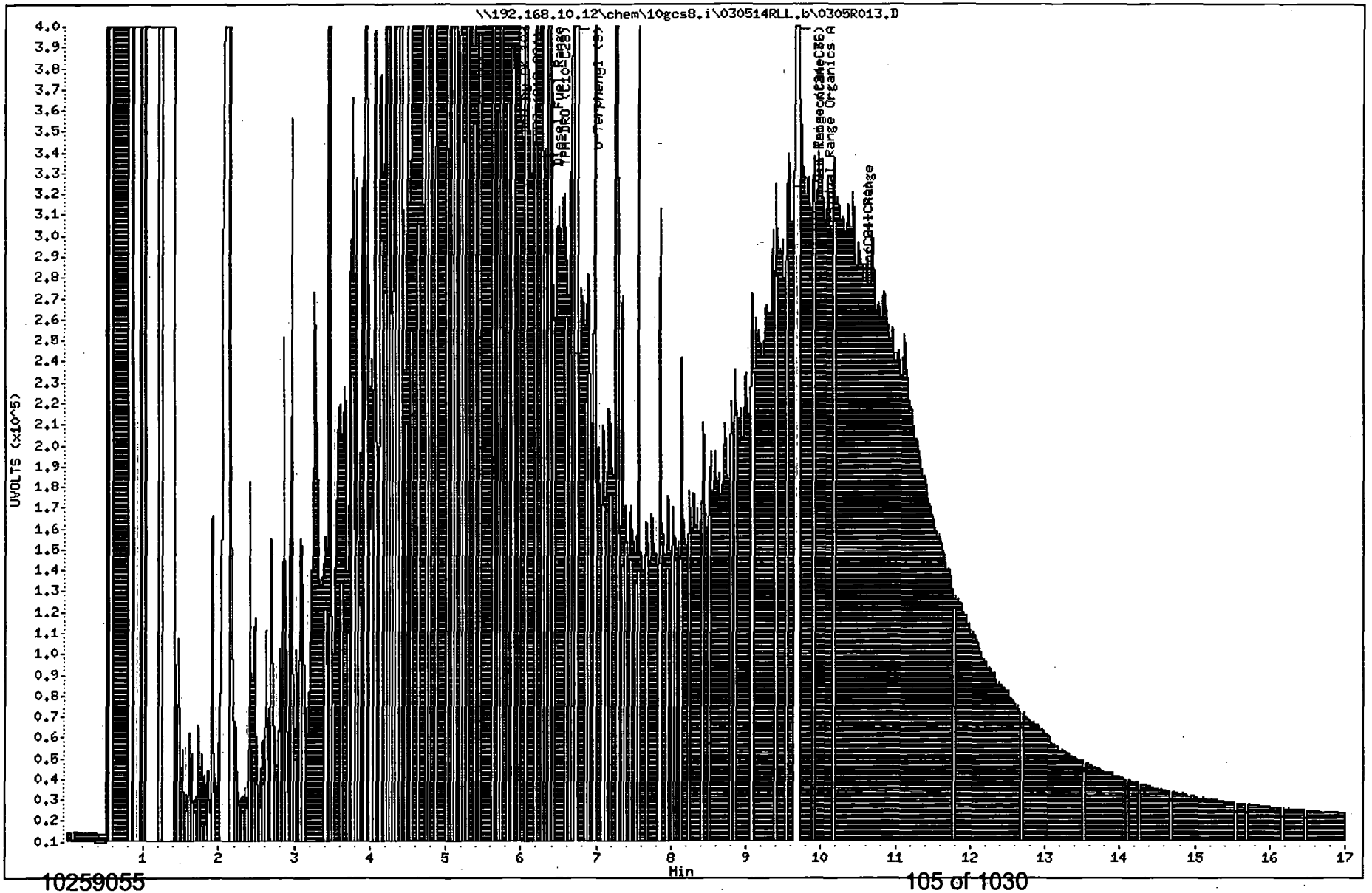
Instrument: 10gcs8.i

Sample Info: D/MOICAL9

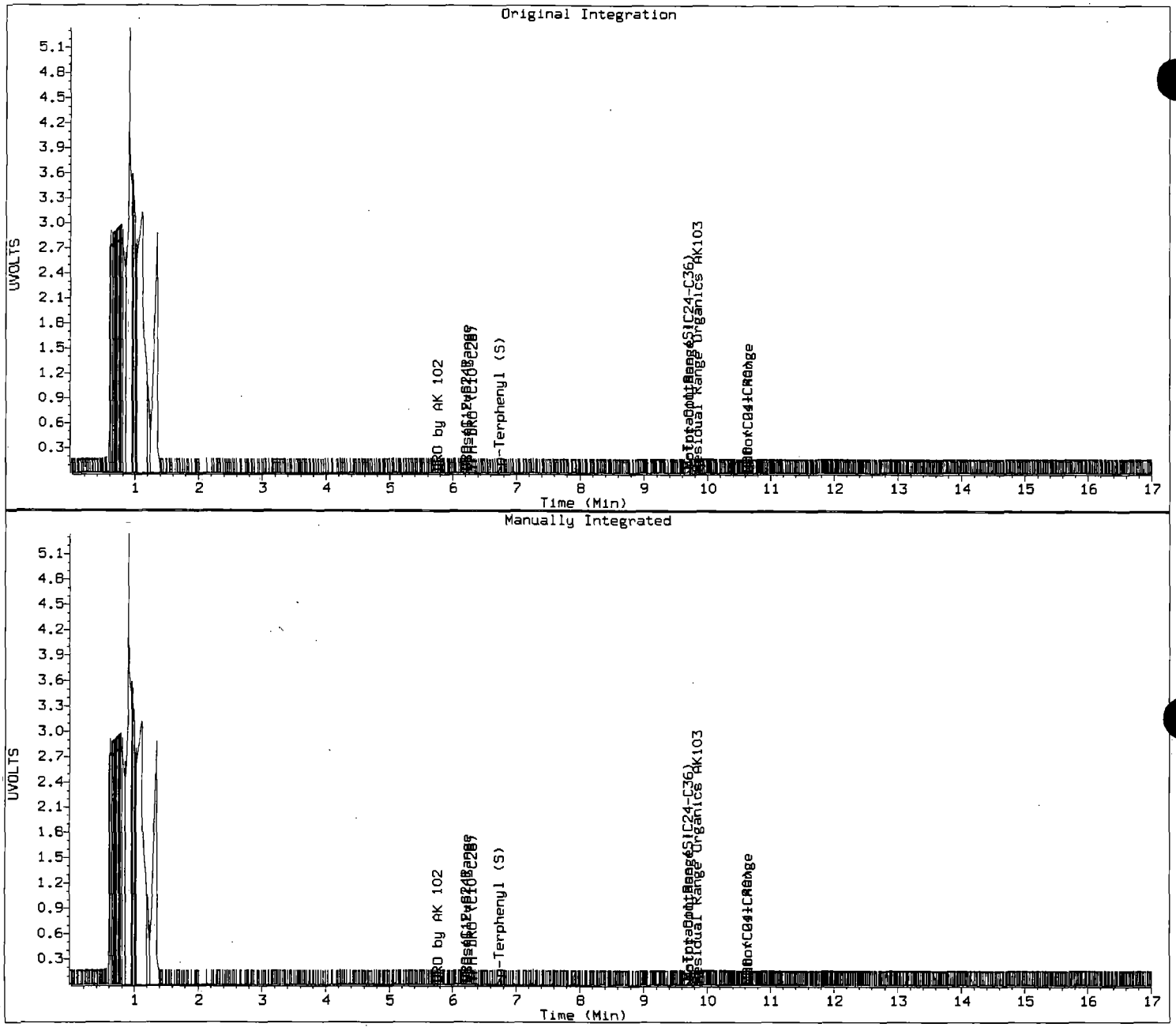
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL9



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	44313144	44313144	
DRO by AK 102	95868241	95868241	
TPH-DRO (C10-C28)	108109532	108109532	
Motor Oil Range (C24-C36)	46840333	46840333	
DRO (C12-C24)	82359076	82359076	
ORO (C24-C40)	52906643	52906643	
Diesel Fuel Range	82359076	82359076	
Motor Oil Range	52906643	52906643	

3-Terphenyl (3)	[illegible]	[illegible]

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R014.d
Lab Smp Id: D/MOICAL10
Inj Date : 05-MAR-2014 12:36
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL10
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 12:13 Cal File: 0305R013.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			204157857	4000.00	4000(M)
$	2 o-Terphenyl (S)	6.772	6.772	0.000	20893356	400.000	406(AM)
$	3 n-Triacontane (S)	9.769	9.769	0.000	14264426	400.000	404(AM)
S	4 Residual Range Organics AK103	8.240-11.450			93502939	4000.00	4000(AM)
S	5 TPH-DRO (C10-C28)	3.320-9.310			229512672	4000.00	4000(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			98651105	4000.00	4000(M)
S	7 DRO (C12-C24)	4.240-8.210			178742732	4000.00	4000(M)
S	8 Diesel Fuel Range	4.240-8.210			178742732	4000.00	4000(M)
S	9 ORO (C24-C40)	8.220-13.070			114323573	4000.00	4000(AM)
S	10 Motor Oil Range	8.220-13.070			114323573	4000.00	4000(AM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R014.D

Date : 05-MAR-2014 12:36

Client ID:

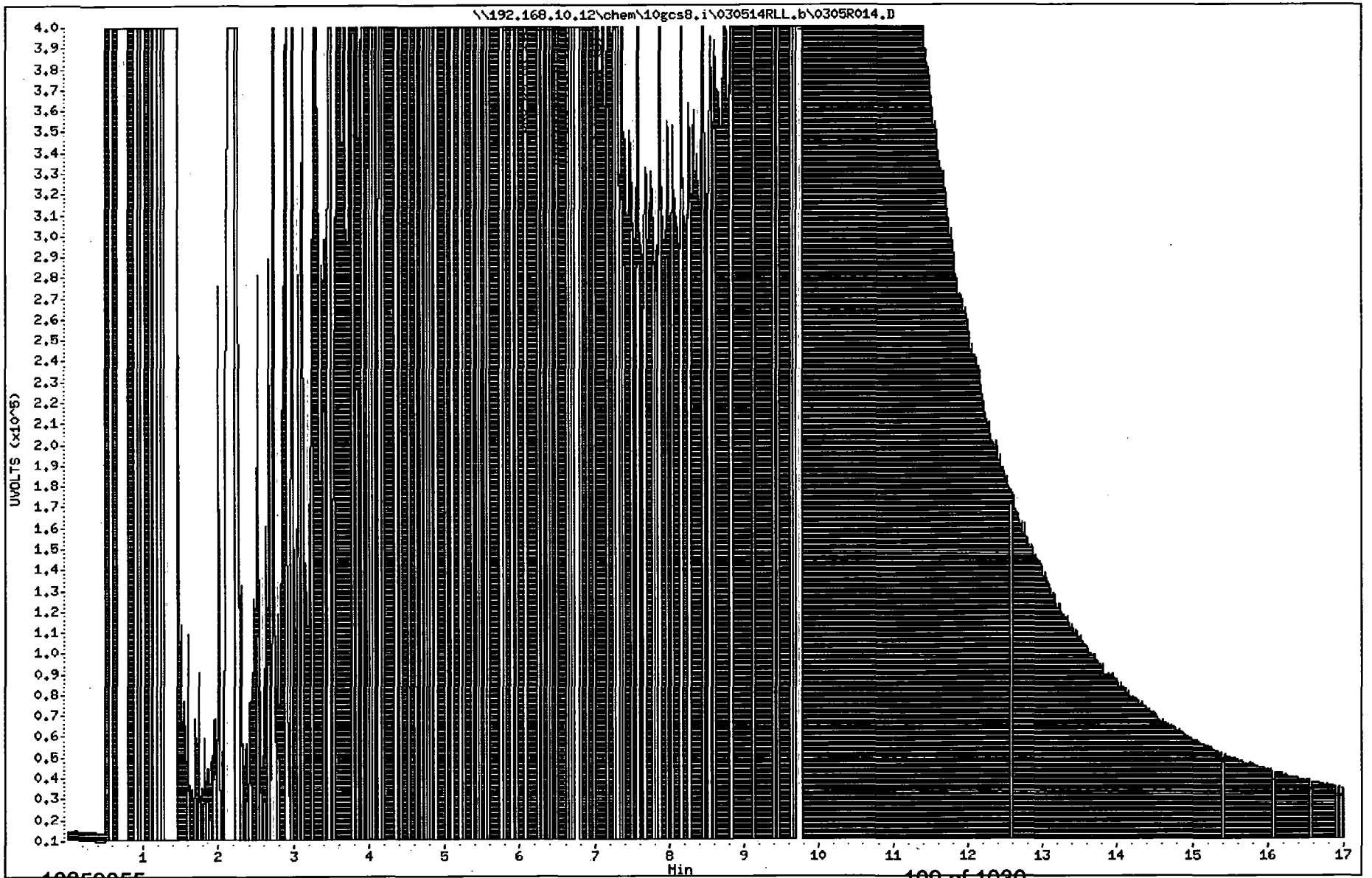
Instrument: 10gcs8.i

Sample Info: D/MOICAL10

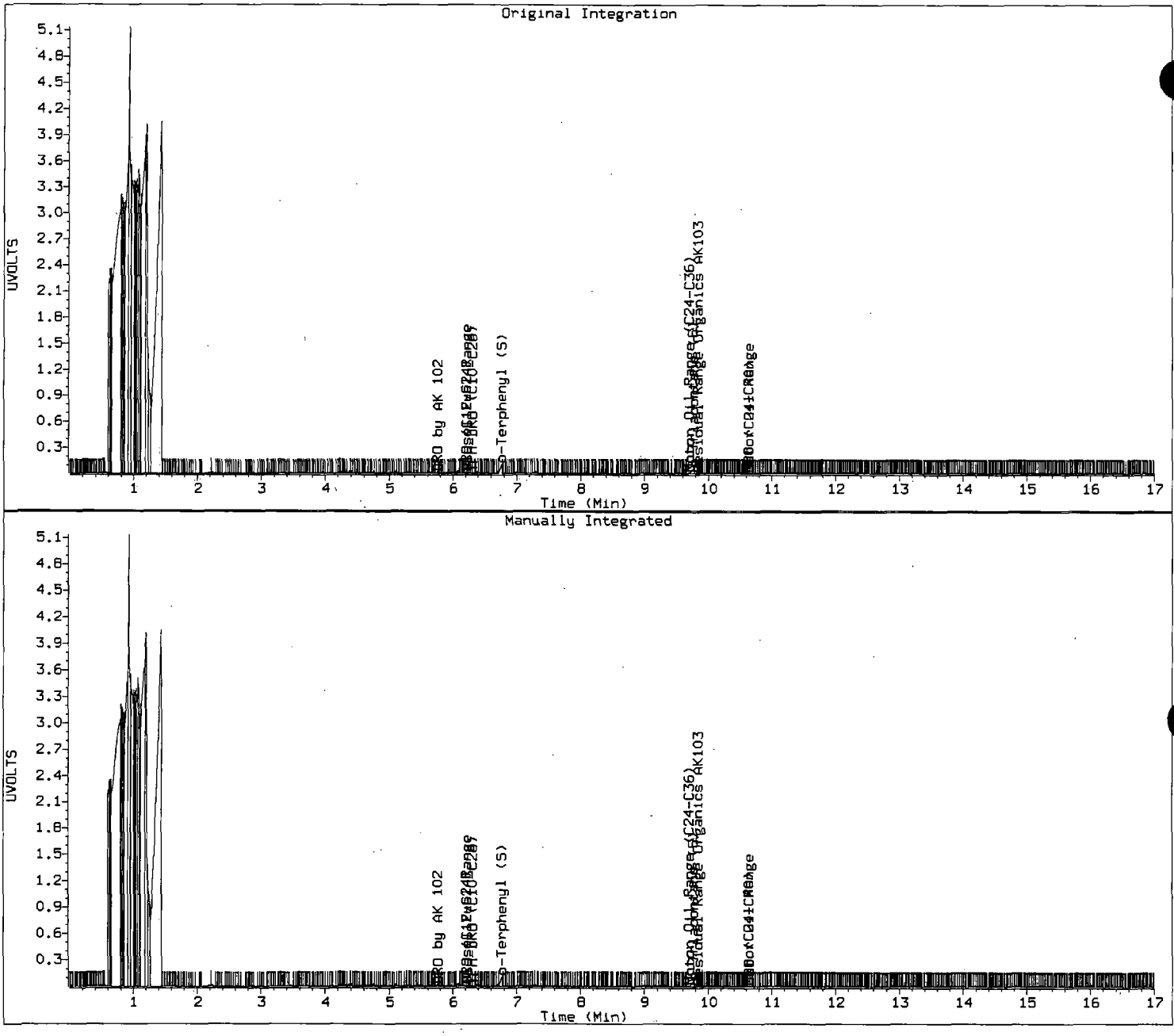
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAY-2014 12:56
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL10



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	93502939	93502939	
DRO by AK 102	204157857	204157857	
TPH-DRO (C10-C28)	229512672	229512672	
Motor Oil Range (C24-C36)	98651105	98651105	
DRO (C12-C24)	178742732	178742732	
ORO (C24-C40)	114323573	114323573	
Diesel Fuel Range	178742732	178742732	
Motor Oil Range	114323573	114323573	

3-Terphenyl (3)	[illegible]	[illegible]

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i Injection Date: 05-MAR-2014 13:22
Lab File ID: 0305R016.d Init. Cal. Date(s): 05-MAR-2014 05-MAR-2014
Analysis Type: Init. Cal. Times: 09:08 12:36
Lab Sample ID: D/MOICV Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m

	COMPOUND	RRF / AMOUNT	RF250	CCAL RRF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S	1 DRO by AK 102	250	245	48136	0.010	-1.81859	25.00000	Quadratic
$	2 o-Terphenyl (S)	25.00000	23.12561	40480	0.010	-7.49758	15.00000	Linear
$	3 n-Triacontane (S)	25.00000	24.23240	31538	0.010	-3.07042	15.00000	Linear
S	4 Residual Range Organics AK1	250	255	22919	0.010	2.06222	25.00000	Quadratic
S	5 TPH-DRO (C10-C28)	250	231	50829	0.010	-7.43455	15.00000	Quadratic
S	6 Motor Oil Range (C24-C36)	250	247	23401	0.010	-1.02574	15.00000	Quadratic
S	7 DRO (C12-C24)	250	270	43844	0.010	7.99481	15.00000	Quadratic
S	8 Diesel Fuel Range	250	270	43844	0.010	7.99481	15.00000	Quadratic
S	9 ORO (C24-C40)	250	277	31769	0.010	10.82342	15.00000	Quadratic
S	10 Motor Oil Range	250	277	31769	0.010	10.82342	15.00000	Quadratic

Average %D / Drift Results.

Calculated Average %D/Drift = 6.05456
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Report Date: 05-Mar-2014 13:42

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R016.d
Lab Smp Id: D/MOICV
Inj Date : 05-MAR-2014 13:22
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICV
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:42 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			12034050	250.000	245(M)
$	2 o-Terphenyl (S)	6.731	6.731	0.000	1011995	25.0000	23.1(M)
$	3 n-Triacontane (S)	9.704	9.704	0.000	788460	25.0000	24.2(M)
S	4 Residual Range Organics AK103	8.240-11.450			5729839	250.000	255(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			12707256	250.000	231(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			5850242	250.000	247(M)
S	7 DRO (C12-C24)	4.240-8.210			10961103	250.000	270(M)
S	8 Diesel Fuel Range	4.240-8.210			10961103	250.000	270(M)
S	9 ORO (C24-C40)	8.220-13.070			7942202	250.000	277(M)
S	10 Motor Oil Range	8.220-13.070			7942202	250.000	277(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R016.D

Page 1

Date : 05-MAR-2014 13:22

Client ID:

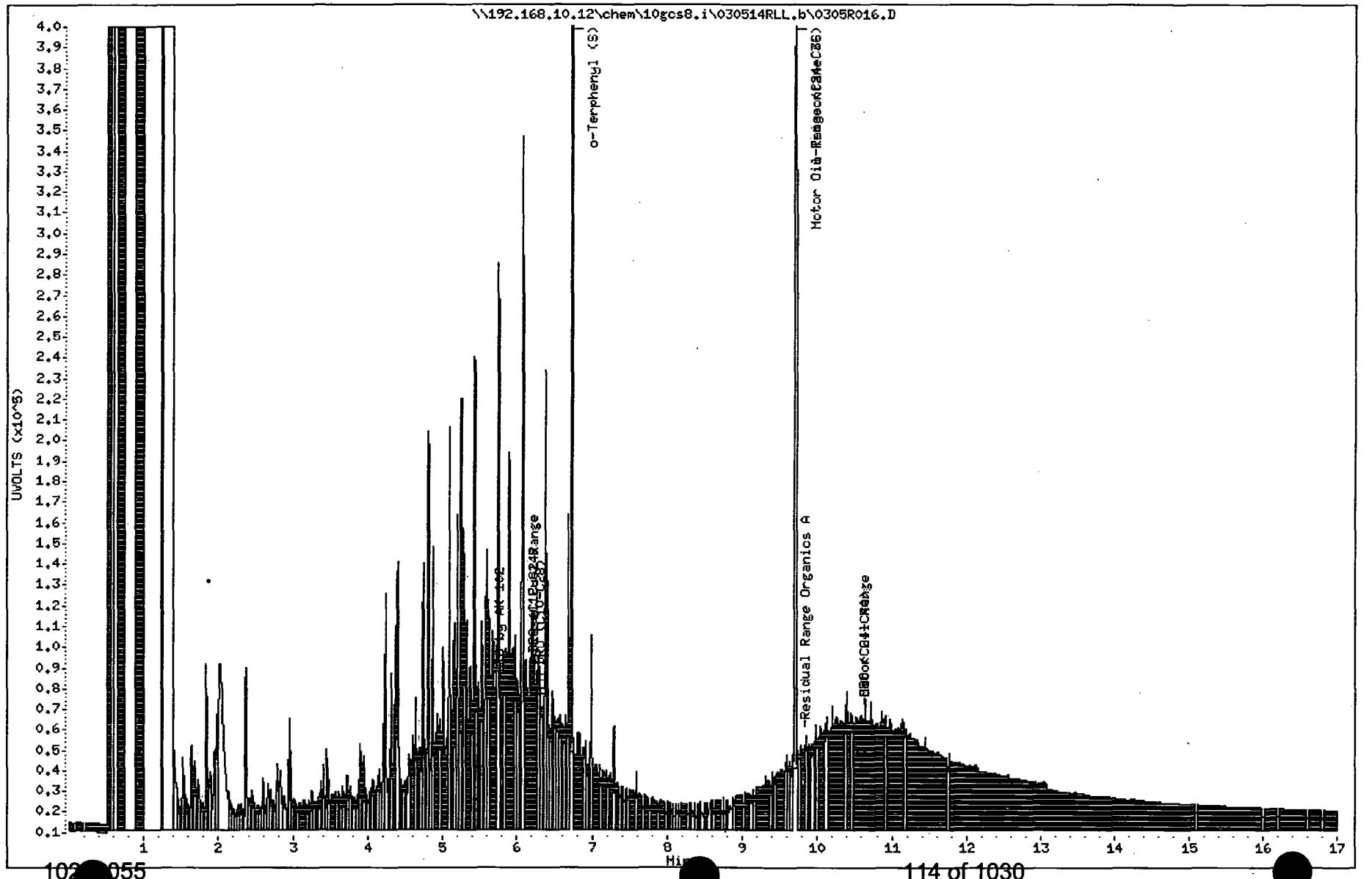
Instrument: 10gcs8.i

Sample Info: D/MOICV

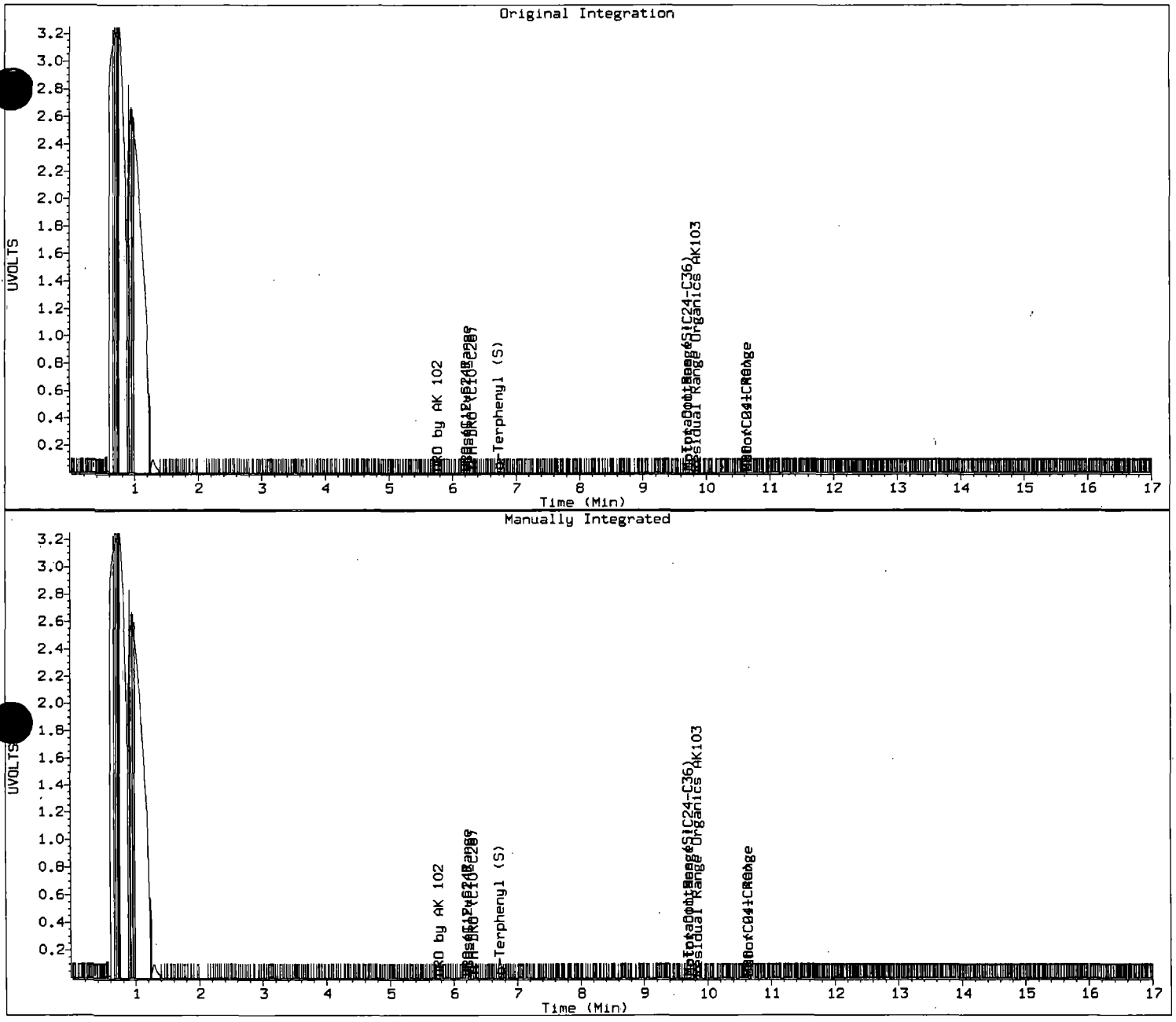
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25

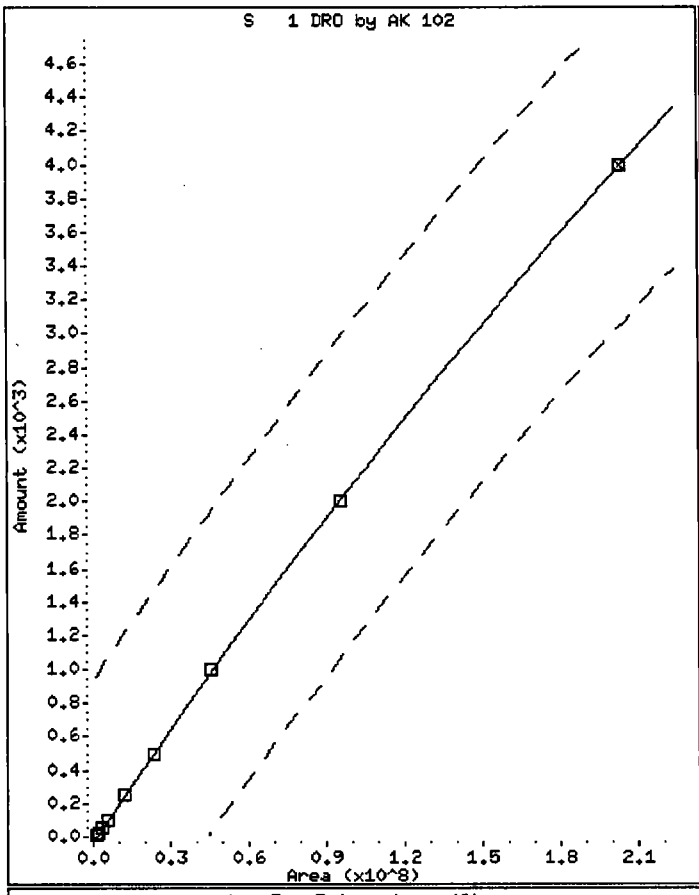


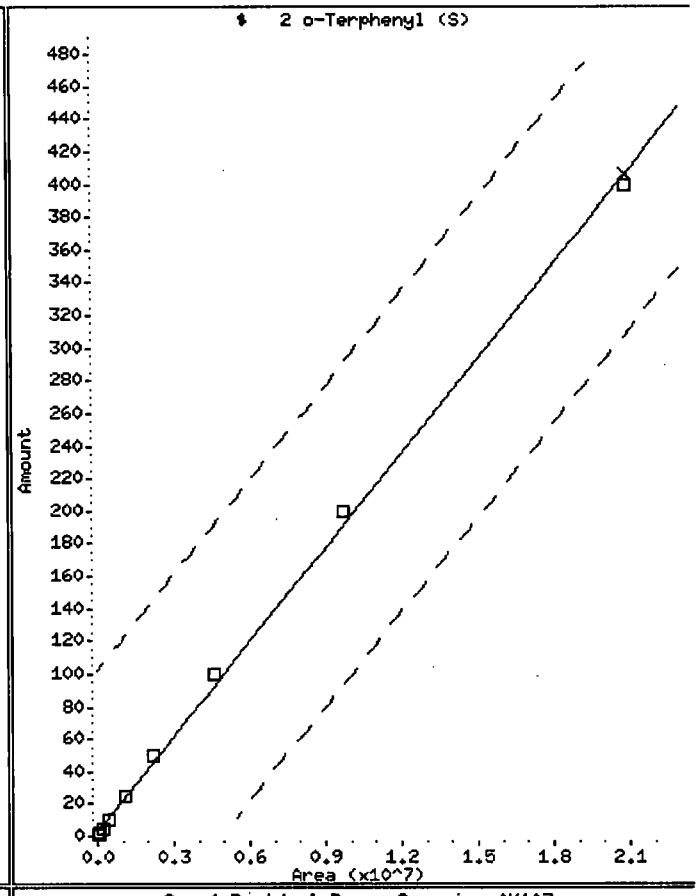
Injection Date: 05-MAR-2014 15:22
Instrument: 10gcs8.i
Lab Sample ID: D/MOICV

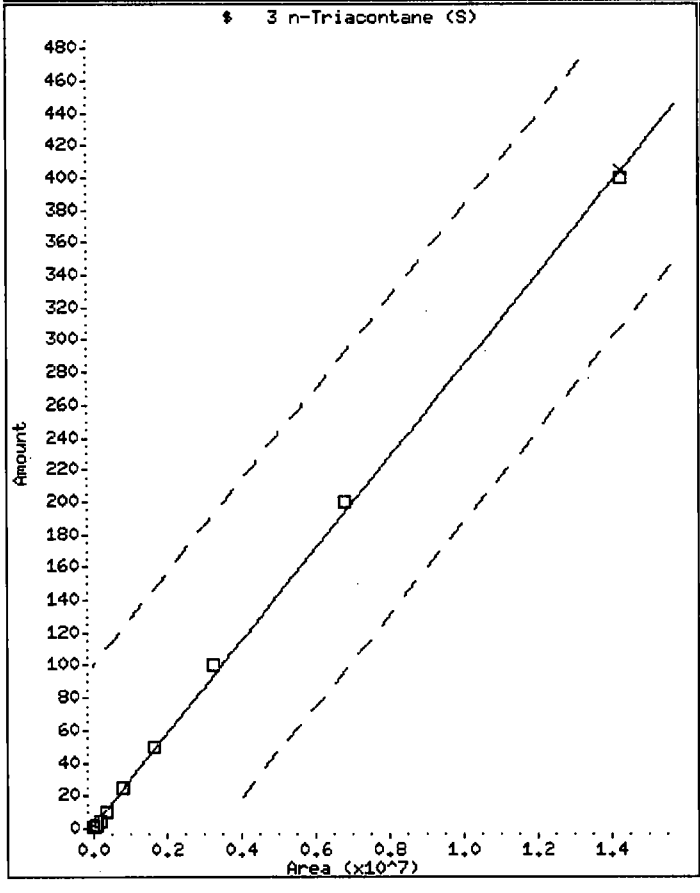


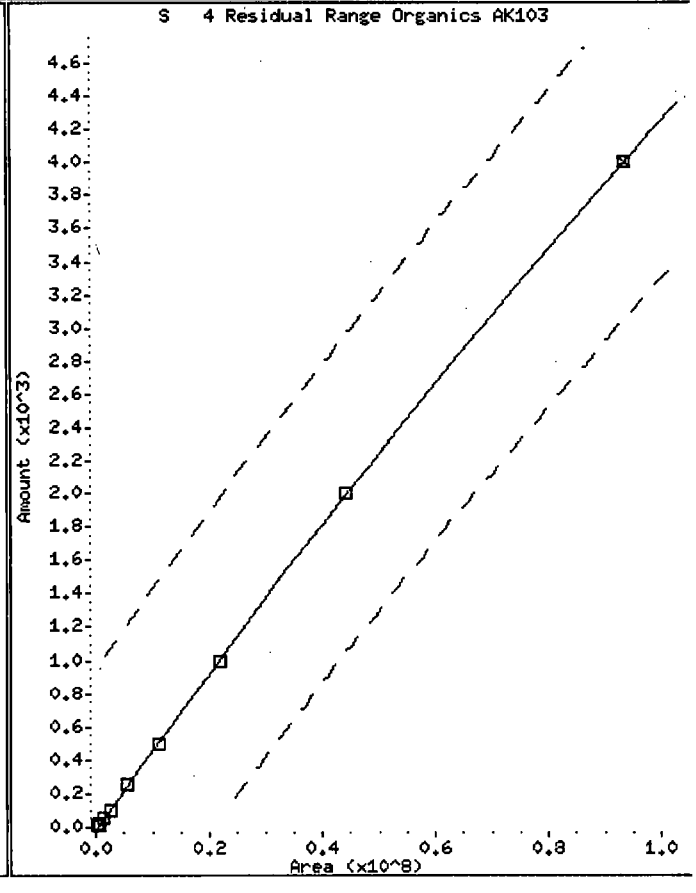
Manually Integrated Compounds

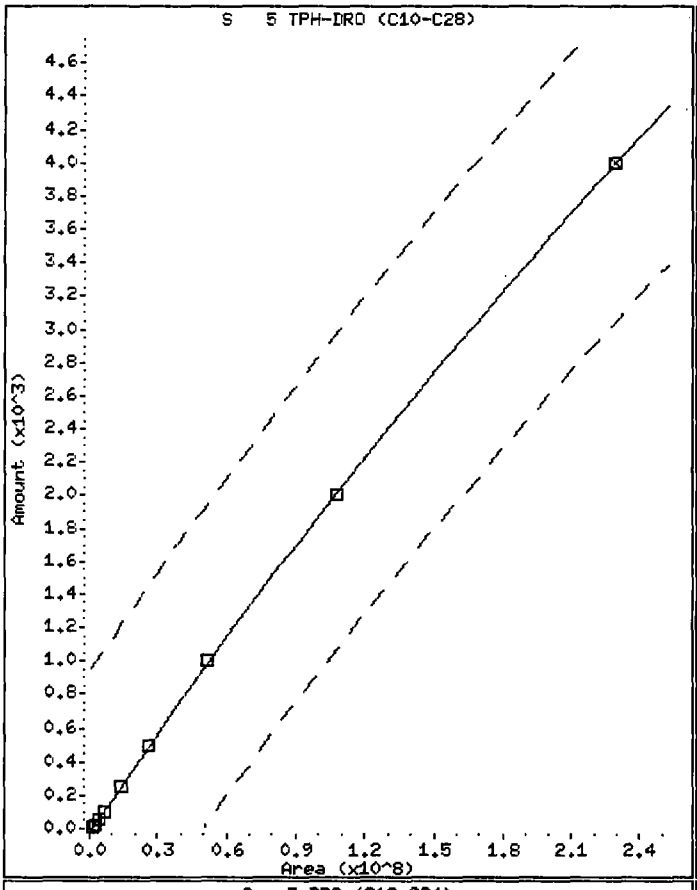
Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	5729839	5729839	
DRO by AK 102	12034050	12034050	
TPH-DRO (C10-C28)	12707256	12707256	
Motor Oil Range (C24-C36)	5850242	5850242	
DRO (C12-C24)	10961103	10961103	
ORO (C24-C40)	7942202	7942202	
Diesel Fuel Range	10961103	10961103	
Motor Oil Range	7942202	7942202	

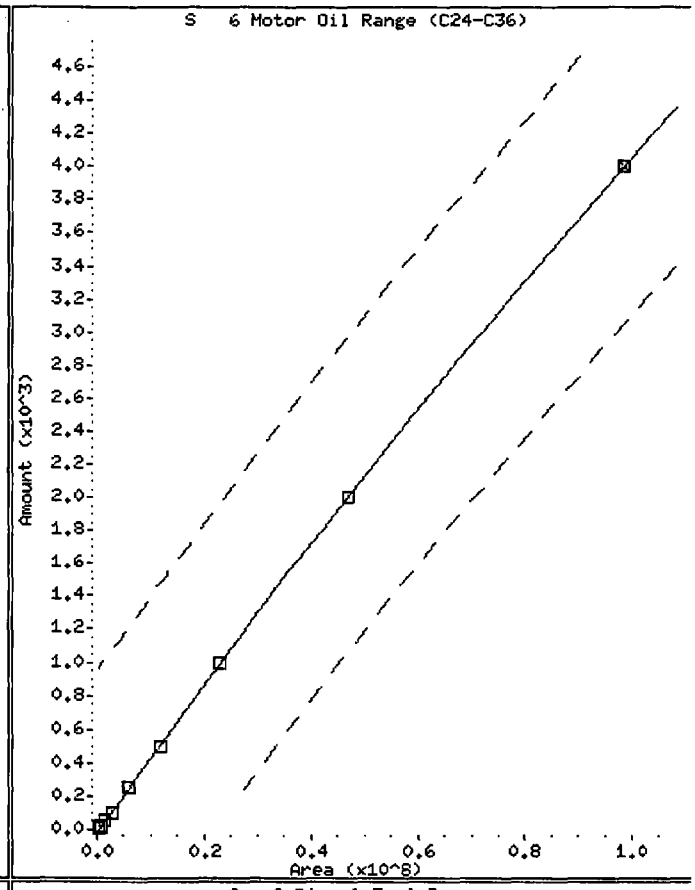

S 1 DRO by AK 102
Amount (x10^3)
Area (x10^8)

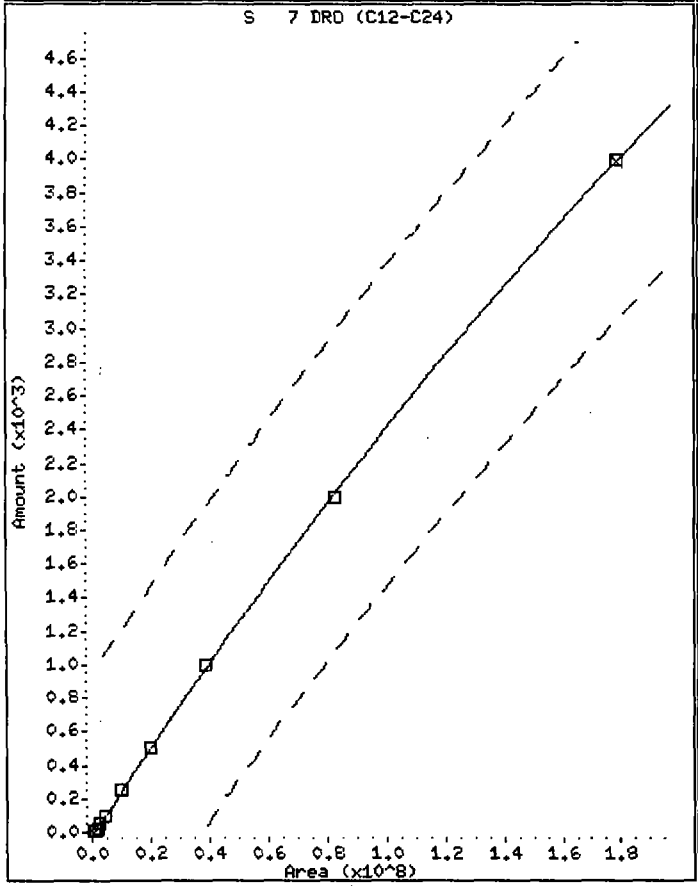

$ 2 o-Terphenyl (S)
Amount
Area (x10^7)

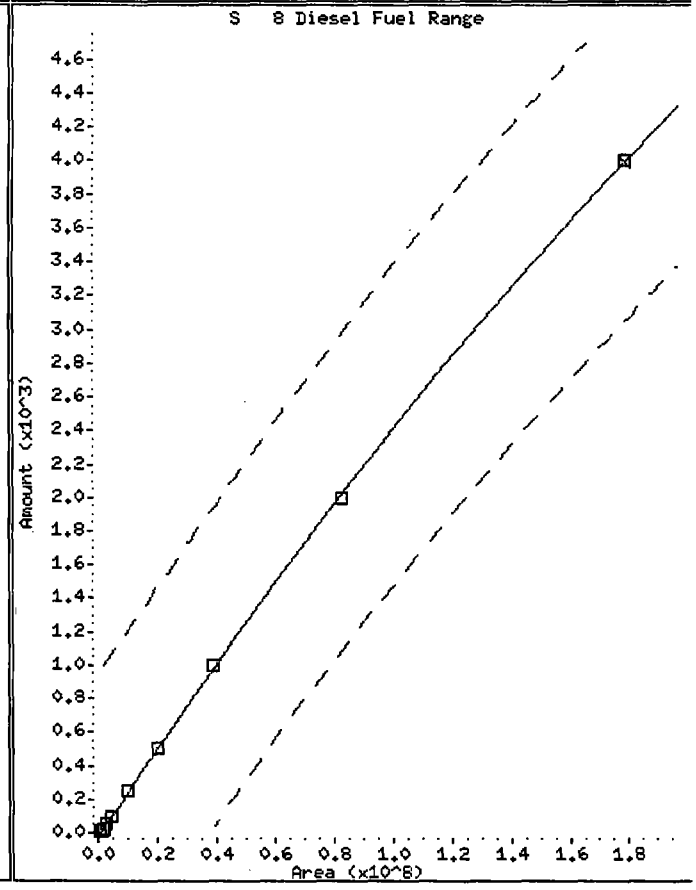

$ 3 n-Triacontane (S)
Amount
Area (x10^7)

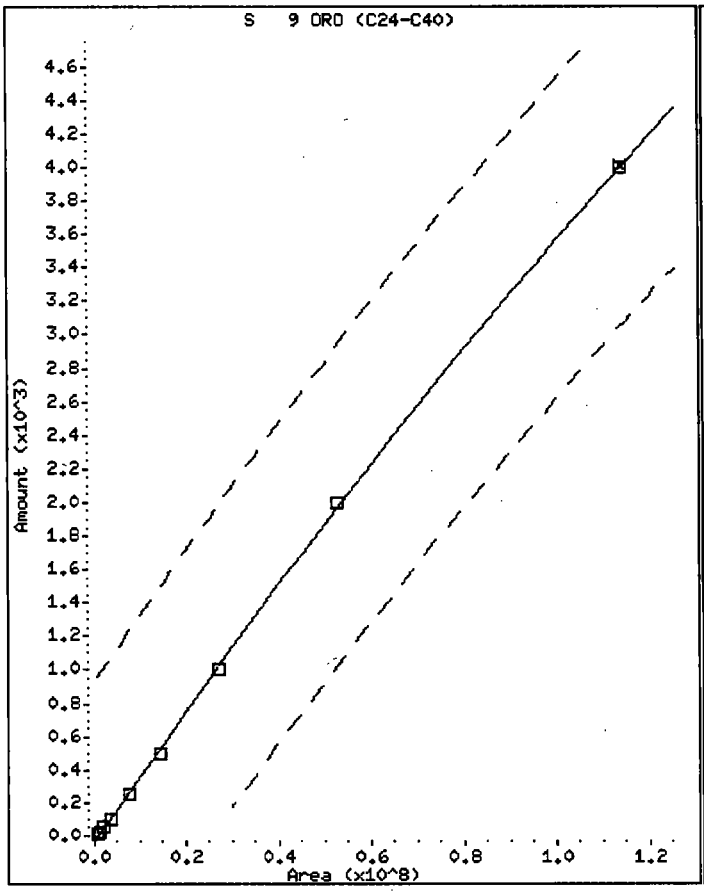

S 4 Residual Range Organics AK103
Amount (x10^3)
Area (x10^8)

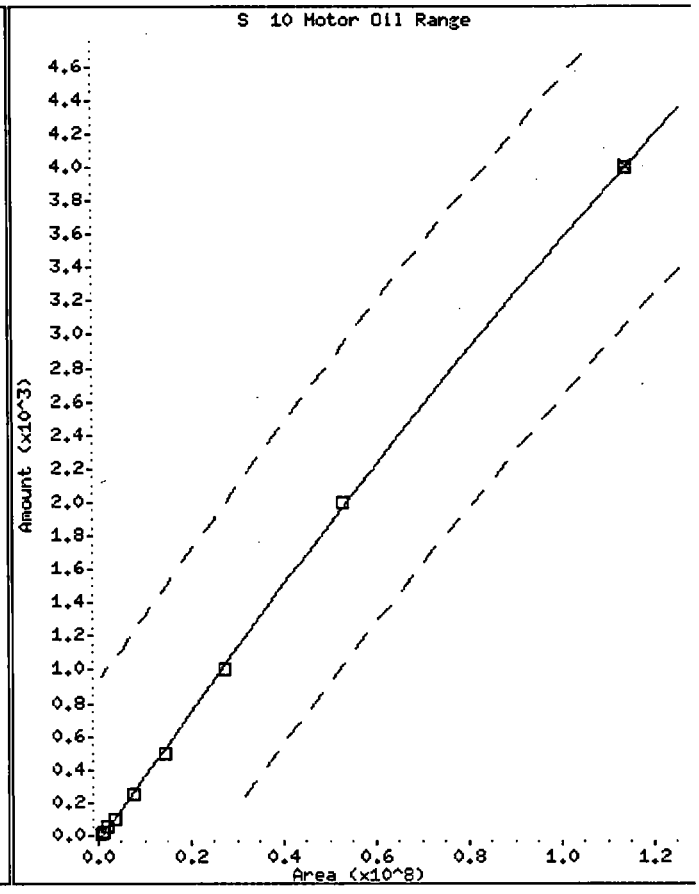

S 5 TPH-DRO (C10-C28)
Amount (x10^3)
Area (x10^8)


S 6 Motor Oil Range (C24-C36)
Amount (x10^3)
Area (x10^8)


S 7 DRO (C12-C24)
Amount (x10^3)
Area (x10^8)


S 8 Diesel Fuel Range
Amount (x10^3)
Area (x10^8)


S 9 ORO (C24-C40)
Amount (x10^3)
Area (x10^8)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0


S 10 Motor Oil Range
Amount (x10^3)
Area (x10^8)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R004.d
Lab Smp Id: RTmark 10328-153
Inj Date : 05-MAR-2014 08:45
Operator : MT Inst ID: 10gcs8.i
Smp Info : RTmark 10328-153
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 12:45 mthao Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)	
S	1 DRO by AK 102	3.320-8.230			6679070			
$	2 o-Terphenyl (S)	6.748	6.748	0.000	132			(R)
$	3 n-Triacontane (S)	9.754	9.760	-0.006	428			(R)
S	4 Residual Range Organics AK103	8.240-11.450			6400910			
S	5 TPH-DRO (C10-C28)	3.320-9.310			10716687			
S	6 Motor Oil Range (C24-C36)	7.960-11.450			8346842			
S	7 DRO (C12-C24)	4.240-8.210			4439636			
S	8 Diesel Fuel Range	4.240-8.210			4439636			
S	9 ORO (C24-C40)	8.220-13.070			8642882			
S	10 Motor Oil Range	8.220-13.070			8642882			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R004.D

Page 1

Date : 05-MAR-2014 08:45

Client ID:

Instrument: 10gcs8.i

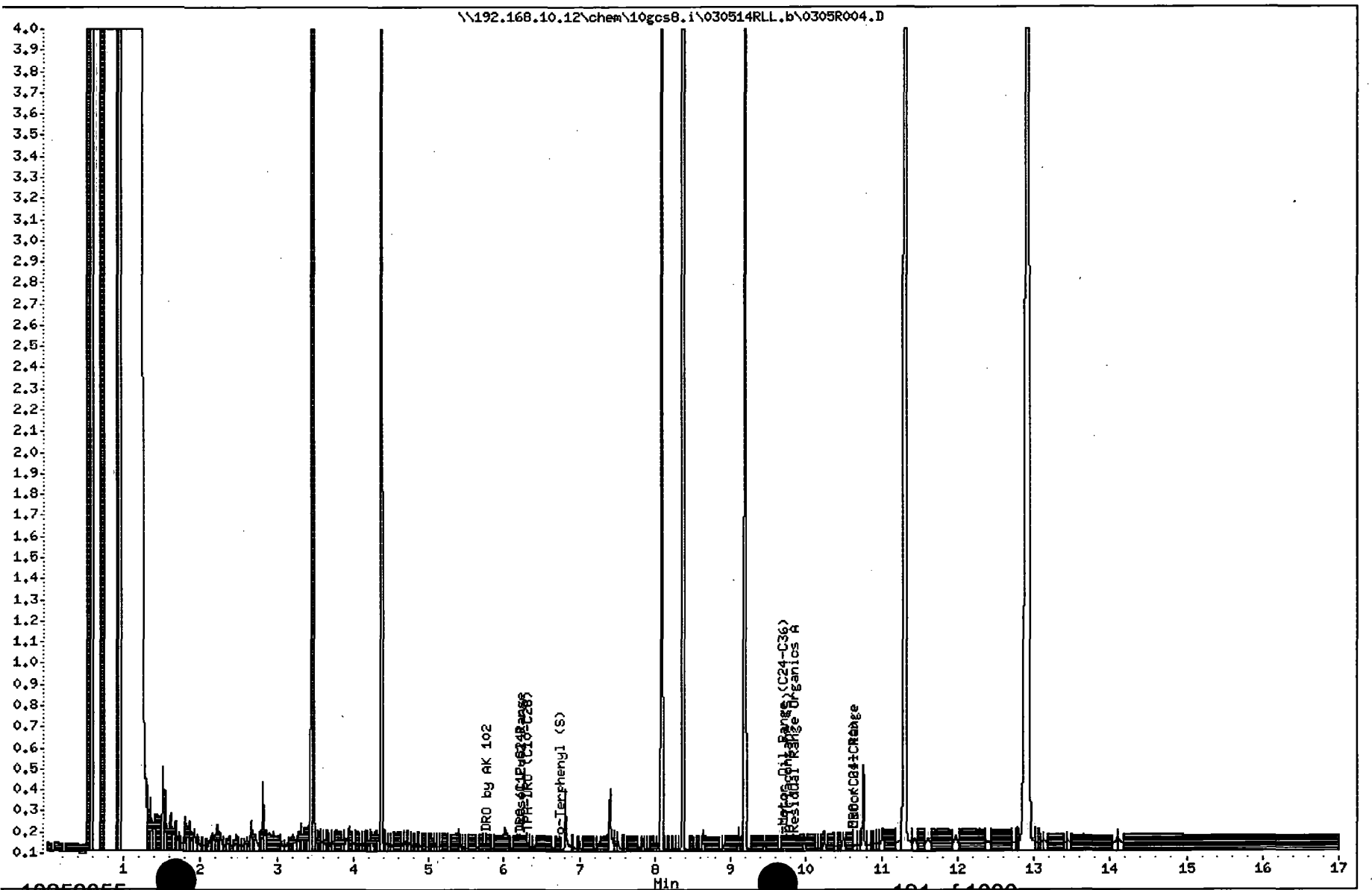
Sample Info: RTmark 10328-153

Volume Injected (uL): 1.0

Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i Injection Date: 05-MAR-2014 17:37
Lab File ID: 0305R027.d Init. Cal. Date(s): 05-MAR-2014 05-MAR-2014
Analysis Type: Init. Cal. Times: 09:08 12:36
Lab Sample ID: D/MO7 10528-020 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m

COMPOUND	RRF / AMOUNT	RF500	CCAL RRF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 2 o-Terphenyl (S)	50.00000	45.12724	43063	0.010	-9.74552	15.00000	Linear
$ 3 n-Triacontane (S)	50.00000	47.74245	32432	0.010	-4.51510	15.00000	Linear
S 5 TPH-DRO (C10-C28)	500	507	53497	0.010	1.41195	15.00000	Quadratic
S 6 Motor Oil Range (C24-C36)	500	539	24861	0.010	7.86643	15.00000	Quadratic

Average %D / Drift Results.

Calculated Average %D/Drift = 5.88475
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Report Date: 06-Mar-2014 07:20

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R027.d
Lab Smp Id: D/MO7 10528-020
Inj Date : 05-MAR-2014 17:37
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MO7 10528-020
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	2 o-Terphenyl (S)	6.712	6.712	0.000	2153165	50.0000	45.1(M)
$	3 n-Triacontane (S)	9.650	9.650	0.000	1621586	50.0000	47.7(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			26748717	500.000	507(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			12430256	500.000	539(M)

QC Flag Legend

M- Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R027.D

Page 1

Date : 05-MAR-2014 17:37

Client ID:

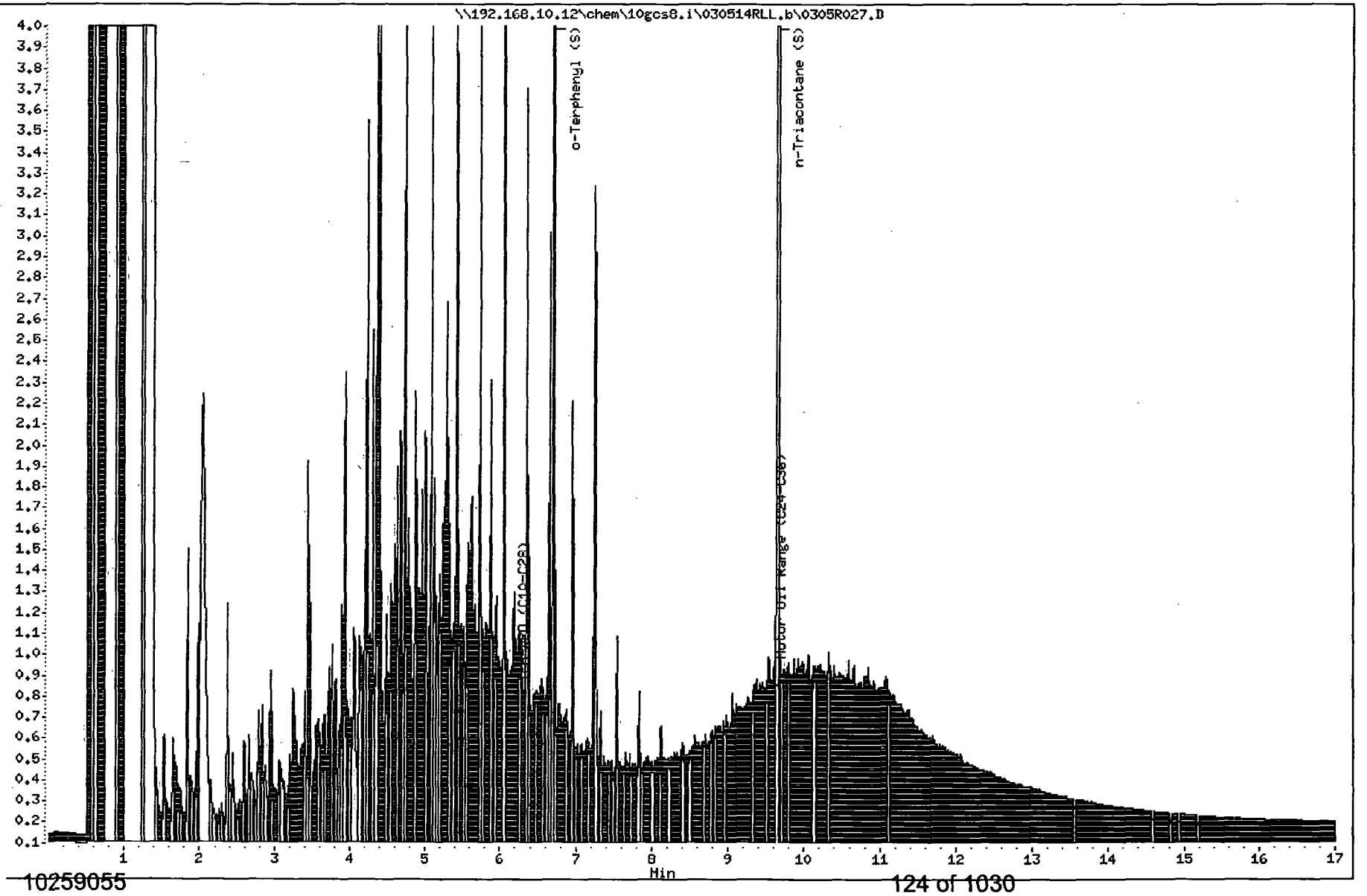
Instrument: 10gcs8.i

Sample Info: D/M07 10528-020

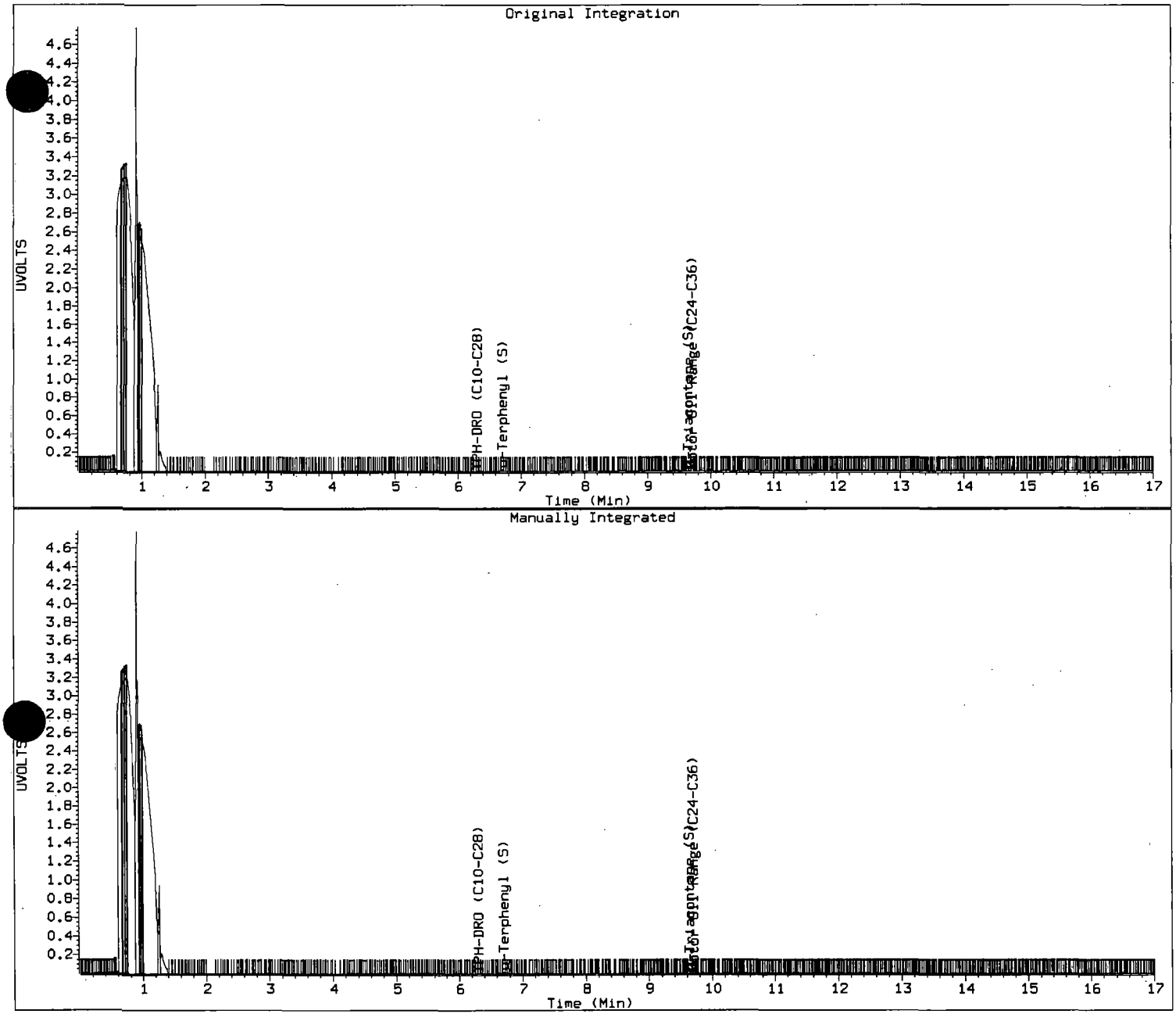
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 17:37
Instrument: 10gcs8.i
Lab Sample ID: D/MO7 10528-020



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	12430256	12430256	
TPH-DRO (C10-C28)	26748717	26748717	
o-Terphenyl (S)	2153165	2153165	
n-Triacontane (S)	1621586	1621586	

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i Injection Date: 05-MAR-2014 20:19
Lab File ID: 0305R034.d Init. Cal. Date(s): 05-MAR-2014 05-MAR-2014
Analysis Type: Init. Cal. Times: 09:08 12:36
Lab Sample ID: D/MO7 10528-020 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m

	COMPOUND	RRF / AMOUNT	RF500	CCAL RRF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S	7 DRO (C12-C24)	500	500	39704	0.010	-0.04246	15.00000	Quadratic
S	8 Diesel Fuel Range	500	500	39704	0.010	-0.04246	15.00000	Quadratic
S	9 ORO (C24-C40)	500	552	29897	0.010	10.38117	15.00000	Quadratic
S	10 Motor Oil Range	500	552	29897	0.010	10.38117	15.00000	Quadratic
$	2 o-Terphenyl (S)	50.00000	44.27919	42184	0.010	-11.44161	15.00000	Linear
$	3 n-Triacontane (S)	50.00000	46.80261	31766	0.010	-6.39477	15.00000	Linear
S	5 TPH-DRO (C10-C28)	500	504	53197	0.010	0.82605	15.00000	Quadratic
S	6 Motor Oil Range (C24-C36)	500	540	24875	0.010	7.93193	15.00000	Quadratic

Average %D / Drift Results.

Calculated Average %D/Drift = 5.93020
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R034.d
Lab Smp Id: D/MO7 10528-020
Inj Date : 05-MAR-2014 20:19
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MO7 10528-020
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Nw8015.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/mL)	(ug/mL)
S	7 DRO (C12-C24)	4.240-8.210			19851836	500.000	500 (M)
S	8 Diesel Fuel Range	4.240-8.210			19851836	500.000	500 (M)
S	9 ORO (C24-C40)	8.220-13.070			14948617	500.000	552 (M)
S	10 Motor Oil Range	8.220-13.070			14948617	500.000	552 (M)
$	2 o-Terphenyl (S)	6.704	6.704	0.000	2109179	50.0000	44.3 (M)
$	3 n-Triacontane (S)	9.590	9.590	0.000	1588281	50.0000	46.8 (M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			26598302	500.000	504 (M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			12437688	500.000	540 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R034.D

Page 1

Date : 05-MAR-2014 20:19

Client ID:

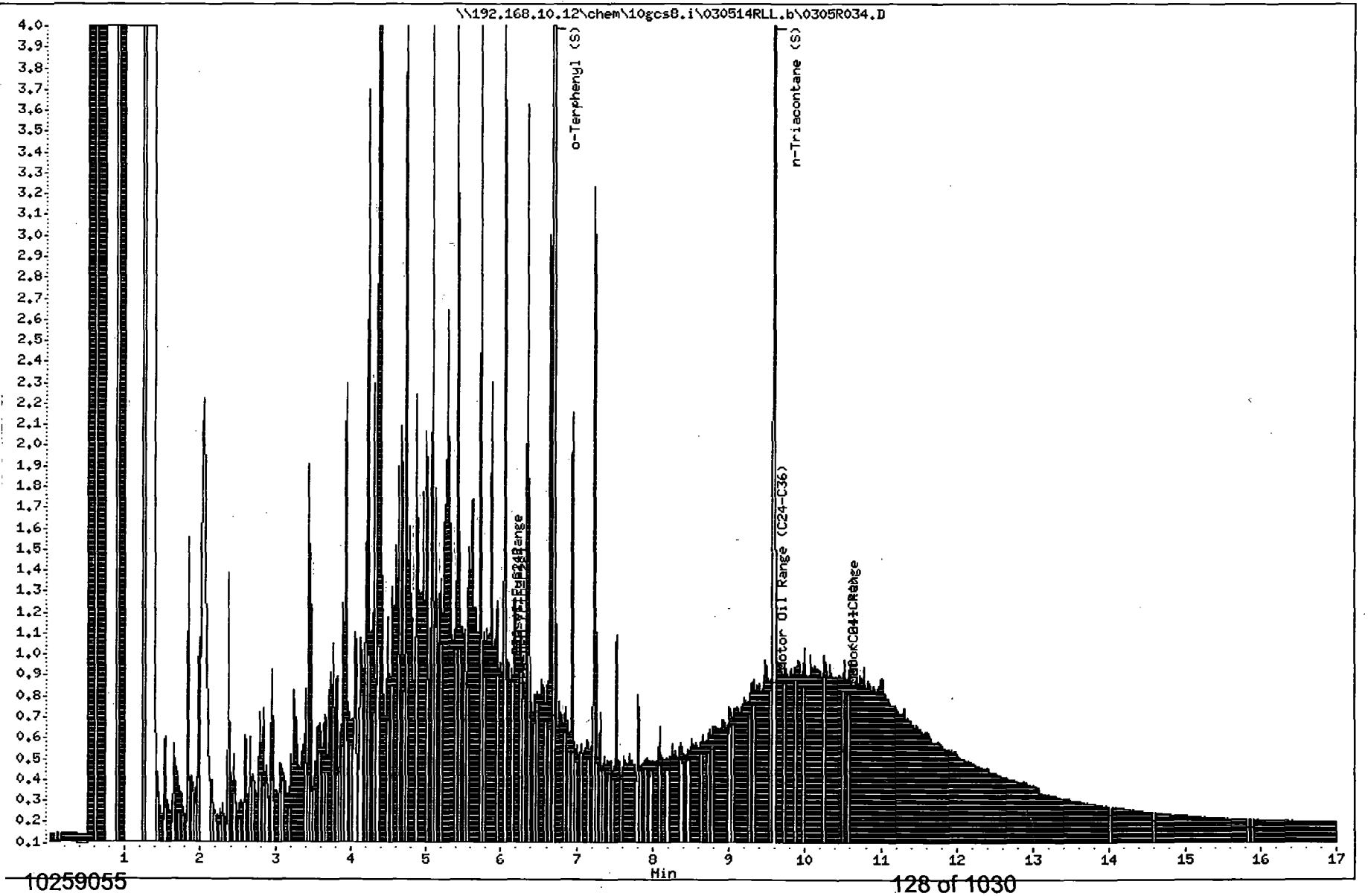
Instrument: 10gcs8.i

Sample Info: D/MO7 10528-020

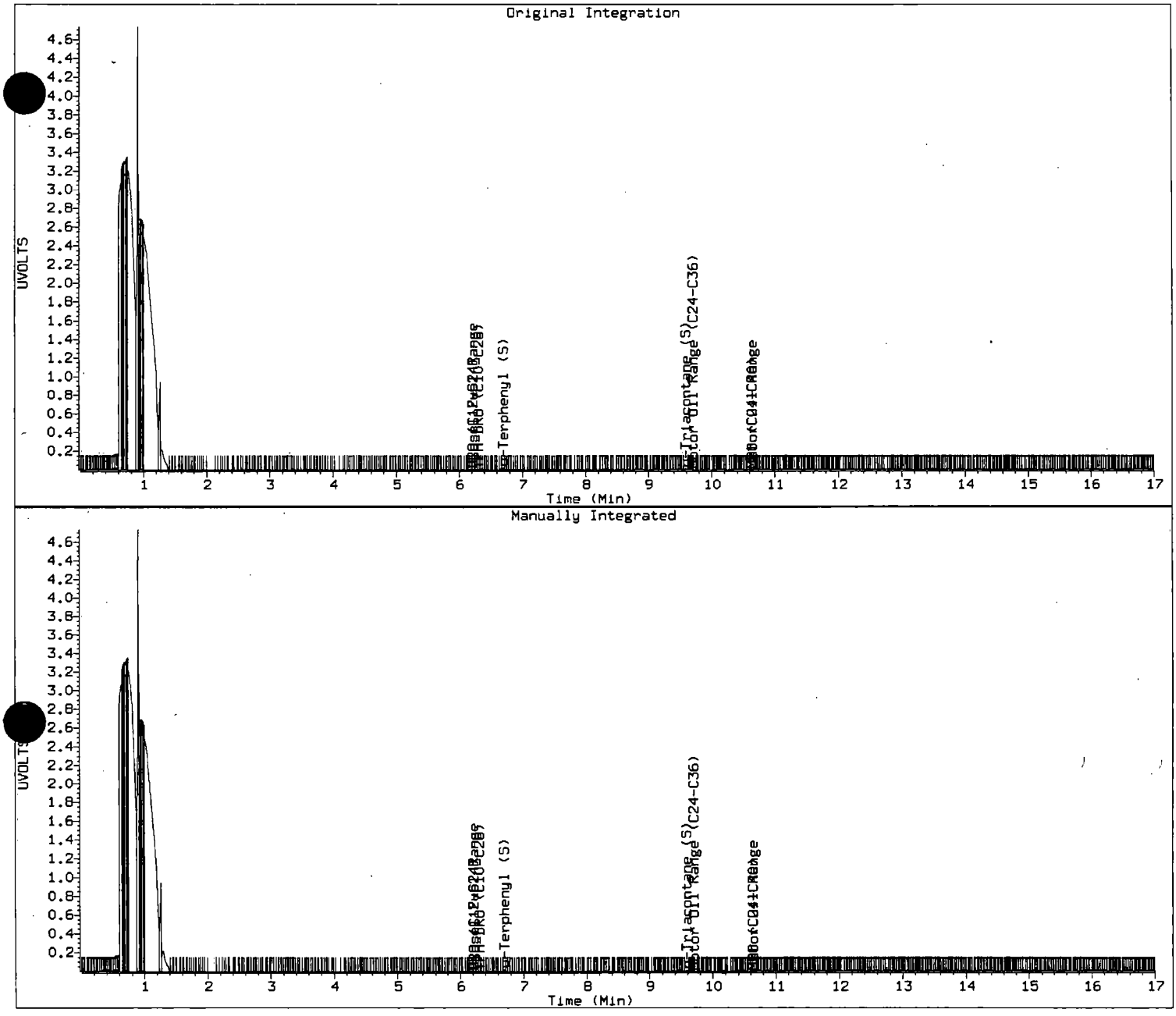
Operator: MT

Column phase: DB-5HS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: D/MO7 10528-020



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
TPH-DRO (C10-C28)	26598302	26598302	
Motor Oil Range (C24-C36)	12437688	12437688	
DRO (C12-C24)	19851836	19851836	
ORO (C24-C40)	14948617	14948617	
Diesel Fuel Range	19851836	19851836	
Motor Oil Range	14948617	14948617	
n-Triacontane (S)	1588281	1588281	
o-Terphenyl (S)	2109179	2109179	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R017.d
Lab Smp Id: 1632388
Inj Date : 05-MAR-2014 13:46
Operator : MT Inst ID: 10gcs8.i
Smp Info : 1632388,mb
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.736	6.722	0.014	2521311	52.2251	5.22(M)
$	3 n-Triacontane (S)	9.669	9.698	-0.029	1689096	49.6475	4.96(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			3028229	38.8460	3.88(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			1354492	45.7318	4.57(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R017.D

Page 1

Date : 05-MAR-2014 13:46

Client ID:

Instrument: 10gcs8.i

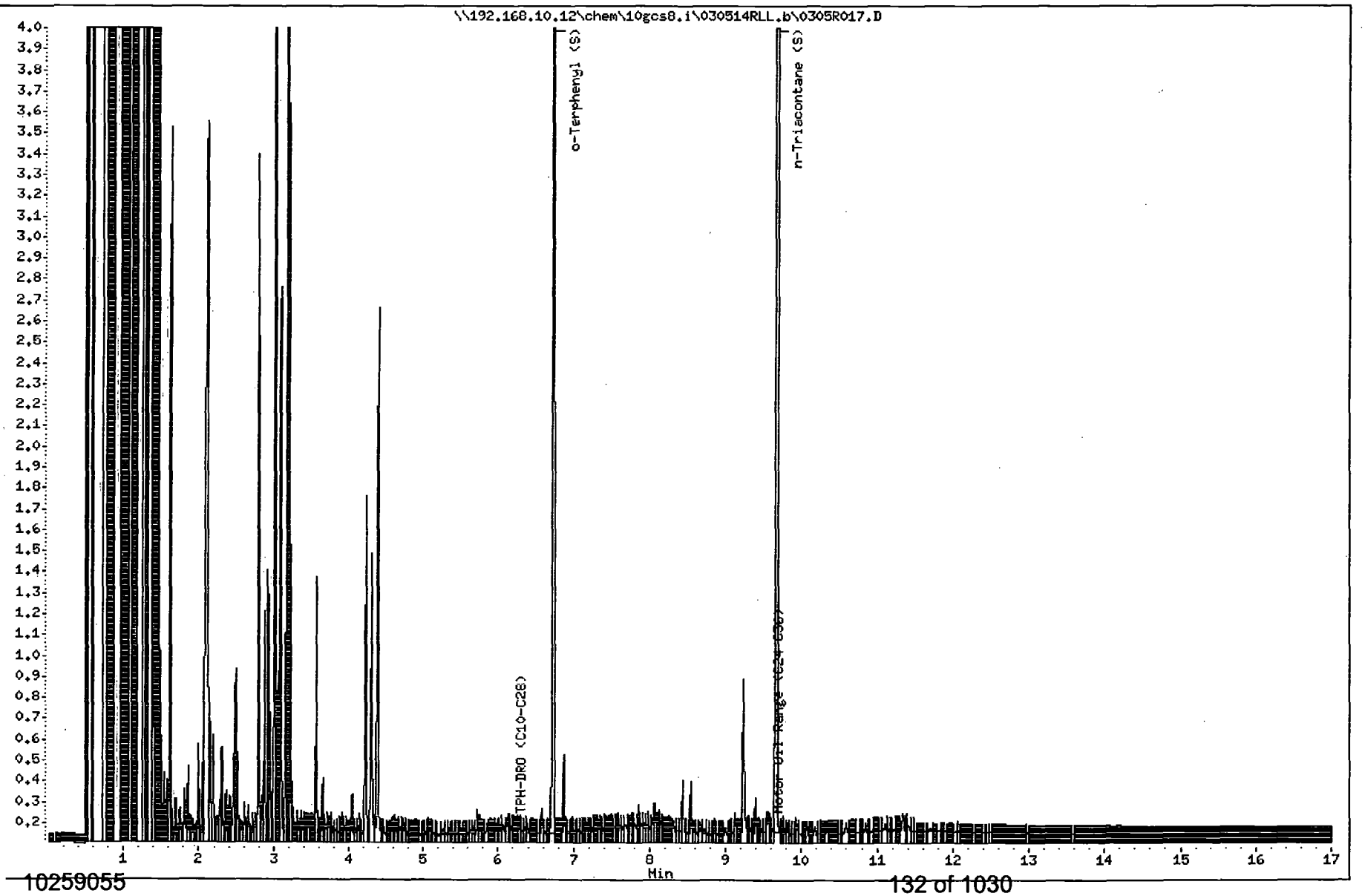
Sample Info: 1632388,mb

Volume Injected (uL): 1.0

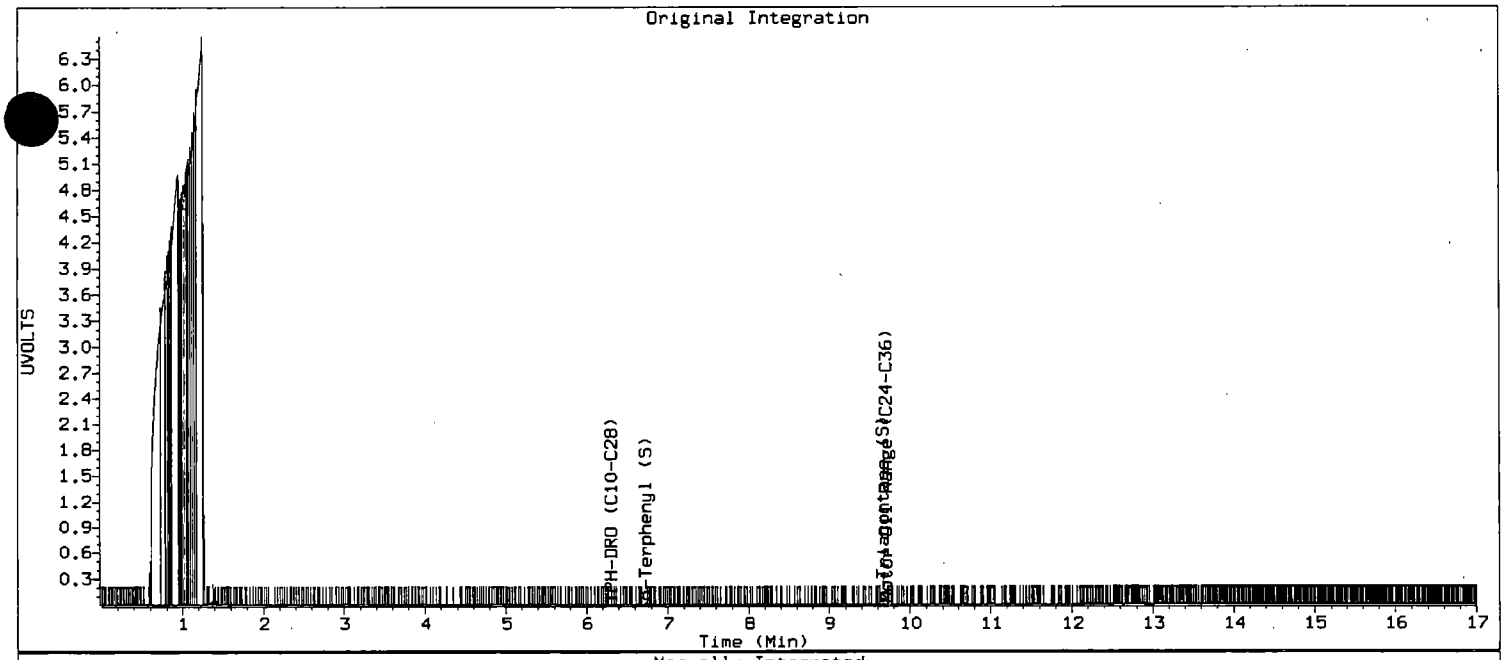
Operator: MT

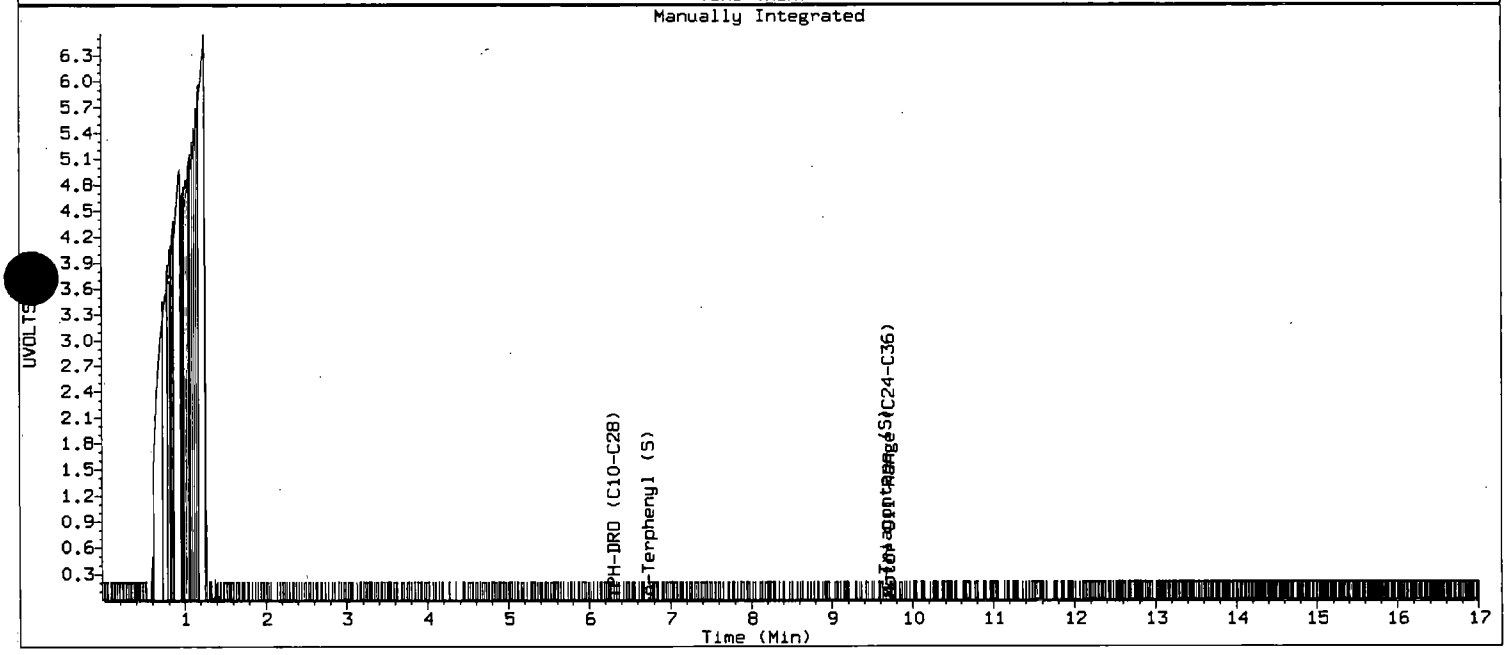
Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 13:46
Instrument: 10gcs8.i
Lab Sample ID: 1632388





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	1354492	1354492	
TPH-DRO (C10-C28)	3028229	3028229	
o-Terphenyl (S)	2521311	2521311	
n-Triacontane (S)	1689096	1689096	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R021.d
Lab Smp Id: 1632390
Inj Date : 05-MAR-2014 15:18
Operator : MT Inst ID: 10gcs8.i
Smp Info : 1632390,ms
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.707	6.704	0.003	2466690	51.1720	5.12(M)
$	3 n-Triacontane (S)	9.617	9.618	-0.001	1680530	49.4058	4.94(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			28145635	534.242	53.4(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			14181373	616.349	61.6(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R021.D

Page 1

Date : 05-MAR-2014 15:18

Client ID:

Instrument: 10gcs8.i

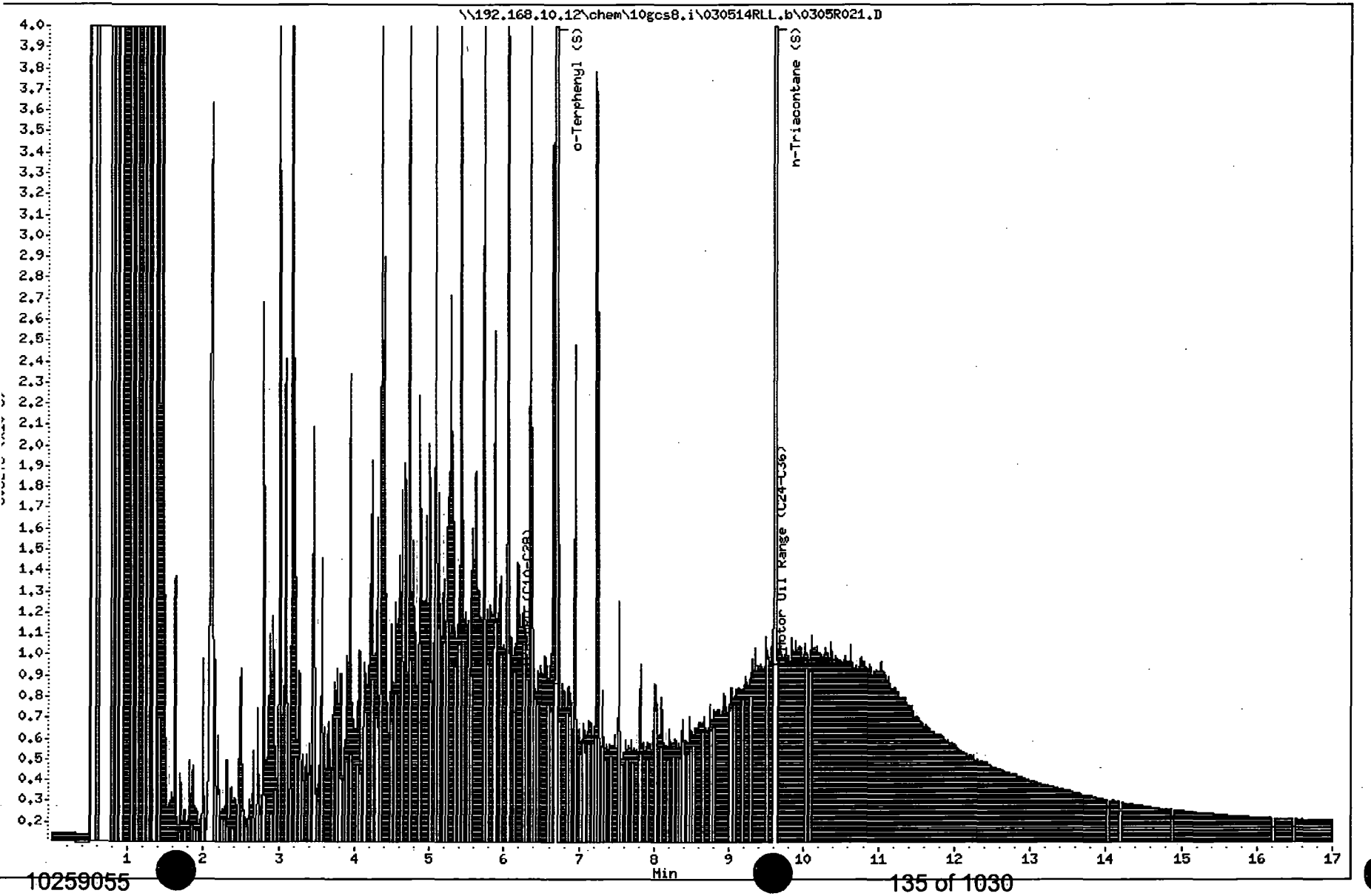
Sample Info: 1632390,ms

Volume Injected (uL): 1.0

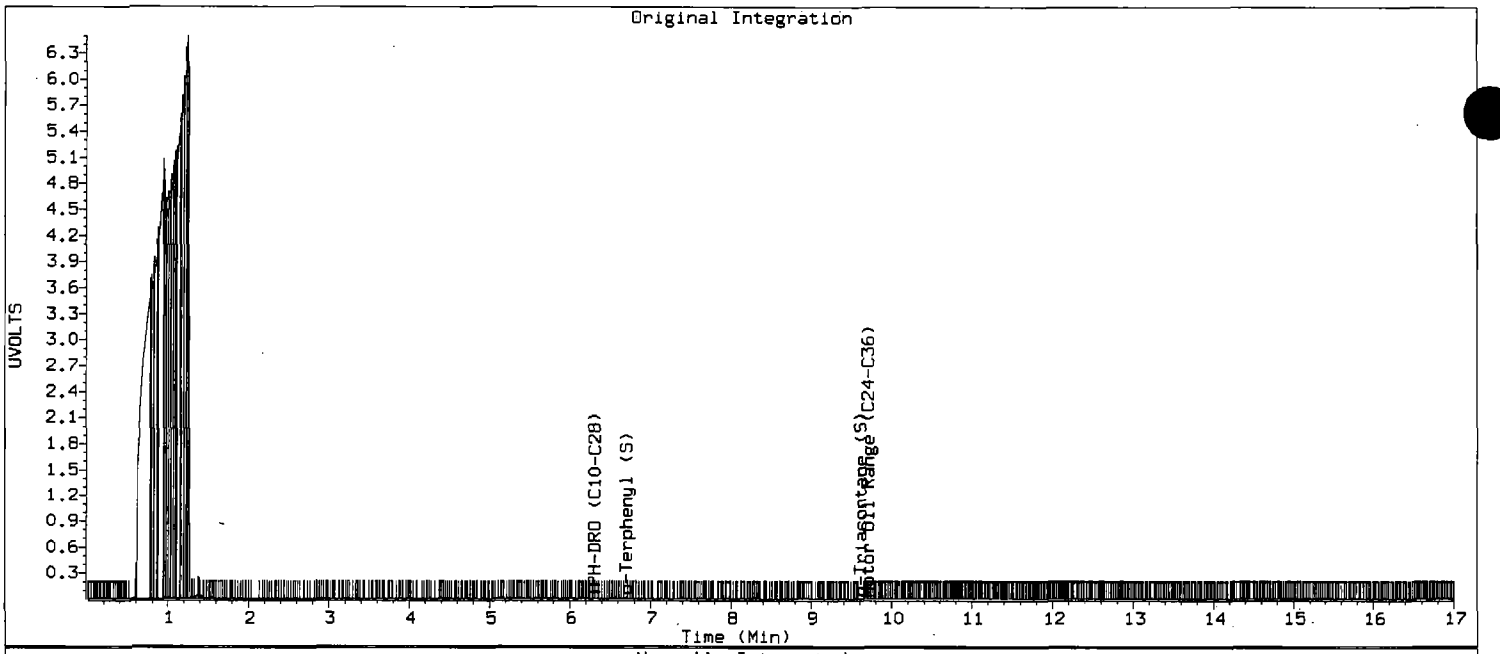
Operator: MT

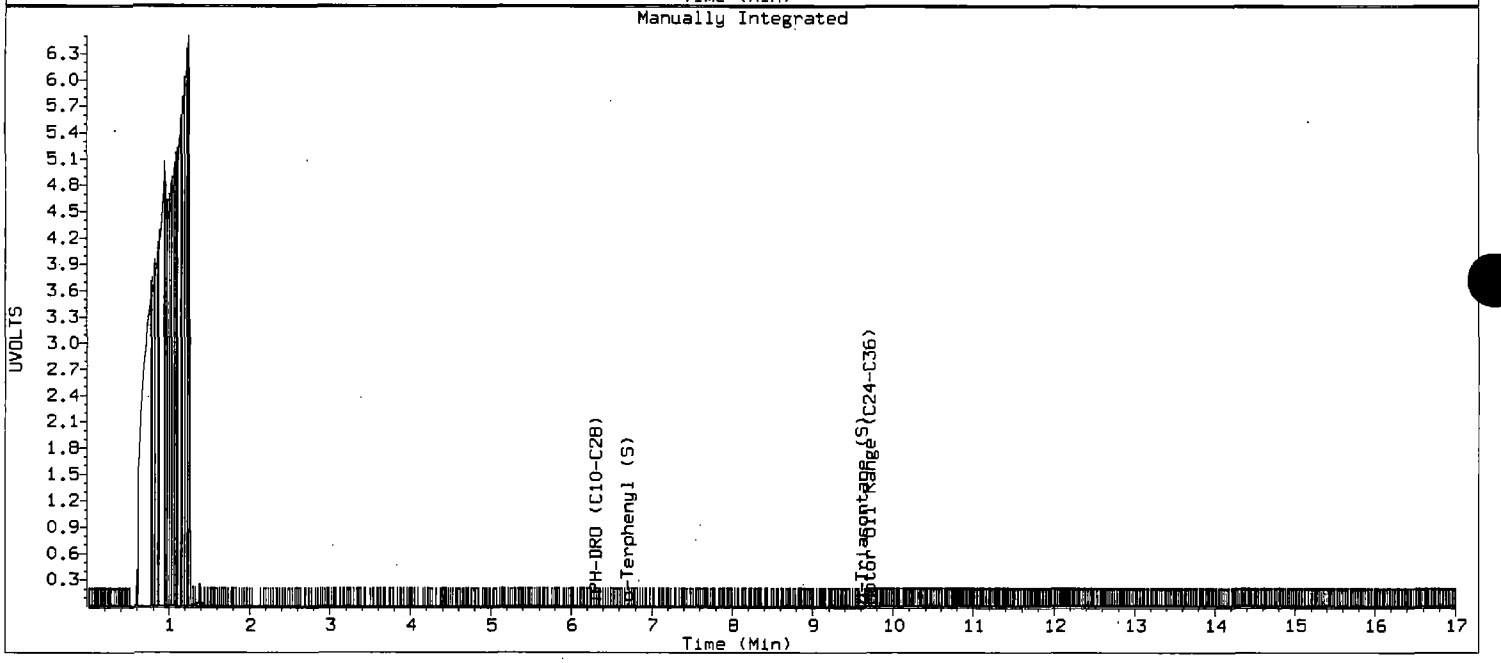
Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 15:18
Instrument: 10gcs8.i
Lab Sample ID: 1632390





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	14181373	14181373	
TPH-DRO (C10-C28)	28145635	28145635	
o-Terphenyl (S)	2466690	2466690	
n-Triacontane (S)	1680530	1680530	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R022.d
Lab Smp Id: 1632391
Inj Date : 05-MAR-2014 15:41
Operator : MT Inst ID: 10gcs8.i
Smp Info : 1632391,msd
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.691	6.704	-0.013	2329038	48.5181	4.85(M)
$	3 n-Triacontane (S)	9.586	9.618	-0.032	1588442	46.8072	4.68(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			27884936	529.172	52.9(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			14832899	644.933	64.5(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R022.D

Page 1

Date : 05-MAR-2014 15:41

Client ID:

Instrument: 10gcs8.i

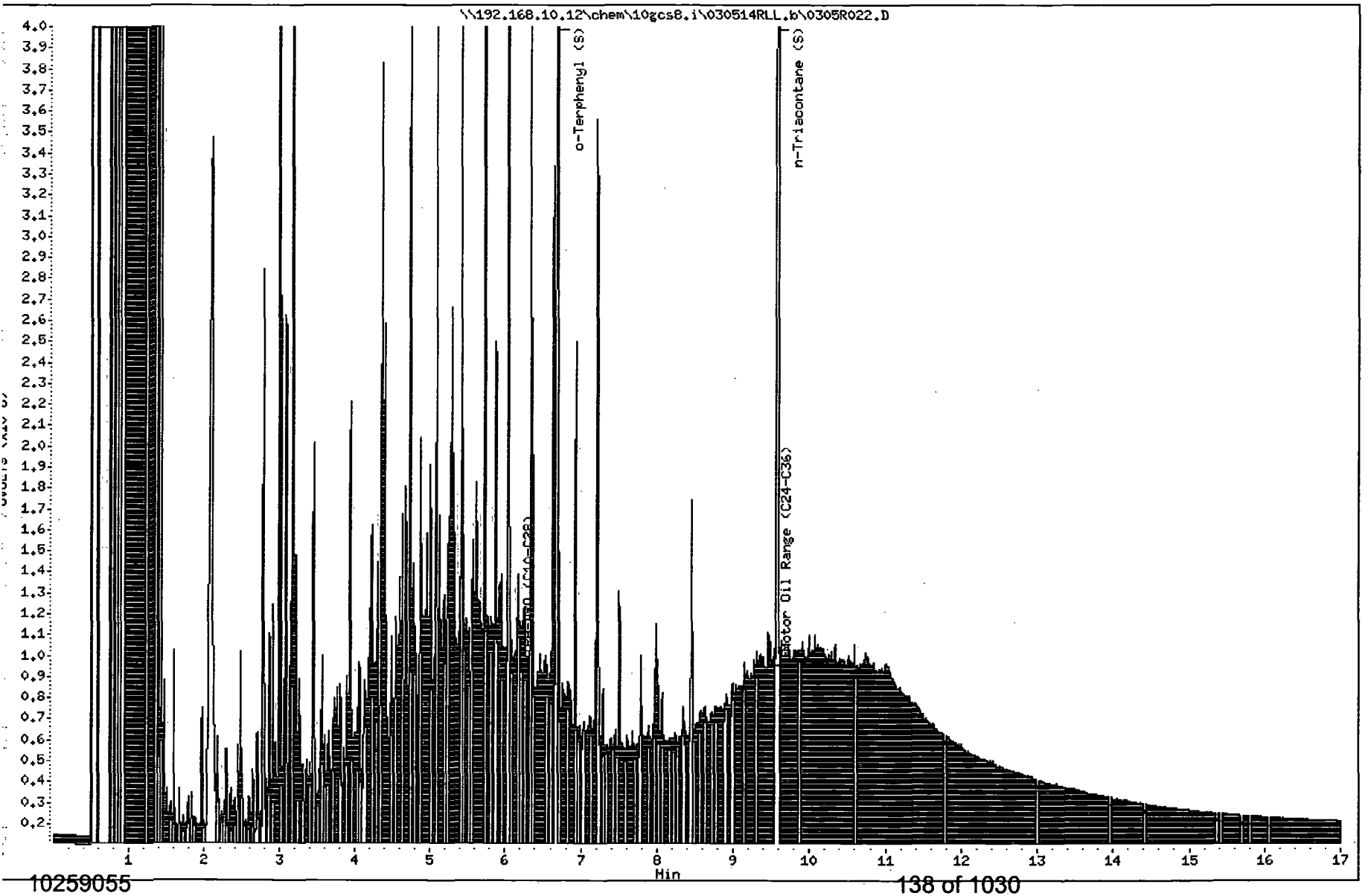
Sample Info: 1632391,msd

Volume Injected (uL): 1.0

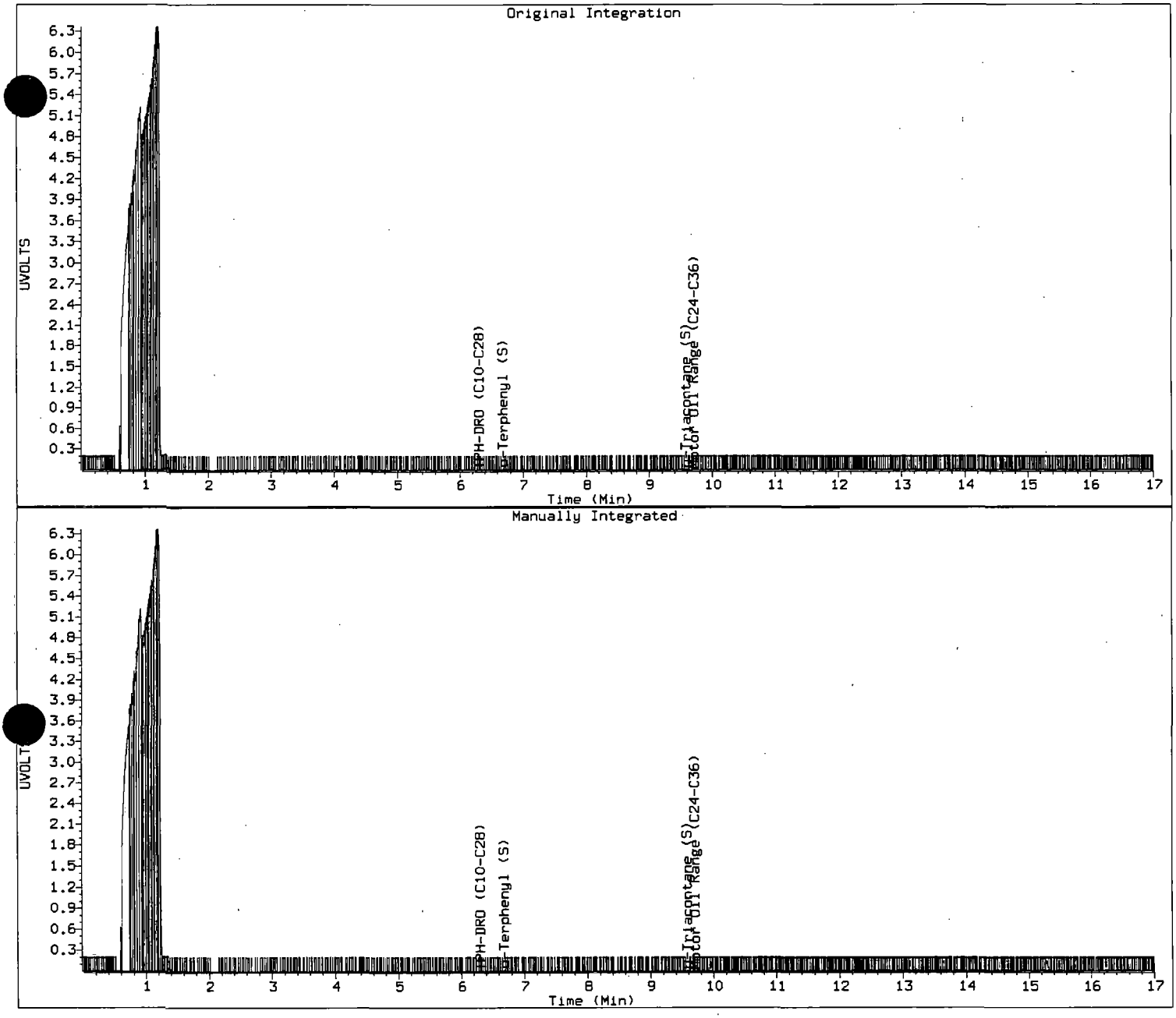
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: 1632391



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	14832899	14832899	
TPH-DRO (C10-C28)	27884936	27884936	
o-Terphenyl (S)	2329038	2329038	
n-Triacontane (S)	1588442	1588442	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R018.d
Lab Smp Id: 1632389
Inj Date : 05-MAR-2014 14:09
Operator : MT Inst ID: 10gcs8.i
Smp Info : 1632389,lcs
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

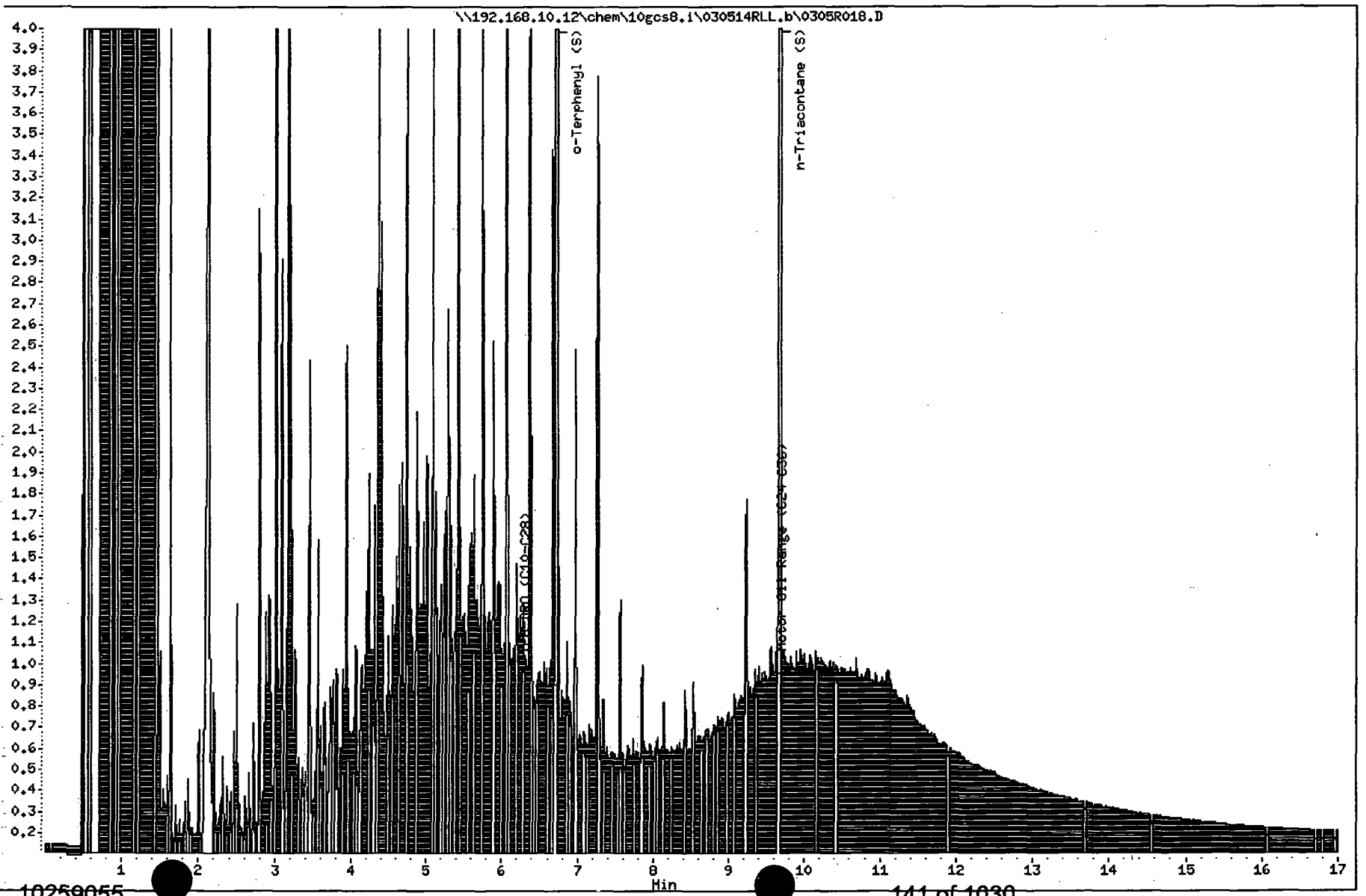
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.725	6.722	0.003	2639716	54.5079	5.45(M)
$	3 n-Triacontane (S)	9.671	9.698	-0.027	1741815	51.1352	5.11(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			28633242	543.720	54.4(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			14261626	619.872	62.0(M)

QC Flag Legend

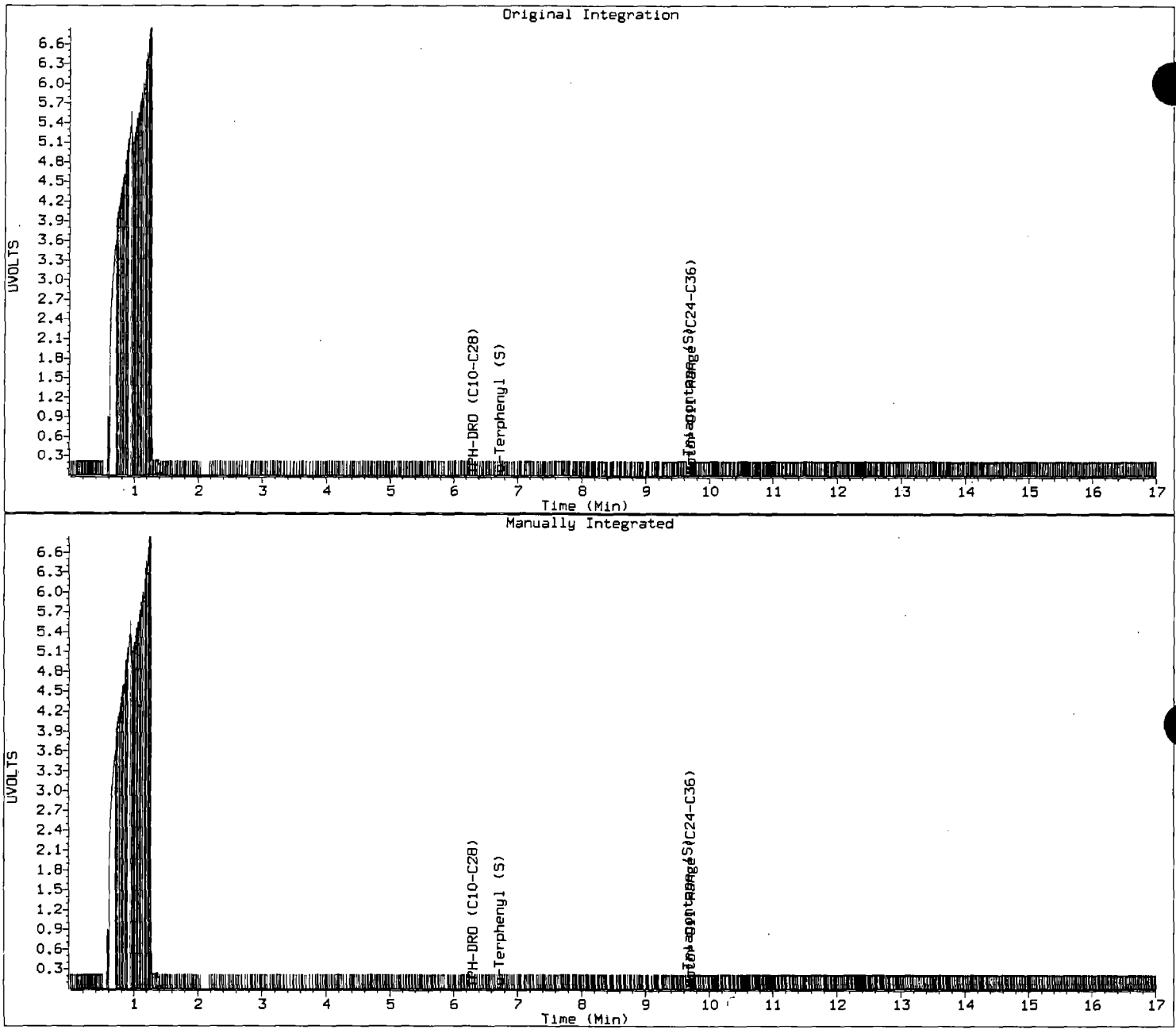
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R018.D
Date : 05-MAR-2014 14:09
Client ID:
Sample Info: 1632389,lcs
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: 10gcs8.i
Operator: MT
Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: 1632389



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	14261626	14261626	
TPH-DRO (C10-C28)	28633242	28633242	
o-Terphenyl (S)	2639716	2639716	
n-Triacontane (S)	1741815	1741815	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R025.d
Lab Smp Id: 10259055001
Inj Date : 05-MAR-2014 16:51
Operator : MT Inst ID: 10gcs8.i
Smp Info : 10259055001
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.713	6.704	0.009	2477585	51.3820	5.14(M)
$	3 n-Triacontane (S)	9.637	9.618	0.019	1679873	49.3873	4.94(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			2580777	29.8932	2.99(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			1619084	57.6538	5.76(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R025.D

Page 1

Date : 05-MAR-2014 16:51

Client ID:

Instrument: 10gcs8.i

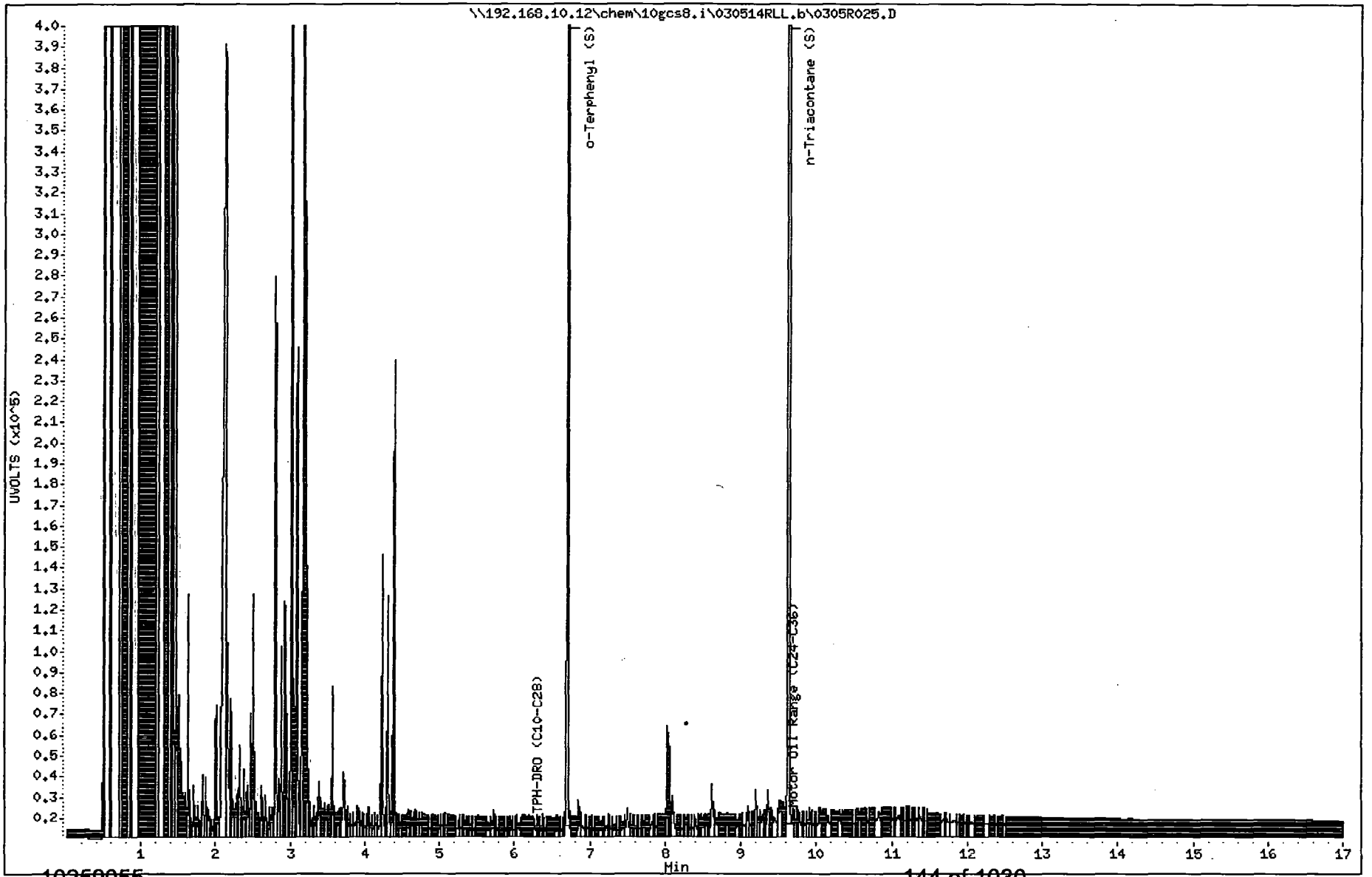
Sample Info: 10259055001

Volume Injected (uL): 1.0

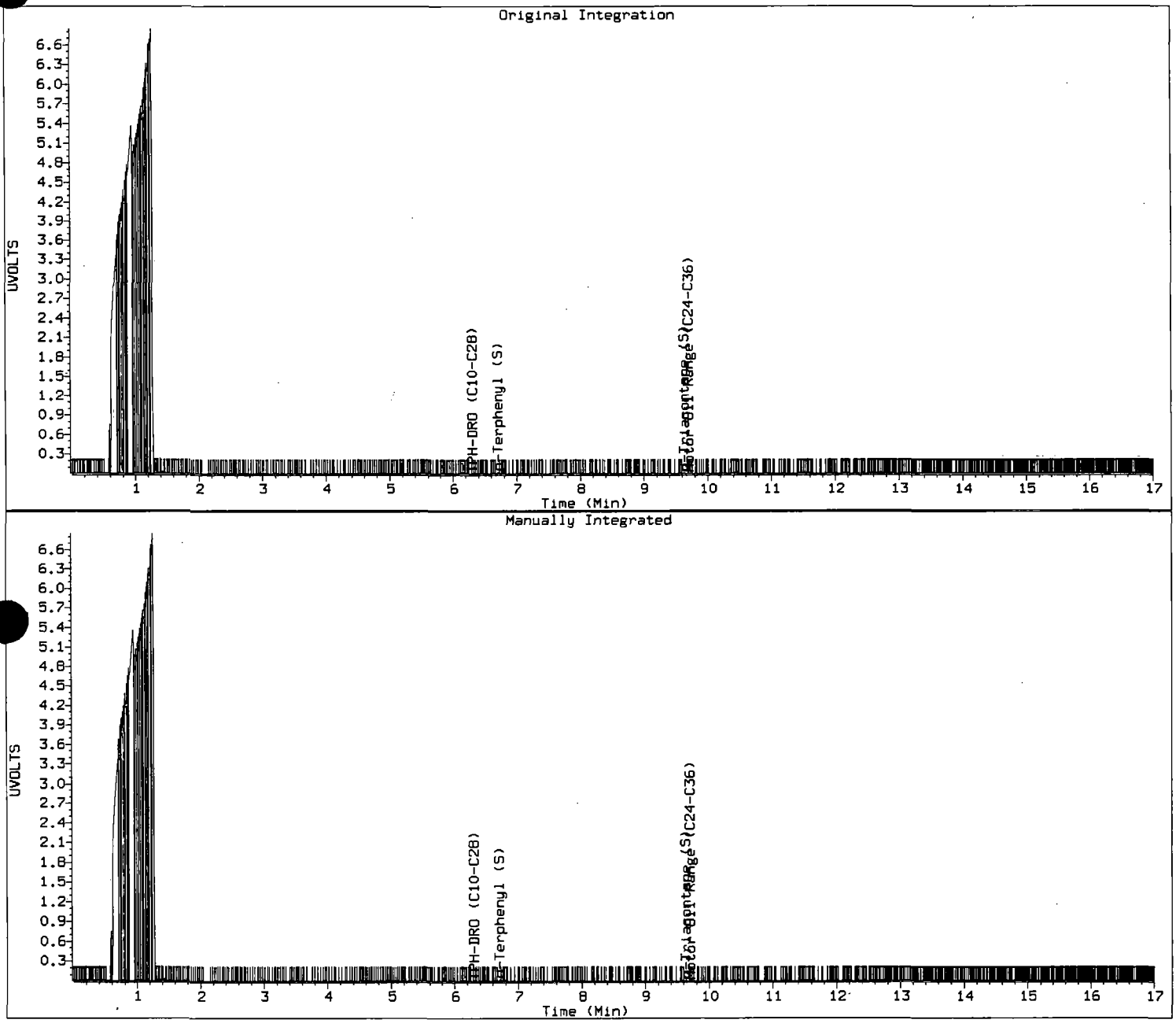
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b/0305R025.d (ManInt: 8015LL.sub Orig: 8015LL.sub)
Injection Date: 05-MAR-2014 16:51
Instrument: 10gcs8.i
Lab Sample ID: 10259055001



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	1619084	1619084	
TPH-DRO (C10-C28)	2580777	2580777	
o-Terphenyl (S)	2477585	2477585	
n-Triacontane (S)	1679873	1679873	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R023.d
Lab Smp Id: 10259055002
Inj Date : 05-MAR-2014 16:04
Operator : MT Inst ID: 10gcs8.i
Smp Info : 10259055002
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.690	6.704	-0.014	2544884	52.6795	5.27(M)
$	3 n-Triacontane (S)	9.585	9.618	-0.033	1802204	52.8393	5.28(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			7639355	130.847	13.1(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			5087556	213.347	21.3(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R023.D

Page 1

Date : 05-MAR-2014 16:04

Client ID:

Instrument: 10gcs8.i

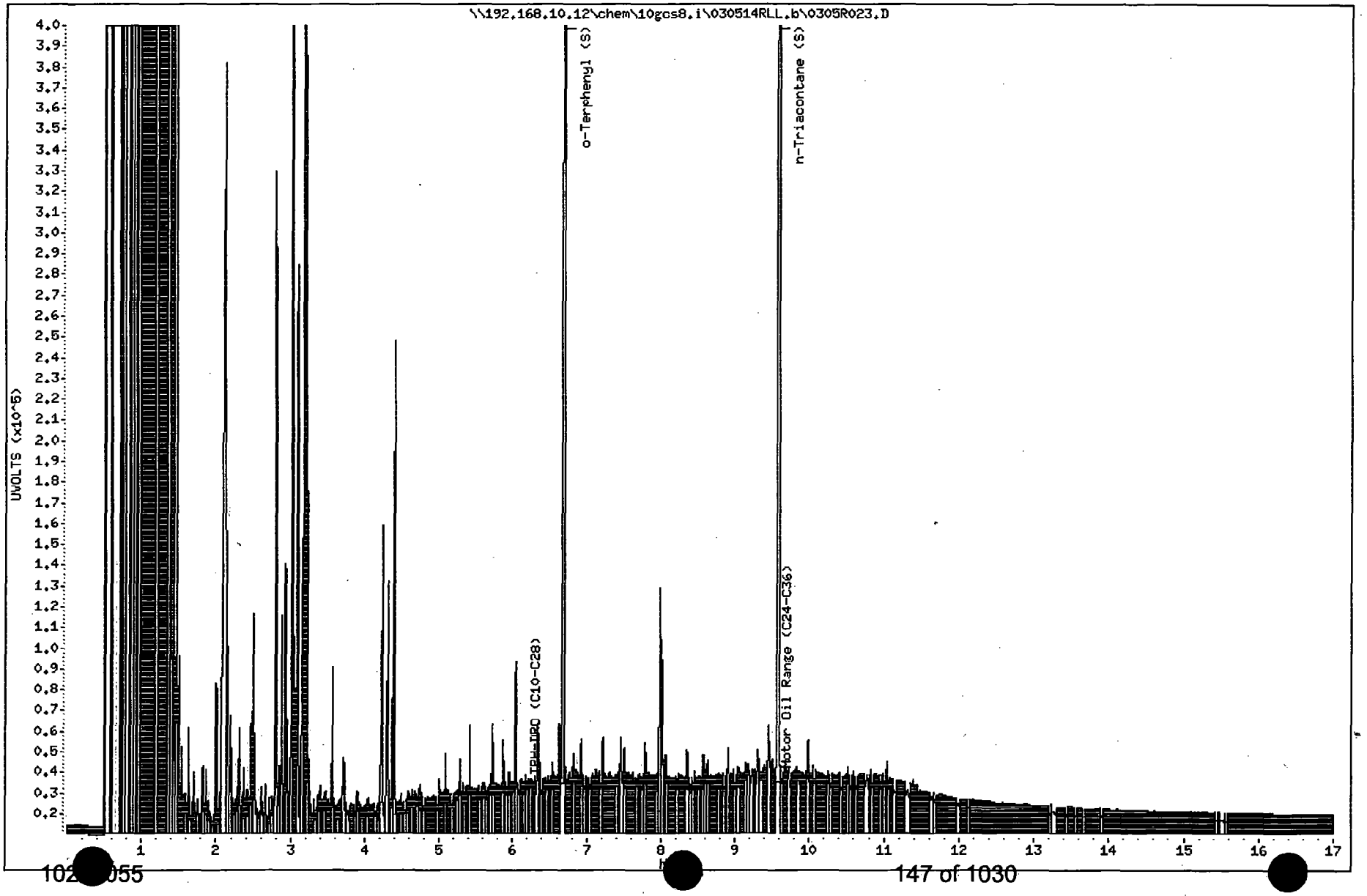
Sample Info: 10259055002

Volume Injected (uL): 1.0

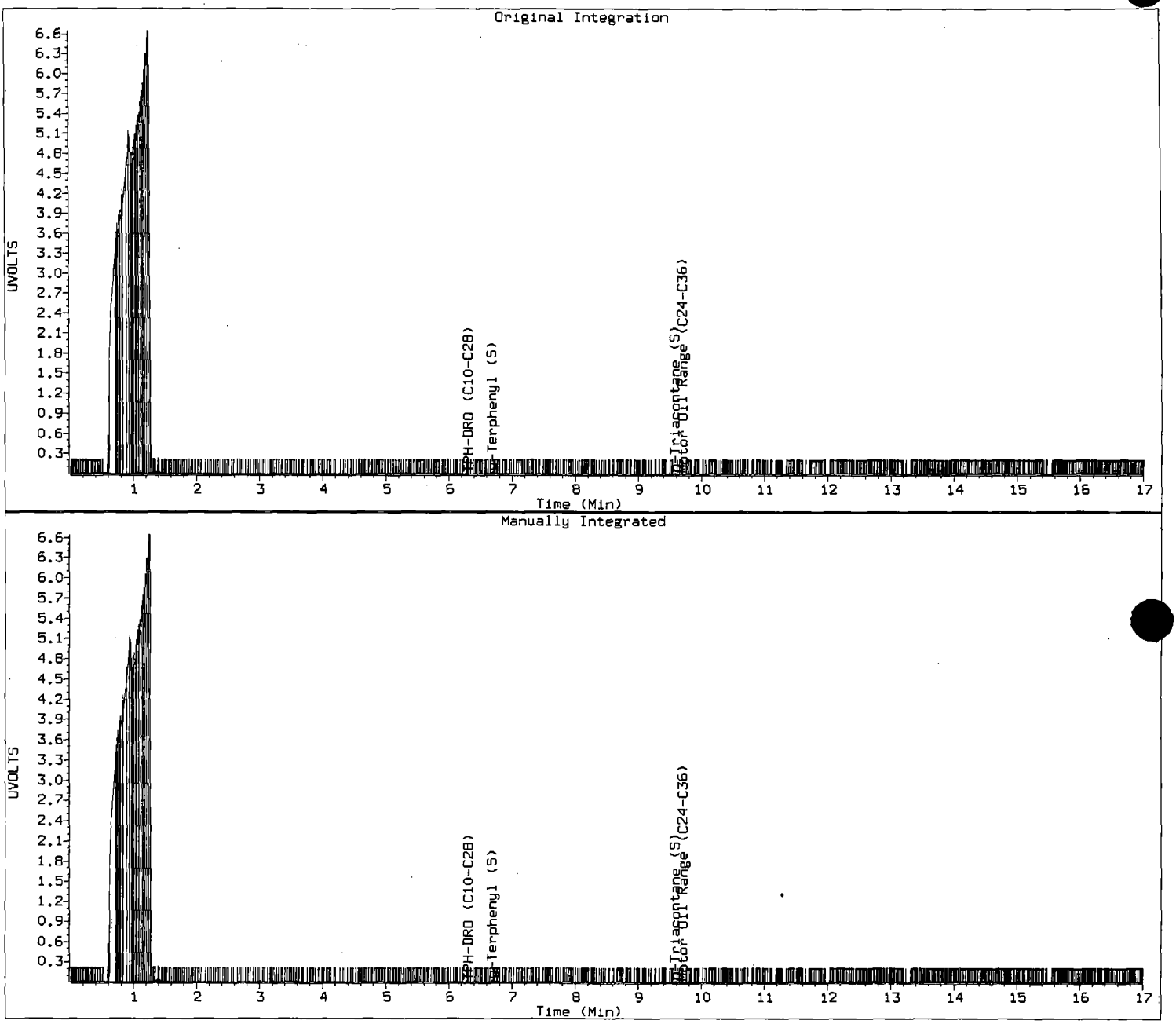
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b/0305R023.d (ManInt: 8015LL.sub Orig: 8015LL.sub)
Injection Date: 05-MAR-2014 16:04
Instrument: 10gcs8.i
Lab Sample ID: 10259055002



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	5087556	5087556	
TPH-DRO (C10-C28)	7639355	7639355	
o-Terphenyl (S)	2544884	2544884	
n-Triacontane (S)	1802204	1802204	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R030.d
Lab Smp Id: 10259055003
Inj Date : 05-MAR-2014 18:47
Operator : MT Inst ID: 10gcs8.i
Smp Info : 10259055003
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.743	6.704	0.039	2504826	51.9072	5.19(M)
$	3 n-Triacontane (S)	9.747	9.618	0.129	1701163	49.9880	5.00(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			2939265	37.0663	3.71(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			2103371	79.4584	7.94(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R030.D

Page 1

Date : 05-MAR-2014 18:47

Client ID:

Instrument: 10gcs8.i

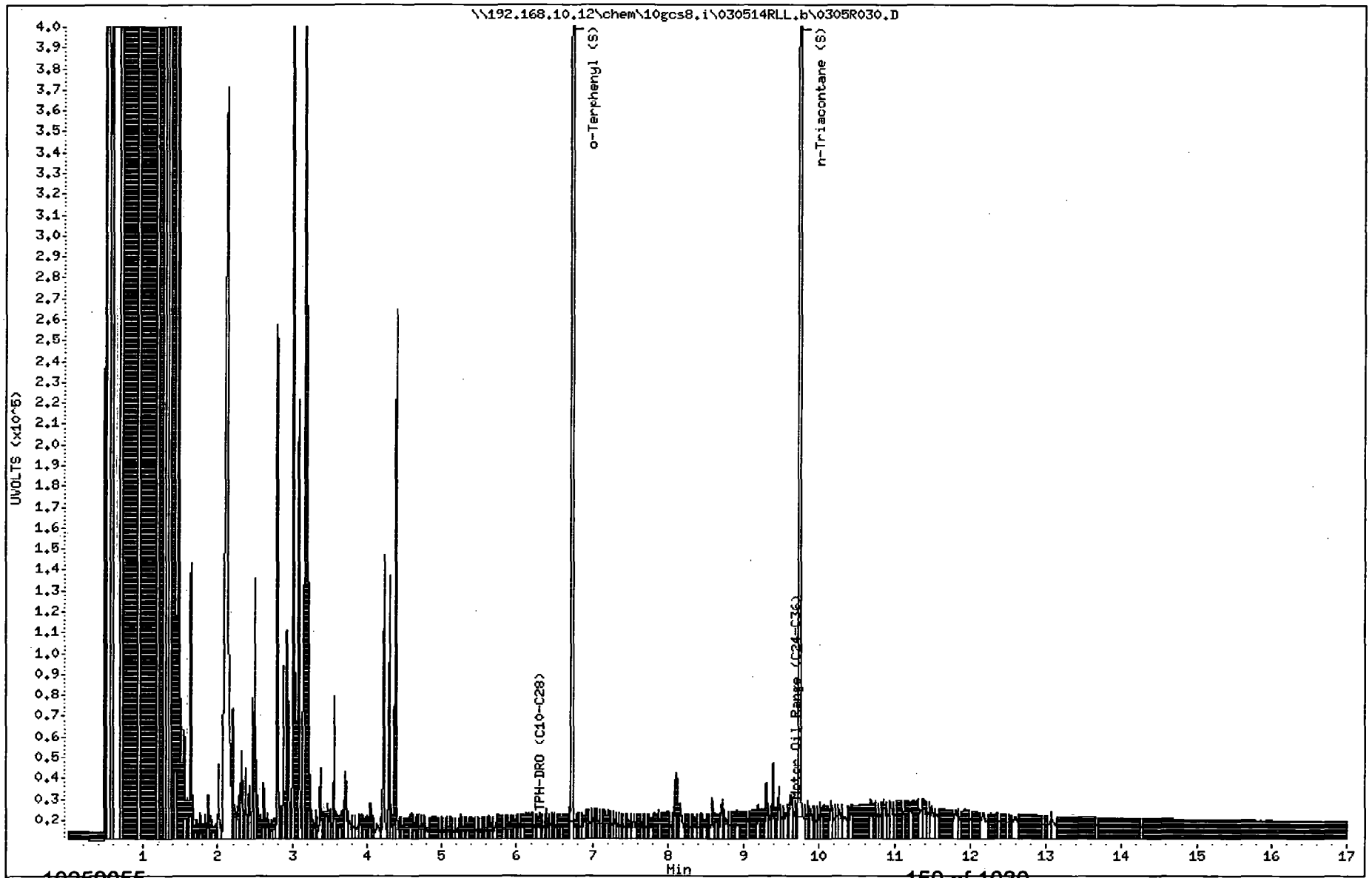
Sample Info: 10259055003

Volume Injected (uL): 1.0

Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



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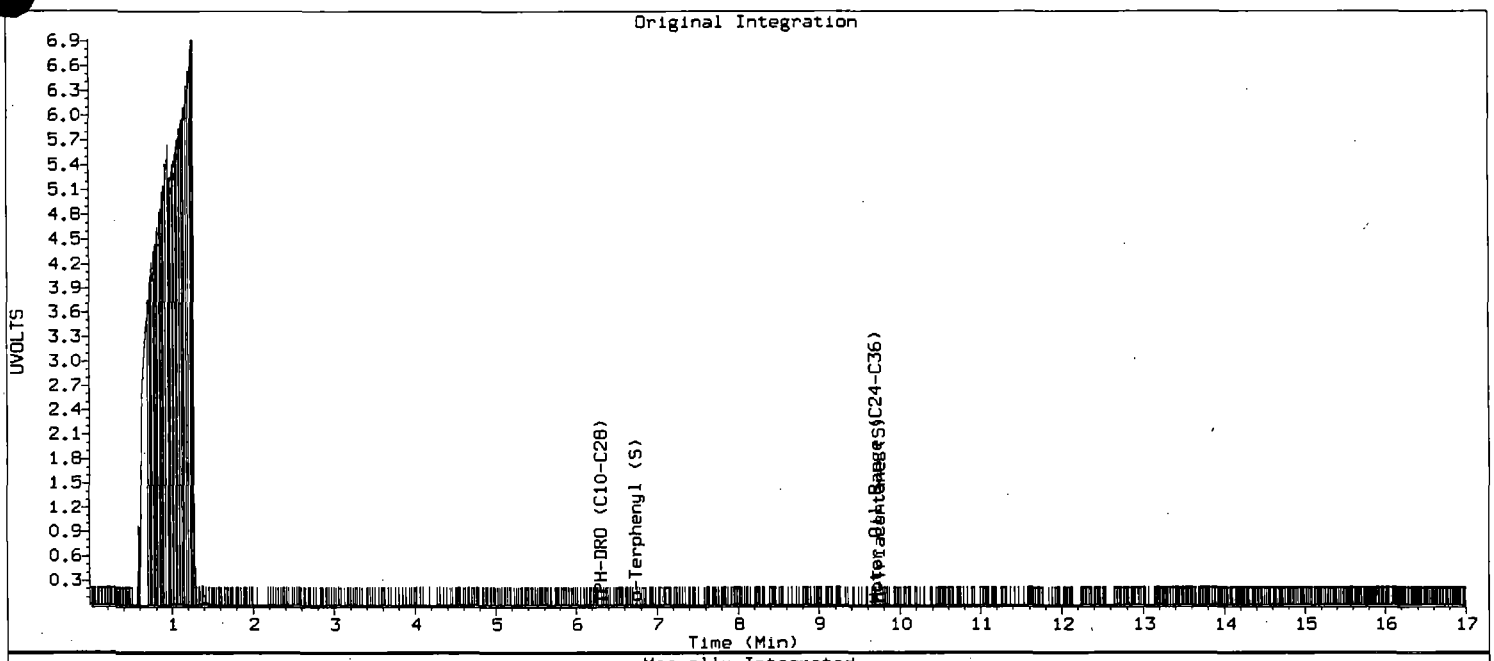
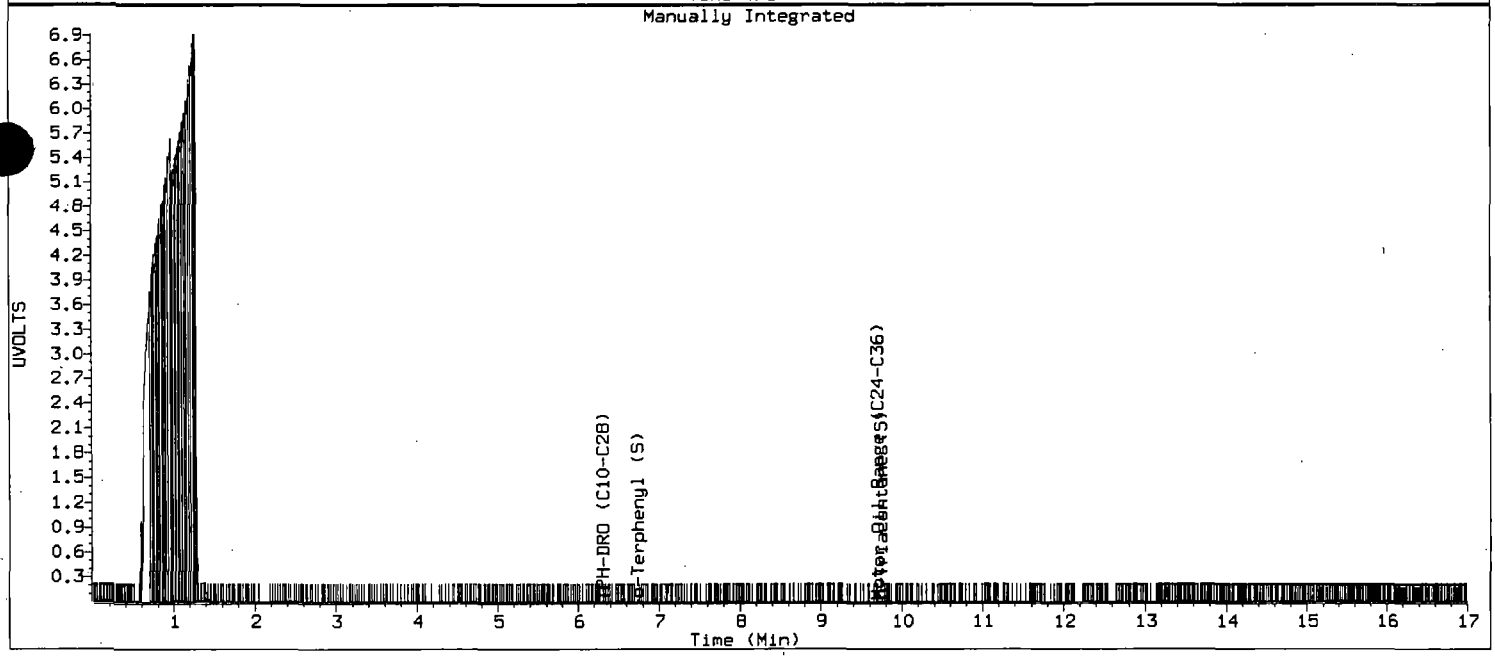
Injection Date: 05-MAR-2014 18:47
Instrument: 10gcs8.i
Lab Sample ID: 10259055003





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	2103371	2103371	
TPH-DRO (C10-C28)	2939265	2939265	
o-Terphenyl (S)	2504826	2504826	
n-Triacontane (S)	1701163	1701163	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R031.d
Lab Smp Id: 10259055004
Inj Date : 05-MAR-2014 19:10
Operator : MT Inst ID: 10gcs8.i
Smp Info : 10259055004
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

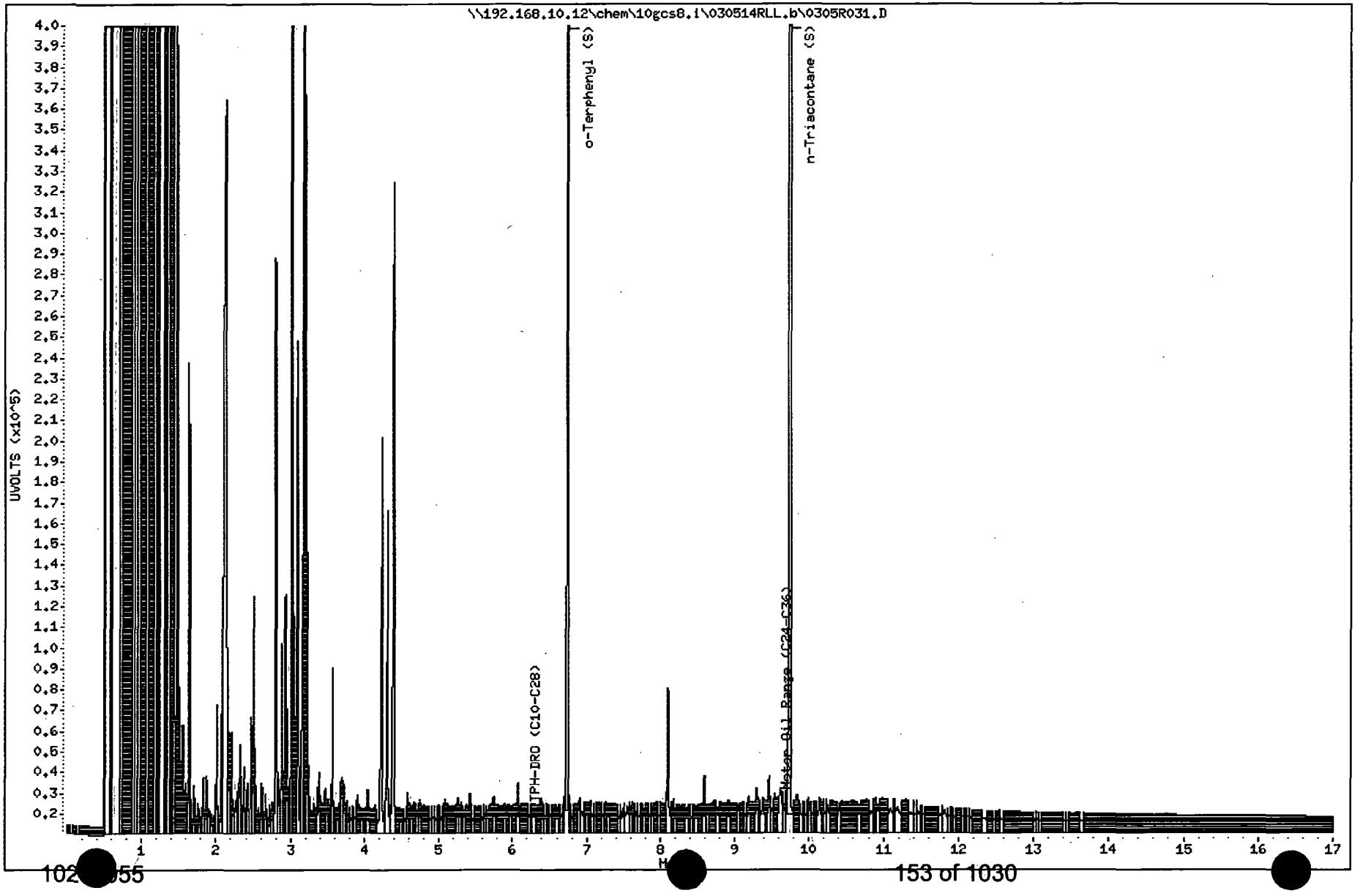
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.748	6.704	0.044	2495620	51.7297	5.17(M)
$	3 n-Triacontane (S)	9.743	9.618	0.125	1808057	53.0045	5.30(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			3876094	55.7980	5.58(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			2038701	76.5479	7.65(M)

QC Flag Legend

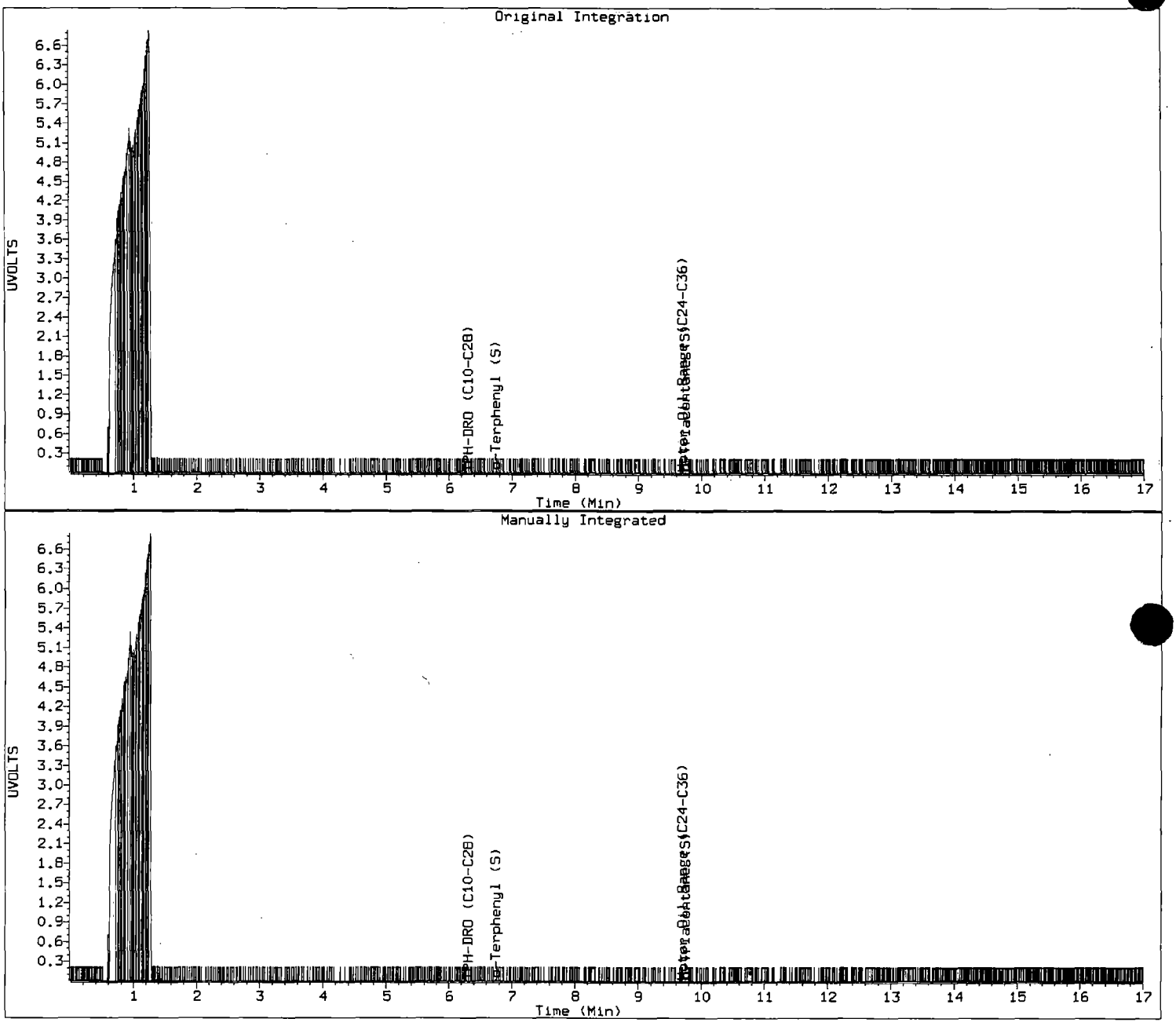
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R031.D
Date : 05-MAR-2014 19:10
Client ID:
Sample Info: 10259055004
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: 10gcs8.i
Operator: MT
Column diameter: 0.25



Data File: \\192.168.10.12\chem\10gcs8.1\030514RLL.b/0305R031.d (ManInt: 8015LL.sub Orig: 8015LL.sub)
Injection Date: 05-MAR-2014 19:10
Instrument: 10gcs8.i
Lab Sample ID: 10259055004



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	2038701	2038701	
TPH-DRO (C10-C28)	3876094	3876094	
o-Terphenyl (S)	2495620	2495620	
n-Triacontane (S)	1808057	1808057	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R033.d
Lab Smp Id: 10259055005
Inj Date : 05-MAR-2014 19:56
Operator : MT Inst ID: 10gcs8.i
Smp Info : 10259055005
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.711	6.704	0.007	2441015	50.6770	5.07(M)
$	3 n-Triacontane (S)	9.611	9.618	-0.007	1589734	46.8436	4.68(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			3517198	48.6243	4.86(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			1892653	69.9736	7.00(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R033.D

Page 1

Date : 05-MAR-2014 19:56

Client ID:

Instrument: 10gcs8.i

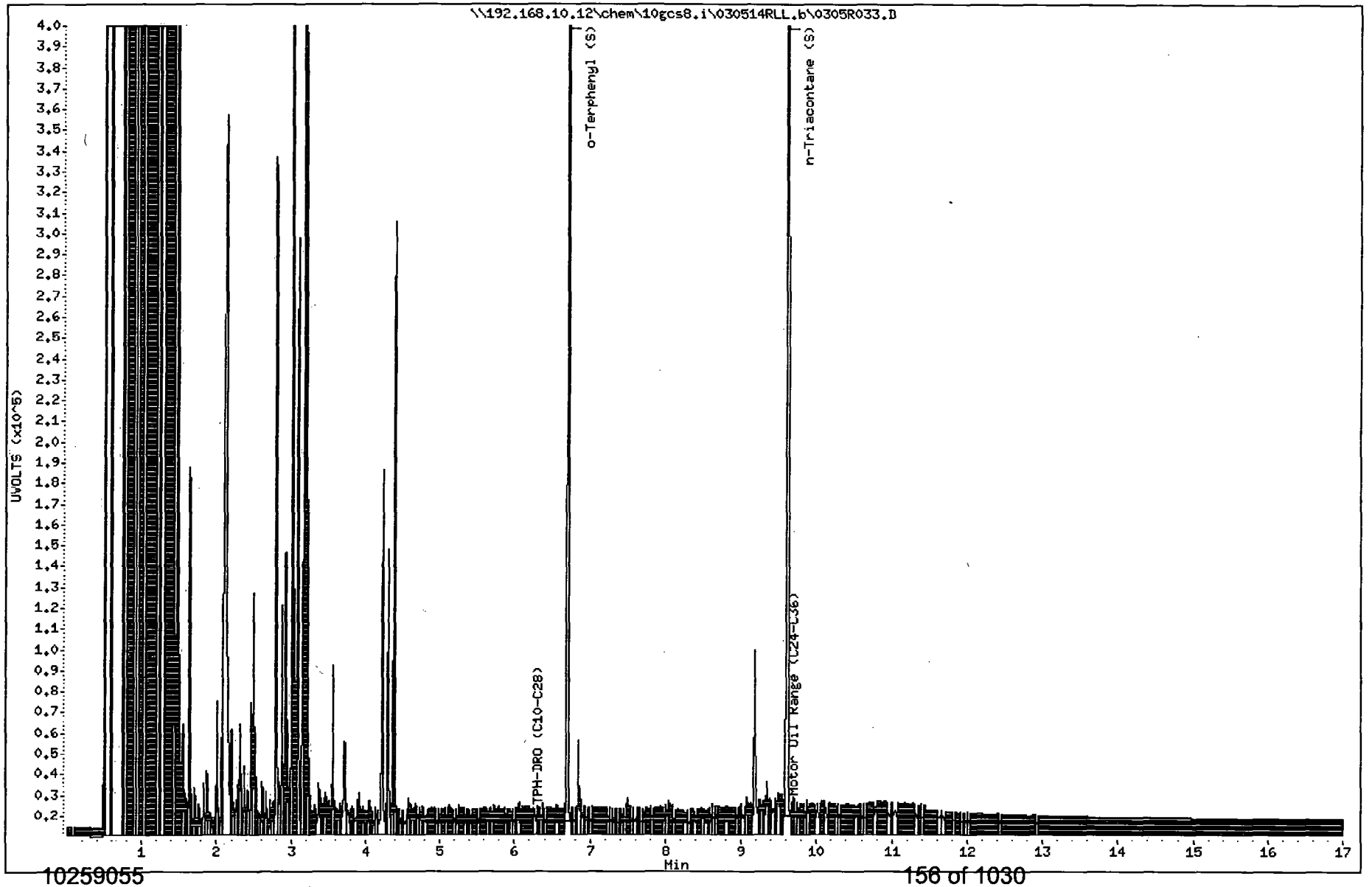
Sample Info: 10259055005

Volume Injected (uL): 1.0

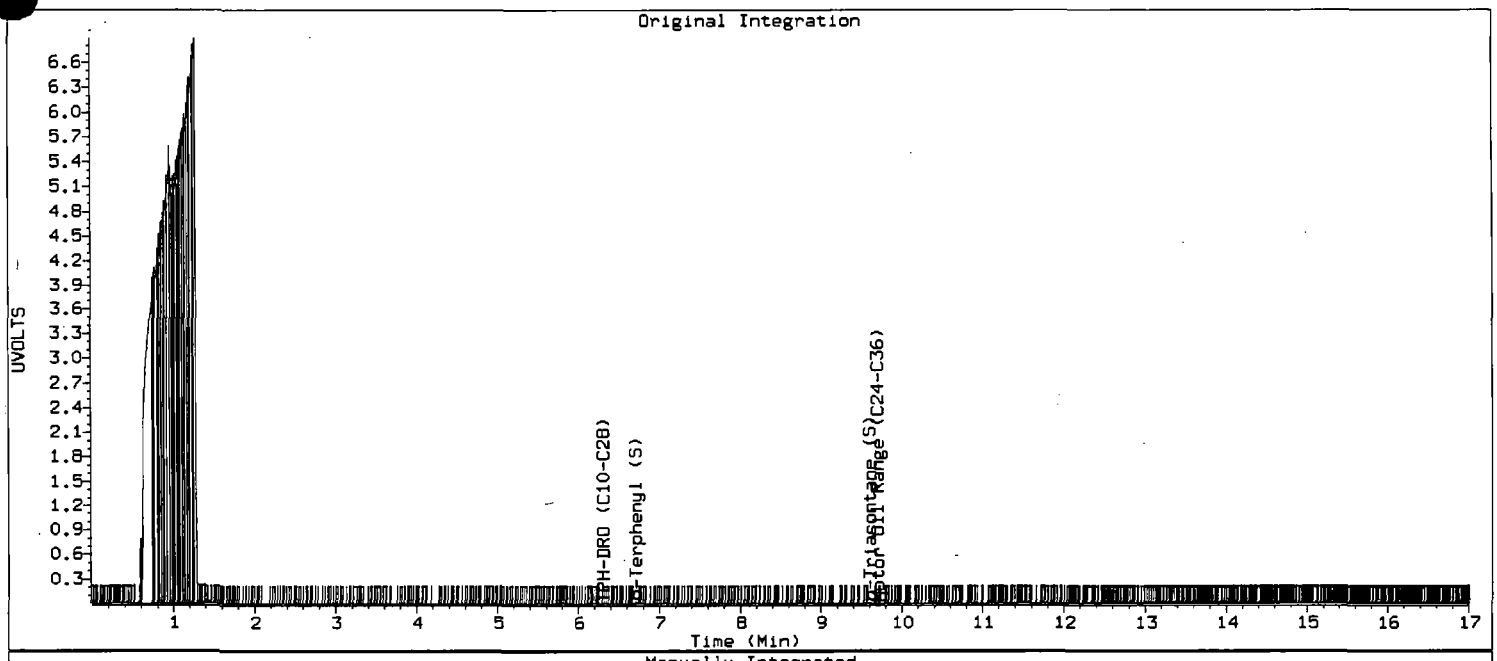
Operator: MT

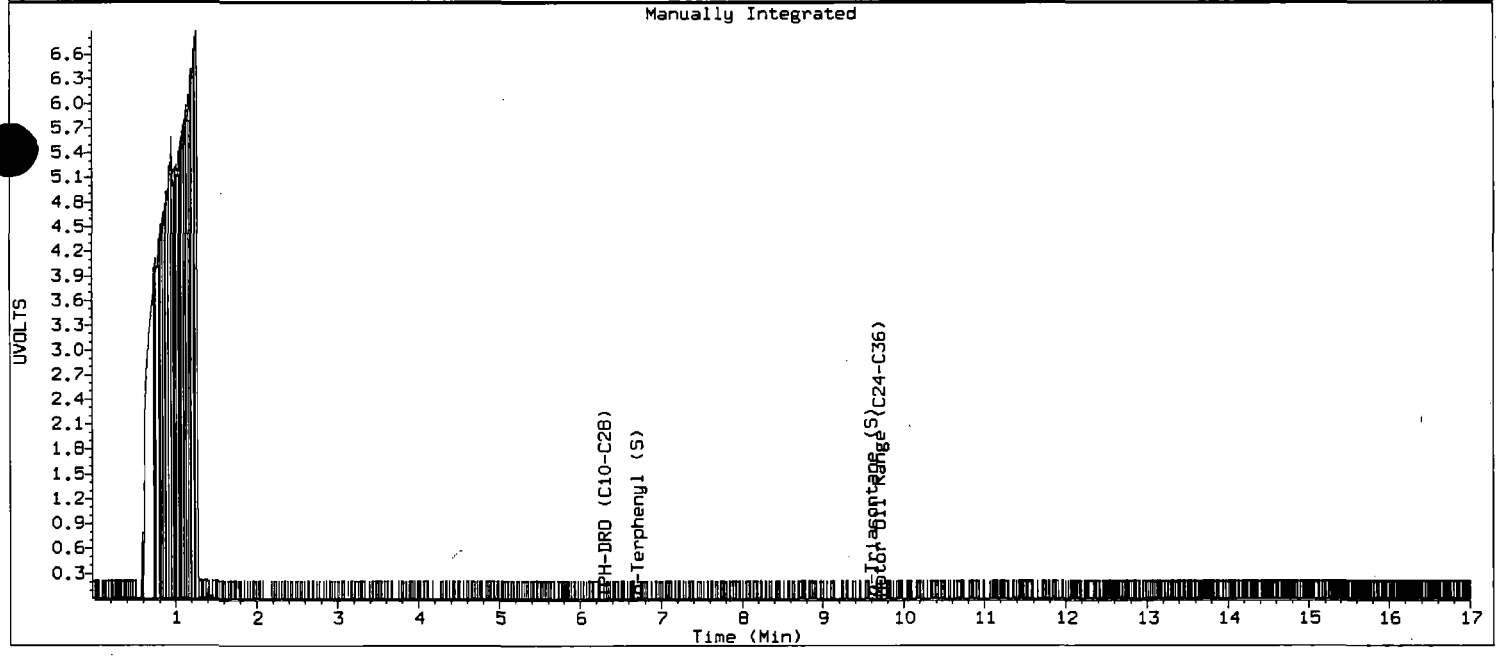
Column phase: DB-5MS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b/0305R033.d (ManInt: 8015LL.sub Orig: 8015LL.sub)
Injection Date: 05-MAR-2014 19:56
Instrument: 10gcs8.i
Lab Sample ID: 10259055005





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	1892653	1892653	
TPH-DRO (C10-C28)	3517198	3517198	
o-Terphenyl (S)	2441015	2441015	
n-Triacontane (S)	1589734	1589734	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R032.d
Lab Smp Id: 10259055006
Inj Date : 05-MAR-2014 19:33
Operator : MT Inst ID: 10gcs8.i
Smp Info : 10259055006
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.729	6.704	0.025	2587416	53.4996	5.35(M)
$	3 n-Triacontane (S)	9.637	9.618	0.019	1728304	50.7539	5.08(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			3722327	52.7248	5.27(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			2206867	84.1154	8.41(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R032.D

Page 1

Date : 05-MAR-2014 19:33

Client ID:

Instrument: 10gcs8.i

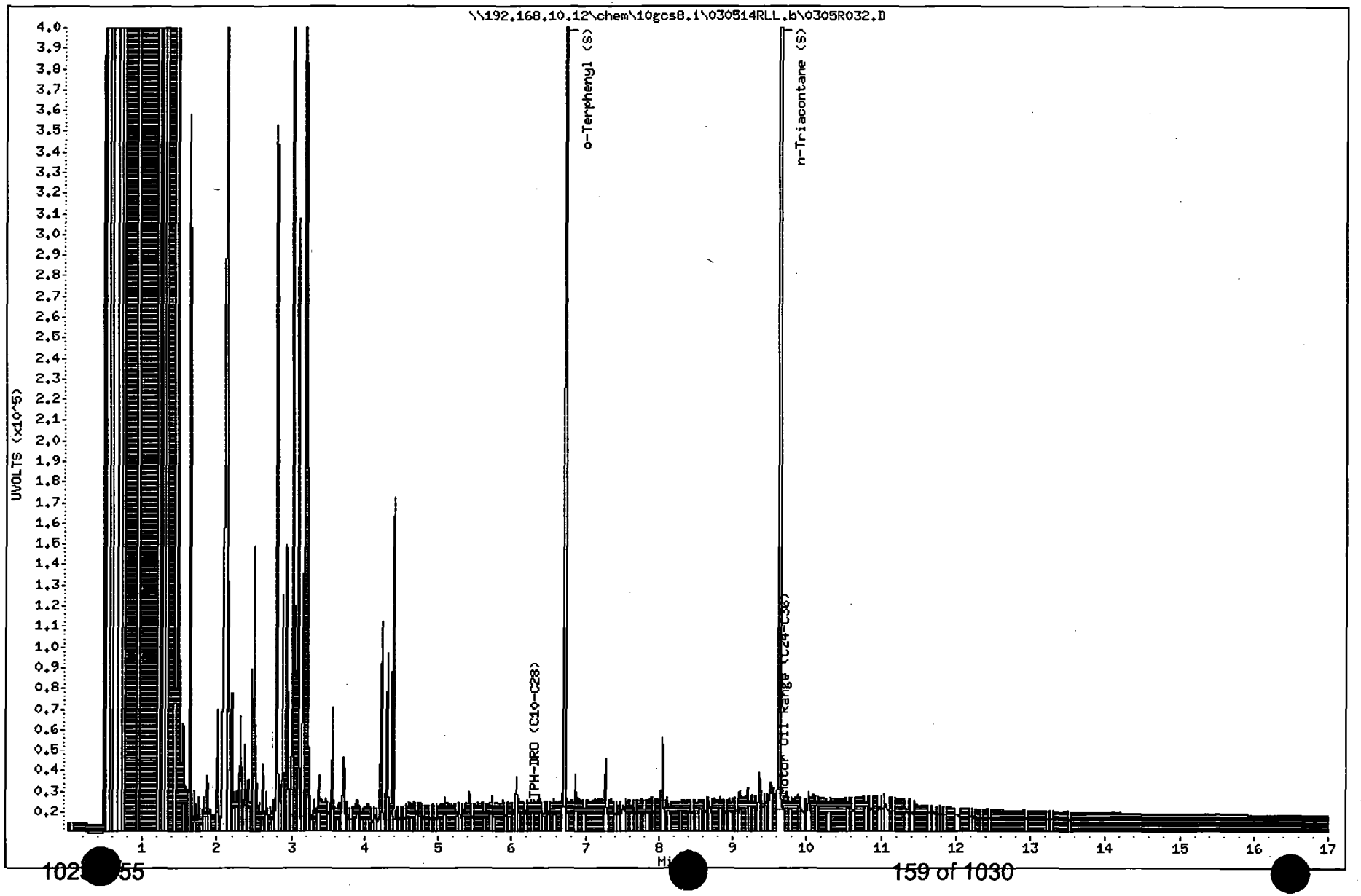
Sample Info: 10259055006

Volume Injected (uL): 1.0

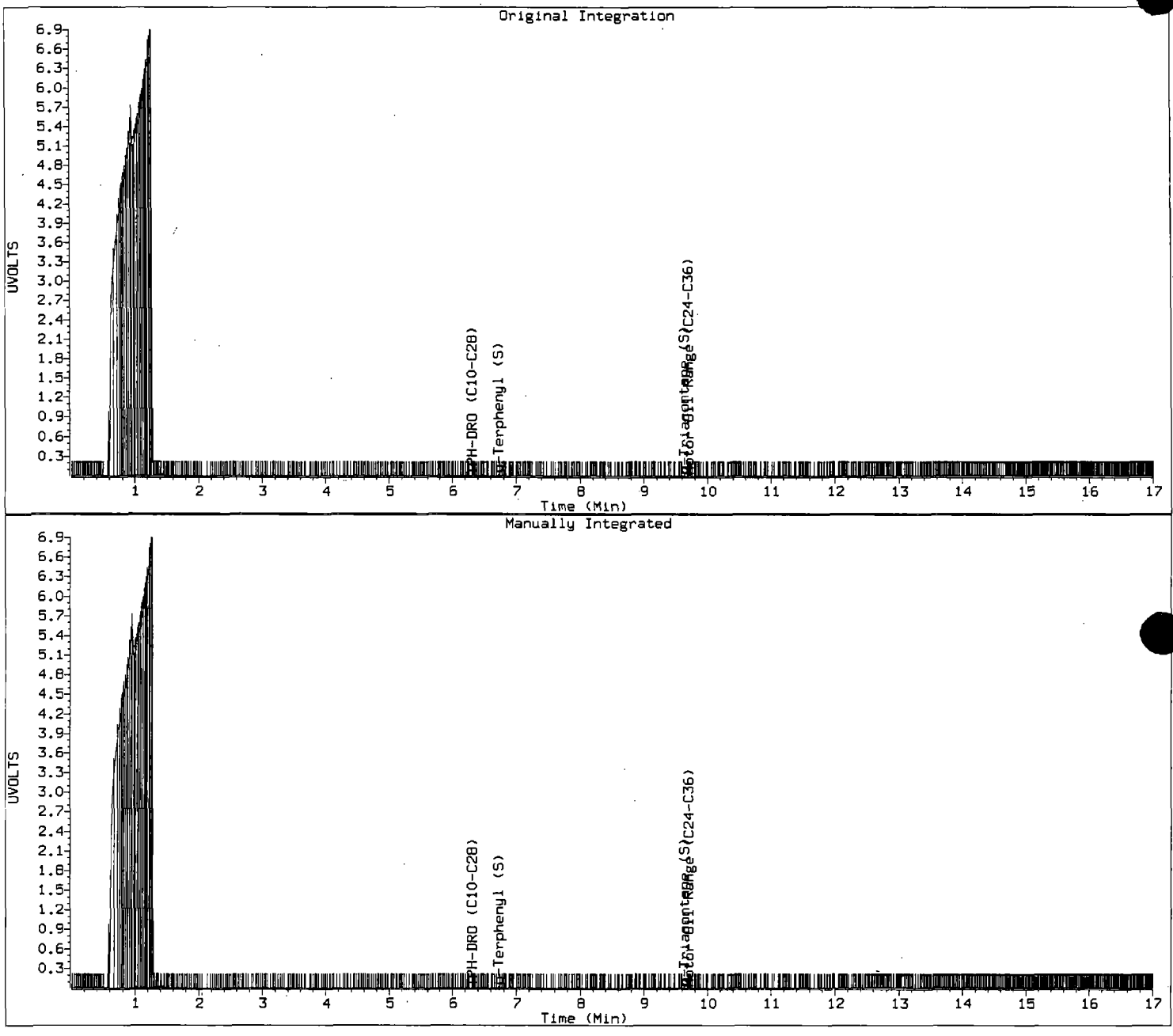
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b/0305R032.d (ManInt: 8015LL.sub Orig: 8015LL.sub)
Injection Date: 05-MAR-2014 19:33
Instrument: 10gcs8.i
Lab Sample ID: 10259055006



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	2206867	2206867	
TPH-DRO (C10-C28)	3722327	3722327	
o-Terphenyl (S)	2587416	2587416	
n-Triacontane (S)	1728304	1728304	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R024.d
Lab Smp Id: 10259055007
Inj Date : 05-MAR-2014 16:28
Operator : MT Inst ID: 10gcs8.i
Smp Info : 10259055007
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.723	6.704	0.019	2581788	53.3910	5.34(M)
$	3 n-Triacontane (S)	9.673	9.618	0.055	1733697	50.9061	5.09(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			5216691	82.5690	8.26(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			3246978	130.863	13.1(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R024.D

Page 1

Date : 05-MAR-2014 16:28

Client ID:

Instrument: 10gcs8.i

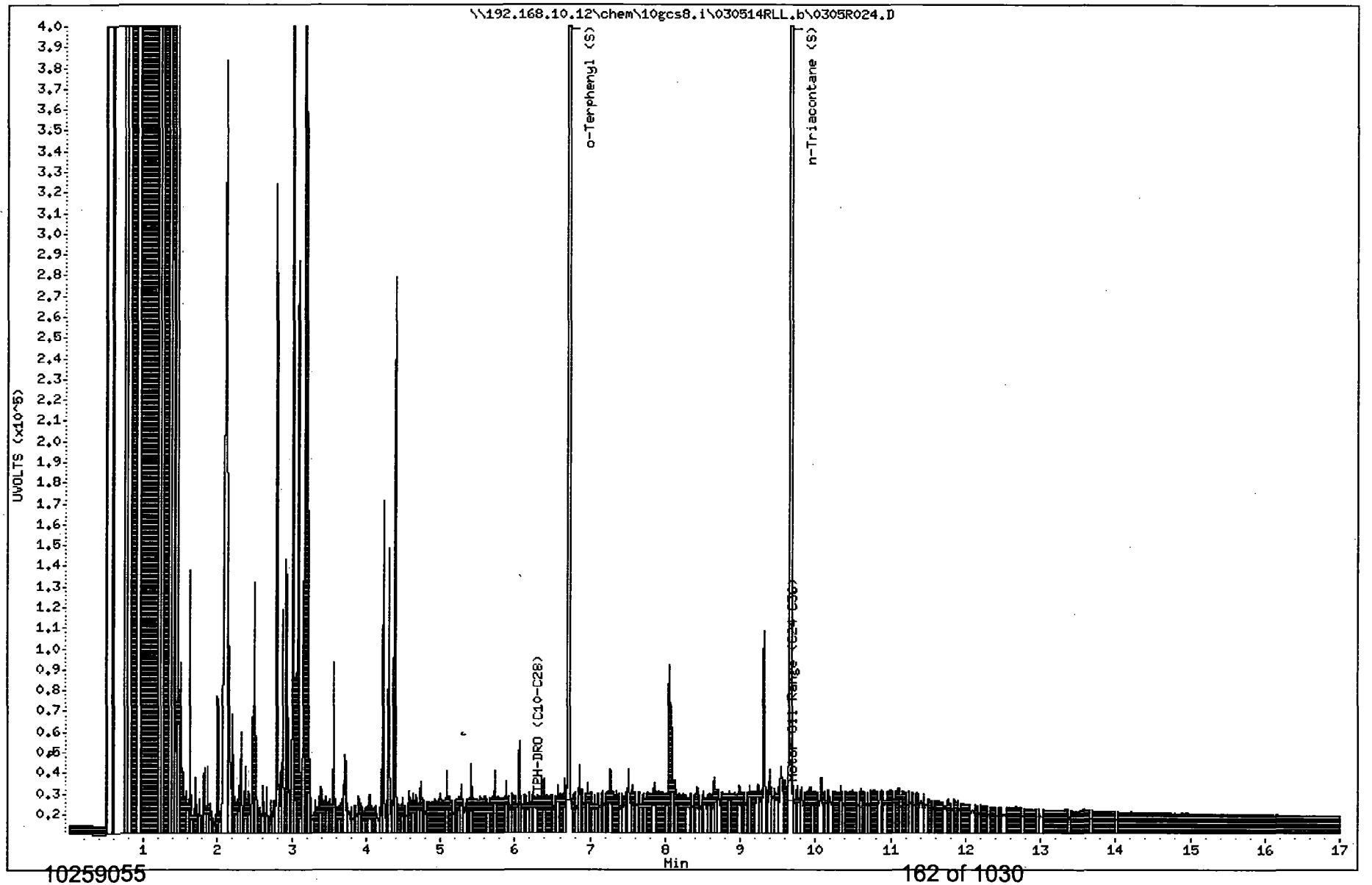
Sample Info: 10259055007

Volume Injected (uL): 1.0

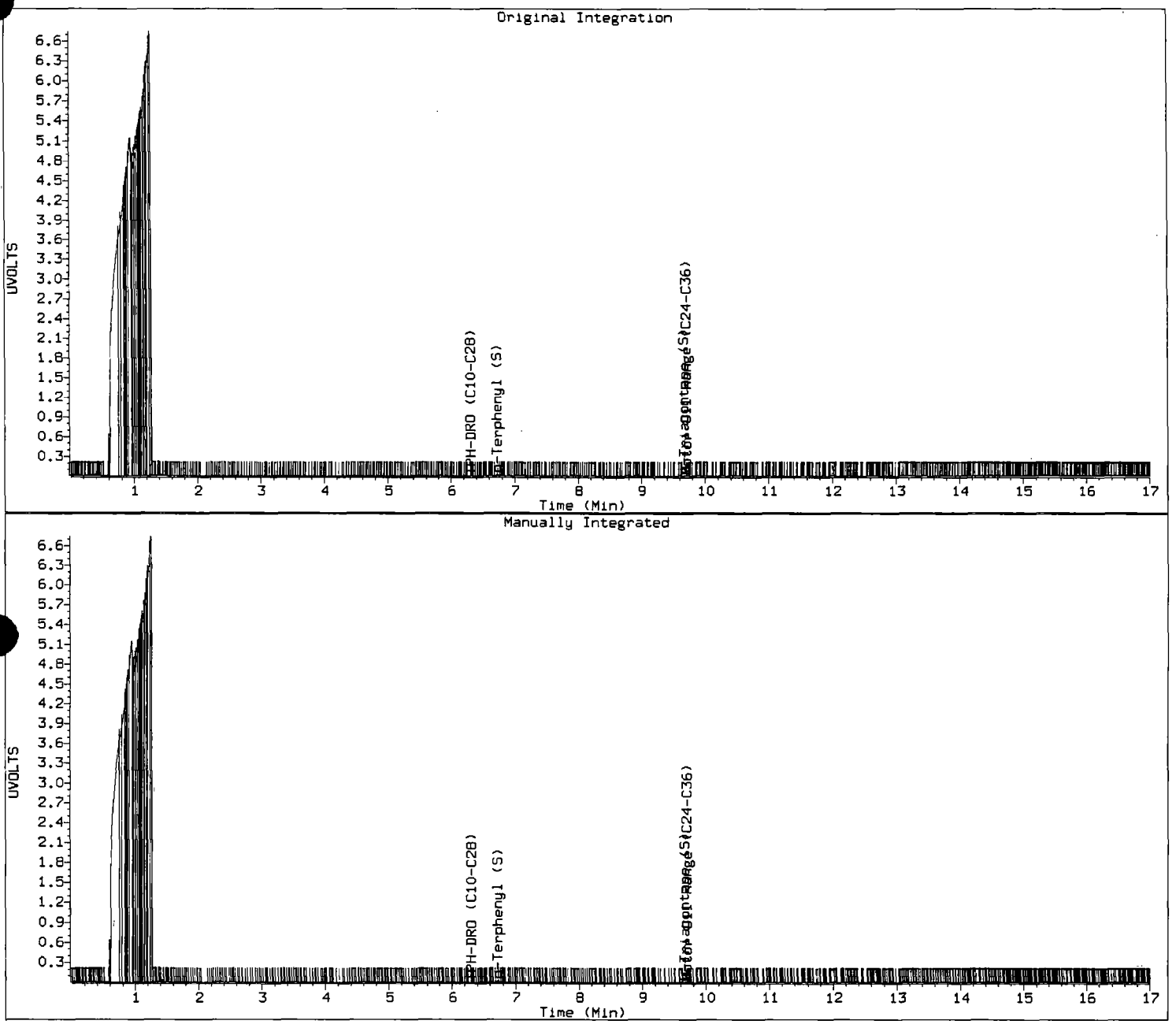
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b/0305R024.d (ManInt: 8015LL.sub Orig: 8015LL.sub)
Injection Date: 05-MAR-2014 16:28
Instrument: 10gcs8.i
Lab Sample ID: 10259055007



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	3246978	3246978	
TPH-DRO (C10-C28)	5216691	5216691	
o-Terphenyl (S)	2581788	2581788	
n-Triacontane (S)	1733697	1733697	

12910-288432

Pace Analytical®	Document Name: Extraction Method: SW 3550 Sonication Analysis: AK102/AK103, 8015, NwTPH-Dx – Soil	Document Revised: 18Feb2014 Page 1 of 2
	Document No.: F-MN-O-253-rev.03	Issuing Authority: Pace Minnesota Quality Office

☐ AK102/AK103 ☒ 8015 ☐ NwTPH-Dx

SS (1): 10185-334	Amt: 25 µL	Analyst: SR	Ext. Date/By: 3/3/14 SR		
SS (2): 10185-320	Amt: 10 µL	Analyst: SR	Batch: 24492-288068		
MS: 10528-009	Amt: 250 µL	Analyst: SR	Dispensor/Syringe IDs: BTJ/~~[illegible]~~ 3-4-13 [illegible]		

SS (1): o-terphenyl: 2,000 µg/mL SS (2): n-triacontane d62: 5,000 µg/mL MS: Diesel/MO: 2,000 µg/mL

	Sample ID	10 grams IV	Spike Ver.		F.V. 1.0 mL (clear) Lot # 24011-1W	Comments
1	MB- 1632388	10	MT	MT	1.0	Sand Lot #: 116733
2	LCS- 1632389	10	MT	MT MT	1.0	Sand Lot #: 116733
3	~~LCSD-~~	~~10~~				~~Sand Lot #:~~ 3/3/14 SR
4	10258121002	10.0	MT	MT	1.0	
5	10258999001	10.0	MT	MT	5.0	
6	10259041001	10.1	MT	MT	1.0	
7	41002	10.0	MT	MT	1.0	
8	MS 1632390	10.0	MT	MT MT	1.0	
9	MSD 1632391	10.0	MT	MT MT	1.0	
10	10259055001	10.1	MT	MT	1.0	
11	55002	10.0	MT	MT	1.0	
12	55003	10.1	MT	MT	1.0	
13	55004	10.0	MT	MT	1.0	
14	55005	10.0	MT	MT	1.0	
15	55006	10.0	MT	MT	1.0	
16	55007	10.0	MT	MT	1.0	
17						
18						
19						
20						
21						3-4-14 AD
22						
23						
24						
25						

Sample IDs Verified: ① H_2SO_4: NA Na_2SO_4: 136130-11 Silica Lot: NA

MeCl2/Acetone: 9222.481 Date Conc./By: AD 3-4-14 MeCl2 Final Volume /Pipet: 13782.7 / PP 1-35, PP 5-1

Thermometer ID: Q146 Bath Temp Read (80°C): 86 °C Bath Temp Corrected: 87 °C

Comments: Filter Paper Lot #: glass wool LOT: 26013999

① No one to verify

Posted by: AD	Date: 3-4-14	Validated by: KR	Date: 3-4-14

Fraction: 8015-GRO

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 288113 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 03031409.D Lab Sample ID: 1632555
GC Column: DB-624 ID: 0.53 (mm) Time Analyzed: 16:55
Instrument ID: 10GCV5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BLANK for HBN 288113 [GCV/1173	1632555	03031409.D	16:55
02	SB-6 15-16.5'	10259055002	03031410.D	17:17
03	SB-7 1.5-3'	10259055003	03031411.D	17:40
04	SB-8 1.5-2.5"	10259055005	03031412.D	18:02
05	SB-7 17-18'	10259055004	03031413.D	18:25
06	DUP-002	10259055007	03031419.D	20:40
07	SB-8 14-15"	10259055006	03031420.D	21:02
08	SB-6 1.5-3'	10259055001	03031421.D	21:25
09	LCS for HBN 288113 [GCV/11739]	1632556	03041404.D	10:53
10	LCSD for HBN 288113 [GCV/11739	1632557	03041405.D	11:15
11	SB-9 12-14'(1631878MS)	1632558-MS	03041406.D	12:04
12	SB-9 12-14'(1631878MSD)	1632559-MSD	03041407.D	12:27

Pace Analytical Services, Inc.
1700 E[illegible]eet - Suite 200
Minn[illegible]olis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259055

QB Batch: GCV / 11739
Method(s): EPA 5030 / EPA 8015/8021

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10259055001		SB-6 1.5-3'	1	93											
1632555	BLANK		1	96											
10259055002		SB-6 15-16.5'	1	96											
1632556	LCS		1	118											
10259055003		SB-7 1.5-3'	1	96											
1632557	LCSD		1	119											
10259055004		SB-7 17-18'	1	96											
1632558	MS		1	127											
10259055005		SB-8 1.5-2.5"	1	95											
1632559	MSD		1	121											
10259055006		SB-8 14-15"	1	94											
10259055007		DUP-002	1	95											
		QC Limits:		68-135											
		Sample Limits:		68-135											

Sur 1: a,a,a-Trifluorotoluene (S)

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc..

Pace Analytical™

Instrument Run Log

Instrument: 10GCV5 Method: TPH Soils Ical Misc. Prep. Info: Surrogate Lot: 10186-41exp 3/11/14
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: 10186-41exp 3/11/14 Cal. Standard: 10186-67C, 10186-68B

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02241401.D	CONDITIONING BLK	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 09:48	LLC	DNR
02241402.D	REAGENT BLANK	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 10:10	LLC	ok
02241403.D	RTM 9314-499	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 10:33	LLC	ok
02241404.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 10:55	LLC	ok
02241405.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 11:18	LLC	ok
02241406.D	10 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 11:42	LLC	ok
02241407.D	25 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 12:07	LLC	ok
02241408.D	50 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 12:45	LLC	ok
02241409.D	100 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 13:19	LLC	ok
02241410.D	500 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 13:42	LLC	ok
02241411.D	1000 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 14:04	LLC	ok
02241412.D	2500 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 14:27	LLC	ok
02241413.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 14:49	LLC	ok
02241414.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 15:12	LLC	ok
02241415.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 15:34	LLC	ok
02241416.D	ICV 10099-12	Solid	CCal	1		G514-TPH-MLS-022414	2/24/14 15:57	LLC	pass

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	x Other minor parts replaced Auto sampler was switched.
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments: TPh Ical

File Path 1: U:\10GCV5.I\022414A-2.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: 2/25/14 LC

Report Date: 02/25/2014 11:08
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10GCV5 Method: 8015B soils Misc. Prep. Info: Surrogate Lot: 10186-41exp 3/11/14
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: 10186-41exp 3/11/14 Cal. Standard: 10186-66D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
03031401.D	CONDITIONING BLK	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 12:08	LLC	DNR
03031402.D	RTM 9314-533	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 12:31	LLC	ok
03031403.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/03/14 12:54	LLC	pass
03031404.D	LCS	S/	LCS	1		G514-TPH-MLS-022414	3/03/14 14:12	LLC	DNR,failed high
03031405.D	1632558	S/	MS	1		G514-TPH-MLS-022414	3/03/14 14:35	LLC	DNR, RR
03031406.D	1632559	S/	MSD	1		G514-TPH-MLS-022414	3/03/14 14:57	LLC	DNR,RR
03031407.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 15:20	LLC	ok
03031408.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 16:01	LLC	ok
03031409.D	1632555	S/11740	Blank	1		G514-TPH-MLS-022414	3/03/14 16:55	LLC	ok
03031410.D	10259055002	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 17:17	LLC	ok
03031411.D	10259055003	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 17:40	LLC	ok
03031412.D	10259055005	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 18:02	LLC	ok
03031413.D	10259055004	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 18:25	LLC	ok
03031414.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/03/14 18:47	LLC	pass
03031415.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 19:10	LLC	ok
03031416.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 19:32	LLC	ok
03031417.D	10259041002	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 19:55	LLC	DNR, RR
03031418.D	10259041001	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 20:17	LLC	ok
03031419.D	10259055007	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 20:40	LLC	ok
03031420.D	10259055006	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 21:02	LLC	ok
03031421.D	10259055001	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 21:25	LLC	ok
03031422.D	10258999001	S/11740	Sample	20		G514-TPH-MLS-022414	3/03/14 21:47	LLC	ok
03031423.D	1632557	S/	LCSD	1		G514-TPH-MLS-022414	3/03/14 22:10	LLC	DNR, failed high
03031424.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/03/14 22:32	LLC	pass

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: batch 11740.288114

File Path 1: U:\10GCV5.I\030314A-2.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: 3/5/14 LC

Report Date: 03/05/2014 14:50
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10GCV5 Method: 8015B soils Misc. Prep. Info: Surrogate Lot: 10186-41exp 3/11/14
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: 10186-41exp 3/11/14 Cal. Standard: 10186-66D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
03041401.D	CONDITIONING BLK	S/	Sample	1		G514-TPH-MLS-022414	3/04/14 09:23	LLC	DNR
03041402.D	RTM 9314-533	S/	Sample	1		G514-TPH-MLS-022414	3/04/14 09:45	LLC	ok
03041403.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/04/14 10:08	LLC	pass
03041404.D	1632556	S/11740	LCS	1		G514-TPH-MLS-022414	3/04/14 10:53	LLC	pass
03041405.D	1632557	S/11740	LCSD	1		G514-TPH-MLS-022414	3/04/14 11:15	LLC	ok
03041406.D	1632558	S/11740	MS	1		G514-TPH-MLS-022414	3/04/14 12:04	LLC	ok
03041407.D	1632559	S/11740	MSD	1		G514-TPH-MLS-022414	3/04/14 12:27	LLC	ok
03041408.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/04/14 12:49	LLC	ok
03041409.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/04/14 13:16	LLC	ok
03041410.D	10259041002	S/11740	Sample	1		G514-TPH-MLS-022414	3/04/14 13:38	LLC	ok
03041411.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/04/14 14:03	LLC	pass

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: batch 11740.288114

File Path 1: U:\10GCV5.I\030414A-2.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: 3/5/14 LC

Report Date: 03/05/2014 14:46
Reviewed By/Date:

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031402.d
Lab Smp Id: RTM 9314-533
Inj Date : 03-MAR-2014 12:31
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-533
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 03-Mar-2014 13:36 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

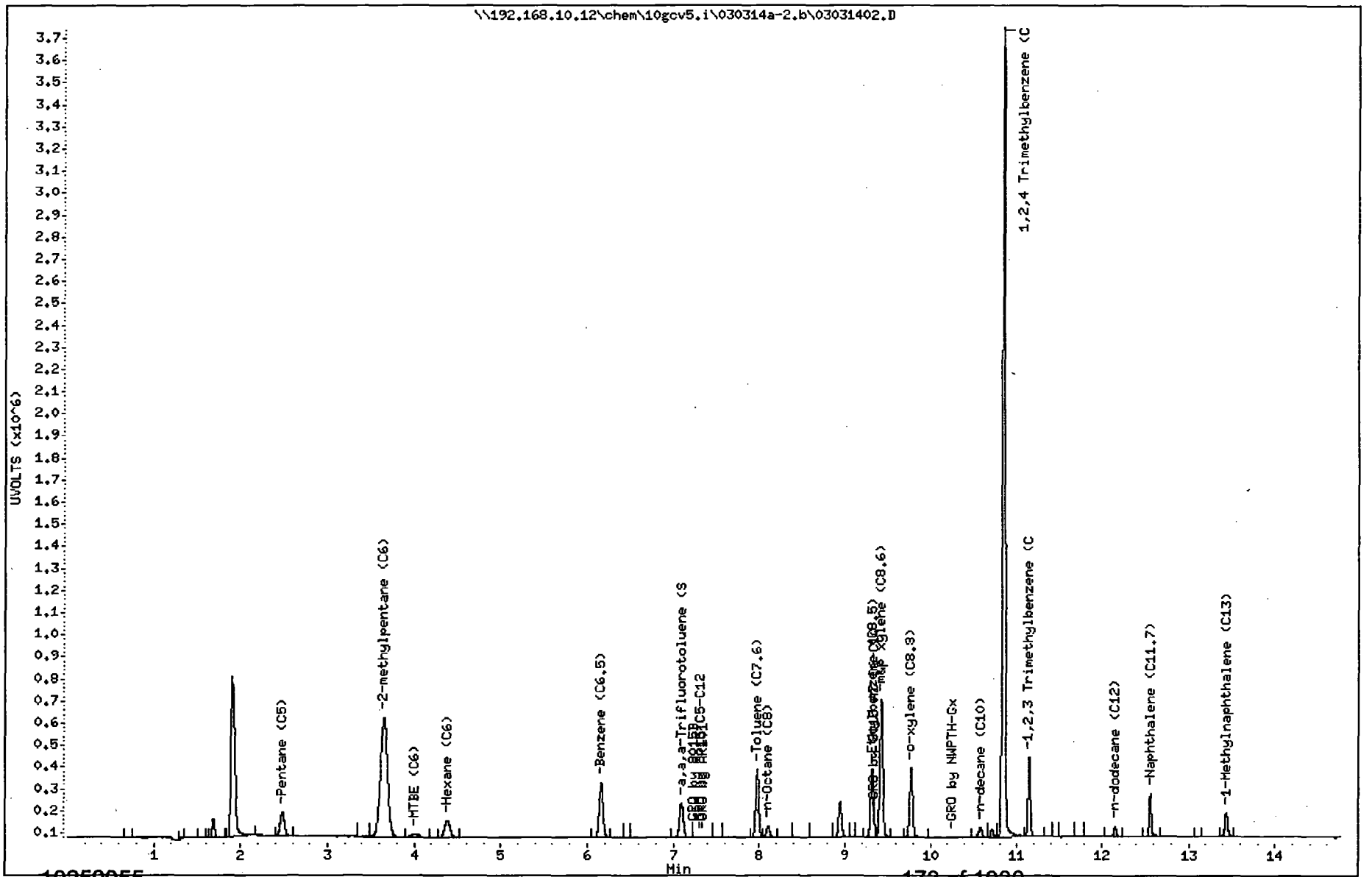
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 1	a,a,a-Trifluorotoluene (S)	7.097	7.106	-0.009	482441	48.8847	48.88
S 2	GRO by AK101	4.250-10.450			411955	37.6906	1884
S 4	GRO by 8015B	3.480-10.990			484093	33.0851	1654
S 5	GRO by 8015 C5-C12	2.360-12.280			502929	26.8398	1342
S 8	GRO by 8015 AZ C6-C10	5.900-12.800			495318	35.8935	1795
S 9	GRO by NWPTH-Gx	7.850-12.680			487909	40.9026	2045
10	Pentane (C5)	2.484	2.488	-0.004	359299		
11	2-methylpentane (C6)	3.651	3.667	-0.016	3112272		
12	MTBE (C6)	4.008	4.027	-0.019	98946		
13	Hexane (C6)	4.385	4.401	-0.016	355230		
14	Benzene (C6.5)	6.161	6.181	-0.020	767262		
15	Toluene (C7.6)	7.979	7.996	-0.017	783823		
16	n-Octane (C8)	8.108	8.126	-0.018	142386		
17	Ethylbenzene (C8.5)	9.324	9.341	-0.017	758689		
18	m&p xylene (C8.6)	9.430	9.446	-0.016	1509000		
19	o-xylene (C8.8)	9.778	9.794	-0.016	776889		
21	n-decane (C10)	10.581	10.600	-0.019	112688		
20	1,2,4 Trimethylbenzene (C10)	10.843	10.858	-0.015	7362180		
22	1,2,3 Trimethylbenzene (C10.1)	11.144	11.158	-0.014	712246		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
23 n-dodecane (C12)	12.156	12.167	-0.011	89836		
24 Naphthalene (C11.7)	12.562	12.574	-0.012	332313		
25 1-Methylnaphthalene (C13)	13.445	13.461	-0.016	234248		

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031402.D
Date : 03-MAR-2014 12:31
Client ID:
Sample Info: RTH 9314-533

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041402.d
Lab Smp Id: RTM 9314-533
Inj Date : 04-MAR-2014 09:45
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-533
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 10:13 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 1	a,a,a-Trifluorotoluene (S)	7.108	7.105	0.003	480112	48.6488	48.65
S 2	GRO by AK101	4.250-10.450			388128	35.5106	1776
S 4	GRO by 8015B	3.480-10.990			421008	28.7736	1439
S 5	GRO by 8015 C5-C12	2.360-12.280			440436	23.5047	1175
S 8	GRO by 8015 AZ C6-C10	5.900-12.800			443855	32.1642	1608
S 9	GRO by NWPTH-Gx	7.850-12.680			443855	37.2095	1860
10	Pentane (C5)	2.496	2.488	0.008	103342		
11	2-methylpentane (C6)	3.667	3.667	0.000	1069672		
12	MTBE (C6)	4.022	4.027	-0.005	38656		
13	Hexane (C6)	4.398	4.401	-0.003	101283		
14	Benzene (C6.5)	6.173	6.181	-0.008	278635		
15	Toluene (C7.6)	7.989	7.996	-0.007	281821		
16	n-Octane (C8)	8.118	8.126	-0.008	35860		
17	Ethylbenzene (C8.5)	9.333	9.341	-0.008	273702		
18	m&p xylene (C8.6)	9.438	9.446	-0.008	543418		
19	o-xylene (C8.8)	9.787	9.794	-0.007	282293		
21	n-decane (C10)	10.588	10.600	-0.012	37421		
20	1,2,4 Trimethylbenzene (C10)	10.850	10.858	-0.008	3068239		
22	1,2,3 Trimethylbenzene (C10.1)	11.151	11.158	-0.007	259432		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
23 n-dodecane (C12)	12.161	12.167	-0.006	19059		
24 Naphthalene (C11.7)	12.568	12.574	-0.006	117369		
25 1-Methylnaphthalene (C13)	13.450	13.461	-0.011	86467		

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041402.D

Page 1

Date : 04-MAR-2014 09:45

Client ID:

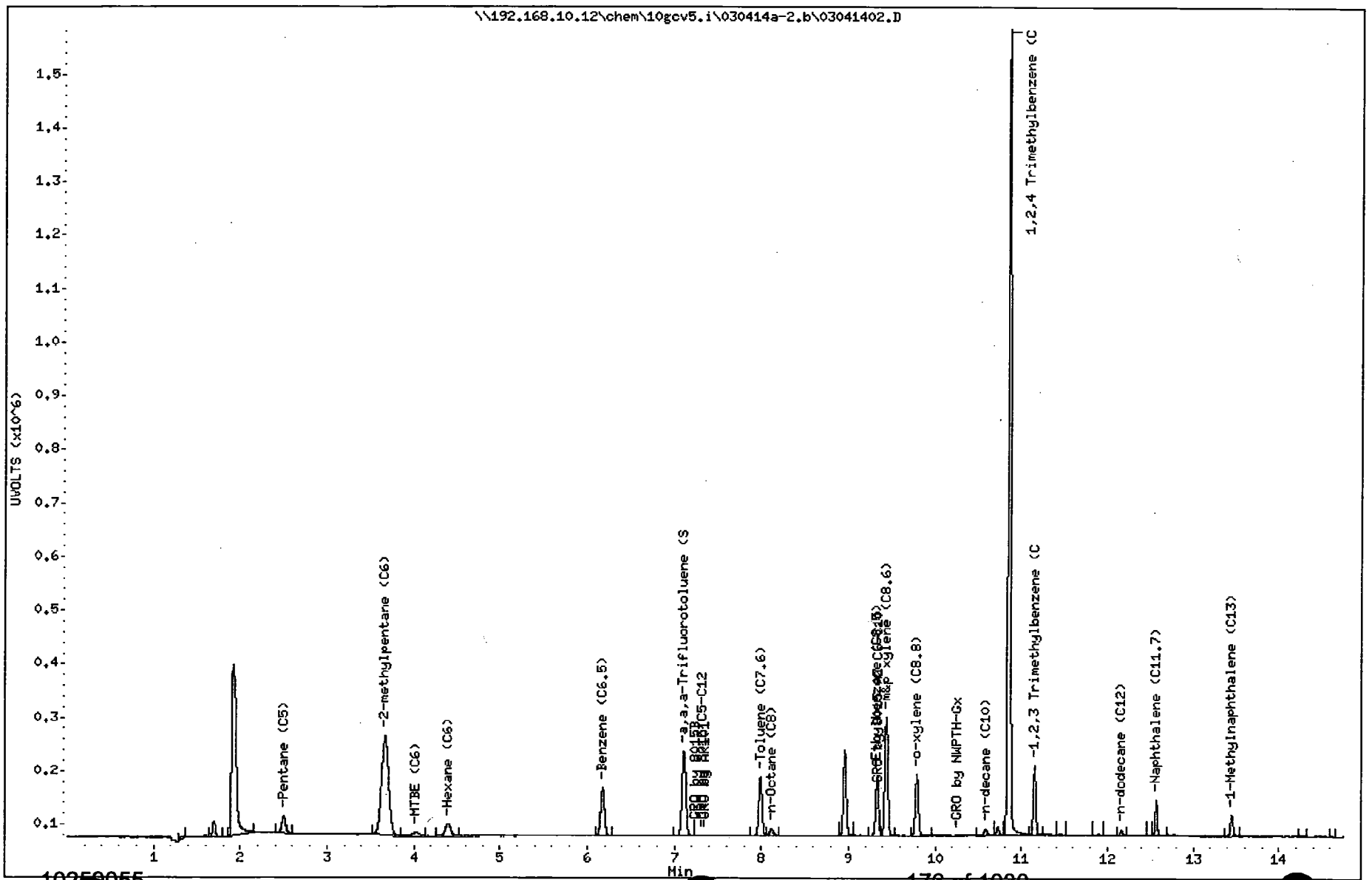
Instrument: 10gcv5.i

Sample Info: RTH 9314-533

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2014 11:42
End Cal Date : 24-FEB-2014 14:27
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.
Last Edit : 25-Feb-2014 10:57 lchristopher
Curve Type : Average

Calibration File Names:
Level 1: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241406.d
Level 2: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241407.d
Level 3: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241408.d
Level 4: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241409.d
Level 5: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241410.d
Level 6: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241411.d
Level 7: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241412.d

Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	500.000 Level 5	1000.000 Level 6	2500.000 Level 7	RRF	% RSD	
S 2 GRO by AK101	+++++	9721	10389	10525	11662	11516	11766	10930	7.651	
S 4 GRO by 8015B	+++++	12502	14253	14962	15494	15202	15377	14632	7.740	
S 5 GRO by 8015 C5-C12	+++++	+++++	16400	21773	18955	18350	18212	18738	10.387	
S 8 GRO by 8015 AZ C6-C10	+++++	12955	13621	13956	14029	14021	14216	13800	3.311	
S 9 GRO by NWPTH-Gx	+++++	11930	11970	12107	11754	11851	11960	11929	0.998	
10 Pentane (C5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
11 2-methylpentane (C6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
12 MTBE (C6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2014 11:42
End Cal Date : 24-FEB-2014 14:27
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.
Last Edit : 25-Feb-2014 10:57 lchristopher
Curve Type : Average

Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	500.000 Level 5	1000.000 Level 6	2500.000 Level 7	$\overline{RRF}$	% RSD	
13 Hexane (C6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
14 Benzene (C6.5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
15 Toluene (C7.6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
16 n-Octane (C8)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
17 Ethylbenzene (C8.5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
18 m&p xylene (C8.6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
19 o-xylene (C8.8)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
21 n-decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
20 1,2,4 Trimethylbenzene (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
22 1,2,3 Trimethylbenzene (C10.1	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
23 n-dodecane (C12)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2014 11:42
End Cal Date : 24-FEB-2014 14:27
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.
Last Edit : 25-Feb-2014 10:57 lchristopher
Curve Type : Average

Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	500.000 Level 5	1000.000 Level 6	2500.000 Level 7	RRF	% RSD	
24 Naphthalene (C11.7)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
25 1-Methylnaphthalene (C13)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 a,a,a-Trifluorotoluene (S)	9609	9690	9665	9844	10536	+++++	+++++	9869	3.880	

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2014 11:42
End Cal Date : 24-FEB-2014 14:27
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.
Last Edit : 25-Feb-2014 10:57 lchristopher
Curve Type : Average

Average %RSD Results.
Calculated Average %RSD = 6.99314
Maximun Average %RSD = 15.00000
* Passed Average %RSD Test.

Report Date: 25-Feb-2014 11:11

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241403.d
Lab Smp Id: RTM 9314-499
Inj Date : 24-FEB-2014 10:33
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-499
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 11:02 10gcv5.i Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.097	7.106	-0.009	8829	0.89462	0.8946(R)
S	2 GRO by AK101	4.250	10.450		39165	3.58329	179.2
S	4 GRO by 8015B	3.480	10.990		71727	4.90215	245.1
S	5 GRO by 8015 C5-C12	2.360	12.280		71727	3.82785	191.4
S	8 GRO by 8015 AZ C6-C10	5.900	12.800		66977	4.85352	242.7
S	9 GRO by NWPTH-Gx	7.850	12.680		48447	4.06143	203.1
	10 Pentane (C5)	2.501	2.488	0.013	87046		
	11 2-methylpentane (C6)	3.669	3.667	0.002	846982		
	12 MTBE (C6)	4.028	4.027	0.001	40267		
	13 Hexane (C6)	4.401	4.401	0.000	78327		
	14 Benzene (C6.5)	6.174	6.181	-0.007	263591		
	15 Toluene (C7.6)	7.986	7.996	-0.010	261155		
	16 n-Octane (C8)	8.116	8.126	-0.010	21169		
	17 Ethylbenzene (C8.5)	9.330	9.341	-0.011	252045		
	18 m&p xylene (C8.6)	9.436	9.446	-0.010	511810		
	19 o-xylene (C8.8)	9.783	9.794	-0.011	270072		
	21 n-decane (C10)	10.573	10.600	-0.027	28012		
	20 1,2,4 Trimethylbenzene (C10)	10.847	10.858	-0.011	2692746		
	22 1,2,3 Trimethylbenzene (C10.1)	11.149	11.158	-0.009	241930		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
23 n-dodecane (C12)	12.156	12.167	-0.011	13071		
24 Naphthalene (C11.7)	12.566	12.574	-0.008	114362		
25 1-Methylnaphthalene (C13)	13.449	13.461	-0.012	86335		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241403.D

Date : 24-FEB-2014 10:33

Client ID:

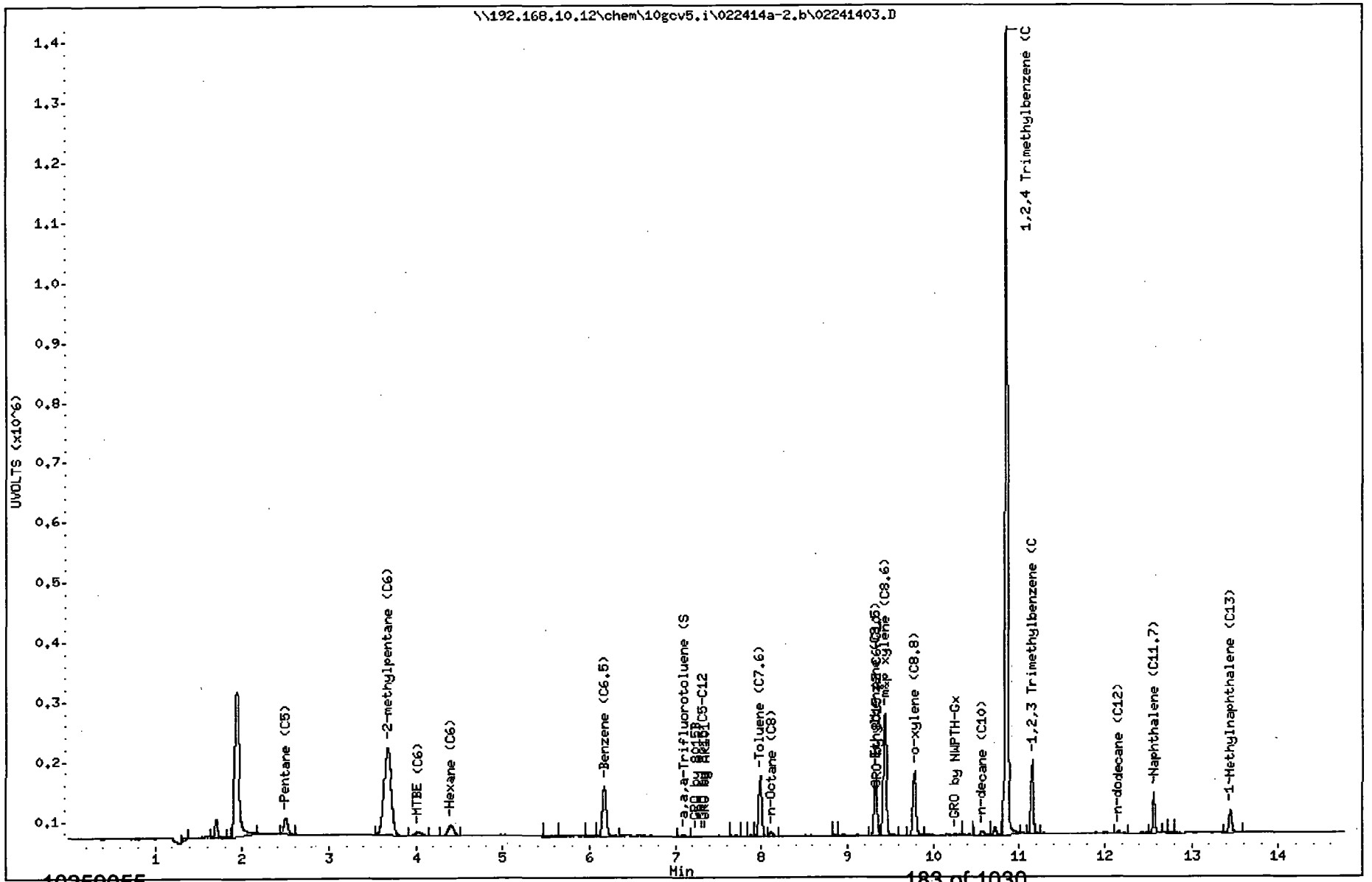
Sample Info: RTH 9314-499

Column phase: DB-624

Instrument: 10gcv5.i

Operator: LLC

Column diameter: 0.53



Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241406.d
Lab Smp Id: 10 10099-11
Inj Date : 24-FEB-2014 11:42
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.106	7.104	0.002	480439	50.0000	48.68
S	2 GRO by AK101	4.250-10.450			74548	10.0000	6.820
S	4 GRO by 8015B	3.480-10.990			99200	10.0000	6.780
S	5 GRO by 8015 C5-C12	2.360-12.280			99200	10.0000	5.294
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			105638	10.0000	7.655
S	9 GRO by NWPTH-Gx	7.850-12.680			105638	10.0000	8.856

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241406.D

Page 1

Date : 24-FEB-2014 11:42

Client ID:

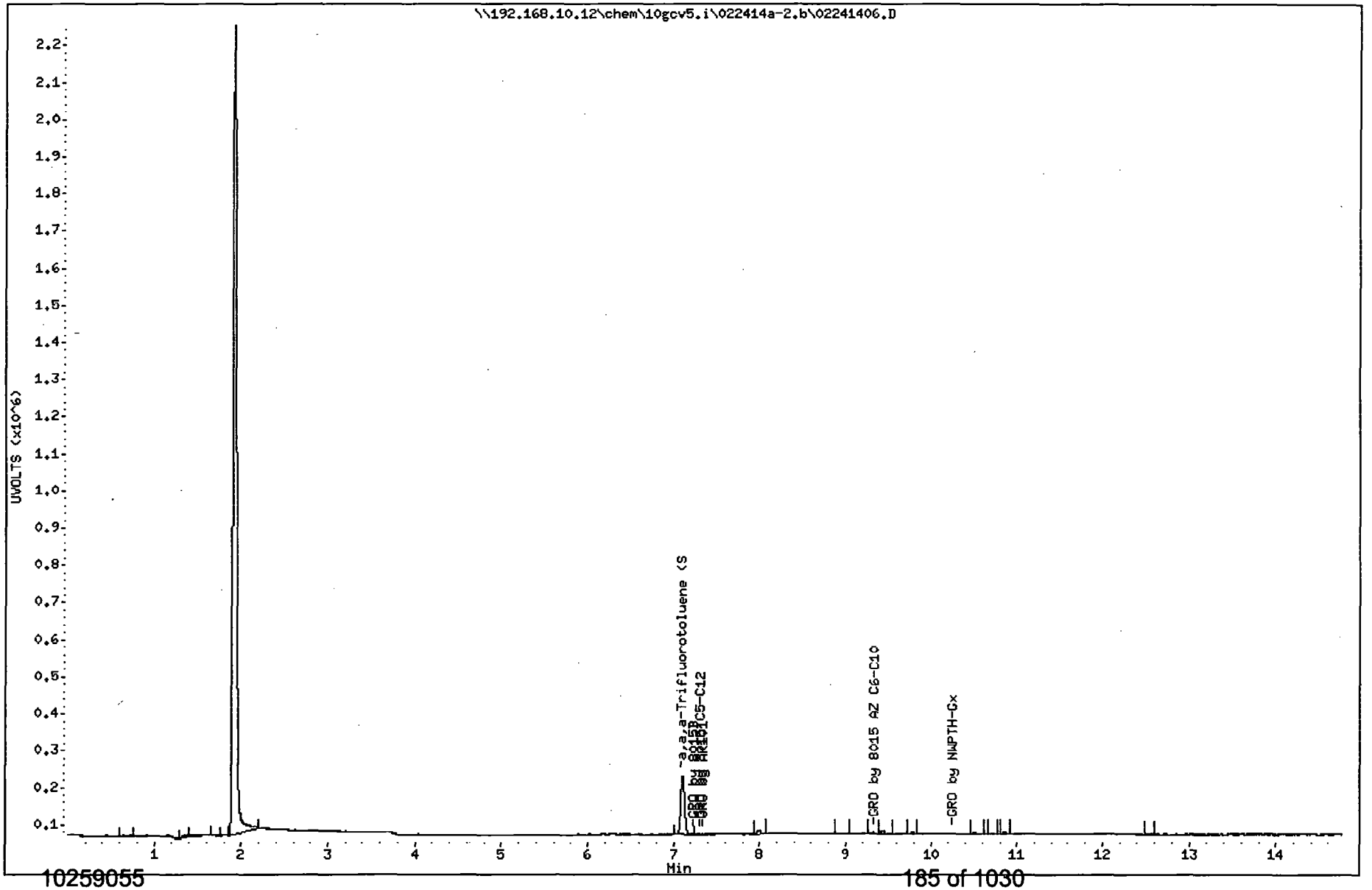
Instrument: 10gcv5.i

Sample Info: 10 10099-11

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 24 FEB 2014 11:42
Instrument: 10gcv5.i
Lab Sample ID: 10 10099-11

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	99200	99200
GRO by 8015B	99200	99200
GRO by AK101	74548	74548
GRO by 8015 AZ C6-C10	105638	105638
GRO by NWPTH-Gx	105638	105638
a,a,a-Trifluorotoluene (S)	480439	480439

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241407.d
Lab Smp Id: 25 10099-11
Inj Date : 24-FEB-2014 12:07
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 25 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

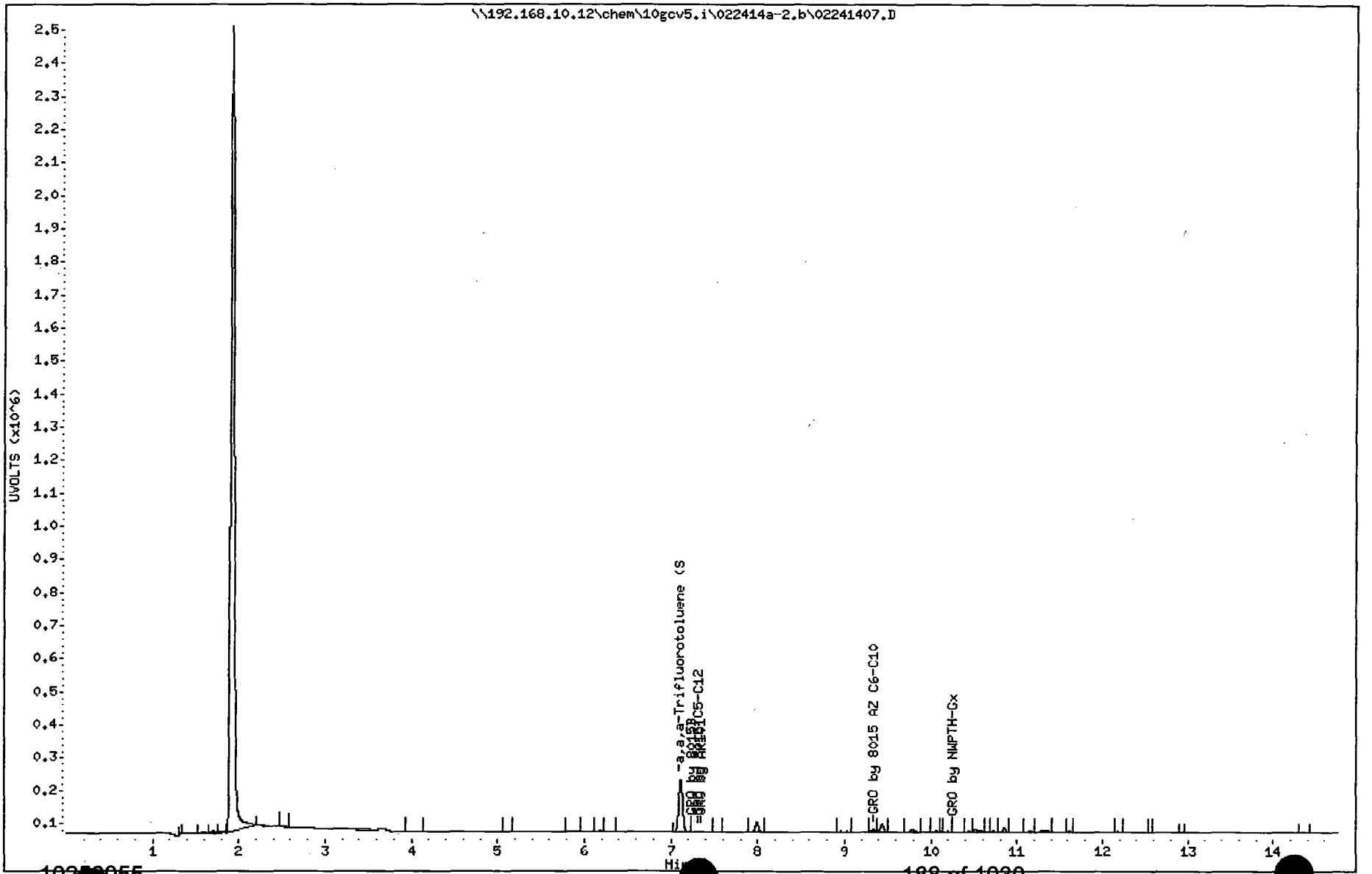
Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a;a,a-Trifluorotoluene (S)	7.108	7.104	0.004	484517	50.0000	49.10
S	2 GRO by AK101	4.250-10.450			243024	25.0000	22.23
S	4 GRO by 8015B	3.480-10.990			312554	25.0000	21.36
S	5 GRO by 8015 C5-C12	2.360-12.280			356764	25.0000	19.04
S	8 GRO by 8015 Az C6-C10	5.900-12.800			323879	25.0000	23.47
S	9 GRO by NWPTH-Gx	7.850-12.680			298244	25.0000	25.00

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241407.D
Date : 24-FEB-2014 12:07
Client ID:
Sample Info: 25 10099-11

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Injection Date: 24-FEB-2014 12:07
Instrument: 10gcv5.i
Lab Sample ID: 25 10099-11

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
[redacted] by 8015 C5-C12	356764	356764
GRO by 8015B	312554	312554
GRO by AK101	243024	243024
GRO by 8015 AZ C6-C10	323879	323879
GRO by NWPTH-Gx	298244	298244
a,a,a-Trifluorotoluene (S)	484517	484517

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241408.d
Lab Smp Id: 50 10099-11
Inj Date : 24-FEB-2014 12:45
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 50 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.104	7.104	0.000	483267	50.0000	48.97
S	2 GRO by AK101	4.250-10.450			519466	50.0000	47.53
S	4 GRO by 8015B	3.480-10.990			712647	50.0000	48.70
S	5 GRO by 8015 C5-C12	2.360-12.280			820018	50.0000	43.76
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			681073	50.0000	49.35
S	9 GRO by NWPTH-Gx	7.850-12.680			598519	50.0000	50.18

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241408.D

Page 1

Date : 24-FEB-2014 12:45

Client ID:

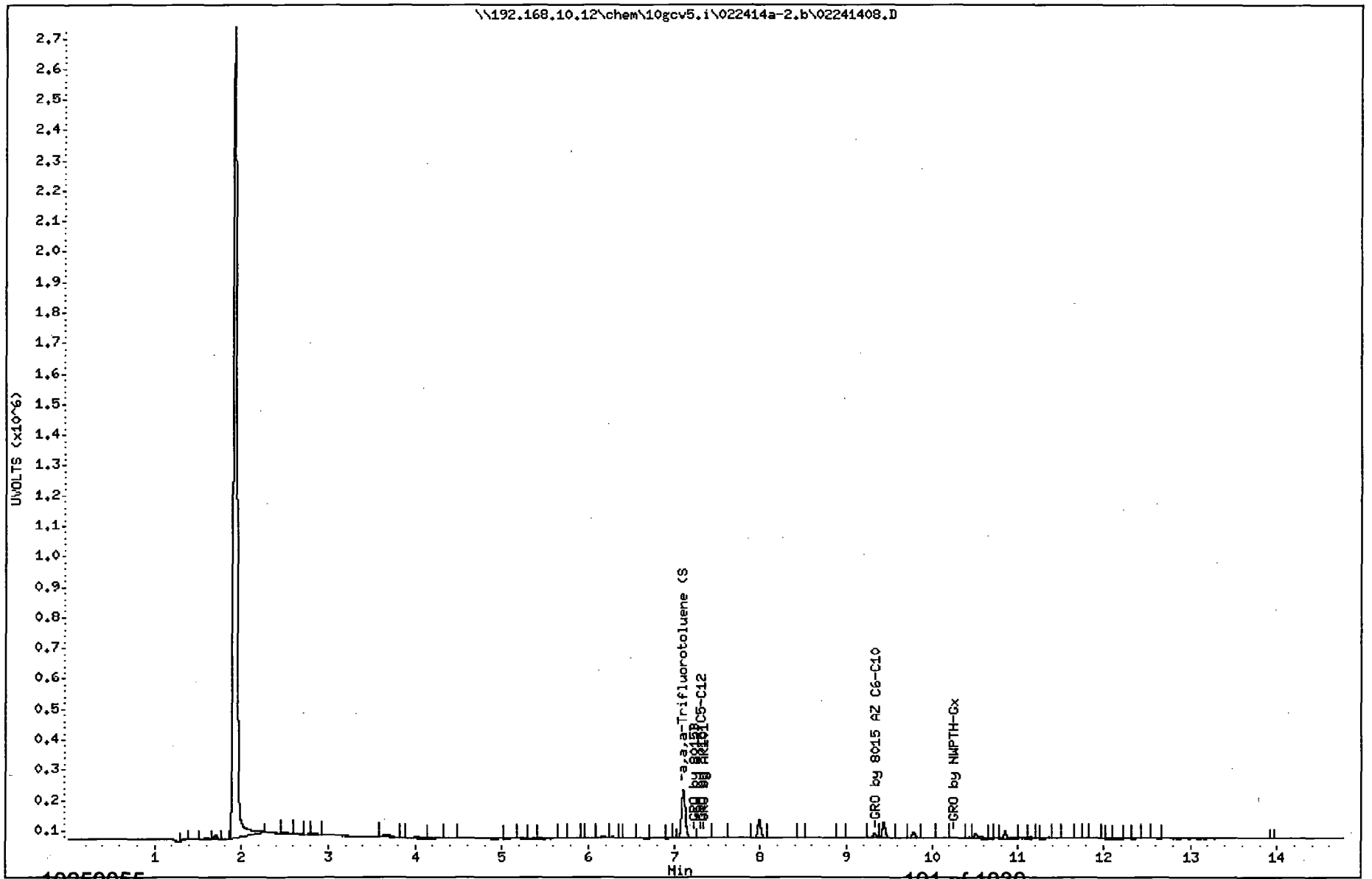
Instrument: 10gcv5.i

Sample Info: 50 10099-11

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 24-FEB-2014 12:45
Instrument: 10gcv5.i
Lab Sample ID: 50 10099-11

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	820018	820018
GRO by 8015B	712647	712647
GRO by AK101	519466	519466
GRO by 8015 AZ C6-C10	681073	681073
GRO by NWPTH-Gx	598519	598519
a,a,a-Trifluorotoluene (S)	483267	483267

Report Date: 25-Feb-2014 11:02

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241409.d
Lab Smp Id: 100 10099-11
Inj Date : 24-FEB-2014 13:19
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 100 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.104	7.104	0.000	492221	50.0000	49.88(M)
S	2 GRO by AK101	4.250-10.450			1052492	100.000	96.29
S	4 GRO by 8015B	3.480-10.990			1496226	100.000	102.2
S	5 GRO by 8015 C5-C12	2.360-12.280			2177337	100.000	116.2
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			1395608	100.000	101.1
S	9 GRO by NWPTH-Gx	7.850-12.680			1210671	100.000	101.5

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241409.D

Page 1

Date : 24-FEB-2014 13:19

Client ID:

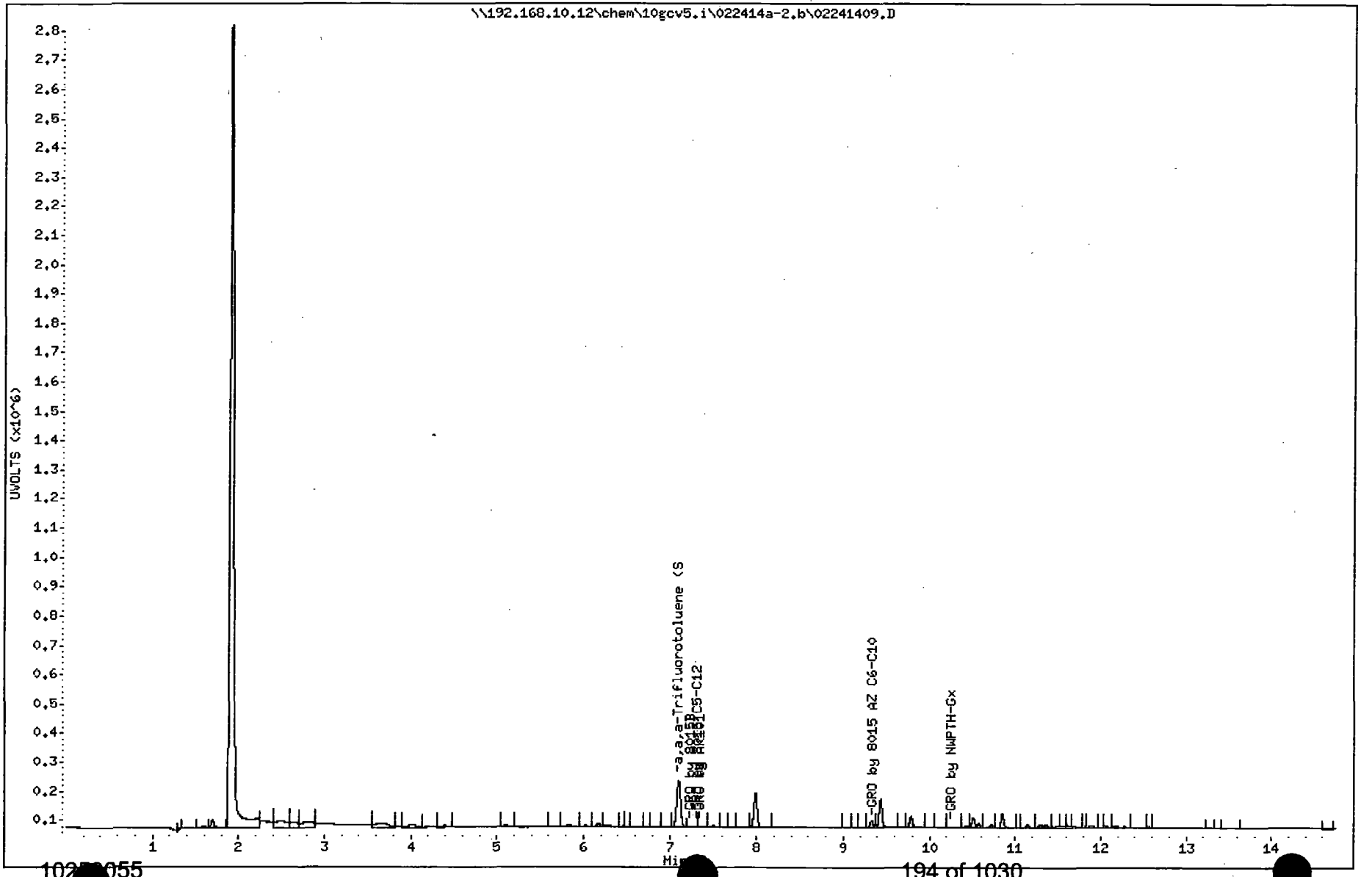
Instrument: 10gcv5.i

Sample Info: 100 10099-11

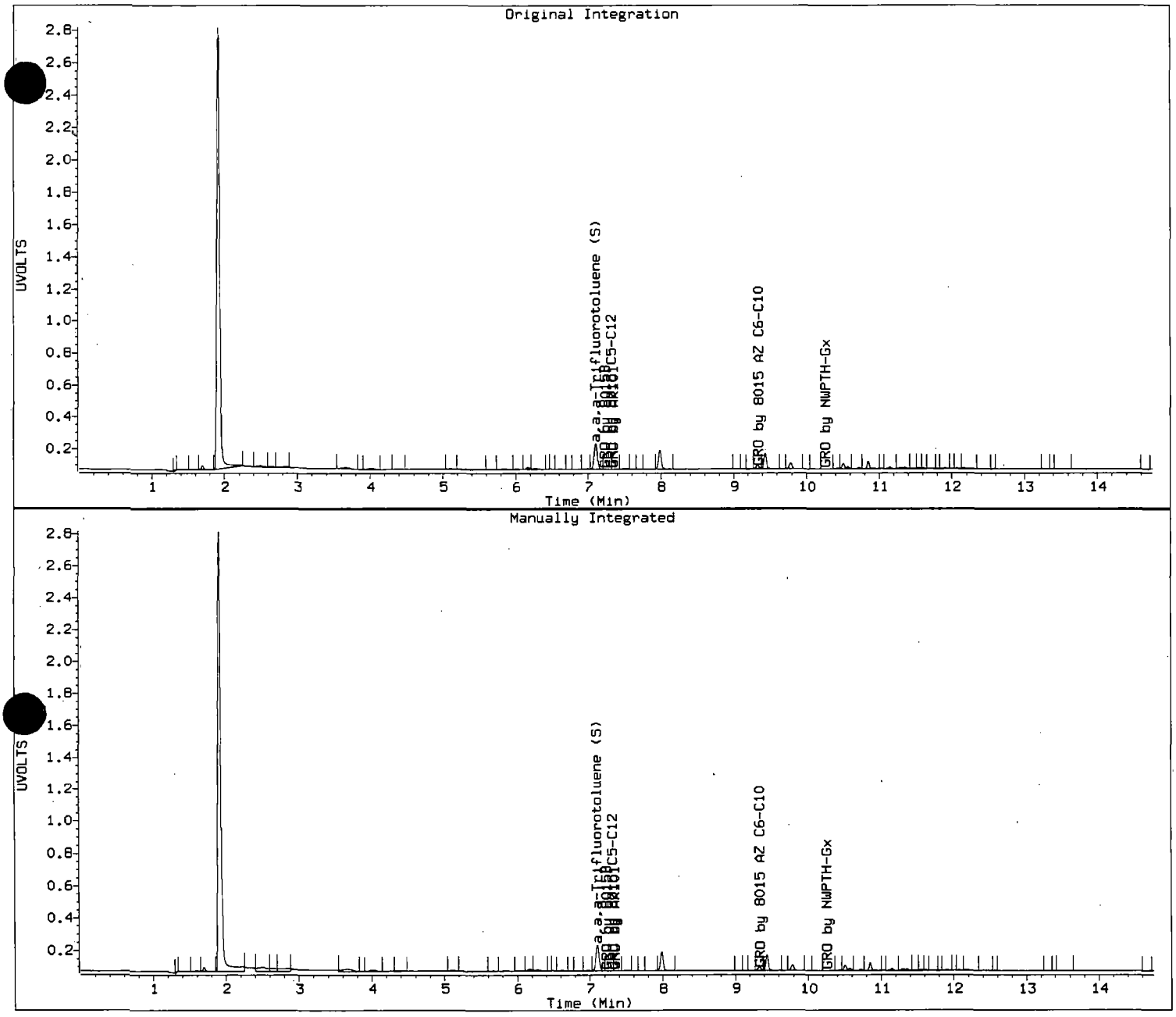
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 24-FEB-2014 13:19
Instrument: 10gcv5.i
Lab Sample ID: 100 10099-11



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	1571905	2177337
GRO by 8015B	1357979	1496226
GRO by AK101	1008194	1052492
GRO by 8015 AZ C6-C10	1323905	1395608
GRO by NWPTH-Gx	1165593	1210671
a,a,a-Trifluorotoluene (S)	485300	492221

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241410.d
Lab Smp Id: 500 10099-11
Inj Date : 24-FEB-2014 13:42
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 500 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.105	7.104	0.001	526793	50.0000	53.38(M)
S	2 GRO by AK101	4.250-10.450			5831236	500.000	533.5
S	4 GRO by 8015B	3.480-10.990			7747156	500.000	529.5
S	5 GRO by 8015 C5-C12	2.360-12.280			9477474	500.000	505.8
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			7014499	500.000	508.3
S	9 GRO by NWPTH-Gx	7.850-12.680			5877069	500.000	492.7

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241410.D

Page 1

Date : 24-FEB-2014 13:42

Client ID:

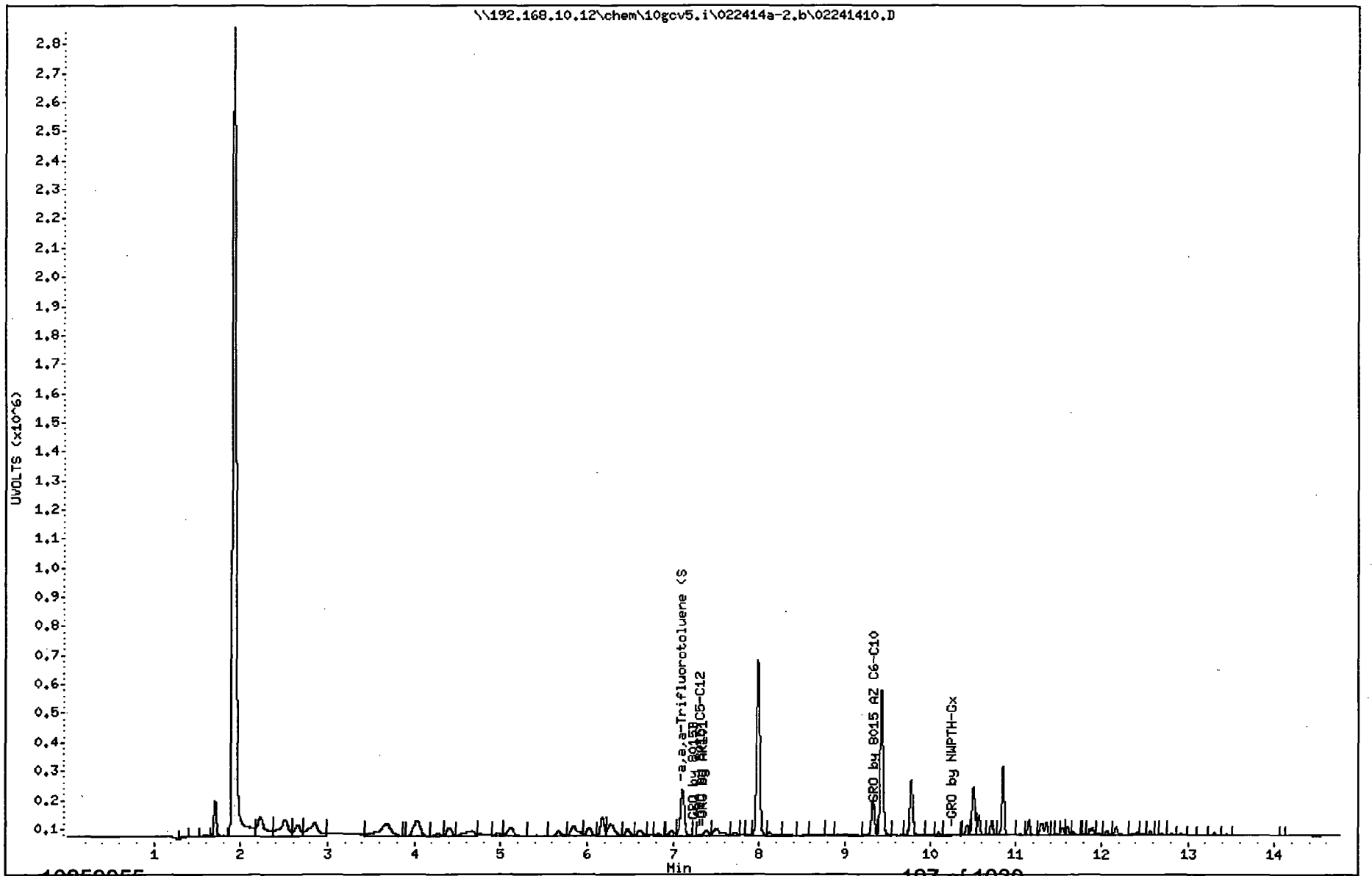
Instrument: 10gcv5.i

Sample Info: 500 10099-11

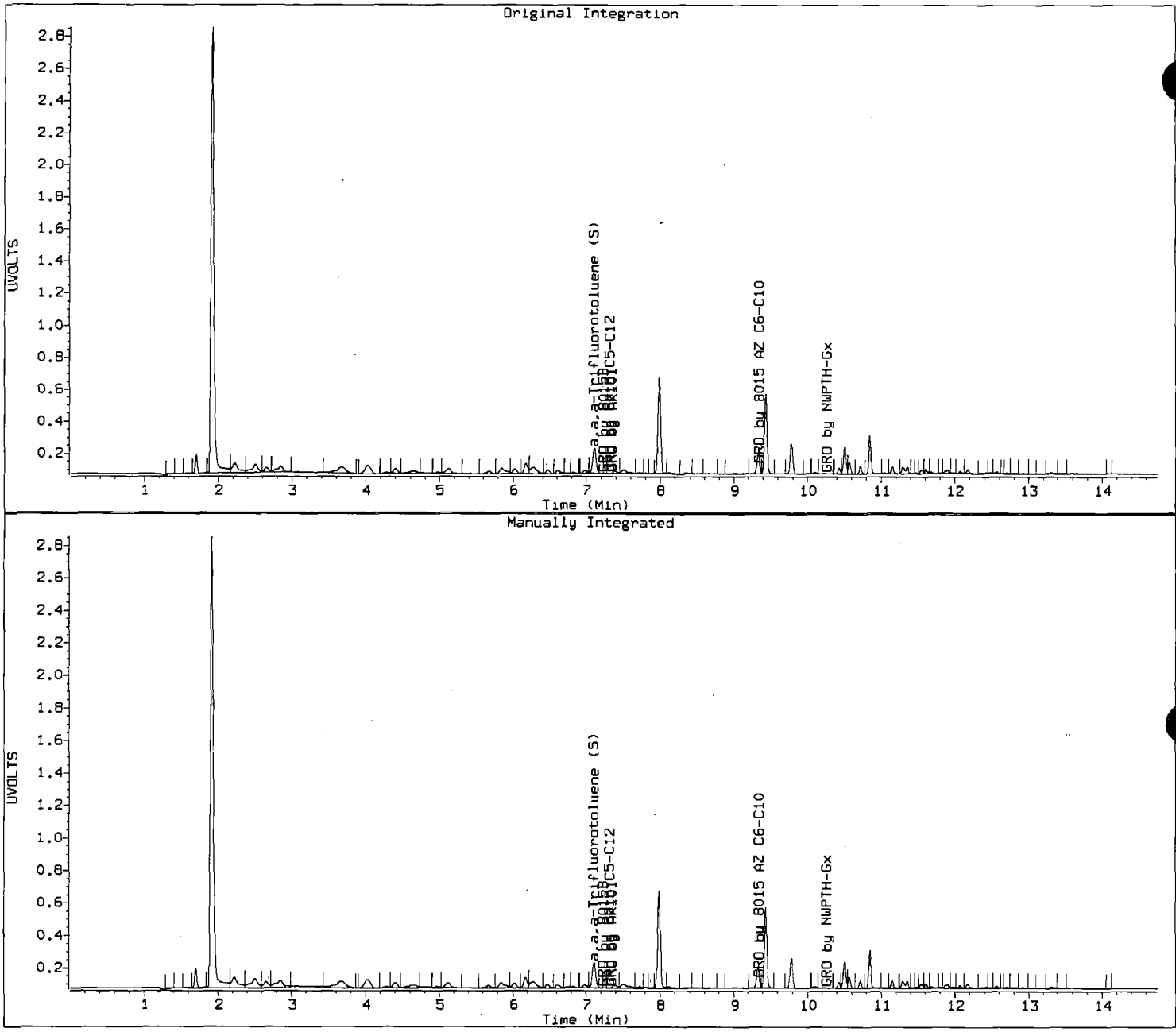
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 24-FEB-2014 13:42
Instrument: 10gcv5.i
Lab Sample ID: 500 10099-11



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	8605047	9477474
GRO by 8015B	7272388	7747156
GRO by AK101	5467576	5831236
GRO by 8015 AZ C6-C10	6707973	7014499
GRO by NWPTH-Gx	5682646	5877069
a,a,a-Trifluorotoluene (S)	511223	526793

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241411.d
Lab Smp Id: 1000 10099-11
Inj Date : 24-FEB-2014 14:04
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1000 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.103	7.104	-0.001	587332	50.0000	59.51(M)
S	2 GRO by AK101	4.250-10.450			11515618	1000.00	1054
S	4 GRO by 8015B	3.480-10.990			15201812	1000.00	1039
S	5 GRO by 8015 C5-C12	2.360-12.280			18350158	1000.00	979.3
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			14020626	1000.00	1016
S	9 GRO by NWPTH-Gx	7.850-12.680			11850759	1000.00	993.5

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241411.D

Page 1

Date : 24-FEB-2014 14:04

Client ID:

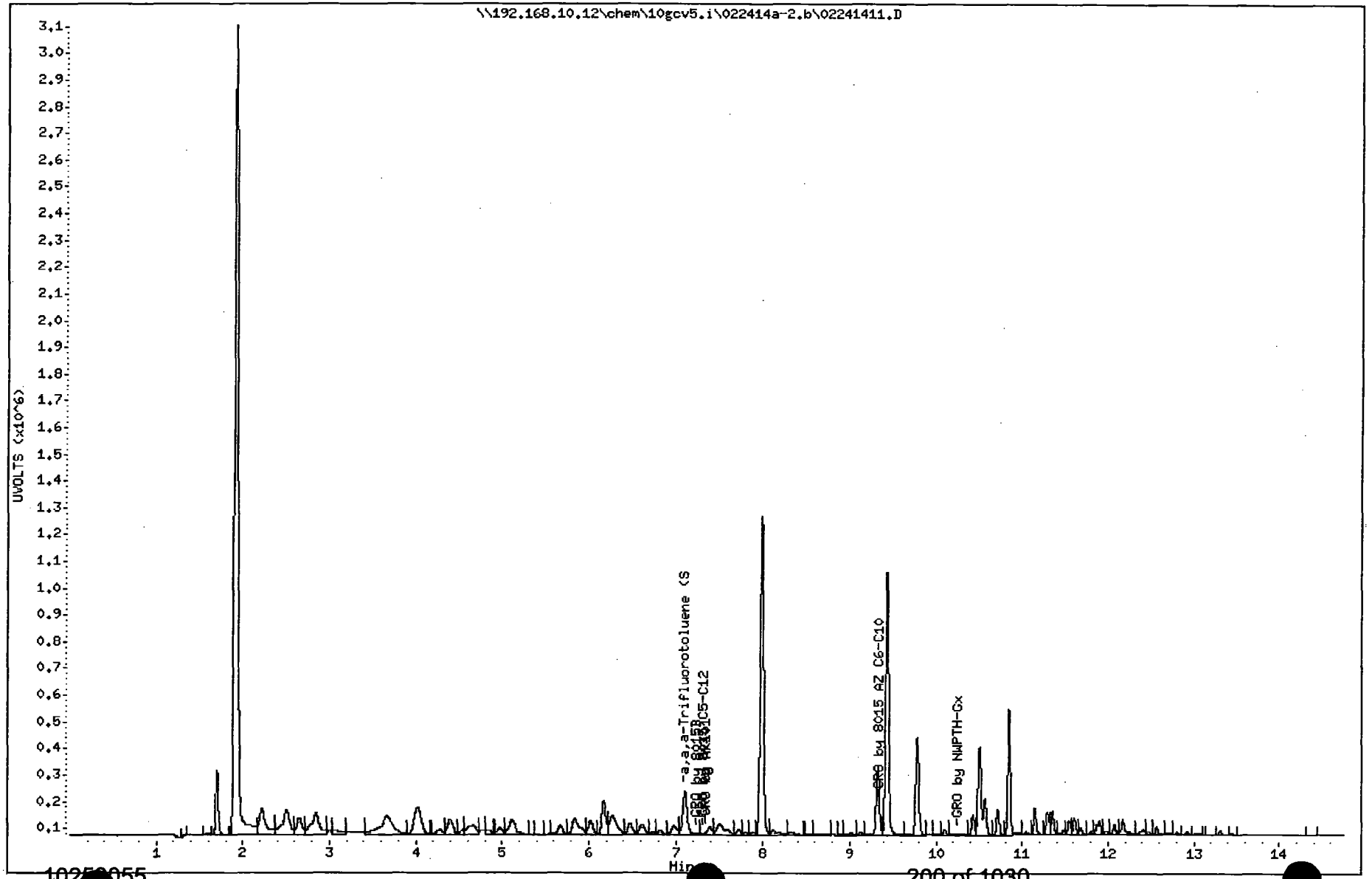
Instrument: 10gcv5.i

Sample Info: 1000 10099-11

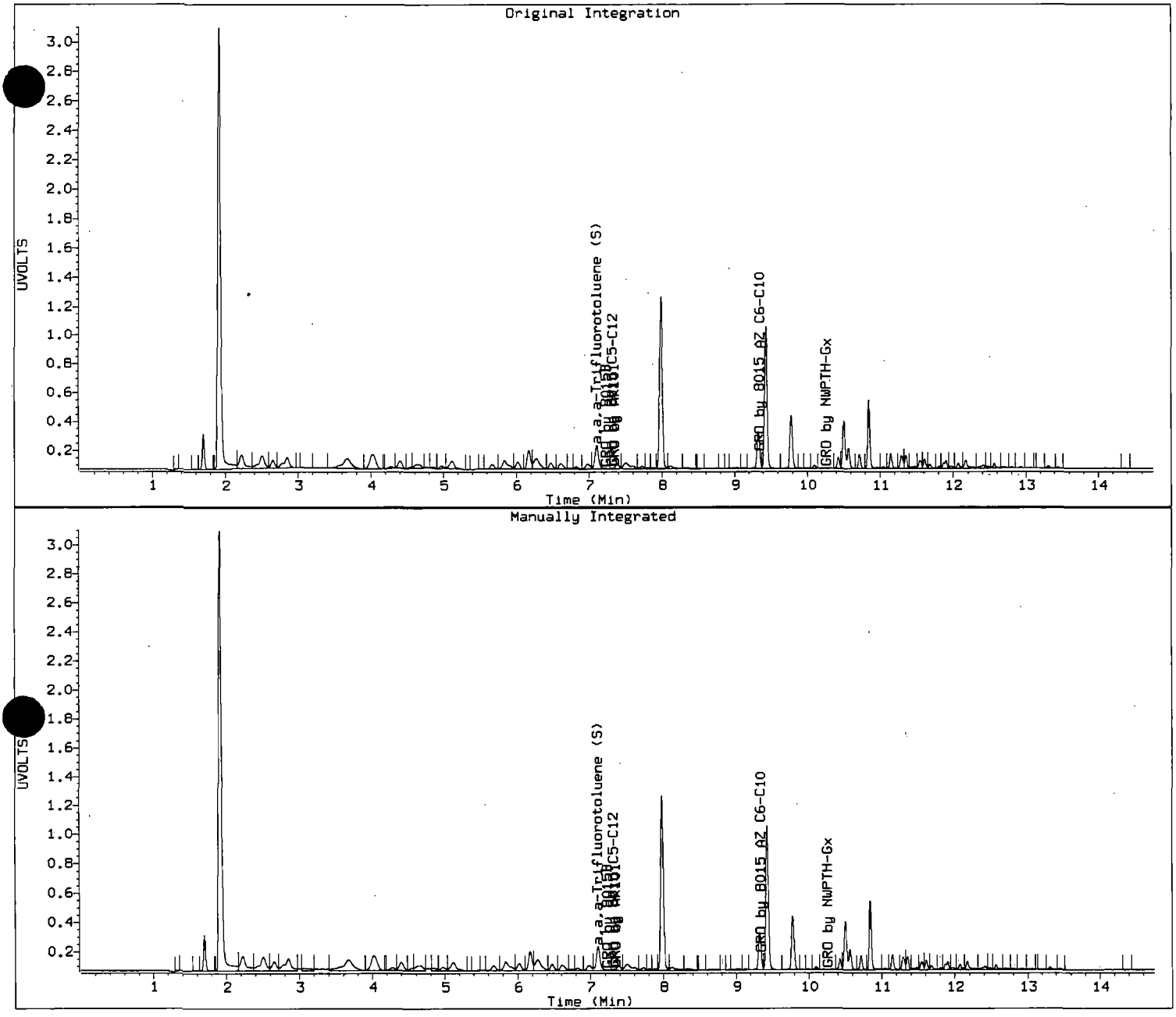
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 24-FEB-2014 14:04
Instrument: 10gcv5.i
Lab Sample ID: 1000 10099-11



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	16563408	18350158
GRO by 8015B	14002767	15201812
GRO by AK101	10562811	11515618
GRO by 8015 AZ C6-C10	13405924	14020626
GRO by NWPTH-Gx	11476991	11850759
a,a,a-Trifluorotoluene (S)	550653	587332

Report Date: 25-Feb-2014 11:02

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241412.d
Lab Smp Id: 2500 10099-11
Inj Date : 24-FEB-2014 14:27
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 2500 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.101	7.104	-0.003	731737	50.0000	74.14(M)
S	2 GRO by AK101	4.250-10.450			29415434	2500.00	2691(A)
S	4 GRO by 8015B	3.480-10.990			38442500	2500.00	2627(A)
S	5 GRO by 8015 C5-C12	2.360-12.280			45530331	2500.00	2430
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			35539330	2500.00	2575(A)
S	9 GRO by NWPTH-Gx	7.850-12.680			29898863	2500.00	2506(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241412.D

Page 1

Date : 24-FEB-2014 14:27

Client ID:

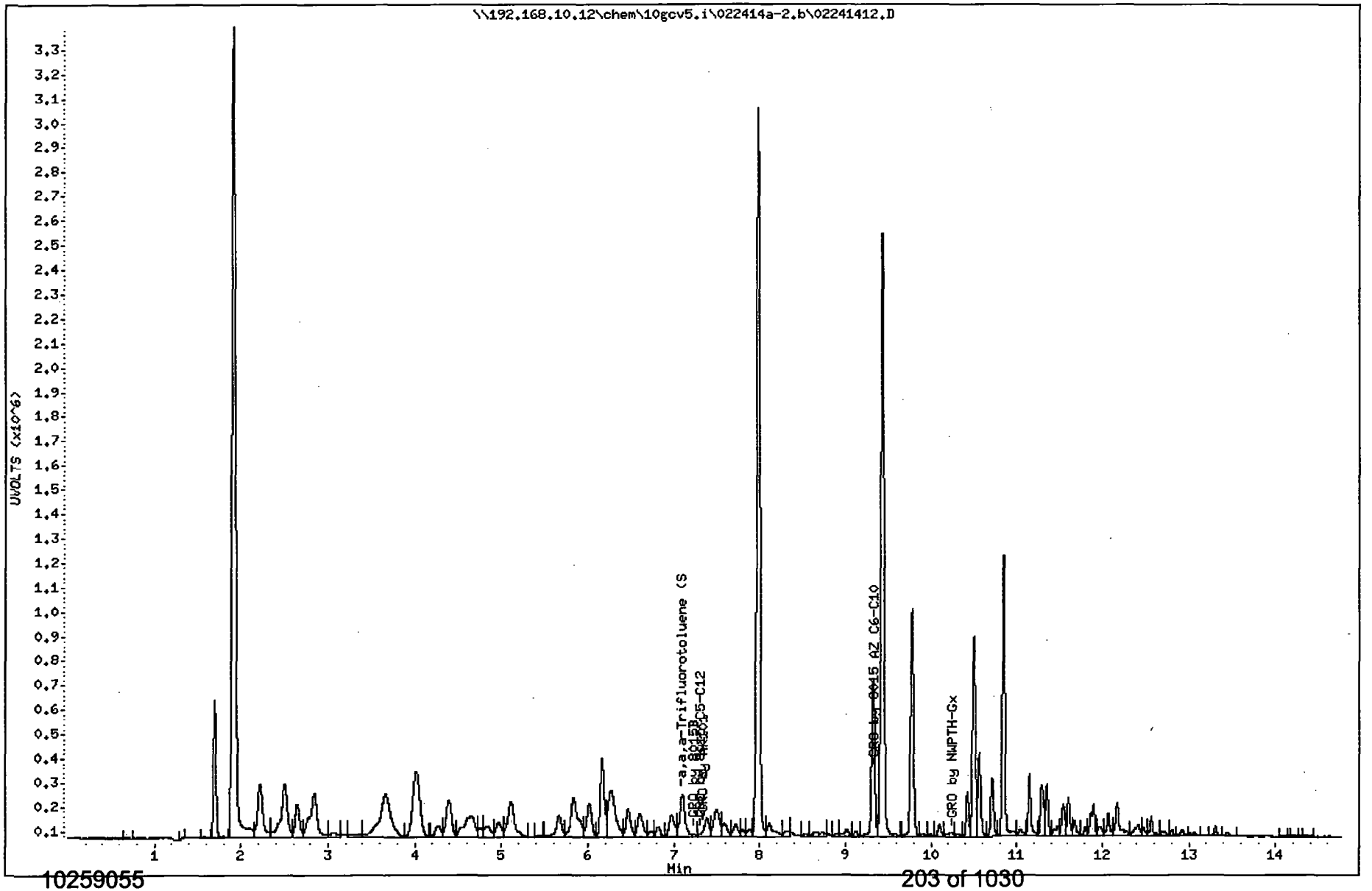
Instrument: 10gcv5.i

Sample Info: 2500 10099-11

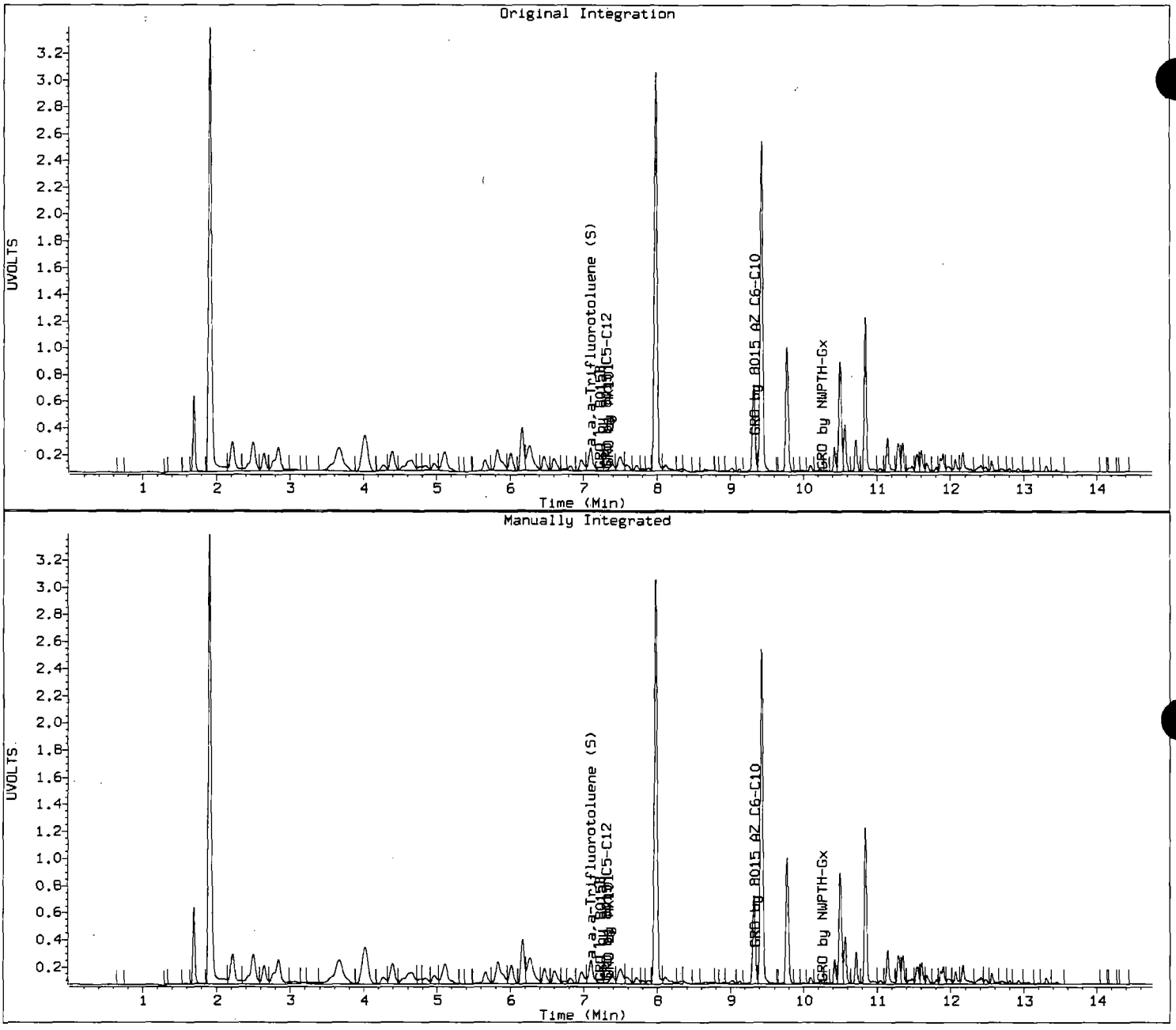
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 24-FEB-2014 14:27
Instrument: 10gcv5.i
Lab Sample ID: 2500 10099-11



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	42947973	45530331
GRO by 8015B	36353364	38442500
GRO by AK101	27548271	29415434
GRO by 8015 AZ C6-C10	34210773	35539330
GRO by NWPTH-Gx	29278710	29898863
a,a,a-Trifluorotoluene (S)	648417	731737

Report Date: 25-Feb-2014 11:02

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 24-FEB-2014 15:57
Lab File ID: 02241416.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: ICV 10099-12 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	9869	12145	0.010	23.06215	25.00000	Averaged
S	2 GRO by AK101	10930	12468	0.010	14.07554	25.00000	Averaged
S	4 GRO by 8015B	14632	16393	0.010	12.03721	15.00000	Averaged
S	5 GRO by 8015 C5-C12	18738	19855	0.010	5.95865	15.00000	Averaged
S	8 GRO by 8015 AZ C6-C10	13800	14400	0.010	4.34862	15.00000	Averaged
S	9 GRO by NWPTH-Gx	11929	11931	0.010	0.02125	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.91724
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241416.d
Lab Smp Id: ICV 10099-12
Inj Date : 24-FEB-2014 15:57
Operator : LLC Inst ID: 10gcv5.i
Smp Info : ICV 10099-12,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 11:02 10gcv5.i Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.106	7.106	0.000	607247	50.0000	61.53(M)
S	2 GRO by AK101	4.250-10.450			12468355	1000.00	1141
S	4 GRO by 8015B	3.480-10.990			16393001	1000.00	1120
S	5 GRO by 8015 C5-C12	2.360-12.280			19854738	1000.00	1060
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			14399771	1000.00	1043
S	9 GRO by NWPTH-Gx	7.850-12.680			11931083	1000.00	1000

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241416.D

Page 1

Date : 24-FEB-2014 15:57

Client ID:

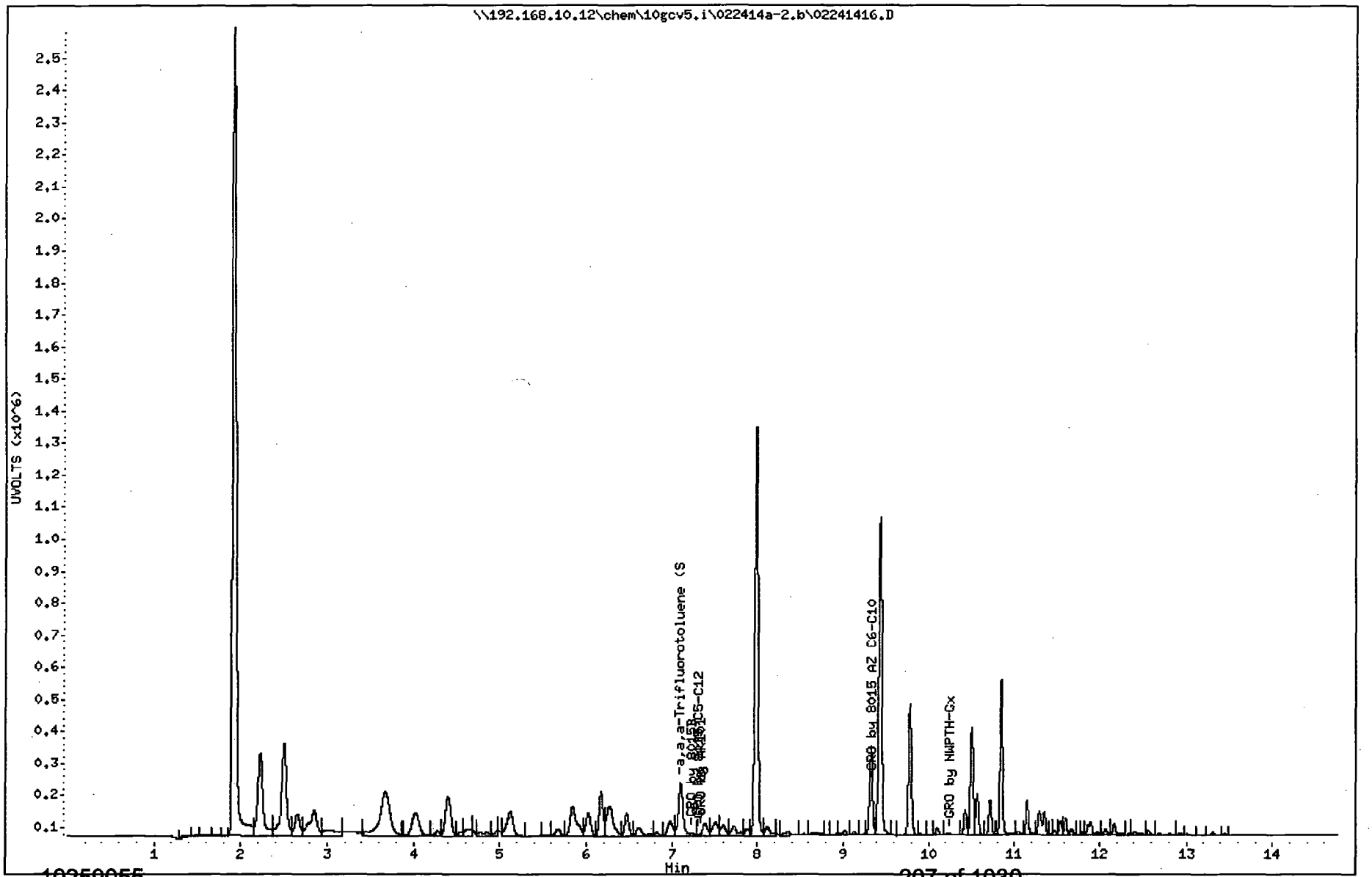
Instrument: 10gcv5.i

Sample Info: ICV 10099-12,1,2

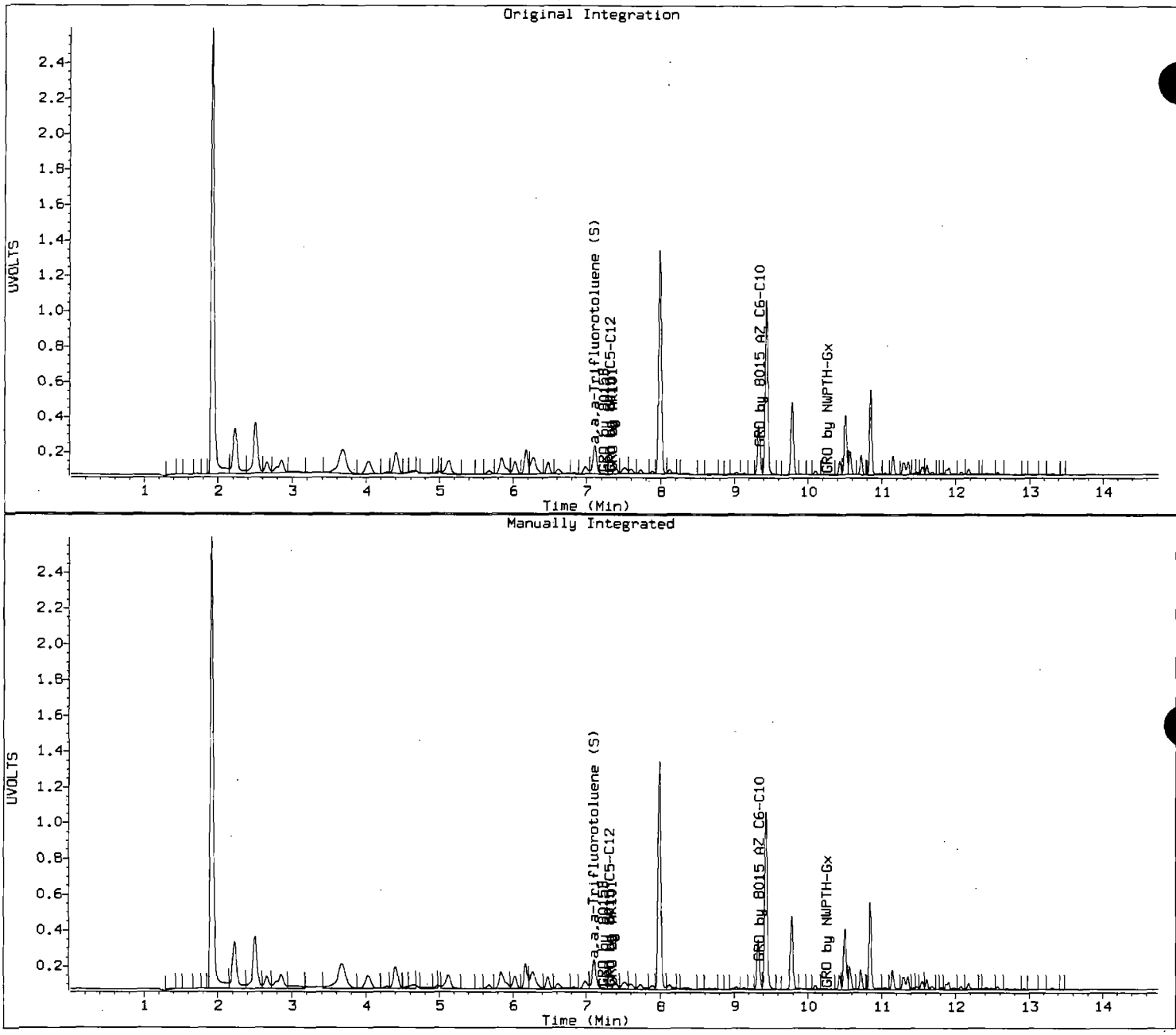
Operator: LLC

Column phase: DB-624

Column diameter: 0.53

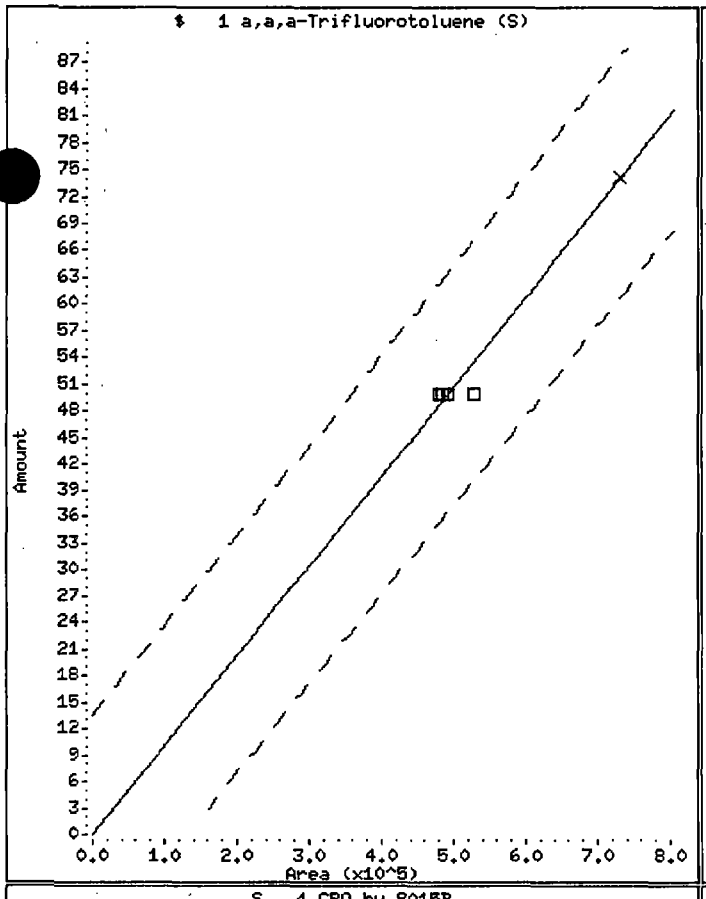


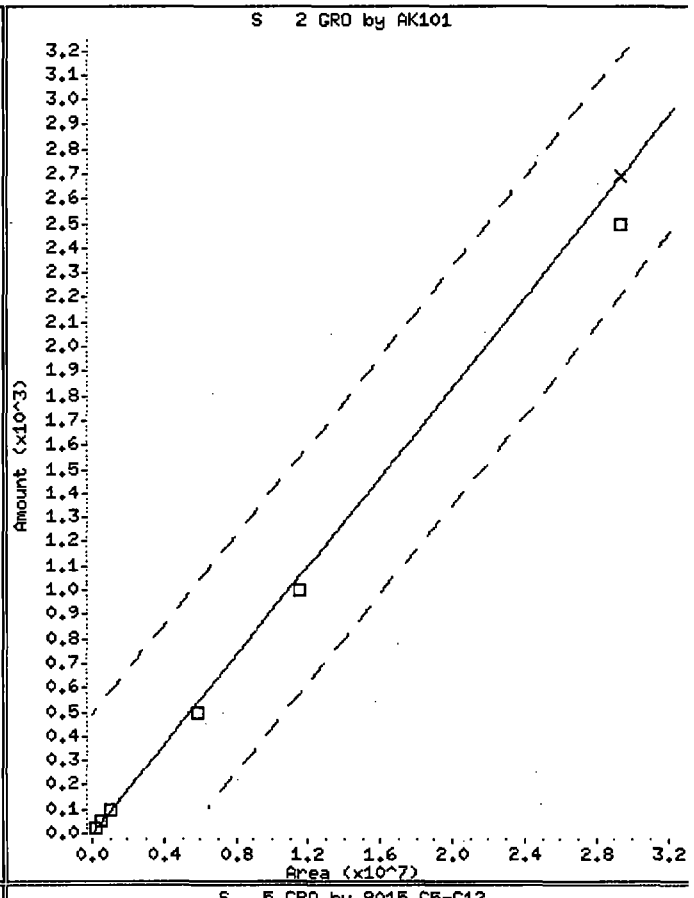
Instrument: 10gcv5.i
Lab Sample ID: ICV 10099-12

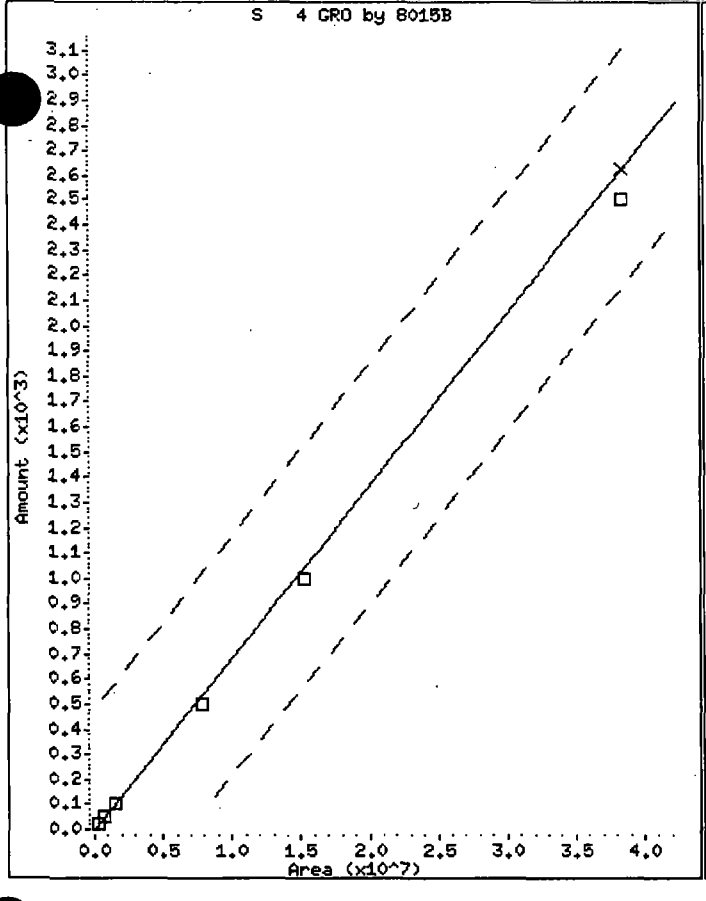


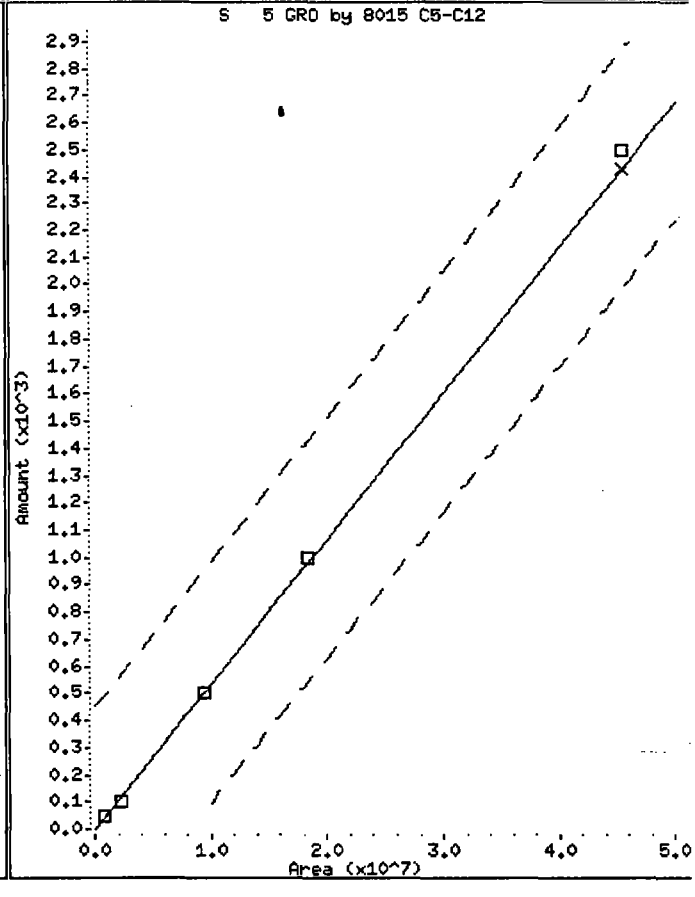
Manually Integrated Compounds

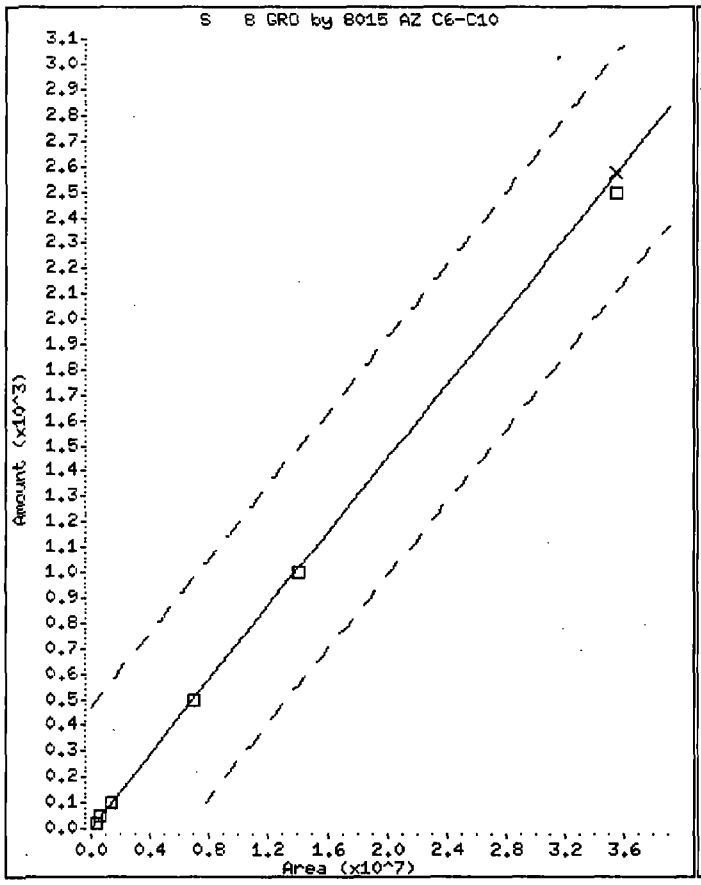
Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	18292384	19854738
GRO by 8015B	15308527	16393001
GRO by AK101	11587564	12468355
GRO by 8015 AZ C6-C10	13609707	14399771
GRO by NWPTH-Gx	11431881	11931083
a,a,a-Trifluorotoluene (S)	571279	607247

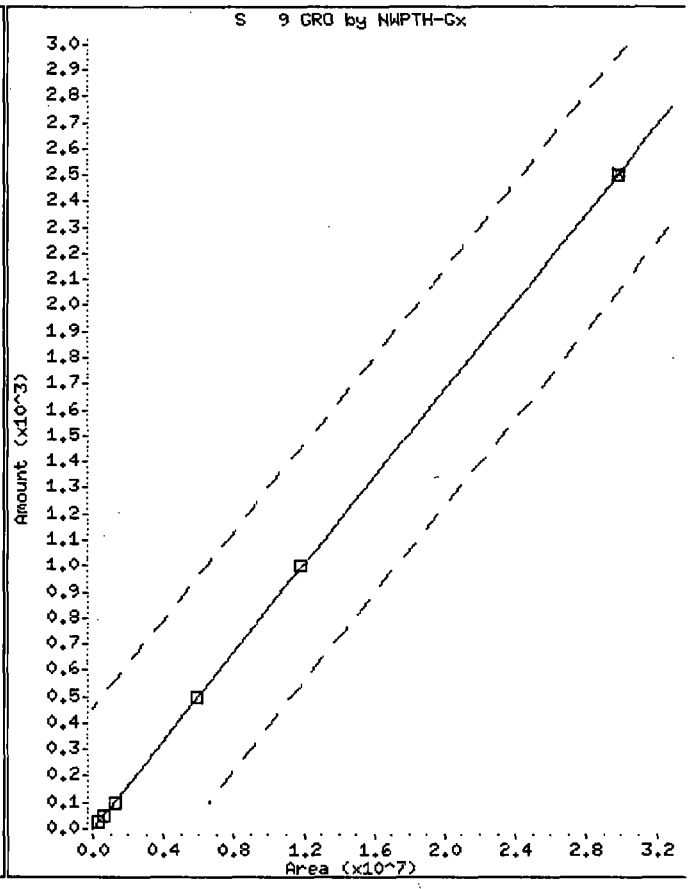

$ 1 a,a,a-Trifluorotoluene (S)
Amount
Area (x10^5)


S 2 GRO by AK101
Amount (x10^3)
Area (x10^7)


S 4 GRO by 8015B
Amount (x10^3)
Area (x10^7)


S 5 GRO by 8015 C5-C12
Amount (x10^3)
Area (x10^7)


S 8 GRO by 8015 AZ C6-C10
Amount (x10^3)
Area (x10^7)


S 9 GRO by NWPTH-Gx
Amount (x10^3)
Area (x10^7)

Report Date: 04-Mar-2014 09:55

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 03-MAR-2014 12:54
Lab File ID: 03031403.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	9869	11466	0.010	16.18442	25.00000	Averaged
S	4 GRO by 8015B	14632	15713	0.010	7.38775	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 11.78608
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Report Date: 04-Mar-2014 09:55

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031403.d
Lab Smp Id: CCV 9314-552
Inj Date : 03-MAR-2014 12:54
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 09:49 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.098	7.098	0.000	573309	50.0000	58.09(M)
S	4 GRO by 8015B	3.480-10.990			15712704	1000.00	1074

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031403.D

Page 1

Date : 03-MAR-2014 12:54

Client ID:

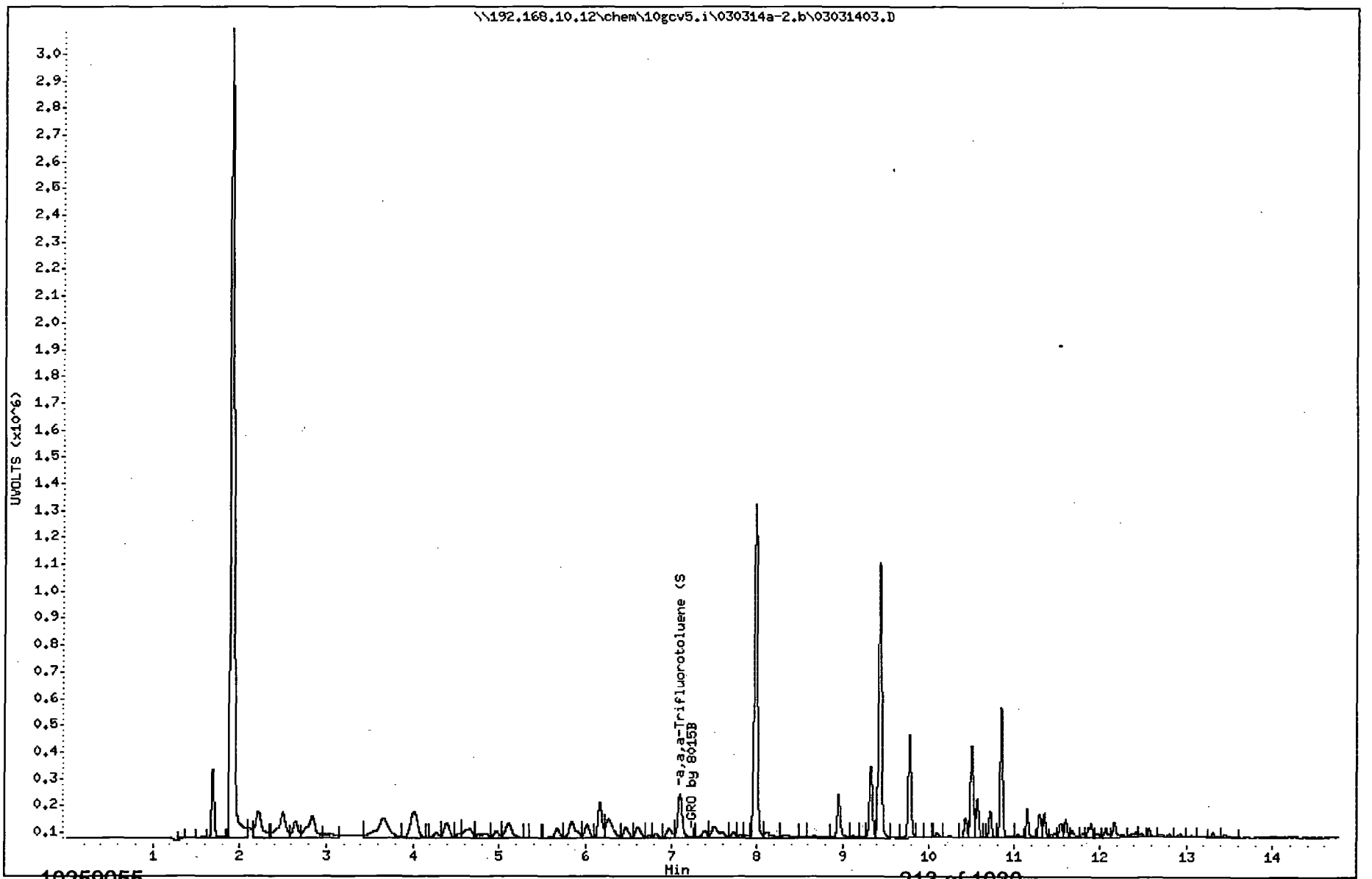
Instrument: 10gcv5.i

Sample Info: CCV 9314-552,1,2

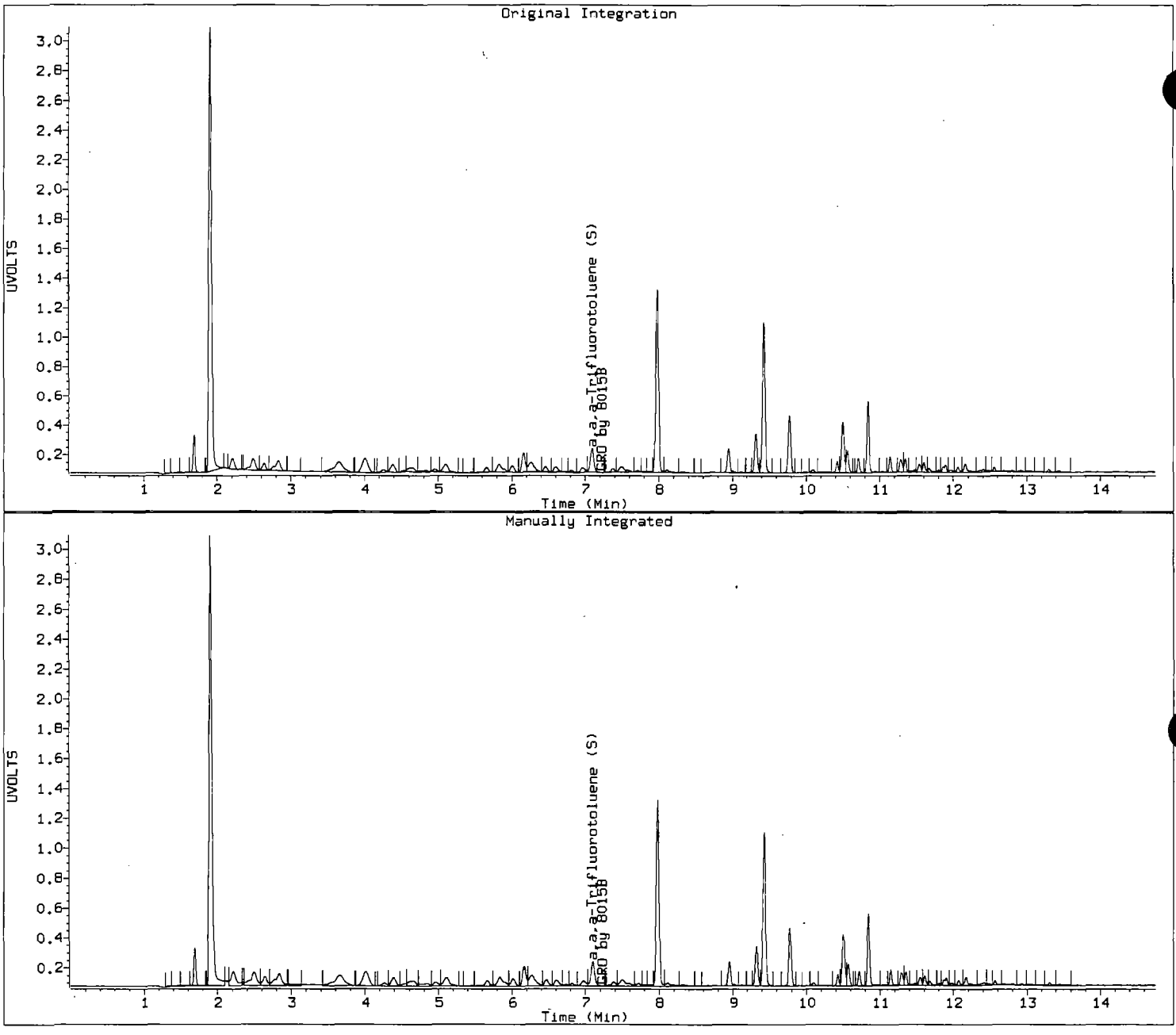
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	14639771	15712704
a,a,a-Trifluorotoluene (S)	528314	573309

Report Date: 04-Mar-2014 09:57

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 03-MAR-2014 18:47
Lab File ID: 03031414.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	9869	11024	0.010	11.70492	25.00000	Averaged
S	4 GRO by 8015B	14632	15037	0.010	2.76771	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.23631
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031414.d
Lab Smp Id: CCV 9314-552
Inj Date : 03-MAR-2014 18:47
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 09:49 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.104	7.104	0.000	551205	50.0000	55.85(M)
S	4 GRO by 8015B	3.480-10.990			15036711	1000.00	1028

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031414.D

Page 1

Date : 03-MAR-2014 18:47

Client ID:

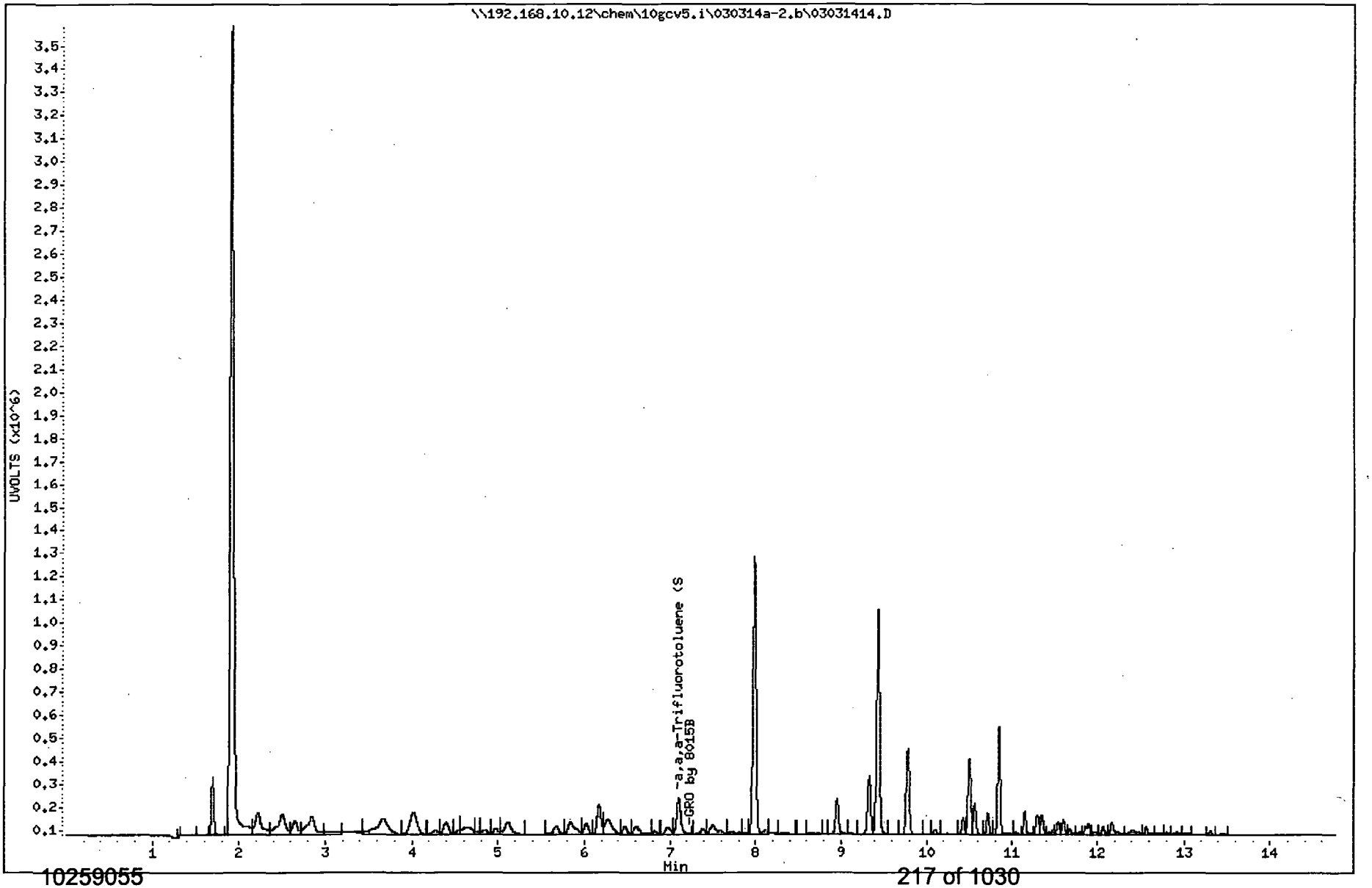
Instrument: 10gcv5.i

Sample Info: CCV 9314-552,1,2

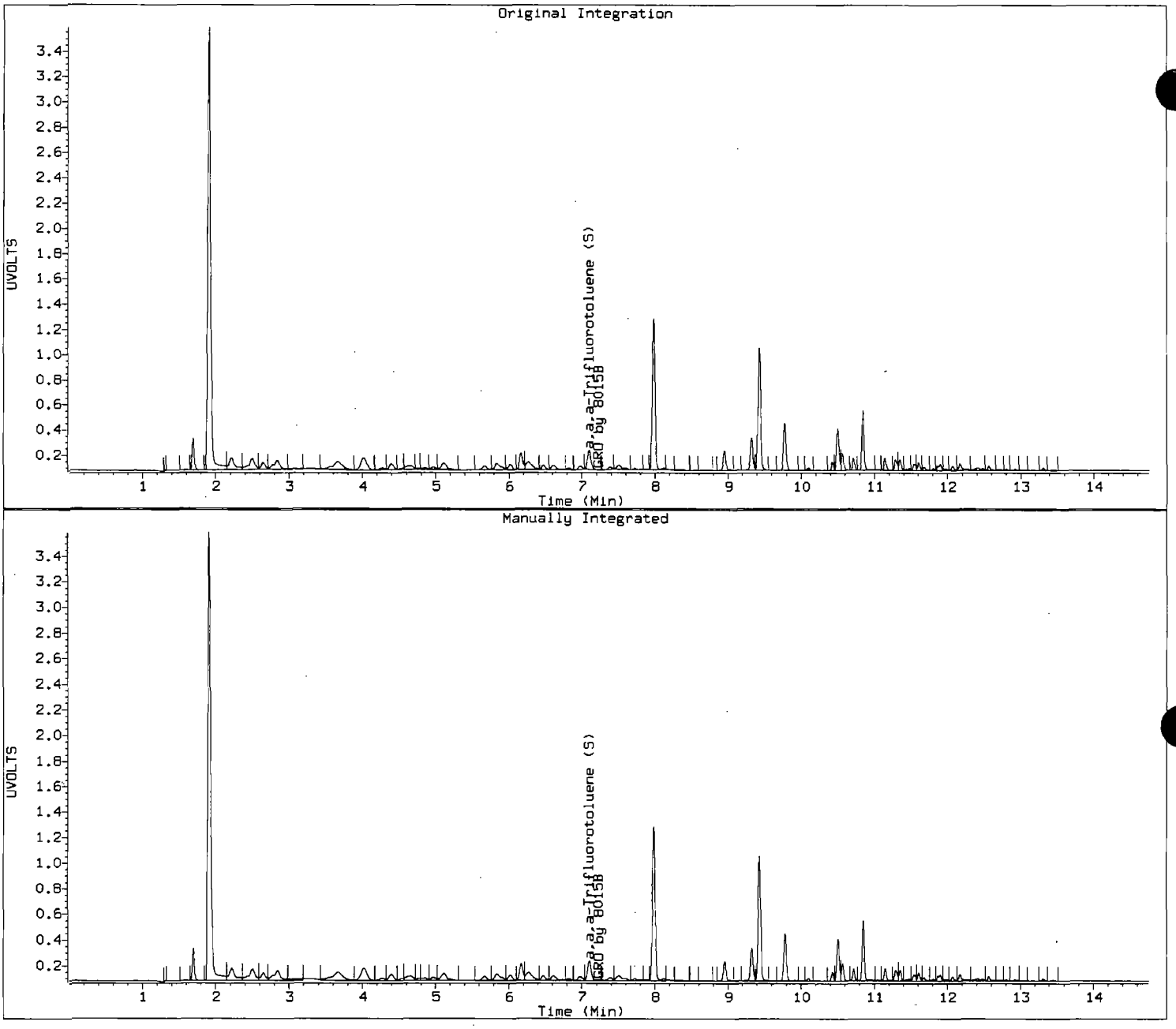
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	14153092	15036711
a,a,a-Trifluorotoluene (S)	504612	551205

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 03-MAR-2014 22:32
Lab File ID: 03031424.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m

COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 a,a,a-Trifluorotoluene (S)	9869	10826	0.010	9.69356	25.00000	Averaged
S 4 GRO by 8015B	14632	14803	0.010	1.17196	15.00000	Averaged

Average %D / Drift Results.
Calculated Average %D/Drift = 5.43276
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031424.d
Lab Smp Id: CCV 9314-552
Inj Date : 03-MAR-2014 22:32
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 09:49 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.105	7.105	0.000	541280	50.0000	54.85(M)
S	4 GRO by 8015B	3.480-10.990			14803226	1000.00	1012

QC Flag Legend

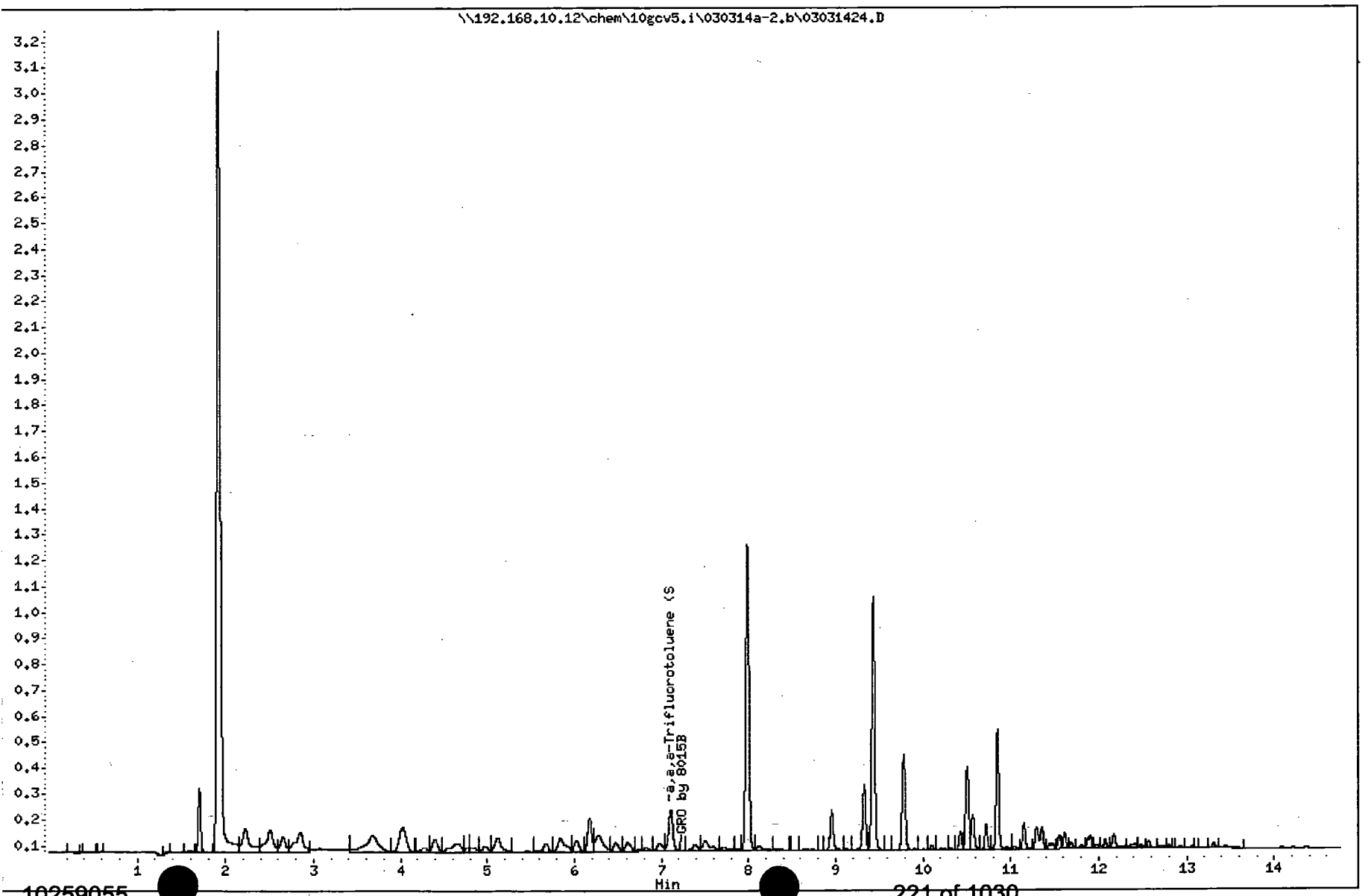
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031424.D
Date : 03-MAR-2014 22:32
Client ID:
Sample Info: CCV 9314-552,1,2

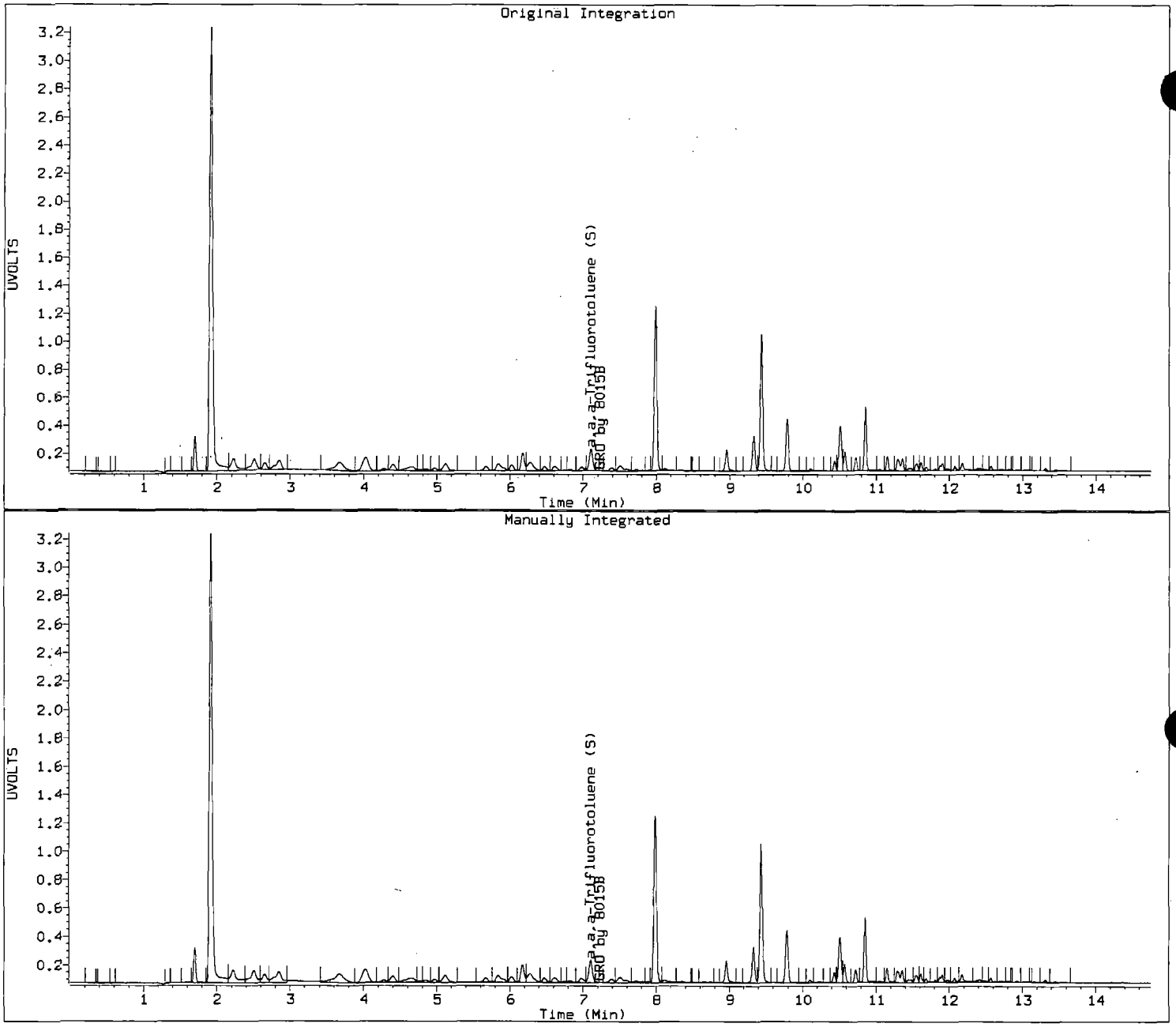
Instrument: 10gcv5.i

Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	14265329	14803226
a,a,a-Trifluorotoluene (S)	513363	541280

Report Date: 04-Mar-2014 10:36

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 04-MAR-2014 10:08
Lab File ID: 03041403.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF1000	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
$ 1 a,a,a-Trifluorotoluene (S)	9869	11166	0.010	13.14681	25.00000	Averaged
S 4 GRO by 8015B	14632	14246	0.010	-2.63929	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.89305
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Report Date: 04-Mar-2014 10:36

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041403.d
Lab Smp Id: CCV 9314-552
Inj Date : 04-MAR-2014 10:08
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 10:34 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.108	7.108	0.000	558320	50.0000	56.57(M)
S	4 GRO by 8015B	3.480-10.990			14245573	1000.00	973.6

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041403.D

Page 1

Date : 04-MAR-2014 10:08

Client ID:

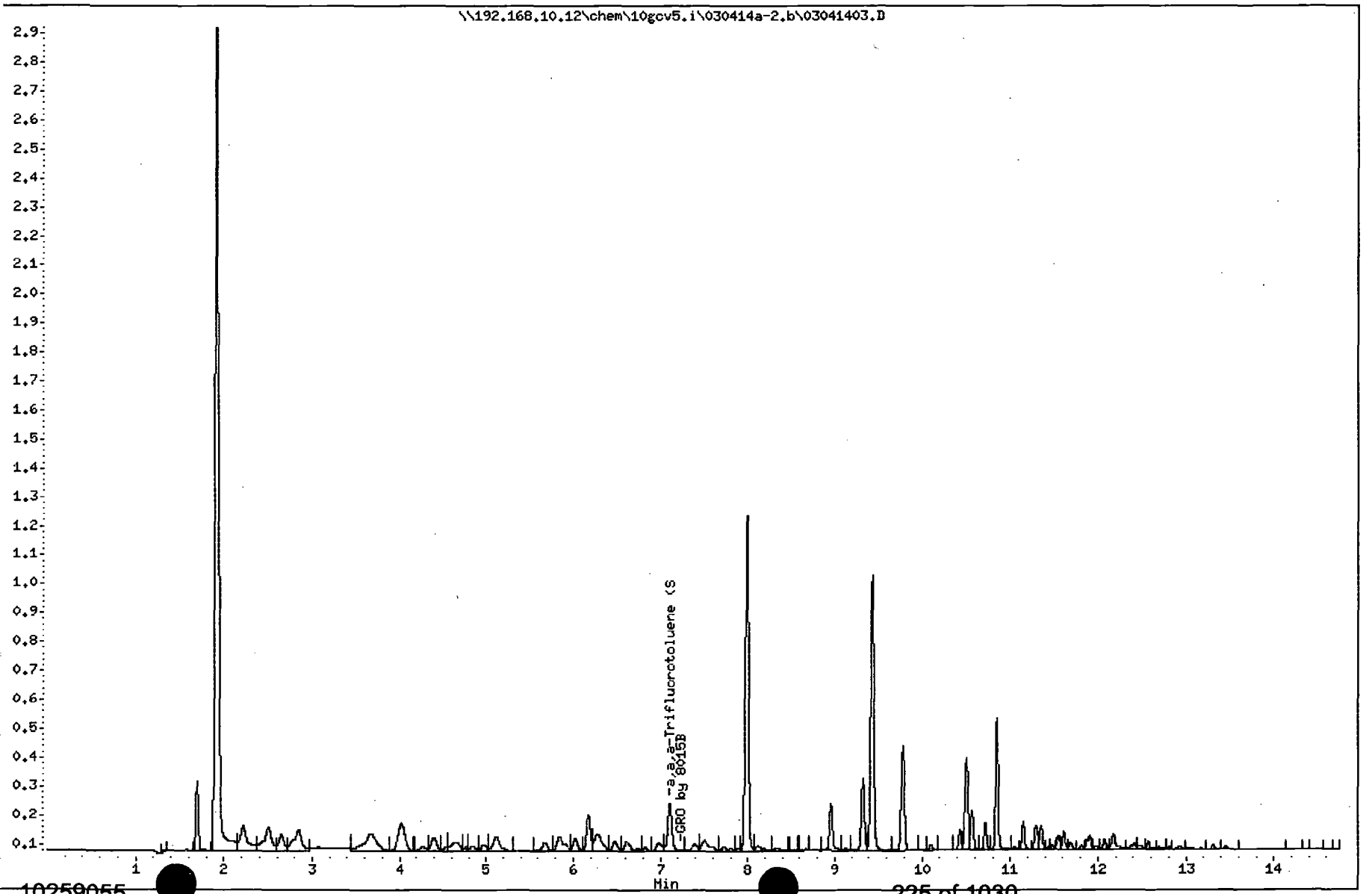
Instrument: 10gcv5.i

Sample Info: CCV 9314-552,1,2

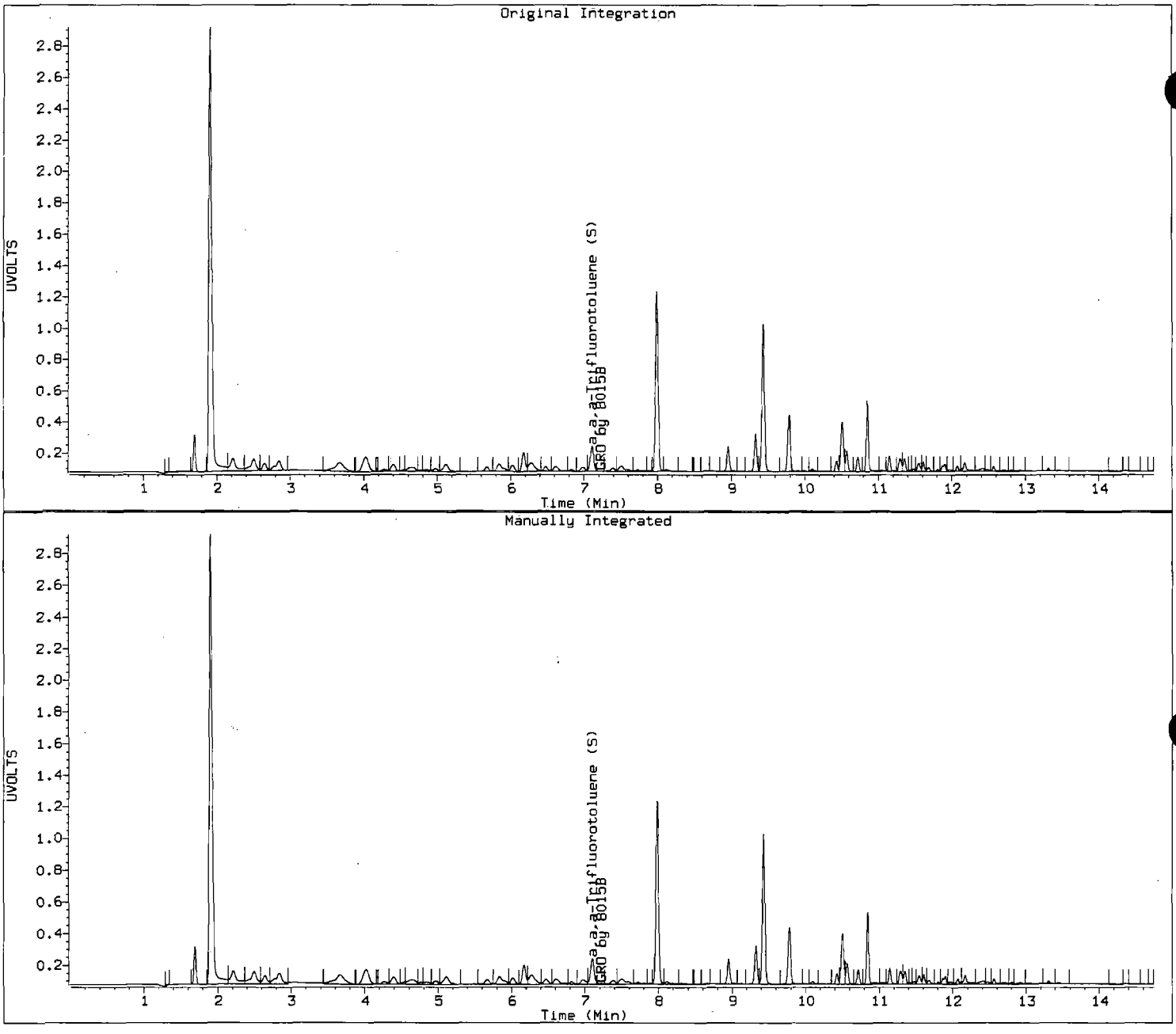
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	13746604	14245573
a,a,a-Trifluorotoluene (S)	534187	558320

Report Date: 04-Mar-2014 14:36

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 04-MAR-2014 14:03
Lab File ID: 03041411.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF1000	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
$ 1 a,a,a-Trifluorotoluene (S)	9869	10341	0.010	4.78320	25.00000	Averaged
S 4 GRO by 8015B	14632	15027	0.010	2.69914	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.74117
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041411.d
Lab Smp Id: CCV 9314-552
Inj Date : 04-MAR-2014 14:03
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:31 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.094	7.094	0.000	517050	50.0000	52.39
S	4 GRO by 8015B	3.480-10.990			15026679	1000.00	1027

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041411.D

Page 1

Date : 04-MAR-2014 14:03

Client ID:

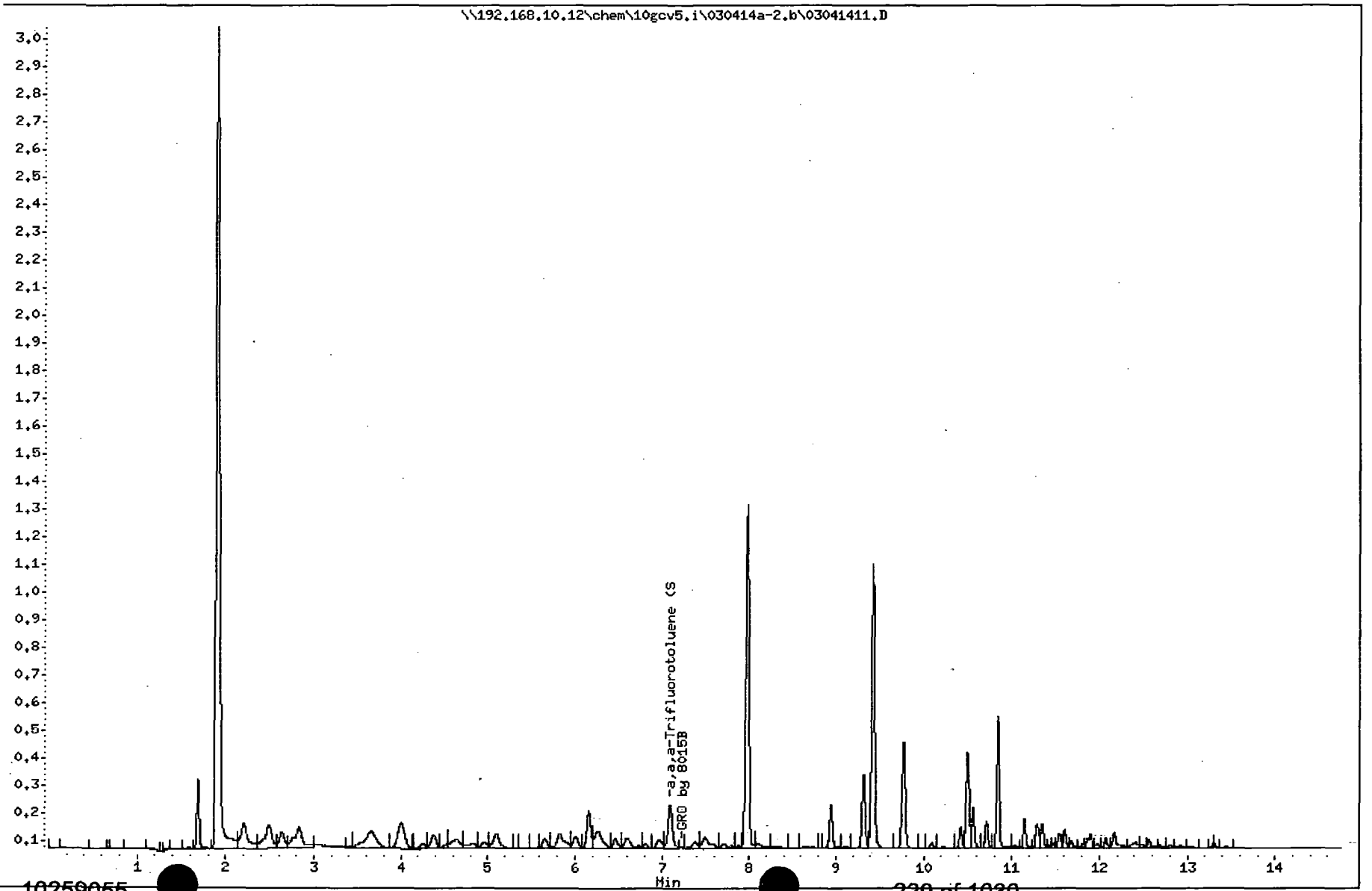
Instrument: 10gcv5.i

Sample Info: CCV 9314-552,1,2

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 04 MAR 2014 14:05
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	14878171	15026679
a,a,a-Trifluorotoluene (S)	517050	517050

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031409.d
Lab Smp Id: 1632555
Inj Date : 03-MAR-2014 16:55
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632555,1,3,BLANK
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.099	7.105	-0.006	471256	47.7514	47.75
S	4 GRO by 8015B	3.480-10.990			435481	29.7627	1488

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031409.D

Page 1

Date : 03-MAR-2014 16:55

Client ID:

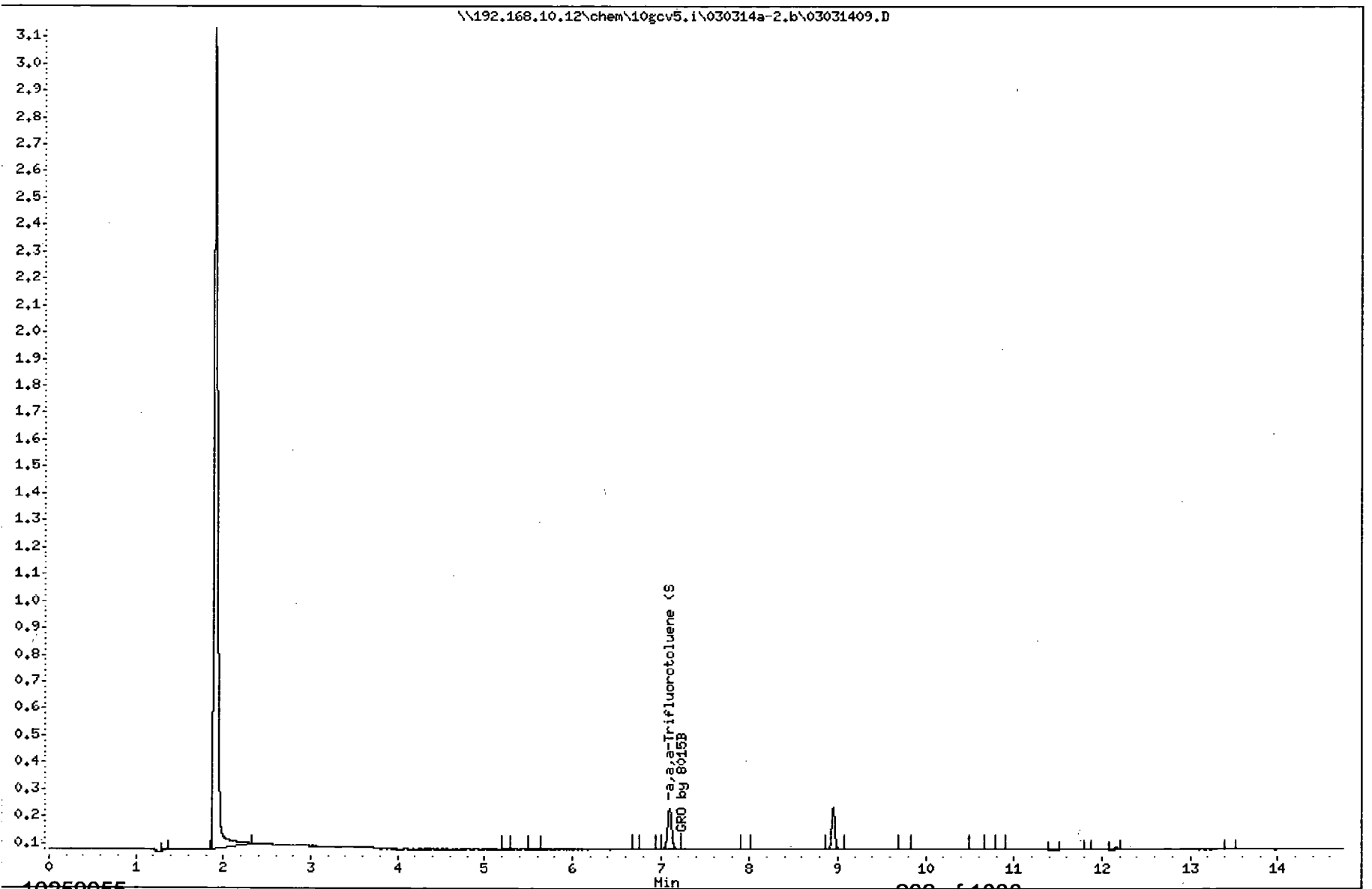
Instrument: 10gcv5.i

Sample Info: 1632555,1,3,BLANK

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Instrument: 10gcv5.i
Lab Sample ID: 1632555

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
by 8015B	435481	435481
a,a,a-Trifluorotoluene (S)	471256	471256

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041406.d
Lab Smp Id: 1632558
Inj Date : 04-MAR-2014 12:04
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632558,1,3,MS
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:38 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.103	7.094	0.009	625482	63.3788	63.38(R)
S	4 GRO by 8015B	3.480-10.990			21864916	1494.35	74720

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041406.D

Date : 04-MAR-2014 12:04

Client ID:

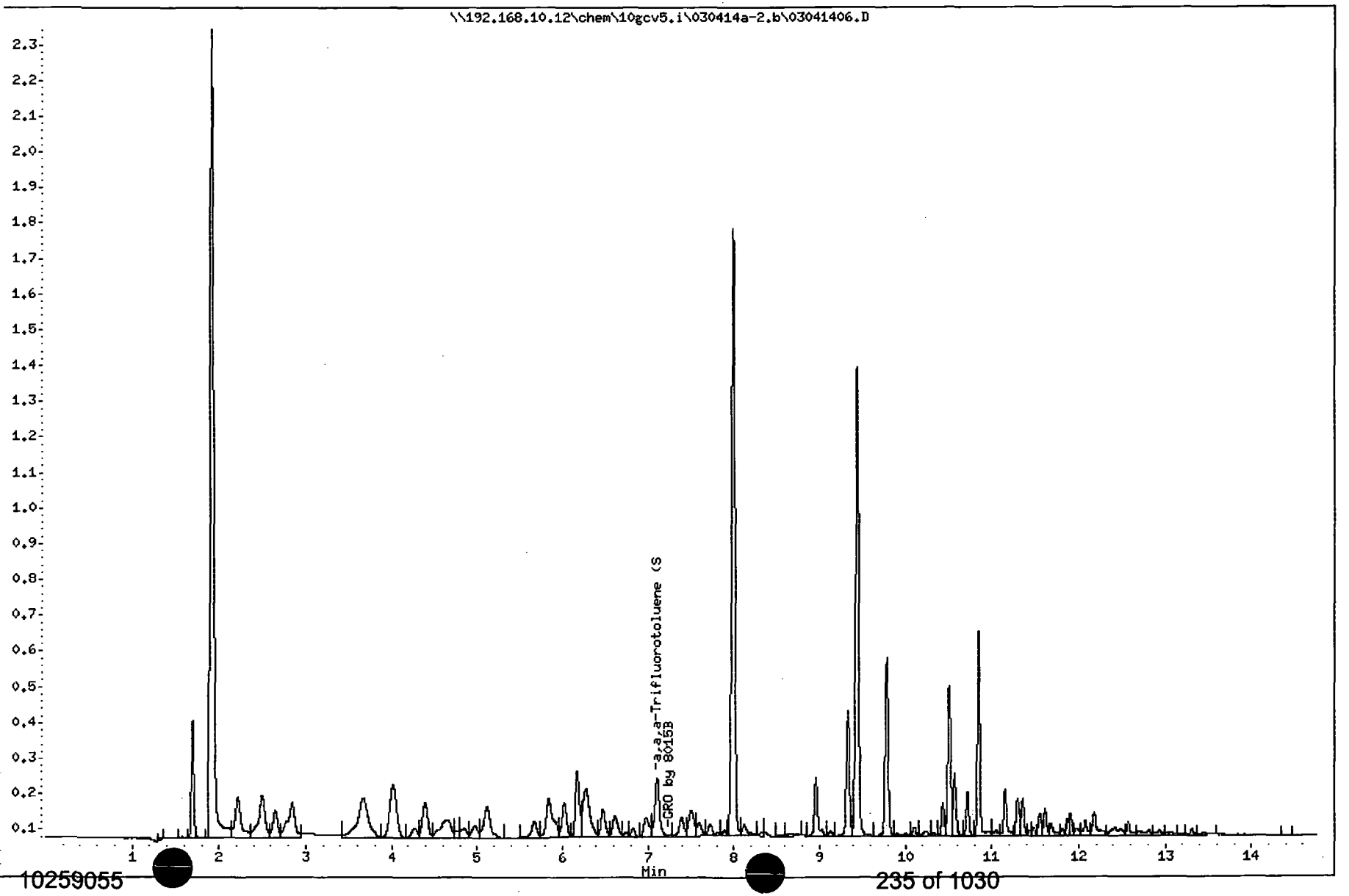
Instrument: 10gcv5.i

Sample Info: 1632558,1,3,MS

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Instrument: 10gcv5.i
Lab Sample ID: 1632558

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	21664591	21864916
a,a,a-Trifluorotoluene (S)	625482	625482

Report Date: 04-Mar-2014 14:39

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041407.d
Lab Smp Id: 1632559
Inj Date : 04-MAR-2014 12:27
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632559,1,3,MSD
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:38 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.105	7.094	0.011	596754	60.4678	60.47
S	4 GRO by 8015B	3.480-10.990			18889397	1290.99	64550

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041407.D

Page 1

Date : 04-MAR-2014 12:27

Client ID:

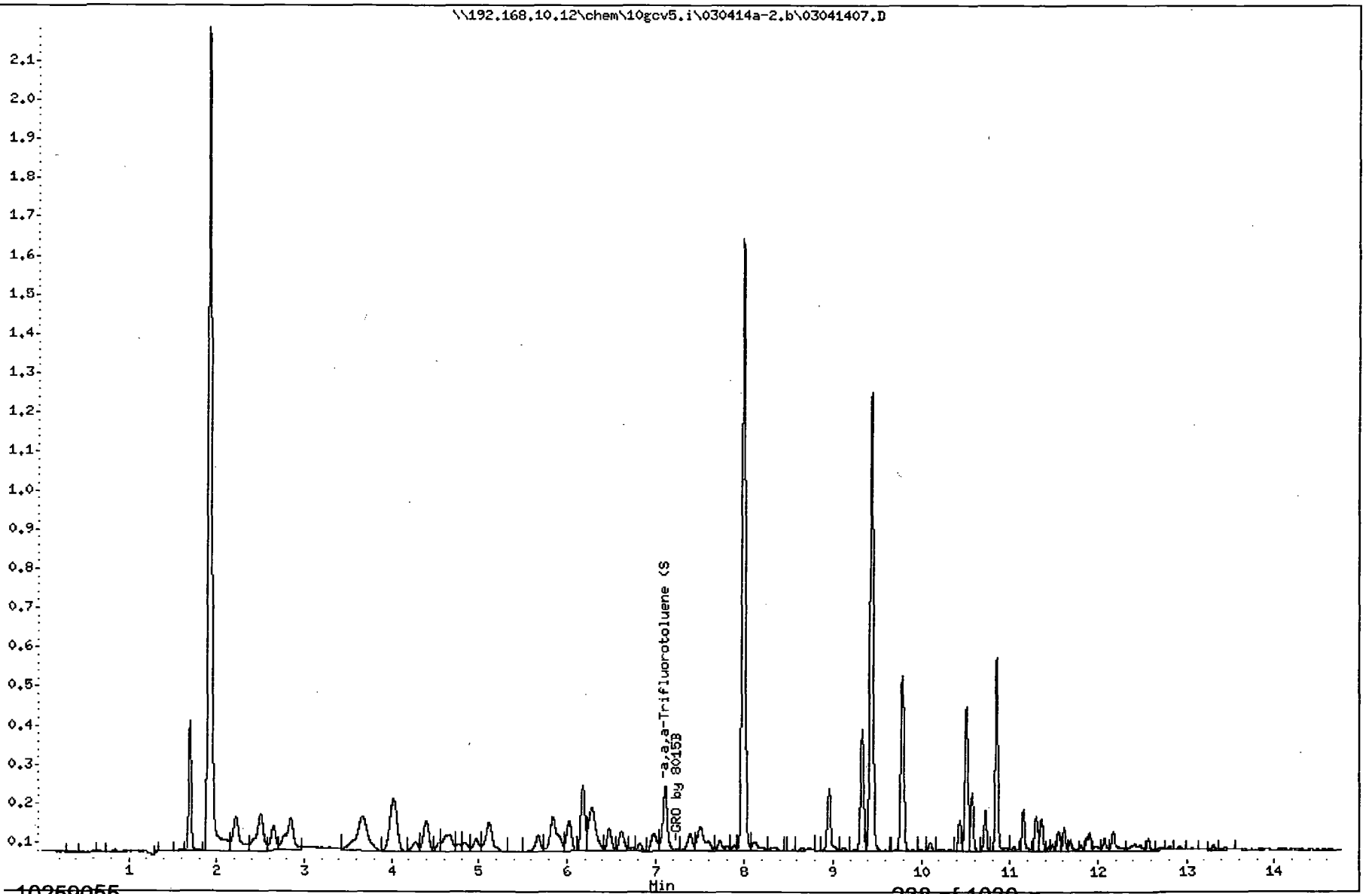
Instrument: 10gcv5.i

Sample Info: 1632559,1,3,MSD

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Instrument: 10gcv5.i
Lab Sample ID: 1632559

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
by 8015B	18727396	18889397
a,a,a-Trifluorotoluene (S)	596754	596754

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041404.d
Lab Smp Id: 1632556
Inj Date : 04-MAR-2014 10:53
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632556,1,3,LCS
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:38 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

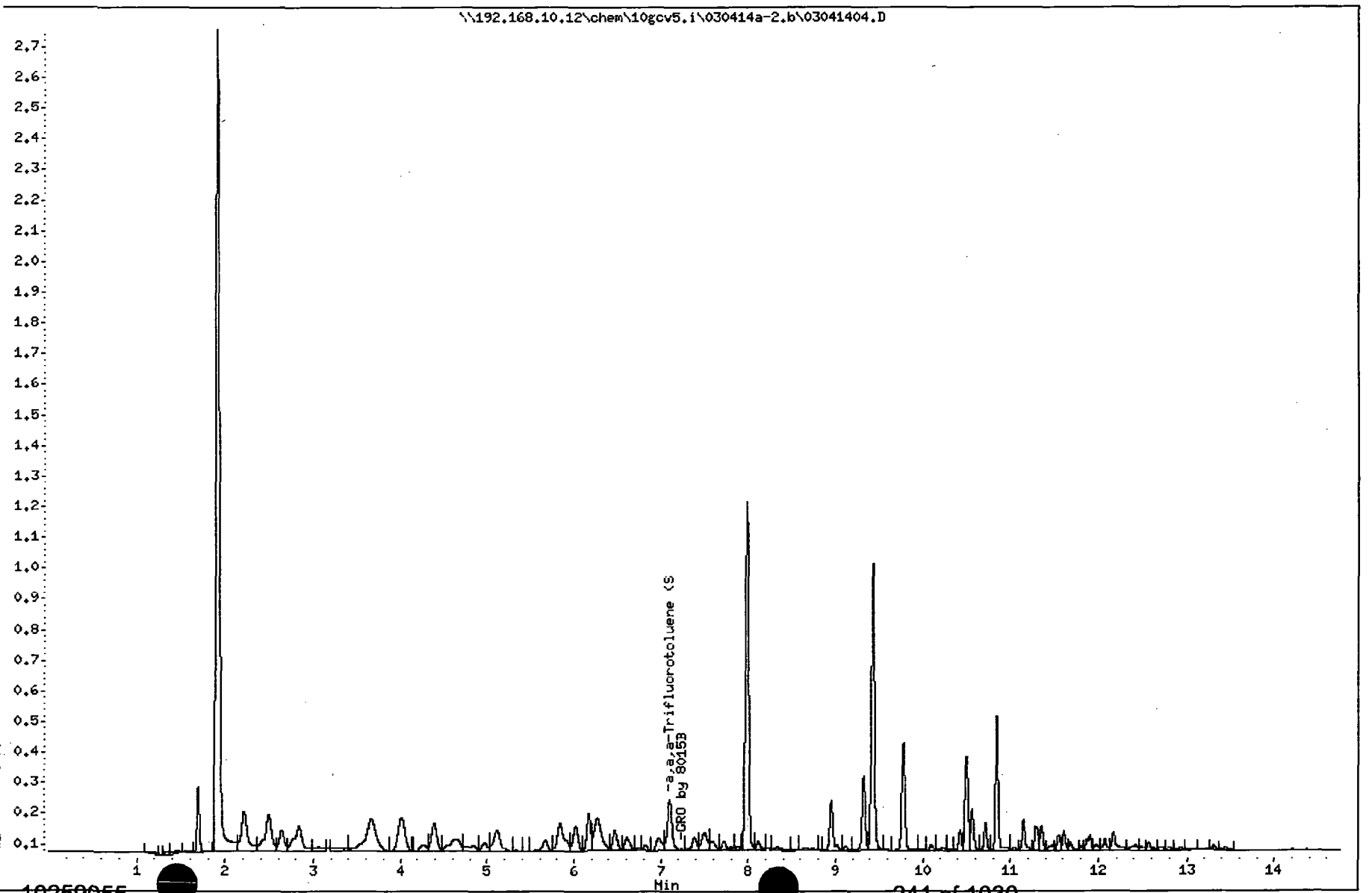
Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.098	7.094	0.004	579853	58.7553	58.76
S	4 GRO by 8015B	3.480-10.990			16209733	1107.85	55390

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041404.D
Date : 04-MAR-2014 10:53
Client ID:
Sample Info: 1632556,1,3,LCS

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Injection Date: 04-Mar-2014 10:55
Instrument: 10gcv5.i
Lab Sample ID: 1632556

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	15815355	16209733
a,a,a-Trifluorotoluene (S)	579853	579853

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041405.d
Lab Smp Id: 1632557
Inj Date : 04-MAR-2014 11:15
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632557,1,3,LCSD
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:38 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.102	7.094	0.008	587216	59.5014	59.50
S	4 GRO by 8015B	3.480-10.990			15661434	1070.37	53520

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041405.D

Page 1

Date : 04-MAR-2014 11:15

Client ID:

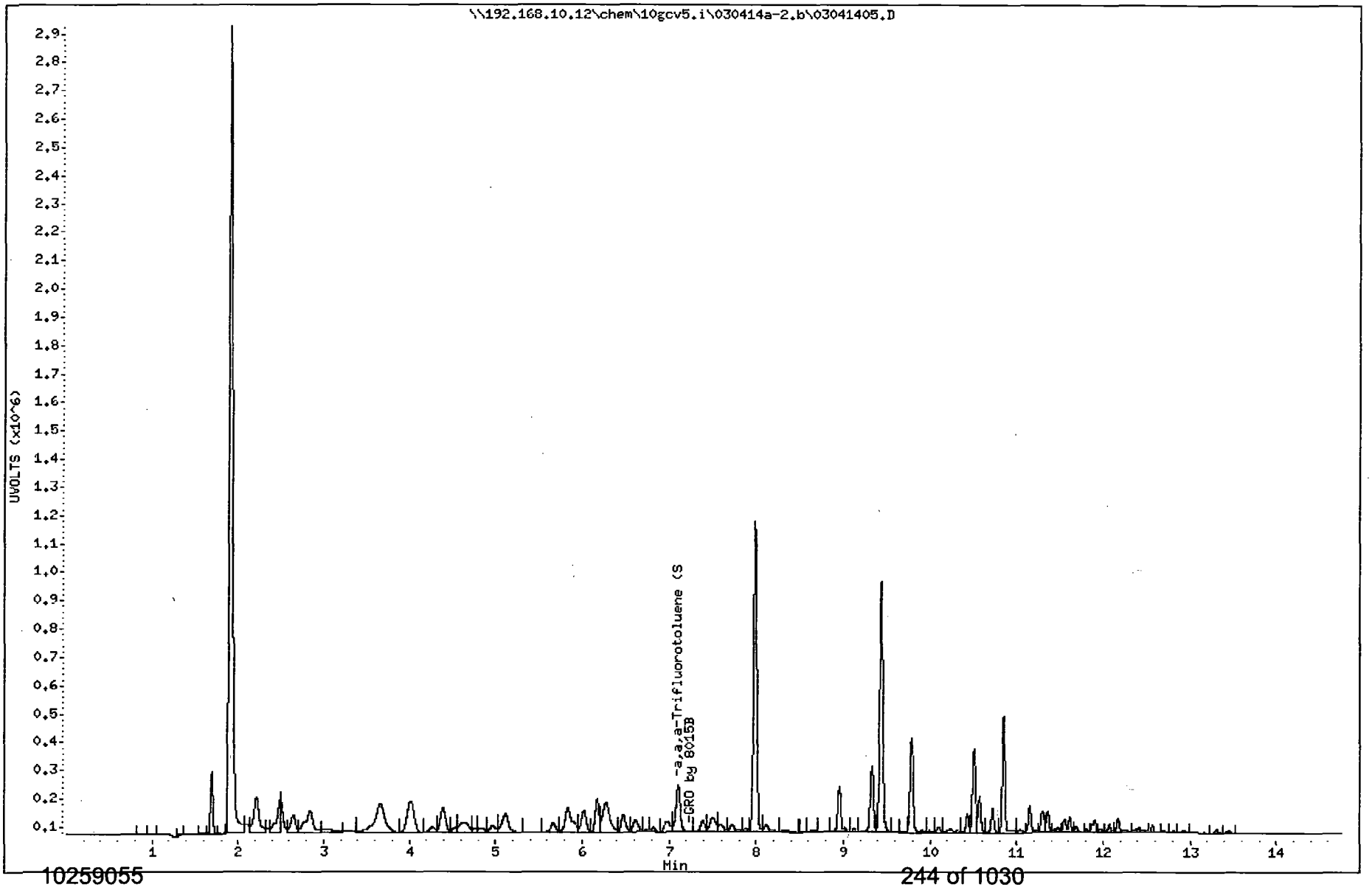
Instrument: 10gcv5.i

Sample Info: 1632557,1,3,LCSD

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 04-MAR-2014 11:15
Instrument: 10gcv5.i
Lab Sample ID: 1632557

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	15453621	15661434
a,a,a-Trifluorotoluene (S)	587216	587216

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031421.d
Lab Smp Id: 10259055001
Inj Date : 03-MAR-2014 21:25
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10259055001
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.104	7.105	-0.001	460005	46.6114	46.61
S	4 GRO by 8015B	3.480-10.990			424022	28.9796	1449

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031421.D

Page 1

Date : 03-MAR-2014 21:26

Client ID:

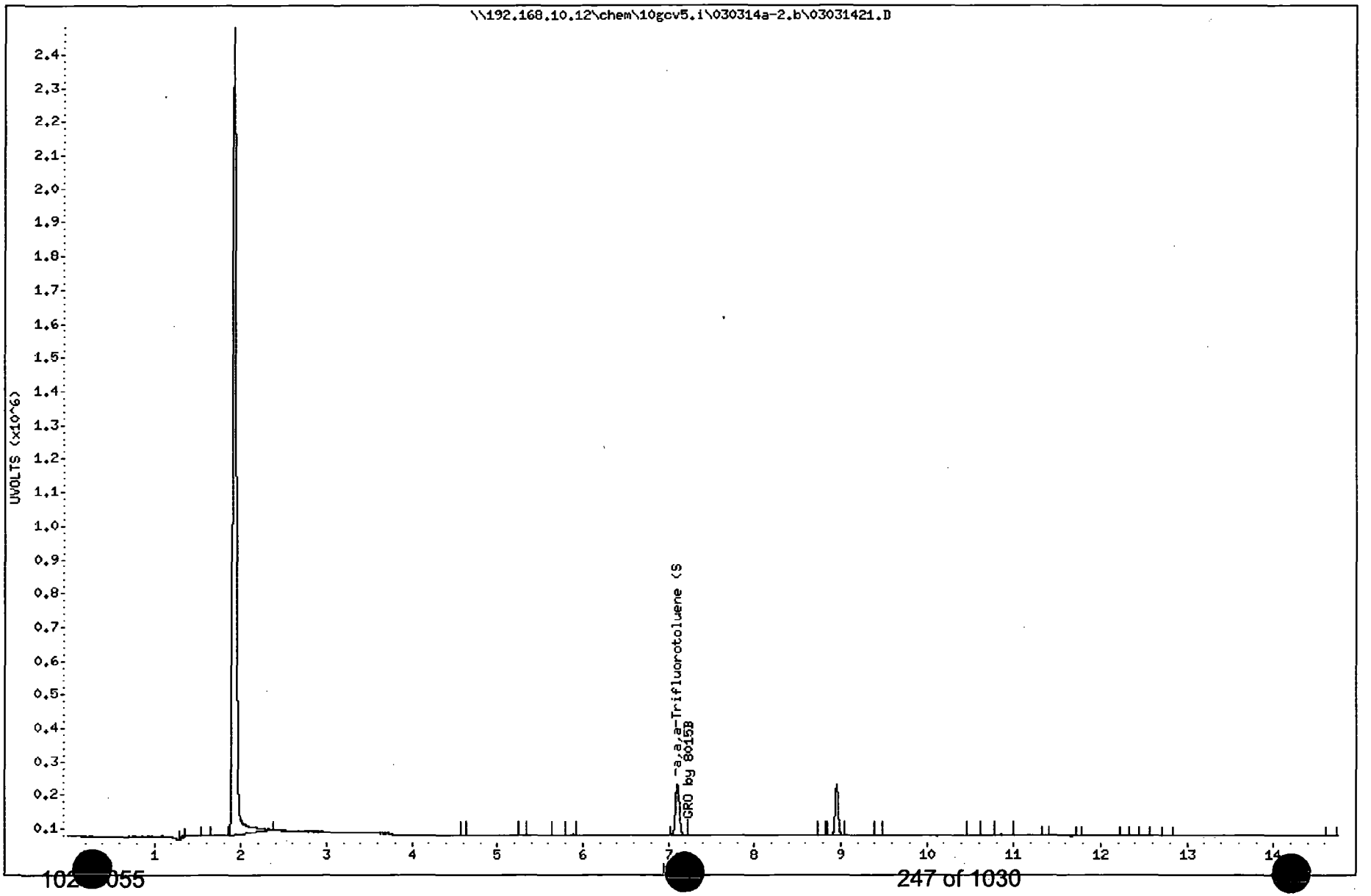
Instrument: 10gcv5.i

Sample Info: 10259055001

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b/03031421.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 03-MAR-2014 21:25
Instrument: 10gcv5.i
Lab Sample ID: 10259055001

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	424022	424022
a,a,a-Trifluorotoluene (S)	460005	460005

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031410.d
Lab Smp Id: 10259055002
Inj Date : 03-MAR-2014 17:17
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10259055002
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.101	7.105	-0.004	472975	47.9256	47.92
S	4 GRO by 8015B	3.480-10.990			403821	27.5990	1380

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031410.D

Page 1

Date : 03-MAR-2014 17:17

Client ID:

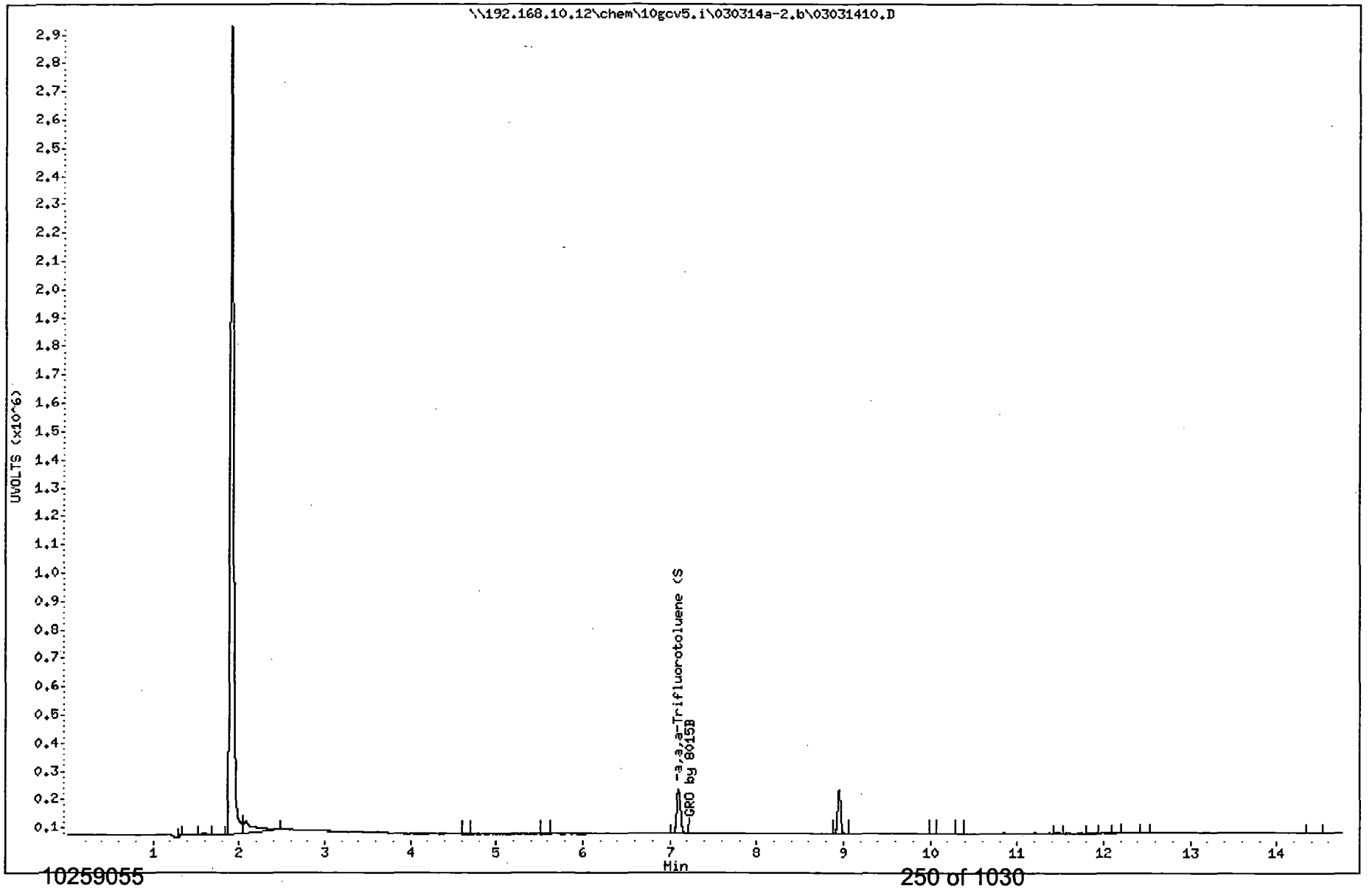
Instrument: 10gcv5.i

Sample Info: 10259055002

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 03-MAR-2014 17:17
Instrument: 10gcv5.i
Lab Sample ID: 10259055002

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	403821	403821
a,a,a-Trifluorotoluene (S)	472975	472975

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031411.d
Lab Smp Id: 10259055003
Inj Date : 03-MAR-2014 17:40
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10259055003
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.099	7.105	-0.006	472977	47.9258	47.92
S	4 GRO by 8015B	3.480-10.990			409216	27.9677	1398

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031411.D

Date : 03-MAR-2014 17:40

Client ID:

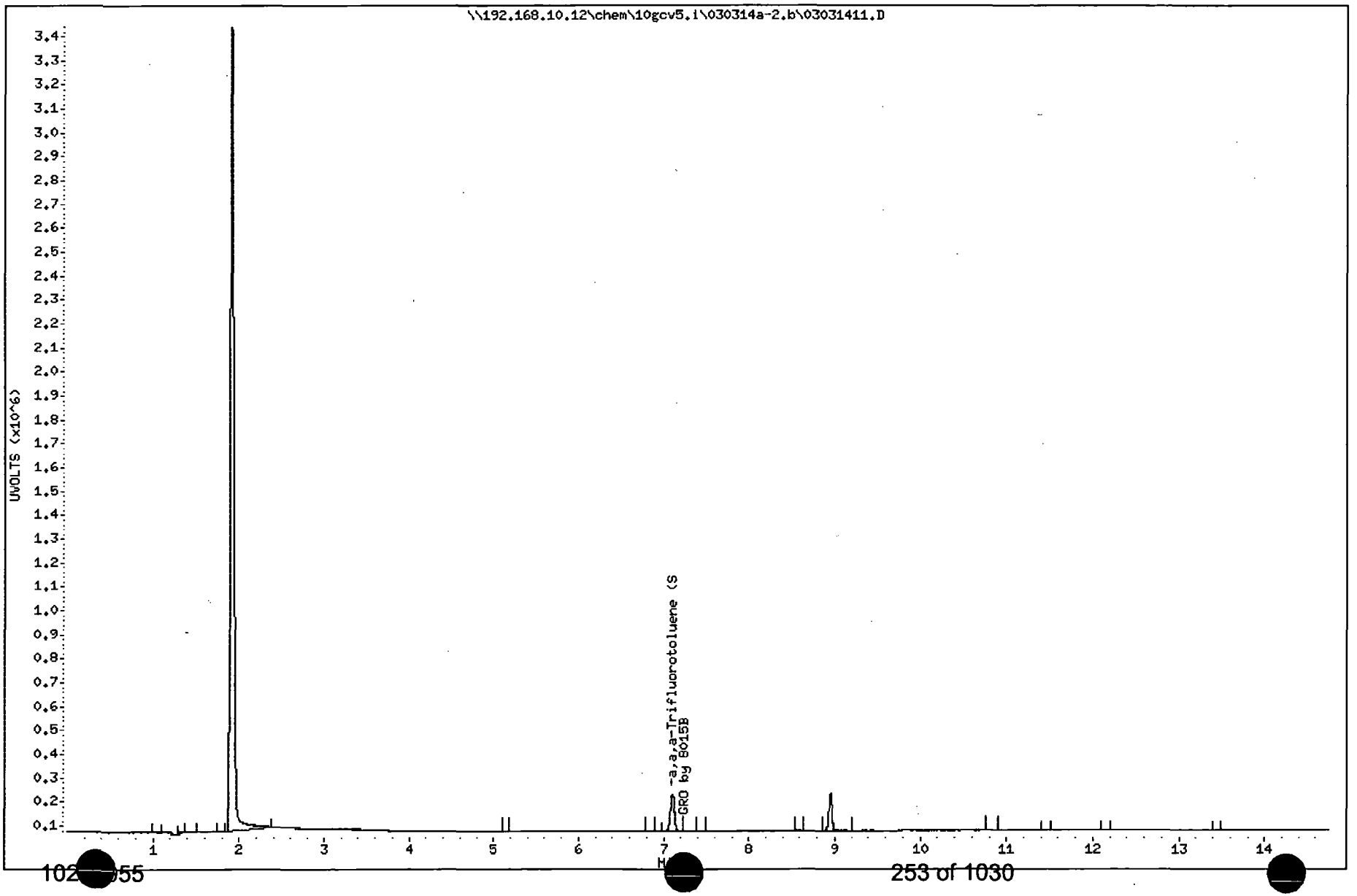
Instrument: 10gcv5.i

Sample Info: 10259055003

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 03-MAR-2014 17:40
Instrument: 10gcv5.i
Lab Sample ID: 10259055003

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	409216	409216
a,a,a-Trifluorotoluene (S)	472977	472977

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031413.d
Lab Smp Id: 10259055004
Inj Date : 03-MAR-2014 18:25
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10259055004
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.102	7.105	-0.003	471355	47.7614	47.76
S	4 GRO by 8015B	3.480-10.990			433229	29.6088	1480

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031413.D

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Date : 03-MAR-2014 18:25

Client ID:

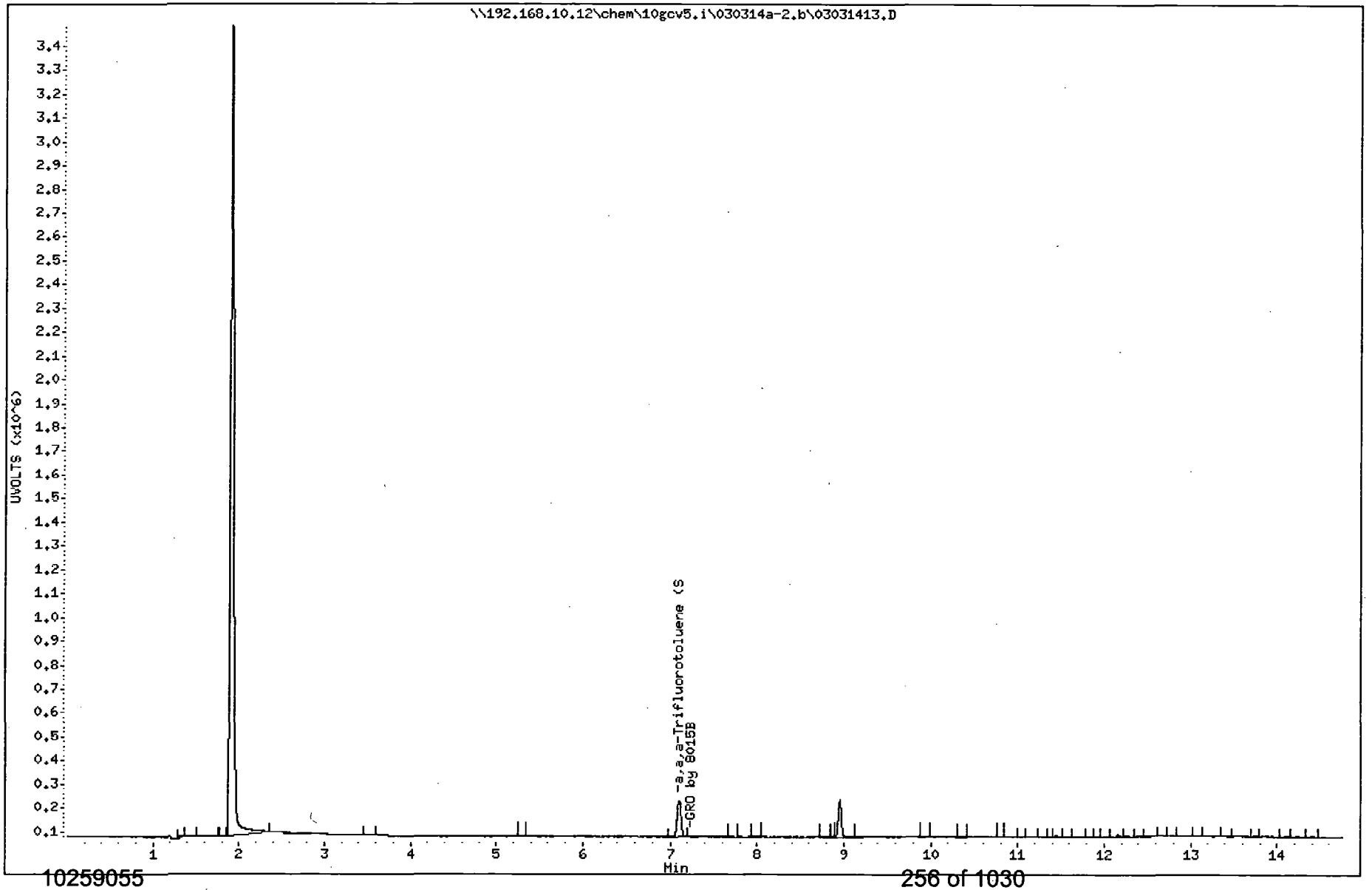
Instrument: 10gcv5.i

Sample Info: 10259055004

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b/03031413.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 03-MAR-2014 18:25
Instrument: 10gcv5.i
Lab Sample ID: 10259055004

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	433229	433229
a,a,a-Trifluorotoluene (S)	471355	471355

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031412.d
Lab Smp Id: 10259055005
Inj Date : 03-MAR-2014 18:02
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10259055005
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.097	7.105	-0.008	469612	47.5848	47.58
S	4 GRO by 8015B	3.480-10.990			407721	27.8655	1393

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031412.D

Page 1

Date : 03-MAR-2014 18:02

Client ID:

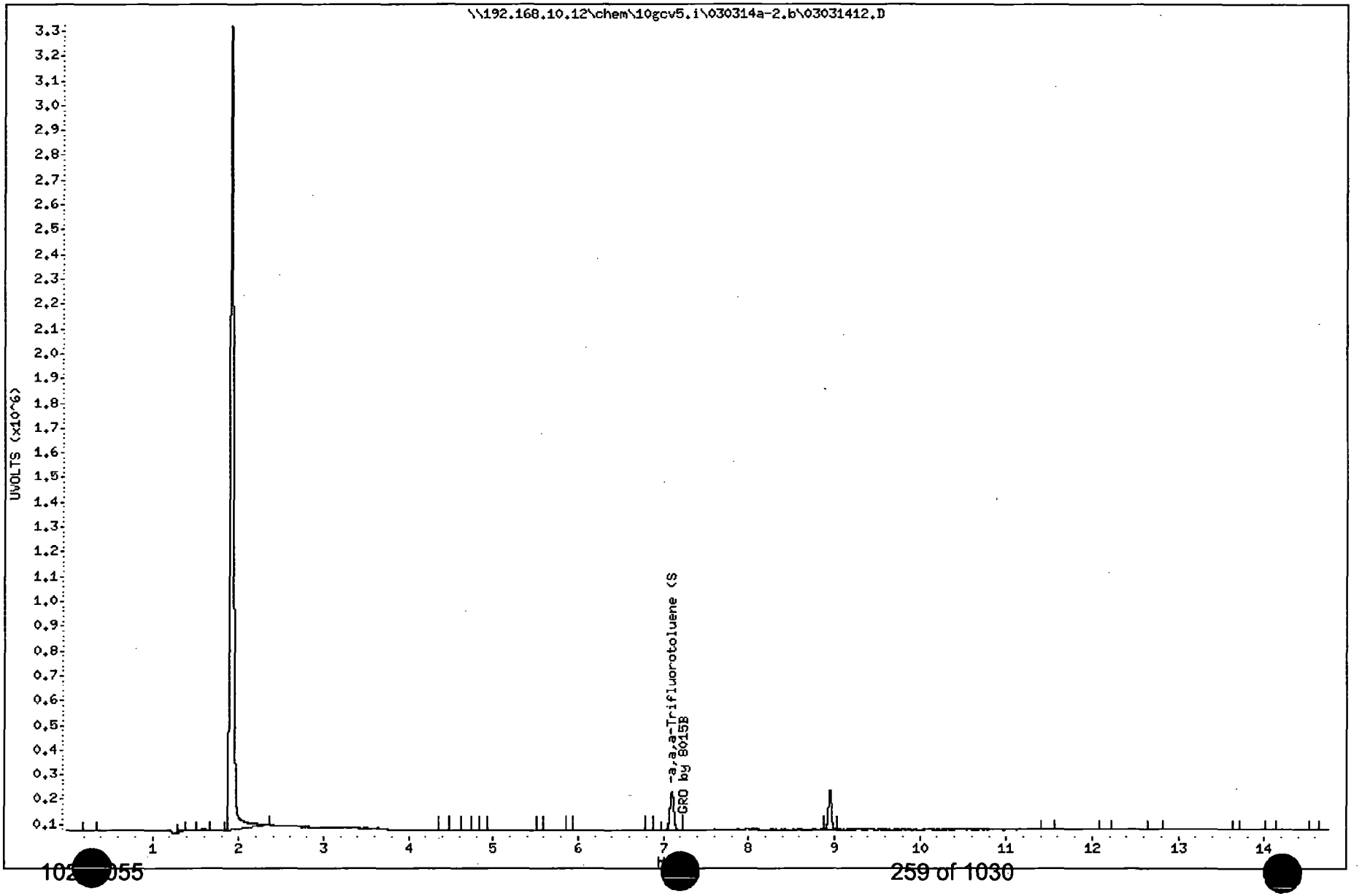
Instrument: 10gcv5.i

Sample Info: 10259055005

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b/03031412.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 03-MAR-2014 18:02
Instrument: 10gcv5.i
Lab Sample ID: 10259055005

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	407721	407721
a,a,a-Trifluorotoluene (S)	469612	469612

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031420.d
Lab Smp Id: 10259055006
Inj Date : 03-MAR-2014 21:02
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10259055006
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.103	7.105	-0.002	463533	46.9688	46.97
S	4 GRO by 8015B	3.480-10.990			392328	26.8135	1341

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031420.D

Page 1

Date : 03-MAR-2014 21:02

Client ID:

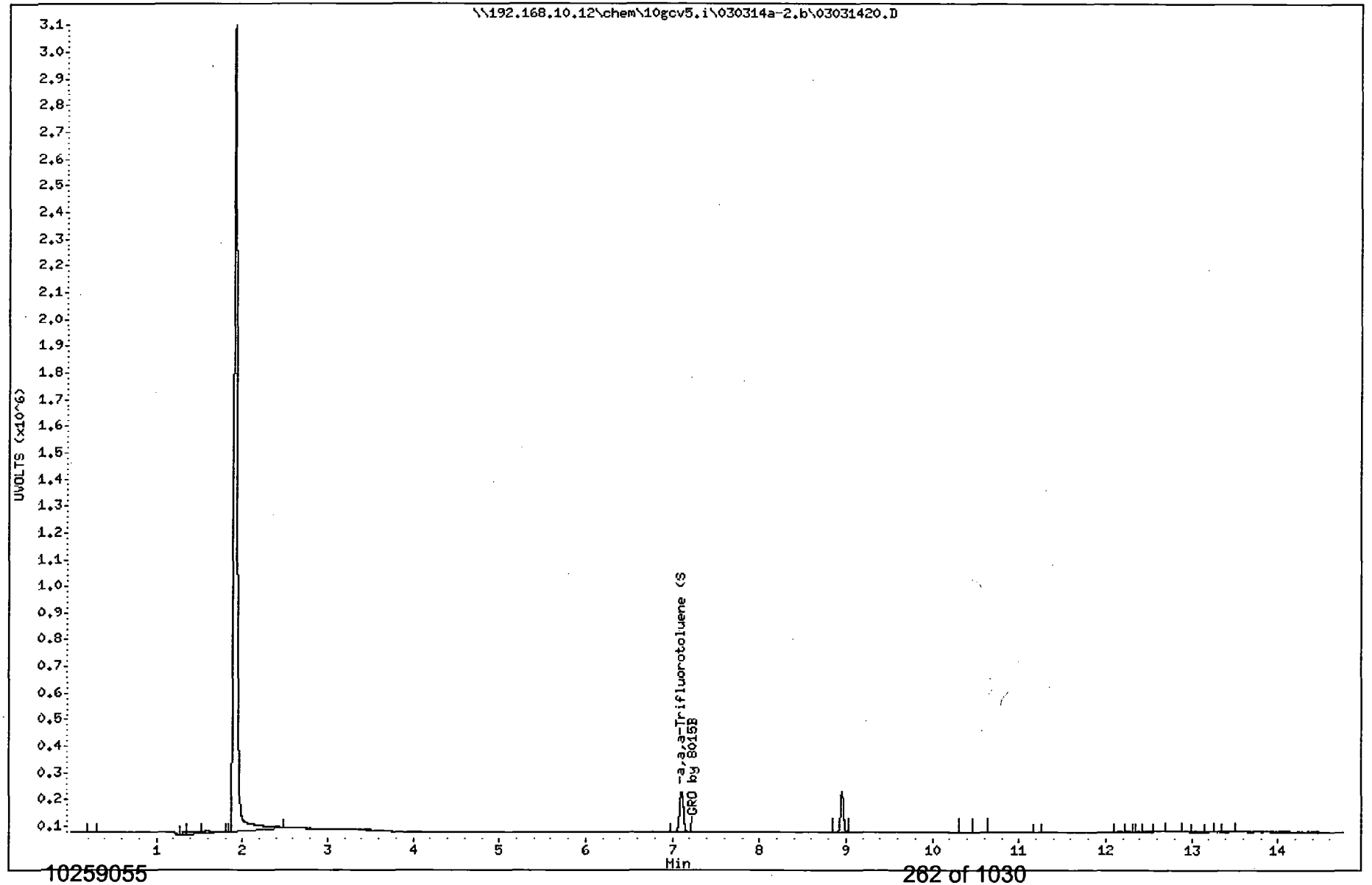
Instrument: 10gcv5.i

Sample Info: 10259055006

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b/03031420.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 03-MAR-2014 21:02
Instrument: 10gcv5.i
Lab Sample ID: 10259055006

SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	392328	392328
a,a,a-Trifluorotoluene (S)	463533	463533

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031419.d
Lab Smp Id: 10259055007
Inj Date : 03-MAR-2014 20:40
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10259055007
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.103	7.105	-0.002	467855	47.4068	47.41
S	4 GRO by 8015B	3.480-10.990			398111	27.2087	1360

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031419.D

Date : 03-MAR-2014 20:40

Client ID:

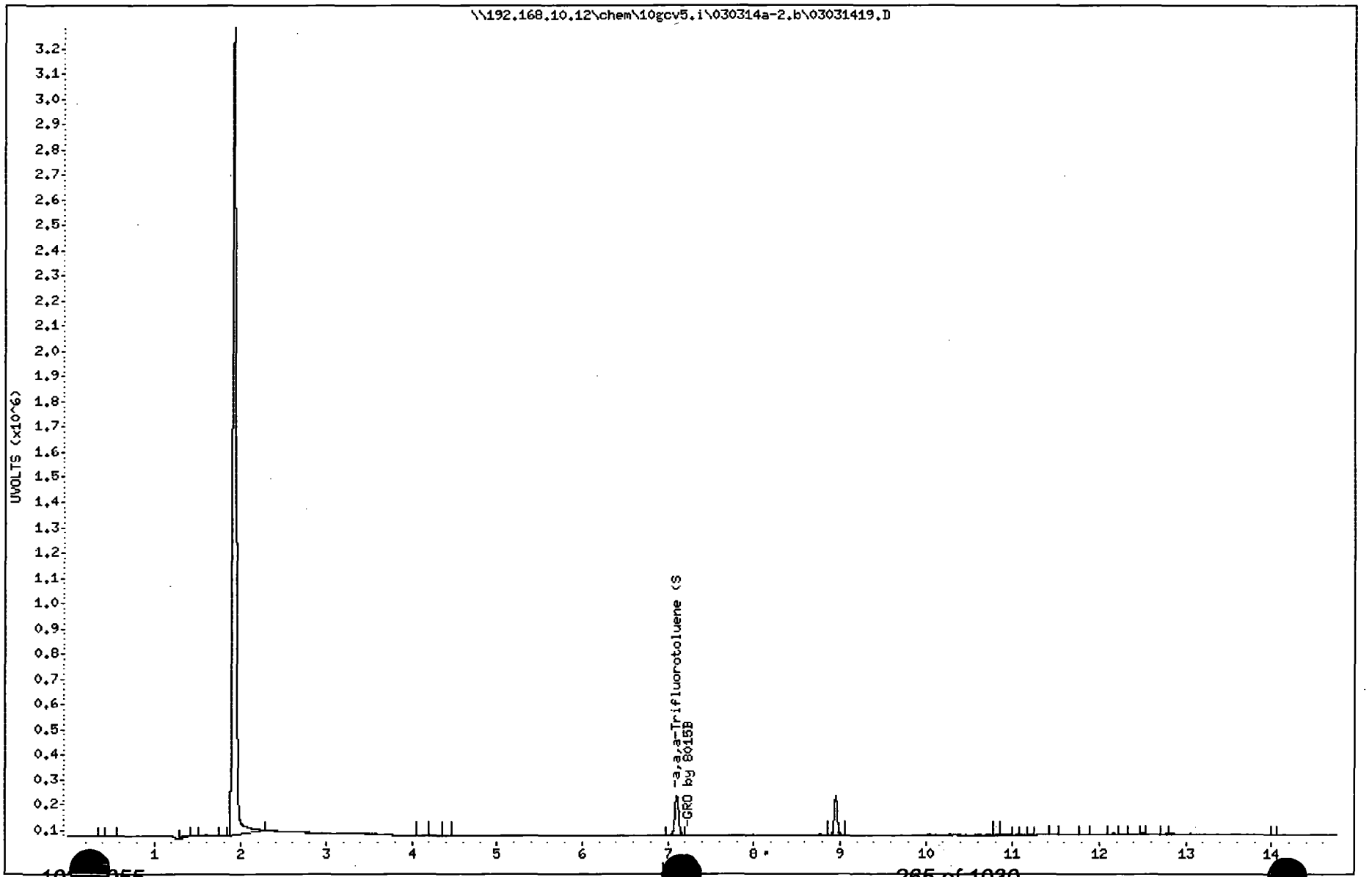
Instrument: 10gcv5.i

Sample Info: 10259055007

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b/03031419.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 03-MAR-2014 20:40
Instrument: 10gcv5.i
Lab Sample ID: 10259055007

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	398111	398111
a,a,a-Trifluorotoluene (S)	467855	467855

Pace Analytical	Document Name: MSV/GCV Soil Prep Batch Worklist Document Number: F-MN-O-173-rev.04	Document Revised: 06Feb2013 Page 1 of 1 Issuing Authority: Pace Minnesota Quality Office

Prep Date 3/3/2014

Prep Analyst Lakeisha Christopher

Balance ID	Sand Lot #	MeOH Lot #	Standard Traceability #	Standard Verification (Initial)
P1897220	12/11/2012	125253	101814	LC

Queue GCV GC Volatiles QC Rule 8015 SG_P: 5030 GCV Extraction Soil

Batch 11739 HBN 288113 Created 3/3/14 11:27

*Weight of Pace label subtracted from soil weight= 0.18

Analyst Lakeisha Christopher

Has the balance been calibrated before use? YES

Has the batch been methanol corrected (mc) for Alaska? NA

Lab ID	Type	Sample ID	**	***	Comments	Soil & Vial Wt (g)	Vial Wt (g)	Soil Wt (g)*	MeOH Added (mL)	Total MeOH (mL)	Standard Added (uL)
1632555	BLANK					-----	-----	10	10	10	-----
1632556	LCS					-----	-----	10	10	10	100
1632557	LCSD					-----	-----	10	10	10	100
10259055001	PS	SB-6 1.5-3'	10			40.16	37.16	2.82	0	10	-----
10259055002	PS	SB-6 15-16.5'	10			43.71	37.21	6.32	0	10	-----
10259055003	PS	SB-7 1.5-3'	10			43.79	37.11	6.50	0	10	-----
10259055004	PS	SB-7 17-18'	10			43.55	36.89	6.48	0	10	-----
10259055005	PS	SB-8 1.5-2.5"	10			45.16	37.18	7.80	0	10	-----
10259055006	PS	SB-8 14-15"	10			43.50	37.01	6.31	0	10	-----
10259055007	PS	DUP-002	10			43.30	37.15	5.97	0	10	-----
10258999001	PS	EP #5 SL 1-8	1	10.19	Preserved from packed jar.			10.19	10	10	-----
10259041001	PS	SB-9 3-4'	10			43.24	36.64	6.42	0	10	-----
10259041002	RQS	SB-9 12-14'	10			38.79	33.07	5.54	0	10	-----
1632558	MS	SB-9 12-14'(1631878MS)	10			40.18	33.45	6.55	0	10	100
1632559	MSD	SB-9 12-14'(1631878MSD)	10			40.52	33.17	7.17	0	10	100

**If blank=manually entered; 1=waste dl or preserved from jar w/10mls MeOH; 2=Preserved Jar greater than 10mls MeOH; 5=5g/5mL; 10=10g/10mL; TB=trip blank

***Weight for jars--manually entering

Note: Methanol extracts are diluted 1:50 for a 1x analysis. Further dilutions maybe be performed refer to department SOP for more information.

Date/Initials Reviewed_____

Fraction: 8260

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 288759 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 031014020.D Lab Sample ID: 1635950
GC Column: Rtx-VMS ID: 0.18 (mm) Time Analyzed: 16:48
Instrument ID: 10MSV7

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS for HBN 288759 [MSV/26501]	1635951	031014016B.D	15:30
02	SB-9 12-14'(1631878MS)	1635952-MS	031014017.D	15:49
03	SB-9 12-14'(1631878MSD)	1635953-MSD	031014018.D	16:09
04	BLANK for HBN 288759 [MSV/2650	1635950	031014020.D	16:48
05	TRIP BLANK	10259055008	031014023.D	17:47
06	SB-6 1.5-3'	10259055001	031014024.D	18:06
07	SB-6 15-16.5'	10259055002	031014025.D	18:26
08	SB-7 1.5-3'	10259055003	031014026.D	18:45
09	SB-7 17-18'	10259055004	031014027.D	19:04
10	SB-8 1.5-2.5"	10259055005	031014028.D	19:23
11	SB-8 14-15"	10259055006	031014029.D	19:41
12	DUP-002	10259055007	031014030.D	20:00

Pace Analytical Services, Inc.
1700 Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259055

QB Batch: MSV / 26460
Method(s): EPA 5035A / EPA 8260

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10259055001		SB-6 1.5-3'	1	104		101		99							
1635950	BLANK		1	96		100		102							
10259055002		SB-6 15-16.5'	1	107		110		102							
1635951	LCS		1	103		101		100							
10259055003		SB-7 1.5-3'	1	106		102		99							
1635952	MS		1	97		134		113							
10259055004		SB-7 17-18'	1	105		108		102							
1635953	MSD		1	99	IS	137		114							
10259055005		SB-8 1.5-2.5"	1	106		101		98							
10259055006		SB-8 14-15"	1	107		114		103							
10259055007		DUP-002	1	107		111		103							
10259055008		TRIP BLANK	1	103		100		100							
		QC Limits:		30-150		30-150		30-150							
		Sample Limits:		30-150		30-150		30-150							

Sur 1: 1,2-Dichloroethane-d4 (S)
Sur 2: 4-Bromofluorobenzene (S)
Sur 3: Toluene-d8 (S)

REPORT OF LABORATORY ANALYSIS

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Pace Analytical™

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8 FORM VIII VOA-I

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055

EPA Sample No. (VSTD050##): V509525-630 Date Analyzed: 03/10/2014

Lab File ID (Standard): 031014016A.D Time Analyzed: 15:30

Instrument ID: 10MSV7 Heated Purge (Y/N): Y

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #
12 HOUR STANDARD	143669	2.650	966546	4.204
UPPER LIMIT	287338	3.150	1933092	4.704
LOWER LIMIT	71834	2.150	483273	3.704
EPA SAMPLE NO.				
LCS for HBN 288759 [MSV/26501]	143669	2.650	966546	4.204
SB-9 12-14'(1631878MS)	105481	2.650	941297	4.204
SB-9 12-14'(1631878MSD)	106982	2.650	929676	4.204
BLANK for HBN 288759 [MSV/2650	121103	2.650	971464	4.204
TRIP BLANK	128130	2.650	954516	4.204
SB-6 1.5-3'	147419	2.650	987114	4.205
SB-6 15-16.5'	159173	2.650	967369	4.204
SB-7 1.5-3'	151158	2.650	981421	4.204
SB-7 17-18'	152528	2.650	998672	4.204
SB-8 1.5-2.5"	158322	2.650	1004151	4.204
SB-8 14-15"	159044	2.650	954557	4.204
DUP-002	152859	2.644	980790	4.205

IS1 = Acetone d6
IS2 = Pentafluorobenzene

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Minneapolis, MN 55414

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Fax: 612- 607-6444

8 FORM VIII VOA-II

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055

EPA Sample No. (VSTD050##): V509525-630 Date Analyzed: 03/10/2014

Lab File ID (Standard): 031014016A.D Time Analyzed: 15:30

Instrument ID: 10MSV7 Heated Purge (Y/N): Y

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS3 AREA #	RT #	IS4 AREA #	RT #
12 HOUR STANDARD	1457917	4.485	174389	4.826
UPPER LIMIT	2915834	4.985	348778	5.326
LOWER LIMIT	728958	3.985	87194	4.326
EPA SAMPLE NO.				
LCS for HBN 288759 [MSV/26501]	1457917	4.485	174389	4.826
SB-9 12-14'(1631878MS)	1415725	4.479	117767	4.826
SB-9 12-14'(1631878MSD)	1398554	4.479	123316	4.826
BLANK for HBN 288759 [MSV/2650	1431301	4.479	155713	4.826
TRIP BLANK	1397647	4.479	199403	4.826
SB-6 1.5-3'	1434287	4.479	199168	4.826
SB-6 15-16.5'	1430349	4.479	166508	4.826
SB-7 1.5-3'	1455215	4.479	197180	4.826
SB-7 17-18'	1461383	4.479	178252	4.826
SB-8 1.5-2.5"	1481716	4.479	181742	4.826
SB-8 14-15"	1406129	4.479	192267	4.826
DUP-002	1451540	4.479	150395	4.826

IS3 = 1,4-Difluorobenzene
IS4 = 1,4 dioxane d8

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8 FORM VIII VOA-III

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055

EPA Sample No. (VSTD050##): V509525-630 Date Analyzed: 03/10/2014

Lab File ID (Standard): 031014016A.D Time Analyzed: 15:30

Instrument ID: 10MSV7 Heated Purge (Y/N): Y

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS5 AREA #	RT #	IS6 AREA #	RT #
12 HOUR STANDARD	1458689	5.789	888899	7.045
UPPER LIMIT	2917378	6.289	1777798	7.545
LOWER LIMIT	729344	5.289	444450	6.545
EPA SAMPLE NO.				
LCS for HBN 288759 [MSV/2	1458689	5.789	888899	7.045
SB-9 12-14'(1631878MS)	1216359	5.783	469070	7.045
SB-9 12-14'(1631878MSD)	1168927	5.789	435818 *	7.045
BLANK for HBN 288759 [MSV	1396129	5.783	847359	7.045
TRIP BLANK	1396307	5.783	860801	7.045
SB-6 1.5-3'	1453393	5.784	894178	7.045
SB-6 15-16.5'	1392113	5.783	755278	7.045
SB-7 1.5-3'	1454777	5.789	888955	7.045
SB-7 17-18'	1439386	5.783	801665	7.045
SB-8 1.5-2.5"	1497095	5.783	915701	7.045
SB-8 14-15"	1349107	5.783	701939	7.045
DUP-002	1395001	5.784	731291	7.045

IS5 = Chlorobenzene-d5
IS6 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

FORM VIII VOA

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Instrument Run Log

Instrument: 10MSV7 | Method: 8260B | Misc. Prep. Info: | Surrogate Lot: 10233-54exp4/28/14
Column: Rtx-VMS 0.18mm Helium | Tune Standard: 10233-54/BFB | ISTD Lot: 10233-54exp4/28/14 | Cal. Standard: 10233-72B/10233-74B

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
031014001.D	VB	Solid	Sample	1		V714-LLS-012914	3/10/14 10:37	HBP	dne
031014002.D	TUNE	Liquid	Tune	1		VOA-BFB-TUNE	3/10/14 10:56	HBP	pass
031014003.D	0.4 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 11:15	HBP	ok
031014004.D	1.0 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 11:34	HBP	ok
031014005.D	4.0 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 11:53	HBP	ok
031014006.D	10 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 12:13	HBP	ok
031014007.D	20 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 12:32	HBP	ok
031014008.D	50 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 12:52	HBP	ok
031014009.D	100 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 13:11	HBP	ok
031014010.D	250 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 13:31	HBP	ok
031014011.D	VB	Solid	Sample	1		V714-LLS-031014	3/10/14 13:50	HBP	dne
031014012.D	V50 ICV 10098-66	Solid	CCal	1		V714-LLS-031014	3/10/14 14:10	HBP	ok

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: 8260 LLS ical

File Path 1: U:\10MSV7.I\031014A.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: hp 3/11/14

Report Date: 03/11/2014 11:43
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSV7 Method: 8260B Misc. Prep. Info: Surrogate Lot: 10233-54exp4/28/14
Column: Rtx-VMS 0.18mm Helium Tune Standard: 10233-54/BFB ISTD Lot: 10233-54exp24/28/14 Cal. Standard: 10233-72B/10233-74B

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
031014013.D	VB	S/	Sample	1		v714-LLS-031014	3/10/14 14:30	HBP	dne
031014014.D	TUNE	L/	Tune	1		voa-bfb-tune	3/10/14 14:49	HBP	pass
031014015.D	V50 9525-630	S/	CCal	1		v714-LLS-031014	3/10/14 15:10	HBP	VC failed low
031014016B.D	1635951	S/26501	LCS	1		v714-LLS-031014	3/10/14 15:30	HBP	ok lcs
031014016A.D	V50 9525-630	S/	CCal	1		v714-LLS-031014	3/10/14 15:30	HBP	ok ccal
031014017.D	1635952	S/26501	MS	1		v714-LLS-031014	3/10/14 15:49	HBP	ok ms
031014018.D	1635953	S/26501	MSD	1		v714-LLS-031014	3/10/14 16:09	HBP	ok msd
031014019.D	VB	S/	Sample	1		v714-LLS-031014	3/10/14 16:29	HBP	dne
031014020.D	1635950	S/26501	Blank	1		v714-LLS-031014	3/10/14 16:48	HBP	ok
031014021.D	10259308001	S/26501	Sample	1		v714-LLS-031014	3/10/14 17:08	HBP	ok cb
031014022.D	10259308002	S/26501	Sample	1		v714-LLS-031014	3/10/14 17:27	HBP	ok cb
031014023.D	10259055008	S/26501	Sample	1		v714-LLS-031014	3/10/14 17:47	HBP	ok
031014024.D	10259055001	S/26501	Sample	1		v714-LLS-031014	3/10/14 18:06	HBP	ok
031014025.D	10259055002	S/26501	Sample	1		v714-LLS-031014	3/10/14 18:26	HBP	ok
031014026.D	10259055003	S/26501	Sample	1		v714-LLS-031014	3/10/14 18:45	HBP	ok
031014027.D	10259055004	S/26501	Sample	1		v714-LLS-031014	3/10/14 19:04	HBP	ok
031014028.D	10259055005	S/26501	Sample	1		v714-LLS-031014	3/10/14 19:23	HBP	ok
031014029.D	10259055006	S/26501	Sample	1		v714-LLS-031014	3/10/14 19:41	HBP	ok
031014030.D	10259055007	S/26501	Sample	1		v714-LLS-031014	3/10/14 20:00	HBP	ok
031014031.D	10259041001	S/26501	Sample	1		v714-LLS-031014	3/10/14 20:19	HBP	ok
031014032.D	10259041002	S/26501	Sample	1		v714-LLS-031014	3/10/14 20:38	HBP	ok
031014033.D	10259318001	S/26501	Sample	1		v714-LLS-031014	3/10/14 20:57	HBP	ok, btex only
031014034.D	10259353005	S/26501	Sample	1		v714-LLS-031014	3/10/14 21:15	HBP	ok, btex only
031014035.D	10259353006	S/26501	Sample	1		v714-LLS-031014	3/10/14 21:34	HBP	ok, btex only
031014036.D	10259353007	S/26501	Sample	1		v714-LLS-031014	3/10/14 21:52	HBP	ok, btex only
031014037.D	10259353008	S/26501	Sample	1		v714-LLS-031014	3/10/14 22:11	HBP	ok, btex only

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: 26501 (8260 LLS)

File Path 1: U:\10MSV7.I\031014B.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: hp 3/11/14

Report Date: 03/11/2014 16:17
Reviewed By/Date:

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-MAR-2014 11:15
End Cal Date : 10-MAR-2014 13:31
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Calibration File Names:
Level 2: \\192.168.10.12\chem\10msv7.i\031014A.b\031014003.D
Level 3: \\192.168.10.12\chem\10msv7.i\031014A.b\031014004.D
Level 4: \\192.168.10.12\chem\10msv7.i\031014A.b\031014005.D
Level 5: \\192.168.10.12\chem\10msv7.i\031014A.b\031014006.D
Level 6: \\192.168.10.12\chem\10msv7.i\031014A.b\031014007.D
Level 7: \\192.168.10.12\chem\10msv7.i\031014A.b\031014008.D
Level 8: \\192.168.10.12\chem\10msv7.i\031014A.b\031014009.D
Level 9: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
1 Dichlorodifluoromethane	+++++	0.31385	0.40152	0.42298	0.44660	0.44081					
	0.42326	0.45654					AVRG		0.41508		11.61023
2 Chloromethane	+++++	0.43363	0.41224	0.43705	0.46527	0.49552					
	0.46558	0.50989					AVRG		0.45988		7.59143
3 Vinyl Chloride	+++++	0.44797	0.49917	0.50207	0.52953	0.52437					
	0.50126	0.55207					AVRG		0.50806		6.44596

Pace Analytical Services, Inc.

