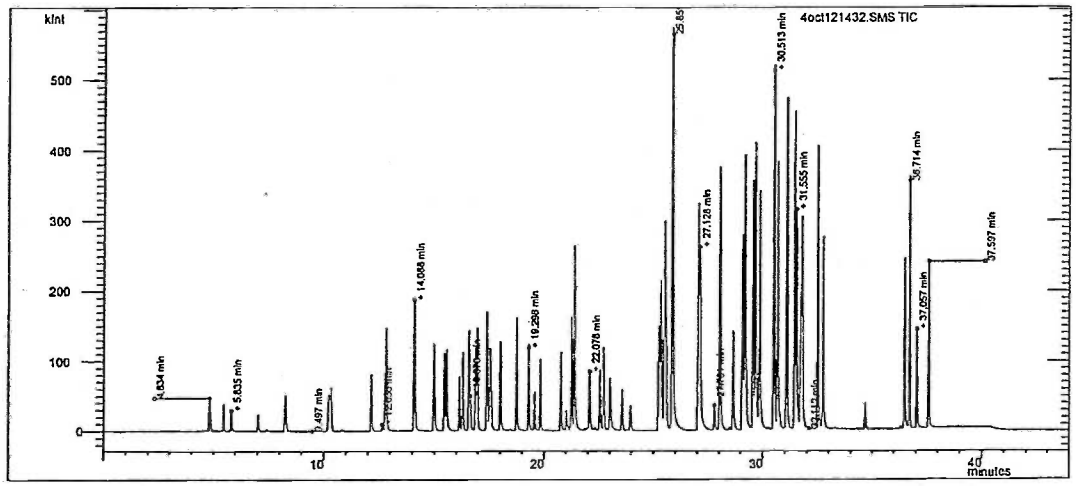
RT	Quan Ions	Compound Name	R.Match	Area	Amount
28.035	105.0+120.0	Isopropylbenzene	993	725215	26.564
28.456	75.0	cis-1,4-Dichloro-2-butene	997	11739	27.081
28.656	95.0	p-Bromofluorobenzene (Surr4)	999	126291	25.593
29.094	83.0+85.0	1,1,2,2-Tetrachloroethane	995	96567	24.879
29.079	77.0+158.0	Bromobenzene	980	303121	25.610
29.187	91.0+120.0	n-Propylbenzene	996	843094	26.487
29.259	75.0	trans-1,4-Dichloro-2-butene	979	53520	26.748
29.258	75.0+110.0	1,2,3-Trichloropropane	983	69666	26.219
29.547	91.0+126.0	2-Chlorotoluene	998	524827	25.924
29.666	105.0+120.0	1,3,5-Trimethylbenzene	998	778813	26.077
29.548	91.0+126.0	4-Chlorotoluene	996	525072	26.804
30.511	119.0+91.0	tert-Butylbenzene	862	954309	26.009
30.689	105.0+120.0	1,2,4-Trimethylbenzene	998	709015	24.788
31.452	117.0	Pentachloroethane	409	100776	25.959
31.091	105.0+134.0	sec-Butylbenzene	992	786672	26.526
30.509	119.0	4-Isopropyltoluene	883	564818	26.051
31.551	146.0+148.0	1,3-Dichlorobenzene	997	396431	25.899
31.550	146.0+148.0	1,4-Dichlorobenzene	996	396431	25.779
32.112	91.0	Benzyl Chloride	571		N/A
32.503	91.0+134.0	n-Butylbenzene	996	558314	24.211
32.749	146.0+148.0	1,2-Dichlorobenzene	996	371330	25.612
34.674	75.0+157.0	1,2-Dibromo-3-chloropropane	986	38182	24.347
37.586	180.0+182.0	1,2,4-Trichlorobenzene	993	216336	21.968
36.704	225.0+226.0	Hexachlorobutadiene	973	152600	23.345
37.050	128.0	Naphthalene	996	161869	22.154
37.589	180.0+182.0	1,2,3-Trichlorobenzene	997	214042	22.406

524 Volatile Organics

Associated Labs
GCMS # 4

Data File Name:	C:\VarianWS\data\4Oct12\4oct121432.SMS	**Calc Method:**	C:\VarianWS\methods\ms4_524_101812_35C.mth
Sample Name:	25ppb 524.2 lcs 2	**Acquisition Date:**	10/20/2012 7:45:15 PM
Inj. Notes:	w#12090604	**Operator Name:**	NZ



RT	Quan Ions	Compound Name	R.Match	Area	Amount
18.028	96.0+70.0	Fluorobenzene (IS1)	903	207630	25.000
25.251	117.0	Chlorobenzene-d5(IS2)	986	180677	25.000
31.735	152.0	1,4-Dichlorobenzene-d4(IS3)	995	102201	25.000
4.834	85.0	Dichlorodifluoromethane	726	81779	22.879
5.468	50.0+52.0+49.0	Chloromethane	993	69888	22.179
5.835	62.0+64.0	Vinyl Chloride	997	75408	24.099
7.033	94.0+45.0	Bromomethane	971	20269	16.663
7.421	45.0+49.0	Chloroethane	779	3540	17.098
8.271	101.0+103.0	Trichlorofluoromethane	978	182944	23.314
9.497	59.0	Ethyl ether	639		N/A
10.244	101.0+151.0	Trichlorotrifluoroethane (Freon 113)	920	101101	21.725
11.202	56.0	Acrolein	375		N/A
10.322	96.0+61.0+98.0	1,1-Dichloroethene	944	147696	24.497
10.883	142.0	Iodomethane	957	1857	0.421
10.818	43.0+58.0	Acetone	894	5959	16.805
11.515	45.0	Isopropyl alcohol (2-Propanol)	789		N/A
10.957	76.0	Carbon disulfide	747		N/A
13.346	41.0	Acetonitrile	888		N/A
11.623	41.0+39.0	Allyl chloride	819		N/A
12.151	84.0+49.0+86.0	Methylene Chloride	907	176820	26.007
12.638	59.0	tert-Butanol	952	17294	117.362
12.785	73.0	Methyl-tert-butyl-ether (MTBE)	968	97919	25.327
12.824	61.0+96.0	t-1,2-Dichloroethene	980	198354	27.458

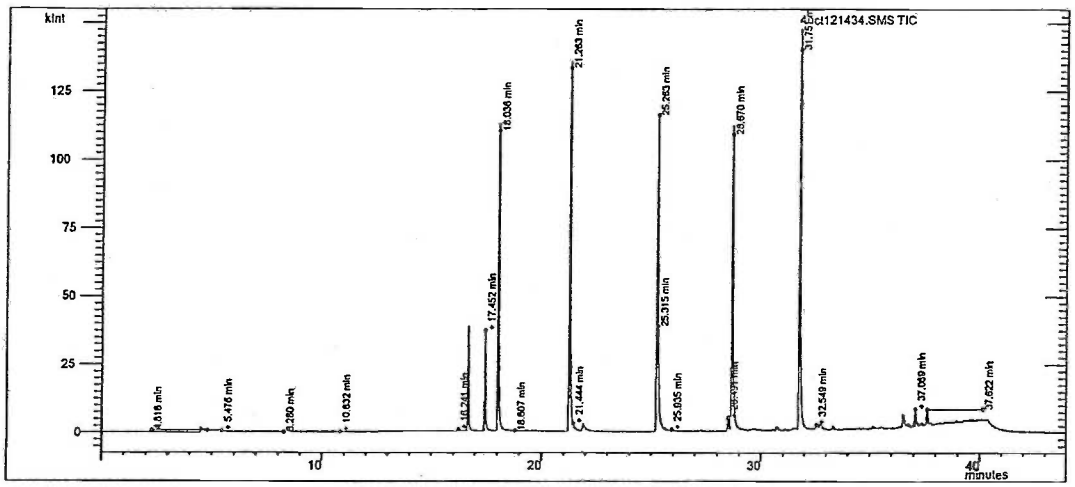
RT	Quan Ions	Compound Name	R.Match	Area	Amount
13.070	53.0	Acrylonitrile	643		N/A
13.360	41.0	n-Hexane	852		N/A
14.094	63.0	1,1-Dichloroethane	974	121342	25.697
14.298	43.0	Vinyl acetate	221		N/A
14.088	45.0	Isopropyl ether	986	194052	28.627
14.201	53.0	Chloroprene	62		N/A
14.987	59.0	Ethyl-tert-butyl-ether	990	210120	27.201
15.470	77.0+41.0	2,2-Dichloropropane	998	168527	26.542
15.576	61.0+96.0	c-1,2-Dichloroethene	995	193500	28.080
15.683	43.0+72.0	2-Butanone (MEK)	584	11437	19.735
15.948	54.0	Propionitrile	289		N/A
16.140	130.0+49.0	Bromochloromethane	991	106161	25.869
17.556	39.0	Methacrylonitrile	335	22616	21.914
16.300	83.0+85.0	Chloroform	993	228783	26.022
16.601	97.0+99.0	1,1,1-Trichloroethane	997	285323	26.454
16.670	111.0	Dibromofluoromethane (Surr1)	985	43572	25.475
16.894	117.0+119.0	Carbon Tetrachloride	991	224116	25.561
16.296	42.0+72.0	Tetrahydrofuran	644	1021	2.962
16.968	75.0+39.0	1,1-Dichloropropene	998	171463	25.421
17.401	78.0	Benzene	986	182129	25.806
17.443	65.0	1,2-Dichloroethane-d4 (Surr2)	978	61461	26.449
17.607	62.0+64.0	1,2-Dichloroethane	975	125268	27.484
17.557	73.0+55.0+87.0	tert-Amyl-methyl-ether	996	208622	27.588
18.761	130.0+132.0+95.0	Trichloroethene	995	232650	25.176
19.298	41.0	Methyl methacrylate	724	44659	33.225
19.297	63.0+65.0	1,2-Dichloropropane	998	65613	27.473
19.571	93.0+174.0	Dibromomethane	992	71701	24.165
20.281	88.0	1,4-Dioxane	450		N/A
19.842	83.0+85.0	Bromodichloromethane	998	181417	27.179
20.393	63.0+43.0	2-Chloroethyl vinyl ether	787		N/A
20.768	75.0+77.0+39.0	c-1,3-Dichloropropene	971	191009	27.161
21.036	43.0+58.0	4-Methyl-2-pentanone	991	48963	25.929
21.251	98.0	Toluene-d8 (Surr3)	996	239120	24.732
21.406	92.0+91.0	Toluene	998	610415	26.771
22.004	69.0	Ethyl methacrylate	774	1430	1.072
23.070	43.0+58.0+100.0	2-Hexanone	989	31739	23.787
22.078	75.0+77.0	t-1,3-Dichloropropene	990	89487	26.890
22.540	97.0+99.0	1,1,2-Trichloroethane	998	90715	26.220
22.705	164.0+166.0	Tetrachloroethene	997	24851	24.223
23.003	76.0+41.0	1,3-Dichloropropane	998	133720	26.389
17.440	41.0	Isobutyl alcohol	231		N/A
23.571	129.0+127.0	Dibromochloromethane	996	117101	26.766
23.966	107.0+109.0	1,2-Dibromoethane	999	113248	25.695
25.749	91.0	1-Chlorohexane	981		N/A
25.337	112.0+114.0	Chlorobenzene	991	383737	26.274
25.506	106.0+91.0	Ethylbenzene	995	720743	26.557
25.573	131.0+117.0	1,1,1,2-Tetrachloroethane	996	145072	26.764
25.859	106.0+91.0	p,m-Xylenes	998	1.439E6	55.517
27.053	106.0+91.0	o-Xylene	998	713806	27.202
27.128	104.0+78.0	Styrene	997	455395	28.882
27.791	171.0+173.0+175.0	Bromoform	986	63680	24.504

RT	Quan Ions	Compound Name	R.Match	Area	Amount
28.037	105.0+120.0	Isopropylbenzene	993	742333	26.452
28.418	75.0	cis-1,4-Dichloro-2-butene	690		N/A
28.657	95.0	p-Bromofluorobenzene (Surr4)	999	123430	24.333
29.094	83.0+85.0	1,1,2,2-Tetrachloroethane	994	101785	25.510
29.079	77.0+158.0	Bromobenzene	994	310813	25.546
29.187	91.0+120.0	n-Propylbenzene	996	872453	26.664
29.255	75.0	trans-1,4-Dichloro-2-butene	869	41752	20.299
29.257	75.0+110.0	1,2,3-Trichloropropane	993	58441	21.397
29.551	91.0+126.0	2-Chlorotoluene	998	545122	26.195
29.670	105.0+120.0	1,3,5-Trimethylbenzene	997	817530	26.629
29.551	91.0+126.0	4-Chlorotoluene	995	545122	27.071
30.515	119.0+91.0	tert-Butylbenzene	868	1.011E6	26.800
30.690	105.0+120.0	1,2,4-Trimethylbenzene	998	686357	23.343
31.457	117.0	Pentachloroethane	414	96095	24.080
31.095	105.0+134.0	sec-Butylbenzene	992	811178	26.608
30.513	119.0	4-Isopropyltoluene	885	598327	26.846
31.555	146.0+148.0	1,3-Dichlorobenzene	996	409605	26.032
31.553	146.0+148.0	1,4-Dichlorobenzene	997	405854	25.674
32.112	91.0	Benzyl Chloride	549		N/A
32.509	91.0+134.0	n-Butylbenzene	996	582306	24.565
32.753	146.0+148.0	1,2-Dichlorobenzene	995	386334	25.922
34.682	75.0+157.0	1,2-Dibromo-3-chloropropane	970	39359	24.415
37.593	180.0+182.0	1,2,4-Trichlorobenzene	988	233127	23.030
36.714	225.0+226.0	Hexachlorobutadiene	970	158337	23.564
37.057	128.0	Naphthalene	997	183996	24.497
37.597	180.0+182.0	1,2,3-Trichlorobenzene	997	229891	23.411

524 Volatile Organics

Associated Labs
GCMS # 4

Data File Name:	C:\VarianWS\data\4Oct12\4oct121434.SMS	**Calc Method:**	C:\VarianWS\methods\ms4_524_101812_35C.mth
Sample Name:	method blk 2	**Acquisition Date:**	10/20/2012 9:25:18 PM
Inj. Notes:	w#12090702	**Operator Name:**	NZ



RT	Quan Ions	Compound Name	R.Match	Area	Amount
18.036	96.0+70.0	Fluorobenzene (IS1)	891	184524	25.000
25.263	117.0	Chlorobenzene-d5(IS2)	987	154547	25.000
31.751	152.0	1,4-Dichlorobenzene-d4(IS3)	959	78118	25.000
4.818	85.0	Dichlorodifluoromethane	730		N/A
5.476	50.0+52.0+49.0	Chloromethane	583	64	0.023
5.905	62.0+64.0	Vinyl Chloride	685	16	0.006
7.014	94.0+45.0	Bromomethane	588		N/A
7.411	45.0+49.0	Chloroethane	516		N/A
8.280	101.0+103.0	Trichlorofluoromethane	825	87	0.012
9.497	59.0	Ethyl ether	637		N/A
10.209	101.0+151.0	Trichlorotrifluoroethane (Freon 113)	430		N/A
11.202	56.0	Acrolein	416		N/A
10.352	96.0+61.0+98.0	1,1-Dichloroethene	619	26	0.005
10.845	142.0	Iodomethane	833		N/A
10.832	43.0+58.0	Acetone	885	304	0.965
11.515	45.0	Isopropyl alcohol (2-Propanol)	823		N/A
10.957	76.0	Carbon disulfide	637		N/A
13.346	41.0	Acetonitrile	924		N/A
11.623	41.0+39.0	Allyl chloride	722		N/A
12.161	84.0+49.0+86.0	Methylene Chloride	878	577	0.096
12.615	59.0	tert-Butanol	634		N/A
12.750	73.0	Methyl-tert-butyl-ether (MTBE)	572		N/A
12.801	61.0+96.0	t-1,2-Dichloroethene	613		N/A

RT	Quan Ions	Compound Name	R.Match	Area	Amount
13.070	53.0	Acrylonitrile	279		N/A
13.360	41.0	n-Hexane	815		N/A
14.068	63.0	1,1-Dichloroethane	586		N/A
14.298	43.0	Vinyl acetate	623		N/A
14.055	45.0	Isopropyl ether	557		N/A
14.201	53.0	Chloroprene	604		N/A
14.968	59.0	Ethyl-tert-butyl-ether	427		N/A
15.440	77.0+41.0	2,2-Dichloropropane	721		N/A
15.554	61.0+96.0	c-1,2-Dichloroethene	614		N/A
15.719	43.0+72.0	2-Butanone (MEK)	464		N/A
15.948	54.0	Propionitrile	316		N/A
16.146	130.0+49.0	Bromochloromethane	628	36	0.010
17.528	39.0	Methacrylonitrile	339		N/A
16.318	83.0+85.0	Chloroform	615	44	0.006
16.584	97.0+99.0	1,1,1-Trichloroethane	576		N/A
16.680	111.0	Dibromofluoromethane (Surr1)	992	38880	25.579
16.861	117.0+119.0	Carbon Tetrachloride	417		N/A
16.241	42.0+72.0	Tetrahydrofuran	817	532	1.739
16.949	75.0+39.0	1,1-Dichloropropene	703		N/A
17.415	78.0	Benzene	352	73	0.012
17.452	65.0	1,2-Dichloroethane-d4 (Surr2)	987	55766	27.004
17.498	62.0+64.0	1,2-Dichloroethane	384	127	0.031
17.537	73.0+55.0+87.0	tert-Amyl-methyl-ether	320		N/A
18.807	130.0+132.0+95.0	Trichloroethene	882	199	0.025
19.397	41.0	Methyl methacrylate	731		N/A
19.273	63.0+65.0	1,2-Dichloropropane	825		N/A
19.543	93.0+174.0	Dibromomethane	766		N/A
20.281	88.0	1,4-Dioxane	399		N/A
19.821	83.0+85.0	Bromodichloromethane	354		N/A
20.393	63.0+43.0	2-Chloroethyl vinyl ether	608		N/A
20.738	75.0+77.0+39.0	c-1,3-Dichloropropene	478		N/A
21.012	43.0+58.0	4-Methyl-2-pentanone	391		N/A
21.263	98.0	Toluene-d8 (Surr3)	997	213473	25.812
21.444	92.0+91.0	Toluene	381	907	0.047
22.013	69.0	Ethyl methacrylate	636		N/A
23.027	43.0+58.0+100.0	2-Hexanone	405		N/A
22.043	75.0+77.0	t-1,3-Dichloropropene	328		N/A
22.504	97.0+99.0	1,1,2-Trichloroethane	548		N/A
22.669	164.0+166.0	Tetrachloroethene	803		N/A
22.981	76.0+41.0	1,3-Dichloropropane	688		N/A
17.440	41.0	Isobutyl alcohol	414		N/A
23.543	129.0+127.0	Dibromochloromethane	482		N/A
23.931	107.0+109.0	1,2-Dibromoethane	653	15	0.004
25.749	91.0	1-Chlorohexane	690		N/A
25.315	112.0+114.0	Chlorobenzene	248		N/A
25.481	106.0+91.0	Ethylbenzene	772		N/A
25.549	131.0+117.0	1,1,1,2-Tetrachloroethane	392		N/A
25.935	106.0+91.0	p,m-Xylenes	899	934	0.047
27.118	106.0+91.0	o-Xylene	847	443	0.022
27.302	104.0+78.0	Styrene	778	112	0.009
27.764	171.0+173.0+175.0	Bromoform	683		N/A

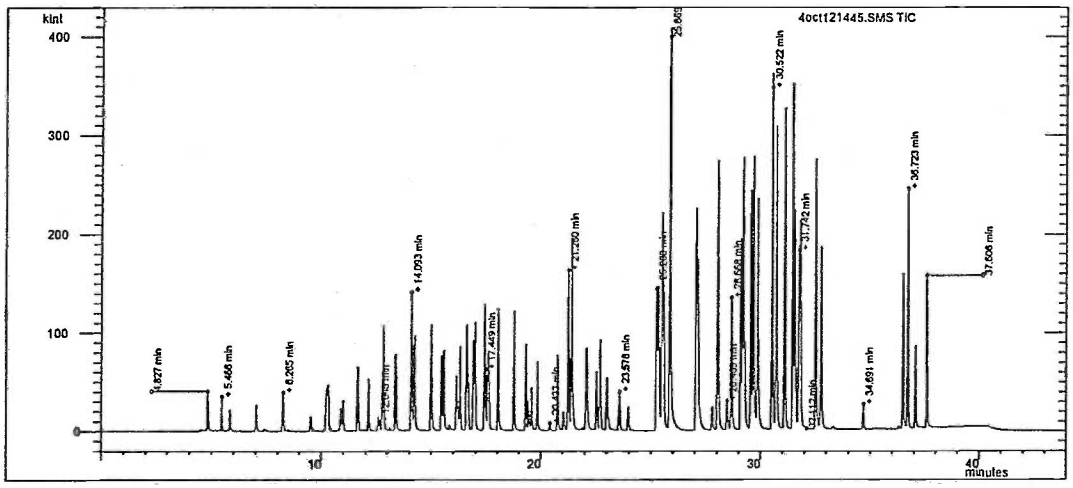
ALAB : 00341

RT	Quan Ions	Compound Name	R.Match	Area	Amount
28.000	105.0+120.0	Isopropylbenzene	854		N/A
28.491	75.0	cis-1,4-Dichloro-2-butene	679	152	0.446
28.670	95.0	p-Bromofluorobenzene (Surr4)	999	106389	27.439
29.090	83.0+85.0	1,1,2,2-Tetrachloroethane	564		N/A
29.044	77.0+158.0	Bromobenzene	815		N/A
29.148	91.0+120.0	n-Propylbenzene	850		N/A
29.229	75.0	trans-1,4-Dichloro-2-butene	660		N/A
29.231	75.0+110.0	1,2,3-Trichloropropane	602		N/A
29.517	91.0+126.0	2-Chlorotoluene	806		N/A
29.648	105.0+120.0	1,3,5-Trimethylbenzene	916	603	0.026
29.521	91.0+126.0	4-Chlorotoluene	825		N/A
30.485	119.0+91.0	tert-Butylbenzene	754		N/A
30.734	105.0+120.0	1,2,4-Trimethylbenzene	974	2526	0.112
31.431	117.0	Pentachloroethane	549		N/A
31.118	105.0+134.0	sec-Butylbenzene	924	1074	0.046
30.546	119.0	4-Isopropyltoluene	756	279	0.016
31.601	146.0+148.0	1,3-Dichlorobenzene	932	406	0.034
31.599	146.0+148.0	1,4-Dichlorobenzene	947	272	0.023
32.112	91.0	Benzyl Chloride	623		N/A
32.549	91.0+134.0	n-Butylbenzene	981	2832	0.156
32.833	146.0+148.0	1,2-Dichlorobenzene	938	274	0.024
34.645	75.0+157.0	1,2-Dibromo-3-chloropropane	739		N/A
37.615	180.0+182.0	1,2,4-Trichlorobenzene	993	7495	0.969
36.683	225.0+226.0	Hexachlorobutadiene	969		N/A
37.089	128.0	Naphthalene	996	6811	1.186
37.622	180.0+182.0	1,2,3-Trichlorobenzene	992	6497	0.866

524 Volatile Organics

Associated Labs
GCMS # 4

Data File Name:	C:\VarianWS\data\4Oct12\4oct121445.SMS	**Calc Method:**	C:\VarianWS\methods\ms4_524_101812_35C.mth
Sample Name:	20ppb 524.2 ccv 3	**Acquisition Date:**	10/21/2012 6:29:17 AM
Inj. Notes:	w#12090602	**Operator Name:**	NZ



RT	Quan Ions	Compound Name	R.Match	Area	Amount
18.034	96.0+70.0	Fluorobenzene (IS1)	888	205676	25.000
25.263	117.0	Chlorobenzene-d5(IS2)	991	178422	25.000
31.742	152.0	1,4-Dichlorobenzene-d4(IS3)	986	96935	25.000
4.827	85.0	Dichlorodifluoromethane	644	70361	19.871
5.466	50.0+52.0+49.0	Chloromethane	994	65097	20.855
5.829	62.0+64.0	Vinyl Chloride	997	56701	18.292 ✓
7.033	94.0+45.0	Bromomethane	957	22122	18.359
7.419	45.0+49.0	Chloroethane	781	3062	14.929
8.265	101.0+103.0	Trichlorofluoromethane	980	140408	18.063
9.528	59.0	Ethyl ether	958	12678	18.000
10.240	101.0+151.0	Trichlorotrifluoroethane (Freon 113)	915	83660	18.148
11.202	56.0	Acrolein	415		N/A
10.321	96.0+61.0+98.0	1,1-Dichloroethene	963	109365	18.312 ✓
10.877	142.0	Iodomethane	941	70355	16.104
10.818	43.0+58.0	Acetone	876	5028	14.315
11.515	45.0	Isopropyl alcohol (2-Propanol)	675		N/A
10.988	76.0	Carbon disulfide	665	84699	17.154
13.387	41.0	Acetonitrile	720	86617	19.835
11.656	41.0+39.0	Allyl chloride	967	169302	19.392
12.153	84.0+49.0+86.0	Methylene Chloride	894	119169	17.694
12.648	59.0	tert-Butanol	951	11488	78.705
12.790	73.0	Methyl-tert-butyl-ether (MTBE)	983	66472	17.356 ✓
12.827	61.0+96.0	t-1,2-Dichloroethene	983	143020	19.986

ALAB : 88413

RT	Quan Ions	Compound Name	R.Match	Area	Amount
13.102	53.0	Acrylonitrile	985	3456	14.608
13.386	41.0	n-Hexane	997	87314	19.944
14.098	63.0	1,1-Dichloroethane	978	96804	20.695
14.298	43.0	Vinyl acetate	174		N/A
14.093	45.0	Isopropyl ether	955	139995	20.849
14.237	53.0	Chloroprene	996	100041	20.171
14.994	59.0	Ethyl-tert-butyl-ether	978	150248	19.635
15.472	77.0+41.0	2,2-Dichloropropane	997	115644	18.386
15.580	61.0+96.0	c-1,2-Dichloroethene	995	137310	20.116
15.697	43.0+72.0	2-Butanone (MEK)	901	8395	14.623
15.971	54.0	Propionitrile	803	1554	15.919
16.147	130.0+49.0	Bromochloromethane	997	76636	18.852
17.565	39.0	Methacrylonitrile	304	15965	15.616
16.303	83.0+85.0	Chloroform	993	169952	19.514
16.606	97.0+99.0	1,1,1-Trichloroethane	997	211112	19.760
16.673	111.0	Dibromofluoromethane (Surr1)	983	42064	24.827
16.899	117.0+119.0	Carbon Tetrachloride	990	167160	19.246
16.208	42.0+72.0	Tetrahydrofuran	654	5563	16.300
16.973	75.0+39.0	1,1-Dichloropropene	997	129981	19.454
17.408	78.0	Benzene	985	134652	19.260
17.449	65.0	1,2-Dichloroethane-d4 (Surr2)	977	59224	25.728
17.613	62.0+64.0	1,2-Dichloroethane	989	89584	19.841
17.565	73.0+55.0+87.0	tert-Amyl-methyl-ether	997	139995	18.688
18.768	130.0+132.0+95.0	Trichloroethene	997	169837	18.611
19.437	41.0	Methyl methacrylate	998	25389	19.127
19.305	63.0+65.0	1,2-Dichloropropane	998	47444	20.116
19.577	93.0+174.0	Dibromomethane	993	52371	17.873
20.281	88.0	1,4-Dioxane	542		N/A
19.847	83.0+85.0	Bromodichloromethane	998	126468	19.186
20.433	63.0+43.0	2-Chloroethyl vinyl ether	729	4724	15.617
20.777	75.0+77.0+39.0	c-1,3-Dichloropropene	955	129783	18.688
21.047	43.0+58.0	4-Methyl-2-pentanone	994	30042	16.110
21.260	98.0	Toluene-d8 (Surr3)	997	238563	24.986
21.413	92.0+91.0	Toluene	997	447987	19.896
22.059	69.0	Ethyl methacrylate	989	19866	15.079
23.091	43.0+58.0+100.0	2-Hexanone	985	17978	13.644
22.087	75.0+77.0	t-1,3-Dichloropropene	983	58794	17.890
22.548	97.0+99.0	1,1,2-Trichloroethane	998	61306	17.944
22.711	164.0+166.0	Tetrachloroethene	997	19616	19.362
23.010	76.0+41.0	1,3-Dichloropropane	997	95536	19.092
17.440	41.0	Isobutyl alcohol	237		N/A
23.578	129.0+127.0	Dibromochloromethane	996	78556	18.183
23.977	107.0+109.0	1,2-Dibromoethane	998	77804	17.876
25.749	91.0	1-Chlorohexane	982		N/A
25.348	112.0+114.0	Chlorobenzene	995	260910	18.090
25.515	106.0+91.0	Ethylbenzene	995	520380	20.216
25.581	131.0+117.0	1,1,1,2-Tetrachloroethane	994	107800	20.968
25.869	106.0+91.0	p,m-Xylenes	998	1.006E6	40.940
27.062	106.0+91.0	o-Xylene	997	490571	19.710
27.139	104.0+78.0	Styrene	996	296365	19.817
27.802	171.0+173.0+175.0	Bromoform	988	42388	17.197

ALAB : 003444

RT	Quan Ions	Compound Name	R.Match	Area	Amount
28.048	105.0+120.0	Isopropylbenzene	992	535639	20.124
28.469	75.0	cis-1,4-Dichloro-2-butene	996	7351	17.394
28.668	95.0	p-Bromofluorobenzene (Surr4)	998	119950	24.931
29.104	83.0+85.0	1,1,2,2-Tetrachloroethane	996	68895	18.205
29.091	77.0+158.0	Bromobenzene	982	219012	18.979
29.198	91.0+120.0	n-Propylbenzene	996	615265	19.826
29.272	75.0	trans-1,4-Dichloro-2-butene	978	34654	17.763
29.271	75.0+110.0	1,2,3-Trichloropropane	985	47510	18.339
29.561	91.0+126.0	2-Chlorotoluene	997	370987	18.795
29.678	105.0+120.0	1,3,5-Trimethylbenzene	997	550403	18.902
29.560	91.0+126.0	4-Chlorotoluene	995	370994	19.424
30.525	119.0+91.0	tert-Butylbenzene	879	714926	19.985
30.703	105.0+120.0	1,2,4-Trimethylbenzene	998	467769	16.773
31.466	117.0	Pentachloroethane	440	73762	19.488
31.106	105.0+134.0	sec-Butylbenzene	990	573011	19.817
30.522	119.0	4-Isopropyltoluene	888	427117	20.205
31.565	146.0+148.0	1,3-Dichlorobenzene	997	278380	18.653
31.562	146.0+148.0	1,4-Dichlorobenzene	998	289148	19.285
32.112	91.0	Benzyl Chloride	438		N/A
32.517	91.0+134.0	n-Butylbenzene	995	393614	17.507
32.764	146.0+148.0	1,2-Dichlorobenzene	996	260901	18.457
34.691	75.0+157.0	1,2-Dibromo-3-chloropropane	966	26335	17.223
37.603	180.0+182.0	1,2,4-Trichlorobenzene	991	151416	15.770
36.723	225.0+226.0	Hexachlorobutadiene	973	115480	18.120
37.066	128.0	Naphthalene	996	109171	15.324
37.606	180.0+182.0	1,2,3-Trichlorobenzene	997	146729	15.754

VOLATILE CONTINUING CALIBRATION CHECK

EPA Method 8260A

Lab Name: Associated Labs Contract:

Lab Code: # 4 Case No.: SAS No.: SDG No.:

Instrument ID: Continuing Cal. Sample Date: 10/20/2012 Time: 6:39

Heated Purge (Y/N): No Initial Cal. Sample Date: 10/18/2012 10/18/2012

GC Column: ID: (mm) Initial Cal. Sample Time: 10:15 22:33

Initial Calibration File: C:\VarianWS\data\4Oct12\4oct121377.SMS

Lab File ID: c:\varianws\data\4oct12\4oct121416.SMS

RRF = (Area(sample)/Amount(sample))/(Area(standard)/Amount(standard))

Compound	RRF	MinRRF	Ci	Cc	% D	Max %D
Dichlorodifluoromethane	0.469	0.100	25.00	27.25	-9.0	20.0
Chloromethane	0.426	0.100	25.00	28.10	-12.4	20.0
Vinyl Chloride	0.385	0.100	25.00	25.53	-2.1	20.0
Bromomethane	0.137	0.100	25.00	23.42	6.3	20.0
Chloroethane	0.021	0.100	25.00	21.53	13.9	20.0
Trichlorofluoromethane	0.953	0.100	25.00	25.22	-0.9	20.0
Ethyl ether	0.090	0.100	25.00	26.39	-5.6	20.0
Trichlorotrifluoroethane (Freon 113)	0.562	0.100	25.00	25.08	-0.3	20.0
Acrolein	0.000	0.100	25.00	0.00	100.0	20.0
1,1-Dichloroethene	0.749	0.100	25.00	25.80	-3.2	20.0
Iodomethane	0.522	0.100	25.00	24.59	1.6	20.0
Acetone	0.037	0.100	25.00	21.85	12.6	20.0
Isopropyl alcohol (2-Propanol)	0.000	0.100	25.00	0.00	100.0	20.0
Carbon disulfide	0.580	0.100	25.00	24.16	3.4	20.0
Acetonitrile	0.593	0.100	25.00	27.93	-11.7	20.0
Allyl chloride	0.922	0.100	25.00	21.72	13.1	20.0
Methylene Chloride	0.661	0.100	25.00	20.17	19.3	20.0
tert-Butanol	0.020	0.100	125.00	137.56	-10.0	20.0
Methyl-tert-butyl-ether (MTBE)	0.499	0.100	25.00	26.80	-7.2	20.0
t-1,2-Dichloroethene	0.927	0.100	25.00	26.65	-6.6	20.0
Acrylonitrile	0.028	0.100	25.00	23.93	4.3	20.0
n-Hexane	0.593	0.100	25.00	27.86	-11.4	20.0
1,1-Dichloroethane	0.645	0.100	25.00	28.38	-13.5	20.0
Vinyl acetate	0.000	0.100	25.00	0.00	100.0	20.0
Isopropyl ether	0.990	0.100	25.00	30.33	-21.3	20.0
Chloroprene	0.692	0.100	25.00	28.70	-14.8	20.0
Ethyl-tert-butyl-ether	1.052	0.100	25.00	28.29	-13.2	20.0
2,2-Dichloropropane	0.762	0.100	25.00	24.91	0.4	20.0
c-1,2-Dichloroethene	0.953	0.100	25.00	28.72	-14.9	20.0
2-Butanone (MEK)	0.074	0.100	25.00	26.45	-5.8	20.0
Propionitrile	0.012	0.100	25.00	25.37	-1.5	20.0
Bromochloromethane	0.546	0.100	25.00	27.62	-10.5	20.0
Methacrylonitrile	0.135	0.100	25.00	27.23	-8.9	20.0
Chloroform	1.132	0.100	25.00	26.73	-6.9	20.0
1,1,1-Trichloroethane	1.374	0.100	25.00	26.45	-5.8	20.0
Dibromofluoromethane (Surr1)	0.214	0.100	25.00	26.02	-4.1	20.0

