Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\042110\0421F012.D Vial: 14
Acq On : 21 Apr 2010 2:57 pm Operator: KR
Sample : SOIL ICAL 200 Inst : MS24
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 21 15:32:48 2010 Quant Results File: 042110MS24SOIL.

Quant Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 14:54:43 2010
Response via : Initial Calibration
DataAcq Meth : 8260

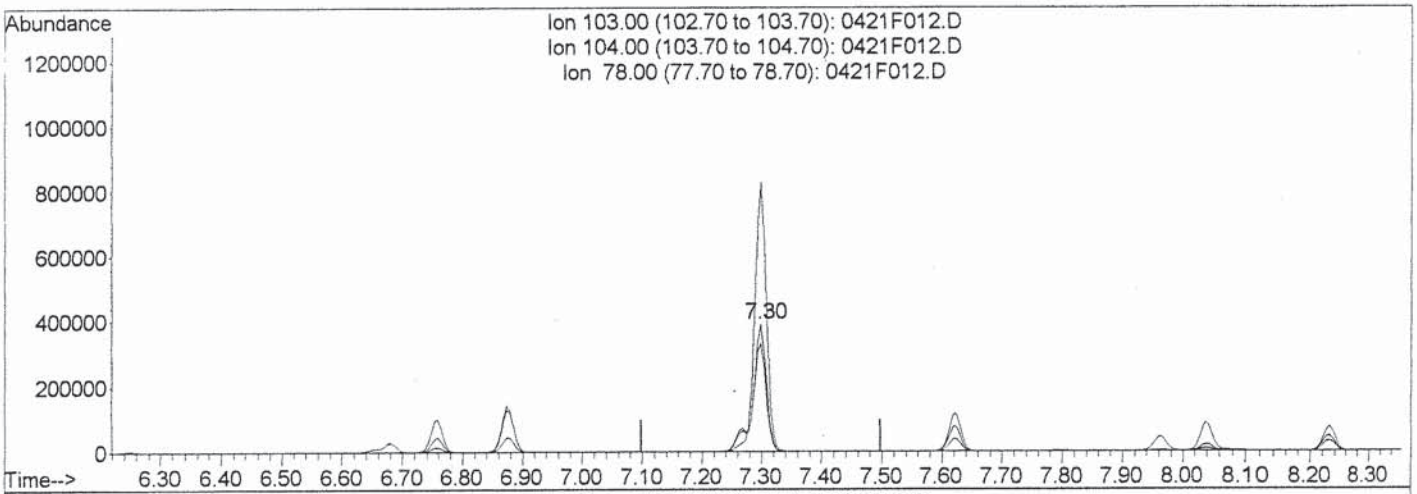
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
77)	Isopropylbenzene	7.62	105	1571347	228.12	PPB		95
78)	cis-1,4-Dichloro-2-butene	7.80	89	104209	582.57	PPB	#	80
81)	1,1,2,2-Tetrachloroethane	8.03	83	394176	206.51	PPB		90
82)	trans-1,4-Dichloro-2-buten	8.10	53	105804	247.87	PPB		67
83)	Bromobenzene	7.96	156	438445	215.57	PPB		95
84)	n-Propylbenzene	8.04	91	1916322	237.49	PPB		96
85)	1,2,3-Trichloropropane	8.07	110	141540	192.51	PPB	#	49
86)	2-Chlorotoluene	8.15	91	1141161	220.62	PPB		97
87)	1,3,5-Trimethylbenzene	8.23	105	1332930	234.73	PPB		98
88)	4-Chlorotoluene	8.27	91	1152641	220.07	PPB		97
89)	tert-Butylbenzene	8.54	119	1150593	230.66	PPB		96
90)	1,2,4-Trimethylbenzene	8.60	105	1360187	235.70	PPB		89
91)	sec-Butylbenzene	8.76	105	1702457	228.69	PPB		98
92)	p-Isopropyltoluene	8.91	119	1434240	231.72	PPB		97
93)	1,3-Dichlorobenzene	8.90	146	800438	213.32	PPB		99
94)	1,4-Dichlorobenzene	9.00	146	797979	203.23	PPB		93
95)	n-Butylbenzene	9.31	91	1271631	233.19	PPB		95
96)	1,2-Dichlorobenzene	9.36	146	790605	214.34	PPB		98
97)	1,2-Dibromo-3-chloropropan	10.14	155	68372	262.46	PPB		83
98)	1,3,5-Trichlorobenzene	10.26	180	608410	232.72	PPB		91
99)	1,2,4-Trichlorobenzene	10.86	180	560688	254.80	PPB		92
100)	Hexachlorobutadiene	10.96	225	309440	263.48	PPB		94
101)	Naphthalene	11.09	128	1408429	266.32	PPB		98
102)	1,2,3-Trichlorobenzene	11.32	180	558765	273.03	PPB		92

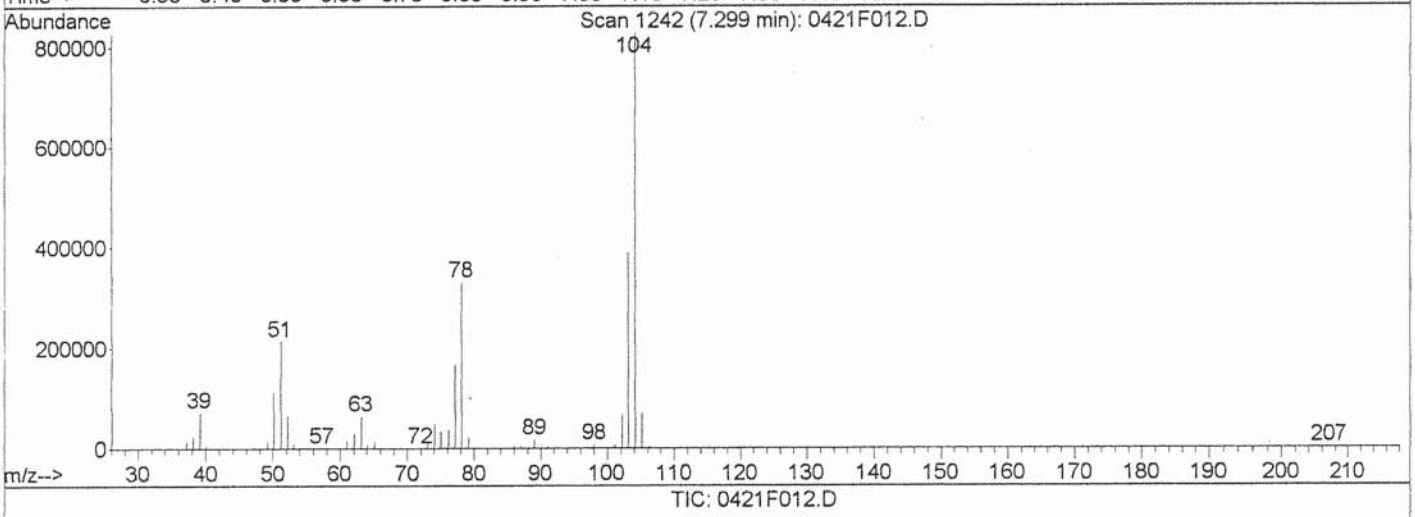
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS24\DATA\042110\0421F012.D Vial: 14
Acq On : 21 Apr 2010 2:57 pm Operator: KR
Sample : SOIL ICAL 200 Inst : MS24
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 21 15:33 2010 Quant Results File: temp.res

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 14:54:43 2010
Response via : Single Level Calibration





TIC: 0421F012.D

(75) Styrene (T)

7.30min 279.38PPB

response 612410

Ion	Exp%	Act%
103.00	100	100
104.00	200.50	212.76
78.00	90.20	84.80
0.00	0.00	0.00

0421F012.D 042110MS24SOIL.M Wed Apr 21 15:33:32 2010

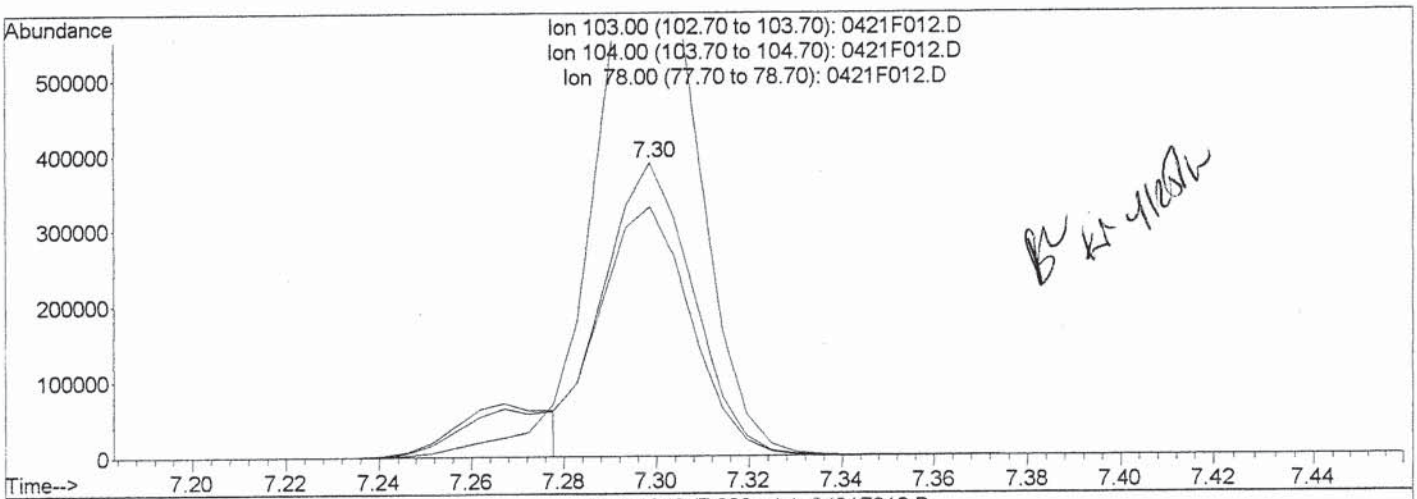
Quantitation Report (Qedit)

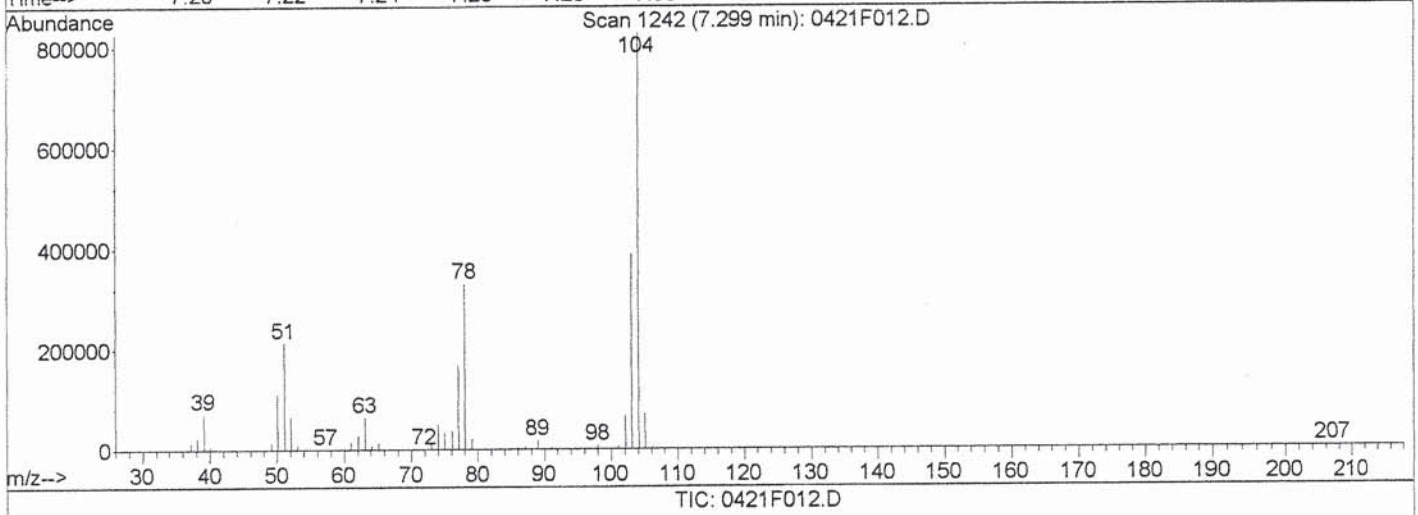
Data File : J:\MS24\DATA\042110\0421F012.D
Acq On : 21 Apr 2010 2:57 pm
Sample : SOIL ICAL 200
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 21 15:33 2010

Vial: 14
Operator: KR
Inst : MS24
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 14:54:43 2010
Response via : Single Level Calibration





TIC: 0421F012.D

(75) Styrene (T)

7.30min 237.52PPB m

response 520670

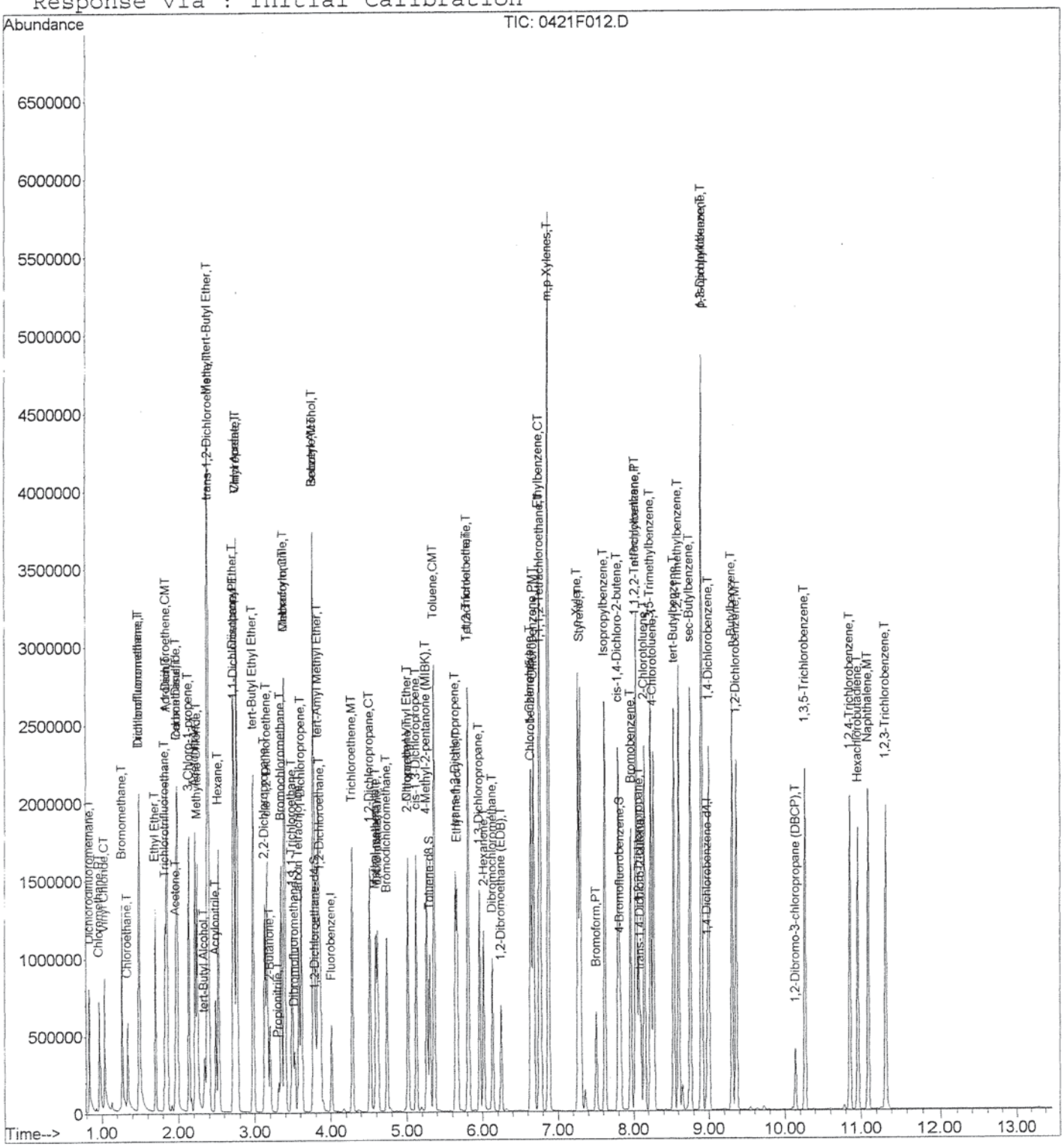
Ion	Exp%	Act%
103.00	100	100
104.00	200.50	212.76
78.00	90.20	84.80
0.00	0.00	0.00

0421F012.D 042110MS24SOIL.M Wed Apr 21 15:33:38 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\042110\0421F012.D Vial: 14
Acq On : 21 Apr 2010 2:57 pm Operator: KR
Sample : SOIL ICAL 200 Inst : MS24
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 21 15:33 2010 Quant Results File: 042110MS24SO

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 14:54:43 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\042110\0421F013.D
Acq On : 21 Apr 2010 3:18 pm
Sample : SOIL ICAL 300
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 21 15:34:10 2010

Vial: 15
Operator: KR
Inst : MS24
Multiplr: 1.00
Quant Results File: 042110MS24SOIL.

Quant Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 15:34:02 2010
Response via : Initial Calibration
DataAcq Meth : 8260

KR 4/21/10

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	4.02	96	361583	50.00	PPB		0.00
59) Chlorobenzene-d5	6.65	82	154401	50.00	PPB		0.00
80) 1,4-Dichlorobenzene-d4	8.98	152	139576	50.00	PPB		0.00
System Monitoring Compounds							
38) Dibromofluoromethane	3.54	113	179289	99.09	PPB		0.00
Spiked Amount 50.000			Recovery =	198.18%			
42) 1,2-Dichloroethane-d4	3.81	65	257144	98.36	PPB		0.00
Spiked Amount 50.000			Recovery =	196.72%			
57) Toluene-d8	5.31	98	641534	101.38	PPB		0.00
Spiked Amount 50.000			Recovery =	202.76%			
79) 4-Bromofluorobenzene	7.83	95	241416	102.15	PPB		0.00
Spiked Amount 50.000			Recovery =	204.30%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	0.86	85	621028	275.36	PPB		97
3) Chloromethane	0.99	50	767457	267.98	PPB		95
4) Vinyl Chloride	1.06	62	689835	271.52	PPB		97
5) Bromomethane	1.29	96	607917	291.10	PPB		99
6) Chloroethane	1.36	64	464004	280.96	PPB		96
7) Dichlorofluoromethane	1.52	67	1170089	283.22	PPB		96
8) Trichlorofluoromethane	1.51	101	994547	285.54	PPB		96
9) Ethyl Ether	1.73	59	603809	290.58	PPB		97
10) Acrolein	1.87	56	548370	1356.91	PPB		91
11) Trichlorotrifluoroethane	1.86	151	377296	283.12	PPB		94
12) 1,1-Dichloroethene	1.88	96	418563	272.51	PPB		95
13) Acetone	1.98	43	437576	506.22	PPB		97
14) Iodomethane	2.00	142	1430832	707.62	PPB		97
15) Carbon Disulfide	2.01	76	1791299	300.26	PPB		97
16) 3-Chloro-1-propene	2.16	76	320752	294.59	PPB		92
17) Acetonitrile	2.24	40	935933	5615.86	PPB		97
18) Methylene Chloride	2.27	84	604267	274.19	PPB		99
19) tert-Butyl Alcohol	2.36	59	387289	1256.76	PPB		97
20) Acrylonitrile	2.51	53	485966	574.85	PPB		97
21) Methyl tert-Butyl Ether	2.40	73	3981690	629.05	PPB		99
22) trans-1,2-Dichloroethene	2.42	96	550773	288.83	PPB		85
23) Hexane	2.54	57	720305	274.09	PPB		96
24) Diisopropyl Ether	2.74	45	2111926	294.62	PPB		96
25) 1,1-Dichloroethane	2.75	63	1076410	285.82	PPB		95
26) Vinyl Acetate	2.78	86	102744	293.86	PPB	#	67
27) Chloroprene	2.78	53	1541830	605.71	PPB		96
28) tert-Butyl Ethyl Ether	2.99	59	1939635	298.46	PPB		95

(#) = qualifier out of range (m) = manual integration
0421F013.D 042110MS24SOIL.M Wed Apr 21 15:35:53 2010 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\042110\0421F013.D
Acq On : 21 Apr 2010 3:18 pm
Sample : SOIL ICAL 300
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 21 15:34:10 2010

Vial: 15
Operator: KR
Inst : MS24
Multiplr: 1.00
Quant Results File: 042110MS24SOIL.

Quant Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 15:34:02 2010
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2,2-Dichloropropane	3.15	77	753506	292.36	PPB		97
30)	cis-1,2-Dichloroethene	3.18	96	603092	284.59	PPB		95
31)	2-Butanone	3.21	72	146925	534.02	PPB	#	88
32)	Propionitrile	3.33	54	174458	510.54	PPB		92
33)	Methacrylonitrile	3.40	67	541326	609.00	PPB		90
34)	Bromochloromethane	3.36	128	303087	292.33	PPB		96
36)	Chloroform	3.41	83	1069250	302.84	PPB		95
37)	1,1,1-Trichloroethane	3.51	97	808833	299.58	PPB		97
39)	Carbon Tetrachloride	3.59	117	702752	303.21	PPB		93
40)	1,1-Dichloropropene	3.63	75	725491	298.98	PPB		94
41)	Isobutyl Alcohol	3.78	43	682224	6193.41	PPB		94
43)	Benzene	3.79	78	2324645	301.99	PPB		98
44)	1,2-Dichloroethane	3.87	62	935886	299.38	PPB		97
45)	tert-Amyl Methyl Ether	3.85	55	476286	283.63	PPB	#	68
46)	Trichloroethene	4.29	95	599930	293.95	PPB		92
48)	1,2-Dichloropropane	4.53	63	622976	304.07	PPB		99
49)	Dibromomethane	4.63	93	388677	299.70	PPB		88
50)	Methyl methacrylate	4.60	69	474664	336.23	PPB		92
51)	1,4-Dioxane	4.62	88	156363	5876.35	PPB		98
52)	Bromodichloromethane	4.75	83	835332	327.08	PPB		97
53)	2-Nitropropane	5.02	41	546012	1032.39	PPB		93
54)	2-Chloroethyl Vinyl Ether	5.02	63	397148	315.40	PPB		93
55)	cis-1,3-Dichloropropene	5.13	75	935253	328.25	PPB		94
56)	4-Methyl-2-pentanone (MIBK	5.27	58	479382	609.80	PPB		95
58)	Toluene	5.37	92	1354781	291.77	PPB		94
61)	trans-1,3-Dichloropropene	5.65	75	863416	345.11	PPB		91
62)	Ethyl methacrylate	5.67	69	802734	335.89	PPB		99
63)	1,1,2-Trichloroethane	5.81	83	449249	278.68	PPB		94
64)	Tetrachloroethene	5.82	164	428914	281.19	PPB		90
65)	2-Hexanone	6.02	57	166885	620.84	PPB	#	67
66)	1,3-Dichloropropane	5.97	76	919962	287.47	PPB		87
67)	Dibromochloromethane	6.14	129	596194	339.66	PPB		97
68)	1,2-Dibromoethane (EDB)	6.25	107	519873	297.25	PPB		98
69)	1-Chlorohexane	6.64	91	673215	306.65	PPB		88
70)	Chlorobenzene	6.69	112	1531178	285.74	PPB		100
71)	Ethylbenzene	6.76	106	791745	305.71	PPB	#	76
72)	1,1,1,2-Tetrachloroethane	6.77	131	558615	320.74	PPB		95
73)	m,p-Xylenes	6.88	106	1922010	632.01	PPB		97
74)	o-Xylene	7.27	106	948574	310.40	PPB		92
75)	Styrene	7.30	103	775204m	325.83	PPB		
76)	Bromoform	7.51	173	373549	352.47	PPB		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\042110\0421F013.D Vial: 15
Acq On : 21 Apr 2010 3:18 pm Operator: KR
Sample : SOIL ICAL 300 Inst : MS24
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 21 15:34:10 2010 Quant Results File: 042110MS24SOIL.

Quant Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 15:34:02 2010
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
77)	Isopropylbenzene	7.62	105	2223093	299.63	PPB		95
78)	cis-1,4-Dichloro-2-butene	7.80	89	161638	806.04	PPB	#	79
81)	1,1,2,2-Tetrachloroethane	8.03	83	576110	281.26	PPB		91
82)	trans-1,4-Dichloro-2-buten	8.10	53	156836	330.79	PPB		65
83)	Bromobenzene	7.96	156	652516	297.47	PPB		93
84)	n-Propylbenzene	8.04	91	2777495	312.49	PPB		96
85)	1,2,3-Trichloropropane	8.07	110	208848	267.18	PPB	#	51
86)	2-Chlorotoluene	8.15	91	1680779	299.80	PPB		96
87)	1,3,5-Trimethylbenzene	8.23	105	1959387	313.96	PPB		99
88)	4-Chlorotoluene	8.27	91	1668043	293.95	PPB		96
89)	tert-Butylbenzene	8.54	119	1721829	315.11	PPB		98
90)	1,2,4-Trimethylbenzene	8.60	105	2066627	325.59	PPB		91
91)	sec-Butylbenzene	8.76	105	2566509	315.23	PPB		97
92)	p-Isopropyltoluene	8.91	119	2153978	317.41	PPB		97
93)	1,3-Dichlorobenzene	8.90	146	1212419	300.00	PPB		100
94)	1,4-Dichlorobenzene	9.00	146	1215576	289.25	PPB		94
95)	n-Butylbenzene	9.31	91	1917329	320.31	PPB		95
96)	1,2-Dichlorobenzene	9.36	146	1185718	298.28	PPB		98
97)	1,2-Dibromo-3-chloropropan	10.14	155	111595	377.48	PPB		85
98)	1,3,5-Trichlorobenzene	10.27	180	847904	297.55	PPB		92
99)	1,2,4-Trichlorobenzene	10.86	180	531356	217.55	PPB		95
100)	Hexachlorobutadiene	10.96	225	267293	204.95	PPB		93
101)	Naphthalene	11.09	128	1422354	236.14	PPB		97
102)	1,2,3-Trichlorobenzene	11.32	180	542825	237.48	PPB		91

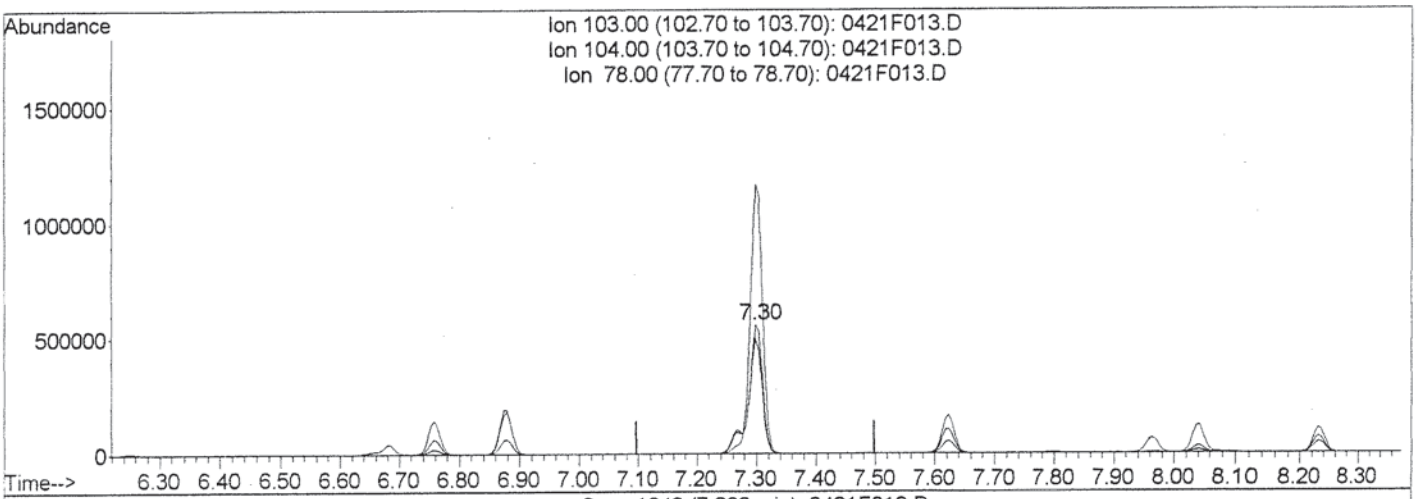
(#) = qualifier out of range (m) = manual integration

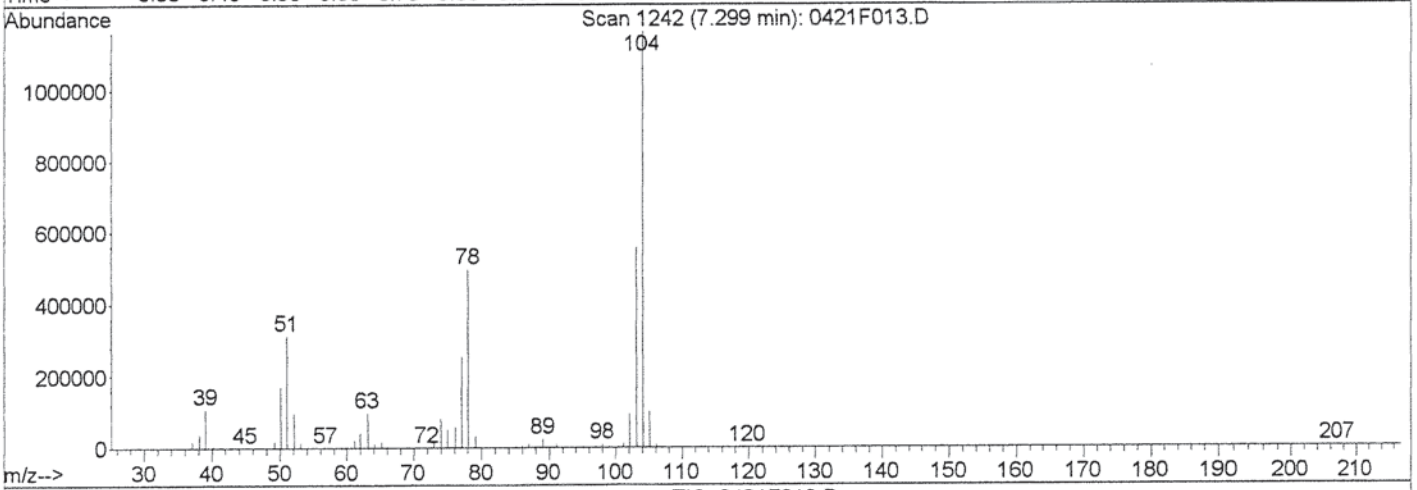
Quantitation Report (Qedit)

Data File : J:\MS24\DATA\042110\0421F013.D
Acq On : 21 Apr 2010 3:18 pm
Sample : SOIL ICAL 300
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 21 15:35 2010

Vial: 15
Operator: KR
Inst : MS24
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 15:34:02 2010
Response via : Single Level Calibration





TIC: 0421F013.D

(75) Styrene (T)

7.30min 379.07PPB

response 901874

Ion	Exp%	Act%
103.00	100	100
104.00	200.50	209.16
78.00	90.20	89.41
0.00	0.00	0.00

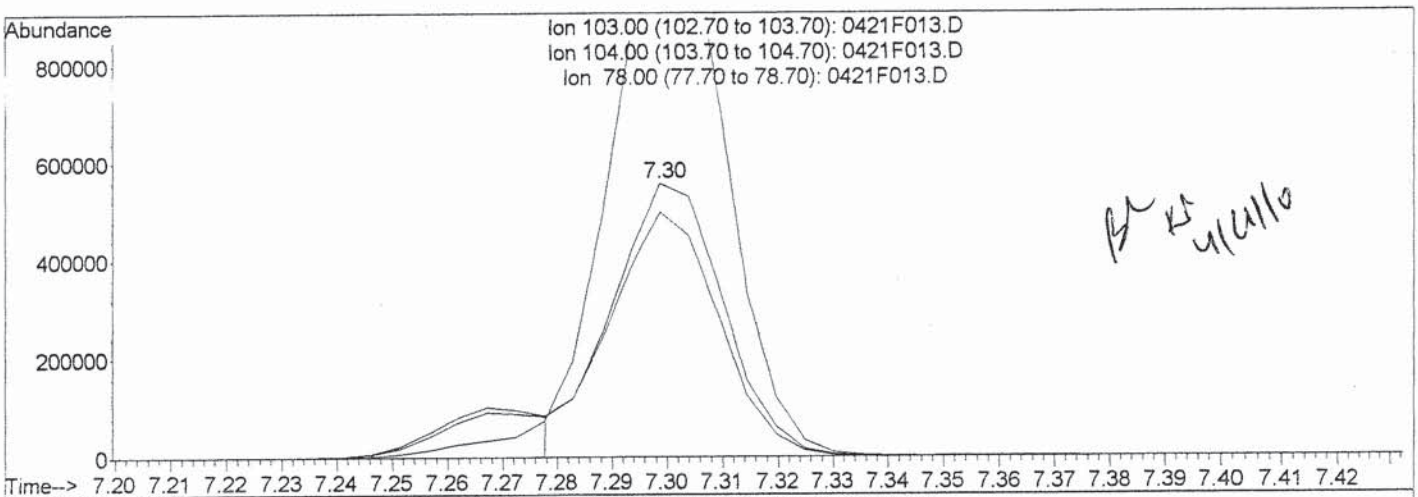
0421F013.D 042110MS24SOIL.M Wed Apr 21 15:35:30 2010

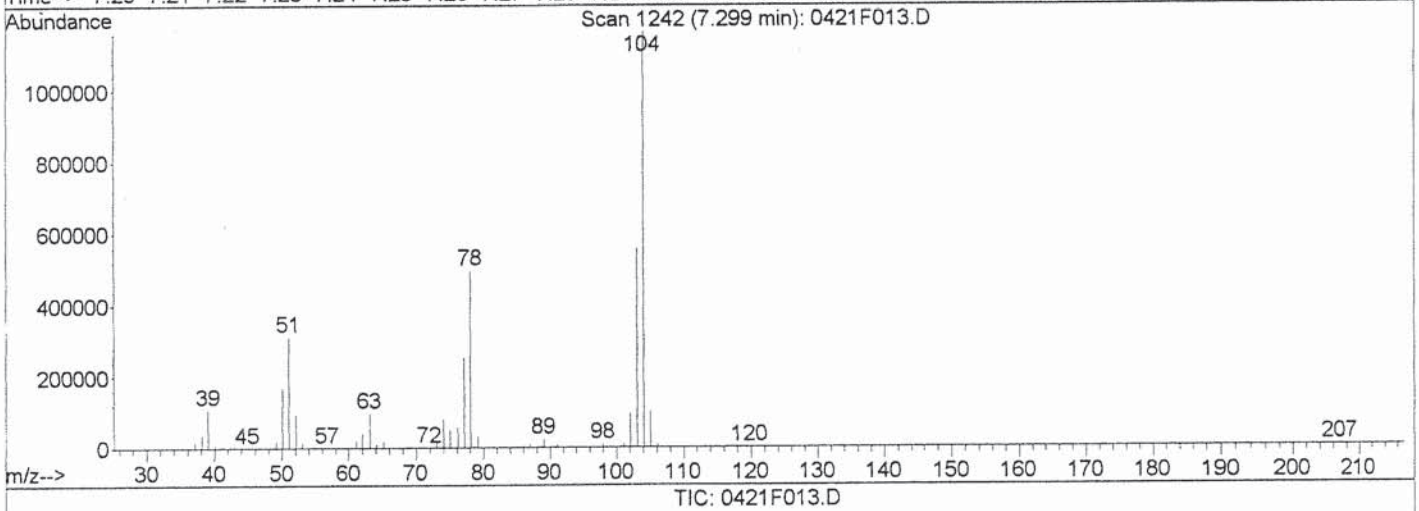
Quantitation Report (Qedit)

Data File : J:\MS24\DATA\042110\0421F013.D
Acq On : 21 Apr 2010 3:18 pm
Sample : SOIL ICAL 300
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 21 15:35 2010

Vial: 15
Operator: KR
Inst : MS24
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 15:34:02 2010
Response via : Single Level Calibration





TIC: 0421F013.D

(75) Styrene (T)

7.30min 325.83PPB m

response 775204

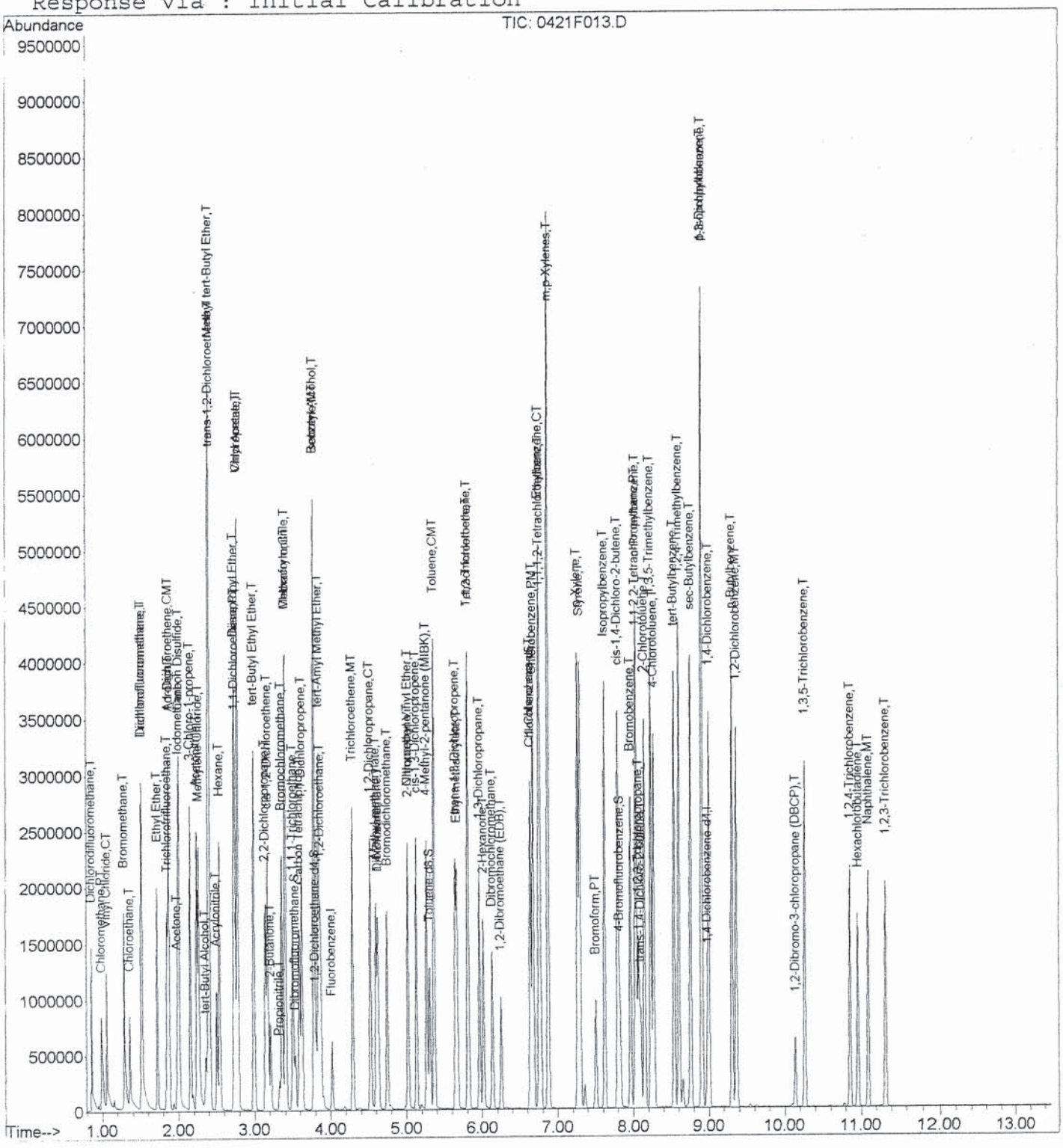
Ion	Exp%	Act%
103.00	100	100
104.00	200.50	209.16
78.00	90.20	89.44
0.00	0.00	0.00

Data File : J:\MS24\DATA\042110\0421F013.D
Acq On : 21 Apr 2010 3:18 pm
Sample : SOIL ICAL 300
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 21 15:35 2010

Vial: 15
Operator: KR
Inst : MS24
Multiplr: 1.00

Quant Results File: 042110MS24SO

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Wed Apr 21 15:34:02 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\042110\0421F017.D
Acq On : 21 Apr 2010 5:07 pm
Sample : ICV
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 22 08:36:26 2010

Vial: 19
Operator: KR
Inst : MS24
Multiplr: 1.00
Quant Results File: 042110MS24SOIL.

Quant Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Thu Apr 22 07:51:04 2010
Response via : Initial Calibration
DataAcq Meth : 8260

KR 4/22/10

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	4.02	96	353765	50.00	PPB		0.00
59) Chlorobenzene-d5	6.65	82	143292	50.00	PPB		0.00
80) 1,4-Dichlorobenzene-d4	8.98	152	141544	50.00	PPB		0.00
System Monitoring Compounds							
38) Dibromofluoromethane	3.53	113	83297	47.11	PPB		0.00
Spiked Amount 50.000			Recovery =	94.22%			
42) 1,2-Dichloroethane-d4	3.81	65	109917	43.06	PPB		0.00
Spiked Amount 50.000			Recovery =	86.12%			
57) Toluene-d8	5.31	98	318509	51.36	PPB		0.00
Spiked Amount 50.000			Recovery =	102.72%			
79) 4-Bromofluorobenzene	7.83	95	110079	50.05	PPB		0.00
Spiked Amount 50.000			Recovery =	100.10%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	0.86	85	105374	48.25	PPB		97
3) Chloromethane	0.99	50	118704	42.87	PPB		96
4) Vinyl Chloride	1.06	62	112972	45.99	PPB		98
5) Bromomethane	1.29	96	91045	44.56	PPB		97
6) Chloroethane	1.36	64	66384	41.46	PPB		93
7) Dichlorofluoromethane	1.52	67	179353	44.65	PPB		98
8) Trichlorofluoromethane	1.51	101	143080	42.24	PPB		97
9) Ethyl Ether	1.73	59	90194	44.52	PPB		96
10) Acrolein	1.87	56	29973	76.62	PPB		91
11) Trichlorotrifluoroethane	1.85	151	65657	50.71	PPB		96
12) 1,1-Dichloroethene	1.88	96	75593	50.89	PPB		97
13) Acetone	1.98	43	173847	211.06	PPB		98
14) Iodomethane	2.00	142	134759	66.42	PPB		97
15) Carbon Disulfide	2.01	76	559675	95.88	PPB		98
16) 3-Chloro-1-propene	2.16	76	64778	60.97	PPB		92
17) Acetonitrile	2.23	40	119752	740.35	PPB		96
18) Methylene Chloride	2.27	84	97359	45.72	PPB		97
19) tert-Butyl Alcohol	2.35	59	132703	449.25	PPB		97
20) Acrylonitrile	2.50	53	98686	119.87	PPB		97
21) Methyl tert-Butyl Ether	2.40	73	292114	46.92	PPB		98
22) trans-1,2-Dichloroethene	2.41	96	90510	48.71	PPB		83
23) Hexane	2.54	57	152816	60.01	PPB		94
24) Diisopropyl Ether	2.73	45	584603	83.52	PPB		95
25) 1,1-Dichloroethane	2.75	63	171578	46.81	PPB		95
26) Vinyl Acetate	2.78	86	70031	205.32	PPB	#	66
27) Chloroprene	2.78	53	193888	77.77	PPB		97
28) tert-Butyl Ethyl Ether	2.99	59	539095	84.83	PPB		94

(#) = qualifier out of range (m) = manual integration

4/22/10

Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\042110\0421F017.D Vial: 19
Acq On : 21 Apr 2010 5:07 pm Operator: KR
Sample : ICV Inst : MS24
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 22 08:36:26 2010 Quant Results File: 042110MS24SOIL.

Quant Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Thu Apr 22 07:51:04 2010
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2,2-Dichloropropane	3.15	77	127046	50.57	PPB		95
30)	cis-1,2-Dichloroethene	3.18	96	94825	46.00	PPB		96
31)	2-Butanone	3.21	72	61469	232.00	PPB	#	40
32)	Propionitrile	3.32	54	21894	66.73	PPB		97
33)	Methacrylonitrile	3.40	67	60507	69.45	PPB		92
34)	Bromochloromethane	3.36	128	48497	47.98	PPB		92
36)	Chloroform	3.41	83	166947	48.27	PPB		97
37)	1,1,1-Trichloroethane	3.50	97	134344	50.87	PPB		94
39)	Carbon Tetrachloride	3.59	117	114995	50.63	PPB		95
40)	1,1-Dichloropropene	3.63	75	113419	47.79	PPB		95
41)	Isobutyl Alcohol	3.78	43	68931	637.04	PPB		94
43)	Benzene	3.79	78	360429	47.82	PPB		98
44)	1,2-Dichloroethane	3.87	62	143906	47.06	PPB		98
45)	tert-Amyl Methyl Ether	3.84	55	135140	82.76	PPB	#	81
46)	Trichloroethene	4.29	95	101608	51.00	PPB		93
47)	Ethyl Acrylate	4.60	55	8745	776.34	PPB	#	1
48)	1,2-Dichloropropane	4.53	63	99804	49.71	PPB		98
49)	Dibromomethane	4.62	93	63147	49.77	PPB		93
50)	Methyl methacrylate	4.60	69	101896	72.52	PPB		94
51)	1,4-Dioxane	4.62	88	20891	804.83	PPB		95
52)	Bromodichloromethane	4.75	83	128944	50.95	PPB		98
53)	2-Nitropropane	5.02	41	37497	71.30	PPB	#	58
54)	2-Chloroethyl Vinyl Ether	5.02	63	67475	54.37	PPB		92
55)	cis-1,3-Dichloropropene	5.13	75	127695	45.20	PPB		93
56)	4-Methyl-2-pentanone (MIBK	5.27	58	190355	246.92	PPB		95
58)	Toluene	5.37	92	224154	49.51	PPB		99
61)	trans-1,3-Dichloropropene	5.65	75	136608	57.60	PPB		87
62)	Ethyl methacrylate	5.67	69	173010	76.69	PPB		99
63)	1,1,2-Trichloroethane	5.81	83	75479	50.85	PPB		95
64)	Tetrachloroethene	5.82	164	75066	53.40	PPB		89
65)	2-Hexanone	6.02	57	64778	258.54	PPB	#	76
66)	1,3-Dichloropropane	5.97	76	149810	50.68	PPB		86
67)	Dibromochloromethane	6.13	129	84742	51.06	PPB		95
68)	1,2-Dibromoethane (EDB)	6.25	107	84721	52.26	PPB		99
69)	1-Chlorohexane	6.64	91	110035	54.01	PPB		89
70)	Chlorobenzene	6.68	112	246494	49.83	PPB		99
71)	Ethylbenzene	6.76	106	128572	53.37	PPB	#	82
72)	1,1,1,2-Tetrachloroethane	6.77	131	84700	51.89	PPB		94
73)	m,p-Xylenes	6.88	106	318534	112.20	PPB		96
74)	o-Xylene	7.27	106	154262	54.12	PPB		95
75)	Styrene	7.30	103	121581m	54.40	PPB		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\042110\0421F017.D
Acq On : 21 Apr 2010 5:07 pm
Sample : ICV
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 22 08:36:26 2010

Vial: 19
Operator: KR
Inst : MS24
Multiplr: 1.00
Quant Results File: 042110MS24SOIL.