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Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
4 Bromomethane	3298	3774	13495	19653	40847	94578					
	208878	592668					QUAD	-0.01163	5.05044	-1.61151	0.99979
5 Chloroethane	+++++	0.19995	0.23206	0.22539	0.23097	0.22790					
	0.20462	0.18022					AVRG		0.21444		9.25313
6 Trichlorofluoromethane	+++++	5158	21801	53527	120301	295414					
	531085	+++++					QUAD	0.01205	1.33599	0.80094	0.99955
7 Dichlorofluoromethane	0.60508	0.76120	0.78301	0.73891	0.76155	0.76720					
	0.74190	0.78000					AVRG		0.74236		7.76631
8 Diethyl ether (Ethyl Ether)	+++++	0.23286	0.27402	0.27171	0.29525	0.29782					
	0.29516	0.29683					AVRG		0.28052		8.47082
9 1,1-Dichloroethene	+++++	0.34656	0.36098	0.36674	0.38797	0.39293					
	0.37419	0.40671					AVRG		0.37658		5.47700
10 Carbon Disulfide	1.74806	1.47144	1.40239	1.31460	1.37917	1.37991					
	1.31575	1.43489					AVRG		1.43078		9.71062

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
11 Ethanol	+++++	+++++	1.29732	1.28063	1.32693	1.41637					
	1.58817	1.37766					AVRG		1.38118		8.20288
12 Trichlorotrifluoroethane	+++++	0.34501	0.35430	0.38737	0.40141	0.40296					
	0.39707	0.42870					AVRG		0.38812		7.53174
13 Iodomethane	+++++	924	7345	24179	66339	209320					
	508901	1548601					QUAD	0.03877	2.01188	-0.30433	0.99935
14 Acrolein	0.04152	0.04521	0.04822	0.04381	0.04689	0.05067					
	0.05388	0.05627					AVRG		0.04831		10.43461
15 Allyl Chloride	0.51767	0.51823	0.55408	0.53430	0.55192	0.56508					
	0.54271	0.57974					AVRG		0.54547		3.99336
16 Methylene Chloride	2995	5141	17543	41216	82651	202399					
	401681	1036029					QUAD	-0.00533	2.42556	-0.10337	0.99997
17 Isopropanol	+++++	26409	32935	49032	75489	144283					
	287385	683474					LINR	-0.02397	6.51155		0.99837

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
19 Acetone	1331	2135	5895	13530	28437	66125					
	136728	342103					QUAD	-0.01383	2.53893	0.13443	1.00000
20 trans-1,2-Dichloroethene	+++++	0.37678	0.41579	0.40116	0.43049	0.43715					
	0.41887	0.44890					AVRG		0.41845		5.74237
21 Hexane	+++++	1.38124	1.36867	1.50997	1.40762	1.54957					
	1.48759	1.50945					AVRG		1.45916		4.92674
22 Methyl-tert-butyl Ether	0.80426	1.00531	0.99316	1.01057	1.05638	1.07487					
	1.07570	1.08936					AVRG		1.01370		9.09484
23 tert-Butyl Alcohol	+++++	14.45038	10.97103	10.39099	10.88868	11.20947					
	12.44365	11.50824					AVRG		11.69463		11.73378
24 Acetonitrile	+++++	0.03442	0.03574	0.03709	0.04045	0.03732					
	0.03894	0.03864					AVRG		0.03751		5.42752
25 Isopropyl Ether	0.96792	1.25034	1.21224	1.15814	1.24429	1.27465					
	1.26120	1.30569					AVRG		1.20931		8.84329

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
26 Acrylonitrile	+++++	0.05463	0.05772	0.05555	0.05860	0.06025					
	0.05751	0.06223					AVRG		0.05807		4.50057
27 1,1-Dichloroethane	0.57110	0.64152	0.70714	0.67873	0.72649	0.73309					
	0.70769	0.74813					AVRG		0.68924		8.45707
28 Ethyl-tert-butyl ether	1.02057	1.09497	1.10322	1.09375	1.13617	1.16159					
	1.16309	1.20117					AVRG		1.12182		4.98542
29 Vinyl Acetate	+++++	0.67609	0.73372	0.73491	0.78216	0.80064					
	0.81257	0.82036					AVRG		0.76578		6.88481
30 cis-1,2-Dichloroethene	0.39993	0.41362	0.44659	0.45062	0.46748	0.46354					
	0.45558	0.47475					AVRG		0.44651		5.91224
31 2,2-Dichloropropane	0.48007	0.56022	0.60384	0.56481	0.59641	0.59714					
	0.57166	0.61698					AVRG		0.57389		7.47403
32 Cyclohexane	+++++	0.62345	0.65305	0.67684	0.71277	0.71330					
	0.70789	0.77287					AVRG		0.69431		6.97848

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Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
33 Bromochloromethane	+++++	0.24101	0.25701	0.25438	0.27196	0.27366					
	0.27244	0.26718					AVRG		0.26252		4.64660
34 Chloroform	0.61441	0.65390	0.70543	0.69849	0.72853	0.72479					
	0.71094	0.74554					AVRG		0.69775		6.19114
35 Carbon Tetrachloride	0.39785	0.49358	0.51536	0.51096	0.53556	0.54040					
	0.51854	0.55895					AVRG		0.50890		9.65910
36 Tetrahydrofuran	0.55073	0.72407	0.69883	0.67299	0.68579	0.69822					
	0.67913	0.62980					AVRG		0.66745		8.14401
37 1,1,1-Trichloroethane	+++++	0.58457	0.59472	0.59208	0.62555	0.63329					
	0.60451	0.64649					AVRG		0.61160		3.85129
38 2-Butanone	+++++	0.16567	0.15079	0.14650	0.15913	0.14828					
	0.15285	0.15258					AVRG		0.15369		4.32100
39 1,1-Dichloropropene	+++++	0.56157	0.56063	0.55821	0.58780	0.59118					
	0.57286	0.61575					AVRG		0.57828		3.65754

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Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
40 Benzene	1.55276	1.78447	1.70314	1.67800	1.75592	1.76821					
	1.71478	1.83834					AVRG		1.72445		4.98162
42 Tert-amyl methyl ether	1.12301	1.20010	1.09822	1.08065	1.12180	1.13511					
	1.14639	1.18168					AVRG		1.13587		3.51601
44 1,2-Dichloroethane	0.38903	0.45437	0.45767	0.44680	0.46350	0.46389					
	0.45403	0.46779					AVRG		0.44964		5.64644
45 Isobutanol	+++++	5.41964	4.12208	4.21659	4.38184	4.65163					
	5.27715	5.00702					AVRG		4.72514		10.96987
46 Tert-Amyl Alcohol	+++++	10.69220	8.64600	8.85538	9.38646	9.76674					
	10.91593	10.36737					AVRG		9.80430		9.08400
47 Trichloroethene	0.24548	0.32979	0.32793	0.31826	0.33012	0.33632					
	0.31784	0.34322					AVRG		0.31862		9.64555
49 Tert-amyl ethyl ether	0.53182	0.59814	0.58285	0.54805	0.57803	0.60489					
	0.60240	0.63959					AVRG		0.58572		5.80528

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
50 Dibromomethane	+++++	0.17397	0.18828	0.17580	0.18514	0.18612					
	0.18644	0.18816					AVRG		0.18370		3.34939
51 1,2-Dichloropropane	0.22186	0.28334	0.27477	0.26643	0.27267	0.28466					
	0.27588	0.29046					AVRG		0.27126		7.87396
52 Bromodichloromethane	0.36610	0.34016	0.35644	0.33603	0.35021	0.36153					
	0.35632	0.37126					AVRG		0.35476		3.42999
54 1,4-Dioxane (P-Dioxane)	+++++	1.48286	1.23987	1.24806	1.27203	1.32917					
	1.54225	1.31083					AVRG		1.34644		8.84465
55 2-Chloroethyl Vinyl Ether	+++++	+++++	2041	6225	15679	40920					
	86062	249718					QUAD	0.03797	44.40821	-48.87742	0.99995
56 cis-1,3-Dichloropropene	0.40571	0.42165	0.44254	0.42118	0.43761	0.45299					
	0.45259	0.47967					AVRG		0.43924		5.28763
58 Toluene	0.81923	0.81788	0.75951	0.70455	0.73758	0.75353					
	0.71358	0.74706					AVRG		0.75661		5.63144

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
59 4-Methyl-2-Pentanone	0.20469	0.23275	0.22022	0.21530	0.23065	0.23241					
	0.23299	0.22695					AVRG		0.22450		4.58641
60 Tetrachloroethene	0.31499	0.37328	0.37178	0.35746	0.37261	0.38120					
	0.35684	0.35631					AVRG		0.36056		5.71986
61 trans-1,3-Dichloropropene	0.34474	0.38776	0.38607	0.37497	0.39121	0.41187					
	0.40523	0.40919					AVRG		0.38888		5.63808
62 1,1,2-Trichloroethane	0.20531	0.24547	0.23644	0.22406	0.23127	0.24057					
	0.23606	0.23270					AVRG		0.23148		5.32937
63 Dibromochloromethane	0.23104	0.26477	0.26947	0.26705	0.27058	0.28418					
	0.27900	0.28232					AVRG		0.26855		6.24894
64 1,3-Dichloropropane	0.36280	0.41068	0.40301	0.37802	0.39388	0.40854					
	0.40306	0.40426					AVRG		0.39553		4.23898
65 1,2-Dibromoethane	+++++	0.23206	0.24426	0.23386	0.24672	0.24832					
	0.24824	0.24789					AVRG		0.24305		2.90137

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
66 2-Hexanone	+++++	0.20915	0.17107	0.16266	0.17159	0.16929					
	0.17066	0.17100					AVRG		0.17506		8.76601
68 Chlorobenzene	0.86832	0.93199	0.83405	0.79223	0.82847	0.83778					
	0.81872	0.84709					AVRG		0.84483		4.90818
69 Ethylbenzene	+++++	1.59332	1.47004	1.34478	1.40764	1.41993					
	1.38769	1.46946					AVRG		1.44184		5.55618
70 1,1,1,2-Tetrachloroethane	0.27977	0.29316	0.28916	0.27787	0.29376	0.30825					
	0.30180	0.30699					AVRG		0.29385		3.89980
71 M&P-Xylene	0.57395	0.57227	0.57312	0.52901	0.54821	0.57144					
	0.54932	0.57509					AVRG		0.56155		3.06227
72 O-Xylene (1,2-Dimethylbenzene	0.49785	0.54714	0.52114	0.50446	0.52037	0.54067					
	0.52403	0.55711					AVRG		0.52660		3.89365
73 Styrene	0.81668	0.86379	0.90433	0.85341	0.89965	0.94049					
	0.93399	0.96948					AVRG		0.89773		5.65235

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[redacted] Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
74 Bromoform	0.18742	0.22638	0.21149	0.20340	0.21205	0.21897					
	0.21993	0.22481					AVRG		0.21306		6.01982
75 Isopropylbenzene (Cumene)	1.39428	1.48446	1.37182	1.32004	1.38755	1.43732					
	1.38395	1.49396					AVRG		1.40917		4.18226
77 cis-1,4-Dichloro-2-Butene	+++++	0.16606	0.15710	0.14419	0.15301	0.15405					
	0.15335	0.15759					AVRG		0.15505		4.22812
78 Bromobenzene	0.51415	0.63476	0.64076	0.60648	0.61958	0.64592					
	0.62001	0.63237					AVRG		0.61425		6.90620
79 n-Propylbenzene	2.73568	2.93640	2.73690	2.71045	2.77474	2.87886					
	2.75455	2.95000					AVRG		2.80970		3.44055
80 1,1,2,2-Tetrachloroethane	0.43777	0.53535	0.50770	0.50377	0.52041	0.52536					
	0.52570	0.52923					AVRG		0.51066		6.13094
81 2-Chlorotoluene	1.67647	1.74089	1.78076	1.67030	1.75721	1.80163					
	1.73314	1.84568					AVRG		1.75076		3.40932

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-MAR-2014 11:15
End Cal Date : 10-MAR-2014 13:31
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
82 1,3,5-Trimethylbenzene	1.93117	1.97792	1.99004	1.91051	1.98946	2.04985					
	1.95865	2.09795					AVRG		1.98819		3.07235
83 1,2,3-Trichloropropane	+++++	0.12154	0.14795	0.14079	0.14876	0.14754					
	0.14751	0.14663					AVRG		0.14296		6.85959
84 trans-1,4-Dichloro-2-Butene	+++++	0.12847	0.12291	0.12837	0.13550	0.13523					
	0.13741	0.13821					AVRG		0.13230		4.34228
85 4-Chlorotoluene	1.59326	1.71630	1.71115	1.59830	1.66073	1.72156					
	1.65102	1.74602					AVRG		1.67479		3.46451
86 tert-Butylbenzene	+++++	2082	57781	141375	300907	740204					
	1524071	4142926					QUAD	0.00005	0.60437	-0.01129	0.99990
87 1,2,4-Trimethylbenzene	1.96119	2.08175	2.00257	1.94368	2.01841	2.06123					
	2.00302	2.12158					AVRG		2.02418		2.98582
88 sec-Butylbenzene	2.33862	2.51001	2.46435	2.42190	2.54586	2.59114					
	2.52107	2.70500					AVRG		2.51224		4.39125

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-MAR-2014 11:15
End Cal Date : 10-MAR-2014 13:31
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
89 p-Isopropyltoluene	2.02806	2.23149	2.13231	2.13175	2.23454	2.31622					
	2.24927	2.37184					AVRG		2.21193		4.99105
90 1,3-Dichlorobenzene	1.24257	1.30086	1.22301	1.18666	1.21492	1.22845					
	1.19912	1.23918					AVRG		1.22935		2.81294
92 1,4-Dichlorobenzene	1.35610	1.38779	1.26982	1.21764	1.25707	1.26800					
	1.22826	1.26482					AVRG		1.28119		4.66163
93 1,2,3 Trimethylbenzene	1.97085	1.95480	1.90959	1.79435	1.88116	1.90695					
	1.94034	2.05277					AVRG		1.92635		3.87929
94 n-Butylbenzene	1.97218	2.05972	2.02302	2.01468	2.08042	2.13475					
	2.06350	2.12789					AVRG		2.05952		2.70691
95 1,2-Dichlorobenzene	1.16025	1.21008	1.15999	1.11254	1.12101	1.16475					
	1.13769	1.15193					AVRG		1.15228		2.62182
96 1,2-Dibromo-3-Chloropropane	0.09284	0.10949	0.11526	0.11141	0.12000	0.11813					
	0.11813	0.11574					AVRG		0.11263		7.75643

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-MAR-2014 11:15
End Cal Date : 10-MAR-2014 13:31
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
97 Hexachlorobutadiene	0.39230	0.49492	0.46080	0.44171	0.46404	0.45391					
	0.44739	0.42080					AVRG		0.44698		6.83393
98 1,2,4-Trichlorobenzene	0.74507	0.81247	0.76399	0.73331	0.75217	0.75438					
	0.74403	0.71148					AVRG		0.75211		3.86282
99 Naphthalene	1.50024	1.51551	1.45236	1.40099	1.45789	1.48967					
	1.45451	1.40822					AVRG		1.45993		2.81662
100 1,2,3-Trichlorobenzene	0.69841	0.73136	0.66397	0.65847	0.68812	0.68582					
	0.66704	0.63693					AVRG		0.67876		4.24368
101 2-Methylnaphthalene	0.62946	0.59362	0.53277	0.53570	0.55685	0.56150					
	0.55905	0.56621					AVRG		0.56690		5.56146
$ 43 1,2-Dichloroethane d4 (S)	0.37193	0.37942	0.38619	0.39507	0.39806	0.39223					
	0.38270	0.38240					AVRG		0.38600		2.25741
$ 57 Toluene-d8 (S)	1.19332	1.17036	1.15863	1.15729	1.17016	1.19161					
	1.18587	1.17244					AVRG		1.17496		1.18748

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-MAR-2014 11:15
End Cal Date : 10-MAR-2014 13:31
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
$ 76 4-Bromofluorobenzene (S)	0.80403	0.80265	0.79026	0.80298	0.79816	0.81261					
	0.80198	0.80555					AVRG		0.80228		0.79185

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-MAR-2014 11:15
End Cal Date : 10-MAR-2014 13:31
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Last Edit : 10-Mar-2014 16:45 hpham

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014003.D
Lab Smp Id: 0.4 ICAL 10098-65
Inj Date : 10-MAR-2014 11:15
Operator : HBP Inst ID: 10msv7.i
Smp Info : 0.4 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.058	1.052	(0.253)	458	0.40000	0.11(TaQ)
2	Chloromethane	50	1.186	1.247	(0.283)	1355	0.40000	0.30(TaQM)
3	Vinyl Chloride	62	1.247	1.247	(0.298)	1031	0.40000	0.21(Ta)
4	Bromomethane	94	1.479	1.479	(0.353)	3298	0.40000	0.56(aQ)
5	Chloroethane	64	1.570	1.570	(0.375)	389	0.40000	0.19(TaQ)
6	Trichlorofluoromethane	101	1.674	1.668	(0.399)	1648	0.40000	1.4(a)
7	Dichlorofluoromethane	67	1.735	1.729	(0.414)	2333	0.40000	0.33(a)
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.466)	746	0.40000	0.28(aQ)
9	1,1-Dichloroethene	96	2.095	2.088	(0.500)	791	0.40000	0.22(TaQ)
10	Carbon Disulfide	76	2.101	2.095	(0.501)	6740	0.40000	0.49(TaQ)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	2.143	2.137	(0.511)	679	0.40000	0.18(TaQ)
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	2.412	2.412	(0.575)	1601	4.00000	3.4(aQ)
15	Allyl Chloride	41	2.540	2.533	(0.606)	1996	0.40000	0.38(TaQ)
16	Methylene Chloride	84	2.637	2.637	(0.629)	2995	0.40000	0.22(a)
17	Isopropanol	45	2.655	2.649	(0.552)	21353	4.00000	(aQ)
* 18	Acetone d6	46	2.649	2.655	(1.000)	122111	200.000	
19	Acetone	58	2.698	2.698	(1.018)	1331	2.00000	2.8(aQ)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.663)	1001	0.40000	0.25(a)
	21 Hexane	86	2.857	2.863	(1.078)	473	1.00000	0.53(aQ)
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.690)	3101	0.40000	0.32(aQ)
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	3.204	3.210	(0.764)	3732	0.40000	0.32(TaQ)
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	3.259	3.265	(0.778)	2202	0.40000	0.33(TaQ)
	28 Ethyl-tert-butyl ether	59	3.454	3.466	(0.824)	3935	0.40000	0.36(aQ)
	29 Vinyl Acetate	43	3.460	3.466	(0.825)	1721	0.40000	0.23(TaQ)
	30 cis-1,2-Dichloroethene	96	3.625	3.637	(0.865)	1542	0.40000	0.36(aQ)
	31 2,2-Dichloropropane	77	3.692	3.704	(0.881)	1851	0.40000	0.33(TaQ)
	32 Cyclohexane	56	3.747	3.759	(0.894)	10070	2.00000	1.5(a)
	33 Bromochloromethane	130	3.753	3.759	(0.895)	641	0.40000	0.25(TaQ)
	34 Chloroform	83	3.802	3.814	(0.907)	2369	0.40000	0.35(a)
	35 Carbon Tetrachloride	117	3.875	3.887	(0.924)	1534	0.40000	0.31(a)
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	1345	4.00000	3.3(aQ)
	37 1,1,1-Trichloroethane	97	3.924	3.930	(0.936)	1683	0.40000	0.28(aQ)
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.137	4.149	(0.987)	5987	0.40000	0.36(a)
*	41 Pentafluorobenzene	168	4.192	4.204	(1.000)	963926	100.000	
	42 Tert-amyl methyl ether	73	4.216	4.222	(1.006)	4330	0.40000	0.40(aQ)
$	43 1,2-Dichloroethane d4 (S)	65	4.210	4.222	(1.004)	358516	100.000	96.4
	44 1,2-Dichloroethane	62	4.247	4.259	(1.013)	1500	0.40000	0.35(TaQ)
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	4.338	4.350	(0.901)	566	4.00000	1.5(TaQ)
	47 Trichloroethene	130	4.454	4.466	(0.996)	1382	0.40000	0.31(aQ)
*	48 1,4 Difluorobenzene	114	4.472	4.478	(1.000)	1407420	100.000	
	49 Tert-amyl ethyl ether	59	4.576	4.588	(1.023)	2994	0.40000	0.36(a)
	50 Dibromomethane	174	4.661	4.667	(1.042)	736	0.40000	0.28(a)
	51 1,2-Dichloropropane	63	4.704	4.716	(1.052)	1249	0.40000	0.33(TaQ)
	52 Bromodichloromethane	83	4.734	4.746	(1.059)	2061	0.40000	0.41(TaQ)
*	53 1,4 dioxane d8	96	4.814	4.832	(1.000)	153323	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	5.015	5.027	(1.121)	2284	0.40000	0.37(a)
$	57 Toluene-d8 (S)	98	5.094	5.106	(0.883)	1634703	100.000	102
	58 Toluene	92	5.118	5.131	(0.887)	4489	0.40000	0.43(a)
	59 4-Methyl-2-Pentanone	43	5.271	5.289	(0.913)	5608	2.00000	1.8(a)
	60 Tetrachloroethene	166	5.277	5.295	(0.914)	1726	0.40000	0.35(a)
	61 trans-1,3-Dichloropropene	75	5.289	5.301	(0.917)	1889	0.40000	0.35(TaQ)
	62 1,1,2-Trichloroethane	97	5.356	5.374	(0.928)	1125	0.40000	0.35(a)
	63 Dibromochloromethane	129	5.435	5.454	(0.942)	1266	0.40000	0.34(a)
	64 1,3-Dichloropropane	76	5.472	5.490	(0.948)	1988	0.40000	0.37(a)
	65 1,2-Dibromoethane	107	5.545	5.557	(0.961)	869	0.40000	0.26(TaQ)
	66 2-Hexanone	43	5.630	5.649	(0.976)	6160	2.00000	2.6(a)
*	67 Chlorobenzene-d5	117	5.771	5.789	(1.000)	1369883	100.000	
	68 Chlorobenzene	112	5.777	5.795	(1.001)	4758	0.40000	0.41(aQ)
	69 Ethylbenzene	91	5.783	5.801	(1.002)	10261	0.40000	0.52(aQ)
	70 1,1,1,2-Tetrachloroethane	131	5.801	5.819	(1.005)	1533	0.40000	0.38(aQ)
	71 M&P-Xylene	106	5.850	5.868	(1.014)	6290	0.80000	0.82(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.057	6.075	(1.050)	2728	0.40000	0.38(a)
	73 Styrene	104	6.082	6.100	(1.054)	4475	0.40000	0.36(a)

Report Date: 10-Mar-2014 16:45

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	74	Bromoform	173	6.106	6.124	(1.058)	1027	0.40000	0.35(TaQ)
	75	Isopropylbenzene (Cumene)	105	6.216	6.234	(1.077)	7640	0.40000	0.40(a)
$	76	4-Bromofluorobenzene (S)	95	6.368	6.386	(0.908)	676353	100.000	100
	77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78	Bromobenzene	156	6.429	6.453	(0.917)	1730	0.40000	0.33(a)
	79	n-Propylbenzene	91	6.429	6.453	(0.917)	9205	0.40000	0.39(a)
	80	1,1,2,2-Tetrachloroethane	83	6.466	6.490	(0.922)	1473	0.40000	0.34(TaQ)
	81	2-Chlorotoluene	91	6.527	6.551	(0.930)	5641	0.40000	0.38(a)
	82	1,3,5-Trimethylbenzene	105	6.533	6.557	(0.931)	6498	0.40000	0.39(a)
	83	1,2,3-Trichloropropane	110	Compound Not Detected.					
	84	trans-1,4-Dichloro-2-Butene	53	6.563	6.588	(0.936)	742	1.00000	0.67(TaQ)
	85	4-Chlorotoluene	91	6.618	6.642	(0.944)	5361	0.40000	0.38(a)
	86	tert-Butylbenzene	119	6.758	6.746	(0.963)	540	0.40000	0.044(aQ)
	87	1,2,4-Trimethylbenzene	105	6.758	6.789	(0.963)	6599	0.40000	0.39(a)
	88	sec-Butylbenzene	105	6.825	6.856	(0.973)	7869	0.40000	0.37(a)
	89	p-Isopropyltoluene	119	6.911	6.941	(0.985)	6824	0.40000	0.37(a)
	90	1,3-Dichlorobenzene	146	6.972	6.996	(0.994)	4181	0.40000	0.40(a)
*	91	1,4-Dichlorobenzene-d4	152	7.014	7.045	(1.000)	841200	100.000	
	92	1,4-Dichlorobenzene	146	7.027	7.057	(1.002)	4563	0.40000	0.42(aQ)
	93	1,2,3 Trimethylbenzene	105	7.033	7.063	(1.678)	7599	0.40000	0.41(a)
	94	n-Butylbenzene	91	7.185	7.215	(1.024)	6636	0.40000	0.38(a)
	95	1,2-Dichlorobenzene	146	7.307	7.331	(1.042)	3904	0.40000	0.40(a)
	96	1,2-Dibromo-3-Chloropropane	157	7.807	7.831	(1.113)	781	1.00000	0.82(a)
	97	Hexachlorobutadiene	225	8.167	8.191	(1.164)	1320	0.40000	0.35(a)
	98	1,2,4-Trichlorobenzene	180	8.185	8.209	(1.167)	2507	0.40000	0.40(a)
	99	Naphthalene	128	8.368	8.392	(1.193)	5048	0.40000	0.41(a)
	100	1,2,3-Trichlorobenzene	180	8.478	8.502	(1.209)	2350	0.40000	0.41(aQ)
	101	2-Methylnaphthalene	142	8.984	9.014	(1.281)	1059	0.20000	0.22(a)

C Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014003.D
Lab Smp Id: 0.4 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	122111	-10.09
41 Pentafluorobenzen	944656	472328	1889312	963926	2.04
48 1,4 Difluorobenze	1423443	711722	2846886	1407420	-1.13
53 1,4 dioxane d8	156016	78008	312032	153323	-1.73
67 Chlorobenzene-d5	1400934	700467	2801868	1369883	-2.22
91 1,4-Dichlorobenze	853329	426665	1706658	841200	-1.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.19	-0.29
48 1,4 Difluorobenze	4.48	3.98	4.98	4.47	-0.14
53 1,4 dioxane d8	4.83	4.33	5.33	4.81	-0.25
67 Chlorobenzene-d5	5.78	5.28	6.28	5.77	-0.21
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.01	-0.43

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

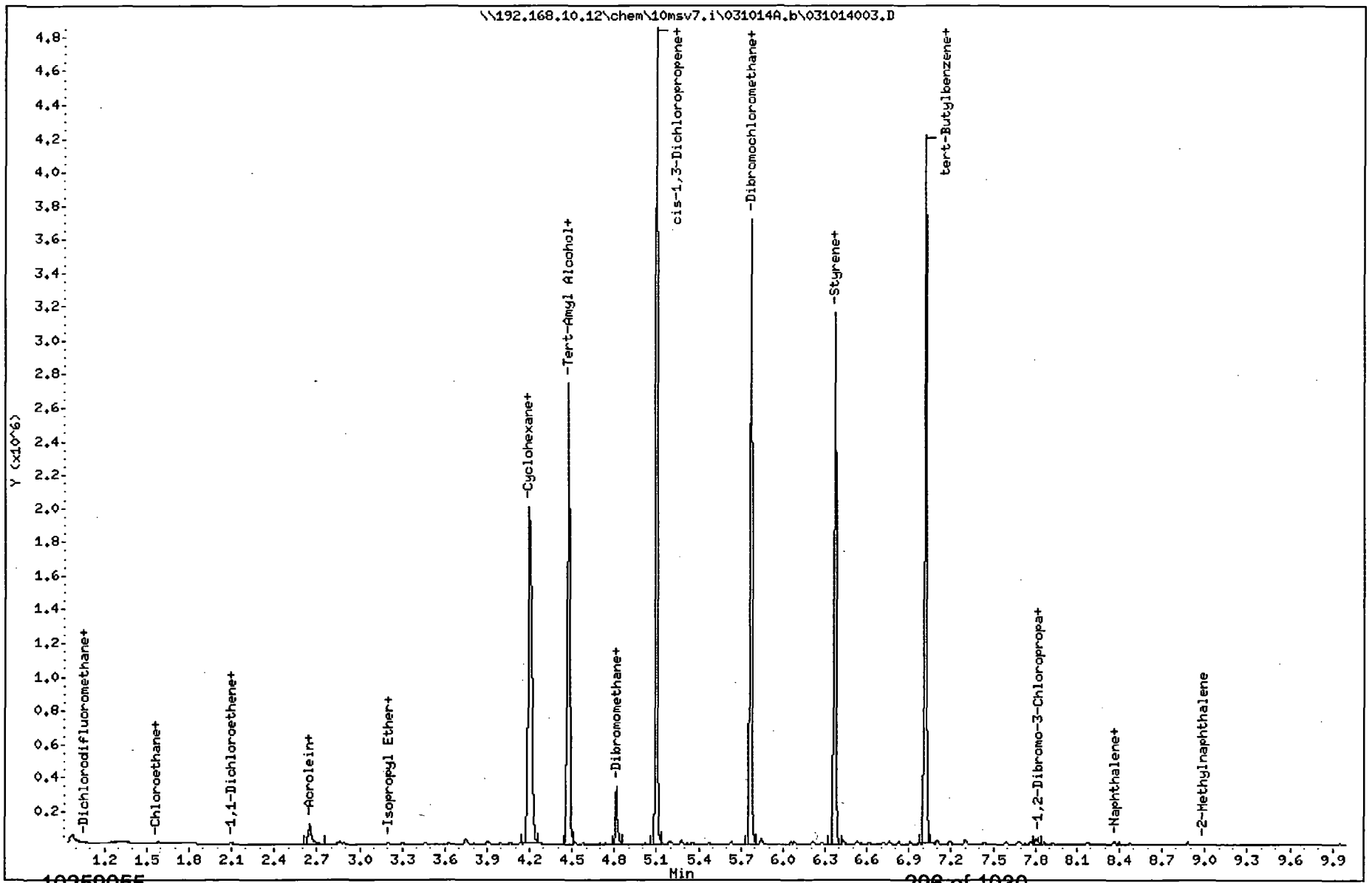
Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014003.D
Date : 10-MAR-2014 11:15
Client ID:
Sample Info: 0.4 ICAL 10098-65

Instrument: 10msv7.i

Operator: HBP

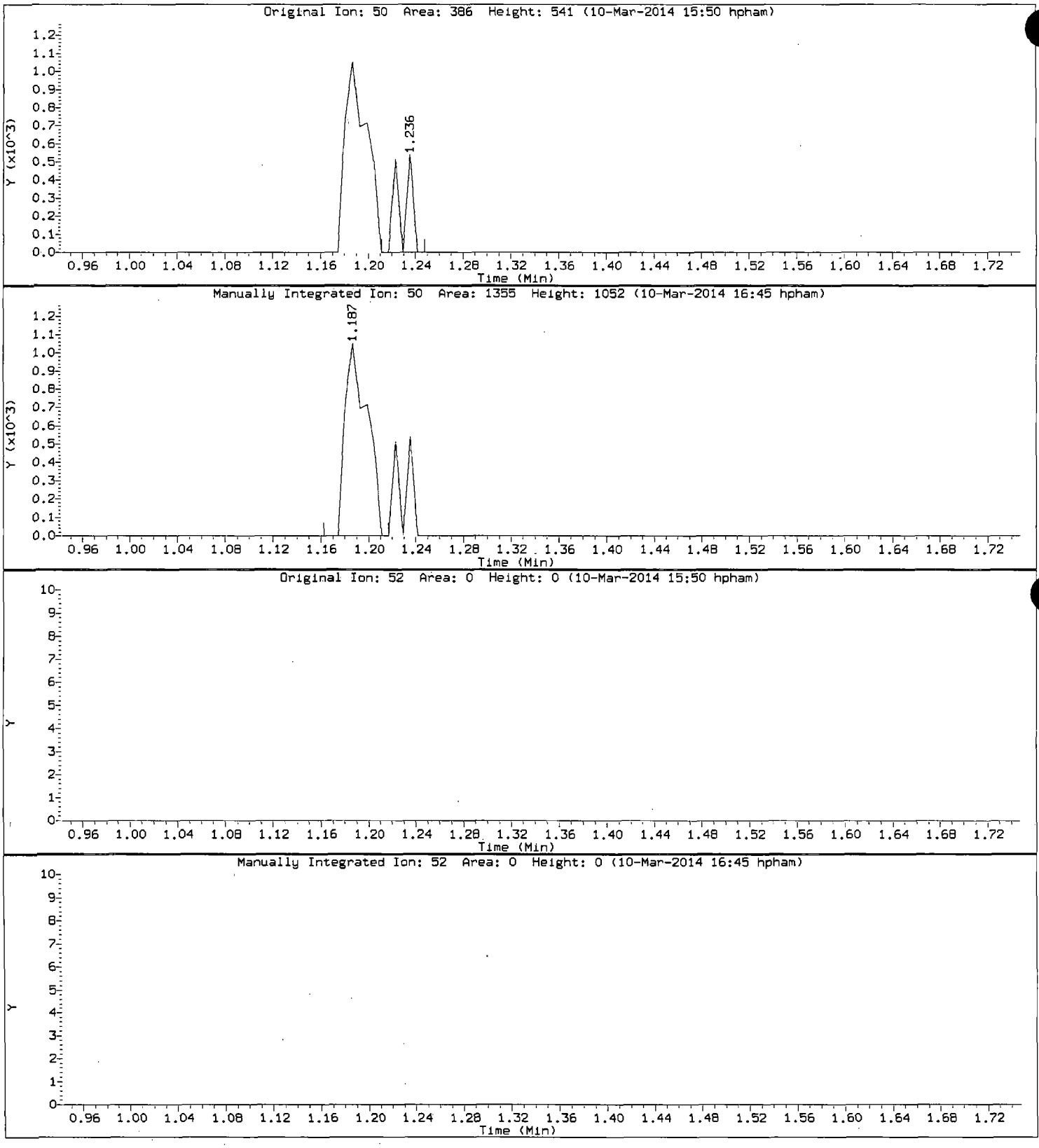
Column phase: Rtx-VMS

Column diameter: 0.18



Instrument: 10msv7.i
Lab Sample ID: 0.4 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3



Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014004.D
Lab Smp Id: 1.0 ICAL 10098-65
Inj Date : 10-MAR-2014 11:34
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1.0 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.251)	3042	1.00000	0.76(aQ)
2	Chloromethane	50	1.186	1.247	(0.283)	4203	1.00000	0.94(TaQM)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	4342	1.00000	0.88(a)
4	Bromomethane	94	1.479	1.479	(0.352)	3774	1.00000	0.80(aQ)
5	Chloroethane	64	1.570	1.570	(0.374)	1938	1.00000	0.93(aQ)
6	Trichlorofluoromethane	101	1.680	1.668	(0.400)	5158	1.00000	1.9(a)
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	7378	1.00000	1.0(a)
8	Diethyl ether (Ethyl Ether)	59	1.955	1.960	(0.466)	2257	1.00000	0.83(aQ)
9	1,1-Dichloroethene	96	2.095	2.088	(0.499)	3359	1.00000	0.92(aQ)
10	Carbon Disulfide	76	2.101	2.095	(0.501)	14262	1.00000	1.0(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	2.144	2.137	(0.511)	3344	1.00000	0.89(a)
13	Iodomethane	142	2.204	2.210	(0.525)	924	1.00000	4.1(TaQ)
14	Acrolein	56	2.412	2.412	(0.575)	4382	10.0000	9.4
15	Allyl Chloride	41	2.534	2.533	(0.604)	5023	1.00000	0.95(a)
16	Methylene Chloride	84	2.637	2.637	(0.628)	5141	1.00000	0.75(a)
17	Isopropanol	45	2.662	2.649	(0.553)	26409	10.0000	25.9(Q)
* 18	Acetone d6	46	2.650	2.655	(1.000)	125568	200.000	
19	Acetone	58	2.698	2.698	(1.018)	2135	5.00000	5.9(Q)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.778	2.777	(0.662)	3652	1.00000	0.90(a)
	21 Hexane	86	2.857	2.863	(1.078)	2168	2.50000	2.4(a)
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.689)	9744	1.00000	0.99(aQ)
	23 tert-Butyl Alcohol	59	3.009	3.021	(0.625)	4814	10.0000	12.4
	24 Acetonitrile	41	3.070	3.070	(0.731)	3336	10.0000	9.2(TQ)
	25 Isopropyl Ether	45	3.204	3.210	(0.763)	12119	1.00000	1.0(aQ)
	26 Acrylonitrile	53	3.241	3.247	(0.772)	5295	10.0000	9.4
	27 1,1-Dichloroethane	63	3.259	3.265	(0.776)	6218	1.00000	0.93(aQ)
	28 Ethyl-tert-butyl ether	59	3.454	3.466	(0.823)	10613	1.00000	0.98(a)
	29 Vinyl Acetate	43	3.466	3.466	(0.826)	6553	1.00000	0.88(TaQ)
	30 cis-1,2-Dichloroethene	96	3.631	3.637	(0.865)	4009	1.00000	0.93(a)
	31 2,2-Dichloropropane	77	3.698	3.704	(0.881)	5430	1.00000	0.98(a)
	32 Cyclohexane	56	3.747	3.759	(0.893)	30214	5.00000	4.5(a)
	33 Bromochloromethane	130	3.753	3.759	(0.894)	2336	1.00000	0.92(a)
	34 Chloroform	83	3.808	3.814	(0.907)	6338	1.00000	0.94(a)
	35 Carbon Tetrachloride	117	3.881	3.887	(0.924)	4784	1.00000	0.97(a)
	36 Tetrahydrofuran	72	3.899	3.905	(1.472)	4546	10.0000	10.8
	37 1,1,1-Trichloroethane	97	3.924	3.930	(0.935)	5666	1.00000	0.96(a)
	38 2-Butanone	43	3.991	4.003	(0.951)	8029	5.00000	5.4
	39 1,1-Dichloropropene	75	3.997	4.003	(0.952)	5443	1.00000	0.97(a)
	40 Benzene	78	4.137	4.149	(0.985)	17296	1.00000	1.0(a)
*	41 Pentafluorobenzene	168	4.198	4.204	(1.000)	969254	100.000	
	42 Tert-amyl methyl ether	73	4.216	4.222	(1.004)	11632	1.00000	1.0(aQ)
$	43 1,2-Dichloroethane d4 (S)	65	4.216	4.222	(1.004)	367753	100.000	98.3
	44 1,2-Dichloroethane	62	4.253	4.259	(1.013)	4404	1.00000	1.0(a)
	45 Isobutanol	43	4.283	4.301	(0.890)	3611	20.0000	22.9
	46 Tert-Amyl Alcohol	59	4.332	4.350	(0.900)	3562	10.0000	10.9
	47 Trichloroethene	130	4.454	4.466	(0.996)	4707	1.00000	1.0(aQ)
*	48 1,4 Difluorobenzene	114	4.472	4.478	(1.000)	1427257	100.000	
	49 Tert-amyl ethyl ether	59	4.576	4.588	(1.023)	8537	1.00000	1.0(a)
	50 Dibromomethane	174	4.661	4.667	(1.042)	2483	1.00000	0.95(a)
	51 1,2-Dichloropropane	63	4.704	4.716	(1.052)	4044	1.00000	1.0(TaQ)
	52 Bromodichloromethane	83	4.734	4.746	(1.059)	4855	1.00000	0.96(TaQ)
*	53 1,4 dioxane d8	96	4.814	4.832	(1.000)	133256	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.826	4.844	(1.003)	988	20.0000	22.0(TQ)
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	5.015	5.027	(1.121)	6018	1.00000	0.96(a)
$	57 Toluene-d8 (S)	98	5.094	5.106	(0.883)	1649196	100.000	99.6
	58 Toluene	92	5.119	5.131	(0.887)	11525	1.00000	1.1(a)
	59 4-Methyl-2-Pentanone	43	5.271	5.289	(0.913)	16399	5.00000	5.2
	60 Tetrachloroethene	166	5.277	5.295	(0.914)	5260	1.00000	1.0(a)
	61 trans-1,3-Dichloropropene	75	5.289	5.301	(0.917)	5464	1.00000	1.00(aQ)
	62 1,1,2-Trichloroethane	97	5.356	5.374	(0.928)	3459	1.00000	1.1(a)
	63 Dibromochloromethane	129	5.436	5.454	(0.942)	3731	1.00000	0.98(a)
	64 1,3-Dichloropropane	76	5.472	5.490	(0.948)	5787	1.00000	1.0(a)
	65 1,2-Dibromoethane	107	5.545	5.557	(0.961)	3270	1.00000	0.95(TaQ)
	66 2-Hexanone	43	5.631	5.649	(0.976)	14736	5.00000	6.0
*	67 Chlorobenzene-d5	117	5.771	5.789	(1.000)	1409133	100.000	
	68 Chlorobenzene	112	5.777	5.795	(1.001)	13133	1.00000	1.1(aQ)
	69 Ethylbenzene	91	5.783	5.801	(1.002)	22452	1.00000	1.1(a)
	70 1,1,1,2-Tetrachloroethane	131	5.801	5.819	(1.005)	4131	1.00000	1.00(aQ)
	71 M&P-Xylene	106	5.850	5.868	(1.014)	16128	2.00000	2.0(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.057	6.075	(1.050)	7710	1.00000	1.0(a)
	73 Styrene	104	6.082	6.100	(1.054)	12172	1.00000	0.96(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 Bromoform	173	6.106	6.124	(1.058)	3190	1.00000	1.1(TaQ)
	75 Isopropylbenzene (Cumene)	105	6.216	6.234	(1.077)	20918	1.00000	1.0(a)
$	76 4-Bromofluorobenzene (S)	95	6.368	6.386	(0.908)	688773	100.000	100
	77 cis-1,4-Dichloro-2-Butene	53	6.393	6.417	(0.911)	1425	1.00000	1.1(aQ)
	78 Bromobenzene	156	6.429	6.453	(0.917)	5447	1.00000	1.0(a)
	79 n-Propylbenzene	91	6.429	6.453	(0.917)	25198	1.00000	1.0(a)
	80 1,1,2,2-Tetrachloroethane	83	6.466	6.490	(0.922)	4594	1.00000	1.0(aQM)
	81 2-Chlorotoluene	91	6.527	6.551	(0.930)	14939	1.00000	0.99(a)
	82 1,3,5-Trimethylbenzene	105	6.533	6.557	(0.931)	16973	1.00000	0.99(a)
	83 1,2,3-Trichloropropane	110	6.551	6.569	(0.934)	1043	1.00000	0.85(a)
	84 trans-1,4-Dichloro-2-Butene	53	6.563	6.588	(0.936)	2756	2.50000	2.4(a)
	85 4-Chlorotoluene	91	6.618	6.642	(0.944)	14728	1.00000	1.0(a)
	86 tert-Butylbenzene	119	6.765	6.746	(0.964)	2082	1.00000	0.15(aQ)
	87 1,2,4-Trimethylbenzene	105	6.758	6.789	(0.963)	17864	1.00000	1.0(a)
	88 sec-Butylbenzene	105	6.826	6.856	(0.973)	21539	1.00000	1.00(a)
	89 p-Isopropyltoluene	119	6.911	6.941	(0.985)	19149	1.00000	1.0(a)
	90 1,3-Dichlorobenzene	146	6.972	6.996	(0.994)	11163	1.00000	1.0(a)
*	91 1,4-Dichlorobenzene-d4	152	7.015	7.045	(1.000)	858125	100.000	
	92 1,4-Dichlorobenzene	146	7.027	7.057	(1.002)	11909	1.00000	1.1(aQ)
	93 1,2,3 Trimethylbenzene	105	7.033	7.063	(1.675)	18947	1.00000	1.0(a)
	94 n-Butylbenzene	91	7.185	7.215	(1.024)	17675	1.00000	1.0(a)
	95 1,2-Dichlorobenzene	146	7.301	7.331	(1.041)	10384	1.00000	1.0(a)
	96 1,2-Dibromo-3-Chloropropane	157	7.807	7.831	(1.113)	2349	2.50000	2.4(a)
	97 Hexachlorobutadiene	225	8.167	8.191	(1.164)	4247	1.00000	1.1(a)
	98 1,2,4-Trichlorobenzene	180	8.185	8.209	(1.167)	6972	1.00000	1.1(a)
	99 Naphthalene	128	8.368	8.392	(1.193)	13005	1.00000	1.0(a)
	100 1,2,3-Trichlorobenzene	180	8.478	8.502	(1.209)	6276	1.00000	1.1(a)
	101 2-Methylnaphthalene	142	8.990	9.014	(1.282)	2547	0.50000	0.52(a)

Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014004.D
Lab Smp Id: 1.0 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	125568	-7.54
41 Pentafluorobenzen	944656	472328	1889312	969254	2.60
48 1,4 Difluorobenze	1423443	711722	2846886	1427257	0.27
53 1,4 dioxane d8	156016	78008	312032	133256	-14.59
67 Chlorobenzene-d5	1400934	700467	2801868	1409133	0.59
91 1,4-Dichlorobenze	853329	426665	1706658	858125	0.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.14
48 1,4 Difluorobenze	4.48	3.98	4.98	4.47	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.81	-0.25
67 Chlorobenzene-d5	5.78	5.28	6.28	5.77	-0.21
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.02	-0.43

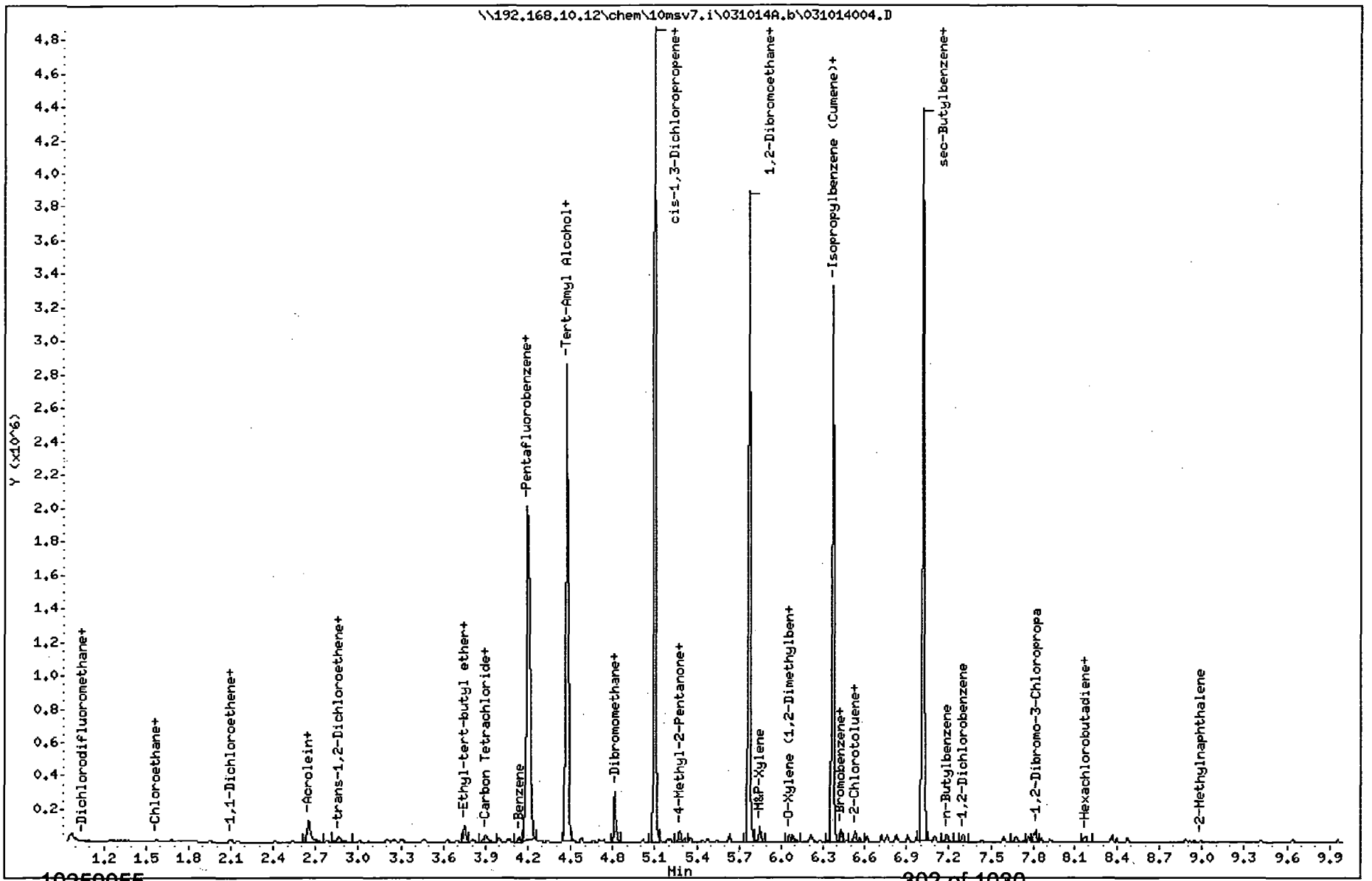
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014004.D
Date : 10-MAR-2014 11:34
Client ID:
Sample Info: 1.0 ICAL 10098-65

Instrument: 10msv7.i

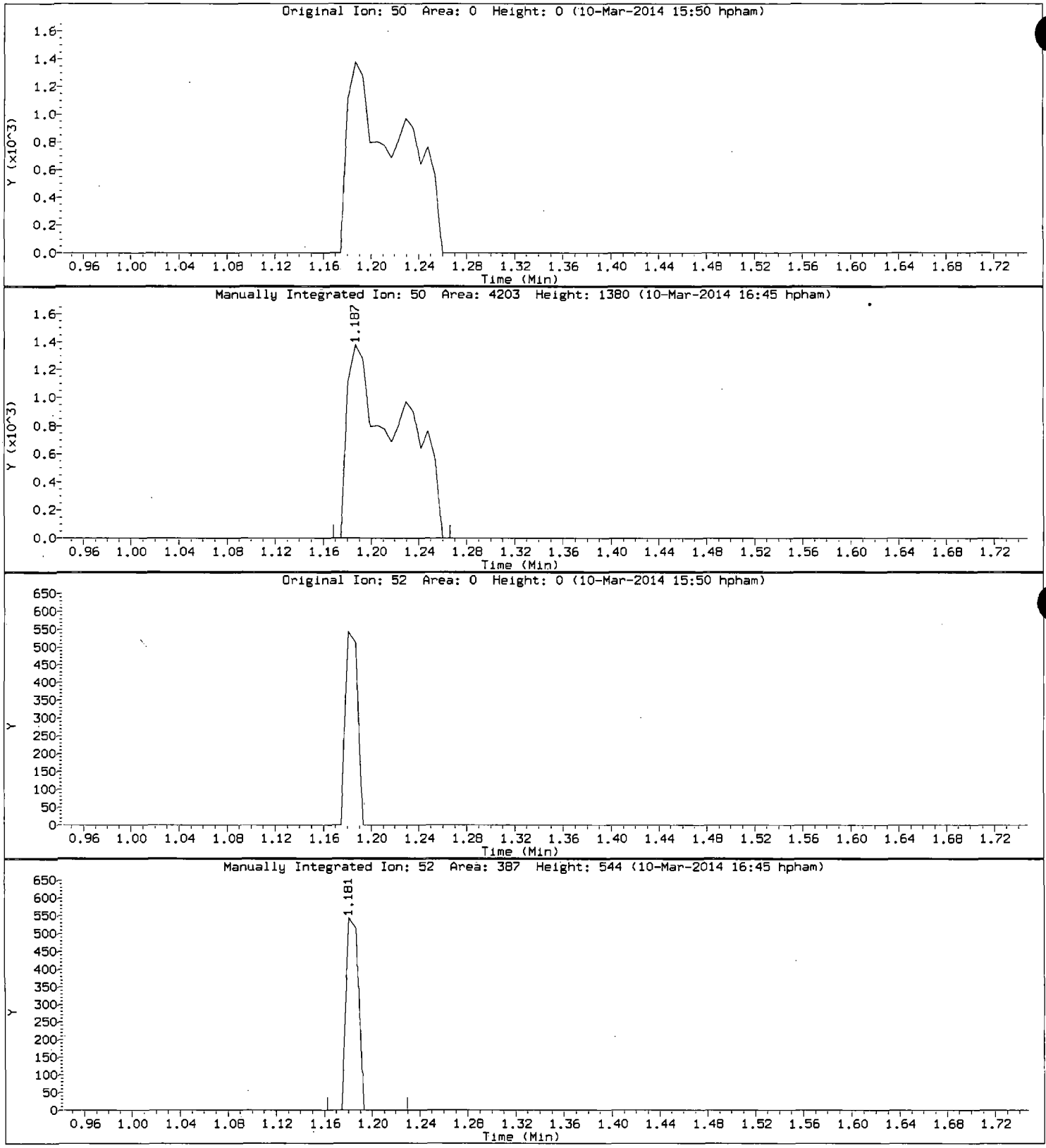
Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



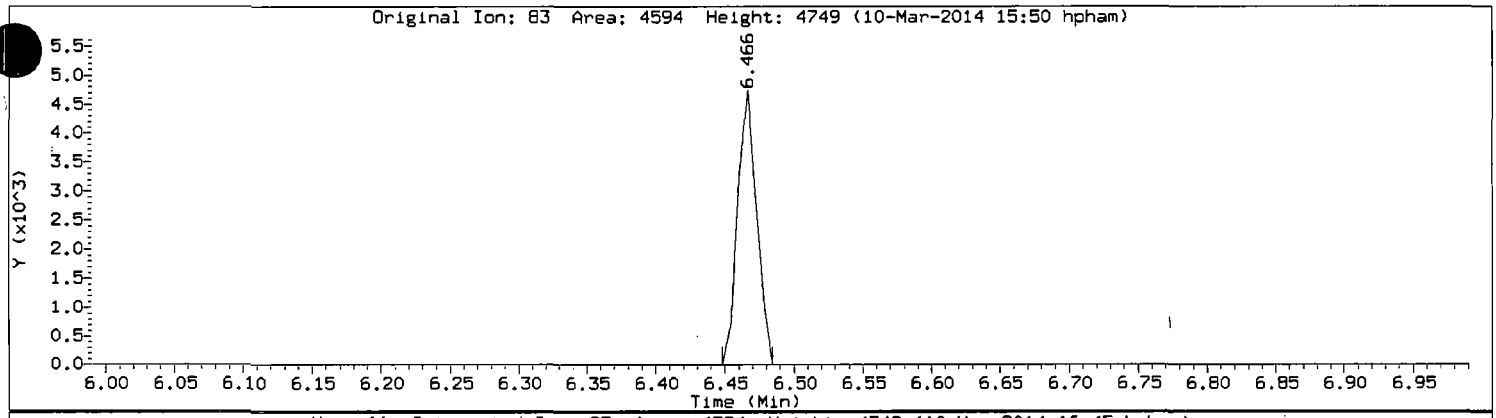
Instrument: 10msv7.i
Lab Sample ID: 1.0 ICAL 10098-65

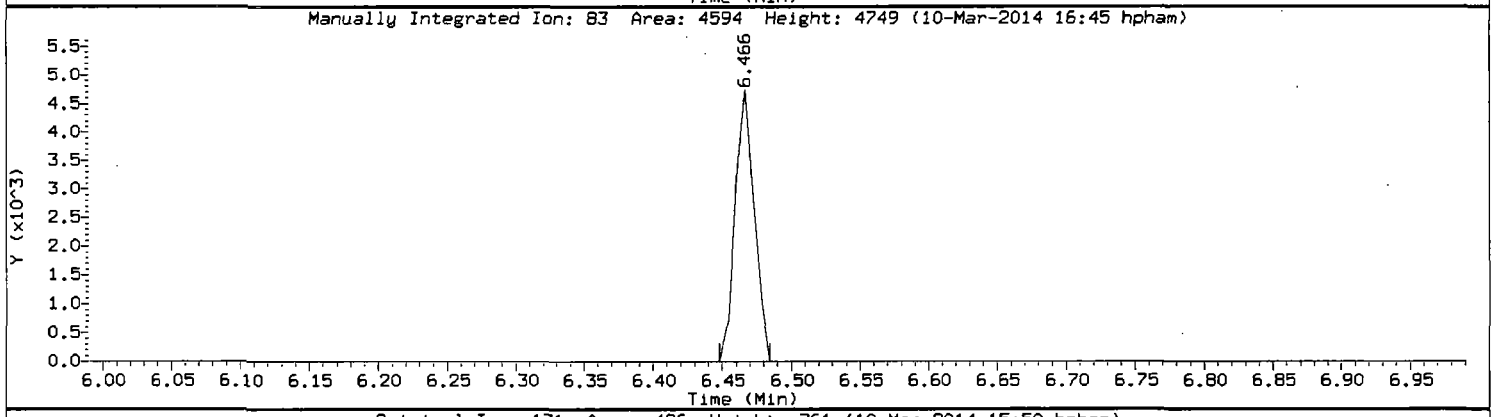
Compound: Chloromethane
CAS Number: 74-87-3

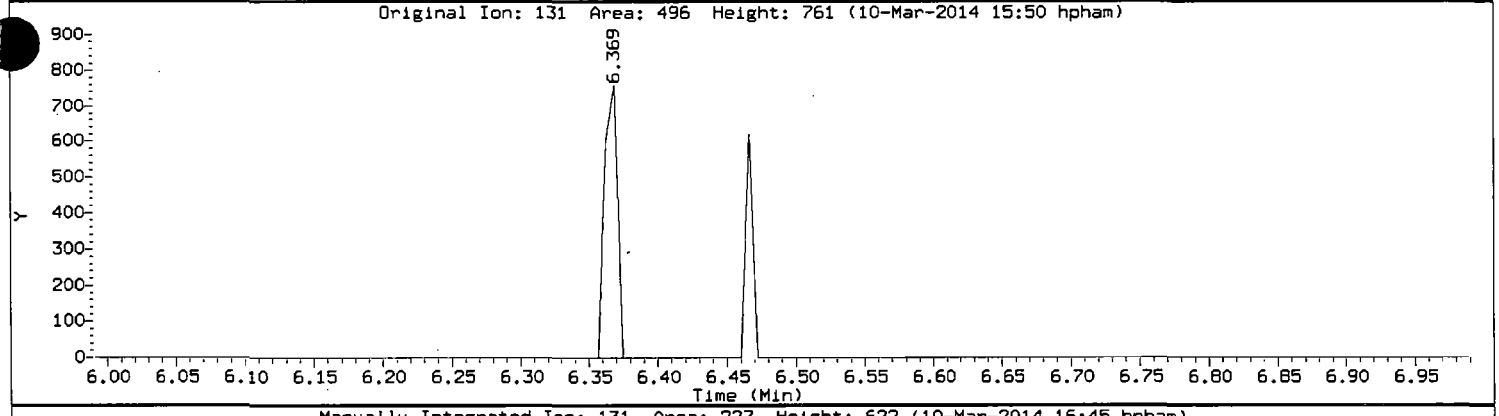


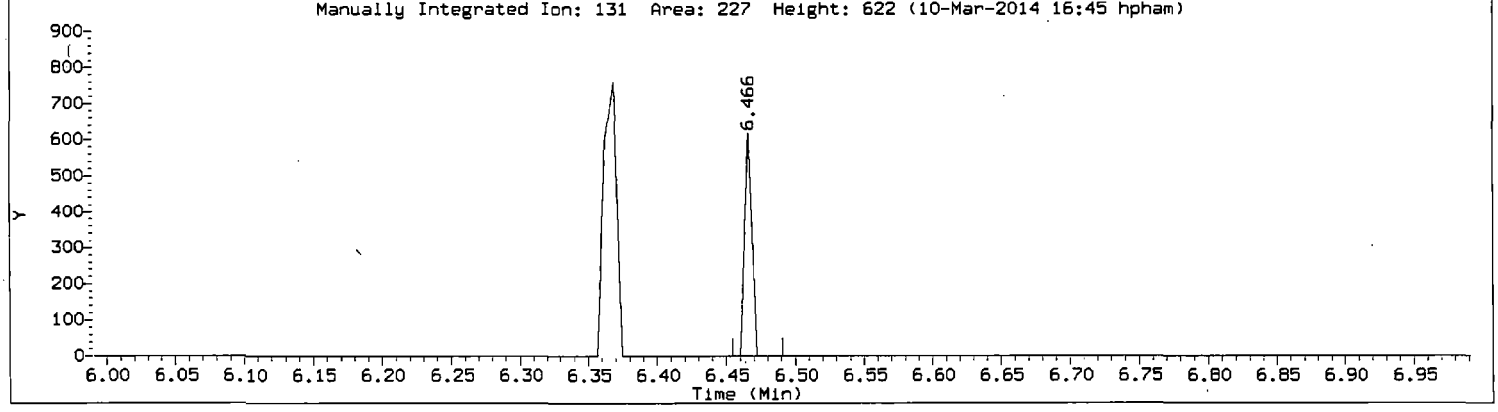
Instrument: 10msv7.i
Lab Sample ID: 1.0 ICAL 10098-65

Compound: 1,1,2,2-Tetrachloroethane
CAS Number: 79-34-5

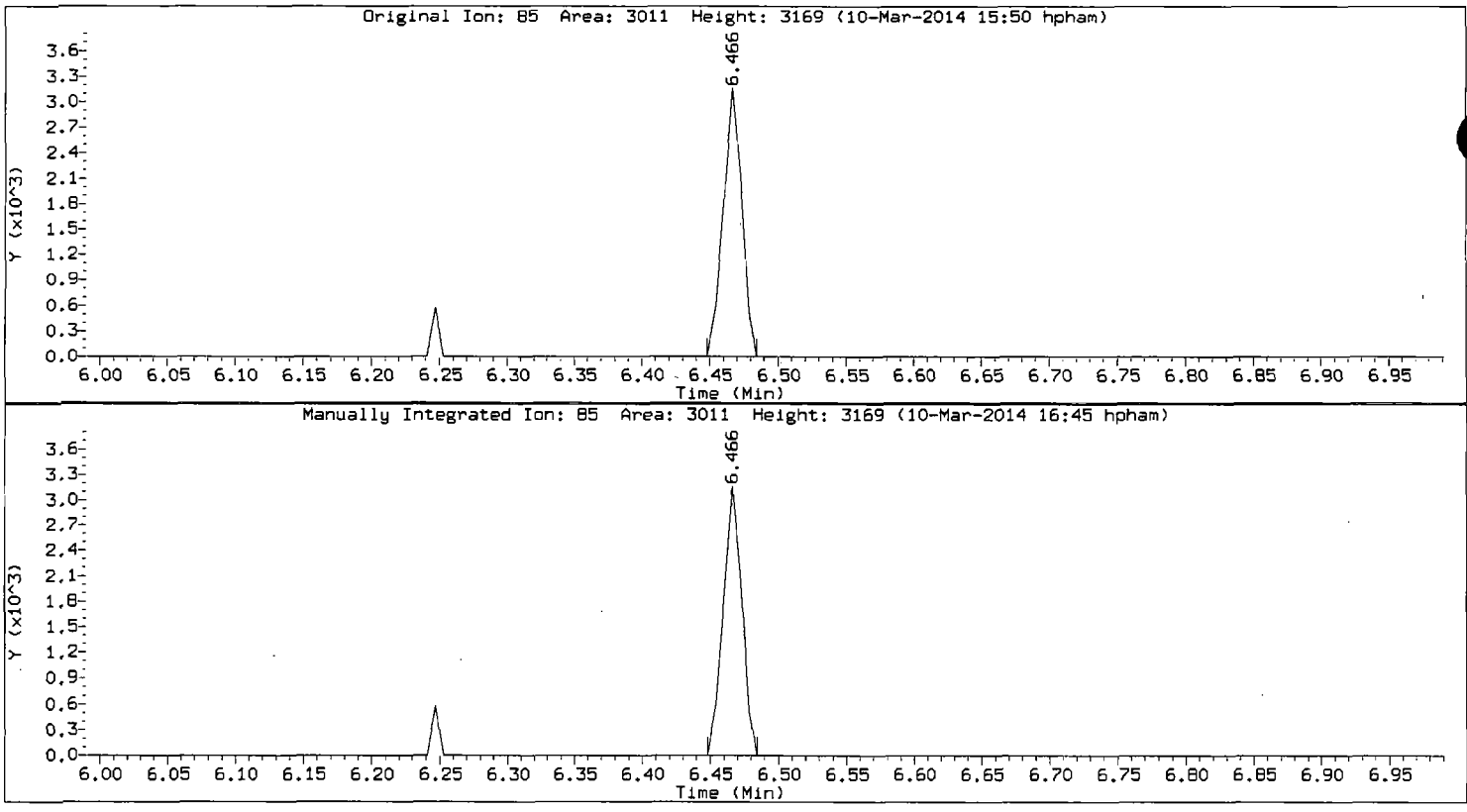








Instrument: 10msv7.i
Lab Sample ID: 1.0 ICAL 10098-65



Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014005.D
Lab Smp Id: 4.0 ICAL 10098-65
Inj Date : 10-MAR-2014 11:53
Operator : HBP Inst ID: 10msv7.i
Smp Info : 4.0 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.251)	15501	4.00000	3.9(aQ)
2	Chloromethane	50	1.186	1.247	(0.283)	15915	4.00000	3.6(TaM)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	19271	4.00000	3.9(a)
4	Bromomethane	94	1.479	1.479	(0.352)	13495	4.00000	5.9(Q)
5	Chloroethane	64	1.570	1.570	(0.374)	8959	4.00000	4.3(a)
6	Trichlorofluoromethane	101	1.680	1.668	(0.400)	21801	4.00000	4.3(a)
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	30229	4.00000	4.2(a)
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.466)	10579	4.00000	3.9(a)
9	1,1-Dichloroethene	96	2.095	2.088	(0.499)	13936	4.00000	3.8(a)
10	Carbon Disulfide	76	2.101	2.095	(0.500)	54141	4.00000	3.9(a)
11	Ethanol	45	2.119	2.137	(0.440)	4042	80.0000	75.1
12	Trichlorotrifluoroethane	101	2.143	2.137	(0.511)	13678	4.00000	3.6(a)
13	Iodomethane	142	2.211	2.210	(0.527)	7345	4.00000	5.4(Q)
14	Acrolein	56	2.412	2.412	(0.575)	18615	40.0000	39.9
15	Allyl Chloride	41	2.540	2.533	(0.605)	21391	4.00000	4.1(a)
16	Methylene Chloride	84	2.643	2.637	(0.630)	17543	4.00000	3.9(a)
17	Isopropanol	45	2.662	2.649	(0.553)	32935	40.0000	34.0(Q)
* 18	Acetone d6	46	2.656	2.655	(1.000)	130682	200.000	
19	Acetone	58	2.704	2.698	(1.018)	5895	20.0000	20.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.784	2.777	(0.663)	16052	4.00000	4.0(a)
	21 Hexane	86	2.863	2.863	(1.078)	8943	10.0000	9.4
	22 Methyl-tert-butyl Ether	73	2.899	2.899	(0.691)	38342	4.00000	3.9(aQ)
	23 tert-Butyl Alcohol	59	3.009	3.021	(0.625)	17091	40.0000	37.5
	24 Acetonitrile	41	3.070	3.070	(0.731)	13797	40.0000	38.1
	25 Isopropyl Ether	45	3.204	3.210	(0.763)	46800	4.00000	4.0(a)
	26 Acrylonitrile	53	3.247	3.247	(0.773)	22285	40.0000	39.8
	27 1,1-Dichloroethane	63	3.265	3.265	(0.778)	27300	4.00000	4.1(a)
	28 Ethyl-tert-butyl ether	59	3.460	3.466	(0.824)	42591	4.00000	3.9(a)
	29 Vinyl Acetate	43	3.460	3.466	(0.824)	28326	4.00000	3.8(aQ)
	30 cis-1,2-Dichloroethene	96	3.631	3.637	(0.865)	17241	4.00000	4.0(a)
	31 2,2-Dichloropropane	77	3.698	3.704	(0.881)	23312	4.00000	4.2(a)
	32 Cyclohexane	56	3.753	3.759	(0.894)	126059	20.0000	18.8
	33 Bromochloromethane	130	3.753	3.759	(0.894)	9922	4.00000	3.9(a)
	34 Chloroform	83	3.808	3.814	(0.907)	27234	4.00000	4.0(a)
	35 Carbon Tetrachloride	117	3.881	3.887	(0.924)	19896	4.00000	4.0(a)
	36 Tetrahydrofuran	72	3.899	3.905	(1.468)	18265	40.0000	41.9
	37 1,1,1-Trichloroethane	97	3.924	3.930	(0.935)	22960	4.00000	3.9(a)
	38 2-Butanone	43	3.997	4.003	(0.952)	29108	20.0000	19.6
	39 1,1-Dichloropropene	75	3.997	4.003	(0.952)	21644	4.00000	3.9(a)
	40 Benzene	78	4.137	4.149	(0.985)	65752	4.00000	4.0(a)
*	41 Pentafluorobenzene	168	4.198	4.204	(1.000)	965156	100.000	
	42 Tert-amyl methyl ether	73	4.216	4.222	(1.004)	42398	4.00000	3.9(aQ)
$	43 1,2-Dichloroethane d4 (S)	65	4.216	4.222	(1.004)	372729	100.000	100
	44 1,2-Dichloroethane	62	4.253	4.259	(1.013)	17669	4.00000	4.1(a)
	45 Isobutanol	43	4.289	4.301	(0.891)	12843	80.0000	69.8
	46 Tert-Amyl Alcohol	59	4.338	4.350	(0.901)	13469	40.0000	35.3
	47 Trichloroethene	130	4.454	4.466	(0.996)	18624	4.00000	4.1(aQ)
*	48 1,4 Difluorobenzene	114	4.472	4.478	(1.000)	1419824	100.000	
	49 Tert-amyl ethyl ether	59	4.582	4.588	(1.025)	33102	4.00000	4.0(a)
	50 Dibromomethane	174	4.661	4.667	(1.042)	10693	4.00000	4.1(a)
	51 1,2-Dichloropropane	63	4.704	4.716	(1.052)	15605	4.00000	4.0(TaQ)
	52 Bromodichloromethane	83	4.734	4.746	(1.059)	20243	4.00000	4.0(a)
*	53 1,4 dioxane d8	96	4.814	4.832	(1.000)	155783	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.832	4.844	(1.004)	3863	80.0000	73.7
	55 2-Chloroethyl Vinyl Ether	63	4.990	5.002	(1.116)	2041	10.0000	10.2(TQ)
	56 cis-1,3-Dichloropropene	75	5.015	5.027	(1.121)	25133	4.00000	4.0(a)
$	57 Toluene-d8 (S)	98	5.094	5.106	(0.883)	1656539	100.000	98.6
	58 Toluene	92	5.119	5.131	(0.887)	43436	4.00000	4.0(a)
	59 4-Methyl-2-Pentanone	43	5.271	5.289	(0.913)	62971	20.0000	19.6
	60 Tetrachloroethene	166	5.283	5.295	(0.915)	21262	4.00000	4.1(a)
	61 trans-1,3-Dichloropropene	75	5.289	5.301	(0.917)	22079	4.00000	4.0(a)
	62 1,1,2-Trichloroethane	97	5.356	5.374	(0.928)	13522	4.00000	4.1(a)
	63 Dibromochloromethane	129	5.442	5.454	(0.943)	15411	4.00000	4.0(a)
	64 1,3-Dichloropropane	76	5.478	5.490	(0.949)	23048	4.00000	4.1(a)
	65 1,2-Dibromoethane	107	5.545	5.557	(0.961)	13969	4.00000	4.0(TaQ)
	66 2-Hexanone	43	5.631	5.649	(0.976)	48916	20.0000	19.5
*	67 Chlorobenzene-d5	117	5.771	5.789	(1.000)	1429738	100.000	
	68 Chlorobenzene	112	5.777	5.795	(1.001)	47699	4.00000	3.9(aQ)
	69 Ethylbenzene	91	5.783	5.801	(1.002)	84071	4.00000	4.1(a)
	70 1,1,1,2-Tetrachloroethane	131	5.807	5.819	(1.006)	16537	4.00000	3.9(a)
	71 M&P-Xylene	106	5.850	5.868	(1.014)	65553	8.00000	8.2
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.063	6.075	(1.051)	29804	4.00000	4.0(a)
	73 Styrene	104	6.088	6.100	(1.055)	51718	4.00000	4.0(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	74 Bromoform	173	6.106	6.124	(1.058)	12095	4.00000	4.0(a)
	75 Isopropylbenzene (Cumene)	105	6.216	6.234	(1.077)	78454	4.00000	3.9(a)
$	76 4-Bromofluorobenzene (S)	95	6.368	6.386	(0.907)	688776	100.000	98.5
	77 cis-1,4-Dichloro-2-Butene	53	6.399	6.417	(0.911)	5477	4.00000	4.0(aQ)
	78 Bromobenzene	156	6.435	6.453	(0.917)	22339	4.00000	4.2(a)
	79 n-Propylbenzene	91	6.435	6.453	(0.917)	95417	4.00000	3.9(a)
	80 1,1,2,2-Tetrachloroethane	83	6.472	6.490	(0.922)	17700	4.00000	4.0(a)
	81 2-Chlorotoluene	91	6.527	6.551	(0.930)	62083	4.00000	4.1(a)
	82 1,3,5-Trimethylbenzene	105	6.539	6.557	(0.931)	69379	4.00000	4.0(a)
	83 1,2,3-Trichloropropane	110	6.551	6.569	(0.933)	5158	4.00000	4.1(a)
	84 trans-1,4-Dichloro-2-Butene	53	6.569	6.588	(0.936)	10713	10.0000	9.3
	85 4-Chlorotoluene	91	6.618	6.642	(0.943)	59656	4.00000	4.1(a)
	86 tert-Butylbenzene	119	6.728	6.746	(0.958)	57781	4.00000	4.0(a)
	87 1,2,4-Trimethylbenzene	105	6.765	6.789	(0.964)	69816	4.00000	4.0(a)
	88 sec-Butylbenzene	105	6.832	6.856	(0.973)	85915	4.00000	3.9(a)
	89 p-Isopropyltoluene	119	6.917	6.941	(0.985)	74339	4.00000	3.8(a)
	90 1,3-Dichlorobenzene	146	6.978	6.996	(0.994)	42638	4.00000	4.0(a)
*	91 1,4-Dichlorobenzene-d4	152	7.021	7.045	(1.000)	871580	100.000	
	92 1,4-Dichlorobenzene	146	7.033	7.057	(1.002)	44270	4.00000	4.0(aQ)
	93 1,2,3 Trimethylbenzene	105	7.039	7.063	(1.677)	73722	4.00000	4.0(a)
	94 n-Butylbenzene	91	7.191	7.215	(1.024)	70529	4.00000	3.9(a)
	95 1,2-Dichlorobenzene	146	7.307	7.331	(1.041)	40441	4.00000	4.0(a)
	96 1,2-Dibromo-3-Chloropropane	157	7.813	7.831	(1.113)	10046	10.0000	10.2
	97 Hexachlorobutadiene	225	8.179	8.191	(1.165)	16065	4.00000	4.1(a)
	98 1,2,4-Trichlorobenzene	180	8.191	8.209	(1.167)	26635	4.00000	4.1(a)
	99 Naphthalene	128	8.380	8.392	(1.194)	50634	4.00000	4.0(a)
	100 1,2,3-Trichlorobenzene	180	8.484	8.502	(1.208)	23148	4.00000	3.9(a)
	101 2-Methylnaphthalene	142	8.996	9.014	(1.281)	9287	2.00000	1.9(a)

Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014005.D
Lab Smp Id: 4.0 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	130682	-3.78
41 Pentafluorobenzen	944656	472328	1889312	965156	2.17
48 1,4 Difluorobenze	1423443	711722	2846886	1419824	-0.25
53 1,4 dioxane d8	156016	78008	312032	155783	-0.15
67 Chlorobenzene-d5	1400934	700467	2801868	1429738	2.06
91 1,4-Dichlorobenze	853329	426665	1706658	871580	2.14

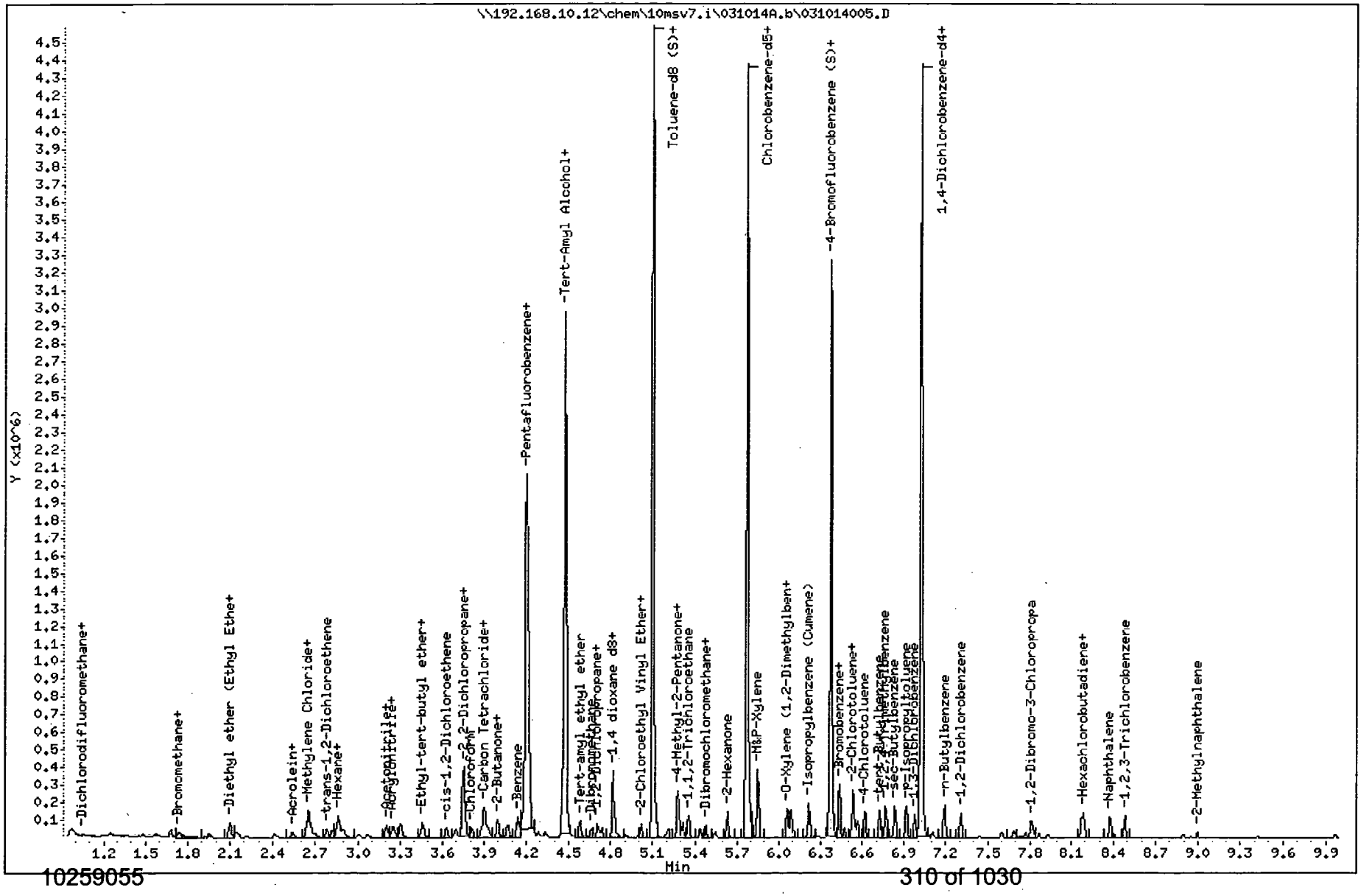
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.66	0.23
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.14
48 1,4 Difluorobenze	4.48	3.98	4.98	4.47	-0.14
53 1,4 dioxane d8	4.83	4.33	5.33	4.81	-0.25
67 Chlorobenzene-d5	5.78	5.28	6.28	5.77	-0.21
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.02	-0.35

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014005.D
Date : 10-MAR-2014 11:53
Client ID:
Sample Info: 4.0 ICAL 10098-65

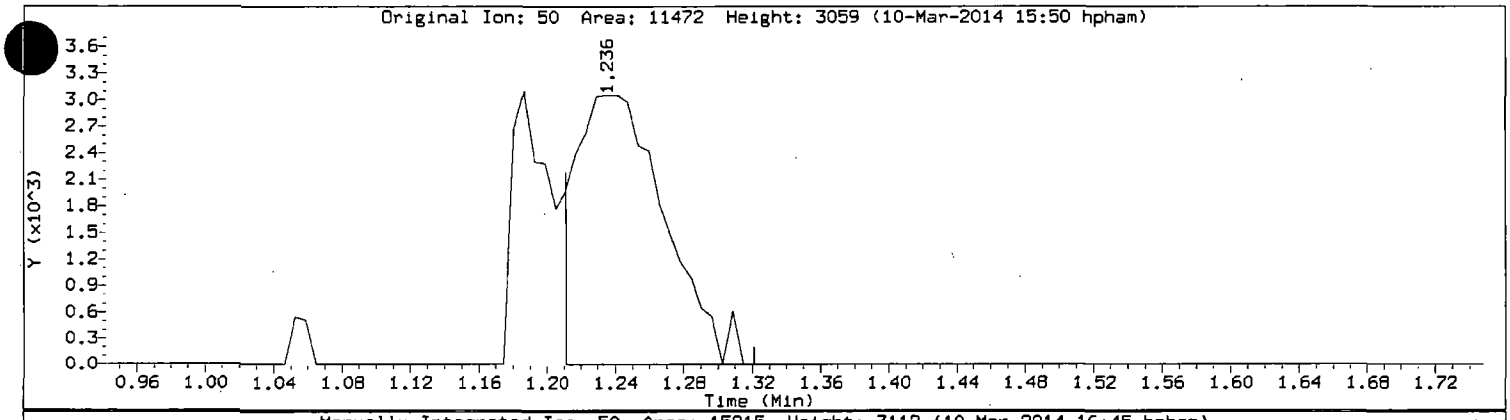
Instrument: 10msv7.i

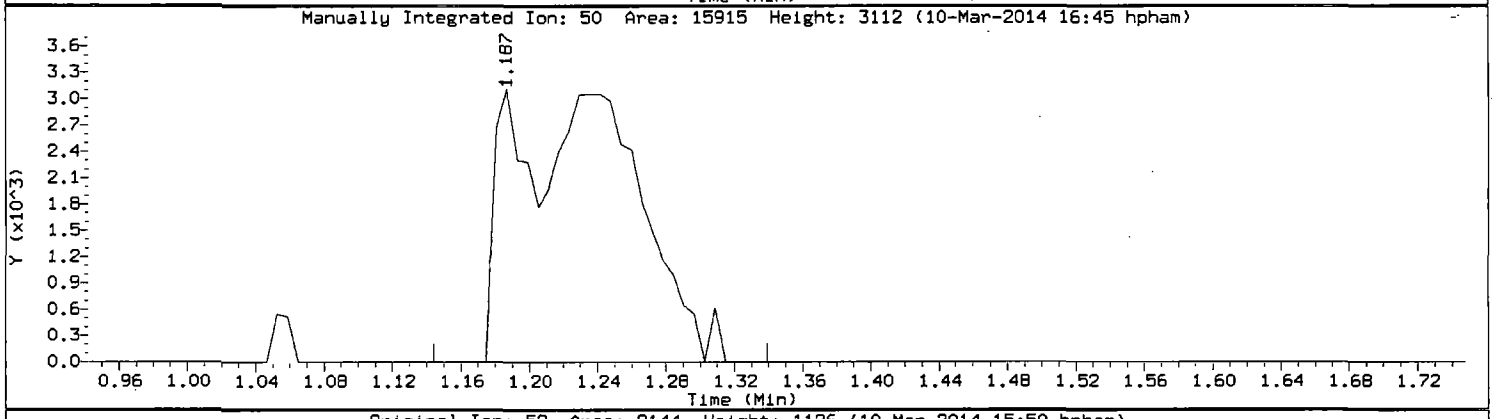
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18

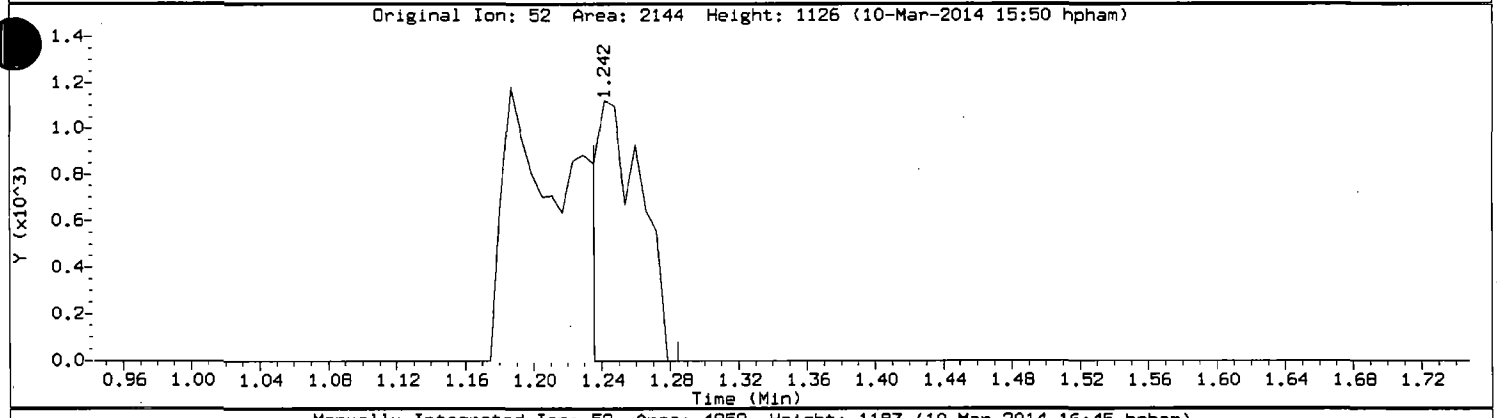


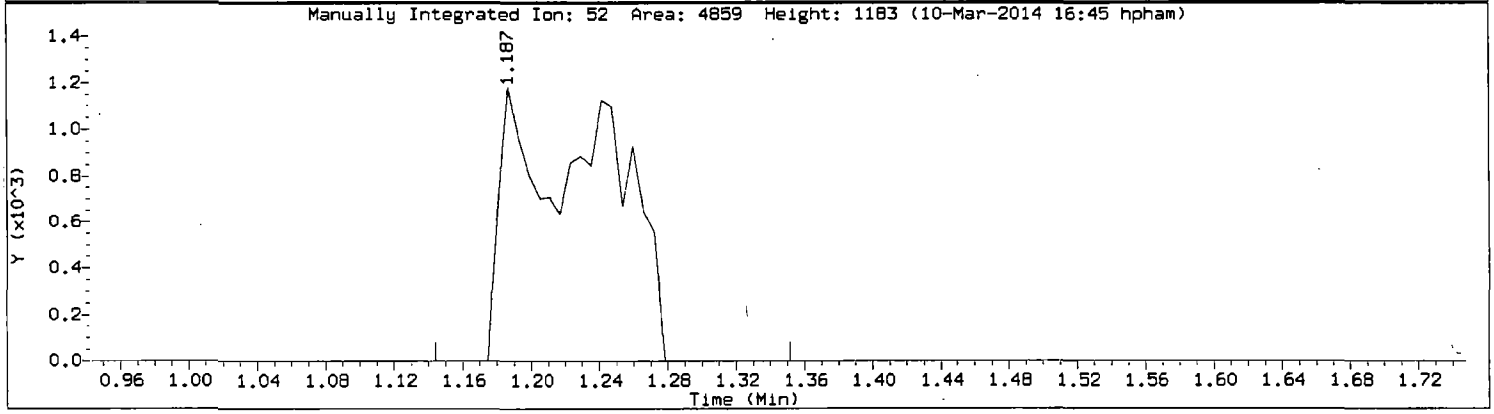
Instrument: 10msv7.i
Lab Sample ID: 4.0 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3









Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014006.D
Lab Smp Id: 10 ICAL 10098-65
Inj Date : 10-MAR-2014 12:13
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	40618	10.0000	10.2
2	Chloromethane	50	1.186	1.247	(0.282)	41970	10.0000	9.5(TM)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	48213	10.0000	9.9
4	Bromomethane	94	1.479	1.479	(0.352)	19653	10.0000	9.1(M)
5	Chloroethane	64	1.570	1.570	(0.374)	21644	10.0000	10.5
6	Trichlorofluoromethane	101	1.674	1.668	(0.398)	53527	10.0000	8.9
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	70957	10.0000	10
8	Diethyl ether (Ethyl Ether)	59	1.948	1.960	(0.464)	26092	10.0000	9.7
9	1,1-Dichloroethene	96	2.095	2.088	(0.498)	35218	10.0000	9.7
10	Carbon Disulfide	76	2.101	2.095	(0.500)	126240	10.0000	9.2
11	Ethanol	45	2.113	2.137	(0.438)	10301	200.000	185
12	Trichlorotrifluoroethane	101	2.137	2.137	(0.508)	37199	10.0000	10
13	Iodomethane	142	2.210	2.210	(0.526)	24179	10.0000	8.9
14	Acrolein	56	2.406	2.412	(0.572)	42074	100.000	90.7
15	Allyl Chloride	41	2.534	2.533	(0.603)	51308	10.0000	9.8
16	Methylene Chloride	84	2.637	2.637	(0.627)	41216	10.0000	9.8
17	Isopropanol	45	2.656	2.649	(0.551)	49032	100.000	91.4(M)
* 18	Acetone d6	46	2.649	2.655	(1.000)	135934	200.000	
19	Acetone	58	2.698	2.698	(1.018)	13530	50.0000	48.0

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	38523	10.0000	9.6
	21 Hexane	86	2.857	2.863	(1.078)	25657	25.0000	25.9
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.688)	97044	10.0000	10(Q)
	23 tert-Butyl Alcohol	59	3.003	3.021	(0.623)	41791	100.000	88.8(Q)
	24 Acetonitrile	41	3.064	3.070	(0.729)	35622	100.000	98.9
	25 Isopropyl Ether	45	3.204	3.210	(0.762)	111215	10.0000	9.6
	26 Acrylonitrile	53	3.247	3.247	(0.772)	53342	100.000	95.6
	27 1,1-Dichloroethane	63	3.259	3.265	(0.775)	65178	10.0000	9.8
	28 Ethyl-tert-butyl ether	59	3.460	3.466	(0.823)	105032	10.0000	9.7
	29 Vinyl Acetate	43	3.460	3.466	(0.823)	70573	10.0000	9.6
	30 cis-1,2-Dichloroethene	96	3.631	3.637	(0.864)	43273	10.0000	10.1
	31 2,2-Dichloropropane	77	3.698	3.704	(0.880)	54238	10.0000	9.8
	32 Cyclohexane	56	3.753	3.759	(0.893)	324983	50.0000	48.7
	33 Bromochloromethane	130	3.753	3.759	(0.893)	24428	10.0000	9.7
	34 Chloroform	83	3.808	3.814	(0.906)	67075	10.0000	10.0
	35 Carbon Tetrachloride	117	3.881	3.887	(0.923)	49067	10.0000	10.0
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	45741	100.000	101
	37 1,1,1-Trichloroethane	97	3.924	3.930	(0.933)	56857	10.0000	9.7
	38 2-Butanone	43	3.997	4.003	(0.951)	70341	50.0000	47.7
	39 1,1-Dichloropropene	75	3.997	4.003	(0.951)	53604	10.0000	9.6
	40 Benzene	78	4.143	4.149	(0.985)	161137	10.0000	9.7
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	960292	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	103774	10.0000	9.5(Q)
$	43 1,2-Dichloroethane d4 (S)	65	4.216	4.222	(1.003)	379379	100.000	102
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	42906	10.0000	9.9
	45 Isobutanol	43	4.289	4.301	(0.890)	33917	200.000	178
	46 Tert-Amyl Alcohol	59	4.338	4.350	(0.900)	35615	100.000	90.3
	47 Trichloroethene	130	4.460	4.466	(0.996)	46063	10.0000	10
*	48 1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1447329	100.000	
	49 Tert-amyl ethyl ether	59	4.582	4.588	(1.023)	79321	10.0000	9.4
	50 Dibromomethane	174	4.667	4.667	(1.042)	25444	10.0000	9.6
	51 1,2-Dichloropropane	63	4.710	4.716	(1.052)	38561	10.0000	9.8
	52 Bromodichloromethane	83	4.740	4.746	(1.059)	48635	10.0000	9.5
*	53 1,4 dioxane d8	96	4.820	4.832	(1.000)	160874	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.844	(1.004)	10039	200.000	185
	55 2-Chloroethyl Vinyl Ether	63	4.997	5.002	(1.116)	6225	25.0000	22.8
	56 cis-1,3-Dichloropropene	75	5.021	5.027	(1.121)	60958	10.0000	9.6
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1667081	100.000	98.5
	58 Toluene	92	5.125	5.131	(0.886)	101491	10.0000	9.3
	59 4-Methyl-2-Pentanone	43	5.283	5.289	(0.914)	155071	50.0000	48.0
	60 Tetrachloroethene	166	5.289	5.295	(0.915)	51492	10.0000	9.9
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	54015	10.0000	9.6
	62 1,1,2-Trichloroethane	97	5.368	5.374	(0.928)	32276	10.0000	9.7
	63 Dibromochloromethane	129	5.448	5.454	(0.942)	38469	10.0000	9.9
	64 1,3-Dichloropropane	76	5.484	5.490	(0.948)	54454	10.0000	9.6
	65 1,2-Dibromoethane	107	5.551	5.557	(0.960)	33688	10.0000	9.6
	66 2-Hexanone	43	5.643	5.649	(0.976)	117157	50.0000	46.4
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1440504	100.000	
	68 Chlorobenzene	112	5.789	5.795	(1.001)	114121	10.0000	9.4
	69 Ethylbenzene	91	5.795	5.801	(1.002)	193716	10.0000	9.3
	70 1,1,1,2-Tetrachloroethane	131	5.820	5.819	(1.006)	40028	10.0000	9.4
	71 M&P-Xylene	106	5.862	5.868	(1.014)	152409	20.0000	18.8
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	72667	10.0000	9.6
	73 Styrene	104	6.100	6.100	(1.055)	122934	10.0000	9.5

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
74	Bromoform	173	6.124	6.124	(1.059)	29300	10.0000	9.5
75	Isopropylbenzene (Cumene)	105	6.228	6.234	(1.077)	190153	10.0000	9.4
$ 76	4-Bromofluorobenzene (S)	95	6.387	6.386	(0.907)	699341	100.000	100
77	cis-1,4-Dichloro-2-Butene	53	6.411	6.417	(0.911)	12558	10.0000	9.3
78	Bromobenzene	156	6.447	6.453	(0.916)	52820	10.0000	9.9
79	n-Propylbenzene	91	6.447	6.453	(0.916)	236062	10.0000	9.6
80	1,1,2,2-Tetrachloroethane	83	6.484	6.490	(0.921)	43875	10.0000	9.9
81	2-Chlorotoluene	91	6.545	6.551	(0.930)	145472	10.0000	9.5
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.932)	166392	10.0000	9.6
83	1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	12262	10.0000	9.8(Q)
84	trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.936)	27950	25.0000	24.2
85	4-Chlorotoluene	91	6.636	6.642	(0.943)	139201	10.0000	9.5
86	tert-Butylbenzene	119	6.746	6.746	(0.958)	141375	10.0000	9.8
87	1,2,4-Trimethylbenzene	105	6.783	6.789	(0.964)	169281	10.0000	9.6
88	sec-Butylbenzene	105	6.850	6.856	(0.973)	210931	10.0000	9.6
89	p-Isopropyltoluene	119	6.935	6.941	(0.985)	185661	10.0000	9.6
90	1,3-Dichlorobenzene	146	6.996	6.996	(0.994)	103350	10.0000	9.6
* 91	1,4-Dichlorobenzene-d4	152	7.039	7.045	(1.000)	870932	100.000	
92	1,4-Dichlorobenzene	146	7.051	7.057	(1.002)	106048	10.0000	9.5
93	1,2,3 Trimethylbenzene	105	7.057	7.063	(1.679)	172310	10.0000	9.3
94	n-Butylbenzene	91	7.210	7.215	(1.024)	175465	10.0000	9.8
95	1,2-Dichlorobenzene	146	7.331	7.331	(1.042)	96895	10.0000	9.6
96	1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.112)	24258	25.0000	24.7
97	Hexachlorobutadiene	225	8.191	8.191	(1.164)	38470	10.0000	9.9
98	1,2,4-Trichlorobenzene	180	8.203	8.209	(1.165)	63866	10.0000	9.7
99	Naphthalene	128	8.392	8.392	(1.192)	122017	10.0000	9.6
100	1,2,3-Trichlorobenzene	180	8.496	8.502	(1.207)	57348	10.0000	9.7
101	2-Methylnaphthalene	142	9.008	9.014	(1.280)	23328	5.00000	4.7(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014006.D
Lab Smp Id: 10 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

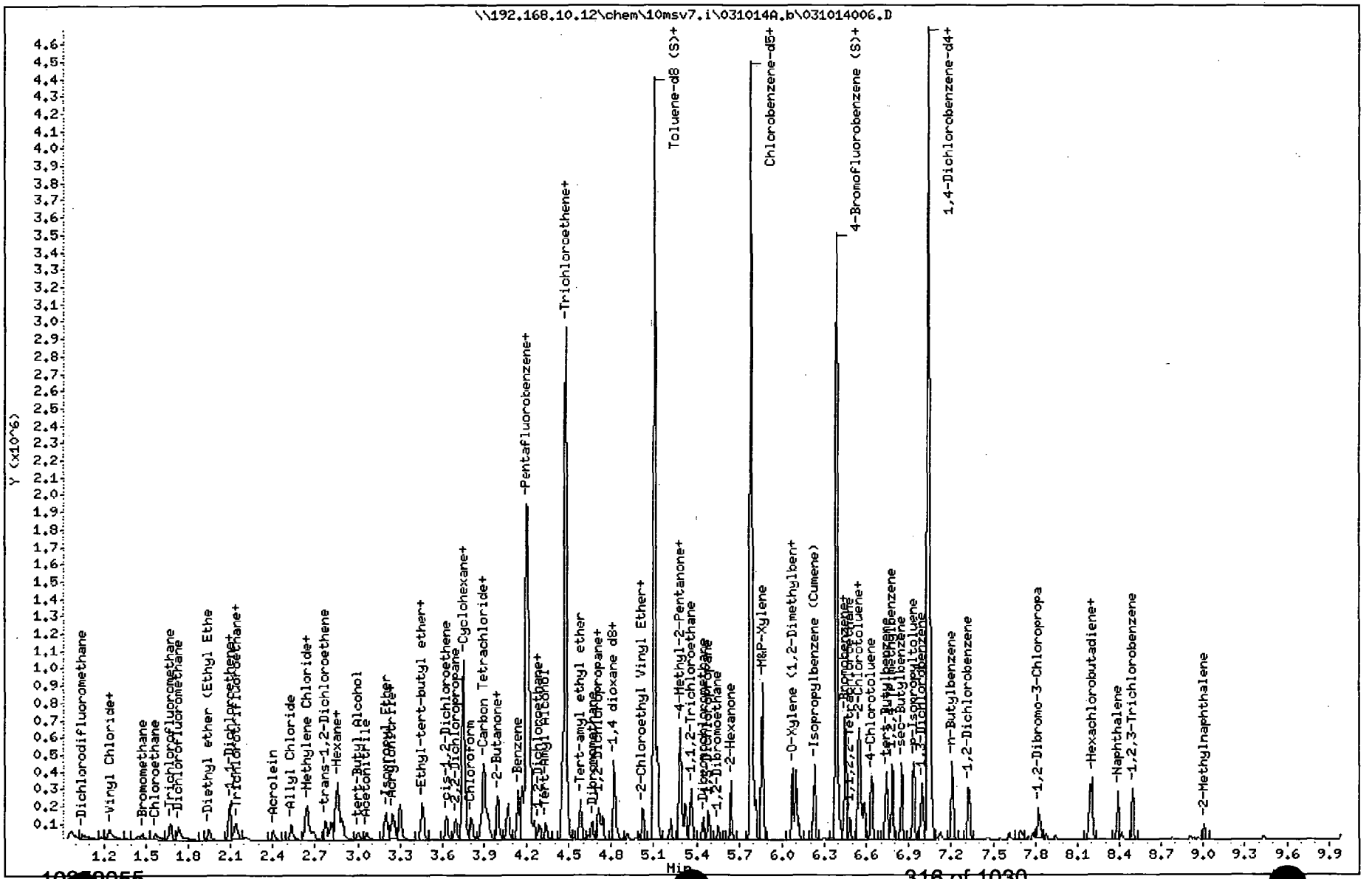
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	135934	0.09
41 Pentafluorobenzen	944656	472328	1889312	960292	1.66
48 1,4 Difluorobenze	1423443	711722	2846886	1447329	1.68
53 1,4 dioxane d8	156016	78008	312032	160874	3.11
67 Chlorobenzene-d5	1400934	700467	2801868	1440504	2.82
91 1,4-Dichlorobenze	853329	426665	1706658	870932	2.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.82	-0.13
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.04	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014006.D
Date : 10-MAR-2014 12:13
Client ID:
Sample Info: 10 ICAL 10098-65

Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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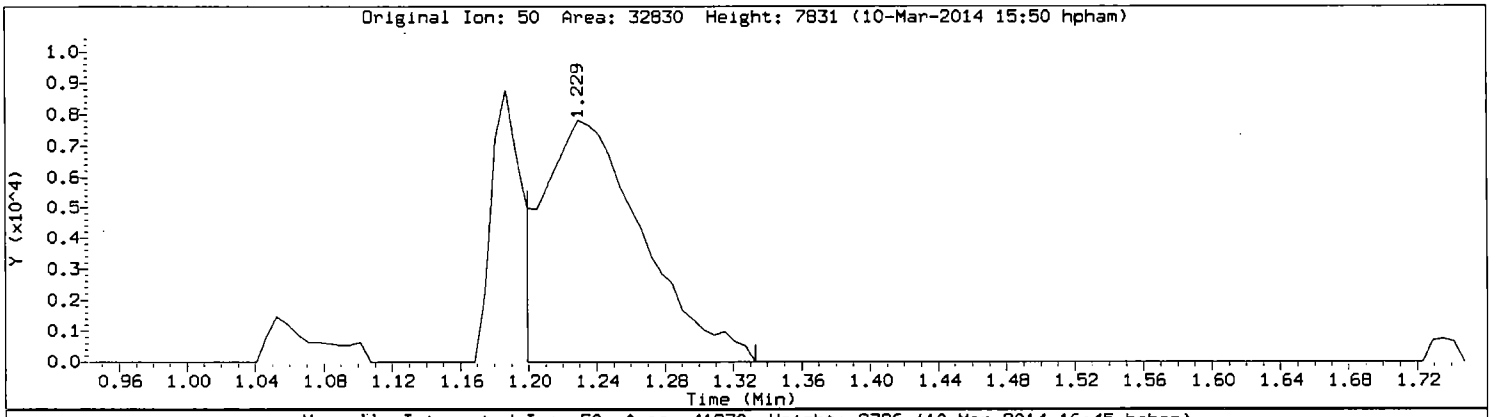
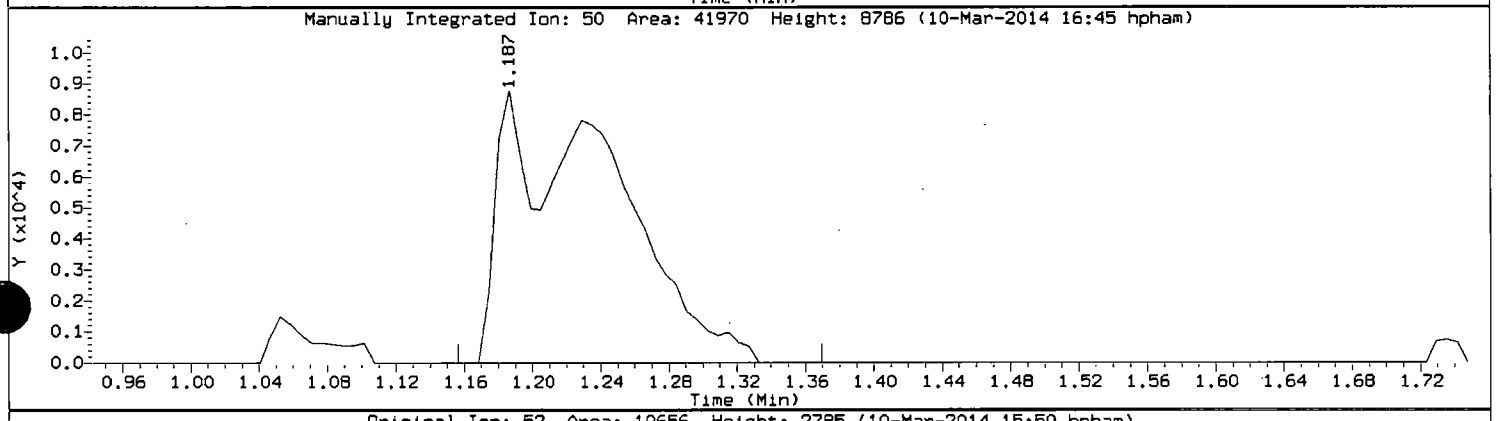
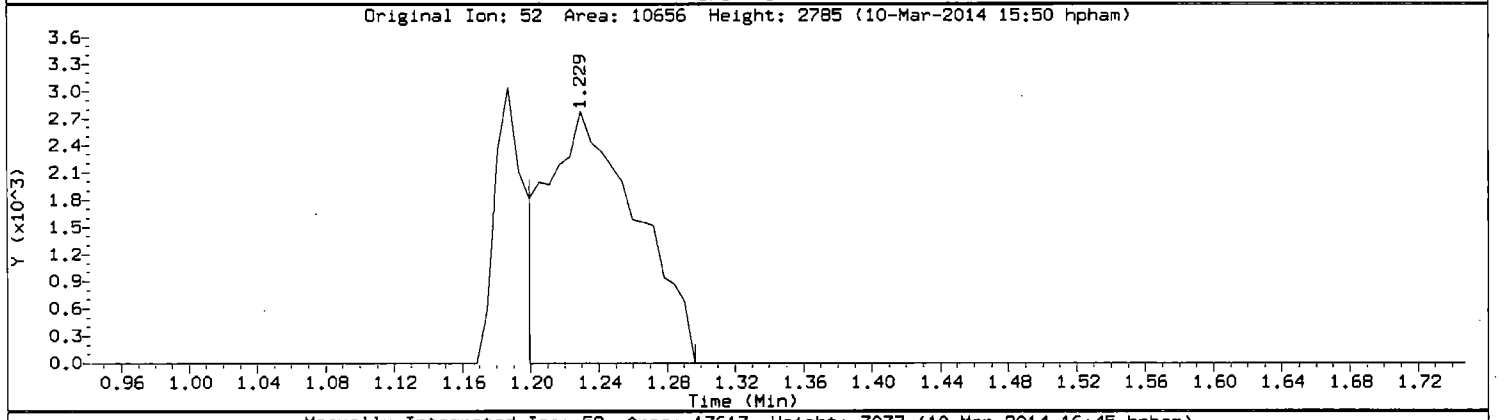
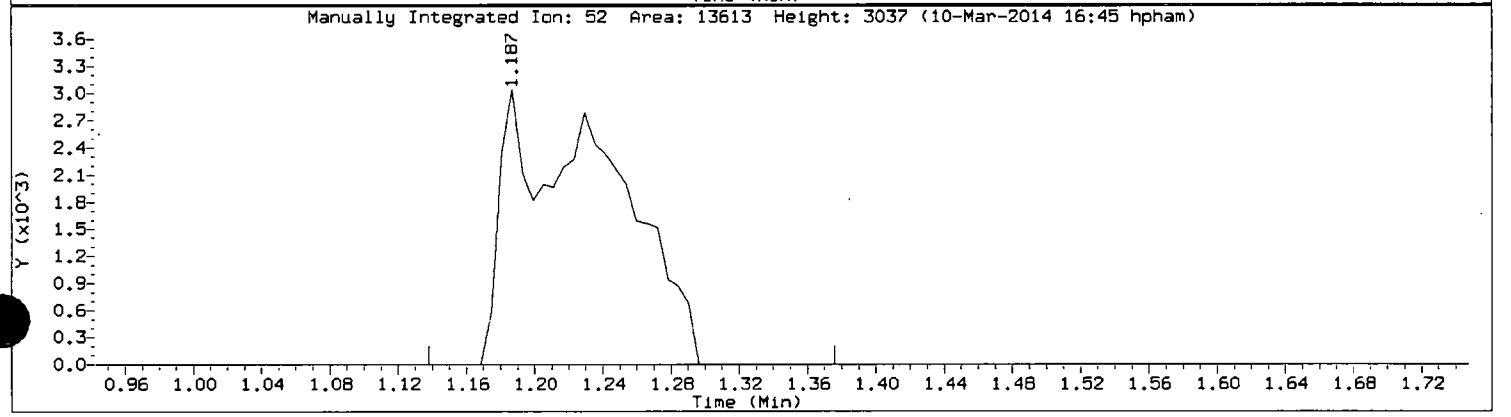
Injection Date: 10-MAR-2014 12:13
Instrument: 10msv7.i
Lab Sample ID: 10 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3



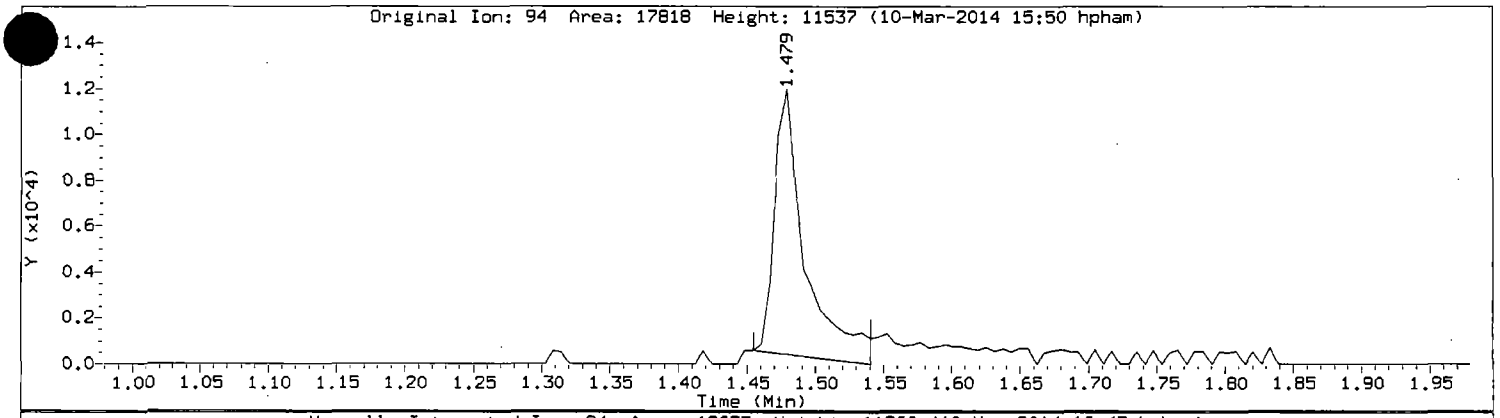


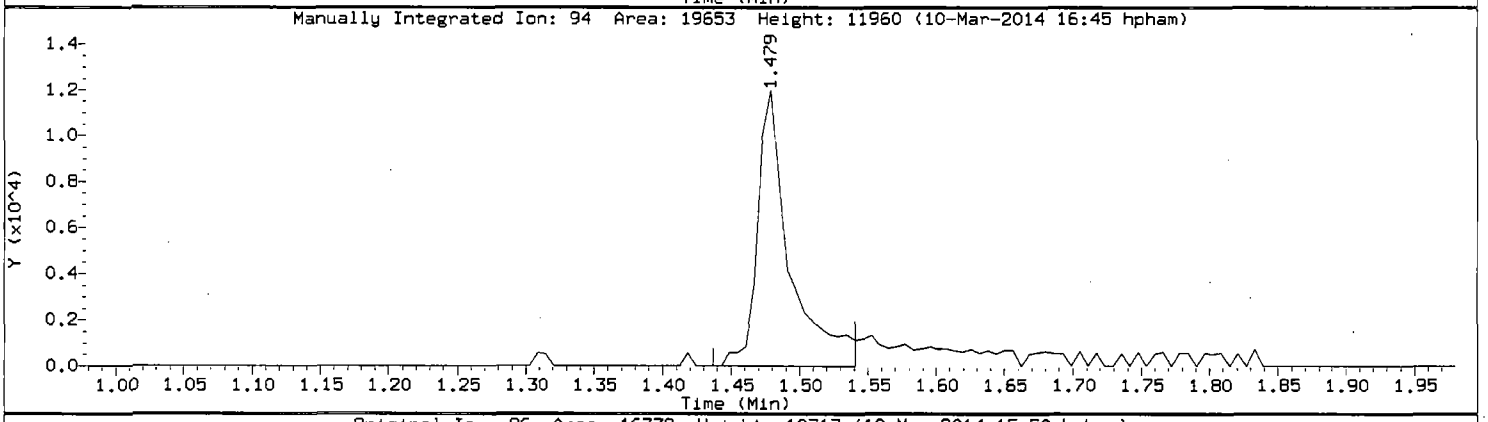


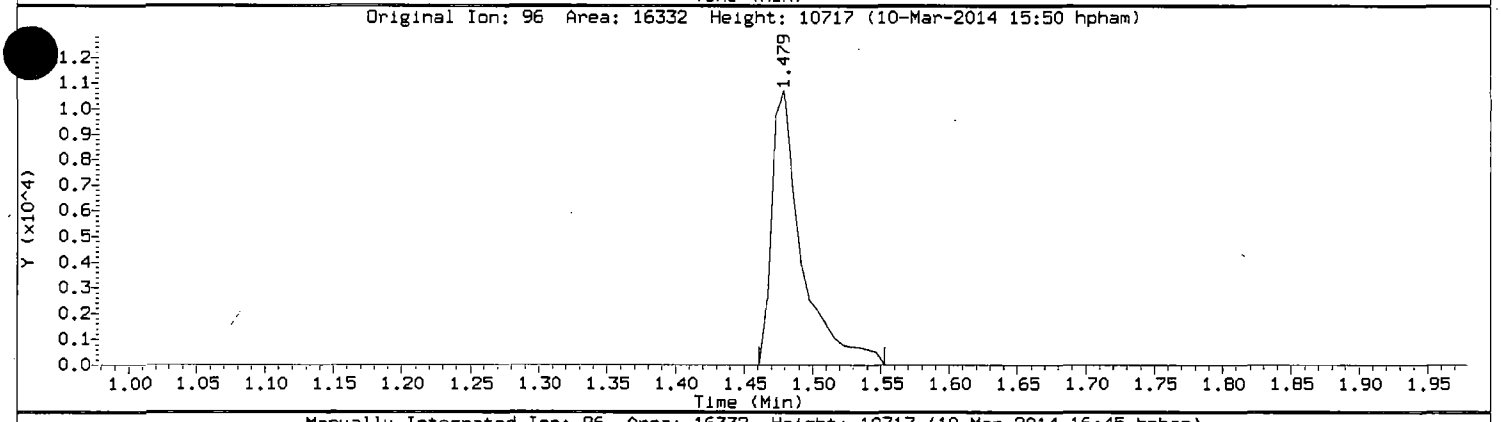


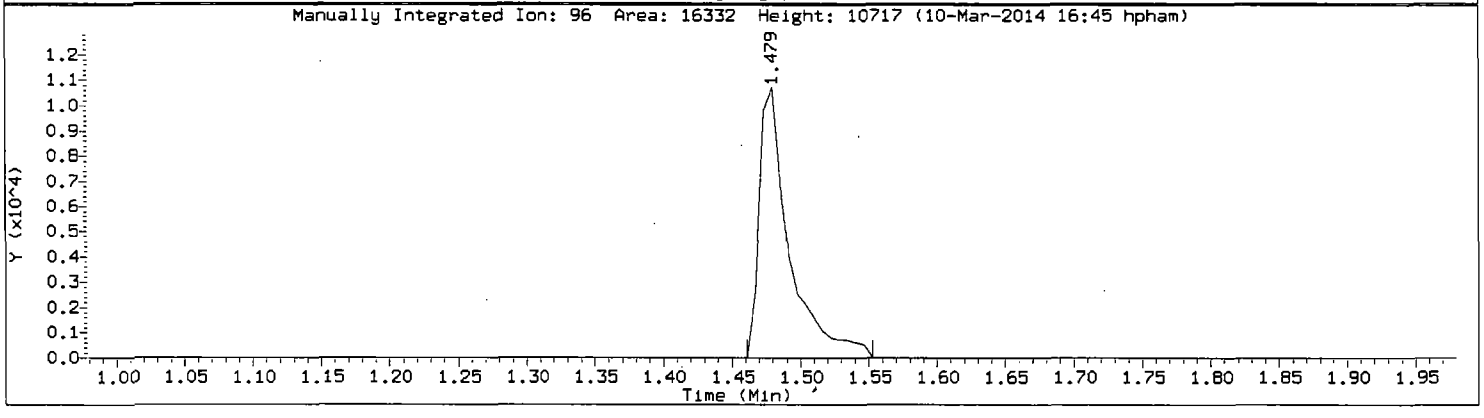
Instrument: 10msv7.i
Lab Sample ID: 10 ICAL 10098-65

Compound: Bromomethane
CAS Number: 74-83-9



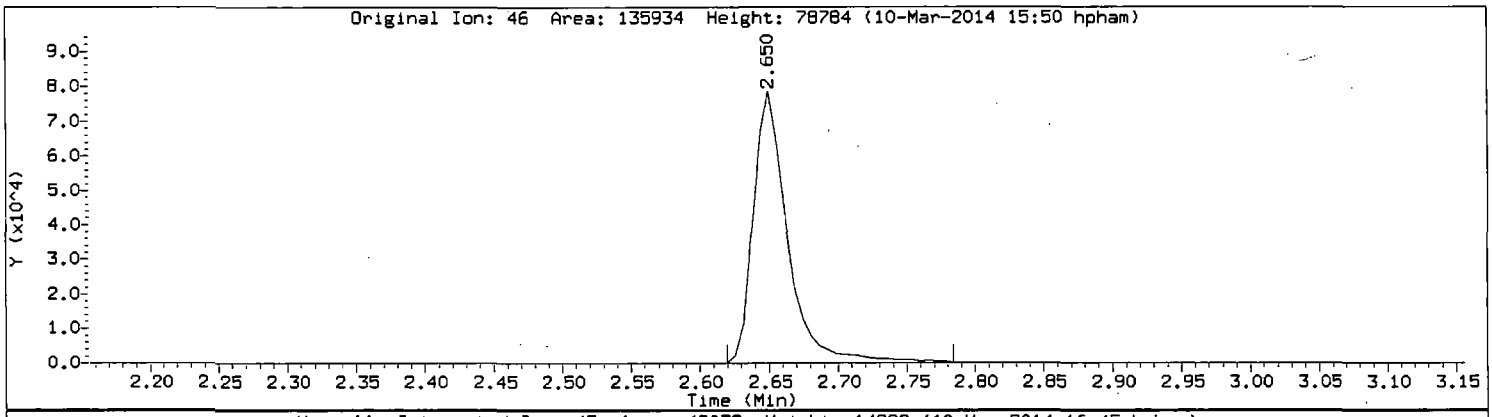


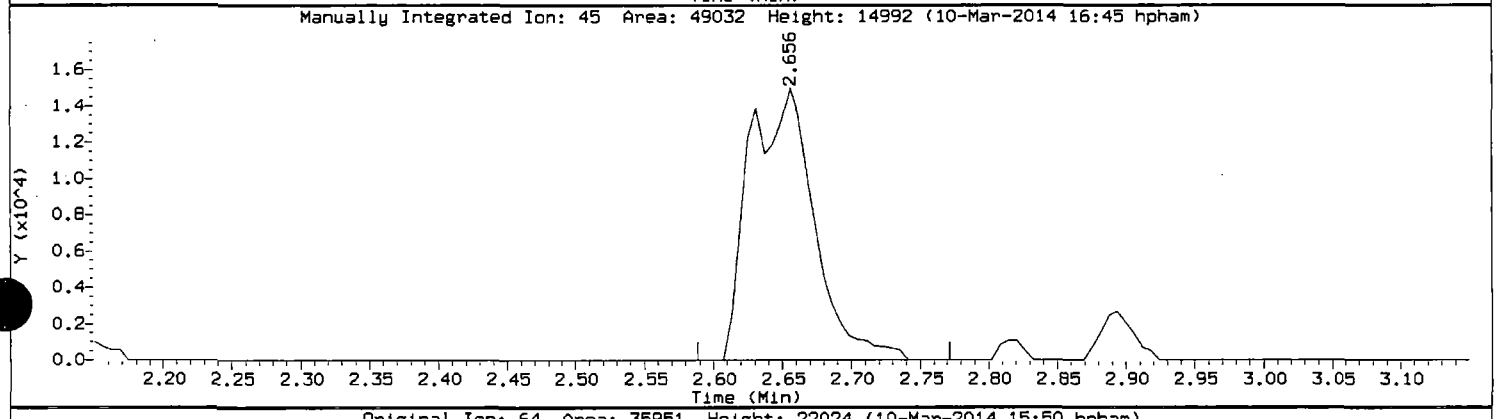


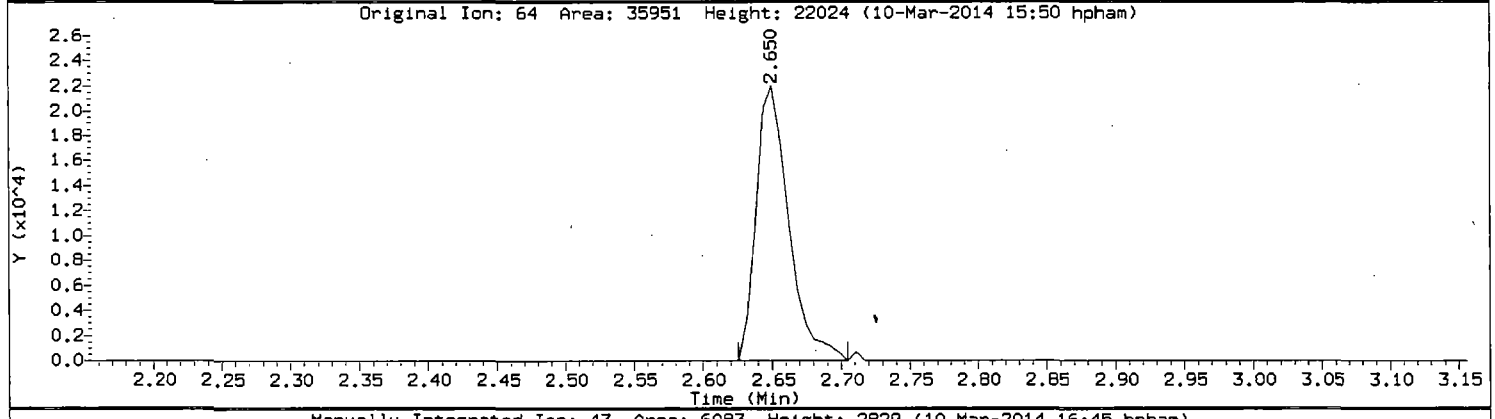


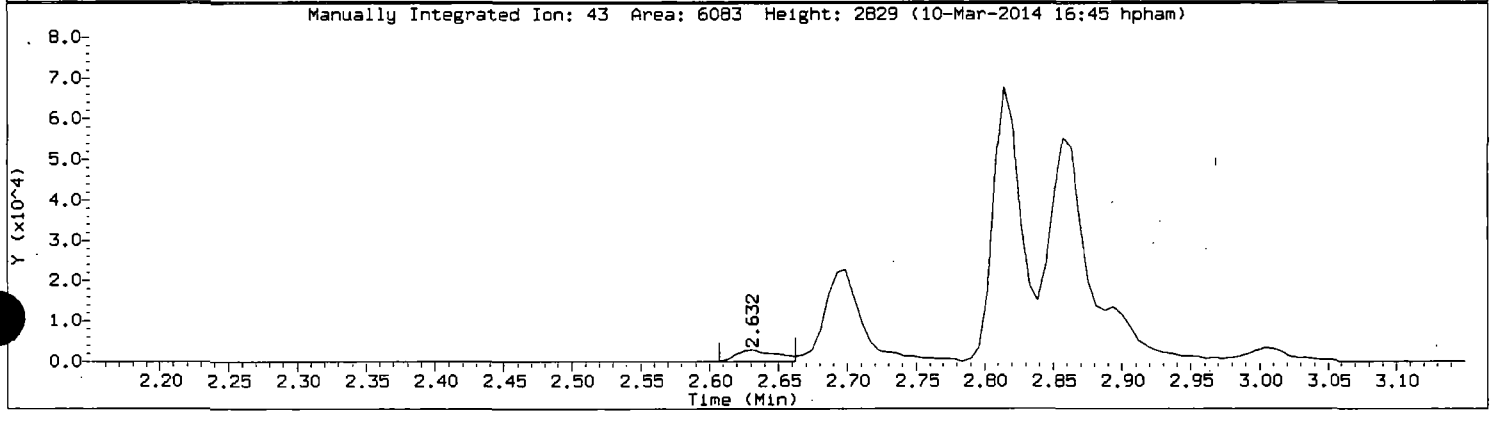
Data File: \\192.168.10.12\chem\10msv7.i\031014A.b/031014006.D
Injection Date: 10-MAR-2014 12:13
Instrument: 10msv7.i
Lab Sample ID: 10 ICAL 10098-65

Compound: Isopropanol
CAS Number: 67-63-0









Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014007.D
Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014007.D
Lab Smp Id: 20 ICAL 10098-65
Inj Date : 10-MAR-2014 12:32
Operator : HBP Inst ID: 10msv7.i
Smp Info : 20 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	85255	20.0000	21.5
2	Chloromethane	50	1.241	1.247	(0.295)	88819	20.0000	20.2(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	101087	20.0000	20.8
4	Bromomethane	94	1.479	1.479	(0.352)	40847	20.0000	20.2
5	Chloroethane	64	1.570	1.570	(0.374)	44093	20.0000	21.5
6	Trichlorofluoromethane	101	1.674	1.668	(0.398)	120301	20.0000	19.3
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	145380	20.0000	20.5
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.465)	56364	20.0000	21.0
9	1,1-Dichloroethene	96	2.095	2.088	(0.498)	74064	20.0000	20.6
10	Carbon Disulfide	76	2.101	2.095	(0.500)	263283	20.0000	19.3
11	Ethanol	45	2.113	2.137	(0.438)	22551	400.000	384
12	Trichlorotrifluoroethane	101	2.143	2.137	(0.510)	76630	20.0000	20.7
13	Iodomethane	142	2.211	2.210	(0.526)	66339	20.0000	17.7
14	Acrolein	56	2.406	2.412	(0.572)	89522	200.000	194
15	Allyl Chloride	41	2.534	2.533	(0.603)	105361	20.0000	20.2
16	Methylene Chloride	84	2.637	2.637	(0.627)	82651	20.0000	20.4
17	Isopropanol	45	2.631	2.649	(0.546)	75489	200.000	177
* 18	Acetone d6	46	2.649	2.655	(1.000)	142834	200.000	
19	Acetone	58	2.698	2.698	(1.018)	28437	100.000	99.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	82181	20.0000	20.6
	21 Hexane	86	2.863	2.863	(1.081)	50264	50.0000	48.2
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.688)	201663	20.0000	20.8(Q)
	23 tert-Butyl Alcohol	59	3.003	3.021	(0.623)	92526	200.000	186
	24 Acetonitrile	41	3.064	3.070	(0.729)	77221	200.000	216
	25 Isopropyl Ether	45	3.204	3.210	(0.762)	237534	20.0000	20.6
	26 Acrylonitrile	53	3.247	3.247	(0.772)	111872	200.000	202
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	138687	20.0000	21.1
	28 Ethyl-tert-butyl ether	59	3.460	3.466	(0.823)	216895	20.0000	20.2
	29 Vinyl Acetate	43	3.460	3.466	(0.823)	149315	20.0000	20.4
	30 cis-1,2-Dichloroethene	96	3.631	3.637	(0.864)	89241	20.0000	20.9
	31 2,2-Dichloropropane	77	3.698	3.704	(0.880)	113855	20.0000	20.8
	32 Cyclohexane	56	3.753	3.759	(0.893)	680335	100.000	103
	33 Bromochloromethane	130	3.759	3.759	(0.894)	51918	20.0000	20.7
	34 Chloroform	83	3.814	3.814	(0.907)	139077	20.0000	20.9
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	102238	20.0000	21.0
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	97954	200.000	205
	37 1,1,1-Trichloroethane	97	3.924	3.930	(0.933)	119418	20.0000	20.4
	38 2-Butanone	43	3.997	4.003	(0.951)	151894	100.000	104
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	112211	20.0000	20.3
	40 Benzene	78	4.143	4.149	(0.985)	335204	20.0000	20.4
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	954499	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	214152	20.0000	19.8(Q)
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	379946	100.000	103
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	88483	20.0000	20.6
	45 Isobutanol	43	4.289	4.301	(0.890)	74469	400.000	371
	46 Tert-Amyl Alcohol	59	4.338	4.350	(0.900)	79761	200.000	191
	47 Trichloroethene	130	4.460	4.466	(0.996)	96191	20.0000	20.7(Q)
*	48 1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1456906	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	168426	20.0000	19.7
	50 Dibromomethane	174	4.667	4.667	(1.042)	53945	20.0000	20.2
	51 1,2-Dichloropropane	63	4.710	4.716	(1.052)	79451	20.0000	20.1
	52 Bromodichloromethane	83	4.747	4.746	(1.060)	102044	20.0000	19.7
*	53 1,4 dioxane d8	96	4.820	4.832	(1.000)	169949	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.844	(1.004)	21618	400.000	378
	55 2-Chloroethyl Vinyl Ether	63	4.997	5.002	(1.116)	15679	50.0000	51.0
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	127510	20.0000	19.9
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1688989	100.000	99.6
	58 Toluene	92	5.125	5.131	(0.886)	212922	20.0000	19.5
	59 4-Methyl-2-Pentanone	43	5.283	5.289	(0.914)	332911	100.000	103
	60 Tetrachloroethene	166	5.289	5.295	(0.915)	107564	20.0000	20.7
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	112934	20.0000	20.1
	62 1,1,2-Trichloroethane	97	5.368	5.374	(0.928)	66762	20.0000	20.0
	63 Dibromochloromethane	129	5.448	5.454	(0.942)	78111	20.0000	20.2
	64 1,3-Dichloropropane	76	5.484	5.490	(0.948)	113704	20.0000	19.9
	65 1,2-Dibromoethane	107	5.551	5.557	(0.960)	71223	20.0000	20.3
	66 2-Hexanone	43	5.643	5.649	(0.976)	247668	100.000	98.0
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1443378	100.000	
	68 Chlorobenzene	112	5.789	5.795	(1.001)	239160	20.0000	19.6
	69 Ethylbenzene	91	5.795	5.801	(1.002)	406352	20.0000	19.5
	70 1,1,1,2-Tetrachloroethane	131	5.820	5.819	(1.006)	84801	20.0000	20.0
	71 M&P-Xylene	106	5.862	5.868	(1.014)	316508	40.0000	39.0
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	150218	20.0000	19.8
	73 Styrene	104	6.100	6.100	(1.055)	259706	20.0000	20.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
74	Bromoform	173	6.124	6.124	(1.059)	61215	20.0000	19.9
75	Isopropylbenzene (Cumene)	105	6.228	6.234	(1.077)	400552	20.0000	19.7
$ 76	4-Bromofluorobenzene (S)	95	6.387	6.386	(0.907)	702050	100.000	99.5
77	cis-1,4-Dichloro-2-Butene	53	6.411	6.417	(0.911)	26917	20.0000	19.7
78	Bromobenzene	156	6.447	6.453	(0.916)	108995	20.0000	20.2
79	n-Propylbenzene	91	6.447	6.453	(0.916)	488123	20.0000	19.8
80	1,1,2,2-Tetrachloroethane	83	6.484	6.490	(0.921)	91549	20.0000	20.4
81	2-Chlorotoluene	91	6.545	6.551	(0.930)	309123	20.0000	20.1
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.932)	349980	20.0000	20.0
83	1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	26169	20.0000	20.8(Q)
84	trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.936)	59590	50.0000	51.2
85	4-Chlorotoluene	91	6.636	6.642	(0.943)	292151	20.0000	19.8
86	tert-Butylbenzene	119	6.746	6.746	(0.958)	300907	20.0000	20.5
87	1,2,4-Trimethylbenzene	105	6.783	6.789	(0.964)	355073	20.0000	19.9
88	sec-Butylbenzene	105	6.850	6.856	(0.973)	447860	20.0000	20.3
89	p-Isopropyltoluene	119	6.935	6.941	(0.985)	393094	20.0000	20.2
90	1,3-Dichlorobenzene	146	6.996	6.996	(0.994)	213724	20.0000	19.8
* 91	1,4-Dichlorobenzene-d4	152	7.039	7.045	(1.000)	879584	100.000	
92	1,4-Dichlorobenzene	146	7.051	7.057	(1.002)	221139	20.0000	19.6
93	1,2,3 Trimethylbenzene	105	7.057	7.063	(1.679)	359114	20.0000	19.5
94	n-Butylbenzene	91	7.210	7.215	(1.024)	365981	20.0000	20.2
95	1,2-Dichlorobenzene	146	7.331	7.331	(1.042)	197205	20.0000	19.4
96	1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.112)	52774	50.0000	53.3
97	Hexachlorobutadiene	225	8.185	8.191	(1.163)	81632	20.0000	20.8
98	1,2,4-Trichlorobenzene	180	8.203	8.209	(1.165)	132319	20.0000	20.0
99	Naphthalene	128	8.386	8.392	(1.191)	256468	20.0000	20.0
100	1,2,3-Trichlorobenzene	180	8.496	8.502	(1.207)	121052	20.0000	20.3
101	2-Methylnaphthalene	142	9.008	9.014	(1.280)	48980	10.0000	9.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014007.D
Lab Smp Id: 20 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	142834	5.17
41 Pentafluorobenzen	944656	472328	1889312	954499	1.04
48 1,4 Difluorobenze	1423443	711722	2846886	1456906	2.35
53 1,4 dioxane d8	156016	78008	312032	169949	8.93
67 Chlorobenzene-d5	1400934	700467	2801868	1443378	3.03
91 1,4-Dichlorobenze	853329	426665	1706658	879584	3.08

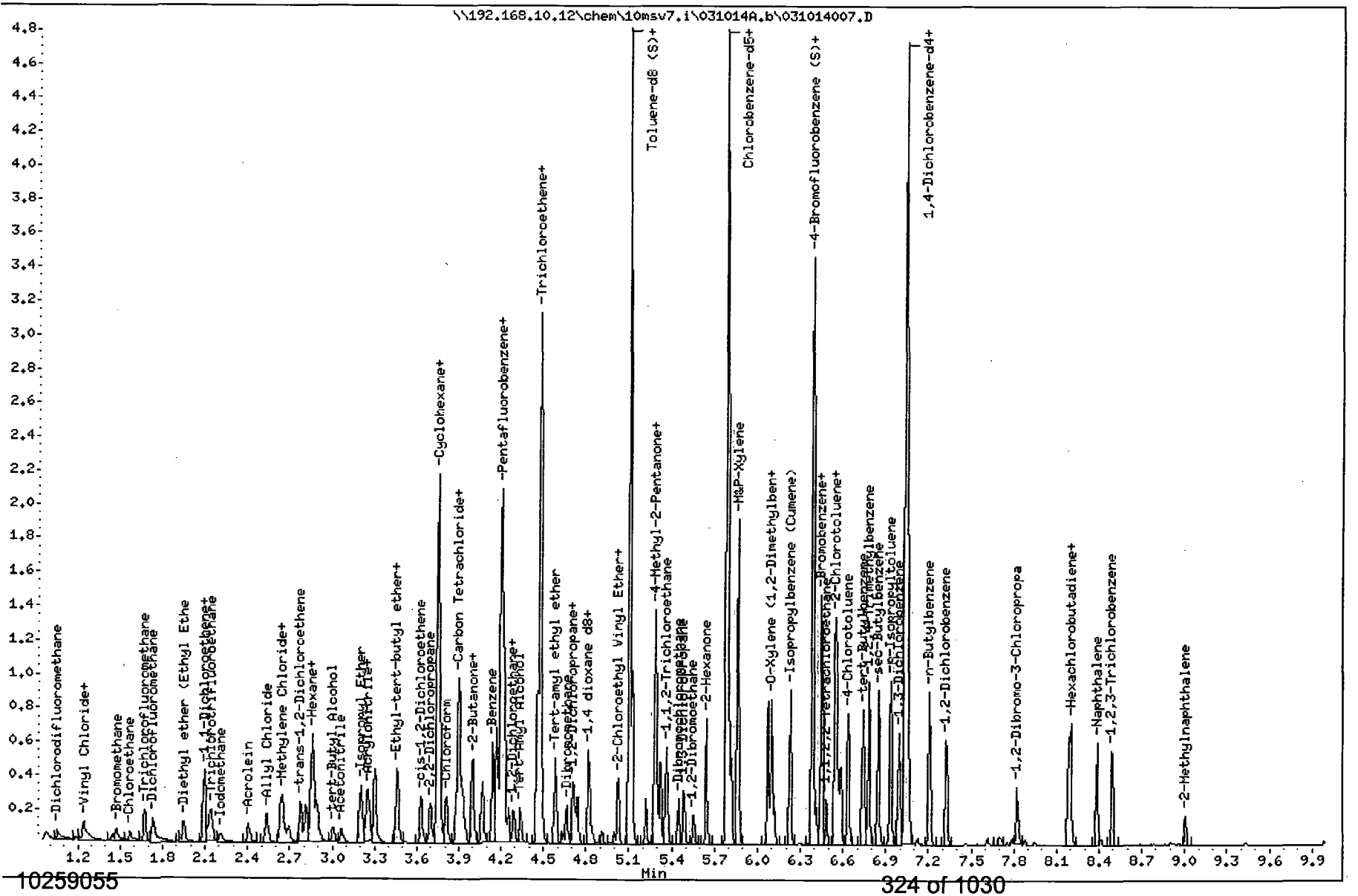
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.82	-0.13
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.04	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014007.D
Date : 10-MAR-2014 12:32
Client ID:
Sample Info: 20 ICAL 10098-65

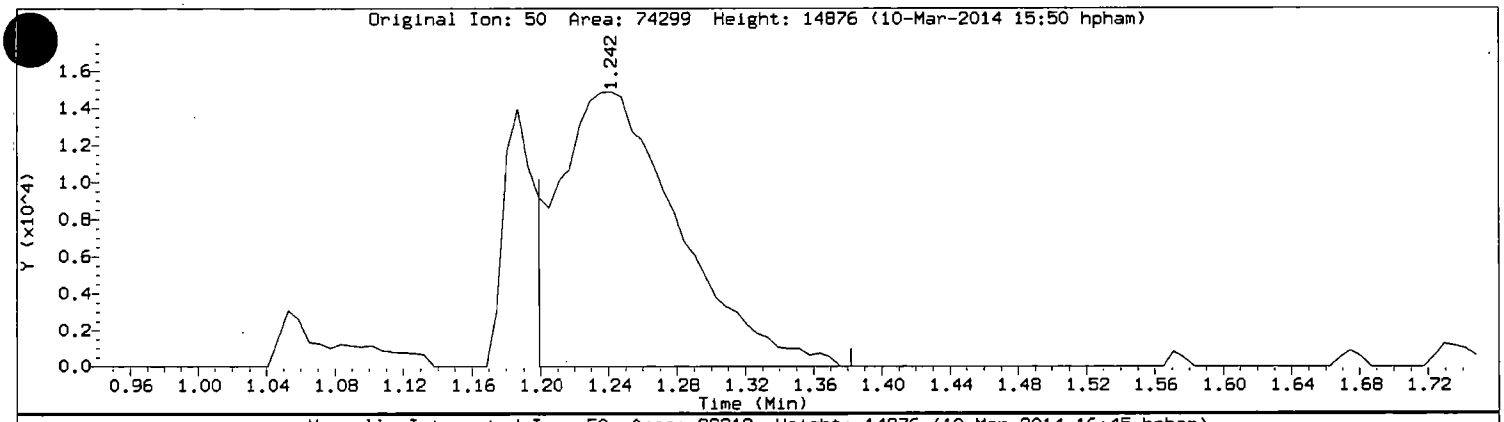
Instrument: 10msv7.i
Operator: HBP
Column diameter: 0.18

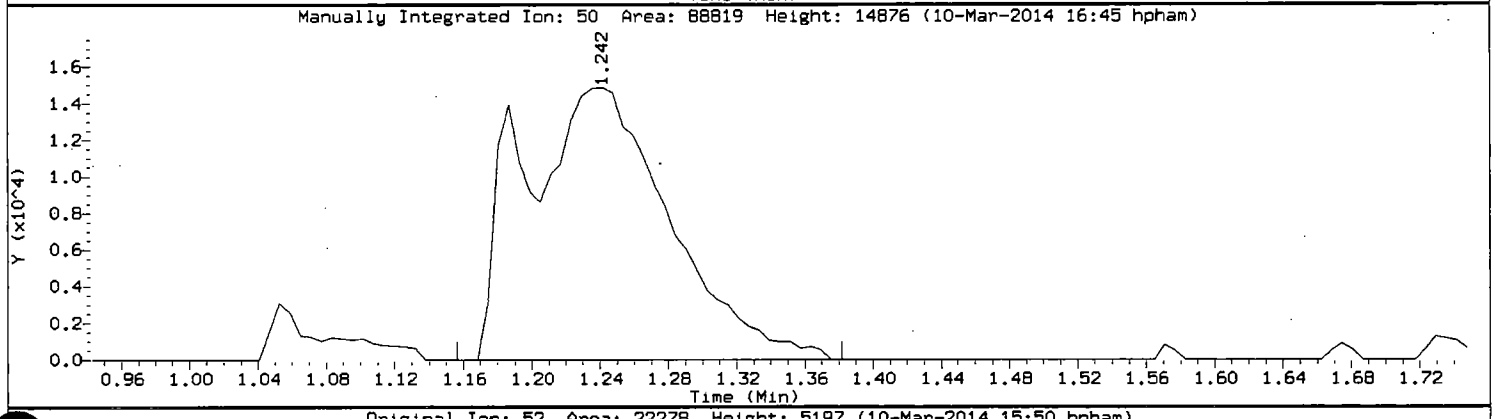
Column phase: Rtx-VMS

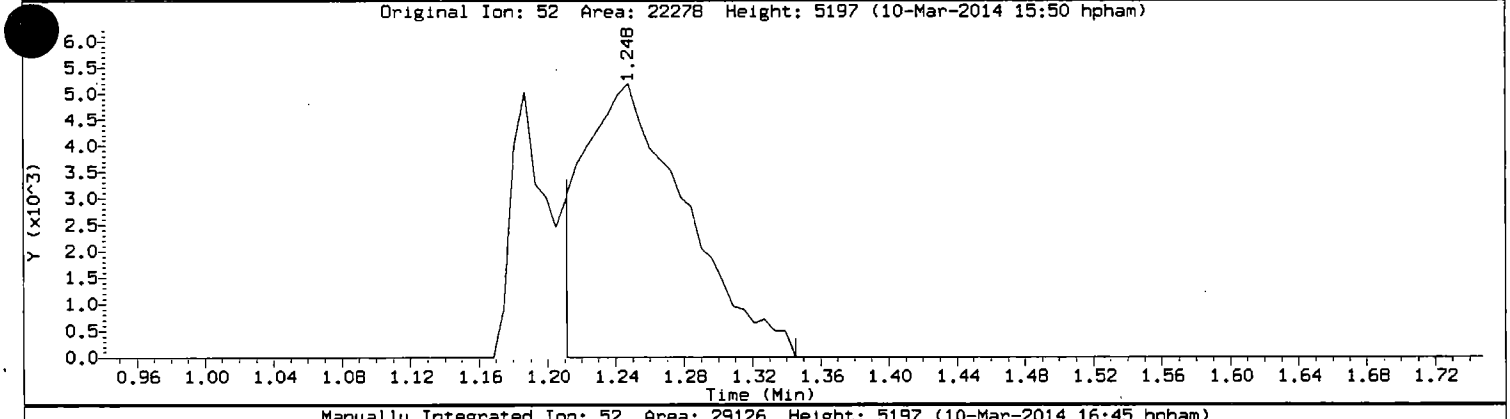


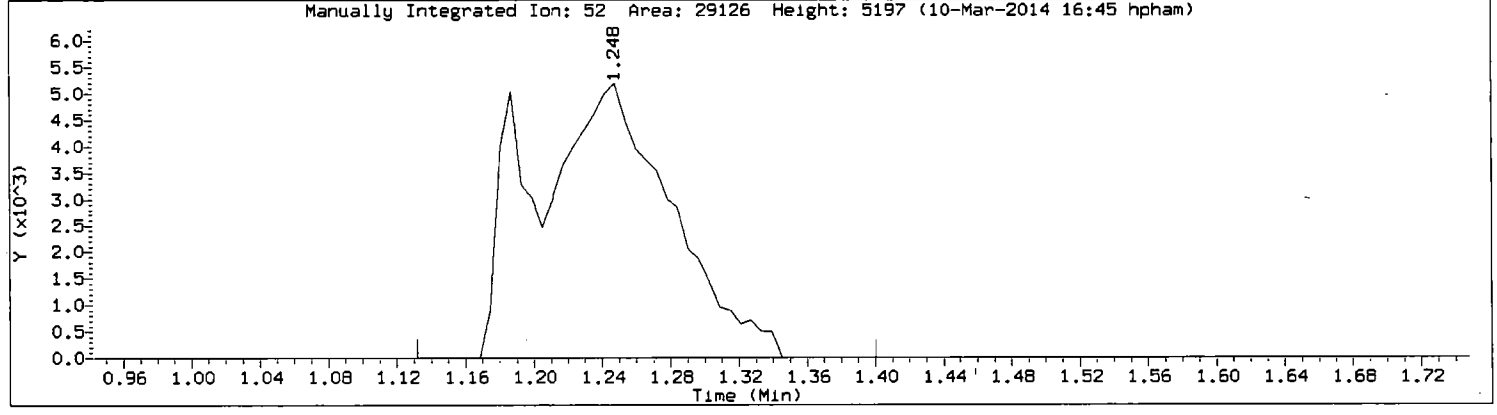
Instrument: 10msv7.i
Lab Sample ID: 20 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3









Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014008.D
Lab Smp Id: 50 ICAL 10098-65
Inj Date : 10-MAR-2014 12:52
Operator : HBP Inst ID: 10msv7.i
Smp Info : 50 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	208205	50.0000	53.1
2	Chloromethane	50	1.241	1.247	(0.295)	234050	50.0000	53.9(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	247675	50.0000	51.6
4	Bromomethane	94	1.479	1.479	(0.352)	94578	50.0000	47.8
5	Chloroethane	64	1.570	1.570	(0.374)	107642	50.0000	53.1
6	Trichlorofluoromethane	101	1.674	1.668	(0.398)	295414	50.0000	50.8
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	362368	50.0000	51.7
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.465)	140670	50.0000	53.1
9	1,1-Dichloroethene	96	2.095	2.088	(0.498)	185593	50.0000	52.2
10	Carbon Disulfide	76	2.101	2.095	(0.500)	651768	50.0000	48.2
11	Ethanol	45	2.113	2.137	(0.438)	55244	1000.00	1020
12	Trichlorotrifluoroethane	101	2.143	2.137	(0.510)	190330	50.0000	51.9
13	Iodomethane	142	2.211	2.210	(0.526)	209320	50.0000	47.0
14	Acrolein	56	2.406	2.412	(0.572)	239326	500.000	524
15	Allyl Chloride	41	2.540	2.533	(0.604)	266902	50.0000	51.8
16	Methylene Chloride	84	2.637	2.637	(0.627)	202399	50.0000	51.0
17	Isopropanol	45	2.631	2.649	(0.545)	144283	500.000	472
* 18	Acetone d6	46	2.649	2.655	(1.000)	135813	200.000	
19	Acetone	58	2.698	2.698	(1.018)	66125	250.000	251

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	206478	50.0000	52.2
	21 Hexane	86	2.863	2.863	(1.081)	131532	125.000	133
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.688)	507693	50.0000	53.0(Q)
	23 tert-Butyl Alcohol	59	3.009	3.021	(0.624)	218607	500.000	479
	24 Acetonitrile	41	3.064	3.070	(0.729)	176262	500.000	497
	25 Isopropyl Ether	45	3.204	3.210	(0.762)	602053	50.0000	52.7
	26 Acrylonitrile	53	3.247	3.247	(0.772)	284581	500.000	519
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	346261	50.0000	53.2
	28 Ethyl-tert-butyl ether	59	3.460	3.466	(0.823)	548653	50.0000	51.8
	29 Vinyl Acetate	43	3.460	3.466	(0.823)	378165	50.0000	52.3
	30 cis-1,2-Dichloroethene	96	3.631	3.637	(0.864)	218945	50.0000	51.9
	31 2,2-Dichloropropane	77	3.698	3.704	(0.880)	282047	50.0000	52.0
	32 Cyclohexane	56	3.753	3.759	(0.893)	1684547	250.000	257
	33 Bromochloromethane	130	3.759	3.759	(0.894)	129257	50.0000	52.1
	34 Chloroform	83	3.814	3.814	(0.907)	342339	50.0000	51.9
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	255246	50.0000	53.1
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	237070	500.000	523
	37 1,1,1-Trichloroethane	97	3.930	3.930	(0.935)	299120	50.0000	51.8
	38 2-Butanone	43	3.997	4.003	(0.951)	350173	250.000	241
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	279230	50.0000	51.1
	40 Benzene	78	4.143	4.149	(0.985)	835177	50.0000	51.3
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	944656	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	536146	50.0000	50.0
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	370524	100.000	102
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	219106	50.0000	51.6
	45 Isobutanol	43	4.295	4.301	(0.890)	181432	1000.00	984
	46 Tert-Amyl Alcohol	59	4.344	4.350	(0.900)	190471	500.000	498
	47 Trichloroethene	130	4.460	4.466	(0.996)	239363	50.0000	52.8
*	48 1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1423443	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	430510	50.0000	51.6
	50 Dibromomethane	174	4.667	4.667	(1.042)	133891	50.0000	51.2
	51 1,2-Dichloropropane	63	4.710	4.716	(1.052)	202598	50.0000	52.5
	52 Bromodichloromethane	83	4.747	4.746	(1.060)	257310	50.0000	51.0
*	53 1,4 dioxane d8	96	4.826	4.832	(1.000)	156016	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.844	(1.003)	51843	1000.00	987
	55 2-Chloroethyl Vinyl Ether	63	5.003	5.002	(1.117)	40920	125.000	127
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	322400	50.0000	51.6
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1669369	100.000	101
	58 Toluene	92	5.131	5.131	(0.887)	527821	50.0000	49.8
	59 4-Methyl-2-Pentanone	43	5.283	5.289	(0.914)	813995	250.000	259
	60 Tetrachloroethene	166	5.289	5.295	(0.915)	267021	50.0000	52.9
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	288502	50.0000	53.0
	62 1,1,2-Trichloroethane	97	5.368	5.374	(0.928)	168508	50.0000	52.0
	63 Dibromochloromethane	129	5.454	5.454	(0.943)	199056	50.0000	52.9
	64 1,3-Dichloropropane	76	5.490	5.490	(0.949)	286169	50.0000	51.6
	65 1,2-Dibromoethane	107	5.557	5.557	(0.961)	173943	50.0000	51.1
	66 2-Hexanone	43	5.643	5.649	(0.976)	592914	250.000	242
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1400934	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.002)	586840	50.0000	49.6
	69 Ethylbenzene	91	5.801	5.801	(1.003)	994615	50.0000	49.2
	70 1,1,1,2-Tetrachloroethane	131	5.820	5.819	(1.006)	215918	50.0000	52.4
	71 M&P-Xylene	106	5.868	5.868	(1.015)	800546	100.000	102
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	378724	50.0000	51.3
	73 Styrene	104	6.100	6.100	(1.055)	658780	50.0000	52.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
74	Bromoform	173	6.124	6.124	(1.059)	153381	50.0000	51.4
75	Isopropylbenzene (Cumene)	105	6.234	6.234	(1.078)	1006794	50.0000	51.0
$ 76	4-Bromofluorobenzene (S)	95	6.387	6.386	(0.907)	693420	100.000	101
77	cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	65726	50.0000	49.7
78	Bromobenzene	156	6.447	6.453	(0.915)	275590	50.0000	52.6
79	n-Propylbenzene	91	6.454	6.453	(0.916)	1228307	50.0000	51.2
80	1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	224153	50.0000	51.4
81	2-Chlorotoluene	91	6.545	6.551	(0.929)	768690	50.0000	51.4
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	874598	50.0000	51.6
83	1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	62950	50.0000	51.6
84	trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.935)	144241	125.000	128
85	4-Chlorotoluene	91	6.643	6.642	(0.943)	734530	50.0000	51.4
86	tert-Butylbenzene	119	6.746	6.746	(0.958)	740204	50.0000	51.6
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	879452	50.0000	50.9
88	sec-Butylbenzene	105	6.850	6.856	(0.972)	1105547	50.0000	51.6
89	p-Isopropyltoluene	119	6.935	6.941	(0.984)	988247	50.0000	52.4
90	1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	524138	50.0000	50.0
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	853329	100.000	
92	1,4-Dichlorobenzene	146	7.051	7.057	(1.001)	541011	50.0000	49.5
93	1,2,3 Trimethylbenzene	105	7.057	7.063	(1.679)	900704	50.0000	49.5
94	n-Butylbenzene	91	7.210	7.215	(1.023)	910820	50.0000	51.8
95	1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	496956	50.0000	50.5
96	1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.111)	126003	125.000	131
97	Hexachlorobutadiene	225	8.191	8.191	(1.163)	193668	50.0000	50.8
98	1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	321867	50.0000	50.2
99	Naphthalene	128	8.392	8.392	(1.191)	635588	50.0000	51.0
100	1,2,3-Trichlorobenzene	180	8.496	8.502	(1.206)	292614	50.0000	50.5
101	2-Methylnaphthalene	142	9.008	9.014	(1.279)	119786	25.0000	24.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014008.D
Lab Smp Id: 50 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	135813	0.00
41 Pentafluorobenzen	944656	472328	1889312	944656	0.00
48 1,4 Difluorobenze	1423443	711722	2846886	1423443	0.00
53 1,4 dioxane d8	156016	78008	312032	156016	0.00
67 Chlorobenzene-d5	1400934	700467	2801868	1400934	0.00
91 1,4-Dichlorobenze	853329	426665	1706658	853329	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

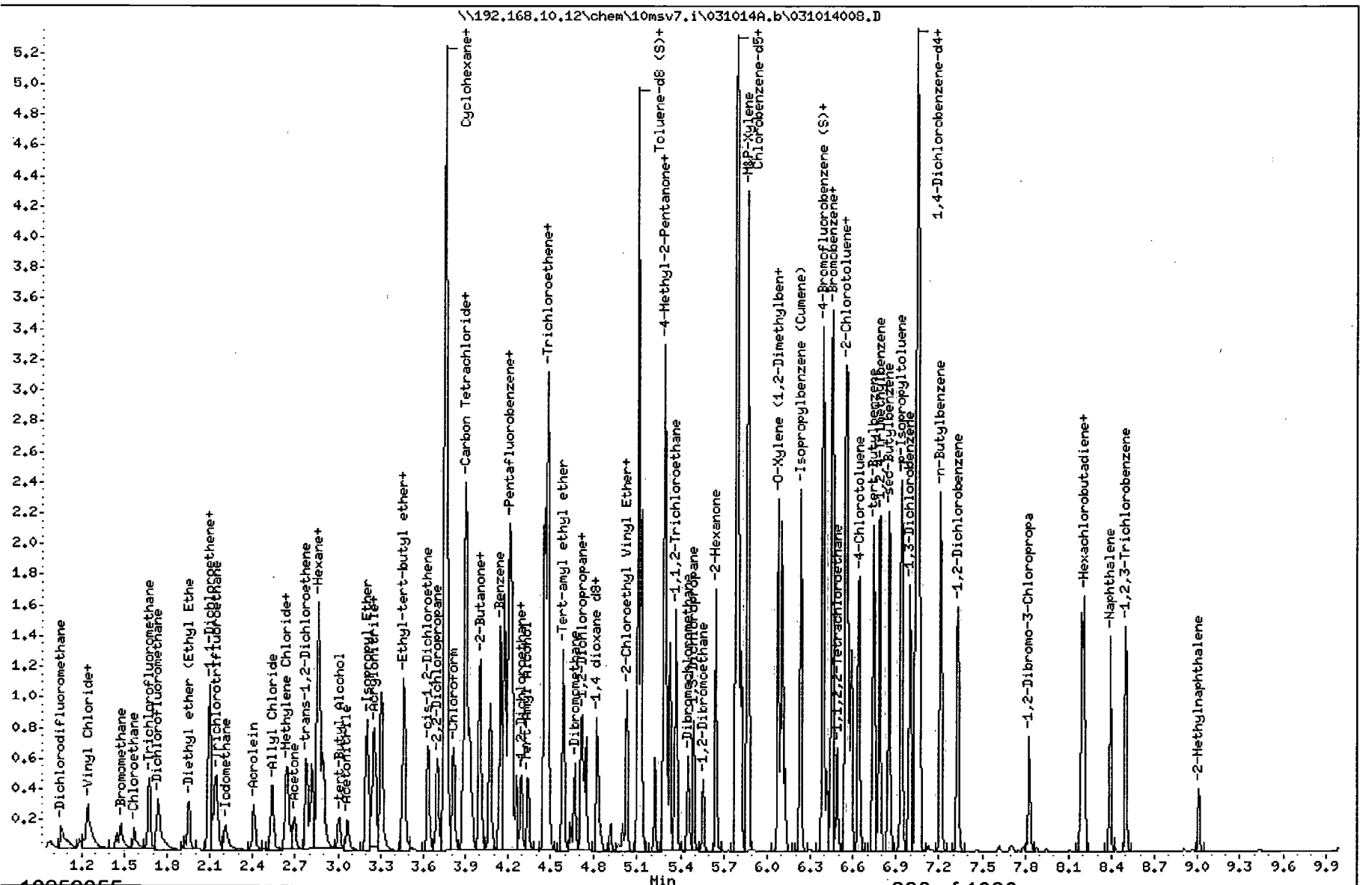
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014008.D
Date : 10-MAR-2014 12:52
Client ID:
Sample Info: 50 ICAL 10098-65

Instrument: 10msv7.i

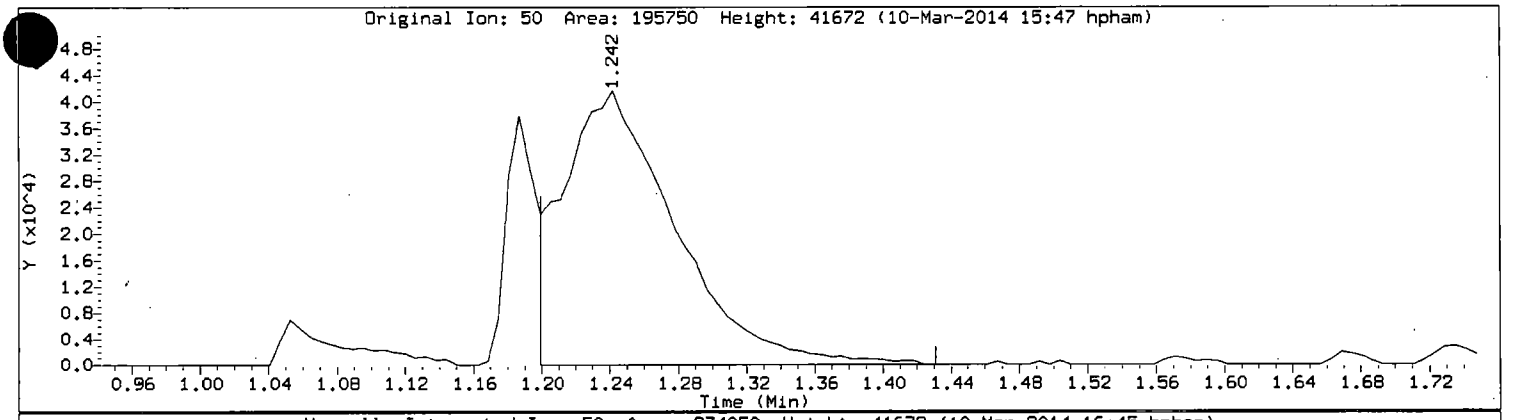
Operator: HBP
Column diameter: 0.18

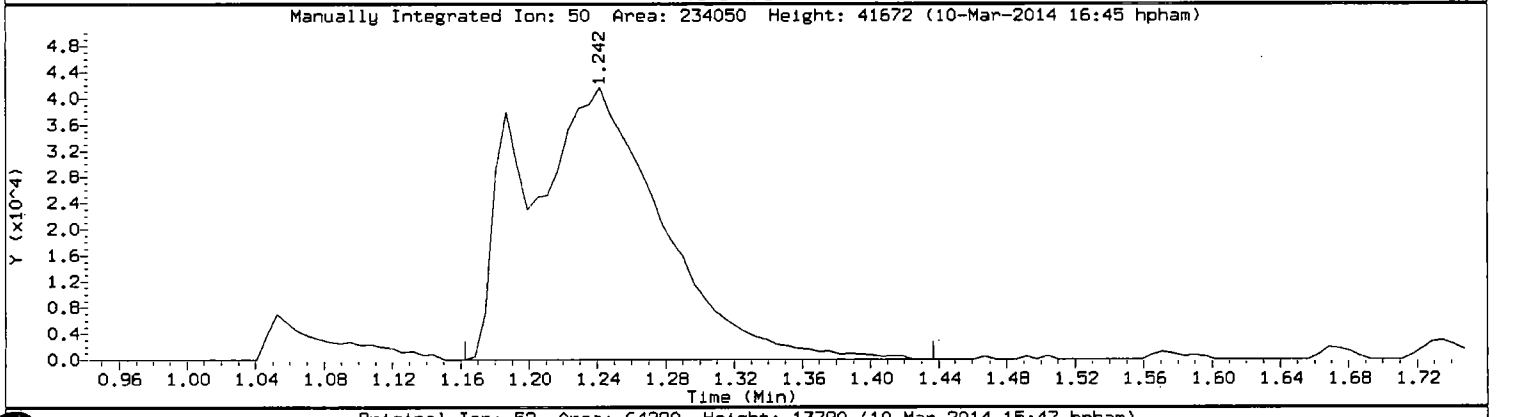
Column phase: Rtx-VMS

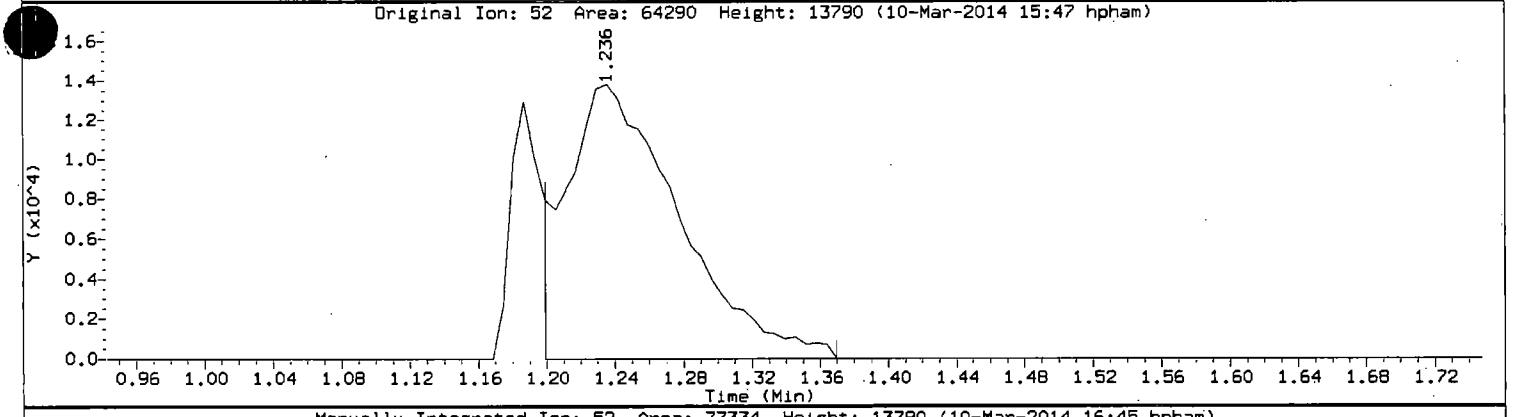


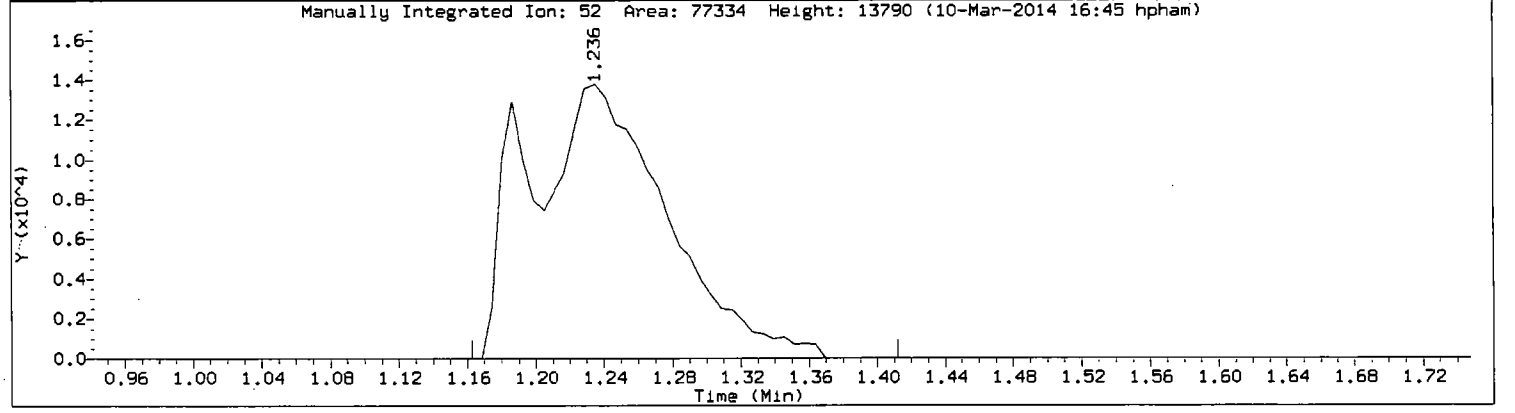
Instrument: 10msv7.i
Lab Sample ID: 50 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3









Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014009.D
Lab Smp Id: 100 ICAL 10098-65
Inj Date : 10-MAR-2014 13:11
Operator : HBP Inst ID: 10msv7.i
Smp Info : 100 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	405804	100.000	102
2	Chloromethane	50	1.247	1.247	(0.297)	446374	100.000	101(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	480586	100.000	98.7
4	Bromomethane	94	1.479	1.479	(0.352)	208878	100.000	101
5	Chloroethane	64	1.570	1.570	(0.374)	196180	100.000	95.4
6	Trichlorofluoromethane	101	1.674	1.668	(0.398)	531085	100.000	99.8
7	Dichlorofluoromethane	67	1.735	1.729	(0.413)	711296	100.000	99.9
8	Diethyl ether (Ethyl Ether)	59	1.954	1.960	(0.465)	282981	100.000	105
9	1,1-Dichloroethene	96	2.095	2.088	(0.498)	358758	100.000	99.4
10	Carbon Disulfide	76	2.101	2.095	(0.500)	1261476	100.000	92.0
11	Ethanol	45	2.119	2.137	(0.439)	119735	2000.00	2300
12	Trichlorotrifluoroethane	101	2.137	2.137	(0.508)	380696	100.000	102
13	Iodomethane	142	2.210	2.210	(0.526)	508901	100.000	102
14	Acrolein	56	2.412	2.412	(0.574)	516609	1000.00	1120
15	Allyl Chloride	41	2.540	2.533	(0.604)	520324	100.000	99.5
16	Methylene Chloride	84	2.637	2.637	(0.627)	401681	100.000	99.3
17	Isopropanol	45	2.637	2.649	(0.546)	287385	1000.00	1070
* 18	Acetone d6	46	2.649	2.655	(1.000)	145016	200.000	
19	Acetone	58	2.698	2.698	(1.018)	136728	500.000	500

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	401597	100.000	100
	21 Hexane	86	2.863	2.863	(1.081)	269655	250.000	255
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.688)	1031332	100.000	106(Q)
	23 tert-Butyl Alcohol	59	3.009	3.021	(0.624)	469076	1000.00	1060
	24 Acetonitrile	41	3.070	3.070	(0.730)	373325	1000.00	1040
	25 Isopropyl Ether	45	3.204	3.210	(0.762)	1209183	100.000	104
	26 Acrylonitrile	53	3.247	3.247	(0.772)	551384	1000.00	990
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	678501	100.000	103
	28 Ethyl-tert-butyl ether	59	3.460	3.466	(0.823)	1115117	100.000	104
	29 Vinyl Acetate	43	3.466	3.466	(0.825)	779055	100.000	106
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	436788	100.000	102
	31 2,2-Dichloropropane	77	3.698	3.704	(0.880)	548076	100.000	99.6
	32 Cyclohexane	56	3.753	3.759	(0.893)	3393455	500.000	510
	33 Bromochloromethane	130	3.759	3.759	(0.894)	261204	100.000	104
	34 Chloroform	83	3.814	3.814	(0.907)	681613	100.000	102
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	497150	100.000	102
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	492425	1000.00	1020
	37 1,1,1-Trichloroethane	97	3.930	3.930	(0.935)	579579	100.000	98.8
	38 2-Butanone	43	3.997	4.003	(0.951)	732746	500.000	497
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	549229	100.000	99.1
	40 Benzene	78	4.143	4.149	(0.986)	1644046	100.000	99.4
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	958753	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	1099102	100.000	101
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	366919	100.000	99.1
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	435304	100.000	101
	45 Isobutanol	43	4.295	4.301	(0.890)	397855	2000.00	2230
	46 Tert-Amyl Alcohol	59	4.344	4.350	(0.900)	411487	1000.00	1110
	47 Trichloroethene	130	4.460	4.466	(0.996)	464276	100.000	99.8
*	48 1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1460730	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	879949	100.000	103
	50 Dibromomethane	174	4.667	4.667	(1.042)	272344	100.000	101
	51 1,2-Dichloropropane	63	4.716	4.716	(1.053)	402992	100.000	102
	52 Bromodichloromethane	83	4.746	4.746	(1.060)	520488	100.000	100
*	53 1,4 dioxane d8	96	4.826	4.832	(1.000)	150784	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.844	(1.003)	116273	2000.00	2290
	55 2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.117)	86062	250.000	248
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	661110	100.000	103
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1730654	100.000	101
	58 Toluene	92	5.131	5.131	(0.887)	1041387	100.000	94.3
	59 4-Methyl-2-Pentanone	43	5.283	5.289	(0.914)	1700137	500.000	519
	60 Tetrachloroethene	166	5.295	5.295	(0.916)	520765	100.000	99.0
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	591395	100.000	104
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.929)	344507	100.000	102
	63 Dibromochloromethane	129	5.454	5.454	(0.943)	407174	100.000	104
	64 1,3-Dichloropropane	76	5.490	5.490	(0.949)	588225	100.000	102
	65 1,2-Dibromoethane	107	5.557	5.557	(0.961)	362274	100.000	102
	66 2-Hexanone	43	5.643	5.649	(0.976)	1245324	500.000	487
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1459391	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.002)	1194834	100.000	96.9
	69 Ethylbenzene	91	5.801	5.801	(1.003)	2025183	100.000	96.2
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.006)	440446	100.000	103
	71 M&P-Xylene	106	5.868	5.868	(1.015)	1603357	200.000	196
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.051)	764761	100.000	99.5
	73 Styrene	104	6.100	6.100	(1.055)	1363058	100.000	104

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 Bromoform	173	6.124	6.124	(1.059)	320967	100.000	103
	75 Isopropylbenzene (Cumene)	105	6.234	6.234	(1.078)	2019730	100.000	98.2
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	723982	100.000	100
	77 cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	138439	100.000	98.9
	78 Bromobenzene	156	6.453	6.453	(0.916)	559708	100.000	101
	79 n-Propylbenzene	91	6.453	6.453	(0.916)	2486659	100.000	98.0
	80 1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	474575	100.000	103
	81 2-Chlorotoluene	91	6.551	6.551	(0.930)	1564583	100.000	99.0
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	1768162	100.000	98.5
	83 1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	133166	100.000	103
	84 trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.935)	310112	250.000	260
	85 4-Chlorotoluene	91	6.642	6.642	(0.943)	1490449	100.000	98.6
	86 tert-Butylbenzene	119	6.746	6.746	(0.958)	1524071	100.000	98.8
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	1808215	100.000	99.0
	88 sec-Butylbenzene	105	6.856	6.856	(0.973)	2275889	100.000	100
	89 p-Isopropyltoluene	119	6.941	6.941	(0.985)	2030517	100.000	102
	90 1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	1082498	100.000	97.5
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	902746	100.000	
	92 1,4-Dichlorobenzene	146	7.051	7.057	(1.001)	1108808	100.000	95.9
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	1860303	100.000	101
	94 n-Butylbenzene	91	7.209	7.215	(1.023)	1862814	100.000	100
	95 1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	1027045	100.000	98.7
	96 1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.111)	266610	250.000	262
	97 Hexachlorobutadiene	225	8.191	8.191	(1.163)	403883	100.000	100
	98 1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	671673	100.000	98.9
	99 Naphthalene	128	8.392	8.392	(1.191)	1313053	100.000	99.6
	100 1,2,3-Trichlorobenzene	180	8.496	8.502	(1.206)	602169	100.000	98.3
	101 2-Methylnaphthalene	142	9.008	9.014	(1.279)	252339	50.0000	49.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014009.D
Lab Smp Id: 100 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	145016	6.78
41 Pentafluorobenzen	944656	472328	1889312	958753	1.49
48 1,4 Difluorobenze	1423443	711722	2846886	1460730	2.62
53 1,4 dioxane d8	156016	78008	312032	150784	-3.35
67 Chlorobenzene-d5	1400934	700467	2801868	1459391	4.17
91 1,4-Dichlorobenze	853329	426665	1706658	902746	5.79

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	-0.00
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	-0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

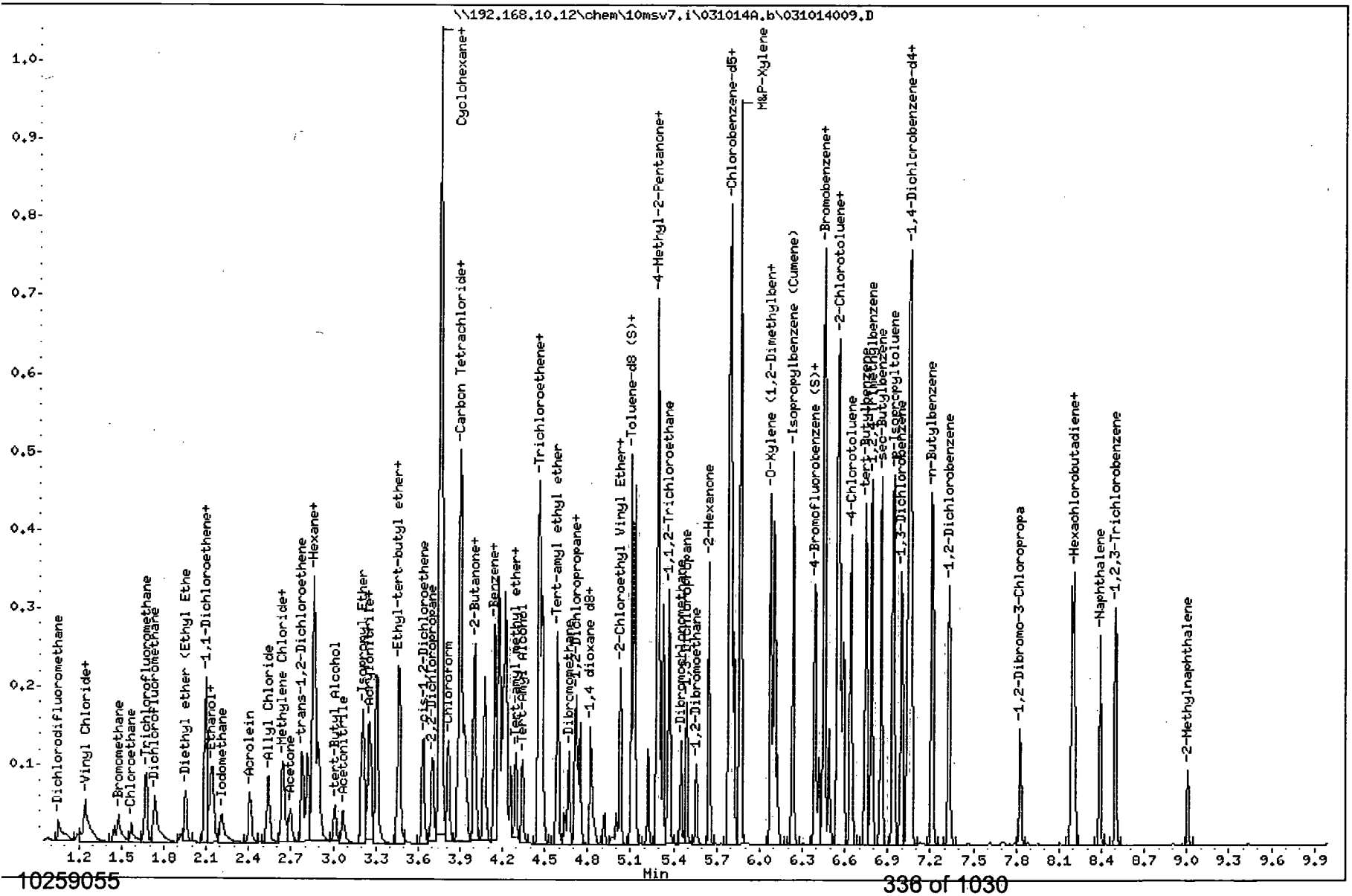
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014009.D
Date : 10-MAR-2014 13:11
Client ID:
Sample Info: 100 ICAL 10098-65

Instrument: 10msv7.i

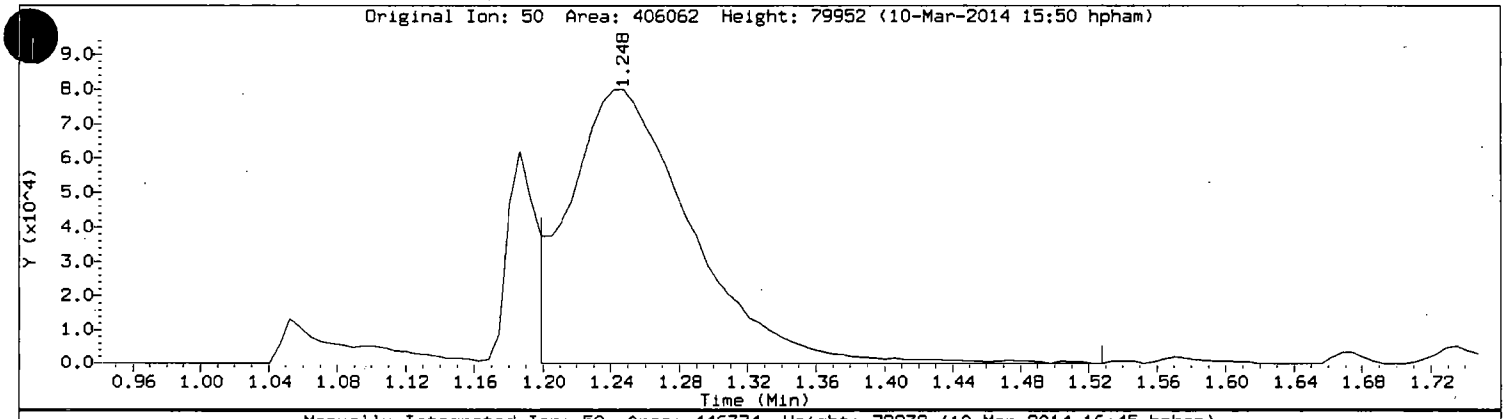
Operator: HBP
Column diameter: 0.18

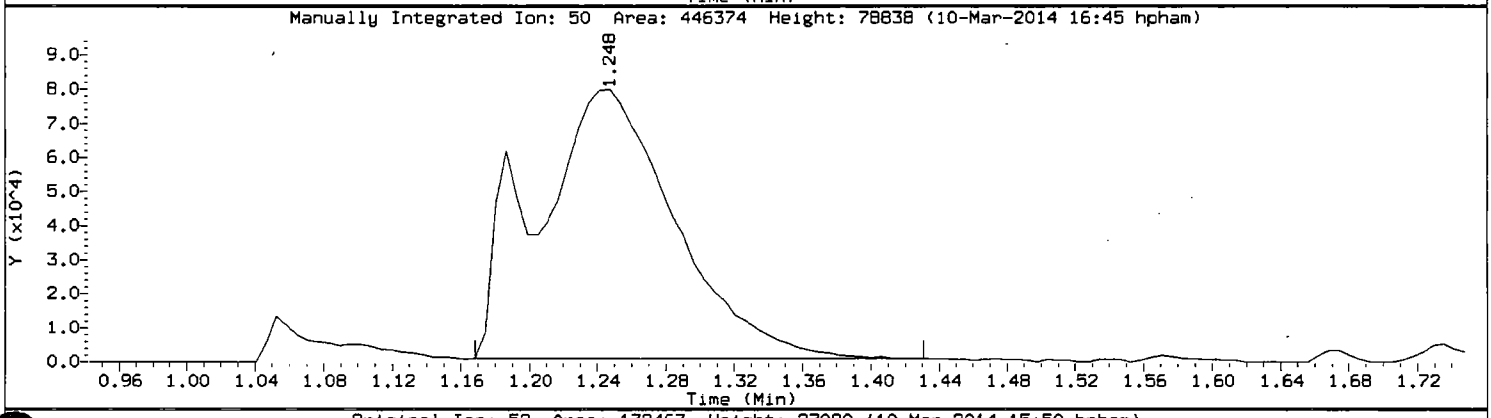
Column phase: Rtx-VMS

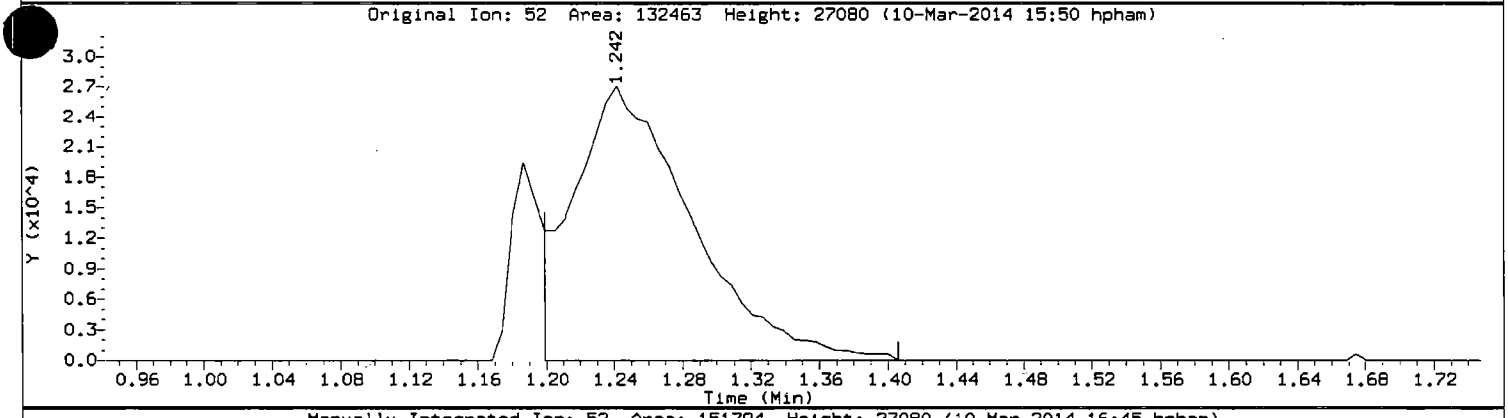


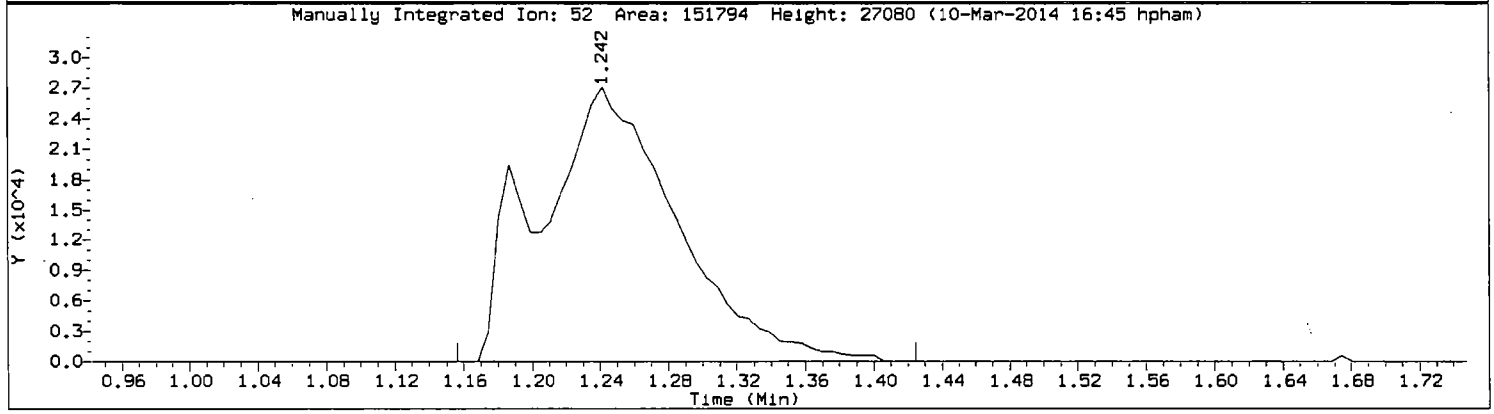
Instrument: 10msv7.i
Lab Sample ID: 100 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3









Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D
Lab Smp Id: 250 ICAL 10098-65
Inj Date : 10-MAR-2014 13:31
Operator : HBP Inst ID: 10msv7.i
Smp Info : 250 ICAL 10098-65
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 10-Mar-2014 16:45 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	1091664	250.000	275(A)
2	Chloromethane	50	1.247	1.247	(0.297)	1219255	250.000	277(AM)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	1320098	250.000	272(A)
4	Bromomethane	94	1.479	1.479	(0.352)	592668	250.000	250
5	Chloroethane	64	1.570	1.570	(0.374)	430938	250.000	210
6	Trichlorofluoromethane	101	1.668	1.668	(0.397)	773168	250.000	162
7	Dichlorofluoromethane	67	1.729	1.729	(0.411)	1865121	250.000	263(A)
8	Diethyl ether (Ethyl Ether)	59	1.960	1.960	(0.466)	709768	250.000	264(A)
9	1,1-Dichloroethene	96	2.088	2.088	(0.497)	972524	250.000	270(A)
10	Carbon Disulfide	76	2.095	2.095	(0.498)	3431109	250.000	251(A)
11	Ethanol	45	2.137	2.137	(0.442)	281275	5000.00	4990(H)
12	Trichlorotrifluoroethane	101	2.137	2.137	(0.508)	1025097	250.000	276(A)
13	Iodomethane	142	2.210	2.210	(0.526)	1548601	250.000	250
14	Acrolein	56	2.412	2.412	(0.574)	1345503	2500.00	2910(A)
15	Allyl Chloride	41	2.533	2.533	(0.603)	1386263	250.000	266(A)
16	Methylene Chloride	84	2.637	2.637	(0.627)	1036029	250.000	250(A)
17	Isopropanol	45	2.649	2.649	(0.548)	683474	2500.00	2470
* 18	Acetone d6	46	2.655	2.655	(1.000)	154884	200.000	
19	Acetone	58	2.698	2.698	(1.016)	342103	1250.00	1250

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	1073414	250.000	268(A)
	21 Hexane	86	2.863	2.863	(1.078)	730591	625.000	646(A)
	22 Methyl-tert-butyl Ether	73	2.899	2.899	(0.690)	2604871	250.000	269(A)
	23 tert-Butyl Alcohol	59	3.021	3.021	(0.625)	1174811	2500.00	2460
	24 Acetonitrile	41	3.070	3.070	(0.730)	923923	2500.00	2570(A)
	25 Isopropyl Ether	45	3.210	3.210	(0.764)	3122165	250.000	270(A)
	26 Acrylonitrile	53	3.247	3.247	(0.772)	1488060	2500.00	2680(A)
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	1788922	250.000	271(A)
	28 Ethyl-tert-butyl ether	59	3.466	3.466	(0.825)	2872226	250.000	268(A)
	29 Vinyl Acetate	43	3.466	3.466	(0.825)	1961639	250.000	268(A)
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	1135218	250.000	266(A)
	31 2,2-Dichloropropane	77	3.704	3.704	(0.881)	1475320	250.000	269(A)
	32 Cyclohexane	56	3.759	3.759	(0.894)	9240377	1250.00	1390(A)
	33 Bromochloromethane	130	3.759	3.759	(0.894)	638883	250.000	254(A)
	34 Chloroform	83	3.814	3.814	(0.907)	1782721	250.000	267(A)
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	1336565	250.000	274(A)
	36 Tetrahydrofuran	72	3.905	3.905	(1.471)	1219326	2500.00	2360
	37 1,1,1-Trichloroethane	97	3.930	3.930	(0.935)	1545881	250.000	264(A)
	38 2-Butanone	43	4.003	4.003	(0.952)	1824223	1250.00	1240
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	1472379	250.000	266(A)
	40 Benzene	78	4.149	4.149	(0.987)	4395817	250.000	266(A)
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	956477	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	2825617	250.000	260(A)
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	365755	100.000	99.1
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	1118584	250.000	260(A)
	45 Isobutanol	43	4.301	4.301	(0.890)	1022277	5000.00	5300(A)
	46 Tert-Amyl Alcohol	59	4.350	4.350	(0.900)	1058346	2500.00	2640(A)
	47 Trichloroethene	130	4.466	4.466	(0.997)	1240288	250.000	269(A)
*	48 1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1445480	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	2311297	250.000	273(A)
	50 Dibromomethane	174	4.667	4.667	(1.042)	679971	250.000	256(A)
	51 1,2-Dichloropropane	63	4.716	4.716	(1.053)	1049622	250.000	268(A)
	52 Bromodichloromethane	83	4.746	4.746	(1.060)	1341633	250.000	262(A)
*	53 1,4 dioxane d8	96	4.832	4.832	(1.000)	163335	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.844	4.844	(1.003)	267630	5000.00	4870
	55 2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.117)	249718	625.000	625(A)
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	1733401	250.000	273(A)
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.882)	1750118	100.000	99.8
	58 Toluene	92	5.131	5.131	(0.886)	2787877	250.000	247
	59 4-Methyl-2-Pentanone	43	5.289	5.289	(0.914)	4234636	1250.00	1260(A)
	60 Tetrachloroethene	166	5.295	5.295	(0.915)	1329666	250.000	247
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.916)	1527007	250.000	263(A)
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.928)	868387	250.000	251(A)
	63 Dibromochloromethane	129	5.454	5.454	(0.942)	1053554	250.000	263(A)
	64 1,3-Dichloropropane	76	5.490	5.490	(0.948)	1508601	250.000	256(A)
	65 1,2-Dibromoethane	107	5.557	5.557	(0.960)	925087	250.000	255(A)
	66 2-Hexanone	43	5.649	5.649	(0.976)	3190654	1250.00	1220
*	67 Chlorobenzene-d5	117	5.789	5.789	(1.000)	1492719	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.001)	3161176	250.000	251(A)
	69 Ethylbenzene	91	5.801	5.801	(1.002)	5483720	250.000	255(A)
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.005)	1145633	250.000	261(A)
	71 M&P-Xylene	106	5.868	5.868	(1.014)	4292270	500.000	512(A)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.049)	2079012	250.000	264(A)
	73 Styrene	104	6.100	6.100	(1.054)	3617893	250.000	270(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
74	Bromoform	173	6.124	6.124	(1.058)	838930	250.000	264(A)
75	Isopropylbenzene (Cumene)	105	6.234	6.234	(1.077)	5575169	250.000	265(A)
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	738381	100.000	100
77	cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	361132	250.000	254(A)
78	Bromobenzene	156	6.453	6.453	(0.916)	1449094	250.000	257(A)
79	n-Propylbenzene	91	6.453	6.453	(0.916)	6760058	250.000	262(A)
80	1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	1212747	250.000	259(A)
81	2-Chlorotoluene	91	6.551	6.551	(0.930)	4229470	250.000	264(A)
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	4807550	250.000	264(A)
83	1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	336004	250.000	256(A)
84	trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.935)	791772	625.000	653(A)
85	4-Chlorotoluene	91	6.642	6.642	(0.943)	4001082	250.000	261(A)
86	tert-Butylbenzene	119	6.746	6.746	(0.958)	4142926	250.000	250(A)
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	4861686	250.000	262(A)
88	sec-Butylbenzene	105	6.856	6.856	(0.973)	6198622	250.000	269(A)
89	p-Isopropyltoluene	119	6.941	6.941	(0.985)	5435189	250.000	268(A)
90	1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	2839632	250.000	252(A)
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	916618	100.000	
92	1,4-Dichlorobenzene	146	7.057	7.057	(1.002)	2898395	250.000	247
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	4908573	250.000	266(A)
94	n-Butylbenzene	91	7.215	7.215	(1.024)	4876145	250.000	258(A)
95	1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	2639700	250.000	250
96	1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	663039	625.000	642(A)
97	Hexachlorobutadiene	225	8.191	8.191	(1.163)	964277	250.000	235
98	1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	1630394	250.000	236
99	Naphthalene	128	8.392	8.392	(1.191)	3227010	250.000	241
100	1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	1459559	250.000	234
101	2-Methylnaphthalene	142	9.014	9.014	(1.279)	648752	125.000	125

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 10-Mar-2014 16:45

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014010.D
Lab Smp Id: 250 ICAL 10098-65
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52
Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	154884	14.04
41 Pentafluorobenzen	944656	472328	1889312	956477	1.25
48 1,4 Difluorobenze	1423443	711722	2846886	1445480	1.55
53 1,4 dioxane d8	156016	78008	312032	163335	4.69
67 Chlorobenzene-d5	1400934	700467	2801868	1492719	6.55
91 1,4-Dichlorobenze	853329	426665	1706658	916618	7.42

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.66	0.22
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.12
67 Chlorobenzene-d5	5.78	5.28	6.28	5.79	0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

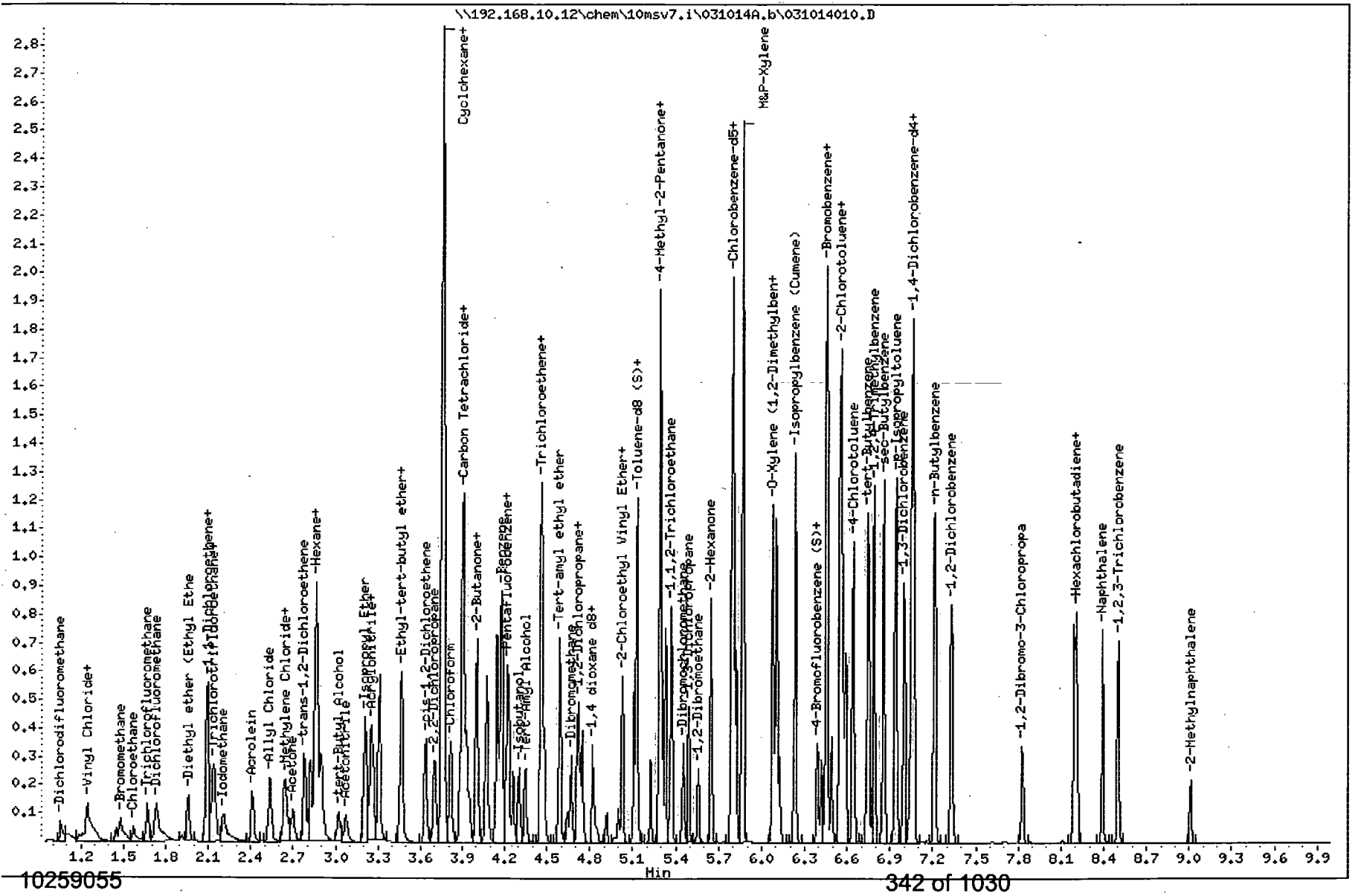
Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D
Date : 10-MAR-2014 13:31
Client ID:
Sample Info: 250 ICAL 10098-65

Instrument: 10msv7.i

Operator: HBP

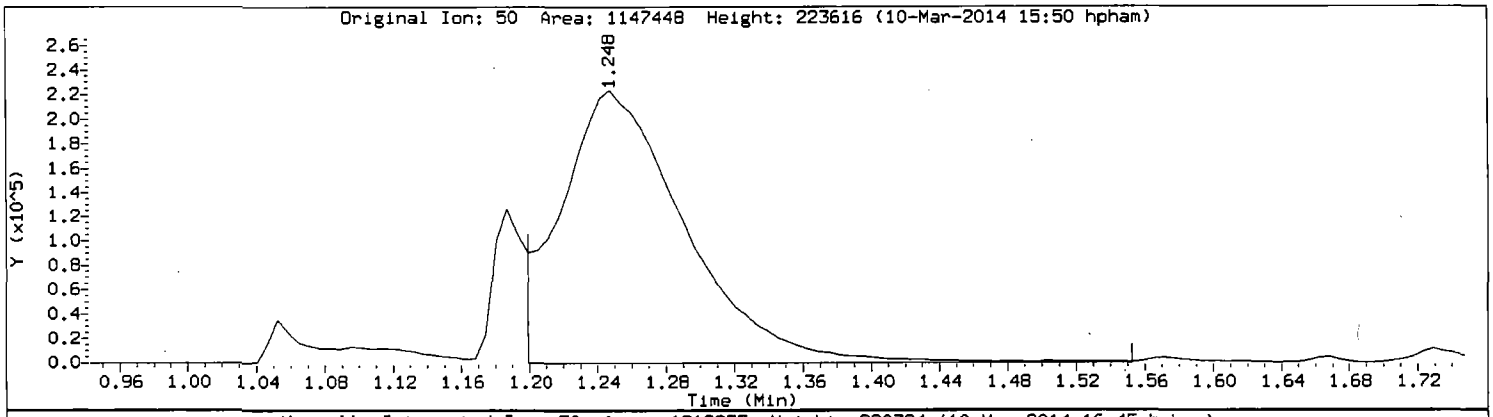
Column phase: Rtx-VMS

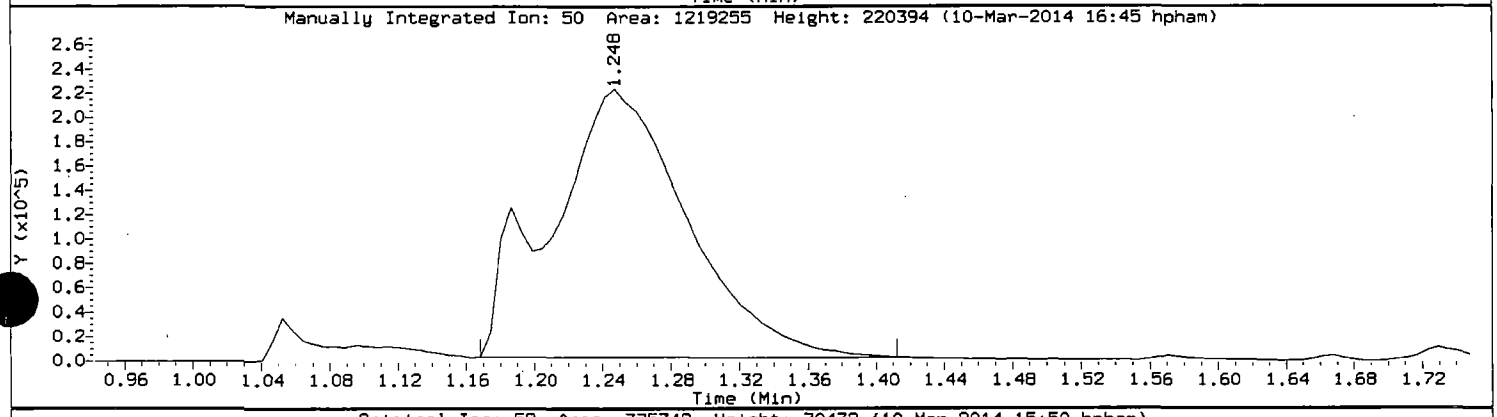
Column diameter: 0.18

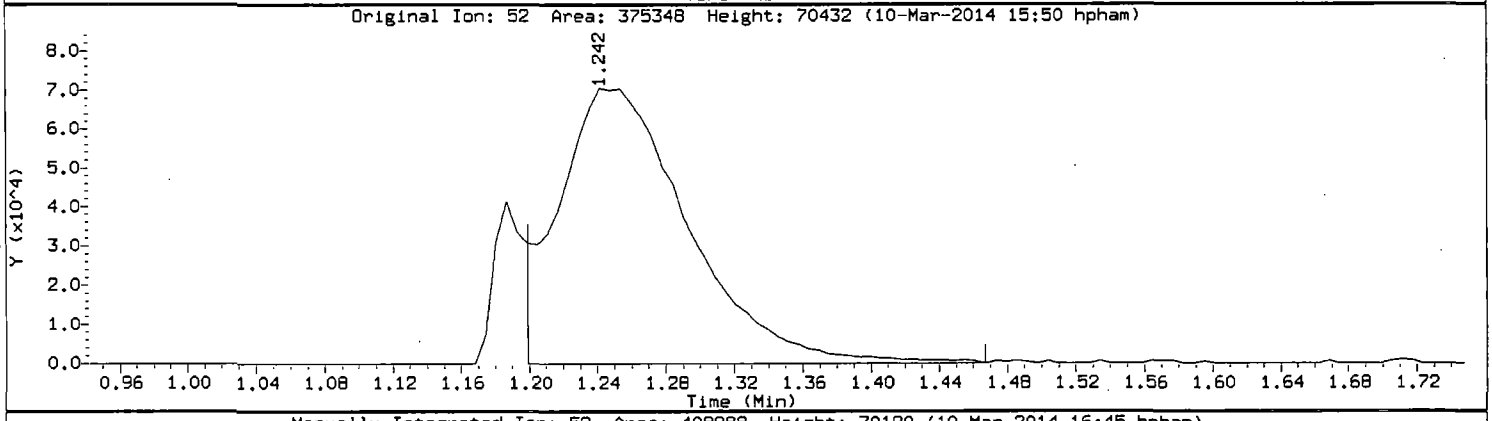


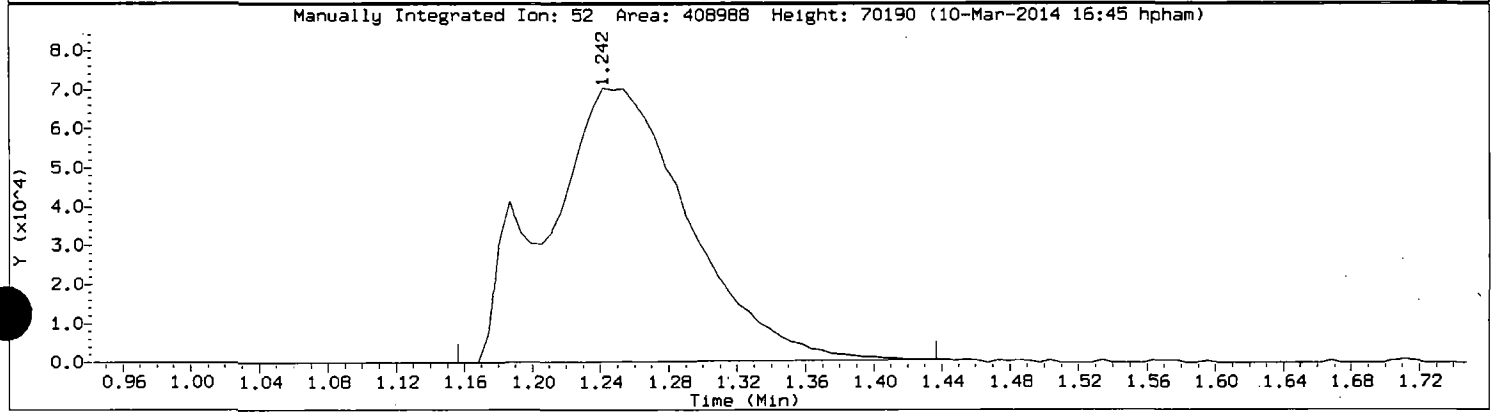
Data File: \\192.168.10.12\chem\10msv7.i\031014A.b/031014010.D
Injection Date: 10-MAR-2014 13:31
Instrument: 10msv7.i
Lab Sample ID: 250 ICAL 10098-65

Compound: Chloromethane
CAS Number: 74-87-3









Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Report Date: 11-Mar-2014 11:24

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 14:10
Lab File ID: 031014012.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 ICV 10098-66 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.41508	0.42565	0.42565	0.100	2.54717	40.00000	Averaged
2 Chloromethane	0.45988	0.51466	0.51466	0.100	11.91038	40.00000	Averaged
3 Vinyl Chloride	0.50806	0.53638	0.53638	0.100	5.57466	20.00000	Averaged
4 Bromomethane	50.00000	62.69954	0.26402	0.050	25.39909	40.00000	Quadratic
5 Chloroethane	0.21444	0.23046	0.23046	0.050	7.46943	40.00000	Averaged
6 Trichlorofluoromethane	50.00000	46.85054	0.58184	0.100	-6.29892	40.00000	Quadratic
7 Dichlorofluoromethane	0.74236	0.78742	0.78742	0.010	6.07068	40.00000	Averaged
8 Diethyl ether (Ethyl Ether)	0.28052	0.29831	0.29831	0.010	6.34189	40.00000	Averaged
9 1,1-Dichloroethene	0.37658	0.39301	0.39301	0.100	4.36283	20.00000	Averaged
10 Carbon Disulfide	1.43078	1.36856	1.36856	0.100	-4.34815	40.00000	Averaged
11 Ethanol	1.38118	1.45093	1.45093	0.050	5.05049	40.00000	Averaged
12 Trichlorotrifluoroethane	0.38812	0.39129	0.39129	0.010	0.81828	40.00000	Averaged
13 Iodomethane	50.00000	43.08508	0.40199	0.010	-13.82984	40.00000	Quadratic
14 Acrolein	0.04831	0.04913	0.04913	0.010	1.68682	40.00000	Averaged
15 Allyl Chloride	0.54547	0.55874	0.55874	0.010	2.43424	40.00000	Averaged
16 Methylene Chloride	50.00000	51.96562	0.43695	0.100	3.93123	40.00000	Quadratic
17 Isopropanol	500	478	7.47332	0.010	-4.40428	40.00000	Linear
19 Acetone	250	246	0.38241	0.010	-1.55853	40.00000	Quadratic
20 trans-1,2-Dichloroethene	0.41845	0.43664	0.43664	0.100	4.34708	20.00000	Averaged
21 Hexane	1.45916	1.29517	1.29517	0.010	-11.23839	40.00000	Averaged
22 Methyl-tert-butyl Ether	1.01370	1.07968	1.07968	0.300	6.50875	20.00000	Averaged
23 tert-Butyl Alcohol	11.69463	11.32679	11.32679	0.010	-3.14538	40.00000	Averaged
24 Acetonitrile	0.03751	0.03774	0.03774	0.010	0.59357	40.00000	Averaged
25 Isopropyl Ether	1.20931	1.27975	1.27975	0.010	5.82485	40.00000	Averaged
26 Acrylonitrile	0.05807	0.05969	0.05969	0.010	2.79022	40.00000	Averaged
27 1,1-Dichloroethane	0.68924	0.72923	0.72923	0.200	5.80203	20.00000	Averaged
28 Ethyl-tert-butyl ether	1.12182	1.17336	1.17336	0.010	4.59519	40.00000	Averaged
29 Vinyl Acetate	0.76578	0.80715	0.80715	0.010	5.40266	40.00000	Averaged
30 cis-1,2-Dichloroethene	0.44651	0.46789	0.46789	0.100	4.78825	20.00000	Averaged
31 2,2-Dichloropropane	0.57389	0.58744	0.58744	0.010	2.36125	40.00000	Averaged
32 Cyclohexane	0.69431	0.70122	0.70122	0.100	0.99569	40.00000	Averaged
33 Bromochloromethane	0.26252	0.27544	0.27544	0.010	4.92296	40.00000	Averaged
34 Chloroform	0.69775	0.73278	0.73278	0.200	5.02011	20.00000	Averaged
35 Carbon Tetrachloride	0.50890	0.53363	0.53363	0.100	4.86028	40.00000	Averaged
36 Tetrahydrofuran	0.66745	0.66852	0.66852	0.010	0.16072	40.00000	Averaged
37 1,1,1-Trichloroethane	0.61160	0.63012	0.63012	0.100	3.02815	20.00000	Averaged
38 2-Butanone	0.15369	0.15162	0.15162	0.050	-1.34241	40.00000	Averaged
39 1,1-Dichloropropene	0.57828	0.58844	0.58844	0.010	1.75627	40.00000	Averaged
40 Benzene	1.72445	1.77688	1.77688	0.500	3.04055	20.00000	Averaged
42 Tert-amyl methyl ether	1.13587	1.13890	1.13890	0.010	0.26679	40.00000	Averaged
$ 43 1,2-Dichloroethane d4 (S)	0.38600	0.39707	0.39707	0.200	2.86778	40.00000	Averaged
44 1,2-Dichloroethane	0.44964	0.46554	0.46554	0.100	3.53585	20.00000	Averaged

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Report Date: 11-Mar-2014 11:24

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 14:10
Lab File ID: 031014012.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 ICV 10098-66 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 Isobutanol	4.72514	4.71676	4.71676	0.010	-0.17729	40.00000	Averaged
46 Tert-Amyl Alcohol	9.80430	9.95690	9.95690	0.010	1.55653	40.00000	Averaged
47 Trichloroethene	0.31862	0.32620	0.32620	0.200	2.38012	20.00000	Averaged
49 Tert-amyl ethyl ether	0.58572	0.60054	0.60054	0.010	2.52978	40.00000	Averaged
50 Dibromomethane	0.18370	0.18753	0.18753	0.010	2.08225	40.00000	Averaged
51 1,2-Dichloropropane	0.27126	0.28122	0.28122	0.100	3.67233	20.00000	Averaged
52 Bromodichloromethane	0.35476	0.36029	0.36029	0.050	1.55917	40.00000	Averaged
54 1,4-Dioxane (P-Dioxane)	1.34644	1.38013	1.38013	0.010	2.50243	40.00000	Averaged
55 2-Chloroethyl Vinyl Ether	125	128	0.02312	0.010	2.43744	40.00000	Quadratic
56 cis-1,3-Dichloropropene	0.43924	0.44997	0.44997	0.050	2.44364	40.00000	Averaged
$ 57 Toluene-d8 (S)	1.17496	1.17711	1.17711	0.200	0.18298	40.00000	Averaged
58 Toluene	0.75661	0.73685	0.73685	0.400	-2.61215	20.00000	Averaged
59 4-Methyl-2-Pentanone	0.22450	0.22840	0.22840	0.100	1.73932	40.00000	Averaged
60 Tetrachloroethene	0.36056	0.36253	0.36253	0.200	0.54596	20.00000	Averaged
61 trans-1,3-Dichloropropene	0.38888	0.40403	0.40403	0.100	3.89688	40.00000	Averaged
62 1,1,2-Trichloroethane	0.23148	0.23772	0.23772	0.100	2.69154	40.00000	Averaged
63 Dibromochloromethane	0.26855	0.27814	0.27814	0.100	3.56912	40.00000	Averaged
64 1,3-Dichloropropane	0.39553	0.40120	0.40120	0.010	1.43310	40.00000	Averaged
65 1,2-Dibromoethane	0.24305	0.24903	0.24903	0.100	2.45839	20.00000	Averaged
66 2-Hexanone	0.17506	0.16874	0.16874	0.050	-3.61001	40.00000	Averaged
68 Chlorobenzene	0.84483	0.82685	0.82685	0.500	-2.12867	40.00000	Averaged
69 Ethylbenzene	1.44184	1.39961	1.39961	0.300	-2.92907	20.00000	Averaged
70 1,1,1,2-Tetrachloroethane	0.29385	0.30227	0.30227	0.010	2.86829	40.00000	Averaged
71 M&P-Xylene	0.56155	0.55051	0.55051	0.300	-1.96654	20.00000	Averaged
72 O-Xylene (1,2-Dimethylbenze	0.52660	0.53067	0.53067	0.300	0.77324	20.00000	Averaged
73 Styrene	0.89773	0.93158	0.93158	0.300	3.77137	40.00000	Averaged
74 Bromoform	0.21306	0.21442	0.21442	0.100	0.64039	40.00000	Averaged
75 Isopropylbenzene (Cumene)	1.40917	1.38630	1.38630	0.100	-1.62331	20.00000	Averaged
$ 76 4-Bromofluorobenzene (S)	0.80228	0.80712	0.80712	0.200	0.60313	40.00000	Averaged
77 cis-1,4-Dichloro-2-Butene	0.15505	0.14970	0.14970	0.010	-3.45080	40.00000	Averaged
78 Bromobenzene	0.61425	0.62606	0.62606	0.010	1.92270	40.00000	Averaged
79 n-Propylbenzene	2.80970	2.76670	2.76670	0.010	-1.53017	20.00000	Averaged
80 1,1,2,2-Tetrachloroethane	0.51066	0.52242	0.52242	0.300	2.30171	40.00000	Averaged
81 2-Chlorotoluene	1.75076	1.75176	1.75176	0.010	0.05734	40.00000	Averaged
82 1,3,5-Trimethylbenzene	1.98819	1.98005	1.98005	0.300	-0.40944	20.00000	Averaged
83 1,2,3-Trichloropropane	0.14296	0.14704	0.14704	0.010	2.85456	40.00000	Averaged
84 trans-1,4-Dichloro-2-Butene	0.13230	0.13182	0.13182	0.010	-0.36303	40.00000	Averaged
85 4-Chlorotoluene	1.67479	1.65644	1.65644	0.010	-1.09592	40.00000	Averaged
86 tert-Butylbenzene	50.00000	50.74218	1.70618	0.010	1.48436	40.00000	Quadratic
87 1,2,4-Trimethylbenzene	2.02418	2.00349	2.00349	0.300	-1.02211	20.00000	Averaged
88 sec-Butylbenzene	2.51224	2.51708	2.51708	0.010	0.19270	40.00000	Averaged
89 p-Isopropyltoluene	2.21193	2.17650	2.17650	0.010	-1.60217	40.00000	Averaged

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Report Date: 11-Mar-2014 11:24

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 14:10
Lab File ID: 031014012.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 ICV 10098-66 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
90 1,3-Dichlorobenzene	1.22935	1.19479	1.19479	0.600	-2.81100	40.00000	Averaged
92 1,4-Dichlorobenzene	1.28119	1.21590	1.21590	0.500	-5.09564	40.00000	Averaged
93 1,2,3 Trimethylbenzene	1.92635	1.90290	1.90290	0.010	-1.21741	40.00000	Averaged
94 n-Butylbenzene	2.05952	1.98875	1.98875	0.010	-3.43611	40.00000	Averaged
95 1,2-Dichlorobenzene	1.15228	1.13029	1.13029	0.400	-1.90835	40.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.11263	0.11660	0.11660	0.010	3.52655	40.00000	Averaged
97 Hexachlorobutadiene	0.44698	0.42120	0.42120	0.010	-5.76810	40.00000	Averaged
98 1,2,4-Trichlorobenzene	0.75211	0.71450	0.71450	0.200	-5.00140	40.00000	Averaged
99 Naphthalene	1.45993	1.47132	1.47132	0.300	0.78042	20.00000	Averaged
100 1,2,3-Trichlorobenzene	0.67876	0.66577	0.66577	0.010	-1.91476	40.00000	Averaged
101 2-Methylnaphthalene	0.56690	0.54294	0.54294	0.100	-4.22518	20.00000	Averaged

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Report Date: 11-Mar-2014 11:24

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Lab Smp Id: V50 ICV 10098-66
Inj Date : 10-MAR-2014 14:10
Operator : HBP Inst ID: 10msv7.i
Smp Info : V50 ICV 10098-66
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:18 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	204174	50.0000	51.3
2	Chloromethane	50	1.247	1.247	(0.297)	246869	50.0000	56.0(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	257291	50.0000	52.8
4	Bromomethane	94	1.479	1.479	(0.352)	126645	50.0000	62.7
5	Chloroethane	64	1.570	1.570	(0.374)	110547	50.0000	53.7
6	Trichlorofluoromethane	101	1.674	1.674	(0.398)	279097	50.0000	46.8
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	377707	50.0000	53.0
8	Diethyl ether (Ethyl Ether)	59	1.954	1.954	(0.465)	143093	50.0000	53.2
9	1,1-Dichloroethene	96	2.094	2.094	(0.498)	188519	50.0000	52.2
10	Carbon Disulfide	76	2.101	2.101	(0.500)	656467	50.0000	47.8
11	Ethanol	45	2.113	2.113	(0.438)	57235	1000.00	1050
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	187694	50.0000	50.4
13	Iodomethane	142	2.210	2.210	(0.526)	192826	50.0000	43.1
14	Acrolein	56	2.412	2.412	(0.574)	235641	500.000	508
15	Allyl Chloride	41	2.540	2.540	(0.604)	268016	50.0000	51.2
16	Methylene Chloride	84	2.643	2.643	(0.629)	209594	50.0000	52.0
17	Isopropanol	45	2.631	2.631	(0.545)	147400	500.000	478
* 18	Acetone d6	46	2.649	2.649	(1.000)	141976	200.000	
19	Acetone	58	2.698	2.698	(1.018)	67866	250.000	246

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Report Date: 11-Mar-2014 11:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.783	2.783	(0.662)	209446	50.0000	52.2
	21 Hexane	86	2.863	2.863	(1.081)	114927	125.000	111
	22 Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	517897	50.0000	53.2(Q)
	23 tert-Butyl Alcohol	59	3.009	3.009	(0.624)	223404	500.000	484
	24 Acetonitrile	41	3.070	3.070	(0.730)	181013	500.000	503
	25 Isopropyl Ether	45	3.204	3.204	(0.762)	613865	50.0000	52.9
	26 Acrylonitrile	53	3.247	3.247	(0.772)	286324	500.000	514
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	349793	50.0000	52.9
	28 Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	562835	50.0000	52.3
	29 Vinyl Acetate	43	3.466	3.466	(0.825)	387171	50.0000	52.7
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	224437	50.0000	52.4
	31 2,2-Dichloropropane	77	3.698	3.698	(0.880)	281782	50.0000	51.2
	32 Cyclohexane	56	3.753	3.753	(0.893)	1681796	250.000	252
	33 Bromochloromethane	130	3.759	3.759	(0.894)	132124	50.0000	52.5
	34 Chloroform	83	3.814	3.814	(0.907)	351498	50.0000	52.5
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	255971	50.0000	52.4
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	237284	500.000	501
	37 1,1,1-Trichloroethane	97	3.930	3.930	(0.935)	302255	50.0000	51.5
	38 2-Butanone	43	3.997	3.997	(0.951)	363652	250.000	247
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	282261	50.0000	50.9
	40 Benzene	78	4.143	4.143	(0.985)	852329	50.0000	51.5
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	959352	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	546303	50.0000	50.1
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	380929	100.000	103
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	223306	50.0000	51.8
	45 Isobutanol	43	4.295	4.295	(0.890)	186062	1000.00	998
	46 Tert-Amyl Alcohol	59	4.344	4.344	(0.900)	196385	500.000	508
	47 Trichloroethene	130	4.466	4.466	(0.997)	238252	50.0000	51.2
*	48 1,4 Difluorobenzene	114	4.478	4.478	(1.000)	1460756	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	438621	50.0000	51.3
	50 Dibromomethane	174	4.667	4.667	(1.042)	136966	50.0000	51.0
	51 1,2-Dichloropropane	63	4.716	4.716	(1.053)	205397	50.0000	51.8
	52 Bromodichloromethane	83	4.746	4.746	(1.060)	263146	50.0000	50.8
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	157788	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	54442	1000.00	1020
	55 2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.117)	42213	125.000	128
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	328651	50.0000	51.2
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1701159	100.000	100
	58 Toluene	92	5.130	5.130	(0.887)	532448	50.0000	48.7
	59 4-Methyl-2-Pentanone	43	5.283	5.283	(0.914)	825210	250.000	254
	60 Tetrachloroethene	166	5.295	5.295	(0.916)	261962	50.0000	50.3
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	291955	50.0000	51.9
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.929)	171773	50.0000	51.3
	63 Dibromochloromethane	129	5.454	5.454	(0.943)	200982	50.0000	51.8
	64 1,3-Dichloropropane	76	5.490	5.490	(0.949)	289907	50.0000	50.7
	65 1,2-Dibromoethane	107	5.557	5.557	(0.961)	179946	50.0000	51.2
	66 2-Hexanone	43	5.643	5.643	(0.976)	609658	250.000	241
*	67 Chlorobenzene-d5	117	5.783	5.783	(1.000)	1445199	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.002)	597481	50.0000	48.9
	69 Ethylbenzene	91	5.801	5.801	(1.003)	1011354	50.0000	48.5
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.006)	218423	50.0000	51.4
	71 M&P-Xylene	106	5.868	5.868	(1.015)	795595	100.000	98.0
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.051)	383461	50.0000	50.4
	73 Styrene	104	6.100	6.100	(1.055)	673161	50.0000	51.9

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Report Date: 11-Mar-2014 11:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	74 Bromoform	173	6.124	6.124	(1.059)	154941	50.0000	50.3
	75 Isopropylbenzene (Cumene)	105	6.234	6.234	(1.078)	1001739	50.0000	49.2
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	712840	100.000	101
	77 cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	66107	50.0000	48.3
	78 Bromobenzene	156	6.453	6.453	(0.916)	276467	50.0000	51.0
	79 n-Propylbenzene	91	6.453	6.453	(0.916)	1221768	50.0000	49.2
	80 1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	230697	50.0000	51.2
	81 2-Chlorotoluene	91	6.545	6.545	(0.929)	773574	50.0000	50.0
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	874385	50.0000	49.8
	83 1,2,3-Trichloropropane	110	6.569	6.569	(0.933)	64933	50.0000	51.4
	84 trans-1,4-Dichloro-2-Butene	53	6.588	6.588	(0.935)	145526	125.000	124
	85 4-Chlorotoluene	91	6.642	6.642	(0.943)	731478	50.0000	49.4
	86 tert-Butylbenzene	119	6.746	6.746	(0.958)	753444	50.0000	50.7
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	884734	50.0000	49.5
	88 sec-Butylbenzene	105	6.856	6.856	(0.973)	1111537	50.0000	50.1
	89 p-Isopropyltoluene	119	6.941	6.941	(0.985)	961134	50.0000	49.2
	90 1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	527615	50.0000	48.6
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	883194	100.000	
	92 1,4-Dichlorobenzene	146	7.051	7.051	(1.001)	536939	50.0000	47.4
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	912775	50.0000	49.4
	94 n-Butylbenzene	91	7.209	7.209	(1.023)	878227	50.0000	48.3
	95 1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	499133	50.0000	49.0
	96 1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	128723	125.000	129
	97 Hexachlorobutadiene	225	8.191	8.191	(1.163)	186001	50.0000	47.1
	98 1,2,4-Trichlorobenzene	180	8.203	8.203	(1.164)	315519	50.0000	47.5
	99 Naphthalene	128	8.392	8.392	(1.191)	649730	50.0000	50.4
	100 1,2,3-Trichlorobenzene	180	8.496	8.496	(1.206)	294001	50.0000	49.0
	101 2-Methylnaphthalene	142	9.008	9.008	(1.279)	119881	25.0000	23.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Report Date: 11-Mar-2014 11:24

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014012.D
Lab Smp Id: V50 ICV 10098-66
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014A.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 12:52

Level: LOW
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 7.
If Continuing Cal. use Initial Cal. Level 7

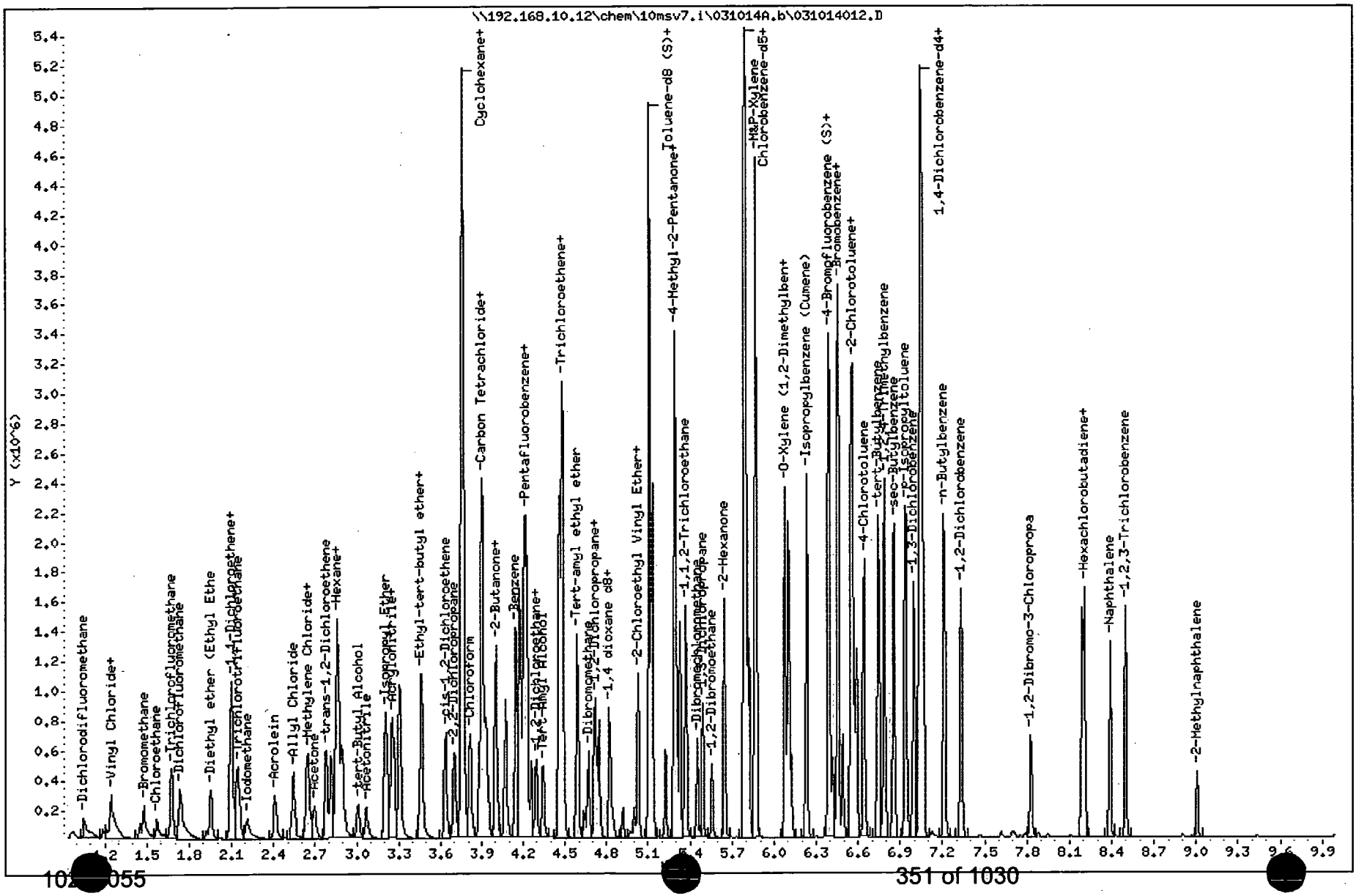
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	141976	4.54
41 Pentafluorobenzen	944656	472328	1889312	959352	1.56
48 1,4 Difluorobenze	1423443	711722	2846886	1460756	2.62
53 1,4 dioxane d8	156016	78008	312032	157788	1.14
67 Chlorobenzene-d5	1400934	700467	2801868	1445199	3.16
91 1,4-Dichlorobenze	853329	426665	1706658	883194	3.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	-0.00
67 Chlorobenzene-d5	5.78	5.28	6.28	5.78	-0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

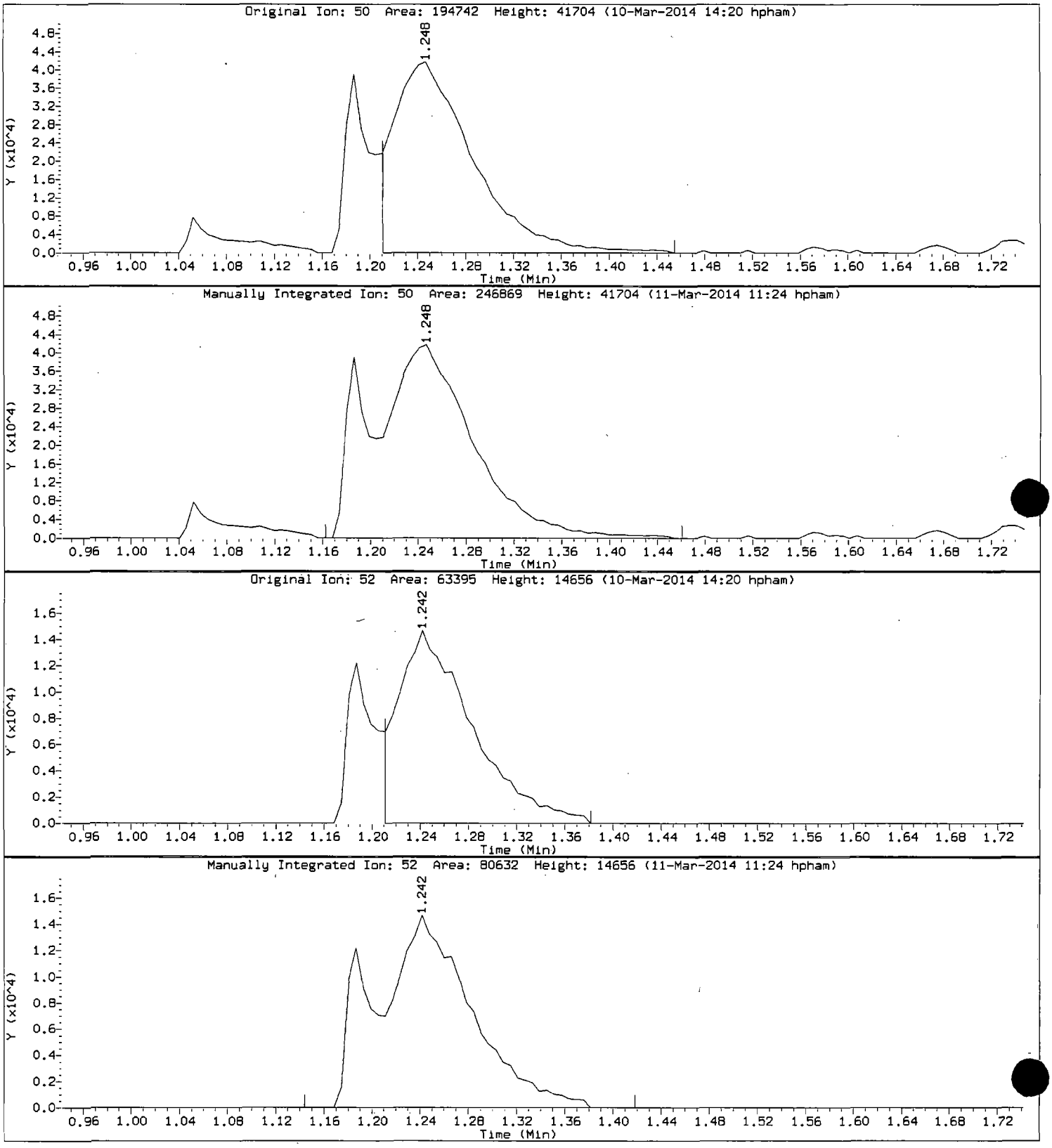
Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014012.D
Date : 10-MAR-2014 14:10
Client ID:
Sample Info: V50 ICV 10098-66

Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\031014A.b/031014012.D
Injection Date: 10-MAR-2014 14:10
Instrument: 10msv7.i
Lab Sample ID: V50 ICV 10098-66

Compound: Chloromethane
CAS Number: 74-87-3



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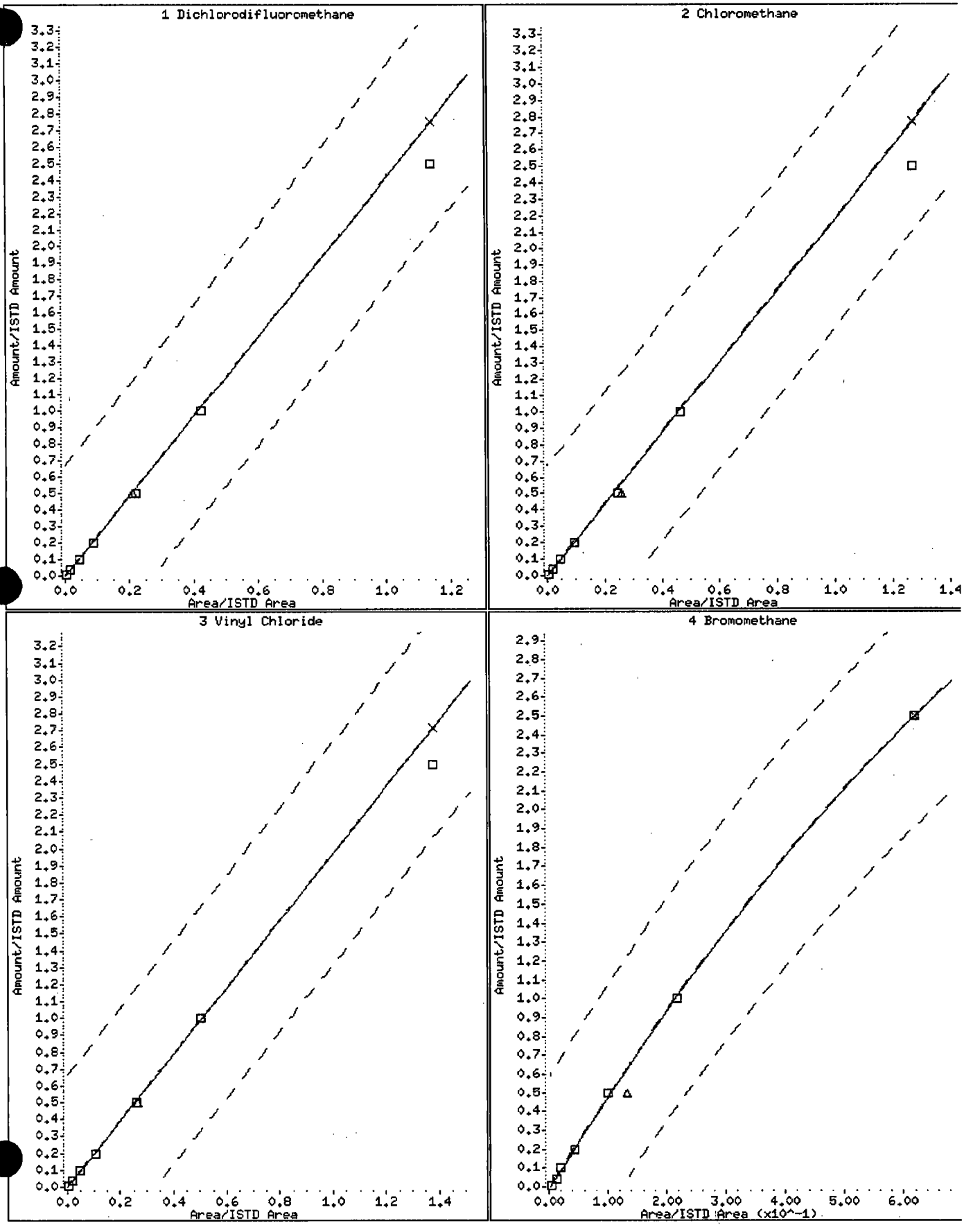
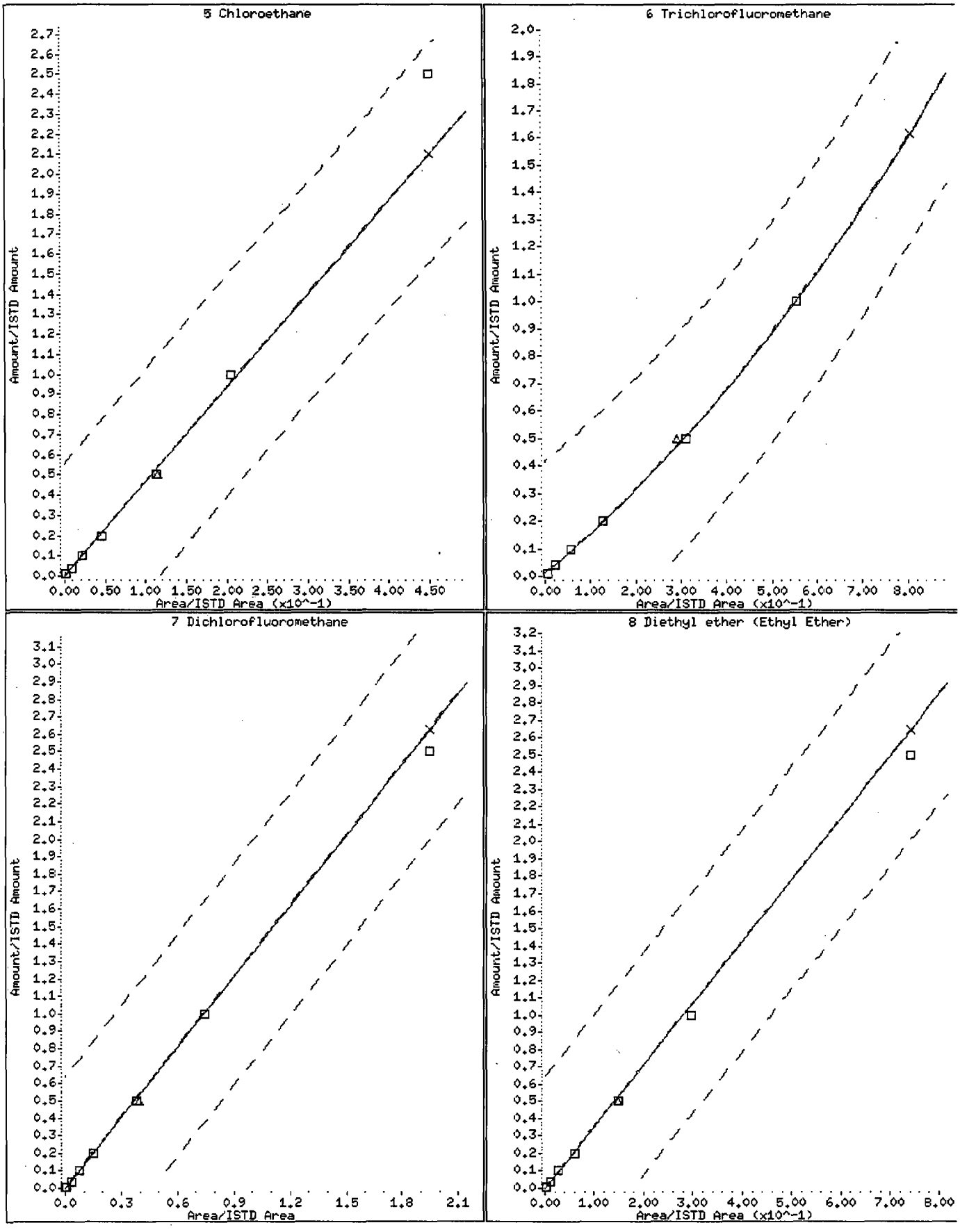


Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014010.D



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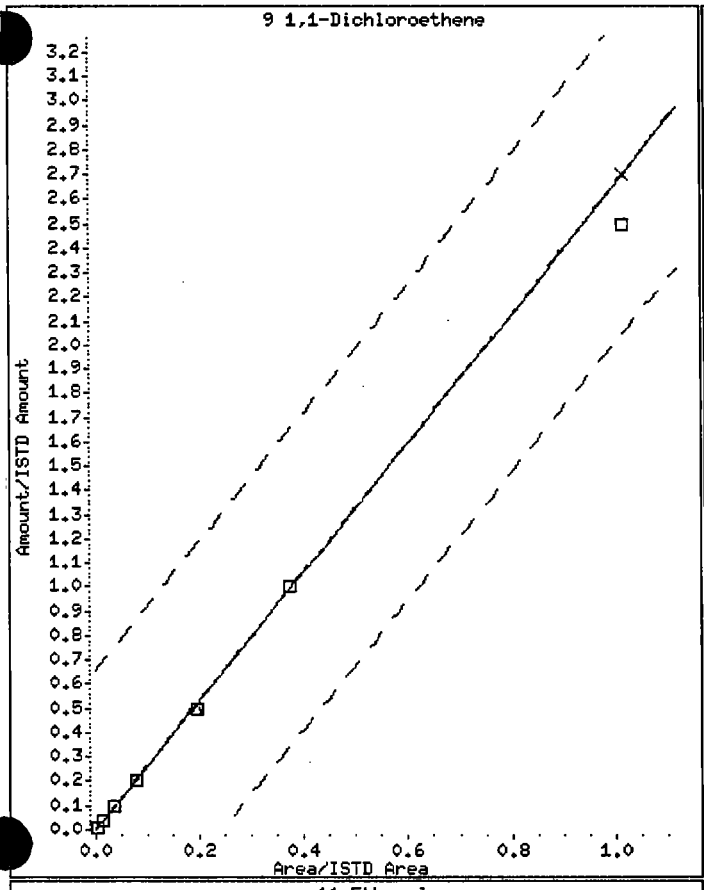

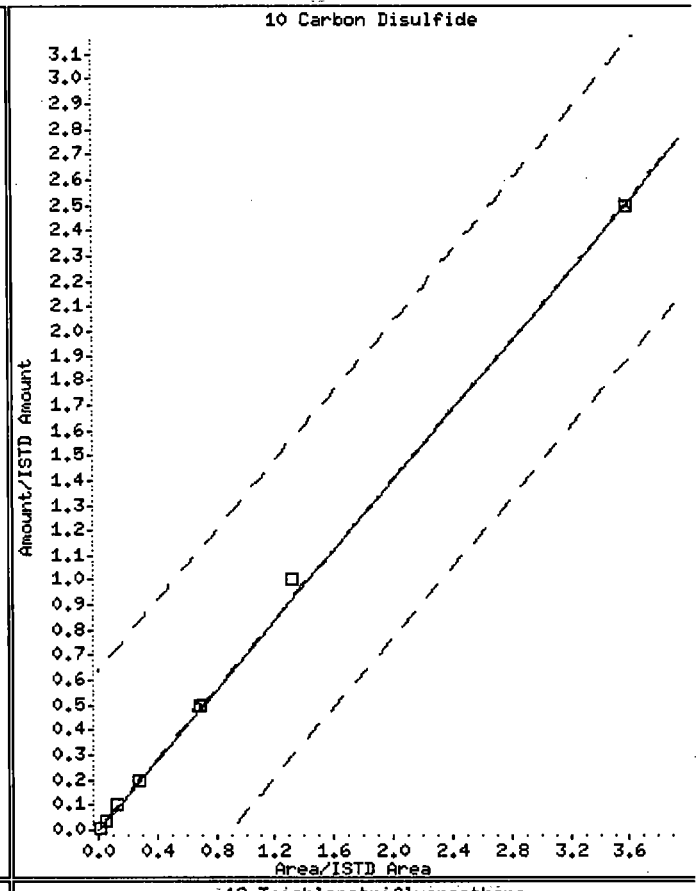

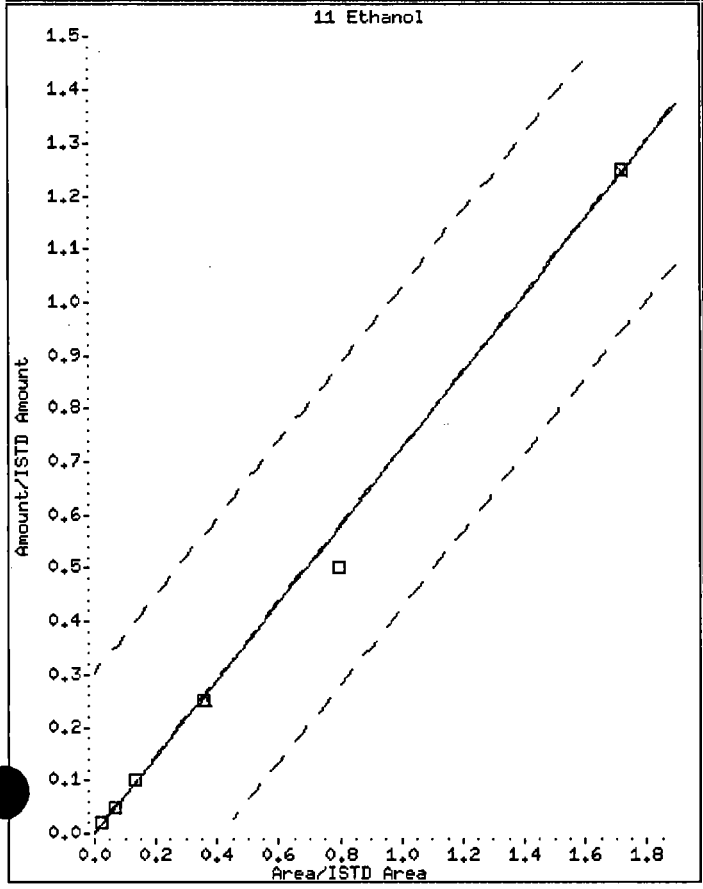

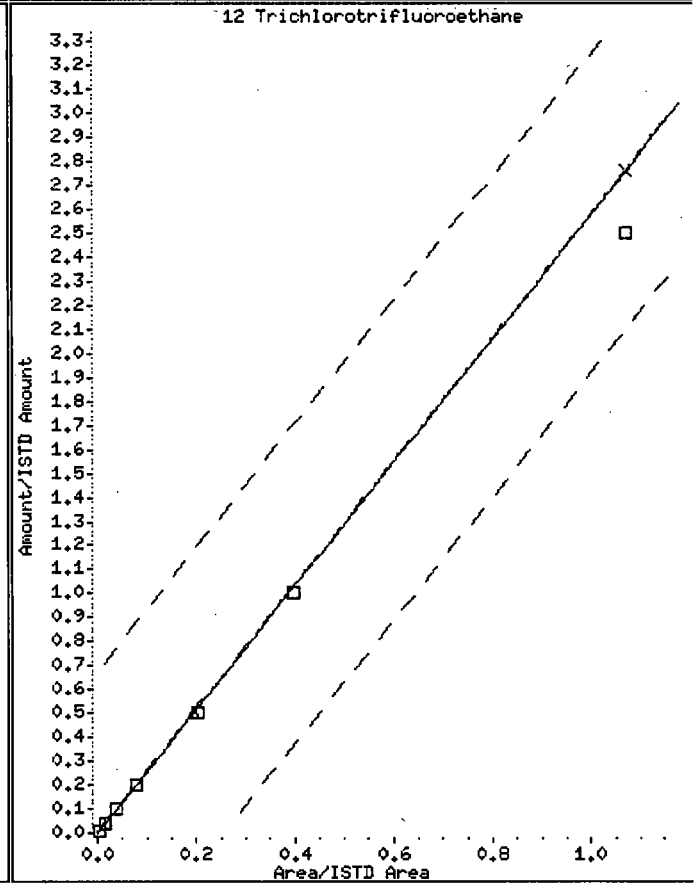

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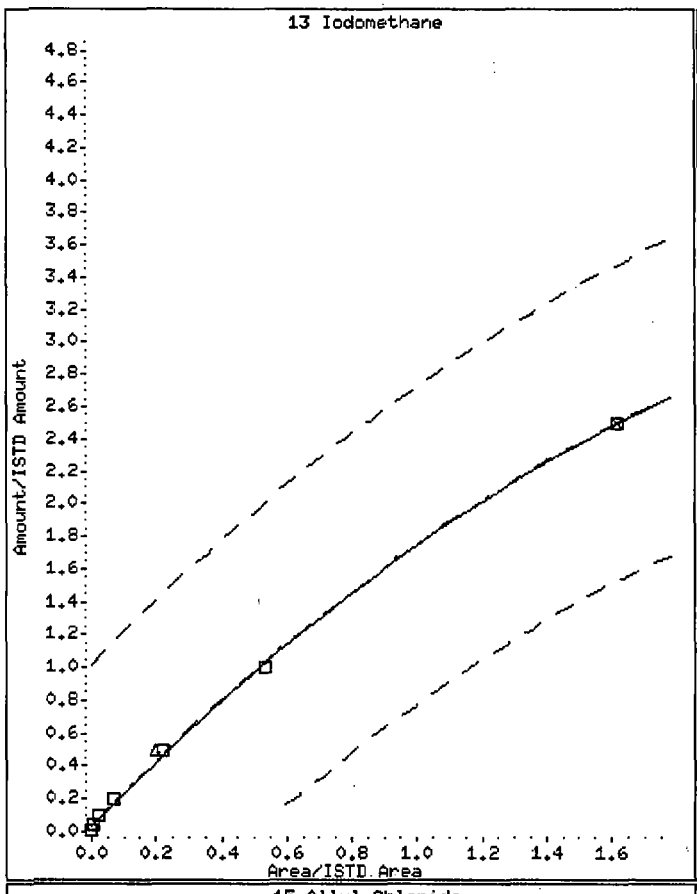

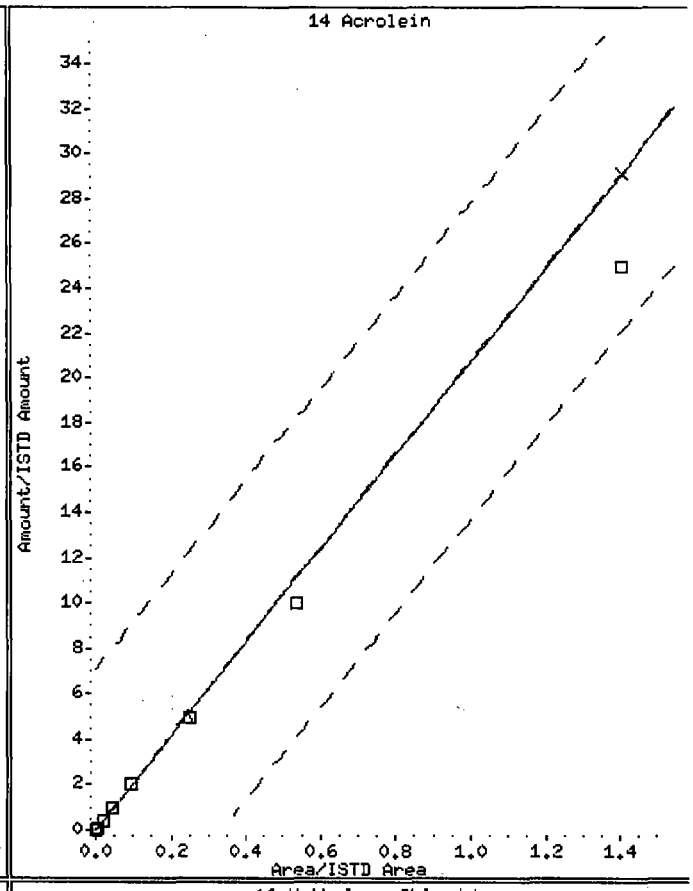

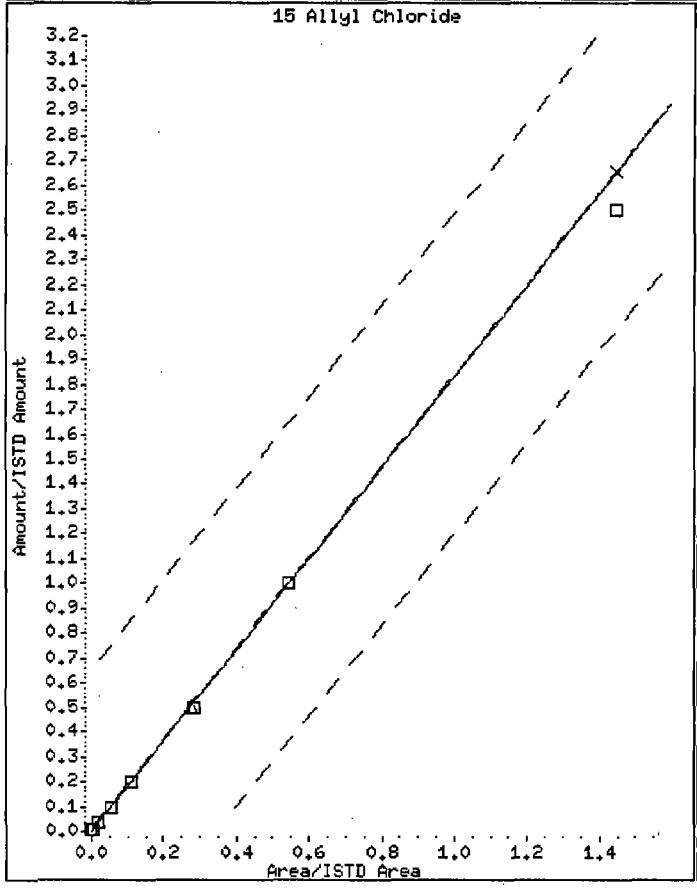

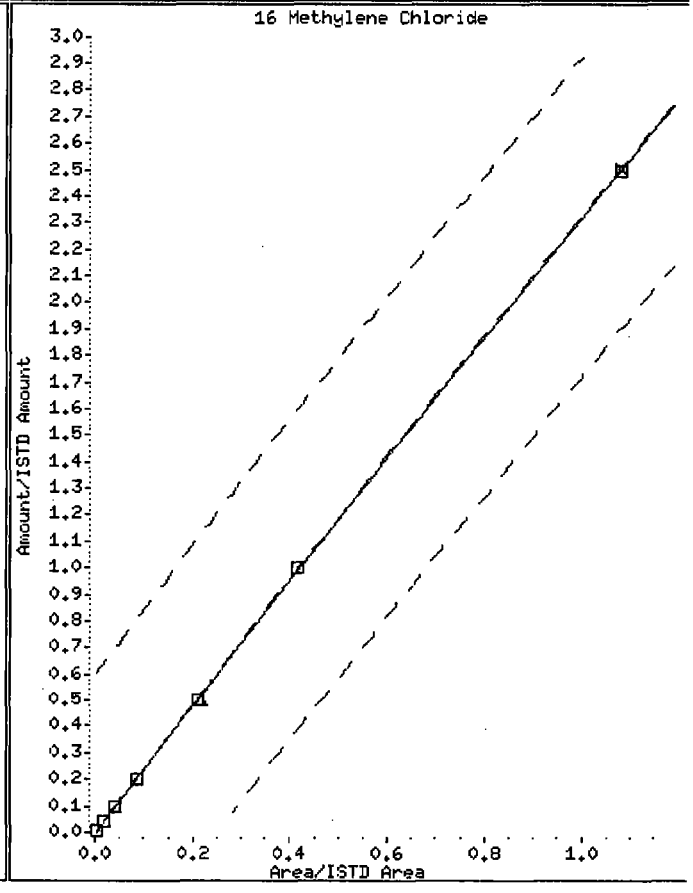

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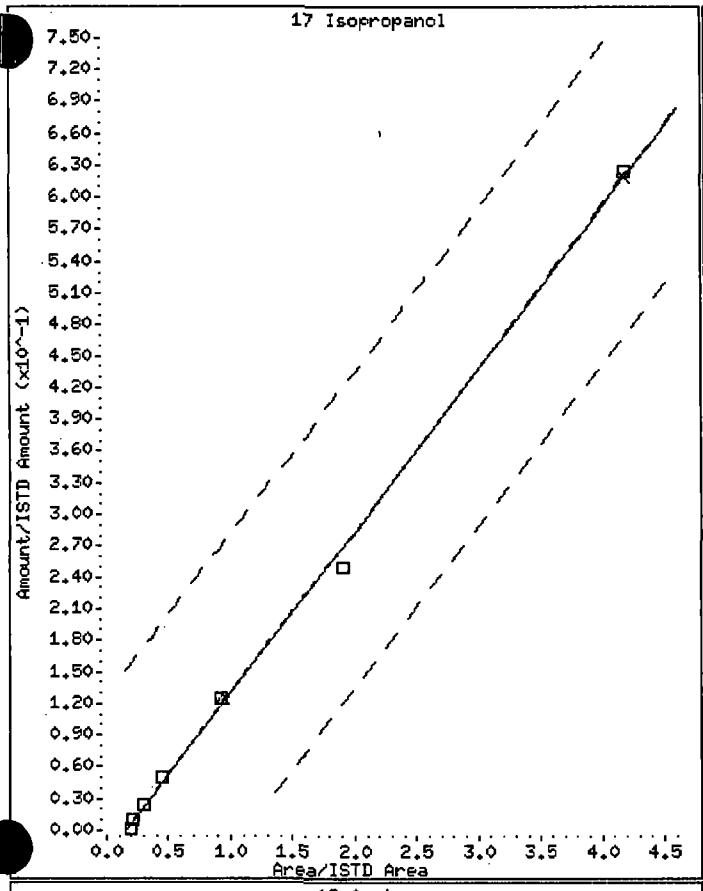

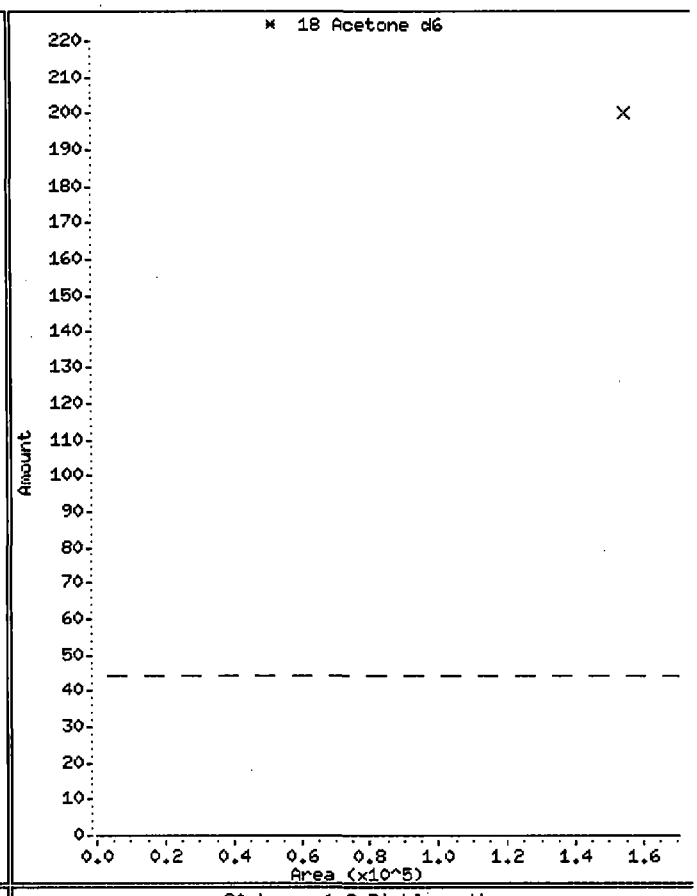

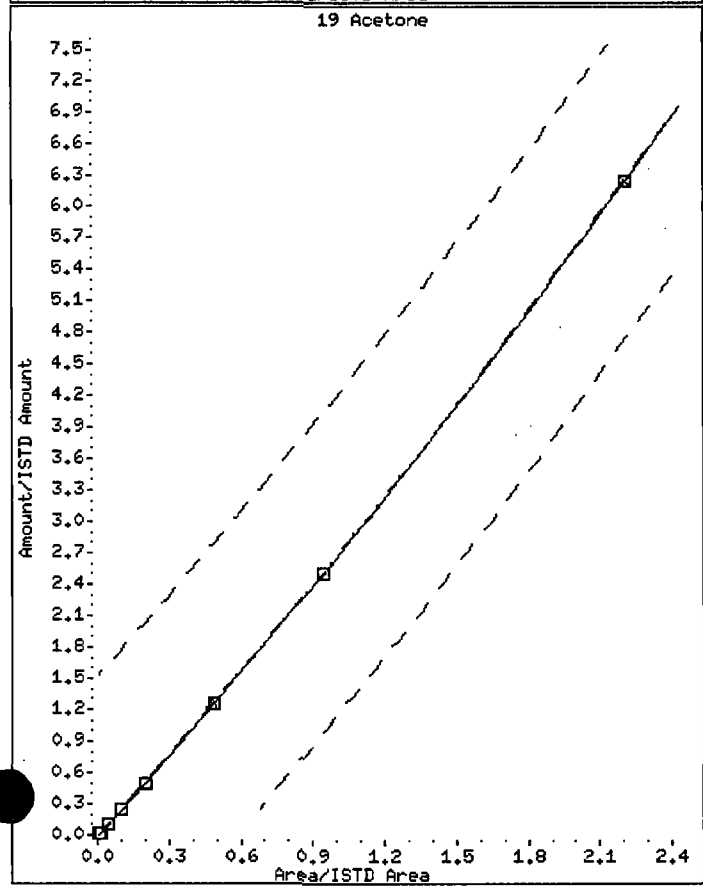

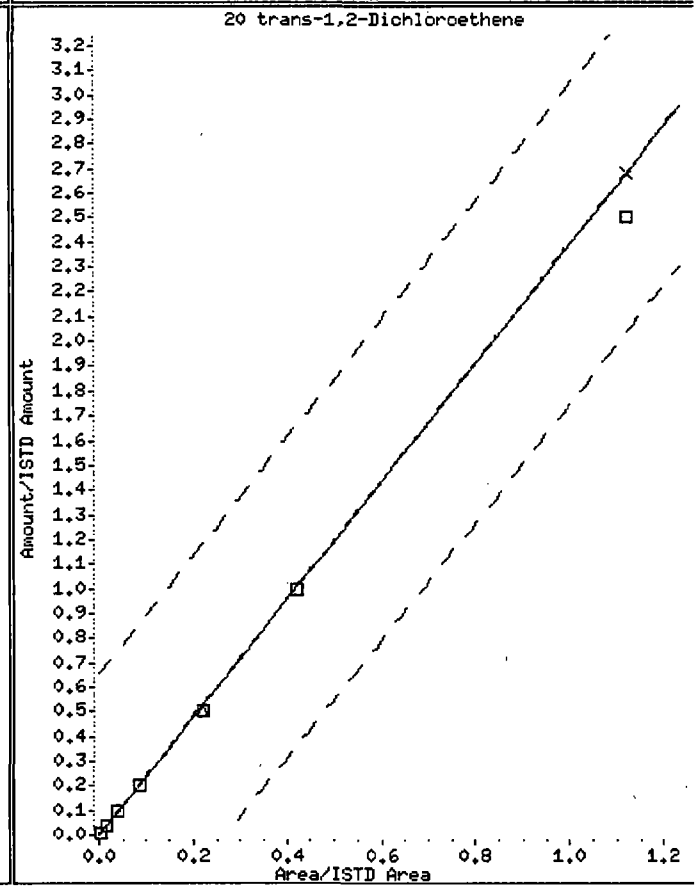

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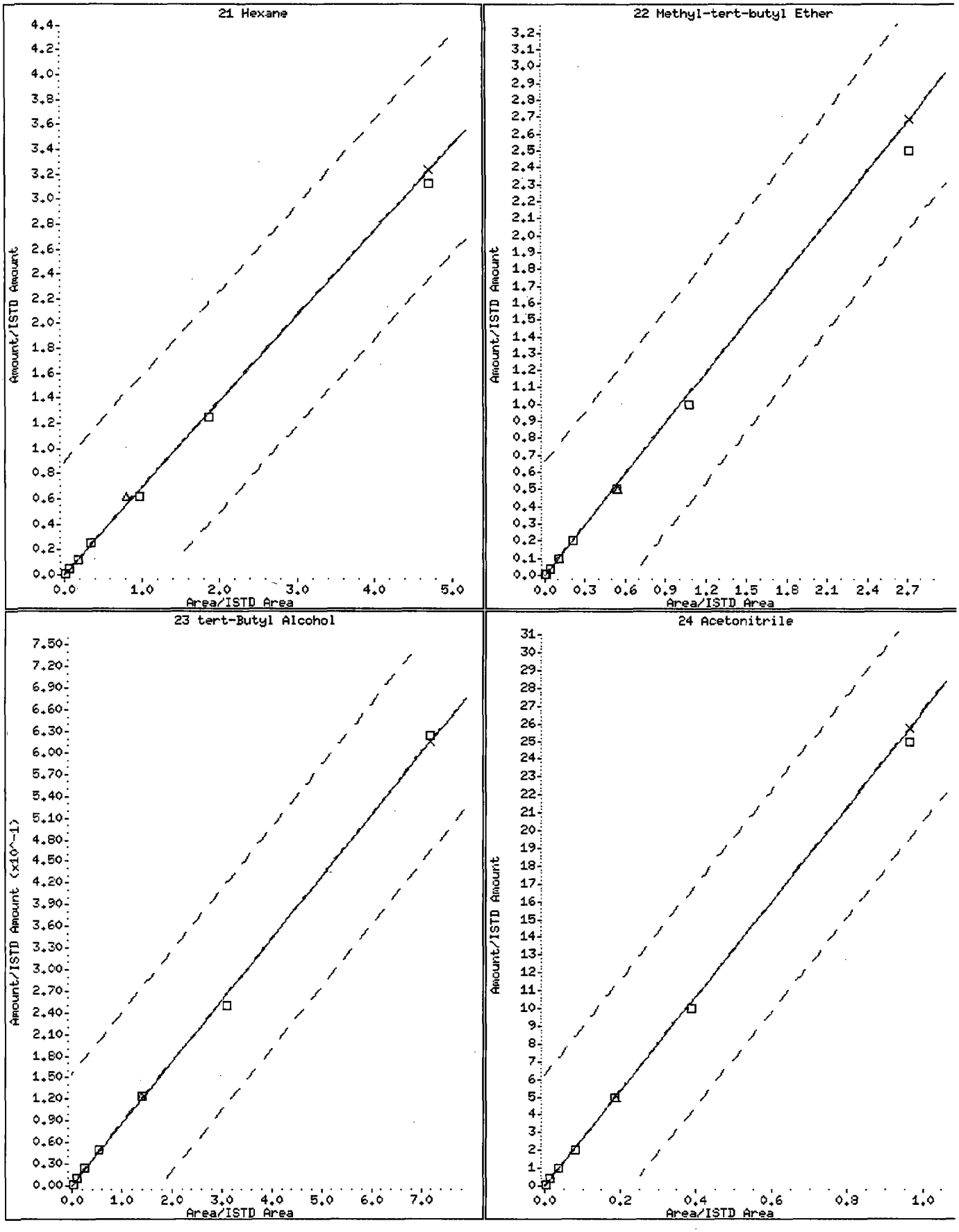

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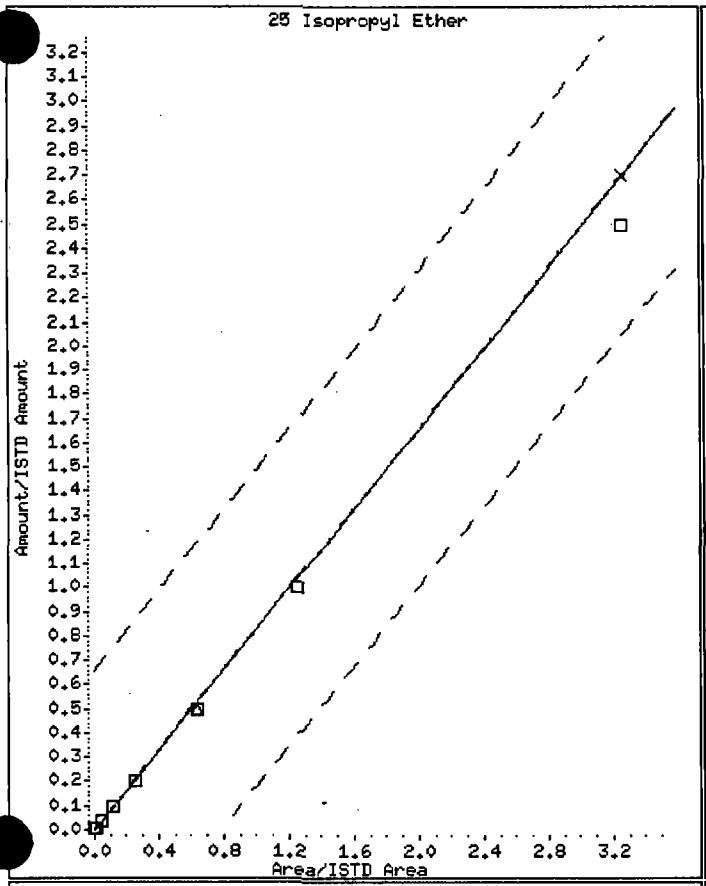

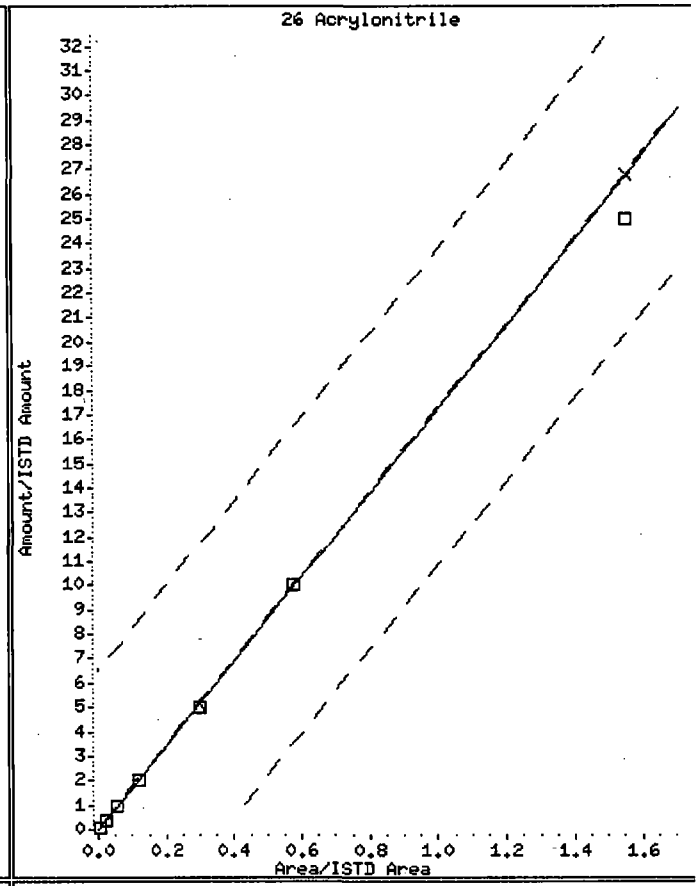

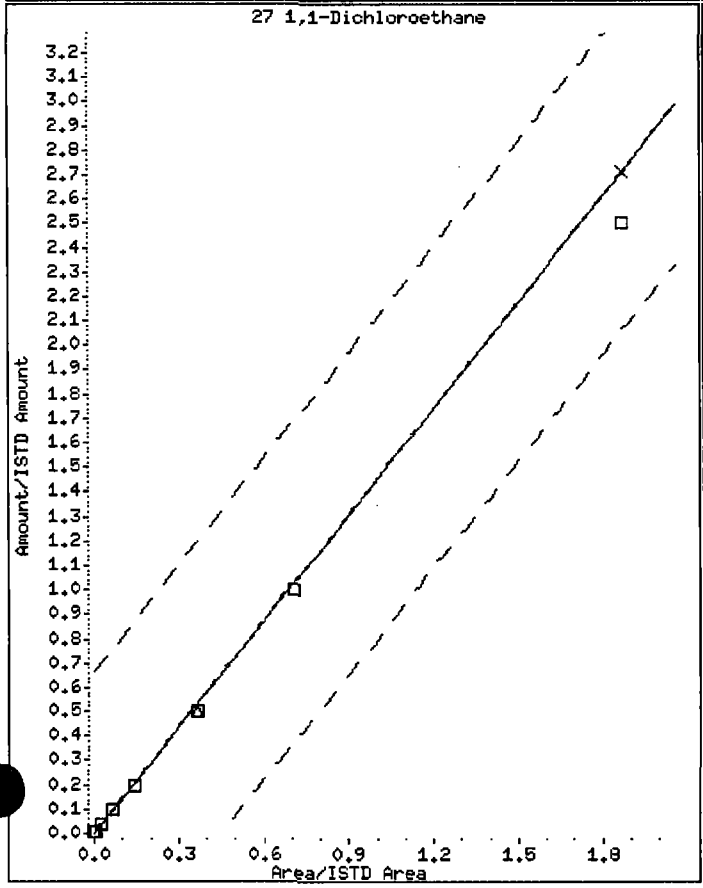

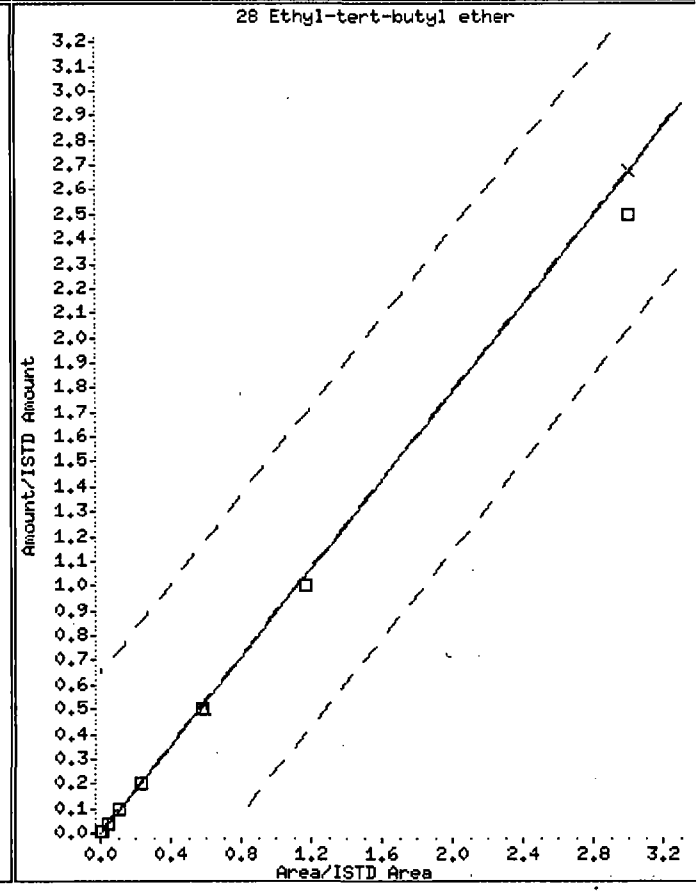

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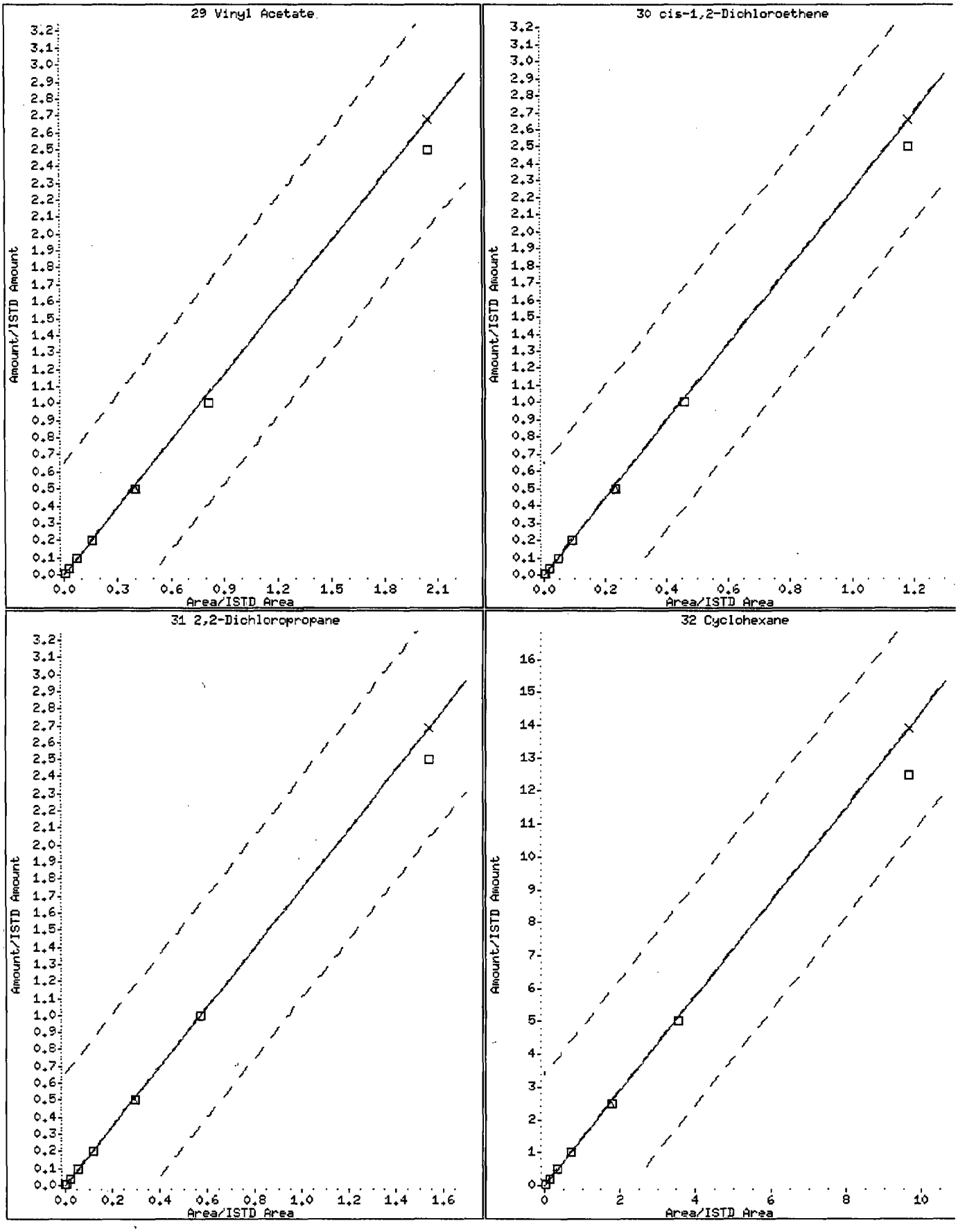

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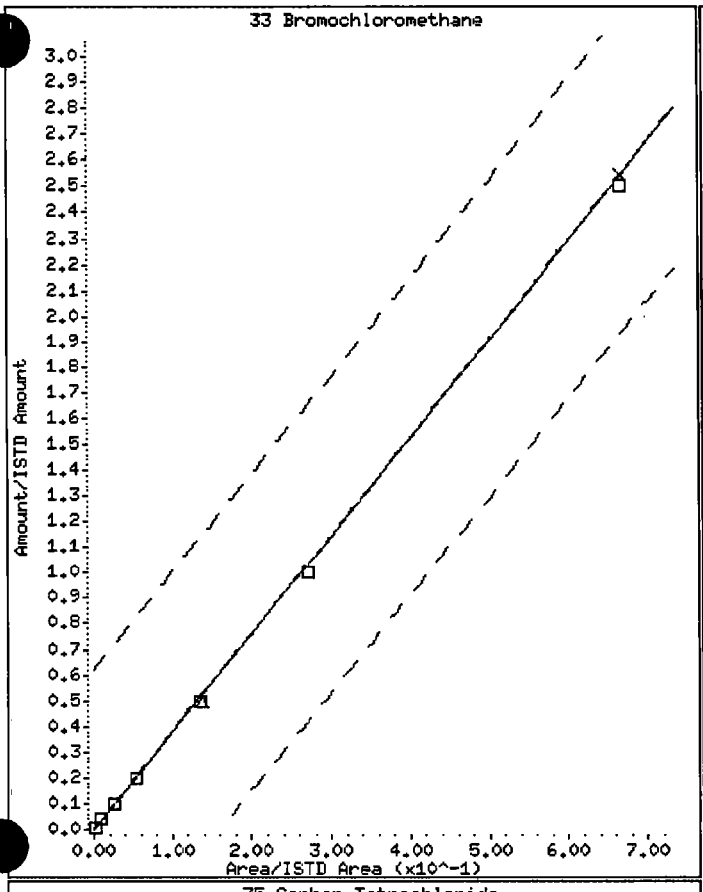

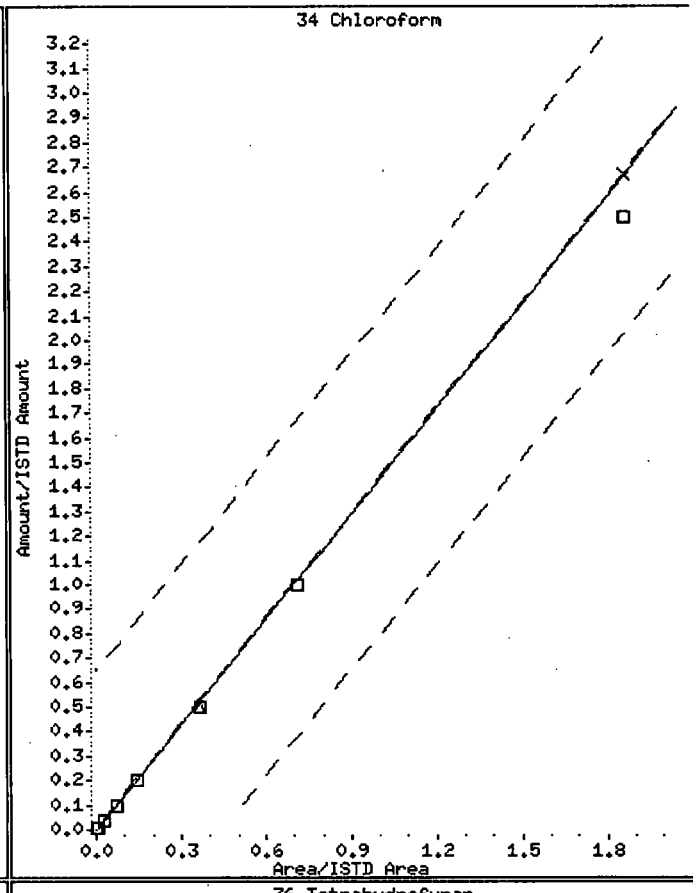

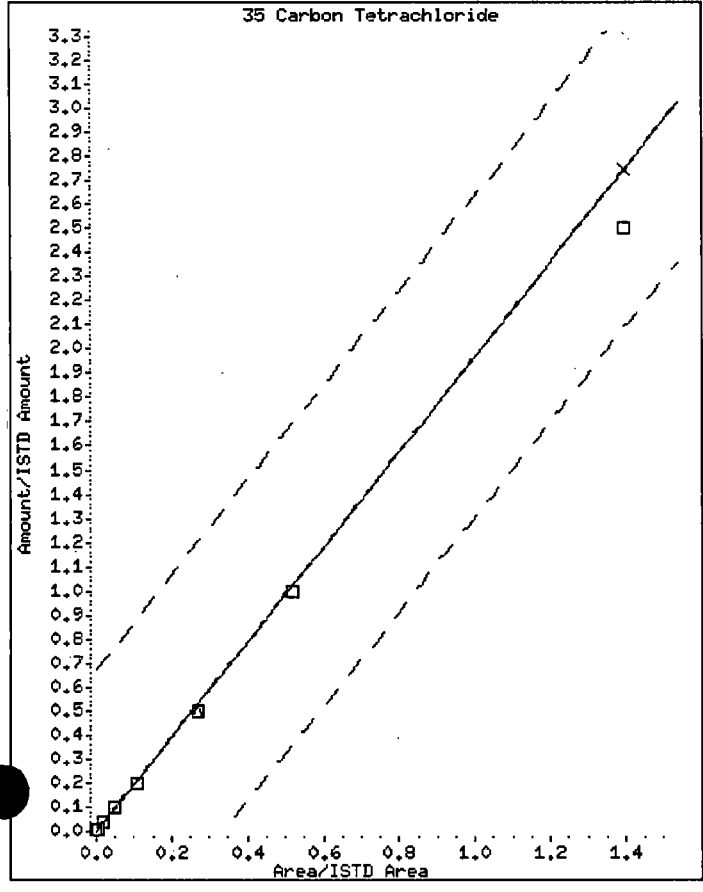

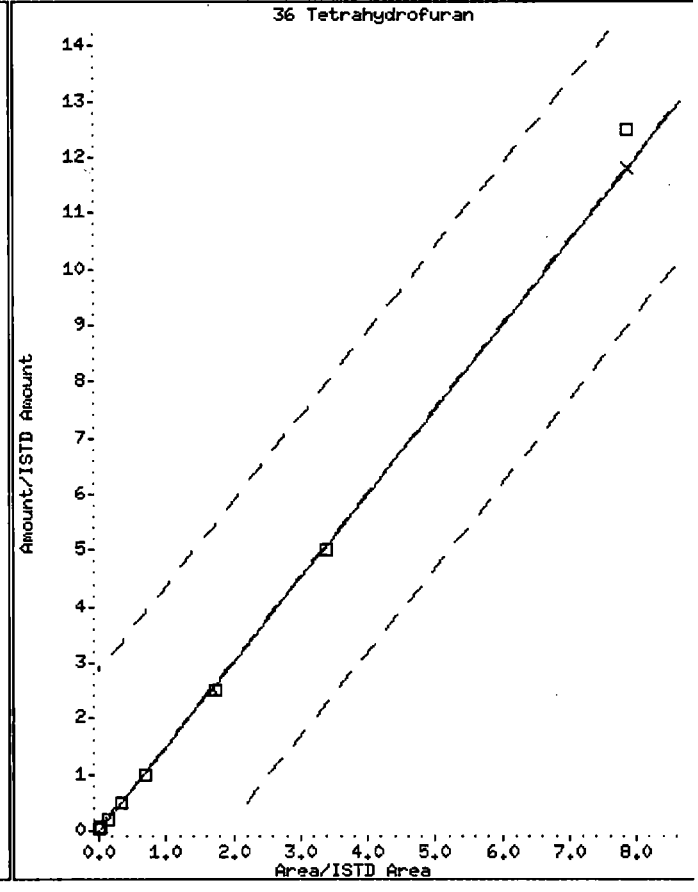

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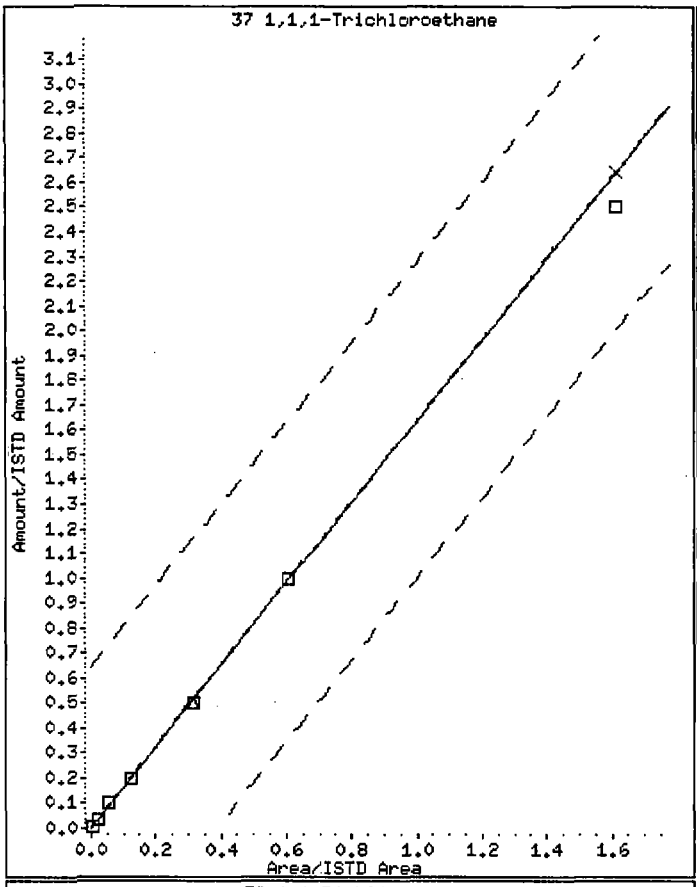

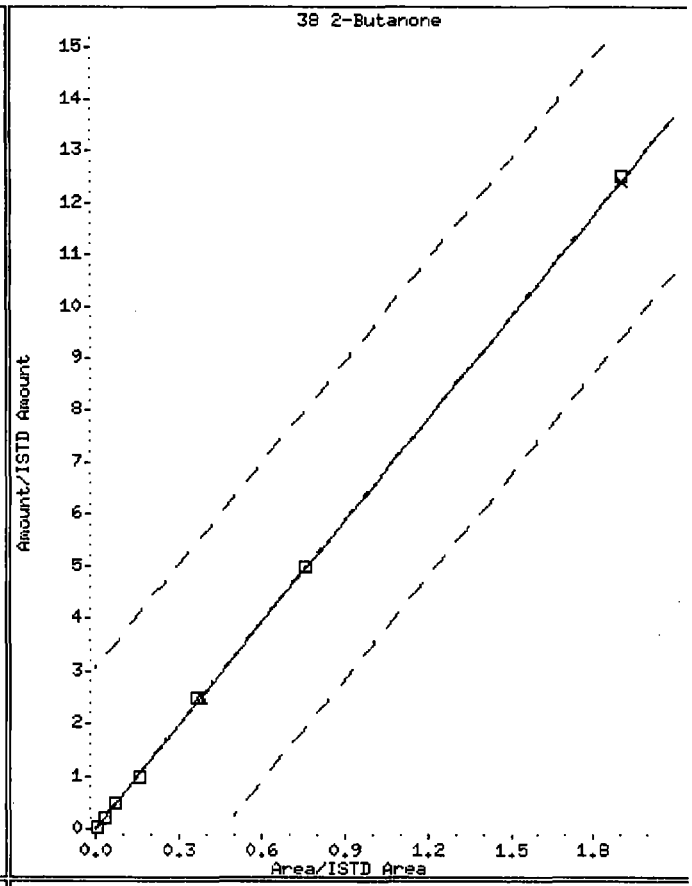

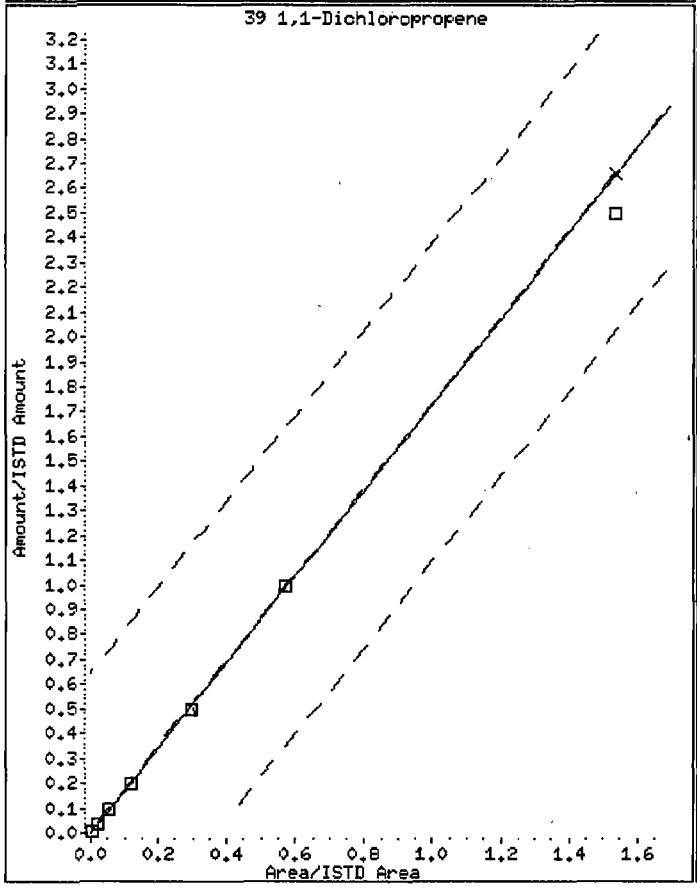

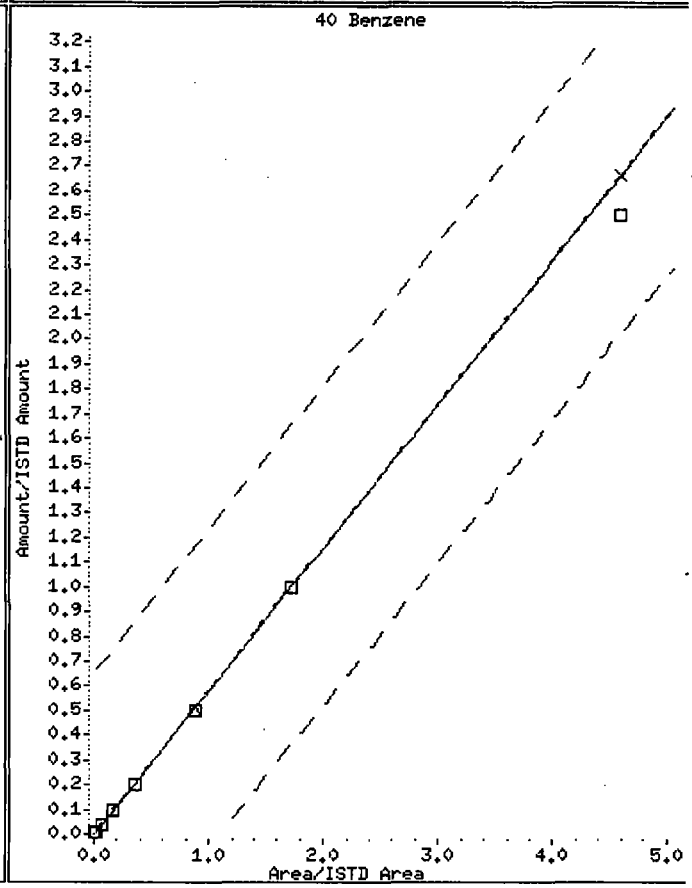

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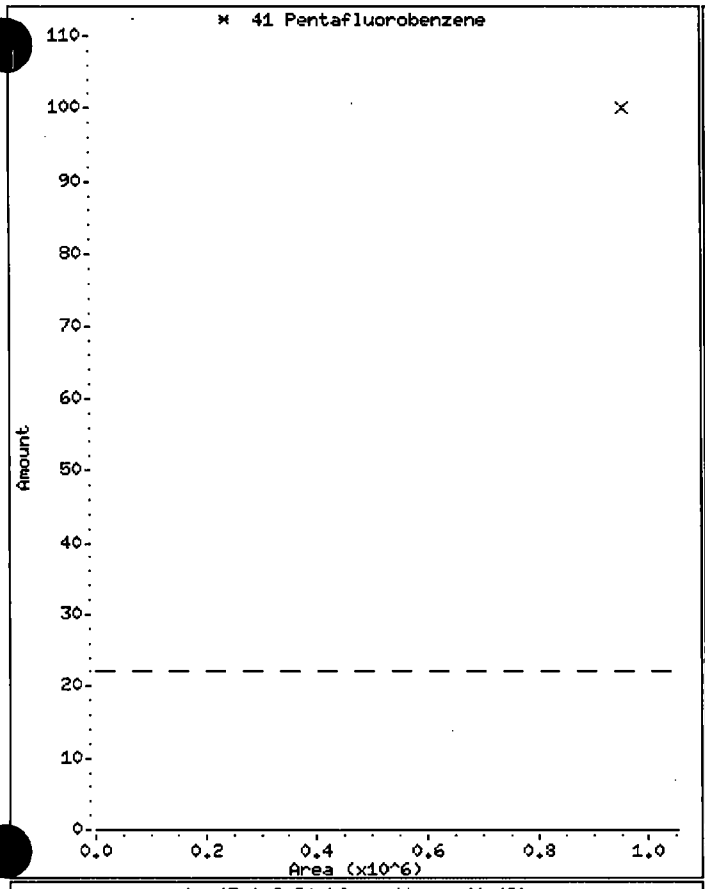

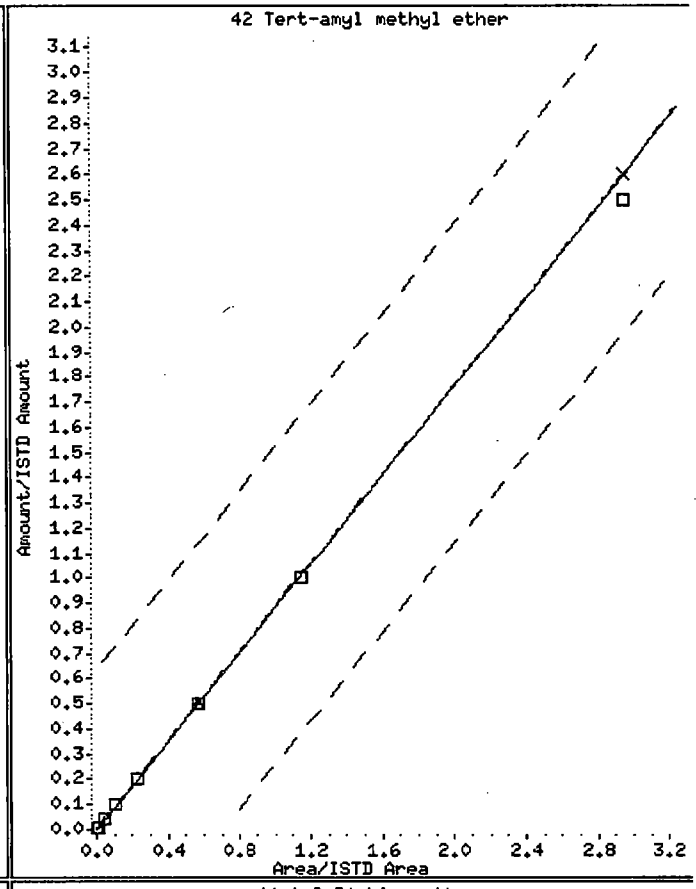

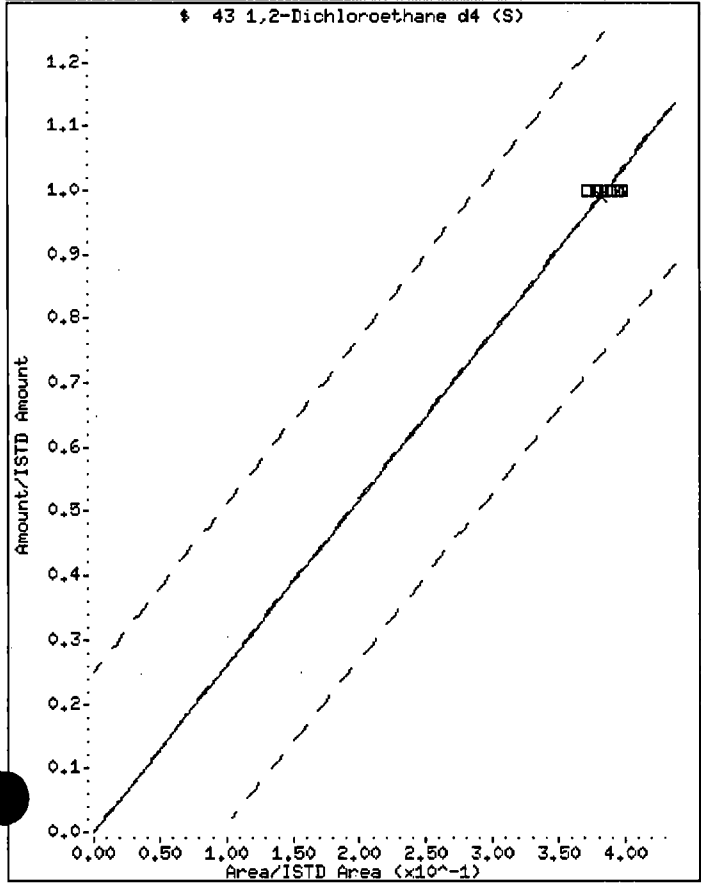

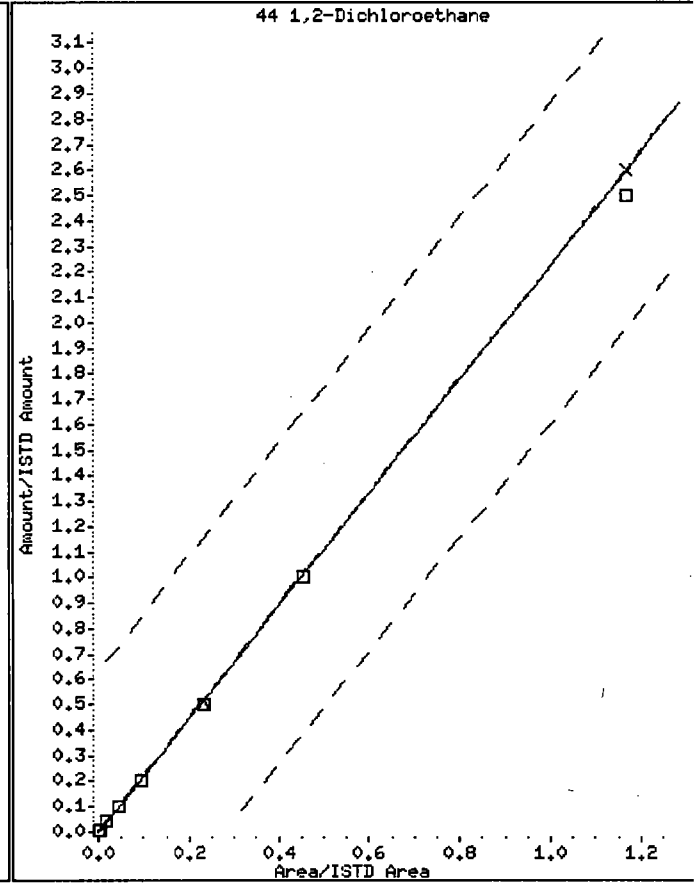

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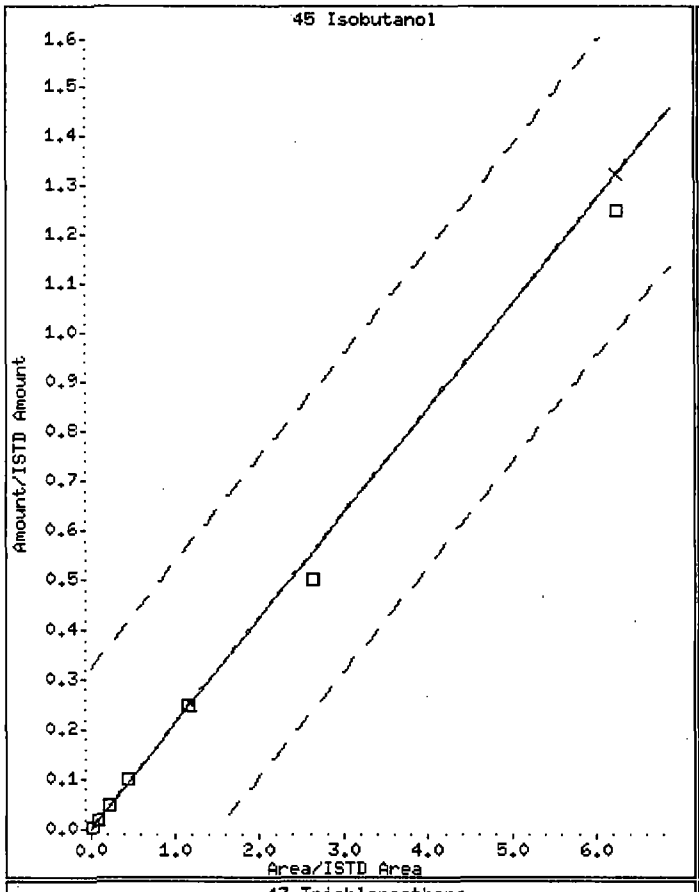

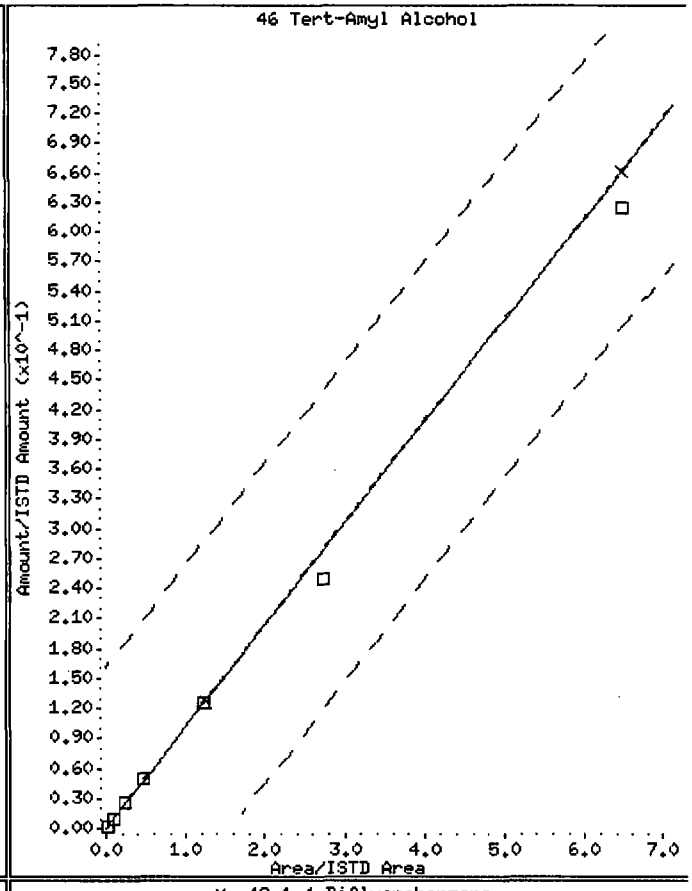

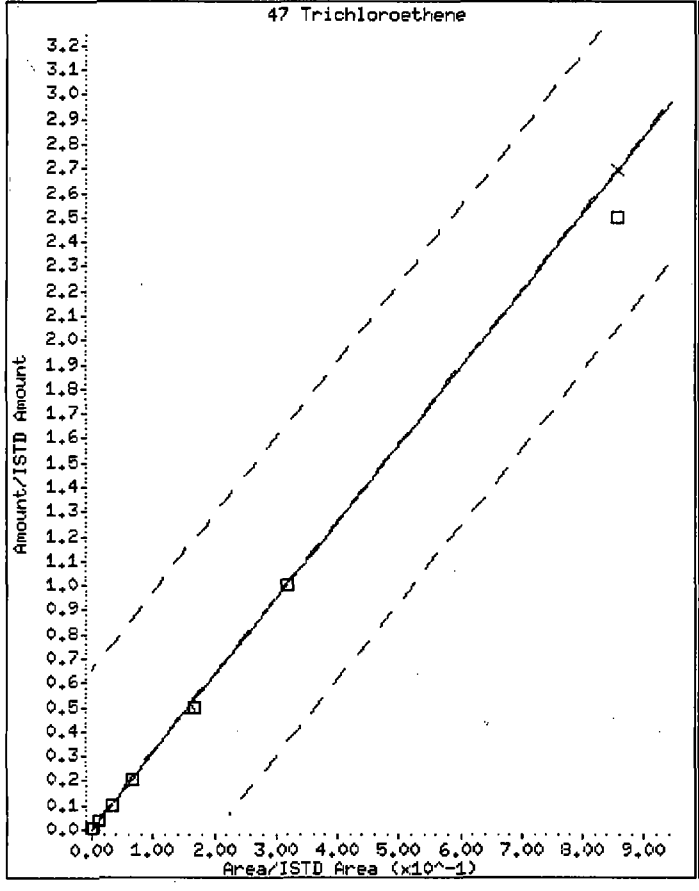

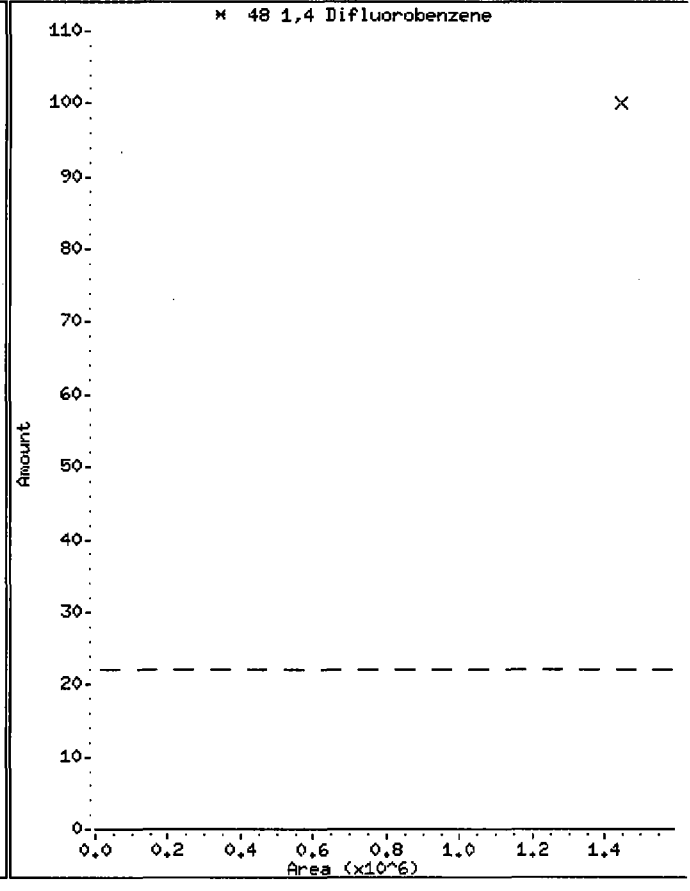

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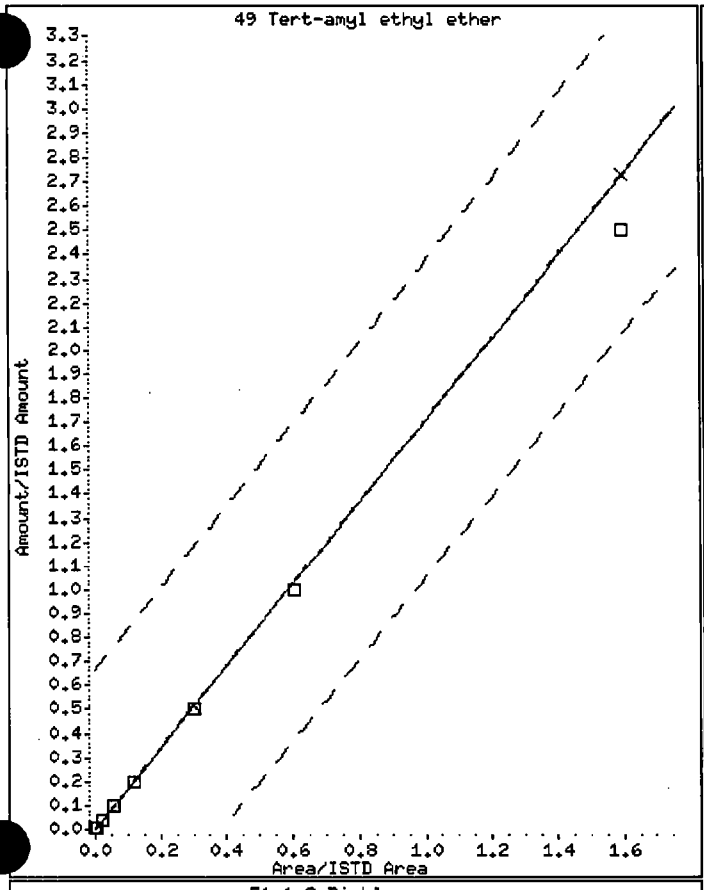

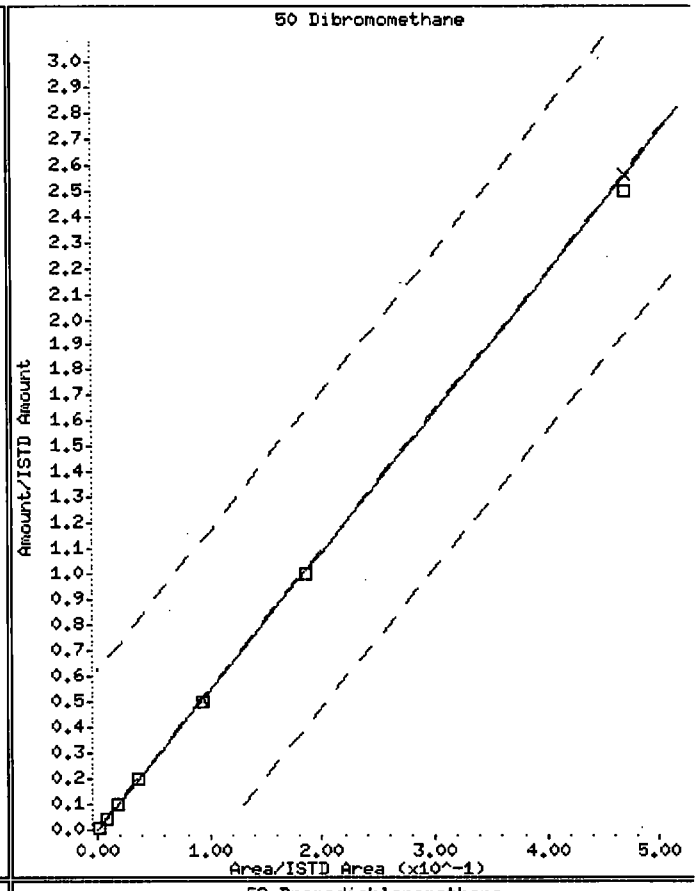

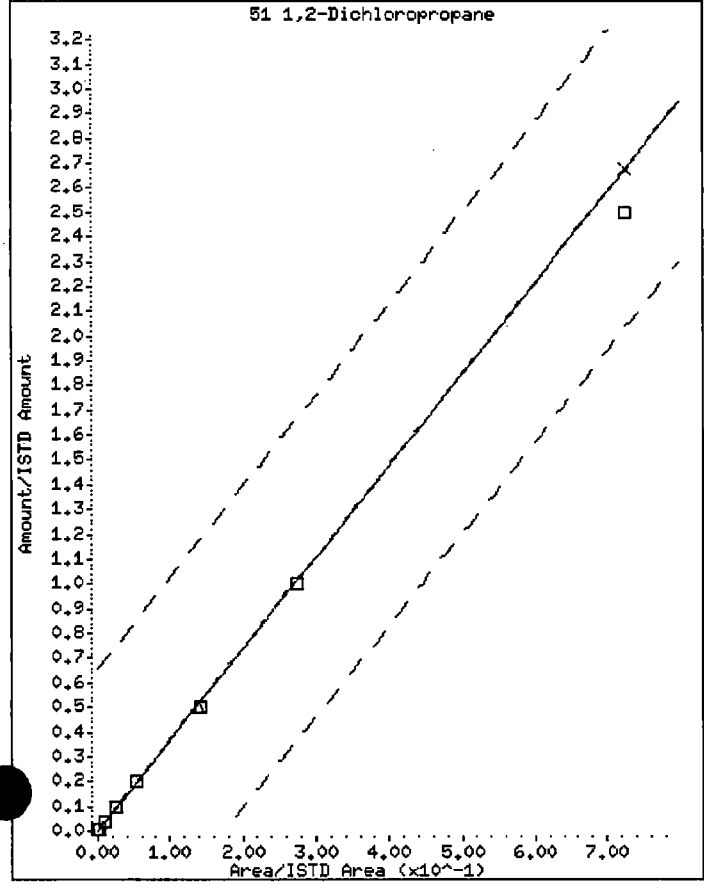

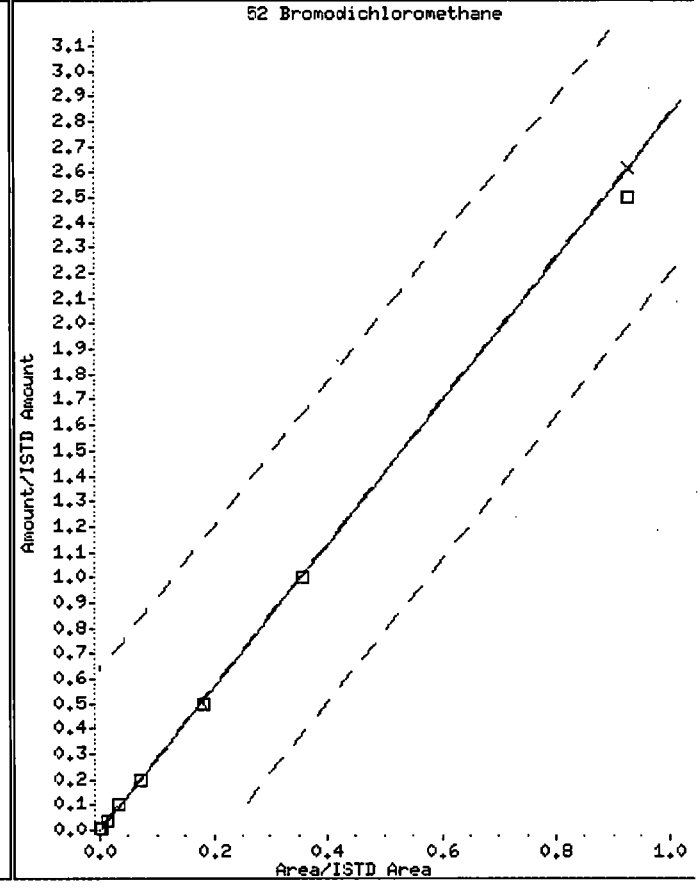

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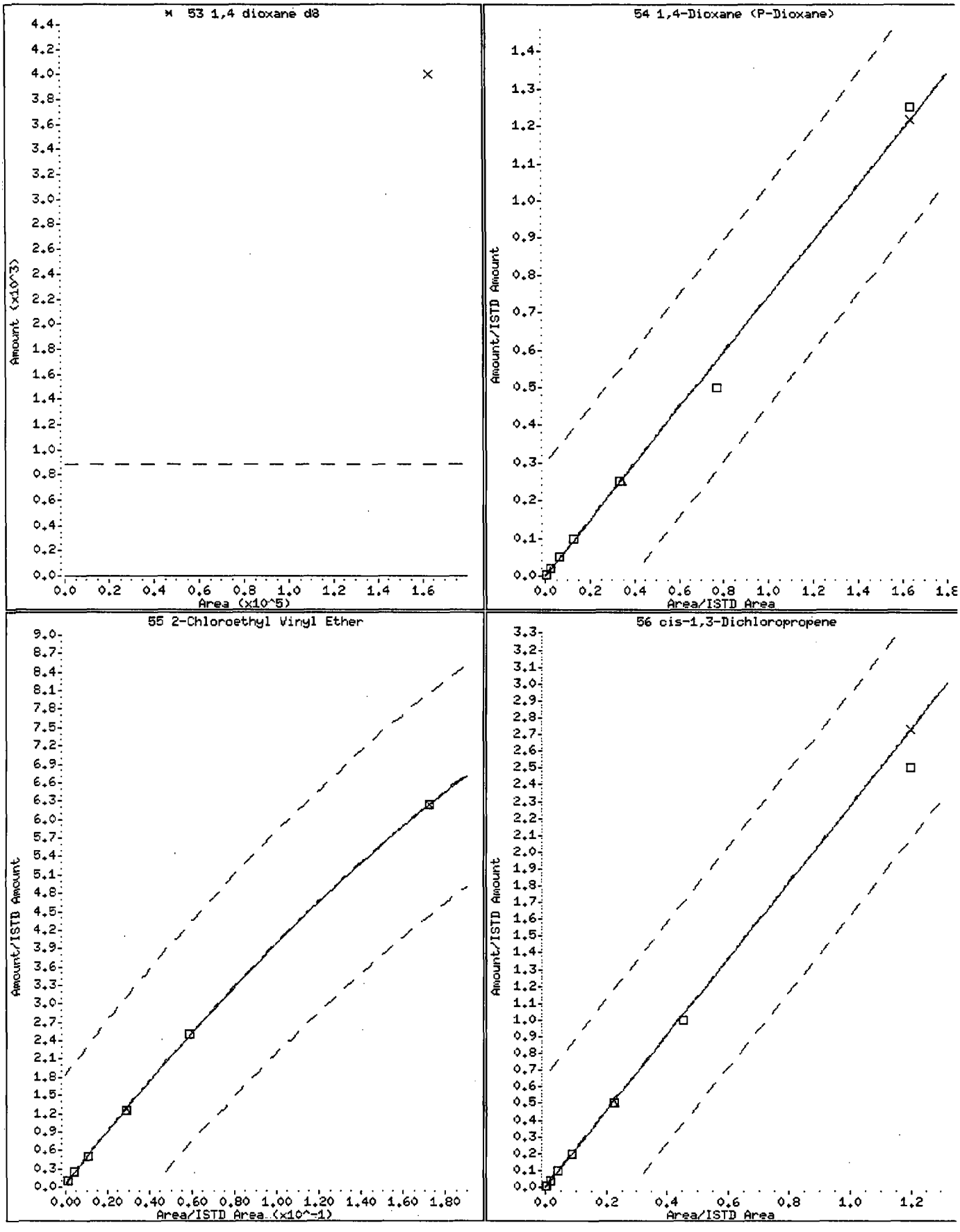

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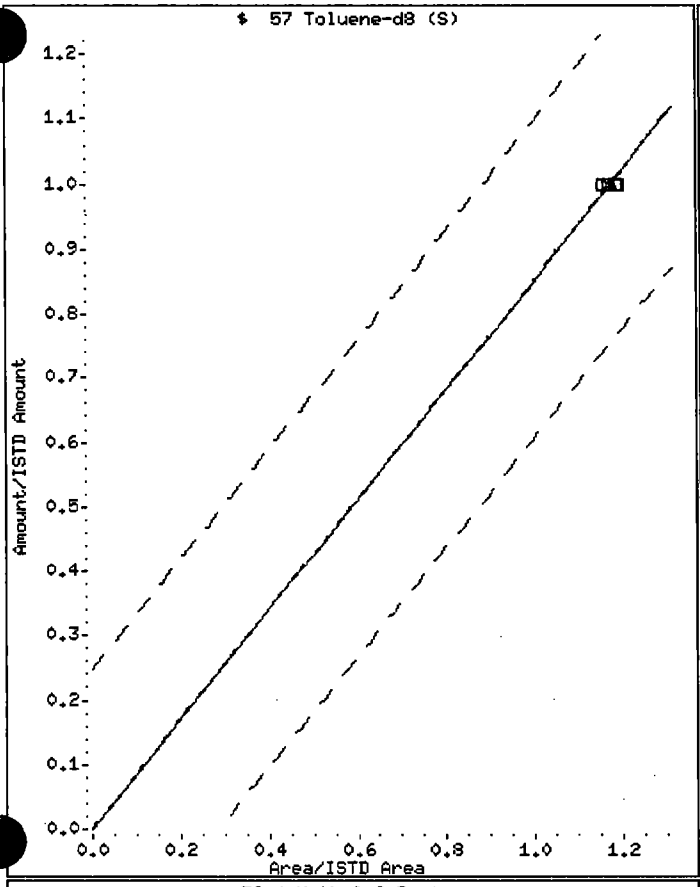

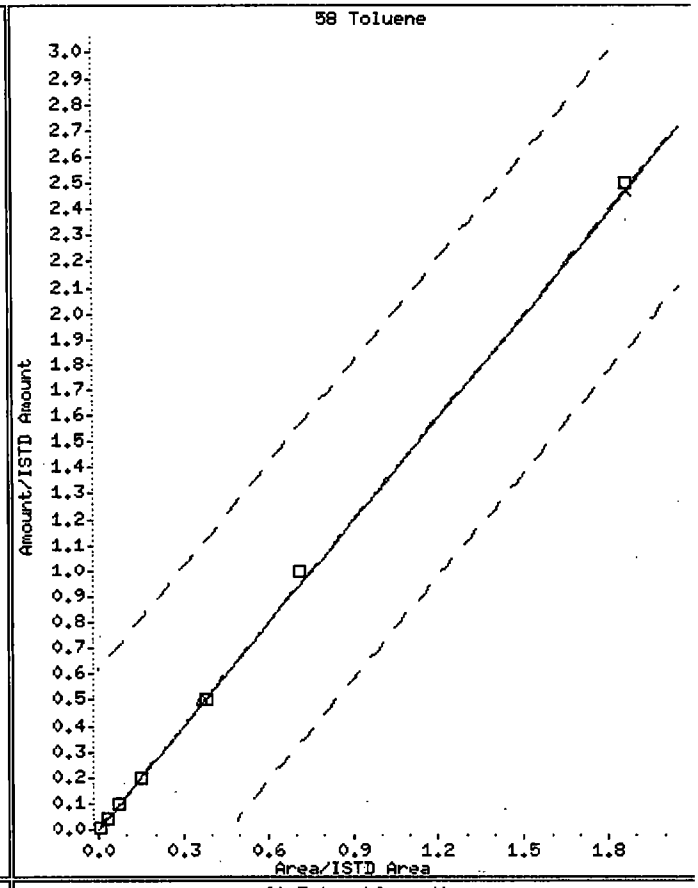

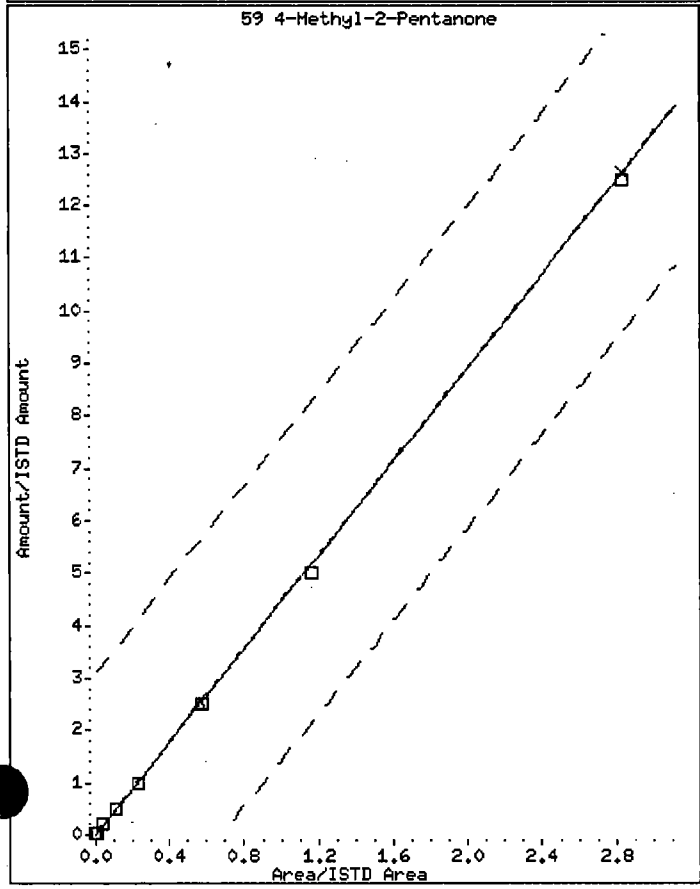

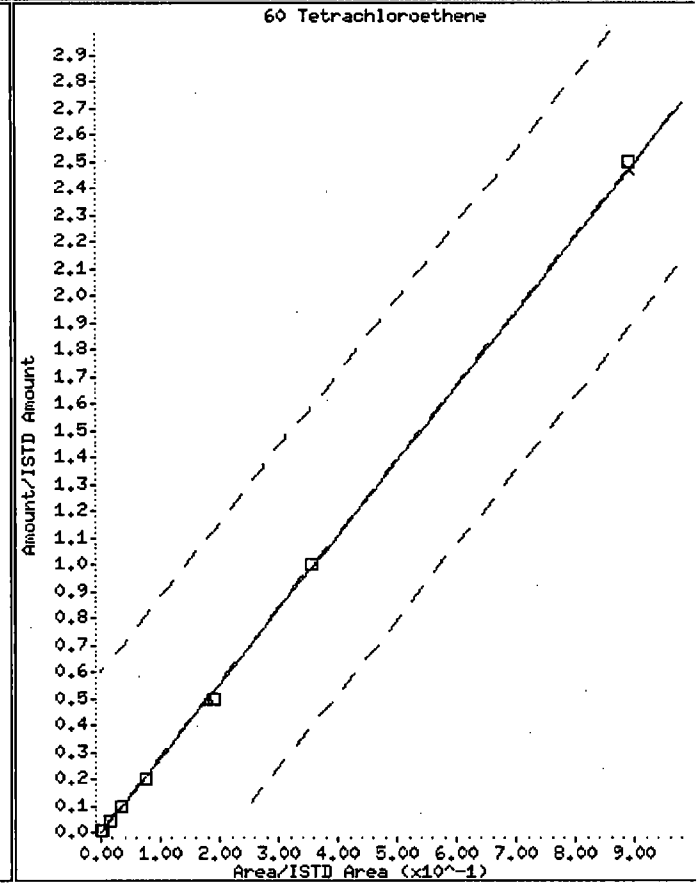

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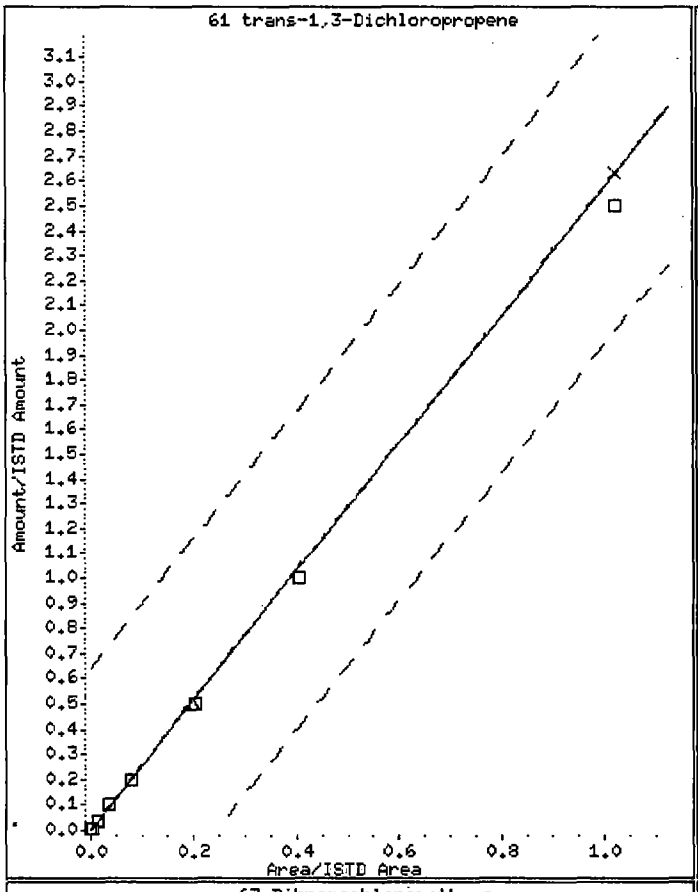

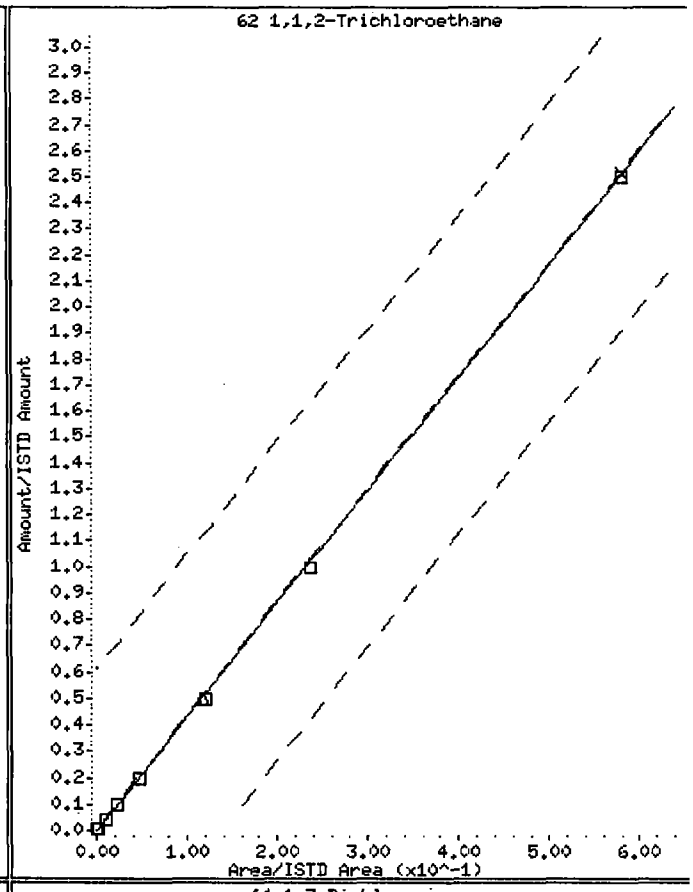

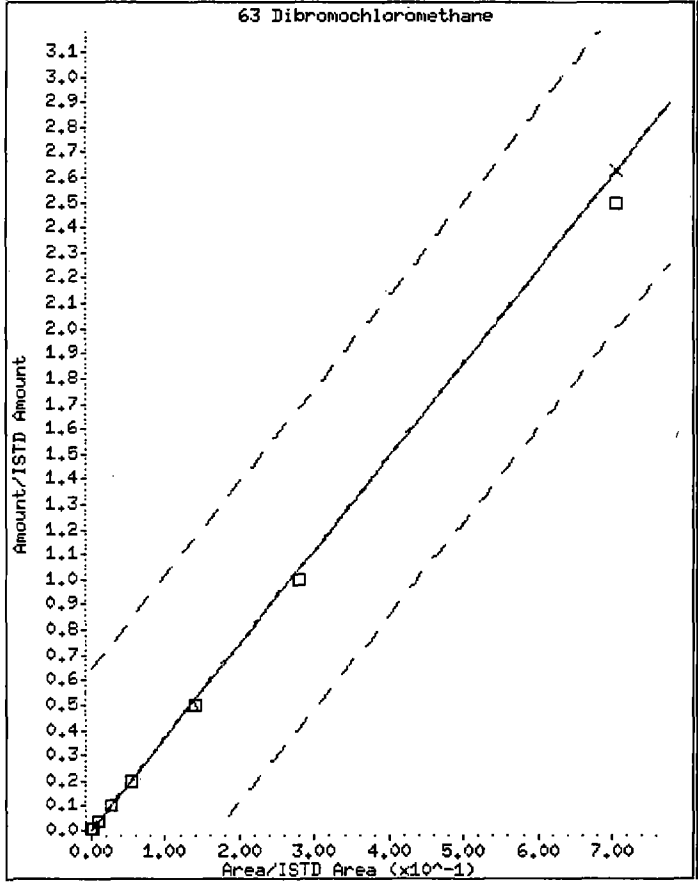

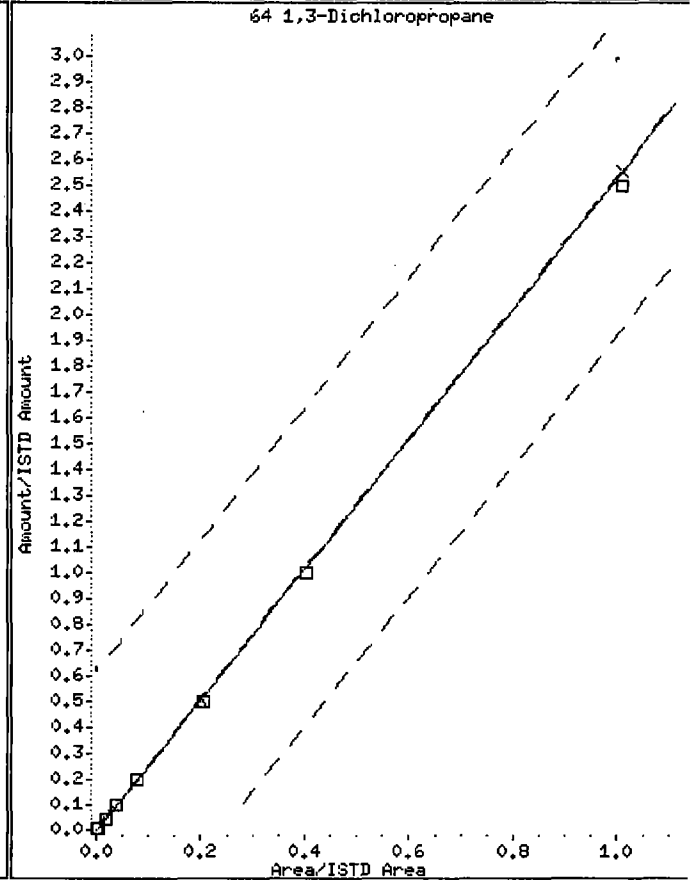

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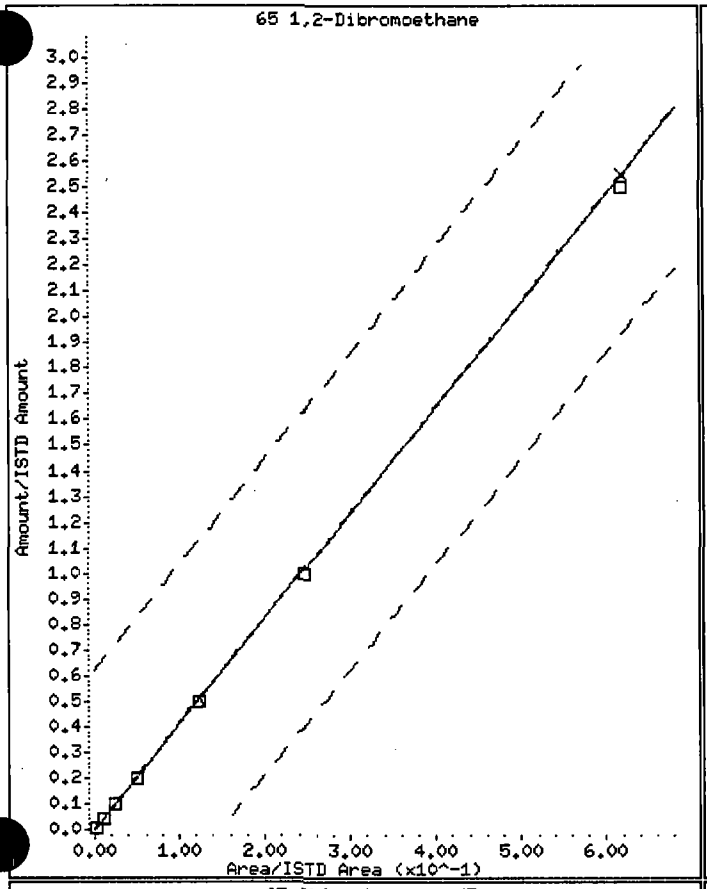

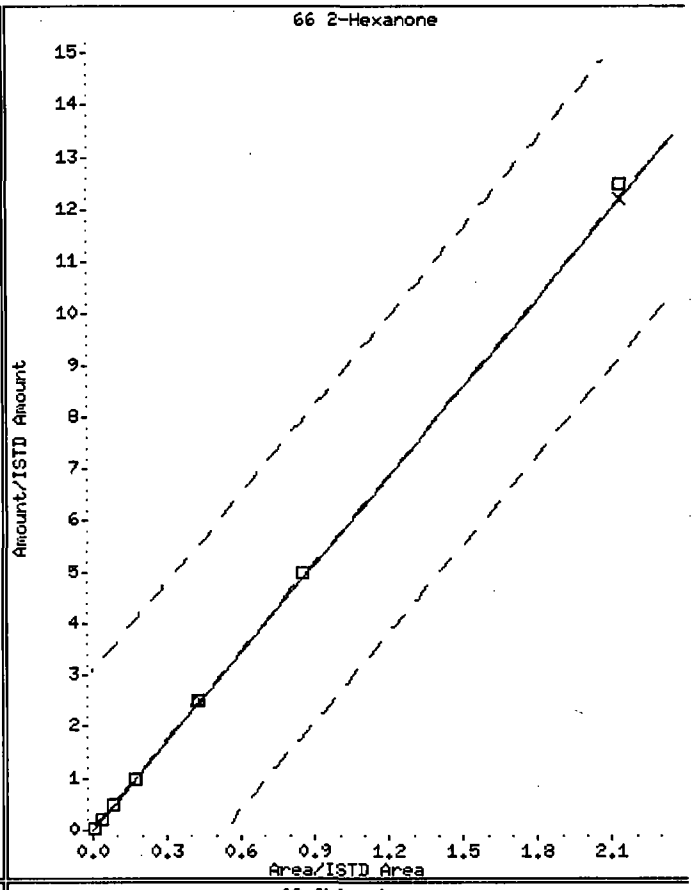

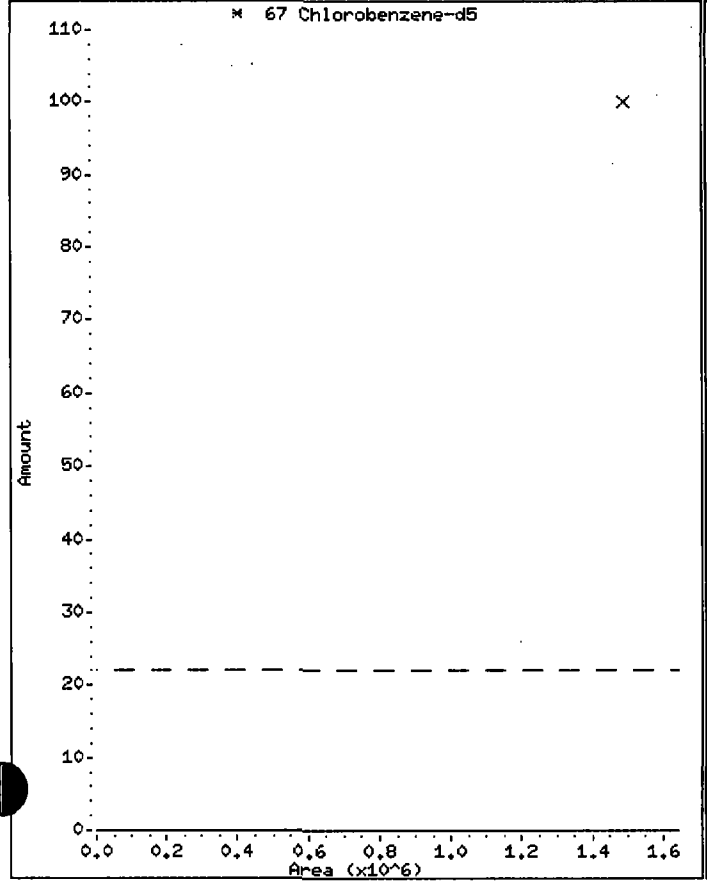

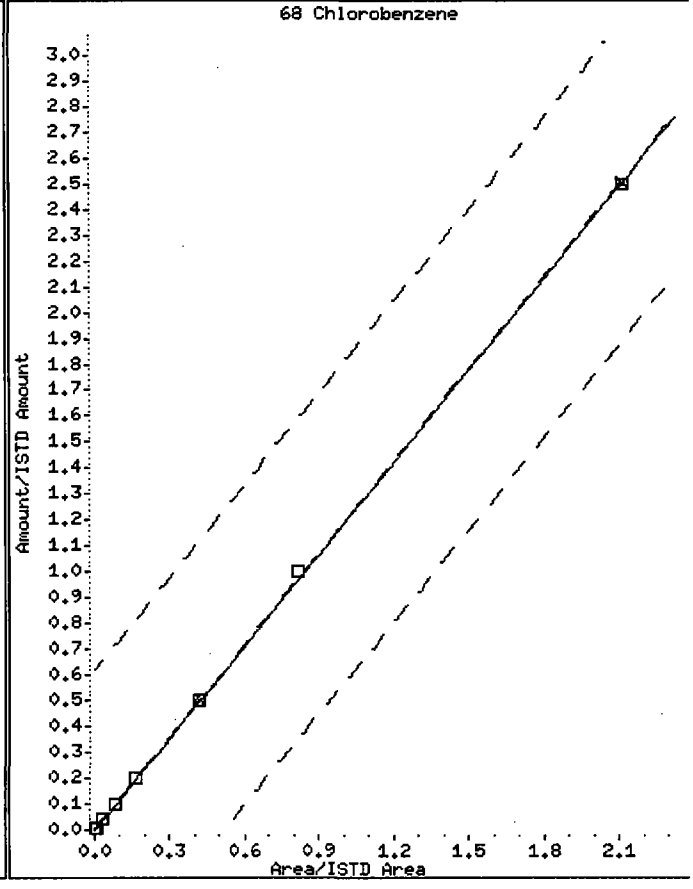

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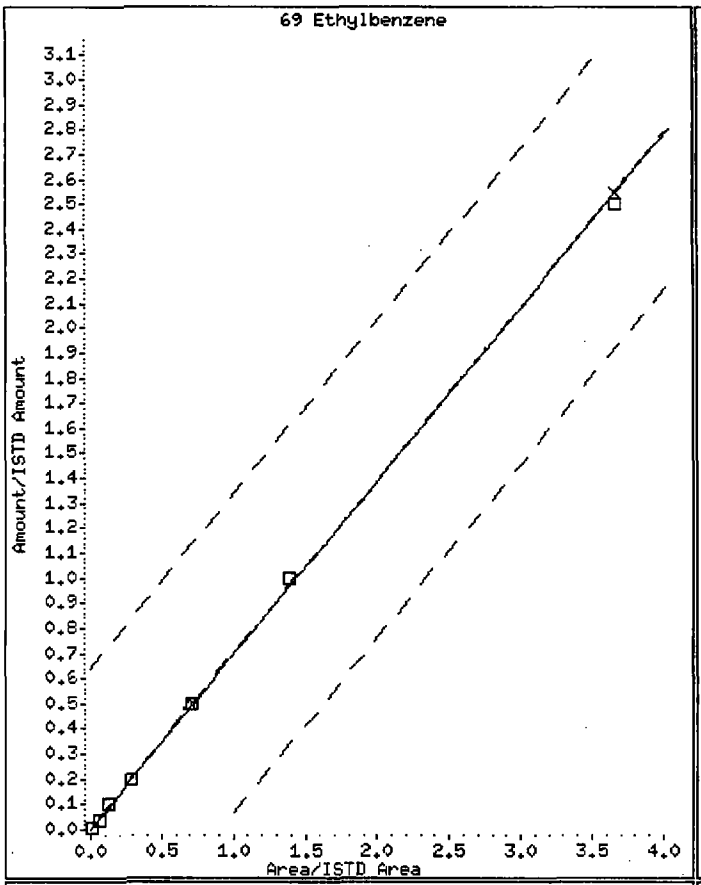

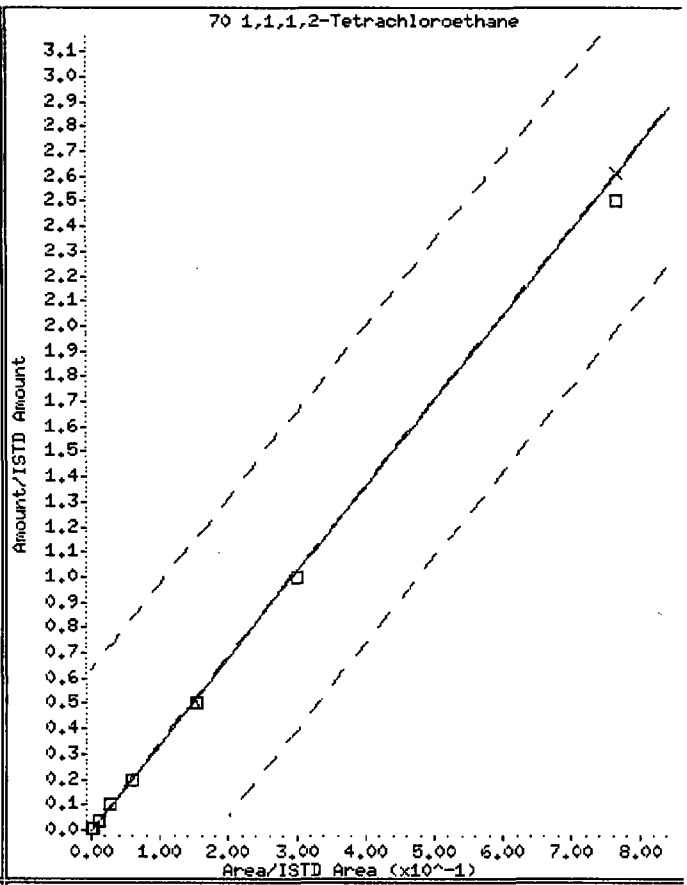

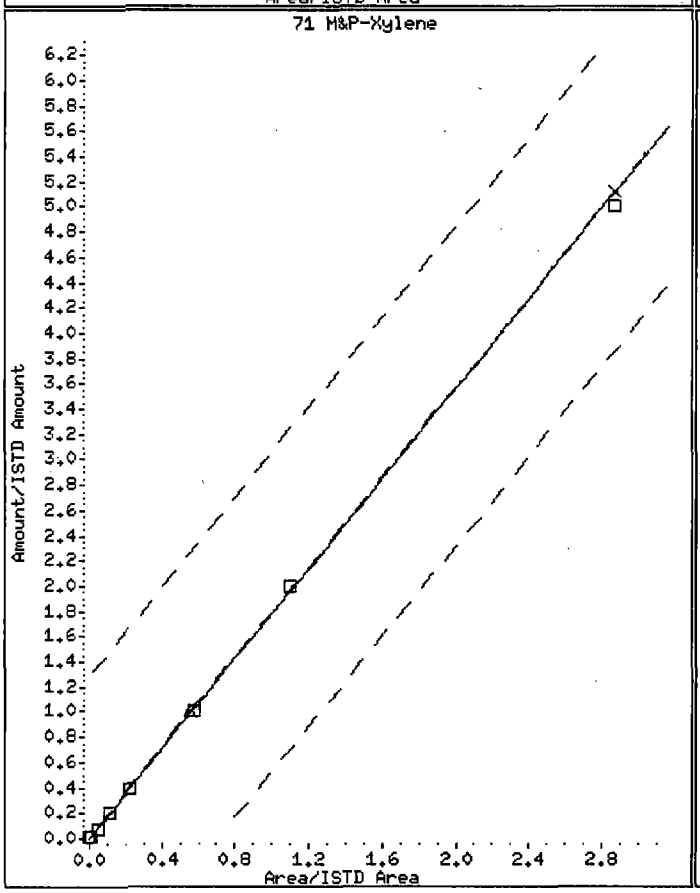

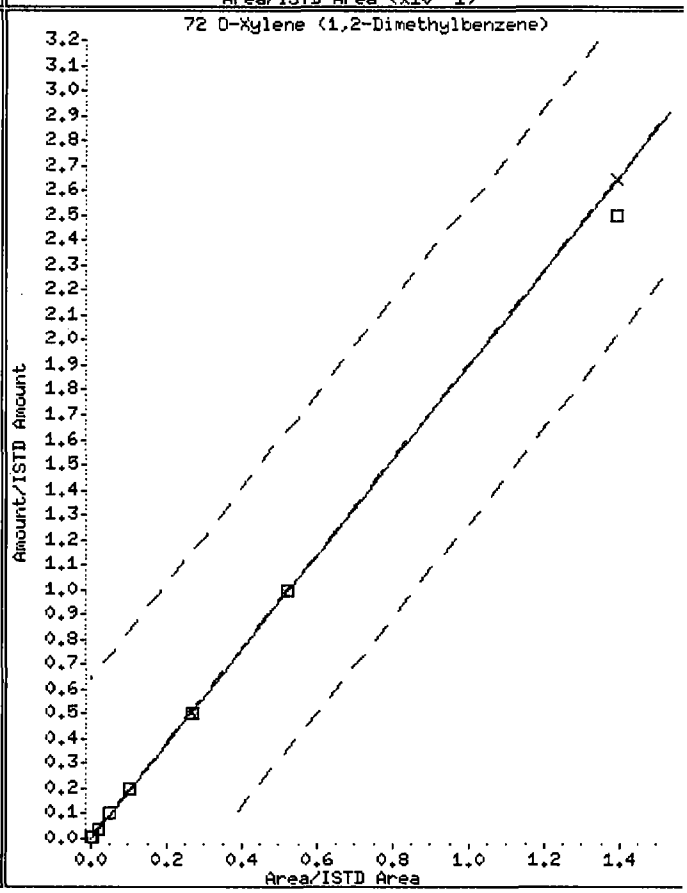

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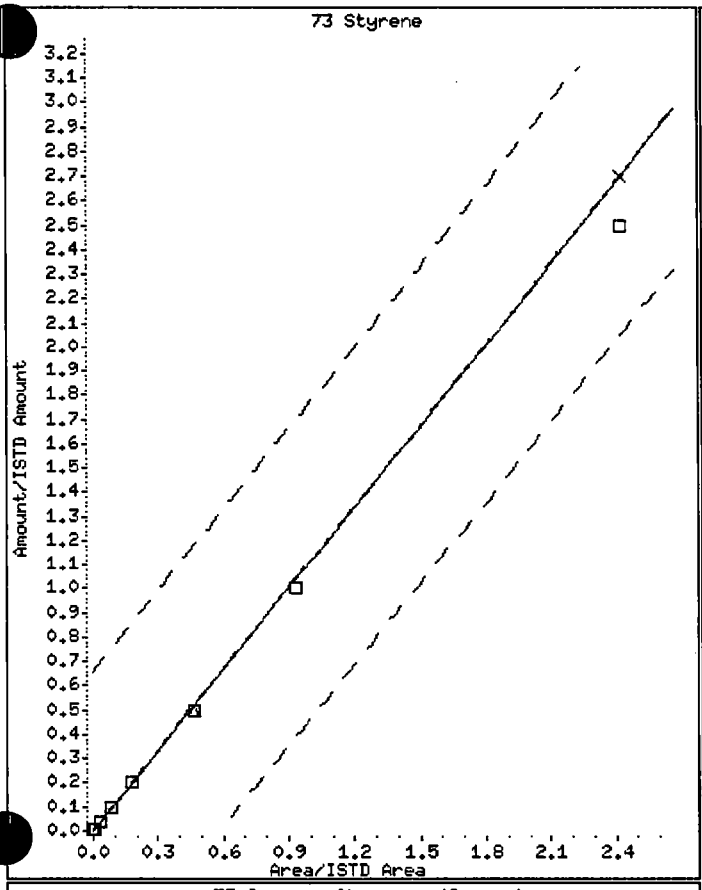

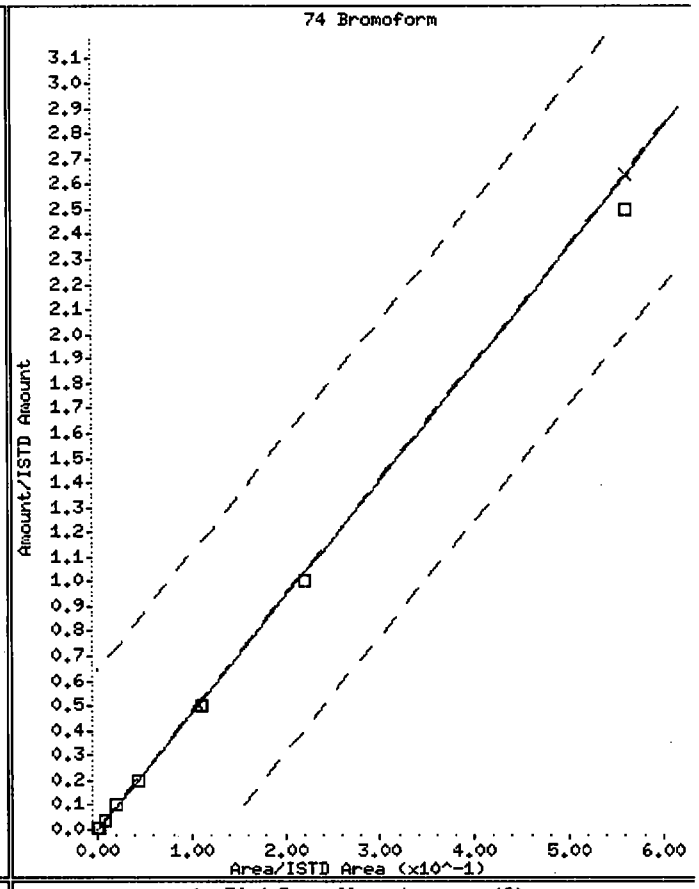

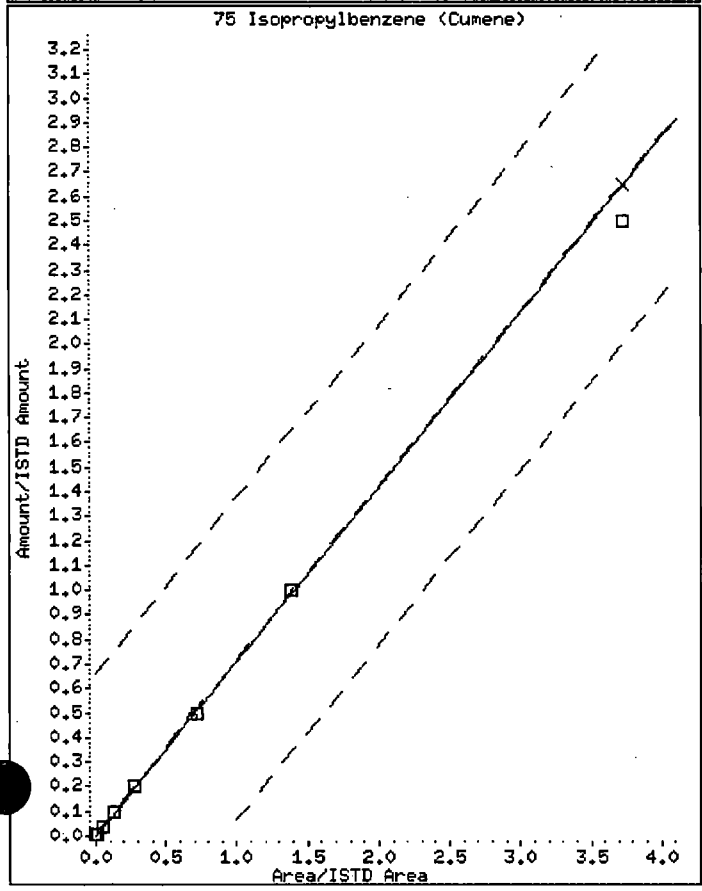

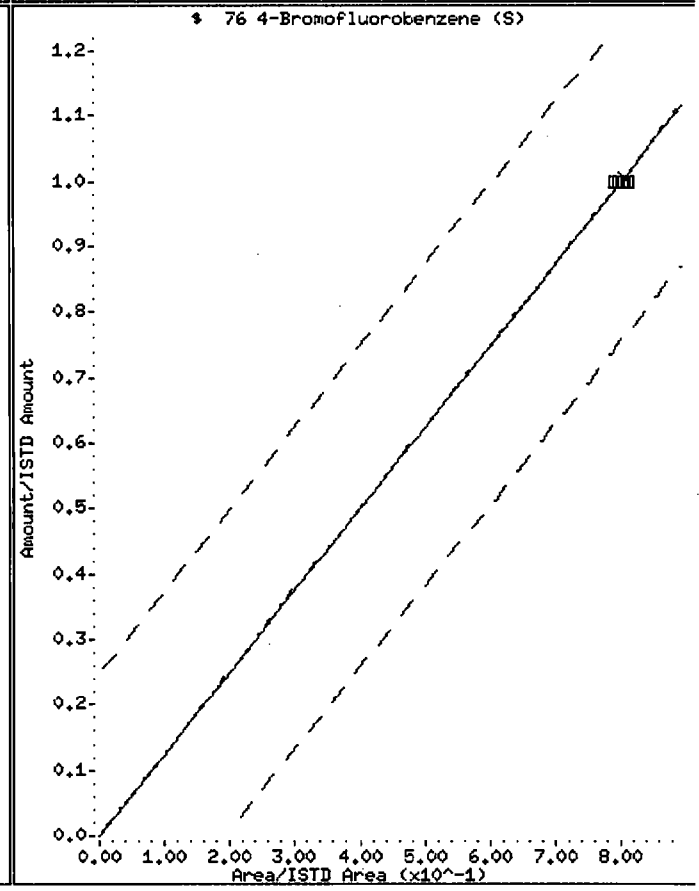

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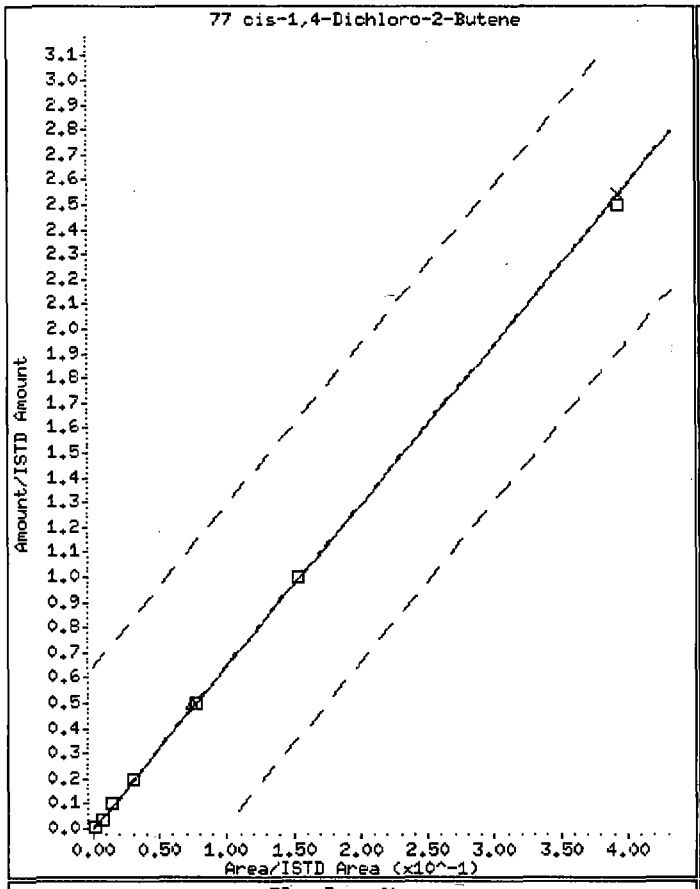

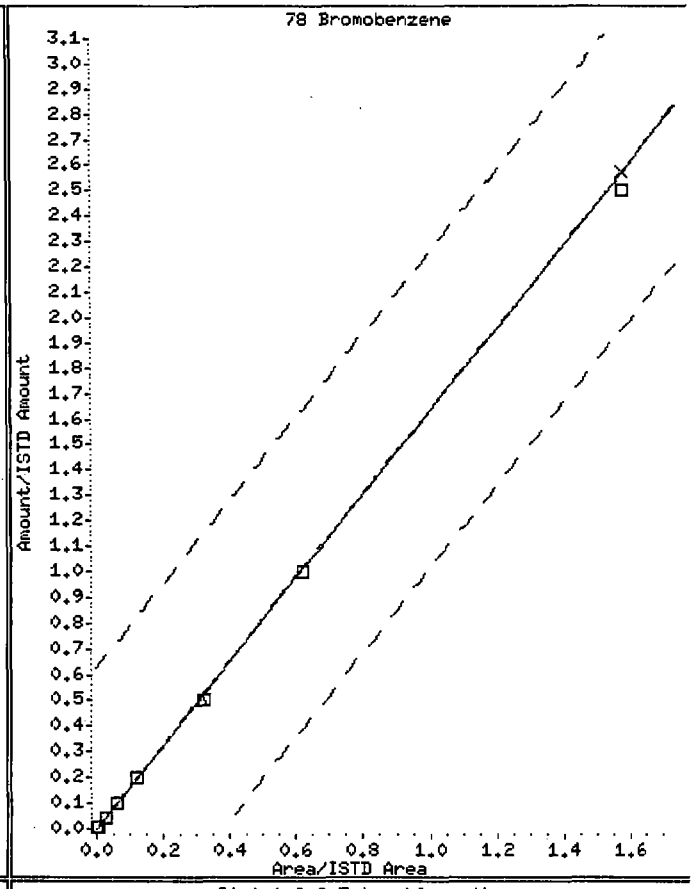

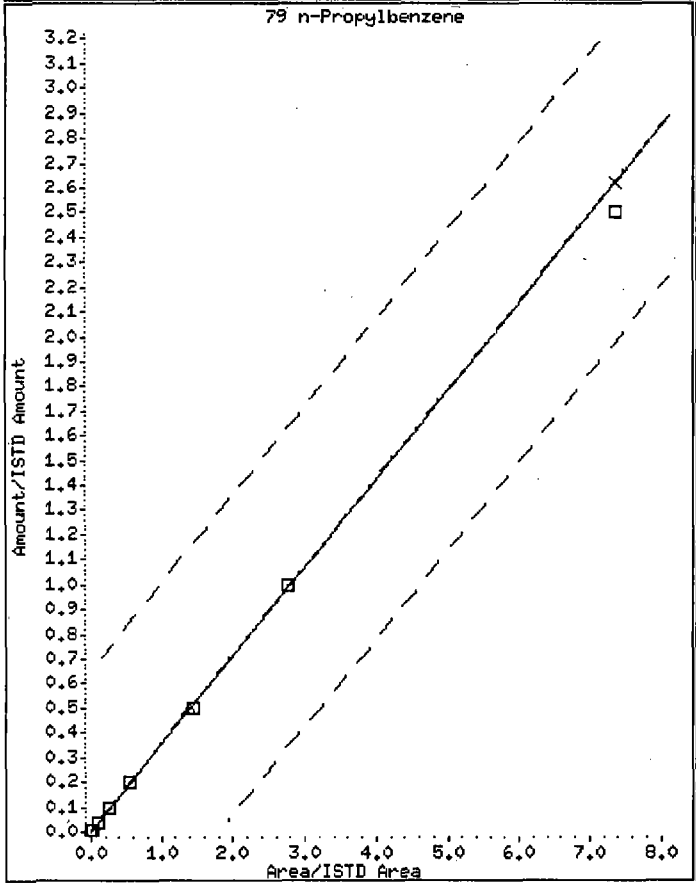

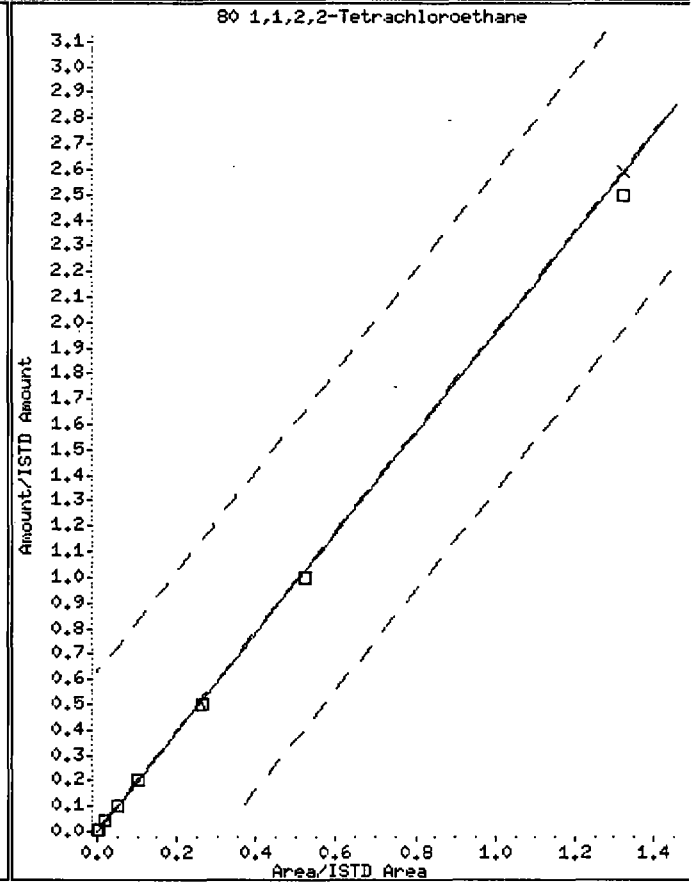

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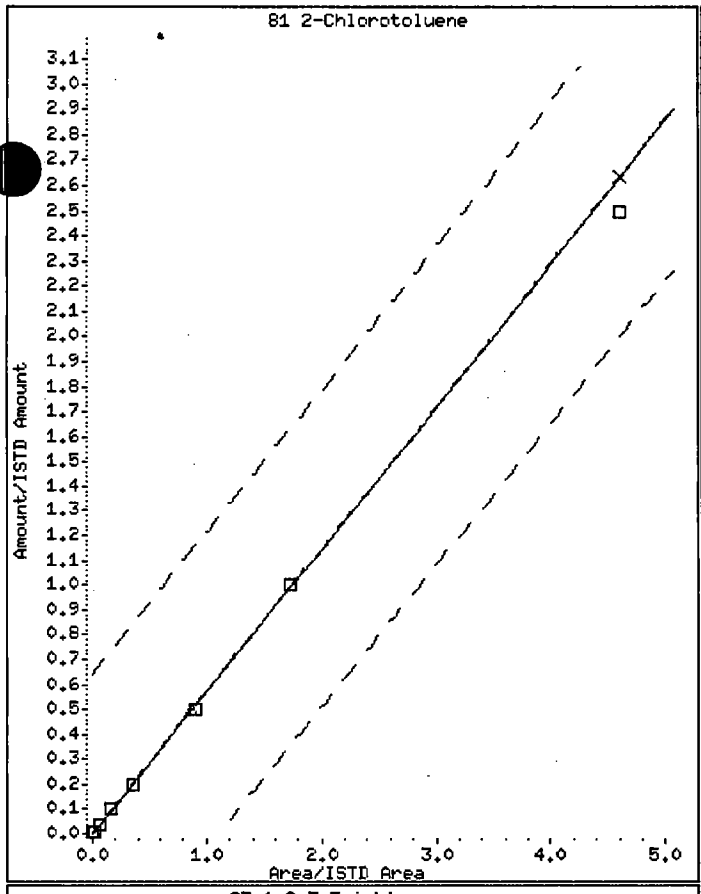

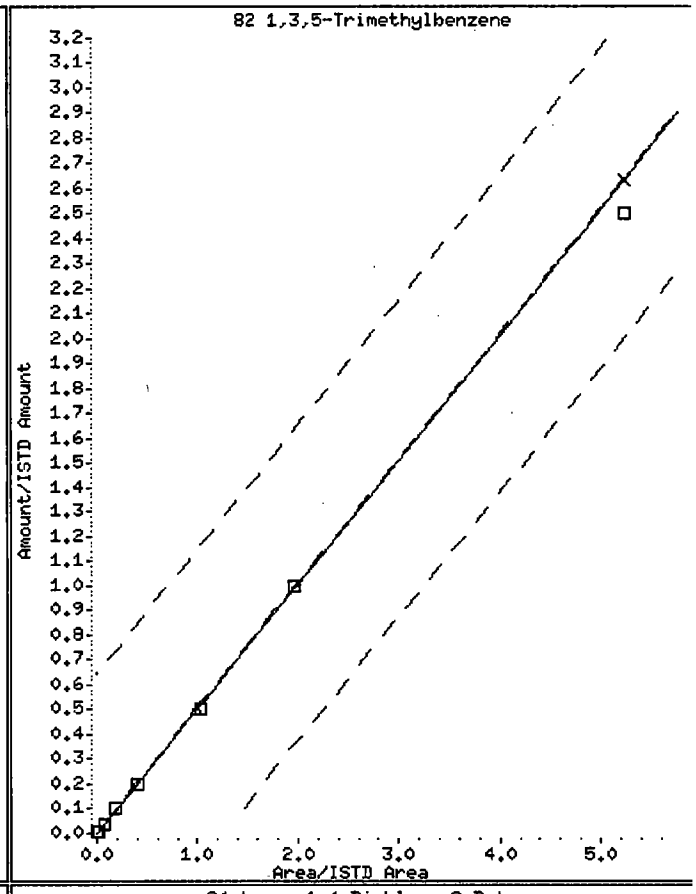

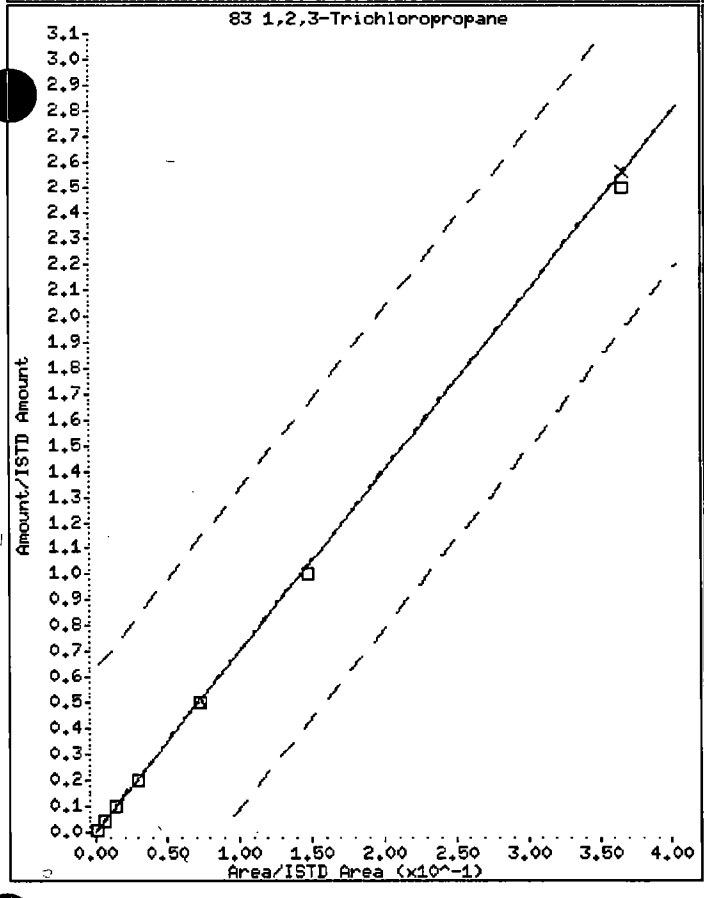

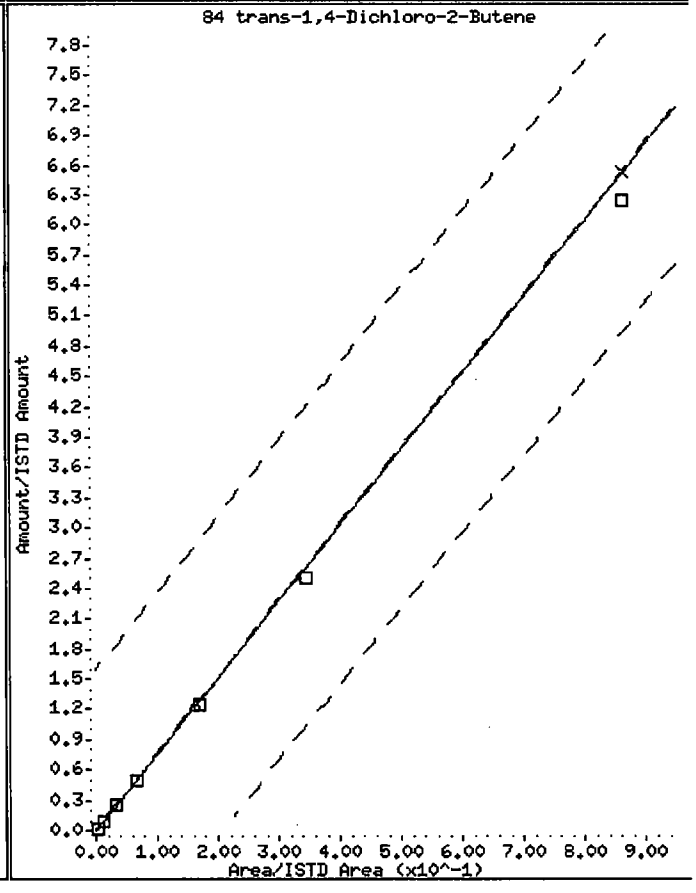

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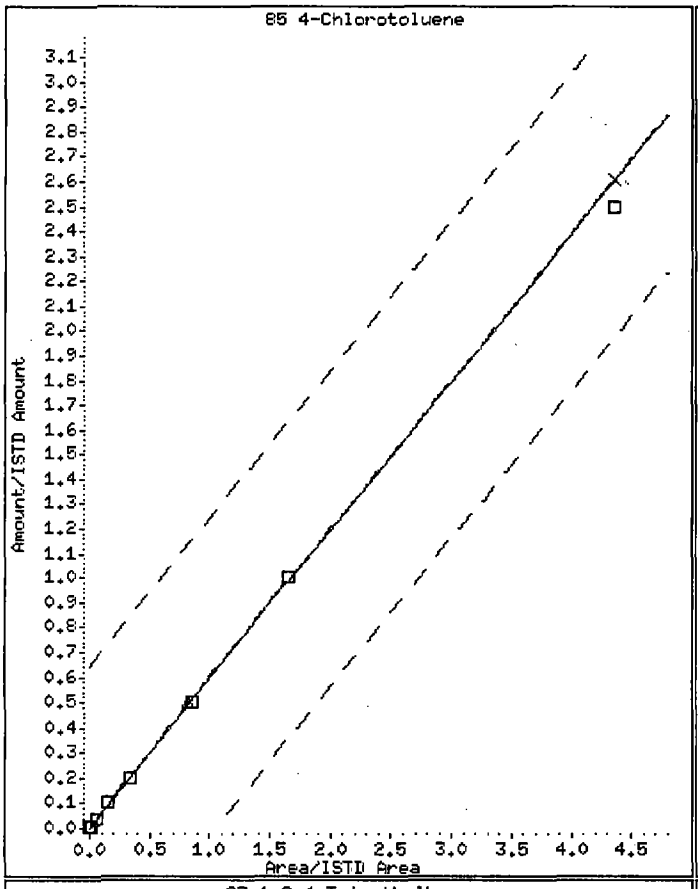

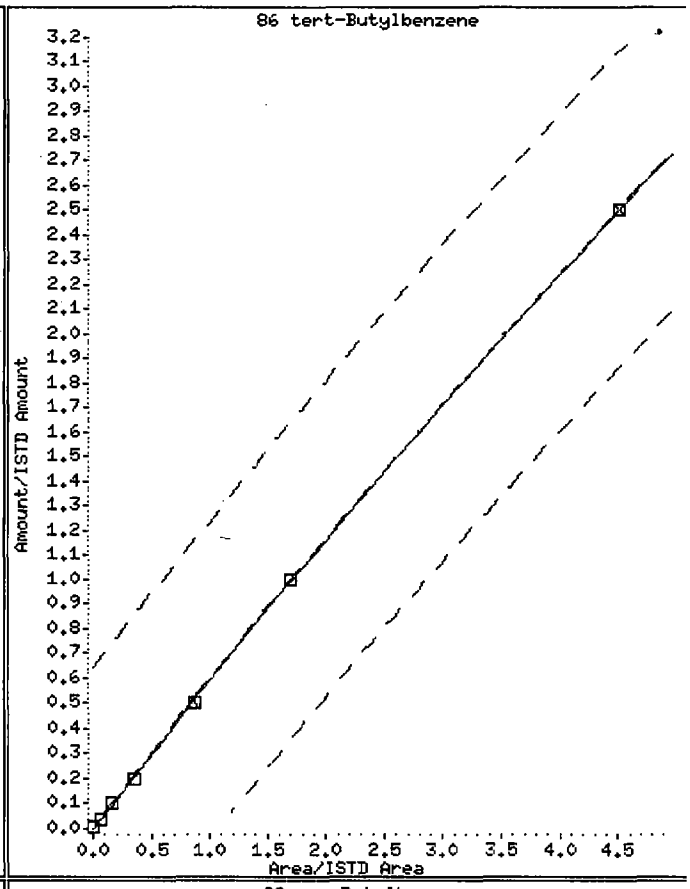

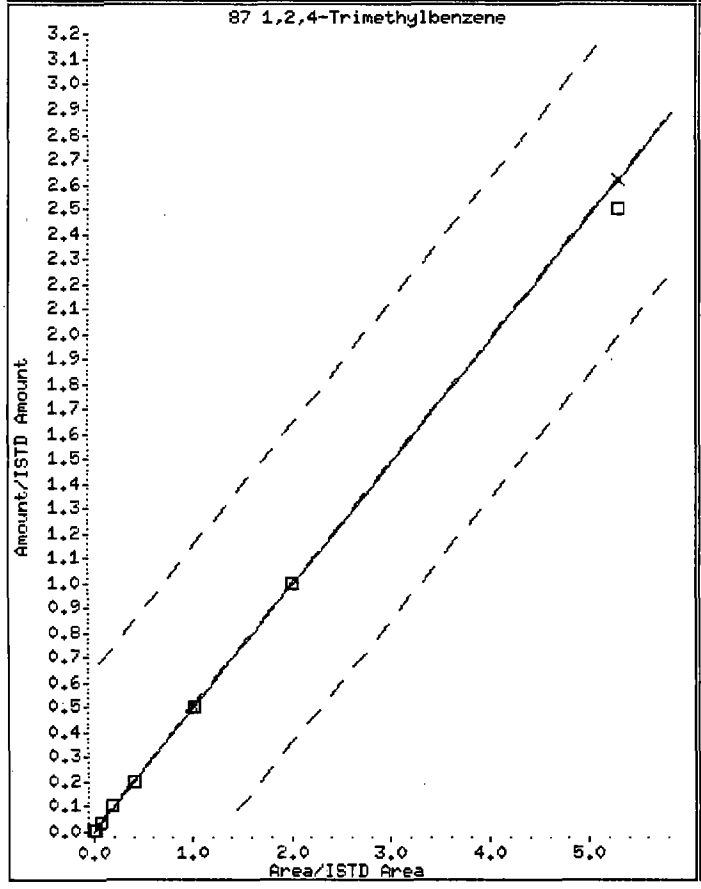

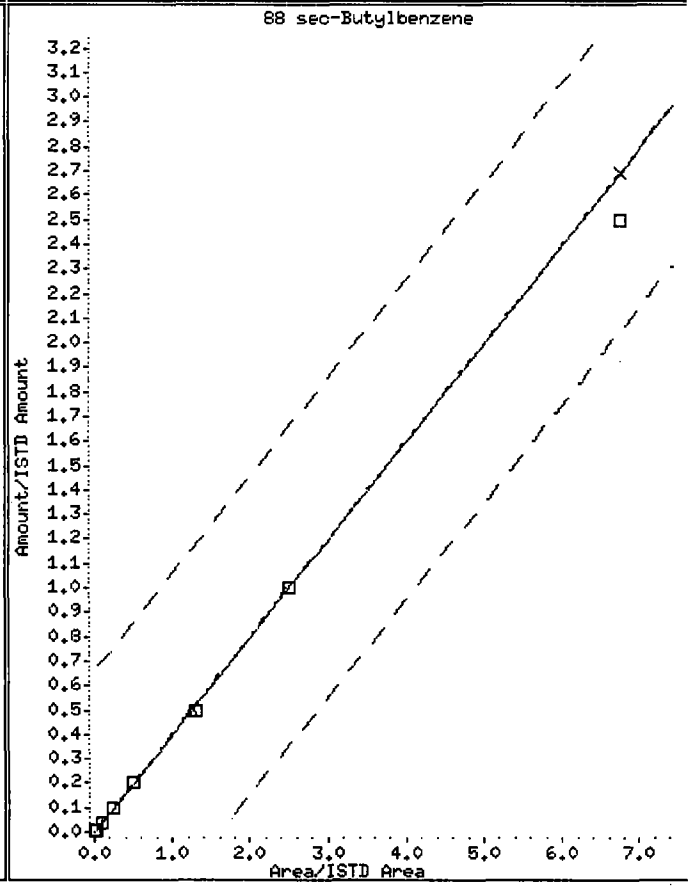

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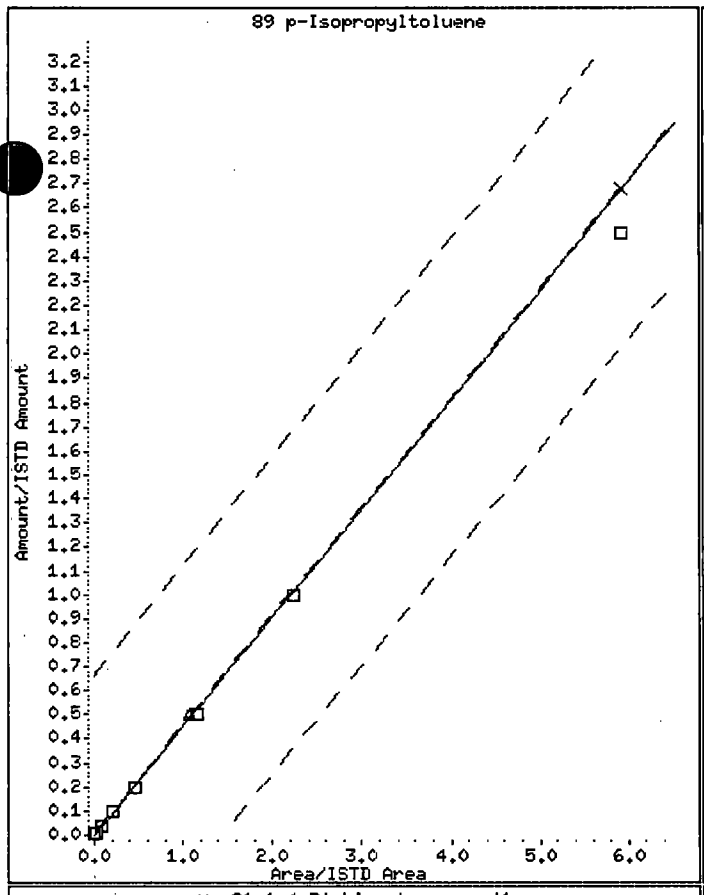

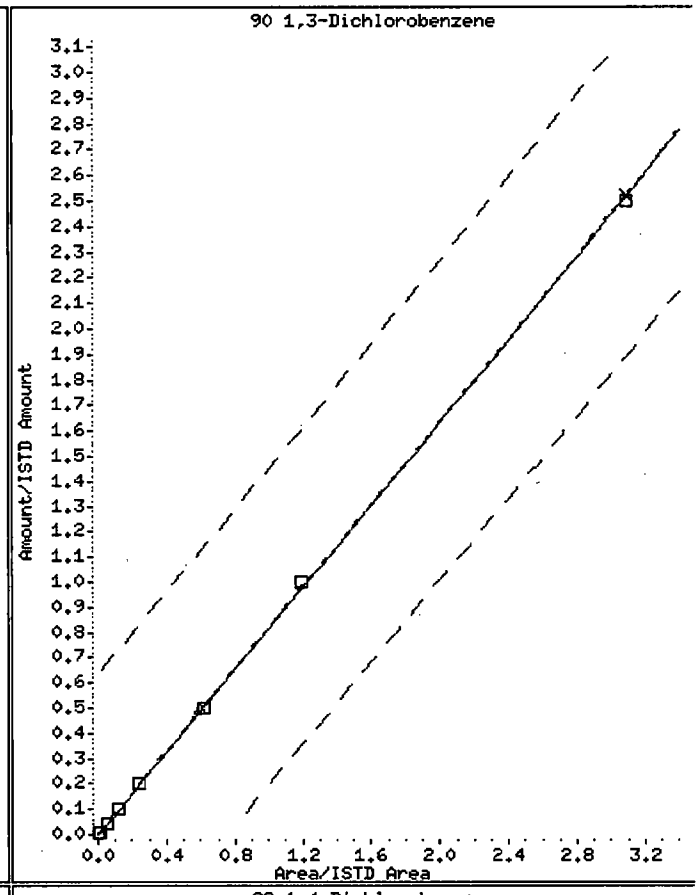

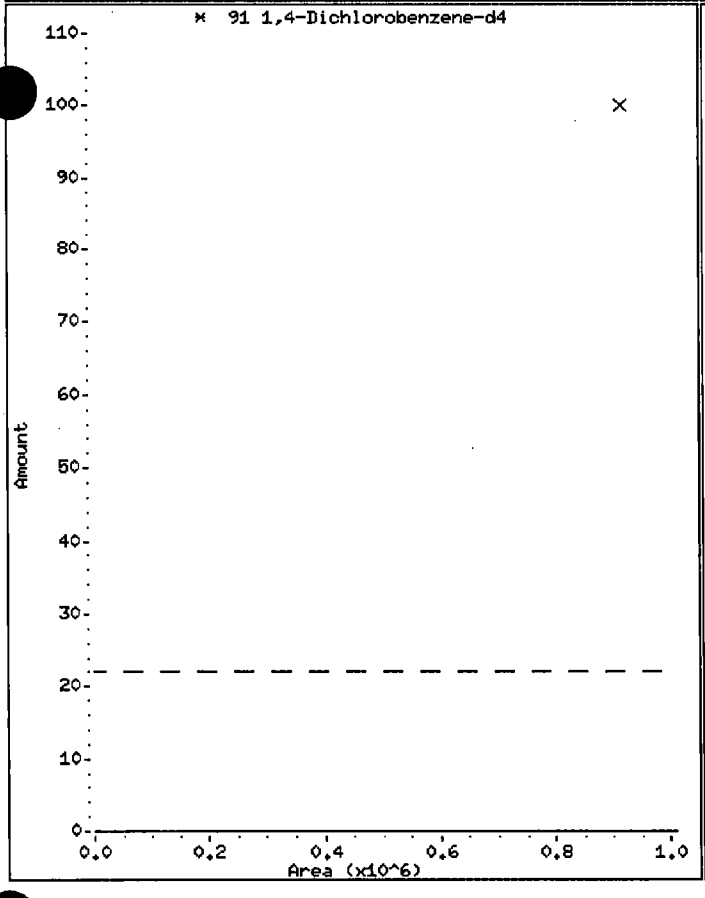

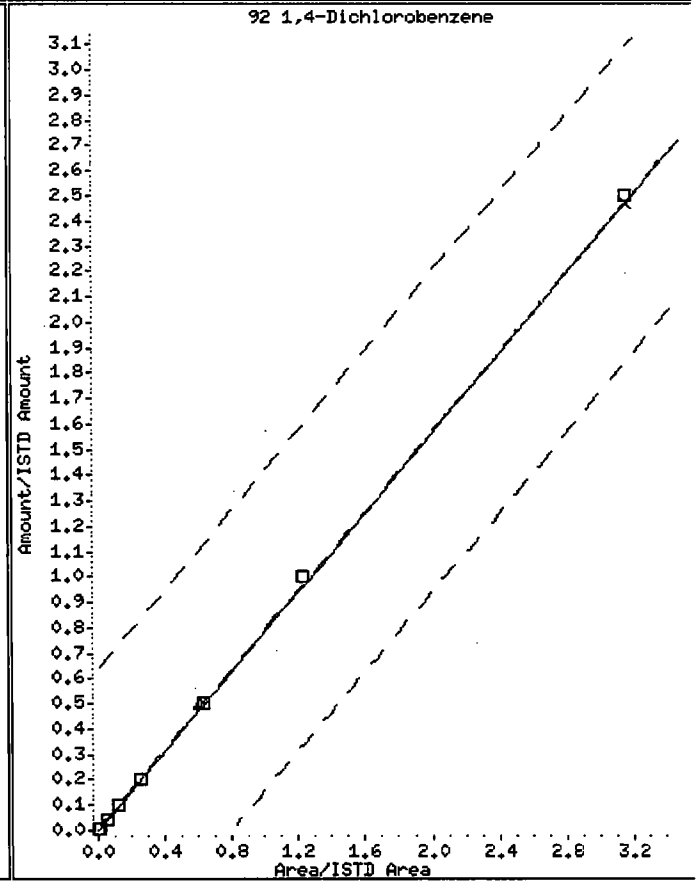

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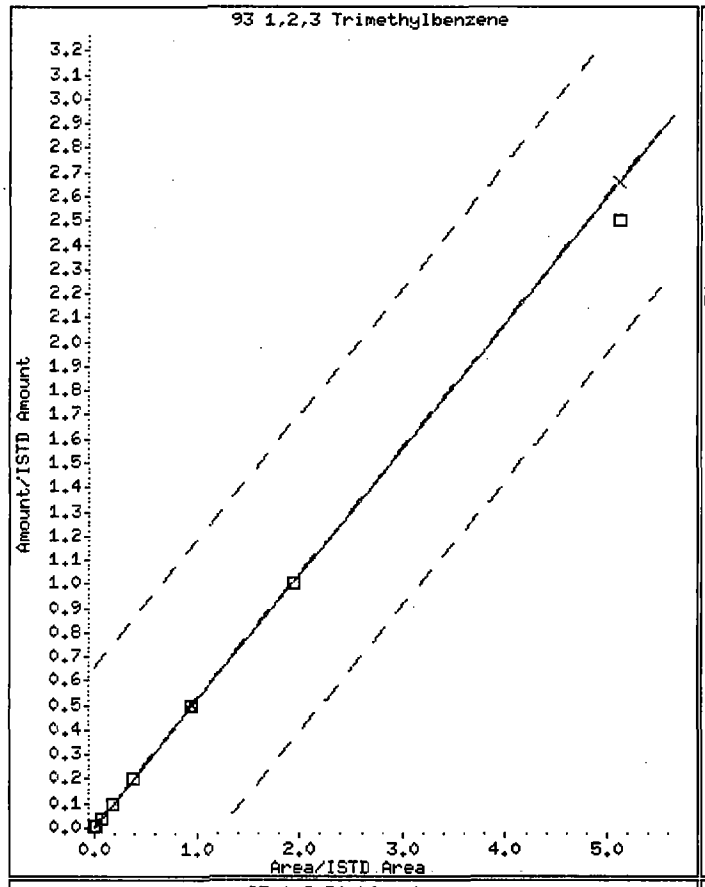

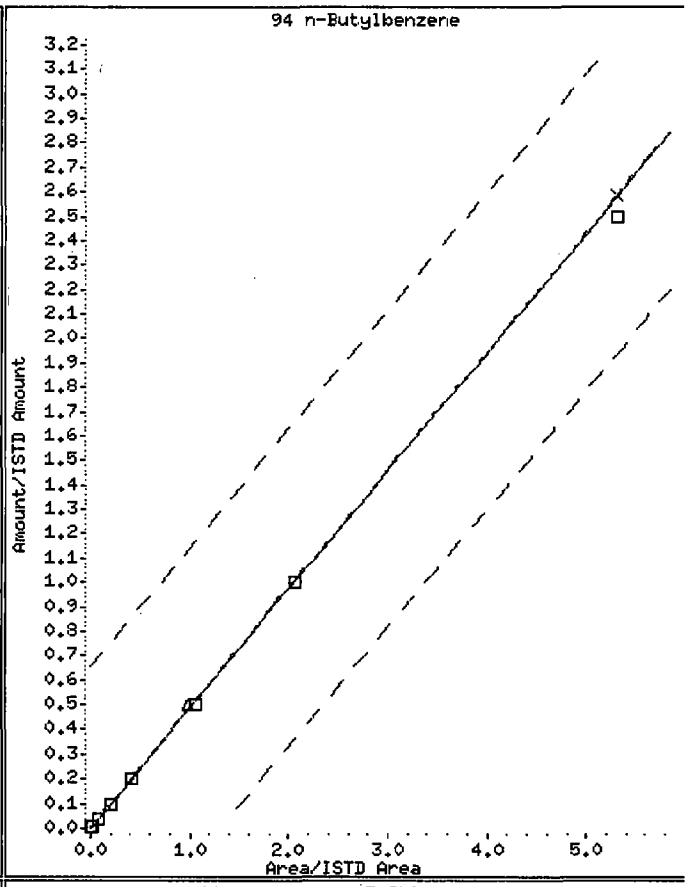

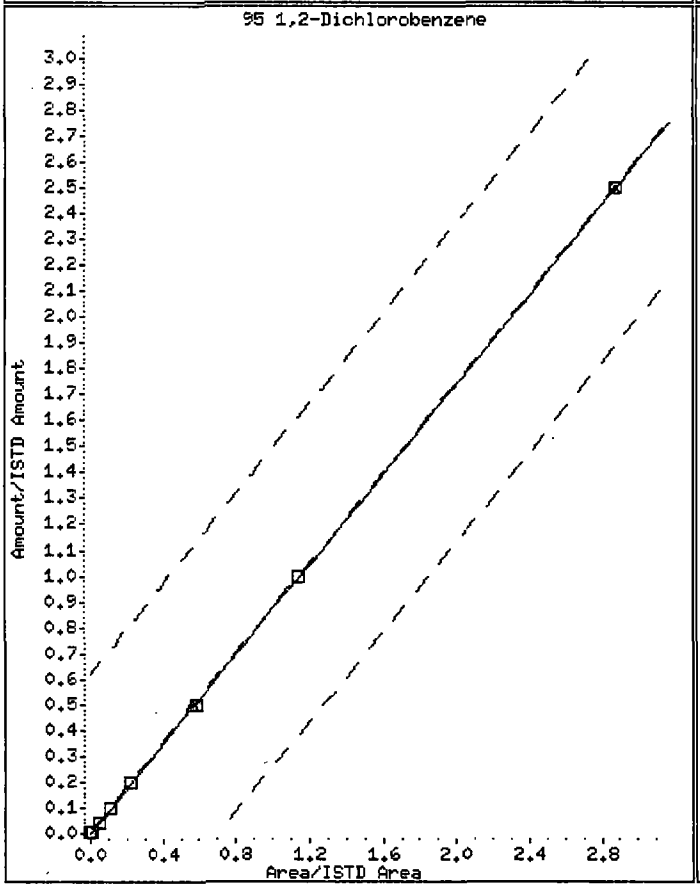

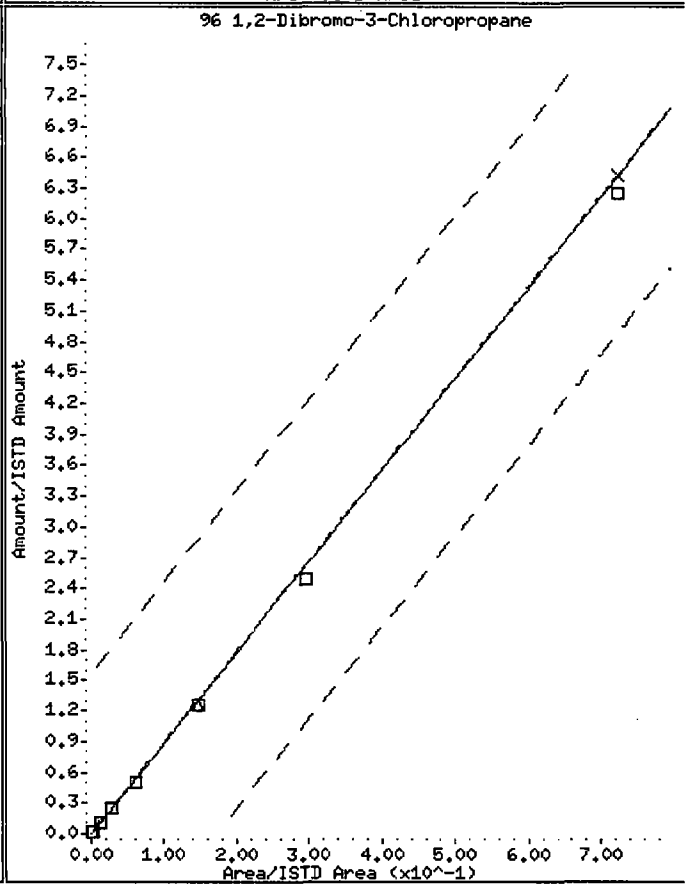

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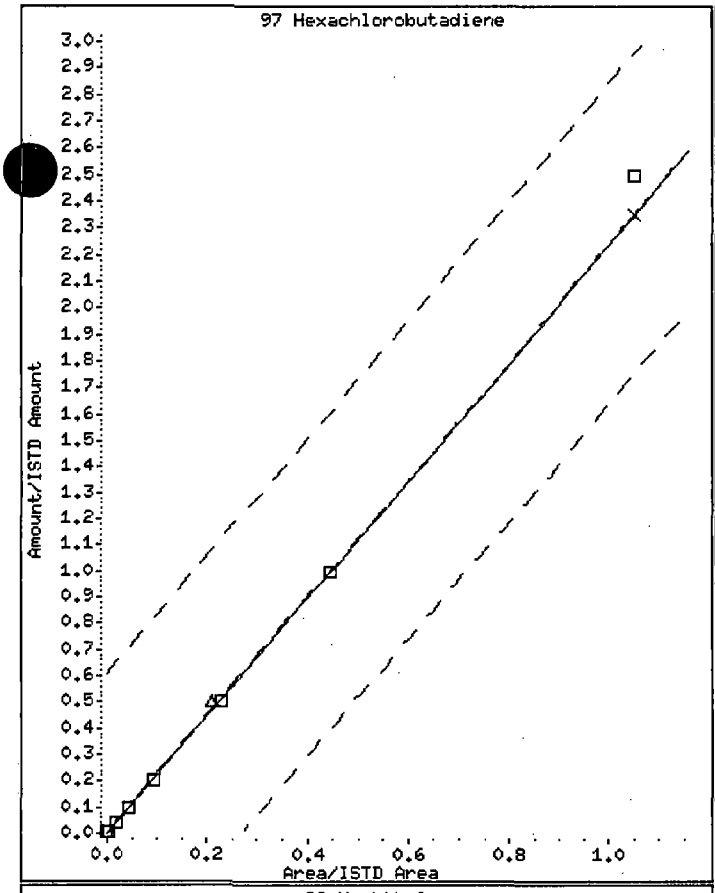

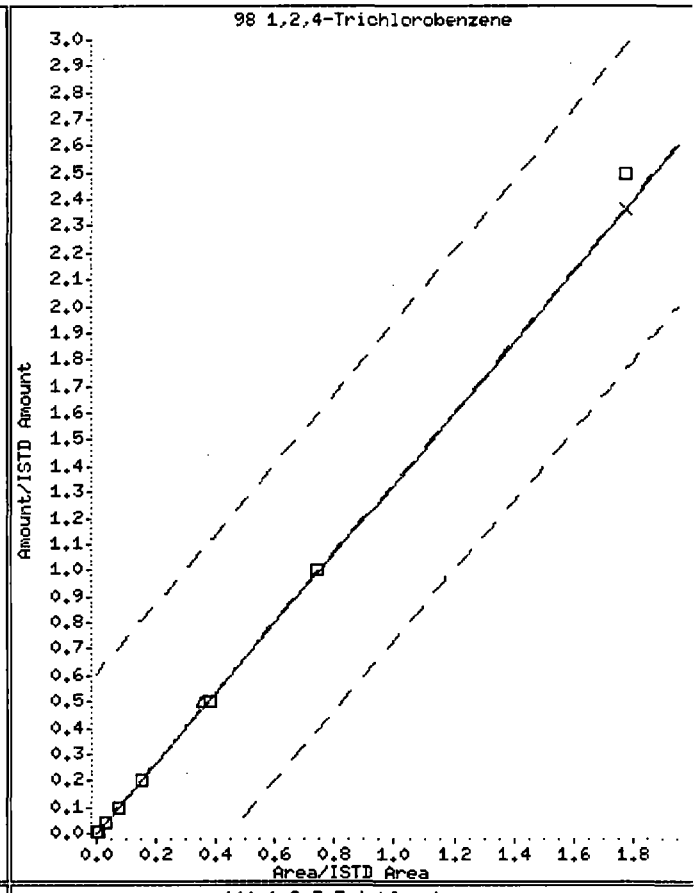

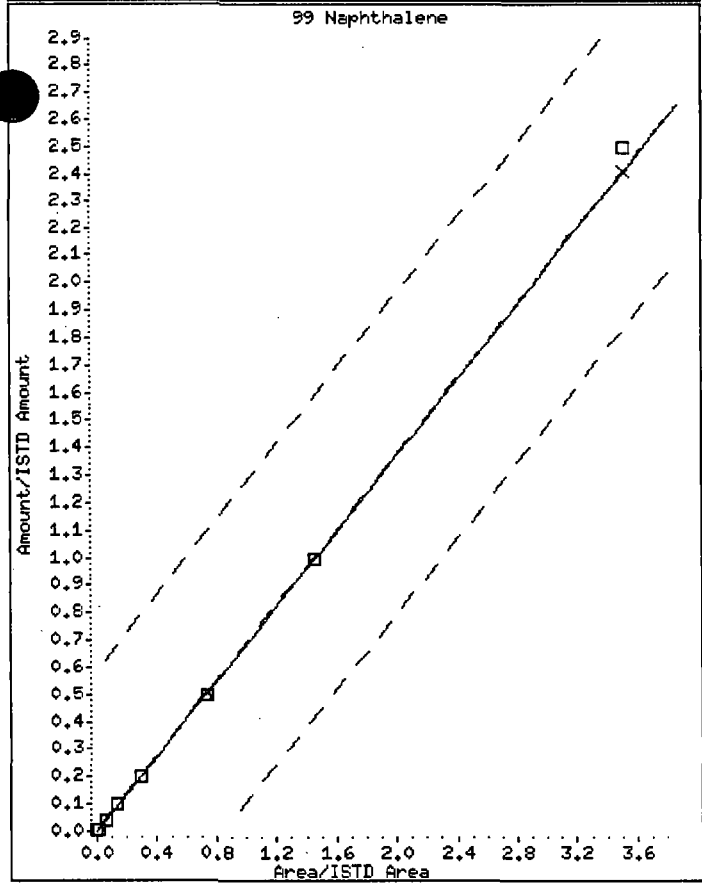

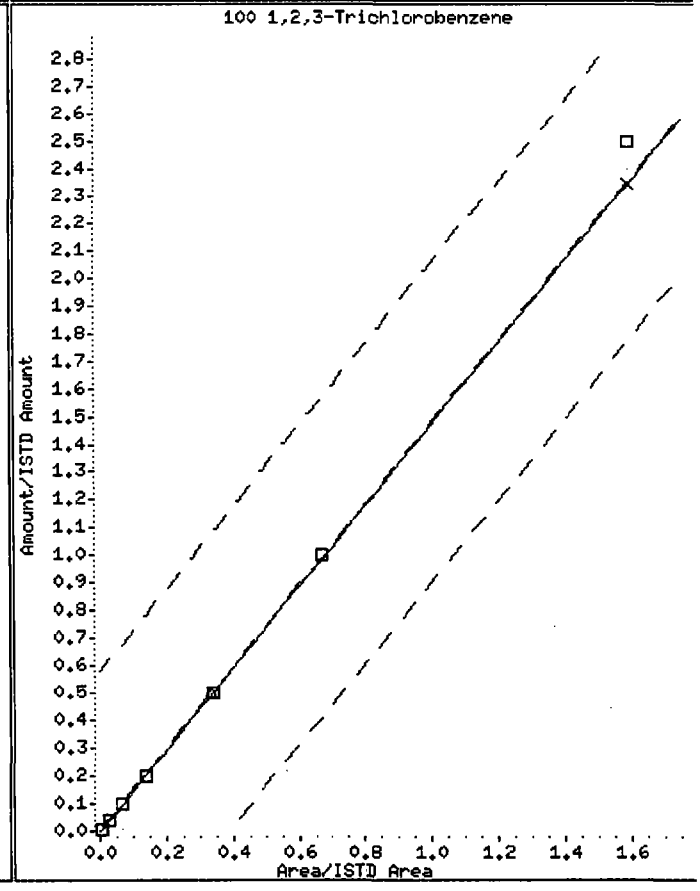

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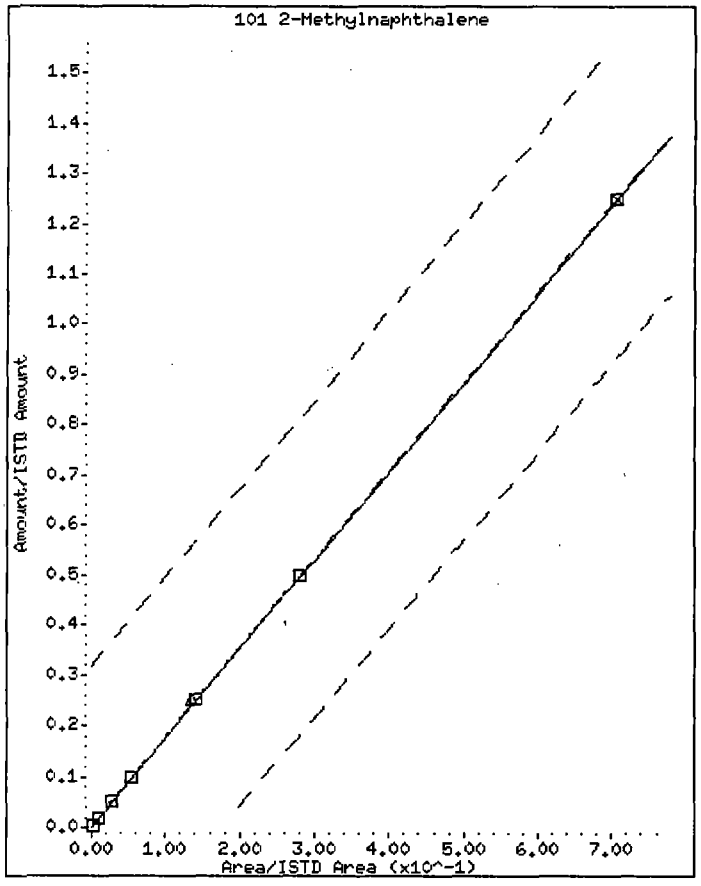


5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 031014002.D BFB Injection Date: 03/10/2014
Instrument ID: 10MSV7 BFB Injection Time: 10:56
GC Column: Rtx-VMS ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	15.21	
75	30.00 - 66.00% of mass 95	44.02	
96	5.00 - 9.00% of mass 95	6.61	
173	Less than 2.00% of mass 174	0.70	(0.69)
174	50.00 - 120.00% of mass 95	100.95	
175	4.00 - 9.00% of mass 174	6.89	(6.82)
176	93.00 - 101.00% of mass 174	98.65	(97.72)
177	5.00 - 9.00% of mass 176	6.29	(6.37)

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	0.4ICAL10098-65	0.4ICAL10098-	031014003.D	03/10/2014	11:15
2	1.0ICAL10098-65	1.0ICAL10098-	031014004.D	03/10/2014	11:34
3	4.0ICAL10098-65	4.0ICAL10098-	031014005.D	03/10/2014	11:53
4	10ICAL10098-65	10ICAL10098-6	031014006.D	03/10/2014	12:13
5	20ICAL10098-65	20ICAL10098-6	031014007.D	03/10/2014	12:32
6	50ICAL10098-65	50ICAL10098-6	031014008.D	03/10/2014	12:52
7	100ICAL10098-65	100ICAL10098-	031014009.D	03/10/2014	13:11
8	250ICAL10098-65	250ICAL10098-	031014010.D	03/10/2014	13:31
9	V50ICV10098-66	V50ICV10098-6	031014012.D	03/10/2014	14:10

Data File: \\192.168.10.12\chem\10msv7.i\031014A.b\031014002.D

Date : 10-MAR-2014 10:56

Client ID:

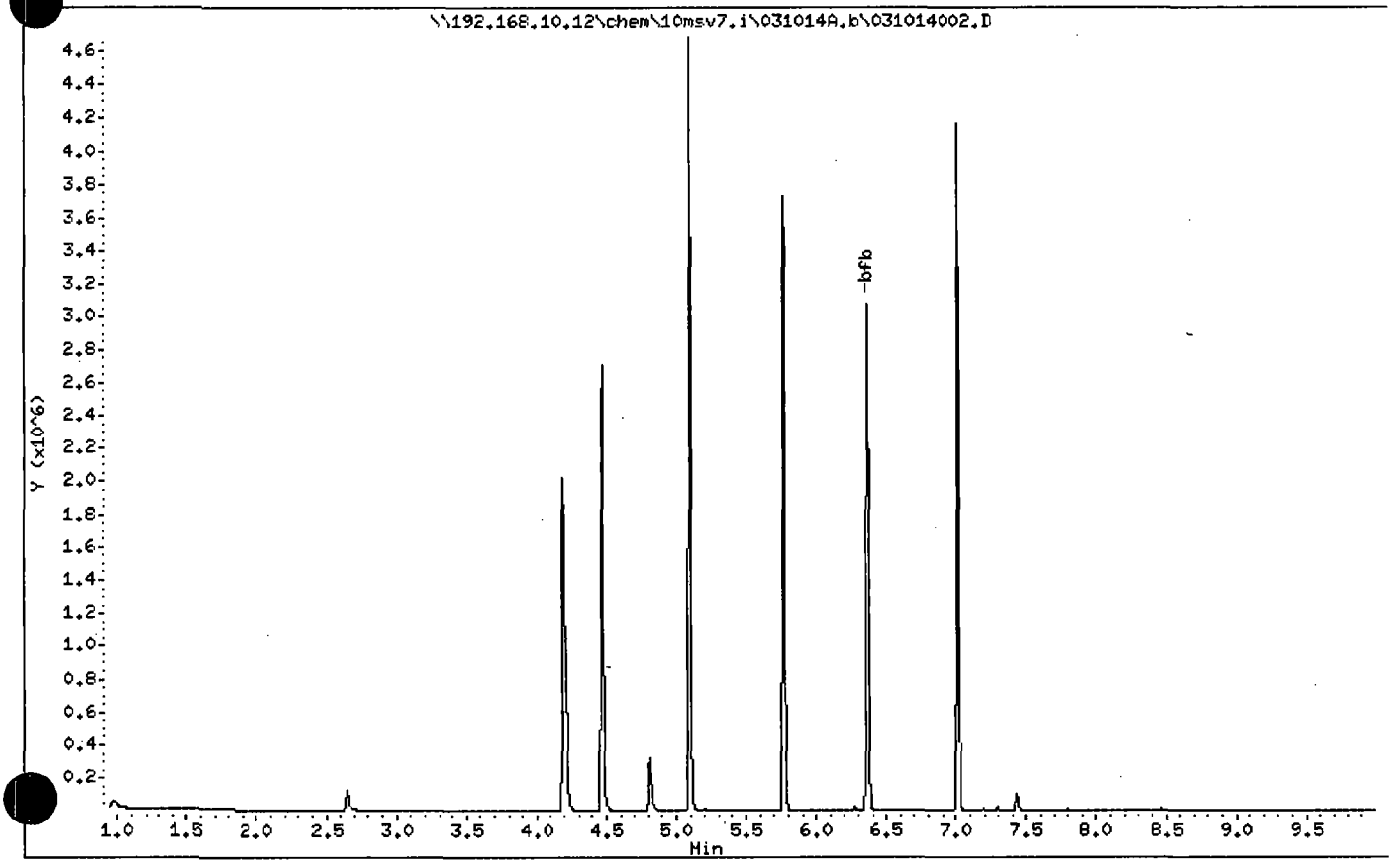
Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



Date : 10-MAR-2014 10:56

Client ID:

Instrument: 10msv7.i

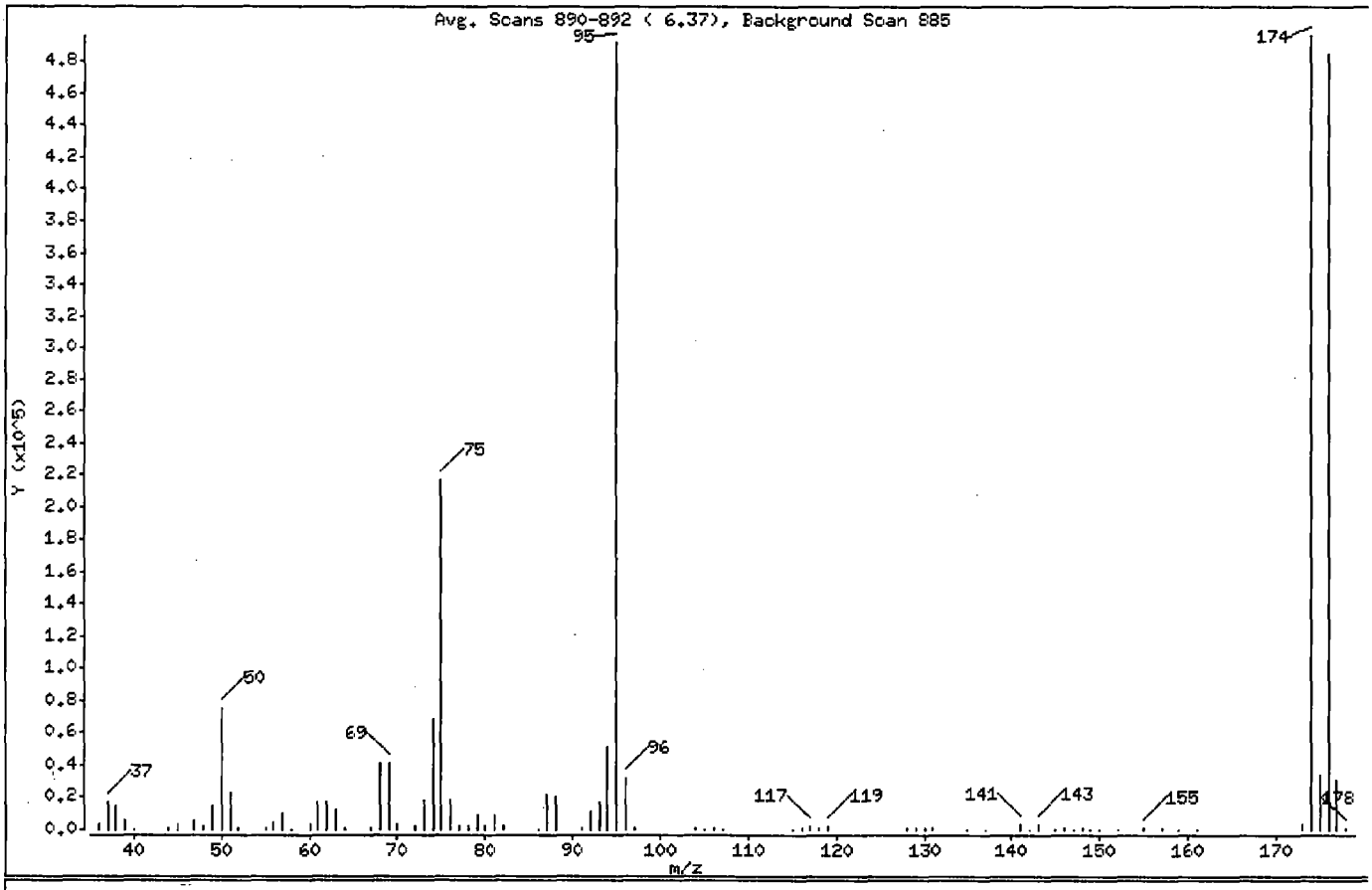
Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

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	15.21
75	30.00 - 66.00% of mass 95	44.02
96	5.00 - 9.00% of mass 95	6.61
173	Less than 2.00% of mass 174	0.70 (0.69)
174	50.00 - 120.00% of mass 95	100.95
175	4.00 - 9.00% of mass 174	6.89 (6.82)
176	93.00 - 101.00% of mass 174	98.65 (97.72)
177	5.00 - 9.00% of mass 176	6.29 (6.37)

Date : 10-MAR-2014 10:56

Client ID: Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS Column diameter: 0.18

Data File: 031014002.D
Spectrum: Avg. Scans 890-892 (6.37), Background Scan 885
Location of Maximum: 174.00
Number of points: 82

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2976	64.00	1064	93.00	17624	142.00	491
37.00	16760	67.00	1057	94.00	50912	143.00	3989
38.00	14728	68.00	40832	95.00	491712	145.00	190
39.00	6225	69.00	41136	96.00	32520	146.00	618
40.00	273	70.00	2994	97.00	964	147.00	192
44.00	1656	72.00	1993	104.00	1618	148.00	1124
45.00	2929	73.00	18192	105.00	414	149.00	191
47.00	5386	74.00	68592	106.00	1503	150.00	175
48.00	2316	75.00	216448	107.00	188	152.00	177
49.00	14924	76.00	18024	115.00	341	155.00	1215
50.00	74776	77.00	2562	116.00	1310	157.00	958
51.00	22728	78.00	1893	117.00	2468	159.00	400
52.00	785	79.00	8909	118.00	1462	161.00	445
55.00	801	80.00	2559	119.00	2106	173.00	3436
56.00	5132	81.00	9321	128.00	1418	174.00	496384
57.00	9720	82.00	1919	129.00	595	175.00	33864
58.00	183	86.00	180	130.00	1558	176.00	485056
60.00	3301	87.00	21872	131.00	579	177.00	30912
61.00	17648	88.00	21056	135.00	521	178.00	862
62.00	17592	91.00	1426	137.00	551		
63.00	12995	92.00	11252	141.00	3755		

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 031014014.D BFB Injection Date: 03/10/2014
Instrument ID: 10MSV7 BFB Injection Time: 14:49
GC Column: Rtx-VMS ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	15.67	
75	30.00 - 66.00% of mass 95	44.81	
96	5.00 - 9.00% of mass 95	6.65	
173	Less than 2.00% of mass 174	0.59	(0.64)
174	50.00 - 120.00% of mass 95	92.94	
175	4.00 - 9.00% of mass 174	6.67	(7.18)
176	93.00 - 101.00% of mass 174	90.39	(97.25)
177	5.00 - 9.00% of mass 176	6.01	(6.65)

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	LCS for HBN 288759 [MSV/26501]	1635951	031014016B.D	03/10/2014	15:30
2	V509525-630	V509525-630	031014016A.D	03/10/2014	15:30
3	SB-9 12-14'(1631878MS)	1635952-MS	031014017.D	03/10/2014	15:49
4	SB-9 12-14'(1631878MSD)	1635953-MSD	031014018.D	03/10/2014	16:09
5	BLANK for HBN 288759 [MSV/2650	1635950	031014020.D	03/10/2014	16:48
6	TRIP BLANK	10259055008	031014023.D	03/10/2014	17:47
7	SB-6 1.5-3'	10259055001	031014024.D	03/10/2014	18:06
8	SB-6 15-16.5'	10259055002	031014025.D	03/10/2014	18:26
9	SB-7 1.5-3'	10259055003	031014026.D	03/10/2014	18:45
10	SB-7 17-18'	10259055004	031014027.D	03/10/2014	19:04
11	SB-8 1.5-2.5"	10259055005	031014028.D	03/10/2014	19:23
12	SB-8 14-15"	10259055006	031014029.D	03/10/2014	19:41
13	DUP-002	10259055007	031014030.D	03/10/2014	20:00

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014014.D

Date : 10-MAR-2014 14:49

Client ID:

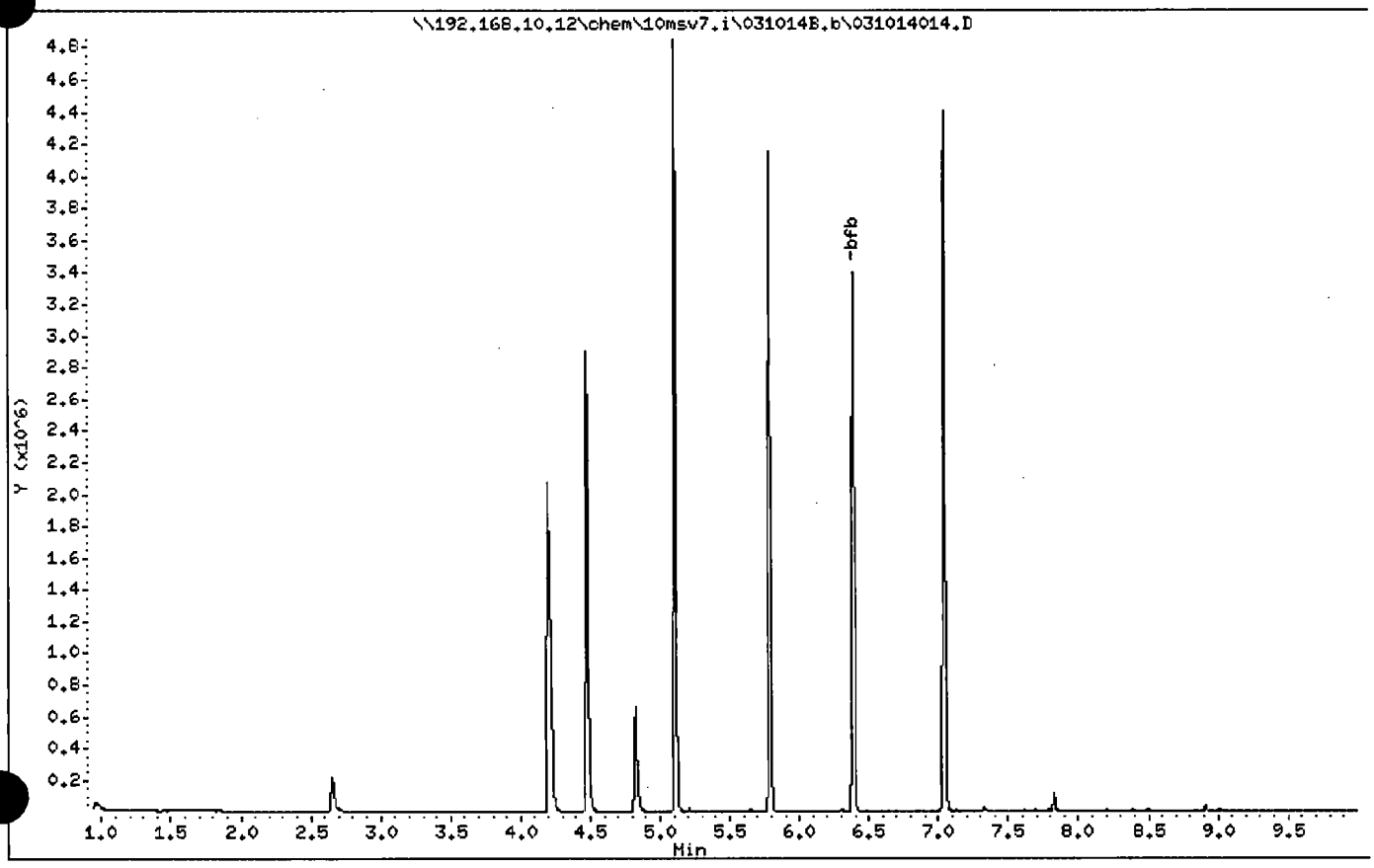
Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014014.D

Date : 10-MAR-2014 14:49

Client ID:

Instrument: 10msv7.i

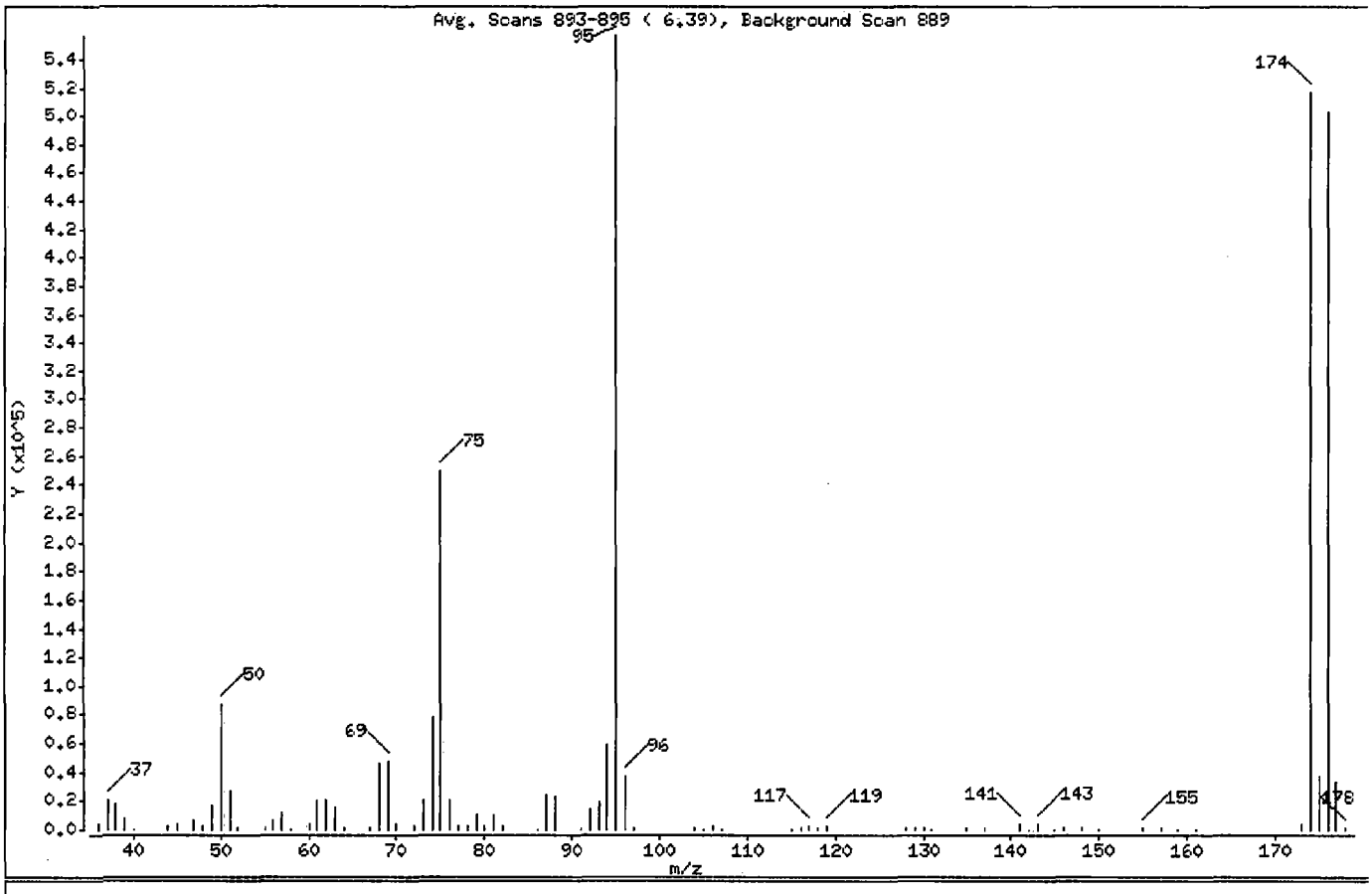
Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

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	15.67
75	30.00 - 66.00% of mass 95	44.81
96	5.00 - 9.00% of mass 95	6.65
173	Less than 2.00% of mass 174	0.59 (0.64)
174	50.00 - 120.00% of mass 95	92.94
175	4.00 - 9.00% of mass 174	6.67 (7.18)
176	93.00 - 101.00% of mass 174	90.39 (97.25)
177	5.00 - 9.00% of mass 176	6.01 (6.65)

Date : 10-MAR-2014 14:49

Client ID:

Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

Data File: 031014014.D

Spectrum: Avg. Scans 893-895 (6.39), Background Scan 889

Location of Maximum: 96.00

Number of points: 79

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3603	63.00	15106	91.00	1473	135.00	848
37.00	19968	64.00	1473	92.00	13612	137.00	805
38.00	18192	67.00	1166	93.00	19696	141.00	4187
39.00	7112	68.00	46288	94.00	58272	142.00	491
40.00	250	69.00	47952	95.00	556480	143.00	4032
44.00	2124	70.00	3835	96.00	36984	145.00	191
45.00	3594	72.00	2378	97.00	1047	146.00	654
47.00	6659	73.00	20368	104.00	1846	148.00	1182
48.00	2628	74.00	78312	105.00	530	150.00	413
49.00	17256	75.00	249344	106.00	2009	155.00	1380
50.00	87176	76.00	21064	107.00	214	157.00	1004
51.00	27096	77.00	2961	115.00	198	159.00	481
52.00	1129	78.00	2194	116.00	1451	161.00	487
55.00	1323	79.00	10239	117.00	2812	173.00	3311
56.00	6009	80.00	3158	118.00	1671	174.00	517184
57.00	11259	81.00	10321	119.00	2386	175.00	37128
58.00	398	82.00	2151	128.00	1682	176.00	502976
60.00	3977	86.00	543	129.00	778	177.00	33472
61.00	20744	87.00	23936	130.00	1735	178.00	797
62.00	19888	88.00	22928	131.00	621		

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 15:30
Lab File ID: 031014016a.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 9525-630 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.41508	0.34273	0.34273	0.100	-17.42938	40.00000	Averaged
2 Chloromethane	0.45988	0.42745	0.42745	0.100	-7.05309	40.00000	Averaged
3 Vinyl Chloride	0.50806	0.45686	0.45686	0.100	-10.07880	20.00000	Averaged
4 Bromomethane	50.00000	53.92553	0.22633	0.050	7.85106	40.00000	Quadratic
5 Chloroethane	0.21444	0.19972	0.19972	0.050	-6.86546	40.00000	Averaged
6 Trichlorofluoromethane	50.00000	42.39371	0.53182	0.100	-15.21258	40.00000	Quadratic
7 Dichlorofluoromethane	0.74236	0.68687	0.68687	0.010	-7.47440	40.00000	Averaged
8 Diethyl ether (Ethyl Ether)	0.28052	0.27273	0.27273	0.010	-2.77677	40.00000	Averaged
9 1,1-Dichloroethene	0.37658	0.33961	0.33961	0.100	-9.81723	20.00000	Averaged
10 Carbon Disulfide	1.43078	1.19404	1.19404	0.100	-16.54587	40.00000	Averaged
11 Ethanol	1.38118	1.19953	1.19953	0.050	-13.15201	40.00000	Averaged
12 Trichlorotrifluoroethane	0.38812	0.34017	0.34017	0.010	-12.35436	40.00000	Averaged
13 Iodomethane	50.00000	40.75056	0.37733	0.010	-18.49888	40.00000	Quadratic
14 Acrolein	0.04831	0.05213	0.05213	0.010	7.90517	40.00000	Averaged
15 Allyl Chloride	0.54547	0.49906	0.49906	0.010	-8.50765	40.00000	Averaged
16 Methylene Chloride	50.00000	46.32357	0.38959	0.100	-7.35287	40.00000	Quadratic
17 Isopropanol	500	399	6.44632	0.010	-20.17618	40.00000	Linear
19 Acetone	250	233	0.36337	0.010	-6.63119	40.00000	Quadratic
20 trans-1,2-Dichloroethene	0.41845	0.38479	0.38479	0.100	-8.04284	20.00000	Averaged
21 Hexane	1.45916	1.10824	1.10824	0.010	-24.04954	40.00000	Averaged
22 Methyl-tert-butyl Ether	1.01370	1.00168	1.00168	0.300	-1.18630	20.00000	Averaged
23 tert-Butyl Alcohol	11.69463	9.76791	9.76791	0.010	-16.47528	40.00000	Averaged
24 Acetonitrile	0.03751	0.03546	0.03546	0.010	-5.48350	40.00000	Averaged
25 Isopropyl Ether	1.20931	1.16032	1.16032	0.010	-4.05069	40.00000	Averaged
26 Acrylonitrile	0.05807	0.05284	0.05284	0.010	-9.01530	40.00000	Averaged
27 1,1-Dichloroethane	0.68924	0.65597	0.65597	0.200	-4.82604	20.00000	Averaged
28 Ethyl-tert-butyl ether	1.12182	1.06742	1.06742	0.010	-4.84873	40.00000	Averaged
29 Vinyl Acetate	0.76578	0.75918	0.75918	0.010	-0.86121	40.00000	Averaged
30 cis-1,2-Dichloroethene	0.44651	0.42296	0.42296	0.100	-5.27582	20.00000	Averaged
31 2,2-Dichloropropane	0.57389	0.53565	0.53565	0.010	-6.66430	40.00000	Averaged
32 Cyclohexane	0.69431	0.61543	0.61543	0.100	-11.36058	40.00000	Averaged
33 Bromochloromethane	0.26252	0.25141	0.25141	0.010	-4.23039	40.00000	Averaged
34 Chloroform	0.69775	0.66242	0.66242	0.200	-5.06448	20.00000	Averaged
35 Carbon Tetrachloride	0.50890	0.46648	0.46648	0.100	-8.33597	40.00000	Averaged
36 Tetrahydrofuran	0.66745	0.65131	0.65131	0.010	-2.41741	40.00000	Averaged
37 1,1,1-Trichloroethane	0.61160	0.55732	0.55732	0.100	-8.87543	20.00000	Averaged
38 2-Butanone	0.15369	0.14459	0.14459	0.050	-5.91716	40.00000	Averaged
39 1,1-Dichloropropene	0.57828	0.51467	0.51467	0.010	-10.99992	40.00000	Averaged
40 Benzene	1.72445	1.56451	1.56451	0.500	-9.27500	20.00000	Averaged
42 Tert-amyl methyl ether	1.13587	1.05510	1.05510	0.010	-7.11052	40.00000	Averaged
$ 43 1,2-Dichloroethane d4 (S)	0.38600	0.39677	0.39677	0.200	2.79045	40.00000	Averaged
44 1,2-Dichloroethane	0.44964	0.42878	0.42878	0.100	-4.63799	20.00000	Averaged

Report Date: 11-Mar-2014 11:30

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 15:30
Lab File ID: 031014016a.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 9525-630 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 Isobutanol	4.72514	4.12916	4.12916	0.010	-12.61291	40.00000	Averaged
46 Tert-Amyl Alcohol	9.80430	8.62233	8.62233	0.010	-12.05558	40.00000	Averaged
47 Trichloroethene	0.31862	0.29711	0.29711	0.200	-6.75140	20.00000	Averaged
49 Tert-amyl ethyl ether	0.58572	0.55975	0.55975	0.010	-4.43434	40.00000	Averaged
50 Dibromomethane	0.18370	0.17433	0.17433	0.010	-5.10445	40.00000	Averaged
51 1,2-Dichloropropane	0.27126	0.25650	0.25650	0.100	-5.44072	20.00000	Averaged
52 Bromodichloromethane	0.35476	0.32955	0.32955	0.050	-7.10570	40.00000	Averaged
54 1,4-Dioxane (P-Dioxane)	1.34644	1.13181	1.13181	0.010	-15.94001	40.00000	Averaged
55 2-Chloroethyl Vinyl Ether	125	128	0.02302	0.010	2.03817	40.00000	Quadratic
56 cis-1,3-Dichloropropene	0.43924	0.41653	0.41653	0.050	-5.17072	40.00000	Averaged
$ 57 Toluene-d8 (S)	1.17496	1.17796	1.17796	0.200	0.25520	40.00000	Averaged
58 Toluene	0.75661	0.66338	0.66338	0.400	-12.32307	20.00000	Averaged
59 4-Methyl-2-Pentanone	0.22450	0.21949	0.21949	0.100	-2.22756	40.00000	Averaged
60 Tetrachloroethene	0.36056	0.32924	0.32924	0.200	-8.68669	20.00000	Averaged
61 trans-1,3-Dichloropropene	0.38888	0.37480	0.37480	0.100	-3.62045	40.00000	Averaged
62 1,1,2-Trichloroethane	0.23148	0.21980	0.21980	0.100	-5.04655	40.00000	Averaged
63 Dibromochloromethane	0.26855	0.25916	0.25916	0.100	-3.49895	40.00000	Averaged
64 1,3-Dichloropropane	0.39553	0.37433	0.37433	0.010	-5.36084	40.00000	Averaged
65 1,2-Dibromoethane	0.24305	0.23279	0.23279	0.100	-4.22172	20.00000	Averaged
66 2-Hexanone	0.17506	0.16311	0.16311	0.050	-6.82820	40.00000	Averaged
68 Chlorobenzene	0.84483	0.76419	0.76419	0.500	-9.54525	40.00000	Averaged
69 Ethylbenzene	1.44184	1.27106	1.27106	0.300	-11.84469	20.00000	Averaged
70 1,1,1,2-Tetrachloroethane	0.29385	0.27702	0.27702	0.010	-5.72740	40.00000	Averaged
71 M&P-Xylene	0.56155	0.50299	0.50299	0.300	-10.42788	20.00000	Averaged
72 O-Xylene (1,2-Dimethylbenze	0.52660	0.48668	0.48668	0.300	-7.57975	20.00000	Averaged
73 Styrene	0.89773	0.86520	0.86520	0.300	-3.62266	40.00000	Averaged
74 Bromoform	0.21306	0.20448	0.20448	0.100	-4.02604	40.00000	Averaged
75 Isopropylbenzene (Cumene)	1.40917	1.24687	1.24687	0.100	-11.51738	20.00000	Averaged
$ 76 4-Bromofluorobenzene (S)	0.80228	0.80652	0.80652	0.200	0.52873	40.00000	Averaged
77 cis-1,4-Dichloro-2-Butene	0.15505	0.14815	0.14815	0.010	-4.44775	40.00000	Averaged
78 Bromobenzene	0.61425	0.58202	0.58202	0.010	-5.24747	40.00000	Averaged
79 n-Propylbenzene	2.80970	2.54135	2.54135	0.010	-9.55080	20.00000	Averaged
80 1,1,2,2-Tetrachloroethane	0.51066	0.49441	0.49441	0.300	-3.18253	40.00000	Averaged
81 2-Chlorotoluene	1.75076	1.61415	1.61415	0.010	-7.80270	40.00000	Averaged
82 1,3,5-Trimethylbenzene	1.98819	1.80923	1.80923	0.300	-9.00131	20.00000	Averaged
83 1,2,3-Trichloropropane	0.14296	0.13908	0.13908	0.010	-2.71439	40.00000	Averaged
84 trans-1,4-Dichloro-2-Butene	0.13230	0.13081	0.13081	0.010	-1.12767	40.00000	Averaged
85 4-Chlorotoluene	1.67479	1.51772	1.51772	0.010	-9.37873	40.00000	Averaged
86 tert-Butylbenzene	50.00000	45.92362	1.54173	0.010	-8.15277	40.00000	Quadratic
87 1,2,4-Trimethylbenzene	2.02418	1.86616	1.86616	0.300	-7.80634	20.00000	Averaged
88 sec-Butylbenzene	2.51224	2.27876	2.27876	0.010	-9.29398	40.00000	Averaged
89 p-Isopropyltoluene	2.21193	2.02695	2.02695	0.010	-8.36292	40.00000	Averaged

Report Date: 11-Mar-2014 11:30

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 10-MAR-2014 15:30
Lab File ID: 031014016a.D Init. Cal. Date(s): 10-MAR-2014 10-MAR-2014
Analysis Type: SOIL Init. Cal. Times: 11:15 13:31
Lab Sample ID: V50 9525-630 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
90 1,3-Dichlorobenzene	1.22935	1.11766	1.11766	0.600	-9.08466	40.00000	Averaged
92 1,4-Dichlorobenzene	1.28119	1.15741	1.15741	0.500	-9.66120	40.00000	Averaged
93 1,2,3 Trimethylbenzene	1.92635	1.76307	1.76307	0.010	-8.47607	40.00000	Averaged
94 n-Butylbenzene	2.05952	1.83846	1.83846	0.010	-10.73373	40.00000	Averaged
95 1,2-Dichlorobenzene	1.15228	1.05488	1.05488	0.400	-8.45319	40.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.11263	0.11219	0.11219	0.010	-0.38702	40.00000	Averaged
97 Hexachlorobutadiene	0.44698	0.39640	0.39640	0.010	-11.31747	40.00000	Averaged
98 1,2,4-Trichlorobenzene	0.75211	0.70037	0.70037	0.200	-6.87982	40.00000	Averaged
99 Naphthalene	1.45993	1.39651	1.39651	0.300	-4.34376	20.00000	Averaged
100 1,2,3-Trichlorobenzene	0.67876	0.65391	0.65391	0.010	-3.66236	40.00000	Averaged
101 2-Methylnaphthalene	0.56690	0.52593	0.52593	0.100	-7.22679	20.00000	Averaged

Report Date: 11-Mar-2014 11:30

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014016a.D
Lab Smp Id: V50 9525-630
Inj Date : 10-MAR-2014 15:30
Operator : HBP Inst ID: 10msv7.i
Smp Info : V50 9525-630,5,2
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:30 10msv7.i Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	165633	50.0000	41.3
2	Chloromethane	50	1.241	1.241	(0.295)	206574	50.0000	46.5(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	220786	50.0000	45.0
4	Bromomethane	94	1.479	1.479	(0.352)	109378	50.0000	53.9
5	Chloroethane	64	1.570	1.570	(0.374)	96520	50.0000	46.6
6	Trichlorofluoromethane	101	1.674	1.674	(0.398)	257016	50.0000	42.4
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	331945	50.0000	46.3
8	Diethyl ether (Ethyl Ether)	59	1.954	1.954	(0.465)	131804	50.0000	48.6
9	1,1-Dichloroethene	96	2.094	2.094	(0.498)	164126	50.0000	45.1
10	Carbon Disulfide	76	2.101	2.101	(0.500)	577048	50.0000	41.7
11	Ethanol	45	2.113	2.113	(0.438)	52296	1000.00	868
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	164394	50.0000	43.8
13	Iodomethane	142	2.210	2.210	(0.526)	182354	50.0000	40.8
14	Acrolein	56	2.411	2.411	(0.574)	251926	500.000	540
15	Allyl Chloride	41	2.539	2.539	(0.604)	241182	50.0000	45.7
16	Methylene Chloride	84	2.637	2.637	(0.627)	188280	50.0000	46.3
17	Isopropanol	45	2.631	2.631	(0.545)	140521	500.000	399
* 18	Acetone d6	46	2.649	2.649	(1.000)	143669	200.000	
19	Acetone	58	2.698	2.698	(1.018)	65256	250.000	233

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	185961	50.0000	46.0
	21 Hexane	86	2.863	2.863	(1.081)	99512	125.000	94.9
	22 Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	484083	50.0000	49.4(Q)
	23 tert-Butyl Alcohol	59	3.009	3.009	(0.624)	212927	500.000	418
	24 Acetonitrile	41	3.070	3.070	(0.730)	171353	500.000	472
	25 Isopropyl Ether	45	3.204	3.204	(0.762)	560753	50.0000	48.0
	26 Acrylonitrile	53	3.247	3.247	(0.772)	255340	500.000	455
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	317015	50.0000	47.6
	28 Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	515856	50.0000	47.6
	29 Vinyl Acetate	43	3.466	3.466	(0.825)	366893	50.0000	49.6
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	204403	50.0000	47.4
	31 2,2-Dichloropropane	77	3.698	3.698	(0.880)	258863	50.0000	46.7
	32 Cyclohexane	56	3.753	3.753	(0.893)	1487106	250.000	222
	33 Bromochloromethane	130	3.759	3.759	(0.894)	121502	50.0000	47.9
	34 Chloroform	83	3.814	3.814	(0.907)	320128	50.0000	47.5
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	225436	50.0000	45.8
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	233933	500.000	488
	37 1,1,1-Trichloroethane	97	3.929	3.929	(0.935)	269338	50.0000	45.6
	38 2-Butanone	43	3.997	3.997	(0.951)	349390	250.000	235
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	248728	50.0000	44.5
	40 Benzene	78	4.143	4.143	(0.985)	756085	50.0000	45.4
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	966546	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	509903	50.0000	46.4
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	383497	100.000	103
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	207219	50.0000	47.7
	45 Isobutanol	43	4.295	4.295	(0.890)	180020	1000.00	874
	46 Tert-Amyl Alcohol	59	4.344	4.344	(0.900)	187955	500.000	440
	47 Trichloroethene	130	4.460	4.460	(0.995)	216580	50.0000	46.6
*	48 1,4 Difluorobenzene	114	4.484	4.484	(1.000)	1457917	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.023)	408034	50.0000	47.8
	50 Dibromomethane	174	4.667	4.667	(1.041)	127076	50.0000	47.4
	51 1,2-Dichloropropane	63	4.716	4.716	(1.052)	186978	50.0000	47.3
	52 Bromodichloromethane	83	4.746	4.746	(1.058)	240227	50.0000	46.4
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	174389	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	49344	1000.00	840
	55 2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.116)	41956	125.000	128
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.121)	303632	50.0000	47.4
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.882)	1718276	100.000	100
	58 Toluene	92	5.130	5.130	(0.886)	483830	50.0000	43.8
	59 4-Methyl-2-Pentanone	43	5.283	5.283	(0.913)	800437	250.000	244
	60 Tetrachloroethene	166	5.295	5.295	(0.915)	240128	50.0000	45.6
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.916)	273359	50.0000	48.2
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.928)	160312	50.0000	47.5
	63 Dibromochloromethane	129	5.454	5.454	(0.942)	189014	50.0000	48.2
	64 1,3-Dichloropropane	76	5.490	5.490	(0.948)	273014	50.0000	47.3
	65 1,2-Dibromoethane	107	5.557	5.557	(0.960)	169784	50.0000	47.9
	66 2-Hexanone	43	5.649	5.649	(0.976)	594804	250.000	233
*	67 Chlorobenzene-d5	117	5.789	5.789	(1.000)	1458689	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.001)	557359	50.0000	45.2
	69 Ethylbenzene	91	5.801	5.801	(1.002)	927038	50.0000	44.1
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.005)	202040	50.0000	47.1
	71 M&P-Xylene	106	5.868	5.868	(1.014)	733712	100.000	89.6
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.049)	354959	50.0000	46.2
	73 Styrene	104	6.106	6.106	(1.055)	631032	50.0000	48.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 Bromoform	173	6.124	6.124	(1.058)	149136	50.0000	48.0
	75 Isopropylbenzene (Cumene)	105	6.234	6.234	(1.077)	909401	50.0000	44.2
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	716914	100.000	100
	77 cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	65847	50.0000	47.8
	78 Bromobenzene	156	6.453	6.453	(0.916)	258678	50.0000	47.4
	79 n-Propylbenzene	91	6.453	6.453	(0.916)	1129501	50.0000	45.2
	80 1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	219740	50.0000	48.4
	81 2-Chlorotoluene	91	6.551	6.551	(0.930)	717410	50.0000	46.1
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	804111	50.0000	45.5
	83 1,2,3-Trichloropropane	110	6.575	6.575	(0.933)	61814	50.0000	48.6(Q)
	84 trans-1,4-Dichloro-2-Butene	53	6.587	6.587	(0.935)	145342	125.000	124
	85 4-Chlorotoluene	91	6.642	6.642	(0.943)	674549	50.0000	45.3
	86 tert-Butylbenzene	119	6.746	6.746	(0.958)	685223	50.0000	45.9
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	829415	50.0000	46.1
	88 sec-Butylbenzene	105	6.856	6.856	(0.973)	1012792	50.0000	45.4
	89 p-Isopropyltoluene	119	6.941	6.941	(0.985)	900878	50.0000	45.8
	90 1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	496745	50.0000	45.4
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	888899	100.000	
	92 1,4-Dichlorobenzene	146	7.057	7.057	(1.002)	514410	50.0000	45.2
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	852045	50.0000	45.8
	94 n-Butylbenzene	91	7.215	7.215	(1.024)	817101	50.0000	44.6
	95 1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	468839	50.0000	45.8
	96 1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	124657	125.000	124
	97 Hexachlorobutadiene	225	8.191	8.191	(1.163)	176178	50.0000	44.3
	98 1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	311278	50.0000	46.6
	99 Naphthalene	128	8.392	8.392	(1.191)	620678	50.0000	47.8
	100 1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	290628	50.0000	48.2
	101 2-Methylnaphthalene	142	9.014	9.014	(1.279)	116874	25.0000	23.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016a.D
Report Date: 11-Mar-2014 11:30

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014016a.D
Lab Smp Id: V50 9525-630
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info:

Calibration Date: 10-MAR-2014
Calibration Time: 14:10
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	135813	67907	271626	143669	5.78
41 Pentafluorobenzen	944656	472328	1889312	966546	2.32
48 1,4 Difluorobenze	1423443	711722	2846886	1457917	2.42
53 1,4 dioxane d8	156016	78008	312032	174389	11.78
67 Chlorobenzene-d5	1400934	700467	2801868	1458689	4.12
91 1,4-Dichlorobenze	853329	426665	1706658	888899	4.17

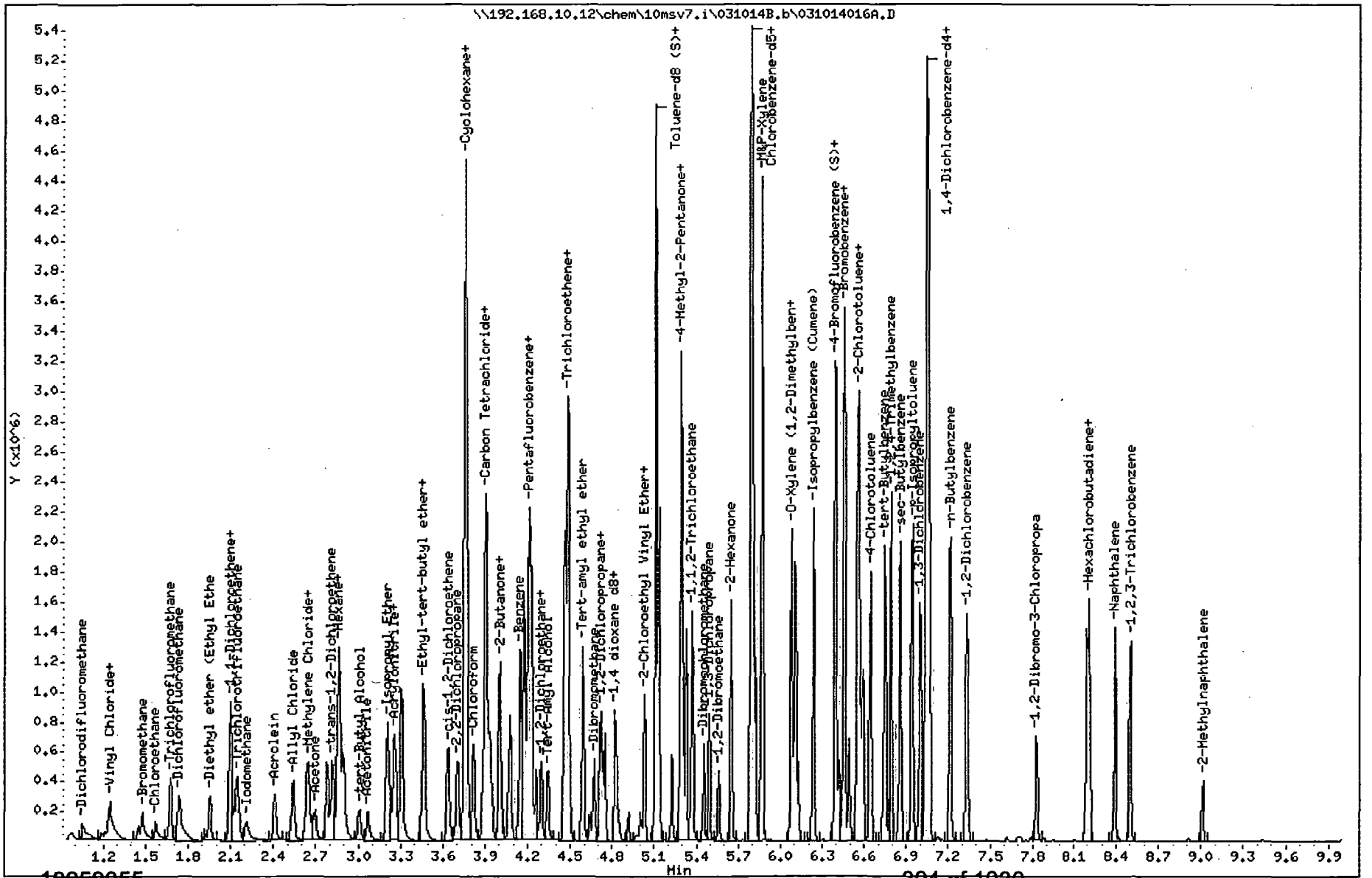
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	-0.01
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	-0.00
67 Chlorobenzene-d5	5.78	5.28	6.28	5.79	0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016A.D
Date : 10-MAR-2014 15:30
Client ID:
Sample Info: V50 9525-630,5,2

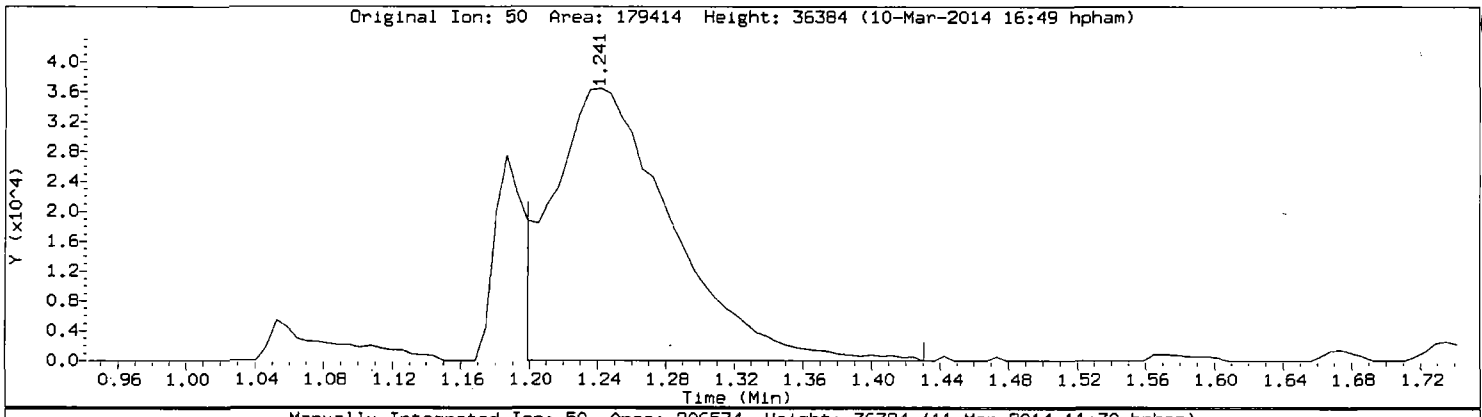
Instrument: 10msv7.i
Operator: HBP
Column diameter: 0.18

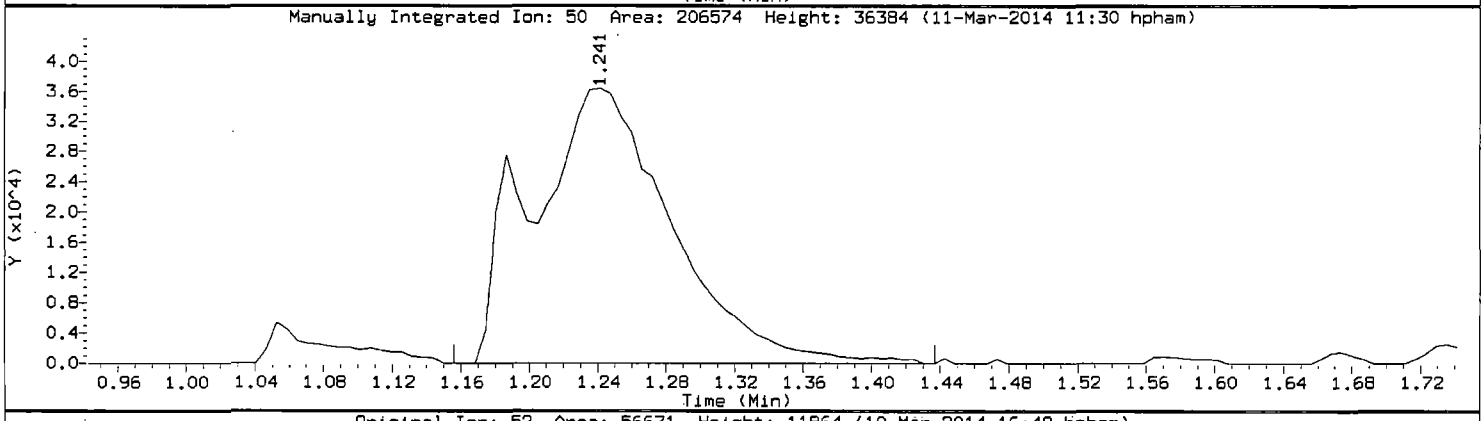
Column phase: Rtx-VMS

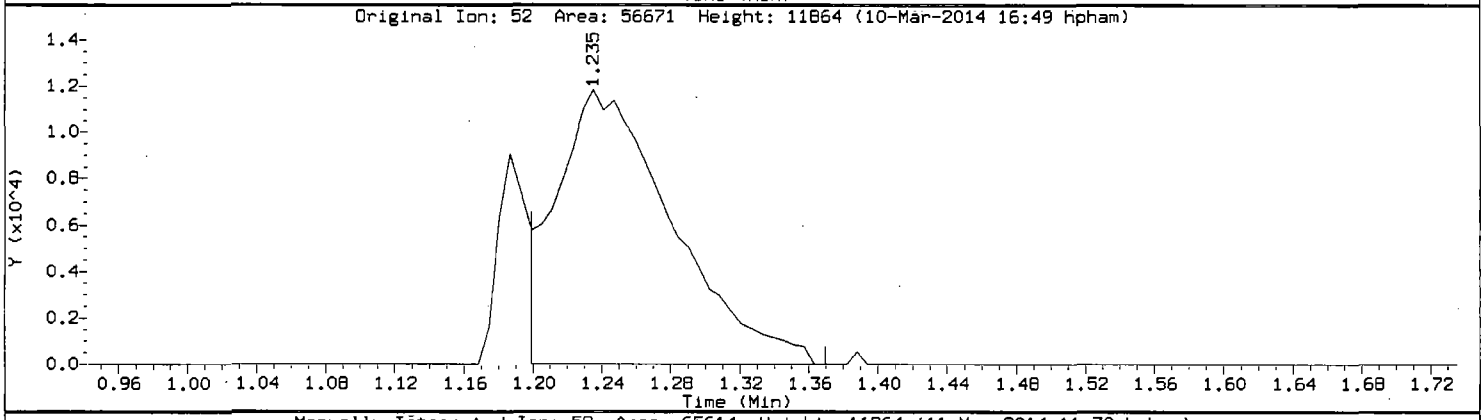


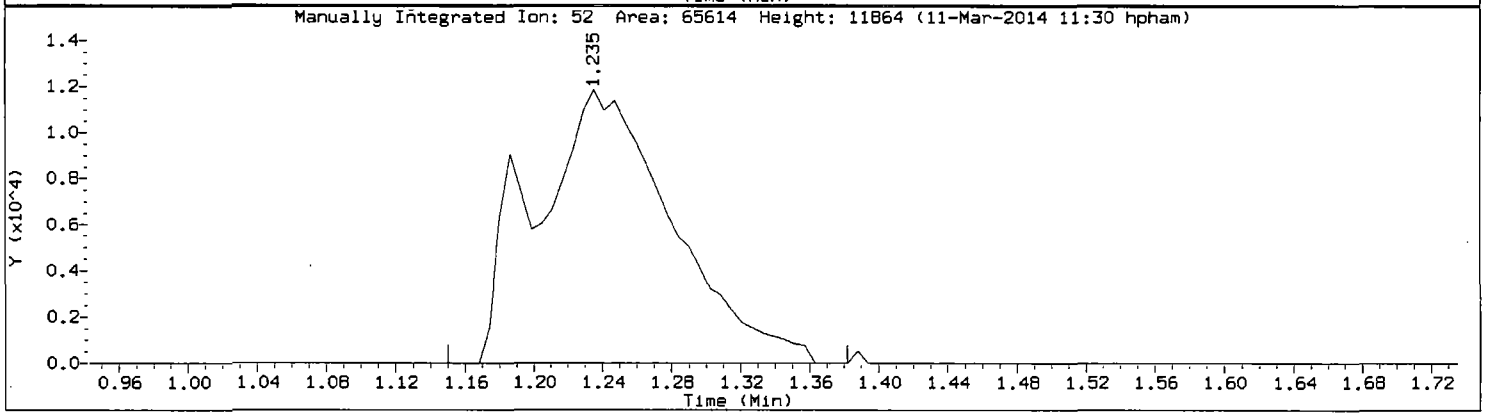
Injection Date: 10-MAR-2014 15:30
Instrument: 10msv7.i
Lab Sample ID: V50 9525-630

Compound: Chloromethane
CAS Number: 74-87-3









Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D
Lab Smp Id: 1635950
Inj Date : 10-MAR-2014 16:48
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1635950,5,3,BLANK
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 20 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.101	2.101	(0.500)	2361	0.16986	0.17(aR)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	121103	200.000	
19	Acetone	58	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	Compound Not Detected.					
	21 Hexane	86	Compound Not Detected.					
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	Compound Not Detected.					
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	Compound Not Detected.					
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	971464	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	359737	95.9338	95.9
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1431301	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	155713	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1675218	102.123	102
	58 Toluene	92	5.131	5.130	(0.887)	1051	0.09950	0.099(aR)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	5.649	5.649	(0.977)	787	0.32200	0.32(aQR)
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1396129	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	Compound Not Detected.					
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	Compound Not Detected.					
	72 O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
	73 Styrene	104	Compound Not Detected.					