Compound	RRF	MinRRF	Ci	Cc	% D	Max %D
Carbon Tetrachloride	1.111	0.100	25.00	26.32	-5.3	20.0
Tetrahydrofuran	0.044	0.100	25.00	26.65	-6.6	20.0
1,1-Dichloropropene	0.880	0.100	25.00	27.07	-8.3	20.0
Benzene	0.946	0.100	25.00	27.83	-11.3	20.0
1,2-Dichloroethane-d4 (Surr2)	0.308	0.100	25.00	27.56	-10.3	20.0
1,2-Dichloroethane	0.631	0.100	25.00	28.75	-15.0	20.0
tert-Amyl-methyl-ether	1.017	0.100	25.00	27.92	-11.7	20.0
Trichloroethene	1.361	0.100	25.00	26.60	-6.4	20.0
Methyl methacrylate	0.228	0.100	25.00	30.69	-22.8	20.0
1,2-Dichloropropane	0.367	0.100	25.00	27.78	-11.1	20.0
Dibromomethane	0.438	0.100	25.00	26.70	-6.8	20.0
1,4-Dioxane	0.000	0.100	25.00	0.00	100.0	20.0
Bromodichloromethane	0.963	0.100	25.00	26.06	-4.2	20.0
2-Chloroethyl vinyl ether	0.044	0.100	25.00	25.85	-3.4	20.0
c-1,3-Dichloropropene	1.018	0.100	25.00	26.14	-4.6	20.0
4-Methyl-2-pentanone	0.292	0.100	25.00	27.92	-11.7	20.0
Toluene-d8 (Surr3)	1.327	0.100	25.00	24.79	0.8	20.0
Toluene	3.377	0.100	25.00	26.76	-7.0	20.0
Ethyl methacrylate	0.186	0.100	25.00	25.17	-0.7	20.0
2-Hexanone	0.179	0.100	25.00	24.20	3.2	20.0
t-1,3-Dichloropropene	0.484	0.100	25.00	26.29	-5.2	20.0
1,1,2-Trichloroethane	0.529	0.100	25.00	27.63	-10.5	20.0
Tetrachloroethene	0.147	0.100	25.00	25.96	-3.8	20.0
1,3-Dichloropropane	0.757	0.100	25.00	27.01	-8.0	20.0
Isobutyl alcohol	0.000	0.100	25.00	0.00	100.0	20.0
Dibromochloromethane	0.632	0.100	25.00	26.12	-4.5	20.0
1,2-Dibromoethane	0.654	0.100	25.00	26.82	-7.3	20.0
1-Chlorohexane	0.000	0.100	25.00	0.00	100.0	20.0
Chlorobenzene	2.073	0.100	25.00	25.64	-2.6	20.0
Ethylbenzene	7.259	0.100	25.00	27.34	-9.3	20.0
1,1,1,2-Tetrachloroethane	1.482	0.100	25.00	27.94	-11.7	20.0
p,m-Xylenes	7.041	0.100	50.00	55.53	-11.1	20.0
o-Xylene	7.051	0.100	25.00	27.46	-9.8	20.0
Styrene	4.330	0.100	25.00	28.07	-12.3	20.0
Bromoform	0.645	0.100	25.00	25.37	-1.5	20.0
Isopropylbenzene	7.509	0.100	25.00	27.35	-9.4	20.0
cis-1,4-Dichloro-2-butene	0.107	0.100	25.00	24.46	2.2	20.0
p-Bromofluorobenzene (Surr4)	1.243	0.100	25.00	25.04	-0.1	20.0
1,1,2,2-Tetrachloroethane	1.035	0.100	25.00	26.51	-6.1	20.0
Bromobenzene	3.200	0.100	25.00	26.88	-7.5	20.0
n-Propylbenzene	8.809	0.100	25.00	27.52	-10.1	20.0
trans-1,4-Dichloro-2-butene	0.558	0.100	25.00	27.71	-10.8	20.0
1,2,3-Trichloropropane	0.723	0.100	25.00	27.07	-8.3	20.0
2-Chlorotoluene	5.279	0.100	25.00	25.93	-3.7	20.0
1,3,5-Trimethylbenzene	7.772	0.100	25.00	25.87	-3.5	20.0
4-Chlorotoluene	5.263	0.100	25.00	26.71	-6.8	20.0
tert-Butylbenzene	9.999	0.100	25.00	27.09	-8.4	20.0
1,2,4-Trimethylbenzene	7.150	0.100	25.00	24.85	0.6	20.0
Pentachloroethane	0.994	0.100	25.00	25.45	-1.8	20.0
sec-Butylbenzene	8.101	0.100	25.00	27.16	-8.6	20.0

Compound	RRF	MinRRF	Ci	Cc	% D	Max %D
4-Isopropyltoluene	5.809	0.100	25.00	26.64	-6.5	20.0
1,3-Dichlorobenzene	4.066	0.100	25.00	26.41	-5.6	20.0
1,4-Dichlorobenzene	4.106	0.100	25.00	26.54	-6.2	20.0
Benzyl Chloride	0.000	0.100	25.00	0.00	100.0	20.0
n-Butylbenzene	5.727	0.100	25.00	24.69	1.2	20.0
1,2-Dichlorobenzene	3.868	0.100	25.00	26.52	-6.1	20.0
1,2-Dibromo-3-chloropropane	0.416	0.100	25.00	26.39	-5.6	20.0
1,2,4-Trichlorobenzene	2.284	0.100	25.00	23.06	7.7	20.0
Hexachlorobutadiene	1.601	0.100	25.00	24.34	2.6	20.0
Naphthalene	1.768	0.100	25.00	24.05	3.8	20.0
1,2,3-Trichlorobenzene	2.234	0.100	25.00	23.25	7.0	20.0

VOLATILE CONTINUING CALIBRATION CHECK

EPA Method 8260A

Lab Name: Associated Labs Contract:

Lab Code: # 4 Case No.: SAS No.: SDG No.:

Instrument ID: Continuing Cal. Sample Date: 10/20/2012 Time: 18:56

Heated Purge (Y/N): No Initial Cal. Sample Date: 10/18/2012 10/18/2012

GC Column: ID: (mm) Initial Cal. Sample Time: 10:15 22:33

Initial Calibration File: C:\VarianWS\data\4Oct12\4oct121377.SMS

Lab File ID: c:\varianws\data\4oct12\4oct121431.SMS

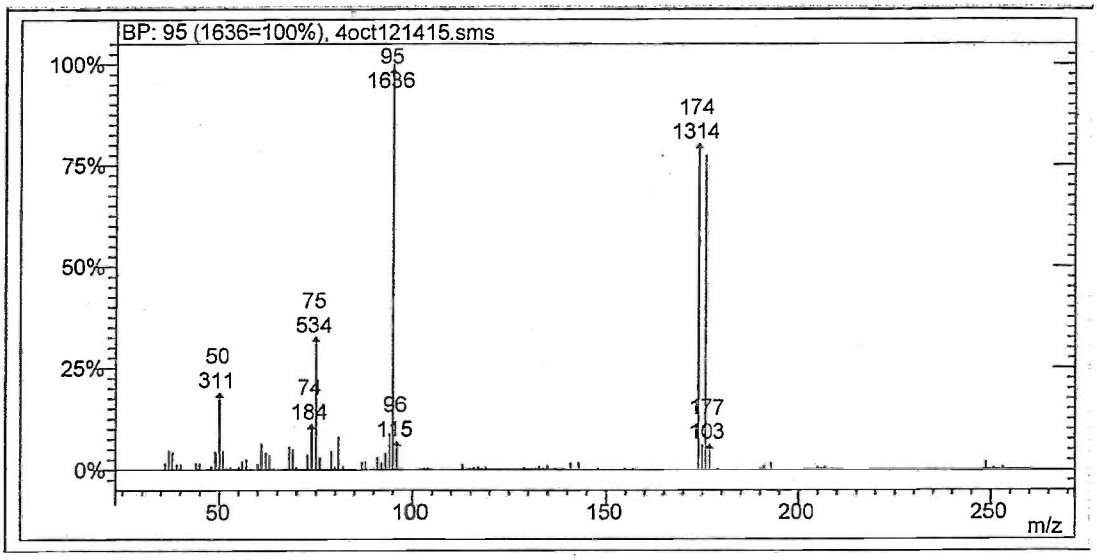
RRF = (Area(sample)/Amount(sample))/(Area(standard)/Amount(standard))

Compound	RRF	MinRRF	Ci	Cc	% D	Max %D
Dichlorodifluoromethane	0.000	0.100	25.00	0.01	100.0	20.0
Chloromethane	0.412	0.100	25.00	27.13	-8.5	20.0
Vinyl Chloride	0.358	0.100	25.00	23.76	5.0	20.0
Bromomethane	0.142	0.100	25.00	24.29	2.9	20.0
Chloroethane	0.019	0.100	25.00	19.53	21.9	20.0
Trichlorofluoromethane	0.900	0.100	25.00	23.83	4.7	20.0
Ethyl ether	0.082	0.100	25.00	23.89	4.5	20.0
Trichlorotrifluoroethane (Freon 113)	0.521	0.100	25.00	23.26	6.9	20.0
Acrolein	0.000	0.100	25.00	0.00	100.0	20.0
1,1-Dichloroethene	0.672	0.100	25.00	23.16	7.4	20.0
Iodomethane	0.431	0.100	25.00	20.27	18.9	20.0
Acetone	0.034	0.100	25.00	19.80	20.8	20.0
Isopropyl alcohol (2-Propanol)	0.000	0.100	25.00	0.00	100.0	20.0
Carbon disulfide	0.542	0.100	25.00	22.57	9.7	20.0
Acetonitrile	0.543	0.100	25.00	25.58	-2.3	20.0
Allyl chloride	1.107	0.100	25.00	26.08	-4.3	20.0
Methylene Chloride	0.825	0.100	25.00	25.21	-0.8	20.0
tert-Butanol	0.017	0.100	125.00	119.49	4.4	20.0
Methyl-tert-butyl-ether (MTBE)	0.438	0.100	25.00	23.54	5.8	20.0
t-1,2-Dichloroethene	0.897	0.100	25.00	25.78	-3.1	20.0
Acrylonitrile	0.026	0.100	25.00	22.76	9.0	20.0
n-Hexane	0.557	0.100	25.00	26.18	-4.7	20.0
1,1-Dichloroethane	0.604	0.100	25.00	26.54	-6.1	20.0
Vinyl acetate	0.000	0.100	25.00	0.00	100.0	20.0
Isopropyl ether	0.913	0.100	25.00	27.96	-11.8	20.0
Chloroprene	0.632	0.100	25.00	26.19	-4.8	20.0
Ethyl-tert-butyl-ether	0.970	0.100	25.00	26.06	-4.3	20.0
2,2-Dichloropropane	0.808	0.100	25.00	26.43	-5.7	20.0
c-1,2-Dichloroethene	0.883	0.100	25.00	26.61	-6.5	20.0
2-Butanone (MEK)	0.062	0.100	25.00	22.22	11.1	20.0
Propionitrile	0.009	0.100	25.00	18.80	24.8	20.0
Bromochloromethane	0.504	0.100	25.00	25.49	-1.9	20.0
Methacrylonitrile	0.118	0.100	25.00	23.73	5.1	20.0
Chloroform	1.058	0.100	25.00	24.99	0.0	20.0
1,1,1-Trichloroethane	1.312	0.100	25.00	25.25	-1.0	20.0
Dibromofluoromethane (Surr1)	0.204	0.100	25.00	24.75	1.0	20.0

Compound	RRF	MinRRF	Ci	Cc	% D	Max %D
Carbon Tetrachloride	1.064	0.100	25.00	25.20	-0.8	20.0
Tetrahydrofuran	0.035	0.100	25.00	21.02	15.9	20.0
1,1-Dichloropropene	0.828	0.100	25.00	25.47	-1.9	20.0
Benzene	0.856	0.100	25.00	25.17	-0.7	20.0
1,2-Dichloroethane-d4 (Surr2)	0.298	0.100	25.00	26.60	-6.4	20.0
1,2-Dichloroethane	0.586	0.100	25.00	26.69	-6.8	20.0
tert-Amyl-methyl-ether	0.936	0.100	25.00	25.70	-2.8	20.0
Trichloroethene	1.267	0.100	25.00	24.78	0.9	20.0
Methyl methacrylate	0.203	0.100	25.00	27.27	-9.1	20.0
1,2-Dichloropropane	0.357	0.100	25.00	26.98	-7.9	20.0
Dibromomethane	0.401	0.100	25.00	24.45	2.2	20.0
1,4-Dioxane	0.000	0.100	25.00	0.00	100.0	20.0
Bromodichloromethane	0.916	0.100	25.00	24.81	0.8	20.0
2-Chloroethyl vinyl ether	0.038	0.100	25.00	22.70	9.2	20.0
c-1,3-Dichloropropene	1.013	0.100	25.00	26.02	-4.1	20.0
4-Methyl-2-pentanone	0.255	0.100	25.00	24.43	2.3	20.0
Toluene-d8 (Surr3)	1.369	0.100	25.00	25.59	-2.3	20.0
Toluene	3.260	0.100	25.00	25.83	-3.3	20.0
Ethyl methacrylate	0.164	0.100	25.00	22.23	11.1	20.0
2-Hexanone	0.154	0.100	25.00	20.86	16.6	20.0
t-1,3-Dichloropropene	0.482	0.100	25.00	26.17	-4.7	20.0
1,1,2-Trichloroethane	0.498	0.100	25.00	26.03	-4.1	20.0
Tetrachloroethene	0.135	0.100	25.00	23.72	5.1	20.0
1,3-Dichloropropane	0.718	0.100	25.00	25.61	-2.4	20.0
Isobutyl alcohol	0.000	0.100	25.00	0.00	100.0	20.0
Dibromochloromethane	0.615	0.100	25.00	25.40	-1.6	20.0
1,2-Dibromoethane	0.623	0.100	25.00	25.54	-2.2	20.0
1-Chlorohexane	0.000	0.100	25.00	0.00	100.0	20.0
Chlorobenzene	2.024	0.100	25.00	25.03	-0.1	20.0
Ethylbenzene	7.076	0.100	25.00	26.65	-6.6	20.0
1,1,1,2-Tetrachloroethane	1.442	0.100	25.00	27.18	-8.7	20.0
p,m-Xylenes	6.851	0.100	50.00	54.03	-8.1	20.0
o-Xylene	6.725	0.100	25.00	26.19	-4.8	20.0
Styrene	4.165	0.100	25.00	27.00	-8.0	20.0
Bromoform	0.611	0.100	25.00	24.05	3.8	20.0
Isopropylbenzene	7.294	0.100	25.00	26.56	-6.3	20.0
cis-1,4-Dichloro-2-butene	0.118	0.100	25.00	27.08	-8.3	20.0
p-Bromofluorobenzene (Surr4)	1.270	0.100	25.00	25.59	-2.4	20.0
1,1,2,2-Tetrachloroethane	0.971	0.100	25.00	24.88	0.5	20.0
Bromobenzene	3.049	0.100	25.00	25.61	-2.4	20.0
n-Propylbenzene	8.480	0.100	25.00	26.49	-5.9	20.0
trans-1,4-Dichloro-2-butene	0.538	0.100	25.00	26.75	-7.0	20.0
1,2,3-Trichloropropane	0.701	0.100	25.00	26.22	-4.9	20.0
2-Chlorotoluene	5.279	0.100	25.00	25.92	-3.7	20.0
1,3,5-Trimethylbenzene	7.833	0.100	25.00	26.08	-4.3	20.0
4-Chlorotoluene	5.281	0.100	25.00	26.80	-7.2	20.0
tert-Butylbenzene	9.599	0.100	25.00	26.01	-4.0	20.0
1,2,4-Trimethylbenzene	7.131	0.100	25.00	24.79	0.8	20.0
Pentachloroethane	1.014	0.100	25.00	25.96	-3.8	20.0
sec-Butylbenzene	7.913	0.100	25.00	26.53	-6.1	20.0

Compound	RRF	MinRRF	Ci	Cc	% D	Max %D
4-Isopropyltoluene	5.681	0.100	25.00	26.05	-4.2	20.0
1,3-Dichlorobenzene	3.987	0.100	25.00	25.90	-3.6	20.0
1,4-Dichlorobenzene	3.987	0.100	25.00	25.78	-3.1	20.0
Benzyl Chloride	0.000	0.100	25.00	0.00	100.0	20.0
n-Butylbenzene	5.616	0.100	25.00	24.21	3.2	20.0
1,2-Dichlorobenzene	3.735	0.100	25.00	25.61	-2.4	20.0
1,2-Dibromo-3-chloropropane	0.384	0.100	25.00	24.35	2.6	20.0
1,2,4-Trichlorobenzene	2.176	0.100	25.00	21.97	12.1	20.0
Hexachlorobutadiene	1.535	0.100	25.00	23.35	6.6	20.0
Naphthalene	1.628	0.100	25.00	22.15	11.4	20.0
1,2,3-Trichlorobenzene	2.153	0.100	25.00	22.41	10.4	20.0

BFB 8260B Report



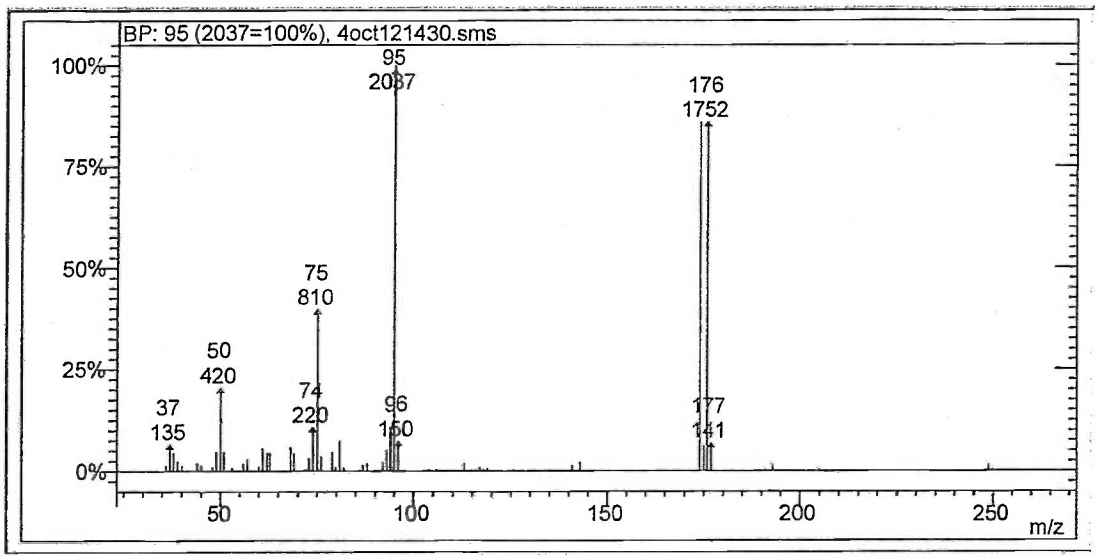
Lab File ID: 4oct121415.sms

Injection Date: 10/20/2012

Injection Time: 5:49

m/z	Acceptance Criterion	Value	Pass/Fail
50	15-40% of m/z 95	19.01	PASS
75	30-60% of m/z 95	32.64	PASS
95	base peak	100.00	PASS
96	5-9% of m/z 95	7.03	PASS
173	<2% of m/z 174	0.00	PASS
174	>50% of m/z 95	80.32	PASS
175	5-9% of m/z 174	7.53	PASS
176	>95% but <101% of m/z 174	96.35	PASS
177	5-9% of m/z 176	8.14	PASS

BFB 8260B Report



Lab File ID: 4oct121430.sms

Injection Date: 10/20/2012

Injection Time: 18:08

m/z	Acceptance Criterion	Value	Pass/Fail
50	15-40% of m/z 95	20.62	PASS
75	30-60% of m/z 95	39.76	PASS
95	base peak	100.00	PASS
96	5-9% of m/z 95	7.36	PASS
173	<2% of m/z 174	0.23	PASS
174	>50% of m/z 95	85.91	PASS
175	5-9% of m/z 174	7.14	PASS
176	>95% but <101% of m/z 174	100.11	PASS
177	5-9% of m/z 176	8.05	PASS

****

Varian Star Workstation - RecalcList Fri Oct 19 10:16:01 2012

RecalcList: C:\VarianWS\8260list.rcl

Created: Wed Dec 01 10:37:29 2004
Modified: Fri Oct 19 10:09:59 2012

MS#4 524.2 101812 -85°C

****

Line	Sample Name	Data File
1	tune	c:\varianws\data\4oct12\4oct121359.SMS
2	mb	c:\varianws\data\4oct12\4oct121360.SMS
3	1ppb 8260 ic	c:\varianws\data\4oct12\4oct121361.SMS
4	0.5ppb 524.2 ic	c:\varianws\data\4oct12\4oct121362.SMS
5	5ppb 8260 ic	c:\varianws\data\4oct12\4oct121363.SMS
6	2.5ppb 524.2 ic	c:\varianws\data\4oct12\4oct121364.SMS
7	20ppb 8260 ic	c:\varianws\data\4oct12\4oct121365.SMS
8	10ppb 524.2 ic	c:\varianws\data\4oct12\4oct121366.SMS
9	50ppb 8260 ic	c:\varianws\data\4oct12\4oct121367.SMS
10	25ppb 524.2 ic	c:\varianws\data\4oct12\4oct121368.SMS
11	100ppb 8260 ic	c:\varianws\data\4oct12\4oct121369.SMS
12	50ppb 524.2 ic	c:\varianws\data\4oct12\4oct121370.SMS
13	150ppb 8260 ic	c:\varianws\data\4oct12\4oct121371.SMS
14	75ppb 524.2 ic	c:\varianws\data\4oct12\4oct121372.SMS
15	200ppb 8260 ic	c:\varianws\data\4oct12\4oct121373.SMS
16	tune	c:\varianws\data\4oct12\4oct121374.SMS
17	100ppb 524.2 ic	c:\varianws\data\4oct12\4oct121375.SMS
18	250ppb 8260 ic	c:\varianws\data\4oct12\4oct121376.SMS
19	125ppb 524.2 ic	c:\varianws\data\4oct12\4oct121377.SMS
20	rinse	c:\varianws\data\4oct12\4oct121378.SMS
21	rinse	c:\varianws\data\4oct12\4oct121379.SMS
22	rinse	c:\varianws\data\4oct12\4oct121380.SMS
23	10ppb BFB tune 1	c:\varianws\data\4oct12\4oct121381.SMS
24	50ppb 8260 ccv 1	c:\varianws\data\4oct12\4oct121382.SMS
25	25ppb 524.2 ccv 1	c:\varianws\data\4oct12\4oct121383.SMS
26	50ppb 8260 lcs 1	c:\varianws\data\4oct12\4oct121384.SMS
27	25ppb 524.2 lcs 1	c:\varianws\data\4oct12\4oct121385.SMS
28	rinse	c:\varianws\data\4oct12\4oct121386.SMS
29	method blk 1	c:\varianws\data\4oct12\4oct121387.SMS
30	312094-001_10mL-1	c:\varianws\data\4oct12\4oct121388.SMS
31	312094-002_10mL-8	c:\varianws\data\4oct12\4oct121389.SMS
32	312094-004_10mL-5	c:\varianws\data\4oct12\4oct121390.SMS

VOLATILE ORGANICS INITIAL CALIBRATION DATA

EPA Method 8260A

Lab Name: Associated Labs Contract:

Lab Code: # 4 Case No.: SAS No: SDG No:

Instrument ID: Cal. Sample Date(s): 10/18/2012 10/18/2012

Heated Purge (Y/N): No Cal. Sample Time(s): 10:15 22:33

GC Column: ID: (mm)

Calibration File: C:\VarianWS\data\4Oct12\4oct121377.SMS

Index: 1	Level: 1	Replicate: 1	Acquired: 10/18/2012 10:15	File: C:\VarianWS\data\4Oct12\4oct121362.SMS
Index: 2	Level: 2	Replicate: 1	Acquired: 10/18/2012 11:53	File: C:\VarianWS\data\4Oct12\4oct121364.SMS
Index: 3	Level: 3	Replicate: 1	Acquired: 10/18/2012 13:32	File: C:\VarianWS\data\4Oct12\4oct121366.SMS
Index: 4	Level: 4	Replicate: 1	Acquired: 10/18/2012 15:10	File: C:\VarianWS\data\4Oct12\4oct121368.SMS
Index: 5	Level: 5	Replicate: 1	Acquired: 10/18/2012 16:48	File: C:\VarianWS\data\4Oct12\4oct121370.SMS
Index: 6	Level: 6	Replicate: 1	Acquired: 10/18/2012 18:27	File: C:\VarianWS\data\4Oct12\4oct121372.SMS
Index: 7	Level: 7	Replicate: 1	Acquired: 10/18/2012 20:54	File: C:\VarianWS\data\4Oct12\4oct121375.SMS
Index: 8	Level: 8	Replicate: 1	Acquired: 10/18/2012 22:33	File: C:\VarianWS\data\4Oct12\4oct121377.SMS

RRF = (Area(sample)/(Amount(sample))/(Area(standard)/Amount(standard))

Compound	RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	Avg RRF	% RSD
Dichlorodifluoromethane	0.401	0.407	0.462	0.452	0.432	0.432	0.427	0.430	0.430	4.7
Chloromethane	0.396	0.395	0.441	0.430	0.383	0.346	0.331	0.314	0.379	12.0
Vinyl Chloride	0.349	0.336	0.383	0.402	0.395	0.381	0.389	0.378	0.377	6.1
Bromomethane	0.191	0.130	0.158	0.145	0.149	0.139	0.135	0.126	0.146	14.1
Chloroethane		0.024	0.026	0.024	0.025	0.025	0.026	0.025	0.025	3.6
Trichlorofluoromethane	0.845	0.891	0.999	0.991	0.969	0.939	0.954	0.970	0.945	5.6
Ethyl ether	0.074	0.084	0.093	0.087	0.088	0.089	0.085	0.084	0.086	6.5
Trichlorotrifluoroethane (Freon 113)	0.497	0.537	0.614	0.588	0.570	0.557	0.562	0.558	0.560	6.2
1,1-Dichloroethene	0.613	0.674	0.810	0.736	0.747	0.746	0.746	0.735	0.726	8.0
Iodomethane			0.423	0.553	0.554	0.537	0.568	0.550	0.531	10.1
Acetone		0.059	0.040	0.037	0.040	0.039	0.041	0.043	0.043	17.8
Carbon disulfide	0.632	0.626	0.620	0.603	0.590	0.565	0.582	0.583	0.600	4.0

Compound	RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	Avg RRF	% RSD
Acetonitrile	0.468	0.534	0.582	0.571	0.542	0.520	0.513	0.517	0.531	6.7
Allyl chloride	0.969	1.074	1.074	1.145	1.098	1.050	1.045	1.035	1.061	4.8
Methylene Chloride	0.859	0.794	0.727	0.823	0.888	0.810	0.816	0.831	0.819	5.8
tert-Butanol	0.016	0.016	0.018	0.018	0.018	0.018	0.018	0.019	0.018	5.7
Methyl-tert-butyl-ether (MTBE)	0.402	0.493	0.479	0.476	0.456	0.456	0.474	0.487	0.466	6.2
t-1,2-Dichloroethene	0.843	0.922	0.957	0.926	0.875	0.828	0.811	0.797	0.870	6.8
Acrylonitrile		0.023	0.025	0.028	0.031	0.031	0.031	0.032	0.029	12.2
n-Hexane	0.461	0.534	0.582	0.571	0.550	0.520	0.522	0.517	0.532	7.0
1,1-Dichloroethane	0.569	0.646	0.650	0.612	0.569	0.532	0.494	0.476	0.569	11.5
Isopropyl ether	0.737	0.872	0.957	0.908	0.827	0.767	0.732	0.729	0.816	10.8
Chloroprene	0.494	0.612	0.654	0.657	0.629	0.589	0.593	0.594	0.603	8.5
Ethyl-tert-butyl-ether	0.945	0.988	1.056	0.998	0.920	0.883	0.826	0.826	0.930	8.9
2,2-Dichloropropane	0.902	0.832	0.838	0.782	0.752	0.698	0.664	0.648	0.765	11.8
c-1,2-Dichloroethene	0.722	0.765	0.908	0.907	0.864	0.824	0.808	0.839	0.830	7.9
2-Butanone (MEK)		0.045	0.065	0.070	0.072	0.076	0.079	0.082	0.070	17.6
Propionitrile		0.005	0.010	0.013	0.014	0.013	0.014	0.015	0.012	29.7
Bromochloromethane	0.469	0.476	0.539	0.520	0.501	0.475	0.476	0.497	0.494	5.1
Methacrylonitrile	0.080	0.131	0.133	0.143	0.134	0.127	0.125	0.121	0.124	15.4
Chloroform	1.036	1.011	1.122	1.096	1.071	1.027	1.049	1.057	1.059	3.5
1,1,1-Trichloroethane	1.180	1.310	1.374	1.361	1.313	1.267	1.291	1.294	1.299	4.6
Dibromofluoromethane (Surr1)	0.209	0.213	0.215	0.213	0.201	0.198	0.199	0.200	0.206	3.5
Carbon Tetrachloride	0.995	1.022	1.085	1.128	1.073	1.025	1.052	1.064	1.056	4.0
Tetrahydrofuran			0.047	0.042	0.037	0.038	0.043	0.042	0.041	9.2
1,1-Dichloropropene	0.820	0.818	0.882	0.849	0.813	0.780	0.761	0.774	0.812	5.0
Benzene	0.898	0.870	0.880	0.867	0.829	0.796	0.818	0.841	0.850	4.1
1,2-Dichloroethane-d4 (Surr2)	0.292	0.322	0.306	0.298	0.277	0.252	0.242	0.249	0.280	10.6
1,2-Dichloroethane	0.447	0.565	0.626	0.623	0.562	0.535	0.523	0.509	0.549	10.8
tert-Amyl-methyl-ether	0.850	0.971	0.995	0.946	0.914	0.878	0.860	0.872	0.911	6.0
Trichloroethene	1.123	1.289	1.345	1.338	1.307	1.271	1.276	1.281	1.279	5.4
Methyl methacrylate	0.219	0.057	0.187	0.212	0.212	0.206	0.199	0.195	0.186	28.5
1,2-Dichloropropane	0.308	0.348	0.377	0.351	0.342	0.324	0.299	0.294	0.330	8.8
Dibromomethane	0.351	0.391	0.447	0.439	0.421	0.418	0.406	0.412	0.411	7.3
Bromodichloromethane	0.763	0.924	1.001	0.942	0.947	0.920	0.942	0.951	0.924	7.5
2-Chloroethyl vinyl ether	0.041	0.029	0.045	0.041	0.041	0.046	0.047	0.049	0.042	14.8

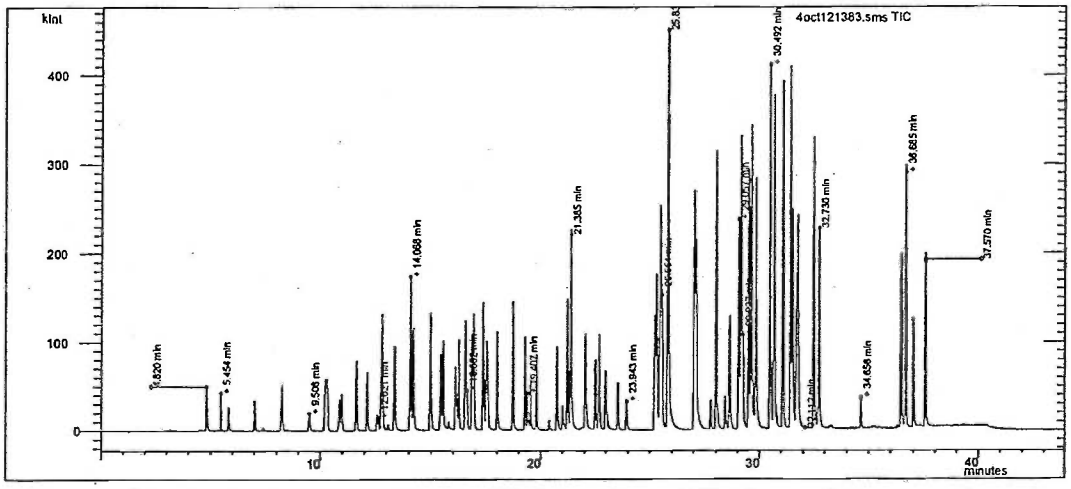
Compound	RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	Avg RRF	% RSD
c-1,3-Dichloropropene	0.764	0.901	1.089	1.056	1.052	0.987	0.969	0.967	0.973	10.7
4-Methyl-2-pentanone		0.169	0.258	0.285	0.278	0.276	0.281	0.284	0.261	16.0
Toluene-d8 (Surr3)	1.339	1.343	1.380	1.315	1.354	1.343	1.312	1.317	1.338	1.7
Toluene	3.125	3.269	3.329	3.222	3.138	3.038	3.022	3.097	3.155	3.5
Ethyl methacrylate			0.169	0.179	0.185	0.186	0.193	0.196	0.185	5.4
2-Hexanone		0.024	0.126	0.192	0.219	0.232	0.242	0.258	0.185	45.0
t-1,3-Dichloropropene	0.361	0.468	0.503	0.488	0.482	0.471	0.456	0.456	0.460	9.4
1,1,2-Trichloroethane	0.363	0.442	0.514	0.511	0.507	0.495	0.491	0.507	0.479	10.9
Tetrachloroethene	0.146	0.147	0.147	0.148	0.139	0.133	0.143	0.133	0.142	4.3
1,3-Dichloropropane	0.554	0.632	0.760	0.736	0.726	0.725	0.731	0.746	0.701	10.1
Dibromochloromethane	0.467	0.547	0.644	0.641	0.636	0.626	0.632	0.649	0.605	10.7
1,2-Dibromoethane	0.403	0.569	0.645	0.642	0.649	0.654	0.654	0.663	0.610	14.5
Chlorobenzene	2.127	2.014	2.069	2.048	2.015	1.953	1.973	1.969	2.021	2.9
Ethylbenzene	6.696	6.717	7.277	6.880	6.545	6.255	6.431	6.309	6.639	5.0
1,1,1,2-Tetrachloroethane	1.153	1.337	1.571	1.423	1.337	1.235	1.286	1.265	1.326	9.6
p,m-Xylenes	6.345	6.503	6.951	6.553	6.240	5.970	6.106	6.051	6.340	5.1
o-Xylene	6.423	6.627	7.071	6.648	6.203	6.010	6.238	6.132	6.419	5.4
Styrene	2.971	3.676	4.254	4.086	3.972	3.883	4.003	4.011	3.857	10.2
Bromoform	0.579	0.636	0.678	0.659	0.625	0.622	0.649	0.638	0.636	4.6
Isopropylbenzene	6.806	7.064	7.345	7.093	6.836	6.473	6.734	6.568	6.865	4.2
cis-1,4-Dichloro-2-butene	0.091	0.101	0.119	0.113	0.112	0.110	0.113	0.114	0.109	8.2
p-Bromofluorobenzene (Surr4)	1.310	1.222	1.268	1.236	1.199	1.224	1.255	1.213	1.241	2.9
1,1,2,2-Tetrachloroethane	0.900	1.029	1.079	0.987	0.956	0.930	0.975	0.952	0.976	5.8
Bromobenzene	2.800	2.884	3.116	3.255	2.938	2.915	2.974	2.927	2.976	4.8
n-Propylbenzene	7.973	8.169	8.639	8.324	8.004	7.628	7.637	7.657	8.004	4.6
trans-1,4-Dichloro-2-butene	0.436	0.510	0.570	0.526	0.499	0.478	0.506	0.501	0.503	7.6
1,2,3-Trichloropropane	0.664	0.688	0.758	0.693	0.645	0.614	0.644	0.638	0.668	6.7
2-Chlorotoluene	4.826	5.218	5.485	5.241	5.138	4.832	4.952	5.032	5.091	4.4
1,3,5-Trimethylbenzene	8.189	7.648	7.896	7.573	7.253	7.055	7.217	7.250	7.510	5.2
4-Chlorotoluene	4.566	5.142	5.325	5.069	4.911	4.735	4.867	4.792	4.926	4.9
tert-Butylbenzene	9.758	9.825	10.014	9.403	8.988	8.569	8.723	8.530	9.226	6.5
1,2,4-Trimethylbenzene	6.930	6.820	7.063	7.222	7.003	7.137	7.499	7.866	7.192	4.7
Pentachloroethane	1.085	1.027	1.036	0.977	0.921	0.925	0.897	0.943	0.976	6.8
sec-Butylbenzene	7.759	7.659	7.884	7.625	7.240	7.151	7.139	7.202	7.457	4.1