Quant Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Thu Apr 22 07:51:04 2010
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
76)	Bromoform	7.51	173	54935	54.49	PPB		89
77)	Isopropylbenzene	7.62	105	395962	57.52	PPB		95
78)	cis-1,4-Dichloro-2-butene	7.80	89	20083	103.47	PPB	#	75
81)	1,1,2,2-Tetrachloroethane	8.03	83	97128	47.13	PPB		90
82)	trans-1,4-Dichloro-2-buten	8.10	53	48782	99.99	PPB		78
83)	Bromobenzene	7.96	156	103842	46.73	PPB		94
84)	n-Propylbenzene	8.04	91	470471	51.89	PPB		97
85)	1,2,3-Trichloropropane	8.07	110	36300	46.36	PPB	#	53
86)	2-Chlorotoluene	8.15	91	288519	50.75	PPB		96
87)	1,3,5-Trimethylbenzene	8.23	105	335693	52.69	PPB		98
88)	4-Chlorotoluene	8.27	91	285094	49.67	PPB		98
89)	tert-Butylbenzene	8.54	119	296183	53.07	PPB		98
90)	1,2,4-Trimethylbenzene	8.60	105	345978	53.10	PPB		91
91)	sec-Butylbenzene	8.76	105	450502	54.17	PPB		100
92)	p-Isopropyltoluene	8.91	119	387073	55.78	PPB		97
93)	1,3-Dichlorobenzene	8.90	146	214487	52.34	PPB		99
94)	1,4-Dichlorobenzene	9.00	146	217486	51.24	PPB		91
95)	n-Butylbenzene	9.31	91	341815	55.77	PPB		95
96)	1,2-Dichlorobenzene	9.36	146	200280	49.71	PPB		95
97)	1,2-Dibromo-3-chloropropan	10.14	155	17506	56.86	PPB		82
98)	1,3,5-Trichlorobenzene	10.26	180	151473	52.46	PPB		94
99)	1,2,4-Trichlorobenzene	10.86	180	136022	53.34	PPB		93
100)	Hexachlorobutadiene	10.96	225	75885	59.47	PPB		94
101)	Naphthalene	11.09	128	314223	53.58	PPB		98
102)	1,2,3-Trichlorobenzene	11.32	180	141470	59.57	PPB		91

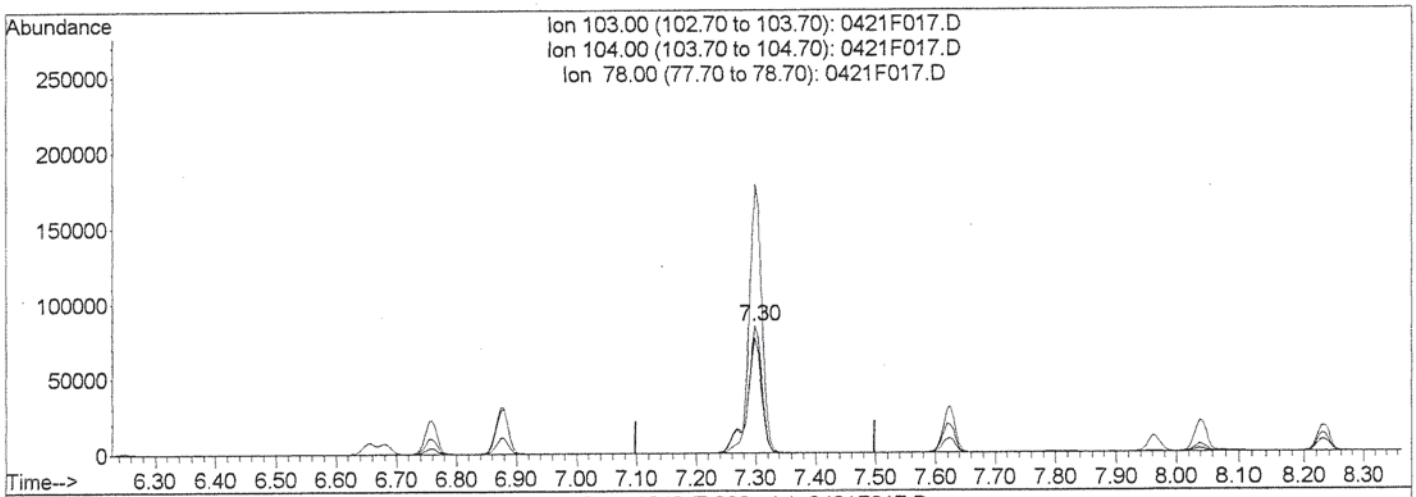
(#) = qualifier out of range (m) = manual integration

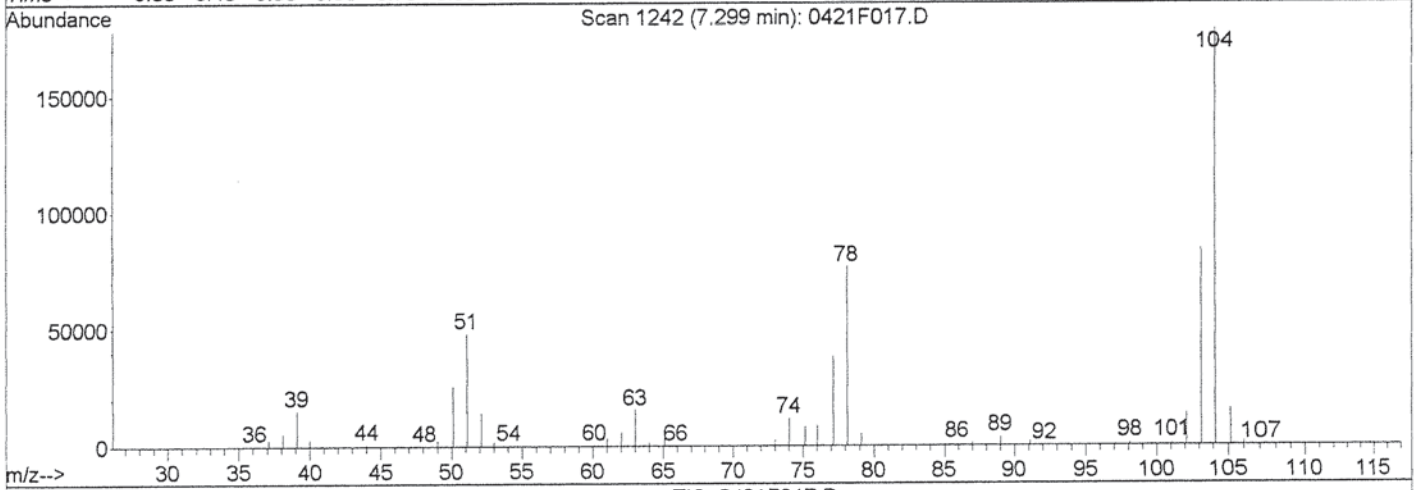
Quantitation Report (Qedit)

Data File : J:\MS24\DATA\042110\0421F017.D
Acq On : 21 Apr 2010 5:07 pm
Sample : ICV
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 22 8:36 2010

Vial: 19
Operator: KR
Inst : MS24
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Thu Apr 22 07:51:04 2010
Response via : Single Level Calibration





TIC: 0421F017.D

(75) Styrene (T)

7.30min 63.76PPB

response 142519

Ion	Exp%	Act%
103.00	100	100
104.00	200.50	211.67
78.00	90.20	90.85
0.00	0.00	0.00

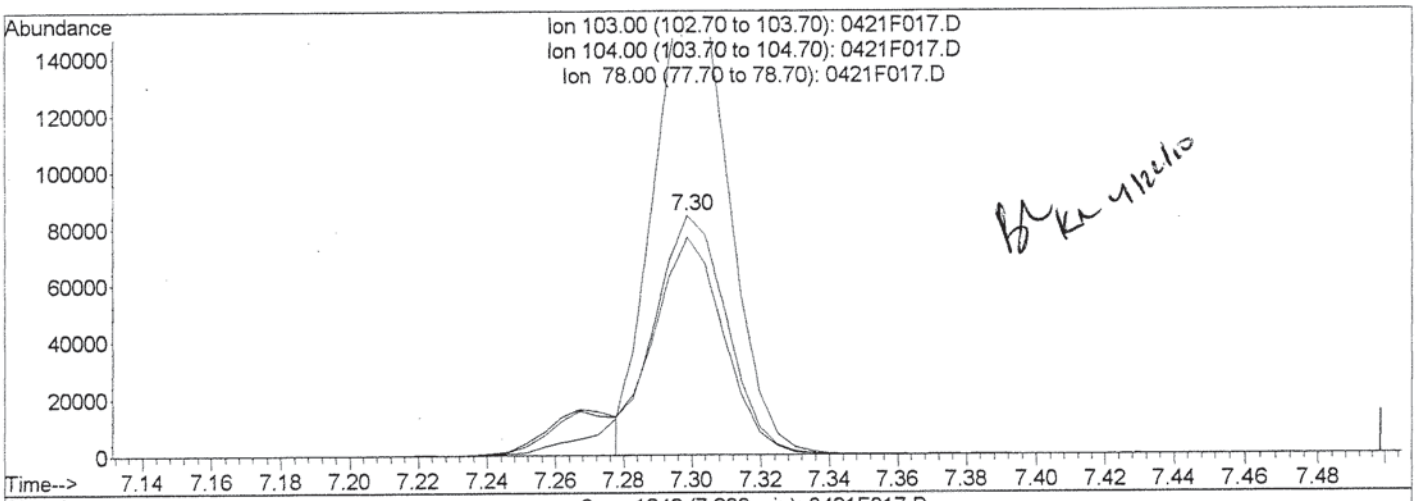
0421F017.D 042110MS24SOIL.M Thu Apr 22 08:36:36 2010

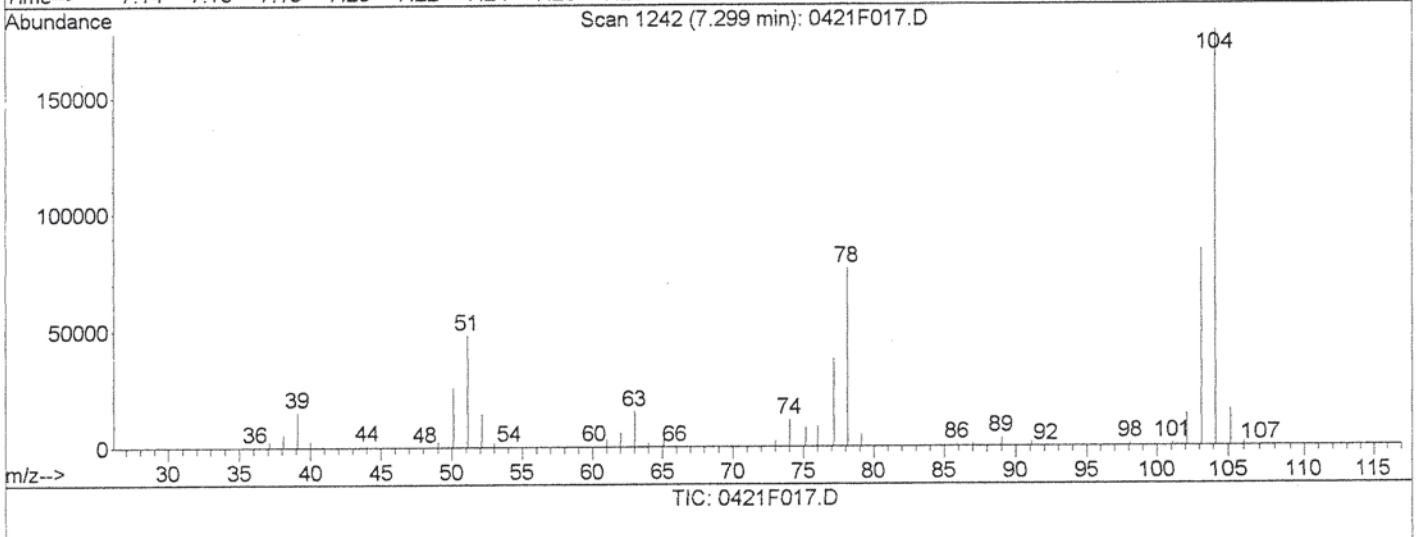
Quantitation Report (Qedit)

Data File : J:\MS24\DATA\042110\0421F017.D
Acq On : 21 Apr 2010 5:07 pm
Sample : ICV
Misc :
MS Integration Params: rteint.p
Quant Time: Apr 22 8:36 2010

Vial: 19
Operator: KR
Inst : MS24
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Thu Apr 22 07:51:04 2010
Response via : Single Level Calibration





TIC: 0421F017.D

(75) Styrene (T)

7.30min 54.40PPB m

response 121581

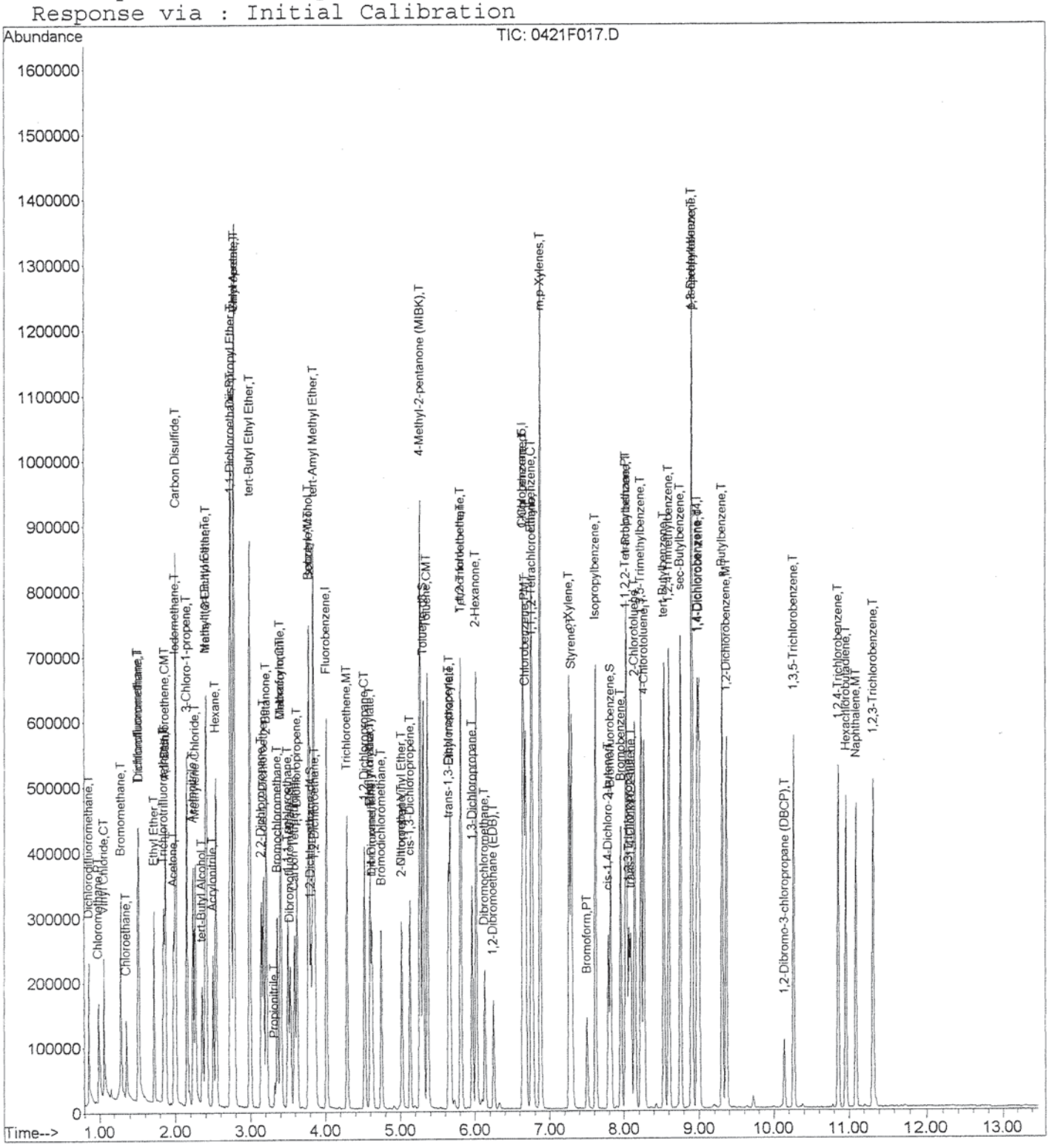
Ion	Exp%	Act%
103.00	100	100
104.00	200.50	211.67
78.00	90.20	90.85
0.00	0.00	0.00

0421F017.D 042110MS24SOIL.M Thu Apr 22 08:36:42 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\042110\0421F017.D Vial: 19
Acq On : 21 Apr 2010 5:07 pm Operator: KR
Sample : ICV Inst : MS24
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 22 8:36 2010 Quant Results File: 042110MS24SO

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Thu Apr 22 07:51:04 2010
Response via : Initial Calibration



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 05/25/2010

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 04/21/2010
Calibration ID: CAL9404
Analysis Lot: KWG1004880
Units: PPB

File ID: J:\MS24\DATA\052510\0525F004.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane	50	36	0.01	0.309	0.221	-29	NA	± 40 %	AverageRF
† Chloromethane	50	43	0.10	0.391	0.340	-13	NA	± 40 %	AverageRF
‡ Vinyl Chloride	50	42	0.01	0.347	0.294	-15	NA	± 20 %	AverageRF
Bromomethane	50	34	0.01	0.289	0.199	-31	NA	± 40 %	AverageRF
Chloroethane	50	46	0.01	0.226	0.206	-9	NA	± 40 %	AverageRF
Trichlorofluoromethane	50	40	0.01	0.479	0.380	-21	NA	± 30 %	AverageRF
‡ 1,1-Dichloroethene	50	45	0.01	0.210	0.188	-10	NA	± 20 %	AverageRF
Acetone	100	92	0.01	0.116	0.107	-8	NA	± 30 %	AverageRF
Carbon Disulfide	50	48	0.01	0.825	0.794	-4	NA	± 30 %	AverageRF
Methylene Chloride	50	52	0.01	0.301	0.315	5	NA	± 30 %	AverageRF
trans-1,2-Dichloroethene	50	49	0.01	0.263	0.258	-2	NA	± 30 %	AverageRF
† 1,1-Dichloroethane	50	50	0.10	0.518	0.518	0	NA	± 30 %	AverageRF
2,2-Dichloropropane	50	49	0.01	0.355	0.347	-2	NA	± 30 %	AverageRF
cis-1,2-Dichloroethene	50	49	0.01	0.291	0.286	-2	NA	± 30 %	AverageRF
2-Butanone (MEK)	100	92	0.01	0.0374	0.0343	-8	NA	± 30 %	AverageRF
Bromochloromethane	50	49	0.01	0.143	0.140	-2	NA	± 30 %	AverageRF
‡ Chloroform	50	50	0.01	0.489	0.490	0	NA	± 20 %	AverageRF
1,1,1-Trichloroethane (TCA)	50	48	0.01	0.373	0.360	-3	NA	± 30 %	AverageRF
Carbon Tetrachloride	50	48	0.01	0.321	0.308	-4	NA	± 30 %	AverageRF
1,1-Dichloropropene	50	50	0.01	0.335	0.337	0	NA	± 30 %	AverageRF
Benzene	50	51	0.01	1.07	1.08	1	NA	± 30 %	AverageRF
1,2-Dichloroethane (EDC)	50	49	0.01	0.432	0.423	-2	NA	± 30 %	AverageRF
Trichloroethene (TCE)	50	52	0.01	0.282	0.294	4	NA	± 30 %	AverageRF
‡ 1,2-Dichloropropane	50	50	0.01	0.284	0.284	0	NA	± 20 %	AverageRF
Dibromomethane	50	47	0.01	0.179	0.170	-5	NA	± 30 %	AverageRF
Bromodichloromethane	50	52	0.01	0.358	0.371	4	NA	± 30 %	AverageRF
cis-1,3-Dichloropropene	50	54	0.01	0.399	0.434	9	NA	± 30 %	AverageRF
4-Methyl-2-pentanone (MIBK)	100	89	0.01	0.109	0.0973	-11	NA	± 30 %	AverageRF
‡ Toluene	50	52	0.01	0.640	0.663	4	NA	± 20 %	AverageRF
trans-1,3-Dichloropropene	50	54	0.01	0.828	0.894	8	NA	± 30 %	AverageRF
1,1,2-Trichloroethane	50	47	0.01	0.518	0.486	-6	NA	± 30 %	AverageRF
Tetrachloroethene (PCE)	50	51	0.01	0.491	0.498	2	NA	± 30 %	AverageRF
2-Hexanone	100	93	0.01	0.0874	0.0817	-7	NA	± 30 %	AverageRF
1,3-Dichloropropane	50	48	0.01	1.03	1.00	-3	NA	± 30 %	AverageRF
Dibromochloromethane	50	52	0.01	0.579	0.605	5	NA	± 30 %	AverageRF
1,2-Dibromoethane (EDB)	50	49	0.01	0.566	0.549	-3	NA	± 30 %	AverageRF
† Chlorobenzene	50	51	0.30	1.73	1.77	2	NA	± 30 %	AverageRF
‡ Ethylbenzene	50	52	0.01	0.841	0.880	5	NA	± 20 %	AverageRF
1,1,1,2-Tetrachloroethane	50	53	0.01	0.570	0.599	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 05/25/2010

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 8260B

Calibration Date: 04/21/2010
Calibration ID: CAL9404
Analysis Lot: KWG1004880
Units: PPB

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
m,p-Xylenes	100	110	0.01	0.991	1.09	10	NA	± 30 %	AverageRF
o-Xylene	50	52	0.01	0.995	1.04	5	NA	± 30 %	AverageRF
Styrene	50	53	0.01	0.780	0.832	7	NA	± 30 %	AverageRF
† Bromoform	50	53	0.10	0.352	0.375	7	NA	± 30 %	AverageRF
Isopropylbenzene	50	53	0.01	2.40	2.54	6	NA	± 30 %	AverageRF
† 1,1,2,2-Tetrachloroethane	50	41	0.30	0.728	0.590	-19	NA	± 30 %	AverageRF
Bromobenzene	50	55	0.01	0.785	0.856	9	NA	± 30 %	AverageRF
n-Propylbenzene	50	58	0.01	3.20	3.69	15	NA	± 30 %	AverageRF
1,2,3-Trichloropropane	50	45	0.01	0.277	0.251	-9	NA	± 30 %	AverageRF
2-Chlorotoluene	50	55	0.01	2.01	2.20	9	NA	± 30 %	AverageRF
1,3,5-Trimethylbenzene	50	56	0.01	2.25	2.50	11	NA	± 30 %	AverageRF
4-Chlorotoluene	50	57	0.01	2.03	2.32	14	NA	± 30 %	AverageRF
tert-Butylbenzene	50	53	0.01	1.97	2.09	6	NA	± 30 %	AverageRF
1,2,4-Trimethylbenzene	50	55	0.01	2.30	2.53	10	NA	± 30 %	AverageRF
sec-Butylbenzene	50	54	0.01	2.94	3.18	8	NA	± 30 %	AverageRF
4-Isopropyltoluene	50	54	0.01	2.45	2.63	7	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	50	53	0.01	1.45	1.54	7	NA	± 30 %	AverageRF
1,4-Dichlorobenzene	50	52	0.01	1.50	1.55	3	NA	± 30 %	AverageRF
n-Butylbenzene	50	56	0.01	2.17	2.43	12	NA	± 30 %	AverageRF
1,2-Dichlorobenzene	50	51	0.01	1.42	1.45	2	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane	50	47	0.01	0.109	0.103	-5	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	50	55	0.01	0.901	0.998	11	NA	± 30 %	AverageRF
Hexachlorobutadiene	50	62	0.01	0.451	0.555	23	NA	± 30 %	AverageRF
Naphthalene	50	49	0.01	2.07	2.05	-1	NA	± 30 %	AverageRF
1,2,3-Trichlorobenzene	50	55	0.01	0.839	0.931	11	NA	± 30 %	AverageRF
Dibromofluoromethane	50	48	0.01	0.250	0.240	-4	NA	± 30 %	AverageRF
Toluene-d8	50	55	0.01	0.877	0.961	10	NA	± 30 %	AverageRF
4-Bromofluorobenzene	50	56	0.01	0.767	0.854	11	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Exception Report

Data File: J:\MS24\DATA\052510\0525F004.D
Lab ID: KWG1004880-2
RunType: CCV
Matrix: SOIL

Date Acquired: 05/25/2010 10:34
Date Quantitated: 05/25/2010 10:53
Batch ID: KWG1004880
Analysis Method: 8260B
MethodJoinID: MJ120

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA		x
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Initial Calibration Minimum RF	1,4-Dioxane	0.0037	0.01	NA	NY

Primary Review: KA 5/25/10

Secondary Review: [illegible] 5/25/10

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	SOIL
Prod Code:	8260B	**Collect Date:**		**Receive Date:**	05/25/2010

Analysis Lot:	KWG1004880	**Prep Lot:**		**Report Group:**	
Analysis Method:	8260B	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS24\METHODS\042110MS24SO	**Calibration ID:**	CAL9404
Title:			
Tune Ref:	J:\MS24\DATA\052510\0525F002.D	**Method ID:**	MJ120
MB Ref:		**Quant based on Method**	

Data File:	J:\MS24\DATA\052510\0525F004.D			**Instrument:**	MS24
Acqu Date:	05/25/2010 10:34	**Quant Date:**	05/25/2010 10:53	**Vial:**	4
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1004880-2			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	4.02	0.00	96	367346	50.00	OK
2	Chlorobenzene-d5	6.65	0.00	82	157615	50.00	OK
3	1,4-Dichlorobenzene-d4	8.98	0.00	152	137921	50.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	3.54			113	88180	48.03		43-153	NA
1	1,2-Dichloroethane-d4	3.81			65	120994	45.65		64-142	NA
1	Toluene-d8	5.31			98	352998	54.82		49-151	NA
2	4-Bromofluorobenzene	7.83			95	134640	55.66		33-150	NA

Target Compounds

Final Conc. Units:

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	0.86			85	81049	35.74			
1	Chloromethane	0.99			50	124932	43.45			
1	Vinyl Chloride	1.06			62	108148	42.40			
1	Bromomethane	1.30			96	73155	34.48			
1	Chloroethane	1.37			64	75717	45.54			
1	Dichlorofluoromethane (CFC 21	1.52			67	184580	44.25			
1	Trichlorofluoromethane	1.51			101	139444	39.65			
1	Diethyl Ether	1.73			59	96893	46.06			
1	Acrolein	1.87			56	103627	255.10			
1	Trichlorotrifluoroethane	1.86			151	59948	44.59			
1	1,1-Dichloroethene	1.88			96	69154	44.83			
1	Acetone	1.98			43	78331	91.58			
1	Iodomethane (Methyl Iodide)	2.00			142	194899	92.50			
1	Carbon Disulfide	2.01			76	291799	48.14			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS24\DATA\052510\0525F004.D			**Instrument:**	MS24
Acqu Date:	05/25/2010 10:34	**Quant Date:**	05/25/2010 10:53	**Vial:**	4
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1004880-2			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:**

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	3-Chloro-1-propene	2.16			76	54453	49.35			
1	Acetonitrile	2.23			40	152951	910.64			
1	Methylene Chloride	2.27			84	115560	52.26			
1	tert-Butyl Alcohol	2.35			59	58341	190.20			
1	Acrylonitrile	2.50			53	77470	90.62			
1	Methyl tert-Butyl Ether	2.40			73	612671	94.76			
1	trans-1,2-Dichloroethene	2.42			96	94898	49.19			
1	n-Hexane	2.54			57	141703	53.59			
1	Diisopropyl Ether	2.74			45	369726	50.87			
1	1,1-Dichloroethane	2.75			63	190297	50.00			
1	Vinyl Acetate	2.78			86	17901	50.54			
1	Chloroprene	2.78			53	262117	101.25			
1	tert-Butyl Ethyl Ether	2.99			59	317069	48.05			
1	2,2-Dichloropropane	3.15			77	127446	48.85			
1	cis-1,2-Dichloroethene	3.18			96	105220	49.15			
1	2-Butanone (MEK)	3.21			72	25207	91.62			
1	Propionitrile	3.32			54	29396	86.28			
1	Methacrylonitrile	3.40			67	84139	93.00			
1	Bromochloromethane	3.36			128	51344	48.92			
1	Chloroform	3.41			83	179920	50.10			
1	1,1,1-Trichloroethane (TCA)	3.51			97	132422	48.29			
1	Carbon Tetrachloride	3.59			117	113019	47.92			
1	1,1-Dichloropropene	3.63			75	123612	50.16			
1	Isobutanol	3.78			43	99085	881.85			
1	Benzene	3.79			78	395295	50.51			
1	1,2-Dichloroethane (EDC)	3.87			62	155447	48.96			
1	tert-Amyl Methyl Ether	3.84			55	85586	50.47			
1	Trichloroethene (TCE)	4.29			95	108062	52.23			
1	1,2-Dichloropropane	4.53			63	104436	50.10			
1	Dibromomethane	4.62			93	62550	47.48			
1	Methyl Methacrylate	4.60			69	68133	46.70			
1	1,4-Dioxane	4.62			88	24691	916.06			
1	Bromodichloromethane	4.75			83	136276	51.85			
1	2-Nitropropane	5.02			41	76751	140.55			
1	2-Chloroethyl Vinyl Ether	5.02			63	61066	47.39			
1	cis-1,3-Dichloropropene	5.13			75	159520	54.38			
1	4-Methyl-2-pentanone (MIBK)	5.27			58	71481	89.29			
1	Toluene	5.37			92	243471	51.79			
2	trans-1,3-Dichloropropene	5.65			75	140921	54.02			
2	Ethyl Methacrylate	5.67			69	120223	48.45			
2	1,1,2-Trichloroethane	5.81			83	76617	46.93			
2	Tetrachloroethene (PCE)	5.82			164	78497	50.77			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS24\DATA\052510\0525F004.D			**Instrument:**	MS24
Acqu Date:	05/25/2010 10:34	**Quant Date:**	05/25/2010 10:53	**Vial:**	4
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1004880-2			**Soln Conc. Units:**	PPB

Target Compounds — **Final Conc. Units:**

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
2	2-Hexanone	6.02			57	25745	93.42			
2	1,3-Dichloropropane	5.97			76	157613	48.47			
2	Dibromochloromethane	6.13			129	95404	52.26			
2	1,2-Dibromoethane (EDB)	6.25			107	86483	48.50			
2	1-Chlorohexane	6.64			91	118415	52.84			
2	Chlorobenzene	6.68			112	278864	51.25			
2	Ethylbenzene	6.76			106	138723	52.35			
2	1,1,1,2-Tetrachloroethane	6.77			131	94383	52.57			
2	m,p-Xylenes	6.87			106	343467	109.99			
2	o-Xylene	7.27			106	163954	52.30			
2	Styrene	7.30			103	131072**m**	53.31			
2	Bromoform	7.51			173	59120	53.31			
2	Isopropylbenzene	7.62			105	400807	52.93			
2	cis-1,4-Dichloro-2-butene	7.80			89	22339	104.63			
3	1,1,2,2-Tetrachloroethane	8.03			83	81363	40.52			
3	trans-1,4-Dichloro-2-butene	8.10			53	24814	52.20			
3	Bromobenzene	7.96			156	118080	54.53			
3	n-Propylbenzene	8.04			91	509266	57.64			
3	1,2,3-Trichloropropane	8.07			110	34562	45.30			
3	2-Chlorotoluene	8.15			91	302866	54.68			
3	1,3,5-Trimethylbenzene	8.23			105	345458	55.65			
3	4-Chlorotoluene	8.27			91	320096	57.23			
3	tert-Butylbenzene	8.54			119	288560	53.06			
3	1,2,4-Trimethylbenzene	8.60			105	349121	54.99			
3	sec-Butylbenzene	8.76			105	437935	54.04			
3	4-Isopropyltoluene	8.91			119	362811	53.66			
3	1,3-Dichlorobenzene	8.90			146	213066	53.35			
3	1,4-Dichlorobenzene	9.00			146	213424	51.60			
3	n-Butylbenzene	9.31			91	334877	56.07			
3	1,2-Dichlorobenzene	9.36			146	200204	51.00			
3	1,2-Dibromo-3-chloropropane	10.14			155	14246	47.49			
3	1,2,4-Trichlorobenzene	10.86			180	137699	55.42			
3	Hexachlorobutadiene	10.96			225	76515	61.54			
3	Naphthalene	11.09			128	282079	49.36			
3	1,2,3-Trichlorobenzene	11.32			180	128407	55.49			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

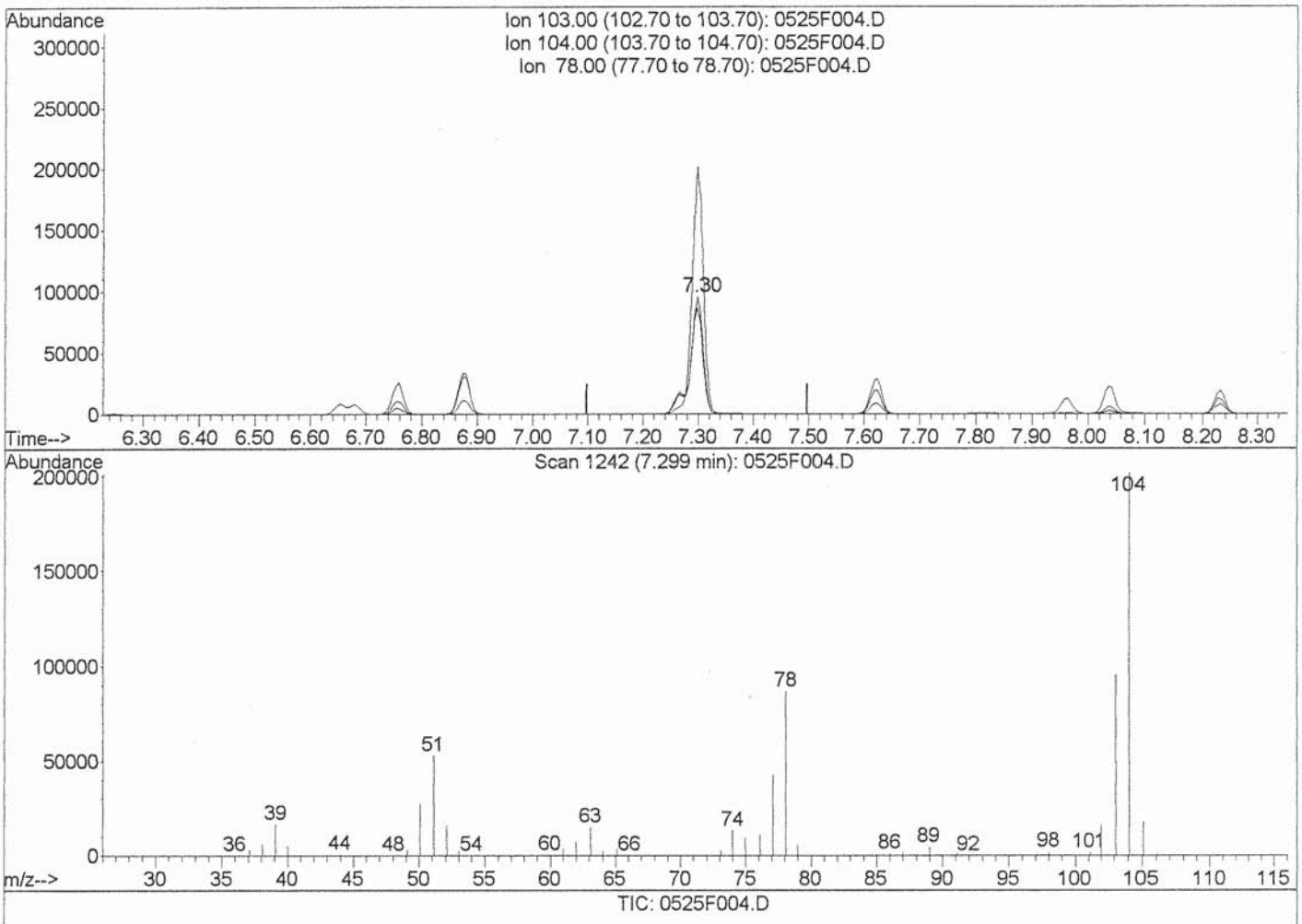
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (Qedit)

Data File : J:\MS24\DATA\052510\0525F004.D Vial: 4
Acq On : 25 May 2010 10:34 am Operator: KR
Sample : CCV W/IS Inst : MS24
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 25 10:53 2010 Quant Results File: temp.res

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Mon May 10 10:34:02 2010
Response via : Single Level Calibration



(75) Styrene (T)

7.30min 62.66PPB

response 154044

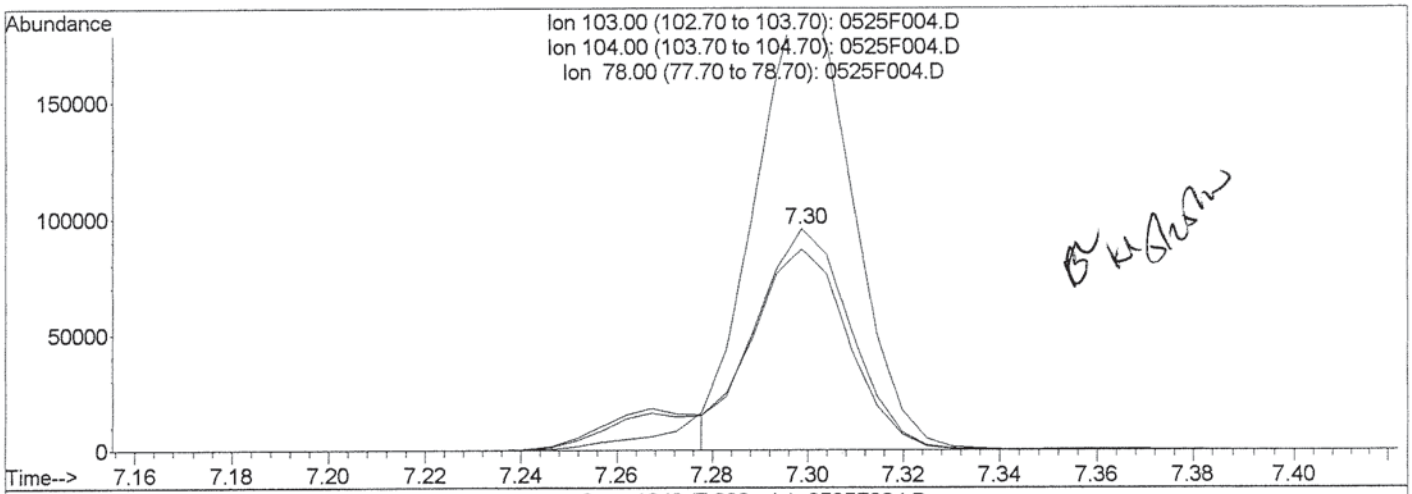
Ion	Exp%	Act%
103.00	100	100
104.00	208.80	211.41
78.00	88.30	90.93
0.00	0.00	0.00

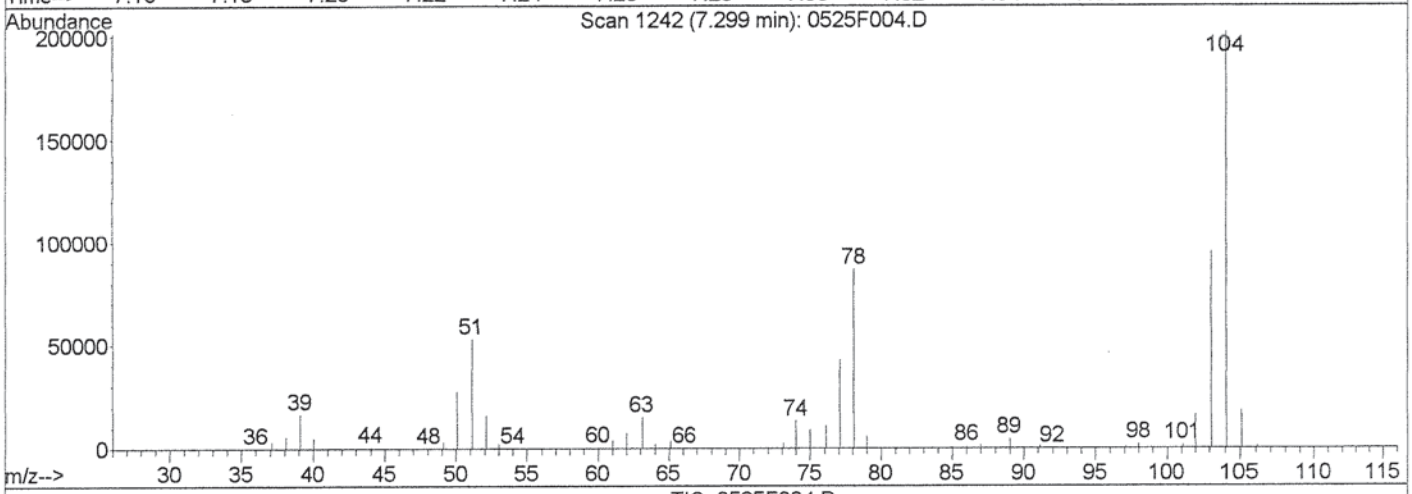
0525F004.D 042110MS24SOIL.M Tue May 25 10:53:55 2010

Quantitation Report (Qedit)

Data File : J:\MS24\DATA\052510\0525F004.D Vial: 4
Acq On : 25 May 2010 10:34 am Operator: KR
Sample : CCV W/IS Inst : MS24
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 25 10:53 2010 Quant Results File: temp.res

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Mon May 10 10:34:02 2010
Response via : Single Level Calibration





TIC: 0525F004.D

(75) Styrene (T)

7.30min 53.31PPB m

response 131072

Ion	Exp%	Act%
103.00	100	100
104.00	208.80	211.41
78.00	88.30	90.93
0.00	0.00	0.00

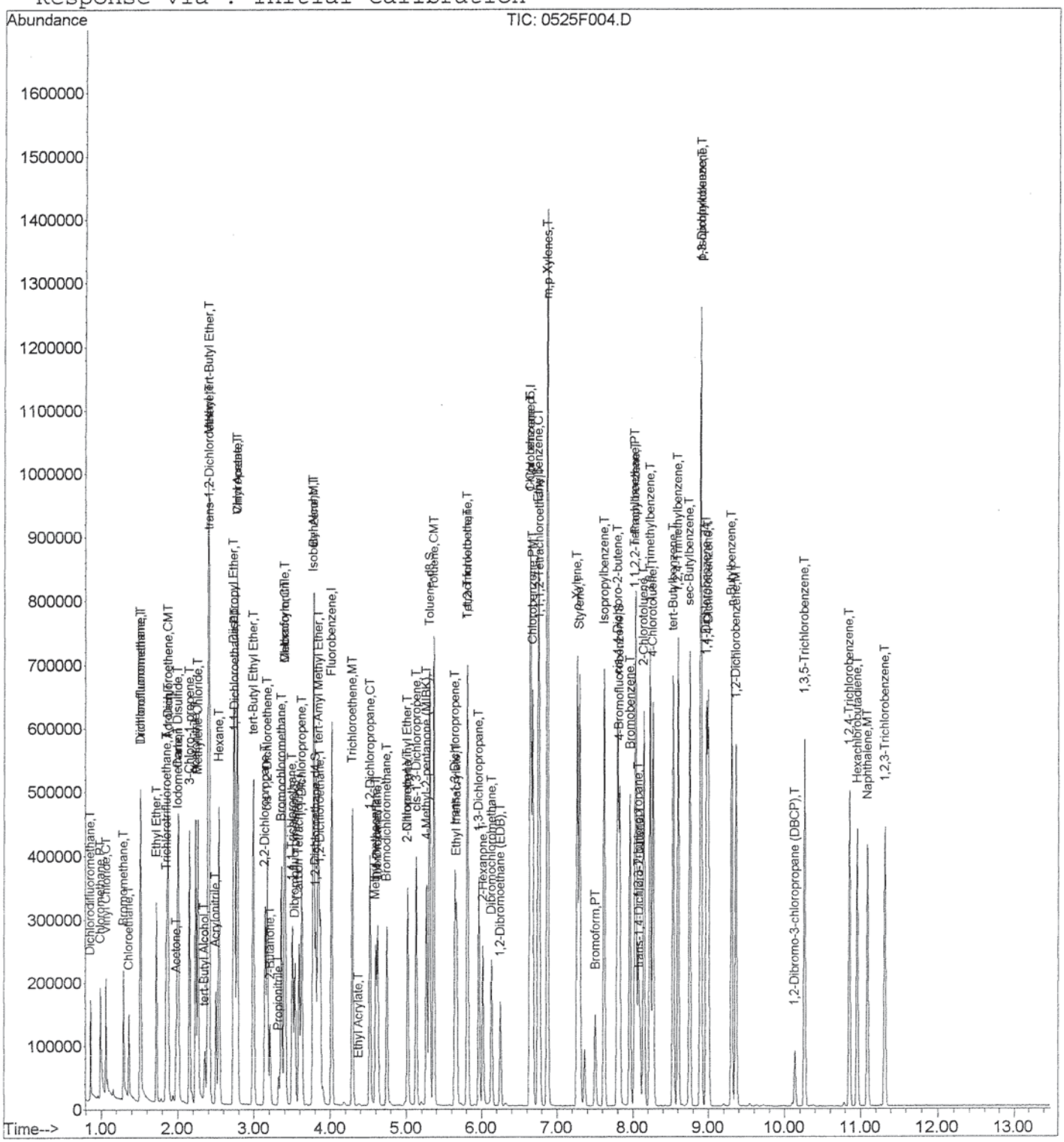
Conc 5/25/10

0525F004.D 042110MS24SOIL.M Tue May 25 10:54:01 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS24\DATA\052510\0525F004.D Vial: 4
Acq On : 25 May 2010 10:34 am Operator: KR
Sample : CCV W/IS Inst : MS24
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 25 10:53 2010 Quant Results File: 042110MS24SO

Method : J:\MS24\METHODS\042110MS24SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Mon May 10 10:34:02 2010
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Sample Prep and Screen Data

Date: 5/25/10

By: KA

IS/SS Std. ID: 56VOA - 64D

CCV Std ID: 56VOA - 64C

MS/DMS/LCS/ICV Std ID: 56VOA65B /68A /65B /67F

BFB Std. ID: 56VOA - 72B

Columbia Analytical Services, Inc.

Injection Log

MS24 - Agilent 5975 / 202159

Tune File: bfbtune.u

New Tune: yes

ICAL Date: 4/21/10 Cal 9404

Second RV: Cmue 5/25/10

LIMS ID: KWG1004880 / 4900

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	IB	0525F001	8260.M				
2	BFB	2		1µl + 5ml			New Tune
3	CCV	3		25µl + 50ml			— NO IS/SS added (NR)
4	CCV	4		25µl - 50ml			
5	LCS	5		50/50/25/20µl + 50ml			
6	DLCS	6		⊥			
7	IB	7					
8	MRL	8		1µl + 50ml			
9	MB	9					
10	K5262-10	10					
11	11	11					
12	K5093- ~~K5244~~ -3	12					
13		3ms 13		50/50/25/20µl + 50			
14	3	30ms 14		⊥			
15	4 IB	15					
16	5 K5262-2 1R	16					
17	⊥	10R 17					
18							
19							
20							
21	10						
22	11						
23	12						
24							
25							
26							
27							

KA 5/25/10

R:\VOA\Injection Logs\INJLOG_MS24_Rev1

Columbia Analytical Services, Inc.

Service Request No.: K1205244, 5262 Analysis: 8260 LL

Analyst: KR Date: 5/25/12

Sample Number	Weight (g)	Tare Weight (g)	Weight Sample + Vial (g)	Volume of P&T MeOH / Water Added (mL)	% Moisture	Final Volume MeOH and Water (mL)
K5262-10	5.05			5mL		
11	5.18					
K5244-3	5.00					
3MS	5.03					
3DMS	5.00					
LCS	5.00					
DUP	5.00					
MB	5.00					
K5262-1R	5.04			5mL		
10R	5.01			5mL		

Start Time: 1100 Stop Time: 3:30 Surrogate: _____ Spike: _____

P&T MeOH Lot No.: _____ Prep Group No.: _____ Storage Location: _____

Comments: _____

Final Volume MeOH and Water = mL of solvent + ((%Moisture x Sample Wt.(g)) / 100)

Semi-Volatile Organic Compounds

Organic Analysis:
Semi-Volatile Organic Compounds by GC/MS

Summary Package

Sample and QC Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244

Cover Page - Organic Analysis Data Package
Semi-Volatile Organic Compounds by GC/MS

Sample Name	Lab Code	Date Collected	Date Received
D-4-16	K1005244-003	05/19/2010	05/21/2010

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Carl Dogan

Date: 6/15/10 Title: Snr Chemist

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: 05/19/2010
Date Received: 05/21/2010

Semi-Volatile Organic Compounds by GC/MS

Sample Name: D-4-16
Lab Code: K1005244-003

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	0.026	1	06/01/10	06/11/10	KWG1005659	
Aniline	ND	U	0.98	0.022	1	06/01/10	06/11/10	KWG1005659	
Bis(2-chloroethyl) Ether	ND	U	0.33	0.012	1	06/01/10	06/11/10	KWG1005659	
Phenol	ND	U	0.33	0.020	1	06/01/10	06/11/10	KWG1005659	
2-Chlorophenol	ND	U	0.33	0.0099	1	06/01/10	06/11/10	KWG1005659	
1,3-Dichlorobenzene	ND	U	0.33	0.019	1	06/01/10	06/11/10	KWG1005659	
1,4-Dichlorobenzene	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
1,2-Dichlorobenzene	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
Benzyl Alcohol	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
Bis(2-chloroisopropyl) Ether	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
2-Methylphenol	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
Hexachloroethane	ND	U	0.33	0.022	1	06/01/10	06/11/10	KWG1005659	
N-Nitrosodi-n-propylamine	ND	U	0.33	0.020	1	06/01/10	06/11/10	KWG1005659	
4-Methylphenol†	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
Nitrobenzene	ND	U	0.33	0.027	1	06/01/10	06/11/10	KWG1005659	
Isophorone	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
2-Nitrophenol	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
2,4-Dimethylphenol	ND	U	0.33	0.016	1	06/01/10	06/11/10	KWG1005659	
Bis(2-chloroethoxy)methane	ND	U	0.33	0.011	1	06/01/10	06/11/10	KWG1005659	
2,4-Dichlorophenol	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
Benzoic Acid	ND	U	2.0	0.14	1	06/01/10	06/11/10	KWG1005659	
1,2,4-Trichlorobenzene	ND	U	0.33	0.011	1	06/01/10	06/11/10	KWG1005659	
Naphthalene	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
4-Chloroaniline	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
Hexachlorobutadiene	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
4-Chloro-3-methylphenol	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
2-Methylnaphthalene	ND	U	0.33	0.011	1	06/01/10	06/11/10	KWG1005659	
Hexachlorocyclopentadiene	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
2,4,6-Trichlorophenol	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
2,4,5-Trichlorophenol	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
2-Chloronaphthalene	ND	U	0.33	0.010	1	06/01/10	06/11/10	KWG1005659	
2-Nitroaniline	ND	U	2.0	0.017	1	06/01/10	06/11/10	KWG1005659	
Acenaphthylene	ND	U	0.33	0.016	1	06/01/10	06/11/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: 05/19/2010
Date Received: 05/21/2010

Semi-Volatile Organic Compounds by GC/MS

Sample Name: D-4-16
Lab Code: K1005244-003

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
2,6-Dinitrotoluene	ND	U	0.33	0.016	1	06/01/10	06/11/10	KWG1005659	
Acenaphthene	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
3-Nitroaniline	ND	U	2.0	0.18	1	06/01/10	06/11/10	KWG1005659	
2,4-Dinitrophenol	ND	U	2.0	0.12	1	06/01/10	06/11/10	KWG1005659	
Dibenzofuran	ND	U	0.33	0.012	1	06/01/10	06/11/10	KWG1005659	
4-Nitrophenol	ND	U	2.0	0.15	1	06/01/10	06/11/10	KWG1005659	
2,4-Dinitrotoluene	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
Fluorene	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
4-Chlorophenyl Phenyl Ether	ND	U	0.33	0.016	1	06/01/10	06/11/10	KWG1005659	
Diethyl Phthalate	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
4-Nitroaniline	ND	U	2.0	0.18	1	06/01/10	06/11/10	KWG1005659	
2-Methyl-4,6-dinitrophenol	ND	U	2.0	0.15	1	06/01/10	06/11/10	KWG1005659	
N-Nitrosodiphenylamine	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
4-Bromophenyl Phenyl Ether	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
Hexachlorobenzene	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
Pentachlorophenol	ND	U	2.0	0.13	1	06/01/10	06/11/10	KWG1005659	
Phenanthrene	ND	U	0.33	0.010	1	06/01/10	06/11/10	KWG1005659	
Anthracene	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
Di-n-butyl Phthalate	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
Fluoranthene	ND	U	0.33	0.012	1	06/01/10	06/11/10	KWG1005659	
Pyrene	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
Butyl Benzyl Phthalate	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
3,3'-Dichlorobenzidine	ND	U	2.0	0.027	1	06/01/10	06/11/10	KWG1005659	
Benz(a)anthracene	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
Chrysene	ND	U	0.33	0.012	1	06/01/10	06/11/10	KWG1005659	
Bis(2-ethylhexyl) Phthalate	**0.076**	J	0.33	0.019	1	06/01/10	06/11/10	KWG1005659	
Di-n-octyl Phthalate	ND	U	0.33	0.024	1	06/01/10	06/11/10	KWG1005659	
Benzo(b)fluoranthene	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
Benzo(k)fluoranthene	ND	U	0.33	0.020	1	06/01/10	06/11/10	KWG1005659	
Benzo(a)pyrene	ND	U	0.33	0.020	1	06/01/10	06/11/10	KWG1005659	
Indeno(1,2,3-cd)pyrene	ND	U	0.33	0.039	1	06/01/10	06/11/10	KWG1005659	
Dibenz(a,h)anthracene	ND	U	0.33	0.028	1	06/01/10	06/11/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: 05/19/2010
Date Received: 05/21/2010

Semi-Volatile Organic Compounds by GC/MS

Sample Name: D-4-16
Lab Code: K1005244-003

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	ND	U	0.33	0.021	1	06/01/10	06/11/10	KWG1005659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	28	20-83	06/11/10	Acceptable
Phenol-d6	45	23-90	06/11/10	Acceptable
Nitrobenzene-d5	51	29-100	06/11/10	Acceptable
2-Fluorobiphenyl	66	32-104	06/11/10	Acceptable
2,4,6-Tribromophenol	22	20-123	06/11/10	Acceptable
Terphenyl-d14	97	37-133	06/11/10	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: KWG1005659-5

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	1.5	0.026	1	06/01/10	06/10/10	KWG1005659	
Aniline	ND	U	0.74	0.022	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethyl) Ether	ND	U	0.25	0.012	1	06/01/10	06/10/10	KWG1005659	
Phenol	ND	U	0.25	0.020	1	06/01/10	06/10/10	KWG1005659	
2-Chlorophenol	ND	U	0.25	0.0099	1	06/01/10	06/10/10	KWG1005659	
1,3-Dichlorobenzene	ND	U	0.25	0.019	1	06/01/10	06/10/10	KWG1005659	
1,4-Dichlorobenzene	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
1,2-Dichlorobenzene	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzyl Alcohol	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroisopropyl) Ether	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
2-Methylphenol	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
Hexachloroethane	ND	U	0.25	0.022	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodi-n-propylamine	ND	U	0.25	0.020	1	06/01/10	06/10/10	KWG1005659	
4-Methylphenol†	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
Nitrobenzene	ND	U	0.25	0.027	1	06/01/10	06/10/10	KWG1005659	
Isophorone	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
2-Nitrophenol	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
2,4-Dimethylphenol	ND	U	0.25	0.016	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethoxy)methane	ND	U	0.25	0.011	1	06/01/10	06/10/10	KWG1005659	
2,4-Dichlorophenol	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
Benzoic Acid	ND	U	1.5	0.14	1	06/01/10	06/10/10	KWG1005659	
1,2,4-Trichlorobenzene	ND	U	0.25	0.011	1	06/01/10	06/10/10	KWG1005659	
Naphthalene	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloroaniline	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobutadiene	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloro-3-methylphenol	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
2-Methylnaphthalene	ND	U	0.25	0.011	1	06/01/10	06/10/10	KWG1005659	
Hexachlorocyclopentadiene	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
2,4,6-Trichlorophenol	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
2,4,5-Trichlorophenol	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
2-Chloronaphthalene	ND	U	0.25	0.010	1	06/01/10	06/10/10	KWG1005659	
2-Nitroaniline	ND	U	1.5	0.017	1	06/01/10	06/10/10	KWG1005659	
Acenaphthylene	ND	U	0.25	0.016	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: KWG1005659-5

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
2,6-Dinitrotoluene	ND	U	0.25	0.016	1	06/01/10	06/10/10	KWG1005659	
Acenaphthene	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
3-Nitroaniline	ND	U	1.5	0.18	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrophenol	ND	U	1.5	0.12	1	06/01/10	06/10/10	KWG1005659	
Dibenzofuran	ND	U	0.25	0.012	1	06/01/10	06/10/10	KWG1005659	
4-Nitrophenol	ND	U	1.5	0.15	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrotoluene	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
Fluorene	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
4-Chlorophenyl Phenyl Ether	ND	U	0.25	0.016	1	06/01/10	06/10/10	KWG1005659	
Diethyl Phthalate	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Nitroaniline	ND	U	1.5	0.18	1	06/01/10	06/10/10	KWG1005659	
2-Methyl-4,6-dinitrophenol	ND	U	1.5	0.15	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodiphenylamine	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
4-Bromophenyl Phenyl Ether	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobenzene	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
Pentachlorophenol	ND	U	1.5	0.13	1	06/01/10	06/10/10	KWG1005659	
Phenanthrene	ND	U	0.25	0.010	1	06/01/10	06/10/10	KWG1005659	
Anthracene	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
Di-n-butyl Phthalate	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
Fluoranthene	ND	U	0.25	0.012	1	06/01/10	06/10/10	KWG1005659	
Pyrene	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
Butyl Benzyl Phthalate	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
3,3'-Dichlorobenzidine	ND	U	1.5	0.027	1	06/01/10	06/10/10	KWG1005659	
Benz(a)anthracene	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
Chrysene	ND	U	0.25	0.012	1	06/01/10	06/10/10	KWG1005659	
Bis(2-ethylhexyl) Phthalate	ND	U	0.25	0.019	1	06/01/10	06/10/10	KWG1005659	
Di-n-octyl Phthalate	ND	U	0.25	0.024	1	06/01/10	06/10/10	KWG1005659	
Benzo(b)fluoranthene	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzo(k)fluoranthene	ND	U	0.25	0.020	1	06/01/10	06/10/10	KWG1005659	
Benzo(a)pyrene	ND	U	0.25	0.020	1	06/01/10	06/10/10	KWG1005659	
Indeno(1,2,3-cd)pyrene	ND	U	0.25	0.039	1	06/01/10	06/10/10	KWG1005659	
Dibenz(a,h)anthracene	ND	U	0.25	0.028	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client:	Exponent	**Service Request:**	K1005244
Project:	Heglar - Kronquist/0907194.000.0601	**Date Collected:**	NA
Sample Matrix:	Misc. solid	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	mg/Kg
Lab Code:	KWG1005659-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	ND	U	0.25	0.021	1	06/01/10	06/10/10	KWG1005659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	56	20-83	06/10/10	Acceptable
Phenol-d6	55	23-90	06/10/10	Acceptable
Nitrobenzene-d5	54	29-100	06/10/10	Acceptable
2-Fluorobiphenyl	66	32-104	06/10/10	Acceptable
2,4,6-Tribromophenol	65	20-123	06/10/10	Acceptable
Terphenyl-d14	100	37-133	06/10/10	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244

Surrogate Recovery Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4	Sur5	Sur6
D-4-16	K1005244-003	28	45	51	66	22	97
Method Blank	KWG1005659-5	56	55	54	66	65	100
Batch QC	K1005175-012	56	58	53	60	72	90
Batch QCMS	KWG1005659-1	59	64	65	68	78	78
Batch QCDMS	KWG1005659-2	60	66	66	65	73	75
Lab Control Sample	KWG1005659-3	59	66	74	75	95	92
Duplicate Lab Control Sample	KWG1005659-4	64	74	76	77	85	87

Surrogate Recovery Control Limits (%)

Sur1 = 2-Fluorophenol	20-83	Sur5 = 2,4,6-Tribromophenol	20-123
Sur2 = Phenol-d6	23-90	Sur6 = Terphenyl-d14	37-133
Sur3 = Nitrobenzene-d5	29-100		
Sur4 = 2-Fluorobiphenyl	32-104		

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 15:32

Internal Standard Area and RT Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F002.D
Instrument ID: MS07
Analysis Method: 8270C

Lab Code: KWG1005663-2
Analysis Lot: KWG1005663

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	109,990	9.33	420,027	11.44	219,736	14.29
	Upper Limit ==>	219,980	9.83	840,054	11.94	439,472	14.79
	Lower Limit ==>	54,995	8.83	210,014	10.94	109,868	13.79
	ICAL Result ==>	103,733	9.34	407,774	11.45	224,107	14.30
Associated Analyses							
Method Blank	KWG1005659-5	85,541	9.33	294,990	11.43	165,284	14.29
Lab Control Sample	KWG1005659-3	82,022	9.33	303,037	11.43	175,397	14.30
Duplicate Lab Control Sample	KWG1005659-4	82,853	9.33	328,582	11.44	180,044	14.29
Batch QCMS	KWG1005659-1	86,297	9.33	318,991	11.43	167,887	14.30
Batch QCDMS	KWG1005659-2	93,653	9.33	364,424	11.43	186,774	14.29

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 15:32

Internal Standard Area and RT Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F002.D
Instrument ID: MS07
Analysis Method: 8270C

Lab Code: KWG1005663-2
Analysis Lot: KWG1005663

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	325,013	16.70	353,756	21.13	274,061	24.31
	Upper Limit ==>	650,026	17.20	707,512	21.63	548,122	24.81
	Lower Limit ==>	162,507	16.20	176,878	20.63	137,031	23.81
	ICAL Result ==>	285,196	16.70	279,166	21.13	255,637	24.31
Associated Analyses							
Method Blank	KWG1005659-5	233,584	16.69	198,229	21.11	158,955	24.29
Lab Control Sample	KWG1005659-3	226,308	16.70	231,145	21.12	195,621	24.30
Duplicate Lab Control Sample	KWG1005659-4	242,964	16.69	239,385	21.12	200,450	24.30
Batch QCMS	KWG1005659-1	221,940	16.70	245,359	21.11	200,032	24.30
Batch QCDMS	KWG1005659-2	217,711	16.69	252,445	21.11	199,314	24.29

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 22:59

Internal Standard Area and RT Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F013.D
Instrument ID: MS07
Analysis Method: 8270C

Lab Code: KWG1005687-2
Analysis Lot: KWG1005687

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	142,104	9.33	539,393	11.44	286,996	14.29
	Upper Limit ==>	284,208	9.83	1,078,786	11.94	573,992	14.79
	Lower Limit ==>	71,052	8.83	269,697	10.94	143,498	13.79
	ICAL Result ==>	103,733	9.34	407,774	11.45	224,107	14.30
Associated Analyses							
Batch QC	K1005175-012	82,676	9.33	292,699	11.43	168,356	14.29
D-4-16	K1005244-003	80,671	9.33	293,139	11.42	166,893	14.28