Data File: \\192.168.10.12\Chem\10MSV7.I\031614B.B\031614020.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	74 Bromoform	173	Compound Not Detected.					
	75 Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	681704	100.278	100
	77 cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78 Bromobenzene	156	Compound Not Detected.					
	79 n-Propylbenzene	91	Compound Not Detected.					
	80 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81 2-Chlorotoluene	91	Compound Not Detected.					
	82 1,3,5-Trimethylbenzene	105	Compound Not Detected.					
	83 1,2,3-Trichloropropane	110	Compound Not Detected.					
	84 trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85 4-Chlorotoluene	91	Compound Not Detected.					
	86 tert-Butylbenzene	119	Compound Not Detected.					
	87 1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	88 sec-Butylbenzene	105	Compound Not Detected.					
	89 p-Isopropyltoluene	119	Compound Not Detected.					
	90 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	847359	100.000	
	92 1,4-Dichlorobenzene	146	Compound Not Detected.					
	93 1,2,3 Trimethylbenzene	105	Compound Not Detected.					
	94 n-Butylbenzene	91	Compound Not Detected.					
	95 1,2-Dichlorobenzene	146	Compound Not Detected.					
	96 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97 Hexachlorobutadiene	225	Compound Not Detected.					
	98 1,2,4-Trichlorobenzene	180	8.203	8.209	(1.164)	507	0.07955	0.080(aR)
	99 Naphthalene	128	8.392	8.392	(1.191)	2136	0.17266	0.17(aR)
	100 1,2,3-Trichlorobenzene	180	Compound Not Detected.					
	101 2-Methylnaphthalene	142	9.008	9.014	(1.279)	866	0.18028	0.18(aQR)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014020.D
Lab Smp Id: 1635950
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	121103	-15.71
41 Pentafluorobenzen	966546	483273	1933092	971464	0.51
48 1,4 Difluorobenze	1457917	728959	2915834	1431301	-1.83
53 1,4 dioxane d8	174389	87195	348778	155713	-10.71
67 Chlorobenzene-d5	1458689	729345	2917378	1396129	-4.29
91 1,4-Dichlorobenze	888899	444450	1777798	847359	-4.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

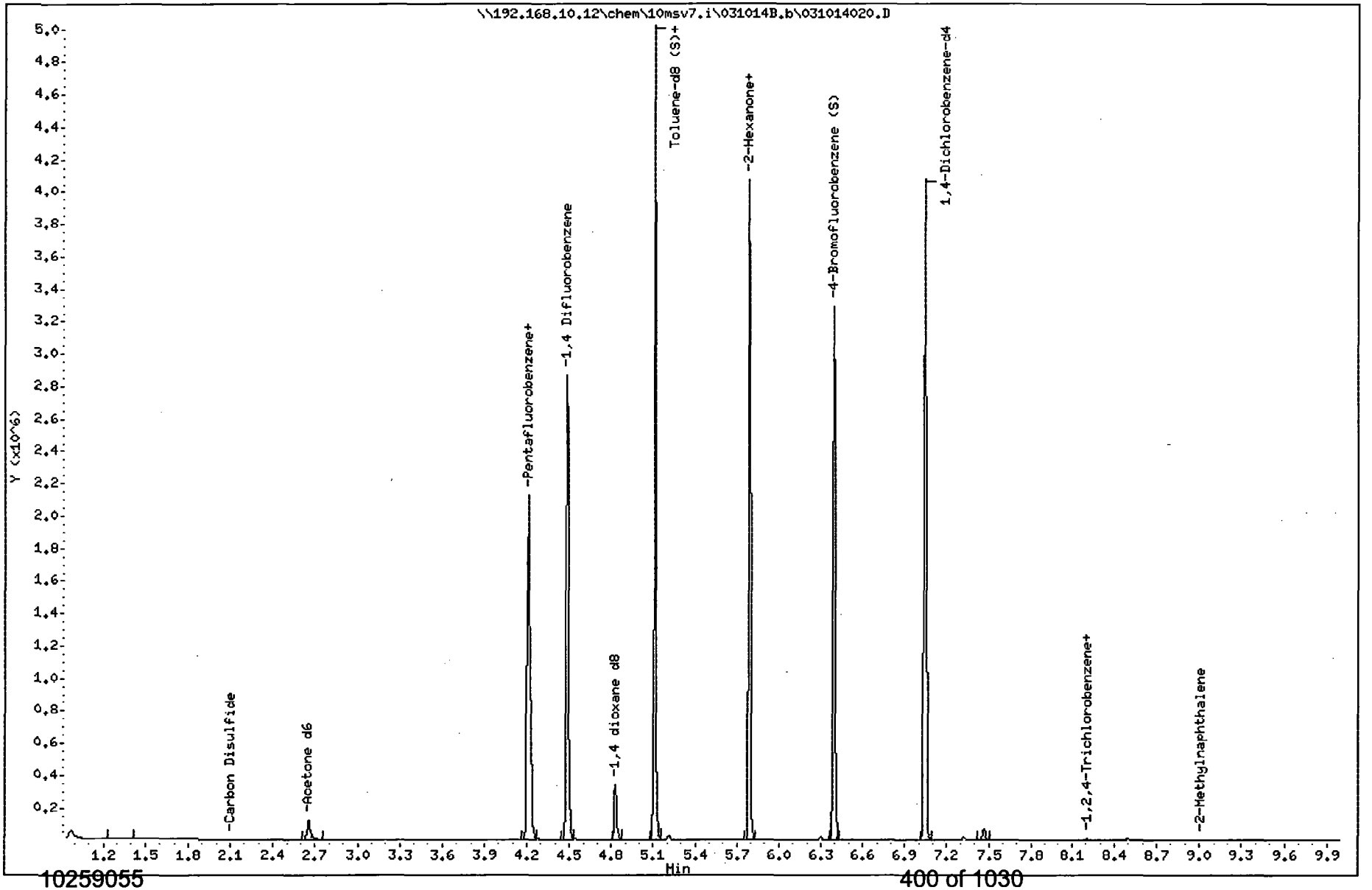
Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D
Date : 10-MAR-2014 16:48
Client ID:
Sample Info: 1635950,5,3,BLANK

Instrument: 10msv7.i

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



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Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

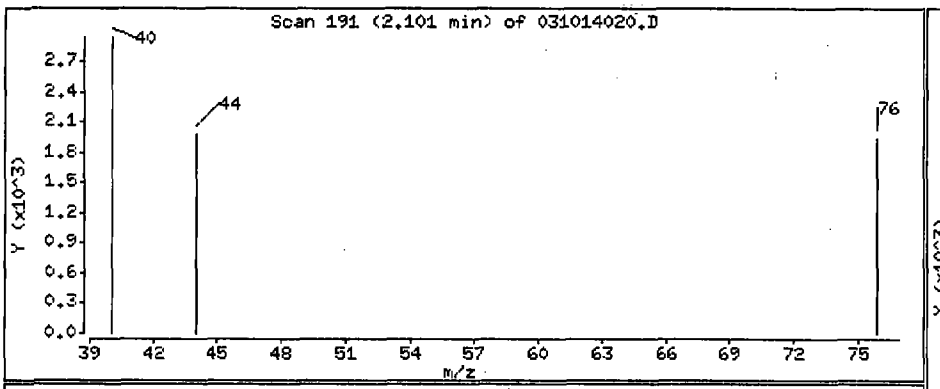
Operator: HBP

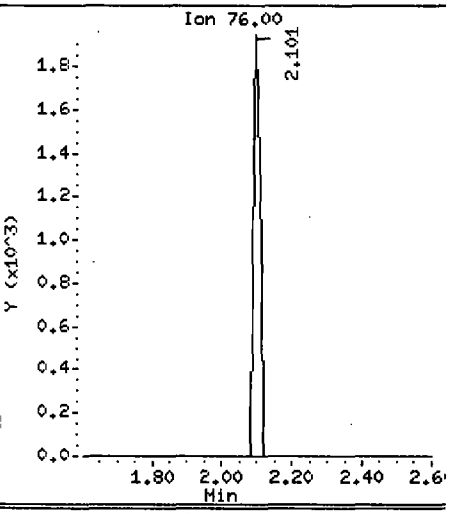
Column phase: Rtx-VMS

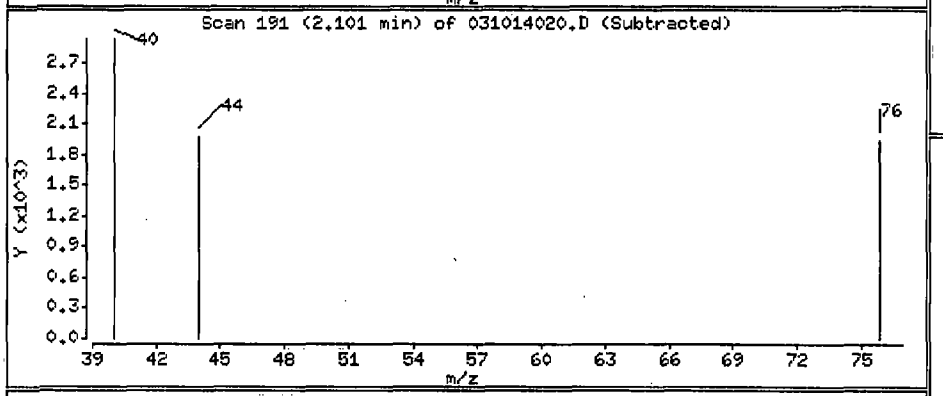
Column diameter: 0.18

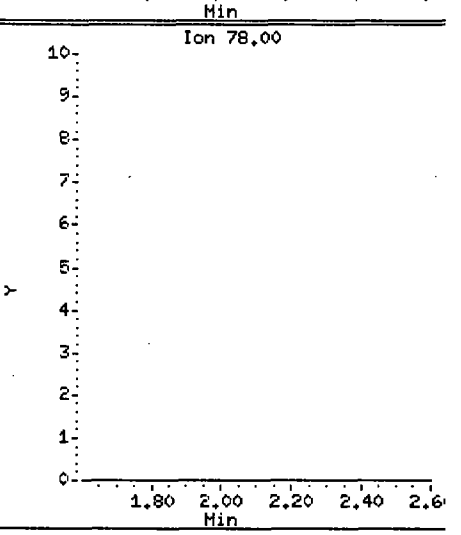
10 Carbon Disulfide

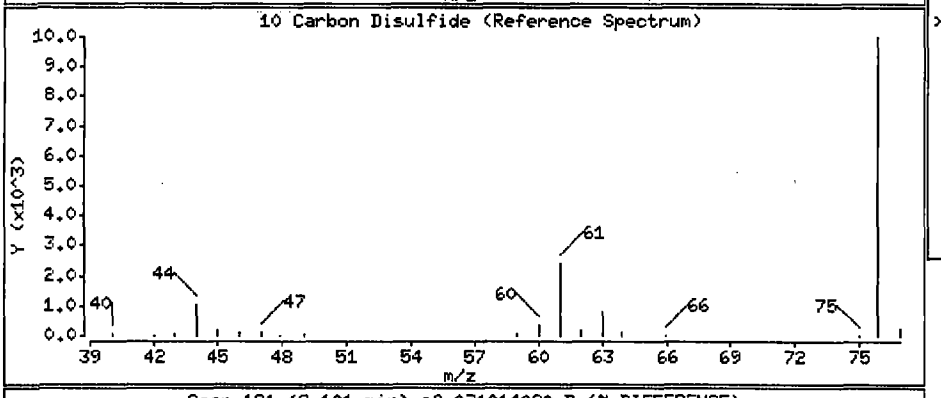
Concentration: 0.17 ug/Kg

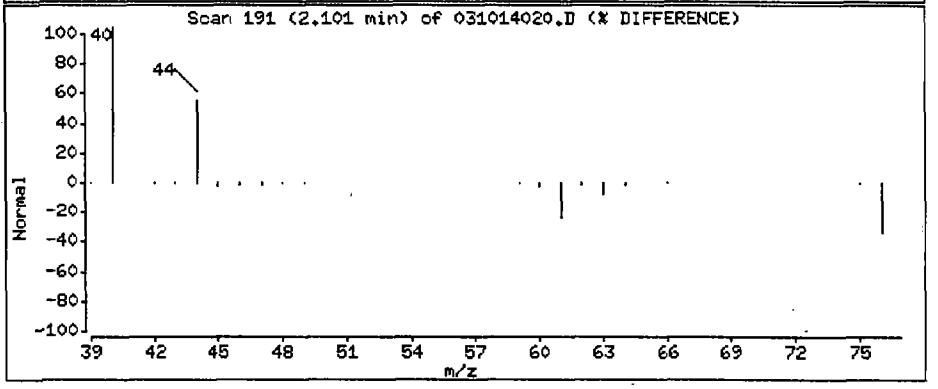












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D

Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

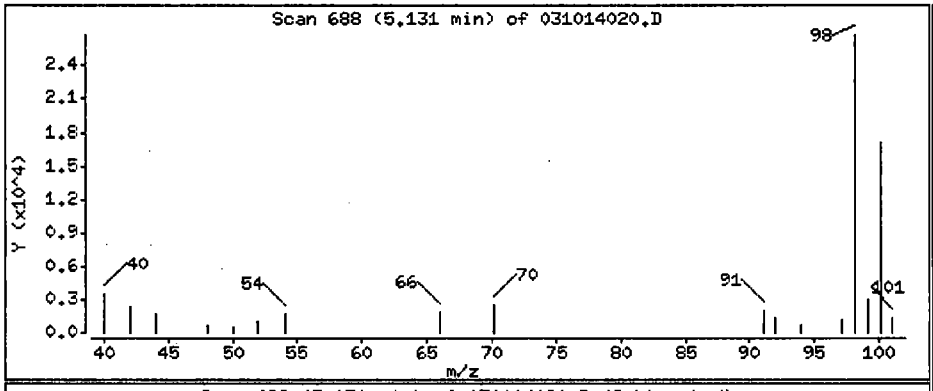
Operator: HBP

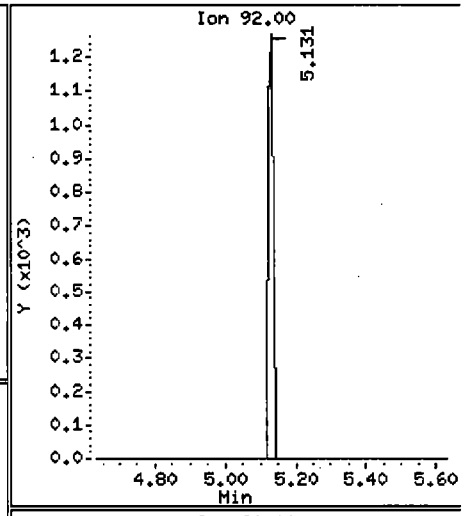
Column phase: Rtx-VMS

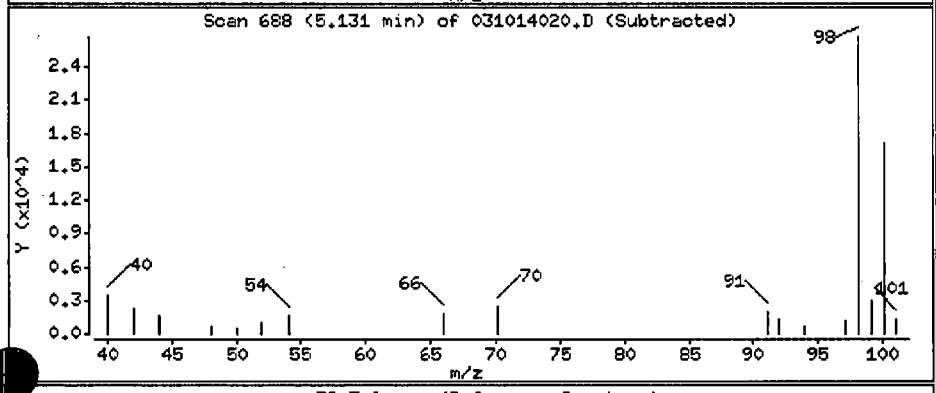
Column diameter: 0.18

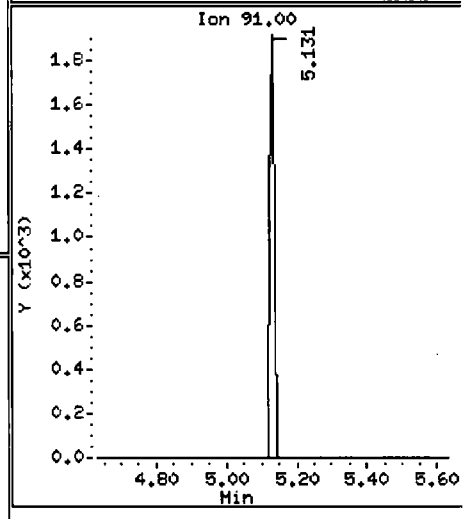
58 Toluene

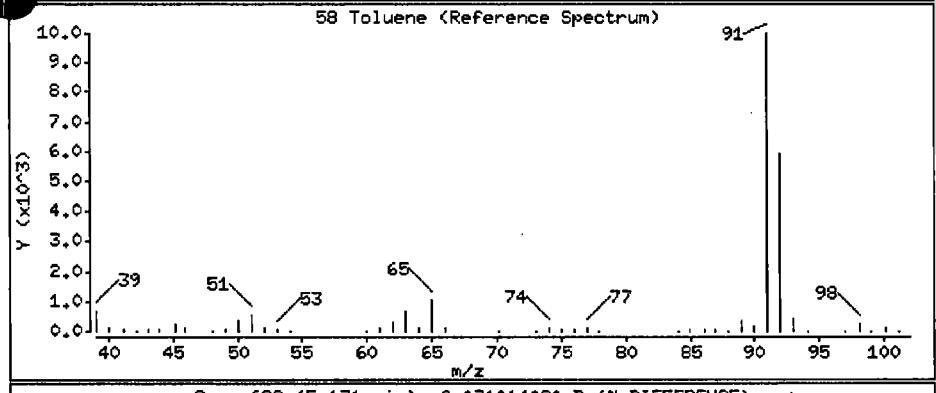
Concentration: 0.099 ug/Kg

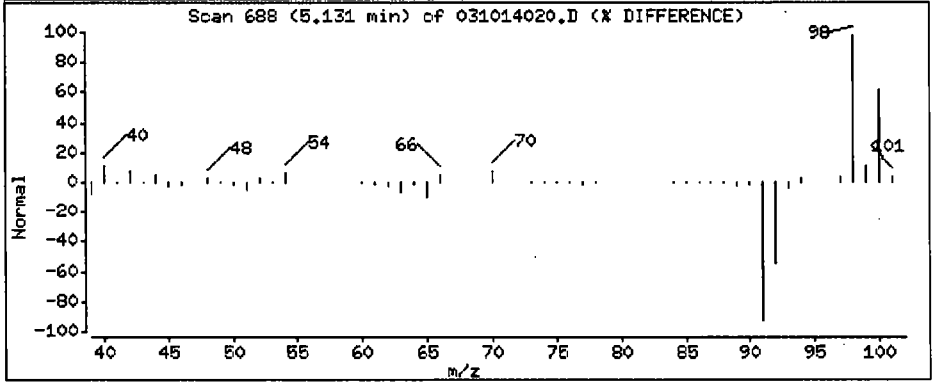












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D

Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

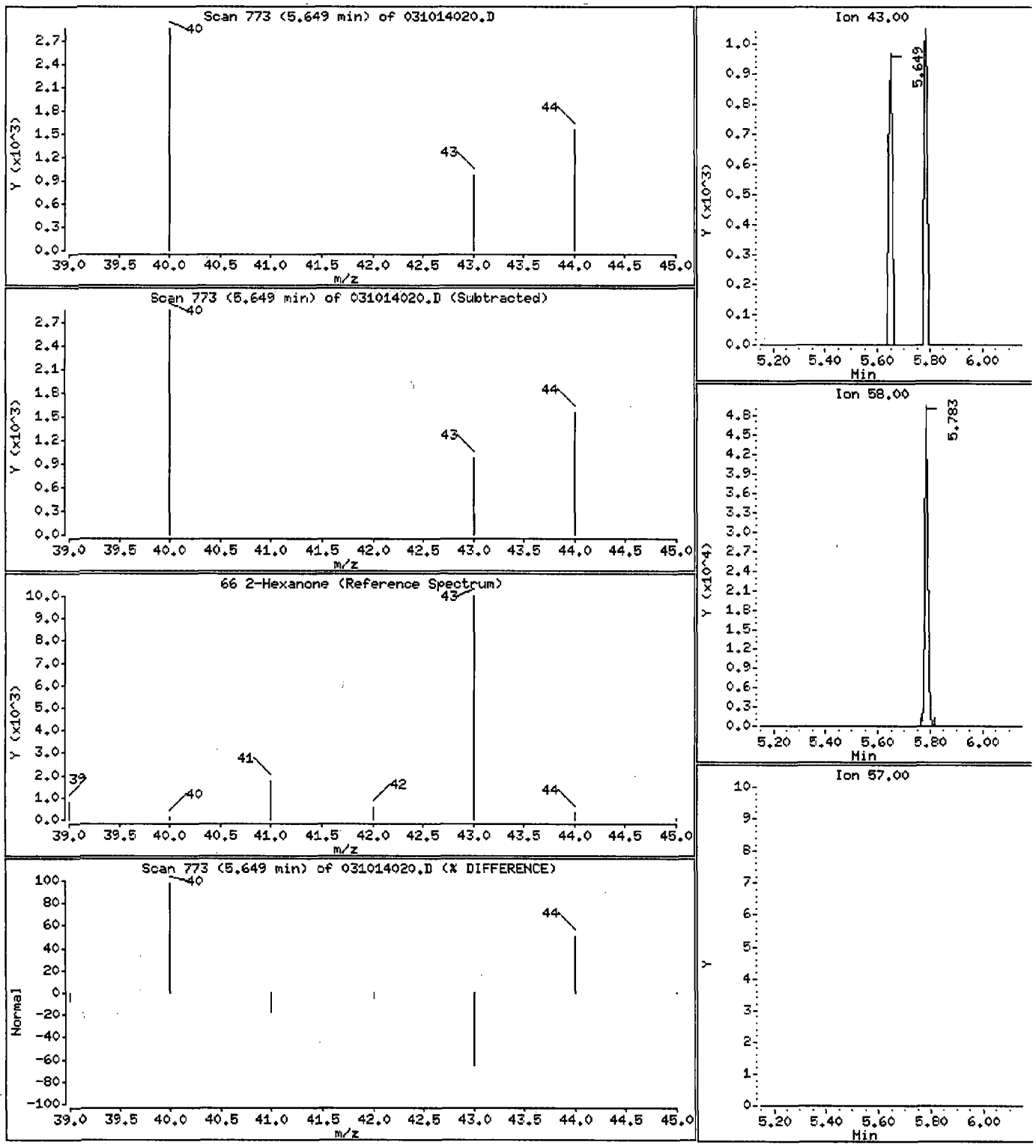
Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

66 2-Hexanone

Concentration: 0.32 ug/Kg



Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D

Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

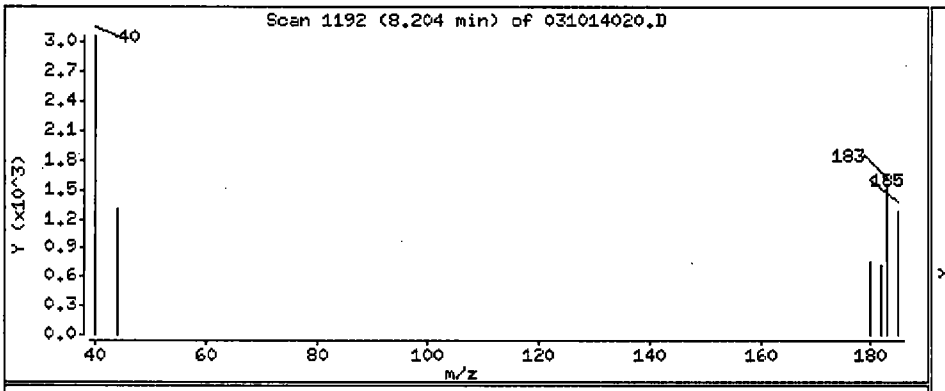
Operator: HBP

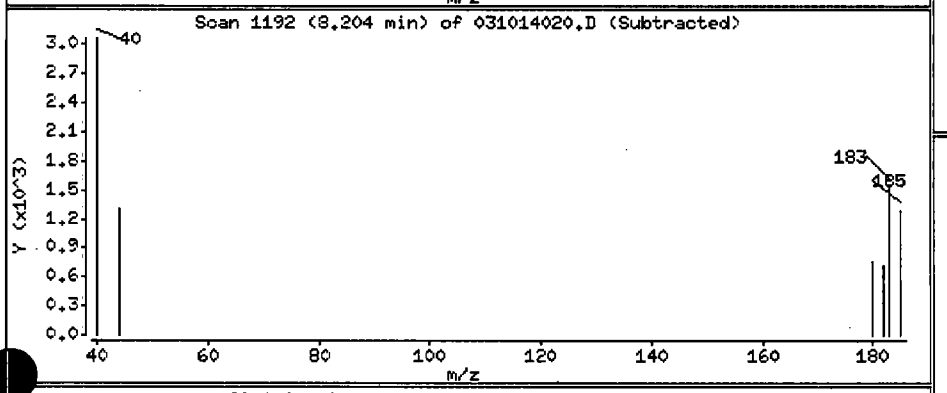
Column phase: Rtx-VMS

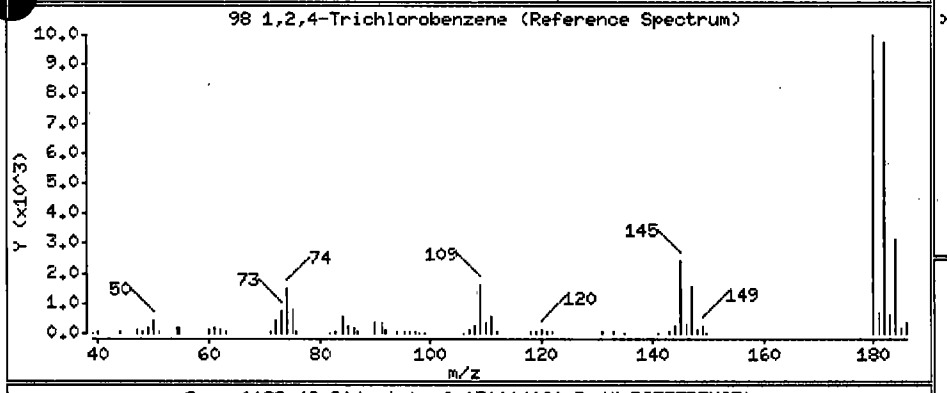
Column diameter: 0.18

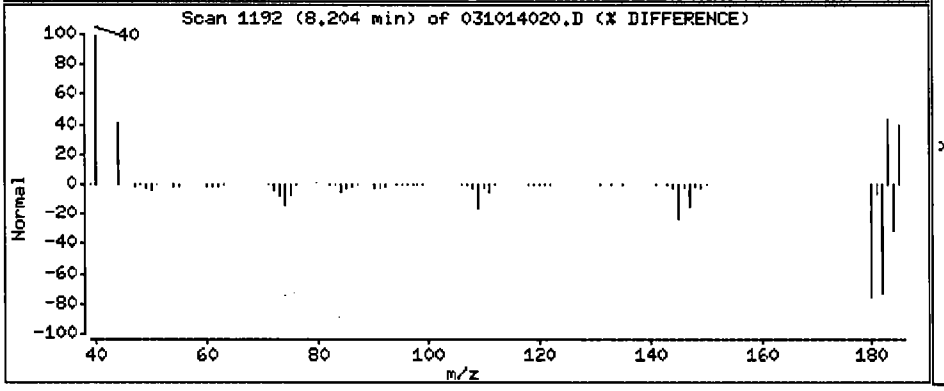
98 1,2,4-Trichlorobenzene

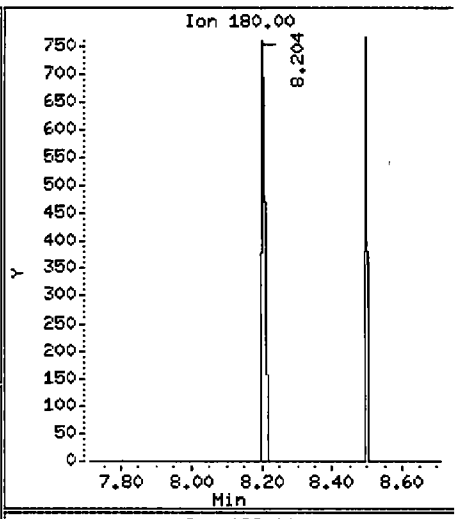
Concentration: 0.080 ug/Kg

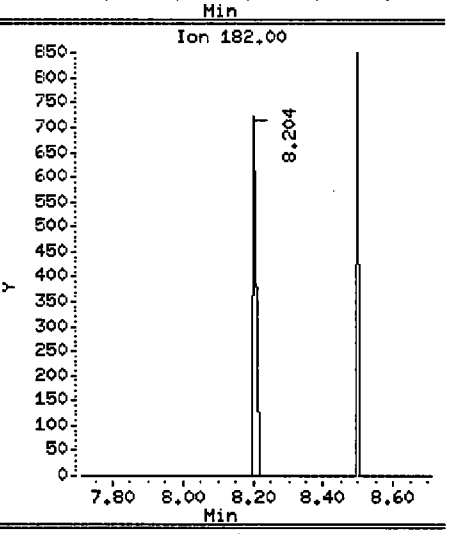


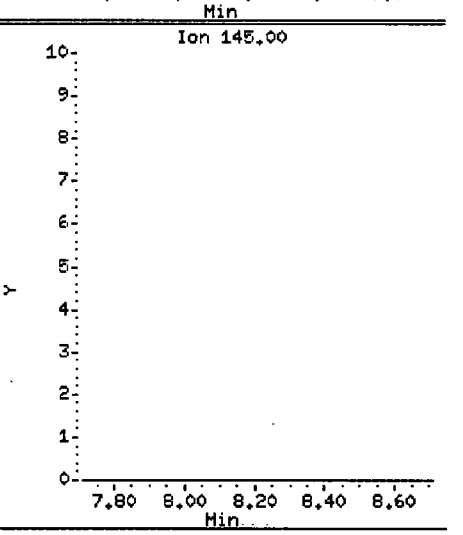












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014020.D

Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

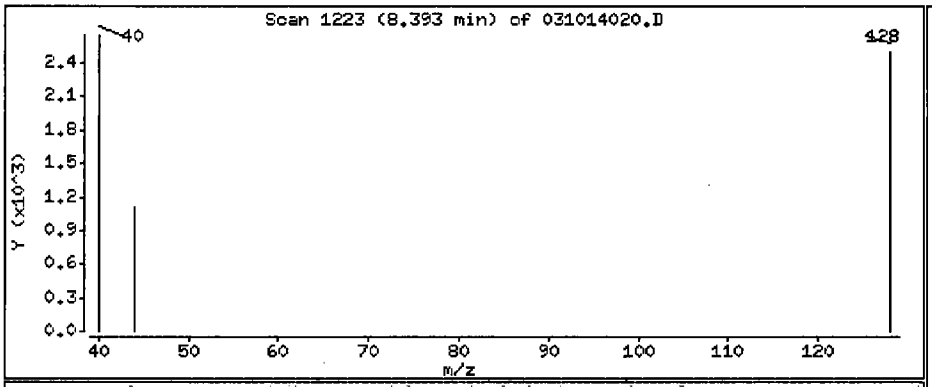
Operator: HBP

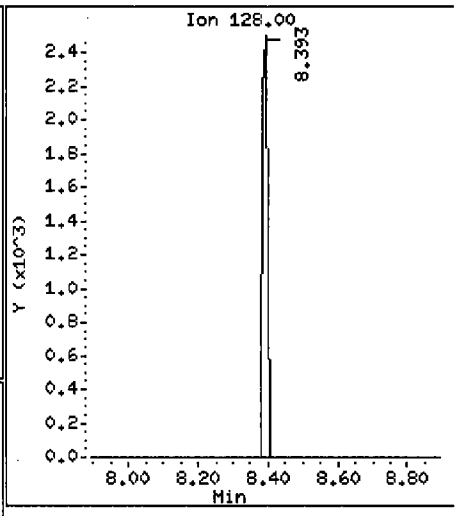
Column phase: Rtx-VMS

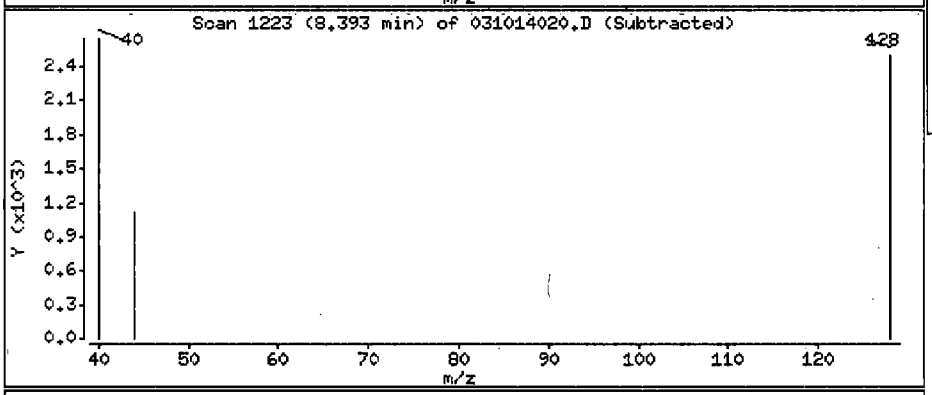
Column diameter: 0.18

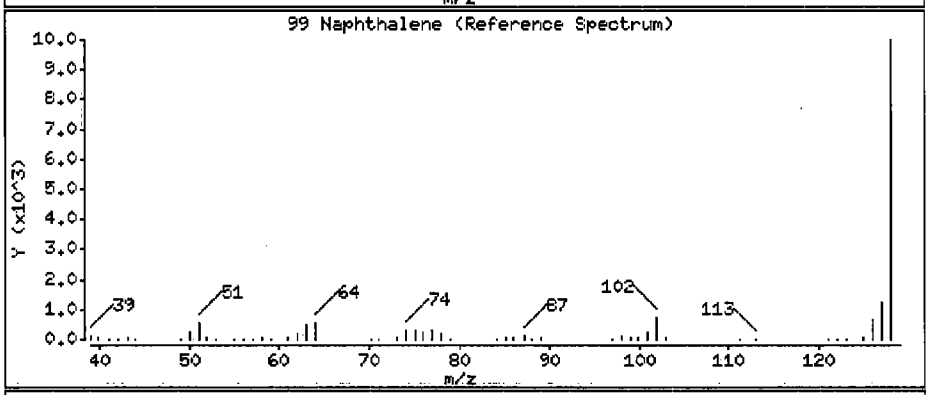
99 Naphthalene

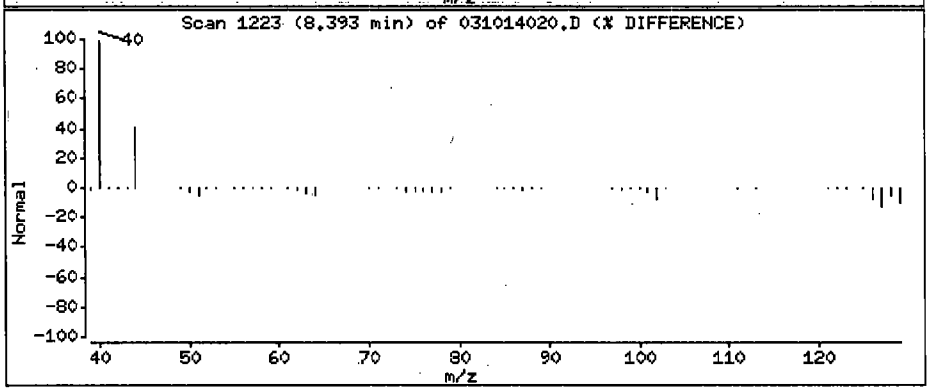
Concentration: 0.17 ug/Kg











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Date : 10-MAR-2014 16:48

Client ID:

Instrument: 10msv7.i

Sample Info: 1635950,5,3,BLANK

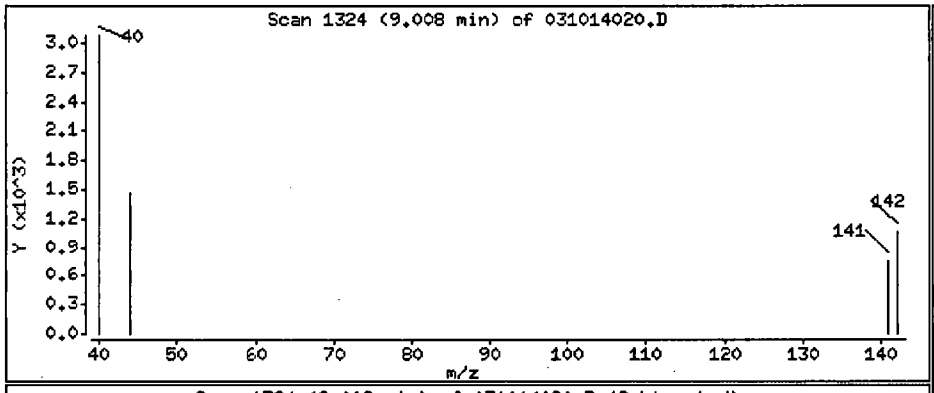
Operator: HBP

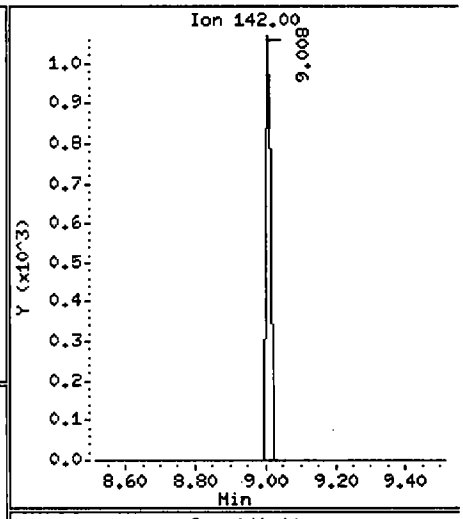
Column phase: Rtx-VMS

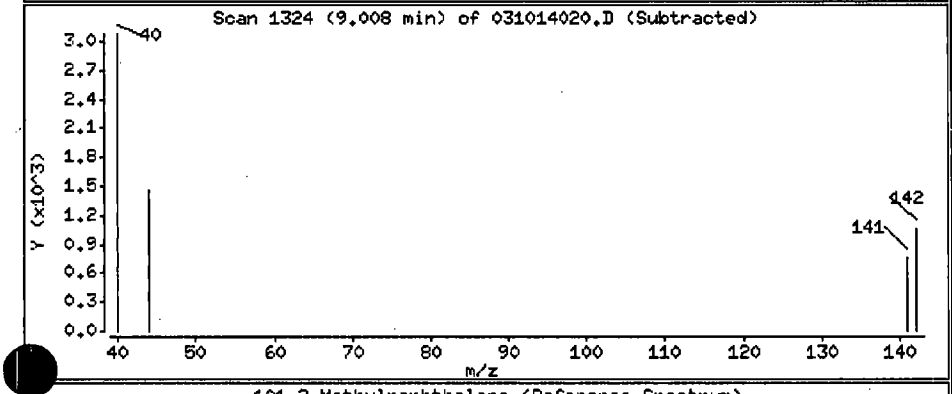
Column diameter: 0.18

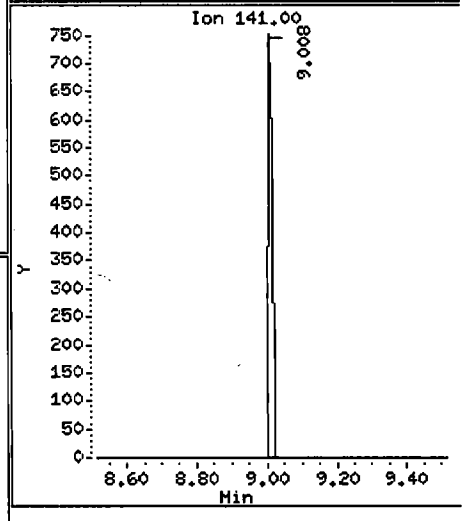
101 2-Methylnaphthalene

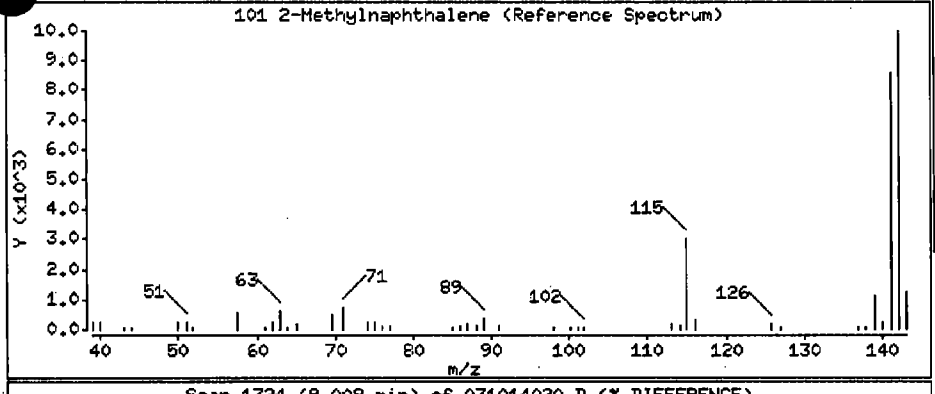
Concentration: 0.18 ug/Kg

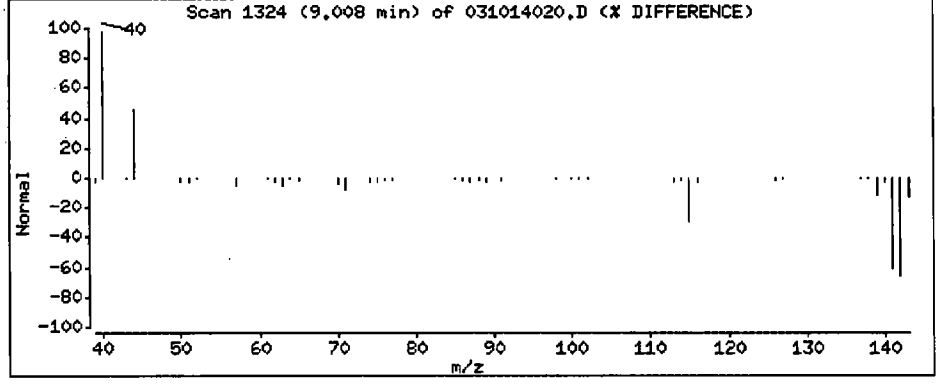












Injection Date: 10-MAR-2014 10:48
Instrument: 10msv7.i
Lab Sample ID: 1635950
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data file: \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Lab Smp Id: 1635952
Inj Date : 10-MAR-2014 15:49
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1635952,6.05,3,MS,10259041002
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.050	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.058	1.052	(0.252)	162699	41.6418	50.4
2	Chloromethane	50	1.229	1.241	(0.292)	206296	47.6558	57.7(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	216166	45.2006	54.7
4	Bromomethane	94	1.479	1.479	(0.352)	106221	53.7763	65.1
5	Chloroethane	64	1.570	1.570	(0.374)	101676	50.3707	60.9
6	Trichlorofluoromethane	101	1.680	1.674	(0.400)	220836	36.9567	44.7
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	323964	46.3616	56.1
8	Diethyl ether (Ethyl Ether)	59	1.948	1.954	(0.463)	123566	46.7957	56.6
9	1,1-Dichloroethene	96	2.094	2.094	(0.498)	147828	41.7031	50.5
10	Carbon Disulfide	76	2.101	2.101	(0.500)	522692	38.8104	47.0
11	Ethanol	45	2.107	2.113	(0.437)	38690	951.449	1150
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	144589	39.5772	47.9
13	Iodomethane	142	2.210	2.210	(0.526)	172511	39.7260	48.1
14	Acrolein	56	2.405	2.411	(0.572)	198310	436.094	528
15	Allyl Chloride	41	2.539	2.539	(0.604)	223173	43.4658	52.6
16	Methylene Chloride	84	2.637	2.637	(0.627)	177757	44.9030	54.3
17	Isopropanol	45	2.625	2.631	(0.544)	105456	454.204	550
* 18	Acetone d6	46	2.649	2.649	(1.000)	105481	200.000	
19	Acetone	58	2.692	2.698	(1.016)	50762	247.829	300

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
20	trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	170553	43.3001	52.4
21	Hexane	86	2.863	2.863	(1.081)	51462	66.8714	80.9
22	Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	444770	46.6121	56.4
23	tert-Butyl Alcohol	59	3.003	3.009	(0.622)	152703	443.504	537
24	Acetonitrile	41	3.064	3.070	(0.729)	129564	366.916	444
25	Isopropyl Ether	45	3.204	3.204	(0.762)	549724	48.2926	58.4
26	Acrylonitrile	53	3.247	3.247	(0.772)	203264	371.857	450
27	1,1-Dichloroethane	63	3.265	3.265	(0.777)	286016	44.0854	53.3
28	Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	506011	47.9195	58.0
29	Vinyl Acetate	43	3.460	3.466	(0.823)	313762	43.5282	52.7
30	cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	179207	42.6378	51.6
31	2,2-Dichloropropane	77	3.698	3.698	(0.880)	232283	42.9993	52.0
32	Cyclohexane	56	3.753	3.753	(0.893)	1107237	169.419	205
33	Bromochloromethane	130	3.759	3.759	(0.894)	104097	42.1258	51.0
34	Chloroform	83	3.814	3.814	(0.907)	275377	41.9275	50.7
35	Carbon Tetrachloride	117	3.887	3.887	(0.925)	186756	38.9867	47.2
36	Tetrahydrofuran	72	3.905	3.905	(1.474)	177618	504.576	610
37	1,1,1-Trichloroethane	97	3.929	3.929	(0.935)	236306	41.0467	49.7
38	2-Butanone	43	3.997	3.997	(0.951)	266000	183.873	222
39	1,1-Dichloropropene	75	4.003	4.003	(0.952)	182342	33.4980	40.5
40	Benzene	78	4.143	4.143	(0.985)	639861	39.4192	47.7
* 41	Pentafluorobenzene	168	4.204	4.204	(1.000)	941297	100.000	
42	Tert-amyl methyl ether	73	4.222	4.222	(1.004)	479317	44.8299	54.2
$ 43	1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	353367	97.2552	97.2
44	1,2-Dichloroethane	62	4.259	4.259	(1.013)	176154	41.6202	50.4
45	Isobutanol	43	4.295	4.295	(0.890)	125834	904.524	1090
46	Tert-Amyl Alcohol	59	4.338	4.344	(0.899)	136864	474.143	574(R)
47	Trichloroethene	130	4.460	4.460	(0.996)	153928	34.1244	41.3
* 48	1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1415725	100.000	
49	Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	382547	46.1333	55.8
50	Dibromomethane	174	4.667	4.667	(1.042)	100085	38.4836	46.6
51	1,2-Dichloropropane	63	4.716	4.716	(1.053)	154752	40.2971	48.8
52	Bromodichloromethane	83	4.746	4.746	(1.060)	186846	37.2027	45.0
* 53	1,4 dioxane d8	96	4.826	4.826	(1.000)	117767	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	35604	898.151	1090
55	2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.117)	24718	79.8425	96.6
56	cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	223387	35.9233	43.5
$ 57	Toluene-d8 (S)	98	5.106	5.106	(0.883)	1615832	113.061	113
58	Toluene	92	5.130	5.130	(0.887)	361026	39.2285	47.5
59	4-Methyl-2-Pentanone	43	5.283	5.283	(0.914)	606710	222.183	269
60	Tetrachloroethene	166	5.295	5.295	(0.916)	134653	30.7028	37.2(R)
61	trans-1,3-Dichloropropene	75	5.301	5.301	(0.917)	181405	38.3506	46.4
62	1,1,2-Trichloroethane	97	5.374	5.374	(0.929)	113548	40.3269	48.8
63	Dibromochloromethane	129	5.454	5.454	(0.943)	122757	37.5799	45.5
64	1,3-Dichloropropane	76	5.490	5.490	(0.949)	189067	39.2982	47.6
65	1,2-Dibromoethane	107	5.557	5.557	(0.961)	107424	36.3365	44.0
66	2-Hexanone	43	5.643	5.649	(0.976)	396402	186.160	225
* 67	Chlorobenzene-d5	117	5.783	5.789	(1.000)	1216359	100.000	
68	Chlorobenzene	112	5.795	5.795	(1.002)	304176	29.6000	35.8(R)
69	Ethylbenzene	91	5.801	5.801	(1.003)	518369	29.5570	35.8(R)
70	1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.006)	144681	40.4791	49.0
71	M&P-Xylene	106	5.868	5.868	(1.015)	391828	57.3646	69.4(R)
72	O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.051)	203223	31.7273	38.4
73	Styrene	104	6.100	6.106	(1.055)	301164	27.5802	33.4(R)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	74 Bromoform	173	6.124	6.124	(1.059)	76134	29.3779	35.5
	75 Isopropylbenzene (Cumene)	105	6.234	6.234	(1.078)	465160	27.1379	32.8(R)
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	503548	133.807	134
	77 cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	33044	45.4341	55.0
	78 Bromobenzene	156	6.447	6.453	(0.915)	108006	37.4856	45.4
	79 n-Propylbenzene	91	6.453	6.453	(0.916)	460343	34.9289	42.3
	80 1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	122814	51.2716	62.0
	81 2-Chlorotoluene	91	6.545	6.551	(0.929)	314843	38.3380	46.4
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	363728	39.0014	47.2
	83 1,2,3-Trichloropropane	110	6.569	6.575	(0.933)	36110	53.8485	65.2(R)
	84 trans-1,4-Dichloro-2-Butene	53	6.587	6.587	(0.935)	64322	103.650	125
	85 4-Chlorotoluene	91	6.642	6.642	(0.943)	256733	32.6801	39.5
	86 tert-Butylbenzene	119	6.746	6.746	(0.958)	361557	45.9194	55.6
	87 1,2,4-Trimethylbenzene	105	6.783	6.789	(0.963)	351501	37.0203	44.8
	88 sec-Butylbenzene	105	6.850	6.856	(0.972)	399940	33.9387	41.1
	89 p-Isopropyltoluene	119	6.935	6.941	(0.984)	328919	31.7014	38.4
	90 1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	149544	25.9333	31.4(R)
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	469070	100.000	
	92 1,4-Dichlorobenzene	146	7.051	7.057	(1.001)	149101	24.8102	30.0(R)
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	377486	20.8180	25.2
	94 n-Butylbenzene	91	7.209	7.215	(1.023)	203876	21.1039	25.5(R)
	95 1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	138622	25.6470	31.0(R)
	96 1,2-Dibromo-3-Chloropropane	157	7.825	7.831	(1.111)	52090	98.6003	119
	97 Hexachlorobutadiene	225	8.191	8.191	(1.163)	45321	21.6158	26.2(R)
	98 1,2,4-Trichlorobenzene	180	8.203	8.209	(1.164)	43275	12.2664	14.8(R)
	99 Naphthalene	128	8.392	8.392	(1.191)	112988	16.4992	20.0(R)
	100 1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	39131	12.2904	14.9(R)
	101 2-Methylnaphthalene	142	9.014	9.014	(1.280)	15473	5.81881	7.0(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014017.D
Lab Smp Id: 1635952
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	105481	-26.58
41 Pentafluorobenzen	966546	483273	1933092	941297	-2.61
48 1,4 Difluorobenze	1457917	728959	2915834	1415725	-2.89
53 1,4 dioxane d8	174389	87195	348778	117767	-32.47
67 Chlorobenzene-d5	1458689	729345	2917378	1216359	-16.61
91 1,4-Dichlorobenze	888899	444450	1777798	469070	-47.23

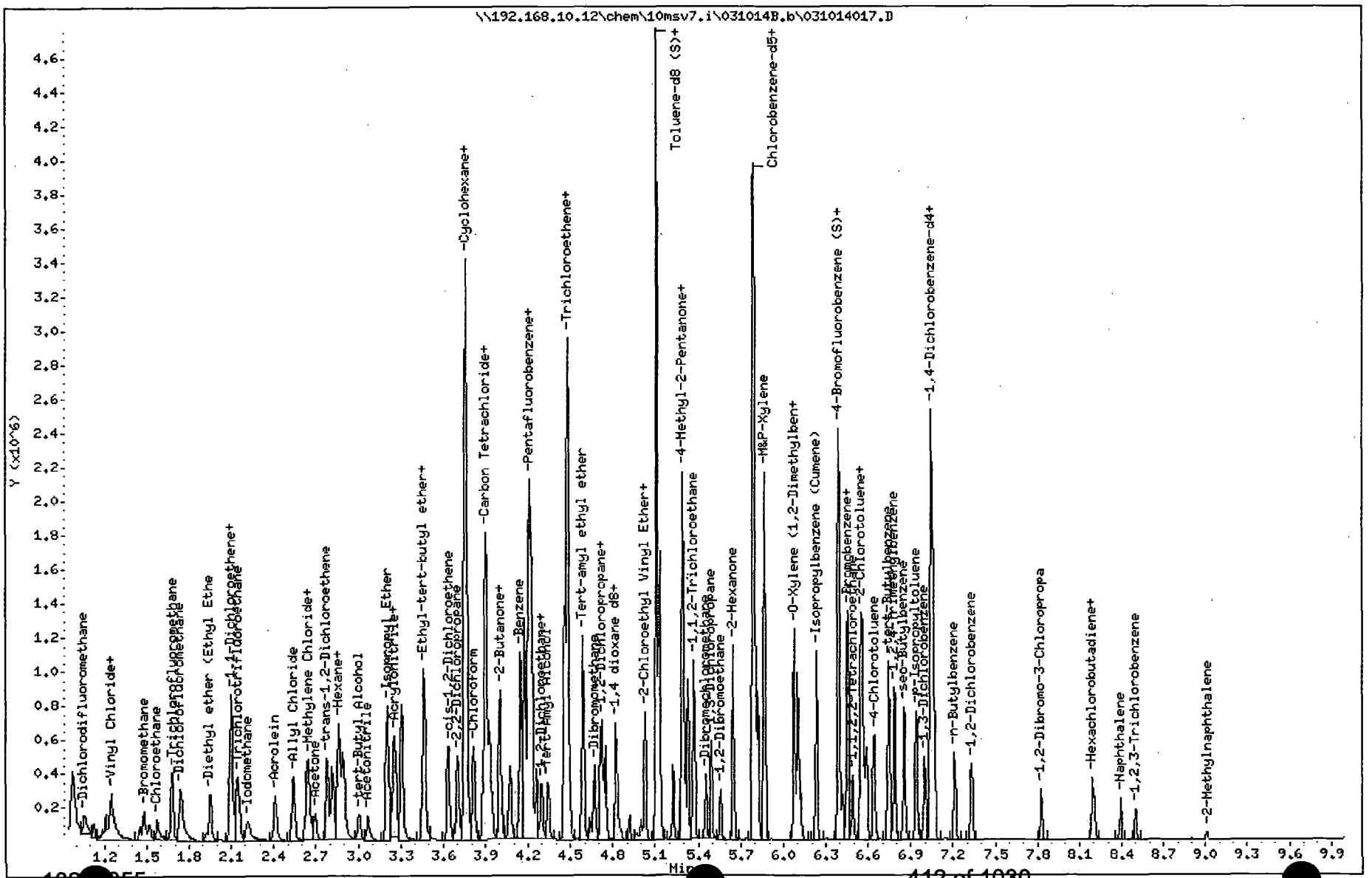
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.14
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	-0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.11
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014017.D
Date : 10-MAR-2014 15:49
Client ID:
Sample Info: 1635952,6.05,3,MS,10259041002

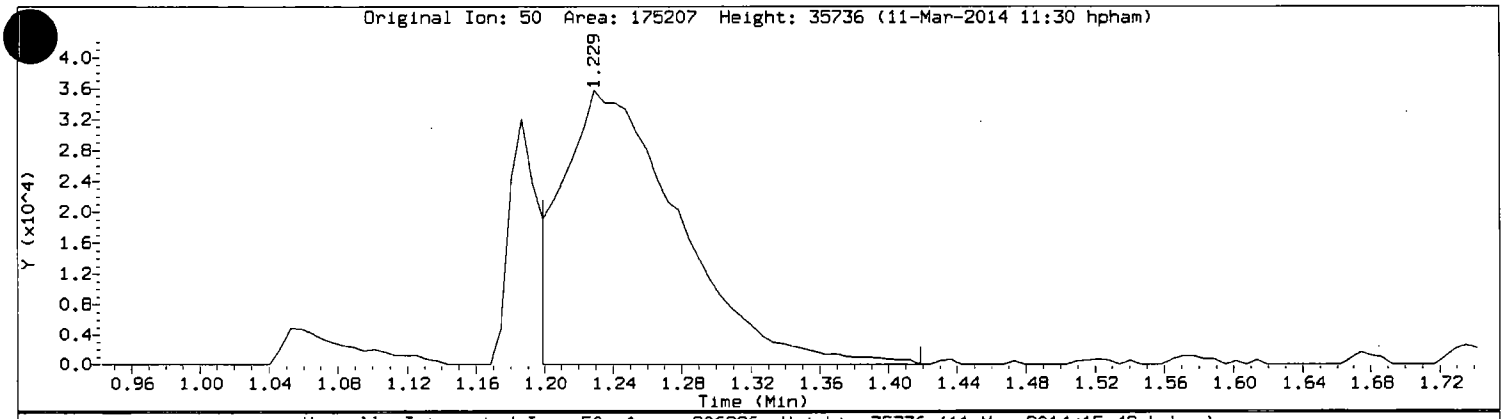
Instrument: 10msv7.i

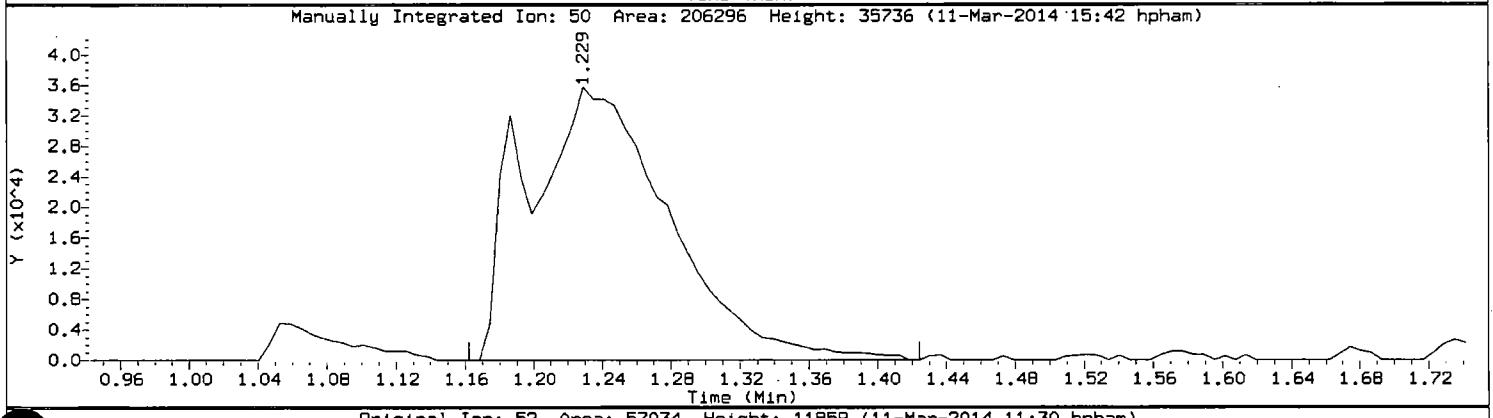
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18

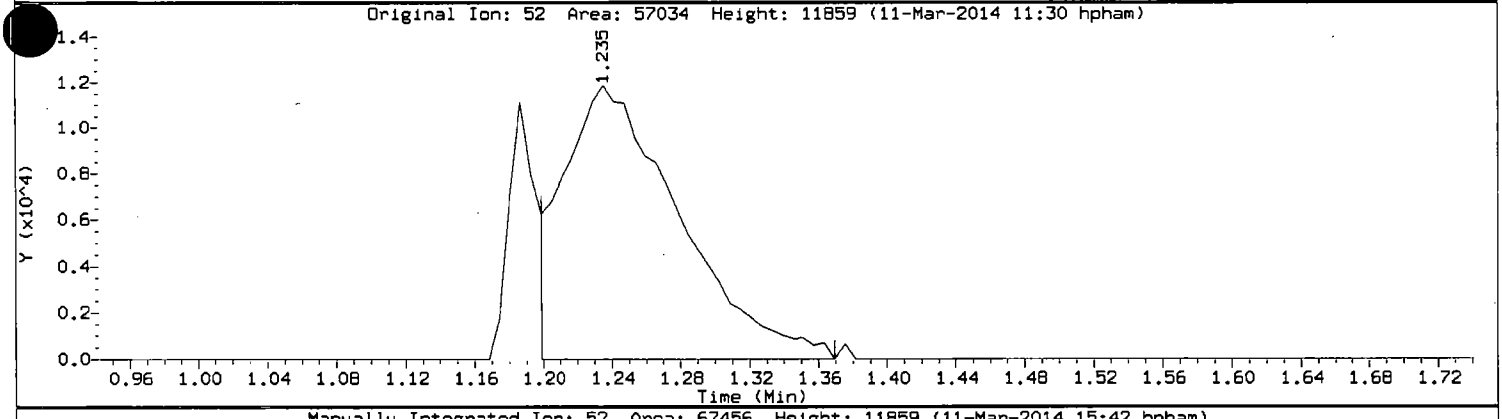


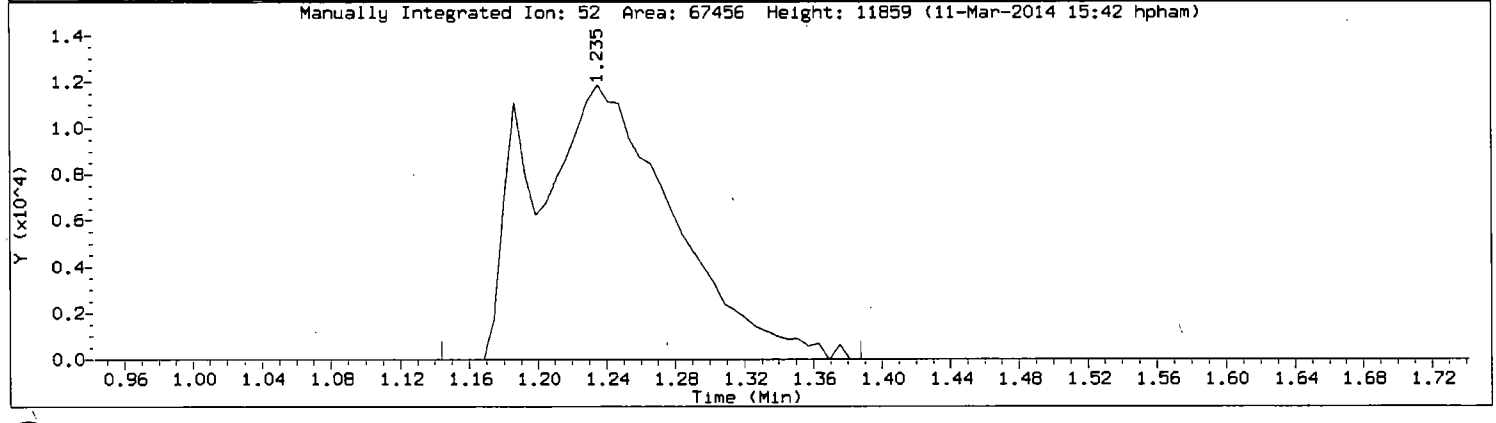
Injection Date: 10-MAR-2014 19:19
Instrument: 10msv7.i
Lab Sample ID: 1635952

Compound: Chloromethane
CAS Number: 74-87-3









Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014018.D
Lab Smp Id: 1635953
Inj Date : 10-MAR-2014 16:09
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1635953,5.97,3,MSD,10259041002
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.970	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.058	1.052	(0.252)	155966	40.4175	48.2
2	Chloromethane	50	1.229	1.241	(0.292)	202632	47.3945	56.6(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	208824	44.2112	52.8
4	Bromomethane	94	1.479	1.479	(0.352)	88851	45.6327	54.5
5	Chloroethane	64	1.570	1.570	(0.374)	95357	47.8307	57.1
6	Trichlorofluoromethane	101	1.674	1.674	(0.398)	209909	35.4529	42.3
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	309389	44.8293	53.5
8	Diethyl ether (Ethyl Ether)	59	1.948	1.954	(0.464)	121504	46.5900	55.6
9	1,1-Dichloroethene	96	2.095	2.094	(0.498)	138319	39.5084	47.2
10	Carbon Disulfide	76	2.101	2.101	(0.500)	503788	37.8743	45.2
11	Ethanol	45	2.107	2.113	(0.437)	39049	917.067	1090
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	143045	39.6440	47.3
13	Iodomethane	142	2.210	2.210	(0.526)	138797	33.2348	39.7
14	Acrolein	56	2.405	2.411	(0.572)	180339	401.532	479
15	Allyl Chloride	41	2.540	2.539	(0.604)	188160	37.1046	44.3
16	Methylene Chloride	84	2.643	2.637	(0.629)	175811	44.9668	53.7
17	Isopropanol	45	2.631	2.631	(0.545)	108542	444.825	531
* 18	Acetone d6	46	2.649	2.649	(1.000)	106982	200.000	
19	Acetone	58	2.692	2.698	(1.016)	56050	270.653	323

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	156618	40.2593	48.1
	21 Hexane	86	2.863	2.863	(1.081)	47869	61.3298	73.2
	22 Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	446285	47.3555	56.5
	23 tert-Butyl Alcohol	59	3.003	3.009	(0.622)	154389	428.223	511
	24 Acetonitrile	41	3.070	3.070	(0.730)	132572	380.127	454
	25 Isopropyl Ether	45	3.204	3.204	(0.762)	529957	47.1381	56.3
	26 Acrylonitrile	53	3.247	3.247	(0.772)	162171	300.389	359(R)
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	262515	40.9688	48.9
	28 Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	494152	47.3814	56.6
	29 Vinyl Acetate	43	3.460	3.466	(0.823)	304666	42.7946	51.1
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	164670	39.6688	47.4
	31 2,2-Dichloropropane	77	3.698	3.698	(0.880)	222178	41.6428	49.7
	32 Cyclohexane	56	3.753	3.753	(0.893)	1043362	161.641	193
	33 Bromochloromethane	130	3.759	3.759	(0.894)	98188	40.2313	48.0
	34 Chloroform	83	3.814	3.814	(0.907)	252158	38.8722	46.4
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	168009	35.5115	42.4
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	176994	495.749	592
	37 1,1,1-Trichloroethane	97	3.930	3.929	(0.935)	220297	38.7443	46.3
	38 2-Butanone	43	3.997	3.997	(0.951)	275392	192.745	230
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	156508	29.1114	34.8(R)
	40 Benzene	78	4.143	4.143	(0.985)	569354	35.5140	42.4
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	929676	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	473807	44.8685	53.6
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	355345	99.0221	99.0
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	164190	39.2784	46.9
	45 Isobutanol	43	4.295	4.295	(0.890)	123438	847.374	1010
	46 Tert-Amyl Alcohol	59	4.338	4.344	(0.899)	136466	451.490	539(R)
	47 Trichloroethene	130	4.460	4.460	(0.996)	131826	29.5834	35.3(R)
*	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1398554	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.025)	373072	45.5430	54.4
	50 Dibromomethane	174	4.667	4.667	(1.042)	91820	35.7391	42.7
	51 1,2-Dichloropropane	63	4.716	4.716	(1.053)	139488	36.7683	43.9
	52 Bromodichloromethane	83	4.747	4.746	(1.060)	164610	33.1778	39.6
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	123316	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	36098	869.637	1040
	55 2-Chloroethyl Vinyl Ether	63	5.003	5.002	(1.117)	21153	69.8463	83.4(R)
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.123)	184693	30.0655	35.9(R)
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.882)	1565363	113.974	114
	58 Toluene	92	5.131	5.130	(0.886)	297216	33.6055	40.1
	59 4-Methyl-2-Pentanone	43	5.283	5.283	(0.913)	593326	226.099	270
	60 Tetrachloroethene	166	5.295	5.295	(0.915)	110091	26.1209	31.2(R)
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.916)	148181	32.5979	38.9
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.928)	102056	37.7163	45.0
	63 Dibromochloromethane	129	5.454	5.454	(0.942)	104146	33.1761	39.6
	64 1,3-Dichloropropane	76	5.490	5.490	(0.948)	163587	35.3818	42.2
	65 1,2-Dibromoethane	107	5.557	5.557	(0.960)	91066	32.0532	38.3
	66 2-Hexanone	43	5.643	5.649	(0.975)	371760	181.672	217
*	67 Chlorobenzene-d5	117	5.789	5.789	(1.000)	1168927	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.001)	242493	24.5551	29.3(R)
	69 Ethylbenzene	91	5.801	5.801	(1.002)	415389	24.6463	29.4(R)
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.005)	134932	39.2833	46.9
	71 M&P-Xylene	106	5.868	5.868	(1.014)	319795	48.7185	58.2(R)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.049)	173885	28.2486	33.7(R)
	73 Styrene	104	6.100	6.106	(1.054)	229246	21.8459	26.1(R)

Data File: \\192.168.10.12\Chem\10MSV7.I\031014B.D\031014018.D
Report Date: 11-Mar-2014 15:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	74 Bromoform	173	6.124	6.124	(1.058)	65904	26.4623	31.6(R)
	75 Isopropylbenzene (Cumene)	105	6.234	6.234	(1.077)	411813	25.0005	29.8(R)
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	479931	137.262	137
	77 cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	24276	35.9252	42.9
	78 Bromobenzene	156	6.453	6.453	(0.916)	82418	30.7872	36.8(R)
	79 n-Propylbenzene	91	6.453	6.453	(0.916)	374340	30.5704	36.5(R)
	80 1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	115052	51.6959	61.7
	81 2-Chlorotoluene	91	6.551	6.551	(0.930)	263498	34.5339	41.2
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	328854	37.9524	45.3
	83 1,2,3-Trichloropropane	110	6.575	6.575	(0.933)	32840	52.7087	62.9(Q)
	84 trans-1,4-Dichloro-2-Butene	53	6.588	6.587	(0.935)	46866	81.2828	97.0
	85 4-Chlorotoluene	91	6.642	6.642	(0.943)	197426	27.0482	32.3(R)
	86 tert-Butylbenzene	119	6.746	6.746	(0.958)	348334	47.5896	56.8
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	298201	33.8030	40.4
	88 sec-Butylbenzene	105	6.856	6.856	(0.973)	374942	34.2450	40.9
	89 p-Isopropyltoluene	119	6.941	6.941	(0.985)	291669	30.2561	36.1(R)
	90 1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	113217	21.1316	25.2(R)
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	435818	100.000	
	92 1,4-Dichlorobenzene	146	7.057	7.057	(1.002)	108599	19.4495	23.2(R)
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	338791	18.9176	22.6
	94 n-Butylbenzene	91	7.216	7.215	(1.024)	169832	18.9212	22.6(R)
	95 1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	108907	21.6867	25.9(R)
	96 1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	47074	95.9042	114
	97 Hexachlorobutadiene	225	8.191	8.191	(1.163)	45648	23.4329	28.0(R)
	98 1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	32250	9.83881	11.7(R)
	99 Naphthalene	128	8.392	8.392	(1.191)	84713	13.3142	15.9(R)
	100 1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	30836	10.4240	12.4(R)
	101 2-Methylnaphthalene	142	9.014	9.014	(1.279)	8544	3.45822	4.1(aR)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014018.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014018.D
Lab Smp Id: 1635953
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30

Level: LOW
Sample Type: SOIL

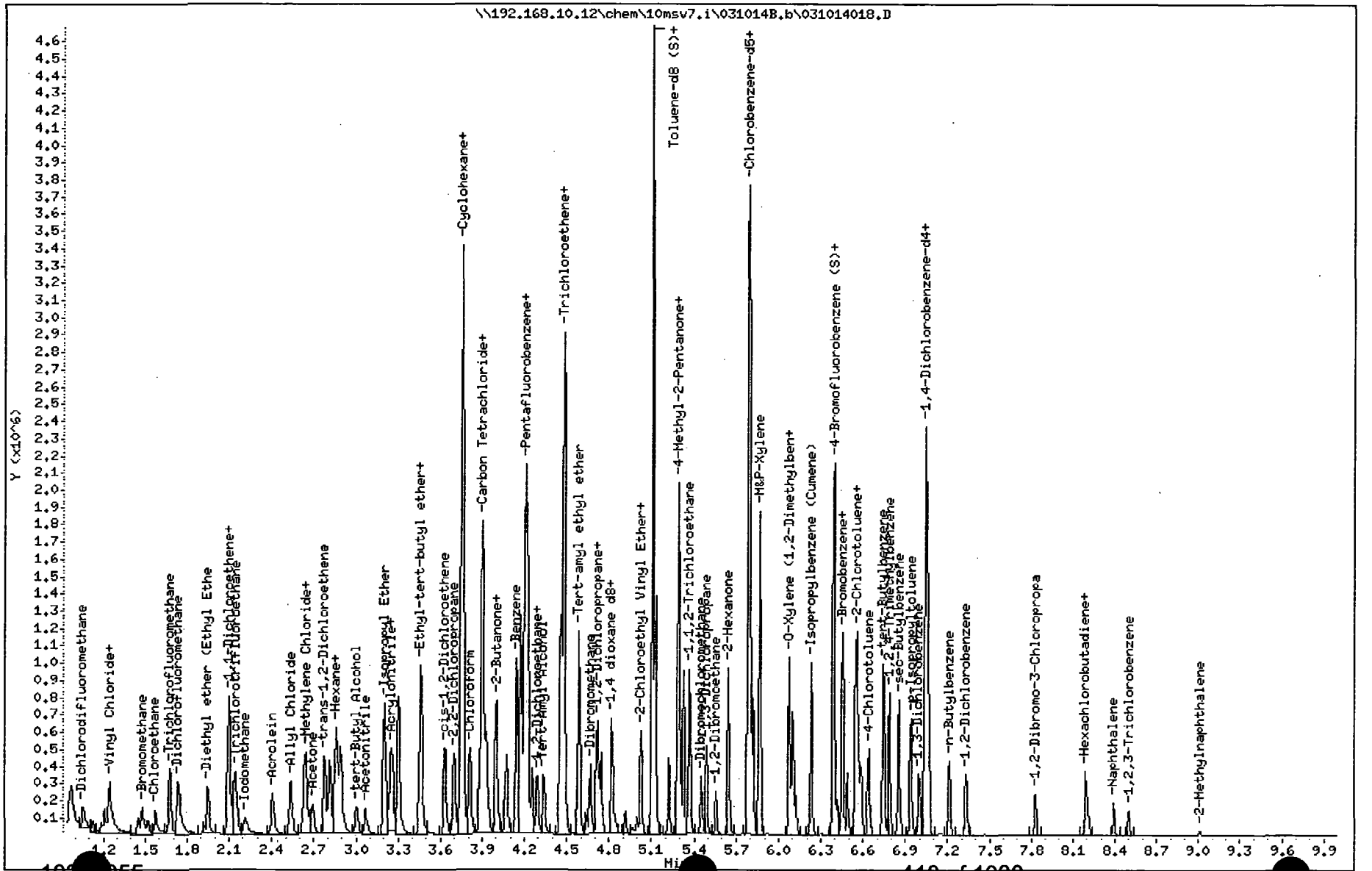
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
18 Acetone d6	143669	71835	287338	106982	-25.54	
41 Pentafluorobenzen	966546	483273	1933092	929676	-3.81	
48 1,4 Difluorobenze	1457917	728959	2915834	1398554	-4.07	
53 1,4 dioxane d8	174389	87195	348778	123316	-29.29	
67 Chlorobenzene-d5	1458689	729345	2917378	1168927	-19.86	
91 1,4-Dichlorobenze	888899	444450	1777798	435818	-50.97	<-

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.79	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

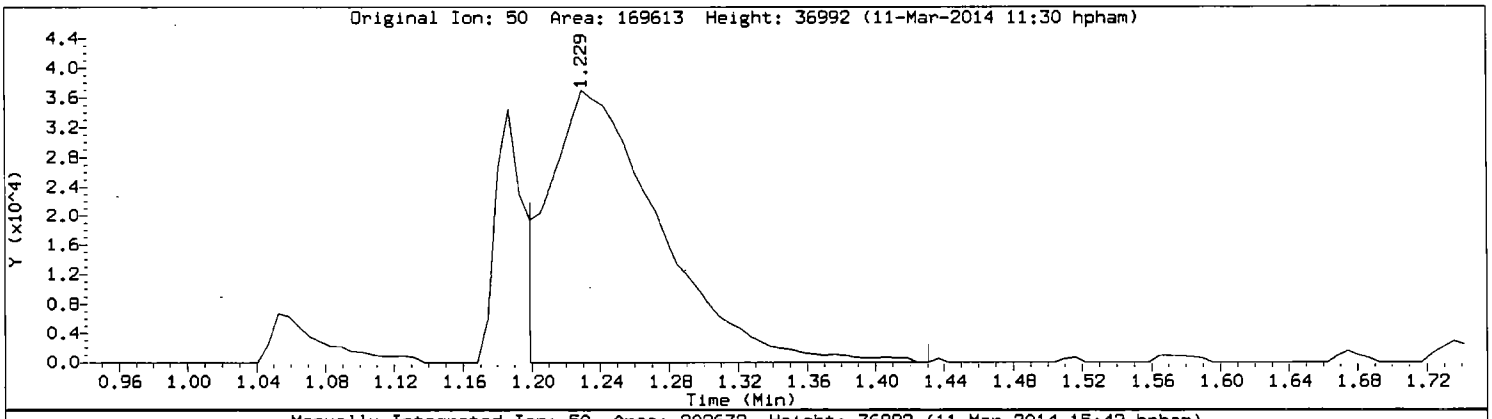
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

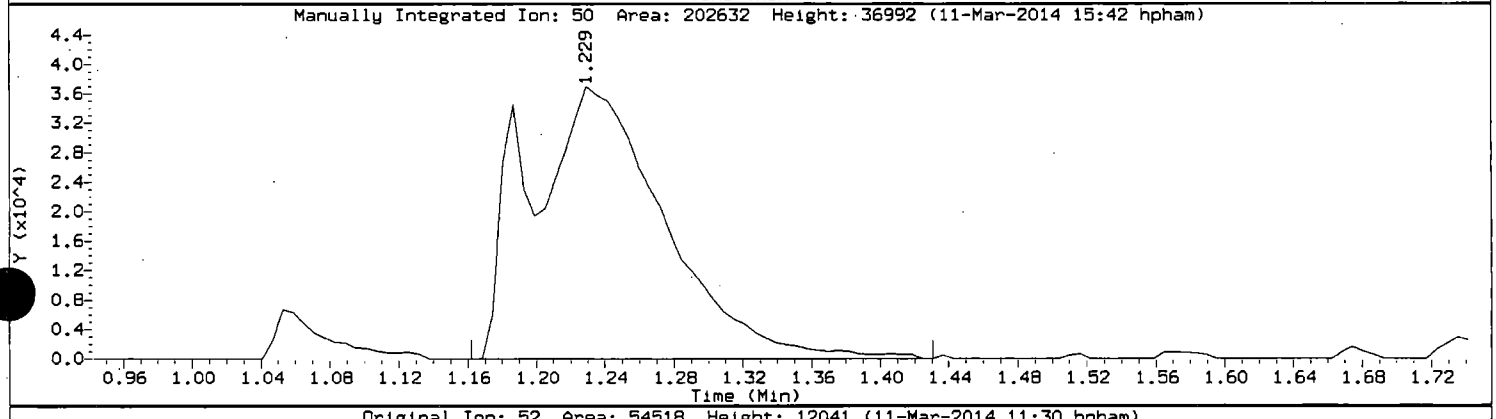
Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014018.D
Date : 10-MAR-2014 16:09
Client ID:
Instrument: 10msv7.i
Sample Info: 1636953,5,97,3,MSD,10259041002
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18

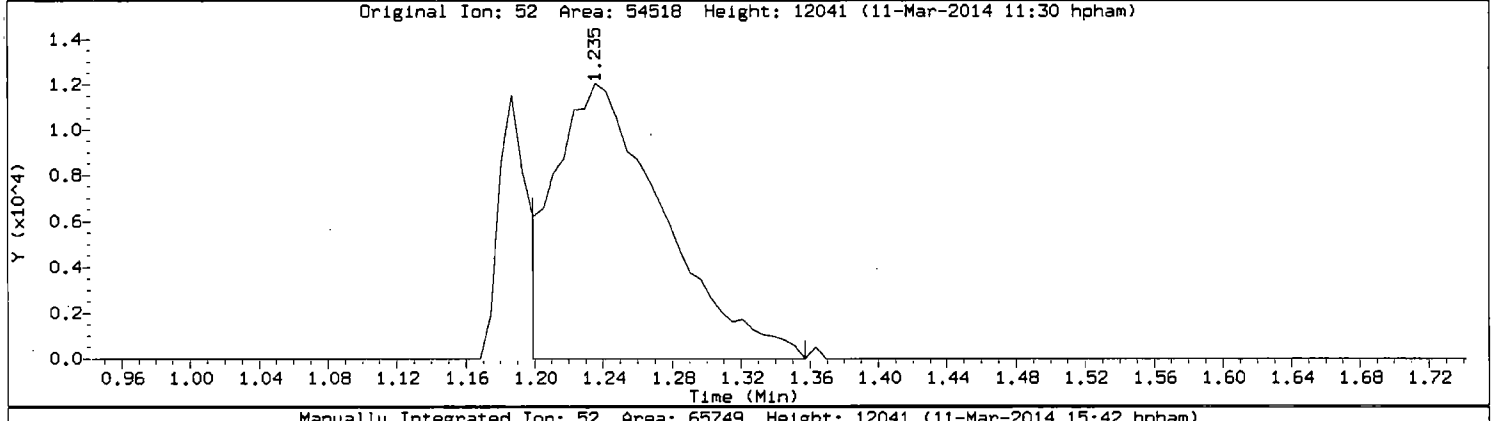


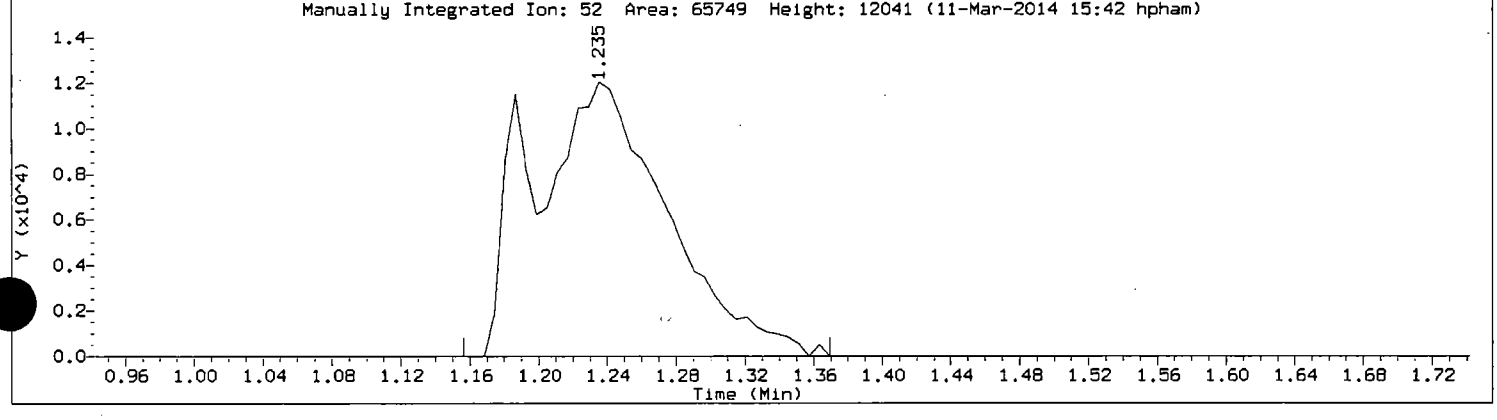
Data File: \\192.168.10.12\chem\10msv7.i\031014B.b/031014018.D
Injection Date: 10-MAR-2014 16:09
Instrument: 10msv7.i
Lab Sample ID: 1635953

Compound: Chloromethane
CAS Number: 74-87-3









Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016b.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014016b.D
Lab Smp Id: 1635951
Inj Date : 10-MAR-2014 15:30
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1635951,5,3,LCS
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 16 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.052	1.052	(0.250)	165633	41.2853	41.3
2	Chloromethane	50	1.241	1.241	(0.295)	206571	46.4728	46.5(M)
3	Vinyl Chloride	62	1.247	1.247	(0.297)	220786	44.9606	45.0
4	Bromomethane	94	1.479	1.479	(0.352)	109378	53.9255	53.9
5	Chloroethane	64	1.570	1.570	(0.374)	96520	46.5673	46.6
6	Trichlorofluoromethane	101	1.674	1.674	(0.398)	257016	42.3937	42.4
7	Dichlorofluoromethane	67	1.735	1.735	(0.413)	331945	46.2628	46.3
8	Diethyl ether (Ethyl Ether)	59	1.954	1.954	(0.465)	131804	48.6116	48.6
9	1,1-Dichloroethene	96	2.094	2.094	(0.498)	164126	45.0914	45.1
10	Carbon Disulfide	76	2.101	2.101	(0.500)	577048	41.7271	41.7
11	Ethanol	45	2.113	2.113	(0.438)	52296	868.480	868
12	Trichlorotrifluoroethane	101	2.143	2.143	(0.510)	164394	43.8228	43.8
13	Iodomethane	142	2.210	2.210	(0.526)	182354	40.7506	40.8
14	Acrolein	56	2.411	2.411	(0.574)	251926	539.526	540
15	Allyl Chloride	41	2.539	2.539	(0.604)	241182	45.7462	45.7
16	Methylene Chloride	84	2.637	2.637	(0.627)	188280	46.3236	46.3
17	Isopropanol	45	2.631	2.631	(0.545)	140521	399.119	399
* 18	Acetone d6	46	2.649	2.649	(1.000)	143669	200.000	
19	Acetone	58	2.698	2.698	(1.018)	65256	233.422	233

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	2.777	2.777	(0.661)	185961	45.9786	46.0
	21 Hexane	86	2.863	2.863	(1.081)	99512	94.9381	94.9
	22 Methyl-tert-butyl Ether	73	2.893	2.893	(0.688)	484083	49.4069	49.4(Q)
	23 tert-Butyl Alcohol	59	3.009	3.009	(0.624)	212927	417.624	418
	24 Acetonitrile	41	3.070	3.070	(0.730)	171353	472.582	472
	25 Isopropyl Ether	45	3.204	3.204	(0.762)	560753	47.9747	48.0
	26 Acrylonitrile	53	3.247	3.247	(0.772)	255340	454.923	455
	27 1,1-Dichloroethane	63	3.265	3.265	(0.777)	317015	47.5870	47.6
	28 Ethyl-tert-butyl ether	59	3.460	3.460	(0.823)	515856	47.5756	47.6
	29 Vinyl Acetate	43	3.466	3.466	(0.825)	366893	49.5694	49.6
	30 cis-1,2-Dichloroethene	96	3.637	3.637	(0.865)	204403	47.3621	47.4
	31 2,2-Dichloropropane	77	3.698	3.698	(0.880)	258863	46.6678	46.7
	32 Cyclohexane	56	3.753	3.753	(0.893)	1487106	221.599	222
	33 Bromochloromethane	130	3.759	3.759	(0.894)	121502	47.8848	47.9
	34 Chloroform	83	3.814	3.814	(0.907)	320128	47.4678	47.5
	35 Carbon Tetrachloride	117	3.887	3.887	(0.925)	225436	45.8320	45.8
	36 Tetrahydrofuran	72	3.905	3.905	(1.474)	233933	487.913	488
	37 1,1,1-Trichloroethane	97	3.929	3.929	(0.935)	269338	45.5623	45.6
	38 2-Butanone	43	3.997	3.997	(0.951)	349390	235.207	235
	39 1,1-Dichloropropene	75	4.003	4.003	(0.952)	248728	44.5000	44.5
	40 Benzene	78	4.143	4.143	(0.985)	756085	45.3625	45.4
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	966546	100.000	
	42 Tert-amyl methyl ether	73	4.222	4.222	(1.004)	509903	46.4447	46.4
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	383497	102.790	103
	44 1,2-Dichloroethane	62	4.259	4.259	(1.013)	207219	47.6810	47.7
	45 Isobutanol	43	4.295	4.295	(0.890)	180020	873.871	874
	46 Tert-Amyl Alcohol	59	4.344	4.344	(0.900)	187955	439.722	440(R)
	47 Trichloroethene	130	4.460	4.460	(0.995)	216580	46.6243	46.6
	48 1,4 Difluorobenzene	114	4.484	4.484	(1.000)	1457917	100.000	
	49 Tert-amyl ethyl ether	59	4.588	4.588	(1.023)	408034	47.7828	47.8
	50 Dibromomethane	174	4.667	4.667	(1.041)	127076	47.4478	47.4
	51 1,2-Dichloropropane	63	4.716	4.716	(1.052)	186978	47.2796	47.3
	52 Bromodichloromethane	83	4.746	4.746	(1.058)	240227	46.4471	46.4
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	174389	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.838	4.838	(1.003)	49344	840.600	840
	55 2-Chloroethyl Vinyl Ether	63	5.002	5.002	(1.116)	41956	127.548	128
	56 cis-1,3-Dichloropropene	75	5.027	5.027	(1.121)	303632	47.4146	47.4
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.882)	1718276	100.255	100
	58 Toluene	92	5.130	5.130	(0.886)	483830	43.8385	43.8
	59 4-Methyl-2-Pentanone	43	5.283	5.283	(0.913)	800437	244.431	244
	60 Tetrachloroethene	166	5.295	5.295	(0.915)	240128	45.6567	45.6
	61 trans-1,3-Dichloropropene	75	5.301	5.301	(0.916)	273359	48.1898	48.2
	62 1,1,2-Trichloroethane	97	5.374	5.374	(0.928)	160312	47.4767	47.5
	63 Dibromochloromethane	129	5.454	5.454	(0.942)	189014	48.2505	48.2
	64 1,3-Dichloropropane	76	5.490	5.490	(0.948)	273014	47.3196	47.3
	65 1,2-Dibromoethane	107	5.557	5.557	(0.960)	169784	47.8891	47.9
	66 2-Hexanone	43	5.649	5.649	(0.976)	594804	232.930	233
*	67 Chlorobenzene-d5	117	5.789	5.789	(1.000)	1458689	100.000	
	68 Chlorobenzene	112	5.795	5.795	(1.001)	557359	45.2274	45.2
	69 Ethylbenzene	91	5.801	5.801	(1.002)	927038	44.0777	44.1
	70 1,1,1,2-Tetrachloroethane	131	5.819	5.819	(1.005)	202040	47.1363	47.1
	71 M&P-Xylene	106	5.868	5.868	(1.014)	733712	89.5721	89.6
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.049)	354959	46.2101	46.2
	73 Styrene	104	6.106	6.106	(1.055)	631032	48.1887	48.2

Data File: \\192.168.10.12\Chem\10msv7.i\031014B.b\031014016b.D
Report Date: 11-Mar-2014 15:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	74 Bromoform	173	6.124	6.124	(1.058)	149136	47.9870	48.0
	75 Isopropylbenzene (Cumene)	105	6.234	6.234	(1.077)	909401	44.2413	44.2
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	716914	100.529	100
	77 cis-1,4-Dichloro-2-Butene	53	6.417	6.417	(0.911)	65847	47.7761	47.8
	78 Bromobenzene	156	6.453	6.453	(0.916)	258678	47.3763	47.4
	79 n-Propylbenzene	91	6.453	6.453	(0.916)	1129501	45.2246	45.2
	80 1,1,2,2-Tetrachloroethane	83	6.490	6.490	(0.921)	219740	48.4087	48.4
	81 2-Chlorotoluene	91	6.551	6.551	(0.930)	717410	46.0987	46.1
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	804111	45.4993	45.5
	83 1,2,3-Trichloropropane	110	6.575	6.575	(0.933)	61814	48.6428	48.6(Q)
	84 trans-1,4-Dichloro-2-Butene	53	6.587	6.587	(0.935)	145342	123.590	124
	85 4-Chlorotoluene	91	6.642	6.642	(0.943)	674549	45.3106	45.3
	86 tert-Butylbenzene	119	6.746	6.746	(0.958)	685223	45.9236	45.9
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	829415	46.0968	46.1
	88 sec-Butylbenzene	105	6.856	6.856	(0.973)	1012792	45.3530	45.4
	89 p-Isopropyltoluene	119	6.941	6.941	(0.985)	900878	45.8185	45.8
	90 1,3-Dichlorobenzene	146	6.996	6.996	(0.993)	496745	45.4577	45.4
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	888899	100.000	
	92 1,4-Dichlorobenzene	146	7.057	7.057	(1.002)	514410	45.1694	45.2
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	852045	45.7620	45.8
	94 n-Butylbenzene	91	7.215	7.215	(1.024)	817101	44.6331	44.6
	95 1,2-Dichlorobenzene	146	7.331	7.331	(1.041)	468839	45.7734	45.8
	96 1,2-Dibromo-3-Chloropropane	157	7.831	7.831	(1.112)	124657	124.516	124
	97 Hexachlorobutadiene	225	8.191	8.191	(1.163)	176178	44.3413	44.3
	98 1,2,4-Trichlorobenzene	180	8.209	8.209	(1.165)	311278	46.5601	46.6
	99 Naphthalene	128	8.392	8.392	(1.191)	620678	47.8281	47.8
	100 1,2,3-Trichlorobenzene	180	8.502	8.502	(1.207)	290628	48.1688	48.2
	101 2-Methylnaphthalene	142	9.014	9.014	(1.279)	116874	23.1933	23.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016b.D
Report Date: 11-Mar-2014 15:43

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014016b.D
Lab Smp Id: 1635951
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	143669	0.00
41 Pentafluorobenzen	966546	483273	1933092	966546	0.00
48 1,4 Difluorobenze	1457917	728959	2915834	1457917	0.00
53 1,4 dioxane d8	174389	87195	348778	174389	0.00
67 Chlorobenzene-d5	1458689	729345	2917378	1458689	0.00
91 1,4-Dichlorobenze	888899	444450	1777798	888899	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	0.00
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.79	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

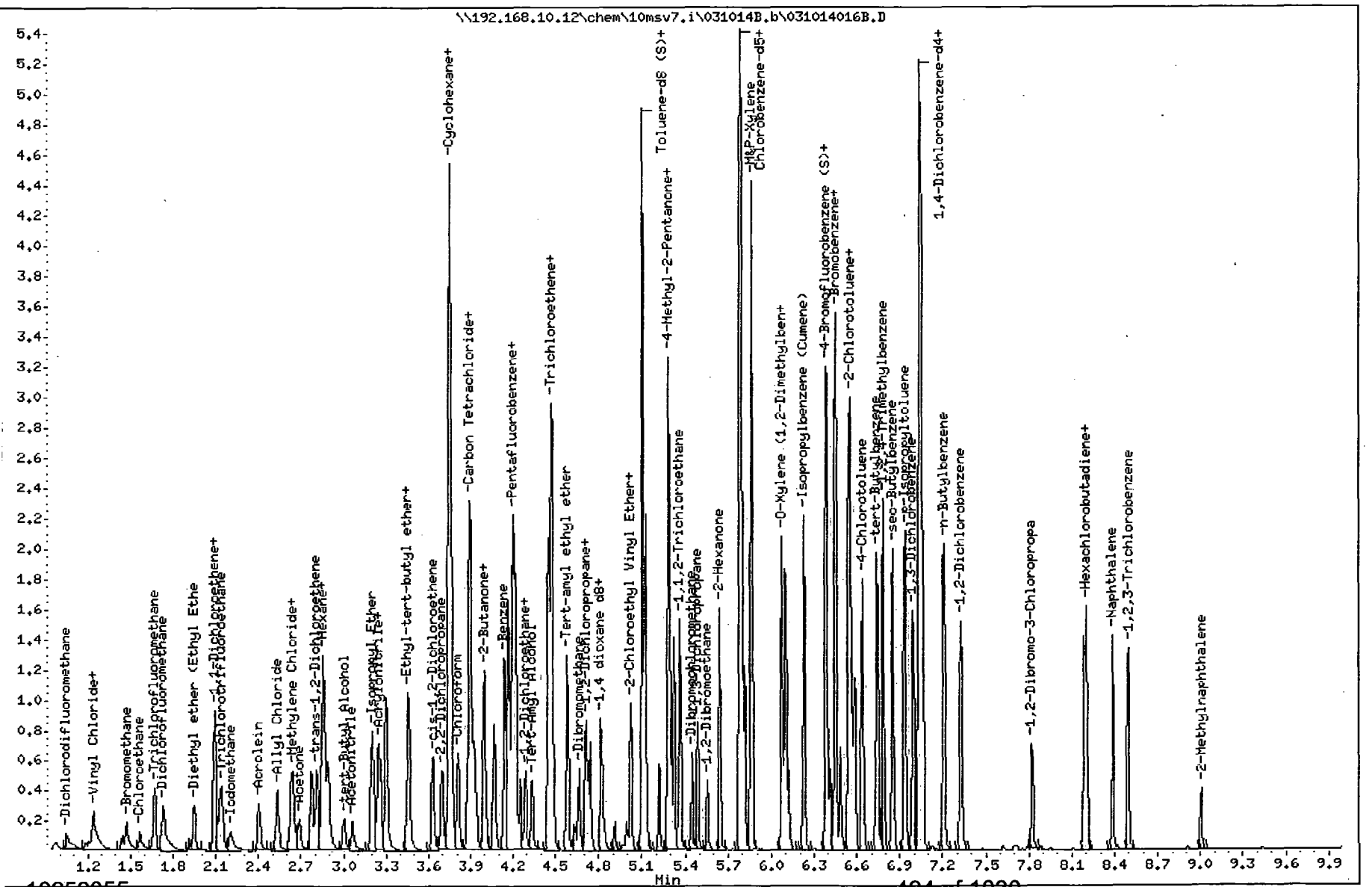
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014016B.D
Date : 10-MAR-2014 15:30
Client ID:
Sample Info: 1636951,5,3,LCS

Instrument: 10msv7.i

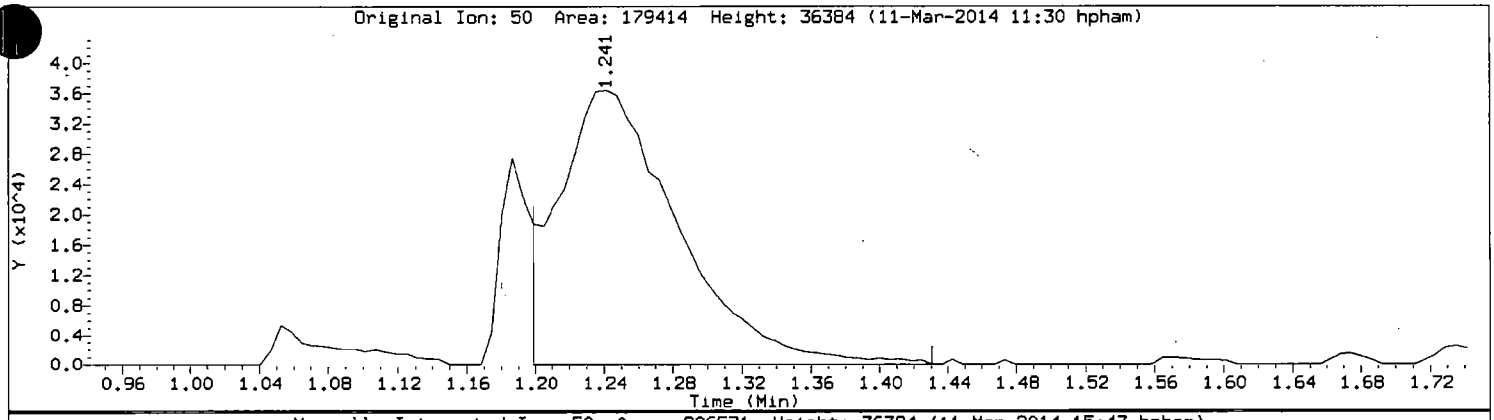
Operator: HBP
Column diameter: 0.18

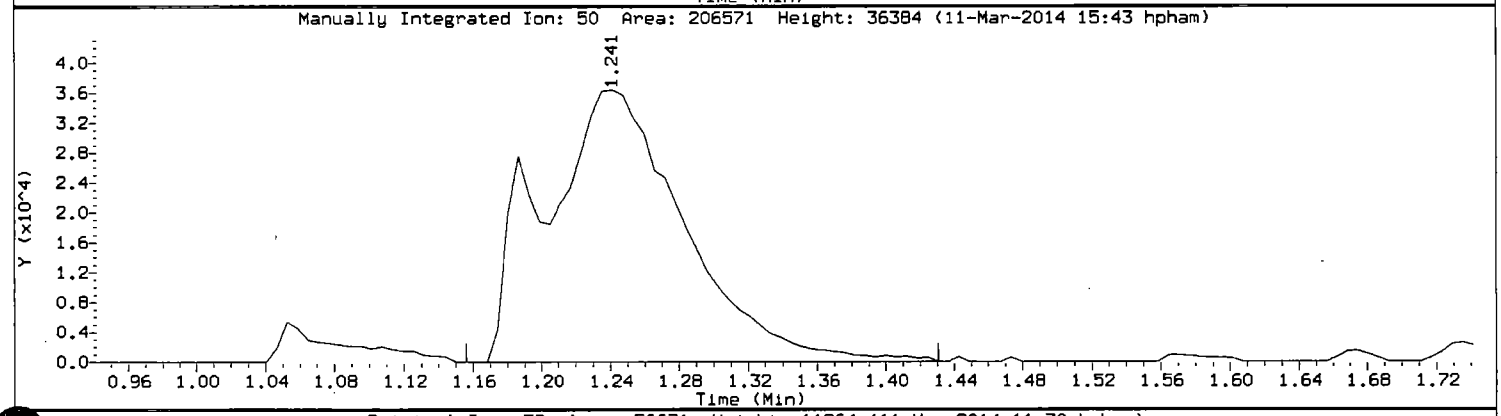
Column phase: Rtx-VMS

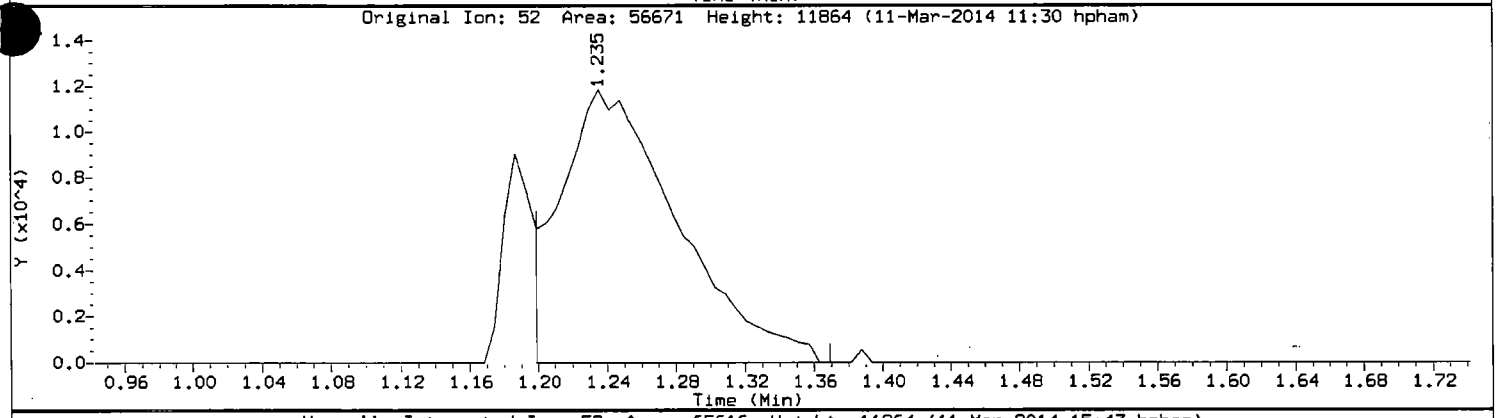


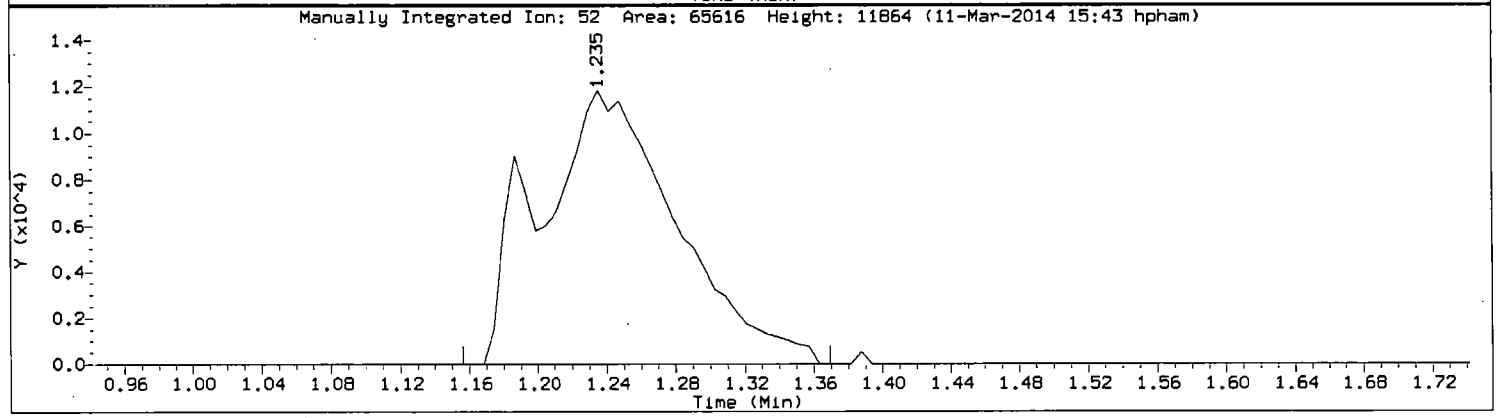
Instrument: 10msv7.i
Lab Sample ID: 1635951

Compound: Chloromethane
CAS Number: 74-87-3









Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014024.D
Lab Smp Id: 10259055001
Inj Date : 10-MAR-2014 18:06
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259055001,6.73
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.730	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.101	2.101	(0.500)	7427	0.52587	0.71(aQ)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	2.637	2.637	(0.627)	2937	0.18829	0.25(a)
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	147419	200.000	
19	Acetone	58	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	Compound Not Detected.					
	21 Hexane	86	2.863	2.863	(1.081)	4398	4.08912	5.5(a)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	3.759	3.753	(0.894)	16705	2.43740	3.3(aQ)
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.143	4.143	(0.985)	32290	1.89692	2.6(a)
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	987114	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	397137	104.228	104
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1434287	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	199168	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1690416	98.9891	99.0
	58 Toluene	92	5.131	5.130	(0.887)	43653	3.96969	5.3(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	5.649	5.649	(0.977)	3928	1.54384	2.1(aQH)
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1453393	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.801	5.801	(1.003)	28636	1.36651	1.8(a)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.868	5.868	(1.015)	19816	2.42797	3.3(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	9162	1.19710	1.6(a)
	73 Styrene	104	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
74	Bromoform	173	Compound Not Detected.					
75	Isopropylbenzene (Cumene)	105	6.234	6.234	(1.078)	2954	0.14423	0.19(a)
$ 76	4-Bromofluorobenzene (S)	95	6.387	6.386	(0.907)	724783	101.032	101
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	6.454	6.453	(0.916)	6544	0.26047	0.35(a)
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	10991	0.61824	0.83(a)
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	28393	1.56870	2.1(a)
88	sec-Butylbenzene	105	6.856	6.856	(0.973)	1609	0.07163	0.096(a)
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	894178	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	12288	0.64622	0.87(a)
94	n-Butylbenzene	91	7.210	7.215	(1.023)	1891	0.10268	0.14(a)
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
99	Naphthalene	128	8.392	8.392	(1.191)	7760	0.59444	0.80(a)
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
101	2-Methylnaphthalene	142	9.008	9.014	(1.279)	2187	0.43144	0.58(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014024.D
Lab Smp Id: 10259055001
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	147419	2.61
41 Pentafluorobenzen	966546	483273	1933092	987114	2.13
48 1,4 Difluorobenze	1457917	728959	2915834	1434287	-1.62
53 1,4 dioxane d8	174389	87195	348778	199168	14.21
67 Chlorobenzene-d5	1458689	729345	2917378	1453393	-0.36
91 1,4-Dichlorobenze	888899	444450	1777798	894178	0.59

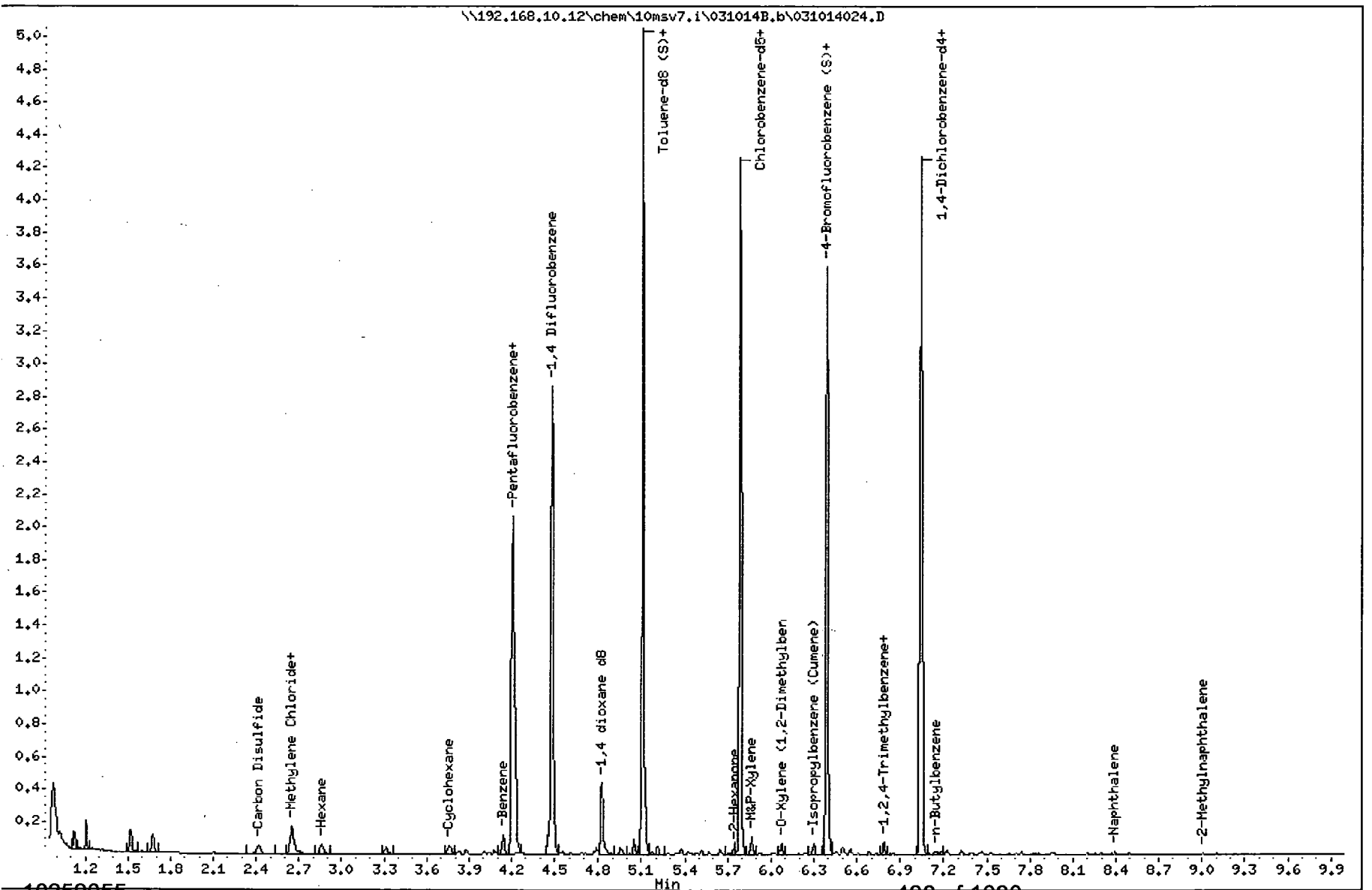
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.01
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.01
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014024.D
Date : 10-MAR-2014 18:06
Client ID:
Sample Info: 10259055001,6.73

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

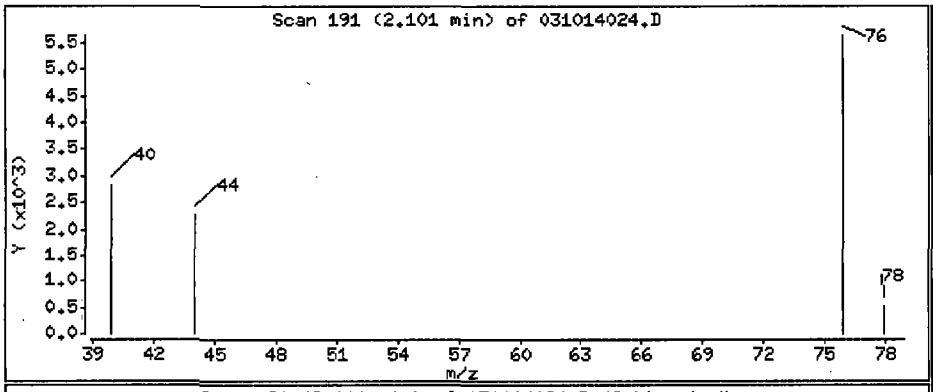
Operator: HBP

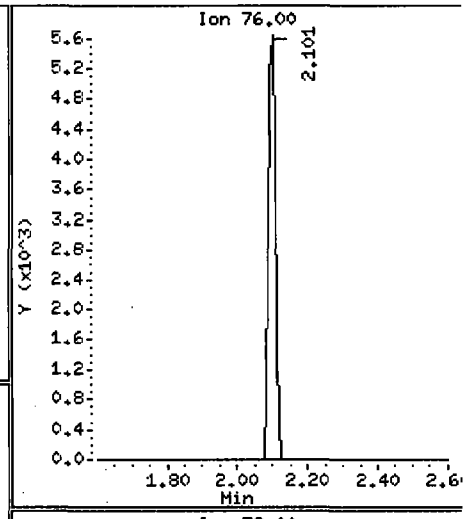
Column phase: Rtx-VMS

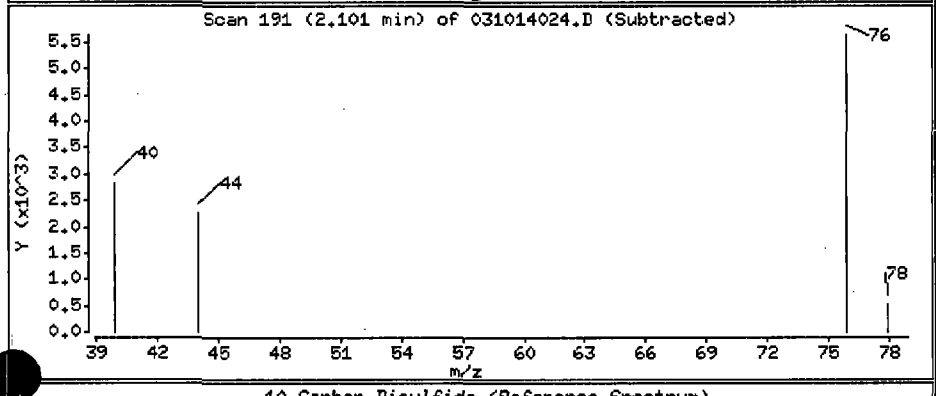
Column diameter: 0.18

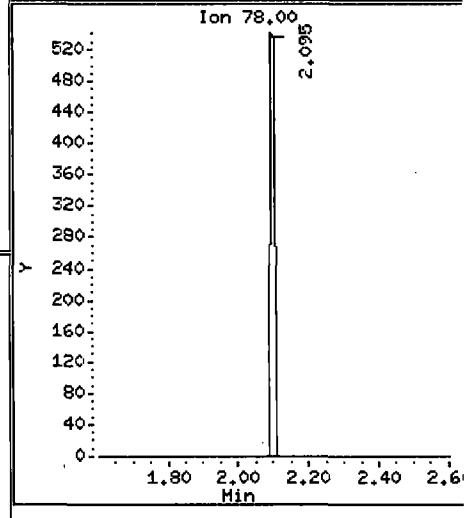
10 Carbon Disulfide

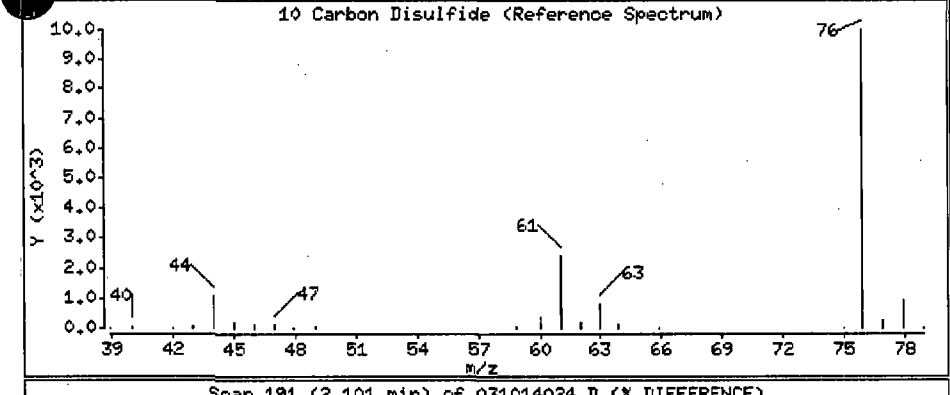
Concentration: 0.71 ug/Kg

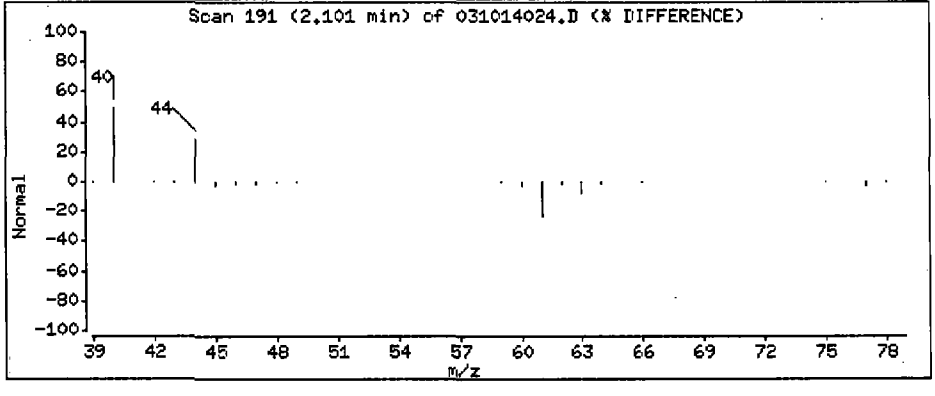












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

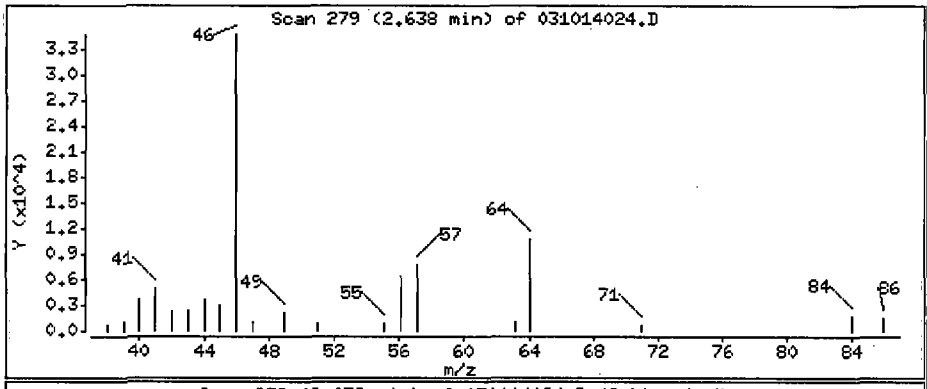
Operator: HBP

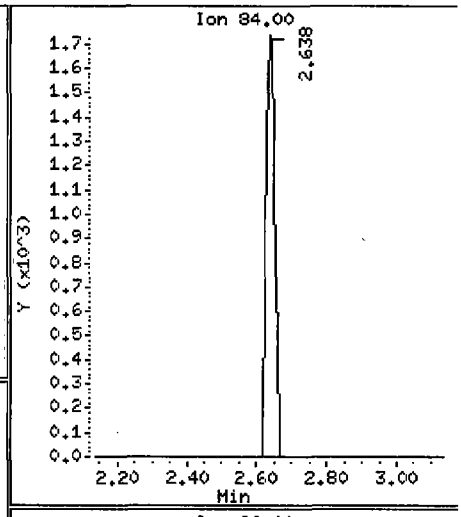
Column phase: Rtx-VMS

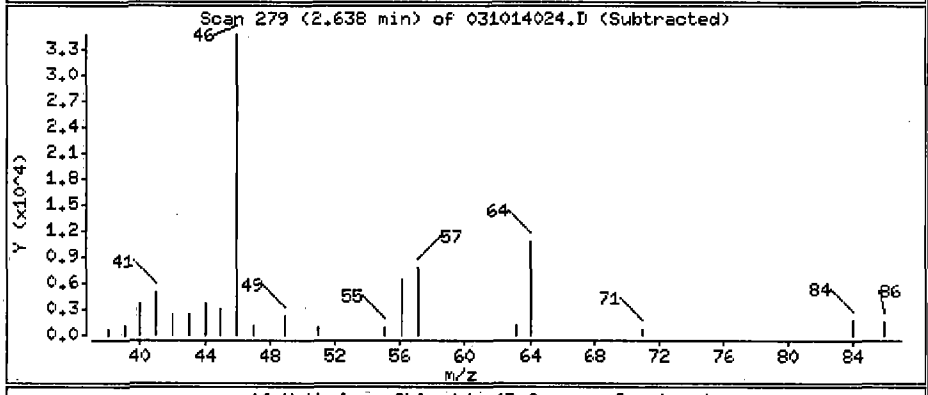
Column diameter: 0.18

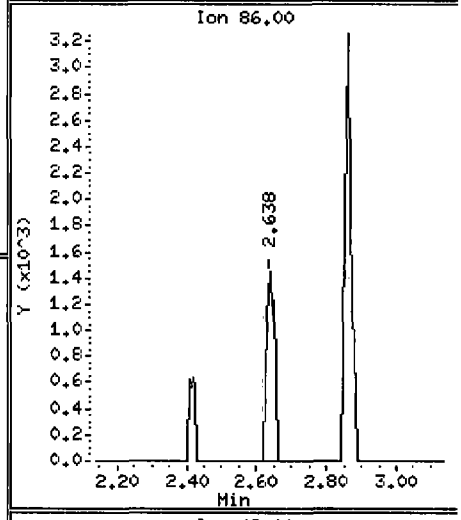
16 Methylene Chloride

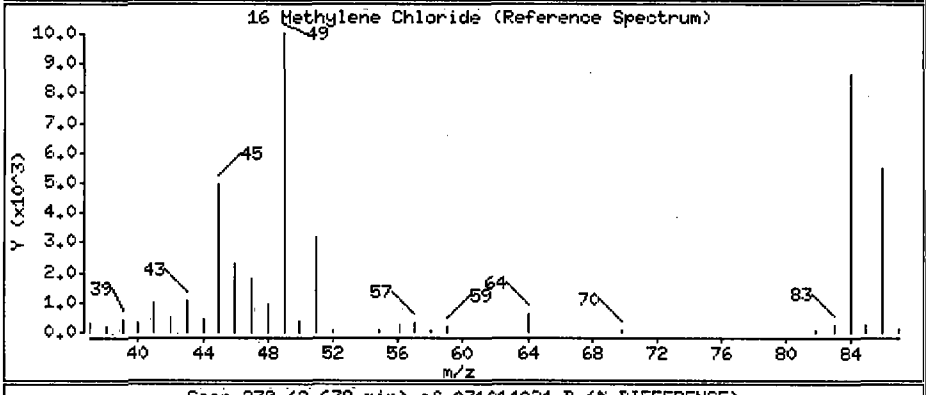
Concentration: 0.25 ug/Kg

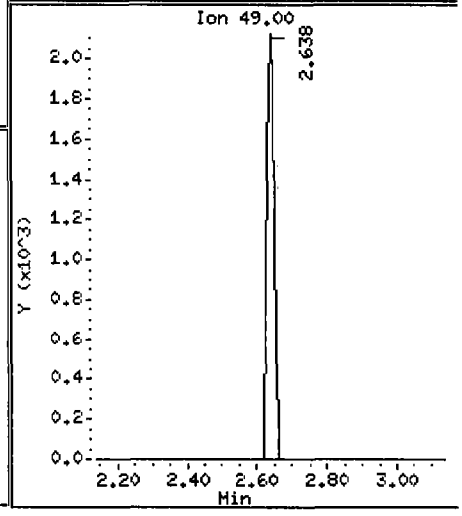


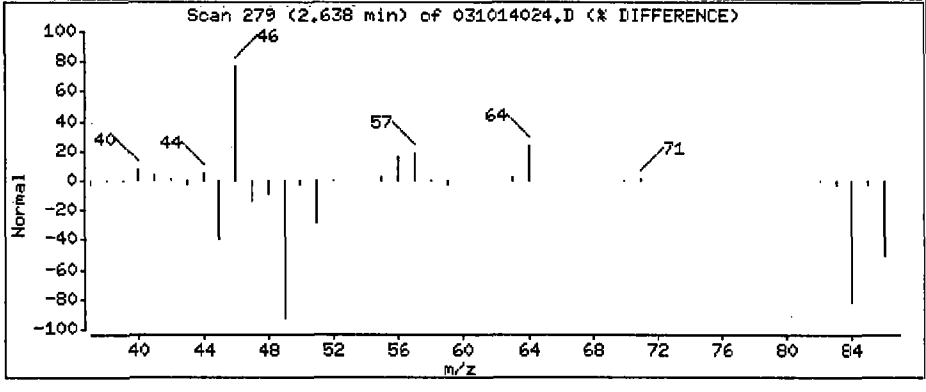












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014024.D

Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

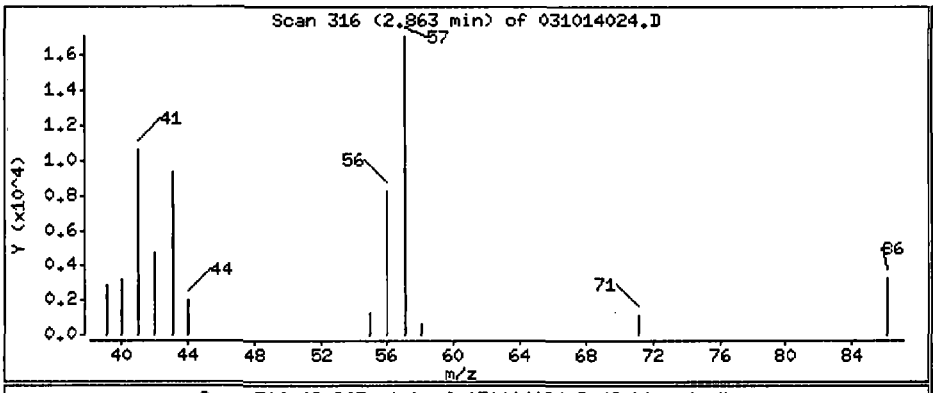
Operator: HBP

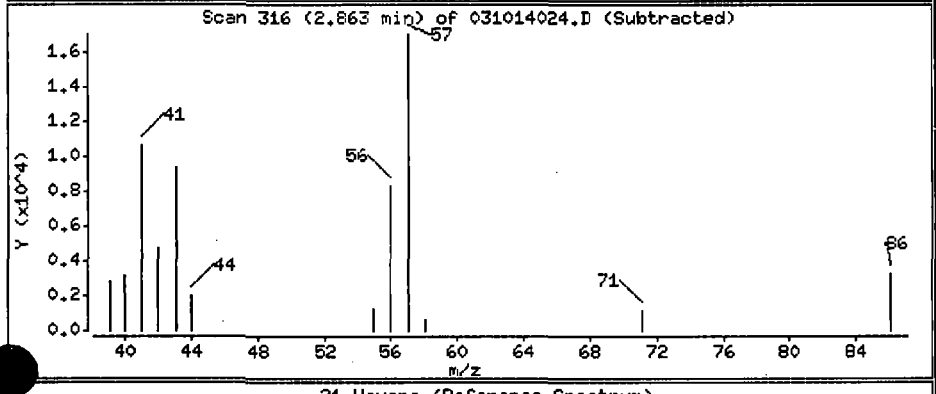
Column phase: Rtx-VMS

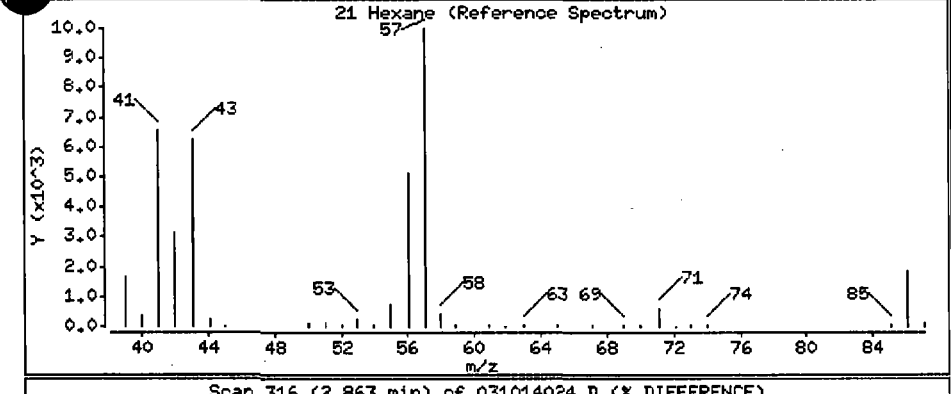
Column diameter: 0.18

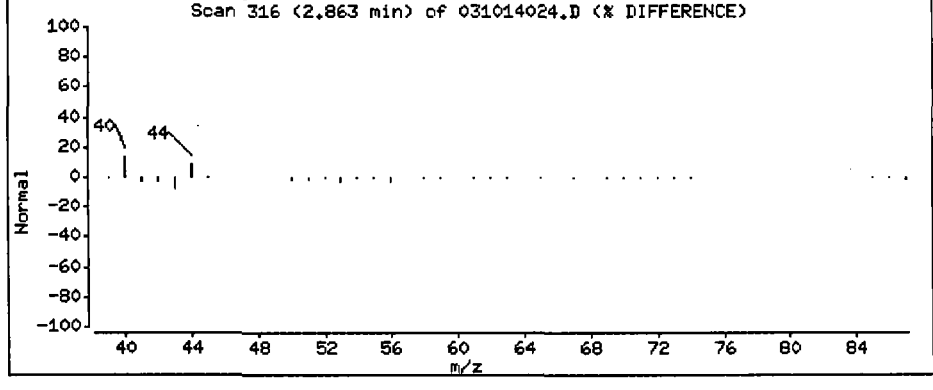
21 Hexane

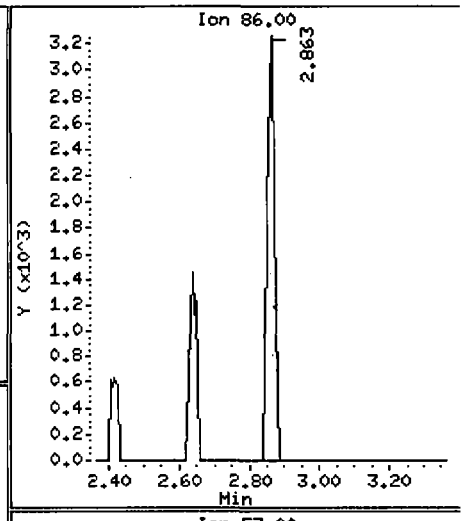
Concentration: 5.5 ug/Kg

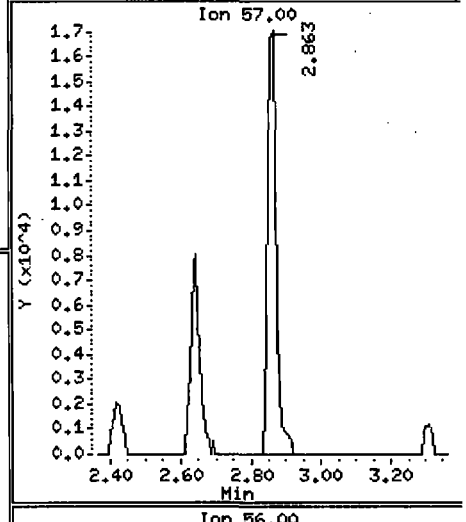


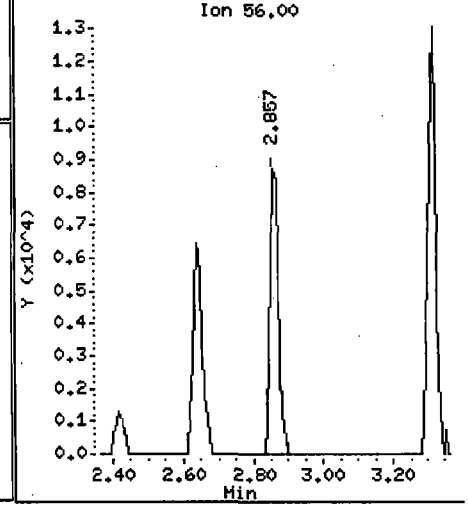












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

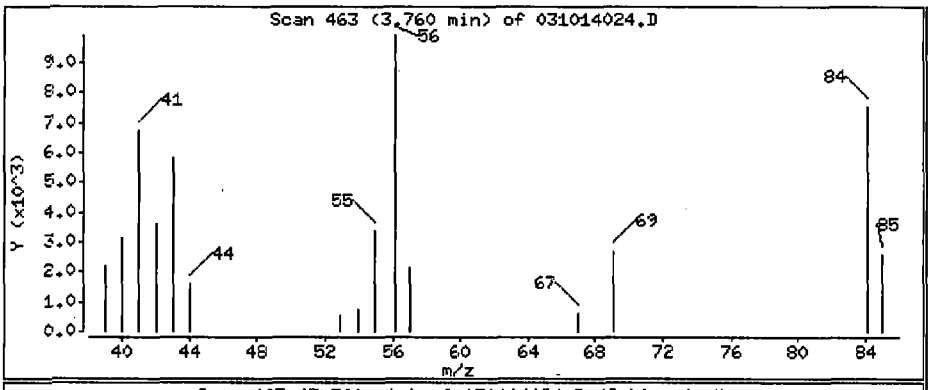
Operator: HBP

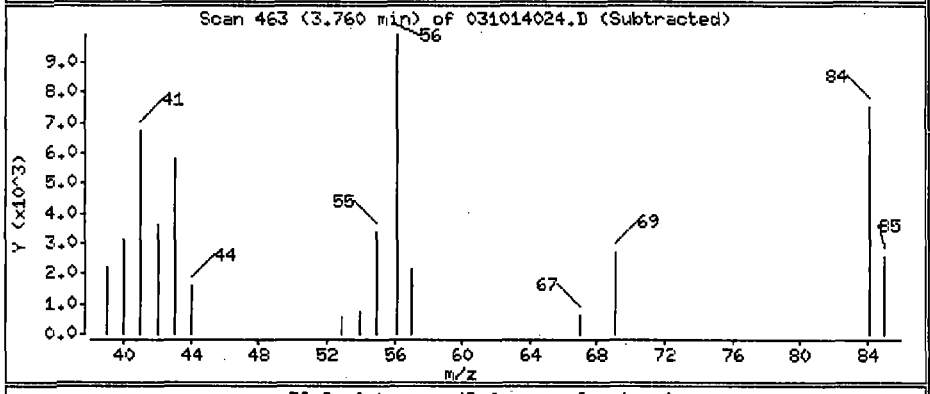
Column phase: Rtx-VMS

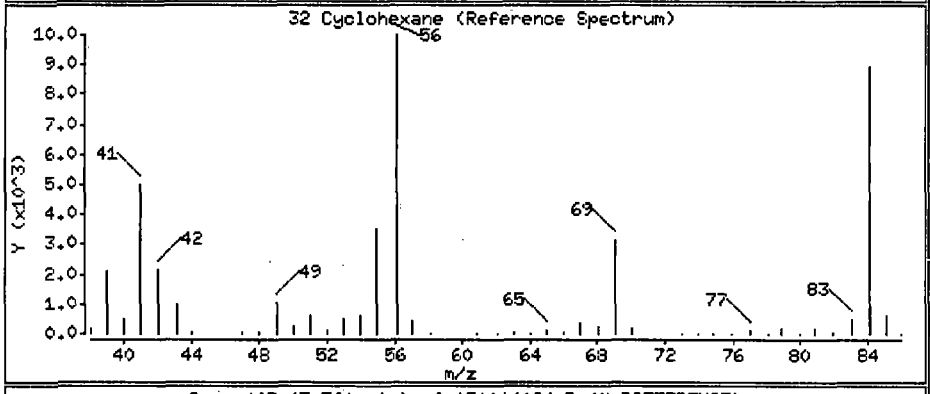
Column diameter: 0.18

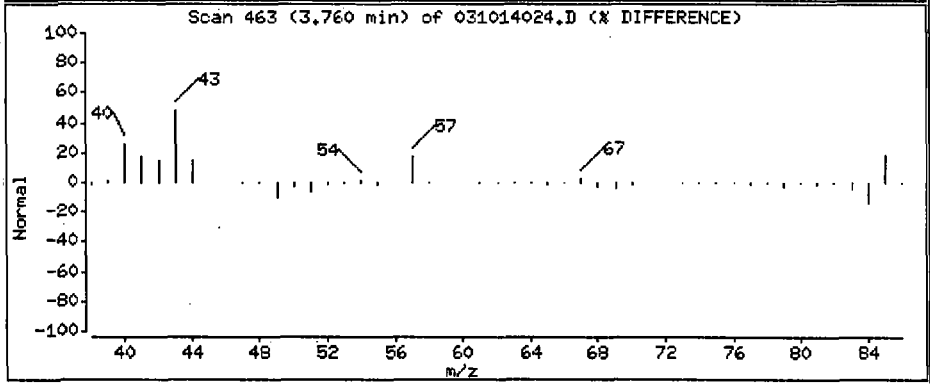
32 Cyclohexane

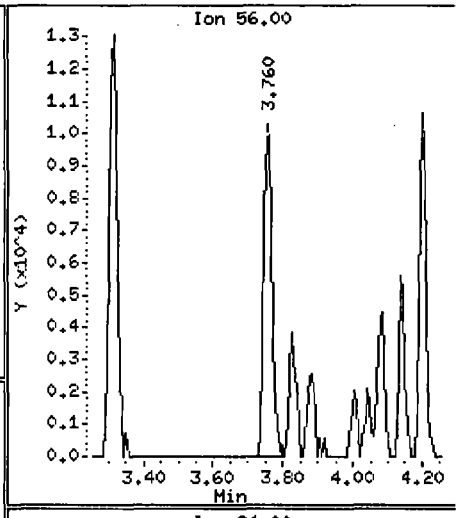
Concentration: 3.3 ug/Kg

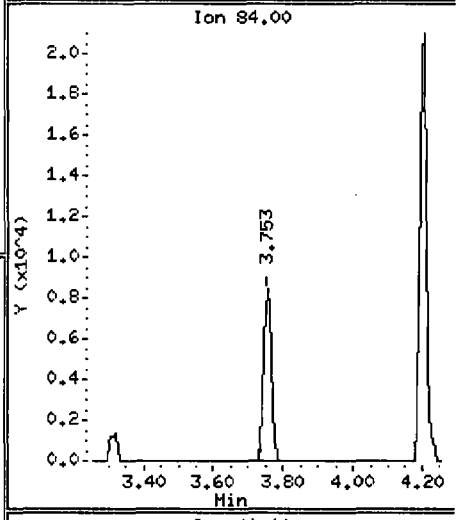


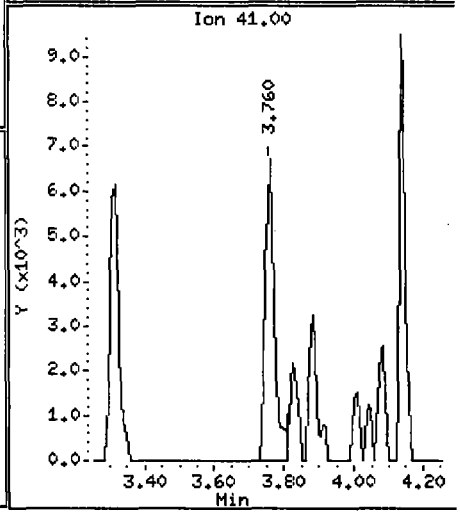












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

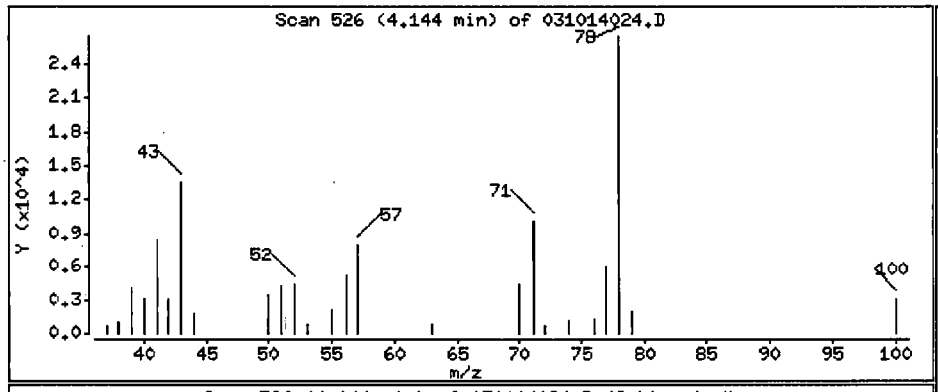
Operator: HBP

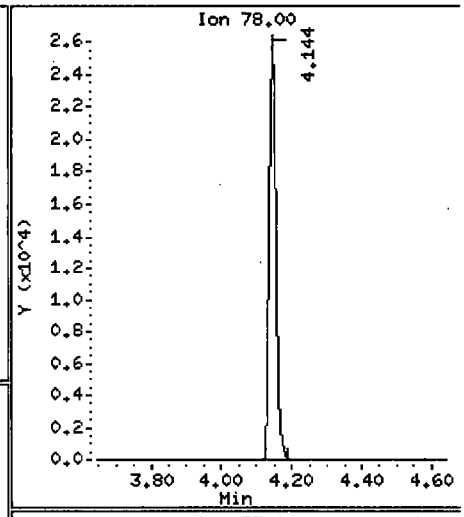
Column phase: Rtx-VMS

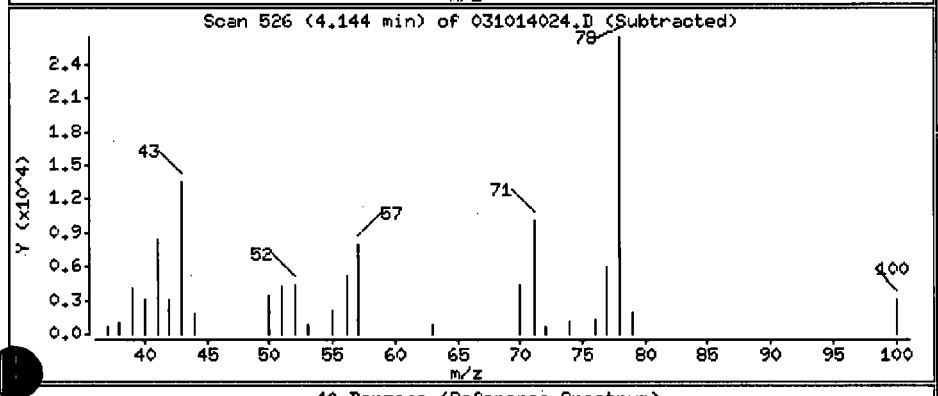
Column diameter: 0.18

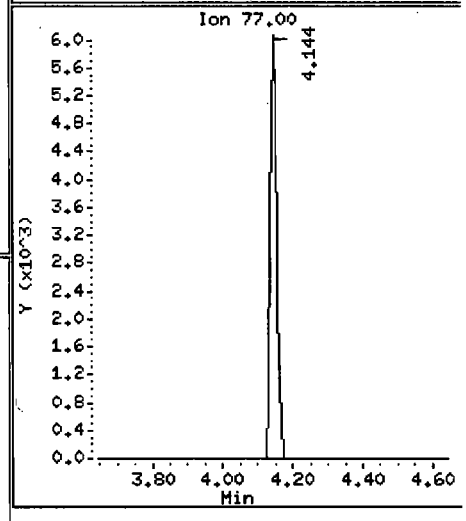
40 Benzene

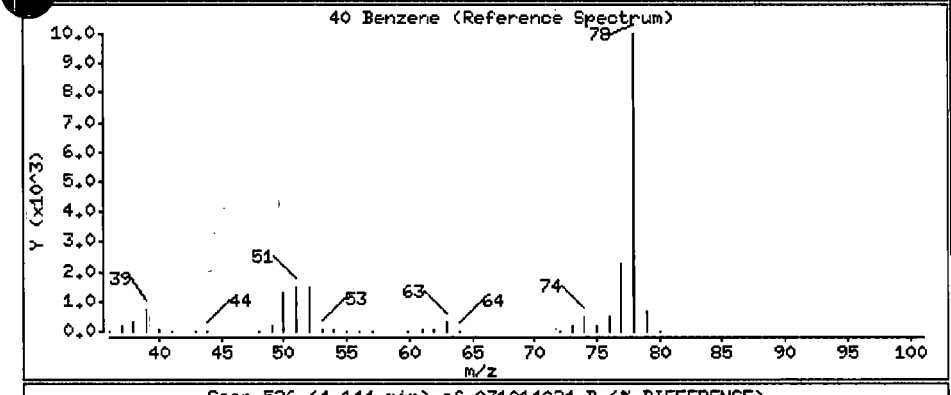
Concentration: 2.6 ug/Kg

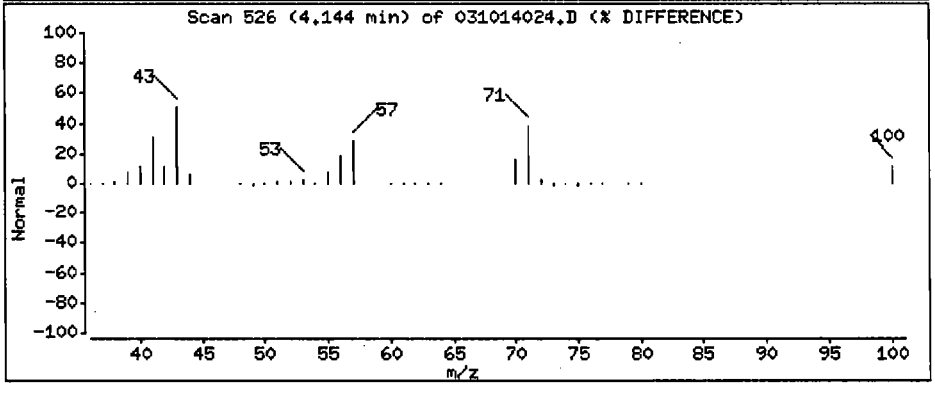












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

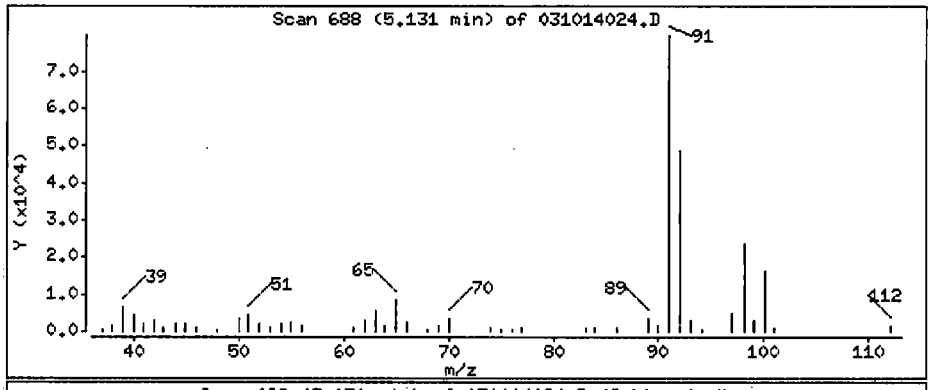
Operator: HBP

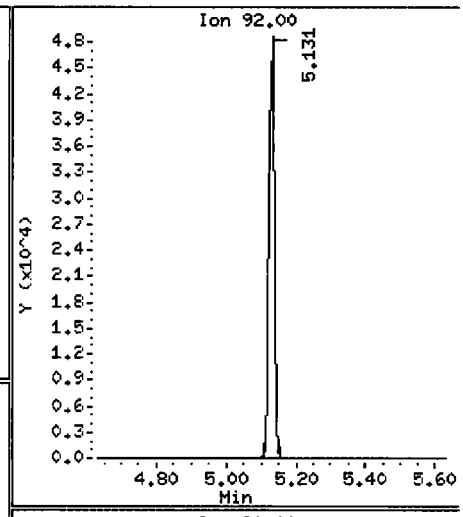
Column phase: Rtx-VMS

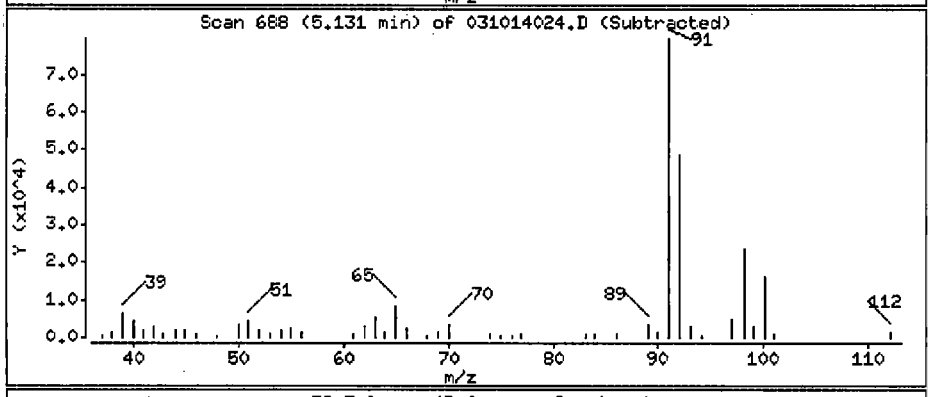
Column diameter: 0.18

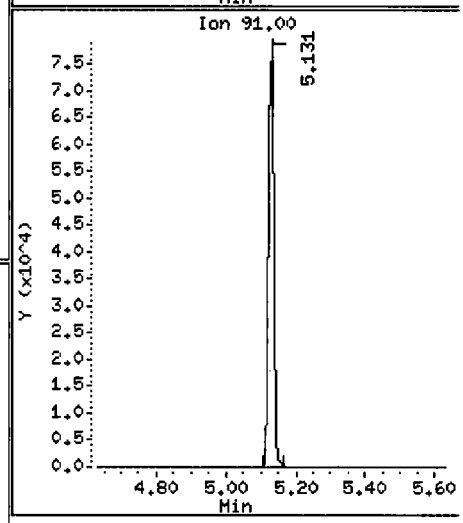
58 Toluene

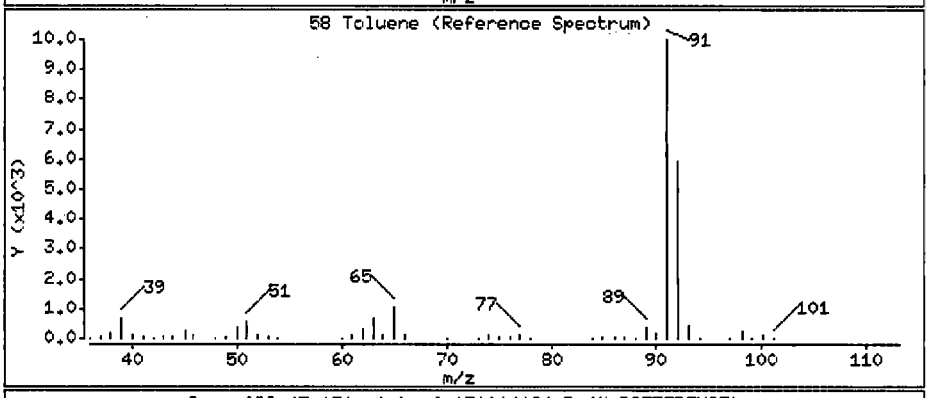
Concentration: 5.3 ug/Kg

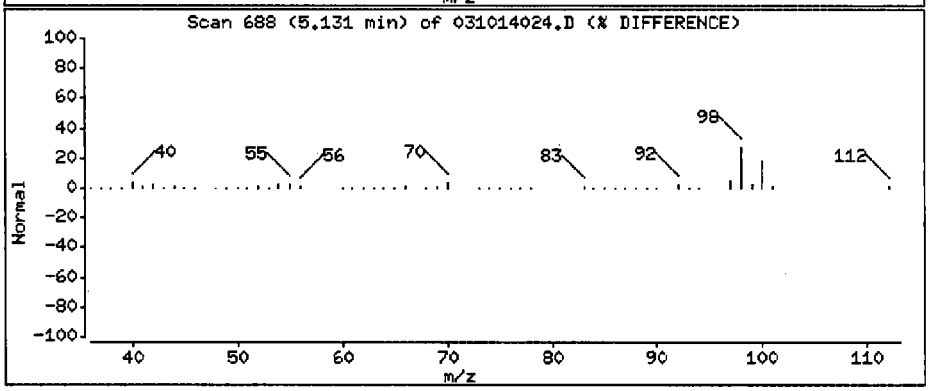












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014024.D

Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

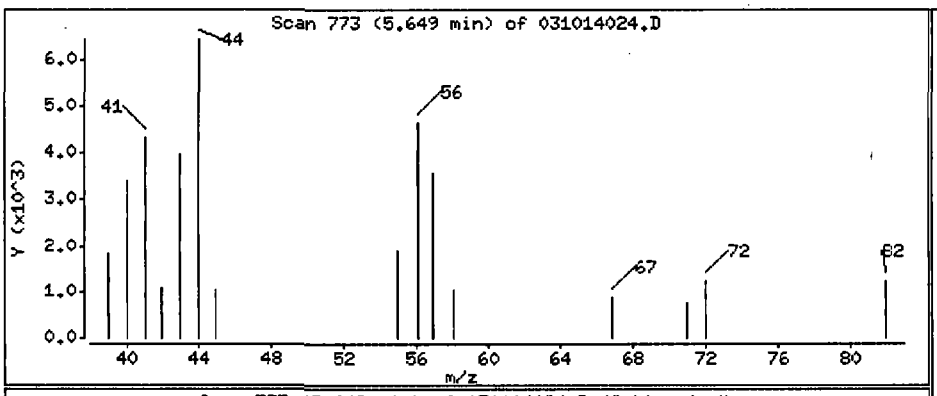
Operator: HBP

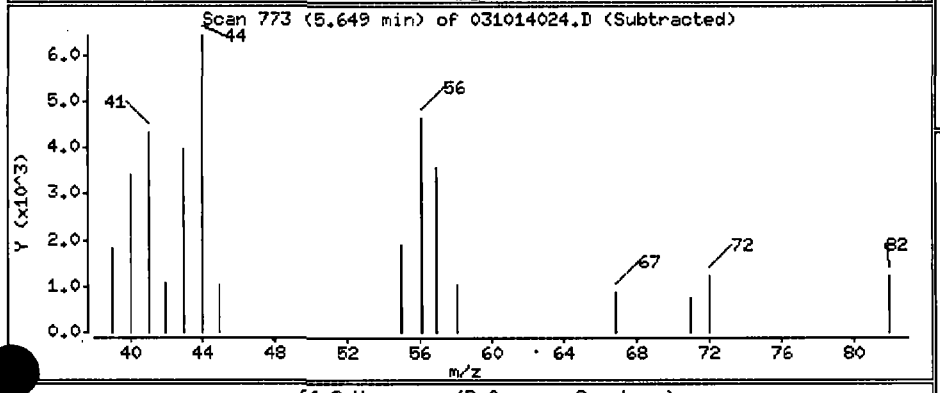
Column phase: Rtx-VMS

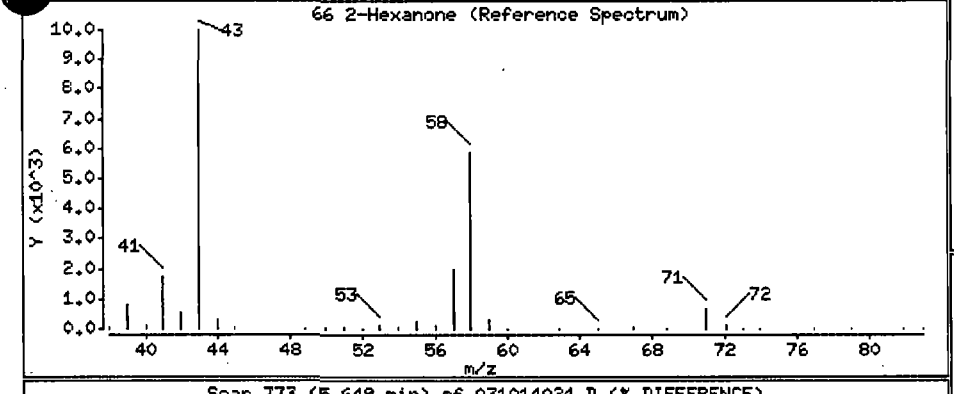
Column diameter: 0.18

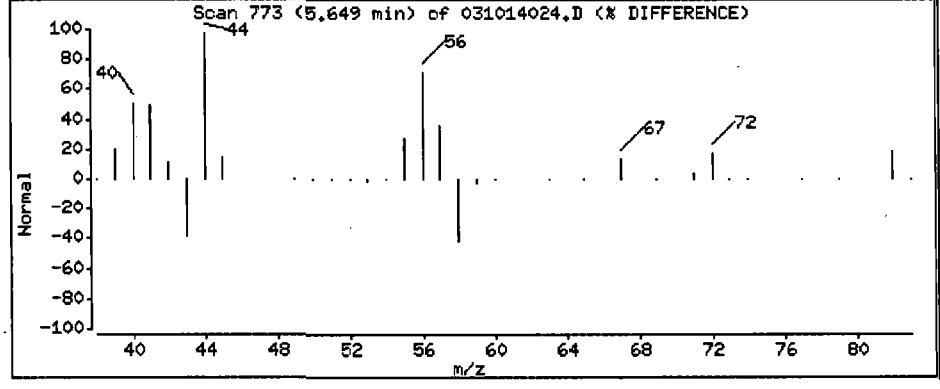
66 2-Hexanone

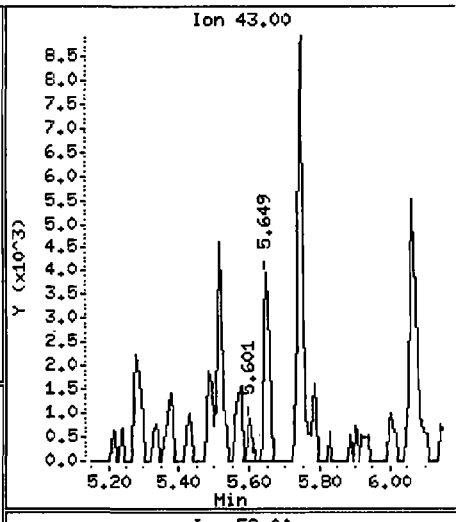
Concentration: 2.1 ug/Kg

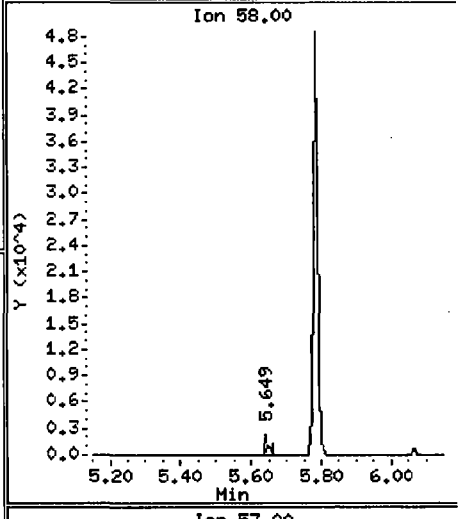


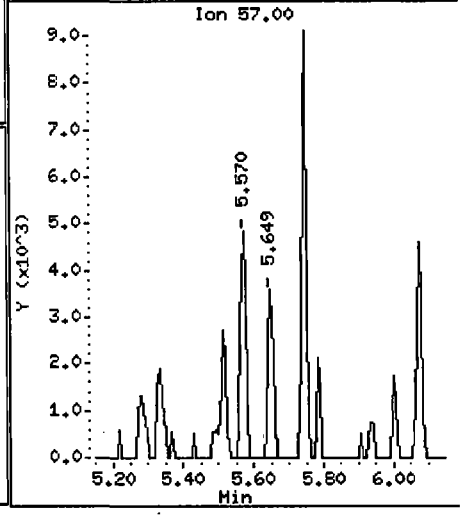












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014024.D

Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

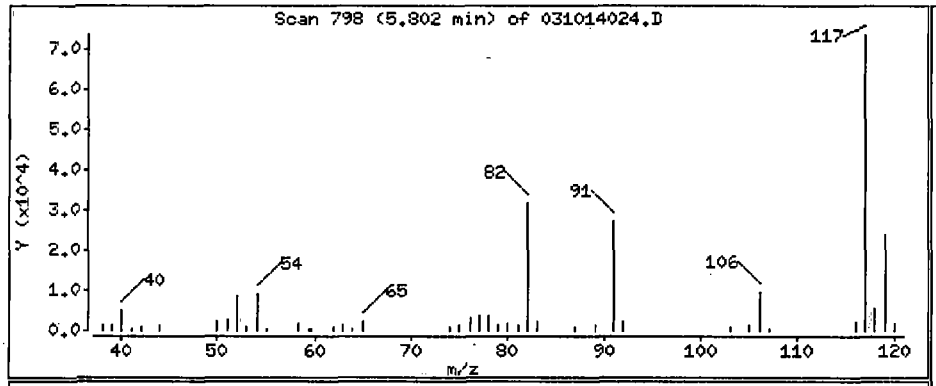
Operator: HBP

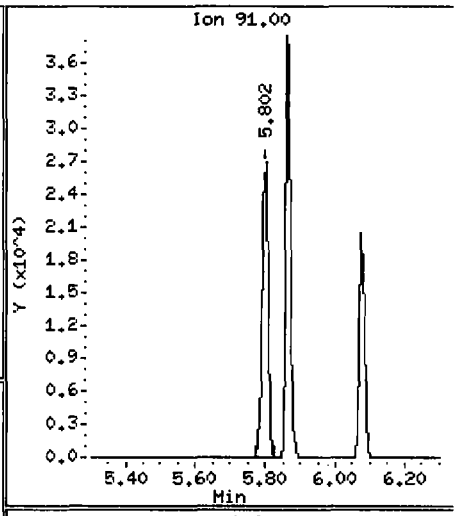
Column phase: Rtx-VMS

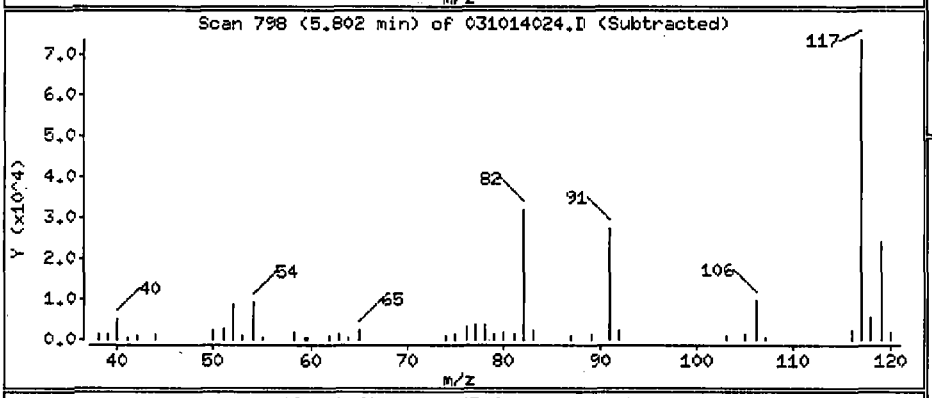
Column diameter: 0.18

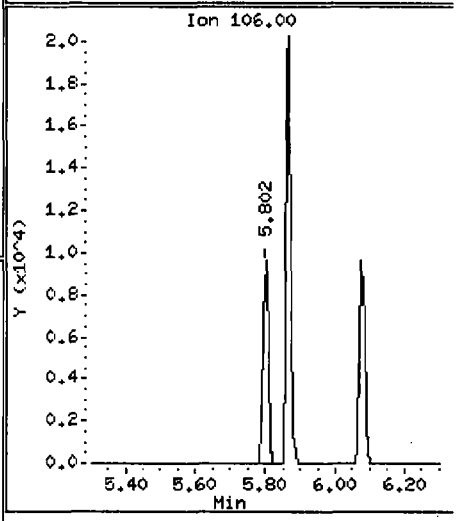
69 Ethylbenzene

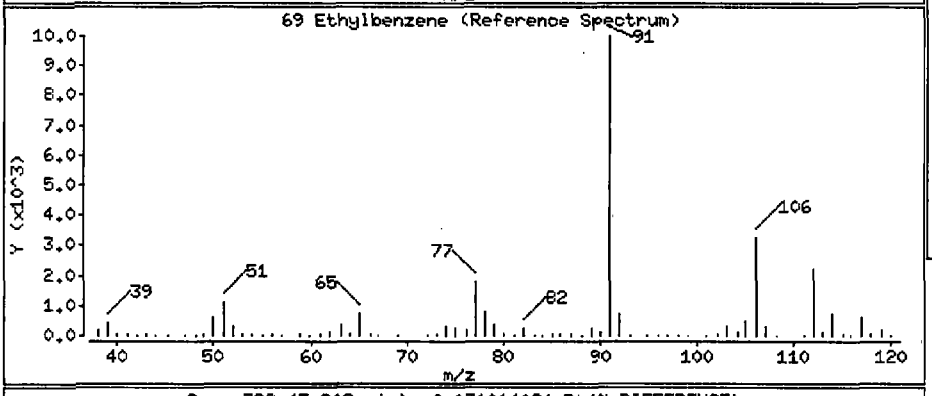
Concentration: 1.8 ug/Kg

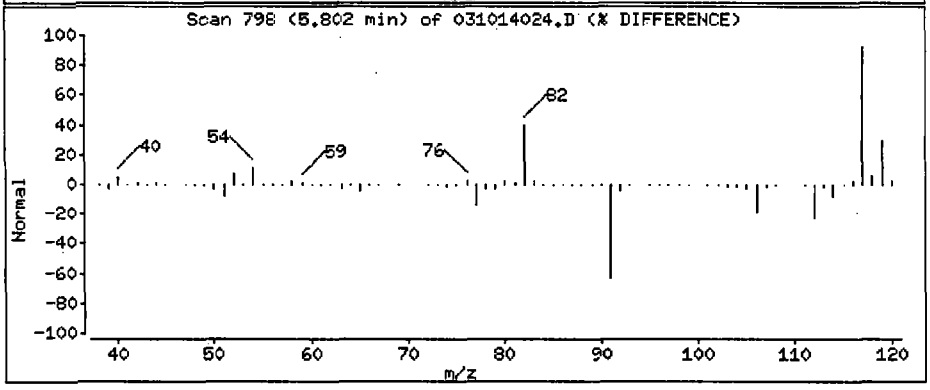












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

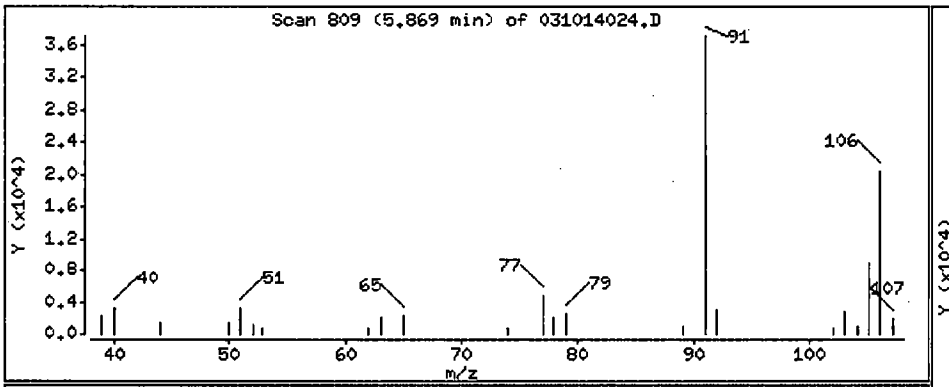
Operator: HBP

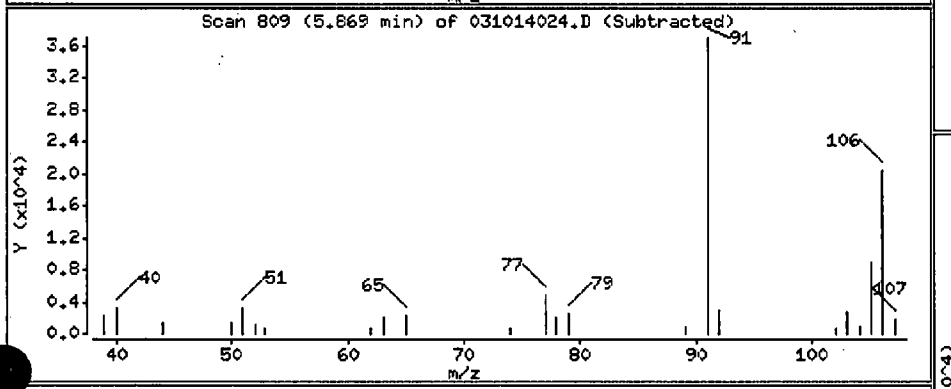
Column phase: Rtx-VMS

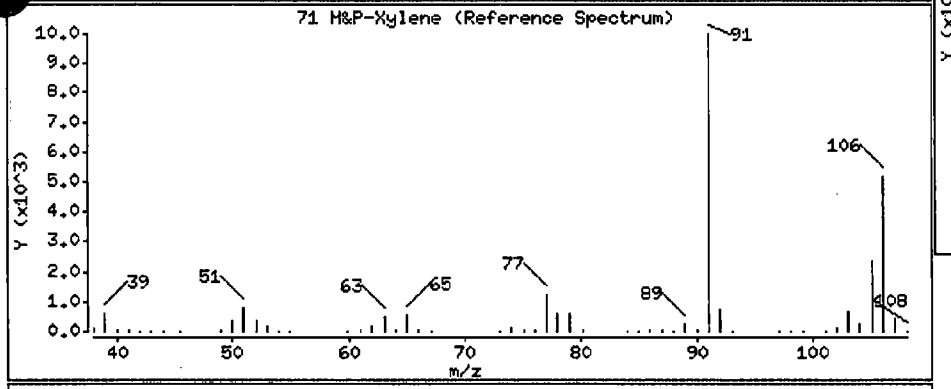
Column diameter: 0.18

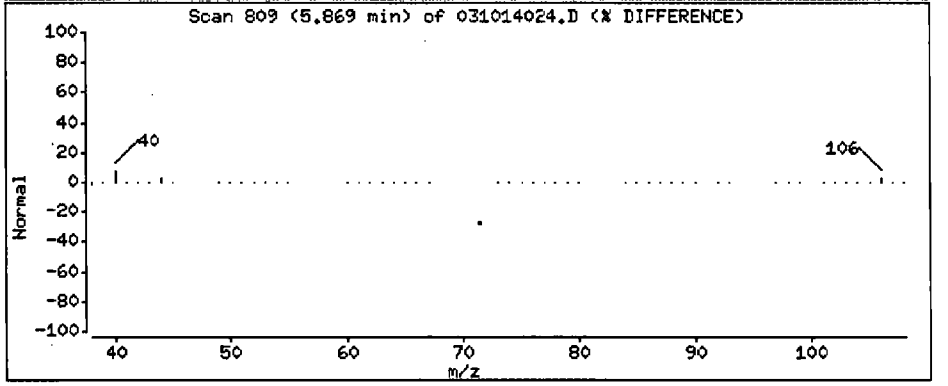
71 M&P-Xylene

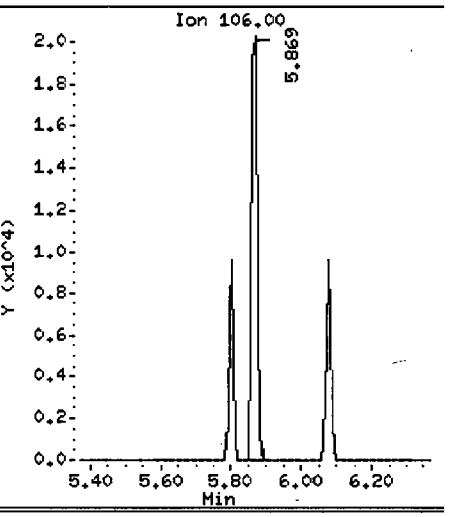
Concentration: 3.3 ug/Kg

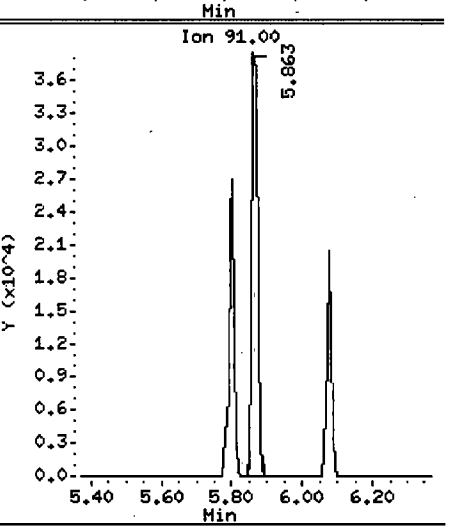












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

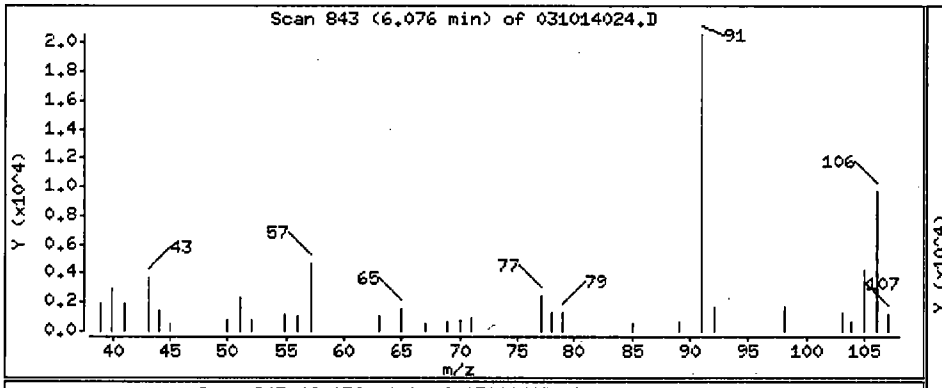
Operator: HBP

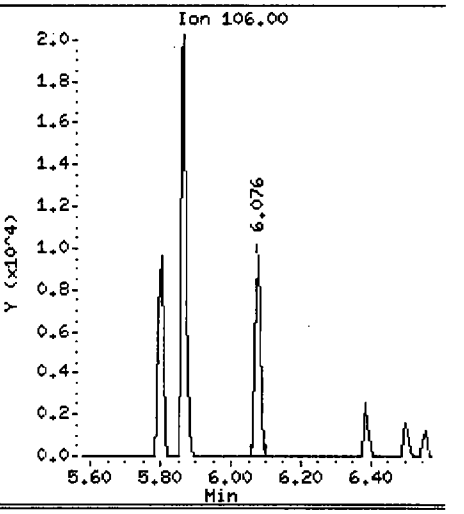
Column phase: Rtx-VMS

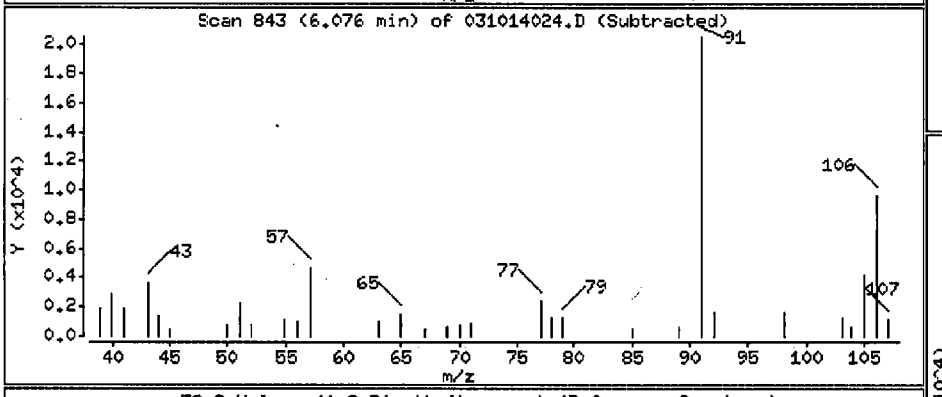
Column diameter: 0.18

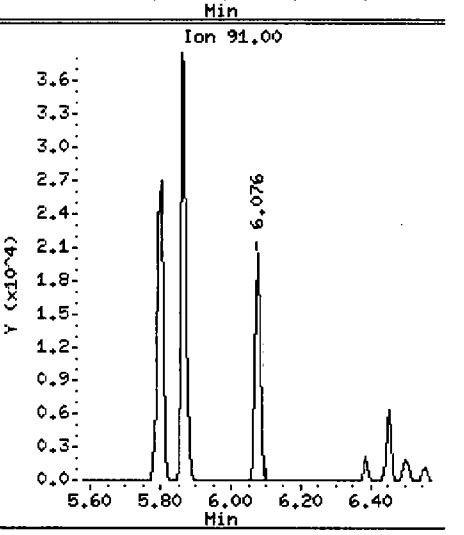
72 O-Xylene (1,2-Dimethylbenzene)

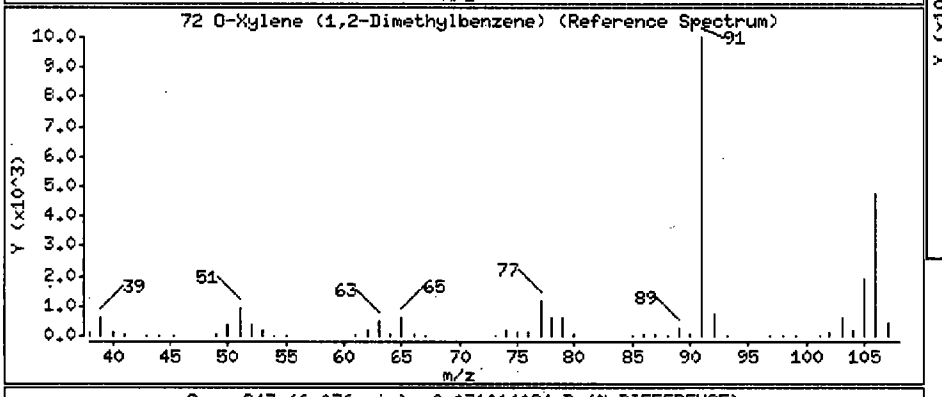
Concentration: 1.6 ug/Kg

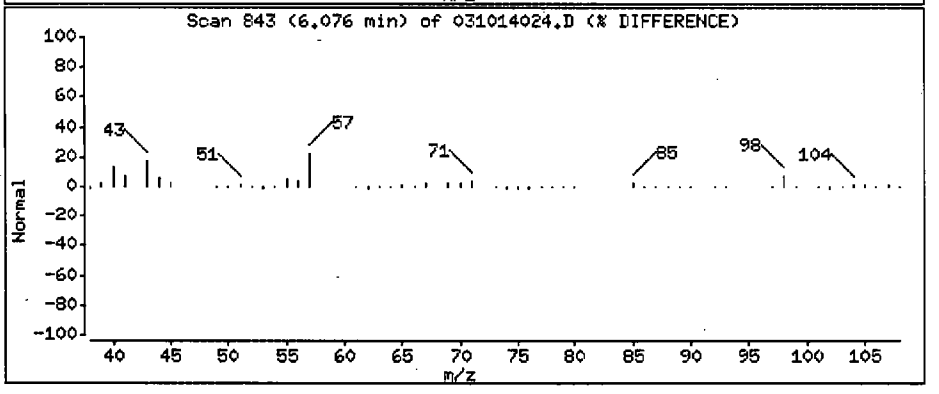












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

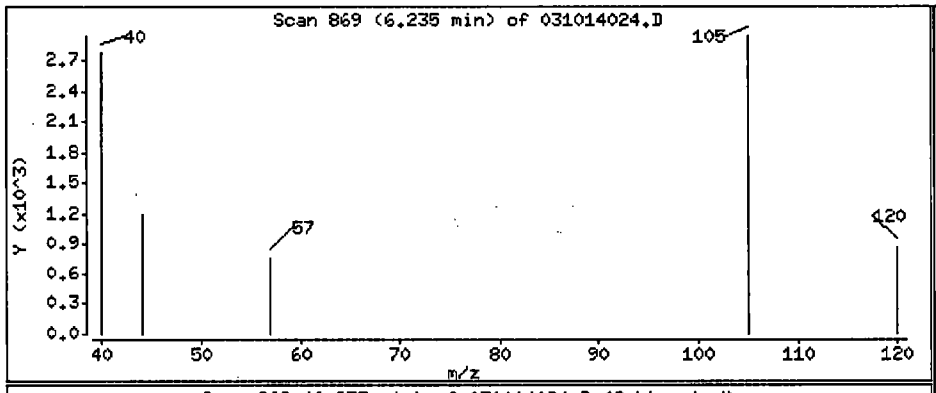
Operator: HBP

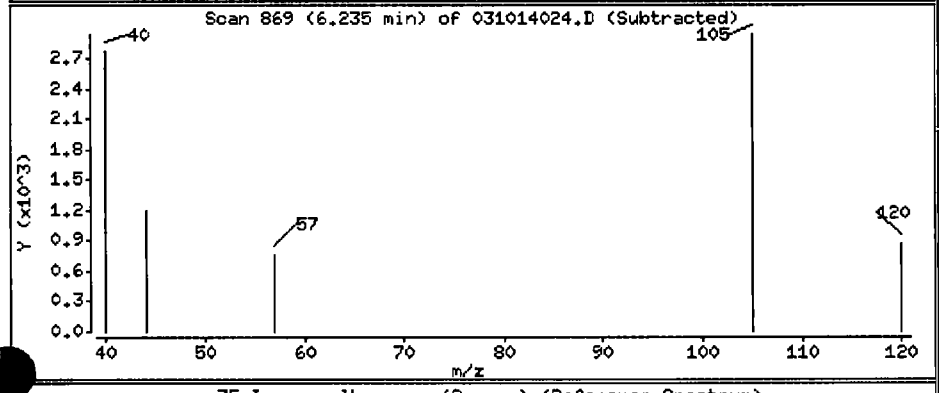
Column phase: Rtx-VMS

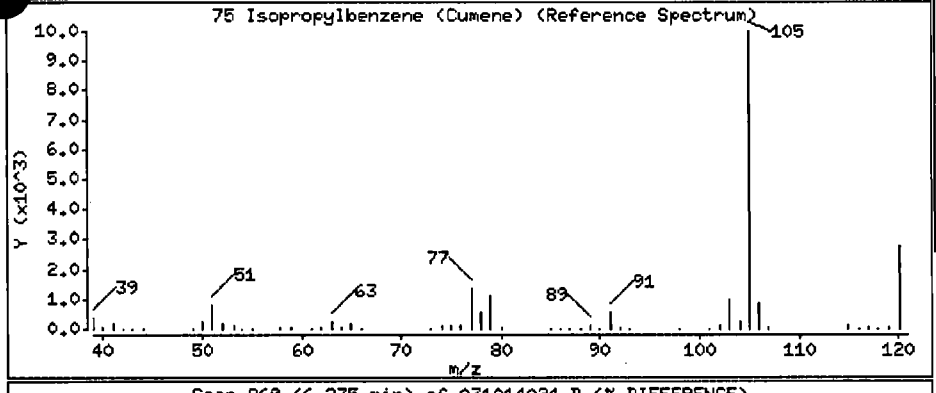
Column diameter: 0.18

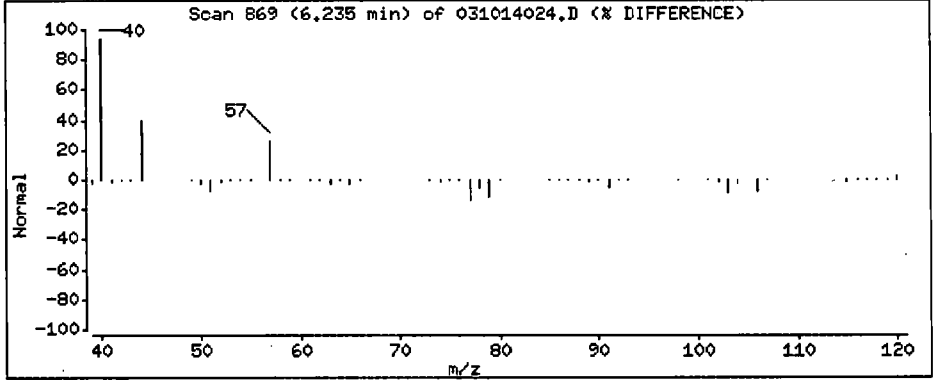
75 Isopropylbenzene (Cumene)

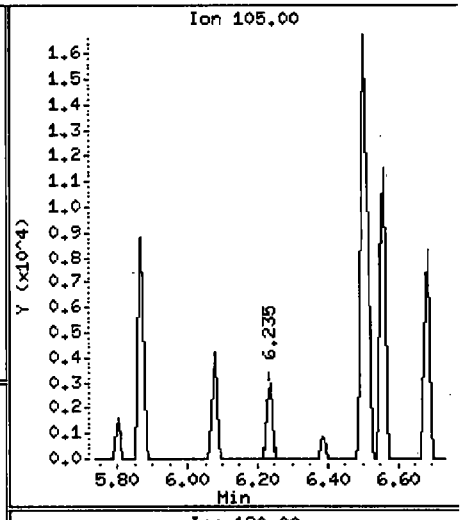
Concentration: 0.19 ug/Kg

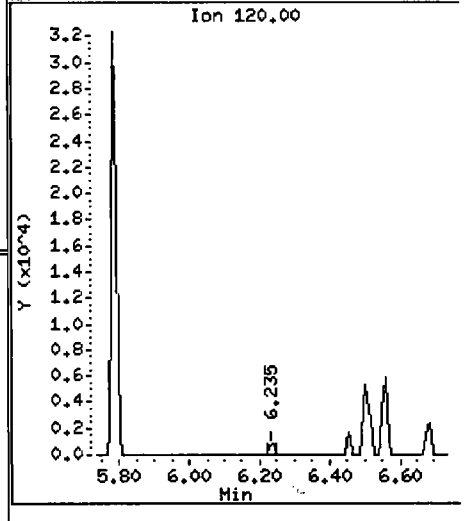












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

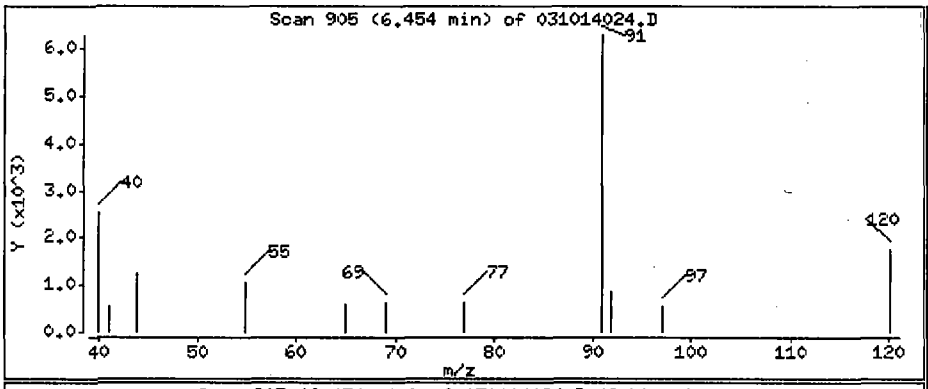
Operator: HBP

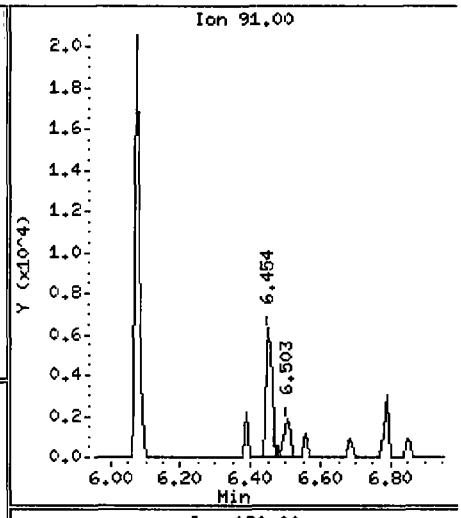
Column phase: Rtx-VMS

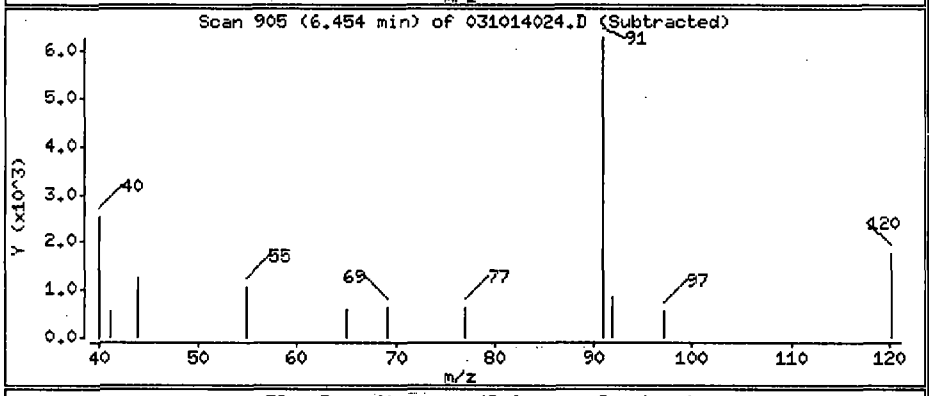
Column diameter: 0.18

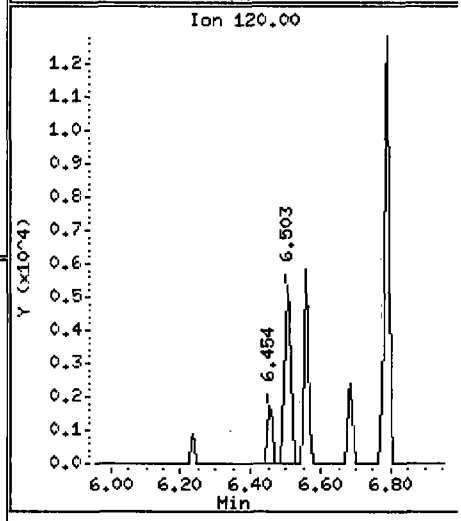
79 n-Propylbenzene

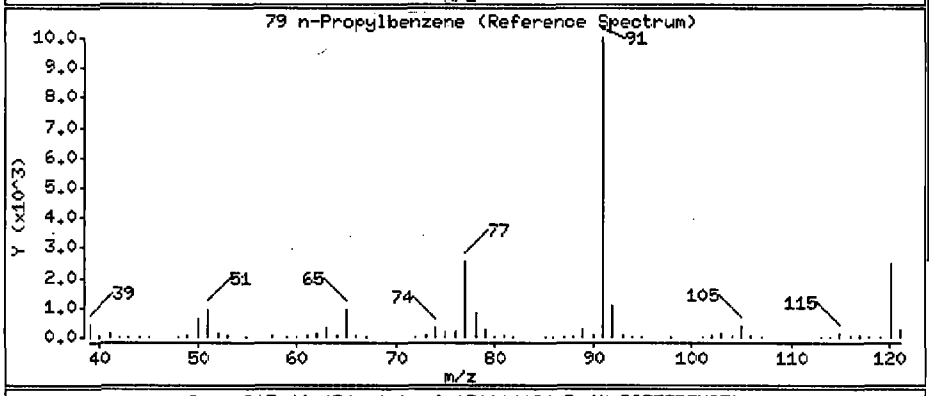
Concentration: 0.35 ug/Kg

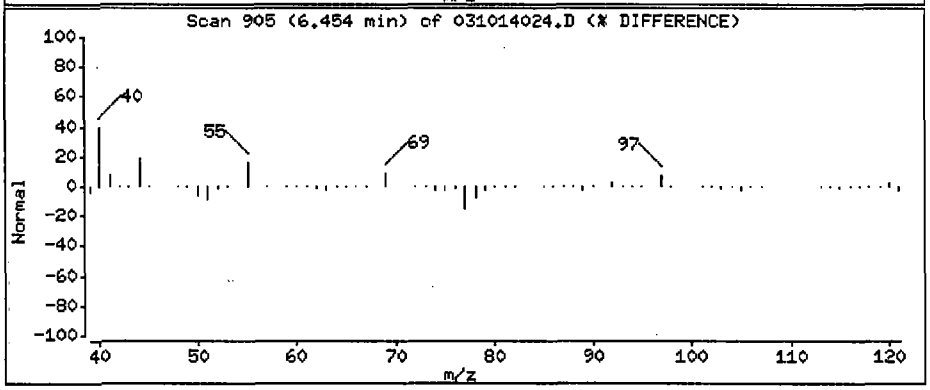












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

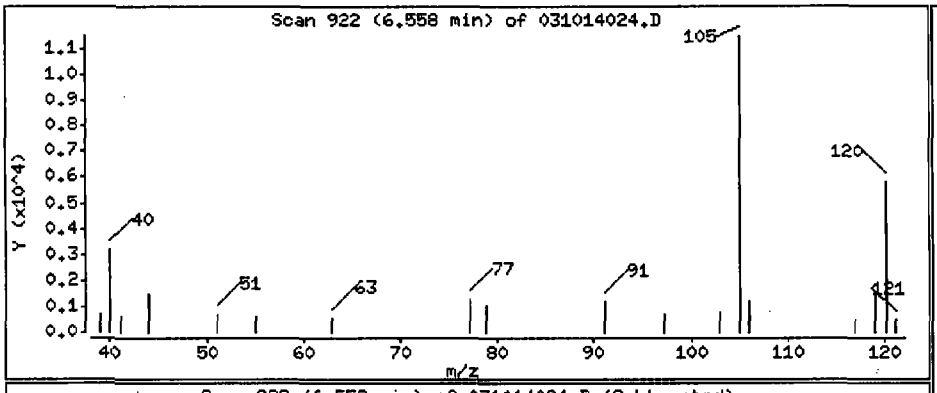
Operator: HBP

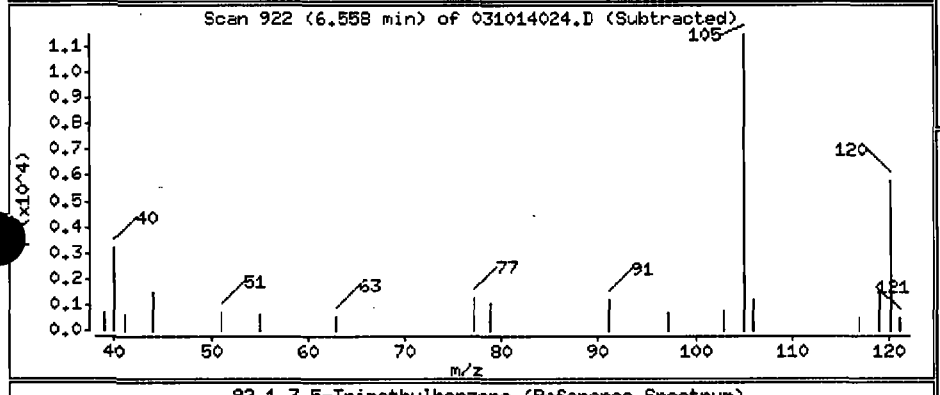
Column phase: Rtx-VMS

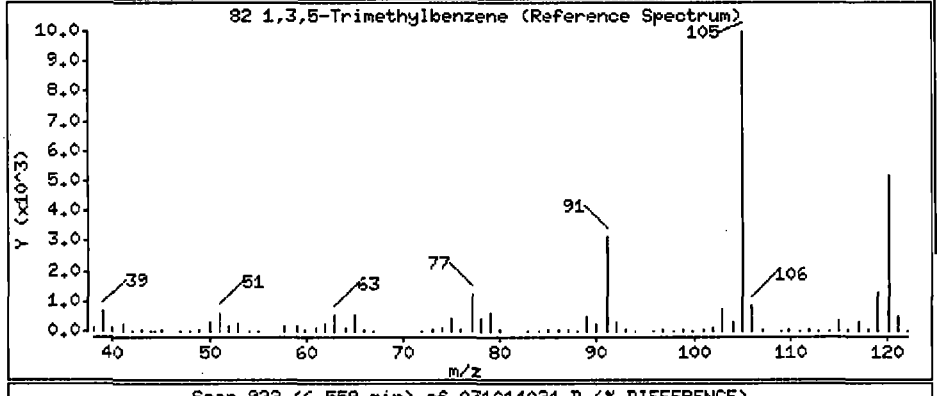
Column diameter: 0.18

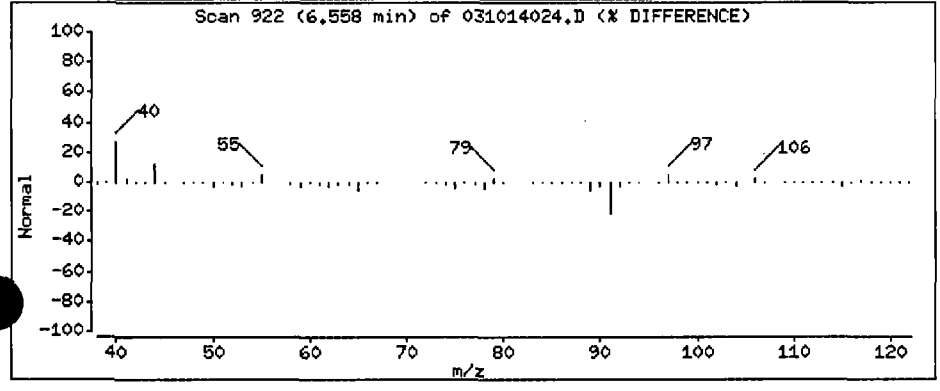
82 1,3,5-Trimethylbenzene

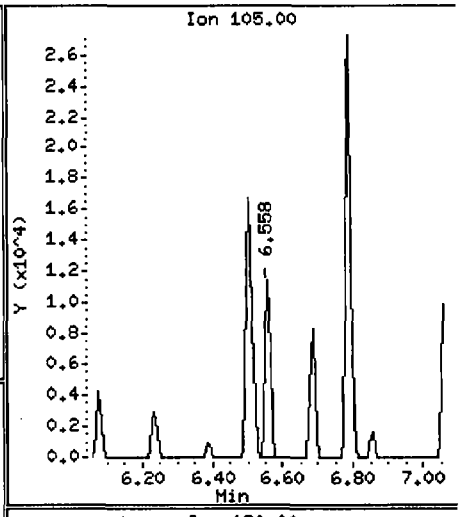
Concentration: 0.83 ug/Kg

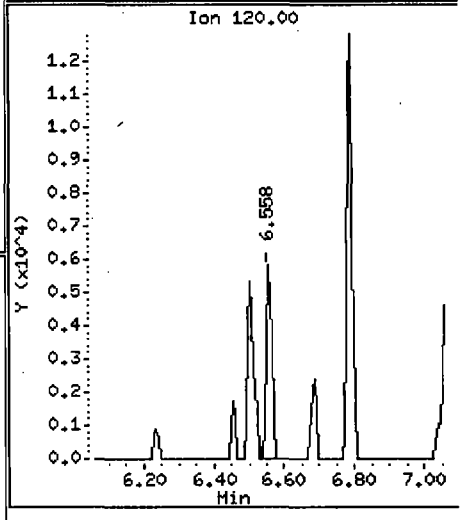












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

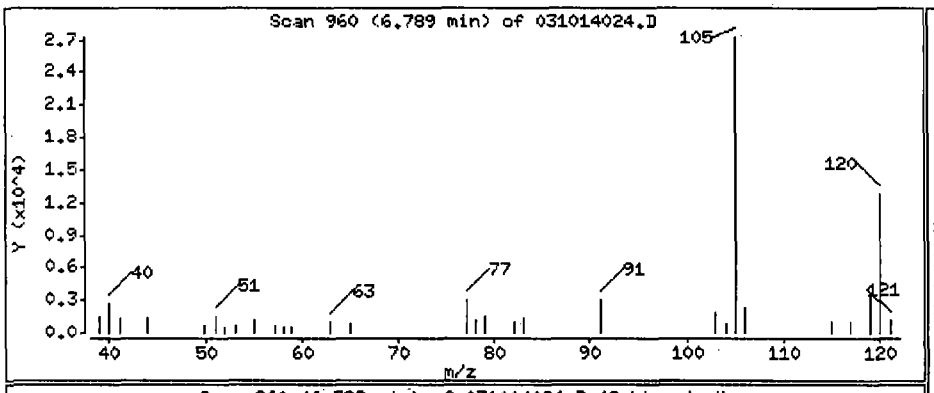
Operator: HBP

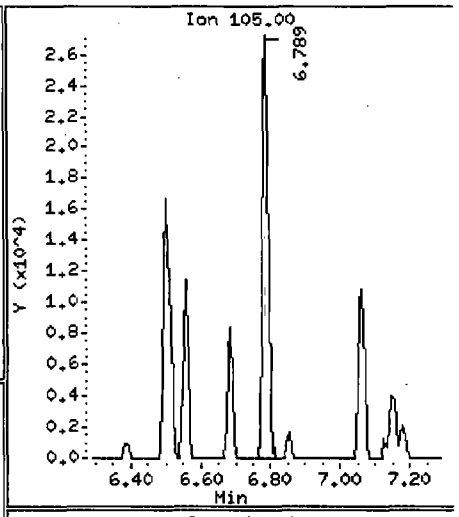
Column phase: Rtx-VMS

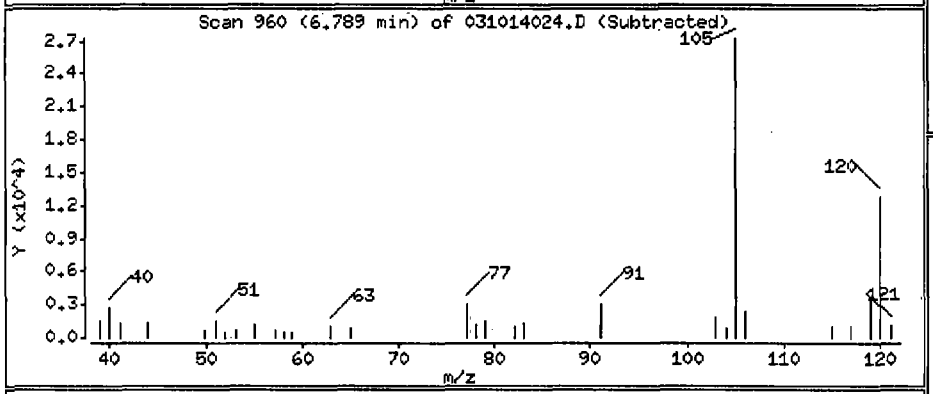
Column diameter: 0.18

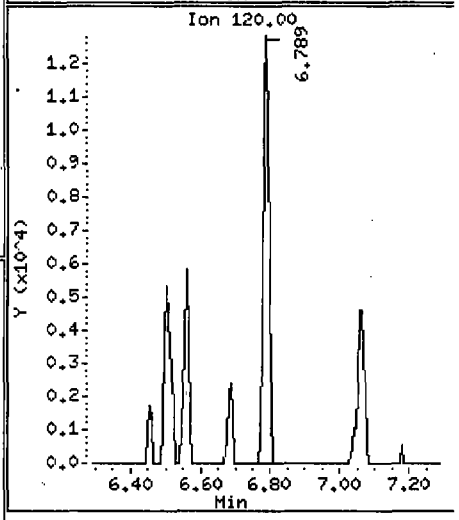
87 1,2,4-Trimethylbenzene

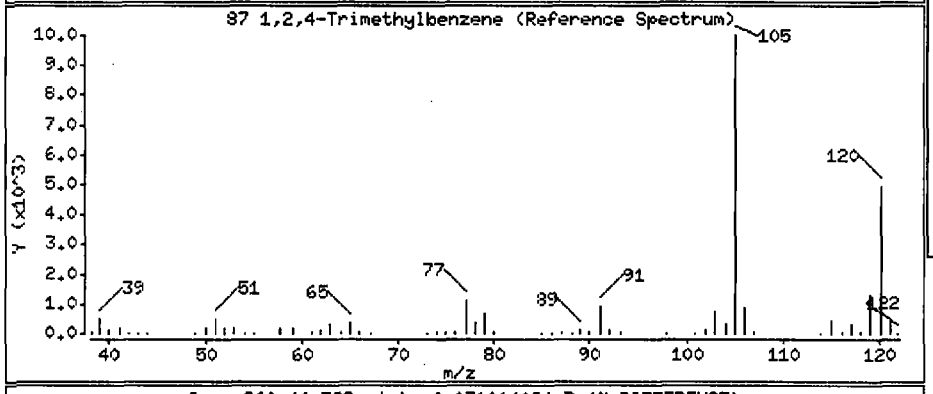
Concentration: 2.1 ug/Kg

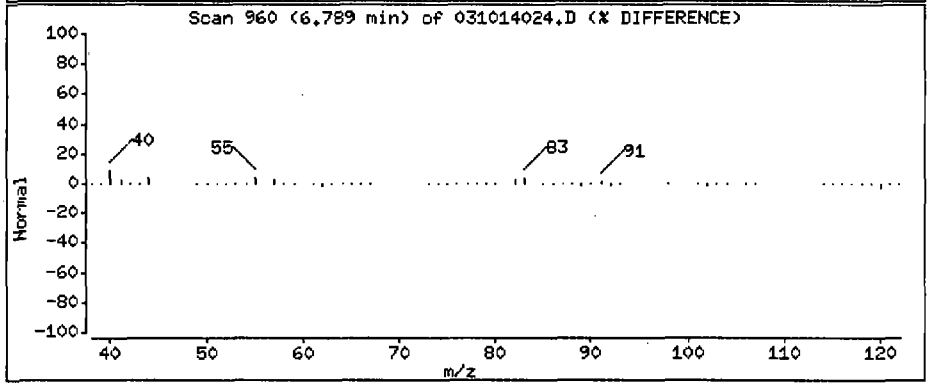












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

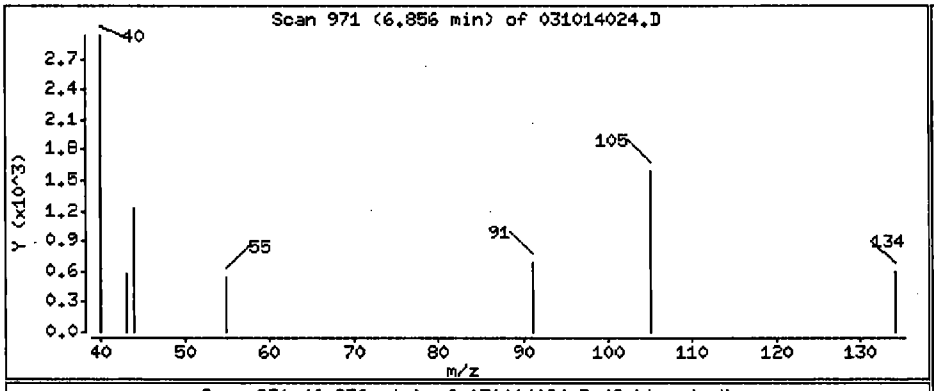
Operator: HBP

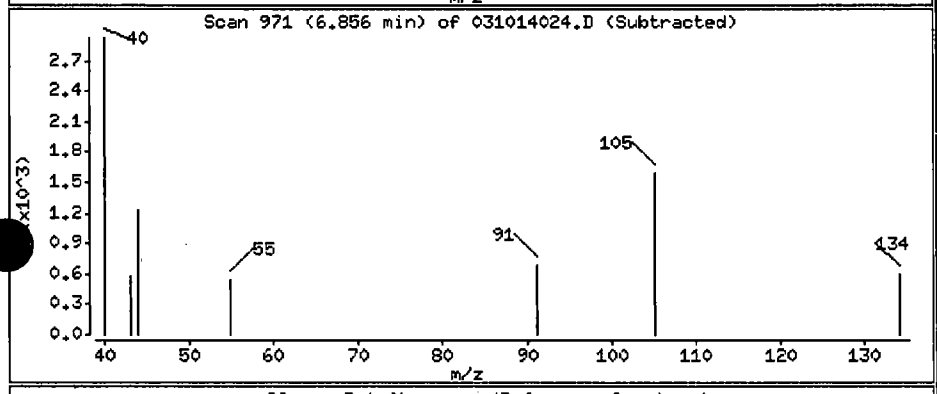
Column phase: Rtx-VMS

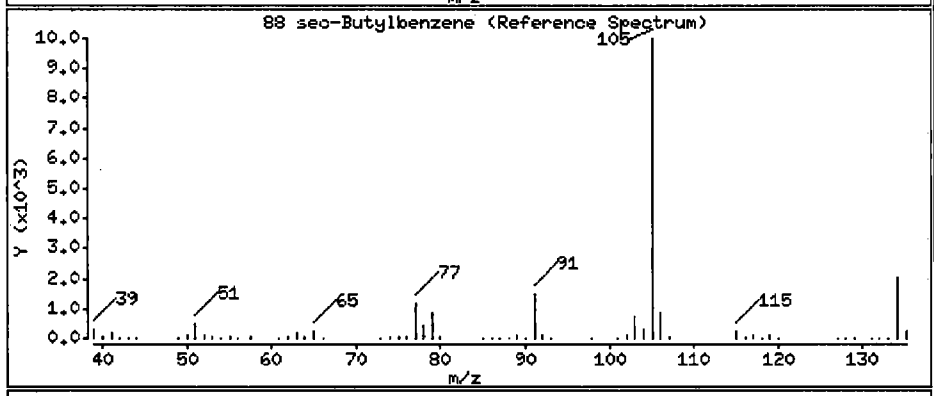
Column diameter: 0.18

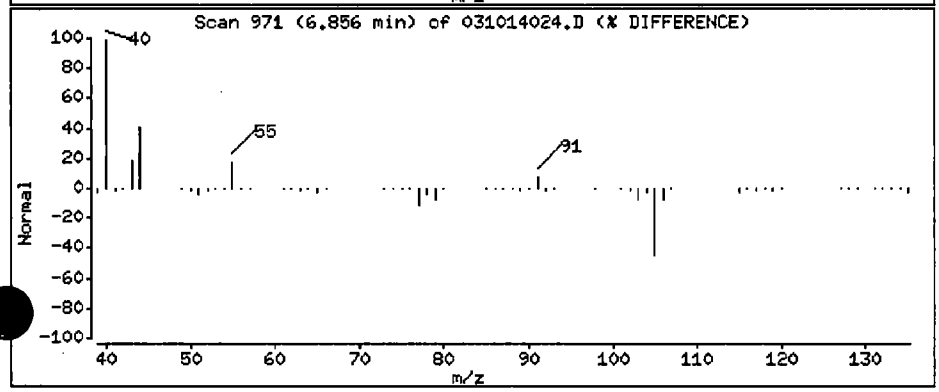
88 sec-Butylbenzene

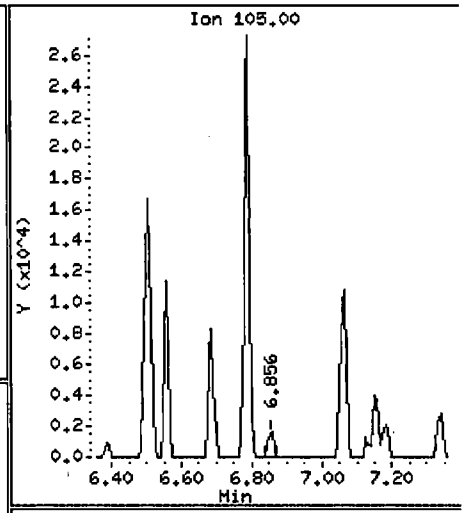
Concentration: 0.096 ug/Kg

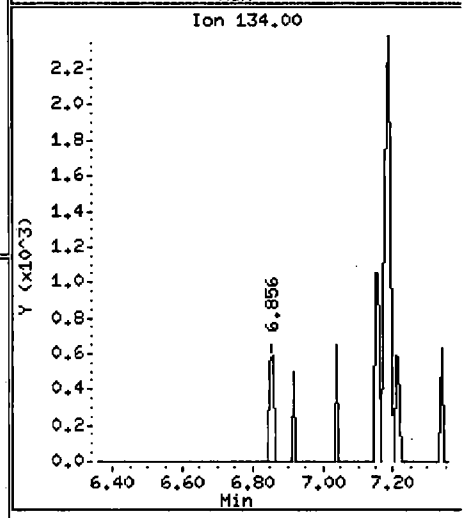












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

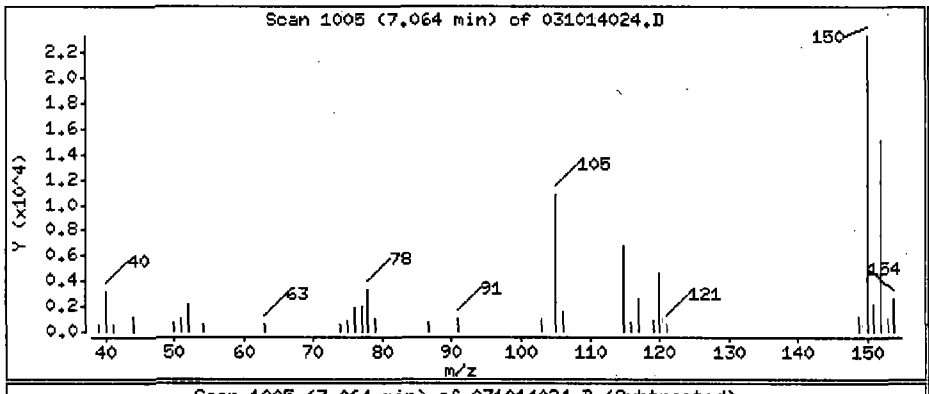
Operator: HBP

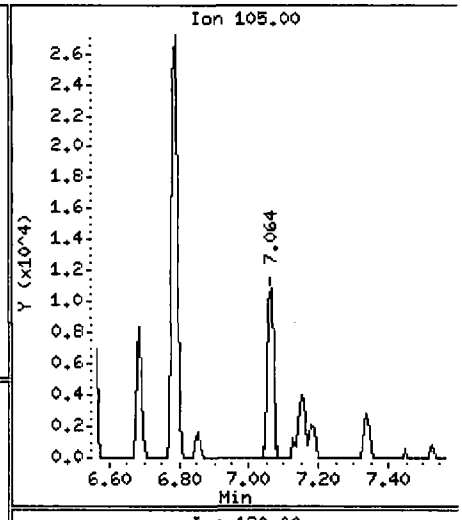
Column phase: Rtx-VMS

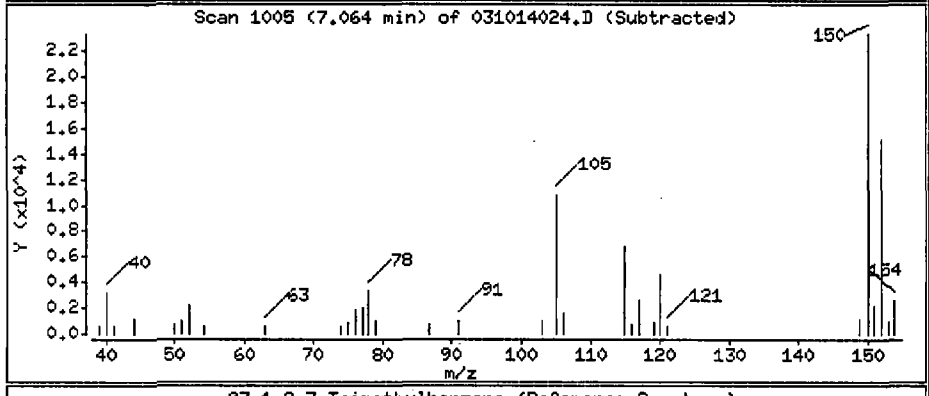
Column diameter: 0.18

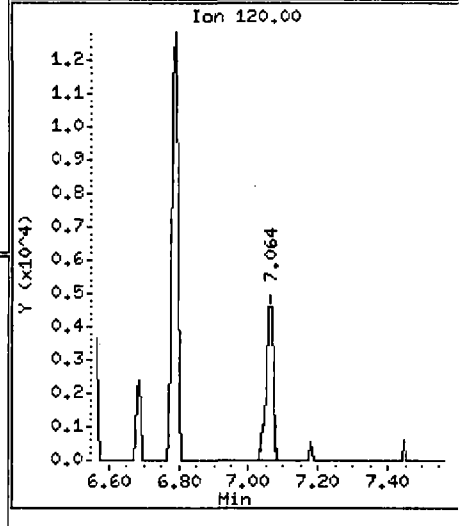
93 1,2,3 Trimethylbenzene

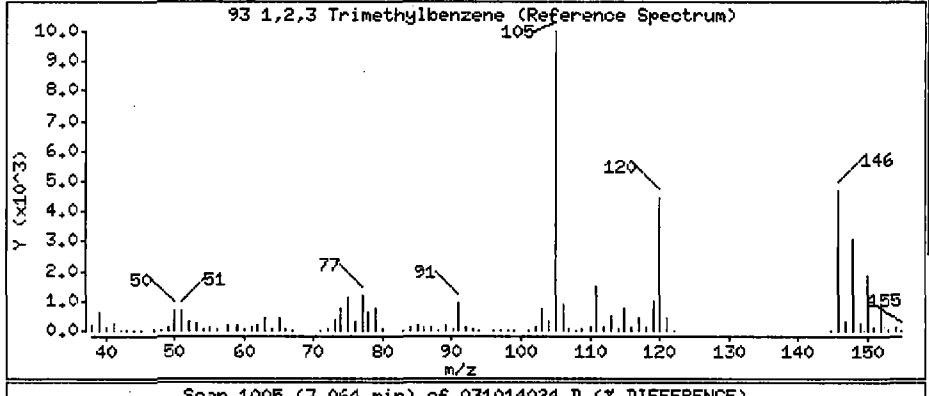
Concentration: 0.87 ug/Kg

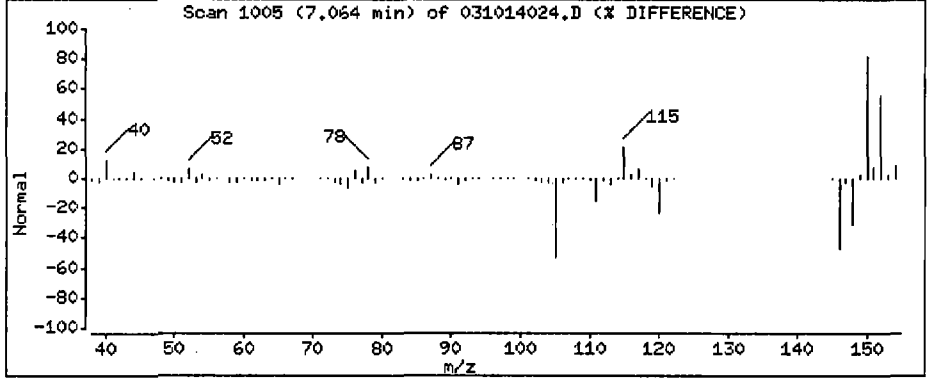












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

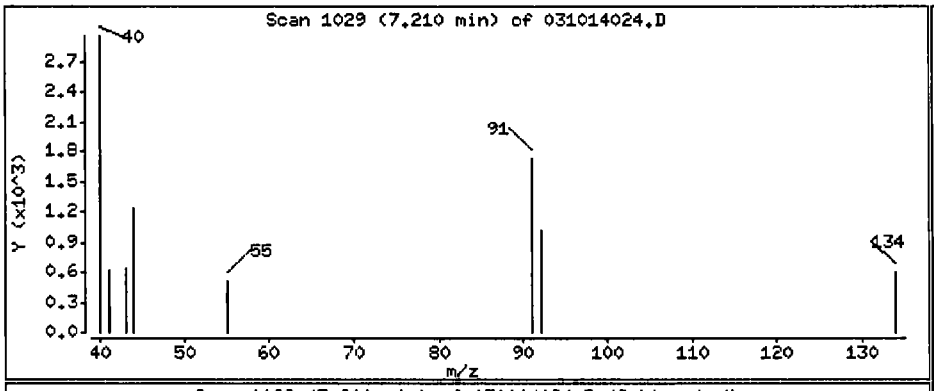
Operator: HBP

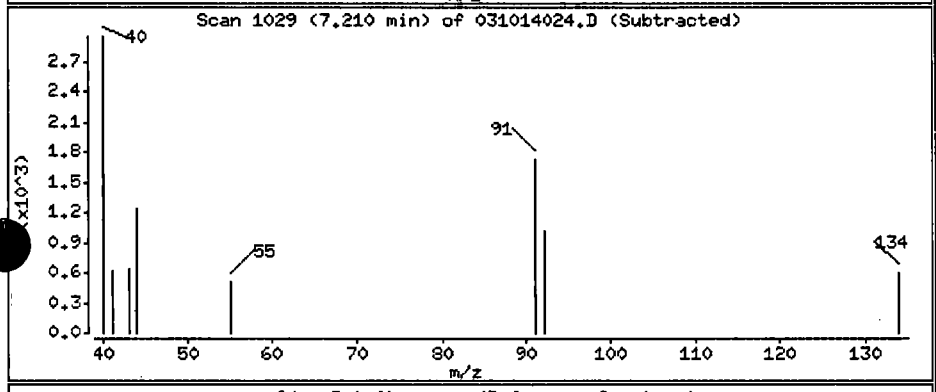
Column phase: Rtx-VMS

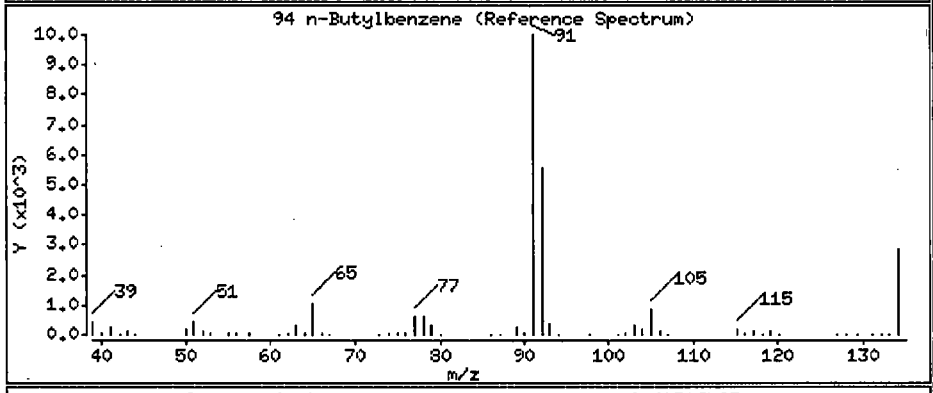
Column diameter: 0.18

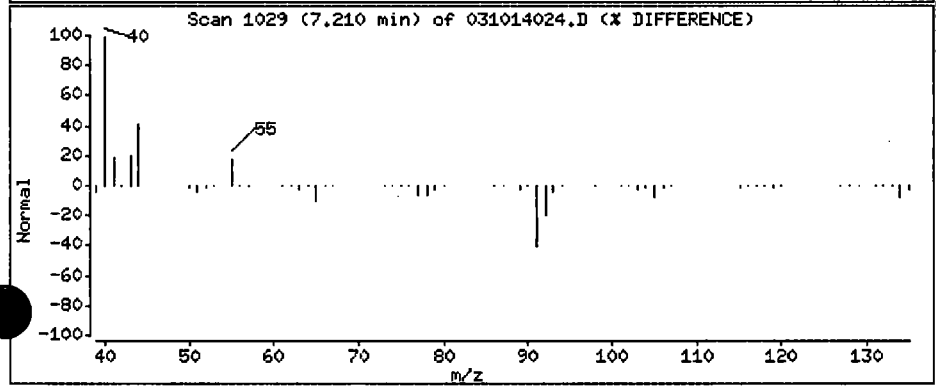
94 n-Butylbenzene

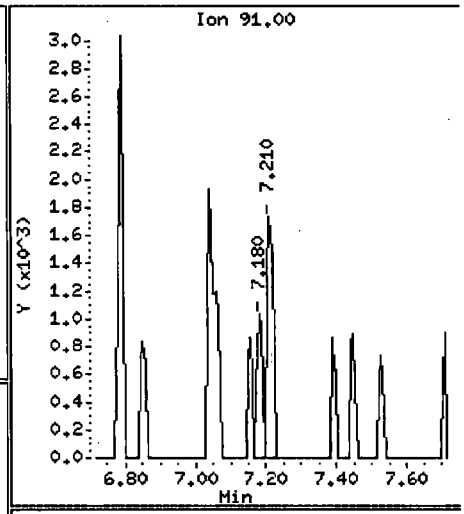
Concentration: 0.14 ug/Kg

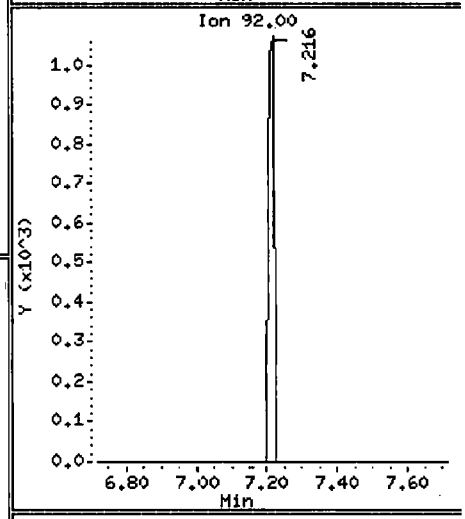


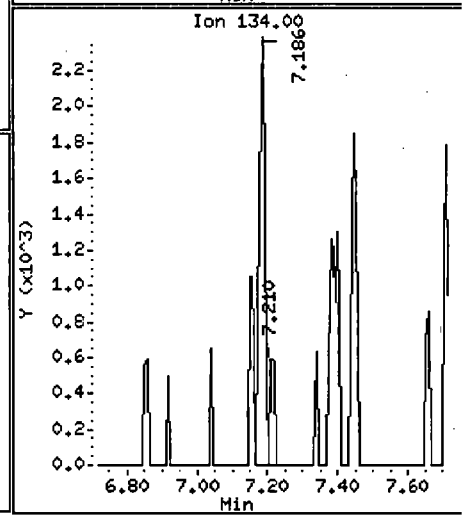












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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

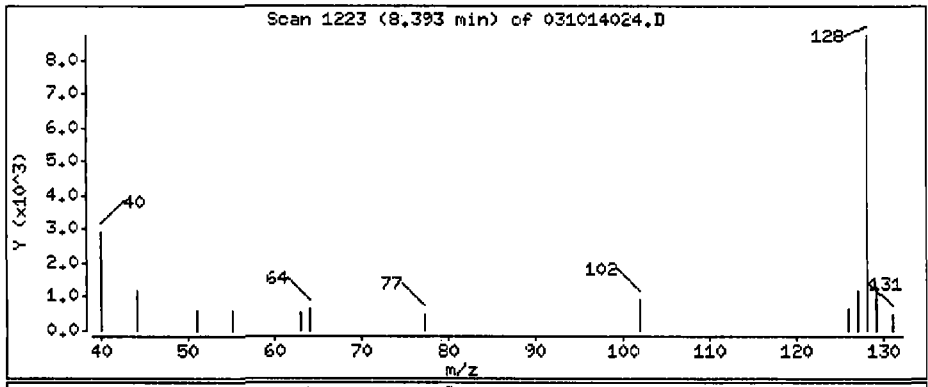
Operator: HBP

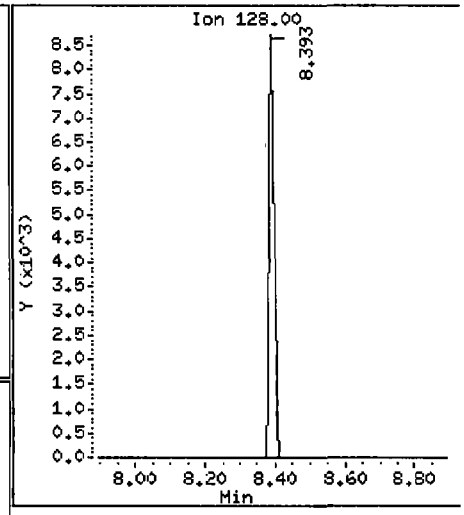
Column phase: Rtx-VMS

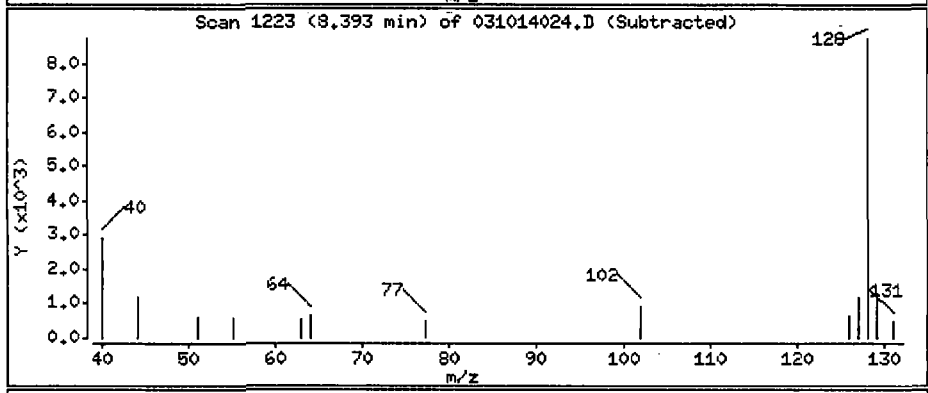
Column diameter: 0.18

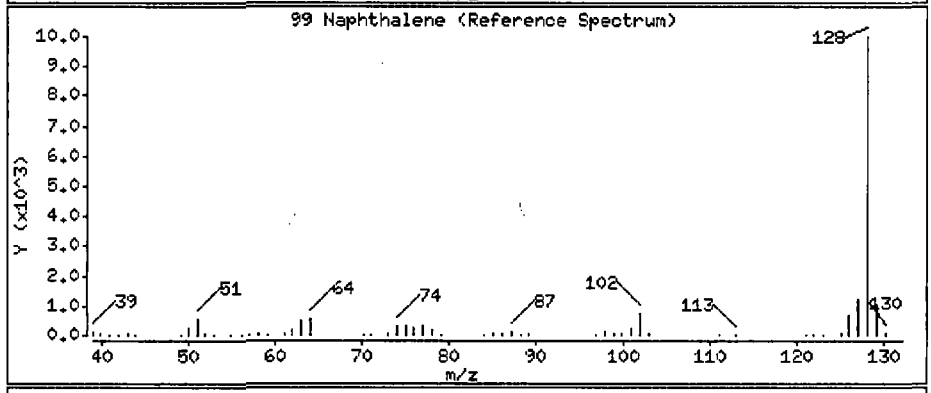
99 Naphthalene

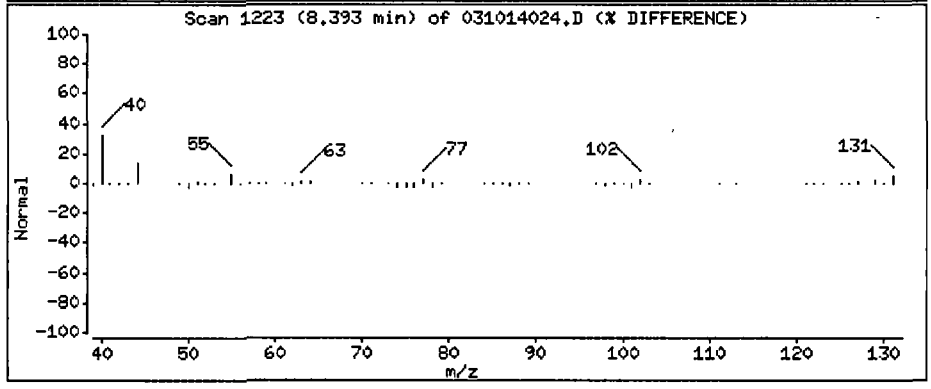
Concentration: 0.80 ug/Kg











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Date : 10-MAR-2014 18:06

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055001,6.73

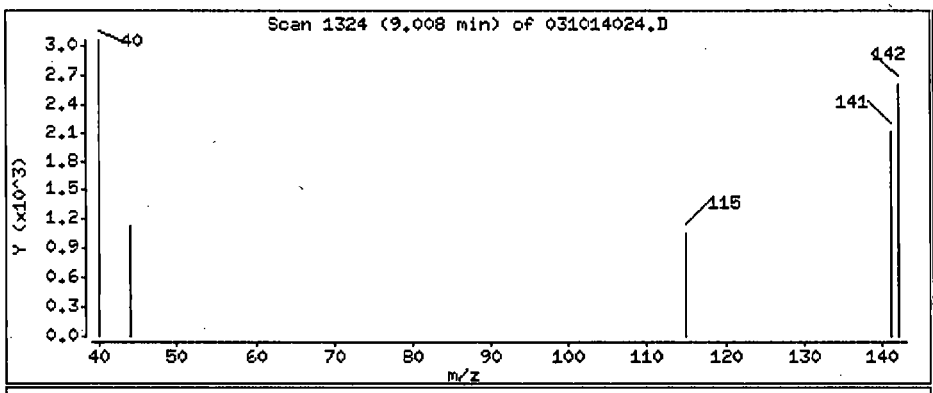
Operator: HBP

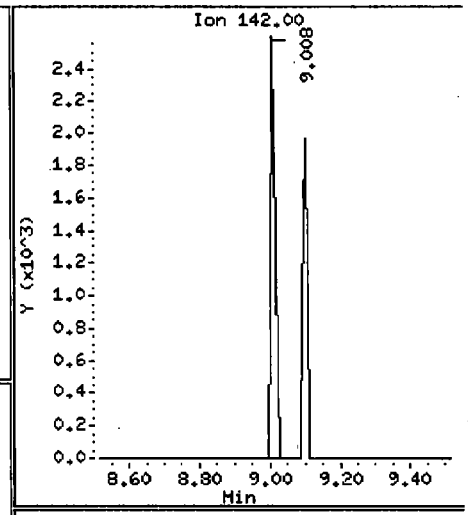
Column phase: Rtx-VMS

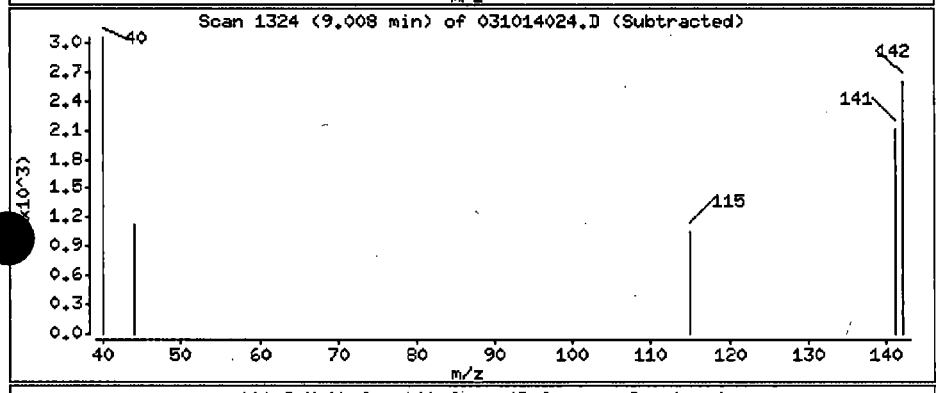
Column diameter: 0.18

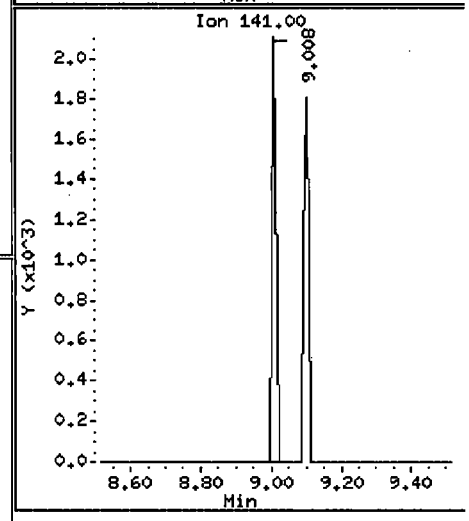
101 2-Methylnaphthalene

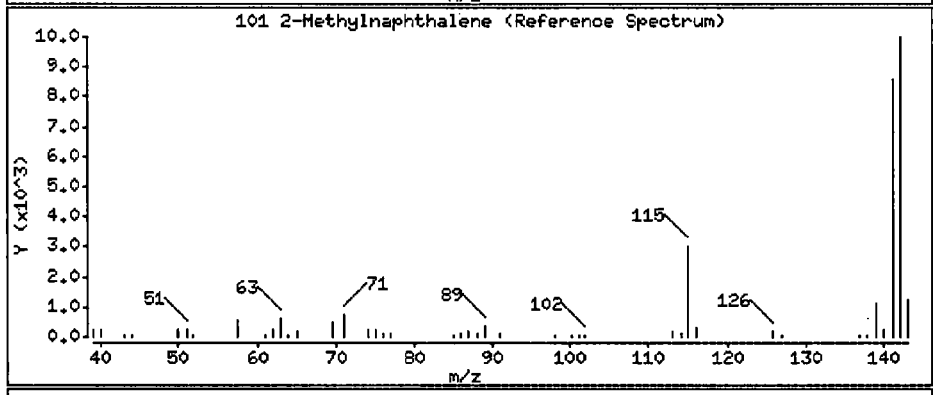
Concentration: 0.58 ug/Kg

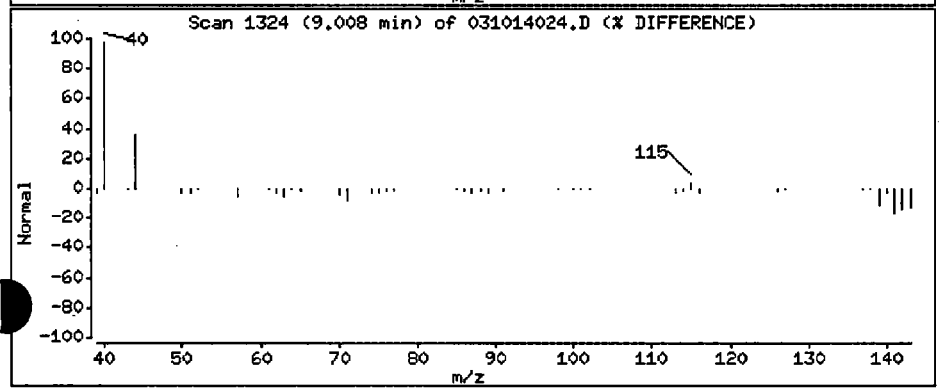












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b/031014024.D
Injection Date: 10-MAR-2014 18:06
Instrument: 10msv7.i
Lab Sample ID: 10259055001
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014025.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014025.D
Lab Smp Id: 10259055002
Inj Date : 10-MAR-2014 18:26
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259055002,5.39
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.390	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.101	2.101	(0.500)	12297	0.88846	0.96(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	159173	200.000	
19	Acetone	58	2.698	2.698	(1.018)	9809	28.6274	30.9
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014025.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	21 Hexane	86	2.863	2.863	(1.081)	836	0.71989	0.78(aQ)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	3.753	3.753	(0.893)	4025	0.59927	0.65(aQ)
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.143	4.143	(0.985)	3909	0.23433	0.25(a)
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	967369	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	401198	107.443	107
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1430349	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	166508	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1667246	101.930	102
	58 Toluene	92	5.131	5.130	(0.887)	4585	0.43530	0.47(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	Compound Not Detected.					
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1392113	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.801	5.801	(1.003)	2682	0.13362	0.14(a)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.868	5.868	(1.015)	1620	0.20723	0.22(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.051)	554	0.07557	0.081(a)
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014025.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	668709	110.359	110
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	Compound Not Detected.					
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	2616	0.17111	0.18(a)
88	sec-Butylbenzene	105	Compound Not Detected.					
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	755278	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	1552	0.08328	0.090(aQ)
94	n-Butylbenzene	91	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
99	Naphthalene	128	8.392	8.392	(1.191)	1650	0.14964	0.16(a)
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
101	2-Methylnaphthalene	142	9.008	9.014	(1.279)	469	0.10954	0.12(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014025.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014025.D
Lab Smp Id: 10259055002
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30

Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	159173	10.79
41 Pentafluorobenzen	966546	483273	1933092	967369	0.09
48 1,4 Difluorobenze	1457917	728959	2915834	1430349	-1.89
53 1,4 dioxane d8	174389	87195	348778	166508	-4.52
67 Chlorobenzene-d5	1458689	729345	2917378	1392113	-4.56
91 1,4-Dichlorobenze	888899	444450	1777798	755278	-15.03

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

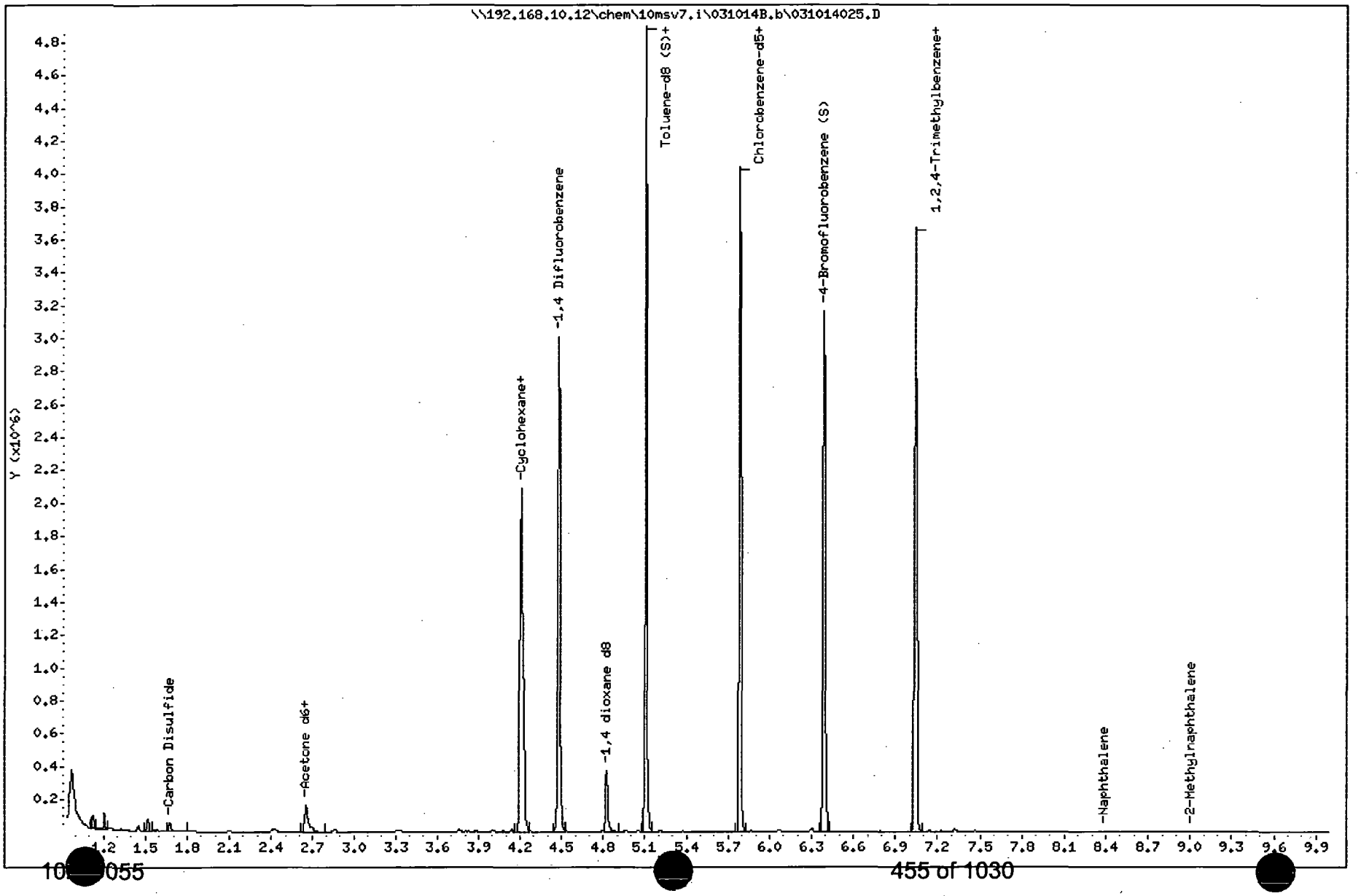
Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014025.D
Date : 10-MAR-2014 18:26
Client ID:
Sample Info: 10259055002,5.39

Instrument: 10msv7.i

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5,39

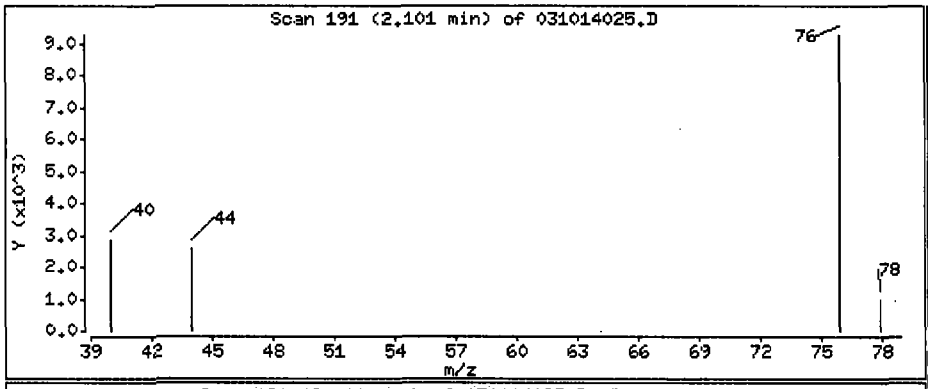
Operator: HBP

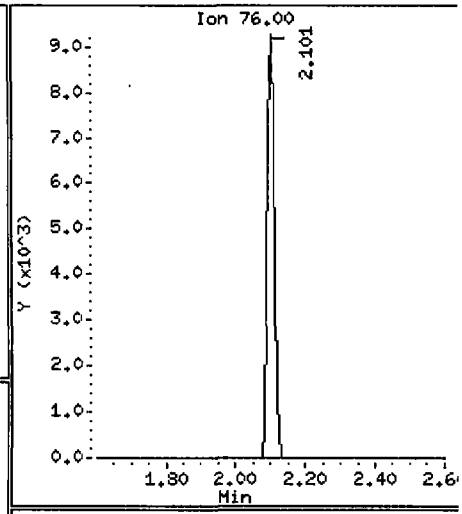
Column phase: Rtx-VMS

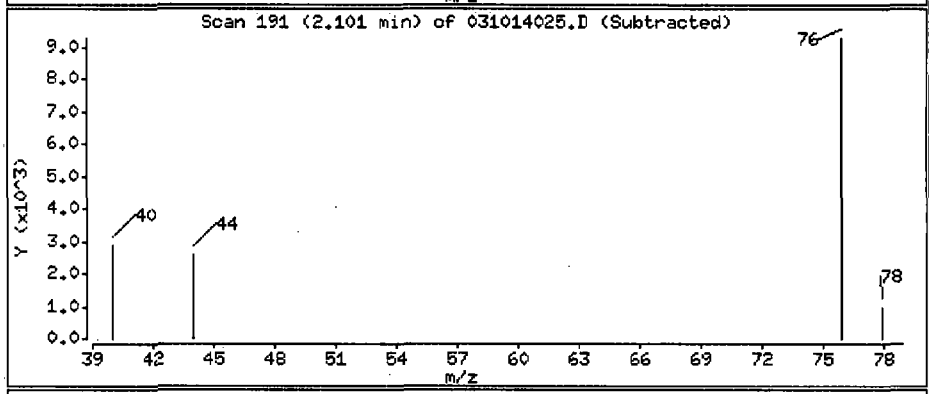
Column diameter: 0.18

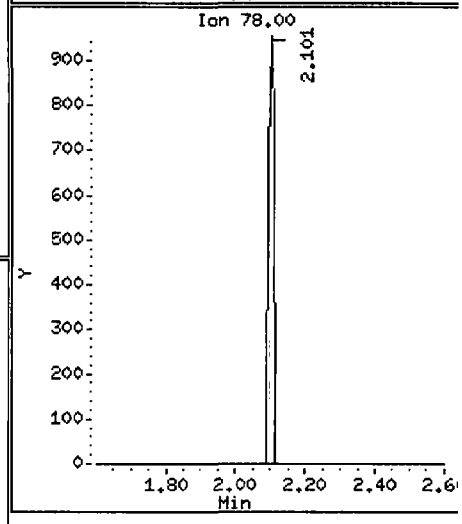
10 Carbon Disulfide

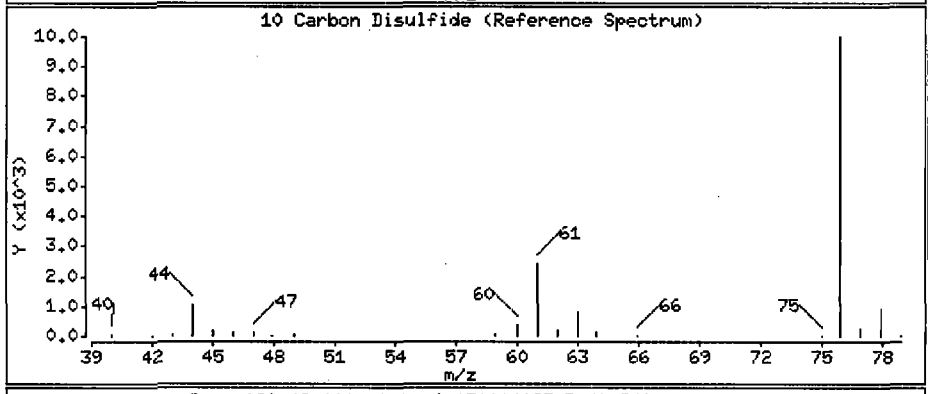
Concentration: 0.96 ug/Kg

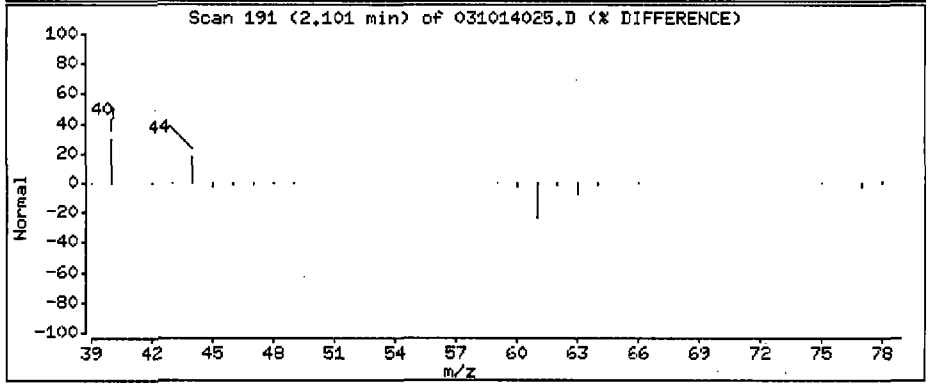












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

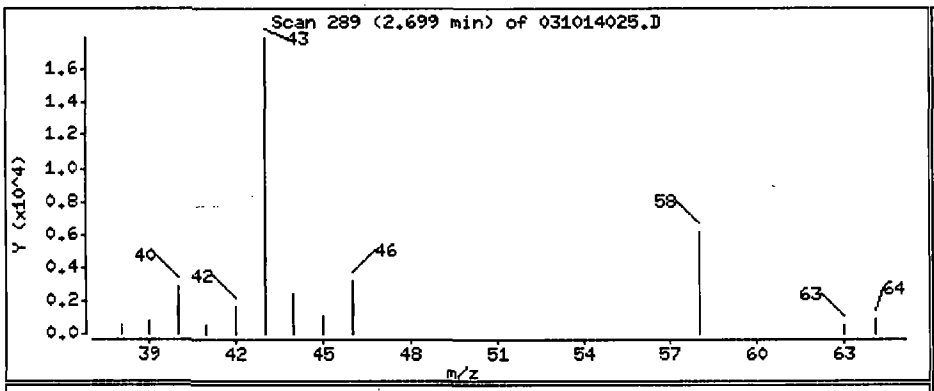
Operator: HBP

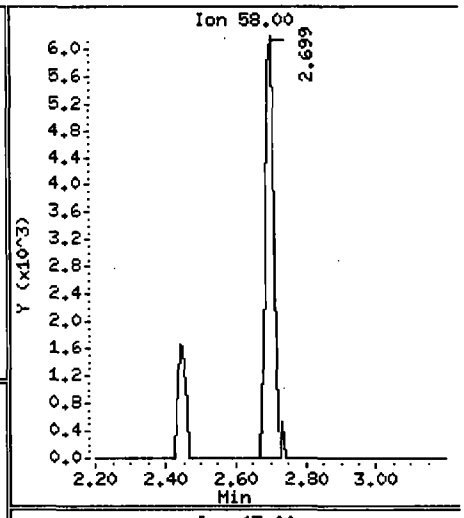
Column phase: Rtx-VMS

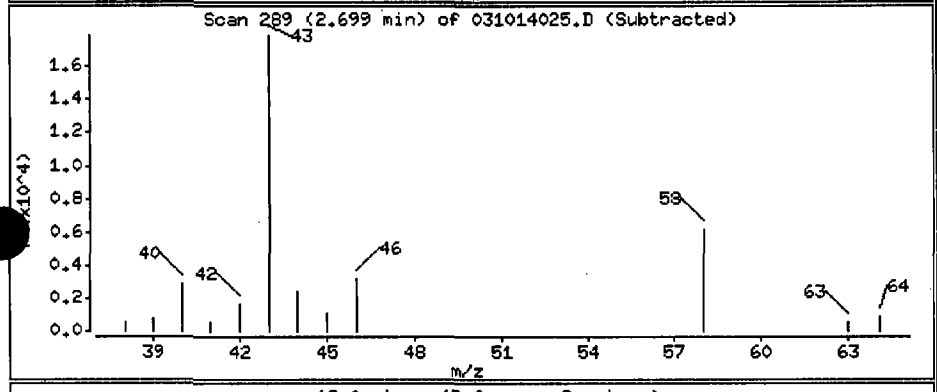
Column diameter: 0.18

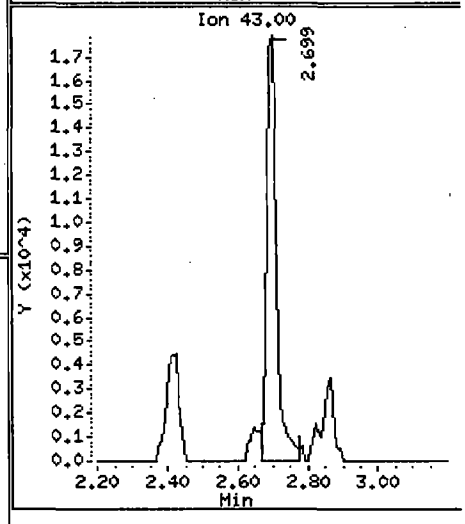
19 Acetone

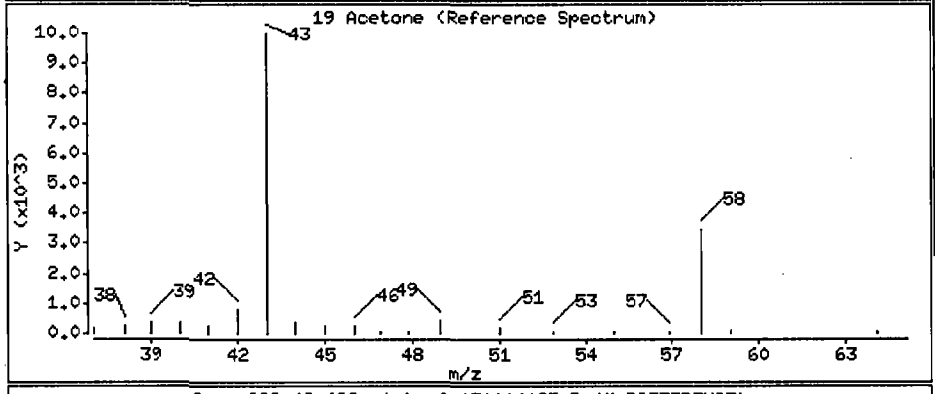
Concentration: 30.9 ug/Kg

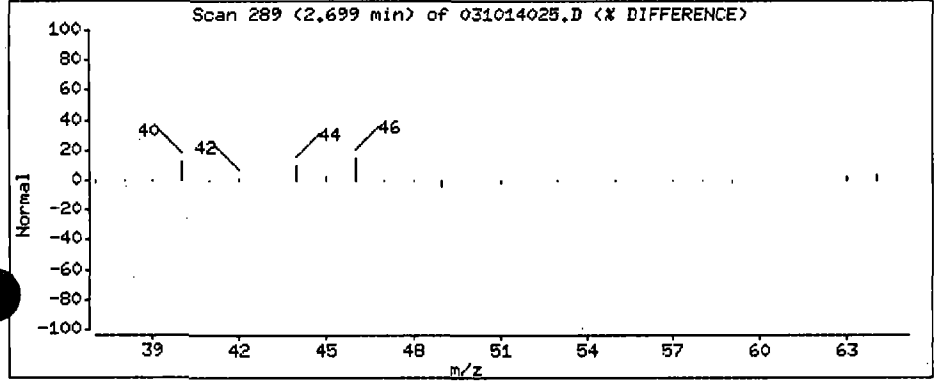












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

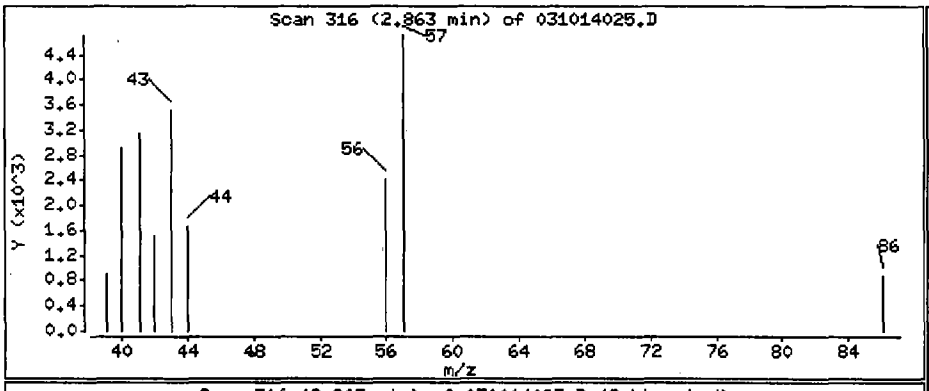
Operator: HBP

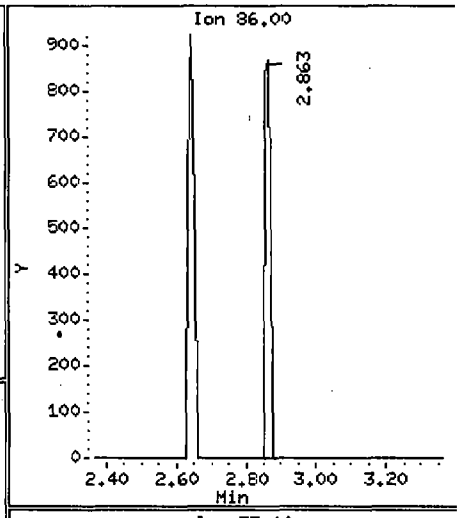
Column phase: Rtx-VMS

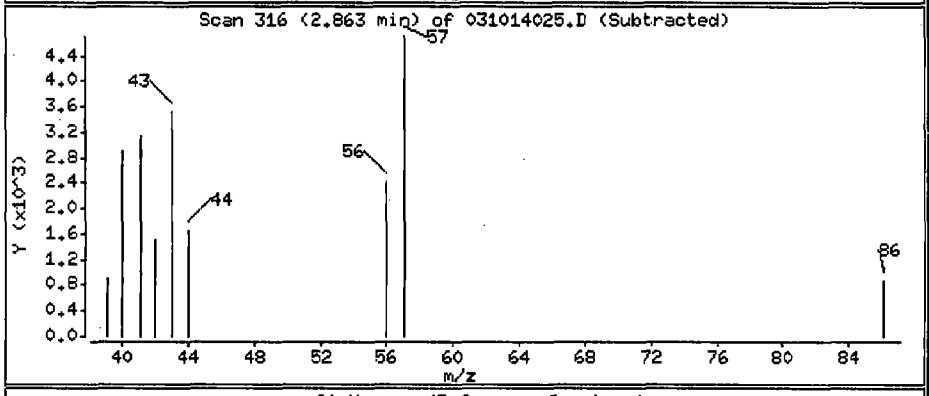
Column diameter: 0.18

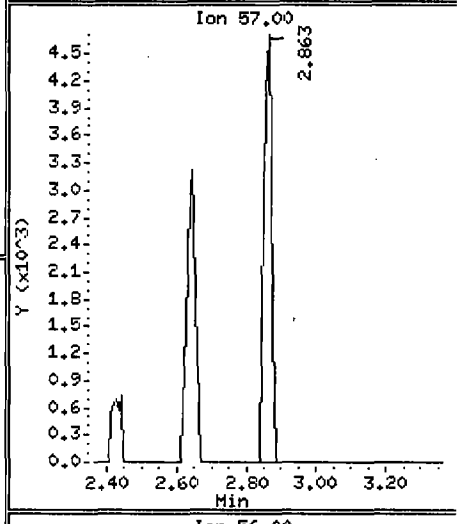
21 Hexane

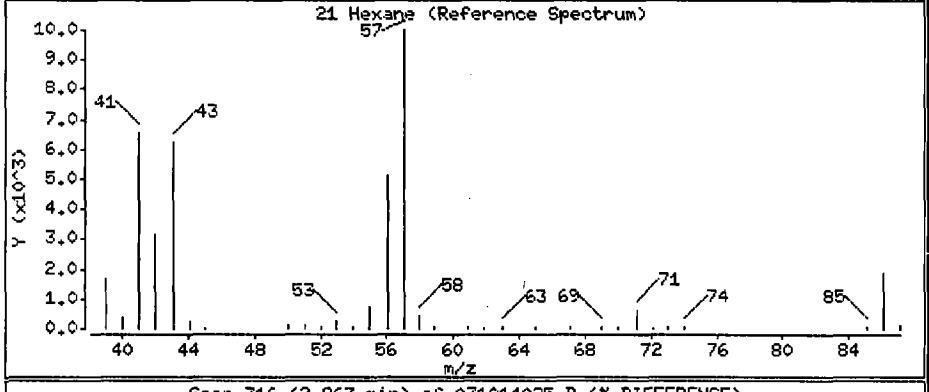
Concentration: 0.78 ug/Kg

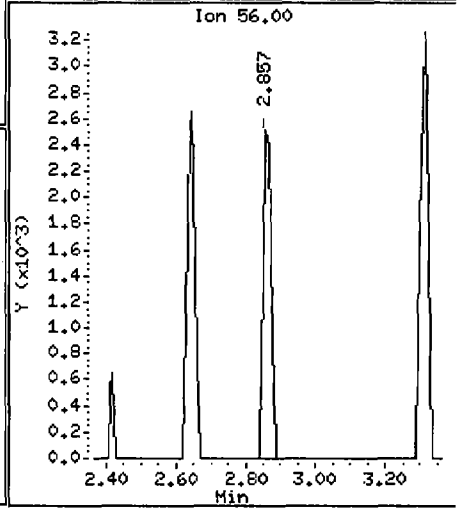


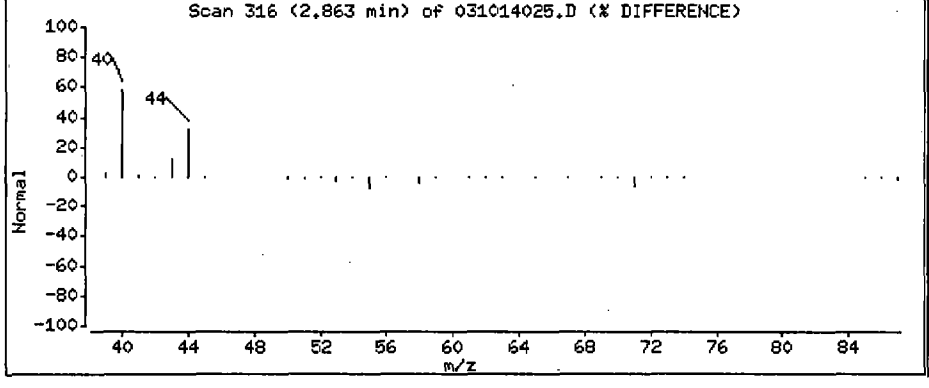












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

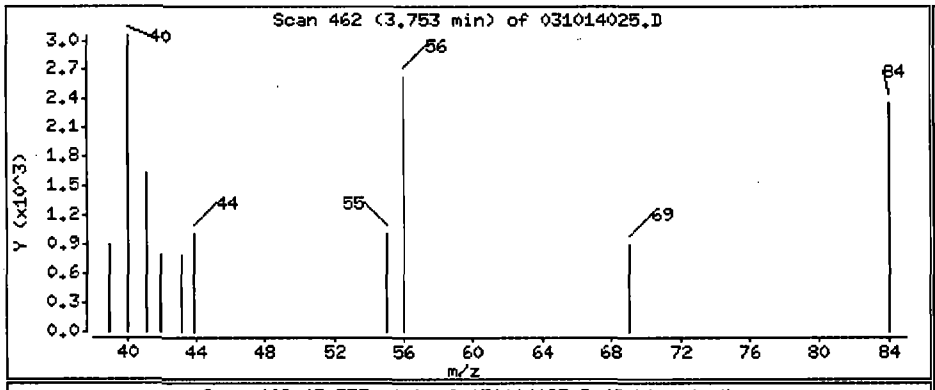
Operator: HBP

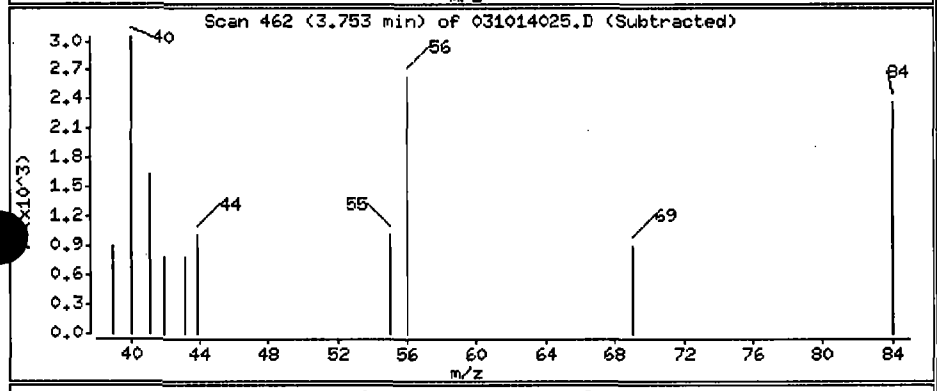
Column phase: Rtx-VMS

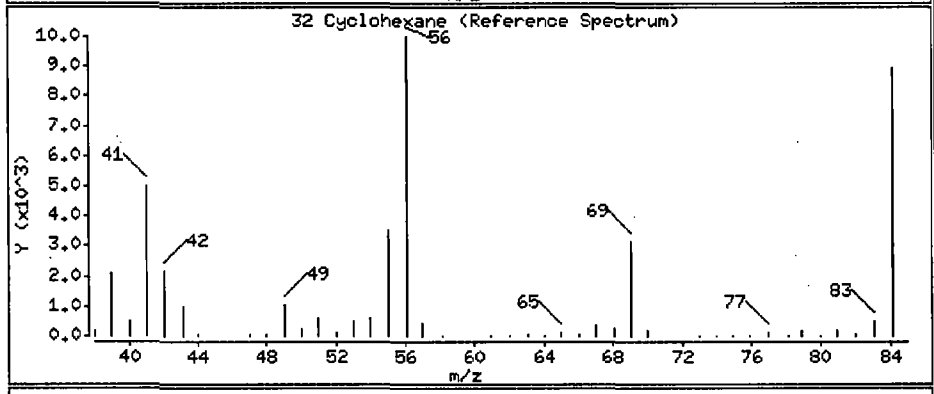
Column diameter: 0.18

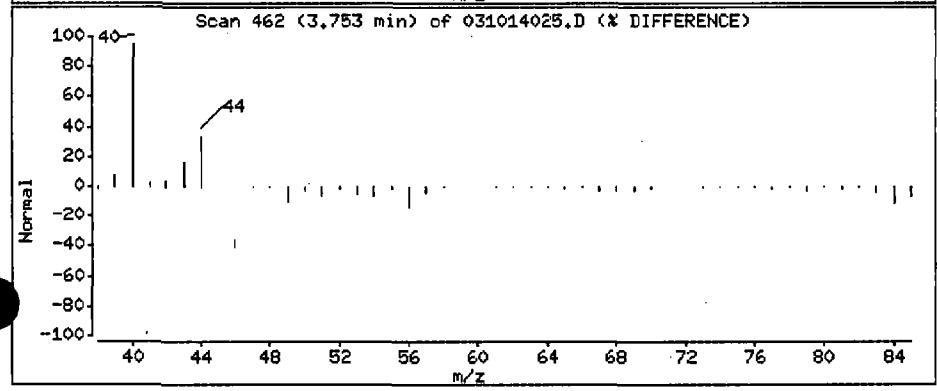
32 Cyclohexane

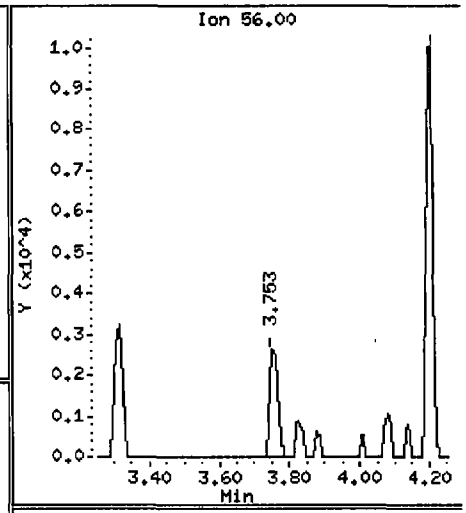
Concentration: 0.65 ug/Kg

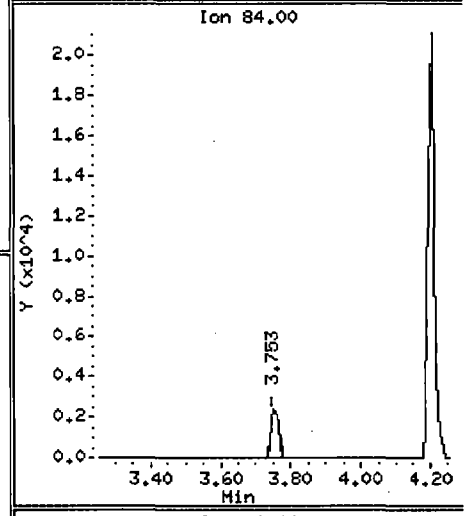


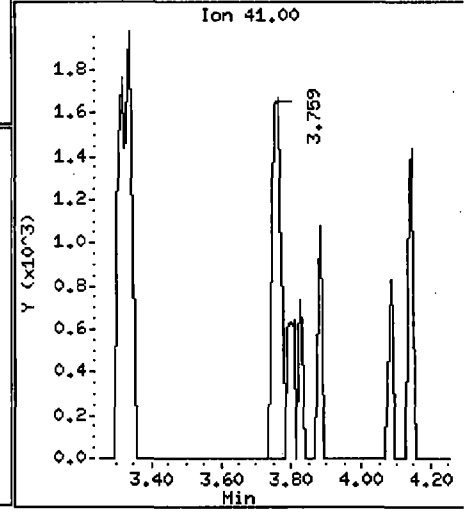












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

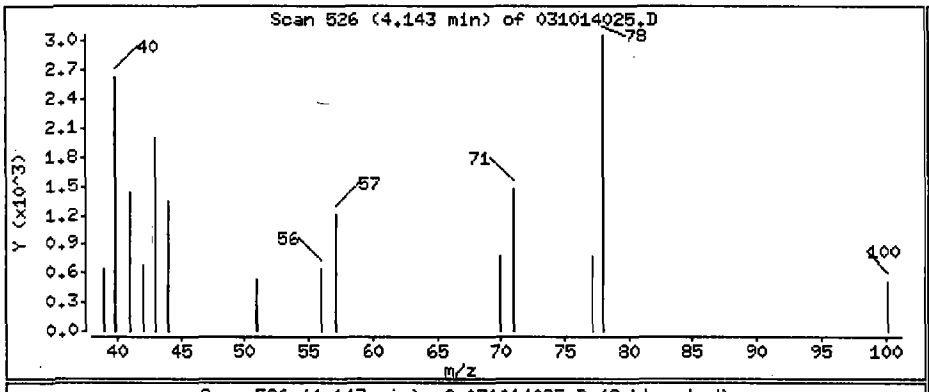
Operator: HBP

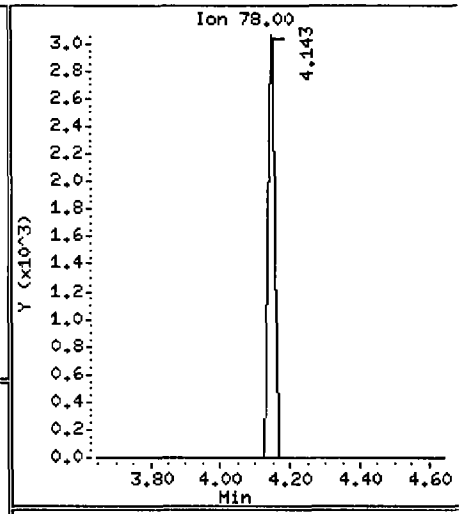
Column phase: Rtx-VMS

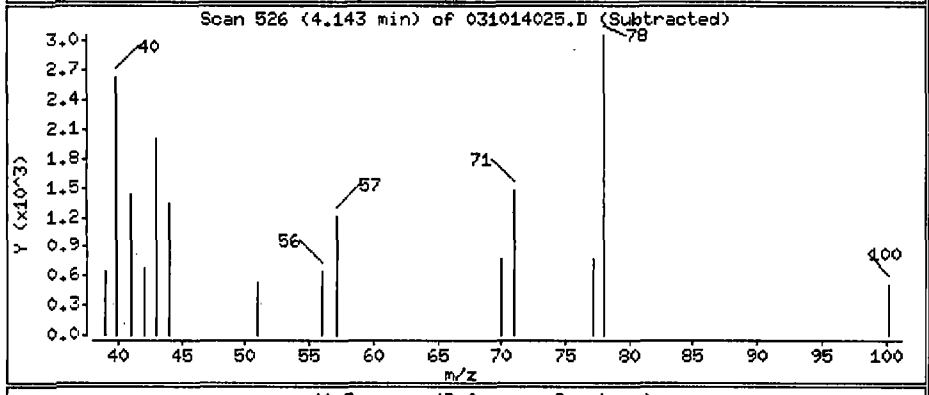
Column diameter: 0.18

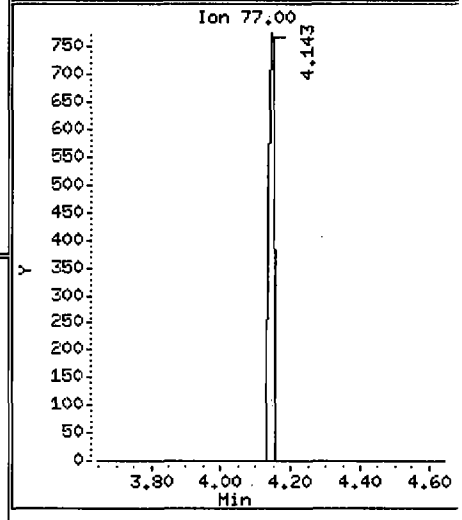
40 Benzene

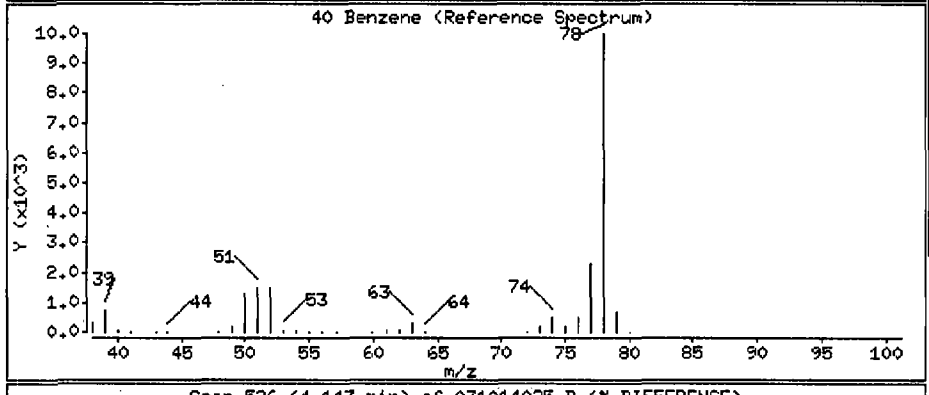
Concentration: 0.25 ug/Kg

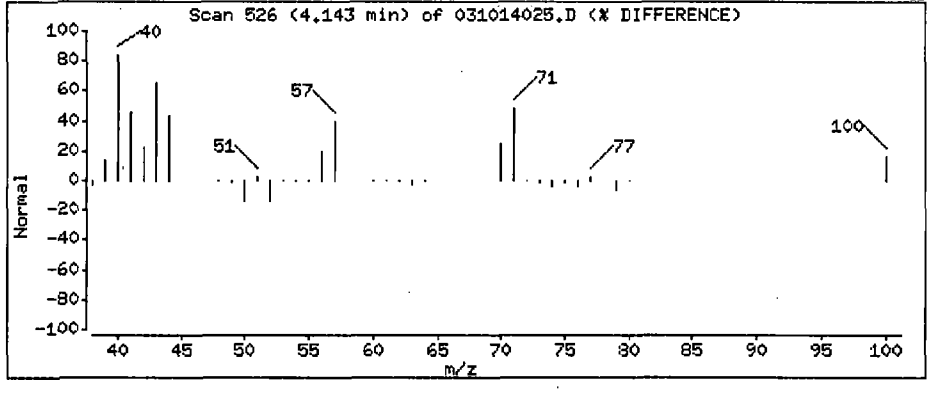












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

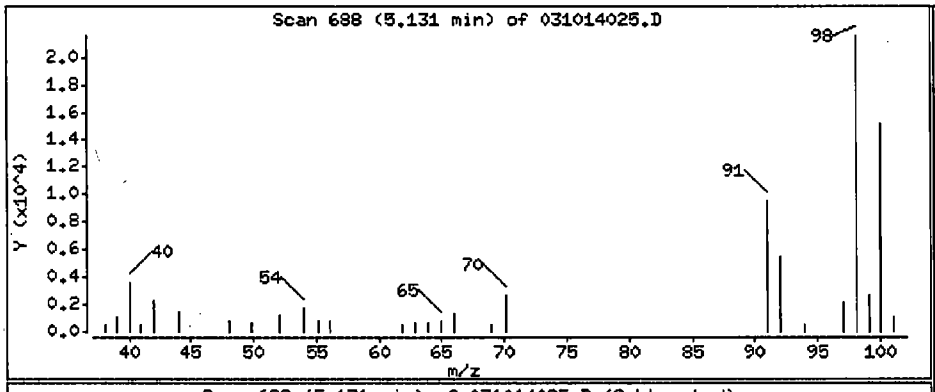
Operator: HBP

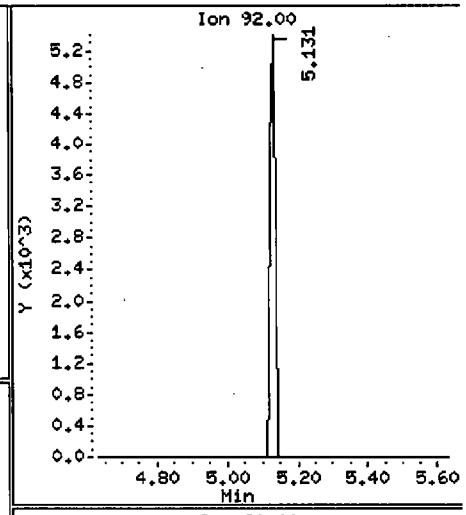
Column phase: Rtx-VMS

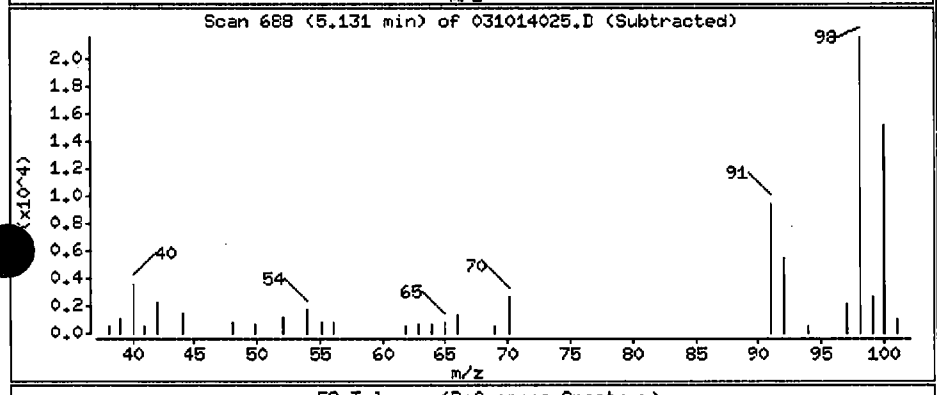
Column diameter: 0.18

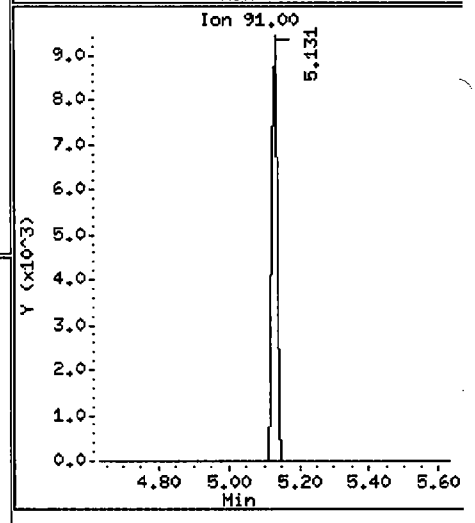
58 Toluene

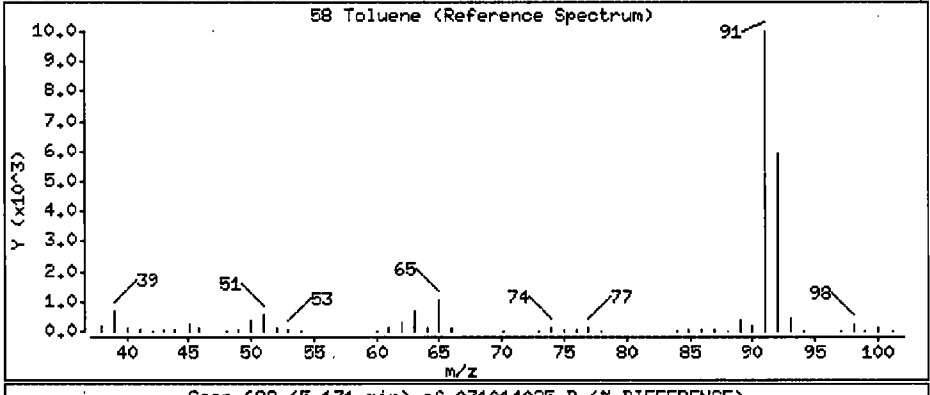
Concentration: 0.47 ug/Kg

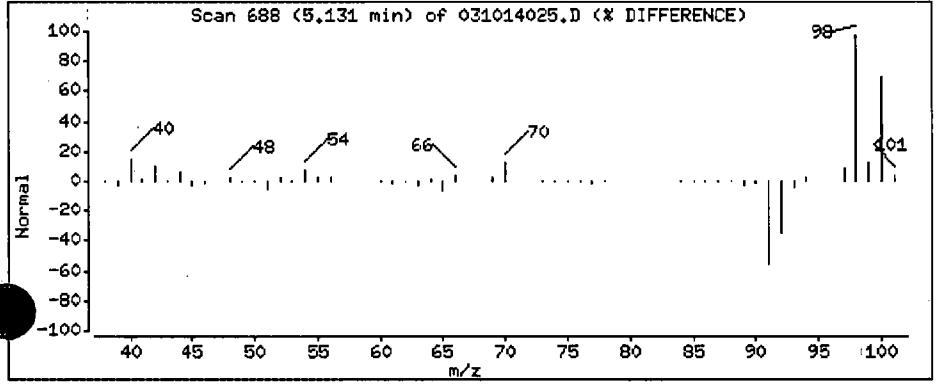












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

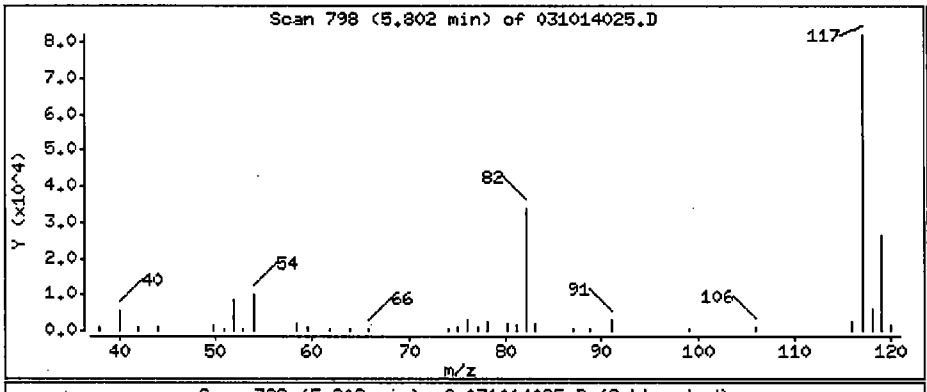
Operator: HBP

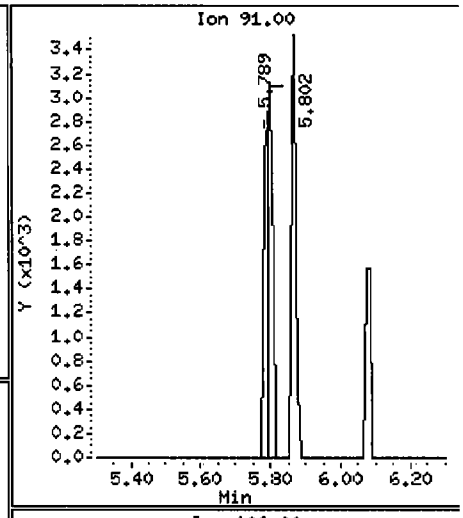
Column phase: Rtx-VMS

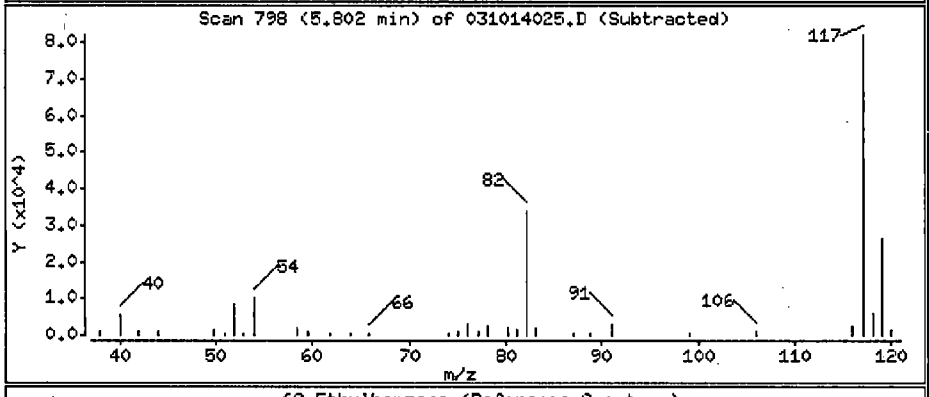
Column diameter: 0.18

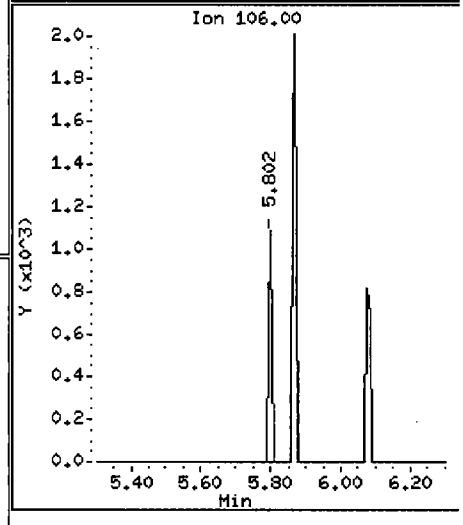
69 Ethylbenzene

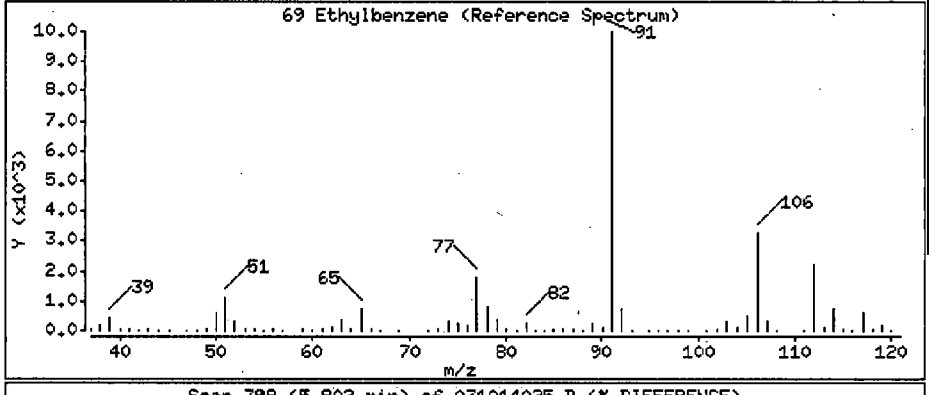
Concentration: 0.14 ug/Kg

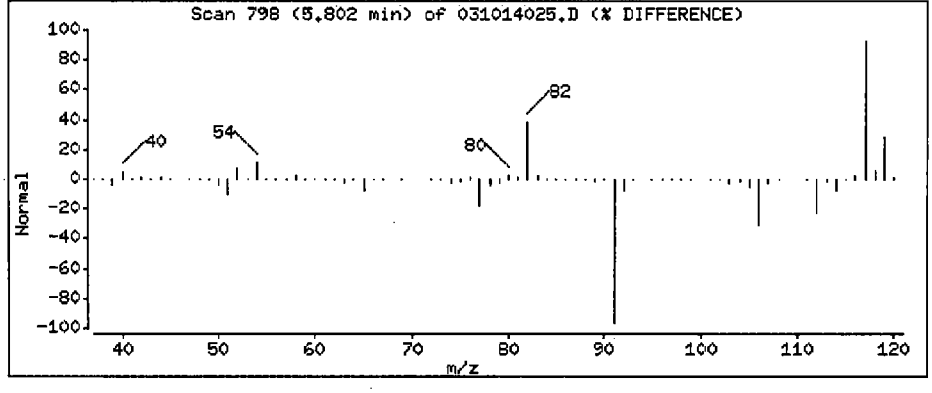












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

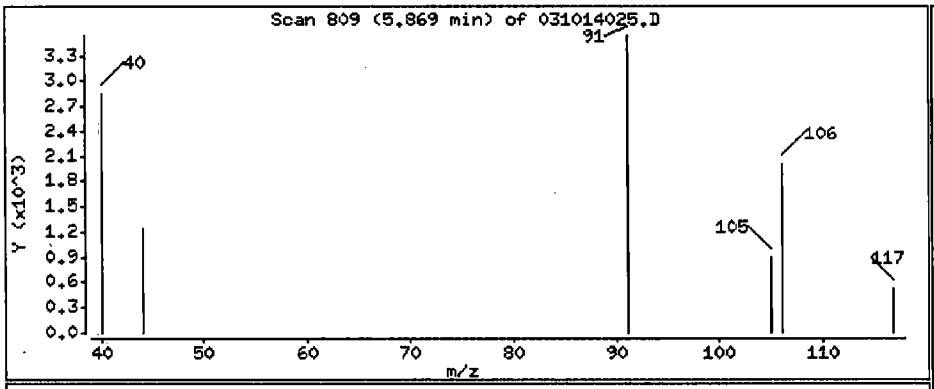
Operator: HBP

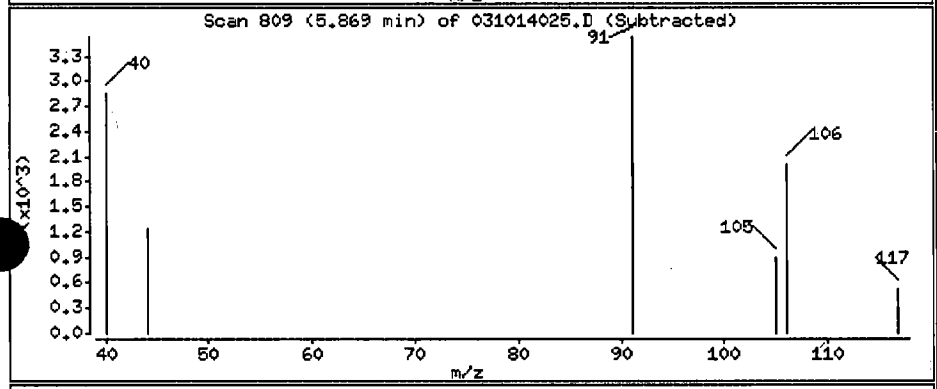
Column phase: Rtx-VMS

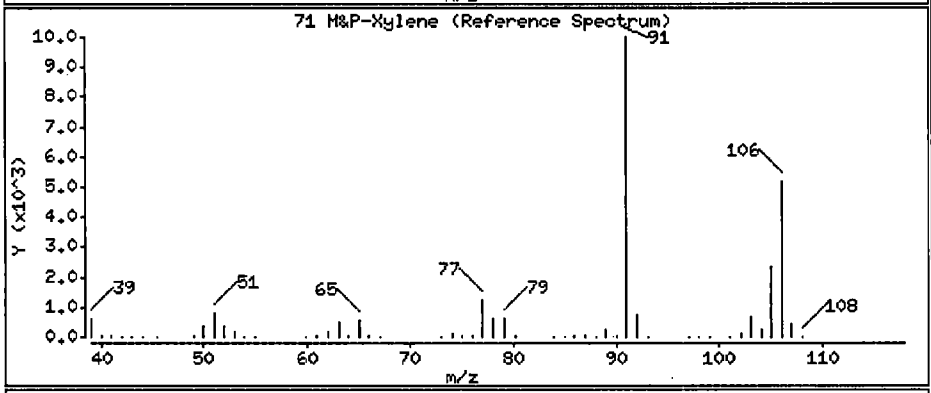
Column diameter: 0.18

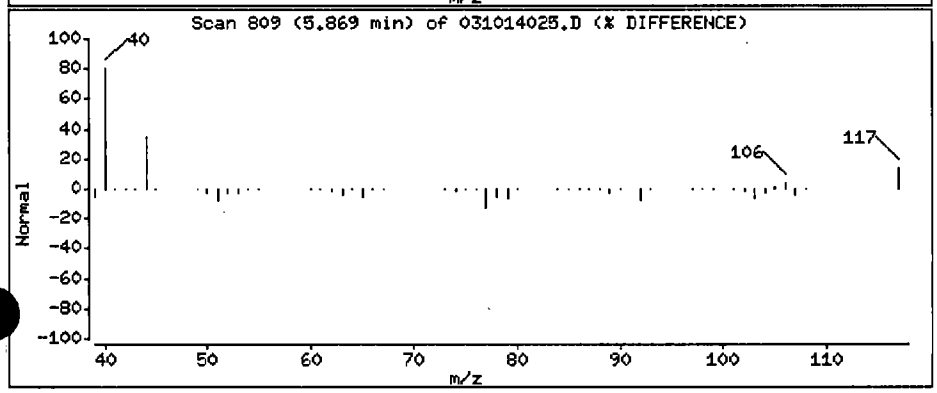
71 M&P-Xylene

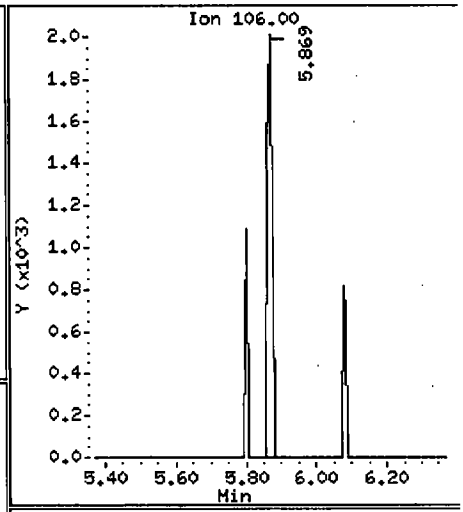
Concentration: 0.22 ug/Kg

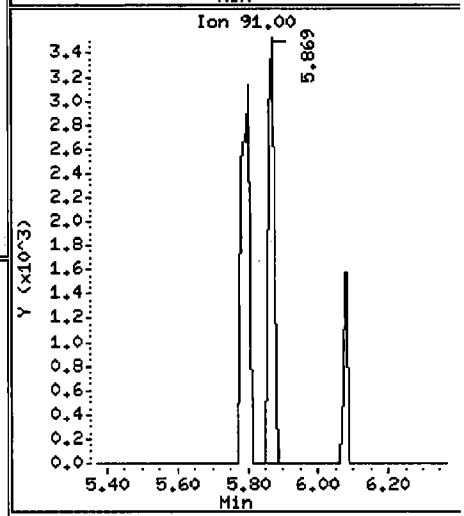












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

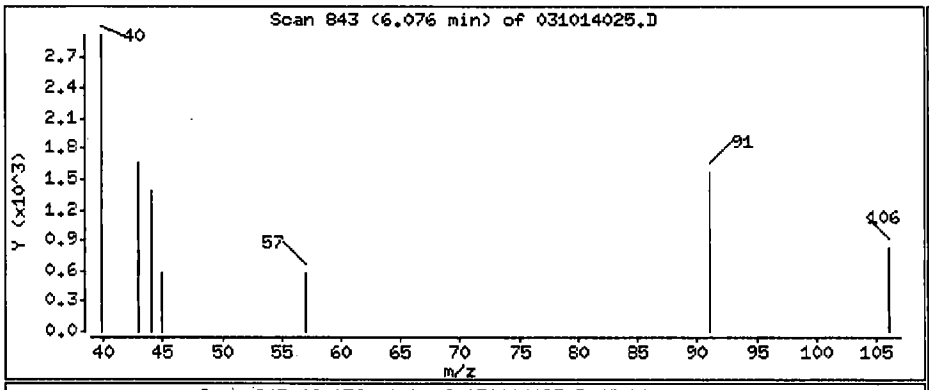
Operator: HBP

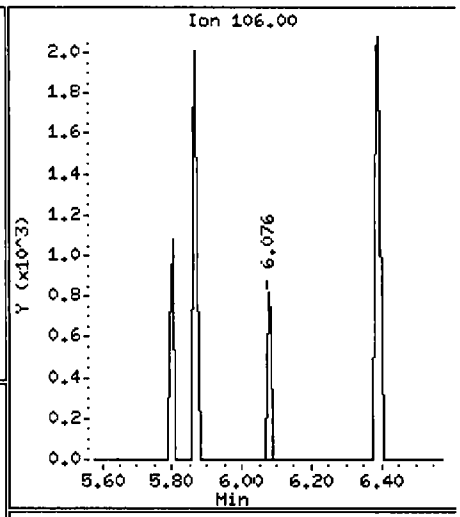
Column phase: Rtx-VMS

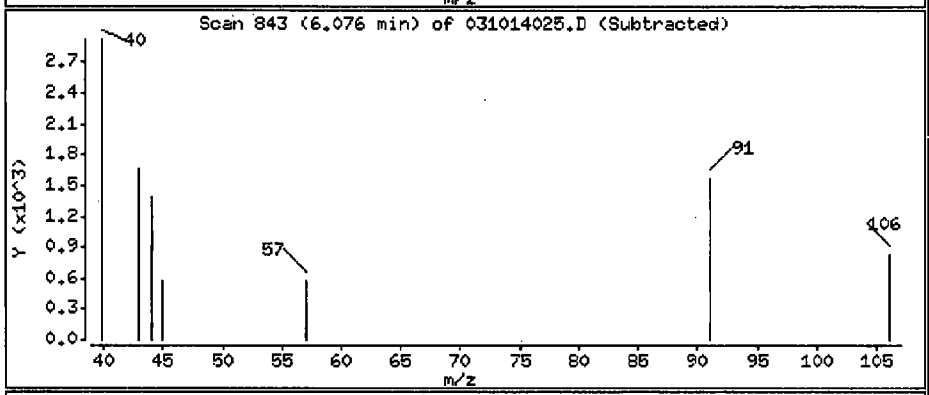
Column diameter: 0.18

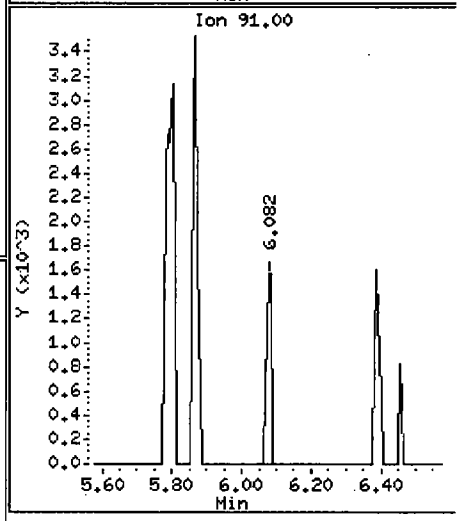
72 O-Xylene (1,2-Dimethylbenzene)

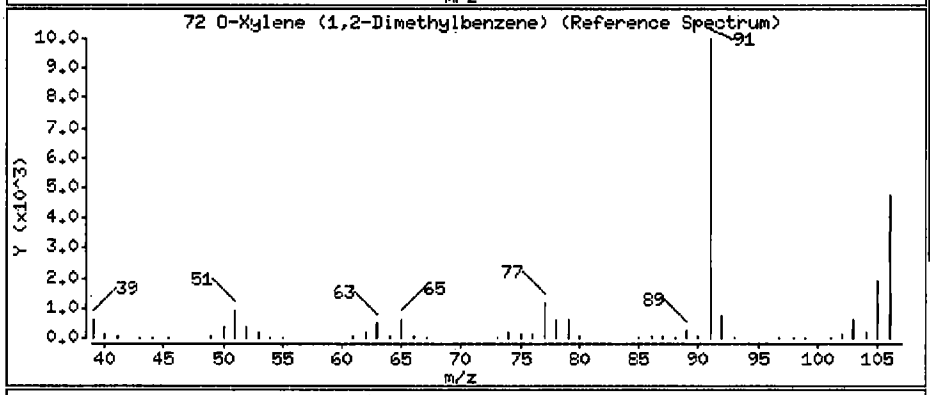
Concentration: 0.081 ug/Kg

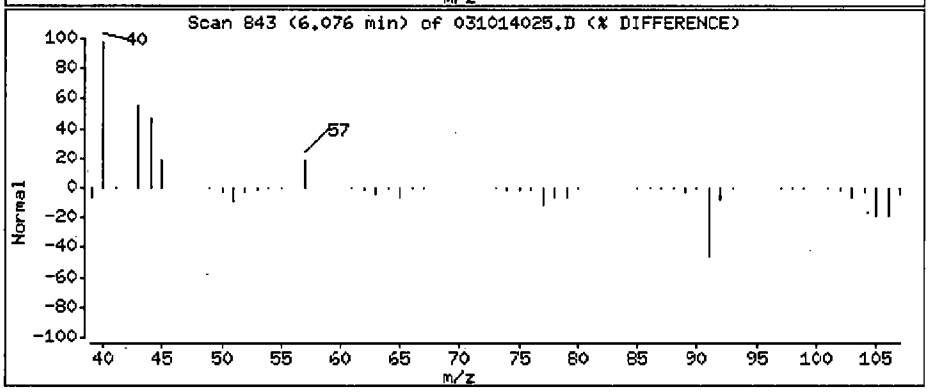












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

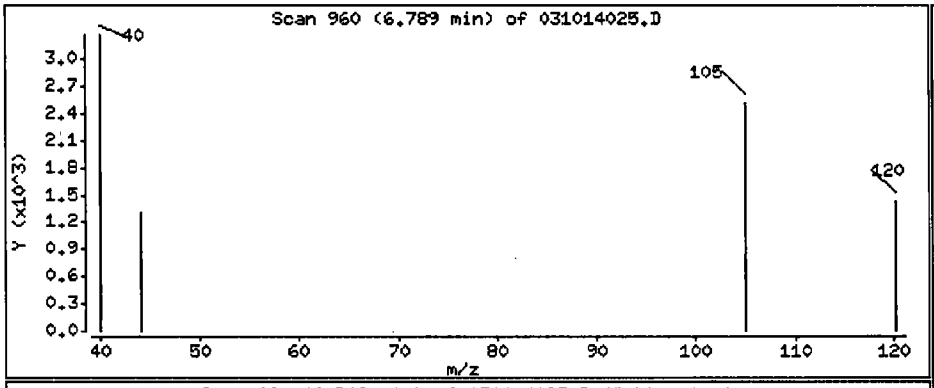
Operator: HBP

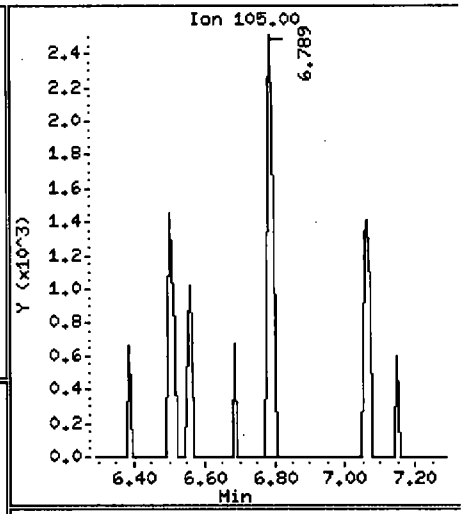
Column phase: Rtx-VMS

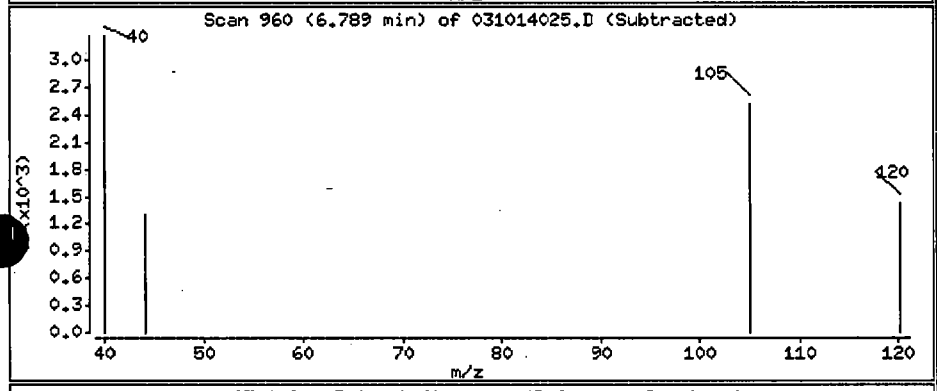
Column diameter: 0.18

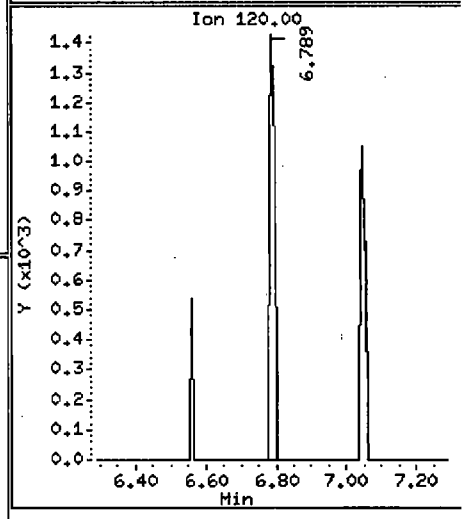
87 1,2,4-Trimethylbenzene

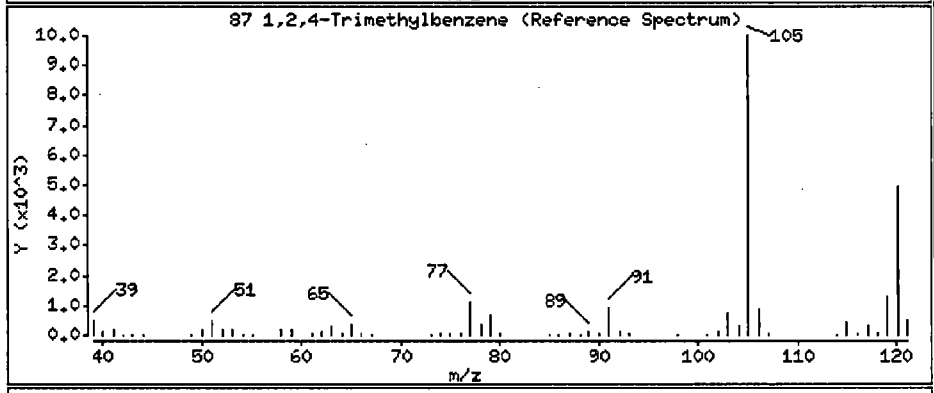
Concentration: 0.18 ug/Kg

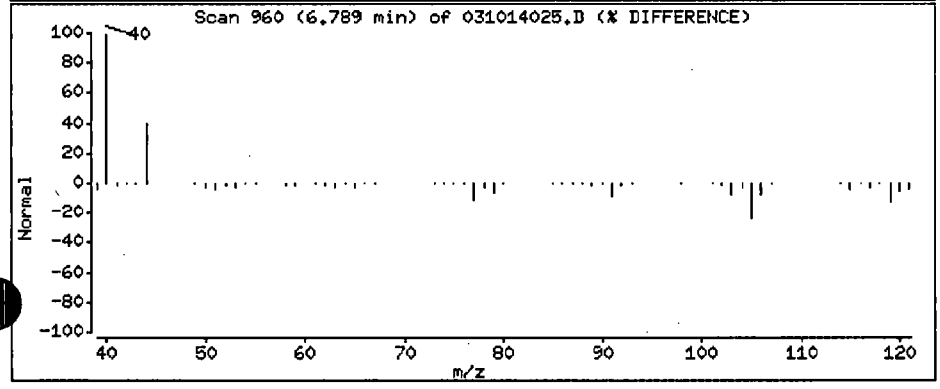












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014025.D

Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

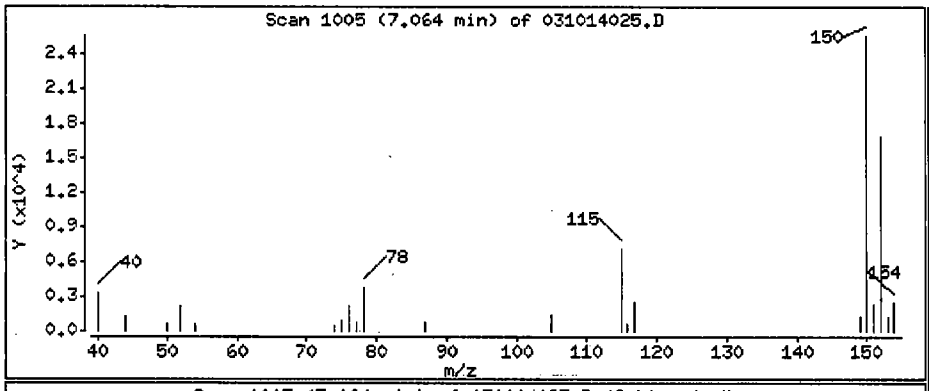
Operator: HBP

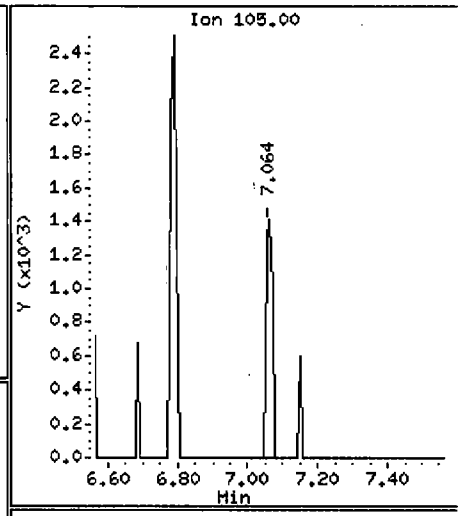
Column phase: Rtx-VMS

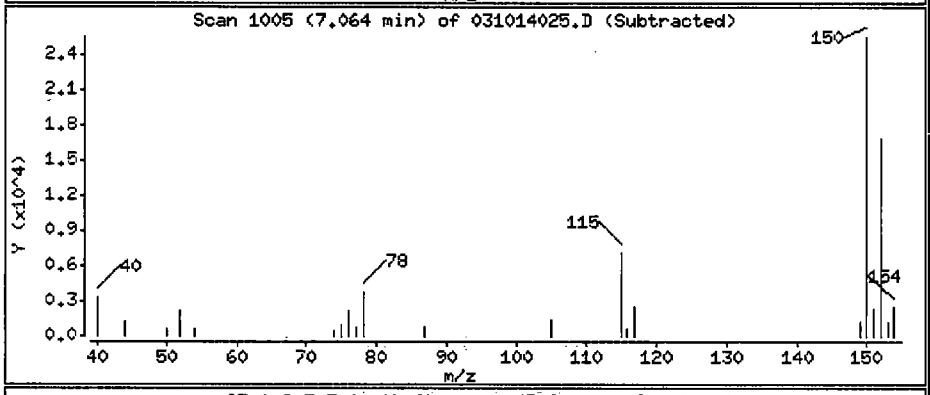
Column diameter: 0.18

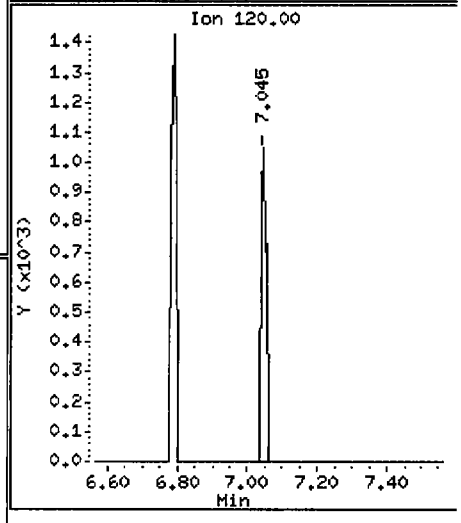
93 1,2,3 Trimethylbenzene

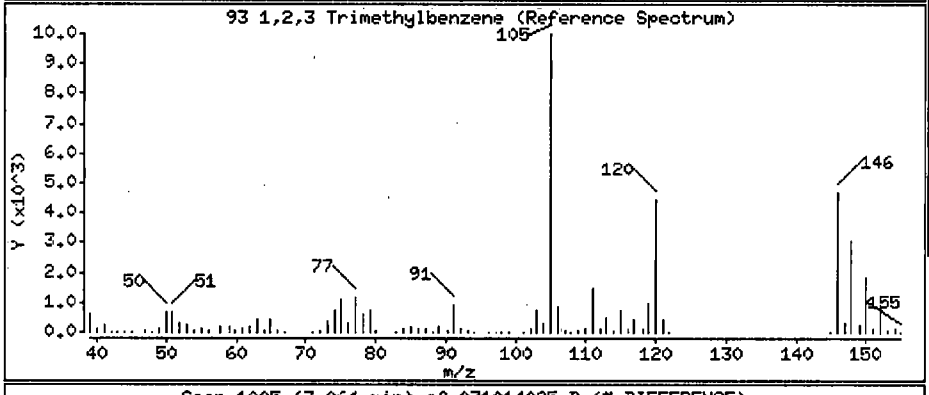
Concentration: 0.090 ug/Kg

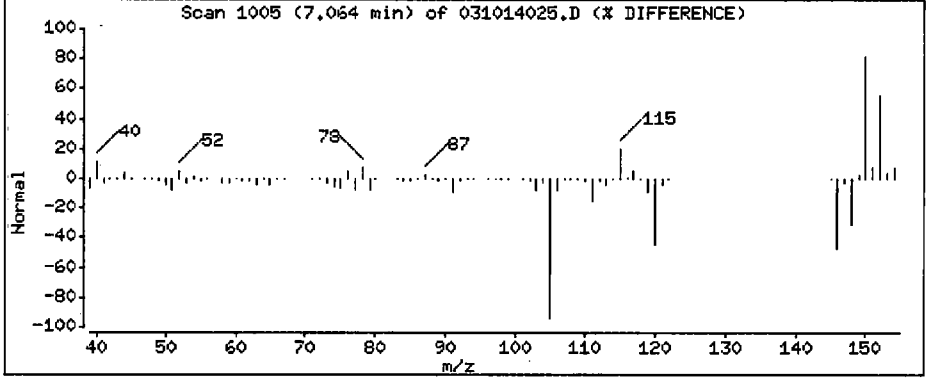












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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5,39

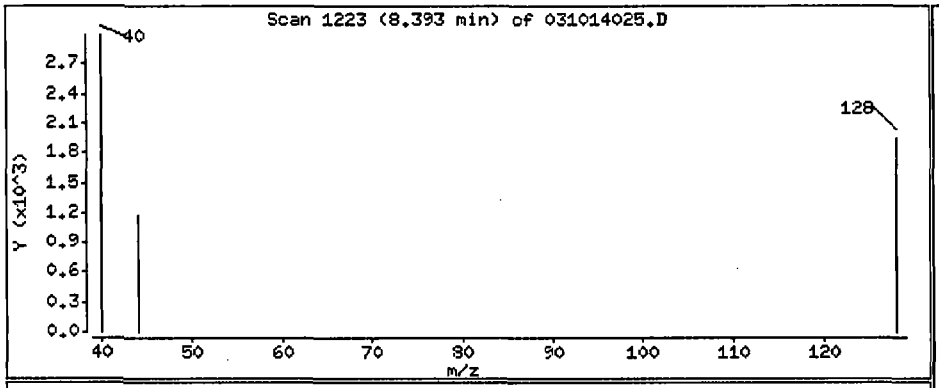
Operator: HBP

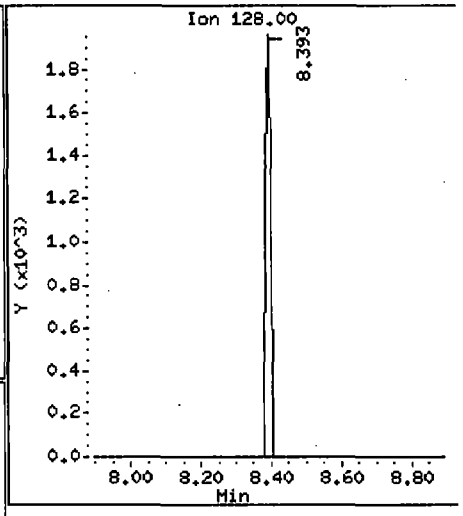
Column phase: Rtx-VMS

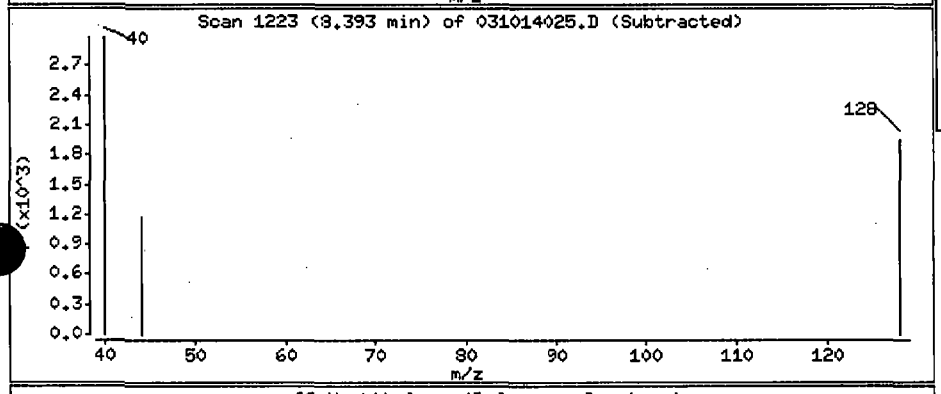
Column diameter: 0.18

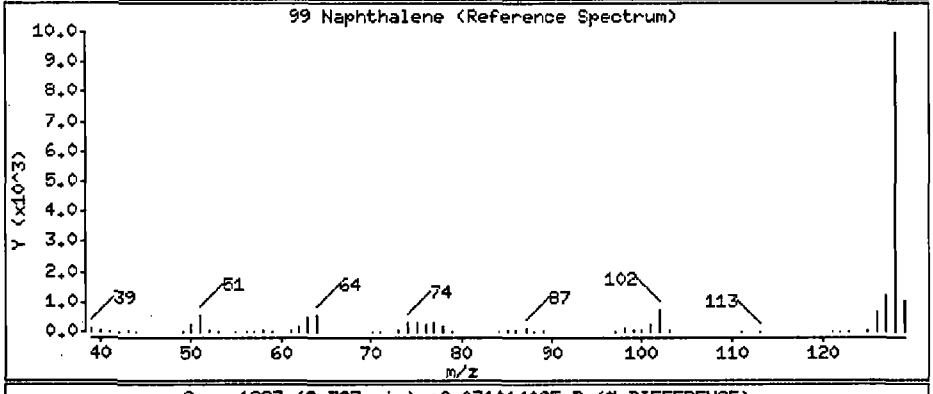
99 Naphthalene

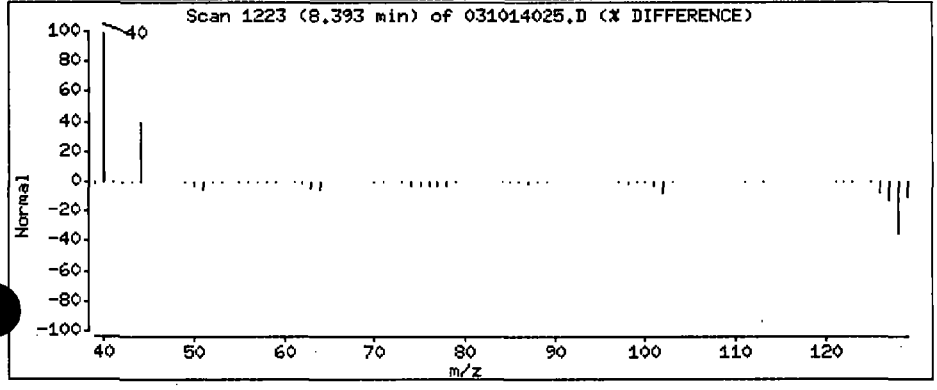
Concentration: 0.16 ug/Kg











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Date : 10-MAR-2014 18:26

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055002,5.39

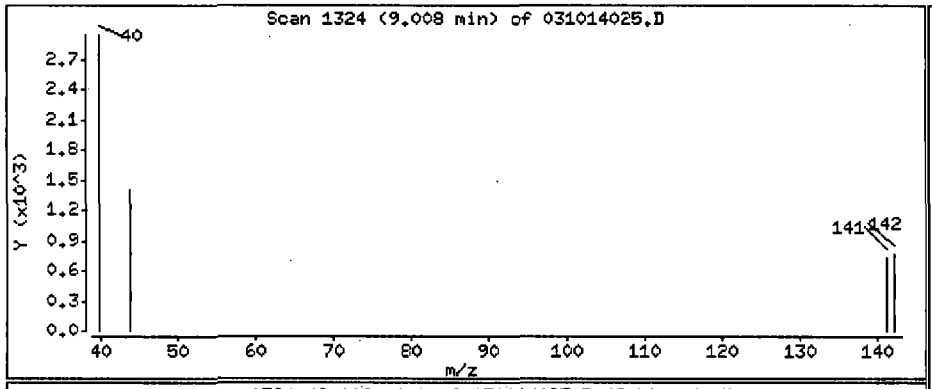
Operator: HBP

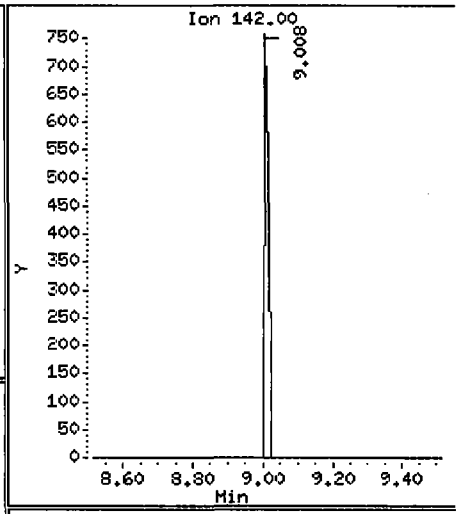
Column phase: Rtx-VMS

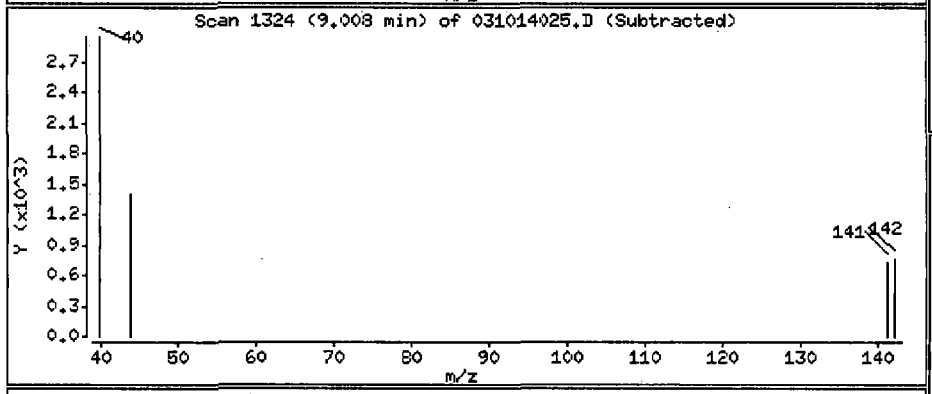
Column diameter: 0.18

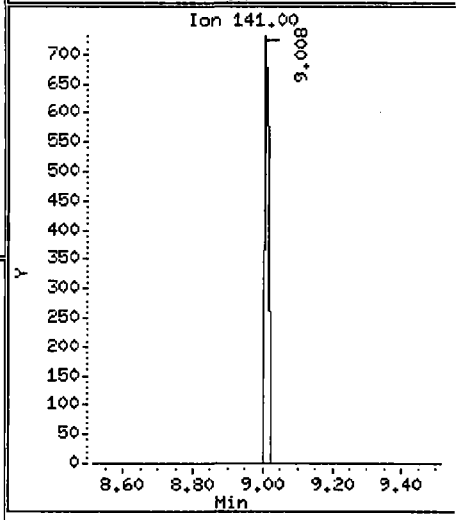
101 2-Methylnaphthalene

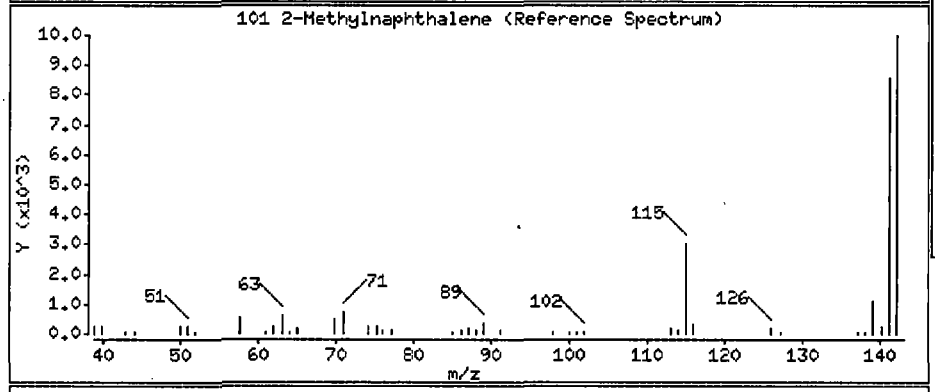
Concentration: 0.12 ug/Kg

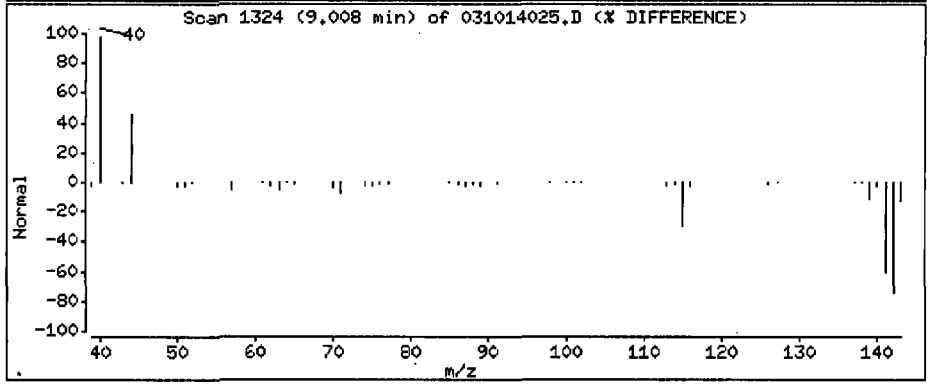












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b/031014025.D
Injection Date: 10-MAR-2014 18:26
Instrument: 10msv7.i
Lab Sample ID: 10259055002
SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014026.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014026.D
Lab Smp Id: 10259055003
Inj Date : 10-MAR-2014 18:45
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259055003,5.99
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.990	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.101	2.101	(0.500)	6903	0.49160	0.59(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	2.637	2.637	(0.627)	2723	0.13959	0.17(a)
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	151158	200.000	
19	Acetone	58	2.698	2.698	(1.018)	2890	6.95125	8.3(Q)
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014026.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	21 Hexane	86	2.857	2.863	(1.078)	3919	3.55363	4.2(a)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	3.753	3.753	(0.893)	13444	1.97297	2.4(aQ)
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.143	4.143	(0.985)	26210	1.54868	1.8(a)
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	981421	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	400190	105.639	106
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1455215	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	197180	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.882)	1686361	98.6577	98.6
	58 Toluene	92	5.131	5.130	(0.886)	36426	3.30933	4.0(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	Compound Not Detected.					
*	67 Chlorobenzene-d5	117	5.789	5.789	(1.000)	1454777	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.801	5.801	(1.002)	25624	1.22161	1.5(a)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.868	5.868	(1.014)	14257	1.74519	2.1(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.075	6.075	(1.049)	6544	0.85422	1.0(a)
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014026.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
75	Isopropylbenzene (Cumene)	105	6.234	6.234	(1.077)	2511	0.12249	0.15(a)
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	726297	101.838	102
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	6.453	6.453	(0.916)	5280	0.21139	0.25(a)
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	5954	0.33688	0.40(a)
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	19816	1.10125	1.3(a)
88	sec-Butylbenzene	105	Compound Not Detected.					
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	888955	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	8059	0.42628	0.51(a)
94	n-Butylbenzene	91	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
99	Naphthalene	128	8.392	8.392	(1.191)	5943	0.45793	0.55(a)
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
101	2-Methylnaphthalene	142	9.008	9.014	(1.279)	1776	0.35242	0.42(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014026.D
Lab Smp Id: 10259055003
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	151158	5.21
41 Pentafluorobenzen	966546	483273	1933092	981421	1.54
48 1,4 Difluorobenze	1457917	728959	2915834	1455215	-0.19
53 1,4 dioxane d8	174389	87195	348778	197180	13.07
67 Chlorobenzene-d5	1458689	729345	2917378	1454777	-0.27
91 1,4-Dichlorobenze	888899	444450	1777798	888955	0.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.79	0.00
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

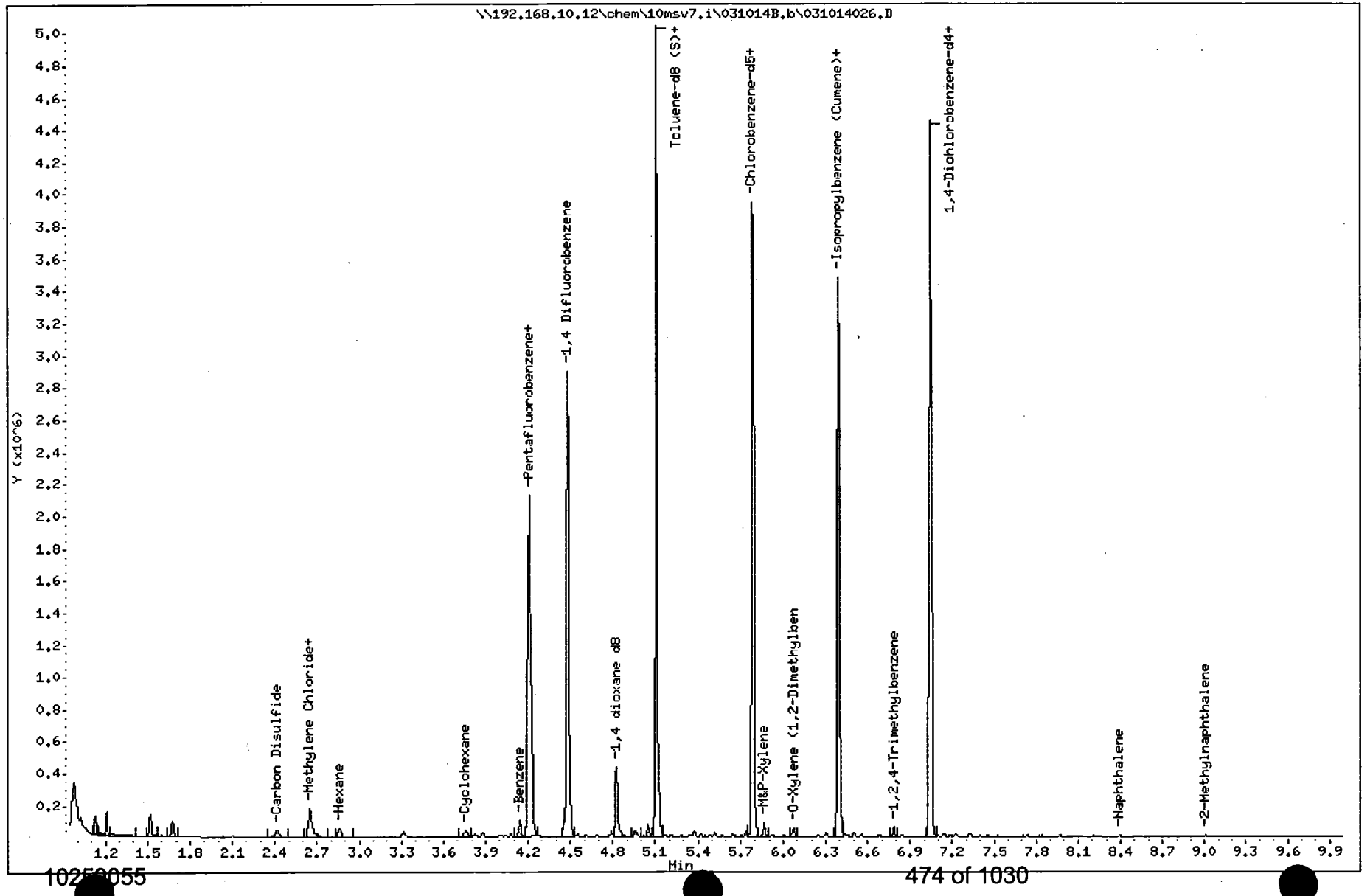
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014026.D
Date : 10-MAR-2014 18:45
Client ID:
Sample Info: 10259055003,5.99