Compound	RRF1	RRF2	RRF3	RRF4	RRF5	RRF6	RRF7	RRF8	Avg RRF	% RSD
4-Isopropyltoluene	5.814	5.671	5.830	5.457	5.257	5.131	5.248	5.207	5.452	5.2
1,3-Dichlorobenzene	3.837	3.890	4.167	4.060	3.763	3.635	3.695	3.745	3.849	4.8
1,4-Dichlorobenzene	3.745	3.904	4.221	4.143	3.763	3.708	3.706	3.745	3.867	5.3
n-Butylbenzene	5.663	5.481	5.736	5.881	5.730	5.775	5.919	6.204	5.799	3.7
1,2-Dichlorobenzene	3.740	3.656	3.831	3.709	3.494	3.581	3.513	3.641	3.646	3.1
1,2-Dibromo-3-chloropropane	0.429	0.367	0.393	0.392	0.370	0.404	0.387	0.412	0.394	5.3
1,2,4-Trichlorobenzene	3.484	2.526	2.471	2.388	2.267	2.209	2.147	2.319	2.476	17.2
Hexachlorobutadiene	2.195	1.724	1.695	1.611	1.532	1.454	1.459	1.479	1.644	15.0
Naphthalene		1.954	1.970	1.854	1.713	1.834	1.652	1.885	1.837	6.4
1,2,3-Trichlorobenzene	3.210	2.515	2.378	2.323	2.212	2.178	2.115	2.287	2.402	14.5
									Average %RSD	8.2

524 Volatile Organics

Associated Labs
GCMS # 4

Data File Name:	c:\varianws\data\4oct12\4oct121383.sm s	**Calc Method:**	C:\VarianWS\methods\ms4_524_101812_35C.mth
Sample Name:	25ppb 524.2 ccv 1	**Acquisition Date:**	10/19/2012 3:28:56 AM
Inj. Notes:	w#12090602	**Operator Name:**	NZ



RT	Quan Ions	Compound Name	R.Match	Area	Amount
18.009	96.0+70.0	Fluorobenzene (IS1)	890	189709	25.000
25.231	117.0	Chlorobenzene-d5(IS2)	995	161370	25.000
31.712	152.0	1,4-Dichlorobenzene-d4(IS3)	963	90615	25.000
4.820	85.0	Dichlorodifluoromethane	956	85179	26.081
5.454	50.0+52.0+49.0	Chloromethane	990	78525	27.274
5.821	62.0+64.0	Vinyl Chloride	998	72144	25.233
7.021	94.0+45.0	Bromomethane	936	26873	24.179
7.403	45.0+49.0	Chloroethane	762	4581	24.215
8.252	101.0+103.0	Trichlorofluoromethane	979	185663	25.895
9.508	59.0	Ethyl ether	979	17286	26.608
10.223	101.0+151.0	Trichlorotrifluoroethane (Freon 113)	919	109129	25.665
11.202	56.0	Acrolein	550		N/A
10.301	96.0+61.0+98.0	1,1-Dichloroethene	948	139906	25.397
10.857	142.0	Iodomethane	939	102854	25.525
10.798	43.0+58.0	Acetone	900	7616	23.510
11.515	45.0	Isopropyl alcohol (2-Propanol)	750		N/A
10.968	76.0	Carbon disulfide	721	110487	24.261
13.363	41.0	Acetonitrile	795	106814	26.519
11.633	41.0+39.0	Allyl chloride	959	206722	25.672
12.131	84.0+49.0+86.0	Methylene Chloride	892	144415	23.247
12.621	59.0	tert-Butanol	952	16678	123.873
12.767	73.0	Methyl-tert-butyl-ether (MTBE)	981	87000	24.628
12.807	61.0+96.0	t-1,2-Dichloroethene	978	169041	25.611

RT	Quan Ions	Compound Name	R.Match	Area	Amount
13.073	53.0	Acrylonitrile	990	5156	23.629
13.364	41.0	n-Hexane	997	106878	26.468
14.075	63.0	1,1-Dichloroethane	980	116738	27.057
14.298	43.0	Vinyl acetate	149		N/A
14.068	45.0	Isopropyl ether	954	171209	27.643
14.213	53.0	Chloroprene	995	121873	26.642
14.971	59.0	Ethyl-tert-butyl-ether	988	188486	26.705
15.450	77.0+41.0	2,2-Dichloropropane	998	128432	22.138
15.558	61.0+96.0	c-1,2-Dichloroethene	988	170337	27.054
15.659	43.0+72.0	2-Butanone (MEK)	778	13430	25.364
15.938	54.0	Propionitrile	845	2144	23.812
16.119	130.0+49.0	Bromochloromethane	997	98978	26.397
17.538	39.0	Methacrylonitrile	328	26469	28.070
16.279	83.0+85.0	Chloroform	995	205501	25.582
16.581	97.0+99.0	1,1,1-Trichloroethane	997	249538	25.322
16.652	111.0	Dibromofluoromethane (Surr1)	985	40319	25.800
16.874	117.0+119.0	Carbon Tetrachloride	990	203783	25.437
16.176	42.0+72.0	Tetrahydrofuran	666	7809	24.807
16.950	75.0+39.0	1,1-Dichloropropene	998	153849	24.964
17.383	78.0	Benzene	992	159274	24.700
17.425	65.0	1,2-Dichloroethane-d4 (Surr2)	976	55138	25.970
17.589	62.0+64.0	1,2-Dichloroethane	981	116558	27.988
17.540	73.0+55.0+87.0	tert-Amyl-methyl-ether	996	181064	26.205
18.745	130.0+132.0+95.0	Trichloroethene	996	209978	25.441
19.407	41.0	Methyl methacrylate	998	35650	29.695
19.283	63.0+65.0	1,2-Dichloropropane	998	56857	26.655
19.551	93.0+174.0	Dibromomethane	992	69684	26.295
20.281	88.0	1,4-Dioxane	468		N/A
19.824	83.0+85.0	Bromodichloromethane	998	151665	25.441
20.404	63.0+43.0	2-Chloroethyl vinyl ether	692	6912	25.268
20.750	75.0+77.0+39.0	c-1,3-Dichloropropene	955	165273	26.313
21.017	43.0+58.0	4-Methyl-2-pentanone	989	47407	28.109
21.233	98.0	Toluene-d8 (Surr3)	996	215731	24.982
21.385	92.0+91.0	Toluene	998	508598	24.974
22.029	69.0	Ethyl methacrylate	989	29880	25.078
23.048	43.0+58.0+100.0	2-Hexanone	993	31215	26.193
22.057	75.0+77.0	t-1,3-Dichloropropene	983	76390	25.701
22.518	97.0+99.0	1,1,2-Trichloroethane	998	82557	26.717
22.685	164.0+166.0	Tetrachloroethene	997	23278	25.405
22.979	76.0+41.0	1,3-Dichloropropane	997	119751	26.460
17.440	41.0	Isobutyl alcohol	247		N/A
23.546	129.0+127.0	Dibromochloromethane	997	102460	26.222
23.943	107.0+109.0	1,2-Dibromoethane	998	105633	26.835
25.749	91.0	1-Chlorohexane	986		N/A
25.313	112.0+114.0	Chlorobenzene	991	327214	25.085
25.481	106.0+91.0	Ethylbenzene	996	606645	25.211
25.551	131.0+117.0	1,1,1,2-Tetrachloroethane	996	127843	26.601
25.834	106.0+91.0	p,m-Xylenes	998	1.154E6	50.198
27.029	106.0+91.0	o-Xylene	997	588039	25.274
27.105	104.0+78.0	Styrene	995	368825	26.382
27.767	171.0+173.0+175.0	Bromoform	989	59031	25.619

RT	Quan Ions	Compound Name	R.Match	Area	Amount
28.014	105.0+120.0	Isopropylbenzene	992	623337	25.051
28.440	75.0	cis-1,4-Dichloro-2-butene	996	9288	23.509
28.637	95.0	p-Bromofluorobenzene (Surr4)	998	113478	25.231
29.072	83.0+85.0	1,1,2,2-Tetrachloroethane	996	90432	25.562
29.057	77.0+158.0	Bromobenzene	994	286893	26.595
29.164	91.0+120.0	n-Propylbenzene	996	724472	24.973
29.237	75.0	trans-1,4-Dichloro-2-butene	990	47736	26.176
29.235	75.0+110.0	1,2,3-Trichloropropane	981	62663	25.876
29.526	91.0+126.0	2-Chlorotoluene	997	461130	24.992
29.644	105.0+120.0	1,3,5-Trimethylbenzene	997	661825	24.313
29.527	91.0+126.0	4-Chlorotoluene	995	454089	25.433
30.492	119.0+91.0	tert-Butylbenzene	866	848830	25.382
30.666	105.0+120.0	1,2,4-Trimethylbenzene	997	617999	23.705
31.431	117.0	Pentachloroethane	420	88466	25.003
31.072	105.0+134.0	sec-Butylbenzene	992	677372	25.060
30.488	119.0	4-Isopropyltoluene	878	492393	24.918
31.530	146.0+148.0	1,3-Dichlorobenzene	996	340872	24.433
31.528	146.0+148.0	1,4-Dichlorobenzene	996	344255	24.561
32.112	91.0	Benzyl Chloride	693		N/A
32.484	91.0+134.0	n-Butylbenzene	996	467775	22.256
32.730	146.0+148.0	1,2-Dichlorobenzene	996	324560	24.562
34.656	75.0+157.0	1,2-Dibromo-3-chloropropane	976	36199	25.326
37.565	180.0+182.0	1,2,4-Trichlorobenzene	989	198290	22.093
36.685	225.0+226.0	Hexachlorobutadiene	977	132506	22.241
37.029	128.0	Naphthalene	997	164753	24.739
37.570	180.0+182.0	1,2,3-Trichlorobenzene	997	192944	22.160

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

EPA Method 8260A

Lab Name: Associated Labs Contract:

Lab Code: # 4 Case No.: SAS No: SDG No:

Lab File ID (CONTROL): c:\varianws\data\4oct12\4oct121383.sms Lab Sample ID: 25ppb 524.2 ccv 1

Instrument ID: Date Analyzed: 10/19/2012 Time Analyzed: 03:28

GC Column: ID: (mm) Heated Purge: (Y/N) No

	AREA#	RT #	AREA#	RT #	AREA#	RT #	AREA#	RT #	AREA#	RT #	AREA#	RT #
	IS1		IS2		IS3							
12 HOUR STD	189709	18.01	161370	25.23	90615	31.71						
UPPER LIMIT	379418	18.51	322740	25.73	181230	32.21						
LOWER LIMIT	94855	17.51	80685	24.73	45308	31.21						
EPA SAMPLE NO												
4oct121362	179830	18.00	147011	25.22	76556	31.71						
4oct121364	180474	18.00	151407	25.21	85930	31.71						
4oct121366	188129	18.00	156992	25.22	86327	31.70						
4oct121368	186528	18.00	162071	25.22	89391	31.70						
4oct121370	193614	18.00	163622	25.22	93444	31.71						
4oct121372	188141	18.01	159138	25.23	93087	31.70						
4oct121375	203095	18.01	175582	25.22	97964	31.70						
4oct121377	190141	18.00	164258	25.22	94309	31.70						

	AREA#	RT	#	AREA#	RT	#	AREA#	RT	#	AREA#	RT	#	AREA#	RT	#	AREA#	RT	#
	IS1			IS2			IS3											

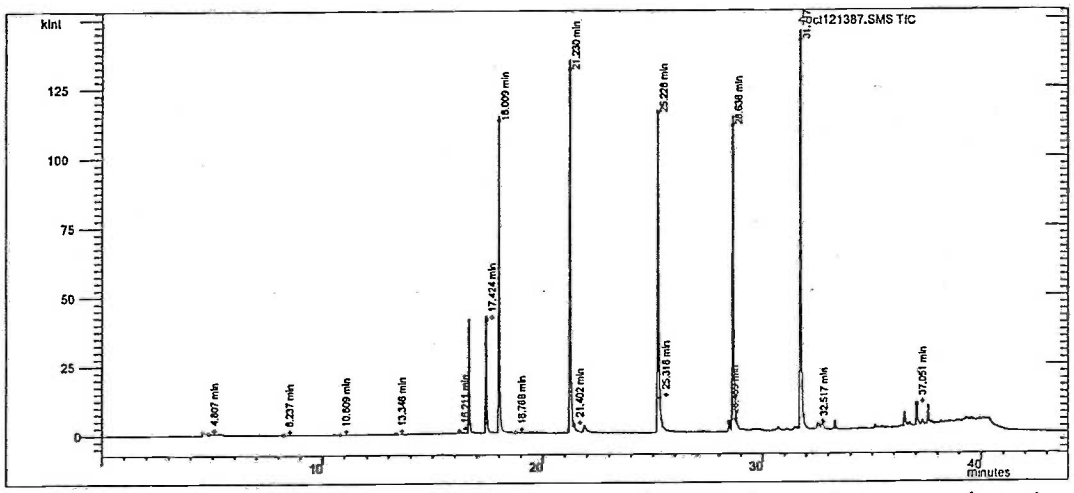
IS1 = Fluorobenzene (IS1)
IS2 = Chlorobenzene-d5(IS2)
IS3 = 1,4-Dichlorobenzene-d4(IS3)

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 internal standard area values with an asterisk.
* Values outside QC limits.
D Indicates the peak is not "Identified".

524 Volatile Organics

Associated Labs
GCMS # 4

Data File Name:	C:\VarianWS\data\4Oct12\4oct121387.SMS	**Calc Method:**	C:\VarianWS\methods\ms4_524_101812_35C.mth
Sample Name:	method blk 1	**Acquisition Date:**	10/19/2012 6:48:20 AM
Inj. Notes:	w#12090702	**Operator Name:**	NZ

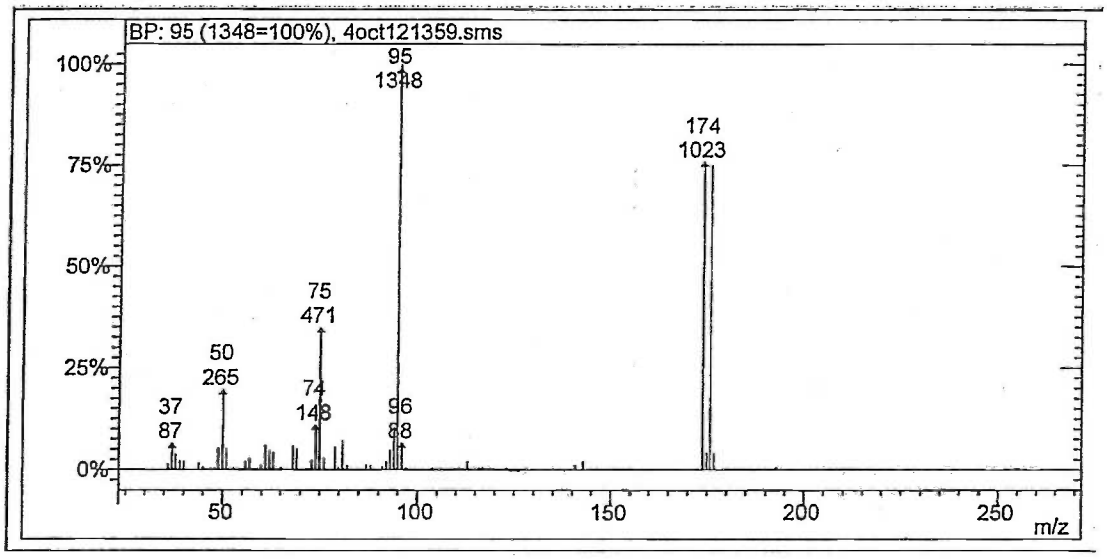


RT	Quan Ions	Compound Name	R.Match	Area	Amount
18.009	96.0+70.0	Fluorobenzene (IS1)	920	188573	25.000
25.228	117.0	Chlorobenzene-d5(IS2)	996	158103	25.000
31.717	152.0	1,4-Dichlorobenzene-d4(IS3)	966	86168	25.000
4.807	85.0	Dichlorodifluoromethane	740		N/A
5.446	50.0+52.0+49.0	Chloromethane	519		N/A
5.812	62.0+64.0	Vinyl Chloride	790		N/A
7.014	94.0+45.0	Bromomethane	674		N/A
7.411	45.0+49.0	Chloroethane	420		N/A
8.237	101.0+103.0	Trichlorofluoromethane	719		N/A
9.497	59.0	Ethyl ether	736		N/A
10.209	101.0+151.0	Trichlorotrifluoroethane (Freon 113)	525		N/A
11.202	56.0	Acrolein	529		N/A
10.287	96.0+61.0+98.0	1,1-Dichloroethene	571		N/A
10.845	142.0	Iodomethane	878		N/A
10.809	43.0+58.0	Acetone	836	346	1.075
11.515	45.0	Isopropyl alcohol (2-Propanol)	657		N/A
10.957	76.0	Carbon disulfide	548		N/A
13.346	41.0	Acetonitrile	667		N/A
11.623	41.0+39.0	Allyl chloride	702		N/A
12.124	84.0+49.0+86.0	Methylene Chloride	892	421	0.068
12.615	59.0	tert-Butanol	613		N/A
12.750	73.0	Methyl-tert-butyl-ether (MTBE)	611		N/A
12.806	61.0+96.0	t-1,2-Dichloroethene	646	110	0.017

RT	Quan Ions	Compound Name	R.Match	Area	Amount
13.070	53.0	Acrylonitrile	454		N/A
13.360	41.0	n-Hexane	523		N/A
14.068	63.0	1,1-Dichloroethane	636		N/A
14.298	43.0	Vinyl acetate	481		N/A
14.055	45.0	Isopropyl ether	654		N/A
14.201	53.0	Chloroprene	536		N/A
14.968	59.0	Ethyl-tert-butyl-ether	423		N/A
15.440	77.0+41.0	2,2-Dichloropropane	693		N/A
15.554	61.0+96.0	c-1,2-Dichloroethene	703		N/A
15.719	43.0+72.0	2-Butanone (MEK)	500		N/A
15.948	54.0	Propionitrile	422		N/A
16.126	130.0+49.0	Bromochloromethane	774	54	0.015
17.528	39.0	Methacrylonitrile	378		N/A
16.285	83.0+85.0	Chloroform	698	106	0.013
16.584	97.0+99.0	1,1,1-Trichloroethane	510		N/A
16.651	111.0	Dibromofluoromethane (Surr1)	986	41299	26.586
16.861	117.0+119.0	Carbon Tetrachloride	613		N/A
16.211	42.0+72.0	Tetrahydrofuran	728	662	2.115
16.949	75.0+39.0	1,1-Dichloropropene	682		N/A
17.417	78.0	Benzene	426	165	0.026
17.424	65.0	1,2-Dichloroethane-d4 (Surr2)	987	64074	30.360
17.467	62.0+64.0	1,2-Dichloroethane	334	29	0.007
17.537	73.0+55.0+87.0	tert-Amyl-methyl-ether	539		N/A
18.768	130.0+132.0+95.0	Trichloroethene	793	168	0.021
19.397	41.0	Methyl methacrylate	652		N/A
19.273	63.0+65.0	1,2-Dichloropropane	761		N/A
19.543	93.0+174.0	Dibromomethane	811		N/A
20.281	88.0	1,4-Dioxane	470		N/A
19.821	83.0+85.0	Bromodichloromethane	603		N/A
20.393	63.0+43.0	2-Chloroethyl vinyl ether	771		N/A
20.738	75.0+77.0+39.0	c-1,3-Dichloropropene	676		N/A
21.126	43.0+58.0	4-Methyl-2-pentanone	512	20	0.012
21.230	98.0	Toluene-d8 (Surr3)	997	208351	24.626
21.402	92.0+91.0	Toluene	341	329	0.016
22.013	69.0	Ethyl methacrylate	516		N/A
23.027	43.0+58.0+100.0	2-Hexanone	537		N/A
22.043	75.0+77.0	t-1,3-Dichloropropene	389		N/A
22.504	97.0+99.0	1,1,2-Trichloroethane	688		N/A
22.669	164.0+166.0	Tetrachloroethene	735		N/A
23.022	76.0+41.0	1,3-Dichloropropane	670	191	0.043
17.440	41.0	Isobutyl alcohol	518		N/A
23.570	129.0+127.0	Dibromochloromethane	717	14	0.004
24.009	107.0+109.0	1,2-Dibromoethane	808	34	0.009
25.749	91.0	1-Chlorohexane	721		N/A
25.318	112.0+114.0	Chlorobenzene	306	606	0.047
25.481	106.0+91.0	Ethylbenzene	769		N/A
25.549	131.0+117.0	1,1,1,2-Tetrachloroethane	530		N/A
25.823	106.0+91.0	p,m-Xylenes	849		N/A
27.024	106.0+91.0	o-Xylene	872		N/A
27.259	104.0+78.0	Styrene	838	443	0.033
27.810	171.0+173.0+175.0	Bromoform	731	22	0.010

RT	Quan Ions	Compound Name	R.Match	Area	Amount
28.042	105.0+120.0	Isopropylbenzene	943	309	0.013
28.459	75.0	cis-1,4-Dichloro-2-butene	635	47	0.126
28.636	95.0	p-Bromofluorobenzene (Surr4)	998	107908	25.231
29.090	83.0+85.0	1,1,2,2-Tetrachloroethane	808		N/A
29.044	77.0+158.0	Bromobenzene	940		N/A
29.148	91.0+120.0	n-Propylbenzene	920		N/A
29.229	75.0	trans-1,4-Dichloro-2-butene	633		N/A
29.231	75.0+110.0	1,2,3-Trichloropropane	653		N/A
29.517	91.0+126.0	2-Chlorotoluene	889		N/A
29.676	105.0+120.0	1,3,5-Trimethylbenzene	888	2433	0.094
29.521	91.0+126.0	4-Chlorotoluene	882		N/A
30.485	119.0+91.0	tert-Butylbenzene	776		N/A
30.695	105.0+120.0	1,2,4-Trimethylbenzene	992	3172	0.128
31.431	117.0	Pentachloroethane	568		N/A
31.088	105.0+134.0	sec-Butylbenzene	931	1796	0.070
30.512	119.0	4-Isopropyltoluene	766	727	0.039
31.556	146.0+148.0	1,3-Dichlorobenzene	953	1319	0.099
31.557	146.0+148.0	1,4-Dichlorobenzene	941	1376	0.103
32.112	91.0	Benzyl Chloride	488		N/A
32.517	91.0+134.0	n-Butylbenzene	949	3821	0.191
32.750	146.0+148.0	1,2-Dichlorobenzene	927	1451	0.116
34.645	75.0+157.0	1,2-Dibromo-3-chloropropane	843		N/A
37.580	180.0+182.0	1,2,4-Trichlorobenzene	993	8974	1.051
36.683	225.0+226.0	Hexachlorobutadiene	937		N/A
37.051	128.0	Naphthalene	996	11273	1.780
37.580	180.0+182.0	1,2,3-Trichlorobenzene	994	8337	1.007

BFB 8260B Report



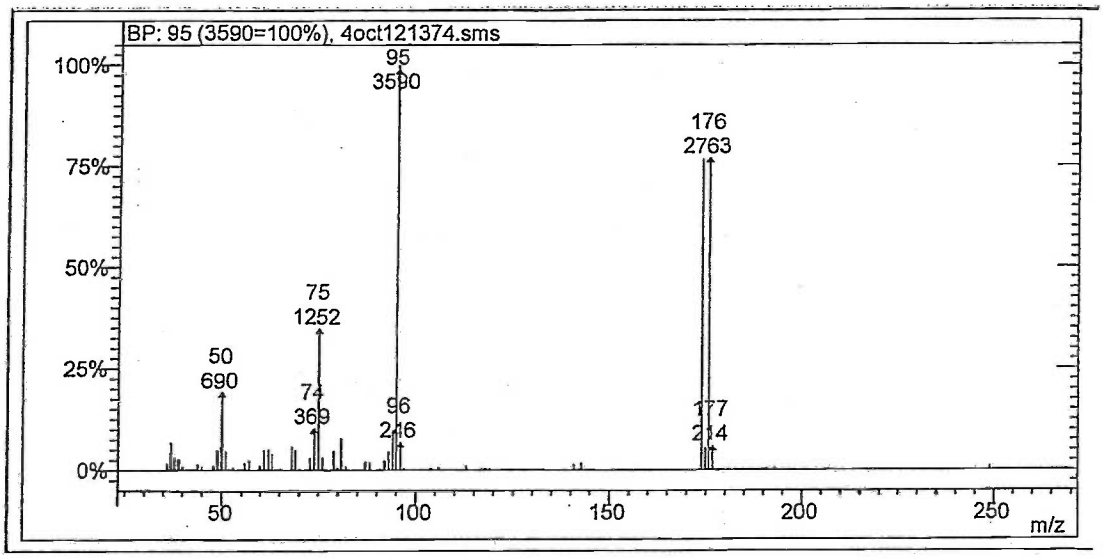
Lab File ID: 4oct121359.sms

Injection Date: 10/18/2012

Injection Time: 7:47

m/z	Acceptance Criterion	Value	Pass/Fail
50	15-40% of m/z 95	19.66	PASS
75	30-60% of m/z 95	34.94	PASS
95	base peak	100.00	PASS
96	5-9% of m/z 95	6.53	PASS
173	<2% of m/z 174	0.20	PASS
174	>50% of m/z 95	75.89	PASS
175	5-9% of m/z 174	5.47	PASS
176	>95% but <101% of m/z 174	98.63	PASS
177	5-9% of m/z 176	5.25	PASS

BFB 8260B Report



Lab File ID: 4oct121374.sms

Injection Date: 10/18/2012

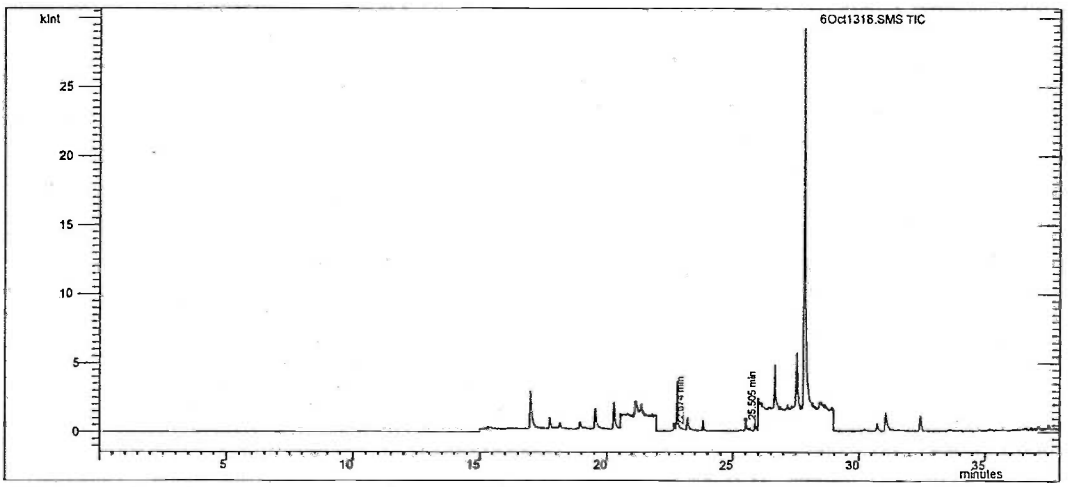
Injection Time: 20:05

m/z	Acceptance Criterion	Value	Pass/Fail
50	15-40% of m/z 95	19.22	PASS
75	30-60% of m/z 95	34.87	PASS
95	base peak	100.00	PASS
96	5-9% of m/z 95	6.85	PASS
173	<2% of m/z 174	0.15	PASS
174	>50% of m/z 95	76.55	PASS
175	5-9% of m/z 174	7.17	PASS
176	>95% but <101% of m/z 174	100.55	PASS
177	5-9% of m/z 176	7.75	PASS

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1318.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	312080-005-4 5ml	**Acquisition Date:**	10/26/2012 6:04:32 PM
Inj. Notes:	pH<2	**Operator Name:**	RyanP



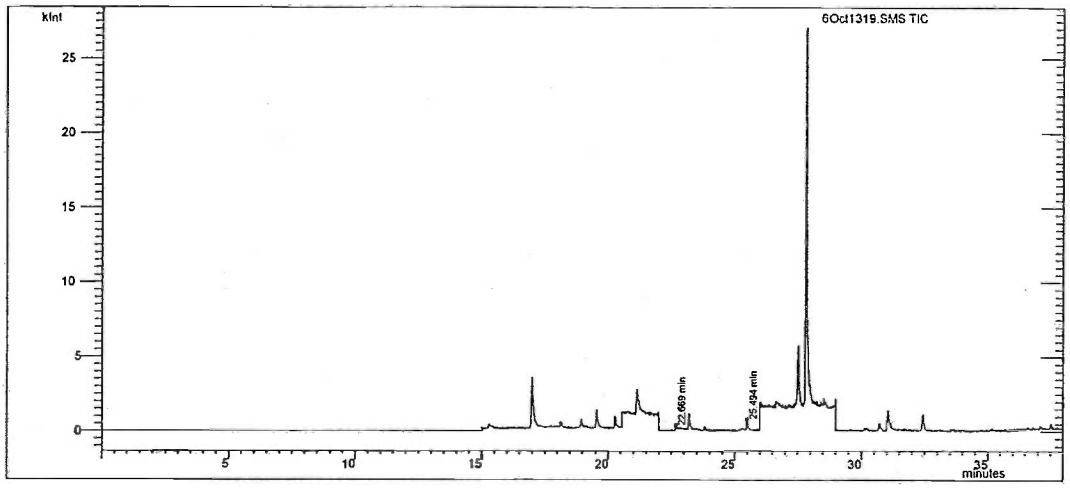
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.505	117.0+82.0	Chlorobenzene-d5(IS2)	998	2178	1.000
22.674	98.0+70.0	Toluene-d8 (Surr 3)	995	860	1.036

ALAB : 60367

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1319.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	312080-006-3 5ml	**Acquisition Date:**	10/26/2012 7:01:24 PM
Inj. Notes:	pH<2	**Operator Name:**	RyanP

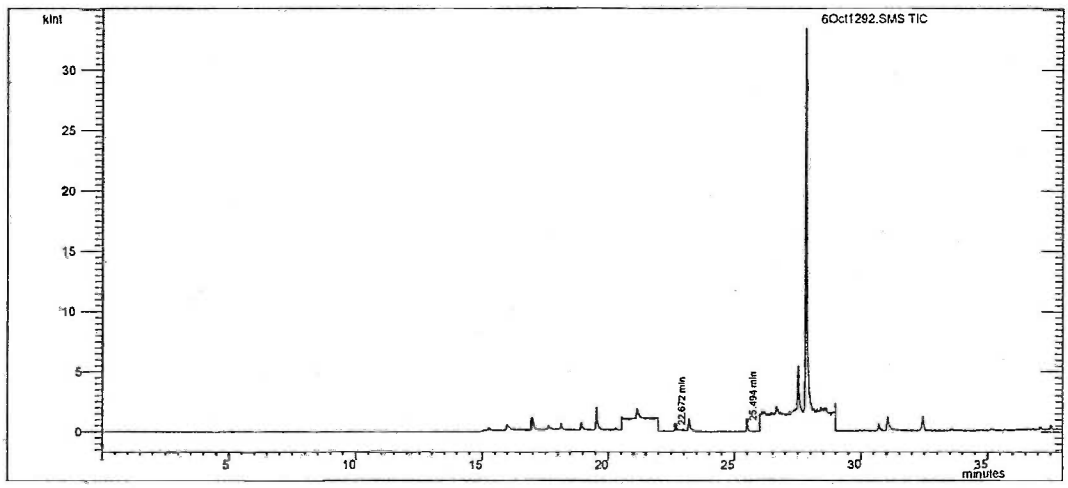


RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.494	117.0+82.0	Chlorobenzene-d5(IS2)	998	1841	1.000
22.669	98.0+70.0	Toluene-d8 (Surr 3)	964	720	1.025

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\VarianWS\data\6Oct12\6Oct1292.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	312080-008-3 5ml	**Acquisition Date:**	10/24/2012 4:19:15 PM
Inj. Notes:	EB pH<2	**Operator Name:**	RyanP



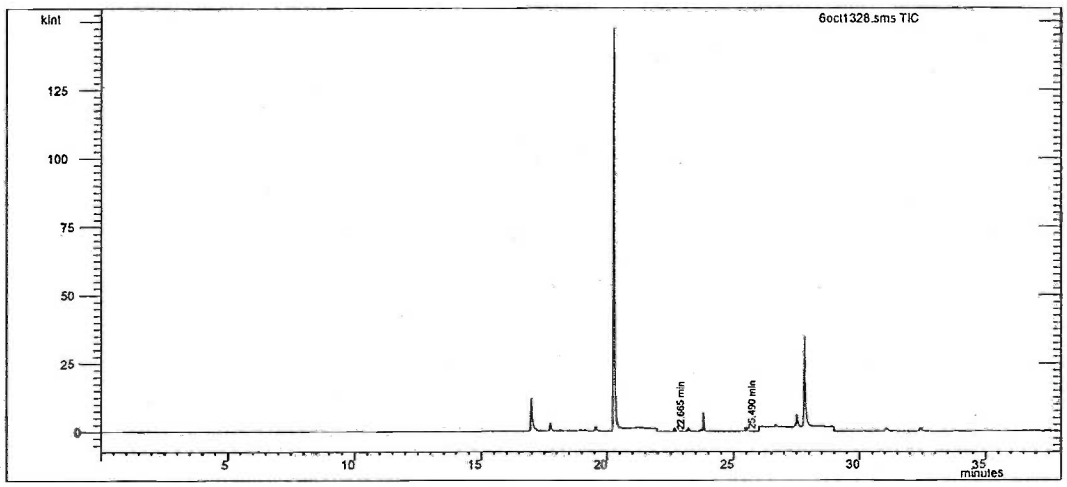
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.494	117.0+82.0	Chlorobenzene-d5(IS2)	999	2405	1.000
22.672	98.0+70.0	Toluene-d8 (Surr 3)	913	1047	1.142

ALAB : 00359

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1328.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	312080-013-13 5ml	**Acquisition Date:**	10/29/2012 5:20:54 PM
Inj. Notes:	pH<2	**Operator Name:**	RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.490	117.0+82.0	Chlorobenzene-d5(IS2)	999	2405	1.000
22.665	98.0+70.0	Toluene-d8 (Surr 3)	968	903	0.985

ALAB : 88378

Associated Labs QCBatch BenchSheet

QCBatchID: QC1130844

Created Date	10/25/2012
Created By:	akk
Matrix:	Water

Test:	8260M MS/MS
Method:	EPA 8260M
Instrument:	VOA-MS (group)
AnalysisDate:	10/25/2012
AnalysisEmployee:	akk

Seq #	Sample ID	Customer Sample ID	QC Source	Sur. Added	Spk. Added	Init. Wt/Vol	Final Vol	Extraction Date	Time	Comments
0	LCS_1									
1	LCSD_1									
2	Method Blank_1									
3	311995-004	B-6-CW03R	311995-004							
4	312080-008	Equipment Blank	312080-008							
5	312094-006	C-1-CW08	312094-006							

InitialCalibSTD:	
CalibCheckSTD:	
InternalSTD:	w#12101901
SurrogateSTD:	w#12101901
LCSSTD:	
MSSTD:	

Solvent Manufacturer and Lot:	
Sand Manufacturer and Lot:	
Na2SO4 Manufacturer and Lot:	
Surrogate Lot:	
Spike Lot:	
Prep By Signature:	