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 22:59

Internal Standard Area and RT Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F013.D
Instrument ID: MS07
Analysis Method: 8270C

Lab Code: KWG1005687-2
Analysis Lot: KWG1005687

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	353,872	16.70	408,000	21.13	306,648	24.31
	Upper Limit ==>	707,744	17.20	816,000	21.63	613,296	24.81
	Lower Limit ==>	176,936	16.20	204,000	20.63	153,324	23.81
	ICAL Result ==>	285,196	16.70	279,166	21.13	255,637	24.31
Associated Analyses							
Batch QC	K1005175-012	245,334	16.69	218,908	21.11	176,848	24.30
D-4-16	K1005244-003	224,585	16.69	208,104	21.10	171,637	24.29

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Extracted: 06/01/2010
Date Analyzed: 06/10/2010

Matrix Spike/Duplicate Matrix Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QC
Lab Code: K1005175-012

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low
Extraction Lot: KWG1005659

Analyte Name	Sample Result	Batch QCMS KWG1005659-1 Matrix Spike			Batch QCDMS KWG1005659-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Phenol	ND	1.85	2.88	64	1.85	2.88	64	18-106	0	40
2-Chlorophenol	ND	1.87	2.88	65	1.78	2.88	62	27-96	5	40
1,4-Dichlorobenzene	ND	1.91	2.88	66	1.73	2.88	60	28-95	10	40
N-Nitrosodi-n-propylamine	ND	1.92	2.88	66	1.89	2.88	65	32-107	2	40
1,2,4-Trichlorobenzene	ND	1.98	2.88	69	1.93	2.88	67	28-105	3	40
4-Chloro-3-methylphenol	ND	2.09	2.88	72	1.90	2.88	66	13-122	9	40
Acenaphthene	ND	2.19	2.88	76	1.97	2.88	68	30-113	11	40
4-Nitrophenol	ND	2.19	2.88	76	1.89	2.88	66	12-141	14	40
2,4-Dinitrotoluene	ND	2.24	2.88	78	1.85	2.88	64	36-127	19	40
Pentachlorophenol	ND	1.85	2.88	64	1.75	2.88	61	10-135	6	40
Pyrene	ND	1.94	2.88	67	1.98	2.88	69	24-126	2	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1005244
Project:	Heglar - Kronquist/0907194.000.0601	**Date Extracted:**	06/01/2010
Sample Matrix:	Misc. solid	**Date Analyzed:**	06/10/2010

Lab Control Spike/Duplicate Lab Control Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method:	EPA 3541	**Units:**	mg/Kg
Analysis Method:	8270C	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG1005659

	Lab Control Sample KWG1005659-3 Lab Control Spike			Duplicate Lab Control Sample KWG1005659-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
N-Nitrosodimethylamine	2.14	3.33	64	2.41	3.33	72	34-93	12	40
Aniline	2.43	3.33	73	2.55	3.33	76	24-92	5	40
Bis(2-chloroethyl) Ether	2.35	3.33	70	2.52	3.33	76	42-88	7	40
Phenol	2.25	3.33	68	2.39	3.33	72	40-87	6	40
2-Chlorophenol	2.30	3.33	69	2.38	3.33	71	42-86	4	40
1,3-Dichlorobenzene	2.35	3.33	70	2.37	3.33	71	41-84	1	40
1,4-Dichlorobenzene	2.40	3.33	72	2.38	3.33	71	41-85	1	40
1,2-Dichlorobenzene	2.42	3.33	73	2.40	3.33	72	41-86	1	40
Benzyl Alcohol	2.52	3.33	76	2.49	3.33	75	35-96	1	40
Bis(2-chloroisopropyl) Ether	2.08	3.33	62	2.24	3.33	67	39-94	7	40
2-Methylphenol	2.33	3.33	70	2.46	3.33	74	35-92	5	40
Hexachloroethane	2.22	3.33	67	2.29	3.33	69	40-87	3	40
N-Nitrosodi-n-propylamine	2.47	3.33	74	2.63	3.33	79	41-96	6	40
4-Methylphenol	2.56	3.33	77	2.59	3.33	78	38-94	1	40
Nitrobenzene	2.47	3.33	74	2.45	3.33	73	44-92	1	40
Isophorone	2.63	3.33	79	2.49	3.33	75	42-93	6	40
2-Nitrophenol	2.75	3.33	82	2.48	3.33	74	44-95	10	40
2,4-Dimethylphenol	2.34	3.33	70	2.02	3.33	61	16-89	15	40
Bis(2-chloroethoxy)methane	2.59	3.33	78	2.40	3.33	72	45-93	8	40
2,4-Dichlorophenol	2.66	3.33	80	2.52	3.33	76	43-94	6	40
Benzoic Acid	1.95	3.33	59	1.52	3.33	46	10-104	25	40
1,2,4-Trichlorobenzene	2.68	3.33	80	2.66	3.33	80	42-91	1	40
Naphthalene	2.68	3.33	80	2.62	3.33	79	44-92	2	40
4-Chloroaniline	2.65	3.33	79	2.71	3.33	81	37-96	2	40
Hexachlorobutadiene	2.64	3.33	79	2.48	3.33	75	42-91	6	40
4-Chloro-3-methylphenol	3.03	3.33	91	2.61	3.33	78	44-101	15	40
2-Methylnaphthalene	2.76	3.33	83	2.75	3.33	82	44-95	0	40
Hexachlorocyclopentadiene	1.14	3.33	34	1.12	3.33	34	10-68	2	40
2,4,6-Trichlorophenol	2.74	3.33	82	2.71	3.33	81	46-101	1	40
2,4,5-Trichlorophenol	2.87	3.33	86	2.63	3.33	79	46-103	9	40
2-Chloronaphthalene	2.71	3.33	81	2.61	3.33	78	44-95	4	40
2-Nitroaniline	2.66	3.33	80	2.64	3.33	79	48-108	1	40
Acenaphthylene	3.02	3.33	91	2.74	3.33	82	46-99	10	40
Dimethyl Phthalate	3.21	3.33	96	2.83	3.33	85	48-113	13	40
2,6-Dinitrotoluene	2.96	3.33	89	2.72	3.33	81	49-114	9	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Extracted: 06/01/2010
Date Analyzed: 06/10/2010

Lab Control Spike/Duplicate Lab Control Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG1005659

Analyte Name	Lab Control Sample KWG1005659-3 Lab Control Spike Result	Expected	%Rec	Duplicate Lab Control Sample KWG1005659-4 Duplicate Lab Control Spike Result	Expected	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	3.02	3.33	91	2.85	3.33	85	49-97	6	40
3-Nitroaniline	2.80	3.33	84	2.65	3.33	80	46-111	5	40
2,4-Dinitrophenol	2.32	3.33	70	1.94	3.33	58	28-116	18	40
Dibenzofuran	2.97	3.33	89	2.51	3.33	75	47-101	17	40
4-Nitrophenol	2.93	3.33	88	2.54	3.33	76	41-121	14	40
2,4-Dinitrotoluene	2.99	3.33	90	2.77	3.33	83	48-119	7	40
Fluorene	3.06	3.33	92	2.94	3.33	88	46-103	4	40
4-Chlorophenyl Phenyl Ether	2.84	3.33	85	2.85	3.33	85	46-105	0	40
Diethyl Phthalate	3.26	3.33	98	2.91	3.33	87	45-121	11	40
4-Nitroaniline	3.06	3.33	92	2.73	3.33	82	39-120	11	40
2-Methyl-4,6-dinitrophenol	2.87	3.33	86	2.49	3.33	75	41-119	14	40
N-Nitrosodiphenylamine	3.05	3.33	91	2.68	3.33	80	44-113	13	40
4-Bromophenyl Phenyl Ether	3.36	3.33	101	2.90	3.33	87	49-110	15	40
Hexachlorobenzene	3.38	3.33	101	2.94	3.33	88	50-109	14	40
Pentachlorophenol	2.80	3.33	84	2.31	3.33	69	39-112	19	40
Phenanthrene	3.16	3.33	95	2.96	3.33	89	52-108	6	40
Anthracene	3.15	3.33	95	2.60	3.33	78	50-108	19	40
Di-n-butyl Phthalate	3.27	3.33	98	2.97	3.33	89	50-124	10	40
Fluoranthene	3.27	3.33	98	2.91	3.33	87	48-116	12	40
Pyrene	2.93	3.33	88	2.78	3.33	83	45-116	5	40
Butyl Benzyl Phthalate	2.92	3.33	88	2.64	3.33	79	51-114	10	40
3,3'-Dichlorobenzidine	3.08	3.33	92	2.62	3.33	78	38-116	16	40
Benz(a)anthracene	3.39	3.33	102	2.92	3.33	88	54-109	15	40
Chrysene	3.29	3.33	99	2.97	3.33	89	53-109	10	40
Bis(2-ethylhexyl) Phthalate	3.14	3.33	94	2.85	3.33	86	51-115	10	40
Di-n-octyl Phthalate	3.18	3.33	95	2.77	3.33	83	51-121	14	40
Benzo(b)fluoranthene	3.35	3.33	101	2.94	3.33	88	53-110	13	40
Benzo(k)fluoranthene	3.37	3.33	101	2.99	3.33	90	52-112	12	40
Benzo(a)pyrene	3.53	3.33	106	3.23	3.33	97	51-114	9	40
Indeno(1,2,3-cd)pyrene	3.15	3.33	95	2.84	3.33	85	53-112	10	40
Dibenz(a,h)anthracene	3.22	3.33	97	2.76	3.33	83	53-114	15	40
Benzo(g,h,i)perylene	3.22	3.33	97	2.69	3.33	81	50-110	18	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1005244
Project:	Heglar - Kronquist/0907194.000.0601	**Date Extracted:**	06/01/2010
Sample Matrix:	Misc. solid	**Date Analyzed:**	06/10/2010
		Time Analyzed:	18:58

Method Blank Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**File ID:**	J:\MS07\DATA\061010\0610F007.D
Lab Code:	KWG1005659-5	**Instrument ID:**	MS07
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C	**Extraction Lot:**	KWG1005659

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1005659-3	J:\MS07\DATA\061010\0610F008.D	06/10/10	19:38
Duplicate Lab Control Sample	KWG1005659-4	J:\MS07\DATA\061010\0610F009.D	06/10/10	20:18
Batch QCMS	KWG1005659-1	J:\MS07\DATA\061010\0610F010.D	06/10/10	20:58
Batch QCDMS	KWG1005659-2	J:\MS07\DATA\061010\0610F011.D	06/10/10	21:38
Batch QC	K1005175-012	J:\MS07\DATA\061010\0610F015.D	06/11/10	00:19
D-4-16	K1005244-003	J:\MS07\DATA\061010\0610F016.D	06/11/10	01:00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1005244
Project:	Heglar - Kronquist/0907194.000.0601	**Date Extracted:**	06/01/2010
Sample Matrix:	Misc. solid	**Date Analyzed:**	06/10/2010
		Time Analyzed:	19:38

Lab Control Sample Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**File ID:**	J:\MS07\DATA\061010\0610F008.D
Lab Code:	KWG1005659-3	**Instrument ID:**	MS07
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C	**Extraction Lot:**	KWG1005659

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1005659-5	J:\MS07\DATA\061010\0610F007.D	06/10/10	18:58
Batch QCMS	KWG1005659-1	J:\MS07\DATA\061010\0610F010.D	06/10/10	20:58
Batch QCDMS	KWG1005659-2	J:\MS07\DATA\061010\0610F011.D	06/10/10	21:38
Batch QC	K1005175-012	J:\MS07\DATA\061010\0610F015.D	06/11/10	00:19
D-4-16	K1005244-003	J:\MS07\DATA\061010\0610F016.D	06/11/10	01:00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 14:51

Tune Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F001.D
Instrument ID: MS07
Column:

Analysis Method: 8270C
Analysis Lot: KWG1005663

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	30	80	50.5	24239	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	59.4	28517	PASS
70	69	0	2	0.2	47	PASS
127	198	25	75	51.1	24529	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	48018	PASS
199	198	5	9	6.7	3236	PASS
275	198	10	30	22.2	10668	PASS
365	198	1	100	3.0	1439	PASS
441	443	0	100	78.5	3934	PASS
442	198	40	110	55.2	26486	PASS
443	442	15	24	18.9	5012	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1005663-2	J:\MS07\DATA\061010\0610F002.D	06/10/2010	15:32	
Method Blank	KWG1005659-5	J:\MS07\DATA\061010\0610F007.D	06/10/2010	18:58	
Lab Control Sample	KWG1005659-3	J:\MS07\DATA\061010\0610F008.D	06/10/2010	19:38	
Duplicate Lab Control Sample	KWG1005659-4	J:\MS07\DATA\061010\0610F009.D	06/10/2010	20:18	
Batch QCMS	KWG1005659-1	J:\MS07\DATA\061010\0610F010.D	06/10/2010	20:58	
Batch QCDMS	KWG1005659-2	J:\MS07\DATA\061010\0610F011.D	06/10/2010	21:38	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 22:19

Tune Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F012.D
Instrument ID: MS07
Column:

Analysis Method: 8270C
Analysis Lot: KWG1005687

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	30	80	48.7	28256	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	58.7	34033	PASS
70	69	0	2	0.0	0	PASS
127	198	25	75	49.0	28411	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	58006	PASS
199	198	5	9	6.7	3890	PASS
275	198	10	30	20.5	11918	PASS
365	198	1	100	2.7	1563	PASS
441	443	0	100	75.9	4319	PASS
442	198	40	110	49.9	28935	PASS
443	442	15	24	19.7	5688	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1005687-2	J:\MS07\DATA\061010\0610F013.D	06/10/2010	22:59	
Batch QC	K1005175-012	J:\MS07\DATA\061010\0610F015.D	06/11/2010	00:19	
D-4-16	K1005244-003	J:\MS07\DATA\061010\0610F016.D	06/11/2010	01:00	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS07\DATA\060210\0602F004.D	F	J:\MS07\DATA\060210\0602F009.D
B	J:\MS07\DATA\060210\0602F005.D	G	J:\MS07\DATA\060210\0602F010.D
C	J:\MS07\DATA\060210\0602F006.D	H	J:\MS07\DATA\060210\0602F011.D
D	J:\MS07\DATA\060210\0602F007.D	I	J:\MS07\DATA\060210\0602F012.D
E	J:\MS07\DATA\060210\0602F008.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosodimethylamine	A	5.0	0.876	B	10	0.953	C	20	0.933	D	50	0.861	E	80	0.952
	F	100	1.02	G	120	0.995	H	160	1.02	I	200	0.996			
Aniline	A	5.0	1.51	B	10	1.55	C	20	1.58	D	50	1.23	E	80	1.50
	F	100	1.55	G	120	1.50	H	160	1.56	I	200	1.51			
Bis(2-chloroethyl) Ether	A	5.0	1.03	B	10	1.14	C	20	1.20	D	50	1.05	E	80	1.24
	F	100	1.29	G	120	1.32	H	160	1.33	I	200	1.29			
‡ Phenol				B	10	1.36	C	20	1.44	D	50	1.31	E	80	1.54
‡	F	100	1.63	G	120	1.63	H	160	1.62	I	200	1.62			
2-Chlorophenol	A	5.0	1.16	B	10	1.25	C	20	1.33	D	50	1.15	E	80	1.34
	F	100	1.43	G	120	1.36	H	160	1.39	I	200	1.36			
1,3-Dichlorobenzene	A	5.0	1.33	B	10	1.39	C	20	1.45	D	50	1.31	E	80	1.39
	F	100	1.43	G	120	1.43	H	160	1.39	I	200	1.36			
‡ 1,4-Dichlorobenzene	A	5.0	1.37	B	10	1.45	C	20	1.46	D	50	1.28	E	80	1.48
‡	F	100	1.44	G	120	1.45	H	160	1.44	I	200	1.36			
1,2-Dichlorobenzene	A	5.0	1.28	B	10	1.31	C	20	1.36	D	50	1.24	E	80	1.41
	F	100	1.36	G	120	1.40	H	160	1.33	I	200	1.36			
Benzyl Alcohol				B	10	0.704	C	20	0.752	D	50	0.686	E	80	0.838
	F	100	0.843	G	120	0.894	H	160	0.879	I	200	0.839			
Bis(2-chloroisopropyl) Ether				B	10	1.81	C	20	1.82	D	50	1.63	E	80	2.01
	F	100	2.16	G	120	2.18	H	160	2.25	I	200	2.20			
2-Methylphenol	A	5.0	0.981	B	10	0.983	C	20	0.985	D	50	0.838	E	80	1.04
	F	100	1.02	G	120	0.997	H	160	1.05	I	200	0.964			
Hexachloroethane	A	5.0	0.579	B	10	0.644	C	20	0.660	D	50	0.598	E	80	0.692
	F	100	0.699	G	120	0.678	H	160	0.653	I	200	0.590			
† N-Nitrosodi-n-propylamine	A	5.0	0.866	B	10	0.899	C	20	0.946	D	50	0.757	E	80	1.06
†	F	100	1.09	G	120	1.11	H	160	1.11	I	200	1.02			
4-Methylphenol	A	5.0	1.37	B	10	1.36	C	20	1.44	D	50	1.33	E	80	1.63
	F	100	1.63	G	120	1.67	H	160	1.56	I	200	1.45			

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound**

‡ **CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Nitrobenzene				B	10	1.24	C	20	1.31	D	50	1.21	E	80	1.40
	F	100	1.46	G	120	1.46	H	160	1.50	I	200	1.33			
Isophorone	A	5.0	0.711	B	10	0.701	C	20	0.765	D	50	0.630	E	80	0.760
	F	100	0.681	G	120	0.768	H	160	0.731	I	200	0.747			
‡ 2-Nitrophenol	A	5.0	0.182	B	10	0.183	C	20	0.204	D	50	0.173	E	80	0.206
‡	F	100	0.190	G	120	0.218	H	160	0.217	I	200	0.217			
2,4-Dimethylphenol	A	5.0	0.264	B	10	0.234	C	20	0.266	D	50	0.245	E	80	0.281
	F	100	0.271	G	120	0.282	H	160	0.273	I	200	0.277			
Bis(2-chloroethoxy)methane	A	5.0	0.391	B	10	0.393	C	20	0.425	D	50	0.375	E	80	0.412
	F	100	0.410	G	120	0.426	H	160	0.395	I	200	0.421			
‡ 2,4-Dichlorophenol	A	5.0	0.273	B	10	0.290	C	20	0.315	D	50	0.286	E	80	0.303
‡	F	100	0.294	G	120	0.341	H	160	0.310	I	200	0.303			
Benzoic Acid							C	20	0.196	D	50	0.203	E	80	0.235
	F	100	0.222	G	120	0.256	H	160	0.241	I	200	0.241			
1,2,4-Trichlorobenzene	A	5.0	0.318	B	10	0.326	C	20	0.339	D	50	0.300	E	80	0.335
	F	100	0.318	G	120	0.332	H	160	0.311	I	200	0.304			
Naphthalene	A	5.0	0.986	B	10	1.00	C	20	1.01	D	50	0.889	E	80	0.980
	F	100	0.935	G	120	1.01	H	160	0.940	I	200	0.884			
4-Chloroaniline	A	5.0	0.433	B	10	0.434	C	20	0.462	D	50	0.407	E	80	0.421
	F	100	0.409	G	120	0.426	H	160	0.405	I	200	0.414			
‡ Hexachlorobutadiene	A	5.0	0.202	B	10	0.201	C	20	0.218	D	50	0.191	E	80	0.218
‡	F	100	0.211	G	120	0.206	H	160	0.191	I	200	0.190			
‡ 4-Chloro-3-methylphenol	A	5.0	0.319	B	10	0.318	C	20	0.322	D	50	0.310	E	80	0.345
‡	F	100	0.299	G	120	0.334	H	160	0.293	I	200	0.294			
2-Methylnaphthalene	A	5.0	0.626	B	10	0.628	C	20	0.658	D	50	0.582	E	80	0.639
	F	100	0.585	G	120	0.646	H	160	0.592	I	200	0.540			
† Hexachlorocyclopentadiene				B	10	0.211	C	20	0.297	D	50	0.327	E	80	0.387
†	F	100	0.465	G	120	0.436	H	160	0.424	I	200	0.438			
‡ 2,4,6-Trichlorophenol	A	5.0	0.373	B	10	0.389	C	20	0.417	D	50	0.388	E	80	0.413
‡	F	100	0.449	G	120	0.429	H	160	0.427	I	200	0.427			
2,4,5-Trichlorophenol	A	5.0	0.418	B	10	0.427	C	20	0.439	D	50	0.438	E	80	0.449
	F	100	0.503	G	120	0.494	H	160	0.479	I	200	0.490			
2-Chloronaphthalene	A	5.0	1.13	B	10	1.08	C	20	1.10	D	50	1.11	E	80	1.18
	F	100	1.25	G	120	1.16	H	160	1.20	I	200	1.20			
2-Nitroaniline	A	5.0	0.332	B	10	0.361	C	20	0.388	D	50	0.353	E	80	0.389
	F	100	0.365	G	120	0.404	H	160	0.401	I	200	0.358			

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound**

‡ **CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Acenaphthylene	A	5.0	1.73	B	10	1.76	C	20	1.84	D	50	1.67	E	80	1.79
	F	100	1.89	G	120	1.81	H	160	1.76	I	200	1.78			
Dimethyl Phthalate	A	5.0	1.49	B	10	1.42	C	20	1.48	D	50	1.36	E	80	1.34
	F	100	1.31	G	120	1.33	H	160	1.28	I	200	1.21			
2,6-Dinitrotoluene	A	5.0	0.316	B	10	0.315	C	20	0.320	D	50	0.286	E	80	0.319
	F	100	0.311	G	120	0.303	H	160	0.299	I	200	0.305			
‡ Acenaphthene	A	5.0	1.10	B	10	1.06	C	20	1.04	D	50	0.936	E	80	1.01
‡	F	100	1.02	G	120	1.02	H	160	0.990	I	200	0.982			
3-Nitroaniline	A	5.0	0.312	B	10	0.330	C	20	0.341	D	50	0.318	E	80	0.340
	F	100	0.314	G	120	0.318	H	160	0.317	I	200	0.327			
† 2,4-Dinitrophenol							C	20	0.126	D	50	0.173	E	80	0.191
†	F	100	0.189	G	120	0.188	H	160	0.196	I	200	0.187			
Dibenzofuran	A	5.0	1.62	B	10	1.71	C	20	1.71	D	50	1.60	E	80	1.66
	F	100	1.58	G	120	1.57	H	160	1.55	I	200	1.43			
† 4-Nitrophenol							C	20	0.149	D	50	0.168	E	80	0.186
†	F	100	0.180	G	120	0.179	H	160	0.183	I	200	0.184			
2,4-Dinitrotoluene	A	5.0	0.442	B	10	0.421	C	20	0.412	D	50	0.379	E	80	0.401
	F	100	0.365	G	120	0.362	H	160	0.369	I	200	0.364			
Fluorene	A	5.0	1.34	B	10	1.29	C	20	1.25	D	50	1.20	E	80	1.21
	F	100	1.18	G	120	1.12	H	160	1.16	I	200	1.07			
4-Chlorophenyl Phenyl Ether	A	5.0	0.653	B	10	0.664	C	20	0.646	D	50	0.591	E	80	0.636
	F	100	0.587	G	120	0.605	H	160	0.586	I	200	0.568			
Diethyl Phthalate				B	10	1.52	C	20	1.50	D	50	1.30	E	80	1.41
	F	100	1.23	G	120	1.26	H	160	1.15	I	200	1.15			
4-Nitroaniline	A	5.0	0.264	B	10	0.281	C	20	0.278	D	50	0.284	E	80	0.287
	F	100	0.278	G	120	0.281	H	160	0.284	I	200	0.289			
2-Methyl-4,6-dinitrophenol							C	20	0.188	D	50	0.221	E	80	0.230
	F	100	0.209	G	120	0.215	H	160	0.219	I	200	0.205			
‡ N-Nitrosodiphenylamine	A	5.0	0.904	B	10	0.854	C	20	0.852	D	50	0.892	E	80	0.789
‡	F	100	0.752	G	120	0.753	H	160	0.728	I	200	0.688			
4-Bromophenyl Phenyl Ether	A	5.0	0.213	B	10	0.226	C	20	0.243	D	50	0.218	E	80	0.267
	F	100	0.257	G	120	0.263	H	160	0.250	I	200	0.233			
Hexachlorobenzene	A	5.0	0.269	B	10	0.266	C	20	0.277	D	50	0.257	E	80	0.306
	F	100	0.297	G	120	0.289	H	160	0.281	I	200	0.274			
‡ Pentachlorophenol							C	20	0.125	D	50	0.142	E	80	0.171
‡	F	100	0.158	G	120	0.169	H	160	0.166	I	200	0.169			

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† **SPCC Compound**

‡ **CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Phenanthrene	A	5.0	1.15	B	10	1.14	C	20	1.09	D	50	0.980	E	80	1.15
	F	100	1.00	G	120	1.04	H	160	1.00	I	200	1.01			
Anthracene	A	5.0	1.15	B	10	1.12	C	20	1.10	D	50	1.04	E	80	1.21
	F	100	1.15	G	120	1.13	H	160	1.10	I	200	1.06			
Di-n-butyl Phthalate	A	5.0	1.26	B	10	1.09	C	20	1.15	D	50	1.16	E	80	1.33
	F	100	1.28	G	120	1.25	H	160	1.19	I	200	1.25			
‡ Fluoranthene	A	5.0	0.954	B	10	0.890	C	20	0.817	D	50	0.817	E	80	0.968
‡	F	100	1.04	G	120	1.04	H	160	1.04	I	200	1.10			
Pyrene				B	10	1.28	C	20	1.15	D	50	1.08	E	80	1.03
	F	100	0.965	G	120	0.970	H	160	0.958	I	200	1.11			
Butyl Benzyl Phthalate	A	5.0	0.581	B	10	0.542	C	20	0.606	D	50	0.565	E	80	0.647
	F	100	0.607	G	120	0.626	H	160	0.620	I	200	0.680			
3,3'-Dichlorobenzidine	A	5.0	0.404	B	10	0.399	C	20	0.423	D	50	0.427	E	80	0.465
	F	100	0.430	G	120	0.415	H	160	0.398	I	200	0.402			
Benz(a)anthracene	A	5.0	0.973	B	10	0.885	C	20	0.921	D	50	0.905	E	80	1.02
	F	100	0.963	G	120	0.923	H	160	0.914	I	200	0.952			
Chrysene	A	5.0	1.01	B	10	0.878	C	20	0.894	D	50	0.882	E	80	0.958
	F	100	0.911	G	120	0.877	H	160	0.866	I	200	0.918			
Bis(2-ethylhexyl) Phthalate	A	5.0	0.827	B	10	0.765	C	20	0.860	D	50	0.809	E	80	0.896
	F	100	0.902	G	120	0.924	H	160	0.901	I	200	0.908			
‡ Di-n-octyl Phthalate				B	10	1.37	C	20	1.40	D	50	1.58	E	80	1.81
‡	F	100	1.99	G	120	1.96	H	160	2.00	I	200	1.98			
Benzo(b)fluoranthene				B	10	0.873	C	20	0.966	D	50	0.943	E	80	1.04
	F	100	1.11	G	120	1.04	H	160	1.12	I	200	1.15			
Benzo(k)fluoranthene	A	5.0	0.941	B	10	0.944	C	20	1.03	D	50	1.03	E	80	1.09
	F	100	1.14	G	120	1.18	H	160	1.10	I	200	1.17			
‡ Benzo(a)pyrene				B	10	0.799	C	20	0.843	D	50	0.788	E	80	0.871
‡	F	100	0.874	G	120	0.881	H	160	0.899	I	200	0.891			
Indeno(1,2,3-cd)pyrene	A	5.0	0.706	B	10	0.671	C	20	0.684	D	50	0.687	E	80	0.758
	F	100	0.750	G	120	0.785	H	160	0.813	I	200	0.816			
Dibenz(a,h)anthracene	A	5.0	0.758	B	10	0.689	C	20	0.761	D	50	0.713	E	80	0.812
	F	100	0.819	G	120	0.809	H	160	0.859	I	200	0.885			
Benzo(g,h,i)perylene	A	5.0	0.819	B	10	0.799	C	20	0.777	D	50	0.744	E	80	0.778
	F	100	0.772	G	120	0.832	H	160	0.809	I	200	0.870			
2-Fluorophenol	A	5.0	0.897	B	10	1.01	C	20	1.02	D	50	1.07	E	80	1.08
	F	100	1.15	G	120	1.12	H	160	1.12	I	200	1.11			

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound**

‡ **CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Phenol-d6	A	5.0	1.24	B	10	1.40	C	20	1.40	D	50	1.43	E	80	1.52
	F	100	1.60	G	120	1.60	H	160	1.61	I	200	1.55			
Nitrobenzene-d5				B	10	1.27	C	20	1.32	D	50	1.34	E	80	1.50
	F	100	1.55	G	120	1.53	H	160	1.58	I	200	1.50			
2-Fluorobiphenyl	A	5.0	1.21	B	10	1.26	C	20	1.26	D	50	1.31	E	80	1.24
	F	100	1.47	G	120	1.38	H	160	1.35	I	200	1.32			
2,4,6-Tribromophenol				B	10	0.133	C	20	0.155	D	50	0.160	E	80	0.180
	F	100	0.173	G	120	0.175	H	160	0.161	I	200	0.160			
Terphenyl-d14				B	10	0.644	C	20	0.659	D	50	0.674	E	80	0.595
	F	100	0.564	G	120	0.551	H	160	0.587	I	200	0.625			

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosodimethylamine	TRG	AverageRF	% RSD	6.0		≤ 15	0.956		0.01
Aniline	TRG	AverageRF	% RSD	6.9		≤ 15	1.50		0.01
Bis(2-chloroethyl) Ether	TRG	AverageRF	% RSD	9.3		≤ 15	1.21		0.01
‡ Phenol	MS	AverageRF	% RSD	8.7		≤ 15	1.52		0.01
2-Chlorophenol	MS	AverageRF	% RSD	7.6		≤ 15	1.31		0.01
1,3-Dichlorobenzene	TRG	AverageRF	% RSD	3.5		≤ 15	1.39		0.01
‡ 1,4-Dichlorobenzene	MS	AverageRF	% RSD	4.5		≤ 15	1.41		0.01
1,2-Dichlorobenzene	TRG	AverageRF	% RSD	4.1		≤ 15	1.34		0.01
Benzyl Alcohol	TRG	AverageRF	% RSD	9.9		≤ 15	0.804		0.01
Bis(2-chloroisopropyl) Ether	TRG	AverageRF	% RSD	11.5		≤ 15	2.01		0.01
2-Methylphenol	TRG	AverageRF	% RSD	6.2		≤ 15	0.984		0.01
Hexachloroethane	TRG	AverageRF	% RSD	7.0		≤ 15	0.644		0.01
† N-Nitrosodi-n-propylamine	MS	AverageRF	% RSD	12.7		≤ 15	0.985		0.05
4-Methylphenol	TRG	AverageRF	% RSD	8.8		≤ 15	1.49		0.01
Nitrobenzene	TRG	AverageRF	% RSD	7.9		≤ 15	1.36		0.01
Isophorone	TRG	AverageRF	% RSD	6.3		≤ 15	0.722		0.01
‡ 2-Nitrophenol	TRG	AverageRF	% RSD	8.7		≤ 15	0.199		0.01
2,4-Dimethylphenol	TRG	AverageRF	% RSD	6.1		≤ 15	0.266		0.01
Bis(2-chloroethoxy)methane	TRG	AverageRF	% RSD	4.3		≤ 15	0.405		0.01
‡ 2,4-Dichlorophenol	TRG	AverageRF	% RSD	6.5		≤ 15	0.302		0.01
Benzoic Acid	TRG	AverageRF	% RSD	9.6		≤ 15	0.228		0.01
1,2,4-Trichlorobenzene	MS	AverageRF	% RSD	4.3		≤ 15	0.320		0.01
Naphthalene	TRG	AverageRF	% RSD	5.2		≤ 15	0.960		0.01
4-Chloroaniline	TRG	AverageRF	% RSD	4.3		≤ 15	0.423		0.01
‡ Hexachlorobutadiene	TRG	AverageRF	% RSD	5.5		≤ 15	0.203		0.01
‡ 4-Chloro-3-methylphenol	MS	AverageRF	% RSD	5.6		≤ 15	0.315		0.01
2-Methylnaphthalene	TRG	AverageRF	% RSD	6.3		≤ 15	0.611		0.01
† Hexachlorocyclopentadiene	TRG	Quadratic	COD	0.993		≥ 0.990	0.373		0.05
‡ 2,4,6-Trichlorophenol	TRG	AverageRF	% RSD	5.9		≤ 15	0.413		0.01
2,4,5-Trichlorophenol	TRG	AverageRF	% RSD	6.9		≤ 15	0.460		0.01
2-Chloronaphthalene	TRG	AverageRF	% RSD	4.8		≤ 15	1.16		0.01
2-Nitroaniline	TRG	AverageRF	% RSD	6.5		≤ 15	0.372		0.01
Acenaphthylene	TRG	AverageRF	% RSD	3.6		≤ 15	1.78		0.01
Dimethyl Phthalate	TRG	AverageRF	% RSD	6.7		≤ 15	1.36		0.01
2,6-Dinitrotoluene	TRG	AverageRF	% RSD	3.6		≤ 15	0.308		0.01
‡ Acenaphthene	MS	AverageRF	% RSD	4.6		≤ 15	1.02		0.01
3-Nitroaniline	TRG	AverageRF	% RSD	3.4		≤ 15	0.324		0.01
† 2,4-Dinitrophenol	TRG	AverageRF	% RSD	13.5		≤ 15	0.179		0.05
Dibenzofuran	TRG	AverageRF	% RSD	5.4		≤ 15	1.60		0.01
† 4-Nitrophenol	MS	AverageRF	% RSD	7.4		≤ 15	0.176		0.05
2,4-Dinitrotoluene	MS	AverageRF	% RSD	7.5		≤ 15	0.391		0.01
Fluorene	TRG	AverageRF	% RSD	7.0		≤ 15	1.20		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
4-Chlorophenyl Phenyl Ether	TRG	AverageRF	% RSD	5.7		≤ 15	0.615		0.01
Diethyl Phthalate	TRG	AverageRF	% RSD	11.0		≤ 15	1.31		0.01
4-Nitroaniline	TRG	AverageRF	% RSD	2.6		≤ 15	0.281		0.01
2-Methyl-4,6-dinitrophenol	TRG	AverageRF	% RSD	6.4		≤ 15	0.212		0.01
‡ N-Nitrosodiphenylamine	TRG	AverageRF	% RSD	9.6		≤ 15	0.801		0.01
4-Bromophenyl Phenyl Ether	TRG	AverageRF	% RSD	8.1		≤ 15	0.241		0.01
Hexachlorobenzene	TRG	AverageRF	% RSD	5.6		≤ 15	0.280		0.01
‡ Pentachlorophenol	MS	AverageRF	% RSD	11.0		≤ 15	0.157		0.01
Phenanthrene	TRG	AverageRF	% RSD	6.5		≤ 15	1.06		0.01
Anthracene	TRG	AverageRF	% RSD	4.6		≤ 15	1.12		0.01
Di-n-butyl Phthalate	TRG	AverageRF	% RSD	6.2		≤ 15	1.22		0.01
‡ Fluoranthene	TRG	AverageRF	% RSD	10.7		≤ 15	0.964		0.01
Pyrene	MS	AverageRF	% RSD	10.4		≤ 15	1.07		0.01
Butyl Benzyl Phthalate	TRG	AverageRF	% RSD	6.9		≤ 15	0.608		0.01
3,3'-Dichlorobenzidine	TRG	AverageRF	% RSD	5.1		≤ 15	0.418		0.01
Benz(a)anthracene	TRG	AverageRF	% RSD	4.5		≤ 15	0.940		0.01
Chrysene	TRG	AverageRF	% RSD	5.1		≤ 15	0.910		0.01
Bis(2-ethylhexyl) Phthalate	TRG	AverageRF	% RSD	6.3		≤ 15	0.866		0.01
‡ Di-n-octyl Phthalate	TRG	Quadratic	COD	0.998		≥ 0.990	1.76		0.01
Benzo(b)fluoranthene	TRG	AverageRF	% RSD	9.4		≤ 15	1.03		0.01
Benzo(k)fluoranthene	TRG	AverageRF	% RSD	8.3		≤ 15	1.07		0.01
‡ Benzo(a)pyrene	TRG	AverageRF	% RSD	4.9		≤ 15	0.856		0.01
Indeno(1,2,3-cd)pyrene	TRG	AverageRF	% RSD	7.6		≤ 15	0.741		0.01
Dibenz(a,h)anthracene	TRG	AverageRF	% RSD	8.2		≤ 15	0.789		0.01
Benzo(g,h,i)perylene	TRG	AverageRF	% RSD	4.7		≤ 15	0.800		0.01
2-Fluorophenol	SURR	AverageRF	% RSD	7.3		≤ 15	1.06		0.01
Phenol-d6	SURR	AverageRF	% RSD	8.3		≤ 15	1.48		0.01
Nitrobenzene-d5	SURR	AverageRF	% RSD	8.3		≤ 15	1.45		0.01
2-Fluorobiphenyl	SURR	AverageRF	% RSD	6.1		≤ 15	1.31		0.01
2,4,6-Tribromophenol	SURR	AverageRF	% RSD	9.2		≤ 15	0.162		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	7.3		≤ 15	0.612		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010
Date Analyzed: 06/02/2010 - 06/03/2010

Second Source Calibration Verification
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration ID: CAL9525
Units: ug/ml

File ID: J:\MS07\DATA\060210\0602F013.D
J:\MS07\DATA\060210\0602F014.D
J:\MS07\DATA\060210\0602F016.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine	80	76	0.956	0.912	-5	NA	± 30 %	AverageRF
Aniline	80	99	1.50	1.85	23	NA	± 30 %	AverageRF
Bis(2-chloroethyl) Ether	80	85	1.21	1.28	6	NA	± 30 %	AverageRF
‡ Phenol	80	86	1.52	1.64	8	NA	± 20 %	AverageRF
2-Chlorophenol	80	83	1.31	1.36	4	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	80	79	1.39	1.37	-1	NA	± 30 %	AverageRF
‡ 1,4-Dichlorobenzene	80	81	1.41	1.43	1	NA	± 20 %	AverageRF
1,2-Dichlorobenzene	80	83	1.34	1.38	3	NA	± 30 %	AverageRF
Benzyl Alcohol	80	88	0.804	0.884	10	NA	± 30 %	AverageRF
Bis(2-chloroisopropyl) Ether	80	89	2.01	2.24	12	NA	± 30 %	AverageRF
2-Methylphenol	80	81	0.984	0.991	1	NA	± 30 %	AverageRF
Hexachloroethane	80	81	0.644	0.653	1	NA	± 30 %	AverageRF
† N-Nitrosodi-n-propylamine	80	77	0.985	0.949	-4	NA	± 30 %	AverageRF
4-Methylphenol	80	84	1.49	1.57	5	NA	± 30 %	AverageRF
Nitrobenzene	80	79	1.36	1.35	-1	NA	± 30 %	AverageRF
Isophorone	80	76	0.722	0.686	-5	NA	± 30 %	AverageRF
‡ 2-Nitrophenol	80	82	0.199	0.204	3	NA	± 20 %	AverageRF
2,4-Dimethylphenol	80	83	0.266	0.276	4	NA	± 30 %	AverageRF
Bis(2-chloroethoxy)methane	80	86	0.405	0.434	7	NA	± 30 %	AverageRF
‡ 2,4-Dichlorophenol	80	81	0.302	0.306	1	NA	± 20 %	AverageRF
Benzoic Acid	80	78	0.228	0.222	-3	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	80	80	0.320	0.321	0	NA	± 30 %	AverageRF
Naphthalene	80	80	0.960	0.962	0	NA	± 30 %	AverageRF
4-Chloroaniline	80	74	0.423	0.392	-7	NA	± 30 %	AverageRF
‡ Hexachlorobutadiene	80	80	0.203	0.203	0	NA	± 20 %	AverageRF
‡ 4-Chloro-3-methylphenol	80	73	0.315	0.287	-9	NA	± 20 %	AverageRF
2-Methylnaphthalene	80	74	0.611	0.561	-8	NA	± 30 %	AverageRF
† Hexachlorocyclopentadiene	80	65	0.373	0.326	NA	-19	± 30 %	Quadratic
‡ 2,4,6-Trichlorophenol	80	86	0.413	0.445	8	NA	± 20 %	AverageRF
2,4,5-Trichlorophenol	80	81	0.460	0.466	1	NA	± 30 %	AverageRF
2-Chloronaphthalene	80	85	1.16	1.23	6	NA	± 30 %	AverageRF
2-Nitroaniline	80	78	0.372	0.362	-3	NA	± 30 %	AverageRF
Acenaphthylene	80	68	1.78	1.51	-15	NA	± 30 %	AverageRF
Dimethyl Phthalate	80	71	1.36	1.20	-12	NA	± 30 %	AverageRF
2,6-Dinitrotoluene	80	75	0.308	0.288	-7	NA	± 30 %	AverageRF
‡ Acenaphthene	80	77	1.02	0.979	-4	NA	± 20 %	AverageRF
3-Nitroaniline	80	72	0.324	0.293	-10	NA	± 30 %	AverageRF
† 2,4-Dinitrophenol	80	79	0.179	0.176	-2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010
Date Analyzed: 06/02/2010 - 06/03/2010

Second Source Calibration Verification
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration ID: CAL9525
Units: ug/ml

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dibenzofuran	80	75	1.60	1.50	-6	NA	± 30 %	AverageRF
† 4-Nitrophenol	80	75	0.176	0.165	-6	NA	± 30 %	AverageRF
2,4-Dinitrotoluene	80	67	0.391	0.325	-17	NA	± 30 %	AverageRF
Fluorene	80	71	1.20	1.07	-11	NA	± 30 %	AverageRF
4-Chlorophenyl Phenyl Ether	80	70	0.615	0.537	-13	NA	± 30 %	AverageRF
Diethyl Phthalate	80	70	1.31	1.14	-13	NA	± 30 %	AverageRF
4-Nitroaniline	80	81	0.281	0.283	1	NA	± 30 %	AverageRF
2-Methyl-4,6-dinitrophenol	80	83	0.212	0.220	3	NA	± 30 %	AverageRF
‡ N-Nitrosodiphenylamine	80	65	0.801	0.653	-18	NA	± 20 %	AverageRF
4-Bromophenyl Phenyl Ether	80	78	0.241	0.234	-3	NA	± 30 %	AverageRF
Hexachlorobenzene	80	76	0.280	0.266	-5	NA	± 30 %	AverageRF
‡ Pentachlorophenol	80	79	0.157	0.155	-1	NA	± 20 %	AverageRF
Phenanthrene	80	81	1.06	1.07	1	NA	± 30 %	AverageRF
Anthracene	80	74	1.12	1.04	-7	NA	± 30 %	AverageRF
Di-n-butyl Phthalate	80	83	1.22	1.26	4	NA	± 30 %	AverageRF
‡ Fluoranthene	80	80	0.964	0.962	0	NA	± 30 %	AverageRF
Pyrene	80	68	1.07	0.905	-15	NA	± 30 %	AverageRF
Butyl Benzyl Phthalate	80	79	0.608	0.604	-1	NA	± 30 %	AverageRF
3,3'-Dichlorobenzidine	80	75	0.418	0.393	-6	NA	± 30 %	AverageRF
Benz(a)anthracene	80	74	0.940	0.866	-8	NA	± 30 %	AverageRF
Chrysene	80	77	0.910	0.880	-3	NA	± 30 %	AverageRF
Bis(2-ethylhexyl) Phthalate	80	83	0.866	0.900	4	NA	± 30 %	AverageRF
‡ Di-n-octyl Phthalate	80	87	1.76	2.07	NA	9	± 20 %	Quadratic
Benzo(b)fluoranthene	80	82	1.03	1.06	3	NA	± 30 %	AverageRF
Benzo(k)fluoranthene	80	83	1.07	1.12	4	NA	± 30 %	AverageRF
‡ Benzo(a)pyrene	80	96	0.856	1.02	20	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	80	82	0.741	0.760	3	NA	± 30 %	AverageRF
Dibenz(a,h)anthracene	80	80	0.789	0.786	0	NA	± 30 %	AverageRF
Benzo(g,h,i)perylene	80	80	0.800	0.796	-1	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound**

‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010

Continuing Calibration Verification Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration Date: 06/02/2010
Calibration ID: CAL9525
Analysis Lot: KWG1005663
Units: ug/ml

File ID: J:\MS07\DATA\061010\0610F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine	80	86	0.01	0.956	1.03	8	NA	± 30 %	AverageRF
Aniline	80	73	0.01	1.50	1.38	-8	NA	± 30 %	AverageRF
Bis(2-chloroethyl) Ether	80	72	0.01	1.21	1.09	-10	NA	± 30 %	AverageRF
‡ Phenol	80	77	0.01	1.52	1.45	-4	NA	± 20 %	AverageRF
2-Chlorophenol	80	80	0.01	1.31	1.31	0	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	80	86	0.01	1.39	1.50	8	NA	± 30 %	AverageRF
‡ 1,4-Dichlorobenzene	80	84	0.01	1.41	1.49	5	NA	± 20 %	AverageRF
1,2-Dichlorobenzene	80	85	0.01	1.34	1.42	6	NA	± 30 %	AverageRF
Benzyl Alcohol	80	83	0.01	0.804	0.839	4	NA	± 30 %	AverageRF
Bis(2-chloroisopropyl) Ether	80	63	0.01	2.01	1.59	-21	NA	± 30 %	AverageRF
2-Methylphenol	80	78	0.01	0.984	0.954	-3	NA	± 30 %	AverageRF
Hexachloroethane	80	88	0.01	0.644	0.709	10	NA	± 30 %	AverageRF
† N-Nitrosodi-n-propylamine	80	73	0.05	0.985	0.894	-9	NA	± 30 %	AverageRF
4-Methylphenol	80	82	0.01	1.49	1.53	2	NA	± 30 %	AverageRF
Nitrobenzene	80	76	0.01	1.36	1.30	-4	NA	± 30 %	AverageRF
Isophorone	80	69	0.01	0.722	0.625	-13	NA	± 30 %	AverageRF
‡ 2-Nitrophenol	80	84	0.01	0.199	0.210	6	NA	± 20 %	AverageRF
2,4-Dimethylphenol	80	80	0.01	0.266	0.266	0	NA	± 30 %	AverageRF
Bis(2-chloroethoxy)methane	80	73	0.01	0.405	0.372	-8	NA	± 30 %	AverageRF
‡ 2,4-Dichlorophenol	80	87	0.01	0.302	0.327	8	NA	± 20 %	AverageRF
Benzoic Acid	80	82	0.01	0.228	0.234	3	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	80	92	0.01	0.320	0.369	15	NA	± 30 %	AverageRF
Naphthalene	80	85	0.01	0.960	1.02	6	NA	± 30 %	AverageRF
4-Chloroaniline	80	77	0.01	0.423	0.405	-4	NA	± 30 %	AverageRF
‡ Hexachlorobutadiene	80	91	0.01	0.203	0.232	14	NA	± 20 %	AverageRF
‡ 4-Chloro-3-methylphenol	80	84	0.01	0.315	0.331	5	NA	± 20 %	AverageRF
2-Methylnaphthalene	80	82	0.01	0.611	0.624	2	NA	± 30 %	AverageRF
† Hexachlorocyclopentadiene	80	61	0.05	0.373	0.308	NA	-23	± 30 %	Quadratic
‡ 2,4,6-Trichlorophenol	80	92	0.01	0.413	0.473	15	NA	± 20 %	AverageRF
2,4,5-Trichlorophenol	80	88	0.01	0.460	0.508	10	NA	± 30 %	AverageRF
2-Chloronaphthalene	80	80	0.01	1.16	1.15	-1	NA	± 30 %	AverageRF
2-Nitroaniline	80	78	0.01	0.372	0.363	-3	NA	± 30 %	AverageRF
Acenaphthylene	80	83	0.01	1.78	1.85	4	NA	± 30 %	AverageRF
Dimethyl Phthalate	80	85	0.01	1.36	1.44	6	NA	± 30 %	AverageRF
2,6-Dinitrotoluene	80	82	0.01	0.308	0.317	3	NA	± 30 %	AverageRF
‡ Acenaphthene	80	86	0.01	1.02	1.09	8	NA	± 20 %	AverageRF
3-Nitroaniline	80	81	0.01	0.324	0.328	1	NA	± 30 %	AverageRF
† 2,4-Dinitrophenol	80	76	0.05	0.179	0.170	-5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010

Continuing Calibration Verification Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration Date: 06/02/2010
Calibration ID: CAL9525
Analysis Lot: KWG1005663
Units: ug/ml

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dibenzofuran	80	90	0.01	1.60	1.80	12	NA	± 30 %	AverageRF
† 4-Nitrophenol	80	97	0.05	0.176	0.213	22	NA	± 30 %	AverageRF
2,4-Dinitrotoluene	80	85	0.01	0.391	0.417	7	NA	± 30 %	AverageRF
Fluorene	80	86	0.01	1.20	1.30	8	NA	± 30 %	AverageRF
4-Chlorophenyl Phenyl Ether	80	87	0.01	0.615	0.671	9	NA	± 30 %	AverageRF
Diethyl Phthalate	80	87	0.01	1.31	1.43	9	NA	± 30 %	AverageRF
4-Nitroaniline	80	83	0.01	0.281	0.291	4	NA	± 30 %	AverageRF
2-Methyl-4,6-dinitrophenol	80	84	0.01	0.212	0.223	5	NA	± 30 %	AverageRF
‡ N-Nitrosodiphenylamine	80	88	0.01	0.801	0.878	10	NA	± 20 %	AverageRF
4-Bromophenyl Phenyl Ether	80	85	0.01	0.241	0.257	6	NA	± 30 %	AverageRF
Hexachlorobenzene	80	87	0.01	0.280	0.304	9	NA	± 30 %	AverageRF
‡ Pentachlorophenol	80	82	0.01	0.157	0.162	3	NA	± 20 %	AverageRF
Phenanthrene	80	83	0.01	1.06	1.10	3	NA	± 30 %	AverageRF
Anthracene	80	80	0.01	1.12	1.11	0	NA	± 30 %	AverageRF
Di-n-butyl Phthalate	80	82	0.01	1.22	1.24	2	NA	± 30 %	AverageRF
‡ Fluoranthene	80	83	0.01	0.964	0.996	3	NA	± 20 %	AverageRF
Pyrene	80	70	0.01	1.07	0.939	-12	NA	± 30 %	AverageRF
Butyl Benzyl Phthalate	80	74	0.01	0.608	0.563	-7	NA	± 30 %	AverageRF
3,3'-Dichlorobenzidine	80	82	0.01	0.418	0.429	3	NA	± 30 %	AverageRF
Benz(a)anthracene	80	82	0.01	0.940	0.964	3	NA	± 30 %	AverageRF
Chrysene	80	80	0.01	0.910	0.905	-1	NA	± 30 %	AverageRF
Bis(2-ethylhexyl) Phthalate	80	77	0.01	0.866	0.837	-3	NA	± 30 %	AverageRF
‡ Di-n-octyl Phthalate	80	83	0.01	1.76	1.96	NA	4	± 20 %	Quadratic
Benzo(b)fluoranthene	80	90	0.01	1.03	1.16	13	NA	± 30 %	AverageRF
Benzo(k)fluoranthene	80	85	0.01	1.07	1.14	6	NA	± 30 %	AverageRF
‡ Benzo(a)pyrene	80	80	0.01	0.856	0.856	0	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	80	86	0.01	0.741	0.796	7	NA	± 30 %	AverageRF
Dibenz(a,h)anthracene	80	85	0.01	0.789	0.842	7	NA	± 30 %	AverageRF
Benzo(g,h,i)perylene	80	82	0.01	0.800	0.825	3	NA	± 30 %	AverageRF
2-Fluorophenol	80	74	0.01	1.06	0.983	-8	NA	± 30 %	AverageRF
Phenol-d6	80	70	0.01	1.48	1.30	-12	NA	± 30 %	AverageRF
Nitrobenzene-d5	80	75	0.01	1.45	1.35	-7	NA	± 30 %	AverageRF
2-Fluorobiphenyl	80	81	0.01	1.31	1.32	1	NA	± 30 %	AverageRF
2,4,6-Tribromophenol	80	83	0.01	0.162	0.169	4	NA	± 30 %	AverageRF
Terphenyl-d14	80	71	0.01	0.612	0.544	-11	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010

Continuing Calibration Verification Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration Date: 06/02/2010
Calibration ID: CAL9525
Analysis Lot: KWG1005687
Units: ug/ml

File ID: J:\MS07\DATA\061010\0610F013.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine	80	81	0.01	0.956	0.963	1	NA	± 30 %	AverageRF
Aniline	80	83	0.01	1.50	1.55	3	NA	± 30 %	AverageRF
Bis(2-chloroethyl) Ether	80	76	0.01	1.21	1.15	-5	NA	± 30 %	AverageRF
‡ Phenol	80	84	0.01	1.52	1.60	5	NA	± 20 %	AverageRF
2-Chlorophenol	80	84	0.01	1.31	1.38	5	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	80	83	0.01	1.39	1.45	4	NA	± 30 %	AverageRF
‡ 1,4-Dichlorobenzene	80	82	0.01	1.41	1.46	3	NA	± 20 %	AverageRF
1,2-Dichlorobenzene	80	83	0.01	1.34	1.38	3	NA	± 30 %	AverageRF
Benzyl Alcohol	80	93	0.01	0.804	0.938	17	NA	± 30 %	AverageRF
Bis(2-chloroisopropyl) Ether	80	76	0.01	2.01	1.91	-5	NA	± 30 %	AverageRF
2-Methylphenol	80	83	0.01	0.984	1.02	4	NA	± 30 %	AverageRF
Hexachloroethane	80	83	0.01	0.644	0.665	3	NA	± 30 %	AverageRF
† N-Nitrosodi-n-propylamine	80	77	0.05	0.985	0.951	-3	NA	± 30 %	AverageRF
4-Methylphenol	80	85	0.01	1.49	1.58	6	NA	± 30 %	AverageRF
Nitrobenzene	80	78	0.01	1.36	1.32	-3	NA	± 30 %	AverageRF
Isophorone	80	79	0.01	0.722	0.713	-1	NA	± 30 %	AverageRF
‡ 2-Nitrophenol	80	87	0.01	0.199	0.217	9	NA	± 20 %	AverageRF
2,4-Dimethylphenol	80	87	0.01	0.266	0.289	9	NA	± 30 %	AverageRF
Bis(2-chloroethoxy)methane	80	79	0.01	0.405	0.398	-2	NA	± 30 %	AverageRF
‡ 2,4-Dichlorophenol	80	88	0.01	0.302	0.332	10	NA	± 20 %	AverageRF
Benzoic Acid	80	87	0.01	0.228	0.249	9	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	80	85	0.01	0.320	0.340	6	NA	± 30 %	AverageRF
Naphthalene	80	81	0.01	0.960	0.967	1	NA	± 30 %	AverageRF
4-Chloroaniline	80	82	0.01	0.423	0.433	2	NA	± 30 %	AverageRF
‡ Hexachlorobutadiene	80	85	0.01	0.203	0.215	6	NA	± 20 %	AverageRF
‡ 4-Chloro-3-methylphenol	80	84	0.01	0.315	0.331	5	NA	± 20 %	AverageRF
2-Methylnaphthalene	80	82	0.01	0.611	0.625	2	NA	± 30 %	AverageRF
† Hexachlorocyclopentadiene	80	64	0.05	0.373	0.322	NA	-20	± 30 %	Quadratic
‡ 2,4,6-Trichlorophenol	80	87	0.01	0.413	0.450	9	NA	± 20 %	AverageRF
2,4,5-Trichlorophenol	80	84	0.01	0.460	0.485	5	NA	± 30 %	AverageRF
2-Chloronaphthalene	80	83	0.01	1.16	1.20	4	NA	± 30 %	AverageRF
2-Nitroaniline	80	76	0.01	0.372	0.352	-5	NA	± 30 %	AverageRF
Acenaphthylene	80	83	0.01	1.78	1.85	4	NA	± 30 %	AverageRF
Dimethyl Phthalate	80	78	0.01	1.36	1.33	-2	NA	± 30 %	AverageRF
2,6-Dinitrotoluene	80	80	0.01	0.308	0.308	0	NA	± 30 %	AverageRF
‡ Acenaphthene	80	83	0.01	1.02	1.06	4	NA	± 20 %	AverageRF
3-Nitroaniline	80	77	0.01	0.324	0.312	-4	NA	± 30 %	AverageRF
† 2,4-Dinitrophenol	80	72	0.05	0.179	0.161	-10	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010