Instrument: 10msv7.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

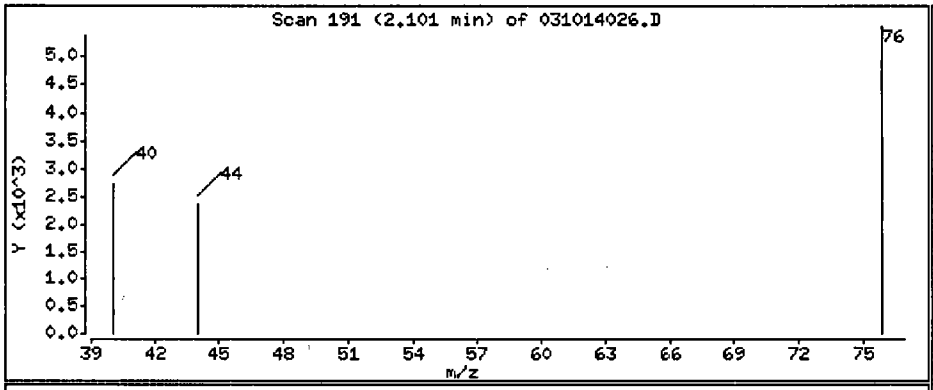
Operator: HBP

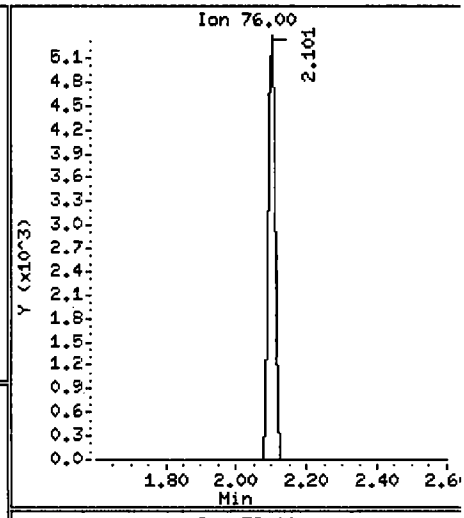
Column phase: Rtx-VMS

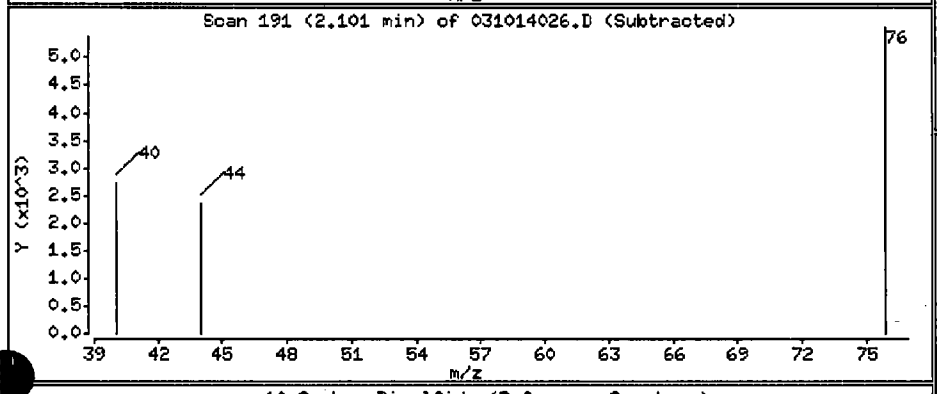
Column diameter: 0.18

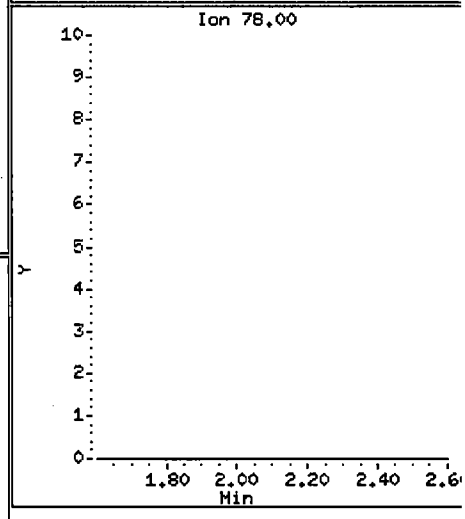
10 Carbon Disulfide

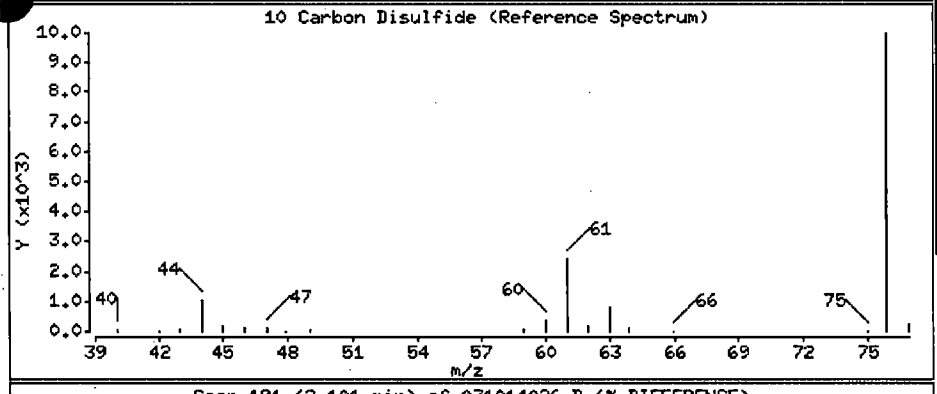
Concentration: 0.59 ug/Kg

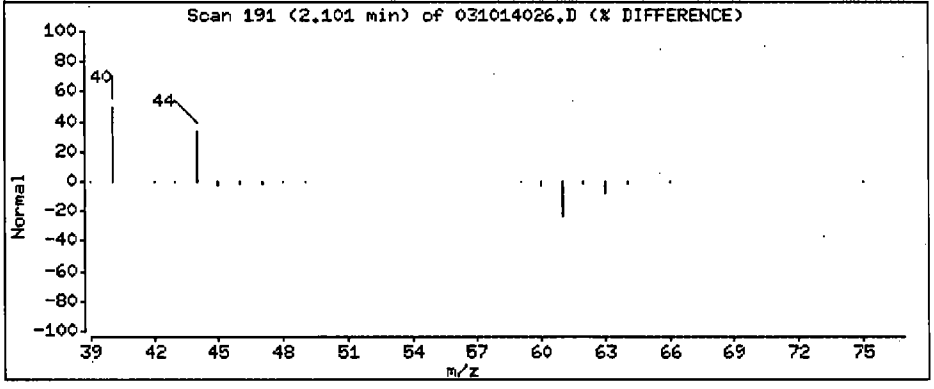












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

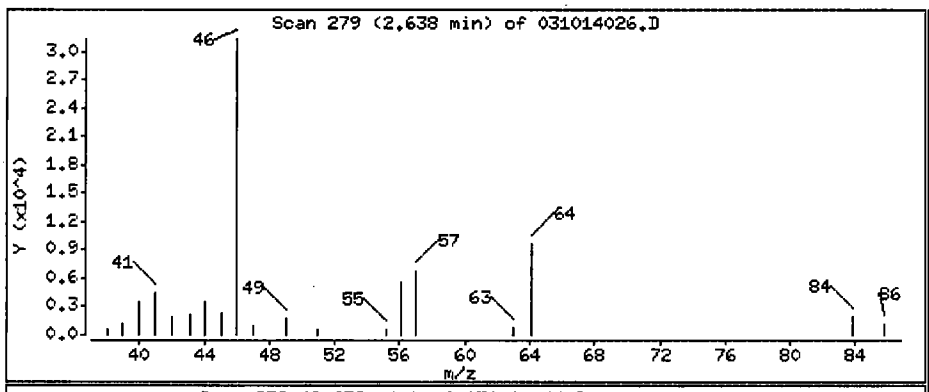
Operator: HBP

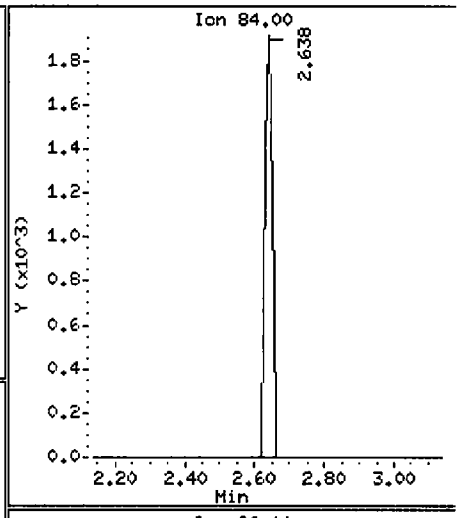
Column phase: Rtx-VMS

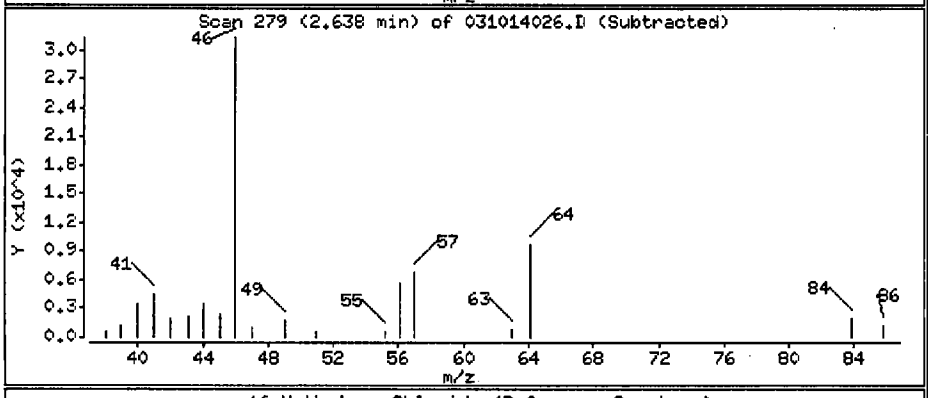
Column diameter: 0.18

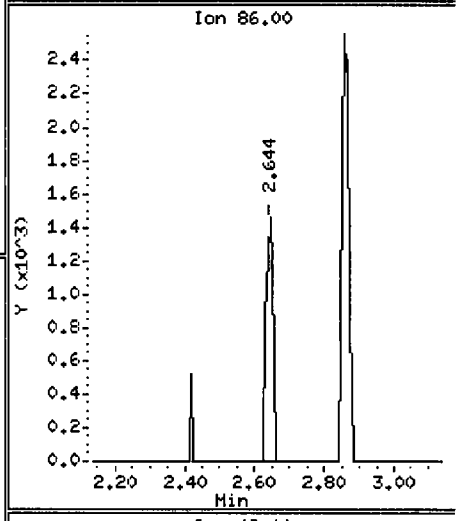
16 Methylene Chloride

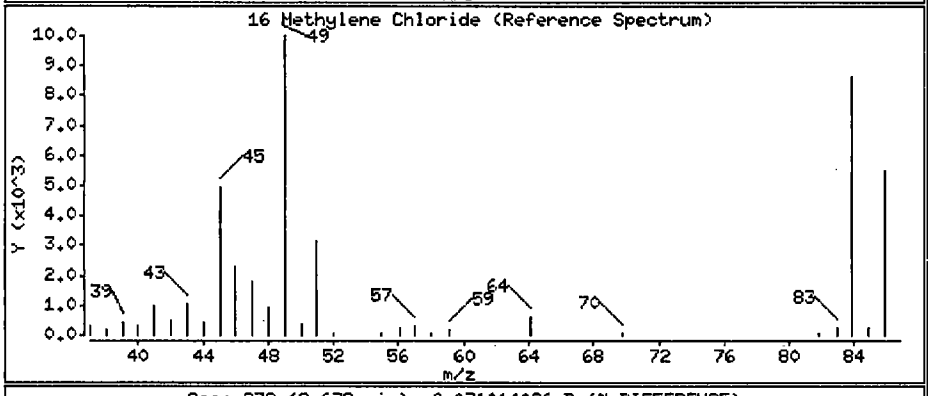
Concentration: 0.17 ug/Kg

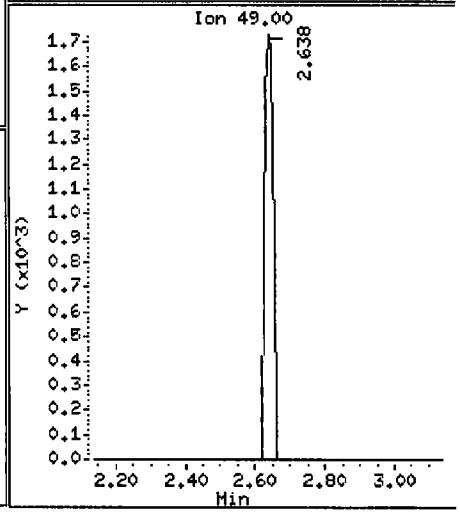


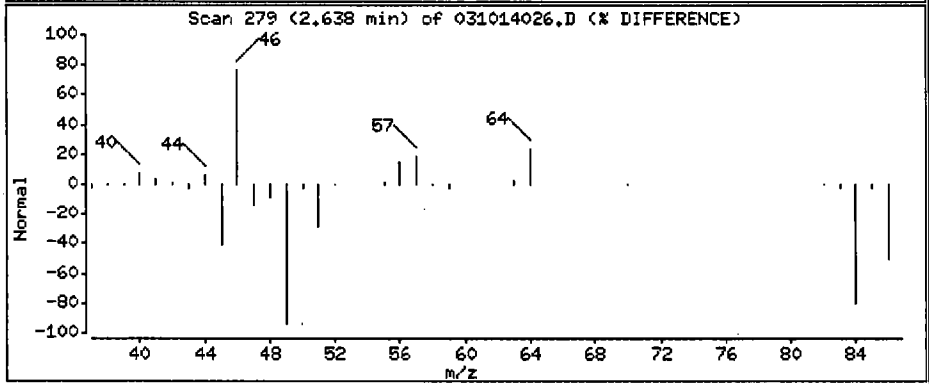












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

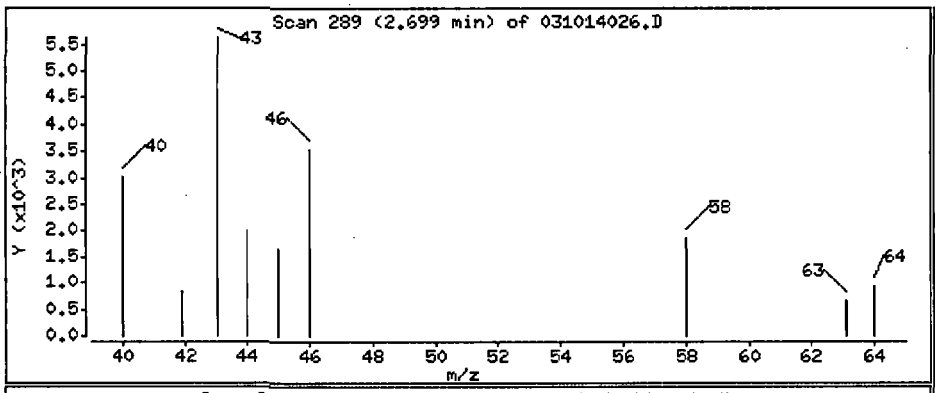
Operator: HBP

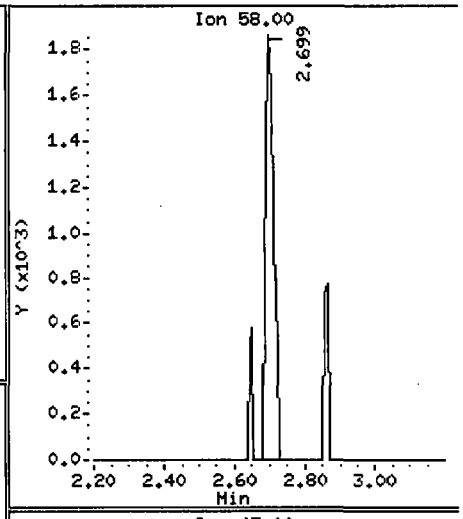
Column phase: Rtx-VMS

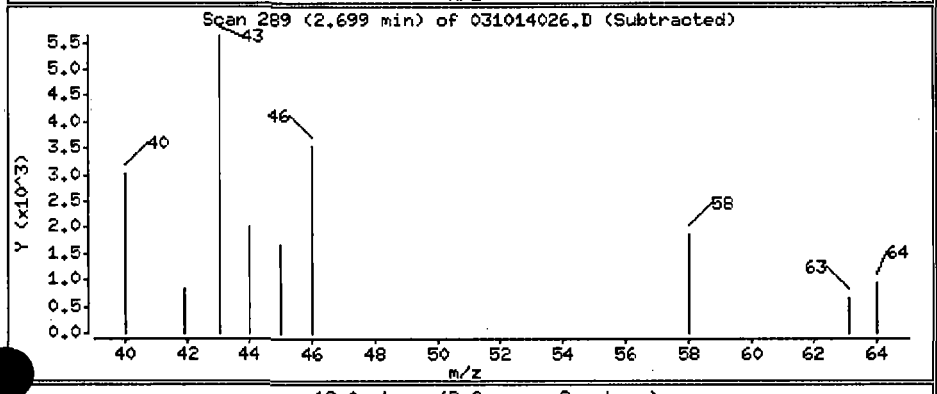
Column diameter: 0.18

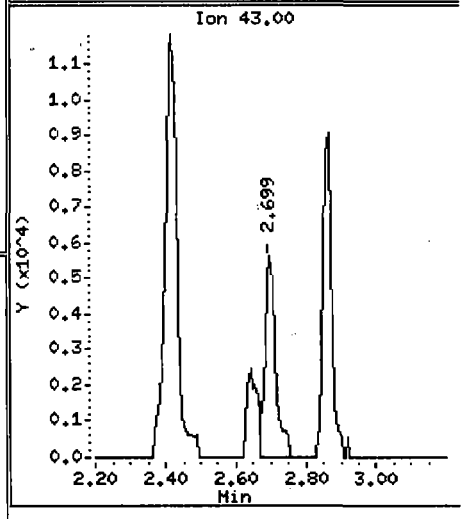
19 Acetone

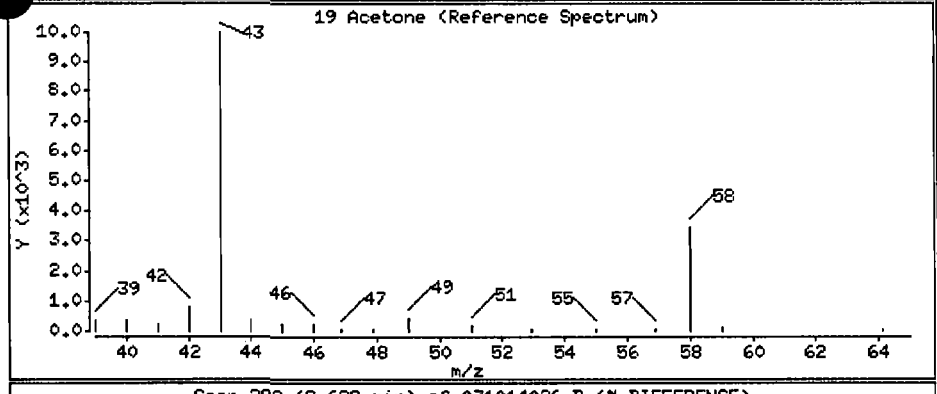
Concentration: 8.3 ug/Kg

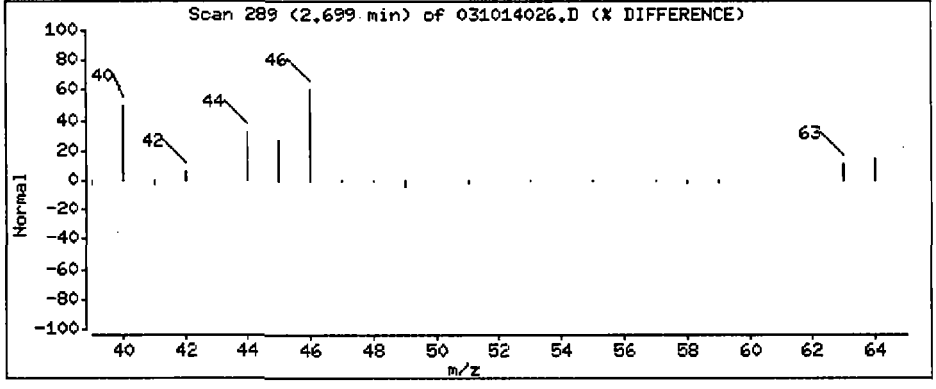












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

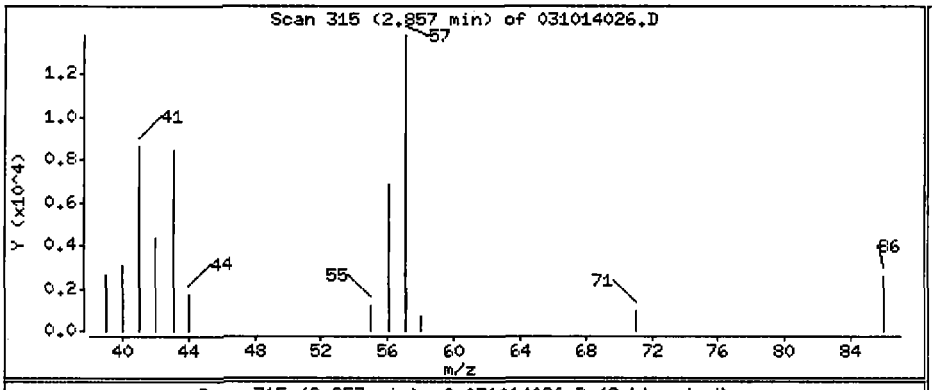
Operator: HBP

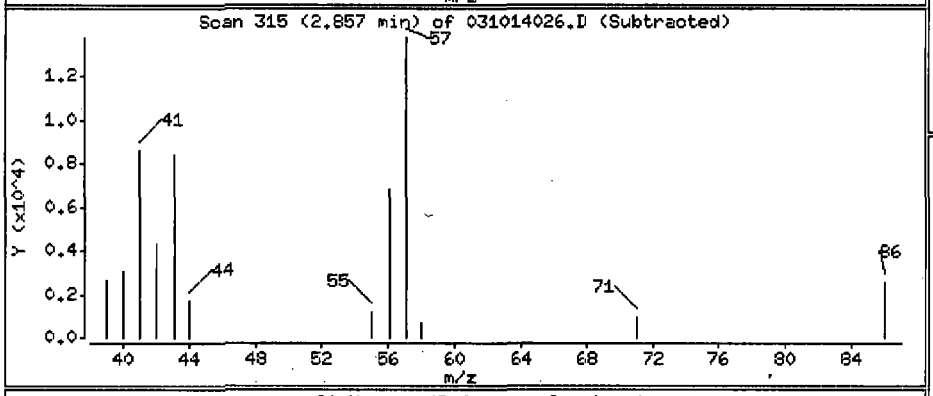
Column phase: Rtx-VMS

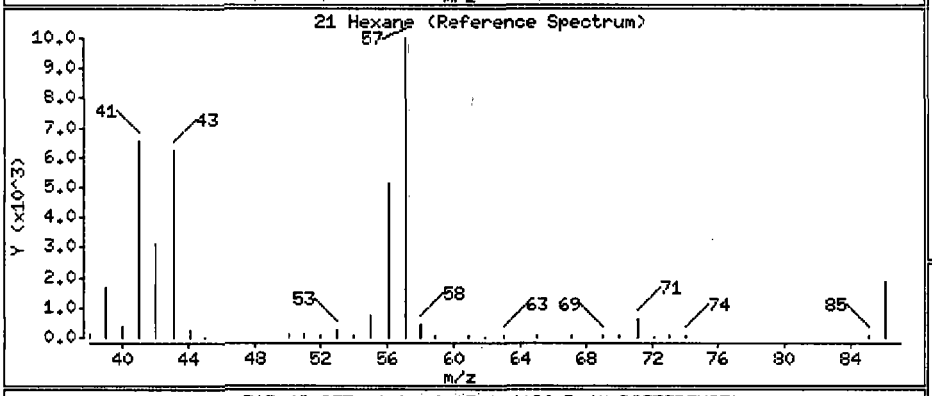
Column diameter: 0.18

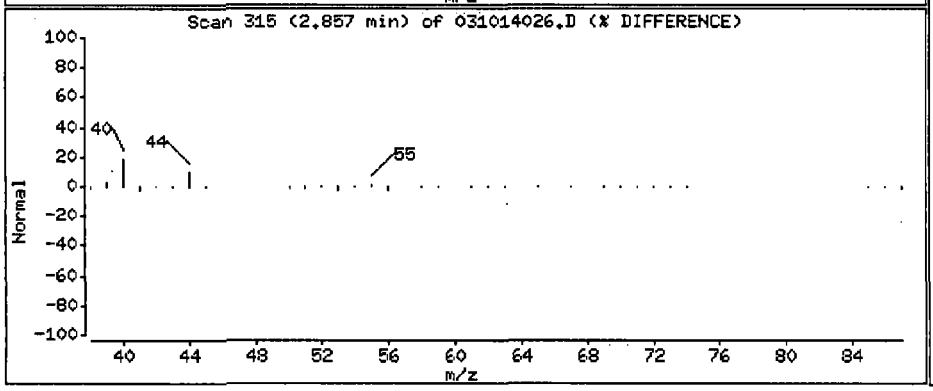
21 Hexane

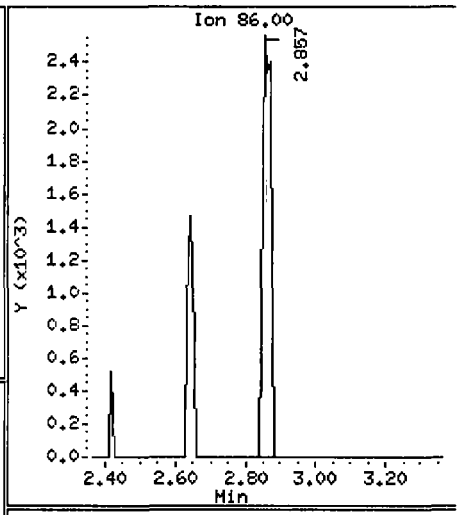
Concentration: 4.2 ug/Kg

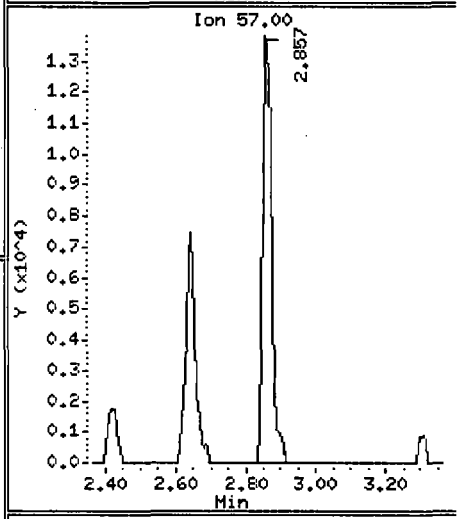


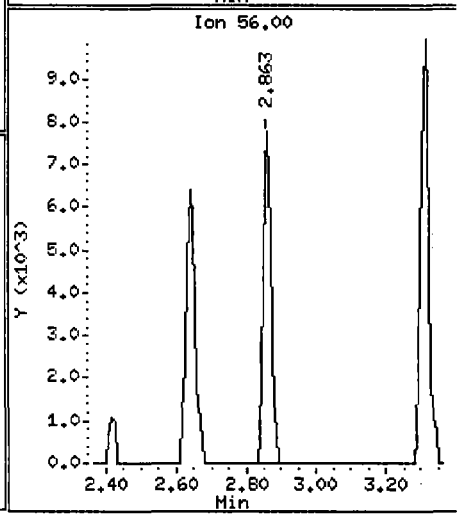












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

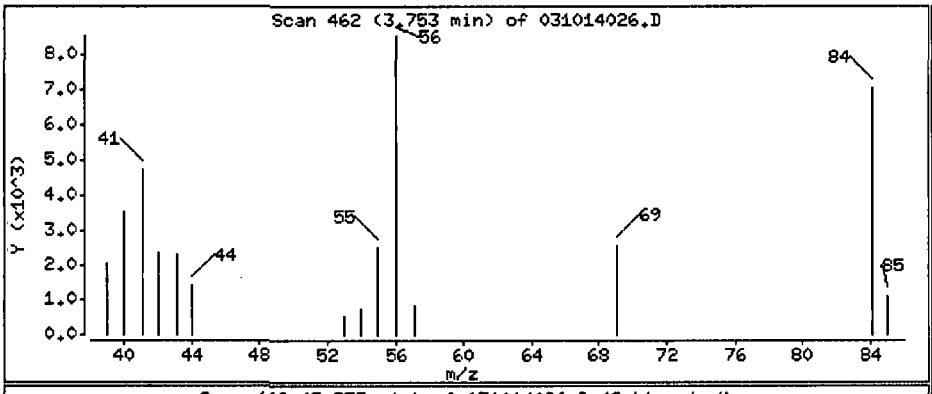
Operator: HBP

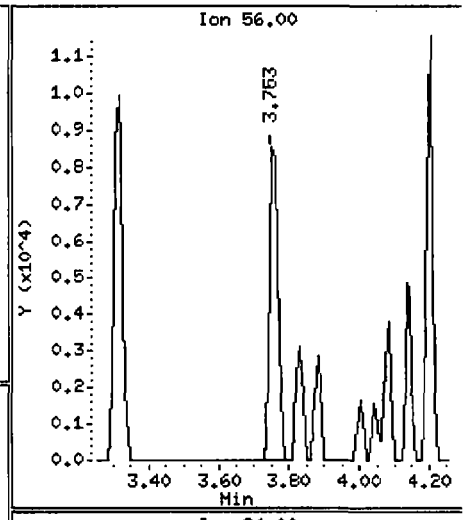
Column phase: Rtx-VMS

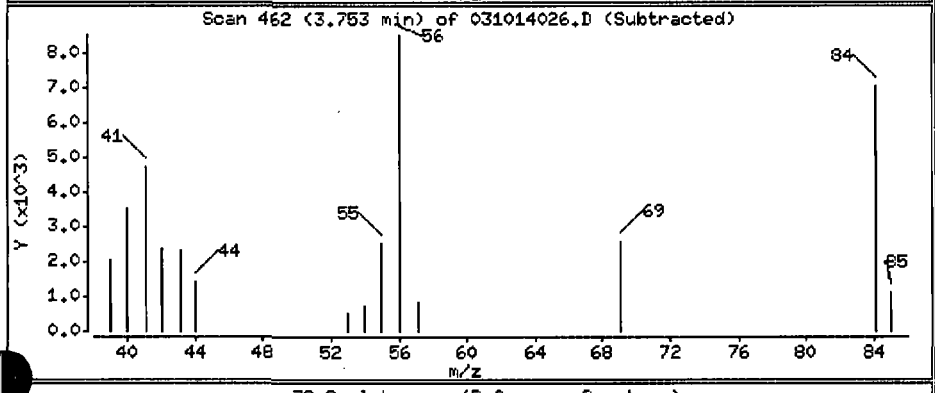
Column diameter: 0.18

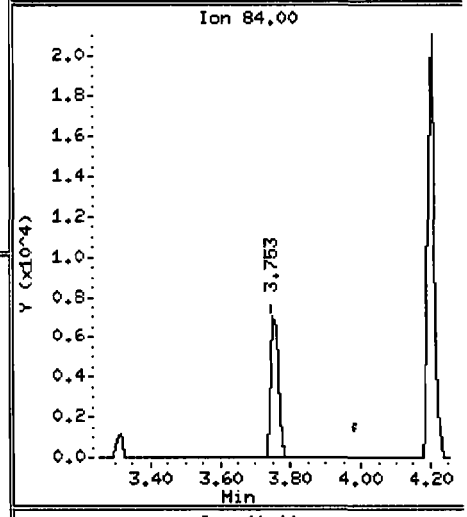
32 Cyclohexane

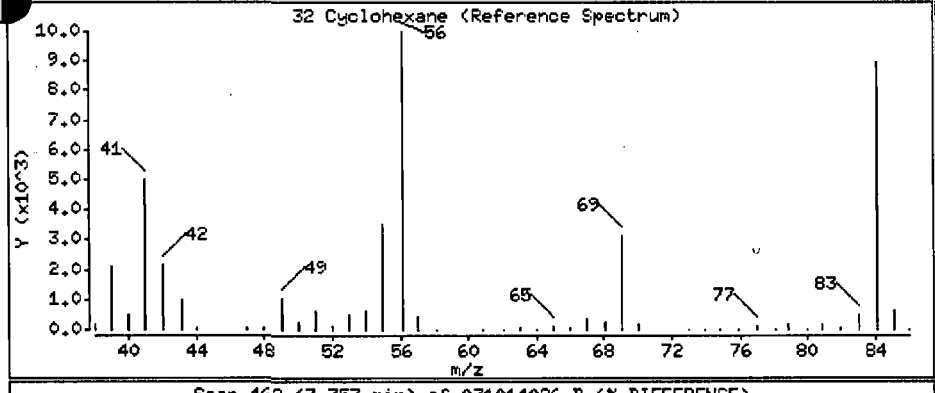
Concentration: 2.4 ug/Kg

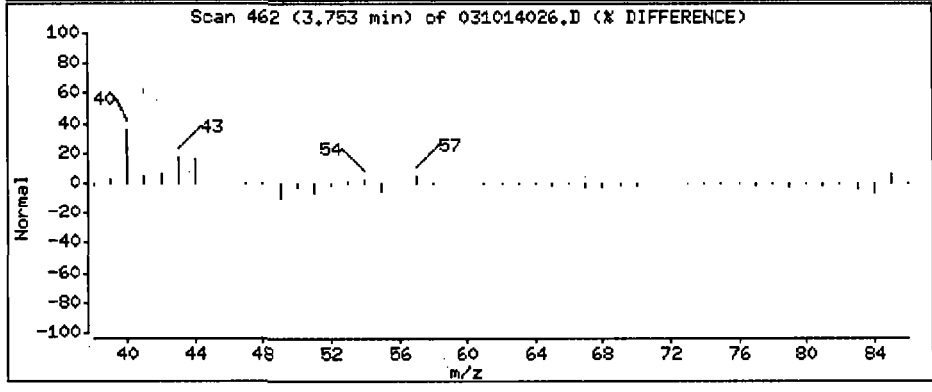


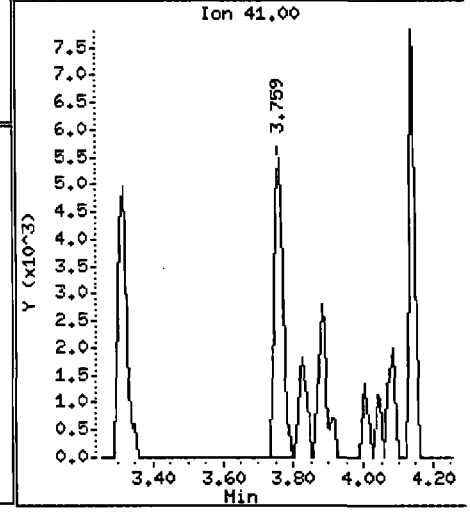












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

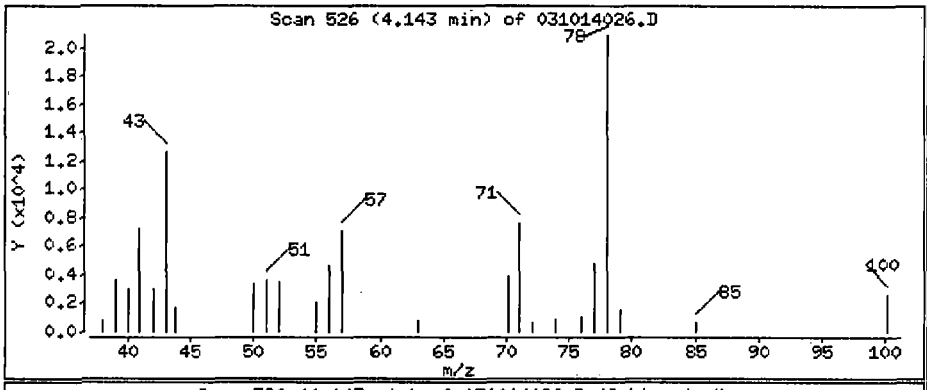
Operator: HBP

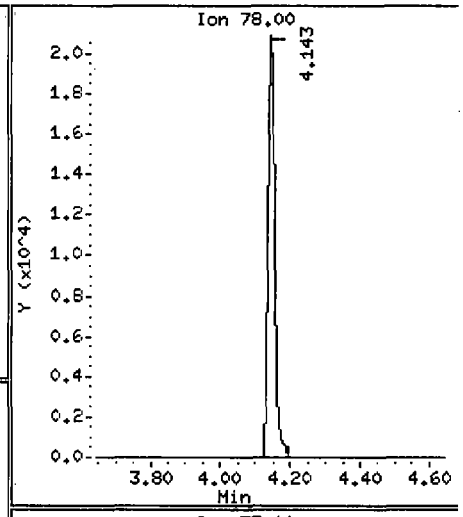
Column phase: Rtx-VMS

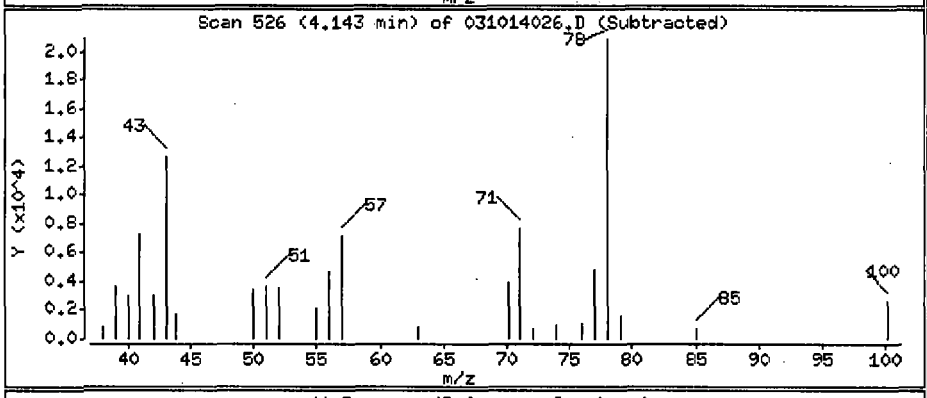
Column diameter: 0.18

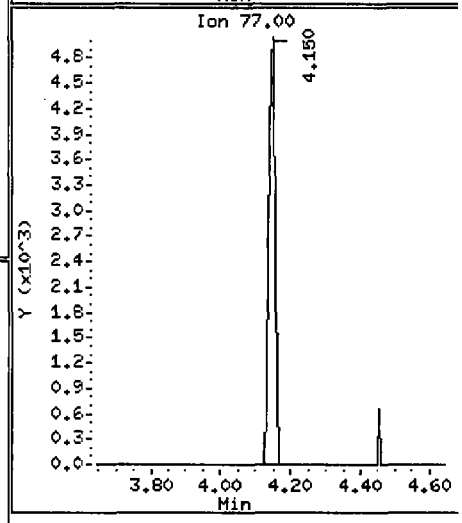
40 Benzene

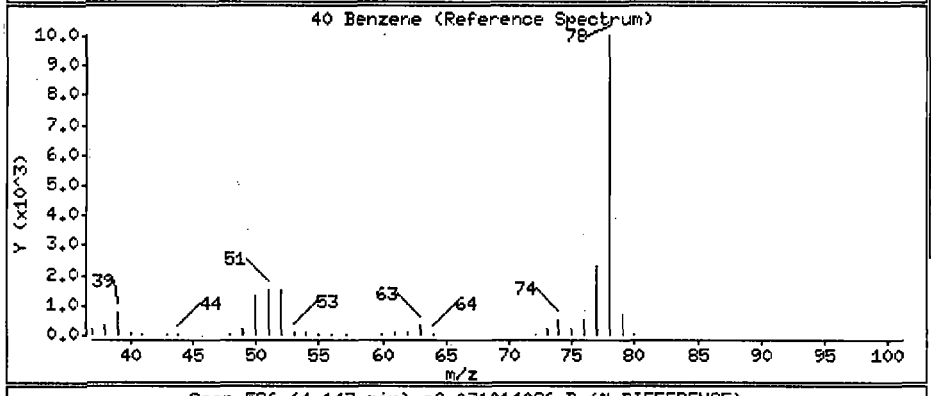
Concentration: 1.8 ug/Kg

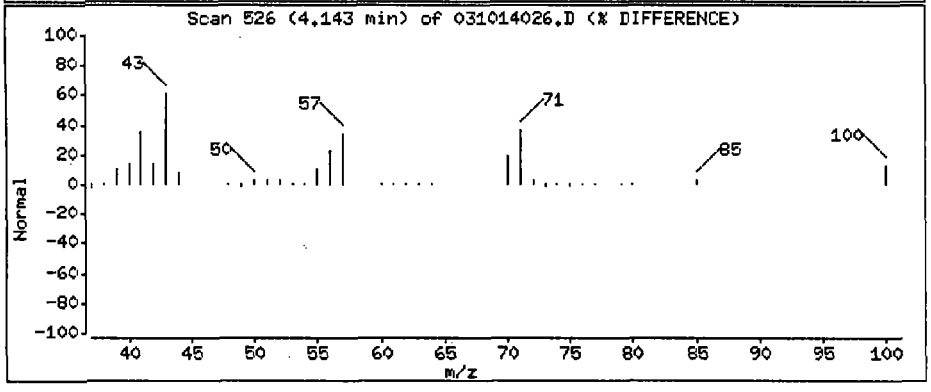












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

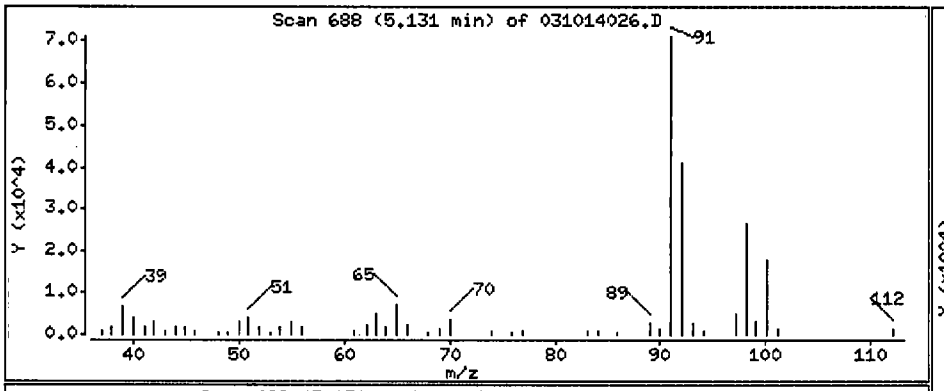
Operator: HBP

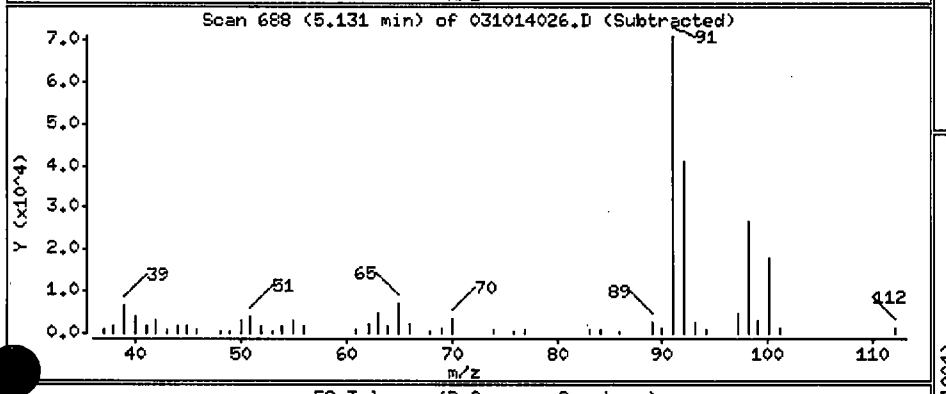
Column phase: Rtx-VMS

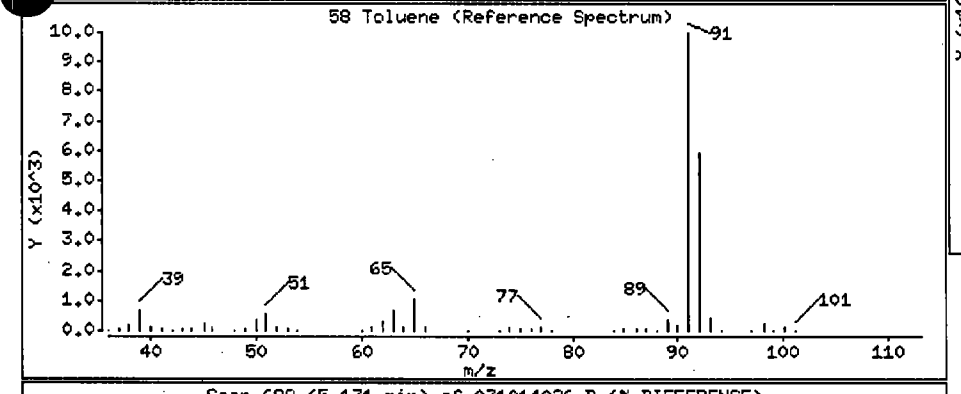
Column diameter: 0.18

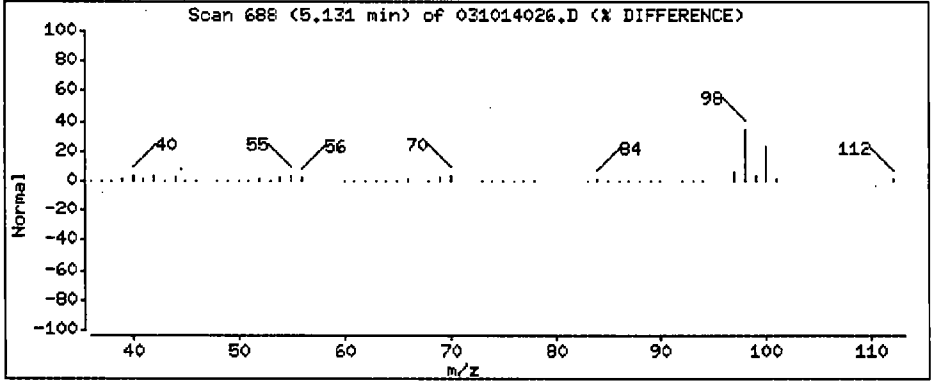
58 Toluene

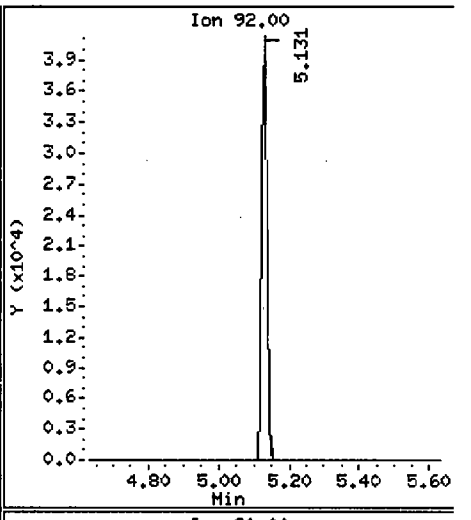
Concentration: 4.0 ug/Kg

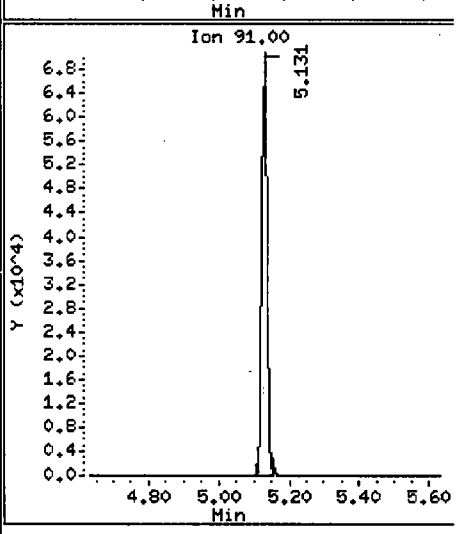












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

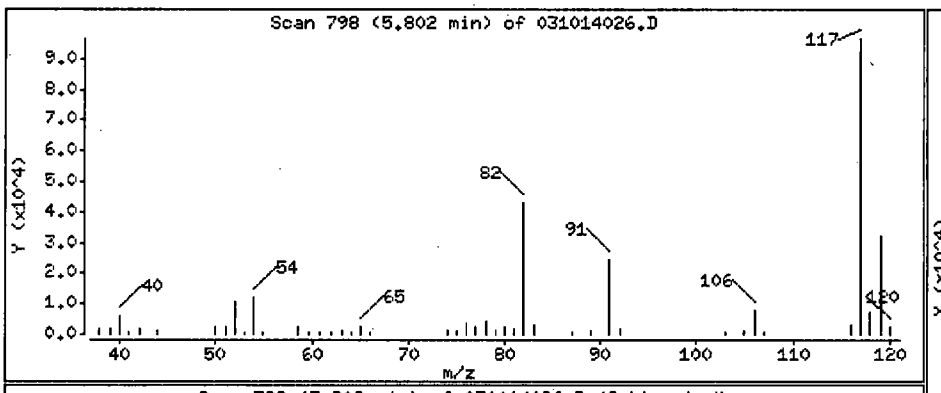
Operator: HBP

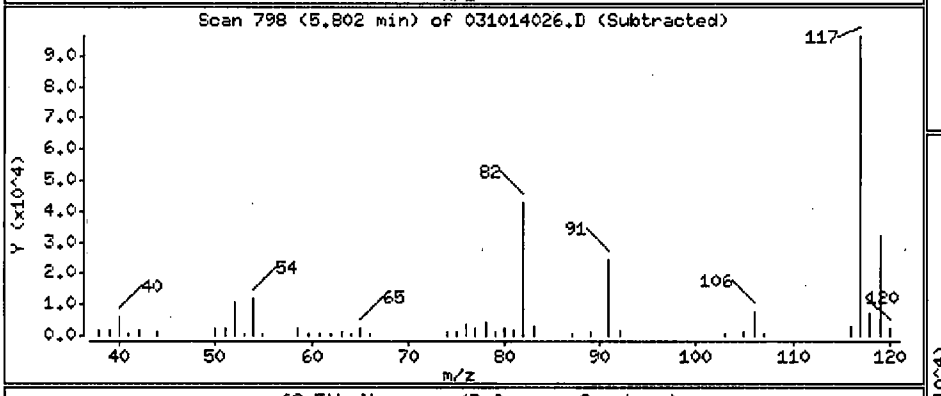
Column phase: Rtx-VMS

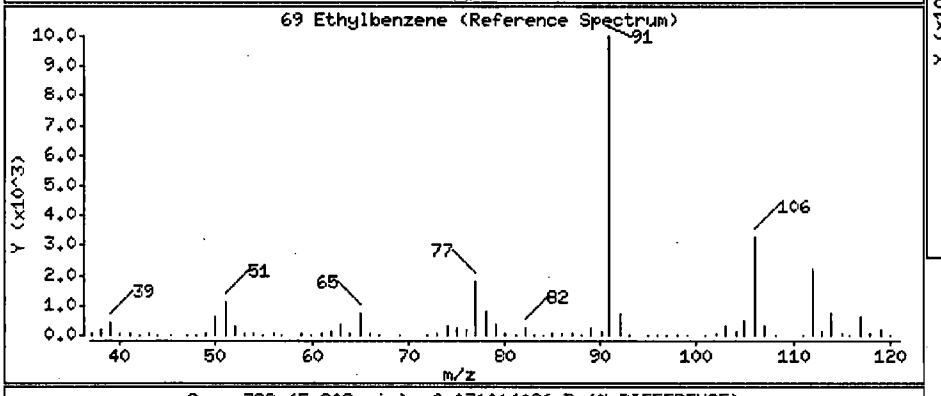
Column diameter: 0.18

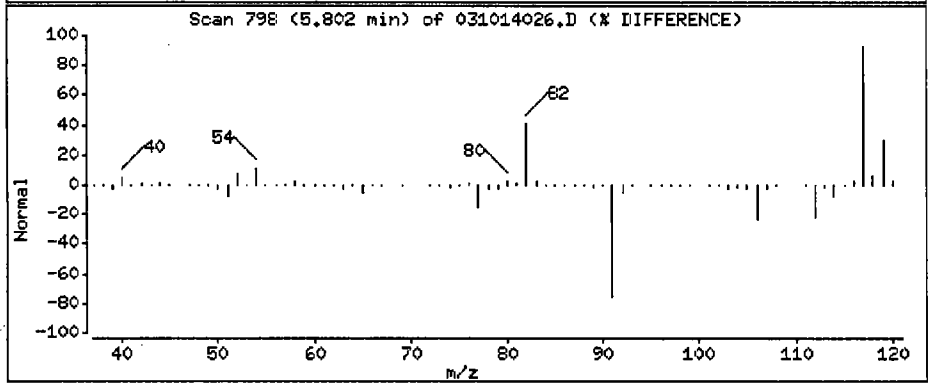
69 Ethylbenzene

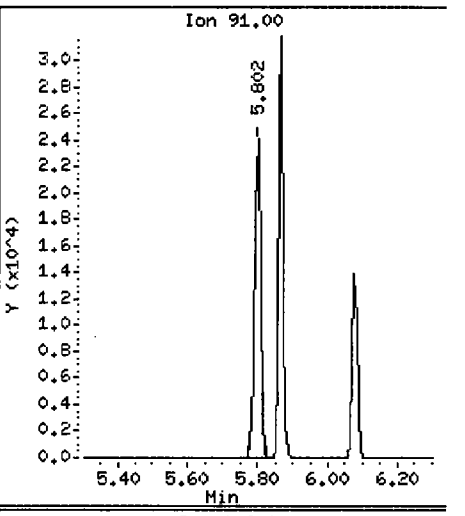
Concentration: 1.5 ug/Kg

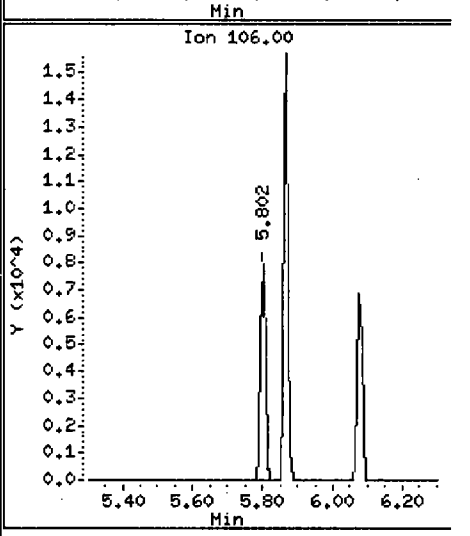












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

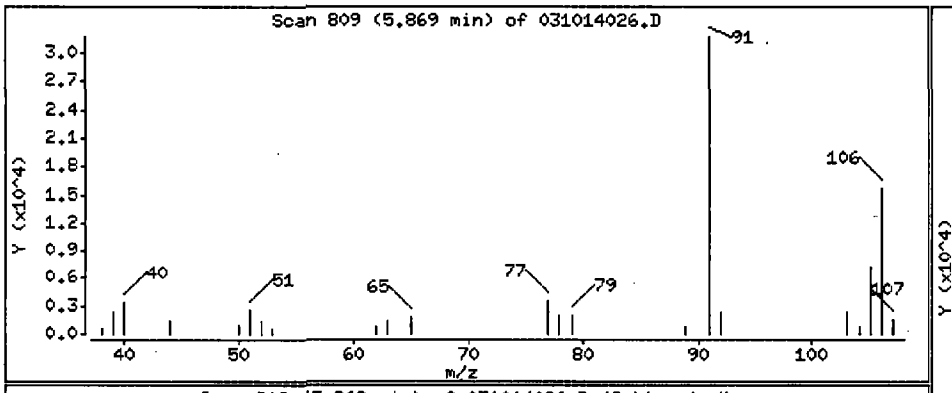
Operator: HBP

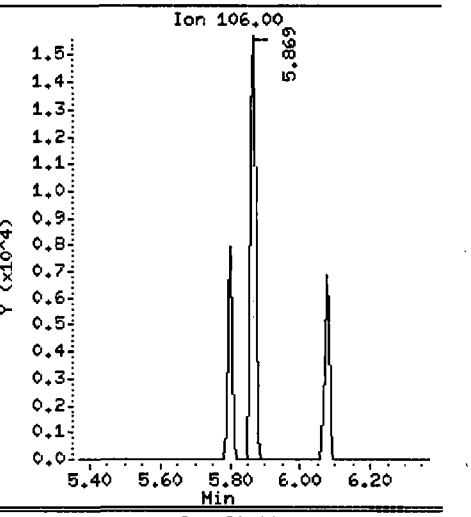
Column phase: Rtx-VMS

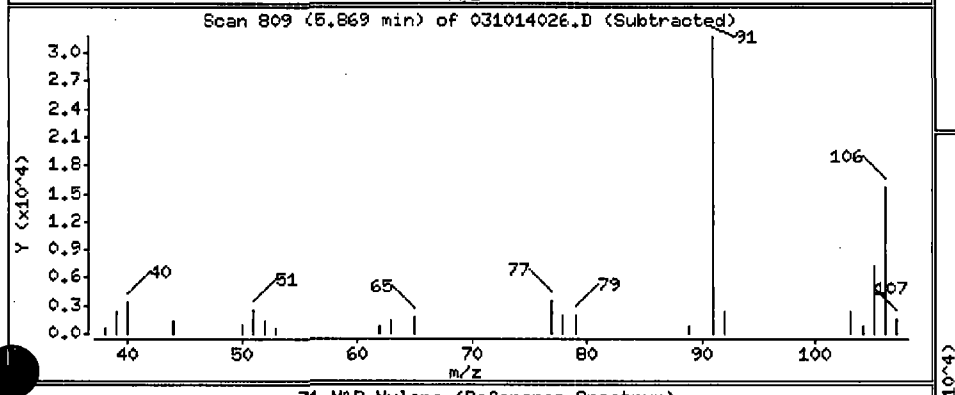
Column diameter: 0.18

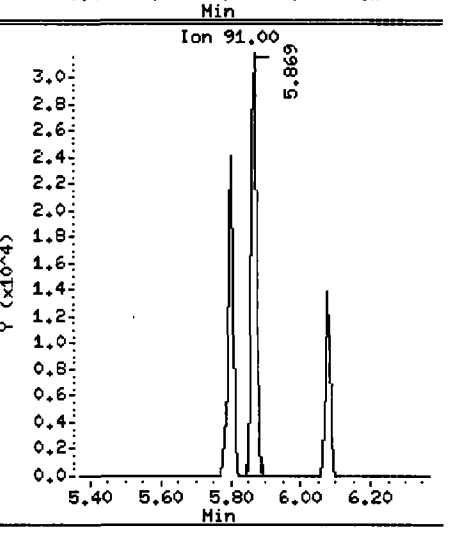
71 M&P-Xylene

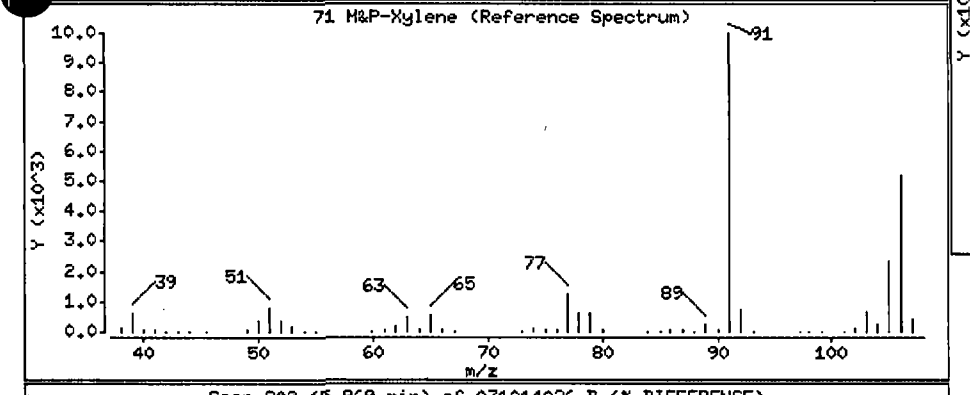
Concentration: 2.1 ug/Kg

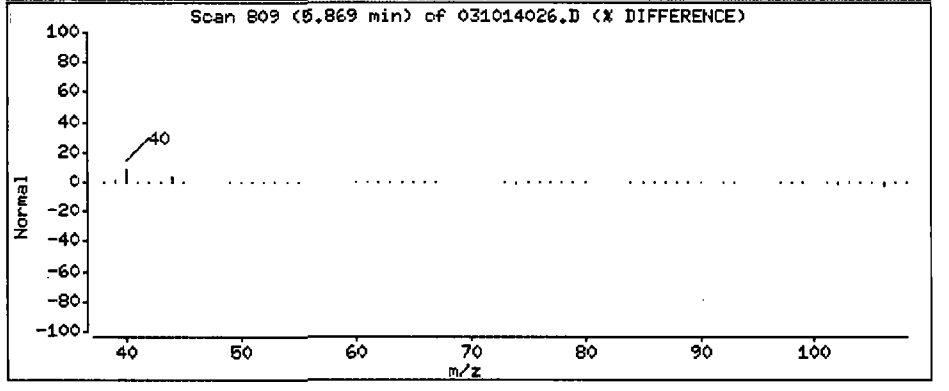












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

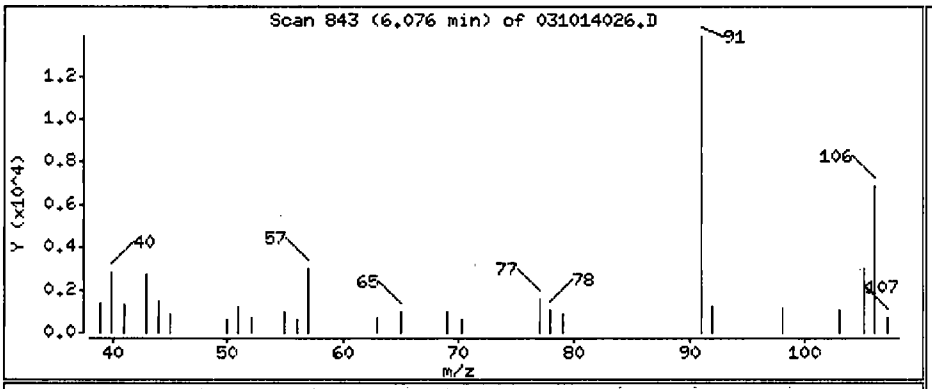
Operator: HBP

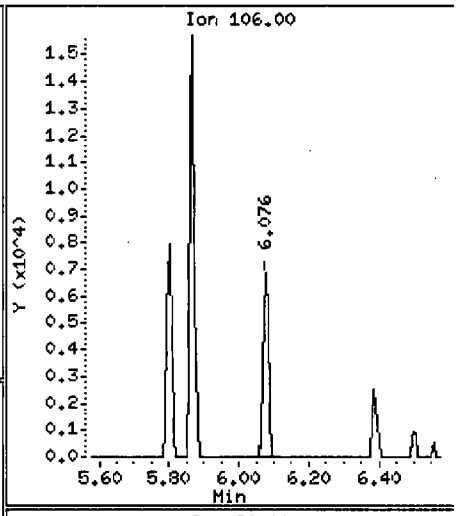
Column phase: Rtx-VMS

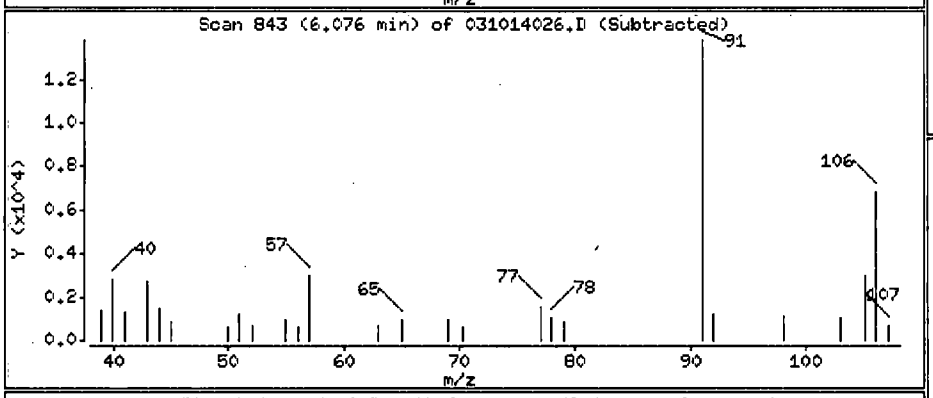
Column diameter: 0.18

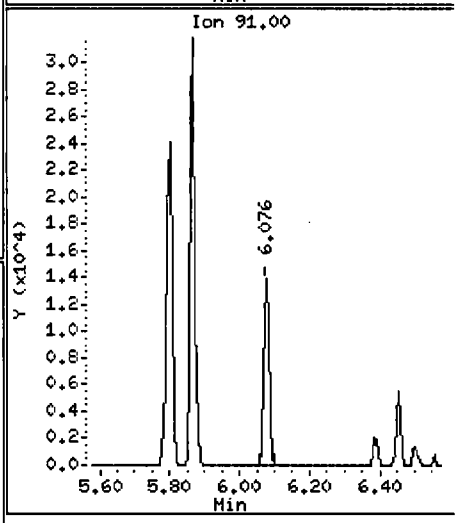
72 O-Xylene (1,2-Dimethylbenzene)

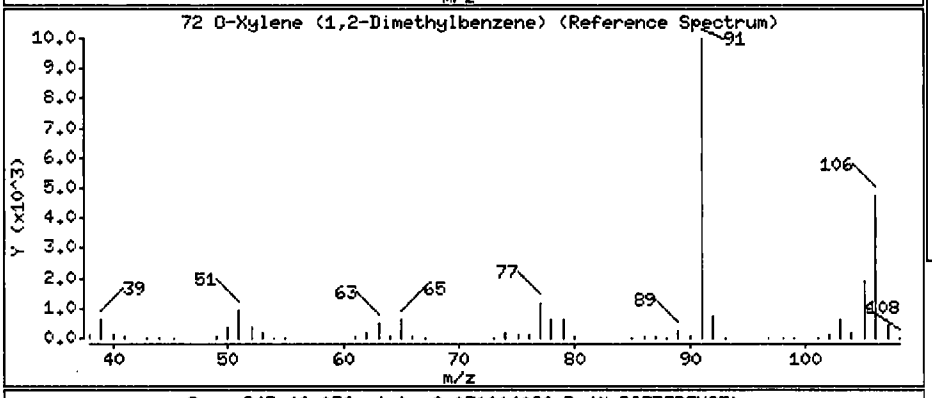
Concentration: 1.0 ug/Kg

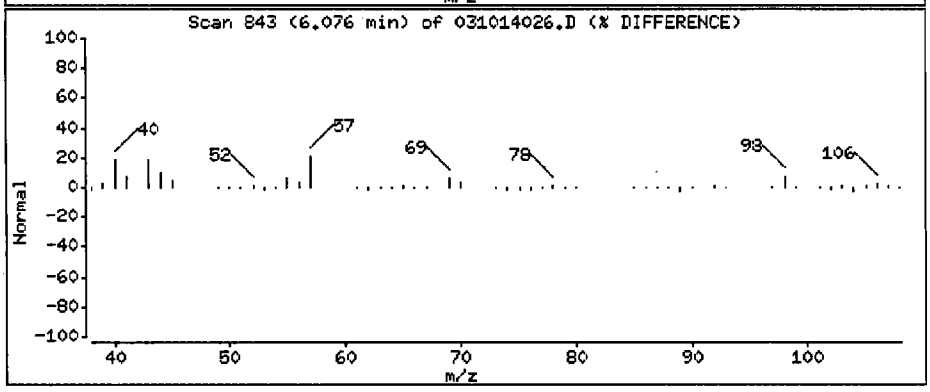












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

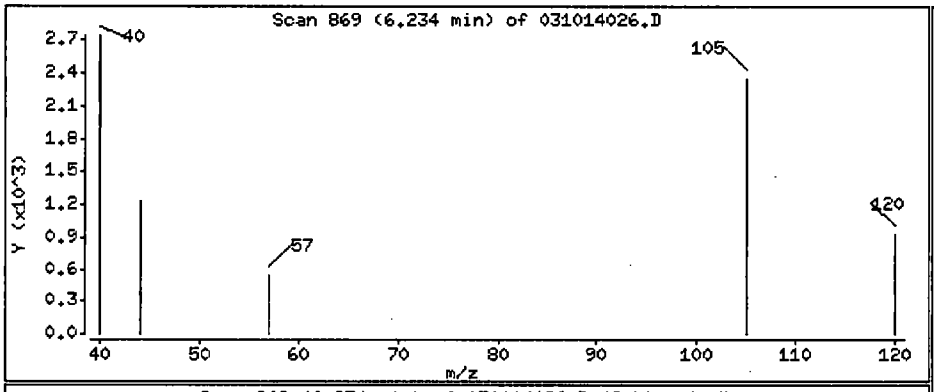
Operator: HBP

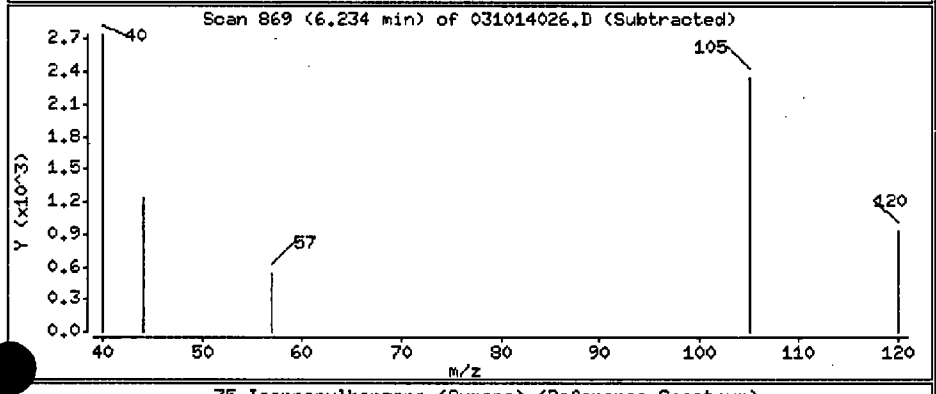
Column phase: Rtx-VMS

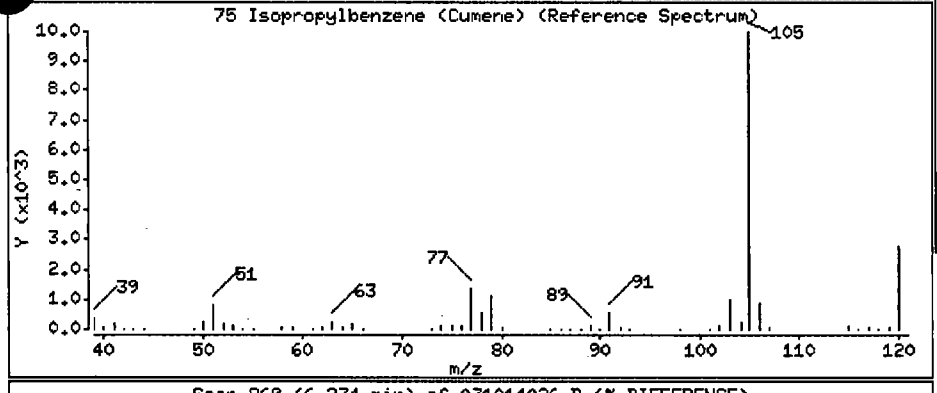
Column diameter: 0.18

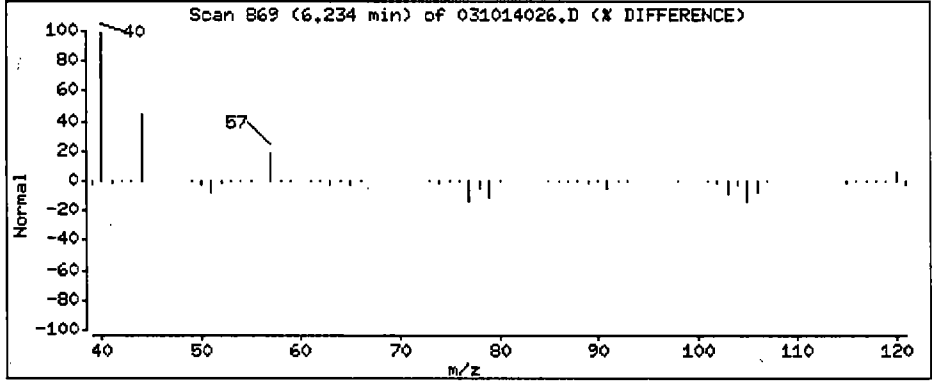
75 Isopropylbenzene (Cumene)

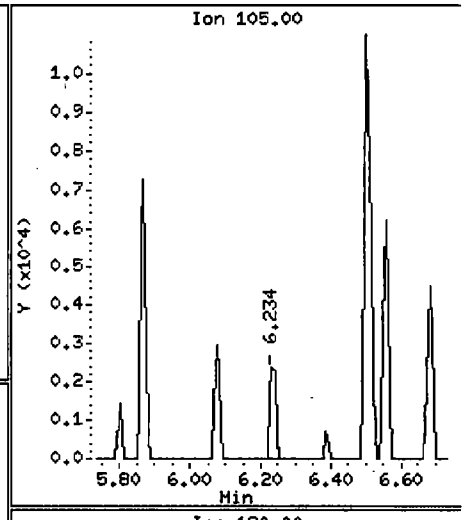
Concentration: 0.15 ug/Kg

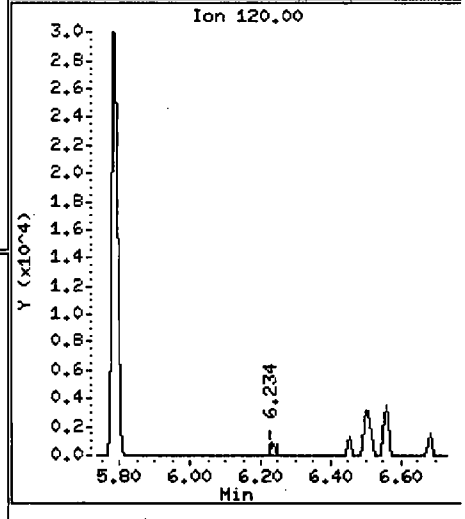












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

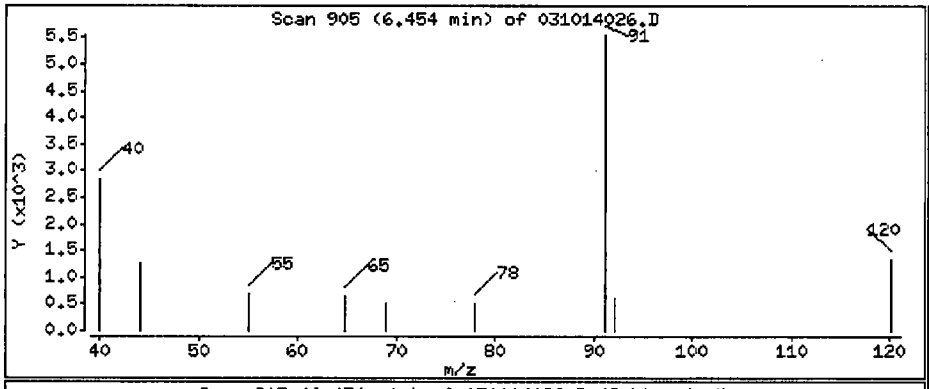
Operator: HBP

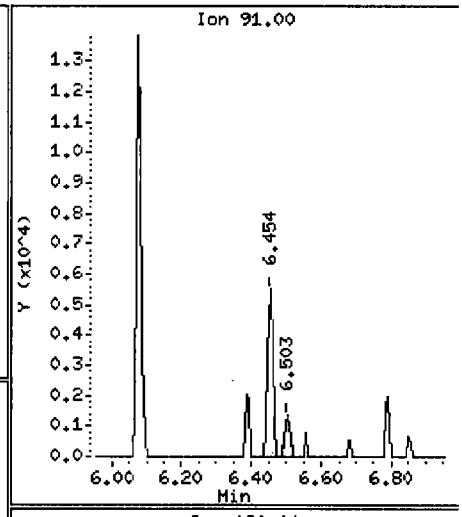
Column phase: Rtx-VMS

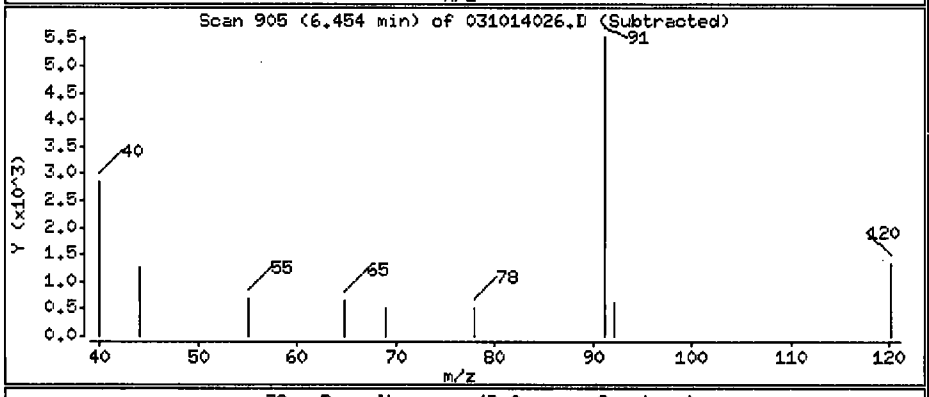
Column diameter: 0.18

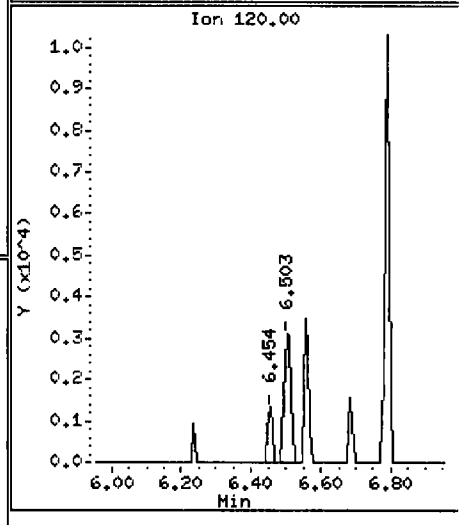
79 n-Propylbenzene

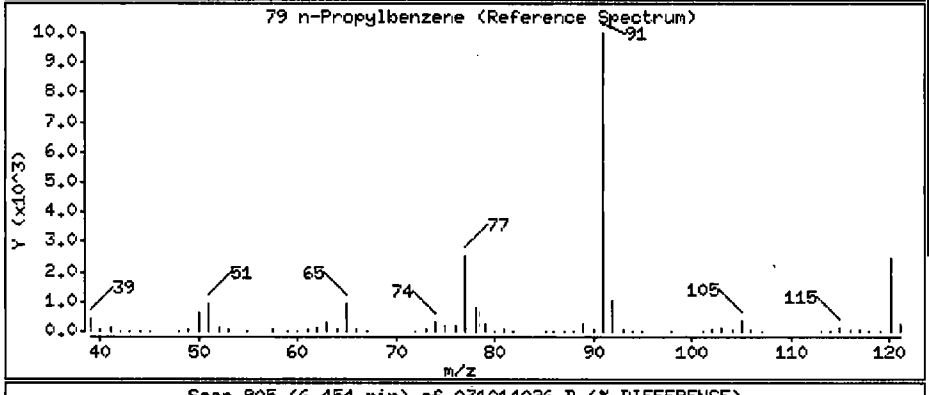
Concentration: 0.25 ug/Kg

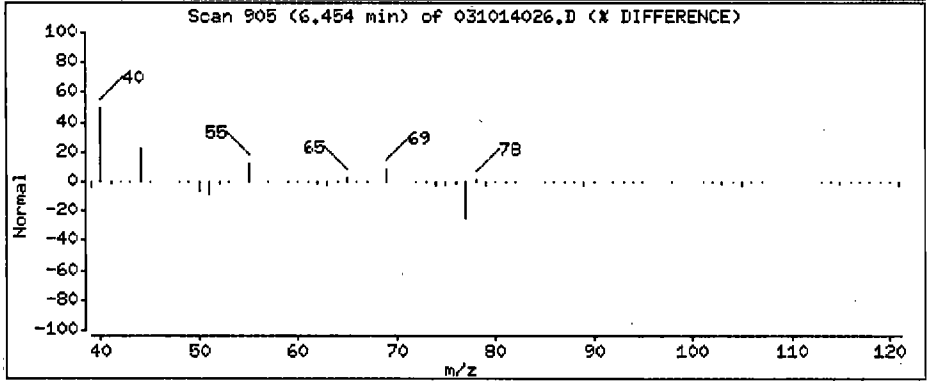












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

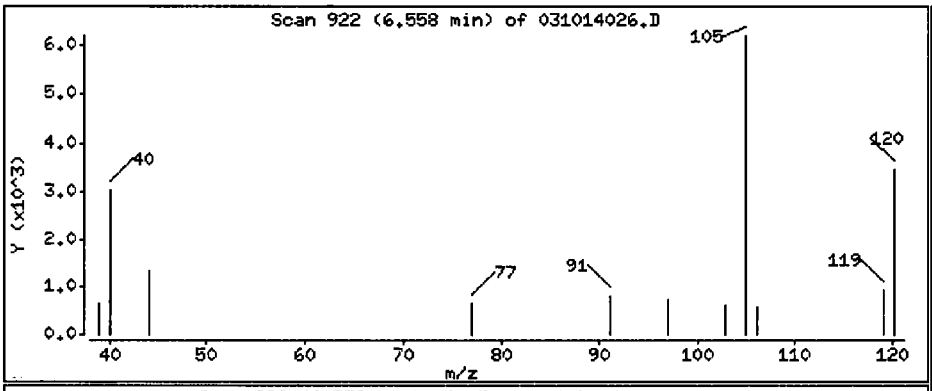
Operator: HBP

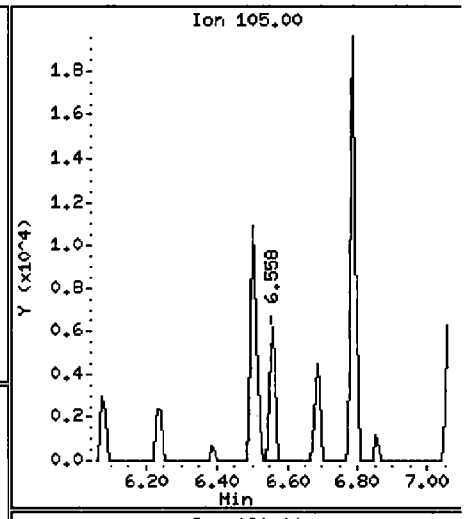
Column phase: Rtx-VMS

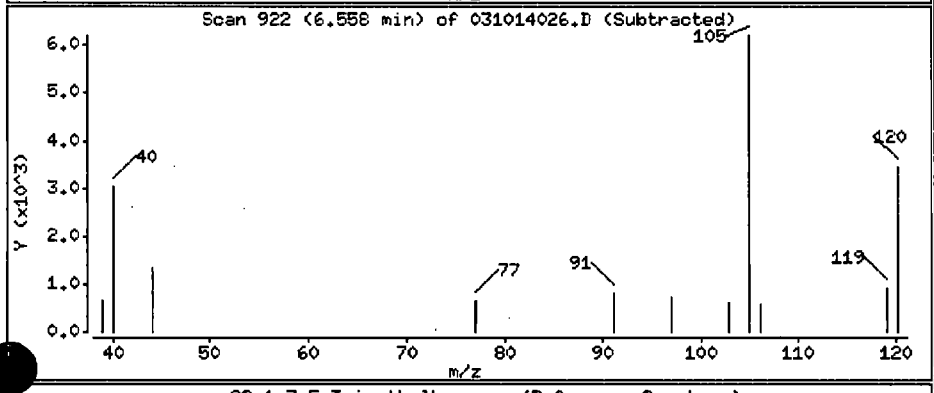
Column diameter: 0.18

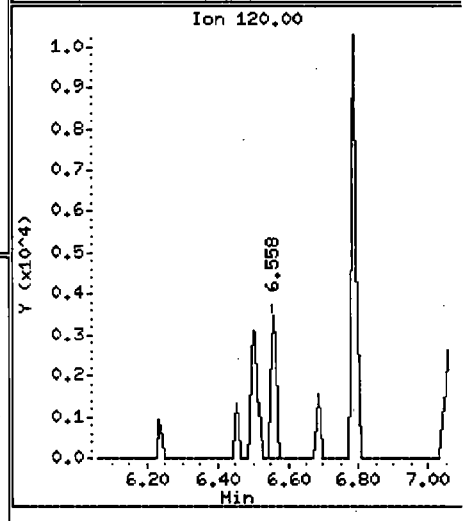
82 1,3,5-Trimethylbenzene

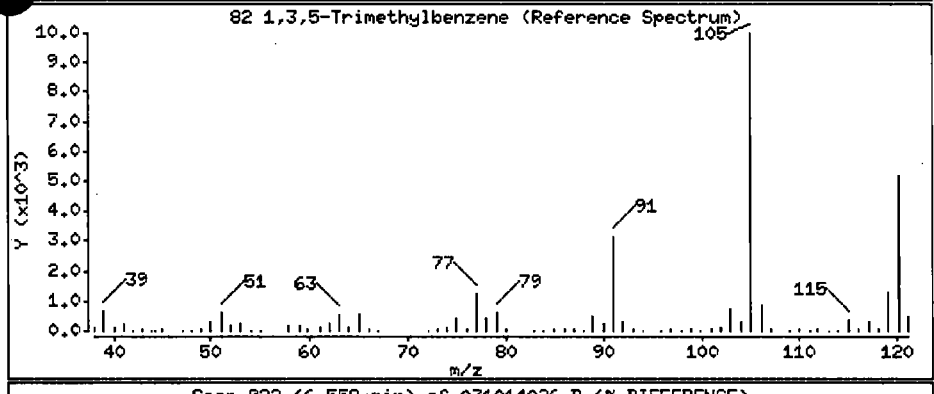
Concentration: 0.40 ug/Kg

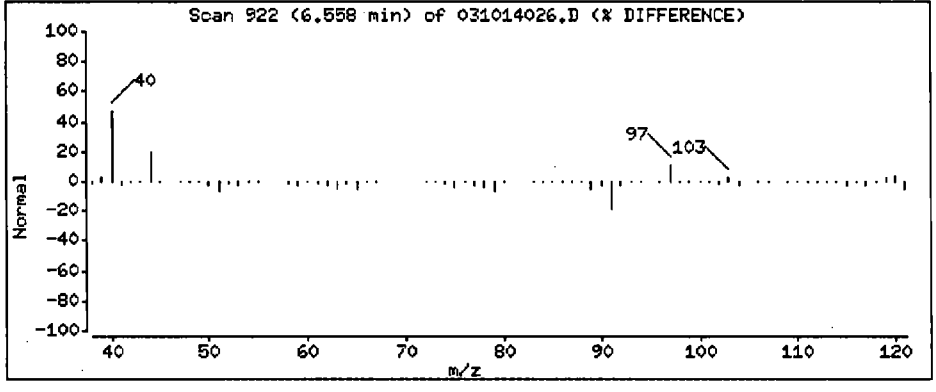












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

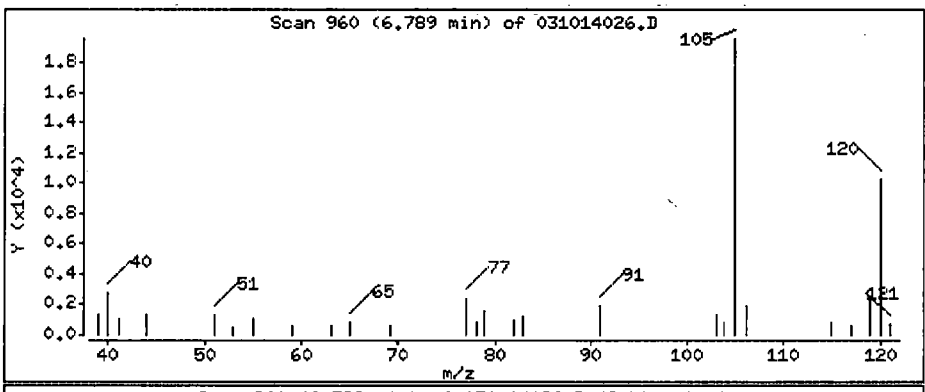
Operator: HBP

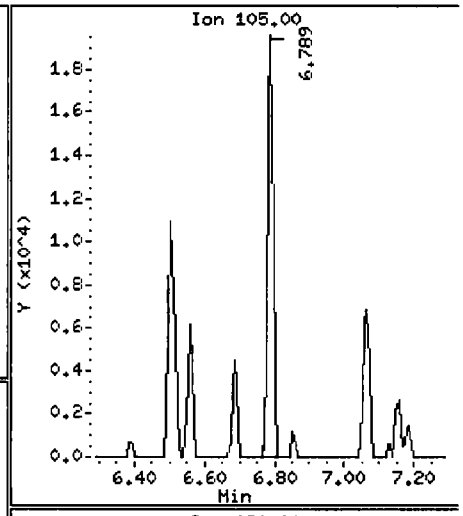
Column phase: Rtx-VMS

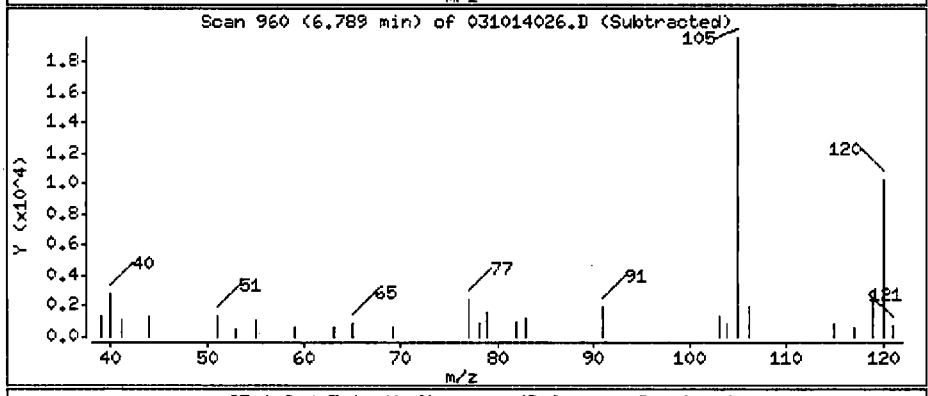
Column diameter: 0.18

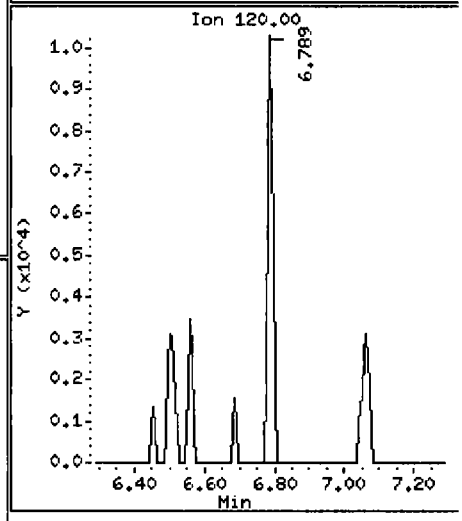
87 1,2,4-Trimethylbenzene

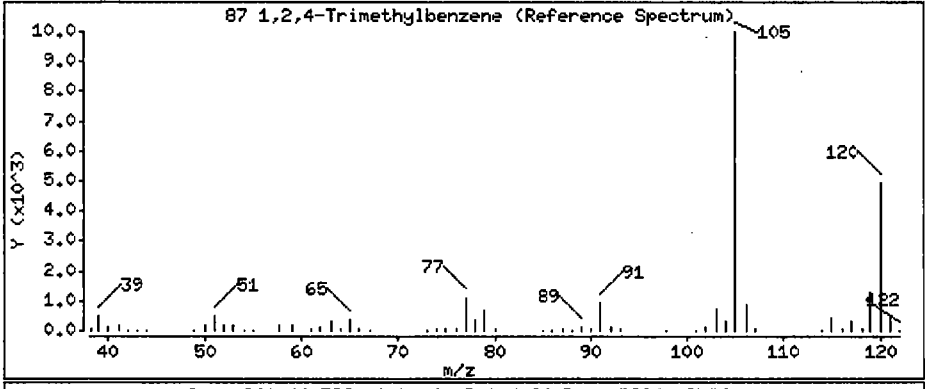
Concentration: 1.3 ug/Kg

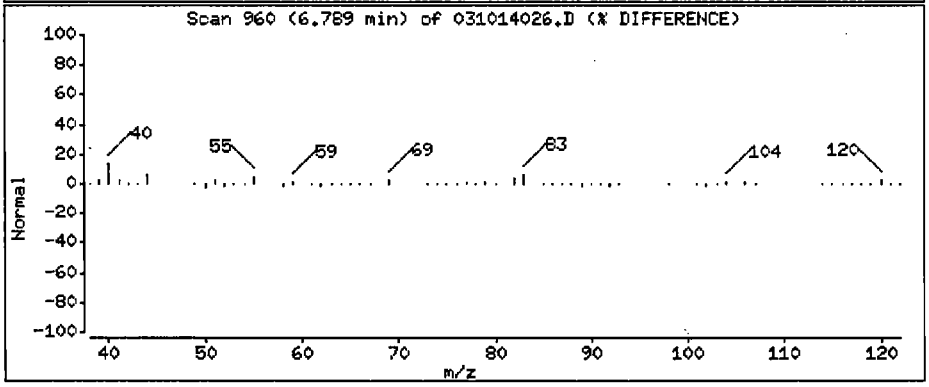












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

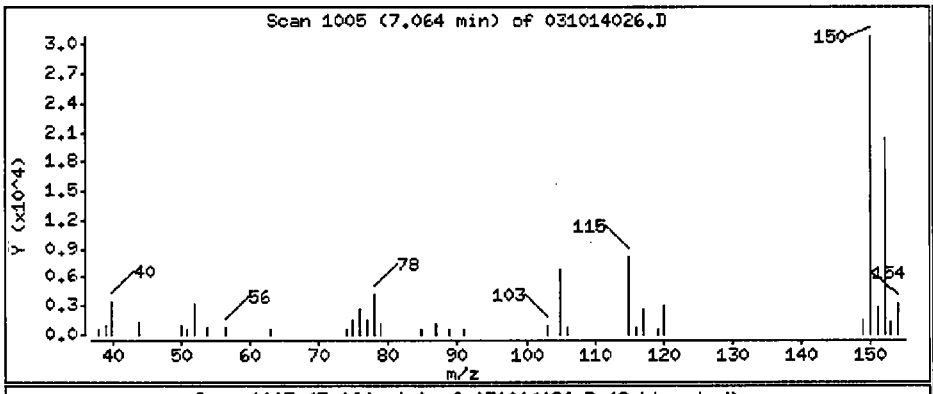
Operator: HBP

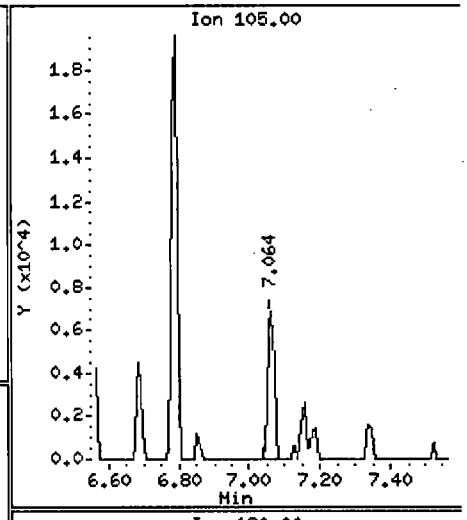
Column phase: Rtx-VMS

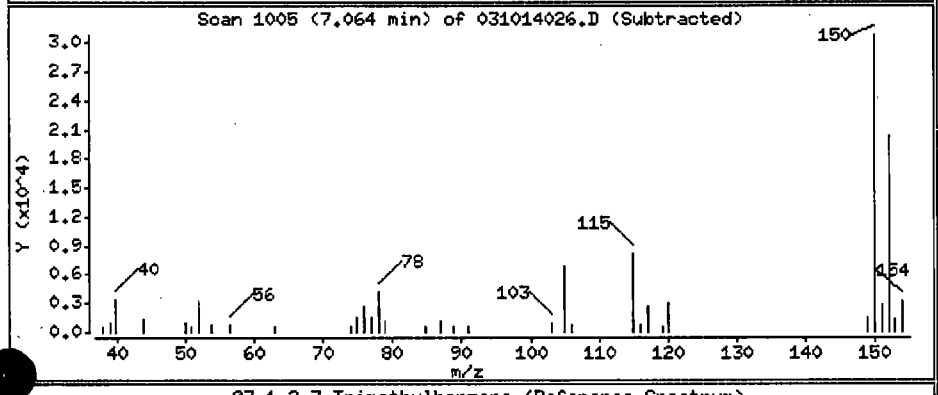
Column diameter: 0.18

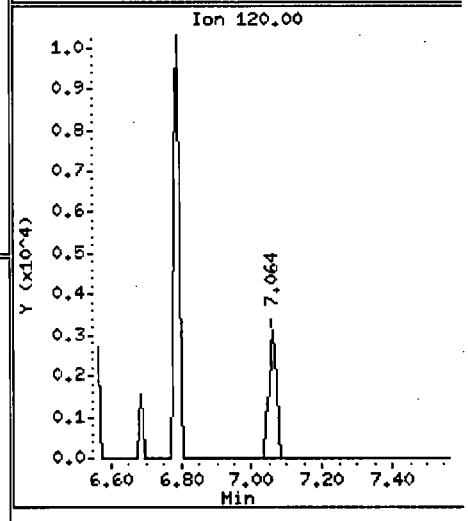
93 1,2,3 Trimethylbenzene

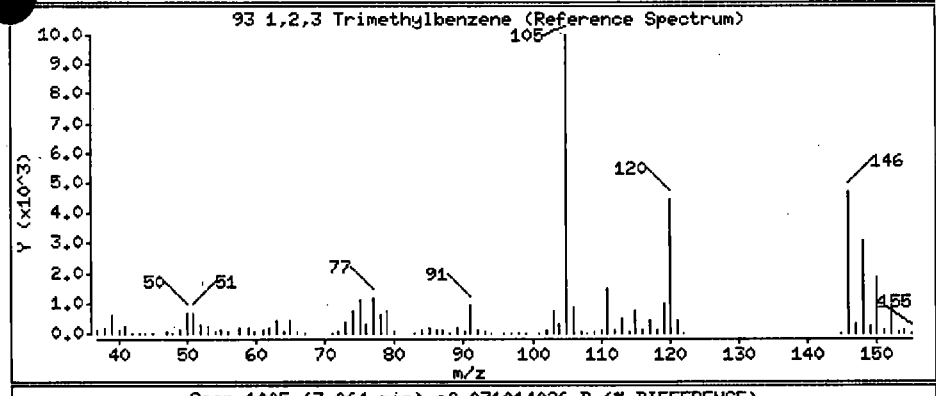
Concentration: 0.51 ug/Kg

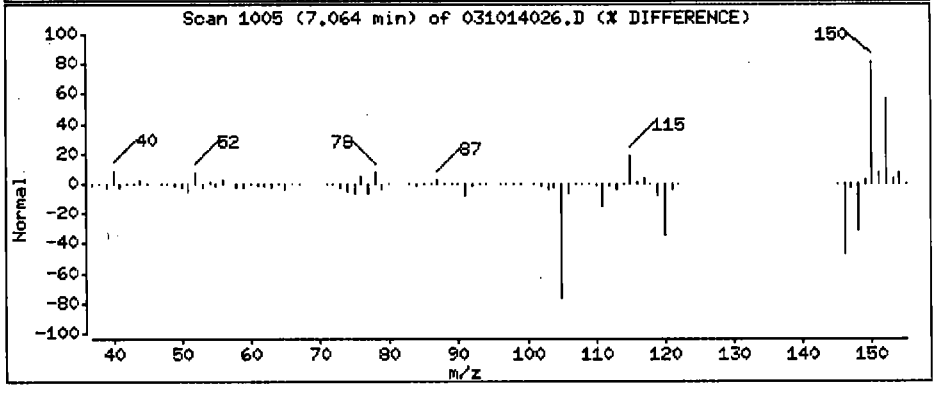












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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

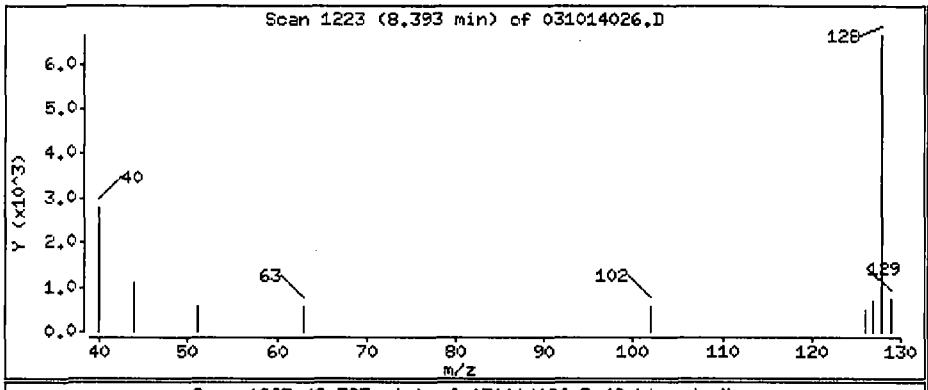
Operator: HBP

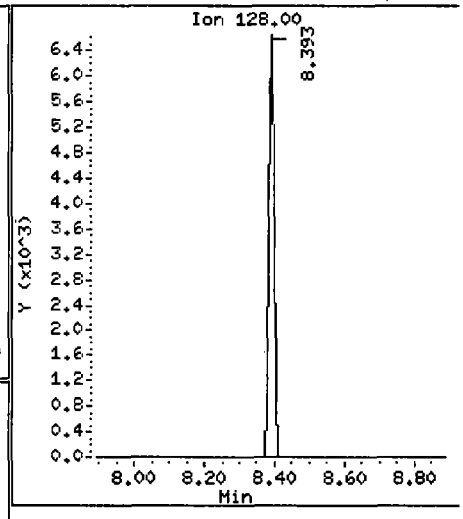
Column phase: Rtx-VMS

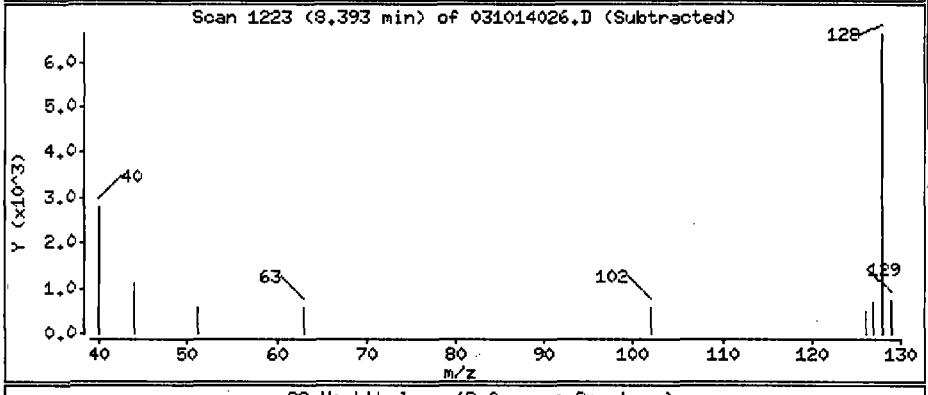
Column diameter: 0.18

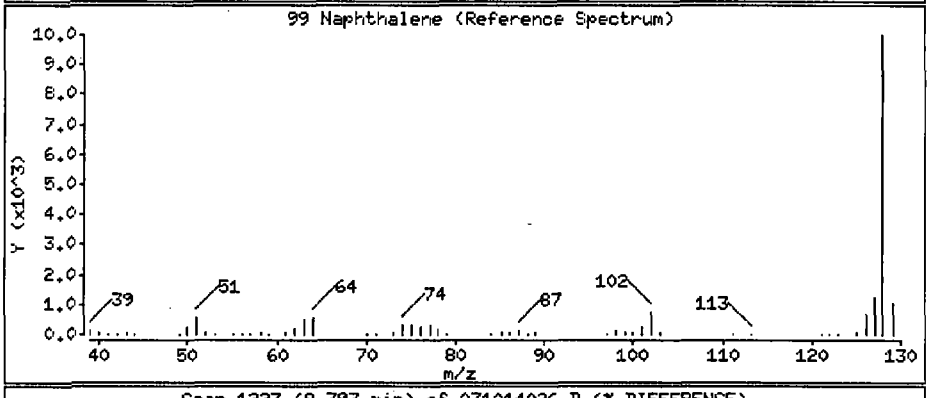
99 Naphthalene

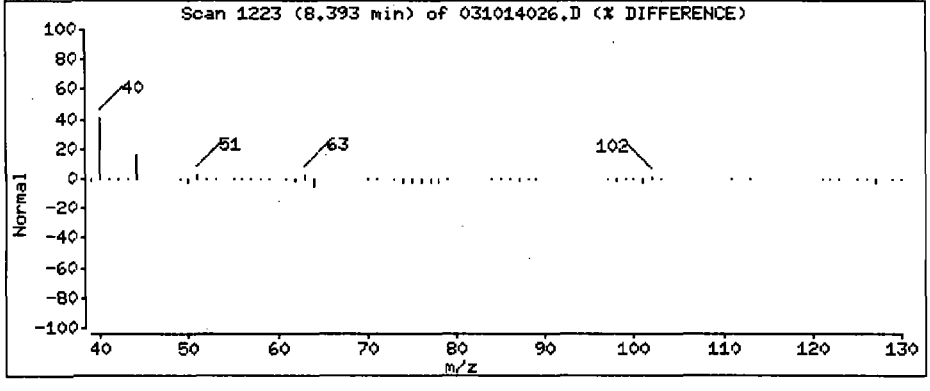
Concentration: 0.55 ug/Kg











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Date : 10-MAR-2014 18:45

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055003,5.99

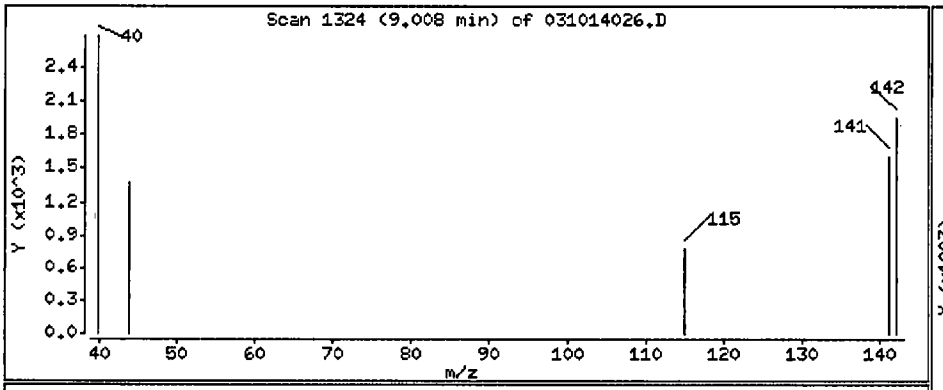
Operator: HBP

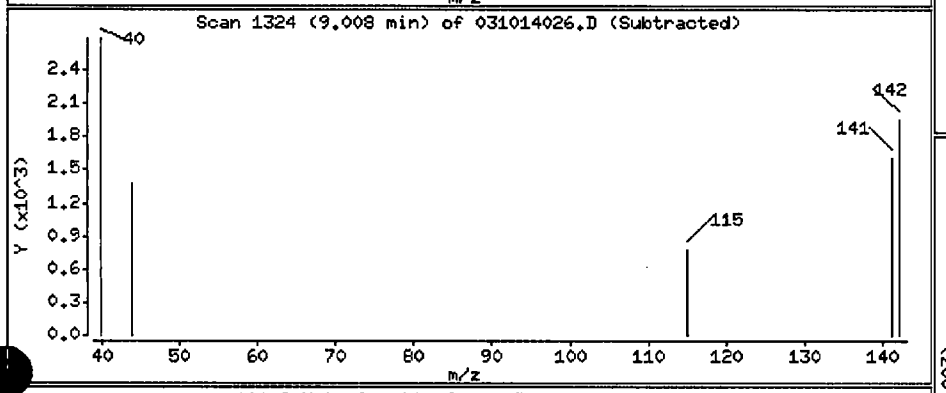
Column phase: Rtx-VMS

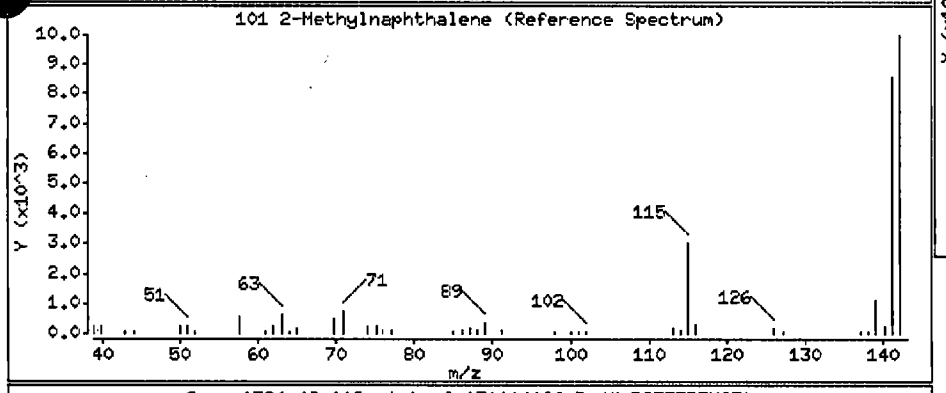
Column diameter: 0.18

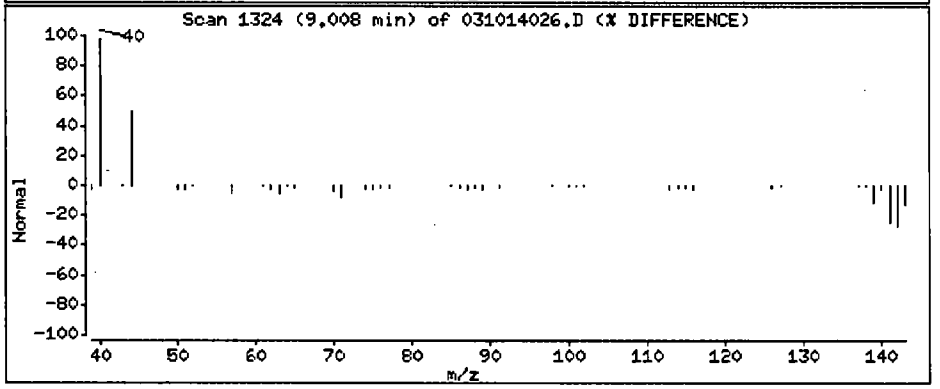
101 2-Methylnaphthalene

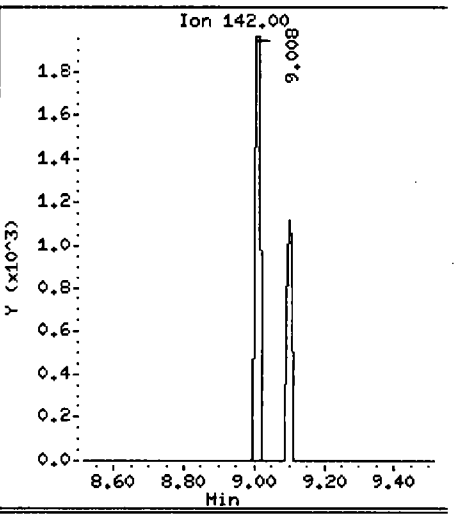
Concentration: 0.42 ug/Kg

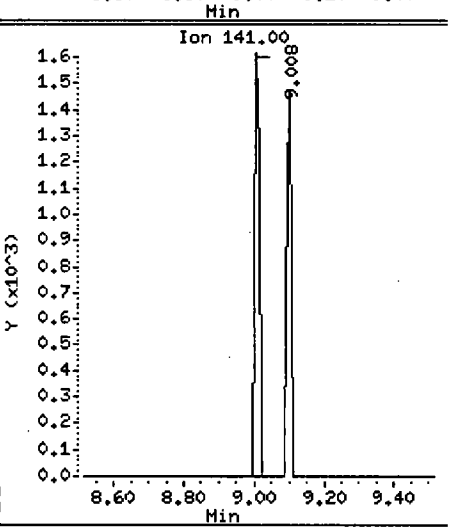












Injection Date: 10-MAR-2014 18:45
Instrument: 10msv7.i
Lab Sample ID: 10259055003
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data file: \\192.168.10.12\chem\10msv7.i\031014B.b\031014027.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014027.D
Lab Smp Id: 10259055004
Inj Date : 10-MAR-2014 19:04
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259055004,7.49
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	7.490	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.101	2.101	(0.500)	6861	0.48017	0.72(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	152528	200.000	
19	Acetone	58	2.698	2.698	(1.018)	7738	23.0631	34.5
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
21	Hexane	86	2.857	2.863	(1.078)	1777	1.59686	2.4(a)
22	Methyl-tert-butyl Ether	73	Compound Not Detected.					
23	tert-Butyl Alcohol	59	Compound Not Detected.					
24	Acetonitrile	41	Compound Not Detected.					
25	Isopropyl Ether	45	Compound Not Detected.					
26	Acrylonitrile	53	Compound Not Detected.					
27	1,1-Dichloroethane	63	Compound Not Detected.					
28	Ethyl-tert-butyl ether	59	Compound Not Detected.					
29	Vinyl Acetate	43	Compound Not Detected.					
30	cis-1,2-Dichloroethene	96	Compound Not Detected.					
31	2,2-Dichloropropane	77	Compound Not Detected.					
32	Cyclohexane	56	3.753	3.753	(0.893)	7762	1.11943	1.7(aQ)
33	Bromochloromethane	130	Compound Not Detected.					
34	Chloroform	83	Compound Not Detected.					
35	Carbon Tetrachloride	117	Compound Not Detected.					
36	Tetrahydrofuran	72	Compound Not Detected.					
37	1,1,1-Trichloroethane	97	Compound Not Detected.					
38	2-Butanone	43	Compound Not Detected.					
39	1,1-Dichloropropene	75	Compound Not Detected.					
40	Benzene	78	4.143	4.143	(0.985)	6876	0.39927	0.60(a)
* 41	Pentafluorobenzene	168	4.204	4.204	(1.000)	998672	100.000	
42	Tert-amyl methyl ether	73	Compound Not Detected.					
$ 43	1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	403490	104.670	105
44	1,2-Dichloroethane	62	Compound Not Detected.					
45	Isobutanol	43	Compound Not Detected.					
46	Tert-Amyl Alcohol	59	Compound Not Detected.					
47	Trichloroethene	130	Compound Not Detected.					
* 48	1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1461383	100.000	
49	Tert-amyl ethyl ether	59	Compound Not Detected.					
50	Dibromomethane	174	Compound Not Detected.					
51	1,2-Dichloropropane	63	Compound Not Detected.					
52	Bromodichloromethane	83	Compound Not Detected.					
* 53	1,4 dioxane d8	96	4.826	4.826	(1.000)	178252	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
55	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
56	cis-1,3-Dichloropropene	75	Compound Not Detected.					
$ 57	Toluene-d8 (S)	98	5.106	5.106	(0.883)	1721367	101.782	102
58	Toluene	92	5.131	5.130	(0.887)	6814	0.62568	0.94(a)
59	4-Methyl-2-Pentanone	43	Compound Not Detected.					
60	Tetrachloroethene	166	Compound Not Detected.					
61	trans-1,3-Dichloropropene	75	Compound Not Detected.					
62	1,1,2-Trichloroethane	97	Compound Not Detected.					
63	Dibromochloromethane	129	Compound Not Detected.					
64	1,3-Dichloropropane	76	Compound Not Detected.					
65	1,2-Dibromoethane	107	Compound Not Detected.					
66	2-Hexanone	43	5.649	5.649	(0.977)	407	0.16152	0.24(aQ)
* 67	Chlorobenzene-d5	117	5.783	5.789	(1.000)	1439386	100.000	
68	Chlorobenzene	112	Compound Not Detected.					
69	Ethylbenzene	91	5.801	5.801	(1.003)	5844	0.28159	0.42(aQ)
70	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
71	M&P-Xylene	106	5.862	5.868	(1.014)	2334	0.28876	0.43(a)
72	O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	638	0.08417	0.13(aQ)
73	Styrene	104	Compound Not Detected.					
74	Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014b.b\031014027.d
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	75 Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	692443	107.663	108
	77 cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78 Bromobenzene	156	Compound Not Detected.					
	79 n-Propylbenzene	91	Compound Not Detected.					
	80 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81 2-Chlorotoluene	91	Compound Not Detected.					
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	910	0.05709	0.086(a)
	83 1,2,3-Trichloropropane	110	Compound Not Detected.					
	84 trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85 4-Chlorotoluene	91	Compound Not Detected.					
	86 tert-Butylbenzene	119	Compound Not Detected.					
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	3372	0.20780	0.31(a)
	88 sec-Butylbenzene	105	Compound Not Detected.					
	89 p-Isopropyltoluene	119	Compound Not Detected.					
	90 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	801665	100.000	
	92 1,4-Dichlorobenzene	146	Compound Not Detected.					
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	1681	0.08738	0.13(aQ)
	94 n-Butylbenzene	91	Compound Not Detected.					
	95 1,2-Dichlorobenzene	146	Compound Not Detected.					
	96 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97 Hexachlorobutadiene	225	Compound Not Detected.					
	98 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	99 Naphthalene	128	8.392	8.392	(1.191)	1462	0.12492	0.19(a)
	100 1,2,3-Trichlorobenzene	180	Compound Not Detected.					
	101 2-Methylnaphthalene	142	Compound Not Detected.					

Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014027.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014027.D
Lab Smp Id: 10259055004
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	152528	6.17
41 Pentafluorobenzen	966546	483273	1933092	998672	3.32
48 1,4 Difluorobenze	1457917	728959	2915834	1461383	0.24
53 1,4 dioxane d8	174389	87195	348778	178252	2.22
67 Chlorobenzene-d5	1458689	729345	2917378	1439386	-1.32
91 1,4-Dichlorobenze	888899	444450	1777798	801665	-9.81

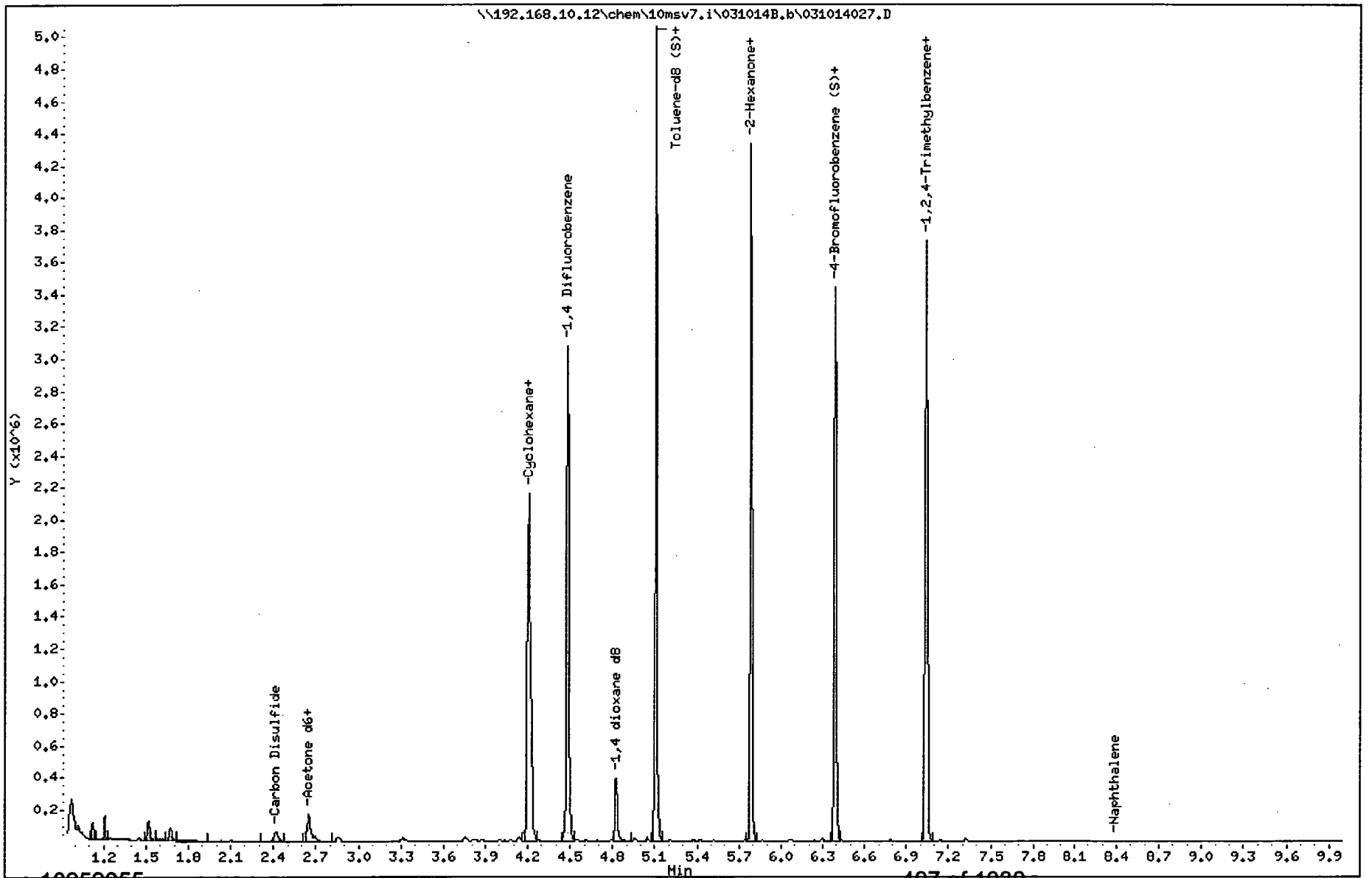
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014027.D
Date : 10-MAR-2014 19:04
Client ID:
Sample Info: 10259055004,7.49

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

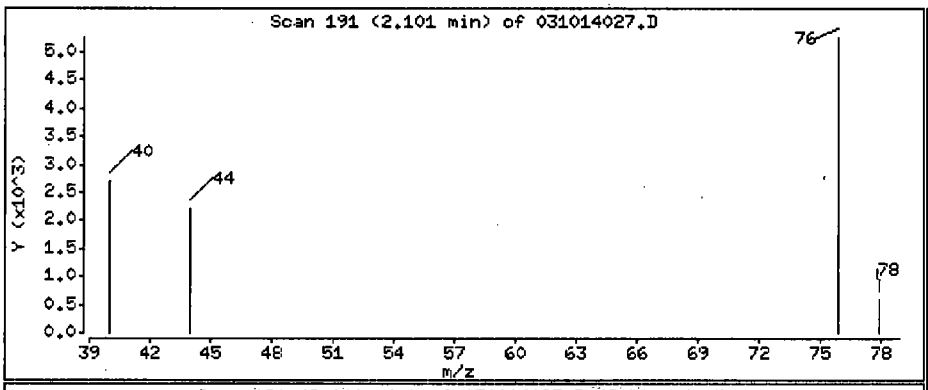
Operator: HBP

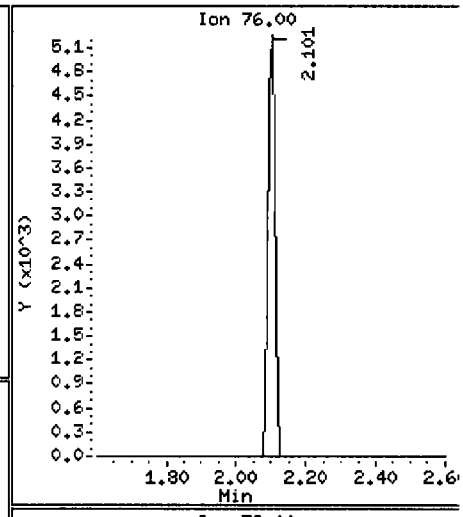
Column phase: Rtx-VMS

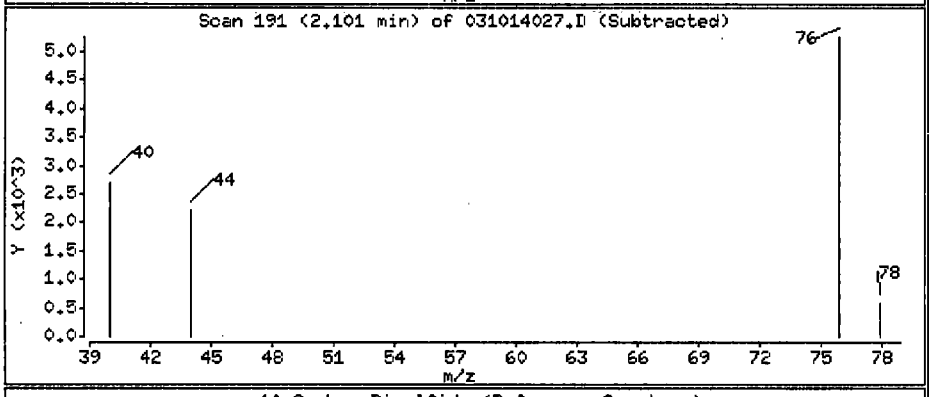
Column diameter: 0.18

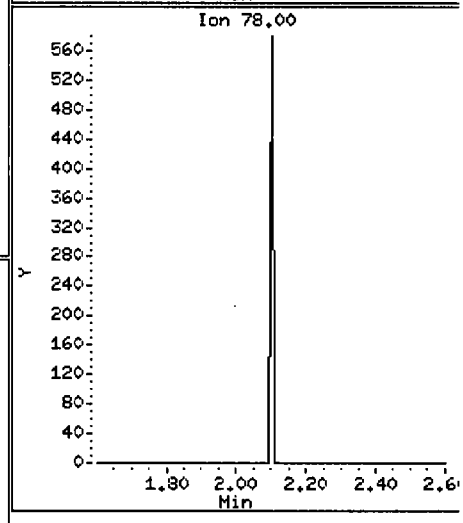
10 Carbon Disulfide

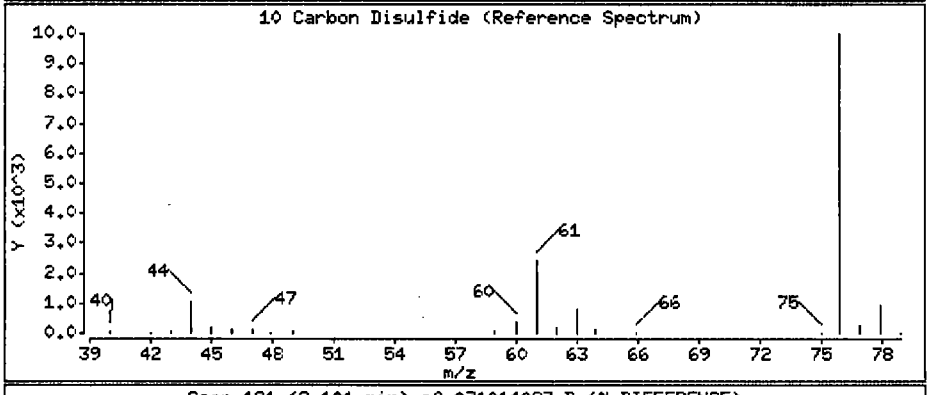
Concentration: 0.72 ug/Kg

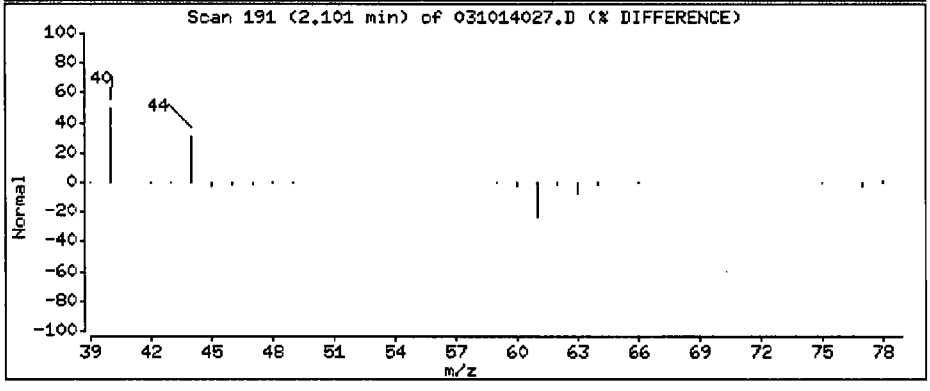












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

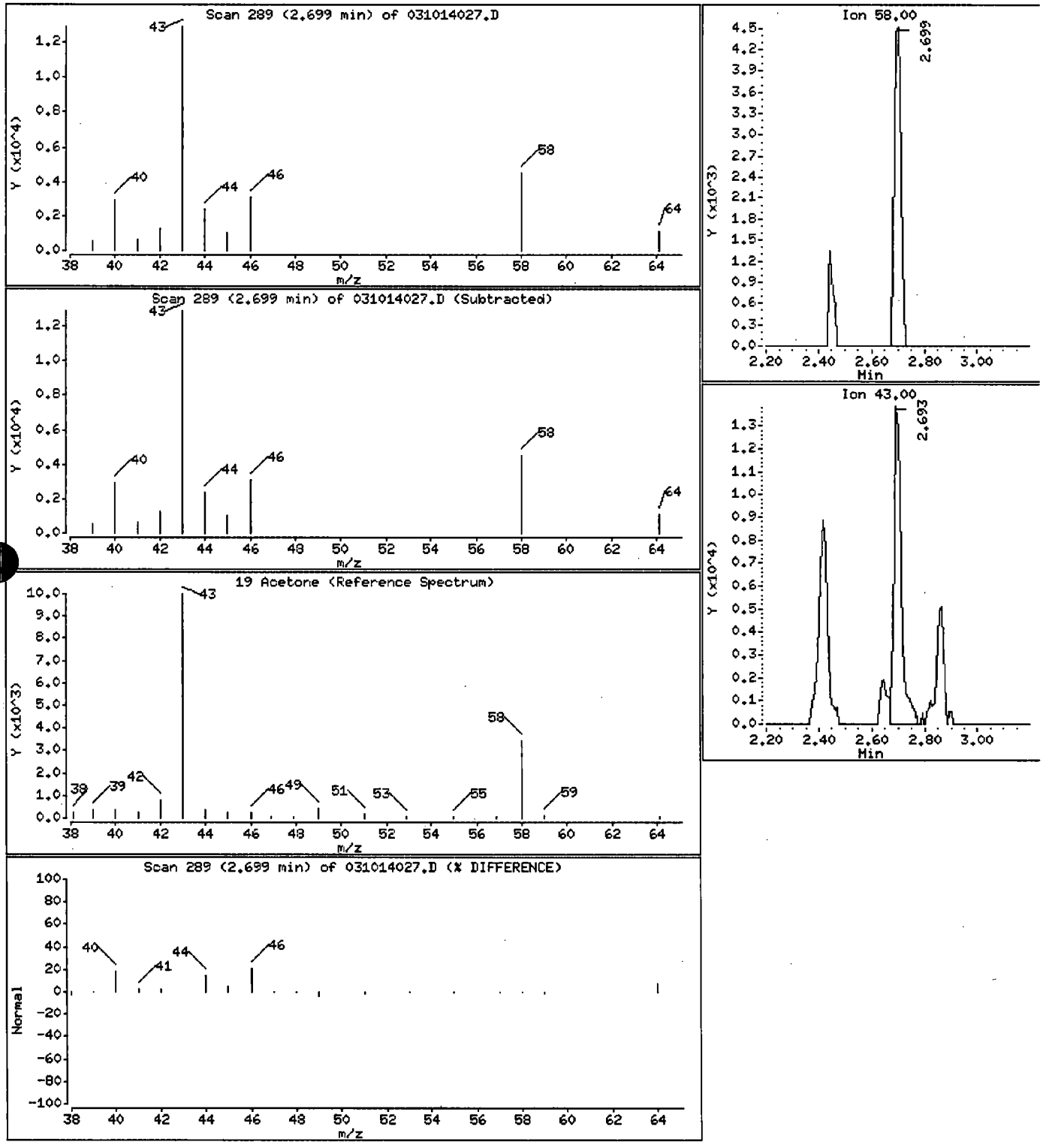
Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

19 Acetone

Concentration: 34.5 ug/Kg



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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

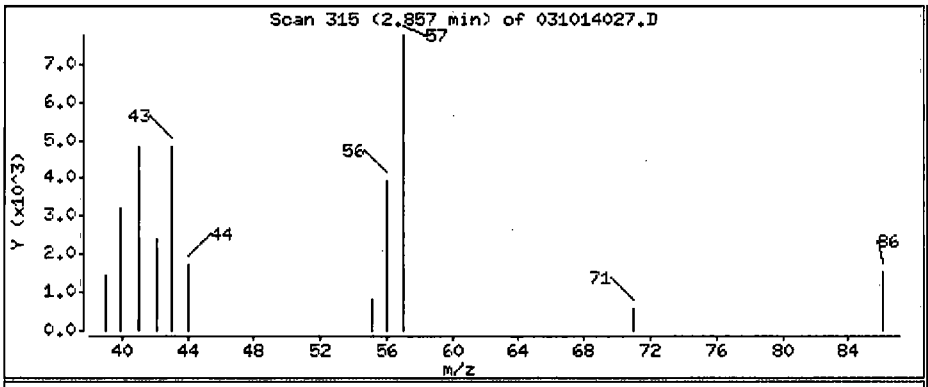
Operator: HBP

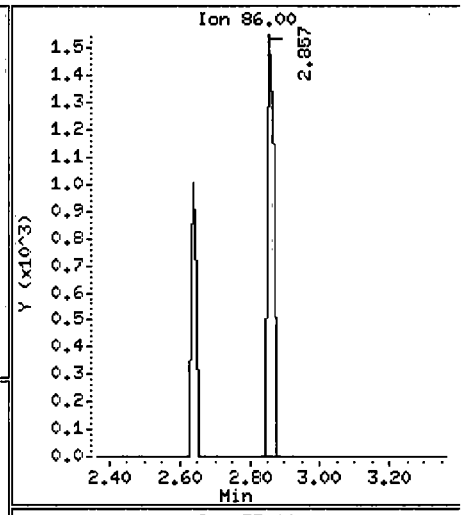
Column phase: Rtx-VMS

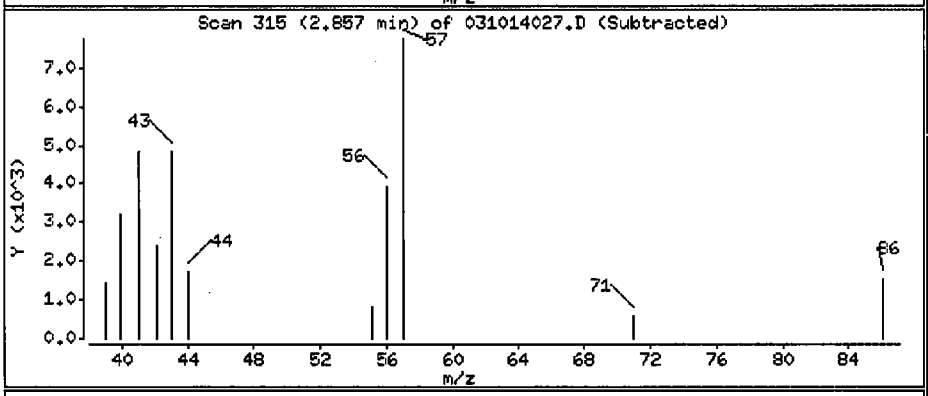
Column diameter: 0.18

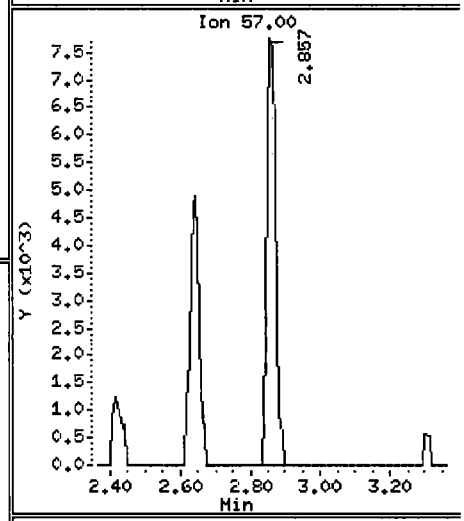
21 Hexane

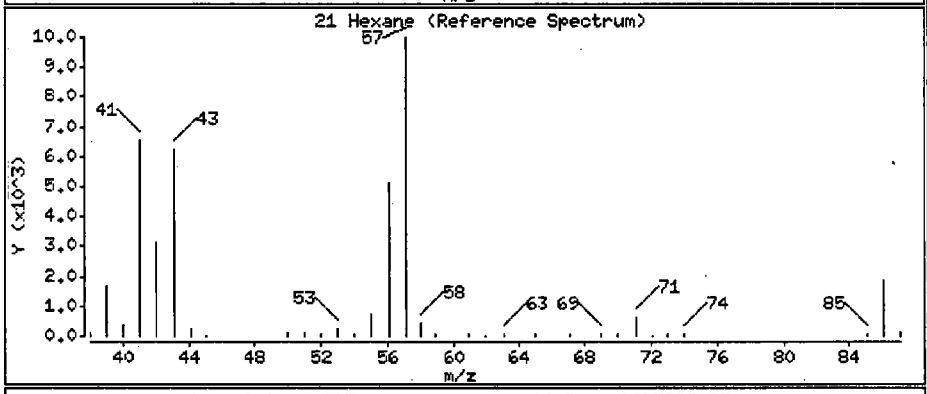
Concentration: 2.4 ug/Kg

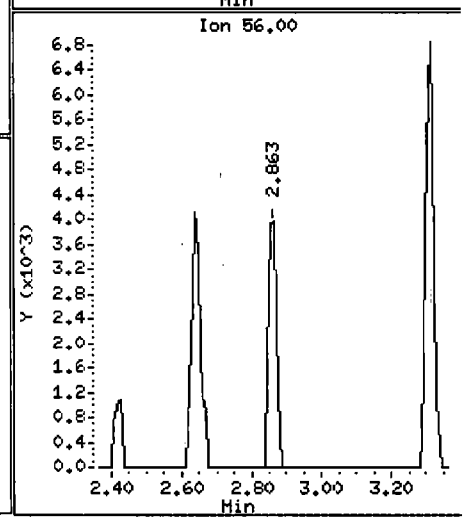


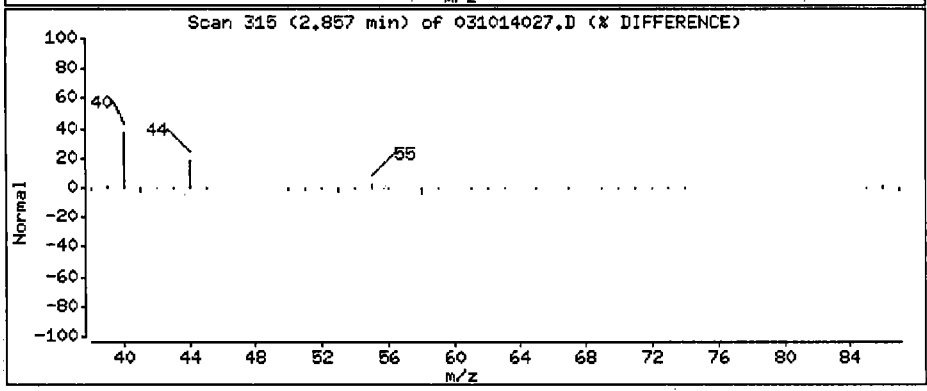












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

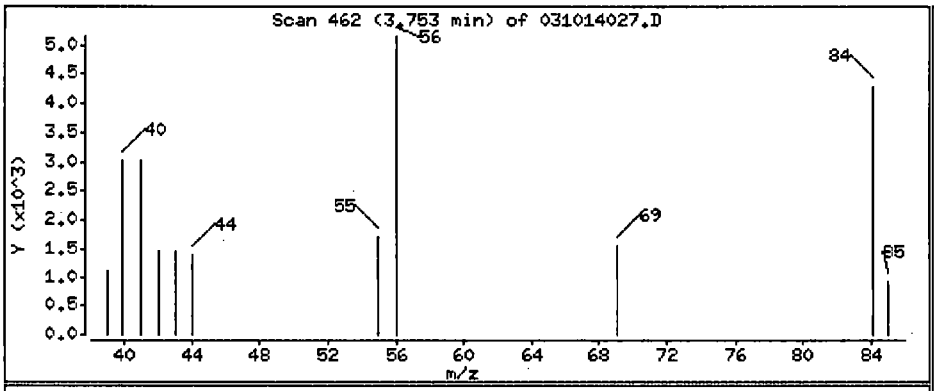
Operator: HBP

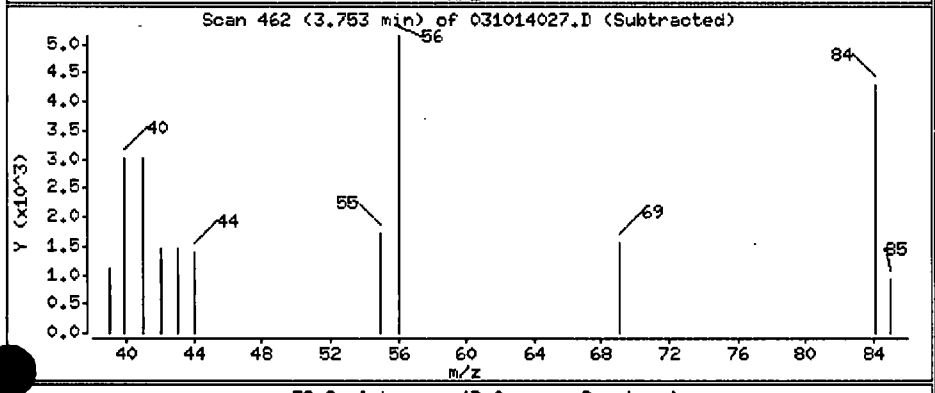
Column phase: Rtx-VMS

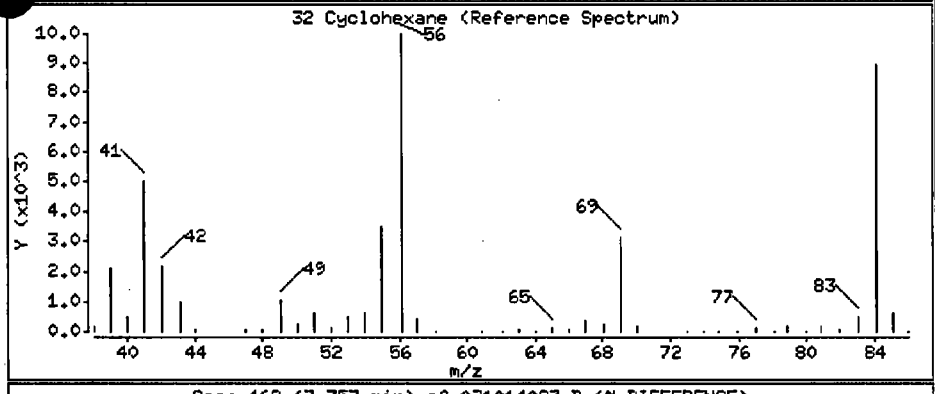
Column diameter: 0.18

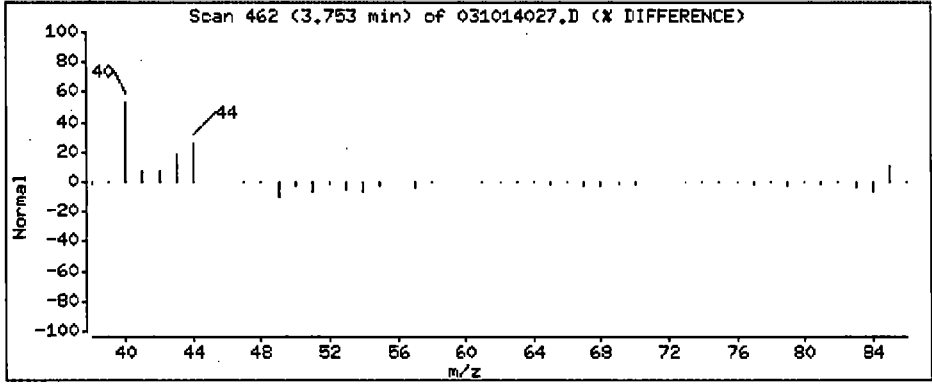
32 Cyclohexane

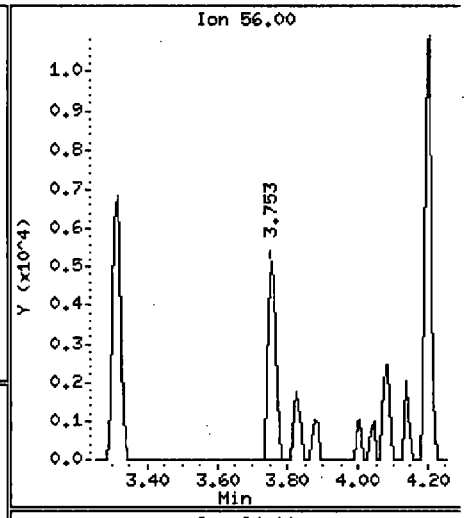
Concentration: 1.7 ug/Kg

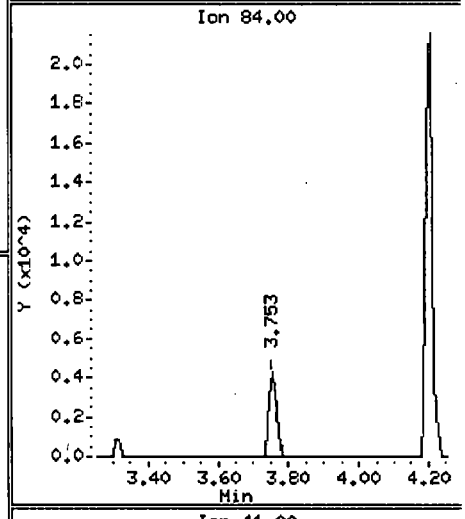


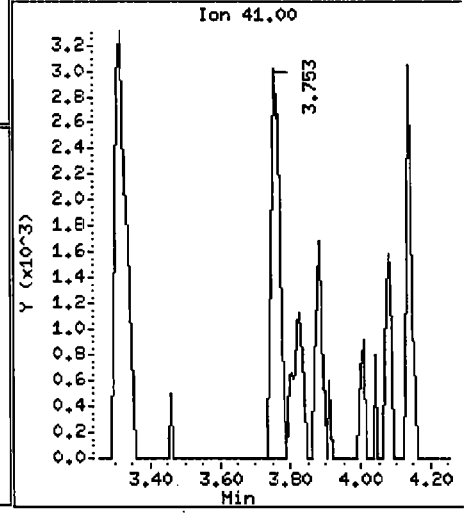












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

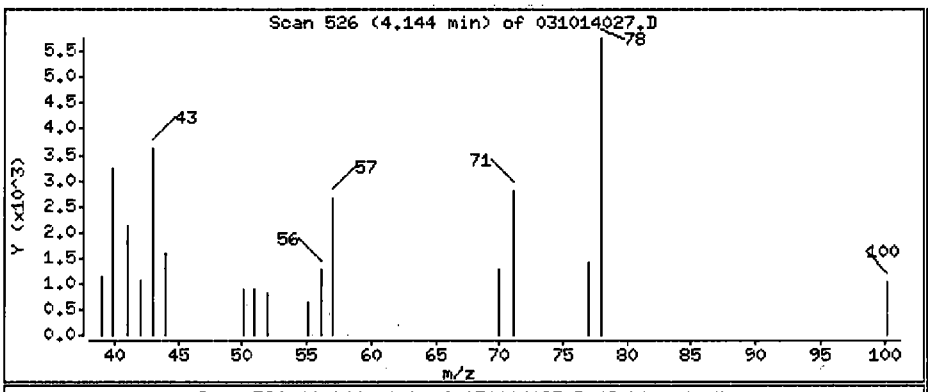
Operator: HBP

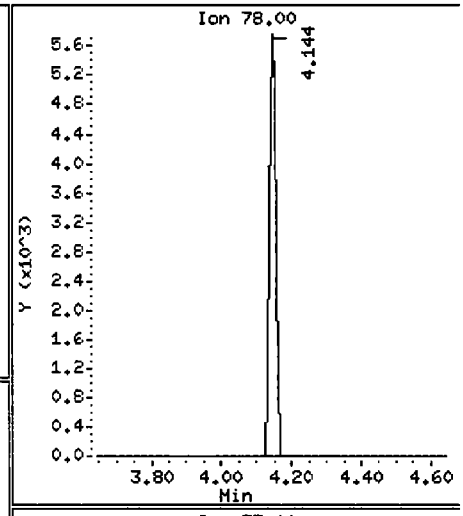
Column phase: Rtx-VMS

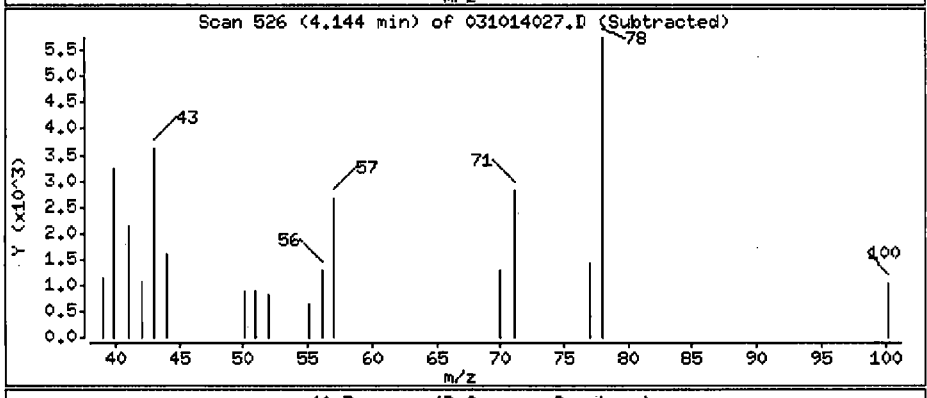
Column diameter: 0.18

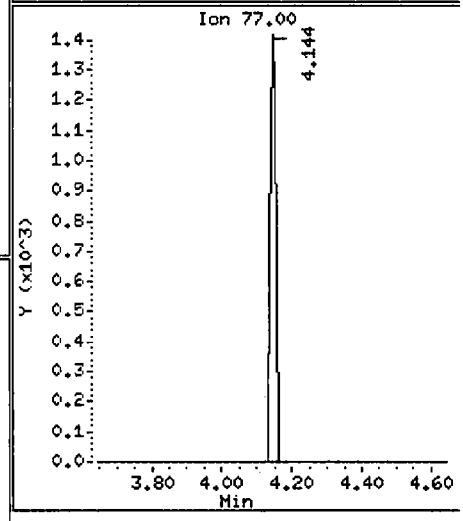
40 Benzene

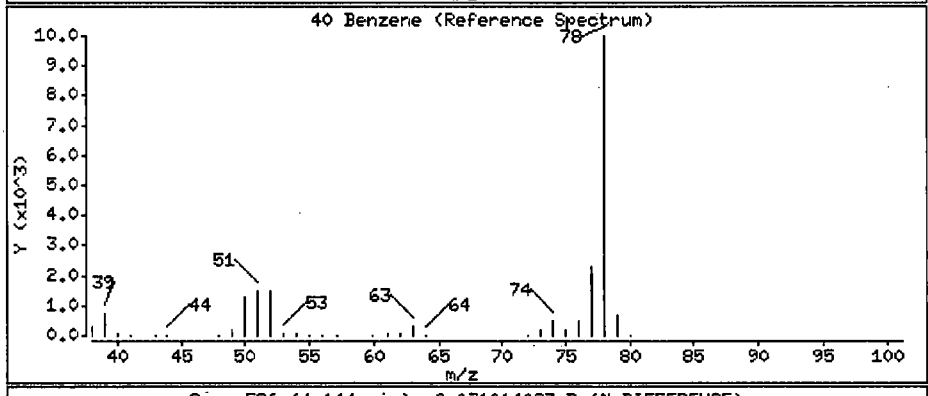
Concentration: 0.60 ug/Kg

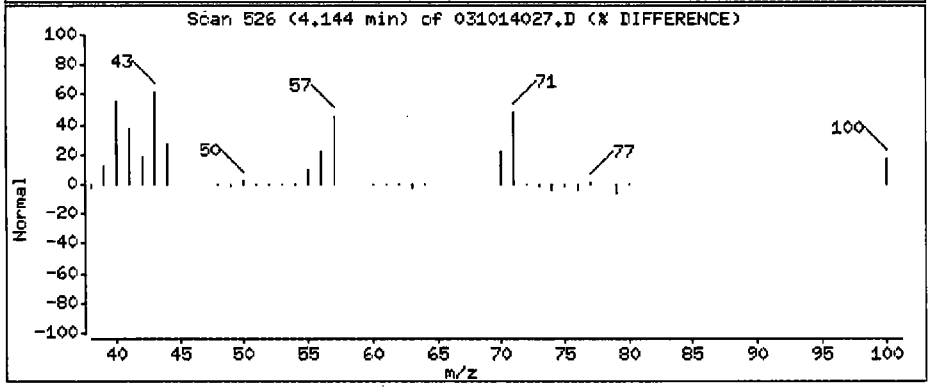












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

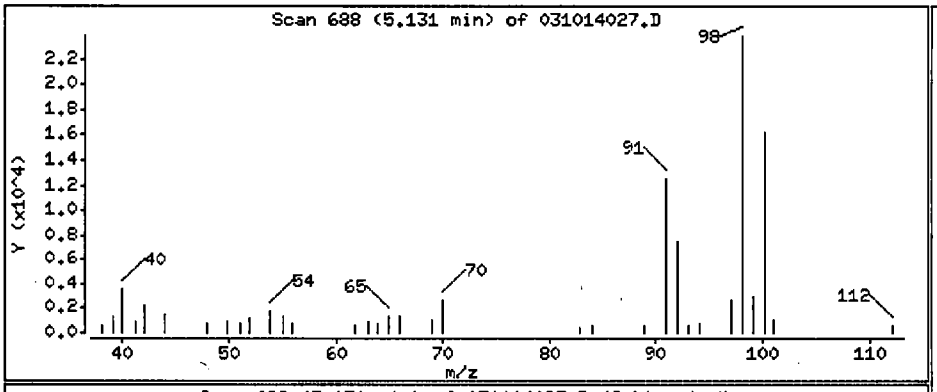
Operator: HBP

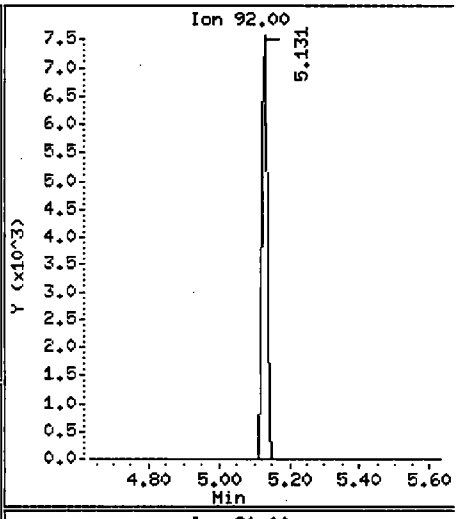
Column phase: Rtx-VMS

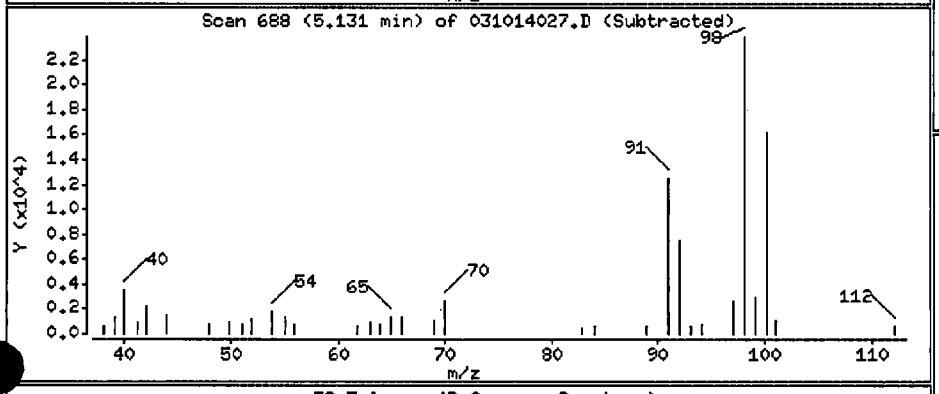
Column diameter: 0.18

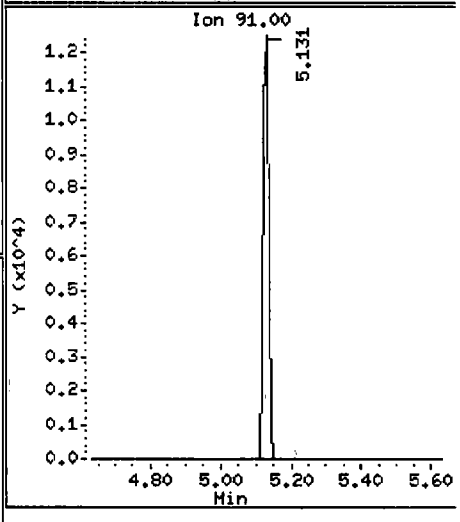
58 Toluene

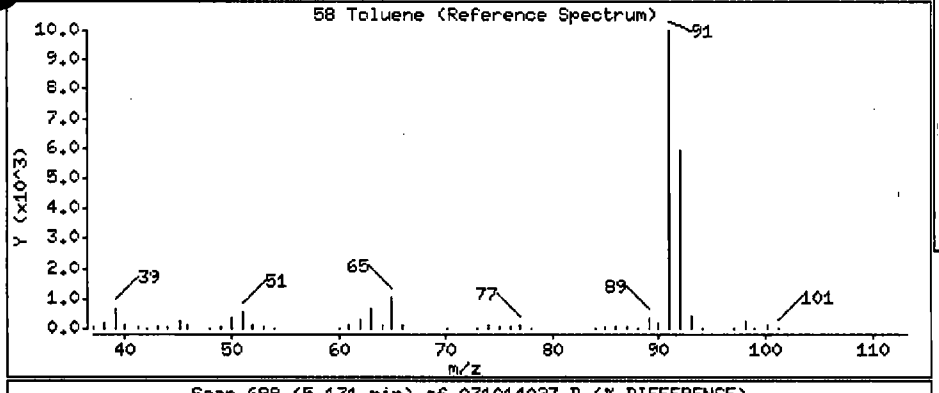
Concentration: 0.94 ug/Kg

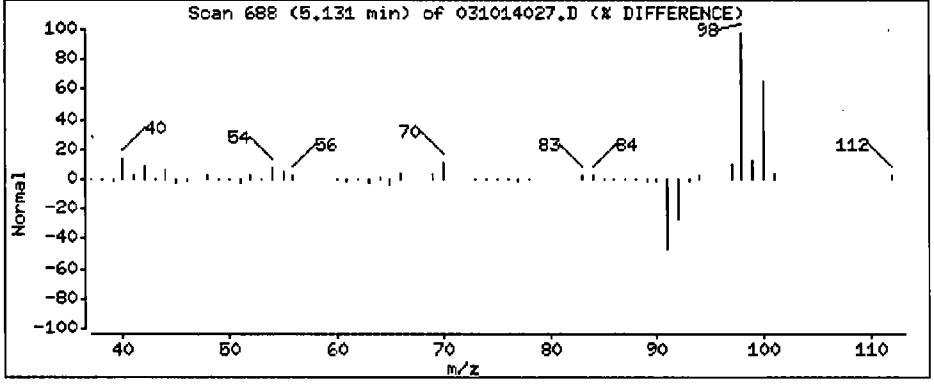












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7,49

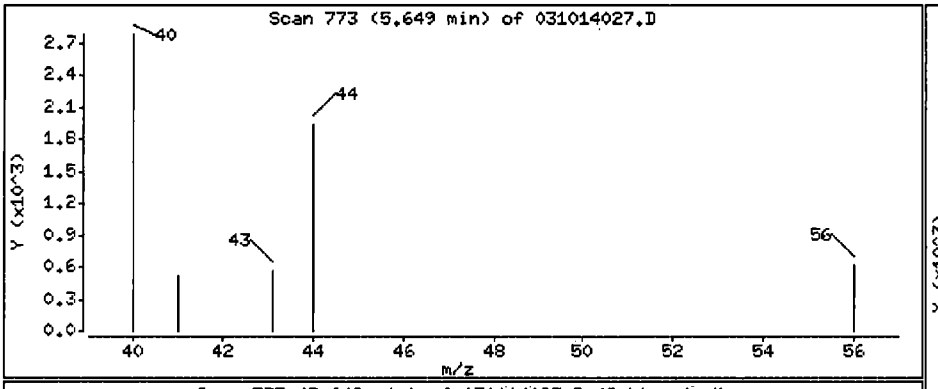
Operator: HBP

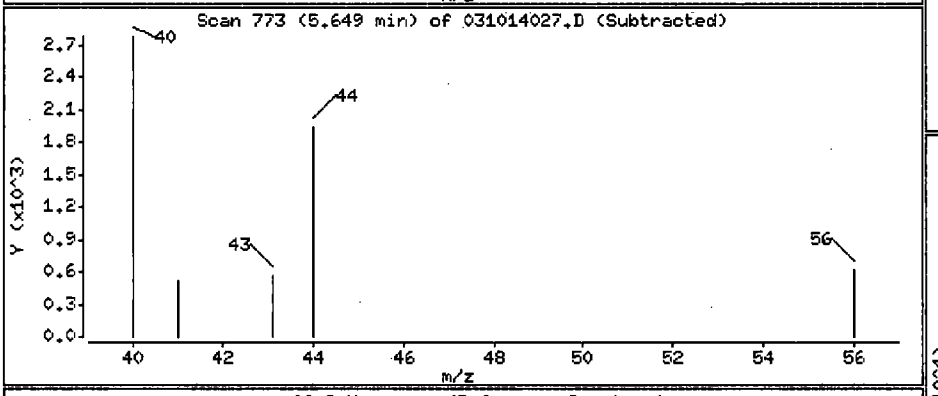
Column phase: Rtx-VMS

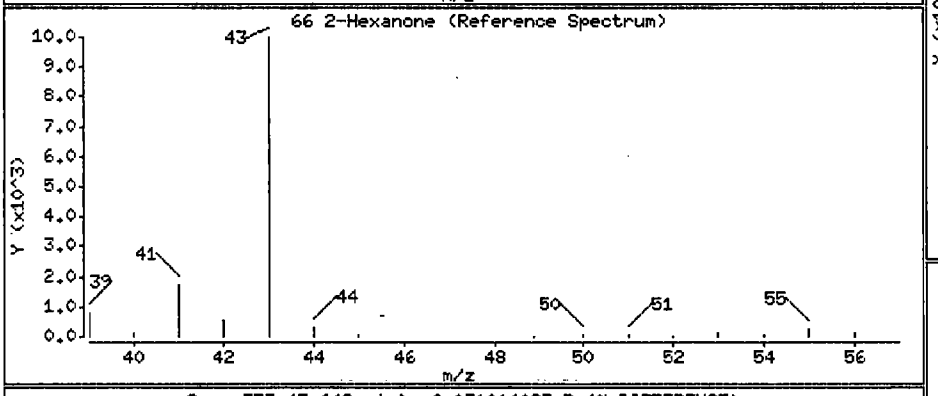
Column diameter: 0.18

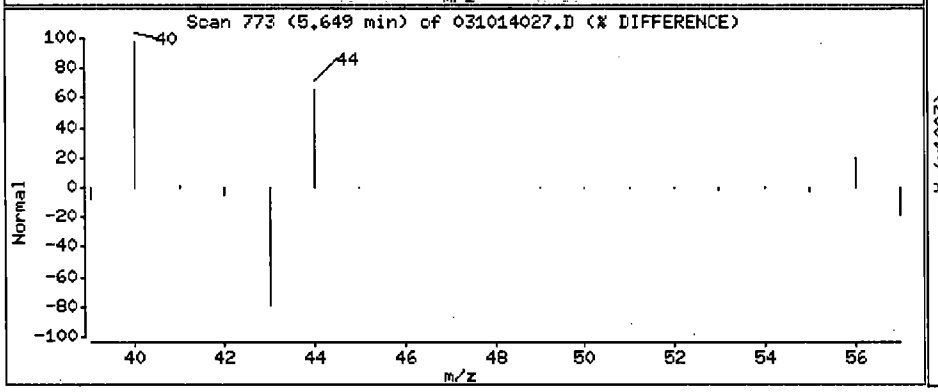
66 2-Hexanone

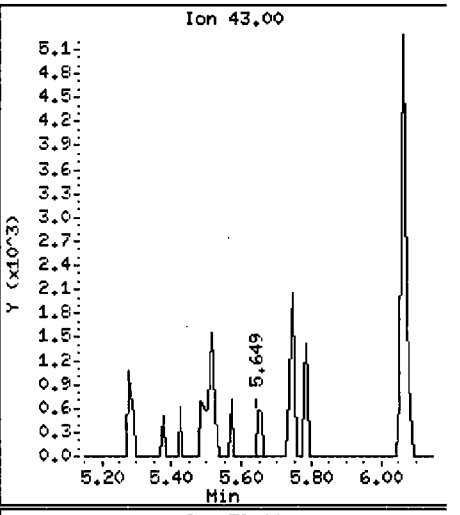
Concentration: 0.24 ug/Kg

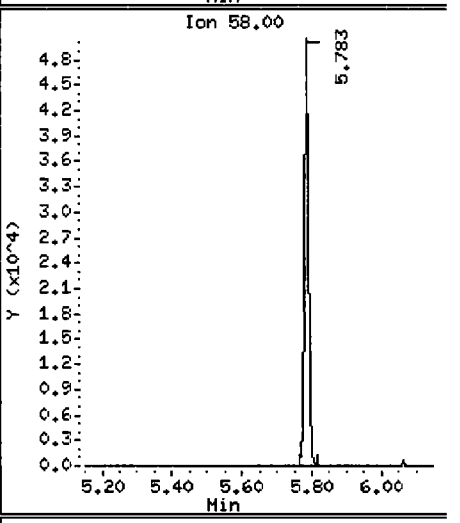


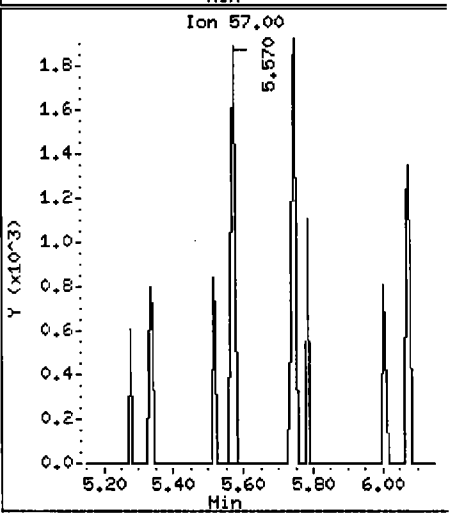












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

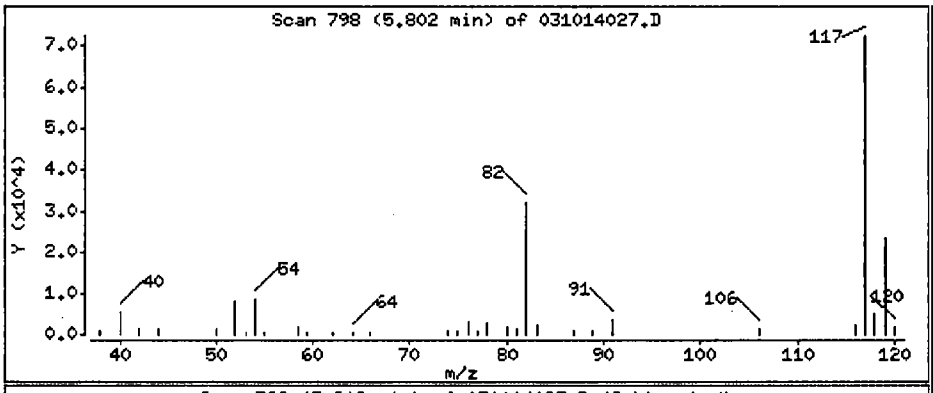
Operator: HBP

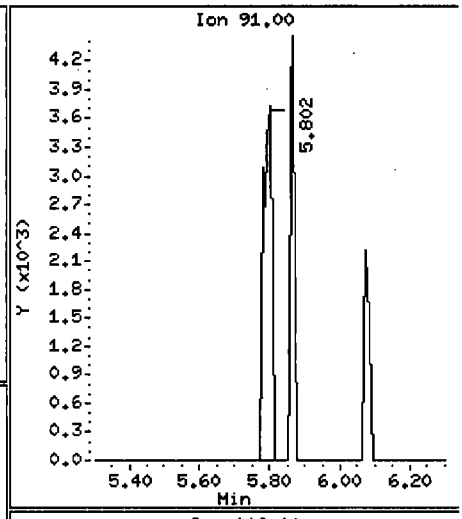
Column phase: Rtx-VMS

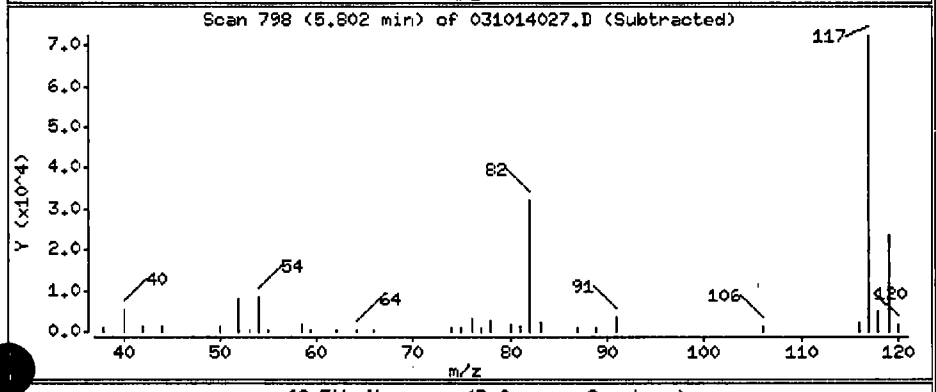
Column diameter: 0.18

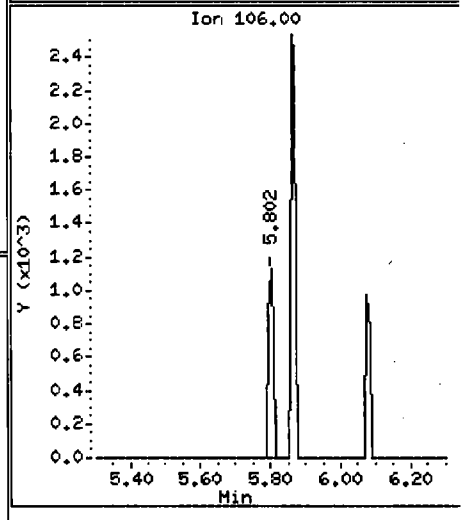
69 Ethylbenzene

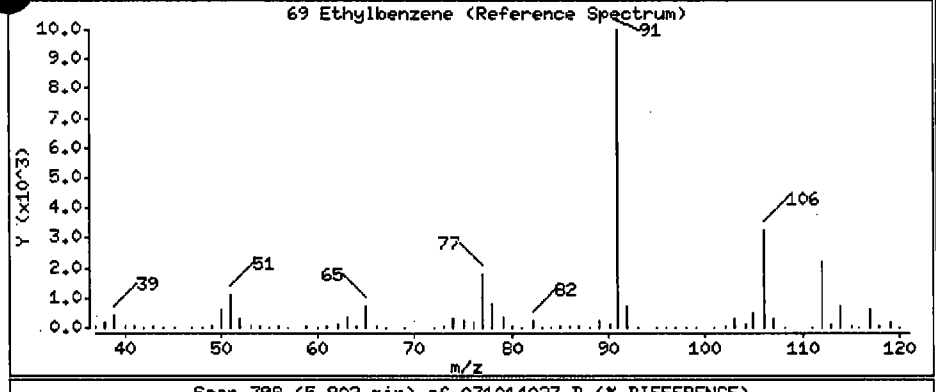
Concentration: 0.42 ug/Kg

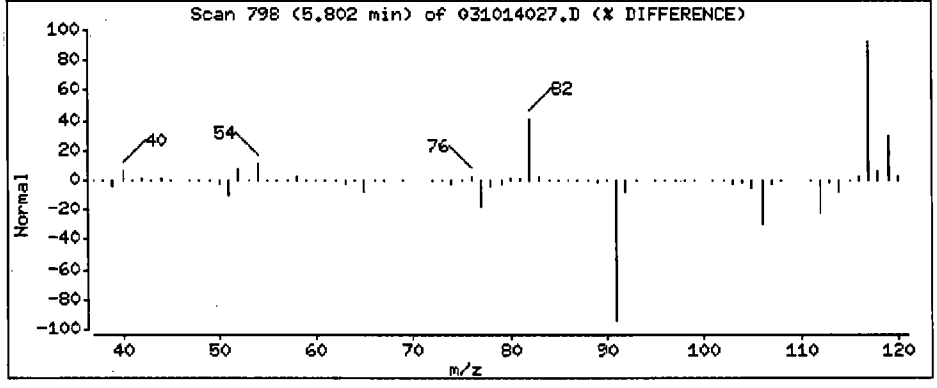












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7,49

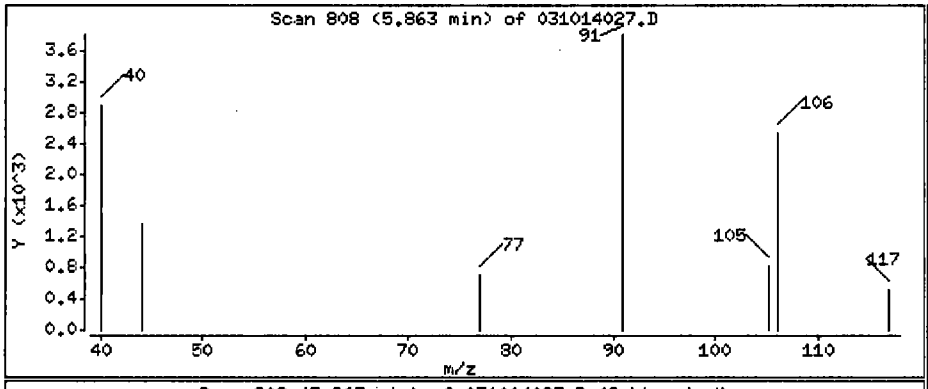
Operator: HBP

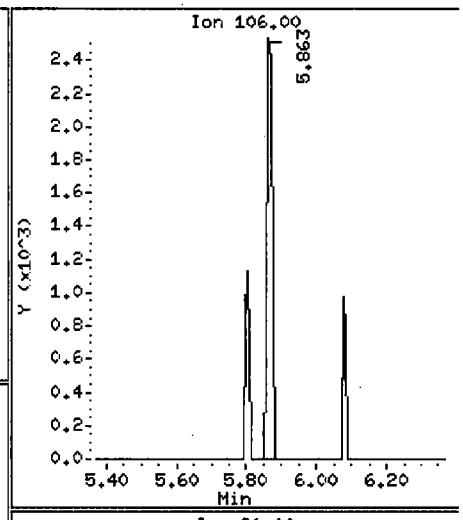
Column phase: Rtx-VMS

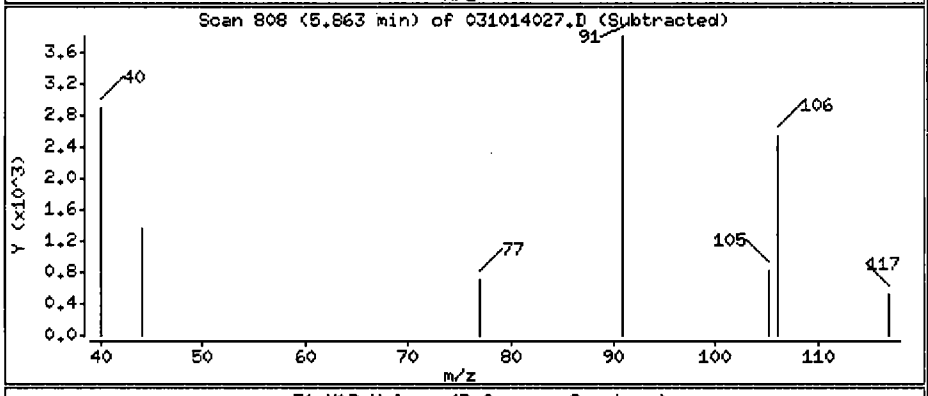
Column diameter: 0.18

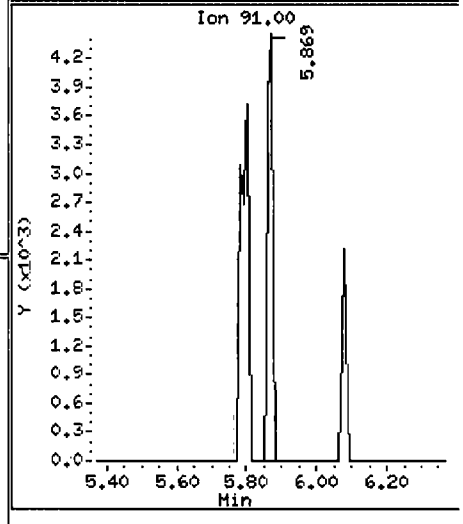
71 M&P-Xylene

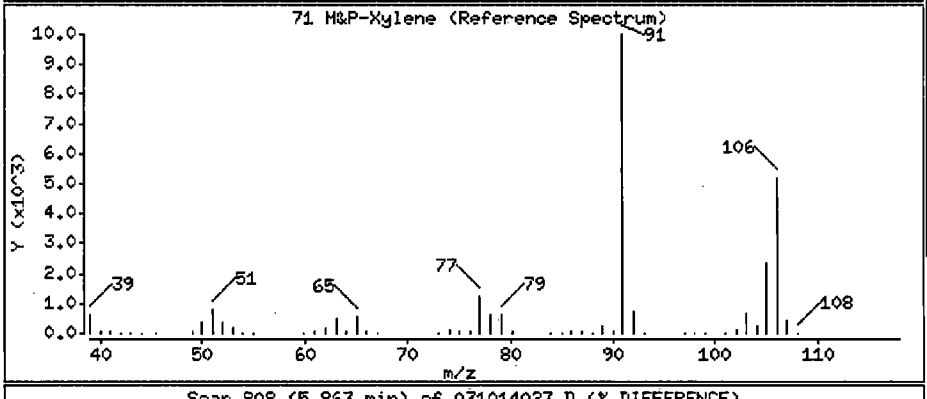
Concentration: 0.43 ug/Kg

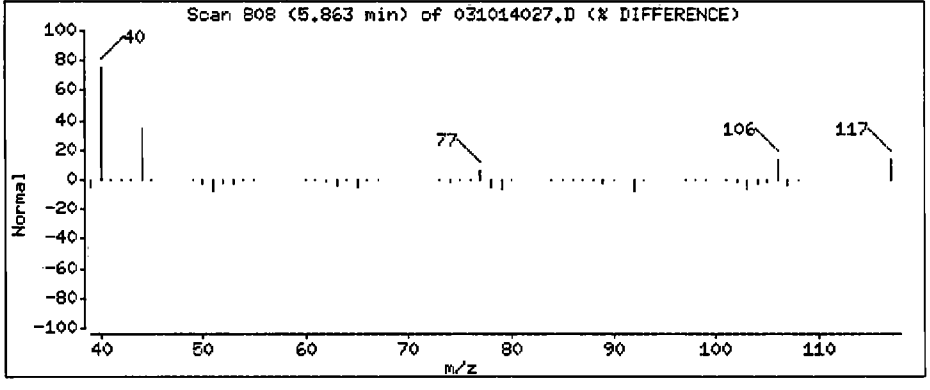












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

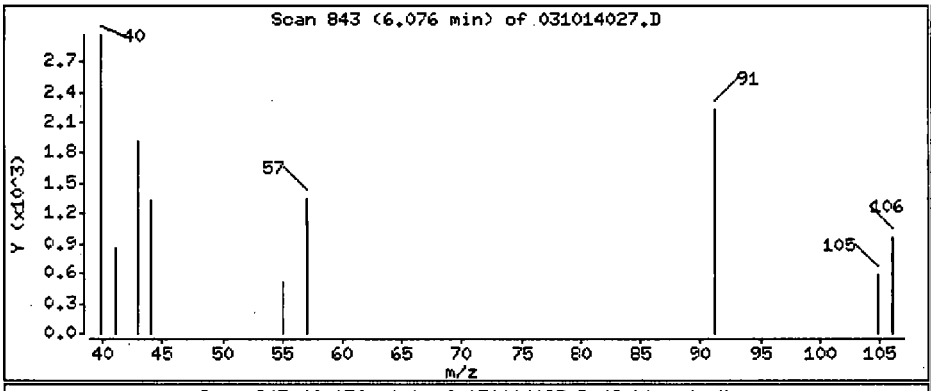
Operator: HBP

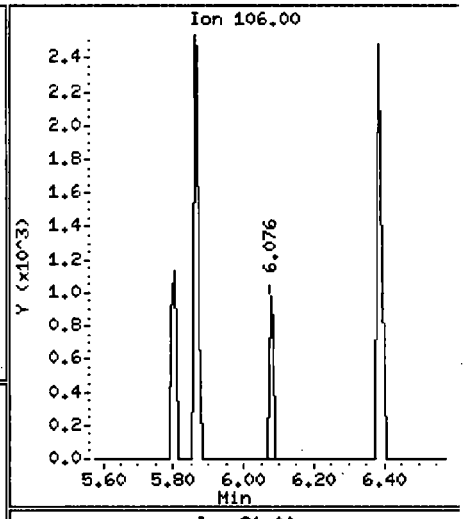
Column phase: Rtx-VMS

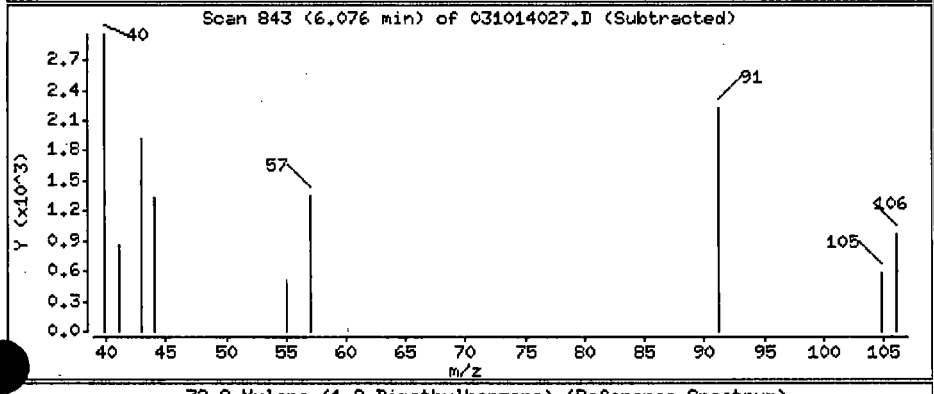
Column diameter: 0.18

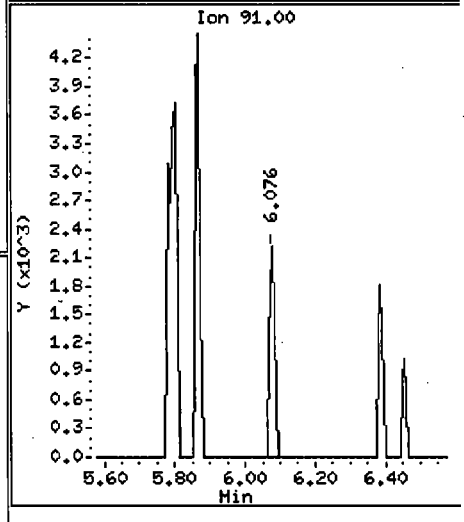
72 O-Xylene (1,2-Dimethylbenzene)

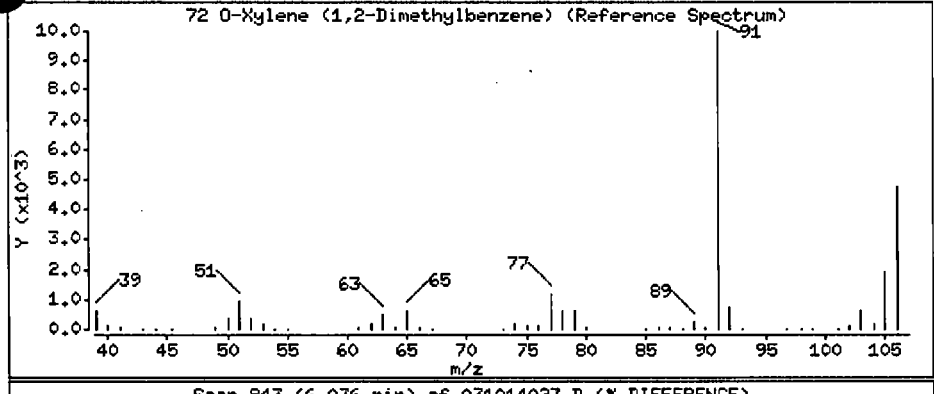
Concentration: 0.13 ug/Kg

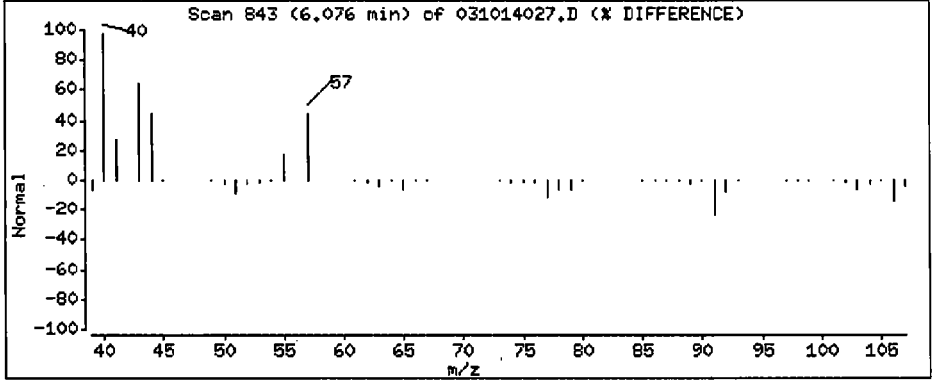












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

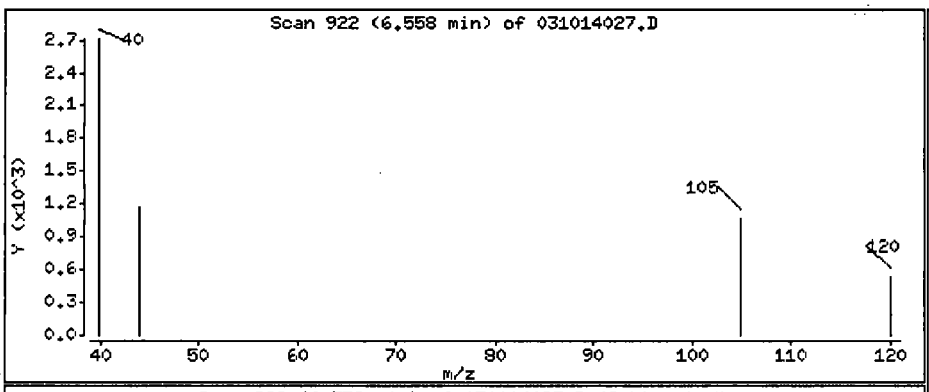
Operator: HBP

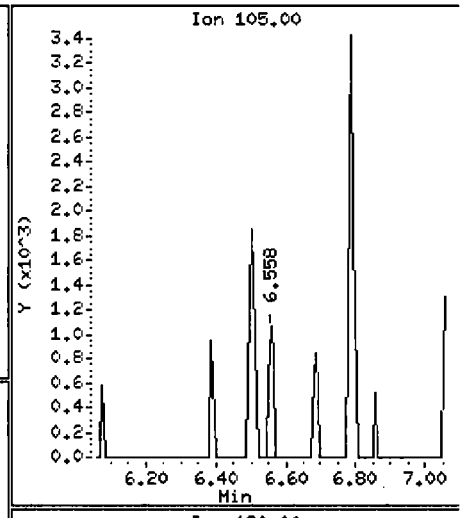
Column phase: Rtx-VMS

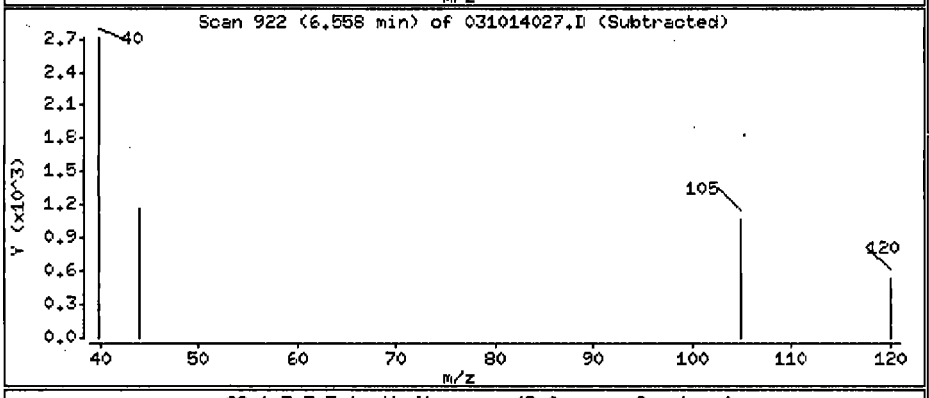
Column diameter: 0.18

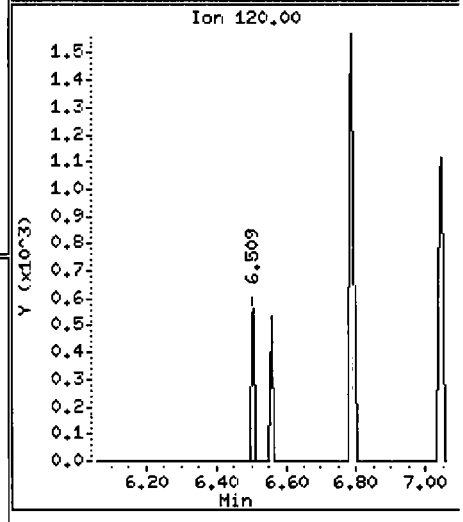
82 1,3,5-Trimethylbenzene

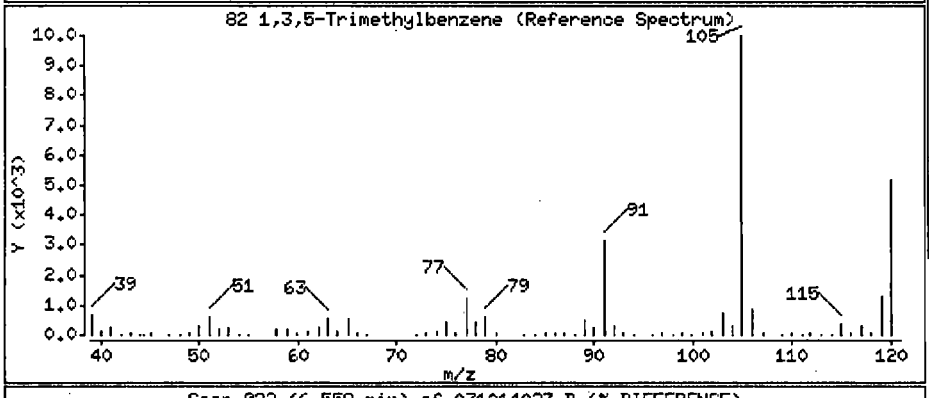
Concentration: 0.086 ug/Kg

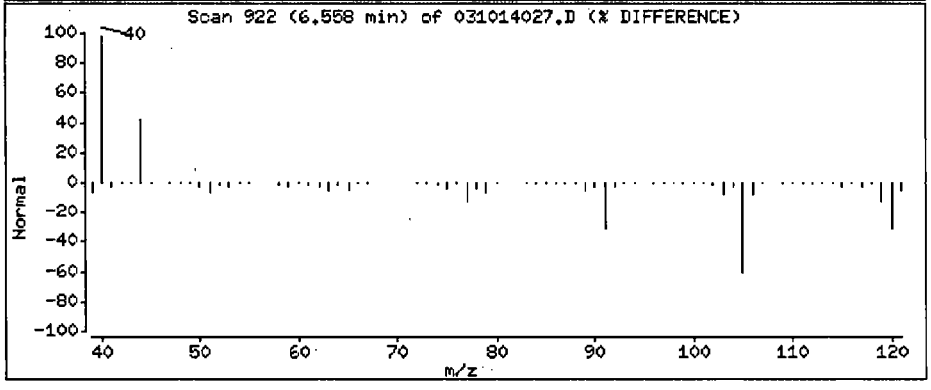












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

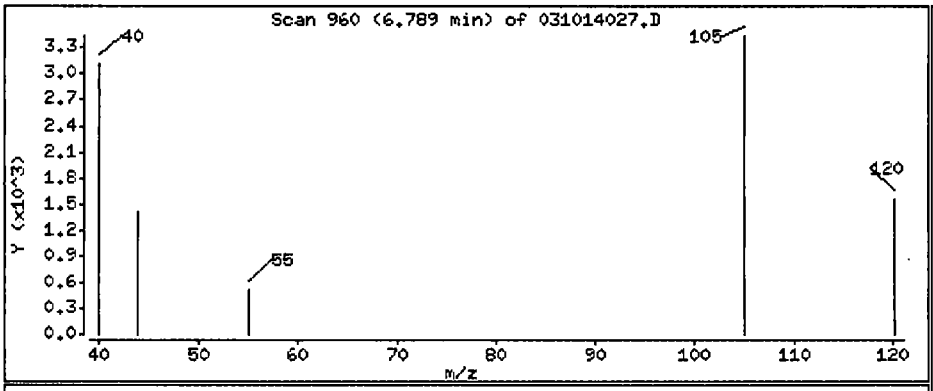
Operator: HBP

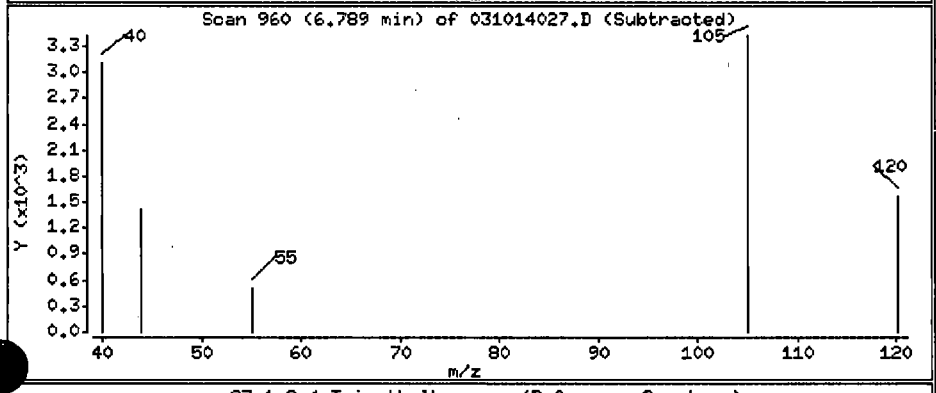
Column phase: Rtx-VMS

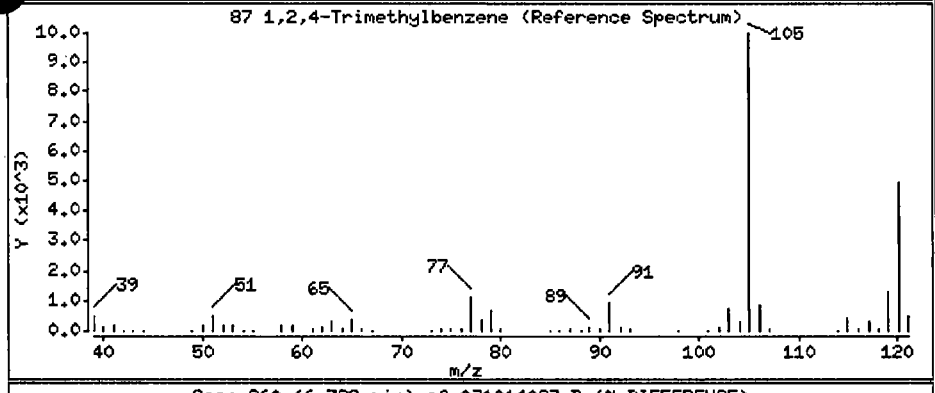
Column diameter: 0.18

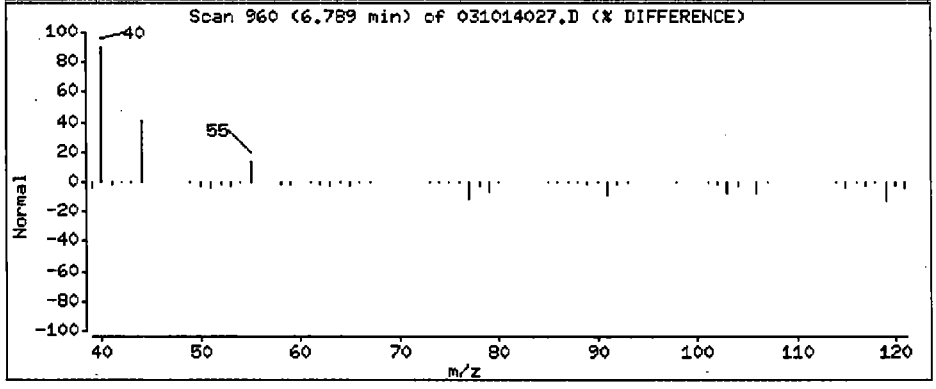
87 1,2,4-Trimethylbenzene

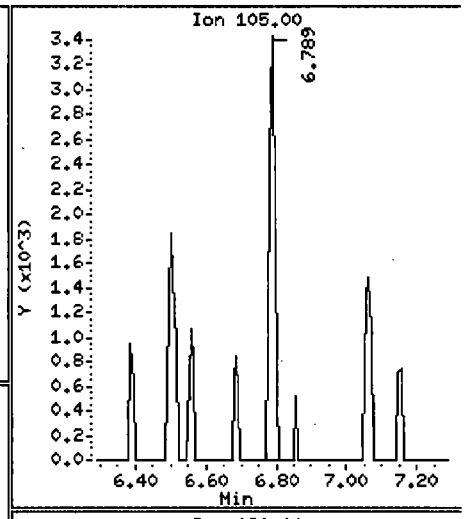
Concentration: 0.31 ug/Kg

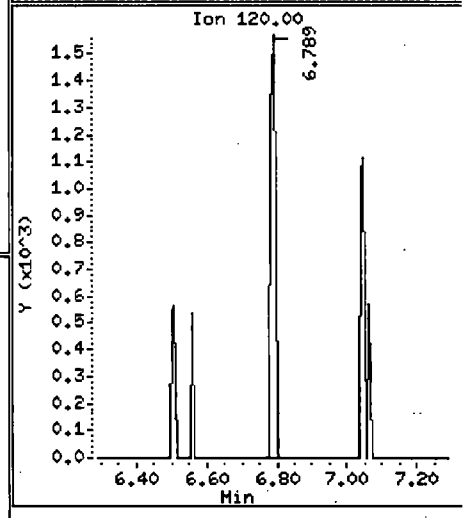












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

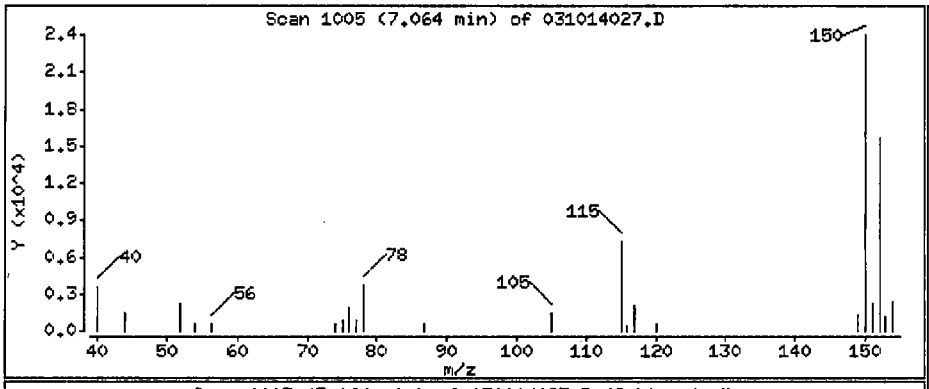
Operator: HBP

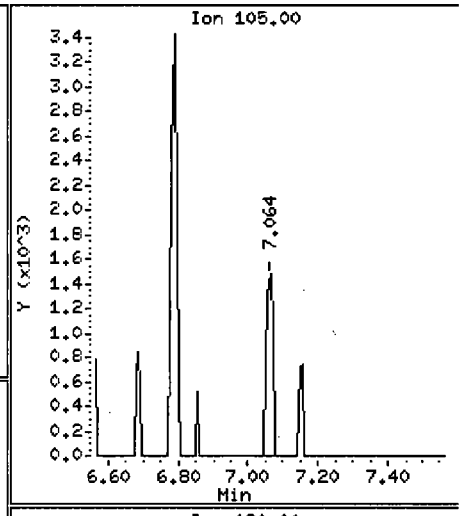
Column phase: Rtx-VMS

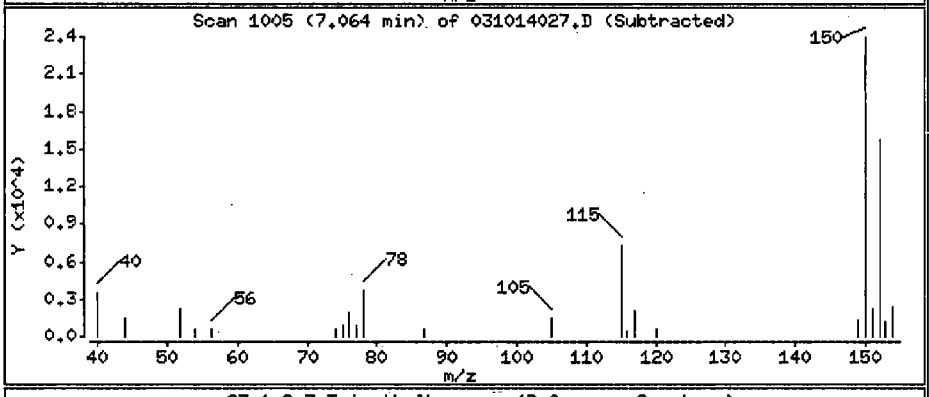
Column diameter: 0.18

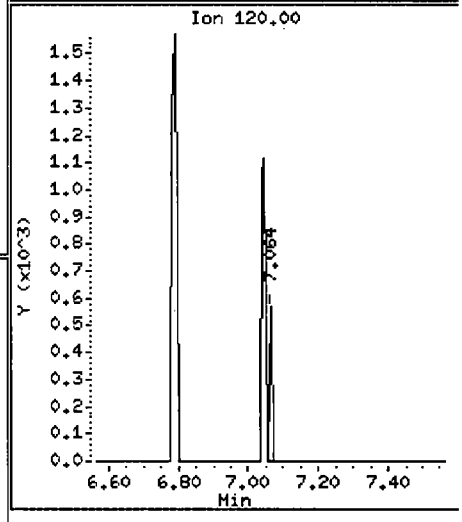
93 1,2,3 Trimethylbenzene

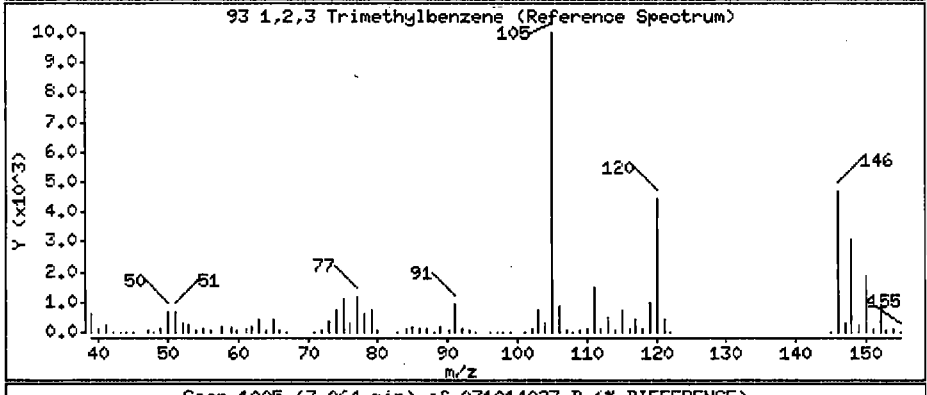
Concentration: 0.13 ug/Kg

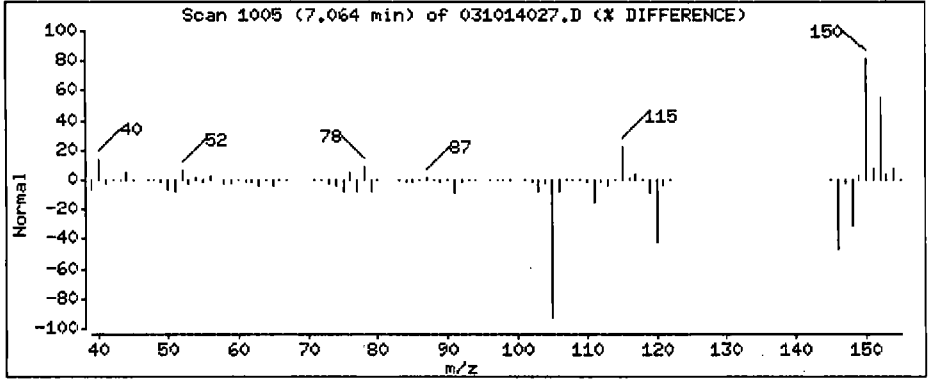












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Date : 10-MAR-2014 19:04

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055004,7.49

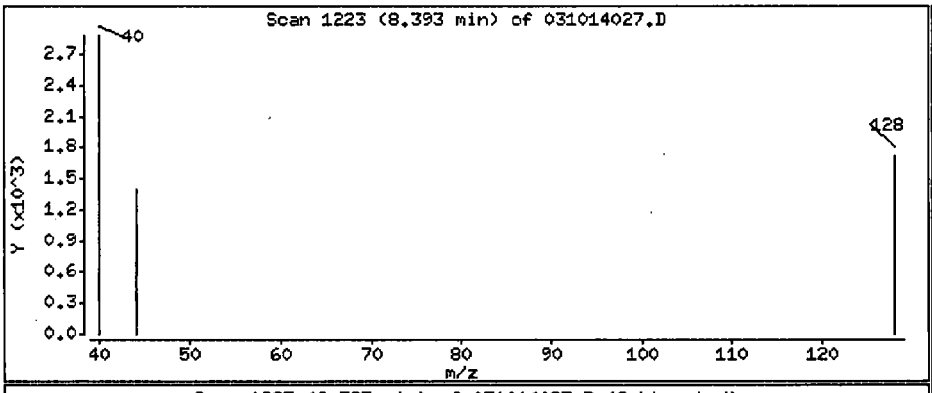
Operator: HBP

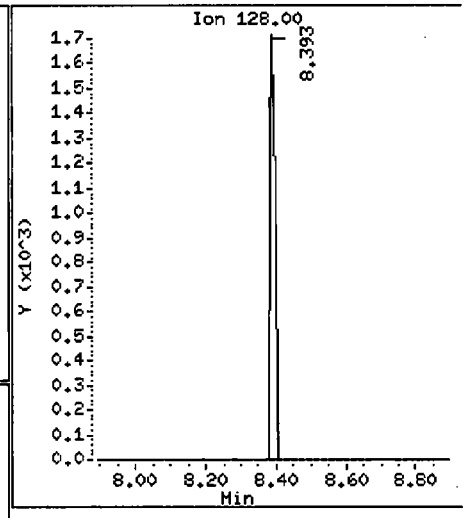
Column phase: Rtx-VMS

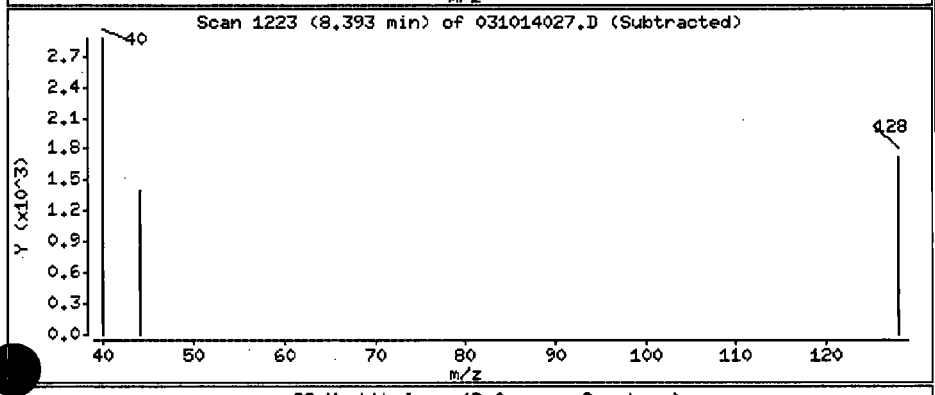
Column diameter: 0.18

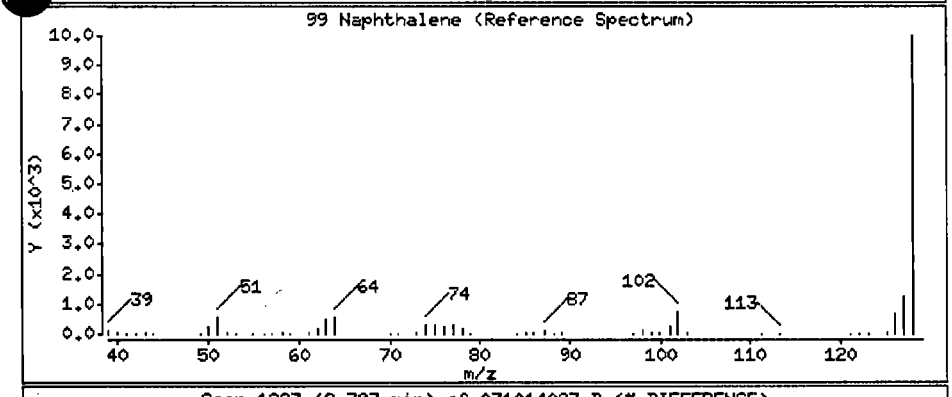
99 Naphthalene

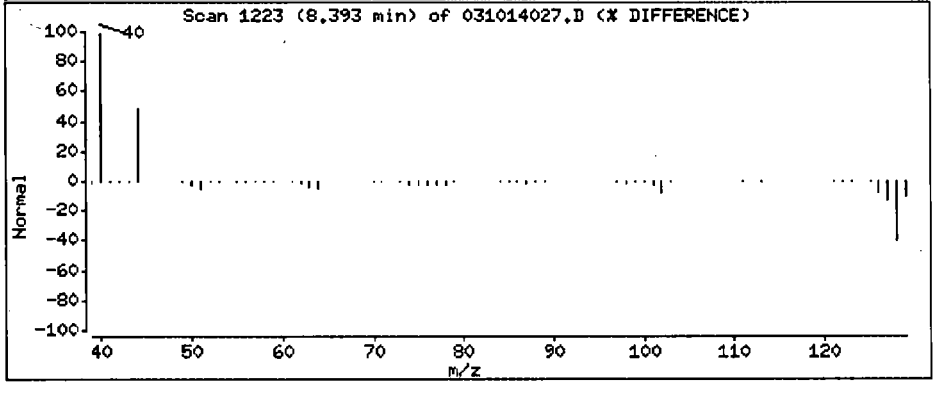
Concentration: 0.19 ug/Kg











Injection Date: 10-MAR-2014 19:04
Instrument: 10msv7.i
Lab Sample ID: 10259055004
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data file: \\192.168.10.12\chem\10msv7.i\031014B.b\031014028.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014028.D
Lab Smp Id: 10259055005
Inj Date : 10-MAR-2014 19:23
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259055005,7.10
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	7.100	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.095	2.101	(0.498)	4307	0.29978	0.42(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	2.637	2.637	(0.627)	2744	0.12944	0.18(a)
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	158322	200.000	
19	Acetone	58	2.698	2.698	(1.018)	3585	8.74498	12.4
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
21	Hexane	86	2.857	2.863	(1.078)	4701	4.06984	5.8(a)
22	Methyl-tert-butyl Ether	73	Compound Not Detected.					
23	tert-Butyl Alcohol	59	Compound Not Detected.					
24	Acetonitrile	41	Compound Not Detected.					
25	Isopropyl Ether	45	Compound Not Detected.					
26	Acrylonitrile	53	Compound Not Detected.					
27	1,1-Dichloroethane	63	Compound Not Detected.					
28	Ethyl-tert-butyl ether	59	Compound Not Detected.					
29	Vinyl Acetate	43	Compound Not Detected.					
30	cis-1,2-Dichloroethene	96	Compound Not Detected.					
31	2,2-Dichloropropane	77	Compound Not Detected.					
32	Cyclohexane	56	3.753	3.753	(0.893)	16301	2.33810	3.3(aQ)
33	Bromochloromethane	130	Compound Not Detected.					
34	Chloroform	83	Compound Not Detected.					
35	Carbon Tetrachloride	117	Compound Not Detected.					
36	Tetrahydrofuran	72	Compound Not Detected.					
37	1,1,1-Trichloroethane	97	Compound Not Detected.					
38	2-Butanone	43	Compound Not Detected.					
39	1,1-Dichloropropene	75	Compound Not Detected.					
40	Benzene	78	4.143	4.143	(0.986)	34767	2.00778	2.8(a)
* 41	Pentafluorobenzene	168	4.204	4.204	(1.000)	1004151	100.000	
42	Tert-amyl methyl ether	73	Compound Not Detected.					
$ 43	1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	411694	106.216	106
44	1,2-Dichloroethane	62	Compound Not Detected.					
45	Isobutanol	43	Compound Not Detected.					
46	Tert-Amyl Alcohol	59	Compound Not Detected.					
47	Trichloroethene	130	Compound Not Detected.					
* 48	1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1481716	100.000	
49	Tert-amyl ethyl ether	59	Compound Not Detected.					
50	Dibromomethane	174	Compound Not Detected.					
51	1,2-Dichloropropane	63	Compound Not Detected.					
52	Bromodichloromethane	83	Compound Not Detected.					
* 53	1,4 dioxane d8	96	4.826	4.826	(1.000)	181742	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
55	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
56	cis-1,3-Dichloropropene	75	Compound Not Detected.					
$ 57	Toluene-d8 (S)	98	5.106	5.106	(0.883)	1730707	98.3900	98.4
58	Toluene	92	5.131	5.130	(0.887)	43125	3.80719	5.4(a)
59	4-Methyl-2-Pentanone	43	Compound Not Detected.					
60	Tetrachloroethene	166	Compound Not Detected.					
61	trans-1,3-Dichloropropene	75	Compound Not Detected.					
62	1,1,2-Trichloroethane	97	Compound Not Detected.					
63	Dibromochloromethane	129	Compound Not Detected.					
64	1,3-Dichloropropane	76	Compound Not Detected.					
65	1,2-Dibromoethane	107	Compound Not Detected.					
66	2-Hexanone	43	Compound Not Detected.					
* 67	Chlorobenzene-d5	117	5.783	5.789	(1.000)	1497095	100.000	
68	Chlorobenzene	112	Compound Not Detected.					
69	Ethylbenzene	91	5.801	5.801	(1.003)	28267	1.30953	1.8(a)
70	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
71	M&P-Xylene	106	5.868	5.868	(1.015)	16545	1.96801	2.8(a)
72	O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	7315	0.92787	1.3(a)
73	Styrene	104	Compound Not Detected.					
74	Bromoform	173	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	75 Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	741989	101.000	101
	77 cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78 Bromobenzene	156	Compound Not Detected.					
	79 n-Propylbenzene	91	6.454	6.453	(0.916)	5855	0.22757	0.32(a)
	80 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81 2-Chlorotoluene	91	Compound Not Detected.					
	82 1,3,5-Trimethylbenzene	105	6.557	6.557	(0.931)	5686	0.31232	0.44(a)
	83 1,2,3-Trichloropropane	110	Compound Not Detected.					
	84 trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85 4-Chlorotoluene	91	Compound Not Detected.					
	86 tert-Butylbenzene	119	Compound Not Detected.					
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	18771	1.01271	1.4(a)
	88 sec-Butylbenzene	105	Compound Not Detected.					
	89 p-Isopropyltoluene	119	Compound Not Detected.					
	90 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	915701	100.000	
	92 1,4-Dichlorobenzene	146	Compound Not Detected.					
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	8018	0.41451	0.59(a)
	94 n-Butylbenzene	91	Compound Not Detected.					
	95 1,2-Dichlorobenzene	146	Compound Not Detected.					
	96 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97 Hexachlorobutadiene	225	Compound Not Detected.					
	98 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	99 Naphthalene	128	8.392	8.392	(1.191)	4062	0.30385	0.43(a)
	100 1,2,3-Trichlorobenzene	180	Compound Not Detected.					
	101 2-Methylnaphthalene	142	9.008	9.014	(1.279)	1285	0.24754	0.35(a)

Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014028.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014028.D
Lab Smp Id: 10259055005
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	158322	10.20
41 Pentafluorobenzen	966546	483273	1933092	1004151	3.89
48 1,4 Difluorobenze	1457917	728959	2915834	1481716	1.63
53 1,4 dioxane d8	174389	87195	348778	181742	4.22
67 Chlorobenzene-d5	1458689	729345	2917378	1497095	2.63
91 1,4-Dichlorobenze	888899	444450	1777798	915701	3.02

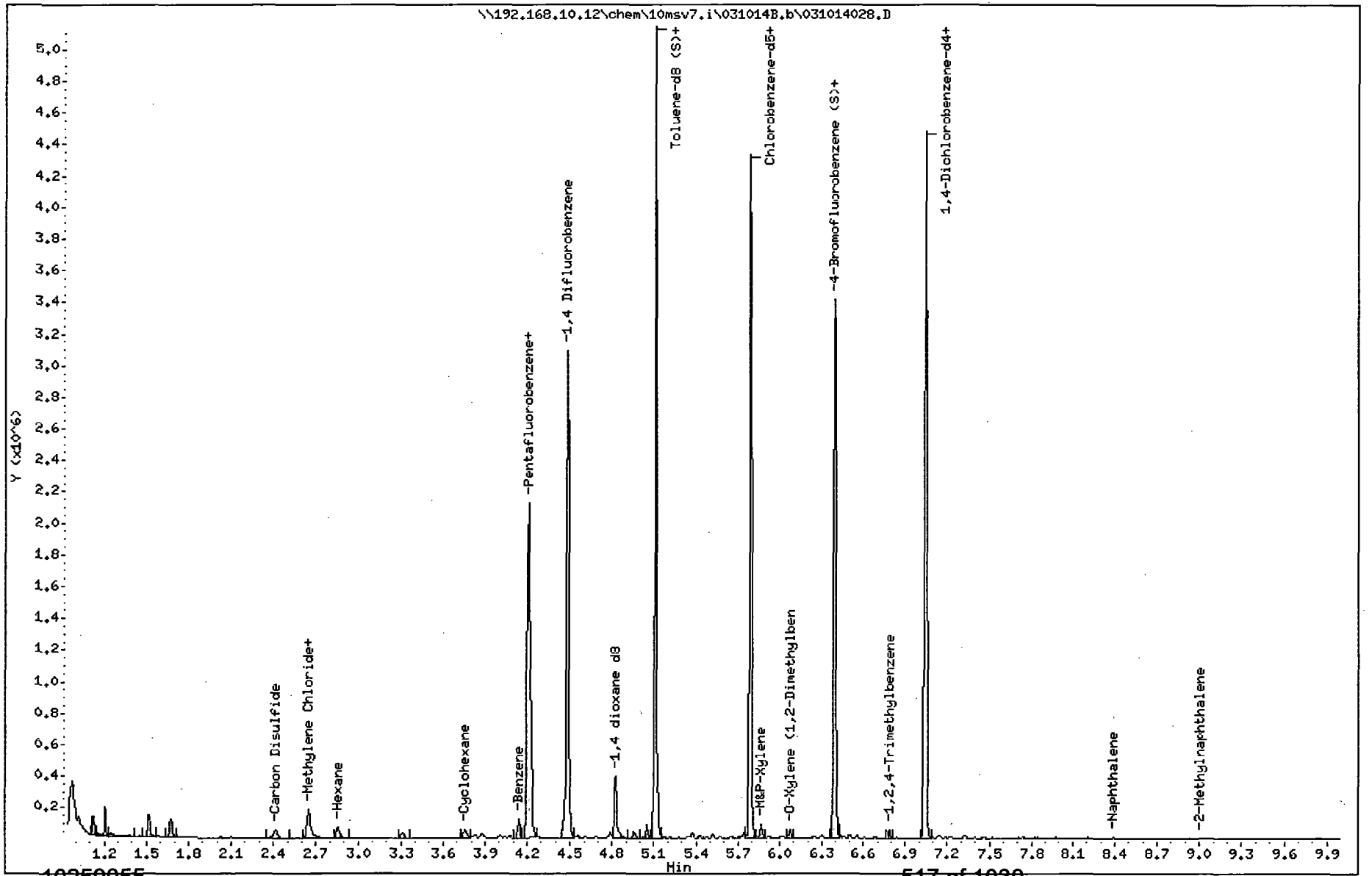
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014028.D
Date : 10-MAR-2014 19:23
Client ID:
Sample Info: 10259055005,7.10

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

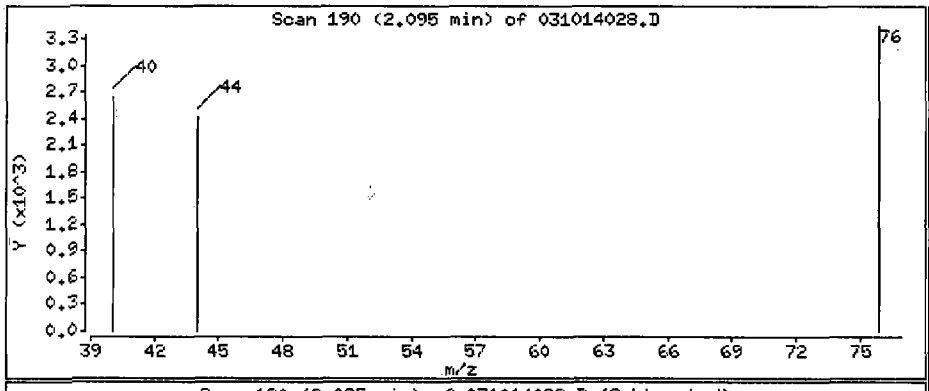
Operator: HBP

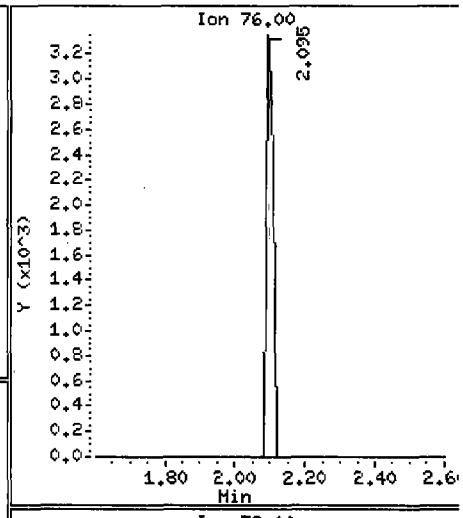
Column phase: Rtx-VMS

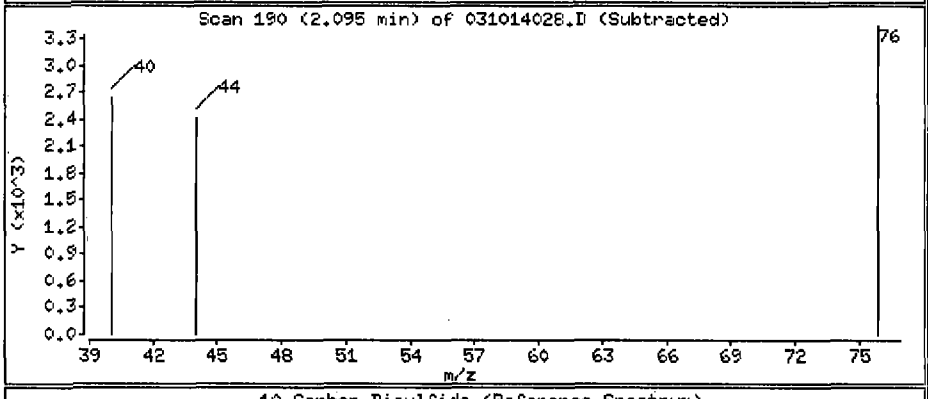
Column diameter: 0.18

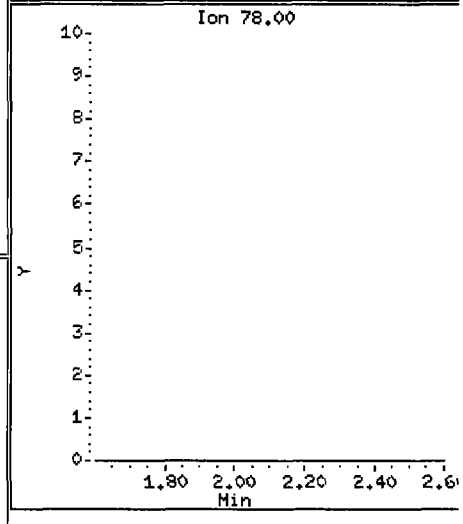
10 Carbon Disulfide

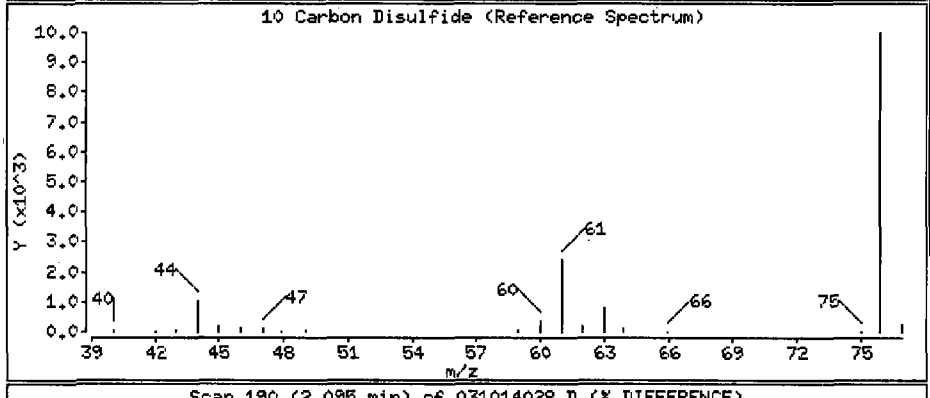
Concentration: 0.42 ug/Kg

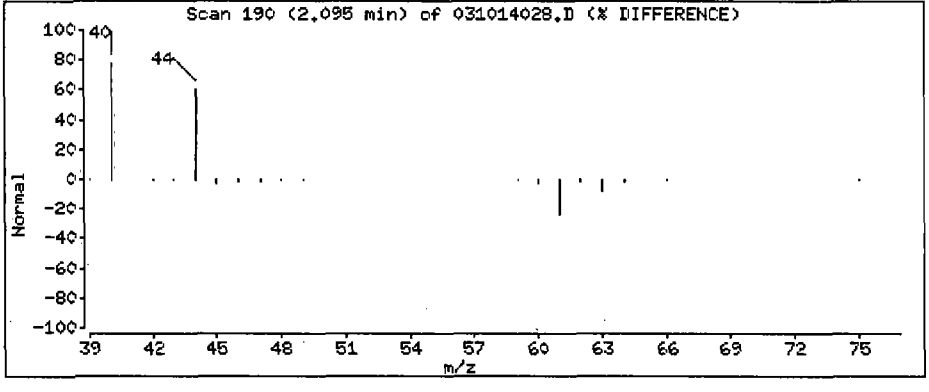












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

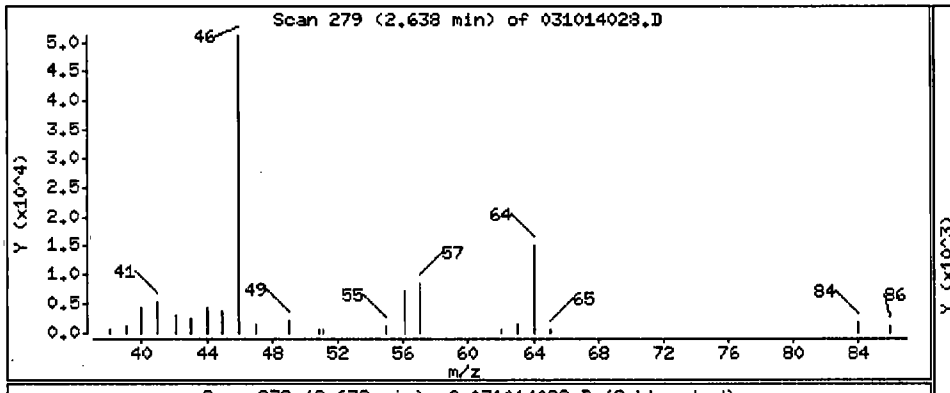
Operator: HBP

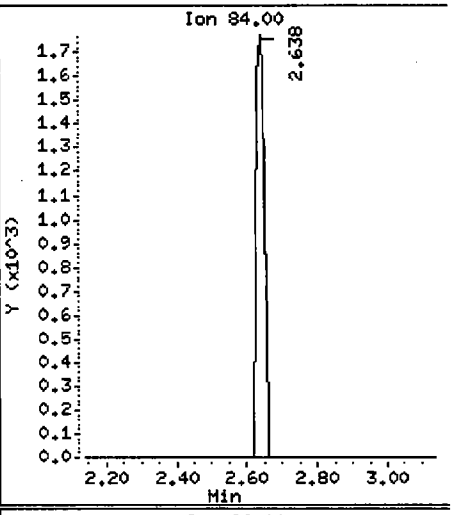
Column phase: Rtx-VMS

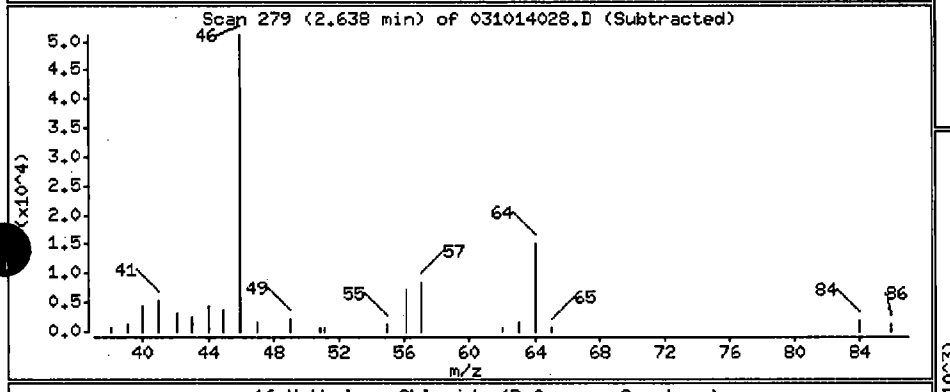
Column diameter: 0.18

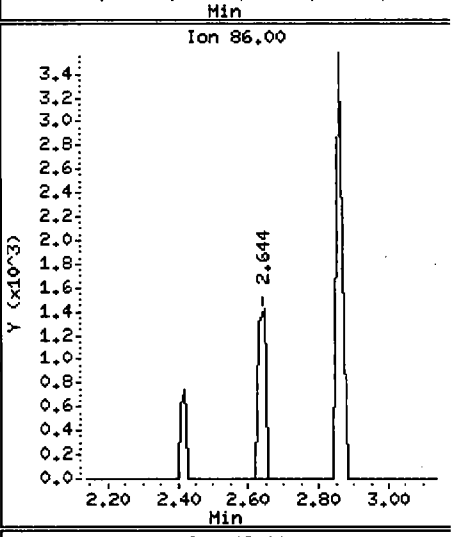
16 Methylene Chloride

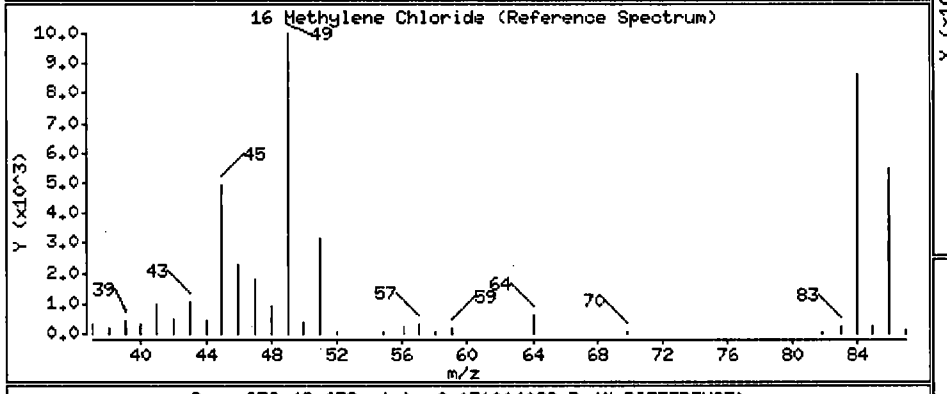
Concentration: 0.18 ug/Kg

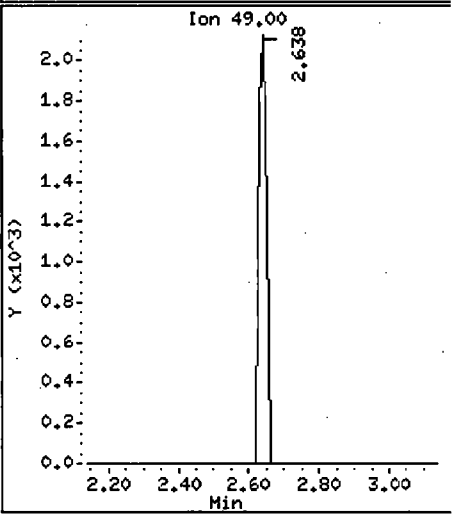


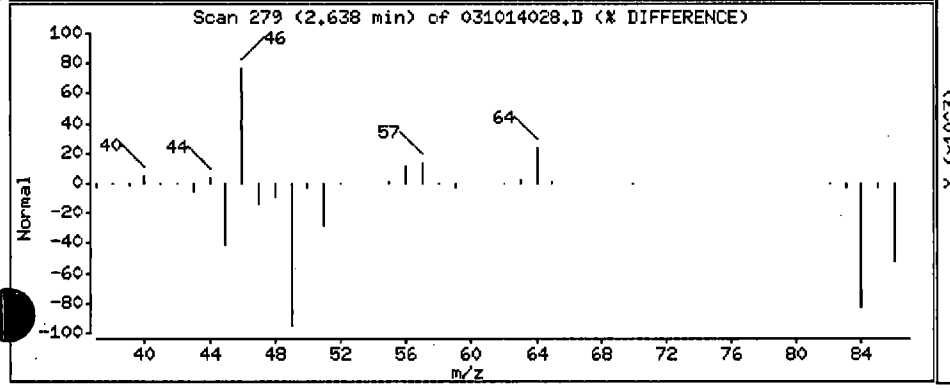












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

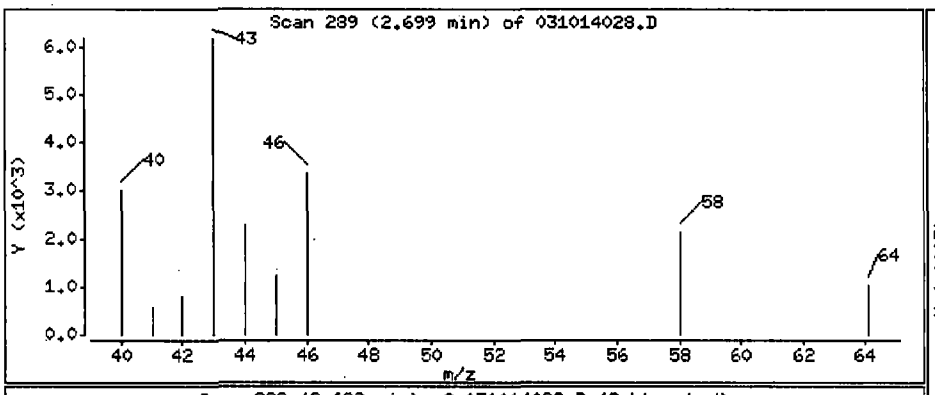
Operator: HEP

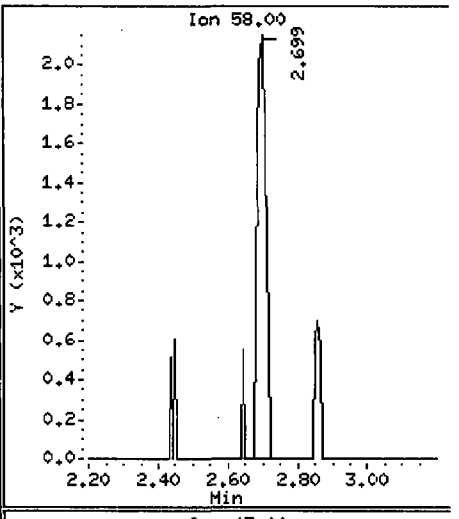
Column phase: Rtx-VMS

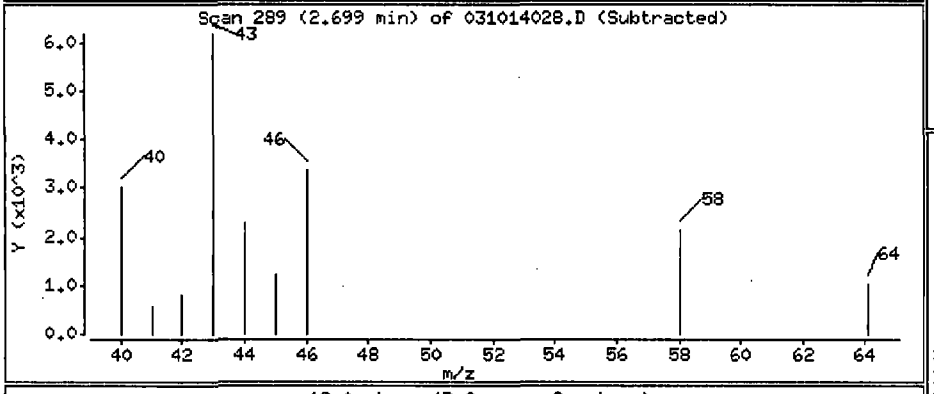
Column diameter: 0.18

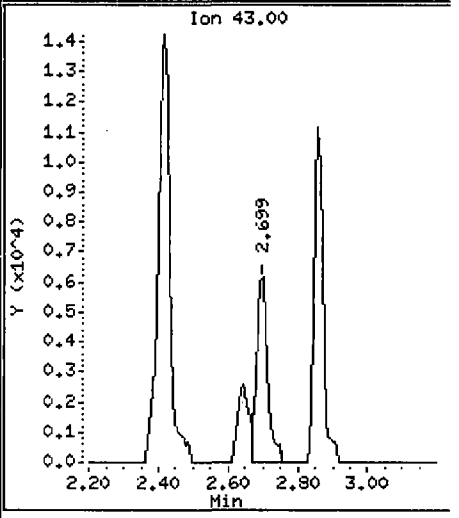
19 Acetone

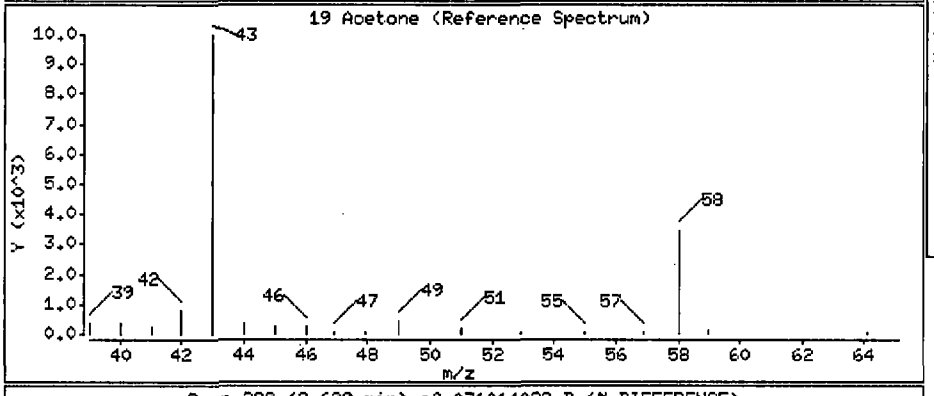
Concentration: 12.4 ug/Kg

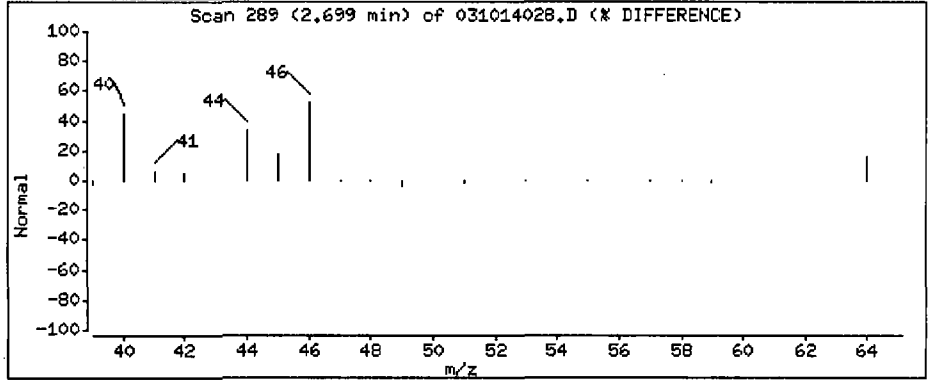












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

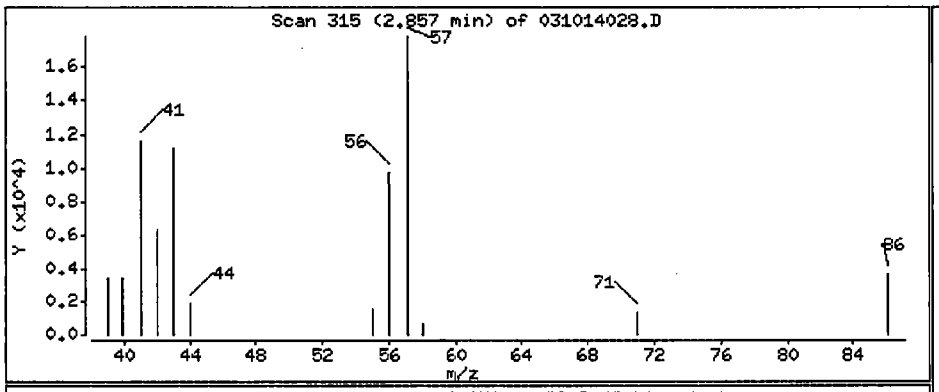
Operator: HBP

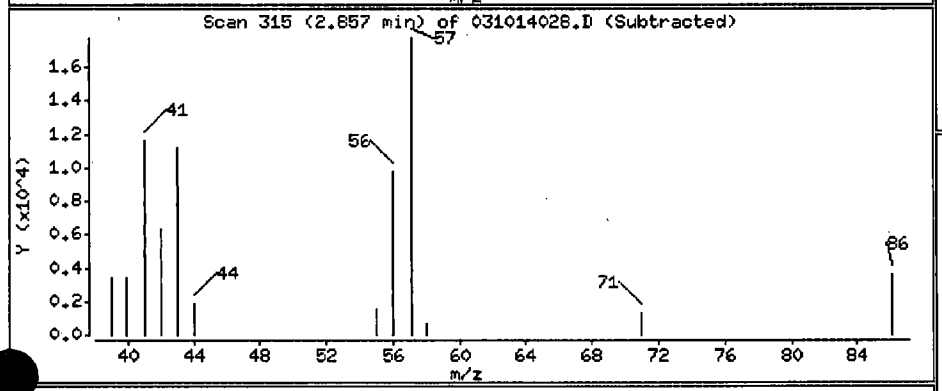
Column phase: Rtx-VMS

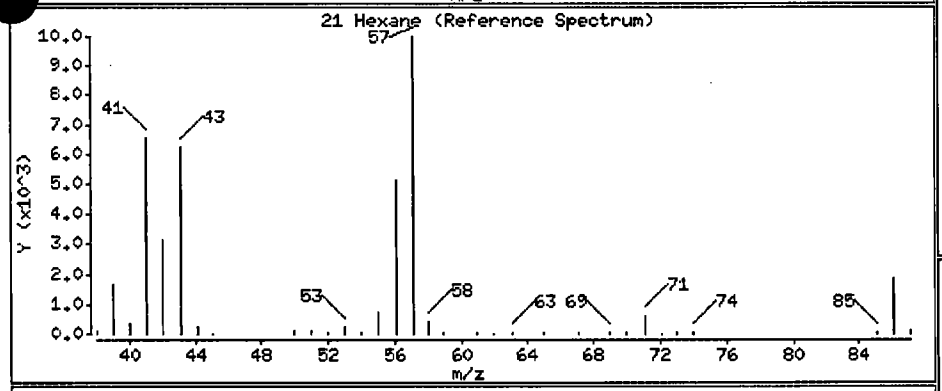
Column diameter: 0.18

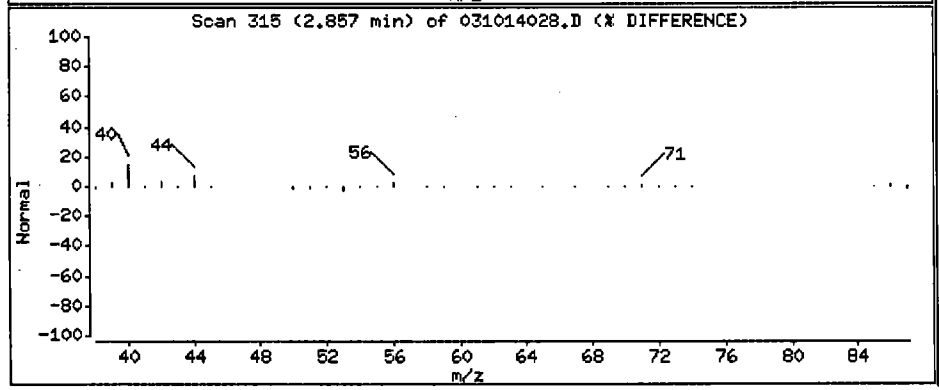
21 Hexane

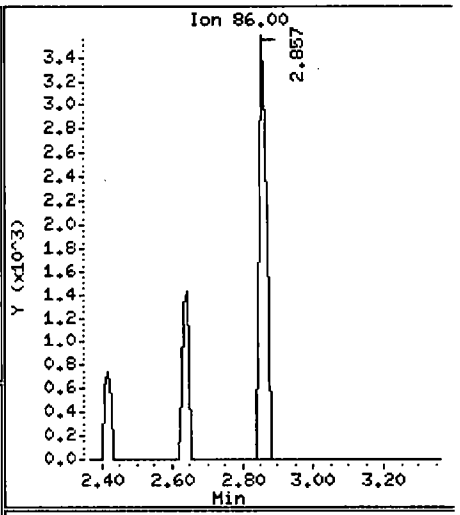
Concentration: 5.8 ug/Kg

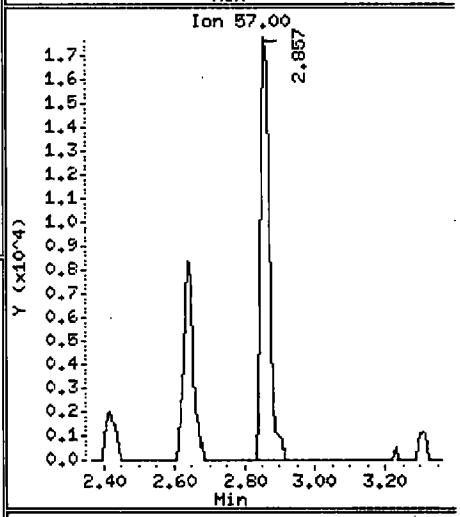


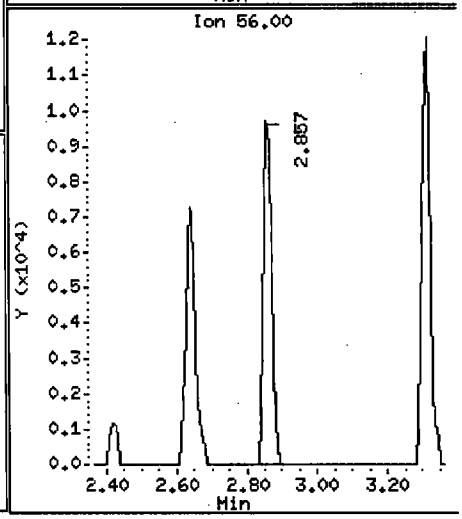












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7,10

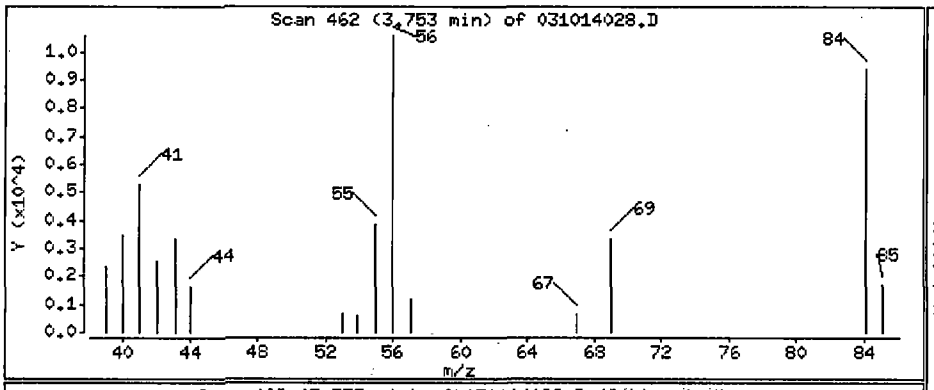
Operator: HBP

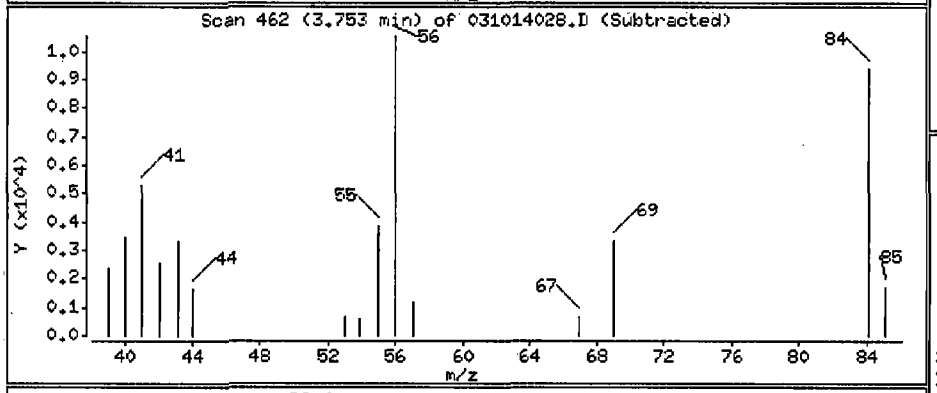
Column phase: Rtx-VMS

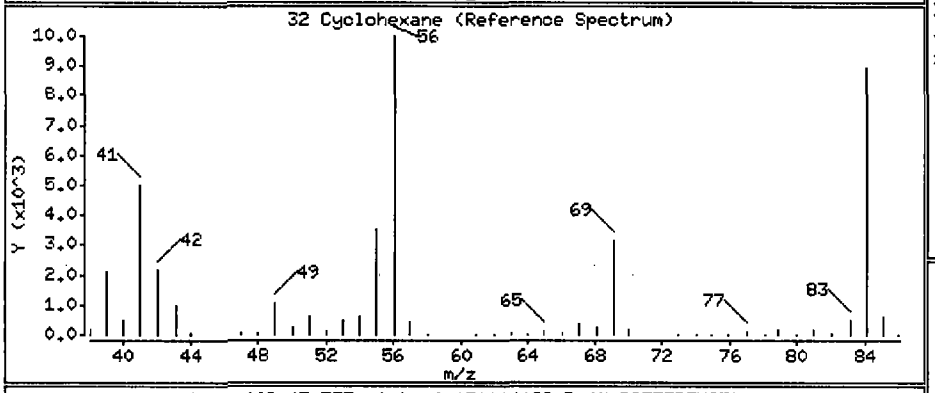
Column diameter: 0.18

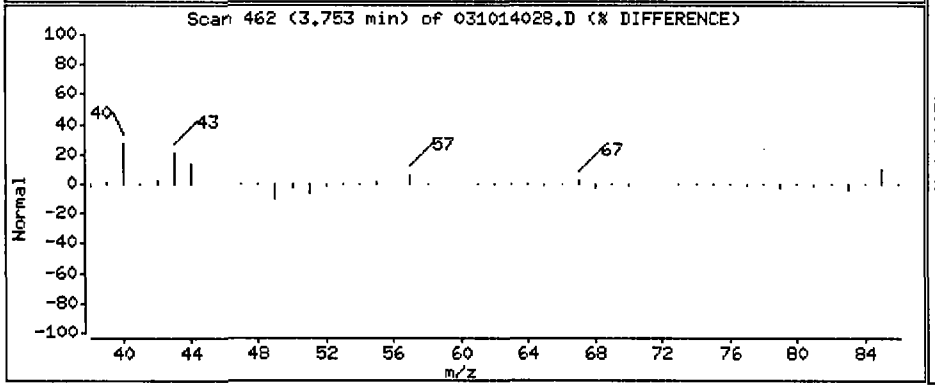
32 Cyclohexane

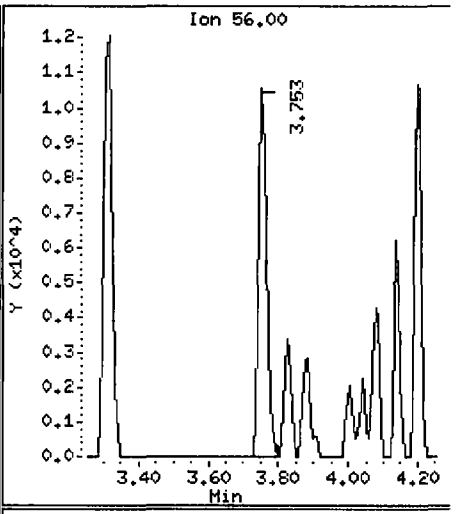
Concentration: 3.3 ug/Kg

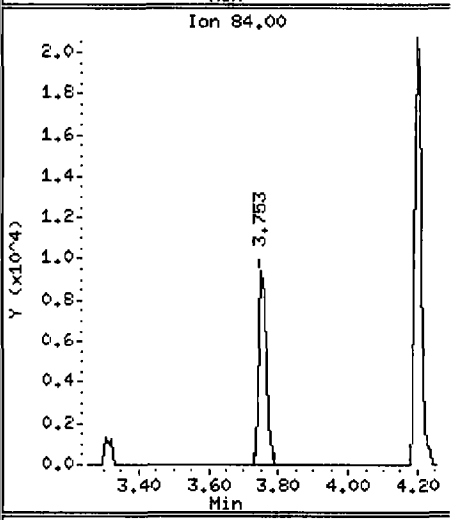


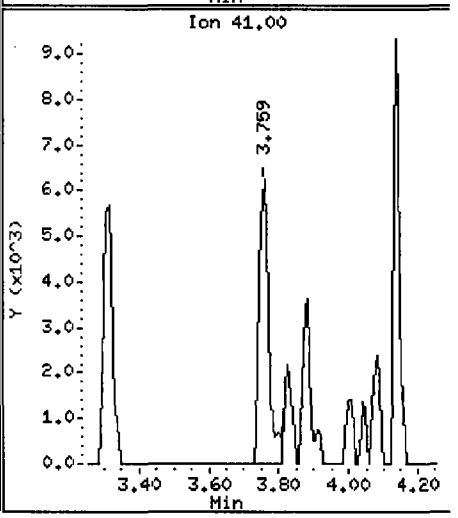












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

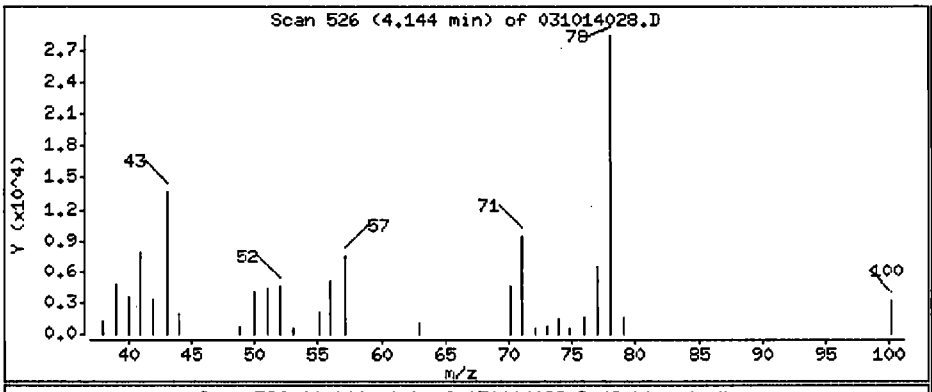
Operator: HBP

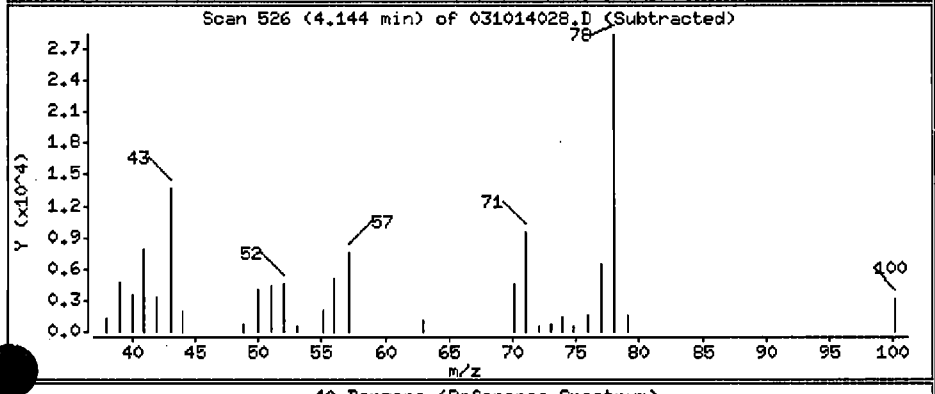
Column phase: Rtx-VMS

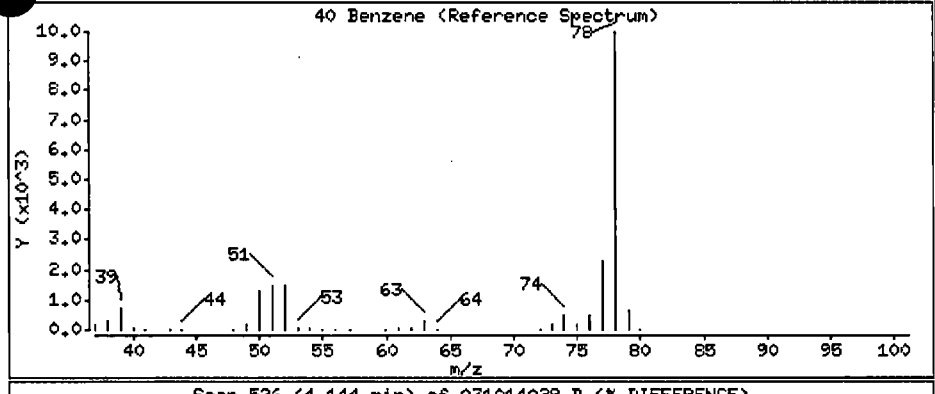
Column diameter: 0.18

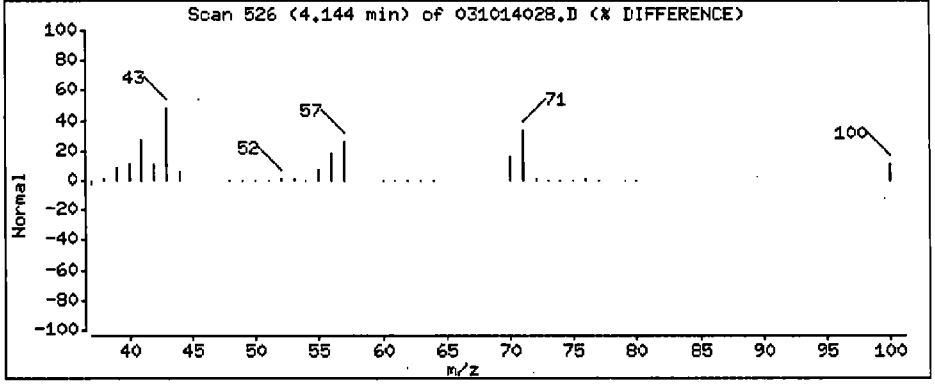
40 Benzene

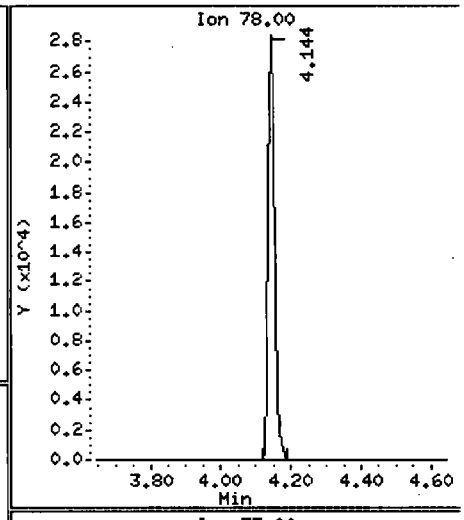
Concentration: 2.8 ug/Kg

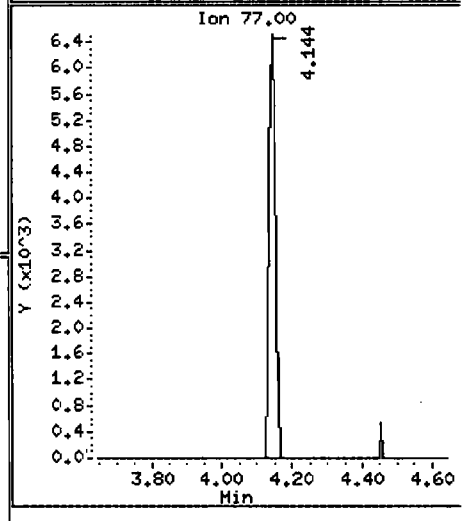












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

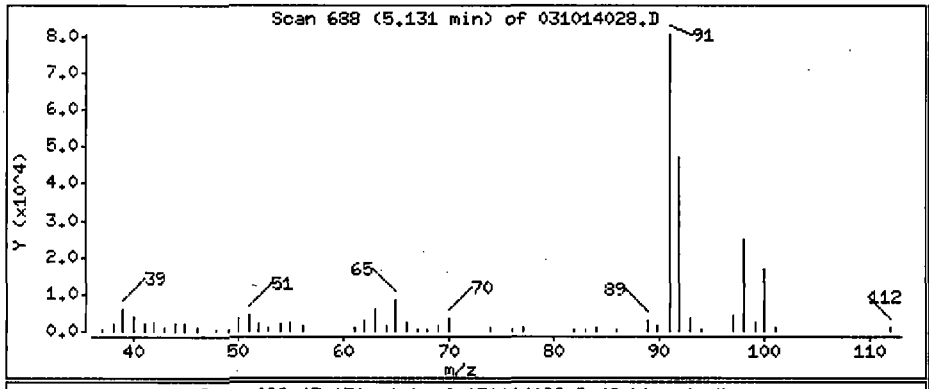
Operator: HBP

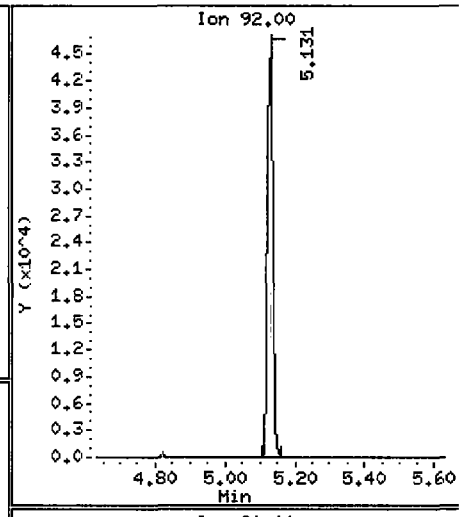
Column phase: Rtx-VMS

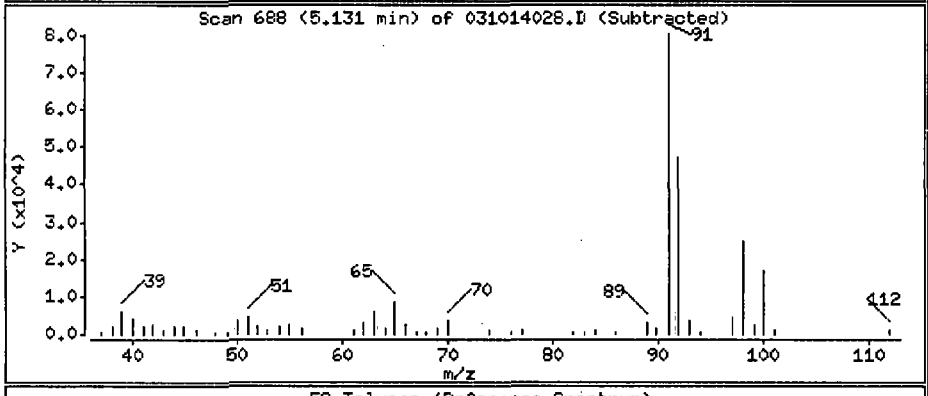
Column diameter: 0.18

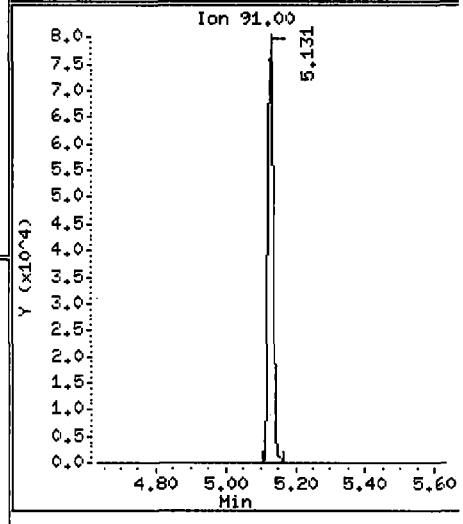
58 Toluene

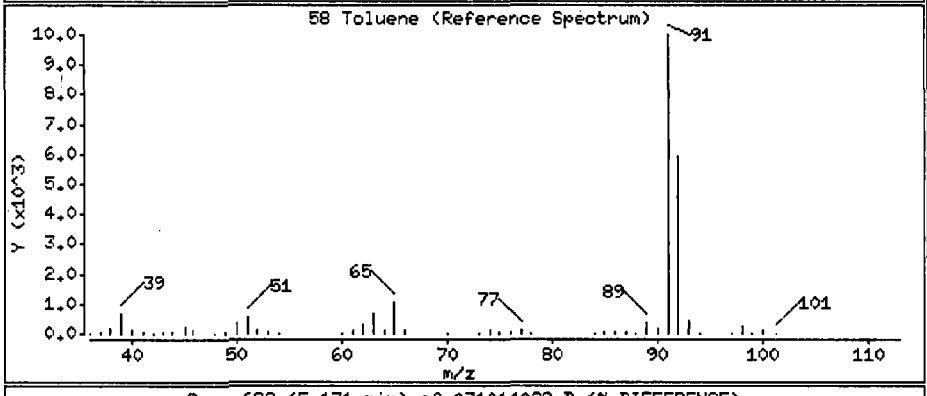
Concentration: 5.4 ug/Kg

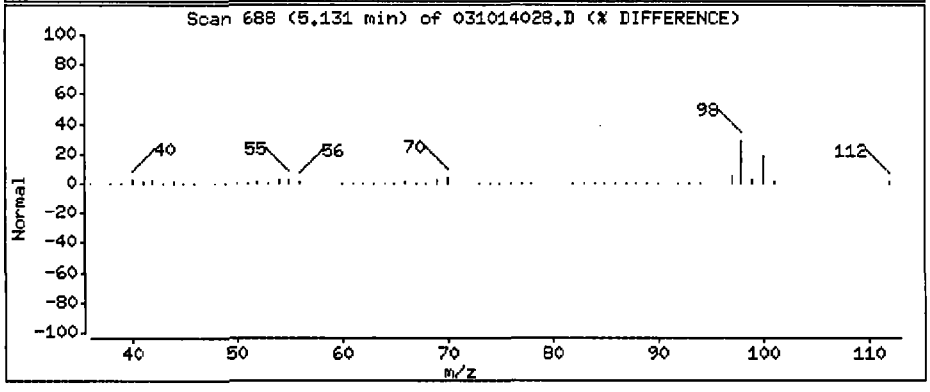












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

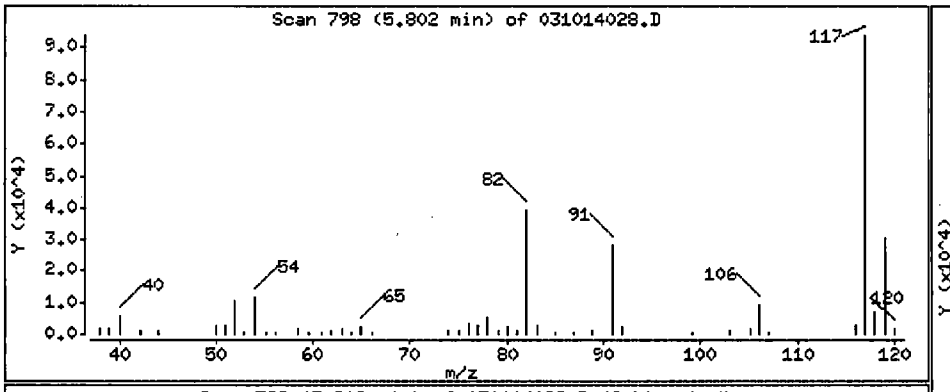
Operator: HBP

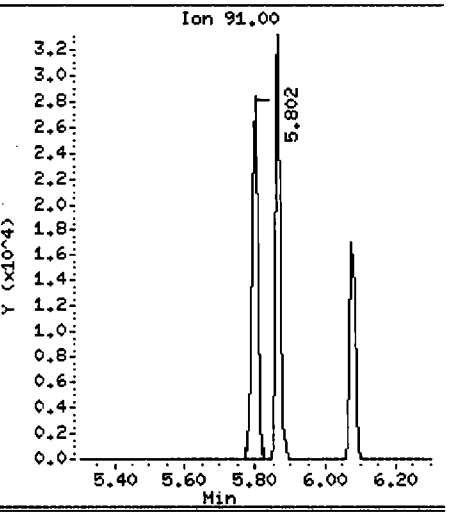
Column phase: Rtx-VMS

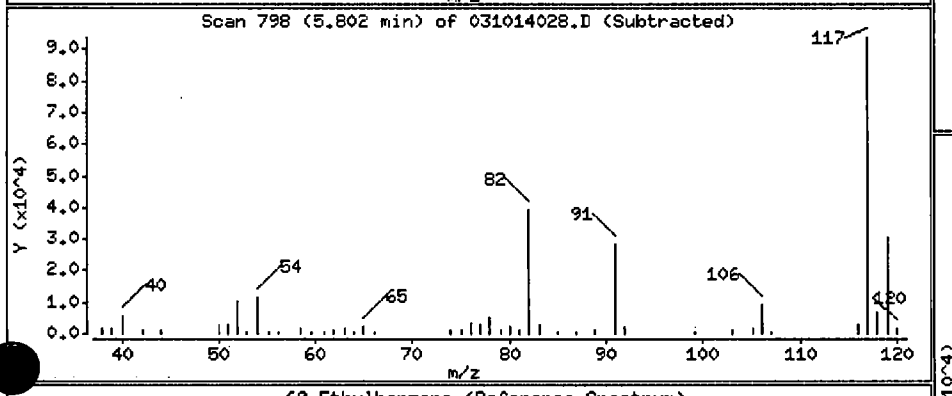
Column diameter: 0.18

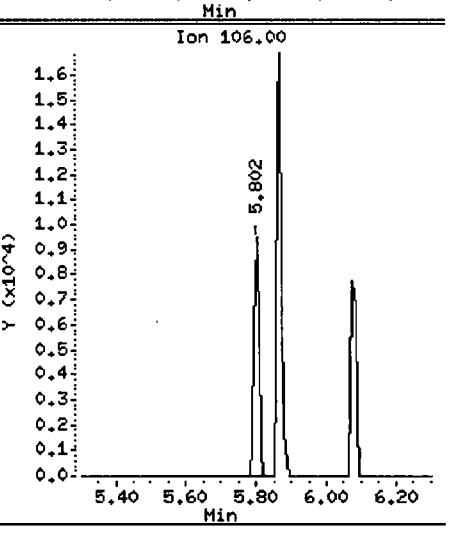
69 Ethylbenzene

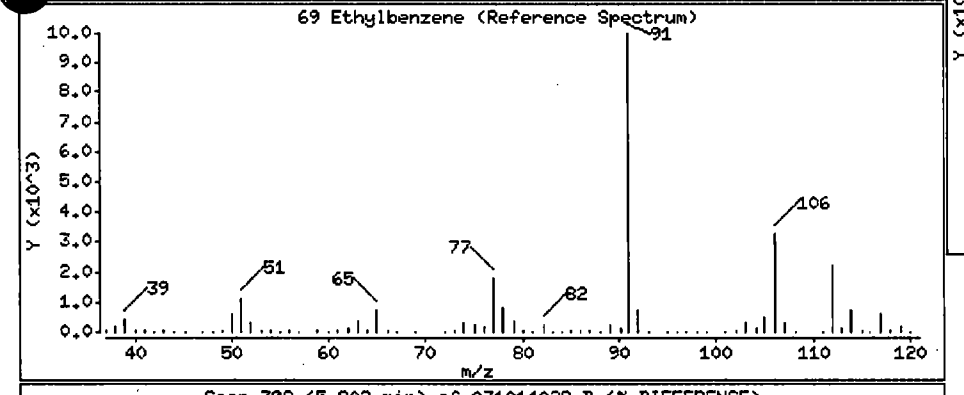
Concentration: 1.8 ug/Kg

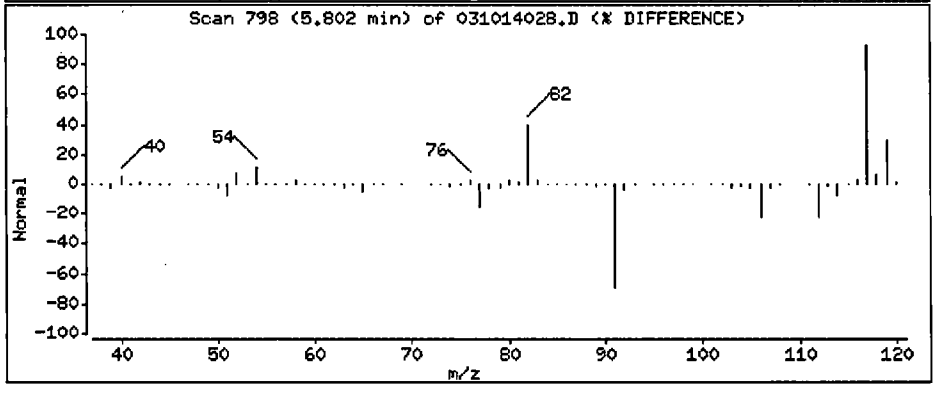












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7,10

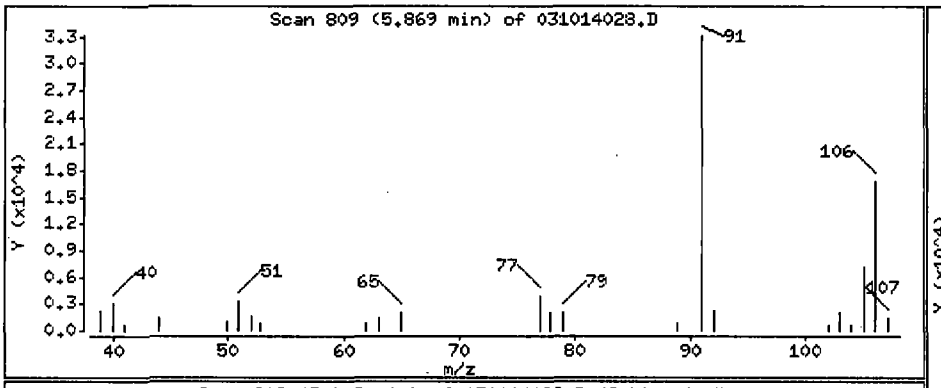
Operator: HBP

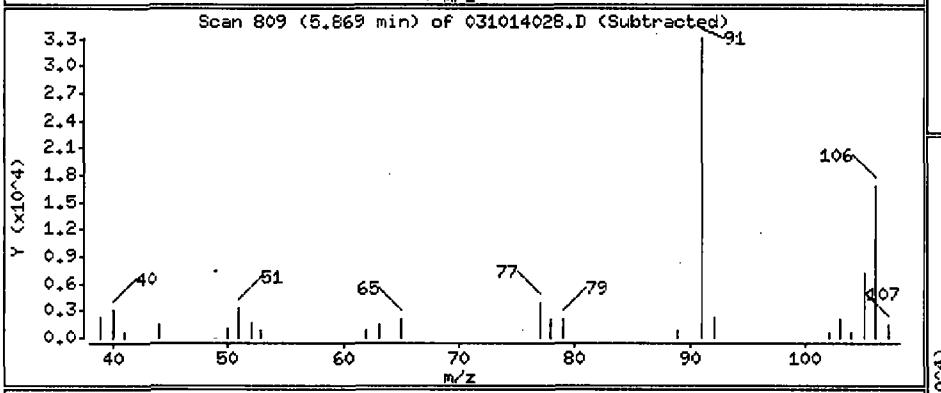
Column phase: Rtx-VMS

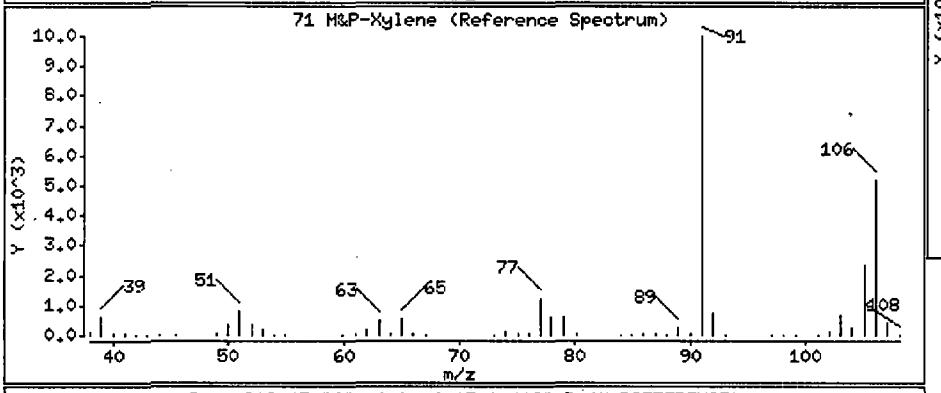
Column diameter: 0.18

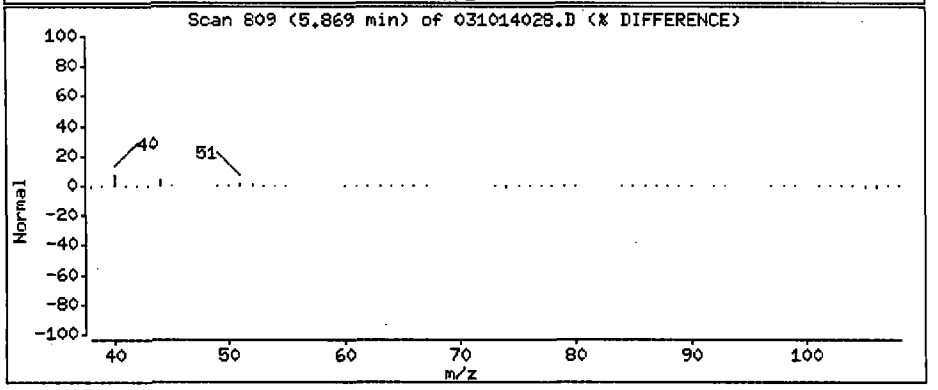
71 M&P-Xylene

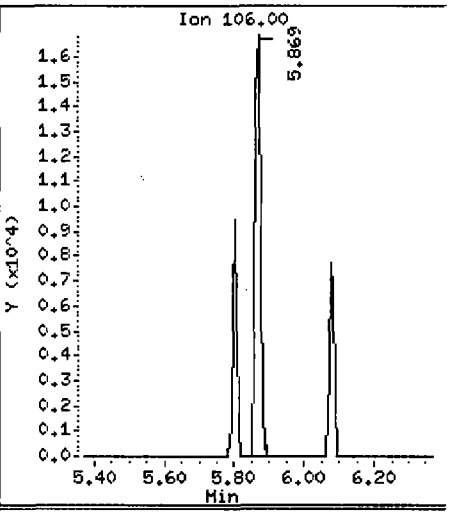
Concentration: 2.8 ug/Kg

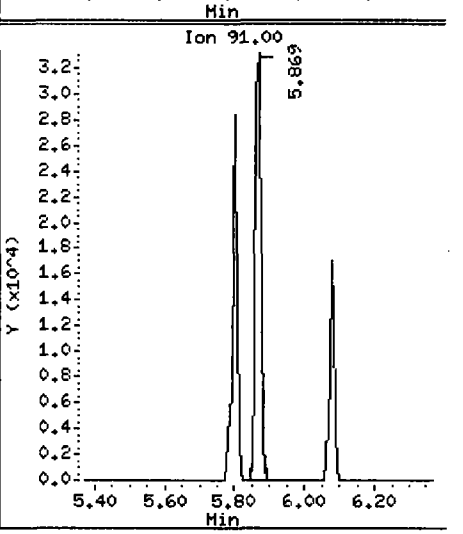












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

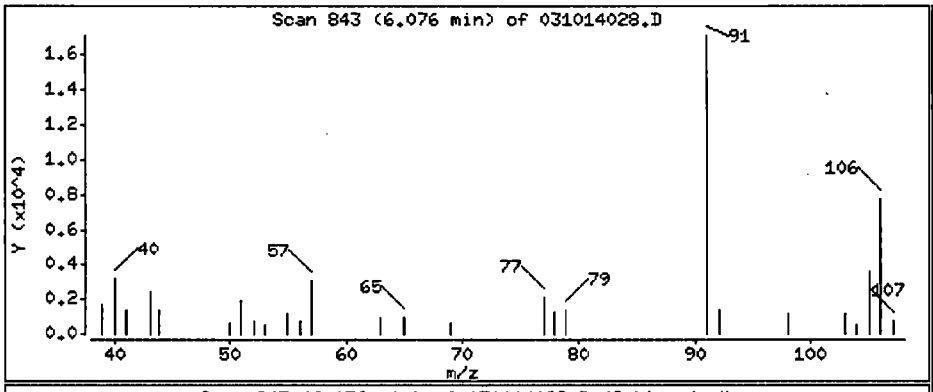
Operator: HBP

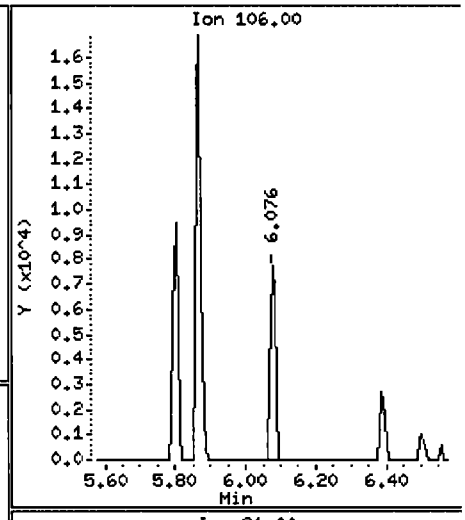
Column phase: Rtx-VMS

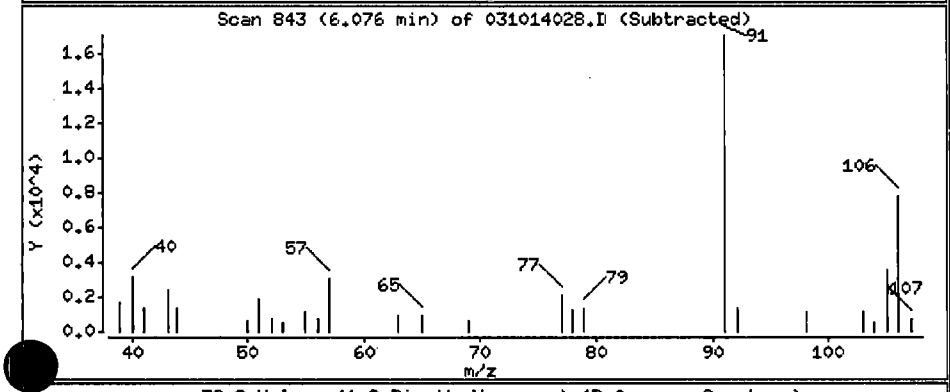
Column diameter: 0.18

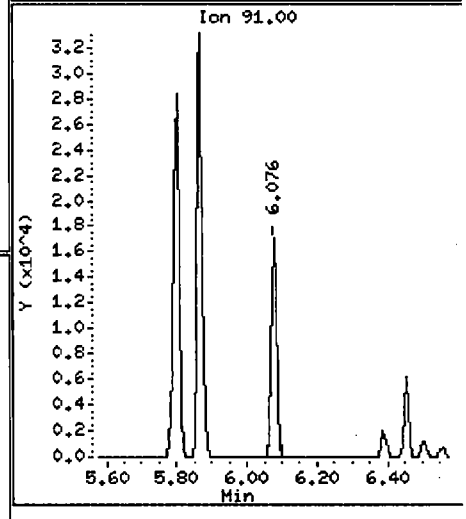
72 O-Xylene (1,2-Dimethylbenzene)

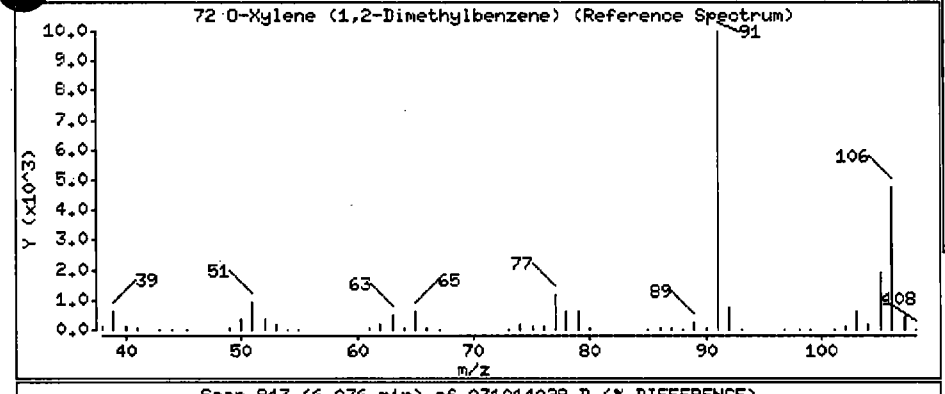
Concentration: 1.3 ug/Kg

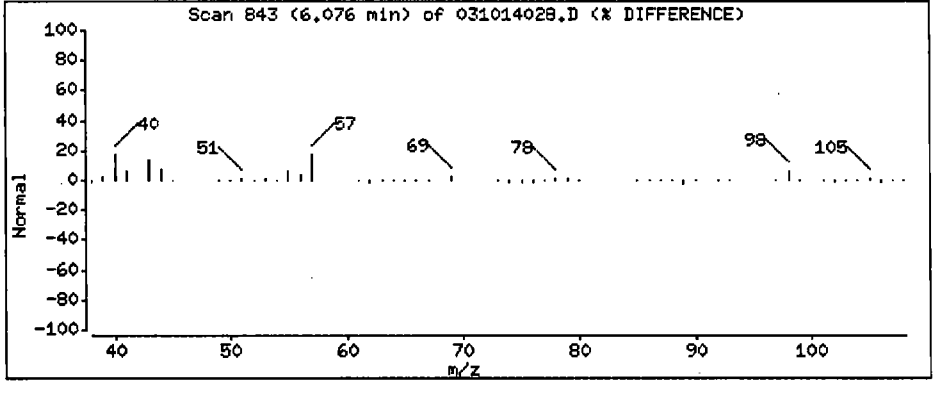












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

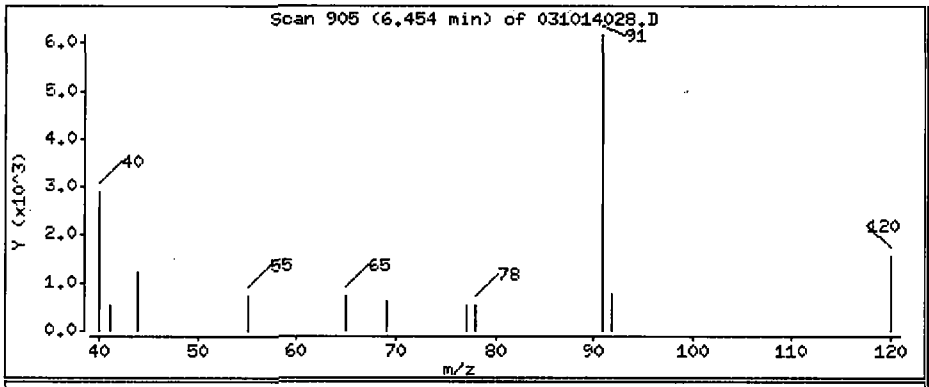
Operator: HBP

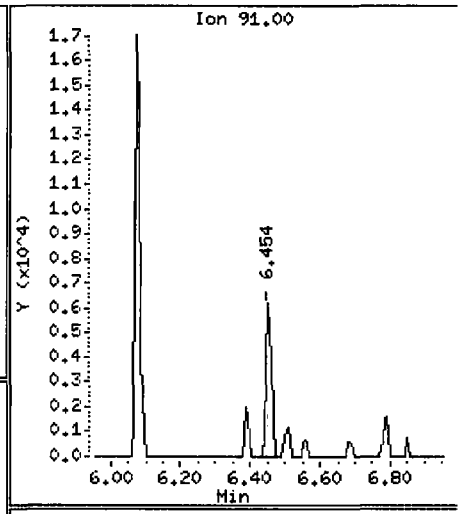
Column phase: Rtx-VMS

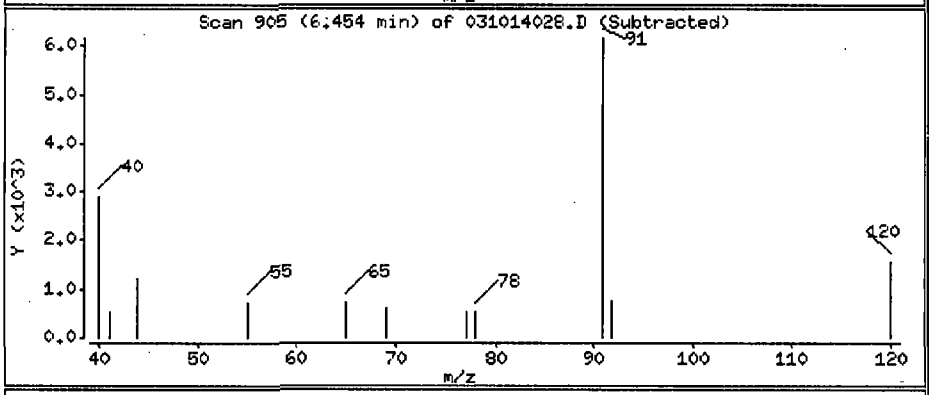
Column diameter: 0.18

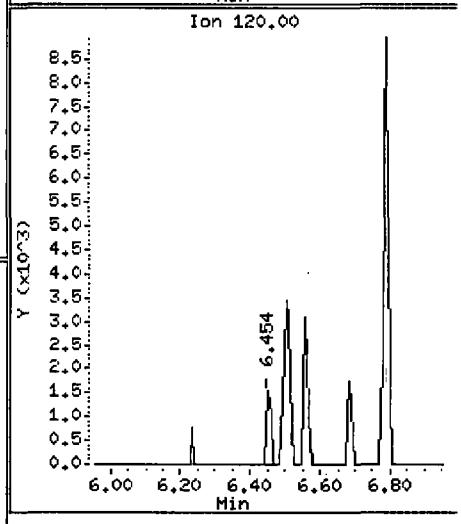
79 n-Propylbenzene

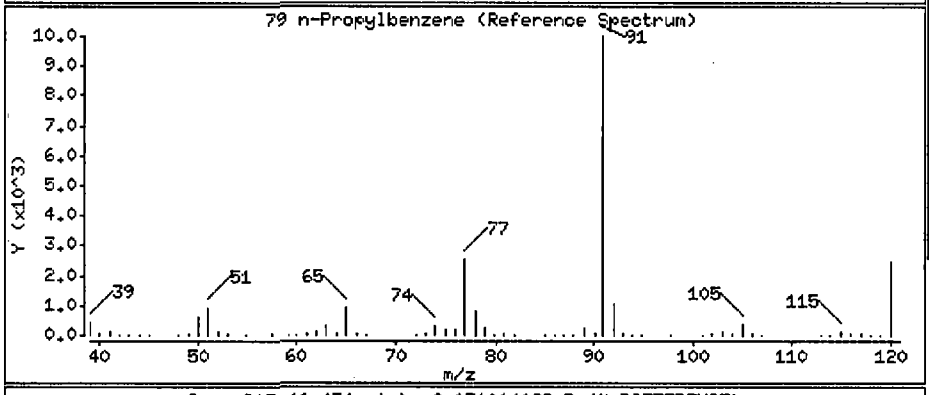
Concentration: 0.32 ug/Kg

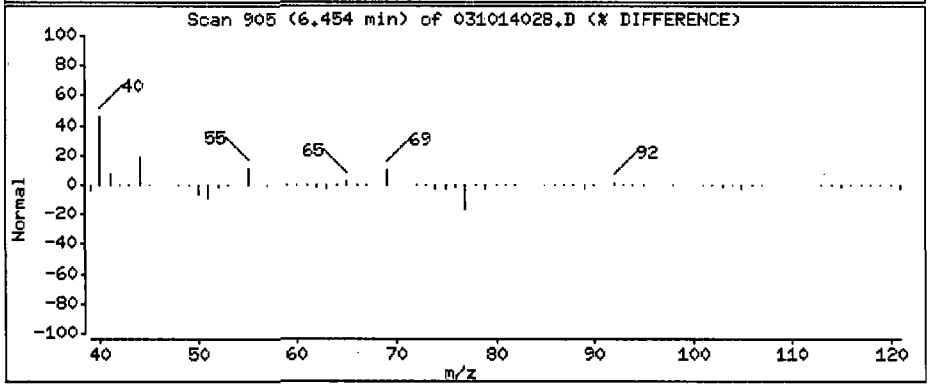












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

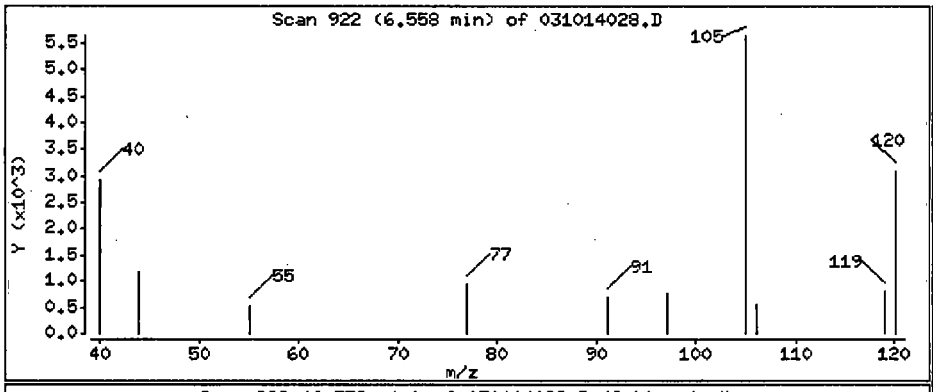
Operator: HBP

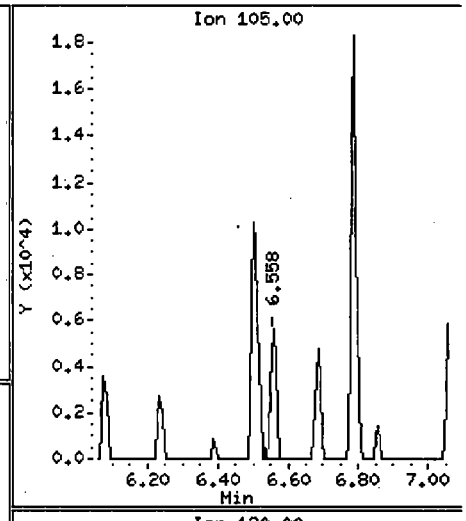
Column phase: Rtx-VMS

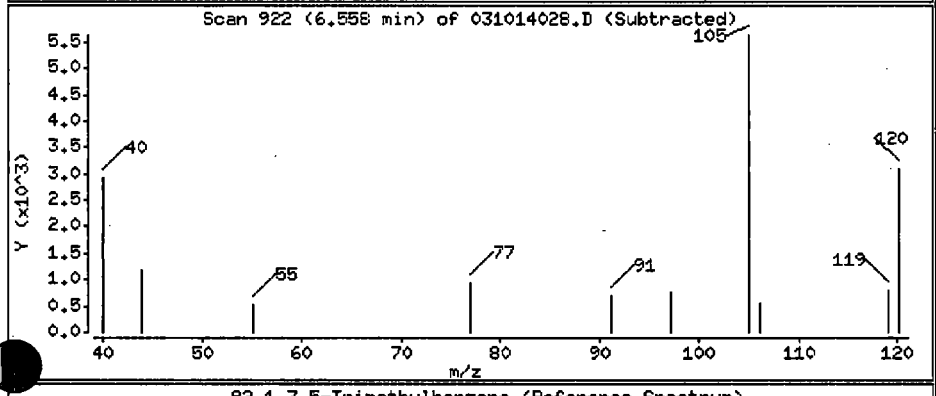
Column diameter: 0.18

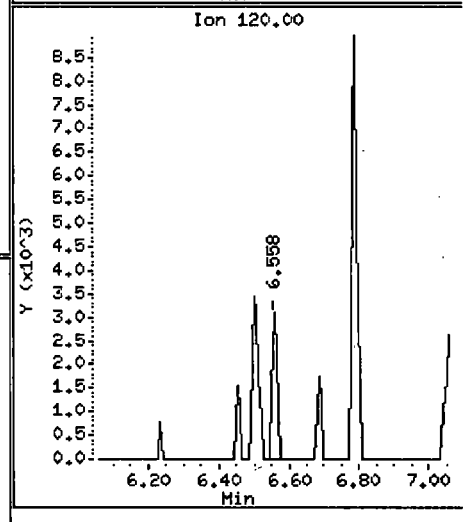
82 1,3,5-Trimethylbenzene

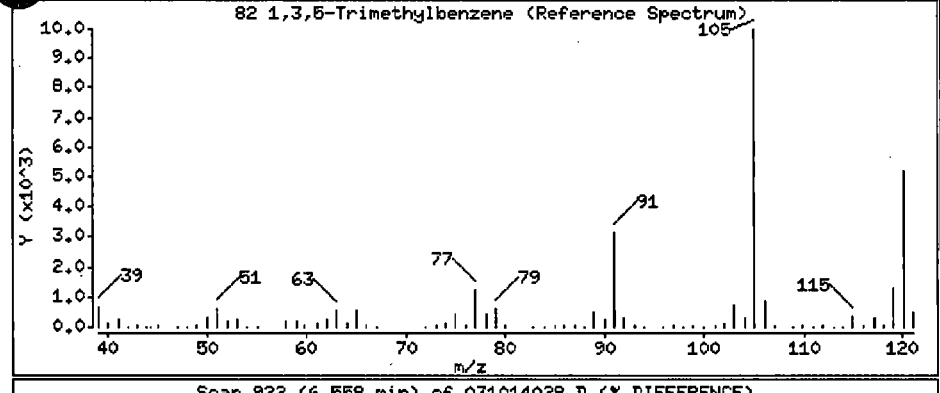
Concentration: 0.44 ug/Kg

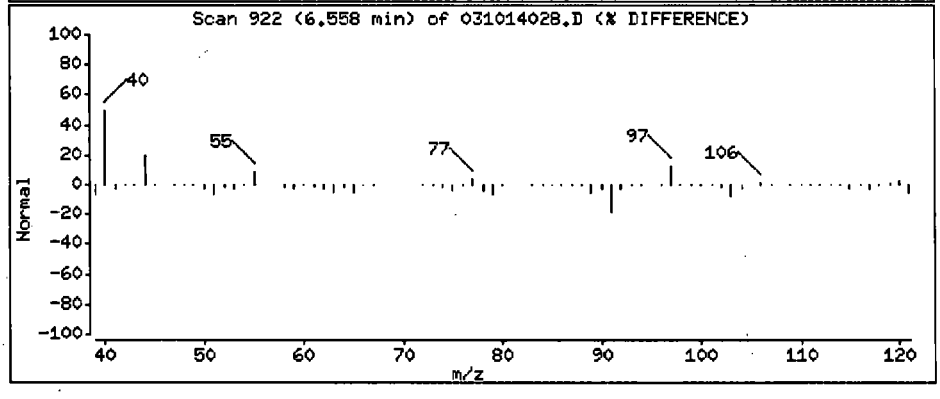












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

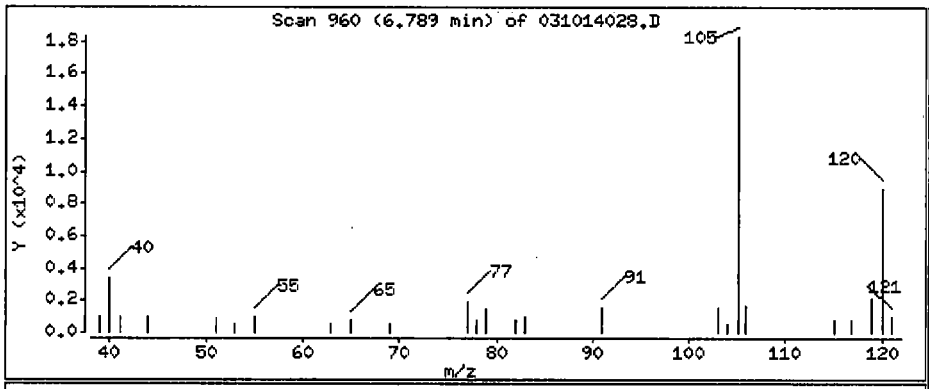
Operator: HBP

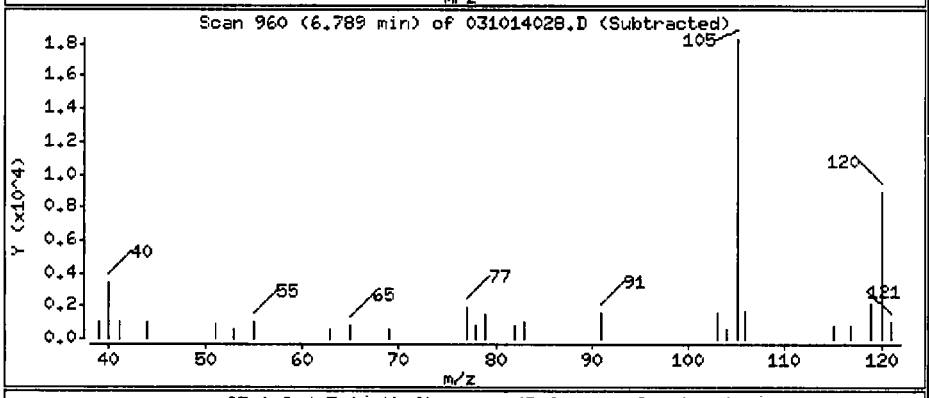
Column phase: Rtx-VMS

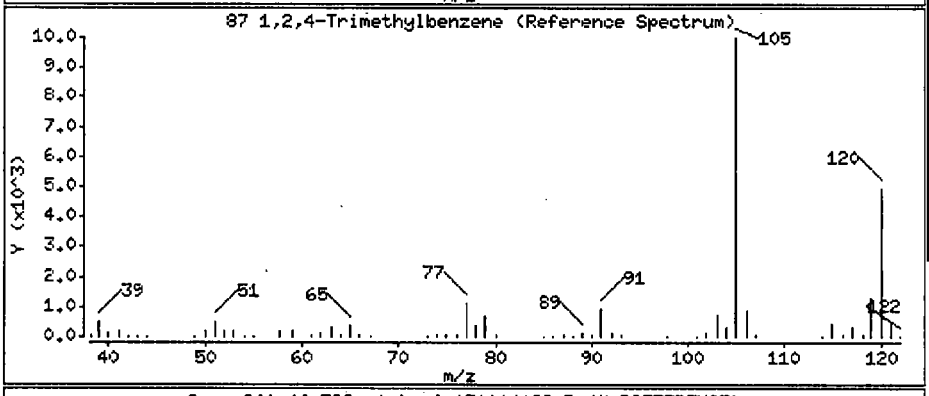
Column diameter: 0.18

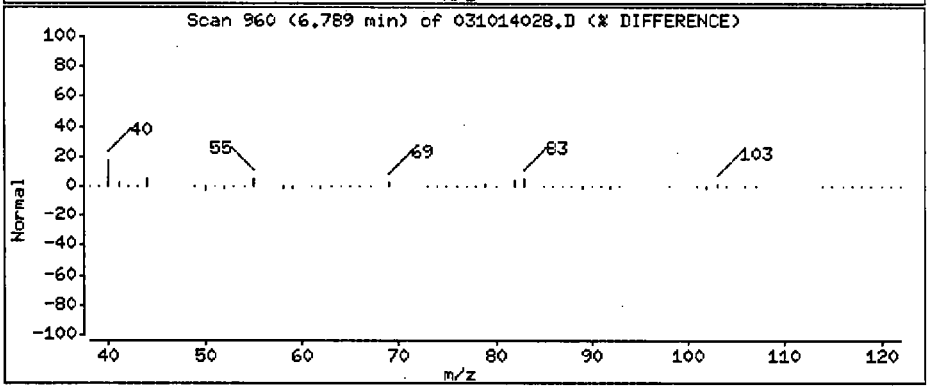
87 1,2,4-Trimethylbenzene

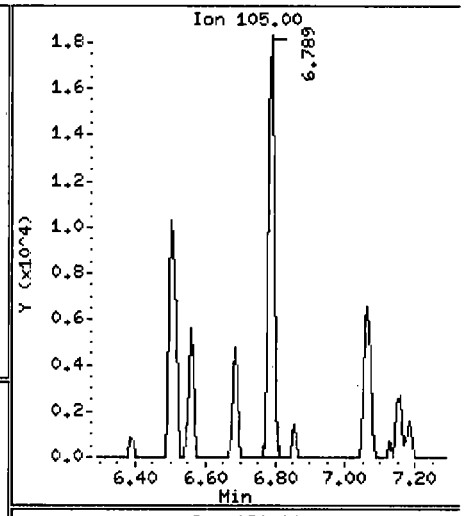
Concentration: 1.4 ug/Kg

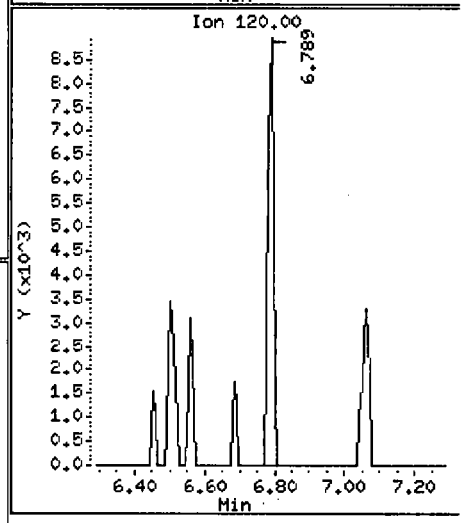












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

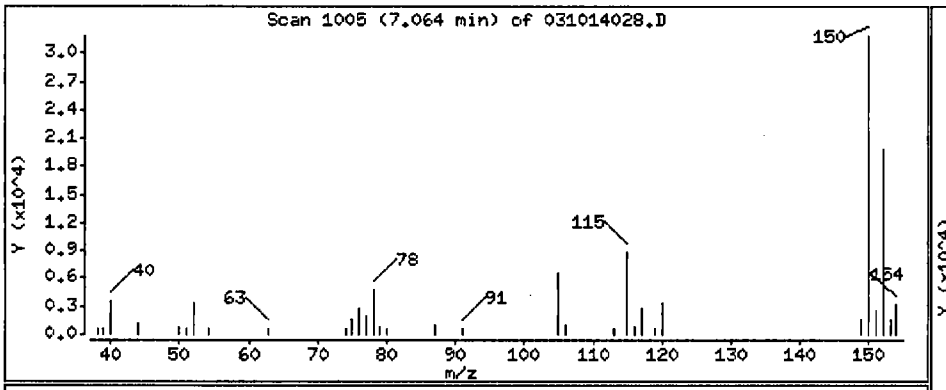
Operator: HBP

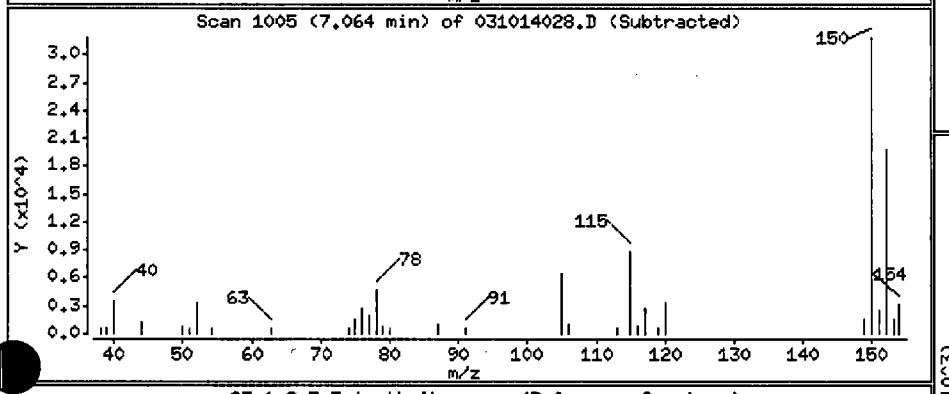
Column phase: Rtx-VMS

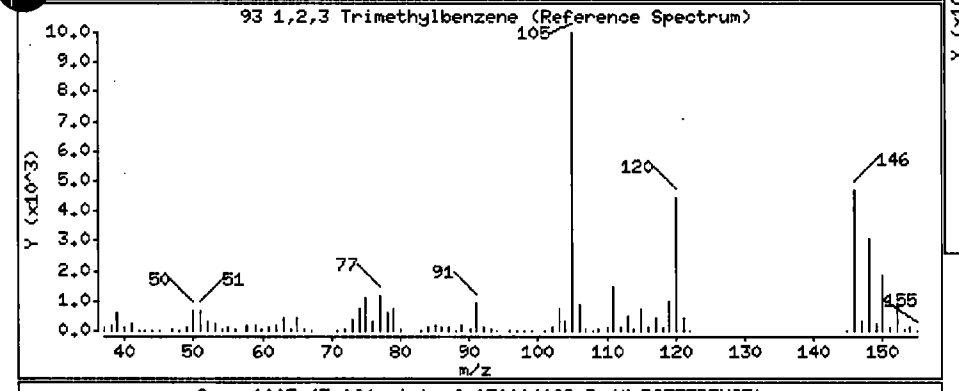
Column diameter: 0.18

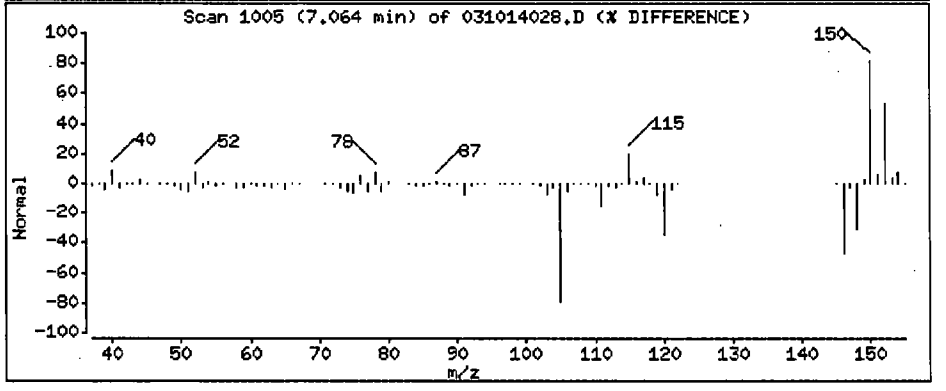
93 1,2,3 Trimethylbenzene

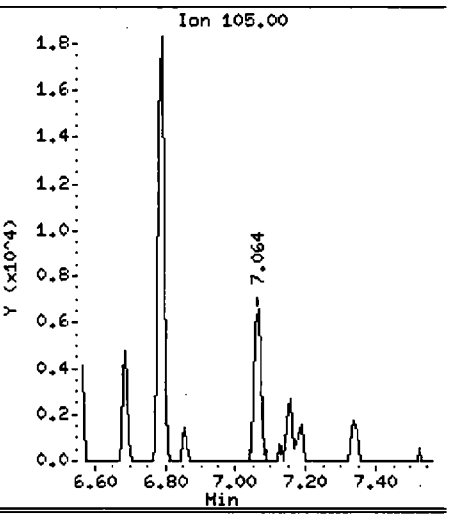
Concentration: 0.59 ug/Kg

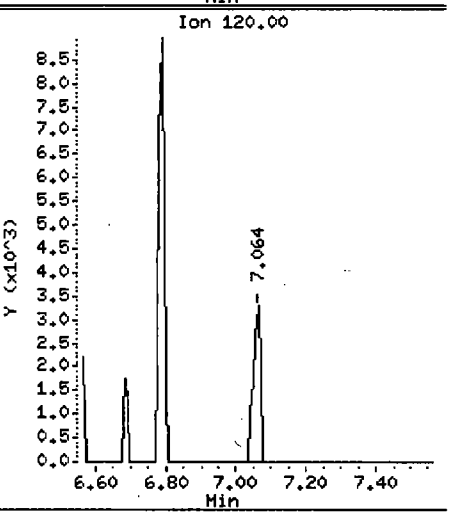












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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7,10

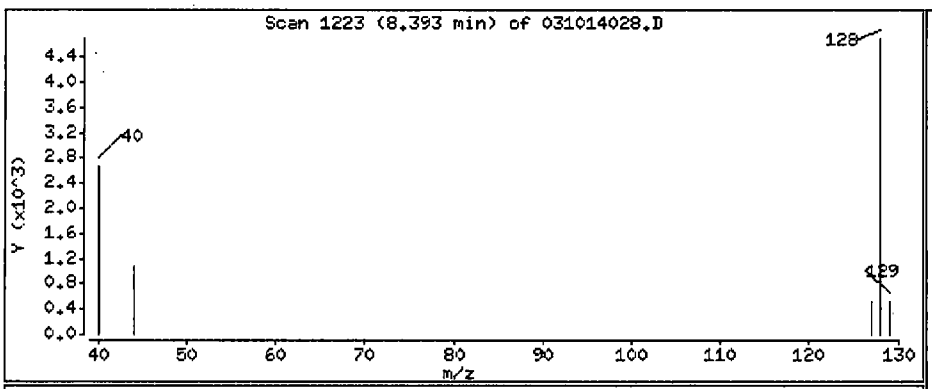
Operator: HBP

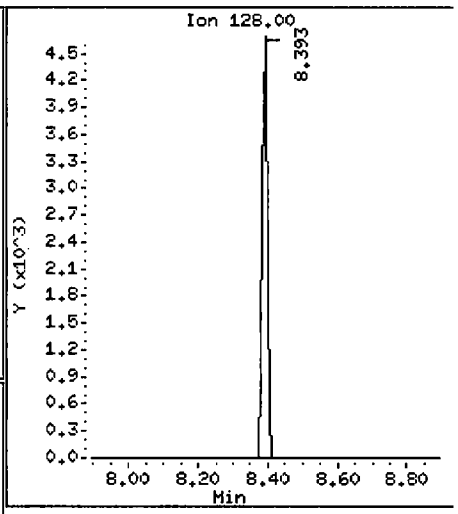
Column phase: Rtx-VMS

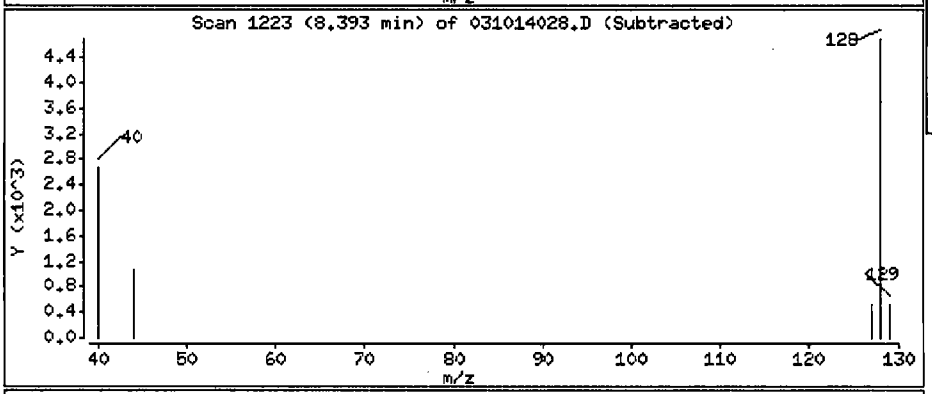
Column diameter: 0.18

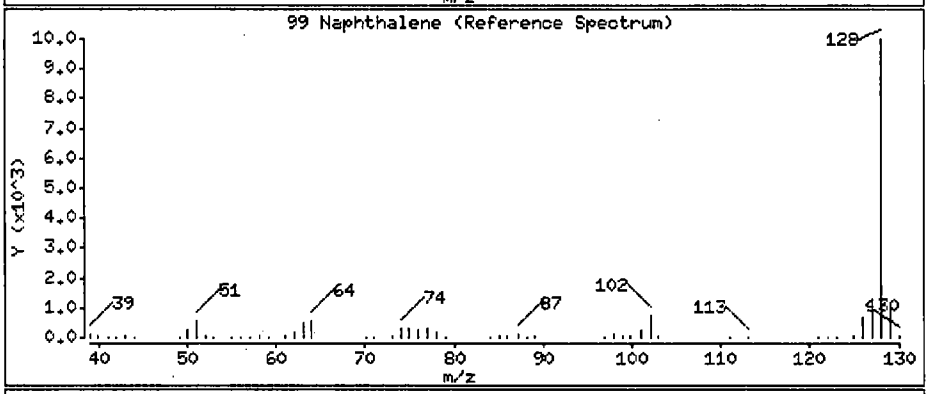
99 Naphthalene

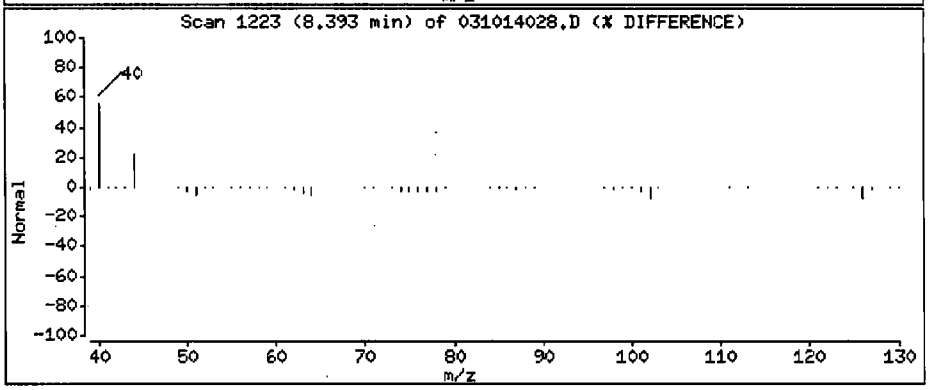
Concentration: 0.43 ug/Kg











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Date : 10-MAR-2014 19:23

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055005,7.10

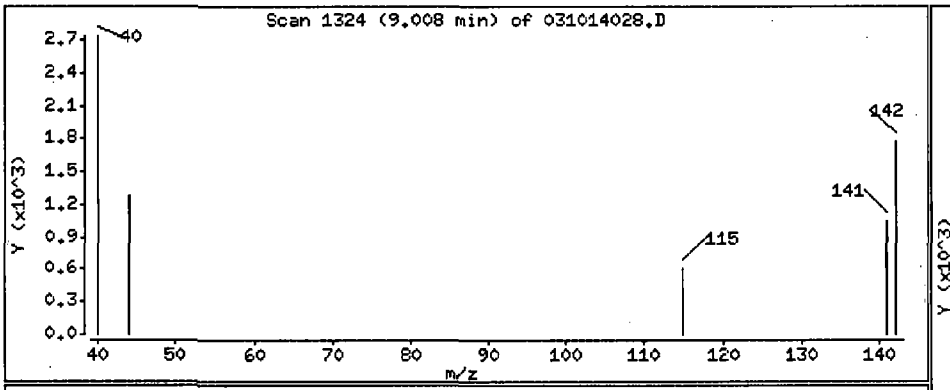
Operator: HBP

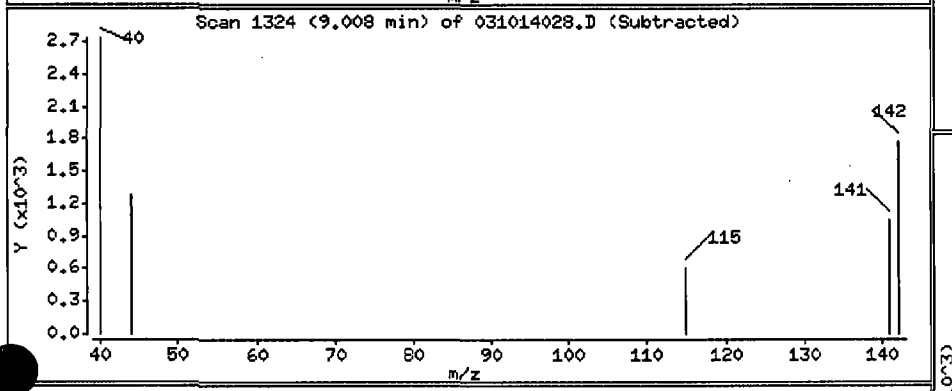
Column phase: Rtx-VMS

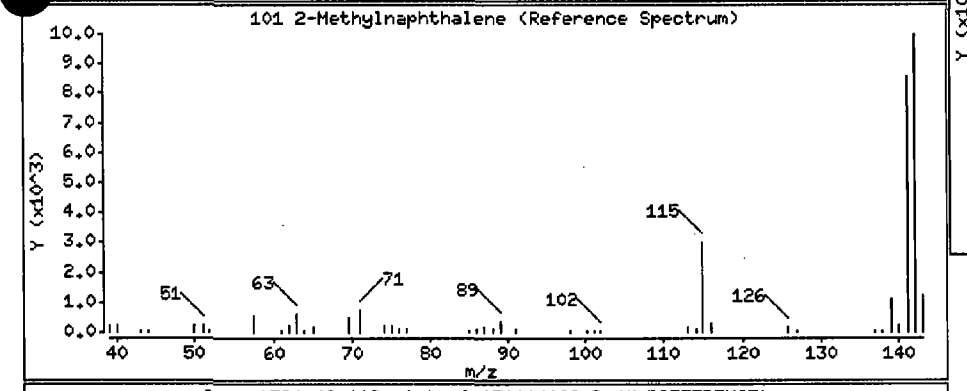
Column diameter: 0.18

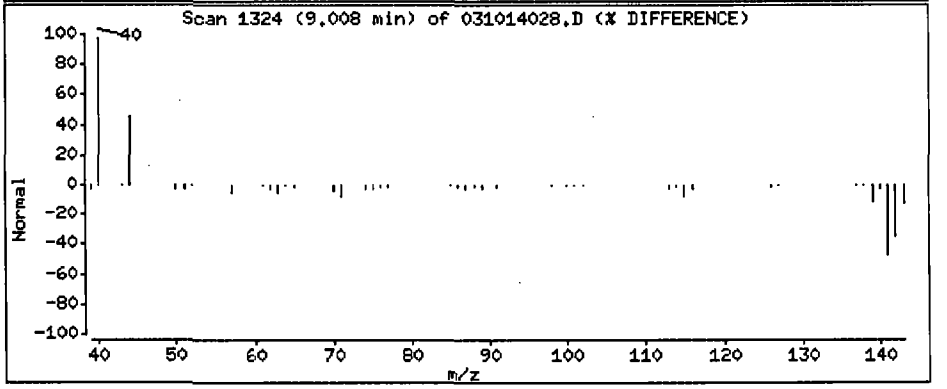
101 2-Methylnaphthalene

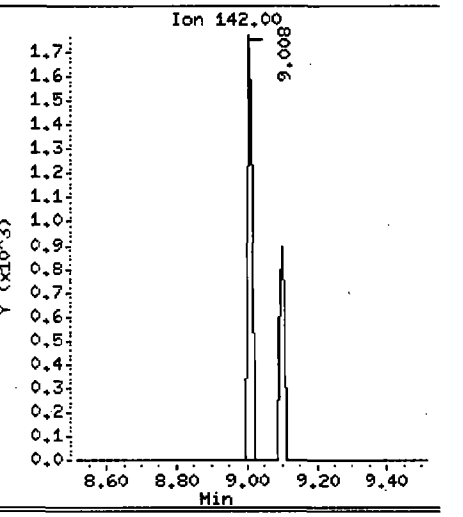
Concentration: 0.35 ug/Kg

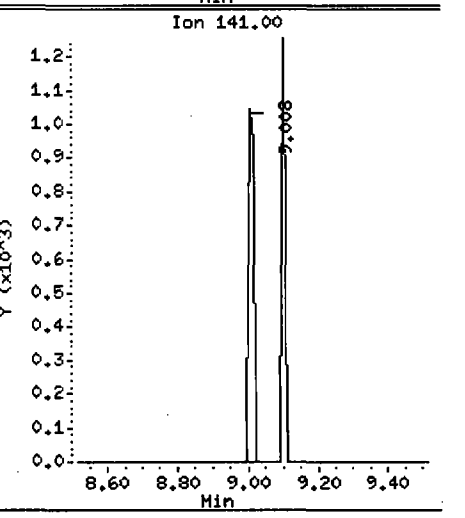












Injection Date: 10-MAR-2014 19:23
Instrument: 10msv7.i
Lab Sample ID: 10259055005
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014029.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014029.D
Lab Smp Id: 10259055006
Inj Date : 10-MAR-2014 19:41
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259055006,5.51
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.510	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.101	2.101	(0.500)	3654	0.26754	0.29(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	159044	200.000	
19	Acetone	58	2.692	2.698	(1.016)	5198	13.8576	15.3
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	21 Hexane	86	2.857	2.863	(1.078)	683	0.58862	0.65(aQ)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	3.753	3.753	(0.893)	3683	0.55571	0.61(aQ)
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.143	4.143	(0.985)	3293	0.20005	0.22(aQ)
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	954557	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	394314	107.017	107
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1406129	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	192267	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1638957	103.395	103
	58 Toluene	92	5.131	5.130	(0.887)	4123	0.40392	0.44(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	Compound Not Detected.					
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1349107	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.789	5.801	(1.001)	4562	0.23453	0.26(aQ)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.868	5.868	(1.015)	1372	0.18110	0.20(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	392	0.05518	0.061(aQ)
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\Chem\10MSV7.I\031014B.D\031014029.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	75 Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	76 4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	640352	113.709	114
	77 cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78 Bromobenzene	156	Compound Not Detected.					
	79 n-Propylbenzene	91	Compound Not Detected.					
	80 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81 2-Chlorotoluene	91	Compound Not Detected.					
	82 1,3,5-Trimethylbenzene	105	Compound Not Detected.					
	83 1,2,3-Trichloropropane	110	Compound Not Detected.					
	84 trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85 4-Chlorotoluene	91	Compound Not Detected.					
	86 tert-Butylbenzene	119	Compound Not Detected.					
	87 1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	2310	0.16258	0.18(a)
	88 sec-Butylbenzene	105	Compound Not Detected.					
	89 p-Isopropyltoluene	119	Compound Not Detected.					
	90 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91 1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	701939	100.000	
	92 1,4-Dichlorobenzene	146	Compound Not Detected.					
	93 1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	950	0.05166	0.057(aQH)
	94 n-Butylbenzene	91	Compound Not Detected.					
	95 1,2-Dichlorobenzene	146	Compound Not Detected.					
	96 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97 Hexachlorobutadiene	225	Compound Not Detected.					
	98 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	99 Naphthalene	128	8.392	8.392	(1.191)	1160	0.11320	0.12(a)
	100 1,2,3-Trichlorobenzene	180	Compound Not Detected.					
	101 2-Methylnaphthalene	142	Compound Not Detected.					

Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014029.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014029.D
Lab Smp Id: 10259055006
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

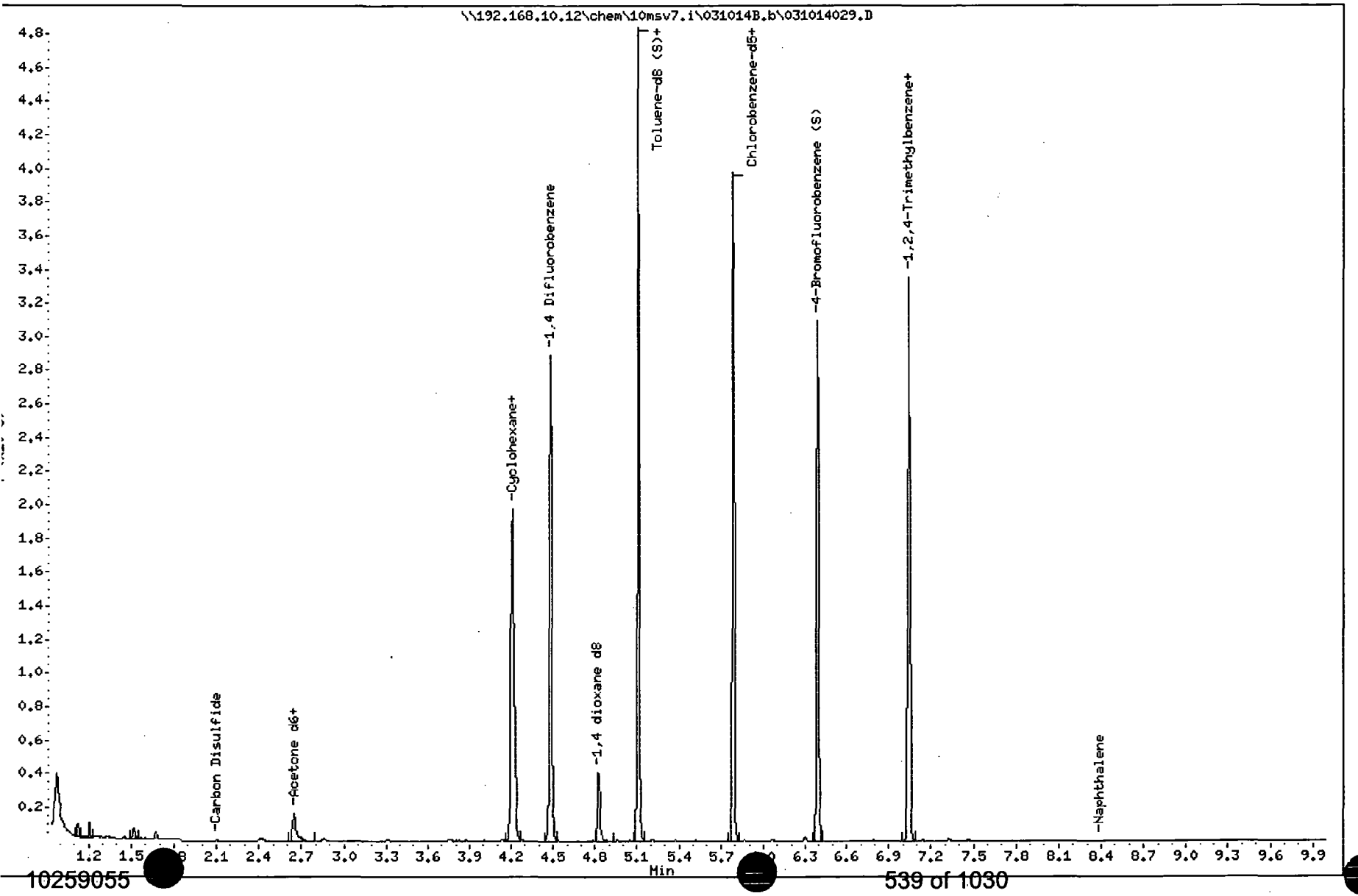
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	159044	10.70
41 Pentafluorobenzen	966546	483273	1933092	954557	-1.24
48 1,4 Difluorobenze	1457917	728959	2915834	1406129	-3.55
53 1,4 dioxane d8	174389	87195	348778	192267	10.25
67 Chlorobenzene-d5	1458689	729345	2917378	1349107	-7.51
91 1,4-Dichlorobenze	888899	444450	1777798	701939	-21.03

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.01
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014029.D
Date : 10-MAR-2014 19:41
Client ID:
Sample Info: 10259055006,5.51

Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5,51

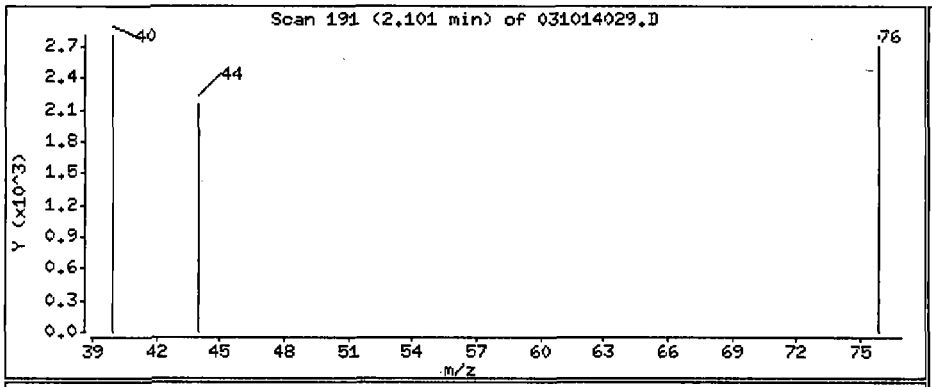
Operator: HBP

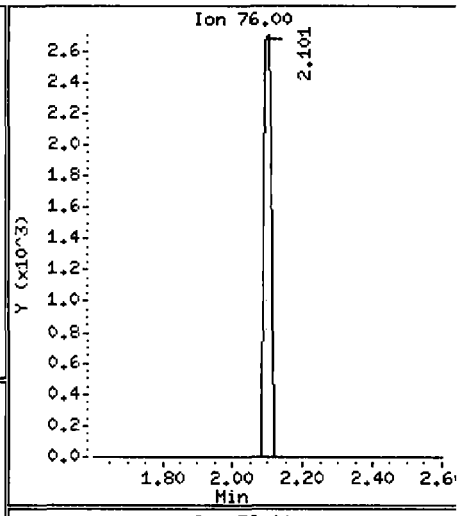
Column phase: Rtx-VMS

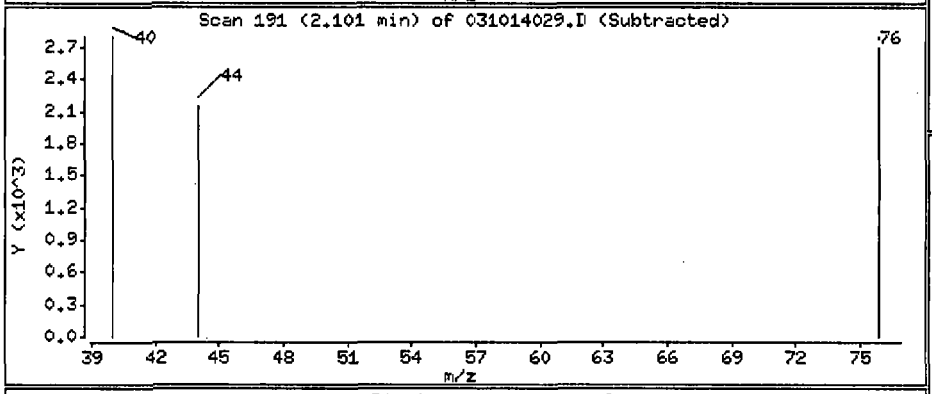
Column diameter: 0.18

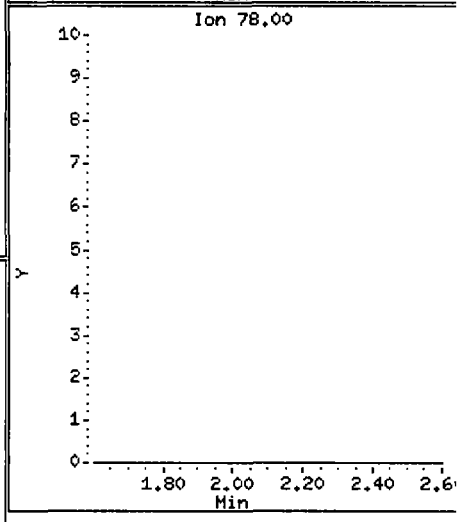
10 Carbon Disulfide

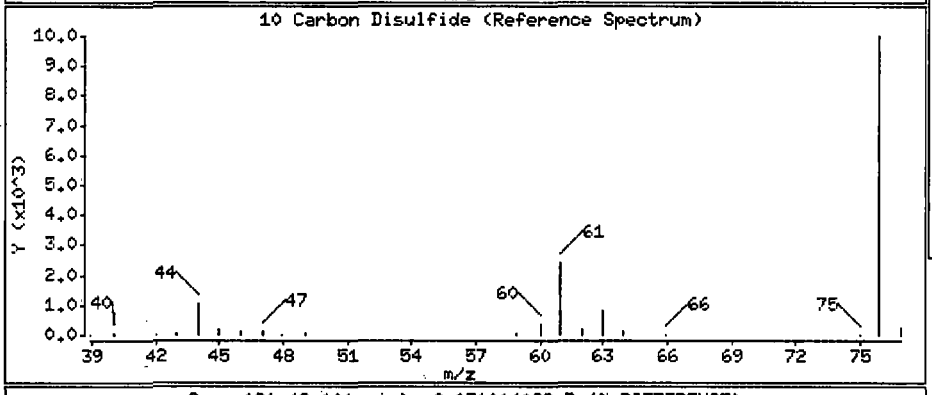
Concentration: 0.29 ug/Kg

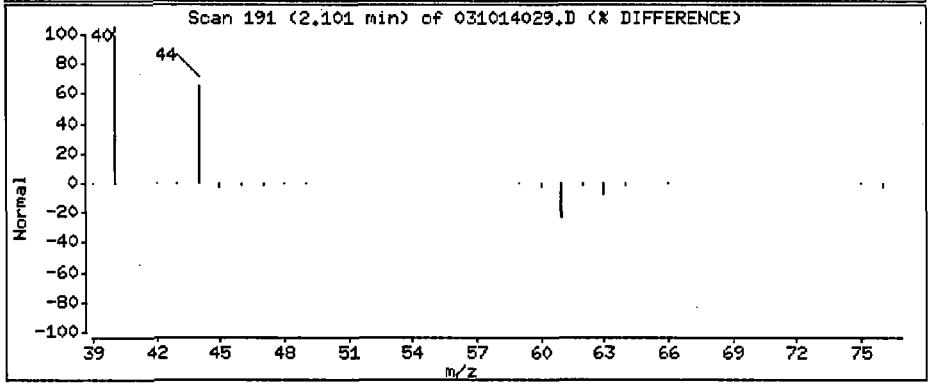












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

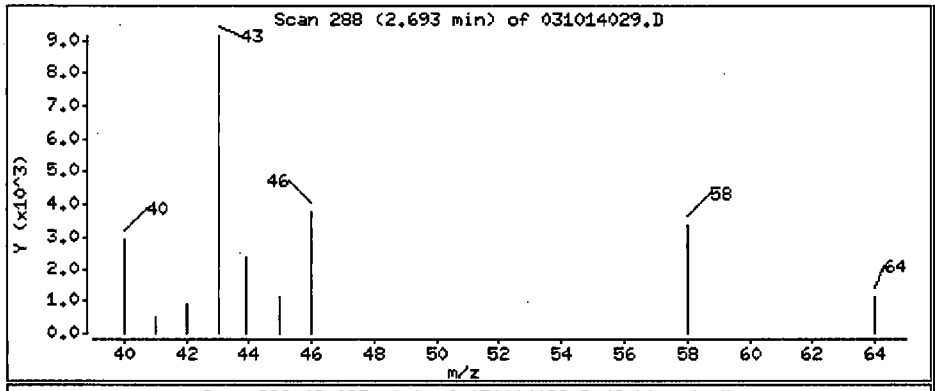
Operator: HBP

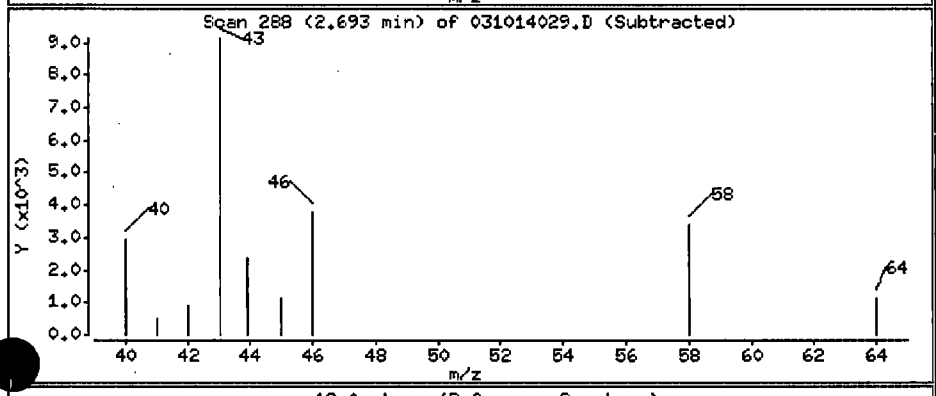
Column phase: Rtx-VMS

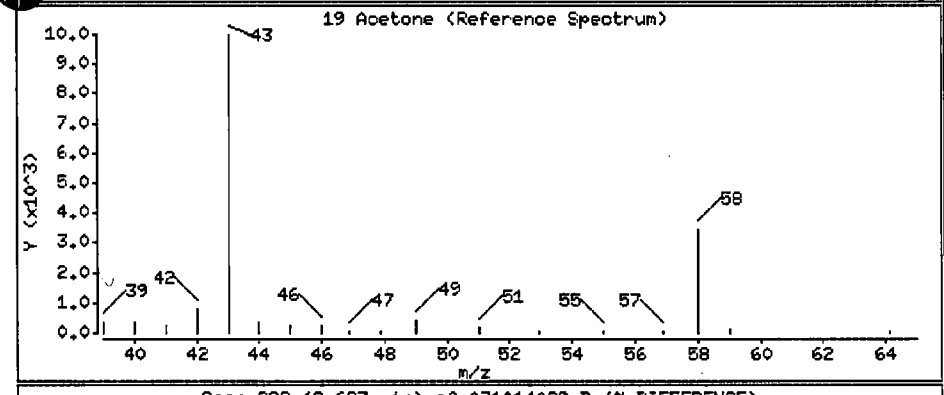
Column diameter: 0.18

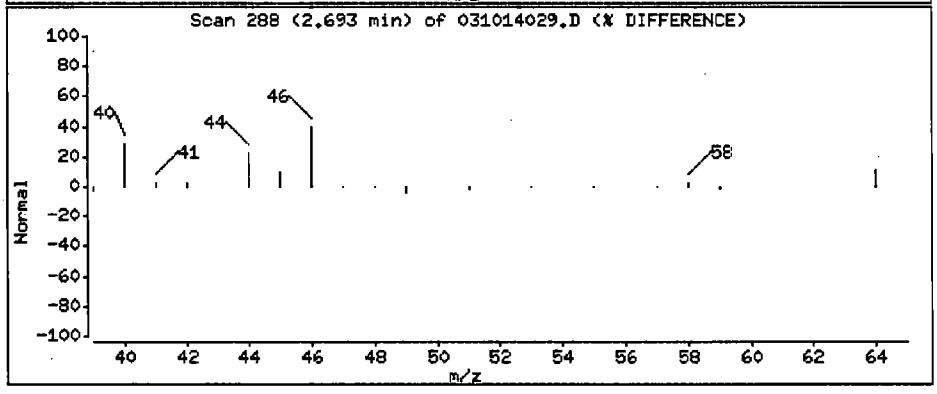
19 Acetone

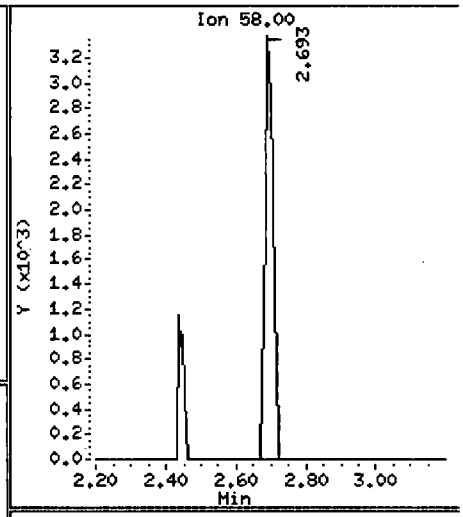
Concentration: 15.3 ug/Kg

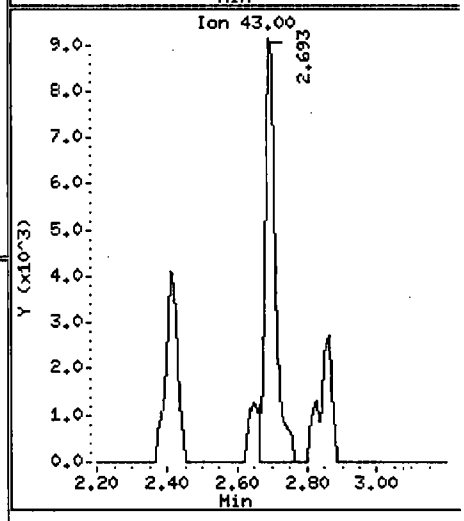












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

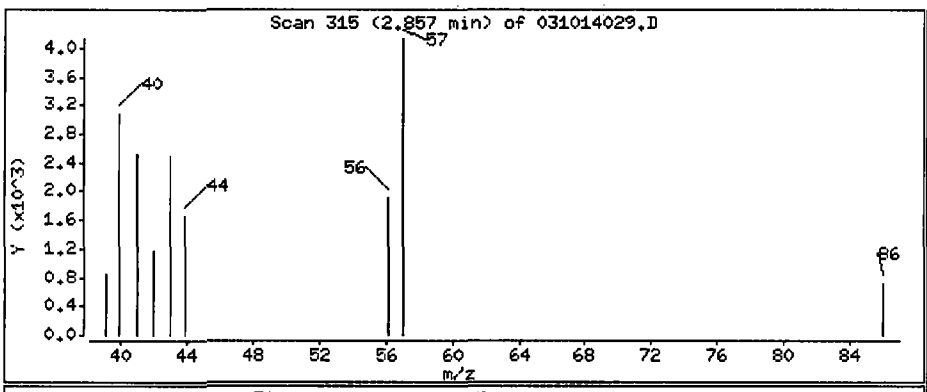
Operator: HBP

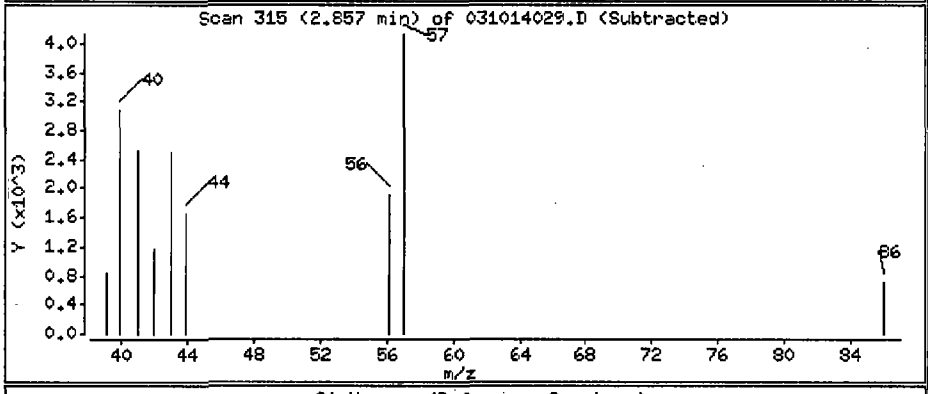
Column phase: Rtx-VMS

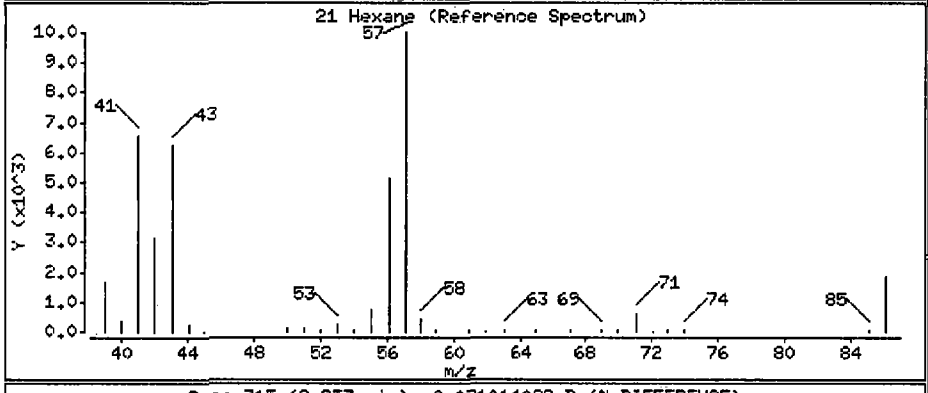
Column diameter: 0.18

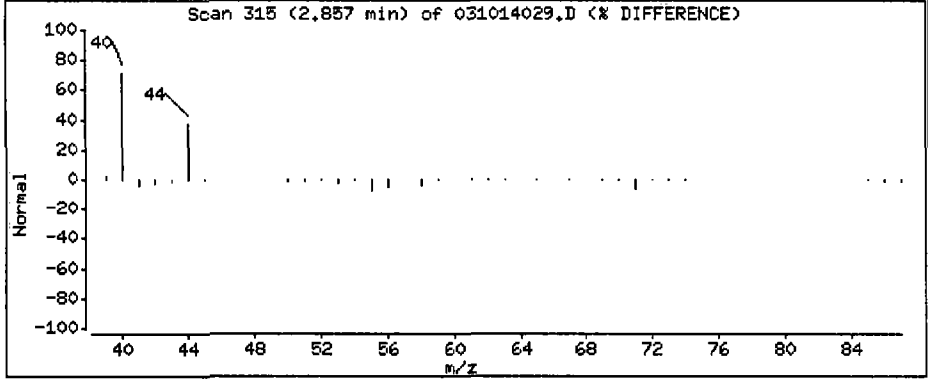
21 Hexane

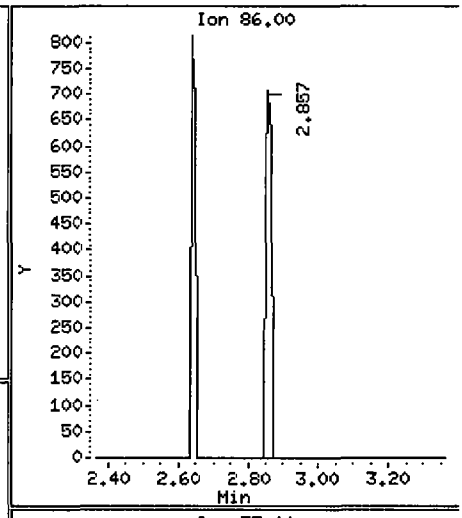
Concentration: 0.65 ug/Kg

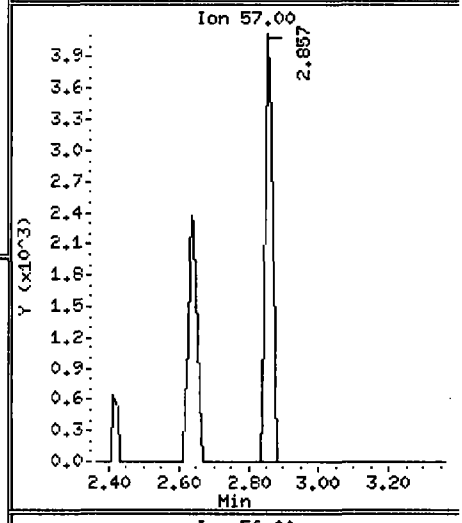


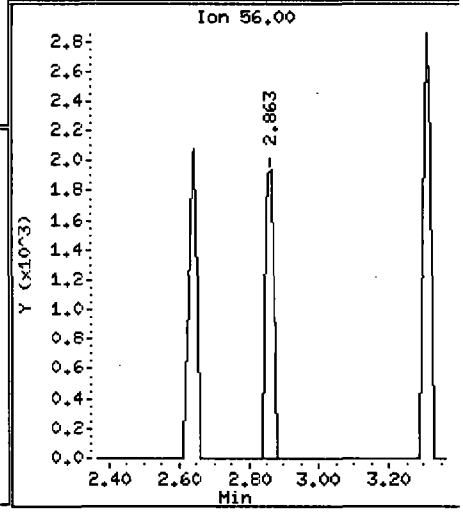












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

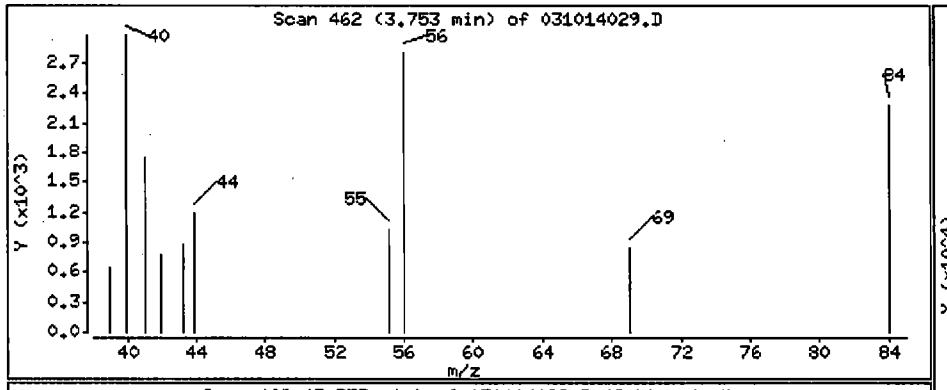
Operator: HBP

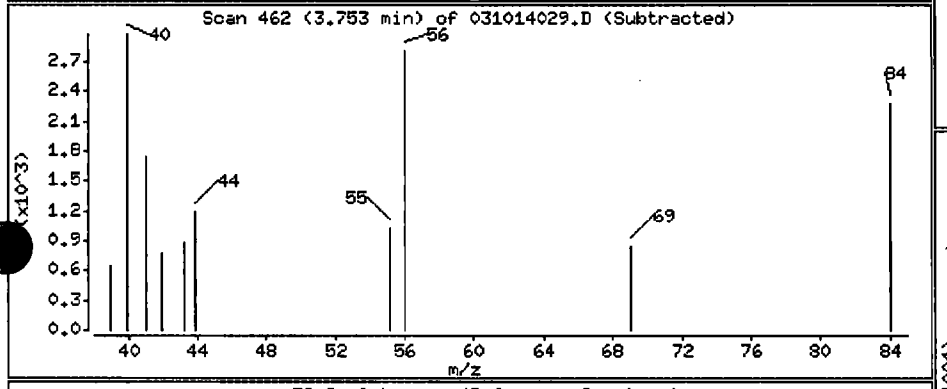
Column phase: Rtx-VMS

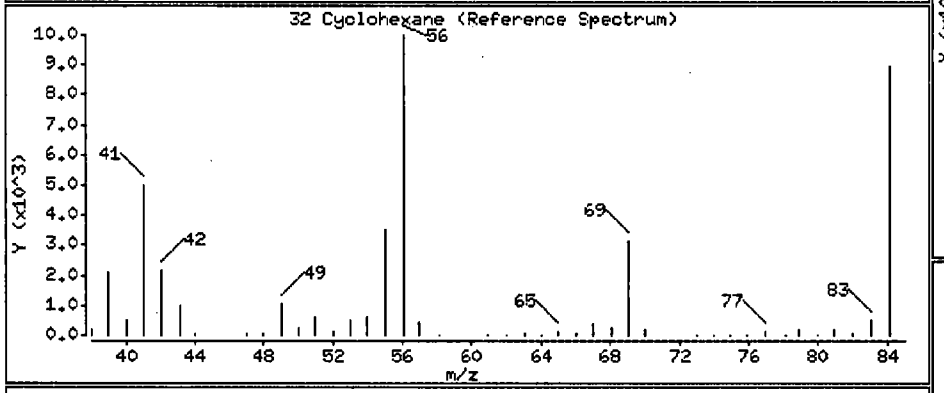
Column diameter: 0.18

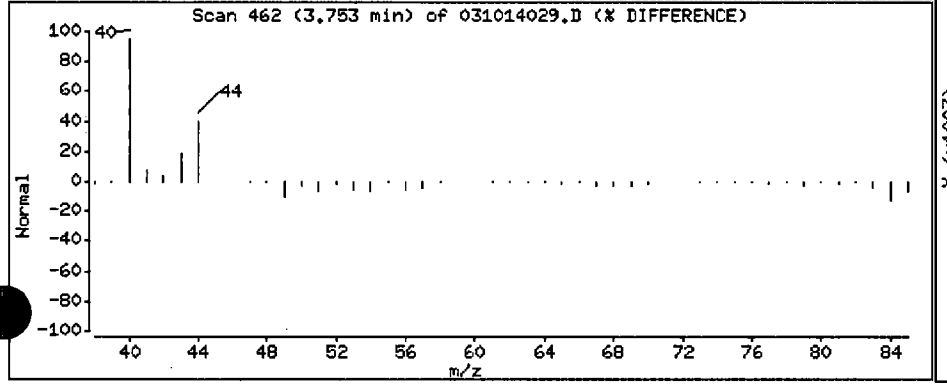
32 Cyclohexane

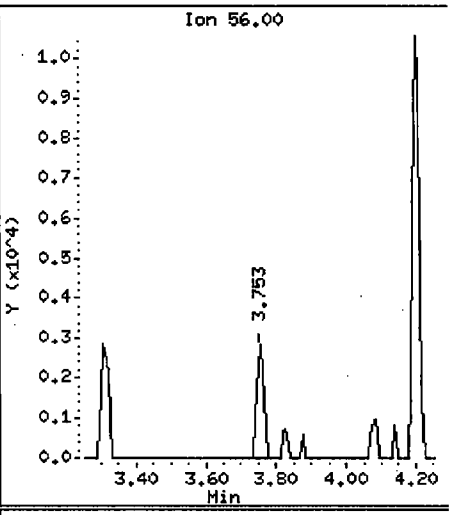
Concentration: 0.61 ug/Kg

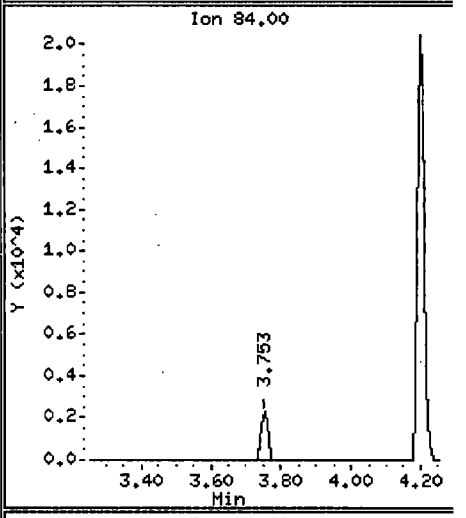


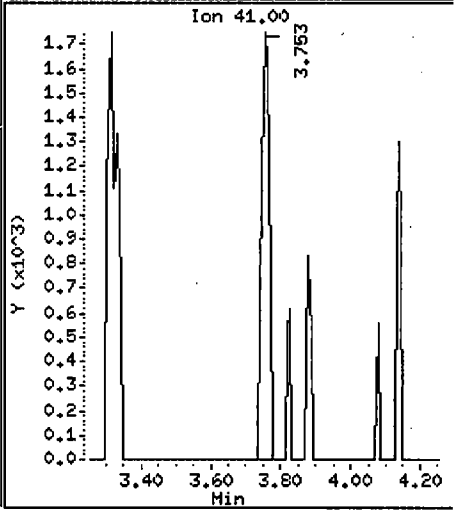












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

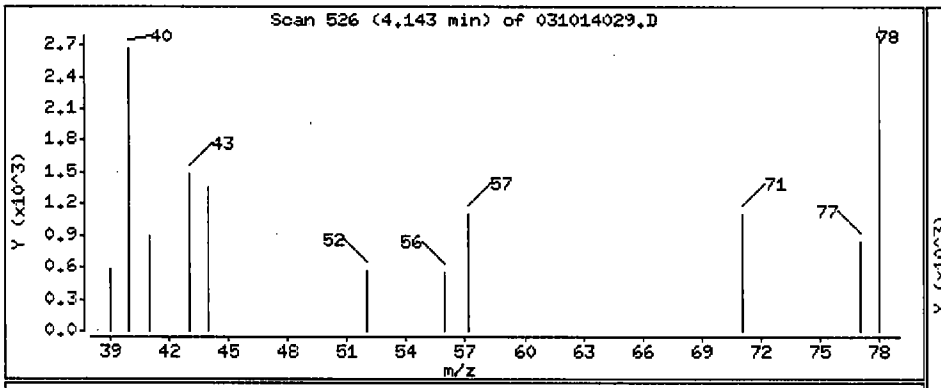
Operator: HBP

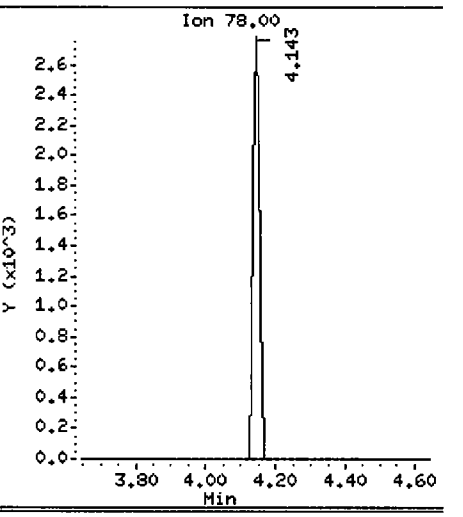
Column phase: Rtx-VMS

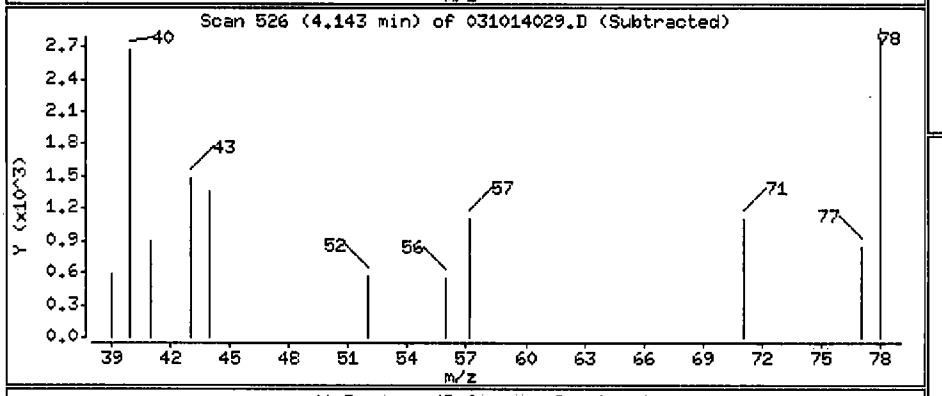
Column diameter: 0.18

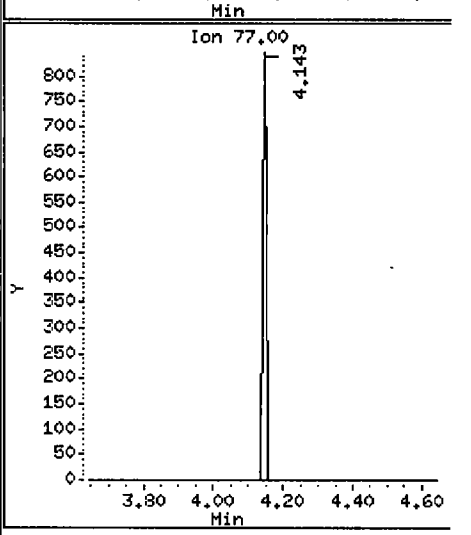
40 Benzene

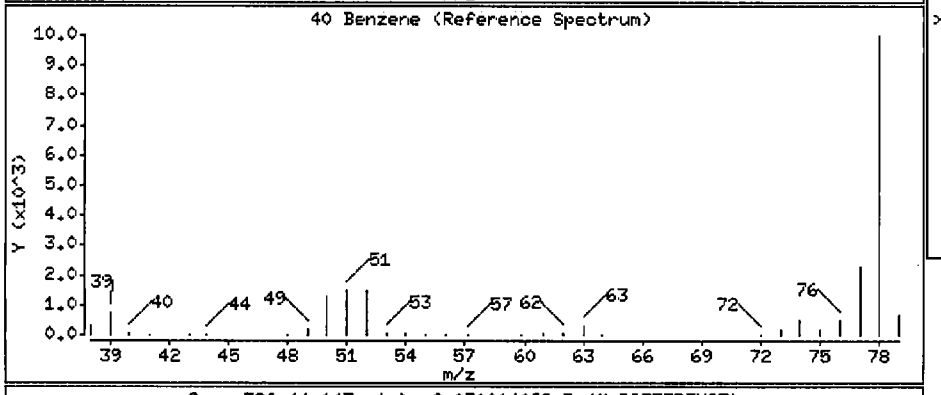
Concentration: 0.22 ug/Kg

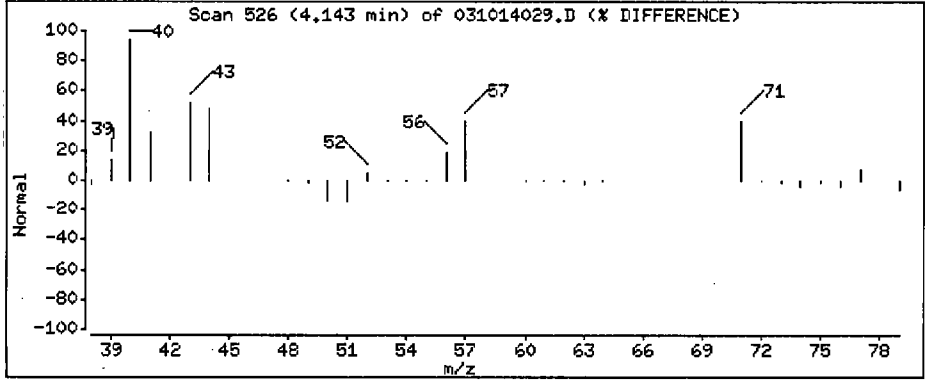












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

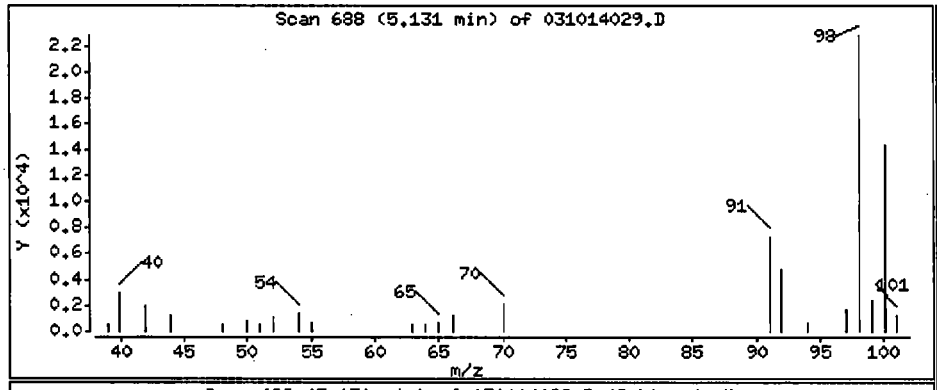
Operator: HBP

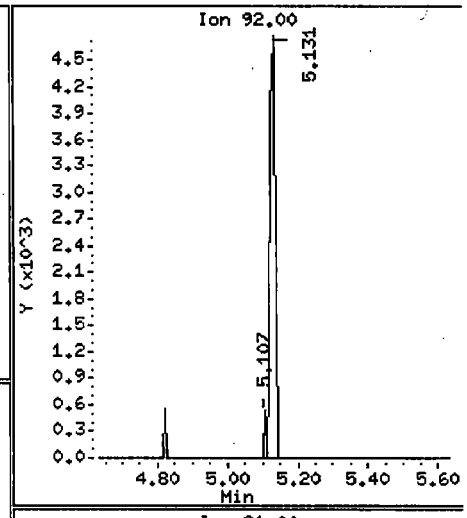
Column phase: Rtx-VMS

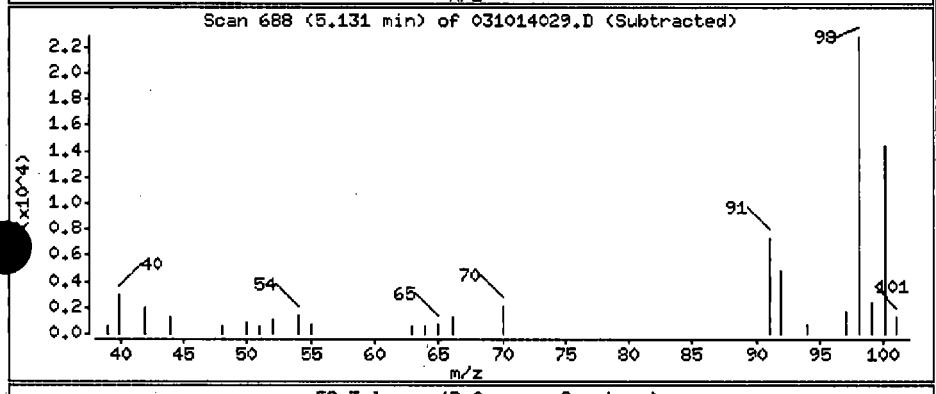
Column diameter: 0.18

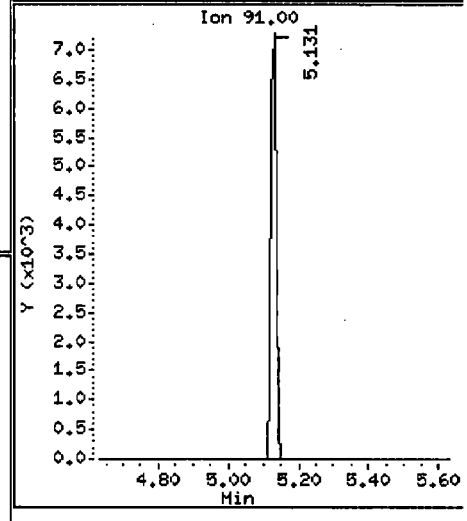
58 Toluene

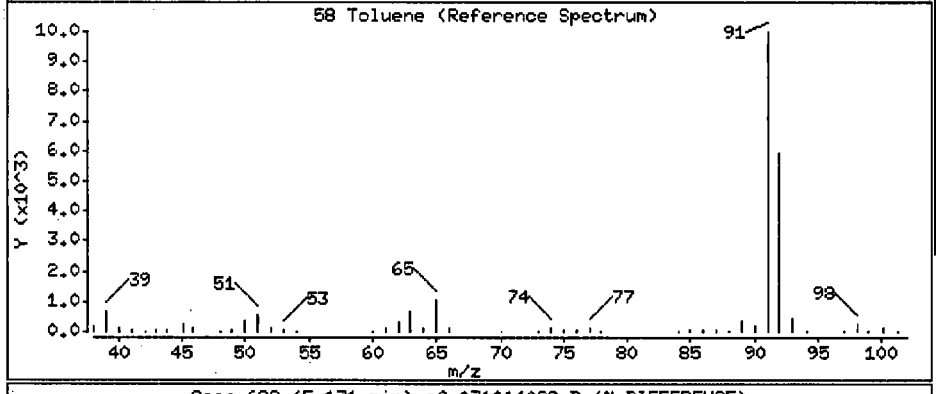
Concentration: 0.44 ug/Kg

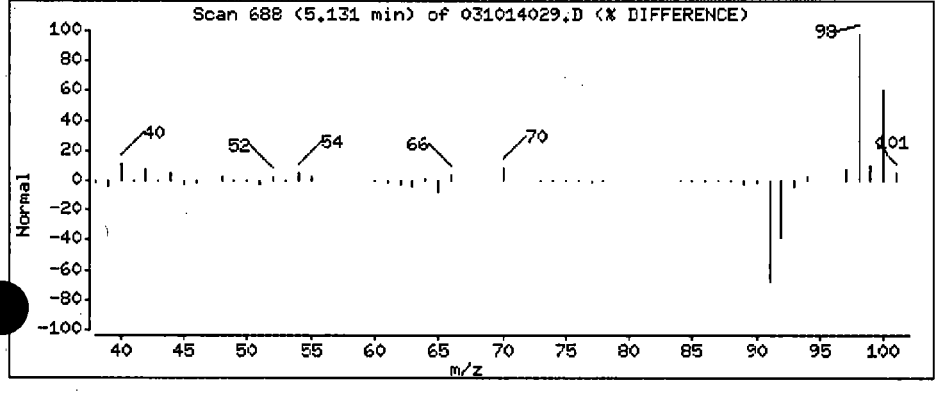












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

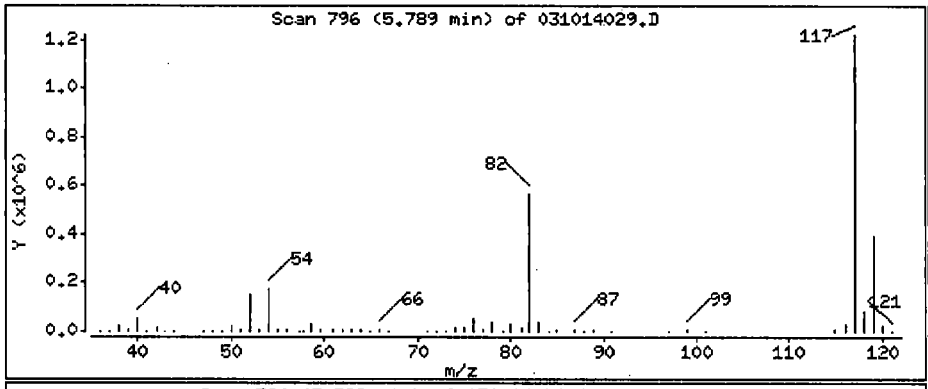
Operator: HBP

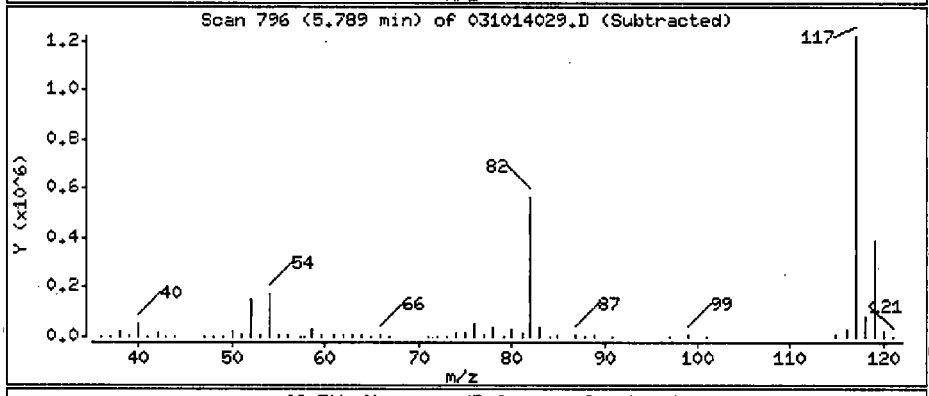
Column phase: Rtx-VMS

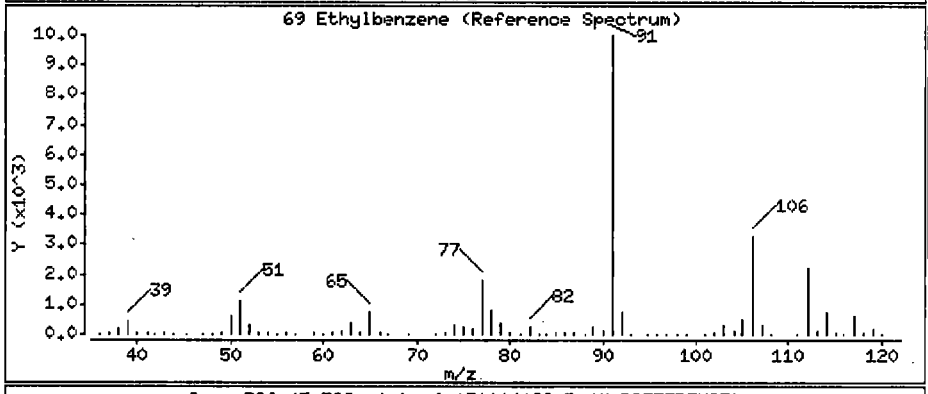
Column diameter: 0.18

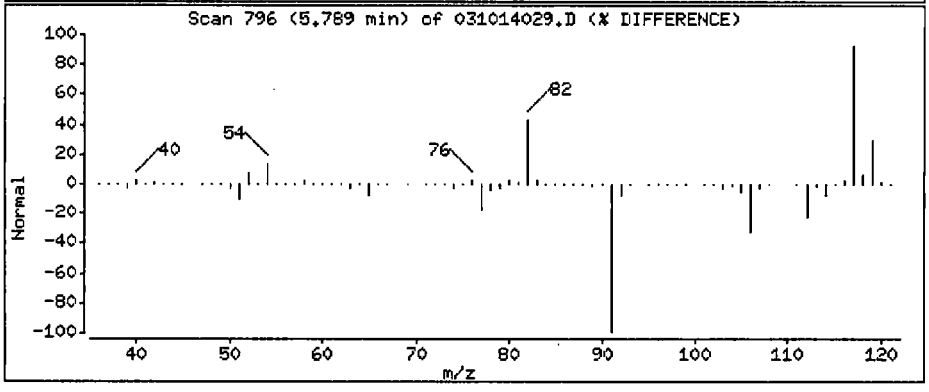
69 Ethylbenzene

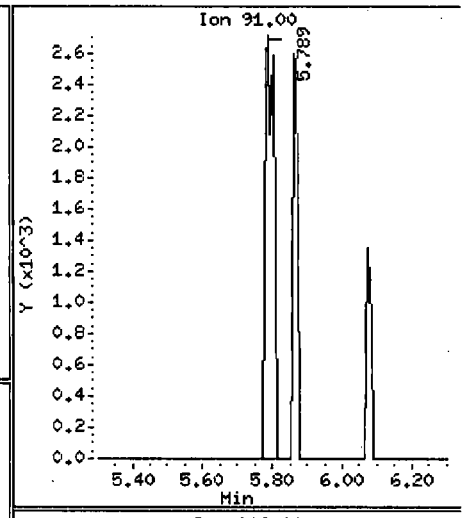
Concentration: 0.26 ug/Kg

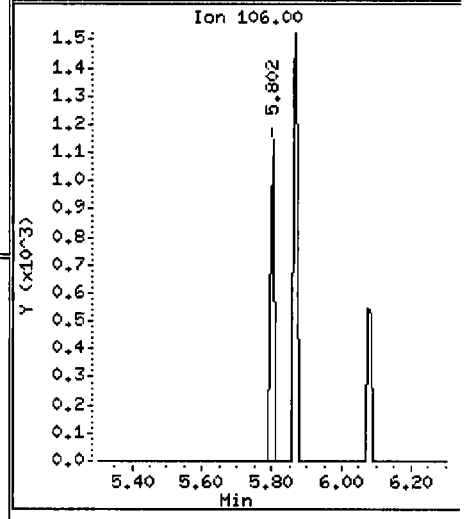












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

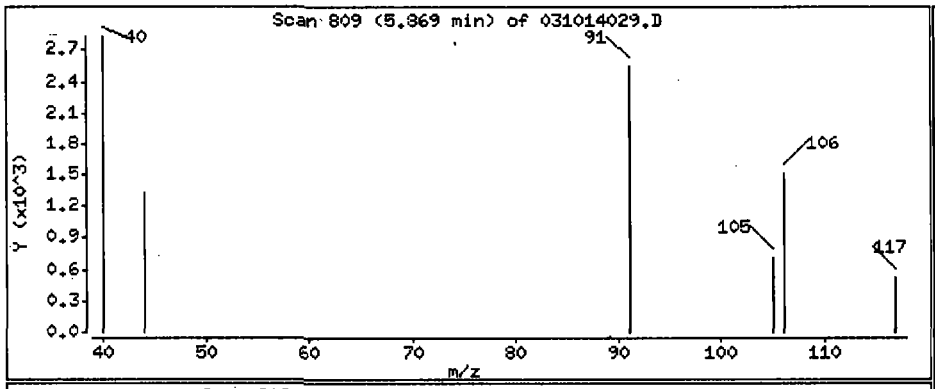
Operator: HBP

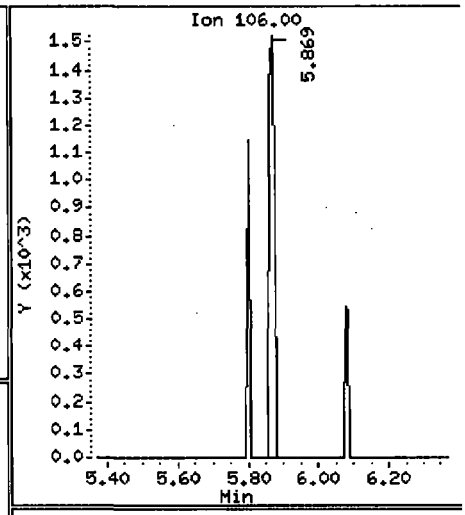
Column phase: Rtx-VMS

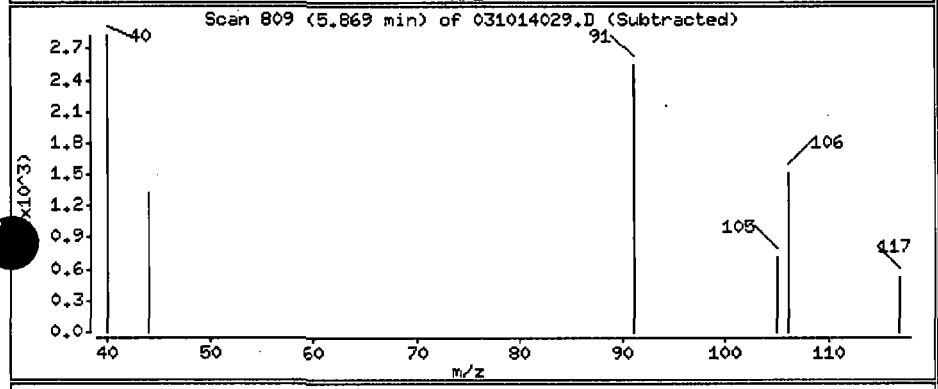
Column diameter: 0.18

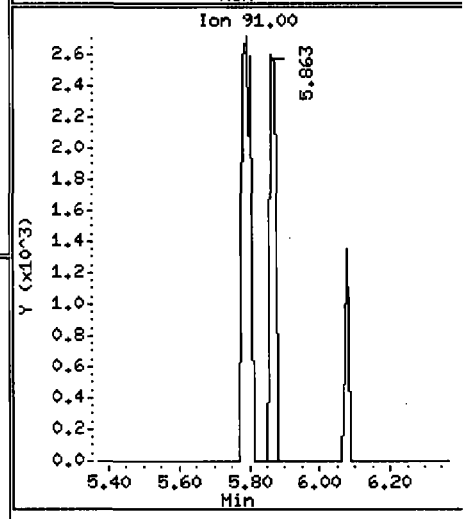
71 M&P-Xylene

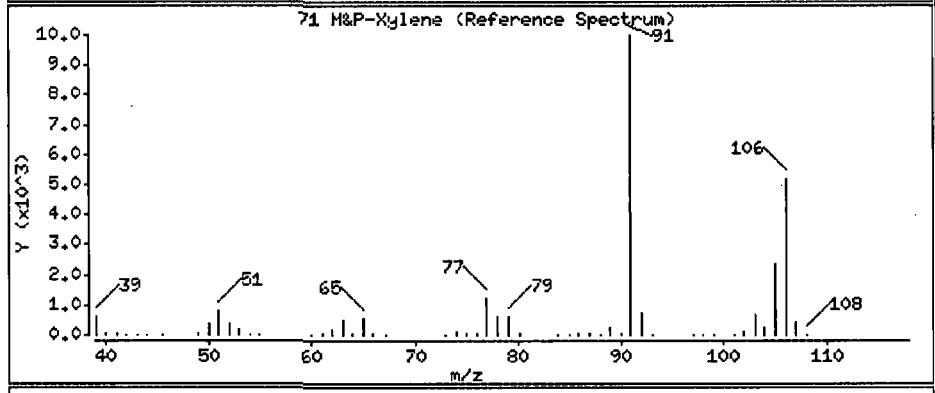
Concentration: 0.20 ug/Kg

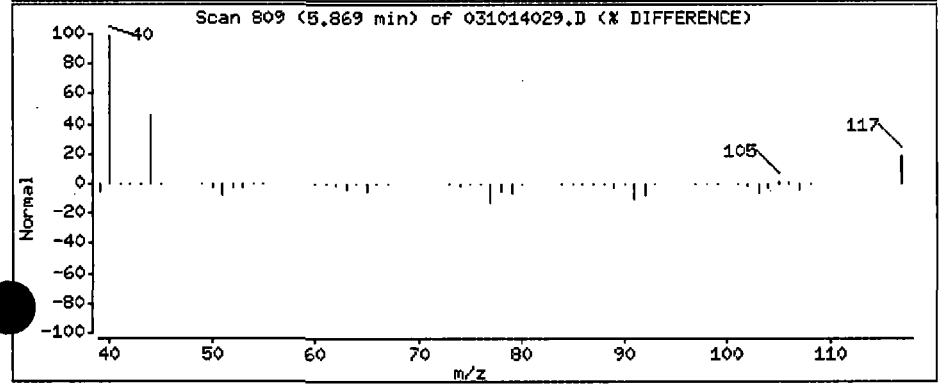












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

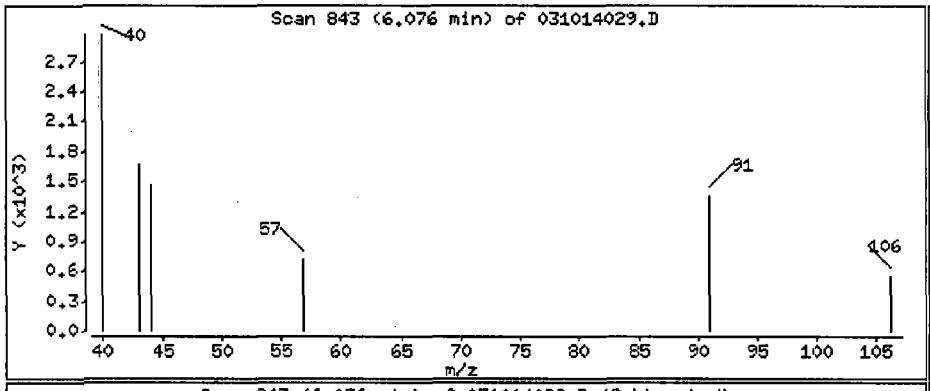
Operator: HBP

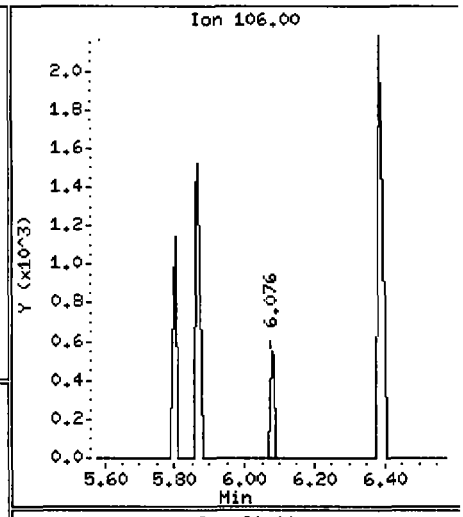
Column phase: Rtx-VMS

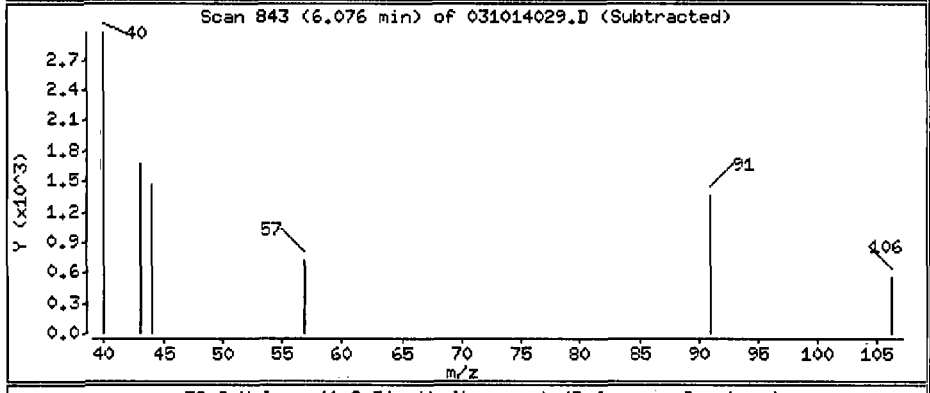
Column diameter: 0.18

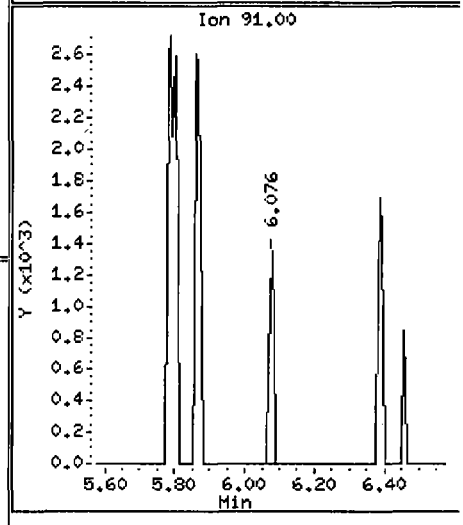
72 O-Xylene (1,2-Dimethylbenzene)