****

Varian Star Workstation - RecalcList Thu Oct 25 09:18:38 2012

RecalcList: C:\VarianWS\8260LIST.RCL

Created: Thu Sep 10 08:16:26 2009
Modified: Thu Oct 25 09:18:31 2012

****

Line	Sample Name	Data File	Recalc Notes
1	0.02ppb tcp ccv	c:\varianws\data\6oct12\6Oct1286.SMS	none
2	0.02ppb tcp lcs	c:\varianws\data\6oct12\6Oct1287.SMS	none
3	0.02ppb tcp lcsd	c:\varianws\data\6oct12\6Oct1288.SMS	none
4	~~method blank~~	c:\varianws\data\6oct12\6Oct1289.SMS	none
5	312080-008-3 5ml	c:\varianws\data\6oct12\6Oct1290.SMS	none
6	method blank	c:\varianws\data\6oct12\6Oct1291.SMS	none
7	312080-008-3 5ml Notes pH<2	c:\varianws\data\6oct12\6Oct1292.SMS	below
8	312094-006-5 5ml Notes pH<2	c:\varianws\data\6oct12\6Oct1293.SMS	below
9	311995-004-2 5ml Notes pH<2	c:\varianws\data\6oct12\6Oct1294.SMS	below
10	~~311995-005-1 5ml~~ Notes pH<2	c:\varianws\data\6oct12\6Oct1295.SMS	below
11	~~311995-007-4 5ml~~ Notes pH<2	c:\varianws\data\6oct12\6Oct1296.SMS	below
12	~~311995-005-1 5ml~~ Notes pH<2	c:\varianws\data\6oct12\6Oct1297.SMS	below
13	~~311995-010-10 5ml~~ Notes pH<2	c:\varianws\data\6oct12\6Oct1298.SMS	below
14	rinse	c:\varianws\data\6oct12\6Oct1299.SMS	none

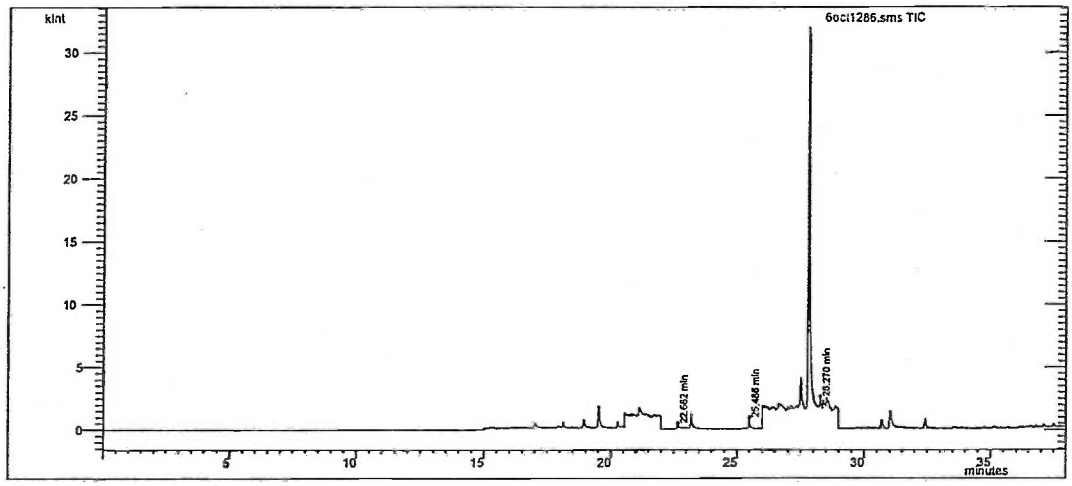
MKK 10/25

ALAB : 00372

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1286.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp ccv	**Acquisition Date:**	10/24/2012 10:21:31 AM
Inj. Notes:	w#12100901	**Operator Name:**	RyanP



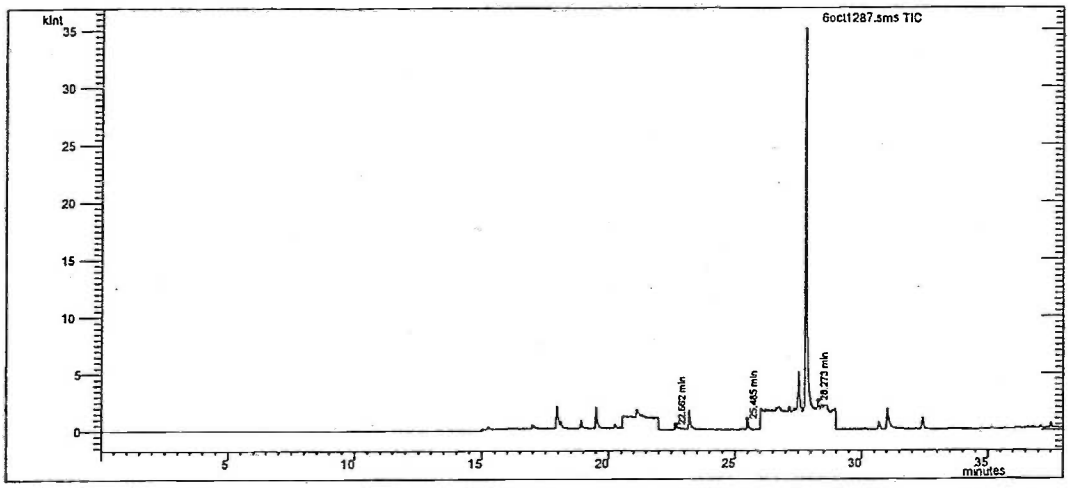
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.486	117.0+82.0	Chlorobenzene-d5(IS2)	997	2158	1.000
28.270	75.0	1,2,3 - TCP	1000	2207	0.019
22.662	98.0+70.0	Toluene-d8 (Surr 3)	894	828	1.007

ALAB : 00373

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1287.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp lcs	**Acquisition Date:**	10/24/2012 11:18:23 AM
Inj. Notes:	w#12100902	**Operator Name:**	RyanP



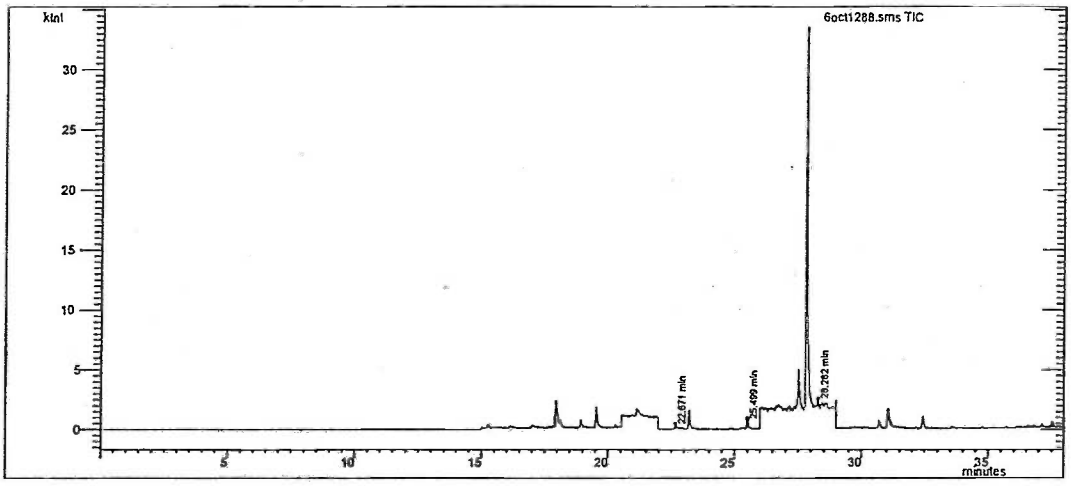
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.485	117.0+82.0	Chlorobenzene-d5(IS2)	999	2260	1.000
28.273	75.0	1,2,3 - TCP	1000	2708	0.022
22.662	98.0+70.0	Toluene-d8 (Surr 3)	947	873	1.013

ALAB : 88374

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1288.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp lcsd	**Acquisition Date:**	10/24/2012 12:16:04 PM
Inj. Notes:	w#12100902	**Operator Name:**	RyanP



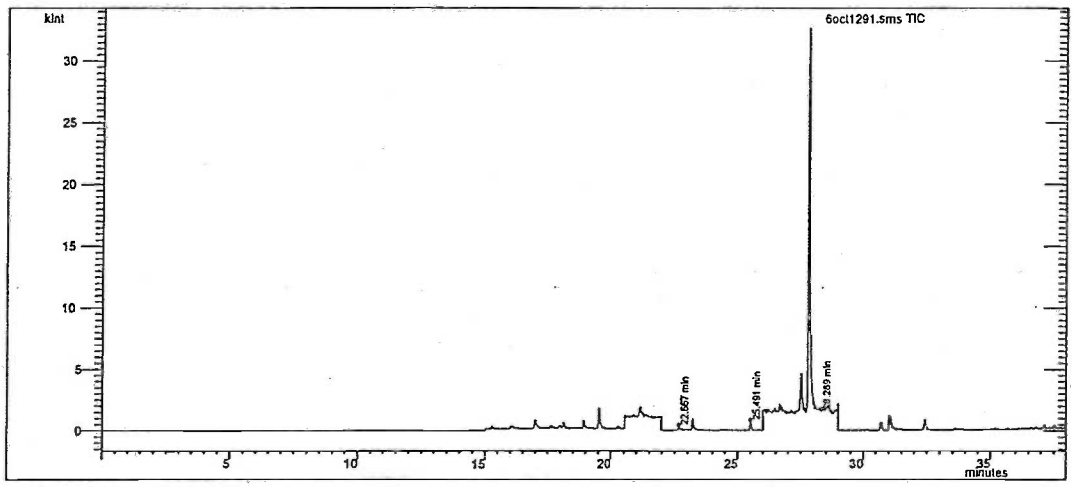
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.499	117.0+82.0	Chlorobenzene-d5(IS2)	999	2224	1.000
28.282	75.0	1,2,3 - TCP	1000	2225	0.019
22.671	98.0+70.0	Toluene-d8 (Surr 3)	927	790	0.932

ALAB : 00375

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1291.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	method blank	**Acquisition Date:**	10/24/2012 3:10:04 PM
Inj. Notes:		**Operator Name:**	RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.491	117.0+82.0	Chlorobenzene-d5(IS2)	999	2163	1.000
28.289	75.0	1,2,3 - TCP	1000	322	0.003
22.667	98.0+70.0	Toluene-d8 (Surr 3)	950	892	1.082

ALAB : 00376

Associated Labs QCBatch BenchSheet

QCBatchID: QC1130929

Created Date	10/29/2012
Created By:	akk
Matrix:	Water

Test:	8260M MS/MS
Method:	EPA 8260M
Instrument:	VOA-MS (group)
AnalysisDate:	10/29/2012
AnalysisEmployee:	akk

Seq #	Sample ID	Customer Sample ID	QC Source	Sur. Added	Spk Added	Init. Wt/Vol	Final Vol.	Extraction Date	Extraction Time	Comments
0	LCS_1									
1	LCSD_1									
2	Method Blank_1									
3	311995-005	B-6-CW03R Duplicate	311995-005							
4	311995-007	C-1-CW05	311995-007							
5	311995-010	B1CW17	311995-010							
6	312080-005	C-1-CW03	312080-005							
7	312080-006	C-1-CW02	312080-006							

InitialCalibSTD:	
CalibCheckSTD:	
InternalSTD:	w#12101901
SurrogateSTD:	w#12101901
LCSSTD:	
MSSTD:	

Solvent Manufacturer and Lot:	
Sand Manufacturer and Lot:	
Na2SO4 Manufacturer and Lot:	
Surrogate Lot:	
Spike Lot:	
Prep By Signature:	

ALAB: 8627

****

Varian Star Workstation - RecalcList Mon Oct 29 08:36:06 2012

RecalcList: C:\Documents and Settings\ragtimerye\Desktop\temp recalc.rcl

Created: Tue Oct 23 09:36:43 2012
Modified: Mon Oct 29 08:35:50 2012

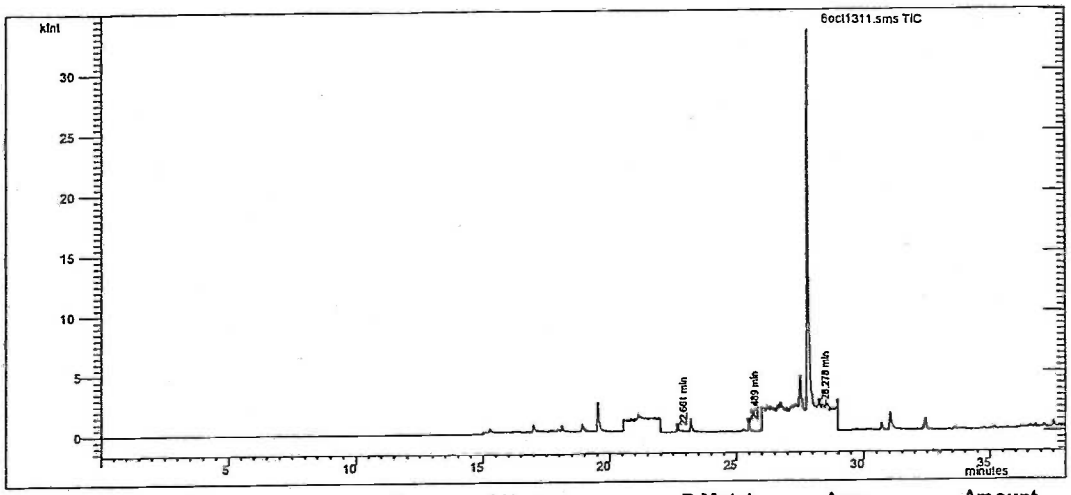
****

Line	Sample Name	Data File	Recalc Notes
1	0.02ppb tcp ccv	c:\varianws\data\6oct12\6Oct1311.SMS	none
2	0.02ppb tcp lcs	c:\varianws\data\6oct12\6Oct1312.SMS	none
3	0.02ppb tcp lcsd	c:\varianws\data\6oct12\6Oct1313.SMS	none
4	method blank	c:\varianws\data\6oct12\6Oct1314.SMS	none
5	311995-005-1 5ml	c:\varianws\data\6oct12\6Oct1315.SMS	below
	Notes pH<2		
6	311955-007-4 5ml	c:\varianws\data\6oct12\6Oct1316.SMS	below
	Notes pH<2		
7	311955-010-10 5ml	c:\varianws\data\6oct12\6Oct1317.SMS	below
	Notes pH<2		
8	312080-005-4 5ml	c:\varianws\data\6oct12\6Oct1318.SMS	below
	Notes pH<2		
9	312080-006-3 5ml	c:\varianws\data\6oct12\6Oct1319.SMS	below
	Notes pH<2		

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1311.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp ccv	**Acquisition Date:**	10/26/2012 10:30:26 AM
Inj. Notes:	w#12100901	**Operator Name:**	RyanP

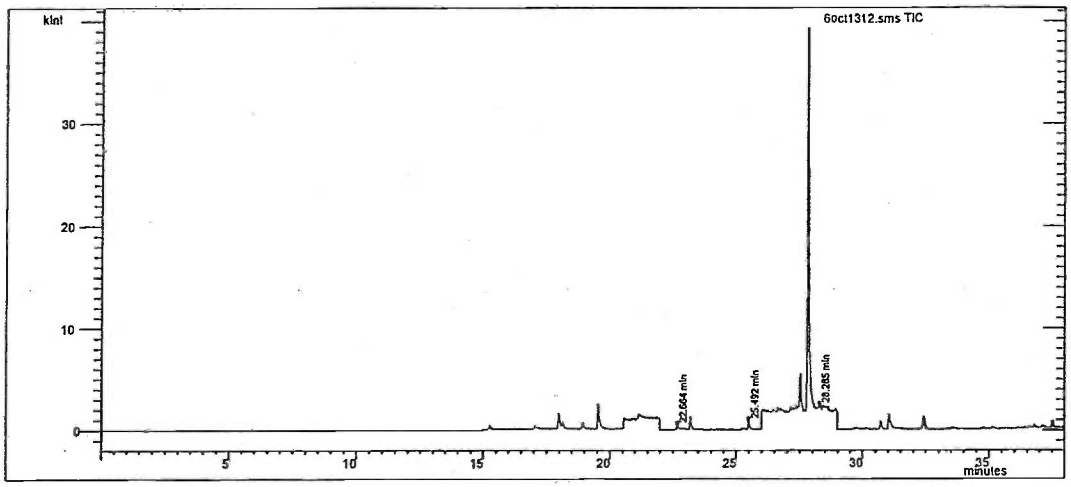


RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.489	117.0+82.0	Chlorobenzene-d5(IS2)	998	2619	1.000
28.278	75.0	1,2,3 - TCP	1000	2499	0.018
22.661	98.0+70.0	Toluene-d8 (Surr 3)	970	1255	1.257

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1312.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp lcs	**Acquisition Date:**	10/26/2012 11:52:15 AM
Inj. Notes:	w#12100902	**Operator Name:**	RyanP

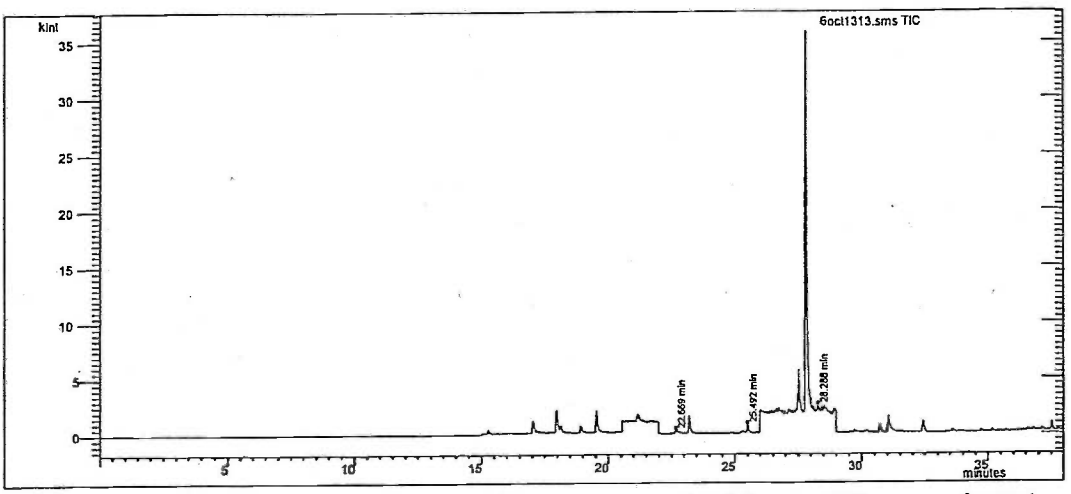


RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.492	117.0+82.0	Chlorobenzene-d5(IS2)	999	2831	1.000
28.285	75.0	1,2,3 - TCP	1000	2478	0.016
22.664	98.0+70.0	Toluene-d8 (Surr 3)	998	1413	1.309

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1313.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp lcsd	**Acquisition Date:**	10/26/2012 12:50:15 PM
Inj. Notes:	w#12100902	**Operator Name:**	RyanP

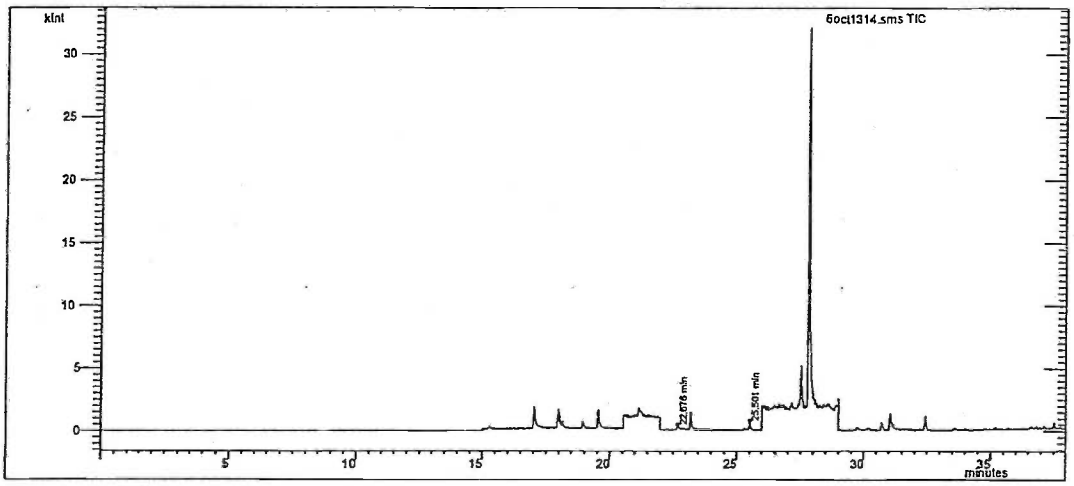


RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.492	117.0+82.0	Chlorobenzene-d5(IS2)	999	2496	1.000
28.286	75.0	1,2,3 - TCP	1000	2488	0.019
22.669	98.0+70.0	Toluene-d8 (Surr 3)	944	1104	1.160

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1314.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	method blank	**Acquisition Date:**	10/26/2012 1:47:30 PM
Inj. Notes:		**Operator Name:**	RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.501	117.0+82.0	Chlorobenzene-d5(IS2)	999	2112	1.000
22.676	98.0+70.0	Toluene-d8 (Surr 3)	971	852	1.058

Associated Labs QCBatch BenchSheet

QCBatchID: QC1130967

Created Date:	10/30/2012
Created By:	akk
Matrix:	Water

Test:	8260M MS/MS
Method:	EPA 8260M
Instrument:	VOA-MS (group)
AnalysisDate:	10/30/2012
AnalysisEmployee:	akk

Seq #	Sample ID	Customer Sample ID	QC Source	Sur. Added	Spk. Added	Init. Wt/Vol	Final Vol.	Extraction Date	Extraction Time	Comments
0	LCS_1									
1	LCSD_1									
2	Method Blank_1									
3	312080-013	B-1-CW12	312080-013							
4	312159-006	EB101512 Equip Blank	312159-006							
5	312205-006	B-6-CW16	312205-006							
6	312205-007	EB101612 Equip Blank	312205-007							

InitialCalibSTD:	
CalibCheckSTD:	
InternalSTD:	w#12101901
SurrogateSTD:	w#12101901
LCSSTD:	
MSSTD:	

Solvent Manufacturer and Lot:	
Sand Manufacturer and Lot:	
Na2SO4 Manufacturer and Lot:	
Surrogate Lot:	
Spike Lot:	
Prep By Signature:	

ALS 0505

****

Varian Star Workstation - RecalcList Tue Oct 30 08:40:43 2012

RecalcList: C:\VarianWS\8260LIST.RCL

Created: Thu Sep 10 08:16:26 2009
Modified: Tue Oct 30 08:40:39 2012

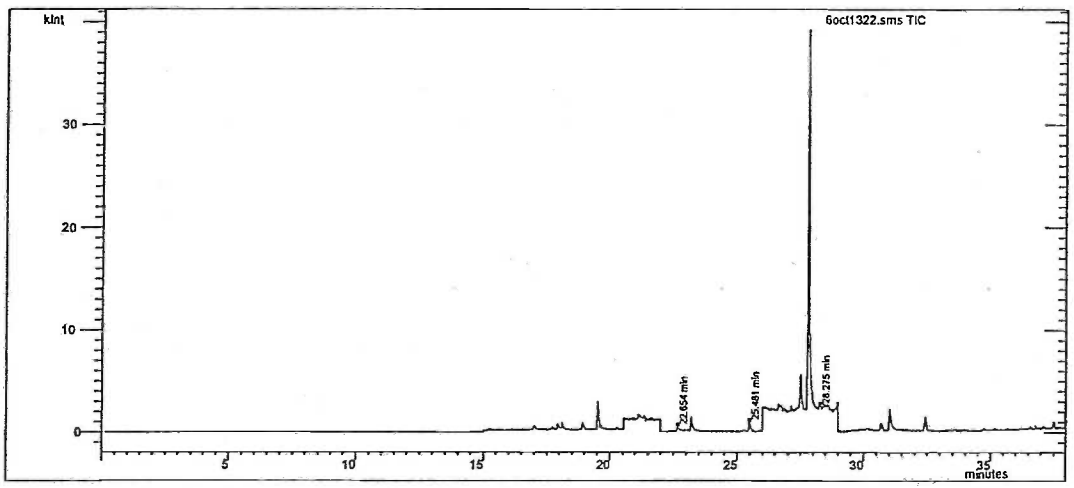
****

Line	Sample Name	Data File	Recalc Notes
1	0.02ppb tcp ccv	c:\varianws\data\6oct12\6Oct1322.SMS	none
2	0.02ppb tcp lcs	c:\varianws\data\6oct12\6Oct1323.SMS	none
3	0.02ppb tcp lcsd	c:\varianws\data\6oct12\6Oct1324.SMS	none
4	method blank	c:\varianws\data\6oct12\6Oct1325.SMS	none
5	312159-006-8 5ml	c:\varianws\data\6oct12\6Oct1326.SMS	below
	Notes pH<2		
6	312205-007-6 5ml	c:\varianws\data\6oct12\6Oct1327.SMS	below
	Notes pH<2		
7	312080-013-13 5ml	c:\varianws\data\6oct12\6Oct1328.SMS	below
	Notes pH<2		
8	312205-006-6 5ml	c:\varianws\data\6oct12\6Oct1329.SMS	below
	Notes pH<2		

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1322.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp ccv	**Acquisition Date:**	10/29/2012 10:24:42 AM
Inj. Notes:	w#12100901	**Operator Name:**	RyanP



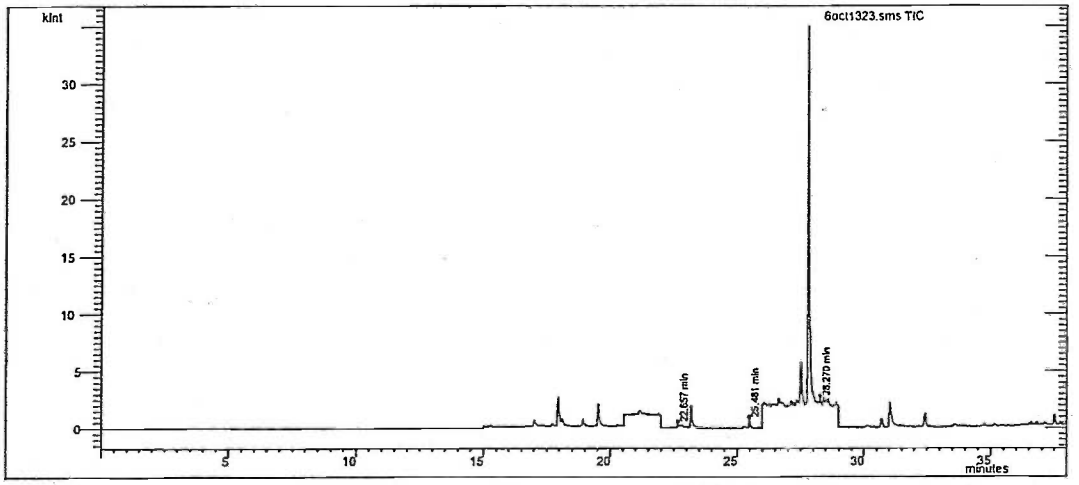
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.481	117.0+82.0	Chlorobenzene-d5(IS2)	999	2916	1.000
28.275	75.0	1,2,3 - TCP	1000	2481	0.016
22.654	98.0+70.0	Toluene-d8 (Surr 3)	971	1428	1.284

ALAB : 00385

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1323.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp lcs	**Acquisition Date:**	10/29/2012 11:27:19 AM
Inj. Notes:	w#12100902	**Operator Name:**	RyanP

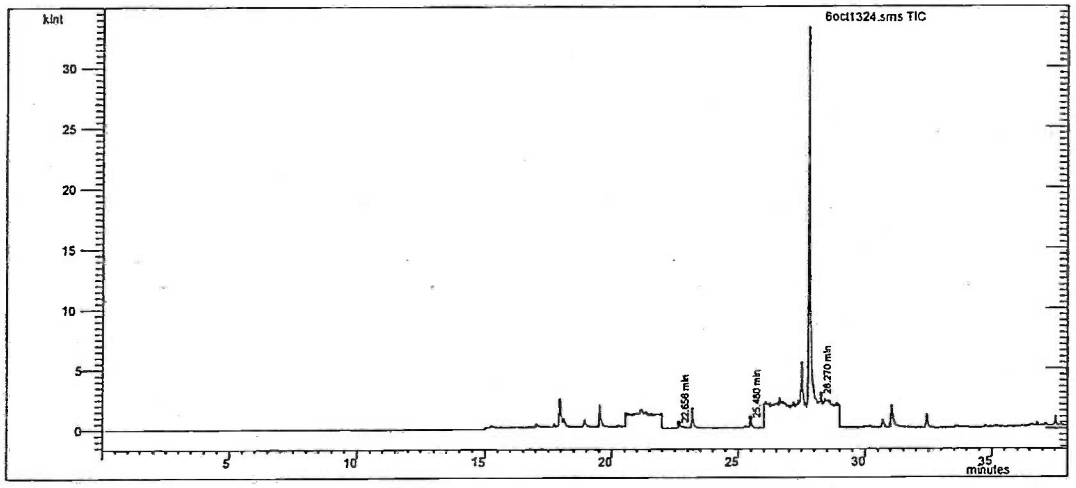


RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.481	117.0+82.0	Chlorobenzene-d5(IS2)	999	2377	1.000
28.270	75.0	1,2,3 - TCP	1000	2167	0.017
22.657	98.0+70.0	Toluene-d8 (Surr 3)	972	1154	1.273

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1324.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp lcsd	**Acquisition Date:**	10/29/2012 12:28:42 PM
Inj. Notes:	w#12100902	**Operator Name:**	RyanP

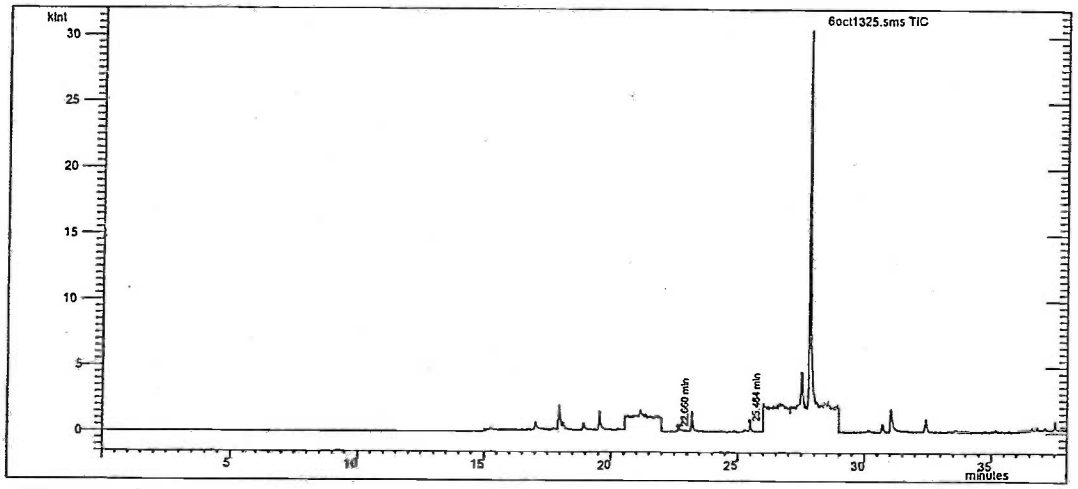


RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.480	117.0+82.0	Chlorobenzene-d5(IS2)	998	2385	1.000
28.270	75.0	1,2,3 - TCP	1000	2473	0.019
22.656	98.0+70.0	Toluene-d8 (Surr 3)	996	944	1.039

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6oct1325.sms	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	method blank	**Acquisition Date:**	10/29/2012 1:31:47 PM
Inj. Notes:		**Operator Name:**	RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.484	117:0+82.0	Chlorobenzene-d5(IS2)	998	2077	1.000
22.660	98.0+70.0	Toluene-d8 (Surr 3)	970	829	1.047

****

Varian Star Workstation - RecalcList Tue Oct 23 08:54:41 2012

RecalcList: C:\Documents and Settings\ragtimerye\Desktop\temp recalc.rcl

Created: Tue Sep 11 16:52:55 2012
Modified: Tue Oct 23 08:34:46 2012

****

TCP_Q_102212

Line	Sample Name	Data File	Recalc Notes
1	rinse	c:\varianws\data\6oct12\6Oct1263.SMS	none
2	0.005ppb tcp ic	c:\varianws\data\6oct12\6Oct1264.SMS	none
3	0.01ppb tcp ic	c:\varianws\data\6oct12\6Oct1265.SMS	none
4	0.02ppb tcp ic	c:\varianws\data\6oct12\6Oct1266.SMS	none
5	0.05ppb tcp ic	c:\varianws\data\6oct12\6Oct1267.SMS	none
6	0.1ppb tcp ic	c:\varianws\data\6oct12\6Oct1268.SMS	none
7	rinse	c:\varianws\data\6oct12\6Oct1269.SMS	none
8	rinse	c:\varianws\data\6oct12\6Oct1270.SMS	none
9	0.02ppb tcp ccv	c:\varianws\data\6oct12\6Oct1271.SMS	none

Print Date: 23 Oct 2012 09:45:38

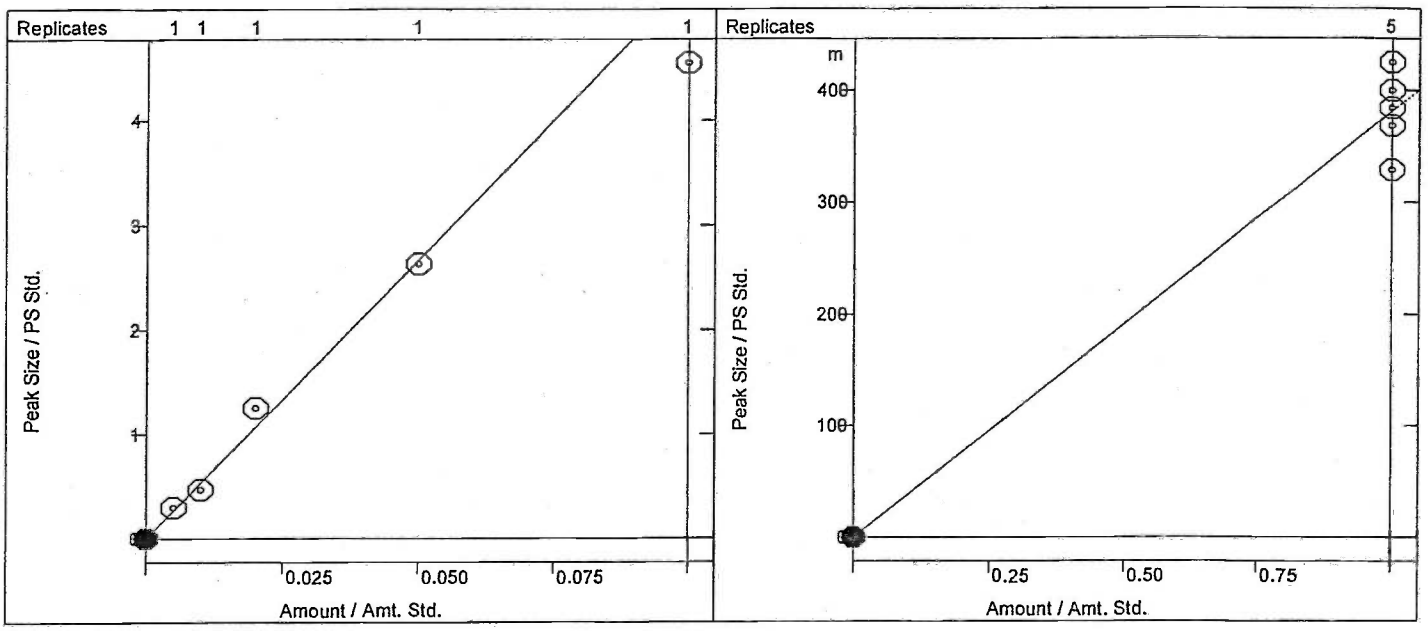
Calibration Curves Report

10/23/2012 9:45 AM

Method:	c:\varianws\methods\tcp-q_102212.mth		
Recalc Method:	...p-q_102212.mth	Last Calibration:	10/23/2012 9:40 AM
Sample List:	N/A	Cmpd. Table Updated:	10/23/2012 9:42 AM
Sequence:	N/A	Detector:	2000 Mass Spec
MS Workstation		Workstation Version:	Version 6.9
Peak Measurement:	Area	Calibration Type:	Internal Standard Analysis