Continuing Calibration Verification Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration Date: 06/02/2010
Calibration ID: CAL9525
Analysis Lot: KWG1005687
Units: ug/ml

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dibenzofuran	80	81	0.01	1.60	1.63	1	NA	± 30 %	AverageRF
† 4-Nitrophenol	80	84	0.05	0.176	0.184	5	NA	± 30 %	AverageRF
2,4-Dinitrotoluene	80	73	0.01	0.391	0.358	-8	NA	± 30 %	AverageRF
Fluorene	80	80	0.01	1.20	1.21	0	NA	± 30 %	AverageRF
4-Chlorophenyl Phenyl Ether	80	78	0.01	0.615	0.596	-3	NA	± 30 %	AverageRF
Diethyl Phthalate	80	80	0.01	1.31	1.31	0	NA	± 30 %	AverageRF
4-Nitroaniline	80	78	0.01	0.281	0.273	-3	NA	± 30 %	AverageRF
2-Methyl-4,6-dinitrophenol	80	73	0.01	0.212	0.193	-9	NA	± 30 %	AverageRF
‡ N-Nitrosodiphenylamine	80	75	0.01	0.801	0.747	-7	NA	± 20 %	AverageRF
4-Bromophenyl Phenyl Ether	80	88	0.01	0.241	0.265	10	NA	± 30 %	AverageRF
Hexachlorobenzene	80	89	0.01	0.280	0.312	12	NA	± 30 %	AverageRF
‡ Pentachlorophenol	80	82	0.01	0.157	0.161	3	NA	± 20 %	AverageRF
Phenanthrene	80	81	0.01	1.06	1.08	1	NA	± 30 %	AverageRF
Anthracene	80	80	0.01	1.12	1.12	0	NA	± 30 %	AverageRF
Di-n-butyl Phthalate	80	87	0.01	1.22	1.32	9	NA	± 30 %	AverageRF
‡ Fluoranthene	80	82	0.01	0.964	0.992	3	NA	± 20 %	AverageRF
Pyrene	80	70	0.01	1.07	0.940	-12	NA	± 30 %	AverageRF
Butyl Benzyl Phthalate	80	79	0.01	0.608	0.598	-2	NA	± 30 %	AverageRF
3,3'-Dichlorobenzidine	80	80	0.01	0.418	0.420	1	NA	± 30 %	AverageRF
Benz(a)anthracene	80	80	0.01	0.940	0.944	0	NA	± 30 %	AverageRF
Chrysene	80	79	0.01	0.910	0.902	-1	NA	± 30 %	AverageRF
Bis(2-ethylhexyl) Phthalate	80	83	0.01	0.866	0.901	4	NA	± 30 %	AverageRF
‡ Di-n-octyl Phthalate	80	90	0.01	1.76	2.14	NA	12	± 20 %	Quadratic
Benzo(b)fluoranthene	80	87	0.01	1.03	1.12	9	NA	± 30 %	AverageRF
Benzo(k)fluoranthene	80	87	0.01	1.07	1.17	9	NA	± 30 %	AverageRF
‡ Benzo(a)pyrene	80	84	0.01	0.856	0.894	5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	80	87	0.01	0.741	0.802	8	NA	± 30 %	AverageRF
Dibenz(a,h)anthracene	80	83	0.01	0.789	0.815	3	NA	± 30 %	AverageRF
Benzo(g,h,i)perylene	80	84	0.01	0.800	0.843	5	NA	± 30 %	AverageRF
2-Fluorophenol	80	79	0.01	1.06	1.05	-1	NA	± 30 %	AverageRF
Phenol-d6	80	78	0.01	1.48	1.45	-2	NA	± 30 %	AverageRF
Nitrobenzene-d5	80	76	0.01	1.45	1.38	-5	NA	± 30 %	AverageRF
2-Fluorobiphenyl	80	80	0.01	1.31	1.31	0	NA	± 30 %	AverageRF
2,4,6-Tribromophenol	80	84	0.01	0.162	0.169	4	NA	± 30 %	AverageRF
Terphenyl-d14	80	70	0.01	0.612	0.538	-12	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244

Analysis Run Log
Semi-Volatile Organic Compounds by GC/MS

Analysis Method: 8270C

Analysis Lot: KWG1005663
Instrument ID: MS07

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0610F001.D	GC/MS Tuning - Decafluorotripheny	KWG1005663-1	6/10/2010	14:51		6/10/2010	15:20
0610F002.D	Continuing Calibration Verification	KWG1005663-2	6/10/2010	15:32		6/10/2010	16:01
0610F003.D	ZZZZZZ	ZZZZZZ	6/10/2010	16:16		6/10/2010	16:45
0610F004.D	ZZZZZZ	ZZZZZZ	6/10/2010	16:56		6/10/2010	17:25
0610F005.D	ZZZZZZ	ZZZZZZ	6/10/2010	17:37		6/10/2010	18:06
0610F006.D	ZZZZZZ	ZZZZZZ	6/10/2010	18:17		6/10/2010	18:46
0610F007.D	Method Blank	KWG1005659-5	6/10/2010	18:58		6/10/2010	19:27
0610F008.D	Lab Control Sample	KWG1005659-3	6/10/2010	19:38		6/10/2010	20:07
0610F009.D	Duplicate Lab Control Sample	KWG1005659-4	6/10/2010	20:18		6/10/2010	20:47
0610F010.D	Batch QCMS	KWG1005659-1	6/10/2010	20:58		6/10/2010	21:27
0610F011.D	Batch QCDMS	KWG1005659-2	6/10/2010	21:38		6/10/2010	22:07

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244

Analysis Run Log
Semi-Volatile Organic Compounds by GC/MS

Analysis Method: 8270C

Analysis Lot: KWG1005687
Instrument ID: MS07

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0610F012.D	GC/MS Tuning - Decafluorotripheny	KWG1005687-1	6/10/2010	22:19		6/10/2010	22:48
0610F013.D	Continuing Calibration Verification	KWG1005687-2	6/10/2010	22:59		6/10/2010	23:28
0610F015.D	Batch QC	K1005175-012	6/11/2010	00:19		6/11/2010	00:48
0610F016.D	D-4-16	K1005244-003	6/11/2010	01:00		6/11/2010	01:29
0610F017.D	ZZZZZZ	ZZZZZZ	6/11/2010	01:40		6/11/2010	02:09
0610F018.D	ZZZZZZ	ZZZZZZ	6/11/2010	02:20		6/11/2010	02:49
0610F019.D	ZZZZZZ	ZZZZZZ	6/11/2010	03:00		6/11/2010	03:29
0610F020.D	ZZZZZZ	ZZZZZZ	6/11/2010	03:41		6/11/2010	04:10
0610F021.D	ZZZZZZ	ZZZZZZ	6/11/2010	04:21		6/11/2010	04:50
0610F022.D	ZZZZZZ	ZZZZZZ	6/11/2010	05:01		6/11/2010	05:30
0610F023.D	ZZZZZZ	ZZZZZZ	6/11/2010	05:41		6/11/2010	06:10
0610F024.D	ZZZZZZ	ZZZZZZ	6/11/2010	06:22		6/11/2010	06:51
0610F025.D	ZZZZZZ	ZZZZZZ	6/11/2010	07:02		6/11/2010	07:31
0610F026.D	ZZZZZZ	ZZZZZZ	6/11/2010	07:41		6/11/2010	08:10
0610F027.D	ZZZZZZ	ZZZZZZ	6/11/2010	08:21		6/11/2010	08:50
0610F028.D	ZZZZZZ	ZZZZZZ	6/11/2010	09:02		6/11/2010	09:31
0610F029.D	ZZZZZZ	ZZZZZZ	6/11/2010	09:42		6/11/2010	10:11

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Extracted: 06/01/2010

Extraction Prep Log
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3541
Analysis Method: 8270C

Extraction Lot: KWG1005659
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
D-4-16	K1005244-003	05/19/10	05/21/10	33.86g	1mL	90.7	
Method Blank	KWG1005659-5	NA	NA	40.82g	1mL	NA	
Batch QC	K1005175-012	NA	NA	40.40g	1mL	86.0	
Batch QCMS	KWG1005659-1	NA	NA	40.35g	1mL	86.0	
Batch QCDMS	KWG1005659-2	NA	NA	40.36g	1mL	86.0	
Lab Control Sample	KWG1005659-3	NA	NA	30.00g	1mL	NA	
Duplicate Lab Control Sample	KWG1005659-4	NA	NA	30.00g	1mL	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Semi-Volatile Organic Compounds by GC/MS

Validation Package

Organic Analysis:
Semi-Volatile Organic Compounds by GC/MS

Validation Package

QC Reports

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244

Surrogate Recovery Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4	Sur5	Sur6
D-4-16	K1005244-003	28	45	51	66	22	97
Method Blank	KWG1005659-5	56	55	54	66	65	100
Batch QC	K1005175-012	56	58	53	60	72	90
Batch QCMS	KWG1005659-1	59	64	65	68	78	78
Batch QCDMS	KWG1005659-2	60	66	66	65	73	75
Lab Control Sample	KWG1005659-3	59	66	74	75	95	92
Duplicate Lab Control Sample	KWG1005659-4	64	74	76	77	85	87

Surrogate Recovery Control Limits (%)

Sur1 = 2-Fluorophenol	20-83	Sur5 = 2,4,6-Tribromophenol	20-123
Sur2 = Phenol-d6	23-90	Sur6 = Terphenyl-d14	37-133
Sur3 = Nitrobenzene-d5	29-100		
Sur4 = 2-Fluorobiphenyl	32-104		

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 15:32

Internal Standard Area and RT Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F002.D
Instrument ID: MS07
Analysis Method: 8270C

Lab Code: KWG1005663-2
Analysis Lot: KWG1005663

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	109,990	9.33	420,027	11.44	219,736	14.29
	Upper Limit ==>	219,980	9.83	840,054	11.94	439,472	14.79
	Lower Limit ==>	54,995	8.83	210,014	10.94	109,868	13.79
	ICAL Result ==>	103,733	9.34	407,774	11.45	224,107	14.30
Associated Analyses							
Method Blank	KWG1005659-5	85,541	9.33	294,990	11.43	165,284	14.29
Lab Control Sample	KWG1005659-3	82,022	9.33	303,037	11.43	175,397	14.30
Duplicate Lab Control Sample	KWG1005659-4	82,853	9.33	328,582	11.44	180,044	14.29
Batch QCMS	KWG1005659-1	86,297	9.33	318,991	11.43	167,887	14.30
Batch QCDMS	KWG1005659-2	93,653	9.33	364,424	11.43	186,774	14.29

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 15:32

Internal Standard Area and RT Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F002.D
Instrument ID: MS07
Analysis Method: 8270C

Lab Code: KWG1005663-2
Analysis Lot: KWG1005663

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT	Area	RT
	Results ==>	325,013	16.70	353,756	21.13	274,061	24.31
	Upper Limit ==>	650,026	17.20	707,512	21.63	548,122	24.81
	Lower Limit ==>	162,507	16.20	176,878	20.63	137,031	23.81
	ICAL Result ==>	285,196	16.70	279,166	21.13	255,637	24.31
Associated Analyses							
Method Blank	KWG1005659-5	233,584	16.69	198,229	21.11	158,955	24.29
Lab Control Sample	KWG1005659-3	226,308	16.70	231,145	21.12	195,621	24.30
Duplicate Lab Control Sample	KWG1005659-4	242,964	16.69	239,385	21.12	200,450	24.30
Batch QCMS	KWG1005659-1	221,940	16.70	245,359	21.11	200,032	24.30
Batch QCDMS	KWG1005659-2	217,711	16.69	252,445	21.11	199,314	24.29

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 22:59

Internal Standard Area and RT Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F013.D
Instrument ID: MS07
Analysis Method: 8270C

Lab Code: KWG1005687-2
Analysis Lot: KWG1005687

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	142,104	9.33	539,393	11.44	286,996	14.29
	Upper Limit ==>	284,208	9.83	1,078,786	11.94	573,992	14.79
	Lower Limit ==>	71,052	8.83	269,697	10.94	143,498	13.79
	ICAL Result ==>	103,733	9.34	407,774	11.45	224,107	14.30
Associated Analyses							
Batch QC	K1005175-012	82,676	9.33	292,699	11.43	168,356	14.29
D-4-16	K1005244-003	80,671	9.33	293,139	11.42	166,893	14.28

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 22:59

Internal Standard Area and RT Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F013.D
Instrument ID: MS07
Analysis Method: 8270C

Lab Code: KWG1005687-2
Analysis Lot: KWG1005687

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	353,872	16.70	408,000	21.13	306,648	24.31
	Upper Limit ==>	707,744	17.20	816,000	21.63	613,296	24.81
	Lower Limit ==>	176,936	16.20	204,000	20.63	153,324	23.81
	ICAL Result ==>	285,196	16.70	279,166	21.13	255,637	24.31
Associated Analyses							
Batch QC	K1005175-012	245,334	16.69	218,908	21.11	176,848	24.30
D-4-16	K1005244-003	224,585	16.69	208,104	21.10	171,637	24.29

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Extracted: 06/01/2010
Date Analyzed: 06/10/2010

Matrix Spike/Duplicate Matrix Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QC
Lab Code: K1005175-012

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low
Extraction Lot: KWG1005659

Analyte Name	Sample Result	Batch QCMS KWG1005659-1 Matrix Spike			Batch QCDMS KWG1005659-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Phenol	ND	1.85	2.88	64	1.85	2.88	64	18-106	0	40
2-Chlorophenol	ND	1.87	2.88	65	1.78	2.88	62	27-96	5	40
1,4-Dichlorobenzene	ND	1.91	2.88	66	1.73	2.88	60	28-95	10	40
N-Nitrosodi-n-propylamine	ND	1.92	2.88	66	1.89	2.88	65	32-107	2	40
1,2,4-Trichlorobenzene	ND	1.98	2.88	69	1.93	2.88	67	28-105	3	40
4-Chloro-3-methylphenol	ND	2.09	2.88	72	1.90	2.88	66	13-122	9	40
Acenaphthene	ND	2.19	2.88	76	1.97	2.88	68	30-113	11	40
4-Nitrophenol	ND	2.19	2.88	76	1.89	2.88	66	12-141	14	40
2,4-Dinitrotoluene	ND	2.24	2.88	78	1.85	2.88	64	36-127	19	40
Pentachlorophenol	ND	1.85	2.88	64	1.75	2.88	61	10-135	6	40
Pyrene	ND	1.94	2.88	67	1.98	2.88	69	24-126	2	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Extracted: 06/01/2010
Date Analyzed: 06/10/2010

Lab Control Spike/Duplicate Lab Control Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG1005659

Analyte Name	Lab Control Sample KWG1005659-3 Lab Control Spike Result	Expected	%Rec	Duplicate Lab Control Sample KWG1005659-4 Duplicate Lab Control Spike Result	Expected	%Rec	%Rec Limits	RPD	RPD Limit
N-Nitrosodimethylamine	2.14	3.33	64	2.41	3.33	72	34-93	12	40
Aniline	2.43	3.33	73	2.55	3.33	76	24-92	5	40
Bis(2-chloroethyl) Ether	2.35	3.33	70	2.52	3.33	76	42-88	7	40
Phenol	2.25	3.33	68	2.39	3.33	72	40-87	6	40
2-Chlorophenol	2.30	3.33	69	2.38	3.33	71	42-86	4	40
1,3-Dichlorobenzene	2.35	3.33	70	2.37	3.33	71	41-84	1	40
1,4-Dichlorobenzene	2.40	3.33	72	2.38	3.33	71	41-85	1	40
1,2-Dichlorobenzene	2.42	3.33	73	2.40	3.33	72	41-86	1	40
Benzyl Alcohol	2.52	3.33	76	2.49	3.33	75	35-96	1	40
Bis(2-chloroisopropyl) Ether	2.08	3.33	62	2.24	3.33	67	39-94	7	40
2-Methylphenol	2.33	3.33	70	2.46	3.33	74	35-92	5	40
Hexachloroethane	2.22	3.33	67	2.29	3.33	69	40-87	3	40
N-Nitrosodi-n-propylamine	2.47	3.33	74	2.63	3.33	79	41-96	6	40
4-Methylphenol	2.56	3.33	77	2.59	3.33	78	38-94	1	40
Nitrobenzene	2.47	3.33	74	2.45	3.33	73	44-92	1	40
Isophorone	2.63	3.33	79	2.49	3.33	75	42-93	6	40
2-Nitrophenol	2.75	3.33	82	2.48	3.33	74	44-95	10	40
2,4-Dimethylphenol	2.34	3.33	70	2.02	3.33	61	16-89	15	40
Bis(2-chloroethoxy)methane	2.59	3.33	78	2.40	3.33	72	45-93	8	40
2,4-Dichlorophenol	2.66	3.33	80	2.52	3.33	76	43-94	6	40
Benzoic Acid	1.95	3.33	59	1.52	3.33	46	10-104	25	40
1,2,4-Trichlorobenzene	2.68	3.33	80	2.66	3.33	80	42-91	1	40
Naphthalene	2.68	3.33	80	2.62	3.33	79	44-92	2	40
4-Chloroaniline	2.65	3.33	79	2.71	3.33	81	37-96	2	40
Hexachlorobutadiene	2.64	3.33	79	2.48	3.33	75	42-91	6	40
4-Chloro-3-methylphenol	3.03	3.33	91	2.61	3.33	78	44-101	15	40
2-Methylnaphthalene	2.76	3.33	83	2.75	3.33	82	44-95	0	40
Hexachlorocyclopentadiene	1.14	3.33	34	1.12	3.33	34	10-68	2	40
2,4,6-Trichlorophenol	2.74	3.33	82	2.71	3.33	81	46-101	1	40
2,4,5-Trichlorophenol	2.87	3.33	86	2.63	3.33	79	46-103	9	40
2-Chloronaphthalene	2.71	3.33	81	2.61	3.33	78	44-95	4	40
2-Nitroaniline	2.66	3.33	80	2.64	3.33	79	48-108	1	40
Acenaphthylene	3.02	3.33	91	2.74	3.33	82	46-99	10	40
Dimethyl Phthalate	3.21	3.33	96	2.83	3.33	85	48-113	13	40
2,6-Dinitrotoluene	2.96	3.33	89	2.72	3.33	81	49-114	9	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Extracted: 06/01/2010
Date Analyzed: 06/10/2010

Lab Control Spike/Duplicate Lab Control Spike Summary
Semi-Volatile Organic Compounds by GC/MS

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG1005659

Analyte Name	Lab Control Sample KWG1005659-3 Lab Control Spike Result	Expected	%Rec	Duplicate Lab Control Sample KWG1005659-4 Duplicate Lab Control Spike Result	Expected	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	3.02	3.33	91	2.85	3.33	85	49-97	6	40
3-Nitroaniline	2.80	3.33	84	2.65	3.33	80	46-111	5	40
2,4-Dinitrophenol	2.32	3.33	70	1.94	3.33	58	28-116	18	40
Dibenzofuran	2.97	3.33	89	2.51	3.33	75	47-101	17	40
4-Nitrophenol	2.93	3.33	88	2.54	3.33	76	41-121	14	40
2,4-Dinitrotoluene	2.99	3.33	90	2.77	3.33	83	48-119	7	40
Fluorene	3.06	3.33	92	2.94	3.33	88	46-103	4	40
4-Chlorophenyl Phenyl Ether	2.84	3.33	85	2.85	3.33	85	46-105	0	40
Diethyl Phthalate	3.26	3.33	98	2.91	3.33	87	45-121	11	40
4-Nitroaniline	3.06	3.33	92	2.73	3.33	82	39-120	11	40
2-Methyl-4,6-dinitrophenol	2.87	3.33	86	2.49	3.33	75	41-119	14	40
N-Nitrosodiphenylamine	3.05	3.33	91	2.68	3.33	80	44-113	13	40
4-Bromophenyl Phenyl Ether	3.36	3.33	101	2.90	3.33	87	49-110	15	40
Hexachlorobenzene	3.38	3.33	101	2.94	3.33	88	50-109	14	40
Pentachlorophenol	2.80	3.33	84	2.31	3.33	69	39-112	19	40
Phenanthrene	3.16	3.33	95	2.96	3.33	89	52-108	6	40
Anthracene	3.15	3.33	95	2.60	3.33	78	50-108	19	40
Di-n-butyl Phthalate	3.27	3.33	98	2.97	3.33	89	50-124	10	40
Fluoranthene	3.27	3.33	98	2.91	3.33	87	48-116	12	40
Pyrene	2.93	3.33	88	2.78	3.33	83	45-116	5	40
Butyl Benzyl Phthalate	2.92	3.33	88	2.64	3.33	79	51-114	10	40
3,3'-Dichlorobenzidine	3.08	3.33	92	2.62	3.33	78	38-116	16	40
Benz(a)anthracene	3.39	3.33	102	2.92	3.33	88	54-109	15	40
Chrysene	3.29	3.33	99	2.97	3.33	89	53-109	10	40
Bis(2-ethylhexyl) Phthalate	3.14	3.33	94	2.85	3.33	86	51-115	10	40
Di-n-octyl Phthalate	3.18	3.33	95	2.77	3.33	83	51-121	14	40
Benzo(b)fluoranthene	3.35	3.33	101	2.94	3.33	88	53-110	13	40
Benzo(k)fluoranthene	3.37	3.33	101	2.99	3.33	90	52-112	12	40
Benzo(a)pyrene	3.53	3.33	106	3.23	3.33	97	51-114	9	40
Indeno(1,2,3-cd)pyrene	3.15	3.33	95	2.84	3.33	85	53-112	10	40
Dibenz(a,h)anthracene	3.22	3.33	97	2.76	3.33	83	53-114	15	40
Benzo(g,h,i)perylene	3.22	3.33	97	2.69	3.33	81	50-110	18	40

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Extracted: 06/01/2010
Date Analyzed: 06/10/2010
Time Analyzed: 18:58

Method Blank Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: KWG1005659-5

File ID: J:\MS07\DATA\061010\0610F007.D
Instrument ID: MS07

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low
Extraction Lot: KWG1005659

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1005659-3	J:\MS07\DATA\061010\0610F008.D	06/10/10	19:38
Duplicate Lab Control Sample	KWG1005659-4	J:\MS07\DATA\061010\0610F009.D	06/10/10	20:18
Batch QCMS	KWG1005659-1	J:\MS07\DATA\061010\0610F010.D	06/10/10	20:58
Batch QCDMS	KWG1005659-2	J:\MS07\DATA\061010\0610F011.D	06/10/10	21:38
Batch QC	K1005175-012	J:\MS07\DATA\061010\0610F015.D	06/11/10	00:19
D-4-16	K1005244-003	J:\MS07\DATA\061010\0610F016.D	06/11/10	01:00

Client:	Exponent	**Service Request:**	K1005244
Project:	Heglar - Kronquist/0907194.000.0601	**Date Extracted:**	06/01/2010
Sample Matrix:	Misc. solid	**Date Analyzed:**	06/10/2010
		Time Analyzed:	19:38

Lab Control Sample Summary
Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Lab Control Sample	**File ID:**	J:\MS07\DATA\061010\0610F008.D
Lab Code:	KWG1005659-3	**Instrument ID:**	MS07
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C	**Extraction Lot:**	KWG1005659

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1005659-5	J:\MS07\DATA\061010\0610F007.D	06/10/10	18:58
Batch QCMS	KWG1005659-1	J:\MS07\DATA\061010\0610F010.D	06/10/10	20:58
Batch QCDMS	KWG1005659-2	J:\MS07\DATA\061010\0610F011.D	06/10/10	21:38
Batch QC	K1005175-012	J:\MS07\DATA\061010\0610F015.D	06/11/10	00:19
D-4-16	K1005244-003	J:\MS07\DATA\061010\0610F016.D	06/11/10	01:00

Organic Analysis:
Semi-Volatile Organic Compounds by GC/MS

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: 05/19/2010
Date Received: 05/21/2010

Semi-Volatile Organic Compounds by GC/MS

Sample Name: D-4-16
Lab Code: K1005244-003

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	0.026	1	06/01/10	06/11/10	KWG1005659	
Aniline	ND	U	0.98	0.022	1	06/01/10	06/11/10	KWG1005659	
Bis(2-chloroethyl) Ether	ND	U	0.33	0.012	1	06/01/10	06/11/10	KWG1005659	
Phenol	ND	U	0.33	0.020	1	06/01/10	06/11/10	KWG1005659	
2-Chlorophenol	ND	U	0.33	0.0099	1	06/01/10	06/11/10	KWG1005659	
1,3-Dichlorobenzene	ND	U	0.33	0.019	1	06/01/10	06/11/10	KWG1005659	
1,4-Dichlorobenzene	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
1,2-Dichlorobenzene	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
Benzyl Alcohol	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
Bis(2-chloroisopropyl) Ether	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
2-Methylphenol	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
Hexachloroethane	ND	U	0.33	0.022	1	06/01/10	06/11/10	KWG1005659	
N-Nitrosodi-n-propylamine	ND	U	0.33	0.020	1	06/01/10	06/11/10	KWG1005659	
4-Methylphenol†	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
Nitrobenzene	ND	U	0.33	0.027	1	06/01/10	06/11/10	KWG1005659	
Isophorone	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
2-Nitrophenol	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
2,4-Dimethylphenol	ND	U	0.33	0.016	1	06/01/10	06/11/10	KWG1005659	
Bis(2-chloroethoxy)methane	ND	U	0.33	0.011	1	06/01/10	06/11/10	KWG1005659	
2,4-Dichlorophenol	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
Benzoic Acid	ND	U	2.0	0.14	1	06/01/10	06/11/10	KWG1005659	
1,2,4-Trichlorobenzene	ND	U	0.33	0.011	1	06/01/10	06/11/10	KWG1005659	
Naphthalene	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
4-Chloroaniline	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
Hexachlorobutadiene	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
4-Chloro-3-methylphenol	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
2-Methylnaphthalene	ND	U	0.33	0.011	1	06/01/10	06/11/10	KWG1005659	
Hexachlorocyclopentadiene	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
2,4,6-Trichlorophenol	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
2,4,5-Trichlorophenol	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
2-Chloronaphthalene	ND	U	0.33	0.010	1	06/01/10	06/11/10	KWG1005659	
2-Nitroaniline	ND	U	2.0	0.017	1	06/01/10	06/11/10	KWG1005659	
Acenaphthylene	ND	U	0.33	0.016	1	06/01/10	06/11/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: 05/19/2010
Date Received: 05/21/2010

Semi-Volatile Organic Compounds by GC/MS

Sample Name: D-4-16
Lab Code: K1005244-003

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
2,6-Dinitrotoluene	ND	U	0.33	0.016	1	06/01/10	06/11/10	KWG1005659	
Acenaphthene	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
3-Nitroaniline	ND	U	2.0	0.18	1	06/01/10	06/11/10	KWG1005659	
2,4-Dinitrophenol	ND	U	2.0	0.12	1	06/01/10	06/11/10	KWG1005659	
Dibenzofuran	ND	U	0.33	0.012	1	06/01/10	06/11/10	KWG1005659	
4-Nitrophenol	ND	U	2.0	0.15	1	06/01/10	06/11/10	KWG1005659	
2,4-Dinitrotoluene	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
Fluorene	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
4-Chlorophenyl Phenyl Ether	ND	U	0.33	0.016	1	06/01/10	06/11/10	KWG1005659	
Diethyl Phthalate	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
4-Nitroaniline	ND	U	2.0	0.18	1	06/01/10	06/11/10	KWG1005659	
2-Methyl-4,6-dinitrophenol	ND	U	2.0	0.15	1	06/01/10	06/11/10	KWG1005659	
N-Nitrosodiphenylamine	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
4-Bromophenyl Phenyl Ether	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
Hexachlorobenzene	ND	U	0.33	0.015	1	06/01/10	06/11/10	KWG1005659	
Pentachlorophenol	ND	U	2.0	0.13	1	06/01/10	06/11/10	KWG1005659	
Phenanthrene	ND	U	0.33	0.010	1	06/01/10	06/11/10	KWG1005659	
Anthracene	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
Di-n-butyl Phthalate	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
Fluoranthene	ND	U	0.33	0.012	1	06/01/10	06/11/10	KWG1005659	
Pyrene	ND	U	0.33	0.014	1	06/01/10	06/11/10	KWG1005659	
Butyl Benzyl Phthalate	ND	U	0.33	0.017	1	06/01/10	06/11/10	KWG1005659	
3,3'-Dichlorobenzidine	ND	U	2.0	0.027	1	06/01/10	06/11/10	KWG1005659	
Benz(a)anthracene	ND	U	0.33	0.013	1	06/01/10	06/11/10	KWG1005659	
Chrysene	ND	U	0.33	0.012	1	06/01/10	06/11/10	KWG1005659	
Bis(2-ethylhexyl) Phthalate	**0.076**	J	0.33	0.019	1	06/01/10	06/11/10	KWG1005659	
Di-n-octyl Phthalate	ND	U	0.33	0.024	1	06/01/10	06/11/10	KWG1005659	
Benzo(b)fluoranthene	ND	U	0.33	0.018	1	06/01/10	06/11/10	KWG1005659	
Benzo(k)fluoranthene	ND	U	0.33	0.020	1	06/01/10	06/11/10	KWG1005659	
Benzo(a)pyrene	ND	U	0.33	0.020	1	06/01/10	06/11/10	KWG1005659	
Indeno(1,2,3-cd)pyrene	ND	U	0.33	0.039	1	06/01/10	06/11/10	KWG1005659	
Dibenz(a,h)anthracene	ND	U	0.33	0.028	1	06/01/10	06/11/10	KWG1005659	

Comments:

Client:	Exponent	**Service Request:**	K1005244
Project:	Heglar - Kronquist/0907194.000.0601	**Date Collected:**	05/19/2010
Sample Matrix:	Misc. solid	**Date Received:**	05/21/2010

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	D-4-16	**Units:**	mg/Kg
Lab Code:	K1005244-003	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	ND	U	0.33	0.021	1	06/01/10	06/11/10	KWG1005659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	28	20-83	06/11/10	Acceptable
Phenol-d6	45	23-90	06/11/10	Acceptable
Nitrobenzene-d5	51	29-100	06/11/10	Acceptable
2-Fluorobiphenyl	66	32-104	06/11/10	Acceptable
2,4,6-Tribromophenol	22	20-123	06/11/10	Acceptable
Terphenyl-d14	97	37-133	06/11/10	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS07\DATA\061010\0610F016.D
Lab ID: K1005244-003
RunType: SMPL
Matrix: MISC. SOLID

Date Acquired: 06/11/2010 01:00
Date Quantitated: 06/11/2010 12:39
Batch ID: KWG1005687
Analysis Method: 8270C
ListJoinID: LJ1859

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 6-14-10

Secondary Review: LB 6/14/10

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	MISC. SOLID
Prod Code:	8270C SVO	**Collect Date:**	05/19/2010	**Receive Date:**	05/21/2010

Analysis Lot:	KWG1005687	**Prep Lot:**	KWG1005659	**Report Group:**	K1005244
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	918259	**Prep Date:**	06/01/2010		

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:	Semi-Volatile Organic Compounds by GC/MS	**Report List ID:**	LJ1859
Tune Ref:	J:\MS07\DATA\061010\0610F012.D	**Method ID:**	MJ250
MB Ref:	J:\MS07\DATA\061010\0610F007.D	**Quant based on Report List**	

Data File:	J:\MS07\DATA\061010\0610F016.D			**Instrument:**	MS07
Acqu Date:	06/11/2010 01:00	**Quant Date:**	06/11/2010 12:39	**Vial:**	13
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1005244-003			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	9.33	0.00	152	80671	40.00	OK
2	Naphthalene-d8	11.42	-0.02	136	293139	40.00	OK
3	Acenaphthene-d10	14.28	-0.01	164	166893	40.00	OK
4	Phenanthrene-d10	16.69	-0.01	188	224585	40.00	OK
5	Chrysene-d12	21.10	-0.03	240	208104	40.00	OK
6	Perylene-d12	24.29	-0.02	264	171637	40.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	7.09	-0.02	0.00	112	90509	42.20	28	20-83	OK	
1	Phenol-d6	8.83	-0.01	0.00	99	199705	66.76	45	23-90	OK	
1	Nitrobenzene-d5	10.26	-0.02	0.00	82	148150	50.70	51	29-100	OK	
3	2-Fluorobiphenyl	13.23	0.00	0.00	172	359121	65.64	66	32-104	OK	
4	2,4,6-Tribromophenol	15.58	0.00	0.00	330	29958	32.91	22	20-123	OK	
5	Terphenyl-d14	19.31	0.00	0.00	244	308516	96.82	97	37-133	OK	

Target Compounds

Final Conc. Units: mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine				42	0		0.026	U	
1	Aniline				93	0d		0.022	U	
1	Bis(2-chloroethyl) Ether				93	0d		0.012	U	
1	Phenol				94	0d		0.020	U	
1	2-Chlorophenol				128	0		0.0099	U	
1	1,3-Dichlorobenzene				146	0		0.019	U	
1	1,4-Dichlorobenzene				146	0		0.018	U	
1	1,2-Dichlorobenzene				146	0		0.018	U	
1	Benzyl Alcohol				108	0		0.017	U	
1	Bis(2-chloroisopropyl) Ether				45	0		0.015	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F016.D			**Instrument:**	MS07
Acqu Date:	06/11/2010 01:00	**Quant Date:**	06/11/2010 12:39	**Vial:**	13
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1005244-003			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:** mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	2-Methylphenol				107	0		0.017	U	
1	Hexachloroethane				117	0		0.022	U	
1	N-Nitrosodi-n-propylamine				70	0**d**		0.020	U	
1	4-Methylphenol				107	0		0.017	U	
1	Nitrobenzene				77	0**d**		0.027	U	
2	Isophorone				82	0**d**		0.014	U	
2	2-Nitrophenol				139	0		0.014	U	
2	2,4-Dimethylphenol				122	0		0.016	U	
2	Bis(2-chloroethoxy)methane				93	0**d**		0.011	U	
2	2,4-Dichlorophenol				162	0		0.017	U	
2	Benzoic Acid				122	0		0.14	U	
2	1,2,4-Trichlorobenzene				180	0		0.011	U	
2	Naphthalene				128	0		0.015	U	
2	4-Chloroaniline				127	0**d**		0.015	U	
2	Hexachlorobutadiene				225	0		0.015	U	
2	4-Chloro-3-methylphenol				107	0		0.017	U	
2	2-Methylnaphthalene				142	0		0.011	U	
3	Hexachlorocyclopentadiene				237	0		0.013	U	
3	2,4,6-Trichlorophenol				196	0		0.015	U	
3	2,4,5-Trichlorophenol				196	0		0.018	U	
3	2-Chloronaphthalene				162	0**d**		0.010	U	
3	2-Nitroaniline				65	0**d**		0.017	U	
3	Acenaphthylene				152	0		0.016	U	
3	Dimethyl Phthalate				163	0**d**		0.017	U	
3	2,6-Dinitrotoluene				165	0**d**		0.016	U	
3	Acenaphthene				154	0**d**		0.014	U	
3	3-Nitroaniline				138	0		0.18	U	
3	2,4-Dinitrophenol				184	0		0.12	U	
3	Dibenzofuran				168	0		0.012	U	
3	4-Nitrophenol				109	0**d**		0.15	U	
3	2,4-Dinitrotoluene				165	0**d**		0.015	U	
3	Fluorene				166	0**d**		0.013	U	
3	4-Chlorophenyl Phenyl Ether				204	0		0.016	U	
3	Diethyl Phthalate	15.06	-0.02	0.00	149	639**m**	0.1200	0.015	U	
3	4-Nitroaniline				138	0		0.18	U	
3	2-Methyl-4,6-dinitrophenol				198	0		0.15	U	
3	N-Nitrosodiphenylamine				169	0**d**		0.018	U	
4	4-Bromophenyl Phenyl Ether				248	0		0.013	U	
4	Hexachlorobenzene				284	0		0.015	U	
4	Pentachlorophenol				266	0		0.13	U	
4	Phenanthrene				178	0**d**		0.010	U	
4	Anthracene				178	0**d**		0.014	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F016.D			**Instrument:**	MS07
Acqu Date:	06/11/2010 01:00	**Quant Date:**	06/11/2010 12:39	**Vial:**	13
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1005244-003			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:** mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Di-n-butyl Phthalate	17.71	-0.01	0.00	149	2042**m**	0.3000	0.013	U	
4	Fluoranthene	18.65	-0.01	0.00	202	846**m**	0.1600	0.012	U	
5	Pyrene	19.01		0.00	202	1014	0.1800	0.014	U	
5	Butyl Benzyl Phthalate				149	0**d**		0.017	U	
5	3,3'-Dichlorobenzidine				252	0		0.027	U	
5	Benz(a)anthracene				228	0**d**		0.013	U	
5	Chrysene				228	0**d**		0.012	U	
5	Bis(2-ethylhexyl) Phthalate	21.28	-0.02	0.00	149	10506	2.33	0.076	J	
6	Di-n-octyl Phthalate				149	0**d**		0.024	U	
6	Benzo(b)fluoranthene				252	0**d**		0.018	U	
6	Benzo(k)fluoranthene				252	0		0.020	U	
6	Benzo(a)pyrene				252	0**d**		0.020	U	
6	Indeno(1,2,3-cd)pyrene				276	0		0.039	U	
6	Dibenz(a,h)anthracene				278	0		0.028	U	
6	Benzo(g,h,i)perylene				276	0		0.021	U	

Prep Amount:	33.86 g	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1
Solids:	90.7 %		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F016.D Vial: 13
Acq On : 11 Jun 2010 1:00 am Operator: M.BUTCHER
Sample : K1005244-3 Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 11:42:53 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 11:42:24 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

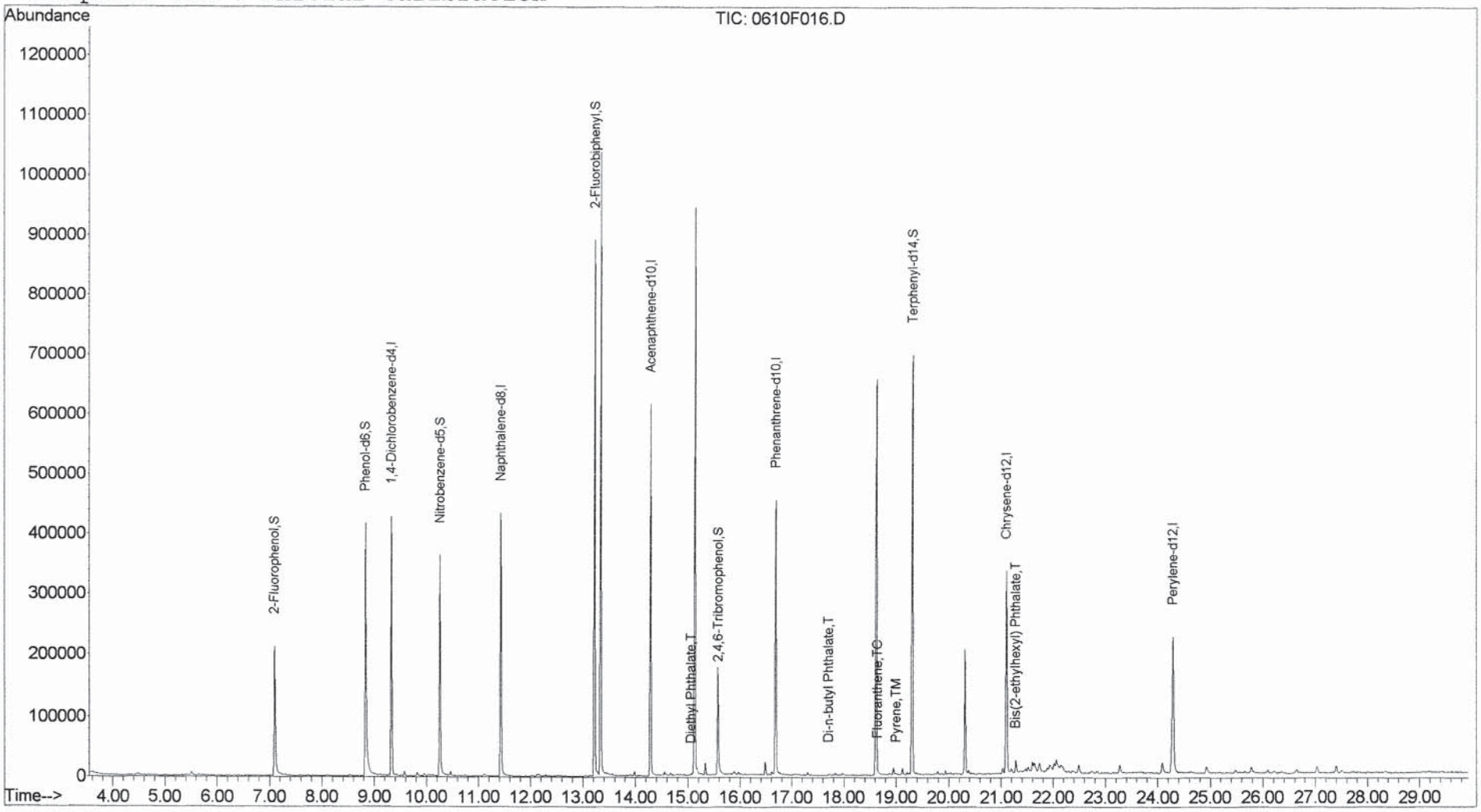
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	80671	40.00	ug/ml	-0.02
21) Naphthalene-d8	11.42	136	293139	40.00	ug/ml	-0.03
34) Acenaphthene-d10	14.28	164	166893	40.00	ug/ml	-0.02
58) Phenanthrene-d10	16.69	188	224585	40.00	ug/ml	-0.02
68) Chrysene-d12	21.10	240	208104	40.00	ug/ml	-0.03
77) Perylene-d12	24.29	264	171637	40.00	ug/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	7.09	112	90509	42.20	ug/ml	-0.04
Spiked Amount 150.000	Range 21 - 100		Recovery = 28.13%			
7) Phenol-d6	8.83	99	199705	66.76	ug/ml	-0.04
Spiked Amount 150.000	Range 10 - 94		Recovery = 44.51%			
19) Nitrobenzene-d5	10.26	82	148150	50.70	ug/ml	-0.03
Spiked Amount 100.000	Range 35 - 114		Recovery = 50.70%			
38) 2-Fluorobiphenyl	13.23	172	359121	65.64	ug/ml	-0.02
Spiked Amount 100.000	Range 43 - 116		Recovery = 65.64%			
59) 2,4,6-Tribromophenol	15.58	330	29958	32.91	ug/ml	-0.02
Spiked Amount 150.000	Range 10 - 123		Recovery = 21.94%			
71) Terphenyl-d14	19.31	244	308516	96.82	ug/ml	-0.02
Spiked Amount 100.000	Range 33 - 141		Recovery = 96.82%			
Target Compounds						Qvalue
53) Diethyl Phthalate	15.06	149	639m	0.12	ug/ml	
66) Di-n-butyl Phthalate	17.71	149	2042m	0.30	ug/ml	
67) Fluoranthene	18.65	202	846m	0.16	ug/ml	
70) Pyrene	19.01	202	1014	0.18	ug/ml	96
76) Bis(2-ethylhexyl) Phthalat	21.28	149	10506	2.33	ug/ml	98

(#) = qualifier out of range (m) = manual integration
0610F016.D 0602BNC7.M Fri Jun 11 14:23:57 2010 Page 1

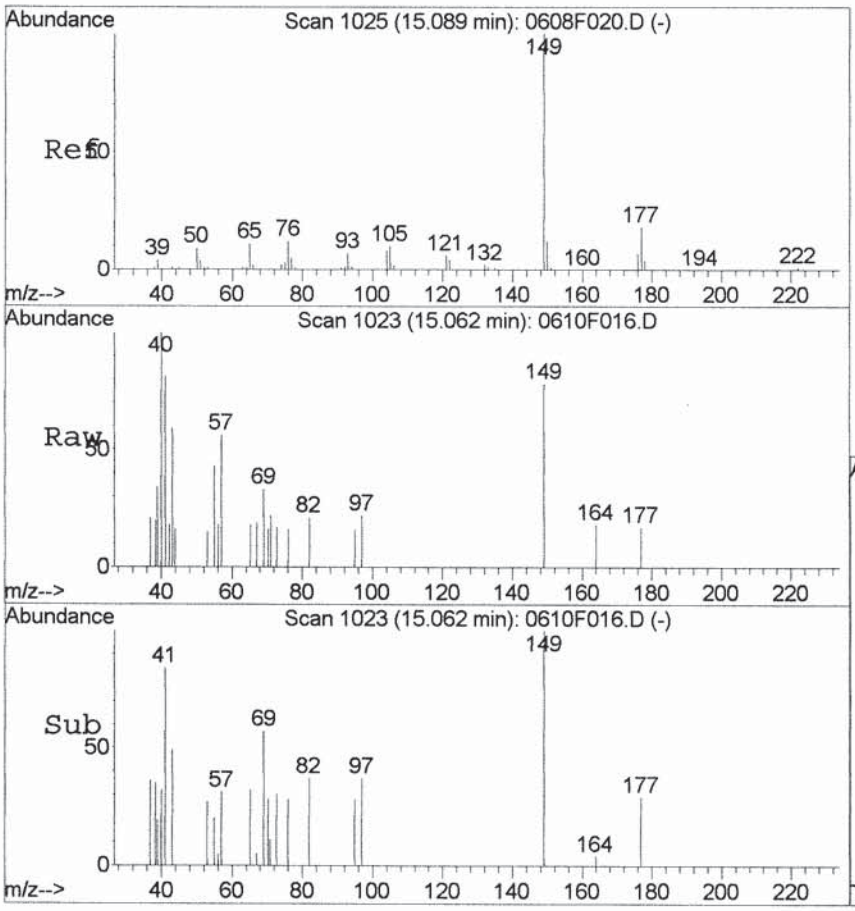
Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F016.D Vial: 13
Acq On : 11 Jun 2010 1:00 am Operator: M.BUTCHER
Sample : K1005244-3 Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 12:39 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 11:42:24 2010
Response via : Initial Calibration



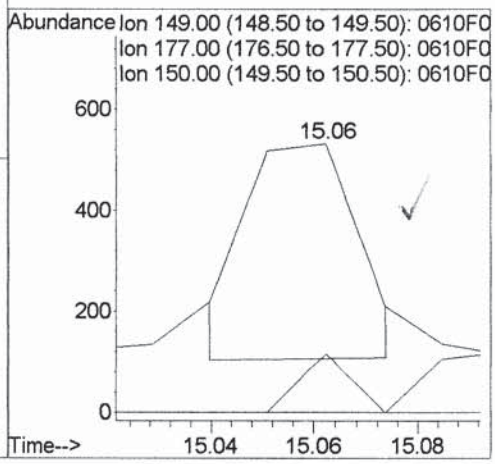
1232

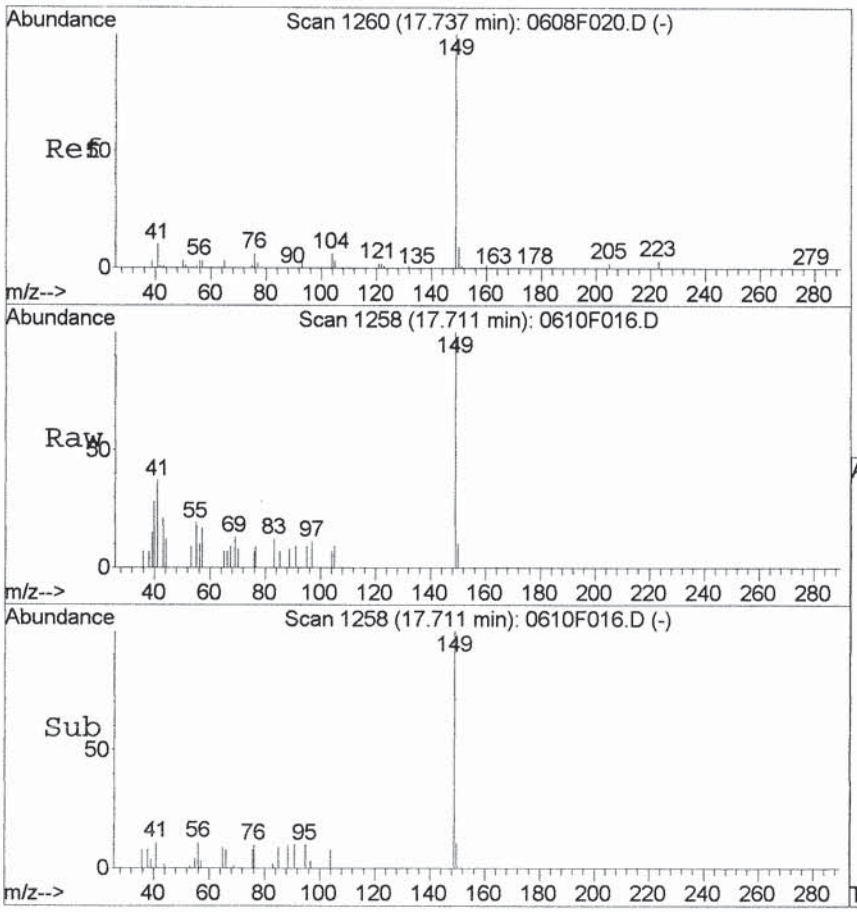


#53
Diethyl Phthalate
Concen: 0.12 ug/ml m
RT: 15.06 min Scan# 1023
Delta R.T. -0.03 min
Lab File: 0610F016.D
Acq: 11 Jun 2010 1:00 am

Tgt Ion:149 Resp: 639

Ion	Ratio	Lower	Upper
149	100		
177	21.6	0.0	49.4
150	0.0	0.0	41.7

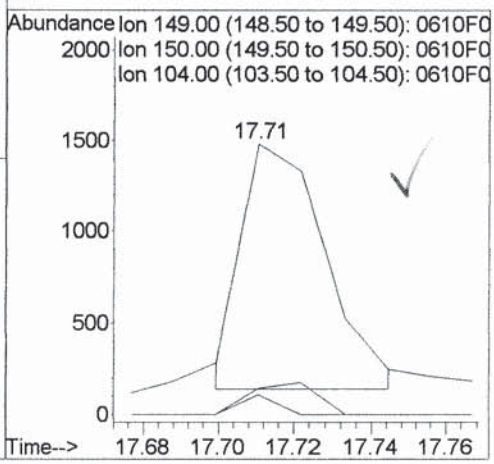


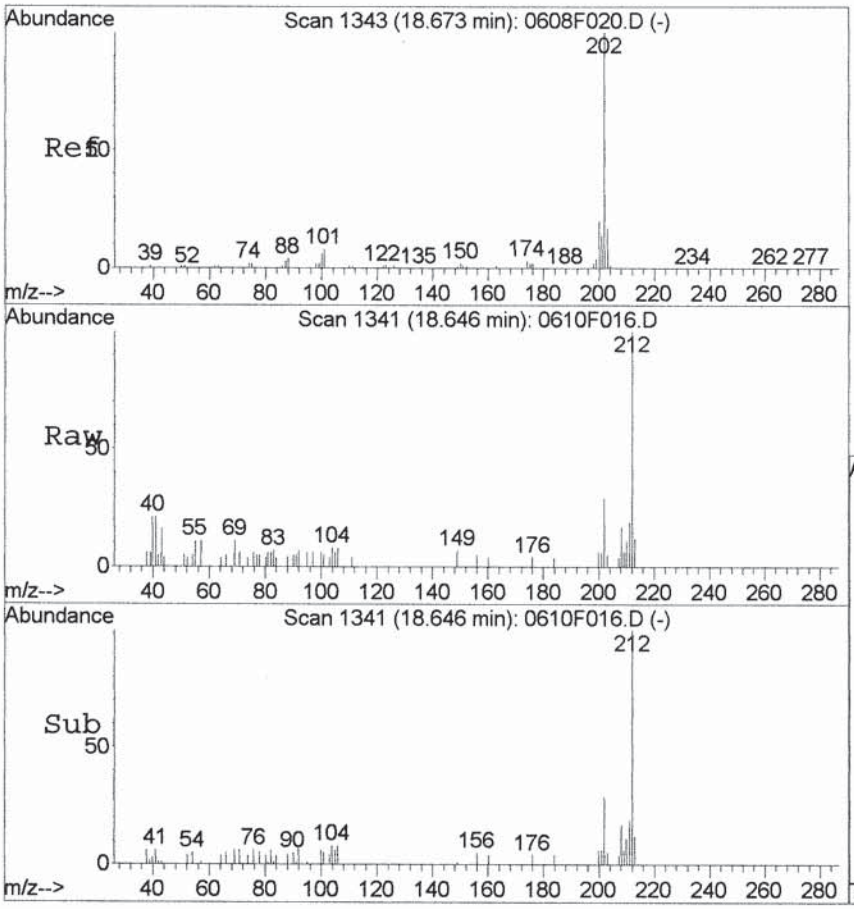


#66
Di-n-butyl Phthalate
Concen: 0.30 ug/ml m
RT: 17.71 min Scan# 1258
Delta R.T. -0.03 min
Lab File: 0610F016.D
Acq: 11 Jun 2010 1:00 am