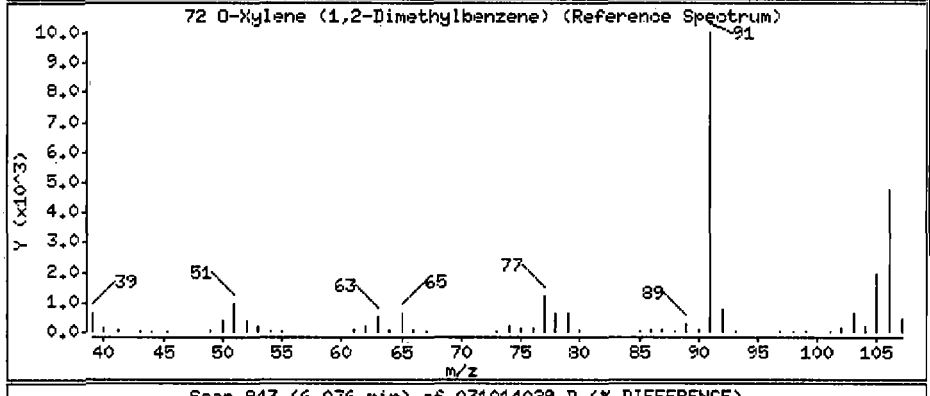
Concentration: 0.061 ug/Kg

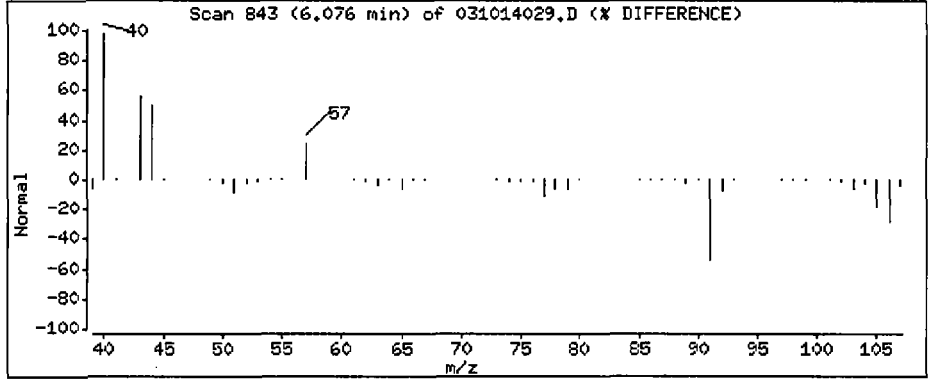












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5,51

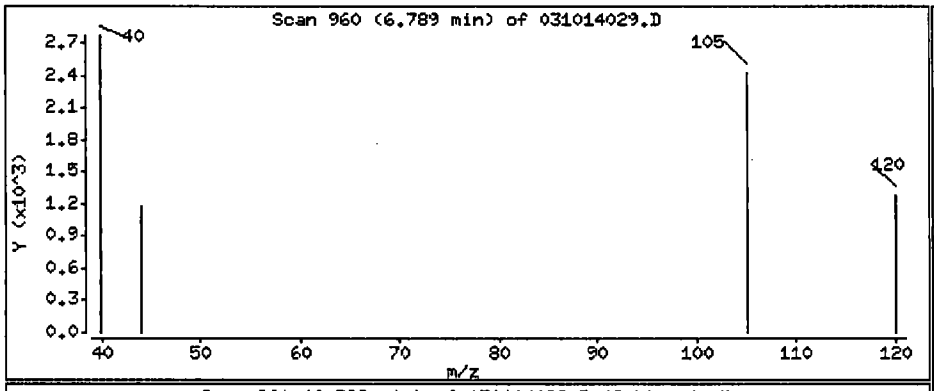
Operator: HBP

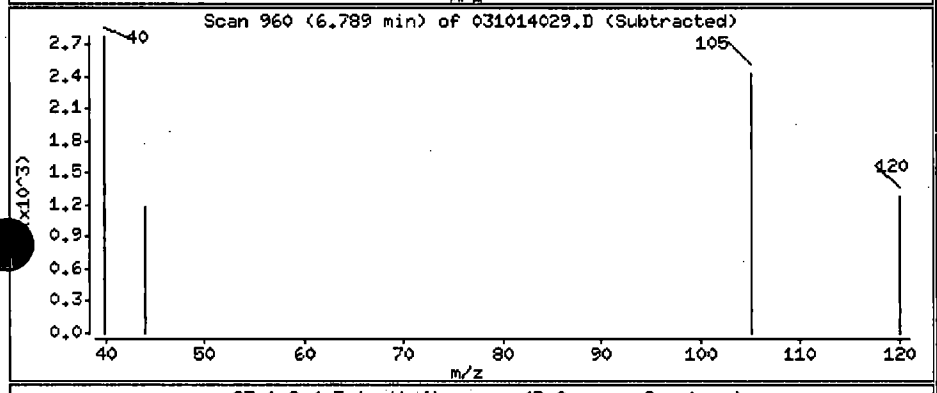
Column phase: Rtx-VMS

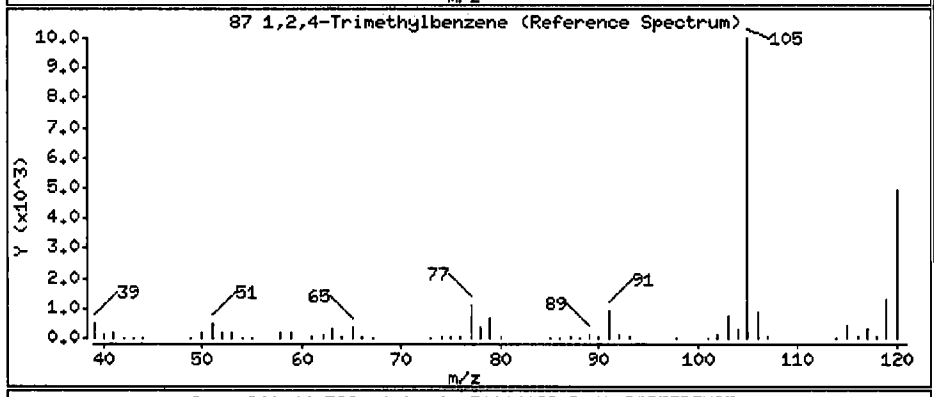
Column diameter: 0.18

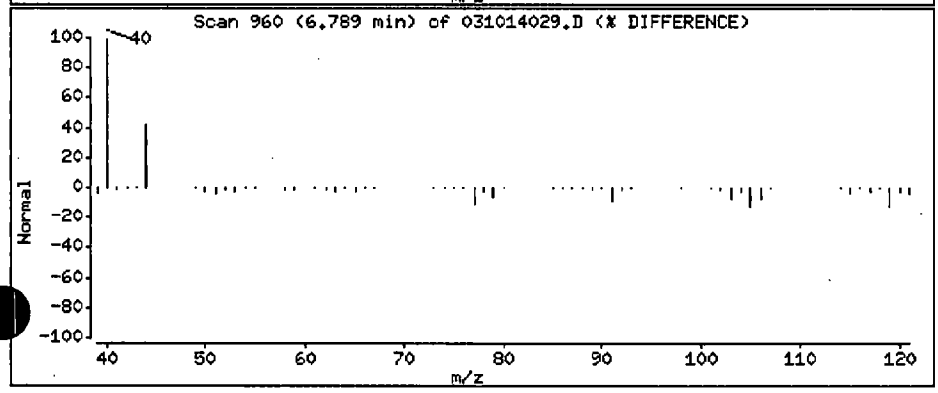
87 1,2,4-Trimethylbenzene

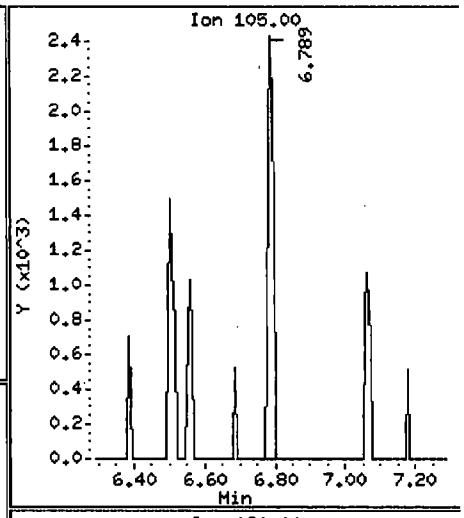
Concentration: 0.18 ug/Kg

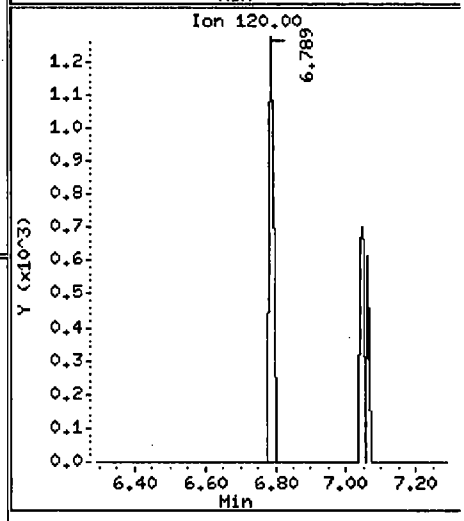












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

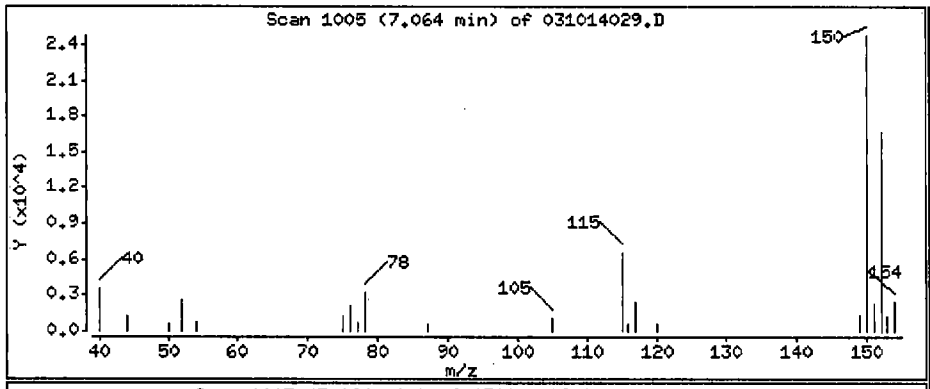
Operator: HBP

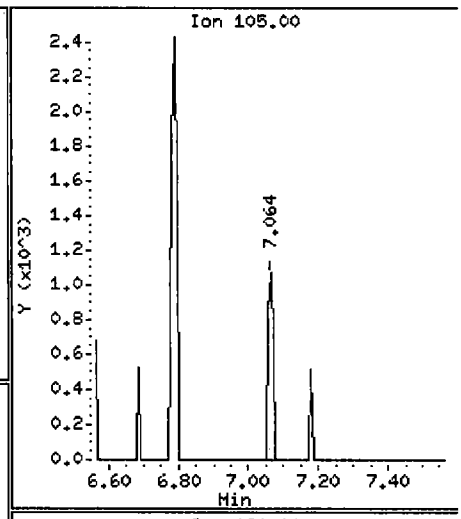
Column phase: Rtx-VMS

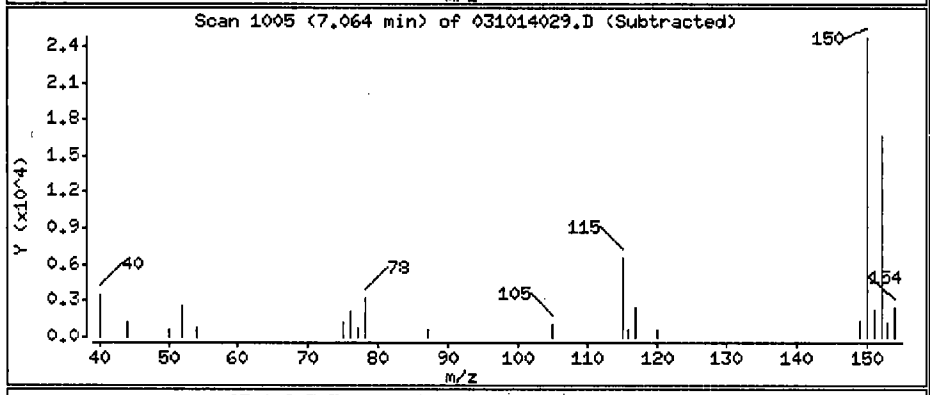
Column diameter: 0.18

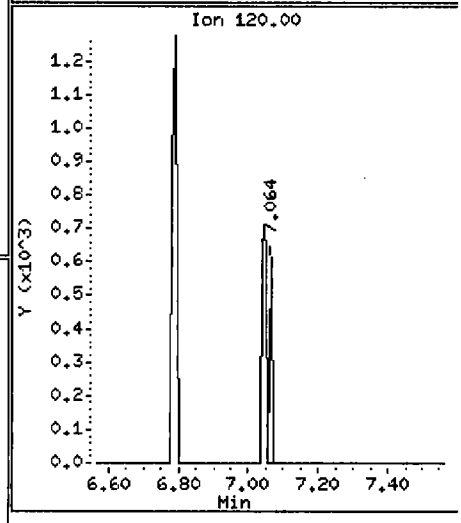
93 1,2,3 Trimethylbenzene

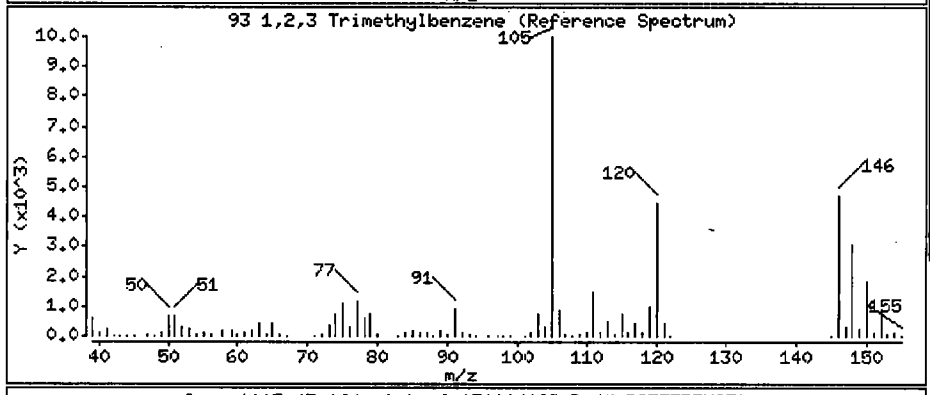
Concentration: 0.057 ug/Kg

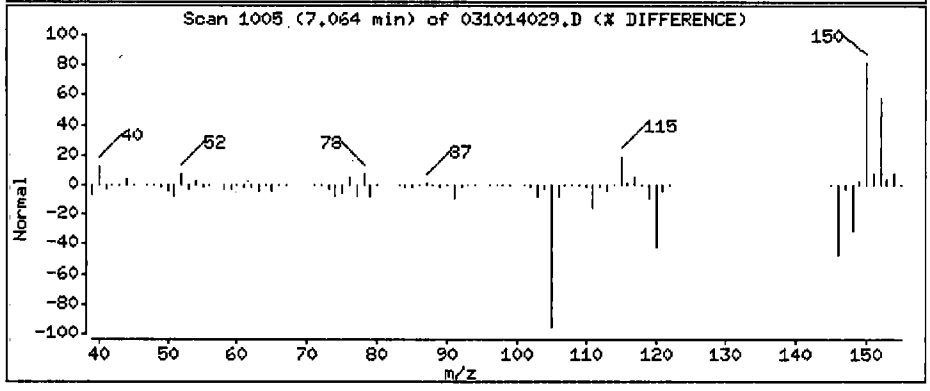












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Date : 10-MAR-2014 19:41

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055006,5.51

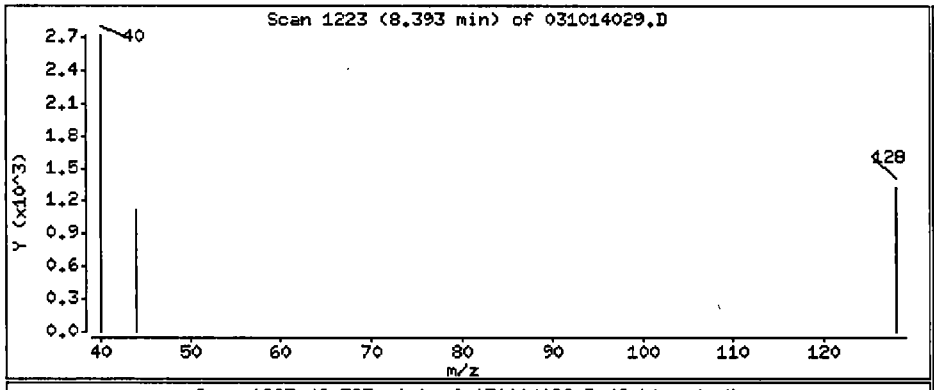
Operator: HBP

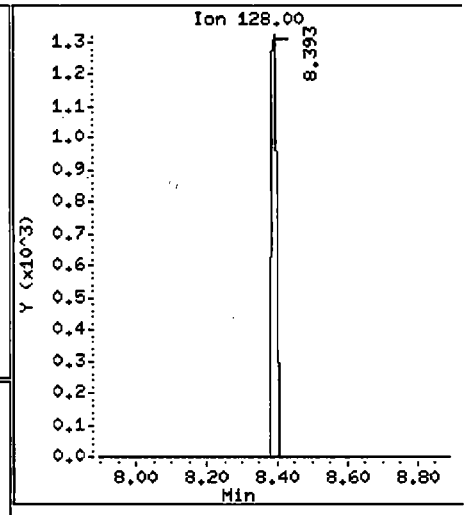
Column phase: Rtx-VMS

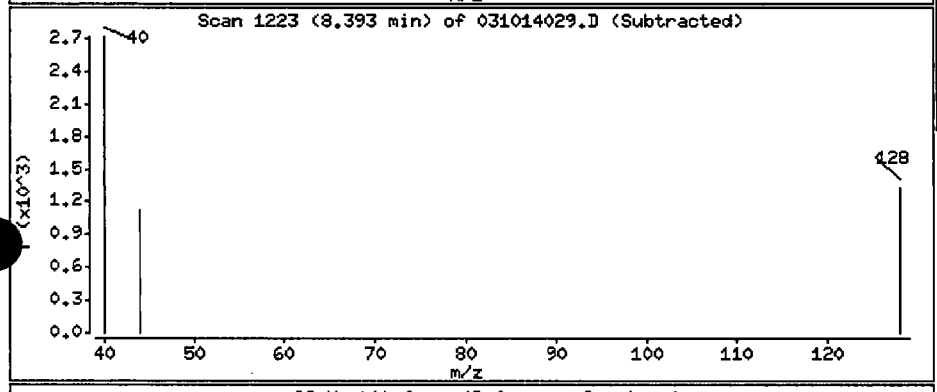
Column diameter: 0.18

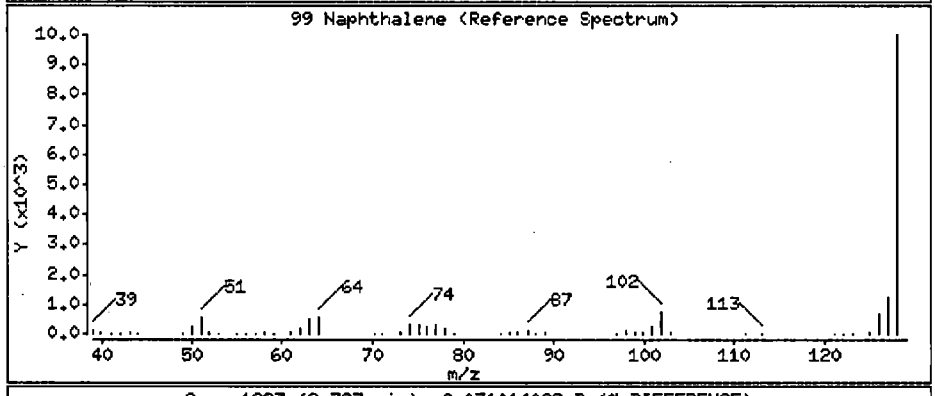
99 Naphthalene

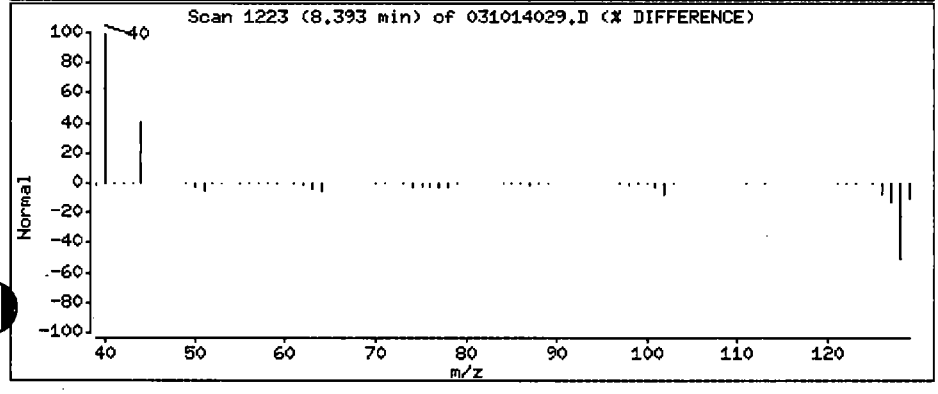
Concentration: 0.12 ug/Kg











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Injection Date: 10-MAR-2014 19:41
Instrument: 10msv7.i
Lab Sample ID: 10259055006
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014030.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014030.D
Lab Smp Id: 10259055007
Inj Date : 10-MAR-2014 20:00
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259055007,5.44
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.440	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.095	2.101	(0.498)	12174	0.86753	0.94(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.643	2.649	(1.000)	152859	200.000	
19	Acetone	58	2.692	2.698	(1.018)	7692	22.8534	24.9
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014030.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	21 Hexane	86	2.863	2.863	(1.083)	859	0.77025	0.84(aQ)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	3.753	3.753	(0.893)	4556	0.66904	0.73(aQ)
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	4.003	3.997	(0.952)	5720	3.79474	4.1(aQ)
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.143	4.143	(0.985)	4611	0.27263	0.30(aQ)
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	980790	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	404420	106.824	107
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1451540	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	150395	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1680279	102.514	102
	58 Toluene	92	5.131	5.130	(0.887)	5126	0.48566	0.53(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	Compound Not Detected.					
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1395001	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.801	5.801	(1.003)	5635	0.28016	0.30(aQM)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.868	5.868	(1.015)	1534	0.19582	0.21(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.076	6.075	(1.051)	615	0.08372	0.091(aQ)
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014030.D
Report Date: 11-Mar-2014 15:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$ 76	4-Bromofluorobenzene (S)	95	6.387	6.386	(0.907)	652182	111.161	111
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	Compound Not Detected.					
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	2458	0.16605	0.18(a)
88	sec-Butylbenzene	105	Compound Not Detected.					
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	731291	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	1386	0.07336	0.080(aQH)
94	n-Butylbenzene	91	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
99	Naphthalene	128	8.392	8.392	(1.191)	1152	0.10790	0.12(a)
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
101	2-Methylnaphthalene	142	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014030.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014030.D
Lab Smp Id: 10259055007
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	152859	6.40
41 Pentafluorobenzen	966546	483273	1933092	980790	1.47
48 1,4 Difluorobenze	1457917	728959	2915834	1451540	-0.44
53 1,4 dioxane d8	174389	87195	348778	150395	-13.76
67 Chlorobenzene-d5	1458689	729345	2917378	1395001	-4.37
91 1,4-Dichlorobenze	888899	444450	1777798	731291	-17.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.64	-0.22
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.01
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.01
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

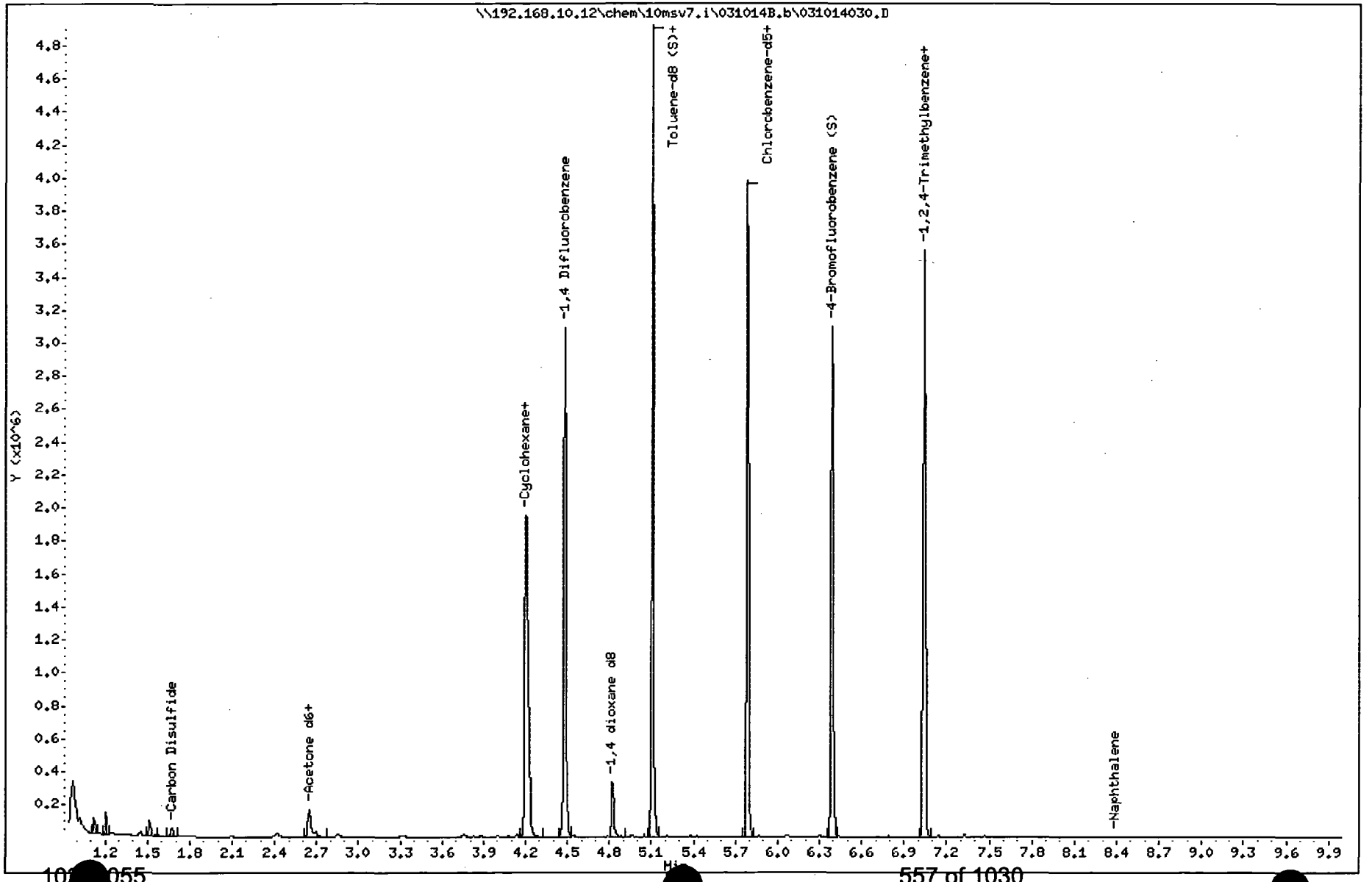
Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014030.D
Date : 10-MAR-2014 20:00
Client ID:
Sample Info: 10259055007,5.44

Instrument: 10msv7.i

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

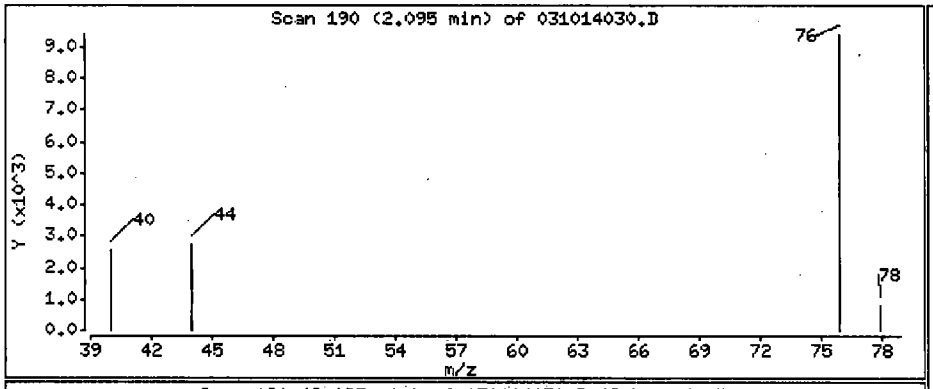
Operator: HBP

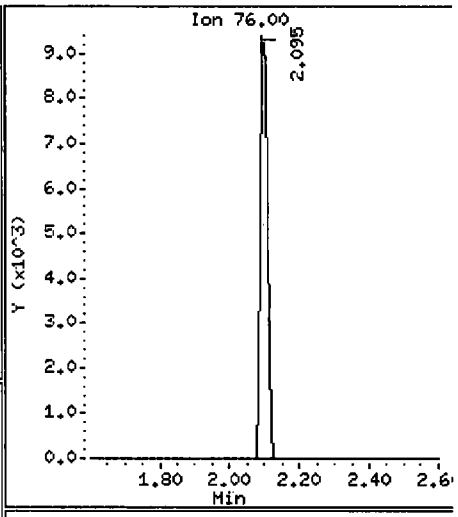
Column phase: Rtx-VMS

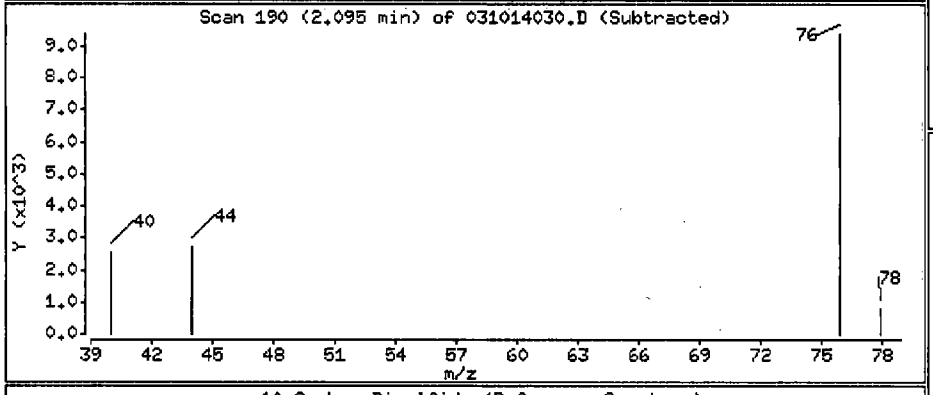
Column diameter: 0.18

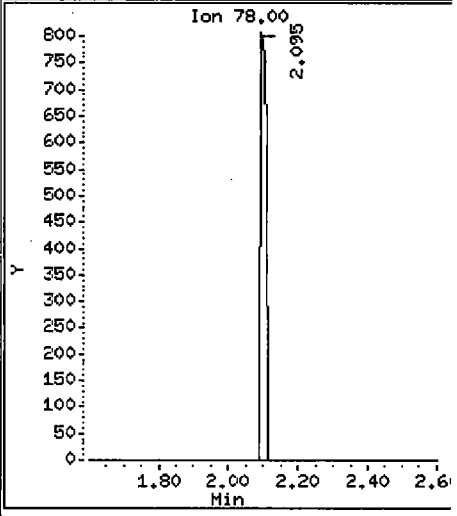
10 Carbon Disulfide

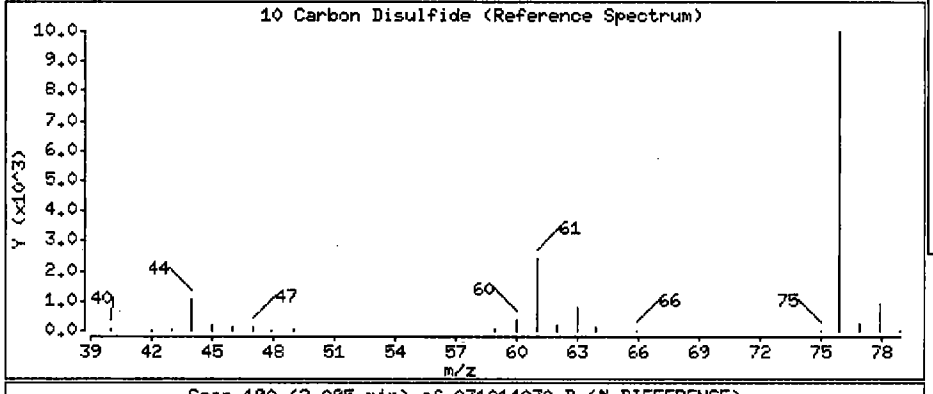
Concentration: 0.94 ug/Kg

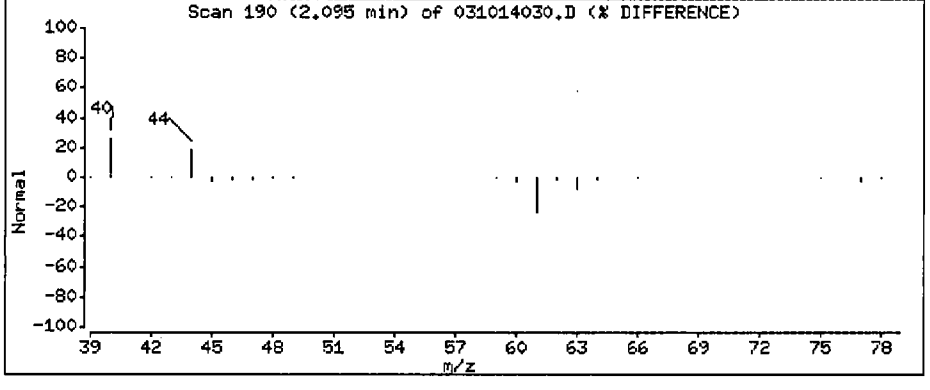












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

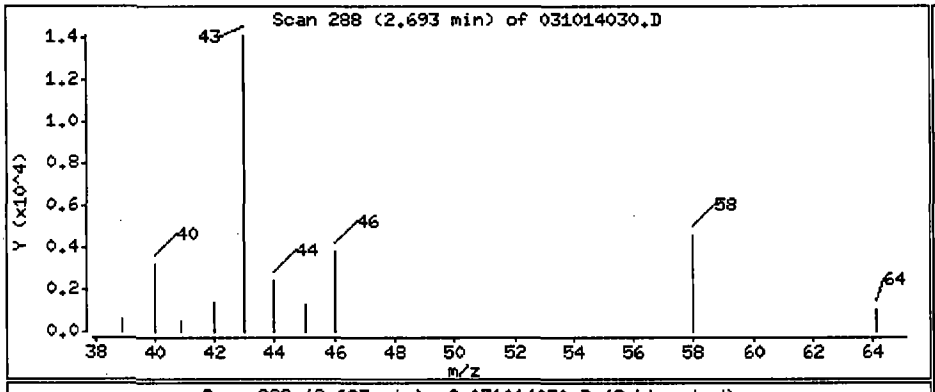
Operator: HBP

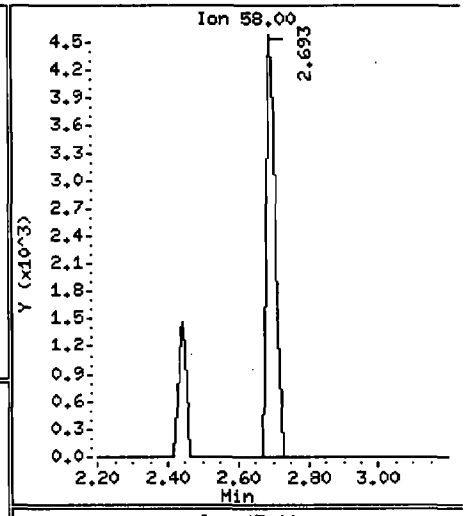
Column phase: Rtx-VMS

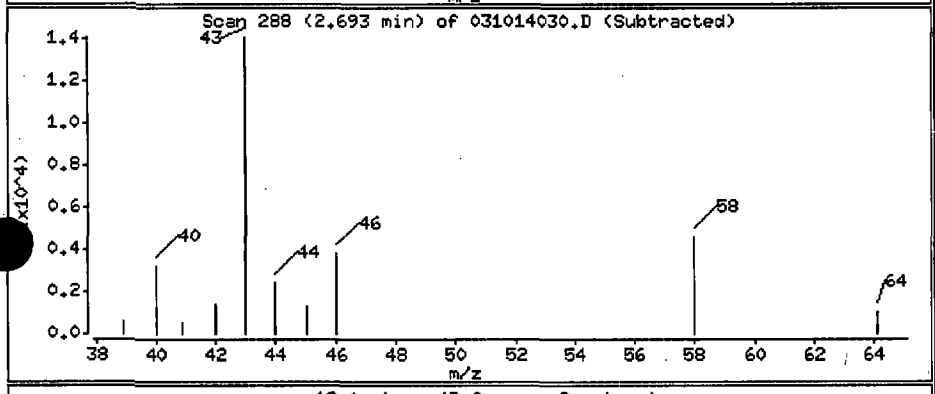
Column diameter: 0.18

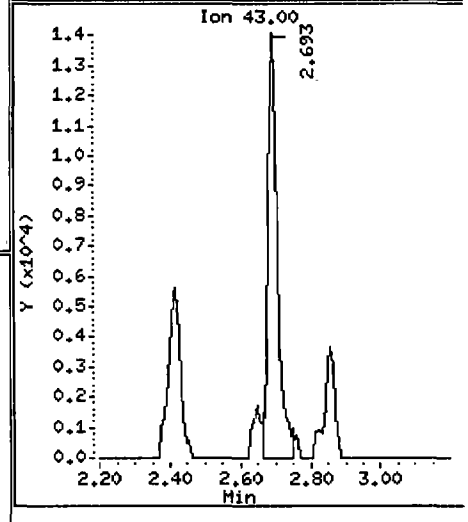
19 Acetone

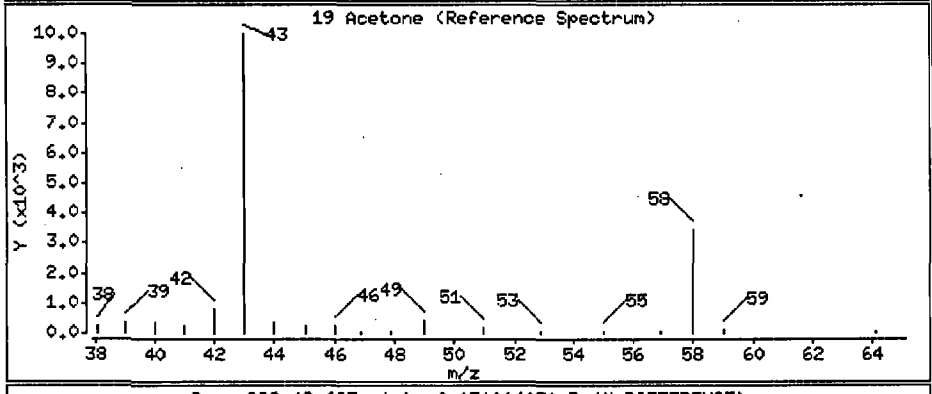
Concentration: 24.9 ug/Kg

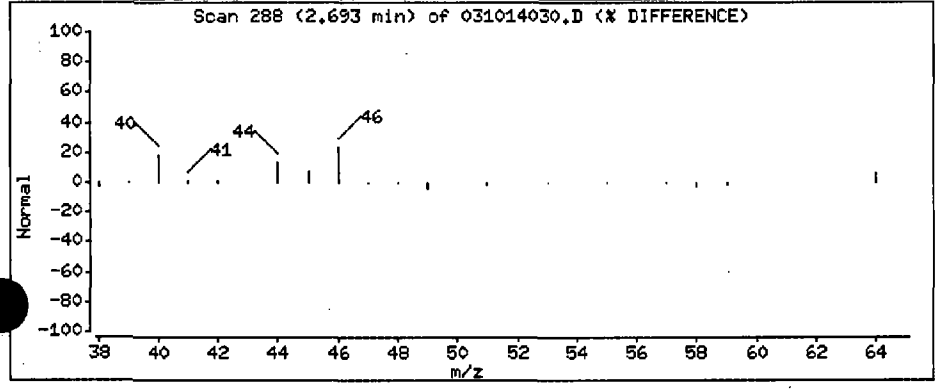












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

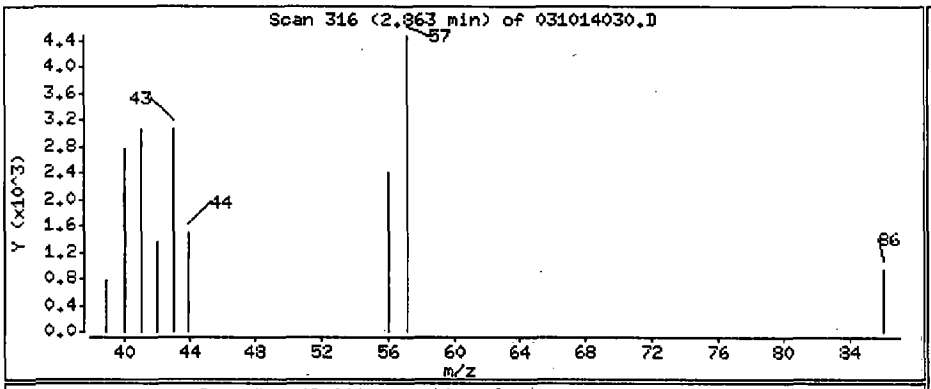
Operator: HBP

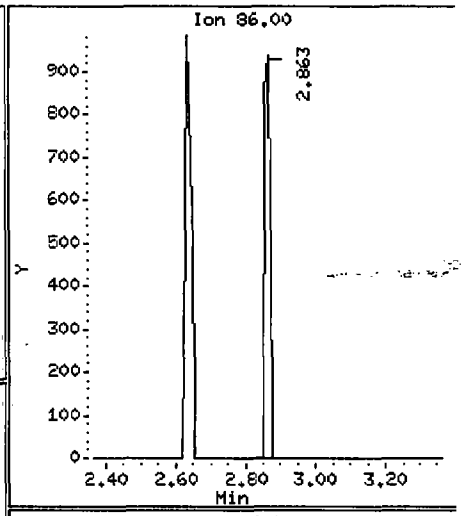
Column phase: Rtx-VMS

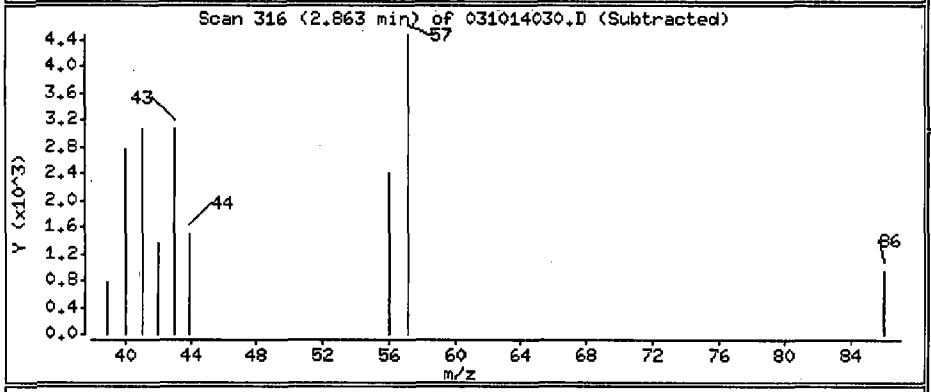
Column diameter: 0.18

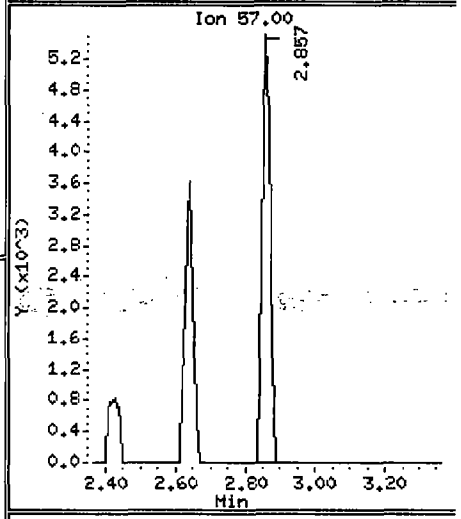
21 Hexane

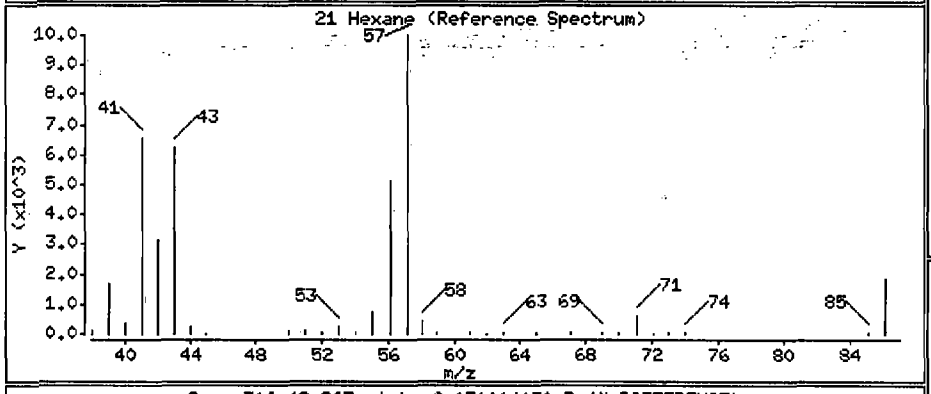
Concentration: 0.84 ug/Kg

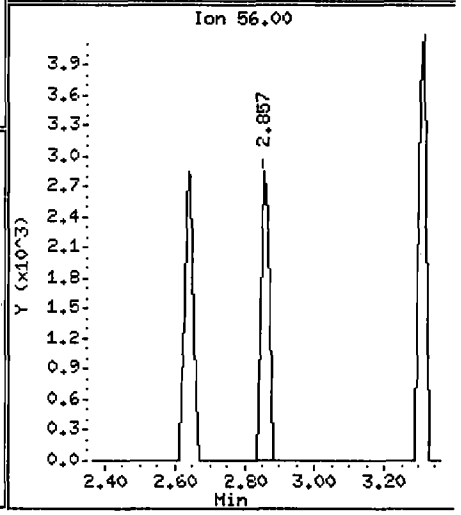


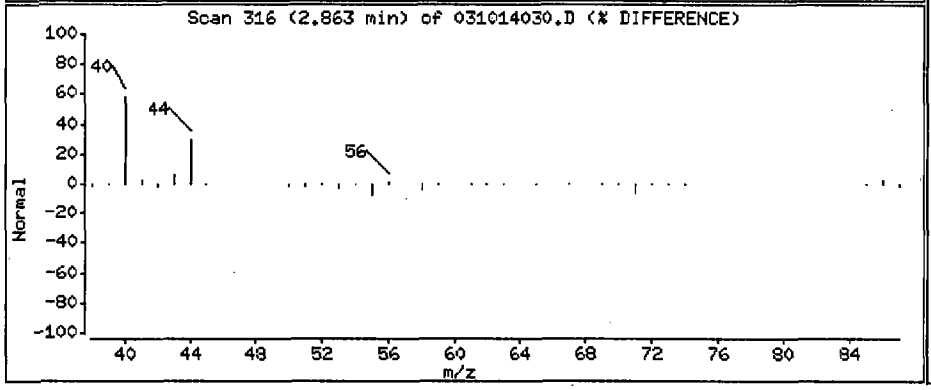












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014030.D

Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

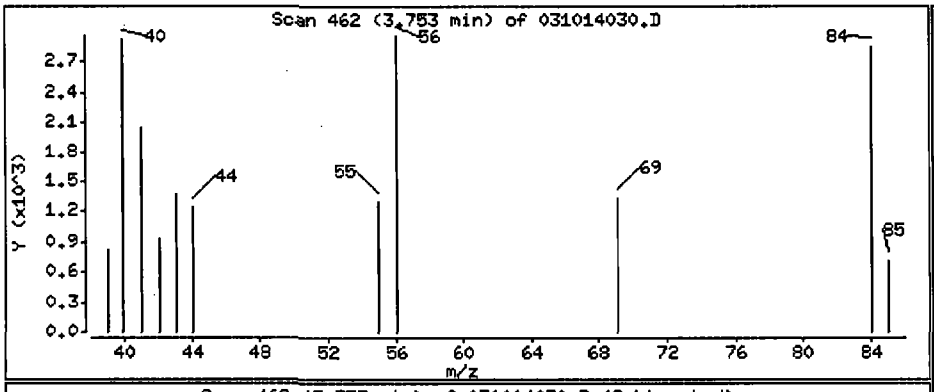
Operator: HBP

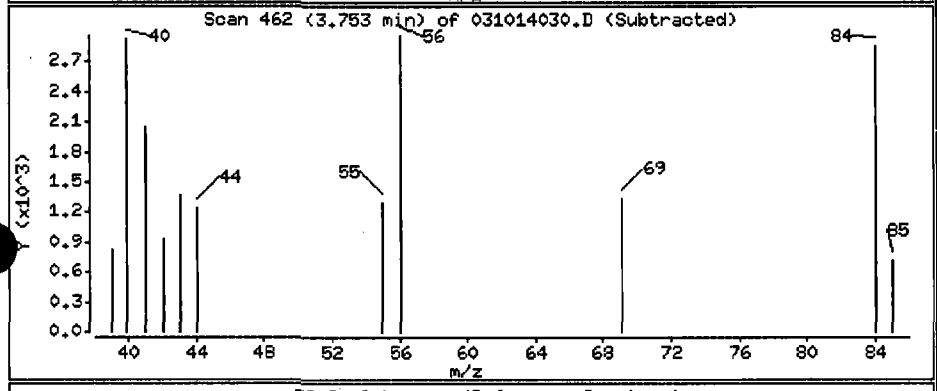
Column phase: Rtx-VMS

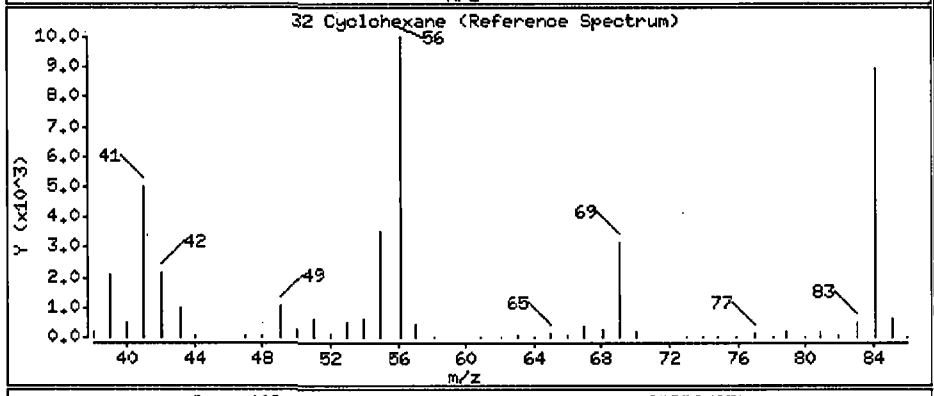
Column diameter: 0.18

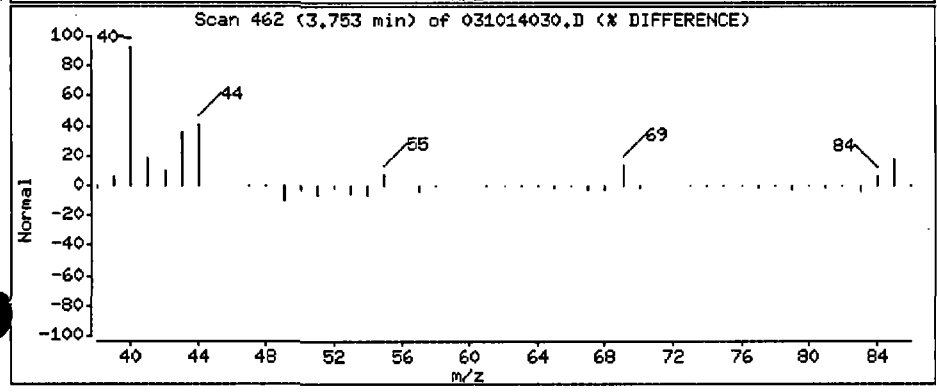
32 Cyclohexane

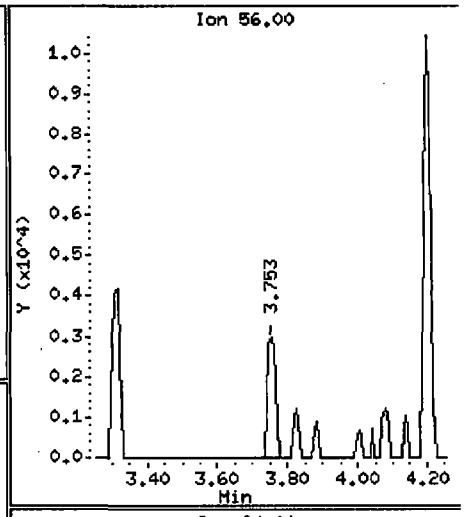
Concentration: 0.73 ug/Kg

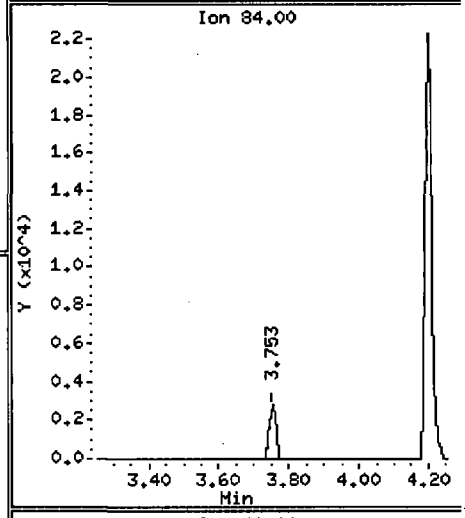


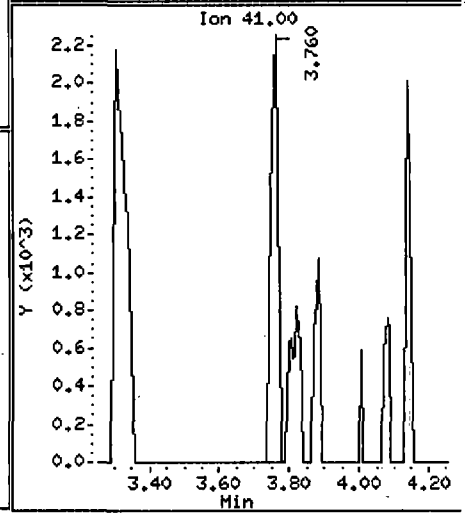












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

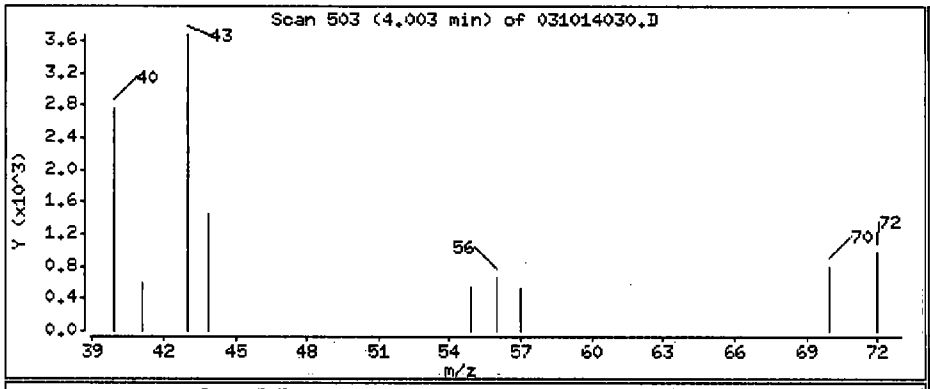
Operator: HBP

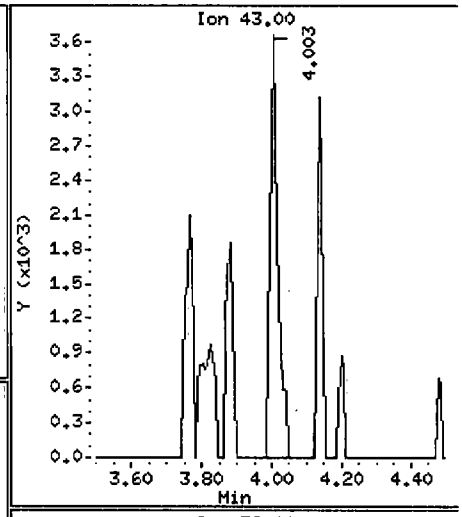
Column phase: Rtx-VMS

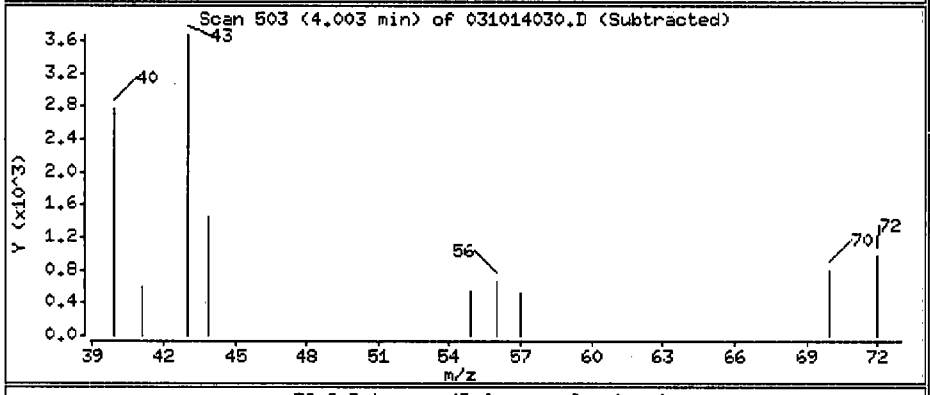
Column diameter: 0.18

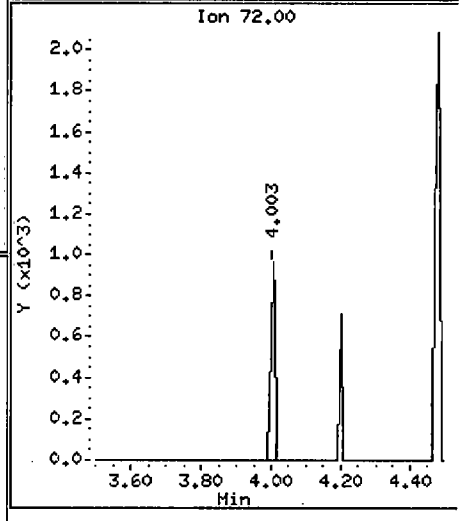
38 2-Butanone

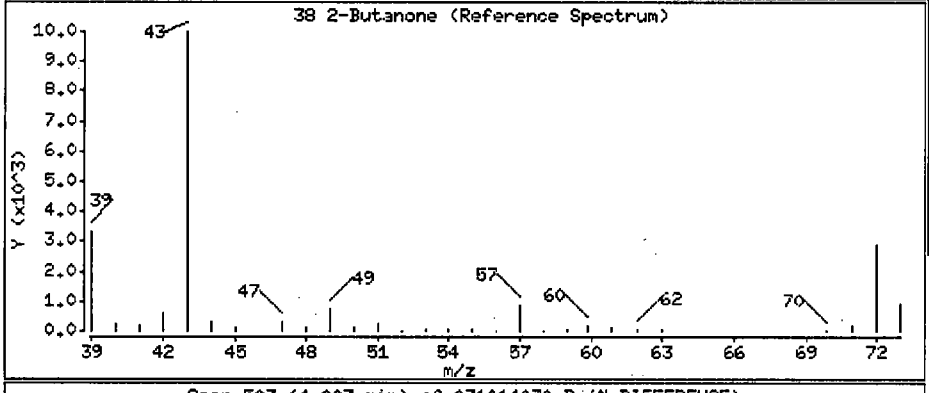
Concentration: 4.1 ug/Kg

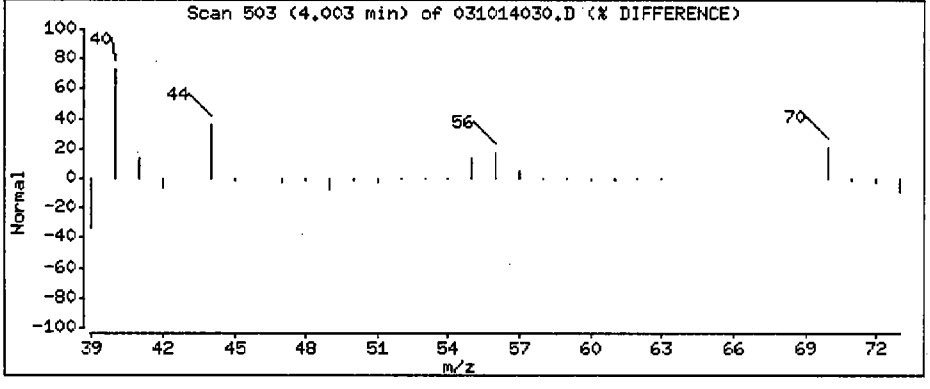












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

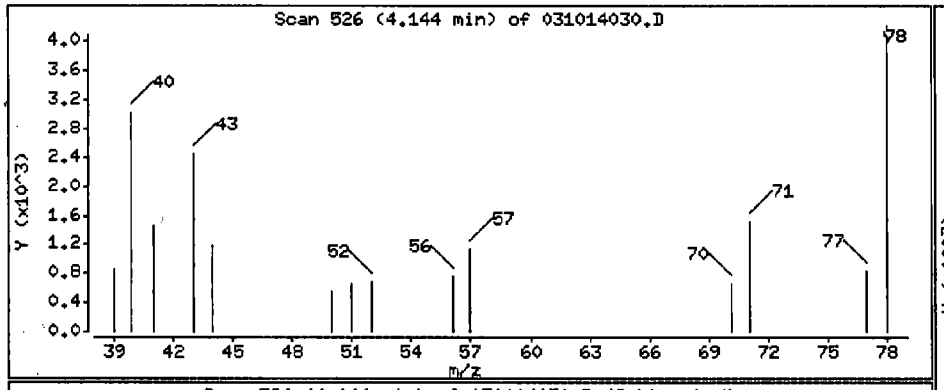
Operator: HBP

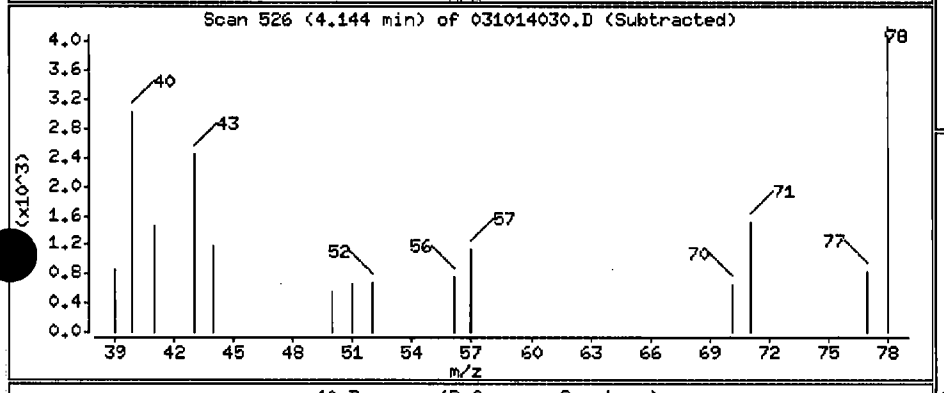
Column phase: Rtx-VMS

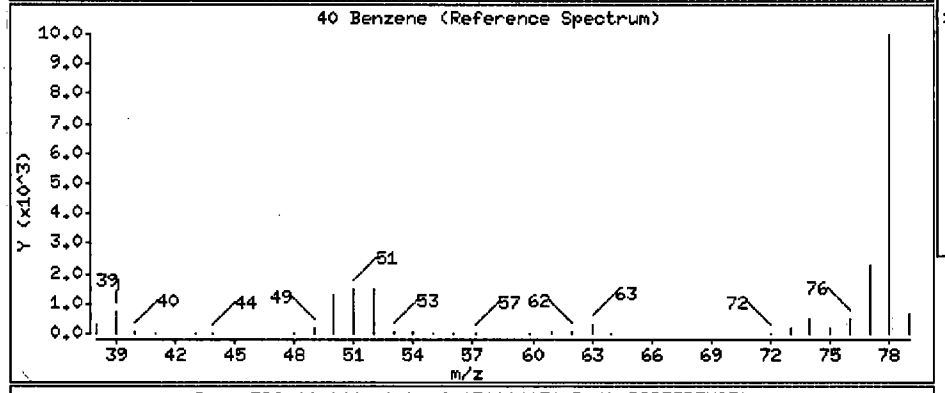
Column diameter: 0.18

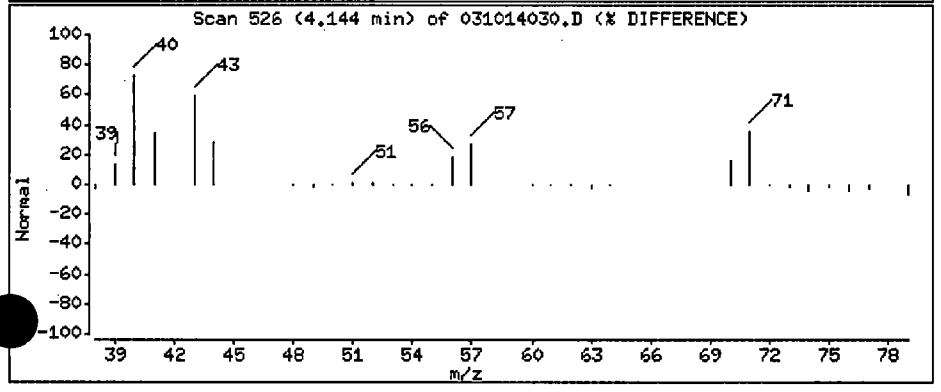
40 Benzene

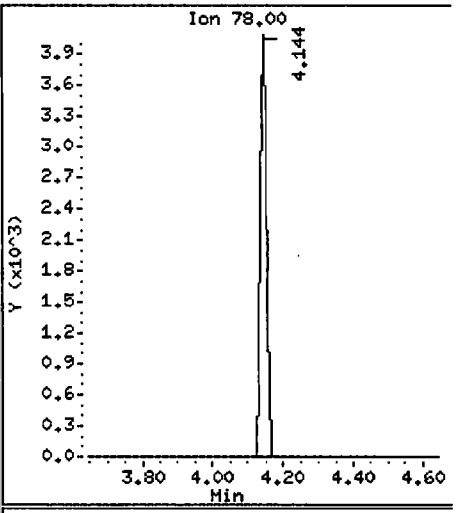
Concentration: 0.30 ug/Kg

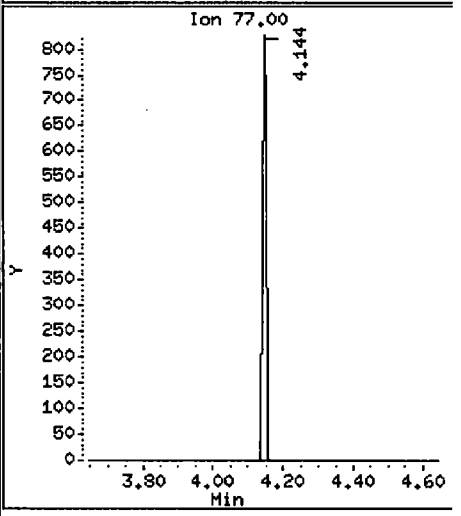












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

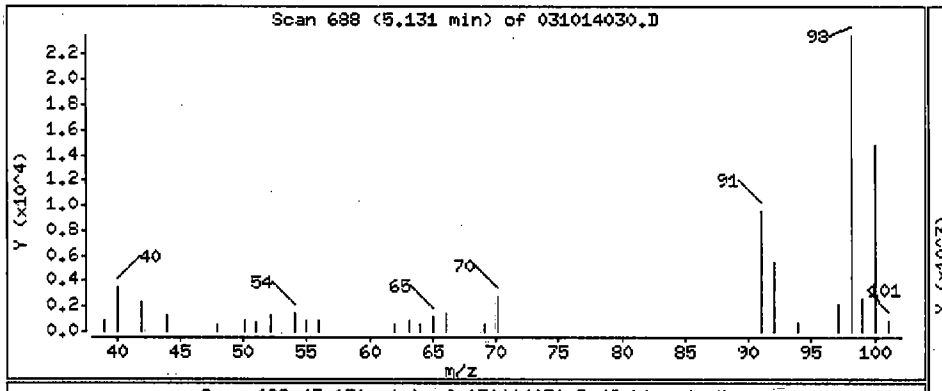
Operator: HBP

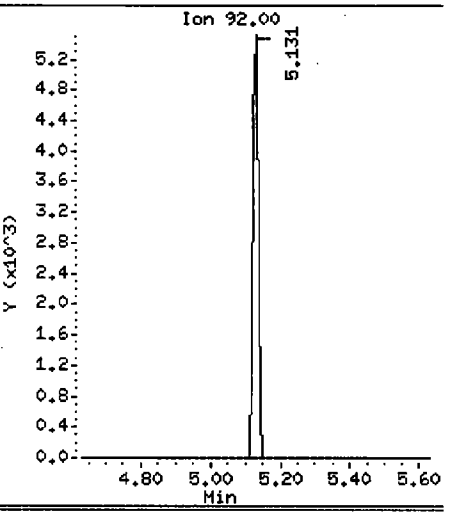
Column phase: Rtx-VMS

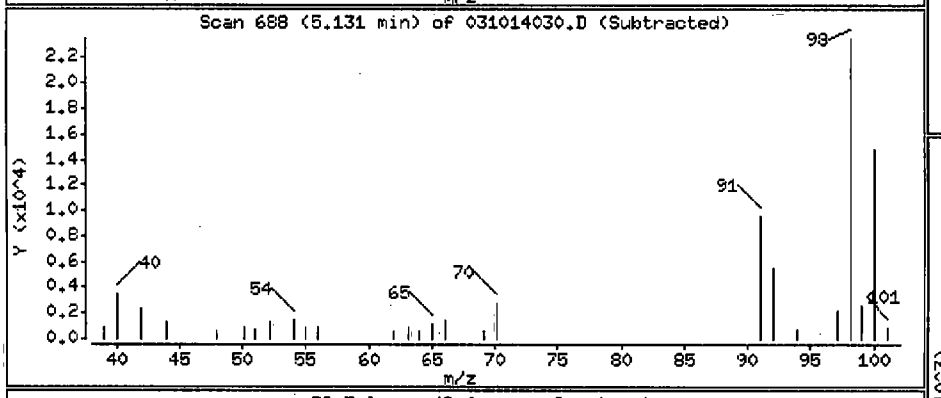
Column diameter: 0.18

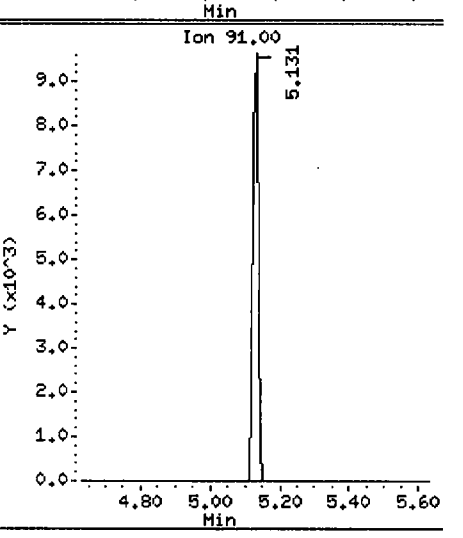
58 Toluene

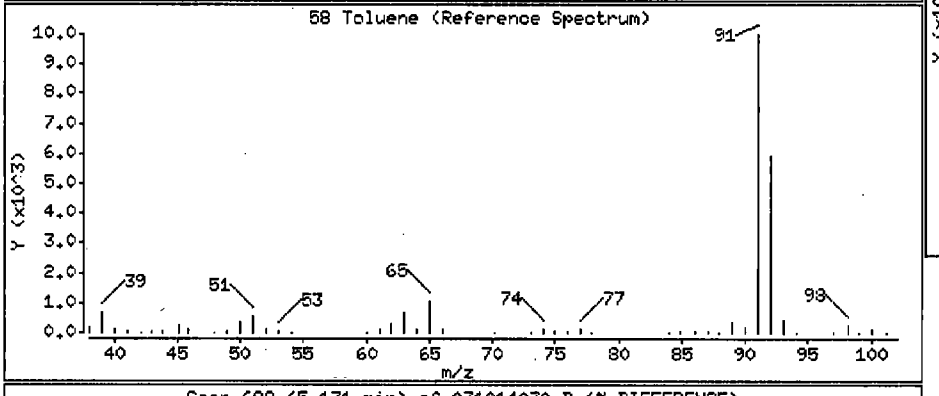
Concentration: 0.53 ug/Kg

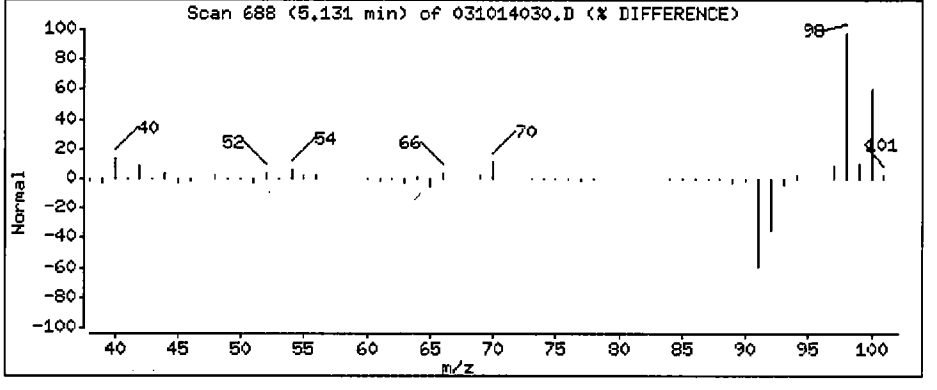












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

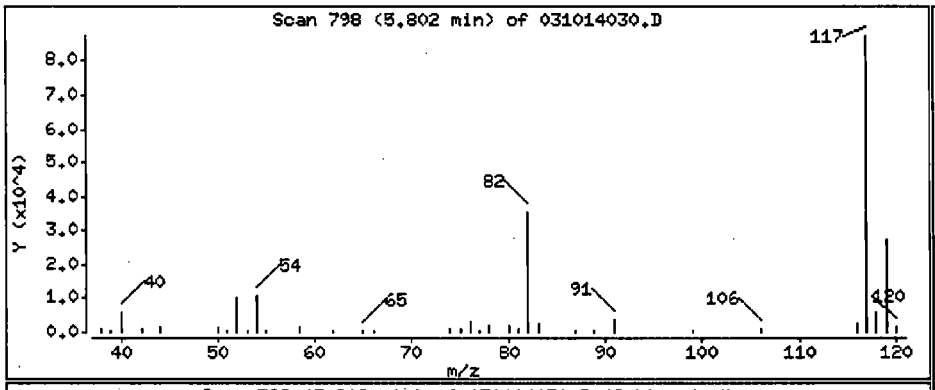
Operator: HBP

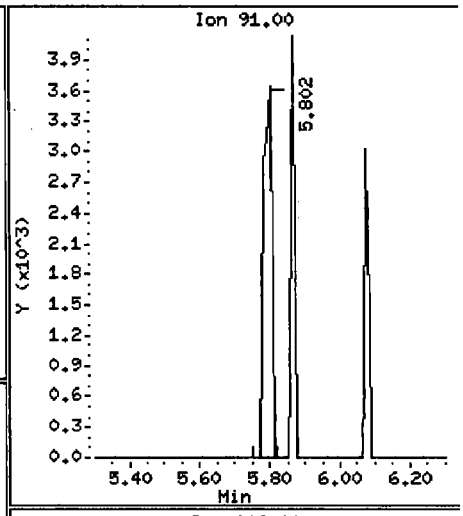
Column phase: Rtx-VMS

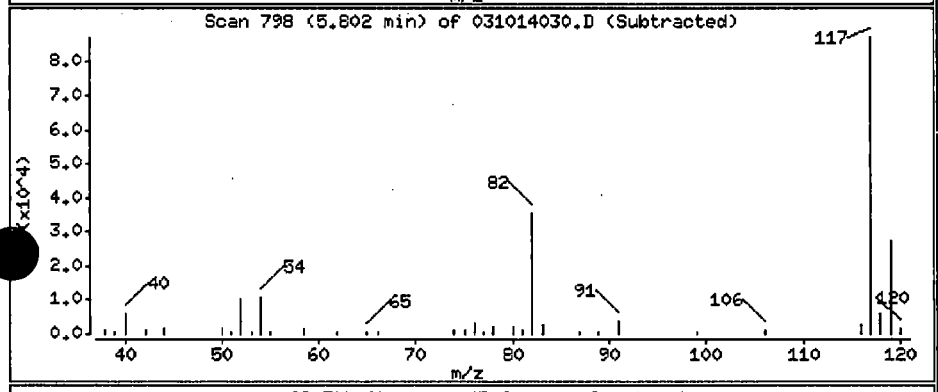
Column diameter: 0.18

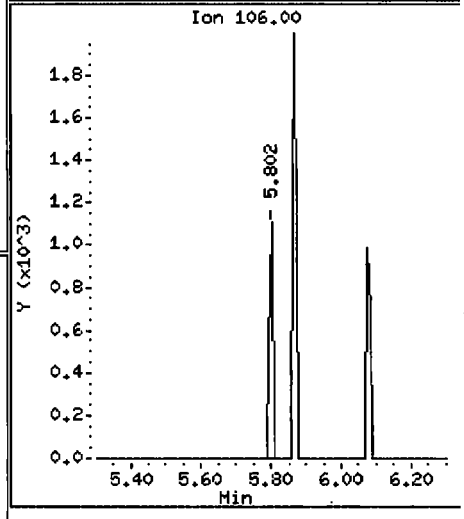
69 Ethylbenzene

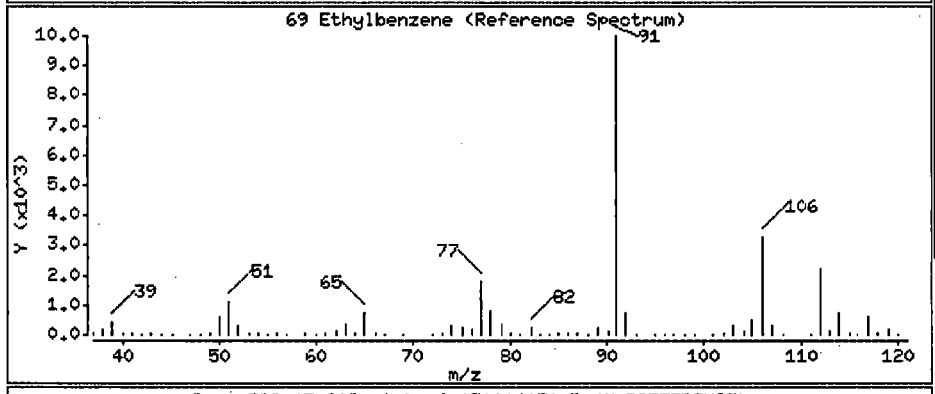
Concentration: 0.30 ug/Kg

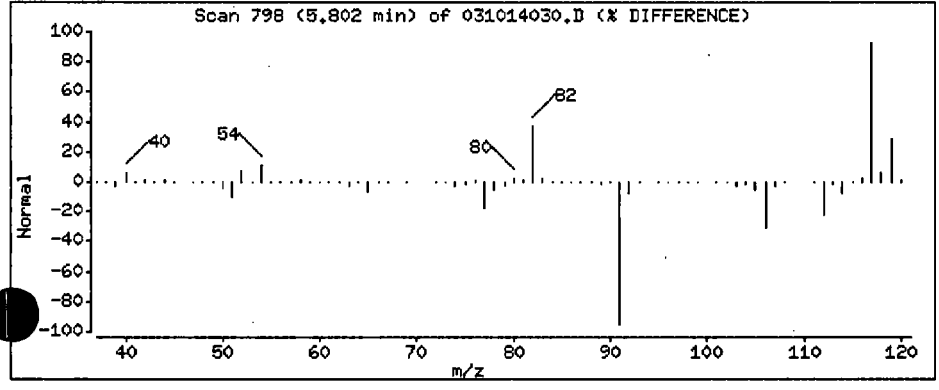












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

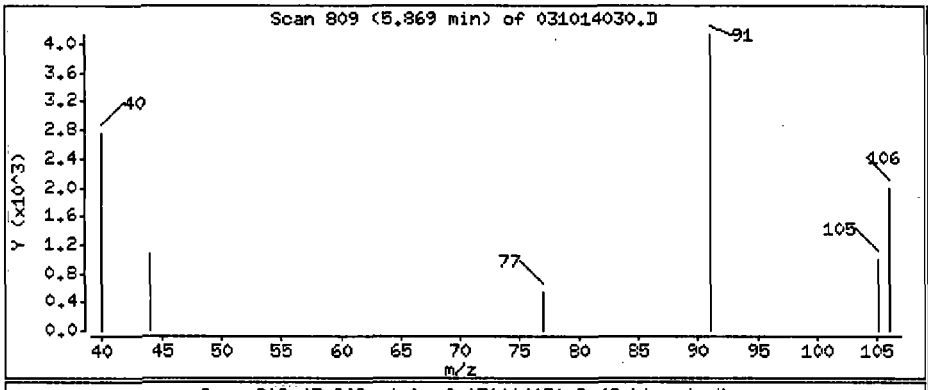
Operator: HBP

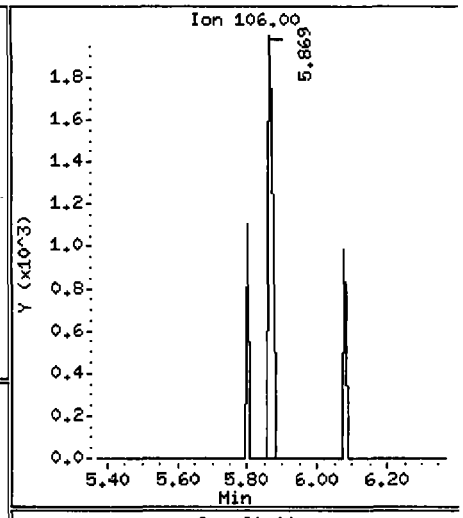
Column phase: Rtx-VMS

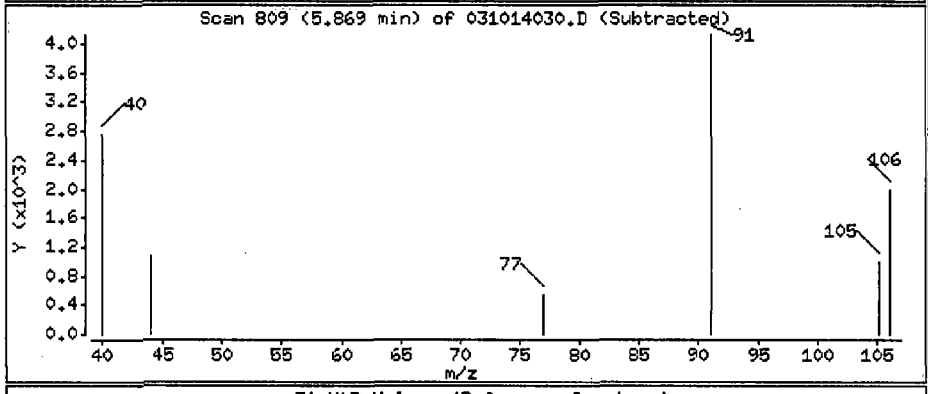
Column diameter: 0.18

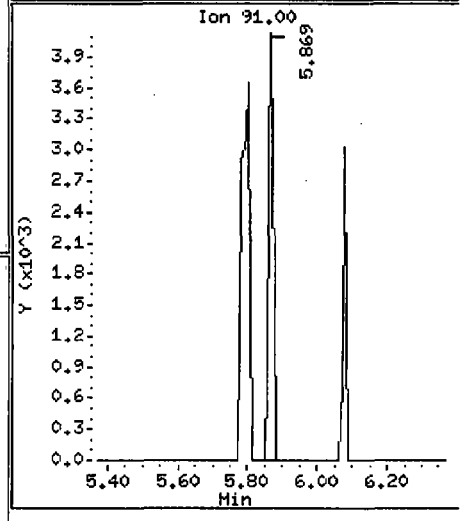
71 M&P-Xylene

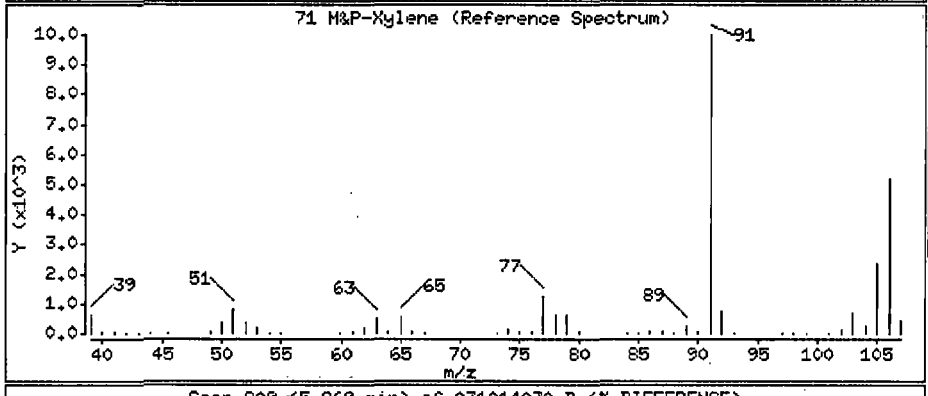
Concentration: 0.21 ug/Kg

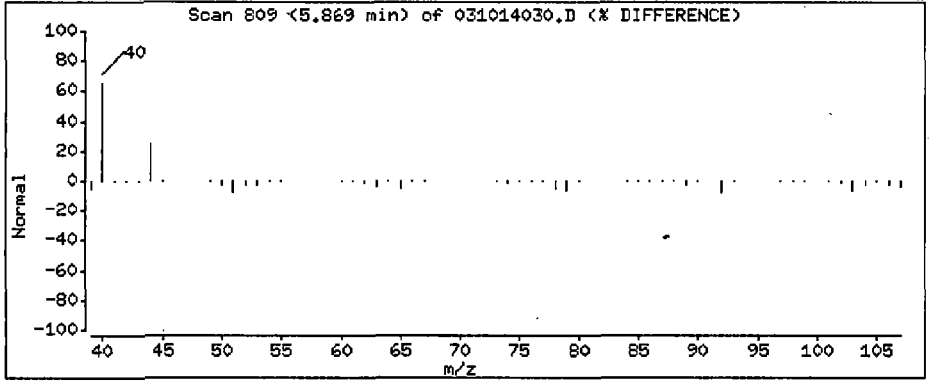












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

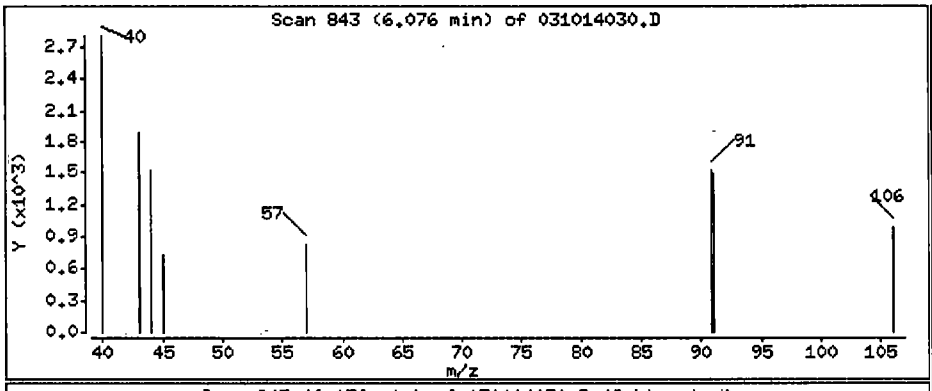
Operator: HBP

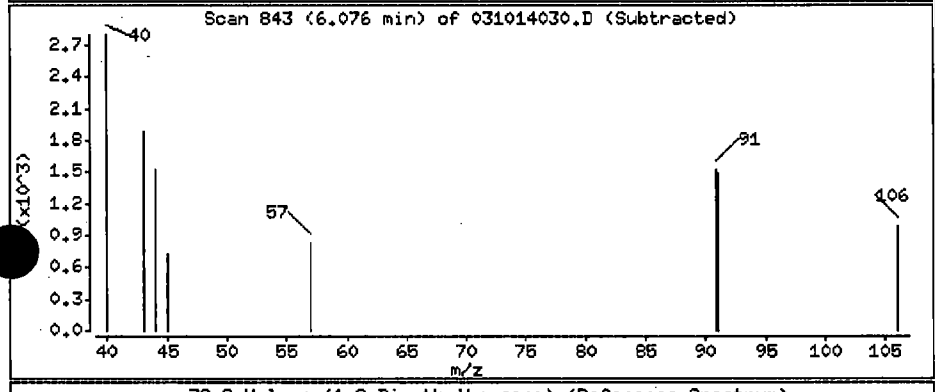
Column phase: Rtx-VMS

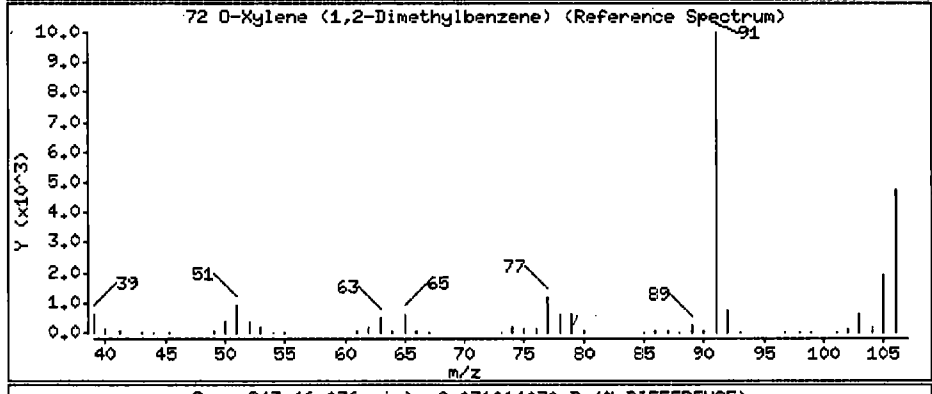
Column diameter: 0.18

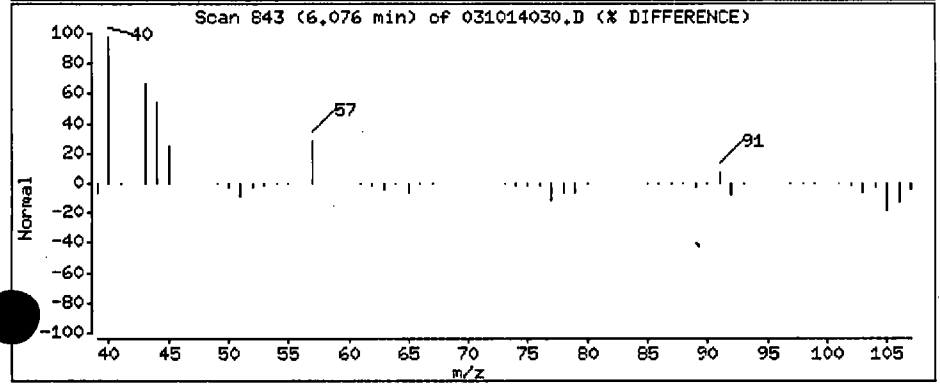
72 O-Xylene (1,2-Dimethylbenzene)

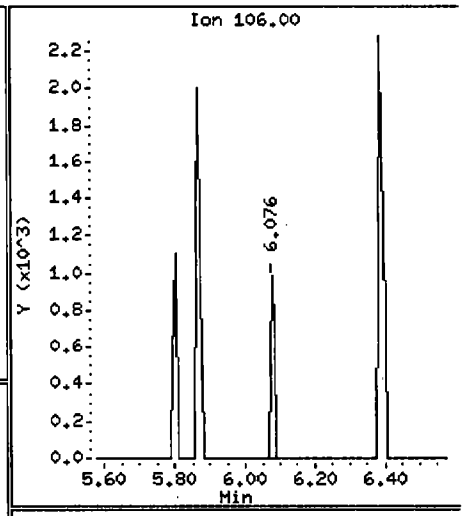
Concentration: 0.091 ug/Kg

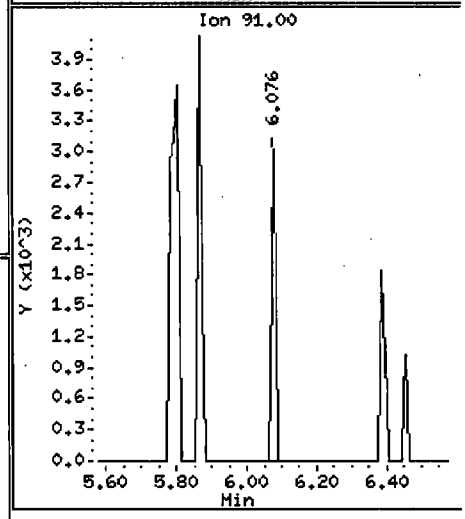












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

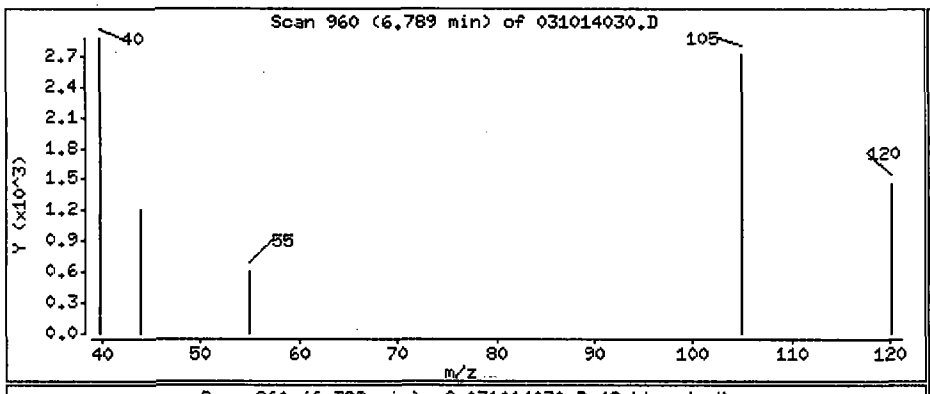
Operator: HBP

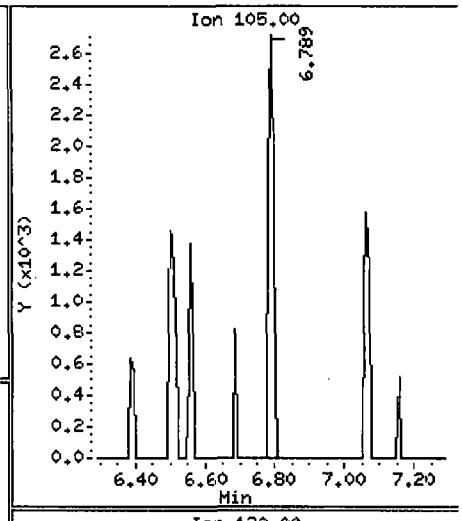
Column phase: Rtx-VMS

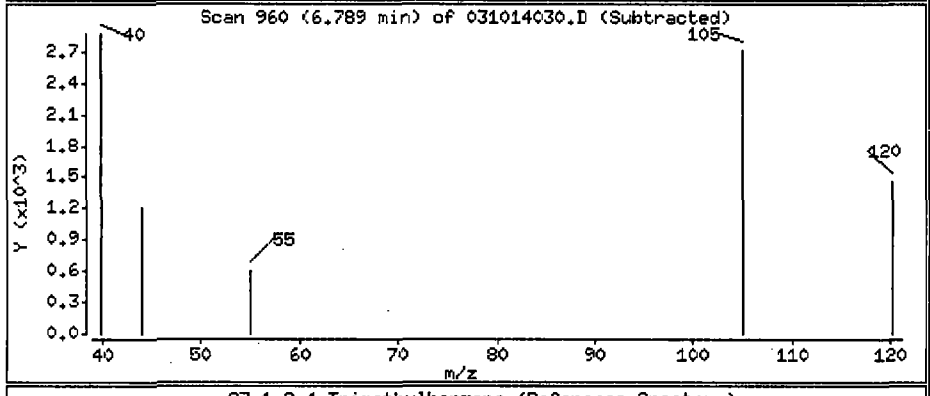
Column diameter: 0.18

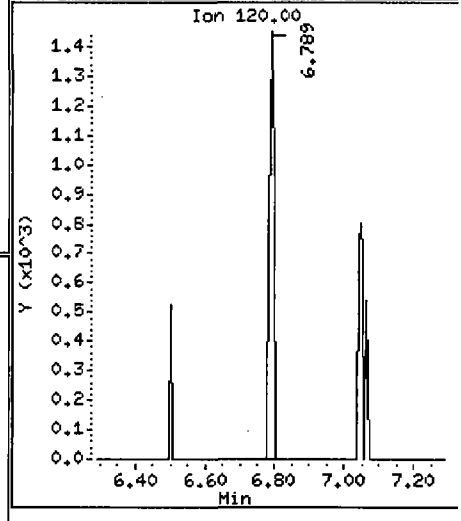
87 1,2,4-Trimethylbenzene

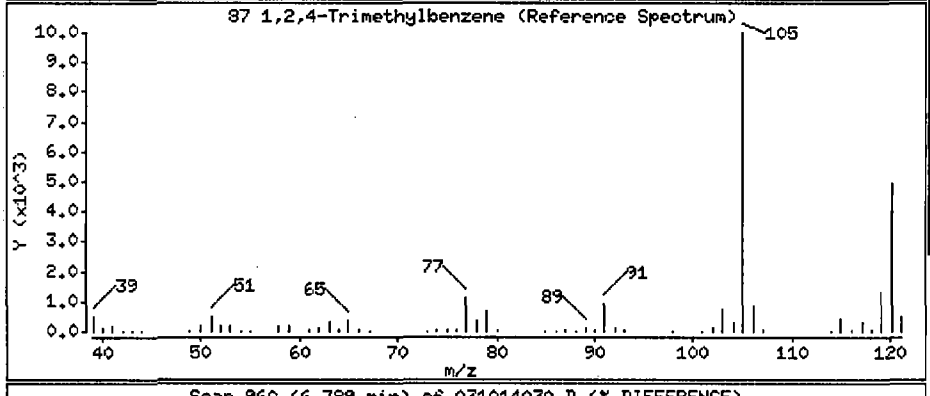
Concentration: 0.18 ug/Kg

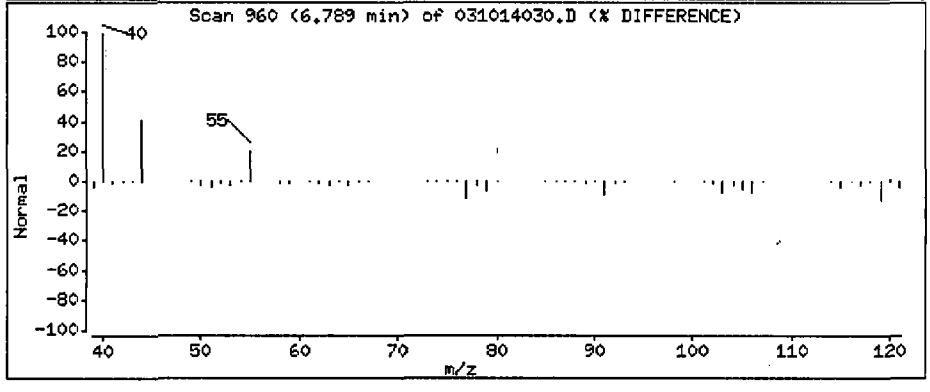












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

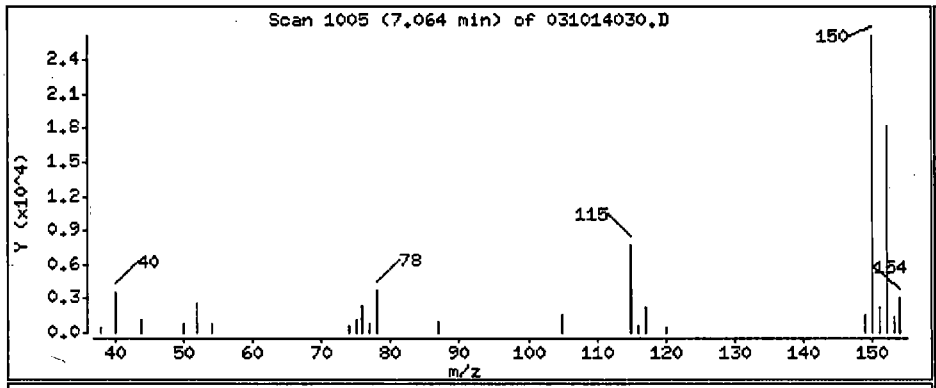
Operator: HBP

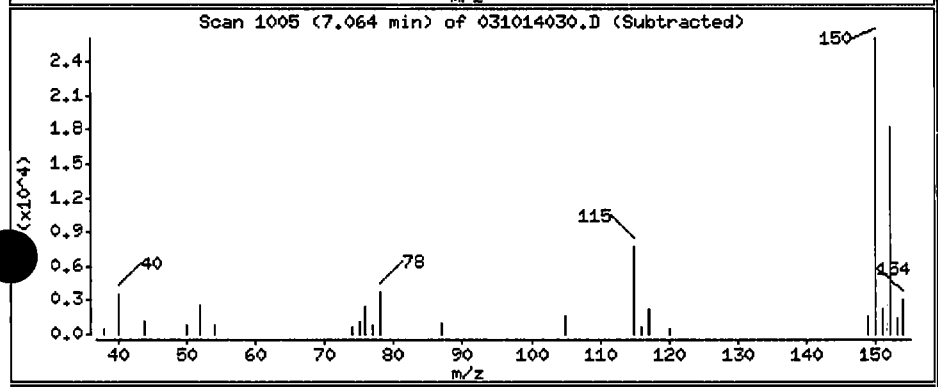
Column phase: Rtx-VMS

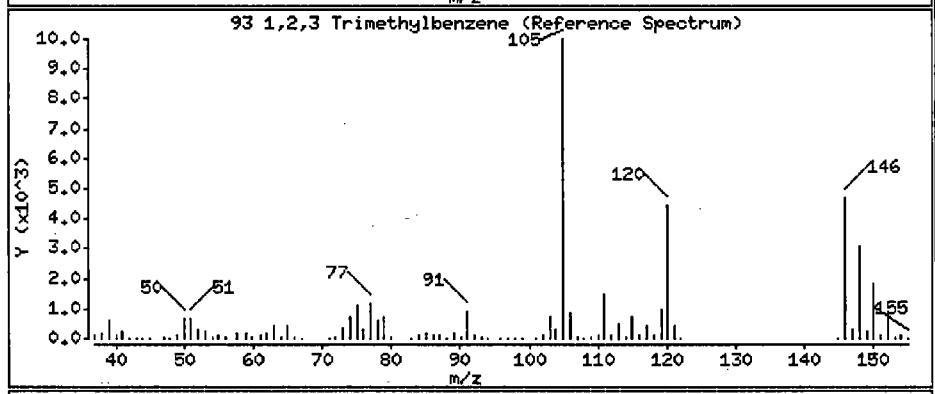
Column diameter: 0.18

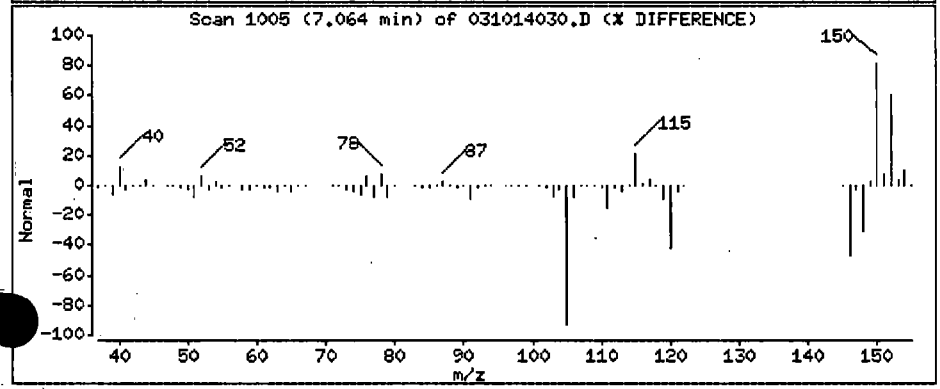
93 1,2,3 Trimethylbenzene

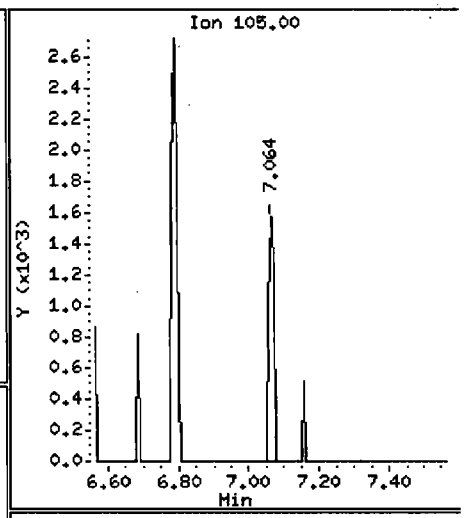
Concentration: 0.080 ug/Kg

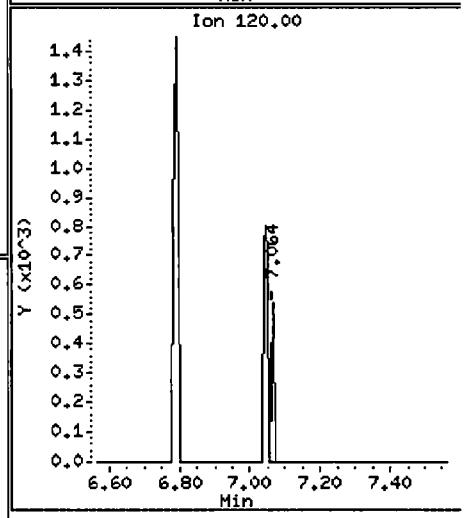












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Date : 10-MAR-2014 20:00

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055007,5.44

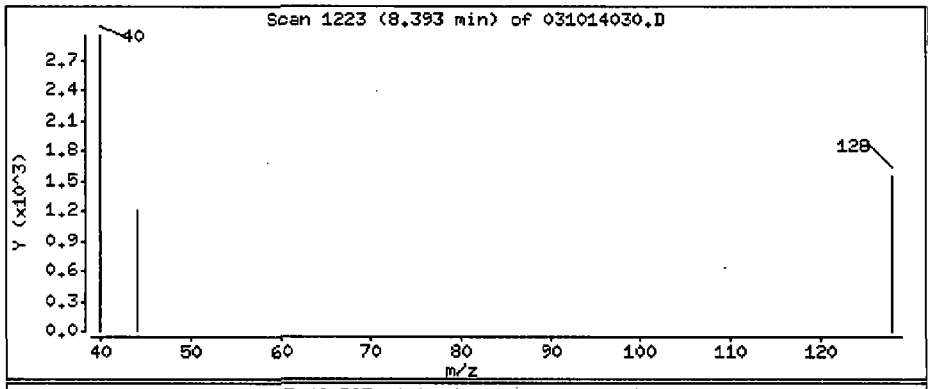
Operator: HBP

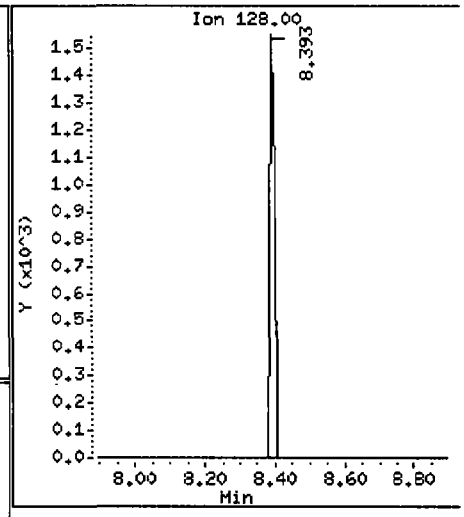
Column phase: Rtx-VMS

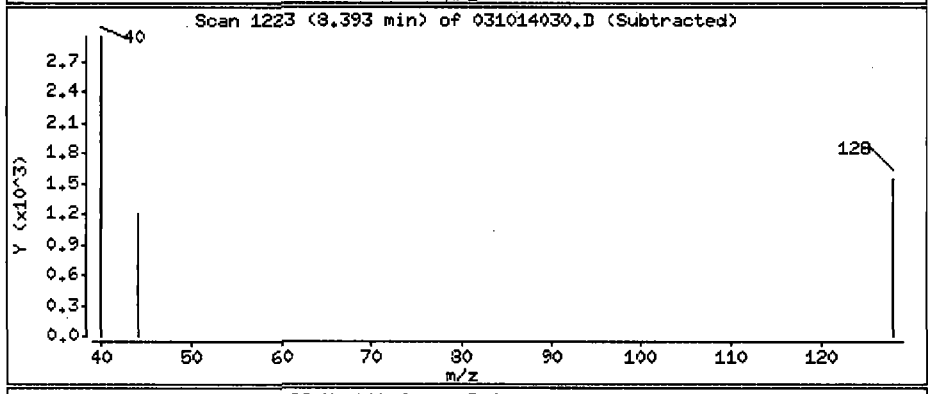
Column diameter: 0.18

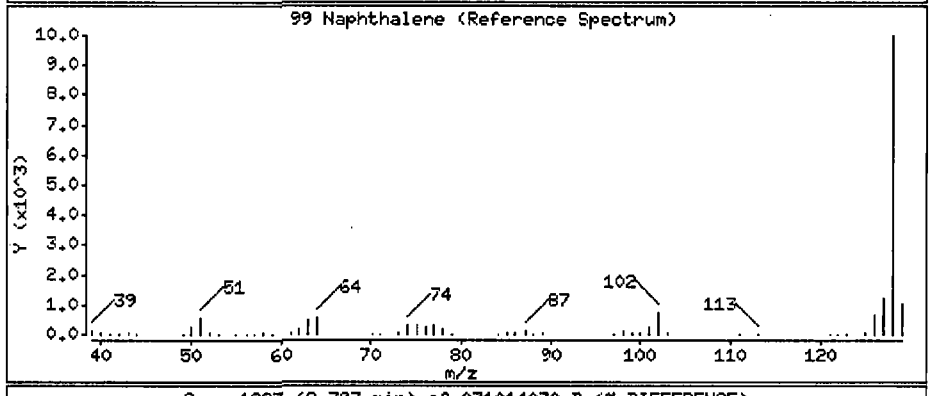
99 Naphthalene

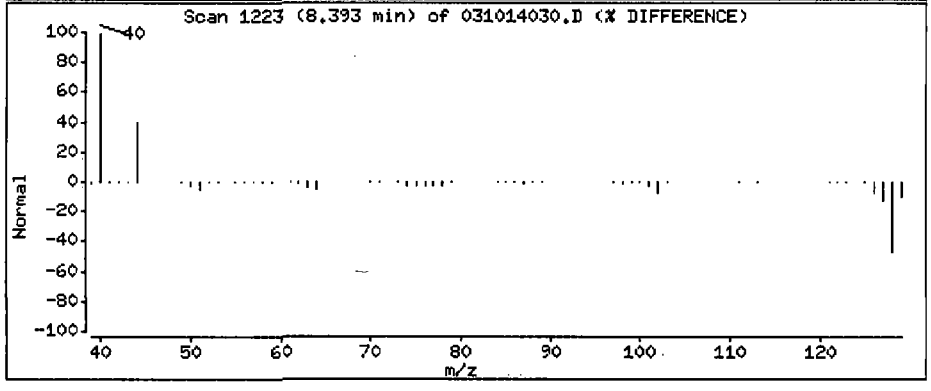
Concentration: 0.12 ug/Kg











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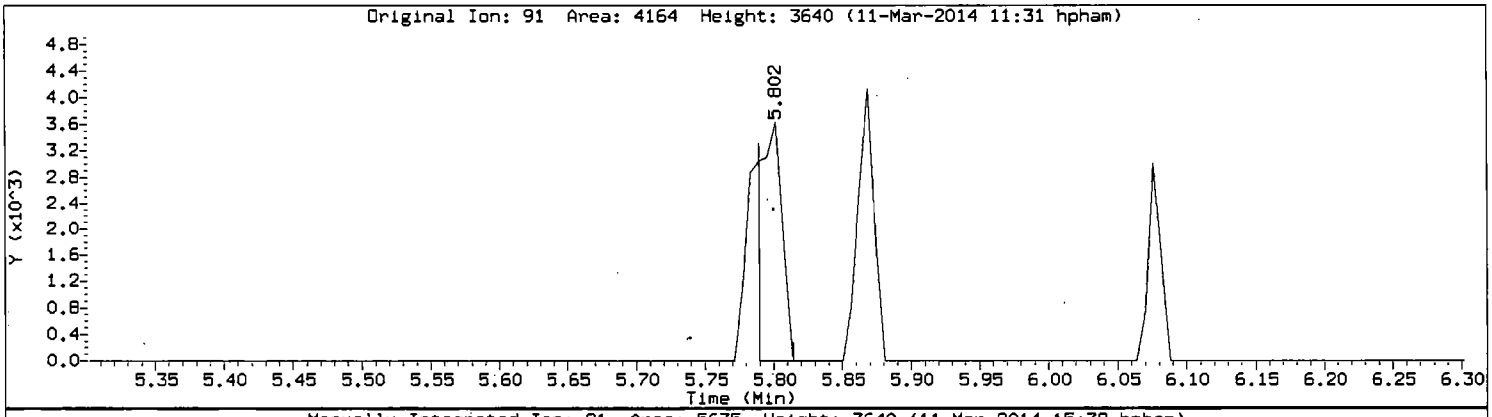
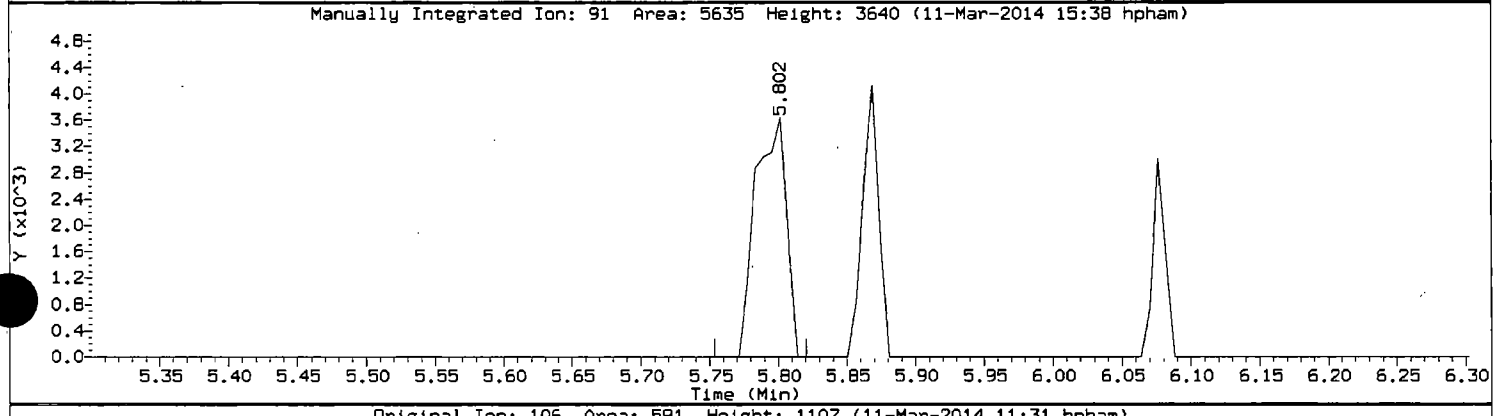
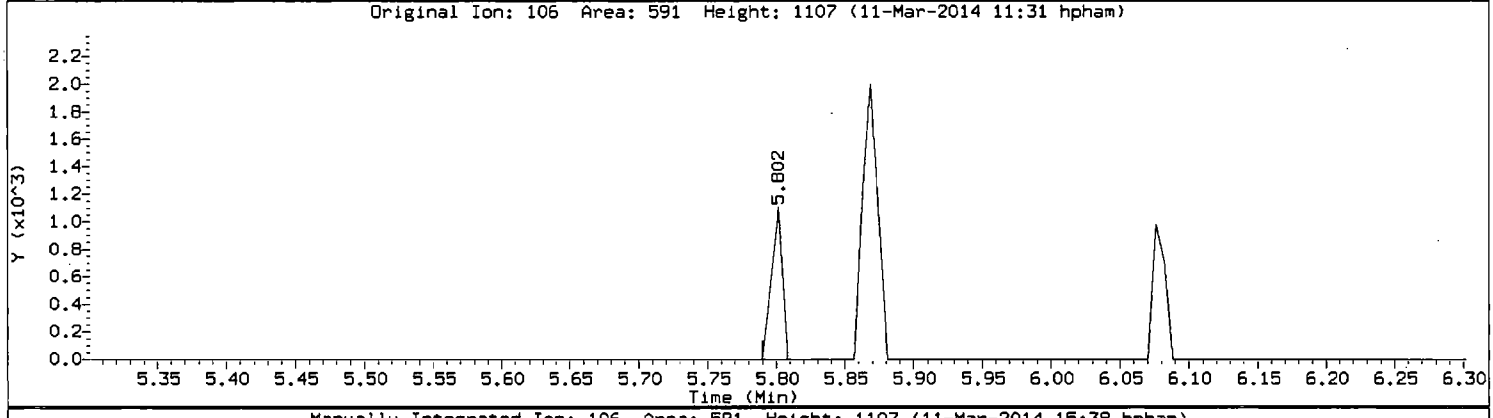
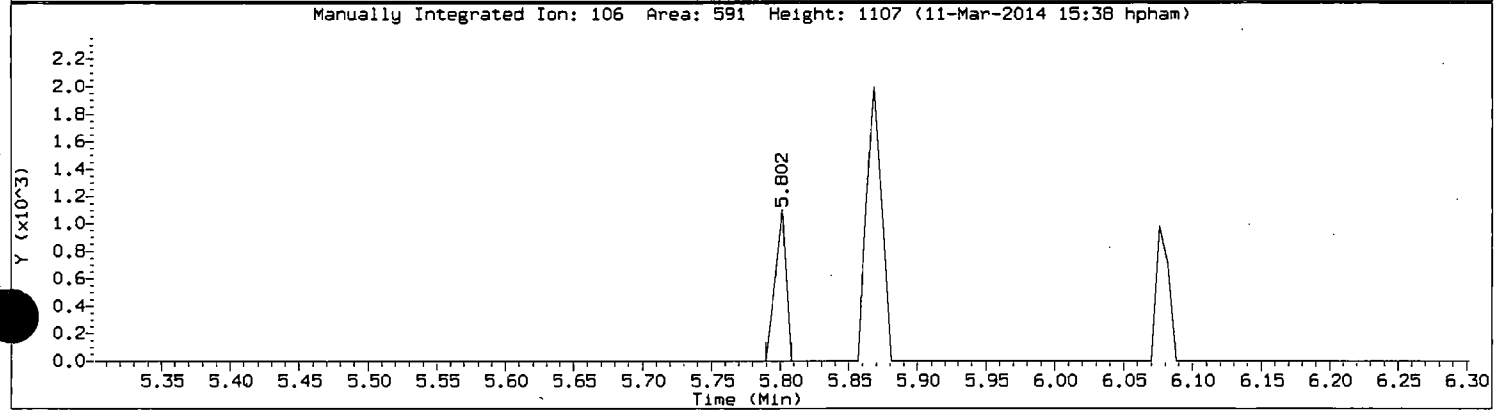
Injection Date: 10-MAR-2014 20:00
Instrument: 10msv7.i
Lab Sample ID: 10259055007

Compound: Ethylbenzene
CAS Number: 100-41-4









Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D
Lab Smp Id: 10259055008
Inj Date : 10-MAR-2014 17:47
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10259055008,5,TB
Misc Info : 26501
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Meth Date : 11-Mar-2014 11:52 hpham Quant Type: ISTD
Cal Date : 10-MAR-2014 13:31 Cal File: 031014010.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.101	2.101	(0.500)	2006	0.14688	0.15(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	2.643	2.637	(0.629)	3345	0.31658	0.32(a)
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	128130	200.000	
19	Acetone	58	2.698	2.698	(1.018)	2287	6.30510	6.3
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	21 Hexane	86	Compound Not Detected.					
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	Compound Not Detected.					
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	Compound Not Detected.					
*	41 Pentafluorobenzene	168	4.204	4.204	(1.000)	954516	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.222	4.222	(1.004)	378298	102.675	103
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.478	4.484	(1.000)	1397647	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.826	4.826	(1.000)	199403	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.106	5.106	(0.883)	1646000	100.329	100
	58 Toluene	92	5.131	5.130	(0.887)	1927	0.18240	0.18(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	Compound Not Detected.					
*	67 Chlorobenzene-d5	117	5.783	5.789	(1.000)	1396307	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	Compound Not Detected.					
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.862	5.868	(1.014)	969	0.12358	0.12(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$ 76	4-Bromofluorobenzene (S)	95	6.386	6.386	(0.907)	693551	100.427	100
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	Compound Not Detected.					
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	6.789	6.789	(0.964)	1772	0.10170	0.10(aQ)
88	sec-Butylbenzene	105	Compound Not Detected.					
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.045	7.045	(1.000)	860801	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	7.063	7.063	(1.680)	976	0.05308	0.053(aQH)
94	n-Butylbenzene	91	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
99	Naphthalene	128	8.392	8.392	(1.191)	1596	0.12700	0.13(a)
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
101	2-Methylnaphthalene	142	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D
Report Date: 11-Mar-2014 15:39

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 031014023.D
Lab Smp Id: 10259055008
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\031014B.b\v714-LLS-031014.m
Misc Info: 26501

Calibration Date: 10-MAR-2014
Calibration Time: 15:30
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143669	71835	287338	128130	-10.82
41 Pentafluorobenzen	966546	483273	1933092	954516	-1.24
48 1,4 Difluorobenze	1457917	728959	2915834	1397647	-4.13
53 1,4 dioxane d8	174389	87195	348778	199403	14.34
67 Chlorobenzene-d5	1458689	729345	2917378	1396307	-4.28
91 1,4-Dichlorobenze	888899	444450	1777798	860801	-3.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.20	3.70	4.70	4.20	0.00
48 1,4 Difluorobenze	4.48	3.98	4.98	4.48	-0.13
53 1,4 dioxane d8	4.83	4.33	5.33	4.83	0.00
67 Chlorobenzene-d5	5.79	5.29	6.29	5.78	-0.10
91 1,4-Dichlorobenze	7.05	6.55	7.55	7.05	0.00

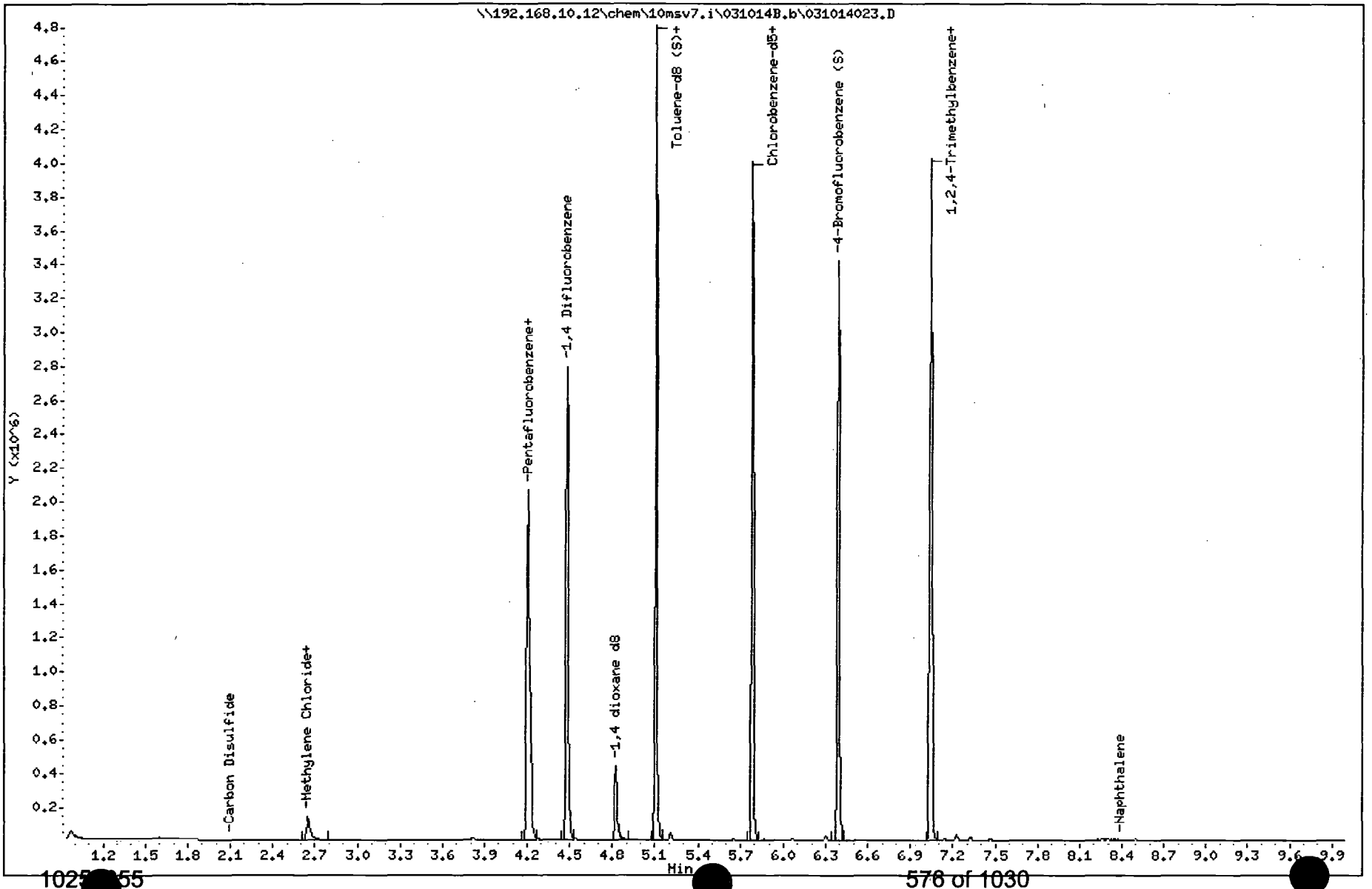
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D
Date : 10-MAR-2014 17:47
Client ID:
Sample Info: 10259055008,5,TB

Instrument: 10msv7.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



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Date : 10-MAR-2014 17:47

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055008,5,TB

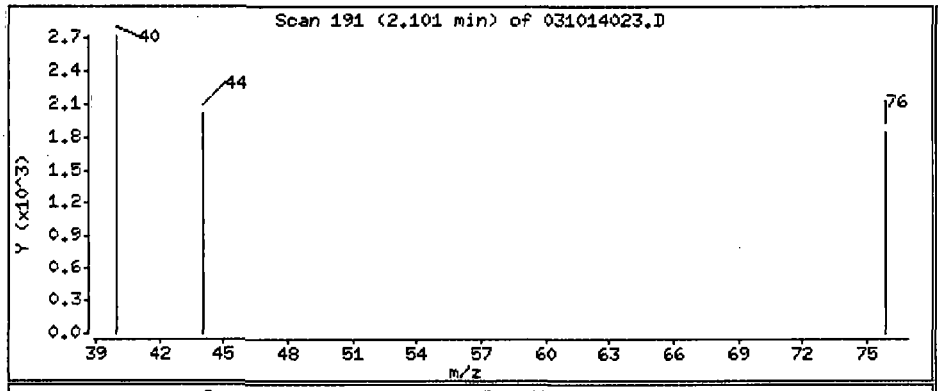
Operator: HBP

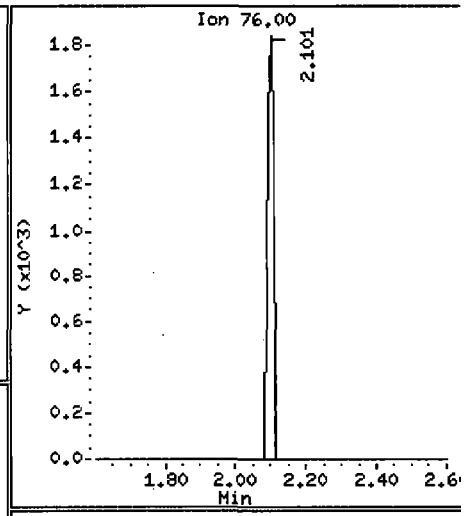
Column phase: Rtx-VMS

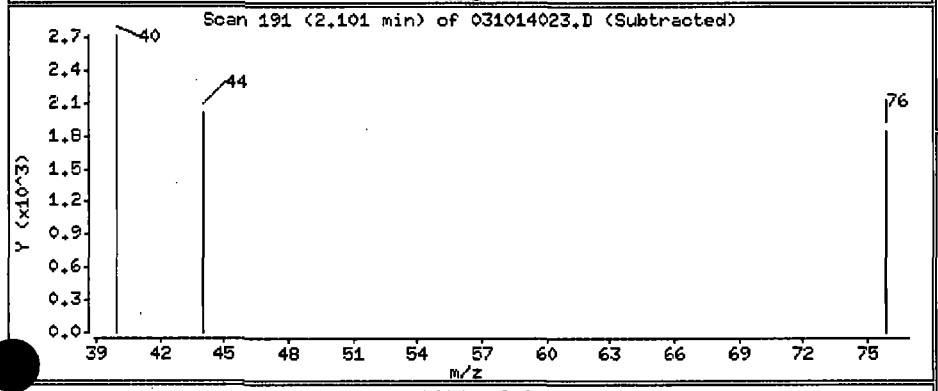
Column diameter: 0.18

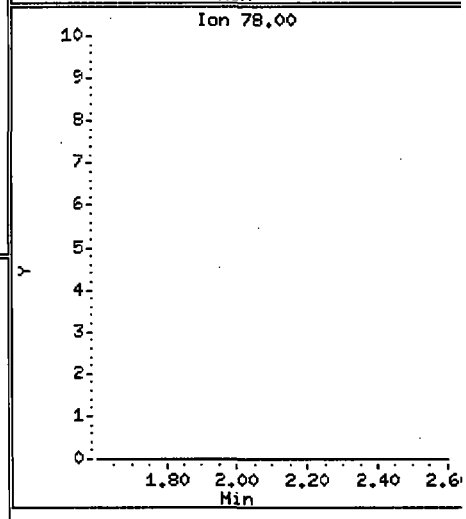
10 Carbon Disulfide

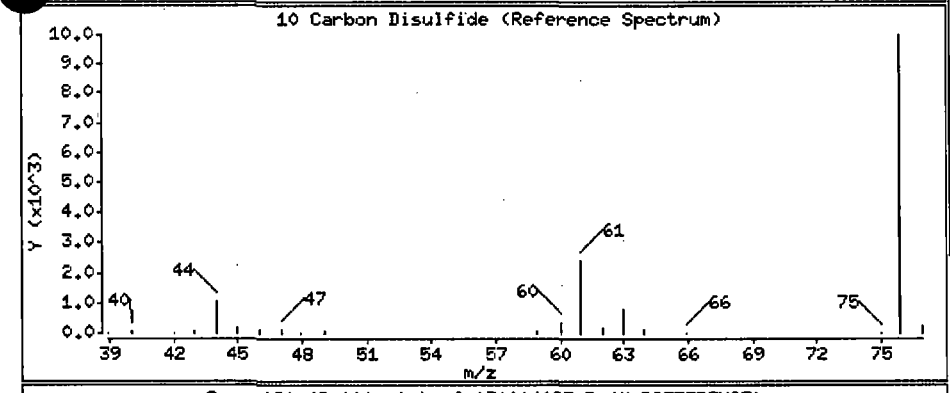
Concentration: 0.15 ug/Kg

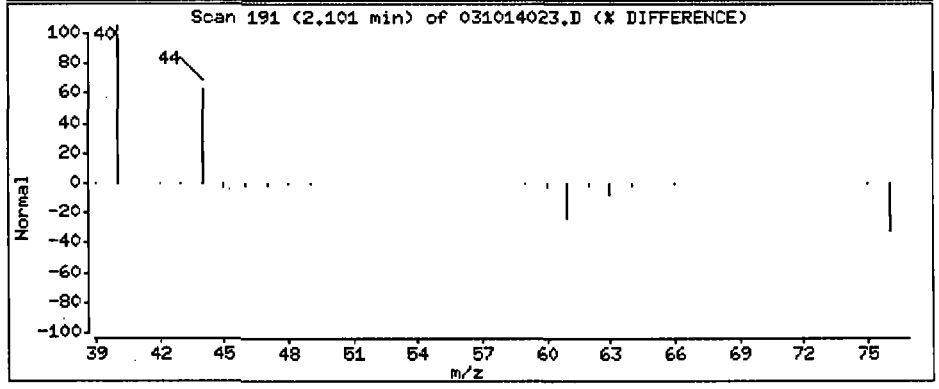












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D

Date : 10-MAR-2014 17:47

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055008,5,TB

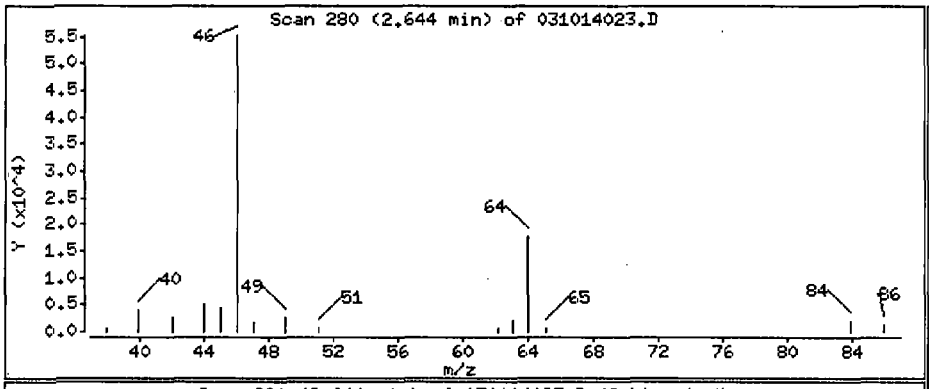
Operator: HBP

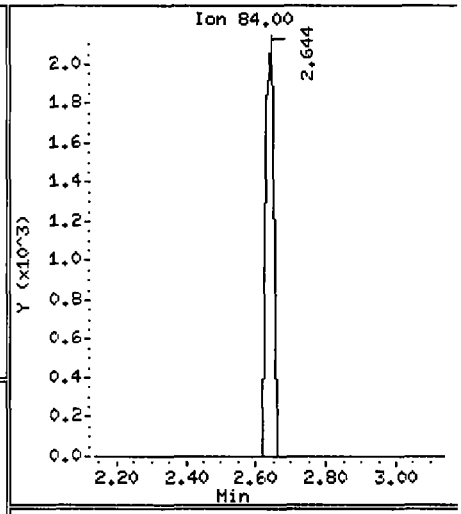
Column phase: Rtx-VMS

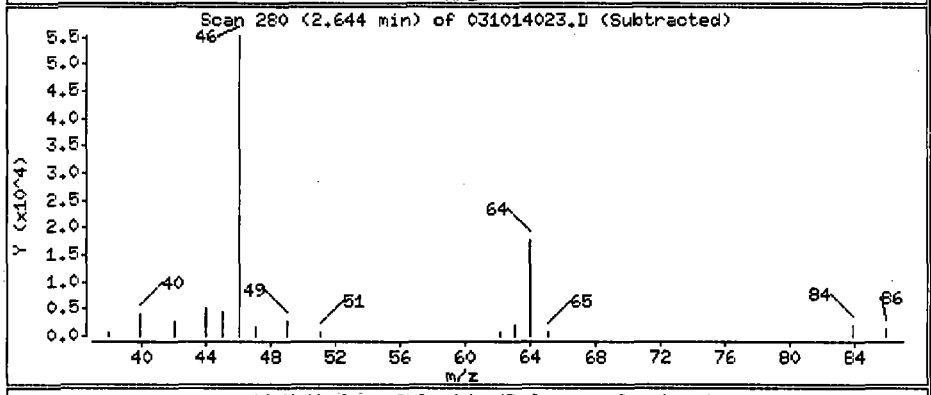
Column diameter: 0.18

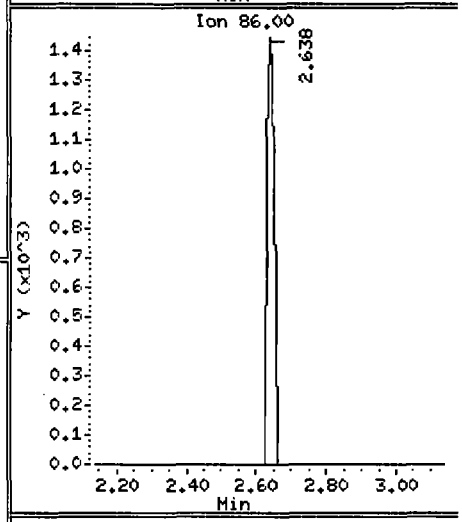
16 Methylene Chloride

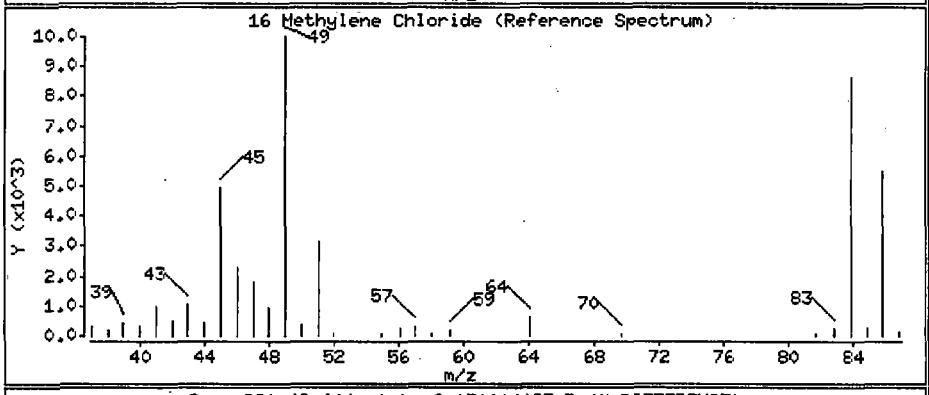
Concentration: 0.32 ug/Kg

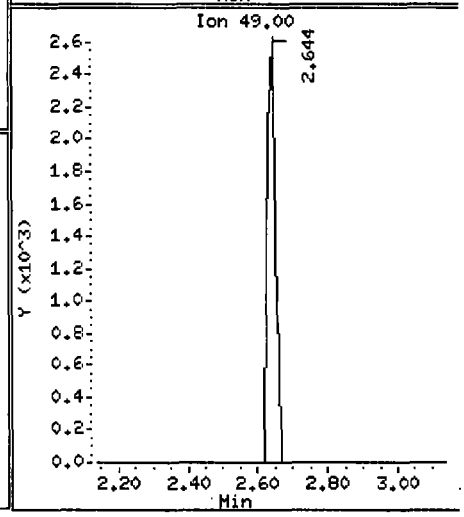


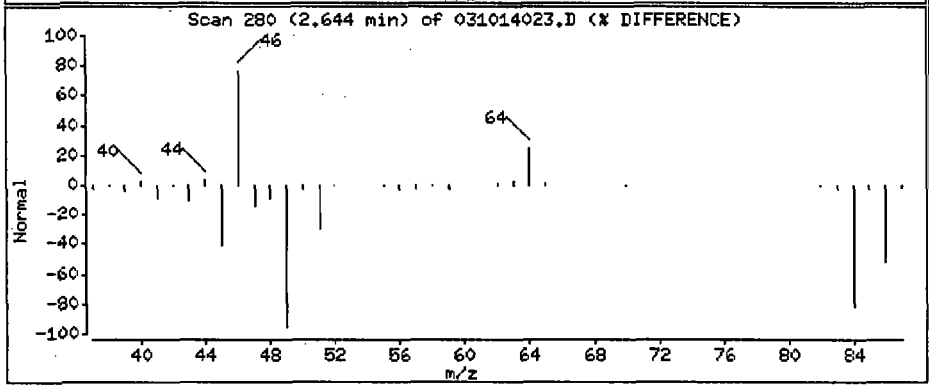












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D

Date : 10-MAR-2014 17:47

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055008,5,TB

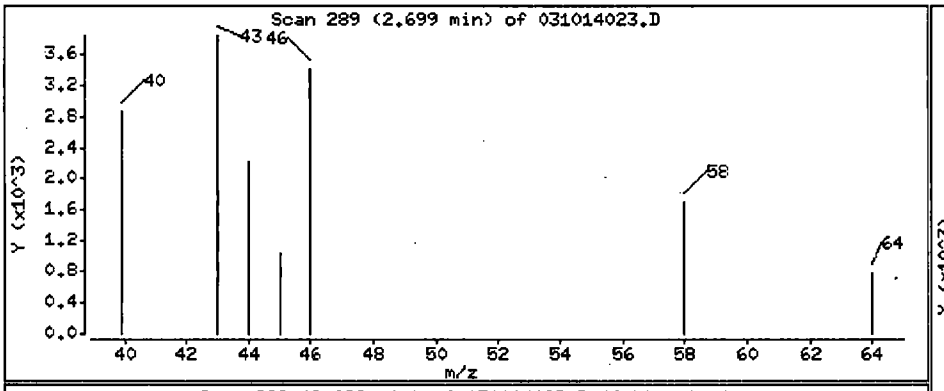
Operator: HBP

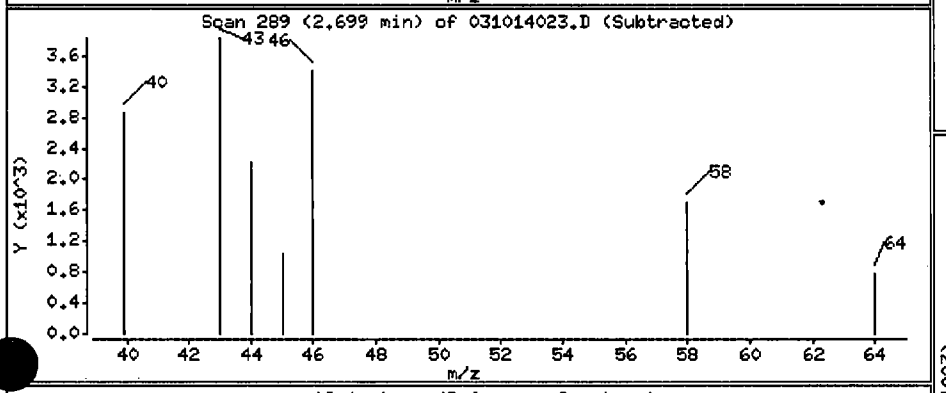
Column phase: Rtx-VMS

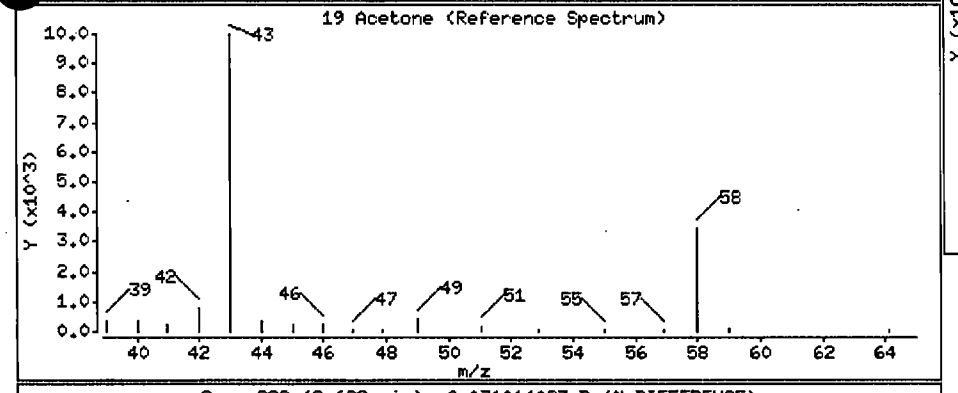
Column diameter: 0.18

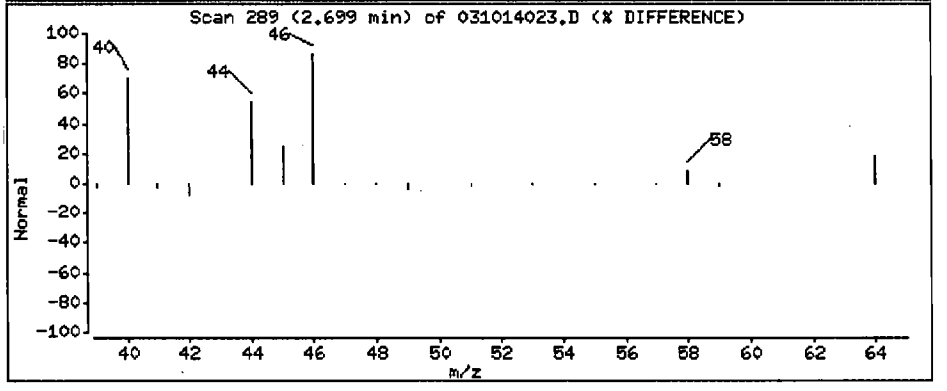
19 Acetone

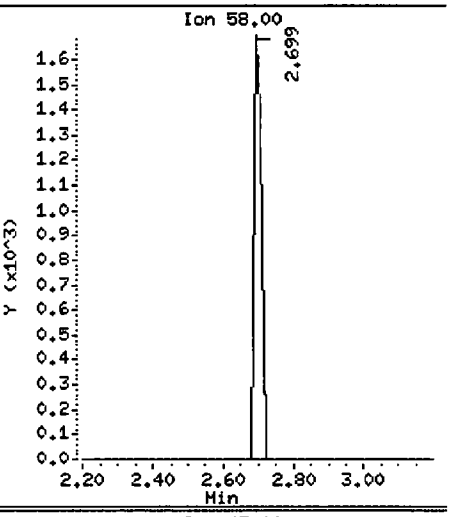
Concentration: 6.3 ug/Kg

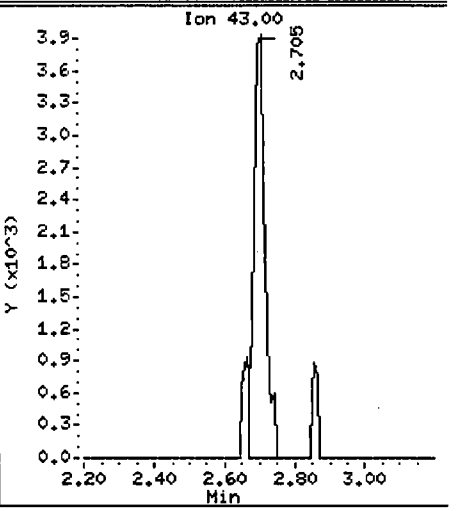












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D

Date : 10-MAR-2014 17:47

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055008,5,TB

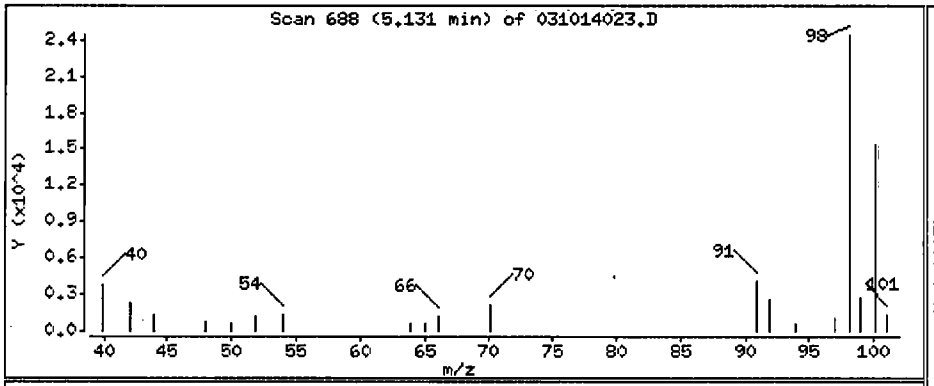
Operator: HBP

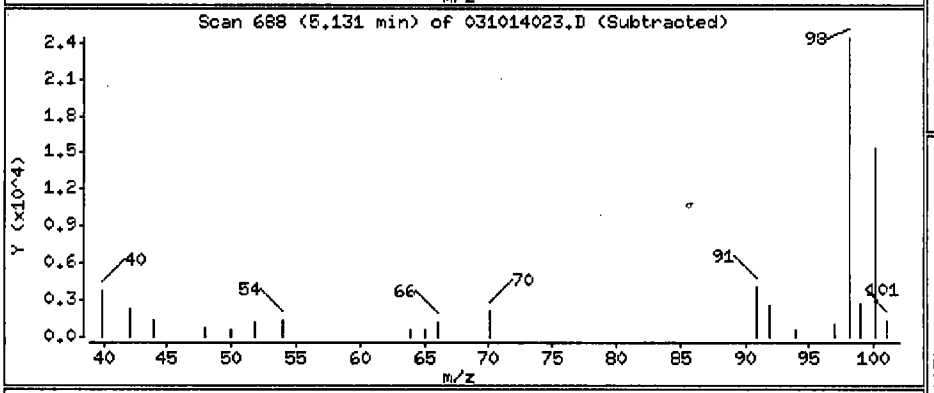
Column phase: Rtx-VMS

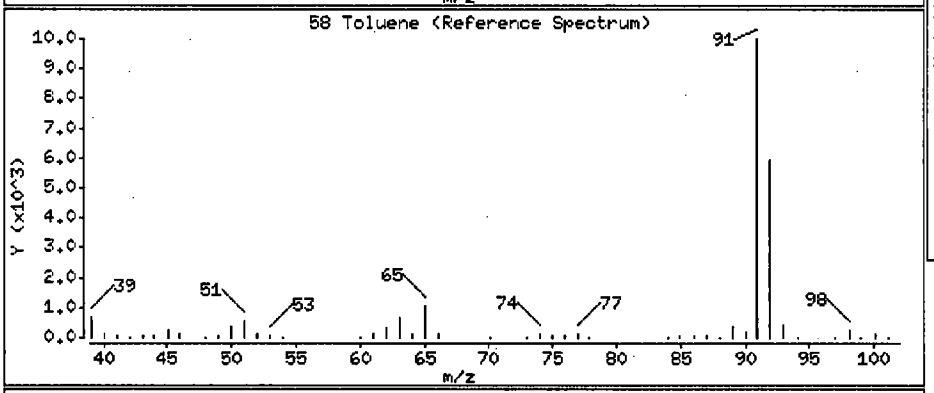
Column diameter: 0.18

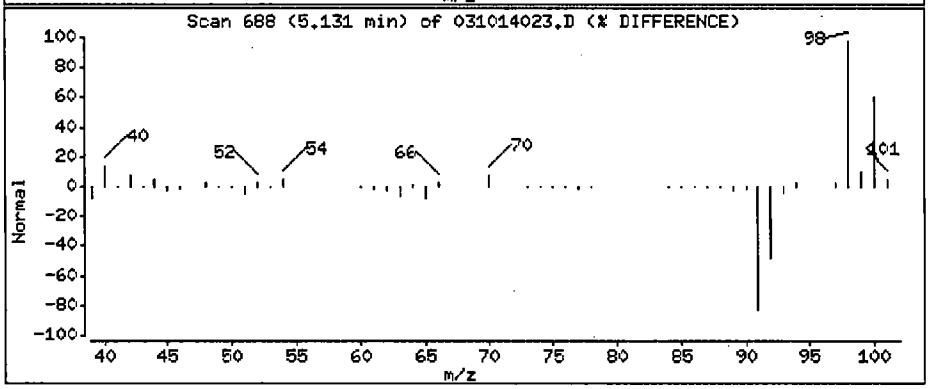
58 Toluene

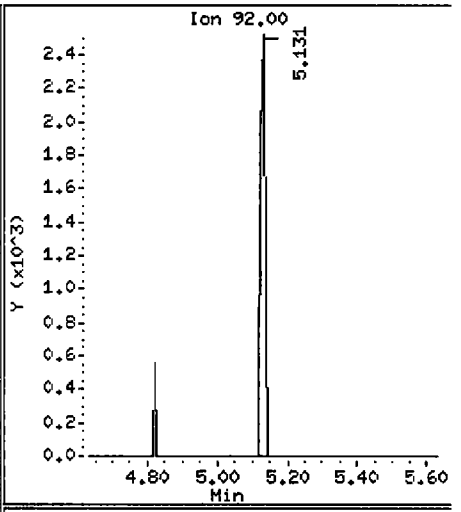
Concentration: 0.18 ug/Kg

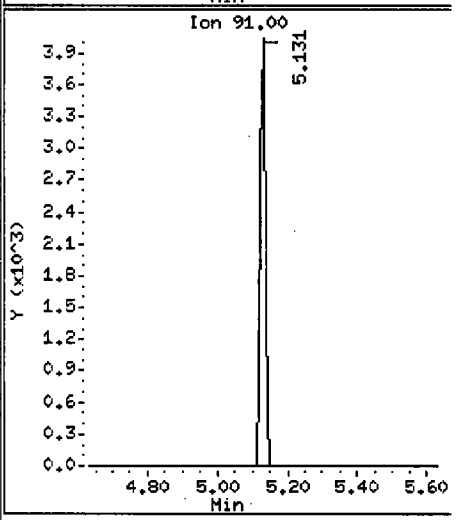












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D

Date : 10-MAR-2014 17:47

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055008,5,TB

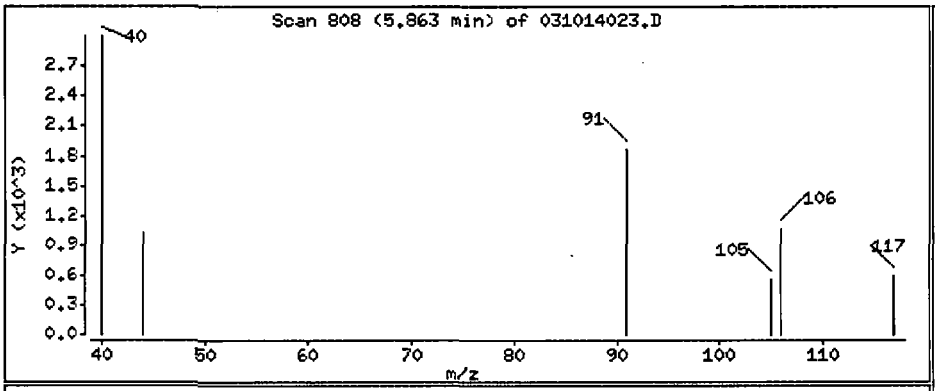
Operator: HBP

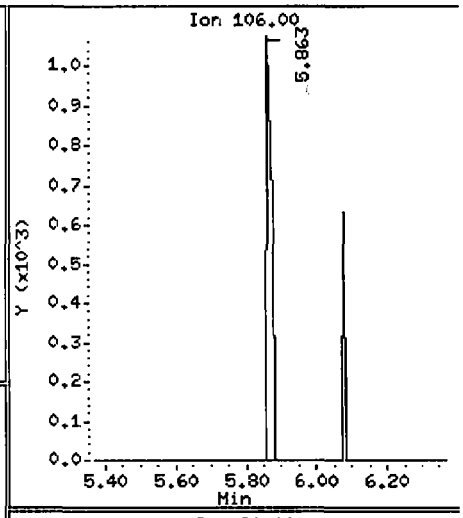
Column phase: Rtx-VMS

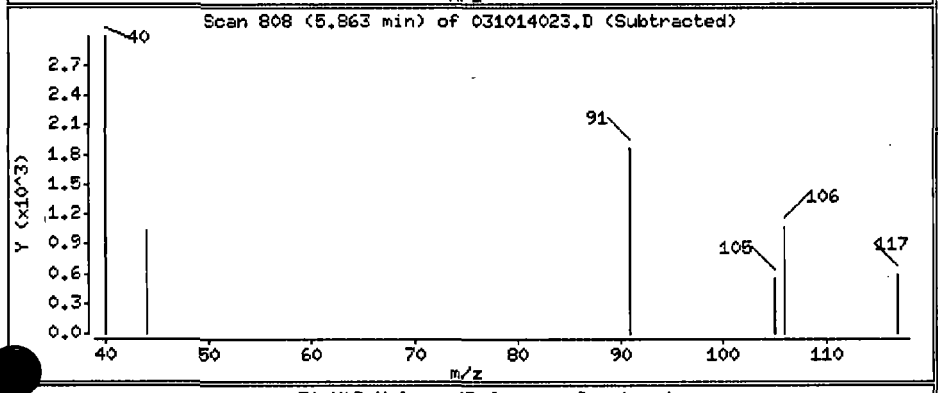
Column diameter: 0.18

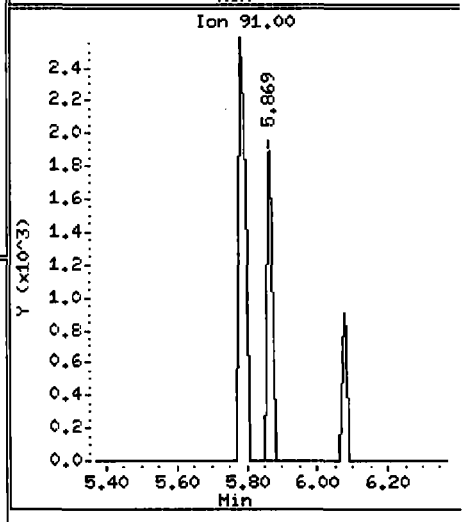
71 M&P-Xylene

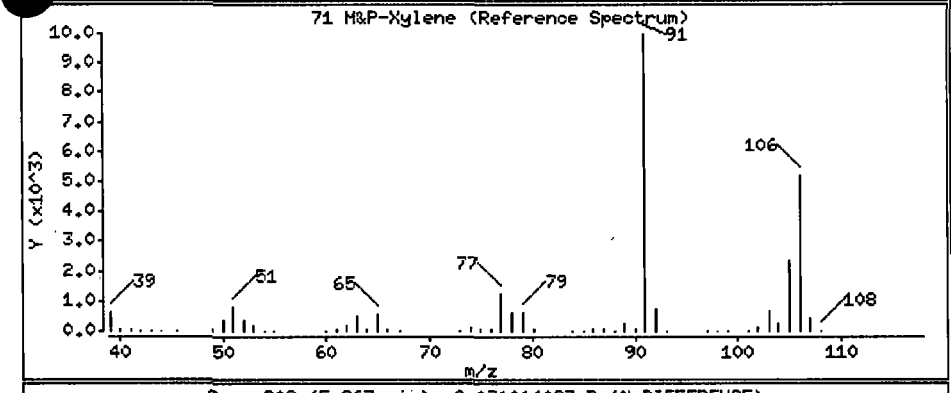
Concentration: 0.12 ug/Kg

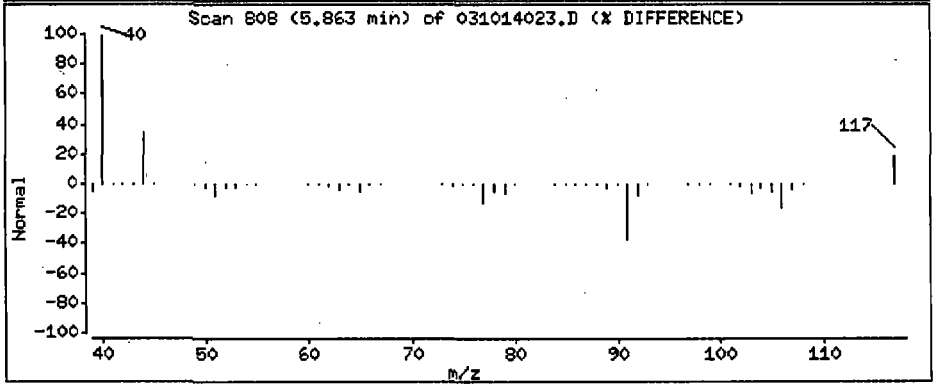












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D

Date : 10-MAR-2014 17:47

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055008,5,TB

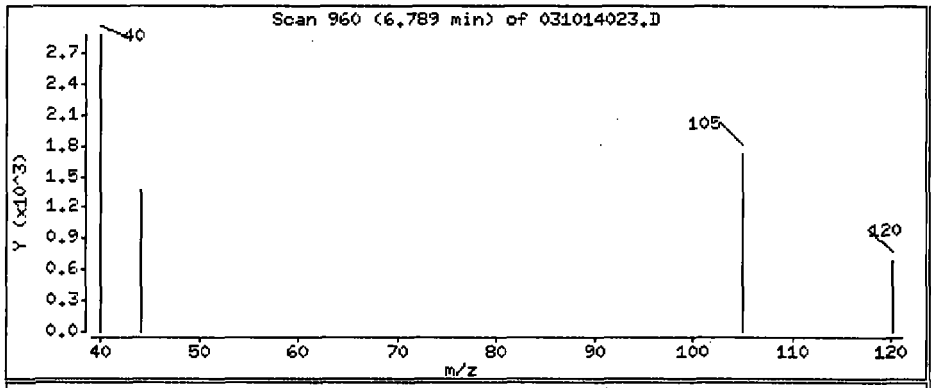
Operator: HBP

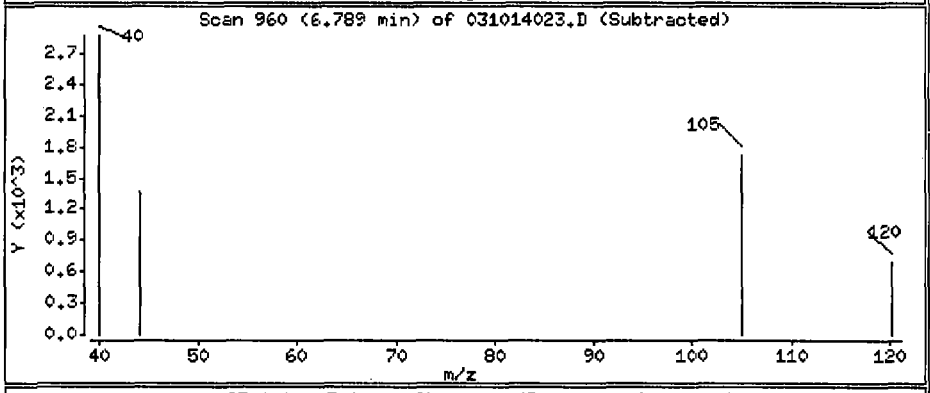
Column phase: Rtx-VMS

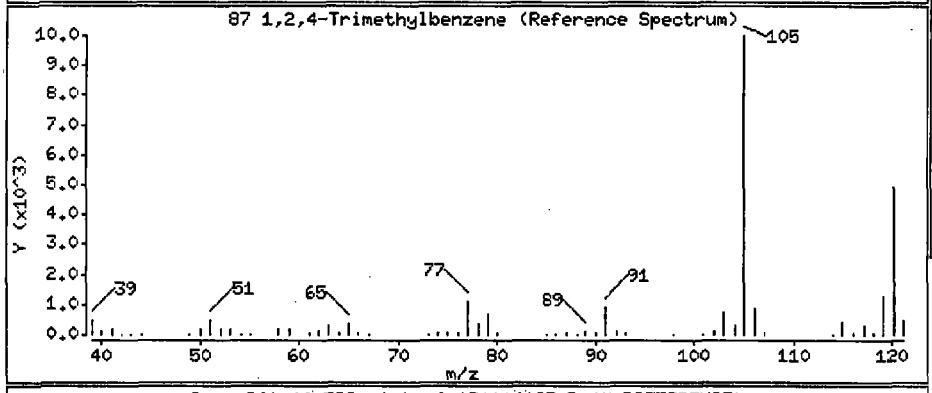
Column diameter: 0.18

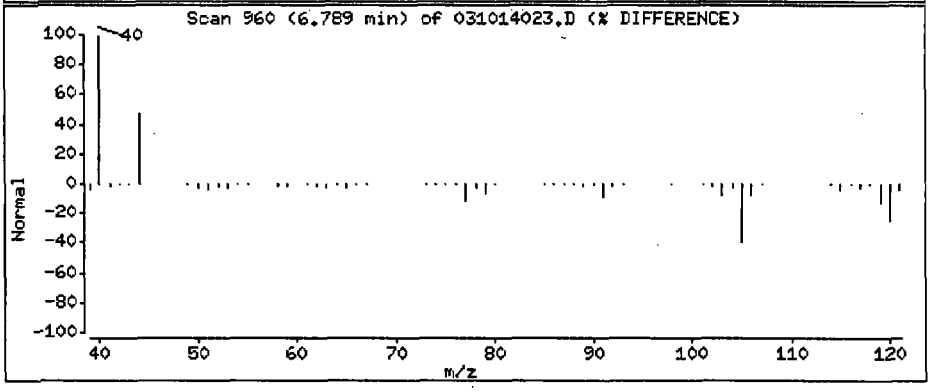
87 1,2,4-Trimethylbenzene

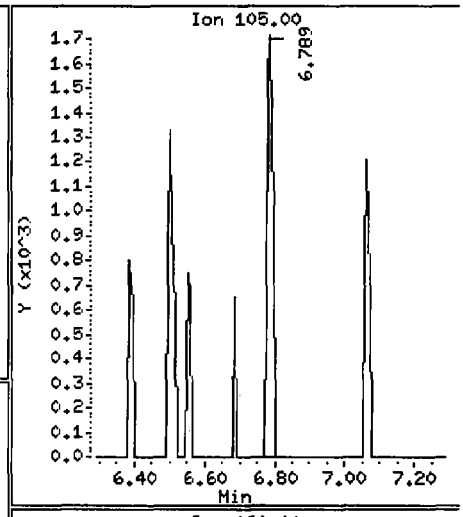
Concentration: 0.10 ug/Kg

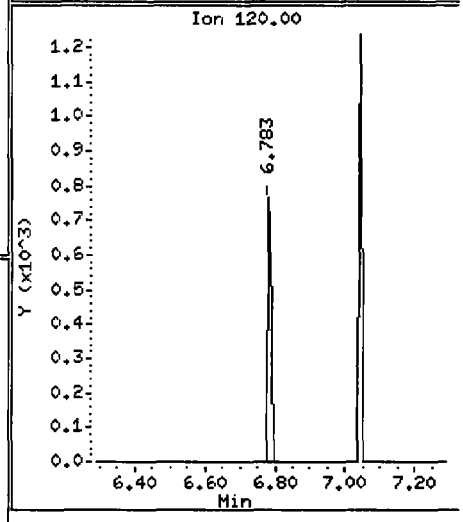












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D

Date : 10-MAR-2014 17:47

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055008,5,TB

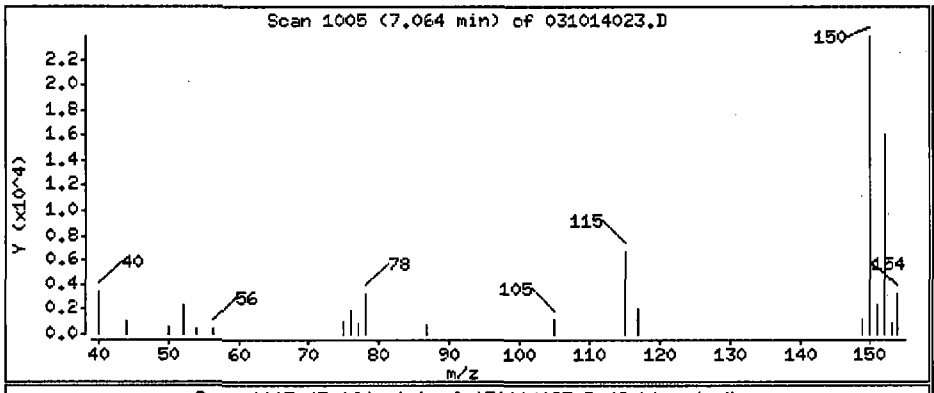
Operator: HBP

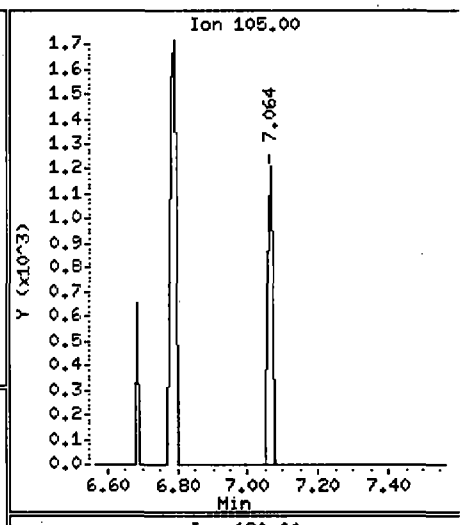
Column phase: Rtx-VMS

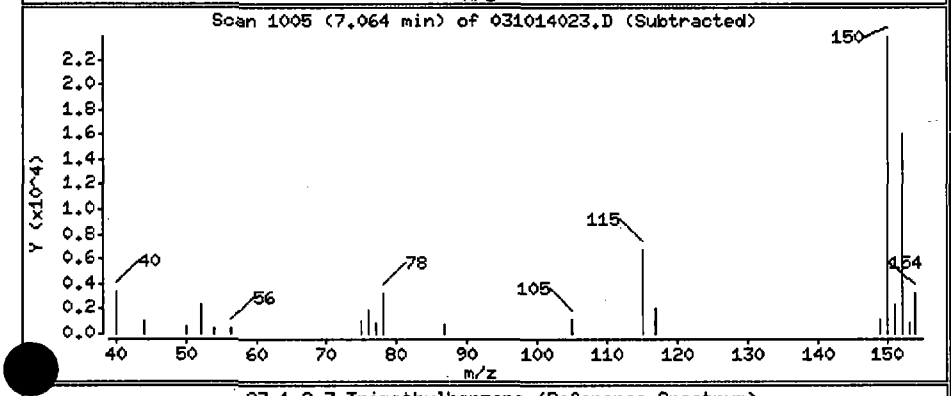
Column diameter: 0.18

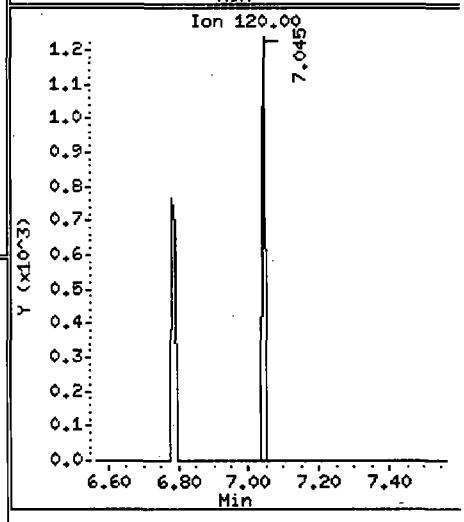
93 1,2,3 Trimethylbenzene

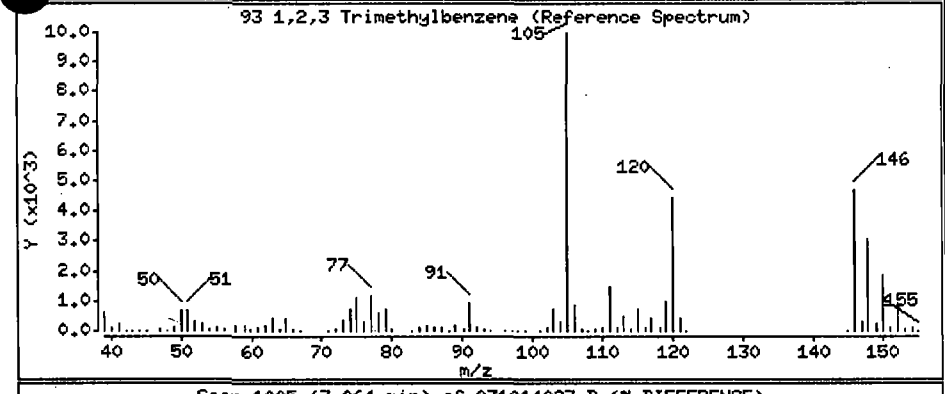
Concentration: 0.053 ug/Kg

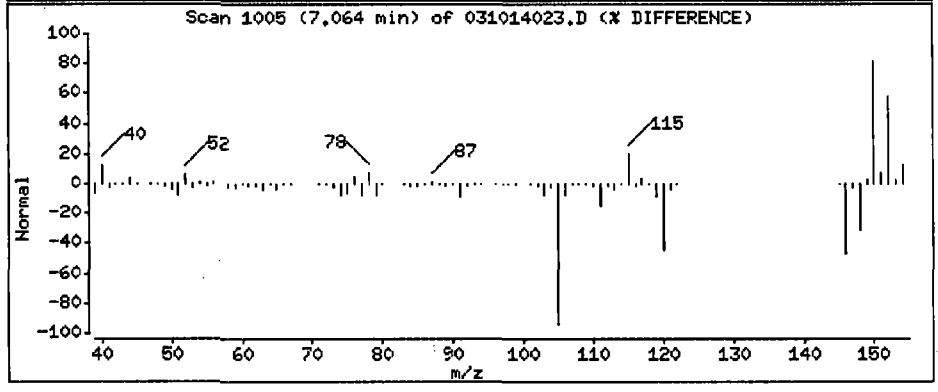












Data File: \\192.168.10.12\chem\10msv7.i\031014B.b\031014023.D

Date : 10-MAR-2014 17:47

Client ID:

Instrument: 10msv7.i

Sample Info: 10259055008,5,TB

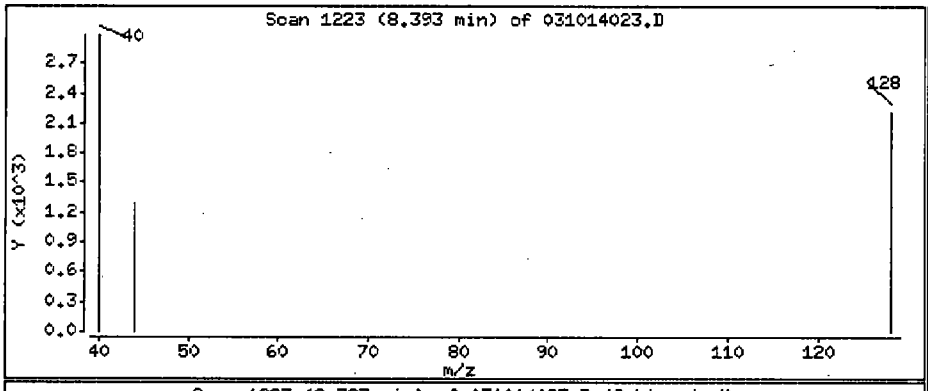
Operator: HBP

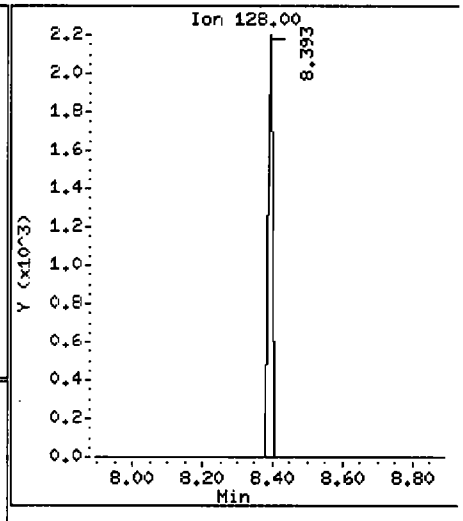
Column phase: Rtx-VMS

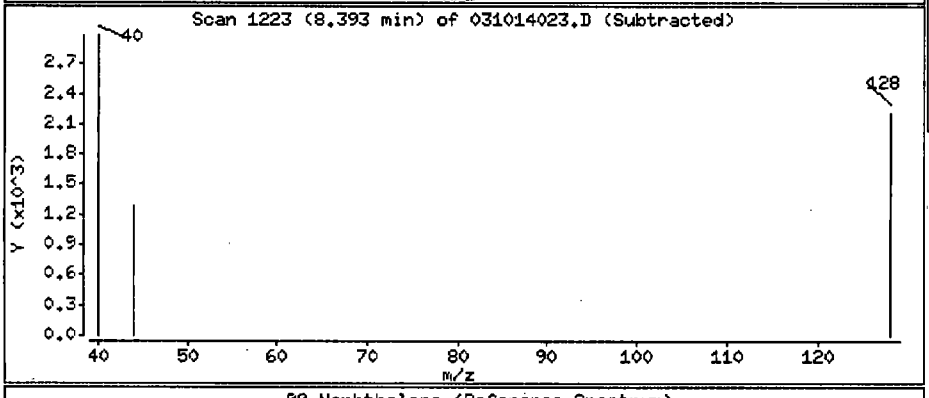
Column diameter: 0.18

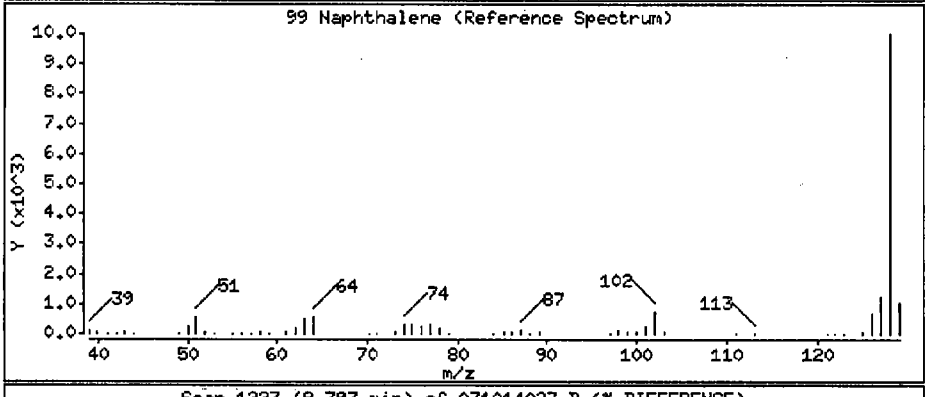
99 Naphthalene

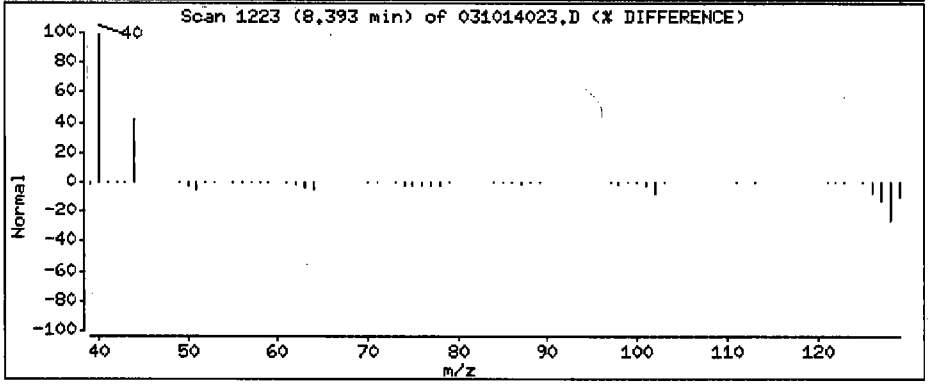
Concentration: 0.13 ug/Kg











Injection Date: 10-MAR-2014 17:47
Instrument: 10msv7.i
Lab Sample ID: 10259055008
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical	Document Name: MSV LL Soil Prep Batch Worklist	Document Revised: 29Mar2012 Page 1 of 1		
	Document Number: F-MN-O-234-rev.01	Issuing Authority: Pace Minnesota Quality Office		

Prep Date 3/10/2014

Prep Analyst MS

Queue	MSV	GC/MS Volatiles	QC Rule	8260 SLL: 8260 MSV 5035 Low Prep
Batch	28501	HBN 288759	Created	3/10/14 9:44
*Weight of Pace label subtracted from soil weight=	0.18	grams	Analyst	Henrik Pham

Balance ID	Sand Lot #	MeOH Lot #	Surr. Lot #	Standard. Traceability #
5304905	113854	NA	NA	10233-72B 10233-74B

Has the balance been calibrated before use? yes

Lab ID	Type	Client	Sample ID	**	***	Comments	Soil & Vial Wt (g)	Vial Wt (g)	Soil Wt (g)*	DI Water Added (mL)	Surr. Added (uL)	Standard Added (mL)
1635950	BLANK	Quality Control					-----	-----	5	5	-----	-----
1635951	LCS	Quality Control					-----	-----	5	-----	-----	5
	PS						-----	-----	5	-----	-----	5
10259055001	PS		SB-6 1.5-3'	5			41.80	34.89	6.73	-----	-----	-----
10259055002	PS		SB-6 15-16.5'	5			40.70	35.13	5.39	-----	-----	-----
10259055003	PS		SB-7 1.5-3'	5			40.50	34.33	5.99	-----	-----	-----
10259055004	PS		SB-7 17-18'	5			43.10	35.43	7.49	-----	-----	-----
10259055005	PS		SB-8 1.5-2.5"	5			42.60	35.32	7.10	-----	-----	-----
10259055006	PS		SB-8 14-15"	5			41.30	35.61	5.51	-----	-----	-----
10259055007	PS		DUP-002	5			40.80	35.18	5.44	-----	-----	-----
10259055008	PS		TRIP BLANK	tb			35.30	35.12	5	-----	-----	-----
10259353005	PS		BH1Ea-0228-14	1	5.30	Preserved from jar w/HS outside 48 hrs			5.30	-----	-----	-----
10259353006	PS		BH1Ca-0228-16 1/2	1	5.00	Preserved from jar w/HS outside 48 hrs			5.00	-----	-----	-----
10259353007	PS		BH1Wa-0228-12 1/2	1	5.30	Preserved from jar w/HS outside 48 hrs			5.30	-----	-----	-----
10259353008	PS		BH2Wa-0228-14	1	5.00	Preserved from jar w/HS outside 48 hrs			5.00	-----	-----	-----
10259041001	PS		SB-9 3-4'	5			43.30	35.62	7.50	-----	-----	-----
10259041002	RQS		SB-9 12-14'	5			42.10	35.51	6.41	-----	-----	-----
1635952	MS		SB-9 12-14'(1631878MS)	5			41.90	35.67	6.05	-----	-----	5
1635953	MSD		SB-9 12-14'(1631878MSD)	5			41.80	35.65	5.97	-----	-----	5
10259308001	PS		V5 lot# 02/18/2014	tb			34.70	34.46	5	-----	-----	-----
10259308002	PS		V3 lot# 02/18/2014	tb			34.80	34.44	5	-----	-----	-----
10259318001	PS		SS-1	5			41.90	35.29	6.43	-----	-----	-----
											-----	-----
										-----	-----	-----
										-----	-----	-----
											-----	-----
								① hp - 3/12/14			-----	-----

**If 1=manually entered; 5=5g/5mL; TB=trip blank ***Weight for jars--manually entering

Date/Initials Reviewed

Fraction: 8270

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 288053 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 03061404.D Lab Sample ID: 1632345
GC Column: DB-5MS ID: 0.25 (mm) Time Analyzed: 08:16
Instrument ID: 10MSSD

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-9 12-14'(1631878MS)	1632347-MS	03051414.D	19:11
02	SB-9 12-14'(1631878MSD)	1632348-MSD	03051415.D	19:38
03	SB-7 1.5-3'	10259055003	03051418.D	20:59
04	SB-7 17-18'	10259055004	03051419.D	21:26
05	SB-8 14-15"	10259055006	03051421.D	22:19
06	BLANK for HBN 288053 [OEXT/244	1632345	03061404.D	08:16
07	LCS for HBN 288053 [OEXT/24489	1632346	03061405.D	08:44
08	SB-6 1.5-3'	10259055001	03061408.D	10:09
09	SB-6 15-16.5'	10259055002	03061409.D	10:37
10	SB-8 1.5-2.5"	10259055005	03061410.D	11:05
11	DUP-002	10259055007	03061415.D	13:27

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259055

QB Batch: OEXT / 24489
Method(s): EPA 3550 / EPA 8270

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10259055001		SB-6 1.5-3'	1	77		84		77		79		80		92	
1632345	BLANK		1	71		67		63		63		65		79	
10259055002		SB-6 15-16.5'	1	84		86		83		81		85		92	
1632346	LCS		1	108		92		87		80		87		98	
10259055003		SB-7 1.5-3'	1	71		82		71		79		77		88	
1632347	MS		1	85		80		74		76		77		83	
10259055004		SB-7 17-18'	1	68		84		72		80		79		96	
1632348	MSD		1	94		81		79		79		80		86	
10259055005		SB-8 1.5-2.5"	1	86		83		81		80		83		100	
10259055006		SB-8 14-15"	1	84		87		86		86		88		93	
10259055007		DUP-002	1	80		79		77		75		78		92	
		QC Limits:		41-125		46-125		31-125		30-125		38-125		64-125	
		Sample Limits:		41-125		46-125		31-125		30-125		38-125		64-125	

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d6 (S)
Sur 6: Terphenyl-d14 (S)

REPORT OF LABORATORY ANALYSIS

This report shall not be r[redacted]uced, except in full,
without the written consent of [redacted] Analytical Services, Inc..

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 03/05/2014

Lab File ID (Standard): 03051406.D Time Analyzed: 15:31

Instrument ID: 10MSS9

	EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STANDARD	110277	4.713	419805	6.156	204219	8.293
	UPPER LIMIT	220554	5.213	839610	6.656	408438	8.793
	LOWER LIMIT	55138	4.213	209902	5.656	102110	7.793
	EPA SAMPLE NO.						
01	SB-9 12-14'(1631878MS)	79750	4.714	305032	6.151	148452	8.287
02	SB-9 12-14'(1631878MSD)	72932	4.708	278217	6.151	134875	8.288
03	SB-7 1.5-3'	67638	4.708	257340	6.150	121538	8.287
04	SB-7 17-18'	69970	4.708	266037	6.150	127746	8.287
05	SB-8 14-15"	62972	4.708	246198	6.150	117768	8.287

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Pace Analytical™

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 03/05/2014

Lab File ID (Standard): 03051406.D Time Analyzed: 15:31

Instrument ID: 10MSS9

	EPA SAMPLE NO.	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STANDARD	329340	10.136	323408	13.416	312096	15.168
	UPPER LIMIT	658680	10.636	646816	13.916	624192	15.668
	LOWER LIMIT	164670	9.636	161704	12.916	156048	14.668
	EPA SAMPLE NO.						
01	SB-9 12-14'(1631878MS)	236350	10.131	220812	13.411	200437	15.158
02	SB-9 12-14'(1631878MSD)	220095	10.131	206059	13.411	187305	15.158
03	SB-7 1.5-3'	199384	10.125	180279	13.405	162963	15.157
04	SB-7 17-18'	207349	10.130	187439	13.405	170520	15.157
05	SB-8 14-15"	191910	10.125	179528	13.405	163907	15.157

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 03/06/2014

Lab File ID (Standard): 03061403.D Time Analyzed: 07:48

Instrument ID: 10MSSD

	EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STANDARD	142387	5.066	559471	6.532	296387	8.688
	UPPER LIMIT	284774	5.566	1118942	7.032	592774	9.188
	LOWER LIMIT	71194	4.566	279736	6.032	148194	8.188
	EPA SAMPLE NO.						
01	BLANK for HBN 288053 [OEXT/244	115896	5.061	442932	6.532	235255	8.682
02	LCS for HBN 288053 [OEXT/24489	116788	5.067	460743	6.532	239411	8.682
03	SB-6 1.5-3'	114549	5.066	440662	6.532	230595	8.682
04	SB-6 15-16.5'	109604	5.067	427467	6.532	227481	8.682
05	SB-8 1.5-2.5"	108114	5.066	422647	6.532	223458	8.682
06	DUP-002	105722	5.067	412186	6.532	222367	8.682

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 03/06/2014

Lab File ID (Standard): 03061403.D Time Analyzed: 07:48

Instrument ID: 10MSSD

	EPA SAMPLE NO.	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STANDARD	500615	10.538	467805	13.833	505479	15.737
	UPPER LIMIT	1001230	11.038	935610	14.333	1010958	16.237
	LOWER LIMIT	250308	10.038	233902	13.333	252740	15.237
	EPA SAMPLE NO.						
01	BLANK for HBN 288053 [OEXT/244	407483	10.533	386994	13.822	387288	15.726
02	LCS for HBN 288053 [OEXT/24489	405527	10.533	389918	13.828	387603	15.732
03	SB-6 1.5-3'	401661	10.533	382899	13.828	374483	15.732
04	SB-6 15-16.5'	401196	10.533	384107	13.828	380378	15.732
05	SB-8 1.5-2.5"	389968	10.533	365121	13.828	366979	15.732
06	DUP-002	388616	10.533	371856	13.828	360392	15.732

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Instrument Run Log

Instrument: 10MSS9 Method: 8270 Misc. Prep. Info: Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium Tune Standard: 10328-111 ISTD Lot: 10362-11 Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02281409.D	MECL2 RINSE	Gas	Tune	1		sw846tun	2/28/14 12:02	JLR	
02281410.D	TUNE	Gas	Tune	1		sw846tun	2/28/14 12:20	JLR	fail mass
02281411.D	TUNE	Gas	Tune	1		sw846tun	2/28/14 12:45	JLR	adjusted target tune, fail mass
02281412.D	TUNE	Gas	Tune	1		sw846tun	2/28/14 13:06	JLR	adjusted target tune again, pass
02281413.D	ICAL 10328-96 8	Liquid	Ical	1		022814-8270MSS9	2/28/14 13:25	JLR	pass
02281414.D	ICAL 10328-96 7	Liquid	Ical	1		022814-8270MSS9	2/28/14 13:52	JLR	pass
02281415.D	ICAL 10328-96 6	Liquid	Ical	1		022814-8270MSS9	2/28/14 14:19	JLR	pass
02281416.D	ICAL 10328-96 5	Liquid	Ical	1		022814-8270MSS9	2/28/14 14:46	JLR	pass
02281417.D	ICAL 10328-96 4	Liquid	Ical	1		022814-8270MSS9	2/28/14 15:13	JLR	pass
02281418.D	ICAL 10328-96 3	Liquid	Ical	1		022814-8270MSS9	2/28/14 15:40	JLR	pass
02281419.D	ICAL 10328-96 2	Liquid	Ical	1		022814-8270MSS9	2/28/14 16:07	JLR	pass
02281420.D	ICV 10328-98	Liquid	CCal	1		022814-8270MSS9	2/28/14 16:34	JLR	pass
02281421.D	ICV2 10328-47	Liquid	CCal	1		022814-8270MSS9	2/28/14 17:01	JLR	pass

Check Maintenance Items Performed:

Changed septum	x Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
x Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10MSS9.I\022814B.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 03/03/2014 07:20
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSS9 Method: 8270 Misc. Prep. Info: Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium Tune Standard: 10328-111 ISTD Lot: 5303 Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
03051401.D	MECL2 RINSE	G/	Tune	1		SW846TUN	3/05/14 09:08	JLR	
03051402.D	TUNE	G/	Tune	1		SW846TUN	3/05/14 09:24	JLR	PCP peak small
03051403.D	TUNE	G/	Tune	1		SW846TUN	3/05/14 11:45	JLR	baked injection port, PCP peak still small
03051404.D	MECL2 RINSE	G/	Tune	1		SW846TUN	3/05/14 14:00	JLR	cleaned split lines
03051405.D	TUNE	G/	Tune	1		SW846TUN	3/05/14 14:59	JLR	pass
03051406.D	CCAL 6 10328-96	L/	CCal	1		022814-8270MSS9	3/05/14 15:31	JLR	pass
03051407.D	1632345	S/10357	Blank	1		022814-8270MSS9	3/05/14 16:02	JLR	IS low, RR
03051408.D	1632346	S/10357	LCS	1		022814-8270MSS9	3/05/14 16:29	JLR	IS low, RR
03051409.D	1632642	L/10356	Blank	1		022814-8270MSS9	3/05/14 16:56	JLR	IS good
03051410.D	1632643	L/10356	LCS	1		022814-8270MSS9	3/05/14 17:23	JLR	IS low, RR
03051411.D	1632644	L/10356	LCSD	1		022814-8270MSS9	3/05/14 17:50	JLR	IS low, RR
03051412.D	10259041001	S/10357	Sample	1		022814-8270MSS9	3/05/14 18:17	JLR	IS good
03051413.D	10259041002	S/10357	Sample	1		022814-8270MSS9	3/05/14 18:44	JLR	IS good
03051414.D	1632347	S/10357	MS	1		022814-8270MSS9	3/05/14 19:11	JLR	IS good
03051415.D	1632348	S/10357	MSD	1		022814-8270MSS9	3/05/14 19:38	JLR	IS good
03051416.D	10259055001	S/10357	Sample	1		022814-8270MSS9	3/05/14 20:05	JLR	IS low, RR
03051417.D	10259055002	S/10357	Sample	1		022814-8270MSS9	3/05/14 20:32	JLR	IS low, RR
03051418.D	10259055003	S/10357	Sample	1		022814-8270MSS9	3/05/14 20:59	JLR	IS good
03051419.D	10259055004	S/10357	Sample	1		022814-8270MSS9	3/05/14 21:26	JLR	IS good
03051420.D	10259055005	S/10357	Sample	1		022814-8270MSS9	3/05/14 21:53	JLR	IS low, RR
03051421.D	10259055006	S/10357	Sample	1		022814-8270MSS9	3/05/14 22:19	JLR	IS good
03051422.D	10259055007	S/10357	Sample	1		022814-8270MSS9	3/05/14 22:46	JLR	IS low, RR
03051423.D	10259067001	S/10357	Sample	1		022814-8270MSS9	3/05/14 23:13	JLR	perylene IS low, sample ND for assoc compounds
03051424.D	10259142001	S/10357	Sample	1		022814-8270MSS9	3/05/14 23:40	JLR	IS low, RR
03051425.D	10259142002	S/10357	Sample	1		022814-8270MSS9	3/06/14 00:06	JLR	perylene IS low, sample ND for assoc compounds
03051426.D	10259022001	S/10356	Sample	50		022814-8270MSS9	3/06/14 00:33	JLR	IS low, RR
03051427.D	10259061001	S/10356	Sample	50		022814-8270MSS9	3/06/14 01:00	JLR	IS low, RR

Check Maintenance Items Performed:

Changed septum	x Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
x Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10MSS9.I\030514.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 03/06/2014 08:00
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSSD | Method: 8270 | Misc. Prep. Info: | Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium | Tune Standard: 10328-111 | ISTD Lot: 10328-11 | Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02281406.D	MECL2 RINSE	G/	Tune	1		SW846TUN	2/28/14 08:26	JLR	
02281407.D	TUNE	G/	Tune	1		SW846TUN	2/28/14 08:48	JLR	
02281408.D	ICAL 8 10328-96	S/	Ical	1		8270D-022814	2/28/14 09:10	JLR	Pass
02281409.D	ICAL 7 10328-96	S/	Ical	1		8270D-022814	2/28/14 09:39	JLR	Pass
02281410.D	ICAL 6 10328-96	S/	Ical	1		8270D-022814	2/28/14 10:07	JLR	Pass
02281411.D	ICAL 5 10328-96	S/	Ical	1		8270D-022814	2/28/14 10:35	JLR	Pass
02281412.D	ICAL 4 10328-96	S/	Ical	1		8270D-022814	2/28/14 11:03	JLR	Pass
02281413.D	ICAL 3 10328-96	S/	Ical	1		8270D-022814	2/28/14 11:31	JLR	Pass
02281414.D	ICAL 2 10328-96	S/	Ical	1		8270D-022814	2/28/14 11:59	JLR	Pass
02281415.D	ICV 10328-98	S/	CCal	1		8270D-022814	2/28/14 12:27	JLR	Pass
02281416.D	ICV2 10328-47	S/	CCal	1		8270D-022814	2/28/14 12:55	JLR	Pass
02281417.D	1630787	L/10346	Blank	1		8270D-022814	2/28/14 13:23	JLR	pass
02281418.D	1631004	L/10346	Blank	1		8270D-022814	2/28/14 13:51	JLR	pass
02281419.D	1630788	L/10346	LCS	1		8270D-022814	2/28/14 14:19	JLR	
02281420.D	10258626001	L/10346	Sample	1		8270D-022814	2/28/14 14:47	JLR	
02281421.D	1630789	L/10346	MS	1		8270D-022814	2/28/14 15:15	ACH1	
02281422.D	1630790	L/10346	MSD	1		8270D-022814	2/28/14 15:43	ACH1	
02281423.D	10258332001	L/10346	Sample	1		8270D-022814	2/28/14 16:12	ACH1	
02281424.D	10258078001	L/	Sample	1		8270D-022814	2/28/14 16:40	JLR	
02281425.D	10258237001	L/	Sample	1		8270D-022814	2/28/14 17:08	JLR	
02281426.D	10258342001	L/	Sample	1		8270D-022814	2/28/14 17:36	JLR	
02281427.D	10258506002	L/	Sample	1		8270D-022814	2/28/14 18:04	JLR	
02281428.D	10258506003	L/	Sample	1		8270D-022814	2/28/14 18:32	JLR	
02281429.D	10258506001	L/	Sample	5		8270D-022814	2/28/14 19:00	JLR	
02281430.D	10258506001	L/	Sample	50		8270D-022814	2/28/14 19:28	JLR	2x=100x
02281431.D	10258506004	L/	Sample	2		8270D-022814	2/28/14 19:56	JLR	

Check Maintenance Items Performed:

Changed septum	x Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
x Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10MSSD.I\022814B.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 02/28/2014 16:55
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSSD | Method: TCLP | Misc. Prep. Info: | Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium | Tune Standard: 10328-111 | ISTD Lot: 5303 | Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
03061401.D	MECL2 RINSE	G/	Tune	1		SW846TUN	3/06/14 06:58	JLR	
03061402.D	TUNE	G/	Tune	1		SW846TUN	3/06/14 07:20	JLR	pass
03061403.D	CCAL 6 10328-96	L/	CCal	1		8270D-022814	3/06/14 07:48	JLR	pass
03061404.D	1632345	S/10357	Blank	1		8270D-022814	3/06/14 08:16	JLR	pass
03061405.D	1632346	S/10357	LCS	1		8270D-022814	3/06/14 08:44	JLR	pass
03061406.D	1632643	L/10356	LCS	1		8270D-022814	3/06/14 09:12	JLR	pass
03061407.D	1632644	L/10356	LCSD	1		8270D-022814	3/06/14 09:40	JLR	pass
03061408.D	10259055001	S/10357	Sample	1		8270D-022814	3/06/14 10:09	JLR	
03061409.D	10259055002	S/10357	Sample	1		8270D-022814	3/06/14 10:37	JLR	
03061410.D	10259055005	S/10357	Sample	1		8270D-022814	3/06/14 11:05	JLR	
03061411.D	10259142001	S/10357	Sample	1		8270D-022814	3/06/14 11:33	JLR	
03061412.D	1633777	L/10358	Blank	1		8270D-022814	3/06/14 12:02	JLR	pass
03061413.D	1633778	L/10358	LCS	1		8270D-022814	3/06/14 12:30	JLR	pass
03061414.D	10258914001	L/10358	Sample	1		8270D-022814	3/06/14 12:59	JLR	
03061415.D	10259055007	S/10357	Sample	1		8270D-022814	3/06/14 13:27	JLR	
03061416.D	1633779	L/10358	MS	1		8270D-022814	3/06/14 13:55	JLR	
03061417.D	1633780	L/10358	MSD	1		8270D-022814	3/06/14 14:24	JLR	
03061418.D	10258916001	L/10358	Sample	1		8270D-022814	3/06/14 14:52	JLR	
03061419.D	10259022001	L/10356	Sample	1		8270D-022814	3/06/14 15:21	JLR	
03061420.D	10259061001	L/10356	Sample	50		8270D-022814	3/06/14 15:49	JLR	

Check Maintenance Items Performed:

- Changed septum
- x Cleaned liner
- x Replaced/Cleaned gold seal
- x Clipped column
- Changed trap - Lot #
- Cleaned MS Source
- Changed column - Lot #
- Other minor parts replaced
- No maintenance performed today

Additional Comments:

File Path 1: U:\10MSSD.I\030614.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 03/07/2014 10:01
Reviewed By/Date:

Report Date : 03-Mar-2014 07:24

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Calibration File Names:
Level 2: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Level 3: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Level 4: \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Level 5: \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Level 6: \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Level 7: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Level 8: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
1 N-Nitrosodimethylamine	0.72789	0.78804	0.81929	0.85961	0.84614	0.89461					
	0.81454						AVRG		0.82144		6.54456
2 Pyridine	1.36163	1.52328	1.49246	1.54232	1.48974	1.58077					
	1.47591						AVRG		1.49516		4.61624
5 Phenol	1.69120	1.73652	1.79306	1.68350	1.68141	1.78366					
	1.60733						AVRG		1.71095		3.80552
6 bis(2-Chloroethyl)ether	1.29559	1.26816	1.34372	1.27881	1.23915	1.29964					
	1.20020						AVRG		1.27504		3.60753

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
7 2-Chlorophenol	1.53875	1.38668	1.48745	1.42656	1.38550	1.49802					
	1.34533						AVRG		1.43833		4.94115
8 1,3-Dichlorobenzene	1.63535	1.66842	1.70034	1.61620	1.55482	1.66971					
	1.50310						AVRG		1.62113		4.31992
10 1,4-Dichlorobenzene	1.73416	1.64816	1.71291	1.62159	1.57644	1.69132					
	1.52584						AVRG		1.64435		4.58882
11 Benzyl alcohol	0.93263	0.89074	1.02948	1.01018	1.00403	1.05846					
	0.95734						AVRG		0.98327		5.97986
12 1,2-Dichlorobenzene	1.58294	1.49110	1.64696	1.52077	1.48755	1.60005					
	1.43390						AVRG		1.53761		4.86836
13 2-Methylphenol	1.11748	1.07948	1.11180	1.10368	1.05730	1.16308					
	1.05115						AVRG		1.09771		3.53457
14 bis(2-Chloroisopropyl) ether	3.34631	3.24859	3.47054	3.25957	3.13606	3.38434					
	3.01630						AVRG		3.26596		4.70824

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
	160.0000 Level 9											
15 3 & 4-Methylphenol	1.45737	1.43361	1.50789	1.40955	1.38234	1.52934						
	1.33332						AVRG		1.43620		4.79581	
16 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
17 N-Nitroso-di-n-propylamine	0.84290	0.80673	0.90133	0.83706	0.79902	0.85349						
	0.76485						AVRG		0.82934		5.30152	
18 Hexachloroethane	0.61177	0.57066	0.63081	0.59419	0.58011	0.63344						
	0.55926						AVRG		0.59718		4.88230	
20 Nitrobenzene	0.32667	0.33126	0.34280	0.32178	0.32291	0.34288						
	0.31394						AVRG		0.32889		3.30637	
21 Isophorone	0.58272	0.59171	0.62630	0.57605	0.57748	0.61165						
	0.56964						AVRG		0.59079		3.52622	
22 2-Nitrophenol	0.19485	0.18640	0.19299	0.18322	0.19492	0.20575						
	0.19070						AVRG		0.19269		3.75192	

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2 / 160.0000 Level 8	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
23 2,4-Dimethylphenol	0.34270	0.33630	0.35674	0.32454	0.33014	0.33947					
	0.31949						AVRG		0.33563		3.69854
24 Benzoic acid	0.13603	0.16959	0.17781	0.17714	0.18340	0.19137					
	0.17286						AVRG		0.17260		10.20852
25 bis(2-Chloroethoxy)methane	0.34329	0.35337	0.36850	0.34530	0.34080	0.36620					
	0.32958						AVRG		0.34958		4.01797
26 2,4-Dichlorophenol	0.27988	0.29290	0.30072	0.28026	0.28723	0.30543					
	0.28284						AVRG		0.28989		3.49929
27 1,2,4-Trichlorobenzene	0.31767	0.30484	0.31457	0.29821	0.29838	0.30705					
	0.28839						AVRG		0.30416		3.33483
29 Naphthalene	1.04786	1.04560	1.06352	1.00184	0.97770	1.03046					
	0.93241						AVRG		1.01420		4.58787
30 4-Chloroaniline	0.41167	0.42253	0.41778	0.37617	0.33189	0.32875					
	0.29075						AVRG		0.36851		14.11588

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
31 Hexachlorobutadiene	0.16558	0.16459	0.17487	0.16272	0.16518	0.17406					
	0.15855						AVRG		0.16651		3.56026
32 4-Chloro-3-methylphenol	0.26748	0.28288	0.28675	0.26965	0.27408	0.28582					
	0.26259						AVRG		0.27561		3.48891
33 2-Methylnaphthalene	0.65715	0.69741	0.68306	0.65812	0.65838	0.70050					
	0.63115						AVRG		0.66940		3.75958
34 1-Methylnaphthalene	0.60614	0.64203	0.65610	0.60179	0.61118	0.64160					
	0.58592						AVRG		0.62068		4.16731
35 Hexachlorocyclopentadiene	2384	8113	15640	34429	72646	106697					
	149972						QUAD	0.09239	3.23289	-0.04604	0.99779
36 2,4,6-Trichlorophenol	0.37411	0.36621	0.37858	0.36261	0.36937	0.39693					
	0.36754						AVRG		0.37362		3.08960
37 2,4,5-Trichlorophenol	0.38078	0.40886	0.40096	0.38155	0.39938	0.42087					
	0.38667						AVRG		0.39701		3.76440

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
39 2-Chloronaphthalene	1.27008	1.25257	1.26458	1.16752	1.19463	1.24582					
	1.14649						AVRG		1.22024		4.10084
40 2-Nitroaniline	0.38065	0.41830	0.39990	0.39794	0.38903	0.41658					
	0.38400						AVRG		0.39806		3.75195
41 Dimethylphthalate	1.31489	1.34506	1.40449	1.28568	1.29891	1.35519					
	1.25871						AVRG		1.32327		3.69368
42 2,6-Dinitrotoluene	0.29027	0.30572	0.33084	0.29540	0.31043	0.32274					
	0.30097						AVRG		0.30805		4.72732
43 Acenaphthylene	1.86411	1.94855	1.97823	1.86316	1.86109	1.95806					
	1.74174						AVRG		1.88785		4.32605
44 3-Nitroaniline	0.36428	0.37498	0.38760	0.33487	0.30434	0.29372					
	0.25845						AVRG		0.33118		14.38912
46 Acenaphthene	1.13682	1.14672	1.14550	1.09150	1.09588	1.15100					
	1.03503						AVRG		1.11464		3.84489

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
47 2,4-Dinitrophenol	786	2701	6442	16083	37043	53931					
	76892						QUAD	0.14925	6.27339	-0.25221	0.99787
48 4-Nitrophenol	0.21915	0.24861	0.26143	0.25162	0.26516	0.27710					
	0.25651						AVRG		0.25423		7.12556
49 2,4-Dinitrotoluene	0.36512	0.39931	0.41769	0.39562	0.41004	0.41934					
	0.38864						AVRG		0.39940		4.74036
50 Dibenzofuran	1.73008	1.73039	1.77022	1.60911	1.61860	1.68241					
	1.52721						AVRG		1.66686		5.14474
51 Diethylphthalate	1.31072	1.32459	1.32095	1.23741	1.26582	1.29927					
	1.19364						AVRG		1.27891		3.83650
52 4-Chlorophenylphenyl ether	0.59120	0.62318	0.62438	0.61055	0.60810	0.63425					
	0.57911						AVRG		0.61011		3.19518
53 4-Nitroaniline	0.34836	0.37407	0.38270	0.35587	0.37300	0.38100					
	0.36124						AVRG		0.36803		3.55196

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2 / 160.0000 Level 8	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
54 Fluorene	1.37696	1.36027	1.43218	1.34042	1.32188	1.37352					
	1.26134						AVRG		1.35237		3.91772
55 4,6-Dinitro-2-methylphenol	2141	5757	11832	26289	53975	78965					
	109808						QUAD	0.08641	6.98532	-0.29082	0.99760
56 N-Nitrosodiphenylamine	0.67901	0.68957	0.73178	0.68001	0.68105	0.71068					
	0.66220						AVRG		0.69061		3.36705
57 Azobenzene	1.21989	1.30308	1.28862	1.19271	1.19221	1.24210					
	1.12946						AVRG		1.22401		4.91325
58 1,2-Diphenylhydrazine	1.21989	1.30308	1.28862	1.19271	1.19221	1.24210					
	1.12946						AVRG		1.22401		4.91325
60 4-Bromophenylphenyl ether	0.19264	0.20445	0.21194	0.18818	0.19992	0.21414					
	0.19876						AVRG		0.20143		4.72347
61 Hexachlorobenzene	0.22195	0.22017	0.22290	0.20347	0.20335	0.21659					
	0.20807						AVRG		0.21379		4.03316

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
62 Pentachlorophenol	1584	4699	8649	20378	44762	64043					
	94832						QUAD	0.09149	9.01386	-2.14926	0.99920
64 Phenanthrene	1.19952	1.16863	1.18193	1.10744	1.11062	1.15891					
	1.07093						AVRG		1.14257		4.09357
65 Anthracene	1.16134	1.16087	1.20884	1.13892	1.14007	1.19774					
	1.10713						AVRG		1.15927		3.03851
66 Carbazole	1.11366	1.13737	1.17698	1.10317	1.11417	1.15655					
	1.07940						AVRG		1.12590		2.95605
67 di-n-Butylphthalate	1.37736	1.35427	1.40106	1.32435	1.36755	1.41827					
	1.31297						AVRG		1.36512		2.80091
68 Fluoranthene	1.22044	1.23773	1.29974	1.20763	1.22916	1.28908					
	1.20315						AVRG		1.24099		3.10019
69 Benzidine	16897	42637	66277	120421	208073	277317					
	367344						QUAD	-0.02985	1.51306	0.32510	0.99620

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2 / 160.0000 Level 8	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
70 Pyrene	1.42756	1.41002	1.43032	1.32162	1.30286	1.35869					
	1.23469						AVRG		1.35511		5.41322
72 Butylbenzylphthalate	0.63499	0.61807	0.65999	0.62145	0.60566	0.65465					
	0.59343						AVRG		0.62689		3.91258
73 bis(2-Ethylhexyl)phthalate	0.87514	0.90466	0.95091	0.89260	0.84056	0.87986					
	0.79115						AVRG		0.87641		5.73909
74 3,3'-Dichlorobenzidine	0.42011	0.41255	0.39163	0.35747	0.31750	0.31913					
	+++++						AVRG		0.36973		12.26979
75 Benzo(a)anthracene	1.28238	1.24682	1.27640	1.21255	1.19129	1.24579					
	1.14509						AVRG		1.22862		3.99135
77 Chrysene	1.15772	1.13013	1.17387	1.10334	1.08504	1.15286					
	1.04777						AVRG		1.12153		4.02196
78 di-n-Octylphthalate	1.56072	1.57736	1.62570	1.54566	1.52951	1.59447					
	1.44766						AVRG		1.55444		3.65289

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2 / 160.0000 Level 8	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
79 Benzo(b)fluoranthene	1.10373	1.26676	1.24017	1.14539	1.16861	1.21993					
	1.17108						AVRG		1.18796		4.80185
80 Benzo(k)fluoranthene	1.19187	1.24747	1.25159	1.19461	1.21722	1.24334					
	1.16294						AVRG		1.21558		2.78142
81 Benzo(a)pyrene	1.10421	1.13918	1.19922	1.12176	1.12178	1.15656					
	1.10116						AVRG		1.13484		3.02058
83 Indeno(1,2,3-cd)pyrene	1.20427	1.23953	1.25839	1.20068	1.24348	1.26681					
	1.15901						AVRG		1.22460		3.12548
84 Dibenzo(a,h)anthracene	1.02921	1.05579	1.07033	1.02084	1.05799	1.07836					
	0.97330						AVRG		1.04083		3.48439
85 Benzo(g,h,i)perylene	1.05132	1.05071	1.07835	1.02299	1.04221	1.07015					
	0.95413						AVRG		1.03655		3.98468
$ 3 2-Fluorophenol (S)	1.36175	1.40830	1.47359	1.43414	1.38432	1.49121					
	1.36692						AVRG		1.41718		3.61049

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
$ 4 Phenol-d6 (S)	1.57656	1.61174	1.68872	1.62466	1.62194	1.72293					
	1.56085						AVRG		1.62963		3.55598
$ 19 Nitrobenzene-d5 (S)	0.33994	0.34616	0.36116	0.33866	0.34532	0.35840					
	0.33264						AVRG		0.34604		3.01517
$ 38 2-Fluorobiphenyl (S)	1.41717	1.42305	1.44440	1.35072	1.38823	1.44266					
	1.32339						AVRG		1.39852		3.33316
$ 59 2,4,6-Tribromophenol (S)	0.12421	0.15164	0.15764	0.15481	0.16169	0.16446					
	0.15459						AVRG		0.15272		8.72105
$ 71 Terphenyl-d14 (S)	0.84061	0.87705	0.89446	0.84708	0.84038	0.87122					
	0.81069						AVRG		0.85450		3.29352

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 13:25
End Cal Date : 28-FEB-2014 16:07
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Last Edit : 03-Mar-2014 07:18 10mss9.i

Average %RSD Results.	
Calculated Average %RSD =	4.60802
Maximun Average %RSD =	15.00000
* Passed Average %RSD Test.	

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Data file: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Lab Smp Id: ICAL 10328-96 8
Inj Date : 28-FEB-2014 13:25
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 8
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	211126	160.000	159(Q)
	2 Pyridine	79	2.416	2.416	(0.512)	382550	160.000	158
$	3 2-Fluorophenol (S)	112	3.436	3.436	(0.728)	354301	160.000	154
$	4 Phenol-d6 (S)	99	4.307	4.307	(0.913)	404566	160.000	153
	5 Phenol	94	4.318	4.318	(0.915)	416613	160.000	150
	6 bis(2-Chloroethyl)ether	63	4.419	4.419	(0.937)	311086	160.000	151
	7 2-Chlorophenol	128	4.505	4.505	(0.955)	348704	160.000	150
	8 1,3-Dichlorobenzene	146	4.665	4.665	(0.989)	389597	160.000	148
*	9 1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	64799	40.0000	
	10 1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	395491	160.000	148
	11 Benzyl alcohol	79	4.852	4.852	(1.028)	248138	160.000	156
	12 1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	371660	160.000	149
	13 2-Methylphenol	107	4.964	4.964	(1.052)	272454	160.000	153
	14 bis(2-Chloroisopropyl) ether	45	4.996	4.996	(1.059)	781813	160.000	148
	15 3 & 4-Methylphenol	107	5.135	5.135	(1.088)	345590	160.000	148
	17 N-Nitroso-di-n-propylamine	70	5.146	5.146	(1.091)	198246	160.000	148
	18 Hexachloroethane	117	5.285	5.285	(1.120)	144958	160.000	150
$	19 Nitrobenzene-d5 (S)	82	5.327	5.327	(0.864)	247398	120.000	115
	20 Nitrobenzene	77	5.349	5.349	(0.867)	311323	160.000	153
	21 Isophorone	82	5.616	5.616	(0.911)	564892	160.000	154
	22 2-Nitrophenol	139	5.712	5.712	(0.926)	189105	160.000	158
	23 2,4-Dimethylphenol	107	5.744	5.744	(0.932)	316824	160.000	152

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24	Benzoic acid	105	5.872	5.872	(0.952)	171420	160.000	160(A)
	25	bis(2-Chloroethoxy)methane	93	5.851	5.851	(0.949)	326828	160.000	151
	26	2,4-Dichlorophenol	162	5.995	5.995	(0.972)	280479	160.000	156
	27	1,2,4-Trichlorobenzene	180	6.091	6.091	(0.988)	285985	160.000	152
*	28	Naphthalene-d8	136	6.166	6.166	(1.000)	247915	40.0000	(Q)
	29	Naphthalene	128	6.193	6.193	(1.004)	924634	160.000	147
	30	4-Chloroaniline	127	6.241	6.241	(1.012)	288327	160.000	126(A)
	31	Hexachlorobutadiene	225	6.332	6.332	(1.027)	157229	160.000	152
	32	4-Chloro-3-methylphenol	107	6.818	6.818	(1.106)	260400	160.000	152
	33	2-Methylnaphthalene	142	7.021	7.021	(1.139)	625886	160.000	151
	34	1-Methylnaphthalene	142	7.144	7.144	(1.159)	581034	160.000	151
	35	Hexachlorocyclopentadiene	237	7.208	7.208	(0.868)	149972	160.000	157
	36	2,4,6-Trichlorophenol	196	7.358	7.358	(0.886)	182437	160.000	157
	37	2,4,5-Trichlorophenol	196	7.406	7.406	(0.892)	191930	160.000	156
$	38	2-Fluorobiphenyl (S)	172	7.459	7.459	(0.898)	492672	120.000	114
	39	2-Chloronaphthalene	162	7.619	7.619	(0.918)	569085	160.000	150
	40	2-Nitroaniline	65	7.737	7.737	(0.932)	190607	160.000	154
	41	Dimethylphthalate	163	7.967	7.967	(0.959)	624789	160.000	152
	42	2,6-Dinitrotoluene	165	8.036	8.036	(0.968)	149392	160.000	156
	43	Acenaphthylene	152	8.132	8.132	(0.979)	864552	160.000	148(M)
	44	3-Nitroaniline	138	8.244	8.244	(0.993)	128285	160.000	125(A)
*	45	Acenaphthene-d10	164	8.303	8.303	(1.000)	124093	40.0000	
	46	Acenaphthene	154	8.346	8.346	(1.005)	513760	160.000	148
	47	2,4-Dinitrophenol	184	8.373	8.373	(1.008)	76892	160.000	158(Q)
	48	4-Nitrophenol	65	8.458	8.458	(1.019)	127325	160.000	161(A)
	49	2,4-Dinitrotoluene	165	8.538	8.538	(1.028)	192912	160.000	156
	50	Dibenzofuran	168	8.560	8.560	(1.031)	758062	160.000	146
	51	Diethylphthalate	149	8.832	8.832	(1.064)	592488	160.000	149
	52	4-Chlorophenylphenyl ether	204	8.976	8.976	(1.081)	287455	160.000	152
	53	4-Nitroaniline	138	9.014	9.014	(1.086)	179308	160.000	157
	54	Fluorene	166	8.982	8.982	(1.082)	626094	160.000	149
	55	4,6-Dinitro-2-methylphenol	198	9.046	9.046	(0.892)	109808	160.000	157
	56	N-Nitrosodiphenylamine	169	9.120	9.120	(0.899)	516254	160.000	153
	57	Azobenzene	77	9.174	9.174	(1.105)	560634	160.000	148
	58	1,2-Diphenylhydrazine	77	9.174	9.174	(1.105)	560634	160.000	148
$	59	2,4,6-Tribromophenol (S)	330	9.281	9.281	(1.118)	76732	160.000	162(A)
	60	4-Bromophenylphenyl ether	248	9.580	9.580	(0.945)	154955	160.000	158
	61	Hexachlorobenzene	284	9.665	9.665	(0.953)	162214	160.000	156
	62	Pentachlorophenol	266	9.906	9.906	(0.977)	94832	160.000	159
*	63	Phenanthrene-d10	188	10.141	10.141	(1.000)	194902	40.0000	
	64	Phenanthrene	178	10.178	10.178	(1.004)	834909	160.000	150
	65	Anthracene	178	10.242	10.242	(1.010)	863130	160.000	153
	66	Carbazole	167	10.440	10.440	(1.029)	841510	160.000	153
	67	di-n-Butylphthalate	149	10.851	10.851	(1.070)	1023605	160.000	154
	68	Fluoranthene	202	11.658	11.658	(1.150)	937986	160.000	155
	69	Benzidine	184	11.808	11.808	(0.879)	367344	160.000	156(A)
	70	Pyrene	202	11.941	11.941	(0.889)	974651	160.000	146
$	71	Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	479959	120.000	114
	72	Butylbenzylphthalate	149	12.716	12.716	(0.947)	468449	160.000	151
	73	bis(2-Ethylhexyl)phthalate	149	13.410	13.410	(0.998)	624522	160.000	144
	74	3,3'-Dichlorobenzidine	252	13.378	13.378	(0.996)	221928	160.000	122(A)
	75	Benzo(a)anthracene	228	13.421	13.421	(0.999)	903917	160.000	149
*	76	Chrysene-d12	240	13.432	13.432	(1.000)	197347	40.0000	(Q)
	77	Chrysene	228	13.469	13.469	(1.003)	827096	160.000	149

Data File: \\192.168.10.12\Chem\10MSD.I\022814B.D\0220415.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.174	14.174	(1.055)	1142764	160.000	149
	79 Benzo(b)fluoranthene	252	14.692	14.692	(0.968)	867047	160.000	158
	80 Benzo(k)fluoranthene	252	14.730	14.730	(0.970)	861019	160.000	153
	81 Benzo(a)pyrene	252	15.120	15.120	(0.996)	815274	160.000	155
*	82 Perylene-d12	264	15.184	15.184	(1.000)	185095	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	16.888	16.888	(1.112)	858110	160.000	151
	84 Dibenzo(a,h)anthracene	278	16.915	16.915	(1.114)	720613	160.000	150
	85 Benzo(g,h,i)perylene	276	17.412	17.412	(1.147)	706421	160.000	147

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281413.D
Lab Smp Id: ICAL 10328-96 8
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 16:34
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

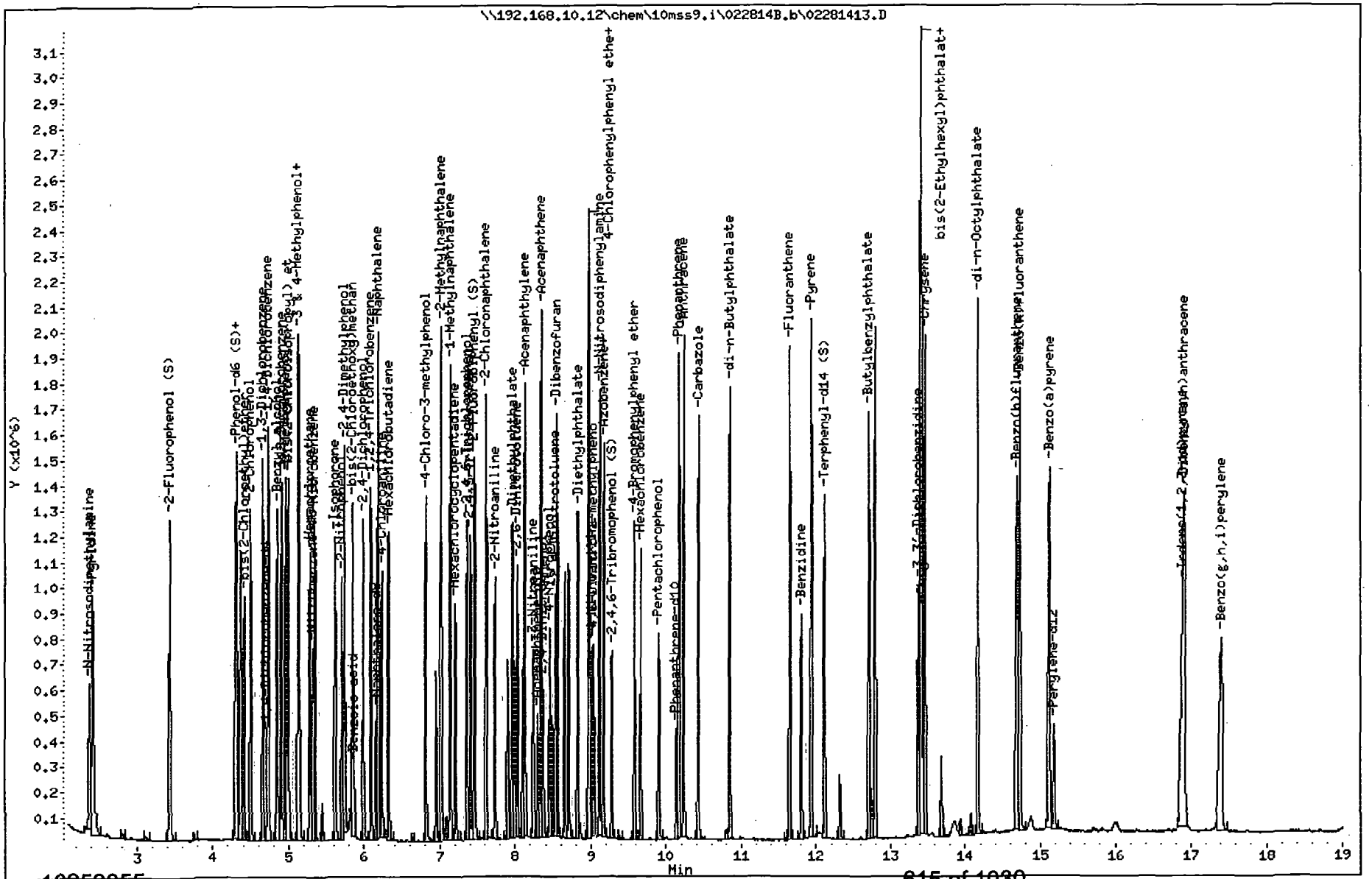
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	64799	-1.42
28 Naphthalene-d8	256733	128367	513466	247915	-3.43
45 Acenaphthene-d10	126640	63320	253280	124093	-2.01
63 Phenanthrene-d10	206748	103374	413496	194902	-5.73
76 Chrysene-d12	194855	97428	389710	197347	1.28
82 Perylene-d12	186487	93244	372974	185095	-0.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.17	0.09
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	0.07
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	0.00
76 Chrysene-d12	13.43	12.93	13.93	13.43	0.04
82 Perylene-d12	15.18	14.68	15.68	15.18	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

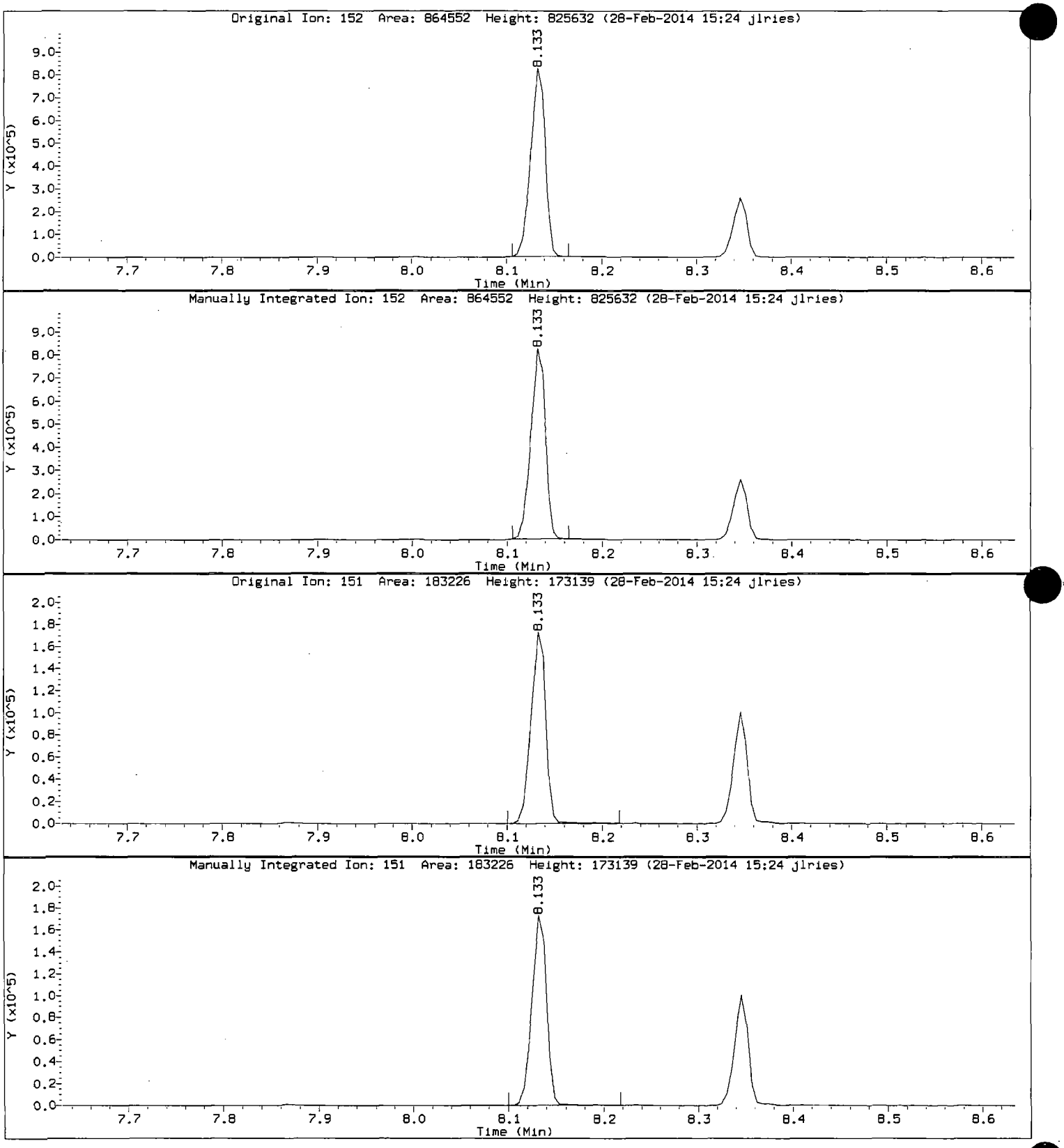
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281413.D
Date : 28-FEB-2014 13:25
Client ID:
Sample Info: ICAL 10328-96 8
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

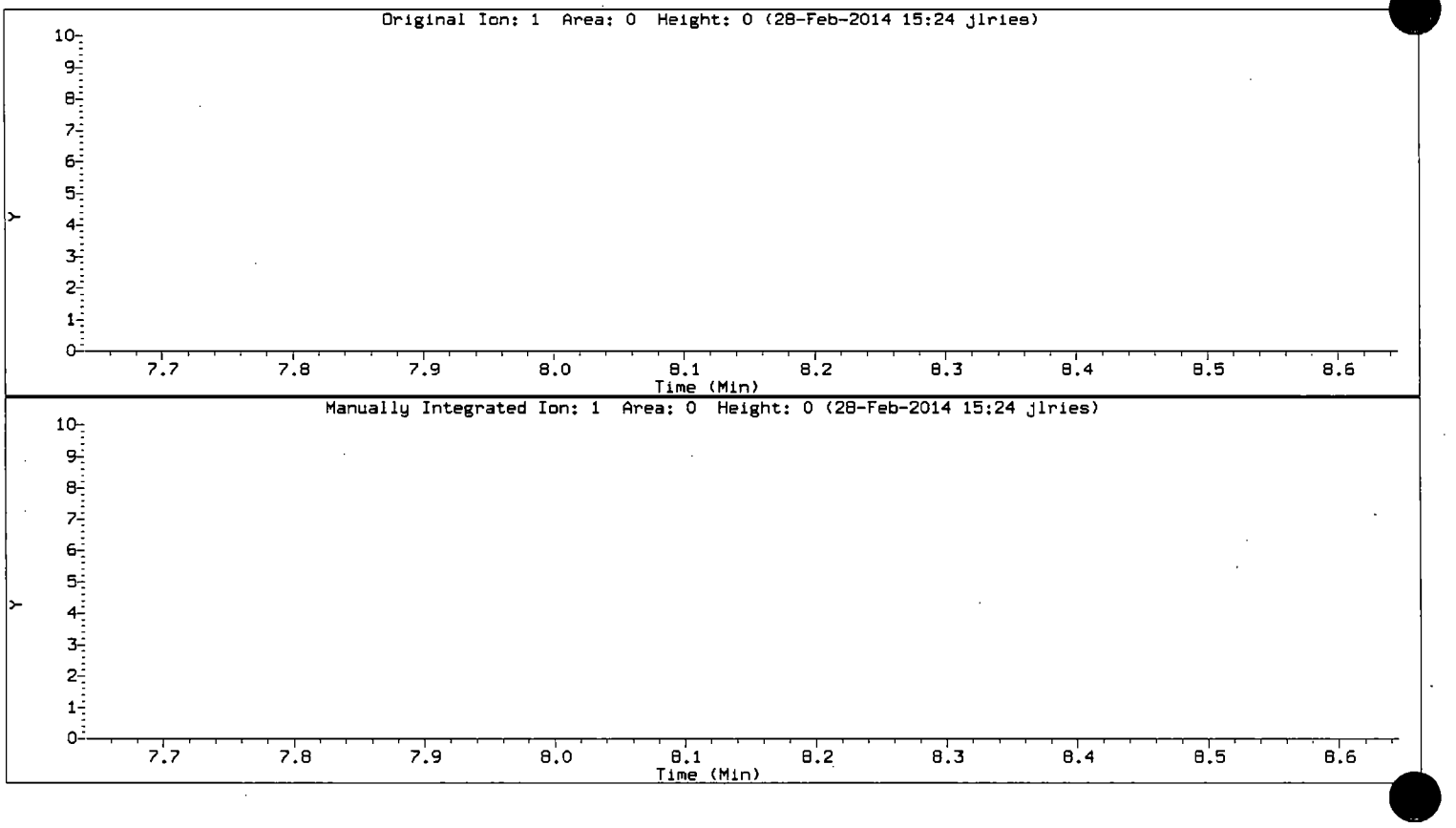


Injection Date: 28-FEB-2014 15:25
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 8

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b/02281413.D
Injection Date: 28-FEB-2014 13:25
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 8



Data file: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Lab Smp Id: ICAL 10328-96 7
Inj Date : 28-FEB-2014 13:52
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 7
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 13:25 Cal File: 02281413.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	153354	120.000	131
	2 Pyridine	79	2.416	2.416	(0.512)	270976	120.000	127
$	3 2-Fluorophenol (S)	112	3.436	3.436	(0.728)	255624	120.000	126
$	4 Phenol-d6 (S)	99	4.302	4.302	(0.912)	295345	120.000	127
	5 Phenol	94	4.318	4.318	(0.915)	305755	120.000	125
	6 bis(2-Chloroethyl)ether	63	4.414	4.414	(0.935)	222784	120.000	122
	7 2-Chlorophenol	128	4.499	4.499	(0.954)	256790	120.000	125
	8 1,3-Dichlorobenzene	146	4.665	4.665	(0.989)	286222	120.000	124
*	9 1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	57140	40.0000	
	10 1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	289926	120.000	123
	11 Benzyl alcohol	79	4.846	4.846	(1.027)	181442	120.000	129
	12 1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	274281	120.000	125
	13 2-Methylphenol	107	4.959	4.959	(1.051)	199376	120.000	127
	14 bis(2-Chloroisopropyl) ether	45	4.996	4.996	(1.059)	580144	120.000	124
	15 3 & 4-Methylphenol	107	5.130	5.130	(1.087)	262159	120.000	128
	17 N-Nitroso-di-n-propylamine	70	5.140	5.140	(1.089)	146305	120.000	123
	18 Hexachloroethane	117	5.285	5.285	(1.120)	108585	120.000	127
$	19 Nitrobenzene-d5 (S)	82	5.322	5.322	(0.864)	180858	90.0000	93.2
	20 Nitrobenzene	77	5.343	5.343	(0.867)	230704	120.000	125
	21 Isophorone	82	5.616	5.616	(0.912)	411544	120.000	124
	22 2-Nitrophenol	139	5.707	5.707	(0.926)	138437	120.000	128
	23 2,4-Dimethylphenol	107	5.739	5.739	(0.931)	228411	120.000	121

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	5.856	5.856	(0.951)	128759	120.000	133
	25 bis(2-Chloroethoxy)methane	93	5.851	5.851	(0.950)	246396	120.000	126
	26 2,4-Dichlorophenol	162	5.990	5.990	(0.972)	205503	120.000	126
	27 1,2,4-Trichlorobenzene	180	6.091	6.091	(0.989)	206596	120.000	121
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	224279	40.0000	(Q)
	29 Naphthalene	128	6.187	6.187	(1.004)	693331	120.000	122
	30 4-Chloroaniline	127	6.235	6.235	(1.012)	221194	120.000	107(A)
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	117112	120.000	125
	32 4-Chloro-3-methylphenol	107	6.812	6.812	(1.106)	192313	120.000	124
	33 2-Methylnaphthalene	142	7.015	7.015	(1.139)	471321	120.000	126
	34 1-Methylnaphthalene	142	7.138	7.138	(1.159)	431692	120.000	124
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	106697	120.000	125
	36 2,4,6-Trichlorophenol	196	7.357	7.357	(0.887)	133247	120.000	127
	37 2,4,5-Trichlorophenol	196	7.405	7.405	(0.892)	141282	120.000	127
$	38 2-Fluorobiphenyl (S)	172	7.459	7.459	(0.899)	363217	90.0000	92.8
	39 2-Chloronaphthalene	162	7.614	7.614	(0.918)	418211	120.000	122
	40 2-Nitroaniline	65	7.731	7.731	(0.932)	139842	120.000	126
	41 Dimethylphthalate	163	7.956	7.956	(0.959)	454925	120.000	123
	42 2,6-Dinitrotoluene	165	8.030	8.030	(0.968)	108342	120.000	126
	43 Acenaphthylene	152	8.132	8.132	(0.980)	657304	120.000	124(M)
	44 3-Nitroaniline	138	8.239	8.239	(0.993)	98600	120.000	106(A)
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	111897	40.0000	
	46 Acenaphthene	154	8.340	8.340	(1.005)	386380	120.000	124
	47 2,4-Dinitrophenol	184	8.367	8.367	(1.008)	53931	120.000	124(Q)
	48 4-Nitrophenol	65	8.452	8.452	(1.019)	93021	120.000	131
	49 2,4-Dinitrotoluene	165	8.527	8.527	(1.028)	140770	120.000	126
	50 Dibenzofuran	168	8.554	8.554	(1.031)	564769	120.000	121
	51 Diethylphthalate	149	8.826	8.826	(1.064)	436154	120.000	122
	52 4-Chlorophenylphenyl ether	204	8.971	8.971	(1.081)	212913	120.000	125
	53 4-Nitroaniline	138	9.003	9.003	(1.085)	127898	120.000	124
	54 Fluorene	166	8.981	8.981	(1.082)	461079	120.000	122
	55 4,6-Dinitro-2-methylphenol	198	9.035	9.035	(0.891)	78965	120.000	126
	56 N-Nitrosodiphenylamine	169	9.120	9.120	(0.899)	377980	120.000	123
	57 Azobenzene	77	9.168	9.168	(1.105)	416961	120.000	122
	58 1,2-Diphenylhydrazine	77	9.168	9.168	(1.105)	416961	120.000	122
$	59 2,4,6-Tribromophenol (S)	330	9.275	9.275	(1.118)	55207	120.000	129
	60 4-Bromophenylphenyl ether	248	9.580	9.580	(0.945)	113890	120.000	128
	61 Hexachlorobenzene	284	9.665	9.665	(0.953)	115195	120.000	122
	62 Pentachlorophenol	266	9.906	9.906	(0.977)	64043	120.000	123
*	63 Phenanthrene-d10	188	10.141	10.141	(1.000)	177286	40.0000	
	64 Phenanthrene	178	10.173	10.173	(1.003)	616373	120.000	122
	65 Anthracene	178	10.237	10.237	(1.009)	637026	120.000	124
	66 Carbazole	167	10.429	10.429	(1.028)	615119	120.000	123
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	754320	120.000	125
	68 Fluoranthene	202	11.653	11.653	(1.149)	685606	120.000	125
	69 Benzidine	184	11.802	11.802	(0.879)	277317	120.000	127(A)
	70 Pyrene	202	11.936	11.936	(0.889)	716184	120.000	120
$	71 Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	344422	90.0000	91.8
	72 Butylbenzylphthalate	149	12.710	12.710	(0.947)	345073	120.000	125
	73 bis(2-Ethylhexyl)phthalate	149	13.410	13.410	(0.999)	463787	120.000	120
	74 3,3'-Dichlorobenzidine	252	13.373	13.373	(0.996)	168216	120.000	104(A)
	75 Benzo(a)anthracene	228	13.415	13.415	(0.999)	656670	120.000	122
*	76 Chrysene-d12	240	13.426	13.426	(1.000)	175704	40.0000	(Q)
	77 Chrysene	228	13.464	13.464	(1.003)	607686	120.000	123

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.169	14.169	(1.055)	840462	120.000	123
79	Benzo(b)fluoranthene	252	14.687	14.687	(0.968)	631609	120.000	123
80	Benzo(k)fluoranthene	252	14.724	14.724	(0.970)	643726	120.000	123
81	Benzo(a)pyrene	252	15.114	15.114	(0.996)	598797	120.000	122
* 82	Perylene-d12	264	15.178	15.178	(1.000)	172580	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.877	16.877	(1.112)	655877	120.000	124
84	Dibenzo(a,h)anthracene	278	16.904	16.904	(1.114)	558311	120.000	124
85	Benzo(g,h,i)perylene	276	17.395	17.395	(1.146)	554058	120.000	124

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281414.D
Lab Smp Id: ICAL 10328-96 7
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 16:34
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

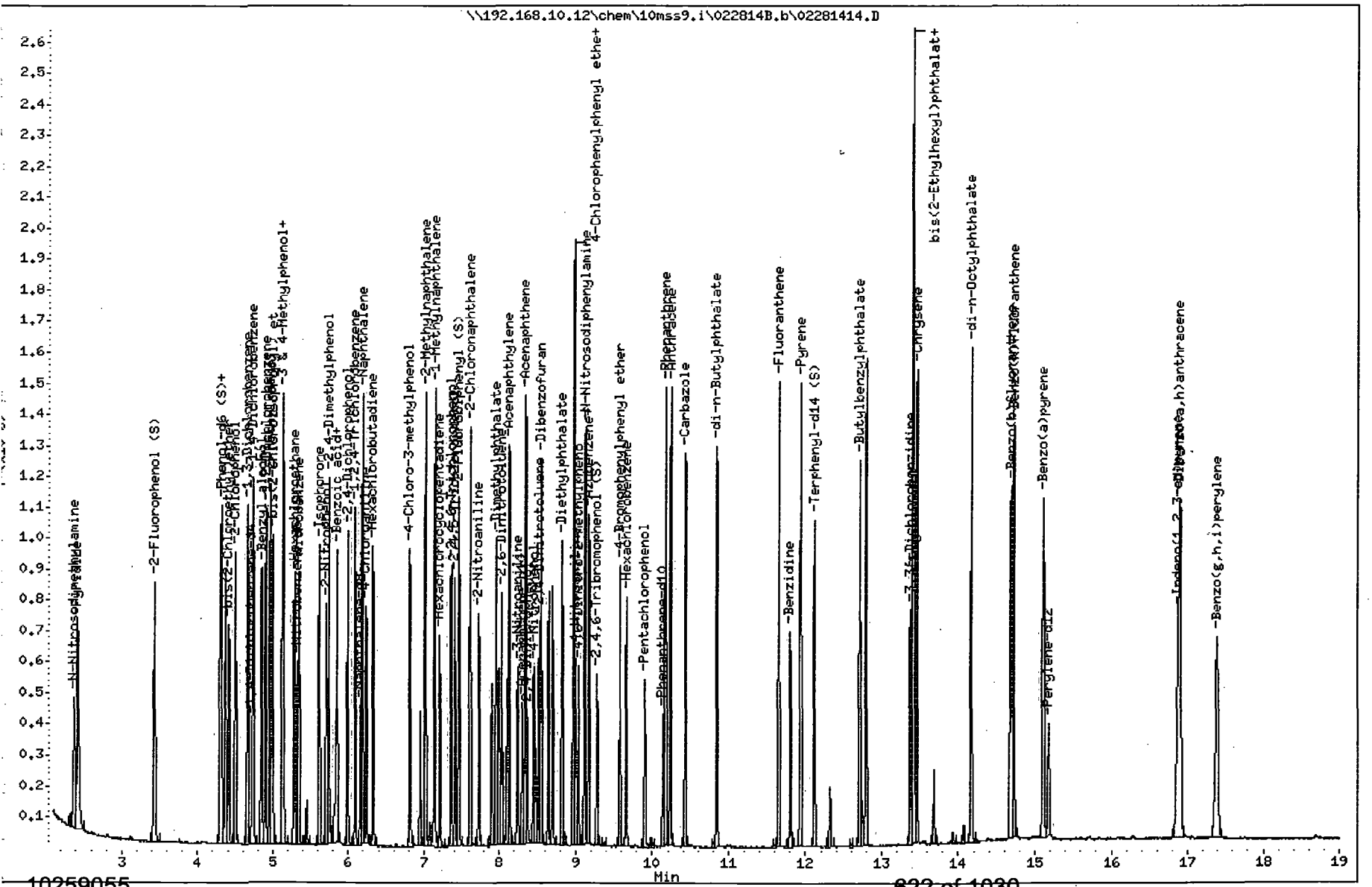
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	57140	-13.07
28 Naphthalene-d8	256733	128367	513466	224279	-12.64
45 Acenaphthene-d10	126640	63320	253280	111897	-11.64
63 Phenanthrene-d10	206748	103374	413496	177286	-14.25
76 Chrysene-d12	194855	97428	389710	175704	-9.83
82 Perylene-d12	186487	93244	372974	172580	-7.46

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.00
76 Chrysene-d12	13.43	12.93	13.93	13.43	-0.00
82 Perylene-d12	15.18	14.68	15.68	15.18	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

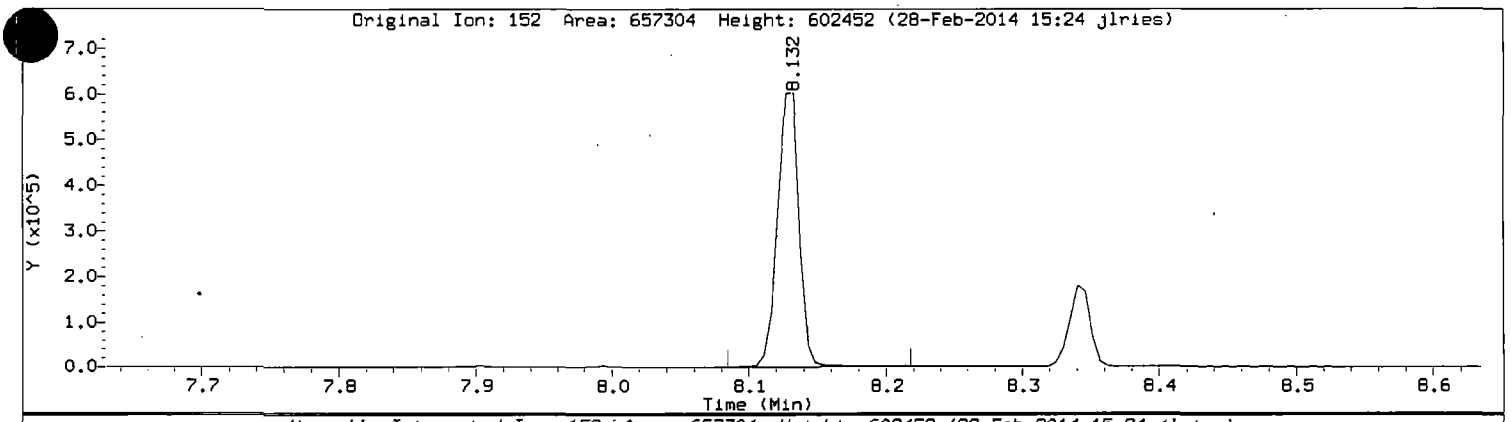
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281414.D
Date : 28-FEB-2014 13:52
Client ID:
Sample Info: ICAL 10328-96 7
Purge Volume: 1.0
Column phase: DB-5MS

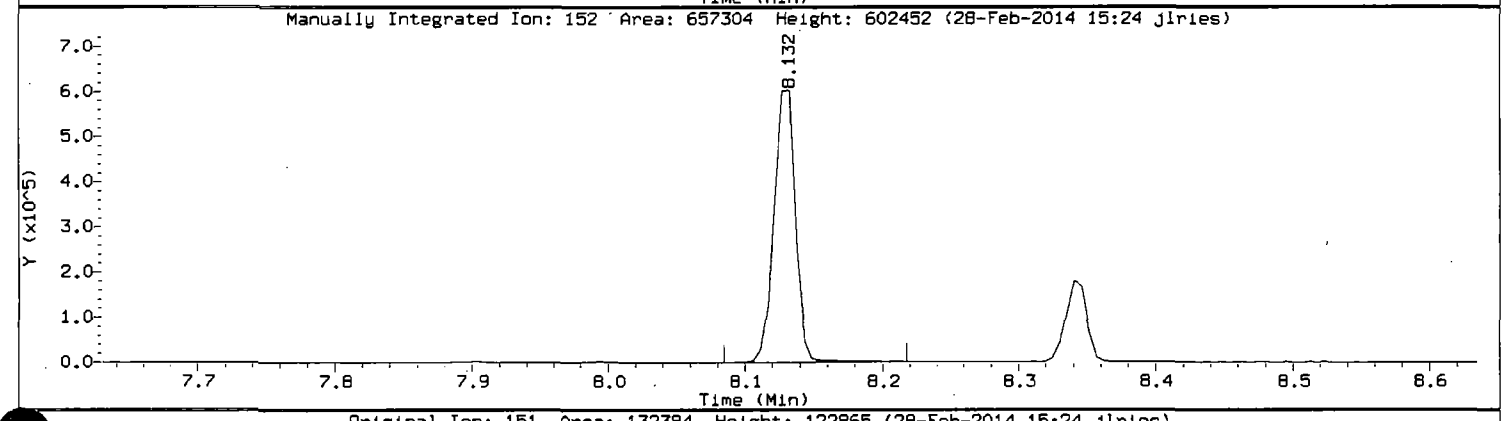
Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

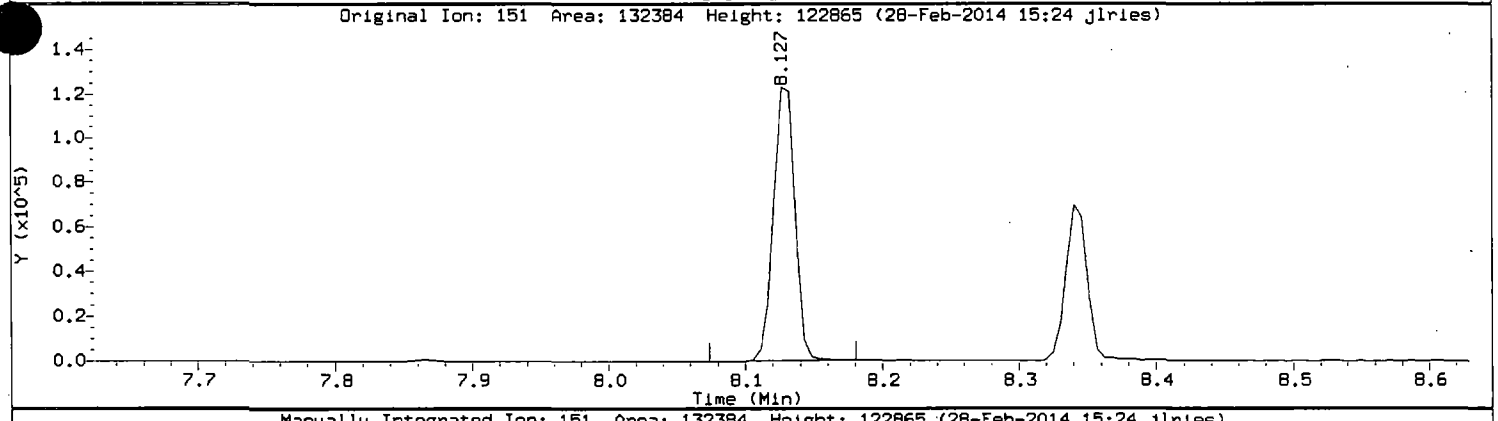


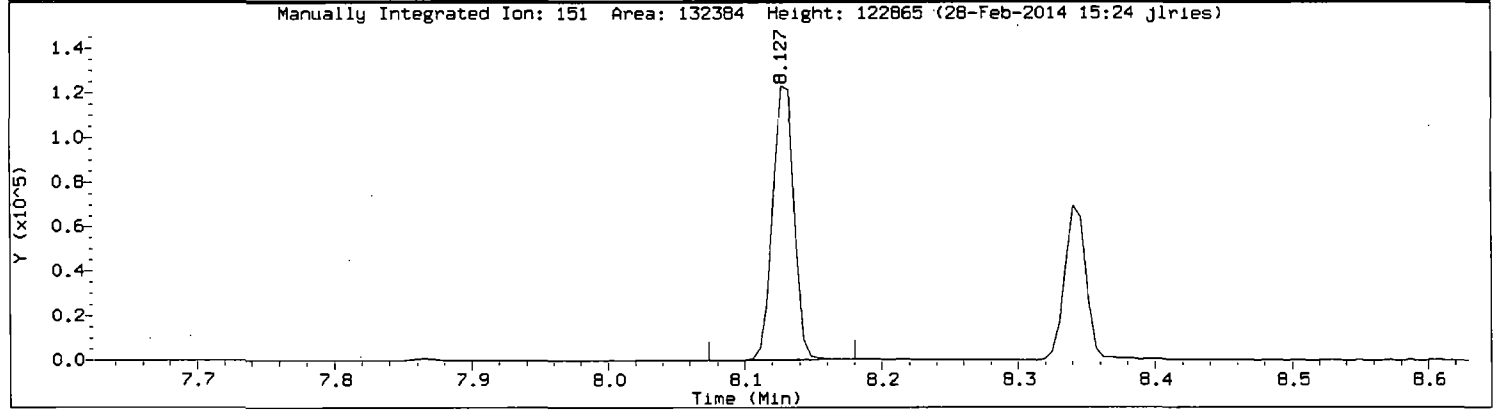
Injection Date: 28-FEB-2014 15:24
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 7

Compound: Acenaphthylene
CAS Number: 208-96-8

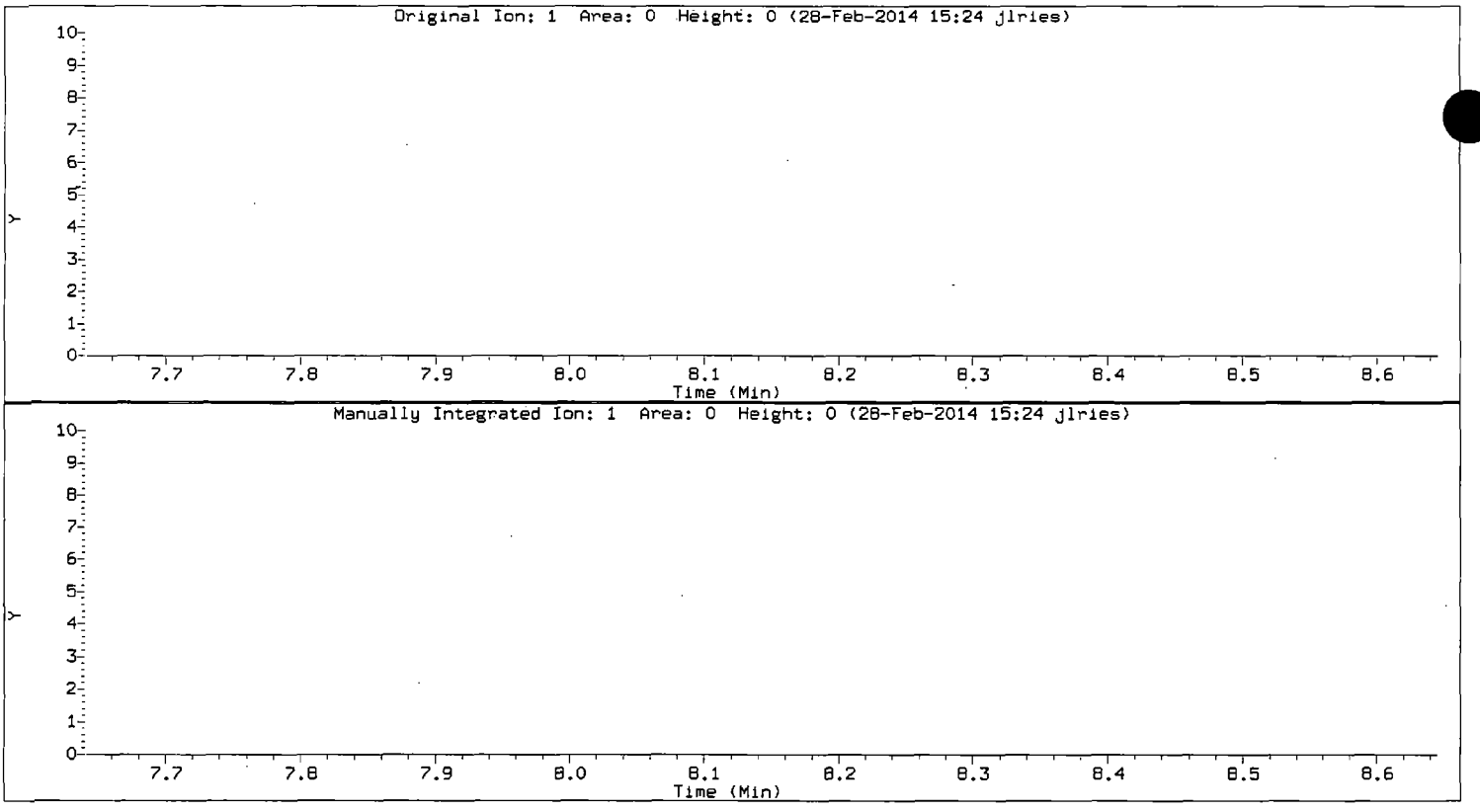








Injection Date: 28-FEB-2014 15:32
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 7



Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Lab Smp Id: ICAL 10328-96 6
Inj Date : 28-FEB-2014 14:19
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 6
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 13:52 Cal File: 02281414.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	111951	80.0000	82.4(Q)
	2 Pyridine	79	2.421	2.421	(0.513)	197105	80.0000	79.7
$	3 2-Fluorophenol (S)	112	3.436	3.436	(0.728)	183156	80.0000	78.1
$	4 Phenol-d6 (S)	99	4.296	4.296	(0.911)	214596	80.0000	79.6
	5 Phenol	94	4.312	4.312	(0.914)	222464	80.0000	78.6
	6 bis(2-Chloroethyl)ether	63	4.414	4.414	(0.935)	163950	80.0000	77.7
	7 2-Chlorophenol	128	4.499	4.499	(0.954)	183313	80.0000	77.1
	8 1,3-Dichlorobenzene	146	4.665	4.665	(0.989)	205715	80.0000	76.7
*	9 1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	66154	40.0000	
	10 1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	208576	80.0000	76.7
	11 Benzyl alcohol	79	4.846	4.846	(1.027)	132841	80.0000	81.7
	12 1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	196815	80.0000	77.4
	13 2-Methylphenol	107	4.959	4.959	(1.051)	139889	80.0000	77.0
	14 bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	414926	80.0000	76.8
	15 3 & 4-Methylphenol	107	5.124	5.124	(1.086)	182895	80.0000	77.0
	17 N-Nitroso-di-n-propylamine	70	5.135	5.135	(1.088)	105717	80.0000	77.1
	18 Hexachloroethane	117	5.284	5.284	(1.120)	76753	80.0000	77.7
$	19 Nitrobenzene-d5 (S)	82	5.322	5.322	(0.864)	132315	60.0000	59.9
	20 Nitrobenzene	77	5.343	5.343	(0.867)	164971	80.0000	78.5
	21 Isophorone	82	5.610	5.610	(0.911)	295025	80.0000	78.2
	22 2-Nitrophenol	139	5.706	5.706	(0.926)	99583	80.0000	80.9
	23 2,4-Dimethylphenol	107	5.739	5.739	(0.931)	168665	80.0000	78.7

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
	24	Benzoic acid	105	5.840	5.840	(0.948)	93698	80.0000	85.0	
	25	bis(2-Chloroethoxy)methane	93	5.845	5.845	(0.949)	174111	80.0000	78.0	
	26	2,4-Dichlorophenol	162	5.984	5.984	(0.971)	146739	80.0000	79.3	
	27	1,2,4-Trichlorobenzene	180	6.091	6.091	(0.989)	152438	80.0000	78.5	
*	28	Naphthalene-d8	136	6.161	6.161	(1.000)	255442	40.0000		(Q)
	29	Naphthalene	128	6.187	6.187	(1.004)	499490	80.0000	77.1	
	30	4-Chloroaniline	127	6.235	6.235	(1.012)	169558	80.0000	72.0	
	31	Hexachlorobutadiene	225	6.326	6.326	(1.027)	84386	80.0000	79.4	
	32	4-Chloro-3-methylphenol	107	6.812	6.812	(1.106)	140023	80.0000	79.6	
	33	2-Methylnaphthalene	142	7.015	7.015	(1.139)	336356	80.0000	78.7	
	34	1-Methylnaphthalene	142	7.138	7.138	(1.159)	312242	80.0000	78.8	
	35	Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	72646	80.0000	77.8	
	36	2,4,6-Trichlorophenol	196	7.357	7.357	(0.887)	92851	80.0000	79.1	
	37	2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	100395	80.0000	80.5	
$	38	2-Fluorobiphenyl (S)	172	7.459	7.459	(0.899)	261726	60.0000	59.6	
	39	2-Chloronaphthalene	162	7.614	7.614	(0.918)	300302	80.0000	78.3	
	40	2-Nitroaniline	65	7.731	7.731	(0.932)	97792	80.0000	78.2	
	41	Dimethylphthalate	163	7.956	7.956	(0.959)	326514	80.0000	78.5	
	42	2,6-Dinitrotoluene	165	8.025	8.025	(0.967)	78034	80.0000	80.6	
	43	Acenaphthylene	152	8.127	8.127	(0.979)	467834	80.0000	78.9	(M)
	44	3-Nitroaniline	138	8.239	8.239	(0.993)	76503	80.0000	73.5	
*	45	Acenaphthene-d10	164	8.297	8.297	(1.000)	125688	40.0000		
	46	Acenaphthene	154	8.340	8.340	(1.005)	275479	80.0000	78.6	
	47	2,4-Dinitrophenol	184	8.362	8.362	(1.008)	37043	80.0000	79.0	(Q)
	48	4-Nitrophenol	65	8.447	8.447	(1.018)	66656	80.0000	83.4	
	49	2,4-Dinitrotoluene	165	8.527	8.527	(1.028)	103075	80.0000	82.1	
	50	Dibenzofuran	168	8.554	8.554	(1.031)	406877	80.0000	77.7	
	51	Diethylphthalate	149	8.821	8.821	(1.063)	318198	80.0000	79.2	
	52	4-Chlorophenylphenyl ether	204	8.971	8.971	(1.081)	152862	80.0000	79.7	
	53	4-Nitroaniline	138	8.997	8.997	(1.084)	93764	80.0000	81.1	
	54	Fluorene	166	8.976	8.976	(1.082)	332290	80.0000	78.2	
	55	4,6-Dinitro-2-methylphenol	198	9.029	9.029	(0.890)	53975	80.0000	77.3	
	56	N-Nitrosodiphenylamine	169	9.115	9.115	(0.899)	275008	80.0000	78.9	
	57	Azobenzene	77	9.168	9.168	(1.105)	299694	80.0000	77.9	
	58	1,2-Diphenylhydrazine	77	9.168	9.168	(1.105)	299694	80.0000	77.9	
$	59	2,4,6-Tribromophenol (S)	330	9.275	9.275	(1.118)	40645	80.0000	84.7	
	60	4-Bromophenylphenyl ether	248	9.574	9.574	(0.944)	80729	80.0000	79.4	
	61	Hexachlorobenzene	284	9.660	9.660	(0.953)	82114	80.0000	76.1	
	62	Pentachlorophenol	266	9.900	9.900	(0.976)	44762	80.0000	79.4	
*	63	Phenanthrene-d10	188	10.141	10.141	(1.000)	201900	40.0000		
	64	Phenanthrene	178	10.173	10.173	(1.003)	448467	80.0000	77.8	
	65	Anthracene	178	10.231	10.231	(1.009)	460362	80.0000	78.7	
	66	Carbazole	167	10.429	10.429	(1.028)	449902	80.0000	79.2	
	67	di-n-Butylphthalate	149	10.846	10.846	(1.070)	552218	80.0000	80.1	
	68	Fluoranthene	202	11.647	11.647	(1.149)	496336	80.0000	79.2	
	69	Benzidine	184	11.802	11.802	(0.879)	208073	80.0000	75.4	
	70	Pyrene	202	11.936	11.936	(0.889)	523886	80.0000	76.9	
$	71	Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	253442	60.0000	59.0	
	72	Butylbenzylphthalate	149	12.710	12.710	(0.947)	243538	80.0000	77.3	
	73	bis(2-Ethylhexyl)phthalate	149	13.410	13.410	(0.999)	337993	80.0000	76.7	
	74	3,3'-Dichlorobenzidine	252	13.367	13.367	(0.996)	127669	80.0000	68.7	
	75	Benzo(a)anthracene	228	13.410	13.410	(0.999)	479026	80.0000	77.6	
*	76	Chrysene-d12	240	13.426	13.426	(1.000)	201053	40.0000		(Q)
	77	Chrysene	228	13.458	13.458	(1.002)	436301	80.0000	77.4	

Data File: \\192.168.10.12\Chem\10MS89.I\022814B.B\0228415.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.169	14.169	(1.055)	615027	80.0000	78.7
	79 Benzo(b)fluoranthene	252	14.681	14.681	(0.967)	449310	80.0000	78.7
	80 Benzo(k)fluoranthene	252	14.719	14.719	(0.970)	467999	80.0000	80.1
	81 Benzo(a)pyrene	252	15.109	15.109	(0.995)	431306	80.0000	79.1
*	82 Perylene-d12	264	15.178	15.178	(1.000)	192241	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	16.877	16.877	(1.112)	478094	80.0000	81.2
	84 Dibenzo(a,h)anthracene	278	16.893	16.893	(1.113)	406777	80.0000	81.3
	85 Benzo(g,h,i)perylene	276	17.385	17.385	(1.145)	400711	80.0000	80.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281415.D
Lab Smp Id: ICAL 10328-96 6
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19
Level: LOW
Sample Type: WATER

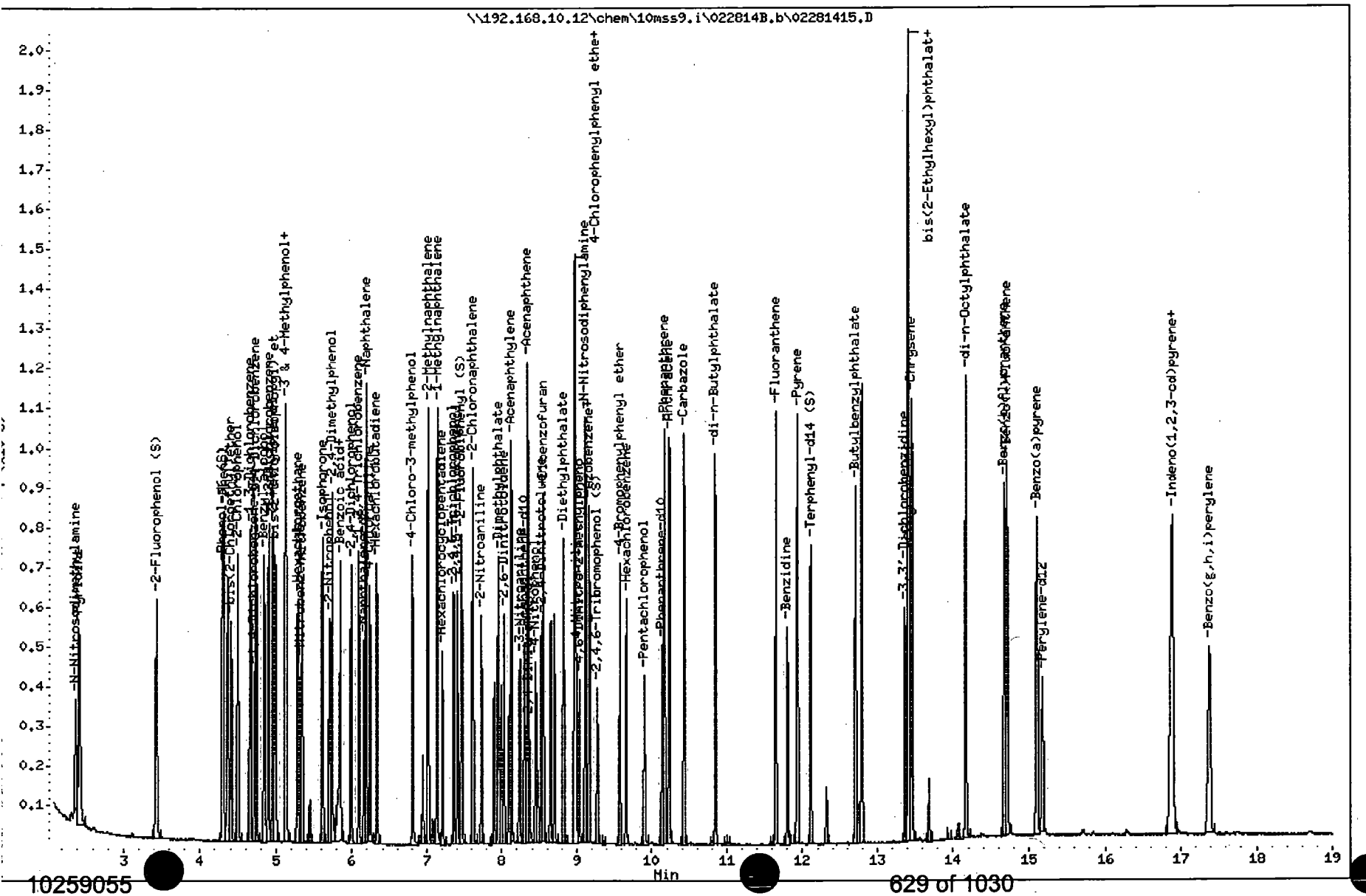
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	66154	0.64
28 Naphthalene-d8	256733	128367	513466	255442	-0.50
45 Acenaphthene-d10	126640	63320	253280	125688	-0.75
63 Phenanthrene-d10	206748	103374	413496	201900	-2.34
76 Chrysene-d12	194855	97428	389710	201053	3.18
82 Perylene-d12	186487	93244	372974	192241	3.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.00
76 Chrysene-d12	13.43	12.93	13.93	13.43	-0.00
82 Perylene-d12	15.18	14.68	15.68	15.18	-0.00

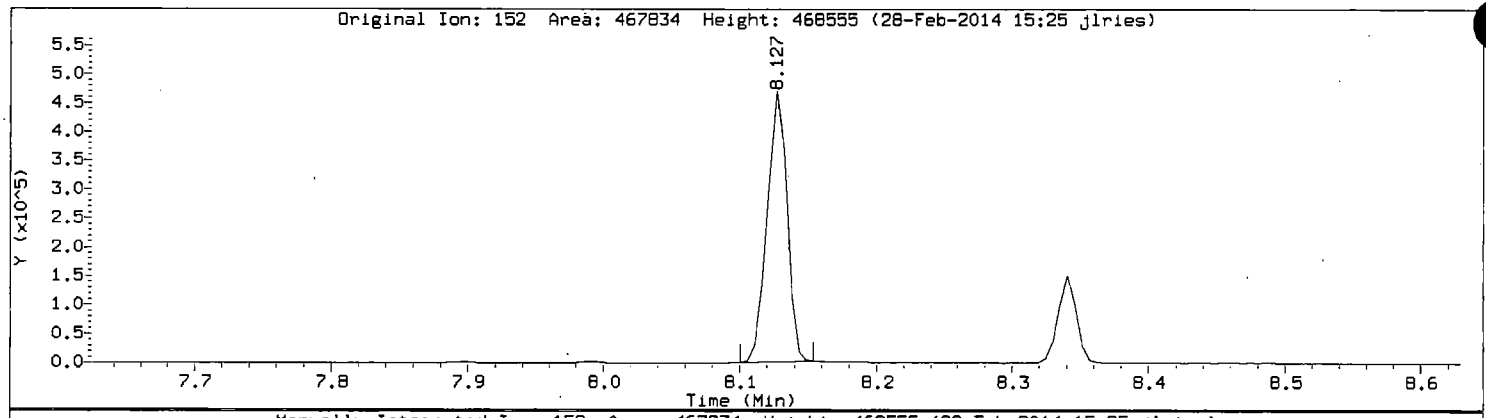
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

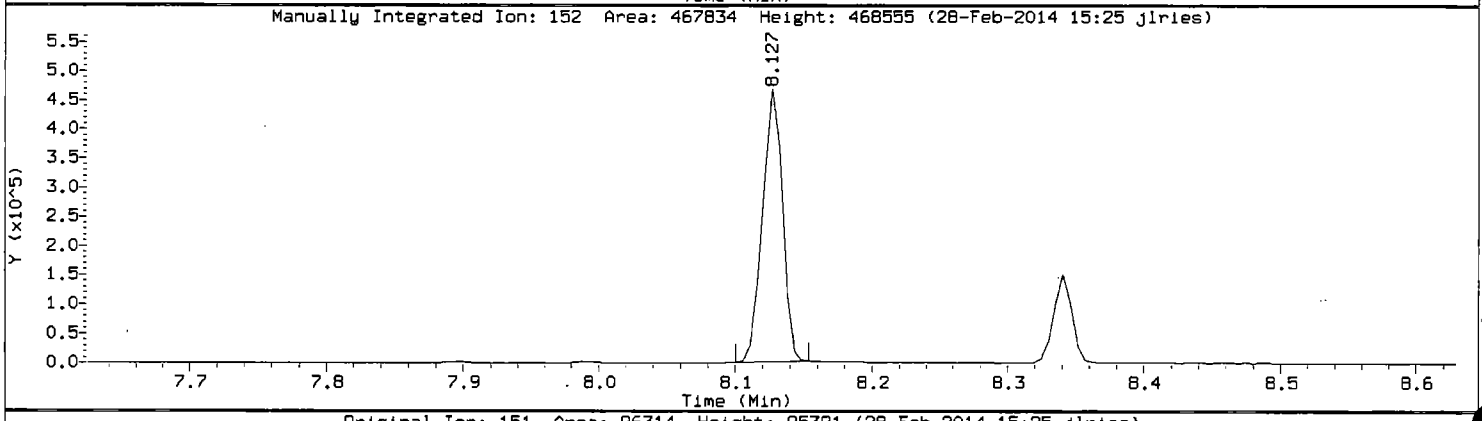
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281415.D
Date : 28-FEB-2014 14:19
Client ID:
Instrument: 10mss9.i
Sample Info: ICAL 10328-96 6
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

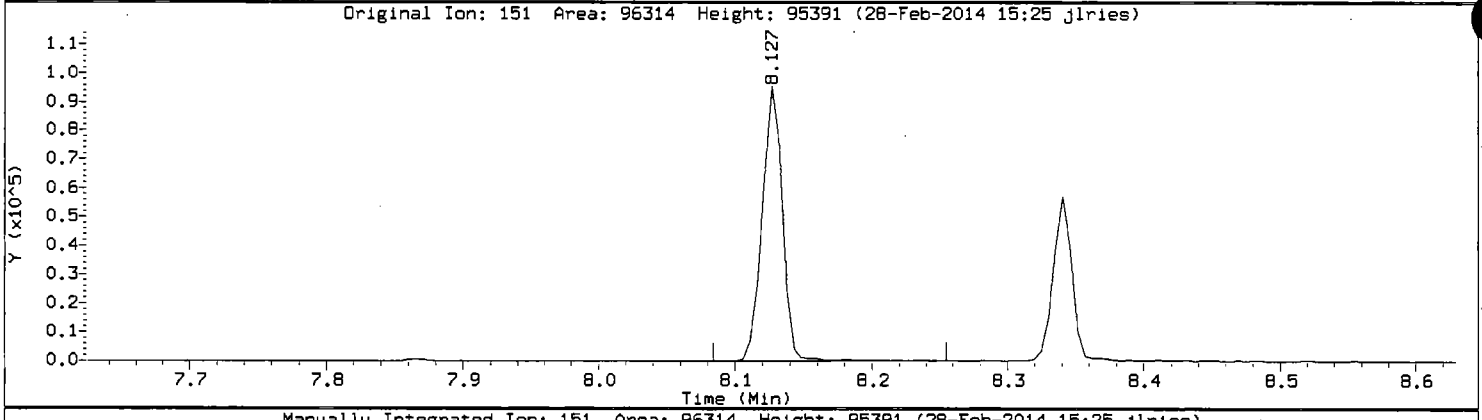


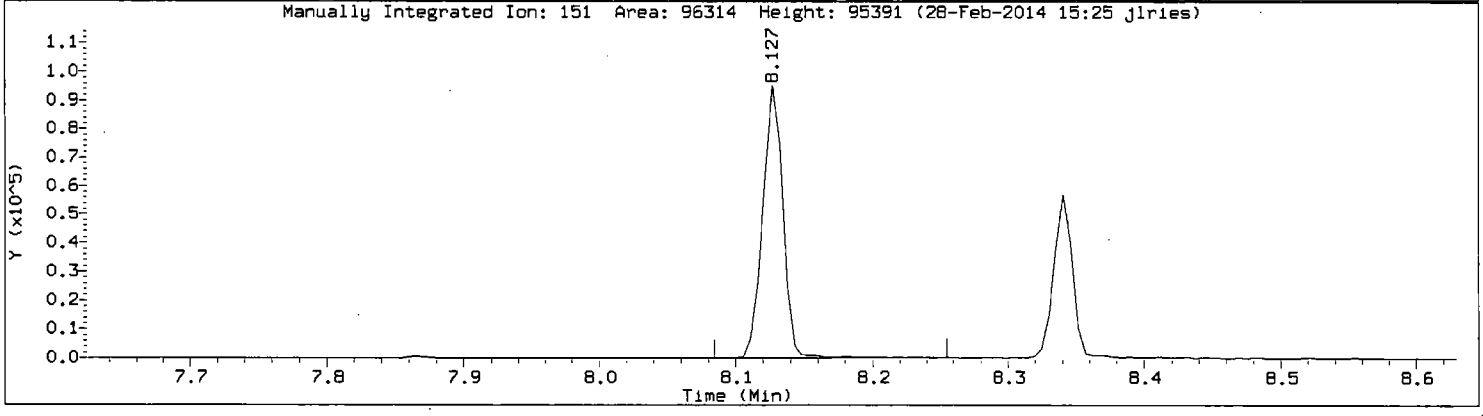
Injection Date: 28-FEB-2014 14:19
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 6

Compound: Acenaphthylene
CAS Number: 208-96-8

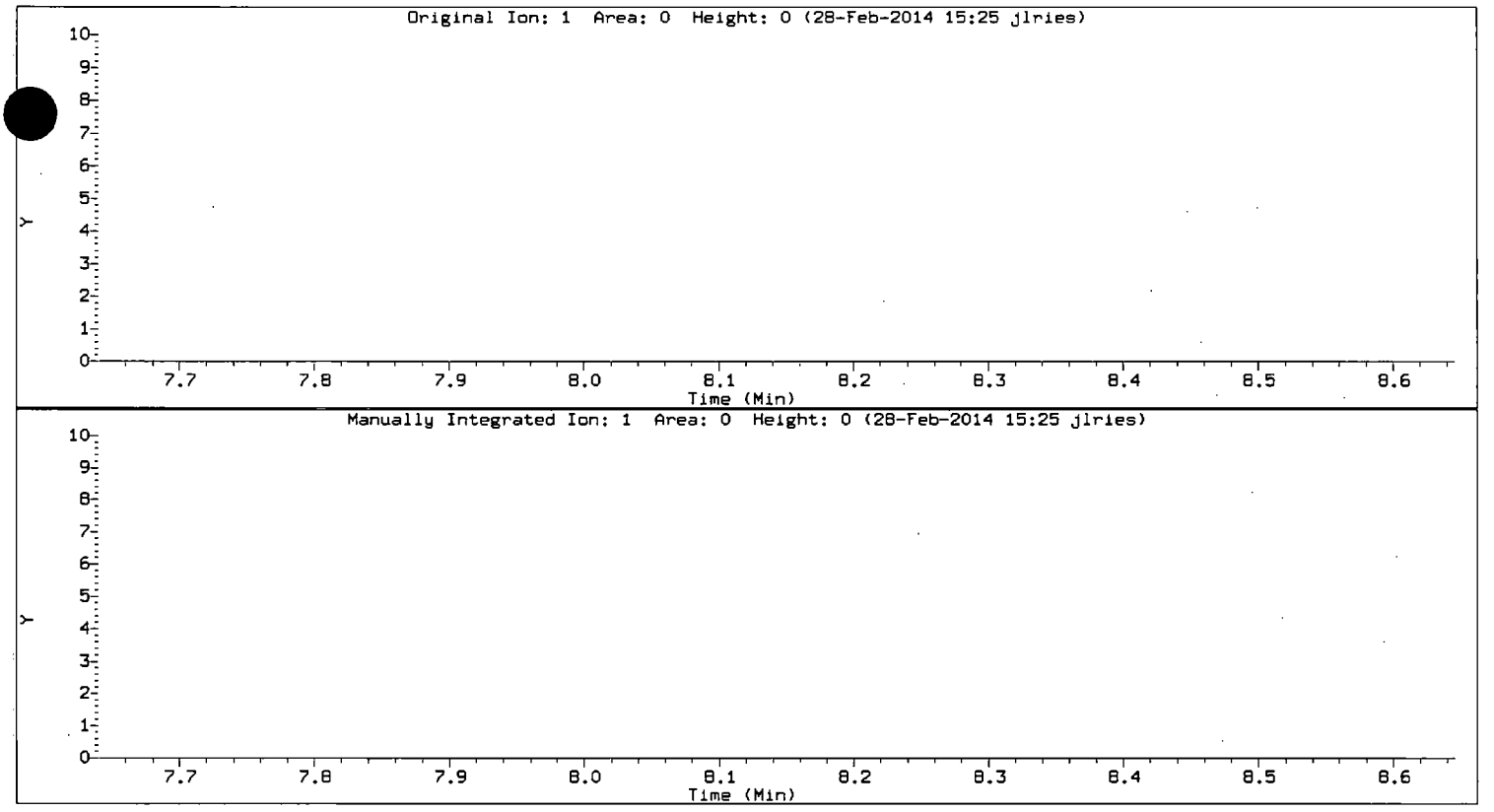








Injection Date: 28-FEB-2014 14:19
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 6



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Lab Smp Id: ICAL 10328-96 5
Inj Date : 28-FEB-2014 14:46
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 5
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 14:19 Cal File: 02281415.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	56918	40.0000	41.8(Q)
2	Pyridine	79	2.416	2.416	(0.512)	102123	40.0000	41.3
$ 3	2-Fluorophenol (S)	112	3.431	3.431	(0.727)	94960	40.0000	40.5
$ 4	Phenol-d6 (S)	99	4.291	4.291	(0.909)	107575	40.0000	39.9
5	Phenol	94	4.307	4.307	(0.913)	111471	40.0000	39.4
6	bis(2-Chloroethyl)ether	63	4.408	4.408	(0.934)	84675	40.0000	40.1
7	2-Chlorophenol	128	4.499	4.499	(0.954)	94458	40.0000	39.7
8	1,3-Dichlorobenzene	146	4.659	4.659	(0.988)	107015	40.0000	39.9
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	66214	40.0000	
10	1,4-Dichlorobenzene	146	4.734	4.734	(1.003)	107372	40.0000	39.4
11	Benzyl alcohol	79	4.841	4.841	(1.026)	66888	40.0000	41.1
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	100696	40.0000	39.6
13	2-Methylphenol	107	4.953	4.953	(1.050)	73079	40.0000	40.2
14	bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	215829	40.0000	39.9
15	3 & 4-Methylphenol	107	5.124	5.124	(1.086)	93332	40.0000	39.2
17	N-Nitroso-di-n-propylamine	70	5.130	5.130	(1.087)	55425	40.0000	40.4
18	Hexachloroethane	117	5.279	5.279	(1.119)	39344	40.0000	39.8
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	66651	30.0000	29.4
20	Nitrobenzene	77	5.338	5.338	(0.866)	84437	40.0000	39.1
21	Isophorone	82	5.605	5.605	(0.910)	151162	40.0000	39.0
22	2-Nitrophenol	139	5.707	5.707	(0.926)	48079	40.0000	38.0
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	85161	40.0000	38.7

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	5.819	5.819	(0.945)	46483	40.0000	41.0
	25 bis(2-Chloroethoxy)methane	93	5.845	5.845	(0.949)	90610	40.0000	39.5
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	73544	40.0000	38.7
	27 1,2,4-Trichlorobenzene	180	6.086	6.086	(0.988)	78252	40.0000	39.2
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	262409	40.0000	
	29 Naphthalene	128	6.187	6.187	(1.004)	262892	40.0000	39.5
	30 4-Chloroaniline	127	6.235	6.235	(1.012)	98710	40.0000	40.8
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	42698	40.0000	39.1
	32 4-Chloro-3-methylphenol	107	6.812	6.812	(1.106)	70759	40.0000	39.1
	33 2-Methylnaphthalene	142	7.015	7.015	(1.139)	172696	40.0000	39.3
	34 1-Methylnaphthalene	142	7.138	7.138	(1.159)	157915	40.0000	38.8
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	34429	40.0000	37.7
	36 2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	47244	40.0000	38.8
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	49712	40.0000	38.4
$	38 2-Fluorobiphenyl (S)	172	7.453	7.453	(0.898)	131987	30.0000	29.0
	39 2-Chloronaphthalene	162	7.608	7.608	(0.917)	152114	40.0000	38.3
	40 2-Nitroaniline	65	7.726	7.726	(0.931)	51847	40.0000	40.0
	41 Dimethylphthalate	163	7.945	7.945	(0.958)	167509	40.0000	38.9
	42 2,6-Dinitrotoluene	165	8.025	8.025	(0.967)	38487	40.0000	38.4
	43 Acenaphthylene	152	8.121	8.121	(0.979)	242747	40.0000	39.5(M)
	44 3-Nitroaniline	138	8.233	8.233	(0.992)	43630	40.0000	40.4
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	130288	40.0000	
	46 Acenaphthene	154	8.335	8.335	(1.004)	142210	40.0000	39.2
	47 2,4-Dinitrophenol	184	8.362	8.362	(1.008)	16083	40.0000	36.8(Q)
	48 4-Nitrophenol	65	8.442	8.442	(1.017)	32783	40.0000	39.6
	49 2,4-Dinitrotoluene	165	8.522	8.522	(1.027)	51545	40.0000	39.6
	50 Dibenzofuran	168	8.549	8.549	(1.030)	209648	40.0000	38.6
	51 Diethylphthalate	149	8.816	8.816	(1.062)	161220	40.0000	38.7
	52 4-Chlorophenylphenyl ether	204	8.965	8.965	(1.080)	79547	40.0000	40.0
	53 4-Nitroaniline	138	8.987	8.987	(1.083)	46365	40.0000	38.7
	54 Fluorene	166	8.976	8.976	(1.082)	174640	40.0000	39.6
	55 4,6-Dinitro-2-methylphenol	198	9.029	9.029	(0.891)	26289	40.0000	38.3
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	142661	40.0000	39.4
	57 Azobenzene	77	9.163	9.163	(1.104)	155396	40.0000	39.0
	58 1,2-Diphenylhydrazine	77	9.163	9.163	(1.104)	155396	40.0000	39.0
$	59 2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.117)	20170	40.0000	40.5
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.945)	39479	40.0000	37.4
	61 Hexachlorobenzene	284	9.660	9.660	(0.953)	42687	40.0000	38.1
	62 Pentachlorophenol	266	9.900	9.900	(0.977)	20378	40.0000	37.9
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	209792	40.0000	
	64 Phenanthrene	178	10.167	10.167	(1.003)	232332	40.0000	38.8
	65 Anthracene	178	10.231	10.231	(1.009)	238937	40.0000	39.3
	66 Carbazole	167	10.429	10.429	(1.029)	231437	40.0000	39.2
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	277838	40.0000	38.8
	68 Fluoranthene	202	11.647	11.647	(1.149)	253351	40.0000	38.9
	69 Benzidine	184	11.802	11.802	(0.879)	120421	40.0000	40.2
	70 Pyrene	202	11.930	11.930	(0.889)	262918	40.0000	39.0
$	71 Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	126386	30.0000	29.7
	72 Butylbenzylphthalate	149	12.710	12.710	(0.947)	123628	40.0000	39.6
	73 bis(2-Ethylhexyl)phthalate	149	13.405	13.405	(0.999)	177570	40.0000	40.7
	74 3,3'-Dichlorobenzidine	252	13.367	13.367	(0.996)	71113	40.0000	38.7
	75 Benzo(a)anthracene	228	13.410	13.410	(0.999)	241219	40.0000	39.5
*	76 Chrysene-d12	240	13.421	13.421	(1.000)	198936	40.0000	
	77 Chrysene	228	13.453	13.453	(1.002)	219495	40.0000	39.4

Data File: \\192.168.10.12\chem\10mss9.i\022814B.D\02281416.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.163	14.163	(1.055)	307488	40.0000	39.8
79	Benzo(b)fluoranthene	252	14.676	14.676	(0.967)	220798	40.0000	38.6
80	Benzo(k)fluoranthene	252	14.708	14.708	(0.969)	230287	40.0000	39.3
81	Benzo(a)pyrene	252	15.098	15.098	(0.995)	216242	40.0000	39.5
* 82	Perylene-d12	264	15.178	15.178	(1.000)	192771	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.861	16.861	(1.111)	231456	40.0000	39.2
84	Dibenzo(a,h)anthracene	278	16.883	16.883	(1.112)	196789	40.0000	39.2
85	Benzo(g,h,i)perylene	276	17.369	17.369	(1.144)	197203	40.0000	39.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\Chem\10mss9.i\022814B.b\02281416.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281416.D
Lab Smp Id: ICAL 10328-96 5
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19
Level: LOW
Sample Type: WATER

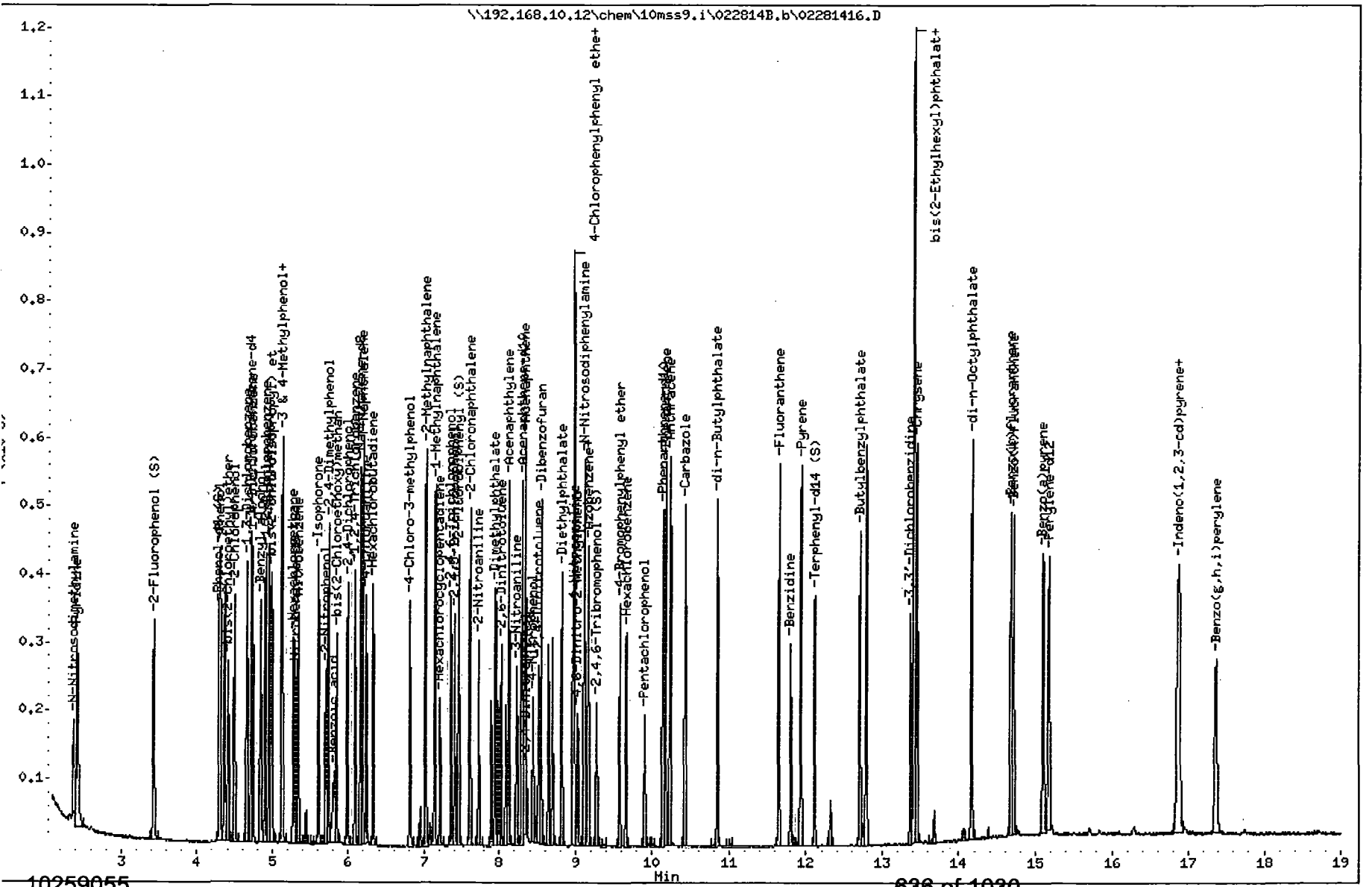
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	66214	0.73
28 Naphthalene-d8	256733	128367	513466	262409	2.21
45 Acenaphthene-d10	126640	63320	253280	130288	2.88
63 Phenanthrene-d10	206748	103374	413496	209792	1.47
76 Chrysene-d12	194855	97428	389710	198936	2.09
82 Perylene-d12	186487	93244	372974	192771	3.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.18	-0.00

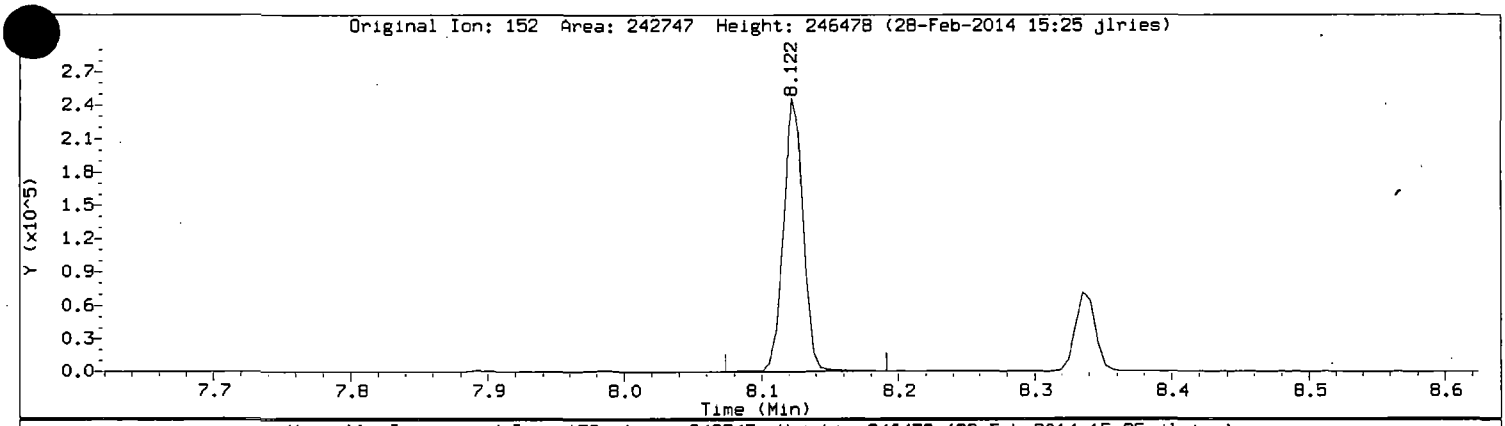
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

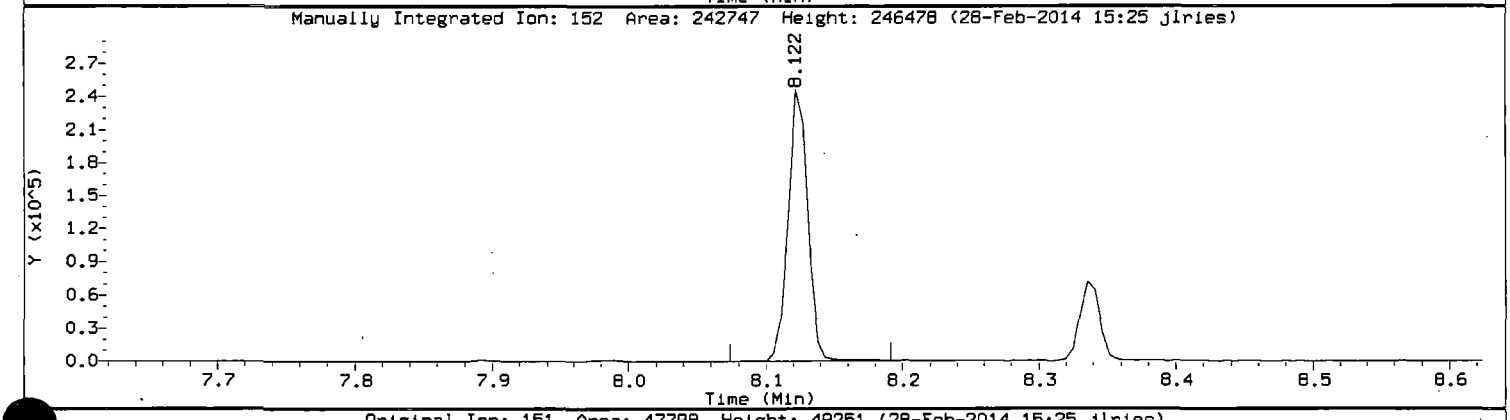
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281416.D
Date : 28-FEB-2014 14:46
Client ID:
Instrument: 10mss9.i
Sample Info: ICAL 10328-96 5
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

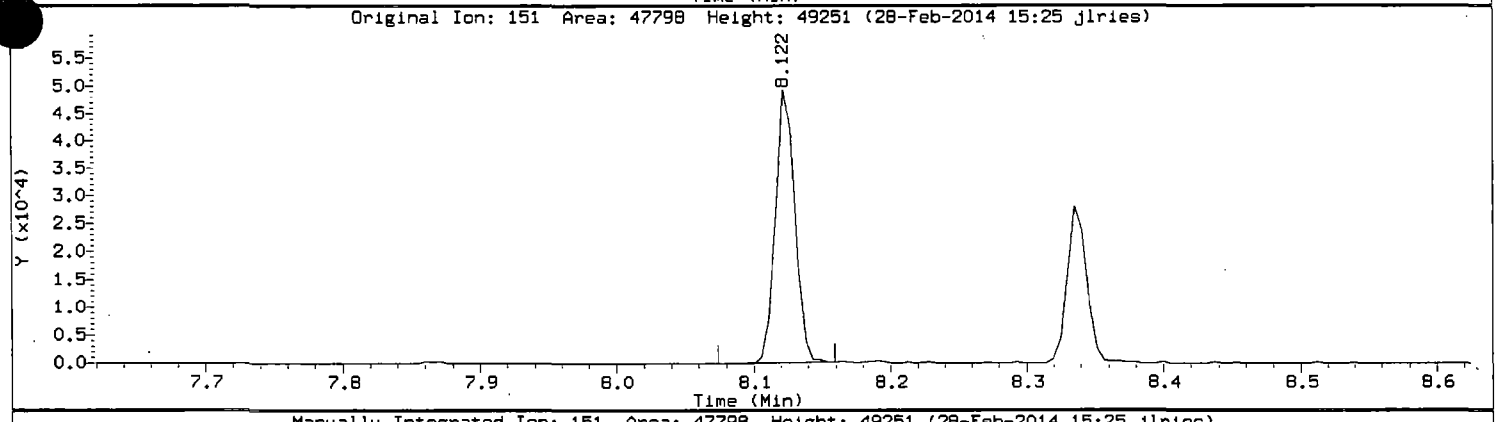


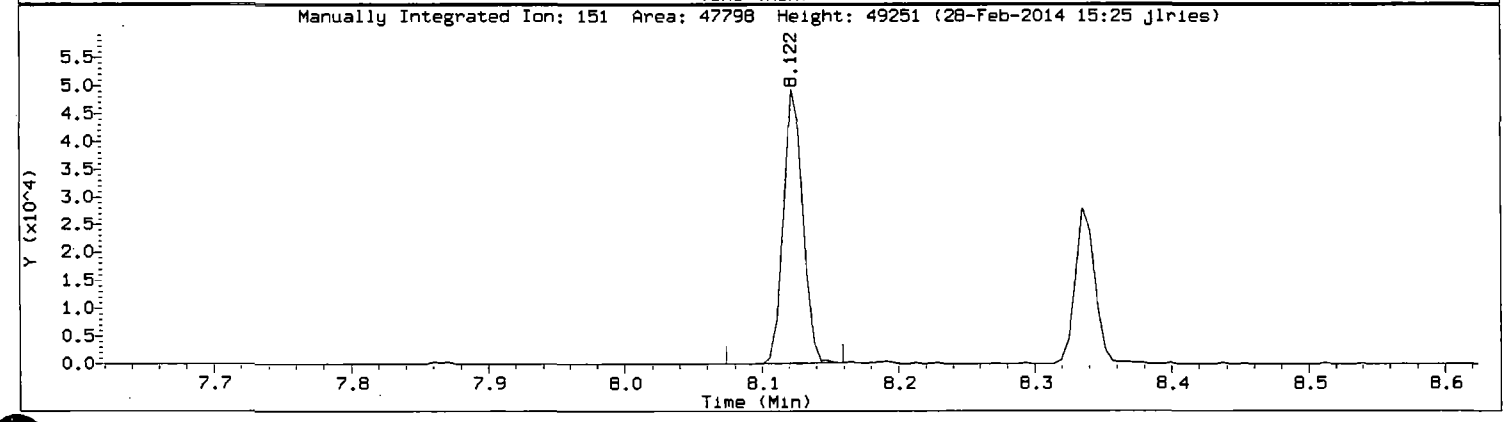
Injection Date: 28-FEB-2014 14:45
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 5

Compound: Acenaphthylene
CAS Number: 208-96-8

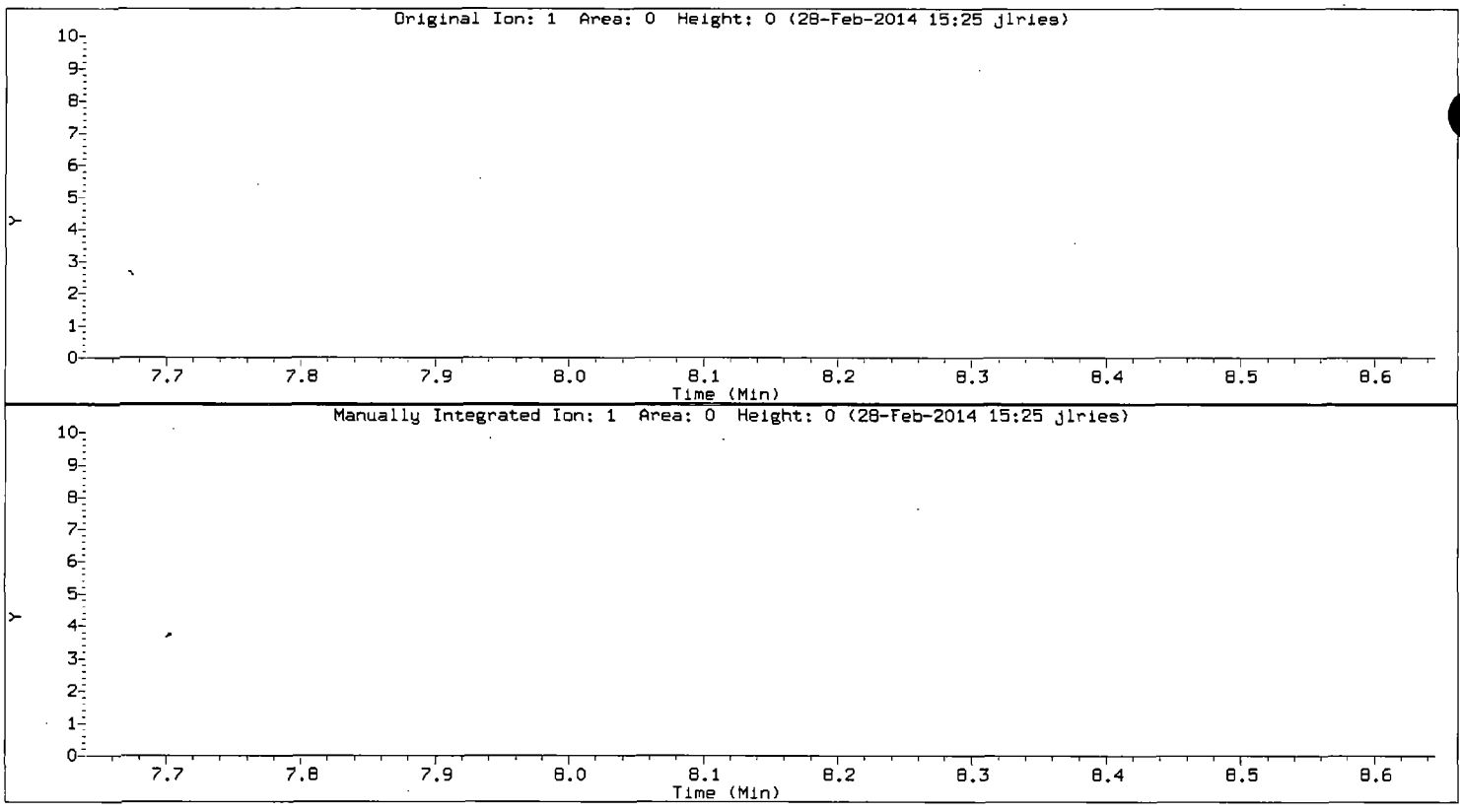








Injection Date: 28-FEB-2014 14:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 5



Data File: \\192.168.10.12\Chem\10mss9.i\022814B.b\02281417.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Lab Smp Id: ICAL 10328-96 4
Inj Date : 28-FEB-2014 15:13
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 4
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 14:46 Cal File: 02281416.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	26015	20.0000	19.9
2	Pyridine	79	2.421	2.421	(0.513)	47390	20.0000	20.0
$ 3	2-Fluorophenol (S)	112	3.431	3.431	(0.727)	46791	20.0000	20.8(M)
$ 4	Phenol-d6 (S)	99	4.291	4.291	(0.909)	53622	20.0000	20.7
5	Phenol	94	4.307	4.307	(0.913)	56935	20.0000	21.0
6	bis(2-Chloroethyl)ether	63	4.408	4.408	(0.934)	42667	20.0000	21.1
7	2-Chlorophenol	128	4.499	4.499	(0.954)	47231	20.0000	20.7
8	1,3-Dichlorobenzene	146	4.660	4.660	(0.988)	53991	20.0000	21.0
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	63506	40.0000	
10	1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	54390	20.0000	20.8
11	Benzyl alcohol	79	4.841	4.841	(1.026)	32689	20.0000	20.9
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	52296	20.0000	21.4
13	2-Methylphenol	107	4.953	4.953	(1.050)	35303	20.0000	20.2
14	bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	110200	20.0000	21.2
15	3 & 4-Methylphenol	107	5.119	5.119	(1.085)	47880	20.0000	21.0
17	N-Nitroso-di-n-propylamine	70	5.130	5.130	(1.087)	28620	20.0000	21.7
18	Hexachloroethane	117	5.279	5.279	(1.119)	20030	20.0000	21.1
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	33976	15.0000	15.6
20	Nitrobenzene	77	5.338	5.338	(0.866)	42998	20.0000	20.8
21	Isophorone	82	5.605	5.605	(0.910)	78559	20.0000	21.2
22	2-Nitrophenol	139	5.701	5.701	(0.925)	24207	20.0000	20.0
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	44747	20.0000	21.2

		QUANT SIG					AMOUNTS	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	5.797	5.797	(0.941)	22303	20.0000	20.6
	25 bis(2-Chloroethoxy)methane	93	5.840	5.840	(0.948)	46222	20.0000	21.1
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	37720	20.0000	20.7
	27 1,2,4-Trichlorobenzene	180	6.086	6.086	(0.988)	39457	20.0000	20.7
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	250866	40.0000	(Q)
	29 Naphthalene	128	6.182	6.182	(1.003)	133400	20.0000	21.0
	30 4-Chloroaniline	127	6.235	6.235	(1.012)	52404	20.0000	22.7
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	21934	20.0000	21.0
	32 4-Chloro-3-methylphenol	107	6.807	6.807	(1.105)	35968	20.0000	20.8
	33 2-Methylnaphthalene	142	7.015	7.015	(1.139)	85678	20.0000	20.4
	34 1-Methylnaphthalene	142	7.133	7.133	(1.158)	82296	20.0000	21.1
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	15640	20.0000	19.9
	36 2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	23542	20.0000	20.3
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	24934	20.0000	20.2
$	38 2-Fluorobiphenyl (S)	172	7.454	7.454	(0.898)	67365	15.0000	15.5
	39 2-Chloronaphthalene	162	7.608	7.608	(0.917)	78638	20.0000	20.7
	40 2-Nitroaniline	65	7.726	7.726	(0.931)	24868	20.0000	20.1
	41 Dimethylphthalate	163	7.945	7.945	(0.958)	87338	20.0000	21.2
	42 2,6-Dinitrotoluene	165	8.020	8.020	(0.967)	20573	20.0000	21.5
	43 Acenaphthylene	152	8.121	8.121	(0.979)	123016	20.0000	21.0 (M)
	44 3-Nitroaniline	138	8.228	8.228	(0.992)	24103	20.0000	23.4
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	124370	40.0000	
	46 Acenaphthene	154	8.335	8.335	(1.004)	71233	20.0000	20.6
	47 2,4-Dinitrophenol	184	8.356	8.356	(1.007)	6442	20.0000	18.9 (Q)
	48 4-Nitrophenol	65	8.436	8.436	(1.017)	16257	20.0000	20.6
	49 2,4-Dinitrotoluene	165	8.517	8.517	(1.026)	25974	20.0000	20.9
	50 Dibenzofuran	168	8.549	8.549	(1.030)	110081	20.0000	21.2
	51 Diethylphthalate	149	8.816	8.816	(1.062)	82143	20.0000	20.6
	52 4-Chlorophenylphenyl ether	204	8.965	8.965	(1.080)	38827	20.0000	20.5
	53 4-Nitroaniline	138	8.981	8.981	(1.082)	23798	20.0000	20.8
	54 Fluorene	166	8.971	8.971	(1.081)	89060	20.0000	21.2
	55 4,6-Dinitro-2-methylphenol	198	9.024	9.024	(0.890)	11832	20.0000	20.1
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	72627	20.0000	21.2
	57 Azobenzene	77	9.163	9.163	(1.104)	80133	20.0000	21.0
	58 1,2-Diphenylhydrazine	77	9.163	9.163	(1.104)	80133	20.0000	21.0
$	59 2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.117)	9803	20.0000	20.6
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.945)	21034	20.0000	21.0
	61 Hexachlorobenzene	284	9.660	9.660	(0.953)	22122	20.0000	20.8
	62 Pentachlorophenol	266	9.900	9.900	(0.977)	8649	20.0000	19.2
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	198494	40.0000	
	64 Phenanthrene	178	10.167	10.167	(1.003)	117303	20.0000	20.7
	65 Anthracene	178	10.231	10.231	(1.009)	119974	20.0000	20.8
	66 Carbazole	167	10.424	10.424	(1.028)	116812	20.0000	20.9
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	139051	20.0000	20.5
	68 Fluoranthene	202	11.647	11.647	(1.149)	128995	20.0000	20.9
	69 Benzidine	184	11.797	11.797	(0.879)	66277	20.0000	21.5
	70 Pyrene	202	11.930	11.930	(0.889)	135762	20.0000	21.1
$	71 Terphenyl-d14 (S)	244	12.107	12.107	(0.902)	63675	15.0000	15.7
	72 Butylbenzylphthalate	149	12.705	12.705	(0.947)	62645	20.0000	21.0
	73 bis(2-Ethylhexyl)phthalate	149	13.405	13.405	(0.999)	90258	20.0000	21.7
	74 3,3'-Dichlorobenzidine	252	13.362	13.362	(0.996)	37173	20.0000	21.2
	75 Benzo(a)anthracene	228	13.405	13.405	(0.999)	121153	20.0000	20.8
*	76 Chrysene-d12	240	13.421	13.421	(1.000)	189835	40.0000	(Q)
	77 Chrysene	228	13.453	13.453	(1.002)	111421	20.0000	20.9

Data File: \\192.168.10.12\Chem\10MSD9.I\022814B.D\0228141?.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.163	14.163	(1.055)	154307	20.0000	20.9
	79 Benzo(b)fluoranthene	252	14.676	14.676	(0.967)	113872	20.0000	20.9
	80 Benzo(k)fluoranthene	252	14.708	14.708	(0.969)	114920	20.0000	20.6
	81 Benzo(a)pyrene	252	15.098	15.098	(0.995)	110112	20.0000	21.1
*	82 Perylene-d12	264	15.173	15.173	(1.000)	183639	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	16.851	16.851	(1.111)	115545	20.0000	20.6
	84 Dibenzo(a,h)anthracene	278	16.872	16.872	(1.112)	98277	20.0000	20.6
	85 Benzo(g,h,i)perylene	276	17.363	17.363	(1.144)	99014	20.0000	20.8

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281417.D
Lab Smp Id: ICAL 10328-96 4
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

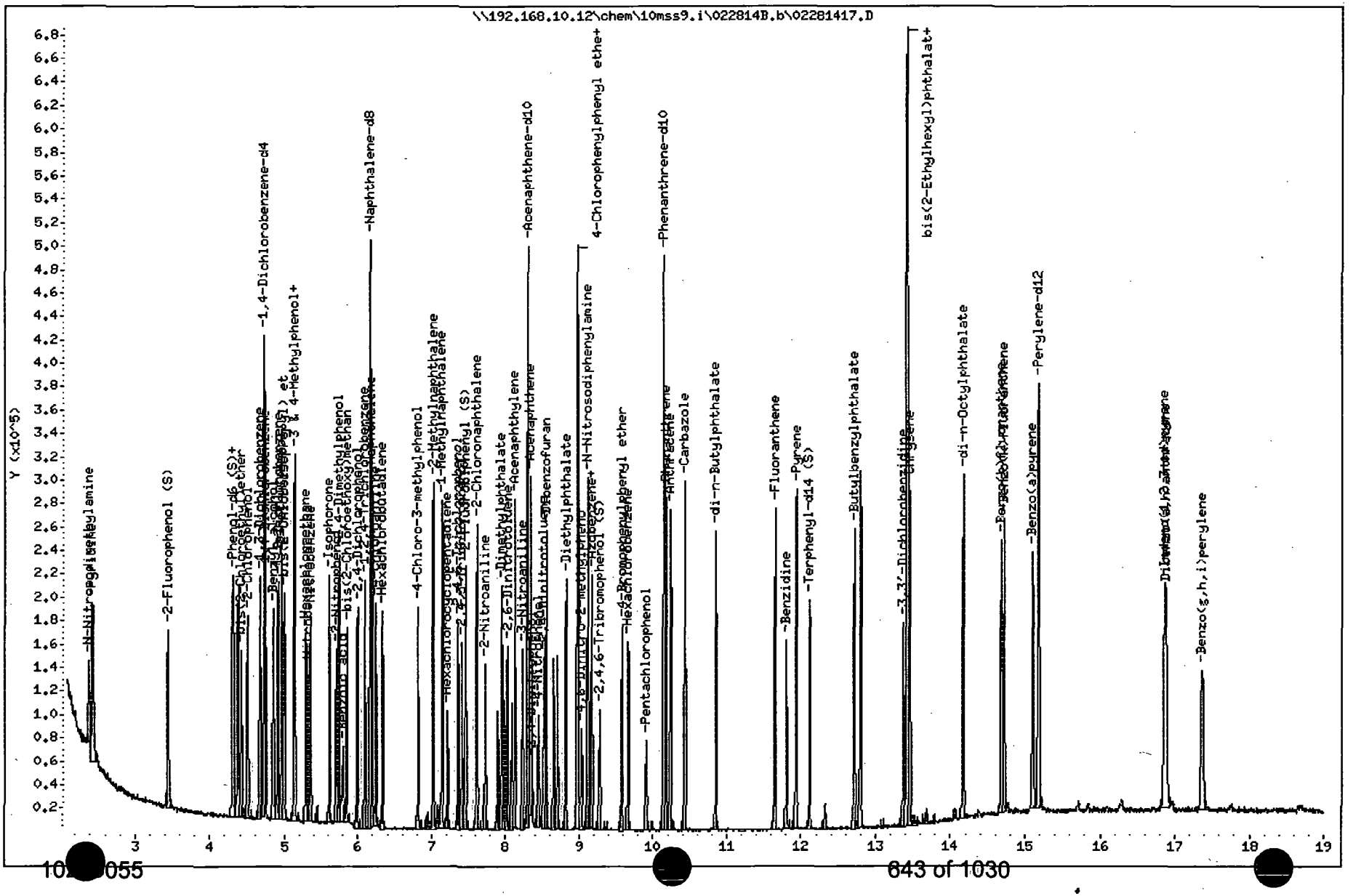
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	63506	-3.39
28 Naphthalene-d8	256733	128367	513466	250866	-2.29
45 Acenaphthene-d10	126640	63320	253280	124370	-1.79
63 Phenanthrene-d10	206748	103374	413496	198494	-3.99
76 Chrysene-d12	194855	97428	389710	189835	-2.58
82 Perylene-d12	186487	93244	372974	183639	-1.53

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281417.D
Date : 28-FEB-2014 15:13
Client ID:
Sample Info: ICAL 10328-96 4
Purge Volume: 1.0
Column phase: DB-5HS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25



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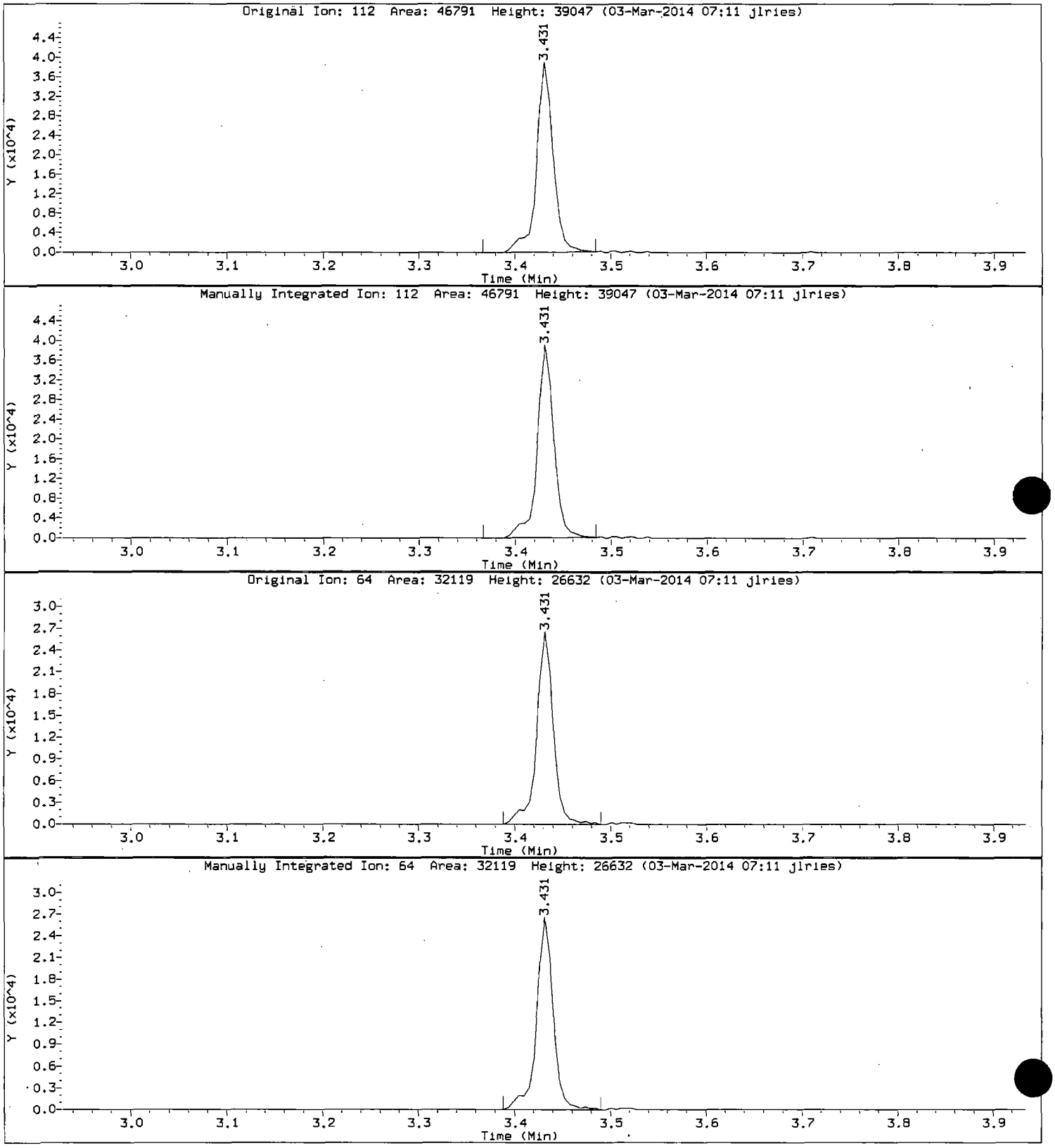
Injection Date: 28-FEB-2014 15:13
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 4

Compound: 2-Fluorophenol (S)
CAS Number: 367-12-4



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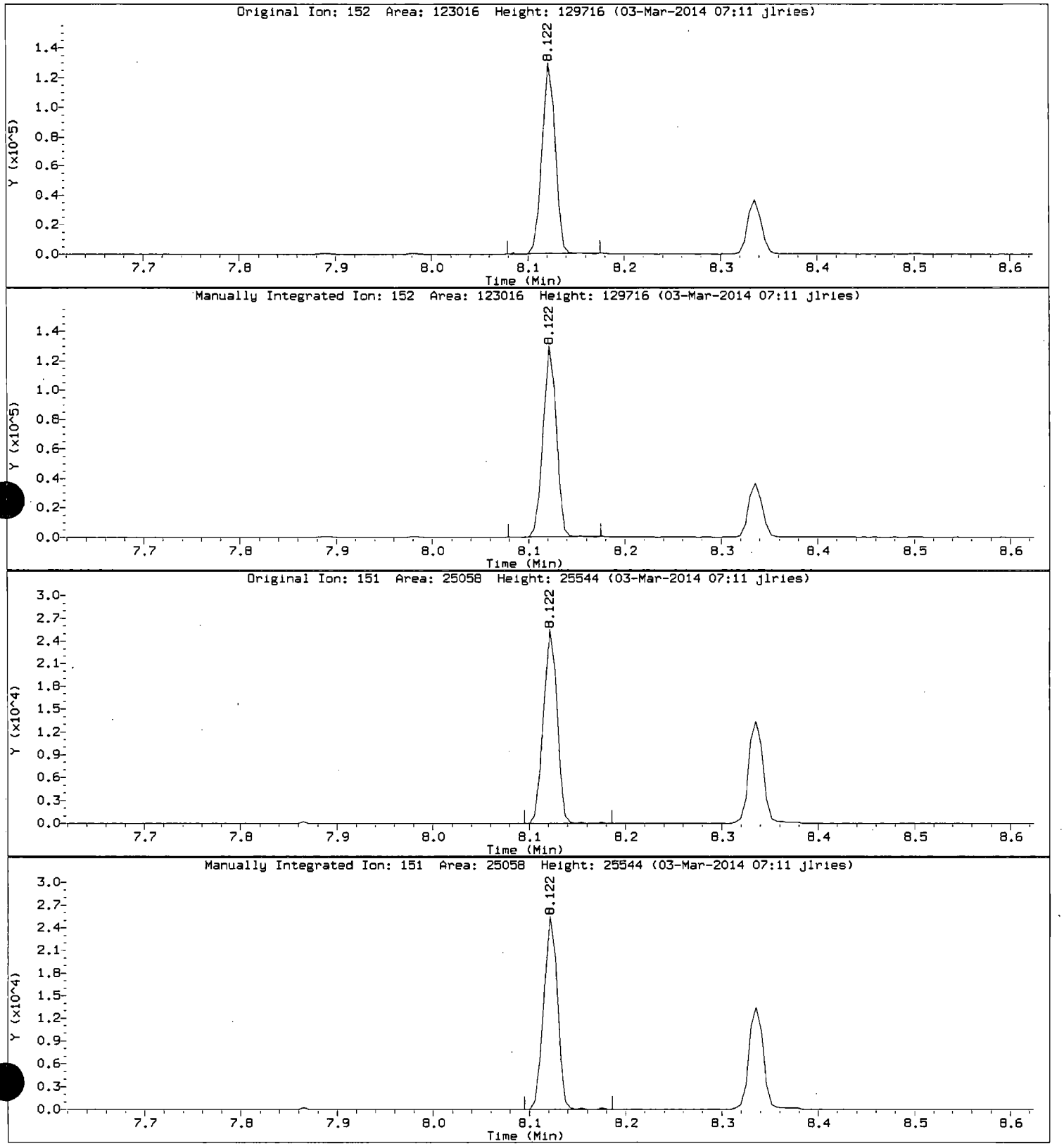
Injection Date: 28-FEB-2014 15:13
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 4

Compound: Acenaphthylene
CAS Number: 208-96-8



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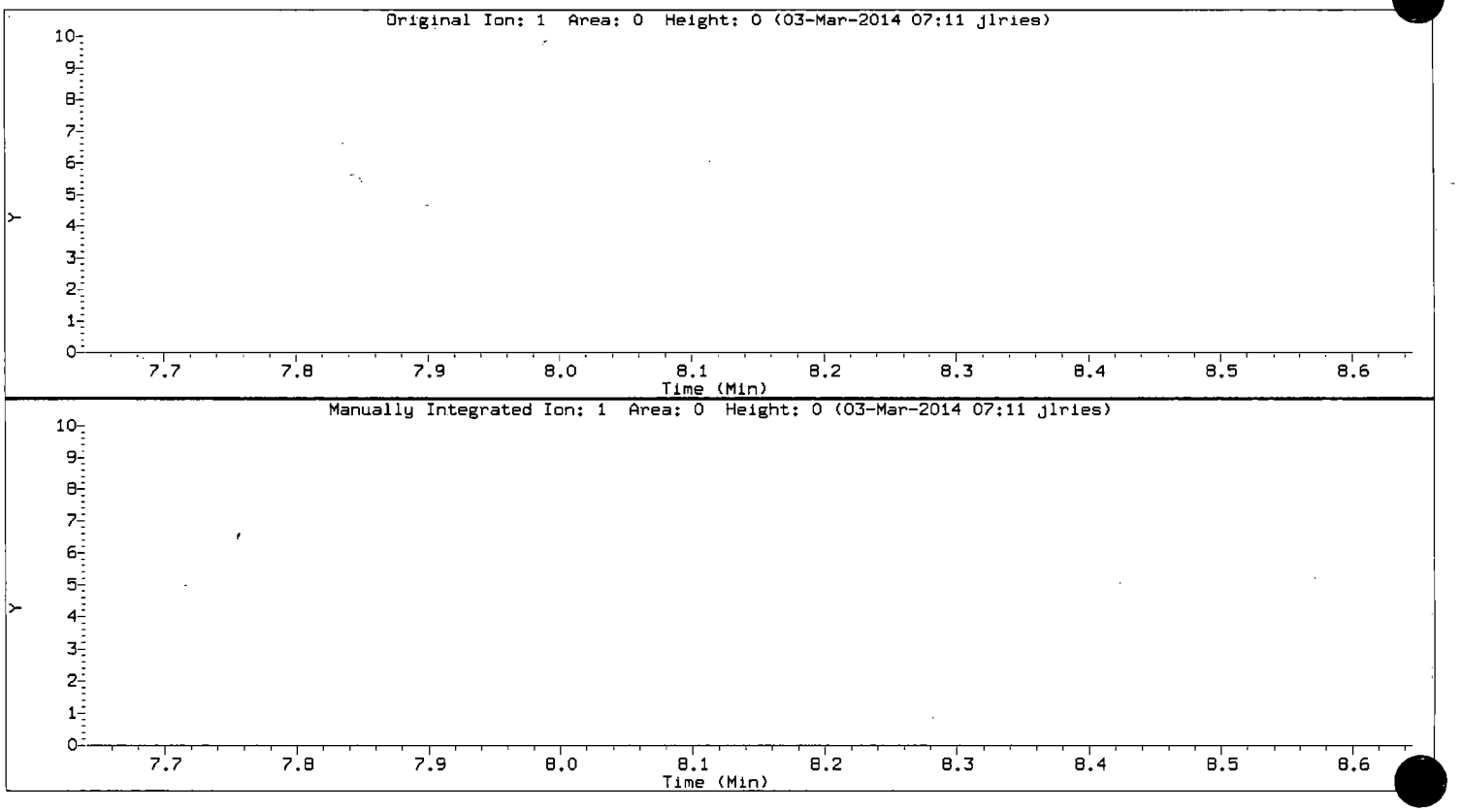
Injection Date: 28-FEB-2014 15:13
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 4



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Lab Smp Id: ICAL 10328-96 3
Inj Date : 28-FEB-2014 15:40
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 3
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 15:13 Cal File: 02281417.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
pnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.378	2.378	(0.504)	15599	10.0000	9.6(a)
2	Pyridine	79	2.421	2.421	(0.513)	30153	10.0000	10.2
$ 3	2-Fluorophenol (S)	112	3.431	3.431	(0.727)	27877	10.0000	9.9(aM)
$ 4	Phenol-d6 (S)	99	4.291	4.291	(0.909)	31904	10.0000	9.9(a)
5	Phenol	94	4.307	4.307	(0.913)	34374	10.0000	10.1
6	bis(2-Chloroethyl)ether	63	4.408	4.408	(0.934)	25103	10.0000	9.9(a)
7	2-Chlorophenol	128	4.499	4.499	(0.954)	27449	10.0000	9.6(a)
8	1,3-Dichlorobenzene	146	4.660	4.660	(0.988)	33026	10.0000	10.3
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	79179	40.0000	
10	1,4-Dichlorobenzene	146	4.734	4.734	(1.003)	32625	10.0000	10.0
11	Benzyl alcohol	79	4.841	4.841	(1.026)	17632	10.0000	9.0(a)
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	29516	10.0000	9.7(a)
13	2-Methylphenol	107	4.953	4.953	(1.050)	21368	10.0000	9.8(a)
14	bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	64305	10.0000	9.9(a)
15	3 & 4-Methylphenol	107	5.119	5.119	(1.085)	28378	10.0000	10
17	N-Nitroso-di-n-propylamine	70	5.130	5.130	(1.087)	15969	10.0000	9.7(a)
18	Hexachloroethane	117	5.279	5.279	(1.119)	11296	10.0000	9.6(a)
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	19716	7.50000	7.5(a)
20	Nitrobenzene	77	5.338	5.338	(0.866)	25156	10.0000	10.1
21	Isophorone	82	5.605	5.605	(0.910)	44935	10.0000	10.0
22	2-Nitrophenol	139	5.701	5.701	(0.925)	14155	10.0000	9.7(a)
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	25539	10.0000	10.0

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	5.781	5.781	(0.938)	12879	10.0000	9.8(aM)
	25 bis(2-Chloroethoxy)methane	93	5.840	5.840	(0.948)	26835	10.0000	10.1
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	22243	10.0000	10.1
	27 1,2,4-Trichlorobenzene	180	6.086	6.086	(0.988)	23150	10.0000	10.0
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	303763	40.0000	(Q)
	29 Naphthalene	128	6.182	6.182	(1.003)	79404	10.0000	10.3
	30 4-Chloroaniline	127	6.230	6.230	(1.011)	32087	10.0000	11.5
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	12499	10.0000	9.9(a)
	32 4-Chloro-3-methylphenol	107	6.807	6.807	(1.105)	21482	10.0000	10.3
	33 2-Methylnaphthalene	142	7.016	7.016	(1.139)	52962	10.0000	10.4
	34 1-Methylnaphthalene	142	7.133	7.133	(1.158)	48756	10.0000	10.3
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	8113	10.0000	10.7
	36 2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	13652	10.0000	9.8(a)
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	15242	10.0000	10.3
$	38 2-Fluorobiphenyl (S)	172	7.454	7.454	(0.898)	39788	7.50000	7.6(a)
	39 2-Chloronaphthalene	162	7.608	7.608	(0.917)	46695	10.0000	10.3
	40 2-Nitroaniline	65	7.721	7.721	(0.930)	15594	10.0000	10.5
	41 Dimethylphthalate	163	7.945	7.945	(0.958)	50143	10.0000	10.2
	42 2,6-Dinitrotoluene	165	8.020	8.020	(0.967)	11397	10.0000	9.9(a)
	43 Acenaphthylene	152	8.121	8.121	(0.979)	72641	10.0000	10.3(M)
	44 3-Nitroaniline	138	8.228	8.228	(0.992)	13979	10.0000	11.3
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	149118	40.0000	
	46 Acenaphthene	154	8.335	8.335	(1.004)	42749	10.0000	10.3
	47 2,4-Dinitrophenol	184	8.362	8.362	(1.008)	2701	10.0000	10.5(Q)
	48 4-Nitrophenol	65	8.437	8.437	(1.017)	9268	10.0000	9.8(a)
	49 2,4-Dinitrotoluene	165	8.517	8.517	(1.026)	14886	10.0000	10
	50 Dibenzofuran	168	8.549	8.549	(1.030)	64508	10.0000	10.4
	51 Diethylphthalate	149	8.816	8.816	(1.062)	49380	10.0000	10.4
	52 4-Chlorophenylphenyl ether	204	8.965	8.965	(1.080)	23232	10.0000	10.2
	53 4-Nitroaniline	138	8.976	8.976	(1.082)	13945	10.0000	10.2(Q)
	54 Fluorene	166	8.971	8.971	(1.081)	50710	10.0000	10.0
	55 4,6-Dinitro-2-methylphenol	198	9.019	9.019	(0.890)	5757	10.0000	10.0
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	42029	10.0000	10
	57 Azobenzene	77	9.158	9.158	(1.104)	48578	10.0000	10.6
	58 1,2-Diphenylhydrazine	77	9.158	9.158	(1.104)	48578	10.0000	10.6
$	59 2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.117)	5653	10.0000	9.9(a)
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.945)	12461	10.0000	10.1
	61 Hexachlorobenzene	284	9.655	9.655	(0.953)	13419	10.0000	10.3
	62 Pentachlorophenol	266	9.900	9.900	(0.977)	4699	10.0000	10.6
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	243797	40.0000	
	64 Phenanthrene	178	10.167	10.167	(1.003)	71227	10.0000	10.2
	65 Anthracene	178	10.232	10.232	(1.009)	70754	10.0000	10.0
	66 Carbazole	167	10.424	10.424	(1.028)	69322	10.0000	10.1
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	82542	10.0000	9.9(a)
	68 Fluoranthene	202	11.642	11.642	(1.149)	75439	10.0000	10
	69 Benzidine	184	11.797	11.797	(0.879)	42637	10.0000	10.3
	70 Pyrene	202	11.925	11.925	(0.889)	82000	10.0000	10.4
$	71 Terphenyl-d14 (S)	244	12.107	12.107	(0.902)	38254	7.50000	7.7(a)
	72 Butylbenzylphthalate	149	12.705	12.705	(0.947)	35944	10.0000	9.8(a)
	73 bis(2-Ethylhexyl)phthalate	149	13.405	13.405	(0.999)	52611	10.0000	10.3
	74 3,3'-Dichlorobenzidine	252	13.362	13.362	(0.996)	23992	10.0000	11.2
	75 Benzo(a)anthracene	228	13.405	13.405	(0.999)	72509	10.0000	10.1
*	76 Chrysene-d12	240	13.421	13.421	(1.000)	232621	40.0000	(Q)
	77 Chrysene	228	13.448	13.448	(1.002)	65723	10.0000	10.1

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.163	14.163	(1.055)	91732	10.0000	10.1
79	Benzo(b)fluoranthene	252	14.676	14.676	(0.967)	69068	10.0000	10.7
80	Benzo(k)fluoranthene	252	14.708	14.708	(0.969)	68016	10.0000	10.3
81	Benzo(a)pyrene	252	15.098	15.098	(0.995)	62112	10.0000	10.0
* 82	Perylene-d12	264	15.173	15.173	(1.000)	218093	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.851	16.851	(1.111)	67583	10.0000	10.1(M)
84	Dibenzo(a,h)anthracene	278	16.872	16.872	(1.112)	57565	10.0000	10.1
85	Benzo(g,h,i)perylene	276	17.358	17.358	(1.144)	57288	10.0000	10.1

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281418.D
Lab Smp Id: ICAL 10328-96 3
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19
Level: LOW
Sample Type: WATER

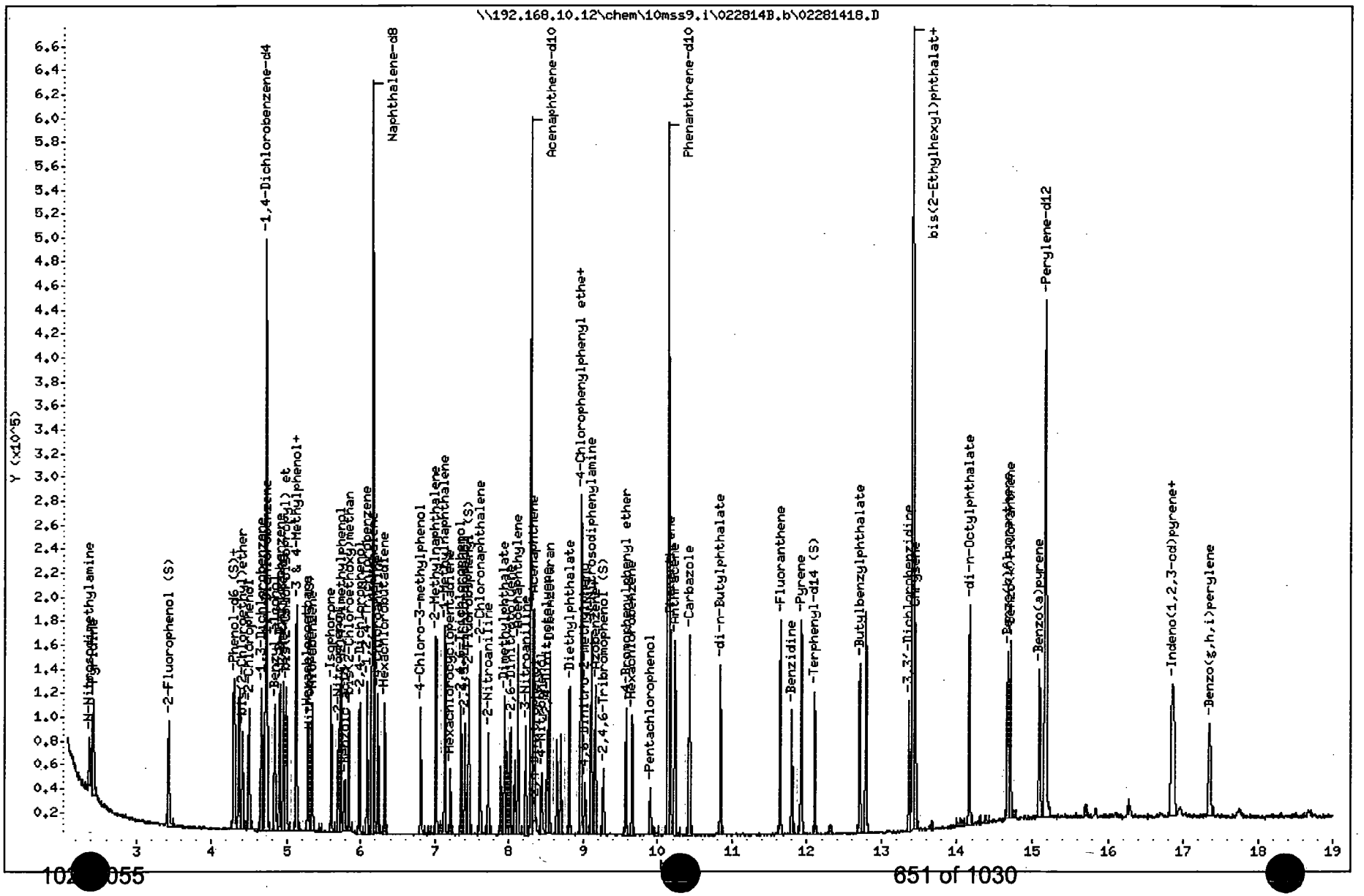
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	79179	20.46
28 Naphthalene-d8	256733	128367	513466	303763	18.32
45 Acenaphthene-d10	126640	63320	253280	149118	17.75
63 Phenanthrene-d10	206748	103374	413496	243797	17.92
76 Chrysene-d12	194855	97428	389710	232621	19.38
82 Perylene-d12	186487	93244	372974	218093	16.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281418.D
Date : 28-FEB-2014 15:40
Client ID:
Instrument: 10mss9.i
Sample Info: ICAL 10328-96 3
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



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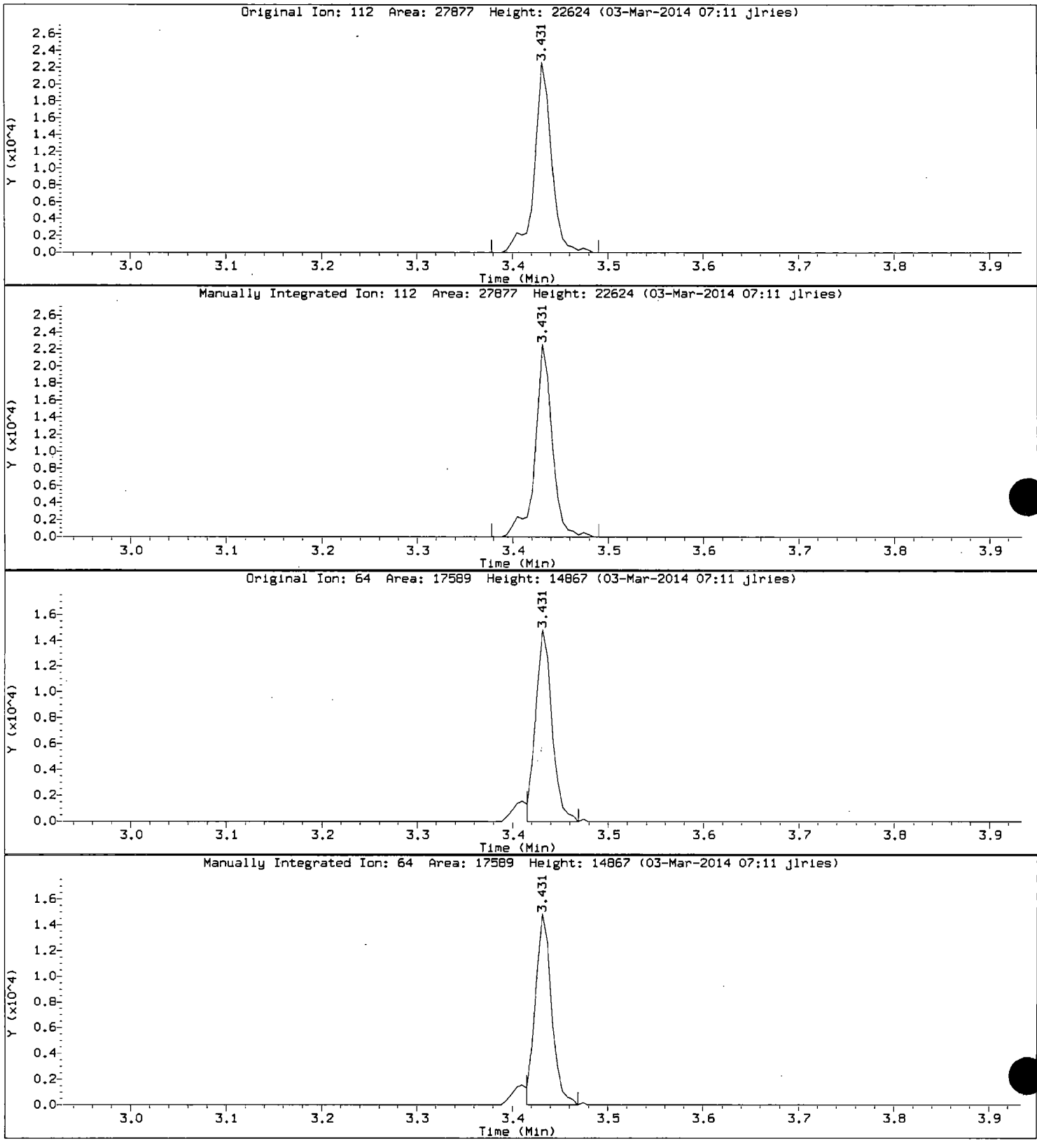
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: 2-Fluorophenol (S)
CAS Number: 367-12-4



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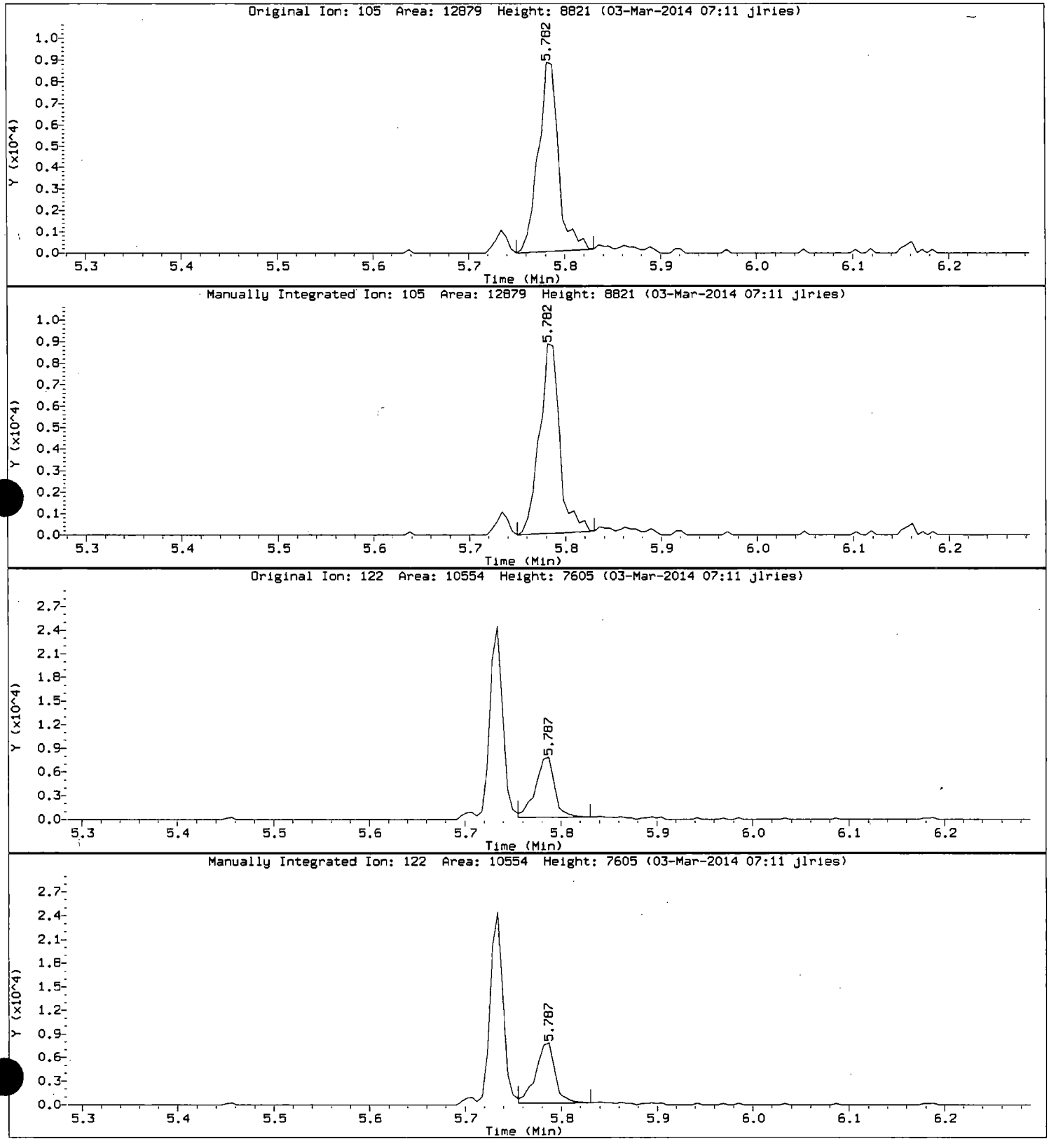
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: Benzoic acid
CAS Number: 65-85-0



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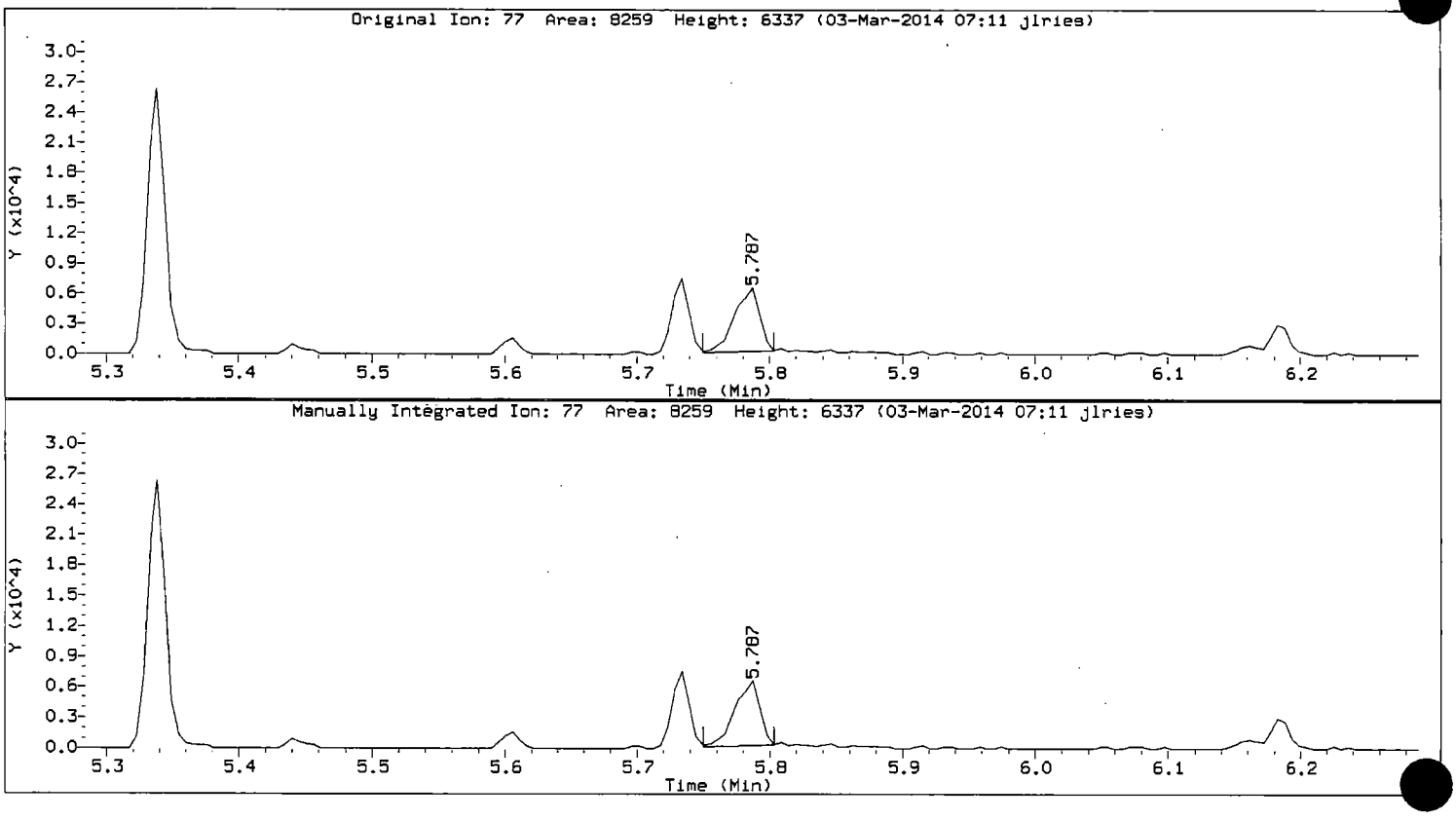
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3



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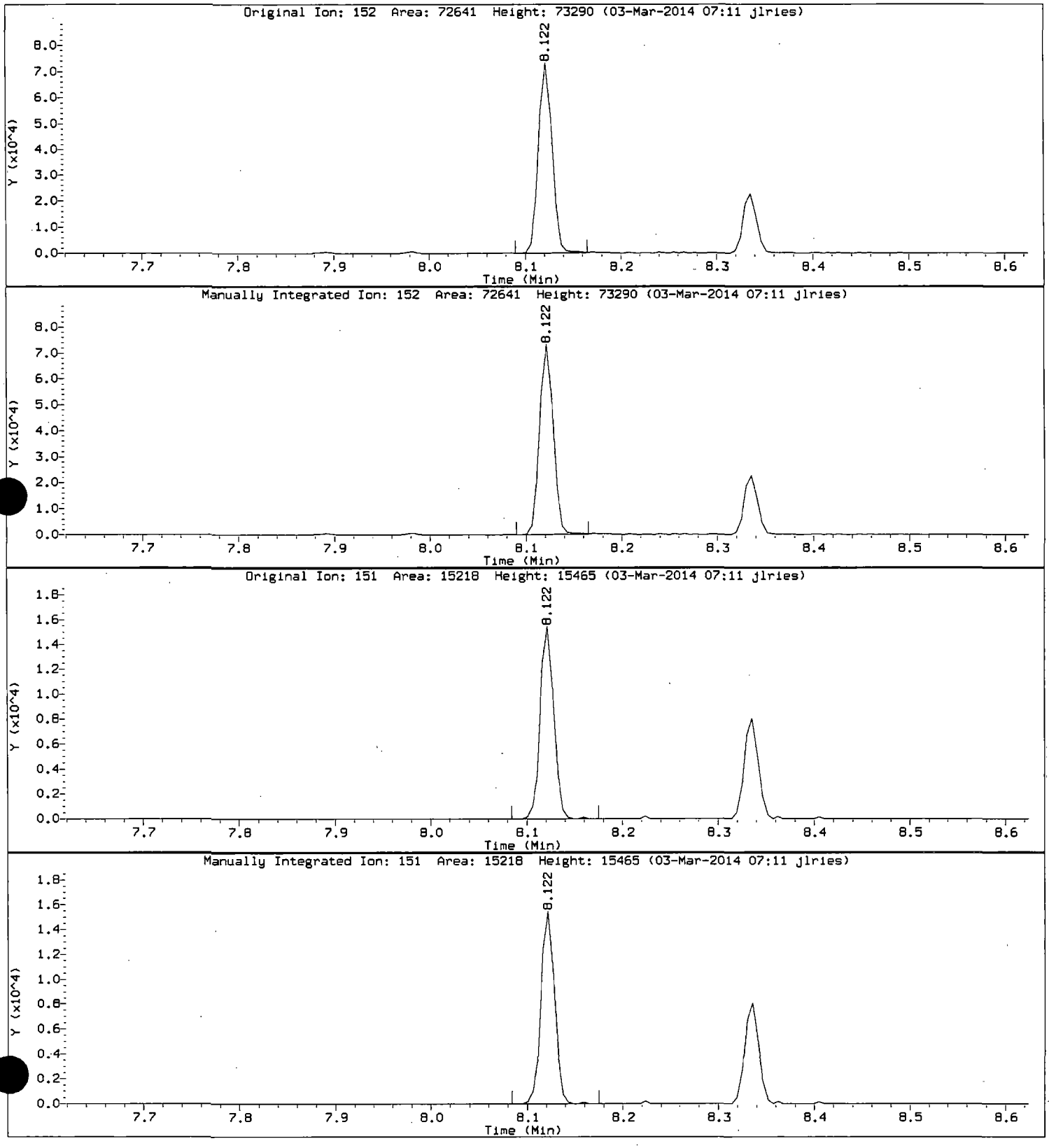
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: Acenaphthylene
CAS Number: 208-96-8



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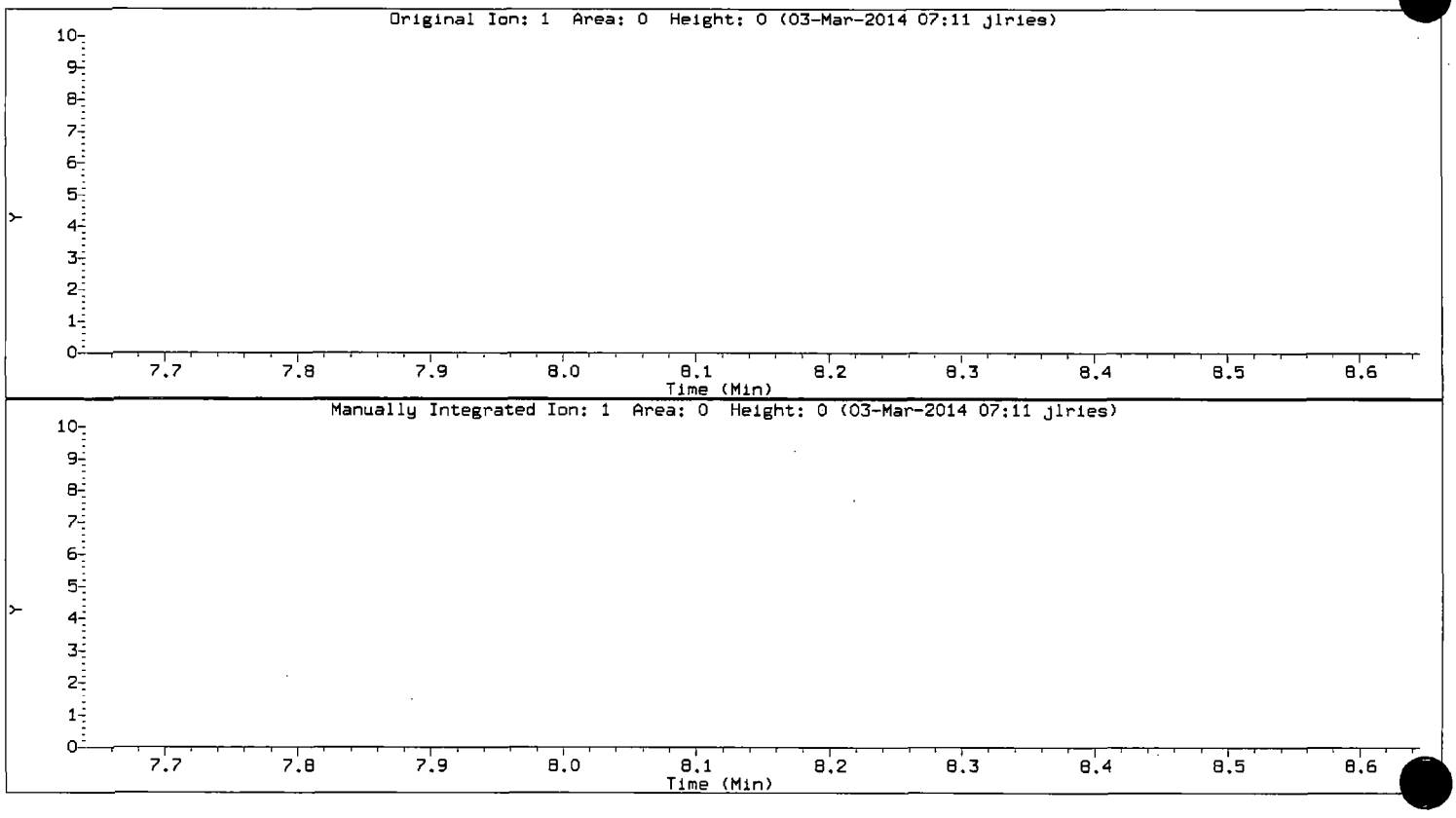
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3



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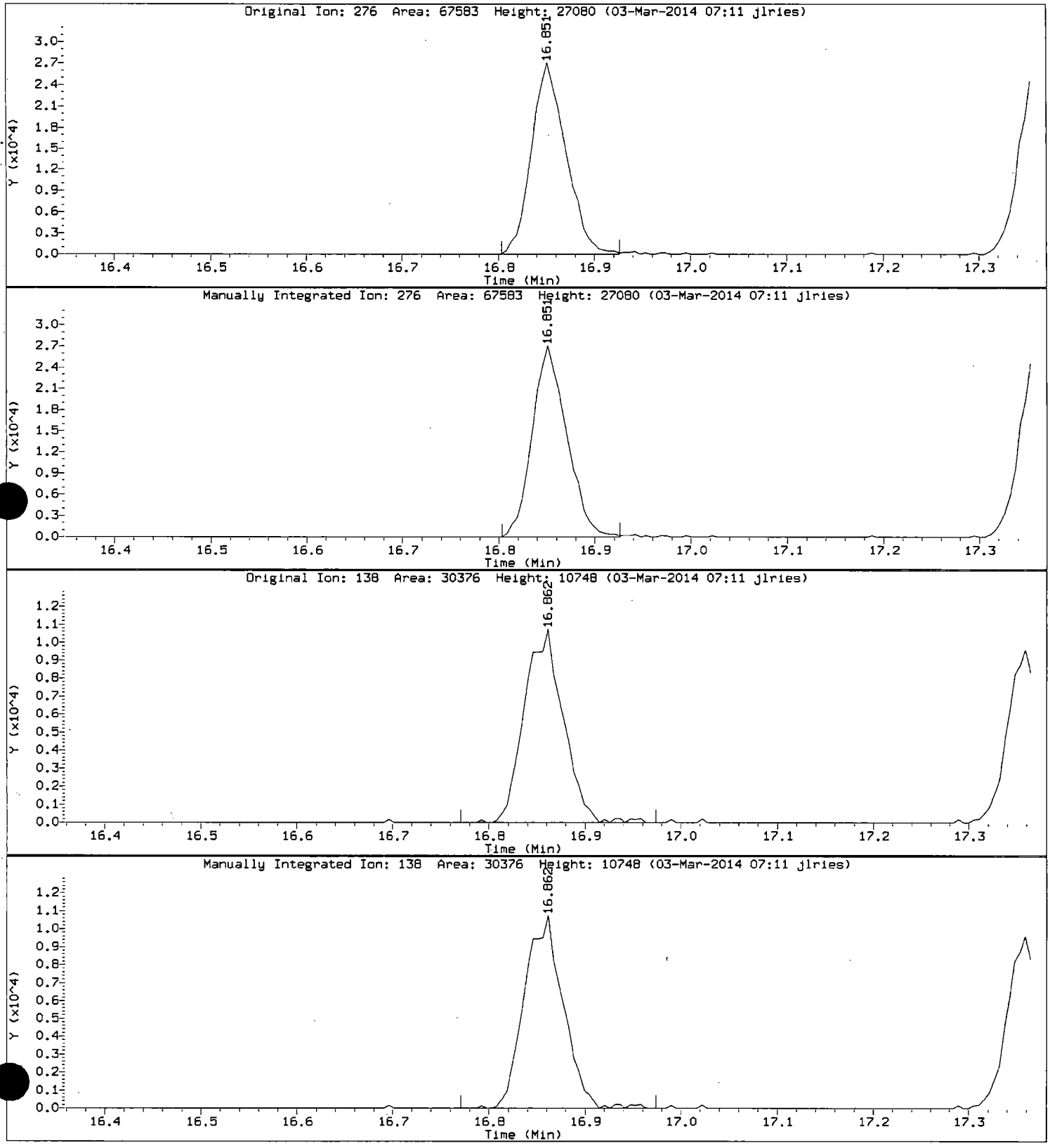
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5



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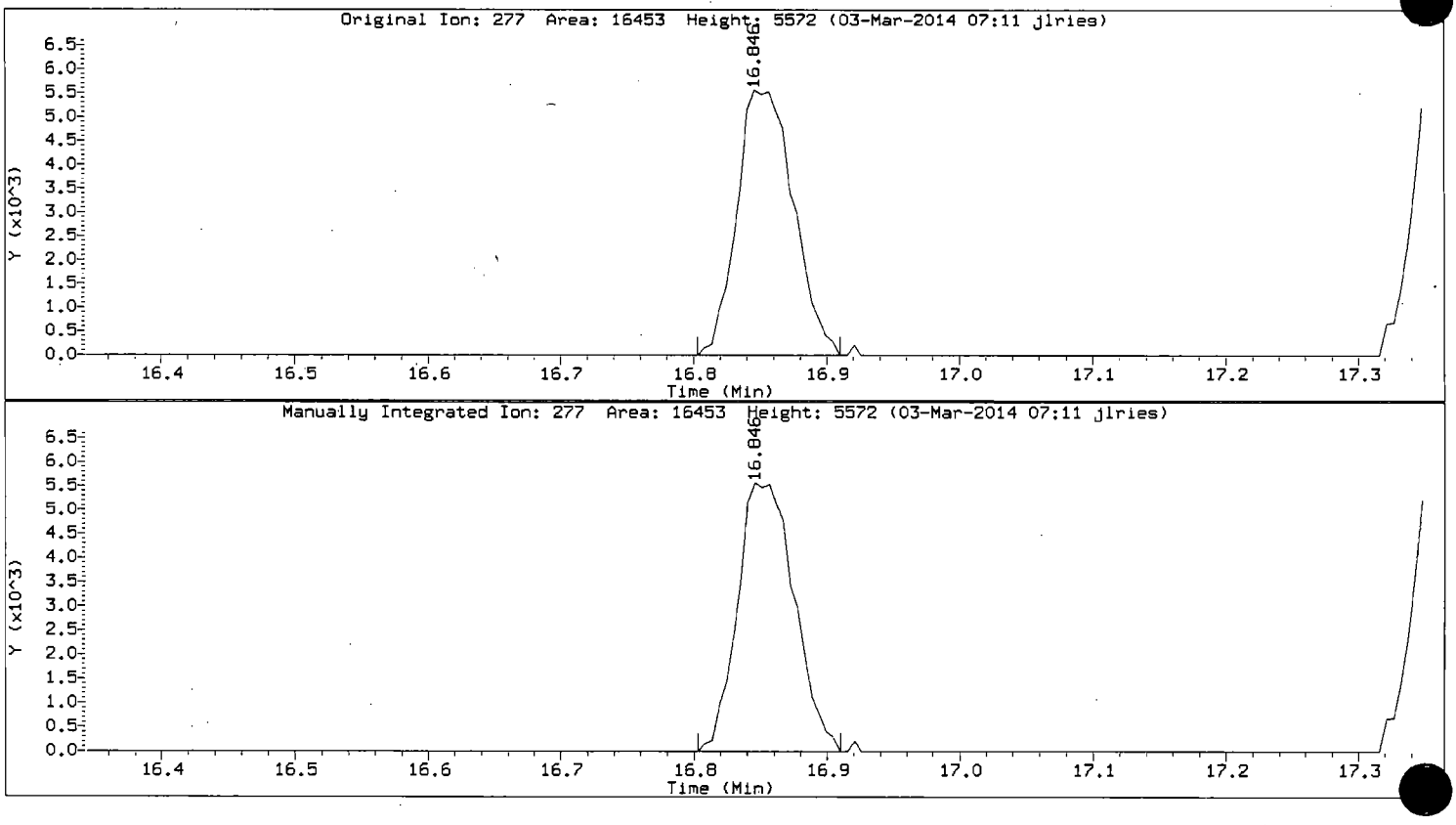
Injection Date: 28-FEB-2014 15:40
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3



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Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Lab Smp Id: ICAL 10328-96 2
Inj Date : 28-FEB-2014 16:07
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 2
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 15:40 Cal File: 02281418.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
CpndVariable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	5930	5.00000	4.4(aQ)
2	Pyridine	79	2.421	2.421	(0.513)	11093	5.00000	4.6(a)
$ 3	2-Fluorophenol (S)	112	3.431	3.431	(0.727)	11094	5.00000	4.8(a)
$ 4	Phenol-d6 (S)	99	4.291	4.291	(0.909)	12844	5.00000	4.8(a)
5	Phenol	94	4.307	4.307	(0.913)	13778	5.00000	4.9(a)
6	bis(2-Chloroethyl)ether	63	4.408	4.408	(0.934)	10555	5.00000	5.1(a)
7	2-Chlorophenol	128	4.494	4.494	(0.952)	12536	5.00000	5.3(a)
8	1,3-Dichlorobenzene	146	4.660	4.660	(0.988)	13323	5.00000	5.0(a)
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	65175	40.0000	
10	1,4-Dichlorobenzene	146	4.734	4.734	(1.003)	14128	5.00000	5.3(a)
11	Benzyl alcohol	79	4.841	4.841	(1.026)	7598	5.00000	4.7(a)
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	12896	5.00000	5.1(a)
13	2-Methylphenol	107	4.953	4.953	(1.050)	9104	5.00000	5.1(a)
14	bis(2-Chloroisopropyl) ether	45	4.991	4.991	(1.058)	27262	5.00000	5.1(a)
15	3 & 4-Methylphenol	107	5.119	5.119	(1.085)	11873	5.00000	5.1(a)
17	N-Nitroso-di-n-propylamine	70	5.124	5.124	(1.086)	6867	5.00000	5.1(aQM)
18	Hexachloroethane	117	5.279	5.279	(1.119)	4984	5.00000	5.1(a)
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	8162	3.75000	3.7(a)
20	Nitrobenzene	77	5.338	5.338	(0.866)	10458	5.00000	5.0(a)
21	Isophorone	82	5.605	5.605	(0.910)	18655	5.00000	4.9(a)
22	2-Nitrophenol	139	5.701	5.701	(0.925)	6238	5.00000	5.0(a)
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	10971	5.00000	5.1(a)

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	5.776	5.776	(0.938)	4355	5.00000	3.9(a)
	25 bis(2-Chloroethoxy)methane	93	5.840	5.840	(0.948)	10990	5.00000	4.9(a)
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	8960	5.00000	4.8(a)
	27 1,2,4-Trichlorobenzene	180	6.086	6.086	(0.988)	10170	5.00000	5.2(a)
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	256111	40.0000	(Q)
	29 Naphthalene	128	6.182	6.182	(1.003)	33546	5.00000	5.2(a)
	30 4-Chloroaniline	127	6.230	6.230	(1.011)	13179	5.00000	5.6(a)
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	5301	5.00000	5.0(a)
	32 4-Chloro-3-methylphenol	107	6.807	6.807	(1.105)	8563	5.00000	4.8(a)
	33 2-Methylnaphthalene	142	7.015	7.015	(1.139)	21038	5.00000	4.9(a)
	34 1-Methylnaphthalene	142	7.133	7.133	(1.158)	19405	5.00000	4.9(a)
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	2384	5.00000	6.2(aQM)
	36 2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	5828	5.00000	5.0(a)
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	5932	5.00000	4.8(a)
$	38 2-Fluorobiphenyl (S)	172	7.454	7.454	(0.898)	16558	3.75000	3.8(a)
	39 2-Chloronaphthalene	162	7.608	7.608	(0.917)	19786	5.00000	5.2(a)
	40 2-Nitroaniline	65	7.721	7.721	(0.930)	5930	5.00000	4.8(a)
	41 Dimethylphthalate	163	7.940	7.940	(0.957)	20484	5.00000	5.0(aM)
	42 2,6-Dinitrotoluene	165	8.014	8.014	(0.966)	4522	5.00000	4.7(a)
	43 Acenaphthylene	152	8.121	8.121	(0.979)	29040	5.00000	4.9(aM)
	44 3-Nitroaniline	138	8.228	8.228	(0.992)	5675	5.00000	5.5(aQM)
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	124628	40.0000	
	46 Acenaphthene	154	8.335	8.335	(1.004)	17710	5.00000	5.1(a)
	47 2,4-Dinitrophenol	184	8.362	8.362	(1.008)	786	5.00000	7.6(aQM)
	48 4-Nitrophenol	65	8.442	8.442	(1.017)	3414	5.00000	4.3(a)
	49 2,4-Dinitrotoluene	165	8.517	8.517	(1.026)	5688	5.00000	4.6(a)
	50 Dibenzofuran	168	8.549	8.549	(1.030)	26952	5.00000	5.2(a)
	51 Diethylphthalate	149	8.816	8.816	(1.062)	20419	5.00000	5.1(a)
	52 4-Chlorophenylphenyl ether	204	8.965	8.965	(1.080)	9210	5.00000	4.8(a)
	53 4-Nitroaniline	138	8.981	8.981	(1.082)	5427	5.00000	4.7(aQ)
	54 Fluorene	166	8.971	8.971	(1.081)	21451	5.00000	5.1(a)
	55 4,6-Dinitro-2-methylphenol	198	9.019	9.019	(0.890)	2141	5.00000	6.5(aM)
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	16750	5.00000	4.9(a)
	57 Azobenzene	77	9.163	9.163	(1.104)	19004	5.00000	5.0(a)
	58 1,2-Diphenylhydrazine	77	9.163	9.163	(1.104)	19004	5.00000	5.0(a)
$	59 2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.117)	1935	5.00000	4.1(aQ)
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.945)	4752	5.00000	4.8(a)
	61 Hexachlorobenzene	284	9.655	9.655	(0.953)	5475	5.00000	5.2(a)
	62 Pentachlorophenol	266	9.900	9.900	(0.977)	1584	5.00000	6.5(aM)
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	197345	40.0000	
	64 Phenanthrene	178	10.162	10.162	(1.003)	29590	5.00000	5.2(a)
	65 Anthracene	178	10.226	10.226	(1.009)	28648	5.00000	5.0(a)
	66 Carbazole	167	10.424	10.424	(1.028)	27472	5.00000	4.9(a)
	67 di-n-Butylphthalate	149	10.841	10.841	(1.070)	33977	5.00000	5.0(a)
	68 Fluoranthene	202	11.642	11.642	(1.149)	30106	5.00000	4.9(a)
	69 Benzidine	184	11.797	11.797	(0.879)	16897	5.00000	4.3(a)
	70 Pyrene	202	11.930	11.930	(0.889)	33716	5.00000	5.3(a)
$	71 Terphenyl-d14 (S)	244	12.107	12.107	(0.902)	14890	3.75000	3.7(a)
	72 Butylbenzylphthalate	149	12.705	12.705	(0.947)	14997	5.00000	5.1(a)
	73 bis(2-Ethylhexyl)phthalate	149	13.405	13.405	(0.999)	20669	5.00000	5.0(aM)
	74 3,3'-Dichlorobenzidine	252	13.362	13.362	(0.996)	9922	5.00000	5.7(a)
	75 Benzo(a)anthracene	228	13.405	13.405	(0.999)	30287	5.00000	5.2(a)
*	76 Chrysene-d12	240	13.421	13.421	(1.000)	188943	40.0000	(Q)
	77 Chrysene	228	13.448	13.448	(1.002)	27343	5.00000	5.2(a)

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.163	14.163	(1.055)	36861	5.00000	5.0(aM)
79	Benzo(b)fluoranthene	252	14.671	14.671	(0.967)	25458	5.00000	4.6(a)
80	Benzo(k)fluoranthene	252	14.703	14.703	(0.969)	27491	5.00000	4.9(a)
81	Benzo(a)pyrene	252	15.098	15.098	(0.995)	25469	5.00000	4.9(a)
* 82	Perylene-d12	264	15.173	15.173	(1.000)	184523	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.851	16.851	(1.111)	27777	5.00000	4.9(a)
84	Dibenzo(a,h)anthracene	278	16.872	16.872	(1.112)	23739	5.00000	4.9(aM)
85	Benzo(g,h,i)perylene	276	17.358	17.358	(1.144)	24249	5.00000	5.1(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281419.D
Lab Smp Id: ICAL 10328-96 2
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

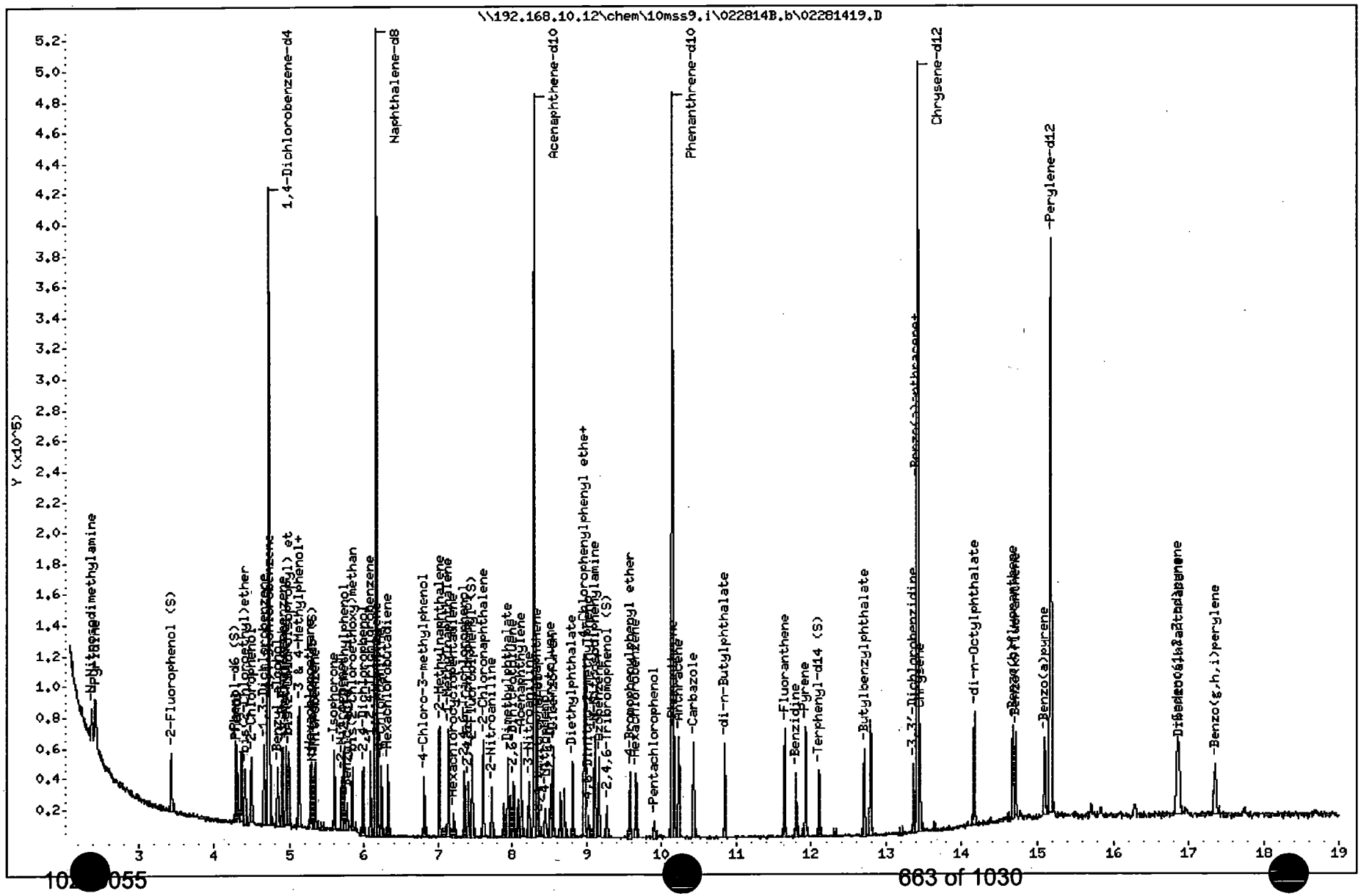
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	65733	32867	131466	65175	-0.85
28 Naphthalene-d8	256733	128367	513466	256111	-0.24
45 Acenaphthene-d10	126640	63320	253280	124628	-1.59
63 Phenanthrene-d10	206748	103374	413496	197345	-4.55
76 Chrysene-d12	194855	97428	389710	188943	-3.03
82 Perylene-d12	186487	93244	372974	184523	-1.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	-0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	-0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281419.D
Date : 28-FEB-2014 16:07
Client ID:
Sample Info: ICAL 10328-96 2
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25



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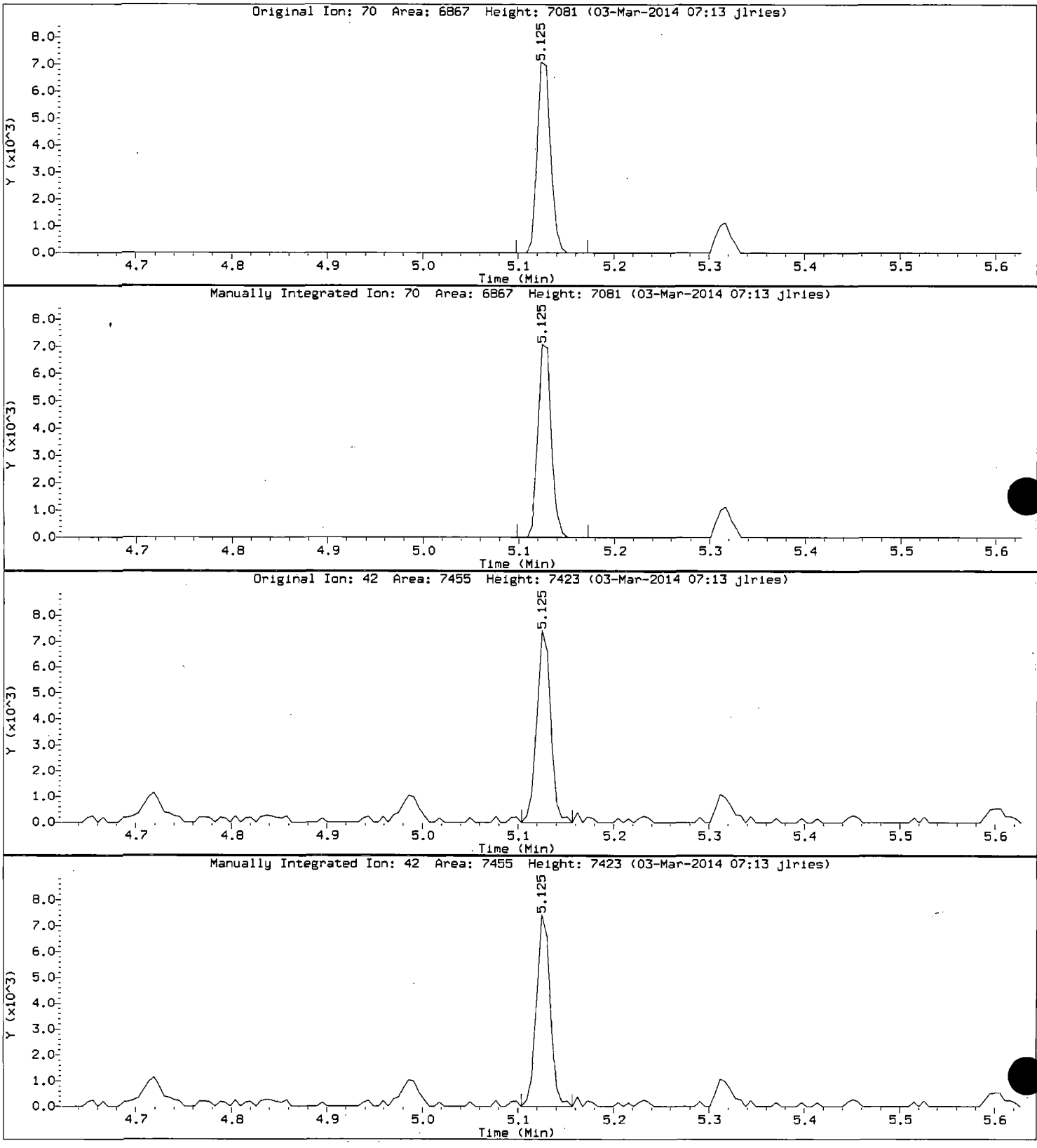
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: N-Nitroso-di-n-propylamine
CAS Number: 621-64-7



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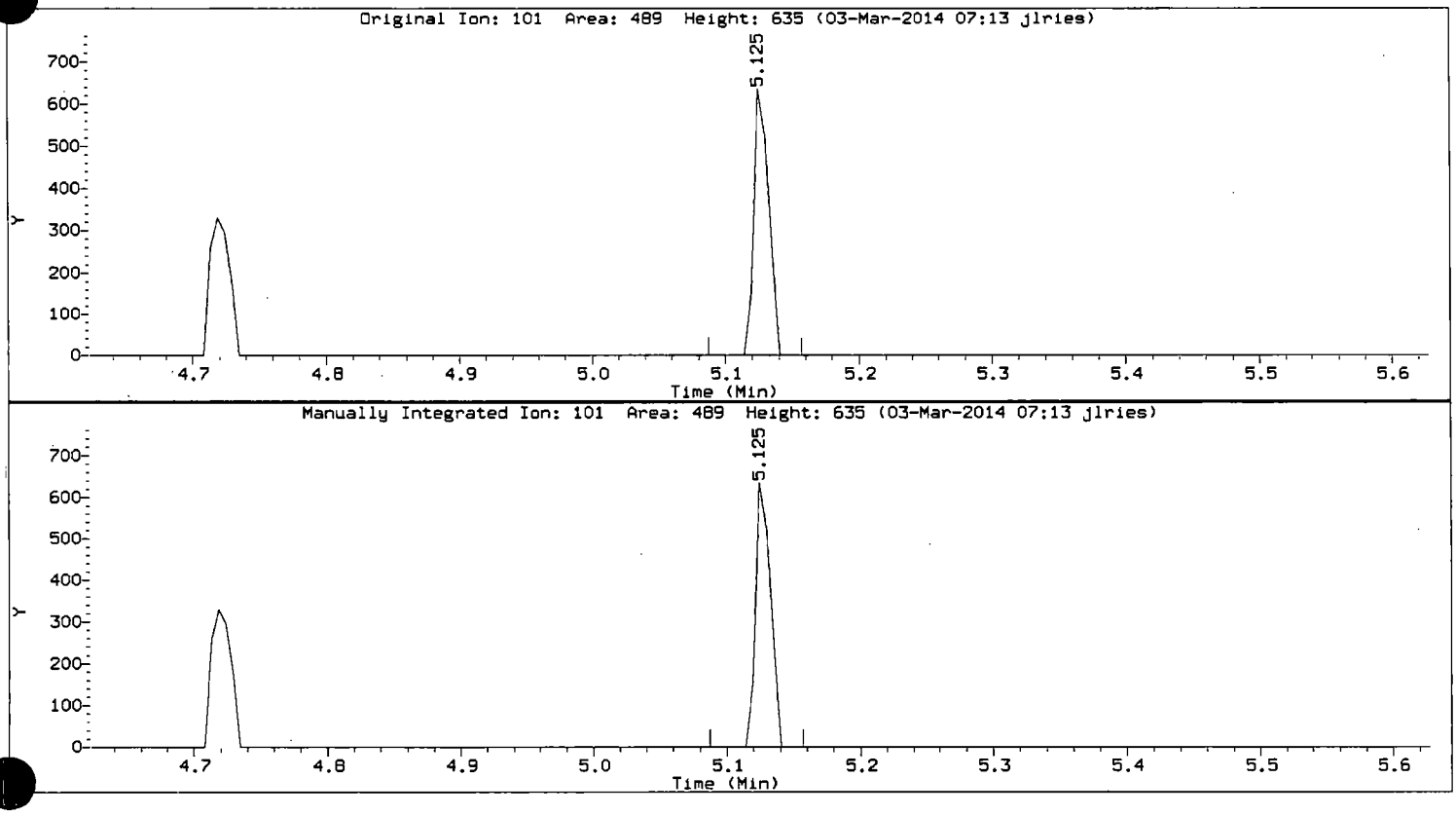
Lab Sample ID: ICAL 10328-96 2



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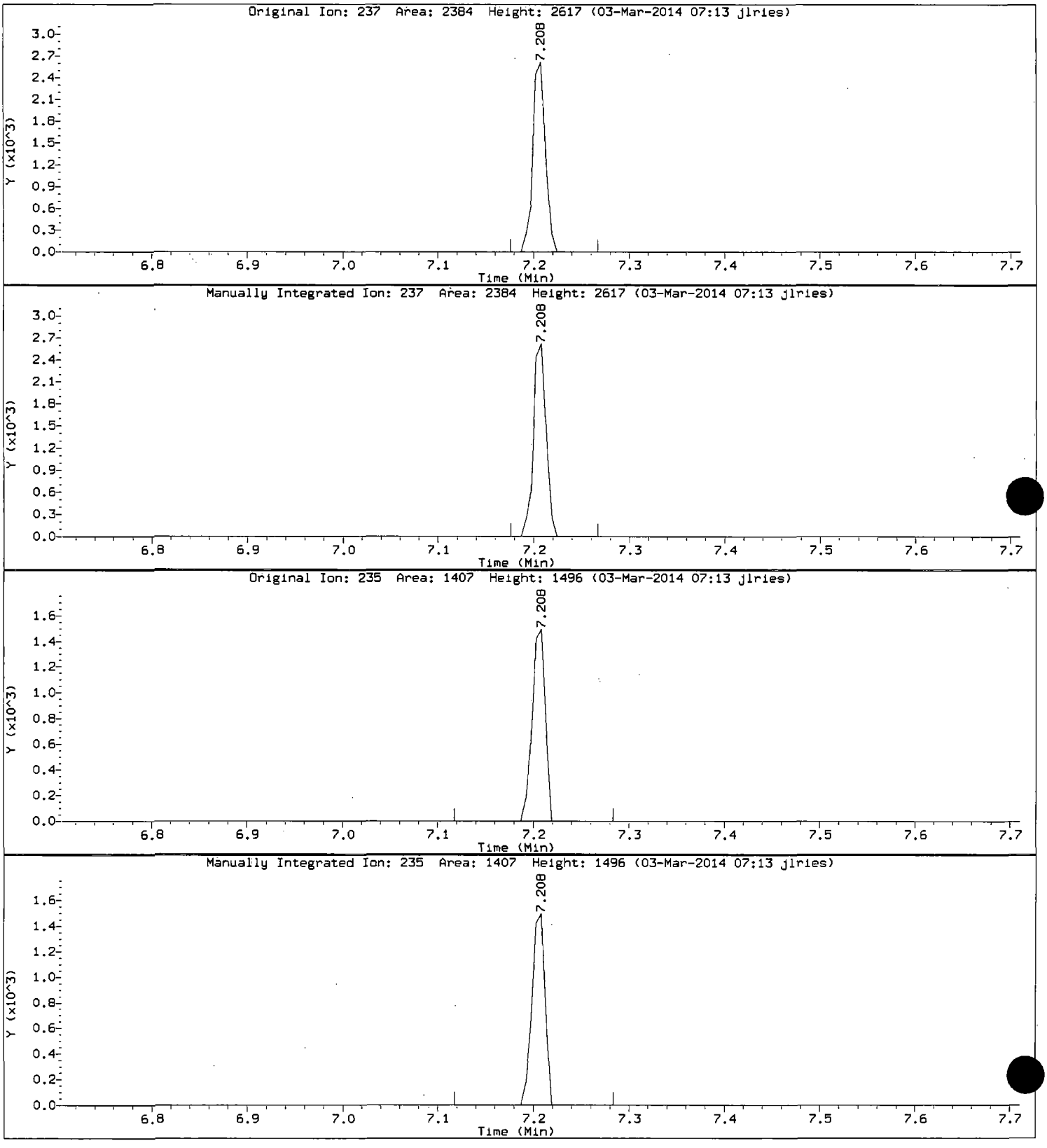
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Hexachlorocyclopentadiene
CAS Number: 77-47-4



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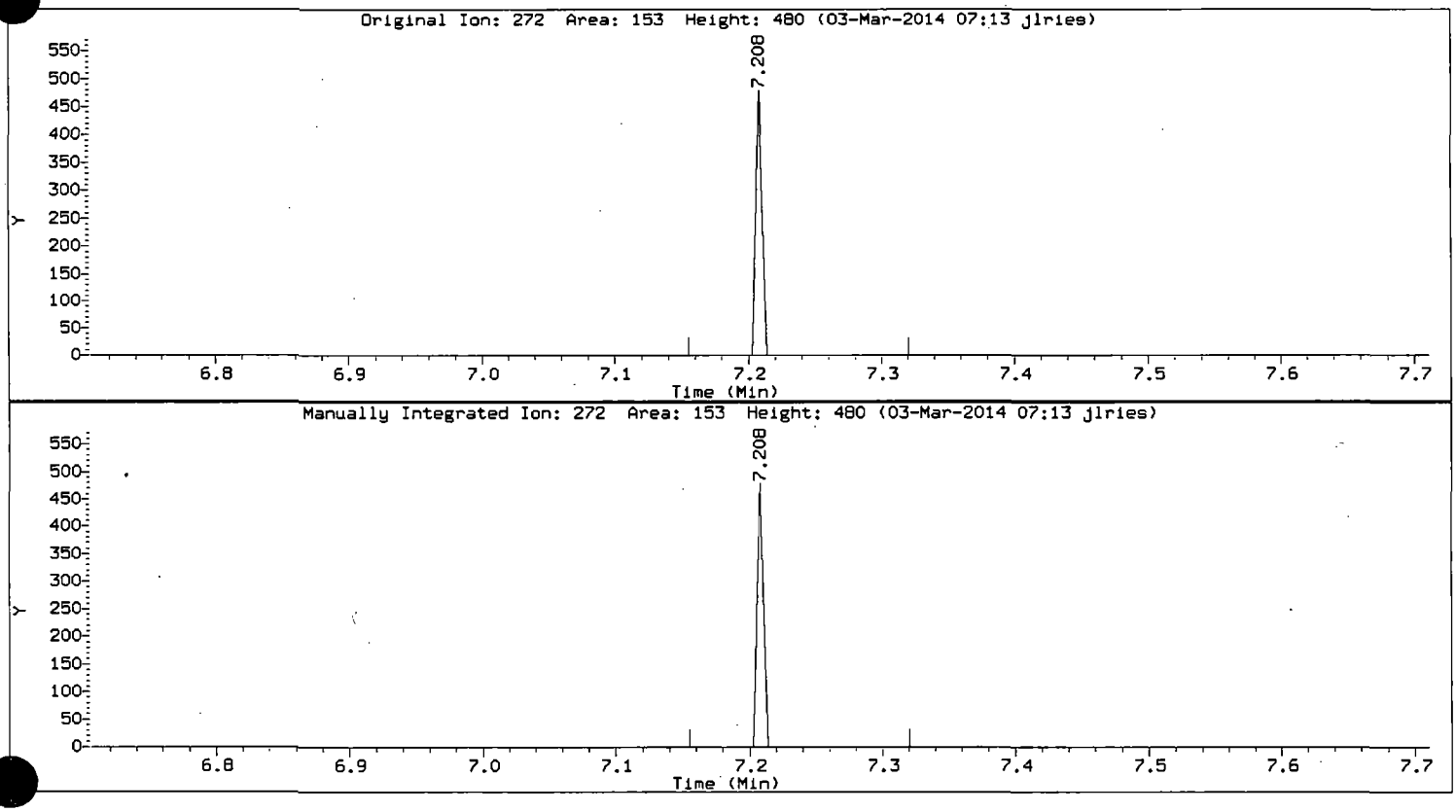
Lab Sample ID: ICAL 10328-96 2



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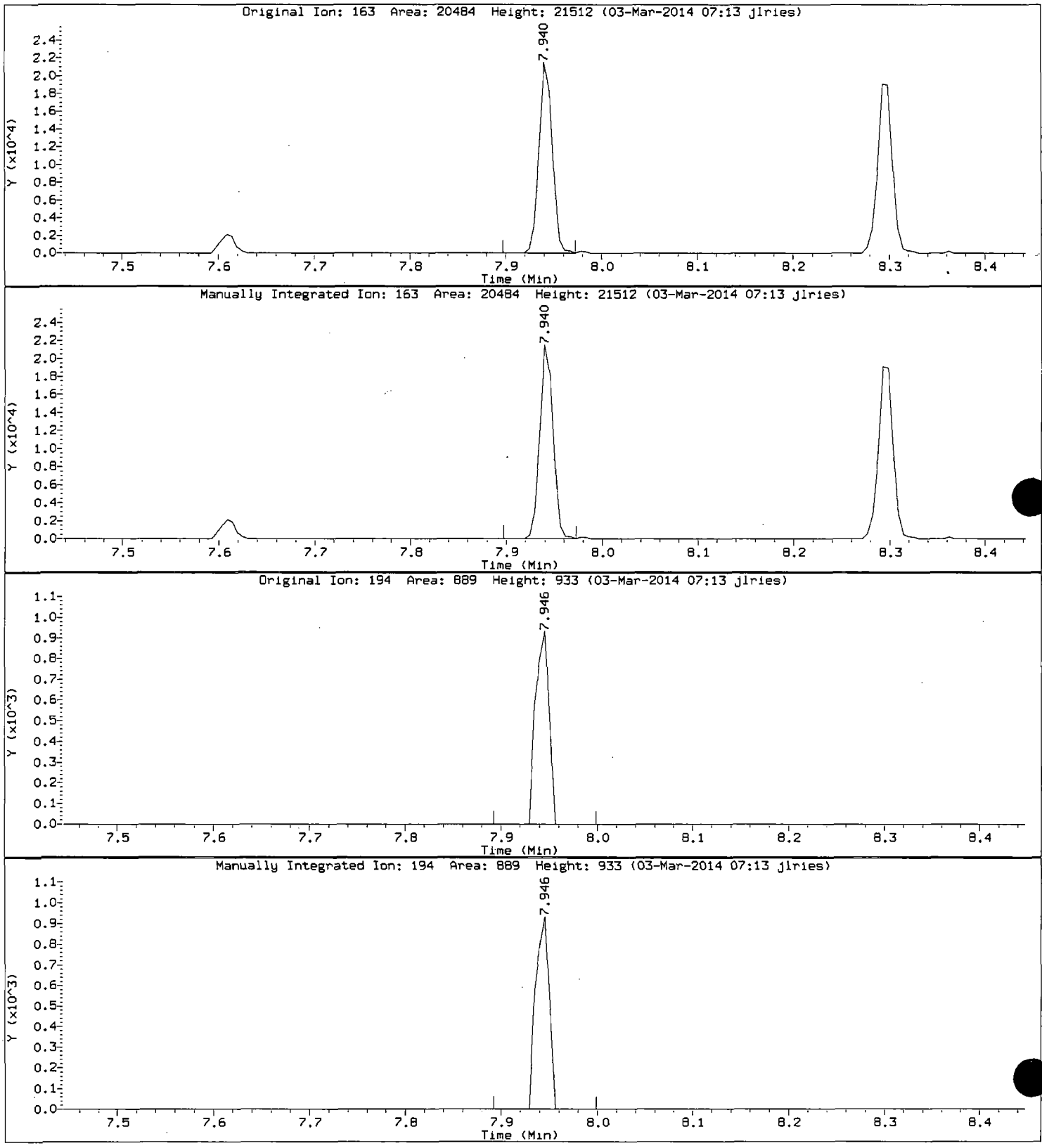
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Dimethylphthalate
CAS Number: 131-11-3



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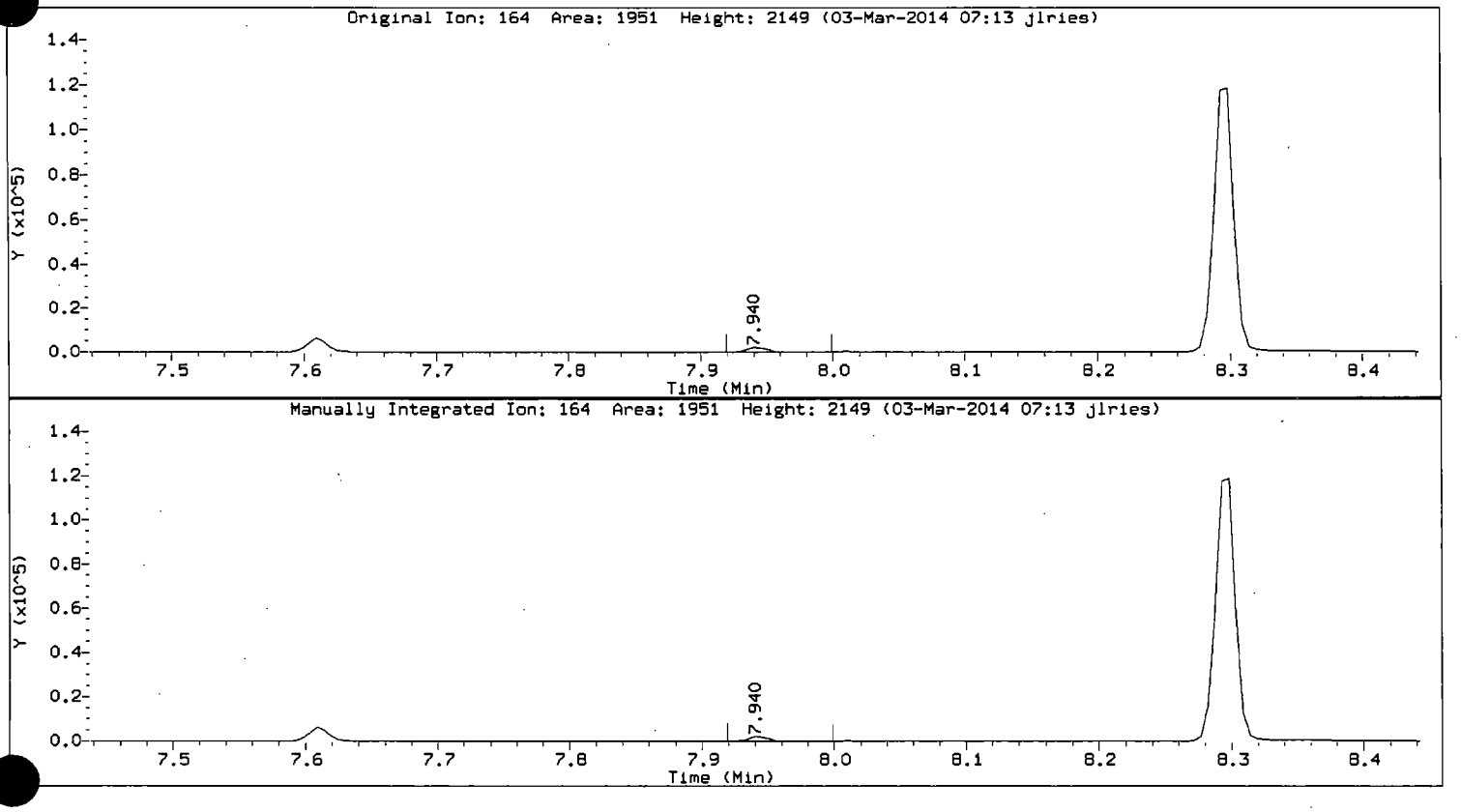
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2