1,2,3 - TCP
Curve Fit: Linear, Origin: Force, Weight: 1/nX2
Resp. Fact. RSD: 14.10%, Coeff. Det.(r2): 0.990412
y = +53.3889x

Toluene-d8 (Surr 3)
Curve Fit: Linear, Origin: Include (Ignore), Weight: 1/nX2
Resp. Fact. RSD: 9.450%, Coeff. Det.(r2): 0.958893
y = +0.3813x +1.1102e-16

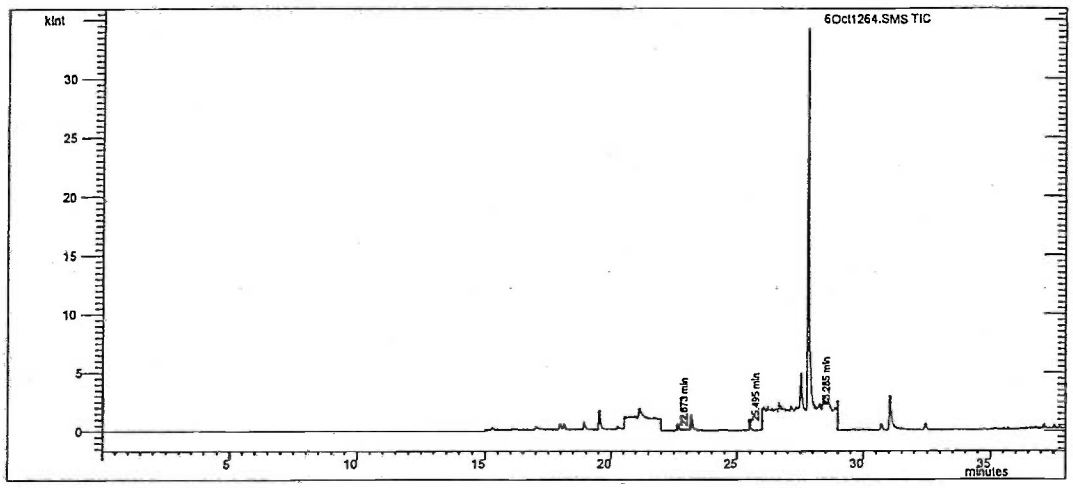


ALAB : 00390

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1264.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.005ppb tcp ic	**Acquisition Date:**	10/22/2012 2:00:44 PM
Inj. Notes:		**Operator Name:**	RyanP



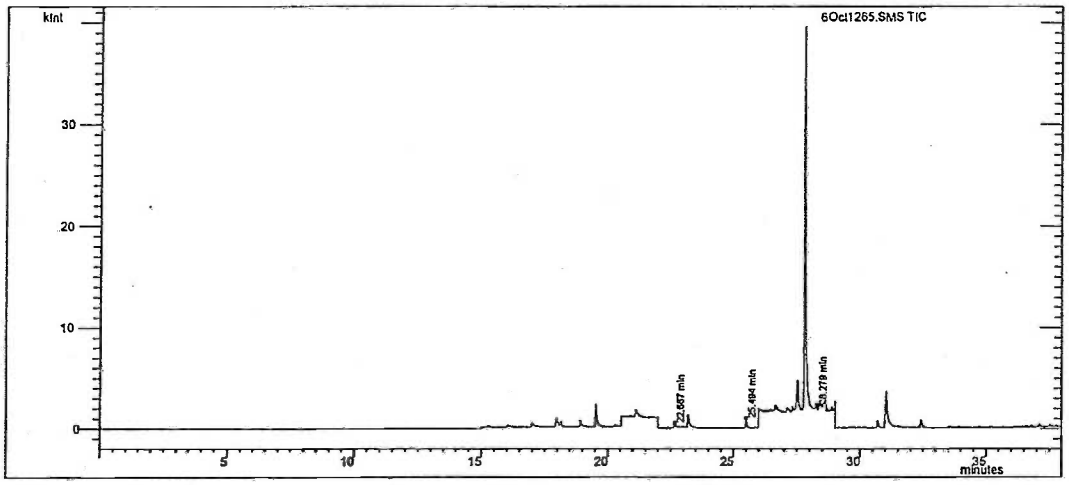
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.495	117.0+82.0	Chlorobenzene-d5(IS2)	998	2092	1.000
28.285	75.0	1,2,3 - TCP	1000	621	0.006
22.673	98.0+70.0	Toluene-d8 (Surr 3)	919	688	0.862

ALAB : 00391

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1265.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.01ppb tcp ic	**Acquisition Date:**	10/22/2012 3:00:07 PM
Inj. Notes:		**Operator Name:**	RyanP



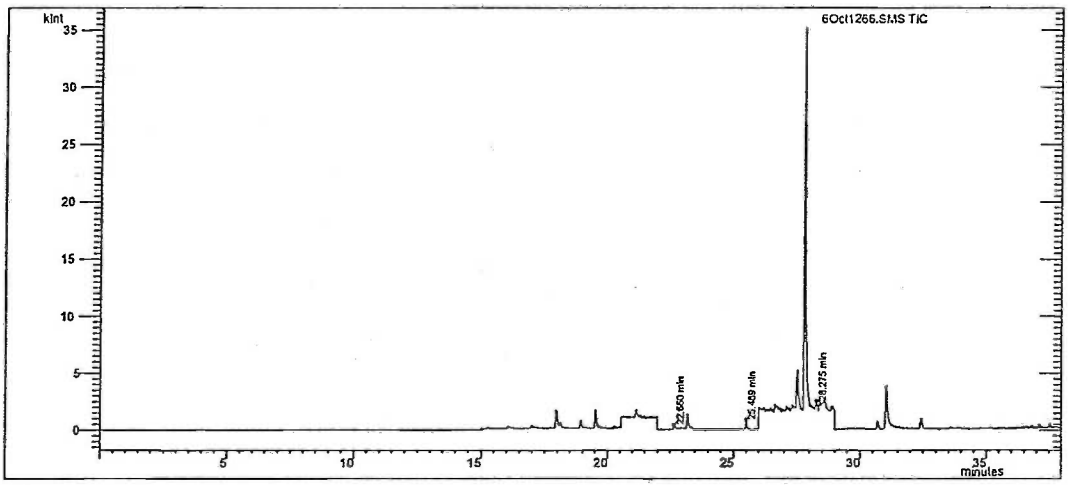
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.494	117.0+82.0	Chlorobenzene-d5(IS2)	999	2434	1.000
28.279	75.0	1,2,3 - TCP	1000	1139	0.009
22.667	98.0+70.0	Toluene-d8 (Surr 3)	944	1035	1.115

ALAB : 02392

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1266.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp ic	**Acquisition Date:**	10/22/2012 4:03:26 PM
Inj. Notes:		**Operator Name:**	RyanP

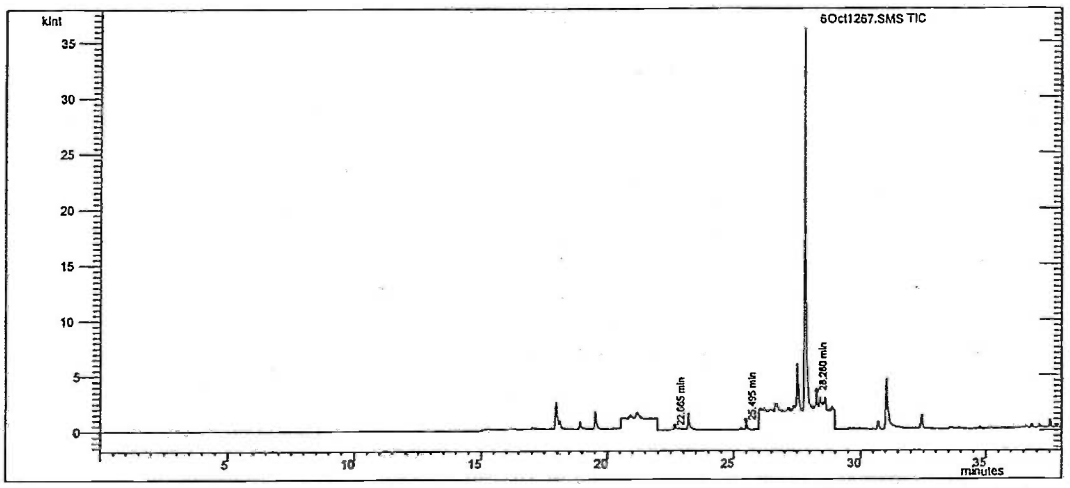


RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.489	117.0+82.0	Chlorobenzene-d5(IS2)	998	2205	1.000
28.275	75.0	1,2,3 - TCP	1000	2760	0.023
22.660	98.0+70.0	Toluene-d8 (Surr 3)	955	812	0.966

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1267.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.05ppb tcp ic	**Acquisition Date:**	10/22/2012 5:05:50 PM
Inj. Notes:		**Operator Name:**	RyanP



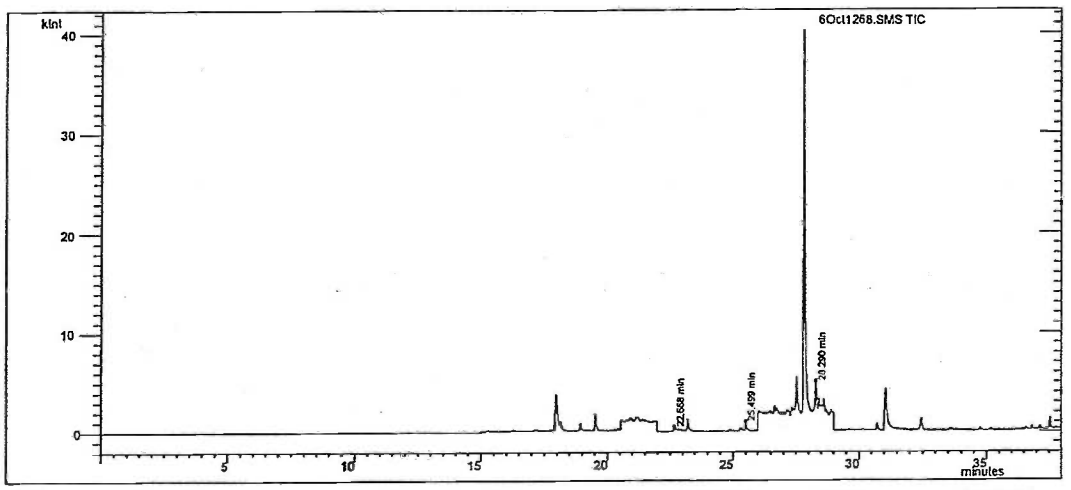
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.495	117.0+82.0	Chlorobenzene-d5(IS2)	998	2183	1.000
28.280	75.0	1,2,3 - TCP	1000	5548	0.048
22.665	98.0+70.0	Toluene-d8 (Surr 3)	892	873	1.049

ALAB : 00394

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1268.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.1ppb tcp ic	**Acquisition Date:**	10/22/2012 6:11:48 PM
Inj. Notes:		**Operator Name:**	RyanP

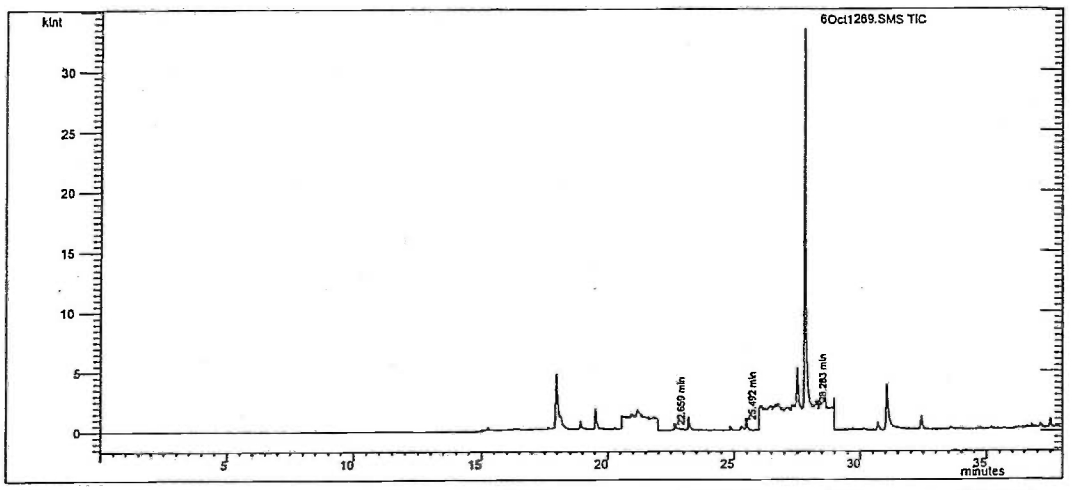


RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.499	117.0+82.0	Chlorobenzene-d5(IS2)	999	2444	1.000
28.290	75.0	1,2,3 - TCP	1000	11238	0.086
22.668	98.0+70.0	Toluene-d8 (Surr 3)	873	949	1.018

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1269.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	rinse	**Acquisition Date:**	10/22/2012 7:08:34 PM
Inj. Notes:		**Operator Name:**	RyanP

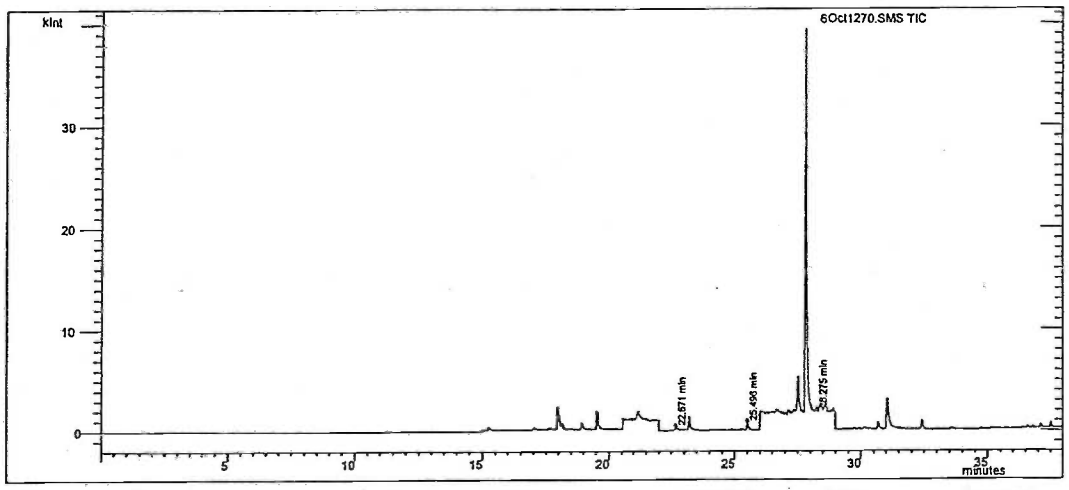


RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.492	117.0+82.0	Chlorobenzene-d5(IS2)	999	2075	1.000
28.283	75.0	1,2,3 - TCP	1000	1236	0.011
22.659	98.0+70.0	Toluene-d8 (Surr 3)	949	774	0.978

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1270.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	rinse	**Acquisition Date:**	10/22/2012 8:05:38 PM
Inj. Notes:		**Operator Name:**	RyanP



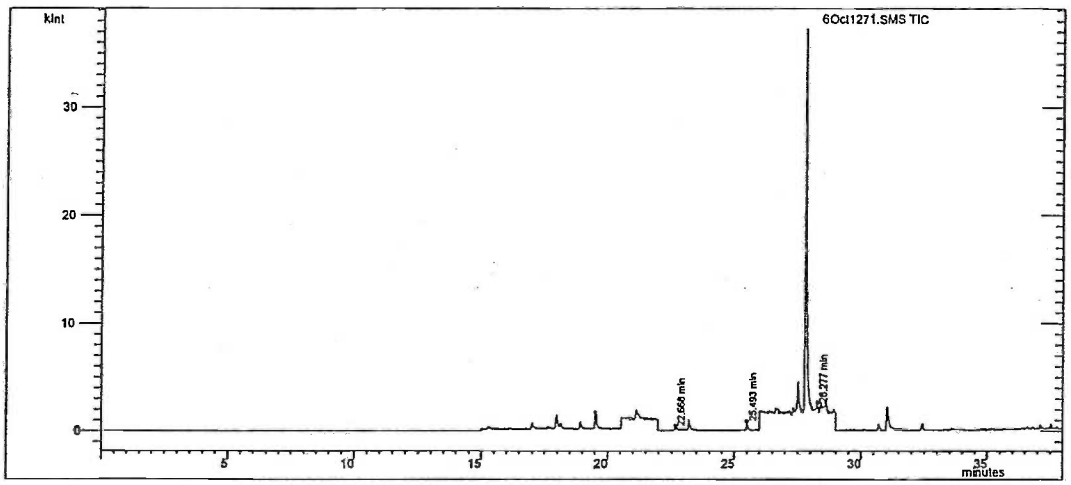
RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.496	117.0+82.0	Chlorobenzene-d5(IS2)	999	2288	1.000
28.275	75.0	1,2,3 - TCP	1000	729	0.006
22.671	98.0+70.0	Toluene-d8 (Surr 3)	887	817	0.937

ALAB : 00396

8260B Volatile Organics

Associated Labs
GCMS # 6

Data File Name:	c:\varianws\data\6oct12\6Oct1271.SMS	**Calc Method:**	C:\VarianWS\methods\TCP-Q_102212.mth
Sample Name:	0.02ppb tcp ccv	**Acquisition Date:**	10/22/2012 9:02:30 PM
Inj. Notes:	w#12100901	**Operator Name:**	RyanP



RT	Quan Ions	Compound Name	R.Match	Area	Amount
25.493	117.0+82.0	Chlorobenzene-d5(IS2)	999	2394	1.000
28.277	75.0	1,2,3 - TCP	1000	2663	0.021
22.668	98.0+70.0	Toluene-d8 (Surr 3)	927	925	1.014

ALAB : 00397

EPA 8270M

GC/MS/SIM

CONFIDENTIAL

Associated Labs QCBatch BenchSheet

QCBatchID: QC1130590

Created Date	10/17/2012
Created By:	qnguyen
Matrix:	Water

Test:	8270M Dioxane
Method:	EPA 8270M
Instrument:	SVOA-MS (group
AnalysisDate:	10/15/2012
AnalysisEmployee:	

Seq.#	Sample ID	Customer Sample ID	QC Source	Sur. Added	Spk. Added	Init. Wt/Vol	Final Vol.	Extraction Date	Extraction Time	Comments
0	LCS_1									
1	LCSD_1									
2	Method Blank_1									
3	311991-009	PV-GW-C-49-101112	311991-009							
4	311991-010	PV-GW-C-142-101112	311991-010							
5	311991-016	PV-GW-C-145-101112	311991-016							
6	311991-018	PV-GW-C-145N-10111	311991-018							
7	312080-003	MW-1	312080-003							
8	312080-004	MW-2	312080-004							
9	312094-005	M-W-6	312094-005							

InitialCalibSTD:	
CalibCheckSTD:	
InternalSTD:	
SurrogateSTD:	
LCSSTD:	
MSSTD:	

VEW

Solvent Manufacturer and Lot:	
Sand Manufacturer and Lot:	
Na2SO4 Manufacturer and Lot:	
Surrogate Lot:	
Spike Lot:	
Prep By Signature:	

LMC-PET-00001215

ASSOCIATED LABORATORIES
8270-M PREP SHEET

BATCH ID: 8270-101512

LAB REQUEST #		PREP METHOD	MATRIX TYPE	SURR. ADDED	SPIKE ADDED	INITIAL WT/(VOL)	FINAL VOLUME	EXTRACTION: DATE	EXTRACTION: TIME	EXTRACTION: BY	COMMENT
BLANK		8270M	W	50µL	—	500mL	0.5mL	10/15/12	6:00pm	H.C.	
LCS					50 µL						
LCSD					50 µL						
311991	009				—						CDM Smith INC
	010				—						"
	016				—						"
	018				—						"
312080	003				—						Arcadis
	004				—						"
312094	005				—						Arcadis

Solvent Manufacturer and Lot # Fisher: #125315

Sand Manufacturer & Lot # ———

Surrogate Lot # W-6270

Spike Lot # W-6145

Na_2SO_4 Manufacturer & Lot # M.T. # 30562N

ALAB: 00159

ALAB: 00400

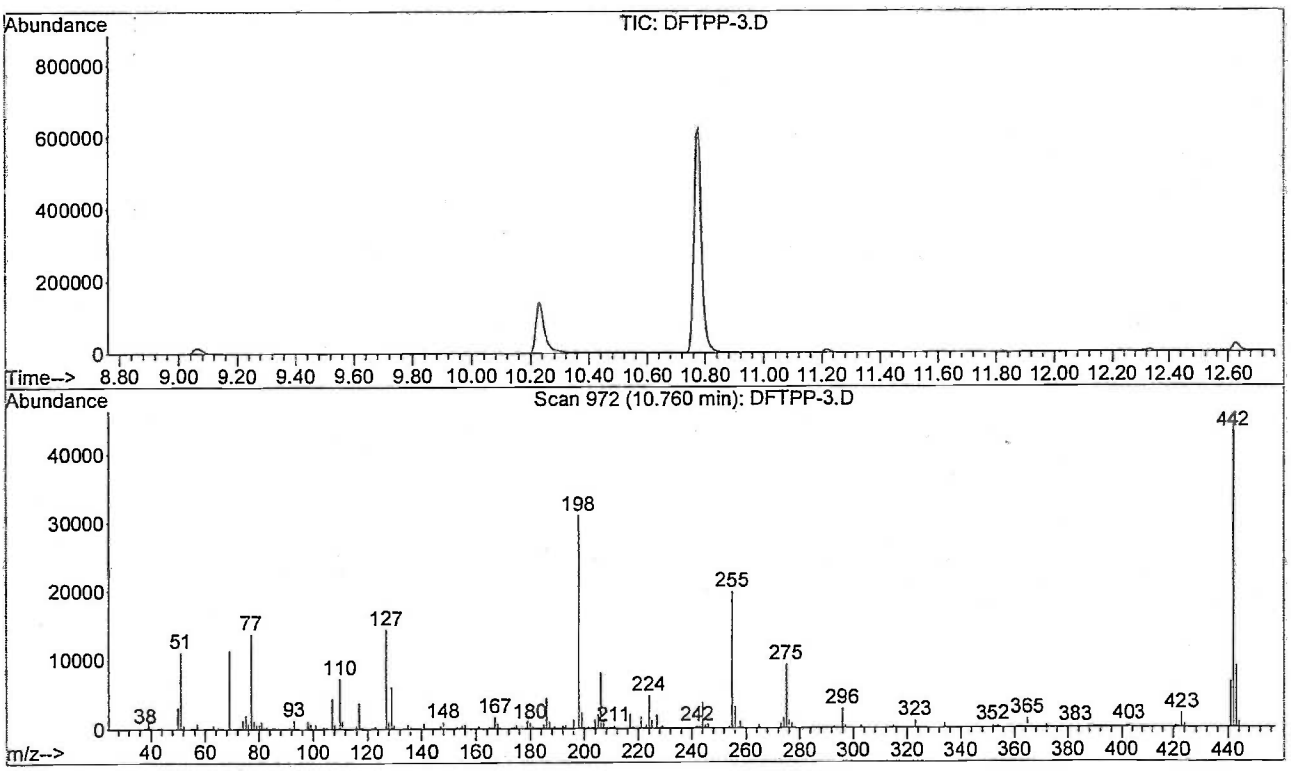
CONFIDENTIAL

LMC-PET-00001216

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20121016\
Data File : DFTPP-3.D
Acq On : 16 Oct 2012 1:25 pm
Operator : QN
Sample : DFTPP
Misc : s-1948
ALS Vial : 98 Sample Multiplier: 1

Integration File: EVENTS.E

Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Title :
Last Update : Wed May 05 16:21:01 2010



Spectrum Information: Scan 972

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%.	Raw Abn	Result Pass/Fail
51	198	30	60	35.8	11107	PASS
68	69	0.00	2	1.4	155	PASS
69	198	0.00	100	36.7	11372	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	46.4	14388	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	31008	PASS
199	198	5	9	7.4	2302	PASS
275	198	10	30	29.6	9188	PASS
365	198	1	100	4.2	1304	PASS
441	443	0.01	100	74.3	6704	PASS
442	198	40	200	142.5	44184	PASS
443	442	17	23	20.4	9027	PASS

ALAB : 00401

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : ICV@10ppb-4.D
Acq On : 16 Oct 2012 8:18 pm
Operator : QN
Sample : ICV@10ppb-2
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 16 20:35:09 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

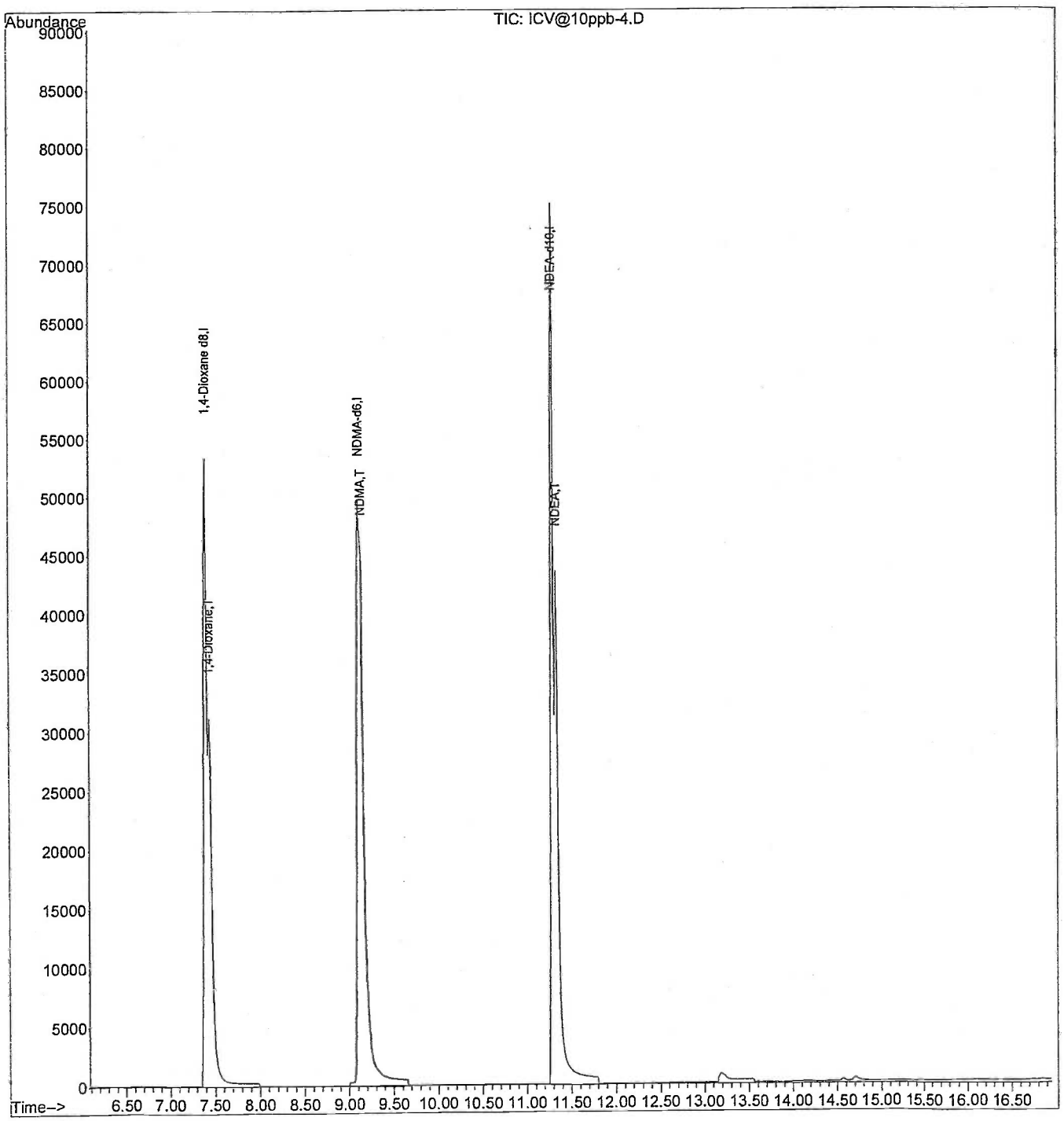
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	905667	20.00	ug/L	-0.18
3) NDMA-d6	9.11	80	1337163	20.00	ug/L	-0.18
5) NDEA-d10	11.29	112	1274918	20.00	ug/L	-0.18
Target Compounds						**Qvalue**
2) 1,4-Dioxane	7.45	88	425787	10.17	ug/L	97
4) NDMA	9.15	74	558373	9.41	ug/L	100
6) NDEA	11.34	102	596483	10.76	ug/L	98

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : ICV@10ppb-4.D
Acq On : 16 Oct 2012 8:18 pm
Operator : QN
Sample : ICV@10ppb-2
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 16 20:35:09 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB : 084463

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-008.D
Acq On : 16 Oct 2012 6:59 pm
Operator : QN
Sample : mb1015
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 17 09:42:23 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.41	96	421459	20.00	ug/L	-0.16
3) NDMA-d6	9.12	80	576418	20.00	ug/L	-0.17
5) NDEA-d10	11.30	112	552086	20.00	ug/L	-0.17

Target Compounds	Qvalue

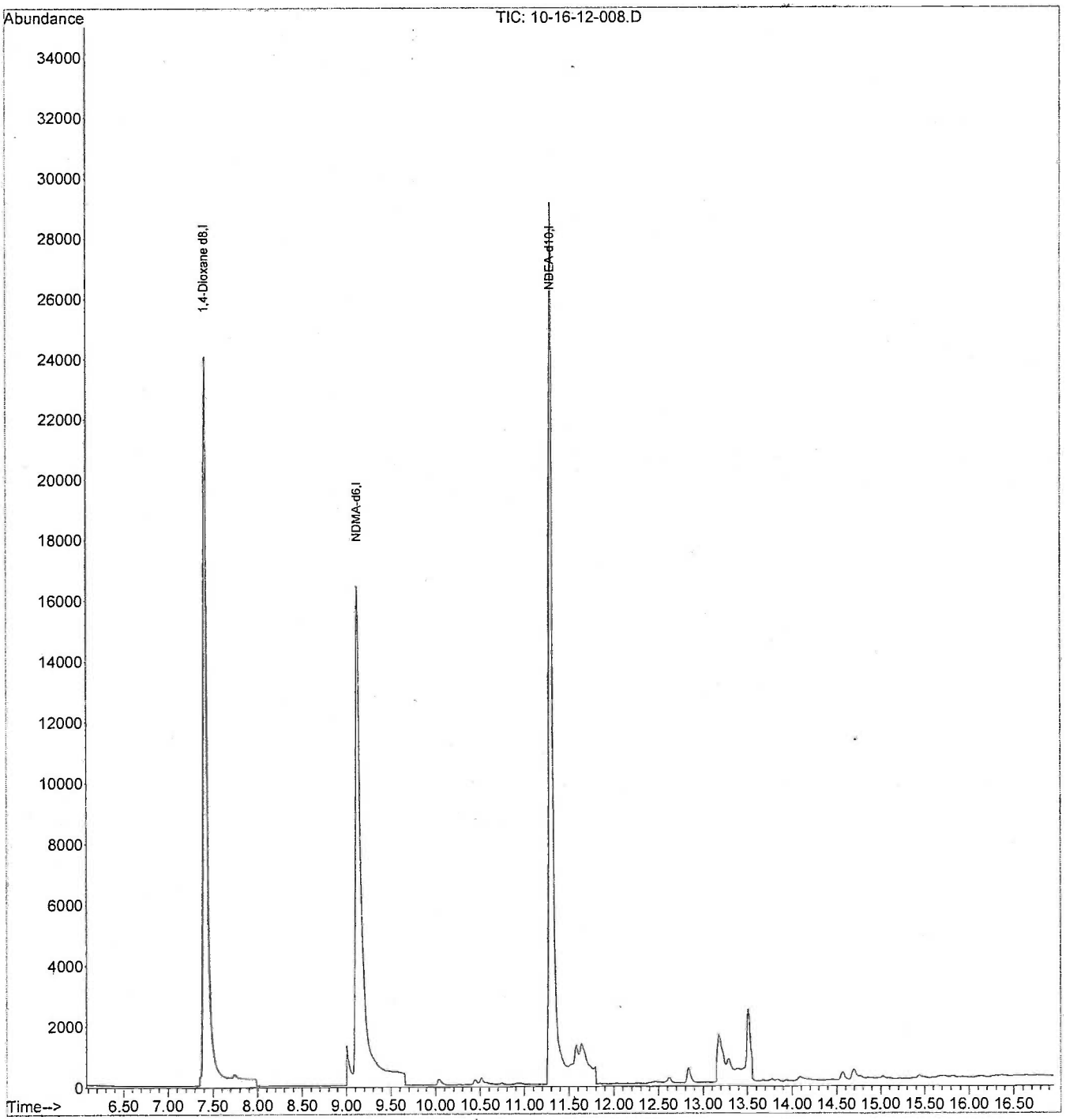
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ALAB : 004004

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-008.D
Acq On : 16 Oct 2012 6:59 pm
Operator : QN
Sample : mb1015
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 17 09:42:23 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB : 00405

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-009.D
Acq On : 16 Oct 2012 7:25 pm
Operator : QN
Sample : lcs1015
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 17 12:30:22 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

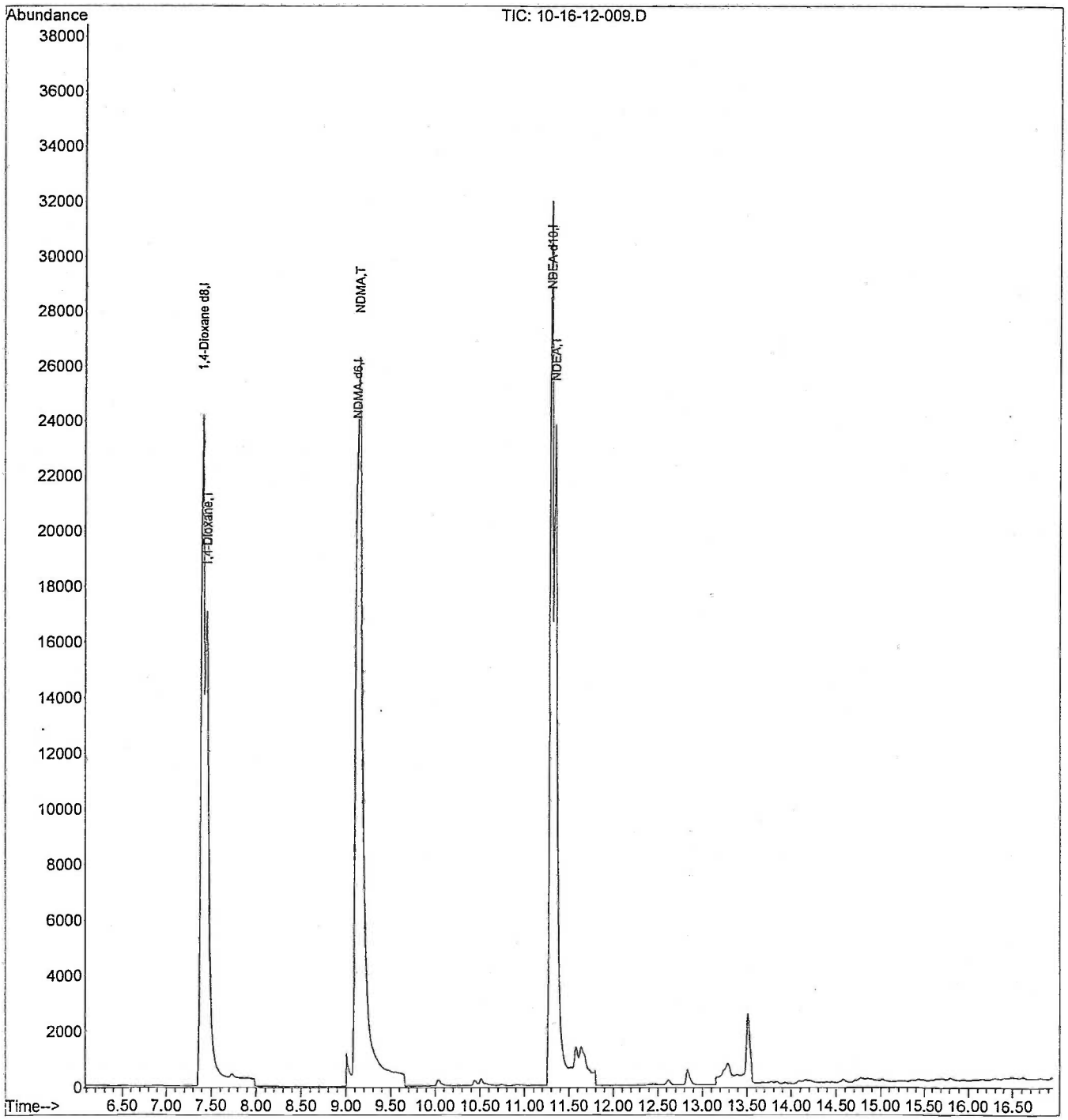
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	404067	20.00	ug/L	-0.18
3) NDMA-d6	9.12	80	586443	20.00	ug/L	-0.17
5) NDEA-d10	11.29	112	562314	20.00	ug/L	-0.18
Target Compounds						Qvalue
2) 1,4-Dioxane	7.45	88	249983	13.39	ug/L	99
4) NDMA	9.15	74	357936	13.75	ug/L	97
6) NDEA	11.34	102	344346	14.08	ug/L	94