Tgt Ion:149 Resp: 2042

Ion	Ratio	Lower	Upper
149	100		
150	9.6	0.0	39.1
104	7.3	0.0	35.2

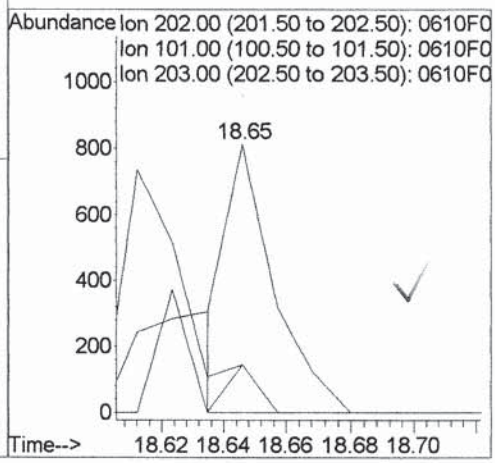


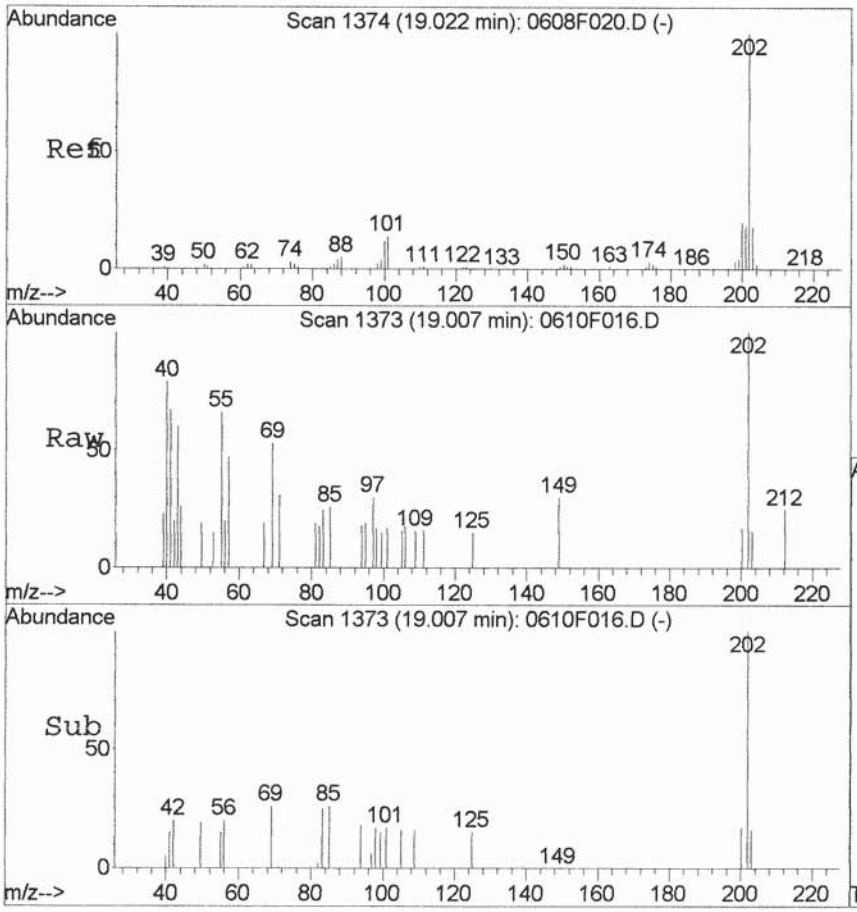


#67
Fluoranthene
Concen: 0.16 ug/ml m
RT: 18.65 min Scan# 1341
Delta R.T. -0.02 min
Lab File: 0610F016.D
Acq: 11 Jun 2010 1:00 am

Tgt Ion:202 Resp: 846

Ion	Ratio	Lower	Upper
202	100		
101	17.7	0.0	43.3
203	17.7	0.0	47.4

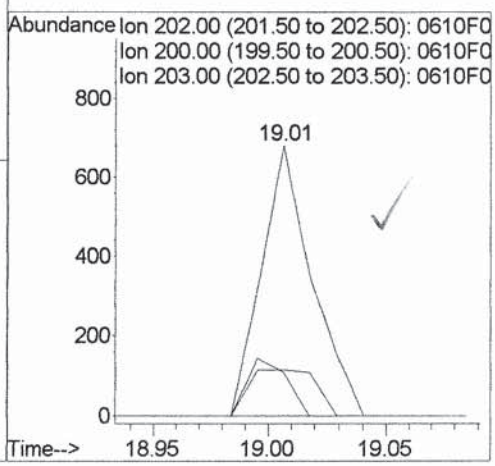


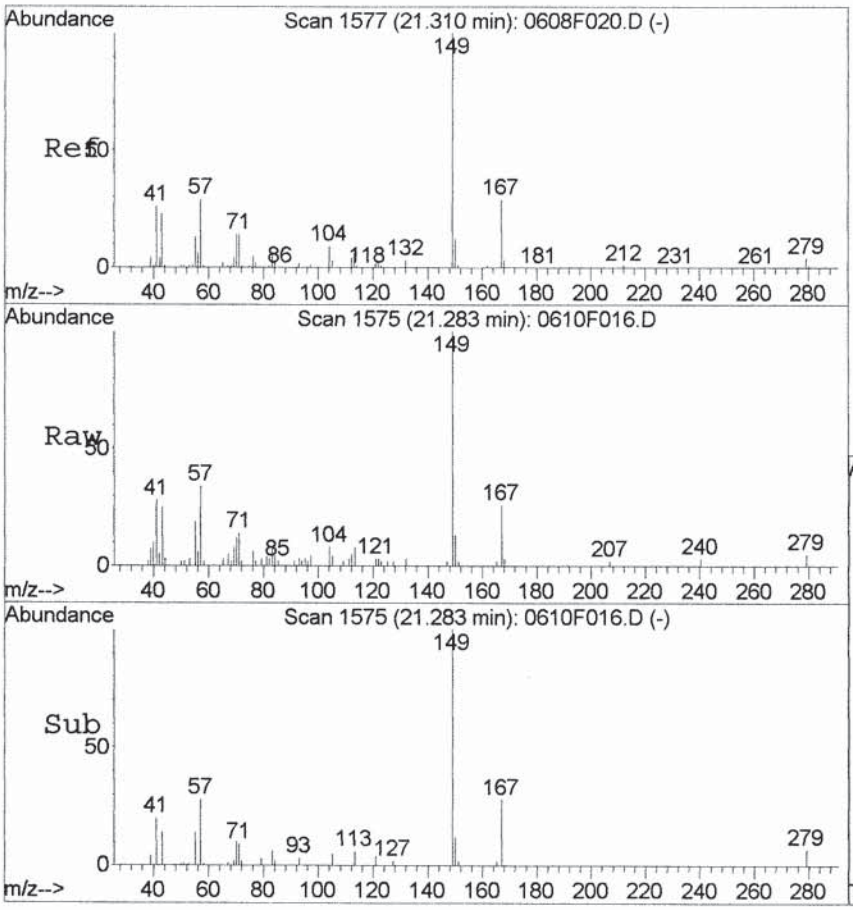


#70
Pyrene
Concen: 0.18 ug/ml
RT: 19.01 min Scan# 1373
Delta R.T. -0.02 min
Lab File: 0610F016.D
Acq: 11 Jun 2010 1:00 am

Tgt Ion:202 Resp: 1014

Ion	Ratio	Lower	Upper
202	100		
200	16.9	0.0	49.7
203	16.0	0.0	46.9

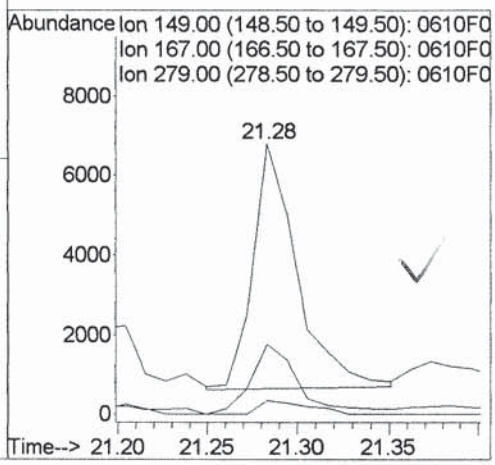




#76
Bis(2-ethylhexyl) Phthalate
Concen: 2.33 ug/ml
RT: 21.28 min Scan# 1575
Delta R.T. -0.03 min
Lab File: 0610F016.D
Acq: 11 Jun 2010 1:00 am

Tgt Ion:149 Resp: 10506

Ion	Ratio	Lower	Upper
149	100		
167	28.2	0.0	59.2
279	5.8	0.0	34.2



Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: KWG1005659-5

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	1.5	0.026	1	06/01/10	06/10/10	KWG1005659	
Aniline	ND	U	0.74	0.022	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethyl) Ether	ND	U	0.25	0.012	1	06/01/10	06/10/10	KWG1005659	
Phenol	ND	U	0.25	0.020	1	06/01/10	06/10/10	KWG1005659	
2-Chlorophenol	ND	U	0.25	0.0099	1	06/01/10	06/10/10	KWG1005659	
1,3-Dichlorobenzene	ND	U	0.25	0.019	1	06/01/10	06/10/10	KWG1005659	
1,4-Dichlorobenzene	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
1,2-Dichlorobenzene	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzyl Alcohol	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroisopropyl) Ether	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
2-Methylphenol	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
Hexachloroethane	ND	U	0.25	0.022	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodi-n-propylamine	ND	U	0.25	0.020	1	06/01/10	06/10/10	KWG1005659	
4-Methylphenol†	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
Nitrobenzene	ND	U	0.25	0.027	1	06/01/10	06/10/10	KWG1005659	
Isophorone	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
2-Nitrophenol	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
2,4-Dimethylphenol	ND	U	0.25	0.016	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethoxy)methane	ND	U	0.25	0.011	1	06/01/10	06/10/10	KWG1005659	
2,4-Dichlorophenol	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
Benzoic Acid	ND	U	1.5	0.14	1	06/01/10	06/10/10	KWG1005659	
1,2,4-Trichlorobenzene	ND	U	0.25	0.011	1	06/01/10	06/10/10	KWG1005659	
Naphthalene	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloroaniline	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobutadiene	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloro-3-methylphenol	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
2-Methylnaphthalene	ND	U	0.25	0.011	1	06/01/10	06/10/10	KWG1005659	
Hexachlorocyclopentadiene	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
2,4,6-Trichlorophenol	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
2,4,5-Trichlorophenol	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
2-Chloronaphthalene	ND	U	0.25	0.010	1	06/01/10	06/10/10	KWG1005659	
2-Nitroaniline	ND	U	1.5	0.017	1	06/01/10	06/10/10	KWG1005659	
Acenaphthylene	ND	U	0.25	0.016	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: KWG1005659-5

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
2,6-Dinitrotoluene	ND	U	0.25	0.016	1	06/01/10	06/10/10	KWG1005659	
Acenaphthene	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
3-Nitroaniline	ND	U	1.5	0.18	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrophenol	ND	U	1.5	0.12	1	06/01/10	06/10/10	KWG1005659	
Dibenzofuran	ND	U	0.25	0.012	1	06/01/10	06/10/10	KWG1005659	
4-Nitrophenol	ND	U	1.5	0.15	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrotoluene	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
Fluorene	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
4-Chlorophenyl Phenyl Ether	ND	U	0.25	0.016	1	06/01/10	06/10/10	KWG1005659	
Diethyl Phthalate	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Nitroaniline	ND	U	1.5	0.18	1	06/01/10	06/10/10	KWG1005659	
2-Methyl-4,6-dinitrophenol	ND	U	1.5	0.15	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodiphenylamine	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
4-Bromophenyl Phenyl Ether	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobenzene	ND	U	0.25	0.015	1	06/01/10	06/10/10	KWG1005659	
Pentachlorophenol	ND	U	1.5	0.13	1	06/01/10	06/10/10	KWG1005659	
Phenanthrene	ND	U	0.25	0.010	1	06/01/10	06/10/10	KWG1005659	
Anthracene	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
Di-n-butyl Phthalate	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
Fluoranthene	ND	U	0.25	0.012	1	06/01/10	06/10/10	KWG1005659	
Pyrene	ND	U	0.25	0.014	1	06/01/10	06/10/10	KWG1005659	
Butyl Benzyl Phthalate	ND	U	0.25	0.017	1	06/01/10	06/10/10	KWG1005659	
3,3'-Dichlorobenzidine	ND	U	1.5	0.027	1	06/01/10	06/10/10	KWG1005659	
Benz(a)anthracene	ND	U	0.25	0.013	1	06/01/10	06/10/10	KWG1005659	
Chrysene	ND	U	0.25	0.012	1	06/01/10	06/10/10	KWG1005659	
Bis(2-ethylhexyl) Phthalate	ND	U	0.25	0.019	1	06/01/10	06/10/10	KWG1005659	
Di-n-octyl Phthalate	ND	U	0.25	0.024	1	06/01/10	06/10/10	KWG1005659	
Benzo(b)fluoranthene	ND	U	0.25	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzo(k)fluoranthene	ND	U	0.25	0.020	1	06/01/10	06/10/10	KWG1005659	
Benzo(a)pyrene	ND	U	0.25	0.020	1	06/01/10	06/10/10	KWG1005659	
Indeno(1,2,3-cd)pyrene	ND	U	0.25	0.039	1	06/01/10	06/10/10	KWG1005659	
Dibenz(a,h)anthracene	ND	U	0.25	0.028	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client:	Exponent	**Service Request:**	K1005244
Project:	Heglar - Kronquist/0907194.000.0601	**Date Collected:**	NA
Sample Matrix:	Misc. solid	**Date Received:**	NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	mg/Kg
Lab Code:	KWG1005659-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	ND	U	0.25	0.021	1	06/01/10	06/10/10	KWG1005659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	56	20-83	06/10/10	Acceptable
Phenol-d6	55	23-90	06/10/10	Acceptable
Nitrobenzene-d5	54	29-100	06/10/10	Acceptable
2-Fluorobiphenyl	66	32-104	06/10/10	Acceptable
2,4,6-Tribromophenol	65	20-123	06/10/10	Acceptable
Terphenyl-d14	100	37-133	06/10/10	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS07\DATA\061010\0610F007.D
Lab ID: KWG1005659-5
RunType: MB
Matrix: MISC. SOLID

Date Acquired: 06/10/2010 18:58
Date Quantitated: 06/11/2010 08:23
Batch ID: KWG1005663
Analysis Method: 8270C
MethodJoinID: MJ250

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

5175
5144
5282
5284
5353

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Benzidine	119.6	NA	30	ltl
Continuing Calibration Recovery	Benzidine	-35.0	NA	30	

Primary Review: 6-11-10

Secondary Review: LB 6/14/10

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC. SOLID
Prod Code:	8270C SVO	**Collect Date:**		**Receive Date:**	06/10/2010

Analysis Lot:	KWG1005663	**Prep Lot:**	KWG1005659	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	918273	**Prep Date:**	06/01/2010		

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:			
Tune Ref:	J:\MS07\DATA\061010\0610F001.D	**Method ID:**	MJ250
MB Ref:		**Quant based on Method**	

Data File:	J:\MS07\DATA\061010\0610F007.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 18:58	**Quant Date:**	06/11/2010 08:23	**Vial:**	5
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG1005659-5			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	9.33	0.00	152	85541	40.00	OK
2	Naphthalene-d8	11.43	-0.01	136	294990	40.00	OK
3	Acenaphthene-d10	14.29	0.00	164	165284	40.00	OK
4	Phenanthrene-d10	16.69	-0.01	188	233584	40.00	OK
5	Chrysene-d12	21.11	-0.02	240	198229	40.00	OK
6	Perylene-d12	24.29	-0.02	264	158955	40.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	7.11	0.00	0.00	112	191966	84.41	56	20-83	OK	
1	Phenol-d6	8.84	-0.02	0.00	99	263437	83.05	55	23-90	OK	
1	Nitrobenzene-d5	10.26	-0.02	0.00	82	167894	54.19	54	29-100	OK	
3	2-Fluorobiphenyl	13.23	0.00	0.00	172	358985	66.25	66	32-104	OK	
4	2,4,6-Tribromophenol	15.58	-0.01	0.00	330	91899	97.07	65	20-123	OK	
5	Terphenyl-d14	19.31	-0.01	0.00	244	303656	100.04	100	37-133	OK	

Target Compounds

Final Conc. Units: mg/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine				42	0		0.026	U	
1	Pyridine				79	0		0.020	U	
1	Aniline				93	0d		0.022	U	
1	Bis(2-chloroethyl) Ether				93	0d		0.012	U	
1	Phenol				94	0d		0.020	U	
1	2-Chlorophenol				128	0		0.0099	U	
1	1,3-Dichlorobenzene				146	0		0.019	U	
1	1,4-Dichlorobenzene				146	0		0.018	U	
1	1,2-Dichlorobenzene				146	0		0.018	U	
1	Benzyl Alcohol				108	0		0.017	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F007.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 18:58	**Quant Date:**	06/11/2010 08:23	**Vial:**	5
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG1005659-5			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:** mg/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Bis(2-chloroisopropyl) Ether				45	0d		0.015	U	
1	2-Methylphenol				107	0d		0.017	U	
1	Hexachloroethane				117	0		0.022	U	
1	N-Nitrosodi-n-propylamine				70	0d		0.020	U	
1	4-Methylphenol				107	0d		0.017	U	
1	Nitrobenzene				77	0d		0.027	U	
2	Isophorone				82	0d		0.014	U	
2	2-Nitrophenol				139	0		0.014	U	
2	2,4-Dimethylphenol				122	0		0.016	U	
2	Bis(2-chloroethoxy)methane				93	0d		0.011	U	
2	2,4-Dichlorophenol				162	0		0.017	U	
2	Benzoic Acid				122	0		0.14	U	
2	1,2,4-Trichlorobenzene				180	0		0.011	U	
2	Naphthalene				128	0		0.015	U	
2	4-Chloroaniline				127	0		0.015	U	
2	Hexachlorobutadiene				225	0		0.015	U	
2	4-Chloro-3-methylphenol				107	0		0.017	U	
2	2-Methylnaphthalene				142	0		0.011	U	
3	Hexachlorocyclopentadiene				237	0		0.013	U	
3	2,4,6-Trichlorophenol				196	0		0.015	U	
3	2,4,5-Trichlorophenol				196	0		0.018	U	
3	2-Chloronaphthalene				162	0d		0.010	U	
3	2-Nitroaniline				65	0d		0.017	U	
3	Acenaphthylene				152	0		0.016	U	
3	Dimethyl Phthalate				163	0d		0.017	U	
3	2,6-Dinitrotoluene				165	0d		0.016	U	
3	Acenaphthene				154	0d		0.014	U	
3	3-Nitroaniline				138	0		0.18	U	
3	2,4-Dinitrophenol				184	0		0.12	U	
3	Dibenzofuran				168	0		0.012	U	
3	4-Nitrophenol				109	0		0.15	U	
3	2,4-Dinitrotoluene				165	0d		0.015	U	
3	2,3,4,6-Tetrachlorophenol				232	0		0.046	U	
3	Fluorene				166	0d		0.013	U	
3	4-Chlorophenyl Phenyl Ether				204	0		0.016	U	
3	Diethyl Phthalate				149	0d		0.015	U	
3	4-Nitroaniline				138	0		0.18	U	
3	2-Methyl-4,6-dinitrophenol				198	0		0.15	U	
3	N-Nitrosodiphenylamine				169	0		0.018	U	
3	1,2-Diphenylhydrazine				77	0d		0.015	U	
4	4-Bromophenyl Phenyl Ether				248	0		0.013	U	
4	Hexachlorobenzene				284	0		0.015	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F007.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 18:58	**Quant Date:**	06/11/2010 08:23	**Vial:**	5
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG1005659-5			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:** mg/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Pentachlorophenol				266	0		0.13	U	
4	Phenanthrene				178	0d		0.010	U	
4	Anthracene				178	0d		0.014	U	
4	Carbazole				167	0d		0.012	U	
4	Di-n-butyl Phthalate	17.72	-0.01	0.00	149	1426m	0.2000	0.013	U	
4	Fluoranthene	18.65	-0.01	0.00	202	766m	0.1400	0.012	U	
5	Benzidine				184	0d		0.42	U	
5	Pyrene	19.01	-0.01	0.00	202	815	0.1500	0.014	U	
5	Butyl Benzyl Phthalate				149	0d		0.017	U	
5	3,3'-Dichlorobenzidine				252	0		0.027	U	
5	Benz(a)anthracene				228	0d		0.013	U	
5	Chrysene				228	0d		0.012	U	
5	Bis(2-ethylhexyl) Phthalate				149	0d		0.019	U	
6	Di-n-octyl Phthalate				149	0d		0.024	U	
6	Benzo(b)fluoranthene				252	0		0.018	U	
6	Benzo(k)fluoranthene				252	0		0.020	U	
6	Benzo(a)pyrene				252	0d		0.020	U	
6	Indeno(1,2,3-cd)pyrene				276	0		0.039	U	
6	Dibenz(a,h)anthracene				278	0		0.028	U	
6	Benzo(g,h,i)perylene				276	0		0.021	U	
	Hexachlorocyclohexane				0	0		0.49	U	NR
	1,2,3-Trichlorobenzene				0	0		0.24	U	NR
	1,2,3,4-Tetrachlorobenzene				0	0		0.24	U	NR
	1,2,3,5-Tetrachlorobenzene				0	0		0.24	U	NR
	1,3,5-Trichlorobenzene				0	0		0.24	U	NR
	Acrylamide				0	0		37	U	NR
	Diisobutyl Phthalate				0	0		0.24	U	NR
	OPMO				0	0		1.5	U	NR
	1-Methylnaphthalene				0	0		0.24	U	NR
	HPMO				0	0		1.5	U	NR
	2,3,7,8-Tetrachlorodibenzo-p-di				0	0		0.49	U	NR

Prep Amount:	40.82 g	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1
Solids:	%		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F007.D Vial: 5
Acq On : 10 Jun 2010 6:58 pm Operator: M.BUTCHER
Sample : KQ5080-5 MB Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:03 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

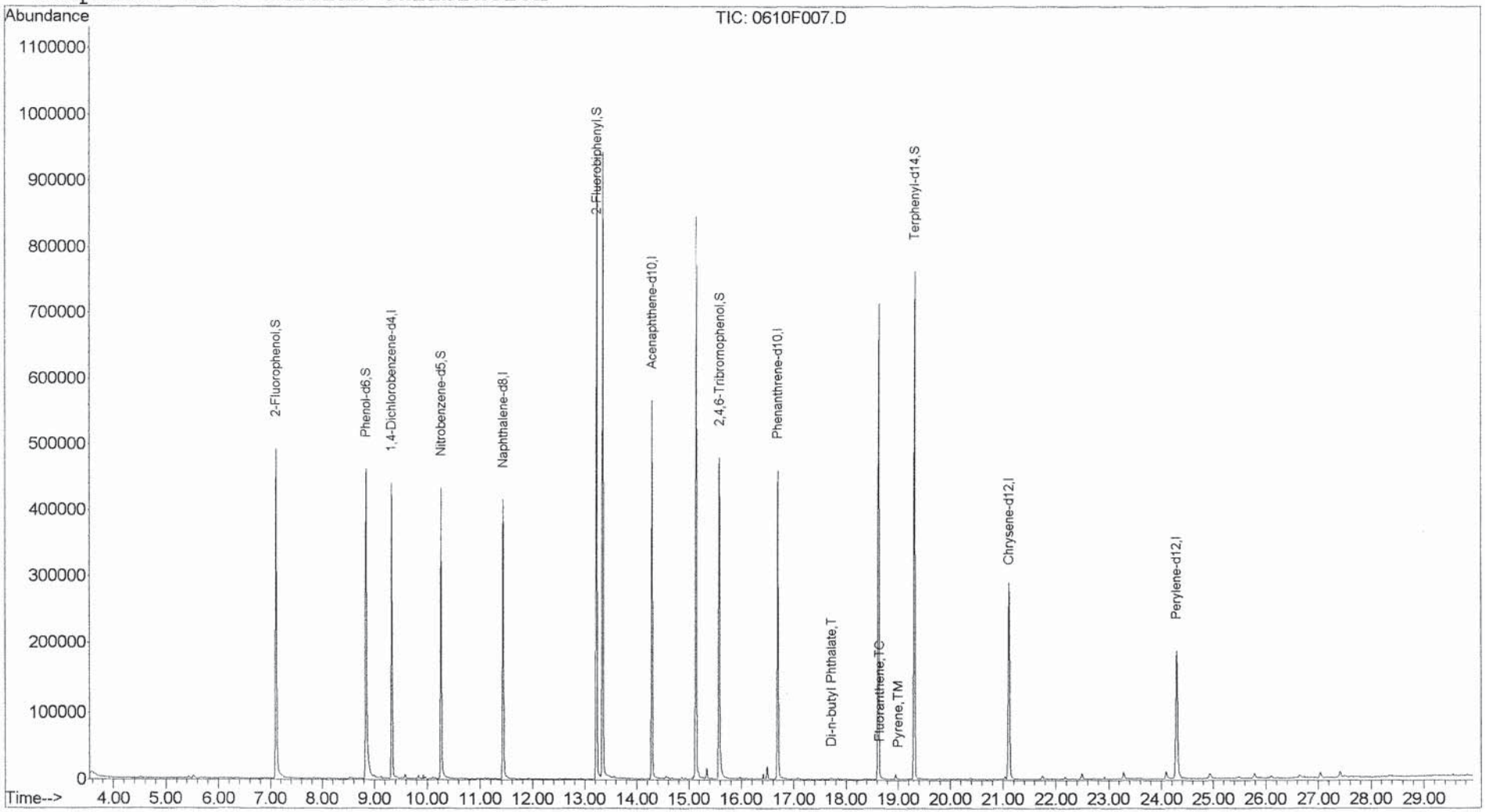
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	85541	40.00	ug/ml	-0.02
21) Naphthalene-d8	11.43	136	294990	40.00	ug/ml	-0.02
34) Acenaphthene-d10	14.29	164	165284	40.00	ug/ml	-0.02
58) Phenanthrene-d10	16.69	188	233584	40.00	ug/ml	-0.02
68) Chrysene-d12	21.11	240	198229	40.00	ug/ml	-0.02
77) Perylene-d12	24.29	264	158955	40.00	ug/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	7.11	112	191966	84.41	ug/ml	-0.03
Spiked Amount 150.000	Range 21 - 100		Recovery = 56.27%			
7) Phenol-d6	8.84	99	263437	83.05	ug/ml	-0.03
Spiked Amount 150.000	Range 10 - 94		Recovery = 55.37%			
19) Nitrobenzene-d5	10.26	82	167894	54.19	ug/ml	-0.03
Spiked Amount 100.000	Range 35 - 114		Recovery = 54.19%			
38) 2-Fluorobiphenyl	13.23	172	358985	66.25	ug/ml	-0.02
Spiked Amount 100.000	Range 43 - 116		Recovery = 66.25%			
59) 2,4,6-Tribromophenol	15.58	330	91899	97.07	ug/ml	-0.02
Spiked Amount 150.000	Range 10 - 123		Recovery = 64.71%			
71) Terphenyl-d14	19.31	244	303656	100.04	ug/ml	-0.02
Spiked Amount 100.000	Range 33 - 141		Recovery = 100.04%			
Target Compounds						Qvalue
66) Di-n-butyl Phthalate	17.72	149	1426m	0.20	ug/ml	
67) Fluoranthene	18.65	202	766m	0.14	ug/ml	
70) Pyrene	19.01	202	815	0.15	ug/ml	87

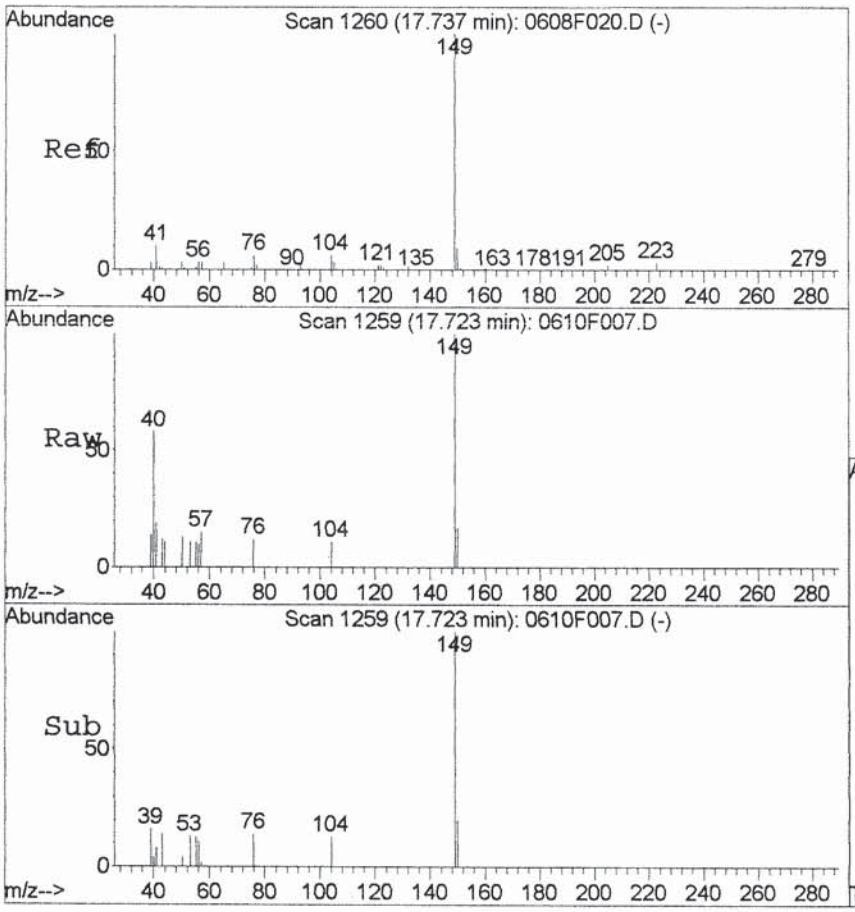
(#) = qualifier out of range (m) = manual integration
0610F007.D 0602BNC7.M Fri Jun 11 10:17:12 2010 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F007.D Vial: 5
Acq On : 10 Jun 2010 6:58 pm Operator: M.BUTCHER
Sample : KQ5080-5 MB Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:23 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration

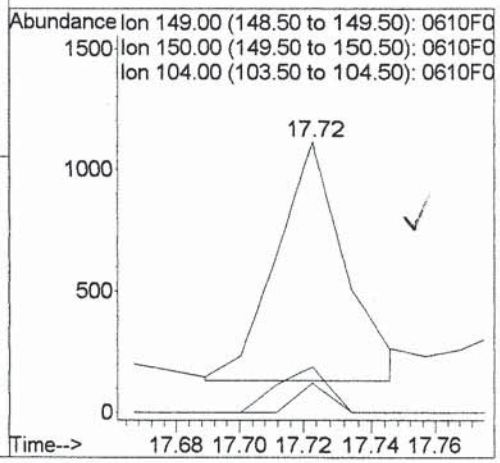


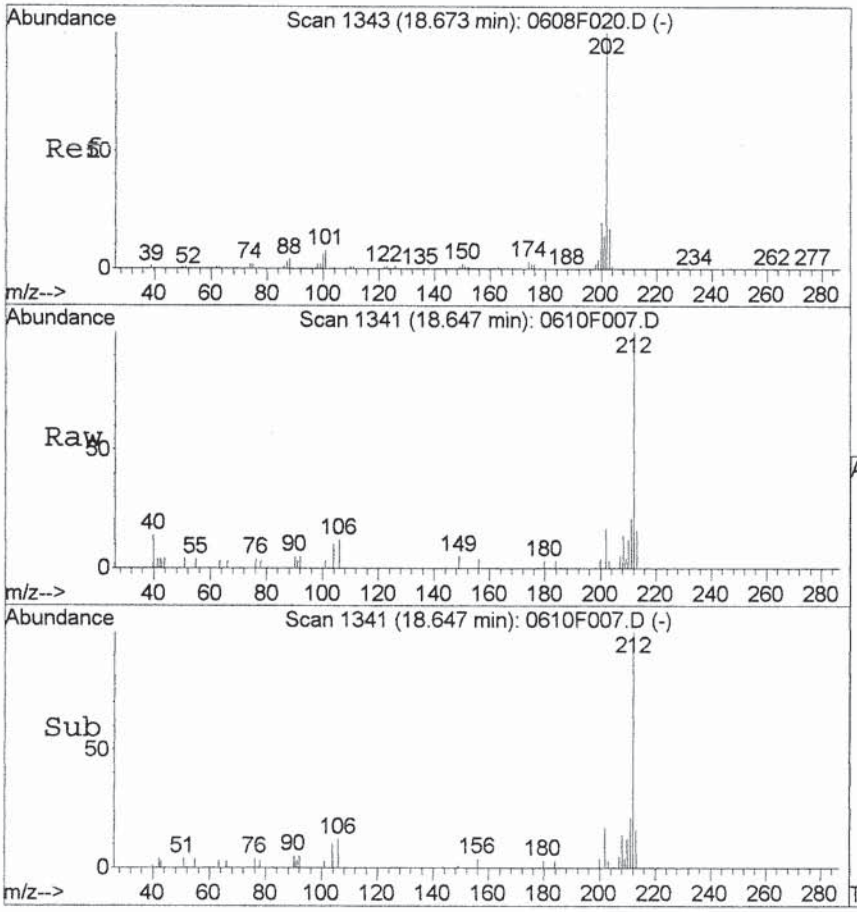


#66
Di-n-butyl Phthalate
Concen: 0.20 ug/ml m
RT: 17.72 min Scan# 1259
Delta R.T. -0.02 min
Lab File: 0610F007.D
Acq: 10 Jun 2010 6:58 pm

Tgt Ion:149 Resp: 1426

Ion	Ratio	Lower	Upper
149	100		
150	16.9	0.0	39.1
104	10.9	0.0	35.2

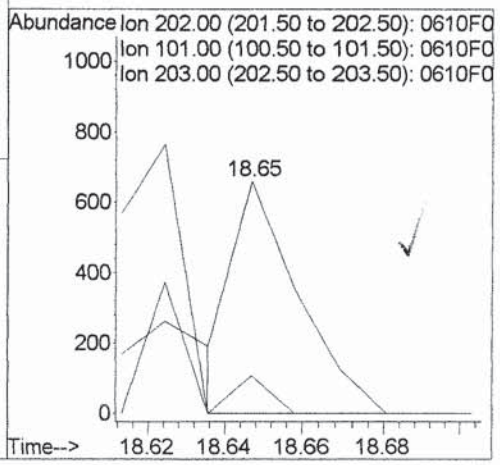


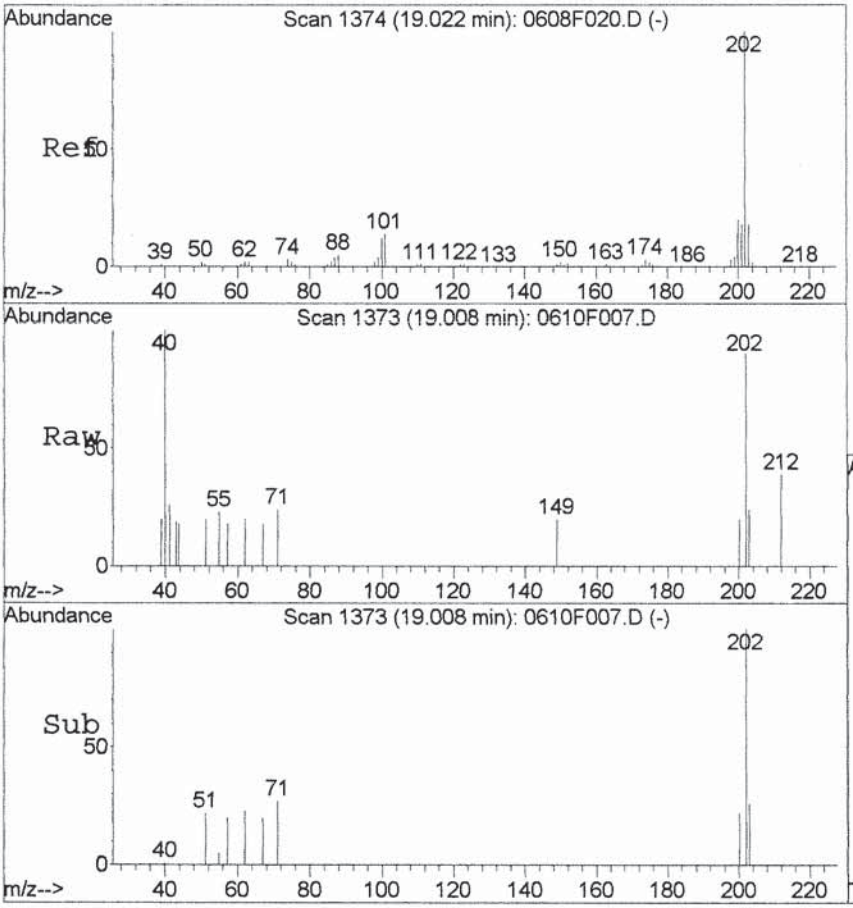


#67
Fluoranthene
Concen: 0.14 ug/ml m
RT: 18.65 min Scan# 1341
Delta R.T. -0.02 min
Lab File: 0610F007.D
Acq: 10 Jun 2010 6:58 pm

Tgt Ion:202 Resp: 766

Ion	Ratio	Lower	Upper
202	100		
101	16.2	0.0	43.3
203	16.2	0.0	47.4

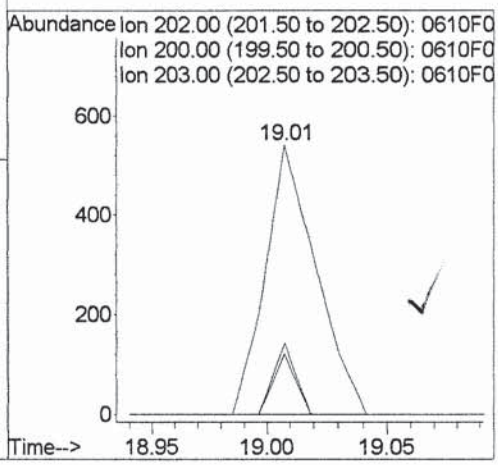




#70
Pyrene
Concen: 0.15 ug/ml
RT: 19.01 min Scan# 1373
Delta R.T. -0.02 min
Lab File: 0610F007.D
Acq: 10 Jun 2010 6:58 pm

Tgt Ion:202 Resp: 815

Ion	Ratio	Lower	Upper
202	100		
200	22.3	0.0	49.7
203	26.4	0.0	46.9



Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QC
Lab Code: K1005175-012

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	1.8	0.026	1	06/01/10	06/11/10	KWG1005659	
Aniline	ND	U	0.87	0.022	1	06/01/10	06/11/10	KWG1005659	
Bis(2-chloroethyl) Ether	ND	U	0.29	0.012	1	06/01/10	06/11/10	KWG1005659	
Phenol	ND	U	0.29	0.020	1	06/01/10	06/11/10	KWG1005659	
2-Chlorophenol	ND	U	0.29	0.0099	1	06/01/10	06/11/10	KWG1005659	
1,3-Dichlorobenzene	ND	U	0.29	0.019	1	06/01/10	06/11/10	KWG1005659	
1,4-Dichlorobenzene	ND	U	0.29	0.018	1	06/01/10	06/11/10	KWG1005659	
1,2-Dichlorobenzene	ND	U	0.29	0.018	1	06/01/10	06/11/10	KWG1005659	
Benzyl Alcohol	ND	U	0.29	0.017	1	06/01/10	06/11/10	KWG1005659	
Bis(2-chloroisopropyl) Ether	ND	U	0.29	0.015	1	06/01/10	06/11/10	KWG1005659	
2-Methylphenol	ND	U	0.29	0.017	1	06/01/10	06/11/10	KWG1005659	
Hexachloroethane	ND	U	0.29	0.022	1	06/01/10	06/11/10	KWG1005659	
N-Nitrosodi-n-propylamine	ND	U	0.29	0.020	1	06/01/10	06/11/10	KWG1005659	
4-Methylphenol†	ND	U	0.29	0.017	1	06/01/10	06/11/10	KWG1005659	
Nitrobenzene	ND	U	0.29	0.027	1	06/01/10	06/11/10	KWG1005659	
Isophorone	ND	U	0.29	0.014	1	06/01/10	06/11/10	KWG1005659	
2-Nitrophenol	ND	U	0.29	0.014	1	06/01/10	06/11/10	KWG1005659	
2,4-Dimethylphenol	ND	U	0.29	0.016	1	06/01/10	06/11/10	KWG1005659	
Bis(2-chloroethoxy)methane	ND	U	0.29	0.011	1	06/01/10	06/11/10	KWG1005659	
2,4-Dichlorophenol	ND	U	0.29	0.017	1	06/01/10	06/11/10	KWG1005659	
Benzoic Acid	ND	U	1.8	0.14	1	06/01/10	06/11/10	KWG1005659	
1,2,4-Trichlorobenzene	ND	U	0.29	0.011	1	06/01/10	06/11/10	KWG1005659	
Naphthalene	ND	U	0.29	0.015	1	06/01/10	06/11/10	KWG1005659	
4-Chloroaniline	ND	U	0.29	0.015	1	06/01/10	06/11/10	KWG1005659	
Hexachlorobutadiene	ND	U	0.29	0.015	1	06/01/10	06/11/10	KWG1005659	
4-Chloro-3-methylphenol	ND	U	0.29	0.017	1	06/01/10	06/11/10	KWG1005659	
2-Methylnaphthalene	ND	U	0.29	0.011	1	06/01/10	06/11/10	KWG1005659	
Hexachlorocyclopentadiene	ND	U	0.29	0.013	1	06/01/10	06/11/10	KWG1005659	
2,4,6-Trichlorophenol	ND	U	0.29	0.015	1	06/01/10	06/11/10	KWG1005659	
2,4,5-Trichlorophenol	ND	U	0.29	0.018	1	06/01/10	06/11/10	KWG1005659	
2-Chloronaphthalene	ND	U	0.29	0.010	1	06/01/10	06/11/10	KWG1005659	
2-Nitroaniline	ND	U	1.8	0.017	1	06/01/10	06/11/10	KWG1005659	
Acenaphthylene	ND	U	0.29	0.016	1	06/01/10	06/11/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QC
Lab Code: K1005175-012

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	ND	U	0.29	0.017	1	06/01/10	06/11/10	KWG1005659	
2,6-Dinitrotoluene	ND	U	0.29	0.016	1	06/01/10	06/11/10	KWG1005659	
Acenaphthene	ND	U	0.29	0.014	1	06/01/10	06/11/10	KWG1005659	
3-Nitroaniline	ND	U	1.8	0.18	1	06/01/10	06/11/10	KWG1005659	
2,4-Dinitrophenol	ND	U	1.8	0.12	1	06/01/10	06/11/10	KWG1005659	
Dibenzofuran	ND	U	0.29	0.012	1	06/01/10	06/11/10	KWG1005659	
4-Nitrophenol	ND	U	1.8	0.15	1	06/01/10	06/11/10	KWG1005659	
2,4-Dinitrotoluene	ND	U	0.29	0.015	1	06/01/10	06/11/10	KWG1005659	
Fluorene	ND	U	0.29	0.013	1	06/01/10	06/11/10	KWG1005659	
4-Chlorophenyl Phenyl Ether	ND	U	0.29	0.016	1	06/01/10	06/11/10	KWG1005659	
Diethyl Phthalate	ND	U	0.29	0.015	1	06/01/10	06/11/10	KWG1005659	
4-Nitroaniline	ND	U	1.8	0.18	1	06/01/10	06/11/10	KWG1005659	
2-Methyl-4,6-dinitrophenol	ND	U	1.8	0.15	1	06/01/10	06/11/10	KWG1005659	
N-Nitrosodiphenylamine	ND	U	0.29	0.018	1	06/01/10	06/11/10	KWG1005659	
4-Bromophenyl Phenyl Ether	ND	U	0.29	0.013	1	06/01/10	06/11/10	KWG1005659	
Hexachlorobenzene	ND	U	0.29	0.015	1	06/01/10	06/11/10	KWG1005659	
Pentachlorophenol	ND	U	1.8	0.13	1	06/01/10	06/11/10	KWG1005659	
Phenanthrene	ND	U	0.29	0.010	1	06/01/10	06/11/10	KWG1005659	
Anthracene	ND	U	0.29	0.014	1	06/01/10	06/11/10	KWG1005659	
Di-n-butyl Phthalate	ND	U	0.29	0.013	1	06/01/10	06/11/10	KWG1005659	
Fluoranthene	ND	U	0.29	0.012	1	06/01/10	06/11/10	KWG1005659	
Pyrene	ND	U	0.29	0.014	1	06/01/10	06/11/10	KWG1005659	
Butyl Benzyl Phthalate	ND	U	0.29	0.017	1	06/01/10	06/11/10	KWG1005659	
3,3'-Dichlorobenzidine	ND	U	1.8	0.027	1	06/01/10	06/11/10	KWG1005659	
Benz(a)anthracene	ND	U	0.29	0.013	1	06/01/10	06/11/10	KWG1005659	
Chrysene	ND	U	0.29	0.012	1	06/01/10	06/11/10	KWG1005659	
Bis(2-ethylhexyl) Phthalate	ND	U	0.29	0.019	1	06/01/10	06/11/10	KWG1005659	
Di-n-octyl Phthalate	ND	U	0.29	0.024	1	06/01/10	06/11/10	KWG1005659	
Benzo(b)fluoranthene	ND	U	0.29	0.018	1	06/01/10	06/11/10	KWG1005659	
Benzo(k)fluoranthene	ND	U	0.29	0.020	1	06/01/10	06/11/10	KWG1005659	
Benzo(a)pyrene	ND	U	0.29	0.020	1	06/01/10	06/11/10	KWG1005659	
Indeno(1,2,3-cd)pyrene	ND	U	0.29	0.039	1	06/01/10	06/11/10	KWG1005659	
Dibenz(a,h)anthracene	ND	U	0.29	0.028	1	06/01/10	06/11/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QC
Lab Code: K1005175-012

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	ND	U	0.29	0.021	1	06/01/10	06/11/10	KWG1005659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	56	20-83	06/11/10	Acceptable
Phenol-d6	58	23-90	06/11/10	Acceptable
Nitrobenzene-d5	53	29-100	06/11/10	Acceptable
2-Fluorobiphenyl	60	32-104	06/11/10	Acceptable
2,4,6-Tribromophenol	72	20-123	06/11/10	Acceptable
Terphenyl-d14	90	37-133	06/11/10	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS07\DATA\061010\0610F015.D
Lab ID: K1005175-012
RunType: SMPL
Matrix: SEDIMENT

Date Acquired: 06/11/2010 00:19
Date Quantitated: 06/11/2010 11:48
Batch ID: KWG1005687
Analysis Method: 8270C
ListJoinID: LJ11610

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

5244
5282
5284
5353

Primary Review: 6-11-10

Secondary Review: LB 6/14/10

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	SEDIMENT
Prod Code:	8270C SVO	**Collect Date:**	05/18/2010	**Receive Date:**	05/20/2010

Analysis Lot:	KWG1005687	**Prep Lot:**	KWG1005659	**Report Group:**	K1005175
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	918258	**Prep Date:**	06/01/2010		

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:	Semi-Volatile Organic Compounds by GC/MS	**Report List ID:**	LJ11610
Tune Ref:	J:\MS07\DATA\061010\0610F012.D	**Method ID:**	MJ250
MB Ref:	J:\MS07\DATA\061010\0610F007.D	**Quant based on Report List**	

Data File:	J:\MS07\DATA\061010\0610F015.D			**Instrument:**	MS07
Acqu Date:	06/11/2010 00:19	**Quant Date:**	06/11/2010 11:48	**Vial:**	12
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1005175-012			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
5	Chrysene-d12	21.11	-0.02	240	218908	40.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
5	Terphenyl-d14	19.30	-0.01	0.00	244	302898	90.37	90	37-133	OK	

Target Compounds

Final Conc. Units: mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
5	Bis(2-ethylhexyl) Phthalate	21.29	-0.01	0.00	149	688**m**	0.1500	0.019	U	

Prep Amount:	40.40 g	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1
Solids:	86.0 %		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F015.D Vial: 12
Acq On : 11 Jun 2010 12:19 am Operator: M.BUTCHER
Sample : K1005175-12 Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 11:42:43 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 11:42:24 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

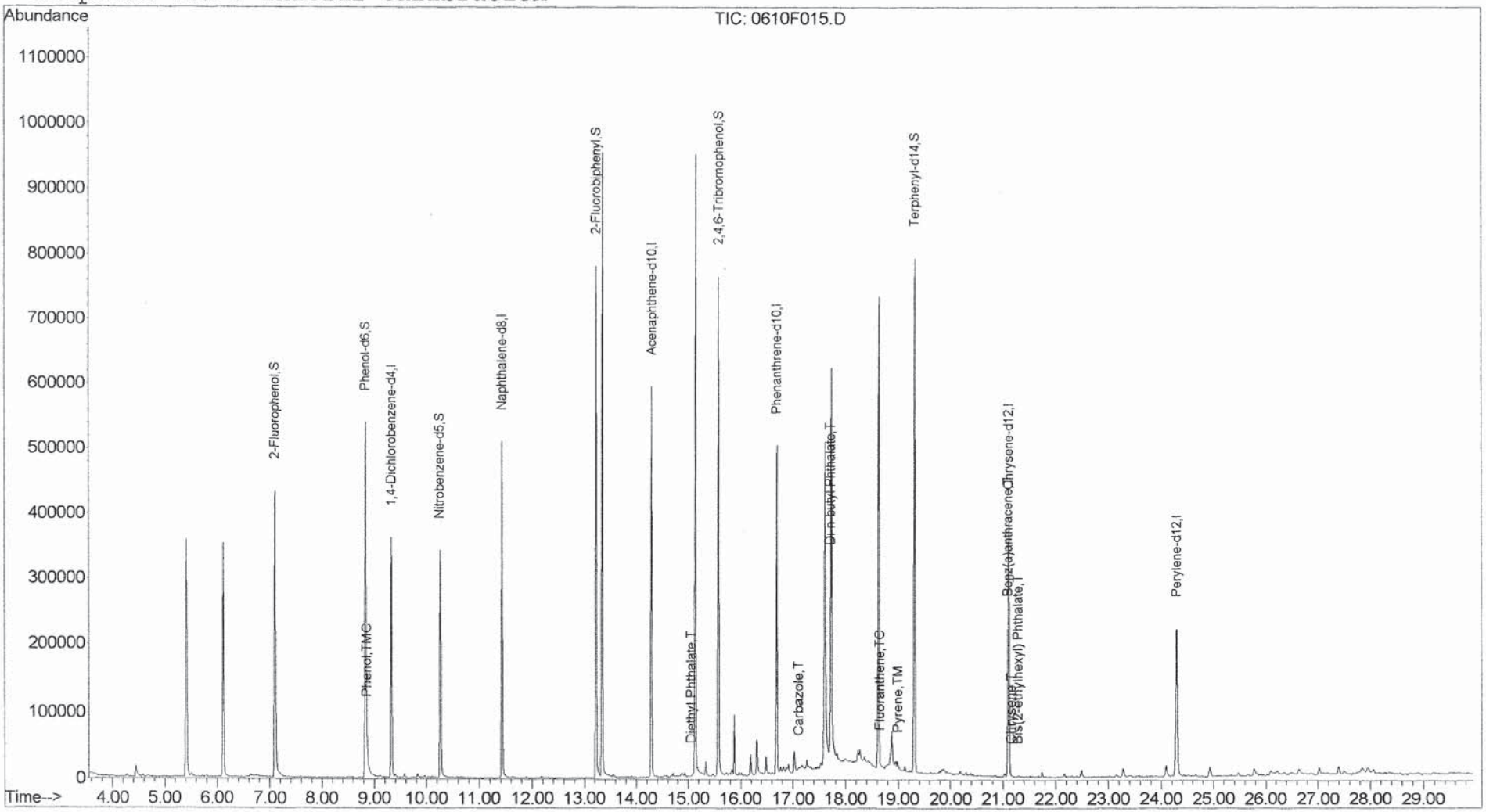
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	82676	40.00	ug/ml	-0.02
21) Naphthalene-d8	11.43	136	292699	40.00	ug/ml	-0.03
34) Acenaphthene-d10	14.29	164	168356	40.00	ug/ml	-0.02
58) Phenanthrene-d10	16.69	188	245334	40.00	ug/ml	-0.02
68) Chrysene-d12	21.11	240	218908	40.00	ug/ml	-0.03
77) Perylene-d12	24.30	264	176848	40.00	ug/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	7.10	112	186172	84.70	ug/ml	-0.04
Spiked Amount 150.000	Range 21 - 100		Recovery = 56.47%			
7) Phenol-d6	8.83	99	265392	86.57	ug/ml	-0.04
Spiked Amount 150.000	Range 10 - 94		Recovery = 57.71%			
19) Nitrobenzene-d5	10.25	82	158916	53.07	ug/ml	-0.04
Spiked Amount 100.000	Range 35 - 114		Recovery = 53.07%			
38) 2-Fluorobiphenyl	13.22	172	330311	59.85	ug/ml	-0.03
Spiked Amount 100.000	Range 43 - 116		Recovery = 59.85%			
59) 2,4,6-Tribromophenol	15.57	330	107297	107.90	ug/ml	-0.03
Spiked Amount 150.000	Range 10 - 123		Recovery = 71.93%			
71) Terphenyl-d14	19.30	244	302898	90.37	ug/ml	-0.03
Spiked Amount 100.000	Range 33 - 141		Recovery = 90.37%			
Target Compounds						Qvalue
8) Phenol	8.86	94	740m	0.24	ug/ml	
53) Diethyl Phthalate	15.05	149	710m	0.13	ug/ml	
65) Carbazole	17.11	167	825	0.15	ug/ml	81
66) Di-n-butyl Phthalate	17.71	149	2895m	0.39	ug/ml	
67) Fluoranthene	18.65	202	1401m	0.24	ug/ml	
70) Pyrene	19.00	202	1779	0.30	ug/ml	92
74) Benz(a)anthracene	21.09	228	1191	0.23	ug/ml	70
75) Chrysene	21.16	228	342m	0.07	ug/ml	
76) Bis(2-ethylhexyl) Phthalat	21.29	149	688m	0.15	ug/ml	

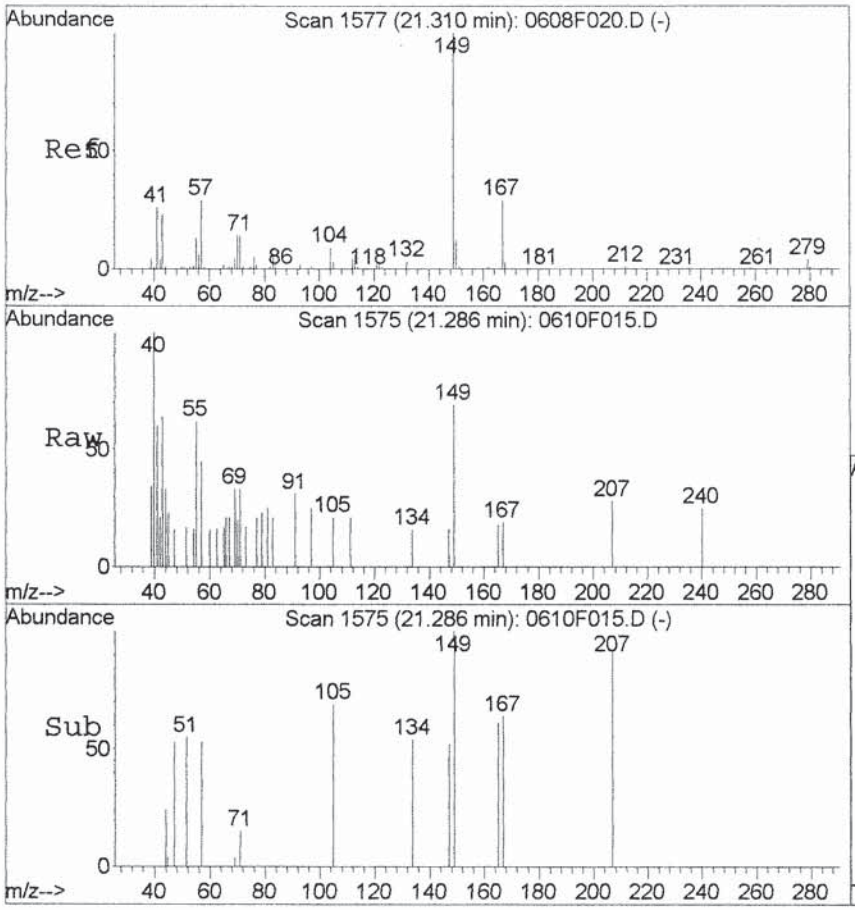
(#) = qualifier out of range (m) = manual integration
0610F015.D 0602BNC7.M Fri Jun 11 14:23:54 2010 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F015.D Vial: 12
Acq On : 11 Jun 2010 12:19 am Operator: M.BUTCHER
Sample : K1005175-12 Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 11:48 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 11:42:24 2010
Response via : Initial Calibration