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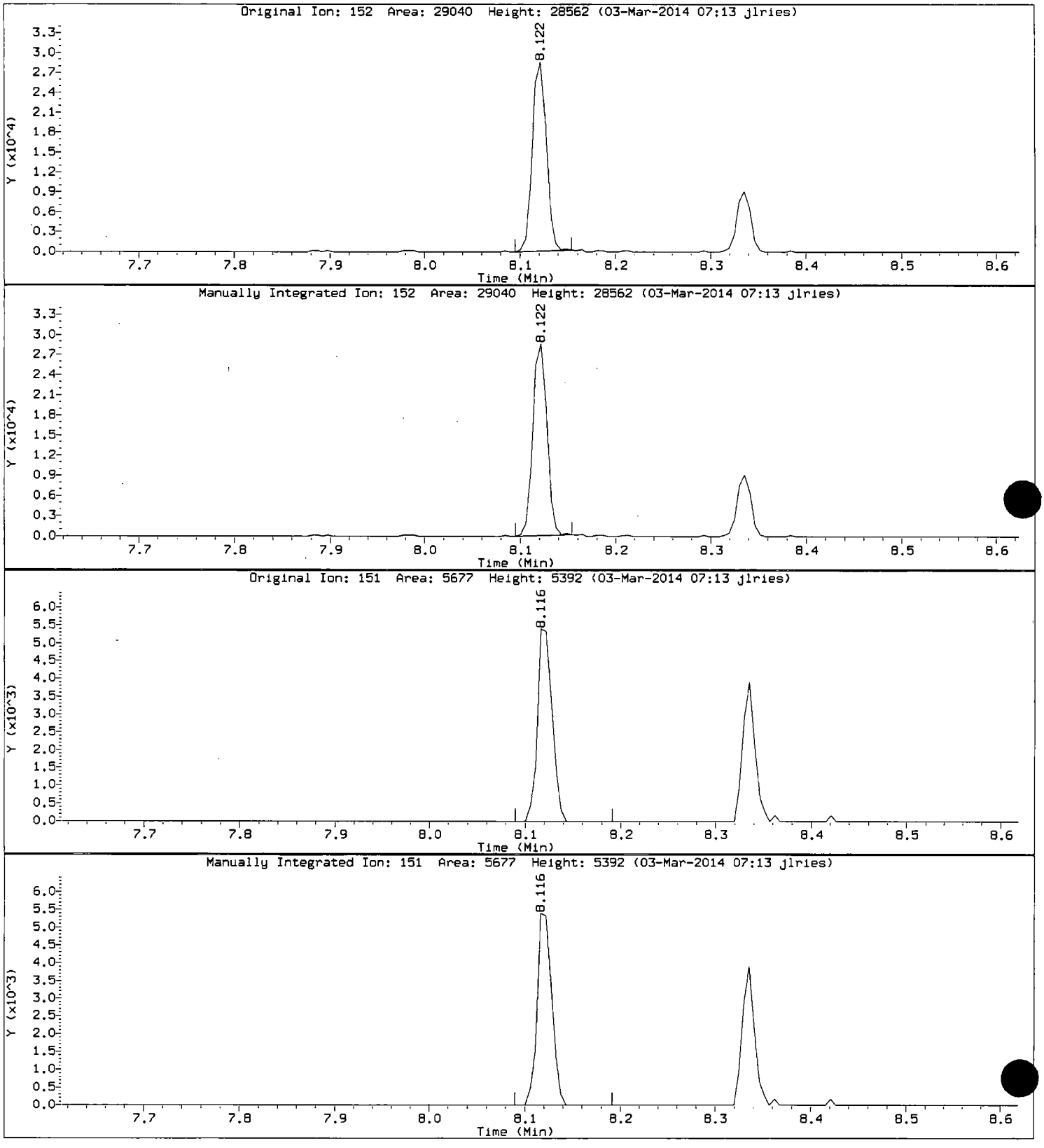
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Acenaphthylene
CAS Number: 208-96-8



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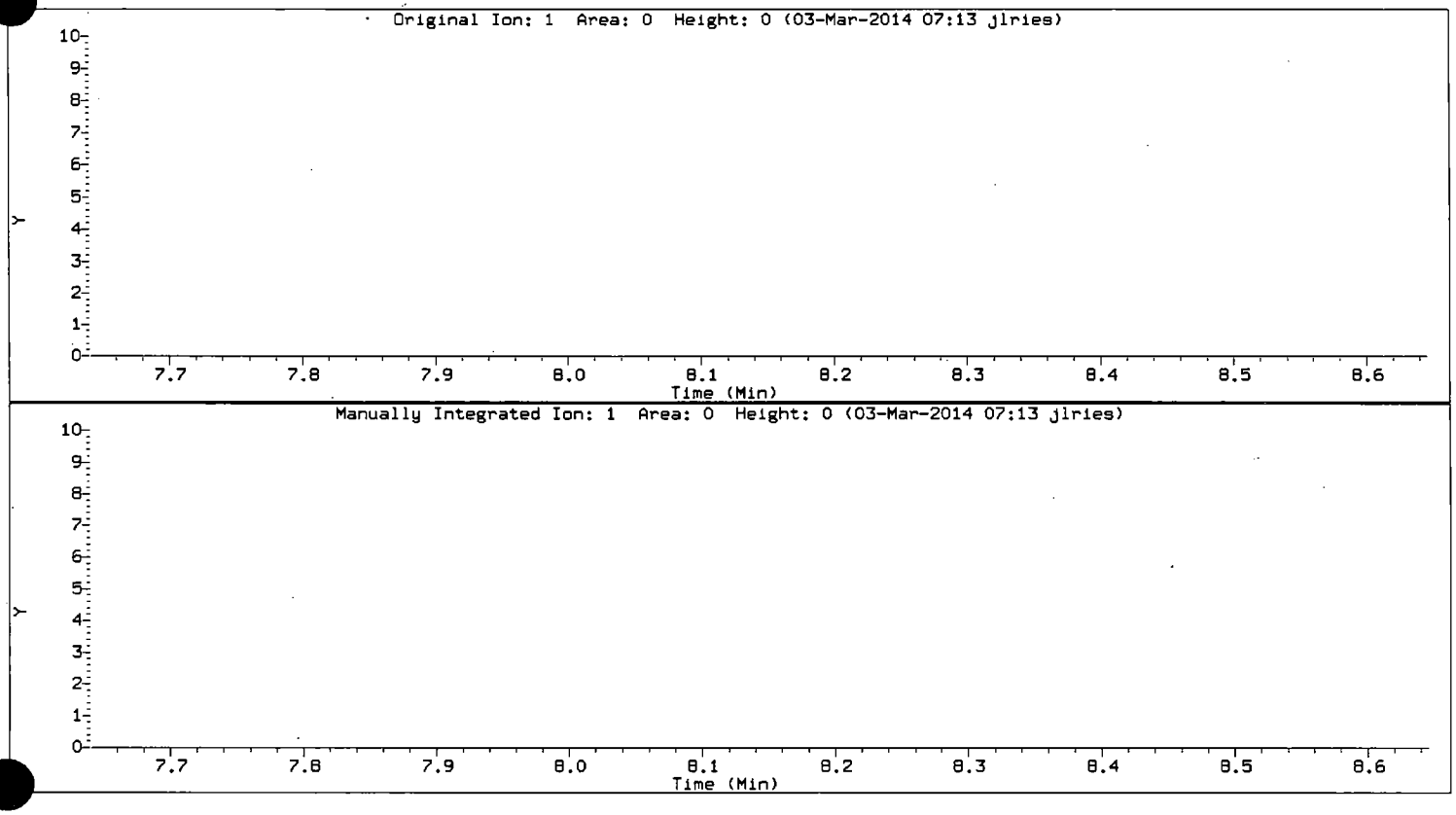
Lab Sample ID: ICAL 10328-96 2



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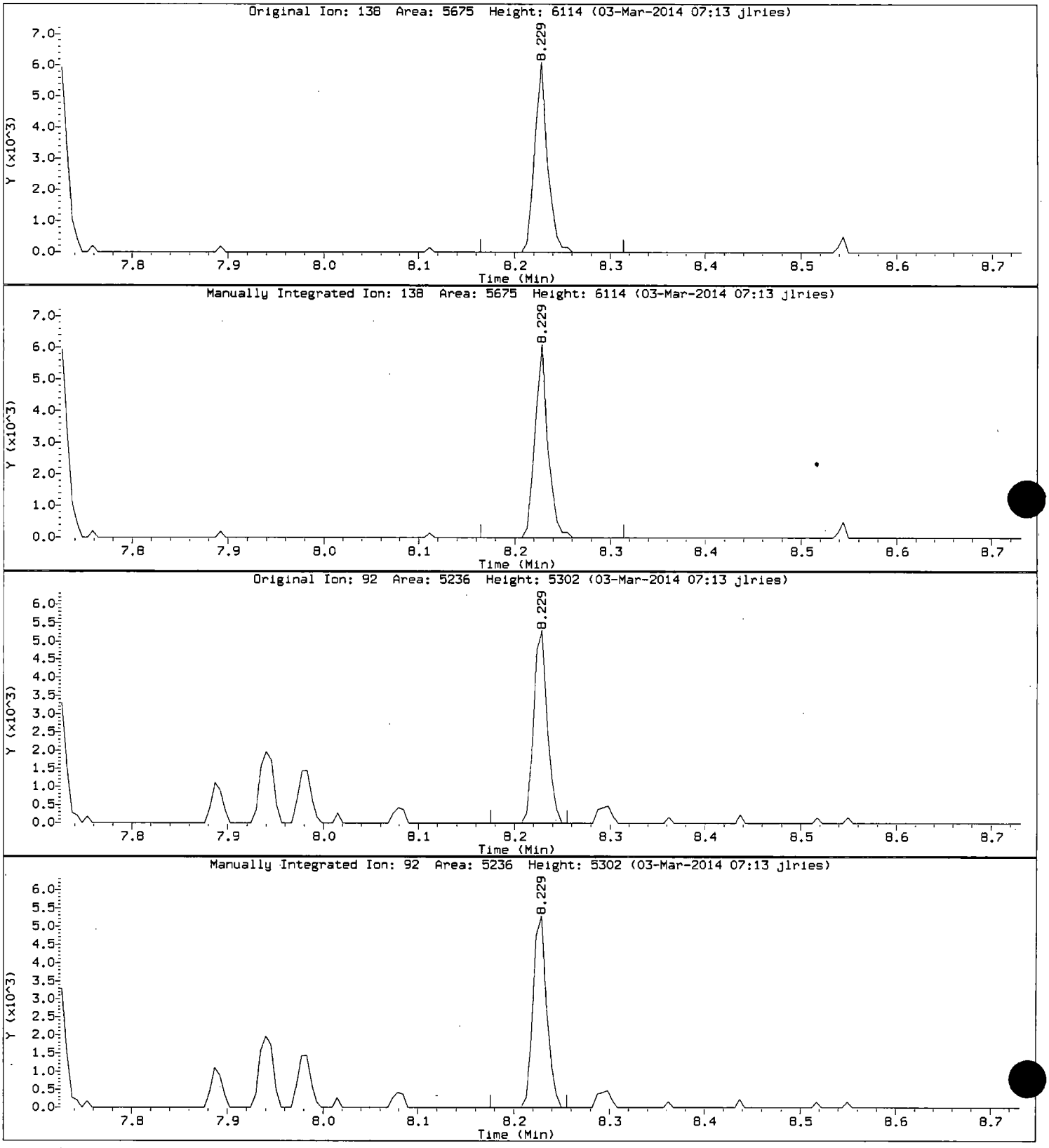
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: 3-Nitroaniline
CAS Number: 99-09-2



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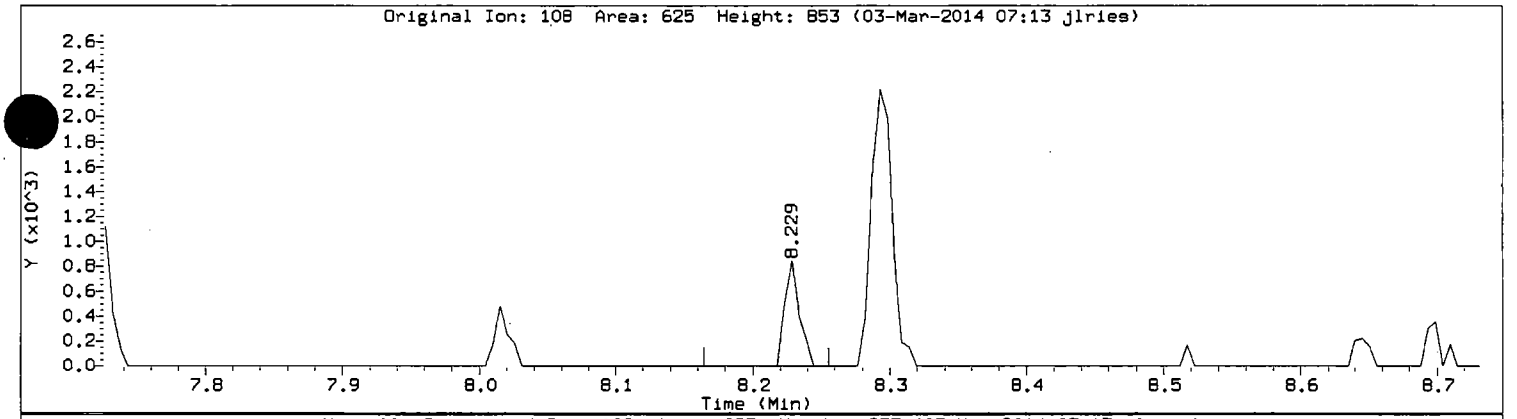
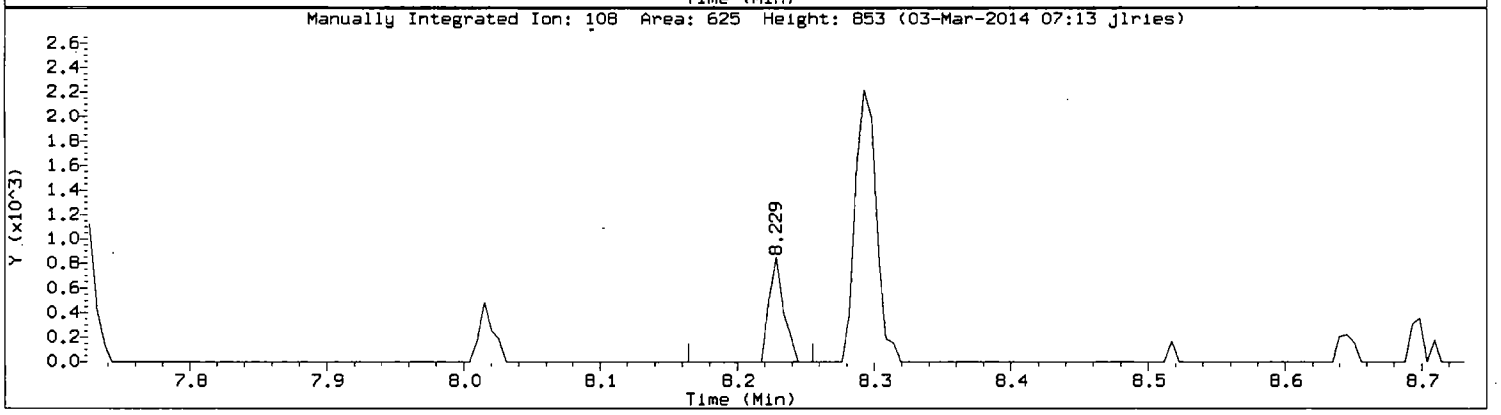
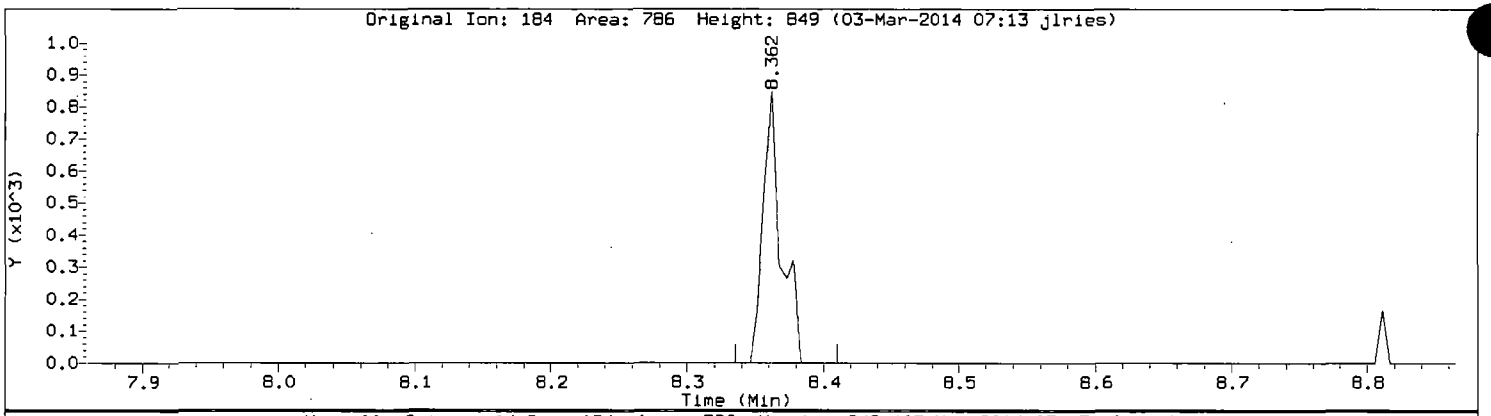
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

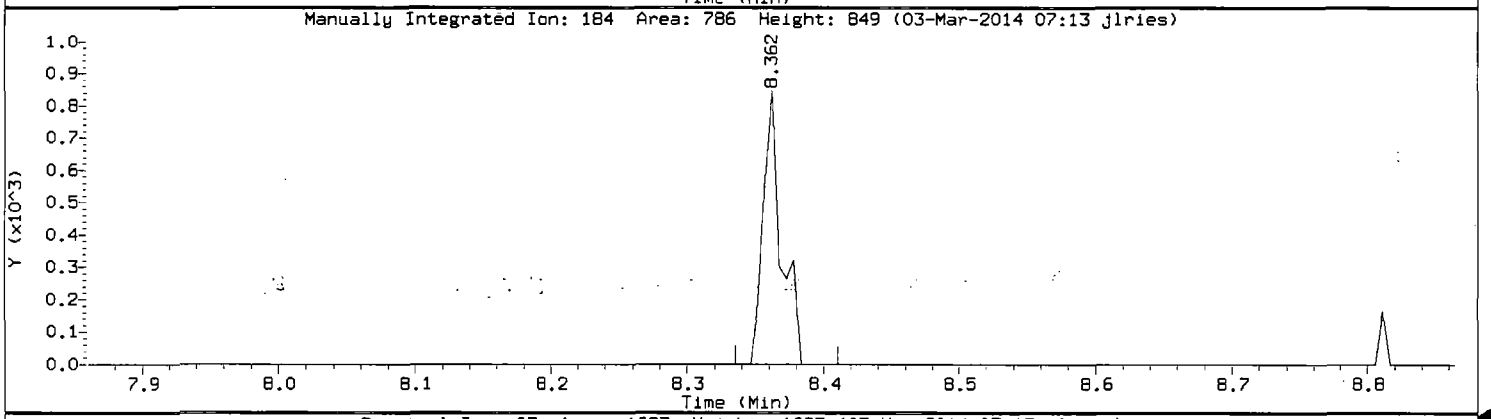


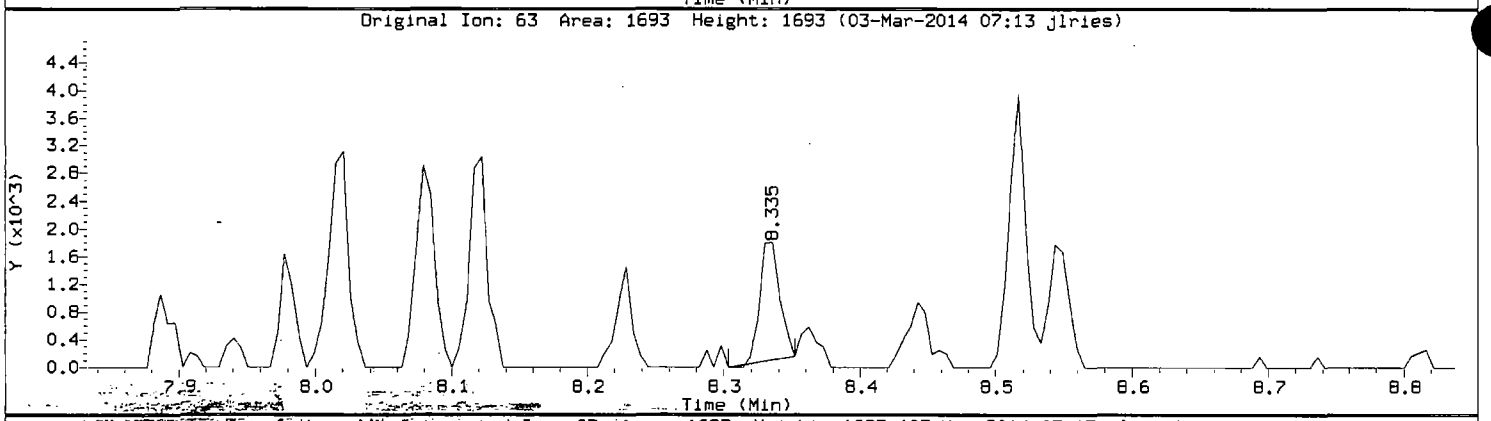


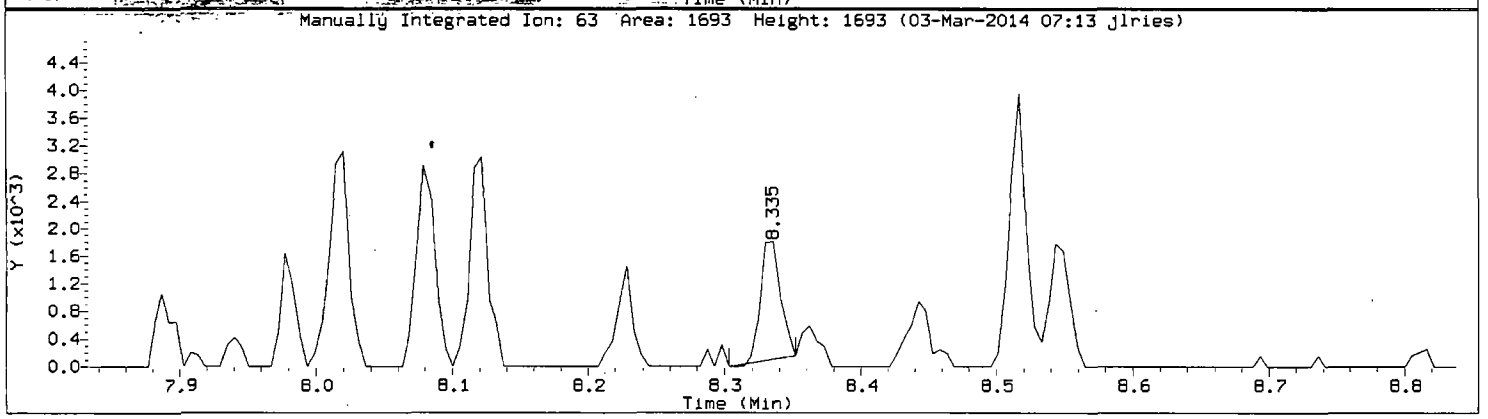
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5









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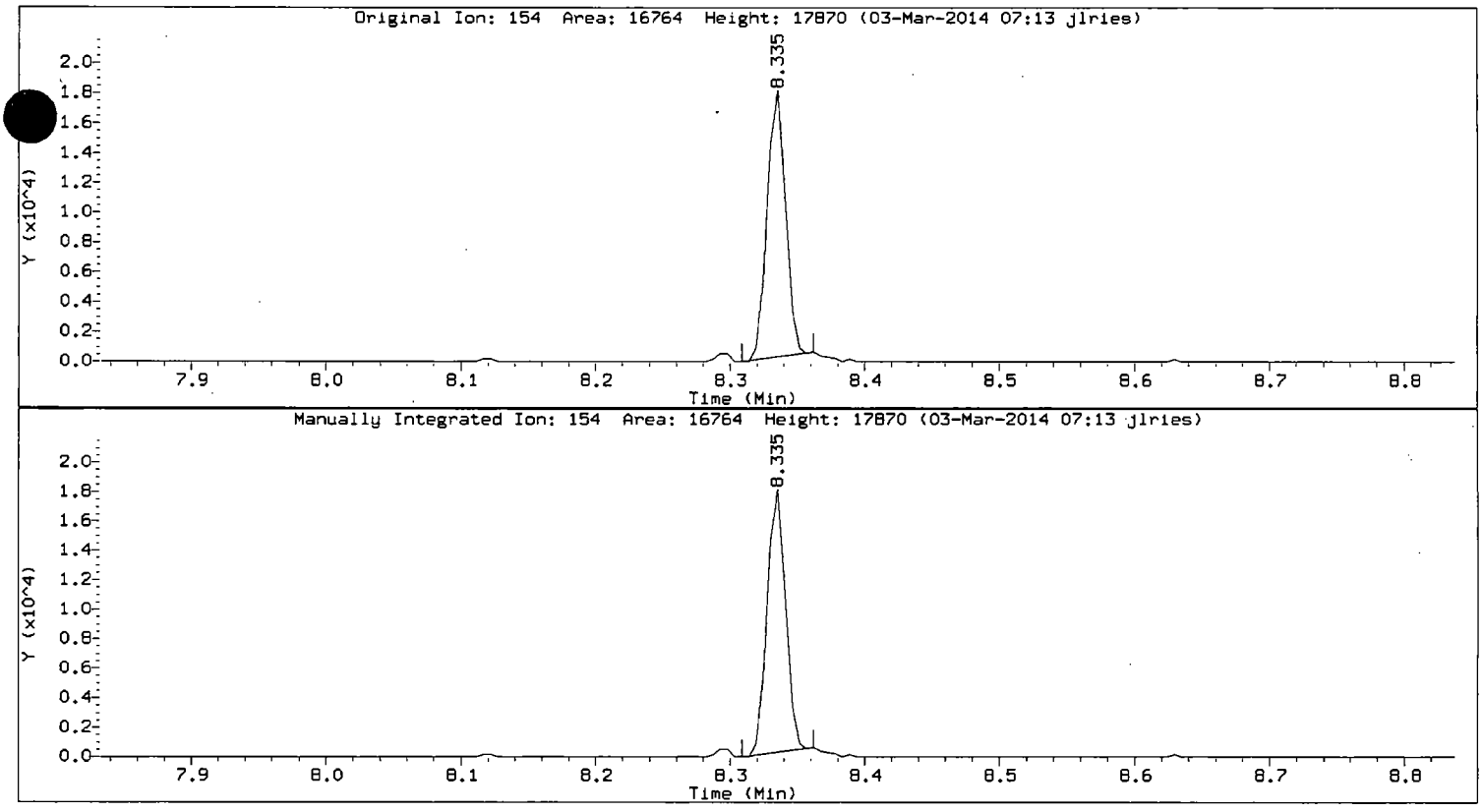
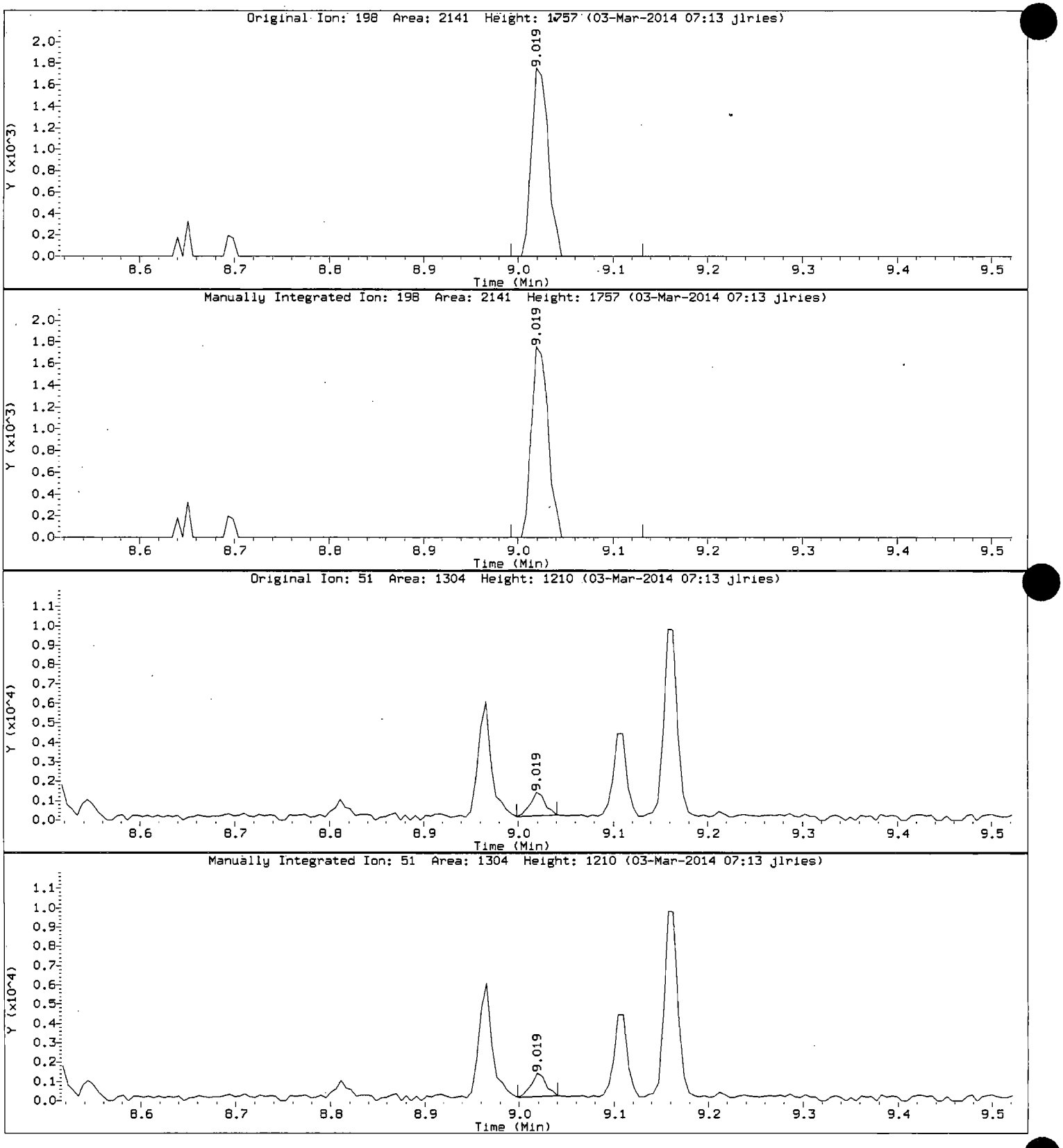
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

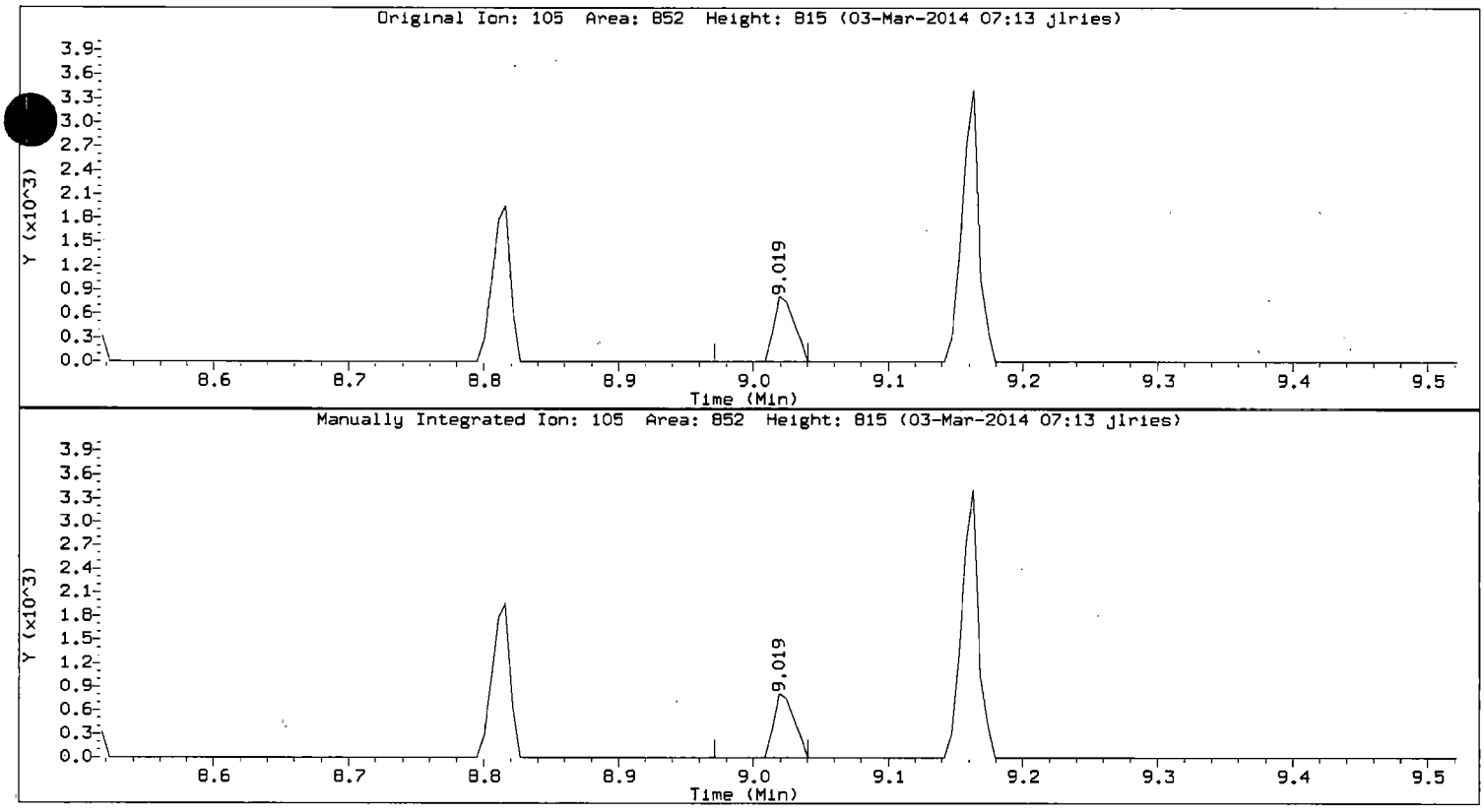


Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1

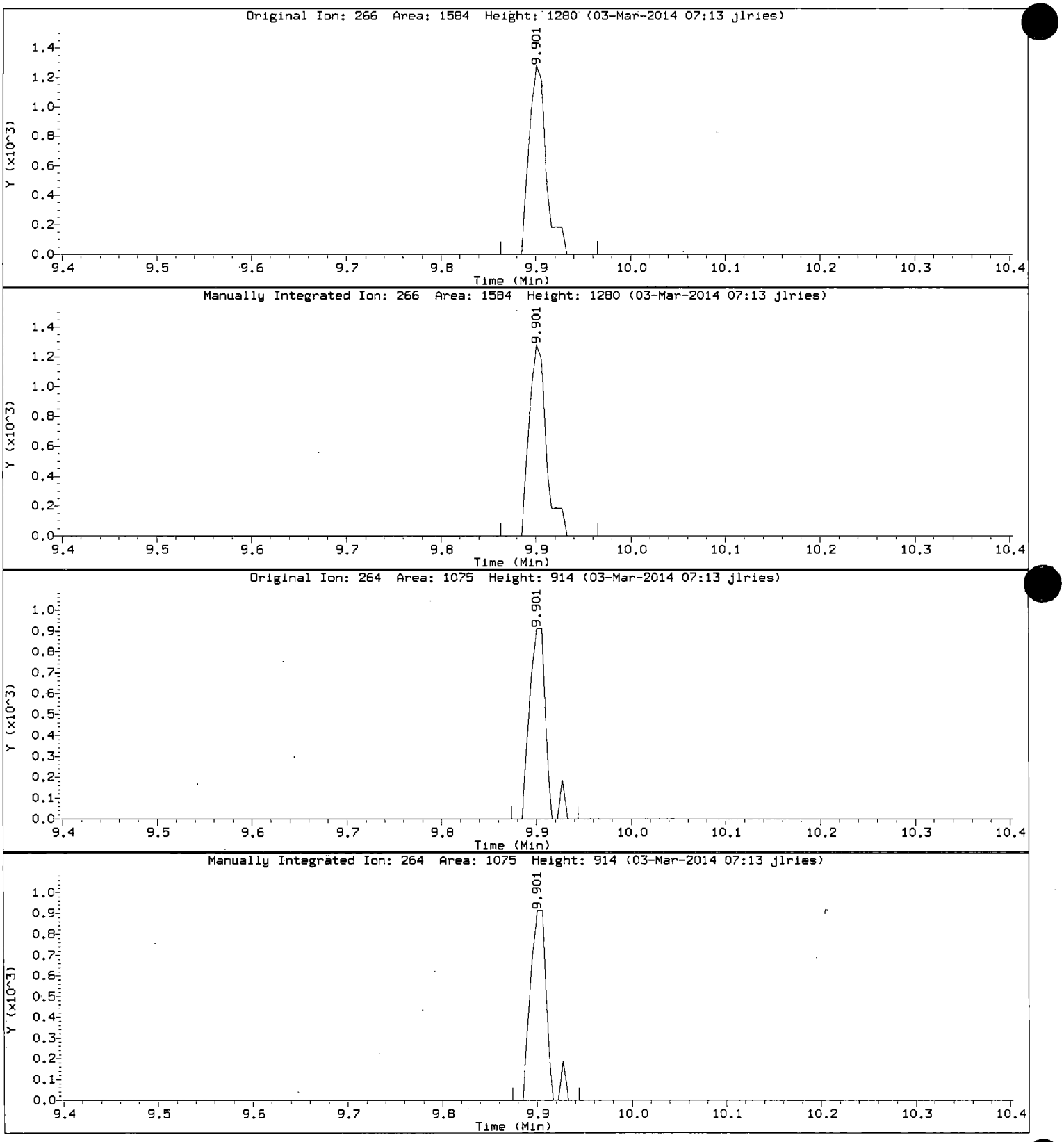


Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

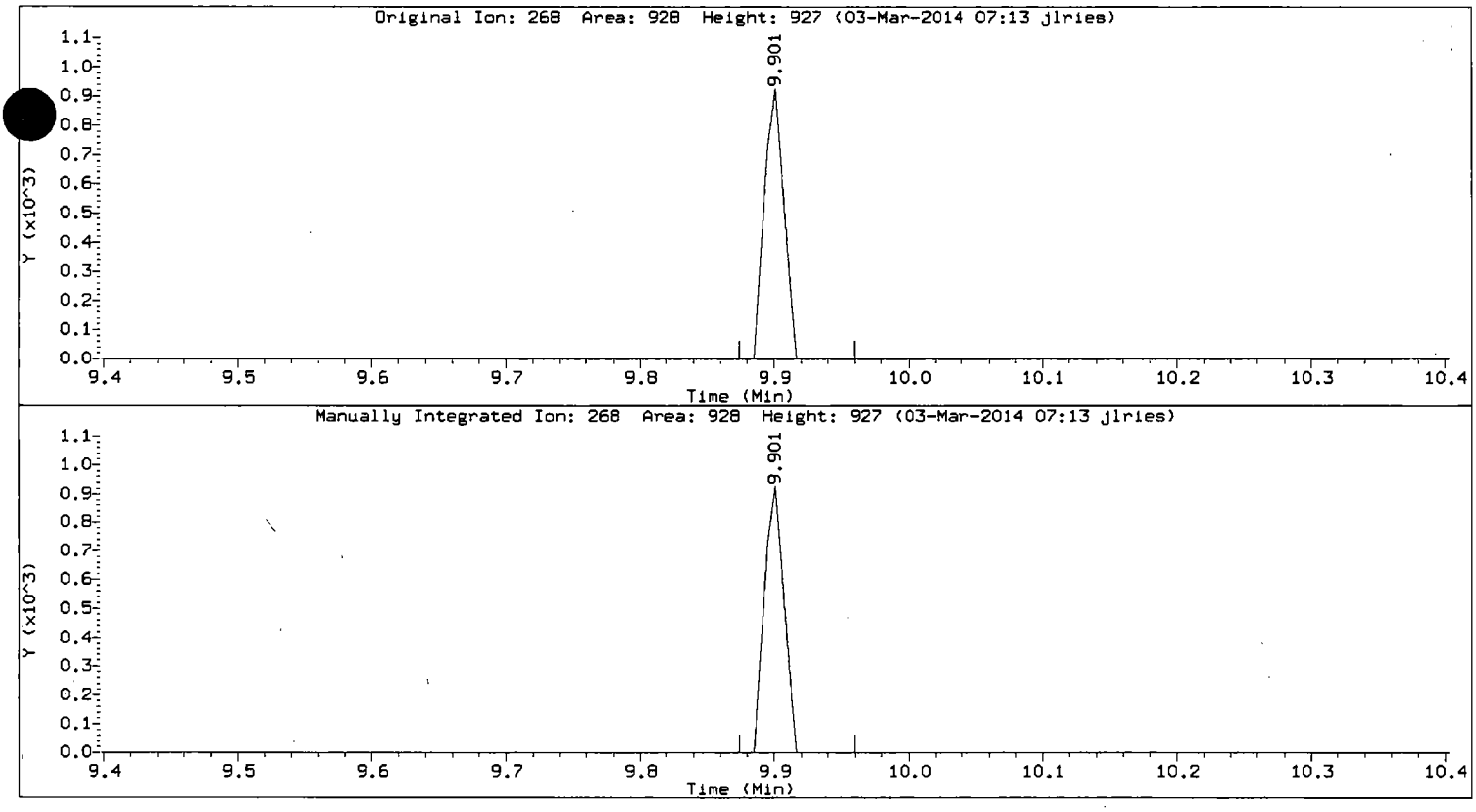


Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Pentachlorophenol
CAS Number: 87-86-5

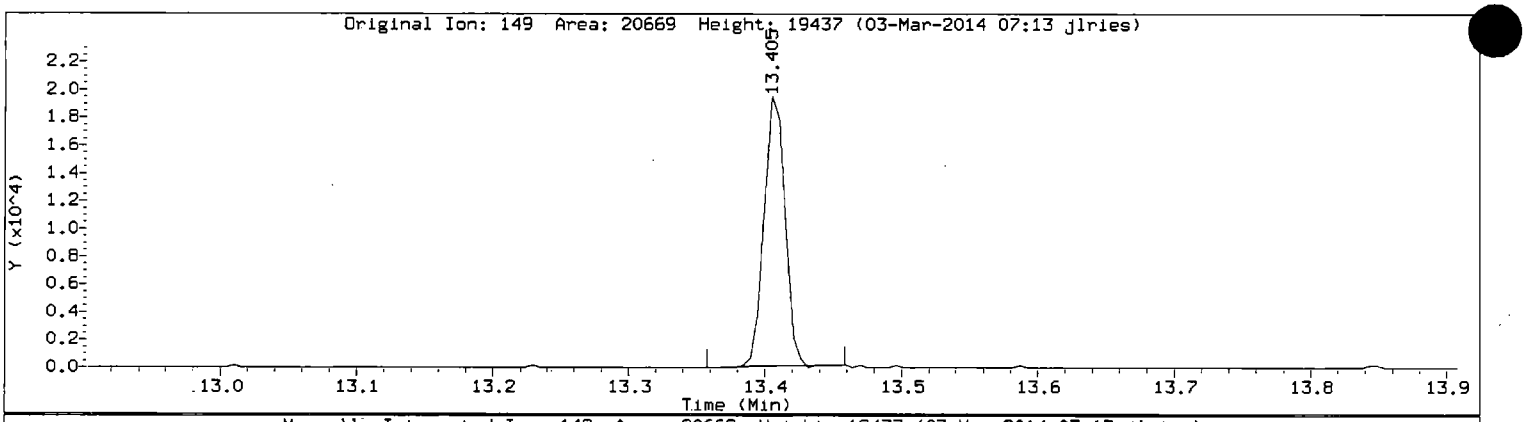


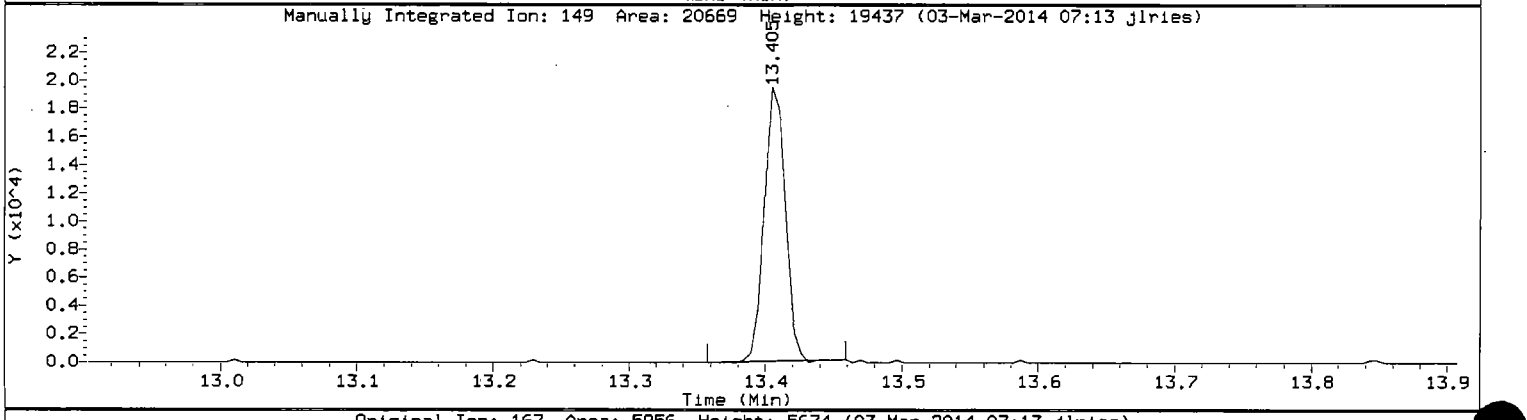
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

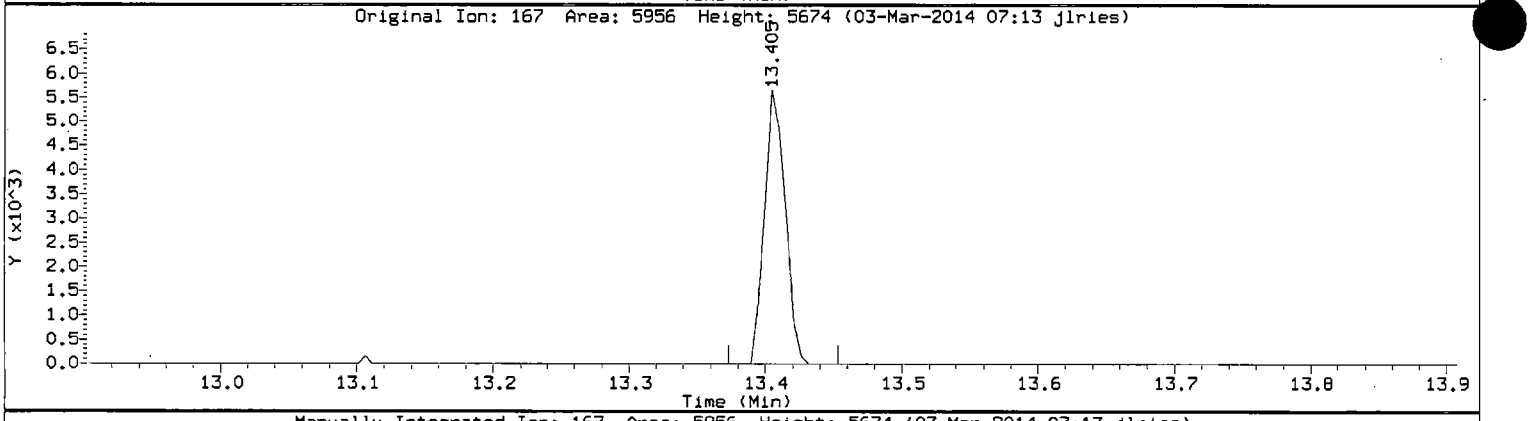


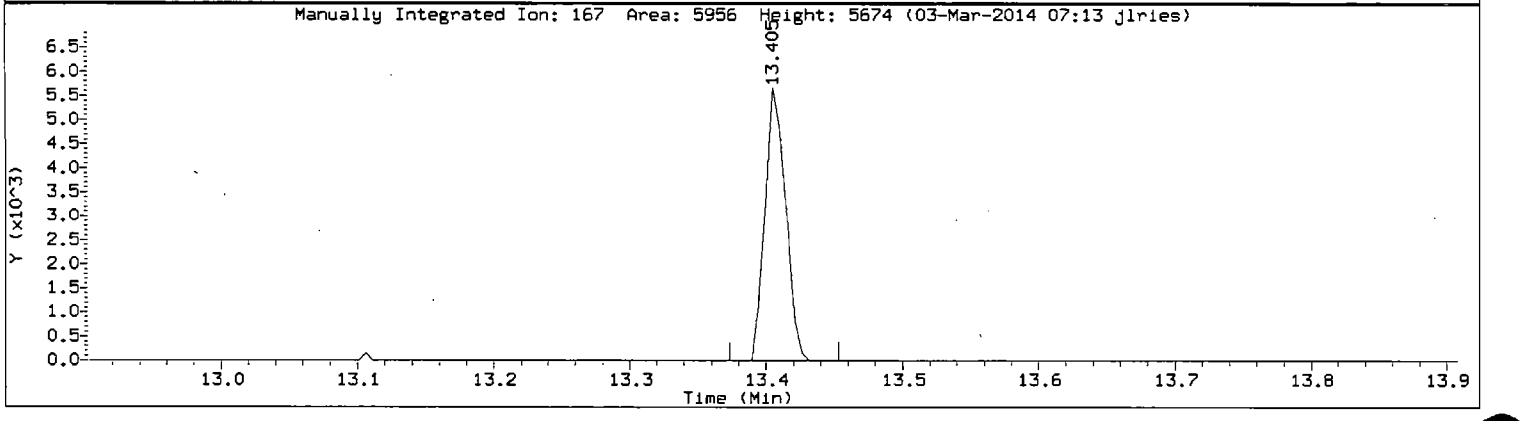
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: bis(2-Ethylhexyl)phthalate
CAS Number: 117-81-7

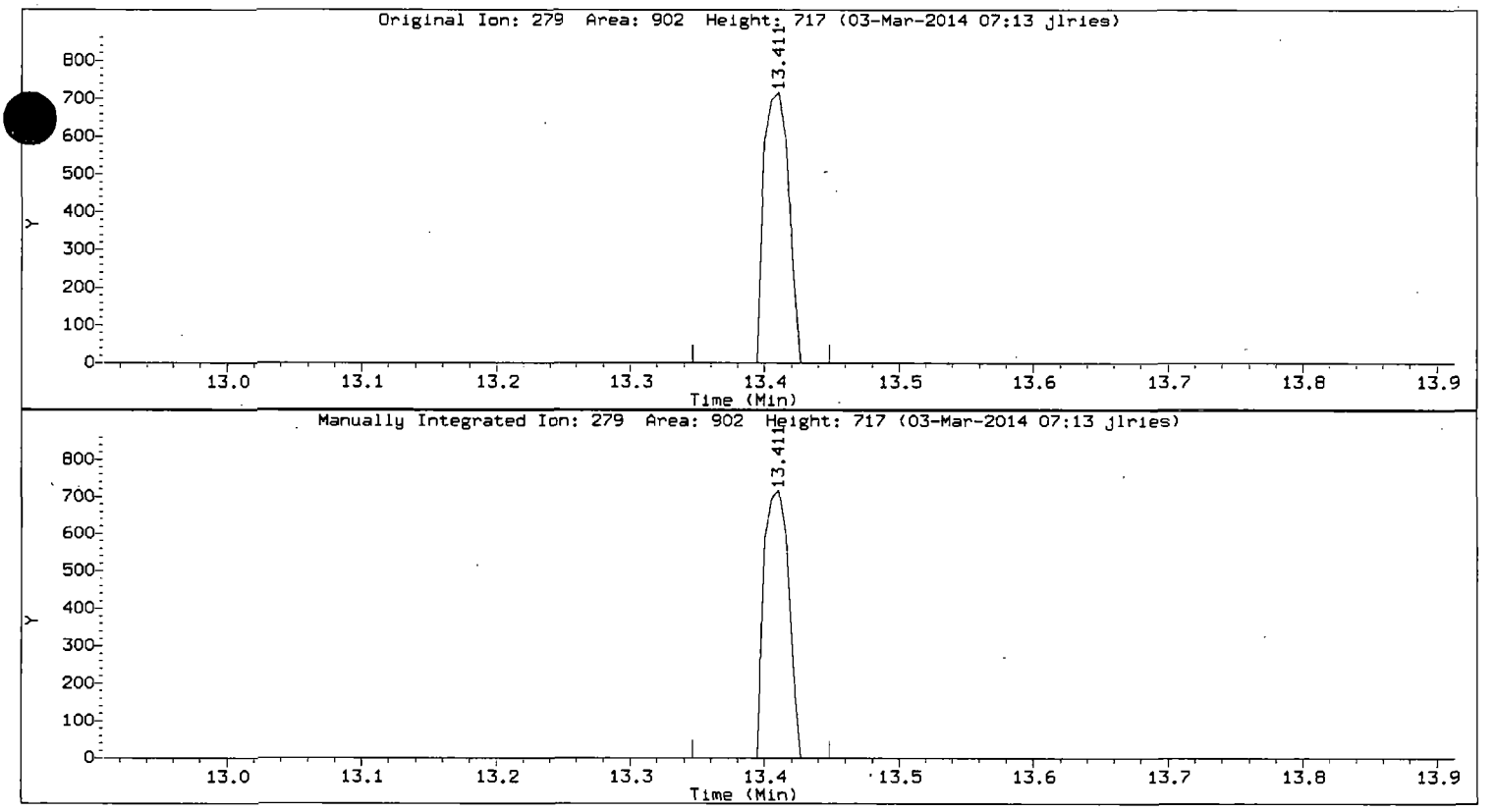






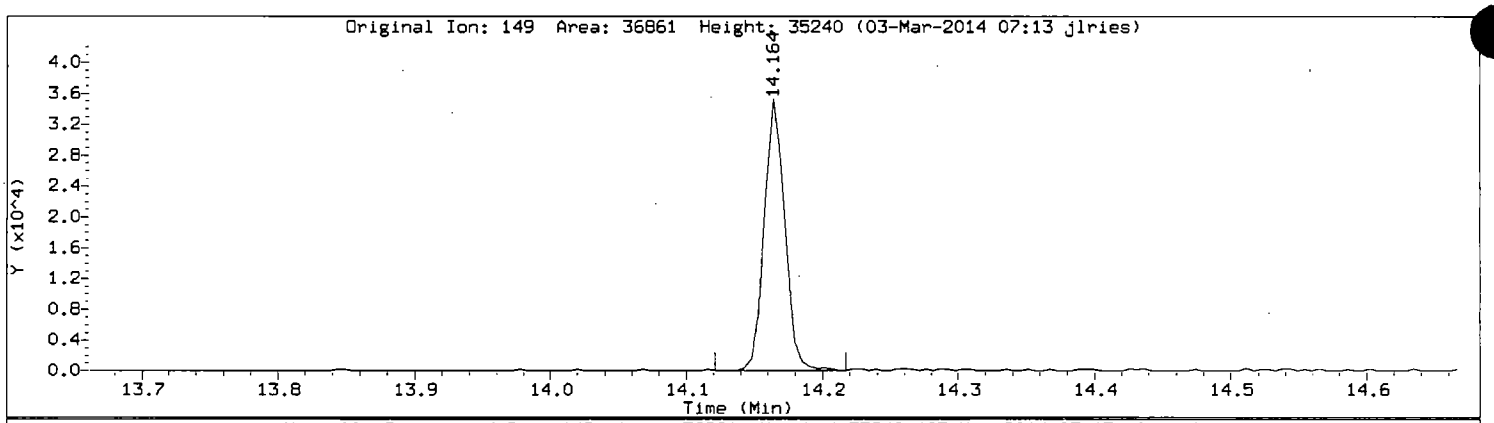


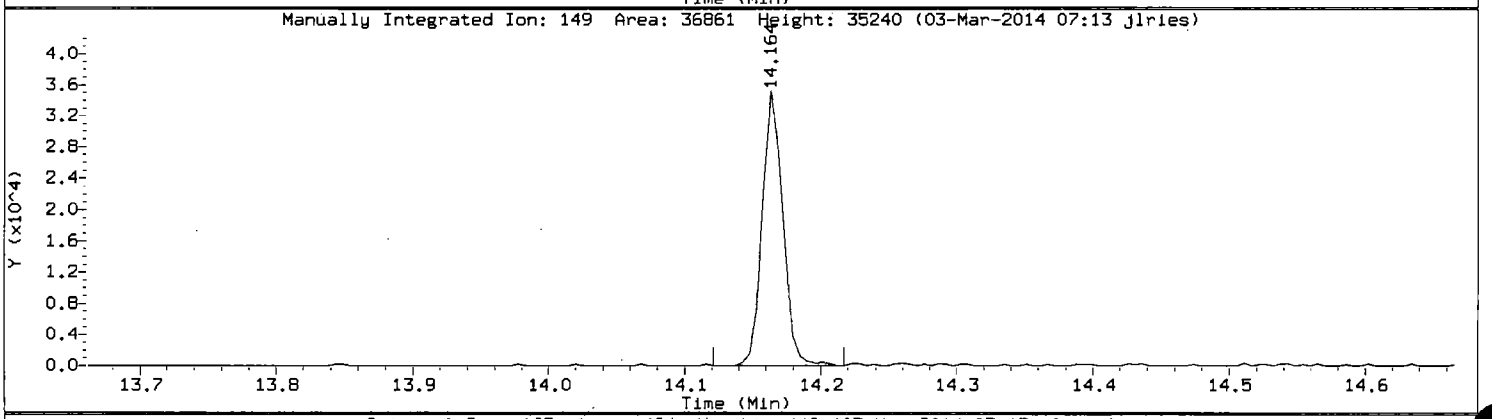
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

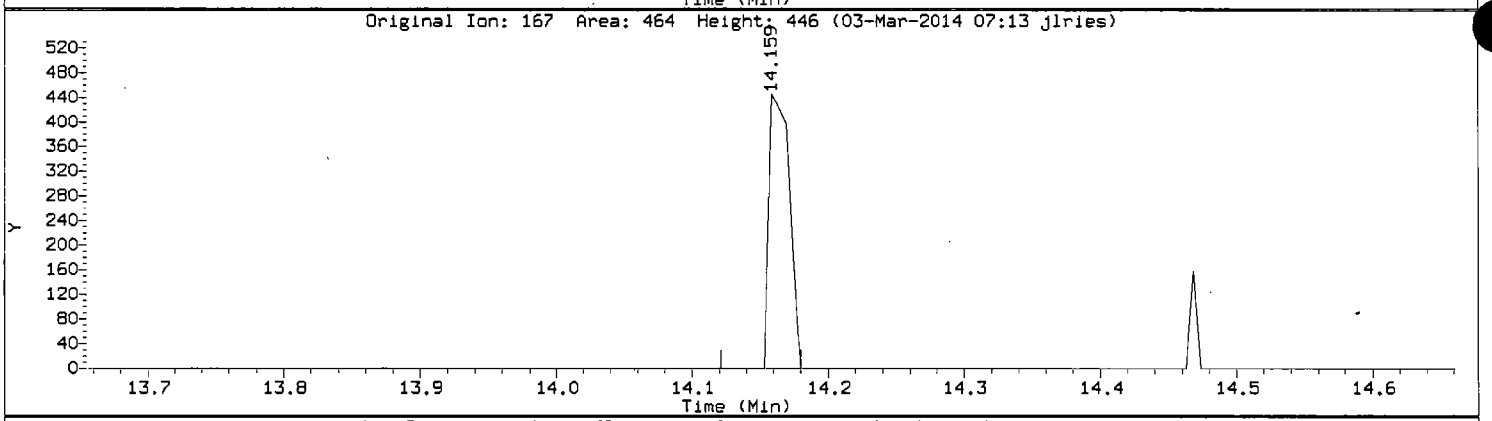


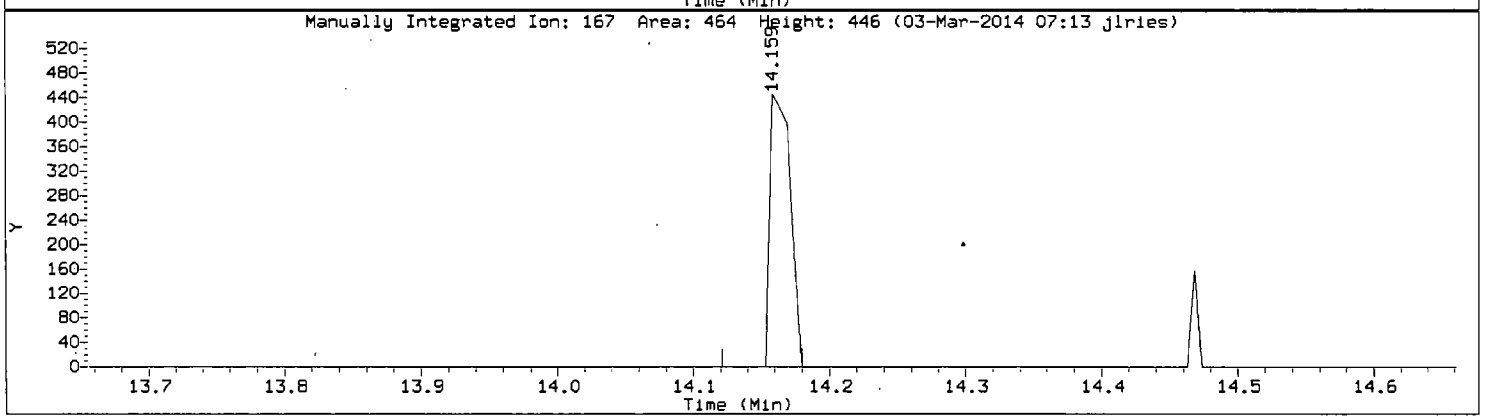
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: di-n-Octylphthalate
CAS Number: 117-84-0

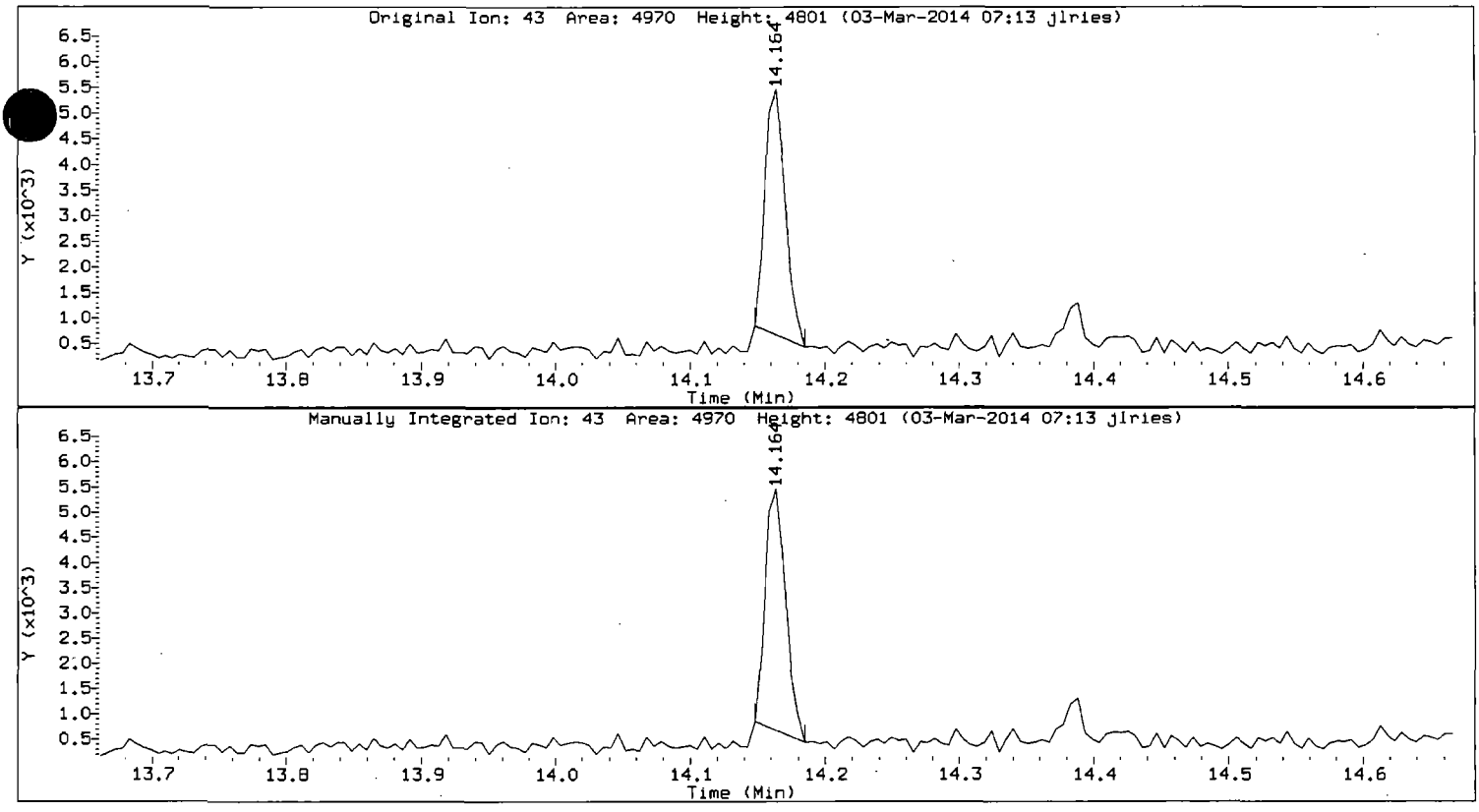






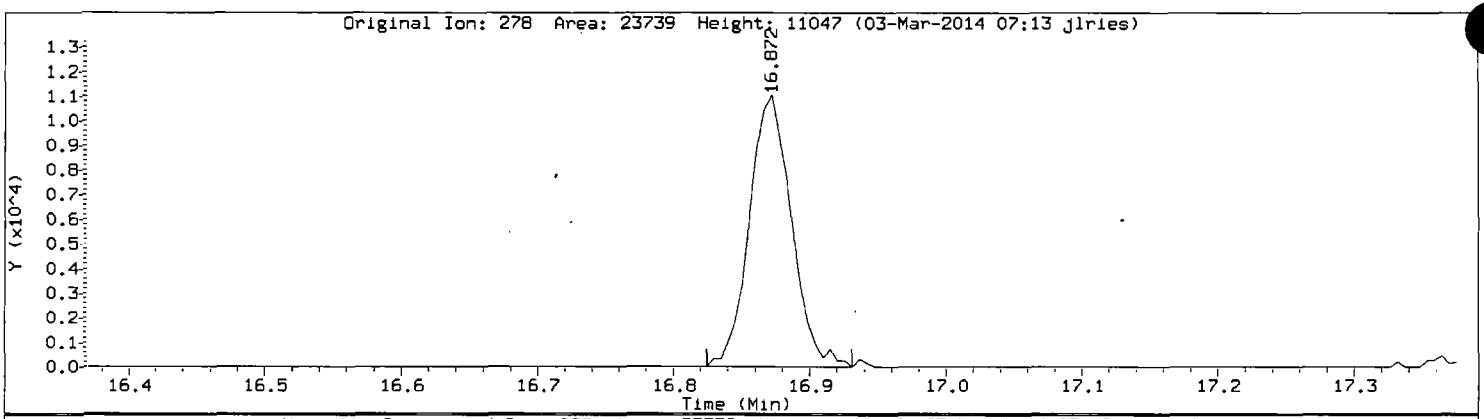


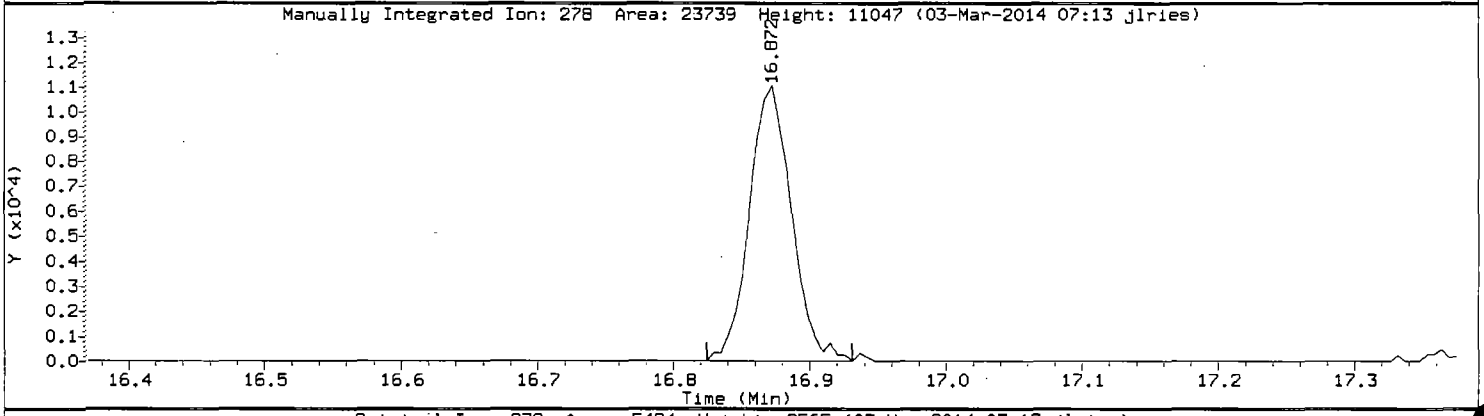
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

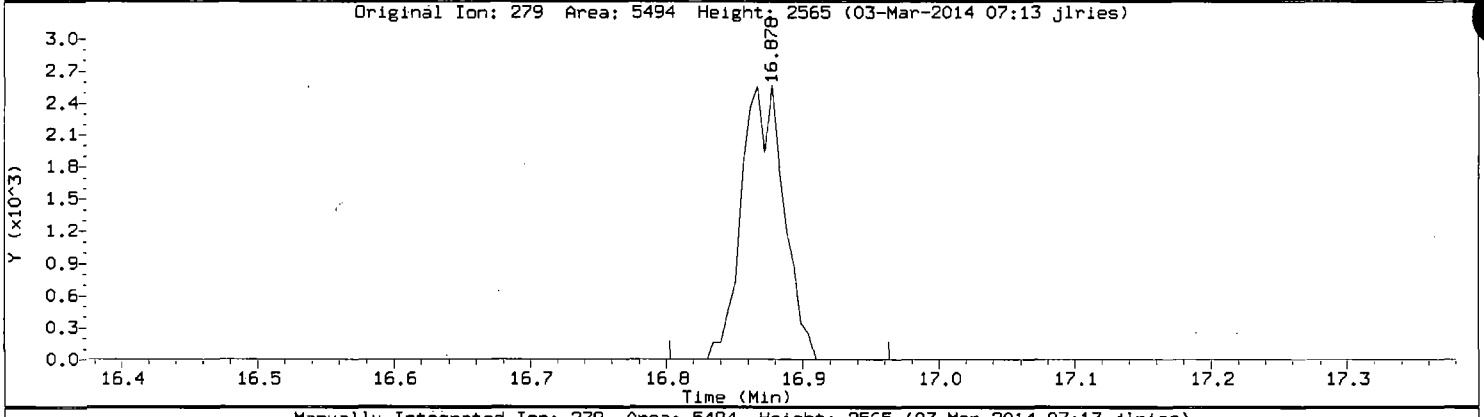


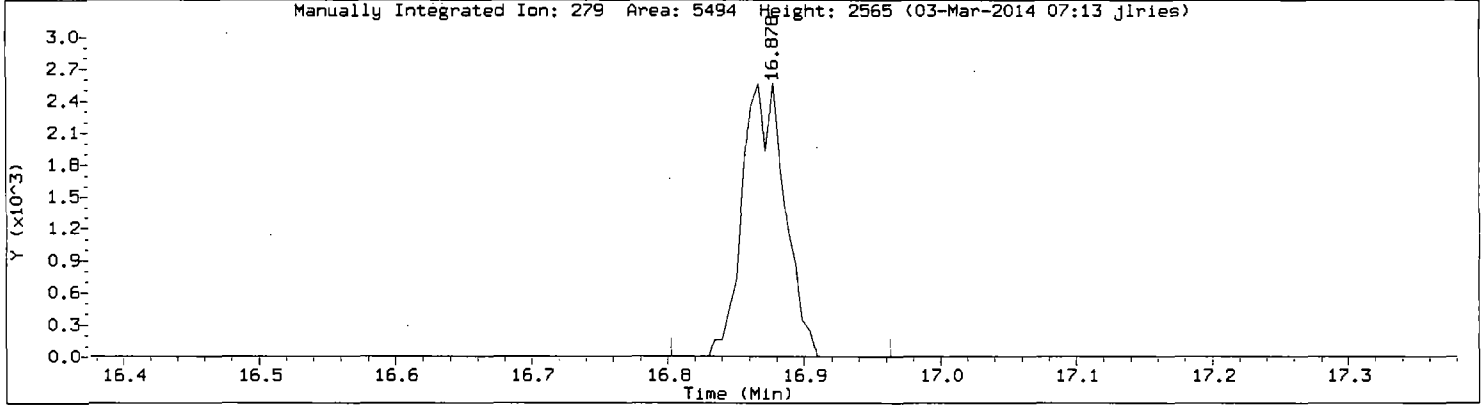
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3

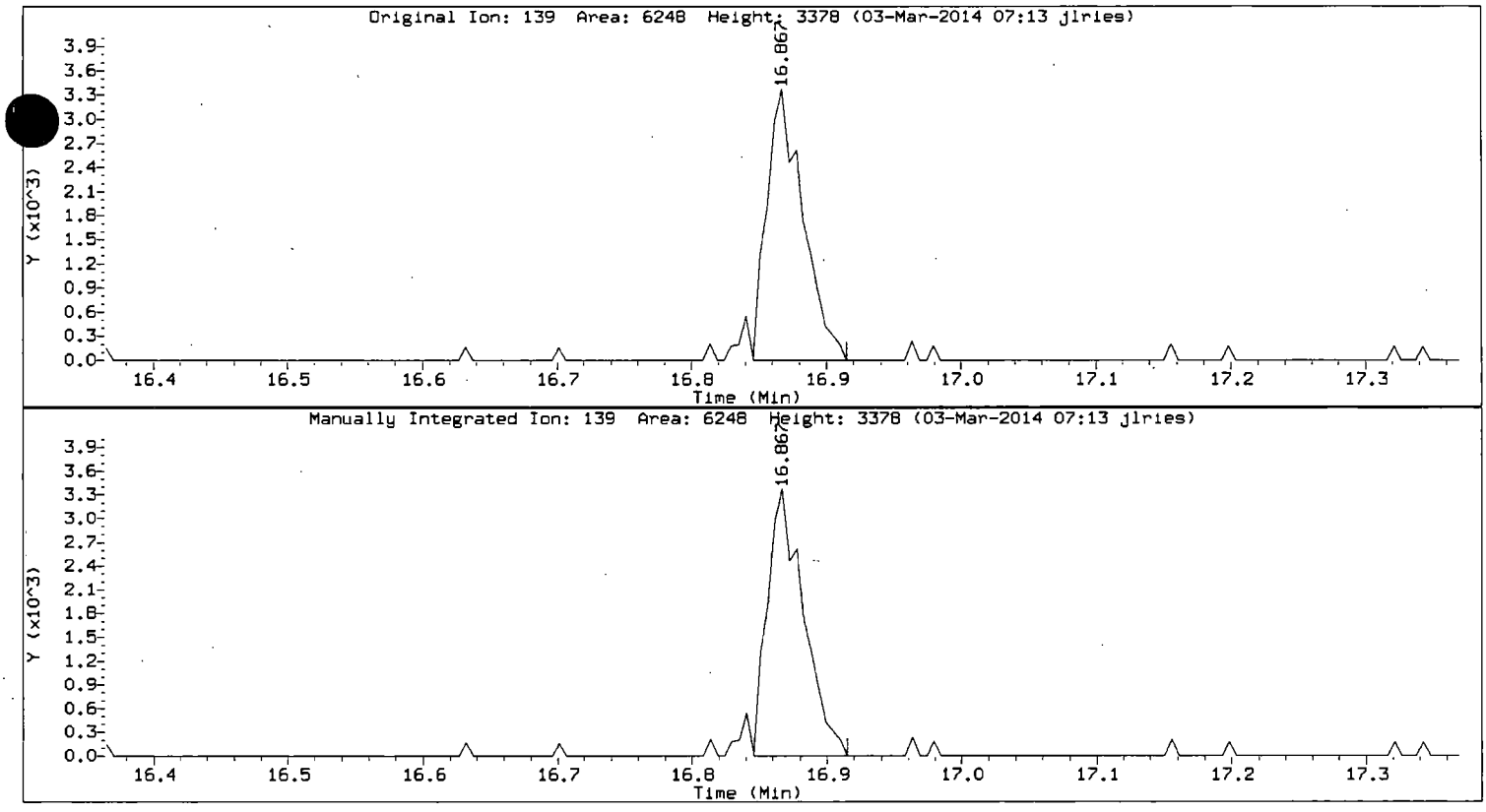






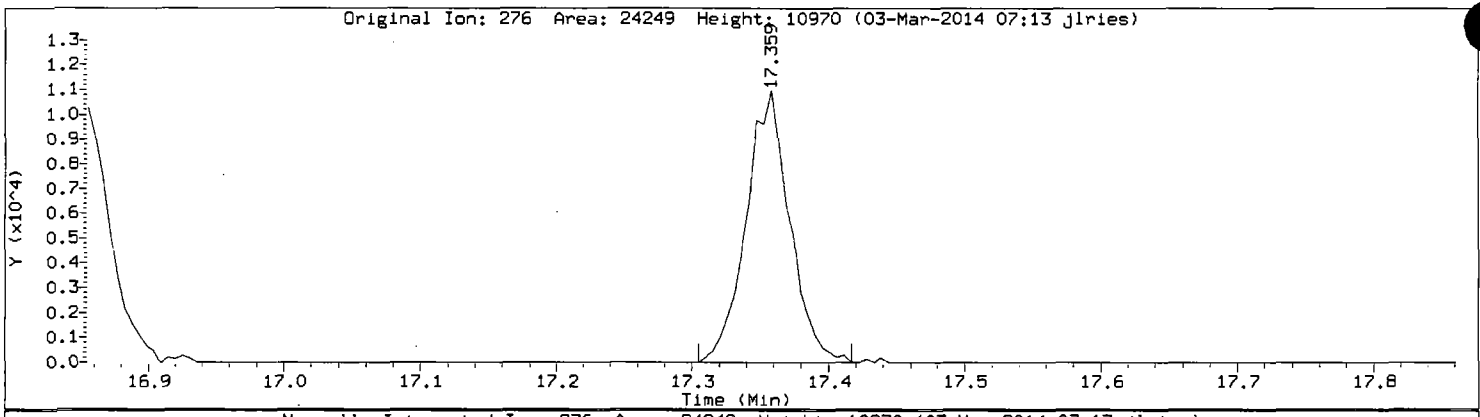


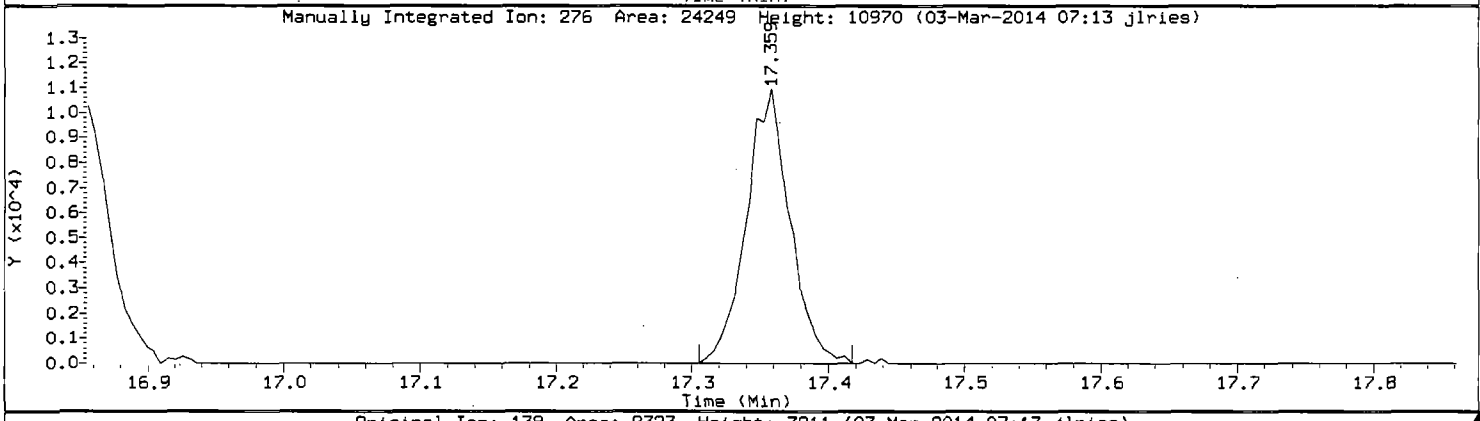
Injection Date: 28-FEB-2014 10:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

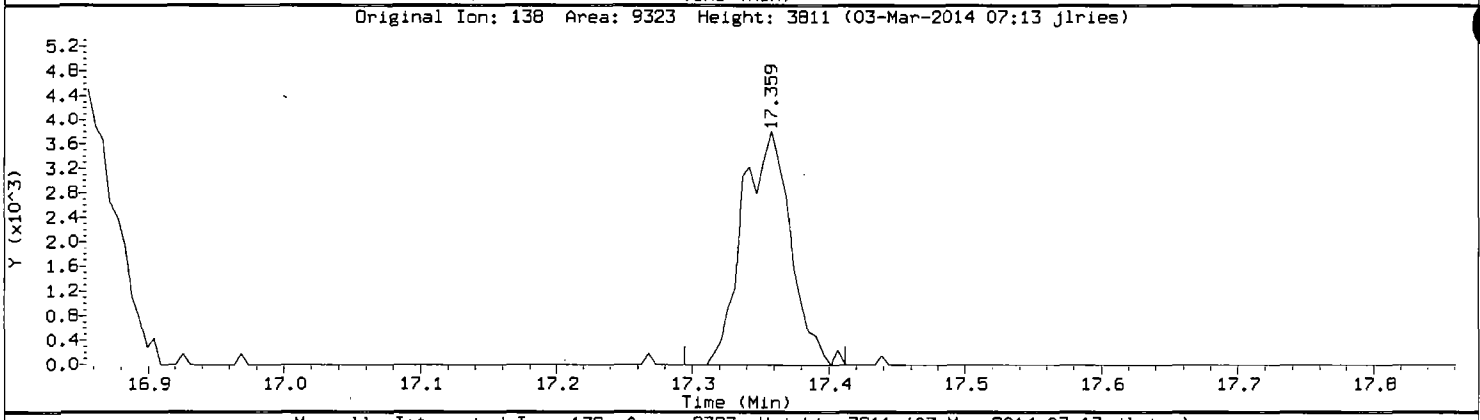


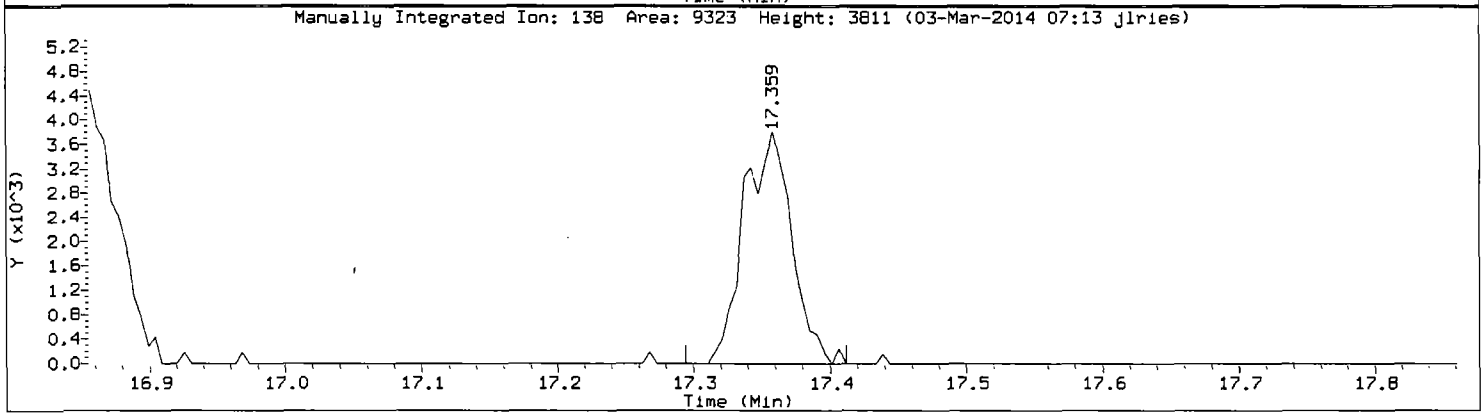
Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2

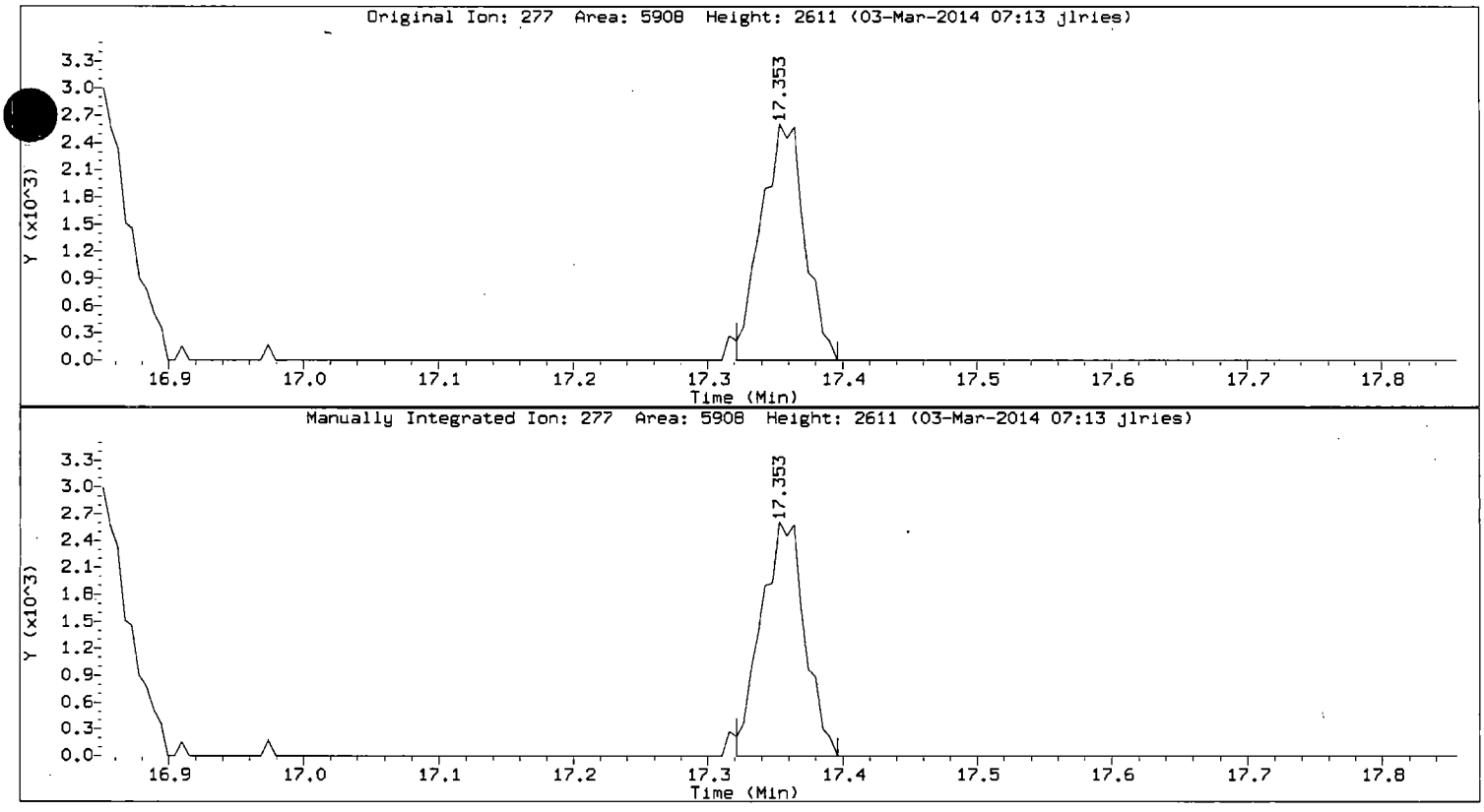








Injection Date: 28-FEB-2014 16:07
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 28-FEB-2014 16:34
Lab File ID: 02281420.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.82144	0.79148	0.79148	0.000	-3.64755	40.00000	Averaged
2 Pyridine	1.49516	1.35527	1.35527	0.000	-9.35606	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.41718	1.34262	1.34262	0.000	-5.26086	20.00000	Averaged
$ 4 Phenol-d6 (S)	1.62963	1.54456	1.54456	0.000	-5.22017	20.00000	Averaged
5 Phenol	1.71095	1.64148	1.64148	0.800	-4.06043	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.27504	1.09188	1.09188	0.700	-14.36496	40.00000	Averaged
7 2-Chlorophenol	1.43833	1.32686	1.32686	0.800	-7.74972	40.00000	Averaged
8 1,3-Dichlorobenzene	1.62113	1.39354	1.39354	0.000	-14.03929	40.00000	Averaged
10 1,4-Dichlorobenzene	1.64435	1.45393	1.45393	0.000	-11.57978	20.00000	Averaged
11 Benzyl alcohol	0.98327	0.89225	0.89225	0.000	-9.25606	40.00000	Averaged
12 1,2-Dichlorobenzene	1.53761	1.33578	1.33578	0.000	-13.12653	40.00000	Averaged
13 2-Methylphenol	1.09771	1.02180	1.02180	0.700	-6.91533	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	3.26596	2.44732	2.44732	0.000	-25.06589	40.00000	Averaged
15 3 & 4-Methylphenol	1.43620	1.49654	1.49654	0.600	4.20113	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	0.82934	0.69001	0.69001	0.500	-16.79997	40.00000	Averaged
18 Hexachloroethane	0.59718	0.51700	0.51700	0.300	-13.42590	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.34604	0.32772	0.32772	0.000	-5.29564	20.00000	Averaged
20 Nitrobenzene	0.32889	0.28438	0.28438	0.200	-13.53518	40.00000	Averaged
21 Isophorone	0.59079	0.53224	0.53224	0.400	-9.91087	40.00000	Averaged
22 2-Nitrophenol	0.19269	0.18402	0.18402	0.100	-4.49925	20.00000	Averaged
23 2,4-Dimethylphenol	0.33563	0.31204	0.31204	0.200	-7.02846	40.00000	Averaged
24 Benzoic acid	0.17260	0.18564	0.18564	0.000	7.55568	40.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.34958	0.31103	0.31103	0.300	-11.02813	40.00000	Averaged
26 2,4-Dichlorophenol	0.28989	0.26636	0.26636	0.200	-8.11842	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.30416	0.26307	0.26307	0.000	-13.51067	40.00000	Averaged
29 Naphthalene	1.01420	0.87951	0.87951	0.700	-13.28034	40.00000	Averaged
30 4-Chloroaniline	0.36851	0.30809	0.30809	0.010	-16.39507	40.00000	Averaged
31 Hexachlorobutadiene	0.16651	0.14296	0.14296	0.010	-14.13885	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.27561	0.24908	0.24908	0.200	-9.62659	20.00000	Averaged
33 2-Methylnaphthalene	0.66940	0.58971	0.58971	0.040	-11.90353	40.00000	Averaged
34 1-Methylnaphthalene	0.62068	0.55480	0.55480	0.000	-10.61342	40.00000	Averaged
35 Hexachlorocyclopentadiene	80.00000	65.95769	0.24241	0.050	-17.55289	40.00000	Quadratic
36 2,4,6-Trichlorophenol	0.37362	0.35911	0.35911	0.200	-3.88437	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.39701	0.38874	0.38874	0.200	-2.08430	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.39852	1.33856	1.33856	0.000	-4.28760	20.00000	Averaged
39 2-Chloronaphthalene	1.22024	1.04947	1.04947	0.800	-13.99453	40.00000	Averaged
40 2-Nitroaniline	0.39806	0.34783	0.34783	0.010	-12.61759	40.00000	Averaged
41 Dimethylphthalate	1.32327	1.16239	1.16239	0.010	-12.15810	40.00000	Averaged
42 2,6-Dinitrotoluene	0.30805	0.27423	0.27423	0.200	-10.97923	40.00000	Averaged
43 Acenaphthylene	1.88785	1.58375	1.58375	0.900	-16.10824	40.00000	Averaged
44 3-Nitroaniline	0.33118	0.27578	0.27578	0.010	-16.72689	40.00000	Averaged
46 Acenaphthene	1.11464	1.00883	1.00883	0.900	-9.49232	20.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 28-FEB-2014 16:34
Lab File ID: 02281420.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF80	RRF80	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
47 2,4-Dinitrophenol	80.00000	69.10209	0.12709	0.050	-13.62238	40.00000	Quadratic
48 4-Nitrophenol	0.25423	0.25133	0.25133	0.050	-1.13907	40.00000	Averaged
49 2,4-Dinitrotoluene	0.39940	0.34820	0.34820	0.200	-12.81840	40.00000	Averaged
50 Dibenzofuran	1.66686	1.48277	1.48277	0.800	-11.04378	40.00000	Averaged
51 Diethylphthalate	1.27891	1.09872	1.09872	0.010	-14.08985	40.00000	Averaged
52 4-Chlorophenylphenyl ether	0.61011	0.55275	0.55275	0.400	-9.40140	40.00000	Averaged
53 4-Nitroaniline	0.36803	0.34911	0.34911	0.010	-5.14126	40.00000	Averaged
54 Fluorene	1.35237	1.17348	1.17348	0.900	-13.22739	40.00000	Averaged
55 4,6-Dinitro-2-methylphenol	80.00000	70.01544	0.12031	0.010	-12.48070	40.00000	Quadratic
56 N-Nitrosodiphenylamine	0.69061	0.49678	0.49678	0.010	-28.06685	20.00000	Averaged <-
57 Azobenzene	1.22401	1.06396	1.06396	0.000	-13.07582	40.00000	Averaged
58 1,2-Diphenylhydrazine	1.22401	1.06396	1.06396	0.000	-13.07582	40.00000	Averaged
$ 59 2,4,6-Tribromophenol (S)	0.15272	0.15151	0.15151	0.000	-0.79299	20.00000	Averaged
60 4-Bromophenylphenyl ether	0.20143	0.17896	0.17896	0.100	-11.15515	40.00000	Averaged
61 Hexachlorobenzene	0.21379	0.17668	0.17668	0.100	-17.35583	40.00000	Averaged
62 Pentachlorophenol	80.00000	87.95026	0.12425	0.050	9.93783	20.00000	Quadratic
64 Phenanthrene	1.14257	0.97081	0.97081	0.700	-15.03223	40.00000	Averaged
65 Anthracene	1.15927	0.98695	0.98695	0.700	-14.86455	40.00000	Averaged
66 Carbazole	1.12590	0.99495	0.99495	0.010	-11.63080	40.00000	Averaged
67 di-n-Butylphthalate	1.36512	1.22230	1.22230	0.010	-10.46220	40.00000	Averaged
68 Fluoranthene	1.24099	1.05212	1.05212	0.600	-15.21922	20.00000	Averaged
69 Benzidine	80.00000	18.15993	0.15020	0.000	-77.30008	40.00000	Quadratic <-
70 Pyrene	1.35511	1.17512	1.17512	0.600	-13.28242	40.00000	Averaged
$ 71 Terphenyl-d14 (S)	0.85450	0.83364	0.83364	0.000	-2.44073	20.00000	Averaged
72 Butylbenzylphthalate	0.62689	0.56298	0.56298	0.010	-10.19521	40.00000	Averaged
73 bis(2-Ethylhexyl)phthalate	0.87641	0.78979	0.78979	0.010	-9.88314	40.00000	Averaged
74 3,3'-Dichlorobenzidine	0.36973	0.34108	0.34108	0.010	-7.74798	40.00000	Averaged
75 Benzo(a)anthracene	1.22862	1.01792	1.01792	0.800	-17.14937	40.00000	Averaged
77 Chrysene	1.12153	0.61175	0.61175	0.700	-45.45375	40.00000	Averaged <-
78 di-n-Octylphthalate	1.55444	1.40057	1.40057	0.010	-9.89898	20.00000	Averaged
79 Benzo(b)fluoranthene	1.18796	1.04745	1.04745	0.700	-11.82763	40.00000	Averaged
80 Benzo(k)fluoranthene	1.21558	1.10290	1.10290	0.700	-9.26967	40.00000	Averaged
81 Benzo(a)pyrene	1.13484	0.96774	0.96774	0.700	-14.72418	20.00000	Averaged
83 Indeno(1,2,3-cd)pyrene	1.22460	1.04176	1.04176	0.500	-14.93012	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.04083	0.61562	0.61562	0.400	-40.85334	40.00000	Averaged <-
85 Benzo(g,h,i)perylene	1.03855	0.94672	0.94672	0.500	-8.84250	40.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 28-FEB-2014 16:34
Lab File ID: 02281420.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	12.66447
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Lab Smp Id: ICV 10328-98
Inj Date : 28-FEB-2014 16:34
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICV 10328-98
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.373	2.373	(0.503)	104053	80.0000	77.1
2	Pyridine	79	2.416	2.416	(0.512)	178172	80.0000	72.5
$ 3	2-Fluorophenol (S)	112	3.431	3.431	(0.727)	176509	80.0000	75.8
$ 4	Phenol-d6 (S)	99	4.296	4.296	(0.911)	203057	80.0000	75.8
5	Phenol	94	4.312	4.312	(0.914)	215799	80.0000	76.8
6	bis(2-Chloroethyl)ether	63	4.414	4.414	(0.935)	143545	80.0000	68.5
7	2-Chlorophenol	128	4.499	4.499	(0.954)	174437	80.0000	73.8
8	1,3-Dichlorobenzene	146	4.665	4.665	(0.989)	183203	80.0000	68.8
* 9	1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	65733	40.0000	
10	1,4-Dichlorobenzene	146	4.740	4.740	(1.005)	191143	80.0000	70.7
11	Benzyl alcohol	79	4.847	4.847	(1.027)	117301	80.0000	72.6
12	1,2-Dichlorobenzene	146	4.905	4.905	(1.040)	175609	80.0000	69.5
13	2-Methylphenol	107	4.953	4.953	(1.050)	134332	80.0000	74.5
14	bis(2-Chloroisopropyl) ether	45	4.985	4.985	(1.057)	321739	80.0000	59.9(M)
15	3 & 4-Methylphenol	107	5.124	5.124	(1.086)	196744	80.0000	83.4
17	N-Nitroso-di-n-propylamine	70	5.135	5.135	(1.088)	90713	80.0000	66.6
18	Hexachloroethane	117	5.279	5.279	(1.119)	67968	80.0000	69.2
$ 19	Nitrobenzene-d5 (S)	82	5.317	5.317	(0.863)	126203	60.0000	56.8
20	Nitrobenzene	77	5.343	5.343	(0.867)	146017	80.0000	69.2
21	Isophorone	82	5.611	5.611	(0.911)	273288	80.0000	72.1
22	2-Nitrophenol	139	5.707	5.707	(0.926)	94488	80.0000	76.4
23	2,4-Dimethylphenol	107	5.733	5.733	(0.931)	160220	80.0000	74.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	5.840	5.840	(0.948)	95321	80.0000	86.0(H)
	25 bis(2-Chloroethoxy)methane	93	5.846	5.846	(0.949)	159701	80.0000	71.2
	26 2,4-Dichlorophenol	162	5.984	5.984	(0.971)	136766	80.0000	73.5
	27 1,2,4-Trichlorobenzene	180	6.091	6.091	(0.989)	135075	80.0000	69.2
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	256733	40.0000	(Q)
	29 Naphthalene	128	6.187	6.187	(1.004)	451598	80.0000	69.4
	30 4-Chloroaniline	127	6.236	6.236	(1.012)	158193	80.0000	66.9
	31 Hexachlorobutadiene	225	6.326	6.326	(1.027)	73407	80.0000	68.7
	32 4-Chloro-3-methylphenol	107	6.813	6.813	(1.106)	127892	80.0000	72.3
	33 2-Methylnaphthalene	142	7.016	7.016	(1.139)	302798	80.0000	70.5
	34 1-Methylnaphthalene	142	7.138	7.138	(1.159)	284873	80.0000	71.5
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	61398	80.0000	66.0
	36 2,4,6-Trichlorophenol	196	7.352	7.352	(0.886)	90955	80.0000	76.9
	37 2,4,5-Trichlorophenol	196	7.400	7.400	(0.892)	98459	80.0000	78.3
$	38 2-Fluorobiphenyl (S)	172	7.459	7.459	(0.899)	254272	60.0000	57.4
	39 2-Chloronaphthalene	162	7.614	7.614	(0.918)	265811	80.0000	68.8
	40 2-Nitroaniline	65	7.726	7.726	(0.931)	88099	80.0000	69.9
	41 Dimethylphthalate	163	7.945	7.945	(0.958)	294410	80.0000	70.3
	42 2,6-Dinitrotoluene	165	8.025	8.025	(0.967)	69457	80.0000	71.2
	43 Acenaphthylene	152	8.121	8.121	(0.979)	401132	80.0000	67.1(M)
	44 3-Nitroaniline	138	8.234	8.234	(0.992)	69850	80.0000	66.6
*	45 Acenaphthene-d10	164	8.298	8.298	(1.000)	126640	40.0000	
	46 Acenaphthene	154	8.340	8.340	(1.005)	255517	80.0000	72.4
	47 2,4-Dinitrophenol	184	8.362	8.362	(1.008)	32190	80.0000	69.1(Q)
	48 4-Nitrophenol	65	8.442	8.442	(1.017)	63657	80.0000	79.1
	49 2,4-Dinitrotoluene	165	8.522	8.522	(1.027)	88192	80.0000	69.7
	50 Dibenzofuran	168	8.549	8.549	(1.030)	375557	80.0000	71.2
	51 Diethylphthalate	149	8.821	8.821	(1.063)	278283	80.0000	68.7
	52 4-Chlorophenylphenyl ether	204	8.971	8.971	(1.081)	140001	80.0000	72.5
	53 4-Nitroaniline	138	8.992	8.992	(1.084)	88423	80.0000	75.9
	54 Fluorene	166	8.976	8.976	(1.082)	297220	80.0000	69.4
	55 4,6-Dinitro-2-methylphenol	198	9.030	9.030	(0.890)	49748	80.0000	70.0
	56 N-Nitrosodiphenylamine	169	9.115	9.115	(0.899)	205417	80.0000	57.5
	57 Azobenzene	77	9.163	9.163	(1.104)	269480	80.0000	69.5
	58 1,2-Diphenylhydrazine	77	9.163	9.163	(1.104)	269480	80.0000	69.5
$	59 2,4,6-Tribromophenol (S)	330	9.275	9.275	(1.118)	38374	80.0000	79.4
	60 4-Bromophenylphenyl ether	248	9.574	9.574	(0.944)	74000	80.0000	71.1
	61 Hexachlorobenzene	284	9.660	9.660	(0.953)	73057	80.0000	66.1
	62 Pentachlorophenol	266	9.900	9.900	(0.976)	51378	80.0000	88.0
*	63 Phenanthrene-d10	188	10.141	10.141	(1.000)	206748	40.0000	
	64 Phenanthrene	178	10.173	10.173	(1.003)	401428	80.0000	68.0
	65 Anthracene	178	10.232	10.232	(1.009)	408101	80.0000	68.1
	66 Carbazole	167	10.429	10.429	(1.028)	411408	80.0000	70.7
	67 di-n-Butylphthalate	149	10.846	10.846	(1.070)	505416	80.0000	71.6
	68 Fluoranthene	202	11.647	11.647	(1.149)	435048	80.0000	67.8
	69 Benzidine	184	11.802	11.802	(0.879)	58533	80.0000	18.2
	70 Pyrene	202	11.930	11.930	(0.889)	457955	80.0000	69.4
$	71 Terphenyl-d14 (S)	244	12.112	12.112	(0.902)	243659	60.0000	58.5
	72 Butylbenzylphthalate	149	12.710	12.710	(0.947)	219398	80.0000	71.8
	73 bis(2-Ethylhexyl)phthalate	149	13.410	13.410	(0.999)	307791	80.0000	72.1
	74 3,3'-Dichlorobenzidine	252	13.367	13.367	(0.996)	132924	80.0000	73.8
	75 Benzo(a)anthracene	228	13.410	13.410	(0.999)	396692	80.0000	66.3
*	76 Chrysene-d12	240	13.426	13.426	(1.000)	194855	40.0000	(Q)
	77 Chrysene	228	13.458	13.458	(1.002)	238407	80.0000	43.6

Data File: \\192.168.10.12\Chem\10mss9.i\022814B.b\0228142O.D
Report Date: 03-Mar-2014 07:18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.169	14.169	(1.055)	545815	80.0000	72.1
	79 Benzo(b)fluoranthene	252	14.682	14.682	(0.967)	390671	80.0000	70.5
	80 Benzo(k)fluoranthene	252	14.719	14.719	(0.970)	411352	80.0000	72.6
	81 Benzo(a)pyrene	252	15.104	15.104	(0.995)	360943	80.0000	68.2
*	82 Perylene-d12	264	15.178	15.178	(1.000)	186487	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	16.872	16.872	(1.112)	388550	80.0000	68.0
	84 Dibenzo(a,h)anthracene	278	16.888	16.888	(1.113)	229609	80.0000	47.3
	85 Benzo(g,h,i)perylene	276	17.385	17.385	(1.145)	353101	80.0000	72.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281420.D
Lab Smp Id: ICV 10328-98
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 14:19
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

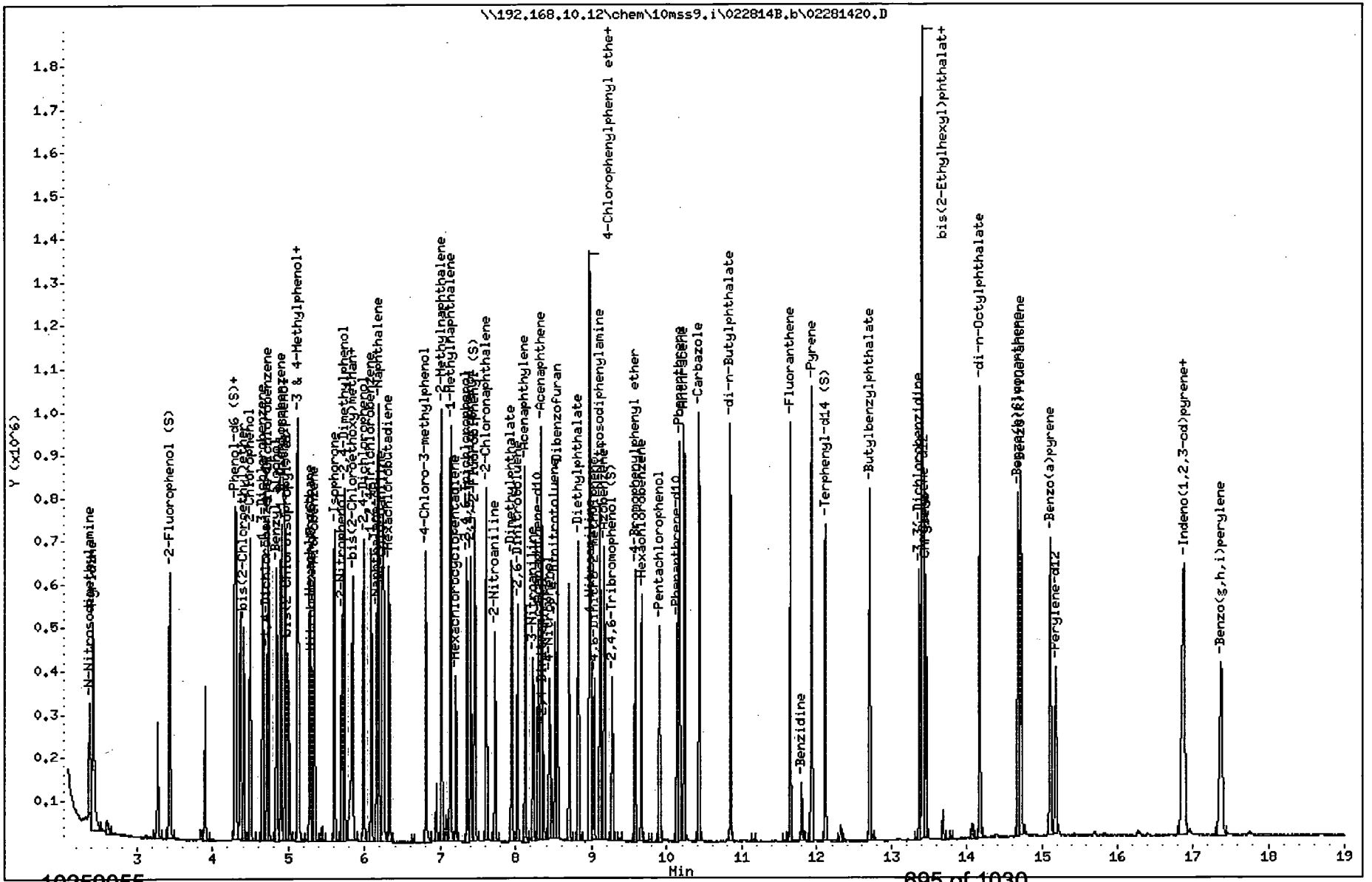
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	66154	33077	132308	65733	-0.64
28 Naphthalene-d8	255442	127721	510884	256733	0.51
45 Acenaphthene-d10	125688	62844	251376	126640	0.76
63 Phenanthrene-d10	201900	100950	403800	206748	2.40
76 Chrysene-d12	201053	100527	402106	194855	-3.08
82 Perylene-d12	192241	96121	384482	186487	-2.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.30	0.00
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	0.00
76 Chrysene-d12	13.43	12.93	13.93	13.43	0.00
82 Perylene-d12	15.18	14.68	15.68	15.18	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

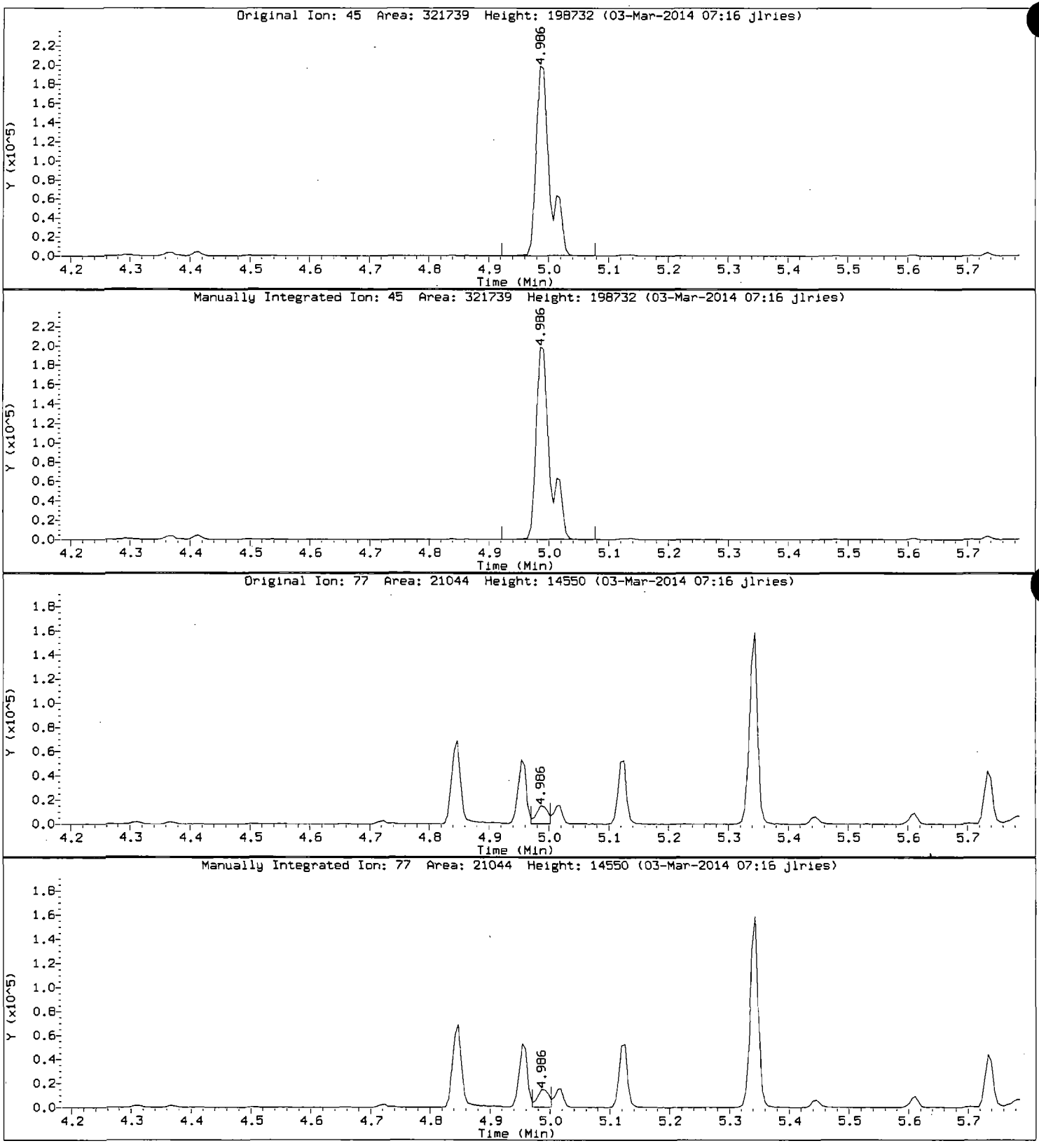
Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281420.D
Date : 28-FEB-2014 16:34
Client ID:
Sample Info: ICV 10328-98
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

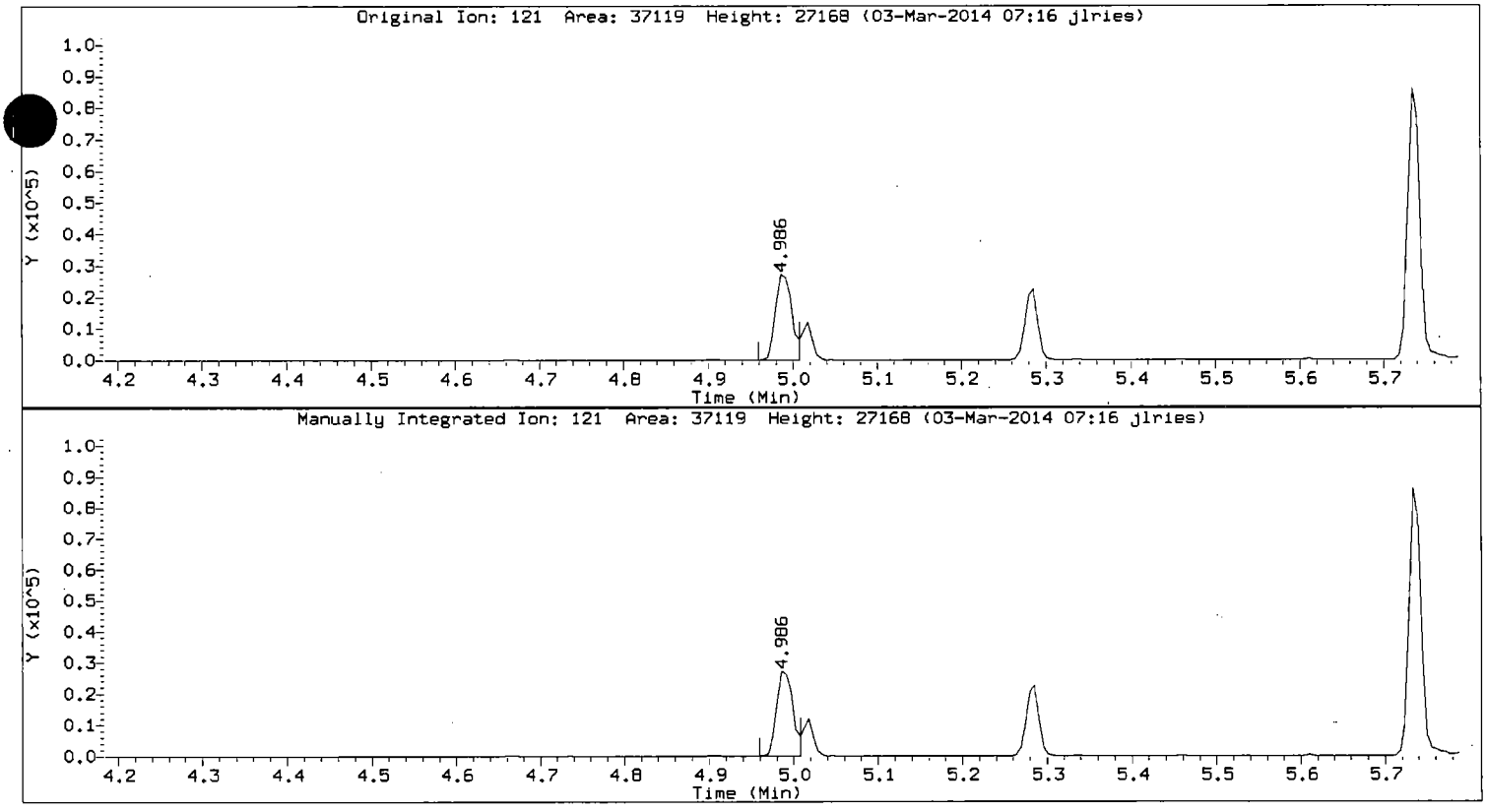


Injection Date: 28-FEB-2014 16:34
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98

Compound: bis(2-Chloroisopropyl) ether
CAS Number: 108-60-1

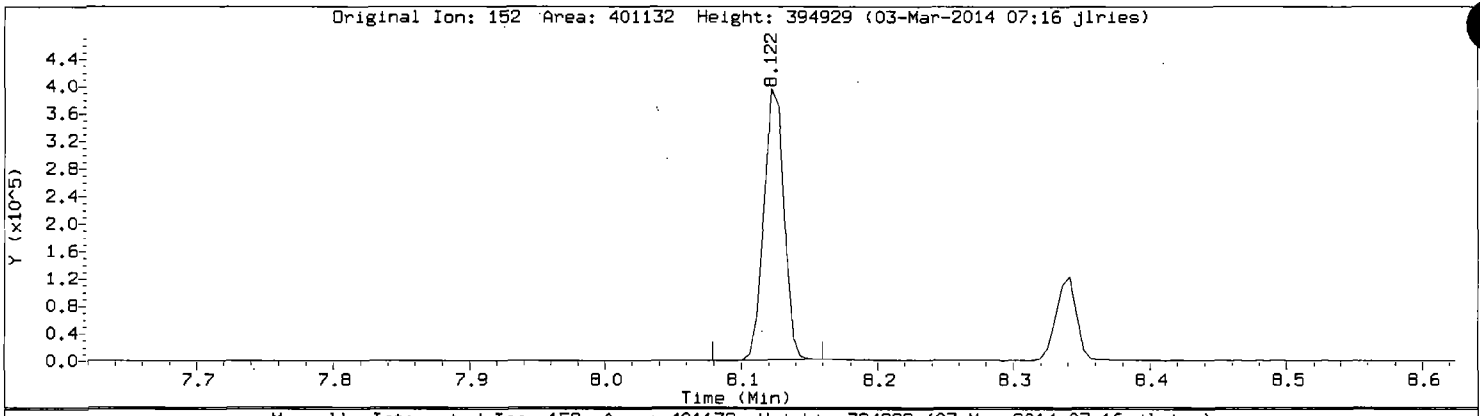


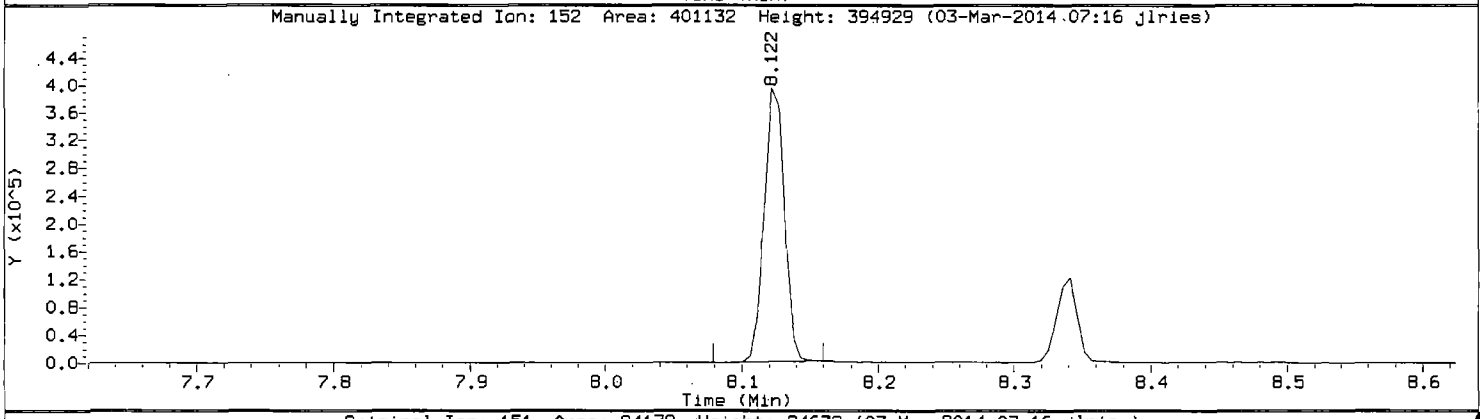
Injection Date: 28-FEB-2014 10:31
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98

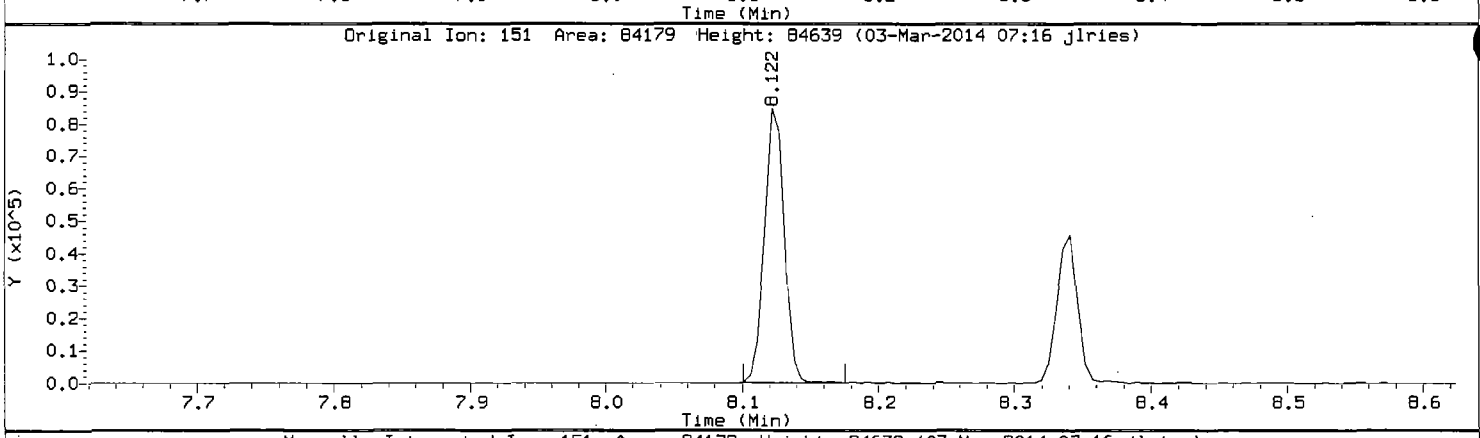


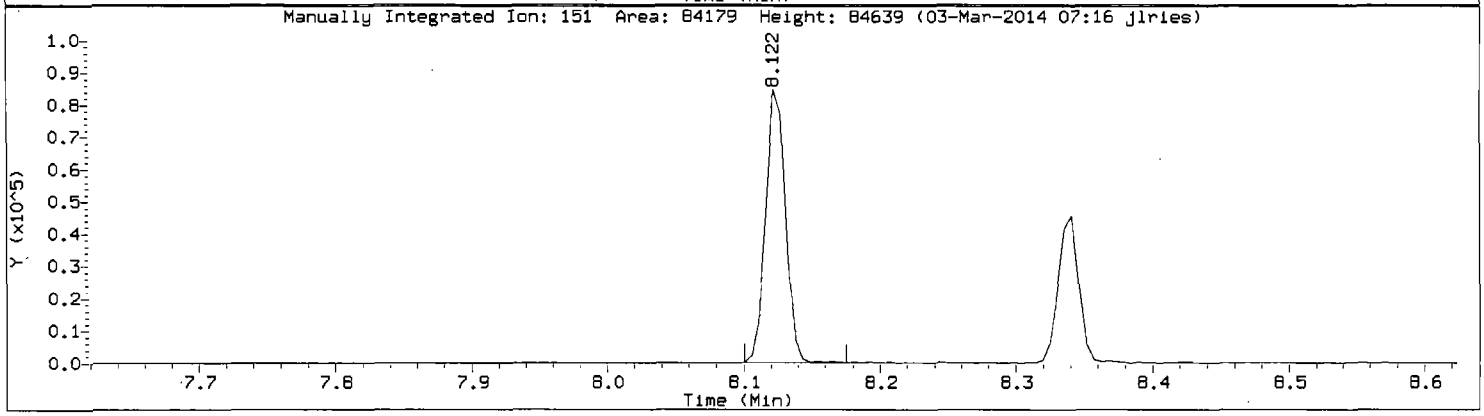
Injection Date: 28-FEB-2014 10:34
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98

Compound: Acenaphthylene
CAS Number: 208-96-8

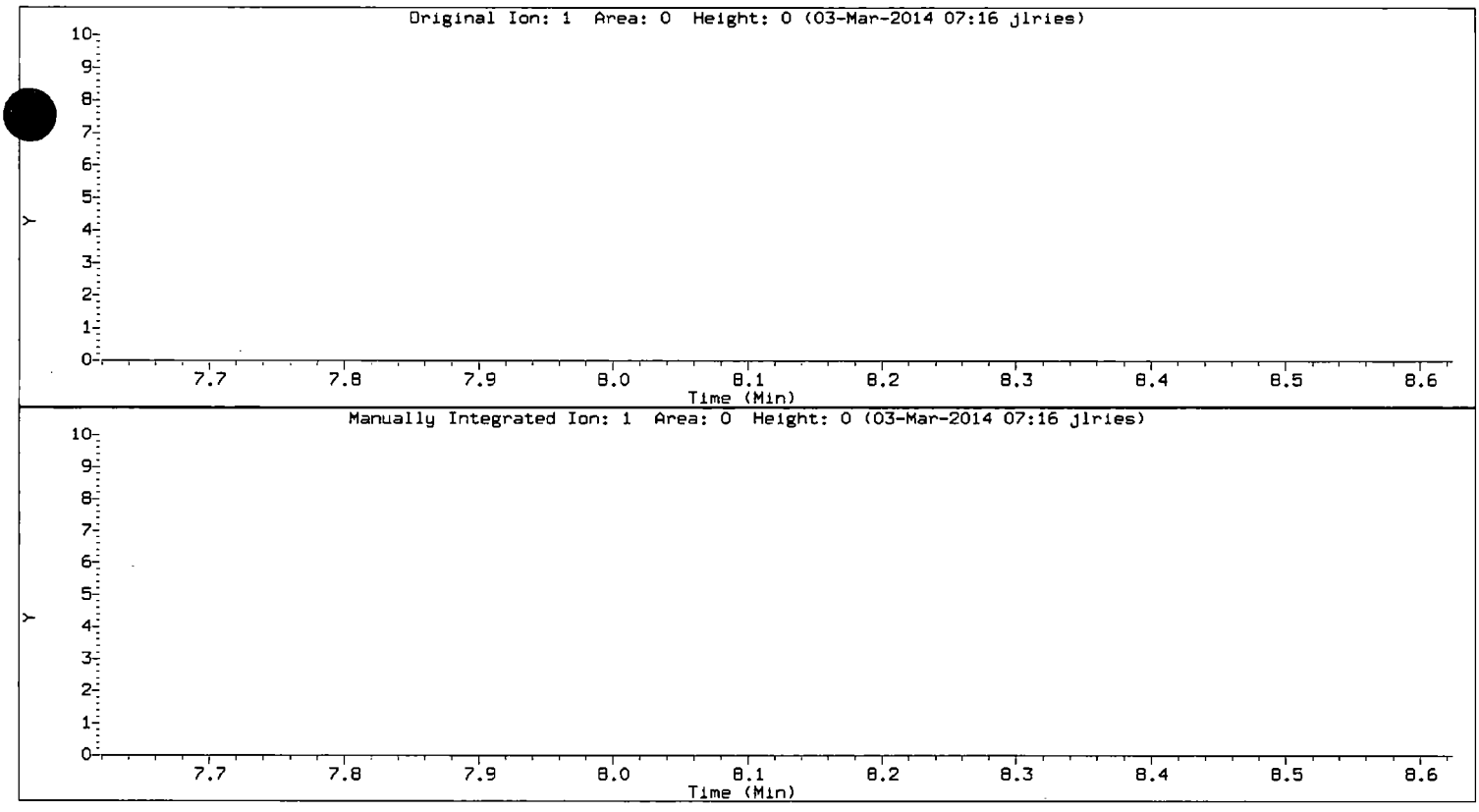








Injection Date: 28-FEB-2014 16:34
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98



Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281421.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 28-FEB-2014 17:01
Lab File ID: 02281421.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: ICV2 10328-47 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 Hexachlorocyclopentadiene	80.00000	71.71653	0.26500	0.050	-10.35434	40.00000	Quadratic
56 N-Nitrosodiphenylamine	0.69061	0.68671	0.68671	0.010	-0.56558	20.00000	Averaged
77 Chrysene	1.12153	1.09155	1.09155	0.700	-2.67334	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.04083	1.03824	1.03824	0.400	-0.24884	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.46052
Maximun Average %D/Drift = 40.00000
* Passed Average %D/Drift Test.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281421.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\022814B.b\02281421.D
Lab Smp Id: ICV2 10328-47
Inj Date : 28-FEB-2014 17:01
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICV2 10328-47
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Meth Date : 03-Mar-2014 07:18 10mss9.i Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ChrysDIPDIB.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
*	9 1,4-Dichlorobenzene-d4	152	4.718	4.718	(1.000)	66581	40.0000		
*	28 Naphthalene-d8	136	6.161	6.161	(1.000)	257430	40.0000		(Q)
	35 Hexachlorocyclopentadiene	237	7.208	7.208	(0.869)	66345	80.0000	71.7	
*	45 Acenaphthene-d10	164	8.292	8.292	(1.000)	125177	40.0000		
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	279426	80.0000	79.5	
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	203453	40.0000		
*	76 Chrysene-d12	240	13.421	13.421	(1.000)	196031	40.0000		(Q)
	77 Chrysene	228	13.458	13.458	(1.003)	427956	80.0000	77.9	
*	82 Perylene-d12	264	15.173	15.173	(1.000)	188111	40.0000		
	84 Dibenzo(a,h)anthracene	278	16.893	16.893	(1.113)	390609	80.0000	79.8	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281421.D
Report Date: 03-Mar-2014 07:18

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02281421.D
Lab Smp Id: ICV2 10328-47
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\022814B.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 16:34
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

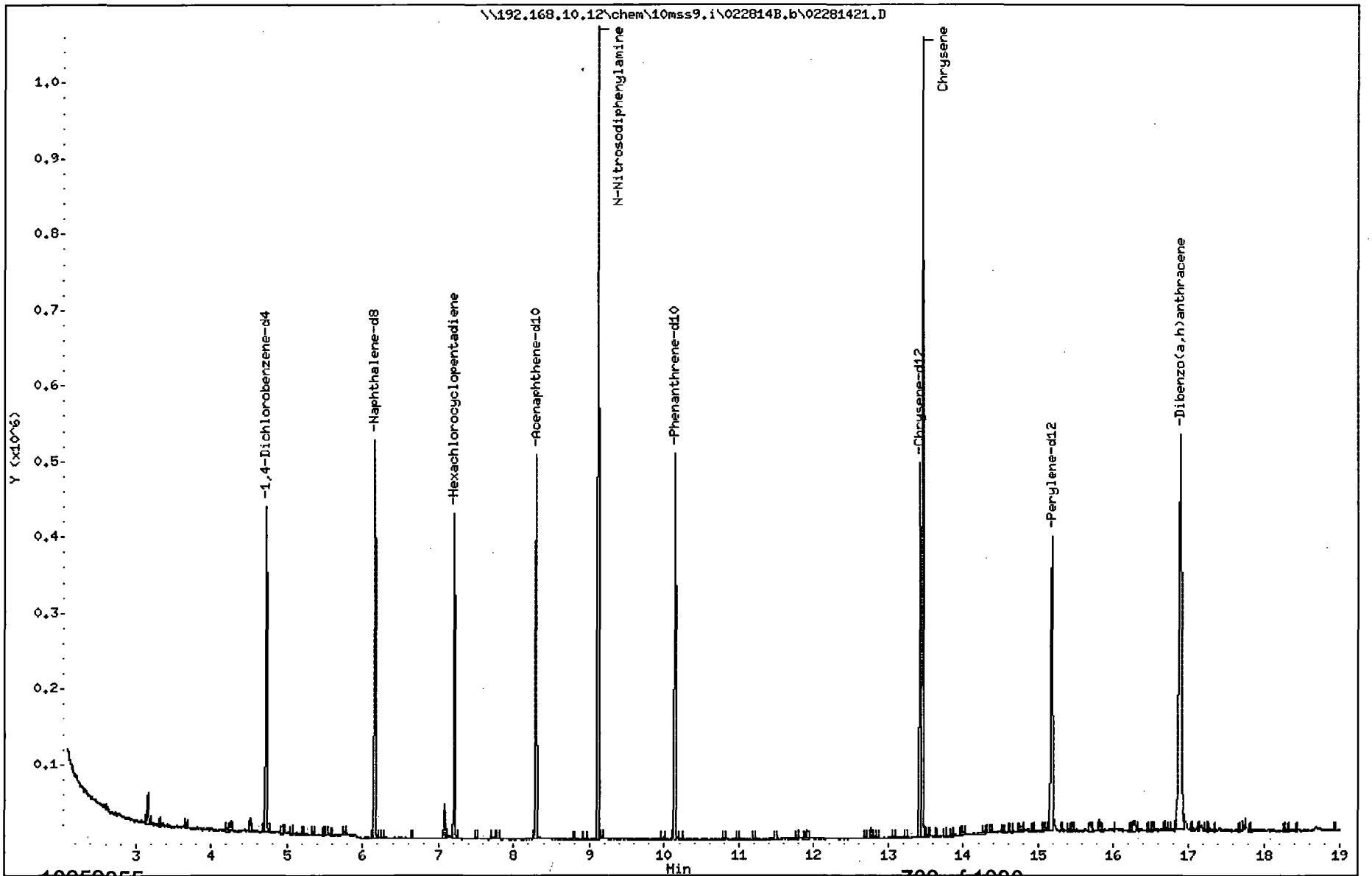
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	66154	33077	132308	66581	0.65
28 Naphthalene-d8	255442	127721	510884	257430	0.78
45 Acenaphthene-d10	125688	62844	251376	125177	-0.41
63 Phenanthrene-d10	201900	100950	403800	203453	0.77
76 Chrysene-d12	201053	100527	402106	196031	-2.50
82 Perylene-d12	192241	96121	384482	188111	-2.15

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.72	0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.16	0.00
45 Acenaphthene-d10	8.30	7.80	8.80	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.04
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281421.D
Date : 28-FEB-2014 17:01
Client ID:
Sample Info: ICV2 10328-47
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25



Injection Date: 28-FEB-2014 17:01
Instrument: 10mss9.i
Lab Sample ID: ICV2 10328-47
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

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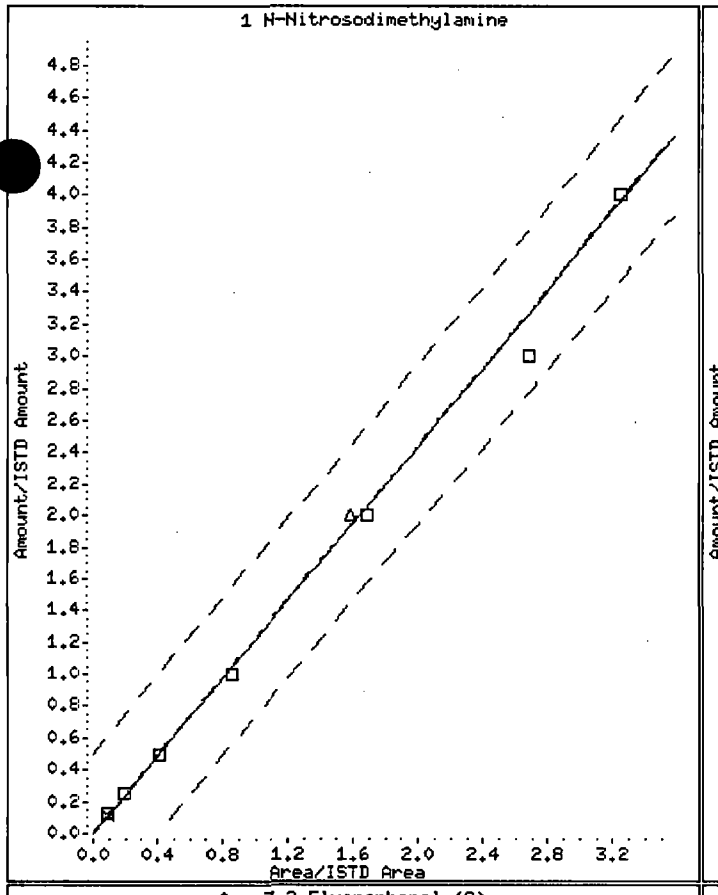

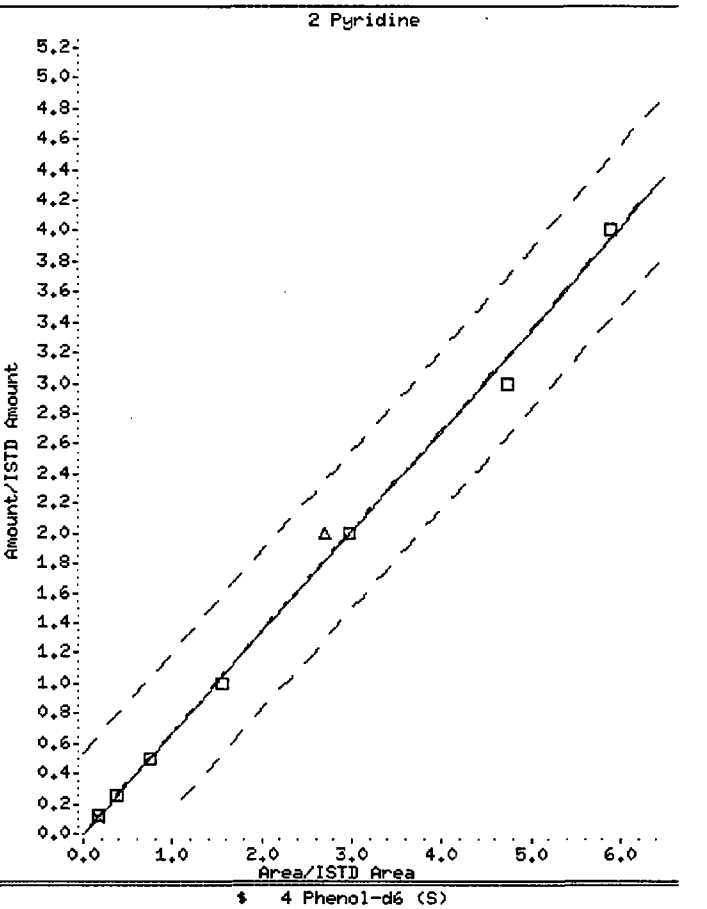

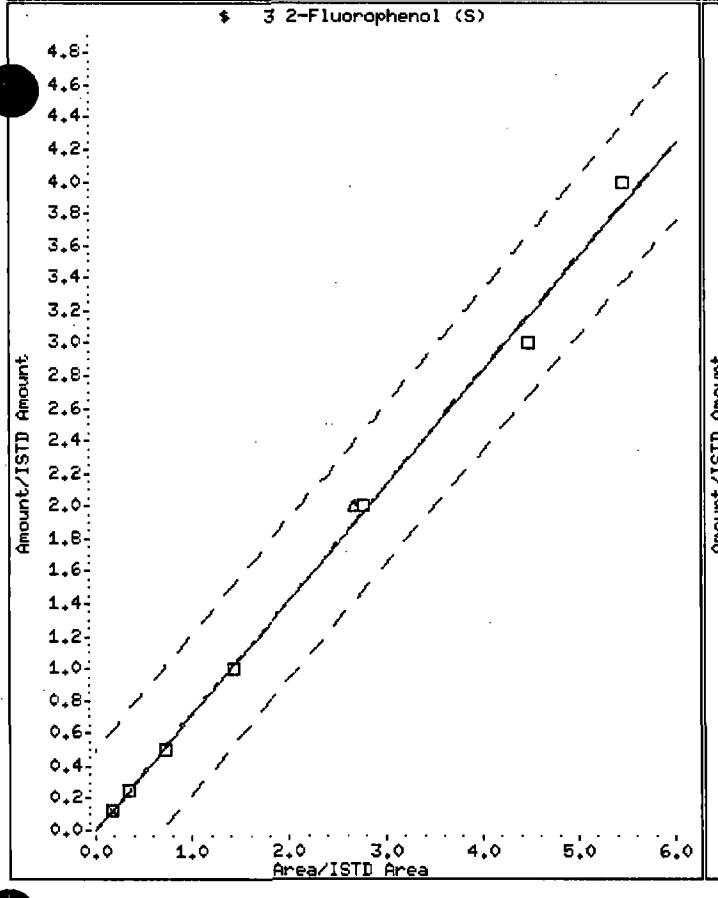

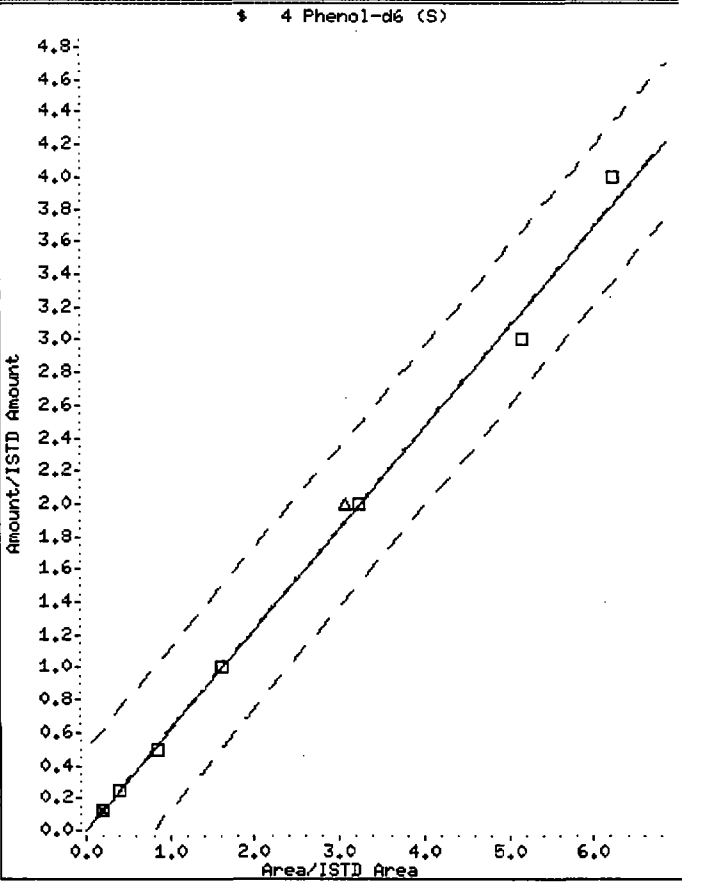

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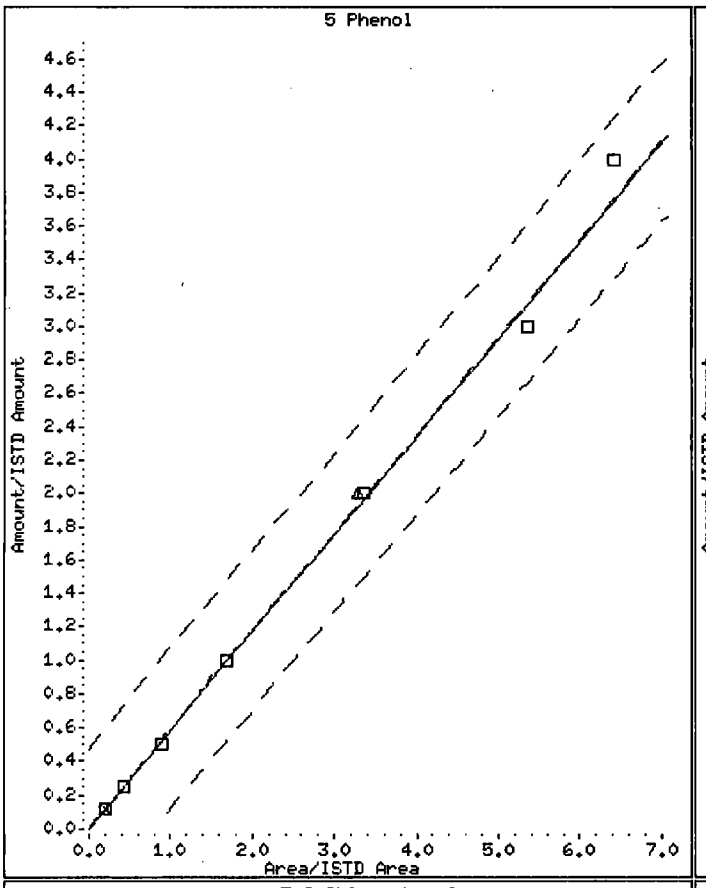

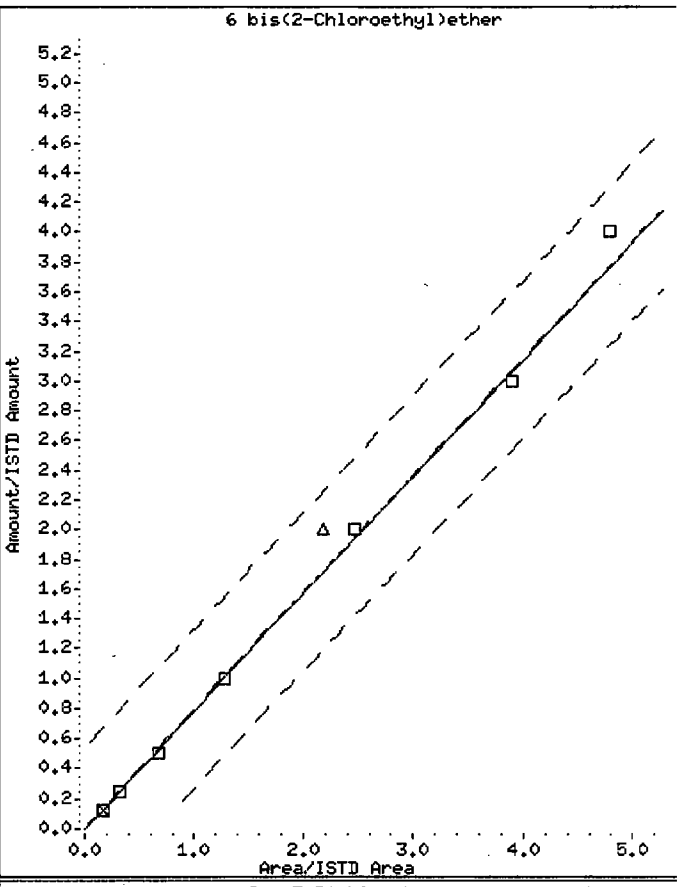

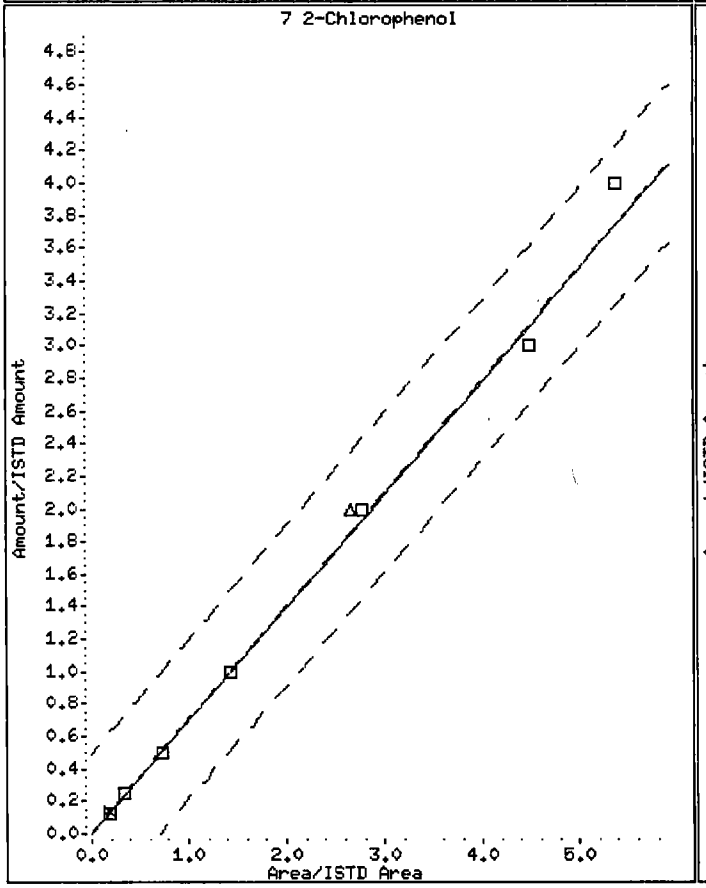

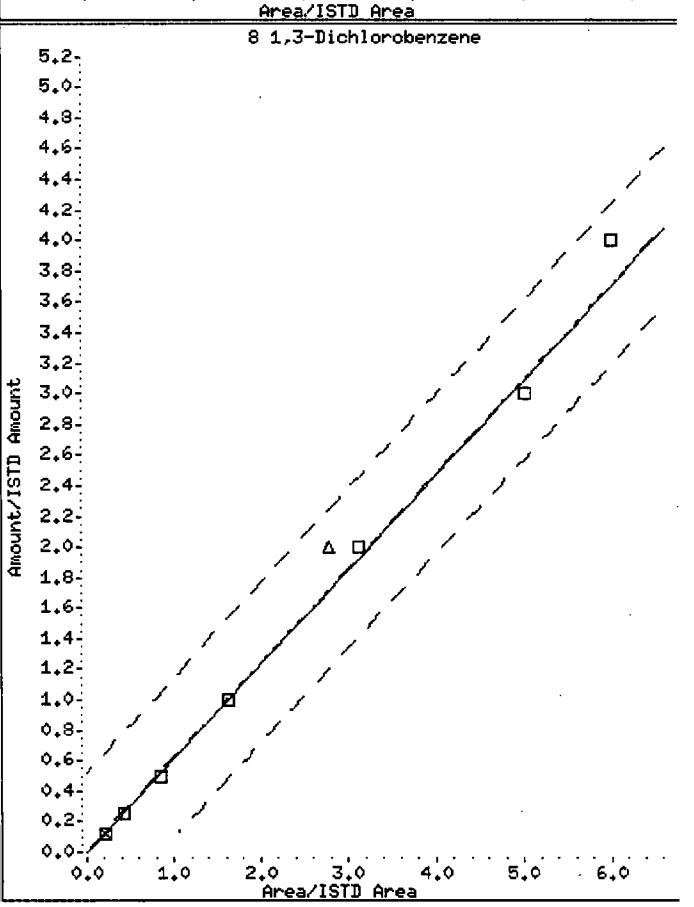

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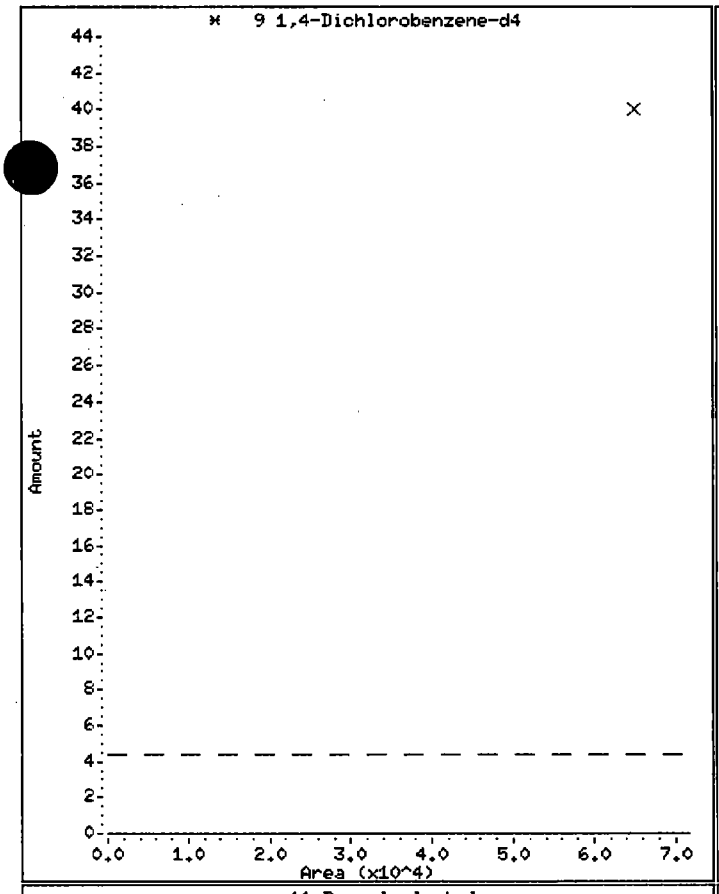

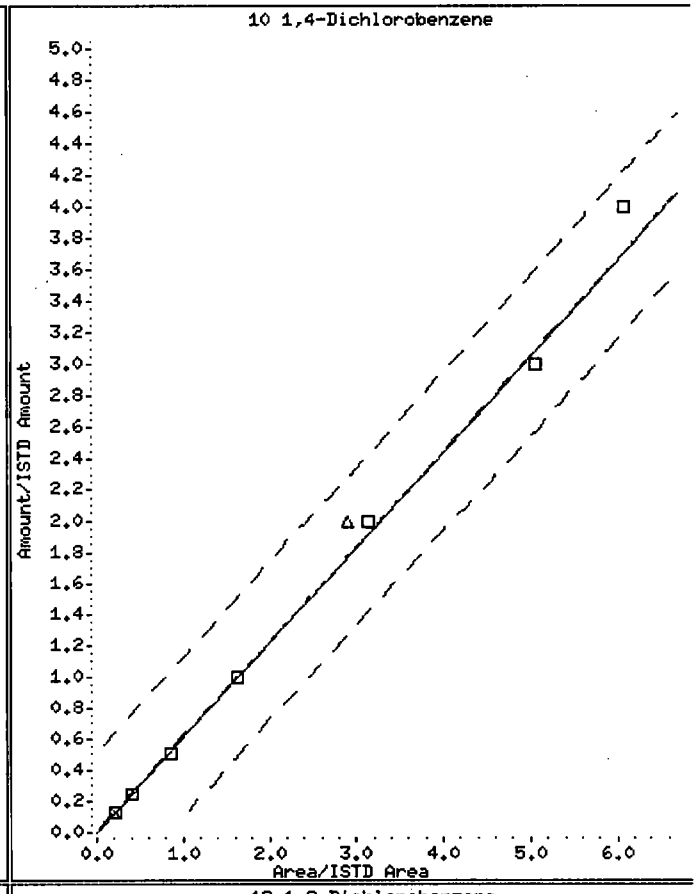

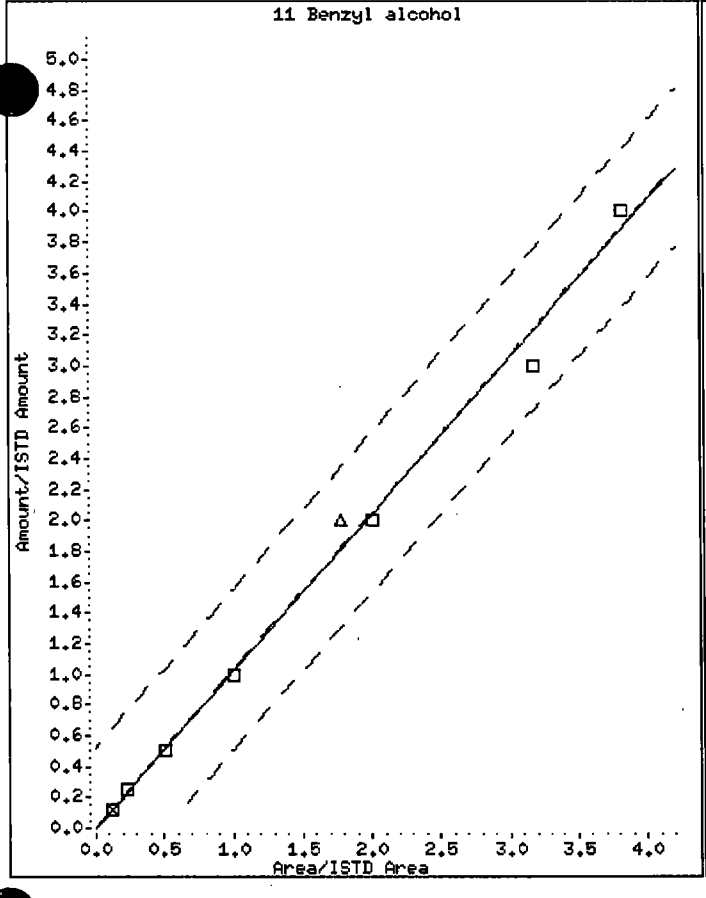

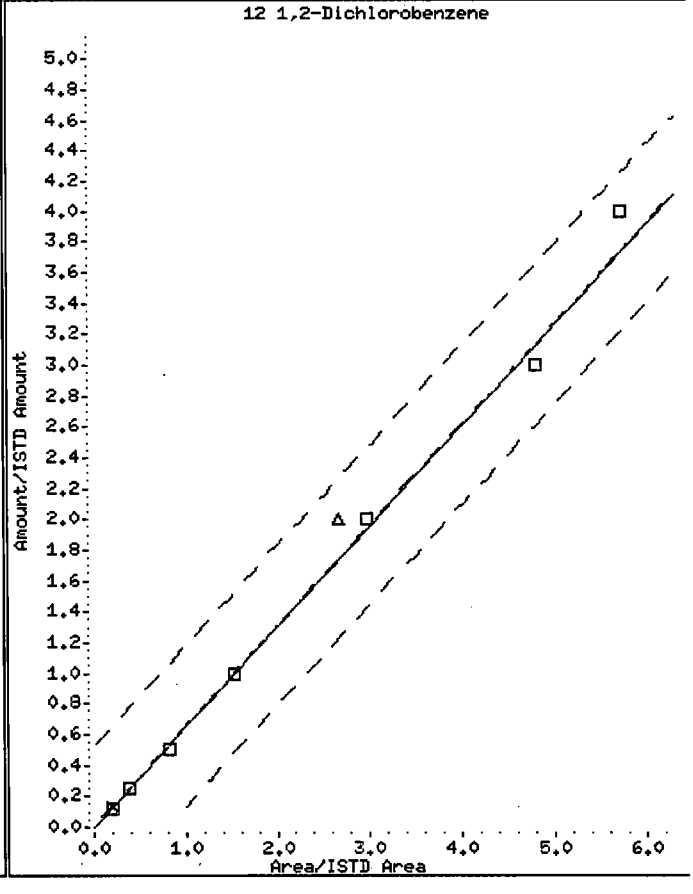

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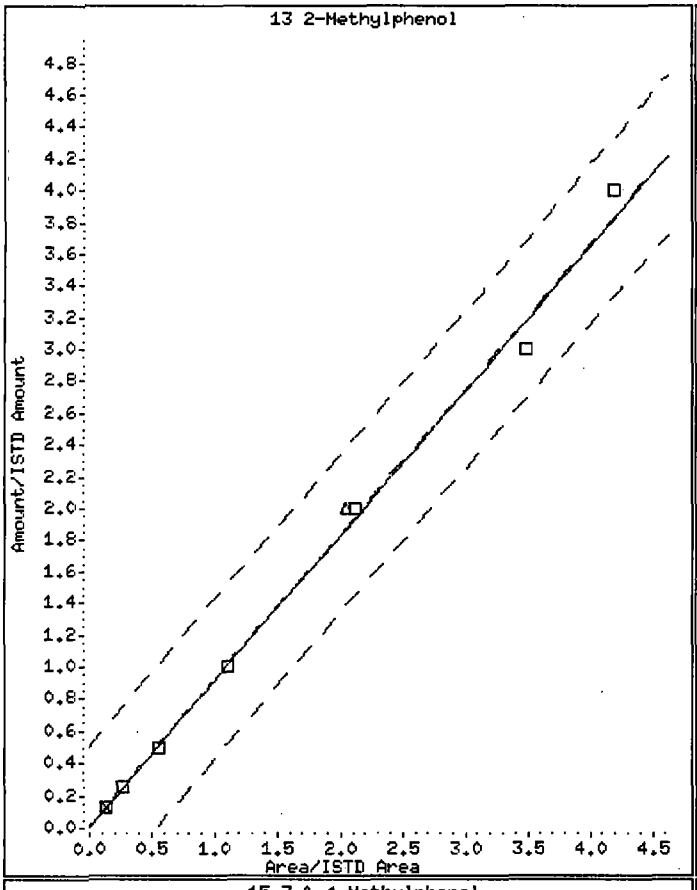

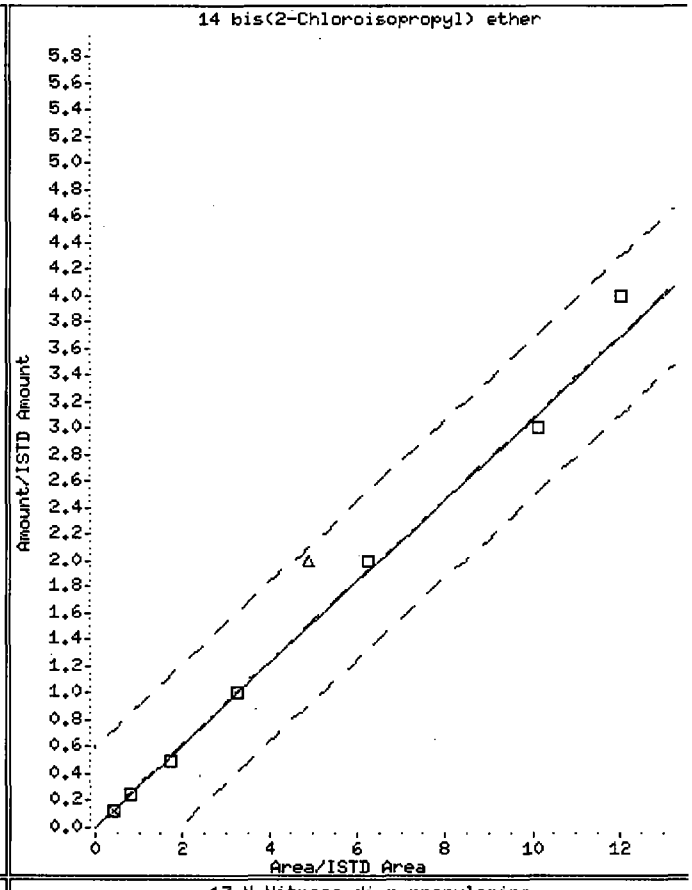

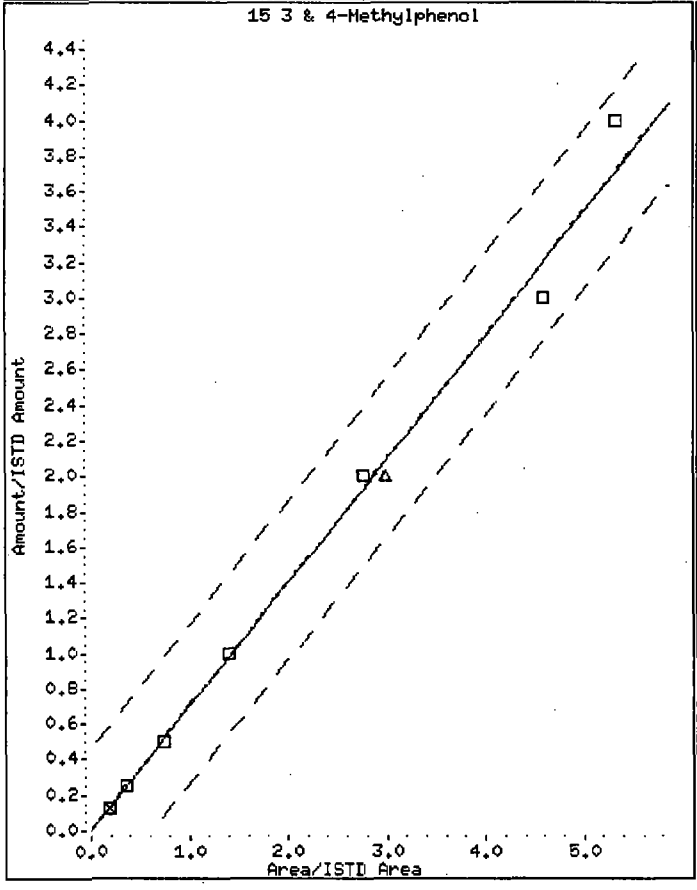

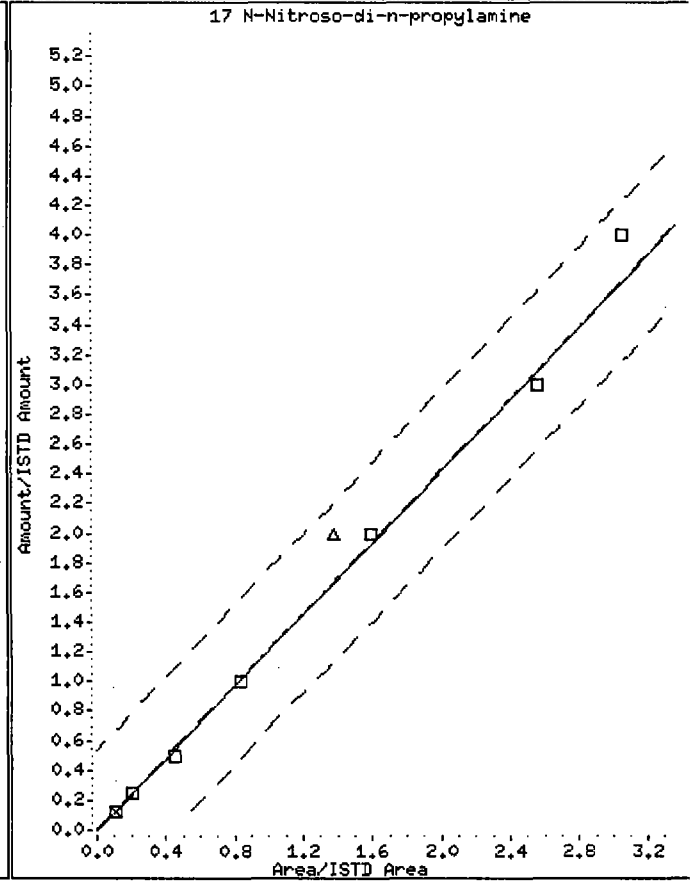

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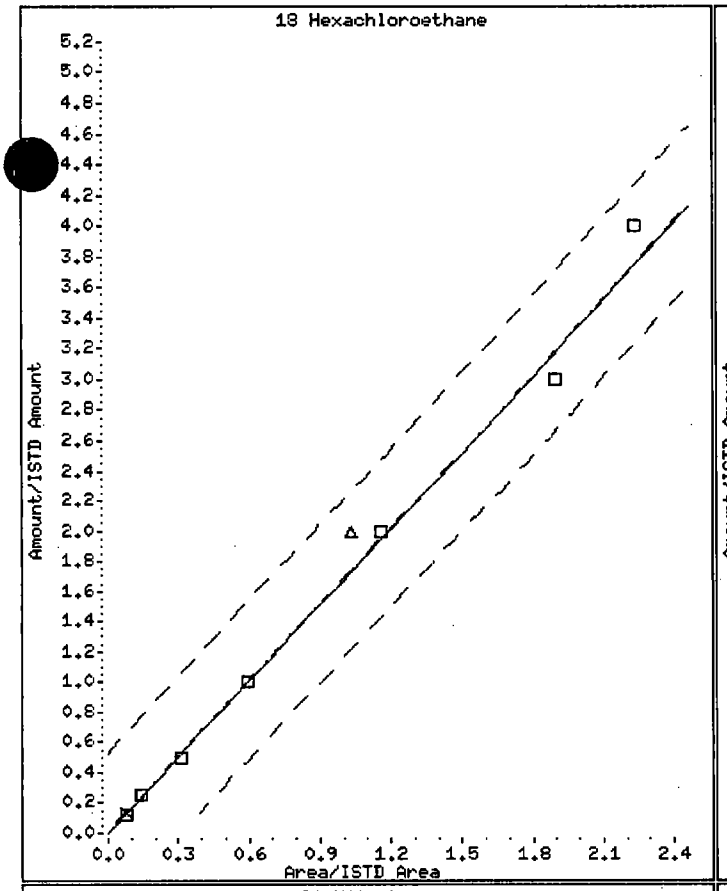

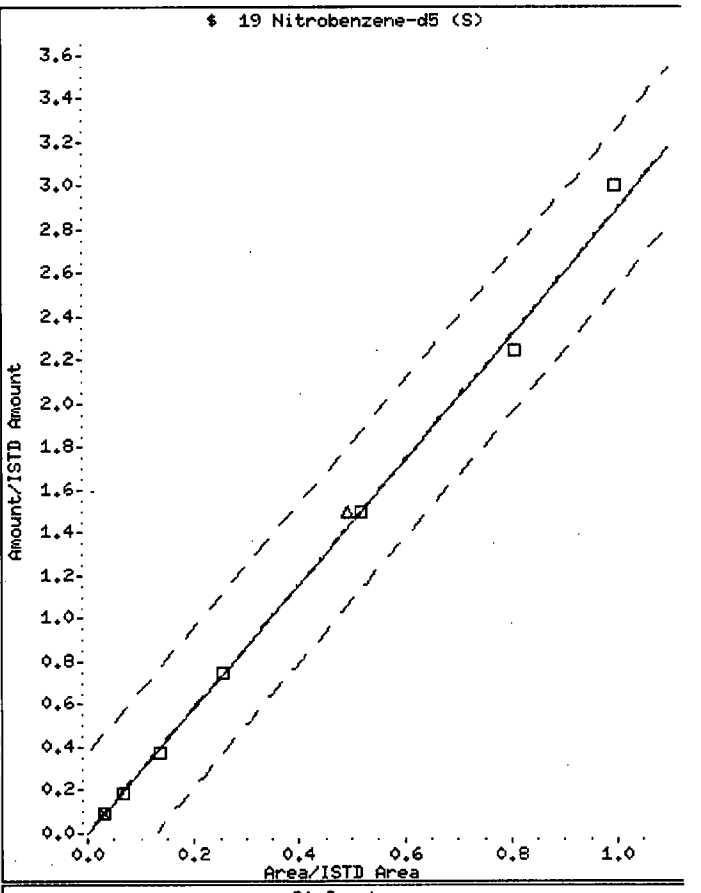

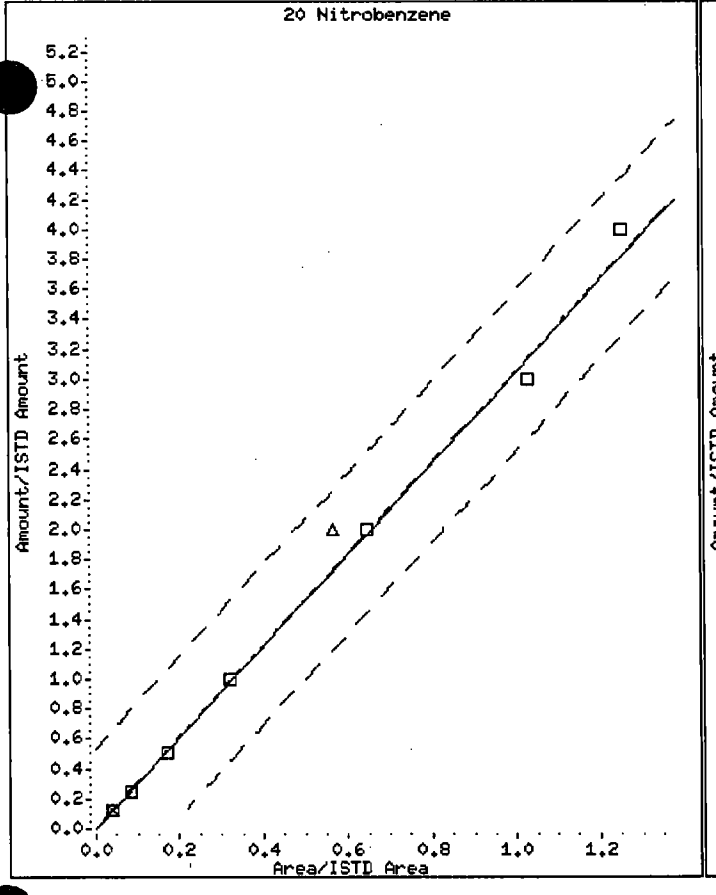

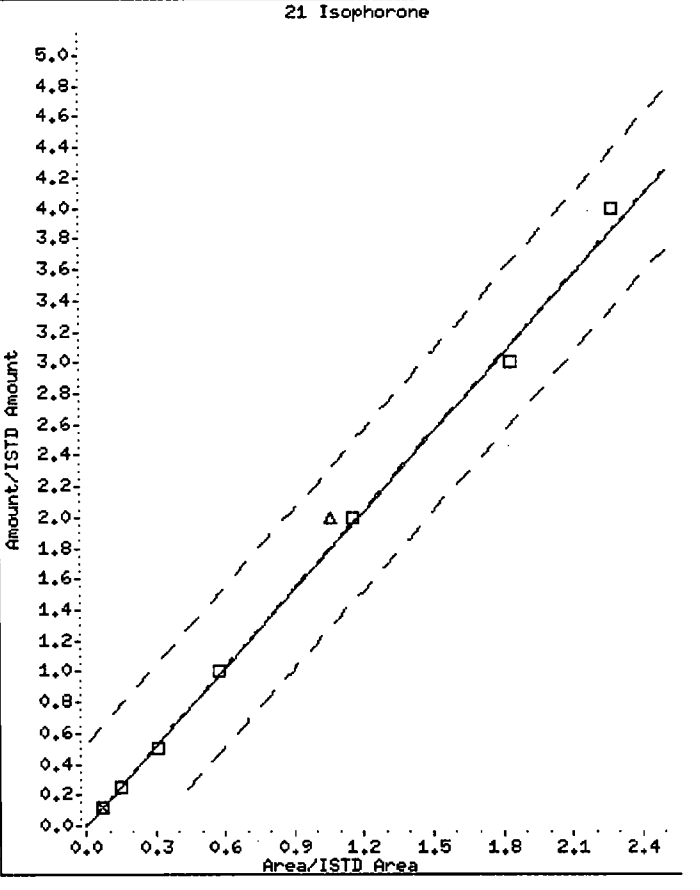

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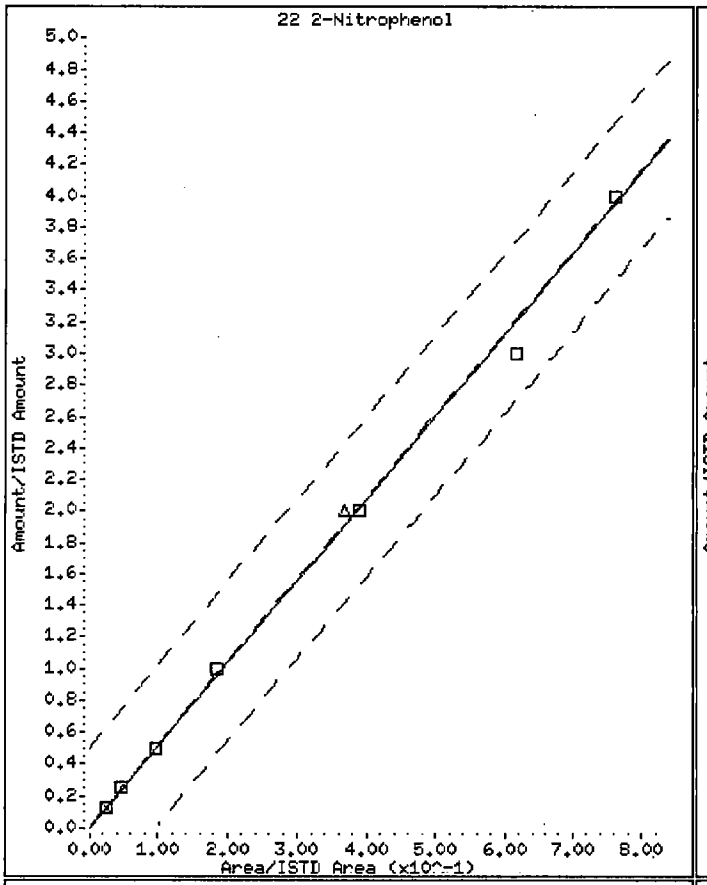

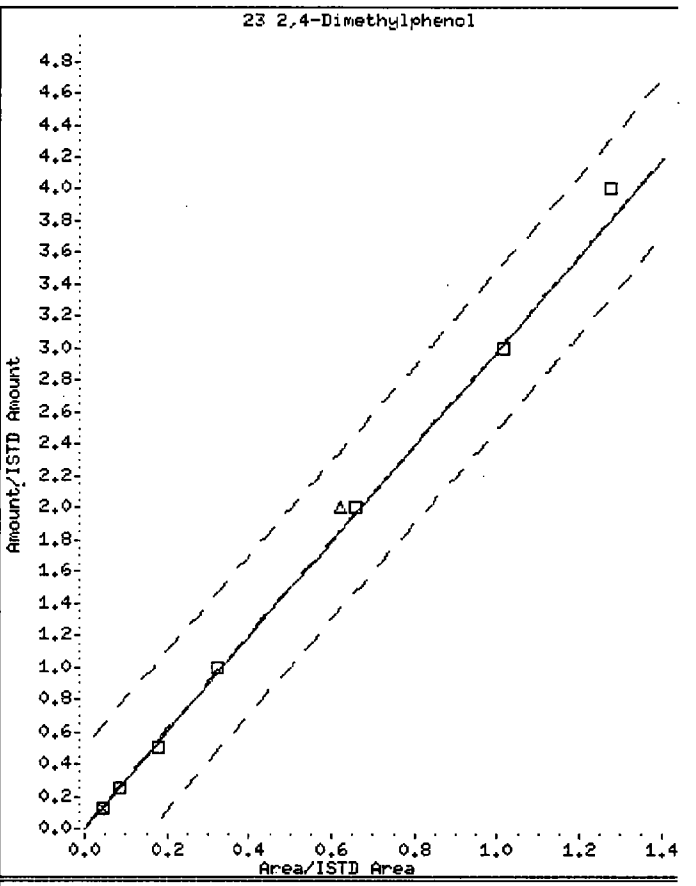

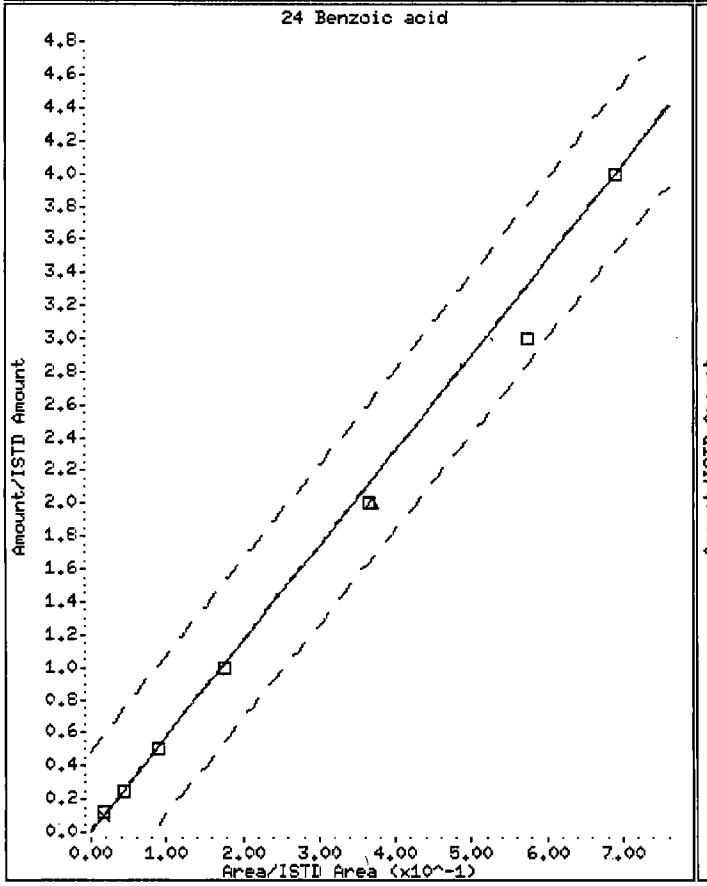

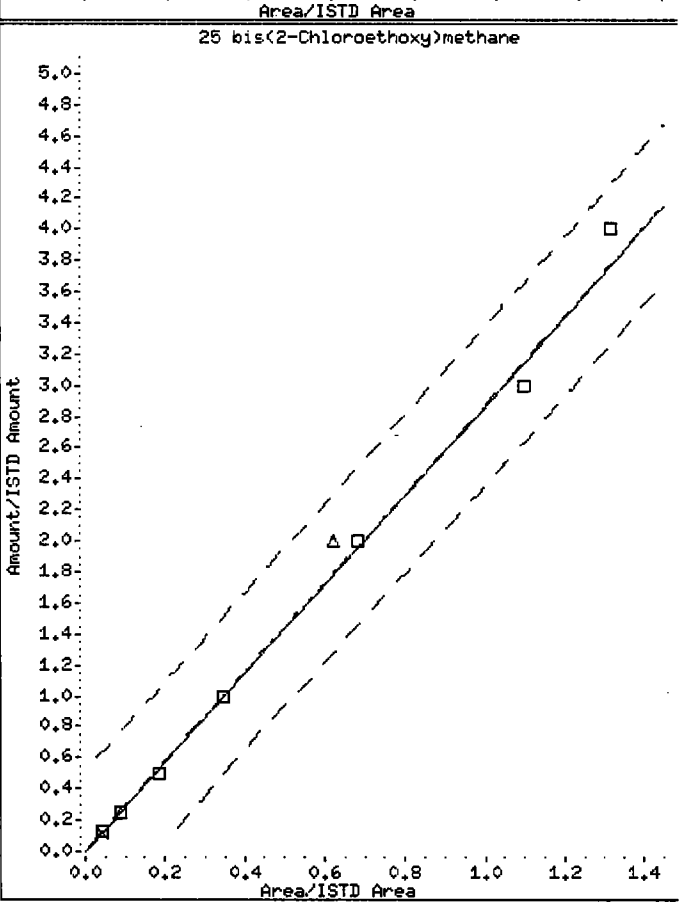

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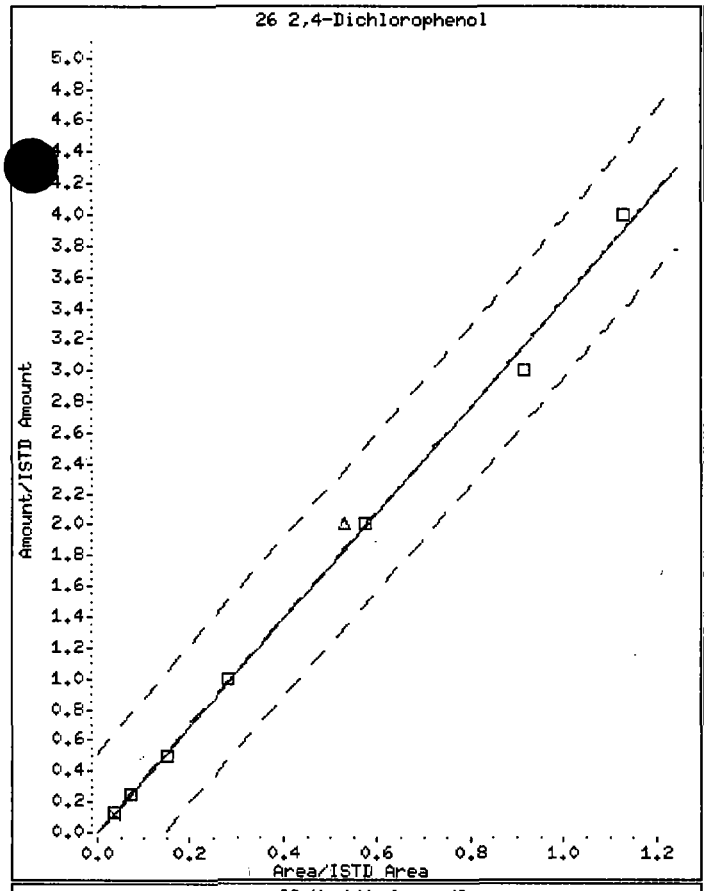

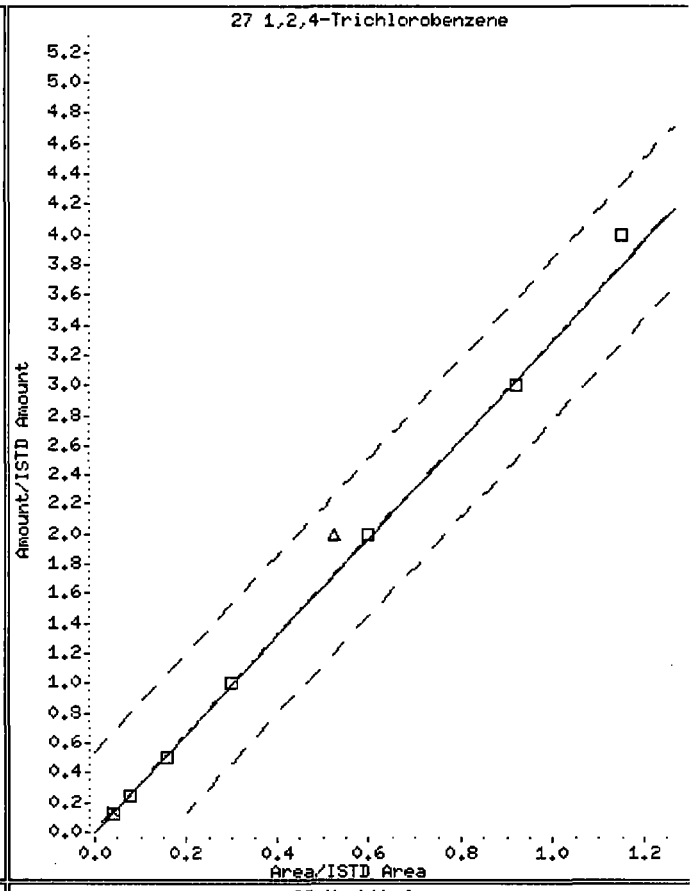

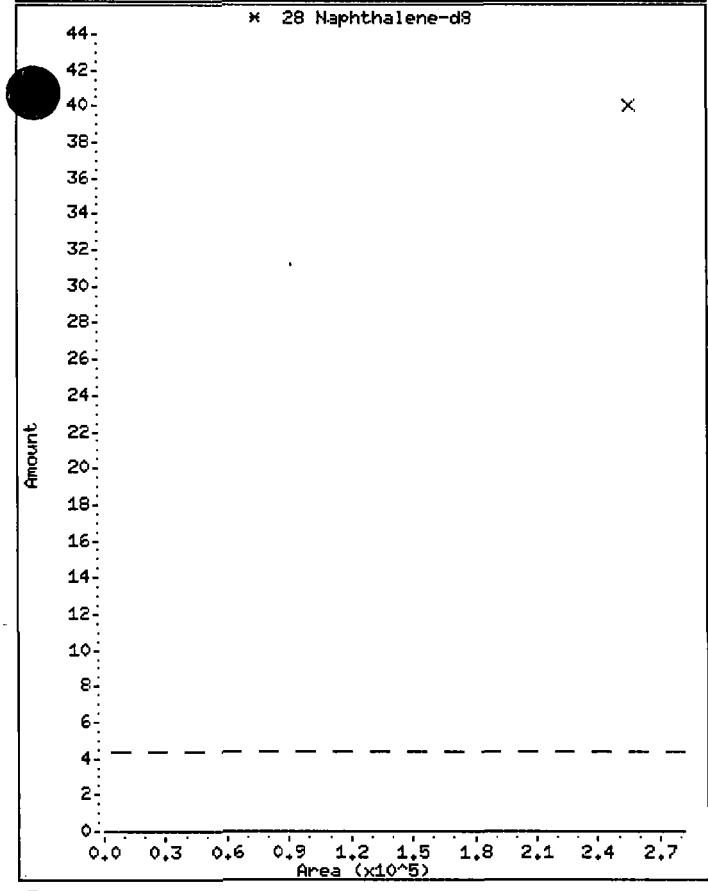

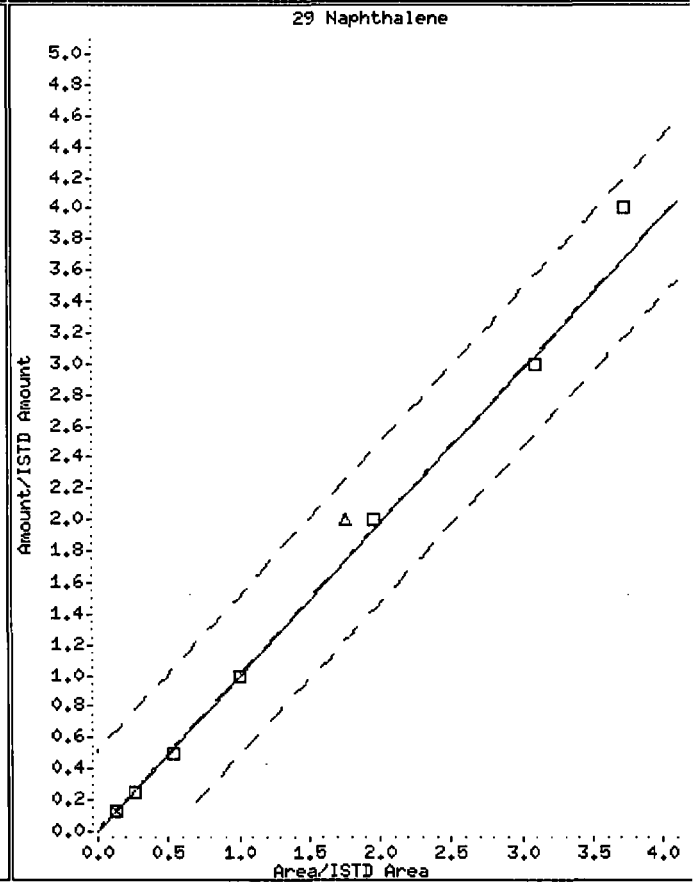

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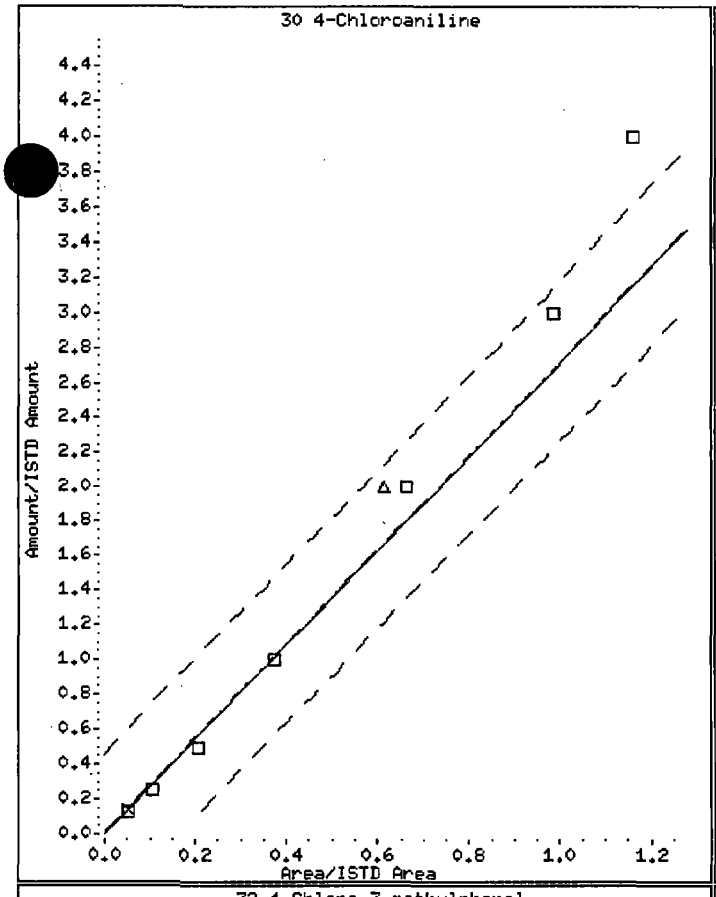

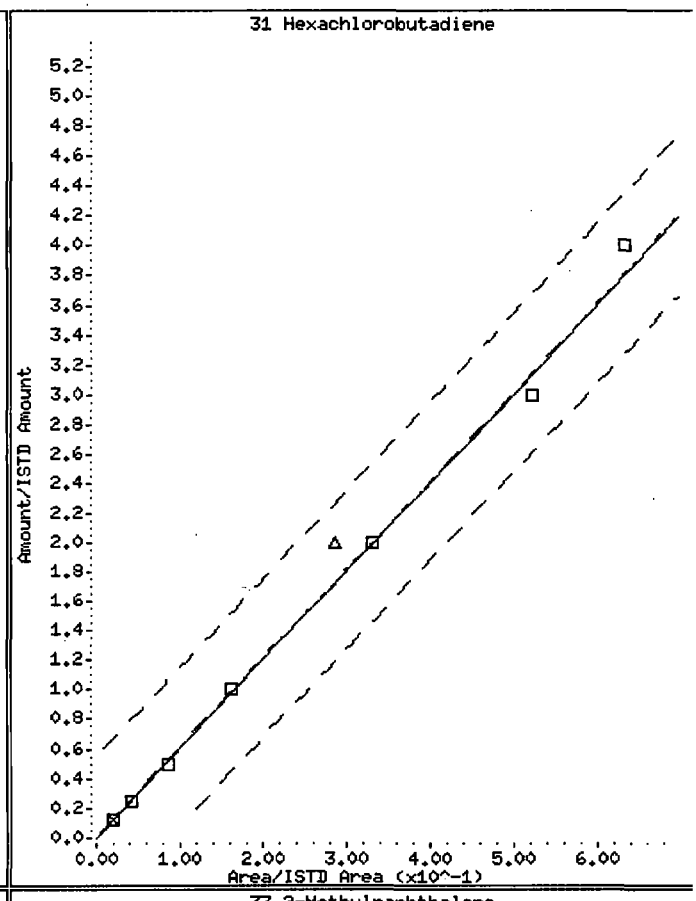

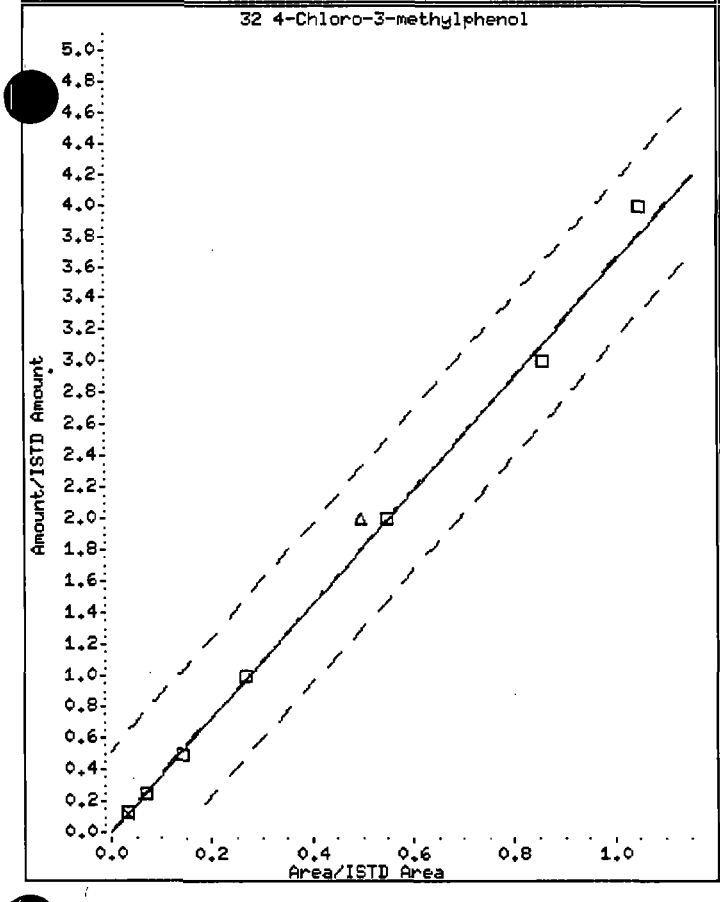

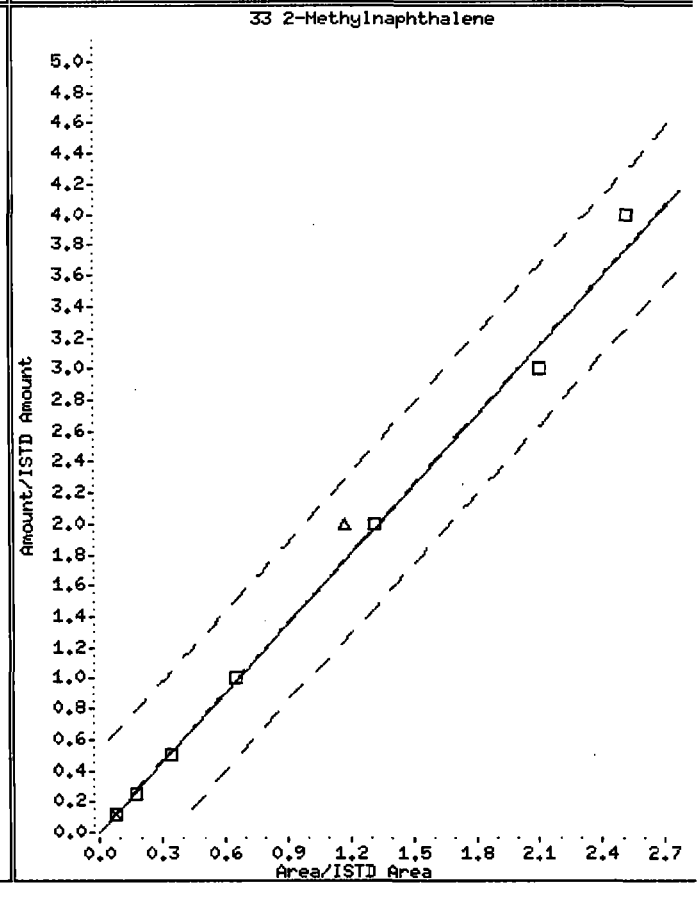

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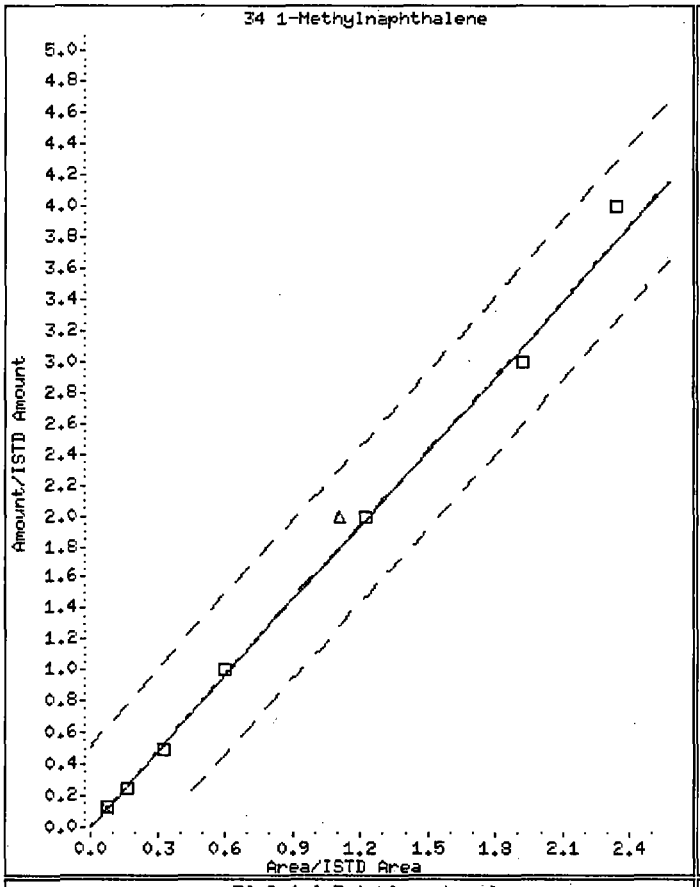

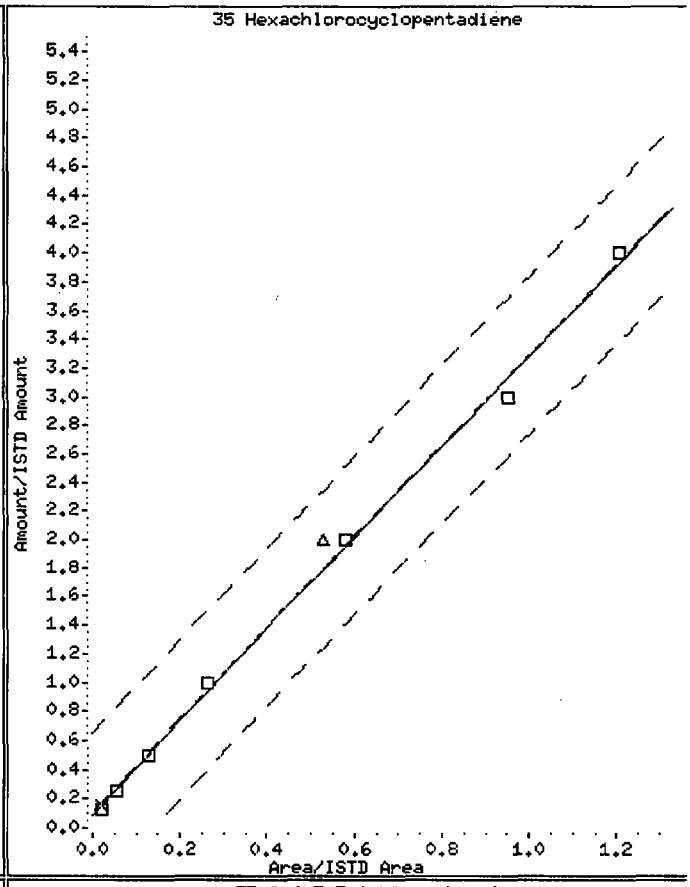

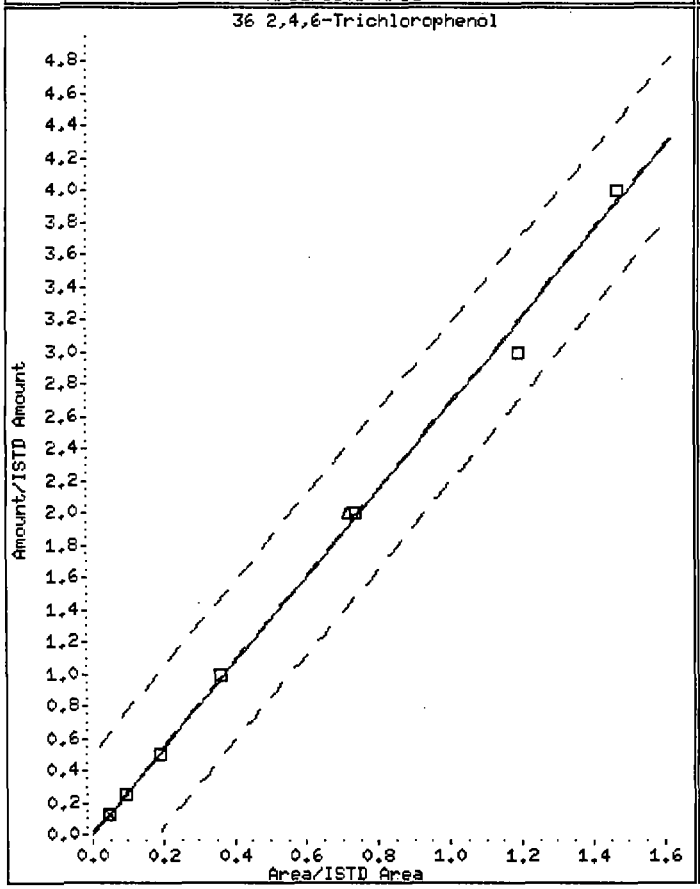

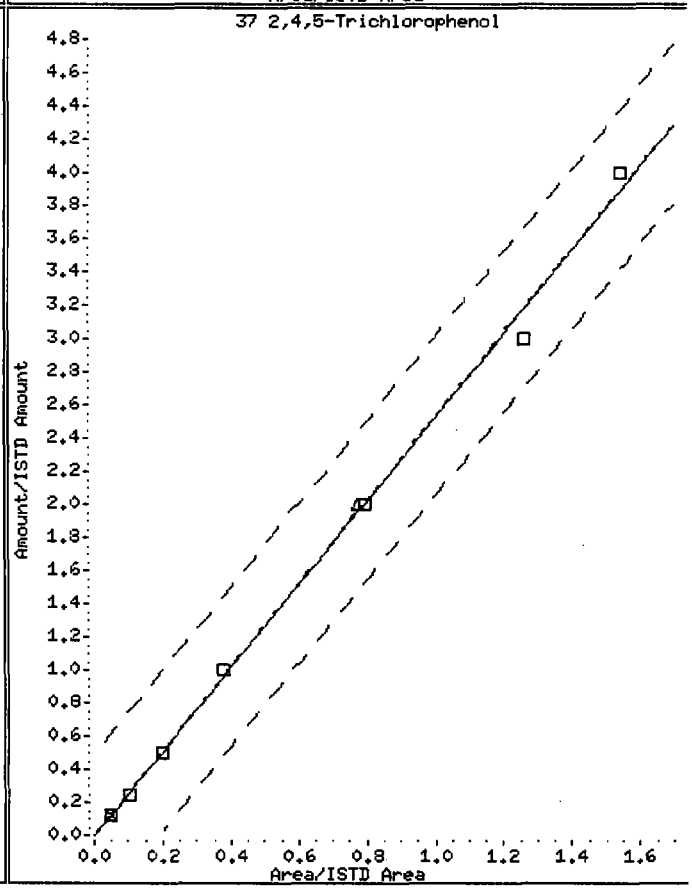

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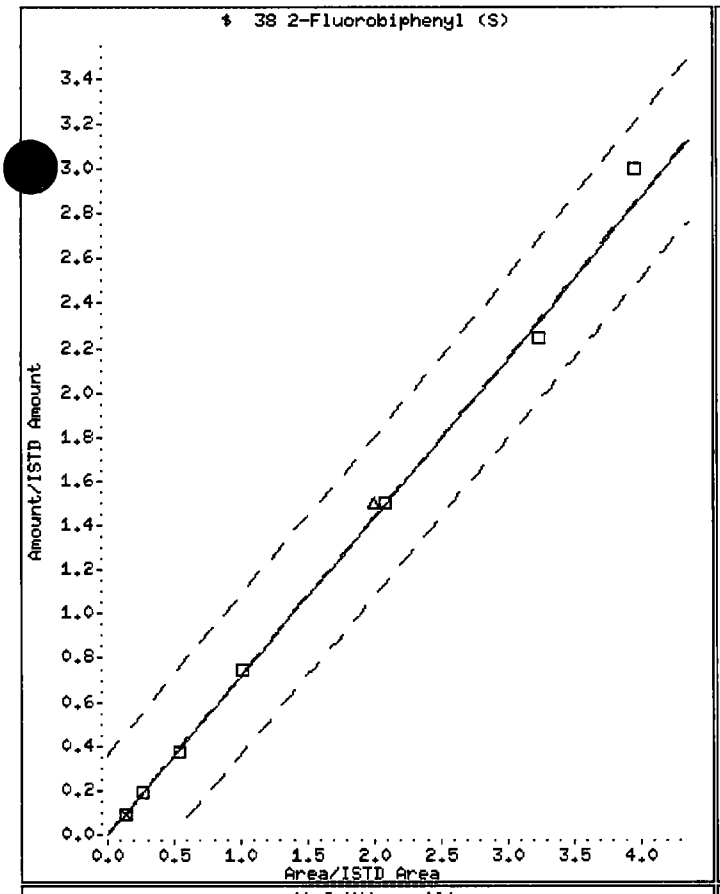

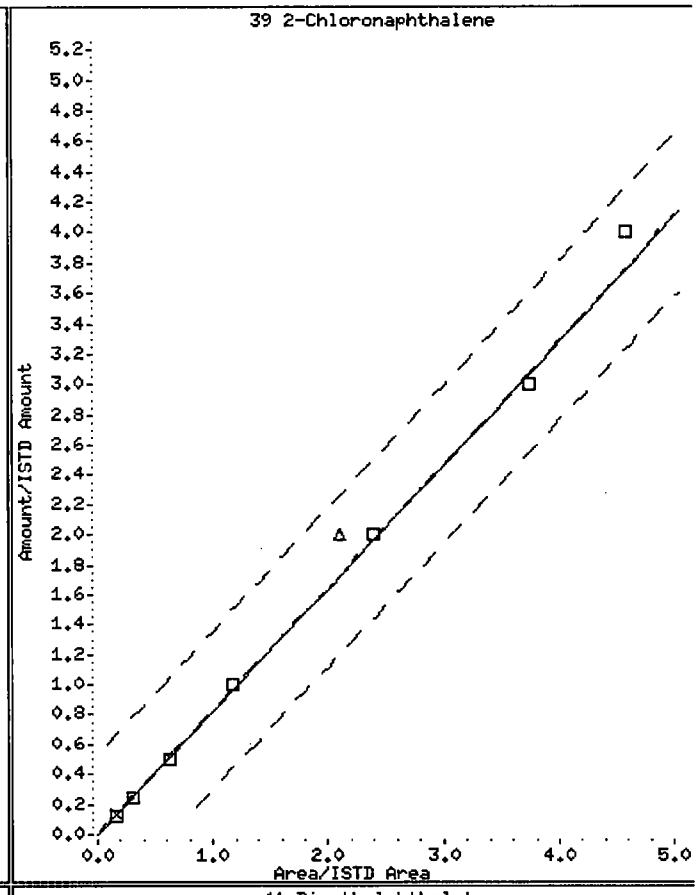

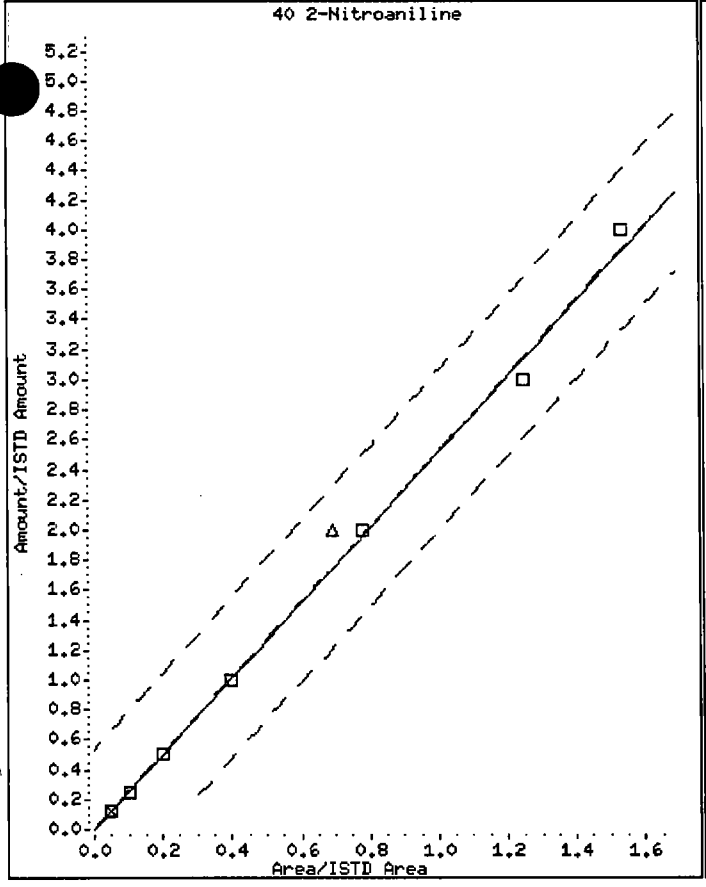

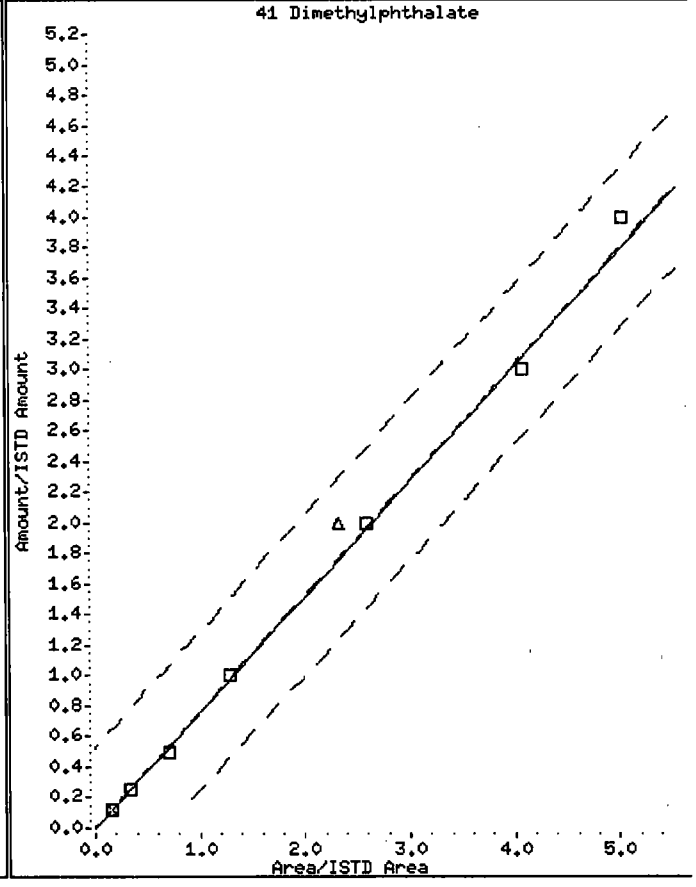

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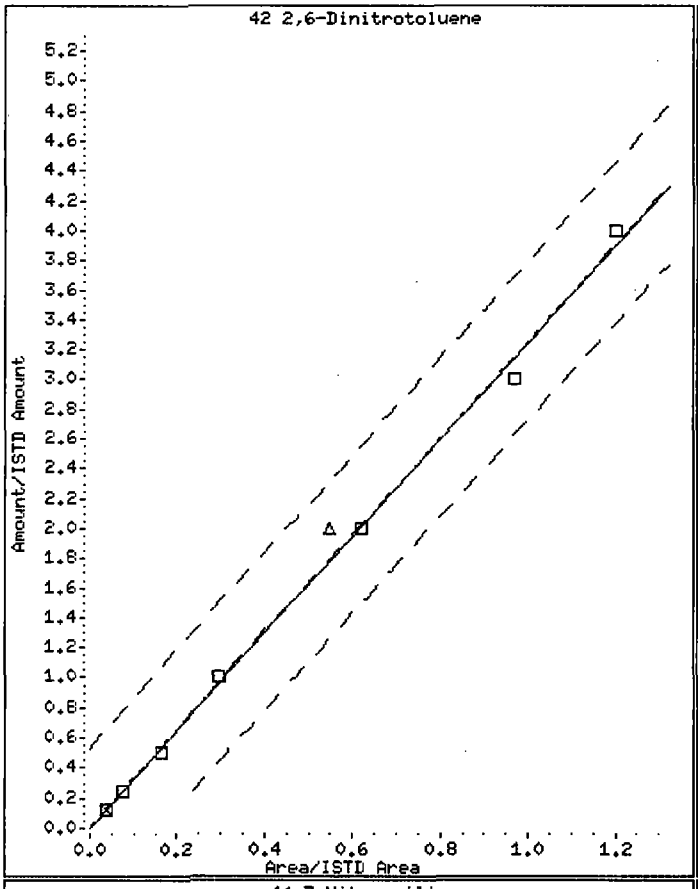

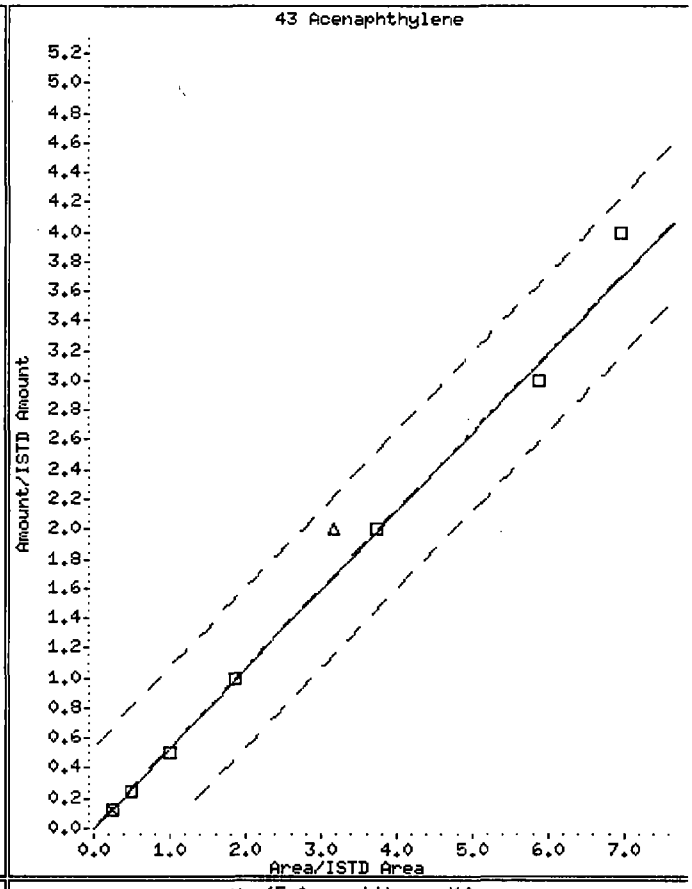

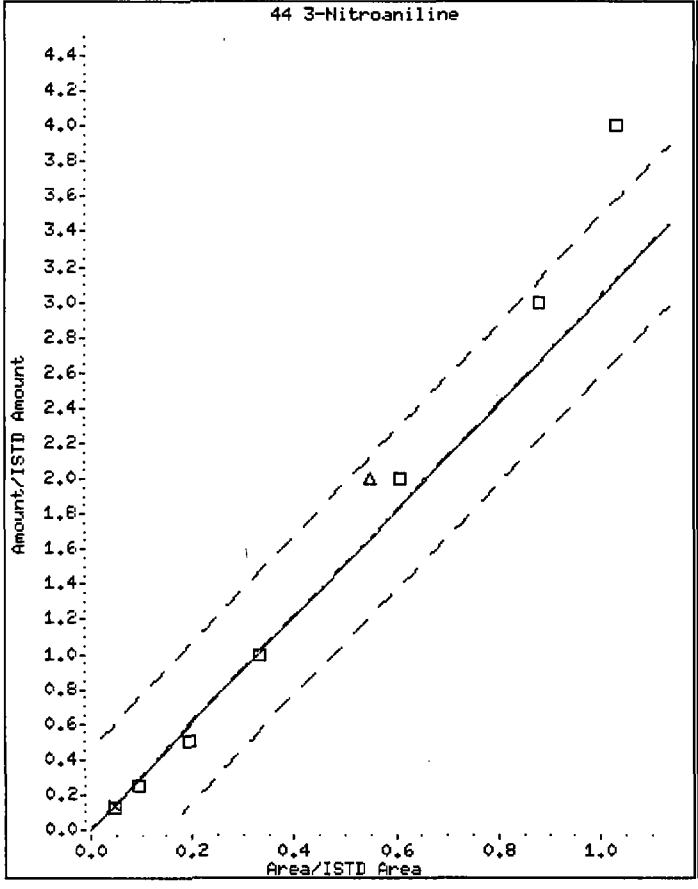

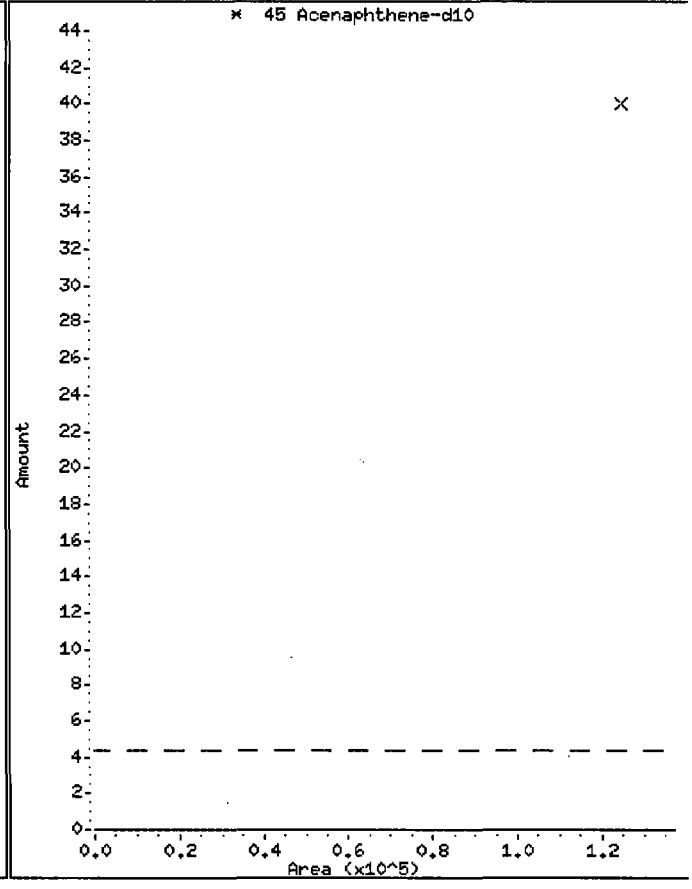

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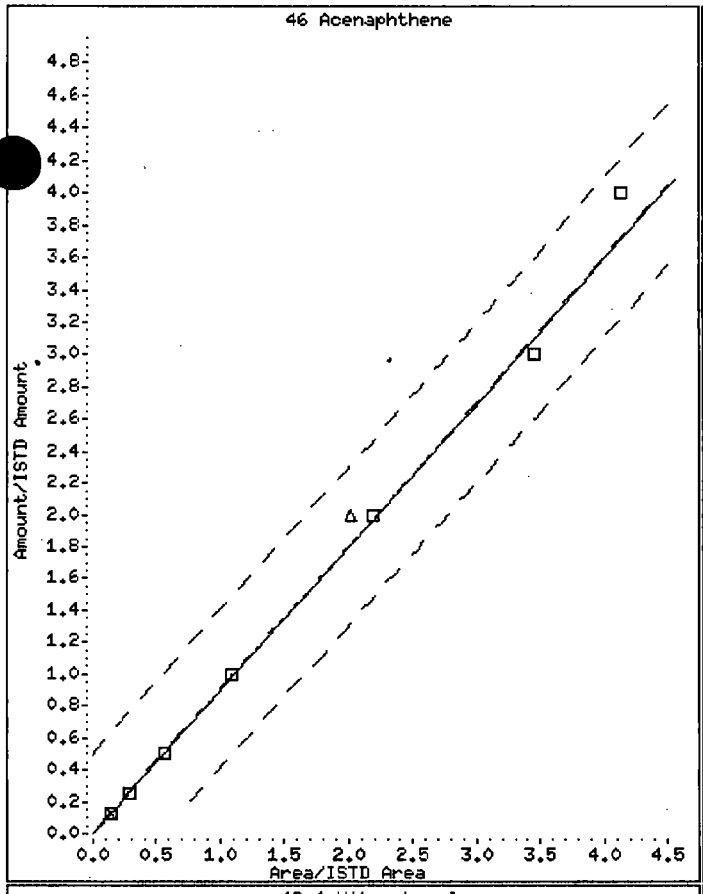

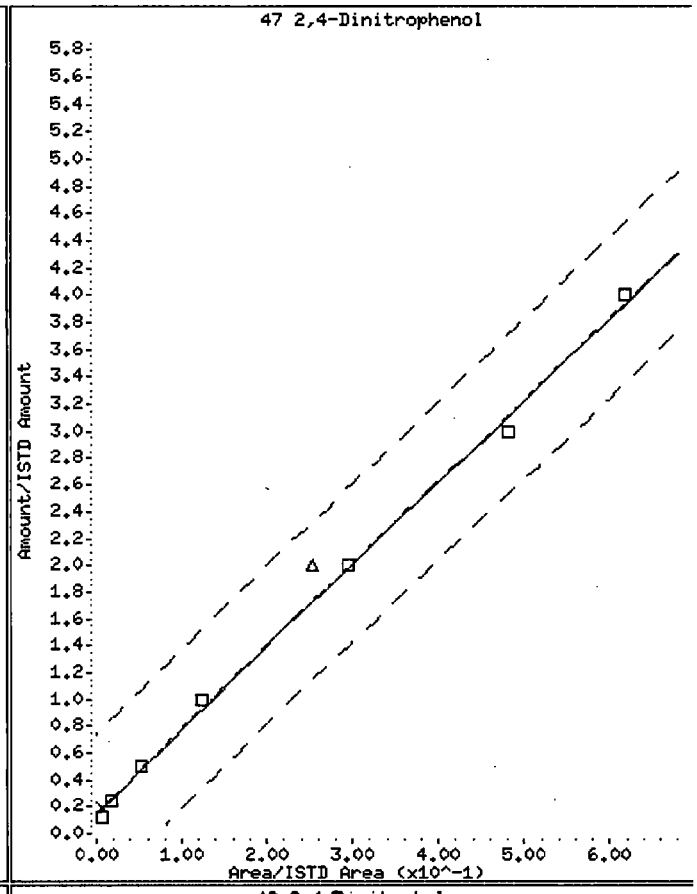

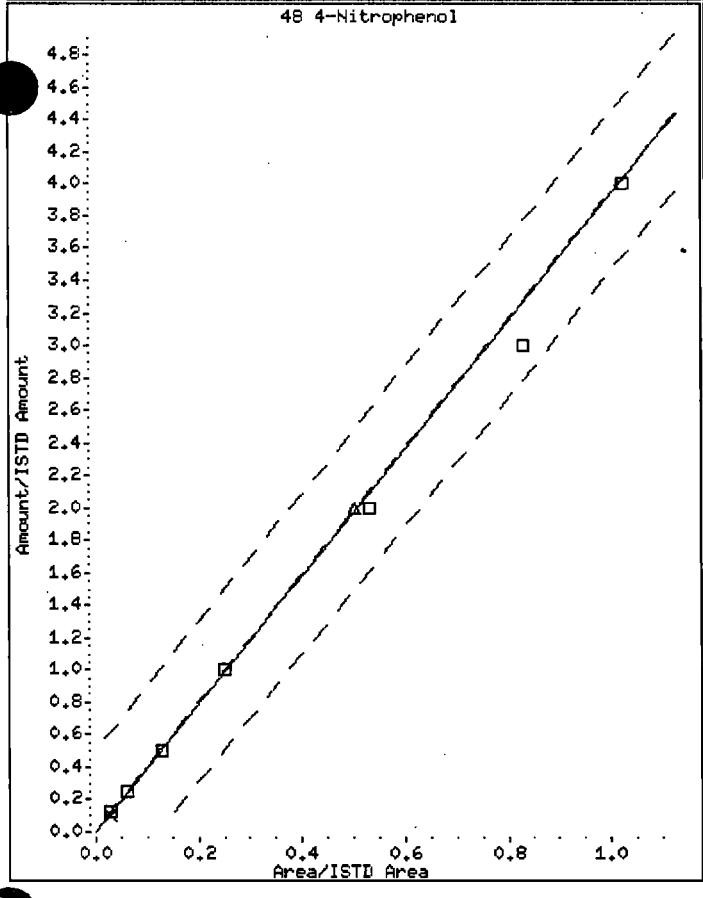

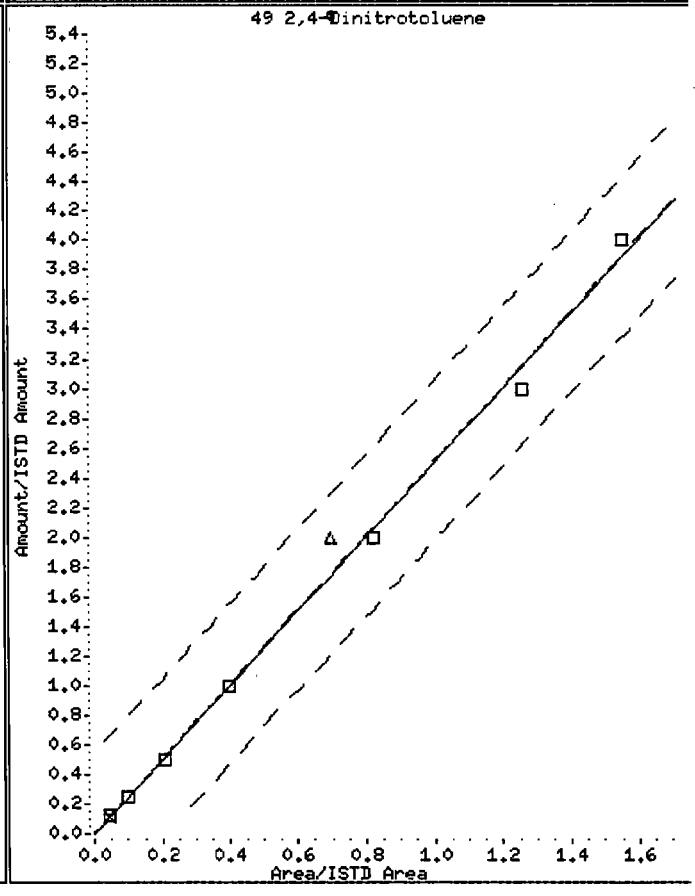

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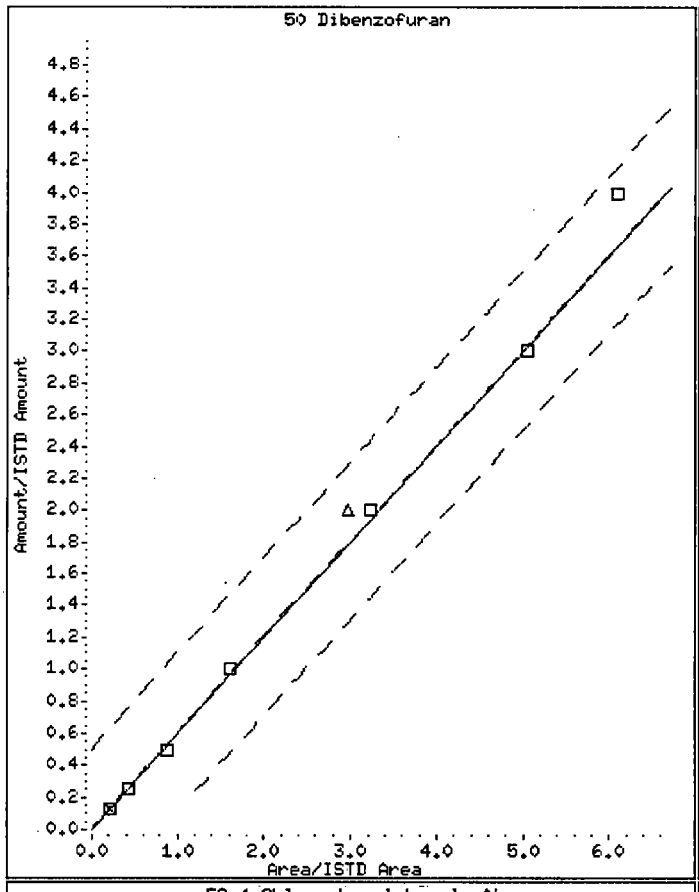

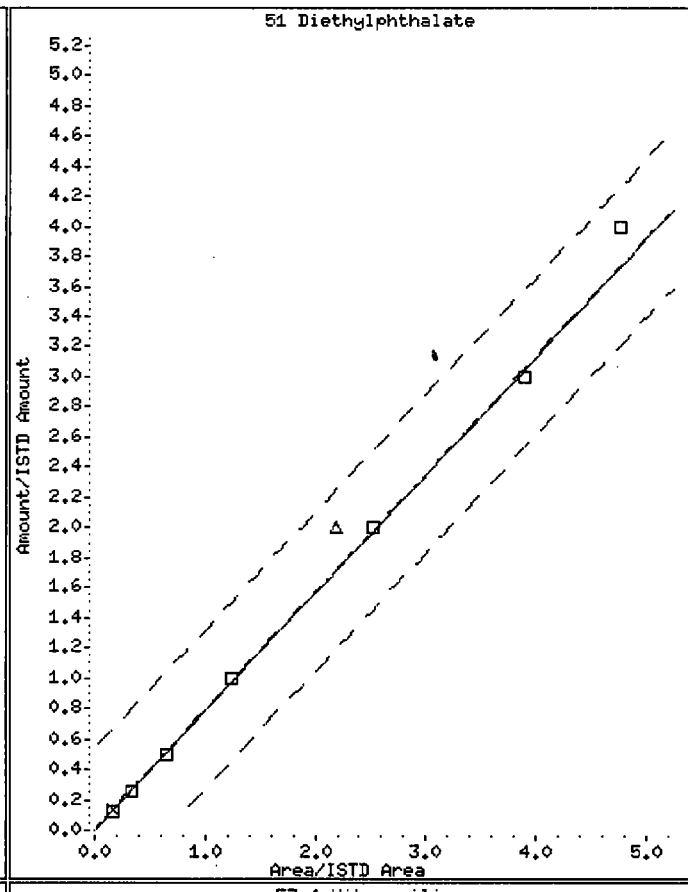

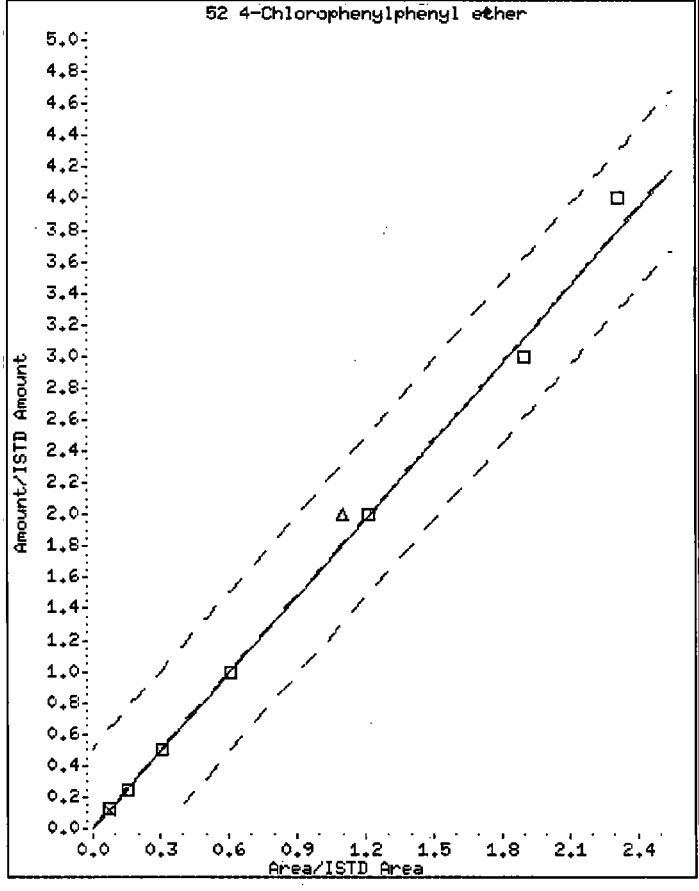

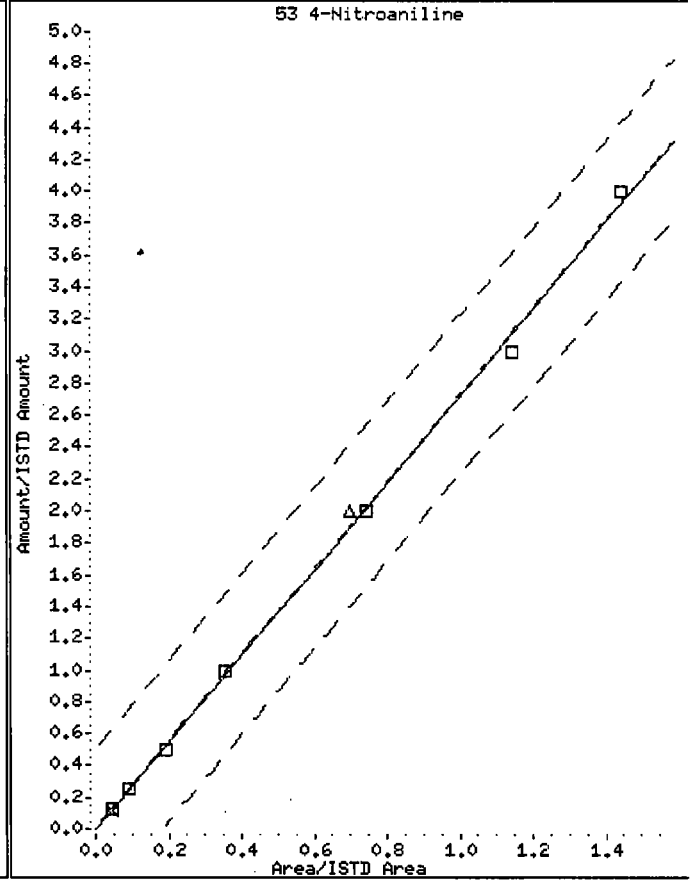

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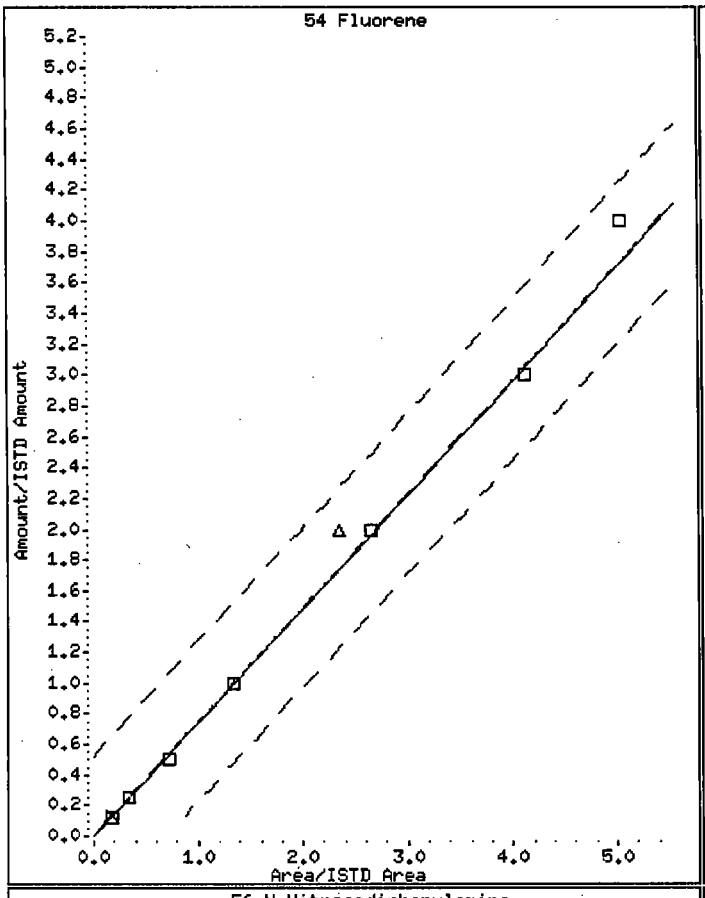

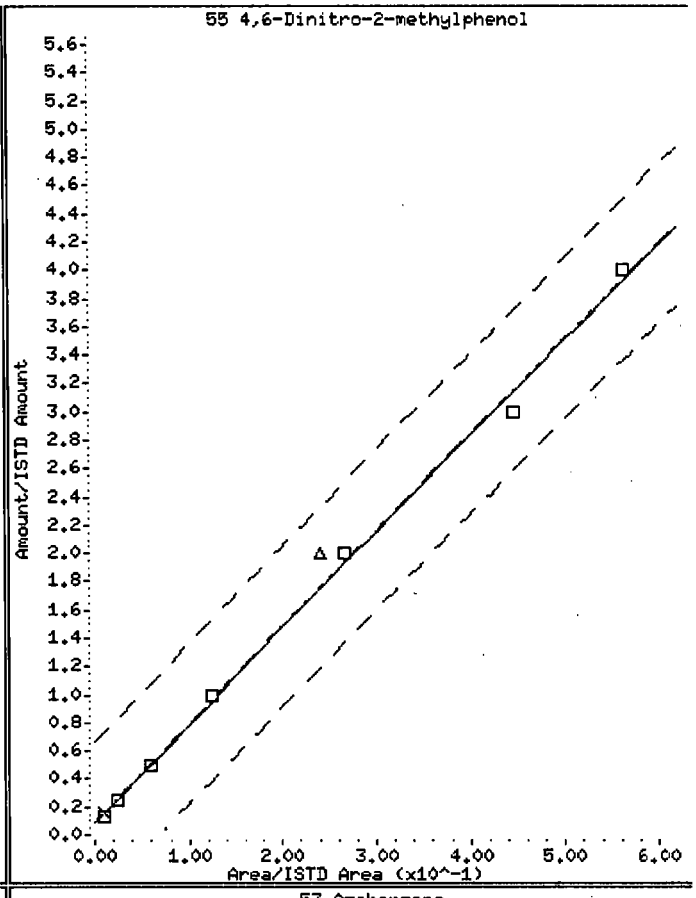

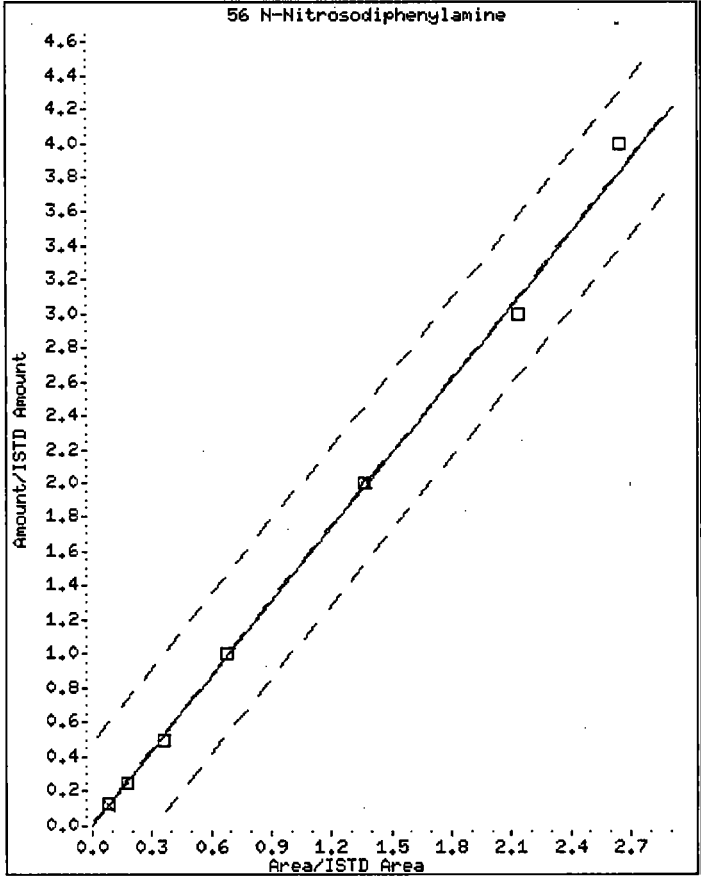

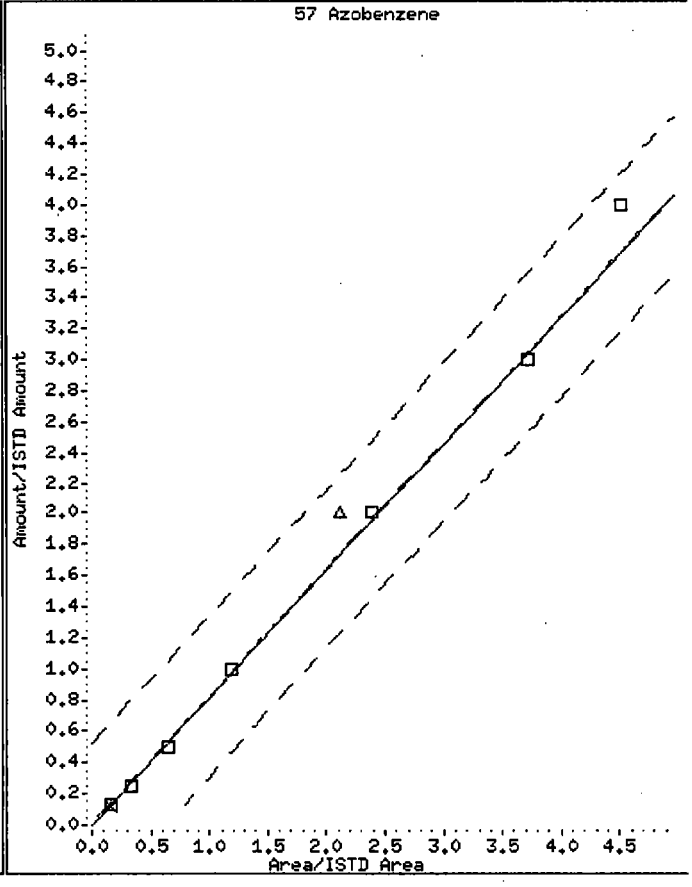

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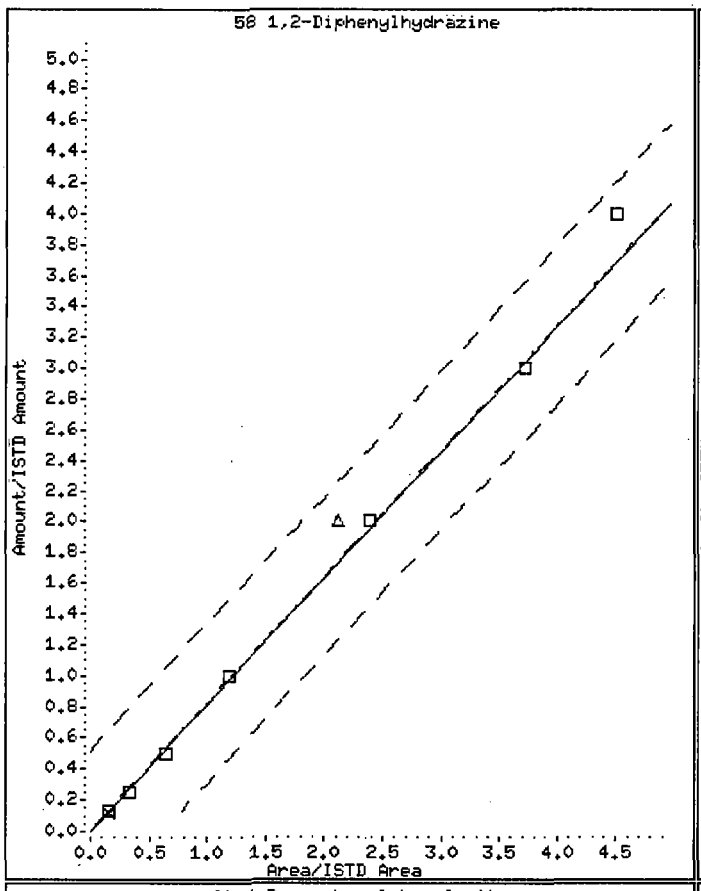

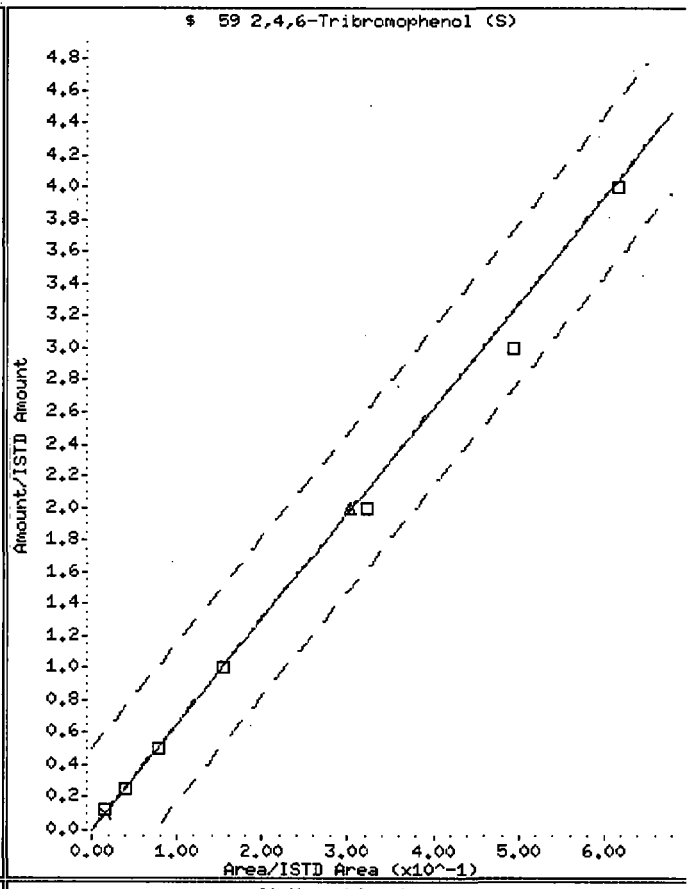

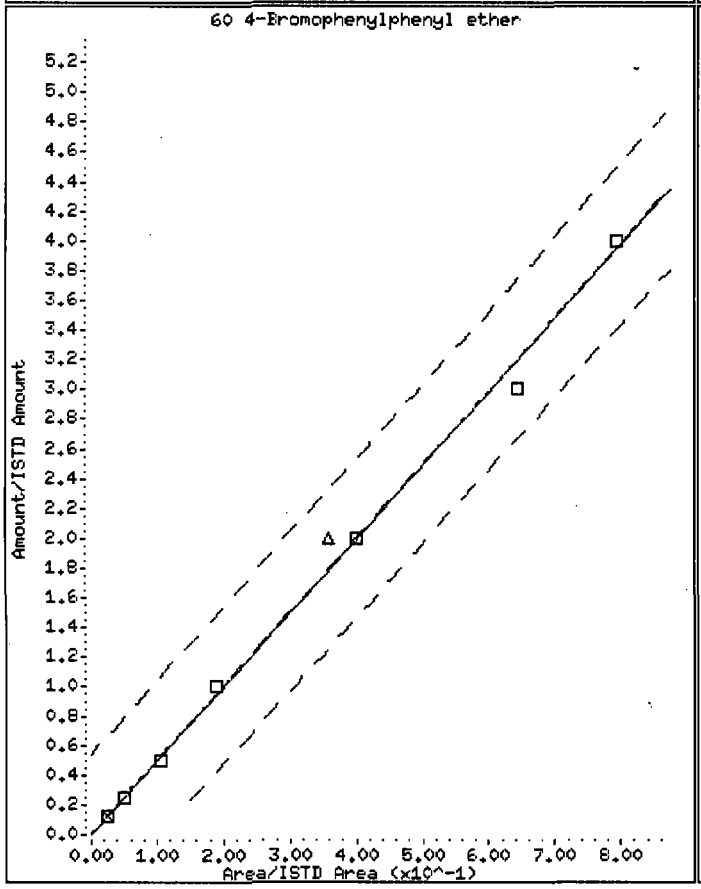

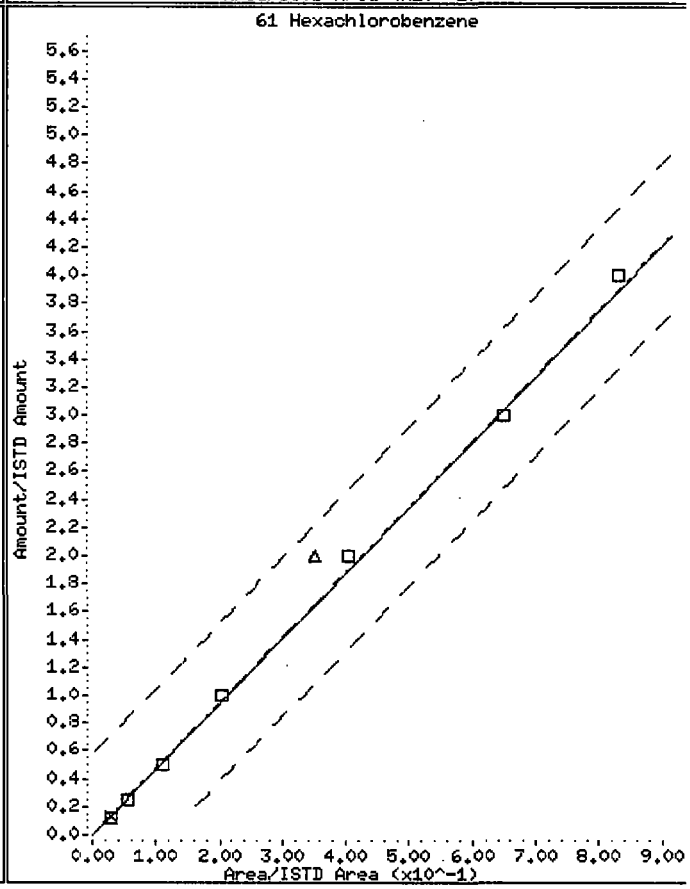

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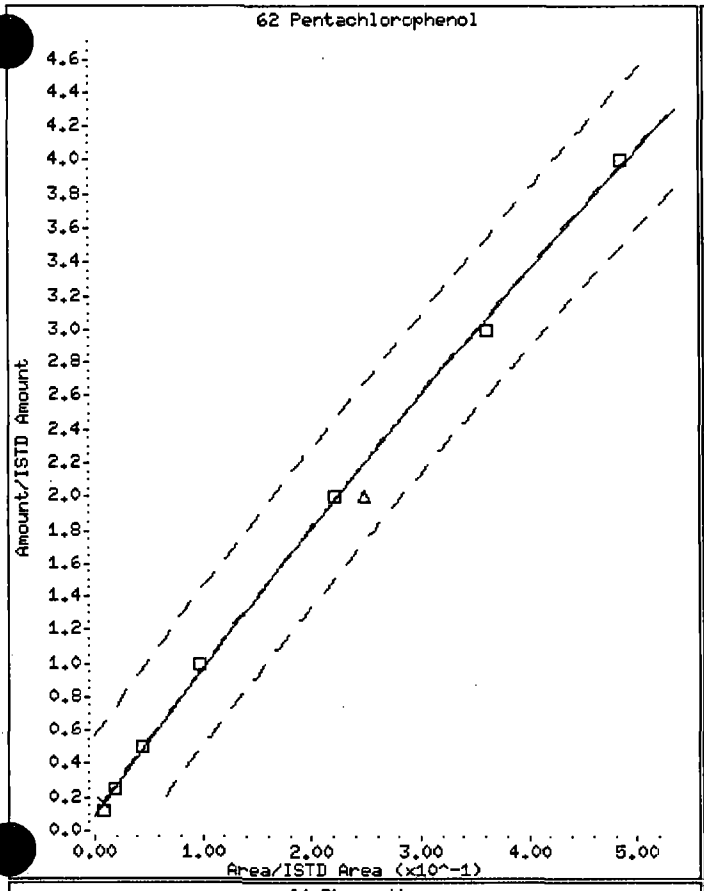

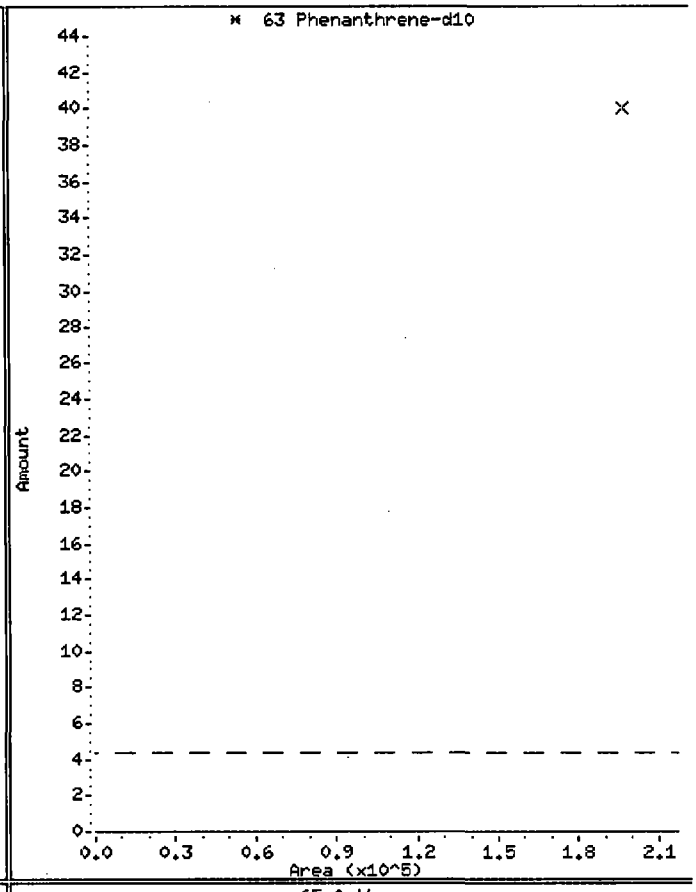

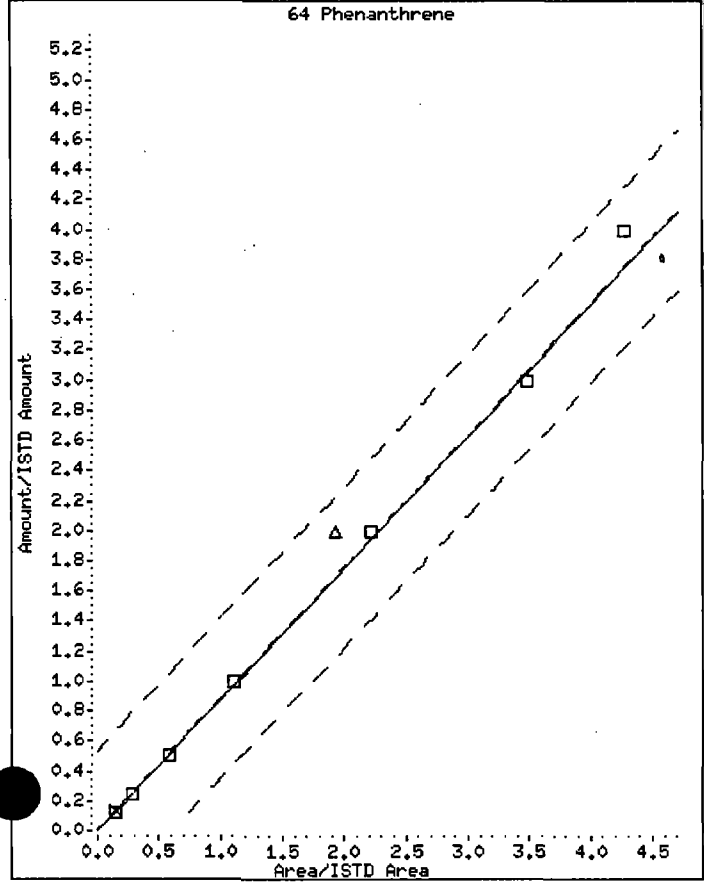

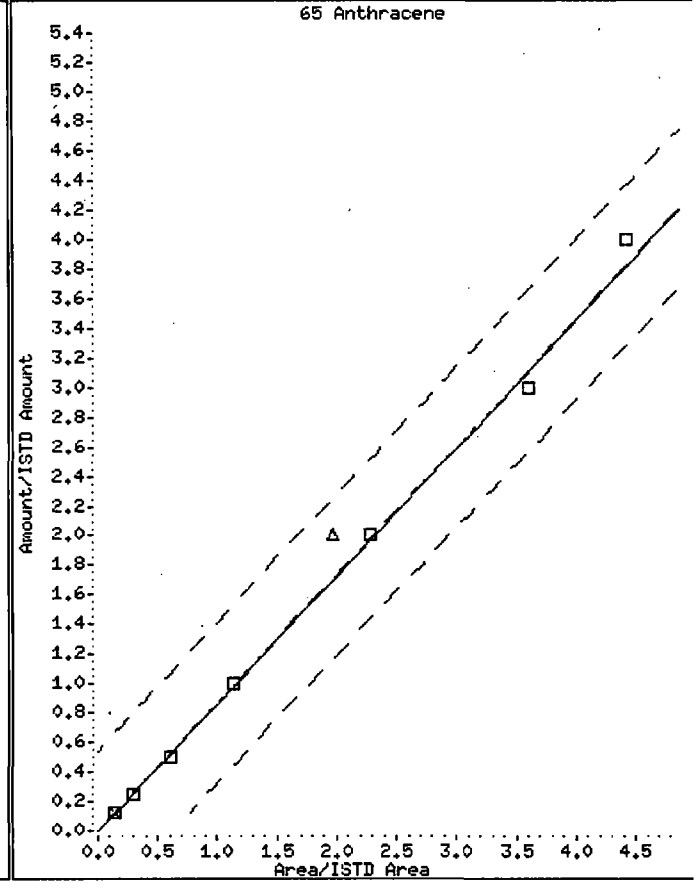

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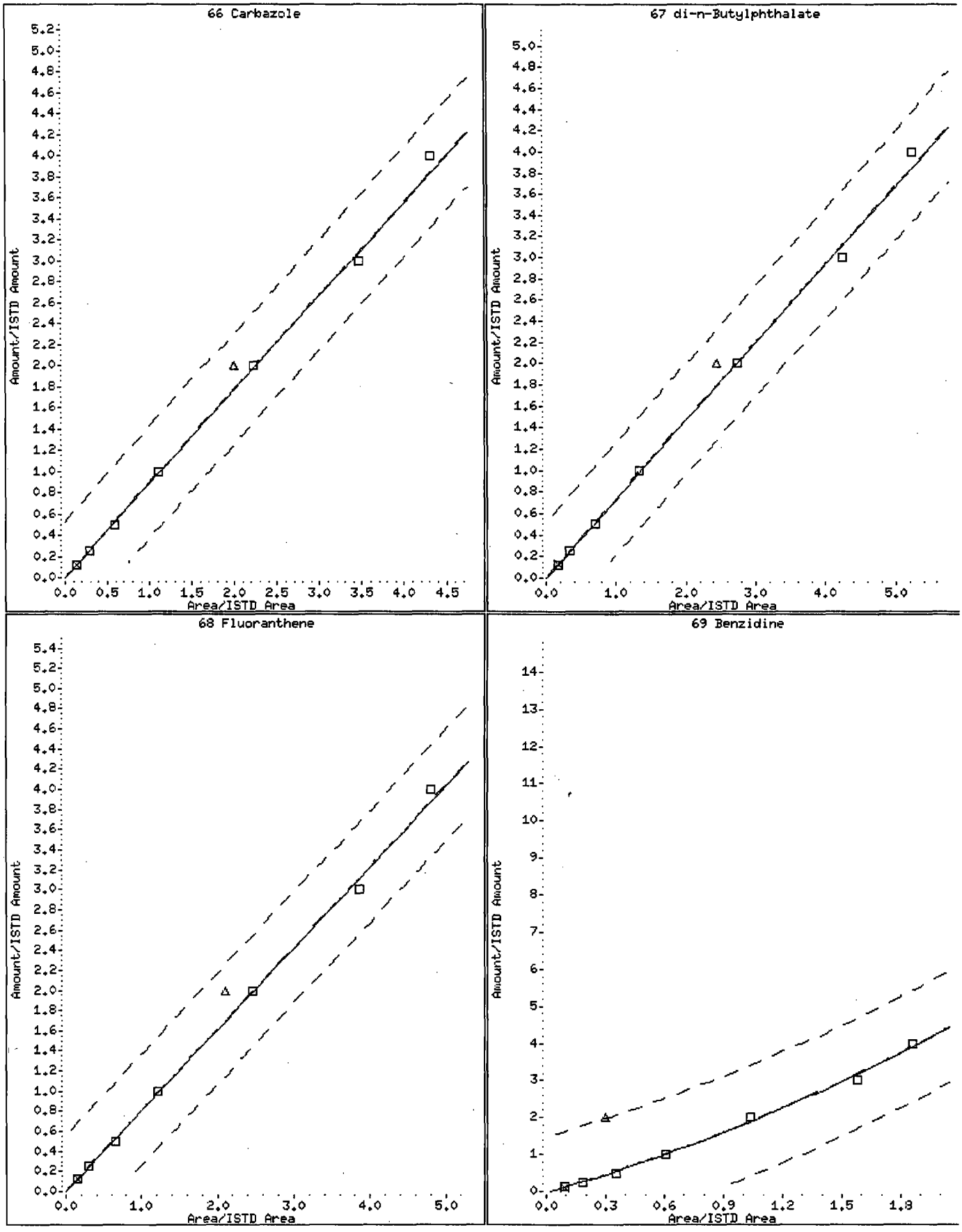

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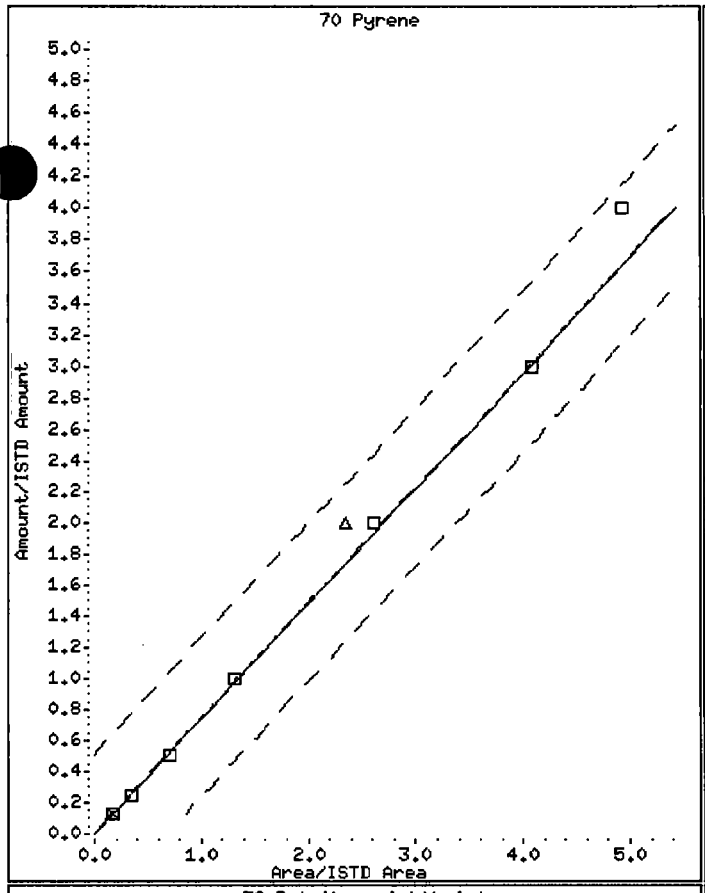

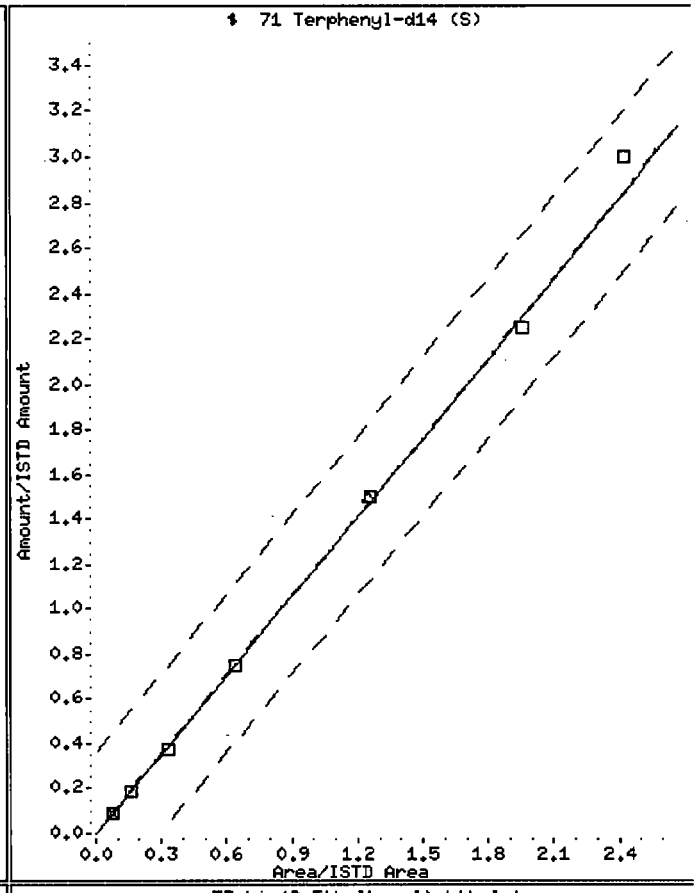

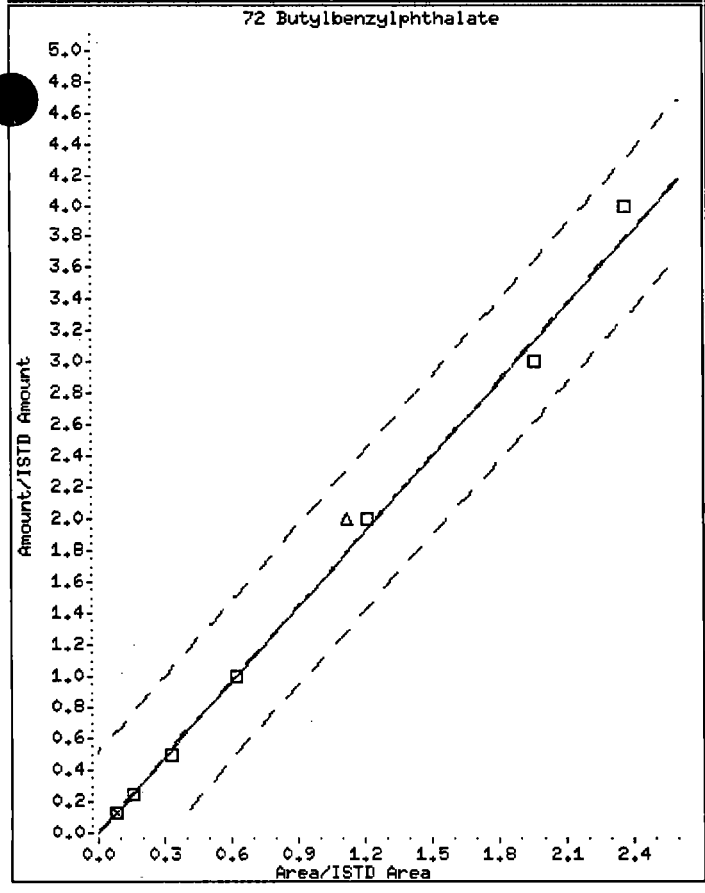

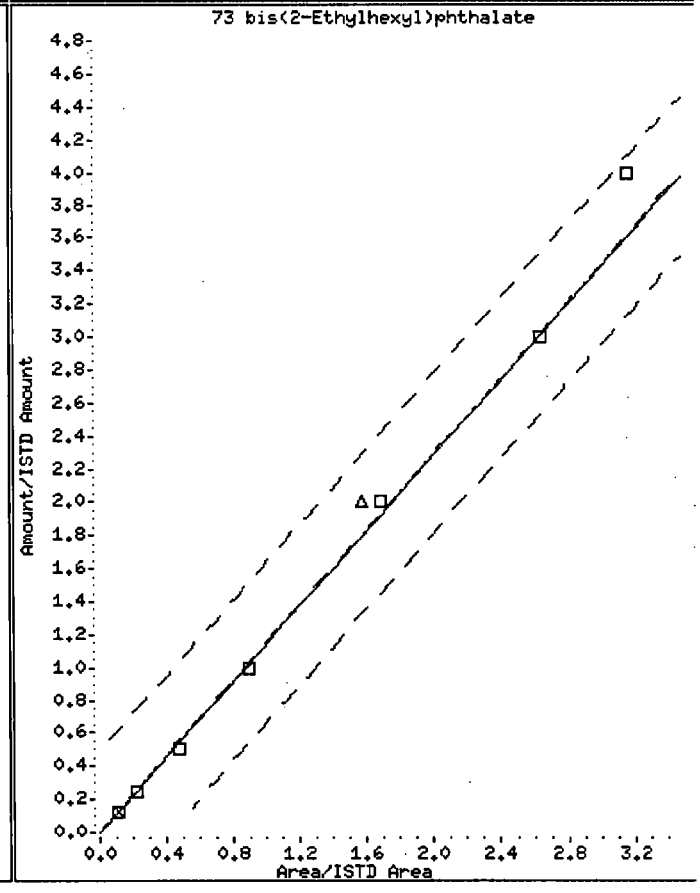

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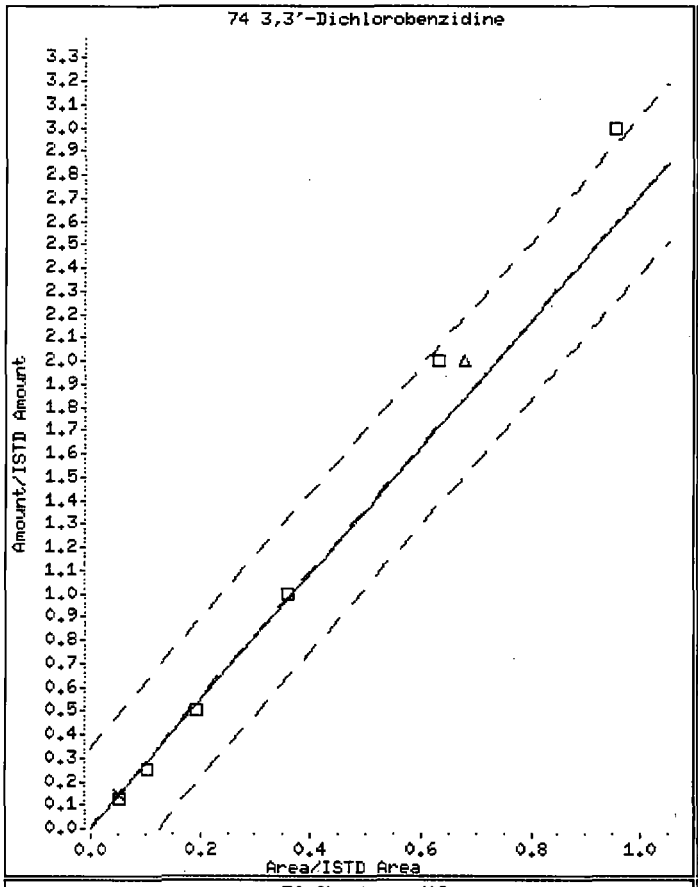

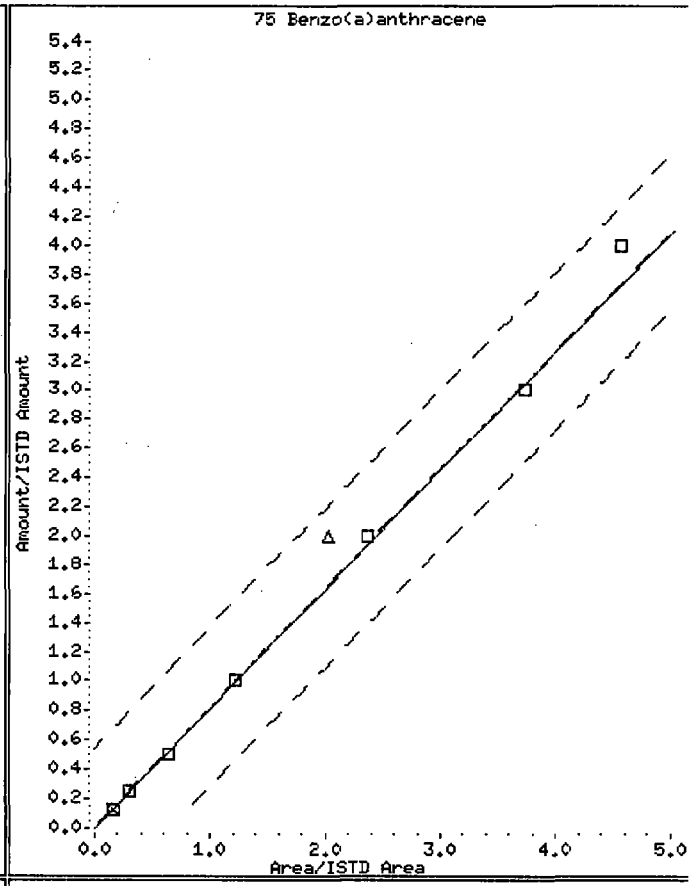

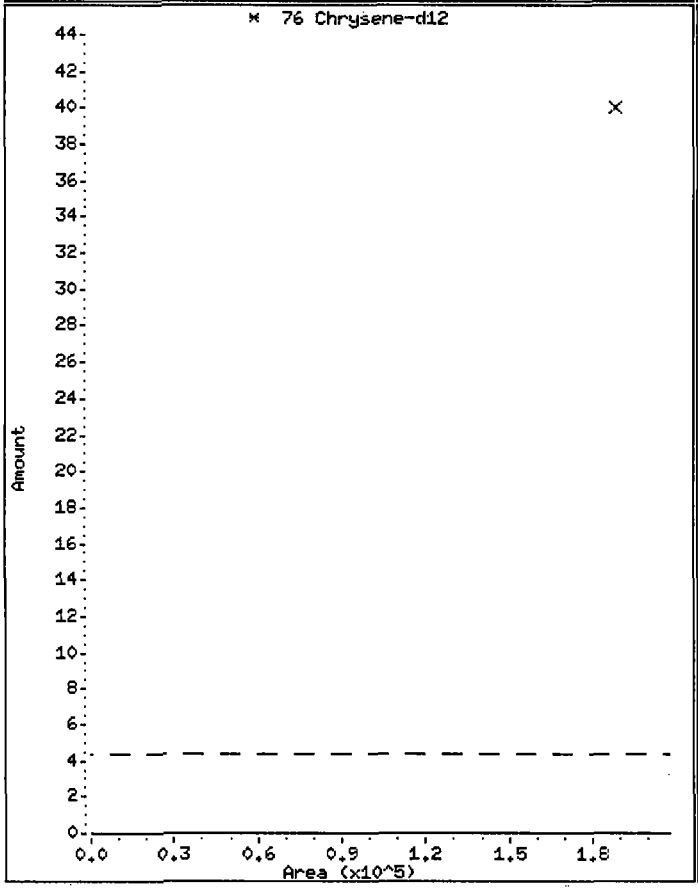

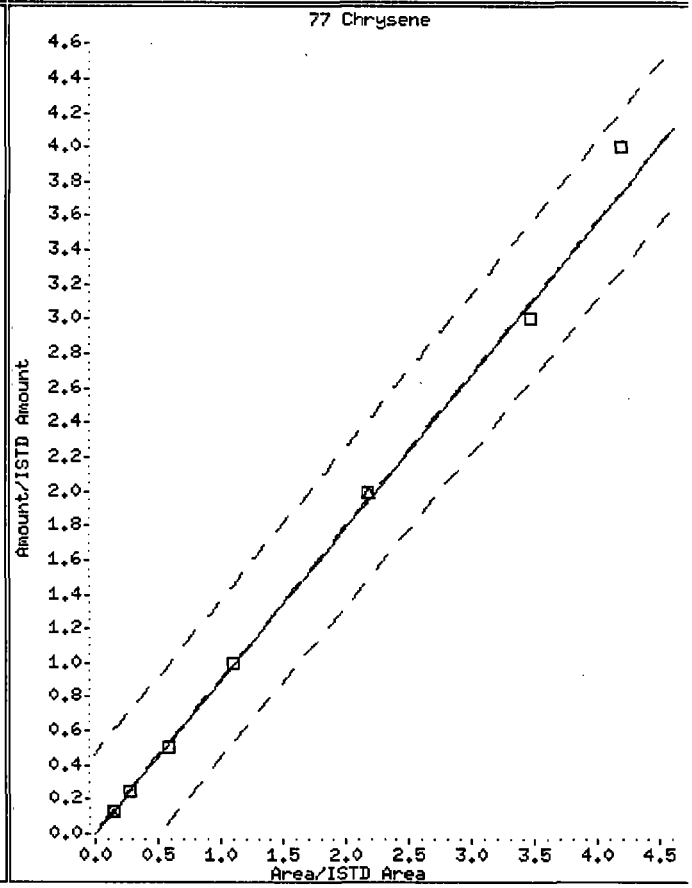

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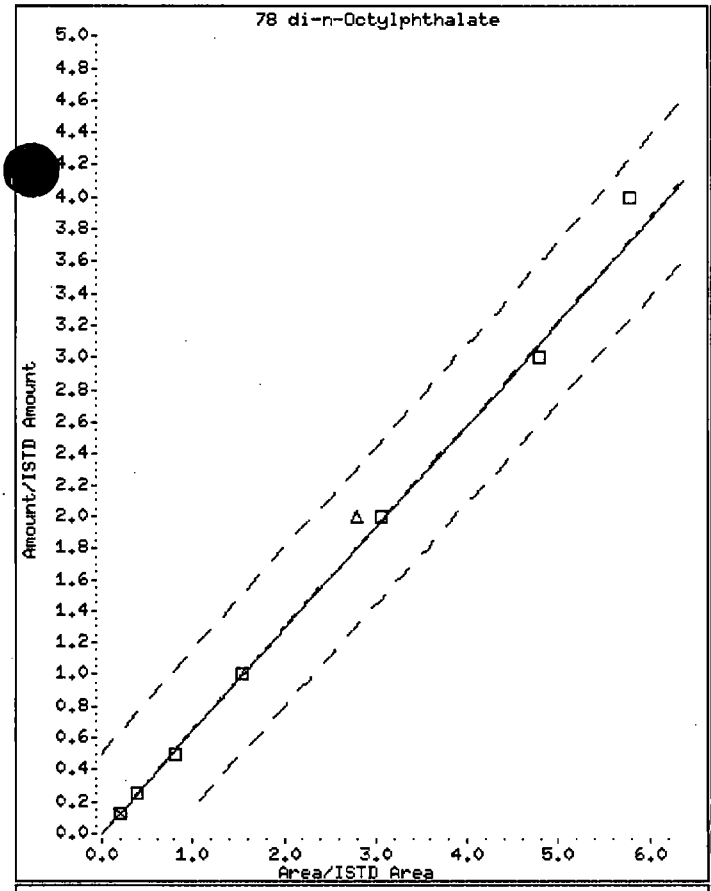

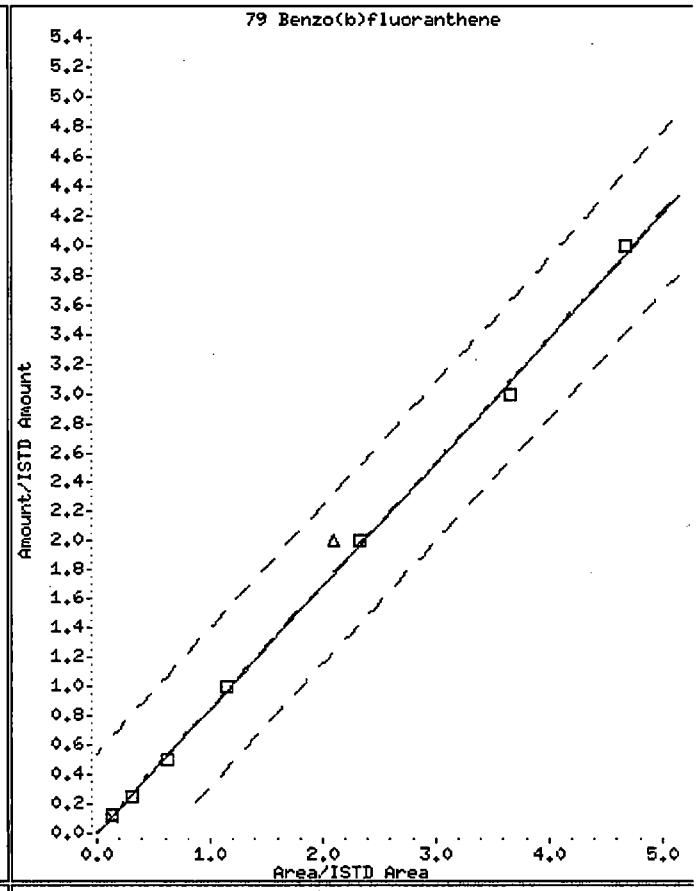

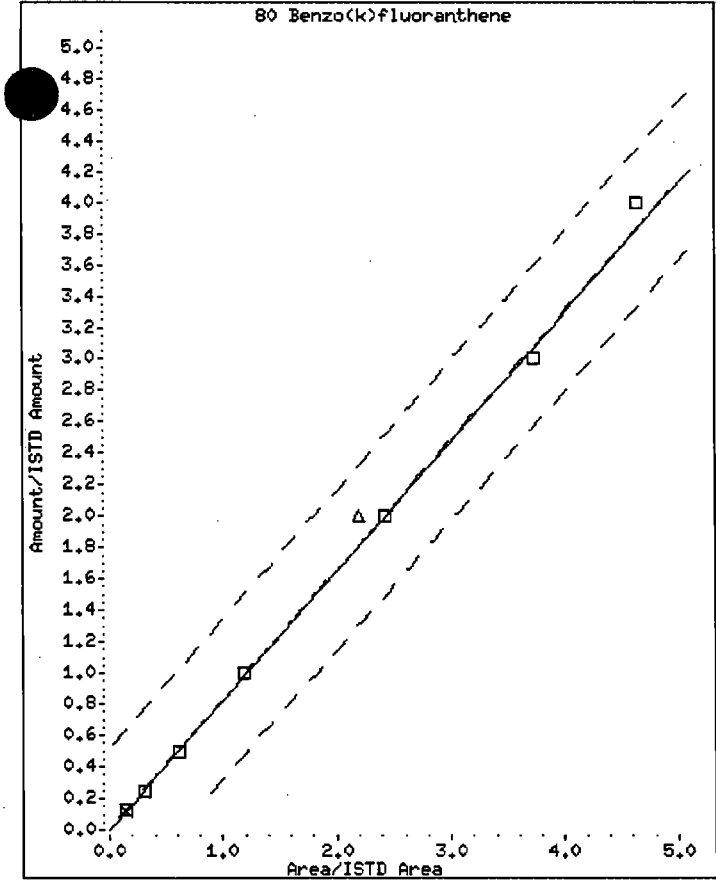

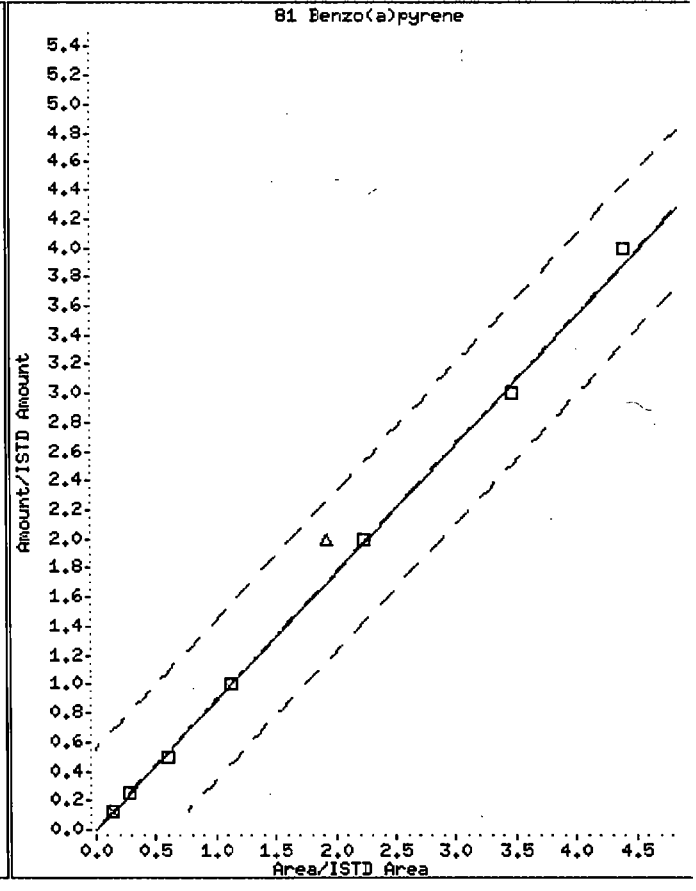

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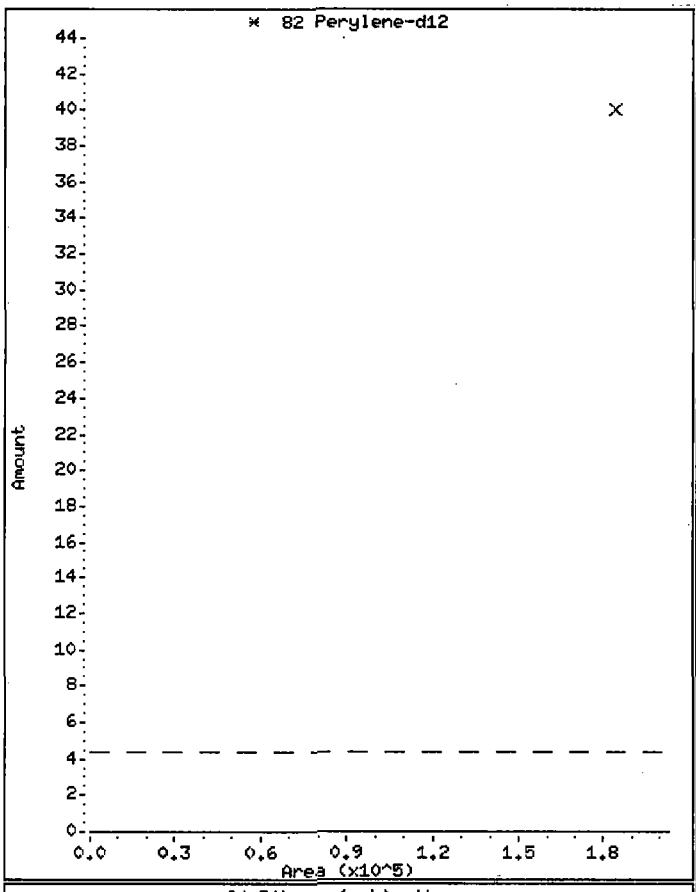

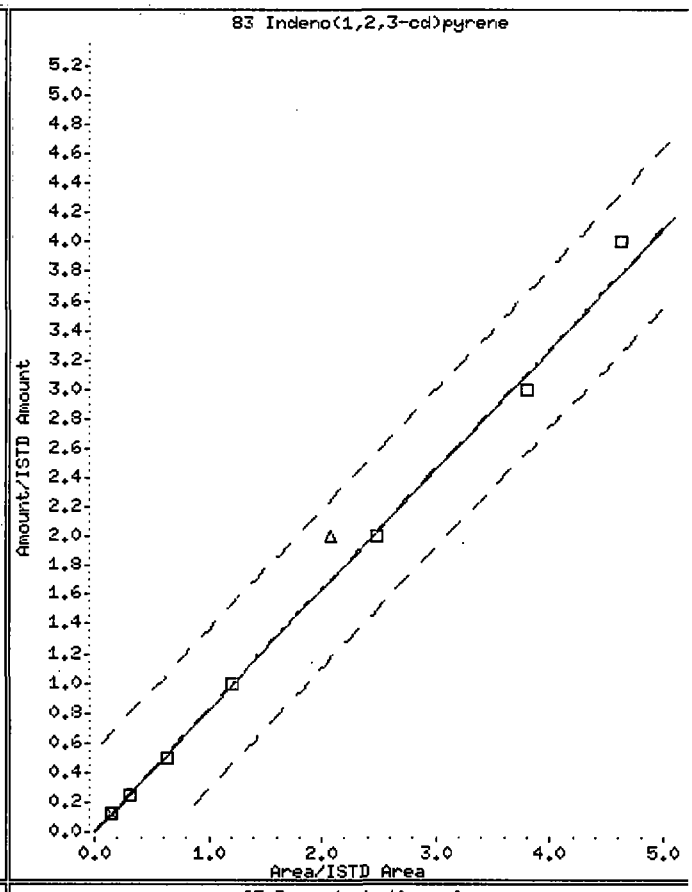

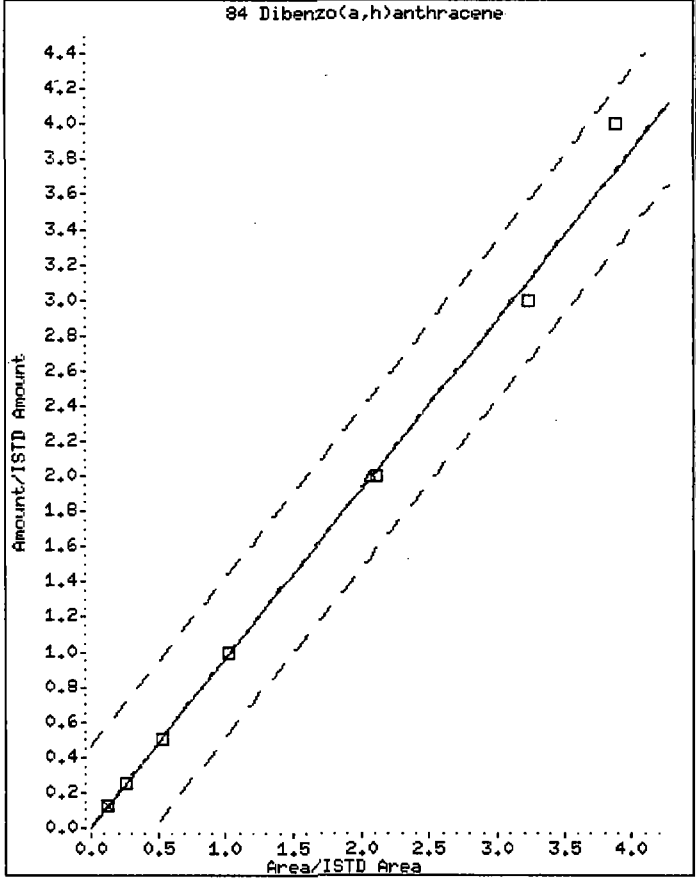

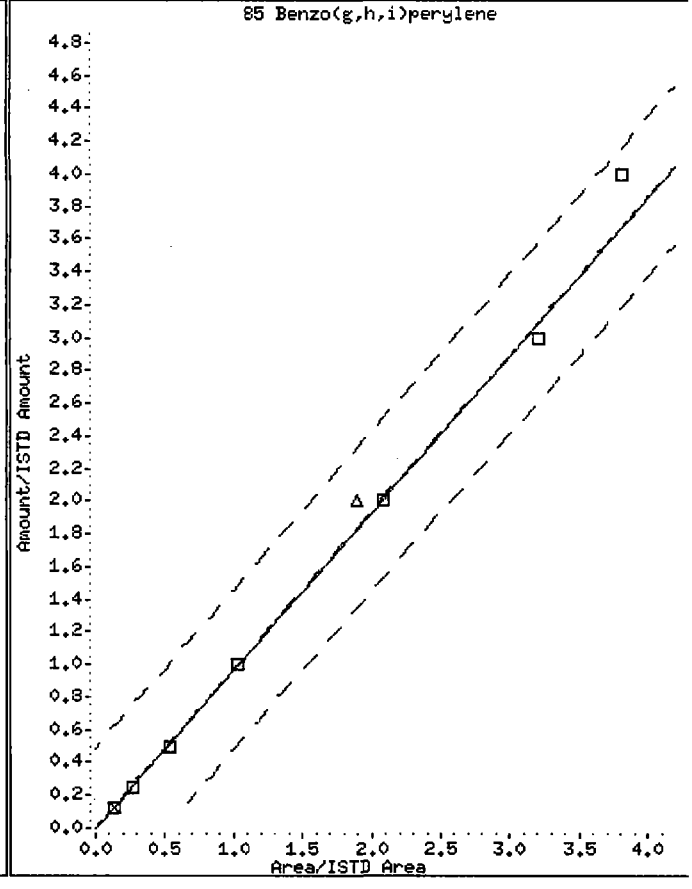

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INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 09:10
End Cal Date : 28-FEB-2014 11:59
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Last Edit : 28-Feb-2014 13:29 jlries

Calibration File Names:
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Level 3: \\192.168.10.12\chem\10mssD.i\022814B.b\02281413.D
Level 4: \\192.168.10.12\chem\10mssD.i\022814B.b\02281412.D
Level 5: \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Level 6: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Level 7: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Level 8: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D

Compound	5.0000 Level 2 / 160.0000 Level 8	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
1 N-Nitrosodimethylamine	0.86290	0.88180	0.96623	0.91991	0.94180	0.98779					
	0.92906						AVRG		0.92707		4.75508
2 Pyridine	1.59299	1.66798	1.74209	1.62793	1.64678	1.74346					
	1.62349						AVRG		1.66353		3.53145
5 Phenol	1.76905	1.77955	1.90469	1.77426	1.79082	1.88786					
	1.77320						AVRG		1.81135		3.23638
6 bis(2-Chloroethyl)ether	1.06611	1.06920	1.13728	1.04453	1.06425	1.11570					
	1.04538						AVRG		1.07749		3.28679

Pace Analytical Services, Inc.

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Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Last Edit : 28-Feb-2014 13:29 jlries

Compound	5.0000 Level 2 / 160.0000 Level 8	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
7 2-Chlorophenol	1.42817	1.45079	1.55902	1.45081	1.48874	1.55755					
	1.44370						AVRG		1.48268		3.69343
8 1,3-Dichlorobenzene	1.51301	1.54609	1.62505	1.50948	1.53545	1.61616					
	1.48677						AVRG		1.54743		3.45982
10 1,4-Dichlorobenzene	1.58695	1.58361	1.66534	1.54046	1.56586	1.62912					
	1.52653						AVRG		1.58541		3.06575
11 Benzyl alcohol	1.19490	1.22430	1.30039	1.21418	1.22758	1.27635					
	1.20404						AVRG		1.23453		3.16392
12 1,2-Dichlorobenzene	1.46795	1.50882	1.60944	1.46437	1.46926	1.53762					
	1.44531						AVRG		1.50040		3.81924
13 2-Methylphenol	1.08791	1.12434	1.19217	1.10227	1.10465	1.15693					
	1.09239						AVRG		1.12295		3.42441
14 bis(2-Chloroisopropyl) ether	2.11070	2.14113	2.22367	2.04576	2.03758	2.12488					
	2.00340						AVRG		2.09816		3.58063

Pace Analytical Services, Inc.

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Last Edit : 28-Feb-2014 13:29 jlries

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
	160.0000 Level 8											
15 3 & 4-Methylphenol	1.39873	1.45146	1.55958	1.44244	1.45241	1.51950						
	1.41598						AVRG		1.46287		3.89997	
16 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
17 N-Nitroso-di-n-propylamine	1.01376	1.01420	1.08462	0.99957	1.01376	1.06474						
	1.00020						AVRG		1.02726		3.25980	
18 Hexachloroethane	0.61692	0.61637	0.64704	0.60116	0.60981	0.62877						
	0.59221						AVRG		0.61604		2.92820	
20 Nitrobenzene	0.37556	0.38323	0.40016	0.37672	0.38073	0.40211						
	0.37398						AVRG		0.38464		3.04320	
21 Isophorone	0.64710	0.67337	0.70751	0.67433	0.67881	0.71074						
	0.67402						AVRG		0.68084		3.22487	
22 2,4-Dimethylphenol	0.34751	0.34818	0.37123	0.35478	0.35334	0.37653						
	0.34191						AVRG		0.35621		3.61206	

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
23 2-Nitrophenol	0.17816	0.18616	0.20208	0.19445	0.19780	0.20765					
	0.19822						AVRG		0.19493		5.08907
24 Benzoic acid	0.19898	0.23289	0.25202	0.25712	0.28173	0.29861					
	0.28014						AVRG		0.25736		13.12941
25 bis(2-Chloroethoxy)methane	0.40655	0.41876	0.43958	0.42052	0.41998	0.43245					
	0.40734						AVRG		0.42074		2.87434
26 2,4-Dichlorophenol	0.25950	0.26749	0.28381	0.27706	0.28030	0.29441					
	0.27510						AVRG		0.27681		4.06739
27 1,2,4-Trichlorobenzene	0.29205	0.29833	0.30499	0.28970	0.28911	0.30522					
	0.28623						AVRG		0.29509		2.63805
29 Naphthalene	1.09413	1.09443	1.12759	1.06164	1.05011	1.08578					
	1.01976						AVRG		1.07621		3.27740
30 4-Chloroaniline	0.45108	0.46009	0.46306	0.41544	0.37460	0.35790					
	0.31540						AVRG		0.40537		14.17419

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
31 Hexachlorobutadiene	0.14852	0.14543	0.15266	0.14373	0.14692	0.15505					
	0.14776						AVRG		0.14858		2.68257
32 4-Chloro-3-methylphenol	0.27845	0.29131	0.31001	0.29736	0.29991	0.31938					
	0.30121						AVRG		0.29966		4.35886
33 2-Methylnaphthalene	0.67623	0.69178	0.73032	0.69966	0.69746	0.73465					
	0.68886						AVRG		0.70271		3.09132
34 1-Methylnaphthalene	0.64055	0.64700	0.68692	0.64294	0.65500	0.68002					
	0.63693						AVRG		0.65562		3.04205
35 Hexachlorocyclopentadiene	0.28834	0.30148	0.32508	0.33109	0.34563	0.37487					
	0.33721						AVRG		0.32910		8.66468
36 2,4,6-Trichlorophenol	0.32133	0.34585	0.36497	0.35583	0.36220	0.38782					
	0.35986						AVRG		0.35684		5.65852
37 2,4,5-Trichlorophenol	0.35564	0.37504	0.39530	0.38128	0.38644	0.42008					
	0.37472						AVRG		0.38407		5.22190

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
39 2-Chloronaphthalene	1.15462	1.19843	1.22260	1.17679	1.17975	1.24260					
	1.12287						AVRG		1.18538		3.40753
40 2-Nitroaniline	0.36221	0.39812	0.40979	0.40082	0.40082	0.42569					
	0.38490						AVRG		0.39748		5.00222
41 Dimethylphthalate	1.30620	1.34087	1.38429	1.31741	1.30752	1.38436					
	1.27419						AVRG		1.33069		3.12299
42 2,6-Dinitrotoluene	0.30071	0.32418	0.33052	0.31485	0.32040	0.34423					
	0.31521						AVRG		0.32144		4.25491
43 Acenaphthylene	1.89830	1.97124	2.05856	1.94680	1.98241	2.06646					
	1.89283						AVRG		1.97380		3.51236
44 3-Nitroaniline	0.35712	0.36964	0.38552	0.34982	0.30093	0.29299					
	0.25792						AVRG		0.33056		14.18353
46 Acenaphthene	1.21508	1.23662	1.29430	1.22468	1.21046	1.30970					
	1.17755						AVRG		1.23834		3.81987

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
47 2,4-Dinitrophenol	2813	6833	17932	42942	94767	153763					
	202211						QUAD	0.12678	4.63679	-0.03462	0.99342
48 4-Nitrophenol	0.27569	0.29563	0.31319	0.30139	0.30264	0.31946					
	0.29325						AVRG		0.30018		4.74378
49 2,4-Dinitrotoluene	0.38324	0.42216	0.44267	0.42371	0.42972	0.45361					
	0.41588						AVRG		0.42443		5.25727
50 Dibenzofuran	1.67918	1.70893	1.72716	1.64142	1.66857	1.72222					
	1.56795						AVRG		1.67363		3.33874
51 Diethylphthalate	1.36247	1.39438	1.44710	1.37156	1.37789	1.46087					
	1.32905						AVRG		1.39190		3.37450
52 4-Chlorophenylphenyl ether	0.59726	0.61005	0.63422	0.59751	0.60787	0.64127					
	0.58298						AVRG		0.61017		3.42252
53 Fluorene	1.39258	1.45162	1.47743	1.41235	1.35952	1.47033					
	1.31432						AVRG		1.41116		4.28325

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	160.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
54 4-Nitroaniline	0.34736	0.38994	0.40485	0.38558	0.37484	0.39282	0.35556	AVRG		0.37871		5.48562
55 4,6-Dinitro-2-methylphenol	4513	10363	24904	54689	118979	178803	243881	QUAD	0.08912	6.32613	0.16766	0.99787
56 N-Nitrosodiphenylamine	0.67438	0.70966	0.74858	0.69857	0.71079	0.75789	0.69285	AVRG		0.71324		4.20692
57 Azobenzene	1.46740	1.51955	1.58440	1.49731	1.44751	1.50062	1.35063	AVRG		1.48106		4.86350
58 1,2-Diphenylhydrazine	1.46740	1.51955	1.58440	1.49731	1.44751	1.50062	1.35063	AVRG		1.48106		4.86350
60 4-Bromophenylphenyl ether	0.18644	0.19549	0.20434	0.19598	0.20253	0.22224	0.20691	AVRG		0.20199		5.57159
61 Hexachlorobenzene	0.21391	0.21485	0.22956	0.21476	0.22431	0.23700	0.22172	AVRG		0.22230		3.92120

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 09:10
End Cal Date : 28-FEB-2014 11:59
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Last Edit : 28-Feb-2014 13:29 jlries

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
62 Pentachlorophenol	+++++	0.10939	0.12854	0.12879	0.13908	0.15446					
	0.14823						AVRG		0.13475		11.99323
64 Phenanthrene	1.10786	1.15481	1.21176	1.11071	1.11948	1.18757					
	1.08264						AVRG		1.13926		4.12150
65 Anthracene	1.10857	1.12812	1.22275	1.12852	1.16393	1.21440					
	1.16364						AVRG		1.16142		3.77991
66 Carbazole	1.06937	1.11727	1.19805	1.09132	1.11277	1.17709					
	1.10994						AVRG		1.12512		4.09153
67 di-n-Butylphthalate	1.21834	1.33010	1.46374	1.38950	1.40768	1.52074					
	1.37868						AVRG		1.38697		6.96324
68 Fluoranthene	1.03062	1.06906	1.17944	1.11135	1.13960	1.25144					
	1.17788						AVRG		1.13706		6.53872
69 Benzidine	0.68615	0.70682	0.72685	0.64583	0.54631	0.55931					
	0.49322						AVRG		0.62350		14.50841

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 09:10
End Cal Date : 28-FEB-2014 11:59
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Last Edit : 28-Feb-2014 13:29 jlries

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	160.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
70 Pyrene	1.19608	1.23884	1.31712	1.21255	1.18574	1.28639						
	1.18311							AVRG		1.23141		4.25161
72 Butylbenzylphthalate	0.54285	0.58810	0.64282	0.61231	0.59209	0.64055						
	0.57886							AVRG		0.59965		5.91389
73 bis(2-Ethylhexyl)phthalate	0.79511	0.83988	0.92922	0.89406	0.85208	0.90120						
	0.81073							AVRG		0.86033		5.76370
74 3,3'-Dichlorobenzidine	0.35073	0.36998	0.38434	0.33046	0.29416	0.31529						
	0.28794							AVRG		0.33327		11.07575
75 Benzo(a)anthracene	1.12690	1.13818	1.20355	1.12024	1.12532	1.18848						
	1.08152							AVRG		1.14060		3.68273
77 Chrysene	1.07474	1.07000	1.12016	1.05141	1.04529	1.08919						
	0.95720							AVRG		1.05828		4.82233
78 di-n-Octylphthalate	1.23053	1.39334	1.52688	1.47631	1.45775	1.52785						
	1.41751							AVRG		1.43288		7.15734

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 09:10
End Cal Date : 28-FEB-2014 11:59
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Last Edit : 28-Feb-2014 13:29 jlries

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
79 Benzo(b)fluoranthene	1.00943	1.05743	1.11332	1.09317	1.10418	1.15176					
	1.10749						AVRG		1.09097		4.17048
80 Benzo(k)fluoranthene	1.09004	1.16760	1.25448	1.14099	1.21317	1.22386					
	1.09494						AVRG		1.16930		5.49520
81 Benzo(a)pyrene	0.93922	1.02075	1.08200	1.04378	1.08164	1.12251					
	1.04029						AVRG		1.04717		5.58034
83 Indeno(1,2,3-cd)pyrene	1.09938	1.17285	1.26784	1.21240	1.20738	1.28883					
	1.22095						AVRG		1.20995		5.15129
84 Dibenzo(a,h)anthracene	0.93875	1.00799	1.07166	1.02681	1.06173	1.12210					
	1.04187						AVRG		1.03870		5.51059
85 Benzo(g,h,i)perylene	0.94584	0.99157	1.06036	1.00719	1.01547	1.09334					
	1.04825						AVRG		1.02315		4.75947
$ 3 2-Fluorophenol (S)	1.32660	1.39500	1.46473	1.35525	1.38391	1.45628					
	1.38143						AVRG		1.39474		3.60664

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 09:10
End Cal Date : 28-FEB-2014 11:59
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Last Edit : 28-Feb-2014 13:29 jlries

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
$ 4 Phenol-d6 (S)	1.65117	1.71398	1.81026	1.68971	1.74192	1.82432					
	1.73382						AVRG		1.73788		3.57464
$ 19 Nitrobenzene-d5 (S)	0.38169	0.39233	0.41254	0.39472	0.39564	0.41624					
	0.38795						AVRG		0.39730		3.17677
$ 38 2-Fluorobiphenyl (S)	1.36399	1.39839	1.44041	1.38175	1.39448	1.45022					
	1.35600						AVRG		1.39789		2.56653
$ 59 2,4,6-Tribromophenol (S)	0.16902	0.17578	0.18458	0.18494	0.19462	0.21209					
	0.19686						AVRG		0.18827		7.61285
$ 71 Terphenyl-d14 (S)	0.82092	0.86552	0.90619	0.85281	0.85085	0.92466					
	0.86345						AVRG		0.86920		4.04769

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 28-FEB-2014 09:10
End Cal Date : 28-FEB-2014 11:59
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Last Edit : 28-Feb-2014 13:29 jlries

Average %RSD Results.	
Calculated Average %RSD =	4.96720
Maximun Average %RSD =	15.00000
* Passed Average %RSD Test.	

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Data file: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Lab Smp Id: ICAL 8 10328-96
Inj Date : 28-FEB-2014 09:10
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 8 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.595	2.595	(0.512)	440555	160.000	160(A)
2	Pyridine	79	2.643	2.643	(0.521)	769845	160.000	156
$ 3	2-Fluorophenol (S)	112	3.729	3.729	(0.735)	655063	160.000	158
$ 4	Phenol-d6 (S)	99	4.622	4.622	(0.911)	822163	160.000	160
5	Phenol	94	4.638	4.638	(0.915)	840835	160.000	157
6	bis(2-Chloroethyl)ether	63	4.756	4.756	(0.938)	495711	160.000	155
7	2-Chlorophenol	128	4.847	4.847	(0.956)	684592	160.000	156
8	1,3-Dichlorobenzene	146	5.018	5.018	(0.989)	705014	160.000	154
* 9	1,4-Dichlorobenzene-d4	152	5.072	5.072	(1.000)	118548	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	723868	160.000	154
11	Benzyl alcohol	79	5.200	5.200	(1.025)	570946	160.000	156
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	685353	160.000	154
13	2-Methylphenol	107	5.302	5.302	(1.045)	518001	160.000	156
14	bis(2-Chloroisopropyl) ether	45	5.344	5.344	(1.054)	949997	160.000	153
15	3 & 4-Methylphenol	107	5.473	5.473	(1.079)	671445	160.000	155
17	N-Nitroso-di-n-propylamine	70	5.499	5.499	(1.084)	474289	160.000	156
18	Hexachloroethane	117	5.655	5.655	(1.115)	280819	160.000	154
$ 19	Nitrobenzene-d5 (S)	82	5.687	5.687	(0.869)	541078	120.000	117
20	Nitrobenzene	77	5.713	5.713	(0.873)	695467	160.000	156
21	Isophorone	82	5.986	5.986	(0.915)	1253420	160.000	158
23	2-Nitrophenol	139	6.077	6.077	(0.929)	368608	160.000	163(A)
22	2,4-Dimethylphenol	107	6.093	6.093	(0.931)	635820	160.000	154

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	6.221	6.221	(0.951)	520962	160.000	174(AM)
	25 bis(2-Chloroethoxy)methane	93	6.211	6.211	(0.949)	757500	160.000	155(Q)
	26 2,4-Dichlorophenol	162	6.361	6.361	(0.972)	511582	160.000	159
	27 1,2,4-Trichlorobenzene	180	6.468	6.468	(0.989)	532285	160.000	155
*	28 Naphthalene-d8	136	6.542	6.542	(1.000)	464907	40.0000	(Q)
	29 Naphthalene	128	6.574	6.574	(1.005)	1896383	160.000	152
	30 4-Chloroaniline	127	6.612	6.612	(1.011)	586524	160.000	124(A)
	31 Hexachlorobutadiene	225	6.708	6.708	(1.025)	274775	160.000	159
	32 4-Chloro-3-methylphenol	107	7.174	7.174	(1.096)	560144	160.000	161(A)
	33 2-Methylnaphthalene	142	7.409	7.409	(1.132)	1281032	160.000	157
	34 1-Methylnaphthalene	142	7.532	7.532	(1.151)	1184455	160.000	155
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	336463	160.000	164(A)
	36 2,4,6-Trichlorophenol	196	7.740	7.740	(0.890)	359064	160.000	161(A)
	37 2,4,5-Trichlorophenol	196	7.783	7.783	(0.895)	373888	160.000	156
$	38 2-Fluorobiphenyl (S)	172	7.847	7.847	(0.902)	1014740	120.000	116
	39 2-Chloronaphthalene	162	8.008	8.008	(0.921)	1120376	160.000	152
	40 2-Nitroaniline	65	8.115	8.115	(0.933)	384044	160.000	155
	41 Dimethylphthalate	163	8.345	8.345	(0.959)	1271354	160.000	153
	42 2,6-Dinitrotoluene	165	8.414	8.414	(0.967)	314507	160.000	157
	43 Acenaphthylene	152	8.532	8.532	(0.981)	1888618	160.000	153(TM)
	44 3-Nitroaniline	138	8.628	8.628	(0.992)	257348	160.000	125(A)
*	45 Acenaphthene-d10	164	8.698	8.698	(1.000)	249444	40.0000	
	46 Acenaphthene	154	8.746	8.746	(1.006)	1174934	160.000	152
	47 2,4-Dinitrophenol	184	8.751	8.751	(1.006)	202211	160.000	154
	48 4-Nitrophenol	65	8.810	8.810	(1.013)	292601	160.000	156
	49 2,4-Dinitrotoluene	165	8.917	8.917	(1.025)	414959	160.000	157
	50 Dibenzofuran	168	8.955	8.955	(1.030)	1564465	160.000	150
	51 Diethylphthalate	149	9.211	9.211	(1.059)	1326091	160.000	153
	52 4-Chlorophenylphenyl ether	204	9.366	9.366	(1.077)	581688	160.000	153
	54 4-Nitroaniline	138	9.399	9.399	(1.081)	354768	160.000	150
	53 Fluorene	166	9.388	9.388	(1.079)	1311397	160.000	149
	55 4,6-Dinitro-2-methylphenol	198	9.431	9.431	(0.894)	243881	160.000	157
	56 N-Nitrosodiphenylamine	169	9.516	9.516	(0.902)	1129761	160.000	155
	57 Azobenzene	77	9.570	9.570	(1.100)	1347627	160.000	146
	58 1,2-Diphenylhydrazine	77	9.570	9.570	(1.100)	1347627	160.000	146
$	59 2,4,6-Tribromophenol (S)	330	9.682	9.682	(1.113)	196420	160.000	167(A)
	60 4-Bromophenylphenyl ether	248	9.982	9.982	(0.946)	337383	160.000	164(A)
	61 Hexachlorobenzene	284	10.072	10.072	(0.954)	361542	160.000	160
	62 Pentachlorophenol	266	10.302	10.302	(0.976)	241699	160.000	176(A)
*	63 Phenanthrene-d10	188	10.554	10.554	(1.000)	407651	40.0000	
	64 Phenanthrene	178	10.586	10.586	(1.003)	1765365	160.000	152
	65 Anthracene	178	10.650	10.650	(1.009)	1897442	160.000	160(A)
	66 Carbazole	167	10.837	10.837	(1.027)	1809872	160.000	158
	67 di-n-Butylphthalate	149	11.244	11.244	(1.065)	2248080	160.000	159
	68 Fluoranthene	202	12.073	12.073	(1.144)	1920654	160.000	166(A)
	69 Benzidine	184	12.212	12.212	(0.881)	848666	160.000	126(A)
	70 Pyrene	202	12.362	12.362	(0.892)	2035741	160.000	154
$	71 Terphenyl-d14 (S)	244	12.528	12.528	(0.904)	1114275	120.000	119
	72 Butylbenzylphthalate	149	13.116	13.116	(0.947)	996017	160.000	154
	73 bis(2-Ethylhexyl)phthalate	149	13.811	13.811	(0.997)	1394994	160.000	151
	74 3,3'-Dichlorobenzidine	252	13.790	13.790	(0.995)	495456	160.000	138(A)
	75 Benzo(a)anthracene	228	13.843	13.843	(0.999)	1860935	160.000	152
*	76 Chrysene-d12	240	13.854	13.854	(1.000)	430166	40.0000	(Q)
	77 Chrysene	228	13.891	13.891	(1.003)	1647014	160.000	145

Data File: \\192.168.10.12\Chem\10mssD.I\022814B.D\02281408.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.587	14.587	(1.053)	2439054	160.000	158
79	Benzo(b)fluoranthene	252	15.207	15.207	(0.964)	1967626	160.000	162(A)
80	Benzo(k)fluoranthene	252	15.250	15.250	(0.967)	1945336	160.000	150
81	Benzo(a)pyrene	252	15.694	15.694	(0.995)	1848244	160.000	159
* 82	Perylene-d12	264	15.769	15.769	(1.000)	444164	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.753	17.753	(1.126)	2169203	160.000	161(A)
84	Dibenzo(a,h)anthracene	278	17.785	17.785	(1.128)	1851045	160.000	160(A)
85	Benzo(g,h,i)perylene	276	18.363	18.363	(1.165)	1862386	160.000	164(A)

QC Flag Legend

T - Target compound detected outside RT window.
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281408.D
Lab Smp Id: ICAL 8 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	118548	0.32
28 Naphthalene-d8	466266	233133	932532	464907	-0.29
45 Acenaphthene-d10	245325	122663	490650	249444	1.68
63 Phenanthrene-d10	405966	202983	811932	407651	0.42
76 Chrysene-d12	427978	213989	855956	430166	0.51
82 Perylene-d12	418836	209418	837672	444164	6.05

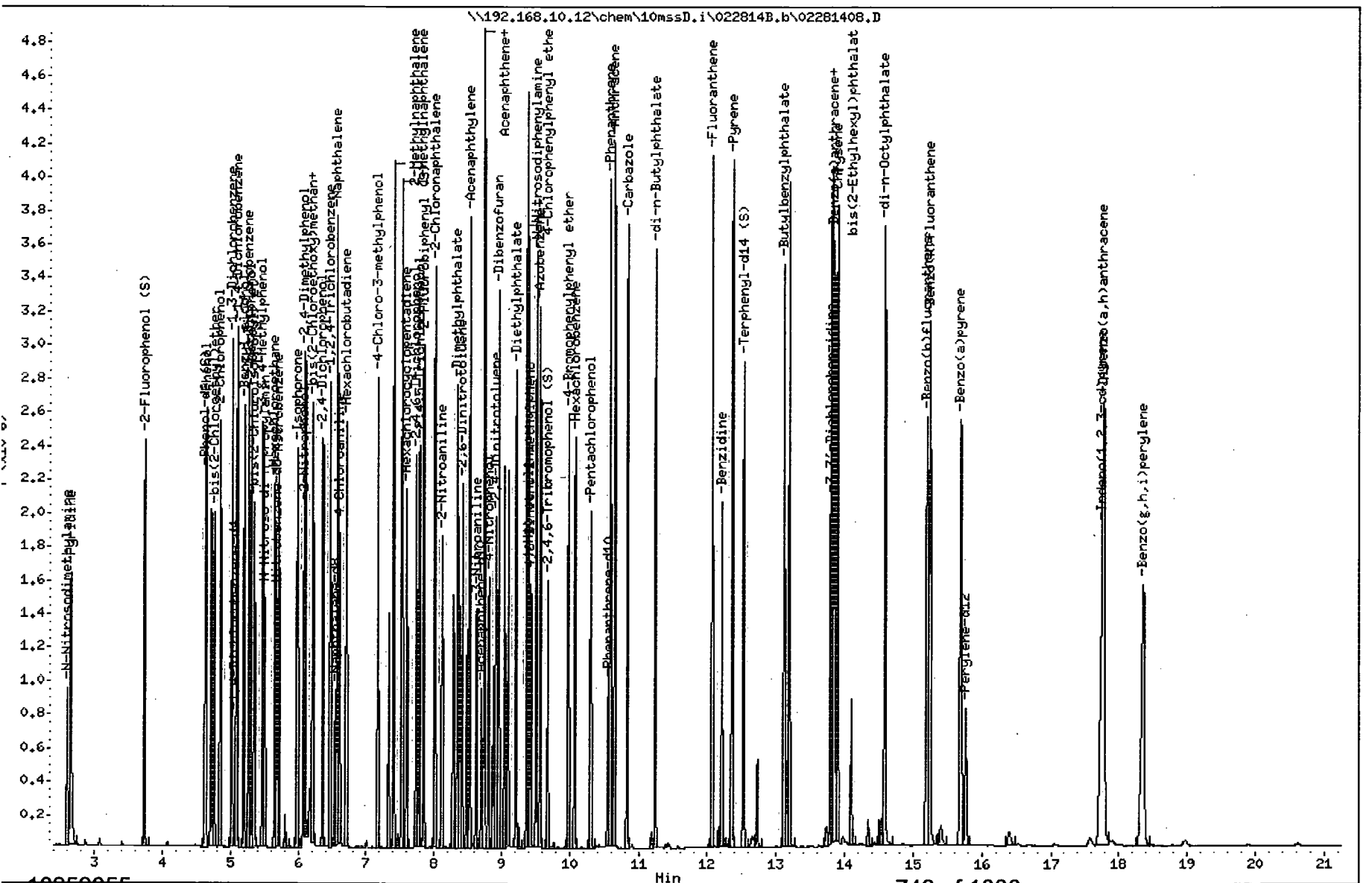
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.05
76 Chrysene-d12	13.85	13.35	14.35	13.85	0.04
82 Perylene-d12	15.76	15.26	16.26	15.77	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281408.D
Date : 28-FEB-2014 09:10
Client ID:
Sample Info: ICAL 8 10328-96

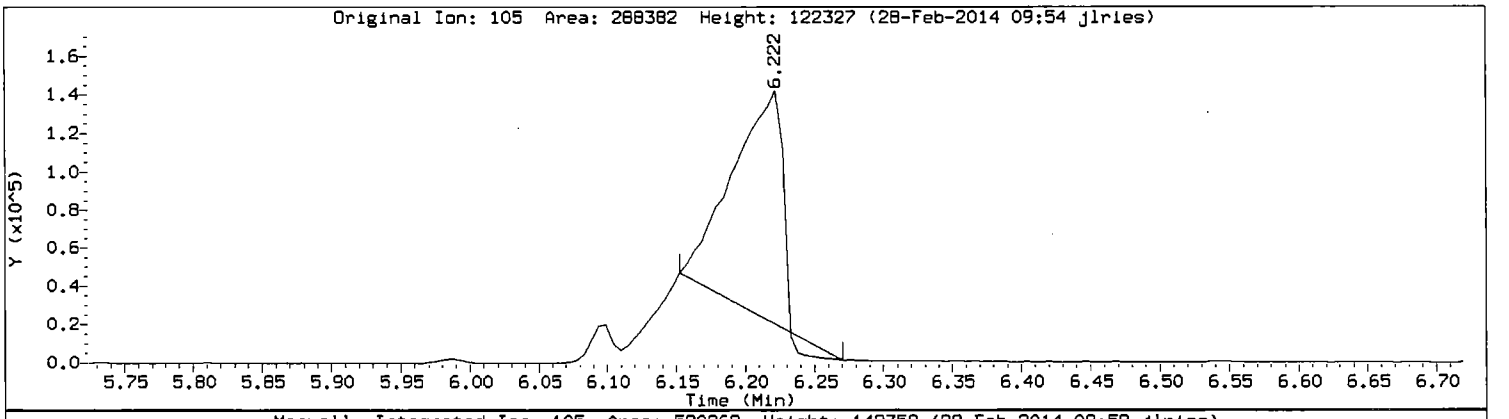
Instrument: 10mssD.i

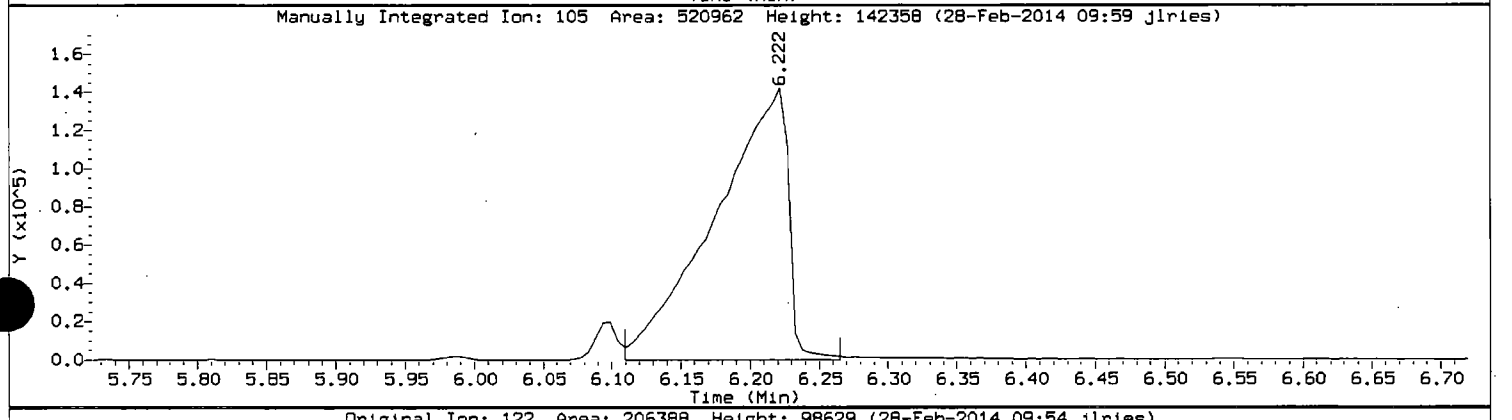
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

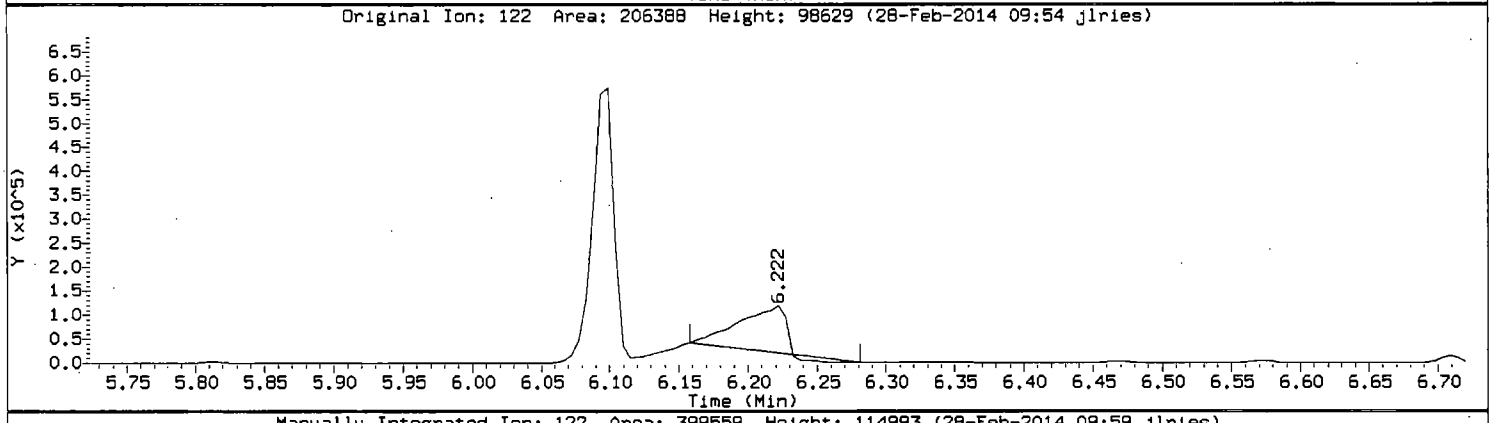


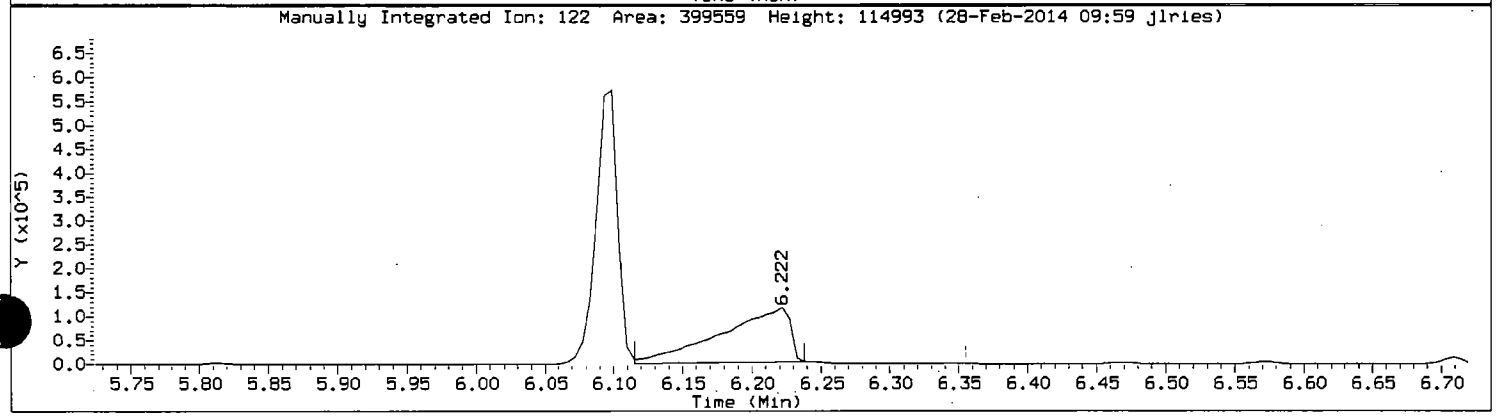
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281408.D
Injection Date: 28-FEB-2014 09:10
Instrument: 10mssD.i
Lab Sample ID: ICAL 8 10328-96

Compound: Benzoic acid
CAS Number: 65-85-0









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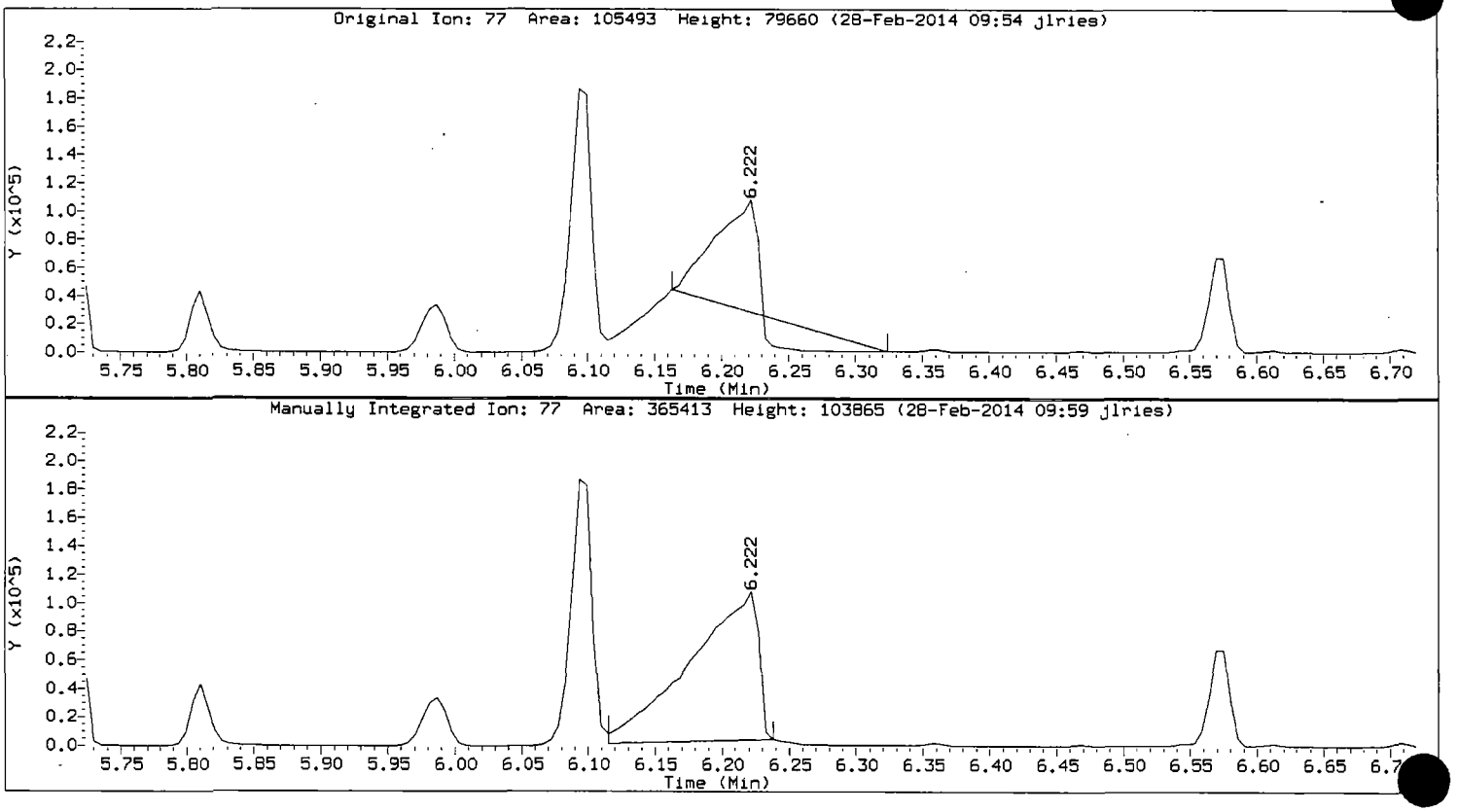
Injection Date: 28-FEB-2014 09:10
Instrument: 10mssD.i
Lab Sample ID: ICAL 8 10328-96



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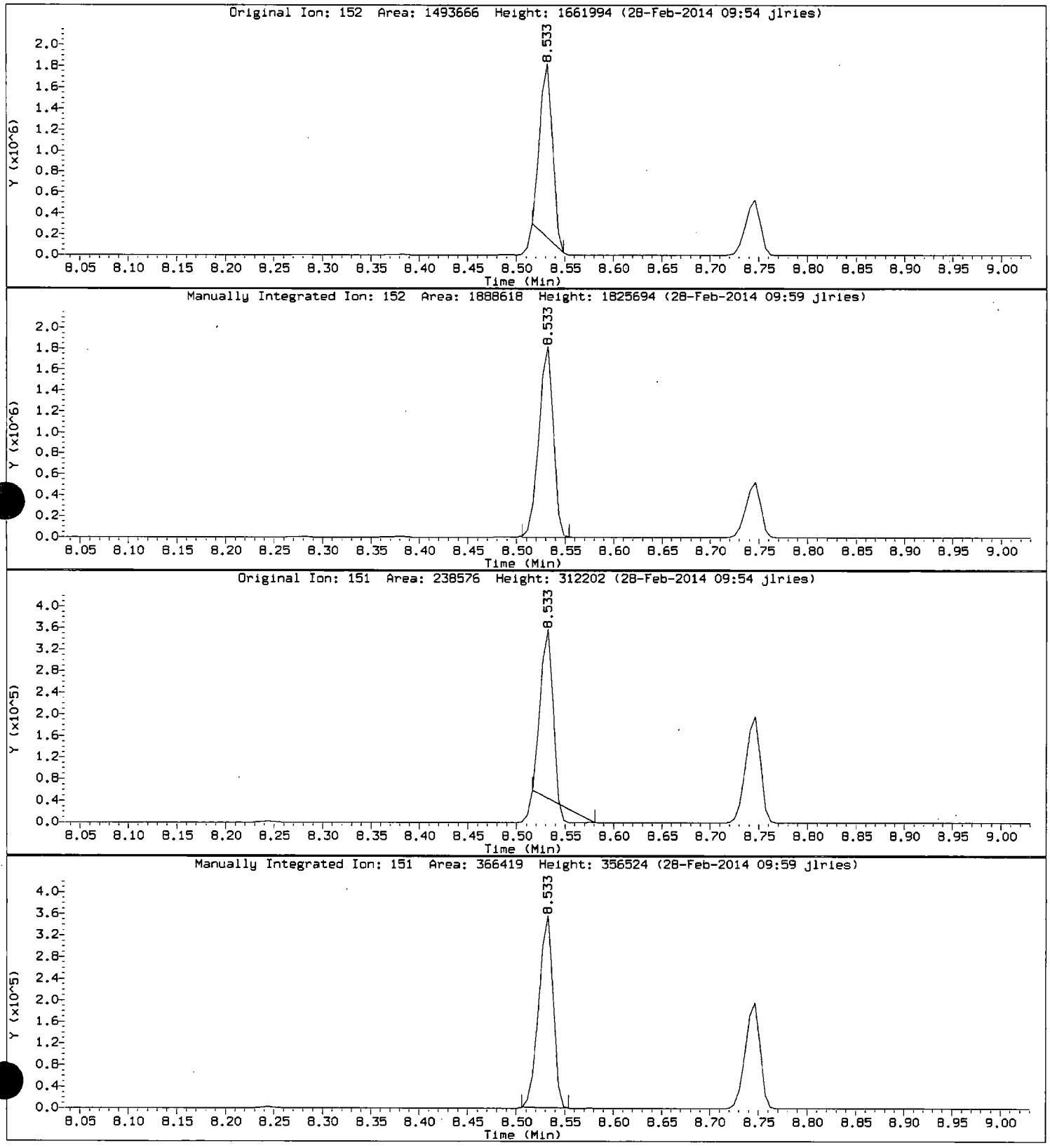
Injection Date: 28-FEB-2014 09:10
Instrument: 10mssD.i
Lab Sample ID: ICAL 8 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



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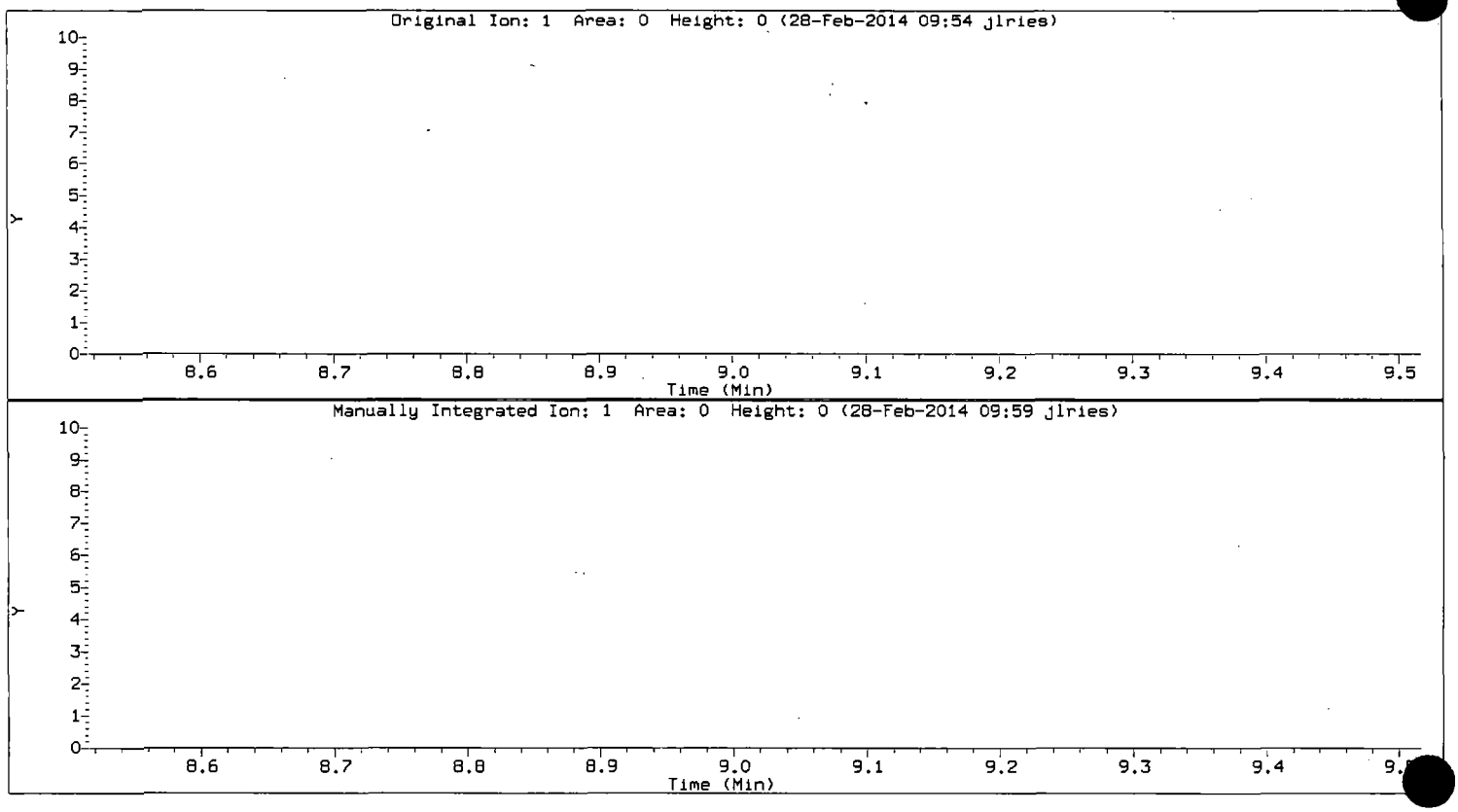
Injection Date: 28-FEB-2014 09:10
Instrument: 10mssD.i
Lab Sample ID: ICAL 8 10328-96



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Lab Smp Id: ICAL 7 10328-96
Inj Date : 28-FEB-2014 09:39
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 7 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 09:10 Cal File: 02281408.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
CpndVariable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	329098	120.000	128
2	Pyridine	79	2.643	2.643	(0.521)	580859	120.000	126
$ 3	2-Fluorophenol (S)	112	3.729	3.729	(0.735)	485182	120.000	125
$ 4	Phenol-d6 (S)	99	4.617	4.617	(0.910)	607801	120.000	126
5	Phenol	94	4.633	4.633	(0.914)	628970	120.000	125
6	bis(2-Chloroethyl)ether	63	4.750	4.750	(0.937)	371712	120.000	124
7	2-Chlorophenol	128	4.847	4.847	(0.956)	518920	120.000	126
8	1,3-Dichlorobenzene	146	5.018	5.018	(0.989)	538447	120.000	125
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	111055	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	542767	120.000	123
11	Benzyl alcohol	79	5.194	5.194	(1.024)	425235	120.000	124
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	512281	120.000	123
13	2-Methylphenol	107	5.296	5.296	(1.044)	385447	120.000	124
14	bis(2-Chloroisopropyl) ether	45	5.344	5.344	(1.054)	707936	120.000	122
15	3 & 4-Methylphenol	107	5.473	5.473	(1.079)	506245	120.000	125
17	N-Nitroso-di-n-propylamine	70	5.494	5.494	(1.083)	354733	120.000	124
18	Hexachloroethane	117	5.654	5.654	(1.115)	209485	120.000	122
$ 19	Nitrobenzene-d5 (S)	82	5.686	5.686	(0.869)	408426	90.0000	94.3
20	Nitrobenzene	77	5.708	5.708	(0.872)	526092	120.000	125
21	Isophorone	82	5.981	5.981	(0.914)	929873	120.000	125
23	2-Nitrophenol	139	6.077	6.077	(0.929)	271676	120.000	128
22	2,4-Dimethylphenol	107	6.093	6.093	(0.931)	492619	120.000	127

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	6.205	6.205	(0.948)	390676	120.000	139(M)
	25 bis(2-Chloroethoxy)methane	93	6.211	6.211	(0.949)	565784	120.000	123(Q)
	26 2,4-Dichlorophenol	162	6.355	6.355	(0.971)	385187	120.000	128
	27 1,2,4-Trichlorobenzene	180	6.467	6.467	(0.989)	399321	120.000	124
*	28 Naphthalene-d8	136	6.542	6.542	(1.000)	436106	40.0000	(Q)
	29 Naphthalene	128	6.569	6.569	(1.004)	1420551	120.000	121
	30 4-Chloroaniline	127	6.606	6.606	(1.010)	468242	120.000	106(A)
	31 Hexachlorobutadiene	225	6.708	6.708	(1.025)	202851	120.000	125
	32 4-Chloro-3-methylphenol	107	7.168	7.168	(1.096)	417856	120.000	128
	33 2-Methylnaphthalene	142	7.403	7.403	(1.132)	961154	120.000	125
	34 1-Methylnaphthalene	142	7.526	7.526	(1.150)	889681	120.000	124
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	256897	120.000	137
	36 2,4,6-Trichlorophenol	196	7.735	7.735	(0.889)	265771	120.000	130
	37 2,4,5-Trichlorophenol	196	7.778	7.778	(0.894)	287877	120.000	131
$	38 2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	745368	90.0000	93.4
	39 2-Chloronaphthalene	162	8.008	8.008	(0.921)	851543	120.000	126
	40 2-Nitroaniline	65	8.115	8.115	(0.933)	291722	120.000	128
	41 Dimethylphthalate	163	8.339	8.339	(0.959)	948686	120.000	125
	42 2,6-Dinitrotoluene	165	8.414	8.414	(0.967)	235898	120.000	128
	43 Acenaphthylene	152	8.527	8.527	(0.980)	1416125	120.000	126(M)
	44 3-Nitroaniline	138	8.623	8.623	(0.991)	200782	120.000	106(A)
*	45 Acenaphthene-d10	164	8.698	8.698	(1.000)	228430	40.0000	
	46 Acenaphthene	154	8.741	8.741	(1.005)	897521	120.000	127
	47 2,4-Dinitrophenol	184	8.746	8.746	(1.006)	153763	120.000	129
	48 4-Nitrophenol	65	8.805	8.805	(1.012)	218921	120.000	128
	49 2,4-Dinitrotoluene	165	8.912	8.912	(1.025)	310854	120.000	128
	50 Dibenzofuran	168	8.954	8.954	(1.030)	1180219	120.000	123
	51 Diethylphthalate	149	9.206	9.206	(1.058)	1001119	120.000	126
	52 4-Chlorophenylphenyl ether	204	9.366	9.366	(1.077)	439456	120.000	126
	54 4-Nitroaniline	138	9.388	9.388	(1.079)	269195	120.000	124
	53 Fluorene	166	9.382	9.382	(1.079)	1007602	120.000	125
	55 4,6-Dinitro-2-methylphenol	198	9.425	9.425	(0.893)	178803	120.000	125
	56 N-Nitrosodiphenylamine	169	9.511	9.511	(0.901)	857266	120.000	128
	57 Azobenzene	77	9.564	9.564	(1.100)	1028361	120.000	122
	58 1,2-Diphenylhydrazine	77	9.564	9.564	(1.100)	1028361	120.000	122
$	59 2,4,6-Tribromophenol (S)	330	9.677	9.677	(1.113)	145341	120.000	135
	60 4-Bromophenylphenyl ether	248	9.976	9.976	(0.945)	251378	120.000	132
	61 Hexachlorobenzene	284	10.072	10.072	(0.954)	268072	120.000	128
	62 Pentachlorophenol	266	10.302	10.302	(0.976)	174709	120.000	138
*	63 Phenanthrene-d10	188	10.554	10.554	(1.000)	377042	40.0000	
	64 Phenanthrene	178	10.586	10.586	(1.003)	1343286	120.000	125
	65 Anthracene	178	10.650	10.650	(1.009)	1373644	120.000	125
	66 Carbazole	167	10.832	10.832	(1.026)	1331441	120.000	126
	67 di-n-Butylphthalate	149	11.238	11.238	(1.065)	1720146	120.000	132
	68 Fluoranthene	202	12.073	12.073	(1.144)	1415539	120.000	132
	69 Benzidine	184	12.206	12.206	(0.881)	665613	120.000	108
	70 Pyrene	202	12.356	12.356	(0.892)	1530870	120.000	125
$	71 Terphenyl-d14 (S)	244	12.522	12.522	(0.904)	825291	90.0000	95.7
	72 Butylbenzylphthalate	149	13.116	13.116	(0.947)	762293	120.000	128
	73 bis(2-Ethylhexyl)phthalate	149	13.811	13.811	(0.997)	1072476	120.000	126
	74 3,3'-Dichlorobenzidine	252	13.784	13.784	(0.995)	375216	120.000	114(A)
	75 Benzo(a)anthracene	228	13.838	13.838	(0.999)	1414348	120.000	125
*	76 Chrysene-d12	240	13.854	13.854	(1.000)	396684	40.0000	(Q)
	77 Chrysene	228	13.886	13.886	(1.002)	1296190	120.000	124

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.587	14.587	(1.053)	1818223	120.000	128
79	Benzo(b)fluoranthene	252	15.202	15.202	(0.964)	1415992	120.000	127
80	Benzo(k)fluoranthene	252	15.239	15.239	(0.966)	1504640	120.000	126
81	Benzo(a)pyrene	252	15.688	15.688	(0.995)	1380042	120.000	129
* 82	Perylene-d12	264	15.769	15.769	(1.000)	409807	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.742	17.742	(1.125)	1584516	120.000	128
84	Dibenzo(a,h)anthracene	278	17.769	17.769	(1.127)	1379534	120.000	130
85	Benzo(g,h,i)perylene	276	18.347	18.347	(1.163)	1344170	120.000	128

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281409.D
Lab Smp Id: ICAL 7 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	111055	-6.02
28 Naphthalene-d8	466266	233133	932532	436106	-6.47
45 Acenaphthene-d10	245325	122663	490650	228430	-6.89
63 Phenanthrene-d10	405966	202983	811932	377042	-7.12
76 Chrysene-d12	427978	213989	855956	396684	-7.31
82 Perylene-d12	418836	209418	837672	409807	-2.16

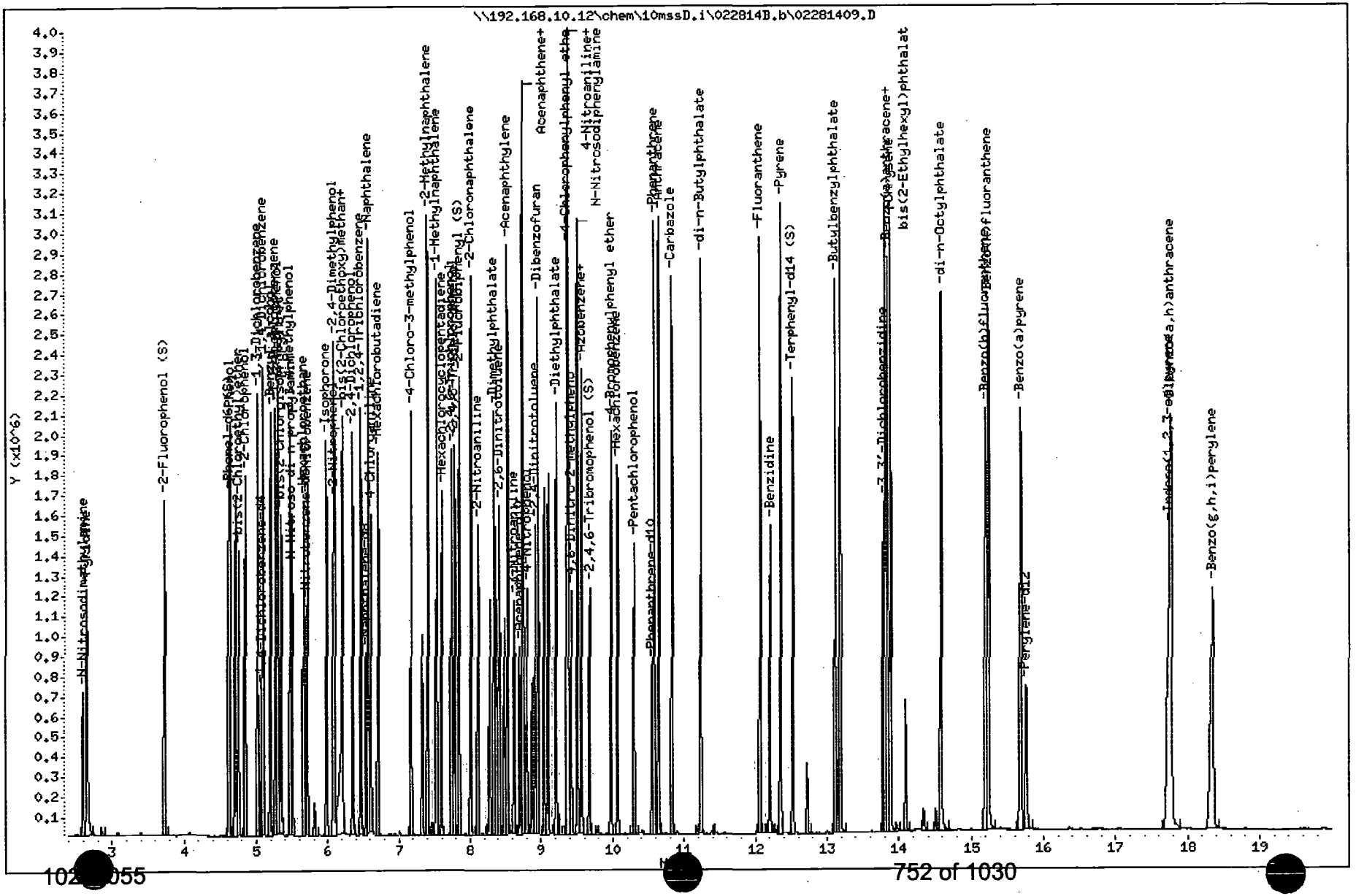
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.05
76 Chrysene-d12	13.85	13.35	14.35	13.85	0.04
82 Perylene-d12	15.76	15.26	16.26	15.77	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281409.D
Date : 28-FEB-2014 09:39
Client ID:
Sample Info: ICAL 7 10328-96

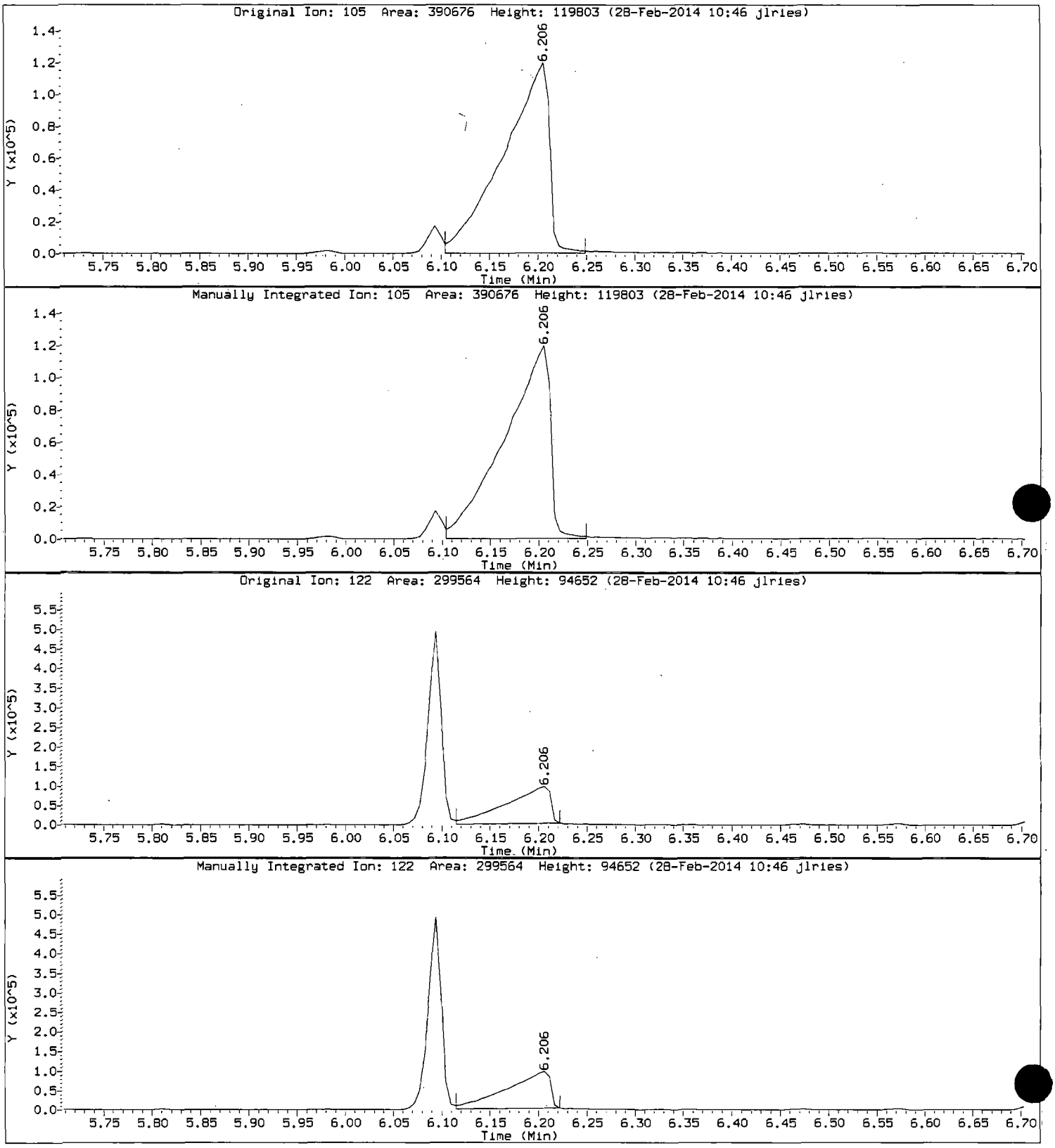
Instrument: 10mssD.i
Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS

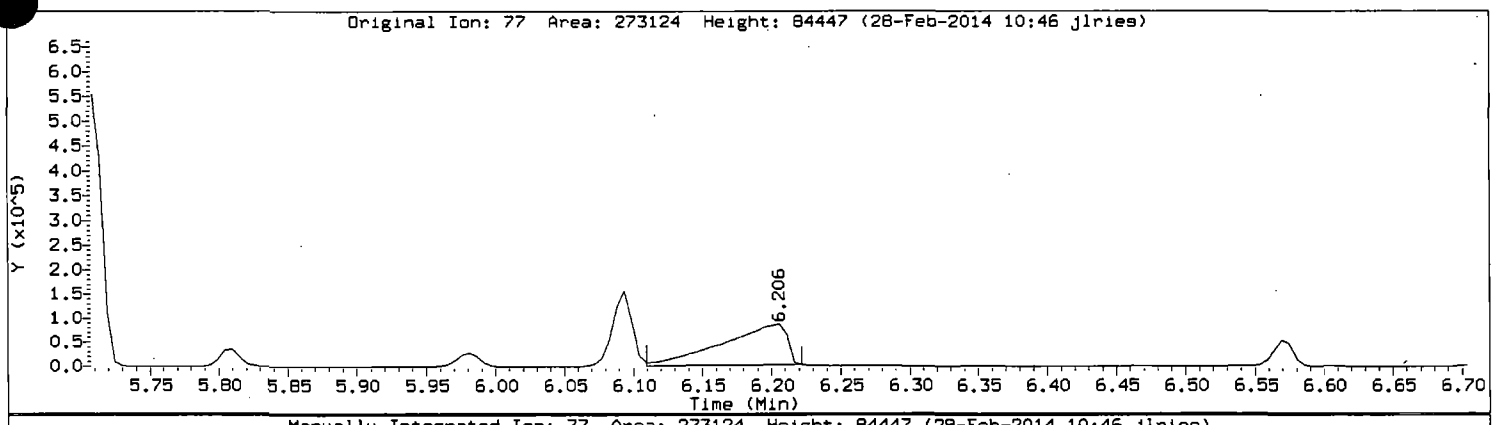


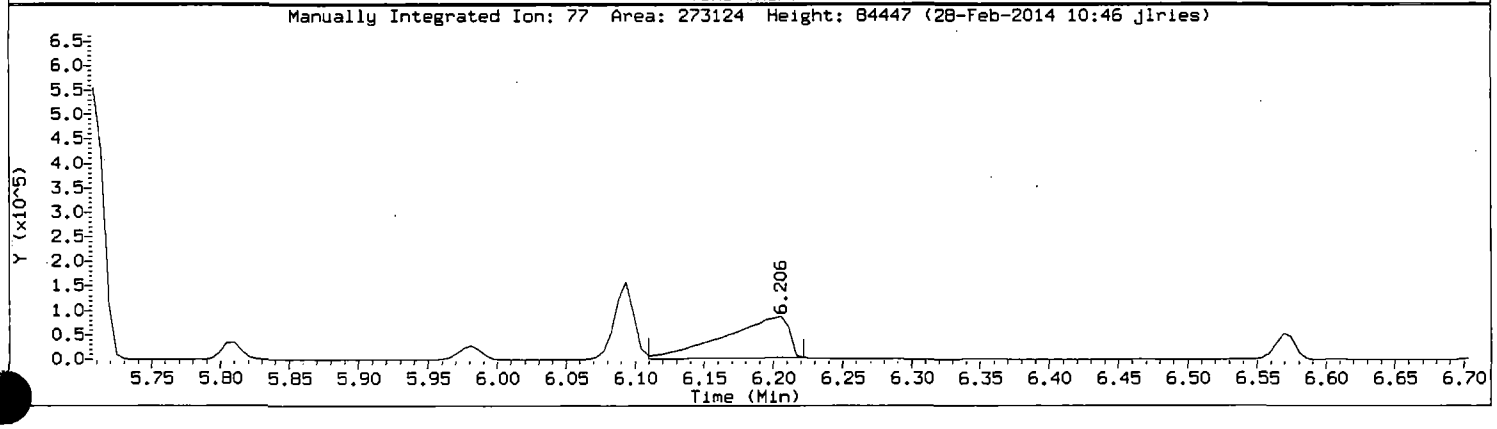
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281409.D
Injection Date: 28-FEB-2014 09:39
Instrument: 10mssD.i
Lab Sample ID: ICAL 7 10328-96

Compound: Benzoic acid
CAS Number: 65-85-0



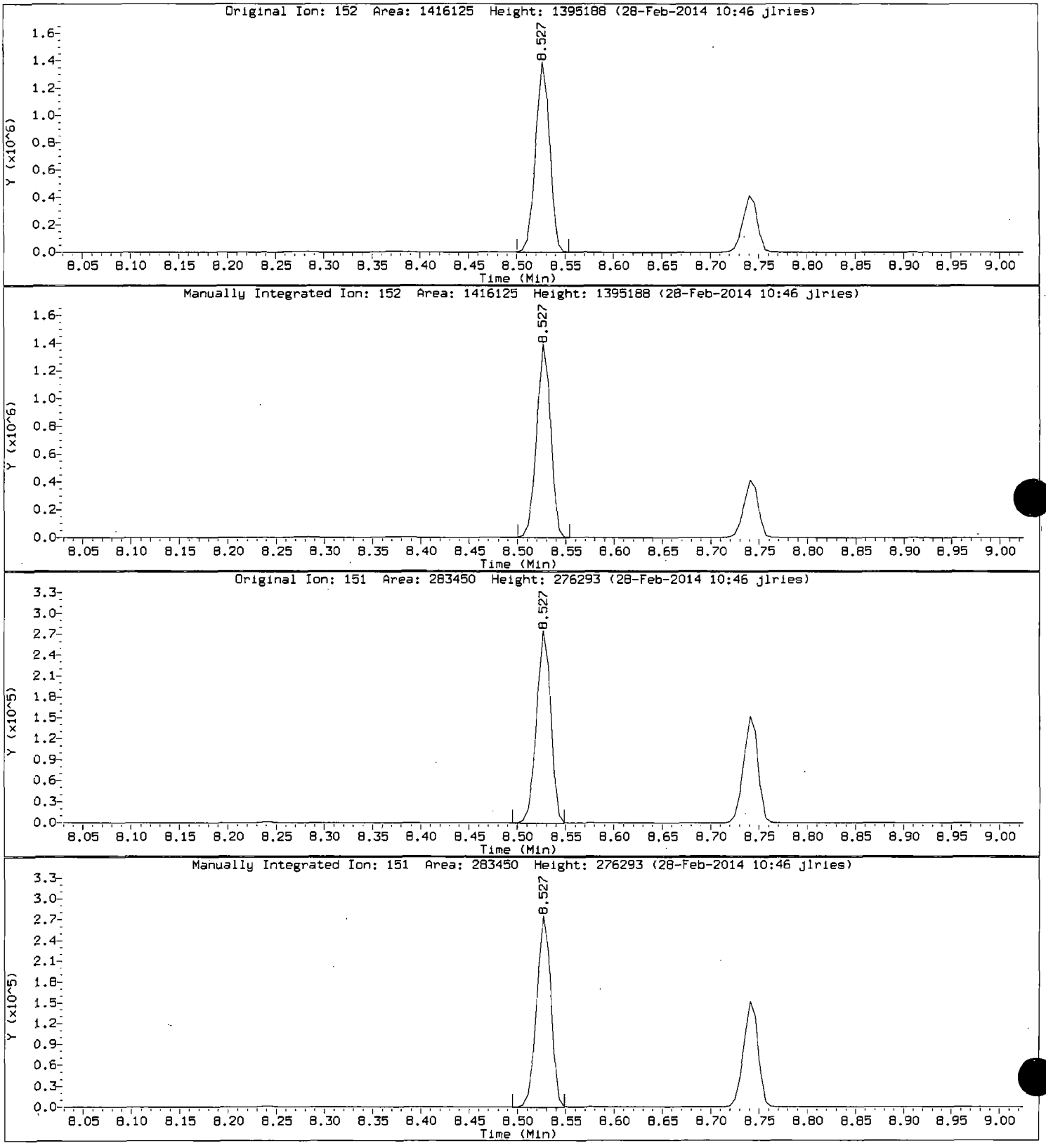
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281409.D
Injection Date: 28-FEB-2014 09:39
Instrument: 10mssD.i
Lab Sample ID: ICAL 7 10328-96





Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281409.D
Injection Date: 28-FEB-2014 09:39
Instrument: 10mssD.i
Lab Sample ID: ICAL 7 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



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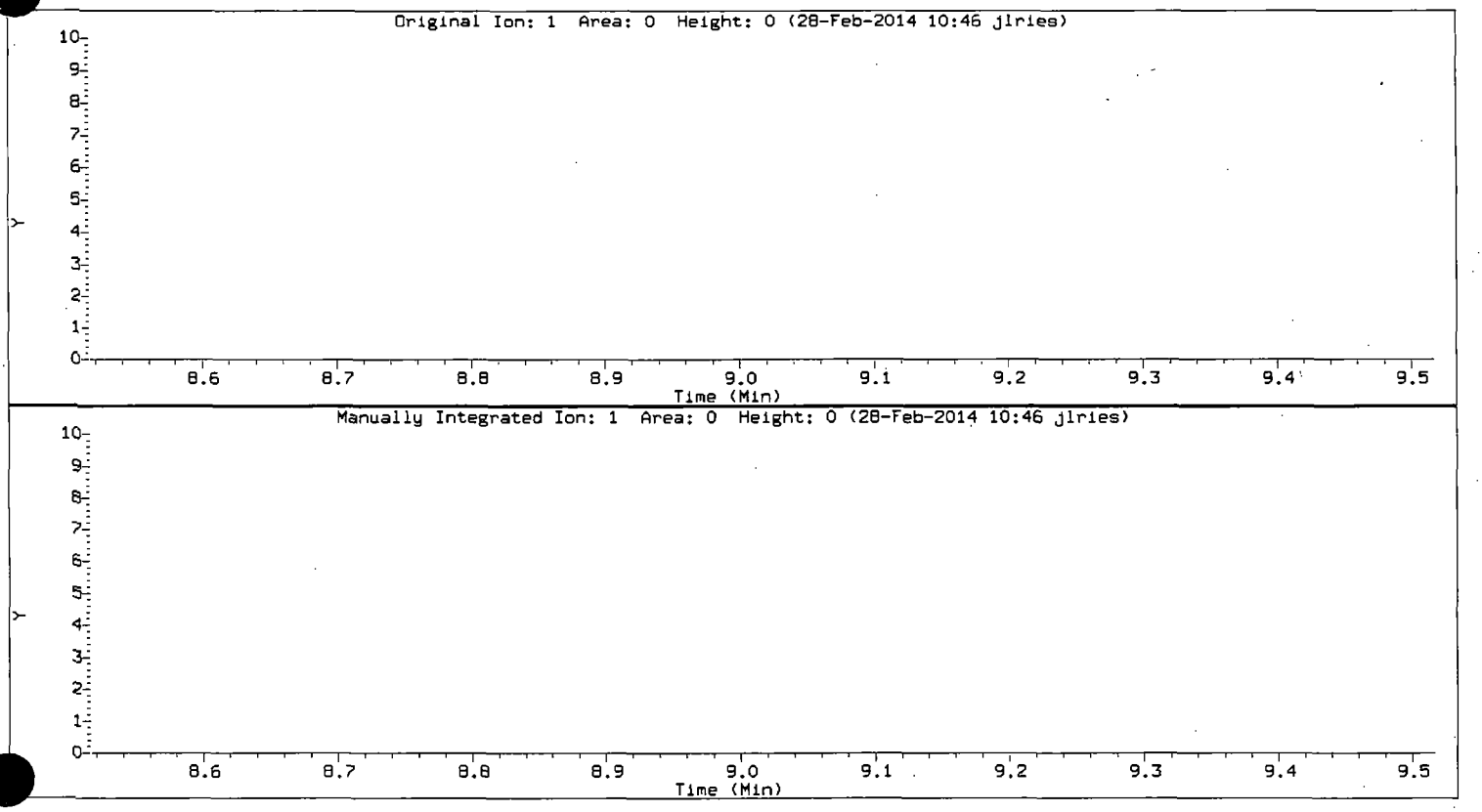
Injection Date: 28-FEB-2014 09:39
Instrument: 10mssD.i
Lab Sample ID: ICAL 7 10328-96



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Lab Smp Id: ICAL 6 10328-96
Inj Date : 28-FEB-2014 10:07
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 6 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 09:39 Cal File: 02281409.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	222579	80.0000	81.3
2	Pyridine	79	2.643	2.643	(0.521)	389191	80.0000	79.2
$ 3	2-Fluorophenol (S)	112	3.724	3.724	(0.734)	327064	80.0000	79.4
$ 4	Phenol-d6 (S)	99	4.611	4.611	(0.909)	411674	80.0000	80.2
5	Phenol	94	4.627	4.627	(0.912)	423232	80.0000	79.1
6	bis(2-Chloroethyl)ether	63	4.750	4.750	(0.937)	251518	80.0000	79.0
7	2-Chlorophenol	128	4.841	4.841	(0.955)	351841	80.0000	80.3
8	1,3-Dichlorobenzene	146	5.018	5.018	(0.989)	362880	80.0000	79.4
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	118167	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	370066	80.0000	79.0
11	Benzyl alcohol	79	5.194	5.194	(1.024)	290120	80.0000	79.5
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	347237	80.0000	78.3
13	2-Methylphenol	107	5.296	5.296	(1.044)	261066	80.0000	78.7
14	bis(2-Chloroisopropyl) ether	45	5.344	5.344	(1.054)	481550	80.0000	77.7
15	3 & 4-Methylphenol	107	5.467	5.467	(1.078)	343254	80.0000	79.4
17	N-Nitroso-di-n-propylamine	70	5.489	5.489	(1.082)	239585	80.0000	78.9
18	Hexachloroethane	117	5.654	5.654	(1.115)	144118	80.0000	79.2
$ 19	Nitrobenzene-d5 (S)	82	5.681	5.681	(0.868)	276709	60.0000	59.7
20	Nitrobenzene	77	5.708	5.708	(0.872)	355044	80.0000	79.2
21	Isophorone	82	5.975	5.975	(0.913)	633011	80.0000	79.8
23	2-Nitrophenol	139	6.077	6.077	(0.929)	184451	80.0000	81.2
22	2,4-Dimethylphenol	107	6.088	6.088	(0.930)	329502	80.0000	79.4

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
	24 Benzoic acid	105	6.184	6.184	(0.945)	262721	80.0000	87.6	(M)
	25 bis(2-Chloroethoxy)methane	93	6.211	6.211	(0.949)	391643	80.0000	79.8	
	26 2,4-Dichlorophenol	162	6.350	6.350	(0.971)	261390	80.0000	81.0	
	27 1,2,4-Trichlorobenzene	180	6.467	6.467	(0.989)	269603	80.0000	78.4	
*	28 Naphthalene-d8	136	6.542	6.542	(1.000)	466266	40.0000		(Q)
	29 Naphthalene	128	6.569	6.569	(1.004)	979257	80.0000	78.0	
	30 4-Chloroaniline	127	6.606	6.606	(1.010)	349330	80.0000	73.9	
	31 Hexachlorobutadiene	225	6.708	6.708	(1.025)	137005	80.0000	79.1	
	32 4-Chloro-3-methylphenol	107	7.168	7.168	(1.096)	279677	80.0000	80.1	
	33 2-Methylnaphthalene	142	7.403	7.403	(1.132)	650402	80.0000	79.4	
	34 1-Methylnaphthalene	142	7.526	7.526	(1.150)	610812	80.0000	79.9	
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	169584	80.0000	84.0	
	36 2,4,6-Trichlorophenol	196	7.735	7.735	(0.889)	177711	80.0000	81.2	
	37 2,4,5-Trichlorophenol	196	7.778	7.778	(0.894)	189606	80.0000	80.5	
$	38 2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	513151	60.0000	59.8	
	39 2-Chloronaphthalene	162	8.008	8.008	(0.921)	578843	80.0000	79.6	
	40 2-Nitroaniline	65	8.109	8.109	(0.932)	196662	80.0000	80.7	
	41 Dimethylphthalate	163	8.334	8.334	(0.958)	641533	80.0000	78.6	
	42 2,6-Dinitrotoluene	165	8.409	8.409	(0.967)	157202	80.0000	79.7	
	43 Acenaphthylene	152	8.527	8.527	(0.980)	972670	80.0000	80.3	(M)
	44 3-Nitroaniline	138	8.618	8.618	(0.991)	147651	80.0000	72.8	
*	45 Acenaphthene-d10	164	8.698	8.698	(1.000)	245325	40.0000		
	46 Acenaphthene	154	8.741	8.741	(1.005)	593913	80.0000	78.2	
	47 2,4-Dinitrophenol	184	8.746	8.746	(1.006)	94767	80.0000	76.5	
	48 4-Nitrophenol	65	8.794	8.794	(1.011)	148489	80.0000	80.6	
	49 2,4-Dinitrotoluene	165	8.906	8.906	(1.024)	210841	80.0000	81.0	
	50 Dibenzofuran	168	8.954	8.954	(1.030)	818682	80.0000	79.8	
	51 Diethylphthalate	149	9.206	9.206	(1.058)	676063	80.0000	79.2	
	52 4-Chlorophenylphenyl ether	204	9.366	9.366	(1.077)	298253	80.0000	79.7	
	54 4-Nitroaniline	138	9.382	9.382	(1.079)	183917	80.0000	79.2	
	53 Fluorene	166	9.377	9.377	(1.078)	667048	80.0000	77.1	
	55 4,6-Dinitro-2-methylphenol	198	9.420	9.420	(0.893)	118979	80.0000	78.3	
	56 N-Nitrosodiphenylamine	169	9.505	9.505	(0.901)	577115	80.0000	79.7	
	57 Azobenzene	77	9.564	9.564	(1.100)	710220	80.0000	78.2	
	58 1,2-Diphenylhydrazine	77	9.564	9.564	(1.100)	710220	80.0000	78.2	
$	59 2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.112)	95488	80.0000	82.7	
	60 4-Bromophenylphenyl ether	248	9.976	9.976	(0.946)	164438	80.0000	80.2	
	61 Hexachlorobenzene	284	10.067	10.067	(0.954)	182127	80.0000	80.7	
	62 Pentachlorophenol	266	10.297	10.297	(0.976)	112926	80.0000	82.6	
*	63 Phenanthrene-d10	188	10.548	10.548	(1.000)	405966	40.0000		
	64 Phenanthrene	178	10.580	10.580	(1.003)	908943	80.0000	78.6	
	65 Anthracene	178	10.645	10.645	(1.009)	945032	80.0000	80.2	
	66 Carbazole	167	10.832	10.832	(1.027)	903494	80.0000	79.1	
	67 di-n-Butylphthalate	149	11.238	11.238	(1.065)	1142937	80.0000	81.2	
	68 Fluoranthene	202	12.067	12.067	(1.144)	925281	80.0000	80.2	
	69 Benzidine	184	12.206	12.206	(0.881)	467617	80.0000	70.1	
	70 Pyrene	202	12.356	12.356	(0.892)	1014944	80.0000	77.0	
$	71 Terphenyl-d14 (S)	244	12.522	12.522	(0.904)	546217	60.0000	58.7	
	72 Butylbenzylphthalate	149	13.110	13.110	(0.947)	506807	80.0000	79.0	
	73 bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	729347	80.0000	79.2	
	74 3,3'-Dichlorobenzidine	252	13.784	13.784	(0.995)	251786	80.0000	70.6	
	75 Benzo(a)anthracene	228	13.838	13.838	(0.999)	963226	80.0000	78.9	
*	76 Chrysene-d12	240	13.848	13.848	(1.000)	427978	40.0000		(Q)
	77 Chrysene	228	13.886	13.886	(1.003)	894722	80.0000	79.0	

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Report Date: 28-Feb-2014 12:46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78 di-n-Octylphthalate	149	14.581	14.581	(1.053)	1247772	80.0000	81.4
79 Benzo(b)fluoranthene	252	15.196	15.196	(0.964)	924937	80.0000	81.0
80 Benzo(k)fluoranthene	252	15.234	15.234	(0.966)	1016239	80.0000	83.0
81 Benzo(a)pyrene	252	15.683	15.683	(0.995)	906061	80.0000	82.6
* 82 Perylene-d12	264	15.763	15.763	(1.000)	418836	40.0000	
83 Indeno(1,2,3-cd)pyrene	276	17.737	17.737	(1.125)	1011387	80.0000	79.8
84 Dibenzo(a,h)anthracene	278	17.758	17.758	(1.127)	889380	80.0000	81.8
85 Benzo(g,h,i)perylene	276	18.336	18.336	(1.163)	850631	80.0000	79.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281410.D
Lab Smp Id: ICAL 6 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	118167	0.00
28 Naphthalene-d8	466266	233133	932532	466266	0.00
45 Acenaphthene-d10	245325	122663	490650	245325	0.00
63 Phenanthrene-d10	405966	202983	811932	405966	0.00
76 Chrysene-d12	427978	213989	855956	427978	0.00
82 Perylene-d12	418836	209418	837672	418836	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.00
76 Chrysene-d12	13.85	13.35	14.35	13.85	0.00
82 Perylene-d12	15.76	15.26	16.26	15.76	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

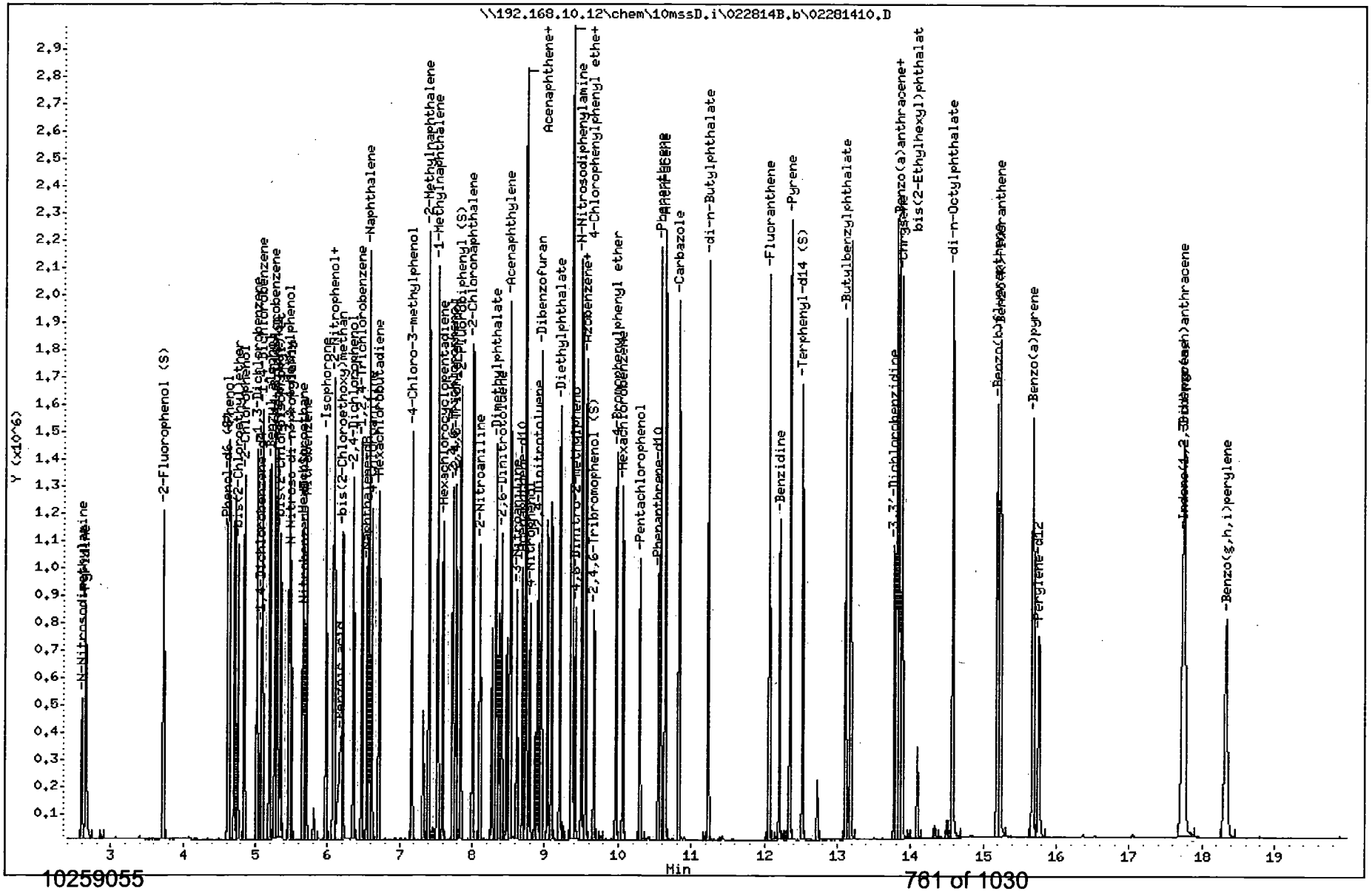
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281410.D
Date : 28-FEB-2014 10:07
Client ID:
Sample Info: ICAL 6 10328-96

Instrument: 10mssD.i

Operator: JLR

Column phase: DB-5MS

Column diameter: 0.25



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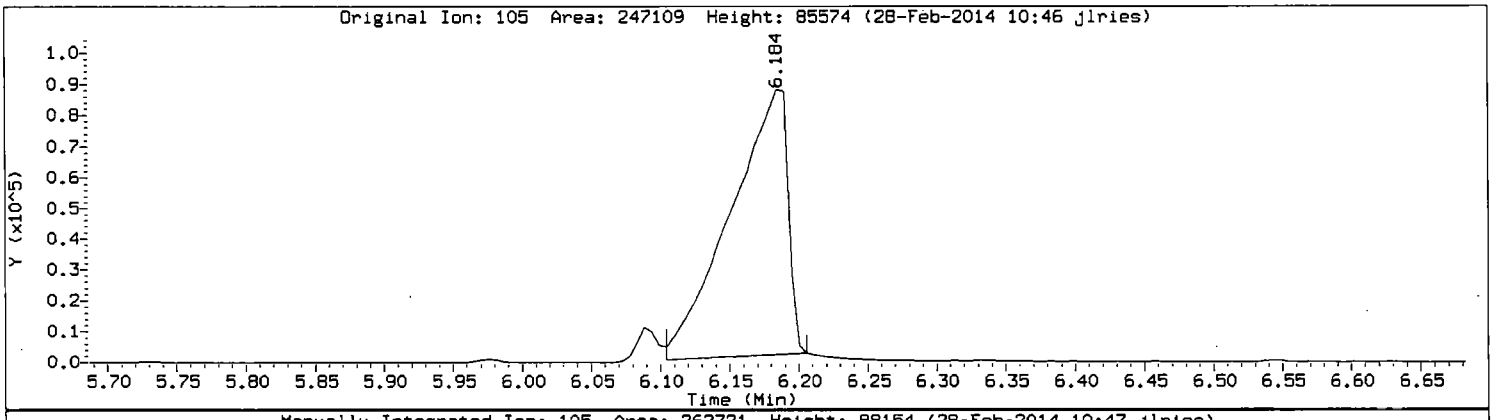
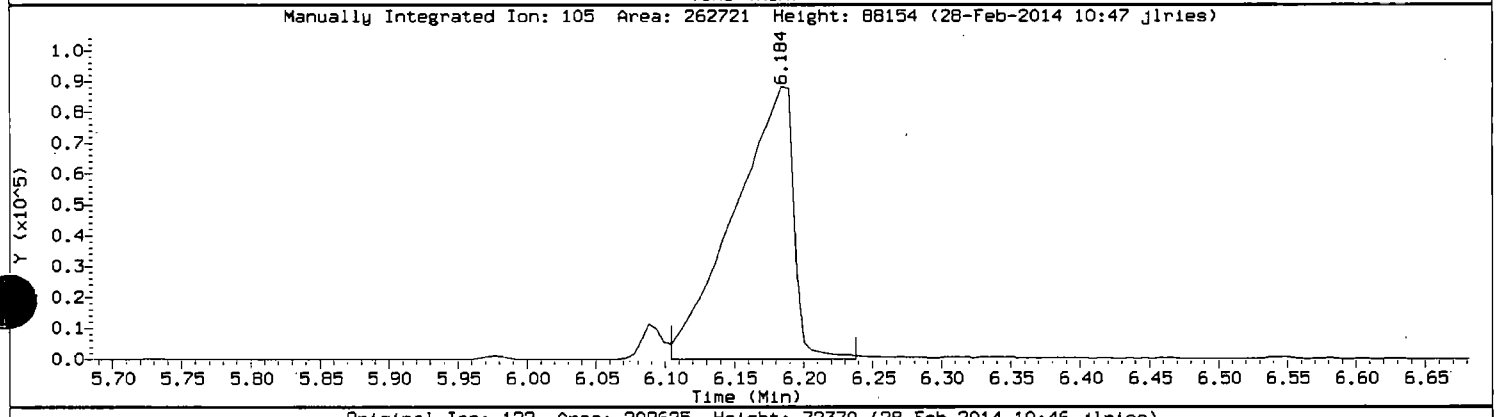
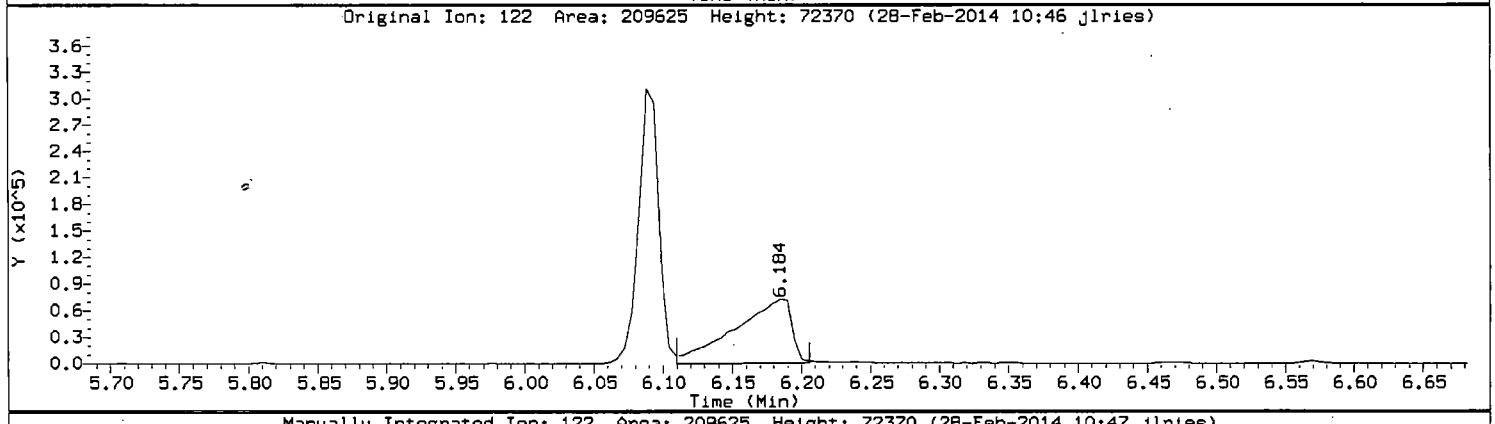
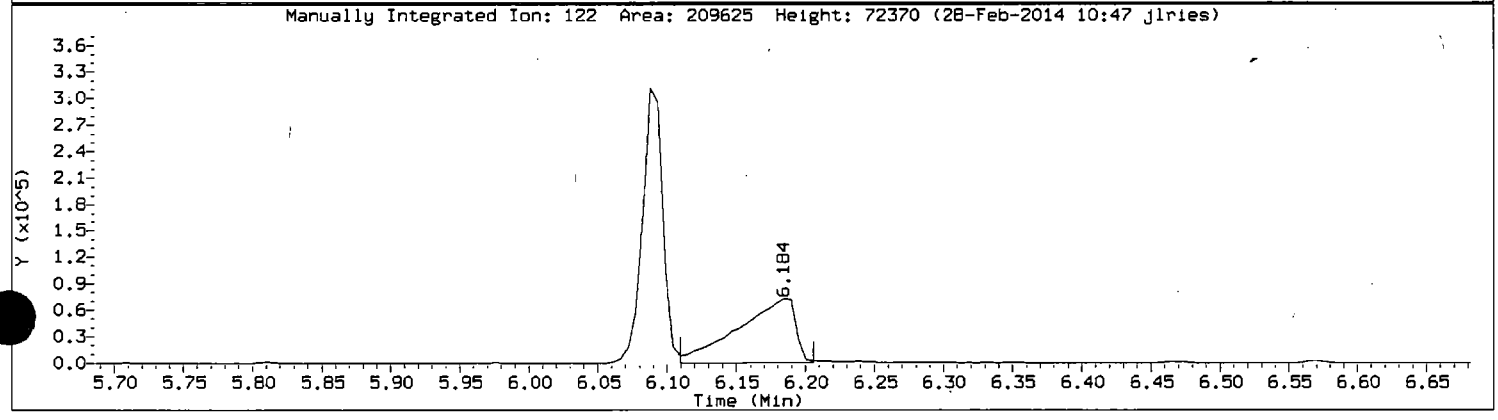
Injection Date: 28-FEB-2014 10:07
Instrument: 10mssD.i
Lab Sample ID: ICAL 6 10328-96