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-009.D
Acq On : 16 Oct 2012 7:25 pm
Operator : QN
Sample : lcs1015
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 17 12:30:22 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



1625_M_041311F2.M Wed Oct 17 12:30:24 2012 Page: 2

ALAB : 00407

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-010.D
Acq On : 16 Oct 2012 7:51 pm
Operator : QN
Sample : lcsd1015
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 17 12:30:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.41	96	634272	20.00	ug/L	-0.16
3) NDMA-d6	9.12	80	1031446	20.00	ug/L	-0.17
5) NDEA-d10	11.29	112	1038516	20.00	ug/L	-0.18
Target Compounds						Qvalue
2) 1,4-Dioxane	7.46	88	408775	13.95	ug/L	97
4) NDMA	9.15	74	668053	14.59	ug/L	95
6) NDEA	11.34	102	690389	15.28	ug/L	96

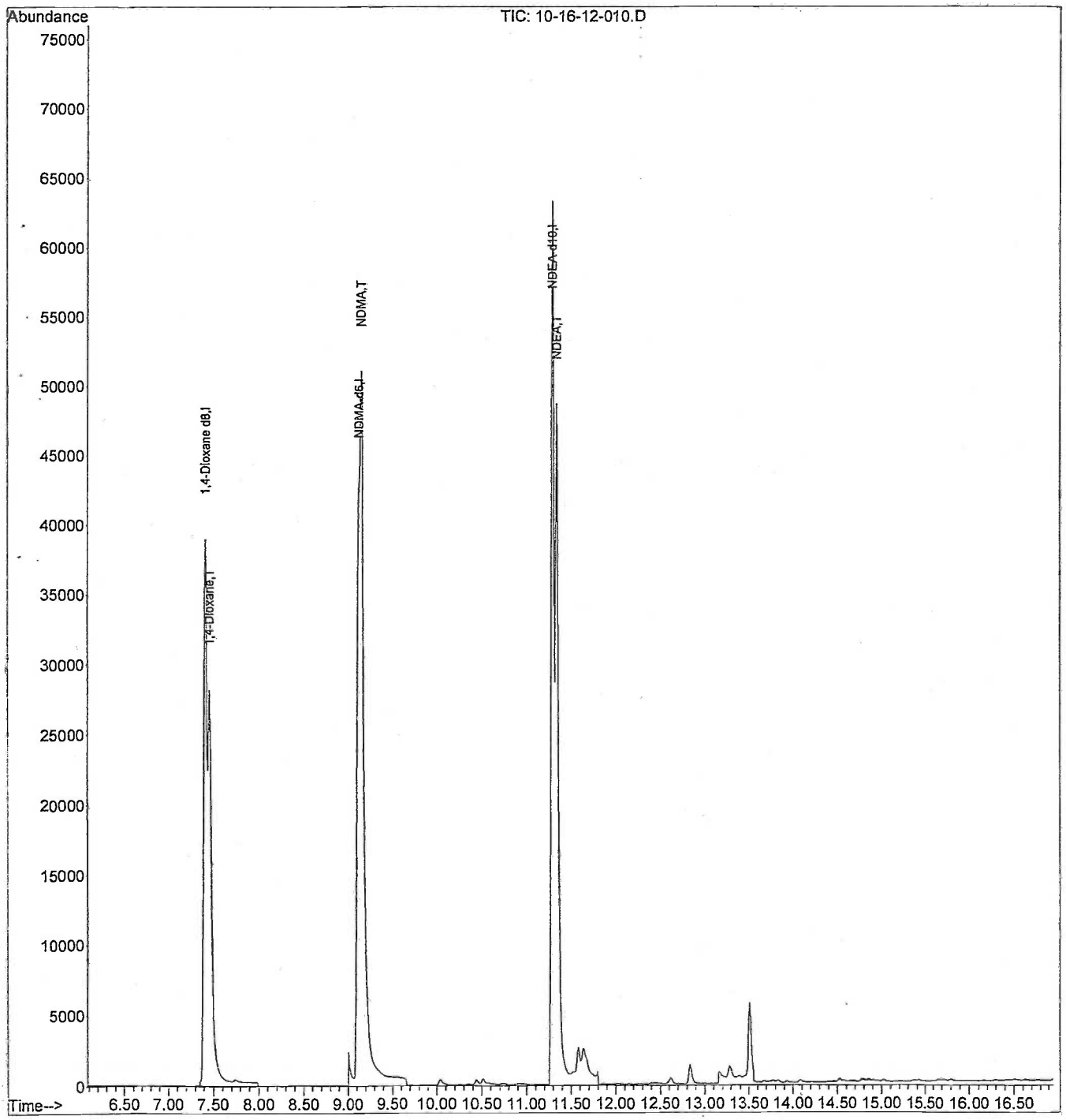
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ALAB : 00408

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-010.D
Acq On : 16 Oct 2012 7:51 pm
Operator : QN
Sample : lcsd1015
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 17 12:30:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB : 00409

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-015.D
Acq On : 16 Oct 2012 10:28 pm
Operator : QN
Sample : 312080-003
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 17 09:46:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	365438	20.00 ug/L	-0.18
3) NDMA-d6	9.12	80	548480	20.00 ug/L	-0.17
5) NDEA-d10	11.30	112	556825	20.00 ug/L	-0.17
Target Compounds					Qvalue
2) 1,4-Dioxane	7.45	88	82937	4.91 ug/L	97

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

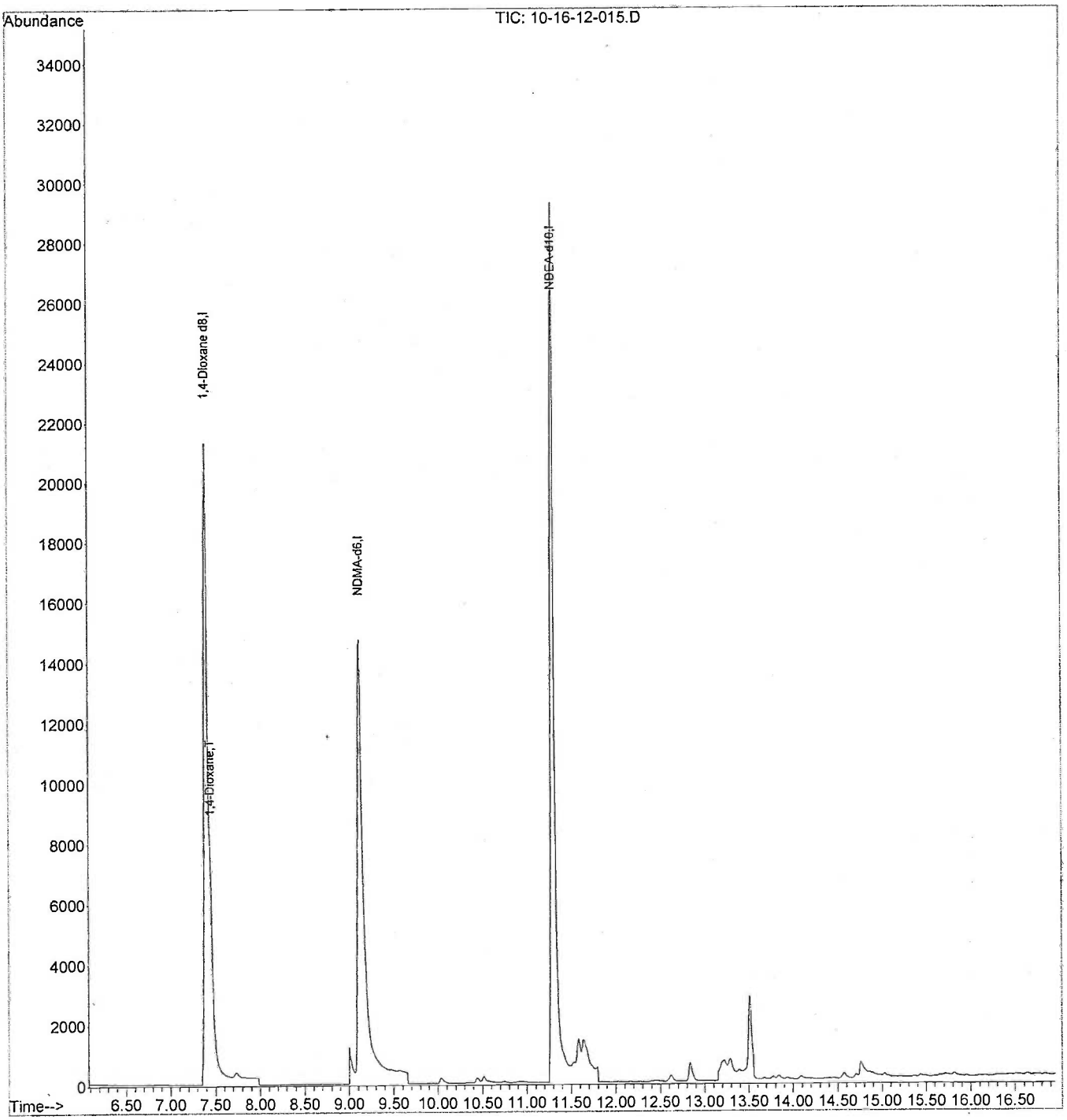
10/17/12

ALAB : 00410

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-015.D
Acq On : 16 Oct 2012 10:28 pm
Operator : QN
Sample : 312080-003
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 17 09:46:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB : 69411

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-016.D
Acq On : 16 Oct 2012 10:55 pm
Operator : QN
Sample : 312080-004
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 17 09:46:21 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	390487	20.00 ug/L	-0.17
3) NDMA-d6	9.12	80	665465	20.00 ug/L	-0.17
5) NDEA-d10	11.30	112	726929	20.00 ug/L	-0.17

Target Compounds	Qvalue

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

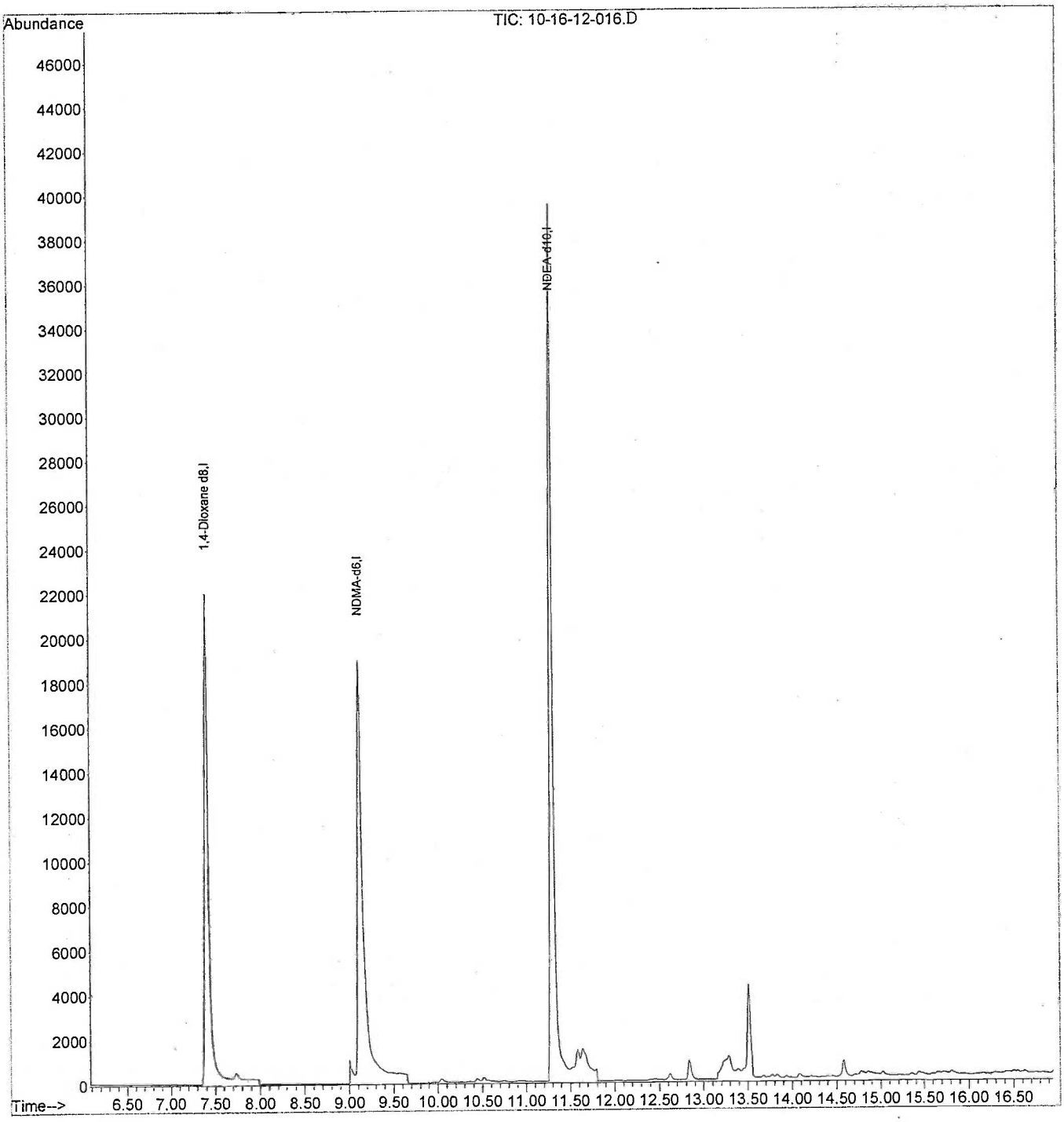
MD
10/17/12

ALAB : 00412

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-016.D
Acq On : 16 Oct 2012 10:55 pm
Operator : QN
Sample : 312080-004
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 17 09:46:21 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB: 00413

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-018.D
Acq On : 16 Oct 2012 11:47 pm
Operator : QN
Sample : ICV@10ppb-3
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 17 09:46:52 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

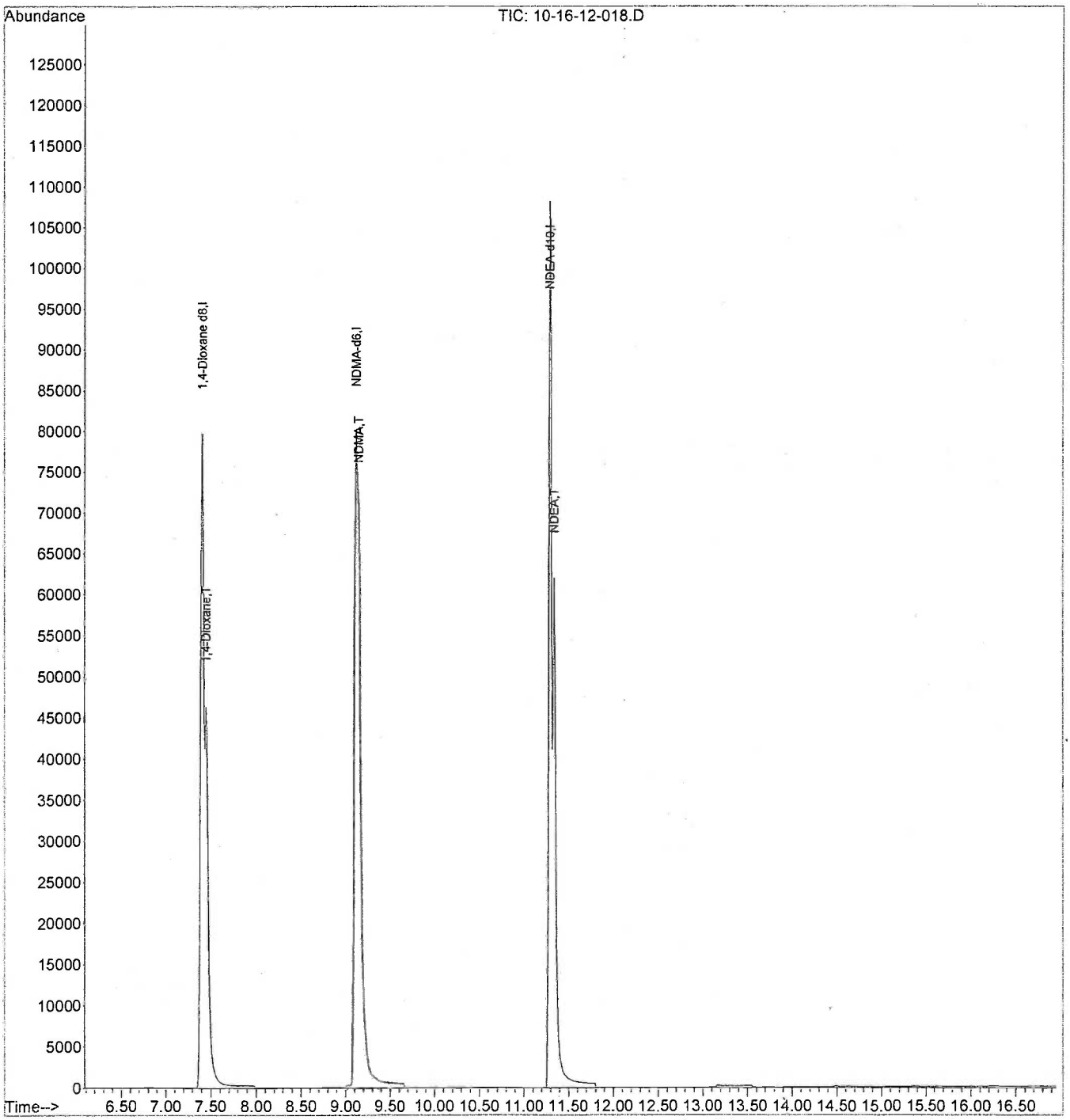
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	1338766	20.00	ug/L	-0.17
3) NDMA-d6	9.11	80	1988221	20.00	ug/L	-0.18
5) NDEA-d10	11.29	112	1755002	20.00	ug/L	-0.18
Target Compounds						Qvalue
2) 1,4-Dioxane	7.45	88	636802	10.29	ug/L	98
4) NDMA	9.15	74	834733	9.46	ug/L	99
6) NDEA	11.34	102	840060	11.01	ug/L	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121016\
Data File : 10-16-12-018.D
Acq On : 16 Oct 2012 11:47 pm
Operator : QN
Sample : ICV@10ppb-3
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 17 09:46:52 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB : 00415

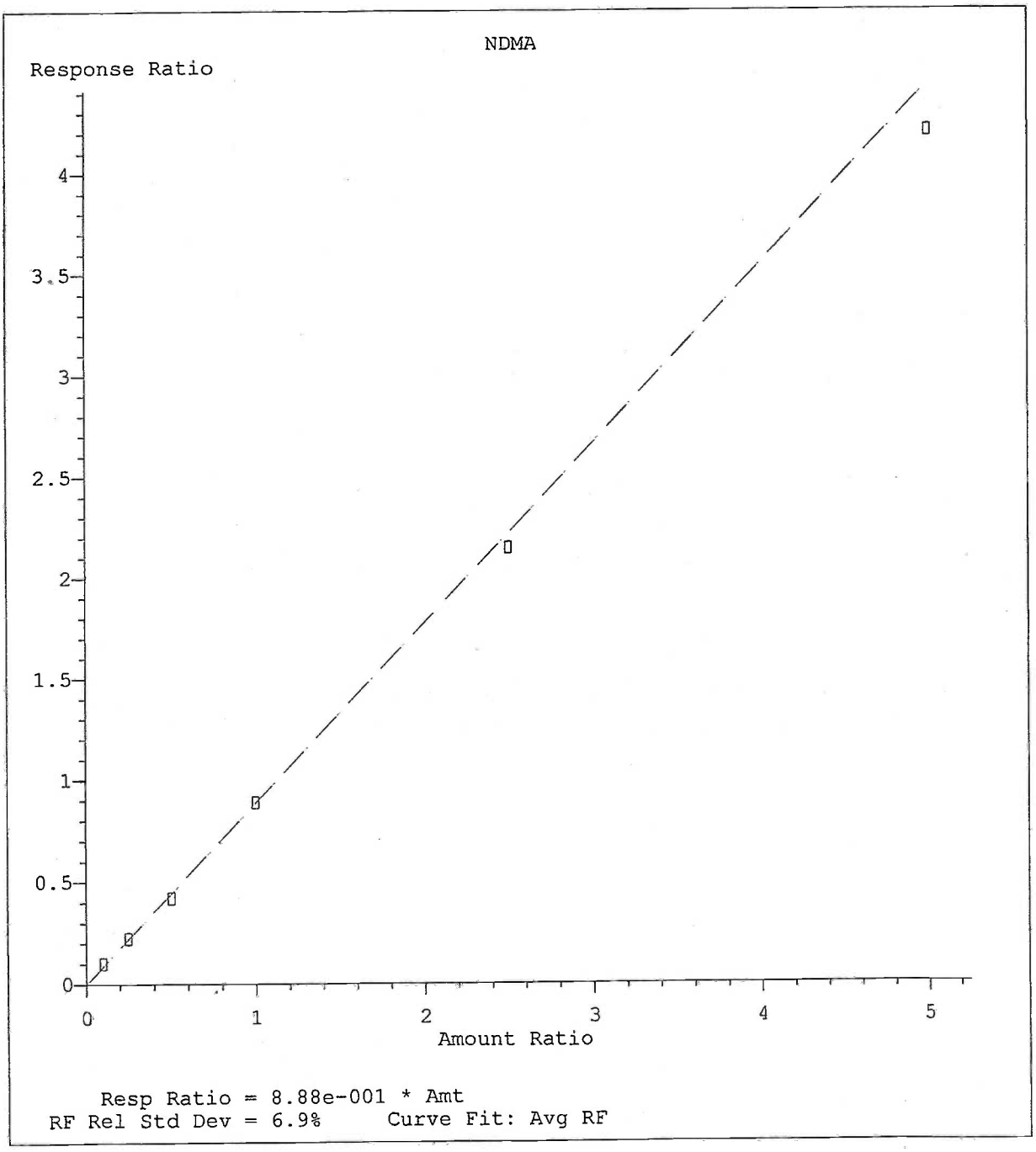
Calibration Status Report SVOA-MS1

Method Path : C:\MSDCHEM\1\METHODS\
Method File : 1625_M_041311F2.M
Title :
Last Update : Wed May 05 16:21:01 2010
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	2	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20110413\cal1.D
2	2	5	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08001.D
3	3	10	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08002.D
4	4	20	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08003.D
5	5	50	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08004.D
6	6	100	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08005.D

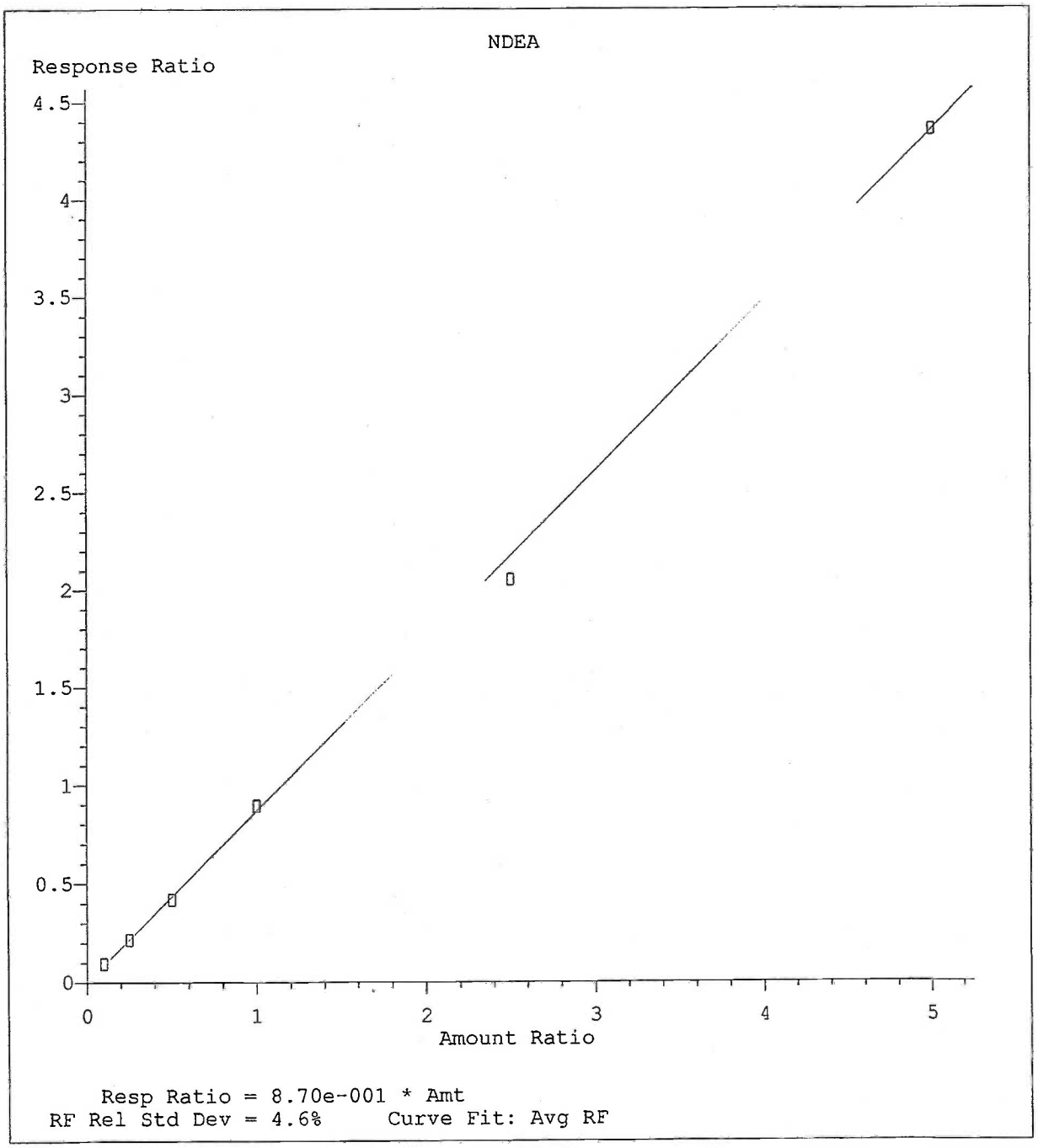
#	ID	Update Time	Quant Time	Acquisition Time
1	1	Apr 13 15:16 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
2	2	Apr 13 15:17 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
3	3	Apr 13 15:17 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
4	4	Apr 13 15:18 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
5	5	Apr 13 15:20 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
6	6	Apr 13 15:20 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm

1625_M_041311F2.M Wed Oct 17 12:14:14 2012



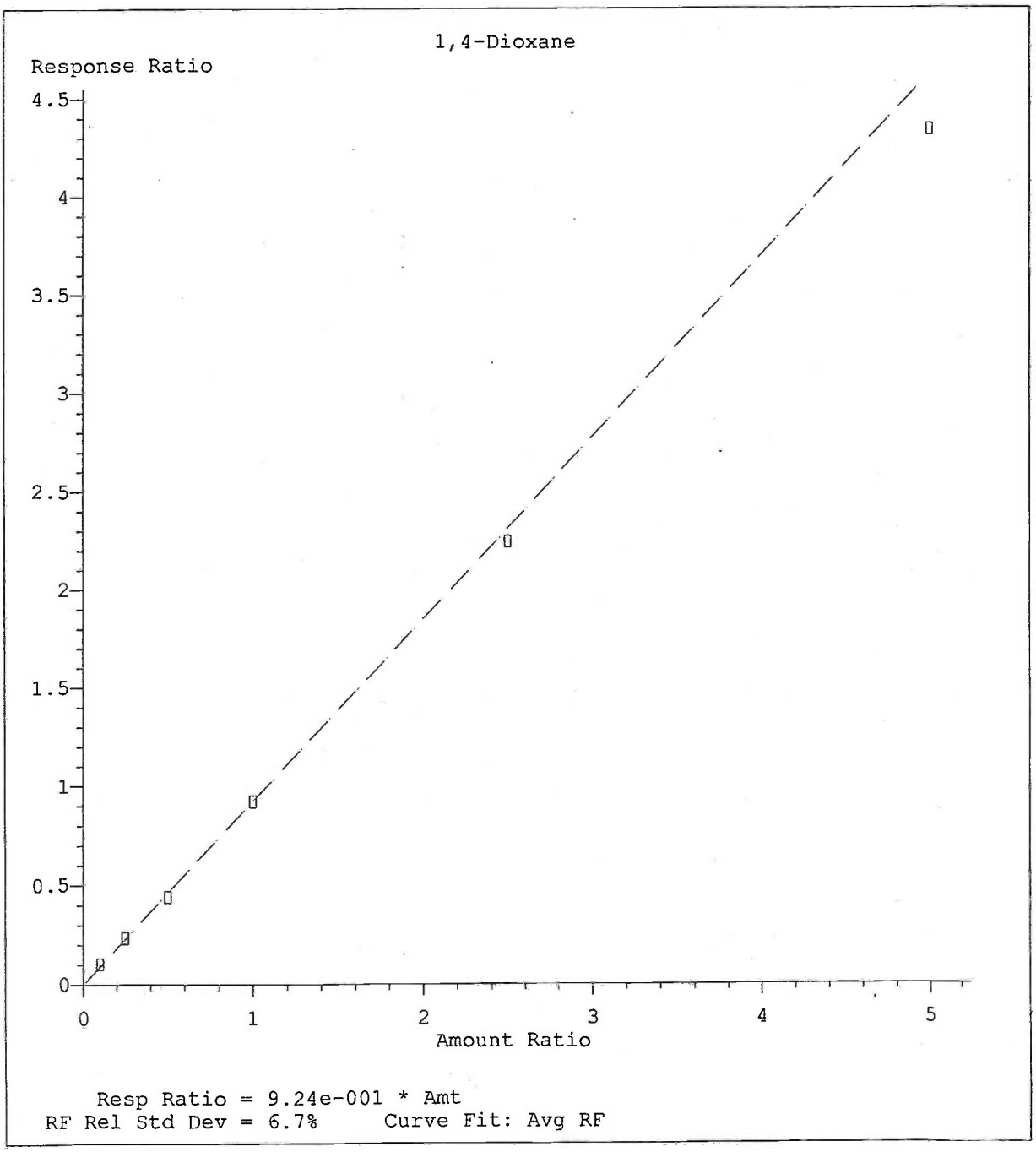
Method Name: C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Calibration Table Last Updated: Wed May 05 16:21:01 2010

ALAB : 00417



Method Name: C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Calibration Table Last Updated: Wed May 05 16:21:01 2010

ALAB : 00418



Method Name: C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Calibration Table Last Updated: Wed May 05 16:21:01 2010

ALAB : 00419

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\z2009_8270M_Data\20090108\
Data File : Jan08008.D
Acq On : 8 Jan 2009 9:19 pm
Operator : SD
Sample : 1625_ICV-Old_10ppm
Misc : w-5133, Spike=10, IS=20
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 11:25:24 2009
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_010809.M
Quant Title :
QLast Update : Fri Jan 09 10:23:29 2009
Response via : Initial Calibration

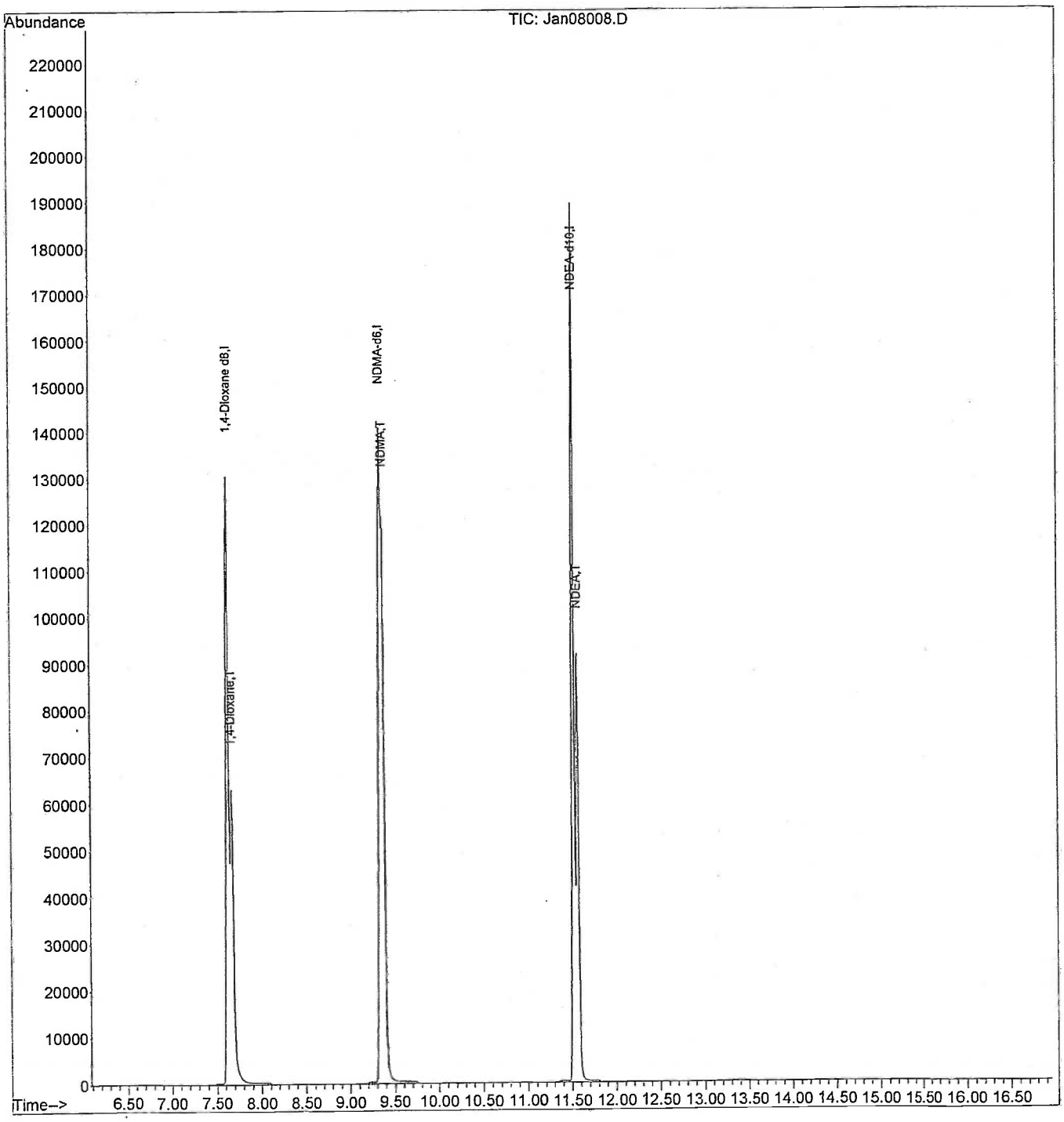
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.63	96	1878033	20.00	ug/L	0.00
3) NDMA-d6	9.34	80	2920326	20.00	ug/L	0.00
5) NDEA-d10	11.52	112	2501029	20.00	ug/L	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	7.68	88	843346	9.72	ug/L	100
4) NDMA	9.38	74	1289108	9.94	ug/L	99
6) NDEA	11.57	102	1132556	10.41	ug/L	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\z2009_8270M_Data\20090108\
Data File : Jan08008.D
Acq On : 8 Jan 2009 9:19 pm
Operator : SD
Sample : 1625_ICV-Old_10ppm
Misc : w-5133, Spike=10, IS=20
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 11:25:24 2009
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_010809.M
Quant Title :
QLast Update : Fri Jan 09 10:23:29 2009
Response via : Initial Calibration