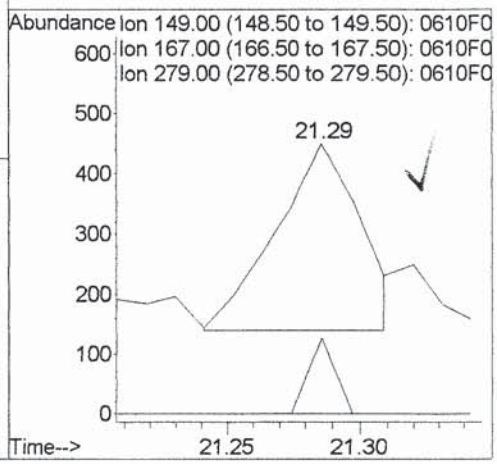




#76
Bis(2-ethylhexyl) Phthalate
Concen: 0.15 ug/ml m
RT: 21.29 min Scan# 1575
Delta R.T. -0.03 min
Lab File: 0610F015.D
Acq: 11 Jun 2010 12:19 am

Tgt Ion:149 Resp: 688

Ion	Ratio	Lower	Upper
149	100		
167	28.2	0.0	59.2
279	0.0	0.0	34.2



Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QCMS
Lab Code: KWG1005659-1

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	**1.63**	J	1.8	0.026	1	06/01/10	06/10/10	KWG1005659	
Aniline	**1.63**		0.87	0.022	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethyl) Ether	**1.82**		0.29	0.012	1	06/01/10	06/10/10	KWG1005659	
Phenol	**1.85**		0.29	0.020	1	06/01/10	06/10/10	KWG1005659	
2-Chlorophenol	**1.87**		0.29	0.0099	1	06/01/10	06/10/10	KWG1005659	
1,3-Dichlorobenzene	**1.86**		0.29	0.019	1	06/01/10	06/10/10	KWG1005659	
1,4-Dichlorobenzene	**1.91**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
1,2-Dichlorobenzene	**1.93**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzyl Alcohol	**1.91**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroisopropyl) Ether	**1.68**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
2-Methylphenol	**1.96**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
Hexachloroethane	**1.85**		0.29	0.022	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodi-n-propylamine	**1.92**		0.29	0.020	1	06/01/10	06/10/10	KWG1005659	
4-Methylphenol†	**1.98**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
Nitrobenzene	**1.86**		0.29	0.027	1	06/01/10	06/10/10	KWG1005659	
Isophorone	**1.83**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
2-Nitrophenol	**2.03**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
2,4-Dimethylphenol	**1.63**		0.29	0.016	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethoxy)methane	**2.02**		0.29	0.011	1	06/01/10	06/10/10	KWG1005659	
2,4-Dichlorophenol	**2.07**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
Benzoic Acid	**0.733**	J	1.8	0.14	1	06/01/10	06/10/10	KWG1005659	
1,2,4-Trichlorobenzene	**1.98**		0.29	0.011	1	06/01/10	06/10/10	KWG1005659	
Naphthalene	**2.06**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloroaniline	**1.87**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobutadiene	**1.97**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloro-3-methylphenol	**2.09**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
2-Methylnaphthalene	**2.19**		0.29	0.011	1	06/01/10	06/10/10	KWG1005659	
Hexachlorocyclopentadiene	**1.14**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
2,4,6-Trichlorophenol	**2.13**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
2,4,5-Trichlorophenol	**2.11**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
2-Chloronaphthalene	**2.15**		0.29	0.010	1	06/01/10	06/10/10	KWG1005659	
2-Nitroaniline	**2.12**		1.8	0.017	1	06/01/10	06/10/10	KWG1005659	
Acenaphthylene	**2.27**		0.29	0.016	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QCMS
Lab Code: KWG1005659-1

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	**2.34**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
2,6-Dinitrotoluene	**2.29**		0.29	0.016	1	06/01/10	06/10/10	KWG1005659	
Acenaphthene	**2.19**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
3-Nitroaniline	**1.93**		1.8	0.18	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrophenol	**1.61**	J	1.8	0.12	1	06/01/10	06/10/10	KWG1005659	
Dibenzofuran	**2.29**		0.29	0.012	1	06/01/10	06/10/10	KWG1005659	
4-Nitrophenol	**2.19**		1.8	0.15	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrotoluene	**2.24**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
Fluorene	**2.34**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
4-Chlorophenyl Phenyl Ether	**2.14**		0.29	0.016	1	06/01/10	06/10/10	KWG1005659	
Diethyl Phthalate	**2.43**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Nitroaniline	**2.21**		1.8	0.18	1	06/01/10	06/10/10	KWG1005659	
2-Methyl-4,6-dinitrophenol	**2.07**		1.8	0.15	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodiphenylamine	**2.12**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
4-Bromophenyl Phenyl Ether	**2.31**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobenzene	**2.31**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
Pentachlorophenol	**1.85**		1.8	0.13	1	06/01/10	06/10/10	KWG1005659	
Phenanthrene	**2.30**		0.29	0.010	1	06/01/10	06/10/10	KWG1005659	
Anthracene	**2.07**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
Di-n-butyl Phthalate	**2.16**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
Fluoranthene	**2.42**		0.29	0.012	1	06/01/10	06/10/10	KWG1005659	
Pyrene	**1.94**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
Butyl Benzyl Phthalate	**2.07**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
3,3'-Dichlorobenzidine	**1.53**	J	1.8	0.027	1	06/01/10	06/10/10	KWG1005659	
Benz(a)anthracene	**2.17**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
Chrysene	**2.24**		0.29	0.012	1	06/01/10	06/10/10	KWG1005659	
Bis(2-ethylhexyl) Phthalate	**2.23**		0.29	0.019	1	06/01/10	06/10/10	KWG1005659	
Di-n-octyl Phthalate	**2.15**		0.29	0.024	1	06/01/10	06/10/10	KWG1005659	
Benzo(b)fluoranthene	**2.27**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzo(k)fluoranthene	**2.06**		0.29	0.020	1	06/01/10	06/10/10	KWG1005659	
Benzo(a)pyrene	**2.28**		0.29	0.020	1	06/01/10	06/10/10	KWG1005659	
Indeno(1,2,3-cd)pyrene	**2.10**		0.29	0.039	1	06/01/10	06/10/10	KWG1005659	
Dibenz(a,h)anthracene	**2.13**		0.29	0.028	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QCMS
Lab Code: KWG1005659-1

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	**1.98**		0.29	0.021	1	06/01/10	06/10/10	KWG1005659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	59	20-83	06/10/10	Acceptable
Phenol-d6	64	23-90	06/10/10	Acceptable
Nitrobenzene-d5	65	29-100	06/10/10	Acceptable
2-Fluorobiphenyl	68	32-104	06/10/10	Acceptable
2,4,6-Tribromophenol	78	20-123	06/10/10	Acceptable
Terphenyl-d14	78	37-133	06/10/10	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS07\DATA\061010\0610F010.D
Lab ID: KWG1005659-1 -- K1005175-012MS
RunType: MS
Matrix: SEDIMENT

Date Acquired: 06/10/2010 20:58
Date Quantitated: 06/11/2010 08:25
Batch ID: KWG1005663
Analysis Method: 8270C
MethodJoinID: MJ250

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Batch QC:
K5244
K5282
K5284
K5353

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Benzidine	119.6	NA	30	NTJ
Continuing Calibration Recovery	Benzidine	-35.0	NA	30	

Primary Review: M 6-11-10

Secondary Review: LB 6/14/10

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	SEDIMENT
Prod Code:	8270C SVO	**Collect Date:**		**Receive Date:**	06/10/2010

Analysis Lot:	KWG1005663	**Prep Lot:**	KWG1005659	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	918269	**Prep Date:**	06/01/2010		

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:			
Tune Ref:	J:\MS07\DATA\061010\0610F001.D	**Method ID:**	MJ250
MB Ref:	J:\MS07\DATA\061010\0610F007.D	**Quant based on Method**	

Data File:	J:\MS07\DATA\061010\0610F010.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 20:58	**Quant Date:**	06/11/2010 08:25	**Vial:**	8
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG1005659-1 -- K1005175-012MS			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	9.33	0.00	152	86297	40.00	OK
2	Naphthalene-d8	11.43	-0.01	136	318991	40.00	OK
3	Acenaphthene-d10	14.30	0.01	164	167887	40.00	OK
4	Phenanthrene-d10	16.70	0.00	188	221940	40.00	OK
5	Chrysene-d12	21.11	-0.02	240	245359	40.00	OK
6	Perylene-d12	24.30	-0.01	264	200032	40.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	7.11	0.00	0.00	112	203599	88.74	59	20-83	OK	
1	Phenol-d6	8.84	-0.02	0.00	99	309459	96.71	64	23-90	OK	
1	Nitrobenzene-d5	10.26	-0.02	0.00	82	204634	65.47	65	29-100	OK	
3	2-Fluorobiphenyl	13.23	0.00	0.00	172	376700	68.44	68	32-104	OK	
4	2,4,6-Tribromophenol	15.58	-0.01	0.00	330	105545	117.33	78	20-123	OK	
5	Terphenyl-d14	19.31	-0.01	0.00	244	293367	78.09	78	37-133	OK	

Target Compounds

Final Conc. Units: mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	4.11	-0.02	0.00	42	116607**m**	56.55	1.63	J	
1	Pyridine	4.15	-0.01	0.00	79	246043**m**	84.21	2.43		
1	Aniline	8.80		0.00	93	182781	56.51	1.63		
1	Bis(2-chloroethyl) Ether	8.93	-0.02	0.00	93	164426	63.01	1.82		
1	Phenol	8.86	-0.02	0.00	94	210506	64.23	1.85		
1	2-Chlorophenol	8.99	-0.02	0.00	128	183806	65.05	1.87		
1	1,3-Dichlorobenzene	9.22	-0.01	0.00	146	193723	64.64	1.86		
1	1,4-Dichlorobenzene	9.36	-0.01	0.00	146	201855	66.13	1.91		
1	1,2-Dichlorobenzene	9.60	-0.01	0.00	146	194000	67.14	1.93		
1	Benzyl Alcohol	9.62	-0.02	0.00	108	114956	66.24	1.91		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F010.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 20:58	**Quant Date:**	06/11/2010 08:25	**Vial:**	8
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG1005659-1 -- K1005175-012MS			**Soln Conc. Units:**	ug/ml

Target Compounds

Final Conc. Units: mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Bis(2-chloroisopropyl) Ether	9.84	-0.01	0.00	45	252710	58.37	1.68		
1	2-Methylphenol	9.86		0.00	107	144075	67.90	1.96		
1	Hexachloroethane	10.16	-0.01	0.00	117	88940	64.04	1.85		
1	N-Nitrosodi-n-propylamine	10.07	-0.02	0.00	70	141215	66.49	1.92		
1	4-Methylphenol	10.11	-0.02	0.00	107	221033	68.59	1.98		
1	Nitrobenzene	10.30	-0.01	0.00	77	189797	64.55	1.86		
2	Isophorone	10.71	-0.02	0.00	82	365457	63.51	1.83		
2	2-Nitrophenol	10.82	-0.01	0.00	139	111483	70.31	2.03		
2	2,4-Dimethylphenol	10.97	-0.01	0.00	122	119660	56.44	1.63		
2	Bis(2-chloroethoxy)methane	11.11		0.00	93	226767	70.15	2.02		
2	2,4-Dichlorophenol	11.25	-0.01	0.00	162	172574	71.75	2.07		
2	Benzoic Acid	11.21	-0.12	-0.01	122	46248	25.45	0.733	J	
2	1,2,4-Trichlorobenzene	11.35	-0.01	0.00	180	175879	68.88	1.98		
2	Naphthalene	11.47		0.00	128	546166	71.36	2.06		
2	4-Chloroaniline	11.59	-0.02	0.00	127	218910	64.83	1.87		
2	Hexachlorobutadiene	11.69	-0.01	0.00	225	110605	68.27	1.97		
2	4-Chloro-3-methylphenol	12.44	-0.01	0.00	107	181945	72.47	2.09		
2	2-Methylnaphthalene	12.61		0.00	142	370108	76.00	2.19		
3	Hexachlorocyclopentadiene	12.88	0.01	0.00	237	61431	39.66	1.14		
3	2,4,6-Trichlorophenol	13.09	-0.02	0.00	196	127924	73.86	2.13		
3	2,4,5-Trichlorophenol	13.17	-0.01	0.00	196	141002	73.06	2.11		
3	2-Chloronaphthalene	13.39	-0.01	0.00	162	361606	74.47	2.15		
3	2-Nitroaniline	13.60		0.00	65	115039	73.65	2.12		
3	Acenaphthylene	14.06	-0.01	0.00	152	590008	78.88	2.27		
3	Dimethyl Phthalate	13.91	-0.02	0.00	163	463253	81.17	2.34		
3	2,6-Dinitrotoluene	14.00	-0.02	0.00	165	102668	79.38	2.29		
3	Acenaphthene	14.34	-0.02	0.00	154	325085	76.15	2.19		
3	3-Nitroaniline	14.27	-0.02	0.00	138	91035	66.90	1.93		
3	2,4-Dinitrophenol	14.44	-0.02	0.00	184	41845	55.76	1.61	J	
3	Dibenzofuran	14.63	-0.01	0.00	168	534457	79.40	2.29		
3	4-Nitrophenol	14.63		0.00	109	55920	75.89	2.19		
3	2,4-Dinitrotoluene	14.66		0.00	165	127381	77.71	2.24		
3	2,3,4,6-Tetrachlorophenol	14.86	-0.01	0.00	232	100147	71.17	2.05		
3	Fluorene	15.19		0.00	166	409935	81.27	2.34		
3	4-Chlorophenyl Phenyl Ether	15.21	-0.01	0.00	204	191562	74.18	2.14		
3	Diethyl Phthalate	15.07	-0.01	0.00	149	466034	84.46	2.43		
3	4-Nitroaniline	15.26	-0.02	0.00	138	90312	76.67	2.21		
3	2-Methyl-4,6-dinitrophenol	15.31	-0.02	0.00	198	64183	71.99	2.07		
3	N-Nitrosodiphenylamine	15.41	-0.01	0.00	169	247055	73.46	2.12		
3	1,2-Diphenylhydrazine	15.47		0.00	77	413542	72.92	2.10		
4	4-Bromophenyl Phenyl Ether	16.00		0.00	248	107050	80.00	2.31		
4	Hexachlorobenzene	16.08		0.00	284	124168	80.06	2.31		

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c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F010.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 20:58	**Quant Date:**	06/11/2010 08:25	**Vial:**	8
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG1005659-1 -- K1005175-012MS			**Soln Conc. Units:**	ug/ml

Target Compounds

Final Conc. Units: mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Pentachlorophenol	16.41	-0.01	0.00	266	56055	64.32	1.85		
4	Phenanthrene	16.73	-0.01	0.00	178	470608	79.81	2.30		
4	Anthracene	16.81	-0.02	0.00	178	444372	71.68	2.07		
4	Carbazole	17.10	-0.01	0.00	167	395545	78.16	2.25		
4	Di-n-butyl Phthalate	17.72	-0.01	0.00	149	506237	74.99	2.16		
4	Fluoranthene	18.66		0.00	202	448256	83.85	2.42		
5	Benzidine	18.92		0.00	184	12985	6.30	0.182	J	
5	Pyrene	19.01	-0.01	0.00	202	440484	67.26	1.94		
5	Butyl Benzyl Phthalate	20.14	-0.01	0.00	149	268709	72.00	2.07		
5	3,3'-Dichlorobenzidine	21.09	-0.02	0.00	252	136504	53.24	1.53	J	
5	Benz(a)anthracene	21.10	-0.01	0.00	228	434215	75.30	2.17		
5	Chrysene	21.17	-0.02	0.00	228	433199	77.60	2.24		
5	Bis(2-ethylhexyl) Phthalate	21.29	-0.01	0.00	149	410845	77.36	2.23		
6	Di-n-octyl Phthalate	22.75	-0.02	0.00	149	697388	74.54	2.15		
6	Benzo(b)fluoranthene	23.44	-0.01	0.00	252	406097	78.81	2.27		
6	Benzo(k)fluoranthene	23.50	-0.03	0.00	252	381507	71.34	2.06		
6	Benzo(a)pyrene	24.17	-0.02	0.00	252	338086	79.00	2.28		
6	Indeno(1,2,3-cd)pyrene	26.75	-0.03	0.00	276	269966	72.84	2.10		
6	Dibenz(a,h)anthracene	26.83	-0.02	0.00	278	291326	73.79	2.13		
6	Benzo(g,h,i)perylene	27.33	-0.02	0.00	276	275111	68.76	1.98		
	Hexachlorocyclohexane				0	0		0.58	UJ	NR
	1,2,3-Trichlorobenzene				0	0		0.29	UJ	NR
	1,2,3,4-Tetrachlorobenzene				0	0		0.29	UJ	NR
	1,2,3,5-Tetrachlorobenzene				0	0		0.29	UJ	NR
	1,3,5-Trichlorobenzene				0	0		0.29	UJ	NR
	Acrylamide				0	0		43	U	NR
	Diisobutyl Phthalate				0	0		0.29	UJ	NR
	OPMO				0	0		1.7	U	NR
	1-Methylnaphthalene				0	0		0.29	UJ	NR
	HPMO				0	0		1.7	U	NR
	2,3,7,8-Tetrachlorodibenzo-p-di				0	0		0.58	UJ	NR

Prep Amount:	40.35 g	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1
Solids:	86.0 %		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F010.D Vial: 8
Acq On : 10 Jun 2010 8:58 pm Operator: M.BUTCHER
Sample : KQ5080-1 K1005175-12 MS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:05 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	86297	40.00	ug/ml	-0.02
21) Naphthalene-d8	11.43	136	318991	40.00	ug/ml	-0.02
34) Acenaphthene-d10	14.30	164	167887	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.70	188	221940	40.00	ug/ml	0.00
68) Chrysene-d12	21.11	240	245359	40.00	ug/ml	-0.02
77) Perylene-d12	24.30	264	200032	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.11	112	203599	88.74	ug/ml	-0.03
Spiked Amount 150.000	Range 21 - 100		Recovery = 59.16%			
7) Phenol-d6	8.84	99	309459	96.71	ug/ml	-0.03
Spiked Amount 150.000	Range 10 - 94		Recovery = 64.47%			
19) Nitrobenzene-d5	10.26	82	204634	65.47	ug/ml	-0.03
Spiked Amount 100.000	Range 35 - 114		Recovery = 65.47%			
38) 2-Fluorobiphenyl	13.23	172	376700	68.44	ug/ml	-0.02
Spiked Amount 100.000	Range 43 - 116		Recovery = 68.44%			
59) 2,4,6-Tribromophenol	15.58	330	105545	117.33	ug/ml	-0.02
Spiked Amount 150.000	Range 10 - 123		Recovery = 78.22%			
71) Terphenyl-d14	19.31	244	293367	78.09	ug/ml	-0.02
Spiked Amount 100.000	Range 33 - 141		Recovery = 78.09%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.11	42	116607m	56.55	ug/ml	
3) Pyridine	4.15	79	246043m	84.21	ug/ml	
5) Aniline	8.80	93	182781	56.51	ug/ml	62
6) Bis(2-chloroethyl) Ether	8.93	93	164426	63.01	ug/ml	98
8) Phenol	8.86	94	210506	64.23	ug/ml	97
9) 2-Chlorophenol	8.99	128	183806	65.05	ug/ml	96
10) 1,3-Dichlorobenzene	9.22	146	193723	64.64	ug/ml	98
11) 1,4-Dichlorobenzene	9.36	146	201855	66.13	ug/ml	98
12) 1,2-Dichlorobenzene	9.60	146	194000	67.14	ug/ml	94
13) Benzyl Alcohol	9.62	108	114956	66.24	ug/ml	95
14) Bis(2-chloroisopropyl) Eth	9.84	45	252710	58.37	ug/ml	81
15) 2-Methylphenol	9.86	107	144075	67.90	ug/ml	95
16) Hexachloroethane	10.16	117	88940	64.04	ug/ml	92
17) N-Nitrosodi-n-propylamine	10.07	70	141215	66.49	ug/ml	95
18) 4-Methylphenol	10.11	107	221033	68.59	ug/ml	99
20) Nitrobenzene	10.30	77	189797	64.55	ug/ml	96
22) Isophorone	10.71	82	365457	63.51	ug/ml	99
23) 2-Nitrophenol	10.82	139	111483	70.31	ug/ml	99
24) 2,4-Dimethylphenol	10.97	122	119660	56.44	ug/ml	98
25) Bis(2-chloroethoxy)methane	11.11	93	226767	70.15	ug/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F010.D Vial: 8
Acq On : 10 Jun 2010 8:58 pm Operator: M.BUTCHER
Sample : KQ5080-1 K1005175-12 MS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:05 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	2,4-Dichlorophenol	11.25	162	172574	71.75 ug/ml	96
27)	Benzoic Acid	11.21	122	46248	25.45 ug/ml	98
28)	1,2,4-Trichlorobenzene	11.35	180	175879	68.88 ug/ml	99
29)	Naphthalene	11.47	128	546166	71.36 ug/ml	100
30)	4-Chloroaniline	11.59	127	218910	64.83 ug/ml	94
31)	Hexachlorobutadiene	11.69	225	110605	68.27 ug/ml	99
32)	4-Chloro-3-methylphenol	12.44	107	181945	72.47 ug/ml#	52
33)	2-Methylnaphthalene	12.61	142	370108	76.00 ug/ml	99
35)	Hexachlorocyclopentadiene	12.88	237	61431	39.66 ug/ml	100
36)	2,4,6-Trichlorophenol	13.09	196	127924	73.86 ug/ml	96
37)	2,4,5-Trichlorophenol	13.17	196	141002	73.06 ug/ml	100
39)	2-Chloronaphthalene	13.39	162	361606	74.47 ug/ml	99
40)	2-Nitroaniline	13.60	65	115039	73.65 ug/ml	94
41)	Acenaphthylene	14.06	152	590008	78.88 ug/ml	99
42)	Dimethyl Phthalate	13.91	163	463253	81.17 ug/ml	99
43)	2,6-Dinitrotoluene	14.00	165	102668	79.38 ug/ml	99
44)	Acenaphthene	14.34	154	325085	76.15 ug/ml	99
45)	3-Nitroaniline	14.27	138	91035	66.90 ug/ml	98
46)	2,4-Dinitrophenol	14.44	184	41845	55.76 ug/ml	88
47)	Dibenzofuran	14.63	168	534457	79.40 ug/ml	96
48)	4-Nitrophenol	14.63	109	55920	75.89 ug/ml#	53
49)	2,4-Dinitrotoluene	14.66	165	127381	77.71 ug/ml	94
50)	2,3,4,6-Tetrachlorophenol	14.86	232	100147	71.17 ug/ml	98
51)	Fluorene	15.19	166	409935	81.27 ug/ml	98
52)	4-Chlorophenyl Phenyl Ethe	15.21	204	191562	74.18 ug/ml	98
53)	Diethyl Phthalate	15.07	149	466034	84.46 ug/ml	99
54)	4-Nitroaniline	15.26	138	90312	76.67 ug/ml	97
55)	2-Methyl-4,6-dinitrophenol	15.31	198	64183	71.99 ug/ml#	62
56)	N-Nitrosodiphenylamine	15.41	169	247055	73.46 ug/ml	99
57)	1,2-Diphenylhydrazine	15.47	77	413542	72.92 ug/ml	99
60)	4-Bromophenyl Phenyl Ether	16.00	248	107050	80.00 ug/ml	97
61)	Hexachlorobenzene	16.08	284	124168	80.06 ug/ml	84
62)	Pentachlorophenol	16.41	266	56055	64.32 ug/ml	95
63)	Phenanthrene	16.73	178	470608	79.81 ug/ml	100
64)	Anthracene	16.81	178	444372	71.68 ug/ml	99
65)	Carbazole	17.10	167	395545	78.16 ug/ml	99
66)	Di-n-butyl Phthalate	17.72	149	506237	74.99 ug/ml	99
67)	Fluoranthene	18.66	202	448256	83.85 ug/ml	97
69)	Benzidine	18.92	184	12985	6.30 ug/ml	95
70)	Pyrene	19.01	202	440484	67.26 ug/ml	98
72)	Butyl Benzyl Phthalate	20.14	149	268709	72.00 ug/ml	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F010.D Vial: 8
Acq On : 10 Jun 2010 8:58 pm Operator: M.BUTCHER
Sample : KQ5080-1 K1005175-12 MS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:05 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

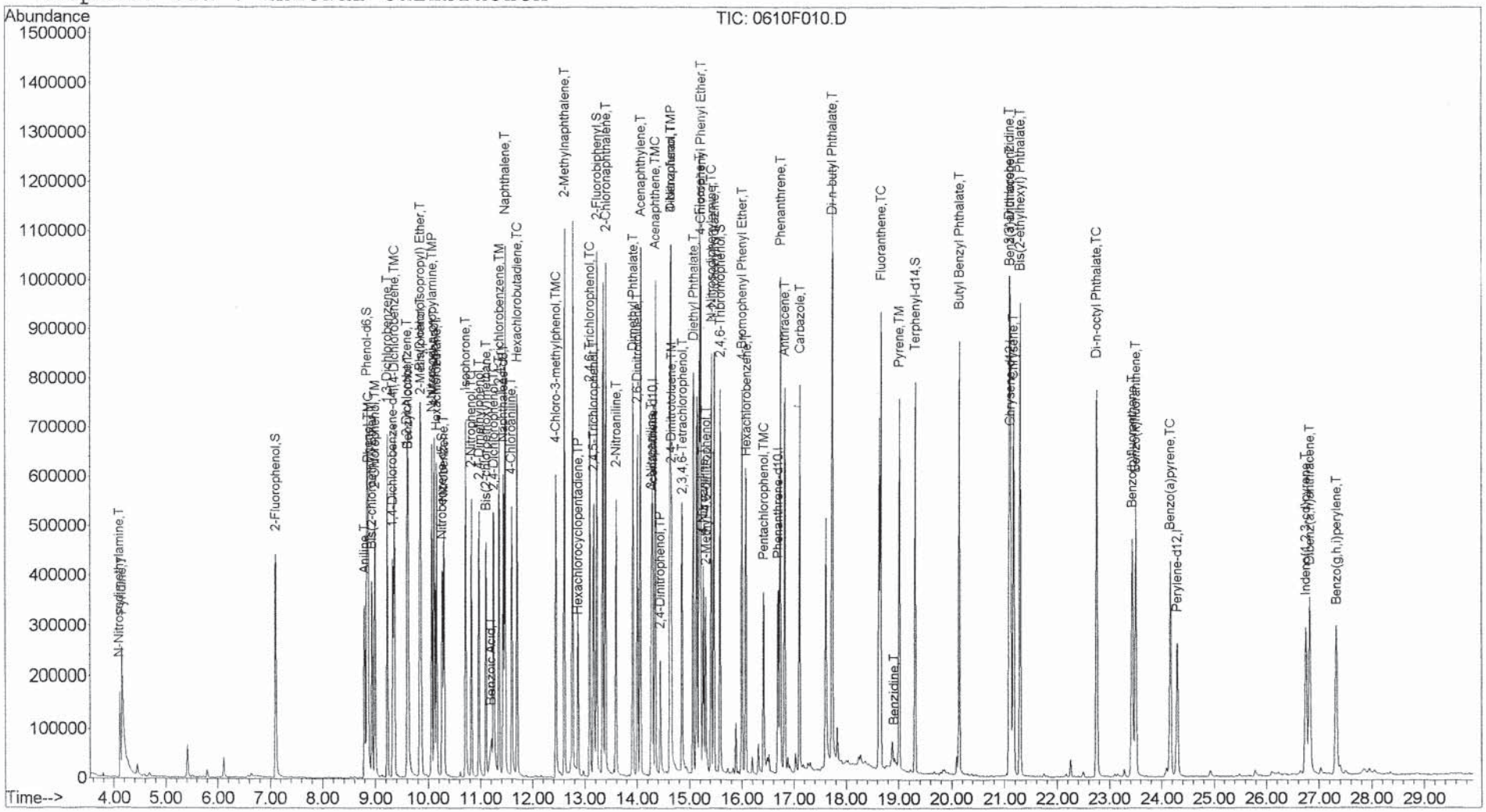
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.09	252	136504	53.24	ug/ml	98
74)	Benz(a)anthracene	21.10	228	434215	75.30	ug/ml	98
75)	Chrysene	21.17	228	433199	77.60	ug/ml	99
76)	Bis(2-ethylhexyl) Phthalat	21.29	149	410845	77.36	ug/ml	99
78)	Di-n-octyl Phthalate	22.75	149	697388	74.54	ug/ml	98
79)	Benzo(b)fluoranthene	23.44	252	406097	78.81	ug/ml	98
80)	Benzo(k)fluoranthene	23.50	252	381507	71.34	ug/ml	99
81)	Benzo(a)pyrene	24.17	252	338086	79.00	ug/ml	99
82)	Indeno(1,2,3-cd)pyrene	26.75	276	269966	72.84	ug/ml	99
83)	Dibenz(a,h)anthracene	26.83	278	291326	73.79	ug/ml	97
84)	Benzo(g,h,i)perylene	27.33	276	275111	68.76	ug/ml	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F010.D Vial: 8
Acq On : 10 Jun 2010 8:58 pm Operator: M.BUTCHER
Sample : KQ5080-1 K1005175-12 MS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:25 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration

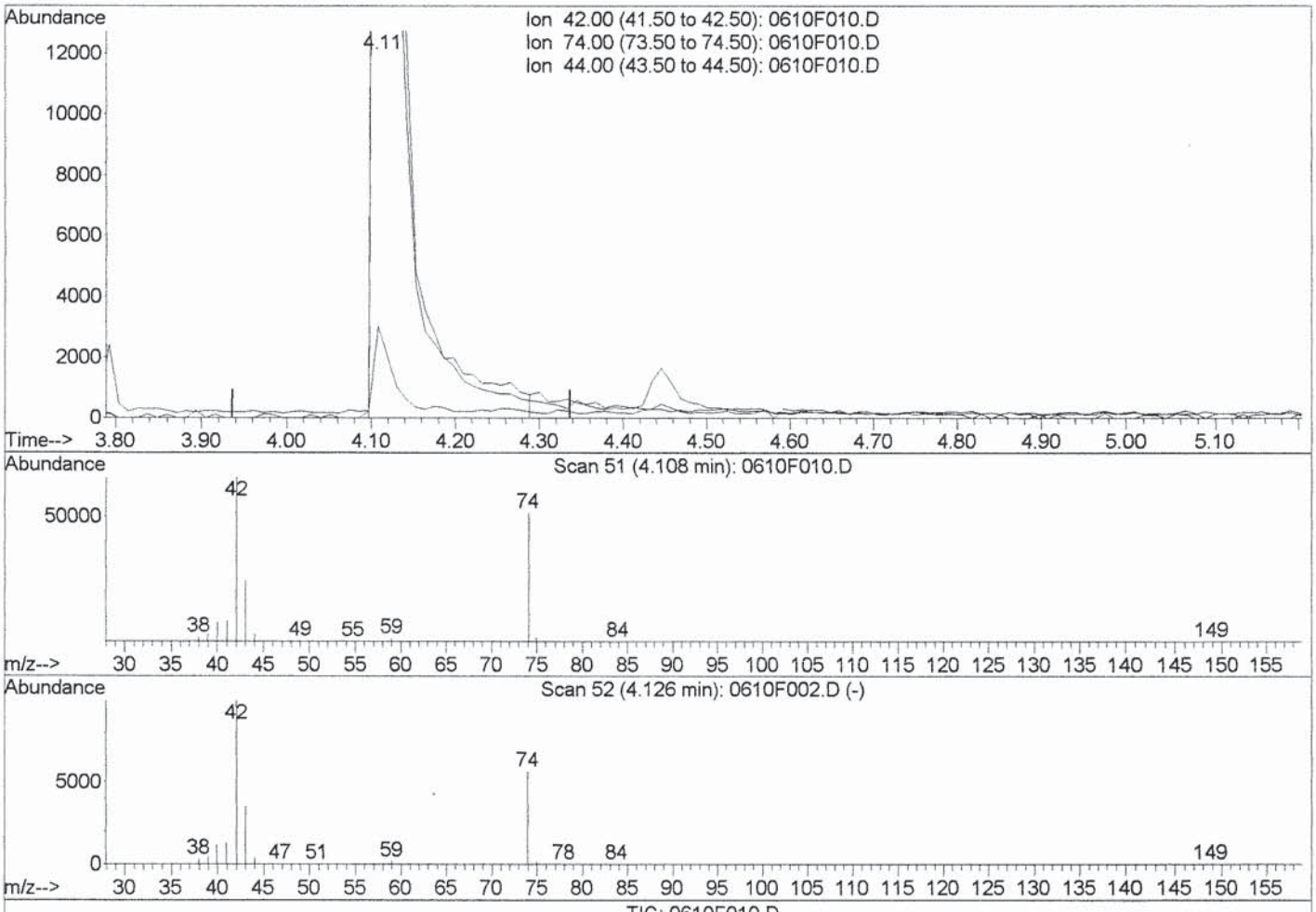


1265

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F010.D Vial: 8
Acq On : 10 Jun 2010 8:58 pm Operator: M.BUTCHER
Sample : KQ5080-1 K1005175-12 MS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:09 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F010.D

(2) N-Nitrosodimethylamine (T)

4.11min 54.59ug/ml

response 112559

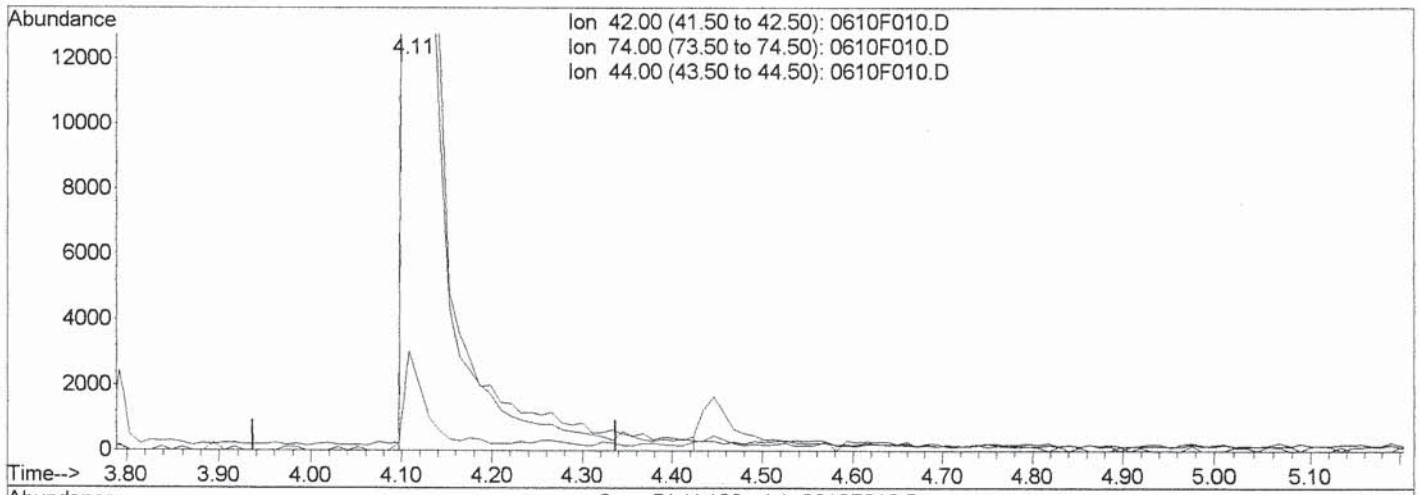
Ion	Exp%	Act%
42.00	100	100
74.00	79.30	78.48
44.00	4.40	4.29
0.00	0.00	0.00

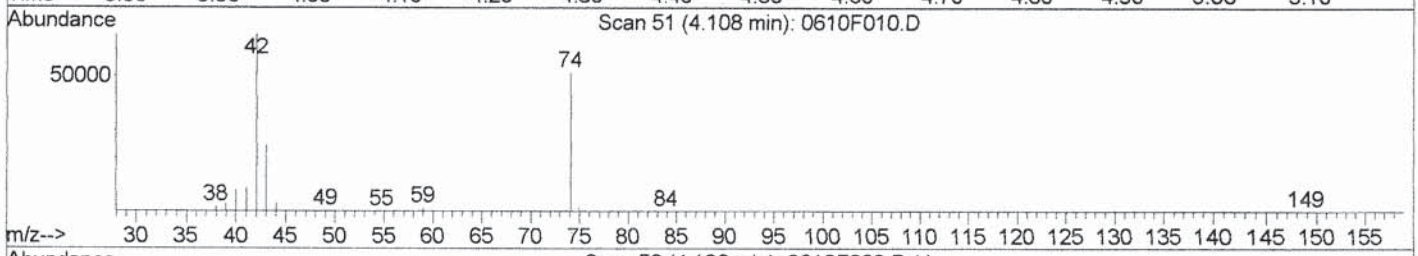
0610F010.D 0602BNC7.M Fri Jun 11 08:25:17 2010

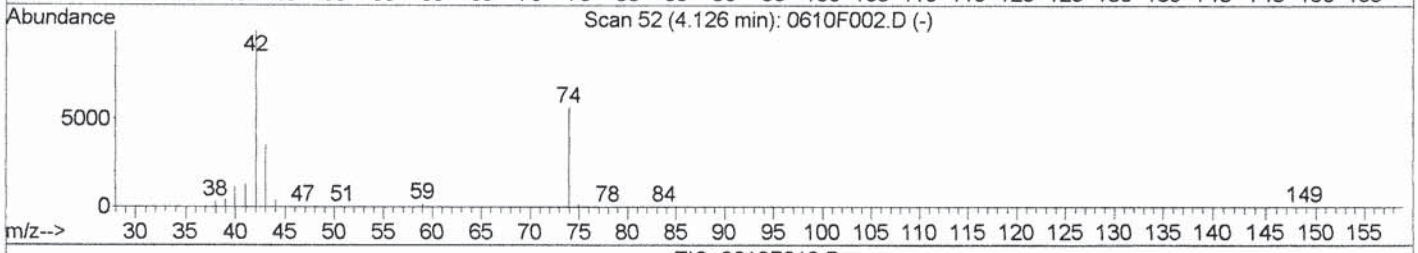
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F010.D Vial: 8
Acq On : 10 Jun 2010 8:58 pm Operator: M.BUTCHER
Sample : KQ5080-1 K1005175-12 MS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:25 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration







TIC: 0610F010.D

(2) N-Nitrosodimethylamine (T)

4.11min 56.55ug/ml m

response 116607

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	78.46
44.00	4.40	4.63
0.00	0.00	0.00

5 ug/ml

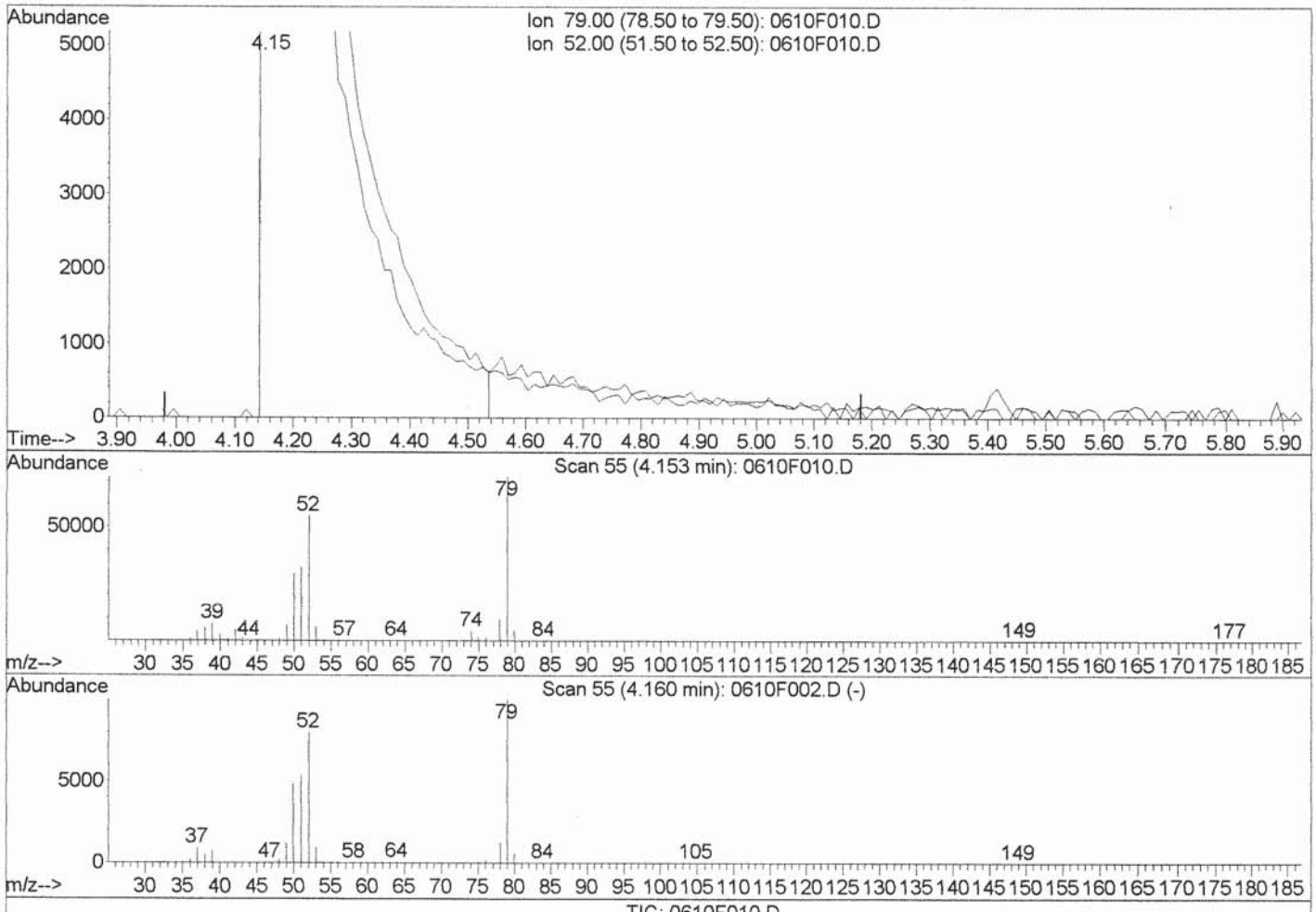
0610F010.D 0602BNC7.M Fri Jun 11 08:25:22 2010

LB 6/14/10

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F010.D Vial: 8
Acq On : 10 Jun 2010 8:58 pm Operator: M.BUTCHER
Sample : KQ5080-1 K1005175-12 MS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:25 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F010.D

(3) Pyridine (T)

4.15min 79.87ug/ml

response 233365

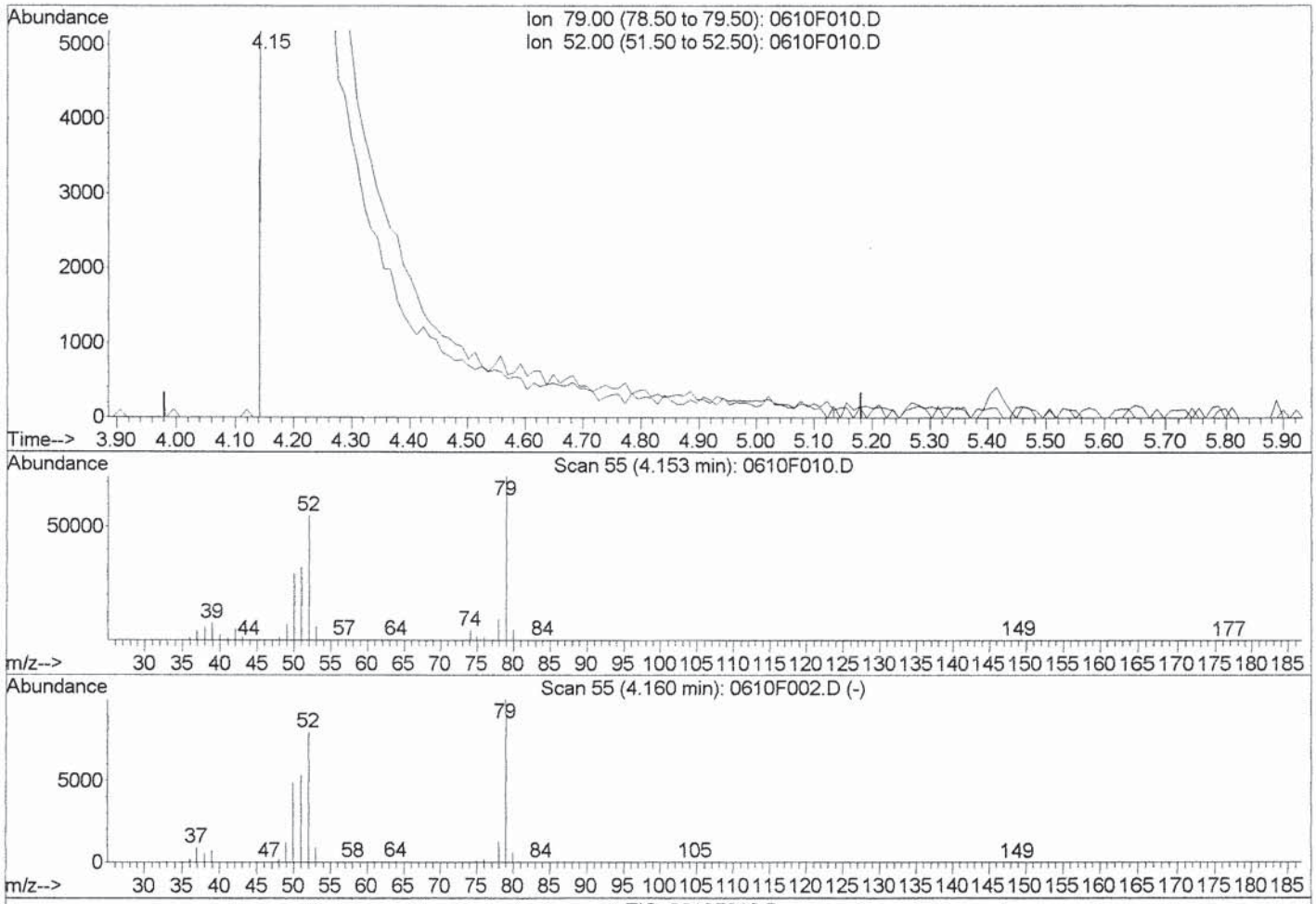
Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.82
0.00	0.00	0.00
0.00	0.00	0.00

0610F010.D 0602BNC7.M Fri Jun 11 08:25:26 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F010.D Vial: 8
Acq On : 10 Jun 2010 8:58 pm Operator: M.BUTCHER
Sample : KQ5080-1 K1005175-12 MS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:25 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F010.D

(3) Pyridine (T)

4.15min 84.21ug/ml m

response 246043

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.92
0.00	0.00	0.00
0.00	0.00	0.00

6-11-10

LB 6/14/10

0610F010.D 0602BNC7.M Fri Jun 11 08:25:31 2010

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QCDMS
Lab Code: KWG1005659-2

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	**1.62**	J	1.8	0.026	1	06/01/10	06/10/10	KWG1005659	
Aniline	**1.66**		0.87	0.022	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethyl) Ether	**1.73**		0.29	0.012	1	06/01/10	06/10/10	KWG1005659	
Phenol	**1.85**		0.29	0.020	1	06/01/10	06/10/10	KWG1005659	
2-Chlorophenol	**1.78**		0.29	0.0099	1	06/01/10	06/10/10	KWG1005659	
1,3-Dichlorobenzene	**1.71**		0.29	0.019	1	06/01/10	06/10/10	KWG1005659	
1,4-Dichlorobenzene	**1.73**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
1,2-Dichlorobenzene	**1.73**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzyl Alcohol	**1.86**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroisopropyl) Ether	**1.71**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
2-Methylphenol	**1.82**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
Hexachloroethane	**1.76**		0.29	0.022	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodi-n-propylamine	**1.89**		0.29	0.020	1	06/01/10	06/10/10	KWG1005659	
4-Methylphenol†	**1.91**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
Nitrobenzene	**1.86**		0.29	0.027	1	06/01/10	06/10/10	KWG1005659	
Isophorone	**1.76**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
2-Nitrophenol	**1.96**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
2,4-Dimethylphenol	**1.51**		0.29	0.016	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethoxy)methane	**1.87**		0.29	0.011	1	06/01/10	06/10/10	KWG1005659	
2,4-Dichlorophenol	**1.87**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
Benzoic Acid	**0.561**	J	1.8	0.14	1	06/01/10	06/10/10	KWG1005659	
1,2,4-Trichlorobenzene	**1.93**		0.29	0.011	1	06/01/10	06/10/10	KWG1005659	
Naphthalene	**1.87**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloroaniline	**1.74**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobutadiene	**1.85**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloro-3-methylphenol	**1.90**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
2-Methylnaphthalene	**1.91**		0.29	0.011	1	06/01/10	06/10/10	KWG1005659	
Hexachlorocyclopentadiene	**1.04**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
2,4,6-Trichlorophenol	**2.04**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
2,4,5-Trichlorophenol	**1.90**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
2-Chloronaphthalene	**2.04**		0.29	0.010	1	06/01/10	06/10/10	KWG1005659	
2-Nitroaniline	**1.78**	J	1.8	0.017	1	06/01/10	06/10/10	KWG1005659	
Acenaphthylene	**1.97**		0.29	0.016	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QCDMS
Lab Code: KWG1005659-2

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	**1.88**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
2,6-Dinitrotoluene	**1.94**		0.29	0.016	1	06/01/10	06/10/10	KWG1005659	
Acenaphthene	**1.97**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
3-Nitroaniline	**1.79**	J	1.8	0.18	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrophenol	**1.36**	J	1.8	0.12	1	06/01/10	06/10/10	KWG1005659	
Dibenzofuran	**1.88**		0.29	0.012	1	06/01/10	06/10/10	KWG1005659	
4-Nitrophenol	**1.89**		1.8	0.15	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrotoluene	**1.85**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
Fluorene	**1.90**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
4-Chlorophenyl Phenyl Ether	**1.81**		0.29	0.016	1	06/01/10	06/10/10	KWG1005659	
Diethyl Phthalate	**1.89**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Nitroaniline	**2.00**		1.8	0.18	1	06/01/10	06/10/10	KWG1005659	
2-Methyl-4,6-dinitrophenol	**1.79**	J	1.8	0.15	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodiphenylamine	**1.91**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
4-Bromophenyl Phenyl Ether	**2.12**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobenzene	**2.16**		0.29	0.015	1	06/01/10	06/10/10	KWG1005659	
Pentachlorophenol	**1.75**	J	1.8	0.13	1	06/01/10	06/10/10	KWG1005659	
Phenanthrene	**2.13**		0.29	0.010	1	06/01/10	06/10/10	KWG1005659	
Anthracene	**1.99**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
Di-n-butyl Phthalate	**2.26**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
Fluoranthene	**2.42**		0.29	0.012	1	06/01/10	06/10/10	KWG1005659	
Pyrene	**1.98**		0.29	0.014	1	06/01/10	06/10/10	KWG1005659	
Butyl Benzyl Phthalate	**2.05**		0.29	0.017	1	06/01/10	06/10/10	KWG1005659	
3,3'-Dichlorobenzidine	**1.57**	J	1.8	0.027	1	06/01/10	06/10/10	KWG1005659	
Benz(a)anthracene	**2.18**		0.29	0.013	1	06/01/10	06/10/10	KWG1005659	
Chrysene	**2.05**		0.29	0.012	1	06/01/10	06/10/10	KWG1005659	
Bis(2-ethylhexyl) Phthalate	**2.12**		0.29	0.019	1	06/01/10	06/10/10	KWG1005659	
Di-n-octyl Phthalate	**2.20**		0.29	0.024	1	06/01/10	06/10/10	KWG1005659	
Benzo(b)fluoranthene	**2.22**		0.29	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzo(k)fluoranthene	**1.95**		0.29	0.020	1	06/01/10	06/10/10	KWG1005659	
Benzo(a)pyrene	**2.15**		0.29	0.020	1	06/01/10	06/10/10	KWG1005659	
Indeno(1,2,3-cd)pyrene	**2.12**		0.29	0.039	1	06/01/10	06/10/10	KWG1005659	
Dibenz(a,h)anthracene	**1.95**		0.29	0.028	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Sediment

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Batch QCDMS
Lab Code: KWG1005659-2

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	**2.05**		0.29	0.021	1	06/01/10	06/10/10	KWG1005659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	60	20-83	06/10/10	Acceptable
Phenol-d6	66	23-90	06/10/10	Acceptable
Nitrobenzene-d5	66	29-100	06/10/10	Acceptable
2-Fluorobiphenyl	65	32-104	06/10/10	Acceptable
2,4,6-Tribromophenol	73	20-123	06/10/10	Acceptable
Terphenyl-d14	75	37-133	06/10/10	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS07\DATA\061010\0610F011.D
Lab ID: KWG1005659-2 -- K1005175-012DMS
RunType: DMS
Matrix: SEDIMENT

Date Acquired: 06/10/2010 21:38
Date Quantitated: 06/11/2010 08:26
Batch ID: KWG1005663
Analysis Method: 8270C
MethodJoinID: MJ250

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Batch QC:
K5244
K5282
K5284
K5353

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Benzidine	119.6	NA	30	NA
Continuing Calibration Recovery	Benzidine	-35.0	NA	30	—

Primary Review: 6-11-10

Secondary Review: KB 6/14/10

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	SEDIMENT
Prod Code:	8270C SVO	**Collect Date:**		**Receive Date:**	06/10/2010

Analysis Lot:	KWG1005663	**Prep Lot:**	KWG1005659	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	918270	**Prep Date:**	06/01/2010		

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:			
Tune Ref:	J:\MS07\DATA\061010\0610F001.D	**Method ID:**	MJ250
MB Ref:	J:\MS07\DATA\061010\0610F007.D	**Quant based on Method**	

Data File:	J:\MS07\DATA\061010\0610F011.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 21:38	**Quant Date:**	06/11/2010 08:26	**Vial:**	9
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG1005659-2 -- K1005175-012DMS			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	9.33	0.00	152	93653	40.00	OK
2	Naphthalene-d8	11.43	-0.01	136	364424	40.00	OK
3	Acenaphthene-d10	14.29	0.00	164	186774	40.00	OK
4	Phenanthrene-d10	16.69	-0.01	188	217711	40.00	OK
5	Chrysene-d12	21.11	-0.02	240	252445	40.00	OK
6	Perylene-d12	24.29	-0.02	264	199314	40.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	7.11	0.00	0.00	112	223303	89.68	60	20-83	OK	
1	Phenol-d6	8.84	-0.02	0.00	99	342883	98.74	66	23-90	OK	
1	Nitrobenzene-d5	10.26	-0.02	0.00	82	222336	65.54	66	29-100	OK	
3	2-Fluorobiphenyl	13.23	0.00	0.00	172	395661	64.62	65	32-104	OK	
4	2,4,6-Tribromophenol	15.58	-0.01	0.00	330	96634	109.51	73	20-123	OK	
5	Terphenyl-d14	19.31	-0.01	0.00	244	290779	75.23	75	37-133	OK	