Compound: Benzoic acid
CAS Number: 65-85-0









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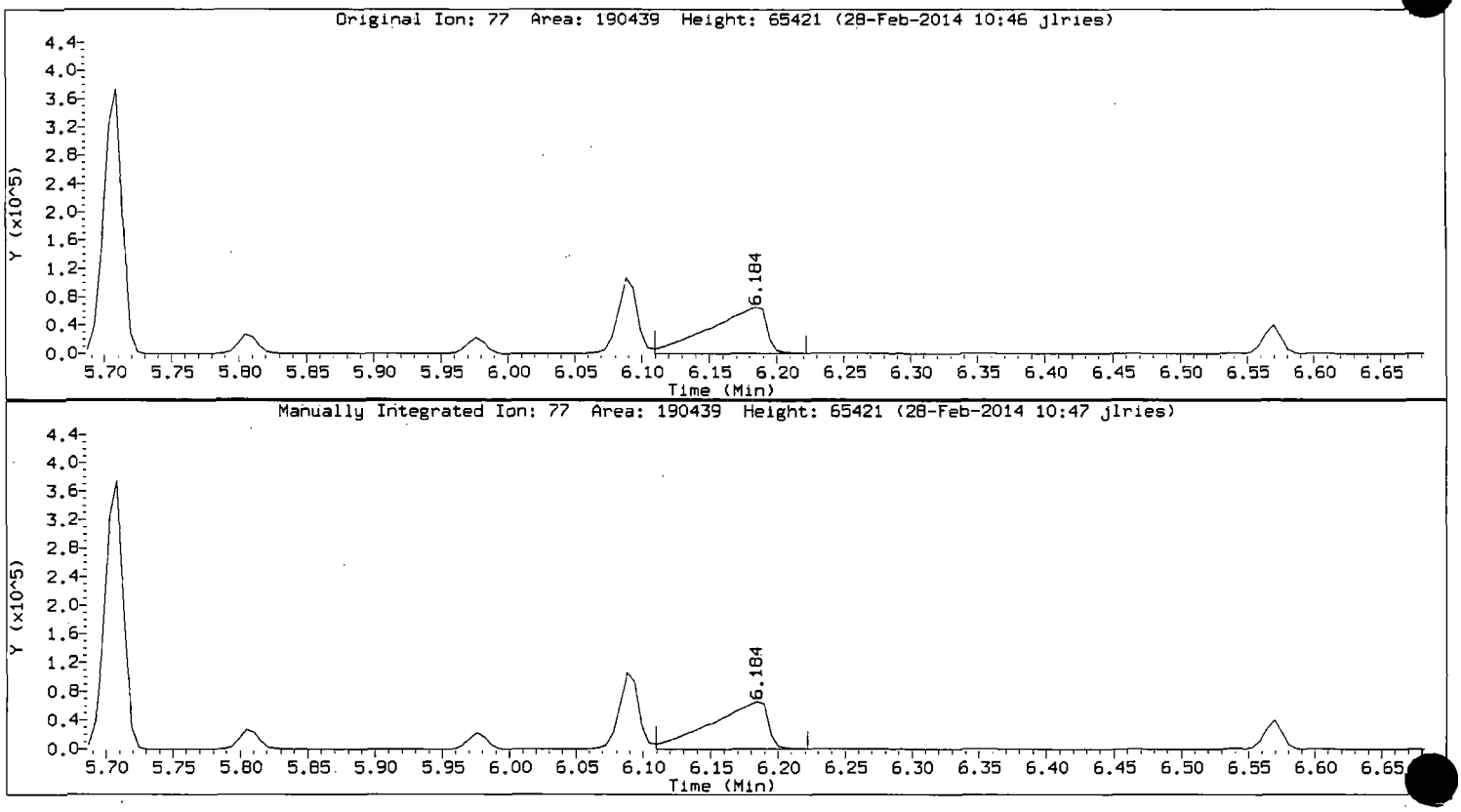
Injection Date: 28-FEB-2014 10:07
Instrument: 10mssD.i
Lab Sample ID: ICAL 6 10328-96



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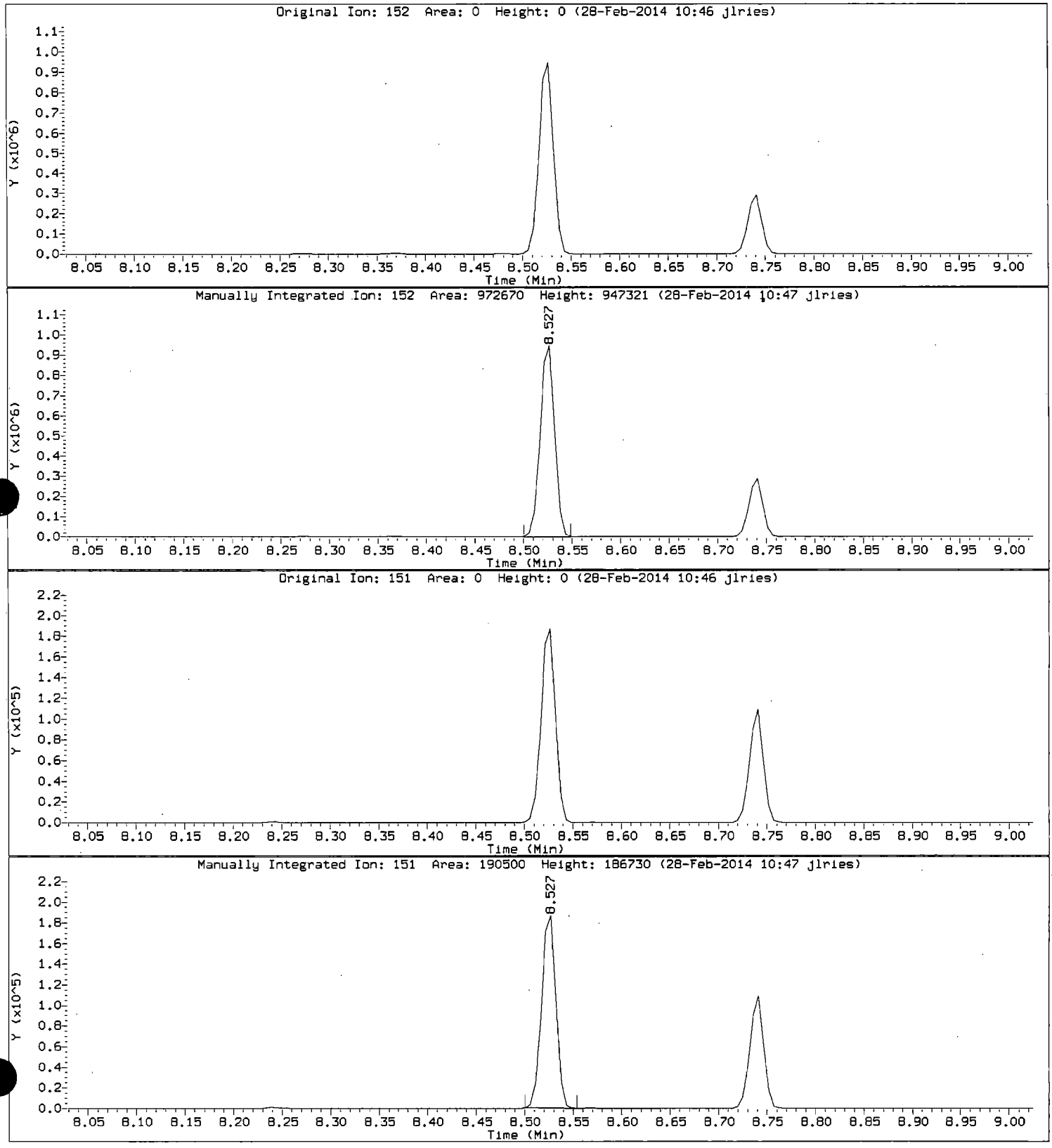
Injection Date: 28-FEB-2014 10:07
Instrument: 10mssD.i
Lab Sample ID: ICAL 6 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



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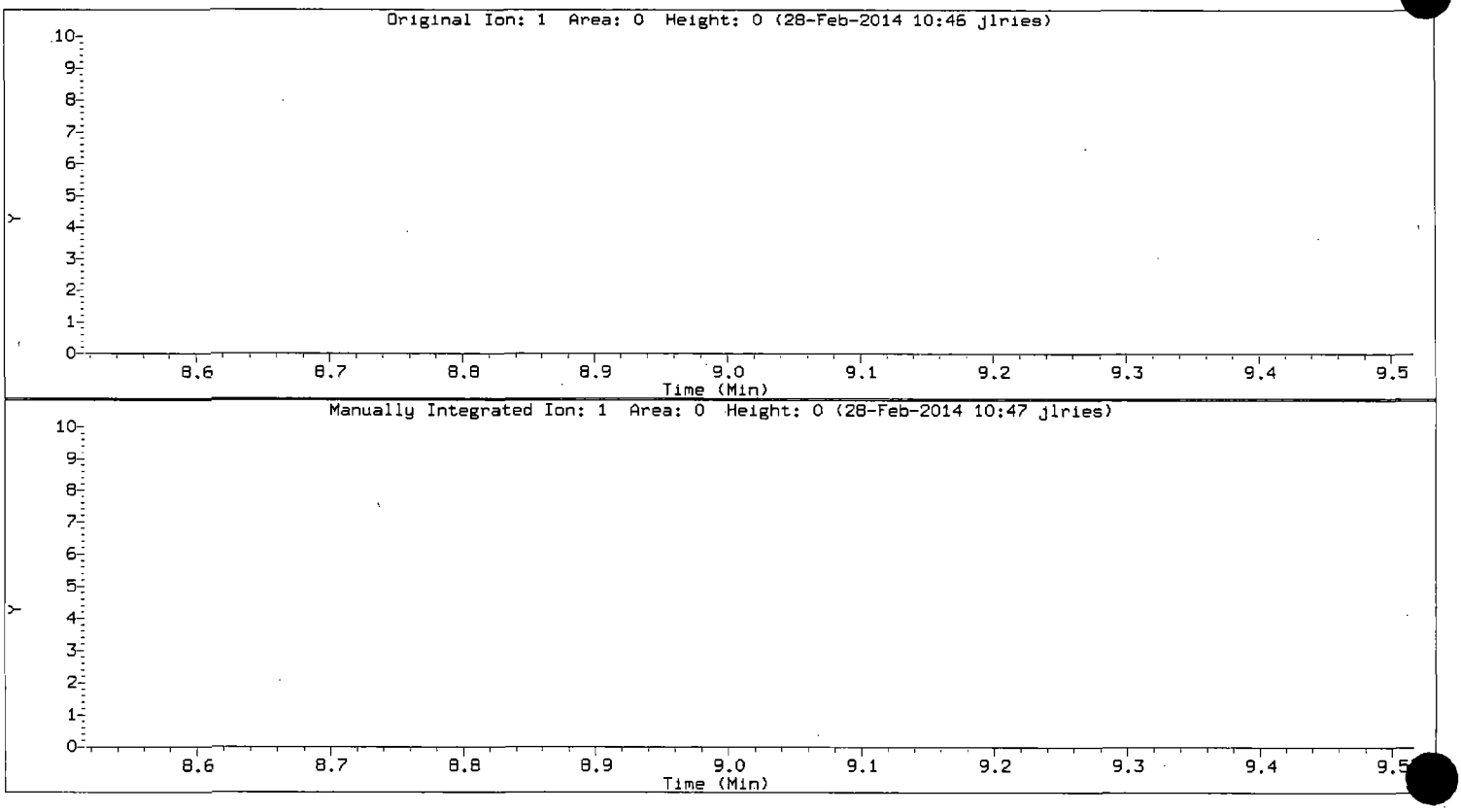
Injection Date: 28-FEB-2014 10:07
Instrument: 10mssD.i
Lab Sample ID: ICAL 6 10328-96



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Lab Smp Id: ICAL 5 10328-96
Inj Date : 28-FEB-2014 10:35
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 5 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 10:07 Cal File: 02281410.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
pnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	109778	40.0000	39.7
2	Pyridine	79	2.643	2.643	(0.521)	194269	40.0000	39.1
$ 3	2-Fluorophenol (S)	112	3.724	3.724	(0.734)	161729	40.0000	38.9
$ 4	Phenol-d6 (S)	99	4.606	4.606	(0.908)	201641	40.0000	38.9
5	Phenol	94	4.622	4.622	(0.911)	211731	40.0000	39.2
6	bis(2-Chloroethyl)ether	63	4.750	4.750	(0.937)	124649	40.0000	38.8
7	2-Chlorophenol	128	4.841	4.841	(0.955)	173133	40.0000	39.1
8	1,3-Dichlorobenzene	146	5.013	5.013	(0.988)	180134	40.0000	39.0
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	119335	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	183831	40.0000	38.9
11	Benzyl alcohol	79	5.189	5.189	(1.023)	144894	40.0000	39.3
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	174751	40.0000	39.0
13	2-Methylphenol	107	5.291	5.291	(1.043)	131539	40.0000	39.3
14	bis(2-Chloroisopropyl) ether	45	5.344	5.344	(1.054)	244131	40.0000	39.0
15	3 & 4-Methylphenol	107	5.462	5.462	(1.077)	172133	40.0000	39.4
17	N-Nitroso-di-n-propylamine	70	5.483	5.483	(1.081)	119284	40.0000	38.9
18	Hexachloroethane	117	5.654	5.654	(1.115)	71740	40.0000	39.0
$ 19	Nitrobenzene-d5 (S)	82	5.681	5.681	(0.868)	139243	30.0000	29.8
20	Nitrobenzene	77	5.703	5.703	(0.872)	177191	40.0000	39.2
21	Isophorone	82	5.970	5.970	(0.913)	317172	40.0000	39.6
23	2-Nitrophenol	139	6.072	6.072	(0.928)	91458	40.0000	39.9
22	2,4-Dimethylphenol	107	6.088	6.088	(0.930)	166871	40.0000	39.8

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	
	24 Benzoic acid	105	6.157	6.157	(0.941)	120934	40.0000	40.0	
	25 bis(2-Chloroethoxy)methane	93	6.205	6.205	(0.948)	197790	40.0000	40.0	
	26 2,4-Dichlorophenol	162	6.350	6.350	(0.971)	130317	40.0000	40.0	
	27 1,2,4-Trichlorobenzene	180	6.462	6.462	(0.988)	136258	40.0000	39.3	
*	28 Naphthalene-d8	136	6.542	6.542	(1.000)	470349	40.0000		
	29 Naphthalene	128	6.569	6.569	(1.004)	499340	40.0000	39.4	
	30 4-Chloroaniline	127	6.601	6.601	(1.009)	195404	40.0000	41.0	
	31 Hexachlorobutadiene	225	6.708	6.708	(1.025)	67604	40.0000	38.7	
	32 4-Chloro-3-methylphenol	107	7.163	7.163	(1.095)	139863	40.0000	39.7	
	33 2-Methylnaphthalene	142	7.403	7.403	(1.132)	329085	40.0000	39.8	
	34 1-Methylnaphthalene	142	7.526	7.526	(1.150)	302404	40.0000	39.2	
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	81630	40.0000	40.2	
	36 2,4,6-Trichlorophenol	196	7.730	7.730	(0.889)	87730	40.0000	39.9	
	37 2,4,5-Trichlorophenol	196	7.772	7.772	(0.894)	94004	40.0000	39.7	
$	38 2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	255500	30.0000	29.6	
	39 2-Chloronaphthalene	162	8.002	8.002	(0.920)	290134	40.0000	39.7	
	40 2-Nitroaniline	65	8.109	8.109	(0.932)	98821	40.0000	40.3	
	41 Dimethylphthalate	163	8.329	8.329	(0.958)	324805	40.0000	39.6	
	42 2,6-Dinitrotoluene	165	8.404	8.404	(0.966)	77626	40.0000	39.2	
	43 Acenaphthylene	152	8.521	8.521	(0.980)	479980	40.0000	39.4	(M)
	44 3-Nitroaniline	138	8.612	8.612	(0.990)	86247	40.0000	42.3	
*	45 Acenaphthene-d10	164	8.698	8.698	(1.000)	246548	40.0000		
	46 Acenaphthene	154	8.735	8.735	(1.004)	301942	40.0000	39.6	
	47 2,4-Dinitrophenol	184	8.741	8.741	(1.005)	42942	40.0000	37.3	
	48 4-Nitrophenol	65	8.789	8.789	(1.010)	74308	40.0000	40.2	
	49 2,4-Dinitrotoluene	165	8.901	8.901	(1.023)	104466	40.0000	39.9	
	50 Dibenzofuran	168	8.949	8.949	(1.029)	404689	40.0000	39.2	
	51 Diethylphthalate	149	9.201	9.201	(1.058)	338155	40.0000	39.4	
	52 4-Chlorophenylphenyl ether	204	9.361	9.361	(1.076)	147316	40.0000	39.2	
	54 4-Nitroaniline	138	9.372	9.372	(1.077)	95063	40.0000	40.7	
	53 Fluorene	166	9.377	9.377	(1.078)	348212	40.0000	40.0	
	55 4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.892)	54689	40.0000	37.2	
	56 N-Nitrosodiphenylamine	169	9.500	9.500	(0.901)	288606	40.0000	39.2	
	57 Azobenzene	77	9.559	9.559	(1.099)	369158	40.0000	40.4	
	58 1,2-Diphenylhydrazine	77	9.559	9.559	(1.099)	369158	40.0000	40.4	
$	59 2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.112)	45597	40.0000	39.3	
	60 4-Bromophenylphenyl ether	248	9.976	9.976	(0.946)	80969	40.0000	38.8	
	61 Hexachlorobenzene	284	10.067	10.067	(0.954)	88726	40.0000	38.6	
	62 Pentachlorophenol	266	10.297	10.297	(0.976)	53207	40.0000	38.2	
*	63 Phenanthrene-d10	188	10.548	10.548	(1.000)	413141	40.0000		
	64 Phenanthrene	178	10.580	10.580	(1.003)	458881	40.0000	39.0	
	65 Anthracene	178	10.645	10.645	(1.009)	466237	40.0000	38.9	
	66 Carbazole	167	10.827	10.827	(1.026)	450869	40.0000	38.8	
	67 di-n-Butylphthalate	149	11.233	11.233	(1.065)	574058	40.0000	40.1	
	68 Fluoranthene	202	12.062	12.062	(1.143)	459144	40.0000	39.1	
	69 Benzidine	184	12.201	12.201	(0.881)	258766	40.0000	41.4	
	70 Pyrene	202	12.351	12.351	(0.892)	485834	40.0000	39.4	
$	71 Terphenyl-d14 (S)	244	12.517	12.517	(0.904)	256274	30.0000	29.4	
	72 Butylbenzylphthalate	149	13.110	13.110	(0.947)	245334	40.0000	40.8	
	73 bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	358223	40.0000	41.6	
	74 3,3'-Dichlorobenzidine	252	13.779	13.779	(0.995)	132408	40.0000	39.7	
	75 Benzo(a)anthracene	228	13.832	13.832	(0.999)	448850	40.0000	39.3	
*	76 Chrysene-d12	240	13.848	13.848	(1.000)	400672	40.0000		
	77 Chrysene	228	13.881	13.881	(1.002)	421271	40.0000	39.7	

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.581	14.581	(1.053)	591518	40.0000	41.2
79	Benzo(b)fluoranthene	252	15.186	15.186	(0.963)	431732	40.0000	40.1
80	Benzo(k)fluoranthene	252	15.228	15.228	(0.966)	450618	40.0000	39.0
81	Benzo(a)pyrene	252	15.678	15.678	(0.995)	412227	40.0000	39.9
* 82	Perylene-d12	264	15.763	15.763	(1.000)	394937	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.721	17.721	(1.124)	478822	40.0000	40.1
84	Dibenzo(a,h)anthracene	278	17.742	17.742	(1.126)	405524	40.0000	39.5
85	Benzo(g,h,i)perylene	276	18.320	18.320	(1.162)	397778	40.0000	39.4

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281411.D
Lab Smp Id: ICAL 5 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07

Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	119335	0.99
28 Naphthalene-d8	466266	233133	932532	470349	0.88
45 Acenaphthene-d10	245325	122663	490650	246548	0.50
63 Phenanthrene-d10	405966	202983	811932	413141	1.77
76 Chrysene-d12	427978	213989	855956	400672	-6.38
82 Perylene-d12	418836	209418	837672	394937	-5.71

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.00
76 Chrysene-d12	13.85	13.35	14.35	13.85	0.00
82 Perylene-d12	15.76	15.26	16.26	15.76	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

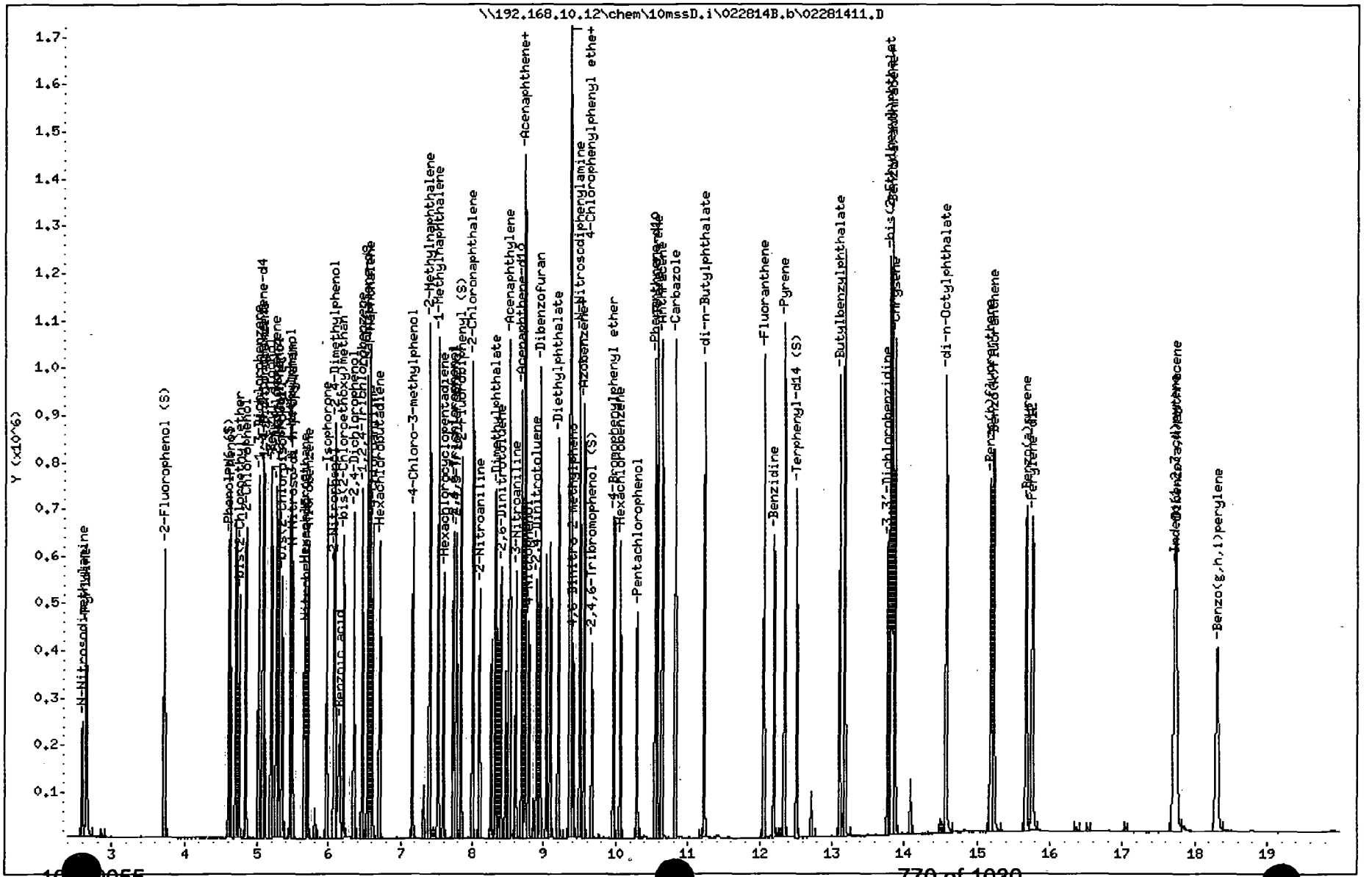
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281411.D
Date : 28-FEB-2014 10:35
Client ID:
Sample Info: ICAL 5 10328-96

Instrument: 10mssD.i

Operator: JLR

Column phase: DB-5MS

Column diameter: 0.25



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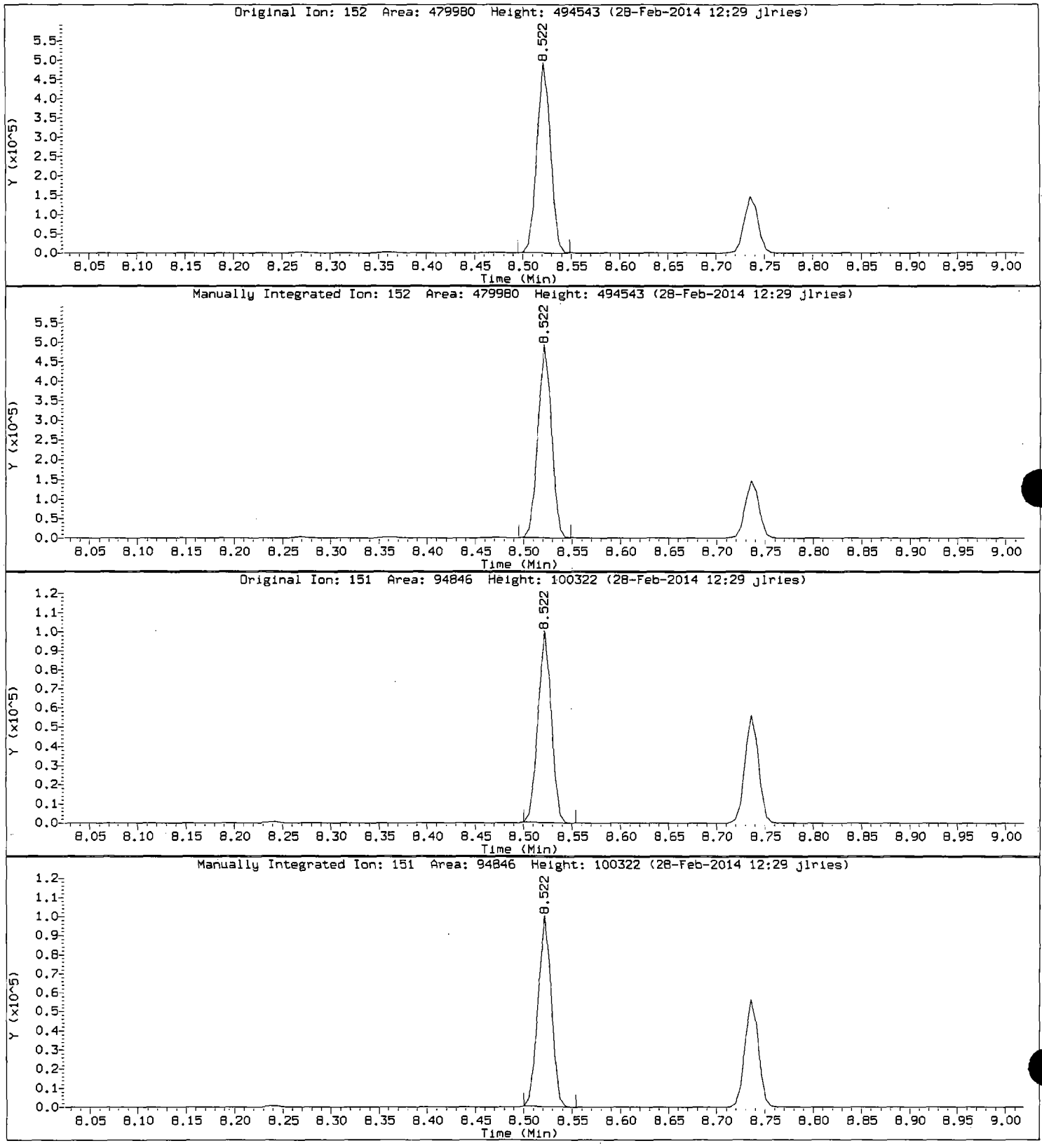
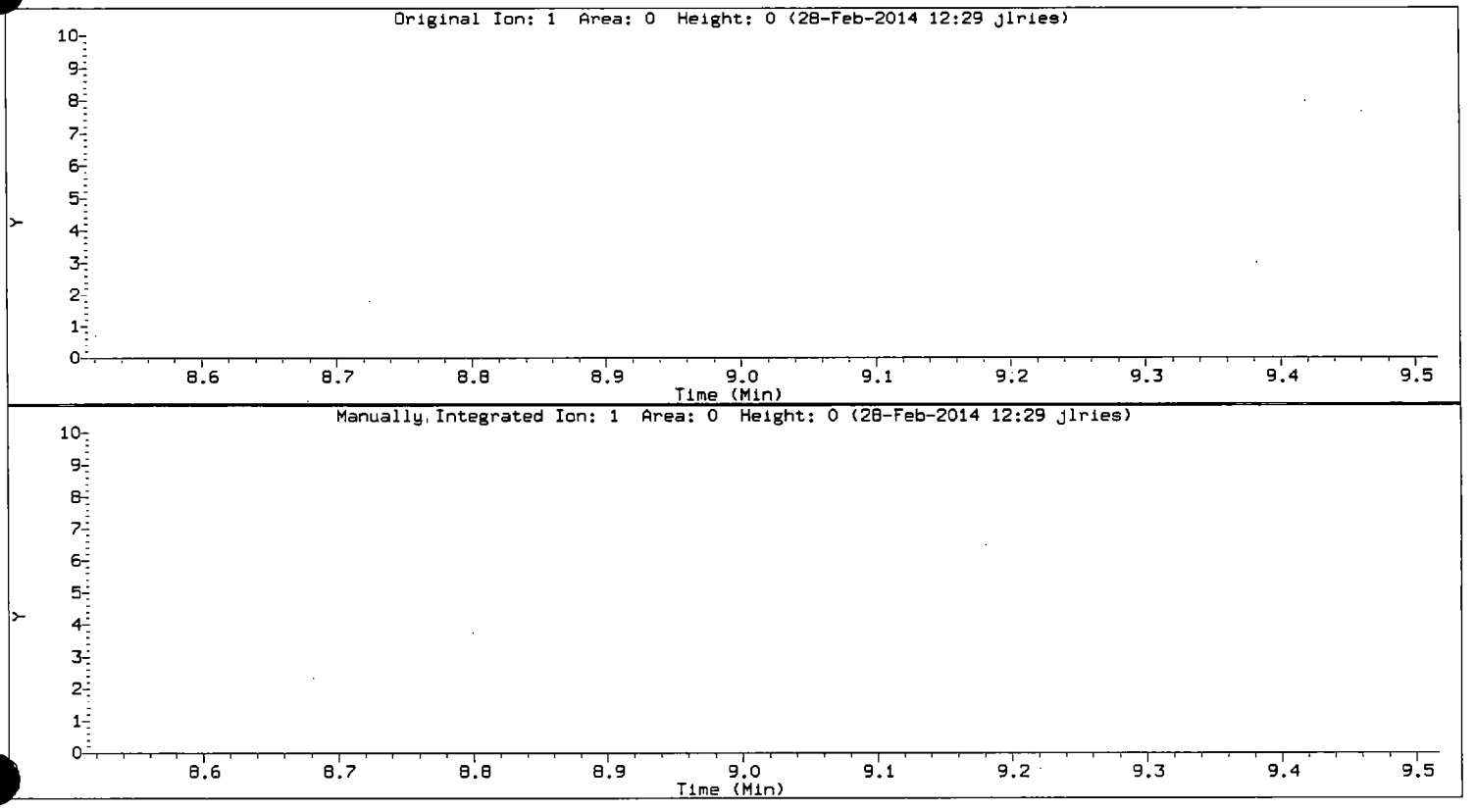
Injection Date: 28-FEB-2014 10:35
Instrument: 10mssD.i
Lab Sample ID: ICAL 5 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b/02281411.D
Injection Date: 28-FEB-2014 10:35
Instrument: 10mssD.i
Lab Sample ID: ICAL 5 10328-96



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281412.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281412.D
Lab Smp Id: ICAL 4 10328-96
Inj Date : 28-FEB-2014 11:03
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 4 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 10:35 Cal File: 02281411.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	52258	20.0000	20.8
2	Pyridine	79	2.643	2.643	(0.521)	94220	20.0000	20.9
$ 3	2-Fluorophenol (S)	112	3.723	3.723	(0.734)	79219	20.0000	21.0
$ 4	Phenol-d6 (S)	99	4.606	4.606	(0.908)	97907	20.0000	20.8
5	Phenol	94	4.622	4.622	(0.911)	103014	20.0000	21.0
6	bis(2-Chloroethyl)ether	63	4.745	4.745	(0.936)	61509	20.0000	21.1
7	2-Chlorophenol	128	4.841	4.841	(0.955)	84319	20.0000	21.0
8	1,3-Dichlorobenzene	146	5.012	5.012	(0.988)	87890	20.0000	21.0
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	108169	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	90069	20.0000	21.0
11	Benzyl alcohol	79	5.189	5.189	(1.023)	70331	20.0000	21.1
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	87046	20.0000	21.4
13	2-Methylphenol	107	5.291	5.291	(1.043)	64478	20.0000	21.2
14	bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.053)	120266	20.0000	21.2
15	3 & 4-Methylphenol	107	5.456	5.456	(1.076)	84349	20.0000	21.3
17	N-Nitroso-di-n-propylamine	70	5.483	5.483	(1.081)	58661	20.0000	21.1
18	Hexachloroethane	117	5.654	5.654	(1.115)	34995	20.0000	21.0
$ 19	Nitrobenzene-d5 (S)	82	5.676	5.676	(0.868)	67377	15.0000	15.6
20	Nitrobenzene	77	5.702	5.702	(0.872)	87140	20.0000	20.8
21	Isophorone	82	5.970	5.970	(0.913)	154070	20.0000	20.8
23	2-Nitrophenol	139	6.071	6.071	(0.928)	44005	20.0000	20.7
22	2,4-Dimethylphenol	107	6.082	6.082	(0.930)	80840	20.0000	20.8

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
Compounds									
	24 Benzoic acid	105	6.136	6.136	(0.938)	54882	20.0000	19.6	
	25 bis(2-Chloroethoxy)methane	93	6.205	6.205	(0.948)	95724	20.0000	20.9	
	26 2,4-Dichlorophenol	162	6.350	6.350	(0.971)	61804	20.0000	20.5	
	27 1,2,4-Trichlorobenzene	180	6.462	6.462	(0.988)	66415	20.0000	20.7	
*	28 Naphthalene-d8	136	6.542	6.542	(1.000)	435529	40.0000		(Q)
	29 Naphthalene	128	6.564	6.564	(1.003)	245549	20.0000	21.0	
	30 4-Chloroaniline	127	6.601	6.601	(1.009)	100839	20.0000	22.8	
	31 Hexachlorobutadiene	225	6.708	6.708	(1.025)	33243	20.0000	20.5	
	32 4-Chloro-3-methylphenol	107	7.163	7.163	(1.095)	67510	20.0000	20.7	
	33 2-Methylnaphthalene	142	7.403	7.403	(1.132)	159037	20.0000	20.8	
	34 1-Methylnaphthalene	142	7.526	7.526	(1.150)	149586	20.0000	21.0	
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.874)	37348	20.0000	19.8	
	36 2,4,6-Trichlorophenol	196	7.730	7.730	(0.889)	41931	20.0000	20.4	
	37 2,4,5-Trichlorophenol	196	7.772	7.772	(0.894)	45416	20.0000	20.6	
$	38 2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	124116	15.0000	15.4	
	39 2-Chloronaphthalene	162	8.002	8.002	(0.921)	140464	20.0000	20.6	
	40 2-Nitroaniline	65	8.104	8.104	(0.932)	47080	20.0000	20.6	
	41 Dimethylphthalate	163	8.323	8.323	(0.958)	159040	20.0000	20.8	
	42 2,6-Dinitrotoluene	165	8.398	8.398	(0.966)	37973	20.0000	20.6	
	43 Acenaphthylene	152	8.521	8.521	(0.980)	236507	20.0000	20.8	(M)
	44 3-Nitroaniline	138	8.612	8.612	(0.991)	44292	20.0000	23.3	
*	45 Acenaphthene-d10	164	8.692	8.692	(1.000)	229779	40.0000		
	46 Acenaphthene	154	8.735	8.735	(1.005)	148701	20.0000	20.9	
	47 2,4-Dinitrophenol	184	8.735	8.735	(1.005)	17932	20.0000	19.5	(Q)
	48 4-Nitrophenol	65	8.789	8.789	(1.011)	35982	20.0000	20.9	
	49 2,4-Dinitrotoluene	165	8.901	8.901	(1.024)	50858	20.0000	20.8	
	50 Dibenzofuran	168	8.949	8.949	(1.030)	198433	20.0000	20.6	
	51 Diethylphthalate	149	9.200	9.200	(1.058)	166257	20.0000	20.8	
	52 4-Chlorophenylphenyl ether	204	9.361	9.361	(1.077)	72865	20.0000	20.8	
	54 4-Nitroaniline	138	9.366	9.366	(1.078)	46513	20.0000	21.4	
	53 Fluorene	166	9.377	9.377	(1.079)	169741	20.0000	20.9	
	55 4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.892)	24904	20.0000	20.4	
	56 N-Nitrosodiphenylamine	169	9.500	9.500	(0.901)	140519	20.0000	21.0	
	57 Azobenzene	77	9.559	9.559	(1.100)	182031	20.0000	21.4	
	58 1,2-Diphenylhydrazine	77	9.559	9.559	(1.100)	182031	20.0000	21.4	
$	59 2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.113)	21206	20.0000	19.6	
	60 4-Bromophenylphenyl ether	248	9.976	9.976	(0.946)	38357	20.0000	20.2	
	61 Hexachlorobenzene	284	10.062	10.062	(0.954)	43092	20.0000	20.6	
	62 Pentachlorophenol	266	10.297	10.297	(0.976)	24128	20.0000	19.1	
*	63 Phenanthrene-d10	188	10.548	10.548	(1.000)	375429	40.0000		
	64 Phenanthrene	178	10.575	10.575	(1.003)	227464	20.0000	21.3	
	65 Anthracene	178	10.639	10.639	(1.009)	229527	20.0000	21.0	
	66 Carbazole	167	10.826	10.826	(1.026)	224891	20.0000	21.3	
	67 di-n-Butylphthalate	149	11.233	11.233	(1.065)	274766	20.0000	21.1	
	68 Fluoranthene	202	12.062	12.062	(1.143)	221398	20.0000	20.7	
	69 Benzidine	184	12.201	12.201	(0.881)	132834	20.0000	23.3	
	70 Pyrene	202	12.351	12.351	(0.892)	240709	20.0000	21.4	
$	71 Terphenyl-d14 (S)	244	12.517	12.517	(0.904)	124208	15.0000	15.6	
	72 Butylbenzylphthalate	149	13.110	13.110	(0.947)	117478	20.0000	21.4	
	73 bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	169818	20.0000	21.6	
	74 3,3'-Dichlorobenzidine	252	13.779	13.779	(0.995)	70239	20.0000	23.1	
	75 Benzo(a)anthracene	228	13.832	13.832	(0.999)	219954	20.0000	21.1	
*	76 Chrysene-d12	240	13.843	13.843	(1.000)	365508	40.0000		(Q)
	77 Chrysene	228	13.875	13.875	(1.002)	204714	20.0000	21.2	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.576	14.576	(1.053)	279044	20.0000	21.3
79	Benzo(b)fluoranthene	252	15.186	15.186	(0.964)	201048	20.0000	20.4
80	Benzo(k)fluoranthene	252	15.223	15.223	(0.966)	226539	20.0000	21.4
81	Benzo(a)pyrene	252	15.672	15.672	(0.995)	195391	20.0000	20.7
* 82	Perylene-d12	264	15.758	15.758	(1.000)	361168	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.710	17.710	(1.124)	228951	20.0000	21.0
84	Dibenzo(a,h)anthracene	278	17.737	17.737	(1.126)	193525	20.0000	20.6
85	Benzo(g,h,i)perylene	276	18.309	18.309	(1.162)	191484	20.0000	20.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281412.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281412.D
Lab Smp Id: ICAL 4 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

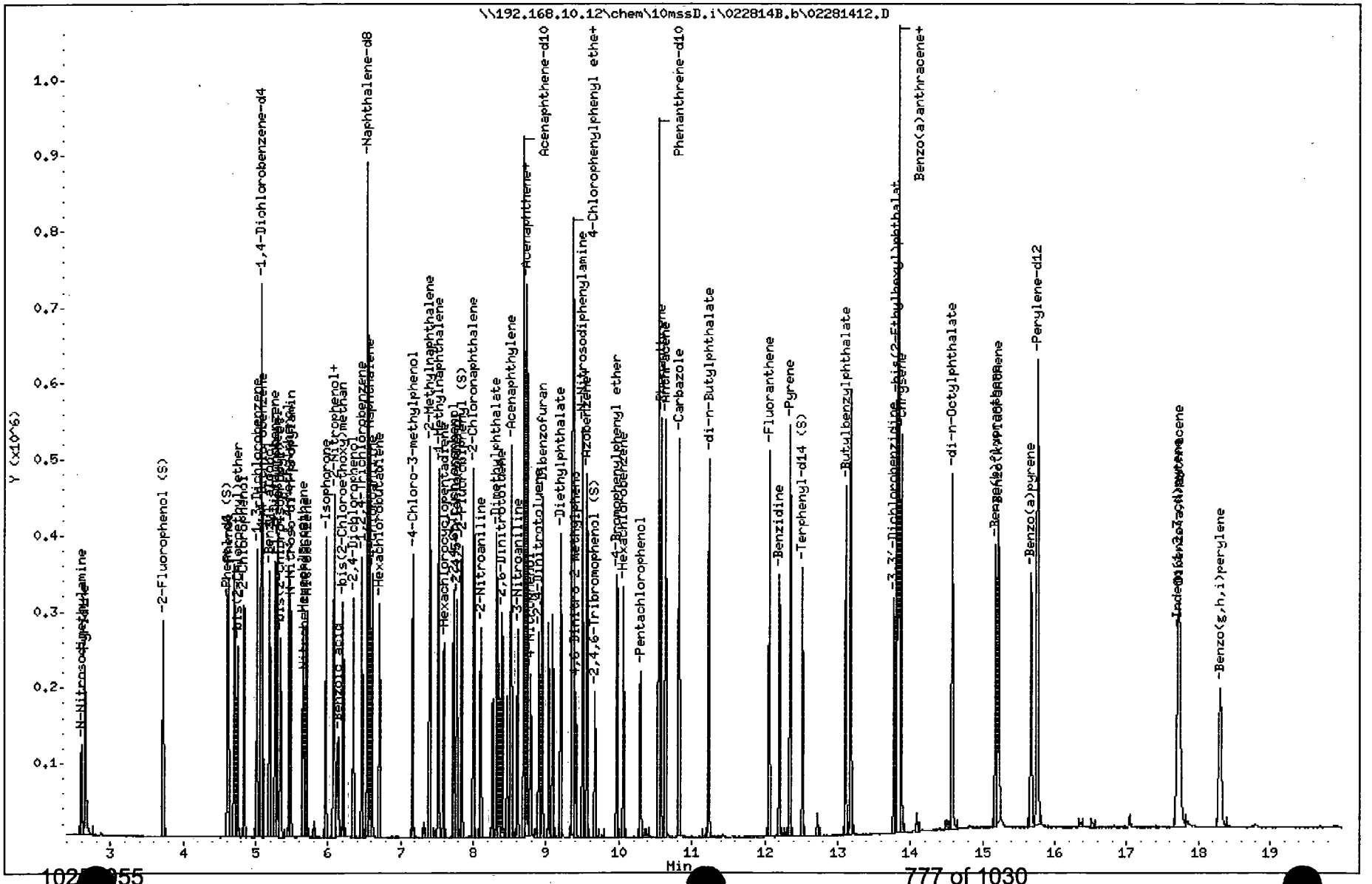
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	108169	-8.46
28 Naphthalene-d8	466266	233133	932532	435529	-6.59
45 Acenaphthene-d10	245325	122663	490650	229779	-6.34
63 Phenanthrene-d10	405966	202983	811932	375429	-7.52
76 Chrysene-d12	427978	213989	855956	365508	-14.60
82 Perylene-d12	418836	209418	837672	361168	-13.77

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	-0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.06
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	-0.00
76 Chrysene-d12	13.85	13.35	14.35	13.84	-0.04
82 Perylene-d12	15.76	15.26	16.26	15.76	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

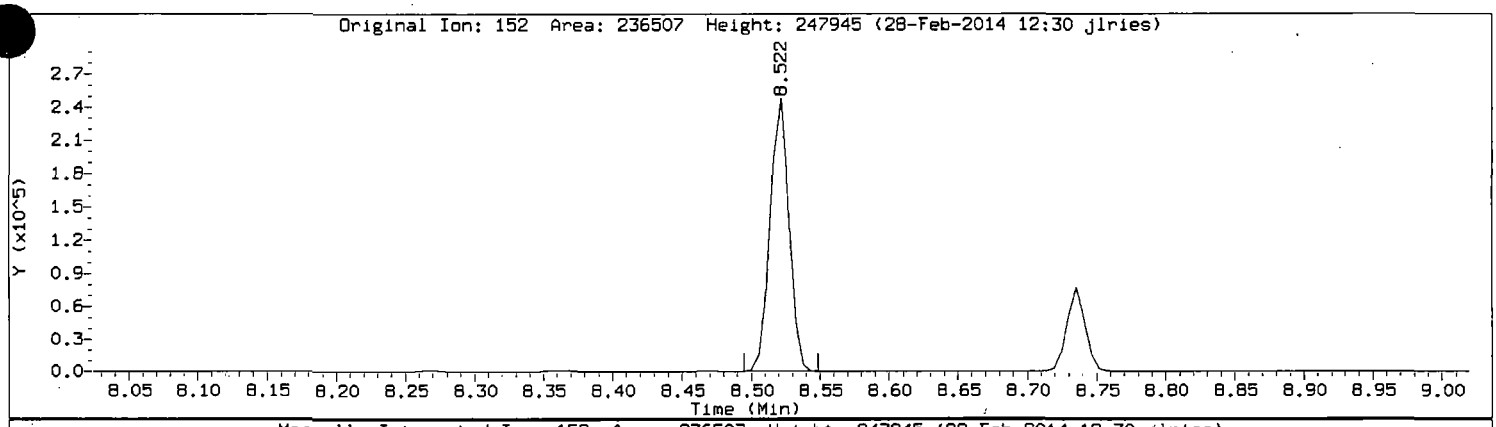
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281412.D
Date : 28-FEB-2014 11:03
Client ID:
Sample Info: ICAL 4 10328-96

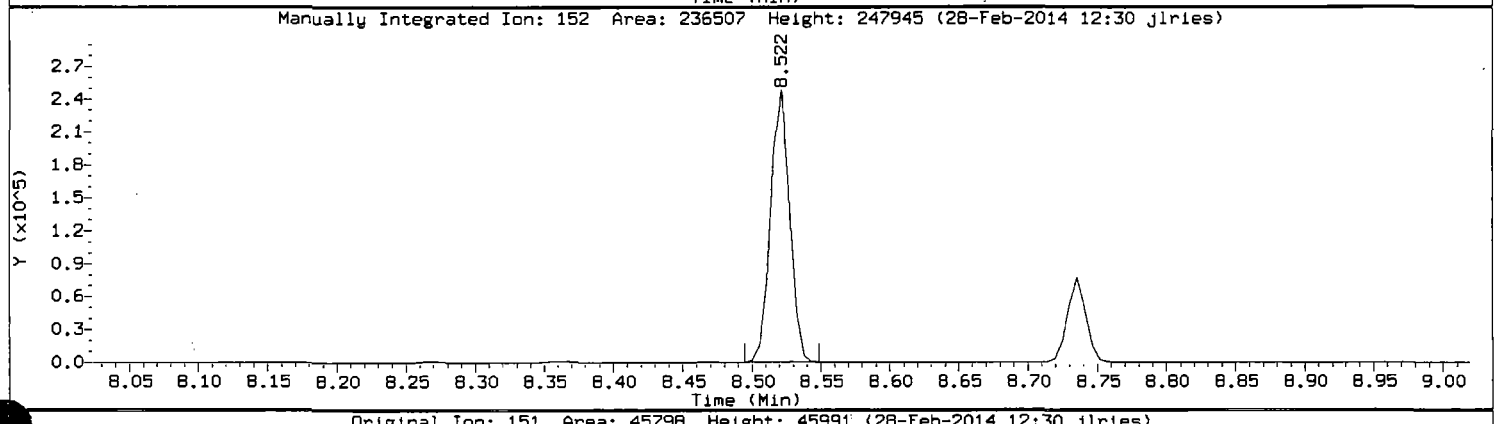
Instrument: 10mssD.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

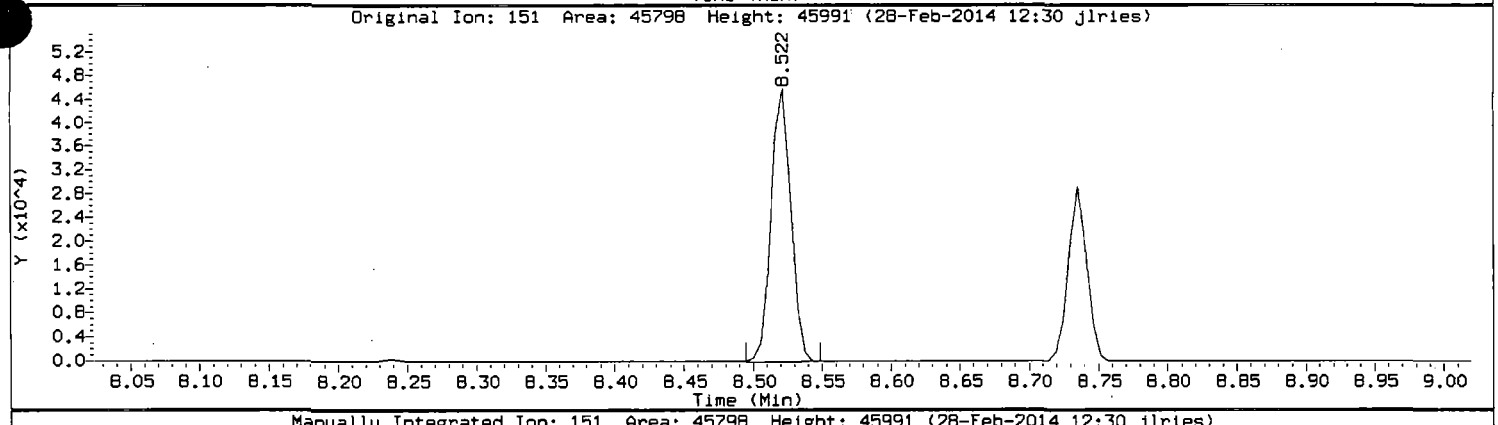


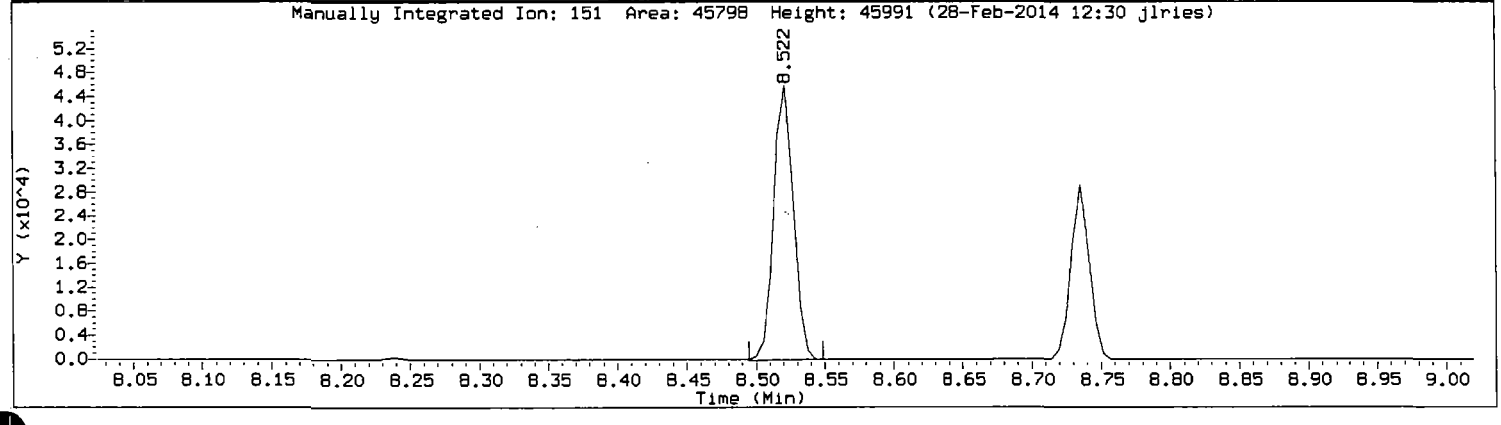
Injection Date: 28-FEB-2014 11:03
Instrument: 10mssD.i
Lab Sample ID: ICAL 4 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8

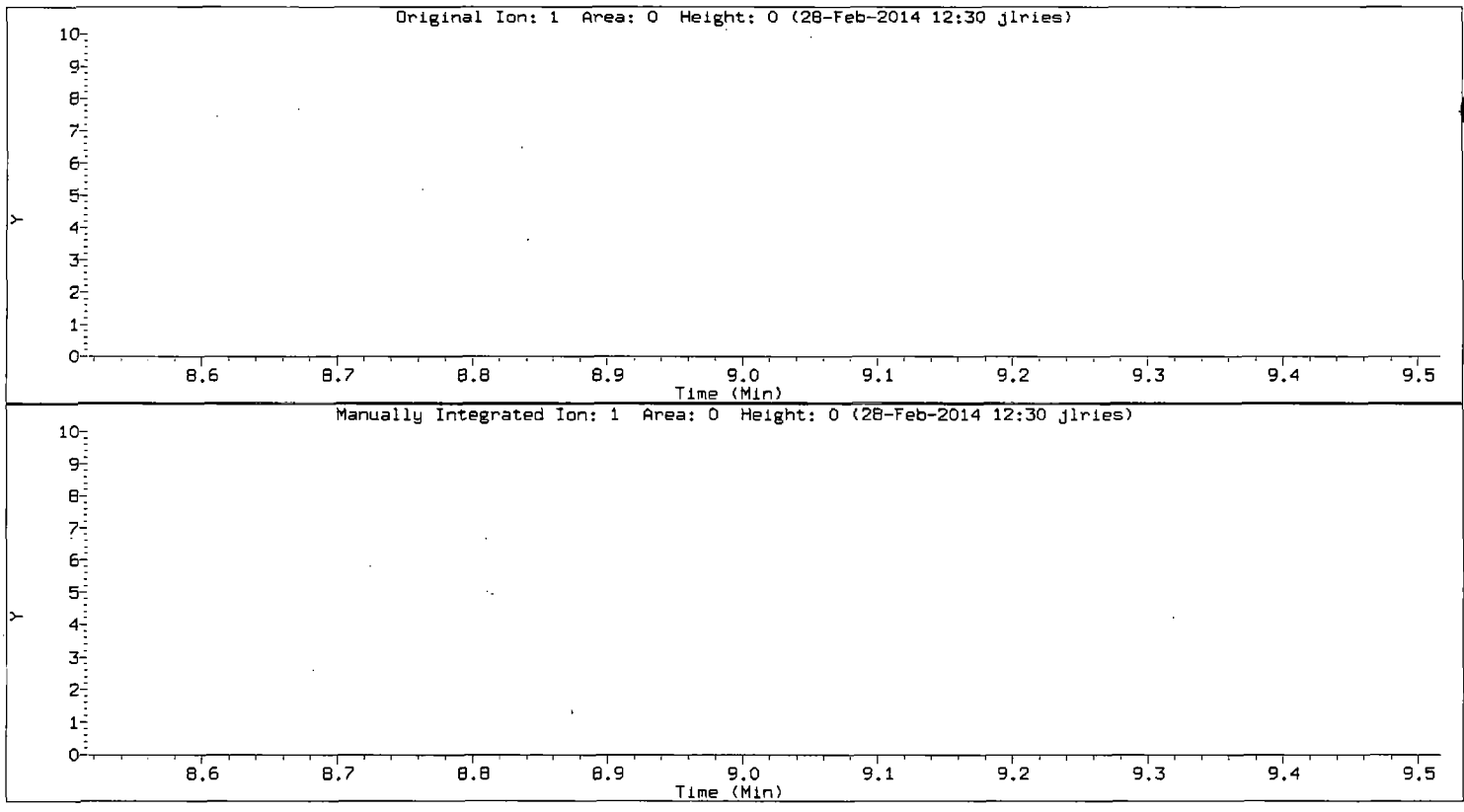








Injection Date: 28-FEB-2014 11:03
Instrument: 10mssD.i
Lab Sample ID: ICAL 4 10328-96



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281413.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281413.D
Lab Smp Id: ICAL 3 10328-96
Inj Date : 28-FEB-2014 11:31
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 3 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 11:03 Cal File: 02281412.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	24770	10.0000	9.5(aQ)
	2 Pyridine	79	2.643	2.643	(0.521)	46854	10.0000	10.0
$	3 2-Fluorophenol (S)	112	3.724	3.724	(0.734)	39186	10.0000	10.0
$	4 Phenol-d6 (S)	99	4.606	4.606	(0.908)	48146	10.0000	9.9(a)
	5 Phenol	94	4.622	4.622	(0.911)	49988	10.0000	9.8(a)
	6 bis(2-Chloroethyl)ether	63	4.745	4.745	(0.936)	30034	10.0000	9.9(a)
	7 2-Chlorophenol	128	4.836	4.836	(0.954)	40753	10.0000	9.8(a)
	8 1,3-Dichlorobenzene	146	5.013	5.013	(0.988)	43430	10.0000	10
*	9 1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	112361	40.0000	
	10 1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	44484	10.0000	10
	11 Benzyl alcohol	79	5.184	5.184	(1.022)	34391	10.0000	9.9(a)
	12 1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	42383	10.0000	10.0
	13 2-Methylphenol	107	5.291	5.291	(1.043)	31583	10.0000	10.0
	14 bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.053)	60145	10.0000	10.2
	15 3 & 4-Methylphenol	107	5.457	5.457	(1.076)	40772	10.0000	9.9(a)
	17 N-Nitroso-di-n-propylamine	70	5.478	5.478	(1.080)	28489	10.0000	9.9(a)
	18 Hexachloroethane	117	5.649	5.649	(1.114)	17314	10.0000	10.0
$	19 Nitrobenzene-d5 (S)	82	5.676	5.676	(0.868)	32877	7.50000	7.4(a)
	20 Nitrobenzene	77	5.703	5.703	(0.872)	42819	10.0000	10
	21 Isophorone	82	5.970	5.970	(0.913)	75237	10.0000	9.9(a)
	23 2-Nitrophenol	139	6.072	6.072	(0.929)	20800	10.0000	9.6(a)
	22 2,4-Dimethylphenol	107	6.082	6.082	(0.930)	38903	10.0000	9.8(a)

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24	Benzoic acid	105	6.120	6.120	(0.936)	26021	10.0000	9.0(a)
	25	bis(2-Chloroethoxy)methane	93	6.205	6.205	(0.949)	46789	10.0000	10
	26	2,4-Dichlorophenol	162	6.350	6.350	(0.971)	29887	10.0000	9.7(a)
	27	1,2,4-Trichlorobenzene	180	6.462	6.462	(0.989)	33333	10.0000	10.1
*	28	Naphthalene-d8	136	6.537	6.537	(1.000)	446926	40.0000	(Q)
	29	Naphthalene	128	6.564	6.564	(1.004)	122282	10.0000	10.2
	30	4-Chloroaniline	127	6.601	6.601	(1.010)	51406	10.0000	11.3
	31	Hexachlorobutadiene	225	6.708	6.708	(1.026)	16249	10.0000	9.8(a)
	32	4-Chloro-3-methylphenol	107	7.163	7.163	(1.096)	32548	10.0000	9.7(a)
	33	2-Methylnaphthalene	142	7.398	7.398	(1.132)	77294	10.0000	9.8(a)
	34	1-Methylnaphthalene	142	7.526	7.526	(1.151)	72290	10.0000	9.9(a)
	35	Hexachlorocyclopentadiene	237	7.596	7.596	(0.874)	17403	10.0000	9.2(a)
	36	2,4,6-Trichlorophenol	196	7.730	7.730	(0.889)	19964	10.0000	9.7(a)
	37	2,4,5-Trichlorophenol	196	7.773	7.773	(0.894)	21649	10.0000	9.8(a)
$	38	2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	60541	7.50000	7.5(a)
	39	2-Chloronaphthalene	162	8.003	8.003	(0.921)	69179	10.0000	10.1
	40	2-Nitroaniline	65	8.104	8.104	(0.932)	22981	10.0000	10.0
	41	Dimethylphthalate	163	8.323	8.323	(0.958)	77401	10.0000	10.1
	42	2,6-Dinitrotoluene	165	8.398	8.398	(0.966)	18713	10.0000	10.1
	43	Acenaphthylene	152	8.521	8.521	(0.980)	113789	10.0000	10(M)
	44	3-Nitroaniline	138	8.607	8.607	(0.990)	21337	10.0000	11.2
*	45	Acenaphthene-d10	164	8.692	8.692	(1.000)	230898	40.0000	
	46	Acenaphthene	154	8.735	8.735	(1.005)	71383	10.0000	10
	47	2,4-Dinitrophenol	184	8.735	8.735	(1.005)	6833	10.0000	10.6(Q)
	48	4-Nitrophenol	65	8.783	8.783	(1.010)	17065	10.0000	9.8(a)
	49	2,4-Dinitrotoluene	165	8.901	8.901	(1.024)	24369	10.0000	9.9(a)
	50	Dibenzofuran	168	8.949	8.949	(1.030)	98647	10.0000	10.2
	51	Diethylphthalate	149	9.195	9.195	(1.058)	80490	10.0000	10.0
	52	4-Chlorophenylphenyl ether	204	9.361	9.361	(1.077)	35215	10.0000	10
	54	4-Nitroaniline	138	9.366	9.366	(1.078)	22509	10.0000	10.3
	53	Fluorene	166	9.372	9.372	(1.078)	83794	10.0000	10.3
	55	4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.892)	10363	10.0000	10.3
	56	N-Nitrosodiphenylamine	169	9.500	9.500	(0.901)	69017	10.0000	9.9(a)
	57	Azobenzene	77	9.559	9.559	(1.100)	87715	10.0000	10.2
	58	1,2-Diphenylhydrazine	77	9.559	9.559	(1.100)	87715	10.0000	10.2
$	59	2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.113)	10147	10.0000	9.3(a)
	60	4-Bromophenylphenyl ether	248	9.971	9.971	(0.945)	19012	10.0000	9.7(a)
	61	Hexachlorobenzene	284	10.062	10.062	(0.954)	20895	10.0000	9.7(a)
	62	Pentachlorophenol	266	10.297	10.297	(0.976)	10639	10.0000	8.1(a)
*	63	Phenanthrene-d10	188	10.548	10.548	(1.000)	389015	40.0000	
	64	Phenanthrene	178	10.575	10.575	(1.003)	112310	10.0000	10.1
	65	Anthracene	178	10.639	10.639	(1.009)	109714	10.0000	9.7(a)
	66	Carbazole	167	10.827	10.827	(1.026)	108659	10.0000	9.9(a)
	67	di-n-Butylphthalate	149	11.233	11.233	(1.065)	129357	10.0000	9.6(a)
	68	Fluoranthene	202	12.062	12.062	(1.143)	103970	10.0000	9.4(a)
	69	Benzidine	184	12.201	12.201	(0.881)	64785	10.0000	11.3
	70	Pyrene	202	12.351	12.351	(0.892)	113548	10.0000	10.1
$	71	Terphenyl-d14 (S)	244	12.517	12.517	(0.904)	59498	7.50000	7.5(a)
	72	Butylbenzylphthalate	149	13.110	13.110	(0.947)	53903	10.0000	9.8(a)
	73	bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	76981	10.0000	9.8(a)
	74	3,3'-Dichlorobenzidine	252	13.774	13.774	(0.995)	33911	10.0000	11.1
	75	Benzo(a)anthracene	228	13.833	13.833	(0.999)	104322	10.0000	10
*	76	Chrysene-d12	240	13.843	13.843	(1.000)	366627	40.0000	(Q)
	77	Chrysene	228	13.875	13.875	(1.002)	98073	10.0000	10.1

Data File: \\192.168.10.12\Chem\10mssD.i\022814B.b\02281413.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.576	14.576	(1.053)	127709	10.0000	9.7(aQ)
	79 Benzo(b)fluoranthene	252	15.186	15.186	(0.964)	95306	10.0000	9.7(a)
	80 Benzo(k)fluoranthene	252	15.223	15.223	(0.966)	105235	10.0000	10
	81 Benzo(a)pyrene	252	15.672	15.672	(0.995)	92000	10.0000	9.7(a)
*	82 Perylene-d12	264	15.758	15.758	(1.000)	360518	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	17.710	17.710	(1.124)	105708	10.0000	9.7(a)
	84 Dibenzo(a,h)anthracene	278	17.737	17.737	(1.126)	90850	10.0000	9.7(a)
	85 Benzo(g,h,i)perylene	276	18.304	18.304	(1.162)	89370	10.0000	9.7(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281413.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281413.D
Lab Smp Id: ICAL 3 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	112361	-4.91
28 Naphthalene-d8	466266	233133	932532	446926	-4.15
45 Acenaphthene-d10	245325	122663	490650	230898	-5.88
63 Phenanthrene-d10	405966	202983	811932	389015	-4.18
76 Chrysene-d12	427978	213989	855956	366627	-14.34
82 Perylene-d12	418836	209418	837672	360518	-13.92

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.08
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.06
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.00
76 Chrysene-d12	13.85	13.35	14.35	13.84	-0.04
82 Perylene-d12	15.76	15.26	16.26	15.76	-0.03

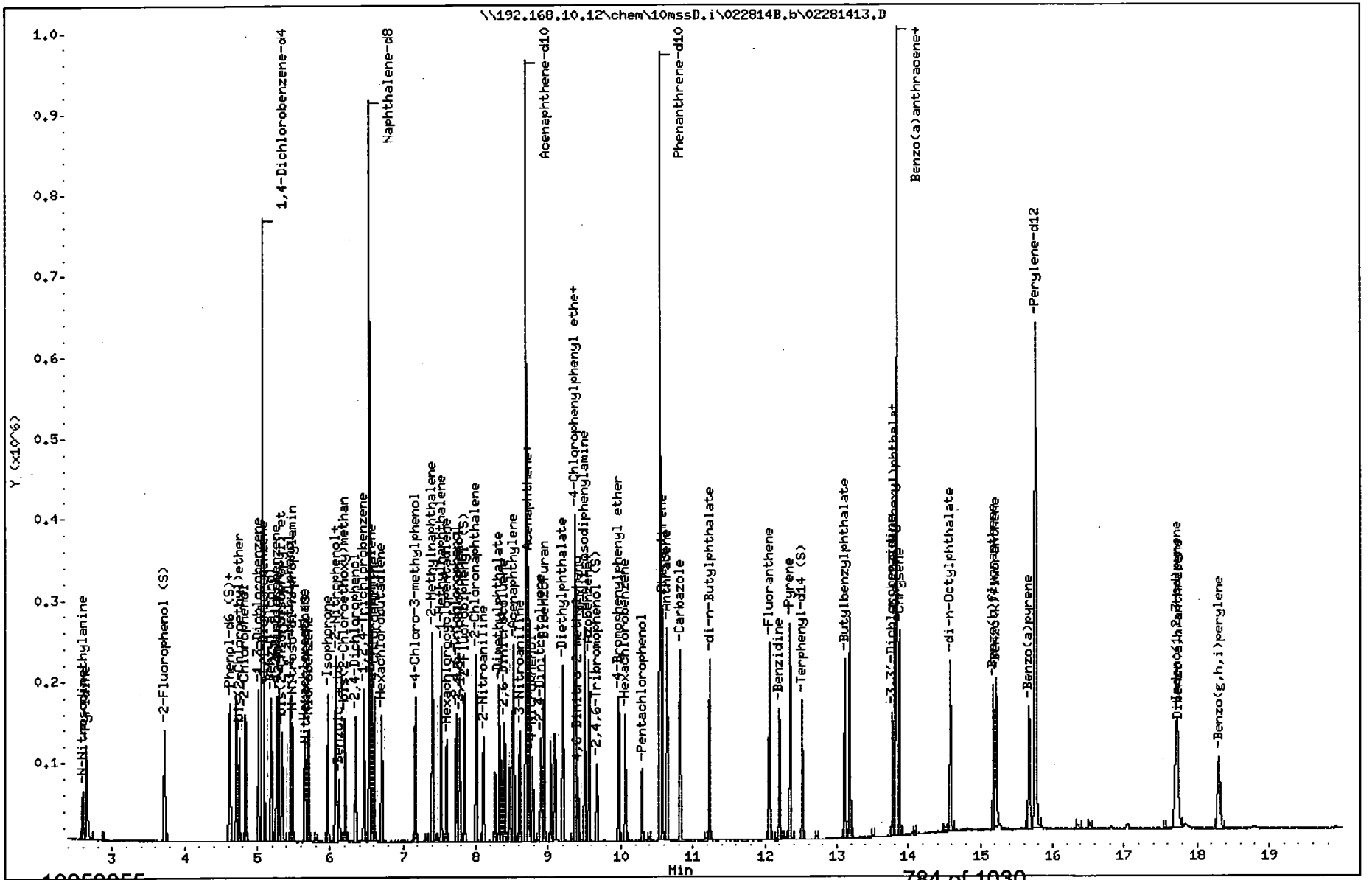
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281413.D
Date : 28-FEB-2014 11:31
Client ID:
Sample Info: ICAL 3 10328-96

Instrument: 10mssD.i

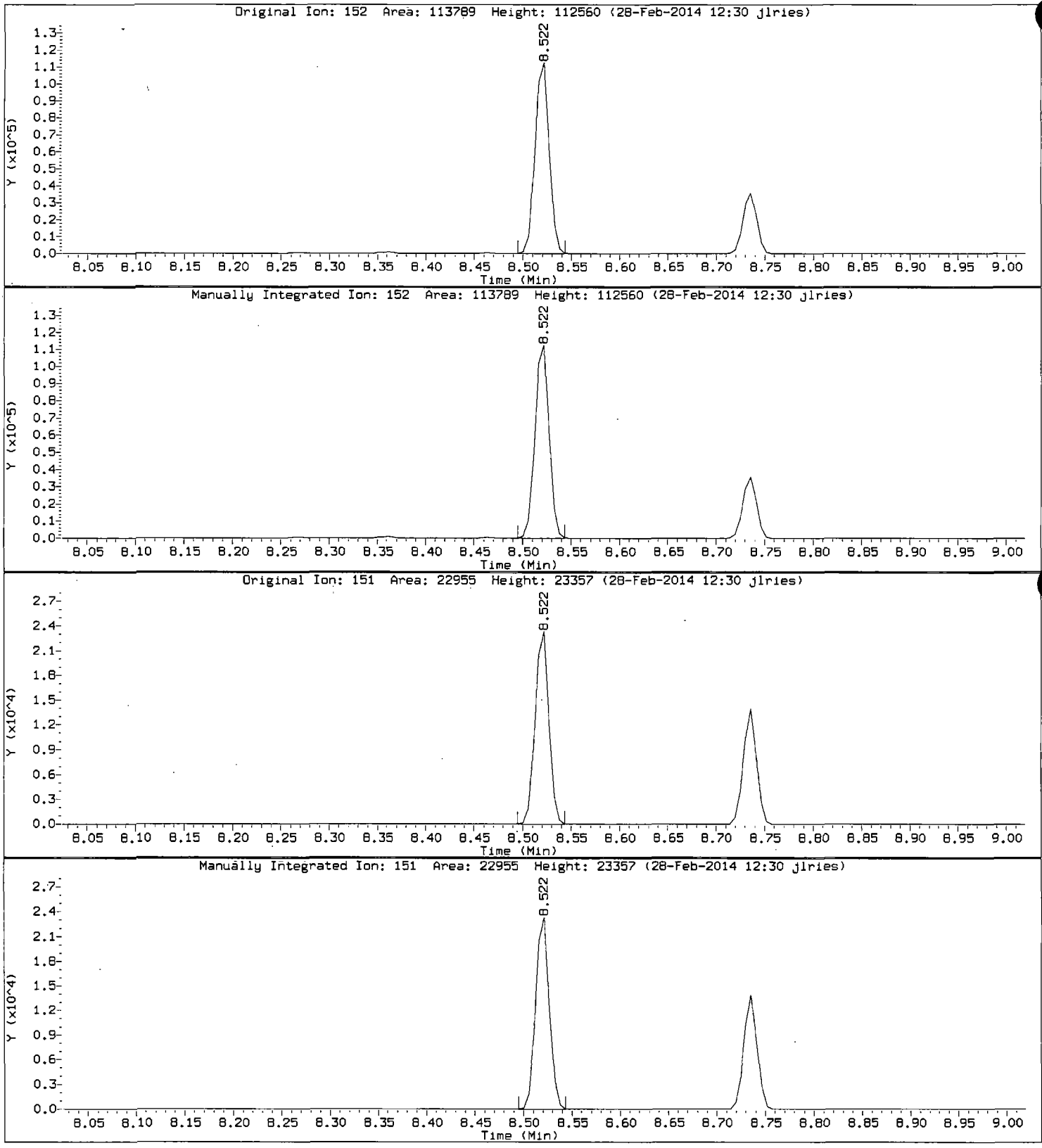
Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS

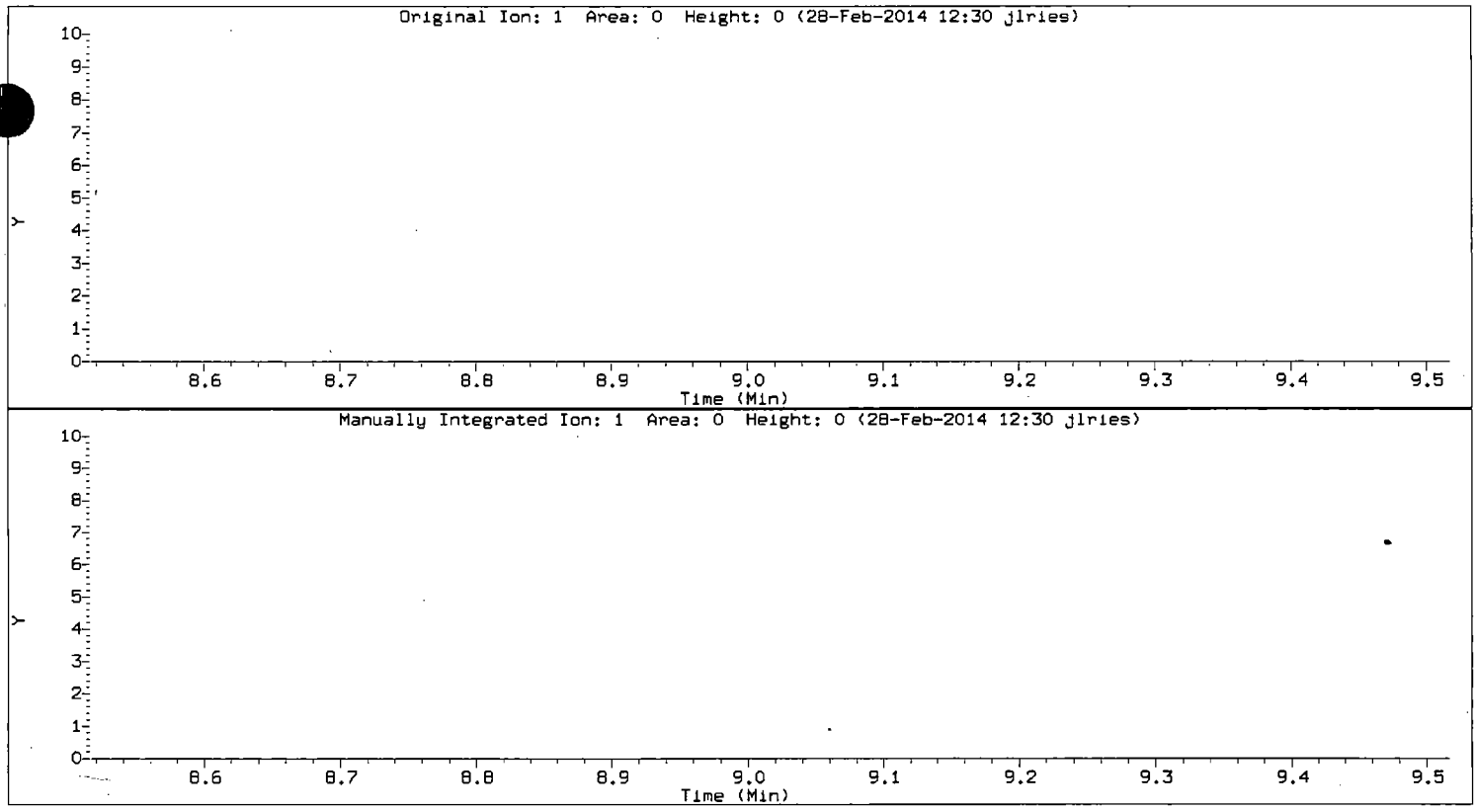


Injection Date: 28-FEB-2014 11:31
Instrument: 10mssD.i
Lab Sample ID: ICAL 3 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Injection Date: 28-FEB-2014 11:31
Instrument: 10mssD.i
Lab Sample ID: ICAL 3 10328-96



Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281414.D
Lab Smp Id: ICAL 2 10328-96
Inj Date : 28-FEB-2014 11:59
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICAL 2 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 12:46 10mssD.i Quant Type: ISTD
Cal Date : 28-FEB-2014 11:31 Cal File: 02281413.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	12429	5.00000	4.6(aQM)
2	Pyridine	79	2.643	2.643	(0.521)	22945	5.00000	4.8(a)
$ 3	2-Fluorophenol (S)	112	3.724	3.724	(0.734)	19108	5.00000	4.8(a)
$ 4	Phenol-d6 (S)	99	4.606	4.606	(0.908)	23783	5.00000	4.8(a)
5	Phenol	94	4.622	4.622	(0.911)	25481	5.00000	4.9(a)
6	bis(2-Chloroethyl)ether	63	4.745	4.745	(0.936)	15356	5.00000	4.9(a)
7	2-Chlorophenol	128	4.836	4.836	(0.954)	20571	5.00000	4.8(a)
8	1,3-Dichlorobenzene	146	5.013	5.013	(0.988)	21793	5.00000	4.9(a)
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	115230	40.0000	
10	1,4-Dichlorobenzene	146	5.087	5.087	(1.003)	22858	5.00000	5.0(a)
11	Benzyl alcohol	79	5.184	5.184	(1.022)	17211	5.00000	4.8(a)
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	21144	5.00000	4.9(a)
13	2-Methylphenol	107	5.291	5.291	(1.043)	15670	5.00000	4.8(a)
14	bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.053)	30402	5.00000	5.0(a)
15	3 & 4-Methylphenol	107	5.457	5.457	(1.076)	20147	5.00000	4.8(a)
17	N-Nitroso-di-n-propylamine	70	5.478	5.478	(1.080)	14602	5.00000	4.9(a)
18	Hexachloroethane	117	5.654	5.654	(1.115)	8886	5.00000	5.0(a)
$ 19	Nitrobenzene-d5 (S)	82	5.676	5.676	(0.868)	16361	3.75000	3.6(a)
20	Nitrobenzene	77	5.697	5.697	(0.872)	21464	5.00000	4.9(a)
21	Isophorone	82	5.970	5.970	(0.913)	36983	5.00000	4.8(a)
23	2-Nitrophenol	139	6.072	6.072	(0.929)	10182	5.00000	4.6(a)
22	2,4-Dimethylphenol	107	6.082	6.082	(0.930)	19861	5.00000	4.9(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24 Benzoic acid	105	6.109	6.109	(0.935)	11372	5.00000	3.9(a)
	25 bis(2-Chloroethoxy)methane	93	6.205	6.205	(0.949)	23235	5.00000	4.8(a)
	26 2,4-Dichlorophenol	162	6.344	6.344	(0.971)	14831	5.00000	4.7(a)
	27 1,2,4-Trichlorobenzene	180	6.462	6.462	(0.989)	16691	5.00000	4.9(a)
*	28 Naphthalene-d8	136	6.537	6.537	(1.000)	457217	40.0000	(Q)
	29 Naphthalene	128	6.564	6.564	(1.004)	62532	5.00000	5.1(a)
	30 4-Chloroaniline	127	6.601	6.601	(1.010)	25780	5.00000	5.6(a)
	31 Hexachlorobutadiene	225	6.703	6.703	(1.025)	8488	5.00000	5.0(a)
	32 4-Chloro-3-methylphenol	107	7.163	7.163	(1.096)	15914	5.00000	4.6(a)
	33 2-Methylnaphthalene	142	7.398	7.398	(1.132)	38648	5.00000	4.8(a)
	34 1-Methylnaphthalene	142	7.526	7.526	(1.151)	36609	5.00000	4.9(a)
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.874)	8598	5.00000	4.4(a)
	36 2,4,6-Trichlorophenol	196	7.730	7.730	(0.889)	9582	5.00000	4.5(a)
	37 2,4,5-Trichlorophenol	196	7.773	7.773	(0.894)	10605	5.00000	4.6(a)
$	38 2-Fluorobiphenyl (S)	172	7.837	7.837	(0.902)	30505	3.75000	3.6(a)
	39 2-Chloronaphthalene	162	8.002	8.002	(0.921)	34430	5.00000	4.9(a)
	40 2-Nitroaniline	65	8.104	8.104	(0.932)	10801	5.00000	4.6(a)
	41 Dimethylphthalate	163	8.323	8.323	(0.958)	38950	5.00000	4.9(a)
	42 2,6-Dinitrotoluene	165	8.398	8.398	(0.966)	8967	5.00000	4.7(a)
	43 Acenaphthylene	152	8.521	8.521	(0.980)	56606	5.00000	4.8(aM)
	44 3-Nitroaniline	138	8.607	8.607	(0.990)	10649	5.00000	5.4(a)
*	45 Acenaphthene-d10	164	8.692	8.692	(1.000)	238555	40.0000	
	46 Acenaphthene	154	8.735	8.735	(1.005)	36233	5.00000	4.9(a)
	47 2,4-Dinitrophenol	184	8.735	8.735	(1.005)	2813	5.00000	7.2(aQ)
	48 4-Nitrophenol	65	8.783	8.783	(1.010)	8221	5.00000	4.6(a)
	49 2,4-Dinitrotoluene	165	8.901	8.901	(1.024)	11428	5.00000	4.5(a)
	50 Dibenzofuran	168	8.944	8.944	(1.029)	50072	5.00000	5.0(a)
	51 Diethylphthalate	149	9.195	9.195	(1.058)	40628	5.00000	4.9(a)
	52 4-Chlorophenylphenyl ether	204	9.361	9.361	(1.077)	17810	5.00000	4.9(a)
	54 4-Nitroaniline	138	9.361	9.361	(1.077)	10358	5.00000	4.6(a)
	53 Fluorene	166	9.372	9.372	(1.078)	41526	5.00000	4.9(a)
	55 4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.892)	4513	5.00000	6.4(aQ)
	56 N-Nitrosodiphenylamine	169	9.500	9.500	(0.901)	33939	5.00000	4.7(a)
	57 Azobenzene	77	9.559	9.559	(1.100)	43757	5.00000	5.0(a)
	58 1,2-Diphenylhydrazine	77	9.559	9.559	(1.100)	43757	5.00000	5.0(a)
$	59 2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.113)	5040	5.00000	4.5(a)
	60 4-Bromophenylphenyl ether	248	9.971	9.971	(0.945)	9383	5.00000	4.6(a)
	61 Hexachlorobenzene	284	10.062	10.062	(0.954)	10765	5.00000	4.8(a)
	62 Pentachlorophenol	266	10.297	10.297	(0.976)	4633	5.00000	3.4(a)
*	63 Phenanthrene-d10	188	10.548	10.548	(1.000)	402608	40.0000	
	64 Phenanthrene	178	10.575	10.575	(1.003)	55754	5.00000	4.9(a)
	65 Anthracene	178	10.639	10.639	(1.009)	55790	5.00000	4.8(a)
	66 Carbazole	167	10.827	10.827	(1.026)	53817	5.00000	4.8(a)
	67 di-n-Butylphthalate	149	11.233	11.233	(1.065)	61314	5.00000	4.4(a)
	68 Fluoranthene	202	12.062	12.062	(1.143)	51867	5.00000	4.5(a)
	69 Benzidine	184	12.201	12.201	(0.881)	31531	5.00000	5.5(a)
	70 Pyrene	202	12.351	12.351	(0.892)	54964	5.00000	4.8(a)
$	71 Terphenyl-d14 (S)	244	12.517	12.517	(0.904)	28293	3.75000	3.5(a)
	72 Butylbenzylphthalate	149	13.110	13.110	(0.947)	24946	5.00000	4.5(a)
	73 bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	36538	5.00000	4.6(aQ)
	74 3,3'-Dichlorobenzidine	252	13.774	13.774	(0.995)	16117	5.00000	5.3(a)
	75 Benzo(a)anthracene	228	13.833	13.833	(0.999)	51785	5.00000	4.9(a)
*	76 Chrysene-d12	240	13.843	13.843	(1.000)	367627	40.0000	(Q)
	77 Chrysene	228	13.875	13.875	(1.002)	49388	5.00000	5.1(a)

Data File: \\192.168.10.12\Chem\10MSSD.I\022814B.D\02281414.D
Report Date: 28-Feb-2014 12:46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.576	14.576	(1.053)	56547	5.00000	4.3(aQM)
79	Benzo(b)fluoranthene	252	15.180	15.180	(0.963)	47230	5.00000	4.6(a)
80	Benzo(k)fluoranthene	252	15.218	15.218	(0.965)	51002	5.00000	4.7(a)
81	Benzo(a)pyrene	252	15.667	15.667	(0.994)	43945	5.00000	4.5(a)
* 82	Perylene-d12	264	15.763	15.763	(1.000)	374312	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.705	17.705	(1.123)	51439	5.00000	4.5(a)
84	Dibenzo(a,h)anthracene	278	17.737	17.737	(1.125)	43923	5.00000	4.5(a)
85	Benzo(g,h,i)perylene	276	18.304	18.304	(1.161)	44255	5.00000	4.6(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281414.D
Report Date: 28-Feb-2014 12:46

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281414.D
Lab Smp Id: ICAL 2 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07

Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	115230	-2.49
28 Naphthalene-d8	466266	233133	932532	457217	-1.94
45 Acenaphthene-d10	245325	122663	490650	238555	-2.76
63 Phenanthrene-d10	405966	202983	811932	402608	-0.83
76 Chrysene-d12	427978	213989	855956	367627	-14.10
82 Perylene-d12	418836	209418	837672	374312	-10.63

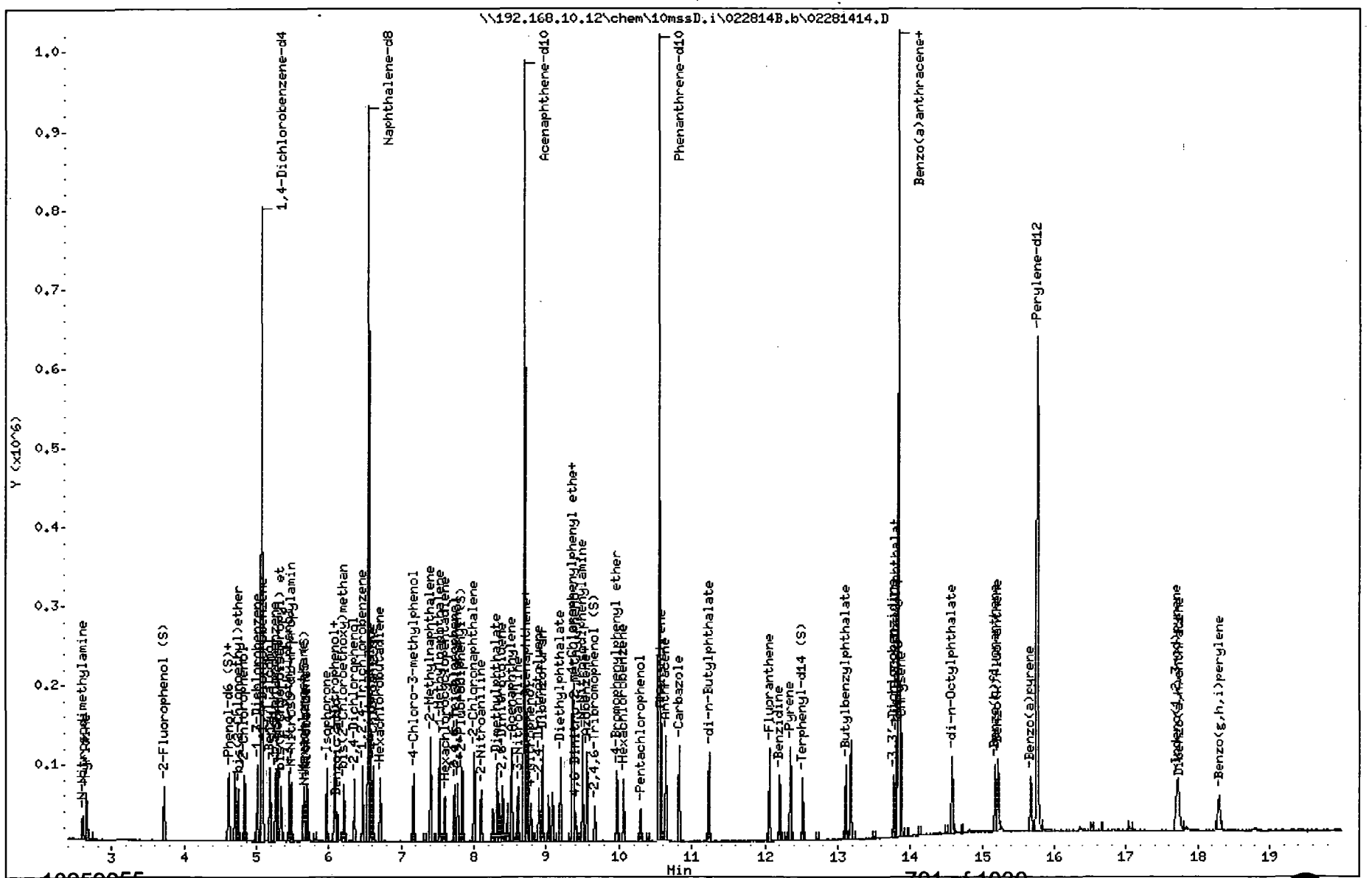
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.08
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.06
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	0.00
76 Chrysene-d12	13.85	13.35	14.35	13.84	-0.04
82 Perylene-d12	15.76	15.26	16.26	15.76	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281414.D
Date : 28-FEB-2014 11:59
Client ID:
Sample Info: ICAL 2 10328-96

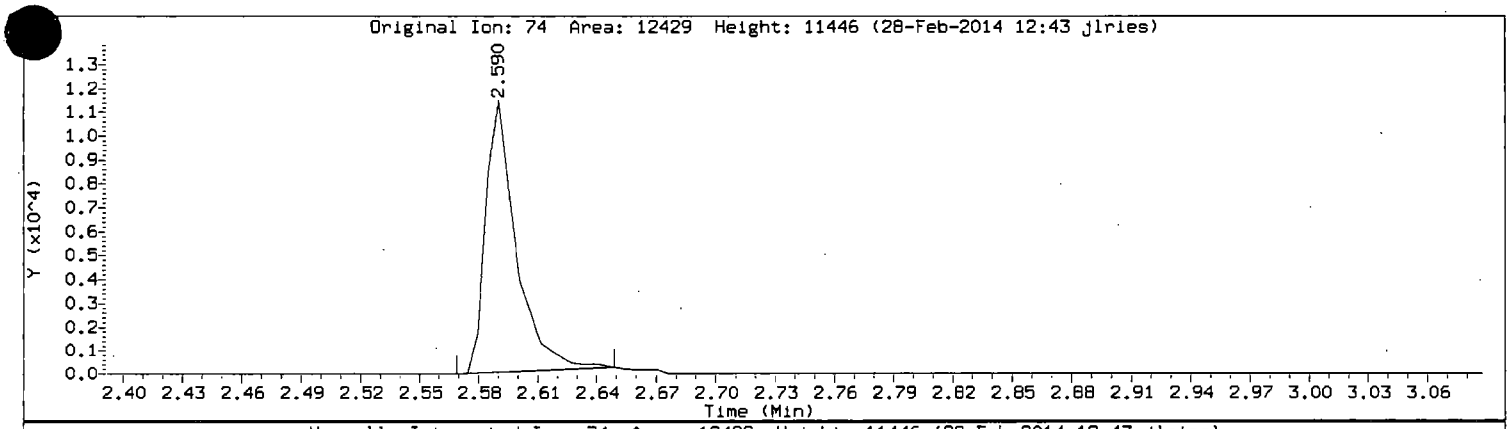
Instrument: 10mssD.i

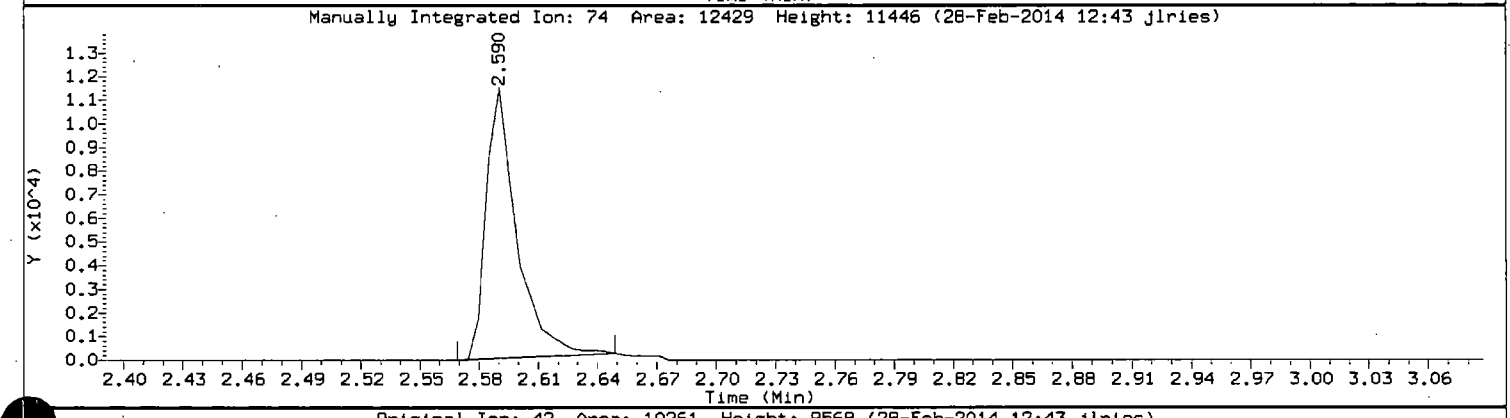
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

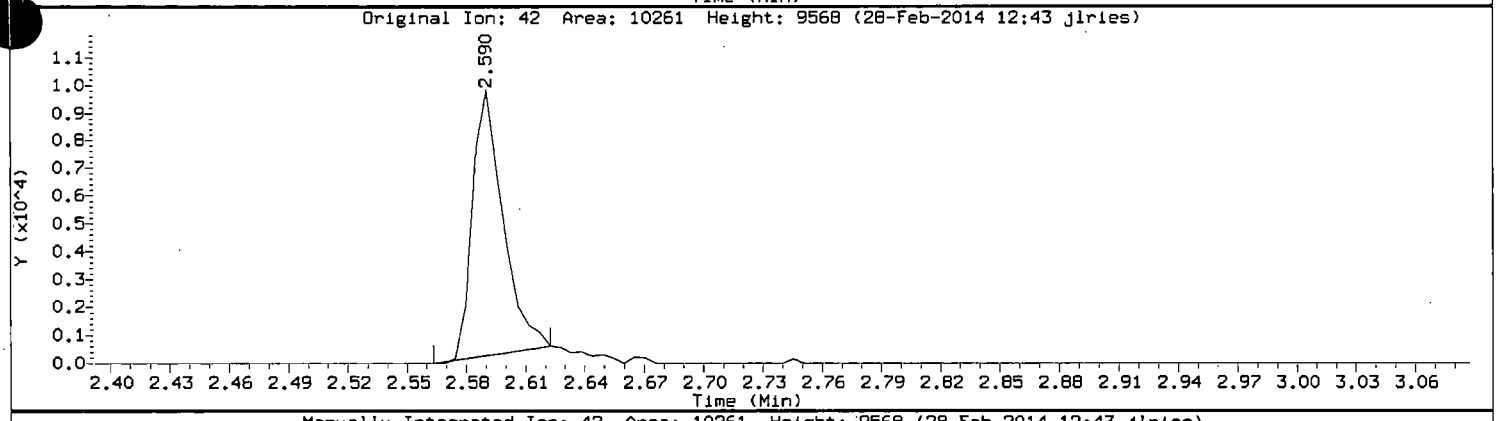


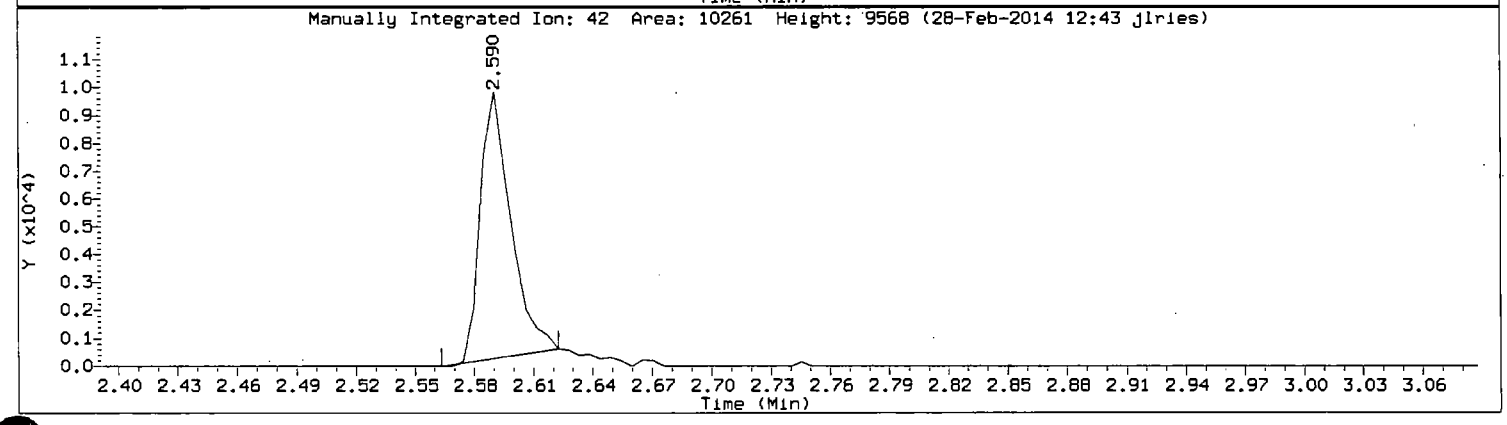
Injection Date: 28-FEB-2014 11:59
Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

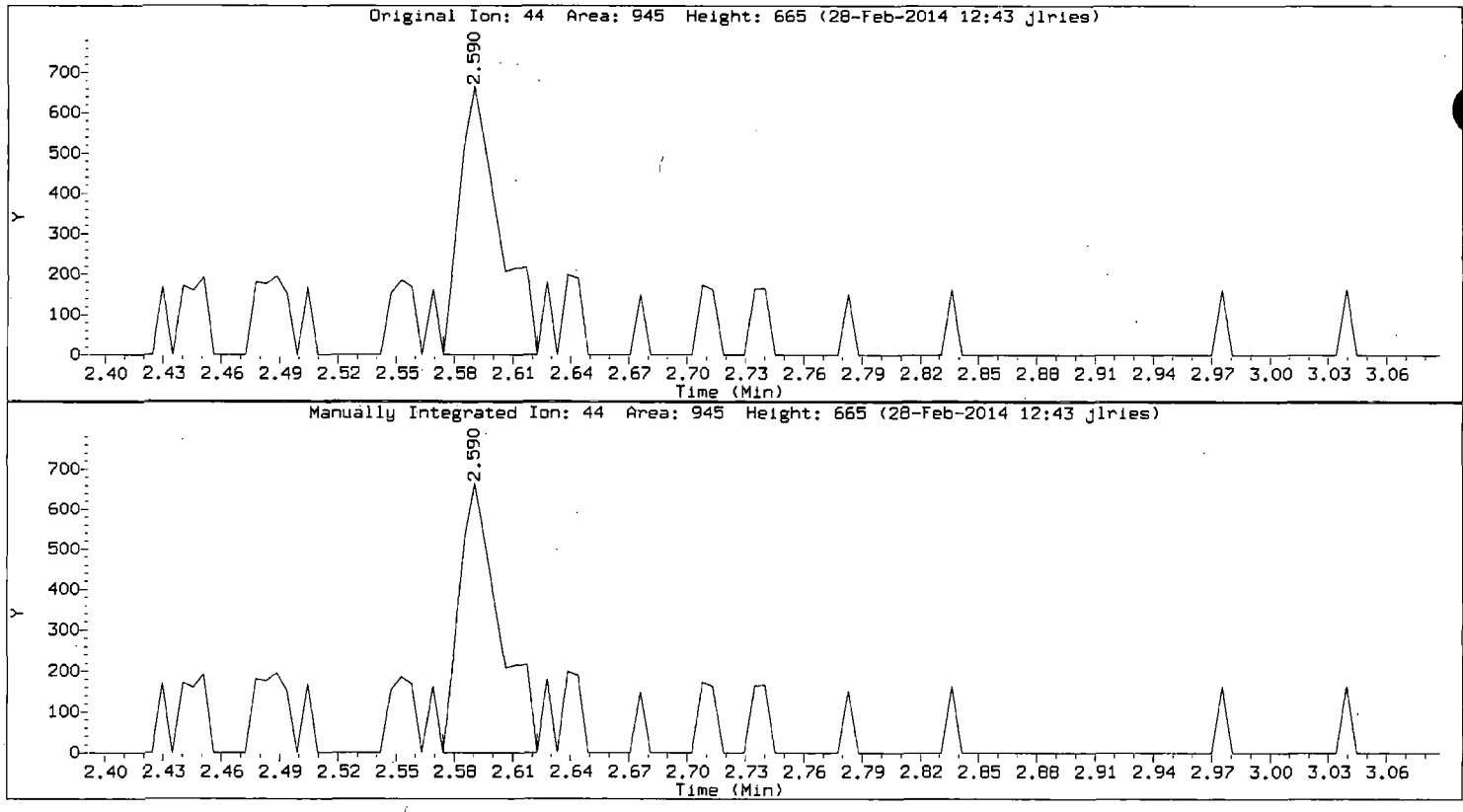






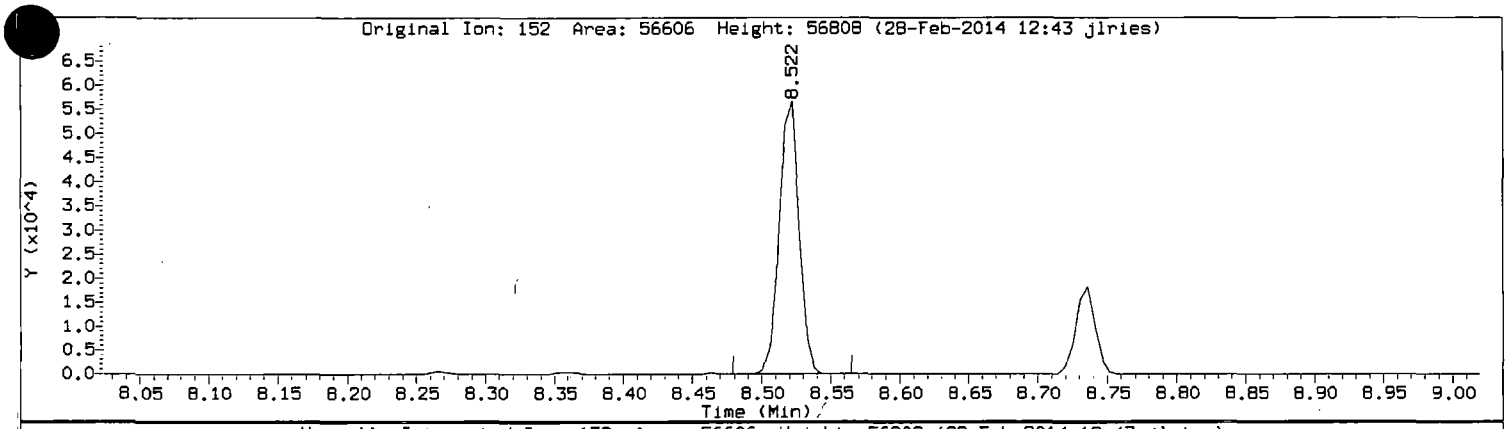


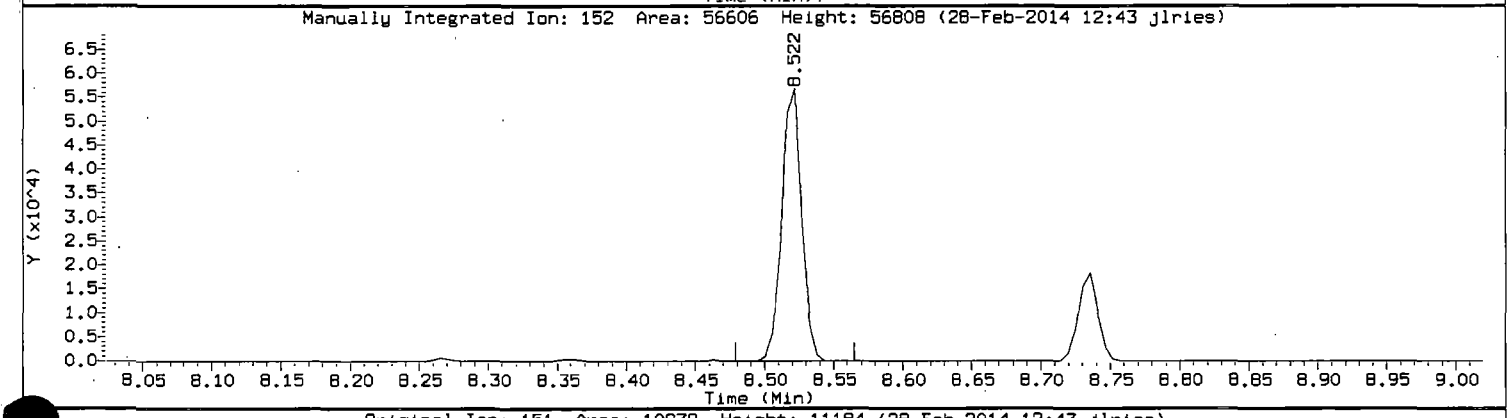
Injection Date: 28-FEB-2014 11:59
Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

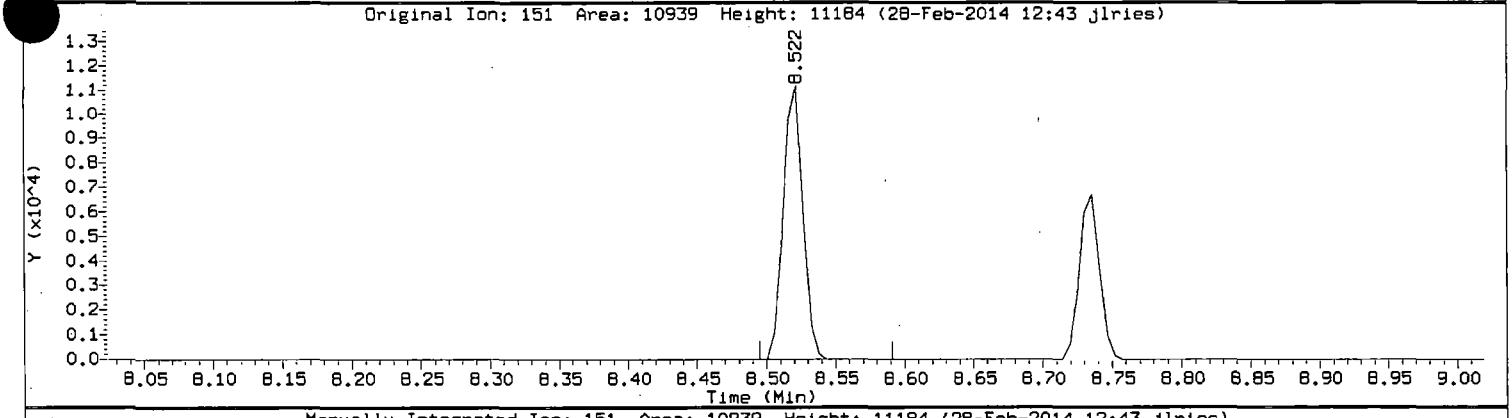


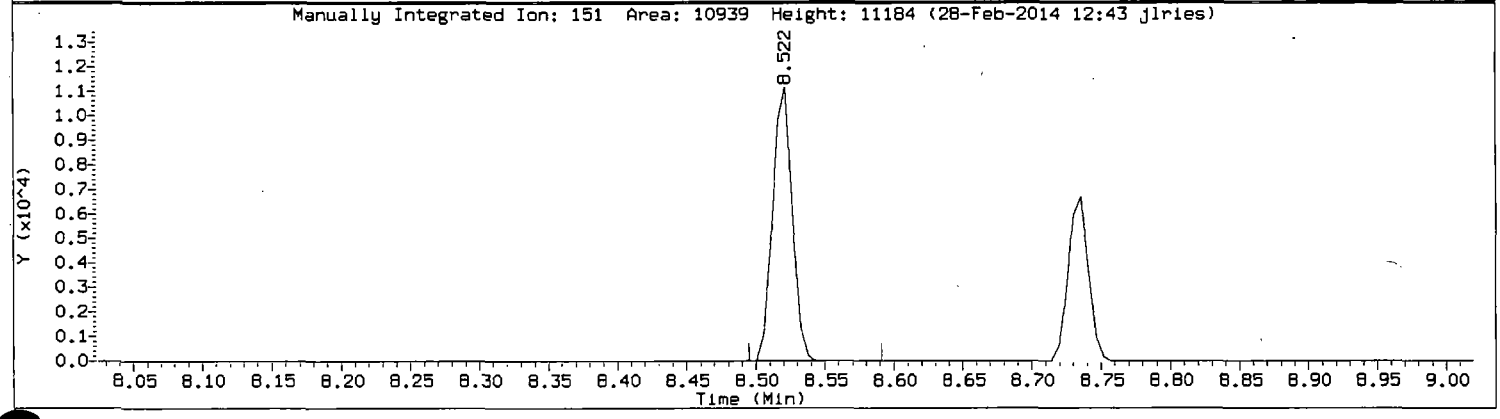
Injection Date: 28-FEB-2014 11:59
Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8

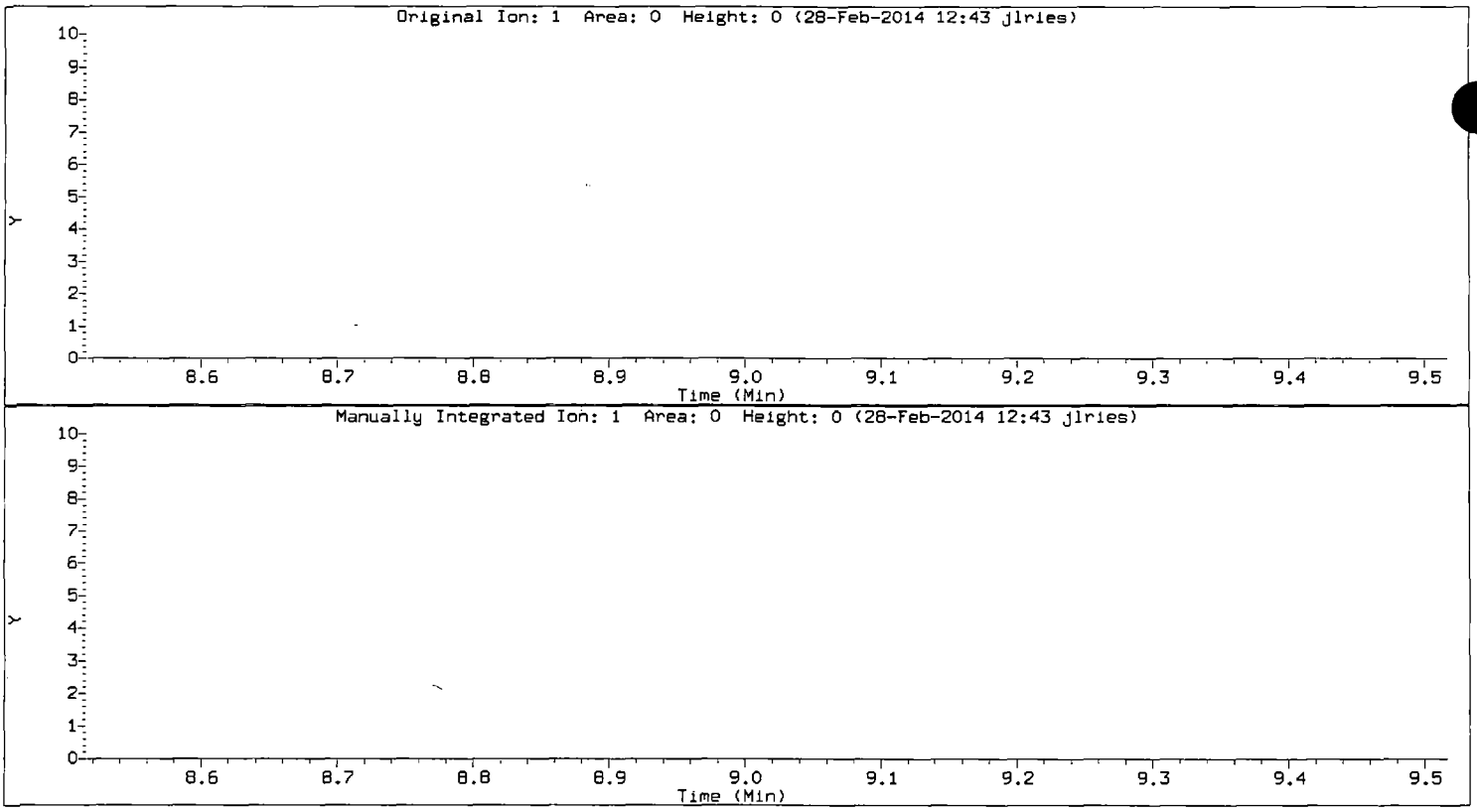






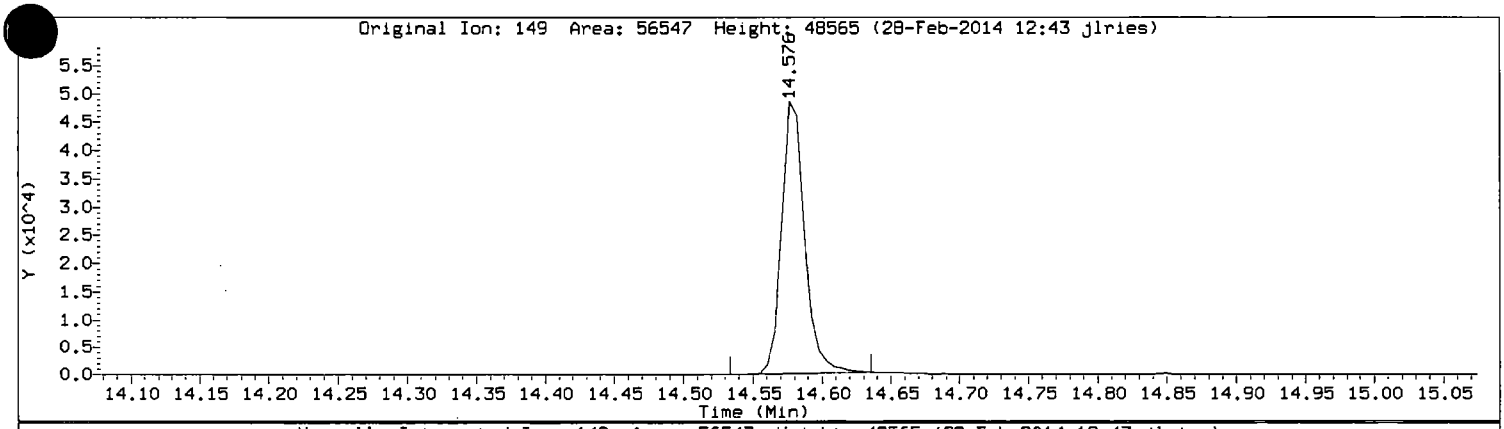


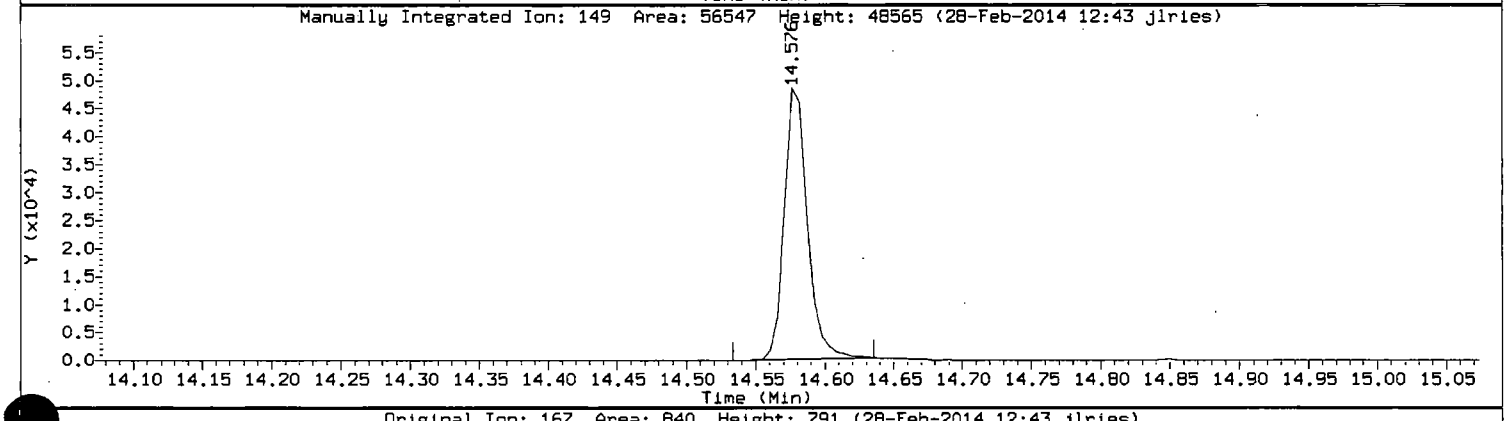
Injection Date: 28-FEB-2014 11:59
Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

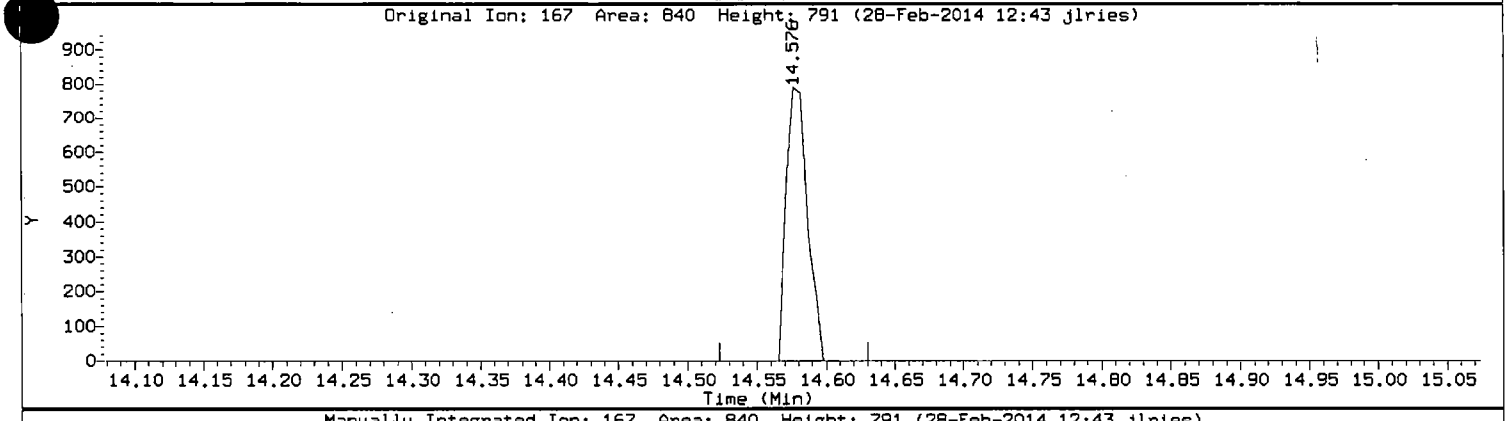


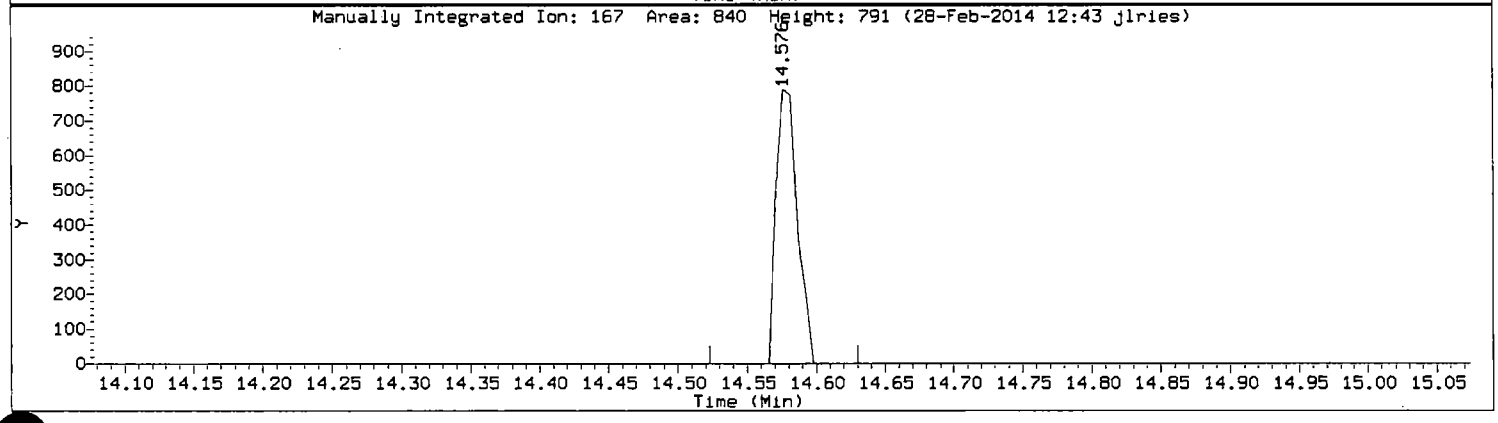
Injection Date: 28-FEB-2014 11:59
Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96

Compound: di-n-Octylphthalate
CAS Number: 117-84-0

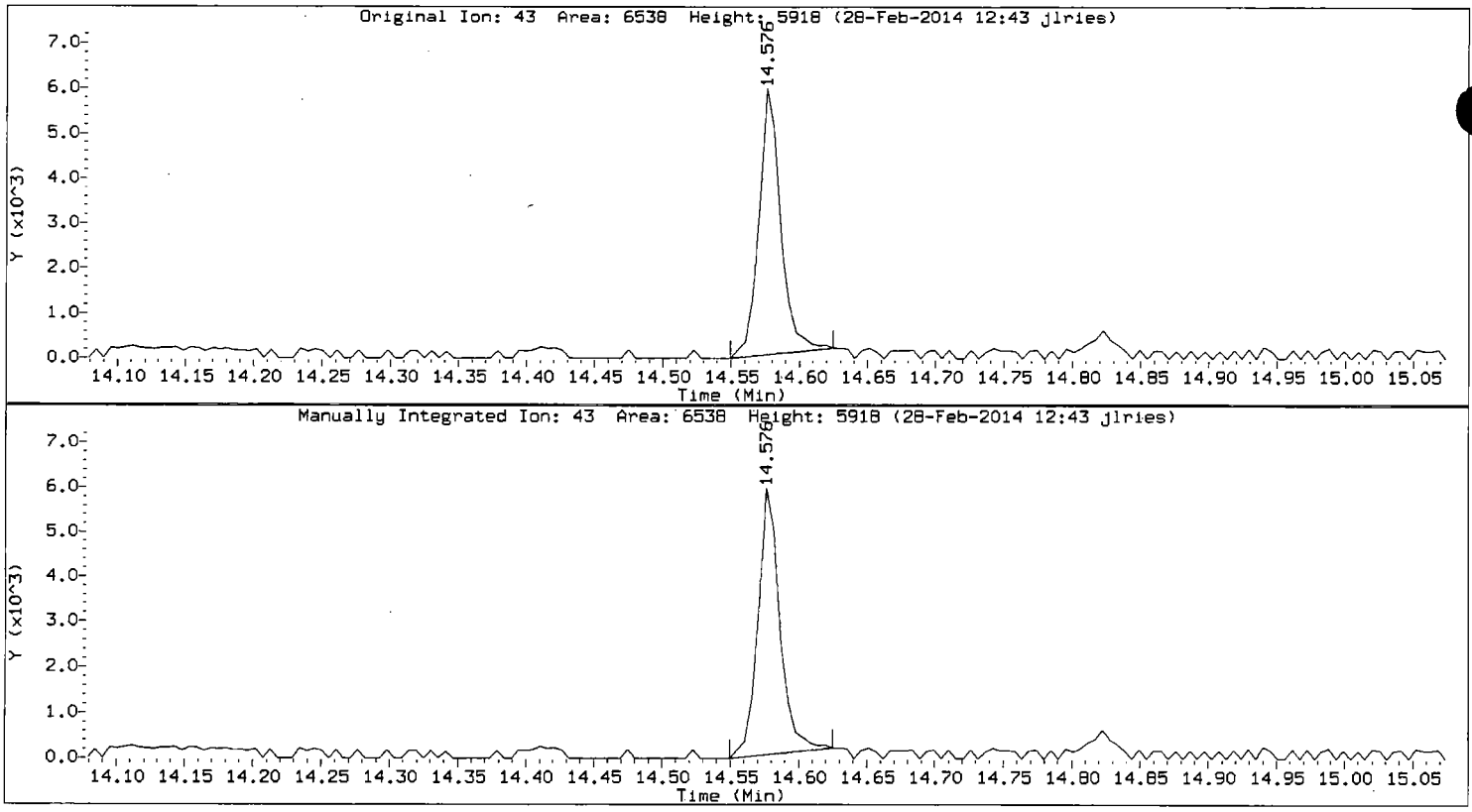








Injection Date: 28-FEB-2014 11:59
Instrument: 10mssD.i
Lab Sample ID: ICAL 2 10328-96



Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281415.D
Report Date: 28-Feb-2014 13:14

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 28-FEB-2014 12:27
Lab File ID: 02281415.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 09:10 11:59
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.92707	0.83086	0.83086	0.000	-10.37779	40.00000	Averaged
2 Pyridine	1.66353	1.47367	1.47367	0.000	-11.41322	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.39474	1.33118	1.33118	0.000	-4.55721	40.00000	Averaged
$ 4 Phenol-d6 (S)	1.73788	1.65548	1.65548	0.000	-4.74168	40.00000	Averaged
5 Phenol	1.81135	1.73708	1.73708	0.800	-4.10001	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.07749	0.92825	0.92825	0.700	-13.85049	40.00000	Averaged
7 2-Chlorophenol	1.48268	1.38281	1.38281	0.800	-6.73580	40.00000	Averaged
8 1,3-Dichlorobenzene	1.54743	1.35379	1.35379	0.000	-12.51332	40.00000	Averaged
10 1,4-Dichlorobenzene	1.58541	1.38539	1.38539	0.000	-12.61656	20.00000	Averaged
11 Benzyl alcohol	1.23453	1.10637	1.10637	0.000	-10.38135	40.00000	Averaged
12 1,2-Dichlorobenzene	1.50040	1.28939	1.28939	0.000	-14.06361	40.00000	Averaged
13 2-Methylphenol	1.12295	1.05920	1.05920	0.700	-5.67701	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	2.09816	1.57669	1.57669	0.000	-24.85351	40.00000	Averaged
15 3 & 4-Methylphenol	1.46287	1.54800	1.54800	0.600	5.81925	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	1.02726	0.84022	0.84022	0.500	-18.20772	40.00000	Averaged
18 Hexachloroethane	0.61604	0.54242	0.54242	0.300	-11.95119	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.39730	0.37676	0.37676	0.000	-5.17107	40.00000	Averaged
20 Nitrobenzene	0.38464	0.34209	0.34209	0.200	-11.06254	40.00000	Averaged
21 Isophorone	0.68084	0.62089	0.62089	0.400	-8.80571	40.00000	Averaged
23 2-Nitrophenol	0.19493	0.18718	0.18718	0.100	-3.97383	20.00000	Averaged
22 2,4-Dimethylphenol	0.35621	0.33528	0.33528	0.200	-5.87745	40.00000	Averaged
24 Benzoic acid	0.25736	0.26840	0.26840	0.000	4.29059	40.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.42074	0.38037	0.38037	0.300	-9.59419	50.00000	Averaged
26 2,4-Dichlorophenol	0.27681	0.25976	0.25976	0.200	-6.16012	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.29509	0.25866	0.25866	0.000	-12.34636	40.00000	Averaged
29 Naphthalene	1.07621	0.94273	0.94273	0.700	-12.40263	40.00000	Averaged
30 4-Chloroaniline	0.40537	0.35960	0.35960	0.010	-11.28929	40.00000	Averaged
31 Hexachlorobutadiene	0.14858	0.12768	0.12768	0.010	-14.06682	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.29966	0.28720	0.28720	0.200	-4.15894	20.00000	Averaged
33 2-Methylnaphthalene	0.70271	0.62446	0.62446	0.040	-11.13575	40.00000	Averaged
34 1-Methylnaphthalene	0.65562	0.59404	0.59404	0.000	-9.39317	40.00000	Averaged
35 Hexachlorocyclopentadiene	0.32910	0.29089	0.29089	0.050	-11.60957	40.00000	Averaged
36 2,4,6-Trichlorophenol	0.35684	0.35217	0.35217	0.200	-1.30782	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.38407	0.38481	0.38481	0.200	0.19305	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.39789	1.32820	1.32820	0.000	-4.98563	40.00000	Averaged
39 2-Chloronaphthalene	1.18538	1.03181	1.03181	0.800	-12.95530	40.00000	Averaged
40 2-Nitroaniline	0.39748	0.36671	0.36671	0.010	-7.74149	40.00000	Averaged
41 Dimethylphthalate	1.33069	1.17421	1.17421	0.010	-11.75931	40.00000	Averaged
42 2,6-Dinitrotoluene	0.32144	0.28695	0.28695	0.200	-10.72921	40.00000	Averaged
43 Acenaphthylene	1.97380	1.72036	1.72036	0.900	-12.84033	40.00000	Averaged
44 3-Nitroaniline	0.33056	0.27439	0.27439	0.010	-16.99197	40.00000	Averaged
46 Acenaphthene	1.23834	1.07219	1.07219	0.900	-13.41695	20.00000	Averaged

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281415.D
Report Date: 28-Feb-2014 13:14

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 28-FEB-2014 12:27
Lab File ID: 02281415.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 09:10 11:59
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
47 2,4-Dinitrophenol	80.00000	70.32784	0.17639	0.010	-12.09020	40.00000	Quadratic	
48 4-Nitrophenol	0.30018	0.29502	0.29502	0.010	-1.71936	40.00000	Averaged	
49 2,4-Dinitrotoluene	0.42443	0.37316	0.37316	0.200	-12.07983	40.00000	Averaged	
50 Dibenzofuran	1.67363	1.49119	1.49119	0.800	-10.90103	40.00000	Averaged	
51 Diethylphthalate	1.39190	1.21869	1.21869	0.010	-12.44444	40.00000	Averaged	
52 4-Chlorophenylphenyl ether	0.61017	0.54782	0.54782	0.400	-10.21866	40.00000	Averaged	
54 4-Nitroaniline	0.37871	0.34752	0.34752	0.010	-8.23507	40.00000	Averaged	
53 Fluorene	1.41116	1.22128	1.22128	0.900	-13.45603	40.00000	Averaged	
55 4,6-Dinitro-2-methylphenol	80.00000	73.02488	0.13626	0.010	-8.71890	40.00000	Quadratic	
56 N-Nitrosodiphenylamine	0.71324	0.53265	0.53265	0.010	-25.32046	20.00000	Averaged	<-
57 Azobenzene	1.48106	1.32632	1.32632	0.000	-10.44770	40.00000	Averaged	
58 1,2-Diphenylhydrazine	1.48106	1.32632	1.32632	0.000	-10.44770	40.00000	Averaged	
$ 59 2,4,6-Tribromophenol (S)	0.18827	0.18838	0.18838	0.000	0.05692	40.00000	Averaged	
60 4-Bromophenylphenyl ether	0.20199	0.17841	0.17841	0.100	-11.67559	40.00000	Averaged	
61 Hexachlorobenzene	0.22230	0.19751	0.19751	0.100	-11.15185	40.00000	Averaged	
62 Pentachlorophenol	0.13475	0.15799	0.15799	0.050	17.24585	20.00000	Averaged	
64 Phenanthrene	1.13926	1.01063	1.01063	0.700	-11.29095	40.00000	Averaged	
65 Anthracene	1.16142	1.02555	1.02555	0.700	-11.69818	40.00000	Averaged	
66 Carbazole	1.12512	1.02170	1.02170	0.010	-9.19168	40.00000	Averaged	
67 di-n-Butylphthalate	1.38697	1.30205	1.30205	0.010	-6.12254	40.00000	Averaged	
68 Fluoranthene	1.13706	0.98993	0.98993	0.600	-12.93909	20.00000	Averaged	
69 Benzidine	0.62350	0.16314	0.16314	0.000	-73.83479	40.00000	Averaged	<-
70 Pyrene	1.23141	1.09812	1.09812	0.600	-10.82344	40.00000	Averaged	
$ 71 Terphenyl-d14 (S)	0.86920	0.84911	0.84911	0.000	-2.31157	40.00000	Averaged	
72 Butylbenzylphthalate	0.59965	0.56432	0.56432	0.010	-5.89292	40.00000	Averaged	
73 bis(2-Ethylhexyl)phthalate	0.86033	0.80560	0.80560	0.010	-6.36064	40.00000	Averaged	
74 3,3'-Dichlorobenzidine	0.33327	0.32896	0.32896	0.010	-1.29314	40.00000	Averaged	
75 Benzo(a)anthracene	1.14060	0.95910	0.95910	0.800	-15.91228	40.00000	Averaged	
77 Chrysene	1.05828	0.58508	0.58508	0.700	-44.71402	40.00000	Averaged	<-
78 di-n-Octylphthalate	1.43288	1.37381	1.37381	0.010	-4.12267	20.00000	Averaged	
79 Benzo(b)fluoranthene	1.09097	0.98413	0.98413	0.700	-9.79281	40.00000	Averaged	
80 Benzo(k)fluoranthene	1.16930	1.09116	1.09116	0.700	-6.68200	40.00000	Averaged	
81 Benzo(a)pyrene	1.04717	0.92282	0.92282	0.700	-11.87485	20.00000	Averaged	
83 Indeno(1,2,3-cd)pyrene	1.20995	1.05823	1.05823	0.500	-12.53920	40.00000	Averaged	
84 Dibenzo(a,h)anthracene	1.03870	0.61596	0.61596	0.400	-40.69939	40.00000	Averaged	<-
85 Benzo(g,h,i)perylene	1.02315	0.95538	0.95538	0.500	-6.62359	40.00000	Averaged	

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281415.D
Report Date: 28-Feb-2014 13:14

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 28-FEB-2014 12:27
Lab File ID: 02281415.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 09:10 11:59
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	11.37241
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281415.D
Lab Smp Id: ICV 10328-98
Inj Date : 28-FEB-2014 12:27
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICV 10328-98
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 13:13 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.589	2.589	(0.511)	195098	80.0000	71.7
2	Pyridine	79	2.643	2.643	(0.521)	346038	80.0000	70.9
$ 3	2-Fluorophenol (S)	112	3.723	3.723	(0.734)	312580	80.0000	76.4
$ 4	Phenol-d6 (S)	99	4.617	4.617	(0.910)	388729	80.0000	76.2
5	Phenol	94	4.633	4.633	(0.914)	407891	80.0000	76.7
6	bis(2-Chloroethyl)ether	63	4.750	4.750	(0.937)	217967	80.0000	68.9
7	2-Chlorophenol	128	4.841	4.841	(0.955)	324704	80.0000	74.6
8	1,3-Dichlorobenzene	146	5.018	5.018	(0.989)	317890	80.0000	70.0
* 9	1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	117407	40.0000	
10	1,4-Dichlorobenzene	146	5.093	5.093	(1.004)	325308	80.0000	69.9
11	Benzyl alcohol	79	5.194	5.194	(1.024)	259792	80.0000	71.7
12	1,2-Dichlorobenzene	146	5.264	5.264	(1.038)	302766	80.0000	68.7
13	2-Methylphenol	107	5.296	5.296	(1.044)	248715	80.0000	75.4
14	bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.053)	370230	80.0000	60.1(M)
15	3 & 4-Methylphenol	107	5.462	5.462	(1.077)	363492	80.0000	84.6
17	N-Nitroso-di-n-propylamine	70	5.488	5.488	(1.082)	197296	80.0000	65.4
18	Hexachloroethane	117	5.654	5.654	(1.115)	127367	80.0000	70.4
$ 19	Nitrobenzene-d5 (S)	82	5.681	5.681	(0.868)	261012	60.0000	56.9
20	Nitrobenzene	77	5.708	5.708	(0.872)	315995	80.0000	71.1
21	Isophorone	82	5.975	5.975	(0.913)	573523	80.0000	73.0
23	2-Nitrophenol	139	6.077	6.077	(0.929)	172904	80.0000	76.8
22	2,4-Dimethylphenol	107	6.088	6.088	(0.930)	309699	80.0000	75.3

Data File: \\192.168.10.12\chem\10mssd.i\022814b.b\02281415.d
Report Date: 28-Feb-2014 13:14

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
	24	Benzoic acid	105	6.189	6.189	(0.946)	247923	80.0000	83.4	(MH)
	25	bis(2-Chloroethoxy)methane	93	6.211	6.211	(0.949)	351356	80.0000	72.3	
	26	2,4-Dichlorophenol	162	6.355	6.355	(0.971)	239944	80.0000	75.1	
	27	1,2,4-Trichlorobenzene	180	6.467	6.467	(0.989)	238924	80.0000	70.1	
*	28	Naphthalene-d8	136	6.542	6.542	(1.000)	461858	40.0000		(Q)
	29	Naphthalene	128	6.569	6.569	(1.004)	870813	80.0000	70.1	
	30	4-Chloroaniline	127	6.606	6.606	(1.010)	332172	80.0000	71.0	
	31	Hexachlorobutadiene	225	6.708	6.708	(1.025)	117939	80.0000	68.7	
	32	4-Chloro-3-methylphenol	107	7.168	7.168	(1.096)	265291	80.0000	76.7	
	33	2-Methylnaphthalene	142	7.403	7.403	(1.132)	576821	80.0000	71.1	
	34	1-Methylnaphthalene	142	7.526	7.526	(1.150)	548723	80.0000	72.5	
	35	Hexachlorocyclopentadiene	237	7.596	7.596	(0.873)	141009	80.0000	70.7	
	36	2,4,6-Trichlorophenol	196	7.735	7.735	(0.889)	170713	80.0000	79.0	
	37	2,4,5-Trichlorophenol	196	7.778	7.778	(0.894)	186536	80.0000	80.2	
$	38	2-Fluorobiphenyl (S)	172	7.842	7.842	(0.902)	482877	60.0000	57.0	
	39	2-Chloronaphthalene	162	8.008	8.008	(0.921)	500164	80.0000	69.6	
	40	2-Nitroaniline	65	8.109	8.109	(0.932)	177759	80.0000	73.8	
	41	Dimethylphthalate	163	8.329	8.329	(0.958)	569191	80.0000	70.6	
	42	2,6-Dinitrotoluene	165	8.403	8.403	(0.966)	139099	80.0000	71.4	
	43	Acenaphthylene	152	8.521	8.521	(0.980)	833933	80.0000	69.7	(M)
	44	3-Nitroaniline	138	8.617	8.617	(0.991)	133010	80.0000	66.4	
*	45	Acenaphthene-d10	164	8.698	8.698	(1.000)	242372	40.0000		
	46	Acenaphthene	154	8.740	8.740	(1.005)	519739	80.0000	69.3	
	47	2,4-Dinitrophenol	184	8.740	8.740	(1.005)	85502	80.0000	70.3	
	48	4-Nitrophenol	65	8.794	8.794	(1.011)	143008	80.0000	78.6	
	49	2,4-Dinitrotoluene	165	8.906	8.906	(1.024)	180886	80.0000	70.3	
	50	Dibenzofuran	168	8.949	8.949	(1.029)	722845	80.0000	71.3	
	51	Diethylphthalate	149	9.206	9.206	(1.058)	590752	80.0000	70.0	
	52	4-Chlorophenylphenyl ether	204	9.366	9.366	(1.077)	265551	80.0000	71.8	
	54	4-Nitroaniline	138	9.382	9.382	(1.079)	168458	80.0000	73.4	
	53	Fluorene	166	9.377	9.377	(1.078)	592007	80.0000	69.2	
	55	4,6-Dinitro-2-methylphenol	198	9.414	9.414	(0.893)	109569	80.0000	73.0	
	56	N-Nitrosodiphenylamine	169	9.505	9.505	(0.901)	428299	80.0000	59.7	
	57	Azobenzene	77	9.564	9.564	(1.100)	642927	80.0000	71.6	
	58	1,2-Diphenylhydrazine	77	9.564	9.564	(1.100)	642927	80.0000	71.6	
$	59	2,4,6-Tribromophenol (S)	330	9.671	9.671	(1.112)	91314	80.0000	80.0	
	60	4-Bromophenylphenyl ether	248	9.976	9.976	(0.946)	143455	80.0000	70.6	
	61	Hexachlorobenzene	284	10.067	10.067	(0.954)	158817	80.0000	71.1	
	62	Pentachlorophenol	266	10.297	10.297	(0.976)	127035	80.0000	93.8	
*	63	Phenanthrene-d10	188	10.548	10.548	(1.000)	402047	40.0000		
	64	Phenanthrene	178	10.580	10.580	(1.003)	812640	80.0000	71.0	
	65	Anthracene	178	10.645	10.645	(1.009)	824642	80.0000	70.6	
	66	Carbazole	167	10.832	10.832	(1.027)	821542	80.0000	72.6	
	67	di-n-Butylphthalate	149	11.238	11.238	(1.065)	1046970	80.0000	75.1	
	68	Fluoranthene	202	12.067	12.067	(1.144)	795998	80.0000	69.6	
	69	Benzidine	184	12.201	12.201	(0.881)	127917	80.0000	20.9	
	70	Pyrene	202	12.356	12.356	(0.892)	861033	80.0000	71.3	
$	71	Terphenyl-d14 (S)	244	12.522	12.522	(0.904)	499335	60.0000	58.6	
	72	Butylbenzylphthalate	149	13.110	13.110	(0.947)	442478	80.0000	75.3	
	73	bis(2-Ethylhexyl)phthalate	149	13.806	13.806	(0.997)	631669	80.0000	74.9	
	74	3,3'-Dichlorobenzidine	252	13.779	13.779	(0.995)	257937	80.0000	79.0	
	75	Benzo(a)anthracene	228	13.838	13.838	(0.999)	752028	80.0000	67.3	
*	76	Chrysene-d12	240	13.848	13.848	(1.000)	392047	40.0000		(Q)
	77	Chrysene	228	13.880	13.880	(1.002)	458760	80.0000	44.2	

Data File: \\192.168.10.12\chem\10mssD.i\022814B.B\02281415.D
Report Date: 28-Feb-2014 13:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.581	14.581	(1.053)	1077196	80.0000	76.7
79	Benzo(b)fluoranthene	252	15.196	15.196	(0.964)	760469	80.0000	72.2
80	Benzo(k)fluoranthene	252	15.234	15.234	(0.966)	843178	80.0000	74.6
81	Benzo(a)pyrene	252	15.683	15.683	(0.995)	713093	80.0000	70.5
* 82	Perylene-d12	264	15.763	15.763	(1.000)	386366	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.737	17.737	(1.125)	817727	80.0000	70.0
84	Dibenzo(a,h)anthracene	278	17.748	17.748	(1.126)	475969	80.0000	47.4
85	Benzo(g,h,i)perylene	276	18.336	18.336	(1.163)	738251	80.0000	74.7

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281415.D
Report Date: 28-Feb-2014 13:14

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281415.D
Lab Smp Id: ICV 10328-98
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 10:07
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	117407	-0.64
28 Naphthalene-d8	466266	233133	932532	461858	-0.95
45 Acenaphthene-d10	245325	122663	490650	242372	-1.20
63 Phenanthrene-d10	405966	202983	811932	402047	-0.97
76 Chrysene-d12	427978	213989	855956	392047	-8.40
82 Perylene-d12	418836	209418	837672	386366	-7.75

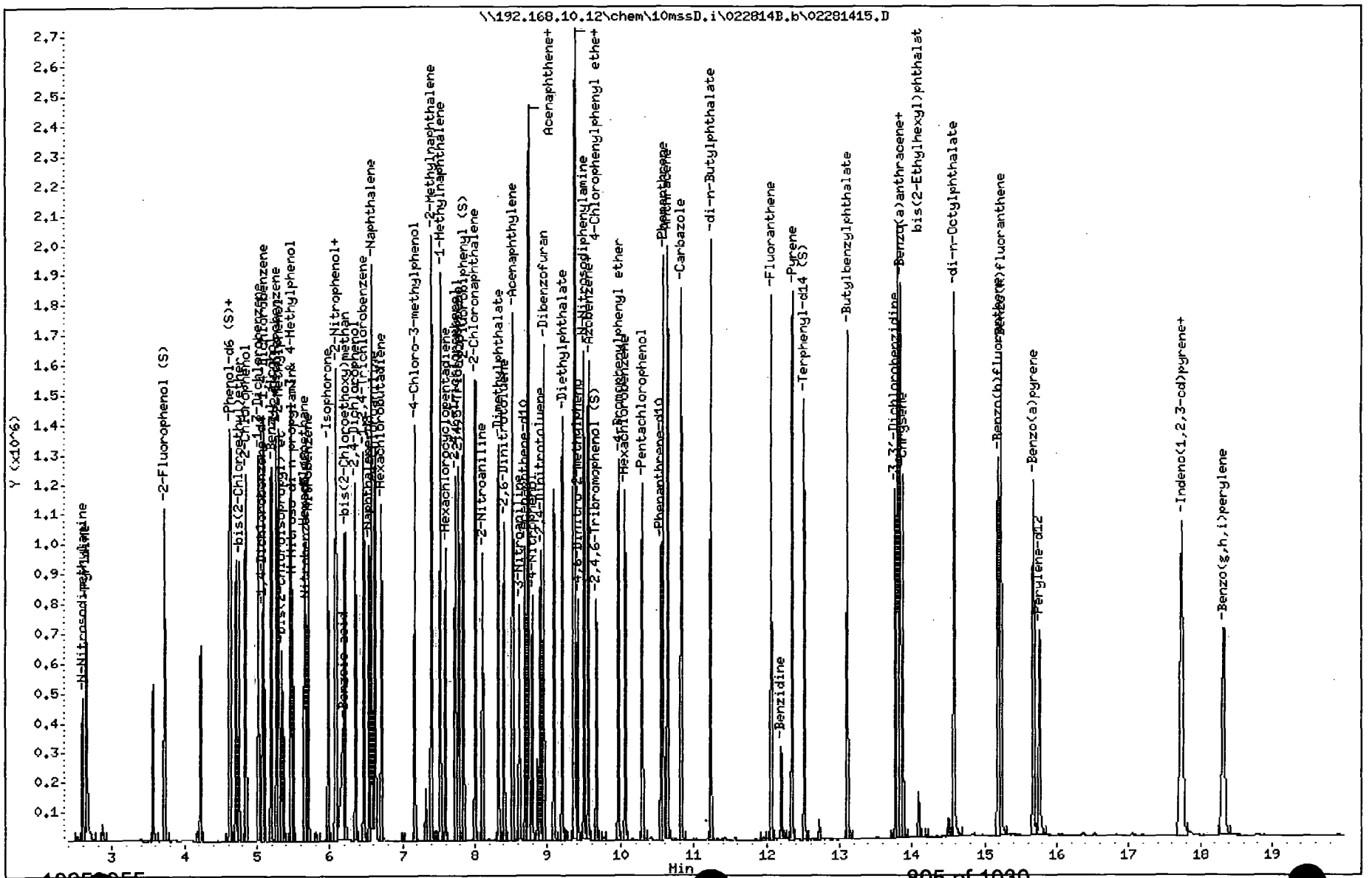
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	-0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.00
45 Acenaphthene-d10	8.70	8.20	9.20	8.70	-0.00
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	-0.00
76 Chrysene-d12	13.85	13.35	14.35	13.85	-0.00
82 Perylene-d12	15.76	15.26	16.26	15.76	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281415.D
Date : 28-FEB-2014 12:27
Client ID:
Sample Info: ICV 10328-98

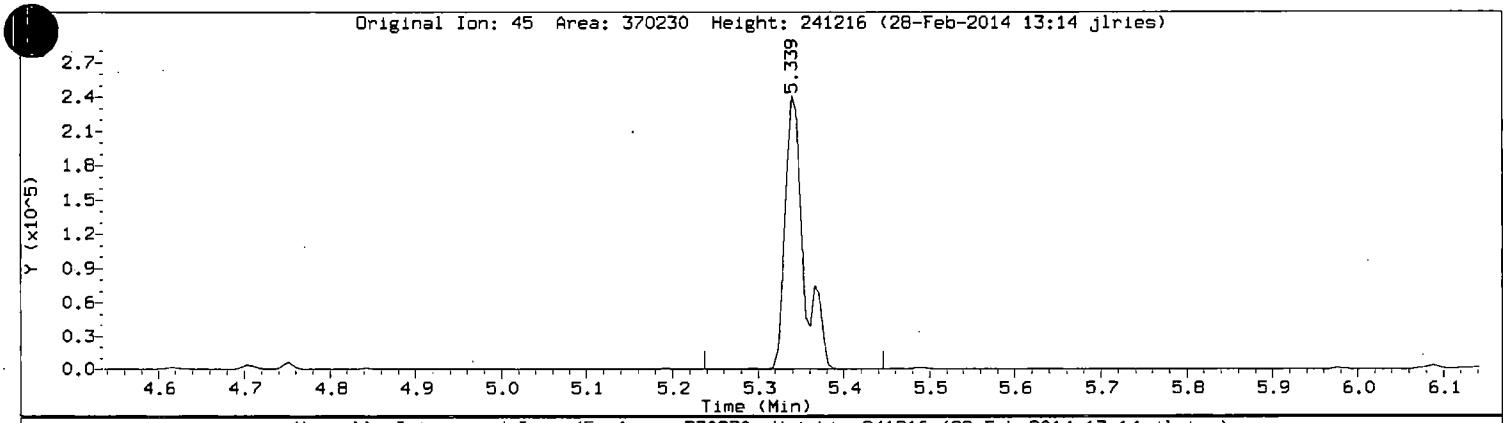
Instrument: 10mssD.i

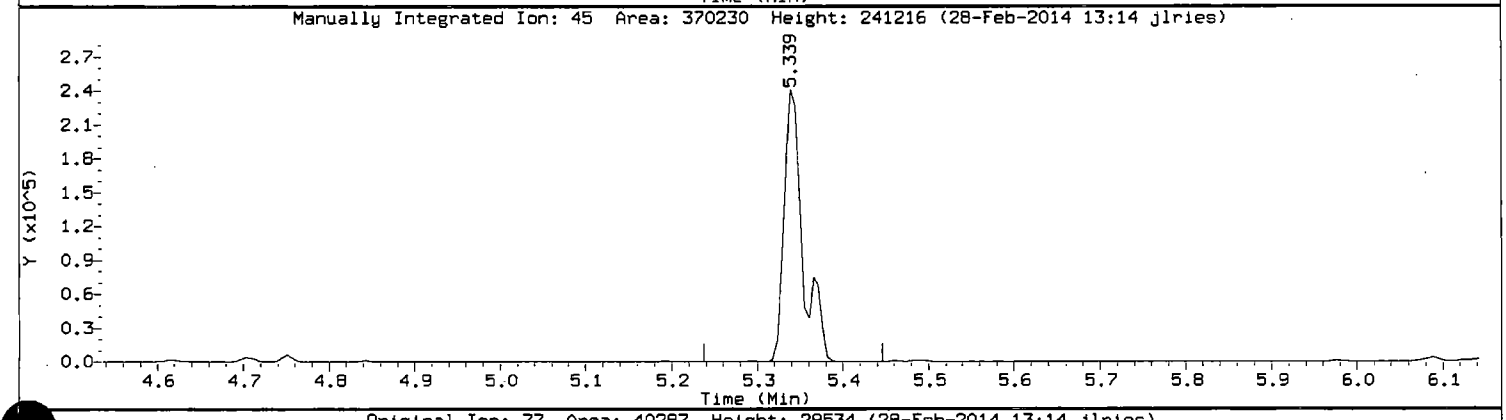
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

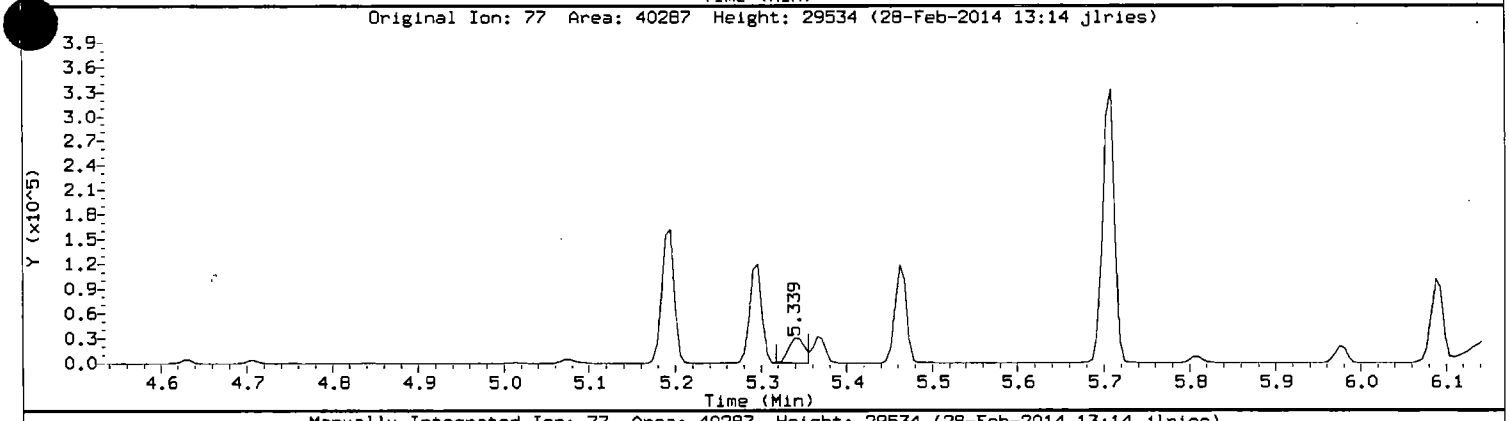


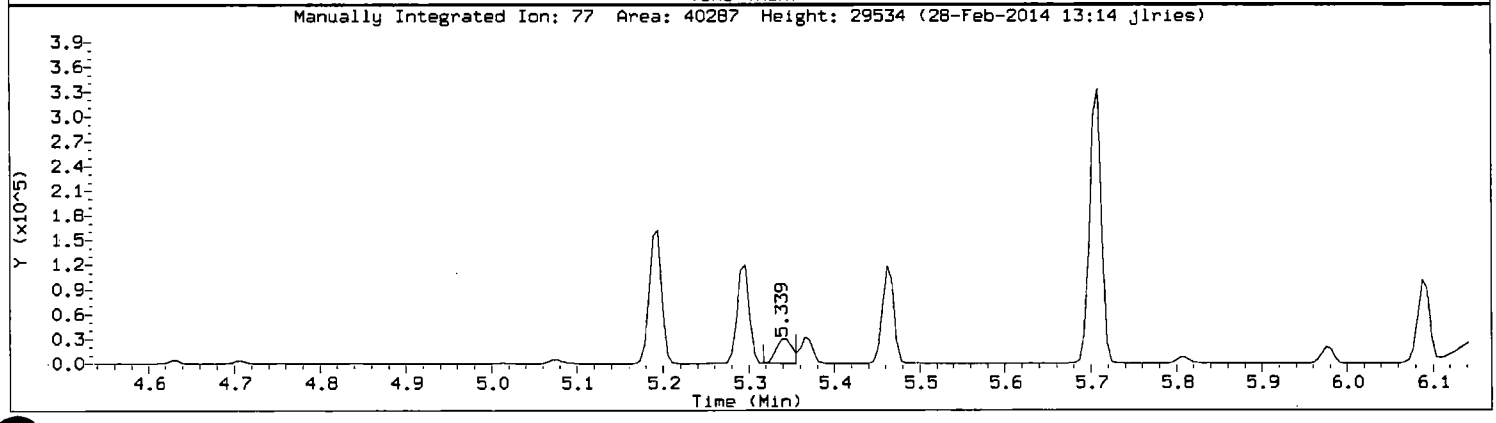
Injection Date: 28-FEB-2014 12:27
Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

Compound: bis(2-Chloroisopropyl) ether
CAS Number: 108-60-1

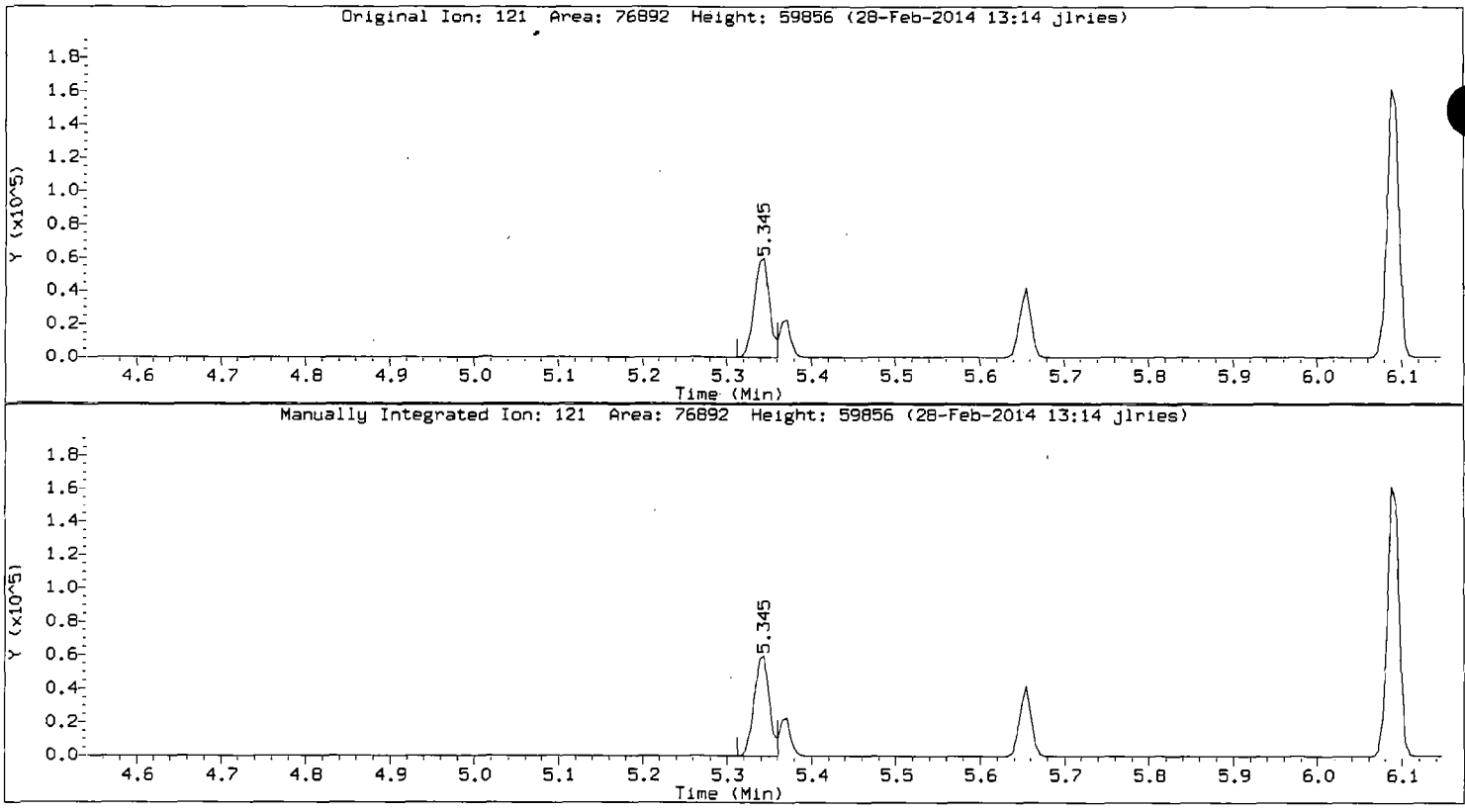






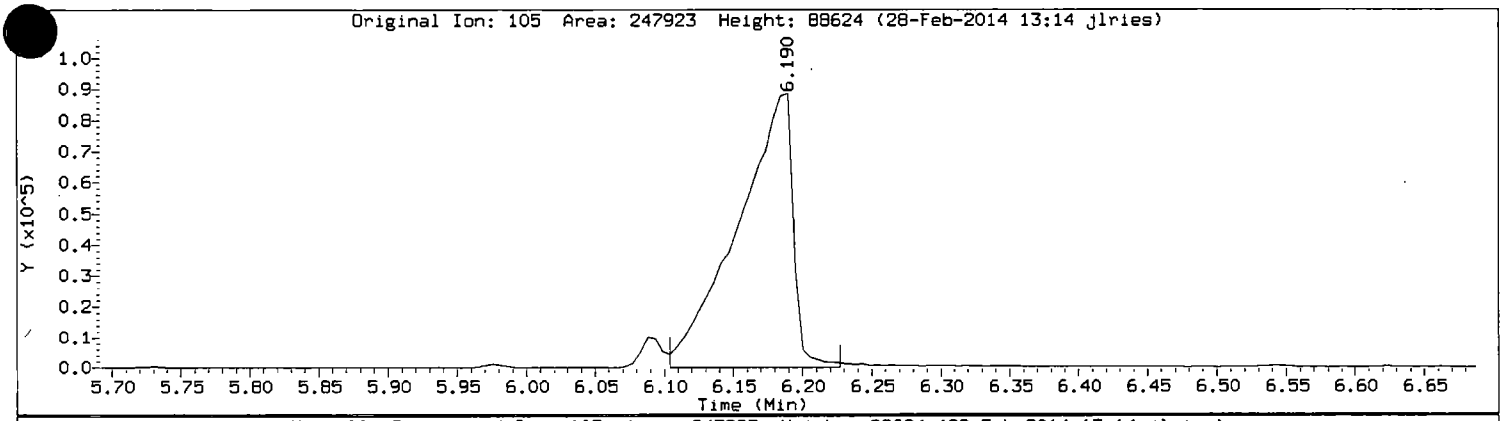


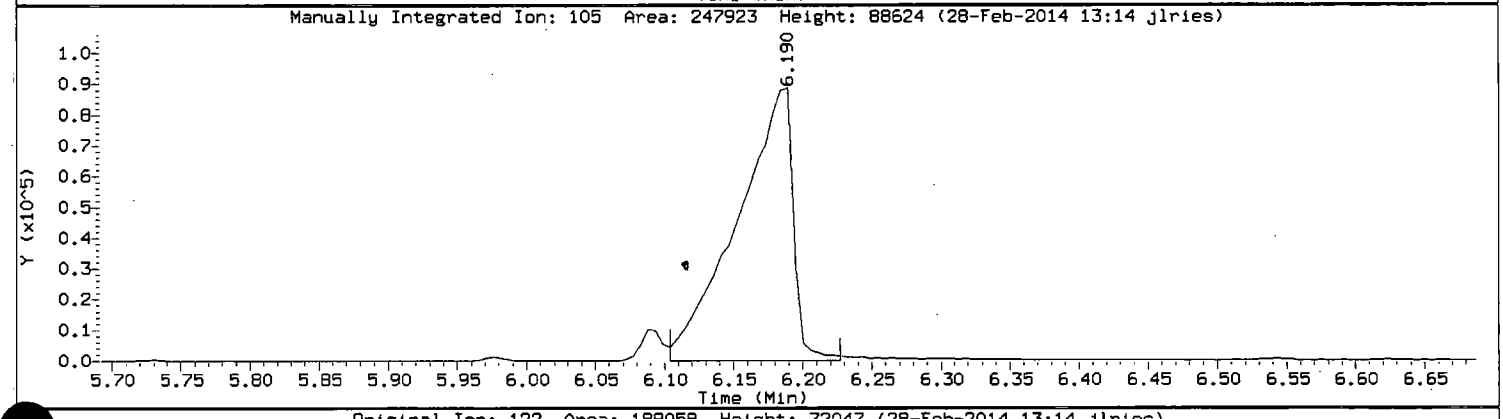
Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

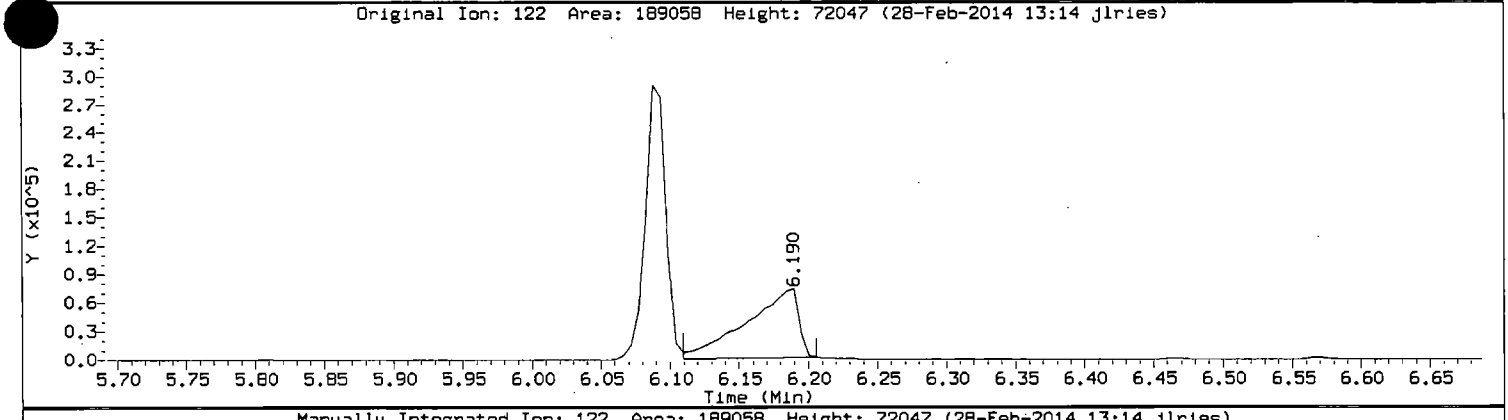


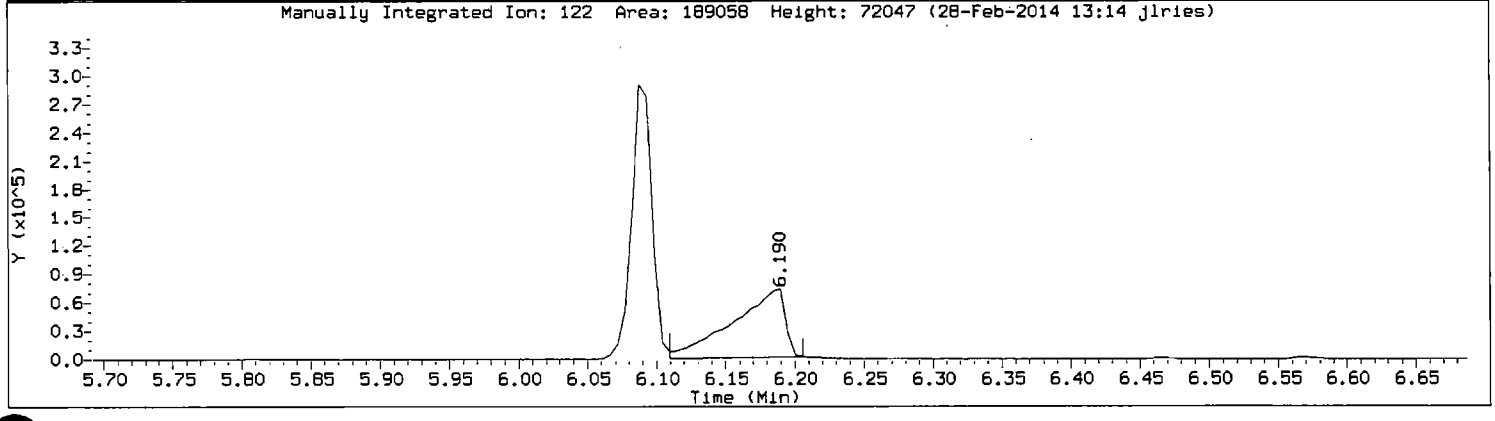
Injection Date: 28-FEB-2014 12:27
Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

Compound: Benzoic acid
CAS Number: 65-85-0

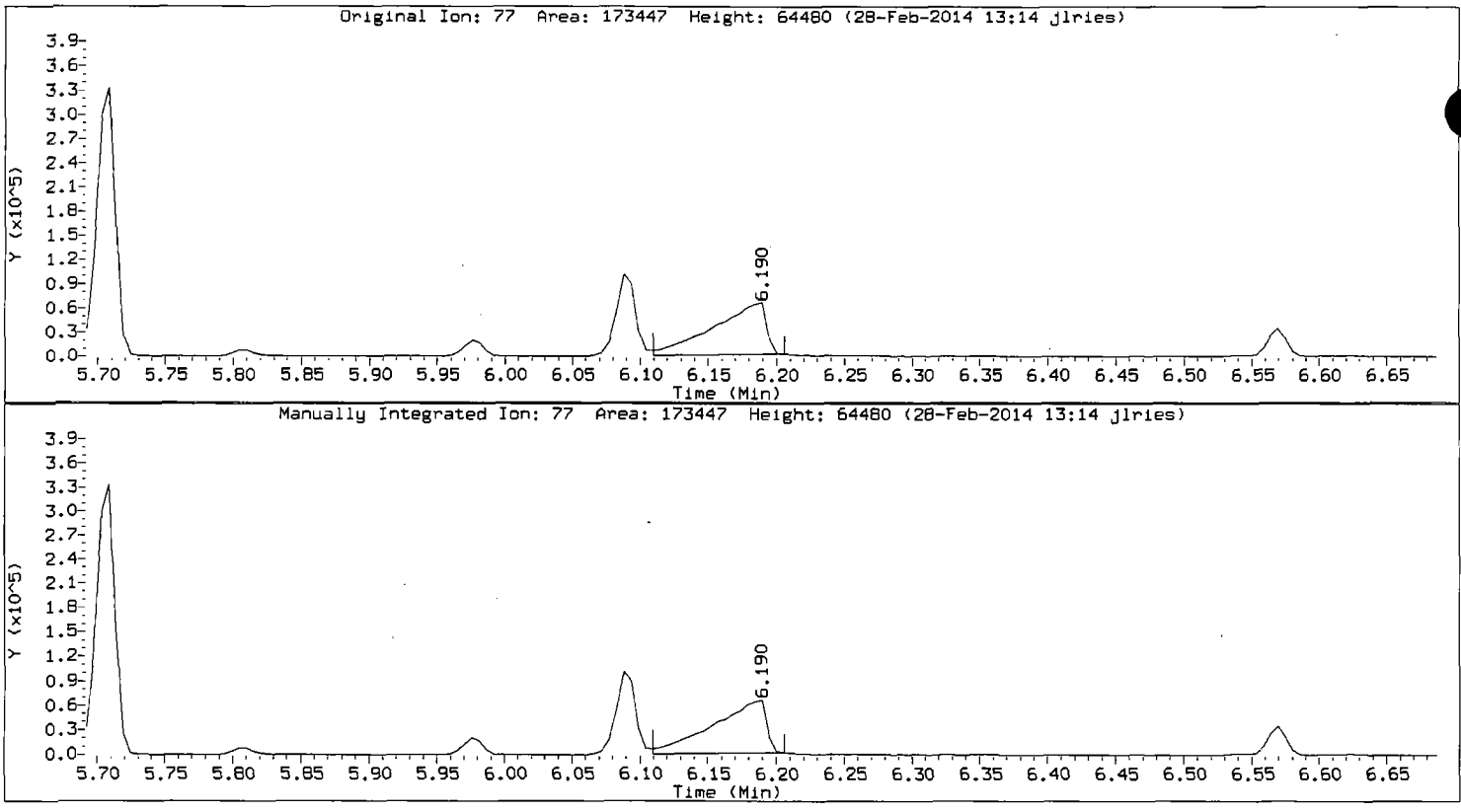






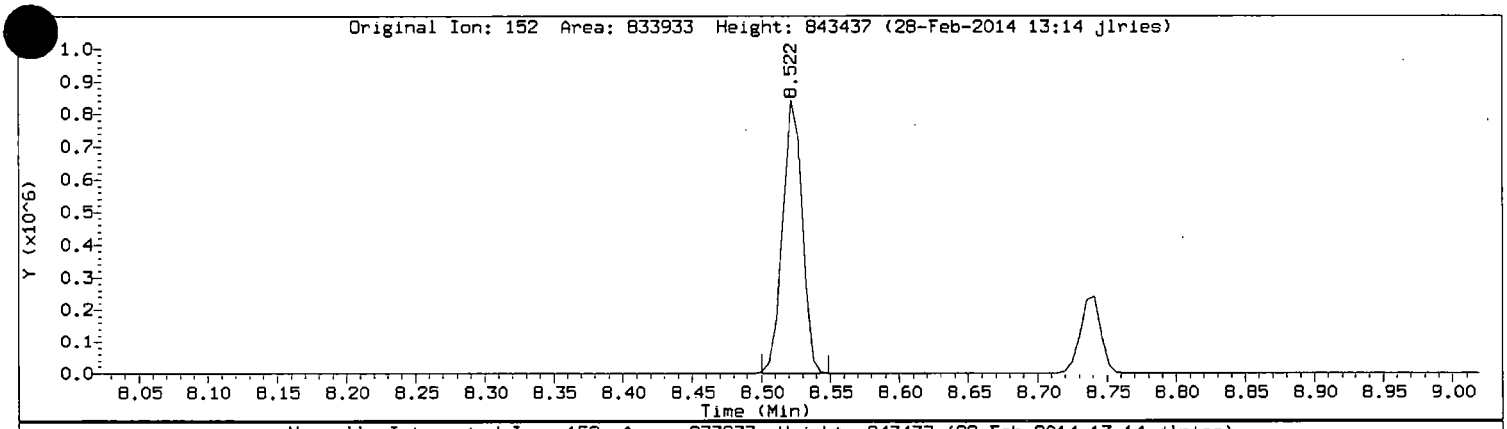


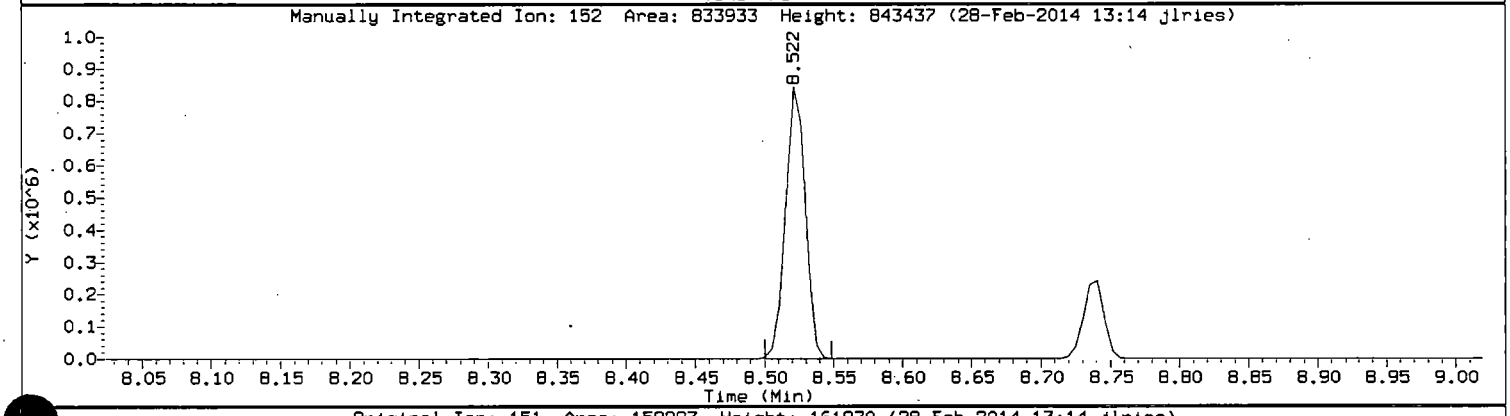
Injection Date: 28-FEB-2014 12:27
Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

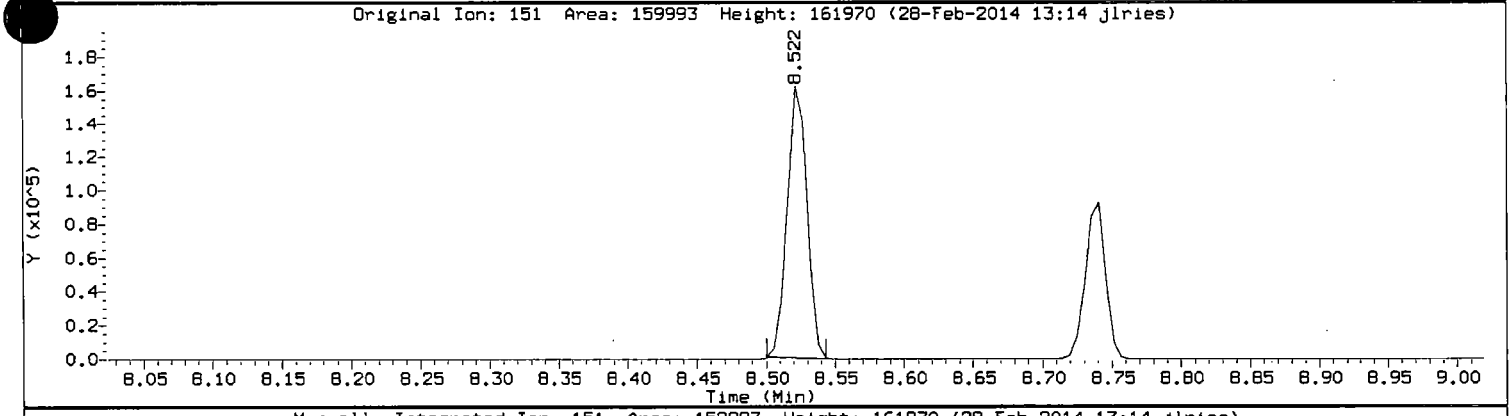


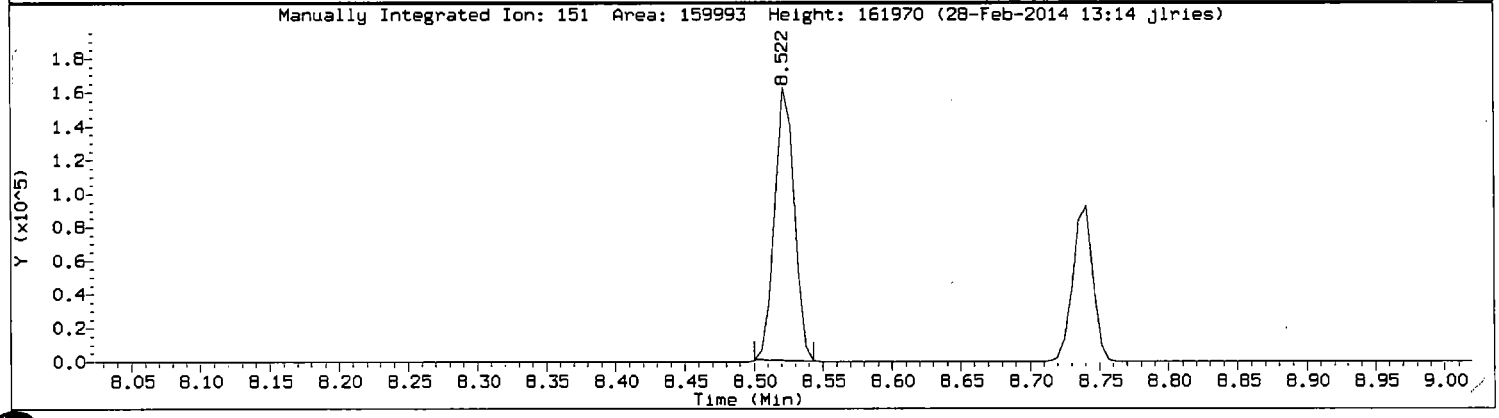
Injection Date: 28-FEB-2014 12:27
Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98

Compound: Acenaphthylene
CAS Number: 208-96-8

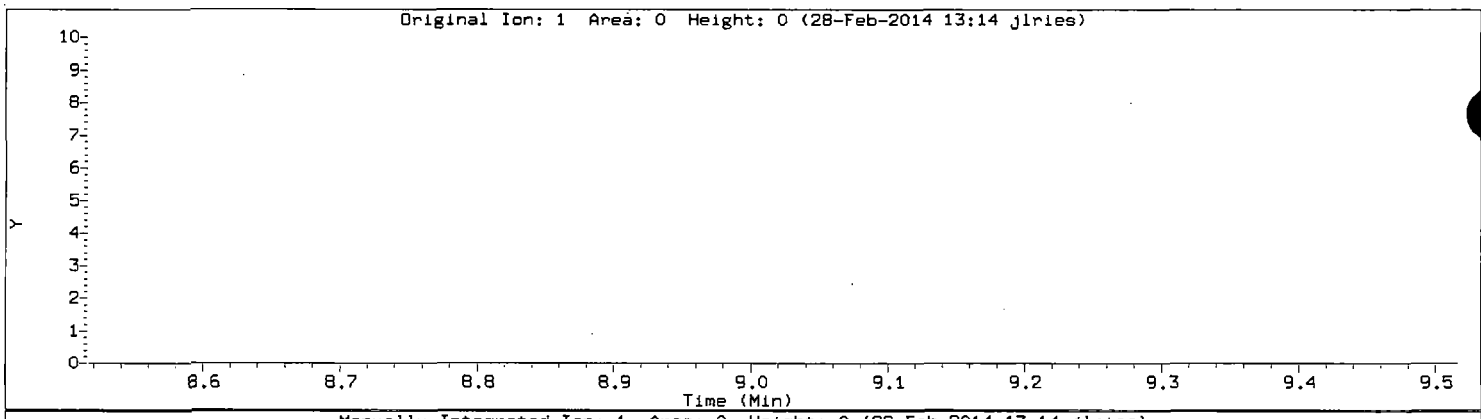


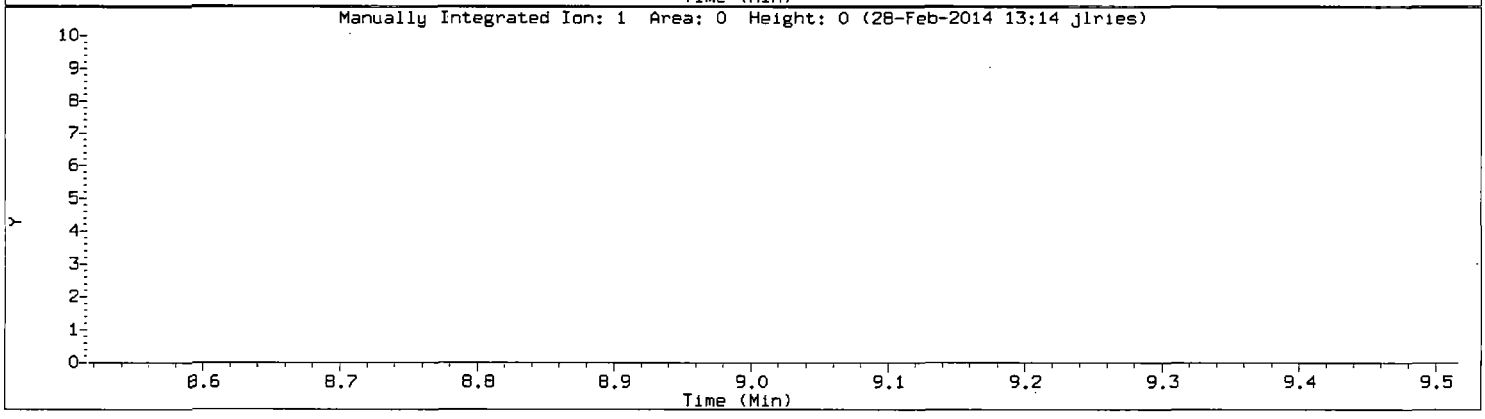






Injection Date: 28-FEB-2014 12:27
Instrument: 10mssD.i
Lab Sample ID: ICV 10328-98





Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281416.D
Report Date: 28-Feb-2014 13:29

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 28-FEB-2014 12:55
Lab File ID: 02281416.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 09:10 11:59
Lab Sample ID: ICV2 10328-47 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 Hexachlorocyclopentadiene	0.32910	0.32297	0.32297	0.050	-1.86326	40.00000	Averaged
56 N-Nitrosodiphenylamine	0.71324	0.70058	0.70058	0.010	-1.77503	20.00000	Averaged
77 Chrysene	1.05828	1.12380	1.12380	0.700	6.19030	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.03870	1.08970	1.08970	0.400	4.91029	40.00000	Averaged

Average %D / Drift Results.
Calculated Average %D/Drift = 3.68472
Maximun Average %D/Drift = 40.00000
* Passed Average %D/Drift Test.

Data file: \\192.168.10.12\chem\10mssD.i\022814B.b\02281416.D
Report Date: 28-Feb-2014 13:29

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\022814B.b\02281416.D
Lab Smp Id: ICV2 10328-47
Inj Date : 28-FEB-2014 12:55
Operator : JLR Inst ID: 10mssD.i
Smp Info : ICV2 10328-47
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Meth Date : 28-Feb-2014 13:29 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ChrysDIPDIB.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
*	9 1,4-Dichlorobenzene-d4	152	5.071	5.071	(1.000)	109209	40.0000		
*	28 Naphthalene-d8	136	6.537	6.537	(1.000)	429195	40.0000		(Q)
	35 Hexachlorocyclopentadiene	237	7.596	7.596	(0.874)	143831	80.0000	78.5	
*	45 Acenaphthene-d10	164	8.692	8.692	(1.000)	222670	40.0000		
	56 N-Nitrosodiphenylamine	169	9.505	9.505	(0.901)	543016	80.0000	78.6	
*	63 Phenanthrene-d10	188	10.548	10.548	(1.000)	387545	40.0000		
*	76 Chrysene-d12	240	13.843	13.843	(1.000)	344625	40.0000		(Q)
	77 Chrysene	228	13.881	13.881	(1.003)	774576	80.0000	85.0	
*	82 Perylene-d12	264	15.763	15.763	(1.000)	356532	40.0000		
	84 Dibenzo(a,h)anthracene	278	17.753	17.753	(1.126)	777029	80.0000	83.9	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281416.D
Report Date: 28-Feb-2014 13:29

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 02281416.D
Lab Smp Id: ICV2 10328-47
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\022814B.b\8270D-022814.m
Misc Info:

Calibration Date: 28-FEB-2014
Calibration Time: 12:27
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	109209	-7.58
28 Naphthalene-d8	466266	233133	932532	429195	-7.95
45 Acenaphthene-d10	245325	122663	490650	222670	-9.23
63 Phenanthrene-d10	405966	202983	811932	387545	-4.54
76 Chrysene-d12	427978	213989	855956	344625	-19.48
82 Perylene-d12	418836	209418	837672	356532	-14.88

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	-0.00
28 Naphthalene-d8	6.54	6.04	7.04	6.54	-0.08
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.06
63 Phenanthrene-d10	10.55	10.05	11.05	10.55	-0.00
76 Chrysene-d12	13.85	13.35	14.35	13.84	-0.04
82 Perylene-d12	15.76	15.26	16.26	15.76	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

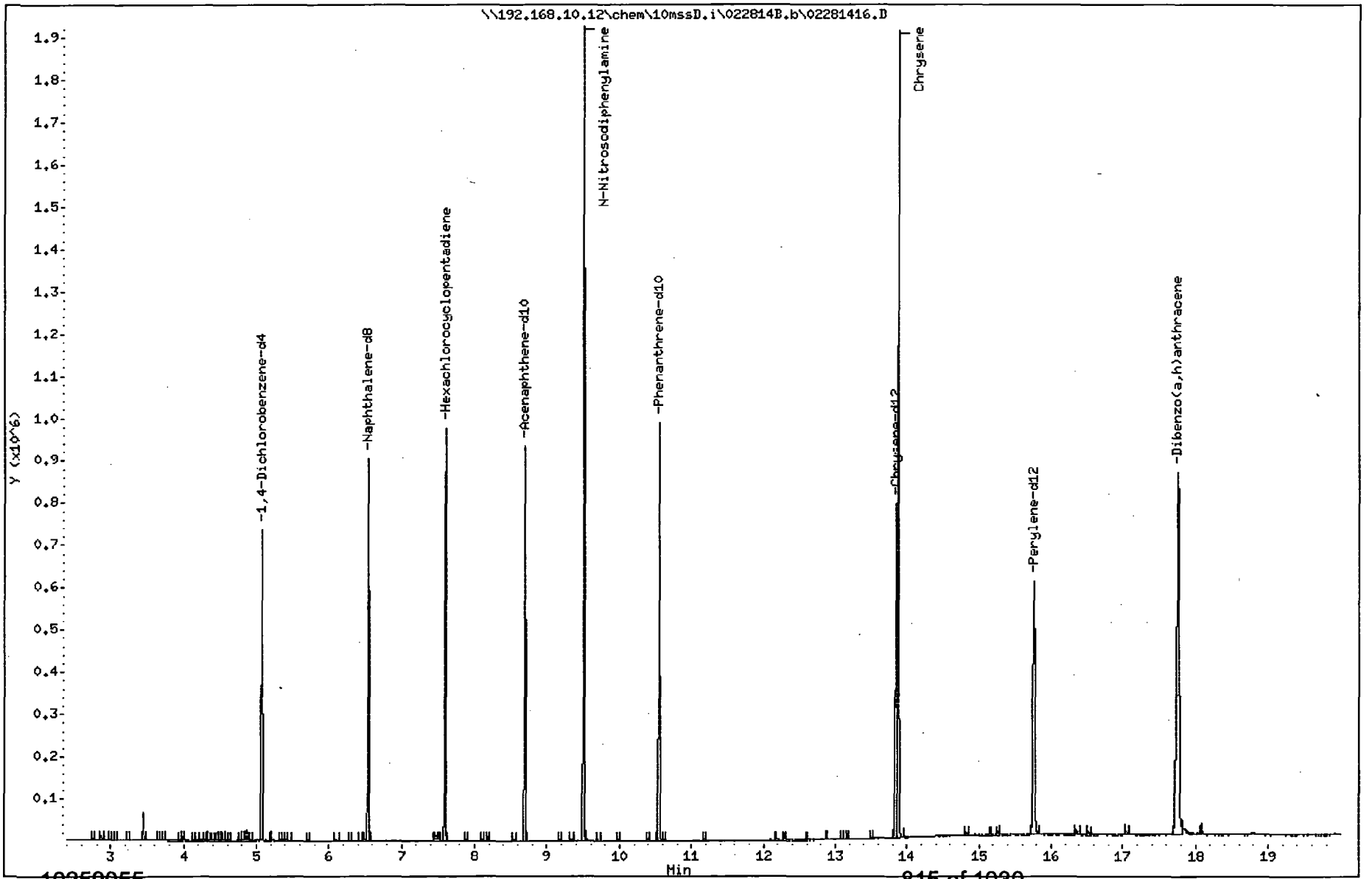
Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281416.D
Date : 28-FEB-2014 12:55
Client ID:
Sample Info: ICV2 10328-47

Instrument: 10mssD.i

Operator: JLR

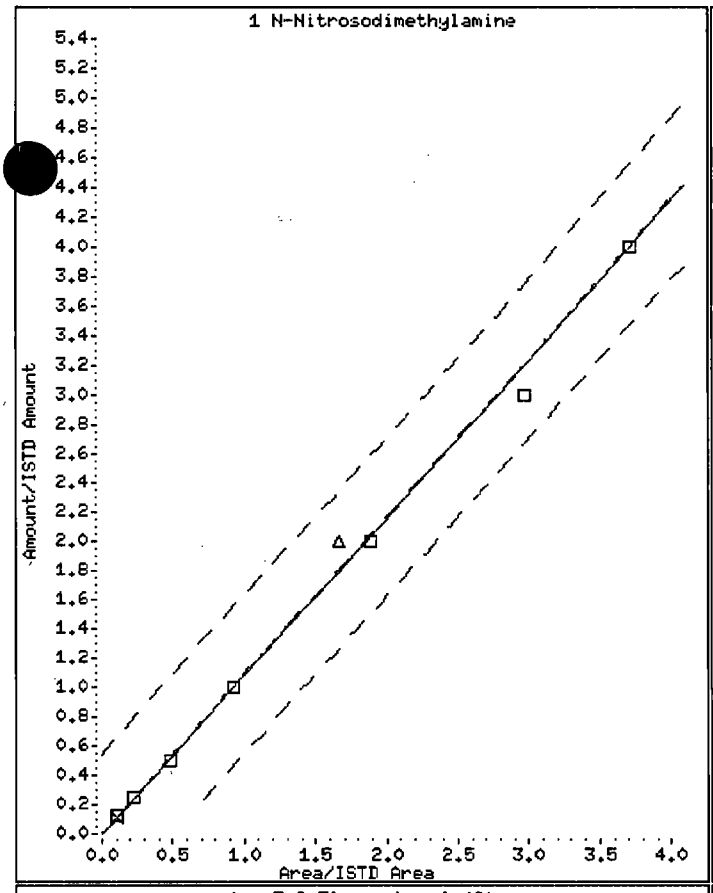
Column phase: DB-5MS

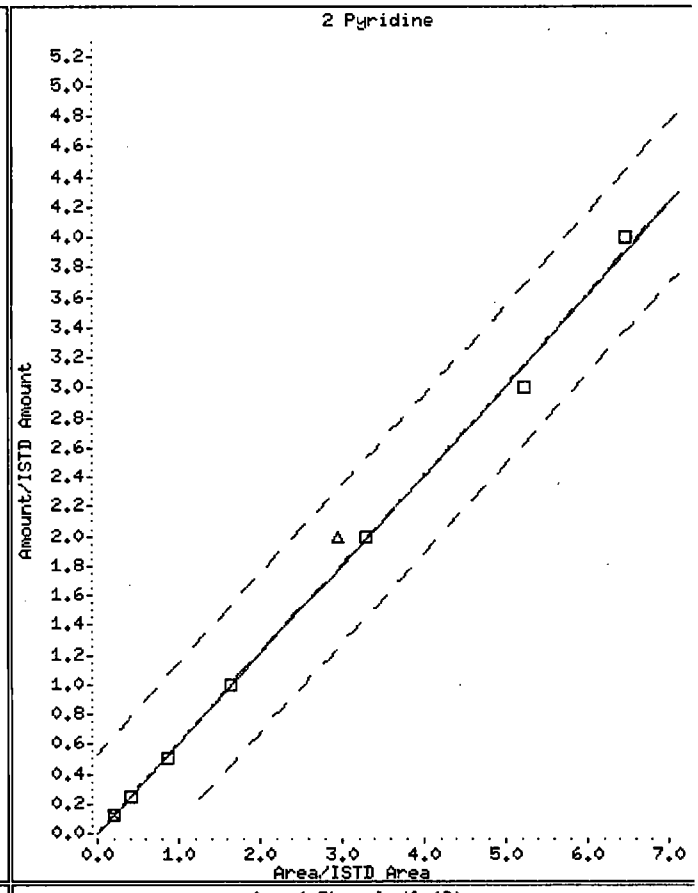
Column diameter: 0.25

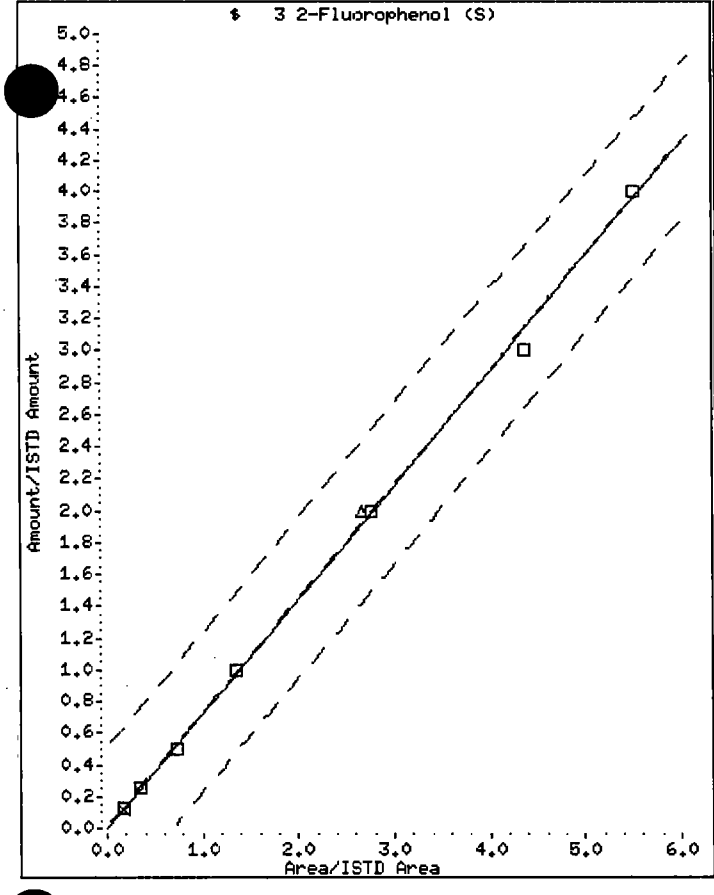


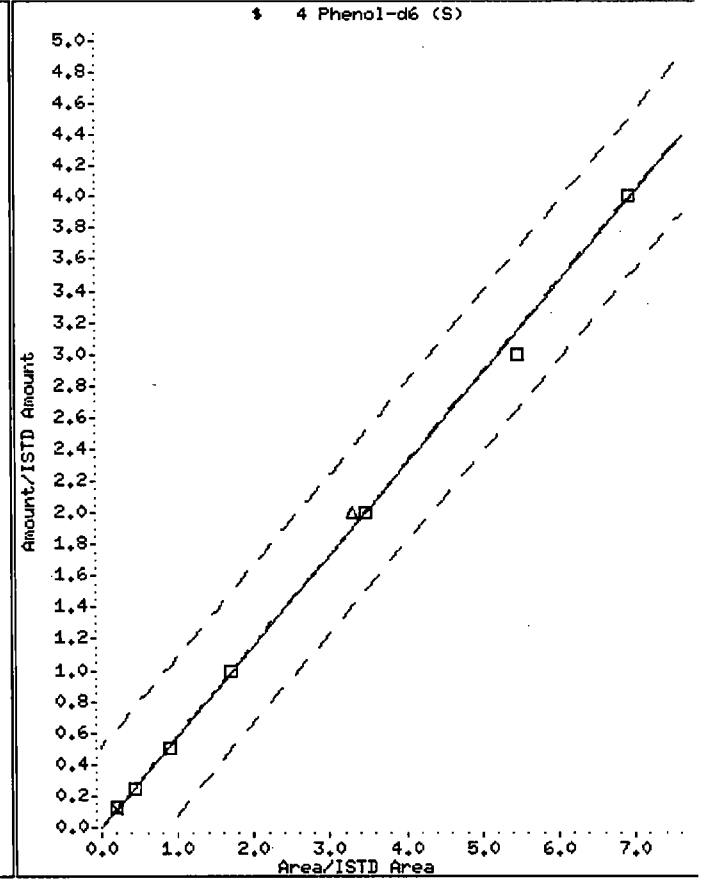
Injection Date: 28-FEB-2014 12:55
Instrument: 10mssD.i
Lab Sample ID: ICV2 10328-47
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mssD.i\022814B.b\02281414.D









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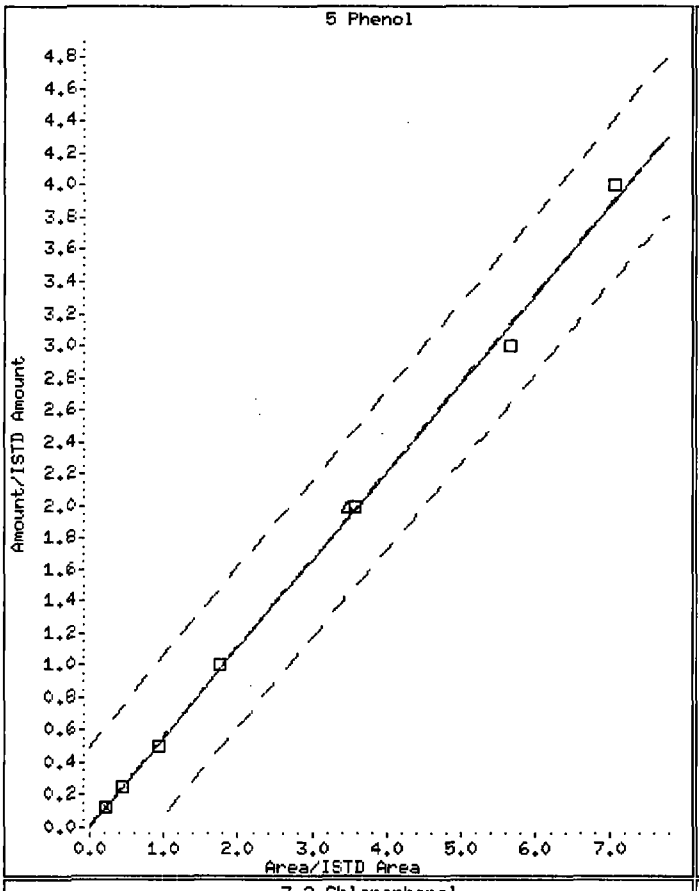

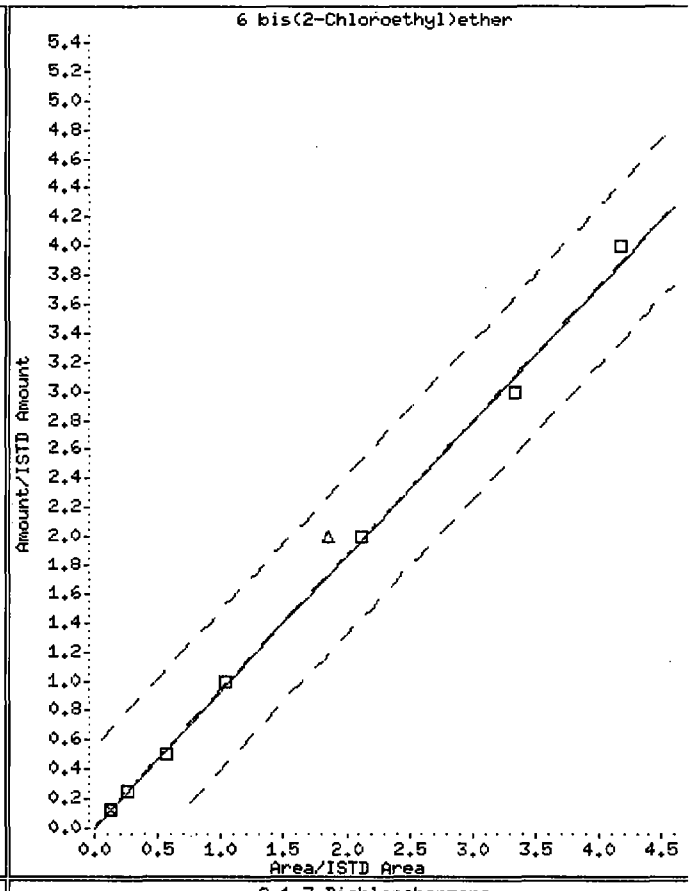

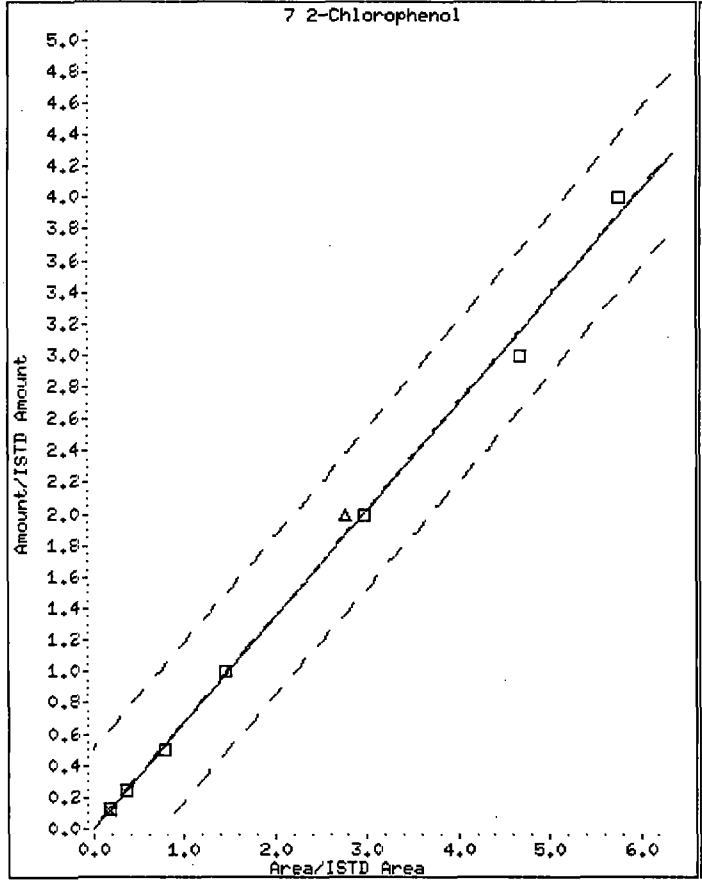

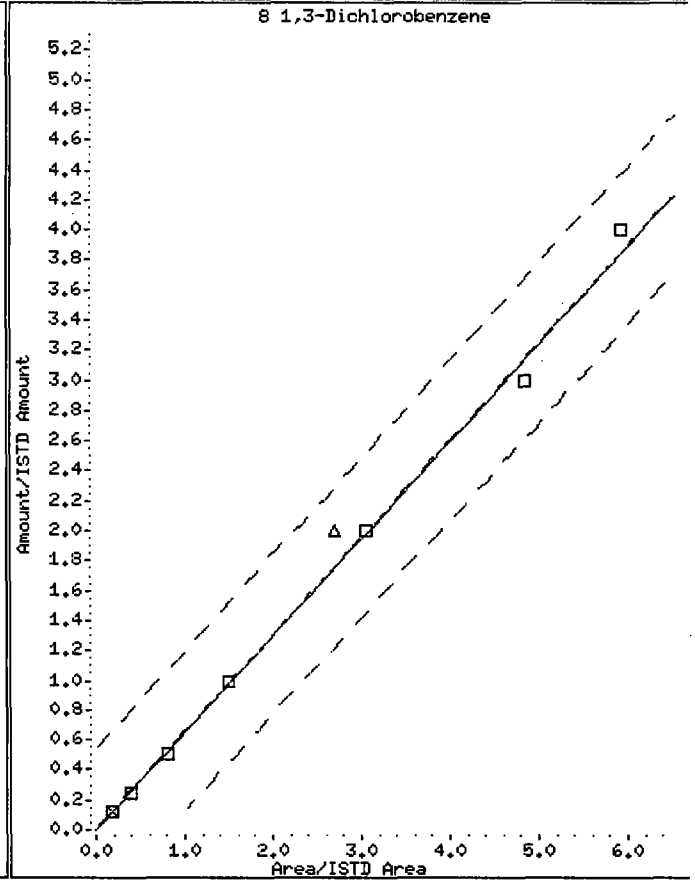

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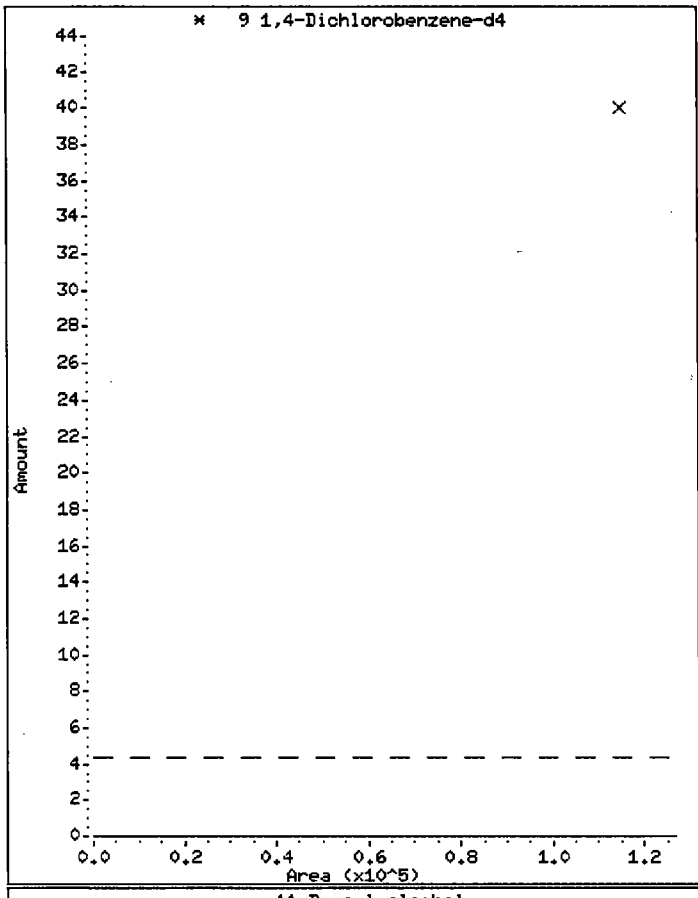

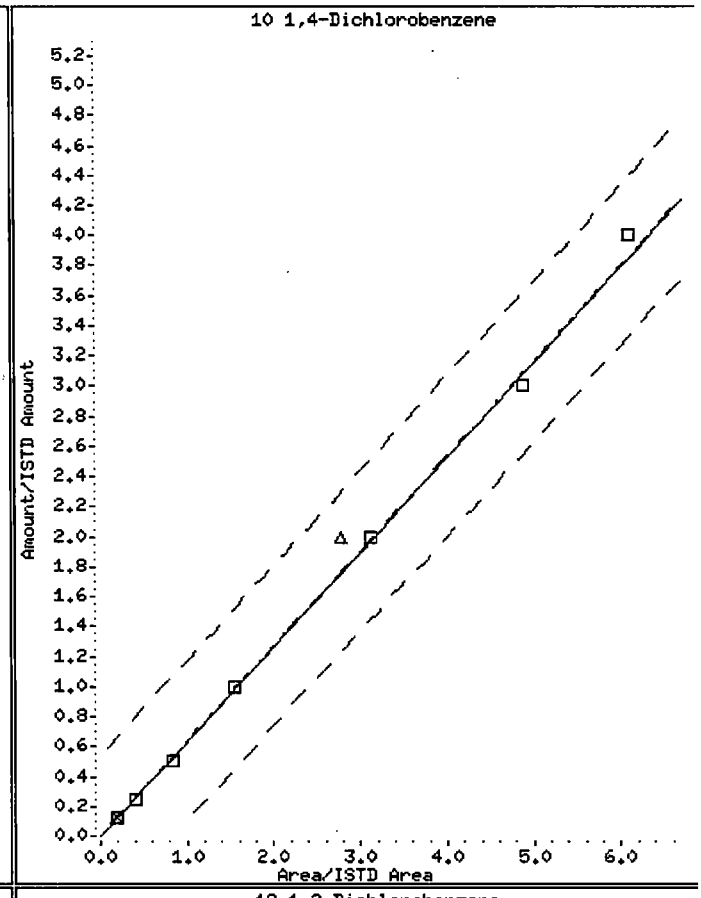

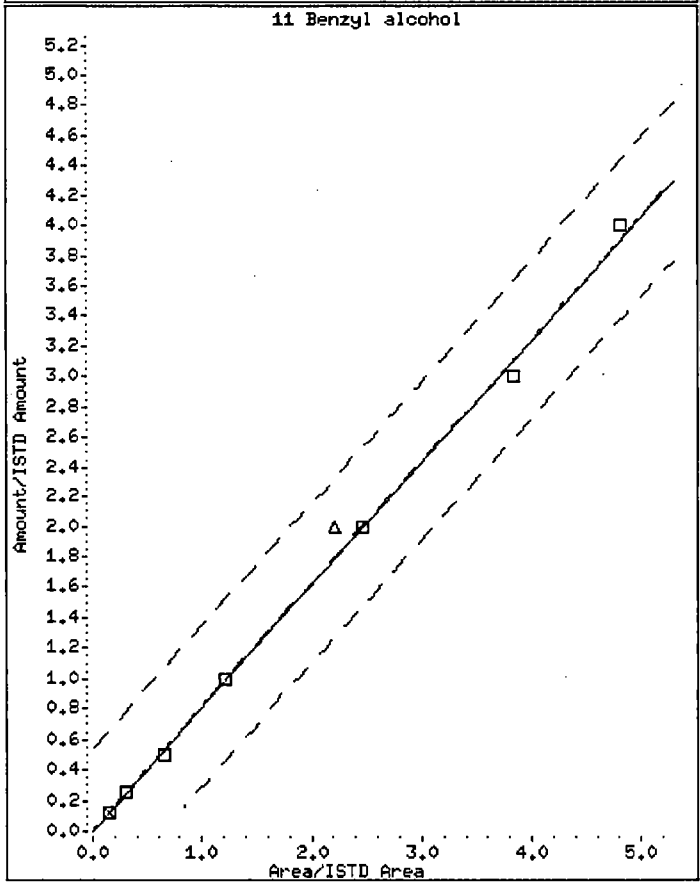

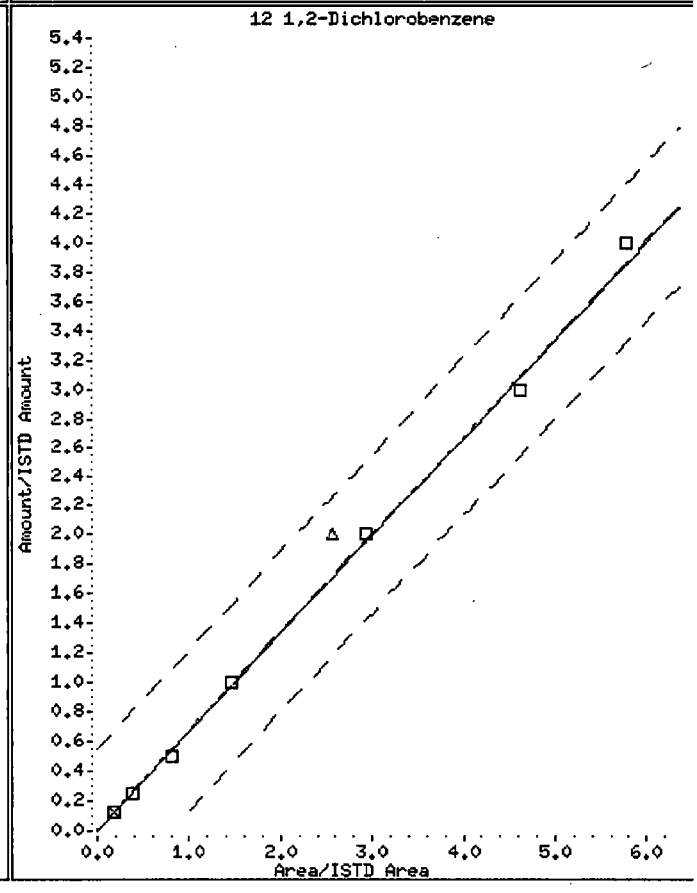

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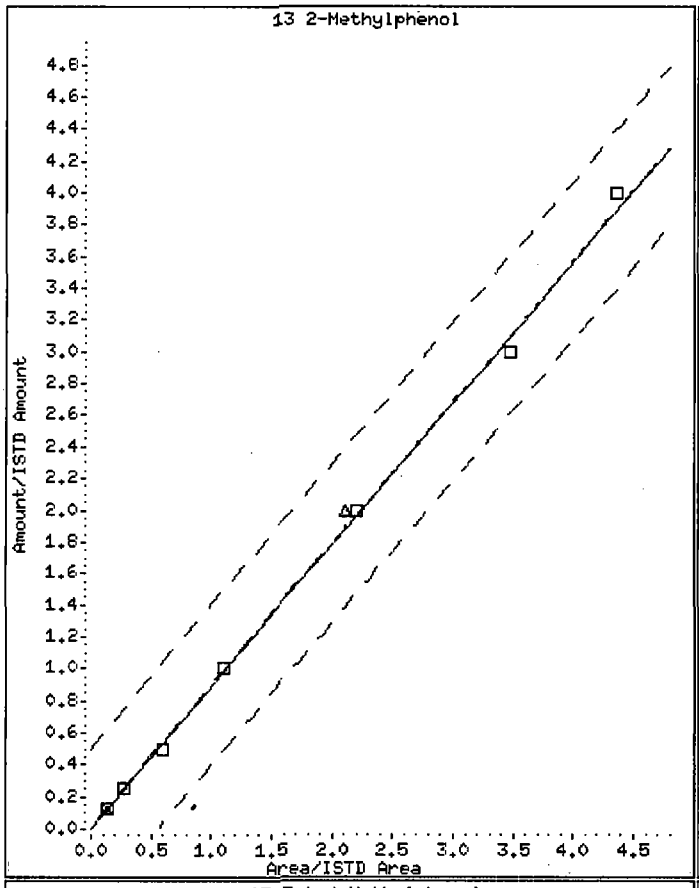

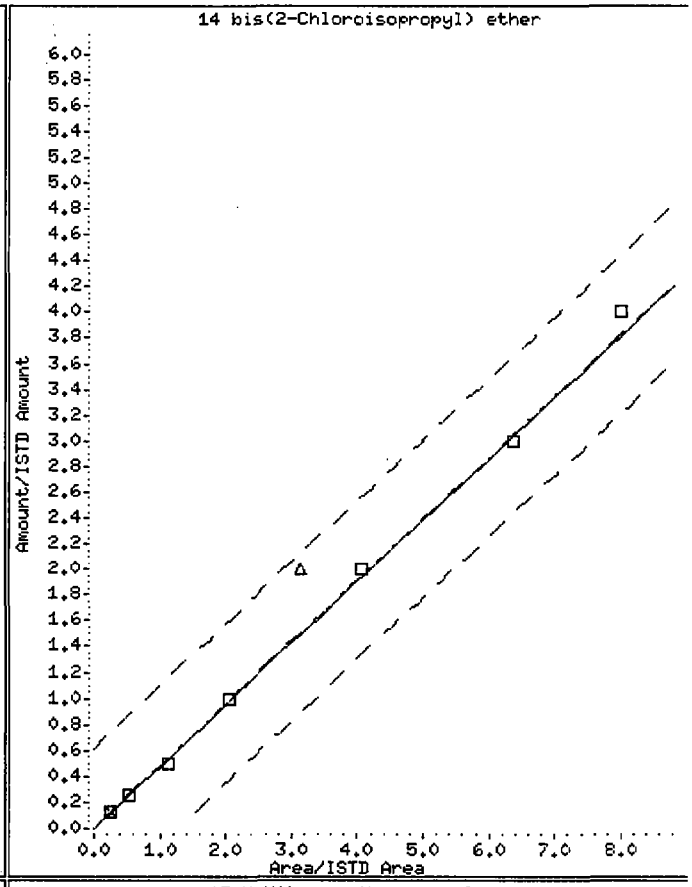

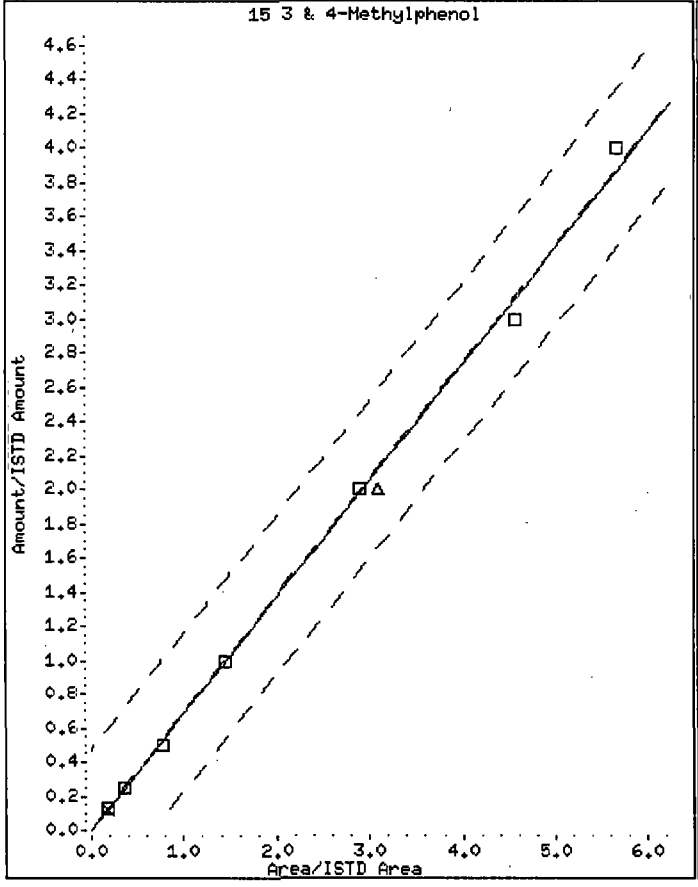

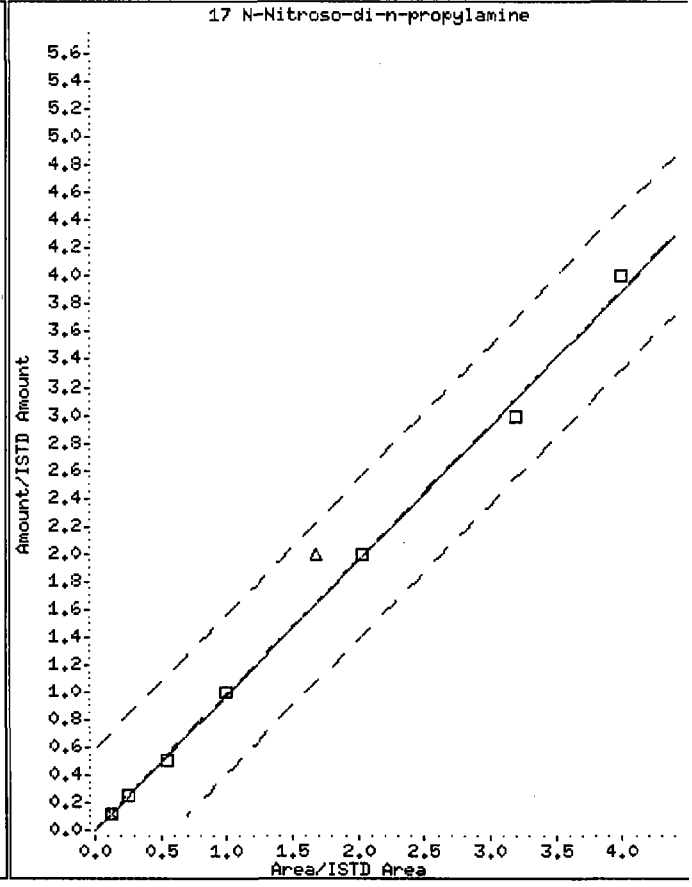

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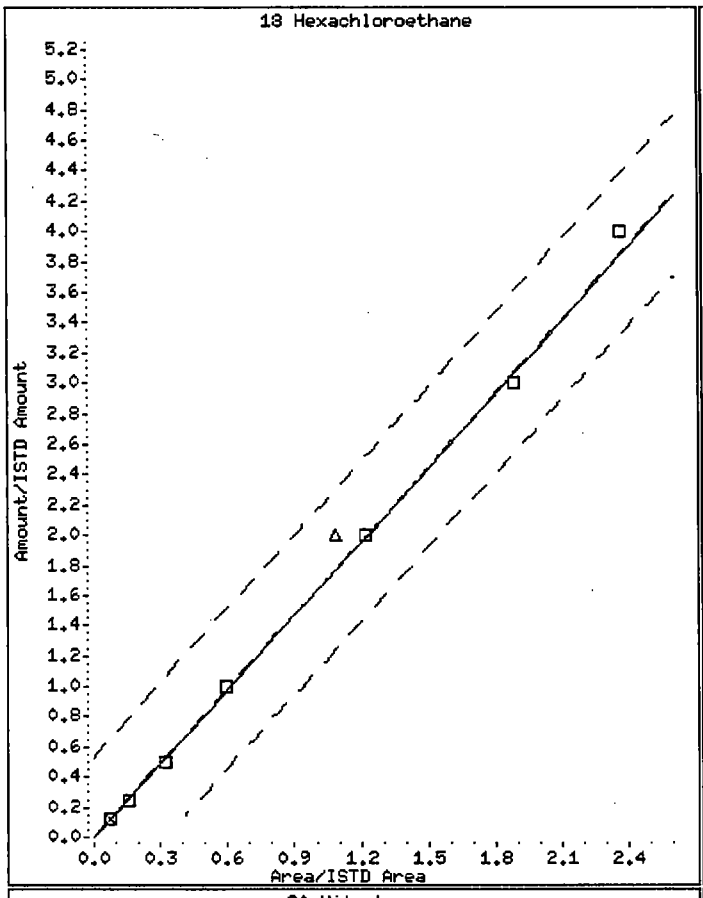

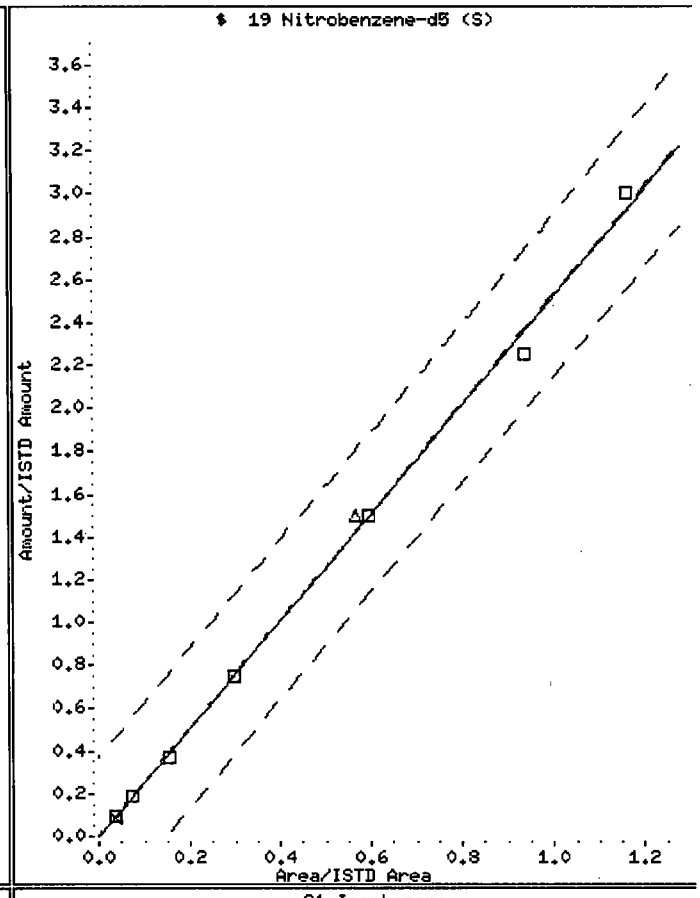

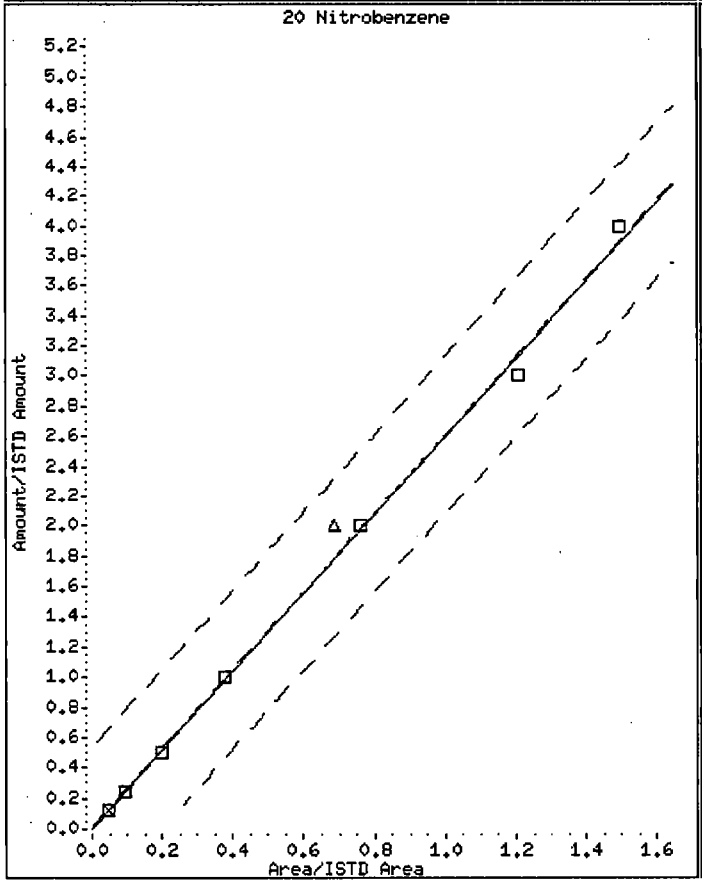

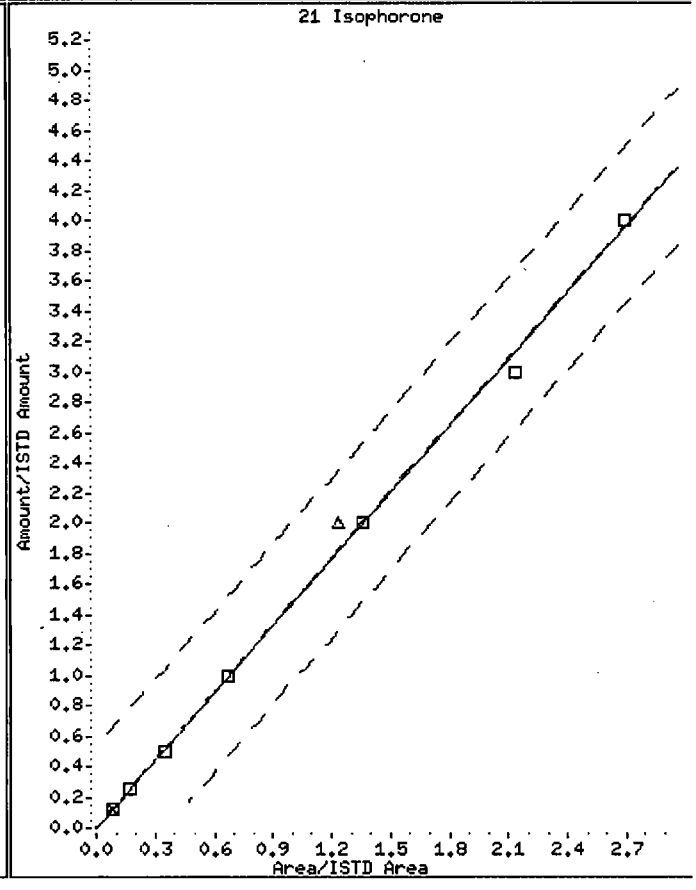

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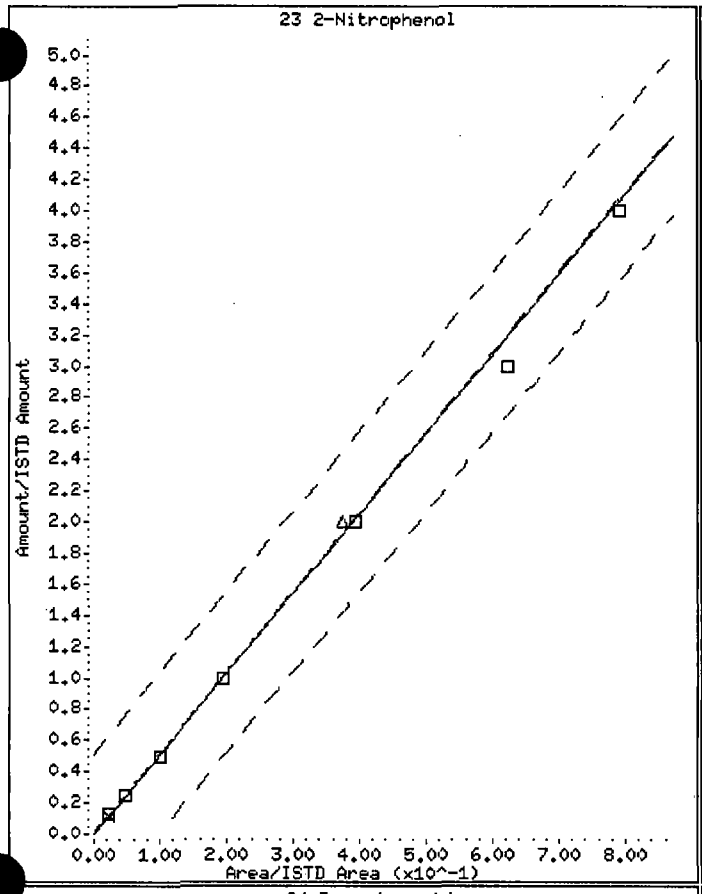

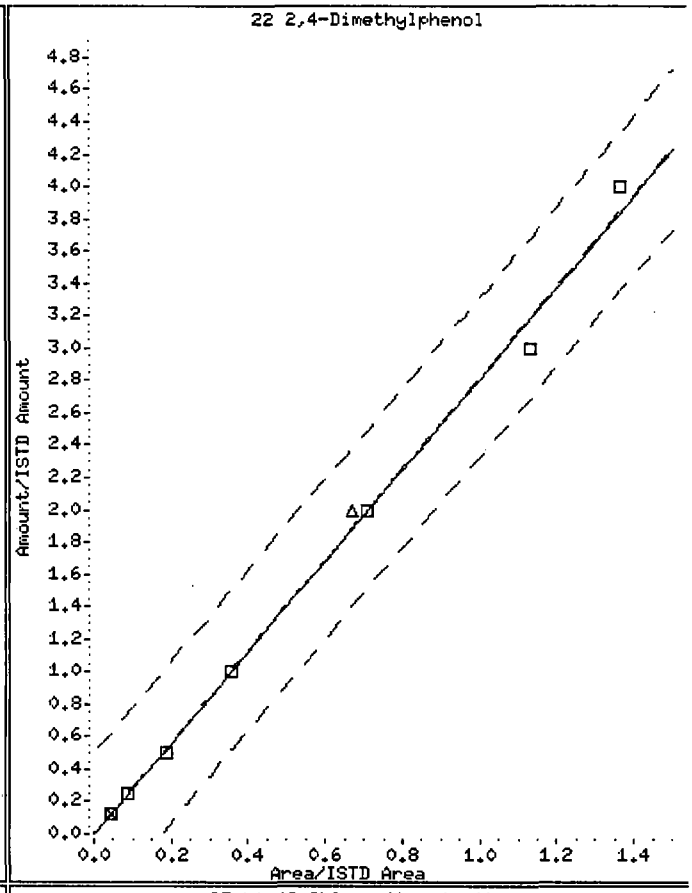

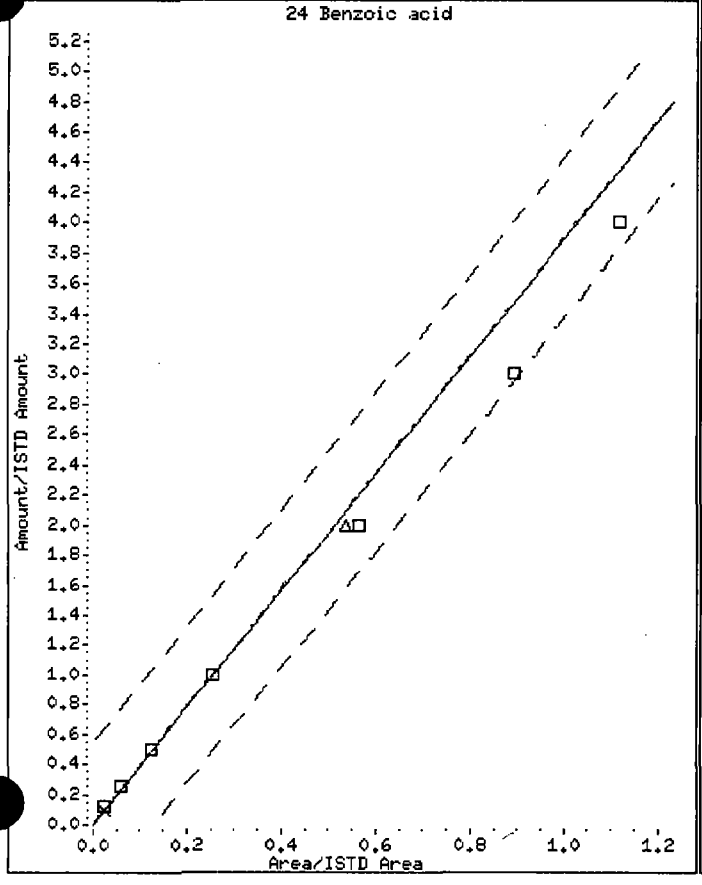

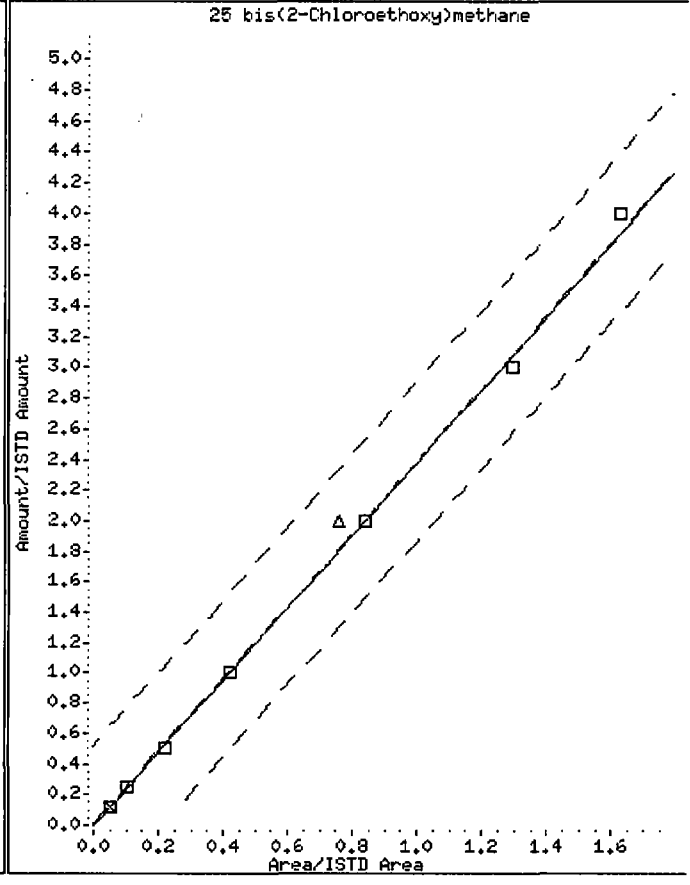

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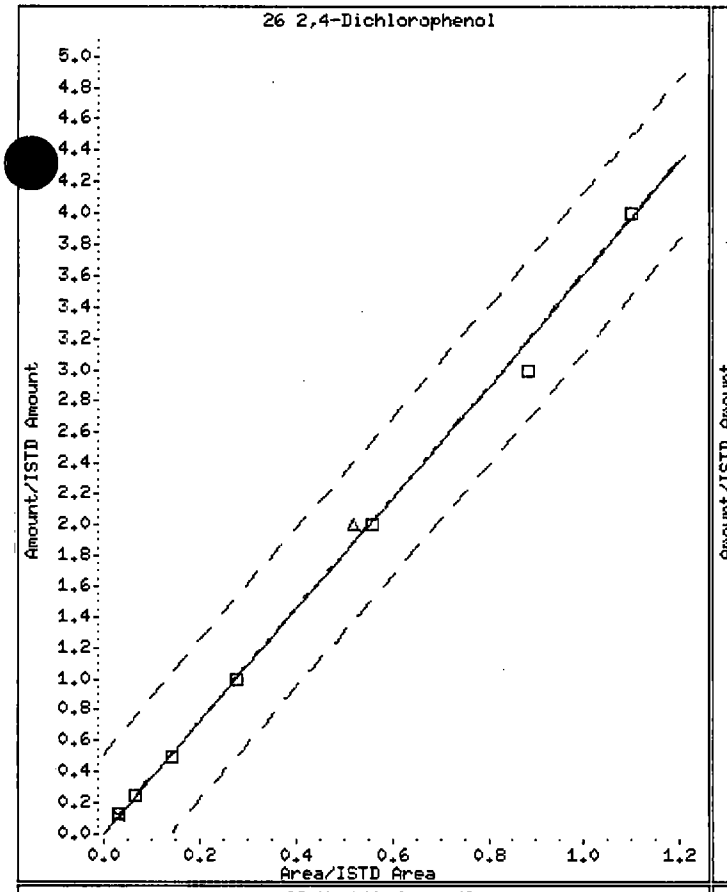

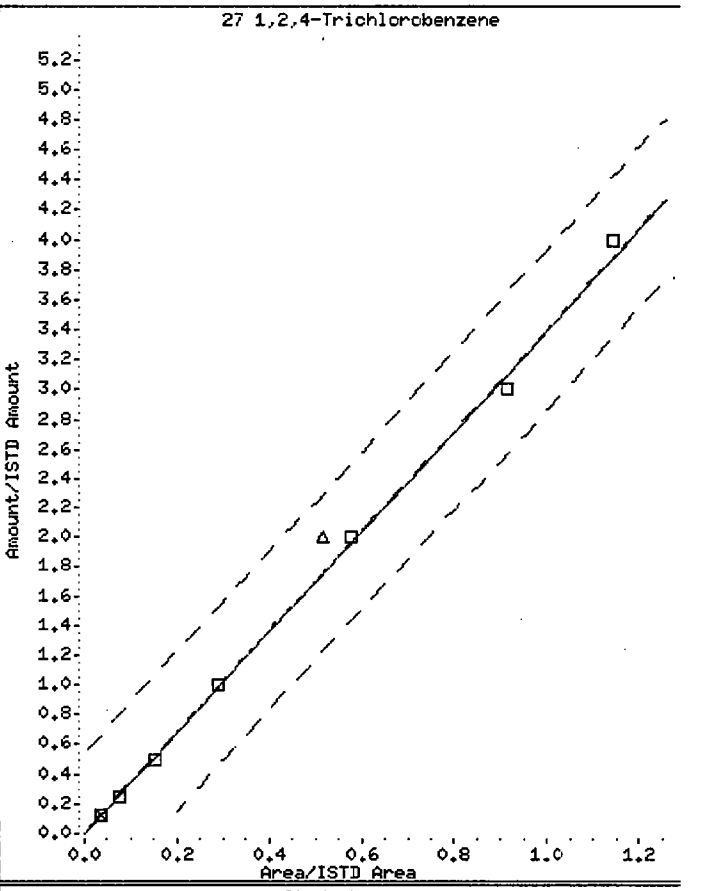

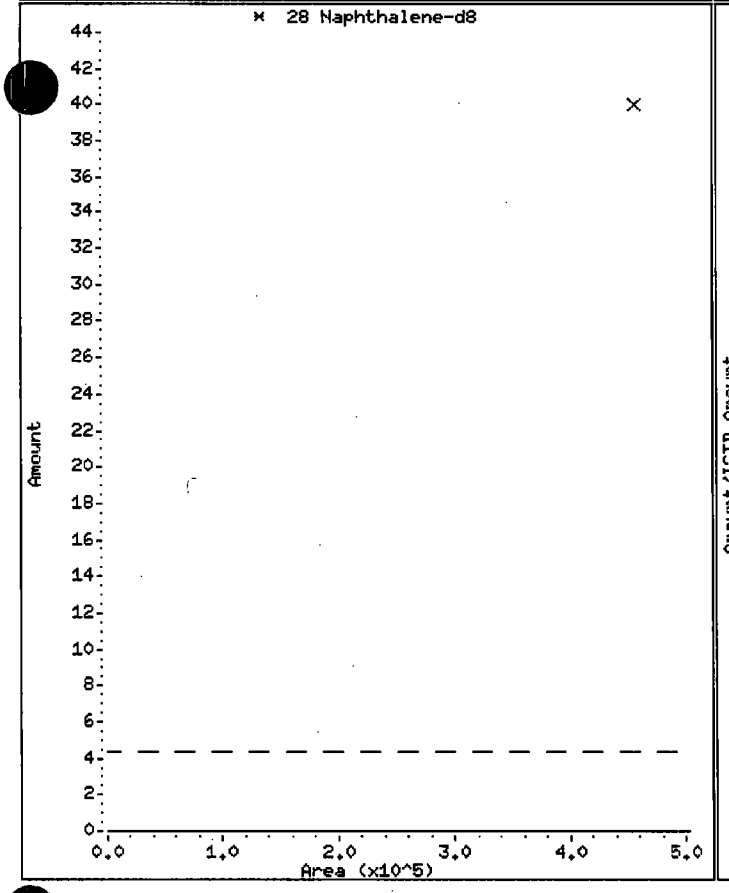

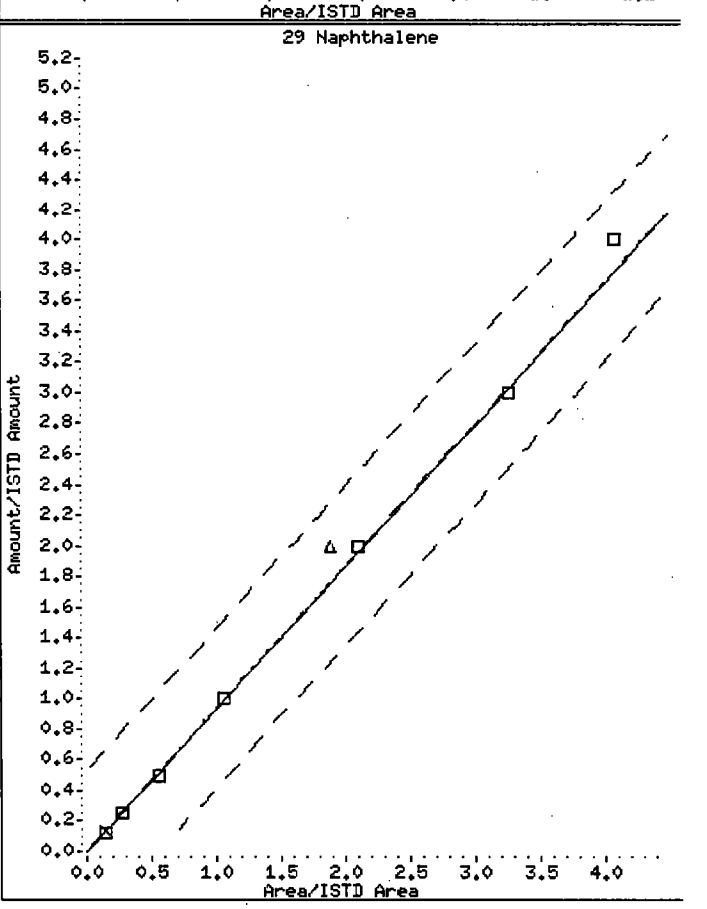

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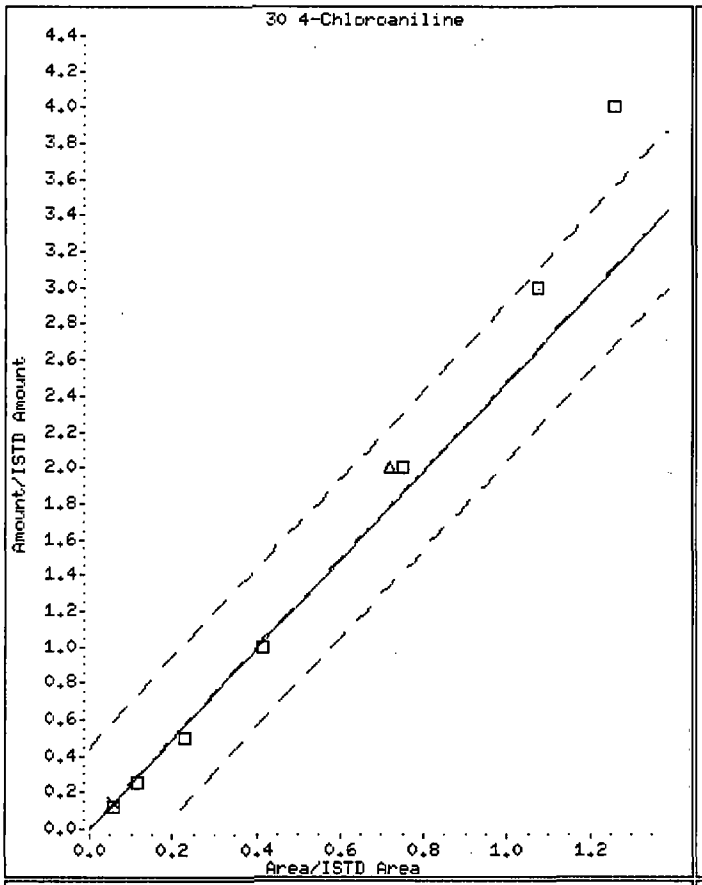

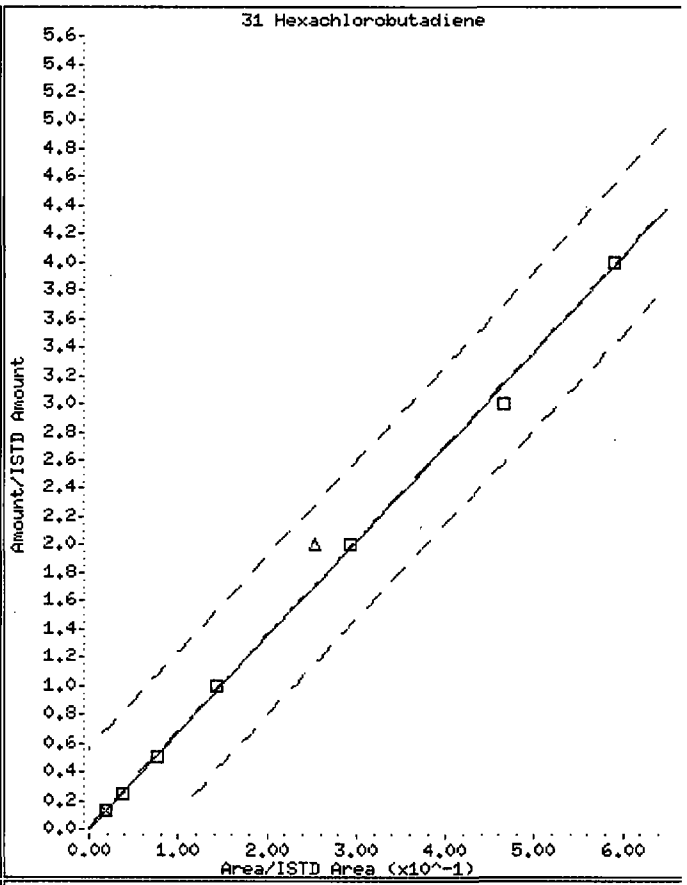

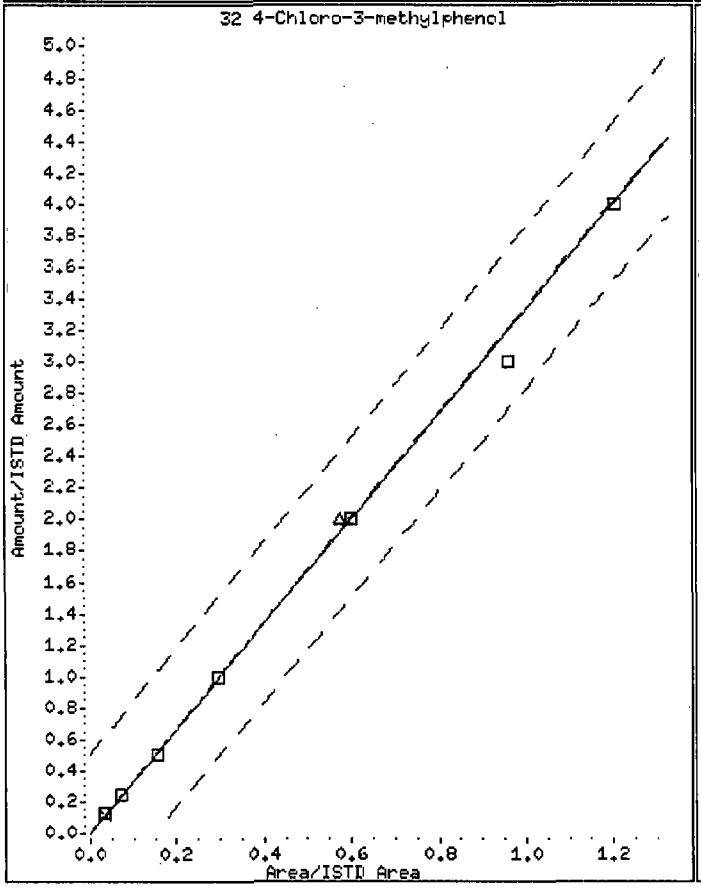

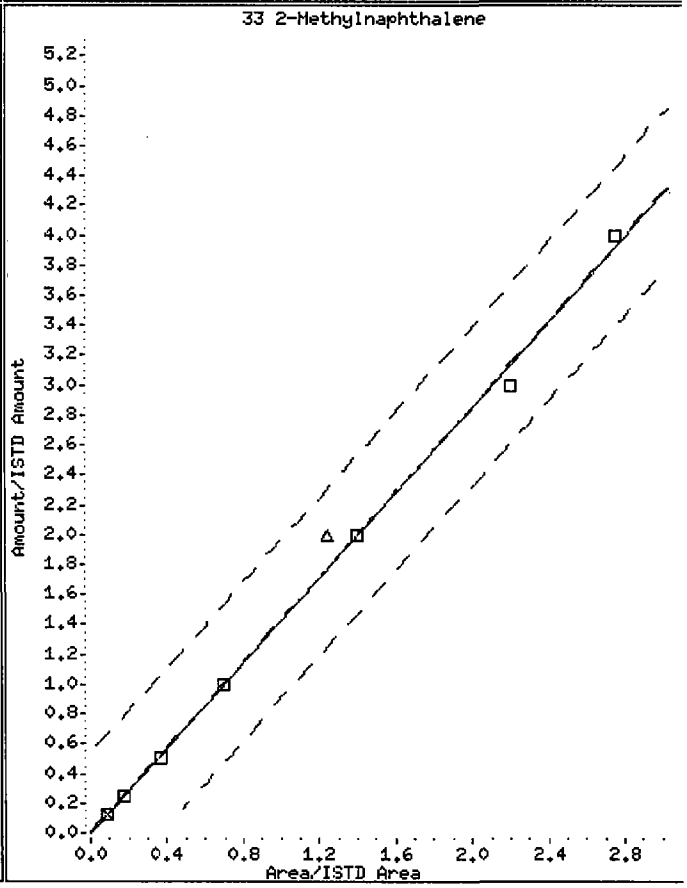

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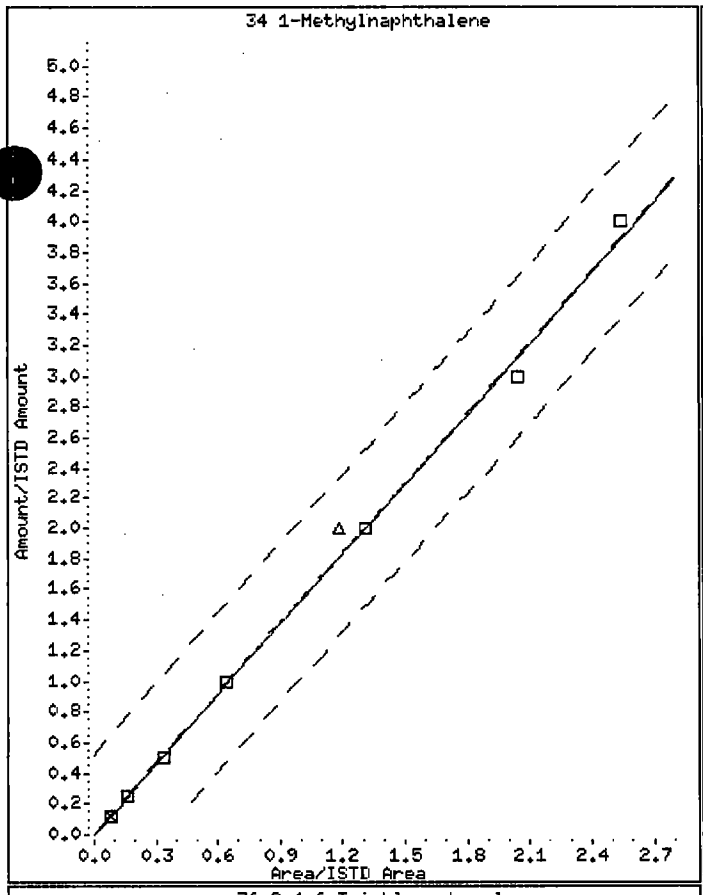

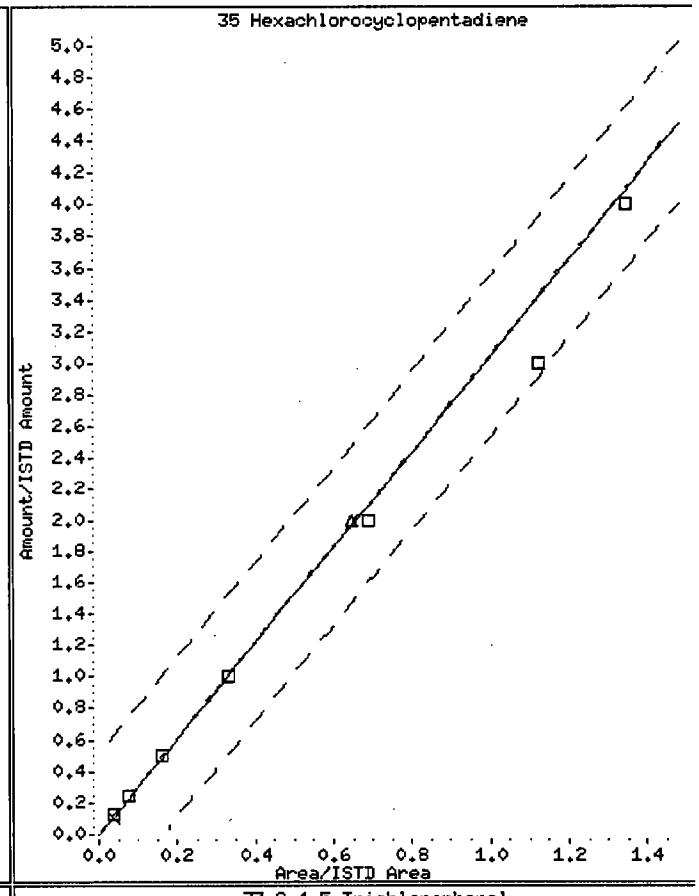

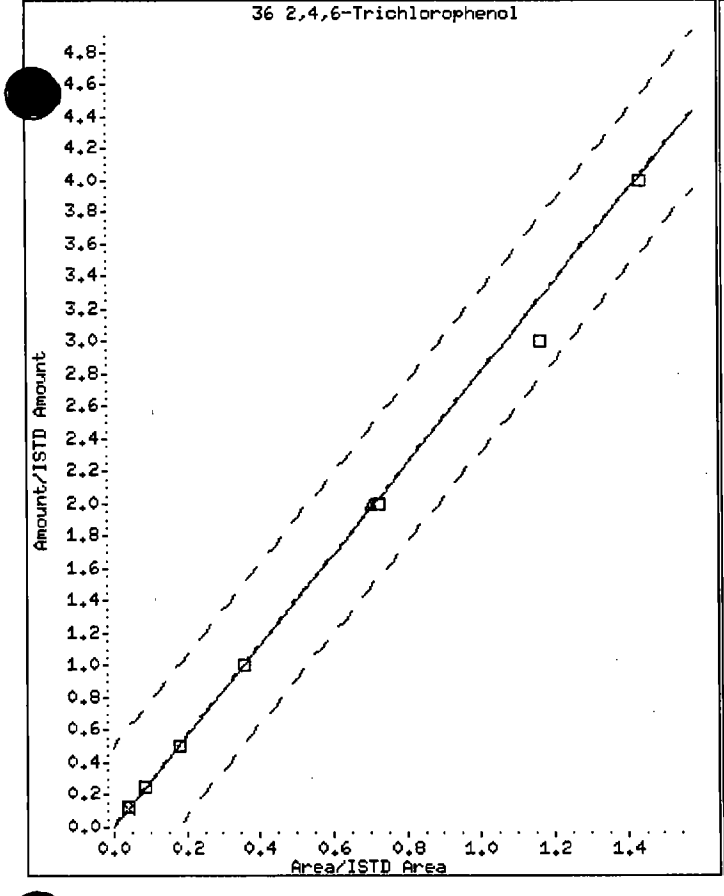

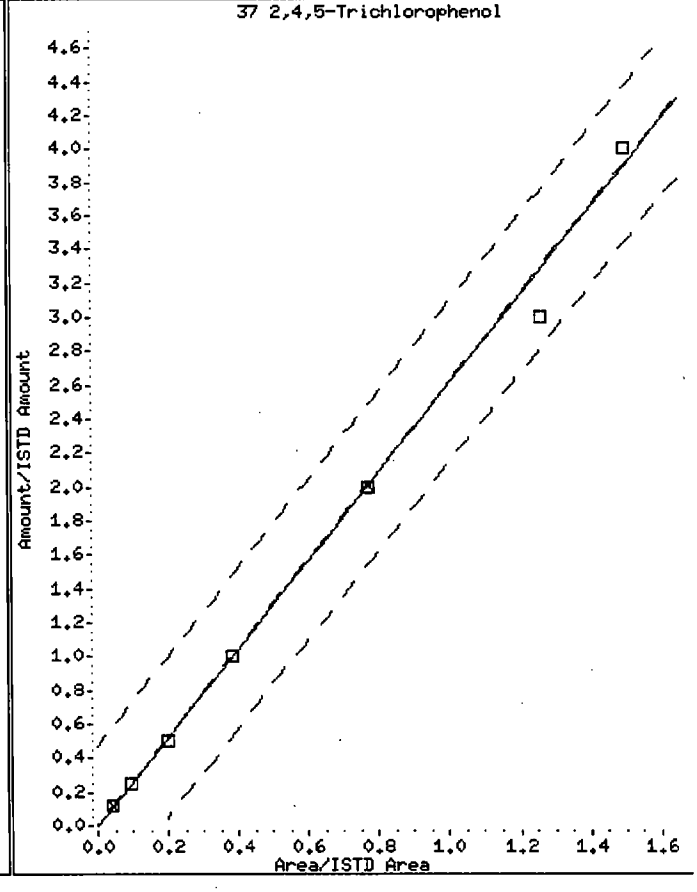

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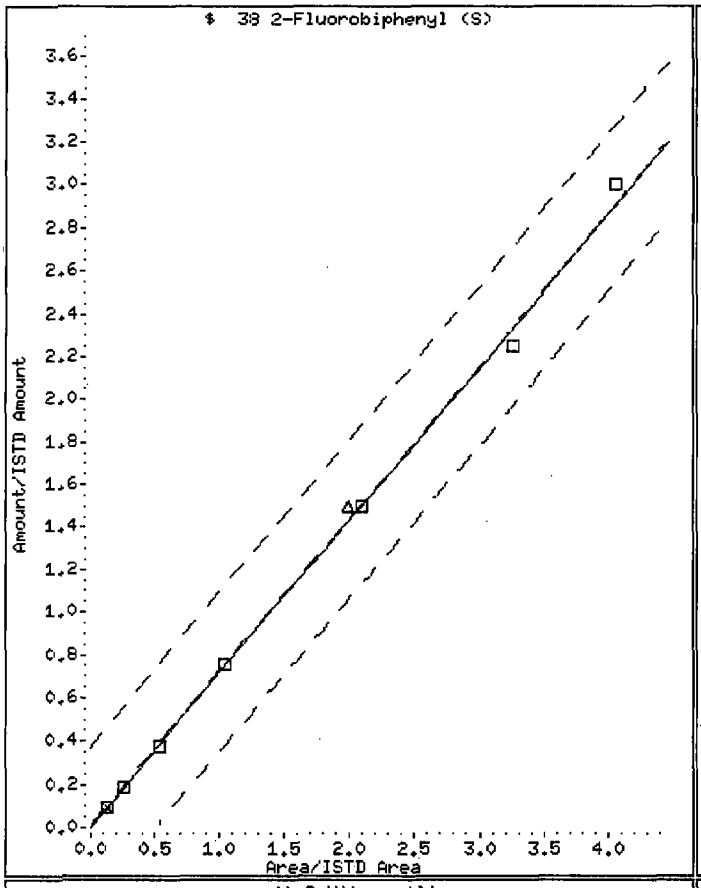

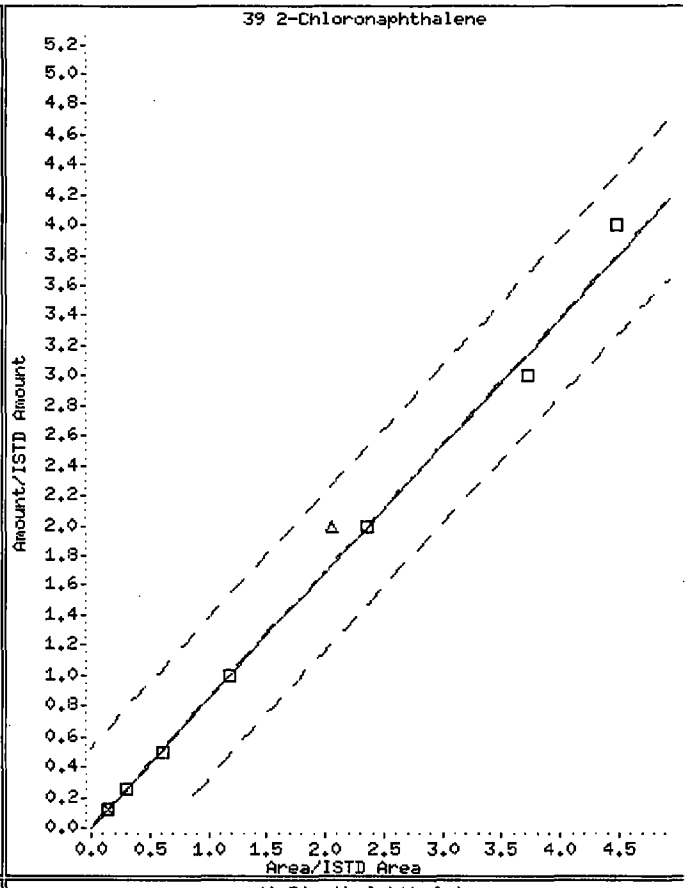

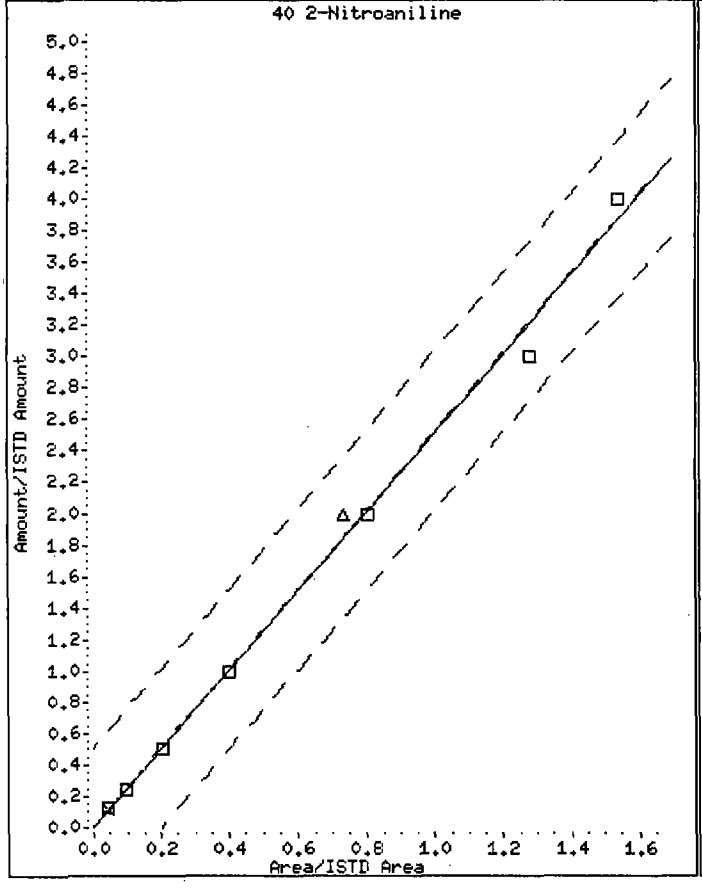

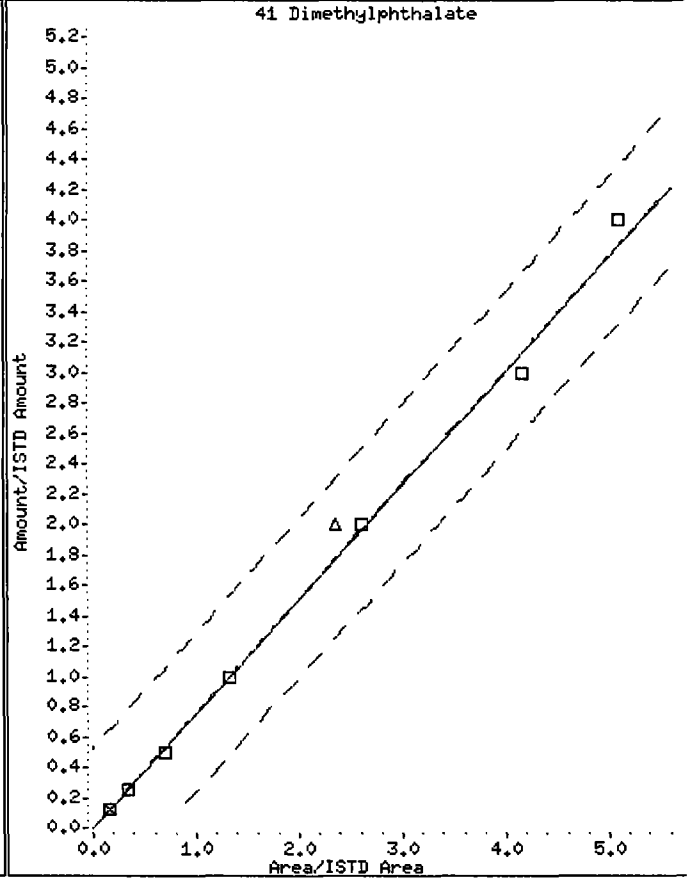

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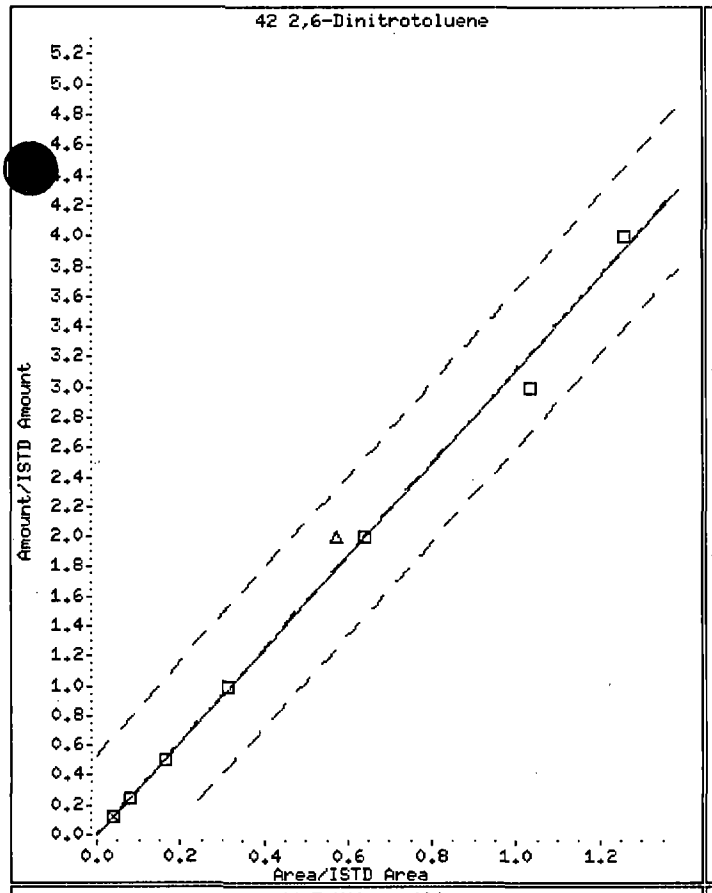

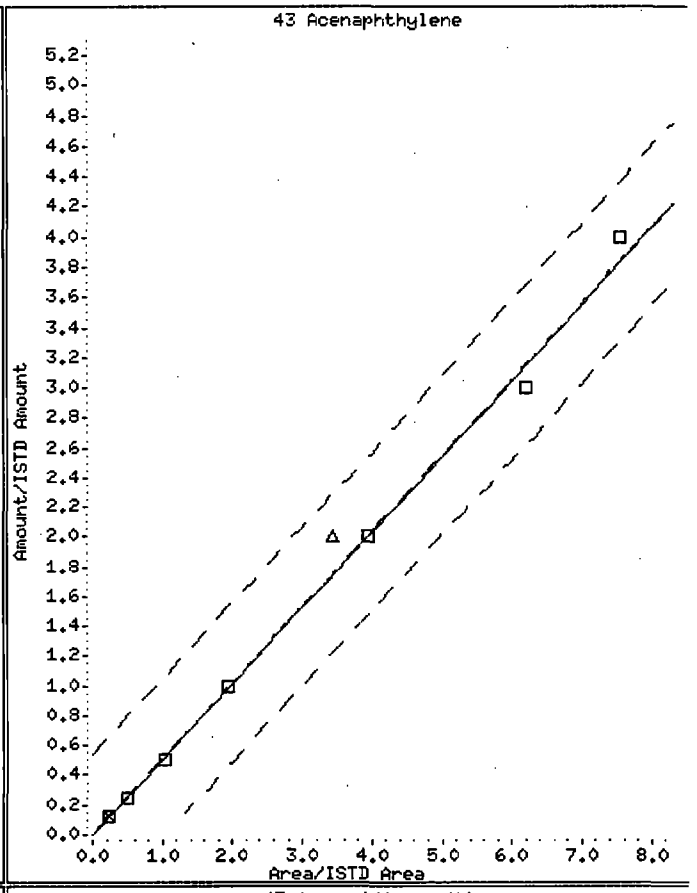

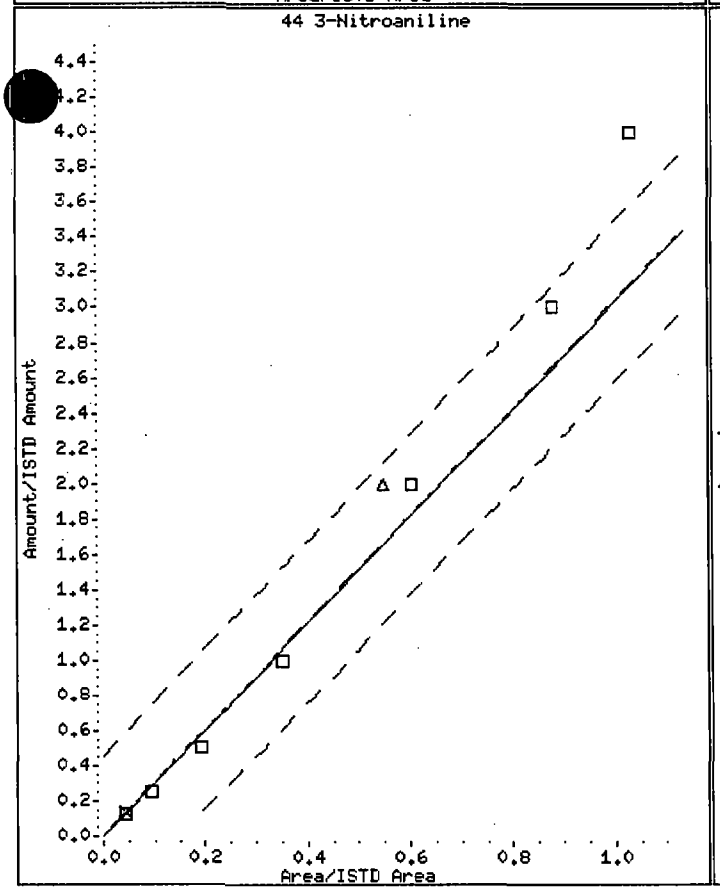

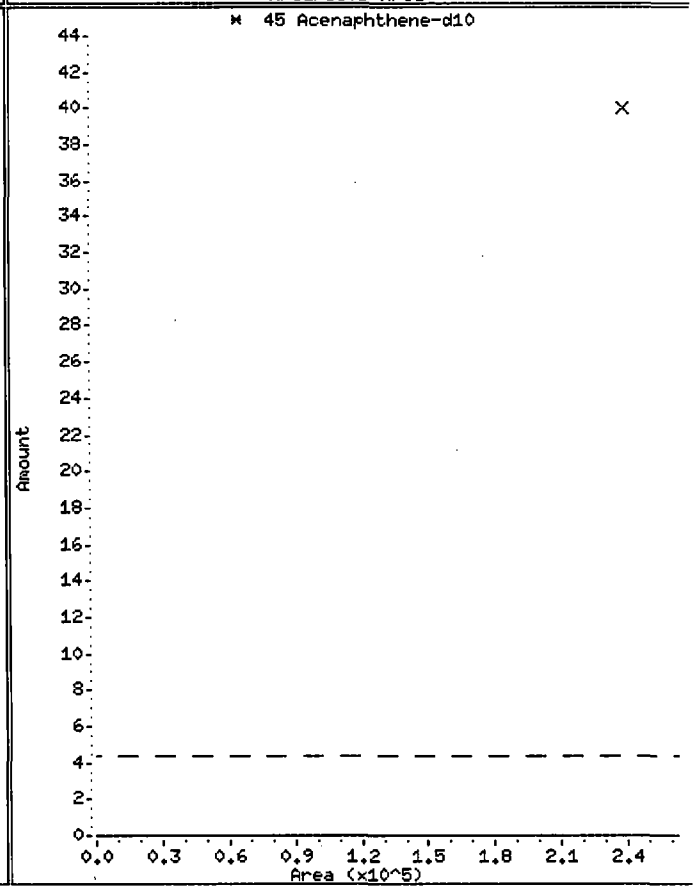

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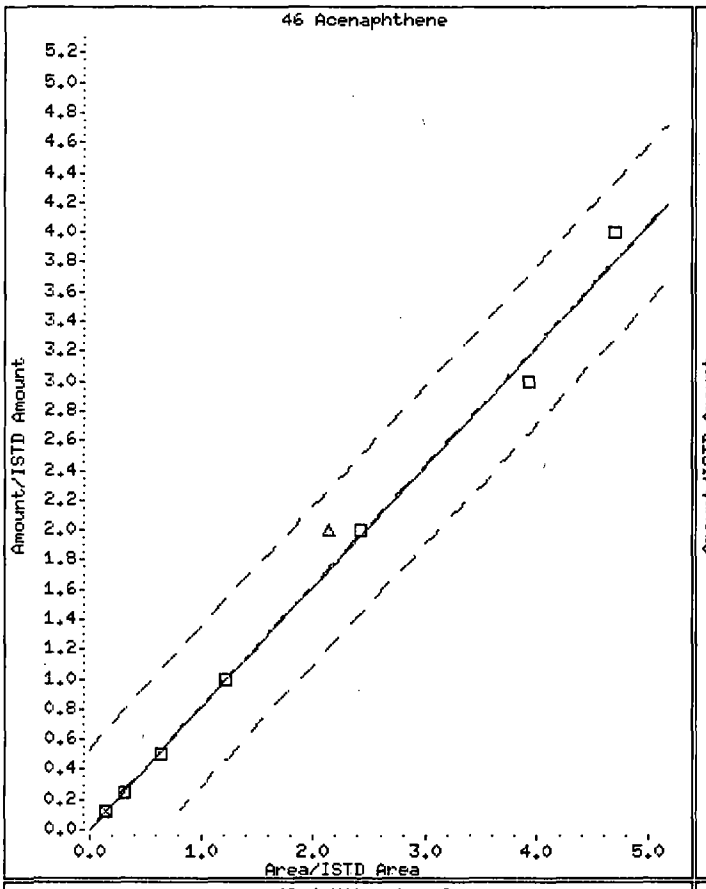

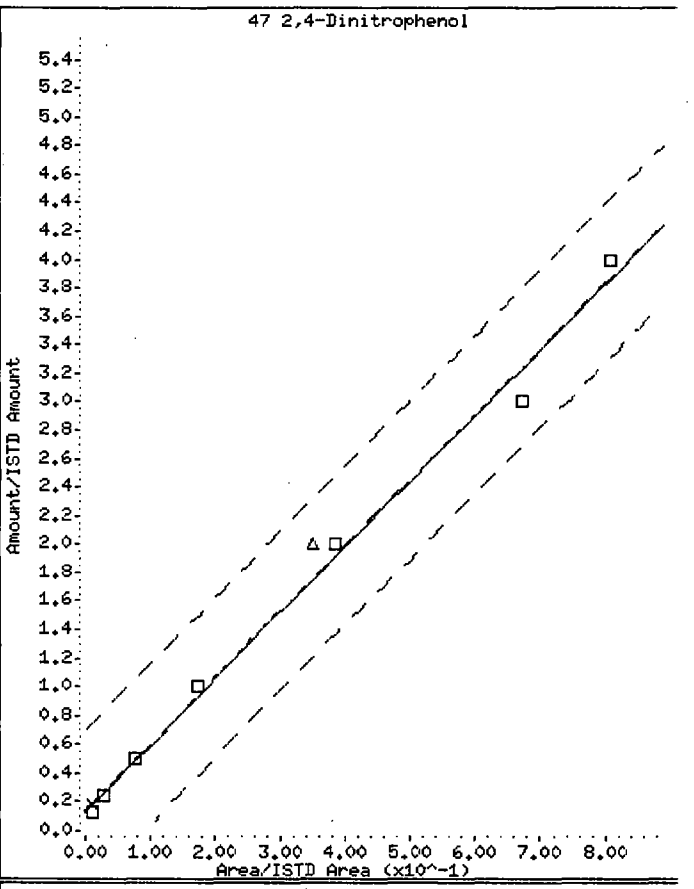

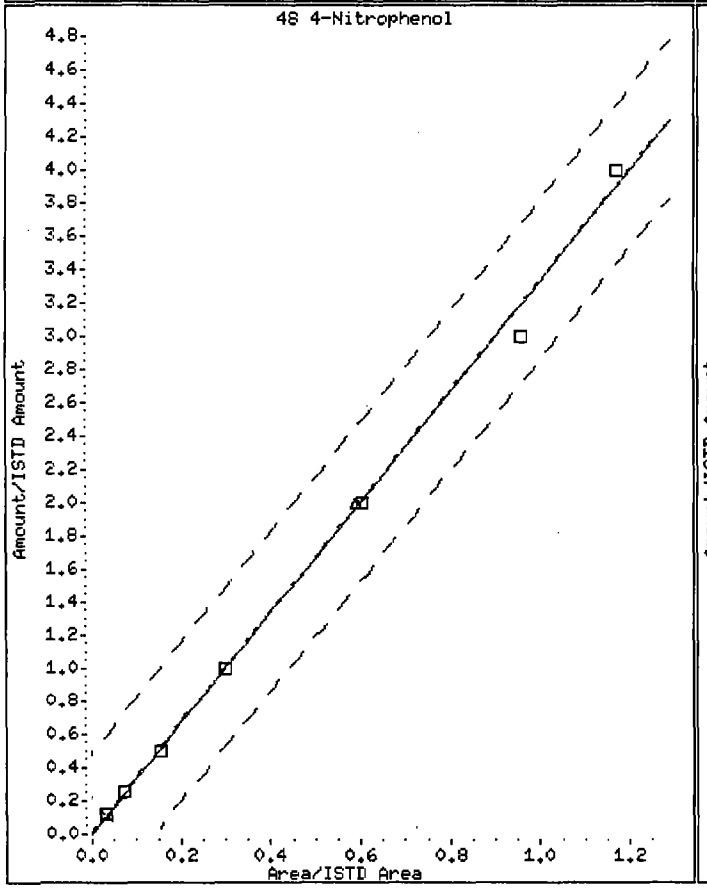

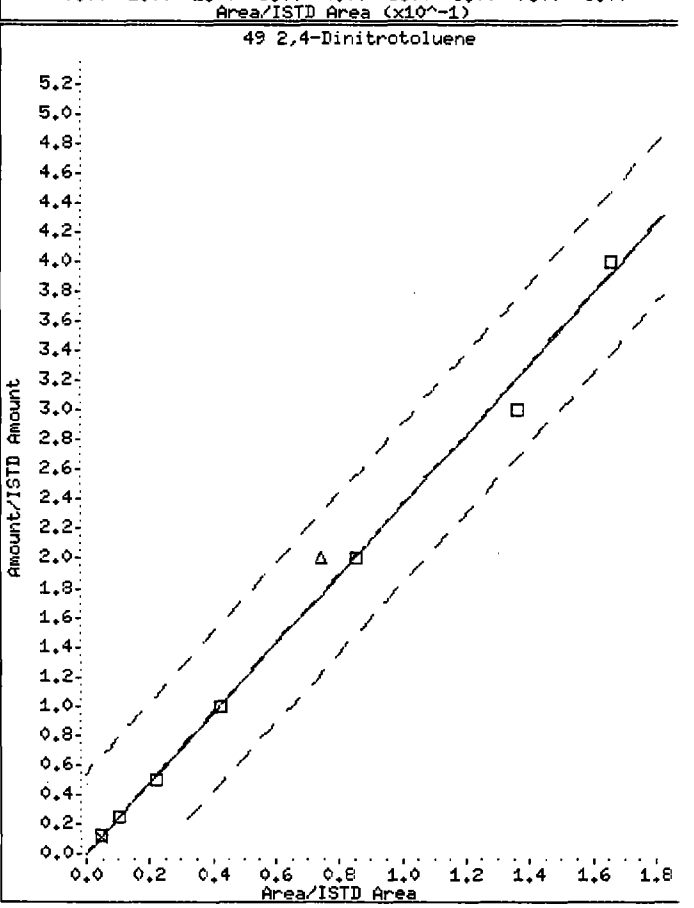

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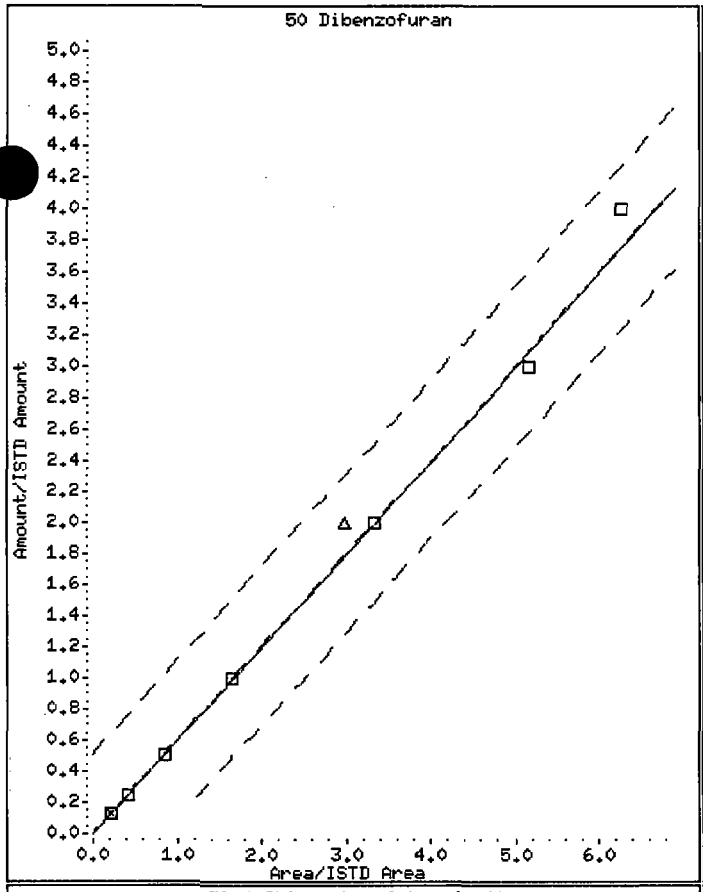

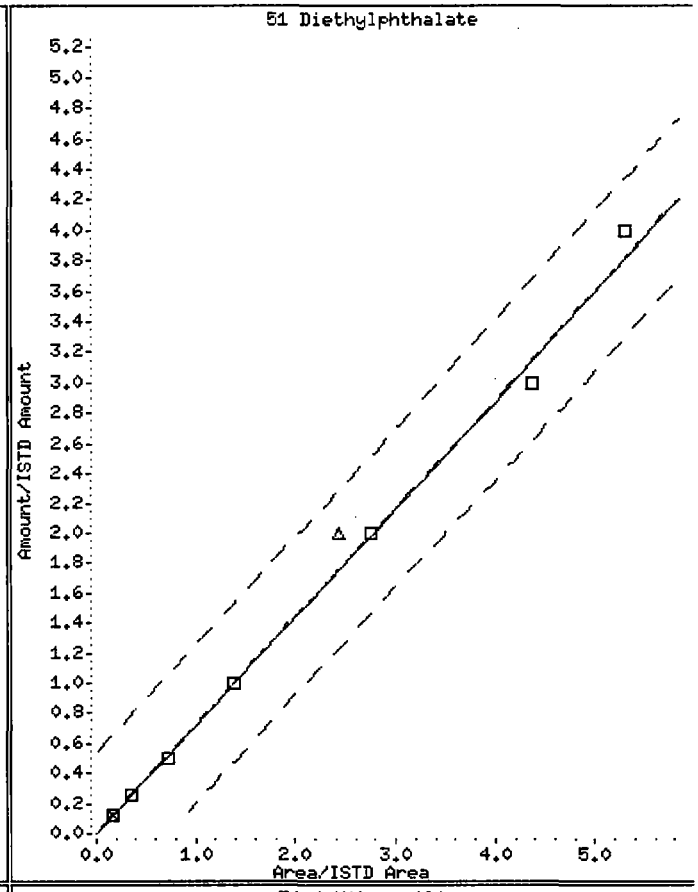

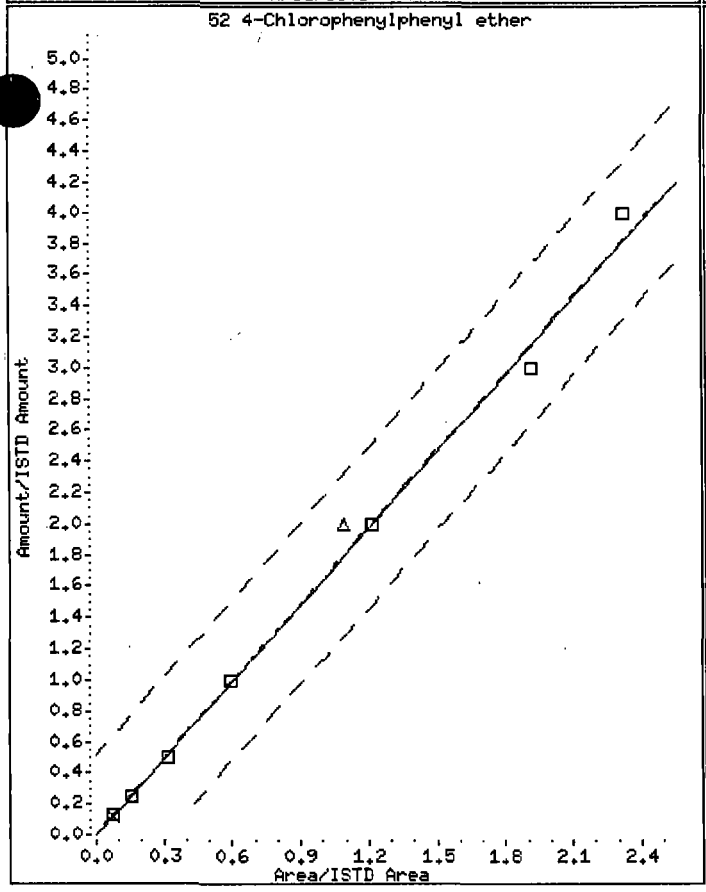

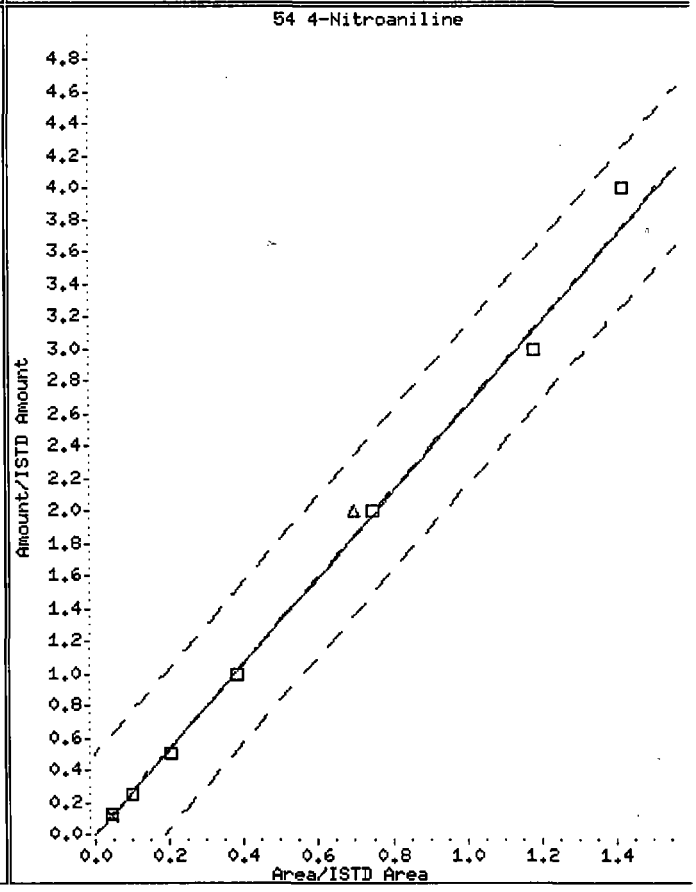

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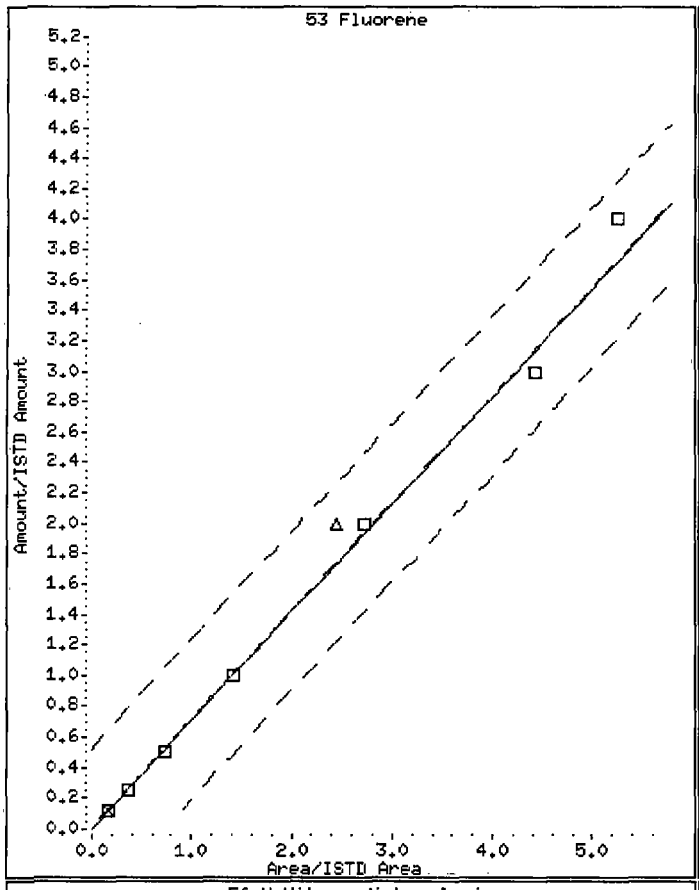

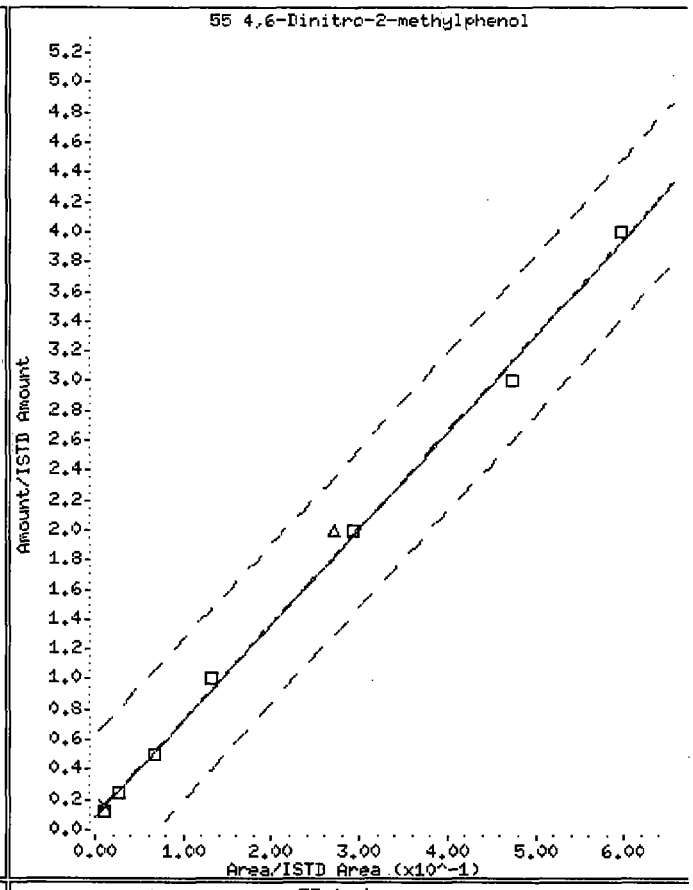

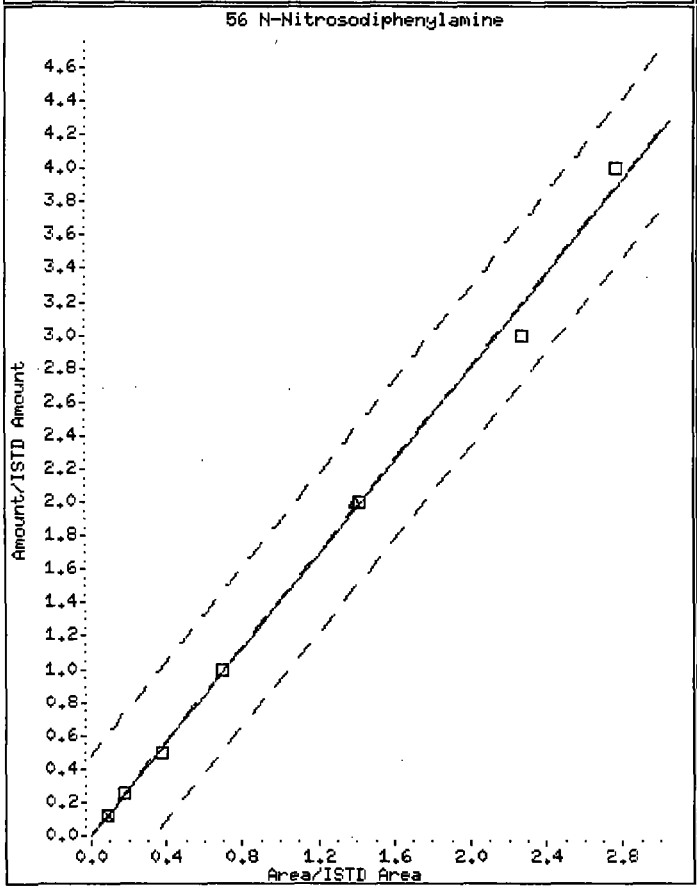

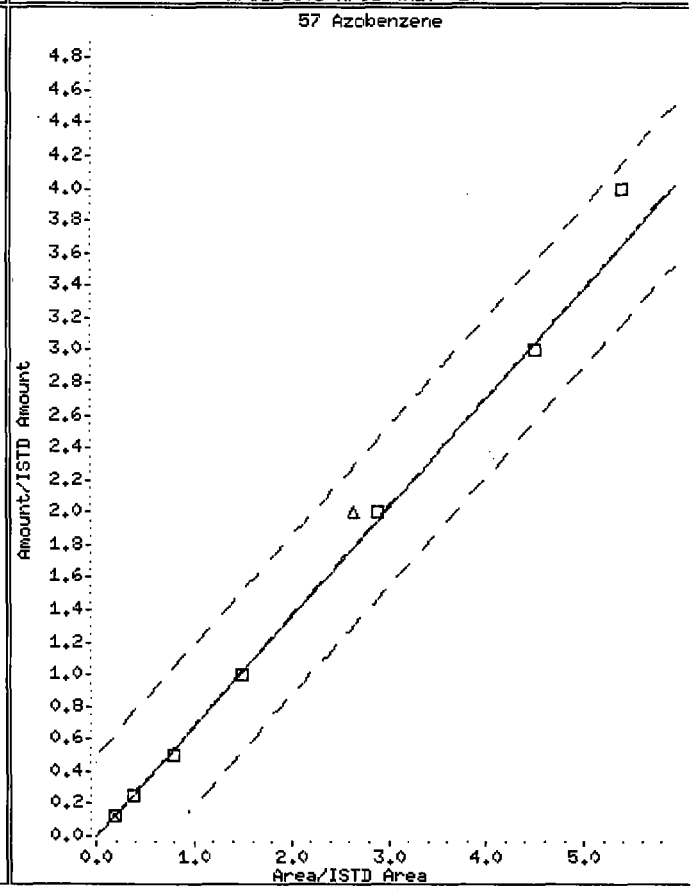

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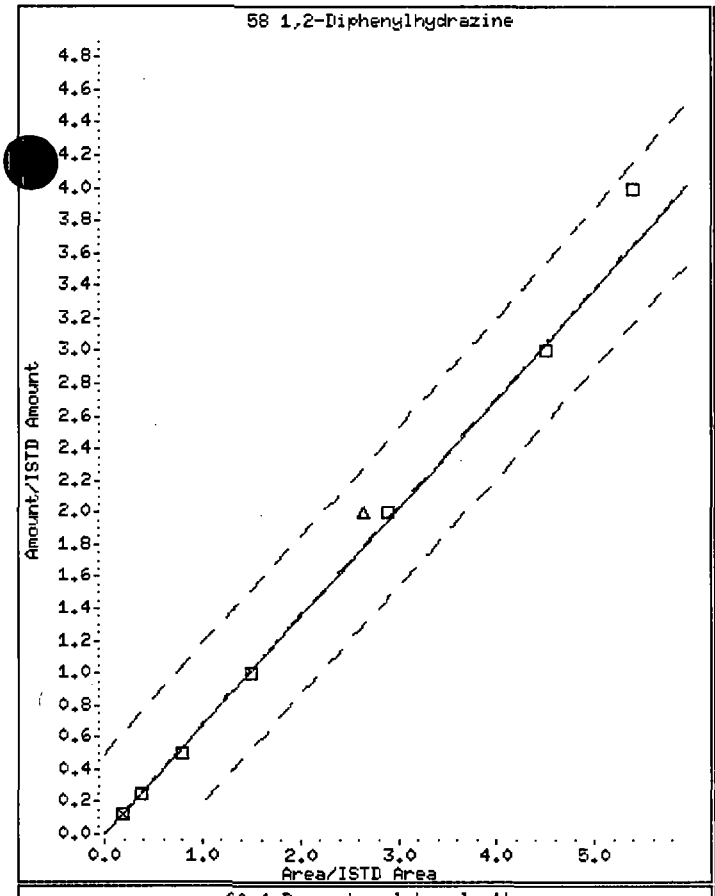

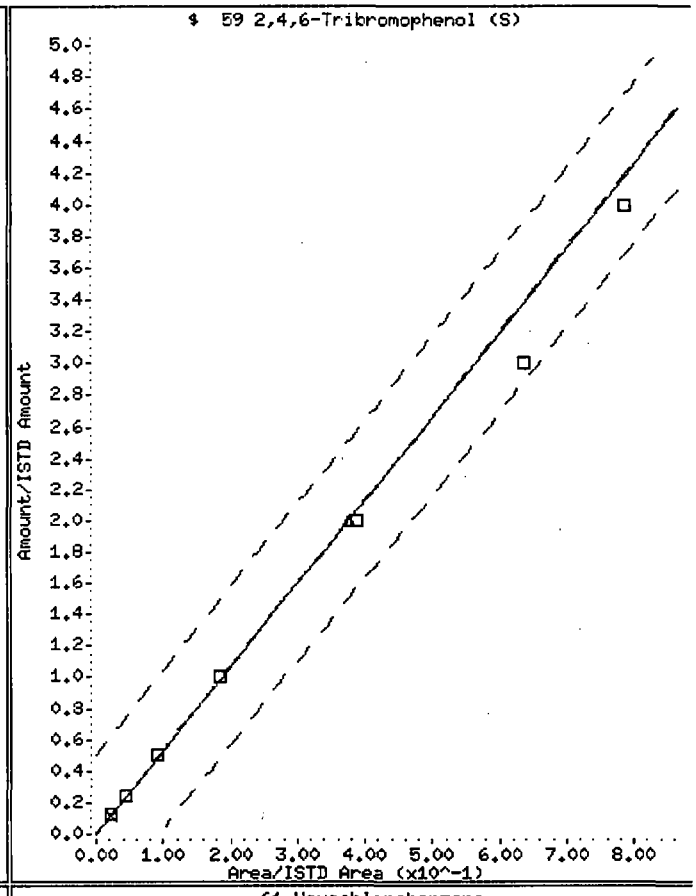

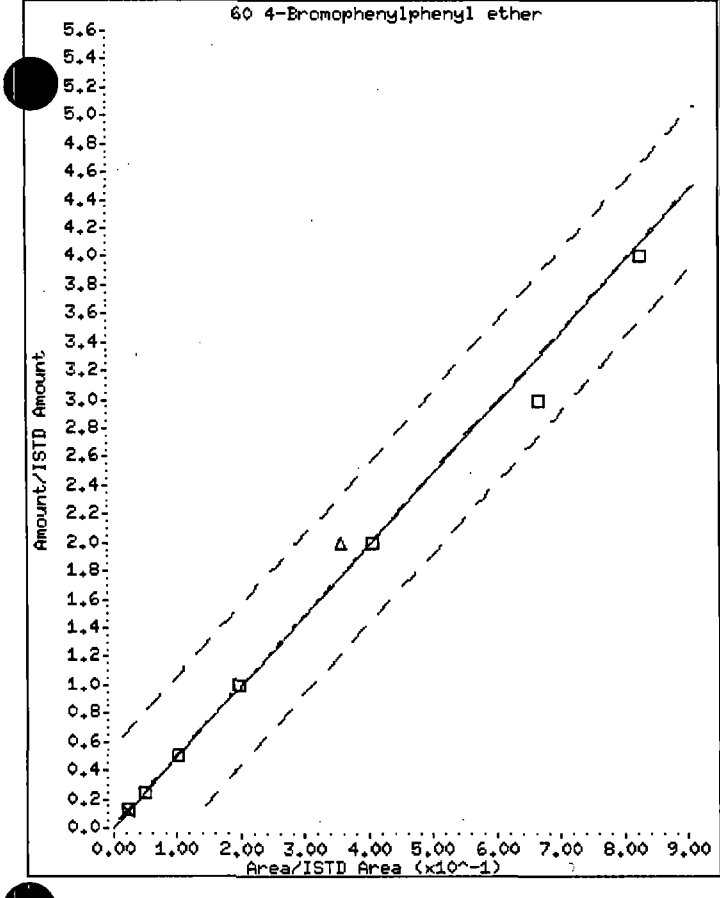

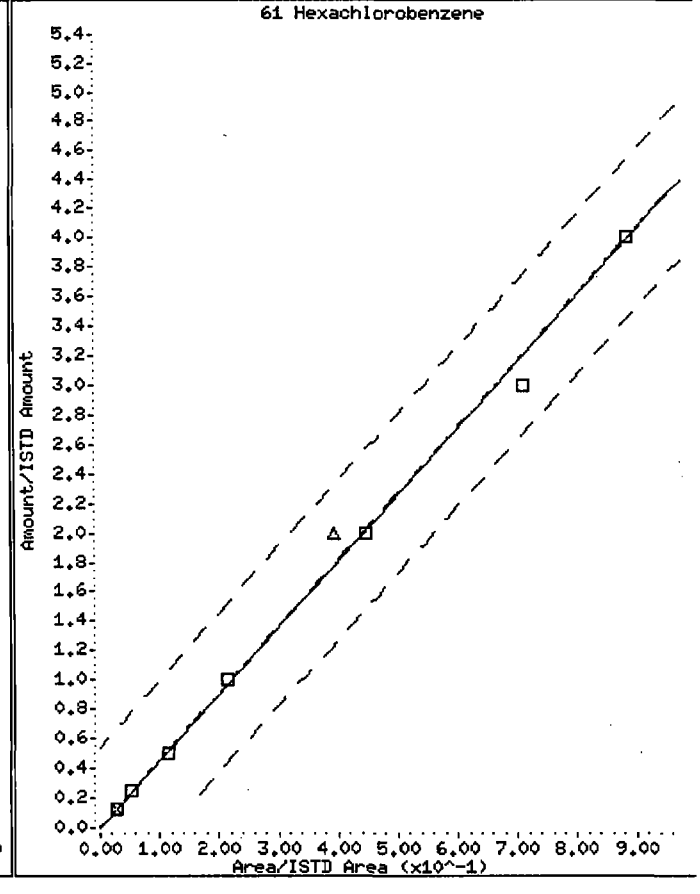

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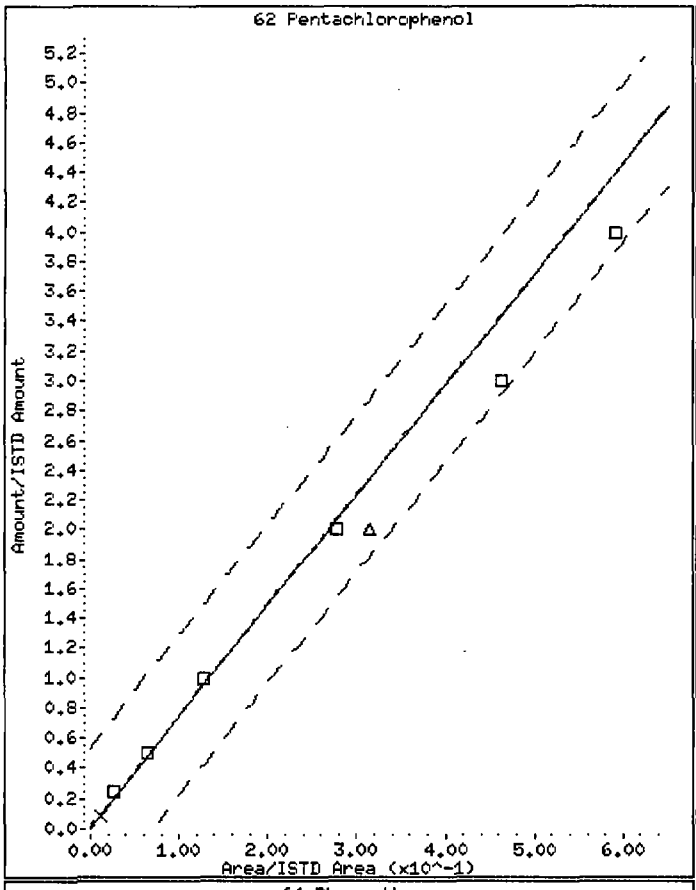

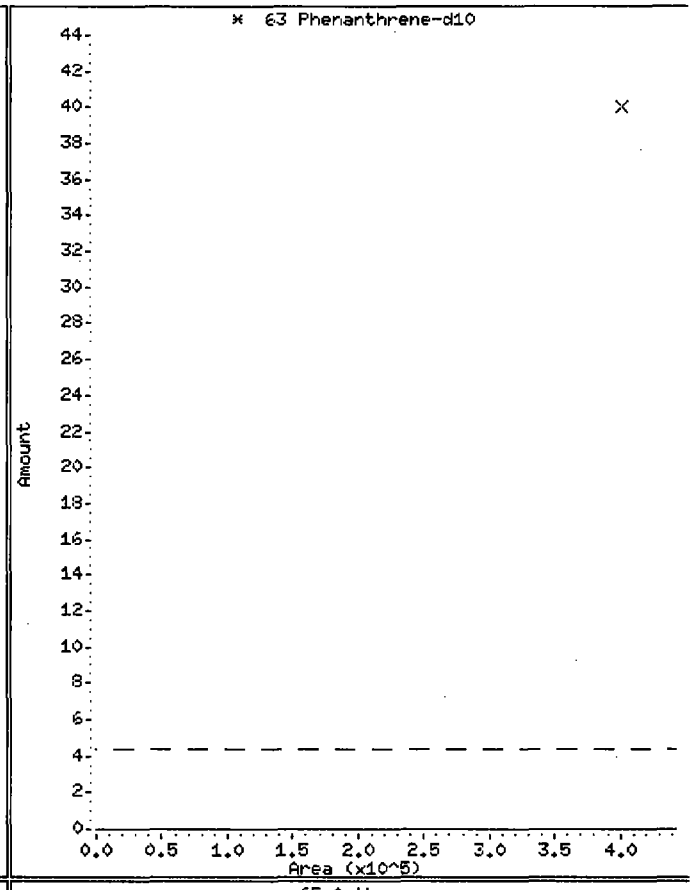

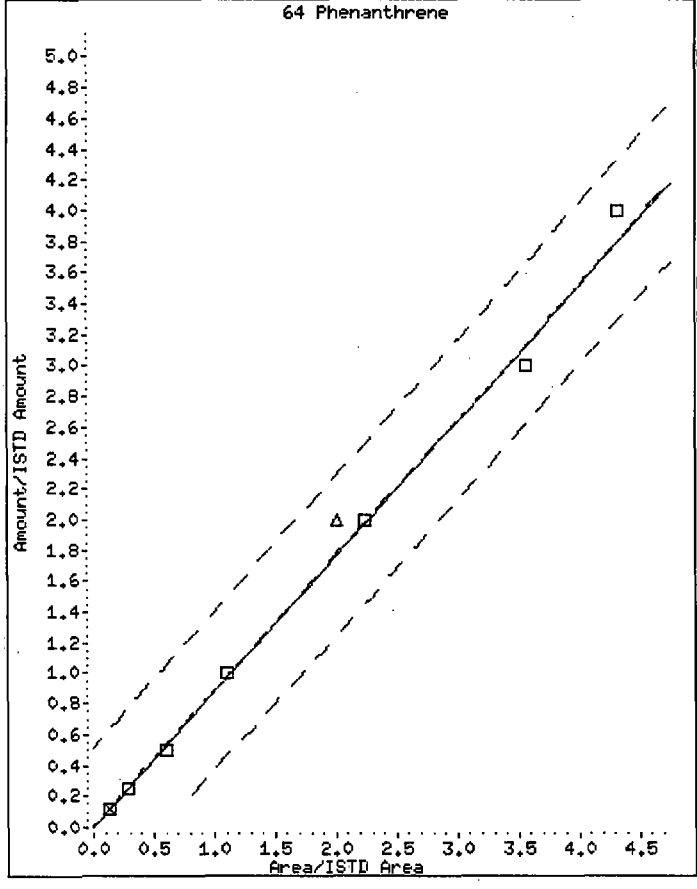

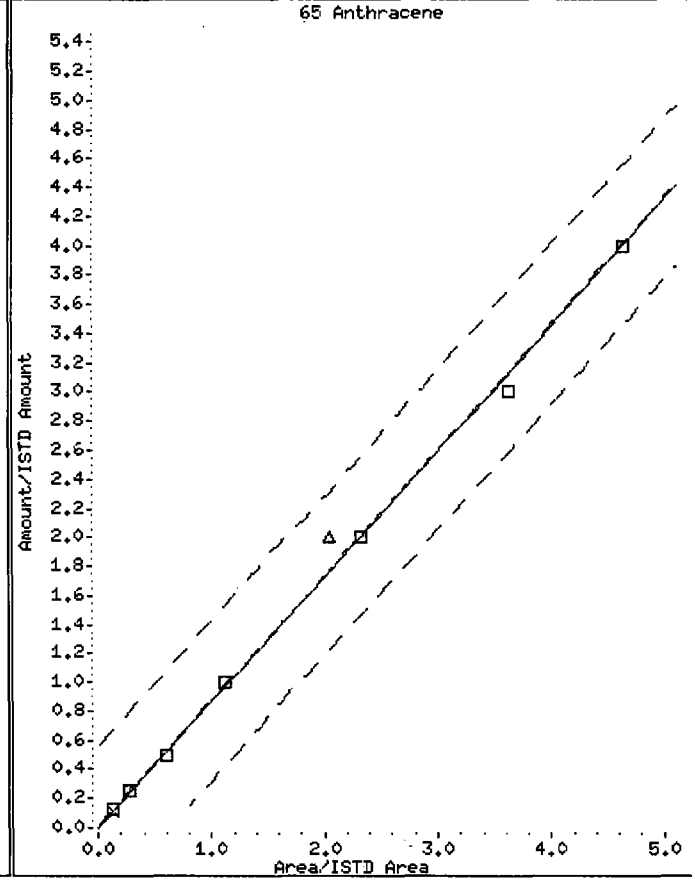

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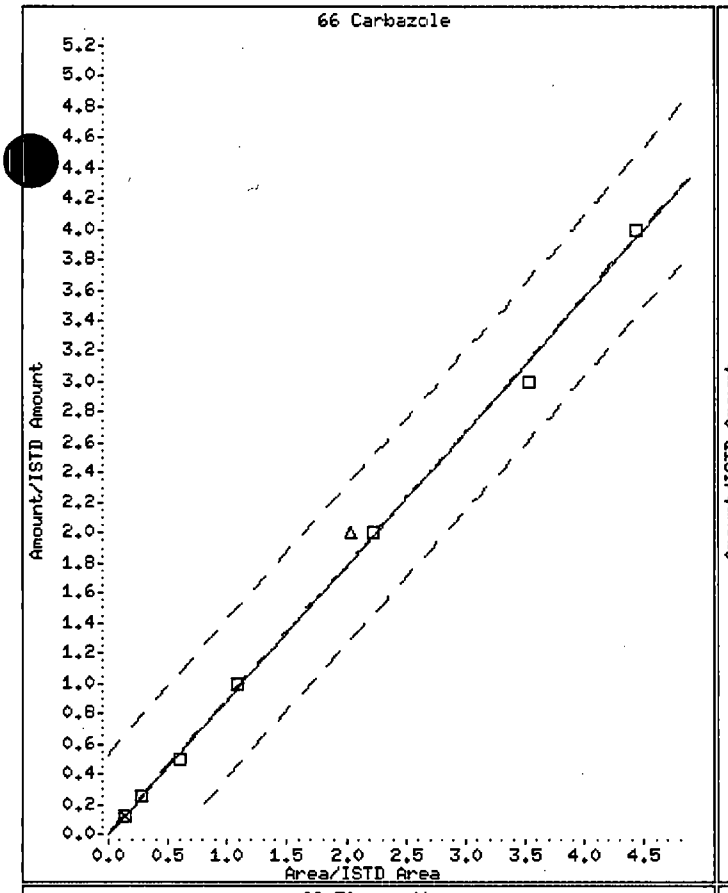

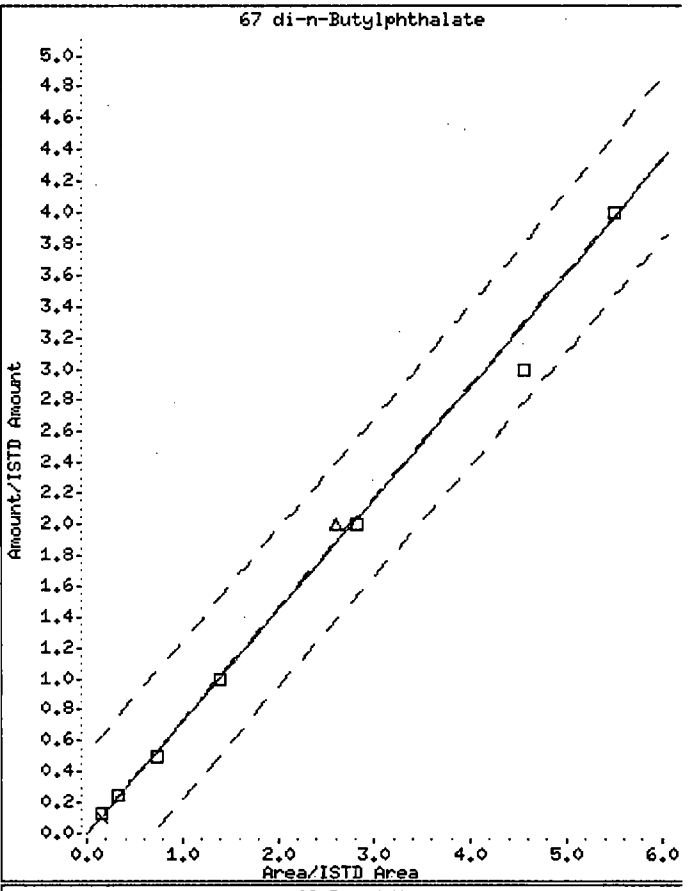

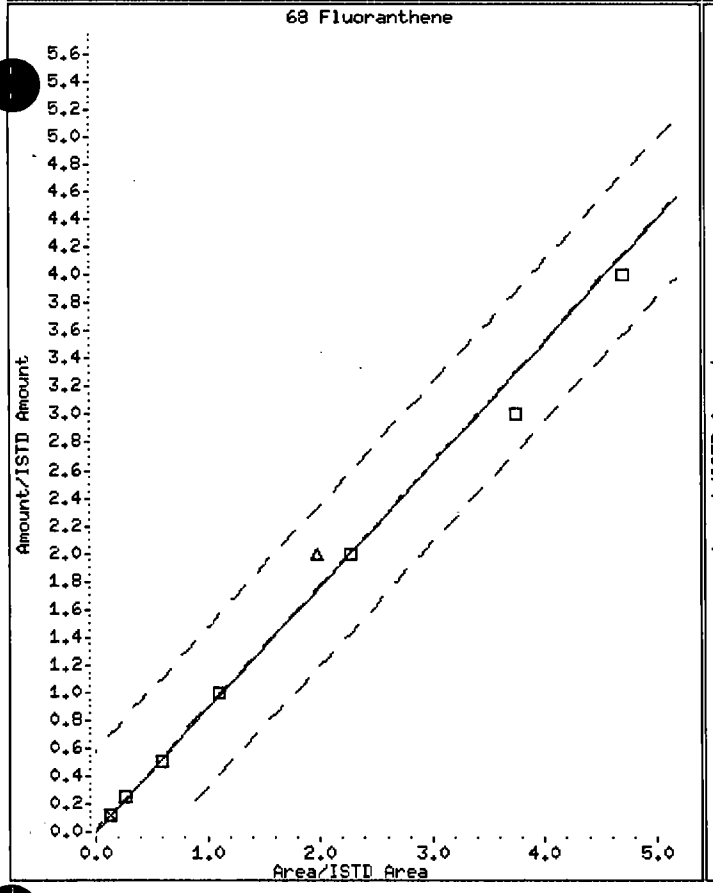

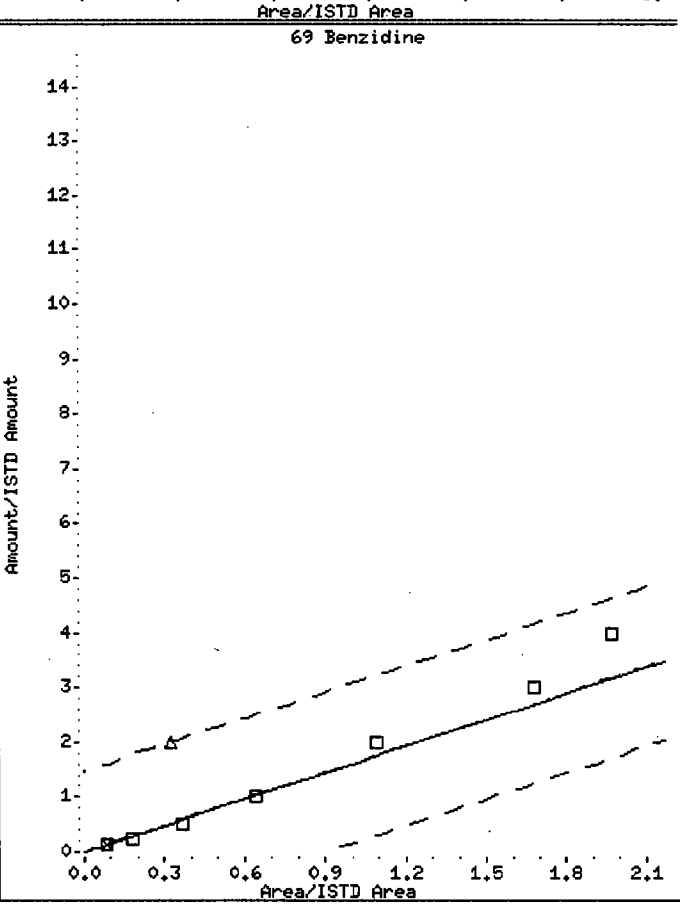

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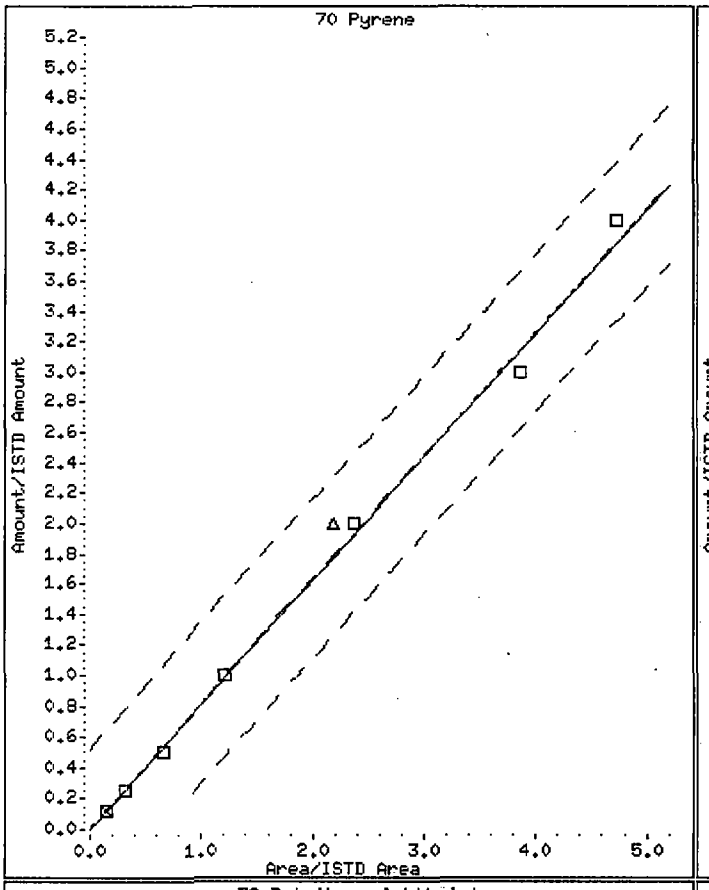

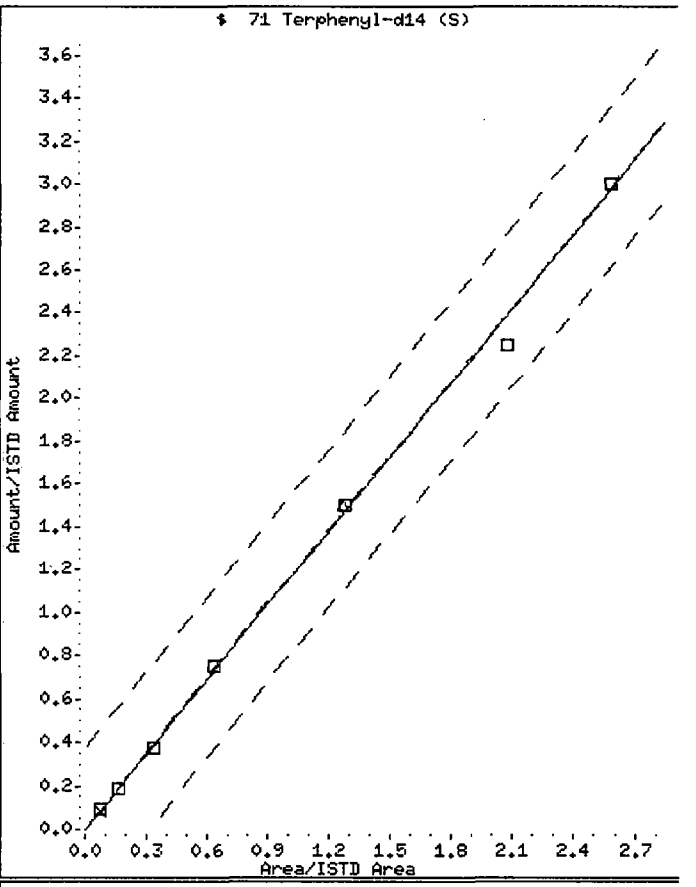

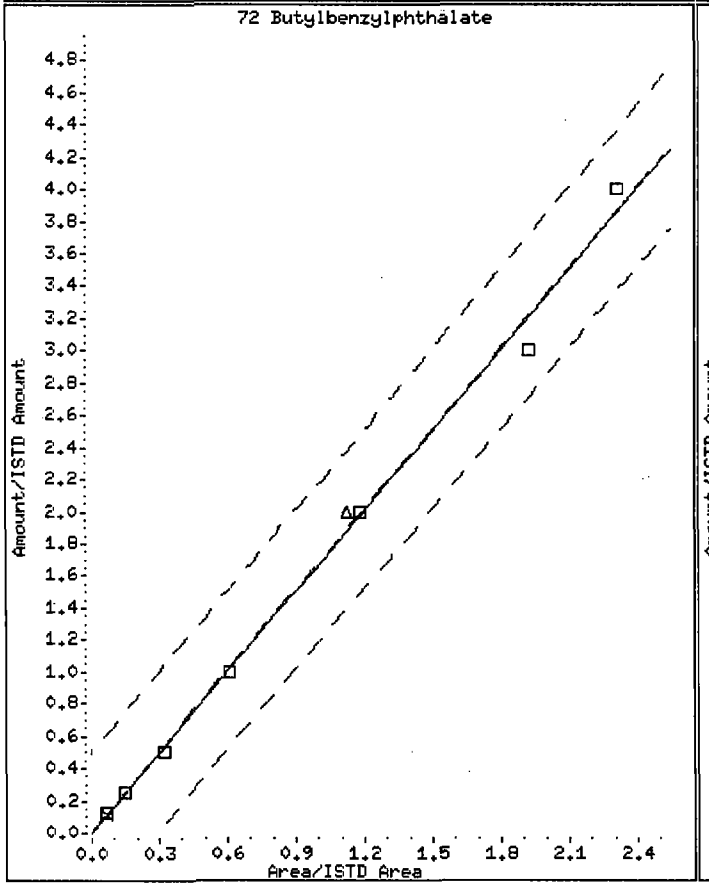

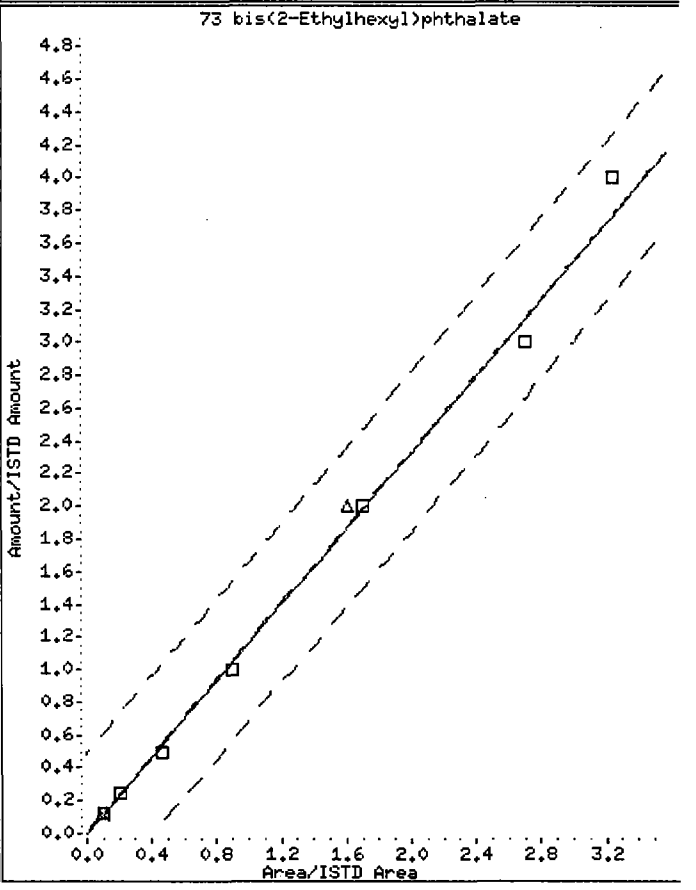

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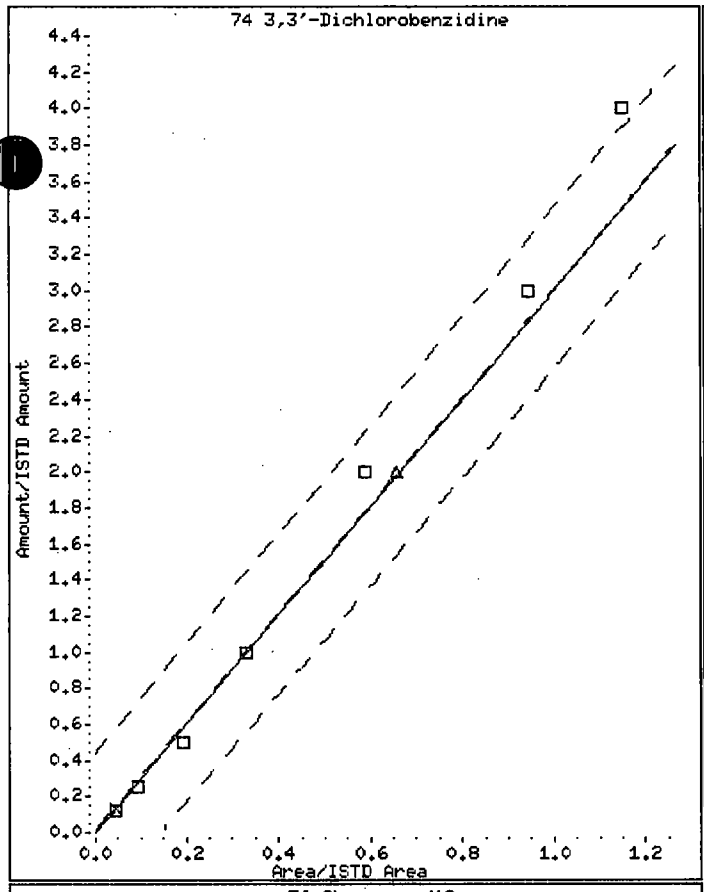

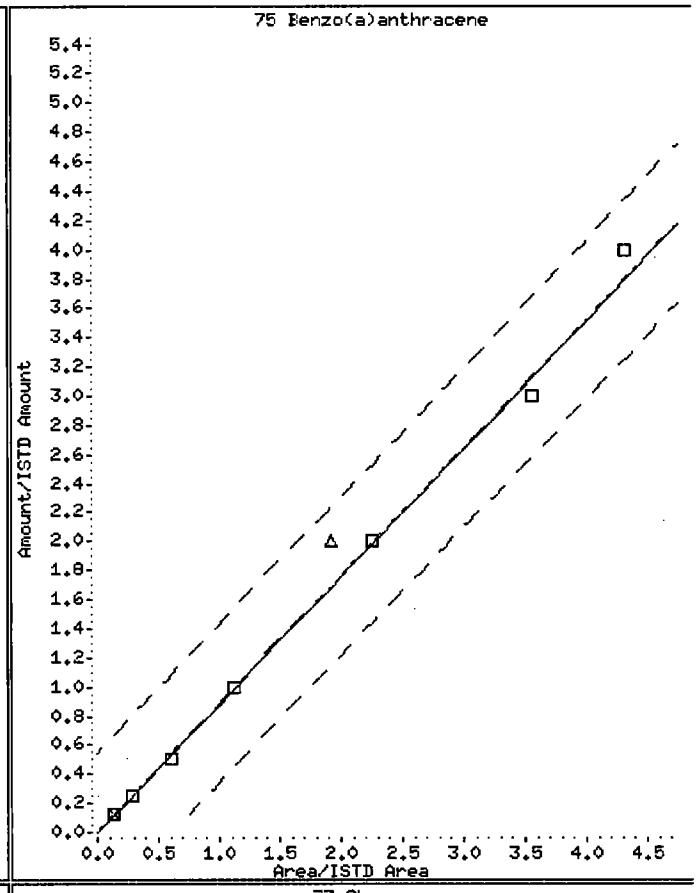

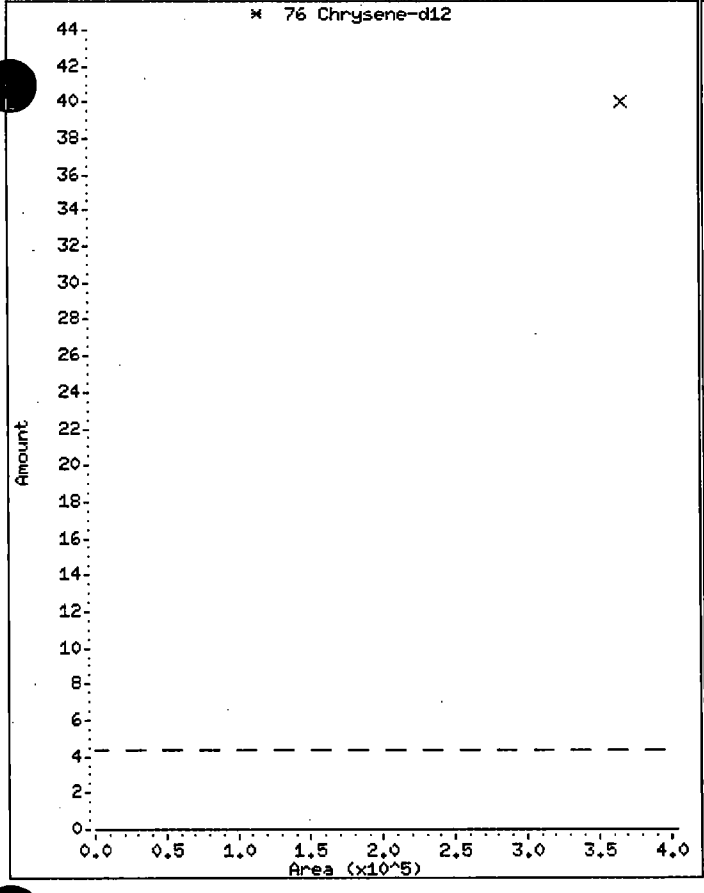

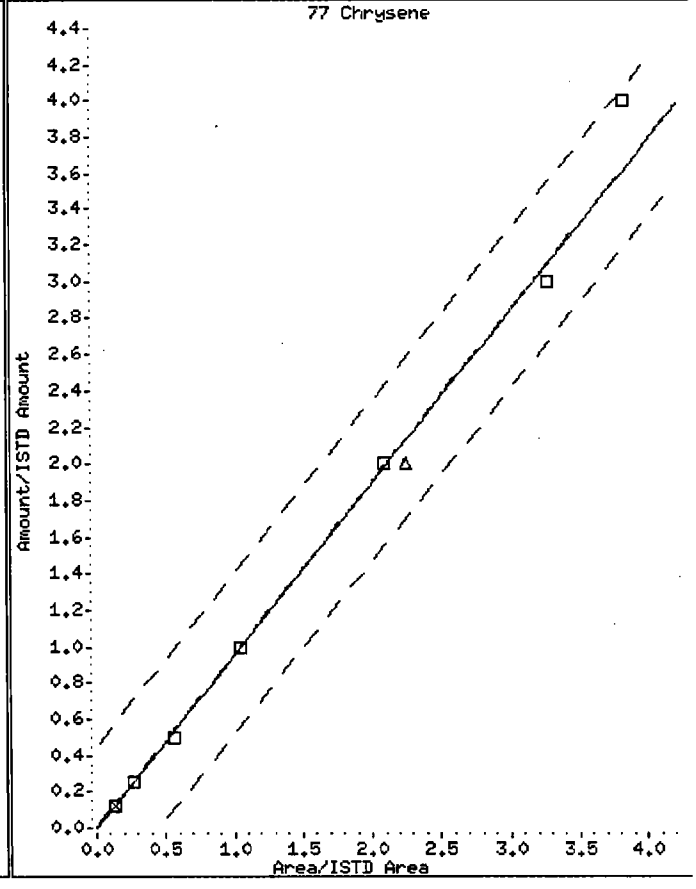

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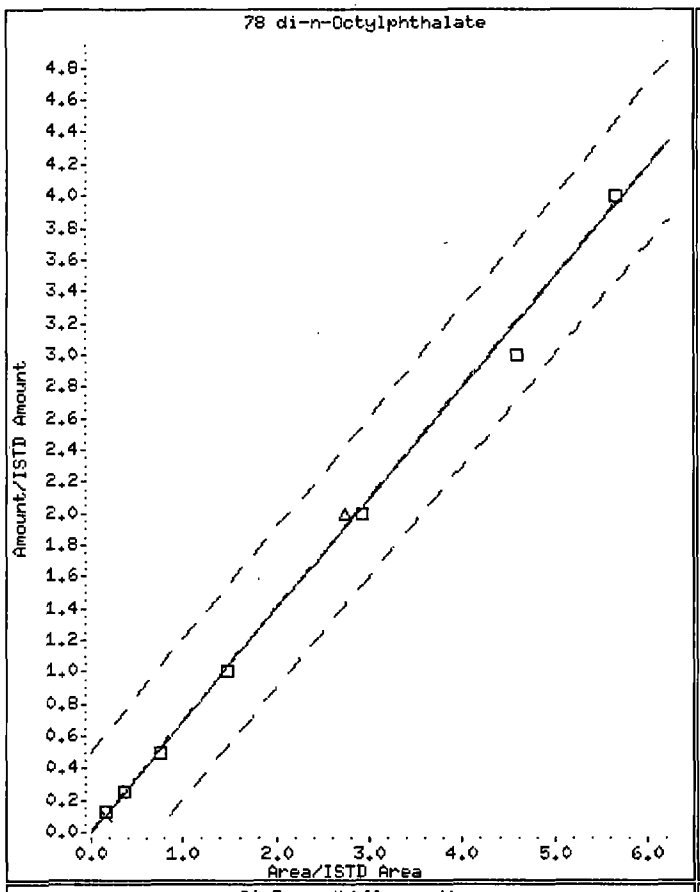

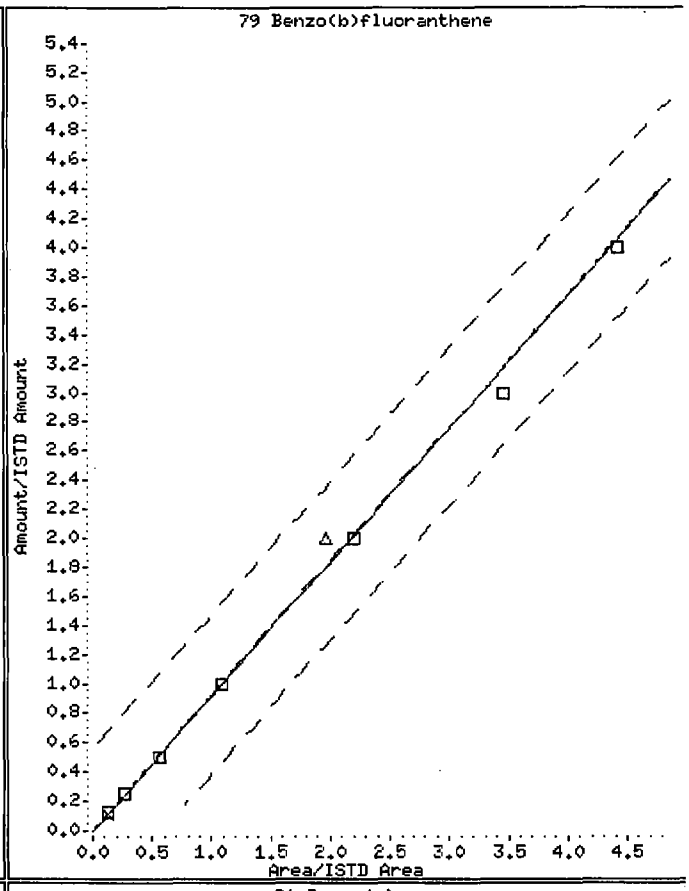

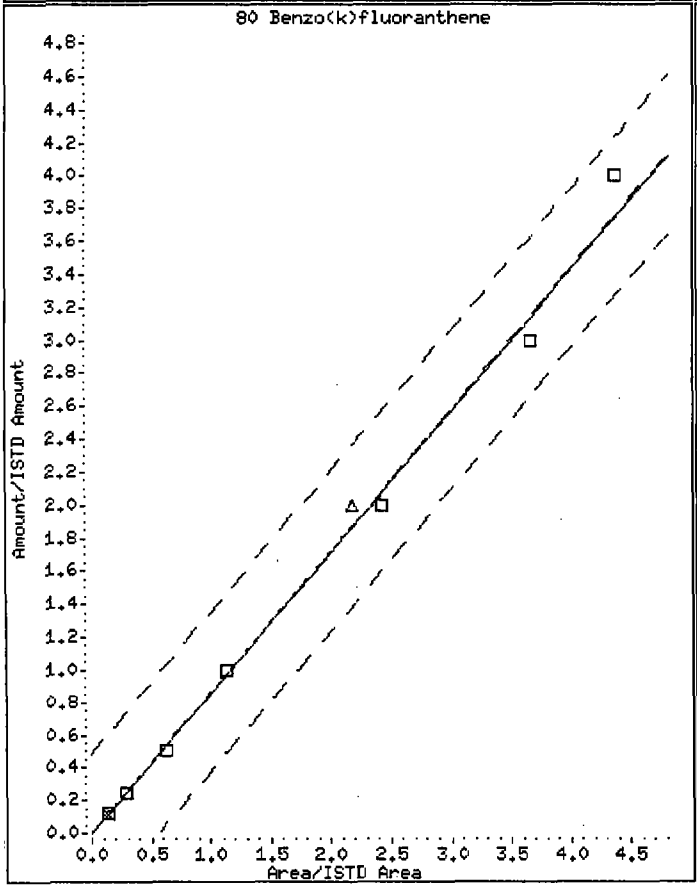

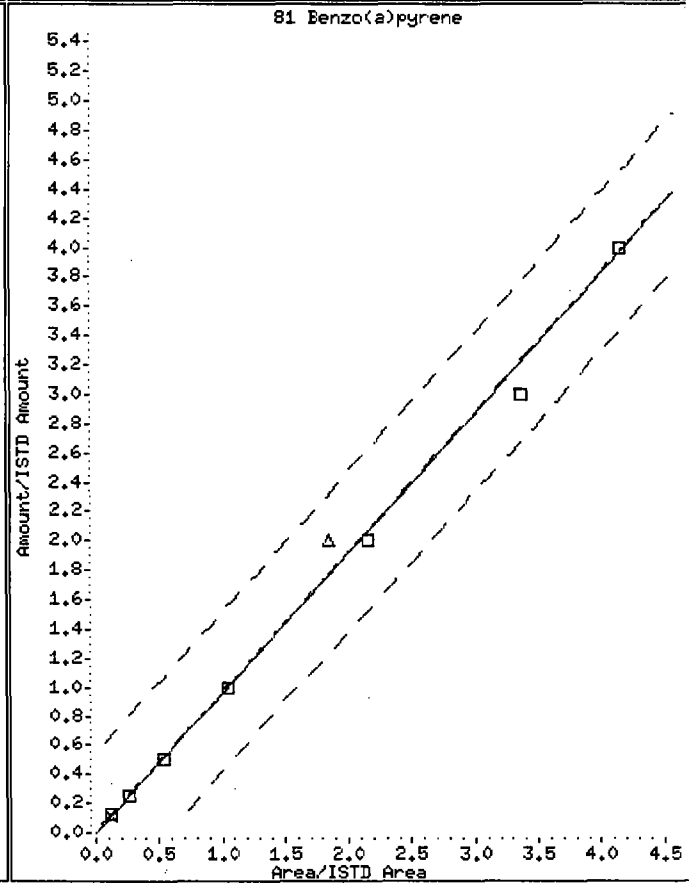

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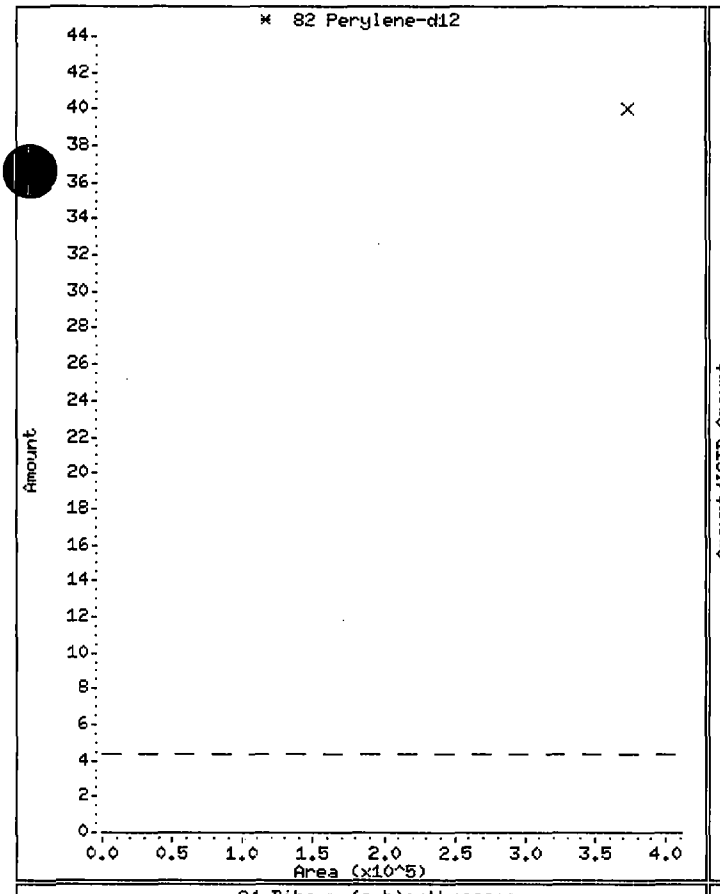
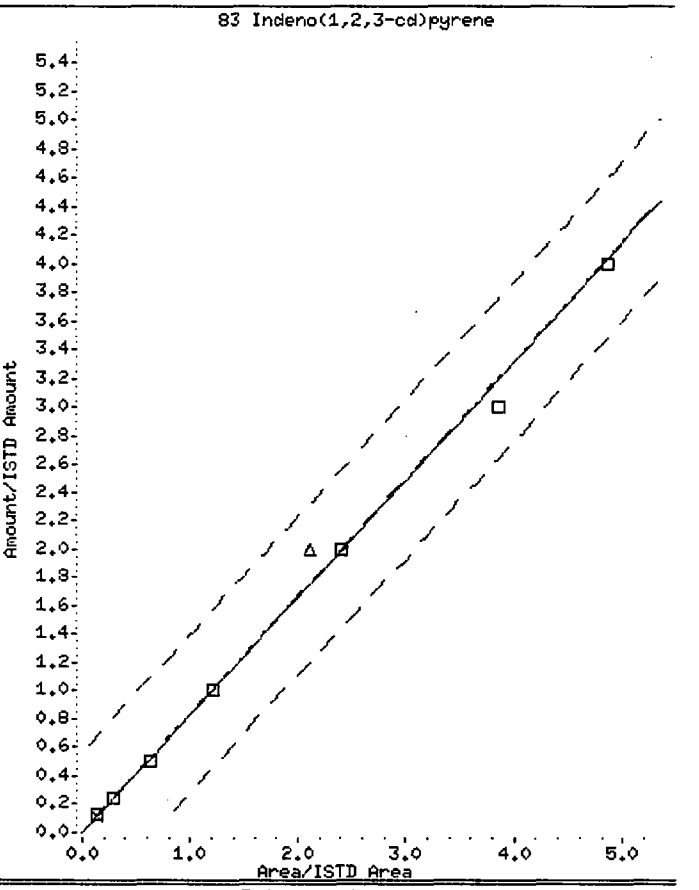
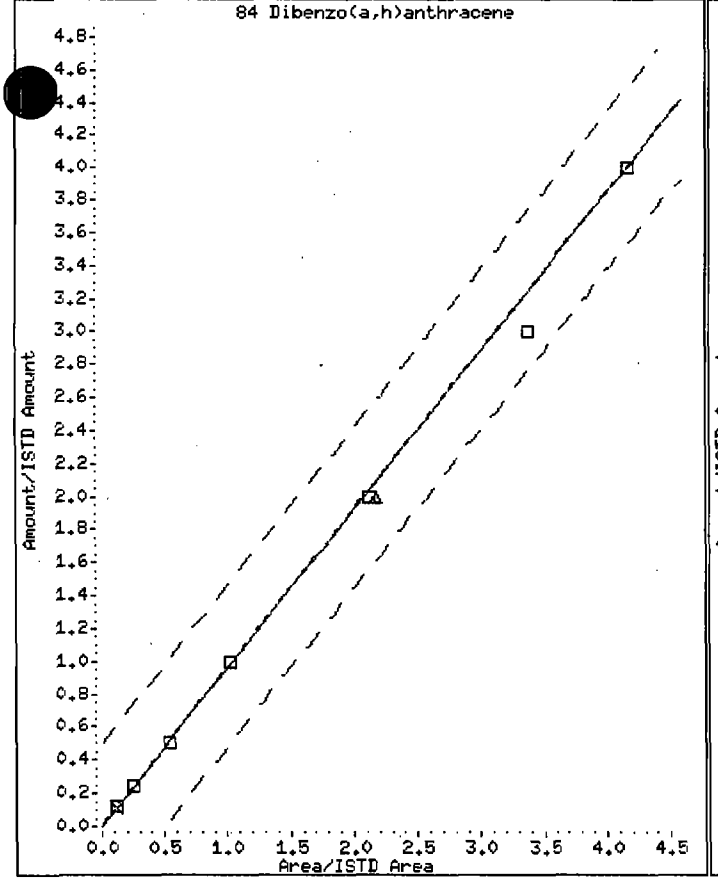
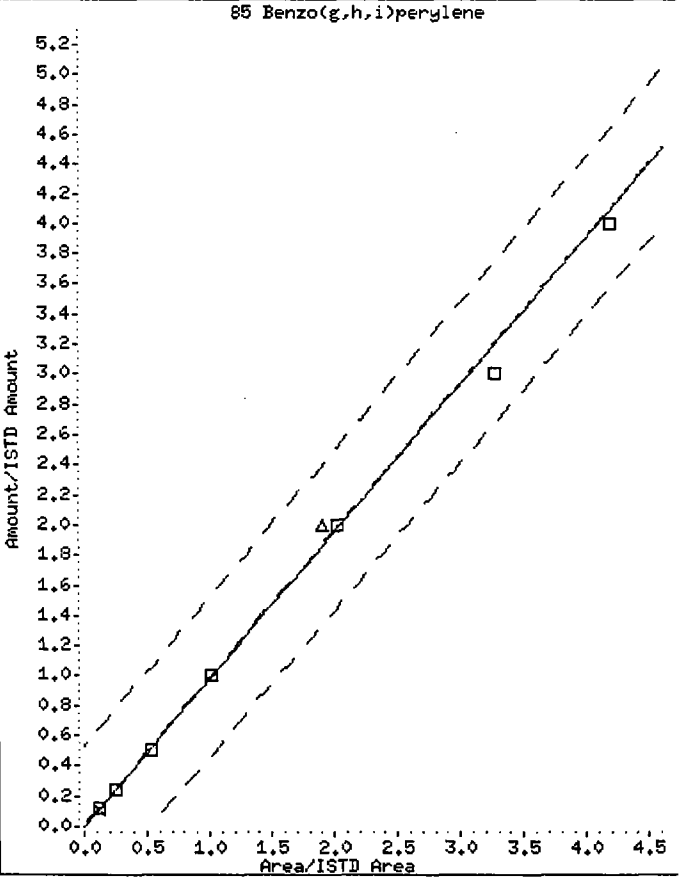








5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 02281412.D DFTPP Injection Date: 02/28/2014
Instrument ID: 10MSS9 DFTPP Injection Time: 13:06
GC Column: ID: 9999 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	46.45	
68	Less than 2.00% of mass 69	0.00	(0.00)
69	Mass 69 relative abundance	28.58	
70	Less than 2.00% of mass 69	0.14	(0.50)
127	40.00 - 60.00% of mass 198	42.93	
197	Less than 1.00% of mass 198	0.00	
199	5.00 - 9.00% of mass 198	6.70	
275	10.00 - 30.00% of mass 198	21.66	
365	Greater than 1.00% of mass 198	2.72	
441	Present, but less than mass 443	15.28	
442	Greater than 40.00% of mass 198	99.88	
443	17.00 - 23.00% of mass 442	19.57	(19.60)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	ICAL10328-968	ICAL10328-968	02281413.D	02/28/2014	13:25
2	ICAL10328-967	ICAL10328-967	02281414.D	02/28/2014	13:52
3	ICAL10328-966	ICAL10328-966	02281415.D	02/28/2014	14:19
4	ICAL10328-965	ICAL10328-965	02281416.D	02/28/2014	14:46
5	ICAL10328-964	ICAL10328-964	02281417.D	02/28/2014	15:13
6	ICAL10328-963	ICAL10328-963	02281418.D	02/28/2014	15:40
7	ICAL10328-962	ICAL10328-962	02281419.D	02/28/2014	16:07
8	ICV10328-98	ICV10328-98	02281420.D	02/28/2014	16:34
9	ICV210328-47	ICV210328-47	02281421.D	02/28/2014	17:01

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	46.45		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	28.58		PASS
70	Less than 2% of mass 69	0.14	(0.50)	PASS
127	40 - 60% of mass 198	42.93		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.70		PASS
275	10 - 30% of mass 198	21.66		PASS
365	Greater than 1% of mass 198	2.72		PASS
441	Present, but less than mass 443	15.28	(78.04)	PASS
442	Greater than 40% of mass 198	99.88		PASS
443	17 - 23% of mass 442	19.57	(19.60)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7963738	5.000	PASS
Benzidine	0.6912243	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	456254			N/A
4,4-DDE	751	0.2	15.0	PASS
4,4-DDD	29821	6.1	15.0	PASS
4,4-DDD + DDE	30572	6.3	15.0	PASS

****
Tuning Sample, //192.168.10.12/chem/10mss9.i/022814B.b/02281412.D/02281412.D,***
****

Data File: \\192.168.10.12\chem\10mss9.i\022814B.b\02281412.D

Date : 28-FEB-2014 13:06

Client ID:

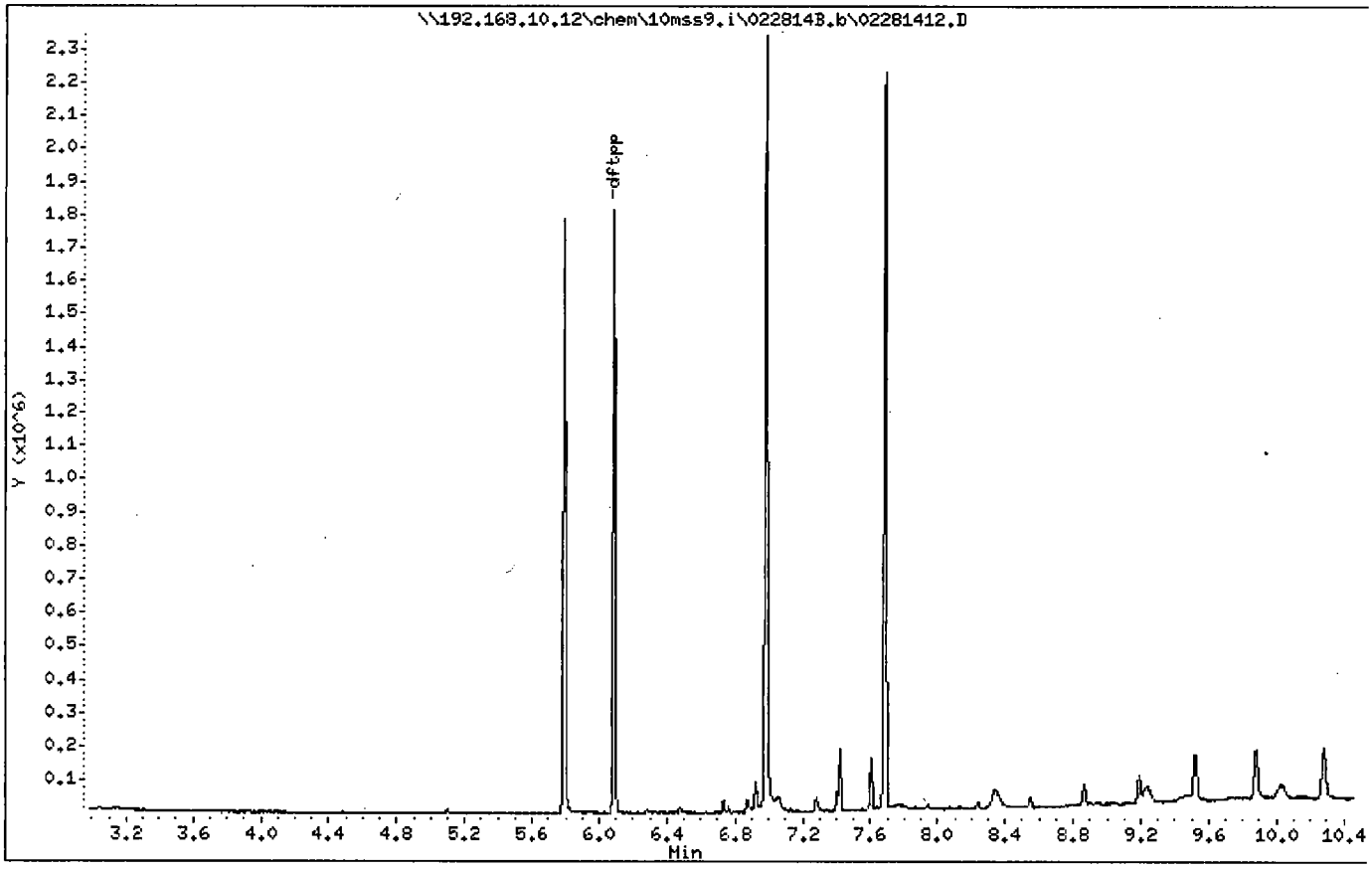
Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99



Date : 28-FEB-2014 13:06

Client ID:

Instrument: 10mss9.i

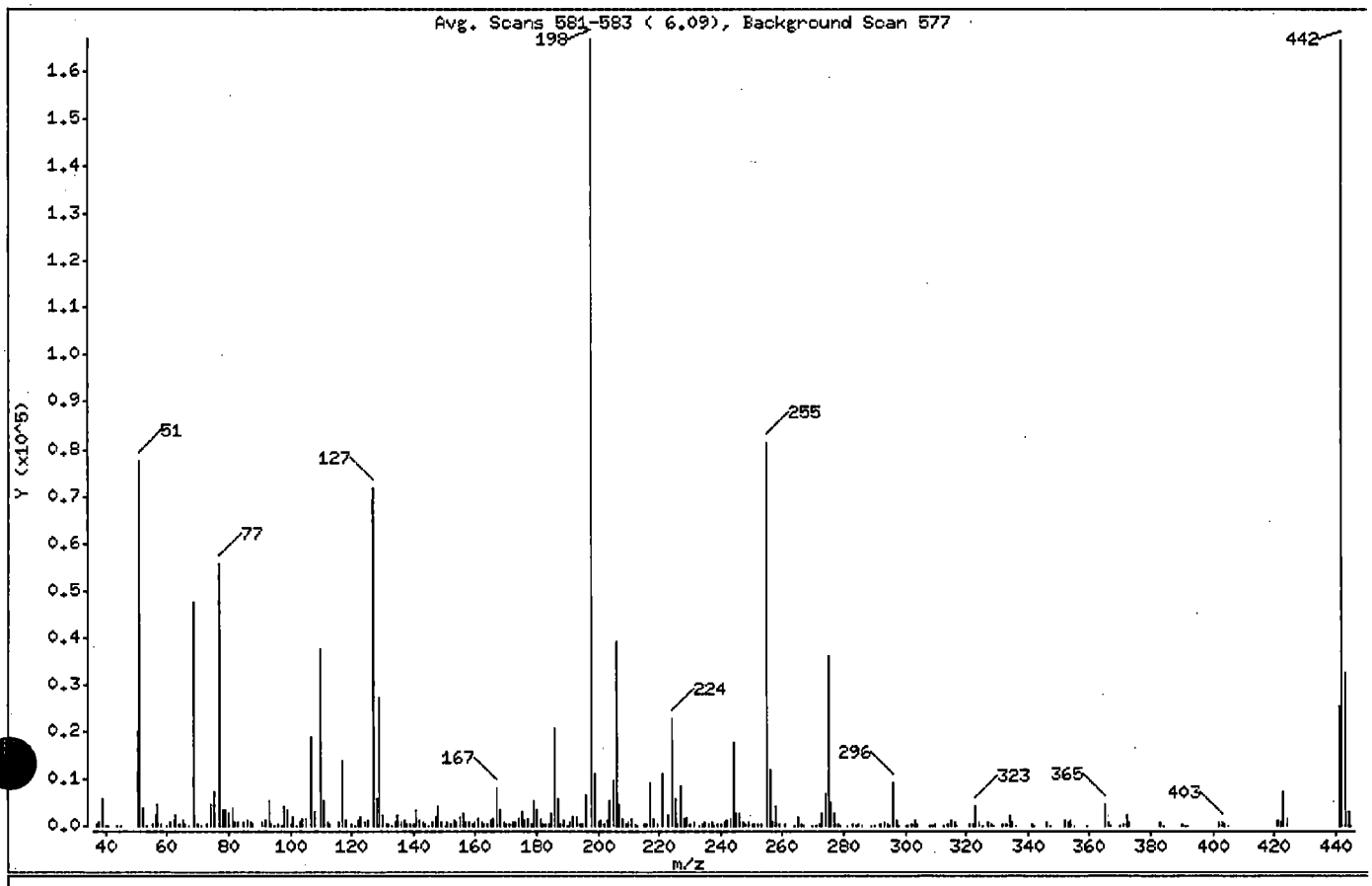
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	46.45
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	28.58
70	Less than 2.00% of mass 69	0.14 (0.50)
127	40.00 - 60.00% of mass 198	42.93
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.70
275	10.00 - 30.00% of mass 198	21.66
365	Greater than 1.00% of mass 198	2.72
441	Present, but less than mass 443	15.28
442	Greater than 40.00% of mass 198	99.88
443	17.00 - 23.00% of mass 442	19.57 (19.60)

Date : 28-FEB-2014 13:06

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 02281412.D

Spectrum: Avg. Scans 581-583 (6.09), Background Scan 577

Location of Maximum: 198.00

Number of points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	336	129.00	27056	202.00	386	286.00	141
38.00	936	130.00	2173	203.00	1061	289.00	50
39.00	5684	131.00	413	204.00	5548	290.00	59
40.00	176	132.00	430	205.00	9725	292.00	215
41.00	153	133.00	71	206.00	39296	293.00	592
44.00	183	134.00	883	207.00	4709	294.00	236
45.00	71	135.00	2325	208.00	1516	295.00	101
50.00	19992	136.00	885	209.00	394	296.00	9091
51.00	77536	137.00	1094	210.00	814	297.00	1306
52.00	3803	138.00	257	211.00	1553	298.00	129
53.00	129	139.00	247	212.00	198	300.00	56
55.00	215	140.00	214	213.00	109	301.00	78
56.00	2127	141.00	3443	215.00	483	302.00	240
57.00	4644	142.00	1228	216.00	205	303.00	1308
58.00	249	143.00	784	217.00	9067	304.00	435
60.00	56	144.00	283	218.00	1417	308.00	64
61.00	735	145.00	175	219.00	238	309.00	59
62.00	1022	146.00	719	221.00	11209	310.00	194
63.00	2398	147.00	1800	223.00	2455	313.00	117
64.00	297	148.00	4075	224.00	22824	314.00	528
65.00	1045	149.00	690	225.00	5922	315.00	1221
66.00	201	150.00	187	226.00	220	316.00	633
67.00	132	151.00	644	227.00	8310	317.00	84
69.00	47704	152.00	237	228.00	1367	321.00	426
70.00	240	153.00	979	229.00	1751	322.00	201
71.00	63	154.00	770	230.00	344	323.00	4111
73.00	507	155.00	2030	231.00	820	324.00	699
74.00	4774	156.00	2820	233.00	106	325.00	103
75.00	7220	157.00	704	234.00	471	327.00	596
77.00	55824	158.00	891	235.00	806	328.00	256
78.00	3460	159.00	573	236.00	559	329.00	54
79.00	3309	160.00	899	237.00	620	332.00	231
80.00	2612	161.00	1677	238.00	123	333.00	299
81.00	3951	162.00	598	239.00	209	334.00	2291
82.00	931	163.00	210	240.00	229	335.00	663

Date : 28-FEB-2014 13:06

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 02281412.D

Spectrum: Avg. Scans 581-583 (6.09), Background Scan 577

Location of Maximum: 198.00

Number of points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	813	164.00	297	241.00	583	336.00	51
85.00	670	165.00	1276	242.00	1256	341.00	499
86.00	1011	166.00	1403	243.00	1351	342.00	76
87.00	586	167.00	7911	244.00	17688	346.00	657
88.00	242	168.00	3402	245.00	2642	347.00	53
91.00	913	169.00	712	246.00	2771	352.00	1027
92.00	1084	170.00	302	247.00	672	353.00	791
93.00	5350	171.00	313	248.00	324	354.00	1179
94.00	415	172.00	737	249.00	801	355.00	160
95.00	106	173.00	886	250.00	288	359.00	87
96.00	406	174.00	1569	251.00	437	365.00	4541
97.00	60	175.00	3142	252.00	393	366.00	670
98.00	4350	176.00	1145	253.00	556	367.00	51
99.00	3431	177.00	1465	255.00	81464	370.00	114
100.00	411	178.00	194	256.00	12072	371.00	386
101.00	2011	179.00	5261	257.00	836	372.00	2148
102.00	95	180.00	3535	258.00	4164	373.00	593
103.00	847	181.00	1691	259.00	566	383.00	583
104.00	1381	182.00	287	261.00	218	384.00	76
105.00	1360	183.00	324	264.00	83	390.00	269
107.00	18944	184.00	445	265.00	1913	391.00	175
108.00	3138	185.00	2733	266.00	246	392.00	148
110.00	37728	186.00	20816	267.00	174	402.00	799
111.00	5185	187.00	6805	270.00	138	403.00	949
112.00	759	188.00	511	271.00	184	404.00	453
113.00	235	189.00	1204	272.00	388	405.00	65
116.00	796	190.00	177	273.00	2519	421.00	962
117.00	13930	191.00	917	274.00	6733	422.00	820
118.00	1099	192.00	1993	275.00	36152	423.00	7118
120.00	243	193.00	2000	276.00	5011	424.00	1388
121.00	51	194.00	511	277.00	2673	441.00	25496
122.00	1255	195.00	394	278.00	505	442.00	166720
123.00	1962	196.00	6540	279.00	57	443.00	32672
124.00	955	198.00	166912	281.00	66	444.00	3062
125.00	1018	199.00	11181	283.00	380	445.00	85

Date : 28-FEB-2014 13:06

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 02281412.D
Spectrum: Avg. Scans 581-583 (6.09), Background Scan 577
Location of Maximum: 198.00
Number of points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
127.00	71656	200.00	817	284.00	136		
128.00	5817	201.00	1095	285.00	440		

5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 03051405.D DFTPP Injection Date: 03/05/2014
Instrument ID: 10MSS9 DFTPP Injection Time: 14:59
GC Column: ID: 9999 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	55.99	
68	Less than 2.00% of mass 69	0.00	(0.00)
69	Mass 69 relative abundance	34.70	
70	Less than 2.00% of mass 69	0.09	(0.27)
127	40.00 - 60.00% of mass 198	48.20	
197	Less than 1.00% of mass 198	0.00	
199	5.00 - 9.00% of mass 198	7.00	
275	10.00 - 30.00% of mass 198	20.68	
365	Greater than 1.00% of mass 198	2.28	
441	Present, but less than mass 443	11.29	
442	Greater than 40.00% of mass 198	74.32	
443	17.00 - 23.00% of mass 442	15.01	(20.20)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCAL610328-96	CCAL610328-9	03051406.D	03/05/2014	15:31
2	SB-9 12-14'(1631878MS)	1632347-MS	03051414.D	03/05/2014	19:11
3	SB-9 12-14'(1631878MSD)	1632348-MSD	03051415.D	03/05/2014	19:38
4	SB-7 1.5-3'	10259055003	03051418.D	03/05/2014	20:59
5	SB-7 17-18'	10259055004	03051419.D	03/05/2014	21:26
6	SB-8 14-15"	10259055006	03051421.D	03/05/2014	22:19

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	55.99		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	34.70		PASS
70	Less than 2% of mass 69	0.09	(0.27)	PASS
127	40 - 60% of mass 198	48.20		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	7.00		PASS
275	10 - 30% of mass 198	20.68		PASS
365	Greater than 1% of mass 198	2.28		PASS
441	Present, but less than mass 443	11.29	(75.21)	PASS
442	Greater than 40% of mass 198	74.32		PASS
443	17 - 23% of mass 442	15.01	(20.20)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.8992126	5.000	PASS
Benzidine	1.2092308	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	96416			N/A
4,4-DDE	1261	1.3	15.0	PASS
4,4-DDD	7991	7.7	15.0	PASS
4,4-DDD + DDE	9252	8.8	15.0	PASS

*****

Tuning Sample, //192.168.10.12/chem/10mss9.i/030514.b/03051405.D/03051405.D,***

*****

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051405.D

Date : 05-MAR-2014 14:59

Client ID:

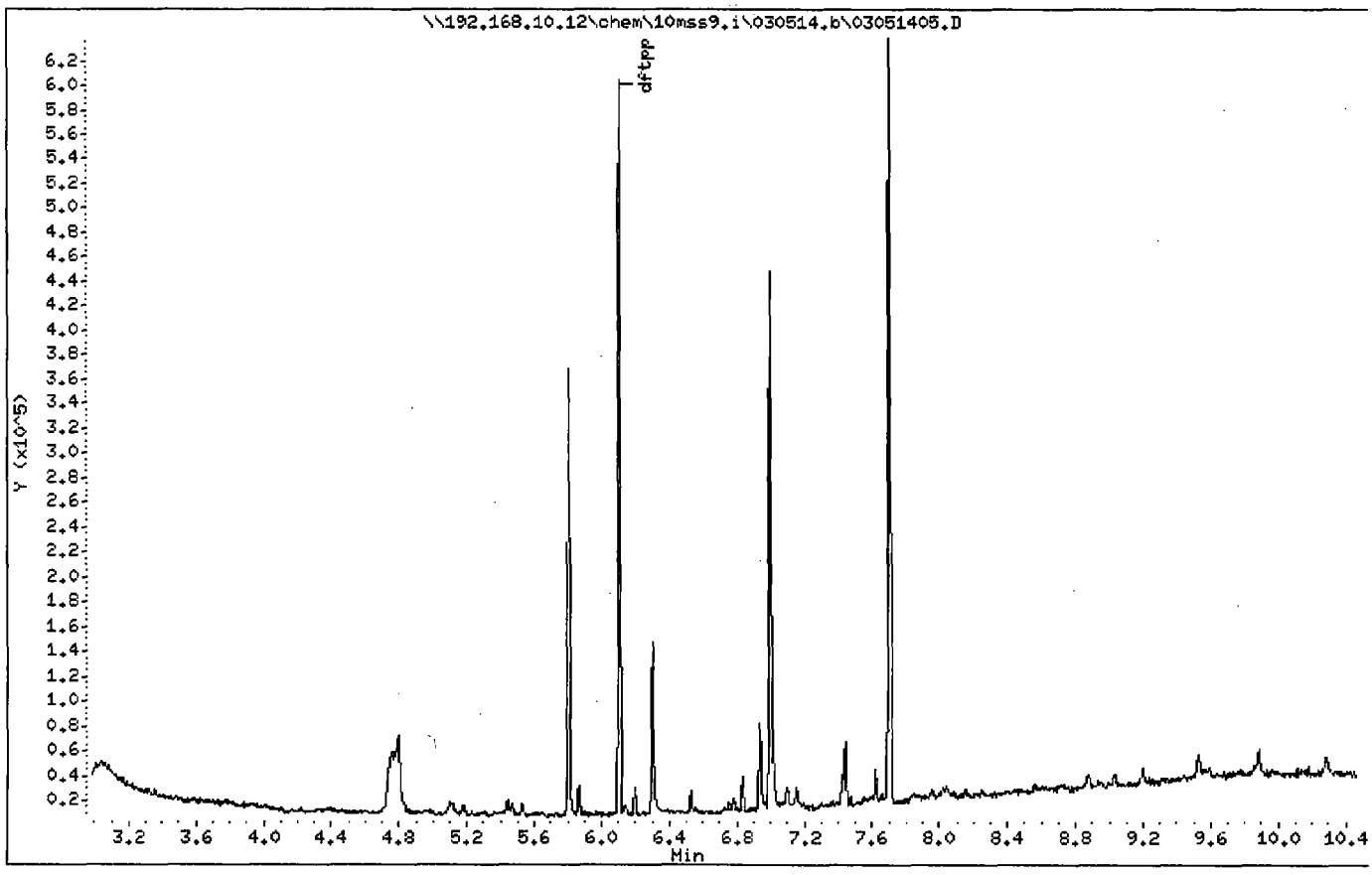
Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99



Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051405.D

Date : 05-MAR-2014 14:59

Client ID:

Instrument: 10mss9.i

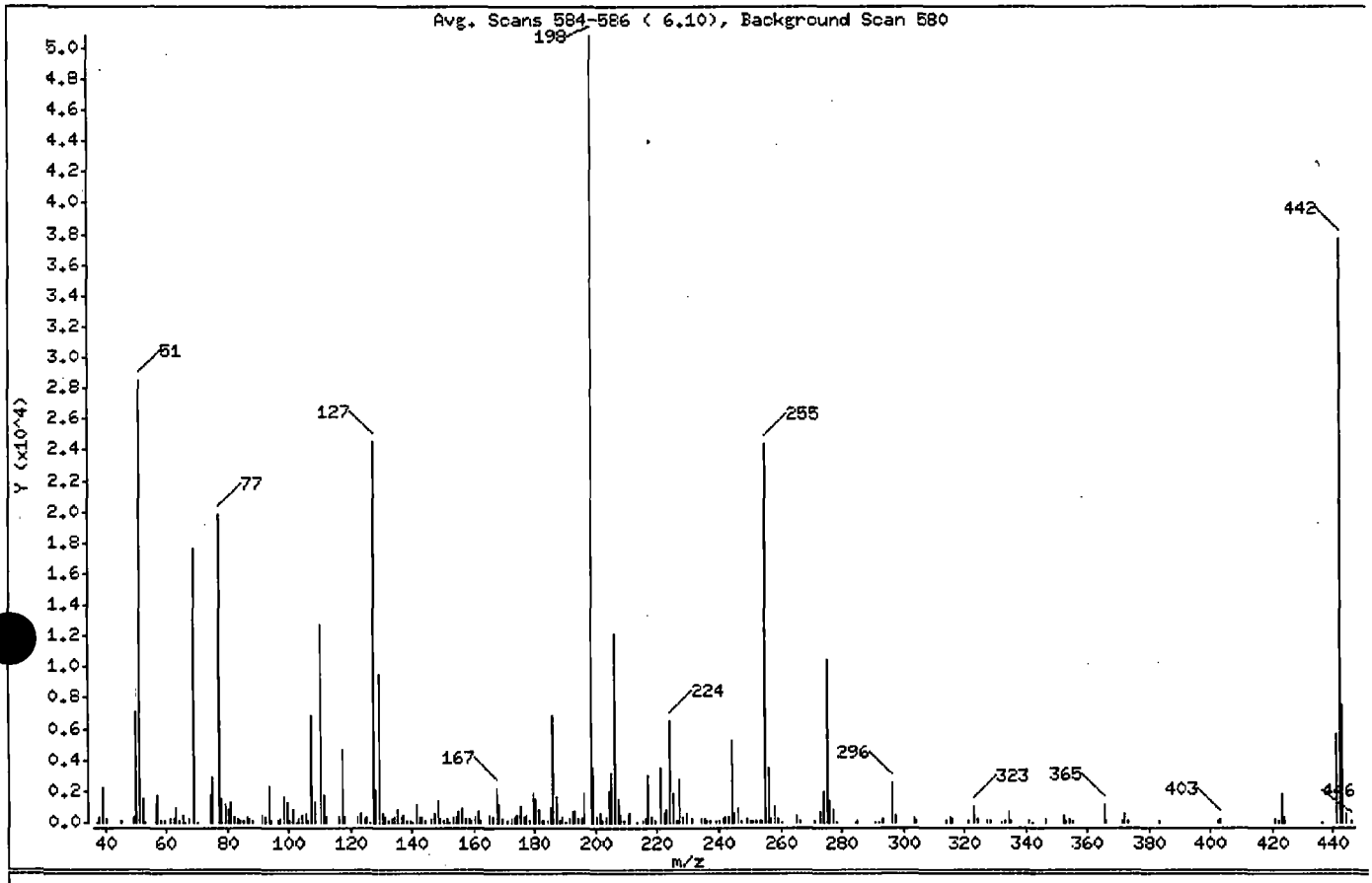
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	55.99
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	34.70
70	Less than 2.00% of mass 69	0.09 (0.27)
127	40.00 - 60.00% of mass 198	48.20
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.00
275	10.00 - 30.00% of mass 198	20.68
365	Greater than 1.00% of mass 198	2.28
441	Present, but less than mass 443	11.29
442	Greater than 40.00% of mass 198	74.32
443	17.00 - 23.00% of mass 442	15.01 (20.20)

Date : 05-MAR-2014 14:59

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 03051405.D
Spectrum: Avg. Scans 584-586 (6.10), Background Scan 580
Location of Maximum: 198.00
Number of points: 241

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	56	123.00	536	188.00	152	258.00	1081
38.00	304	124.00	286	189.00	385	259.00	274
39.00	2163	125.00	402	190.00	56	260.00	51
40.00	201	126.00	51	191.00	247	265.00	510
45.00	172	127.00	24480	192.00	679	266.00	91
49.00	313	128.00	2074	193.00	721	271.00	63
50.00	7112	129.00	9543	194.00	287	273.00	720
51.00	28432	130.00	605	195.00	191	274.00	1979
52.00	1479	131.00	292	196.00	1817	275.00	10500
53.00	37	132.00	63	198.00	50784	276.00	1430
56.00	1172	133.00	186	199.00	3553	277.00	827
57.00	1798	134.00	349	200.00	356	278.00	53
58.00	158	135.00	833	201.00	604	284.00	55
59.00	60	136.00	366	202.00	60	285.00	143
61.00	213	137.00	436	203.00	387	291.00	52
62.00	256	138.00	64	204.00	2012	292.00	51
63.00	985	139.00	173	205.00	3152	293.00	241
64.00	60	140.00	57	206.00	12180	296.00	2515
65.00	435	141.00	1188	207.00	1476	297.00	416
66.00	56	142.00	373	208.00	501	303.00	340
67.00	254	143.00	309	209.00	169	304.00	79
69.00	17624	144.00	75	210.00	498	314.00	102
70.00	48	146.00	231	211.00	561	315.00	389
74.00	1776	147.00	528	213.00	52	316.00	208
75.00	2892	148.00	1433	215.00	104	321.00	127
77.00	13904	149.00	284	216.00	200	323.00	1050
78.00	1509	150.00	88	217.00	3075	324.00	204
79.00	1196	151.00	252	218.00	379	327.00	109
80.00	848	152.00	50	219.00	68	328.00	95
81.00	1299	153.00	347	221.00	3506	332.00	57
82.00	382	154.00	304	222.00	534	333.00	66
83.00	179	155.00	701	223.00	865	334.00	720
84.00	91	156.00	936	224.00	6569	335.00	99
85.00	100	157.00	225	225.00	1922	341.00	126
86.00	301	158.00	260	226.00	64	342.00	51

Date : 05-MAR-2014 14:59

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 03051405.D

Spectrum: Avg. Scans 584-586 (6.10), Background Scan 580

Location of Maximum: 198.00

Number of points: 241

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	224	159.00	110	227.00	2785	346.00	230
88.00	113	160.00	299	228.00	372	352.00	446
91.00	415	161.00	662	229.00	595	353.00	171
92.00	389	162.00	148	231.00	229	354.00	221
93.00	2290	165.00	517	234.00	190	355.00	73
94.00	171	166.00	389	235.00	177	365.00	1160
96.00	146	167.00	2214	236.00	72	366.00	162
97.00	243	168.00	1198	237.00	158	371.00	68
98.00	1634	169.00	287	239.00	63	372.00	576
99.00	1315	171.00	140	240.00	117	373.00	133
100.00	69	172.00	256	241.00	210	383.00	110
101.00	828	173.00	321	242.00	386	402.00	138
102.00	51	174.00	472	243.00	392	403.00	287
103.00	219	175.00	1039	244.00	5260	421.00	192
104.00	515	176.00	349	245.00	637	422.00	170
105.00	539	177.00	477	246.00	884	423.00	1899
106.00	103	178.00	164	247.00	173	424.00	399
107.00	6938	179.00	1861	249.00	213	436.00	50
108.00	1268	180.00	1464	250.00	140	441.00	5733
110.00	12732	181.00	760	251.00	134	442.00	37744
111.00	1795	182.00	69	252.00	144	443.00	7623
112.00	347	183.00	107	253.00	159	444.00	634
116.00	331	184.00	140	254.00	90	446.00	66
117.00	4717	185.00	885	255.00	24408		
118.00	384	186.00	6881	256.00	3547		
122.00	395	187.00	1586	257.00	252		

5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 02281407.D DFTPP Injection Date: 02/28/2014
Instrument ID: 10MSSD DFTPP Injection Time: 08:48
GC Column: ID: 2 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	44.72	
68	Less than 2.00% of mass 69	0.70	(1.77)
69	Mass 69 relative abundance	39.56	
70	Less than 2.00% of mass 69	0.25	(0.64)
127	40.00 - 60.00% of mass 198	55.01	
197	Less than 1.00% of mass 198	0.40	
199	5.00 - 9.00% of mass 198	6.78	
275	10.00 - 30.00% of mass 198	26.51	
365	Greater than 1.00% of mass 198	3.35	
441	Present, but less than mass 443	12.52	
442	Greater than 40.00% of mass 198	88.32	
443	17.00 - 23.00% of mass 442	16.57	(18.76)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	ICAL810328-96	ICAL810328-96	02281408.D	02/28/2014	09:10
2	ICAL710328-96	ICAL710328-96	02281409.D	02/28/2014	09:39
3	ICAL610328-96	ICAL610328-96	02281410.D	02/28/2014	10:07
4	ICAL510328-96	ICAL510328-96	02281411.D	02/28/2014	10:35
5	ICAL410328-96	ICAL410328-96	02281412.D	02/28/2014	11:03
6	ICAL310328-96	ICAL310328-96	02281413.D	02/28/2014	11:31
7	ICAL210328-96	ICAL210328-96	02281414.D	02/28/2014	11:59
8	ICV10328-98	ICV10328-98	02281415.D	02/28/2014	12:27
9	ICV210328-47	ICV210328-47	02281416.D	02/28/2014	12:55

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	44.72		PASS
68	Less than 2% of mass 69	0.70	(1.77)	PASS
69	Mass 69 relative abundance	39.56		PASS
70	Less than 2% of mass 69	0.25	(0.64)	PASS
127	40 - 60% of mass 198	55.01		PASS
197	0 - 1% of mass 198	0.40		PASS
199	5 - 9% of mass 198	6.78		PASS
275	10 - 30% of mass 198	26.51		PASS
365	Greater than 1% of mass 198	3.35		PASS
441	Present, but less than mass 443	12.52	(75.56)	PASS
442	Greater than 40% of mass 198	88.32		PASS
443	17 - 23% of mass 442	16.57	(18.76)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.7583131	5.000	PASS
Benzidine	1.0039809	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	1199609			N/A
4,4-DDE	3595	0.3	15.0	PASS
4,4-DDD	50728	4.1	15.0	PASS
4,4-DDD + DDE	54323	4.3	15.0	PASS

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Tuning Sample, //192.168.10.12/chem/10mssD.i/022814B.b/02281407.D/02281407.D,***
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Date : 28-FEB-2014 08:48

Client ID:

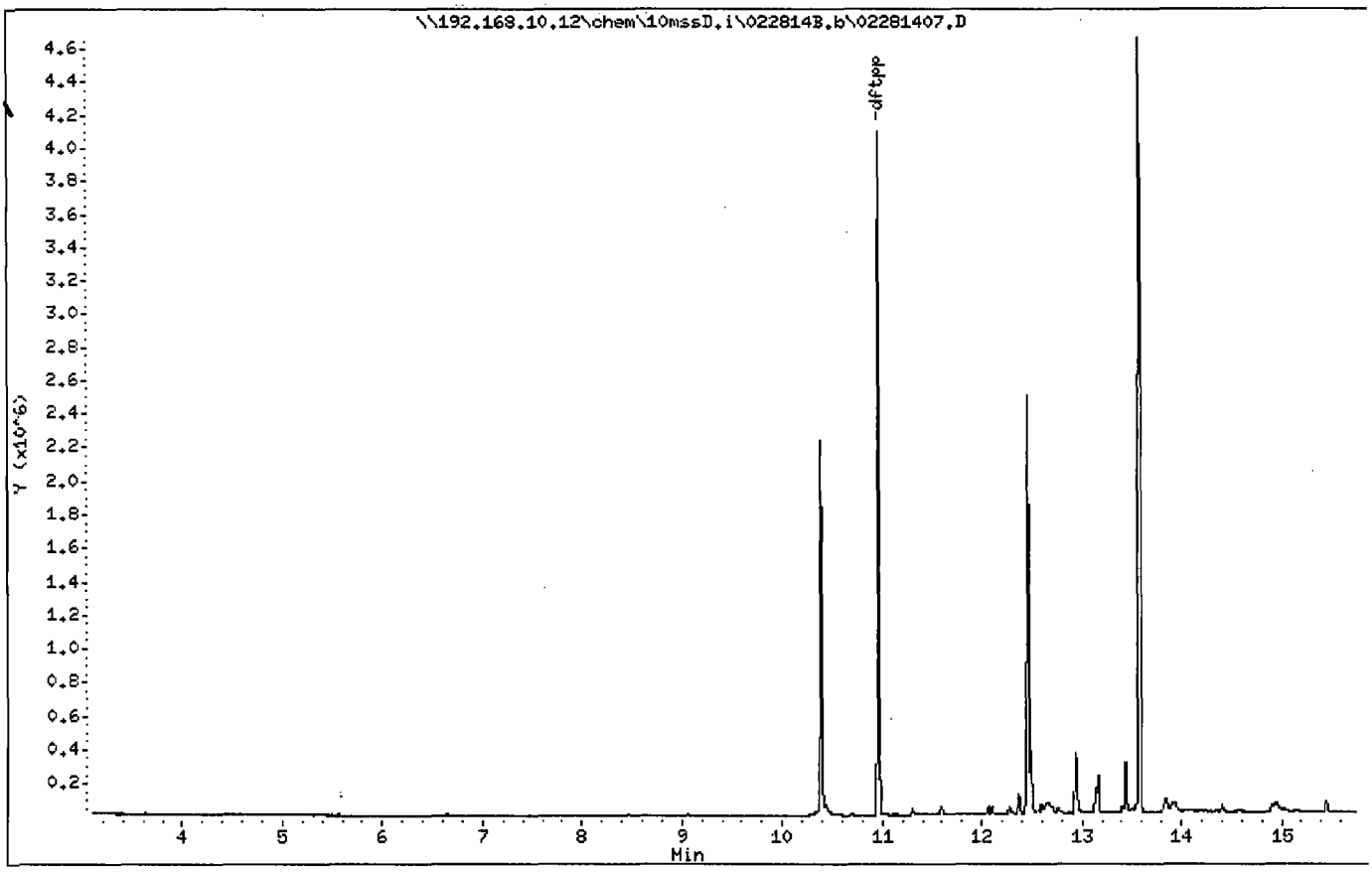
Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00



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Date : 28-FEB-2014 08:48

Client ID:

Instrument: 10mssD.i

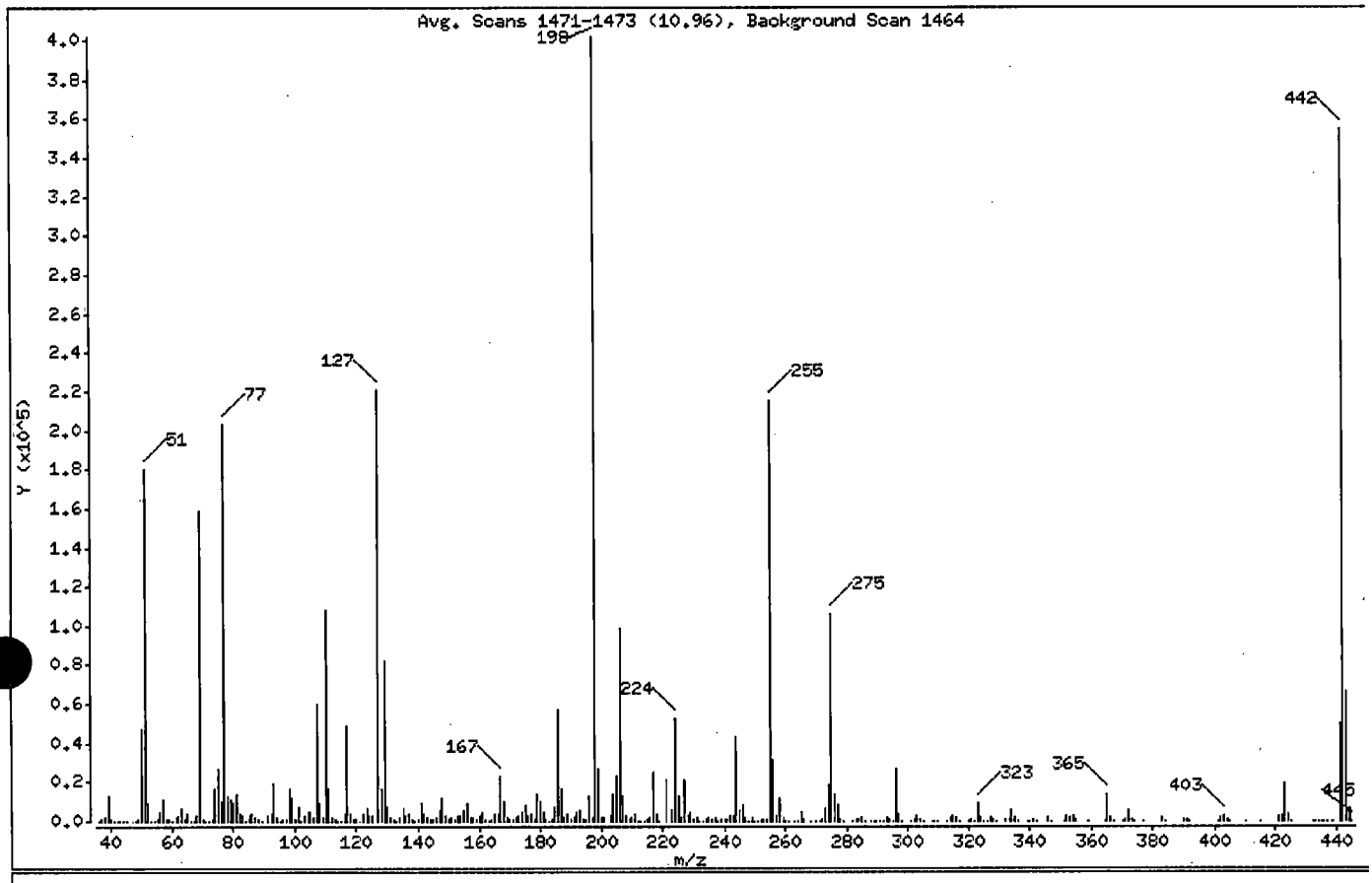
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.72
68	Less than 2.00% of mass 69	0.70 (1.77)
69	Mass 69 relative abundance	39.56
70	Less than 2.00% of mass 69	0.25 (0.64)
127	40.00 - 60.00% of mass 198	55.01
197	Less than 1.00% of mass 198	0.40
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 30.00% of mass 198	26.51
365	Greater than 1.00% of mass 198	3.35
441	Present, but less than mass 443	12.52
442	Greater than 40.00% of mass 198	83.32
443	17.00 - 23.00% of mass 442	16.57 (18.76)

Date : 28-FEB-2014 08:48

Client ID: Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 2.00

Data File: 02281407.D
Spectrum: Avg. Scans 1471-1473 (10.96), Background Scan 1464
Location of Maximum: 198.00
Number of points: 331

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	209	121.00	183	206.00	99296	297.00	3995
37.00	708	122.00	3307	207.00	12760	298.00	288
38.00	1978	123.00	6090	208.00	3196	301.00	383
39.00	12750	124.00	2737	209.00	998	302.00	542
40.00	647	125.00	2678	210.00	1481	303.00	3216
41.00	443	127.00	221184	211.00	3789	304.00	845
42.00	233	128.00	16784	212.00	176	305.00	50
43.00	423	129.00	81976	213.00	257	308.00	388
44.00	154	130.00	7155	214.00	134	309.00	283
45.00	345	131.00	1423	215.00	1013	310.00	342
47.00	4	132.00	803	216.00	2154	313.00	252
48.00	18	133.00	302	217.00	25240	314.00	1396
49.00	1125	134.00	2123	218.00	3472	315.00	3031
50.00	47464	135.00	6452	219.00	314	316.00	1820
51.00	179776	136.00	2614	221.00	21272	317.00	354
52.00	8914	137.00	3294	223.00	5610	320.00	107
53.00	441	138.00	861	224.00	52768	321.00	927
54.00	57	139.00	416	225.00	13020	322.00	423
55.00	815	140.00	854	226.00	1458	323.00	9132
56.00	4825	141.00	9653	227.00	21288	324.00	1705
57.00	11374	142.00	3536	228.00	3012	325.00	181
58.00	509	143.00	2289	229.00	4460	326.00	154
59.00	914	144.00	678	230.00	660	327.00	1662
60.00	57	145.00	568	231.00	2004	328.00	863
61.00	2051	146.00	1840	232.00	339	329.00	146
62.00	2586	147.00	5220	233.00	422	332.00	742
63.00	6591	148.00	12083	234.00	1334	333.00	1005
64.00	968	149.00	2447	235.00	1606	334.00	5926
65.00	3384	150.00	667	236.00	1230	335.00	1534
66.00	300	151.00	1698	237.00	1793	336.00	170
67.00	407	152.00	619	238.00	241	339.00	127
68.00	2812	153.00	3157	239.00	804	340.00	62
69.00	159040	154.00	2352	240.00	622	341.00	1019
70.00	1017	155.00	5781	241.00	1296	342.00	223
71.00	168	156.00	8993	242.00	2847	346.00	1831

Date : 28-FEB-2014 08:48

Client ID:

Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00

Data File: 02281407.D

Spectrum: Avg. Scans 1471-1473 (10.96), Background Scan 1464

Location of Maximum: 198.00

Number of points: 331

m/z	Y	m/z	Y	m/z	Y	m/z	Y
72.00	272	157.00	1656	243.00	3227	347.00	385
73.00	1305	158.00	1731	244.00	43704	351.00	159
74.00	16776	159.00	1312	245.00	5784	352.00	2834
75.00	26672	160.00	2976	246.00	8292	353.00	2024
76.00	10431	161.00	4695	247.00	1699	354.00	2936
77.00	203008	162.00	1201	248.00	365	355.00	546
78.00	13383	163.00	320	249.00	1611	359.00	170
79.00	11161	164.00	609	250.00	368	364.00	70
80.00	8841	165.00	3510	251.00	377	365.00	13475
81.00	13547	166.00	3431	252.00	491	366.00	1967
82.00	3499	167.00	23064	253.00	1141	367.00	56
83.00	3107	168.00	9785	254.00	601	370.00	284
84.00	351	169.00	1761	255.00	215616	371.00	775
85.00	2494	170.00	645	256.00	31840	372.00	5161
86.00	3649	171.00	718	257.00	2395	373.00	1248
87.00	1723	172.00	1770	258.00	11971	374.00	132
88.00	688	173.00	2404	259.00	1925	377.00	64
89.00	319	174.00	4320	260.00	343	383.00	1413
91.00	2744	175.00	8504	261.00	372	384.00	357
92.00	3390	176.00	2416	263.00	140	390.00	673
93.00	19840	177.00	3494	264.00	421	391.00	468
94.00	1440	178.00	1238	265.00	5017	392.00	407
95.00	447	179.00	13470	266.00	701	401.00	259
96.00	1185	180.00	9890	268.00	50	402.00	2103
97.00	506	181.00	4854	270.00	230	403.00	2955
98.00	16364	182.00	763	271.00	460	404.00	1087
99.00	12009	183.00	449	272.00	701	405.00	153
100.00	1124	184.00	1233	273.00	6791	410.00	56
101.00	7813	185.00	7538	274.00	18472	415.00	132
102.00	434	186.00	57496	275.00	106592	421.00	2600
103.00	2348	187.00	16330	276.00	13857	422.00	2395
104.00	4179	188.00	1720	277.00	8324	423.00	19784
105.00	4406	189.00	3292	278.00	1281	424.00	3890
106.00	1566	190.00	563	279.00	288	425.00	389
107.00	60152	191.00	1698	282.00	169	432.00	56

Date : 28-FEB-2014 08:48

Client ID: Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 2.00

Data File: 02281407.D

Spectrum: Avg. Scans 1471-1473 (10.96), Background Scan 1464

Location of Maximum: 198.00

Number of points: 331

m/z	Y	m/z	Y	m/z	Y	m/z	Y
108.00	9310	192.00	4823	283.00	942	433.00	122
109.00	1907	193.00	5174	284.00	678	434.00	56
110.00	108376	194.00	1133	285.00	1531	435.00	144
111.00	16736	195.00	770	286.00	260	436.00	104
112.00	2017	196.00	13055	288.00	64	437.00	142
113.00	688	197.00	1617	289.00	348	438.00	77
114.00	202	198.00	402048	290.00	339	439.00	245
115.00	199	199.00	27248	291.00	140	441.00	50344
116.00	3370	200.00	1994	292.00	412	442.00	355072
117.00	49416	201.00	2084	293.00	1961	443.00	66624
118.00	3440	203.00	2609	294.00	506	444.00	6363
119.00	465	204.00	14077	295.00	244	445.00	343
120.00	737	205.00	23456	296.00	26800		

5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259055
Lab File ID: 03061402.D DFTPP Injection Date: 03/06/2014
Instrument ID: 10MSSD DFTPP Injection Time: 07:20
GC Column: ID: 2 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	44.34	
68	Less than 2.00% of mass 69	0.76	(1.93)
69	Mass 69 relative abundance	39.64	
70	Less than 2.00% of mass 69	0.22	(0.56)
127	40.00 - 60.00% of mass 198	53.72	
197	Less than 1.00% of mass 198	0.51	
199	5.00 - 9.00% of mass 198	6.74	
275	10.00 - 30.00% of mass 198	28.32	
365	Greater than 1.00% of mass 198	3.82	
441	Present, but less than mass 443	15.43	
442	Greater than 40.00% of mass 198	110.50	
443	17.00 - 23.00% of mass 442	21.31	(19.28)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCAL610328-96	CCAL610328-9	03061403.D	03/06/2014	07:48
2	BLANK for HBN 288053 [OEXT/244	1632345	03061404.D	03/06/2014	08:16
3	LCS for HBN 288053 [OEXT/24489	1632346	03061405.D	03/06/2014	08:44
4	SB-6 1.5-3'	10259055001	03061408.D	03/06/2014	10:09
5	SB-6 15-16.5'	10259055002	03061409.D	03/06/2014	10:37
6	SB-8 1.5-2.5"	10259055005	03061410.D	03/06/2014	11:05
7	DUP-002	10259055007	03061415.D	03/06/2014	13:27

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	90.50		PASS
51	30 - 60% of mass 198	44.34		PASS
68	Less than 2% of mass 69	0.76	(1.93)	PASS
69	Mass 69 relative abundance	39.64		PASS
70	Less than 2% of mass 69	0.22	(0.56)	PASS
127	40 - 60% of mass 198	53.72		PASS
197	0 - 1% of mass 198	0.51		PASS
199	5 - 9% of mass 198	6.74		PASS
275	10 - 30% of mass 198	28.32		PASS
365	Greater than 1% of mass 198	3.82		PASS
441	Present, but less than mass 443	15.43	(72.39)	PASS
442	Greater than 40% of mass 198	110.50		PASS
443	17 - 23% of mass 442	21.31	(19.28)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1450677	5.000	PASS
Benzidine	0.9762658	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	887844			N/A
4,4-DDE	8272	0.9	15.0	PASS
4,4-DDD	52378	5.6	15.0	PASS
4,4-DDD + DDE	60650	6.4	15.0	PASS

***** Tuning Sample, //192.168.10.12/chem/10mssD.i/030614.b/03061402.D/03061402.D,*** *****

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061402.D

Date : 06-MAR-2014 07:20

Client ID:

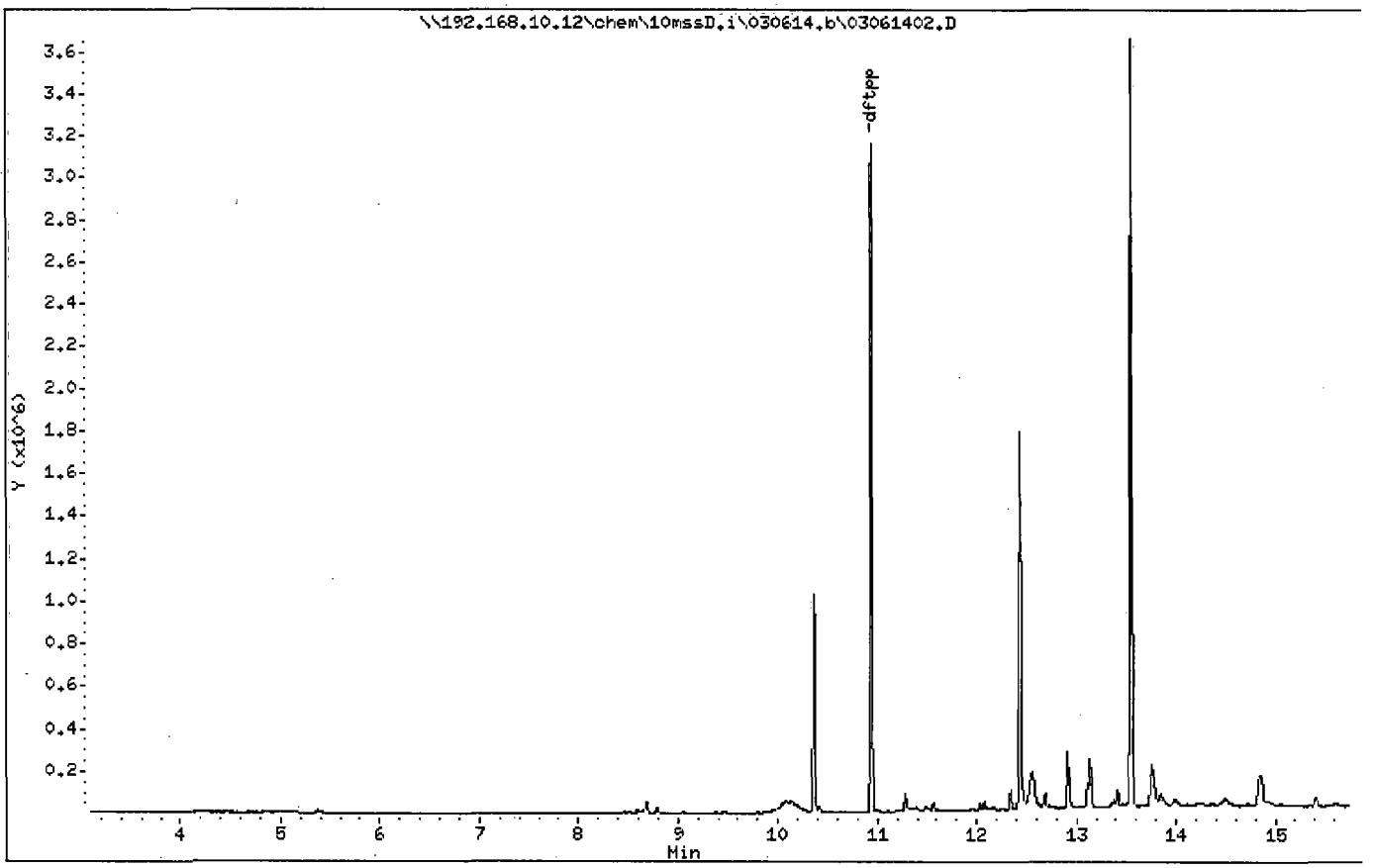
Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00



Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061402.D

Date : 06-MAR-2014 07:20

Client ID:

Instrument: 10mssD.i

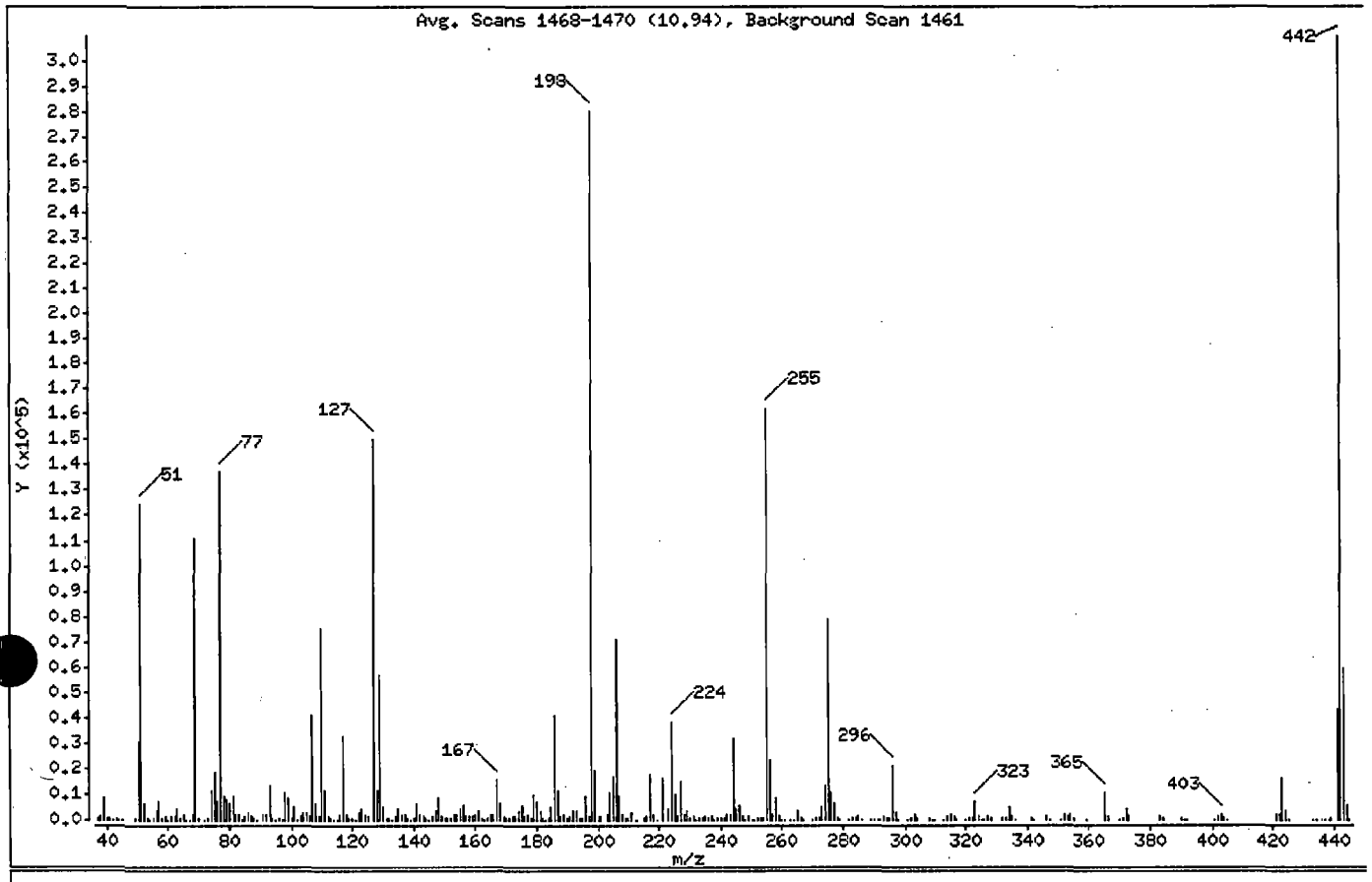
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	44.34
68	Less than 2.00% of mass 69	0.76 (1.93)
69	Mass 69 relative abundance	39.64
70	Less than 2.00% of mass 69	0.22 (0.56)
127	40.00 - 60.00% of mass 198	53.72
197	Less than 1.00% of mass 198	0.51
199	5.00 - 9.00% of mass 198	6.74
275	10.00 - 30.00% of mass 198	28.32
365	Greater than 1.00% of mass 198	3.82
441	Present, but less than mass 443	15.43
442	Greater than 40.00% of mass 198	110.50
443	17.00 - 23.00% of mass 442	21.31 (19.28)

Date : 06-MAR-2014 07:20

Client ID: Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 2.00

Data File: 03061402.D
Spectrum: Avg. Scans 1468-1470 (10.94), Background Scan 1461
Location of Maximum: 442.00
Number of points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	466	121.00	233	201.00	1461	291.00	195
38.00	1353	122.00	2563	203.00	1837	292.00	310
39.00	9567	123.00	4103	204.00	10522	293.00	1611
40.00	439	124.00	1907	205.00	16968	294.00	477
41.00	456	125.00	1562	206.00	71072	295.00	545
42.00	87	127.00	150592	207.00	9209	296.00	21152
43.00	560	128.00	11567	208.00	2304	297.00	2970
44.00	30	129.00	56616	209.00	715	298.00	190
45.00	239	130.00	4669	210.00	729	301.00	279
49.00	772	131.00	899	211.00	2880	302.00	369
50.00	30592	132.00	531	212.00	310	303.00	2416
51.00	124296	133.00	204	213.00	156	304.00	678
52.00	6224	134.00	1388	215.00	831	308.00	417
53.00	379	135.00	4446	216.00	1746	309.00	155
54.00	257	136.00	1874	217.00	18040	310.00	290
55.00	841	137.00	2266	218.00	2289	313.00	174
56.00	3323	138.00	614	219.00	183	314.00	1118
57.00	7412	139.00	329	221.00	16528	315.00	2343
58.00	417	140.00	675	223.00	4248	316.00	1342
59.00	1401	141.00	6653	224.00	38168	317.00	235
60.00	69	142.00	2433	225.00	9981	320.00	50
61.00	1370	143.00	1716	226.00	1109	321.00	762
62.00	1592	144.00	532	227.00	15099	322.00	428
63.00	4604	145.00	342	228.00	2220	323.00	7346
64.00	796	146.00	1135	229.00	3476	324.00	1413
65.00	2359	147.00	3725	230.00	460	325.00	127
66.00	134	148.00	8248	231.00	1358	326.00	77
67.00	187	149.00	1727	232.00	275	327.00	1249
68.00	2143	150.00	471	233.00	373	328.00	762
69.00	111128	151.00	1023	234.00	920	332.00	478
70.00	617	152.00	404	235.00	1170	333.00	739
72.00	350	153.00	2250	236.00	803	334.00	5020
73.00	817	154.00	1801	237.00	1240	335.00	1238
74.00	11603	155.00	3960	238.00	167	336.00	65
75.00	18608	156.00	5877	239.00	644	341.00	830

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061402.D

Date : 06-MAR-2014 07:20

Client ID:

Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 2.00

Data File: 03061402.D

Spectrum: Avg. Scans 1468-1470 (10,94), Background Scan 1461

Location of Maximum: 442.00

Number of points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	7201	157.00	1314	240.00	525	342.00	230
77.00	137408	158.00	1291	241.00	944	346.00	1643
78.00	9492	159.00	1102	242.00	2158	347.00	212
79.00	7811	160.00	2259	243.00	2321	351.00	64
80.00	6110	161.00	3361	244.00	32080	352.00	2292
81.00	9140	162.00	1066	245.00	4186	353.00	1697
82.00	2429	163.00	191	246.00	6033	354.00	2470
83.00	2251	164.00	452	247.00	1267	355.00	488
84.00	301	165.00	2441	248.00	347	359.00	117
85.00	1513	166.00	2323	249.00	1172	365.00	10695
86.00	2493	167.00	15567	250.00	274	366.00	1373
87.00	1296	168.00	6459	251.00	286	370.00	171
88.00	437	169.00	1237	252.00	367	371.00	618
89.00	206	170.00	481	253.00	1009	372.00	4292
91.00	1985	171.00	615	254.00	511	373.00	1111
92.00	2149	172.00	1205	255.00	162688	383.00	1108
93.00	13348	173.00	1548	256.00	23520	384.00	357
94.00	996	174.00	3421	257.00	1784	390.00	622
95.00	255	175.00	5500	258.00	8718	391.00	345
96.00	833	176.00	1665	259.00	1480	392.00	298
97.00	90	177.00	2354	260.00	177	401.00	250
98.00	10597	178.00	969	261.00	309	402.00	1622
99.00	8559	179.00	9747	263.00	51	403.00	2418
100.00	853	180.00	6989	264.00	307	404.00	844
101.00	5229	181.00	3384	265.00	3673	405.00	52
102.00	324	182.00	557	266.00	568	421.00	2201
103.00	1667	183.00	294	267.00	55	422.00	2152
104.00	3140	184.00	808	270.00	140	423.00	16384
105.00	3099	185.00	5249	271.00	367	424.00	3299
106.00	1072	186.00	41184	272.00	532	425.00	289
107.00	41624	187.00	11295	273.00	5209	433.00	51
108.00	6463	188.00	1198	274.00	13719	434.00	127
109.00	1192	189.00	2400	275.00	79376	436.00	175
110.00	75192	190.00	394	276.00	10643	437.00	170
111.00	11071	191.00	1163	277.00	6411	438.00	171

Date : 06-MAR-2014 07:20

Client ID: Instrument: 10mssD.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 2.00

Data File: 03061402.D
Spectrum: Avg. Scans 1468-1470 (10.94), Background Scan 1461
Location of Maximum: 442.00
Number of points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	1493	192.00	3297	278.00	933	439.00	357
113.00	554	193.00	3719	279.00	143	441.00	43240
114.00	126	194.00	845	282.00	119	442.00	309760
115.00	177	195.00	551	283.00	703	443.00	59728
116.00	2377	196.00	9281	284.00	500	444.00	5342
117.00	32584	197.00	1428	285.00	1112	445.00	314
118.00	2397	198.00	280320	286.00	215		
119.00	365	199.00	18396	289.00	192		
120.00	549	200.00	1502	290.00	247		

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Report Date: 05-Mar-2014 16:08

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 05-MAR-2014 15:31
Lab File ID: 03051406.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.82144	0.85739	0.85739	0.000	4.37596	40.00000	Averaged
2 Pyridine	1.49516	1.51663	1.51663	0.000	1.43582	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.41718	1.40485	1.40485	0.000	-0.86957	20.00000	Averaged
$ 4 Phenol-d6 (S)	1.62963	1.57881	1.57881	0.000	-3.11837	20.00000	Averaged
5 Phenol	1.71095	1.61900	1.61900	0.800	-5.37412	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.27504	1.15571	1.15571	0.700	-9.35894	40.00000	Averaged
7 2-Chlorophenol	1.43833	1.38863	1.38863	0.800	-3.45512	40.00000	Averaged
8 1,3-Dichlorobenzene	1.62113	1.57158	1.57158	0.000	-3.05687	40.00000	Averaged
10 1,4-Dichlorobenzene	1.64435	1.56250	1.56250	0.000	-4.97762	20.00000	Averaged
11 Benzyl alcohol	0.98327	0.97185	0.97185	0.000	-1.16113	40.00000	Averaged
12 1,2-Dichlorobenzene	1.53761	1.48083	1.48083	0.000	-3.69302	40.00000	Averaged
13 2-Methylphenol	1.09771	1.04548	1.04548	0.700	-4.75847	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	3.26596	2.97321	2.97321	0.000	-8.96369	40.00000	Averaged
15 3 & 4-Methylphenol	1.43620	1.34343	1.34343	0.600	-6.45951	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	0.82934	0.76415	0.76415	0.500	-7.86011	40.00000	Averaged
18 Hexachloroethane	0.59718	0.57156	0.57156	0.300	-4.29032	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.34604	0.33490	0.33490	0.000	-3.22077	20.00000	Averaged
20 Nitrobenzene	0.32889	0.31833	0.31833	0.200	-3.20973	40.00000	Averaged
21 Isophorone	0.59079	0.56475	0.56475	0.400	-4.40915	40.00000	Averaged
22 2-Nitrophenol	0.19269	0.19568	0.19568	0.100	1.55078	20.00000	Averaged
23 2,4-Dimethylphenol	0.33563	0.32025	0.32025	0.200	-4.58226	40.00000	Averaged
24 Benzoic acid	0.17260	0.18006	0.18006	0.000	4.32065	40.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.34958	0.33826	0.33826	0.300	-3.23861	40.00000	Averaged
26 2,4-Dichlorophenol	0.28989	0.28481	0.28481	0.200	-1.75278	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.30416	0.29703	0.29703	0.000	-2.34360	40.00000	Averaged
29 Naphthalene	1.01420	0.96221	0.96221	0.700	-5.12592	40.00000	Averaged
30 4-Chloroaniline	0.36851	0.32408	0.32408	0.010	-12.05418	40.00000	Averaged
31 Hexachlorobutadiene	0.16651	0.16249	0.16249	0.010	-2.40976	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.27561	0.26175	0.26175	0.200	-5.02924	20.00000	Averaged
33 2-Methylnaphthalene	0.66940	0.64264	0.64264	0.040	-3.99749	40.00000	Averaged
34 1-Methylnaphthalene	0.62068	0.59864	0.59864	0.000	-3.55010	40.00000	Averaged
35 Hexachlorocyclopentadiene	80.00000	73.12764	0.27055	0.050	-8.59045	40.00000	Quadratic
36 2,4,6-Trichlorophenol	0.37362	0.37639	0.37639	0.200	0.74039	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.39701	0.39855	0.39855	0.200	0.38713	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.39852	1.38894	1.38894	0.000	-0.68511	20.00000	Averaged
39 2-Chloronaphthalene	1.22024	1.17193	1.17193	0.800	-3.95897	40.00000	Averaged
40 2-Nitroaniline	0.39806	0.38085	0.38085	0.010	-4.32207	40.00000	Averaged
41 Dimethylphthalate	1.32327	1.27302	1.27302	0.010	-3.79769	40.00000	Averaged
42 2,6-Dinitrotoluene	0.30805	0.30628	0.30628	0.200	-0.57469	40.00000	Averaged
43 Acenaphthylene	1.88785	1.81898	1.81698	0.900	-3.64780	40.00000	Averaged
44 3-Nitroaniline	0.33118	0.29110	0.29110	0.010	-12.10172	40.00000	Averaged
46 Acenaphthene	1.11464	1.06507	1.06507	0.900	-4.44693	20.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Report Date: 05-Mar-2014 16:08

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 05-MAR-2014 15:31
Lab File ID: 03051406.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
47 2,4-Dinitrophenol	80.00000	82.54606	0.15450	0.050	3.18258	40.00000	Quadratic
48 4-Nitrophenol	0.25423	0.25260	0.25260	0.050	-0.64016	40.00000	Averaged
49 2,4-Dinitrotoluene	0.39940	0.39768	0.39768	0.200	-0.42997	40.00000	Averaged
50 Dibenzofuran	1.66686	1.59158	1.59158	0.800	-4.51642	40.00000	Averaged
51 Diethylphthalate	1.27891	1.22194	1.22194	0.010	-4.45501	40.00000	Averaged
52 4-Chlorophenylphenyl ether	0.61011	0.60120	0.60120	0.400	-1.46090	40.00000	Averaged
53 4-Nitroaniline	0.36803	0.35696	0.35696	0.010	-3.00944	40.00000	Averaged
54 Fluorene	1.35237	1.31316	1.31316	0.900	-2.89920	40.00000	Averaged
55 4,6-Dinitro-2-methylphenol	80.00000	82.87456	0.14384	0.010	3.59320	40.00000	Quadratic
56 N-Nitrosodiphenylamine	0.69061	0.67660	0.67660	0.010	-2.02976	20.00000	Averaged
57 Azobenzene	1.22401	1.14825	1.14825	0.000	-6.18969	40.00000	Averaged
58 1,2-Diphenylhydrazine	1.22401	1.14825	1.14825	0.000	-6.18969	40.00000	Averaged
$ 59 2,4,6-Tribromophenol (S)	0.15272	0.16133	0.16133	0.000	5.63619	20.00000	Averaged
60 4-Bromophenylphenyl ether	0.20143	0.20254	0.20254	0.100	0.55160	40.00000	Averaged
61 Hexachlorobenzene	0.21379	0.20538	0.20538	0.100	-3.93083	40.00000	Averaged
62 Pentachlorophenol	80.00000	88.30358	0.12481	0.050	10.37947	20.00000	Quadratic
64 Phenanthrene	1.14257	1.07558	1.07558	0.700	-5.86335	40.00000	Averaged
65 Anthracene	1.15927	1.09707	1.09707	0.700	-5.36587	40.00000	Averaged
66 Carbazole	1.12590	1.07782	1.07782	0.010	-4.27044	40.00000	Averaged
67 di-n-Butylphthalate	1.36512	1.27356	1.27356	0.010	-6.70747	40.00000	Averaged
68 Fluoranthene	1.24099	1.19624	1.19624	0.600	-3.60571	20.00000	Averaged
69 Benzidine	80.00000	66.73759	0.46735	0.000	-16.57801	40.00000	Quadratic
70 Pyrene	1.35511	1.28344	1.28344	0.600	-5.28849	40.00000	Averaged
$ 71 Terphenyl-d14 (S)	0.85450	0.82516	0.82516	0.000	-3.43314	20.00000	Averaged
72 Butylbenzylphthalate	0.62689	0.59051	0.59051	0.010	-5.80314	40.00000	Averaged
73 bis(2-Ethylhexyl)phthalate	0.87641	0.80212	0.80212	0.010	-8.47649	40.00000	Averaged
74 3,3'-Dichlorobenzidine	0.36973	0.32182	0.32182	0.010	-12.95766	40.00000	Averaged
75 Benzo(a)anthracene	1.22862	1.15404	1.15404	0.800	-6.06984	40.00000	Averaged
77 Chrysene	1.12153	1.05869	1.05869	0.700	-5.60364	40.00000	Averaged
78 di-n-Octylphthalate	1.55444	1.44241	1.44241	0.010	-7.20733	20.00000	Averaged
79 Benzo(b)fluoranthene	1.18796	1.13583	1.13583	0.700	-4.38768	40.00000	Averaged
80 Benzo(k)fluoranthene	1.21558	1.18390	1.18390	0.700	-2.60620	40.00000	Averaged
81 Benzo(a)pyrene	1.13484	1.09403	1.09403	0.700	-3.59611	20.00000	Averaged
83 Indeno(1,2,3-cd)pyrene	1.22460	1.21030	1.21030	0.500	-1.16716	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.04083	1.01246	1.01246	0.400	-2.72584	40.00000	Averaged
85 Benzo(g,h,i)perylene	1.03855	1.00245	1.00245	0.500	-3.47633	40.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Report Date: 05-Mar-2014 16:08

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 05-MAR-2014 15:31
Lab File ID: 03051406.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 13:25 16:07
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	4.50693
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Report Date: 05-Mar-2014 16:08

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Lab Smp Id: CCAL 6 10328-96
Inj Date : 05-MAR-2014 15:31
Operator : JLR Inst ID: 10mss9.i
Smp Info : CCAL 6 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 05-Mar-2014 16:08 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.368	2.368	(0.502)	189101	80.0000	83.5
	2 Pyridine	79	2.410	2.410	(0.512)	334498	80.0000	81.1
$	3 2-Fluorophenol (S)	112	3.425	3.425	(0.727)	309846	80.0000	79.3(M)
$	4 Phenol-d6 (S)	99	4.291	4.291	(0.910)	348213	80.0000	77.5
	5 Phenol	94	4.302	4.302	(0.913)	357078	80.0000	75.7
	6 bis(2-Chloroethyl)ether	63	4.408	4.408	(0.935)	254896	80.0000	72.5
	7 2-Chlorophenol	128	4.494	4.494	(0.954)	306268	80.0000	77.2
	8 1,3-Dichlorobenzene	146	4.660	4.660	(0.989)	346618	80.0000	77.6
*	9 1,4-Dichlorobenzene-d4	152	4.713	4.713	(1.000)	110277	40.0000	
	10 1,4-Dichlorobenzene	146	4.734	4.734	(1.005)	344615	80.0000	76.0
	11 Benzyl alcohol	79	4.841	4.841	(1.027)	214345	80.0000	79.1
	12 1,2-Dichlorobenzene	146	4.900	4.900	(1.040)	326602	80.0000	77.0
	13 2-Methylphenol	107	4.948	4.948	(1.050)	230584	80.0000	76.2
	14 bis(2-Chloroisopropyl) ether	45	4.985	4.985	(1.058)	655753	80.0000	72.8
	15 3 & 4-Methylphenol	107	5.119	5.119	(1.086)	296299	80.0000	74.8
	17 N-Nitroso-di-n-propylamine	70	5.130	5.130	(1.088)	168537	80.0000	73.7
	18 Hexachloroethane	117	5.279	5.279	(1.120)	126059	80.0000	76.6
$	19 Nitrobenzene-d5 (S)	82	5.317	5.317	(0.864)	210886	60.0000	58.1
	20 Nitrobenzene	77	5.338	5.338	(0.867)	267277	80.0000	77.4
	21 Isophorone	82	5.605	5.605	(0.911)	474166	80.0000	76.5
	22 2-Nitrophenol	139	5.701	5.701	(0.926)	164293	80.0000	81.2
	23 2,4-Dimethylphenol	107	5.733	5.733	(0.931)	268882	80.0000	76.3

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Report Date: 05-Mar-2014 16:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
	24 Benzoic acid	105	5.835	5.835	(0.948)	151179	80.0000	83.4	
	25 bis(2-Chloroethoxy)methane	93	5.840	5.840	(0.949)	284003	80.0000	77.4	
	26 2,4-Dichlorophenol	162	5.979	5.979	(0.971)	239131	80.0000	78.6	
	27 1,2,4-Trichlorobenzene	180	6.086	6.086	(0.989)	249390	80.0000	78.1	
*	28 Naphthalene-d8	136	6.155	6.155	(1.000)	419805	40.0000		(Q)
	29 Naphthalene	128	6.182	6.182	(1.004)	807882	80.0000	75.9	
	30 4-Chloroaniline	127	6.230	6.230	(1.012)	272105	80.0000	70.4	
	31 Hexachlorobutadiene	225	6.321	6.321	(1.027)	136431	80.0000	78.1	
	32 4-Chloro-3-methylphenol	107	6.807	6.807	(1.106)	219765	80.0000	76.0	
	33 2-Methylnaphthalene	142	7.010	7.010	(1.139)	539564	80.0000	76.8	
	34 1-Methylnaphthalene	142	7.133	7.133	(1.159)	502628	80.0000	77.2	
	35 Hexachlorocyclopentadiene	237	7.202	7.202	(0.869)	110501	80.0000	73.1	
	36 2,4,6-Trichlorophenol	196	7.347	7.347	(0.886)	153731	80.0000	80.6	
	37 2,4,5-Trichlorophenol	196	7.395	7.395	(0.892)	162782	80.0000	80.3	
$	38 2-Fluorobiphenyl (S)	172	7.453	7.453	(0.899)	425471	60.0000	59.6	
	39 2-Chloronaphthalene	162	7.608	7.608	(0.918)	478662	80.0000	76.8	
	40 2-Nitroaniline	65	7.726	7.726	(0.932)	155555	80.0000	76.5	
	41 Dimethylphthalate	163	7.950	7.950	(0.959)	519950	80.0000	77.0	
	42 2,6-Dinitrotoluene	165	8.025	8.025	(0.968)	125097	80.0000	79.5	
	43 Acenaphthylene	152	8.121	8.121	(0.979)	742942	80.0000	77.1	(M)
	44 3-Nitroaniline	138	8.233	8.233	(0.993)	118896	80.0000	70.3	
*	45 Acenaphthene-d10	164	8.292	8.292	(1.000)	204219	40.0000		
	46 Acenaphthene	154	8.335	8.335	(1.005)	435015	80.0000	76.4	
	47 2,4-Dinitrophenol	184	8.362	8.362	(1.008)	63104	80.0000	82.5	
	48 4-Nitrophenol	65	8.436	8.436	(1.017)	103171	80.0000	79.5	
	49 2,4-Dinitrotoluene	165	8.522	8.522	(1.028)	162427	80.0000	79.6	
	50 Dibenzofuran	168	8.549	8.549	(1.031)	650060	80.0000	76.4	
	51 Diethylphthalate	149	8.816	8.816	(1.063)	499086	80.0000	76.4	
	52 4-Chlorophenylphenyl ether	204	8.965	8.965	(1.081)	245552	80.0000	78.8	
	53 4-Nitroaniline	138	8.992	8.992	(1.084)	145795	80.0000	77.6	
	54 Fluorene	166	8.971	8.971	(1.082)	536344	80.0000	77.7	
	55 4,6-Dinitro-2-methylphenol	198	9.024	9.024	(0.890)	94744	80.0000	82.9	
	56 N-Nitrosodiphenylamine	169	9.110	9.110	(0.899)	445661	80.0000	78.4	
	57 Azobenzene	77	9.163	9.163	(1.105)	468988	80.0000	75.0	
	58 1,2-Diphenylhydrazine	77	9.163	9.163	(1.105)	468988	80.0000	75.0	
$	59 2,4,6-Tribromophenol (S)	330	9.270	9.270	(1.118)	65892	80.0000	84.5	
	60 4-Bromophenylphenyl ether	248	9.569	9.569	(0.944)	133411	80.0000	80.4	
	61 Hexachlorobenzene	284	9.655	9.655	(0.953)	135281	80.0000	76.8	
	62 Pentachlorophenol	266	9.895	9.895	(0.976)	82209	80.0000	88.3	
*	63 Phenanthrene-d10	188	10.135	10.135	(1.000)	329340	40.0000		
	64 Phenanthrene	178	10.167	10.167	(1.003)	708460	80.0000	75.3	
	65 Anthracene	178	10.226	10.226	(1.009)	722617	80.0000	75.7	
	66 Carbazole	167	10.424	10.424	(1.028)	709939	80.0000	76.6	
	67 di-n-Butylphthalate	149	10.840	10.840	(1.070)	838866	80.0000	74.6	
	68 Fluoranthene	202	11.642	11.642	(1.149)	787942	80.0000	77.1	
	69 Benzidine	184	11.791	11.791	(0.879)	302290	80.0000	66.7	
	70 Pyrene	202	11.925	11.925	(0.889)	830152	80.0000	75.8	
$	71 Terphenyl-d14 (S)	244	12.101	12.101	(0.902)	400296	60.0000	57.9	
	72 Butylbenzylphthalate	149	12.700	12.700	(0.947)	381952	80.0000	75.4	
	73 bis(2-Ethylhexyl)phthalate	149	13.399	13.399	(0.999)	518826	80.0000	73.2	
	74 3,3'-Dichlorobenzidine	252	13.362	13.362	(0.996)	208160	80.0000	69.6	
	75 Benzo(a)anthracene	228	13.405	13.405	(0.999)	746452	80.0000	75.1	
*	76 Chrysene-d12	240	13.415	13.415	(1.000)	323408	40.0000		(Q)
	77 Chrysene	228	13.453	13.453	(1.003)	684776	80.0000	75.5	

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Report Date: 05-Mar-2014 16:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.158	14.158	(1.055)	932972	80.0000	74.2
79	Benzo(b)fluoranthene	252	14.676	14.676	(0.968)	708977	80.0000	76.5
80	Benzo(k)fluoranthene	252	14.708	14.708	(0.970)	738979	80.0000	77.9
81	Benzo(a)pyrene	252	15.098	15.098	(0.995)	682884	80.0000	77.1
* 82	Perylene-d12	264	15.168	15.168	(1.000)	312096	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.856	16.856	(1.111)	755461	80.0000	79.1
84	Dibenzo(a,h)anthracene	278	16.877	16.877	(1.113)	631969	80.0000	77.8
85	Benzo(g,h,i)perylene	276	17.369	17.369	(1.145)	625720	80.0000	77.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Report Date: 05-Mar-2014 16:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051406.D
Lab Smp Id: CCAL 6 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info:

Calibration Date: 04-MAR-2014
Calibration Time: 07:46
Level: LOW
Sample Type: WATER

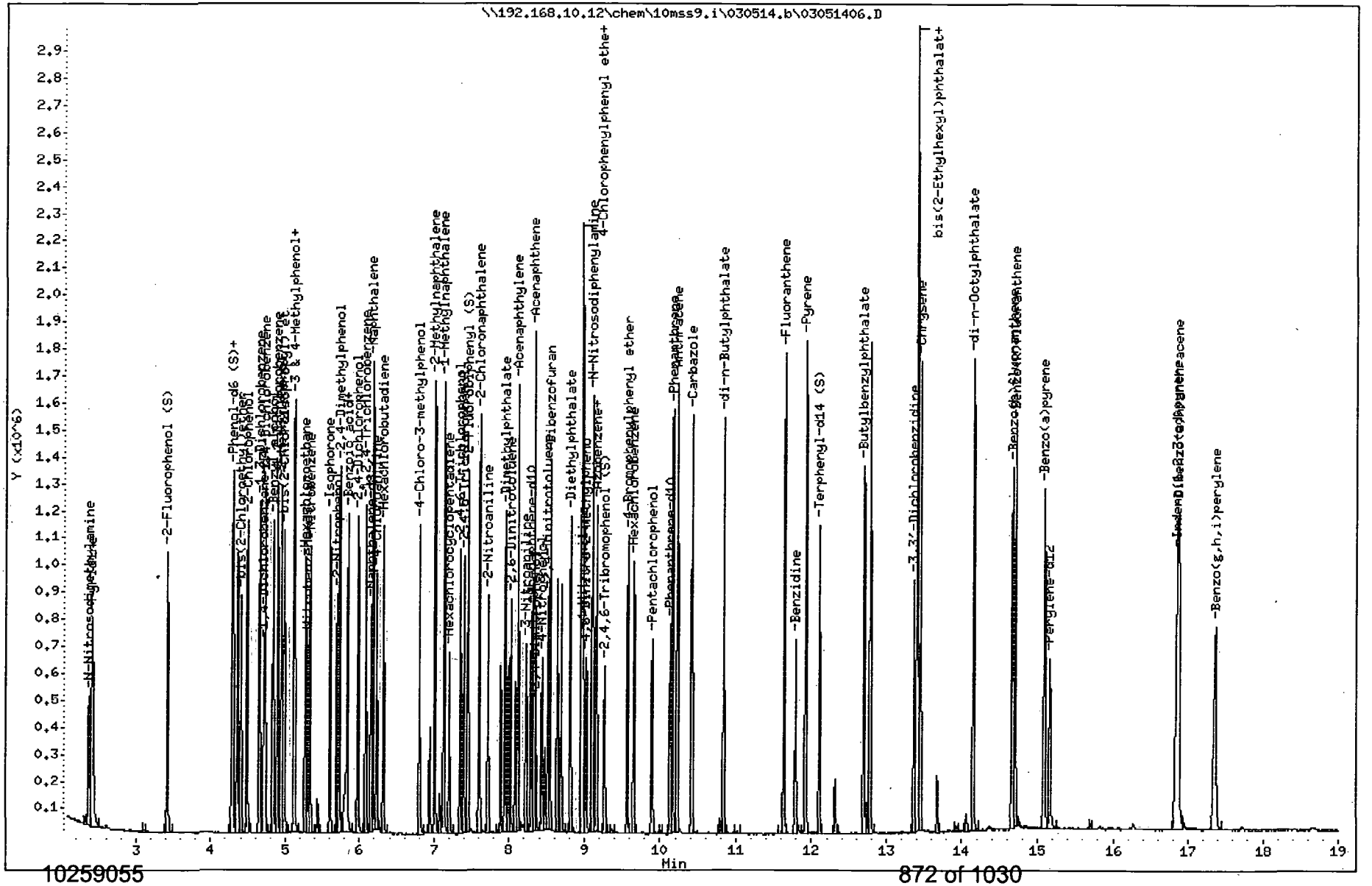
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	66154	33077	132308	110277	66.70
28 Naphthalene-d8	255442	127721	510884	419805	64.34
45 Acenaphthene-d10	125688	62844	251376	204219	62.48
63 Phenanthrene-d10	201900	100950	403800	329340	63.12
76 Chrysene-d12	201053	100527	402106	323408	60.86
82 Perylene-d12	192241	96121	384482	312096	62.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.72	4.22	5.22	4.71	-0.11
28 Naphthalene-d8	6.16	5.66	6.66	6.16	-0.09
45 Acenaphthene-d10	8.30	7.80	8.80	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.14	-0.05
76 Chrysene-d12	13.43	12.93	13.93	13.42	-0.08
82 Perylene-d12	15.18	14.68	15.68	15.17	-0.07

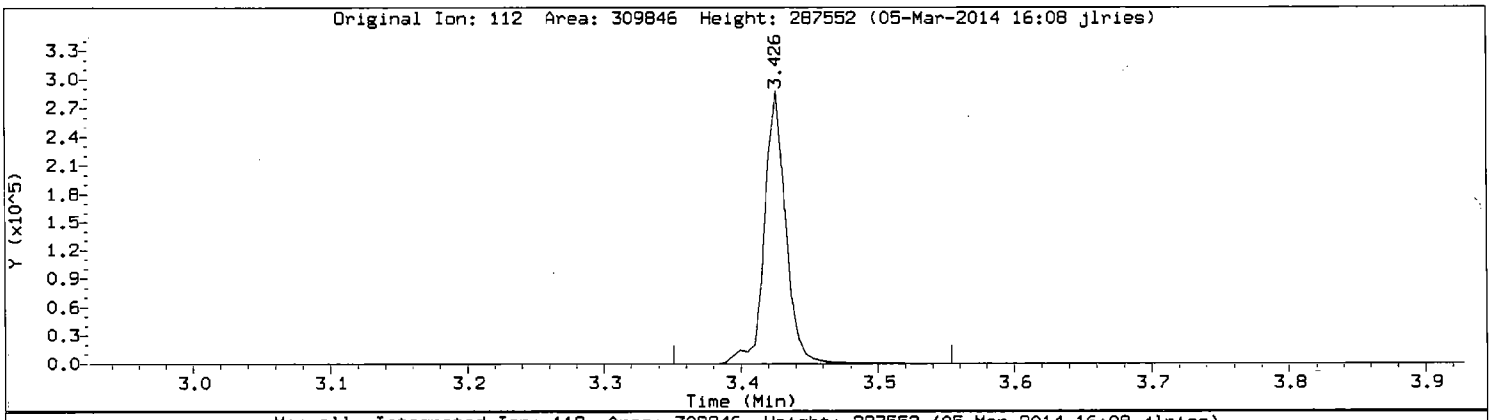
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

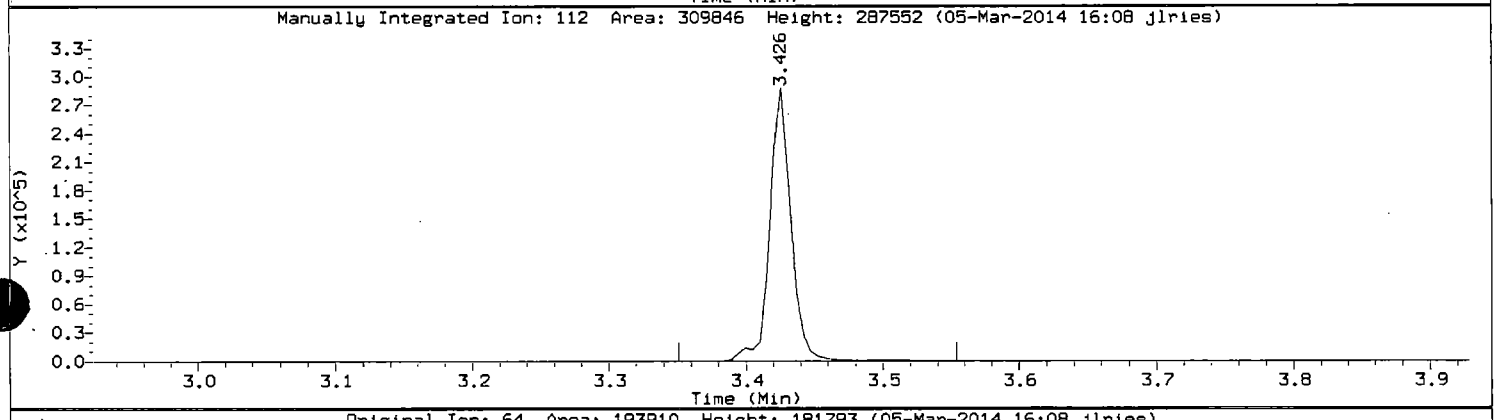
Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051406.D
Date : 05-MAR-2014 15:31
Client ID:
Instrument: 10mss9.i
Sample Info: CCAL 6 10328-96
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

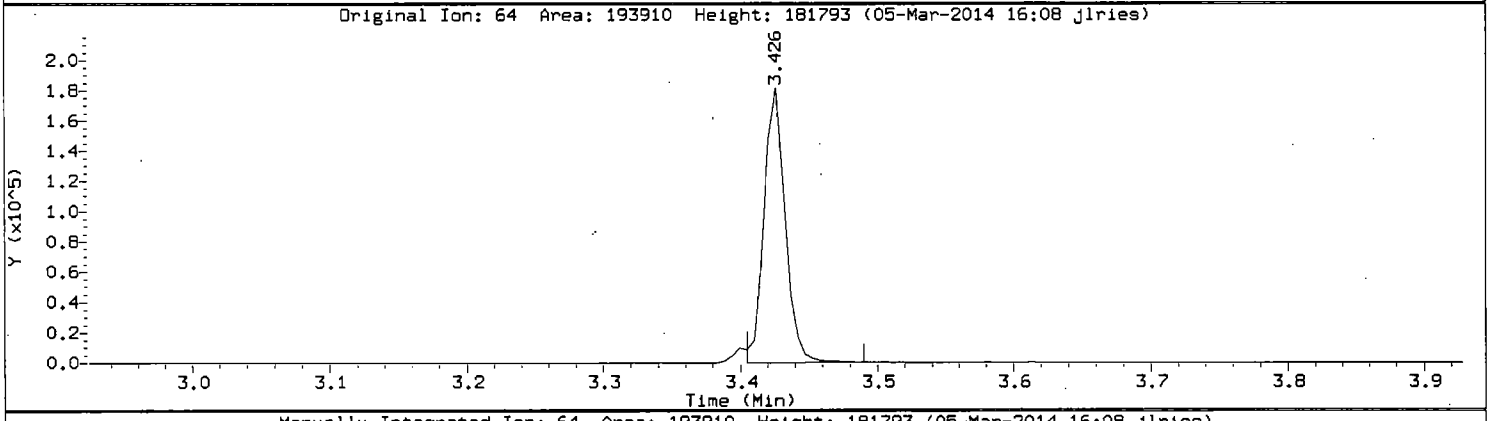


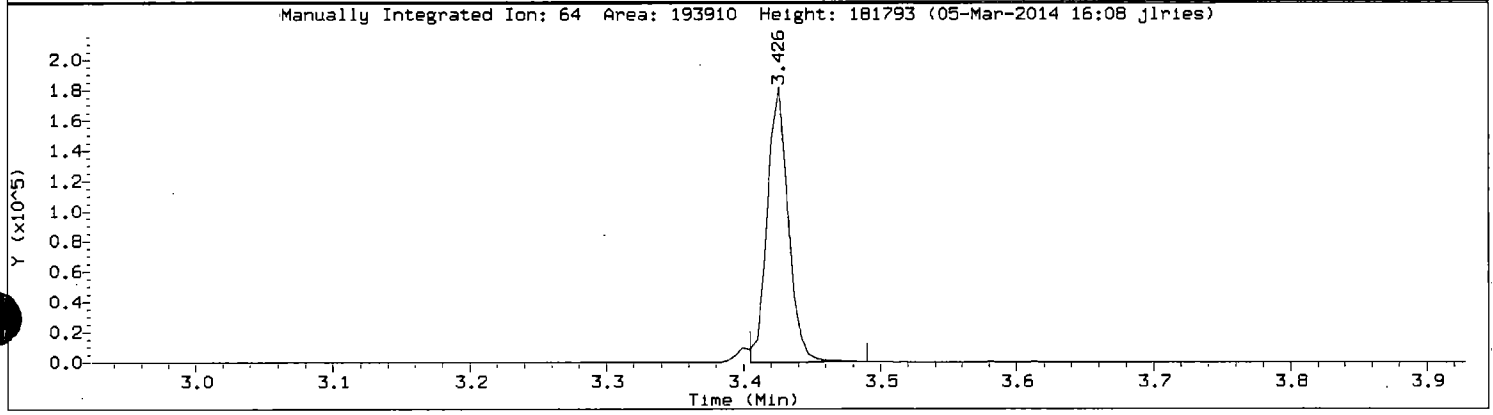
Data File: \\192.168.10.12\chem\10mss9.i\030514.b/03051406.D
Injection Date: 05-MAR-2014 15:31
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96

Compound: 2-Fluorophenol (S)
CAS Number: 367-12-4



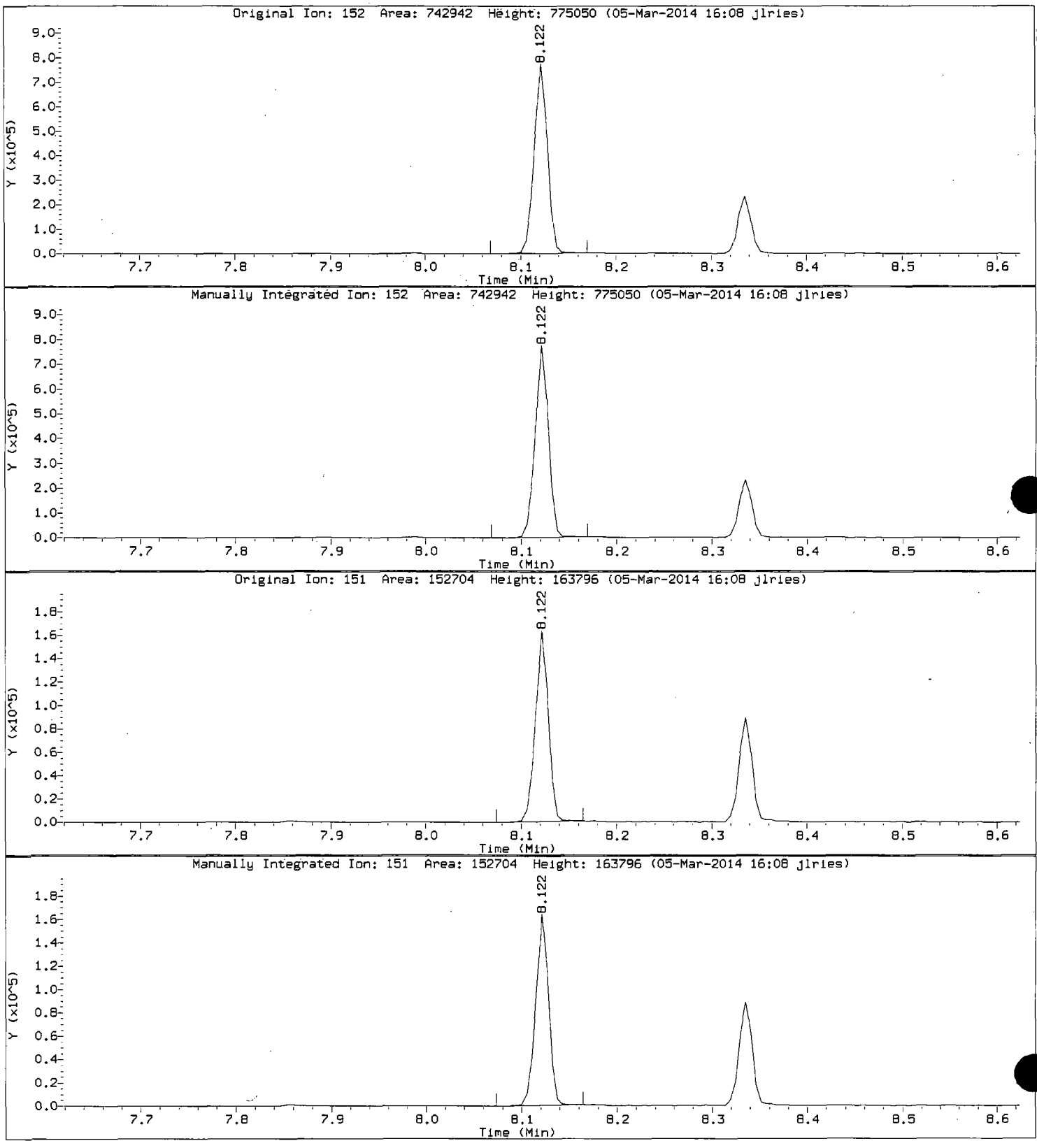




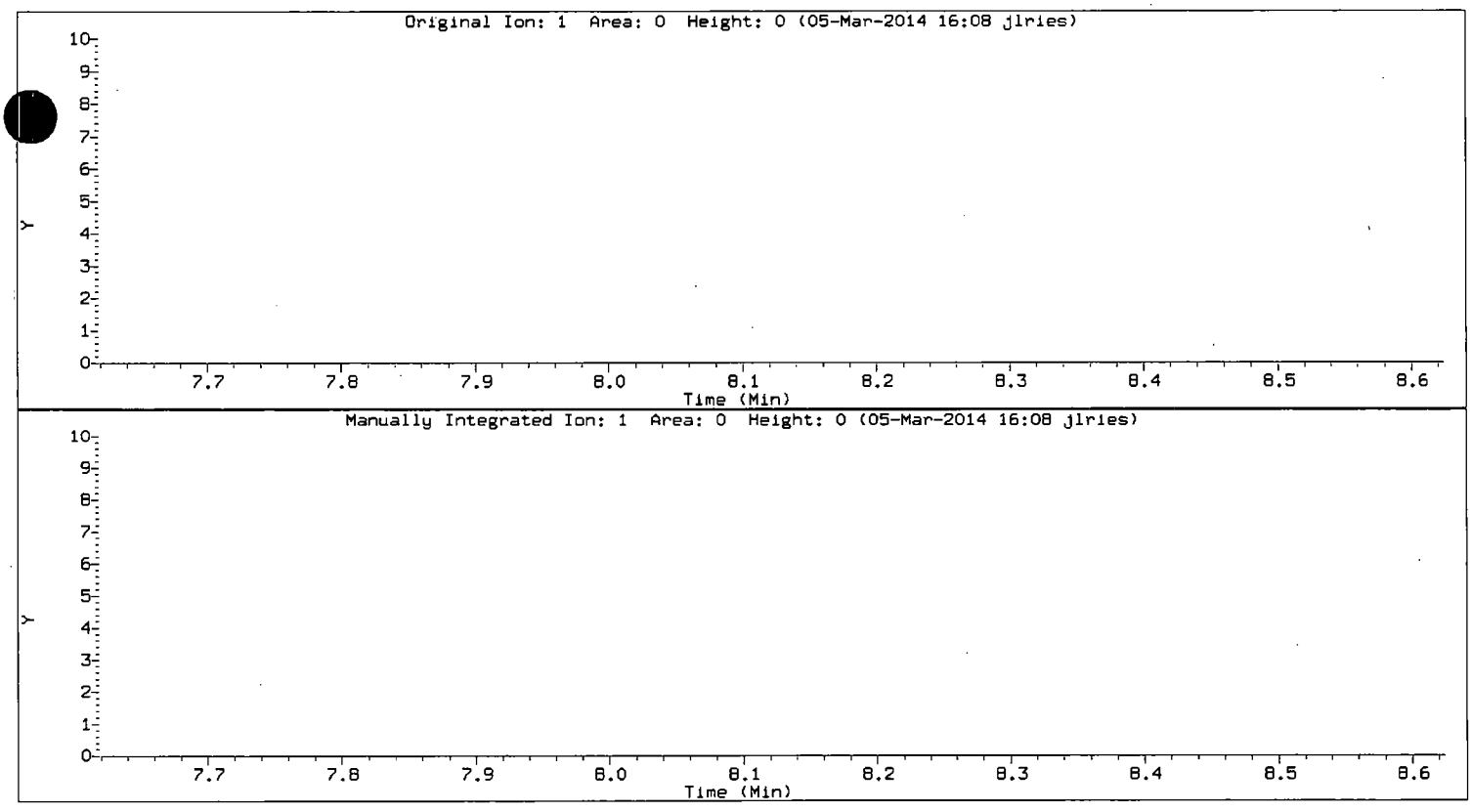


Data File: \\192.168.10.12\chem\10mss9.i\030514.b/03051406.D
Injection Date: 05-MAR-2014 15:31
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Injection Date: 05-MAR-2014 15:31
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 06-MAR-2014 07:48
Lab File ID: 03061403.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 09:10 11:59
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.92707	0.81938	0.81938	0.000	-11.61635	40.00000	Averaged
2 Pyridine	1.66353	1.45364	1.45364	0.000	-12.61696	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.39474	1.34962	1.34962	0.000	-3.23486	40.00000	Averaged
$ 4 Phenol-d6 (S)	1.73788	1.66279	1.66279	0.000	-4.32111	40.00000	Averaged
5 Phenol	1.81135	1.71495	1.71495	0.800	-5.32186	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.07749	0.95935	0.95935	0.700	-10.96481	40.00000	Averaged
7 2-Chlorophenol	1.48268	1.45130	1.45130	0.800	-2.11684	40.00000	Averaged
8 1,3-Dichlorobenzene	1.54743	1.48622	1.48622	0.000	-3.95576	40.00000	Averaged
10 1,4-Dichlorobenzene	1.58541	1.53563	1.53563	0.000	-3.14000	20.00000	Averaged
11 Benzyl alcohol	1.23453	1.15344	1.15344	0.000	-6.56879	40.00000	Averaged
12 1,2-Dichlorobenzene	1.50040	1.43295	1.43295	0.000	-4.49521	40.00000	Averaged
13 2-Methylphenol	1.12295	1.08684	1.08684	0.700	-3.21525	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	2.09816	1.89681	1.89681	0.000	-9.59676	40.00000	Averaged
15 3 & 4-Methylphenol	1.46287	1.41817	1.41817	0.600	-3.05572	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	1.02726	0.95494	0.95494	0.500	-7.04080	40.00000	Averaged
18 Hexachloroethane	0.61604	0.57193	0.57193	0.300	-7.16081	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.39730	0.37590	0.37590	0.000	-5.38597	40.00000	Averaged
20 Nitrobenzene	0.38464	0.36444	0.36444	0.200	-5.25251	40.00000	Averaged
21 Isophorone	0.68084	0.63819	0.63819	0.400	-6.26406	40.00000	Averaged
23 2-Nitrophenol	0.19493	0.19442	0.19442	0.100	-0.25973	20.00000	Averaged
22 2,4-Dimethylphenol	0.35621	0.33427	0.33427	0.200	-6.16056	40.00000	Averaged
24 Benzoic acid	0.25736	0.23766	0.23766	0.000	-7.65116	40.00000	Averaged
25 bis(2-Chloroethoxy)methane	0.42074	0.39340	0.39340	0.300	-6.49798	50.00000	Averaged
26 2,4-Dichlorophenol	0.27681	0.28011	0.28011	0.200	1.19330	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.29509	0.29077	0.29077	0.000	-1.46287	40.00000	Averaged
29 Naphthalene	1.07621	1.01418	1.01418	0.700	-5.76360	40.00000	Averaged
30 4-Chloroaniline	0.40537	0.36420	0.36420	0.010	-10.15455	40.00000	Averaged
31 Hexachlorobutadiene	0.14858	0.15203	0.15203	0.010	2.32206	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.29966	0.29684	0.29684	0.200	-0.94332	20.00000	Averaged
33 2-Methylnaphthalene	0.70271	0.68773	0.68773	0.040	-2.13199	40.00000	Averaged
34 1-Methylnaphthalene	0.65562	0.62689	0.62689	0.000	-4.38253	40.00000	Averaged
35 Hexachlorocyclopentadiene	0.32910	0.33159	0.33159	0.050	0.75532	40.00000	Averaged
36 2,4,6-Trichlorophenol	0.35684	0.36703	0.36703	0.200	2.85525	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.38407	0.39135	0.39135	0.200	1.89623	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.39789	1.37443	1.37443	0.000	-1.67816	40.00000	Averaged
39 2-Chloronaphthalene	1.18538	1.14636	1.14636	0.800	-3.29199	40.00000	Averaged
40 2-Nitroaniline	0.39748	0.38620	0.38620	0.010	-2.83702	40.00000	Averaged
41 Dimethylphthalate	1.33069	1.30881	1.30881	0.010	-1.64441	40.00000	Averaged
42 2,6-Dinitrotoluene	0.32144	0.31853	0.31853	0.200	-0.90492	40.00000	Averaged
43 Acenaphthylene	1.97380	1.89355	1.89355	0.900	-4.06561	40.00000	Averaged
44 3-Nitroaniline	0.33056	0.30168	0.30168	0.010	-8.73601	40.00000	Averaged
46 Acenaphthene	1.23834	1.15504	1.15504	0.900	-6.72672	20.00000	Averaged

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061403.D
Report Date: 06-Mar-2014 08:23

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 06-MAR-2014 07:48
Lab File ID: 03061403.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 09:10 11:59
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
47 2,4-Dinitrophenol	80.00000	72.26798	0.18164	0.010	-9.66503	40.00000	Quadratic
48 4-Nitrophenol	0.30018	0.28009	0.28009	0.010	-6.69173	40.00000	Averaged
49 2,4-Dinitrotoluene	0.42443	0.42729	0.42729	0.200	0.67496	40.00000	Averaged
50 Dibenzofuran	1.67363	1.61051	1.61051	0.800	-3.77152	40.00000	Averaged
51 Diethylphthalate	1.39190	1.33368	1.33368	0.010	-4.18321	40.00000	Averaged
52 4-Chlorophenylphenyl ether	0.61017	0.61236	0.61236	0.400	0.35950	40.00000	Averaged
54 4-Nitroaniline	0.37871	0.35842	0.35842	0.010	-5.35720	40.00000	Averaged
53 Fluorene	1.41116	1.34789	1.34789	0.900	-4.48350	40.00000	Averaged
55 4,6-Dinitro-2-methylphenol	80.00000	73.99487	0.13815	0.010	-7.50641	40.00000	Quadratic
56 N-Nitrosodiphenylamine	0.71324	0.69923	0.69923	0.010	-1.96550	20.00000	Averaged
57 Azobenzene	1.48106	1.35014	1.35014	0.000	-8.83956	40.00000	Averaged
58 1,2-Diphenylhydrazine	1.48106	1.35014	1.35014	0.000	-8.83956	40.00000	Averaged
$ 59 2,4,6-Tribromophenol (S)	0.18827	0.20933	0.20933	0.000	11.18658	40.00000	Averaged
60 4-Bromophenylphenyl ether	0.20199	0.20902	0.20902	0.100	3.48123	40.00000	Averaged
61 Hexachlorobenzene	0.22230	0.22677	0.22677	0.100	2.00849	40.00000	Averaged
62 Pentachlorophenol	0.13475	0.14780	0.14780	0.050	9.68572	20.00000	Averaged
64 Phenanthrene	1.13926	1.08910	1.08910	0.700	-4.40312	40.00000	Averaged
65 Anthracene	1.16142	1.12728	1.12728	0.700	-2.93905	40.00000	Averaged
66 Carbazole	1.12512	1.09110	1.09110	0.010	-3.02352	40.00000	Averaged
67 di-n-Butylphthalate	1.38697	1.32568	1.32568	0.010	-4.41895	40.00000	Averaged
68 Fluoranthene	1.13706	1.14140	1.14140	0.600	0.38237	20.00000	Averaged
69 Benzidine	0.62350	0.55656	0.55656	0.000	-10.73623	40.00000	Averaged
70 Pyrene	1.23141	1.23035	1.23035	0.600	-0.08549	40.00000	Averaged
$ 71 Terphenyl-d14 (S)	0.86920	0.91247	0.91247	0.000	4.97786	40.00000	Averaged
72 Butylbenzylphthalate	0.59965	0.60260	0.60260	0.010	0.49106	40.00000	Averaged
73 bis(2-Ethylhexyl)phthalate	0.86033	0.81994	0.81994	0.010	-4.69402	40.00000	Averaged
74 3,3'-Dichlorobenzidine	0.33327	0.34395	0.34395	0.010	3.20509	40.00000	Averaged
75 Benzo(a)anthracene	1.14060	1.08859	1.08859	0.800	-4.55946	40.00000	Averaged
77 Chrysene	1.05828	1.00726	1.00726	0.700	-4.82098	40.00000	Averaged
78 di-n-Octylphthalate	1.43288	1.44407	1.44407	0.010	0.78080	20.00000	Averaged
79 Benzo(b)fluoranthene	1.09097	1.09053	1.09053	0.700	-0.04021	40.00000	Averaged
80 Benzo(k)fluoranthene	1.16930	1.05491	1.05491	0.700	-9.78262	40.00000	Averaged
81 Benzo(a)pyrene	1.04717	1.02123	1.02123	0.700	-2.47726	20.00000	Averaged
83 Indeno(1,2,3-cd)pyrene	1.20995	1.21758	1.21758	0.500	0.63116	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.03870	1.00627	1.00627	0.400	-3.12244	40.00000	Averaged
85 Benzo(g,h,i)perylene	1.02315	1.03539	1.03539	0.500	1.19634	40.00000	Averaged

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061403.D
Report Date: 06-Mar-2014 08:23

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mssD.i Injection Date: 06-MAR-2014 07:48
Lab File ID: 03061403.D Init. Cal. Date(s): 28-FEB-2014 28-FEB-2014
Analysis Type: WATER Init. Cal. Times: 09:10 11:59
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	4.55266
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061403.D
Report Date: 06-Mar-2014 08:23

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061403.D
Lab Smp Id: CCAL 6 10328-96
Inj Date : 06-MAR-2014 07:48
Operator : JLR Inst ID: 10mssD.i
Smp Info : CCAL 6 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.590	2.590	(0.511)	233338	80.0000	70.7
	2 Pyridine	79	2.638	2.638	(0.521)	413960	80.0000	69.9
$	3 2-Fluorophenol (S)	112	3.718	3.718	(0.734)	384338	80.0000	77.4
$	4 Phenol-d6 (S)	99	4.611	4.611	(0.910)	473518	80.0000	76.5
	5 Phenol	94	4.627	4.627	(0.913)	488373	80.0000	75.7
	6 bis(2-Chloroethyl)ether	63	4.745	4.745	(0.937)	273197	80.0000	71.2
	7 2-Chlorophenol	128	4.836	4.836	(0.955)	413292	80.0000	78.3
	8 1,3-Dichlorobenzene	146	5.007	5.007	(0.988)	423236	80.0000	76.8
*	9 1,4-Dichlorobenzene-d4	152	5.066	5.066	(1.000)	142387	40.0000	
	10 1,4-Dichlorobenzene	146	5.082	5.082	(1.003)	437307	80.0000	77.5
	11 Benzyl alcohol	79	5.184	5.184	(1.023)	328470	80.0000	74.7
	12 1,2-Dichlorobenzene	146	5.259	5.259	(1.038)	408067	80.0000	76.4
	13 2-Methylphenol	107	5.291	5.291	(1.044)	309505	80.0000	77.4
	14 bis(2-Chloroisopropyl) ether	45	5.339	5.339	(1.054)	540161	80.0000	72.3
	15 3 & 4-Methylphenol	107	5.462	5.462	(1.078)	403858	80.0000	77.6
	17 N-Nitroso-di-n-propylamine	70	5.483	5.483	(1.082)	271941	80.0000	74.4
	18 Hexachloroethane	117	5.644	5.644	(1.114)	162870	80.0000	74.3
$	19 Nitrobenzene-d5 (S)	82	5.676	5.676	(0.869)	315460	60.0000	56.8
	20 Nitrobenzene	77	5.697	5.697	(0.872)	407786	80.0000	75.8
	21 Isophorone	82	5.970	5.970	(0.914)	714099	80.0000	75.0
	23 2-Nitrophenol	139	6.066	6.066	(0.929)	217548	80.0000	79.8
	22 2,4-Dimethylphenol	107	6.082	6.082	(0.931)	374025	80.0000	75.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
	24 Benzoic acid	105	6.178	6.178	(0.946)	265933	80.0000	73.9	
	25 bis(2-Chloroethoxy)methane	93	6.200	6.200	(0.949)	440191	80.0000	74.8	
	26 2,4-Dichlorophenol	162	6.344	6.344	(0.971)	313432	80.0000	81.0	
	27 1,2,4-Trichlorobenzene	180	6.457	6.457	(0.989)	325356	80.0000	78.8	
*	28 Naphthalene-d8	136	6.532	6.532	(1.000)	559471	40.0000		(Q)
	29 Naphthalene	128	6.564	6.564	(1.005)	1134806	80.0000	75.4	
	30 4-Chloroaniline	127	6.601	6.601	(1.011)	407523	80.0000	71.9	
	31 Hexachlorobutadiene	225	6.697	6.697	(1.025)	170112	80.0000	81.8	
	32 4-Chloro-3-methylphenol	107	7.163	7.163	(1.097)	332142	80.0000	79.2	
	33 2-Methylnaphthalene	142	7.393	7.393	(1.132)	769527	80.0000	78.3	
	34 1-Methylnaphthalene	142	7.516	7.516	(1.151)	701453	80.0000	76.5	
	35 Hexachlorocyclopentadiene	237	7.585	7.585	(0.873)	196556	80.0000	80.6	
	36 2,4,6-Trichlorophenol	196	7.724	7.724	(0.889)	217564	80.0000	82.3	
	37 2,4,5-Trichlorophenol	196	7.767	7.767	(0.894)	231985	80.0000	81.5	
$	38 2-Fluorobiphenyl (S)	172	7.831	7.831	(0.901)	611046	60.0000	59.0	
	39 2-Chloronaphthalene	162	7.997	7.997	(0.921)	679531	80.0000	77.4	
	40 2-Nitroaniline	65	8.104	8.104	(0.933)	228930	80.0000	77.7	
	41 Dimethylphthalate	163	8.323	8.323	(0.958)	775827	80.0000	78.7	
	42 2,6-Dinitrotoluene	165	8.398	8.398	(0.967)	188818	80.0000	79.3	
	43 Acenaphthylene	152	8.516	8.516	(0.980)	1122449	80.0000	76.7	(M)
	44 3-Nitroaniline	138	8.612	8.612	(0.991)	178830	80.0000	73.0	
*	45 Acenaphthene-d10	164	8.687	8.687	(1.000)	296387	40.0000		
	46 Acenaphthene	154	8.730	8.730	(1.005)	684678	80.0000	74.6	
	47 2,4-Dinitrophenol	184	8.735	8.735	(1.006)	107674	80.0000	72.3	
	48 4-Nitrophenol	65	8.789	8.789	(1.012)	166031	80.0000	74.6	
	49 2,4-Dinitrotoluene	165	8.901	8.901	(1.025)	253288	80.0000	80.5	
	50 Dibenzofuran	168	8.944	8.944	(1.030)	954669	80.0000	77.0	
	51 Diethylphthalate	149	9.195	9.195	(1.058)	790569	80.0000	76.6	
	52 4-Chlorophenylphenyl ether	204	9.356	9.356	(1.077)	362992	80.0000	80.3	
	54 4-Nitroaniline	138	9.372	9.372	(1.079)	212461	80.0000	75.7	
	53 Fluorene	166	9.366	9.366	(1.078)	798997	80.0000	76.4	
	55 4,6-Dinitro-2-methylphenol	198	9.409	9.409	(0.893)	138323	80.0000	74.0	
	56 N-Nitrosodiphenylamine	169	9.495	9.495	(0.901)	700086	80.0000	78.4	
	57 Azobenzene	77	9.553	9.553	(1.100)	800328	80.0000	72.9	
	58 1,2-Diphenylhydrazine	77	9.553	9.553	(1.100)	800328	80.0000	72.9	
$	59 2,4,6-Tribromophenol (S)	330	9.666	9.666	(1.113)	124085	80.0000	88.9	
	60 4-Bromophenylphenyl ether	248	9.965	9.965	(0.946)	209278	80.0000	82.8	
	61 Hexachlorobenzene	284	10.056	10.056	(0.954)	227045	80.0000	81.6	
	62 Pentachlorophenol	266	10.286	10.286	(0.976)	147980	80.0000	87.7	
*	63 Phenanthrene-d10	188	10.538	10.538	(1.000)	500615	40.0000		
	64 Phenanthrene	178	10.570	10.570	(1.003)	1090438	80.0000	76.5	
	65 Anthracene	178	10.634	10.634	(1.009)	1128671	80.0000	77.6	
	66 Carbazole	167	10.816	10.816	(1.026)	1092440	80.0000	77.6	
	67 di-n-Butylphthalate	149	11.222	11.222	(1.065)	1327308	80.0000	76.5	
	68 Fluoranthene	202	12.051	12.051	(1.144)	1142808	80.0000	80.3	
	69 Benzidine	184	12.190	12.190	(0.881)	520722	80.0000	71.4	
	70 Pyrene	202	12.340	12.340	(0.892)	1151130	80.0000	79.9	
$	71 Terphenyl-d14 (S)	244	12.506	12.506	(0.904)	640285	60.0000	63.0	
	72 Butylbenzylphthalate	149	13.094	13.094	(0.947)	563798	80.0000	80.4	
	73 bis(2-Ethylhexyl)phthalate	149	13.790	13.790	(0.997)	767146	80.0000	76.2	
	74 3,3'-Dichlorobenzidine	252	13.763	13.763	(0.995)	321806	80.0000	82.6	(A)
	75 Benzo(a)anthracene	228	13.822	13.822	(0.999)	1018500	80.0000	76.4	
*	76 Chrysene-d12	240	13.832	13.832	(1.000)	467805	40.0000		(Q)
	77 Chrysene	228	13.864	13.864	(1.002)	942407	80.0000	76.1	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.560	14.560	(1.053)	1351087	80.0000	80.6
	79 Benzo(b)fluoranthene	252	15.170	15.170	(0.964)	1102478	80.0000	80.0
	80 Benzo(k)fluoranthene	252	15.212	15.212	(0.967)	1066469	80.0000	72.2
	81 Benzo(a)pyrene	252	15.656	15.656	(0.995)	1032420	80.0000	78.0
*	82 Perylene-d12	264	15.737	15.737	(1.000)	505479	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	17.694	17.694	(1.124)	1230925	80.0000	80.5
	84 Dibenzo(a,h)anthracene	278	17.716	17.716	(1.126)	1017295	80.0000	77.5
	85 Benzo(g,h,i)perylene	276	18.293	18.293	(1.162)	1046733	80.0000	81.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061403.D
Report Date: 06-Mar-2014 08:23

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061403.D
Lab Smp Id: CCAL 6 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info:

Calibration Date: 05-MAR-2014
Calibration Time: 10:08
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

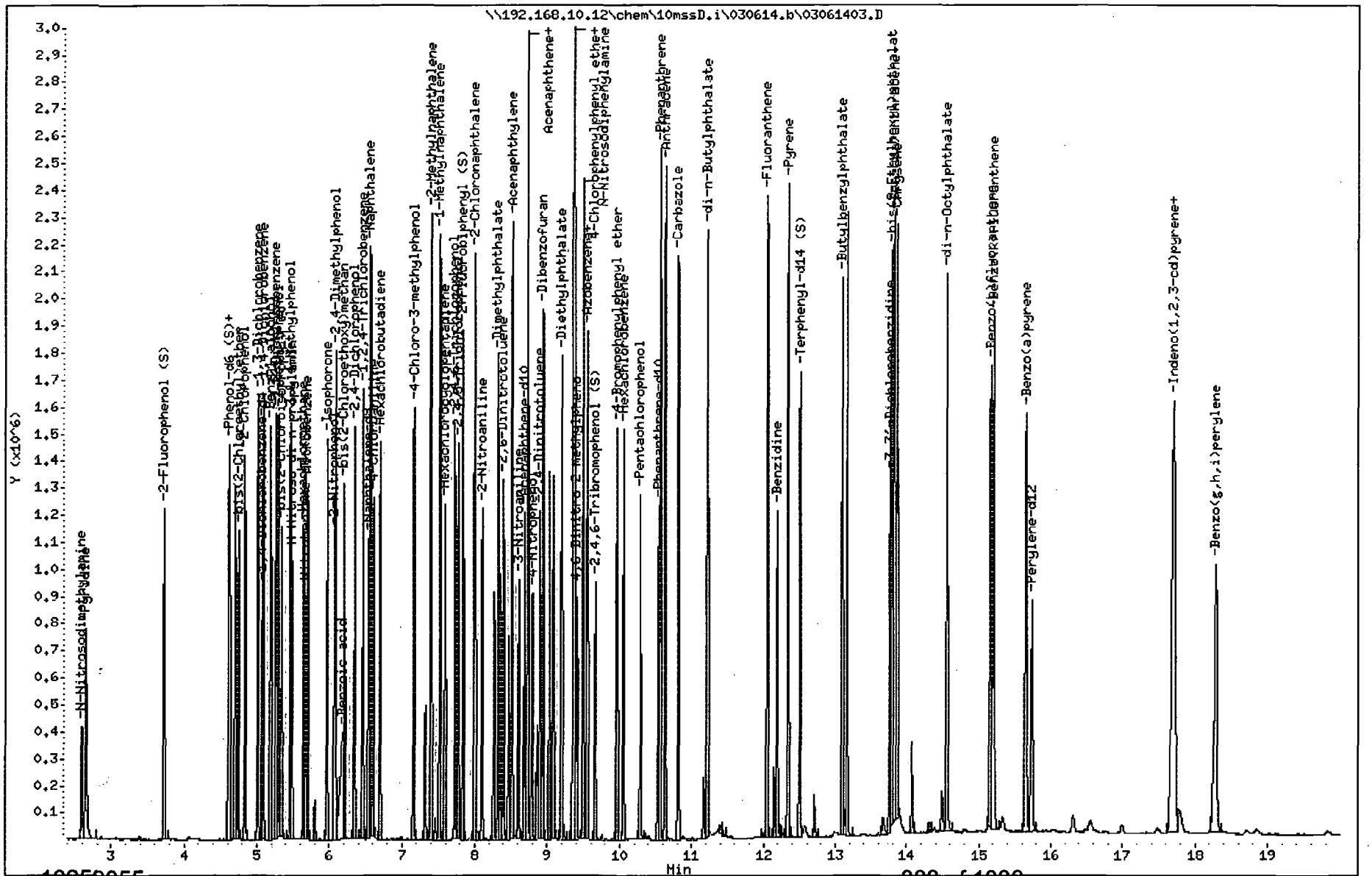
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	118167	59084	236334	142387	20.50
28 Naphthalene-d8	466266	233133	932532	559471	19.99
45 Acenaphthene-d10	245325	122663	490650	296387	20.81
63 Phenanthrene-d10	405966	202983	811932	500615	23.31
76 Chrysene-d12	427978	213989	855956	467805	9.31
82 Perylene-d12	418836	209418	837672	505479	20.69

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	-0.11
28 Naphthalene-d8	6.54	6.04	7.04	6.53	-0.16
45 Acenaphthene-d10	8.70	8.20	9.20	8.69	-0.12
63 Phenanthrene-d10	10.55	10.05	11.05	10.54	-0.10
76 Chrysene-d12	13.85	13.35	14.35	13.83	-0.12
82 Perylene-d12	15.76	15.26	16.26	15.74	-0.17

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

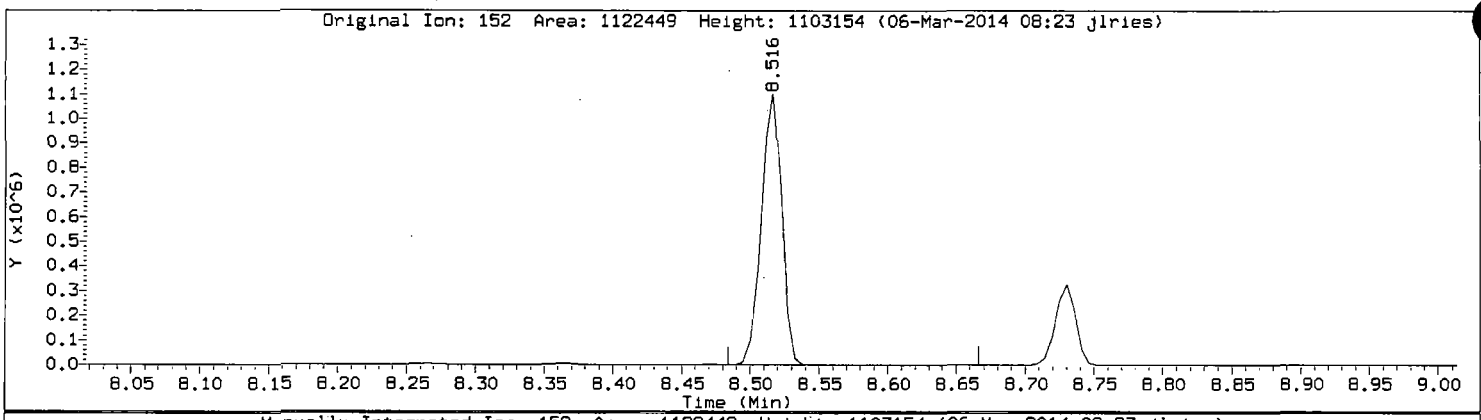
Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061403.D
Date : 06-MAR-2014 07:48
Client ID:
Sample Info: CCAL 6 10328-96
Purge Volume: 1.0
Column phase: DB-5MS

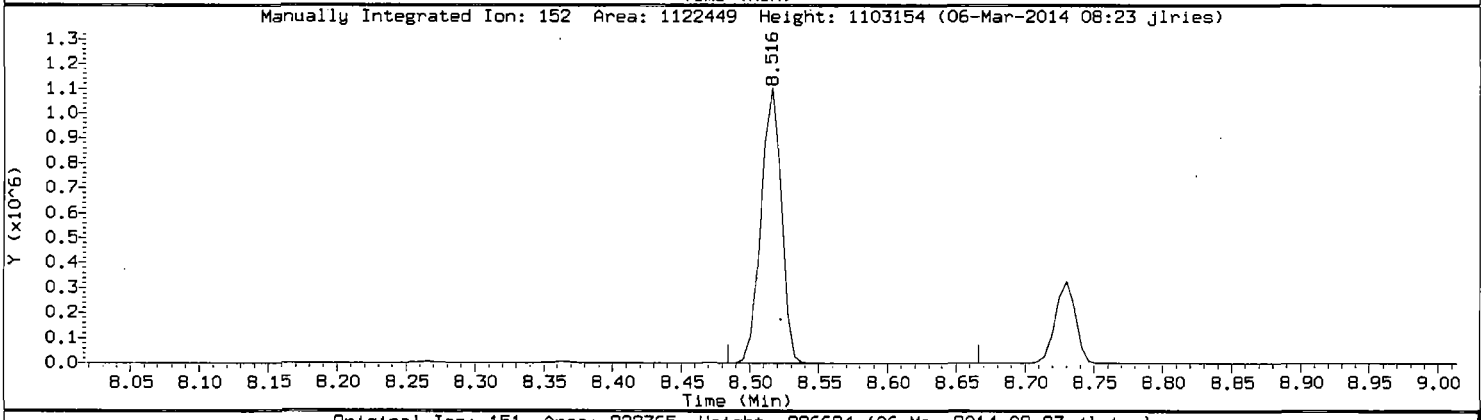
Instrument: 10mssD.i
Operator: JLR
Column diameter: 0.25

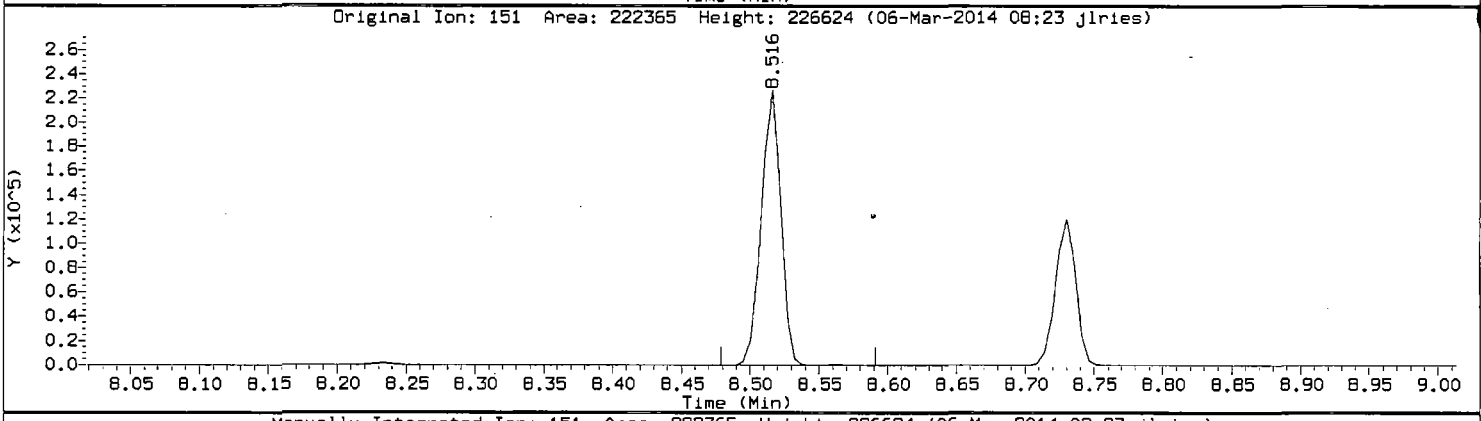


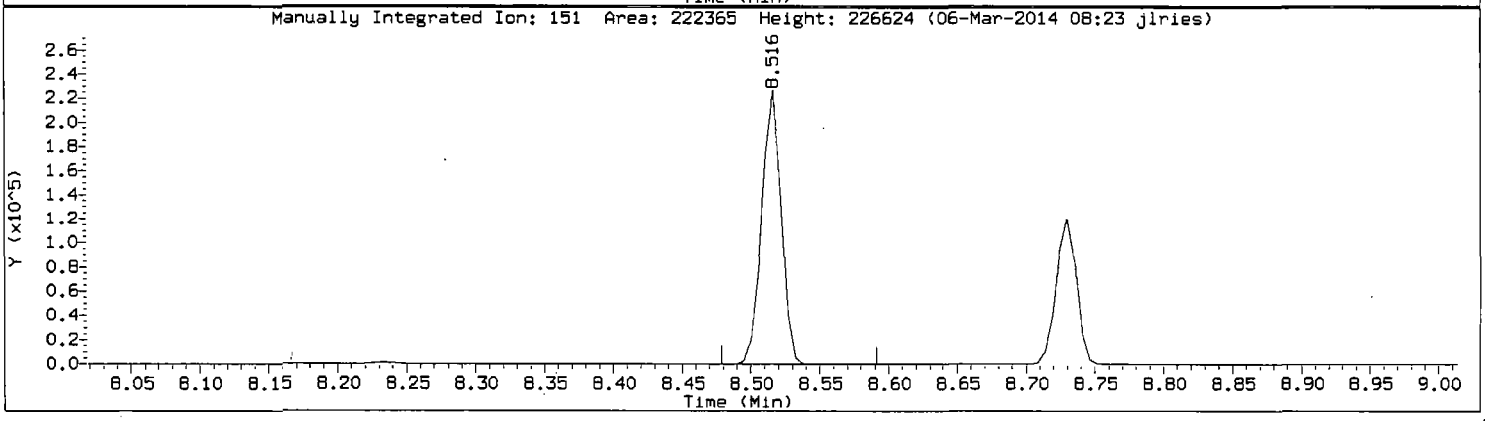
Injection Date: 06-MAR-2014 07:48
Instrument: 10mssD.i
Lab Sample ID: CCAL 6 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8

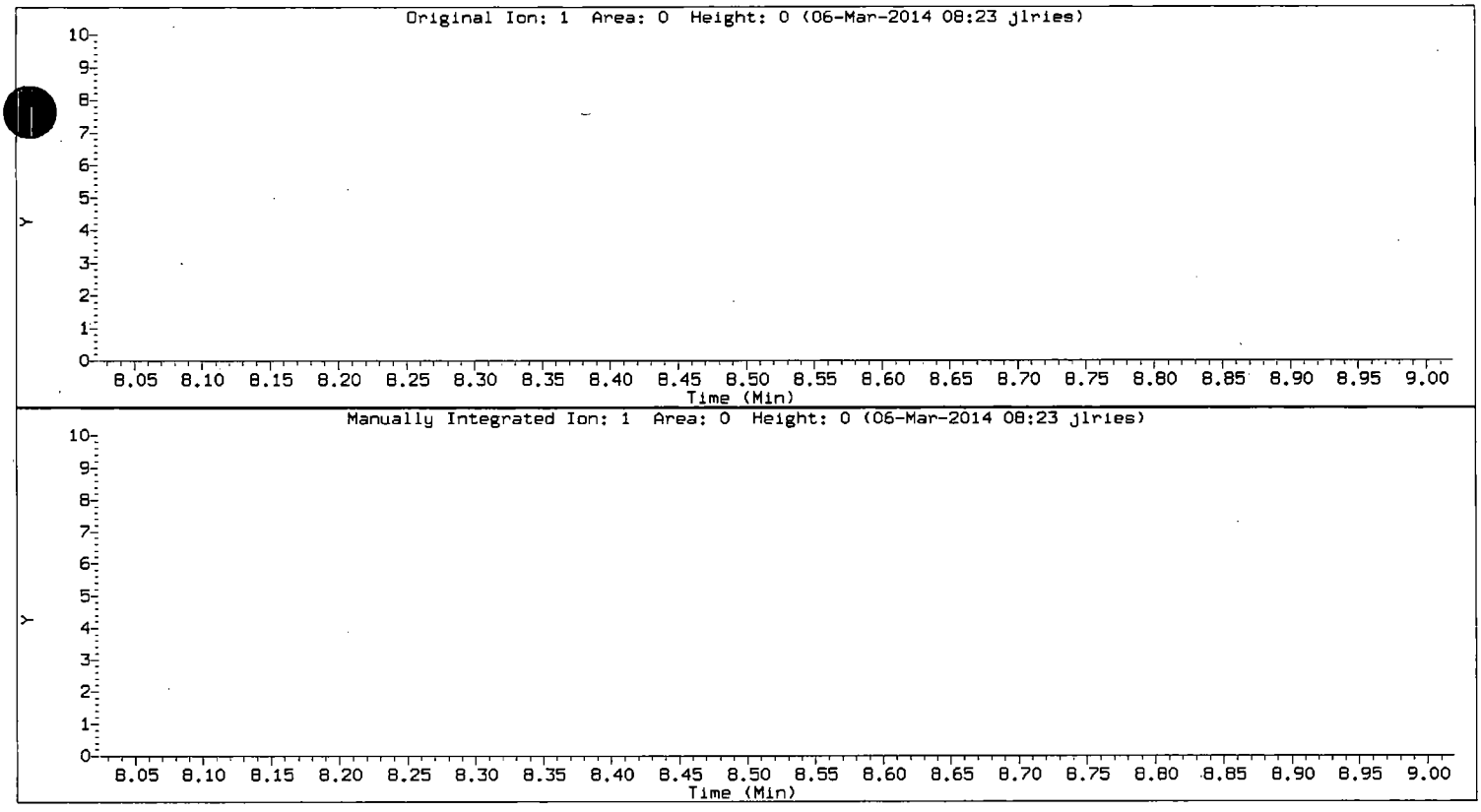








Injection Date: 06-MAR-2014 07:48
Instrument: 10mssD.i
Lab Sample ID: CCAL 6 10328-96



Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061404.D
Report Date: 06-Mar-2014 09:01

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061404.D
Lab Smp Id: 1632345
Inj Date : 06-MAR-2014 08:16
Operator : JLR Inst ID: 10mssD.i
Smp Info : 1632345,MB
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.724	3.718	(0.736)	254371	62.9456	2100
$ 4	Phenol-d6 (S)	99	4.606	4.611	(0.910)	324952	64.5343	2150(Q)
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.061	5.066	(1.000)	115896	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.671	5.676	(0.868)	206990	47.0492	1570
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
23	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.532	6.532	(1.000)	442932	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.831	7.831	(0.902)	414794	50.4522	1680	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.682	8.687	(1.000)	235255	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	54 4-Nitroaniline	138	Compound Not Detected.						
	53 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.655	9.666	(1.112)	78575	70.9623	2360	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.532	10.538	(1.000)	407483	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.501	12.506	(0.904)	496977	59.0980	1970	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.822	13.832	(1.000)	386994	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061404.D
Report Date: 06-Mar-2014 09:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.726	15.737	(1.000)	387288	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061404.D
Report Date: 06-Mar-2014 09:01

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061404.D
Lab Smp Id: 1632345
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info: 10357

Calibration Date: 06-MAR-2014
Calibration Time: 07:48
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	142387	71194	284774	115896	-18.60
28 Naphthalene-d8	559471	279736	1118942	442932	-20.83
45 Acenaphthene-d10	296387	148194	592774	235255	-20.63
63 Phenanthrene-d10	500615	250308	1001230	407483	-18.60
76 Chrysene-d12	467805	233903	935610	386994	-17.27
82 Perylene-d12	505479	252740	1010958	387288	-23.38

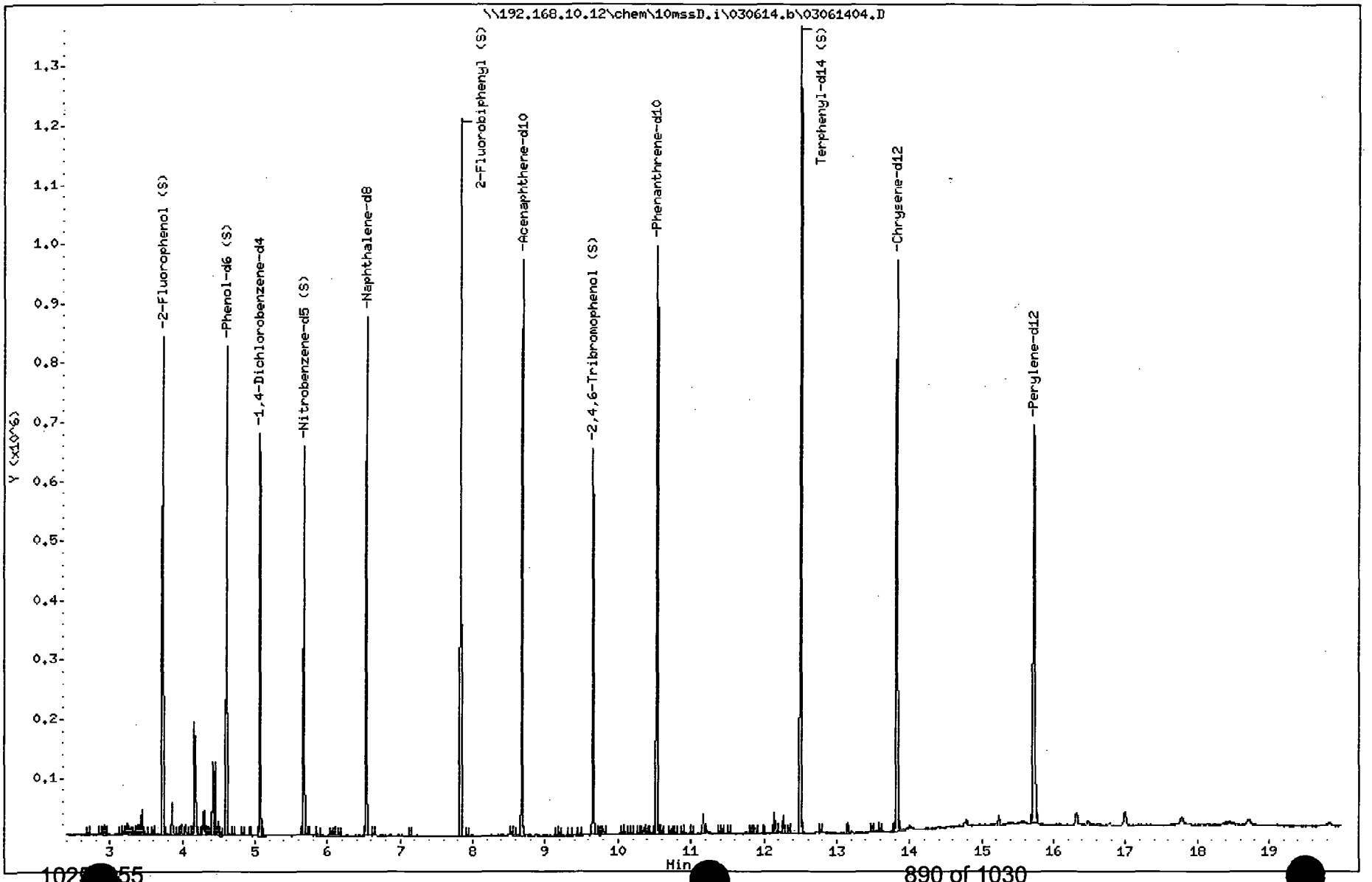
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.06	-0.10
28 Naphthalene-d8	6.53	6.03	7.03	6.53	0.00
45 Acenaphthene-d10	8.69	8.19	9.19	8.68	-0.06
63 Phenanthrene-d10	10.54	10.04	11.04	10.53	-0.05
76 Chrysene-d12	13.83	13.33	14.33	13.82	-0.08
82 Perylene-d12	15.74	15.24	16.24	15.73	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061404.D
Date : 06-MAR-2014 08:16
Client ID:
Sample Info: 1632345,MB

Instrument: 10mssD.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Injection Date: 06-MAR-2014 08:16
Instrument: 10mssD.i
Lab Sample ID: 1632345
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051414.D
Report Date: 06-Mar-2014 08:03

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051414.D
Lab Smp Id: 1632347
Inj Date : 05-MAR-2014 19:11
Operator : JLR Inst ID: 10mss9.i
Smp Info : 1632347,MS
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 06-Mar-2014 07:20 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 11 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	2.352	2.368	(0.499)	63009	38.4728	1280
	2 Pyridine	79	2.400	2.410	(0.509)	91051	30.5441	1020
$	3 2-Fluorophenol (S)	112	3.426	3.425	(0.727)	209986	74.3183	2480
$	4 Phenol-d6 (S)	99	4.286	4.291	(0.909)	250507	77.1011	2570
	5 Phenol	94	4.296	4.302	(0.912)	124477	36.4905	1220
	6 bis(2-Chloroethyl)ether	63	4.403	4.408	(0.934)	89072	35.0387	1170
	7 2-Chlorophenol	128	4.489	4.494	(0.952)	102966	35.9059	1200
	8 1,3-Dichlorobenzene	146	4.654	4.660	(0.988)	111744	34.5728	1150
*	9 1,4-Dichlorobenzene-d4	152	4.713	4.713	(1.000)	79750	40.0000	
	10 1,4-Dichlorobenzene	146	4.729	4.734	(1.003)	116560	35.5538	1180
	11 Benzyl alcohol	79	4.836	4.841	(1.026)	73392	37.4375	1250
	12 1,2-Dichlorobenzene	146	4.895	4.900	(1.039)	109192	35.6184	1190
	13 2-Methylphenol	107	4.943	4.948	(1.049)	83766	38.2745	1280
	14 bis(2-Chloroisopropyl) ether	45	4.986	4.985	(1.058)	224074	34.4120	1150
	15 3 & 4-Methylphenol	107	5.114	5.119	(1.085)	107585	37.5721	1250
	17 N-Nitroso-di-n-propylamine	70	5.124	5.130	(1.087)	59923	36.2402	1210
	18 Hexachloroethane	117	5.274	5.279	(1.119)	41007	34.4417	1150
$	19 Nitrobenzene-d5 (S)	82	5.311	5.317	(0.864)	150304	56.9585	1900
	20 Nitrobenzene	77	5.333	5.338	(0.867)	90196	35.9625	1200
	21 Isophorone	82	5.600	5.605	(0.911)	170828	37.9173	1260
	22 2-Nitrophenol	139	5.696	5.701	(0.926)	54619	37.1706	1240
	23 2,4-Dimethylphenol	107	5.723	5.733	(0.930)	92737	36.2337	1210

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24 Benzoic acid	105	5.798	5.835	(0.943)	41455	31.4955	1050	
	25 bis(2-Chloroethoxy)methane	93	5.835	5.840	(0.949)	100513	37.7045	1260	
	26 2,4-Dichlorophenol	162	5.974	5.979	(0.971)	87592	39.6224	1320	
	27 1,2,4-Trichlorobenzene	180	6.081	6.086	(0.989)	85541	36.8798	1230	
*	28 Naphthalene-d8	136	6.150	6.155	(1.000)	305032	40.0000		(Q)
	29 Naphthalene	128	6.177	6.182	(1.004)	284105	36.7342	1220	
	30 4-Chloroaniline	127	6.225	6.230	(1.012)	56379	20.0626	669	
	31 Hexachlorobutadiene	225	6.321	6.321	(1.028)	45723	36.0098	1200	
	32 4-Chloro-3-methylphenol	107	6.802	6.807	(1.106)	81315	38.6896	1290	
	33 2-Methylnaphthalene	142	7.005	7.010	(1.139)	195174	38.2344	1270	
	34 1-Methylnaphthalene	142	7.128	7.133	(1.159)	176589	37.3088	1240	
	35 Hexachlorocyclopentadiene	237	7.197	7.202	(0.868)	29426	29.2559	975	
	36 2,4,6-Trichlorophenol	196	7.347	7.347	(0.887)	54531	39.3265	1310	
	37 2,4,5-Trichlorophenol	196	7.390	7.395	(0.892)	56680	38.4682	1280	
$	38 2-Fluorobiphenyl (S)	172	7.448	7.453	(0.899)	312539	60.2157	2010	
	39 2-Chloronaphthalene	162	7.603	7.608	(0.917)	179444	39.6239	1320	
	40 2-Nitroaniline	65	7.715	7.726	(0.931)	58594	39.6626	1320	
	41 Dimethylphthalate	163	7.940	7.950	(0.958)	190933	38.8781	1300	
	42 2,6-Dinitrotoluene	165	8.015	8.025	(0.967)	45463	39.7657	1320	
	43 Acenaphthylene	152	8.116	8.121	(0.979)	276230	39.4255	1310	(M)
	44 3-Nitroaniline	138	8.223	8.233	(0.992)	34174	27.8041	927	
*	45 Acenaphthene-d10	164	8.287	8.292	(1.000)	148452	40.0000		
	46 Acenaphthene	154	8.330	8.335	(1.005)	169375	40.9440	1360	
	47 2,4-Dinitrophenol	184	8.351	8.362	(1.008)	15359	31.8239	1060	(Q)
	48 4-Nitrophenol	65	8.426	8.436	(1.017)	36992	39.2068	1310	
	49 2,4-Dinitrotoluene	165	8.511	8.522	(1.027)	59187	39.9298	1330	
	50 Dibenzofuran	168	8.543	8.549	(1.031)	241666	39.0653	1300	
	51 Diethylphthalate	149	8.811	8.816	(1.063)	187583	39.5208	1320	
	52 4-Chlorophenylphenyl ether	204	8.960	8.965	(1.081)	87854	38.7996	1290	
	53 4-Nitroaniline	138	8.976	8.992	(1.083)	49357	36.1356	1200	
	54 Fluorene	166	8.965	8.971	(1.082)	201195	40.0864	1340	
	55 4,6-Dinitro-2-methylphenol	198	9.014	9.024	(0.890)	27948	36.3337	1210	
	56 N-Nitrosodiphenylamine	169	9.104	9.110	(0.899)	159716	39.1396	1300	
	57 Azobenzene	77	9.152	9.163	(1.104)	178689	39.3357	1310	
	58 1,2-Diphenylhydrazine	77	9.152	9.163	(1.104)	178689	39.3357	1310	
$	59 2,4,6-Tribromophenol (S)	330	9.265	9.270	(1.118)	48111	84.8837	2830	
	60 4-Bromophenylphenyl ether	248	9.564	9.569	(0.944)	47577	39.9736	1330	
	61 Hexachlorobenzene	284	9.649	9.655	(0.953)	50089	39.6523	1320	
	62 Pentachlorophenol	266	9.890	9.895	(0.976)	22548	37.2744	1240	
*	63 Phenanthrene-d10	188	10.130	10.135	(1.000)	236350	40.0000		
	64 Phenanthrene	178	10.157	10.167	(1.003)	263001	38.9565	1300	
	65 Anthracene	178	10.221	10.226	(1.009)	270066	39.4265	1310	
	66 Carbazole	167	10.419	10.424	(1.028)	260129	39.1014	1300	
	67 di-n-Butylphthalate	149	10.835	10.840	(1.070)	308490	38.2450	1270	
	68 Fluoranthene	202	11.637	11.642	(1.149)	287029	39.1437	1300	
	69 Benzidine	184	11.786	11.791	(0.879)	17490	3.68145	123	(aR)
	70 Pyrene	202	11.920	11.925	(0.889)	300448	40.1636	1340	
$	71 Terphenyl-d14 (S)	244	12.101	12.101	(0.902)	294524	62.4377	2080	
	72 Butylbenzylphthalate	149	12.694	12.700	(0.947)	137312	39.6784	1320	
	73 bis(2-Ethylhexyl)phthalate	149	13.394	13.399	(0.999)	189376	39.1430	1300	
	74 3,3'-Dichlorobenzidine	252	13.351	13.362	(0.996)	51556	25.2598	842	
	75 Benzo(a)anthracene	228	13.400	13.405	(0.999)	269175	39.6877	1320	
*	76 Chrysene-d12	240	13.410	13.415	(1.000)	220812	40.0000		(Q)
	77 Chrysene	228	13.442	13.453	(1.002)	247100	39.9115	1330	

Report Date: 06-Mar-2014 08:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
78	di-n-Octylphthalate	149	14.153	14.158	(1.055)	330570	38.5236	1280
79	Benzo(b)fluoranthene	252	14.666	14.676	(0.968)	249080	41.8428	1390
80	Benzo(k)fluoranthene	252	14.698	14.708	(0.970)	237976	39.0690	1300
81	Benzo(a)pyrene	252	15.082	15.098	(0.995)	229376	40.3363	1340
* 82	Perylene-d12	264	15.157	15.168	(1.000)	200437	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	16.835	16.856	(1.111)	245911	40.0744	1340
84	Dibenzo(a,h)anthracene	278	16.856	16.877	(1.112)	209521	40.1726	1340
85	Benzo(g,h,i)perylene	276	17.337	17.369	(1.144)	206950	39.7667	1320

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051414.D
Report Date: 06-Mar-2014 08:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051414.D
Lab Smp Id: 1632347
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info: 10357

Calibration Date: 05-MAR-2014
Calibration Time: 15:31
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	110277	55139	220554	79750	-27.68
28 Naphthalene-d8	419805	209903	839610	305032	-27.34
45 Acenaphthene-d10	204219	102110	408438	148452	-27.31
63 Phenanthrene-d10	329340	164670	658680	236350	-28.24
76 Chrysene-d12	323408	161704	646816	220812	-31.72
82 Perylene-d12	312096	156048	624192	200437	-35.78

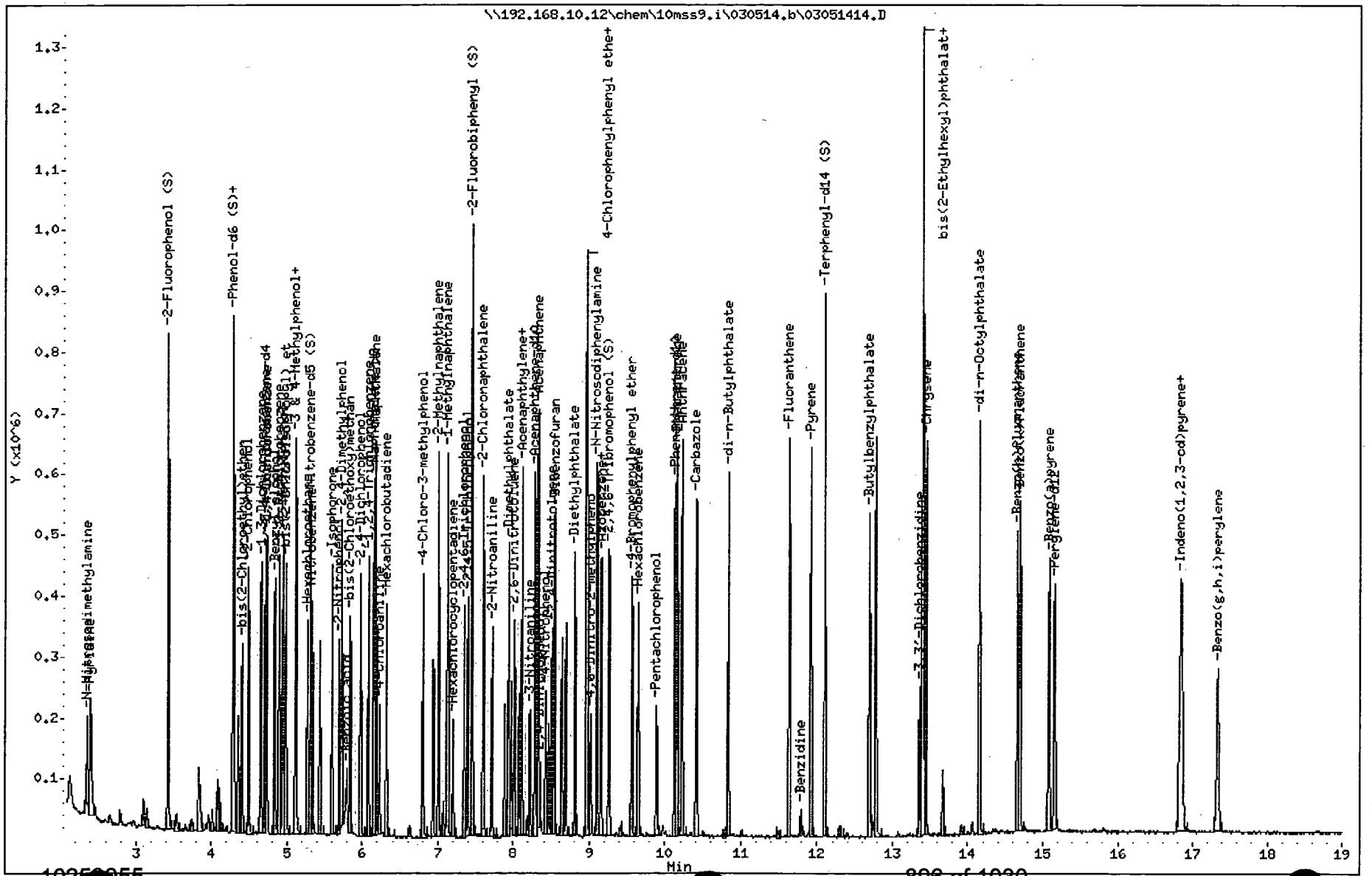
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.71	4.21	5.21	4.71	0.00
28 Naphthalene-d8	6.16	5.66	6.66	6.15	-0.08
45 Acenaphthene-d10	8.29	7.79	8.79	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.13	-0.05
76 Chrysene-d12	13.42	12.92	13.92	13.41	-0.04
82 Perylene-d12	15.17	14.67	15.67	15.16	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051414.D
Date : 05-MAR-2014 19:11
Client ID:
Sample Info: 1632347,MS

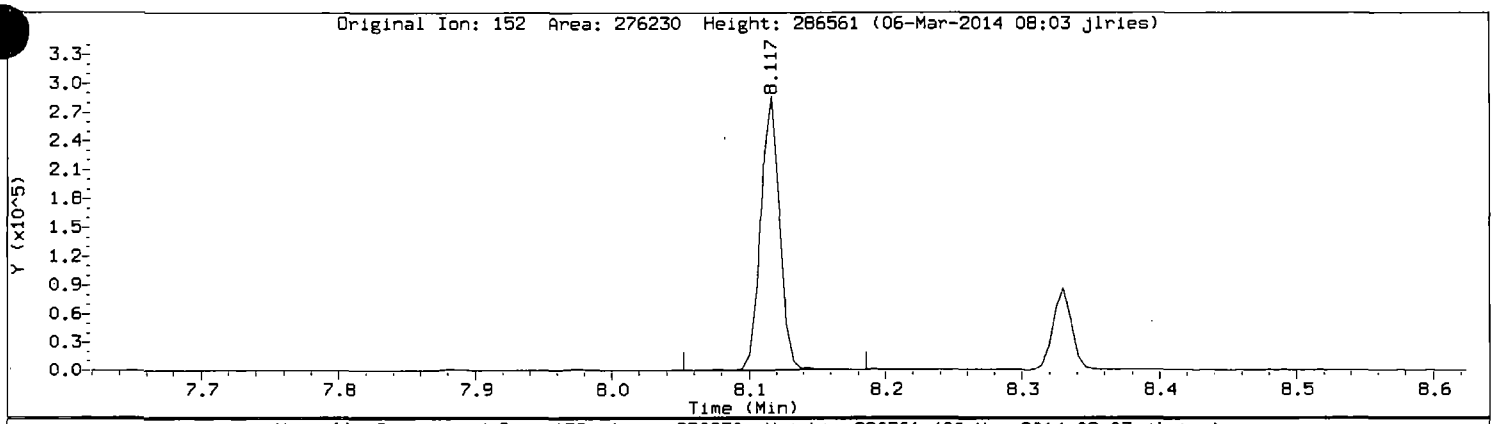
Instrument: 10mss9.i

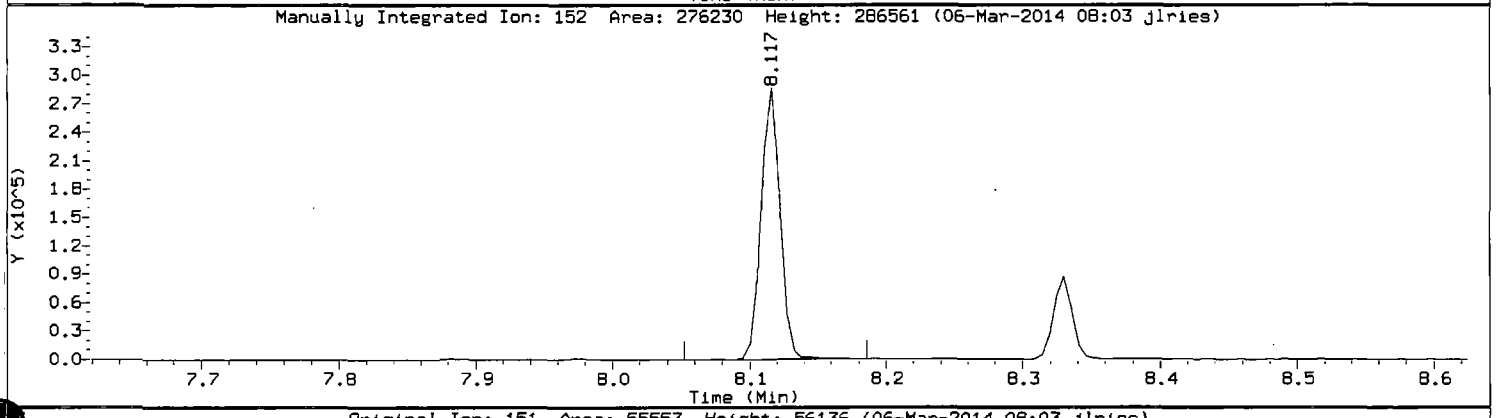
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

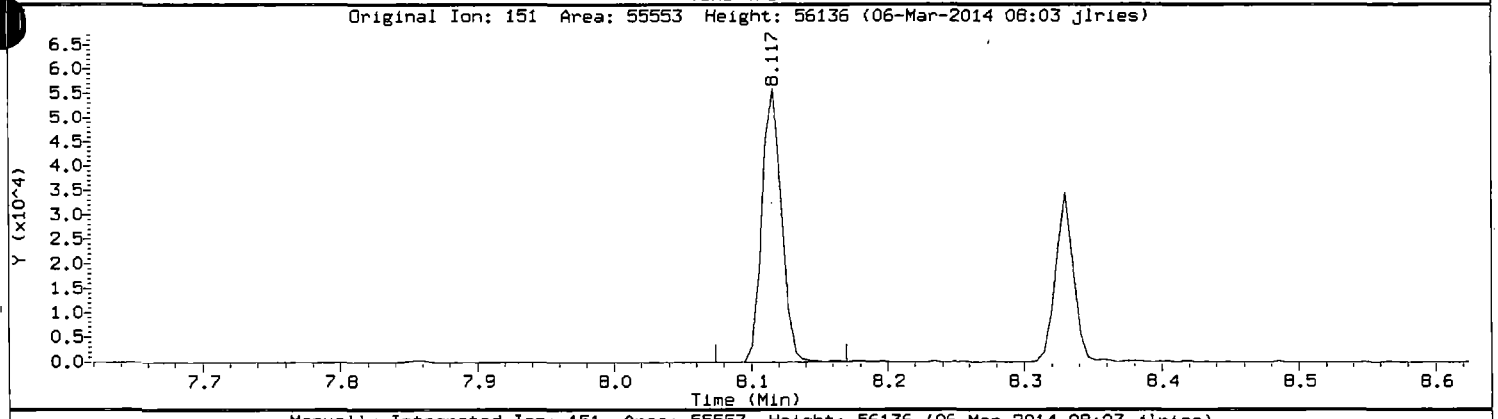


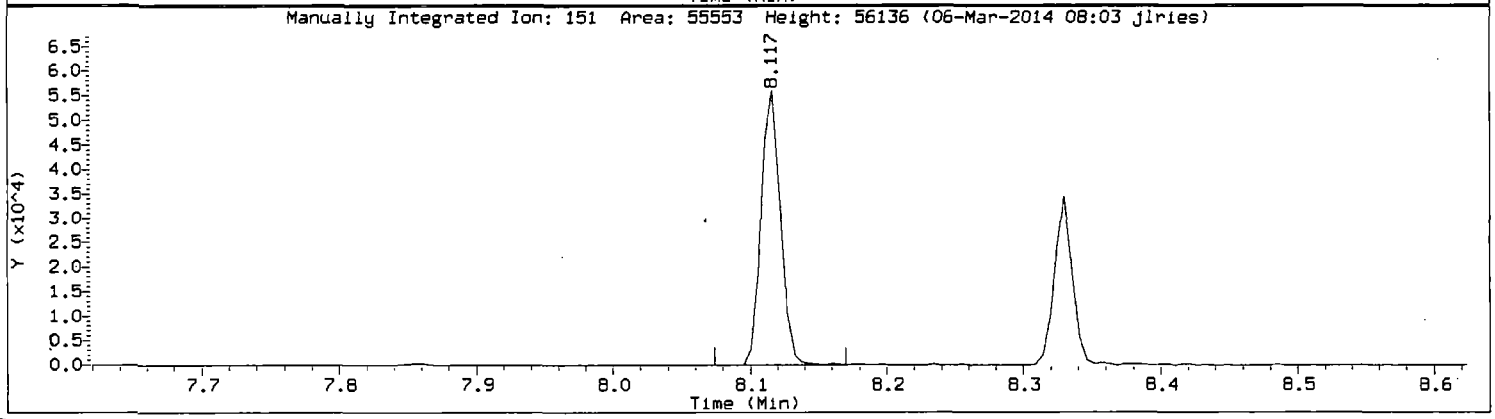
Injection Date: 05-MAR-2014 19:11
Instrument: 10mss9.i
Lab Sample ID: 1632347

Compound: Acenaphthylene
CAS Number: 208-96-8

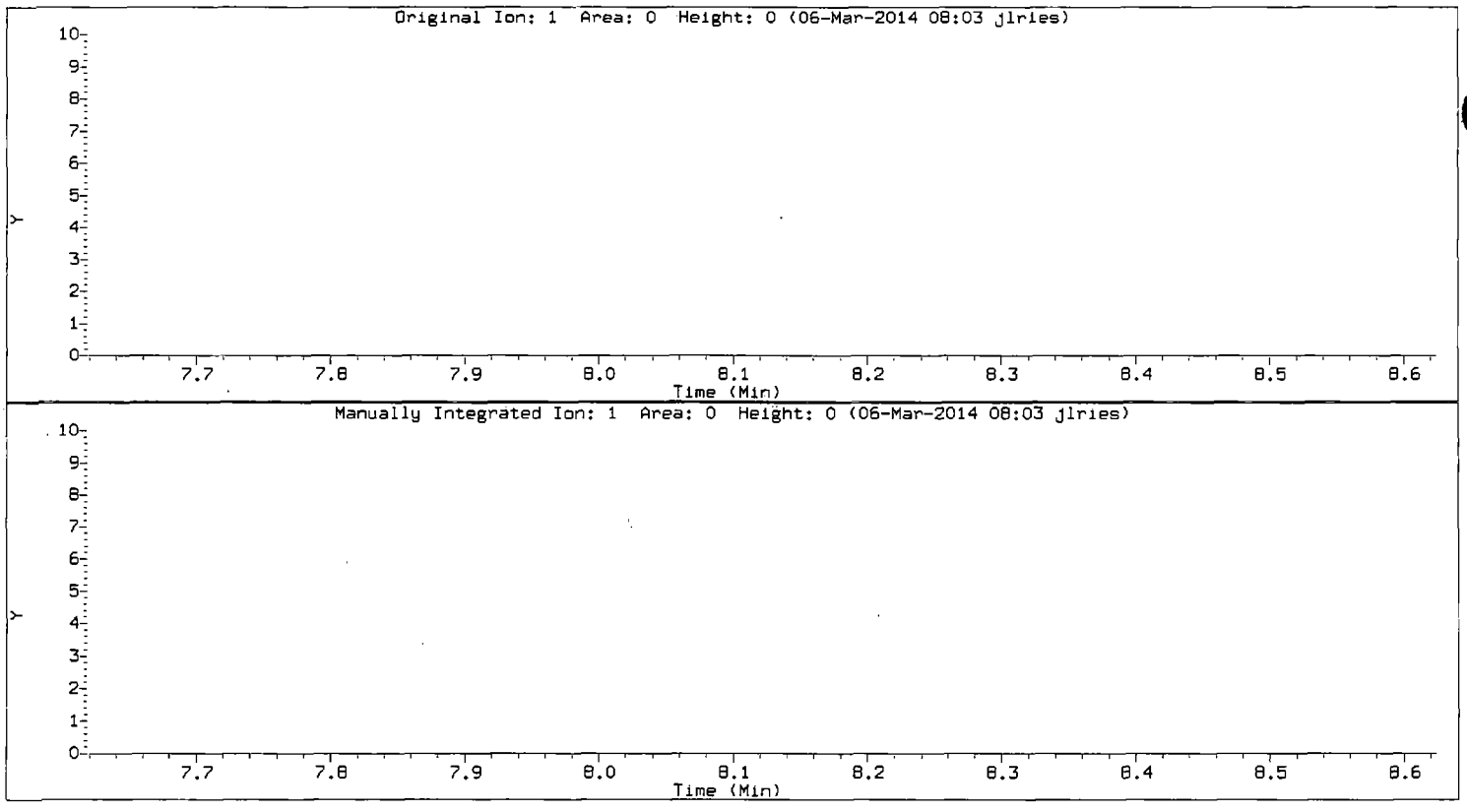








Injection Date: 05-MAR-2014 19:11
Instrument: 10mss9.i
Lab Sample ID: 1632347



Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051415.D
Report Date: 06-Mar-2014 08:03

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051415.D
Lab Smp Id: 1632348
Inj Date : 05-MAR-2014 19:38
Operator : JLR Inst ID: 10mss9.i
Smp Info : 1632348,MSD
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 06-Mar-2014 07:20 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	2.352	2.368	(0.500)	58579	39.1116	1300(Q)
	2 Pyridine	79	2.395	2.410	(0.509)	80100	29.3824	979
$	3 2-Fluorophenol (S)	112	3.426	3.425	(0.728)	203193	78.6369	2620
$	4 Phenol-d6 (S)	99	4.286	4.291	(0.910)	237023	79.7708	2660
	5 Phenol	94	4.296	4.302	(0.913)	123216	39.4976	1320
	6 bis(2-Chloroethyl)ether	63	4.403	4.408	(0.935)	85324	36.7020	1220
	7 2-Chlorophenol	128	4.489	4.494	(0.953)	100459	38.3066	1280
	8 1,3-Dichlorobenzene	146	4.654	4.660	(0.989)	107544	36.3839	1210
*	9 1,4-Dichlorobenzene-d4	152	4.708	4.713	(1.000)	72932	40.0000	
	10 1,4-Dichlorobenzene	146	4.729	4.734	(1.005)	109616	36.5614	1220
	11 Benzyl alcohol	79	4.836	4.841	(1.027)	69756	38.9092	1300
	12 1,2-Dichlorobenzene	146	4.895	4.900	(1.040)	103978	37.0883	1240
	13 2-Methylphenol	107	4.943	4.948	(1.050)	77761	38.8522	1300
	14 bis(2-Chloroisopropyl) ether	45	4.986	4.985	(1.059)	220539	37.0354	1230
	15 3 & 4-Methylphenol	107	5.114	5.119	(1.086)	102312	39.0708	1300
	17 N-Nitroso-di-n-propylamine	70	5.119	5.130	(1.087)	57237	37.8518	1260
	18 Hexachloroethane	117	5.274	5.279	(1.120)	40602	37.2895	1240
$	19 Nitrobenzene-d5 (S)	82	5.311	5.317	(0.864)	142942	59.3895	1980
	20 Nitrobenzene	77	5.333	5.338	(0.867)	89501	39.1248	1300
	21 Isophorone	82	5.595	5.605	(0.910)	163064	39.6824	1320
	22 2-Nitrophenol	139	5.696	5.701	(0.926)	52474	39.1528	1300
	23 2,4-Dimethylphenol	107	5.723	5.733	(0.930)	87327	37.4085	1250

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
24	Benzoic acid	105	5.787	5.835	(0.941)	30007	24.9951	833	
25	bis(2-Chloroethoxy)methane	93	5.835	5.840	(0.949)	95756	39.3821	1310	(Q)
26	2,4-Dichlorophenol	162	5.974	5.979	(0.971)	81016	40.1799	1340	
27	1,2,4-Trichlorobenzene	180	6.081	6.086	(0.989)	83077	39.2696	1310	
* 28	Naphthalene-d8	136	6.150	6.155	(1.000)	278217	40.0000		(Q)
29	Naphthalene	128	6.177	6.182	(1.004)	274416	38.9012	1300	
30	4-Chloroaniline	127	6.225	6.230	(1.012)	51842	20.2262	674	
31	Hexachlorobutadiene	225	6.321	6.321	(1.028)	44173	38.1421	1270	
32	4-Chloro-3-methylphenol	107	6.802	6.807	(1.106)	81354	42.4389	1410	
33	2-Methylnaphthalene	142	7.005	7.010	(1.139)	185618	39.8670	1330	
34	1-Methylnaphthalene	142	7.128	7.133	(1.159)	170928	39.5934	1320	
35	Hexachlorocyclopentadiene	237	7.197	7.202	(0.868)	26262	28.8051	960	
36	2,4,6-Trichlorophenol	196	7.347	7.347	(0.887)	53365	42.3597	1410	
37	2,4,5-Trichlorophenol	196	7.390	7.395	(0.892)	56634	42.3062	1410	
$ 38	2-Fluorobiphenyl (S)	172	7.448	7.453	(0.899)	286583	60.7730	2020	
39	2-Chloronaphthalene	162	7.603	7.608	(0.917)	166457	40.4562	1350	
40	2-Nitroaniline	65	7.715	7.726	(0.931)	57609	42.9213	1430	
41	Dimethylphthalate	163	7.940	7.950	(0.958)	187677	42.0620	1400	
42	2,6-Dinitrotoluene	165	8.015	8.025	(0.967)	43893	42.2571	1410	
43	Acenaphthylene	152	8.116	8.121	(0.979)	263682	41.4230	1380	(M)
44	3-Nitroaniline	138	8.218	8.233	(0.992)	33057	29.6027	987	
* 45	Acenaphthene-d10	164	8.287	8.292	(1.000)	134875	40.0000		
46	Acenaphthene	154	8.330	8.335	(1.005)	161899	43.0764	1440	
47	2,4-Dinitrophenol	184	8.351	8.362	(1.008)	13577	31.1277	1040	(Q)
48	4-Nitrophenol	65	8.426	8.436	(1.017)	35956	41.9449	1400	
49	2,4-Dinitrotoluene	165	8.511	8.522	(1.027)	58554	43.4792	1450	
50	Dibenzofuran	168	8.538	8.549	(1.030)	233194	41.4904	1380	
51	Diethylphthalate	149	8.811	8.816	(1.063)	178801	41.4627	1380	
52	4-Chlorophenylphenyl ether	204	8.960	8.965	(1.081)	87356	42.4632	1420	
53	4-Nitroaniline	138	8.976	8.992	(1.083)	47551	38.3179	1280	
54	Fluorene	166	8.965	8.971	(1.082)	192757	42.2712	1410	
55	4,6-Dinitro-2-methylphenol	198	9.014	9.024	(0.890)	26119	36.4508	1220	
56	N-Nitrosodiphenylamine	169	9.104	9.110	(0.899)	156154	41.0929	1370	
57	Azobenzene	77	9.152	9.163	(1.104)	172227	41.7297	1390	
58	1,2-Diphenylhydrazine	77	9.152	9.163	(1.104)	172227	41.7297	1390	
$ 59	2,4,6-Tribromophenol (S)	330	9.265	9.270	(1.118)	48176	93.5547	3120	
60	4-Bromophenylphenyl ether	248	9.564	9.569	(0.944)	46579	42.0254	1400	
61	Hexachlorobenzene	284	9.649	9.655	(0.953)	48292	41.0532	1370	
62	Pentachlorophenol	266	9.890	9.895	(0.976)	21256	37.6789	1260	
* 63	Phenanthrene-d10	188	10.130	10.135	(1.000)	220095	40.0000		
64	Phenanthrene	178	10.157	10.167	(1.003)	253102	40.2590	1340	
65	Anthracene	178	10.221	10.226	(1.009)	260012	40.7622	1360	
66	Carbazole	167	10.419	10.424	(1.028)	258448	41.7179	1390	
67	di-n-Butylphthalate	149	10.835	10.840	(1.070)	304735	40.5696	1350	
68	Fluoranthene	202	11.637	11.642	(1.149)	282246	41.3342	1380	
69	Benzidine	184	11.786	11.791	(0.879)	21710	5.32690	178	(aR)
70	Pyrene	202	11.920	11.925	(0.889)	295588	42.3429	1410	
$ 71	Terphenyl-d14 (S)	244	12.101	12.101	(0.902)	282312	64.1337	2140	
72	Butylbenzylphthalate	149	12.694	12.700	(0.947)	134786	41.7370	1390	
73	bis(2-Ethylhexyl)phthalate	149	13.394	13.399	(0.999)	190080	42.1014	1400	
74	3,3'-Dichlorobenzidine	252	13.351	13.362	(0.996)	50315	26.4168	880	
75	Benzo(a)anthracene	228	13.394	13.405	(0.999)	263992	41.7103	1390	
* 76	Chrysene-d12	240	13.410	13.415	(1.000)	206059	40.0000		(Q)
77	Chrysene	228	13.442	13.453	(1.002)	238783	41.3294	1380	

Data File: \\192.168.10.12\Chem\10MS59.I\030514.D\03051415.D
Report Date: 06-Mar-2014 08:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	14.153	14.158	(1.055)	320375	40.0086	1330
	79 Benzo(b)fluoranthene	252	14.660	14.676	(0.967)	235257	42.2915	1410
	80 Benzo(k)fluoranthene	252	14.698	14.708	(0.970)	250832	44.0667	1470
	81 Benzo(a)pyrene	252	15.082	15.098	(0.995)	226537	42.6300	1420
*	82 Perylene-d12	264	15.157	15.168	(1.000)	187305	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	16.835	16.856	(1.111)	242207	42.2381	1410
	84 Dibenzo(a,h)anthracene	278	16.851	16.877	(1.112)	205948	42.2560	1410
	85 Benzo(g,h,i)perylene	276	17.342	17.369	(1.144)	207744	42.7180	1420

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051415.D
Report Date: 06-Mar-2014 08:03

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051415.D
Lab Smp Id: 1632348
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info: 10357

Calibration Date: 05-MAR-2014
Calibration Time: 15:31
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	110277	55139	220554	72932	-33.86
28 Naphthalene-d8	419805	209903	839610	278217	-33.73
45 Acenaphthene-d10	204219	102110	408438	134875	-33.96
63 Phenanthrene-d10	329340	164670	658680	220095	-33.17
76 Chrysene-d12	323408	161704	646816	206059	-36.29
82 Perylene-d12	312096	156048	624192	187305	-39.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.71	4.21	5.21	4.71	-0.11
28 Naphthalene-d8	6.16	5.66	6.66	6.15	-0.08
45 Acenaphthene-d10	8.29	7.79	8.79	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.13	-0.05
76 Chrysene-d12	13.42	12.92	13.92	13.41	-0.04
82 Perylene-d12	15.17	14.67	15.67	15.16	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

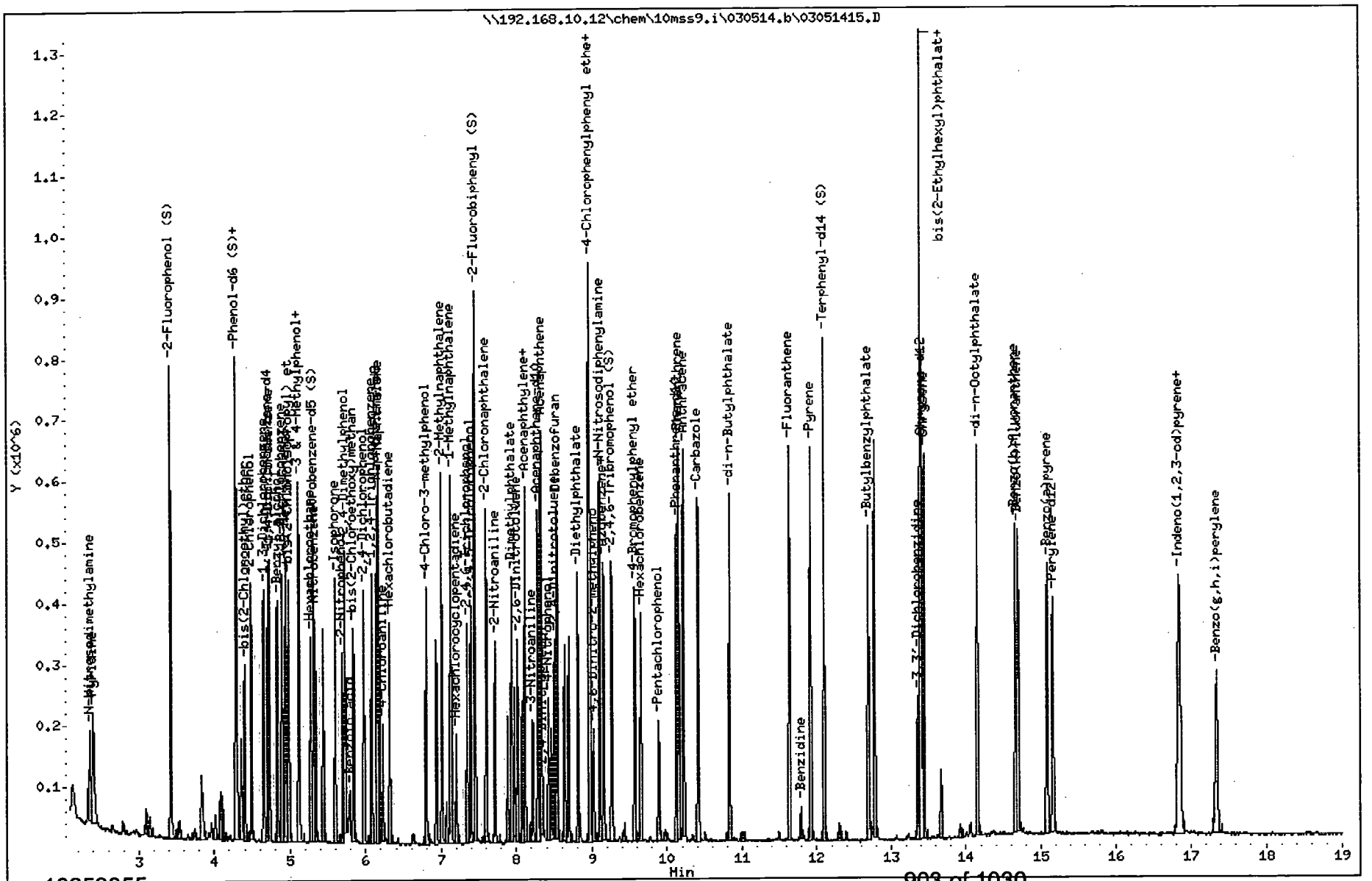
Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051415.D
Date : 05-MAR-2014 19:38
Client ID:
Sample Info: 1632348,MSD

Instrument: 10mss9.i

Operator: JLR

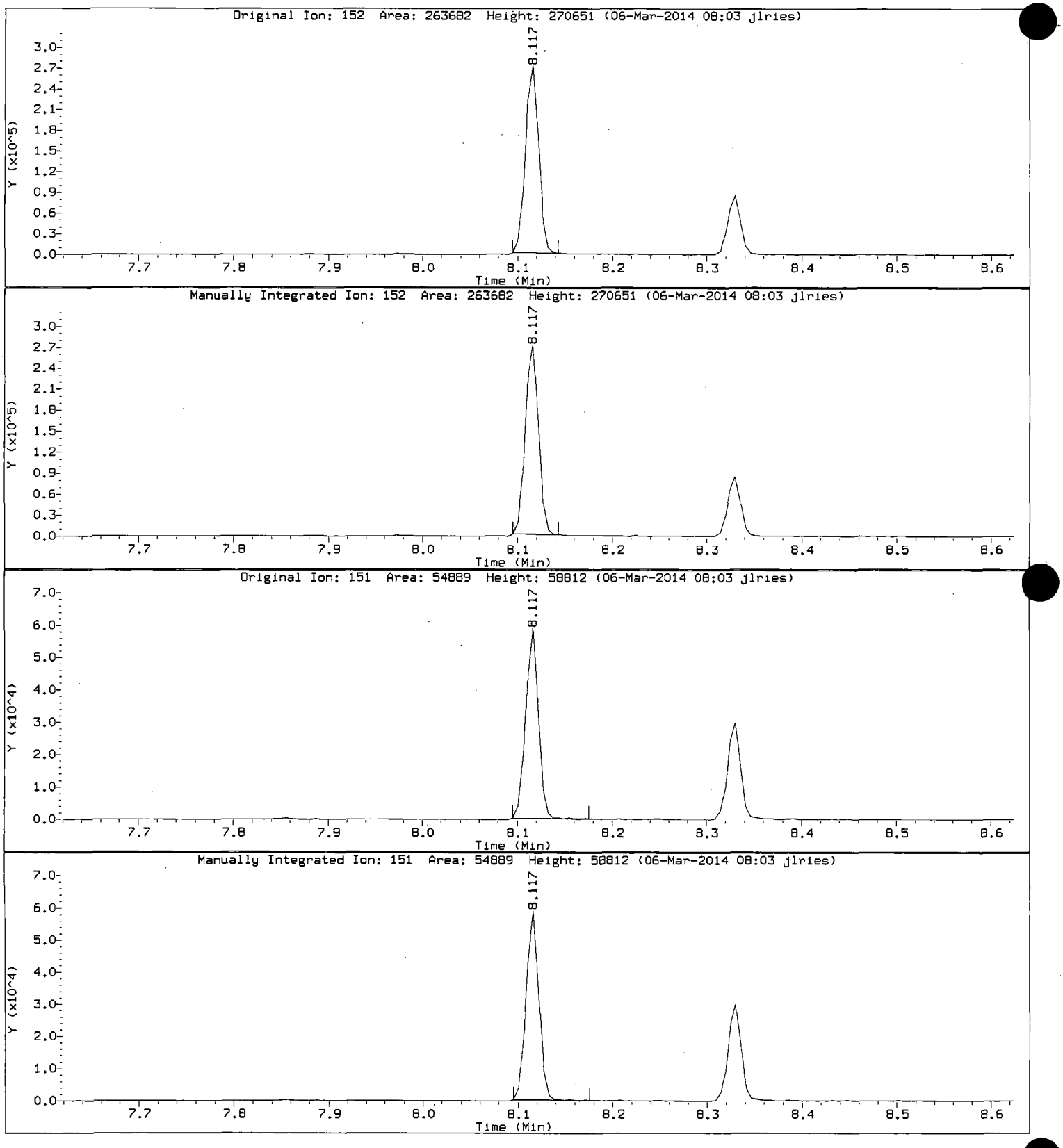
Column phase: DB-5MS

Column diameter: 0.25

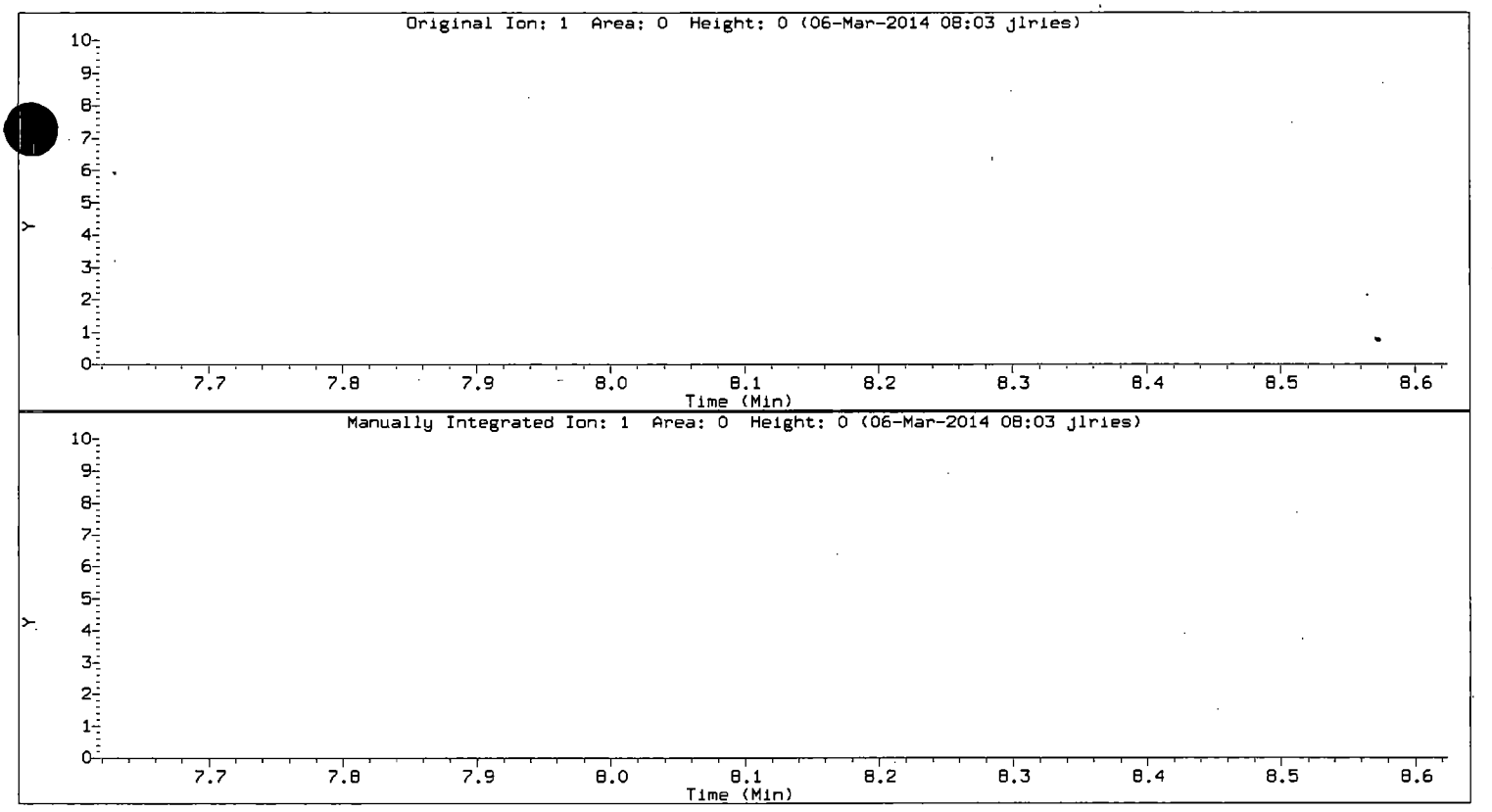


Injection Date: 05-MAR-2014 19:38
Instrument: 10mss9.i
Lab Sample ID: 1632348

Compound: Acenaphthylene
CAS Number: 208-96-8



Injection Date: 05-MAR-2014 19:58
Instrument: 10mss9.i
Lab Sample ID: 1632348



Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061405.D
Report Date: 06-Mar-2014 10:38

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061405.D
Lab Smp Id: 1632346
Inj Date : 06-MAR-2014 08:44
Operator : JLR Inst ID: 10mssD.i
Smp Info : 1632346,LCS
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	2.584	2.590	(0.510)	93747	34.6343	1150
	2 Pyridine	79	2.632	2.638	(0.520)	127408	26.2318	874
$	3 2-Fluorophenol (S)	112	3.724	3.718	(0.735)	353294	86.7569	2890
$	4 Phenol-d6 (S)	99	4.606	4.611	(0.909)	439622	86.6405	2890
	5 Phenol	94	4.622	4.627	(0.912)	211937	40.0744	1340
	6 bis(2-Chloroethyl)ether	63	4.740	4.745	(0.936)	116371	36.9907	1230
	7 2-Chlorophenol	128	4.836	4.836	(0.955)	175232	40.4787	1350
	8 1,3-Dichlorobenzene	146	5.007	5.007	(0.988)	175099	38.7556	1290
*	9 1,4-Dichlorobenzene-d4	152	5.066	5.066	(1.000)	116788	40.0000	
	10 1,4-Dichlorobenzene	146	5.082	5.082	(1.003)	181107	39.1251	1300
	11 Benzyl alcohol	79	5.184	5.184	(1.023)	139165	38.6090	1290
	12 1,2-Dichlorobenzene	146	5.253	5.259	(1.037)	171958	39.2535	1310
	13 2-Methylphenol	107	5.285	5.291	(1.043)	132670	40.4645	1350
	14 bis(2-Chloroisopropyl) ether	45	5.333	5.339	(1.053)	223308	36.4525	1220
	15 3 & 4-Methylphenol	107	5.456	5.462	(1.077)	176664	41.3622	1380
	17 N-Nitroso-di-n-propylamine	70	5.478	5.483	(1.081)	114792	38.2729	1280
	18 Hexachloroethane	117	5.644	5.644	(1.114)	68212	37.9239	1260
$	19 Nitrobenzene-d5 (S)	82	5.670	5.676	(0.868)	274637	60.0123	2000
	20 Nitrobenzene	77	5.697	5.697	(0.872)	171804	38.7773	1290
	21 Isophorone	82	5.965	5.970	(0.913)	313653	39.9950	1330
	23 2-Nitrophenol	139	6.066	6.066	(0.929)	94071	41.8967	1400
	22 2,4-Dimethylphenol	107	6.077	6.082	(0.930)	148237	36.1285	1200

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24	Benzoic acid	105	6.146	6.178	(0.941)	99537	33.5778	1120	
	25	bis(2-Chloroethoxy)methane	93	6.195	6.200	(0.948)	197222	40.6953	1360	(Q)
	26	2,4-Dichlorophenol	162	6.339	6.344	(0.971)	135332	42.4441	1410	
	27	1,2,4-Trichlorobenzene	180	6.457	6.457	(0.989)	137329	40.4029	1350	
*	28	Naphthalene-d8	136	6.532	6.532	(1.000)	460743	40.0000		(Q)
	29	Naphthalene	128	6.558	6.564	(1.004)	495112	39.9401	1330	
	30	4-Chloroaniline	127	6.596	6.601	(1.010)	96429	20.6519	688	
	31	Hexachlorobutadiene	225	6.697	6.697	(1.025)	70829	41.3861	1380	
	32	4-Chloro-3-methylphenol	107	7.157	7.163	(1.096)	149269	43.2453	1440	
	33	2-Methylnaphthalene	142	7.393	7.393	(1.132)	335962	41.5065	1380	
	34	1-Methylnaphthalene	142	7.516	7.516	(1.151)	311461	41.2431	1370	
	35	Hexachlorocyclopentadiene	237	7.585	7.585	(0.874)	77049	39.1159	1300	
	36	2,4,6-Trichlorophenol	196	7.724	7.724	(0.890)	96293	45.0857	1500	
	37	2,4,5-Trichlorophenol	196	7.767	7.767	(0.895)	103325	44.9478	1500	
$	38	2-Fluorobiphenyl (S)	172	7.831	7.831	(0.902)	574366	68.6485	2290	
	39	2-Chloronaphthalene	162	7.992	7.997	(0.921)	303455	42.7713	1420	
	40	2-Nitroaniline	65	8.099	8.104	(0.933)	101706	42.7513	1420	
	41	Dimethylphthalate	163	8.318	8.323	(0.958)	349424	43.8725	1460	
	42	2,6-Dinitrotoluene	165	8.393	8.398	(0.967)	82745	43.0086	1430	
	43	Acenaphthylene	152	8.511	8.516	(0.980)	506173	42.8461	1430	(M)
	44	3-Nitroaniline	138	8.601	8.612	(0.991)	61317	30.9917	1030	
*	45	Acenaphthene-d10	164	8.682	8.687	(1.000)	239411	40.0000		
	46	Acenaphthene	154	8.724	8.730	(1.005)	312733	42.1939	1410	
	47	2,4-Dinitrophenol	184	8.730	8.735	(1.006)	37389	34.0025	1130	(Q)
	48	4-Nitrophenol	65	8.783	8.789	(1.012)	72730	40.4808	1350	
	49	2,4-Dinitrotoluene	165	8.890	8.901	(1.024)	112445	44.2641	1480	
	50	Dibenzofuran	168	8.938	8.944	(1.030)	438522	43.7771	1460	
	51	Diethylphthalate	149	9.190	9.195	(1.059)	355382	42.6582	1420	
	52	4-Chlorophenylphenyl ether	204	9.350	9.356	(1.077)	160008	43.8135	1460	
	54	4-Nitroaniline	138	9.361	9.372	(1.078)	92051	40.6108	1350	
	53	Fluorene	166	9.366	9.366	(1.079)	366119	43.3472	1440	
	55	4,6-Dinitro-2-methylphenol	198	9.398	9.409	(0.892)	54578	37.7426	1260	
	56	N-Nitrosodiphenylamine	169	9.489	9.495	(0.901)	315808	43.6742	1460	
	57	Azobenzene	77	9.548	9.553	(1.100)	372848	42.0606	1400	
	58	1,2-Diphenylhydrazine	77	9.548	9.553	(1.100)	372848	42.0606	1400	
$	59	2,4,6-Tribromophenol (S)	330	9.661	9.666	(1.113)	121159	107.521	3580	
	60	4-Bromophenylphenyl ether	248	9.960	9.965	(0.946)	91187	44.5292	1480	
	61	Hexachlorobenzene	284	10.051	10.056	(0.954)	99714	44.2440	1470	
	62	Pentachlorophenol	266	10.286	10.286	(0.977)	56905	41.6554	1390	
*	63	Phenanthrene-d10	188	10.532	10.538	(1.000)	405527	40.0000		
	64	Phenanthrene	178	10.564	10.570	(1.003)	491905	42.5891	1420	
	65	Anthracene	178	10.629	10.634	(1.009)	503317	42.7457	1420	
	66	Carbazole	167	10.816	10.816	(1.027)	495684	43.4558	1450	
	67	di-n-Butylphthalate	149	11.222	11.222	(1.066)	612928	43.5897	1450	
	68	Fluoranthene	202	12.046	12.051	(1.144)	510493	44.2841	1480	
	69	Benzidine	184	12.185	12.190	(0.881)	11103	1.82680	60.9	(aR)
	70	Pyrene	202	12.335	12.340	(0.892)	532586	44.3686	1480	
$	71	Terphenyl-d14 (S)	244	12.506	12.506	(0.904)	619924	73.1654	2440	
	72	Butylbenzylphthalate	149	13.089	13.094	(0.947)	264903	45.3182	1510	
	73	bis(2-Ethylhexyl)phthalate	149	13.784	13.790	(0.997)	364521	43.4657	1450	
	74	3,3'-Dichlorobenzidine	252	13.758	13.763	(0.995)	116139	35.7492	1190	
	75	Benzo(a)anthracene	228	13.811	13.822	(0.999)	489816	44.0541	1470	
*	76	Chrysene-d12	240	13.827	13.832	(1.000)	389918	40.0000		(Q)
	77	Chrysene	228	13.859	13.864	(1.002)	452361	43.8500	1460	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	14.555	14.560	(1.053)	610790	43.7288	1460
79	Benzo(b)fluoranthene	252	15.164	15.170	(0.964)	483353	45.7221	1520
80	Benzo(k)fluoranthene	252	15.202	15.212	(0.966)	510247	45.0327	1500
81	Benzo(a)pyrene	252	15.646	15.656	(0.995)	457431	45.0797	1500
* 82	Perylene-d12	264	15.731	15.737	(1.000)	387603	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	17.673	17.694	(1.123)	545412	46.5191	1550
84	Dibenzo(a,h)anthracene	278	17.694	17.716	(1.125)	468008	46.4981	1550
85	Benzo(g,h,i)perylene	276	18.266	18.293	(1.161)	460268	46.4243	1550

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061405.D
Report Date: 06-Mar-2014 10:38

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061405.D
Lab Smp Id: 1632346
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info: 10357

Calibration Date: 06-MAR-2014
Calibration Time: 07:48
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

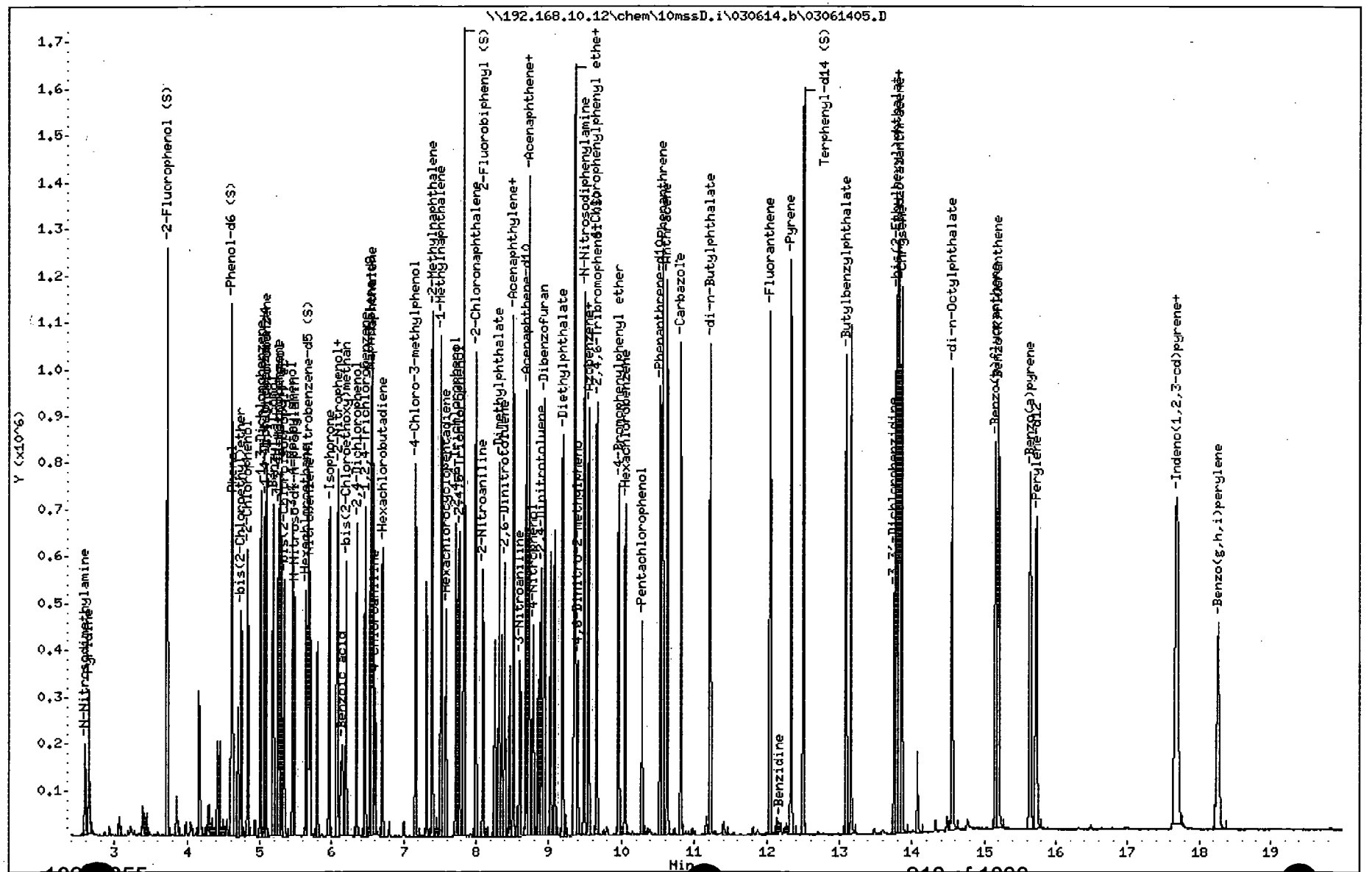
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	142387	71194	284774	116788	-17.98
28 Naphthalene-d8	559471	279736	1118942	460743	-17.65
45 Acenaphthene-d10	296387	148194	592774	239411	-19.22
63 Phenanthrene-d10	500615	250308	1001230	405527	-18.99
76 Chrysene-d12	467805	233903	935610	389918	-16.65
82 Perylene-d12	505479	252740	1010958	387603	-23.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.53	6.03	7.03	6.53	0.00
45 Acenaphthene-d10	8.69	8.19	9.19	8.68	-0.06
63 Phenanthrene-d10	10.54	10.04	11.04	10.53	-0.05
76 Chrysene-d12	13.83	13.33	14.33	13.83	-0.04
82 Perylene-d12	15.74	15.24	16.24	15.73	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

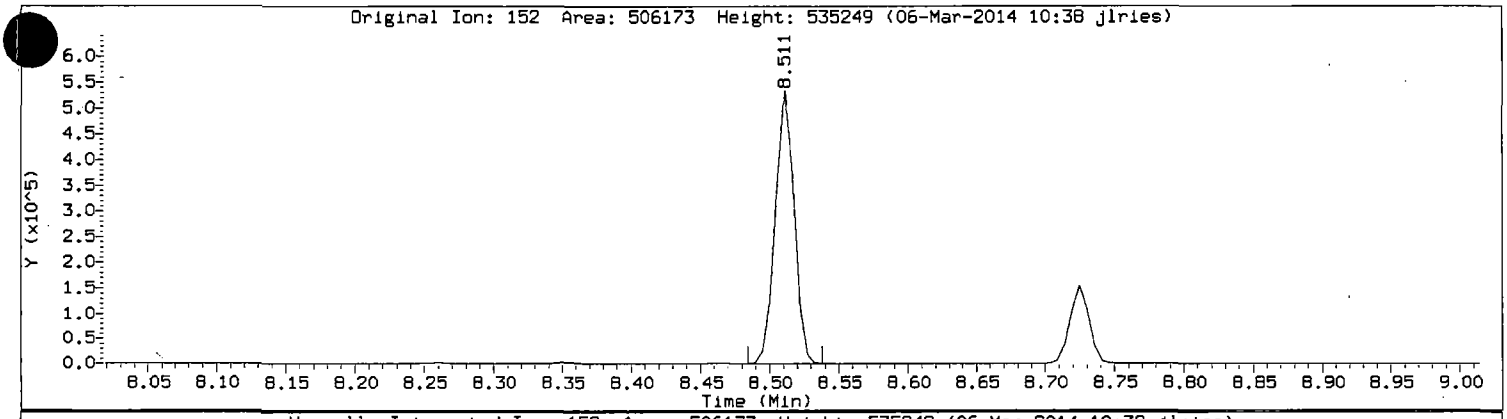
Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061405.D
Date : 06-MAR-2014 08:44
Client ID:
Sample Info: 1632346,LCS

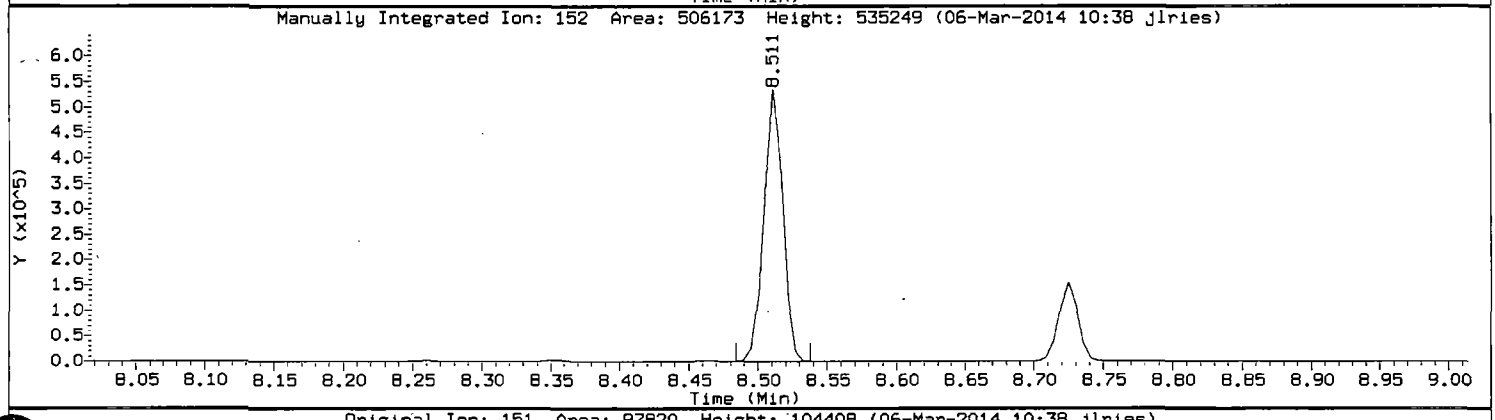
Instrument: 10mssD.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

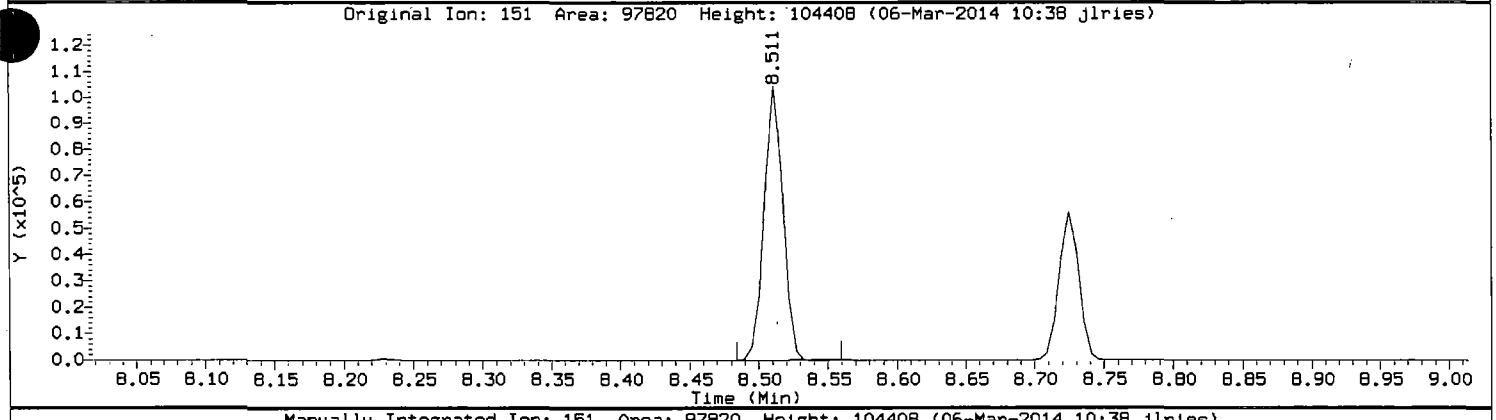


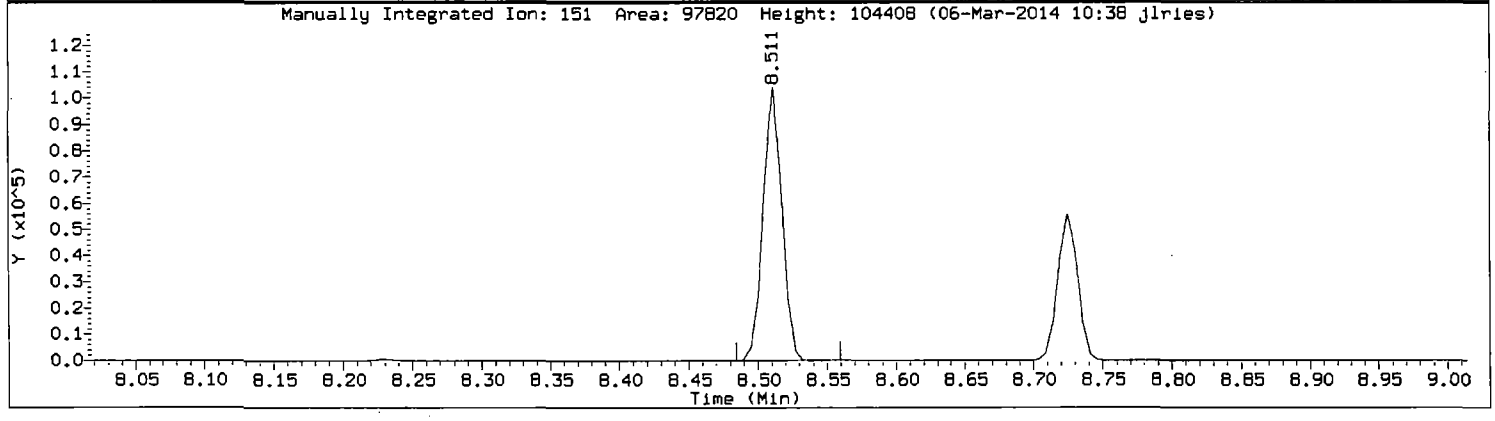
Injection Date: 06-MAR-2014 08:44
Instrument: 10mssD.i
Lab Sample ID: 1632346

Compound: Acenaphthylene
CAS Number: 208-96-8

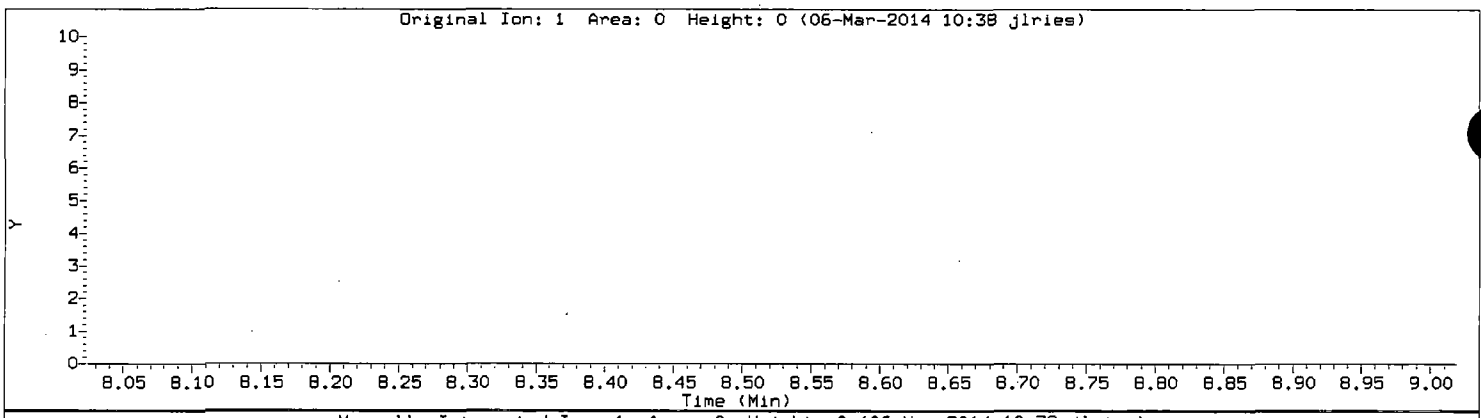


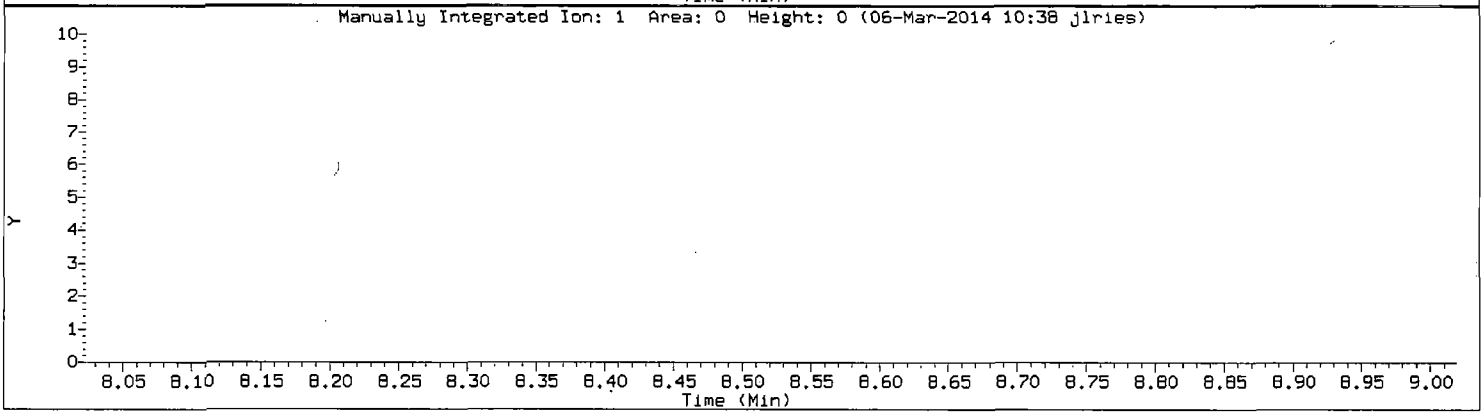






Injection Date: 06-MAR-2014 08:44
Instrument: 10mssD.i
Lab Sample ID: 1632346





Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061408.D
Report Date: 06-Mar-2014 10:56

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061408.D
Lab Smp Id: 10259055001
Inj Date : 06-MAR-2014 10:09
Operator : JLR Inst ID: 10mssD.i
Smp Info : 10259055001
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	Compound Not Detected.					
	2 Pyridine	79	Compound Not Detected.					
$	3 2-Fluorophenol (S)	112	3.723	3.718	(0.735)	306817	76.8164	2560
$	4 Phenol-d6 (S)	99	4.606	4.611	(0.909)	398456	80.0625	2670
	5 Phenol	94	Compound Not Detected.					
	6 bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7 2-Chlorophenol	128	Compound Not Detected.					
	8 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9 1,4-Dichlorobenzene-d4	152	5.066	5.066	(1.000)	114549	40.0000	
	10 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	107	Compound Not Detected.					
	14 bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15 3 & 4-Methylphenol	107	Compound Not Detected.					
	17 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18 Hexachloroethane	117	Compound Not Detected.					
$	19 Nitrobenzene-d5 (S)	82	5.670	5.676	(0.868)	257905	58.9243	1960
	20 Nitrobenzene	77	Compound Not Detected.					
	21 Isophorone	82	Compound Not Detected.					
	23 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.532	6.532	(1.000)	440662	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.831	7.831	(0.902)	504707	62.6291	2090	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.682	8.687	(1.000)	230595	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	54 4-Nitroaniline	138	Compound Not Detected.						
	53 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.660	9.666	(1.113)	83326	76.7738	2560	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.532	10.538	(1.000)	401661	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.506	12.506	(0.904)	575374	69.1523	2300	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.827	13.832	(1.000)	382899	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252	Compound Not Detected.					
	81 Benzo(a)pyrene	252	Compound Not Detected.					
*	82 Perylene-d12	264	15.731	15.737	(1.000)	374483	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061408.D
Report Date: 06-Mar-2014 10:56

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061408.D
Lab Smp Id: 10259055001
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info: 10357

Calibration Date: 06-MAR-2014
Calibration Time: 07:48
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	142387	71194	284774	114549	-19.55
28 Naphthalene-d8	559471	279736	1118942	440662	-21.24
45 Acenaphthene-d10	296387	148194	592774	230595	-22.20
63 Phenanthrene-d10	500615	250308	1001230	401661	-19.77
76 Chrysene-d12	467805	233903	935610	382899	-18.15
82 Perylene-d12	505479	252740	1010958	374483	-25.92

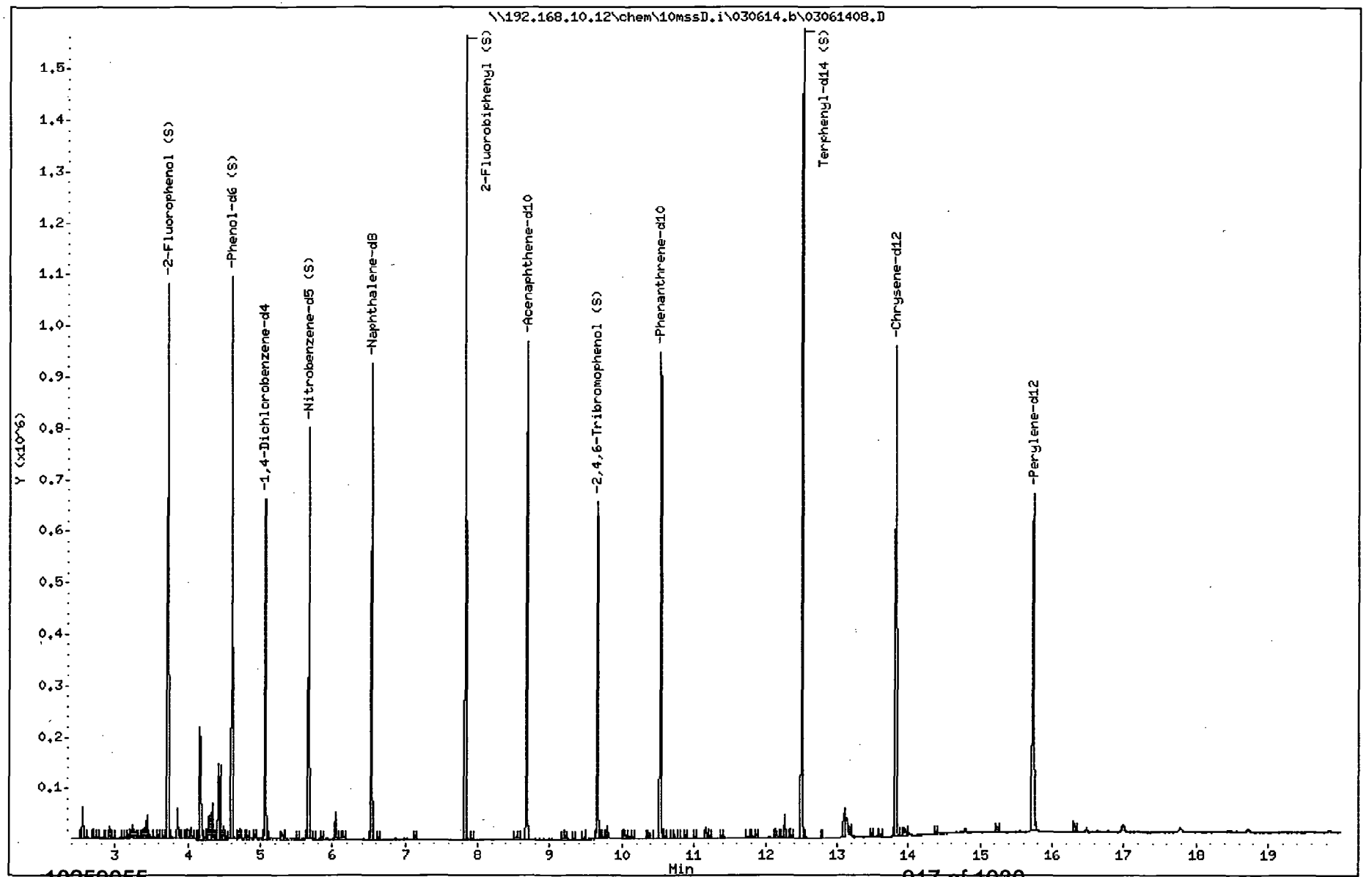
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.53	6.03	7.03	6.53	0.00
45 Acenaphthene-d10	8.69	8.19	9.19	8.68	-0.06
63 Phenanthrene-d10	10.54	10.04	11.04	10.53	-0.05
76 Chrysene-d12	13.83	13.33	14.33	13.83	-0.04
82 Perylene-d12	15.74	15.24	16.24	15.73	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061408.D
Date : 06-MAR-2014 10:09
Client ID:
Sample Info: 10259055001

Instrument: 10mssD.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Injection Date: 06-MAR-2014 10:09
Instrument: 10mssD.i
Lab Sample ID: 10259055001
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061409.D
Report Date: 06-Mar-2014 12:59

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061409.D
Lab Smp Id: 10259055002
Inj Date : 06-MAR-2014 10:37
Operator : JLR Inst ID: 10mssD.i
Smp Info : 10259055002
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	Compound Not Detected.					
	2 Pyridine	79	Compound Not Detected.					
$	3 2-Fluorophenol (S)	112	3.724	3.718	(0.735)	319049	83.4828	2780
$	4 Phenol-d6 (S)	99	4.606	4.611	(0.909)	404080	84.8557	2830
	5 Phenol	94	Compound Not Detected.					
	6 bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7 2-Chlorophenol	128	Compound Not Detected.					
	8 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9 1,4-Dichlorobenzene-d4	152	5.066	5.066	(1.000)	109604	40.0000	
	10 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	107	Compound Not Detected.					
	14 bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15 3 & 4-Methylphenol	107	Compound Not Detected.					
	17 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18 Hexachloroethane	117	Compound Not Detected.					
$	19 Nitrobenzene-d5 (S)	82	5.670	5.676	(0.868)	258331	60.8435	2030
	20 Nitrobenzene	77	Compound Not Detected.					
	21 Isophorone	82	Compound Not Detected.					
	23 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24	Benzoic acid	105	Compound Not Detected.						
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26	2,4-Dichlorophenol	162	Compound Not Detected.						
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28	Naphthalene-d8	136	6.532	6.532	(1.000)	427467	40.0000		(Q)
	29	Naphthalene	128	Compound Not Detected.						
	30	4-Chloroaniline	127	Compound Not Detected.						
	31	Hexachlorobutadiene	225	Compound Not Detected.						
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33	2-Methylnaphthalene	142	Compound Not Detected.						
	34	1-Methylnaphthalene	142	Compound Not Detected.						
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38	2-Fluorobiphenyl (S)	172	7.831	7.831	(0.902)	510004	64.1527	2140	
	39	2-Chloronaphthalene	162	Compound Not Detected.						
	40	2-Nitroaniline	65	Compound Not Detected.						
	41	Dimethylphthalate	163	Compound Not Detected.						
	42	2,6-Dinitrotoluene	165	Compound Not Detected.						
	43	Acenaphthylene	152	Compound Not Detected.						
	44	3-Nitroaniline	138	Compound Not Detected.						
*	45	Acenaphthene-d10	164	8.682	8.687	(1.000)	227481	40.0000		
	46	Acenaphthene	154	Compound Not Detected.						
	47	2,4-Dinitrophenol	184	Compound Not Detected.						
	48	4-Nitrophenol	65	Compound Not Detected.						
	49	2,4-Dinitrotoluene	165	Compound Not Detected.						
	50	Dibenzofuran	168	Compound Not Detected.						
	51	Diethylphthalate	149	Compound Not Detected.						
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	54	4-Nitroaniline	138	Compound Not Detected.						
	53	Fluorene	166	Compound Not Detected.						
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Azobenzene	77	Compound Not Detected.						
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59	2,4,6-Tribromophenol (S)	330	9.655	9.666	(1.112)	89534	83.6229	2790	
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61	Hexachlorobenzene	284	Compound Not Detected.						
	62	Pentachlorophenol	266	Compound Not Detected.						
*	63	Phenanthrene-d10	188	10.532	10.538	(1.000)	401196	40.0000		
	64	Phenanthrene	178	Compound Not Detected.						
	65	Anthracene	178	Compound Not Detected.						
	66	Carbazole	167	Compound Not Detected.						
	67	di-n-Butylphthalate	149	Compound Not Detected.						
	68	Fluoranthene	202	Compound Not Detected.						
	69	Benzidine	184	Compound Not Detected.						
	70	Pyrene	202	Compound Not Detected.						
$	71	Terphenyl-d14 (S)	244	12.506	12.506	(0.904)	578526	69.3124	2310	
	72	Butylbenzylphthalate	149	Compound Not Detected.						
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75	Benzo(a)anthracene	228	Compound Not Detected.						
*	76	Chrysene-d12	240	13.827	13.832	(1.000)	384107	40.0000		(Q)
	77	Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061409.D
Report Date: 06-Mar-2014 12:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.731	15.737	(1.000)	380378	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061409.D
Report Date: 06-Mar-2014 12:59

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061409.D
Lab Smp Id: 10259055002
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info: 10357

Calibration Date: 06-MAR-2014
Calibration Time: 07:48
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	142387	71194	284774	109604	-23.02
28 Naphthalene-d8	559471	279736	1118942	427467	-23.59
45 Acenaphthene-d10	296387	148194	592774	227481	-23.25
63 Phenanthrene-d10	500615	250308	1001230	401196	-19.86
76 Chrysene-d12	467805	233903	935610	384107	-17.89
82 Perylene-d12	505479	252740	1010958	380378	-24.75

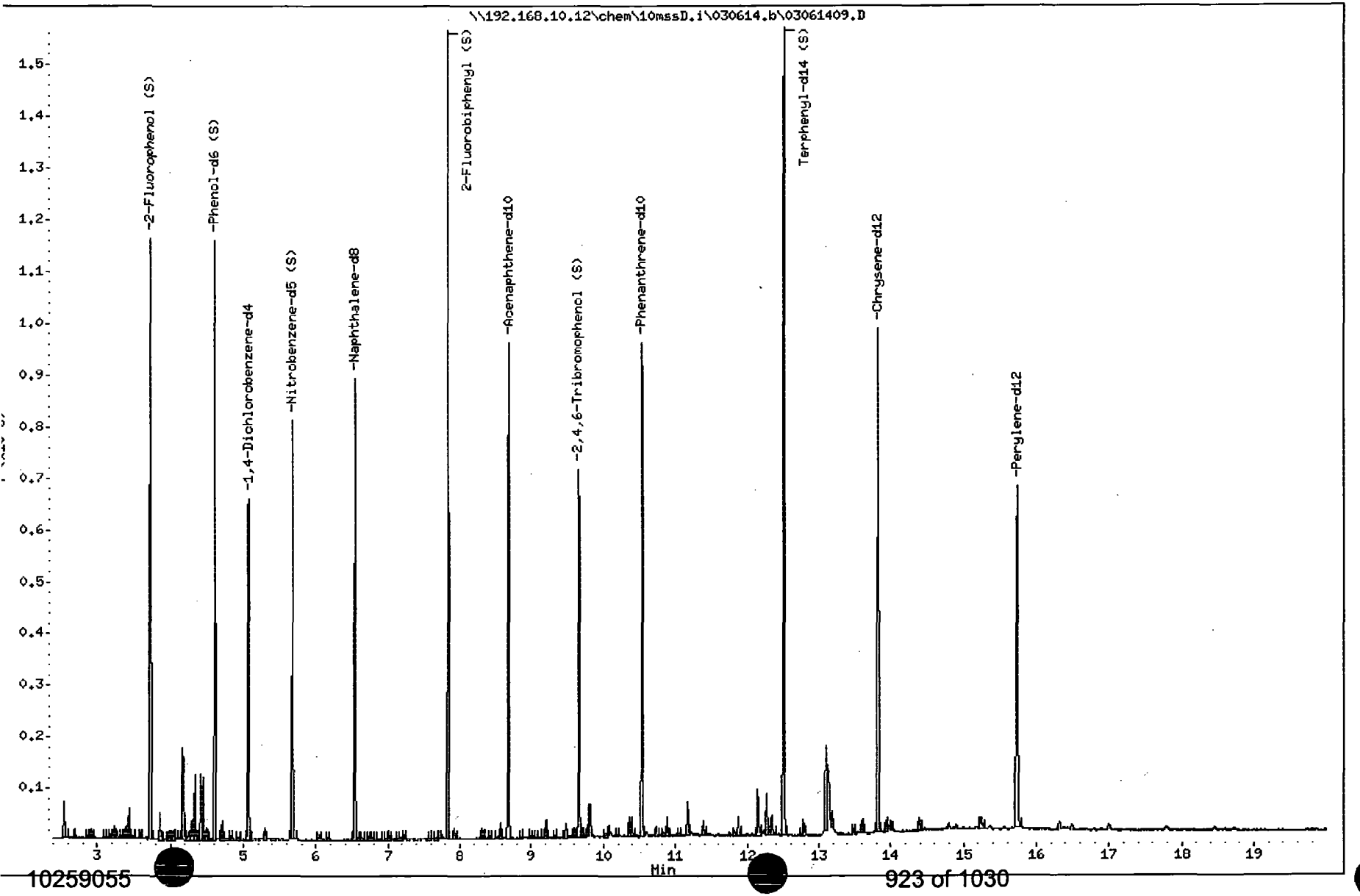
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.53	6.03	7.03	6.53	0.00
45 Acenaphthene-d10	8.69	8.19	9.19	8.68	-0.06
63 Phenanthrene-d10	10.54	10.04	11.04	10.53	-0.05
76 Chrysene-d12	13.83	13.33	14.33	13.83	-0.04
82 Perylene-d12	15.74	15.24	16.24	15.73	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061409.D
Date : 06-MAR-2014 10:37
Client ID:
Sample Info: 10259055002

Instrument: 10mssD.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Injection Date: 06-MAR-2014 10:37
Instrument: 10mssD.i
Lab Sample ID: 10259055002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051418.D
Report Date: 06-Mar-2014 07:23

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051418.D
Lab Smp Id: 10259055003
Inj Date : 05-MAR-2014 20:59
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10259055003
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 06-Mar-2014 07:20 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	Compound Not Detected.					
	2 Pyridine	79	Compound Not Detected.					
$	3 2-Fluorophenol (S)	112	3.425	3.425	(0.728)	171337	71.4984	2380
$	4 Phenol-d6 (S)	99	4.280	4.291	(0.909)	211181	76.6365	2550
	5 Phenol	94	Compound Not Detected.					
	6 bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7 2-Chlorophenol	128	Compound Not Detected.					
	8 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9 1,4-Dichlorobenzene-d4	152	4.708	4.713	(1.000)	67638	40.0000	
	10 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	107	Compound Not Detected.					
	14 bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15 3 & 4-Methylphenol	107	Compound Not Detected.					
	17 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18 Hexachloroethane	117	Compound Not Detected.					
$	19 Nitrobenzene-d5 (S)	82	5.311	5.317	(0.864)	132406	59.4749	1980
	20 Nitrobenzene	77	Compound Not Detected.					
	21 Isophorone	82	Compound Not Detected.					
	22 2-Nitrophenol	139	Compound Not Detected.					
	23 2,4-Dimethylphenol	107	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	24	Benzoic acid	105	Compound Not Detected.					
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	26	2,4-Dichlorophenol	162	Compound Not Detected.					
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	28	Naphthalene-d8	136	6.150	6.155	(1.000)	257340	40.0000	(Q)
	29	Naphthalene	128	Compound Not Detected.					
	30	4-Chloroaniline	127	Compound Not Detected.					
	31	Hexachlorobutadiene	225	Compound Not Detected.					
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.					
	33	2-Methylnaphthalene	142	Compound Not Detected.					
	34	1-Methylnaphthalene	142	Compound Not Detected.					
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.					
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	38	2-Fluorobiphenyl (S)	172	7.448	7.453	(0.899)	260045	61.1967	2040
	39	2-Chloronaphthalene	162	Compound Not Detected.					
	40	2-Nitroaniline	65	Compound Not Detected.					
	41	Dimethylphthalate	163	Compound Not Detected.					
	42	2,6-Dinitrotoluene	165	Compound Not Detected.					
	43	Acenaphthylene	152	Compound Not Detected.					
	44	3-Nitroaniline	138	Compound Not Detected.					
*	45	Acenaphthene-d10	164	8.287	8.292	(1.000)	121538	40.0000	
	46	Acenaphthene	154	Compound Not Detected.					
	47	2,4-Dinitrophenol	184	Compound Not Detected.					
	48	4-Nitrophenol	65	Compound Not Detected.					
	49	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Dibenzofuran	168	Compound Not Detected.					
	51	Diethylphthalate	149	Compound Not Detected.					
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.					
	53	4-Nitroaniline	138	Compound Not Detected.					
	54	Fluorene	166	9.259	8.971	(1.117)	2327	0.56630	18.9(aQ)
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Azobenzene	77	Compound Not Detected.					
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.					
$	59	2,4,6-Tribromophenol (S)	330	9.259	9.270	(1.117)	32730	70.5343	2350
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.					
	61	Hexachlorobenzene	284	Compound Not Detected.					
	62	Pentachlorophenol	266	Compound Not Detected.					
*	63	Phenanthrene-d10	188	10.125	10.135	(1.000)	199384	40.0000	
	64	Phenanthrene	178	Compound Not Detected.					
	65	Anthracene	178	Compound Not Detected.					
	66	Carbazole	167	Compound Not Detected.					
	67	di-n-Butylphthalate	149	Compound Not Detected.					
	68	Fluoranthene	202	Compound Not Detected.					
	69	Benzidine	184	Compound Not Detected.					
	70	Pyrene	202	Compound Not Detected.					
$	71	Terphenyl-d14 (S)	244	12.101	12.101	(0.903)	255212	66.2681	2210
	72	Butylbenzylphthalate	149	Compound Not Detected.					
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	75	Benzo(a)anthracene	228	Compound Not Detected.					
*	76	Chrysene-d12	240	13.405	13.415	(1.000)	180279	40.0000	(Q)
	77	Chrysene	228	Compound Not Detected.					

Data File: \\192.168.10.12\Chem\10mss9.i\030514.D\0305l418.D
Report Date: 06-Mar-2014 07:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78 di-n-Octylphthalate	149	Compound Not Detected.					
79 Benzo(b)fluoranthene	252	Compound Not Detected.					
80 Benzo(k)fluoranthene	252	Compound Not Detected.					
81 Benzo(a)pyrene	252	Compound Not Detected.					
* 82 Perylene-d12	264	15.157	15.168	(1.000)	162963	40.0000	
83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051418.D
Report Date: 06-Mar-2014 07:23

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051418.D
Lab Smp Id: 10259055003
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info: 10357

Calibration Date: 05-MAR-2014
Calibration Time: 15:31
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

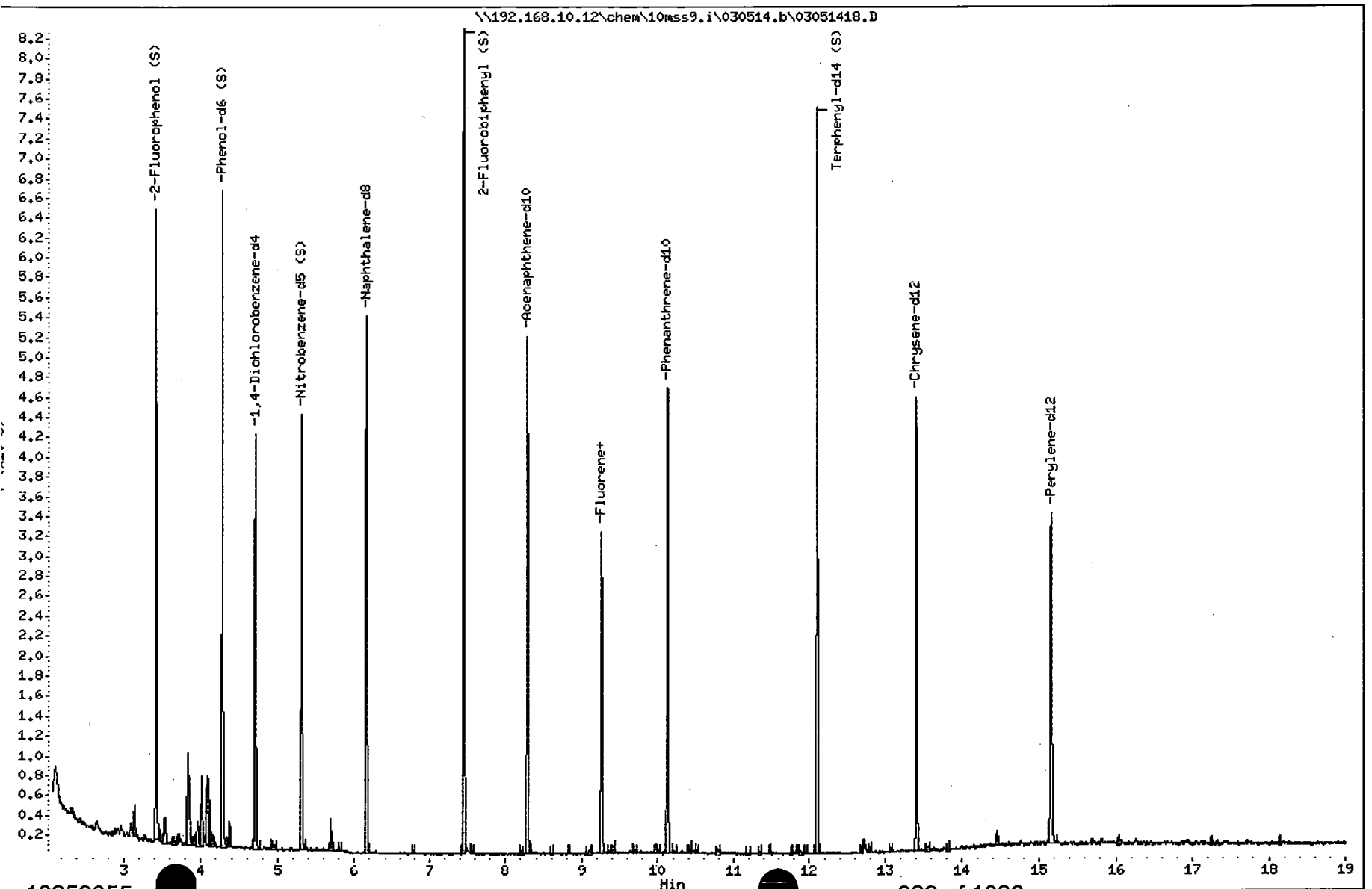
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	110277	55139	220554	67638	-38.67
28 Naphthalene-d8	419805	209903	839610	257340	-38.70
45 Acenaphthene-d10	204219	102110	408438	121538	-40.49
63 Phenanthrene-d10	329340	164670	658680	199384	-39.46
76 Chrysene-d12	323408	161704	646816	180279	-44.26
82 Perylene-d12	312096	156048	624192	162963	-47.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.71	4.21	5.21	4.71	-0.11
28 Naphthalene-d8	6.16	5.66	6.66	6.15	-0.09
45 Acenaphthene-d10	8.29	7.79	8.79	8.29	-0.07
63 Phenanthrene-d10	10.14	9.64	10.64	10.13	-0.11
76 Chrysene-d12	13.42	12.92	13.92	13.41	-0.08
82 Perylene-d12	15.17	14.67	15.67	15.16	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051418.D
Date : 05-MAR-2014 20:59
Client ID:
Sample Info: 10259055003

Instrument: 10mss9.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051418.D

Date : 05-MAR-2014 20:59

Client ID:

Instrument: 10mss9.i

Sample Info: 10259055003

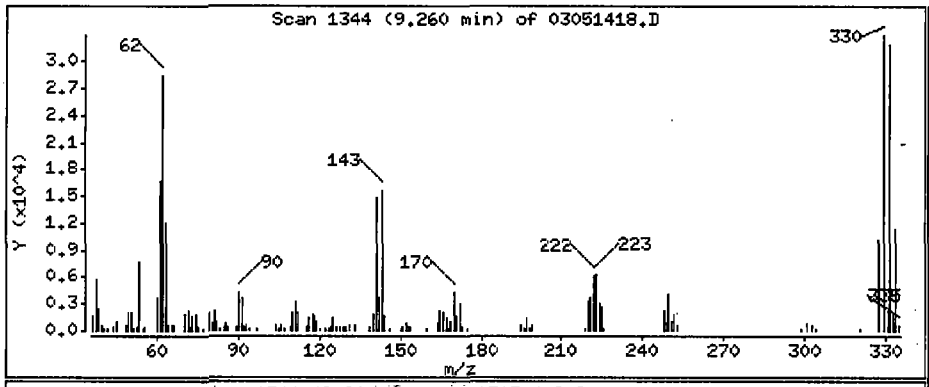
Operator: JLR

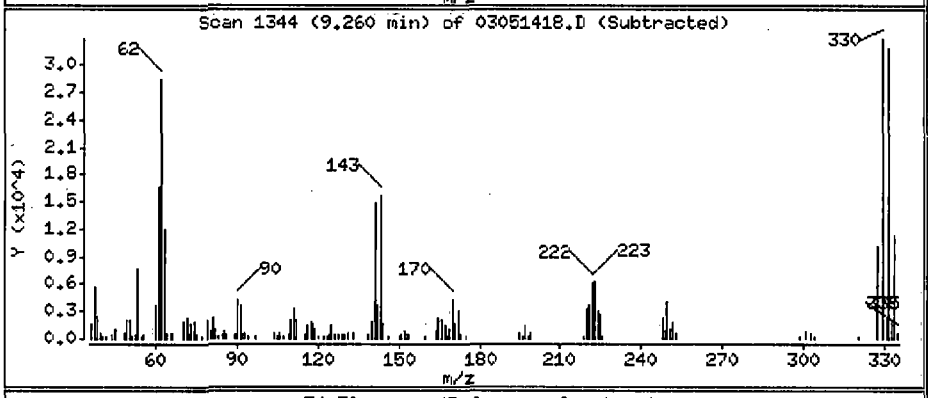
Column phase: DB-5MS

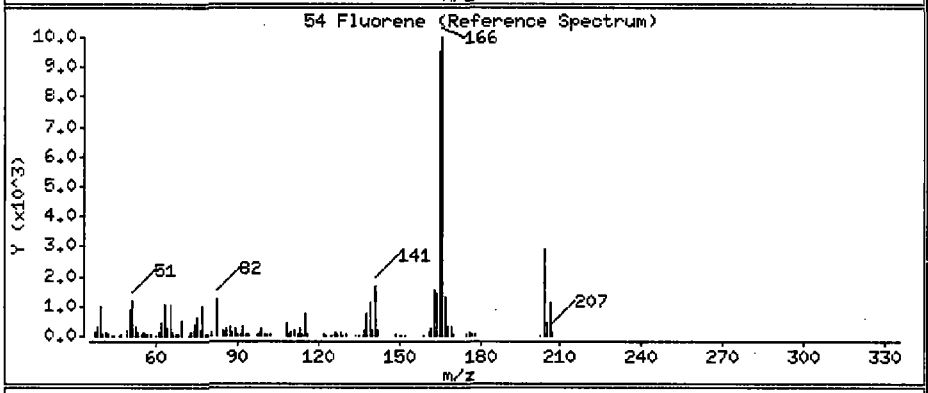
Column diameter: 0.25

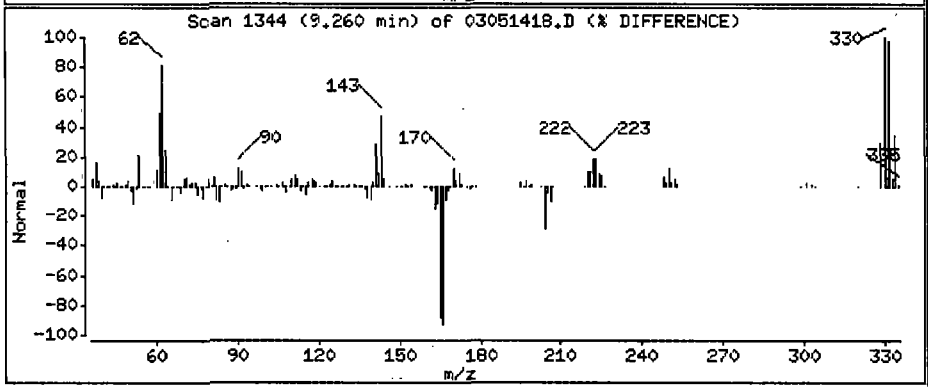
54 Fluorene

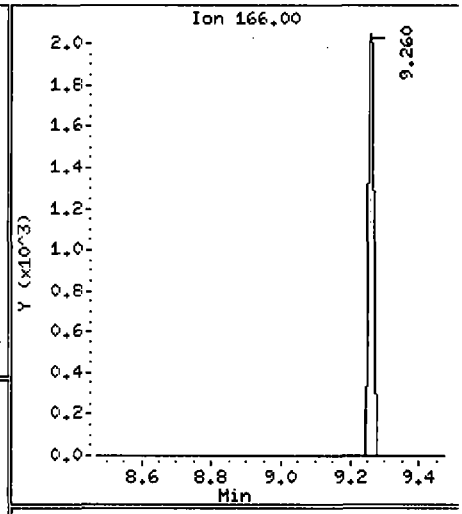
Concentration: 18.9 ug/Kg

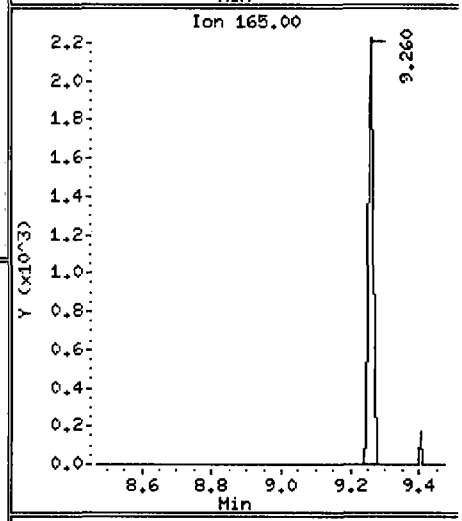


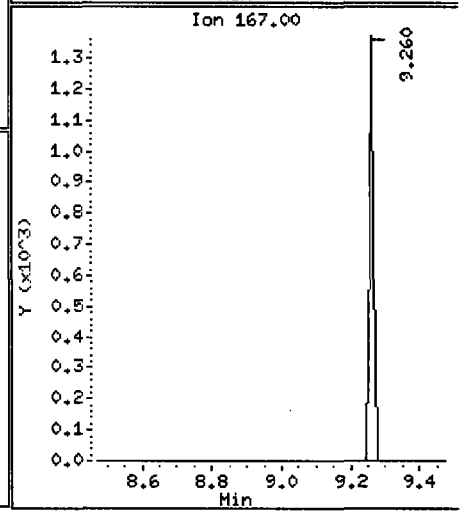






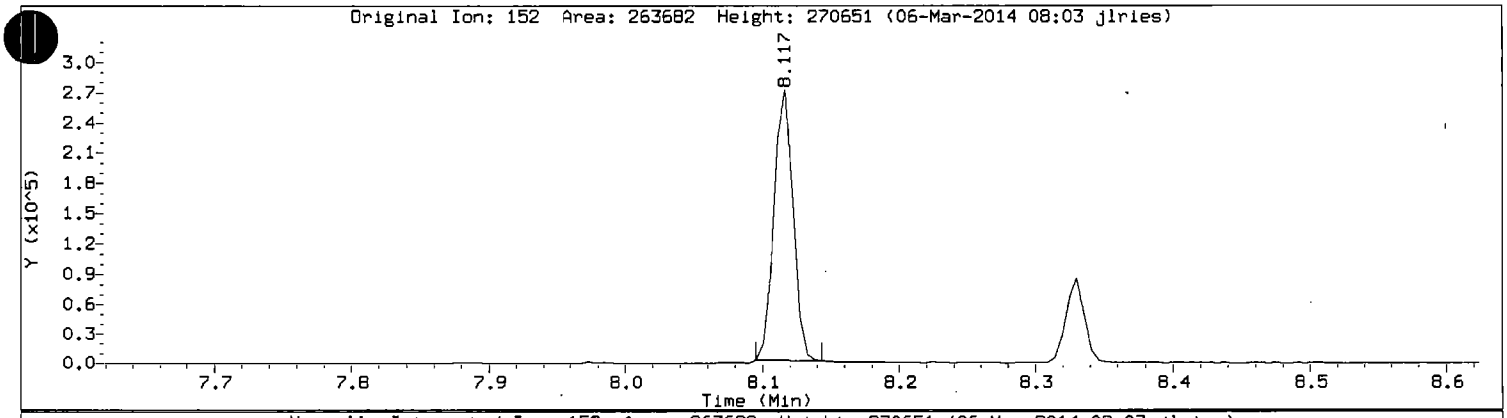


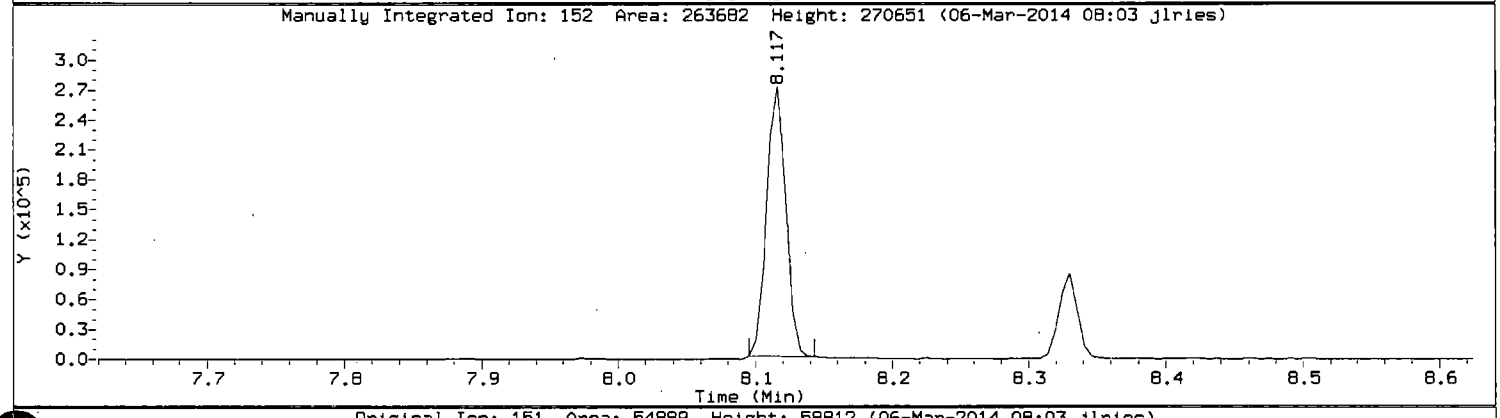


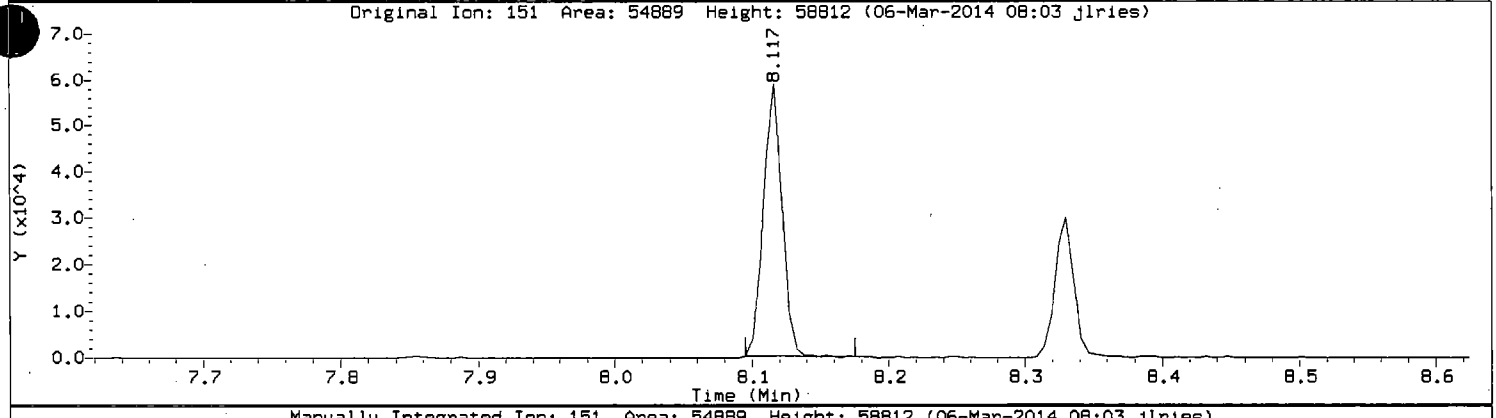


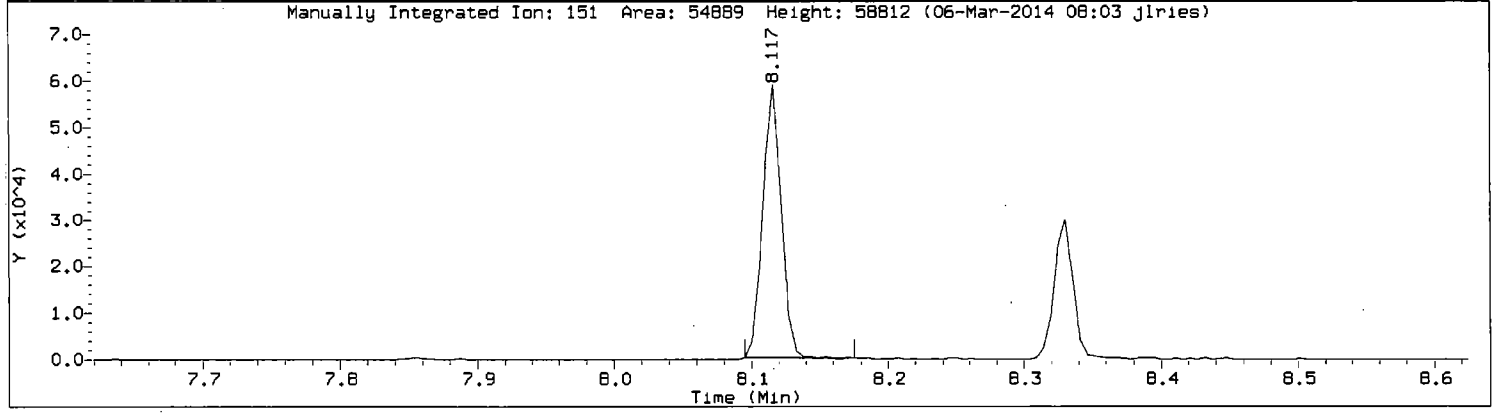
Injection Date: 05-MAR-2014 19:38
Instrument: 10mss9.i
Lab Sample ID: 1632348

Compound: Acenaphthylene
CAS Number: 208-96-8

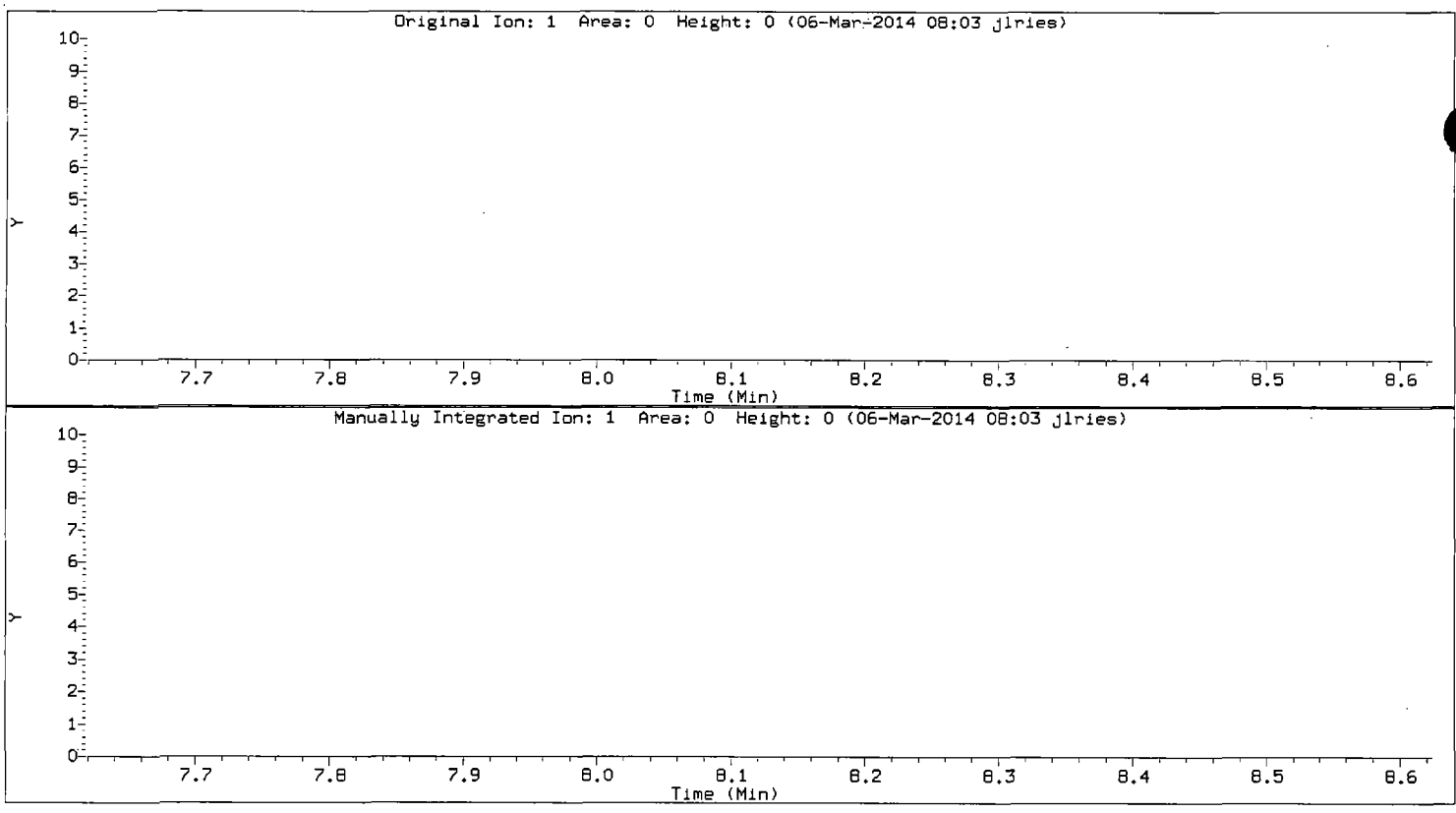








Injection Date: 06-MAR-2014 19:36
Instrument: 10mss9.i
Lab Sample ID: 1632348



Data file: \\192.168.10.12\chem\10mss9.i\030514.b\03051419.D
Report Date: 06-Mar-2014 07:23

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051419.D
Lab Smp Id: 10259055004
Inj Date : 05-MAR-2014 21:26
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10259055004
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 06-Mar-2014 07:20 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.425	3.425	(0.728)	179481	72.4007	2410
$ 4	Phenol-d6 (S)	99	4.280	4.291	(0.909)	225463	79.0924	2640
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	4.708	4.713	(1.000)	69970	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.311	5.317	(0.864)	138929	60.3649	2010
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
22	2-Nitrophenol	139	Compound Not Detected.					
23	2,4-Dimethylphenol	107	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24	Benzoic acid	105	Compound Not Detected.						
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26	2,4-Dichlorophenol	162	Compound Not Detected.						
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28	Naphthalene-d8	136	6.150	6.155	(1.000)	266037	40.0000		(Q)
	29	Naphthalene	128	Compound Not Detected.						
	30	4-Chloroaniline	127	Compound Not Detected.						
	31	Hexachlorobutadiene	225	Compound Not Detected.						
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33	2-Methylnaphthalene	142	Compound Not Detected.						
	34	1-Methylnaphthalene	142	Compound Not Detected.						
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38	2-Fluorobiphenyl (S)	172	7.448	7.453	(0.899)	279748	62.6342	2090	
	39	2-Chloronaphthalene	162	Compound Not Detected.						
	40	2-Nitroaniline	65	Compound Not Detected.						
	41	Dimethylphthalate	163	Compound Not Detected.						
	42	2,6-Dinitrotoluene	165	Compound Not Detected.						
	43	Acenaphthylene	152	Compound Not Detected.						
	44	3-Nitroaniline	138	Compound Not Detected.						
*	45	Acenaphthene-d10	164	8.287	8.292	(1.000)	127746	40.0000		
	46	Acenaphthene	154	Compound Not Detected.						
	47	2,4-Dinitrophenol	184	Compound Not Detected.						
	48	4-Nitrophenol	65	Compound Not Detected.						
	49	2,4-Dinitrotoluene	165	Compound Not Detected.						
	50	Dibenzofuran	168	Compound Not Detected.						
	51	Diethylphthalate	149	Compound Not Detected.						
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53	4-Nitroaniline	138	Compound Not Detected.						
	54	Fluorene	166	Compound Not Detected.						
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Azobenzene	77	Compound Not Detected.						
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59	2,4,6-Tribromophenol (S)	330	9.259	9.270	(1.117)	33187	68.0435	2270	
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61	Hexachlorobenzene	284	Compound Not Detected.						
	62	Pentachlorophenol	266	Compound Not Detected.						
*	63	Phenanthrene-d10	188	10.130	10.135	(1.000)	207349	40.0000		
	64	Phenanthrene	178	Compound Not Detected.						
	65	Anthracene	178	Compound Not Detected.						
	66	Carbazole	167	Compound Not Detected.						
	67	di-n-Butylphthalate	149	Compound Not Detected.						
	68	Fluoranthene	202	Compound Not Detected.						
	69	Benzidine	184	Compound Not Detected.						
	70	Pyrene	202	Compound Not Detected.						
$	71	Terphenyl-d14 (S)	244	12.101	12.101	(0.903)	286809	71.6278	2390	
	72	Butylbenzylphthalate	149	Compound Not Detected.						
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75	Benzo(a)anthracene	228	Compound Not Detected.						
*	76	Chrysene-d12	240	13.405	13.415	(1.000)	187439	40.0000		(Q)
	77	Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\Chem\10mss9.i\030514.b\03051419.D
Report Date: 06-Mar-2014 07:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78 di-n-Octylphthalate	149	Compound Not Detected.					
79 Benzo(b)fluoranthene	252	Compound Not Detected.					
80 Benzo(k)fluoranthene	252	Compound Not Detected.					
81 Benzo(a)pyrene	252	Compound Not Detected.					
* 82 Perylene-d12	264	15.157	15.168	(1.000)	170521	40.0000	
83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051419.D
Report Date: 06-Mar-2014 07:23

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051419.D
Lab Smp Id: 10259055004
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info: 10357

Calibration Date: 05-MAR-2014
Calibration Time: 15:31
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

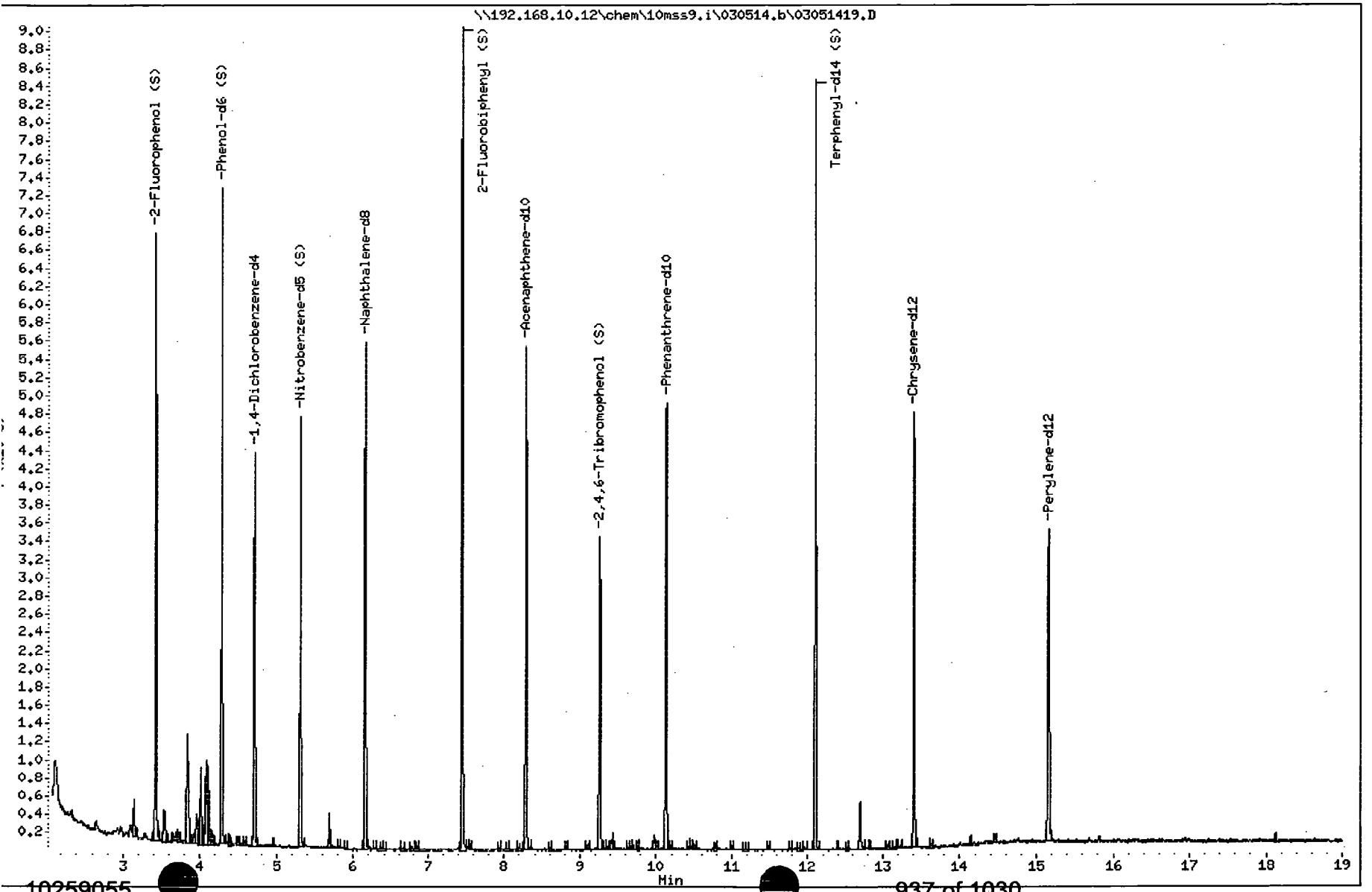
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	110277	55139	220554	69970	-36.55
28 Naphthalene-d8	419805	209903	839610	266037	-36.63
45 Acenaphthene-d10	204219	102110	408438	127746	-37.45
63 Phenanthrene-d10	329340	164670	658680	207349	-37.04
76 Chrysene-d12	323408	161704	646816	187439	-42.04
82 Perylene-d12	312096	156048	624192	170521	-45.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.71	4.21	5.21	4.71	-0.11
28 Naphthalene-d8	6.16	5.66	6.66	6.15	-0.09
45 Acenaphthene-d10	8.29	7.79	8.79	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.13	-0.05
76 Chrysene-d12	13.42	12.92	13.92	13.41	-0.08
82 Perylene-d12	15.17	14.67	15.67	15.16	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

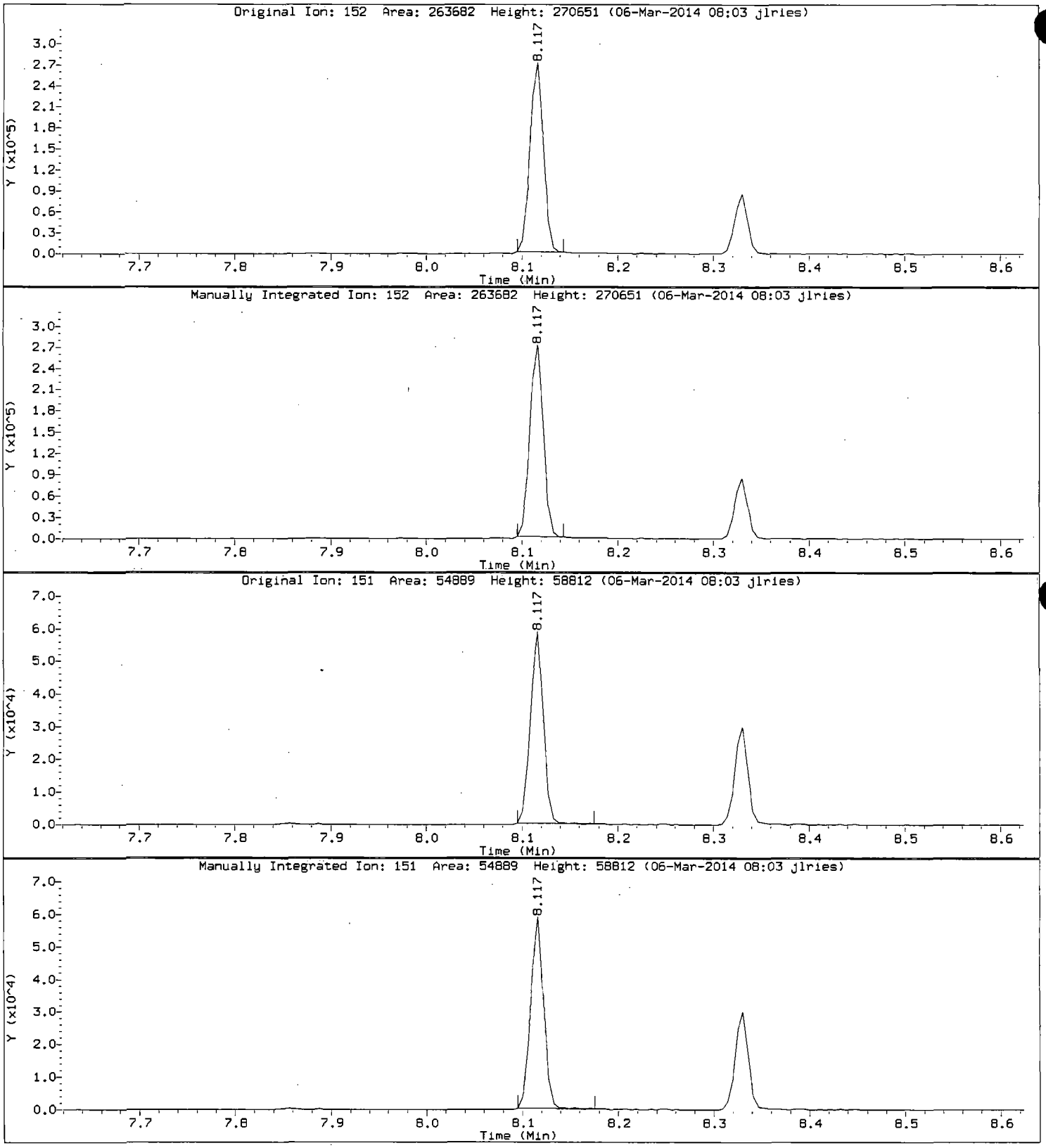
Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051419.D
Date : 05-MAR-2014 21:26
Client ID:
Sample Info: 10259055004

Instrument: 10mss9.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

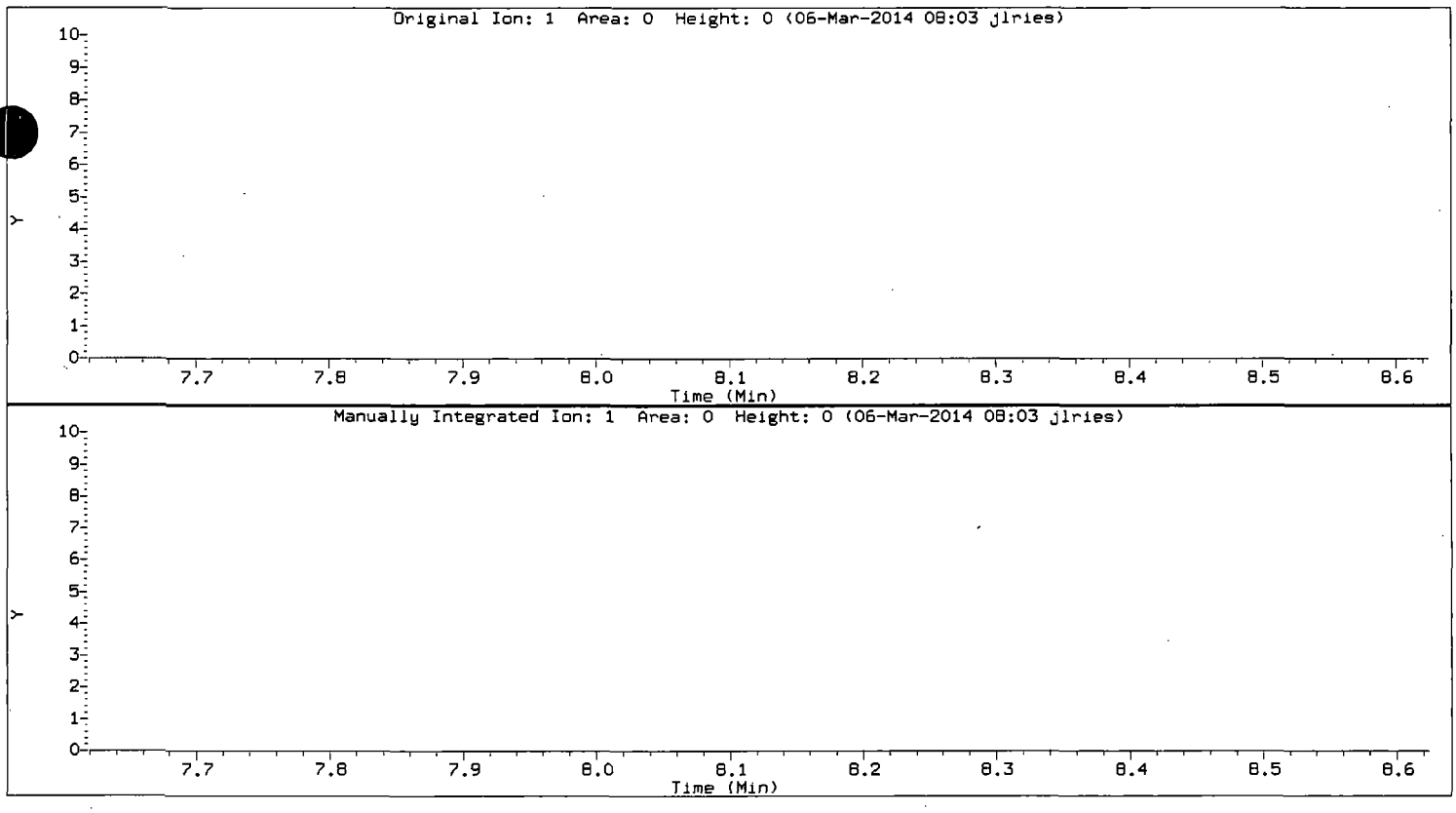


Injection Date: 05-MAR-2014 19:38
Instrument: 10mss9.i
Lab Sample ID: 1632348

Compound: Acenaphthylene
CAS Number: 208-96-8



Injection Date: 05-MAR-2014 19:38
Instrument: 10mss9.i
Lab Sample ID: 1632348



Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061410.D
Report Date: 06-Mar-2014 12:59

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061410.D
Lab Smp Id: 10259055005
Inj Date : 06-MAR-2014 11:05
Operator : JLR Inst ID: 10mssD.i
Smp Info : 10259055005
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	Compound Not Detected.					
	2 Pyridine	79	Compound Not Detected.					
$	3 2-Fluorophenol (S)	112	3.723	3.718	(0.735)	306884	81.4063	2710
$	4 Phenol-d6 (S)	99	4.606	4.611	(0.909)	388911	82.7958	2760
	5 Phenol	94	Compound Not Detected.					
	6 bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7 2-Chlorophenol	128	Compound Not Detected.					
	8 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9 1,4-Dichlorobenzene-d4	152	5.066	5.066	(1.000)	108114	40.0000	
	10 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	107	Compound Not Detected.					
	14 bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15 3 & 4-Methylphenol	107	Compound Not Detected.					
	17 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18 Hexachloroethane	117	Compound Not Detected.					
$	19 Nitrobenzene-d5 (S)	82	5.670	5.676	(0.868)	250562	59.6867	1990
	20 Nitrobenzene	77	Compound Not Detected.					
	21 Isophorone	82	Compound Not Detected.					
	23 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24	Benzoic acid	105	Compound Not Detected.						
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26	2,4-Dichlorophenol	162	Compound Not Detected.						
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28	Naphthalene-d8	136	6.532	6.532	(1.000)	422647	40.0000		(Q)
	29	Naphthalene	128	Compound Not Detected.						
	30	4-Chloroaniline	127	Compound Not Detected.						
	31	Hexachlorobutadiene	225	Compound Not Detected.						
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33	2-Methylnaphthalene	142	Compound Not Detected.						
	34	1-Methylnaphthalene	142	Compound Not Detected.						
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38	2-Fluorobiphenyl (S)	172	7.831	7.831	(0.902)	488753	62.5864	2090	
	39	2-Chloronaphthalene	162	Compound Not Detected.						
	40	2-Nitroaniline	65	Compound Not Detected.						
	41	Dimethylphthalate	163	Compound Not Detected.						
	42	2,6-Dinitrotoluene	165	Compound Not Detected.						
	43	Acenaphthylene	152	Compound Not Detected.						
	44	3-Nitroaniline	138	Compound Not Detected.						
*	45	Acenaphthene-d10	164	8.682	8.687	(1.000)	223458	40.0000		
	46	Acenaphthene	154	Compound Not Detected.						
	47	2,4-Dinitrophenol	184	Compound Not Detected.						
	48	4-Nitrophenol	65	Compound Not Detected.						
	49	2,4-Dinitrotoluene	165	Compound Not Detected.						
	50	Dibenzofuran	168	Compound Not Detected.						
	51	Diethylphthalate	149	Compound Not Detected.						
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	54	4-Nitroaniline	138	Compound Not Detected.						
	53	Fluorene	166	Compound Not Detected.						
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Azobenzene	77	Compound Not Detected.						
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59	2,4,6-Tribromophenol (S)	330	9.660	9.666	(1.113)	90634	86.1742	2870	
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61	Hexachlorobenzene	284	Compound Not Detected.						
	62	Pentachlorophenol	266	Compound Not Detected.						
*	63	Phenanthrene-d10	188	10.532	10.538	(1.000)	389968	40.0000		
	64	Phenanthrene	178	Compound Not Detected.						
	65	Anthracene	178	Compound Not Detected.						
	66	Carbazole	167	Compound Not Detected.						
	67	di-n-Butylphthalate	149	Compound Not Detected.						
	68	Fluoranthene	202	Compound Not Detected.						
	69	Benzidine	184	Compound Not Detected.						
	70	Pyrene	202	Compound Not Detected.						
$	71	Terphenyl-d14 (S)	244	12.506	12.506	(0.904)	597311	75.2843	2510	
	72	Butylbenzylphthalate	149	Compound Not Detected.						
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75	Benzo(a)anthracene	228	Compound Not Detected.						
*	76	Chrysene-d12	240	13.827	13.832	(1.000)	365121	40.0000		(Q)
	77	Chrysene	228	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.731	15.737	(1.000)	366979	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061410.D
Report Date: 06-Mar-2014 12:59

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061410.D
Lab Smp Id: 10259055005
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info: 10357

Calibration Date: 06-MAR-2014
Calibration Time: 07:48
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	142387	71194	284774	108114	-24.07
28 Naphthalene-d8	559471	279736	1118942	422647	-24.46
45 Acenaphthene-d10	296387	148194	592774	223458	-24.61
63 Phenanthrene-d10	500615	250308	1001230	389968	-22.10
76 Chrysene-d12	467805	233903	935610	365121	-21.95
82 Perylene-d12	505479	252740	1010958	366979	-27.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.53	6.03	7.03	6.53	0.00
45 Acenaphthene-d10	8.69	8.19	9.19	8.68	-0.06
63 Phenanthrene-d10	10.54	10.04	11.04	10.53	-0.05
76 Chrysene-d12	13.83	13.33	14.33	13.83	-0.04
82 Perylene-d12	15.74	15.24	16.24	15.73	-0.03

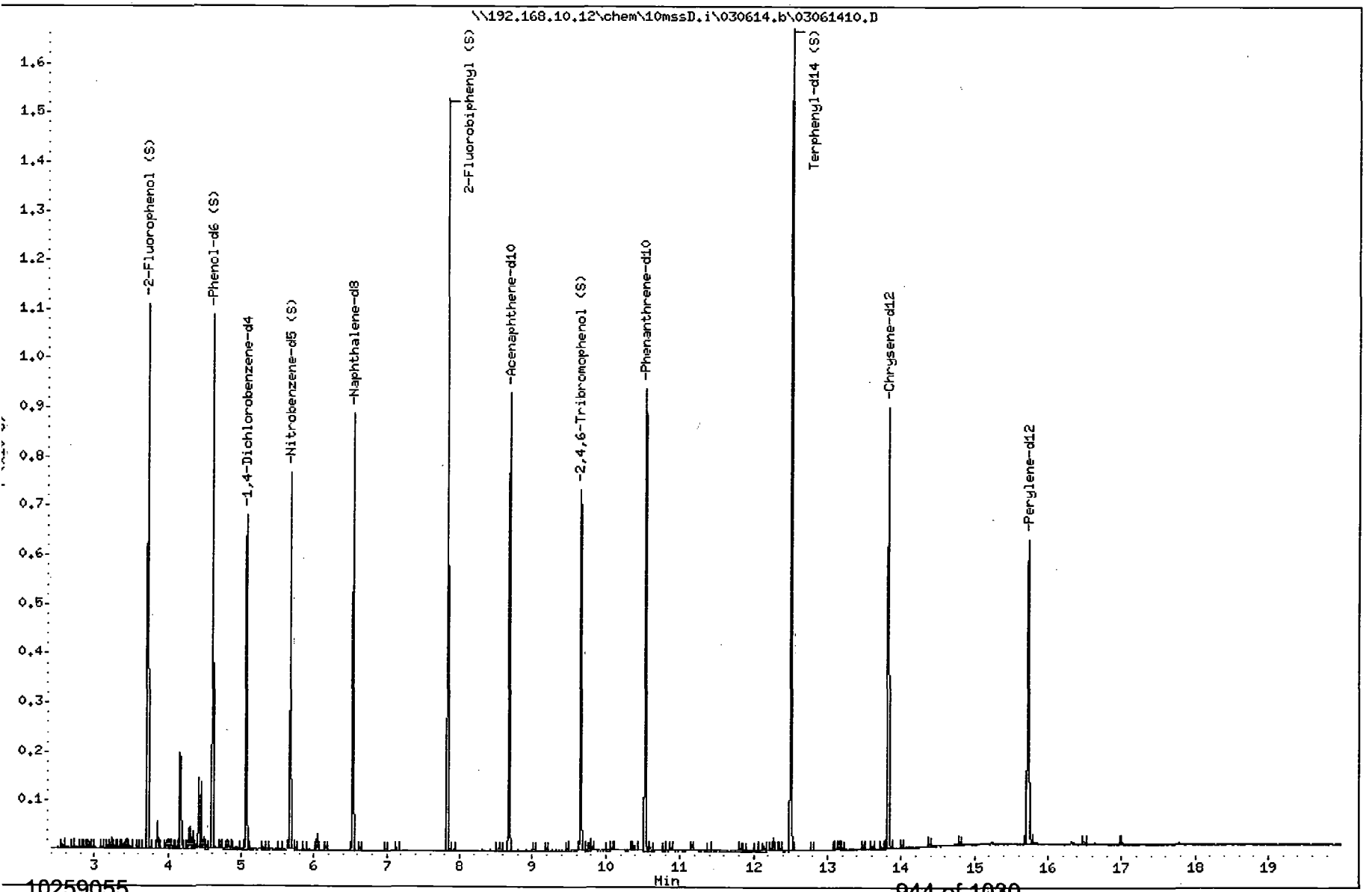
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061410.D
Date : 06-MAR-2014 11:05
Client ID:
Sample Info: 10259055005

Instrument: 10mssD.i

Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS



Data File: \\192.168.10.12\chem\10mssD.i\030614.b/03061410.D
Injection Date: 06-MAR-2014 11:05
Instrument: 10mssD.i
Lab Sample ID: 10259055005
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051421.D
Report Date: 06-Mar-2014 08:05

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\030514.b\03051421.D
Lab Smp Id: 10259055006
Inj Date : 05-MAR-2014 22:19
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10259055006
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Meth Date : 06-Mar-2014 07:20 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 16:07 Cal File: 02281419.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.425	3.425	(0.728)	191613	85.8842	2860
$ 4	Phenol-d6 (S)	99	4.280	4.291	(0.909)	226686	88.3586	2940
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	4.708	4.713	(1.000)	62972	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.311	5.317	(0.864)	136806	64.2324	2140
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
22	2-Nitrophenol	139	Compound Not Detected.					
23	2,4-Dimethylphenol	107	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051421.D
Report Date: 06-Mar-2014 08:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.150	6.155	(1.000)	246198	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.448	7.453	(0.899)	268267	65.1526	2170	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.287	8.292	(1.000)	117768	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53 4-Nitroaniline	138	Compound Not Detected.						
	54 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.259	9.270	(1.117)	37612	83.6499	2790	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.125	10.135	(1.000)	191910	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.101	12.101	(0.903)	266287	69.4331	2310	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.405	13.415	(1.000)	179528	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051421.D
Report Date: 06-Mar-2014 08:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.157	15.168	(1.000)	163907	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051421.D
Report Date: 06-Mar-2014 08:05

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 03051421.D
Lab Smp Id: 10259055006
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\030514.b\022814-8270MSS9.m
Misc Info: 10357

Calibration Date: 05-MAR-2014
Calibration Time: 15:31
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	110277	55139	220554	62972	-42.90
28 Naphthalene-d8	419805	209903	839610	246198	-41.35
45 Acenaphthene-d10	204219	102110	408438	117768	-42.33
63 Phenanthrene-d10	329340	164670	658680	191910	-41.73
76 Chrysene-d12	323408	161704	646816	179528	-44.49
82 Perylene-d12	312096	156048	624192	163907	-47.48

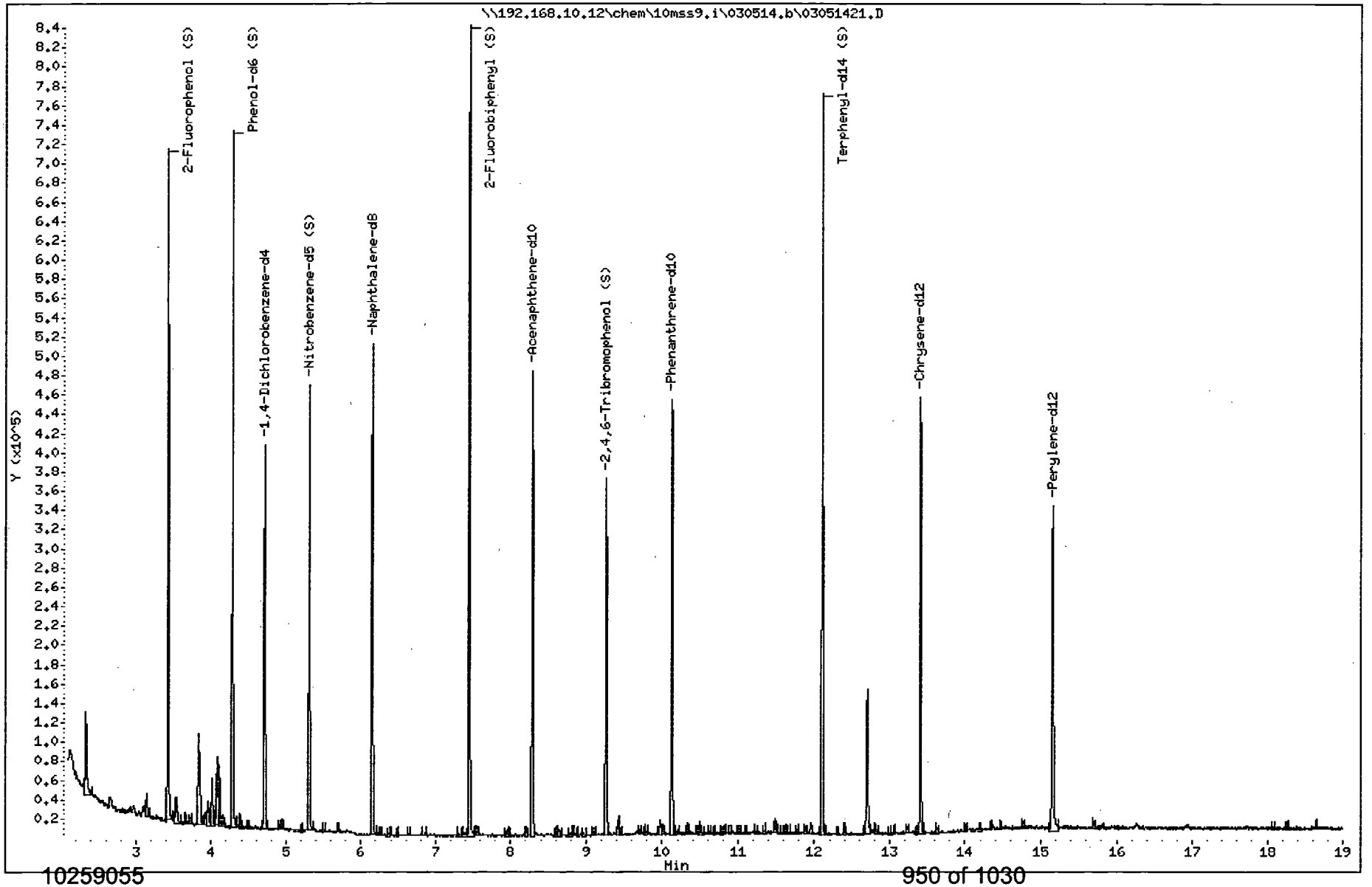
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	4.71	4.21	5.21	4.71	-0.11
28 Naphthalene-d8	6.16	5.66	6.66	6.15	-0.09
45 Acenaphthene-d10	8.29	7.79	8.79	8.29	-0.06
63 Phenanthrene-d10	10.14	9.64	10.64	10.13	-0.11
76 Chrysene-d12	13.42	12.92	13.92	13.41	-0.08
82 Perylene-d12	15.17	14.67	15.67	15.16	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\030514.b\03051421.D
Date : 05-MAR-2014 22:19
Client ID:
Sample Info: 10259055006

Instrument: 10mss9.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Data File: \\192.168.10.12\chem\10mss9.i\030514.b/03051421.D
Injection Date: 05-MAR-2014 22:19
Instrument: 10mss9.i
Lab Sample ID: 10259055006
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061415.D
Report Date: 06-Mar-2014 14:06

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mssD.i\030614.b\03061415.D
Lab Smp Id: 10259055007
Inj Date : 06-MAR-2014 13:27
Operator : JLR Inst ID: 10mssD.i
Smp Info : 10259055007
Misc Info : 10357
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Meth Date : 06-Mar-2014 08:22 jlries Quant Type: ISTD
Cal Date : 28-FEB-2014 11:59 Cal File: 02281414.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.724	3.718	(0.735)	284045	77.0527	2570
$ 4	Phenol-d6 (S)	99	4.606	4.611	(0.909)	358164	77.9752	2600
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.066	5.066	(1.000)	105722	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.671	5.676	(0.868)	231079	56.4426	1880
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
23	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061415.D
Report Date: 06-Mar-2014 14:06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.532	6.532	(1.000)	412186	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.831	7.831	(0.902)	460806	59.2972	1980	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.682	8.687	(1.000)	222367	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	54 4-Nitroaniline	138	Compound Not Detected.						
	53 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.661	9.666	(1.113)	83508	79.7884	2660	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.532	10.538	(1.000)	388616	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.506	12.506	(0.904)	556465	68.8658	2300	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.827	13.832	(1.000)	371856	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061415.D
Report Date: 06-Mar-2014 14:06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.731	15.737	(1.000)	360392	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061415.D
Report Date: 06-Mar-2014 14:06

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mssD.i
Lab File ID: 03061415.D
Lab Smp Id: 10259055007
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mssD.i\030614.b\8270D-022814.m
Misc Info: 10357

Calibration Date: 06-MAR-2014
Calibration Time: 07:48
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	142387	71194	284774	105722	-25.75
28 Naphthalene-d8	559471	279736	1118942	412186	-26.33
45 Acenaphthene-d10	296387	148194	592774	222367	-24.97
63 Phenanthrene-d10	500615	250308	1001230	388616	-22.37
76 Chrysene-d12	467805	233903	935610	371856	-20.51
82 Perylene-d12	505479	252740	1010958	360392	-28.70

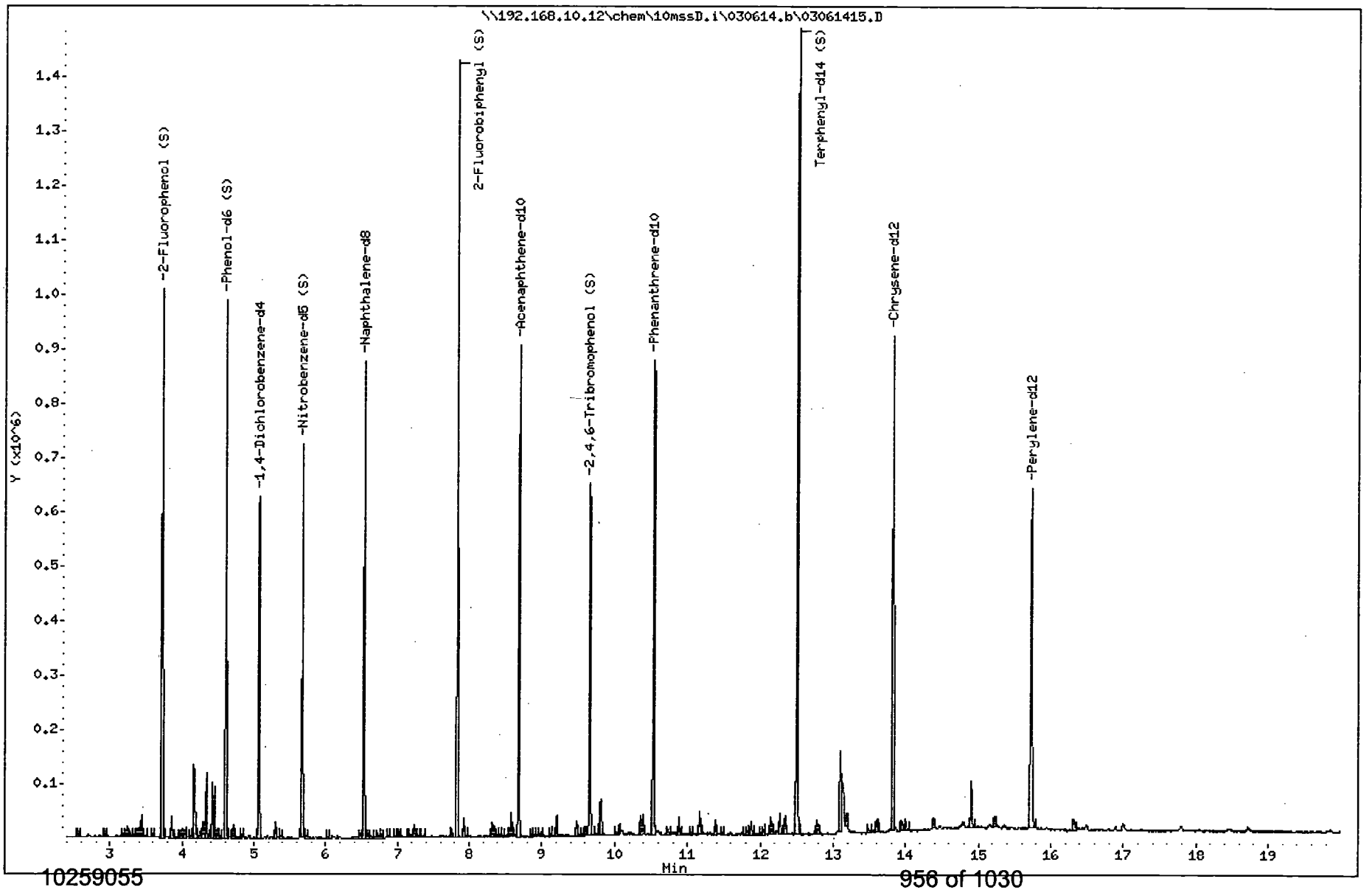
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.07	4.57	5.57	5.07	0.00
28 Naphthalene-d8	6.53	6.03	7.03	6.53	0.00
45 Acenaphthene-d10	8.69	8.19	9.19	8.68	-0.06
63 Phenanthrene-d10	10.54	10.04	11.04	10.53	-0.05
76 Chrysene-d12	13.83	13.33	14.33	13.83	-0.04
82 Perylene-d12	15.74	15.24	16.24	15.73	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mssD.i\030614.b\03061415.D
Date : 06-MAR-2014 13:27
Client ID:
Sample Info: 10259055007

Instrument: 10mssD.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Data File: \\192.168.10.12\chem\10mssD.i\030614.b/03061415.D
Injection Date: 06-MAR-2014 13:27
Instrument: 10mssD.i
Lab Sample ID: 10259055007
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

10357/288445

Pace Analytical®	Document Name: Extraction Sheet – 8270C Soil Sonication	Document Revised: 17 Aug 2011 Page 1 of 1
	Document No.: O-108 Rev.06	Issuing Authority: Pace Minnesota Quality Office

SS:	10328-113	Amt: 100 µL	Analyst: SR	Ext. Date/By:	3/3/14 SR
MS:	10328-97	Amt: 500 µL	Analyst: SR	Batch:	244891 288053
BNA SS 750/1000 µg/mL		BNA MS 100 µg/mL		Pipettor ID:	PP1-35

	Sample ID	I.W. 30g	Spike Ver.		F.V. 1.0 mL (amber)	Comments
1	MB- 1632345	30.0	①		1.0	Solid Lot #: 116733
2	LCS- 1632346	30.0	①	①	1.0	Solid Lot #: 116733
3	~~LCSD~~	~~30.0~~				~~Solid Lot #:~~ 3/3/14 SR
4	10259041001	30.0	①		1.0	
5	41002	30.0	①		1.0	
6	MS 1632347	30.1	①	①	1.0	
7	MSD 1632348	30.0	①	①	1.0	
8	10259055001	30.1	①		1.0	
9	55002	30.0	①		1.0	
10	55003	30.0	①		1.0	
11	55004	30.1	①		1.0	
12	55005	30.0	①		1.0	
13	55006	30.0	①		1.0	
14	55007	30.1	①		1.0	
15	10259067001	30.1	①		1.0	
16	10259142001	30.0	①		1.0	
17	42002	30.1	①		1.0	
18						
19						
20					KR	3-4-14
21						
22						
23						
24						
25						

Sample ID Verified by: ① Filter Paper Lot: 65839138 Date Conc./By: AD 3-4-14

Balance ID: P1888067 ☒ Calibrated. $MeCl_2$/Acetone (Ext): 9222-481 $MeCl_2$ (F.V.): 137829

Sonicator ID: P1-4 ☒ Tuned @ 800 Na_2SO_4 Lot: 136130-11 Bath Temp (95°): 97

Comments: ① No one to verify

8270C – Soil (Sonication)

Posted by/Date: AD 3-4-14	Validated by/Date: KR 3-4-14

Moisture Data

Work Order

10259055

Pace Analytical Services
Minneapolis, MN

Date = MM/DD/YY >> 03/03/2014

	Lab Sample #	Tray ID	Tare Mass	Wet Mass	Dry Mass	MSI	Client	Sample Type	Batch	Queue	Procedure	Analyst	Date
1	1230865001	1	0.97	9.82	8.70	12.64	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
2	1632425	2	1.01	9.62	8.50	13.02	Quality Control	DUP	44616	MPRP	RY WEIGH	JDL	03/03/2014
3	10259021001	3	1.02	9.55	9.05	5.88	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
4	10259021002	4	0.99	8.29	7.01	17.53	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
5	10259021003	5	1.03	8.62	6.55	27.24	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
6	10259023001	6	1.02	8.76	7.75	13.01	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
7	10259024001	7	1.00	9.39	8.71	8.16	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
8	10259024002	8	1.04	9.48	9.19	3.42	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
9	10258967001	9	1.04	9.89	8.29	18.07	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
10	10258967002	10	1.00	8.78	7.93	10.95	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
11	1230845001	11	1.01	9.22	8.74	5.83	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
12	10258999001	12	1.01	9.60	8.63	11.31	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
13	10259041001	13	1.02	8.35	6.95	19.05	[redacted]	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
14	10259041002	14	1.01	9.59	7.94	19.23	[redacted]	RQS	44616	MPRP	RY WEIGH	JDL	03/03/2014
15	1632426	15	1.01	9.75	8.05	19.44	Quality Control	DUP	44616	MPRP	RY WEIGH	JDL	03/03/2014
16	10259055001	16	1.01	8.56	7.78	10.27	BP-STANTEC-IL	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
17	10259055002	17	0.99	8.85	7.28	19.96	BP-STANTEC-IL	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
18	10259055003	18	1.02	9.83	8.60	13.95	BP-STANTEC-IL	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
19	10259055004	19	1.04	9.89	8.38	17.07	BP-STANTEC-IL	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
20	10259055005	20	1.06	9.72	8.47	14.50	BP-STANTEC-IL	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
21	10259055006	21	1.00	8.36	6.84	20.74	BP-STANTEC-IL	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
22	10259055007	22	1.00	8.68	7.20	19.31	BP-STANTEC-IL	PS	44616	MPRP	RY WEIGH	JDL	03/03/2014
23	oven @ 1100 3/3	23				100.00						JDL	
24	f oven @ 0700 3	24				100.00						JDL	
25	f dess. @ 0810 3	25				100.00						JDL	
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													

Start an instrument for the current WorkSheet.

Collecting: Off

start

Tuesday, Mar 04, 2014 08:13 AM

ICP-AES

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259055

Initial Calibration Verification Source: 14578 Instrument ID: 10ICP2

Continuing Calibration Verification Source: 14579

Concentration Units: ug/L

	Initial Calibration Verification 03/13/14 07:33			Continuing Calibration Verification 03/13/14 08:22			03/13/14 09:19		M
Analyte	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Lead	2000.0	2011.60	101	2000.0	1955.40	98	1915.96	96	P

(1) Control Limits: 90-110

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259055

Initial Calibration Verification Source: 14578 Instrument ID: 10ICP2

Continuing Calibration Verification Source: 14579

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification 03/13/14 10:44					M
Analyte	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Lead				2000.0	1983.58	99			P

(1) Control Limits: 90-110

2B-IN
CRQL CHECK STANDARD

Lab Name: Pace Analytical

SDG No.: 10259055

Lab Code: PASI

Instrument ID: 10ICP2

CRQL Check Standard Source: 14581

Concentration Units: ug/L

Analyte		03/13/14 08:18		03/13/14 10:35	
		CRQL Check Standard			
		Initial		Final	
	True	Found	%R (1)	Found	%R (1)
Lead	10.00	8.15J	82	8.58J	86

(1) Control Limits: 60-140

Flags:
J = Estimated value
U = Target element not detected

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259055

Preparation Blank Matrix (soil/water):Solid

Instrument ID: 10ICP2

Preparation Blank Concentration Units (ug/L or mg/kg): mg/kg

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)					
	03/13/14 07:37		03/13/14 08:27		03/13/14 09:23		03/13/14 10:48	
Analyte		C	1	C	2	C	3	C
Lead	1.440	U	-1.926	J	1.440	U	1.440	U

Flags:
J = Estimated value
U = Target element not detected

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259055

ICP-AES Instrument ID: 10ICP2 ICS Source: 14582

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
			03/13/14 07:55		03/13/14 08:02		03/13/14 10:31		03/13/14 10:26	
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	500000	500000	539000	108	561000	112	560000	112	586000	117
Calcium	500000	500000	485000	97	519000	104	511000	102	540000	108
Iron	200000	200000	189000	94	200000	100	188000	94	202000	101
Lead	0	100	14.3		110	110	24.9		114	114
Magnesium	500000	500000	476000	95	505000	101	478000	96	515000	103

SAMPLE NO.

1635277SD

FORM VIII INORGANIC-1
SERIAL DILUTIONS

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Matrix: Solid Parent Sample ID: 10259041002

Analyte	Units	Initial Sample Result	Serial Dilution Result	% Difference	Control Limit %D
Lead	ug/L	312	347	11.0*	10

% Difference not evaluated for parent results less than 50 times the reporting limit.

9-IN
METHOD DETECTION LIMITS

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259055

Instrument Type:

Concentration Units (ug/L or mg/Kg): mg/kg

Analyte	Wavelength /Mass	CRQL	MDL
Lead	208.00	0.95	0.072

Form IX-IN

12-IN
PREPARATION LOG

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259055

Preparation Method: HW2

Client Sample ID	Lab Sample ID	Preparation Date	Weight (gram)	Volume (mL)
ZZZZZZ	10259041002	03/07/2014	1.40	50
SB-6 1.5-3'	10259055001	03/07/2014	1.43	50
SB-6 15-16.5'	10259055002	03/07/2014	1.47	50
SB-7 1.5-3'	10259055003	03/07/2014	1.42	50
SB-7 17-18'	10259055004	03/07/2014	1.20	50
SB-8 1.5-2.5"	10259055005	03/07/2014	1.03	50
SB-8 14-15"	10259055006	03/07/2014	1.20	50
DUP-002	10259055007	03/07/2014	1.24	50
1632332 (BLK)	1632332 (BLK)	03/07/2014	1.05	50
1632333 (LCS)	1632333 (LCS)	03/07/2014	1.04	50
1632334 (MS)	1632334 (MS)	03/07/2014	1.31	50
1632335 (MSD)	1632335 (MSD)	03/07/2014	1.09	50

Form 13 Equivalent
ANALYSIS RUN LOG

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259055

Instrument ID: 10ICP2

Analysis Method: P

Start Date: 03/13/2014

End Date: 03/13/2014

Lab Sample ID	Client Sample ID	D/F	Time	Analytes				
				Al	Ca	Fe	Mg	Pb
CAL0	CAL0	1	07:25					x
CAL1	CAL1	1	07:30					x
ICV	ICV	1	07:33					x
ICB	ICB	1	07:37					x
ICSA	ICSA	1	07:42					
AL 500 PPM	AL 500 PPM	1	07:47					
ICSA	ICSA	1	07:55	x	x	x	x	x
ICSAB	ICSAB	1	08:02	x	x	x	x	x
CRDLA	CRDLA	1	08:09					
CRDLB	CRDLB	1	08:14					
CRDLA	CRDLA	1	08:18					x
CCV	CCV	1	08:22					x
CCB	CCB	1	08:27					x
1632332 (BLK)	1632332 (BLK)	1	08:31					x
1632333 (LCS)	1632333 (LCS)	1	08:36					x
10259041001	ZZZZZZ	1	08:41					
10259041002	ZZZZZZ	1	08:47					x
1635277	1635277	5	08:53					x
TEST	TEST	1	08:59					
1635278	1635278	1	09:04					
1632334 (MS)	1632334 (MS)	1	09:09					x
1632335 (MSD)	1632335 (MSD)	1	09:14					x
CCV	CCV	1	09:19					x
CCB	CCB	1	09:23					x
10259055001	SB-6 1.5-3'	1	09:28					x
10259055002	SB-6 15-16.5'	1	09:35					
10259055003	SB-7 1.5-3'	1	09:41					x
10259055004	SB-7 17-18'	1	09:47					x
10259055002	SB-6 15-16.5'	5	09:53					x
10259055005	SB-8 1.5-2.5"	1	10:00					x
10259055006	SB-8 14-15"	1	10:07					x
10259055007	DUP-002	1	10:13					x
ICSA	ICSA	1	10:19					
ICSAB	ICSAB	1	10:26	x	x	x	x	x

Form 13 Equivalent
ANALYSIS RUN LOG

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259055

Instrument ID: 10ICP2

Analysis Method: P

Start Date: 03/13/2014

End Date: 03/13/2014

Lab Sample ID	Client Sample ID	D/F	Time	Analytes				
				Al	Ca	Fe	Mg	Pb
ICSA	ICSA	1	10:31	x	x	x	x	x
CRDLA	CRDLA	1	10:35					x
CRDLB	CRDLB	1	10:39					
CCV	CCV	1	10:44					x
CCB	CCB	1	10:48					x

FORM XIII-IN

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259055

Instrument: 10ICP2 **Chart Number: 031314ICP2**

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
CAL0	CAL0		03/13/2014	07:25
CAL1	CAL1		03/13/2014	07:30
ICV	ICV		03/13/2014	07:33
ICB	ICB		03/13/2014	07:37
ICSA	ICSA		03/13/2014	07:42
AL 500 PPM	AL 500 PPM		03/13/2014	07:47
ICSA	ICSA		03/13/2014	07:55
ICSAB	ICSAB		03/13/2014	08:02
CRDLA	CRDLA		03/13/2014	08:09
CRDLB	CRDLB		03/13/2014	08:14
CRDLA	CRDLA		03/13/2014	08:18
CCV	CCV		03/13/2014	08:22
CCB	CCB		03/13/2014	08:27
1632332 (BLK)	1632332 (BLK)	6010	03/13/2014	08:31
1632333 (LCS)	1632333 (LCS)	6010	03/13/2014	08:36
ZZZZZZ	ZZZZZZ	6010	03/13/2014	08:41
ZZZZZZ	ZZZZZZ	6010	03/13/2014	08:47
1635277	1635277	6010	03/13/2014	08:53
TEST	TEST		03/13/2014	08:59
1635278	1635278	6010	03/13/2014	09:04
1632334 (MS)	1632334 (MS)	6010	03/13/2014	09:09
1632335 (MSD)	1632335 (MSD)	6010	03/13/2014	09:14
CCV	CCV		03/13/2014	09:19
CCB	CCB		03/13/2014	09:23
10259055001	SB-6 1.5-3'	6010	03/13/2014	09:28
10259055002	SB-6 15-16.5'	6010	03/13/2014	09:35
10259055003	SB-7 1.5-3'	6010	03/13/2014	09:41
10259055004	SB-7 17-18'	6010	03/13/2014	09:47
10259055002	SB-6 15-16.5'	6010	03/13/2014	09:53
10259055005	SB-8 1.5-2.5"	6010	03/13/2014	10:00
10259055006	SB-8 14-15"	6010	03/13/2014	10:07
10259055007	DUP-002	6010	03/13/2014	10:13
ICSA	ICSA		03/13/2014	10:19
ICSAB	ICSAB		03/13/2014	10:26
ICSA	ICSA		03/13/2014	10:31
CRDLA	CRDLA		03/13/2014	10:35
CRDLB	CRDLB		03/13/2014	10:39
CCV	CCV		03/13/2014	10:44
CCB	CCB		03/13/2014	10:48
ZZZZZZ	ZZZZZZ	6010	03/13/2014	10:53
ZZZZZZ	ZZZZZZ	6010	03/13/2014	10:58
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:02

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI SDG No.: 10259055

Instrument: 10ICP2 **Chart Number: 031314ICP2**

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:09
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:14
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:21
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:28
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:35
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:42
ZZZZZZ	ZZZZZZ	6010	03/13/2014	11:48
CRDLA	CRDLA		03/13/2014	11:55
CCV	CCV		03/13/2014	11:59
CCB	CCB		03/13/2014	12:03
1638112 (BLK)	1638112 (BLK)	200.7	03/13/2014	12:08
1638113 (LCS)	1638113 (LCS)	200.7	03/13/2014	12:13
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	12:18
1638114 (MS)	1638114 (MS)	200.7	03/13/2014	12:25
1638115 (MSD)	1638115 (MSD)	200.7	03/13/2014	12:31
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	12:36
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	12:43
TEST	TEST		03/13/2014	12:50
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	12:55
CCV	CCV		03/13/2014	13:02
CCB	CCB		03/13/2014	13:06
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:10
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:17
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:22
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:29
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:35
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:42
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:49
ZZZZZZ	ZZZZZZ	200.7	03/13/2014	13:56
1638116 (MS)	1638116 (MS)	200.7	03/13/2014	14:03
CCV	CCV		03/13/2014	14:06
CCB	CCB		03/13/2014	14:10
1637308 (BLK)	1637308 (BLK)	6010	03/13/2014	14:15
1637309 (LCS)	1637309 (LCS)	6010	03/13/2014	14:20
ZZZZZZ	ZZZZZZ	6010	03/13/2014	14:24
1638244	1638244	6010	03/13/2014	14:30
1638245	1638245	6010	03/13/2014	14:36
ZZZZZZ	ZZZZZZ	6010	03/13/2014	14:41
1637310 (MS)	1637310 (MS)	6010	03/13/2014	14:48
CCV	CCV		03/13/2014	14:53
CCB	CCB		03/13/2014	14:58
1637311 (MSD)	1637311 (MSD)	6010	03/13/2014	15:02

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259055

Instrument: 10ICP2

Chart Number: 031314ICP2

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:07
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:13
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:20
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:27
ZZZZZZ	ZZZZZZ	6010	03/13/2014	15:34
CRDLA	CRDLA		03/13/2014	15:41
CRDLB	CRDLB		03/13/2014	15:45
CCV	CCV		03/13/2014	15:50
CCB	CCB		03/13/2014	15:55
1636452 (BLK)	1636452 (BLK)	6010	03/13/2014	15:59
1636453 (LCS)	1636453 (LCS)	6010	03/13/2014	16:04
ZZZZZZ	ZZZZZZ	6010	03/13/2014	16:09
1637341	1637341	6010	03/13/2014	16:16
1637342	1637342	6010	03/13/2014	16:21
1636454 (MS)	1636454 (MS)	6010	03/13/2014	16:27
CCV	CCV		03/13/2014	16:33
CCB	CCB		03/13/2014	16:38
1636455 (MSD)	1636455 (MSD)	6010	03/13/2014	16:43
ZZZZZZ	ZZZZZZ	6010	03/13/2014	16:49
ZZZZZZ	ZZZZZZ	6010	03/13/2014	16:55
ZZZZZZ	ZZZZZZ	6010	03/13/2014	17:02
ZZZZZZ	ZZZZZZ	6010	03/13/2014	17:09
CRDLA	CRDLA		03/13/2014	17:16
CRDLB	CRDLB		03/13/2014	17:21
CCV	CCV		03/13/2014	17:25
CCB	CCB		03/13/2014	17:30
1637856 (BLK)	1637856 (BLK)	6010	03/13/2014	17:35
1637857 (LCS)	1637857 (LCS)	6010	03/13/2014	17:40
1636495	1636495	6010	03/13/2014	17:44
1636496	1636496	6010	03/13/2014	17:51
ZZZZZZ	ZZZZZZ	6010	03/13/2014	17:56
ZZZZZZ	ZZZZZZ	6010	03/13/2014	18:01
ZZZZZZ	ZZZZZZ	6010	03/13/2014	18:08
CCV	CCV		03/13/2014	18:13
CCB	CCB		03/13/2014	18:17
ZZZZZZ	ZZZZZZ	6010	03/13/2014	18:21
ZZZZZZ	ZZZZZZ	6010	03/13/2014	18:28
1638246	1638246	6010	03/13/2014	18:35
1638247	1638247	6010	03/13/2014	18:40
1637858 (MS)	1637858 (MS)	6010	03/13/2014	18:47
1637859 (MSD)	1637859 (MSD)	6010	03/13/2014	18:54
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:01

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259055

Instrument: 10ICP2

Chart Number: 031314ICP2

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:08
CCV	CCV		03/13/2014	19:15
CCB	CCB		03/13/2014	19:18
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:23
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:30
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:37
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:44
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:51
ZZZZZZ	ZZZZZZ	6010	03/13/2014	19:58
CRDLA	CRDLA		03/13/2014	20:04
CRDLB	CRDLB		03/13/2014	20:09
CCV	CCV		03/13/2014	20:14
CCB	CCB		03/13/2014	20:18
1637317 (BLK)	1637317 (BLK)	6010	03/13/2014	20:22
1637318 (LCS)	1637318 (LCS)	6010	03/13/2014	20:27
ZZZZZZ	ZZZZZZ	6010	03/13/2014	20:32
1638248	1638248	6010	03/13/2014	20:39
1638249	1638249	6010	03/13/2014	20:44
1637319 (MS)	1637319 (MS)	6010	03/13/2014	20:51
1637320 (MSD)	1637320 (MSD)	6010	03/13/2014	20:58
CCV	CCV		03/13/2014	21:05
CCB	CCB		03/13/2014	21:09
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:13
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:18
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:25
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:32
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:39
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:46
ZZZZZZ	ZZZZZZ	6010	03/13/2014	21:53
CCV	CCV		03/13/2014	22:00
CCB	CCB		03/13/2014	22:04
1637905 (BLK)	1637905 (BLK)	6010	03/13/2014	22:08
1637906 (LCS)	1637906 (LCS)	6010	03/13/2014	22:13
ZZZZZZ	ZZZZZZ	6010	03/13/2014	22:18
1638242	1638242	6010	03/13/2014	22:23
1638243	1638243	6010	03/13/2014	22:27
1637907 (MS)	1637907 (MS)	6010	03/13/2014	22:31
1637908 (MSD)	1637908 (MSD)	6010	03/13/2014	22:35
ICSA	ICSA		03/13/2014	22:39
ICSAB	ICSAB		03/13/2014	22:46
CRDLA	CRDLA		03/13/2014	22:52
CRDLB	CRDLB		03/13/2014	22:57

Instrument Run Log

Lab Name: Pace Analytical

Lab Code: PASI

SDG No.: 10259055

Instrument: 10ICP2

Chart Number: 031314ICP2

Lab Sample ID	Client Sample ID	Analytical Method	Date Analyzed	Time Analyzed
CCV	CCV		03/13/2014	23:02
CCB	CCB		03/13/2014	23:06

Sequence No.: 1
Sample ID: CAL0
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/13/2014 7:25:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CAL0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ar 363.268	7123.0	32.74	0.46%	1.00	mg/L
Y 371.029	8456765.1	101421.52	1.20%	5.00	mg/L
Ag 328.068†	-975.7	147.93	15.16%	[0.00]	ug/L
Al†	62.0	32.98	53.19%	[0.00]	ug/L
As 193.696†	9.8	3.67	37.40%	[0.00]	ug/L
B 249.677†	11.7	4.49	38.42%	[0.00]	ug/L
Ba 233.527†	-122.9	7.22	5.88%	[0.00]	ug/L
Be†	0.0	4.72	>999.9%	[0.00]	ug/L
Ca 317.933†	13.7	9.47	69.31%	[0.00]	ug/L
Cd 228.802†	94.0	12.28	13.06%	[0.00]	ug/L
Co 228.616†	-249.7	5.50	2.20%	[0.00]	ug/L
Cr 267.716†	131.5	24.62	18.72%	[0.00]	ug/L
Cu 327.393†	127.2	42.38	33.31%	[0.00]	ug/L
Fe†	11.6	2.94	25.23%	[0.00]	ug/L
K†	1691.6	5.34	0.32%	[0.00]	ug/L
Mg 279.077†	3.2	1.37	43.04%	[0.00]	ug/L
Mn 257.610†	1409.5	99.01	7.02%	[0.00]	ug/L
Mo 202.031†	137.3	9.28	6.76%	[0.00]	ug/L
Na 589.592†	454.6	47.83	10.52%	[0.00]	ug/L
Ni 231.604†	-624.4	45.82	7.34%	[0.00]	ug/L
Pb 220.353†	-241.7	10.12	4.19%	[0.00]	ug/L
Sb 217.582†	-66.1	7.69	11.64%	[0.00]	ug/L
Se 196.026†	-4.4	1.59	36.53%	[0.00]	ug/L
Sn 189.927†	1.1	1.60	144.13%	[0.00]	ug/L
Ti 334.940†	1472.8	34.70	2.36%	[0.00]	ug/L
Tl 190.801†	-25.6	1.09	4.28%	[0.00]	ug/L
V 290.880†	2286.5	58.84	2.57%	[0.00]	ug/L
Zn 206.200†	201.4	12.08	6.00%	[0.00]	ug/L

Sequence No.: 2
Sample ID: CAL1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/13/2014 7:30:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CAL1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Ar 363.268	6796.9	150.69	2.22%	0.954	mg/L
Y 371.029	8346134.6	59580.15	0.71%	4.93	mg/L
Ag 328.068†	438376.9	4162.17	0.95%	[2000]	ug/L
Al†	26572.7	148.21	0.56%	[20000]	ug/L
As 193.696†	5362.7	69.26	1.29%	[4000]	ug/L
B 249.677†	3328.1	19.54	0.59%	[4000]	ug/L
Ba 233.527†	749210.1	2397.79	0.32%	[4000]	ug/L
Be†	191115.3	3366.78	1.76%	[4000]	ug/L
Ca 317.933†	33414.6	495.43	1.48%	[20000]	ug/L
Cd 228.802†	249401.1	2910.43	1.17%	[4000]	ug/L
Co 228.616†	227163.5	3387.33	1.49%	[4000]	ug/L
Cr 267.716†	448451.6	2048.22	0.46%	[4000]	ug/L
Cu 327.393†	396502.1	5619.45	1.42%	[4000]	ug/L
Fe†	43355.6	275.40	0.64%	[20000]	ug/L
K†	39469.2	356.34	0.90%	[20000]	ug/L
Mg 279.077†	6163.4	47.58	0.77%	[20000]	ug/L
Mn 257.610†	4345099.9	17401.03	0.40%	[4000]	ug/L
Mo 202.031†	81752.7	1286.08	1.57%	[4000]	ug/L
Na 589.592†	98240.3	1002.36	1.02%	[20000]	ug/L
Ni 231.604†	258173.1	3067.87	1.19%	[4000]	ug/L
Pb 220.353†	47560.5	1051.06	2.21%	[4000]	ug/L
Sb 217.582†	11066.1	26.26	0.24%	[4000]	ug/L
Se 196.026†	2800.6	3.17	0.11%	[4000]	ug/L
Sn 189.927†	21635.3	254.91	1.18%	[4000]	ug/L
Ti 334.940†	2935568.1	4689.99	0.16%	[4000]	ug/L
Tl 190.801†	6583.8	8.07	0.12%	[4000]	ug/L
V 290.880†	522455.0	4494.26	0.86%	[4000]	ug/L
Zn 206.200†	223438.5	3691.75	1.65%	[4000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	219.2	0.00000	1.000000	
Al	1	Lin Thru 0	0.0	1.329	0.00000	1.000000	
As 193.696	1	Lin Thru 0	0.0	1.341	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	0.8320	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	187.3	0.00000	1.000000	
Be	1	Lin Thru 0	0.0	47.78	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	1.671	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	62.35	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	56.79	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	112.1	0.00000	1.000000	
Cu 327.393	1	Lin Thru 0	0.0	99.13	0.00000	1.000000	
Fe	1	Lin Thru 0	0.0	2.168	0.00000	1.000000	
K	1	Lin Thru 0	0.0	1.973	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	0.3082	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	1086	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	20.44	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	4.912	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	64.54	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	11.89	0.00000	1.000000	
Sb 217.582	1	Lin Thru 0	0.0	2.767	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	0.7002	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	5.409	0.00000	1.000000	
Ti 334.940	1	Lin Thru 0	0.0	733.9	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	1.646	0.00000	1.000000	
V 290.880	1	Lin Thru 0	0.0	130.6	0.00000	1.000000	

Zn 206.200	1	Lin Thru 0	0.0	55.86	0.00000	1.000000

Sequence No.: 3
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/13/2014 7:33:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	7119.3	0.999	mg/L	0.0346				3.46%
Y 371.029	8349283.5	4.94	mg/L	0.033				0.66%
Ag 328.068†	224694.9	1030	ug/L	12.7	1030	µg/L	12.7	1.23%
QC value within limits for Ag 328.068 Recovery = 102.58%								
Al†	13591.6	10200	ug/L	166.5	10200	µg/L	166.5	1.63%
QC value within limits for Al Recovery = 102.31%								
As 193.696†	2718.1	2030	ug/L	26.0	2030	µg/L	26.0	1.28%
QC value within limits for As 193.696 Recovery = 101.54%								
B 249.677†	1635.3	1970	ug/L	3.9	1970	µg/L	3.9	0.20%
QC value within limits for B 249.677 Recovery = 98.31%								
Ba 233.527†	375591.0	2010	ug/L	34.8	2010	µg/L	34.8	1.74%
QC value within limits for Ba 233.527 Recovery = 100.25%								
Be†	97695.6	2040	ug/L	13.5	2040	µg/L	13.5	0.66%
QC value within limits for Be Recovery = 102.24%								
Ca 317.933†	17051.0	10200	ug/L	244.3	10200	µg/L	244.3	2.39%
QC value within limits for Ca 317.933 Recovery = 102.06%								
Cd 228.802†	126704.1	2030	ug/L	39.7	2030	µg/L	39.7	1.95%
QC value within limits for Cd 228.802 Recovery = 101.62%								
Co 228.616†	116519.0	2050	ug/L	34.1	2050	µg/L	34.1	1.66%
QC value within limits for Co 228.616 Recovery = 102.59%								
Cr 267.716†	228679.9	2040	ug/L	49.2	2040	µg/L	49.2	2.41%
QC value within limits for Cr 267.716 Recovery = 101.99%								
Cu 327.393†	203206.6	2050	ug/L	74.9	2050	µg/L	74.9	3.65%
QC value within limits for Cu 327.393 Recovery = 102.53%								
Fe†	22257.4	10300	ug/L	165.5	10300	µg/L	165.5	1.61%
QC value within limits for Fe Recovery = 102.67%								
K†	20389.1	10300	ug/L	138.2	10300	µg/L	138.2	1.34%
QC value within limits for K Recovery = 103.32%								
Mg 279.077†	3127.2	10100	ug/L	109.0	10100	µg/L	109.0	1.07%
QC value within limits for Mg 279.077 Recovery = 101.45%								
Mn 257.610†	2228498.1	2050	ug/L	8.6	2050	µg/L	8.6	0.42%
QC value within limits for Mn 257.610 Recovery = 102.58%								
Mo 202.031†	41246.5	2020	ug/L	34.8	2020	µg/L	34.8	1.72%
QC value within limits for Mo 202.031 Recovery = 100.93%								
Na 589.592†	50385.0	10300	ug/L	51.8	10300	µg/L	51.8	0.50%
QC value within limits for Na 589.592 Recovery = 102.57%								
Ni 231.604†	132483.2	2050	ug/L	34.2	2050	µg/L	34.2	1.67%
QC value within limits for Ni 231.604 Recovery = 102.63%								
Pb 220.353†	23884.9	2010	ug/L	10.6	2010	µg/L	10.6	0.53%
QC value within limits for Pb 220.353 Recovery = 100.58%								
Sb 217.582†	5582.4	2020	ug/L	47.2	2020	µg/L	47.2	2.33%
QC value within limits for Sb 217.582 Recovery = 101.06%								
Se 196.026†	1431.9	2050	ug/L	59.2	2050	µg/L	59.2	2.89%
QC value within limits for Se 196.026 Recovery = 102.41%								
Sn 189.927†	10627.4	1970	ug/L	25.1	1970	µg/L	25.1	1.28%
QC value within limits for Sn 189.927 Recovery = 98.30%								
Ti 334.940†	1452478.4	1980	ug/L	6.2	1980	µg/L	6.2	0.31%
QC value within limits for Ti 334.940 Recovery = 98.95%								
Tl 190.801†	3499.4	2130	ug/L	50.7	2130	µg/L	50.7	2.38%
QC value within limits for Tl 190.801 Recovery = 106.35%								
V 290.880†	263683.2	2020	ug/L	43.2	2020	µg/L	43.2	2.14%
QC value within limits for V 290.880 Recovery = 100.91%								
Zn 206.200†	114607.3	2050	ug/L	37.9	2050	µg/L	37.9	1.85%
QC value within limits for Zn 206.200 Recovery = 102.59%								

All analyte(s) passed QC.

Sequence No.: 4
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/13/2014 7:37:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	6933.8	0.973	mg/L	0.0145				1.49%
Y 371.029	8222836.2	4.86	mg/L	0.008				0.16%
Ag 328.068†	-16.7	-0.076	ug/L	0.4457	-0.076	µg/L	0.4457	588.84%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	-11.0	-8.28	ug/L	13.287	-8.28	µg/L	13.287	160.40%
QC value within limits for Al Recovery = Not calculated								
As 193.696†	2.2	1.61	ug/L	0.528	1.61	µg/L	0.528	32.88%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	3.1	3.68	ug/L	3.770	3.68	µg/L	3.770	102.45%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-14.5	-0.078	ug/L	0.0936	-0.078	µg/L	0.0936	120.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	0.1	0.002	ug/L	0.0323	0.002	µg/L	0.0323	>999.9%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	12.0	7.19	ug/L	4.532	7.19	µg/L	4.532	63.03%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	6.3	0.101	ug/L	0.0695	0.101	µg/L	0.0695	69.16%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-13.5	-0.238	ug/L	0.1265	-0.238	µg/L	0.1265	53.20%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	20.9	0.186	ug/L	0.7994	0.186	µg/L	0.7994	429.28%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	21.8	0.220	ug/L	0.0952	0.220	µg/L	0.0952	43.23%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	8.6	3.98	ug/L	1.204	3.98	µg/L	1.204	30.28%
QC value within limits for Fe Recovery = Not calculated								
K†	70.0	35.5	ug/L	14.58	35.5	µg/L	14.58	41.10%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	-2.3	-7.56	ug/L	14.777	-7.56	µg/L	14.777	195.45%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	4.7	0.005	ug/L	0.0384	0.005	µg/L	0.0384	770.54%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	246.4	12.1	ug/L	1.26	12.1	µg/L	1.26	10.42%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	57.7	11.7	ug/L	6.25	11.7	µg/L	6.25	53.20%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	42.8	0.663	ug/L	0.2604	0.663	µg/L	0.2604	39.31%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-4.6	-0.386	ug/L	0.7330	-0.386	µg/L	0.7330	189.94%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	5.6	2.04	ug/L	2.055	2.04	µg/L	2.055	100.79%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	-2.0	-2.86	ug/L	2.470	-2.86	µg/L	2.470	86.32%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	6.4	1.19	ug/L	0.393	1.19	µg/L	0.393	33.07%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	59.8	0.081	ug/L	0.0529	0.081	µg/L	0.0529	64.97%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.5	1.54	ug/L	2.585	1.54	µg/L	2.585	168.33%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-4.2	-0.033	ug/L	0.2429	-0.033	µg/L	0.2429	744.91%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-40.9	-0.731	ug/L	0.2004	-0.731	µg/L	0.2004	27.40%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

User canceled analysis.

Sequence No.: 3 **Autosampler Location: 6**
Sample ID: ICSA **Date Collected: 3/13/2014 7:55:55 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	1622.9	0.228	mg/L	0.0050				2.19%
Y 371.029	7408916.7	4.38	mg/L	0.031				0.70%
Ag 328.068†	-2336.9	2.60	ug/L	0.481	2.60	µg/L	0.481	18.48%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	715702.4	539000	ug/L	9731.4	539000	µg/L	9731.4	1.81%
QC value within limits for Al Recovery = 107.74%								
As 193.696†	-219.9	-8.06	ug/L	2.341	-8.06	µg/L	2.341	29.05%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	-18.8	-8.92	ug/L	2.090	-8.92	µg/L	2.090	23.42%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1238.1	2.16	ug/L	0.036	2.16	µg/L	0.036	1.66%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	-13.9	-0.292	ug/L	0.0608	-0.292	µg/L	0.0608	20.82%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	810757.2	485000	ug/L	9564.3	485000	µg/L	9564.3	1.97%
QC value within limits for Ca 317.933 Recovery = 97.05%								
Cd 228.802†	-41.0	2.95	ug/L	0.234	2.95	µg/L	0.234	7.92%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	44.0	0.774	ug/L	0.2288	0.774	µg/L	0.2288	29.55%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	355.7	3.17	ug/L	0.174	3.17	µg/L	0.174	5.49%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1467.3	-4.47	ug/L	0.915	-4.47	µg/L	0.915	20.48%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	410733.7	189000	ug/L	1013.1	189000	µg/L	1013.1	0.53%
QC value within limits for Fe Recovery = 94.73%								
K†	452.4	229	ug/L	54.7	229	µg/L	54.7	23.86%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	146618.1	476000	ug/L	5833.0	476000	µg/L	5833.0	1.23%
QC value within limits for Mg 279.077 Recovery = 95.15%								
Mn 257.610†	19105.9	1.39	ug/L	0.139	1.39	µg/L	0.139	10.02%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-266.5	-2.64	ug/L	0.365	-2.64	µg/L	0.365	13.84%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	201.2	6.18	ug/L	8.704	6.18	µg/L	8.704	140.75%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	127.7	1.98	ug/L	0.266	1.98	µg/L	0.266	13.42%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1512.0	14.3	ug/L	3.81	14.3	µg/L	3.81	26.59%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	-255.5	-4.07	ug/L	0.770	-4.07	µg/L	0.770	18.91%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	0.5	35.6	ug/L	4.91	35.6	µg/L	4.91	13.78%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-401.2	-22.3	ug/L	1.00	-22.3	µg/L	1.00	4.51%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	9454.3	3.67	ug/L	0.333	3.67	µg/L	0.333	9.09%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-16.4	9.01	ug/L	2.913	9.01	µg/L	2.913	32.33%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-1272.2	-22.7	ug/L	1.77	-22.7	µg/L	1.77	7.81%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	305.4	5.47	ug/L	0.362	5.47	µg/L	0.362	6.61%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 4
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 3/13/2014 8:02:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	1514.0	0.213	mg/L	0.0030				1.43%
Y 371.029	7360825.5	4.35	mg/L	0.042				0.95%
Ag 328.068†	9525.8	57.5	ug/L	0.36	57.5	µg/L	0.36	0.62%
QC value within limits for Ag 328.068 Recovery = 114.94%								
Al†	744968.6	561000	ug/L	19651.4	561000	µg/L	19651.4	3.50%
QC value within limits for Al Recovery = 112.14%								
As 193.696†	-81.2	102	ug/L	9.6	102	µg/L	9.6	9.39%
QC value within limits for As 193.696 Recovery = 101.70%								
B 249.677†	828.1	1010	ug/L	10.5	1010	µg/L	10.5	1.04%
QC value within limits for B 249.677 Recovery = 100.98%								
Ba 233.527†	19421.1	99.0	ug/L	1.47	99.0	µg/L	1.47	1.48%
QC value within limits for Ba 233.527 Recovery = 98.98%								
Be†	2745.7	57.5	ug/L	1.05	57.5	µg/L	1.05	1.82%
QC value within limits for Be Recovery = 114.93%								
Ca 317.933†	866594.4	519000	ug/L	21076.7	519000	µg/L	21076.7	4.06%
QC value within limits for Ca 317.933 Recovery = 103.74%								
Cd 228.802†	6248.3	104	ug/L	1.5	104	µg/L	1.5	1.46%
QC value within limits for Cd 228.802 Recovery = 104.03%								
Co 228.616†	5195.2	91.5	ug/L	1.41	91.5	µg/L	1.41	1.54%
QC value within limits for Co 228.616 Recovery = 91.48%								
Cr 267.716†	11198.3	99.9	ug/L	1.49	99.9	µg/L	1.49	1.50%
QC value within limits for Cr 267.716 Recovery = 99.88%								
Cu 327.393†	9062.2	102	ug/L	1.1	102	µg/L	1.1	1.04%
QC value within limits for Cu 327.393 Recovery = 102.34%								
Fe†	433886.7	200000	ug/L	4334.8	200000	µg/L	4334.8	2.17%
QC value within limits for Fe Recovery = 100.07%								
K†	10726.5	5440	ug/L	132.7	5440	µg/L	132.7	2.44%
QC value within limits for K Recovery = 108.71%								
Mg 279.077†	155757.1	505000	ug/L	10141.8	505000	µg/L	10141.8	2.01%
QC value within limits for Mg 279.077 Recovery = 101.08%								
Mn 257.610†	128085.9	101	ug/L	1.6	101	µg/L	1.6	1.55%
QC value within limits for Mn 257.610 Recovery = 100.63%								
Mo 202.031†	1733.1	95.8	ug/L	1.85	95.8	µg/L	1.85	1.93%
QC value within limits for Mo 202.031 Recovery = 95.78%								
Na 589.592†	20370.9	4110	ug/L	67.4	4110	µg/L	67.4	1.64%
QC value within limits for Na 589.592 Recovery = 117.46%								
Ni 231.604†	5657.6	87.7	ug/L	1.19	87.7	µg/L	1.19	1.35%
QC value within limits for Ni 231.604 Recovery = 87.66%								
Pb 220.353†	-446.9	110	ug/L	4.4	110	µg/L	4.4	3.99%
QC value within limits for Pb 220.353 Recovery = 109.66%								
Sb 217.582†	311.3	206	ug/L	10.5	206	µg/L	10.5	5.11%
QC value within limits for Sb 217.582 Recovery = 102.77%								
Se 196.026†	117.4	204	ug/L	14.0	204	µg/L	14.0	6.85%
QC value within limits for Se 196.026 Recovery = 101.90%								
Sn 189.927†	2125.2	448	ug/L	8.2	448	µg/L	8.2	1.83%
QC value within limits for Sn 189.927 Recovery = 89.61%								
Ti 334.940†	84271.2	105	ug/L	1.2	105	µg/L	1.2	1.18%
QC value within limits for Ti 334.940 Recovery = 104.98%								
Tl 190.801†	128.8	98.3	ug/L	3.49	98.3	µg/L	3.49	3.55%
QC value within limits for Tl 190.801 Recovery = 98.26%								
V 290.880†	12630.9	83.1	ug/L	2.52	83.1	µg/L	2.52	3.04%
QC value within limits for V 290.880 Recovery = 83.06%								
Zn 206.200†	5593.3	100	ug/L	1.8	100	µg/L	1.8	1.80%
QC value within limits for Zn 206.200 Recovery = 100.13%								

All analyte(s) passed QC.

User canceled analysis.

Sequence No.: 5 **Autosampler Location: 7**
Sample ID: CRDLA **Date Collected: 3/13/2014 8:18:06 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CRDLA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Ar 363.268	7033.2	0.987	mg/L	0.0151				1.53%
Y 371.029	8217586.7	4.86	mg/L	0.079				1.64%
Ag 328.068†	2003.4	9.14	ug/L	0.496	9.14	µg/L	0.496	5.43%
QC value within limits for Ag 328.068 Recovery = 91.43%								
Al†	249.4	188	ug/L	28.7	188	µg/L	28.7	15.28%
QC value within limits for Al Recovery = 93.87%								
As 193.696†	22.0	16.5	ug/L	0.81	16.5	µg/L	0.81	4.89%
QC value within limits for As 193.696 Recovery = 82.46%								
B 249.677†	104.9	126	ug/L	4.0	126	µg/L	4.0	3.14%
QC value within limits for B 249.677 Recovery = 84.09%								
Ba 233.527†	1733.2	9.25	ug/L	0.159	9.25	µg/L	0.159	1.71%
QC value within limits for Ba 233.527 Recovery = 92.53%								
Be†	224.8	4.70	ug/L	0.142	4.70	µg/L	0.142	3.02%
QC value within limits for Be Recovery = 94.10%								
Ca 317.933†	784.2	469	ug/L	22.8	469	µg/L	22.8	4.87%
QC value within limits for Ca 317.933 Recovery = 93.88%								
Cd 228.802†	188.4	3.02	ug/L	0.189	3.02	µg/L	0.189	6.26%
QC value within limits for Cd 228.802 Recovery = 100.75%								
Co 228.616†	527.7	9.29	ug/L	0.089	9.29	µg/L	0.089	0.95%
QC value within limits for Co 228.616 Recovery = 92.93%								
Cr 267.716†	1048.2	9.35	ug/L	0.282	9.35	µg/L	0.282	3.02%
QC value within limits for Cr 267.716 Recovery = 93.50%								
Cu 327.393†	1027.9	10.4	ug/L	0.52	10.4	µg/L	0.52	5.02%
QC value within limits for Cu 327.393 Recovery = 103.72%								
Fe†	104.5	48.2	ug/L	1.42	48.2	µg/L	1.42	2.94%
QC value within limits for Fe Recovery = 96.38%								
K†	4887.5	2480	ug/L	23.0	2480	µg/L	23.0	0.93%
QC value within limits for K Recovery = 99.06%								
Mg 279.077†	145.4	472	ug/L	16.6	472	µg/L	16.6	3.52%
QC value within limits for Mg 279.077 Recovery = 94.37%								
Mn 257.610†	5255.3	4.81	ug/L	0.121	4.81	µg/L	0.121	2.51%
QC value within limits for Mn 257.610 Recovery = 96.27%								
Mo 202.031†	205.8	10.1	ug/L	0.28	10.1	µg/L	0.28	2.79%
QC value less than the lower limit for Mo 202.031 Recovery = 67.14%								
Na 589.592†	4832.9	984	ug/L	15.1	984	µg/L	15.1	1.53%
QC value within limits for Na 589.592 Recovery = 98.39%								
Ni 231.604†	1256.7	19.5	ug/L	0.42	19.5	µg/L	0.42	2.17%
QC value within limits for Ni 231.604 Recovery = 97.35%								
Pb 220.353†	96.3	8.15	ug/L	0.158	8.15	µg/L	0.158	1.94%
QC value within limits for Pb 220.353 Recovery = 81.49%								
Sb 217.582†	42.7	15.5	ug/L	2.88	15.5	µg/L	2.88	18.67%
QC value within limits for Sb 217.582 Recovery = 77.27%								
Se 196.026†	17.2	24.6	ug/L	1.85	24.6	µg/L	1.85	7.53%
QC value within limits for Se 196.026 Recovery = 123.04%								
Sn 189.927†	359.8	66.6	ug/L	1.62	66.6	µg/L	1.62	2.44%
QC value within limits for Sn 189.927 Recovery = 88.75%								
Ti 334.940†	17290.0	23.6	ug/L	0.53	23.6	µg/L	0.53	2.24%
QC value within limits for Ti 334.940 Recovery = 94.20%								
Tl 190.801†	27.8	16.9	ug/L	0.33	16.9	µg/L	0.33	1.94%
QC value within limits for Tl 190.801 Recovery = 84.53%								
V 290.880†	1954.4	15.0	ug/L	0.75	15.0	µg/L	0.75	4.99%
QC value within limits for V 290.880 Recovery = 99.73%								
Zn 206.200†	1056.3	18.9	ug/L	0.57	18.9	µg/L	0.57	3.00%
QC value within limits for Zn 206.200 Recovery = 94.55%								

QC Failed. Continue with analysis.

Sequence No.: 1
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 4
Date Collected: 3/13/2014 8:22:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/13/2014 8:22:24 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	6604.7	0.927	mg/L	0.0124				1.34%
Y 371.029	8136029.9	4.81	mg/L	0.031				0.65%
Ag 328.068†	226277.3	1030	ug/L	16.8	1030	µg/L	16.8	1.63%
QC value within limits for Ag 328.068 Recovery = 103.30%								
Al†	13712.9	10300	ug/L	133.1	10300	µg/L	133.1	1.29%
QC value within limits for Al Recovery = 103.22%								
As 193.696†	2627.2	1960	ug/L	11.9	1960	µg/L	11.9	0.60%
QC value within limits for As 193.696 Recovery = 98.15%								
B 249.677†	1630.9	1960	ug/L	37.9	1960	µg/L	37.9	1.93%
QC value within limits for B 249.677 Recovery = 98.04%								
Ba 233.527†	367558.9	1960	ug/L	37.3	1960	µg/L	37.3	1.90%
QC value within limits for Ba 233.527 Recovery = 98.11%								
Be†	95965.7	2010	ug/L	49.5	2010	µg/L	49.5	2.46%
QC value within limits for Be Recovery = 100.43%								
Ca 317.933†	16128.2	9650	ug/L	388.4	9650	µg/L	388.4	4.02%
QC value within limits for Ca 317.933 Recovery = 96.53%								
Cd 228.802†	124998.1	2000	ug/L	36.7	2000	µg/L	36.7	1.83%
QC value within limits for Cd 228.802 Recovery = 100.25%								
Co 228.616†	113461.5	2000	ug/L	37.6	2000	µg/L	37.6	1.88%
QC value within limits for Co 228.616 Recovery = 99.89%								
Cr 267.716†	224292.7	2000	ug/L	42.0	2000	µg/L	42.0	2.10%
QC value within limits for Cr 267.716 Recovery = 100.03%								
Cu 327.393†	203832.1	2060	ug/L	45.9	2060	µg/L	45.9	2.23%
QC value within limits for Cu 327.393 Recovery = 102.84%								
Fe†	21467.5	9900	ug/L	195.8	9900	µg/L	195.8	1.98%
QC value within limits for Fe Recovery = 99.03%								
K†	20467.9	10400	ug/L	213.9	10400	µg/L	213.9	2.06%
QC value within limits for K Recovery = 103.72%								
Mg 279.077†	3047.3	9890	ug/L	172.1	9890	µg/L	172.1	1.74%
QC value within limits for Mg 279.077 Recovery = 98.86%								
Mn 257.610†	2200188.9	2030	ug/L	10.2	2030	µg/L	10.2	0.51%
QC value within limits for Mn 257.610 Recovery = 101.27%								
Mo 202.031†	40063.7	1960	ug/L	31.0	1960	µg/L	31.0	1.58%
QC value within limits for Mo 202.031 Recovery = 98.04%								
Na 589.592†	50465.3	10300	ug/L	195.2	10300	µg/L	195.2	1.90%
QC value within limits for Na 589.592 Recovery = 102.73%								
Ni 231.604†	129019.1	2000	ug/L	38.8	2000	µg/L	38.8	1.94%
QC value within limits for Ni 231.604 Recovery = 99.95%								
Pb 220.353†	23220.2	1960	ug/L	20.6	1960	µg/L	20.6	1.05%
QC value within limits for Pb 220.353 Recovery = 97.77%								
Sb 217.582†	5470.8	1980	ug/L	0.4	1980	µg/L	0.4	0.02%
QC value within limits for Sb 217.582 Recovery = 99.04%								
Se 196.026†	1368.4	1960	ug/L	11.4	1960	µg/L	11.4	0.58%
QC value within limits for Se 196.026 Recovery = 97.88%								
Sn 189.927†	10203.9	1890	ug/L	10.9	1890	µg/L	10.9	0.58%
QC value within limits for Sn 189.927 Recovery = 94.38%								
Ti 334.940†	1446775.8	1970	ug/L	11.3	1970	µg/L	11.3	0.58%
QC value within limits for Ti 334.940 Recovery = 98.56%								
Tl 190.801†	3387.2	2060	ug/L	10.2	2060	µg/L	10.2	0.50%
QC value within limits for Tl 190.801 Recovery = 102.94%								

V 290.880†	260426.0	1990 ug/L	39.0	1990 µg/L	39.0	1.96%
QC value within limits for V 290.880 Recovery = 99.66%						
Zn 206.200†	108987.8	1950 ug/L	36.5	1950 µg/L	36.5	1.87%
QC value within limits for Zn 206.200 Recovery = 97.56%						

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/13/2014 8:27:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	7210.8	1.01	mg/L	0.010				1.01%
Y 371.029	8352022.5	4.94	mg/L	0.030				0.61%
Ag 328.068†	185.5	0.847	ug/L	0.2970	0.847	µg/L	0.2970	35.08%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	17.2	12.9	ug/L	9.32	12.9	µg/L	9.32	72.01%
QC value within limits for Al Recovery = Not calculated								
As 193.696†	0.6	0.473	ug/L	1.2330	0.473	µg/L	1.2330	260.69%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	0.4	0.537	ug/L	2.3968	0.537	µg/L	2.3968	446.21%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.0	0.064	ug/L	0.1012	0.064	µg/L	0.1012	158.23%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	-1.9	-0.040	ug/L	0.0758	-0.040	µg/L	0.0758	189.65%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	8.4	5.02	ug/L	3.621	5.02	µg/L	3.621	72.17%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	7.2	0.115	ug/L	0.0315	0.115	µg/L	0.0315	27.37%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-1.8	-0.031	ug/L	0.1136	-0.031	µg/L	0.1136	367.89%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.7	0.007	ug/L	0.2866	0.007	µg/L	0.2866	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	78.7	0.794	ug/L	0.6005	0.794	µg/L	0.6005	75.67%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	6.3	2.92	ug/L	4.739	2.92	µg/L	4.739	162.11%
QC value within limits for Fe Recovery = Not calculated								
K†	175.6	89.0	ug/L	19.50	89.0	µg/L	19.50	21.92%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	0.8	2.62	ug/L	19.463	2.62	µg/L	19.463	742.47%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	41.4	0.038	ug/L	0.0235	0.038	µg/L	0.0235	61.55%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	140.0	6.85	ug/L	1.793	6.85	µg/L	1.793	26.17%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	34.8	7.08	ug/L	2.791	7.08	µg/L	2.791	39.40%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	56.1	0.869	ug/L	0.3438	0.869	µg/L	0.3438	39.55%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-22.9	-1.93	ug/L	0.408	-1.93	µg/L	0.408	21.17%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	-1.4	-0.515	ug/L	0.4845	-0.515	µg/L	0.4845	94.14%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	4.4	6.33	ug/L	2.603	6.33	µg/L	2.603	41.12%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	6.1	1.12	ug/L	0.692	1.12	µg/L	0.692	61.80%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	248.1	0.338	ug/L	0.2544	0.338	µg/L	0.2544	75.27%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-3.3	-2.02	ug/L	0.676	-2.02	µg/L	0.676	33.43%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	117.3	0.898	ug/L	0.2661	0.898	µg/L	0.2661	29.63%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-62.0	-1.11	ug/L	0.163	-1.11	µg/L	0.163	14.67%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: 1632332_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 128
Date Collected: 3/13/2014 8:31:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1632332_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	6599.6	0.927	mg/L	0.0182				1.97%
Y 371.029	7554907.8	4.47	mg/L	0.055				1.24%
Ag 328.068†	99.6	0.458	ug/L	0.2038	0.458	µg/L	0.2038	44.52%
Al†	34.1	25.6	ug/L	19.02	25.6	µg/L	19.02	74.16%
As 193.696†	4.6	3.43	ug/L	2.169	3.43	µg/L	2.169	63.30%
B 249.677†	0.2	0.268	ug/L	3.6296	0.268	µg/L	3.6296	>999.9%
Ba 233.527†	72.6	0.386	ug/L	0.0548	0.386	µg/L	0.0548	14.18%
Be†	1.4	0.029	ug/L	0.0500	0.029	µg/L	0.0500	171.56%
Ca 317.933†	217.5	130	ug/L	5.9	130	µg/L	5.9	4.52%
Cd 228.802†	22.2	0.358	ug/L	0.0796	0.358	µg/L	0.0796	22.25%
Co 228.616†	-21.0	-0.370	ug/L	0.1940	-0.370	µg/L	0.1940	52.39%
Cr 267.716†	113.8	1.02	ug/L	0.383	1.02	µg/L	0.383	37.74%
Cu 327.393†	279.1	2.82	ug/L	0.349	2.82	µg/L	0.349	12.38%
Fe†	99.1	45.7	ug/L	2.31	45.7	µg/L	2.31	5.05%
K†	266.4	135	ug/L	30.7	135	µg/L	30.7	22.74%
Mg 279.077†	11.3	36.8	ug/L	12.07	36.8	µg/L	12.07	32.82%
Mn 257.610†	968.4	0.892	ug/L	0.0141	0.892	µg/L	0.0141	1.59%
Mo 202.031†	3.1	0.156	ug/L	0.7618	0.156	µg/L	0.7618	488.09%
Na 589.592†	204.7	41.7	ug/L	6.97	41.7	µg/L	6.97	16.74%
Ni 231.604†	-22.8	-0.353	ug/L	0.7327	-0.353	µg/L	0.7327	207.67%
Pb 220.353†	-41.4	-3.48	ug/L	0.595	-3.48	µg/L	0.595	17.12%
Sb 217.582†	-2.8	-0.990	ug/L	2.6359	-0.990	µg/L	2.6359	266.15%
Se 196.026†	8.3	11.8	ug/L	4.59	11.8	µg/L	4.59	38.83%
Sn 189.927†	106.5	19.7	ug/L	0.45	19.7	µg/L	0.45	2.29%
Ti 334.940†	325.4	0.441	ug/L	0.1933	0.441	µg/L	0.1933	43.84%
Tl 190.801†	-5.6	-3.38	ug/L	1.829	-3.38	µg/L	1.829	54.17%
V 290.880†	96.2	0.734	ug/L	0.5226	0.734	µg/L	0.5226	71.22%
Zn 206.200†	422.6	7.57	ug/L	0.166	7.57	µg/L	0.166	2.20%

Sequence No.: 11
Sample ID: 1632333_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 129
Date Collected: 3/13/2014 8:36:36 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1632333_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	6257.9	0.879	mg/L	0.0035				0.40%
Y 371.029	7544607.7	4.46	mg/L	0.017				0.39%
Ag 328.068†	112297.8	513	ug/L	4.0	513	µg/L	4.0	0.77%
Al†	14521.8	10900	ug/L	249.6	10900	µg/L	249.6	2.28%
As 193.696†	1280.6	959	ug/L	3.1	959	µg/L	3.1	0.32%
B 249.677†	807.4	971	ug/L	1.8	971	µg/L	1.8	0.18%
Ba 233.527†	190907.1	1020	ug/L	9.9	1020	µg/L	9.9	0.97%
Be†	49450.4	1030	ug/L	16.9	1030	µg/L	16.9	1.64%
Ca 317.933†	17074.8	10200	ug/L	389.5	10200	µg/L	389.5	3.81%
Cd 228.802†	61161.0	981	ug/L	10.3	981	µg/L	10.3	1.05%
Co 228.616†	57801.6	1020	ug/L	9.3	1020	µg/L	9.3	0.91%
Cr 267.716†	117861.0	1050	ug/L	10.6	1050	µg/L	10.6	1.01%
Cu 327.393†	105280.5	1060	ug/L	13.7	1060	µg/L	13.7	1.29%
Fe†	22262.1	10300	ug/L	89.2	10300	µg/L	89.2	0.87%
K†	21492.8	10900	ug/L	115.2	10900	µg/L	115.2	1.06%
Mg 279.077†	3147.9	10200	ug/L	32.0	10200	µg/L	32.0	0.31%
Mn 257.610†	1127085.9	1040	ug/L	1.9	1040	µg/L	1.9	0.18%
Mo 202.031†	21482.4	1050	ug/L	10.4	1050	µg/L	10.4	0.99%
Na 589.592†	52939.2	10800	ug/L	102.8	10800	µg/L	102.8	0.95%
Ni 231.604†	65049.9	1010	ug/L	8.1	1010	µg/L	8.1	0.80%
Pb 220.353†	11829.8	998	ug/L	13.7	998	µg/L	13.7	1.37%
Sb 217.582†	2752.9	998	ug/L	4.9	998	µg/L	4.9	0.49%
Se 196.026†	627.7	900	ug/L	7.5	900	µg/L	7.5	0.84%
Sn 189.927†	5403.5	1000	ug/L	4.9	1000	µg/L	4.9	0.49%
Ti 334.940†	757468.7	1030	ug/L	1.1	1030	µg/L	1.1	0.11%
Tl 190.801†	1634.0	994	ug/L	8.3	994	µg/L	8.3	0.83%
V 290.880†	137599.8	1050	ug/L	8.8	1050	µg/L	8.8	0.83%
Zn 206.200†	52442.9	939	ug/L	10.4	939	µg/L	10.4	1.11%

Sequence No.: 13
Sample ID: 10259041002_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 131
Date Collected: 3/13/2014 8:47:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259041002_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-5668.1	-0.796	mg/L	0.0024				0.30%
Y 371.029	6855443.7	4.05	mg/L	0.029				0.70%
Ag 328.068†	-6726.7	1.96	ug/L	0.547	1.96	µg/L	0.547	27.99%
Al†	549344.0	414000	ug/L	1882.0	414000	µg/L	1882.0	0.46%
As 193.696†	-28.2	86.8	ug/L	44.69	86.8	µg/L	44.69	51.49%
B 249.677†	309.9	406	ug/L	9.4	406	µg/L	9.4	2.32%
Ba 233.527†	227886.8	1210	ug/L	3.1	1210	µg/L	3.1	0.26%
Be†	1036.8	21.7	ug/L	0.05	21.7	µg/L	0.05	0.21%
Ca 317.933†	2543613.1	1520000	ug/L	57048.2	1520000	µg/L	57048.2	3.75%
Cd 228.802†	218.6	12.4	ug/L	0.49	12.4	µg/L	0.49	3.92%
Co 228.616†	11311.7	199	ug/L	0.5	199	µg/L	0.5	0.27%
Cr 267.716†	62956.0	562	ug/L	2.3	562	µg/L	2.3	0.41%
Cu 327.393†	64278.1	674	ug/L	1.2	674	µg/L	1.2	0.18%
Fe†	1010957.4	466000	ug/L	4689.7	466000	µg/L	4689.7	1.01%
K†	189992.3	96300	ug/L	814.0	96300	µg/L	814.0	0.85%
Mg 279.077†	225800.8	733000	ug/L	7073.9	733000	µg/L	7073.9	0.97%
Mn 257.610†	7726155.9	7100	ug/L	13.4	7100	µg/L	13.4	0.19%
Mo 202.031†	-27.1	24.3	ug/L	0.38	24.3	µg/L	0.38	1.59%
Na 589.592†	29378.2	5950	ug/L	65.4	5950	µg/L	65.4	1.10%
Ni 231.604†	37644.5	583	ug/L	2.5	583	µg/L	2.5	0.42%
Pb 220.353†	2503.3	312	ug/L	12.4	312	µg/L	12.4	3.97%
Sb 217.582†	-535.0	-12.3	ug/L	2.09	-12.3	µg/L	2.09	16.99%
Se 196.026†	-49.0	-34.7	ug/L	32.76	-34.7	µg/L	32.76	94.50%
Sn 189.927†	-414.7	3.25	ug/L	5.646	3.25	µg/L	5.646	173.96%
Ti 334.940†	3310023.8	4480	ug/L	4.2	4480	µg/L	4.2	0.09%
Tl 190.801†	-21.6	33.5	ug/L	13.07	33.5	µg/L	13.07	39.04%
V 290.880†	102330.2	753	ug/L	0.5	753	µg/L	0.5	0.07%
Zn 206.200†	79315.6	1420	ug/L	5.9	1420	µg/L	5.9	0.42%

Sequence No.: 14
Sample ID: 1635277_B18873Dx5
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 132
Date Collected: 3/13/2014 8:53:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1635277_B18873Dx5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	4040.1	0.567	mg/L	0.0043				0.76%
Y 371.029	7764254.4	4.59	mg/L	0.002				0.05%
Ag 328.068†	-1448.7	0.001	ug/L	0.4979	0.001	µg/L	0.4979	>999.9%
Al†	102046.9	76800	ug/L	2137.3	76800	µg/L	2137.3	2.78%
As 193.696†	-13.8	9.69	ug/L	5.190	9.69	µg/L	5.190	53.54%
B 249.677†	53.6	71.3	ug/L	1.93	71.3	µg/L	1.93	2.71%
Ba 233.527†	48175.7	255	ug/L	2.4	255	µg/L	2.4	0.94%
Be†	199.9	4.18	ug/L	0.174	4.18	µg/L	0.174	4.16%
Ca 317.933†	504134.2	302000	ug/L	9399.6	302000	µg/L	9399.6	3.12%
Cd 228.802†	46.0	2.54	ug/L	0.281	2.54	µg/L	0.281	11.07%
Co 228.616†	2477.8	43.6	ug/L	0.15	43.6	µg/L	0.15	0.34%
Cr 267.716†	13478.8	120	ug/L	0.9	120	µg/L	0.9	0.77%
Cu 327.393†	12598.1	132	ug/L	1.2	132	µg/L	1.2	0.88%
Fe†	204711.0	94400	ug/L	1208.6	94400	µg/L	1208.6	1.28%
K†	34548.4	17500	ug/L	149.5	17500	µg/L	149.5	0.85%
Mg 279.077†	44071.0	143000	ug/L	1397.0	143000	µg/L	1397.0	0.98%
Mn 257.610†	1657940.8	1520	ug/L	2.5	1520	µg/L	2.5	0.17%
Mo 202.031†	-77.6	1.39	ug/L	0.410	1.39	µg/L	0.410	29.61%
Na 589.592†	5545.7	1120	ug/L	8.3	1120	µg/L	8.3	0.74%
Ni 231.604†	8474.5	131	ug/L	0.9	131	µg/L	0.9	0.69%
Pb 220.353†	601.9	69.4	ug/L	0.93	69.4	µg/L	0.93	1.35%
Sb 217.582†	-104.5	-1.67	ug/L	2.354	-1.67	µg/L	2.354	140.74%
Se 196.026†	35.0	57.7	ug/L	1.80	57.7	µg/L	1.80	3.13%
Sn 189.927†	-303.5	-40.5	ug/L	1.26	-40.5	µg/L	1.26	3.11%
Ti 334.940†	675867.8	915	ug/L	2.5	915	µg/L	2.5	0.27%
Tl 190.801†	-10.4	3.12	ug/L	2.980	3.12	µg/L	2.980	95.39%
V 290.880†	19183.0	141	ug/L	2.9	141	µg/L	2.9	2.05%
Zn 206.200†	18077.2	324	ug/L	3.1	324	µg/L	3.1	0.95%

Sequence No.: 17
Sample ID: 1632334_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 134
Date Collected: 3/13/2014 9:09:44 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1632334_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-8521.6	-1.20	mg/L	0.032				2.71%
Y 371.029	6808604.6	4.03	mg/L	0.014				0.35%
Ag 328.068†	114853.3	565	ug/L	6.3	565	µg/L	6.3	1.12%
Al†	733742.5	552000	ug/L	4441.7	552000	µg/L	4441.7	0.80%
As 193.696†	1344.3	1160	ug/L	22.0	1160	µg/L	22.0	1.90%
B 249.677†	1287.5	1590	ug/L	55.3	1590	µg/L	55.3	3.48%
Ba 233.527†	506650.6	2690	ug/L	33.9	2690	µg/L	33.9	1.26%
Be†	55591.1	1160	ug/L	24.1	1160	µg/L	24.1	2.07%
Ca 317.933†	2528712.7	1510000	ug/L	20582.4	1510000	µg/L	20582.4	1.36%
Cd 228.802†	64620.2	1050	ug/L	1.8	1050	µg/L	1.8	0.17%
Co 228.616†	66029.1	1160	ug/L	3.4	1160	µg/L	3.4	0.29%
Cr 267.716†	203597.3	1820	ug/L	39.1	1820	µg/L	39.1	2.15%
Cu 327.393†	182657.2	1870	ug/L	65.9	1870	µg/L	65.9	3.52%
Fe†	1283268.6	592000	ug/L	5008.7	592000	µg/L	5008.7	0.85%
K†	287616.8	146000	ug/L	916.6	146000	µg/L	916.6	0.63%
Mg 279.077†	225631.6	732000	ug/L	8308.5	732000	µg/L	8308.5	1.14%
Mn 257.610†	13979516.3	12900	ug/L	46.4	12900	µg/L	46.4	0.36%
Mo 202.031†	19033.8	964	ug/L	3.3	964	µg/L	3.3	0.34%
Na 589.592†	93990.5	19100	ug/L	172.3	19100	µg/L	172.3	0.90%
Ni 231.604†	101842.9	1580	ug/L	26.3	1580	µg/L	26.3	1.67%
Pb 220.353†	12523.8	1190	ug/L	5.2	1190	µg/L	5.2	0.44%
Sb 217.582†	273.0	317	ug/L	10.8	317	µg/L	10.8	3.42%
Se 196.026†	575.0	908	ug/L	12.2	908	µg/L	12.2	1.34%
Sn 189.927†	4396.9	893	ug/L	2.1	893	µg/L	2.1	0.23%
Ti 334.940†	4473715.4	6070	ug/L	90.8	6070	µg/L	90.8	1.50%
Tl 190.801†	1369.7	891	ug/L	23.0	891	µg/L	23.0	2.58%
V 290.880†	264663.4	1990	ug/L	38.4	1990	µg/L	38.4	1.93%
Zn 206.200†	126190.0	2260	ug/L	30.5	2260	µg/L	30.5	1.35%

Sequence No.: 18
Sample ID: 1632335_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 135
Date Collected: 3/13/2014 9:14:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1632335_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-4475.7	-0.628	mg/L	0.0186				2.96%
Y 371.029	6921410.1	4.09	mg/L	0.015				0.36%
Ag 328.068†	114066.3	551	ug/L	2.4	551	µg/L	2.4	0.44%
Al†	594496.0	447000	ug/L	3884.7	447000	µg/L	3884.7	0.87%
As 193.696†	1395.6	1160	ug/L	11.5	1160	µg/L	11.5	0.99%
B 249.677†	1251.7	1540	ug/L	34.8	1540	µg/L	34.8	2.26%
Ba 233.527†	410766.2	2180	ug/L	5.8	2180	µg/L	5.8	0.27%
Be†	55410.4	1160	ug/L	4.0	1160	µg/L	4.0	0.35%
Ca 317.933†	2132007.4	1280000	ug/L	26094.2	1280000	µg/L	26094.2	2.04%
Cd 228.802†	63833.0	1030	ug/L	8.7	1030	µg/L	8.7	0.85%
Co 228.616†	62331.0	1100	ug/L	11.7	1100	µg/L	11.7	1.07%
Cr 267.716†	179069.1	1600	ug/L	3.0	1600	µg/L	3.0	0.19%
Cu 327.393†	169510.5	1730	ug/L	18.0	1730	µg/L	18.0	1.04%
Fe†	934036.6	431000	ug/L	2386.7	431000	µg/L	2386.7	0.55%
K†	238512.0	121000	ug/L	237.1	121000	µg/L	237.1	0.20%
Mg 279.077†	187635.8	609000	ug/L	2372.0	609000	µg/L	2372.0	0.39%
Mn 257.610†	8376777.1	7700	ug/L	19.1	7700	µg/L	19.1	0.25%
Mo 202.031†	19156.9	961	ug/L	2.6	961	µg/L	2.6	0.27%
Na 589.592†	84310.4	17100	ug/L	30.7	17100	µg/L	30.7	0.18%
Ni 231.604†	90979.9	1410	ug/L	5.5	1410	µg/L	5.5	0.39%
Pb 220.353†	12337.0	1150	ug/L	9.5	1150	µg/L	9.5	0.83%
Sb 217.582†	482.8	341	ug/L	11.8	341	µg/L	11.8	3.45%
Se 196.026†	619.9	932	ug/L	52.0	932	µg/L	52.0	5.58%
Sn 189.927†	4443.2	888	ug/L	9.7	888	µg/L	9.7	1.10%
Ti 334.940†	4091245.3	5550	ug/L	7.8	5550	µg/L	7.8	0.14%
Tl 190.801†	1434.1	914	ug/L	6.8	914	µg/L	6.8	0.75%
V 290.880†	243327.4	1830	ug/L	9.7	1830	µg/L	9.7	0.53%
Zn 206.200†	120186.9	2150	ug/L	4.6	2150	µg/L	4.6	0.21%

Sequence No.: 19 **Autosampler Location: 9**
Sample ID: CCV **Date Collected: 3/13/2014 9:19:54 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	6839.1	0.960	mg/L	0.0199				2.08%
Y 371.029	8264212.7	4.89	mg/L	0.066				1.36%
Ag 328.068†	227281.9	1040	ug/L	16.0	1040	µg/L	16.0	1.54%
QC value within limits for Ag 328.068 Recovery = 103.76%								
Al†	14225.2	10700	ug/L	108.0	10700	µg/L	108.0	1.01%
QC value within limits for Al Recovery = 107.08%								
As 193.696†	2615.8	1950	ug/L	31.3	1950	µg/L	31.3	1.60%
QC value within limits for As 193.696 Recovery = 97.73%								
B 249.677†	1631.2	1960	ug/L	57.1	1960	µg/L	57.1	2.91%
QC value within limits for B 249.677 Recovery = 98.06%								
Ba 233.527†	373295.6	1990	ug/L	32.5	1990	µg/L	32.5	1.63%
QC value within limits for Ba 233.527 Recovery = 99.64%								
Be†	97935.6	2050	ug/L	26.6	2050	µg/L	26.6	1.30%
QC value within limits for Be Recovery = 102.49%								
Ca 317.933†	17628.9	10600	ug/L	38.3	10600	µg/L	38.3	0.36%
QC value within limits for Ca 317.933 Recovery = 105.52%								
Cd 228.802†	125720.5	2020	ug/L	34.4	2020	µg/L	34.4	1.71%
QC value within limits for Cd 228.802 Recovery = 100.83%								
Co 228.616†	113956.8	2010	ug/L	38.7	2010	µg/L	38.7	1.93%
QC value within limits for Co 228.616 Recovery = 100.33%								
Cr 267.716†	227353.7	2030	ug/L	18.3	2030	µg/L	18.3	0.90%
QC value within limits for Cr 267.716 Recovery = 101.39%								
Cu 327.393†	212361.5	2140	ug/L	14.1	2140	µg/L	14.1	0.66%
QC value within limits for Cu 327.393 Recovery = 107.15%								
Fe†	22005.5	10200	ug/L	87.2	10200	µg/L	87.2	0.86%
QC value within limits for Fe Recovery = 101.51%								
K†	20740.9	10500	ug/L	130.5	10500	µg/L	130.5	1.24%
QC value within limits for K Recovery = 105.10%								
Mg 279.077†	3095.8	10000	ug/L	110.8	10000	µg/L	110.8	1.10%
QC value within limits for Mg 279.077 Recovery = 100.43%								
Mn 257.610†	2187555.6	2010	ug/L	32.4	2010	µg/L	32.4	1.61%
QC value within limits for Mn 257.610 Recovery = 100.69%								
Mo 202.031†	39825.8	1950	ug/L	43.3	1950	µg/L	43.3	2.22%
QC value within limits for Mo 202.031 Recovery = 97.46%								
Na 589.592†	50142.8	10200	ug/L	104.0	10200	µg/L	104.0	1.02%
QC value within limits for Na 589.592 Recovery = 102.08%								
Ni 231.604†	129754.6	2010	ug/L	29.0	2010	µg/L	29.0	1.44%
QC value within limits for Ni 231.604 Recovery = 100.52%								
Pb 220.353†	22750.1	1920	ug/L	47.2	1920	µg/L	47.2	2.47%
QC value within limits for Pb 220.353 Recovery = 95.80%								
Sb 217.582†	5535.2	2000	ug/L	34.9	2000	µg/L	34.9	1.74%
QC value within limits for Sb 217.582 Recovery = 100.21%								
Se 196.026†	1400.8	2000	ug/L	40.5	2000	µg/L	40.5	2.02%
QC value within limits for Se 196.026 Recovery = 100.19%								
Sn 189.927†	10047.6	1860	ug/L	25.8	1860	µg/L	25.8	1.39%
QC value within limits for Sn 189.927 Recovery = 92.94%								
Ti 334.940†	1447048.5	1970	ug/L	28.4	1970	µg/L	28.4	1.44%
QC value within limits for Ti 334.940 Recovery = 98.58%								
Tl 190.801†	3476.4	2110	ug/L	33.0	2110	µg/L	33.0	1.56%
QC value within limits for Tl 190.801 Recovery = 105.66%								
V 290.880†	265304.2	2030	ug/L	26.0	2030	µg/L	26.0	1.28%
QC value within limits for V 290.880 Recovery = 101.53%								
Zn 206.200†	109152.2	1950	ug/L	33.9	1950	µg/L	33.9	1.74%
QC value within limits for Zn 206.200 Recovery = 97.70%								

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/13/2014 9:23:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	7242.6	1.02	mg/L	0.004				0.43%
Y 371.029	8445551.5	4.99	mg/L	0.060				1.20%
Ag 328.068†	165.7	0.756	ug/L	0.2589	0.756	µg/L	0.2589	34.23%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	-1.4	-1.07	ug/L	12.165	-1.07	µg/L	12.165	>999.9%
QC value within limits for Al Recovery = Not calculated								
As 193.696†	-0.2	-0.132	ug/L	3.5026	-0.132	µg/L	3.5026	>999.9%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	0.1	0.072	ug/L	2.1072	0.072	µg/L	2.1072	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	17.2	0.092	ug/L	0.0601	0.092	µg/L	0.0601	65.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	2.2	0.046	ug/L	0.1066	0.046	µg/L	0.1066	232.83%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	14.0	8.41	ug/L	6.745	8.41	µg/L	6.745	80.21%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	10.1	0.162	ug/L	0.0132	0.162	µg/L	0.0132	8.12%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.8	0.032	ug/L	0.1453	0.032	µg/L	0.1453	458.40%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-5.8	-0.052	ug/L	0.1851	-0.052	µg/L	0.1851	355.27%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	55.5	0.560	ug/L	0.3449	0.560	µg/L	0.3449	61.60%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	11.0	5.07	ug/L	1.055	5.07	µg/L	1.055	20.80%
QC value within limits for Fe Recovery = Not calculated								
K†	171.7	87.0	ug/L	42.19	87.0	µg/L	42.19	48.50%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	-2.3	-7.44	ug/L	7.927	-7.44	µg/L	7.927	106.57%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	113.7	0.105	ug/L	0.1002	0.105	µg/L	0.1002	95.03%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	132.9	6.50	ug/L	2.060	6.50	µg/L	2.060	31.67%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	22.2	4.53	ug/L	3.469	4.53	µg/L	3.469	76.64%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	81.8	1.27	ug/L	0.614	1.27	µg/L	0.614	48.45%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-9.3	-0.779	ug/L	0.6943	-0.779	µg/L	0.6943	89.11%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	0.7	0.255	ug/L	1.2387	0.255	µg/L	1.2387	485.21%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	3.9	5.60	ug/L	6.204	5.60	µg/L	6.204	110.74%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	7.1	1.31	ug/L	0.353	1.31	µg/L	0.353	26.89%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	192.6	0.262	ug/L	0.1019	0.262	µg/L	0.1019	38.83%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.4	-0.832	ug/L	0.1896	-0.832	µg/L	0.1896	22.79%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	21.3	0.163	ug/L	0.2731	0.163	µg/L	0.2731	167.40%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-24.3	-0.435	ug/L	0.1137	-0.435	µg/L	0.1137	26.16%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: 10259055001_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 136
Date Collected: 3/13/2014 9:28:32 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259055001_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	409.9	0.0576	mg/L	0.00794				13.79%
Y 371.029	6818151.4	4.03	mg/L	0.010				0.25%
Ag 328.068†	-4785.7	-10.1	ug/L	0.71	-10.1	µg/L	0.71	7.06%
Al†	91557.7	68900	ug/L	96.9	68900	µg/L	96.9	0.14%
As 193.696†	38.6	4.07	ug/L	2.306	4.07	µg/L	2.306	56.71%
B 249.677†	112.9	148	ug/L	4.0	148	µg/L	4.0	2.74%
Ba 233.527†	44699.2	235	ug/L	2.2	235	µg/L	2.2	0.95%
Be†	188.6	3.95	ug/L	0.078	3.95	µg/L	0.078	1.97%
Ca 317.933†	3578336.4	2140000	ug/L	95409.0	2140000	µg/L	95409.0	4.45%
Cd 228.802†	136.7	5.39	ug/L	0.209	5.39	µg/L	0.209	3.88%
Co 228.616†	3435.5	60.5	ug/L	0.69	60.5	µg/L	0.69	1.14%
Cr 267.716†	14513.3	129	ug/L	1.0	129	µg/L	1.0	0.79%
Cu 327.393†	11534.3	126	ug/L	2.8	126	µg/L	2.8	2.26%
Fe†	364036.9	168000	ug/L	644.2	168000	µg/L	644.2	0.38%
K†	26168.8	13300	ug/L	147.8	13300	µg/L	147.8	1.11%
Mg 279.077†	279719.9	908000	ug/L	5159.2	908000	µg/L	5159.2	0.57%
Mn 257.610†	6696184.9	6120	ug/L	48.6	6120	µg/L	48.6	0.79%
Mo 202.031†	56.8	12.0	ug/L	1.57	12.0	µg/L	1.57	13.06%
Na 589.592†	21064.8	4280	ug/L	73.5	4280	µg/L	73.5	1.72%
Ni 231.604†	7296.6	113	ug/L	0.7	113	µg/L	0.7	0.64%
Pb 220.353†	620.0	72.7	ug/L	1.75	72.7	µg/L	1.75	2.41%
Sb 217.582†	-494.4	-67.3	ug/L	1.80	-67.3	µg/L	1.80	2.67%
Se 196.026†	24.1	-116	ug/L	7.2	-116	µg/L	7.2	6.23%
Sn 189.927†	-405.4	24.0	ug/L	0.83	24.0	µg/L	0.83	3.45%
Ti 334.940†	1806565.1	2420	ug/L	14.2	2420	µg/L	14.2	0.59%
Tl 190.801†	-23.3	2.64	ug/L	2.199	2.64	µg/L	2.199	83.44%
V 290.880†	28741.2	209	ug/L	0.8	209	µg/L	0.8	0.40%
Zn 206.200†	20321.1	364	ug/L	3.6	364	µg/L	3.6	0.99%

Sequence No.: 23
Sample ID: 10259055003_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 138
Date Collected: 3/13/2014 9:41:30 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259055003_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-2751.2	-0.386	mg/L	0.0152				3.93%
Y 371.029	6929533.2	4.10	mg/L	0.062				1.50%
Ag 328.068†	-5064.5	2.32	ug/L	1.335	2.32	µg/L	1.335	57.44%
Al†	359871.2	271000	ug/L	5427.4	271000	µg/L	5427.4	2.00%
As 193.696†	-41.2	35.0	ug/L	47.41	35.0	µg/L	47.41	135.45%
B 249.677†	196.5	263	ug/L	4.8	263	µg/L	4.8	1.84%
Ba 233.527†	175463.6	928	ug/L	15.9	928	µg/L	15.9	1.72%
Be†	619.5	13.0	ug/L	0.29	13.0	µg/L	0.29	2.25%
Ca 317.933†	2226440.0	1330000	ug/L	49207.6	1330000	µg/L	49207.6	3.69%
Cd 228.802†	274.8	11.3	ug/L	0.50	11.3	µg/L	0.50	4.44%
Co 228.616†	9236.2	163	ug/L	2.9	163	µg/L	2.9	1.81%
Cr 267.716†	38196.8	341	ug/L	5.2	341	µg/L	5.2	1.53%
Cu 327.393†	30552.0	328	ug/L	3.6	328	µg/L	3.6	1.10%
Fe†	787548.8	363000	ug/L	3559.6	363000	µg/L	3559.6	0.98%
K†	114994.5	58300	ug/L	819.8	58300	µg/L	819.8	1.41%
Mg 279.077†	193123.6	627000	ug/L	5469.1	627000	µg/L	5469.1	0.87%
Mn 257.610†	11418172.5	10500	ug/L	179.8	10500	µg/L	179.8	1.71%
Mo 202.031†	-0.6	19.9	ug/L	1.03	19.9	µg/L	1.03	5.16%
Na 589.592†	29440.4	5980	ug/L	68.8	5980	µg/L	68.8	1.15%
Ni 231.604†	25736.5	399	ug/L	4.7	399	µg/L	4.7	1.19%
Pb 220.353†	1004.0	150	ug/L	6.1	150	µg/L	6.1	4.03%
Sb 217.582†	-375.0	7.56	ug/L	11.680	7.56	µg/L	11.680	154.53%
Se 196.026†	-24.2	-22.4	ug/L	40.71	-22.4	µg/L	40.71	181.78%
Sn 189.927†	-419.8	-9.27	ug/L	6.781	-9.27	µg/L	6.781	73.12%
Ti 334.940†	2968478.2	4020	ug/L	62.9	4020	µg/L	62.9	1.57%
Tl 190.801†	-26.9	20.0	ug/L	4.84	20.0	µg/L	4.84	24.21%
V 290.880†	64444.6	470	ug/L	10.5	470	µg/L	10.5	2.24%
Zn 206.200†	50524.5	904	ug/L	16.6	904	µg/L	16.6	1.84%

Sequence No.: 24
Sample ID: 10259055004_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 139
Date Collected: 3/13/2014 9:47:30 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259055004_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-5936.5	-0.833	mg/L	0.0142				1.71%
Y 371.029	6790948.7	4.02	mg/L	0.043				1.08%
Ag 328.068†	-6216.9	6.19	ug/L	0.906	6.19	µg/L	0.906	14.64%
Al†	526105.6	396000	ug/L	5104.7	396000	µg/L	5104.7	1.29%
As 193.696†	80.2	165	ug/L	12.2	165	µg/L	12.2	7.40%
B 249.677†	303.8	401	ug/L	4.5	401	µg/L	4.5	1.12%
Ba 233.527†	280932.7	1490	ug/L	7.1	1490	µg/L	7.1	0.47%
Be†	989.2	20.7	ug/L	0.14	20.7	µg/L	0.14	0.66%
Ca 317.933†	2493484.7	1490000	ug/L	51252.5	1490000	µg/L	51252.5	3.43%
Cd 228.802†	95.8	10.9	ug/L	0.89	10.9	µg/L	0.89	8.10%
Co 228.616†	14248.9	251	ug/L	1.4	251	µg/L	1.4	0.54%
Cr 267.716†	59439.8	530	ug/L	1.5	530	µg/L	1.5	0.29%
Cu 327.393†	54605.6	578	ug/L	4.1	578	µg/L	4.1	0.70%
Fe†	1070061.1	494000	ug/L	5222.1	494000	µg/L	5222.1	1.06%
K†	205856.5	104000	ug/L	859.9	104000	µg/L	859.9	0.82%
Mg 279.077†	215385.3	699000	ug/L	8778.2	699000	µg/L	8778.2	1.26%
Mn 257.610†	9729824.9	8950	ug/L	21.2	8950	µg/L	21.2	0.24%
Mo 202.031†	376.2	45.5	ug/L	3.06	45.5	µg/L	3.06	6.72%
Na 589.592†	24075.7	4880	ug/L	80.0	4880	µg/L	80.0	1.64%
Ni 231.604†	40669.5	630	ug/L	1.9	630	µg/L	1.9	0.30%
Pb 220.353†	1783.7	246	ug/L	4.3	246	µg/L	4.3	1.74%
Sb 217.582†	-604.5	-32.7	ug/L	4.54	-32.7	µg/L	4.54	13.90%
Se 196.026†	-92.7	-83.7	ug/L	37.26	-83.7	µg/L	37.26	44.50%
Sn 189.927†	-382.5	5.50	ug/L	2.140	5.50	µg/L	2.140	38.88%
Ti 334.940†	3464038.5	4690	ug/L	25.5	4690	µg/L	25.5	0.54%
Tl 190.801†	-31.6	30.2	ug/L	4.91	30.2	µg/L	4.91	16.29%
V 290.880†	89155.7	651	ug/L	3.5	651	µg/L	3.5	0.54%
Zn 206.200†	61070.5	1090	ug/L	5.9	1090	µg/L	5.9	0.54%

Sequence No.: 25
Sample ID: 10259055002_B18873Dx5
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 137
Date Collected: 3/13/2014 9:53:30 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259055002_B18873Dx5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	3169.1	0.445	mg/L	0.0065				1.46%
Y 371.029	7780341.7	4.60	mg/L	0.043				0.94%
Ag 328.068†	-1881.9	0.546	ug/L	0.6433	0.546	µg/L	0.6433	117.85%
Al†	123357.0	92900	ug/L	4201.2	92900	µg/L	4201.2	4.52%
As 193.696†	23.1	41.1	ug/L	5.29	41.1	µg/L	5.29	12.87%
B 249.677†	59.9	81.4	ug/L	5.40	81.4	µg/L	5.40	6.64%
Ba 233.527†	75170.5	398	ug/L	10.3	398	µg/L	10.3	2.59%
Be†	242.7	5.08	ug/L	0.197	5.08	µg/L	0.197	3.88%
Ca 317.933†	679313.9	407000	ug/L	23125.9	407000	µg/L	23125.9	5.69%
Cd 228.802†	32.5	3.01	ug/L	0.032	3.01	µg/L	0.032	1.06%
Co 228.616†	3546.7	62.5	ug/L	0.48	62.5	µg/L	0.48	0.77%
Cr 267.716†	16138.9	144	ug/L	1.5	144	µg/L	1.5	1.06%
Cu 327.393†	13476.3	143	ug/L	4.6	143	µg/L	4.6	3.23%
Fe†	282791.7	130000	ug/L	3735.2	130000	µg/L	3735.2	2.86%
K†	45007.1	22800	ug/L	650.7	22800	µg/L	650.7	2.85%
Mg 279.077†	54591.0	177000	ug/L	4035.2	177000	µg/L	4035.2	2.28%
Mn 257.610†	2605846.0	2400	ug/L	8.6	2400	µg/L	8.6	0.36%
Mo 202.031†	-20.1	6.18	ug/L	0.560	6.18	µg/L	0.560	9.06%
Na 589.592†	6444.8	1310	ug/L	44.8	1310	µg/L	44.8	3.43%
Ni 231.604†	10243.1	159	ug/L	1.8	159	µg/L	1.8	1.11%
Pb 220.353†	495.7	63.9	ug/L	0.89	63.9	µg/L	0.89	1.39%
Sb 217.582†	-139.3	-1.46	ug/L	2.233	-1.46	µg/L	2.233	152.53%
Se 196.026†	23.9	45.4	ug/L	7.16	45.4	µg/L	7.16	15.79%
Sn 189.927†	-326.2	-41.0	ug/L	1.72	-41.0	µg/L	1.72	4.20%
Ti 334.940†	1062799.9	1440	ug/L	6.7	1440	µg/L	6.7	0.47%
Tl 190.801†	-11.9	5.83	ug/L	2.815	5.83	µg/L	2.815	48.31%
V 290.880†	22131.5	161	ug/L	4.4	161	µg/L	4.4	2.73%
Zn 206.200†	17202.6	308	ug/L	2.4	308	µg/L	2.4	0.77%

Sequence No.: 26
Sample ID: 10259055005_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 140
Date Collected: 3/13/2014 10:00:20 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259055005_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	1785.7	0.251	mg/L	0.0017				0.67%
Y 371.029	6990701.1	4.13	mg/L	0.052				1.27%
Ag 328.068†	-3515.3	-5.25	ug/L	0.226	-5.25	µg/L	0.226	4.31%
Al†	87521.6	65900	ug/L	90.4	65900	µg/L	90.4	0.14%
As 193.696†	30.0	28.9	ug/L	6.42	28.9	µg/L	6.42	22.23%
B 249.677†	60.3	83.7	ug/L	1.24	83.7	µg/L	1.24	1.48%
Ba 233.527†	76872.7	407	ug/L	3.2	407	µg/L	3.2	0.78%
Be†	239.3	5.01	ug/L	0.194	5.01	µg/L	0.194	3.88%
Ca 317.933†	1564568.0	936000	ug/L	21103.7	936000	µg/L	21103.7	2.25%
Cd 228.802†	230.2	6.63	ug/L	0.118	6.63	µg/L	0.118	1.78%
Co 228.616†	3111.6	54.8	ug/L	0.22	54.8	µg/L	0.22	0.41%
Cr 267.716†	11458.0	102	ug/L	0.7	102	µg/L	0.7	0.67%
Cu 327.393†	12502.8	135	ug/L	1.5	135	µg/L	1.5	1.10%
Fe†	333988.9	154000	ug/L	948.2	154000	µg/L	948.2	0.62%
K†	22655.3	11500	ug/L	184.0	11500	µg/L	184.0	1.60%
Mg 279.077†	157380.0	511000	ug/L	3912.3	511000	µg/L	3912.3	0.77%
Mn 257.610†	5914316.9	5420	ug/L	12.6	5420	µg/L	12.6	0.23%
Mo 202.031†	-0.2	8.45	ug/L	0.799	8.45	µg/L	0.799	9.45%
Na 589.592†	35129.1	7150	ug/L	154.8	7150	µg/L	154.8	2.17%
Ni 231.604†	7336.8	114	ug/L	0.6	114	µg/L	0.6	0.55%
Pb 220.353†	968.6	97.5	ug/L	1.68	97.5	µg/L	1.68	1.72%
Sb 217.582†	-250.3	-20.6	ug/L	6.33	-20.6	µg/L	6.33	30.76%
Se 196.026†	31.5	13.7	ug/L	10.88	13.7	µg/L	10.88	79.26%
Sn 189.927†	-355.2	-9.98	ug/L	1.605	-9.98	µg/L	1.605	16.09%
Ti 334.940†	1498082.1	2020	ug/L	7.8	2020	µg/L	7.8	0.39%
Tl 190.801†	-22.2	1.91	ug/L	2.552	1.91	µg/L	2.552	133.96%
V 290.880†	26540.3	193	ug/L	2.3	193	µg/L	2.3	1.19%
Zn 206.200†	28784.8	515	ug/L	2.4	515	µg/L	2.4	0.47%

Sequence No.: 27
Sample ID: 10259055006_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 141
Date Collected: 3/13/2014 10:07:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259055006_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-6002.4	-0.843	mg/L	0.0153				1.82%
Y 371.029	6845013.6	4.05	mg/L	0.013				0.33%
Ag 328.068†	-6513.6	5.05	ug/L	1.656	5.05	µg/L	1.656	32.82%
Al†	502333.0	378000	ug/L	11956.2	378000	µg/L	11956.2	3.16%
As 193.696†	-100.7	27.5	ug/L	10.58	27.5	µg/L	10.58	38.50%
B 249.677†	278.7	371	ug/L	5.1	371	µg/L	5.1	1.37%
Ba 233.527†	267707.1	1420	ug/L	5.6	1420	µg/L	5.6	0.40%
Be†	938.5	19.6	ug/L	0.20	19.6	µg/L	0.20	1.04%
Ca 317.933†	2331904.7	1400000	ug/L	49656.2	1400000	µg/L	49656.2	3.56%
Cd 228.802†	90.9	10.9	ug/L	0.32	10.9	µg/L	0.32	2.97%
Co 228.616†	11514.1	203	ug/L	5.7	203	µg/L	5.7	2.83%
Cr 267.716†	58305.6	520	ug/L	10.0	520	µg/L	10.0	1.92%
Cu 327.393†	53561.0	567	ug/L	9.7	567	µg/L	9.7	1.72%
Fe†	1076537.1	497000	ug/L	9811.1	497000	µg/L	9811.1	1.98%
K†	186695.7	94600	ug/L	891.6	94600	µg/L	891.6	0.94%
Mg 279.077†	202831.8	658000	ug/L	12044.7	658000	µg/L	12044.7	1.83%
Mn 257.610†	9880196.4	9090	ug/L	9.5	9090	µg/L	9.5	0.10%
Mo 202.031†	56.5	30.0	ug/L	0.62	30.0	µg/L	0.62	2.05%
Na 589.592†	26259.7	5320	ug/L	82.2	5320	µg/L	82.2	1.54%
Ni 231.604†	33728.4	523	ug/L	10.8	523	µg/L	10.8	2.07%
Pb 220.353†	1834.9	245	ug/L	8.3	245	µg/L	8.3	3.37%
Sb 217.582†	-486.5	6.71	ug/L	20.204	6.71	µg/L	20.204	300.93%
Se 196.026†	-90.7	-70.0	ug/L	14.52	-70.0	µg/L	14.52	20.75%
Sn 189.927†	-385.6	0.496	ug/L	2.9704	0.496	µg/L	2.9704	598.92%
Ti 334.940†	3533684.8	4790	ug/L	19.9	4790	µg/L	19.9	0.42%
Tl 190.801†	-41.8	24.2	ug/L	5.88	24.2	µg/L	5.88	24.24%
V 290.880†	90235.3	659	ug/L	4.8	659	µg/L	4.8	0.73%
Zn 206.200†	66630.0	1190	ug/L	28.4	1190	µg/L	28.4	2.38%

Sequence No.: 28
Sample ID: 10259055007_B18873Dx1
Analyst: IP
Initial Sample Wt:
Dilution:

Autosampler Location: 142
Date Collected: 3/13/2014 10:13:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 10259055007_B18873Dx1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	-5791.6	-0.813	mg/L	0.0052				0.63%
Y 371.029	6846988.5	4.05	mg/L	0.031				0.78%
Ag 328.068†	-6519.8	3.43	ug/L	0.688	3.43	µg/L	0.688	20.07%
Al†	454623.2	342000	ug/L	3767.6	342000	µg/L	3767.6	1.10%
As 193.696†	-40.3	56.8	ug/L	7.41	56.8	µg/L	7.41	13.05%
B 249.677†	252.4	338	ug/L	2.8	338	µg/L	2.8	0.83%
Ba 233.527†	244953.7	1300	ug/L	5.4	1300	µg/L	5.4	0.42%
Be†	839.5	17.6	ug/L	0.13	17.6	µg/L	0.13	0.75%
Ca 317.933†	2621639.8	1570000	ug/L	56789.9	1570000	µg/L	56789.9	3.62%
Cd 228.802†	75.0	10.2	ug/L	0.72	10.2	µg/L	0.72	7.00%
Co 228.616†	11540.9	203	ug/L	2.9	203	µg/L	2.9	1.43%
Cr 267.716†	52131.0	465	ug/L	3.0	465	µg/L	3.0	0.64%
Cu 327.393†	52504.7	556	ug/L	6.1	556	µg/L	6.1	1.10%
Fe†	1027348.6	474000	ug/L	3130.5	474000	µg/L	3130.5	0.66%
K†	172114.6	87200	ug/L	837.9	87200	µg/L	837.9	0.96%
Mg 279.077†	228570.8	742000	ug/L	3788.0	742000	µg/L	3788.0	0.51%
Mn 257.610†	9869002.5	9070	ug/L	13.6	9070	µg/L	13.6	0.15%
Mo 202.031†	-32.6	24.4	ug/L	2.12	24.4	µg/L	2.12	8.68%
Na 589.592†	23992.6	4860	ug/L	77.0	4860	µg/L	77.0	1.58%
Ni 231.604†	33308.9	516	ug/L	6.7	516	µg/L	6.7	1.30%
Pb 220.353†	1948.2	246	ug/L	4.2	246	µg/L	4.2	1.70%
Sb 217.582†	-475.8	8.78	ug/L	21.475	8.78	µg/L	21.475	244.69%
Se 196.026†	-57.5	-49.3	ug/L	33.41	-49.3	µg/L	33.41	67.82%
Sn 189.927†	-404.8	6.06	ug/L	3.684	6.06	µg/L	3.684	60.78%
Ti 334.940†	3356650.1	4540	ug/L	19.1	4540	µg/L	19.1	0.42%
Tl 190.801†	-53.8	14.7	ug/L	13.86	14.7	µg/L	13.86	94.08%
V 290.880†	81888.7	596	ug/L	4.4	596	µg/L	4.4	0.74%
Zn 206.200†	64747.7	1160	ug/L	13.7	1160	µg/L	13.7	1.18%

Sequence No.: 30
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 3/13/2014 10:26:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Ar 363.268	1265.1	0.178	mg/L	0.0085				4.77%
Y 371.029	7365477.0	4.35	mg/L	0.074				1.70%
Ag 328.068†	9667.9	58.3	ug/L	1.10	58.3	µg/L	1.10	1.90%
QC value within limits for Ag 328.068 Recovery = 116.54%								
Al†	778864.3	586000	ug/L	5592.5	586000	µg/L	5592.5	0.95%
QC value within limits for Al Recovery = 117.25%								
As 193.696†	-74.9	113	ug/L	2.1	113	µg/L	2.1	1.86%
QC value within limits for As 193.696 Recovery = 113.19%								
B 249.677†	837.0	1020	ug/L	23.4	1020	µg/L	23.4	2.29%
QC value within limits for B 249.677 Recovery = 102.06%								
Ba 233.527†	19576.1	99.8	ug/L	1.06	99.8	µg/L	1.06	1.06%
QC value within limits for Ba 233.527 Recovery = 99.76%								
Be†	2834.4	59.3	ug/L	0.56	59.3	µg/L	0.56	0.94%
QC value within limits for Be Recovery = 118.65%								
Ca 317.933†	901545.5	540000	ug/L	11947.7	540000	µg/L	11947.7	2.21%
QC value within limits for Ca 317.933 Recovery = 107.92%								
Cd 228.802†	6313.2	105	ug/L	0.8	105	µg/L	0.8	0.77%
QC value within limits for Cd 228.802 Recovery = 105.11%								
Co 228.616†	5225.5	92.0	ug/L	1.04	92.0	µg/L	1.04	1.13%
QC value within limits for Co 228.616 Recovery = 92.01%								
Cr 267.716†	11349.6	101	ug/L	1.0	101	µg/L	1.0	0.96%
QC value within limits for Cr 267.716 Recovery = 101.23%								
Cu 327.393†	9233.9	104	ug/L	1.6	104	µg/L	1.6	1.50%
QC value within limits for Cu 327.393 Recovery = 104.19%								
Fe†	438563.1	202000	ug/L	1325.7	202000	µg/L	1325.7	0.66%
QC value within limits for Fe Recovery = 101.15%								
K†	11367.7	5760	ug/L	80.5	5760	µg/L	80.5	1.40%
QC value within limits for K Recovery = 115.21%								
Mg 279.077†	158805.8	515000	ug/L	5822.6	515000	µg/L	5822.6	1.13%
QC value within limits for Mg 279.077 Recovery = 103.05%								
Mn 257.610†	129724.0	102	ug/L	3.0	102	µg/L	3.0	2.93%
QC value within limits for Mn 257.610 Recovery = 101.70%								
Mo 202.031†	1746.6	96.6	ug/L	1.00	96.6	µg/L	1.00	1.04%
QC value within limits for Mo 202.031 Recovery = 96.56%								
Na 589.592†	20789.4	4190	ug/L	43.5	4190	µg/L	43.5	1.04%
QC value within limits for Na 589.592 Recovery = 119.84%								
Ni 231.604†	5709.3	88.5	ug/L	0.60	88.5	µg/L	0.60	0.67%
QC value within limits for Ni 231.604 Recovery = 88.46%								
Pb 220.353†	-478.2	114	ug/L	1.5	114	µg/L	1.5	1.32%
QC value within limits for Pb 220.353 Recovery = 113.95%								
Sb 217.582†	325.0	213	ug/L	4.2	213	µg/L	4.2	1.99%
QC value within limits for Sb 217.582 Recovery = 106.49%								
Se 196.026†	129.7	220	ug/L	13.3	220	µg/L	13.3	6.05%
QC value within limits for Se 196.026 Recovery = 110.16%								
Sn 189.927†	2113.3	447	ug/L	3.9	447	µg/L	3.9	0.86%
QC value within limits for Sn 189.927 Recovery = 89.38%								
Ti 334.940†	85392.1	106	ug/L	2.8	106	µg/L	2.8	2.61%
QC value within limits for Ti 334.940 Recovery = 106.13%								
Tl 190.801†	129.0	98.6	ug/L	4.41	98.6	µg/L	4.41	4.47%
QC value within limits for Tl 190.801 Recovery = 98.59%								
V 290.880†	13452.5	89.2	ug/L	2.38	89.2	µg/L	2.38	2.67%
QC value within limits for V 290.880 Recovery = 89.17%								
Zn 206.200†	5670.0	102	ug/L	0.9	102	µg/L	0.9	0.86%
QC value within limits for Zn 206.200 Recovery = 101.50%								

All analyte(s) passed QC.

Sequence No.: 1 **Autosampler Location: 4**
Sample ID: ICV **Date Collected: 3/13/2014 10:30:53 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
User canceled analysis.

Sequence No.: 26 **Autosampler Location: 6**
Sample ID: ICSA **Date Collected: 3/13/2014 10:31:18 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	1443.8	0.203	mg/L	0.0063				3.10%
Y 371.029	7343262.7	4.34	mg/L	0.030				0.70%
Ag 328.068†	-2090.8	3.65	ug/L	0.724	3.65	µg/L	0.724	19.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	744219.0	560000	ug/L	10290.6	560000	µg/L	10290.6	1.84%
QC value within limits for Al Recovery = 112.03%								
As 193.696†	-197.7	13.6	ug/L	11.70	13.6	µg/L	11.70	85.73%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	-16.7	-6.48	ug/L	6.173	-6.48	µg/L	6.173	95.19%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1222.4	2.10	ug/L	0.042	2.10	µg/L	0.042	2.02%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	-20.6	-0.430	ug/L	0.0537	-0.430	µg/L	0.0537	12.48%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	853725.0	511000	ug/L	21058.4	511000	µg/L	21058.4	4.12%
QC value within limits for Ca 317.933 Recovery = 102.20%								
Cd 228.802†	-44.4	2.88	ug/L	0.084	2.88	µg/L	0.084	2.92%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	73.6	1.30	ug/L	0.295	1.30	µg/L	0.295	22.80%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	351.8	3.14	ug/L	0.325	3.14	µg/L	0.325	10.36%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1387.5	-3.72	ug/L	0.360	-3.72	µg/L	0.360	9.67%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	408424.2	188000	ug/L	735.1	188000	µg/L	735.1	0.39%
QC value within limits for Fe Recovery = 94.20%								
K†	431.9	219	ug/L	21.1	219	µg/L	21.1	9.63%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	147427.1	478000	ug/L	1648.6	478000	µg/L	1648.6	0.34%
QC value within limits for Mg 279.077 Recovery = 95.67%								
Mn 257.610†	18591.5	0.697	ug/L	0.5850	0.697	µg/L	0.5850	83.95%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-267.5	-2.75	ug/L	0.875	-2.75	µg/L	0.875	31.85%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	223.1	9.27	ug/L	9.120	9.27	µg/L	9.120	98.32%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	119.7	1.86	ug/L	0.121	1.86	µg/L	0.121	6.54%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1457.3	24.9	ug/L	5.63	24.9	µg/L	5.63	22.61%
QC value greater than the upper limit for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	-240.5	2.97	ug/L	7.371	2.97	µg/L	7.371	248.51%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	-8.0	20.4	ug/L	7.18	20.4	µg/L	7.18	35.15%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-392.9	-20.5	ug/L	1.49	-20.5	µg/L	1.49	7.28%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	9195.2	2.85	ug/L	0.700	2.85	µg/L	0.700	24.54%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-16.7	8.70	ug/L	3.408	8.70	µg/L	3.408	39.17%
QC value within limits for Tl 190.801 Recovery = Not calculated								

V 290.880†	-1169.2	-21.9 ug/L	1.64	-21.9 µg/L	1.64	7.49%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	336.3	6.02 ug/L	0.340	6.02 µg/L	0.340	5.65%
QC value within limits for Zn 206.200 Recovery = Not calculated						

QC Failed. Continue with analysis.

User canceled analysis.

Sequence No.: 28 **Autosampler Location: 7**
Sample ID: CRDLA **Date Collected: 3/13/2014 10:35:12 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CRDLA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	7207.4	1.01	mg/L	0.002				0.21%
Y 371.029	8272272.6	4.89	mg/L	0.036				0.74%
Ag 328.068†	1982.4	9.05	ug/L	0.131	9.05	µg/L	0.131	1.45%
QC value within limits for Ag 328.068 Recovery = 90.50%								
Al†	278.9	210	ug/L	4.5	210	µg/L	4.5	2.16%
QC value within limits for Al Recovery = 104.96%								
As 193.696†	21.5	16.1	ug/L	2.83	16.1	µg/L	2.83	17.60%
QC value within limits for As 193.696 Recovery = 80.54%								
B 249.677†	102.2	123	ug/L	1.6	123	µg/L	1.6	1.32%
QC value within limits for B 249.677 Recovery = 81.90%								
Ba 233.527†	1793.7	9.57	ug/L	0.100	9.57	µg/L	0.100	1.05%
QC value within limits for Ba 233.527 Recovery = 95.75%								
Be†	233.3	4.88	ug/L	0.150	4.88	µg/L	0.150	3.08%
QC value within limits for Be Recovery = 97.66%								
Ca 317.933†	833.8	499	ug/L	16.1	499	µg/L	16.1	3.22%
QC value within limits for Ca 317.933 Recovery = 99.81%								
Cd 228.802†	186.5	2.99	ug/L	0.038	2.99	µg/L	0.038	1.25%
QC value within limits for Cd 228.802 Recovery = 99.76%								
Co 228.616†	546.4	9.62	ug/L	0.141	9.62	µg/L	0.141	1.46%
QC value within limits for Co 228.616 Recovery = 96.21%								
Cr 267.716†	1072.7	9.57	ug/L	0.082	9.57	µg/L	0.082	0.85%
QC value within limits for Cr 267.716 Recovery = 95.68%								
Cu 327.393†	959.1	9.68	ug/L	0.845	9.68	µg/L	0.845	8.73%
QC value within limits for Cu 327.393 Recovery = 96.80%								
Fe†	166.8	76.9	ug/L	11.34	76.9	µg/L	11.34	14.74%
QC value greater than the upper limit for Fe Recovery = 153.87%								
K†	5129.4	2600	ug/L	16.4	2600	µg/L	16.4	0.63%
QC value within limits for K Recovery = 103.97%								
Mg 279.077†	153.1	497	ug/L	2.1	497	µg/L	2.1	0.43%
QC value within limits for Mg 279.077 Recovery = 99.34%								
Mn 257.610†	5500.6	5.04	ug/L	0.045	5.04	µg/L	0.045	0.89%
QC value within limits for Mn 257.610 Recovery = 100.79%								
Mo 202.031†	204.0	9.99	ug/L	0.486	9.99	µg/L	0.486	4.87%
QC value less than the lower limit for Mo 202.031 Recovery = 66.58%								
Na 589.592†	4859.8	989	ug/L	17.3	989	µg/L	17.3	1.75%
QC value within limits for Na 589.592 Recovery = 98.93%								
Ni 231.604†	1303.6	20.2	ug/L	0.21	20.2	µg/L	0.21	1.03%
QC value within limits for Ni 231.604 Recovery = 100.99%								
Pb 220.353†	101.4	8.58	ug/L	0.179	8.58	µg/L	0.179	2.08%
QC value within limits for Pb 220.353 Recovery = 85.81%								
Sb 217.582†	38.4	13.9	ug/L	1.14	13.9	µg/L	1.14	8.23%
QC value less than the lower limit for Sb 217.582 Recovery = 69.56%								
Se 196.026†	18.3	26.1	ug/L	1.00	26.1	µg/L	1.00	3.84%
QC value greater than the upper limit for Se 196.026 Recovery = 130.52%								
Sn 189.927†	355.3	65.7	ug/L	0.77	65.7	µg/L	0.77	1.17%
QC value within limits for Sn 189.927 Recovery = 87.65%								
Ti 334.940†	17599.1	24.0	ug/L	0.35	24.0	µg/L	0.35	1.44%
QC value within limits for Ti 334.940 Recovery = 95.89%								
Tl 190.801†	30.4	18.5	ug/L	0.26	18.5	µg/L	0.26	1.43%
QC value within limits for Tl 190.801 Recovery = 92.39%								
V 290.880†	2043.0	15.6	ug/L	0.85	15.6	µg/L	0.85	5.41%
QC value within limits for V 290.880 Recovery = 104.24%								
Zn 206.200†	1177.7	21.1	ug/L	0.21	21.1	µg/L	0.21	1.01%
QC value within limits for Zn 206.200 Recovery = 105.42%								

QC Failed. Continue with analysis.

Sequence No.: 30
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/13/2014 10:44:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	6804.6	0.955	mg/L	0.0192				2.01%
Y 371.029	8102570.3	4.79	mg/L	0.064				1.34%
Ag 328.068†	228324.3	1040	ug/L	12.5	1040	µg/L	12.5	1.20%
QC value within limits for Ag 328.068 Recovery = 104.24%								
Al†	14439.8	10900	ug/L	160.7	10900	µg/L	160.7	1.48%
QC value within limits for Al Recovery = 108.69%								
As 193.696†	2696.9	2020	ug/L	33.9	2020	µg/L	33.9	1.68%
QC value within limits for As 193.696 Recovery = 100.76%								
B 249.677†	1619.6	1950	ug/L	20.6	1950	µg/L	20.6	1.06%
QC value within limits for B 249.677 Recovery = 97.37%								
Ba 233.527†	375640.7	2010	ug/L	32.4	2010	µg/L	32.4	1.62%
QC value within limits for Ba 233.527 Recovery = 100.26%								
Be†	100569.6	2100	ug/L	54.7	2100	µg/L	54.7	2.60%
QC value within limits for Be Recovery = 105.24%								
Ca 317.933†	17658.1	10600	ug/L	119.6	10600	µg/L	119.6	1.13%
QC value within limits for Ca 317.933 Recovery = 105.69%								
Cd 228.802†	127239.2	2040	ug/L	33.8	2040	µg/L	33.8	1.66%
QC value within limits for Cd 228.802 Recovery = 102.05%								
Co 228.616†	115758.7	2040	ug/L	34.7	2040	µg/L	34.7	1.70%
QC value within limits for Co 228.616 Recovery = 101.92%								
Cr 267.716†	229217.4	2040	ug/L	30.8	2040	µg/L	30.8	1.51%
QC value within limits for Cr 267.716 Recovery = 102.23%								
Cu 327.393†	212078.1	2140	ug/L	39.8	2140	µg/L	39.8	1.86%
QC value within limits for Cu 327.393 Recovery = 107.00%								
Fe†	22068.8	10200	ug/L	76.6	10200	µg/L	76.6	0.75%
QC value within limits for Fe Recovery = 101.80%								
K†	21429.3	10900	ug/L	277.9	10900	µg/L	277.9	2.56%
QC value within limits for K Recovery = 108.59%								
Mg 279.077†	3166.1	10300	ug/L	110.8	10300	µg/L	110.8	1.08%
QC value within limits for Mg 279.077 Recovery = 102.71%								
Mn 257.610†	2226857.2	2050	ug/L	9.8	2050	µg/L	9.8	0.48%
QC value within limits for Mn 257.610 Recovery = 102.50%								
Mo 202.031†	40482.3	1980	ug/L	32.0	1980	µg/L	32.0	1.61%
QC value within limits for Mo 202.031 Recovery = 99.06%								
Na 589.592†	51228.8	10400	ug/L	270.9	10400	µg/L	270.9	2.60%
QC value within limits for Na 589.592 Recovery = 104.29%								
Ni 231.604†	131734.8	2040	ug/L	35.4	2040	µg/L	35.4	1.74%
QC value within limits for Ni 231.604 Recovery = 102.05%								
Pb 220.353†	23553.6	1980	ug/L	22.0	1980	µg/L	22.0	1.11%
QC value within limits for Pb 220.353 Recovery = 99.18%								
Sb 217.582†	5642.3	2040	ug/L	38.6	2040	µg/L	38.6	1.89%
QC value within limits for Sb 217.582 Recovery = 102.14%								
Se 196.026†	1439.6	2060	ug/L	51.9	2060	µg/L	51.9	2.52%
QC value within limits for Se 196.026 Recovery = 102.96%								
Sn 189.927†	10244.7	1900	ug/L	28.9	1900	µg/L	28.9	1.53%
QC value within limits for Sn 189.927 Recovery = 94.76%								
Ti 334.940†	1466067.8	2000	ug/L	2.6	2000	µg/L	2.6	0.13%
QC value within limits for Ti 334.940 Recovery = 99.87%								
Tl 190.801†	3542.7	2150	ug/L	57.9	2150	µg/L	57.9	2.69%
QC value within limits for Tl 190.801 Recovery = 107.67%								
V 290.880†	266896.8	2040	ug/L	34.7	2040	µg/L	34.7	1.70%
QC value within limits for V 290.880 Recovery = 102.14%								
Zn 206.200†	111304.0	1990	ug/L	30.1	1990	µg/L	30.1	1.51%
QC value within limits for Zn 206.200 Recovery = 99.63%								

All analyte(s) passed QC.

Sequence No.: 31 **Autosampler Location: 10**
Sample ID: CCB **Date Collected: 3/13/2014 10:48:25 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Ar 363.268	7302.3	1.03	mg/L	0.009				0.91%
Y 371.029	8363072.2	4.94	mg/L	0.044				0.88%
Ag 328.068†	122.3	0.558	ug/L	0.4652	0.558	µg/L	0.4652	83.32%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al†	32.6	24.6	ug/L	6.55	24.6	µg/L	6.55	26.64%
QC value within limits for Al Recovery = Not calculated								
As 193.696†	-1.0	-0.724	ug/L	1.7208	-0.724	µg/L	1.7208	237.60%
QC value within limits for As 193.696 Recovery = Not calculated								
B 249.677†	1.9	2.32	ug/L	2.691	2.32	µg/L	2.691	116.03%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.2	0.049	ug/L	0.0485	0.049	µg/L	0.0485	98.86%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be†	0.4	0.008	ug/L	0.0774	0.008	µg/L	0.0774	922.82%
QC value within limits for Be Recovery = Not calculated								
Ca 317.933†	9.7	5.81	ug/L	6.634	5.81	µg/L	6.634	114.15%
QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 228.802†	16.6	0.267	ug/L	0.0507	0.267	µg/L	0.0507	18.97%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	7.1	0.126	ug/L	0.1383	0.126	µg/L	0.1383	109.85%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-14.7	-0.131	ug/L	0.1869	-0.131	µg/L	0.1869	142.59%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-8.6	-0.086	ug/L	0.7696	-0.086	µg/L	0.7696	891.71%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe†	8.8	4.07	ug/L	2.181	4.07	µg/L	2.181	53.57%
QC value within limits for Fe Recovery = Not calculated								
K†	135.8	68.8	ug/L	88.61	68.8	µg/L	88.61	128.74%
QC value within limits for K Recovery = Not calculated								
Mg 279.077†	-0.4	-1.34	ug/L	7.608	-1.34	µg/L	7.608	567.02%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	168.4	0.155	ug/L	0.0364	0.155	µg/L	0.0364	23.40%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	115.4	5.65	ug/L	1.324	5.65	µg/L	1.324	23.44%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Na 589.592†	93.4	19.0	ug/L	7.37	19.0	µg/L	7.37	38.78%
QC value within limits for Na 589.592 Recovery = Not calculated								
Ni 231.604†	61.8	0.958	ug/L	0.2473	0.958	µg/L	0.2473	25.82%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-10.3	-0.860	ug/L	0.4140	-0.860	µg/L	0.4140	48.15%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 217.582†	-4.7	-1.71	ug/L	1.255	-1.71	µg/L	1.255	73.42%
QC value within limits for Sb 217.582 Recovery = Not calculated								
Se 196.026†	2.7	3.84	ug/L	5.853	3.84	µg/L	5.853	152.46%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	3.0	0.551	ug/L	0.4769	0.551	µg/L	0.4769	86.59%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	191.2	0.260	ug/L	0.0476	0.260	µg/L	0.0476	18.27%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-2.3	-1.39	ug/L	0.878	-1.39	µg/L	0.878	63.05%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	67.8	0.519	ug/L	0.3526	0.519	µg/L	0.3526	67.97%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-3.0	-0.054	ug/L	0.0746	-0.054	µg/L	0.0746	136.99%
QC value within limits for Zn 206.200 Recovery = Not calculated								

All analyte(s) passed QC.

Pace Analytical®

Analytical Data Package

Prepared by:

Pace Analytical Services - Minnesota

Pace Project No.: 10259055

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Pace Analytical®

InOrganic

Wet Chemistry

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SAMPLE NO.

SB-6 1.5-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Lab Sample ID: 10259055001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	pH at 25 Degrees C	8.6		Std. Units	1	03/10/2014 14:35

SAMPLE NO.

SB-6 15-16.5'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Lab Sample ID: 10259055002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	pH at 25 Degrees C	8.0		Std. Units	1	03/10/2014 14:36

SAMPLE NO.

SB-7 1.5-3'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Lab Sample ID: 10259055003 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	pH at 25 Degrees C	8.3		Std. Units	1	03/10/2014 14:37

SAMPLE NO.

SB-7 17-18'

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Lab Sample ID: 10259055004 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	pH at 25 Degrees C	8.0		Std. Units	1	03/10/2014 14:38

SAMPLE NO.

SB-8 1.5-2.5"

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Lab Sample ID: 10259055005 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	pH at 25 Degrees C	8.8		Std. Units	1	03/10/2014 14:43

SAMPLE NO.

SB-8 14-15"

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Lab Sample ID: 10259055006 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	pH at 25 Degrees C	7.9		Std. Units	1	03/10/2014 14:44

SAMPLE NO.

DUP-002

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Lab Sample ID: 10259055007 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	pH at 25 Degrees C	7.8		Std. Units	1	03/10/2014 14:33

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Initial Calibration Verification Source: 4761

Continuing Calibration Verification Source:

Concentration Units: mg/L Instrument ID: 10WT53

	Initial Calibration Verification			
	03/10/2014 14:13			
Analyte	True	Found	%R	Control Limit
pH at 25 Degrees C	2.0	2.1	105.0	95-105

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Initial Calibration Verification Source: 11717

Continuing Calibration Verification Source:

Concentration Units: mg/L Instrument ID: 10WT53

	Initial Calibration Verification			
	03/10/2014 14:15			
Analyte	True	Found	%R	Control Limit
pH at 25 Degrees C	12.45	12.4	99.5	99-101

FORM II INORGANIC-1

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Initial Calibration Verification Source: 10343

Continuing Calibration Verification Source: 10343

Concentration Units: mg/L Instrument ID: 10WT53

	Initial Calibration Verification				Continuing Calibration Verification						
	03/10/2014 14:16				03/10/2014 14:39			03/10/2014 15:02			Control Limit
Analyte	True	Found	%R	Control Limit	True	Found	%R	True	Found	%R	
pH at 25 Degrees C	5.0	5.0	100.4	98-102	5.0	5.0	100.6	5.0	5.0	99.2	98-102

SAMPLE NO.

1635853DUP

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Matrix: Solid Concentration Units: Std. Units

Percent Moisture: _____ Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
pH at 25 Degrees C	3	7.6	7.6	0.3

SAMPLE NO.

1635854DUP

FORM VI INORGANIC-2
DUPLICATES

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Matrix: Solid Concentration Units: Std. Units

Percent Moisture: _____ Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
pH at 25 Degrees C	3	8.0	8.0	0.9

SAMPLE NO.

1635852LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Matrix: Solid

Analyte	Units	True	Found	%R	Limits	
pH at 25 Degrees C	Std. Units	5.0	5.0	100	98	102

FORM IX INORGANIC-1
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Preparation Method: EPA 9045 Instrument ID: 10WT53

Concentration Units: Std. Units

Analyte	PQL	MDL	MDL Date
pH at 25 Degrees C	0.10	0.10	06/20/2013

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Preparation Method: EPA 9045 Batch: WET 34603

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
1635852	1635852	03/10/2014	1	1
1635853	1635853	03/10/2014	1	1
1635854	1635854	03/10/2014	1	1
10259055001	SB-6 1.5-3'	03/10/2014	1	1
10259055002	SB-6 15-16.5'	03/10/2014	1	1
10259055003	SB-7 1.5-3'	03/10/2014	1	1
10259055004	SB-7 17-18'	03/10/2014	1	1
10259055005	SB-8 1.5-2.5"	03/10/2014	1	1
10259055006	SB-8 14-15"	03/10/2014	1	1
10259055007	DUP-002	03/10/2014	1	1

FORM XIII INORGANIC-1
ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10259055 Contract: BP-IL SS#5482

Instrument ID: 10WT53 Analysis Method: EPA 9045

Start Date: 03/10/2014 13:47 End Date: 03/10/2014 15:02

Sample Name	Lab Sample ID	D/F	Date	Time	pH 25
10422529CAL1	10422529CAL1	1	03/10/2014	13:47	X
10422534CAL2	10422534CAL2	1	03/10/2014	13:48	X
10422531CAL3	10422531CAL3	1	03/10/2014	13:49	X
10422532ICVA	10422532ICVA	1	03/10/2014	14:13	X
10422533ICVB	10422533ICVB	1	03/10/2014	14:15	X
10422530ICV	10422530ICV	1	03/10/2014	14:16	X
1635852LCS	1635852	1	03/10/2014	14:16	X
10256148009	10256148009	1	03/10/2014	14:25	X
1635853DUP	1635853	1	03/10/2014	14:26	X
DUP-002	10259055007	1	03/10/2014	14:33	X
SB-6 1.5-3'	10259055001	1	03/10/2014	14:35	X
SB-6 15-16.5'	10259055002	1	03/10/2014	14:36	X
SB-7 1.5-3'	10259055003	1	03/10/2014	14:37	X
SB-7 17-18'	10259055004	1	03/10/2014	14:38	X
10422526CCV	10422526CCV	1	03/10/2014	14:39	X
SB-8 1.5-2.5"	10259055005	1	03/10/2014	14:43	X
SB-8 14-15"	10259055006	1	03/10/2014	14:44	X
10259041002	10259041002	1	03/10/2014	14:46	X
1635854DUP	1635854	1	03/10/2014	14:47	X
10422527CCV	10422527CCV	1	03/10/2014	15:02	X

Pace Analytical Prep Log Report

Batch Information: WET 34603 Soil pH Prep

Template Version: F-MN-I-351-Rev.00 (13Dec2013)

Extracted By	HNKH	Instrument	10BALB	Batch Notes		Reviewed By	KEO
Reviewed By Date	03/11/2014 11:33:08:028						

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Initial Weight (g)	Extraction Start Date/Time	Extraction End Date/Time	DI Water (mL)	Sample Notes
9045 S	PS	**10256148011**	20.02	03/10/2014 08:49:31	03/10/2014 10:31:08	10953 (20)	
9045 S	RQS	**10256148009**	20.07	03/10/2014 08:57:42	03/10/2014 10:31:11	10953 (20)	
9045 S	DUP	**1635853**	20.09	03/10/2014 09:00:48	03/10/2014 10:31:13	10953 (20)	
9045 S	PS	**10256148010**	20.03	03/10/2014 09:04:02	03/10/2014 10:31:15	10953 (20)	
9045 S	PS	**10259055007**	20.01	03/10/2014 09:08:30	03/10/2014 10:31:17	10953 (20)	
9045 S	PS	**10259055001**	20.06	03/10/2014 09:10:17	03/10/2014 10:31:19	10953 (20)	
9045 S	PS	**10259055002**	20.03	03/10/2014 09:15:45	03/10/2014 10:31:21	10953 (20)	
9045 S	PS	**10259055003**	20.02	03/10/2014 09:22:43	03/10/2014 10:31:23	10953 (20)	
9045 S	PS	**10259055004**	20.04	03/10/2014 09:26:54	03/10/2014 10:31:25	10953 (20)	
9045 S	PS	**10259055005**	20.01	03/10/2014 09:30:44	03/10/2014 10:31:27	10953 (20)	
9045 S	PS	**10259055006**	20.05	03/10/2014 09:35:38	03/10/2014 10:31:30	10953 (20)	
9045 S	PS	**10259041001**	20.04	03/10/2014 09:38:59	03/10/2014 10:31:32	10953 (20)	
9045 S	RQS	**10259041002**	20.02	03/10/2014 09:42:45	03/10/2014 10:31:34	10953 (20)	
9045 S	DUP	**1635854**	20.04	03/10/2014 09:46:32	03/10/2014 10:31:36	10953 (20)	
9045 S	PS	**10259453001**	20.02	03/10/2014 09:48:50	03/10/2014 10:31:38	10953 (20)	
9045 S	PS	**10259480002**	20.04	03/10/2014 09:51:04	03/10/2014 10:31:40	10953 (20)	
9045 S	PS	**10259480004**	20.06	03/10/2014 09:58:59	03/10/2014 10:31:42	10953 (20)	
9045 S	PS	**10259480005**	20.07	03/10/2014 10:00:32	03/10/2014 10:31:44	10953 (20)	
9045 S	PS	**10259480006**	20.06	03/10/2014 10:02:13	03/10/2014 10:31:47	10953 (20)	

Pace Analytical: Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Initial Weight (g)	Extraction Start Date/Time	Extraction End Date/Time	DI Water (mL)	Sample Notes
9045 S	PS	**10259552001**	20.07	03/10/2014 10:03:45	03/10/2014 10:31:49	10953 (20)	
9045 S	PS	**10259721001**	20.02	03/10/2014 09:19:23	03/10/2014 10:31:51	10953 (20)	

Pace Analytical · Prep Log Report

Batch Information: WET 34603 Soil pH **Template Version: F-MN-I-362-Rev.00 (13Dec2013)**

Daily Cal Slope	100	Cal Date	3/10/14	Instrument	10WT53
Batch Notes		Reviewed By	KEO	Reviewed By Date	03/11/2014 11:36:11:268

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	Run Date/Time	Matrix	pH @ 25 deg C	Sample Temp (C)	Analyzed By	Sample Notes	PH-SPK (mL)	CAL-STD
WET pH_Q	CAL1	**CAL1**	Y	03/10/2014 13:47:38	Water	7.01	21.8	HNKH			10170 (1)
WET pH_Q	CAL2	**CAL2**	Y	03/10/2014 13:48:20	Water	4.00	21.5	HNKH			10168 (1)
WET pH_Q	CAL3	**CAL3**	Y	03/10/2014 13:49:05	Water	10.06	21.5	HNKH			10171 (1)
WET pH_Q	ICVA	**ICVA**	Y	03/10/2014 14:13:33	Water	2.10	21.7	HNKH	E		4761 (1)
WET pH_Q	ICVB	**ICVB**	Y	03/10/2014 14:15:10	Water	12.39	21.7	HNKH	B		11717 (1)
WET pH_Q	ICV	**ICV**	Y	03/10/2014 14:16:03	Water	5.02	21.5	HNKH	D		10343 (1)
9045 S	LCS	**1635852**	Y	03/10/2014 14:16:44	Solid	5.02	21.7	HNKH	D	10343 (1)	
9045 S	PS	**10256148011**	Y	03/10/2014 14:24:59	Solid	7.90	21.5	HNKH			
9045 S	RQS	**10256148009**	Y	03/10/2014 14:25:33	Solid	7.57	21.8	HNKH			
9045 S	DUP	**1635853**	Y	03/10/2014 14:26:16	Solid	7.55	21.9	HNKH			
9045 S	PS	**10256148010**	Y	03/10/2014 14:32:26	Solid	8.40	21.8	HNKH			
9045 S	PS	**10259055007**	Y	03/10/2014 14:33:34	Solid	7.83	21.8	HNKH			
9045 S	PS	**10259055001**	Y	03/10/2014 14:35:01	Solid	8.64	21.8	HNKH			
9045 S	PS	**10259055002**	Y	03/10/2014 14:36:24	Solid	8.03	21.8	HNKH			
9045 S	PS	**10259055003**	Y	03/10/2014 14:37:37	Solid	8.27	21.8	HNKH			
9045 S	PS	**10259055004**	Y	03/10/2014 14:38:42	Solid	8.02	21.7	HNKH			
WET pH_Q	CCV	**CCV**	Y	03/10/2014 14:39:31	Water	5.03	21.3	HNKH	D	10343 (1)	10343 (1)
9045 S	PS	**10259055005**	Y	03/10/2014 14:43:38	Solid	8.79	21.7	HNKH			
9045 S	PS	**10259055006**	Y	03/10/2014 14:44:09	Solid	7.88	21.9	HNKH			

Prep Log Report

QC Rule	Sample Type	Lab Sample ID	Select	Run Date/Time	Matrix	pH @ 25 deg C	Sample Temp (C)	Analyzed By	Sample Notes	PH-SPK (mL)	CAL-STD
9045 S	PS	**10259041001**	Y	03/10/2014 14:44:58	Solid	7.98	22	HNKH			
9045 S	RQS	**10259041002**	Y	03/10/2014 14:46:29	Solid	8.02	21.8	HNKH			
9045 S	DUP	**1635854**	Y	03/10/2014 14:47:56	Solid	7.95	22.6	HNKH			
9045 S	PS	**10259453001**	Y	03/10/2014 14:49:46	Solid	6.25	21.9	HNKH			
9045 S	PS	**10259480002**	Y	03/10/2014 14:58:54	Solid	9.89	22	HNKH			
9045 S	PS	**10259480004**	Y	03/10/2014 14:59:47	Solid	9.67	22	HNKH			
9045 S	PS	**10259480005**	Y	03/10/2014 15:00:31	Solid	9.66	22.2	HNKH			
9045 S	PS	**10259480006**	Y	03/10/2014 15:01:07	Solid	9.65	22.2	HNKH			
WET pH_Q	CCV	**CCV**	Y	03/10/2014 15:02:41	Water	4.96	21.8	HNKH	D	10343 (1)	10343 (1)
9045 S	PS	**10259552001**	Y	03/10/2014 15:04:53	Solid	6.27	21.9	HNKH			
9045 S	PS	**10259721001**	Y	03/10/2014 15:06:33	Solid	8.39	21.9	HNKH			
WET pH_Q	CCV	**CCV**	Y	03/10/2014 15:07:29	Water	5.03	21.7	HNKH	D	10343 (1)	10343 (1)

Standard Notes:

10168: pH 4.00 Buffer 10074-508
10170: pH 7.00 Buffer 10074-507
10171: pH 10.00 buffer 10074-509
10343: pH 5.00 Buffer 10074-413
11717: pH 12.45 Buffer - 2 bottles marked A-B
4761: pH 2.00 Buffer 9726-557 - 6 bottles marked A-

Appendix E

Bills of Lading

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shippers of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number."

Date 1/24/14 Bill of Lading No. WEDRON-1

Shipper No.

Memorandum Heritage Transport (Name of Carrier) Carrier No. MVI-0314460-OH

TO:		FROM:	
Consignee	Heritage Transport	Shipper	STANTEC
Street	15330 Canal Bank Road	Street	Wedron Road West of RT71
Destination	Lemont IL Zip Code 60439	Origin	Wedron, IL Zip Code
Route:	Vehicle No.	SCAC	Emergency Response Phone Number 1151

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions	Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360.	Weight (Subject to Correction)*	Rate or Class	CHARGES
1 DM		Soil Borings (pending analysis)		lbs		
		Stantec Wedron site				

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight".

REMIT C.O.D. TO: ADDRESS | C.O.D. Amt. $ | C.O.D. FEE: PREPAID ☐ COLLECT ☐ $ | TOTAL CHARGES: $

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____ _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

FREIGHT CHARGES
Check Appropriate Box:
☐ Freight prepaid
☐ Collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (ii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply, unless a specific exception from the requirement is provided in the Regulation for a particular material.

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203: Proper shipping name, hazardous class, UN identification number, packing group, and subsidiary class(es).

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 United States Code, Sections 14706(c (1)(A) and (B).

SHIPPER [illegible] – STANTEC 1-24-14

CARRIER [signature]

PER

PER Heritage Transport

This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation.

Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response information was made available and/or carrier has the U.S. Department of Transportation emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.

STRAIGHT BILL OF LADING – SHORT FORM

NOTICE: Shipper of hazardous materials must enter 24-hour emergency response telephone number under "Emergency Response Phone Number.

Date 2/26/[redacted] WEDRON-2 Bill of Lading No.

Shipper No.

Memorandum Heritage Transport (Name of Carrier) Carrier No. PW-0314460-OH

TO: Consignee	Heritage Environmental	FROM: Shipper	(STANTEC) BP
Street	15330 Canal Bank Road	Street	Wedron Road west of RT71
Destination	Lemont, IL Zip Code 60439	Origin	Wedron, IL Zip Code
Route:	Vehicle No. 1055	SCAC	Emergency Response Phone Number 877-737-1151

No. Shipping Units	+HM	Kind of Packaging, Description of Articles Special Marks and Exceptions (Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of National Motor Freight Classification, Item 360.)	Weight (Subject to Correction)*	Rate or Class	CHARGES
1 DM		Soil Borings (pending analysis) (1 x 55DM, 100#)	100 LBS.		
		Stantec Wedron site----Pick up #2			
					Job # 935249
		CRA: 414-803-7726			

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading state whether weight is "carrier's or shipper's weight".

REMIT C.O.D. TO: ADDRESS | C.O.D. Amt. $ | C.O.D. FEE: PREPAID ☐ COLLECT ☐ $ | TOTAL CHARGES: $

Note–Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding

$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other charges.

_____ (Signature of Consignor)

FREIGHT CHARGES

Check Appropriate Box:

☐ Freight prepaid

☐ Collect

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classifications in effect on the date hereof, if this is a rail or a rail-water shipment or (2) in the applicable motor carrier classification or tariff, if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Mark with "RQ" if appropriate to designate Hazardous Materials as defined in the U.S. Department of Transportation Regulations governing the transportation of hazardous materials. The use of this column is an optional method for identifying hazardous materials on Bills of Lading per 172.201(a)(1) (ii) of Title 49 Code of Federal Regulations. Also when shipping hazardous materials, the shipper's certification statement prescribed in section 172.204(a) of the Federal Regulations, as indicated on the Bill of Lading does apply, unless a specific exception from the requirements is provided in the Regulation for a particular material.

The format and content of hazardous item list is the responsibility of individual company interpretation of requirements as described in 49 Code of Federal Regulations 172, Subpart C-Shipping Papers. Such description consists of the following per Sections 172.201 (Hazardous Material Table) and Sections 172.202 and 172.203: Proper shipping name, hazardous class, UN identification number, packing group, and subsidiary class(es).

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 United States Code, Sections 14706(c (1)(A) and (B).

SHIPPER _____

PER _____

CARRIER _____

PER Heritage Transport

This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation.

Carrier acknowledges receipt of packages and any required placards. Carrier certifies emergency response information was made available and/or carrier has the U.S. Department of Transportation emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.