ALAB : 88421

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\z2011_8270M_Data\20110413\
Data File : Apr13-CCV1.D
Acq On : 13 Apr 2011 5:54 pm
Operator : QN
Sample : ICV@10ppb
Misc : w-5913
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 14 12:32:42 2011
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title : 1ppm_method
QLast Update : Wed Apr 13 15:21:31 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dioxane d8	7.53	96	1010029	20.00	ug/L		-0.04
3) NDMA-d6	9.25	80	1395845	20.00	ug/L		-0.04
5) NDEA-d10	11.44	112	1411218	20.00	ug/L		-0.03
Target Compounds							Qvalue
2) 1,4-Dioxane	7.58	88	462323	9.92	ug/L		92
4) NDMA	9.29	74	650596	10.19	ug/L	#	79
6) NDEA	11.48	102	662698	10.48	ug/L		87

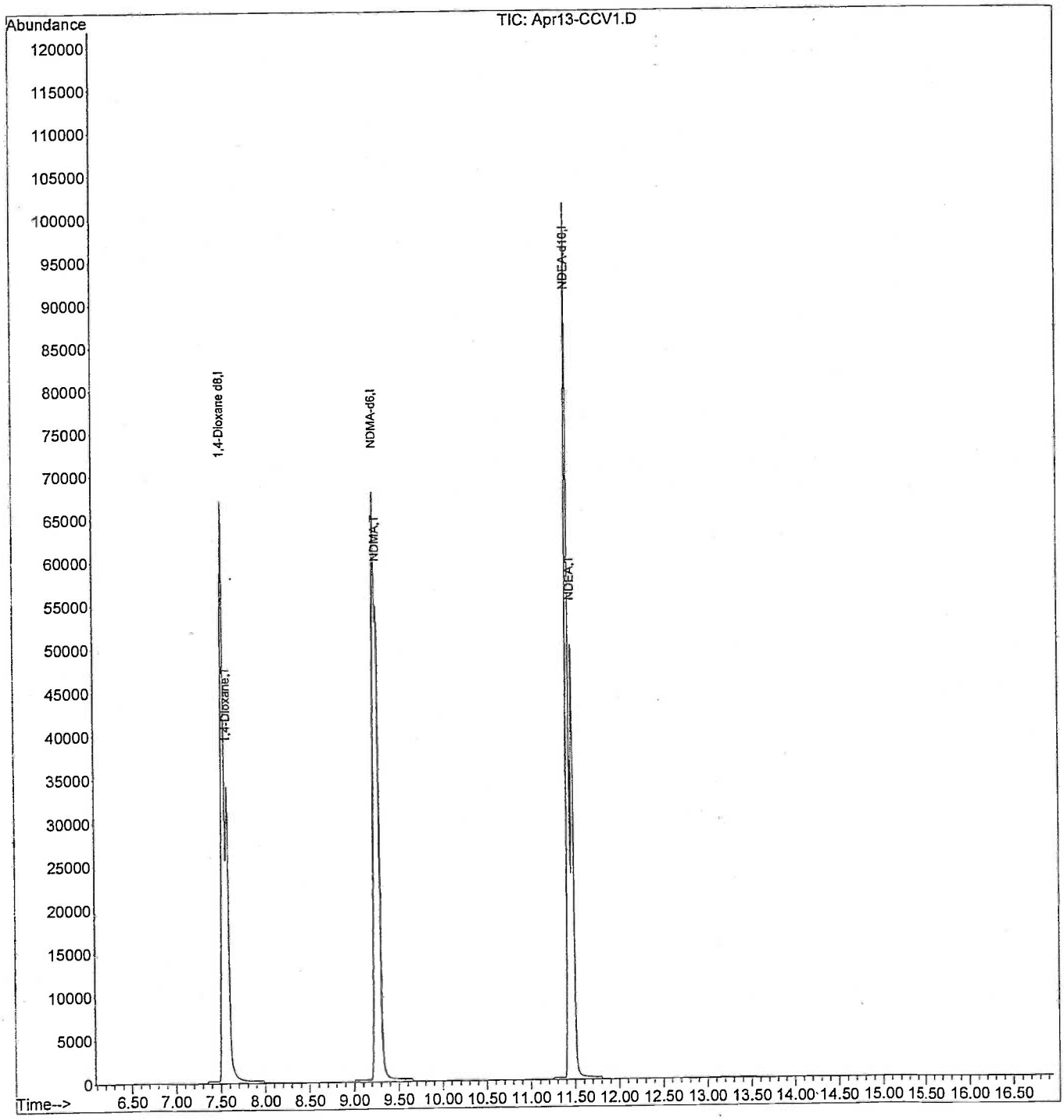
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ALAB : 00422

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\z2011_8270M_Data\20110413\
Data File : Apr13-CCV1.D
Acq On : 13 Apr 2011 5:54 pm
Operator : QN
Sample : ICV@10ppb
Misc : w-5913
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 14 12:32:42 2011
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title : 1ppm_method
QLast Update : Wed Apr 13 15:21:31 2011
Response via : Initial Calibration



ALAB : 00424

Associated Labs QCBatch BenchSheet

QCBatchID: QC1130645

Created Date	10/18/2012
Created By:	qnguyen
Matrix	Water

Test:	8270M Dioxane
Method:	EPA 8270M
Instrument:	SVOA-MS (group
AnalysisDate	10/16/2012
AnalysisEmployee	

Seq #	Sample ID	Customer Sample ID	QC Source	Sur. Added	Spk. Added	Init Wt/Vol	Final Vol.	Extraction Date	Extraction Time	Comments
0	LCS_1									
1	LCSD_1									
2	Method Blank_1									
3	312080-015	MW-3	312080-015							
4	312159-003	MW-4	312159-003							
5	312159-004	MW-7	312159-004							
6	312159-006	EB101512 Equip Blank	312159-006							
7	312205-002	MW-8	312205-002							
8	312205-003	MW-8-DUP	312205-003							
9	312205-004	MW-5	312205-004							
10	312205-007	EB101612 Equip Blank	312205-007							

InitialCalibSTD:	
CalibCheckSTD:	
InternalSTD:	
SurrogateSTD:	
LCSSTD:	
MSSTD:	

KEW

Solvent Manufacturer and Lot:	
Sand Manufacturer and Lot:	
Na2SO4 Manufacturer and Lot:	
Surrogate Lot:	
Spike Lot:	
Prep By Signature:	

CONFIDENTIAL

ASSOCIATED LABORATORIES
8270-M PREP SHEET

BATCH ID: 8270M-101612

LAB REQUEST #	PREP METHOD	MATRIX TYPE	SURR. ADDED	SPIKE ADDED	INITIAL WT / VOL	FINAL VOLUME	EXTRACTION: DATE	EXTRACTION: TIME	EXTRACTION: BY	COMMENT
BLANK 101612	8270M	W	50 µL	—	500mL	0.5mL	10/16/12	6:00pm	H.C.	
LCS 101612				50 µL						
LCSD				50 µL						
312080 015				—						Arcadis
312159 003				—						Arcadis
004				—						"
006				—						"
312205 002				—						Arcadis
003				—						
004				—						
007				—						

Solvent Manufacturer and Lot # Fisher # 124145

Surrogate Lot # W-6270

Spike Lot # W-6145

Sand Manufacturer & Lot # —

Na_2SO_4 Manufacturer & Lot # M.T. # 30562N

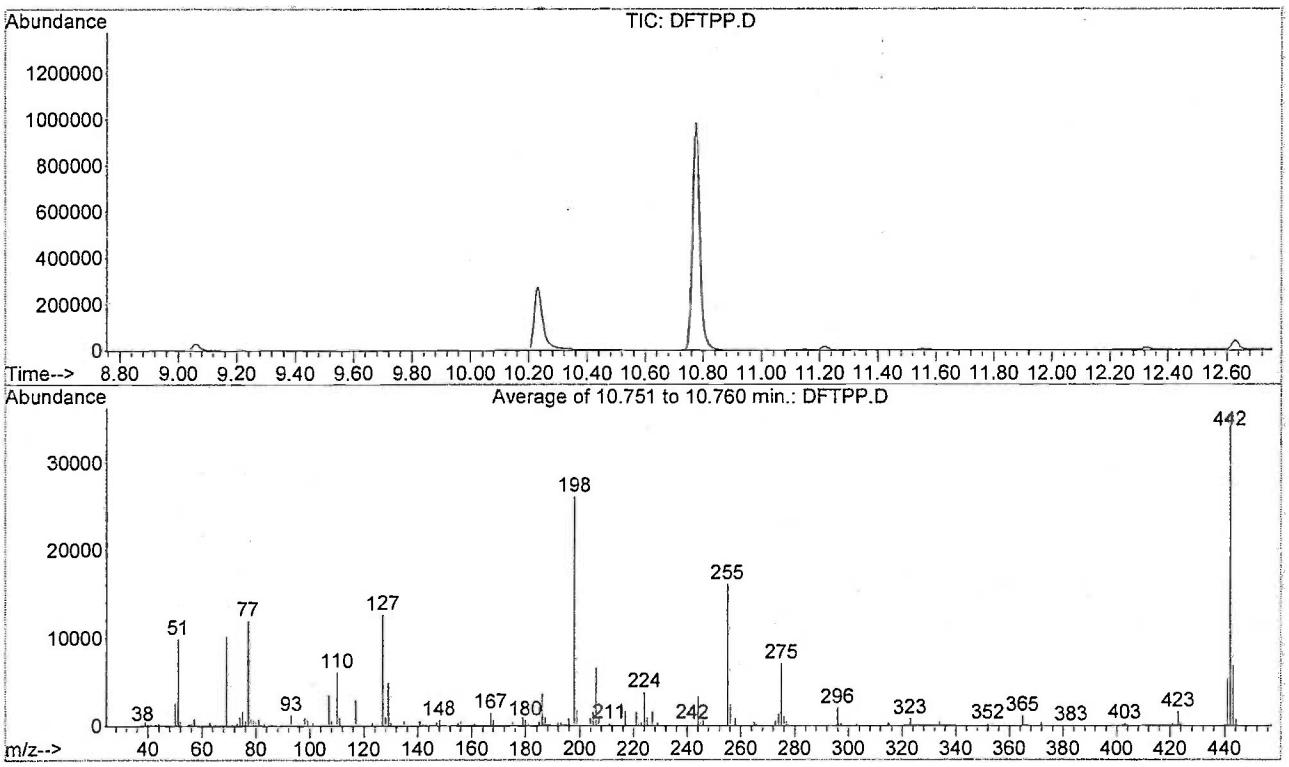
LAB: 89455
ALAB: 091225

LMC-PET-0001241

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20121017\
Data File : DFTPP.D
Acq On : 17 Oct 2012 1:36 pm
Operator : QN
Sample : DFTPP
Misc : s-1948
ALS Vial : 98 Sample Multiplier: 1

Integration File: EVENTS.E

Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Title :
Last Update : Wed May 05 16:21:01 2010



Spectrum Information: Average of 10.751 to 10.760 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.8	9882	PASS
68	69	0.00	2	1.7	173	PASS
69	198	0.00	100	39.0	10202	PASS
70	69	0.00	2	0.6	63	PASS
127	198	40	60	48.5	12675	PASS
197	198	0.00	1	0.7	196	PASS
198	198	100	100	100.0	26136	PASS
199	198	5	9	6.8	1775	PASS
275	198	10	30	27.2	7099	PASS
365	198	1	100	4.2	1105	PASS
441	443	0.01	100	77.1	5280	PASS
442	198	40	200	132.0	34503	PASS
443	442	17	23	19.9	6850	PASS

ALAB : 68427

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121017\
Data File : ICV@10ppb-01.D
Acq On : 17 Oct 2012 2:05 pm
Operator : QN
Sample : ICV@10ppb
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 17 14:22:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	1137824	20.00	ug/L	-0.18
3) NDMA-d6	9.11	80	1669556	20.00	ug/L	-0.18
5) NDEA-d10	11.29	112	1475015	20.00	ug/L	-0.18
Target Compounds						Qvalue
2) 1,4-Dioxane	7.45	88	538894	10.25	ug/L	98
4) NDMA	9.15	74	699282	9.44	ug/L	100
6) NDEA	11.34	102	702860	10.96	ug/L	99

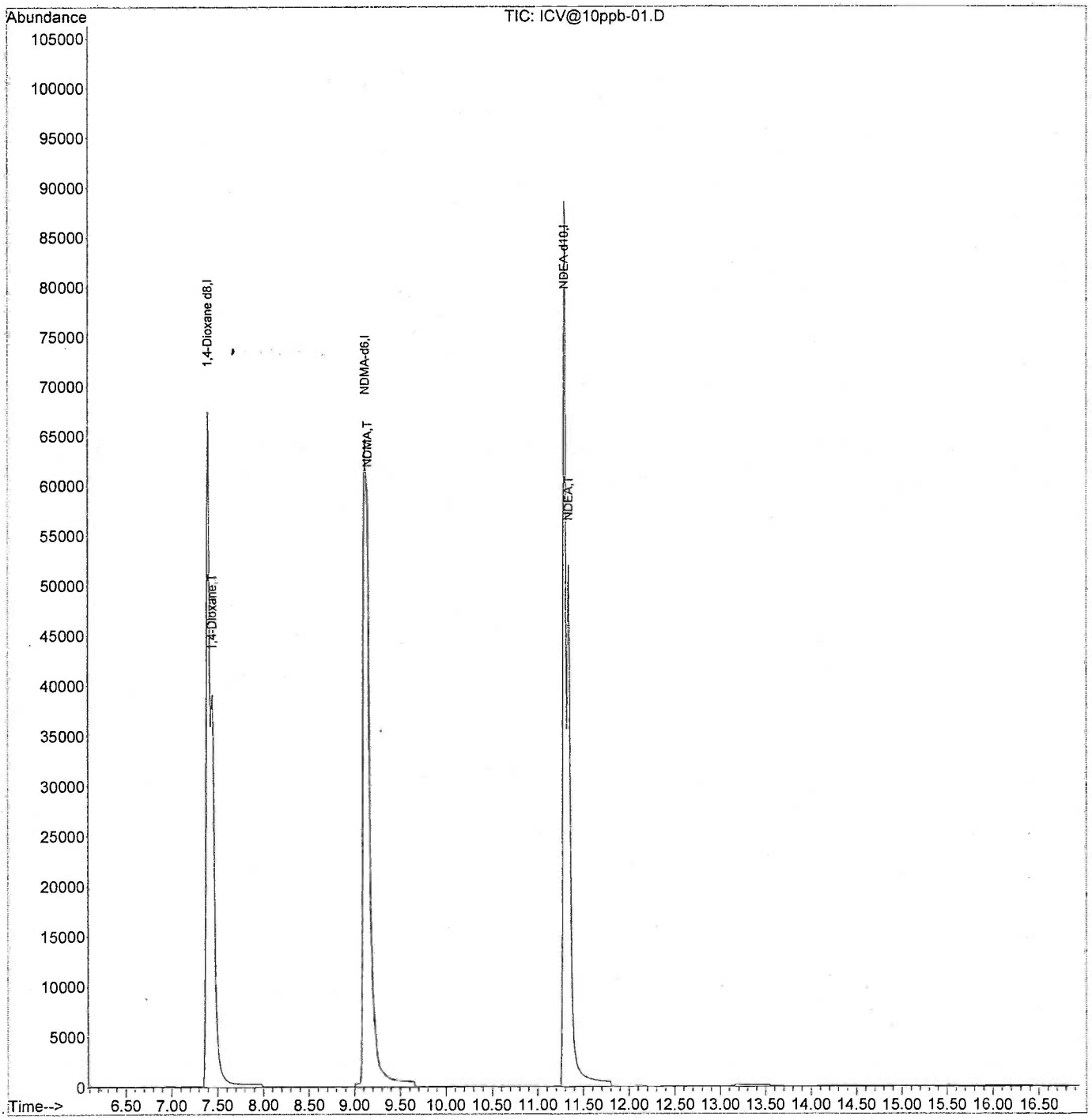
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ALAB : 00428

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121017\
Data File : ICV@10ppb-01.D
Acq On : 17 Oct 2012 2:05 pm
Operator : QN
Sample : ICV@10ppb
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 17 14:22:25 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB : 00429

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121017\
Data File : 10-17-12_01.D
Acq On : 17 Oct 2012 2:31 pm
Operator : QN
Sample : 625M_Blk_101612
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 17 14:48:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	218652	20.00	ug/L	-0.18
3) NDMA-d6	9.13	80	296890	20.00	ug/L	-0.16
5) NDEA-d10	11.30	112	295498	20.00	ug/L	-0.17

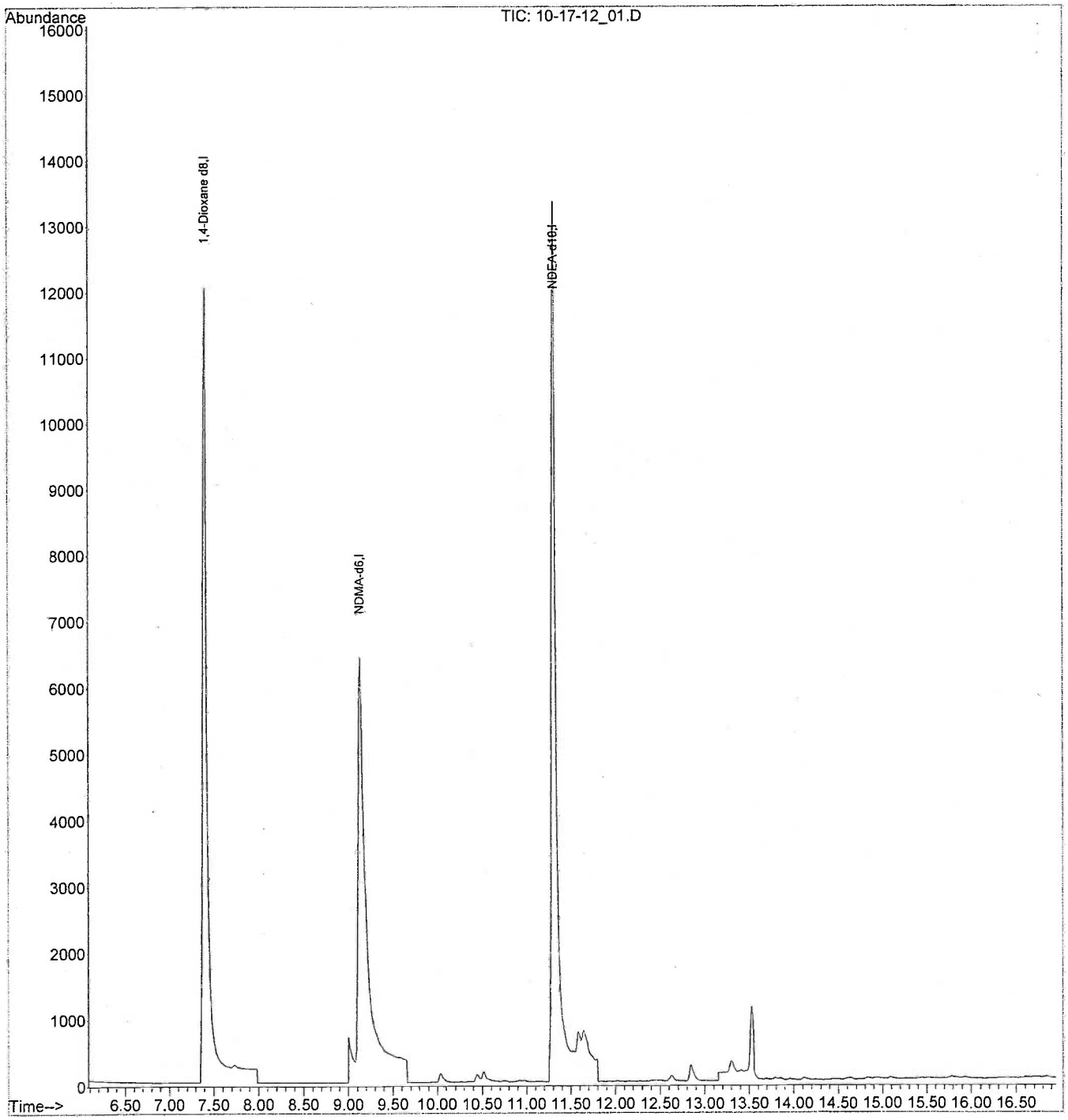
Target Compounds	Qvalue

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121017\
Data File : 10-17-12_01.D
Acq On : 17 Oct 2012 2:31 pm
Operator : QN
Sample : 625M_Blk_101612
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 17 14:48:55 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



1625_M_041311F2.M Wed Oct 17 14:48:57 2012 Page: 2

ALAB : 00431

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20121017\
Data File : 10-17-12_02.D
Acq On : 17 Oct 2012 2:58 pm
Operator : QN
Sample : 625M_LCS_101612
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 18 15:13:32 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

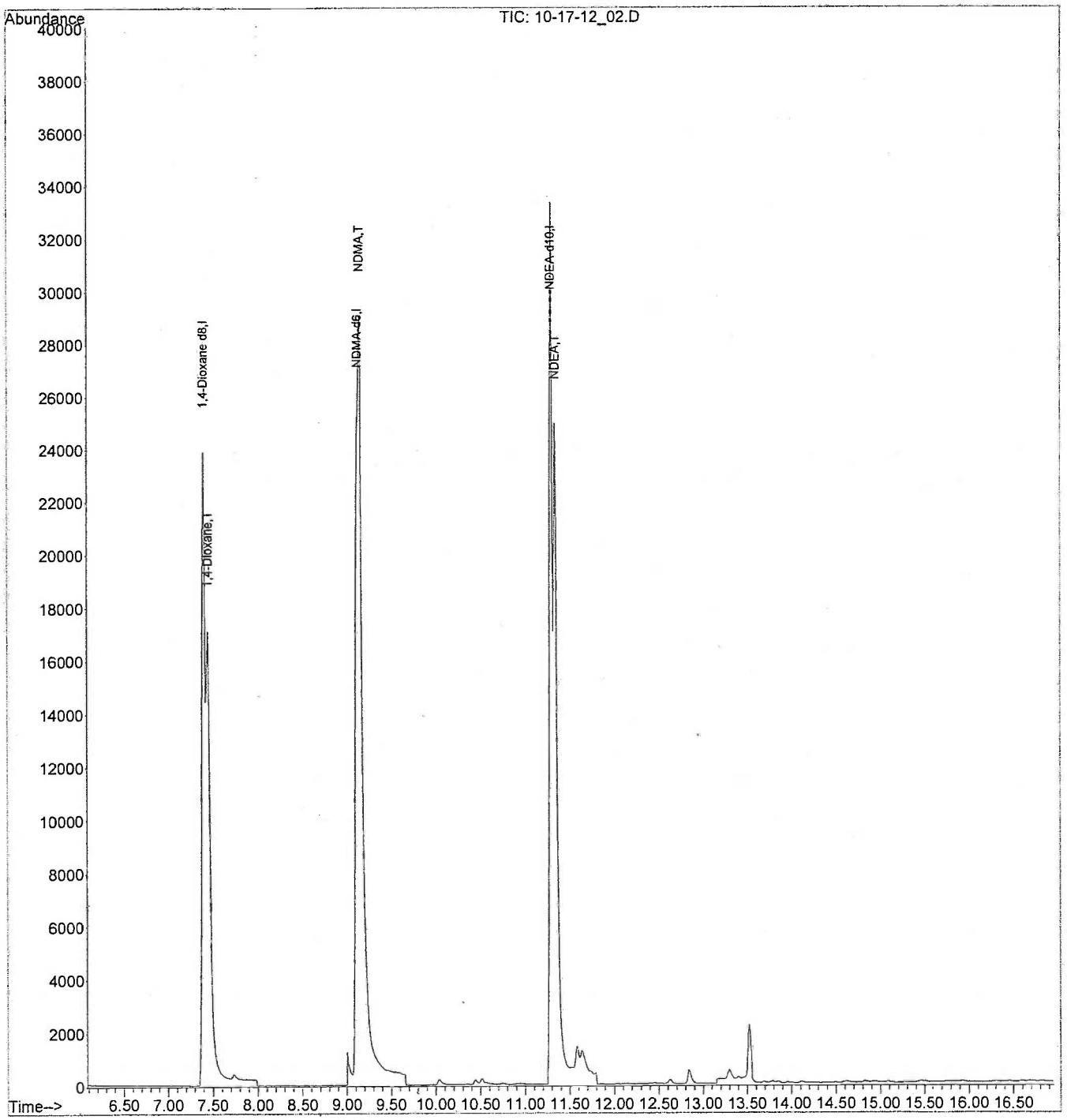
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	389825m	20.00	ug/L	-0.17
3) NDMA-d6	9.11	80	645607	20.00	ug/L	-0.18
5) NDEA-d10	11.29	112	589644	20.00	ug/L	-0.18
Target Compounds						Qvalue
2) 1,4-Dioxane	7.45	88	247237	13.72	ug/L	97
4) NDMA	9.15	74	387259	13.51	ug/L	99
6) NDEA	11.34	102	357723	13.95	ug/L	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20121017\
Data File : 10-17-12_02.D
Acq On : 17 Oct 2012 2:58 pm
Operator : QN
Sample : 625M_LCS_101612
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 18 15:13:32 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB : 00493

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121017\
Data File : 10-17-12_03.D
Acq On : 17 Oct 2012 3:24 pm
Operator : QN
Sample : 625M_LCSD_101612
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 17 15:41:36 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	297192	20.00	ug/L	-0.18
3) NDMA-d6	9.12	80	432425	20.00	ug/L	-0.17
5) NDEA-d10	11.30	112	401717	20.00	ug/L	-0.17
Target Compounds						Qvalue
2) 1,4-Dioxane	7.45	88	194569	14.17	ug/L	98
4) NDMA	9.15	74	279462	14.56	ug/L	98
6) NDEA	11.34	102	257178	14.72	ug/L	92

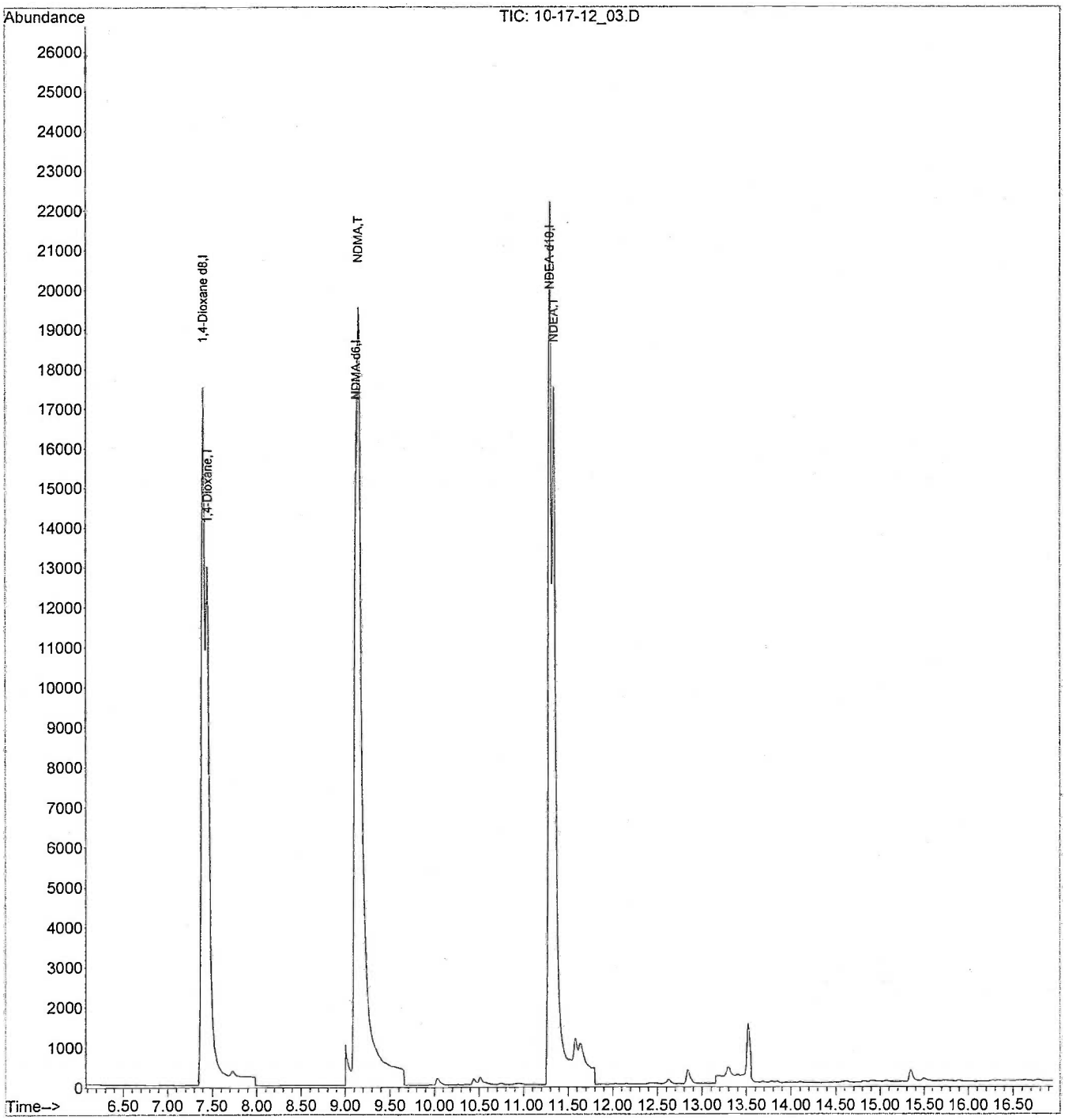
(#) = qualifier out of range (m) = manual integration (+) = signals summed

ALAB:00434

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121017\
Data File : 10-17-12_03.D
Acq On : 17 Oct 2012 3:24 pm
Operator : QN
Sample : 625M_LCSD_101612
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 17 15:41:36 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB : 00435

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121017\
Data File : 10-17-12_04.D
Acq On : 17 Oct 2012 3:51 pm
Operator : QN
Sample : 312080-015
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 17 16:08:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dioxane d8	7.40	96	500039	20.00 ug/L	-0.17
3) NDMA-d6	9.12	80	783860	20.00 ug/L	-0.17
5) NDEA-d10	11.29	112	733048	20.00 ug/L	-0.18
Target Compounds					Qvalue
2) 1,4-Dioxane	7.45	88	43744	1.89 ug/L	94

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

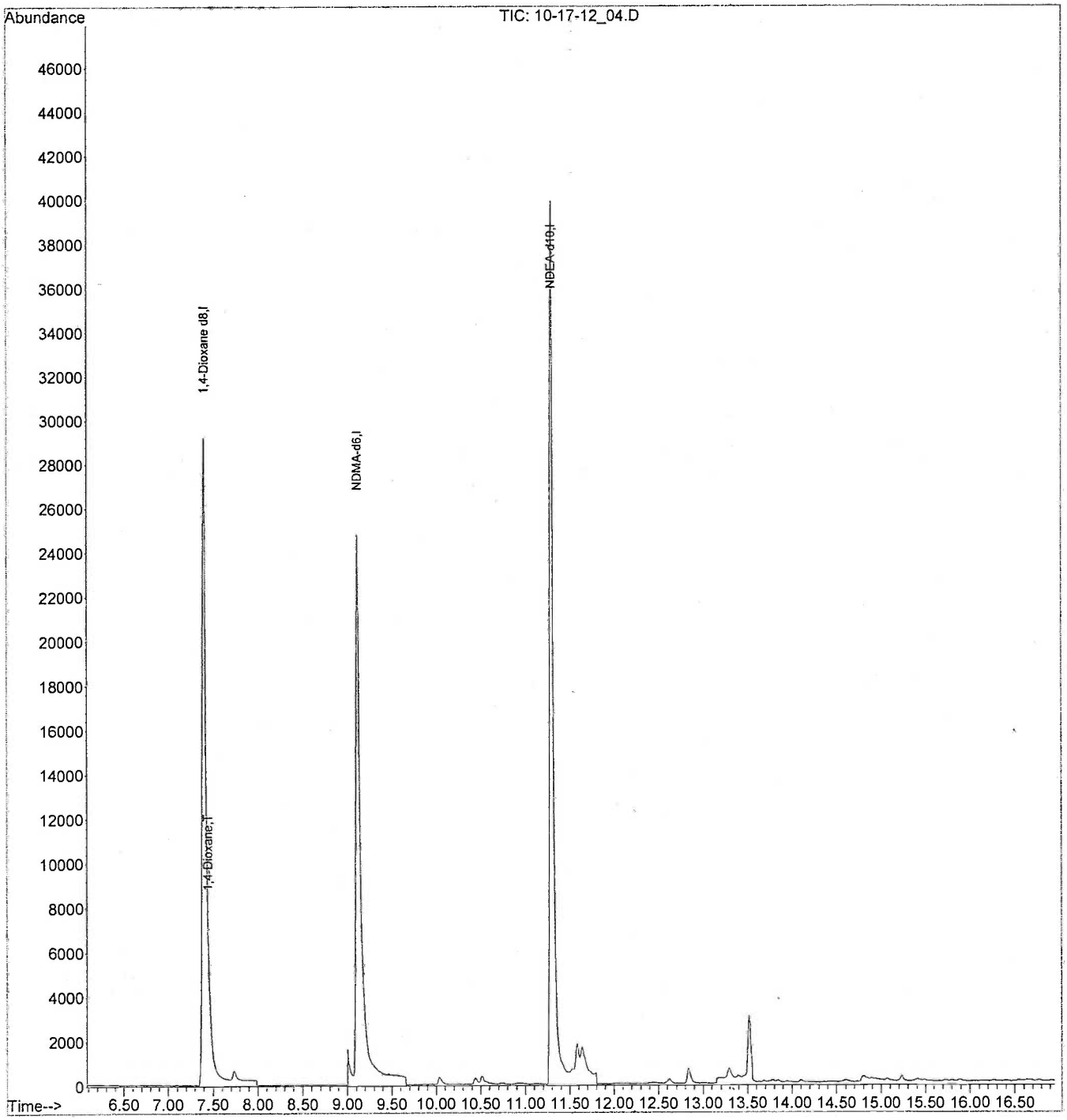
10/18/12

ALAB : 00436

Quantitation Report (Not Reviewed)