Target Compounds

Final Conc. Units: mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	4.11	-0.02	0.00	42	125784m	56.21	1.62	J	
1	Pyridine	4.15	-0.01	0.00	79	277894m	87.64	2.52		
1	Aniline	8.80		0.00	93	201772	57.49	1.66		
1	Bis(2-chloroethyl) Ether	8.93	-0.02	0.00	93	169872	59.99	1.73		
1	Phenol	8.86	-0.02	0.00	94	228663	64.29	1.85		
1	2-Chlorophenol	8.99	-0.02	0.00	128	189953	61.95	1.78		
1	1,3-Dichlorobenzene	9.23		0.00	146	192861	59.30	1.71		
1	1,4-Dichlorobenzene	9.36	-0.01	0.00	146	198468	59.91	1.73		
1	1,2-Dichlorobenzene	9.60	-0.01	0.00	146	188627	60.16	1.73		
1	Benzyl Alcohol	9.62	-0.02	0.00	108	121796	64.67	1.86		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F011.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 21:38	**Quant Date:**	06/11/2010 08:26	**Vial:**	9
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG1005659-2 -- K1005175-012DMS			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:** mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Bis(2-chloroisopropyl) Ether	9.85		0.00	45	278742	59.33	1.71		
1	2-Methylphenol	9.86		0.00	107	145628	63.24	1.82		
1	Hexachloroethane	10.16	-0.01	0.00	117	92028	61.06	1.76		
1	N-Nitrosodi-n-propylamine	10.07	-0.02	0.00	70	150829	65.43	1.89		
1	4-Methylphenol	10.12	-0.01	0.00	107	231989	66.34	1.91		
1	Nitrobenzene	10.30	-0.01	0.00	77	206496	64.71	1.86		
2	Isophorone	10.71	-0.02	0.00	82	402493	61.23	1.76		
2	2-Nitrophenol	10.83		0.00	139	122977	67.89	1.96		
2	2,4-Dimethylphenol	10.97	-0.01	0.00	122	127199	52.52	1.51		
2	Bis(2-chloroethoxy)methane	11.10	-0.01	0.00	93	240278	65.06	1.87		
2	2,4-Dichlorophenol	11.25	-0.01	0.00	162	178690	65.03	1.87		
2	Benzoic Acid	11.20	-0.13	-0.01	122	40389	19.46	0.561	J	
2	1,2,4-Trichlorobenzene	11.36		0.00	180	195796	67.12	1.93		
2	Naphthalene	11.47		0.00	128	566813	64.83	1.87		
2	4-Chloroaniline	11.59	-0.02	0.00	127	232671	60.32	1.74		
2	Hexachlorobutadiene	11.69	-0.01	0.00	225	119070	64.34	1.85		
2	4-Chloro-3-methylphenol	12.44	-0.01	0.00	107	189522	66.07	1.90		
2	2-Methylnaphthalene	12.61		0.00	142	368552	66.24	1.91		
3	Hexachlorocyclopentadiene	12.87		0.00	237	60409	35.97	1.04		
3	2,4,6-Trichlorophenol	13.09	-0.02	0.00	196	136199	70.69	2.04		
3	2,4,5-Trichlorophenol	13.17	-0.01	0.00	196	141504	65.90	1.90		
3	2-Chloronaphthalene	13.40		0.00	162	382155	70.75	2.04		
3	2-Nitroaniline	13.60		0.00	65	107337	61.77	1.78	J	
3	Acenaphthylene	14.06	-0.01	0.00	152	569765	68.47	1.97		
3	Dimethyl Phthalate	13.91	-0.02	0.00	163	413664	65.15	1.88		
3	2,6-Dinitrotoluene	14.00	-0.02	0.00	165	96926	67.36	1.94		
3	Acenaphthene	14.34	-0.02	0.00	154	324037	68.23	1.97		
3	3-Nitroaniline	14.27	-0.02	0.00	138	93873	62.01	1.79	J	
3	2,4-Dinitrophenol	14.44	-0.02	0.00	184	39391	47.18	1.36	J	
3	Dibenzofuran	14.62	-0.02	0.00	168	488202	65.19	1.88		
3	4-Nitrophenol	14.63		0.00	109	53855	65.70	1.89		
3	2,4-Dinitrotoluene	14.65	-0.01	0.00	165	116964	64.14	1.85		
3	2,3,4,6-Tetrachlorophenol	14.85	-0.02	0.00	232	90233	57.64	1.66		
3	Fluorene	15.19		0.00	166	370475	66.02	1.90		
3	4-Chlorophenyl Phenyl Ether	15.21	-0.01	0.00	204	180353	62.78	1.81		
3	Diethyl Phthalate	15.06	-0.02	0.00	149	403634	65.76	1.89		
3	4-Nitroaniline	15.27	-0.01	0.00	138	90815	69.30	2.00		
3	2-Methyl-4,6-dinitrophenol	15.31	-0.02	0.00	198	61791	62.30	1.79	J	
3	N-Nitrosodiphenylamine	15.41	-0.01	0.00	169	248251	66.35	1.91		
3	1,2-Diphenylhydrazine	15.46	-0.01	0.00	77	382987	60.70	1.75		
4	4-Bromophenyl Phenyl Ether	16.00		0.00	248	96638	73.62	2.12		
4	Hexachlorobenzene	16.07	-0.01	0.00	284	113847	74.83	2.16		

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d: Compound manually deleted
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*: Result fails acceptance criteria
#: Acceptance criteria not applicable
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e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F011.D		**Instrument:** MS07
Acqu Date:	06/10/2010 21:38	**Quant Date:** 06/11/2010 08:26	**Vial:** 9
Run Type:	DMS		**Dilution:** 1.0
Lab ID:	KWG1005659-2 -- K1005175-012DMS		**Soln Conc. Units:** ug/ml

Target Compounds **Final Conc. Units:** mg/Kg Dry Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Pentachlorophenol	16.42		0.00	266	52006	60.83	1.75	J	
4	Phenanthrene	16.73	-0.01	0.00	178	428371	74.06	2.13		
4	Anthracene	16.81	-0.02	0.00	178	420685	69.18	1.99		
4	Carbazole	17.10	-0.01	0.00	167	380635	76.68	2.21		
4	Di-n-butyl Phthalate	17.72	-0.01	0.00	149	519024	78.38	2.26		
4	Fluoranthene	18.66		0.00	202	440909	84.07	2.42		
5	Benzidine	18.92		0.00	184	17394	8.21	0.237	J	
5	Pyrene	19.01	-0.01	0.00	202	463767	68.83	1.98		
5	Butyl Benzyl Phthalate	20.15		0.00	149	273336	71.19	2.05		
5	3,3'-Dichlorobenzidine	21.09	-0.02	0.00	252	143598	54.43	1.57	J	
5	Benz(a)anthracene	21.09	-0.02	0.00	228	448048	75.52	2.18		
5	Chrysene	21.17	-0.02	0.00	228	407876	71.01	2.05		
5	Bis(2-ethylhexyl) Phthalate	21.30		0.00	149	401221	73.42	2.12		
6	Di-n-octyl Phthalate	22.75	-0.02	0.00	149	714538	76.46	2.20		
6	Benzo(b)fluoranthene	23.44	-0.01	0.00	252	395646	77.06	2.22		
6	Benzo(k)fluoranthene	23.50	-0.03	0.00	252	359882	67.54	1.95		
6	Benzo(a)pyrene	24.17	-0.02	0.00	252	318095	74.59	2.15		
6	Indeno(1,2,3-cd)pyrene	26.75	-0.03	0.00	276	271463	73.50	2.12		
6	Dibenz(a,h)anthracene	26.83	-0.02	0.00	278	265906	67.59	1.95		
6	Benzo(g,h,i)perylene	27.32	-0.03	0.00	276	283555	71.13	2.05		
	Hexachlorocyclohexane				0	0		0.58	UJ	NR
	1,2,3-Trichlorobenzene				0	0		0.29	UJ	NR
	1,2,3,4-Tetrachlorobenzene				0	0		0.29	UJ	NR
	1,2,3,5-Tetrachlorobenzene				0	0		0.29	UJ	NR
	1,3,5-Trichlorobenzene				0	0		0.29	UJ	NR
	Acrylamide				0	0		43	U	NR
	Diisobutyl Phthalate				0	0		0.29	UJ	NR
	OPMO				0	0		1.7	U	NR
	1-Methylnaphthalene				0	0		0.29	UJ	NR
	HPMO				0	0		1.7	U	NR
	2,3,7,8-Tetrachlorodibenzo-p-di				0	0		0.58	UJ	NR

Prep Amount:	40.36 g	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1
Solids:	86.0 %		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

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Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F011.D Vial: 9
Acq On : 10 Jun 2010 9:38 pm Operator: M.BUTCHER
Sample : KQ5080-2 K1005175-12 DMS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:06 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	93653	40.00	ug/ml	-0.02
21) Naphthalene-d8	11.43	136	364424	40.00	ug/ml	-0.02
34) Acenaphthene-d10	14.29	164	186774	40.00	ug/ml	-0.02
58) Phenanthrene-d10	16.69	188	217711	40.00	ug/ml	-0.02
68) Chrysene-d12	21.11	240	252445	40.00	ug/ml	-0.02
77) Perylene-d12	24.29	264	199314	40.00	ug/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol	7.11	112	223303	89.68	ug/ml	-0.03
Spiked Amount 150.000	Range 21 - 100		Recovery = 59.79%			
7) Phenol-d6	8.84	99	342883	98.74	ug/ml	-0.03
Spiked Amount 150.000	Range 10 - 94		Recovery = 65.83%			
19) Nitrobenzene-d5	10.26	82	222336	65.54	ug/ml	-0.03
Spiked Amount 100.000	Range 35 - 114		Recovery = 65.54%			
38) 2-Fluorobiphenyl	13.23	172	395661	64.62	ug/ml	-0.02
Spiked Amount 100.000	Range 43 - 116		Recovery = 64.62%			
59) 2,4,6-Tribromophenol	15.58	330	96634	109.51	ug/ml	-0.02
Spiked Amount 150.000	Range 10 - 123		Recovery = 73.01%			
71) Terphenyl-d14	19.31	244	290779	75.23	ug/ml	-0.02
Spiked Amount 100.000	Range 33 - 141		Recovery = 75.23%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.11	42	125784m	56.21	ug/ml	
3) Pyridine	4.15	79	277894m	87.64	ug/ml	
5) Aniline	8.80	93	201772	57.49	ug/ml	62
6) Bis(2-chloroethyl) Ether	8.93	93	169872	59.99	ug/ml	96
8) Phenol	8.86	94	228663	64.29	ug/ml	94
9) 2-Chlorophenol	8.99	128	189953	61.95	ug/ml	98
10) 1,3-Dichlorobenzene	9.23	146	192861	59.30	ug/ml	97
11) 1,4-Dichlorobenzene	9.36	146	198468	59.91	ug/ml	99
12) 1,2-Dichlorobenzene	9.60	146	188627	60.16	ug/ml	96
13) Benzyl Alcohol	9.62	108	121796	64.67	ug/ml	96
14) Bis(2-chloroisopropyl) Eth	9.85	45	278742	59.33	ug/ml	84
15) 2-Methylphenol	9.86	107	145628	63.24	ug/ml	96
16) Hexachloroethane	10.16	117	92028	61.06	ug/ml	90
17) N-Nitrosodi-n-propylamine	10.07	70	150829	65.43	ug/ml	94
18) 4-Methylphenol	10.12	107	231989	66.34	ug/ml	98
20) Nitrobenzene	10.30	77	206496	64.71	ug/ml	94
22) Isophorone	10.71	82	402493	61.23	ug/ml	100
23) 2-Nitrophenol	10.83	139	122977	67.89	ug/ml	100
24) 2,4-Dimethylphenol	10.97	122	127199	52.52	ug/ml	98
25) Bis(2-chloroethoxy)methane	11.10	93	240278	65.06	ug/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F011.D Vial: 9
Acq On : 10 Jun 2010 9:38 pm Operator: M.BUTCHER
Sample : KQ5080-2 K1005175-12 DMS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:06 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.25	162	178690	65.03	ug/ml	96
27)	Benzoic Acid	11.20	122	40389	19.46	ug/ml	98
28)	1,2,4-Trichlorobenzene	11.36	180	195796	67.12	ug/ml	99
29)	Naphthalene	11.47	128	566813	64.83	ug/ml	99
30)	4-Chloroaniline	11.59	127	232671	60.32	ug/ml	96
31)	Hexachlorobutadiene	11.69	225	119070	64.34	ug/ml	99
32)	4-Chloro-3-methylphenol	12.44	107	189522	66.07	ug/ml	85
33)	2-Methylnaphthalene	12.61	142	368552	66.24	ug/ml	99
35)	Hexachlorocyclopentadiene	12.87	237	60409	35.97	ug/ml	94
36)	2,4,6-Trichlorophenol	13.09	196	136199	70.69	ug/ml	97
37)	2,4,5-Trichlorophenol	13.17	196	141504	65.90	ug/ml	100
39)	2-Chloronaphthalene	13.40	162	382155	70.75	ug/ml	99
40)	2-Nitroaniline	13.60	65	107337	61.77	ug/ml	86
41)	Acenaphthylene	14.06	152	569765	68.47	ug/ml	99
42)	Dimethyl Phthalate	13.91	163	413664	65.15	ug/ml	99
43)	2,6-Dinitrotoluene	14.00	165	96926	67.36	ug/ml	91
44)	Acenaphthene	14.34	154	324037	68.23	ug/ml	98
45)	3-Nitroaniline	14.27	138	93873	62.01	ug/ml	93
46)	2,4-Dinitrophenol	14.44	184	39391	47.18	ug/ml	97
47)	Dibenzofuran	14.62	168	488202	65.19	ug/ml	98
48)	4-Nitrophenol	14.63	109	53855	65.70	ug/ml	95
49)	2,4-Dinitrotoluene	14.65	165	116964	64.14	ug/ml	70
50)	2,3,4,6-Tetrachlorophenol	14.85	232	90233	57.64	ug/ml#	74
51)	Fluorene	15.19	166	370475	66.02	ug/ml	99
52)	4-Chlorophenyl Phenyl Ethe	15.21	204	180353	62.78	ug/ml	99
53)	Diethyl Phthalate	15.06	149	403634	65.76	ug/ml	97
54)	4-Nitroaniline	15.27	138	90815	69.30	ug/ml	99
55)	2-Methyl-4,6-dinitrophenol	15.31	198	61791	62.30	ug/ml#	35
56)	N-Nitrosodiphenylamine	15.41	169	248251	66.35	ug/ml	99
57)	1,2-Diphenylhydrazine	15.46	77	382987	60.70	ug/ml	92
60)	4-Bromophenyl Phenyl Ether	16.00	248	96638	73.62	ug/ml	96
61)	Hexachlorobenzene	16.07	284	113847	74.83	ug/ml	100
62)	Pentachlorophenol	16.42	266	52006	60.83	ug/ml	98
63)	Phenanthrene	16.73	178	428371	74.06	ug/ml	100
64)	Anthracene	16.81	178	420685	69.18	ug/ml	100
65)	Carbazole	17.10	167	380635	76.68	ug/ml	99
66)	Di-n-butyl Phthalate	17.72	149	519024	78.38	ug/ml	100
67)	Fluoranthene	18.66	202	440909	84.07	ug/ml	96
69)	Benzidine	18.92	184	17394	8.21	ug/ml	96
70)	Pyrene	19.01	202	463767	68.83	ug/ml	99
72)	Butyl Benzyl Phthalate	20.15	149	273336	71.19	ug/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F011.D Vial: 9
Acq On : 10 Jun 2010 9:38 pm Operator: M.BUTCHER
Sample : KQ5080-2 K1005175-12 DMS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:06 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

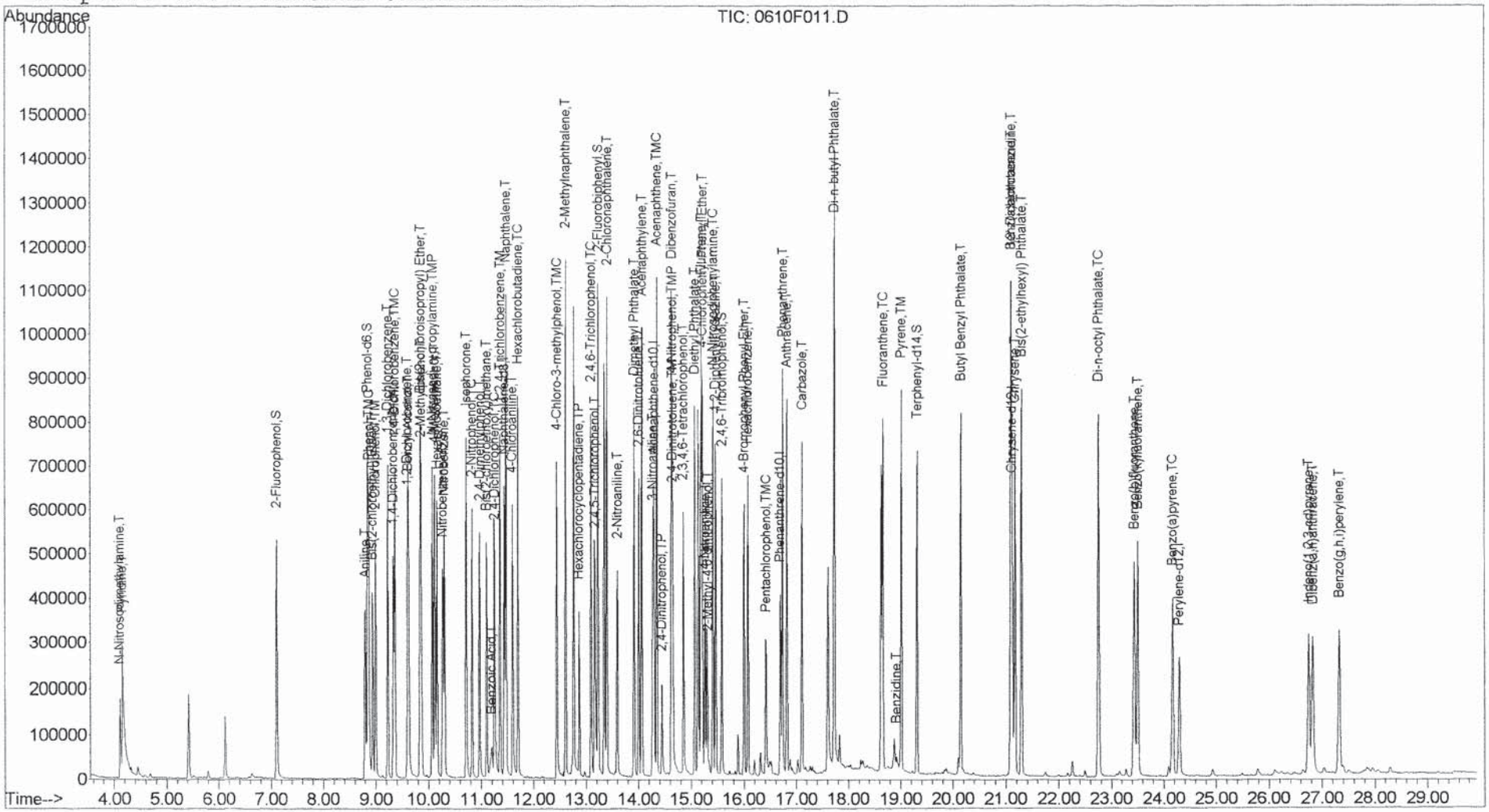
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.09	252	143598	54.43	ug/ml	98
74)	Benz(a)anthracene	21.09	228	448048	75.52	ug/ml	99
75)	Chrysene	21.17	228	407876	71.01	ug/ml	99
76)	Bis(2-ethylhexyl) Phthalat	21.30	149	401221	73.42	ug/ml	99
78)	Di-n-octyl Phthalate	22.75	149	714538	76.46	ug/ml	100
79)	Benzo(b)fluoranthene	23.44	252	395646	77.06	ug/ml	96
80)	Benzo(k)fluoranthene	23.50	252	359882	67.54	ug/ml	99
81)	Benzo(a)pyrene	24.17	252	318095	74.59	ug/ml	99
82)	Indeno(1,2,3-cd)pyrene	26.75	276	271463	73.50	ug/ml	99
83)	Dibenz(a,h)anthracene	26.83	278	265906	67.59	ug/ml	99
84)	Benzo(g,h,i)perylene	27.32	276	283555	71.13	ug/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F011.D Vial: 9
Acq On : 10 Jun 2010 9:38 pm Operator: M.BUTCHER
Sample : KQ5080-2 K1005175-12 DMS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:26 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration

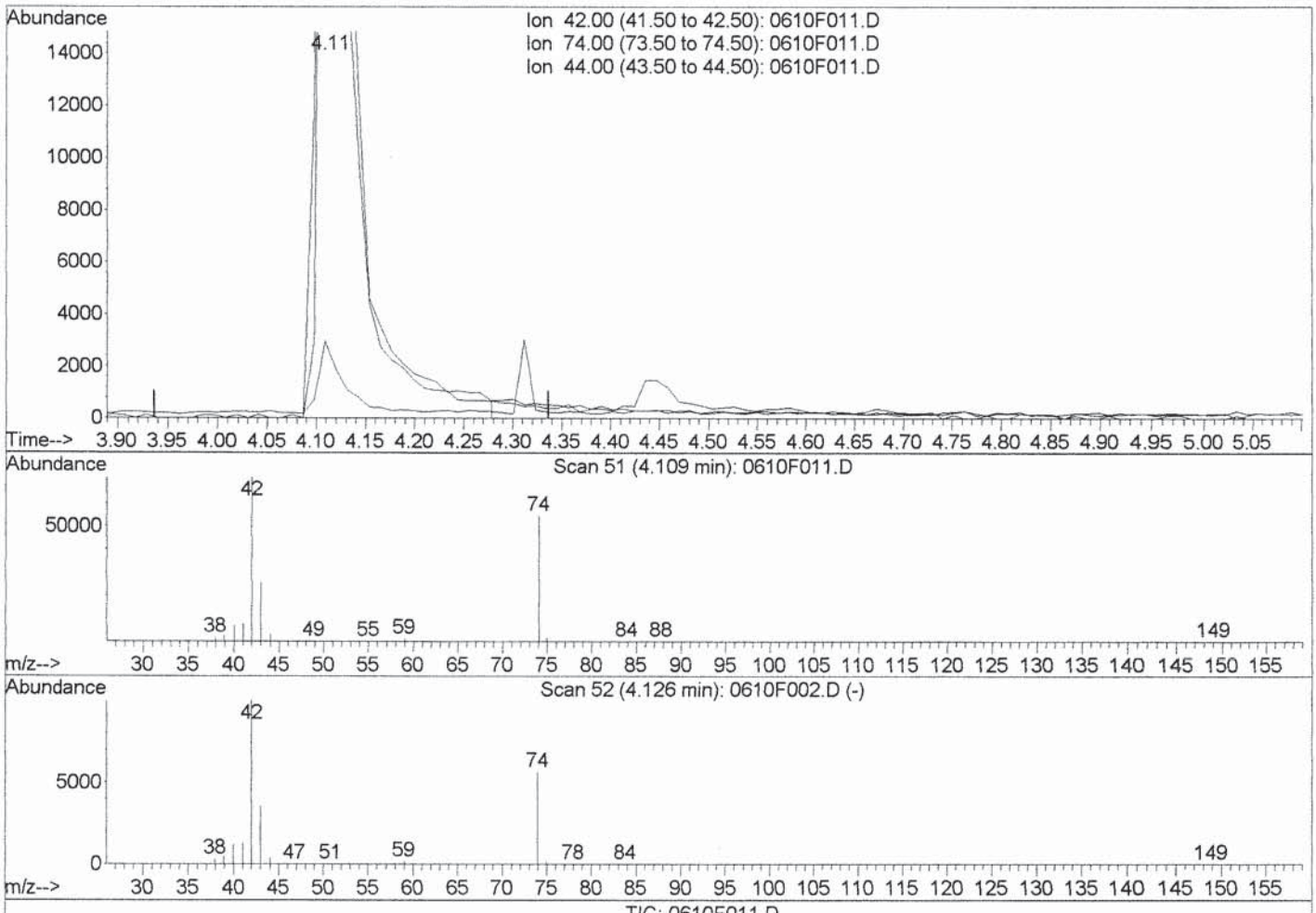


1280

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F011.D Vial: 9
Acq On : 10 Jun 2010 9:38 pm Operator: M.BUTCHER
Sample : KQ5080-2 K1005175-12 DMS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:09 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F011.D

(2) N-Nitrosodimethylamine (T)

4.11min 54.44ug/ml

response 121815

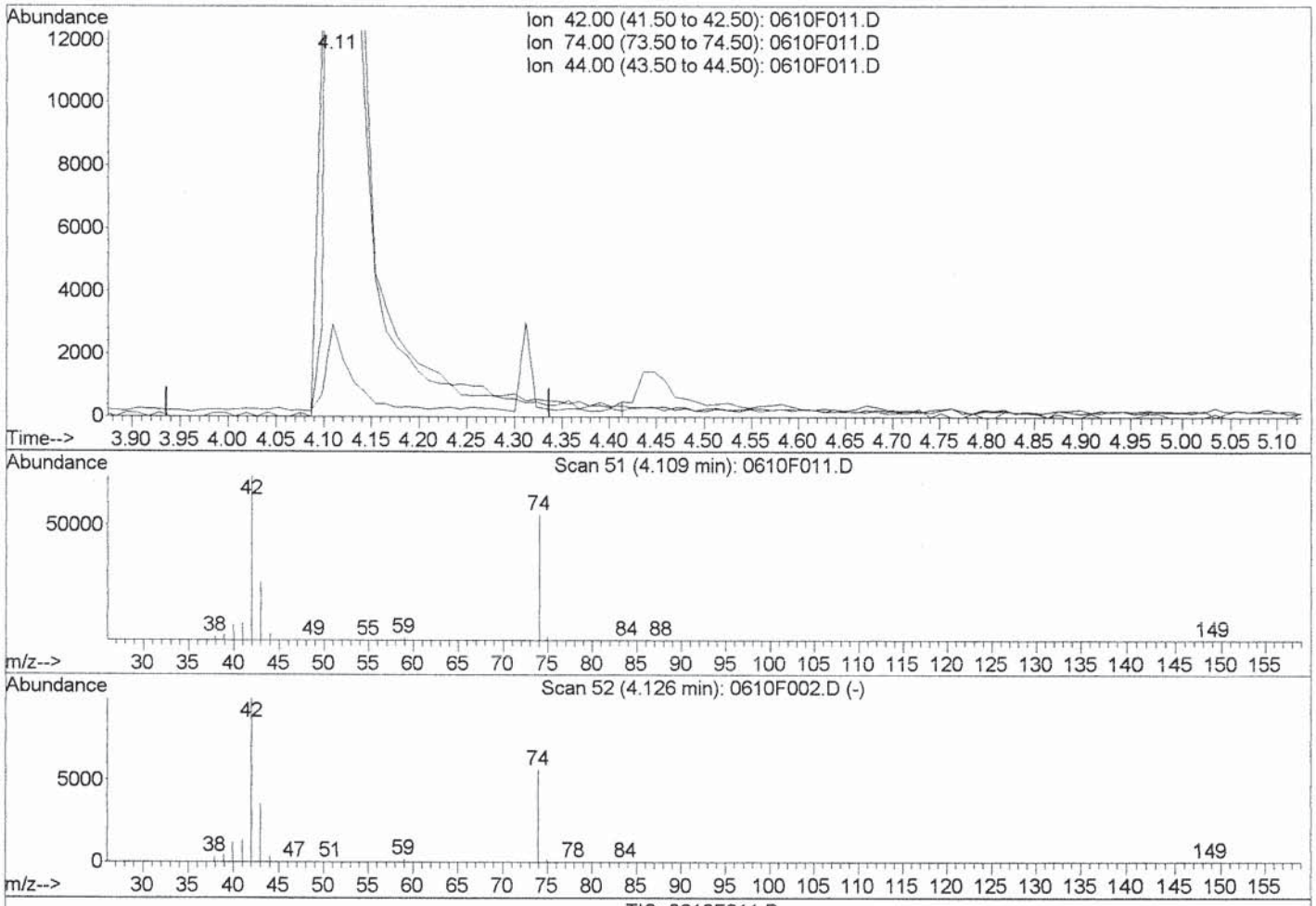
Ion	Exp%	Act%
42.00	100	100
74.00	79.30	76.31
44.00	4.40	3.85
0.00	0.00	0.00

0610F011.D 0602BNC7.M Fri Jun 11 08:26:07 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F011.D Vial: 9
Acq On : 10 Jun 2010 9:38 pm Operator: M.BUTCHER
Sample : KQ5080-2 K1005175-12 DMS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:26 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F011.D

(2) N-Nitrosodimethylamine (T)

4.11min 56.21ug/ml m

response 125784

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	76.41
44.00	4.40	4.15
0.00	0.00	0.00

SC 6/11/10

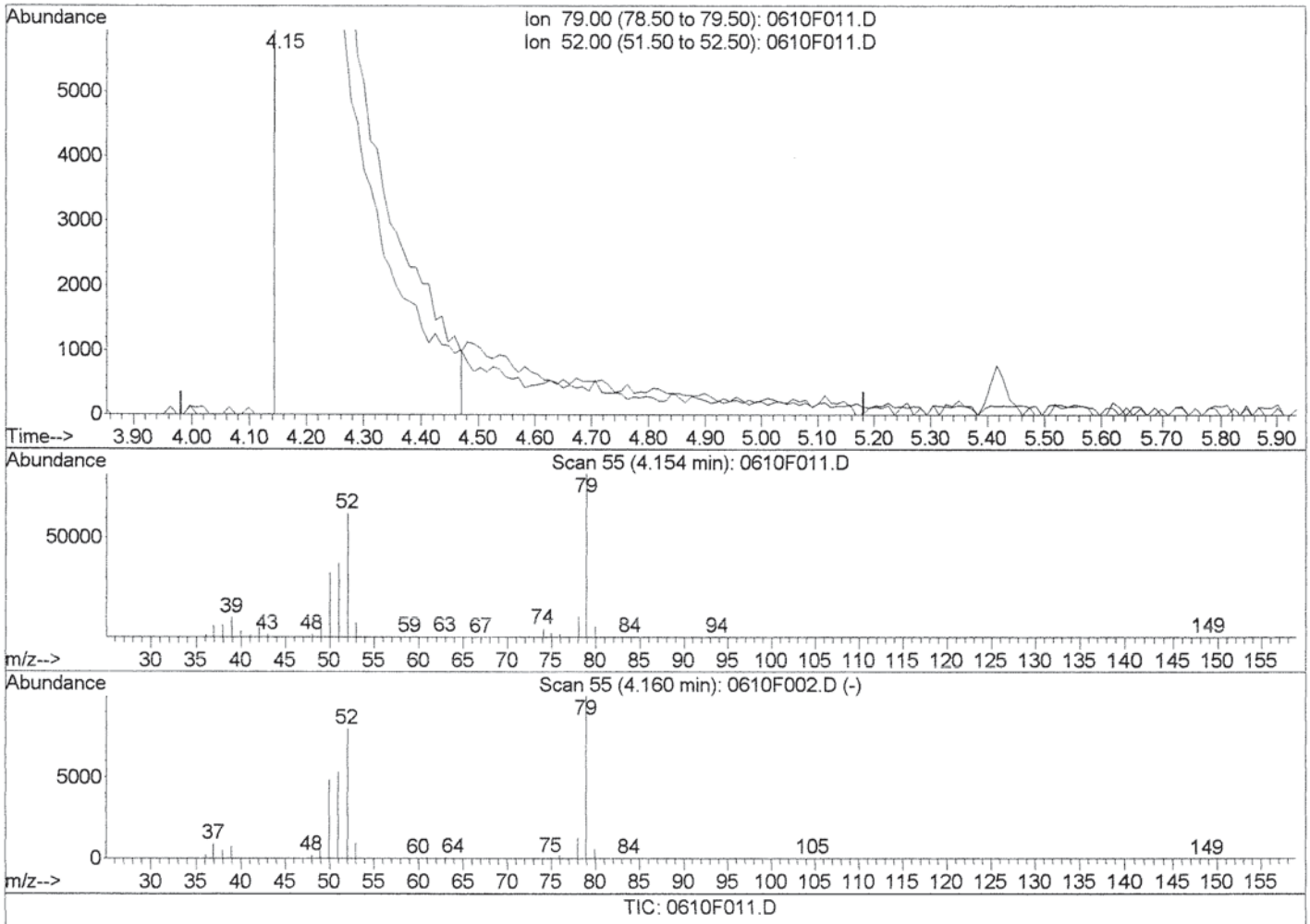
LB 6/14/10

0610F011.D 0602BNC7.M Fri Jun 11 08:26:15 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F011.D Vial: 9
Acq On : 10 Jun 2010 9:38 pm Operator: M.BUTCHER
Sample : KQ5080-2 K1005175-12 DMS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:26 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F011.D

(3) Pyridine (T)

4.15min 81.98ug/ml

response 259943

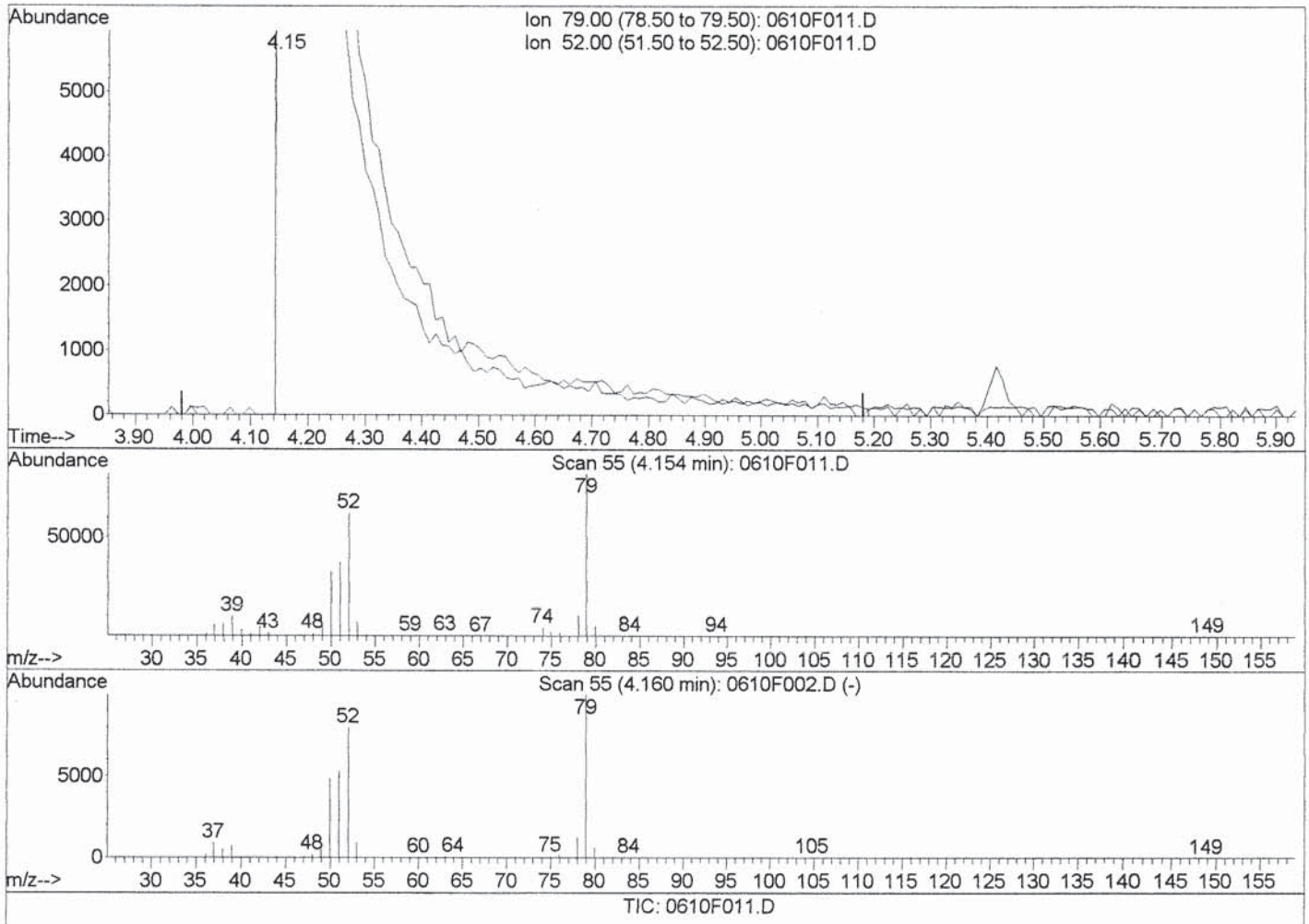
Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.26
0.00	0.00	0.00
0.00	0.00	0.00

0610F011.D 0602BNC7.M Fri Jun 11 08:26:19 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F011.D Vial: 9
Acq On : 10 Jun 2010 9:38 pm Operator: M.BUTCHER
Sample : KQ5080-2 K1005175-12 DMS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:26 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F011.D

(3) Pyridine (T)

4.15min 87.64ug/ml m

response 277894

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.42
0.00	0.00	0.00
0.00	0.00	0.00

IC 6-11-10

0610F011.D 0602BNC7.M Fri Jun 11 08:26:23 2010

LB 6/14/10

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: KWG1005659-3

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	**2.14**		2.0	0.026	1	06/01/10	06/10/10	KWG1005659	
Aniline	**2.43**		1.0	0.022	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethyl) Ether	**2.35**		0.34	0.012	1	06/01/10	06/10/10	KWG1005659	
Phenol	**2.25**		0.34	0.020	1	06/01/10	06/10/10	KWG1005659	
2-Chlorophenol	**2.30**		0.34	0.0099	1	06/01/10	06/10/10	KWG1005659	
1,3-Dichlorobenzene	**2.35**		0.34	0.019	1	06/01/10	06/10/10	KWG1005659	
1,4-Dichlorobenzene	**2.40**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
1,2-Dichlorobenzene	**2.42**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzyl Alcohol	**2.52**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroisopropyl) Ether	**2.08**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
2-Methylphenol	**2.33**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
Hexachloroethane	**2.22**		0.34	0.022	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodi-n-propylamine	**2.47**		0.34	0.020	1	06/01/10	06/10/10	KWG1005659	
4-Methylphenol†	**2.56**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
Nitrobenzene	**2.47**		0.34	0.027	1	06/01/10	06/10/10	KWG1005659	
Isophorone	**2.63**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
2-Nitrophenol	**2.75**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
2,4-Dimethylphenol	**2.34**		0.34	0.016	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethoxy)methane	**2.59**		0.34	0.011	1	06/01/10	06/10/10	KWG1005659	
2,4-Dichlorophenol	**2.66**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
Benzoic Acid	**1.95**	J	2.0	0.14	1	06/01/10	06/10/10	KWG1005659	
1,2,4-Trichlorobenzene	**2.68**		0.34	0.011	1	06/01/10	06/10/10	KWG1005659	
Naphthalene	**2.68**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloroaniline	**2.65**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobutadiene	**2.64**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloro-3-methylphenol	**3.03**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
2-Methylnaphthalene	**2.76**		0.34	0.011	1	06/01/10	06/10/10	KWG1005659	
Hexachlorocyclopentadiene	**1.14**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
2,4,6-Trichlorophenol	**2.74**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
2,4,5-Trichlorophenol	**2.87**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
2-Chloronaphthalene	**2.71**		0.34	0.010	1	06/01/10	06/10/10	KWG1005659	
2-Nitroaniline	**2.66**		2.0	0.017	1	06/01/10	06/10/10	KWG1005659	
Acenaphthylene	**3.02**		0.34	0.016	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: KWG1005659-3

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	**3.21**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
2,6-Dinitrotoluene	**2.96**		0.34	0.016	1	06/01/10	06/10/10	KWG1005659	
Acenaphthene	**3.02**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
3-Nitroaniline	**2.80**		2.0	0.18	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrophenol	**2.32**		2.0	0.12	1	06/01/10	06/10/10	KWG1005659	
Dibenzofuran	**2.97**		0.34	0.012	1	06/01/10	06/10/10	KWG1005659	
4-Nitrophenol	**2.93**		2.0	0.15	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrotoluene	**2.99**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
Fluorene	**3.06**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
4-Chlorophenyl Phenyl Ether	**2.84**		0.34	0.016	1	06/01/10	06/10/10	KWG1005659	
Diethyl Phthalate	**3.26**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Nitroaniline	**3.06**		2.0	0.18	1	06/01/10	06/10/10	KWG1005659	
2-Methyl-4,6-dinitrophenol	**2.87**		2.0	0.15	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodiphenylamine	**3.05**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
4-Bromophenyl Phenyl Ether	**3.36**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobenzene	**3.38**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
Pentachlorophenol	**2.80**		2.0	0.13	1	06/01/10	06/10/10	KWG1005659	
Phenanthrene	**3.16**		0.34	0.010	1	06/01/10	06/10/10	KWG1005659	
Anthracene	**3.15**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
Di-n-butyl Phthalate	**3.27**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
Fluoranthene	**3.27**		0.34	0.012	1	06/01/10	06/10/10	KWG1005659	
Pyrene	**2.93**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
Butyl Benzyl Phthalate	**2.92**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
3,3'-Dichlorobenzidine	**3.08**		2.0	0.027	1	06/01/10	06/10/10	KWG1005659	
Benz(a)anthracene	**3.39**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
Chrysene	**3.29**		0.34	0.012	1	06/01/10	06/10/10	KWG1005659	
Bis(2-ethylhexyl) Phthalate	**3.14**		0.34	0.019	1	06/01/10	06/10/10	KWG1005659	
Di-n-octyl Phthalate	**3.18**		0.34	0.024	1	06/01/10	06/10/10	KWG1005659	
Benzo(b)fluoranthene	**3.35**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzo(k)fluoranthene	**3.37**		0.34	0.020	1	06/01/10	06/10/10	KWG1005659	
Benzo(a)pyrene	**3.53**		0.34	0.020	1	06/01/10	06/10/10	KWG1005659	
Indeno(1,2,3-cd)pyrene	**3.15**		0.34	0.039	1	06/01/10	06/10/10	KWG1005659	
Dibenz(a,h)anthracene	**3.22**		0.34	0.028	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: KWG1005659-3

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	**3.22**		0.34	0.021	1	06/01/10	06/10/10	KWG1005659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	59	20-83	06/10/10	Acceptable
Phenol-d6	66	23-90	06/10/10	Acceptable
Nitrobenzene-d5	74	29-100	06/10/10	Acceptable
2-Fluorobiphenyl	75	32-104	06/10/10	Acceptable
2,4,6-Tribromophenol	95	20-123	06/10/10	Acceptable
Terphenyl-d14	92	37-133	06/10/10	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS07\DATA\061010\0610F008.D
Lab ID: KWG1005659-3
RunType: LCS
Matrix: MISC. SOLID

Date Acquired: 06/10/2010 19:38
Date Quantitated: 06/11/2010 08:23
Batch ID: KWG1005663
Analysis Method: 8270C
MethodJoinID: MJ250

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

5175
5244
5282
5284
5353

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Benzidine	119.6	NA	30	NFI
Continuing Calibration Recovery	Benzidine	-35.0	NA	30	"

Primary Review: M 6-11-10

Secondary Review: LB 6/14/10

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC. SOLID
Prod Code:	8270C SVO	**Collect Date:**		**Receive Date:**	06/10/2010

Analysis Lot:	KWG1005663	**Prep Lot:**	KWG1005659	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	918271	**Prep Date:**	06/01/2010		

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:			
Tune Ref:	J:\MS07\DATA\061010\0610F001.D	**Method ID:**	MJ250
MB Ref:	J:\MS07\DATA\061010\0610F007.D	**Quant based on Method**	

Data File:	J:\MS07\DATA\061010\0610F008.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 19:38	**Quant Date:**	06/11/2010 08:23	**Vial:**	6
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG1005659-3			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	9.33	0.00	152	82022	40.00	OK
2	Naphthalene-d8	11.43	-0.01	136	303037	40.00	OK
3	Acenaphthene-d10	14.30	0.01	164	175397	40.00	OK
4	Phenanthrene-d10	16.70	0.00	188	226308	40.00	OK
5	Chrysene-d12	21.12	-0.01	240	231145	40.00	OK
6	Perylene-d12	24.30	-0.01	264	195621	40.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	7.11	0.00	0.00	112	191825	87.97	59	20-83	OK	
1	Phenol-d6	8.84	-0.02	0.00	99	302737	99.54	66	23-90	OK	
1	Nitrobenzene-d5	10.27	-0.01	0.00	82	220121	74.09	74	29-100	OK	
3	2-Fluorobiphenyl	13.22	-0.01	0.00	172	433920	75.46	75	32-104	OK	
4	2,4,6-Tribromophenol	15.58	-0.01	0.00	330	131013	142.83	95	20-123	OK	
5	Terphenyl-d14	19.31	-0.01	0.00	244	326906	92.37	92	37-133	OK	

Target Compounds

Final Conc. Units: mg/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	4.11	-0.02	0.00	42	125679m	64.13	2.14		
1	Pyridine	4.15	-0.01	0.00	79	246331m	88.70	2.96		
1	Aniline	8.80		0.00	93	223757	72.79	2.43		
1	Bis(2-chloroethyl) Ether	8.94	-0.01	0.00	93	174483	70.35	2.35		
1	Phenol	8.86	-0.02	0.00	94	210624	67.62	2.25		
1	2-Chlorophenol	9.00	-0.01	0.00	128	185250	68.98	2.30		
1	1,3-Dichlorobenzene	9.22	-0.01	0.00	146	200777	70.49	2.35		
1	1,4-Dichlorobenzene	9.36	-0.01	0.00	146	208498	71.87	2.40		
1	1,2-Dichlorobenzene	9.61		0.00	146	199172	72.53	2.42		
1	Benzyl Alcohol	9.62	-0.02	0.00	108	124632	75.56	2.52		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F008.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 19:38	**Quant Date:**	06/11/2010 08:23	**Vial:**	6
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG1005659-3			**Soln Conc. Units:**	ug/ml

Target Compounds

Final Conc. Units: mg/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Bis(2-chloroisopropyl) Ether	9.84	-0.01	0.00	45	256884	62.43	2.08		
1	2-Methylphenol	9.86		0.00	107	141140	69.98	2.33		
1	Hexachloroethane	10.16	-0.01	0.00	117	87779	66.50	2.22		
1	N-Nitrosodi-n-propylamine	10.07	-0.02	0.00	70	149473	74.04	2.47		
1	4-Methylphenol	10.11	-0.02	0.00	107	235051	76.74	2.56		
1	Nitrobenzene	10.31		0.00	77	206788	73.99	2.47		
2	Isophorone	10.71	-0.02	0.00	82	431316	78.90	2.63		
2	2-Nitrophenol	10.82	-0.01	0.00	139	124089	82.38	2.75		
2	2,4-Dimethylphenol	10.97	-0.01	0.00	122	141299	70.16	2.34		
2	Bis(2-chloroethoxy)methane	11.11		0.00	93	238990	77.82	2.59		
2	2,4-Dichlorophenol	11.25	-0.01	0.00	162	182572	79.90	2.66		
2	Benzoic Acid	11.25	-0.08	-0.01	122	101181	58.62	1.95	J	
2	1,2,4-Trichlorobenzene	11.35	-0.01	0.00	180	195167	80.45	2.68		
2	Naphthalene	11.47		0.00	128	584273	80.36	2.68		
2	4-Chloroaniline	11.60	-0.01	0.00	127	254903	79.47	2.65		
2	Hexachlorobutadiene	11.69	-0.01	0.00	225	122032	79.29	2.64		
2	4-Chloro-3-methylphenol	12.45		0.00	107	216801	90.89	3.03		
2	2-Methylnaphthalene	12.60	-0.01	0.00	142	383044	82.80	2.76		
3	Hexachlorocyclopentadiene	12.88	0.01	0.00	237	53027	34.14	1.14		
3	2,4,6-Trichlorophenol	13.10	-0.01	0.00	196	148676	82.17	2.74		
3	2,4,5-Trichlorophenol	13.17	-0.01	0.00	196	173428	86.01	2.87		
3	2-Chloronaphthalene	13.39	-0.01	0.00	162	412439	81.31	2.71		
3	2-Nitroaniline	13.60		0.00	65	130129	79.74	2.66		
3	Acenaphthylene	14.06	-0.01	0.00	152	708977	90.72	3.02		
3	Dimethyl Phthalate	13.92	-0.01	0.00	163	574429	96.34	3.21		
3	2,6-Dinitrotoluene	14.01	-0.01	0.00	165	120135	88.91	2.96		
3	Acenaphthene	14.35	-0.01	0.00	154	404330	90.66	3.02		
3	3-Nitroaniline	14.27	-0.02	0.00	138	119281	83.90	2.80		
3	2,4-Dinitrophenol	14.45	-0.01	0.00	184	54552	69.58	2.32		
3	Dibenzofuran	14.63	-0.01	0.00	168	626091	89.03	2.97		
3	4-Nitrophenol	14.62	-0.01	0.00	109	67653	87.88	2.93		
3	2,4-Dinitrotoluene	14.66		0.00	165	153422	89.59	2.99		
3	2,3,4,6-Tetrachlorophenol	14.86	-0.01	0.00	232	127599	86.80	2.89		
3	Fluorene	15.19		0.00	166	483737	91.80	3.06		
3	4-Chlorophenyl Phenyl Ether	15.21	-0.01	0.00	204	230129	85.30	2.84		
3	Diethyl Phthalate	15.07	-0.01	0.00	149	563985	97.84	3.26		
3	4-Nitroaniline	15.28		0.00	138	113013	91.84	3.06		
3	2-Methyl-4,6-dinitrophenol	15.31	-0.02	0.00	198	80180	86.08	2.87		
3	N-Nitrosodiphenylamine	15.41	-0.01	0.00	169	321253	91.43	3.05		
3	1,2-Diphenylhydrazine	15.47		0.00	77	507693	85.69	2.86		
4	4-Bromophenyl Phenyl Ether	16.00		0.00	248	137690	100.92	3.36		
4	Hexachlorobenzene	16.08		0.00	284	160227	101.32	3.38		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F008.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 19:38	**Quant Date:**	06/11/2010 08:23	**Vial:**	6
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG1005659-3			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:** mg/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Pentachlorophenol	16.41	-0.01	0.00	266	74713	84.07	2.80		
4	Phenanthrene	16.73	-0.01	0.00	178	569637	94.74	3.16		
4	Anthracene	16.82	-0.01	0.00	178	597827	94.57	3.15		
4	Carbazole	17.10	-0.01	0.00	167	504759	97.82	3.26		
4	Di-n-butyl Phthalate	17.72	-0.01	0.00	149	675209	98.09	3.27		
4	Fluoranthene	18.66		0.00	202	534529	98.05	3.27		
5	Benzidine	18.92		0.00	184	99488	51.26	1.71	J	
5	Pyrene	19.02		0.00	202	542145	87.87	2.93		
5	Butyl Benzyl Phthalate	20.14	-0.01	0.00	149	308479	87.74	2.92		
5	3,3'-Dichlorobenzidine	21.10	-0.01	0.00	252	223115	92.37	3.08		
5	Benz(a)anthracene	21.10	-0.01	0.00	228	552848	101.77	3.39		
5	Chrysene	21.18	-0.01	0.00	228	518543	98.60	3.29		
5	Bis(2-ethylhexyl) Phthalate	21.29	-0.01	0.00	149	471635	94.26	3.14		
6	Di-n-octyl Phthalate	22.76	-0.01	0.00	149	890345	95.27	3.18		
6	Benzo(b)fluoranthene	23.45		0.00	252	506804	100.57	3.35		
6	Benzo(k)fluoranthene	23.51	-0.02	0.00	252	529453	101.24	3.37		
6	Benzo(a)pyrene	24.18	-0.01	0.00	252	442652	105.76	3.53		
6	Indeno(1,2,3-cd)pyrene	26.76	-0.02	0.00	276	342992	94.63	3.15		
6	Dibenz(a,h)anthracene	26.84	-0.01	0.00	278	372669	96.52	3.22		
6	Benzo(g,h,i)perylene	27.33	-0.02	0.00	276	378148	96.65	3.22		
	Hexachlorocyclohexane				0	0		0.67	UJ	NR
	1,3,5-Trichlorobenzene				0	0		0.33	UJ	NR
	1,2,3,5-Tetrachlorobenzene				0	0		0.33	UJ	NR
	1,2,3-Trichlorobenzene				0	0		0.33	UJ	NR
	1,2,3,4-Tetrachlorobenzene				0	0		0.33	UJ	NR
	Acrylamide				0	0		50	U	NR
	Diisobutyl Phthalate				0	0		0.33	UJ	NR
	HPMO				0	0		2.0	UJ	NR
	OPMO				0	0		2.0	UJ	NR
	1-Methylnaphthalene				0	0		0.33	UJ	NR
	2,3,7,8-Tetrachlorodibenzo-p-di				0	0		0.67	UJ	NR