Data Path : C:\MSDCHEM\1\DATA\NDMA_1_4_DIOXANE\20121017\
Data File : 10-17-12_04.D
Acq On : 17 Oct 2012 3:51 pm
Operator : QN
Sample : 312080-015
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 17 16:08:06 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

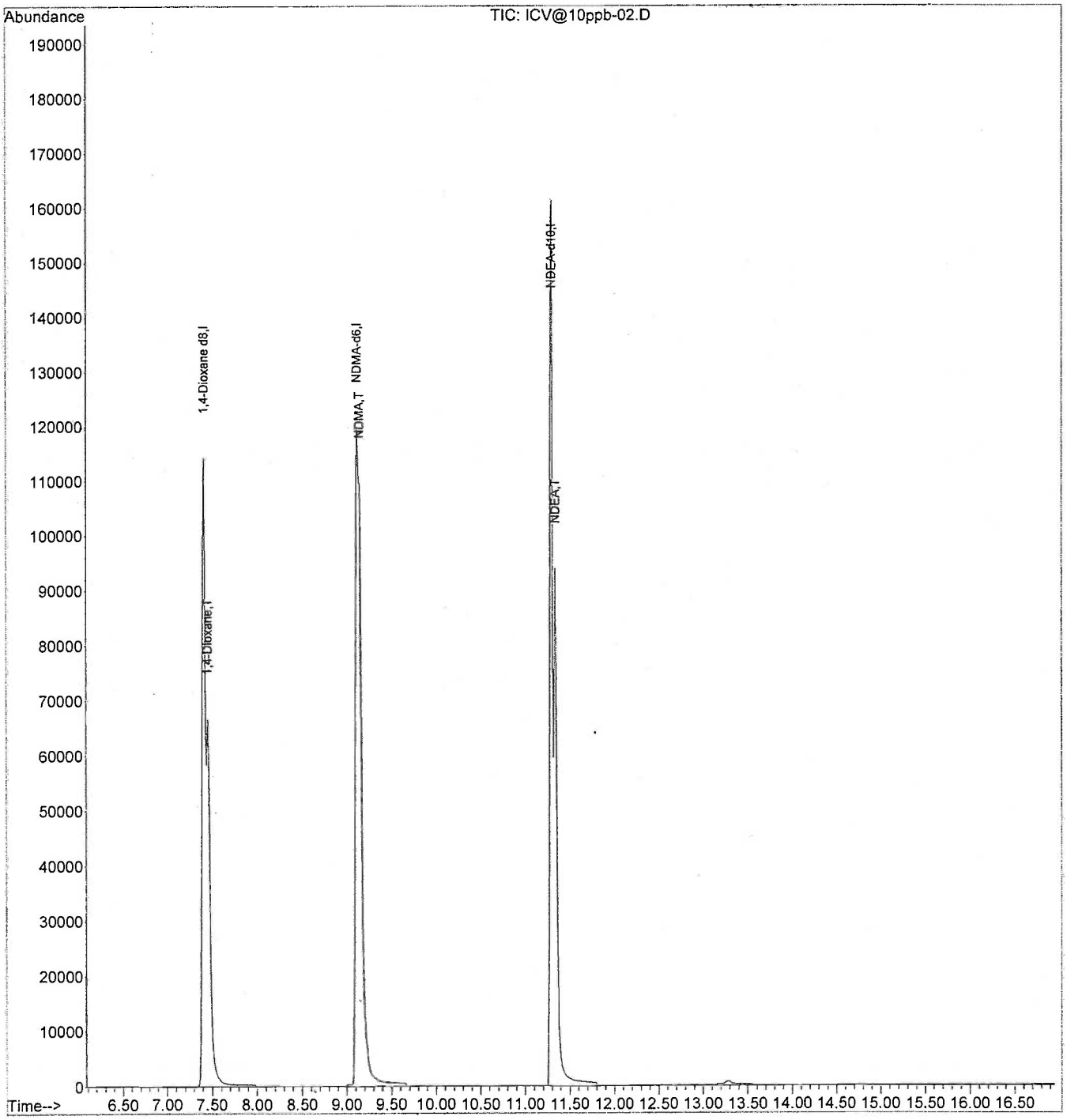


ALAB : 00437

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20121017\
Data File : ICV@10ppb-02.D
Acq On : 17 Oct 2012 7:22 pm
Operator : QN
Sample : ICV@10ppb
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 18 15:20:29 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration



ALAB : 00438

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20121017\
Data File : ICV@10ppb-02.D
Acq On : 17 Oct 2012 7:22 pm
Operator : QN
Sample : ICV@10ppb
Misc : W-6204
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Oct 18 15:20:29 2012
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title :
QLast Update : Wed May 05 16:21:01 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.41	96	1898343	20.00	ug/L	-0.17
3) NDMA-d6	9.11	80	2902619	20.00	ug/L	-0.18
5) NDEA-d10	11.29	112	2568711	20.00	ug/L	-0.18
Target Compounds						Qvalue
2) 1,4-Dioxane	7.46	88	911626	10.39	ug/L	98
4) NDMA	9.15	74	1234236	9.58	ug/L	99
6) NDEA	11.34	102	1251225	11.20	ug/L	97

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

ALAB : 00439

Calibration Status Report SVOA-MS1

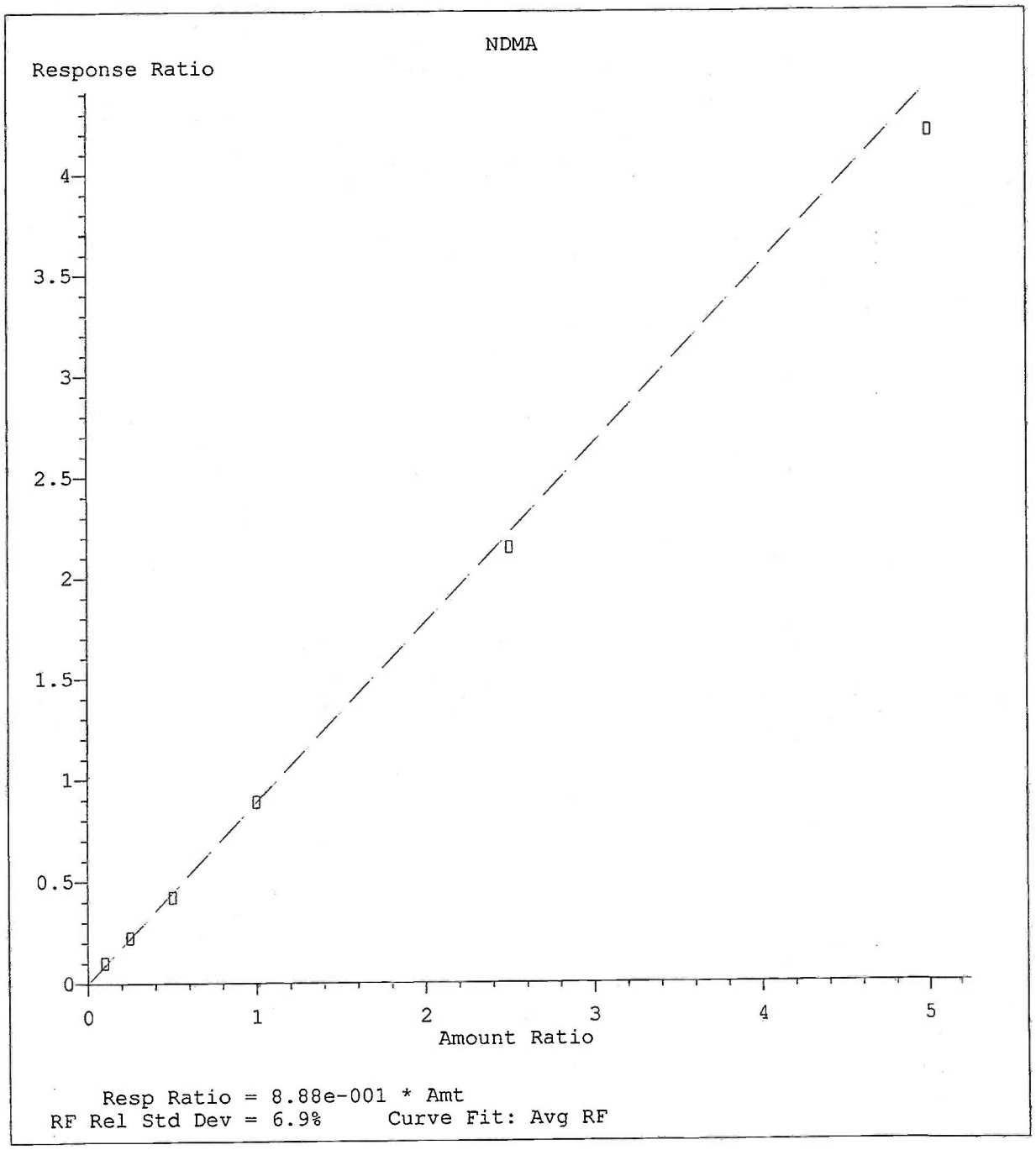
Method Path : C:\MSDCHEM\1\METHODS\
Method File : 1625_M_041311F2.M
Title :
Last Update : Wed May 05 16:21:01 2010
Response Via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
1	1	2	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20110413\cal1.D
2	2	5	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08001.D
3	3	10	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08002.D
4	4	20	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08003.D
5	5	50	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08004.D
6	6	100	20	C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\20090108\Jan08005.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Apr 13 15:16 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
2	2	Apr 13 15:17 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
3	3	Apr 13 15:17 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
4	4	Apr 13 15:18 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
5	5	Apr 13 15:20 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm
6	6	Apr 13 15:20 2011	Apr 13 14:59 2011	13 Apr 2011 12:42 pm

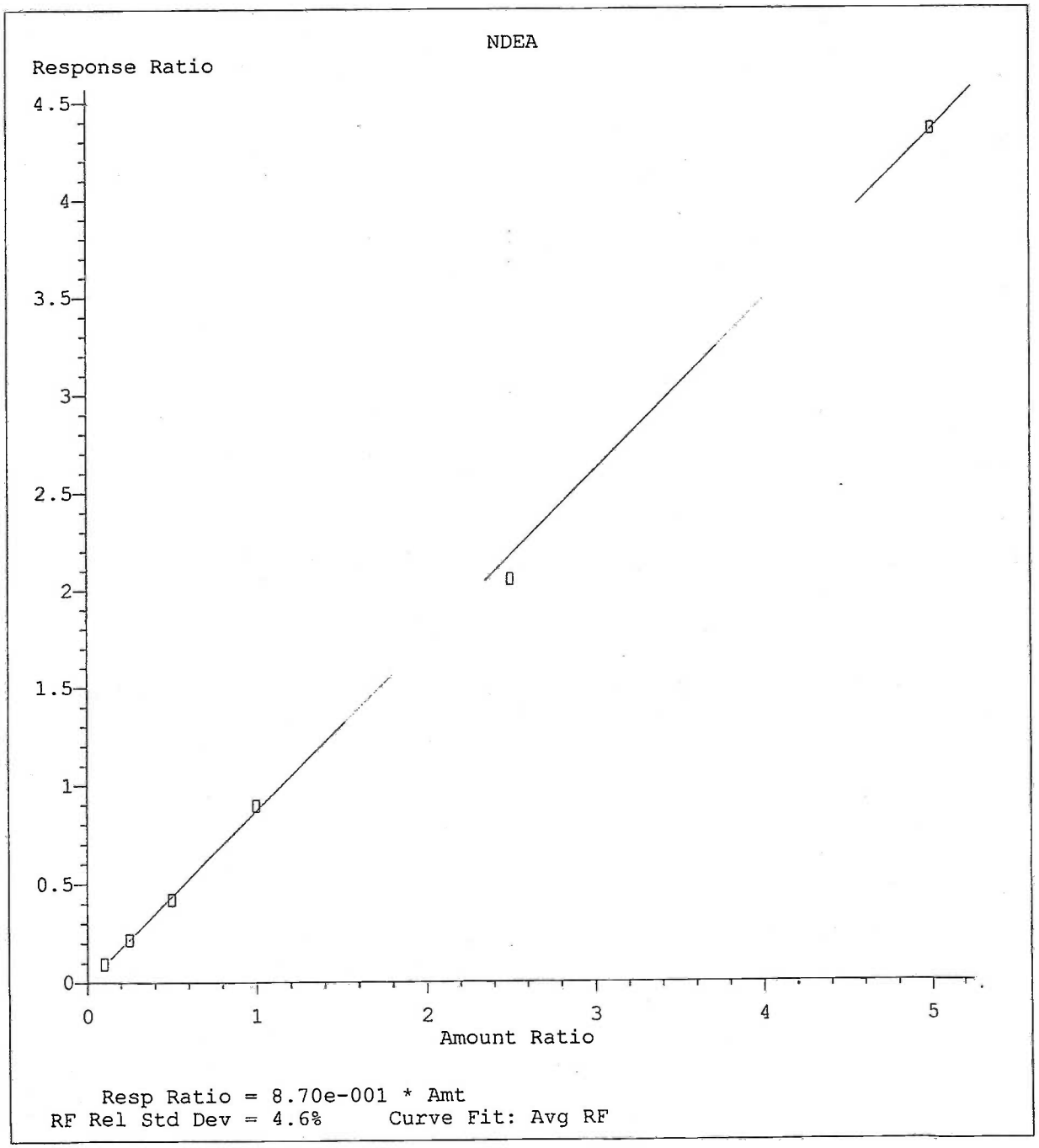
1625_M_041311F2.M Wed Oct 17 12:14:14 2012

ALAB : 08448



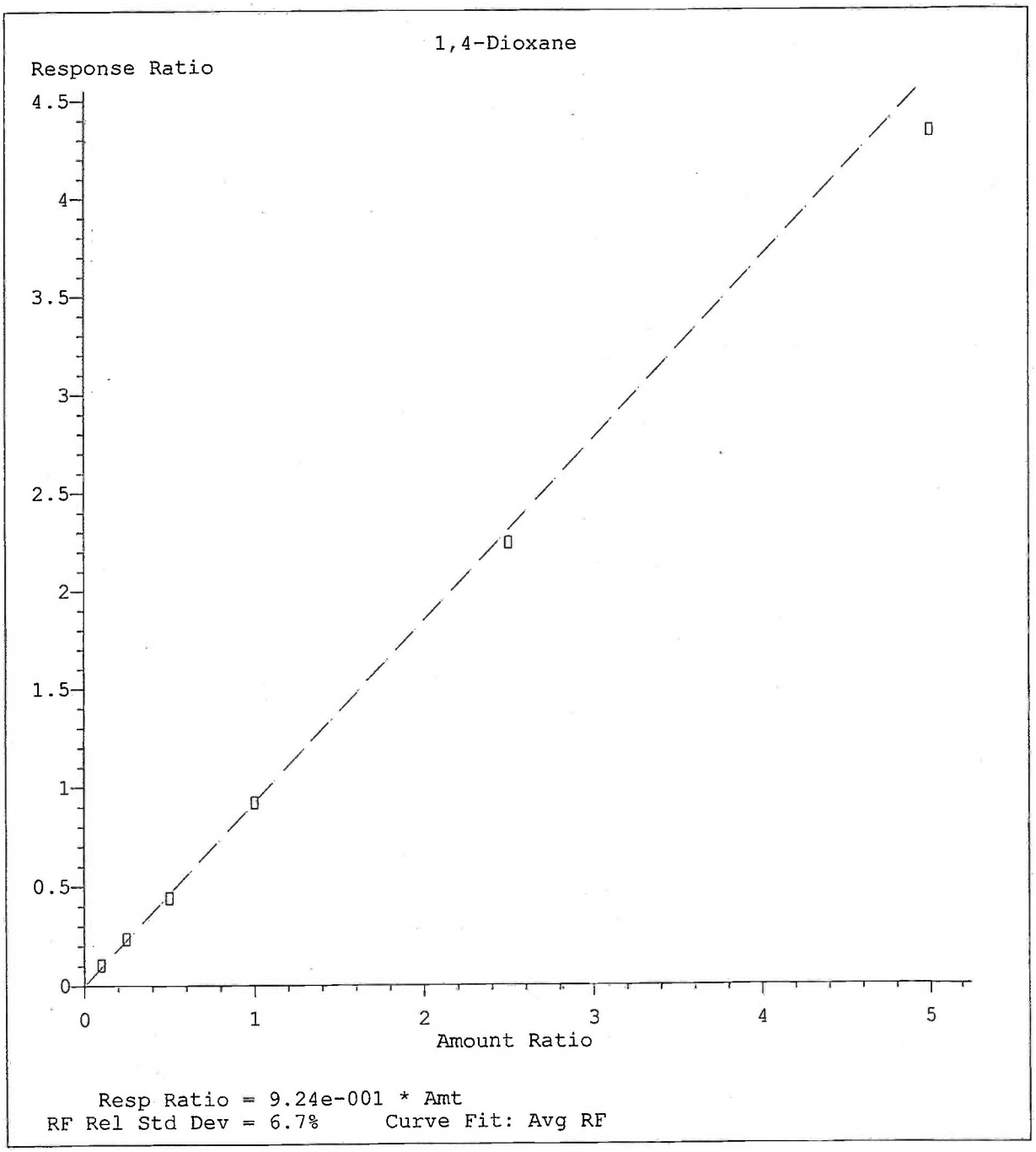
Method Name: C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Calibration Table Last Updated: Wed May 05 16:21:01 2010

ALAB : 60141



Method Name: C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Calibration Table Last Updated: Wed May 05 16:21:01 2010

ALAB : 00442



Method Name: C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Calibration Table Last Updated: Wed May 05 16:21:01 2010

ALAB : 60443

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\z2009_8270M_Data\20090108\
Data File : Jan08008.D
Acq On : 8 Jan 2009 9:19 pm
Operator : SD
Sample : 1625_ICV-Old_10ppm
Misc : w-5133, Spike=10, IS=20
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 11:25:24 2009
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_010809.M
Quant Title :
QLast Update : Fri Jan 09 10:23:29 2009
Response via : Initial Calibration

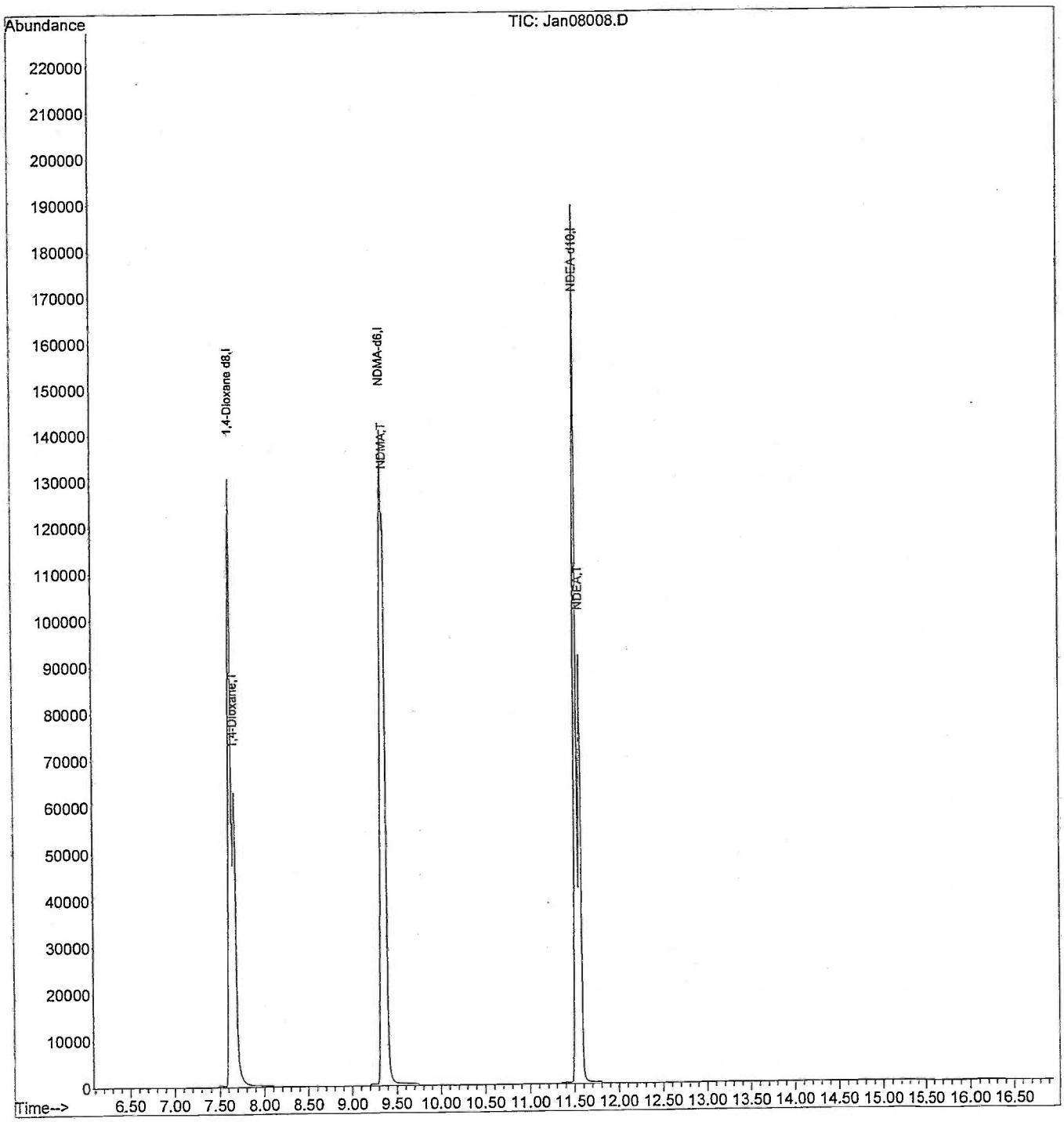
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dioxane d8	7.63	96	1878033	20.00	ug/L	0.00
3) NDMA-d6	9.34	80	2920326	20.00	ug/L	0.00
5) NDEA-d10	11.52	112	2501029	20.00	ug/L	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	7.68	88	843346	9.72	ug/L	100
4) NDMA	9.38	74	1289108	9.94	ug/L	99
6) NDEA	11.57	102	1132556	10.41	ug/L	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\z2009_8270M_Data\20090108\
Data File : Jan08008.D
Acq On : 8 Jan 2009 9:19 pm
Operator : SD
Sample : 1625_ICV-Old_10ppm
Misc : w-5133, Spike=10, IS=20
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 09 11:25:24 2009
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_010809.M
Quant Title :
QLast Update : Fri Jan 09 10:23:29 2009
Response via : Initial Calibration



1625_M_041311F2.M Wed Oct 17 12:19:39 2012 Page: 2

ALAB : 00445

Quantitation Report (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\z2011_8270M_Data\20110413\
Data File : Apr13-CCV1.D
Acq On : 13 Apr 2011 5:54 pm
Operator : QN
Sample : ICV@10ppb
Misc : w-5913
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 14 12:32:42 2011
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title : 1ppm_method
QLast Update : Wed Apr 13 15:21:31 2011
Response via : Initial Calibration

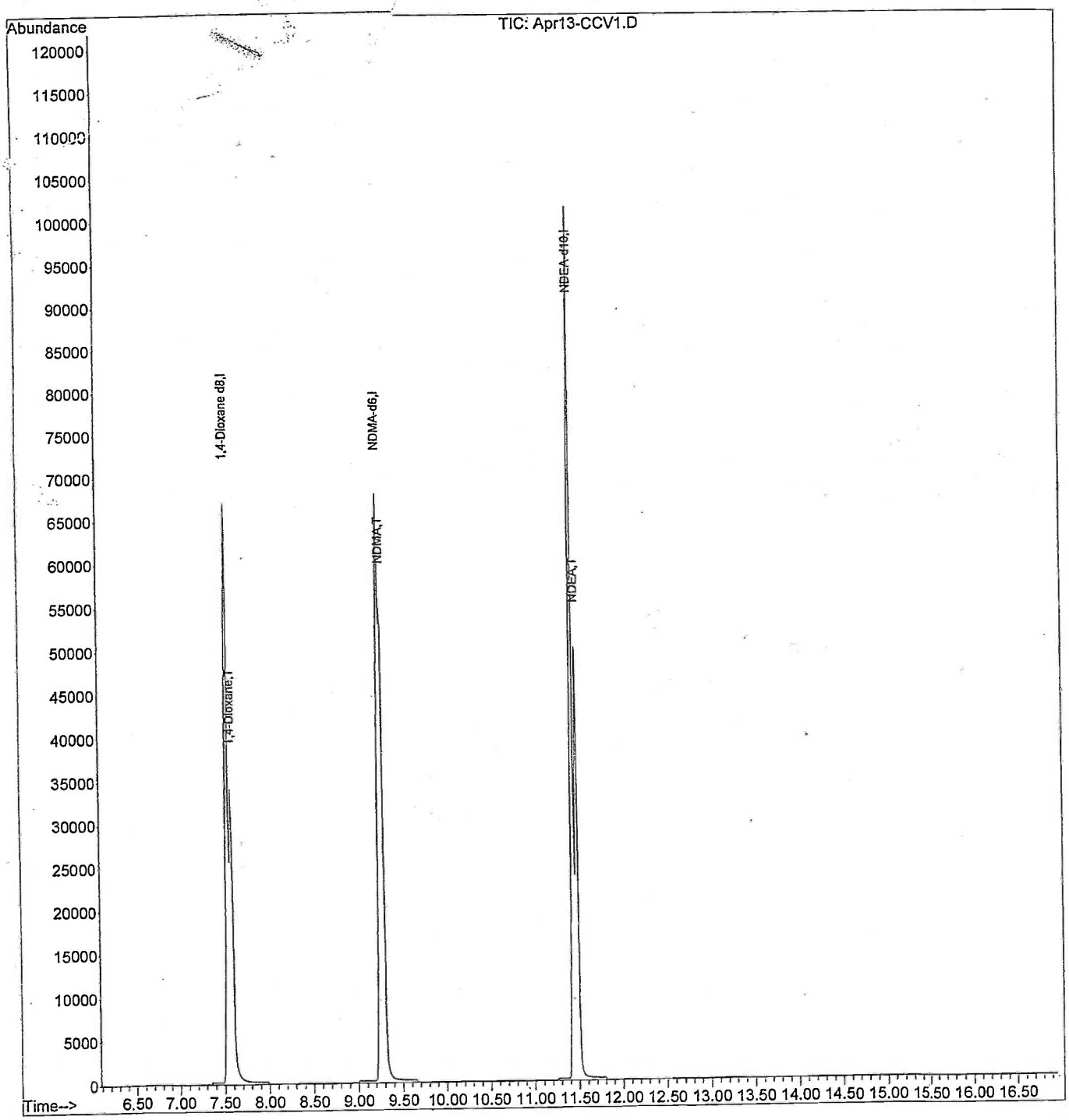
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dioxane d8	7.53	96	1010029	20.00	ug/L		-0.04
3) NDMA-d6	9.25	80	1395845	20.00	ug/L		-0.04
5) NDEA-d10	11.44	112	1411218	20.00	ug/L		-0.03
Target Compounds							Qvalue
2) 1,4-Dioxane	7.58	88	462323	9.92	ug/L		92
4) NDMA	9.29	74	650596	10.19	ug/L	#	79
6) NDEA	11.48	102	662698	10.48	ug/L		87

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

Quantita (Not Reviewed)

Data Path : C:\MSDChem\1\DATA\NDMA_1_4_Dioxane\z2011_8270M_Data\20110413\
Data File : Apr13-CCV1.D
Acq On : 13 Apr 2011 5:54 pm
Operator : QN
Sample : ICV@10ppb
Misc : w-5913
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 14 12:32:42 2011
Quant Method : C:\MSDCHEM\1\METHODS\1625_M_041311F2.M
Quant Title : 1ppm_method
QLast Update : Wed Apr 13 15:21:31 2011
Response via : Initial Calibration



AR: 89417

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714 538-1209

CLIENT: ARCADIS LAB REQUEST: 312094
ATTN: Leah Levy

PROJECT: BOU Burbank

FULL DATAPACKAGE

TABLE OF CONTENTS

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714 538-1209

ARCADIS
BOU Burbank Project
ALAB # 312094
Level III Data Package

ALAB Project Manger: Danielle Roberts
ALAB Laboratory Director: Ed Behare PhD
ALAB Quality Control Manager: Hongling Cao

Associated Laboratories
806 N. Batavia - Orange, CA 92868
Tel (714)771-6900 Fax (714)538-1209
www.associatedlabs.com
Info@associatedlabs.com

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client:	ARCADIS	Lab Request:	312094
Address:	3750 Schaufele Ave., Suite 225	Report Date:	10/29/2012
	Long Beach, CA 90808	Date Received:	10/13/2012
Attn:	Lawrence Browne	Client ID:	14099

Comments: #B0038189.0000.00001
BOU Burbank
Hollywood Way, Burbank, CA

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
312094-001	TB101312
312094-002	B-1-CW20
312094-003	C-1-CW06
312094-004	B-5-CW02
312094-005	M-W-6
312094-006	C-1-CW08
312094-007	3871G

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Lab Director

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

ALAB : 00002

Matrix: Water	**Client:** ARCADIS		**Collector:** Client
Sampled: 10/13/2012 07:30	**Site:**		**Notes:**
Sample #: 312094-001	**Client Sample #:** TB101312		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 8260 *NELAC*	**Prep Method:** EPA 5030B						QCBatchID: QC1130739	
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/19/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/19/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/19/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/19/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/19/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/19/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/19/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/19/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/19/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/19/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/19/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/19/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/19/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/19/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/19/12	nicollez	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/19/12	nicollez	
Chloroform	ND	1	0.044	0.5	ug/L	10/19/12	nicollez	
Chloromethane	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,2-Dichloroethene	ND	1	0.055	0.5	ug/L	10/19/12	nicollez	
cis-1,3-dichloropropene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
cis-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	
Dibromomethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Dichlorodifluoromethane	ND	1	0.062	0.5	ug/L	10/19/12	nicollez	
Di-isopropyl ether (DIPE)	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Ethylbenzene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
Ethyl-tertbutylether (ETBE)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	**Client:** ARCADIS		**Collector:** Client
Sampled: 10/13/2012 07:30	**Site:**		**Notes:**
Sample #: 312094-001	**Client Sample #:** TB101312		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Hexachlorobutadiene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Isopropylbenzene	ND	1	0.089	0.5	ug/L	10/19/12	nicollez	
m and p-Xylene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
Methylene chloride	ND	1	0.15	0.5	ug/L	10/19/12	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
Naphthalene	ND	1	0.061	0.5	ug/L	10/19/12	nicollez	
N-butylbenzene	ND	1	0.094	0.5	ug/L	10/19/12	nicollez	
N-propylbenzene	ND	1	0.09	0.5	ug/L	10/19/12	nicollez	
o-Xylene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Sec-butylbenzene	ND	1	0.077	0.5	ug/L	10/19/12	nicollez	
Styrene	ND	1	0.088	0.5	ug/L	10/19/12	nicollez	
t-Butyl alcohol (TBA)	ND	1	5	5	ug/L	10/19/12	nicollez	
Tert-amylmethylether (TAME)	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
Tert-butylbenzene	ND	1	0.092	0.5	ug/L	10/19/12	nicollez	
Tetrachloroethene	ND	1	0.15	0.5	ug/L	10/19/12	nicollez	
Toluene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
trans-1,2-dichloroethene	ND	1	0.17	0.5	ug/L	10/19/12	nicollez	
trans-1,3-dichloropropene	ND	1	0.056	0.5	ug/L	10/19/12	nicollez	
trans-1,4-dichloro-2-butene	ND	1	0.075	5	ug/L	10/19/12	nicollez	
Trichloroethene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
Trichlorofluoromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Vinyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Xylenes (Total)	ND	1	0.25	0.5	ug/L	10/19/12	nicollez	

Analyte	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	*113*	*70-145*	
4-Bromofluorobenzene (SUR)	*106*	*70-145*	
Dibromodifluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*102*	*70-145*	

ND = Not Detected or < MDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor

Matrix: Water	Client: ARCADIS		Collector: Client
Sampled: 10/13/2012 09:25	Site:		Notes:
Sample #: 312094-002	Client Sample #: B-1-CW20		

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 200.7	**Prep Method:** EPA 3010A						**QCBatchID:** QC1130599	
Calcium	**88.7**	1	0.038	0.1	mg/L	10/17/12	nina	
Magnesium	**30.7**	1	0.016	0.1	mg/L	10/17/12	nina	
Method: EPA 300.0	**Prep Method:** Method						**QCBatchID:** QC1130592	
Chloride	**67.3**	1	0.1	1	mg/L	10/13/12	wei	
Sulfate	**100**	1	0.12	1	mg/L	10/13/12	wei	
Nitrate, as Nitrogen	**6.80**	1	0.06	0.1	mg/L	10/13/12	wei	
Nitrite, as Nitrogen	**0.05 J**	1	0.018	0.1	mg/L	10/13/12	wei	
Fluoride	**0.44**	1	0.04	0.2	mg/L	10/13/12	wei	
Method: EPA 8260 *NELAC*	**Prep Method:** EPA 5030B						**QCBatchID:** QC1130739	
1,1,1,2-Tetrachloroethane	ND	1	0.122	0.5	ug/L	10/19/12	nicollez	
1,1,1-Trichloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2,2-Tetrachloroethane	ND	1	0.063	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichloroethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
1,1,2-Trichlorotrifluoroethane	ND	1	0.119	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethane	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloroethene	ND	1	0.13	0.5	ug/L	10/19/12	nicollez	
1,1-Dichloropropene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichlorobenzene	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,2,3-Trichloropropane	ND	1	0.073	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trichlorobenzene	ND	1	0.068	0.5	ug/L	10/19/12	nicollez	
1,2,4-Trimethylbenzene	ND	1	0.078	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromo-3-chloropropane	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
1,2-Dibromoethane	ND	1	0.043	0.5	ug/L	10/19/12	nicollez	
1,2-Dichlorobenzene	ND	1	0.051	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloroethane	ND	1	0.066	0.5	ug/L	10/19/12	nicollez	
1,2-Dichloropropane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
1,3,5-Trimethylbenzene	ND	1	0.097	0.5	ug/L	10/19/12	nicollez	
1,3-Dichlorobenzene	ND	1	0.052	0.5	ug/L	10/19/12	nicollez	
1,3-Dichloropropane	ND	1	0.68	0.5	ug/L	10/19/12	nicollez	
1,4-Dichlorobenzene	ND	1	0.12	0.5	ug/L	10/19/12	nicollez	
2,2-Dichloropropane	ND	1	0.11	0.5	ug/L	10/19/12	nicollez	
2-Butanone (MEK)	ND	1	0.3	5	ug/L	10/19/12	nicollez	
2-Chloroethyl Vinyl Ether	ND	1	0.23	0.5	ug/L	10/19/12	nicollez	
2-Chlorotoluene	ND	1	0.079	0.5	ug/L	10/19/12	nicollez	
4-Chlorotoluene	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
4-Isopropyltoluene	ND	1	0.091	0.5	ug/L	10/19/12	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	1	0.16	5	ug/L	10/19/12	nicollez	
Acetone	ND	1	0.2	10	ug/L	10/19/12	nicollez	
Allyl Chloride	ND	1	0.08	0.5	ug/L	10/19/12	nicollez	
Benzene	ND	1	0.071	0.5	ug/L	10/19/12	nicollez	
Bromobenzene	ND	1	0.073	1	ug/L	10/19/12	nicollez	
Bromochloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromodichloromethane	ND	1	0.06	0.5	ug/L	10/19/12	nicollez	
Bromoform	ND	1	0.053	0.5	ug/L	10/19/12	nicollez	
Bromomethane	ND	1	0.13	1	ug/L	10/19/12	nicollez	
Carbon Tetrachloride	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chlorobenzene	ND	1	0.075	0.5	ug/L	10/19/12	nicollez	
Chlorodibromomethane	ND	1	0.045	0.5	ug/L	10/19/12	nicollez	
Chloroethane	ND	1	0.4	0.5	ug/L	10/19/12	nicollez	

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