Prep Amount:	30.00 g	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1
Solids:	%		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F008.D Vial: 6
Acq On : 10 Jun 2010 7:38 pm Operator: M.BUTCHER
Sample : KQ5080-3 LCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:04 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	82022	40.00	ug/ml	-0.02
21) Naphthalene-d8	11.43	136	303037	40.00	ug/ml	-0.02
34) Acenaphthene-d10	14.30	164	175397	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.70	188	226308	40.00	ug/ml	0.00
68) Chrysene-d12	21.12	240	231145	40.00	ug/ml	0.00
77) Perylene-d12	24.30	264	195621	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.11	112	191825	87.97	ug/ml	-0.03
Spiked Amount 150.000	Range 21 - 100		Recovery = 58.65%			
7) Phenol-d6	8.84	99	302737	99.54	ug/ml	-0.03
Spiked Amount 150.000	Range 10 - 94		Recovery = 66.36%			
19) Nitrobenzene-d5	10.27	82	220121	74.09	ug/ml	-0.02
Spiked Amount 100.000	Range 35 - 114		Recovery = 74.09%			
38) 2-Fluorobiphenyl	13.22	172	433920	75.46	ug/ml	-0.02
Spiked Amount 100.000	Range 43 - 116		Recovery = 75.46%			
59) 2,4,6-Tribromophenol	15.58	330	131013	142.83	ug/ml	-0.02
Spiked Amount 150.000	Range 10 - 123		Recovery = 95.22%			
71) Terphenyl-d14	19.31	244	326906	92.37	ug/ml	-0.02
Spiked Amount 100.000	Range 33 - 141		Recovery = 92.37%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.11	42	125679m	64.13	ug/ml	
3) Pyridine	4.15	79	246331m	88.70	ug/ml	
5) Aniline	8.80	93	223757	72.79	ug/ml	76
6) Bis(2-chloroethyl) Ether	8.94	93	174483	70.35	ug/ml	95
8) Phenol	8.86	94	210624	67.62	ug/ml	98
9) 2-Chlorophenol	9.00	128	185250	68.98	ug/ml	89
10) 1,3-Dichlorobenzene	9.22	146	200777	70.49	ug/ml	100
11) 1,4-Dichlorobenzene	9.36	146	208498	71.87	ug/ml	99
12) 1,2-Dichlorobenzene	9.61	146	199172	72.53	ug/ml	100
13) Benzyl Alcohol	9.62	108	124632	75.56	ug/ml	97
14) Bis(2-chloroisopropyl) Eth	9.84	45	256884	62.43	ug/ml	81
15) 2-Methylphenol	9.86	107	141140	69.98	ug/ml	99
16) Hexachloroethane	10.16	117	87779	66.50	ug/ml	97
17) N-Nitrosodi-n-propylamine	10.07	70	149473	74.04	ug/ml	89
18) 4-Methylphenol	10.11	107	235051	76.74	ug/ml	99
20) Nitrobenzene	10.31	77	206788	73.99	ug/ml	98
22) Isophorone	10.71	82	431316	78.90	ug/ml	98
23) 2-Nitrophenol	10.82	139	124089	82.38	ug/ml	92
24) 2,4-Dimethylphenol	10.97	122	141299	70.16	ug/ml	99
25) Bis(2-chloroethoxy)methane	11.11	93	238990	77.82	ug/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F008.D Vial: 6
Acq On : 10 Jun 2010 7:38 pm Operator: M.BUTCHER
Sample : KQ5080-3 LCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:04 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.25	162	182572	79.90	ug/ml	96
27)	Benzoic Acid	11.25	122	101181	58.62	ug/ml	97
28)	1,2,4-Trichlorobenzene	11.35	180	195167	80.45	ug/ml	99
29)	Naphthalene	11.47	128	584273	80.36	ug/ml	100
30)	4-Chloroaniline	11.60	127	254903	79.47	ug/ml	99
31)	Hexachlorobutadiene	11.69	225	122032	79.29	ug/ml	99
32)	4-Chloro-3-methylphenol	12.45	107	216801	90.89	ug/ml#	52
33)	2-Methylnaphthalene	12.60	142	383044	82.80	ug/ml	98
35)	Hexachlorocyclopentadiene	12.88	237	53027	34.14	ug/ml	99
36)	2,4,6-Trichlorophenol	13.10	196	148676	82.17	ug/ml	100
37)	2,4,5-Trichlorophenol	13.17	196	173428	86.01	ug/ml	99
39)	2-Chloronaphthalene	13.39	162	412439	81.31	ug/ml	99
40)	2-Nitroaniline	13.60	65	130129	79.74	ug/ml	94
41)	Acenaphthylene	14.06	152	708977	90.72	ug/ml	99
42)	Dimethyl Phthalate	13.92	163	574429	96.34	ug/ml	99
43)	2,6-Dinitrotoluene	14.01	165	120135	88.91	ug/ml	77
44)	Acenaphthene	14.35	154	404330	90.66	ug/ml	98
45)	3-Nitroaniline	14.27	138	119281	83.90	ug/ml	99
46)	2,4-Dinitrophenol	14.45	184	54552	69.58	ug/ml	93
47)	Dibenzofuran	14.63	168	626091	89.03	ug/ml	96
48)	4-Nitrophenol	14.62	109	67653	87.88	ug/ml	98
49)	2,4-Dinitrotoluene	14.66	165	153422	89.59	ug/ml	77
50)	2,3,4,6-Tetrachlorophenol	14.86	232	127599	86.80	ug/ml	92
51)	Fluorene	15.19	166	483737	91.80	ug/ml	99
52)	4-Chlorophenyl Phenyl Ethe	15.21	204	230129	85.30	ug/ml	95
53)	Diethyl Phthalate	15.07	149	563985	97.84	ug/ml	99
54)	4-Nitroaniline	15.28	138	113013	91.84	ug/ml	95
55)	2-Methyl-4,6-dinitrophenol	15.31	198	80180	86.08	ug/ml	97
56)	N-Nitrosodiphenylamine	15.41	169	321253	91.43	ug/ml	99
57)	1,2-Diphenylhydrazine	15.47	77	507693	85.69	ug/ml	95
60)	4-Bromophenyl Phenyl Ether	16.00	248	137690	100.92	ug/ml	91
61)	Hexachlorobenzene	16.08	284	160227	101.32	ug/ml	89
62)	Pentachlorophenol	16.41	266	74713	84.07	ug/ml	97
63)	Phenanthrene	16.73	178	569637	94.74	ug/ml	99
64)	Anthracene	16.82	178	597827	94.57	ug/ml	100
65)	Carbazole	17.10	167	504759	97.82	ug/ml	100
66)	Di-n-butyl Phthalate	17.72	149	675209	98.09	ug/ml	99
67)	Fluoranthene	18.66	202	534529	98.05	ug/ml	97
69)	Benzidine	18.92	184	99488	51.26	ug/ml	96
70)	Pyrene	19.02	202	542145	87.87	ug/ml	100
72)	Butyl Benzyl Phthalate	20.14	149	308479	87.74	ug/ml	94

(#) = qualifier out of range (m) = manual integration

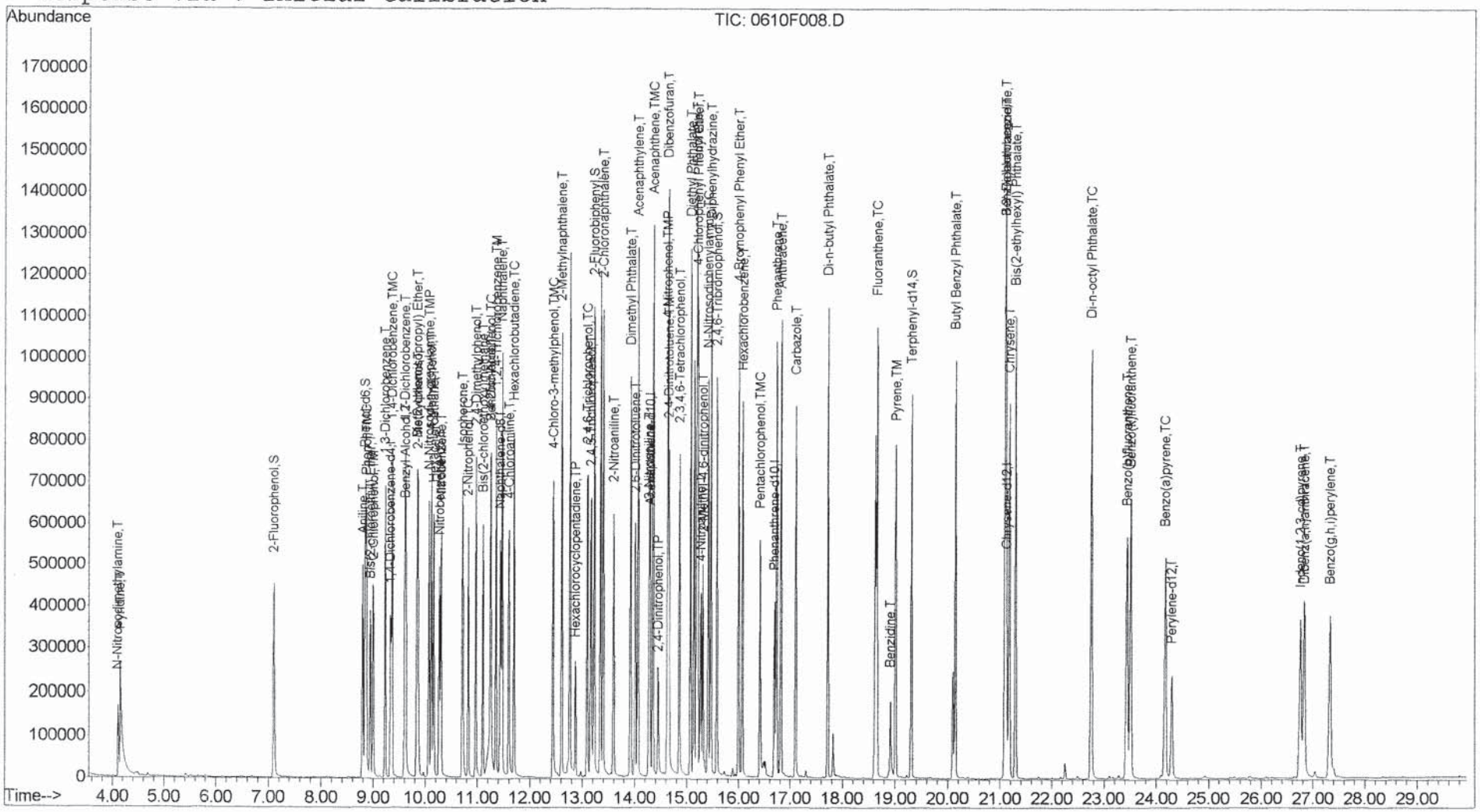
Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F008.D
Acq On : 10 Jun 2010 7:38 pm
Sample : KQ5080-3 LCS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:23 2010

Vial: 6
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration

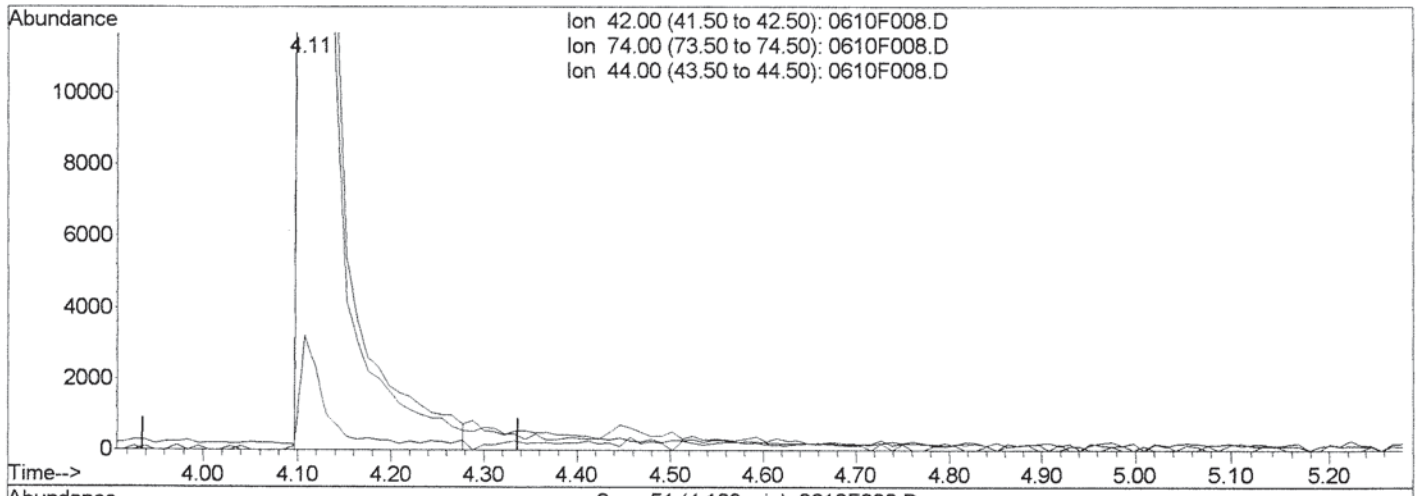


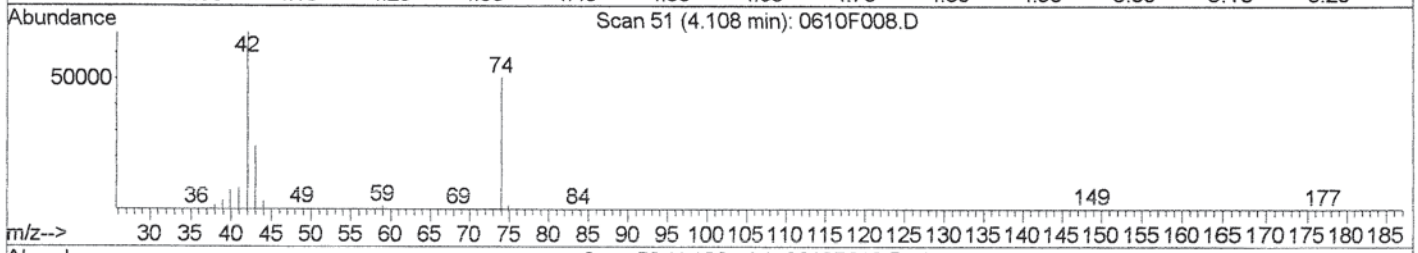
1294

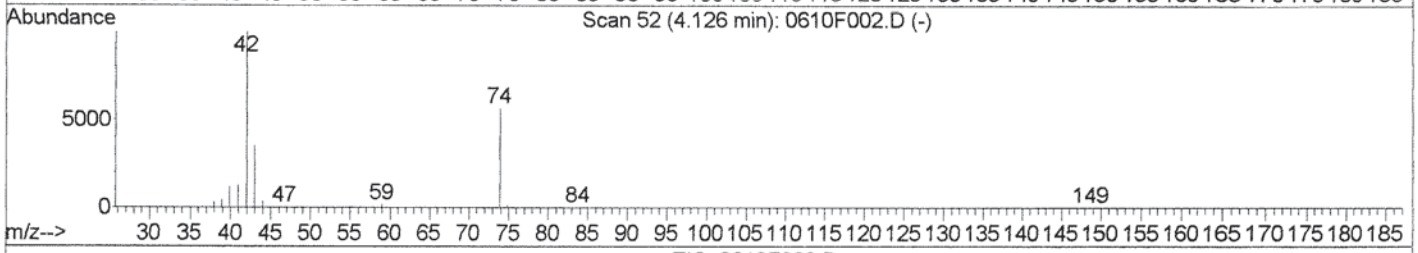
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F008.D Vial: 6
Acq On : 10 Jun 2010 7:38 pm Operator: M.BUTCHER
Sample : KQ5080-3 LCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:09 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration







TIC: 0610F008.D

(2) N-Nitrosodimethylamine (T)

4.11min 61.94ug/ml

response 121392

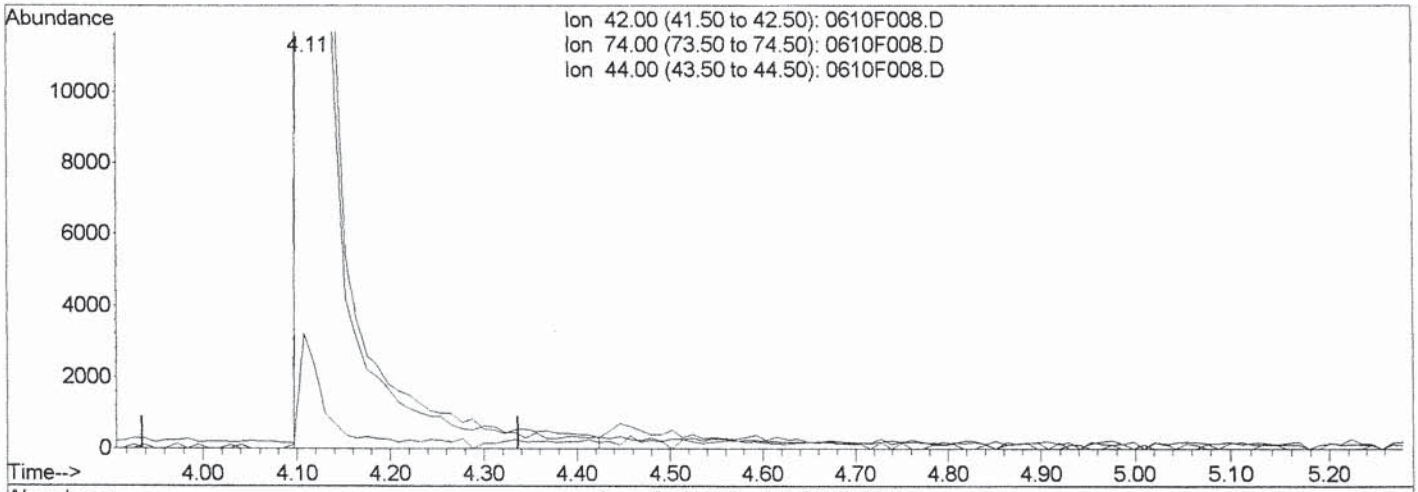
Ion	Exp%	Act%
42.00	100	100
74.00	79.30	74.17
44.00	4.40	4.39
0.00	0.00	0.00

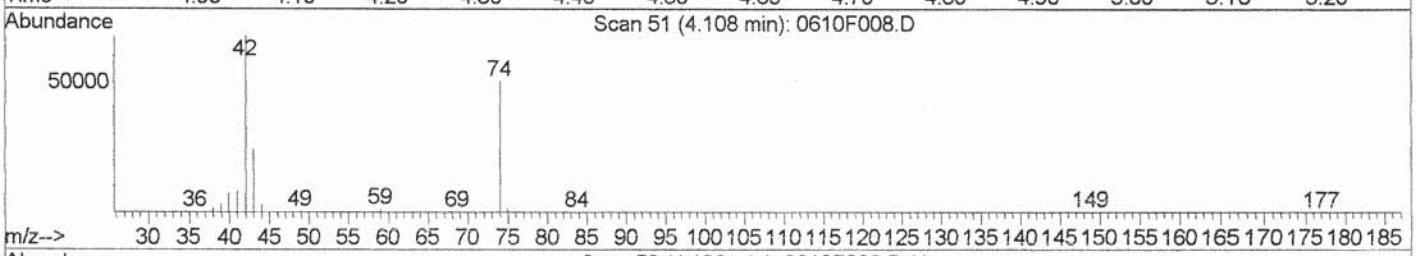
0610F008.D 0602BNC7.M Fri Jun 11 08:23:35 2010

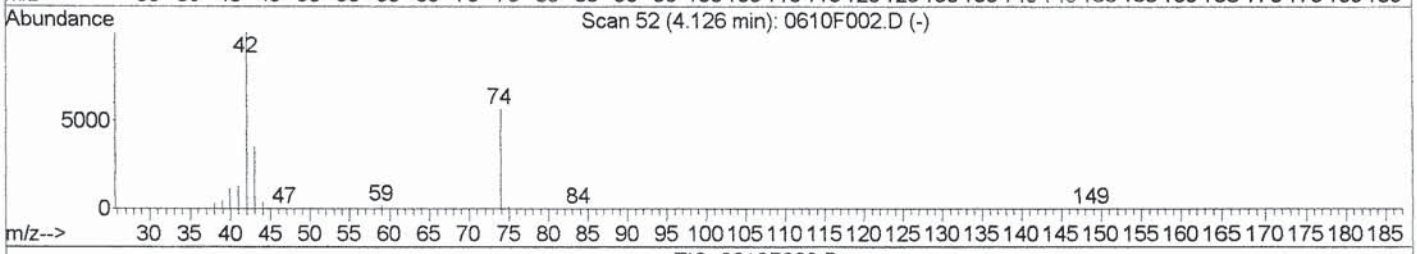
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F008.D Vial: 6
Acq On : 10 Jun 2010 7:38 pm Operator: M.BUTCHER
Sample : KQ5080-3 LCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:23 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration







TIC: 0610F008.D

(2) N-Nitrosodimethylamine (T)

4.11min 64.13ug/ml m

response 125679

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	74.18
44.00	4.40	4.71
0.00	0.00	0.00

EC 6-11-10

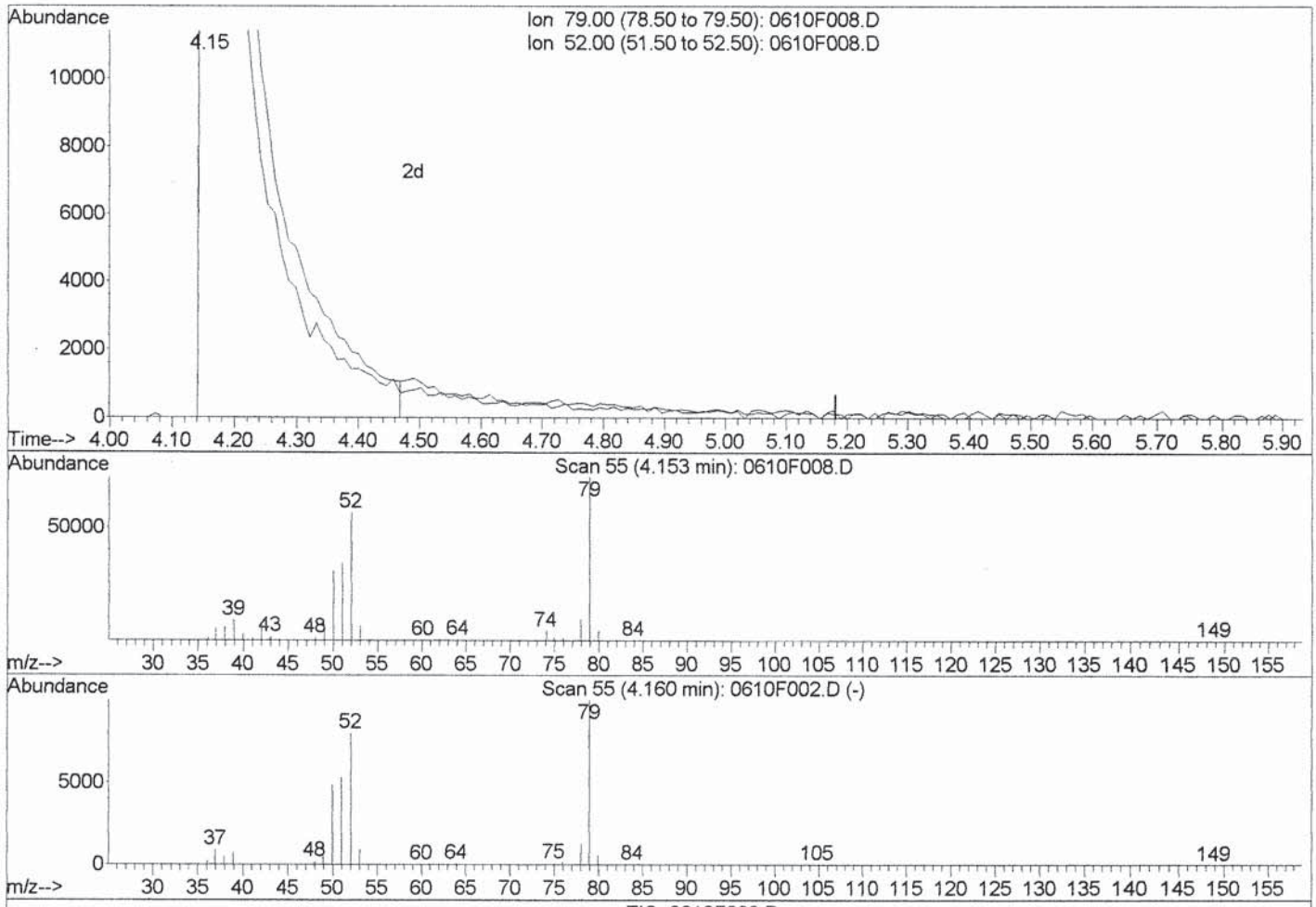
0610F008.D 0602BNC7.M Fri Jun 11 08:23:39 2010

LB 6/14/10

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F008.D Vial: 6
Acq On : 10 Jun 2010 7:38 pm Operator: M.BUTCHER
Sample : KQ5080-3 LCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:23 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F008.D

(3) Pyridine (T)

4.15min 83.30ug/ml

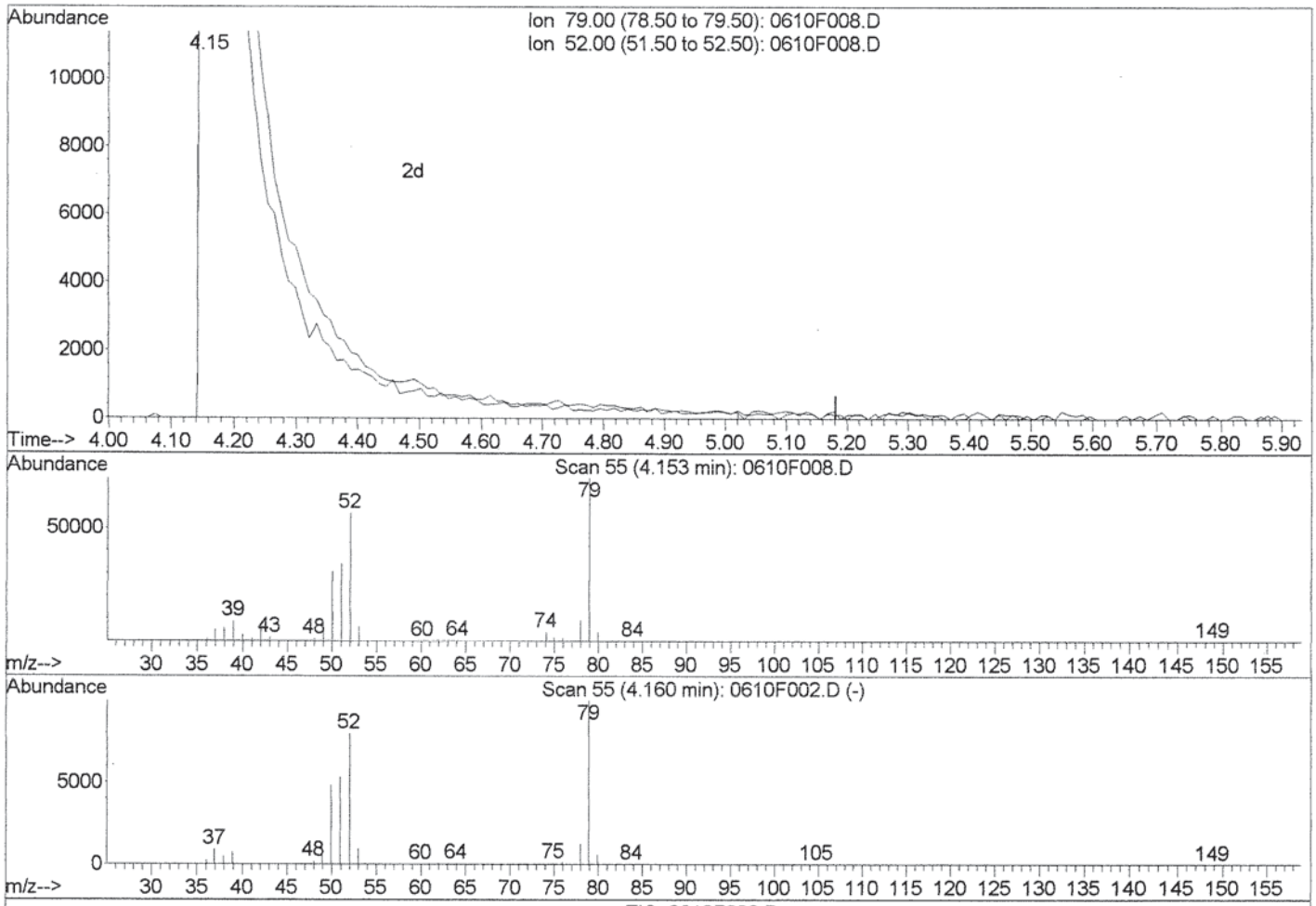
response 231337

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	78.53
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F008.D Vial: 6
Acq On : 10 Jun 2010 7:38 pm Operator: M.BUTCHER
Sample : KQ5080-3 LCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:23 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F008.D

(3) Pyridine (T)

4.15min 88.70ug/ml m

response 246331

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	78.45
0.00	0.00	0.00
0.00	0.00	0.00

DC 6-11-10

0610F008.D 0602BNC7.M Fri Jun 11 08:23:46 2010

LB 6/14/10

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Duplicate Lab Control Sample
Lab Code: KWG1005659-4

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	**2.41**		2.0	0.026	1	06/01/10	06/10/10	KWG1005659	
Aniline	**2.55**		1.0	0.022	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethyl) Ether	**2.52**		0.34	0.012	1	06/01/10	06/10/10	KWG1005659	
Phenol	**2.39**		0.34	0.020	1	06/01/10	06/10/10	KWG1005659	
2-Chlorophenol	**2.38**		0.34	0.0099	1	06/01/10	06/10/10	KWG1005659	
1,3-Dichlorobenzene	**2.37**		0.34	0.019	1	06/01/10	06/10/10	KWG1005659	
1,4-Dichlorobenzene	**2.38**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
1,2-Dichlorobenzene	**2.40**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzyl Alcohol	**2.49**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroisopropyl) Ether	**2.24**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
2-Methylphenol	**2.46**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
Hexachloroethane	**2.29**		0.34	0.022	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodi-n-propylamine	**2.63**		0.34	0.020	1	06/01/10	06/10/10	KWG1005659	
4-Methylphenol†	**2.59**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
Nitrobenzene	**2.45**		0.34	0.027	1	06/01/10	06/10/10	KWG1005659	
Isophorone	**2.49**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
2-Nitrophenol	**2.48**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
2,4-Dimethylphenol	**2.02**		0.34	0.016	1	06/01/10	06/10/10	KWG1005659	
Bis(2-chloroethoxy)methane	**2.40**		0.34	0.011	1	06/01/10	06/10/10	KWG1005659	
2,4-Dichlorophenol	**2.52**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
Benzoic Acid	**1.52**	J	2.0	0.14	1	06/01/10	06/10/10	KWG1005659	
1,2,4-Trichlorobenzene	**2.66**		0.34	0.011	1	06/01/10	06/10/10	KWG1005659	
Naphthalene	**2.62**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloroaniline	**2.71**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobutadiene	**2.48**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Chloro-3-methylphenol	**2.61**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
2-Methylnaphthalene	**2.75**		0.34	0.011	1	06/01/10	06/10/10	KWG1005659	
Hexachlorocyclopentadiene	**1.12**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
2,4,6-Trichlorophenol	**2.71**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
2,4,5-Trichlorophenol	**2.63**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
2-Chloronaphthalene	**2.61**		0.34	0.010	1	06/01/10	06/10/10	KWG1005659	
2-Nitroaniline	**2.64**		2.0	0.017	1	06/01/10	06/10/10	KWG1005659	
Acenaphthylene	**2.74**		0.34	0.016	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Duplicate Lab Control Sample
Lab Code: KWG1005659-4

Units: mg/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dimethyl Phthalate	**2.83**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
2,6-Dinitrotoluene	**2.72**		0.34	0.016	1	06/01/10	06/10/10	KWG1005659	
Acenaphthene	**2.85**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
3-Nitroaniline	**2.65**		2.0	0.18	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrophenol	**1.94**	J	2.0	0.12	1	06/01/10	06/10/10	KWG1005659	
Dibenzofuran	**2.51**		0.34	0.012	1	06/01/10	06/10/10	KWG1005659	
4-Nitrophenol	**2.54**		2.0	0.15	1	06/01/10	06/10/10	KWG1005659	
2,4-Dinitrotoluene	**2.77**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
Fluorene	**2.94**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
4-Chlorophenyl Phenyl Ether	**2.85**		0.34	0.016	1	06/01/10	06/10/10	KWG1005659	
Diethyl Phthalate	**2.91**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
4-Nitroaniline	**2.73**		2.0	0.18	1	06/01/10	06/10/10	KWG1005659	
2-Methyl-4,6-dinitrophenol	**2.49**		2.0	0.15	1	06/01/10	06/10/10	KWG1005659	
N-Nitrosodiphenylamine	**2.68**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
4-Bromophenyl Phenyl Ether	**2.90**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
Hexachlorobenzene	**2.94**		0.34	0.015	1	06/01/10	06/10/10	KWG1005659	
Pentachlorophenol	**2.31**		2.0	0.13	1	06/01/10	06/10/10	KWG1005659	
Phenanthrene	**2.96**		0.34	0.010	1	06/01/10	06/10/10	KWG1005659	
Anthracene	**2.60**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
Di-n-butyl Phthalate	**2.97**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
Fluoranthene	**2.91**		0.34	0.012	1	06/01/10	06/10/10	KWG1005659	
Pyrene	**2.78**		0.34	0.014	1	06/01/10	06/10/10	KWG1005659	
Butyl Benzyl Phthalate	**2.64**		0.34	0.017	1	06/01/10	06/10/10	KWG1005659	
3,3'-Dichlorobenzidine	**2.62**		2.0	0.027	1	06/01/10	06/10/10	KWG1005659	
Benz(a)anthracene	**2.92**		0.34	0.013	1	06/01/10	06/10/10	KWG1005659	
Chrysene	**2.97**		0.34	0.012	1	06/01/10	06/10/10	KWG1005659	
Bis(2-ethylhexyl) Phthalate	**2.85**		0.34	0.019	1	06/01/10	06/10/10	KWG1005659	
Di-n-octyl Phthalate	**2.77**		0.34	0.024	1	06/01/10	06/10/10	KWG1005659	
Benzo(b)fluoranthene	**2.94**		0.34	0.018	1	06/01/10	06/10/10	KWG1005659	
Benzo(k)fluoranthene	**2.99**		0.34	0.020	1	06/01/10	06/10/10	KWG1005659	
Benzo(a)pyrene	**3.23**		0.34	0.020	1	06/01/10	06/10/10	KWG1005659	
Indeno(1,2,3-cd)pyrene	**2.84**		0.34	0.039	1	06/01/10	06/10/10	KWG1005659	
Dibenz(a,h)anthracene	**2.76**		0.34	0.028	1	06/01/10	06/10/10	KWG1005659	

Comments:

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601
Sample Matrix: Misc. solid

Service Request: K1005244
Date Collected: NA
Date Received: NA

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Duplicate Lab Control Sample
Lab Code: KWG1005659-4

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: mg/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Benzo(g,h,i)perylene	**2.69**		0.34	0.021	1	06/01/10	06/10/10	KWG1005659	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	64	20-83	06/10/10	Acceptable
Phenol-d6	74	23-90	06/10/10	Acceptable
Nitrobenzene-d5	76	29-100	06/10/10	Acceptable
2-Fluorobiphenyl	77	32-104	06/10/10	Acceptable
2,4,6-Tribromophenol	85	20-123	06/10/10	Acceptable
Terphenyl-d14	87	37-133	06/10/10	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

Exception Report

Data File: J:\MS07\DATA\061010\0610F009.D
Lab ID: KWG1005659-4
RunType: DLCS
Matrix: MISC. SOLID

Date Acquired: 06/10/2010 20:18
Date Quantitated: 06/11/2010 08:24
Batch ID: KWG1005663
Analysis Method: 8270C
MethodJoinID: MJ250

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA		x
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

5175
5244
5282
5284
5353

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Benzidine	119.6	NA	30	NT 1
Continuing Calibration Recovery	Benzidine	-35.0	NA	30	1

Primary Review: M 6-11-10
Secondary Review: LB 6/14/10

Printed: 06/11/2010 10:12:31
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	MISC. SOLID
Prod Code:	8270C SVO	**Collect Date:**		**Receive Date:**	06/10/2010

Analysis Lot:	KWG1005663	**Prep Lot:**	KWG1005659	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**	EPA 3541		
Prep Ref:	918272	**Prep Date:**	06/01/2010		

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:			
Tune Ref:	J:\MS07\DATA\061010\0610F001.D	**Method ID:**	MJ250
MB Ref:	J:\MS07\DATA\061010\0610F007.D	**Quant based on Method**	

Data File:	J:\MS07\DATA\061010\0610F009.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 20:18	**Quant Date:**	06/11/2010 08:24	**Vial:**	7
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG1005659-4			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	9.33	0.00	152	82853	40.00	OK
2	Naphthalene-d8	11.44	0.00	136	328582	40.00	OK
3	Acenaphthene-d10	14.29	0.00	164	180044	40.00	OK
4	Phenanthrene-d10	16.69	-0.01	188	242964	40.00	OK
5	Chrysene-d12	21.12	-0.01	240	239385	40.00	OK
6	Perylene-d12	24.30	-0.01	264	200450	40.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	7.10	-0.01	0.00	112	210469	95.55	64	20-83	OK	
1	Phenol-d6	8.84	-0.02	0.00	99	343181	111.71	74	23-90	OK	
1	Nitrobenzene-d5	10.27	-0.01	0.00	82	228880	76.27	76	29-100	OK	
3	2-Fluorobiphenyl	13.23	0.00	0.00	172	455315	77.14	77	32-104	OK	
4	2,4,6-Tribromophenol	15.59	0.00	0.00	330	125893	127.84	85	20-123	OK	
5	Terphenyl-d14	19.30	-0.02	0.00	244	317261	86.55	87	37-133	OK	

Target Compounds

Final Conc. Units: mg/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	4.11	-0.02	0.00	42	143290**m**	72.38	2.41		
1	Pyridine	4.16		0.00	79	253679**m**	90.43	3.01		
1	Aniline	8.79	-0.01	0.00	93	237134	76.37	2.55		
1	Bis(2-chloroethyl) Ether	8.94	-0.01	0.00	93	189151	75.50	2.52		
1	Phenol	8.86	-0.02	0.00	94	225849	71.78	2.39		
1	2-Chlorophenol	8.99	-0.02	0.00	128	193856	71.46	2.38		
1	1,3-Dichlorobenzene	9.23		0.00	146	204276	71.00	2.37		
1	1,4-Dichlorobenzene	9.35	-0.02	0.00	146	209424	71.46	2.38		
1	1,2-Dichlorobenzene	9.60	-0.01	0.00	146	199706	71.99	2.40		
1	Benzyl Alcohol	9.62	-0.02	0.00	108	124648	74.81	2.49		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F009.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 20:18	**Quant Date:**	06/11/2010 08:24	**Vial:**	7
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG1005659-4			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:** mg/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Bis(2-chloroisopropyl) Ether	9.85		0.00	45	279100	67.15	2.24		
1	2-Methylphenol	9.85	-0.01	0.00	107	150062	73.66	2.46		
1	Hexachloroethane	10.15	-0.02	0.00	117	91420	68.57	2.29		
1	N-Nitrosodi-n-propylamine	10.08	-0.01	0.00	70	160975	78.94	2.63		
1	4-Methylphenol	10.11	-0.02	0.00	107	240058	77.59	2.59		
1	Nitrobenzene	10.30	-0.01	0.00	77	207201	73.40	2.45		
2	Isophorone	10.72	-0.01	0.00	82	441943	74.56	2.49		
2	2-Nitrophenol	10.83		0.00	139	121531	74.41	2.48		
2	2,4-Dimethylphenol	10.97	-0.01	0.00	122	132358	60.61	2.02		
2	Bis(2-chloroethoxy)methane	11.10	-0.01	0.00	93	239372	71.89	2.40		
2	2,4-Dichlorophenol	11.25	-0.01	0.00	162	187067	75.50	2.52		
2	Benzoic Acid	11.25	-0.08	-0.01	122	85401	45.63	1.52	J	
2	1,2,4-Trichlorobenzene	11.35	-0.01	0.00	180	209692	79.72	2.66		
2	Naphthalene	11.47		0.00	128	619857	78.63	2.62		
2	4-Chloroaniline	11.60	-0.01	0.00	127	282581	81.25	2.71		
2	Hexachlorobutadiene	11.70		0.00	225	124316	74.50	2.48		
2	4-Chloro-3-methylphenol	12.44	-0.01	0.00	107	202335	78.23	2.61		
2	2-Methylnaphthalene	12.61		0.00	142	413806	82.49	2.75		
3	Hexachlorocyclopentadiene	12.87		0.00	237	53121	33.51	1.12		
3	2,4,6-Trichlorophenol	13.10	-0.01	0.00	196	151050	81.32	2.71		
3	2,4,5-Trichlorophenol	13.16	-0.02	0.00	196	163096	78.80	2.63		
3	2-Chloronaphthalene	13.40		0.00	162	408248	78.40	2.61		
3	2-Nitroaniline	13.60		0.00	65	132723	79.23	2.64		
3	Acenaphthylene	14.06	-0.01	0.00	152	659485	82.21	2.74		
3	Dimethyl Phthalate	13.92	-0.01	0.00	163	519704	84.91	2.83		
3	2,6-Dinitrotoluene	14.01	-0.01	0.00	165	112990	81.46	2.72		
3	Acenaphthene	14.35	-0.01	0.00	154	391348	85.48	2.85		
3	3-Nitroaniline	14.28	-0.01	0.00	138	116093	79.55	2.65		
3	2,4-Dinitrophenol	14.45	-0.01	0.00	184	46812	58.17	1.94	J	
3	Dibenzofuran	14.63	-0.01	0.00	168	543973	75.36	2.51		
3	4-Nitrophenol	14.63		0.00	109	60258	76.26	2.54		
3	2,4-Dinitrotoluene	14.66		0.00	165	146174	83.15	2.77		
3	2,3,4,6-Tetrachlorophenol	14.85	-0.02	0.00	232	122873	81.42	2.71		
3	Fluorene	15.19		0.00	166	477154	88.21	2.94		
3	4-Chlorophenyl Phenyl Ether	15.21	-0.01	0.00	204	236519	85.41	2.85		
3	Diethyl Phthalate	15.07	-0.01	0.00	149	517364	87.43	2.91		
3	4-Nitroaniline	15.27	-0.01	0.00	138	103461	81.91	2.73		
3	2-Methyl-4,6-dinitrophenol	15.32	-0.01	0.00	198	71472	74.76	2.49		
3	N-Nitrosodiphenylamine	15.42		0.00	169	290316	80.49	2.68		
3	1,2-Diphenylhydrazine	15.46	-0.01	0.00	77	481810m	79.22	2.64		
4	4-Bromophenyl Phenyl Ether	16.00		0.00	248	127418	86.98	2.90		
4	Hexachlorobenzene	16.07	-0.01	0.00	284	149546	88.08	2.94		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F009.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 20:18	**Quant Date:**	06/11/2010 08:24	**Vial:**	7
Run Type:	DLCS			**Dilution:**	1.0
Lab ID:	KWG1005659-4			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:** mg/Kg Wet Weight

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Pentachlorophenol	16.41	-0.01	0.00	266	66036	69.21	2.31		
4	Phenanthrene	16.74		0.00	178	573248	88.81	2.96		
4	Anthracene	16.81	-0.02	0.00	178	529499	78.02	2.60		
4	Carbazole	17.11		0.00	167	466022	84.12	2.80		
4	Di-n-butyl Phthalate	17.73		0.00	149	658214	89.07	2.97		
4	Fluoranthene	18.65	-0.01	0.00	202	511258	87.35	2.91		
5	Benzidine	18.91	-0.01	0.00	184	92803	46.17	1.54	J	
5	Pyrene	19.01	-0.01	0.00	202	531997	83.26	2.78		
5	Butyl Benzyl Phthalate	20.15		0.00	149	288136	79.13	2.64		
5	3,3'-Dichlorobenzidine	21.10	-0.01	0.00	252	196340	78.48	2.62		
5	Benz(a)anthracene	21.10	-0.01	0.00	228	493598	87.74	2.92		
5	Chrysene	21.18	-0.01	0.00	228	484888	89.02	2.97		
5	Bis(2-ethylhexyl) Phthalate	21.30		0.00	149	443290	85.55	2.85		
6	Di-n-octyl Phthalate	22.75	-0.02	0.00	149	786424	83.05	2.77		
6	Benzo(b)fluoranthene	23.44	-0.01	0.00	252	455412	88.19	2.94		
6	Benzo(k)fluoranthene	23.51	-0.02	0.00	252	481148	89.79	2.99		
6	Benzo(a)pyrene	24.17	-0.02	0.00	252	415013	96.77	3.23		
6	Indeno(1,2,3-cd)pyrene	26.75	-0.03	0.00	276	316559	85.23	2.84		
6	Dibenz(a,h)anthracene	26.83	-0.02	0.00	278	327197	82.70	2.76		
6	Benzo(g,h,i)perylene	27.34	-0.01	0.00	276	323390	80.66	2.69		
	Hexachlorocyclohexane				0	0		0.67	UJ	NR
	1,2,3-Trichlorobenzene				0	0		0.33	UJ	NR
	1,2,3,4-Tetrachlorobenzene				0	0		0.33	UJ	NR
	1,2,3,5-Tetrachlorobenzene				0	0		0.33	UJ	NR
	1,3,5-Trichlorobenzene				0	0		0.33	UJ	NR
	Acrylamide				0	0		50	U	NR
	Diisobutyl Phthalate				0	0		0.33	UJ	NR
	OPMO				0	0		2.0	UJ	NR
	1-Methylnaphthalene				0	0		0.33	UJ	NR
	HPMO				0	0		2.0	UJ	NR
	2,3,7,8-Tetrachlorodibenzo-p-di				0	0		0.67	UJ	NR

Prep Amount:	30.00 g	**Dilution:**	1.0
Prep Final Vol:	1 mL	**Unit Factor:**	1
Solids:	%		

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / (Prep Amount x Solids)) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F009.D Vial: 7
Acq On : 10 Jun 2010 8:18 pm Operator: M.BUTCHER
Sample : KQ5080-4 DLCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:04 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	82853	40.00	ug/ml	-0.01
21) Naphthalene-d8	11.44	136	328582	40.00	ug/ml	-0.01
34) Acenaphthene-d10	14.29	164	180044	40.00	ug/ml	-0.01
58) Phenanthrene-d10	16.69	188	242964	40.00	ug/ml	-0.01
68) Chrysene-d12	21.12	240	239385	40.00	ug/ml	-0.01
77) Perylene-d12	24.30	264	200450	40.00	ug/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	7.10	112	210469	95.55	ug/ml	-0.04
Spiked Amount 150.000	Range 21 - 100		Recovery = 63.70%			
7) Phenol-d6	8.84	99	343181	111.71	ug/ml	-0.04
Spiked Amount 150.000	Range 10 - 94		Recovery = 74.47%			
19) Nitrobenzene-d5	10.27	82	228880	76.27	ug/ml	-0.02
Spiked Amount 100.000	Range 35 - 114		Recovery = 76.27%			
38) 2-Fluorobiphenyl	13.23	172	455315	77.14	ug/ml	-0.01
Spiked Amount 100.000	Range 43 - 116		Recovery = 77.14%			
59) 2,4,6-Tribromophenol	15.59	330	125893	127.84	ug/ml	-0.01
Spiked Amount 150.000	Range 10 - 123		Recovery = 85.23%			
71) Terphenyl-d14	19.30	244	317261	86.55	ug/ml	-0.02
Spiked Amount 100.000	Range 33 - 141		Recovery = 86.55%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.11	42	143290m	72.38	ug/ml	
3) Pyridine	4.16	79	253679m	90.43	ug/ml	
5) Aniline	8.79	93	237134	76.37	ug/ml	96
6) Bis(2-chloroethyl) Ether	8.94	93	189151	75.50	ug/ml	99
8) Phenol	8.86	94	225849	71.78	ug/ml	98
9) 2-Chlorophenol	8.99	128	193856	71.46	ug/ml	93
10) 1,3-Dichlorobenzene	9.23	146	204276	71.00	ug/ml	95
11) 1,4-Dichlorobenzene	9.35	146	209424	71.46	ug/ml	98
12) 1,2-Dichlorobenzene	9.60	146	199706	71.99	ug/ml	98
13) Benzyl Alcohol	9.62	108	124648	74.81	ug/ml	100
14) Bis(2-chloroisopropyl) Eth	9.85	45	279100	67.15	ug/ml	76
15) 2-Methylphenol	9.85	107	150062	73.66	ug/ml	94
16) Hexachloroethane	10.15	117	91420	68.57	ug/ml	94
17) N-Nitrosodi-n-propylamine	10.08	70	160975	78.94	ug/ml	100
18) 4-Methylphenol	10.11	107	240058	77.59	ug/ml	98
20) Nitrobenzene	10.30	77	207201	73.40	ug/ml	96
22) Isophorone	10.72	82	441943	74.56	ug/ml	98
23) 2-Nitrophenol	10.83	139	121531	74.41	ug/ml	98
24) 2,4-Dimethylphenol	10.97	122	132358	60.61	ug/ml	95
25) Bis(2-chloroethoxy)methane	11.10	93	239372	71.89	ug/ml	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F009.D Vial: 7
Acq On : 10 Jun 2010 8:18 pm Operator: M.BUTCHER
Sample : KQ5080-4 DLCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:04 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.25	162	187067	75.50	ug/ml	98
27)	Benzoic Acid	11.25	122	85401	45.63	ug/ml	93
28)	1,2,4-Trichlorobenzene	11.35	180	209692	79.72	ug/ml	98
29)	Naphthalene	11.47	128	619857	78.63	ug/ml	99
30)	4-Chloroaniline	11.60	127	282581	81.25	ug/ml	97
31)	Hexachlorobutadiene	11.70	225	124316	74.50	ug/ml	99
32)	4-Chloro-3-methylphenol	12.44	107	202335	78.23	ug/ml#	67
33)	2-Methylnaphthalene	12.61	142	413806	82.49	ug/ml	100
35)	Hexachlorocyclopentadiene	12.87	237	53121	33.51	ug/ml	99
36)	2,4,6-Trichlorophenol	13.10	196	151050	81.32	ug/ml	98
37)	2,4,5-Trichlorophenol	13.16	196	163096	78.80	ug/ml	99
39)	2-Chloronaphthalene	13.40	162	408248	78.40	ug/ml	98
40)	2-Nitroaniline	13.60	65	132723	79.23	ug/ml	81
41)	Acenaphthylene	14.06	152	659485	82.21	ug/ml	99
42)	Dimethyl Phthalate	13.92	163	519704	84.91	ug/ml	99
43)	2,6-Dinitrotoluene	14.01	165	112990	81.46	ug/ml	89
44)	Acenaphthene	14.35	154	391348	85.48	ug/ml	99
45)	3-Nitroaniline	14.28	138	116093	79.55	ug/ml	97
46)	2,4-Dinitrophenol	14.45	184	46812	58.17	ug/ml	97
47)	Dibenzofuran	14.63	168	543973	75.36	ug/ml	98
48)	4-Nitrophenol	14.63	109	60258	76.26	ug/ml#	27
49)	2,4-Dinitrotoluene	14.66	165	146174	83.15	ug/ml	97
50)	2,3,4,6-Tetrachlorophenol	14.85	232	122873	81.42	ug/ml#	83
51)	Fluorene	15.19	166	477154	88.21	ug/ml	98
52)	4-Chlorophenyl Phenyl Ethe	15.21	204	236519	85.41	ug/ml	97
53)	Diethyl Phthalate	15.07	149	517364	87.43	ug/ml	98
54)	4-Nitroaniline	15.27	138	103461	81.91	ug/ml	93
55)	2-Methyl-4,6-dinitrophenol	15.32	198	71472	74.76	ug/ml#	35
56)	N-Nitrosodiphenylamine	15.42	169	290316	80.49	ug/ml	99
57)	1,2-Diphenylhydrazine	15.46	77	481810m	79.22	ug/ml	
60)	4-Bromophenyl Phenyl Ether	16.00	248	127418	86.98	ug/ml	93
61)	Hexachlorobenzene	16.07	284	149546	88.08	ug/ml	98
62)	Pentachlorophenol	16.41	266	66036	69.21	ug/ml	99
63)	Phenanthrene	16.74	178	573248	88.81	ug/ml	100
64)	Anthracene	16.81	178	529499	78.02	ug/ml	99
65)	Carbazole	17.11	167	466022	84.12	ug/ml	99
66)	Di-n-butyl Phthalate	17.73	149	658214	89.07	ug/ml	99
67)	Fluoranthene	18.65	202	511258	87.35	ug/ml	99
69)	Benzidine	18.91	184	92803	46.17	ug/ml	98
70)	Pyrene	19.01	202	531997	83.26	ug/ml	99
72)	Butyl Benzyl Phthalate	20.15	149	288136	79.13	ug/ml	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F009.D Vial: 7
Acq On : 10 Jun 2010 8:18 pm Operator: M.BUTCHER
Sample : KQ5080-4 DLCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 08:09:04 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

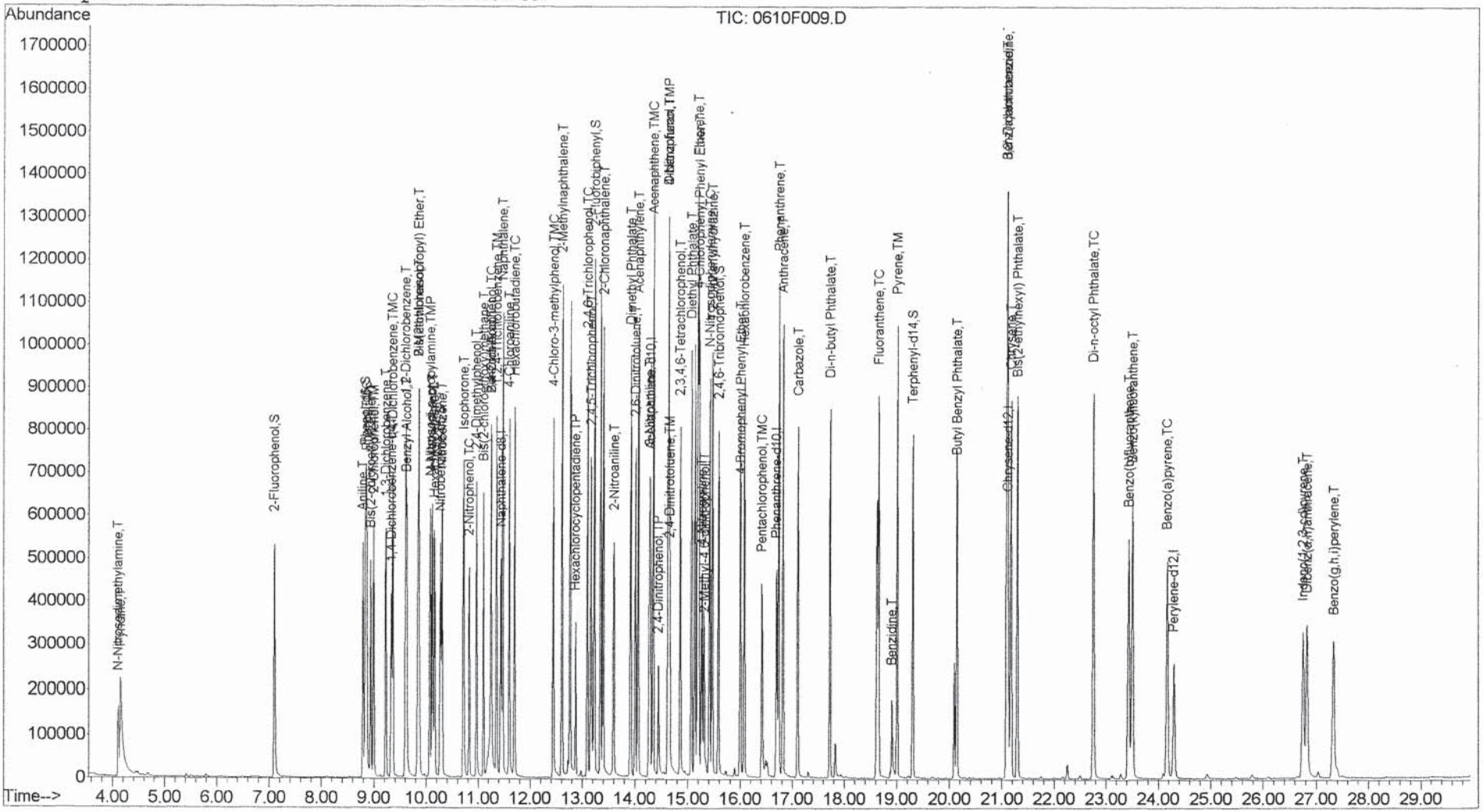
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.10	252	196340	78.48	ug/ml	97
74)	Benz(a)anthracene	21.10	228	493598	87.74	ug/ml	99
75)	Chrysene	21.18	228	484888	89.02	ug/ml	100
76)	Bis(2-ethylhexyl) Phthalat	21.30	149	443290	85.55	ug/ml	98
78)	Di-n-octyl Phthalate	22.75	149	786424	83.05	ug/ml	99
79)	Benzo(b)fluoranthene	23.44	252	455412	88.19	ug/ml	97
80)	Benzo(k)fluoranthene	23.51	252	481148	89.79	ug/ml	99
81)	Benzo(a)pyrene	24.17	252	415013	96.77	ug/ml	97
82)	Indeno(1,2,3-cd)pyrene	26.75	276	316559	85.23	ug/ml	98
83)	Dibenz(a,h)anthracene	26.83	278	327197	82.70	ug/ml	98
84)	Benzo(g,h,i)perylene	27.34	276	323390	80.66	ug/ml	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F009.D Vial: 7
Acq On : 10 Jun 2010 8:18 pm Operator: M.BUTCHER
Sample : KQ5080-4 DLCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:24 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration

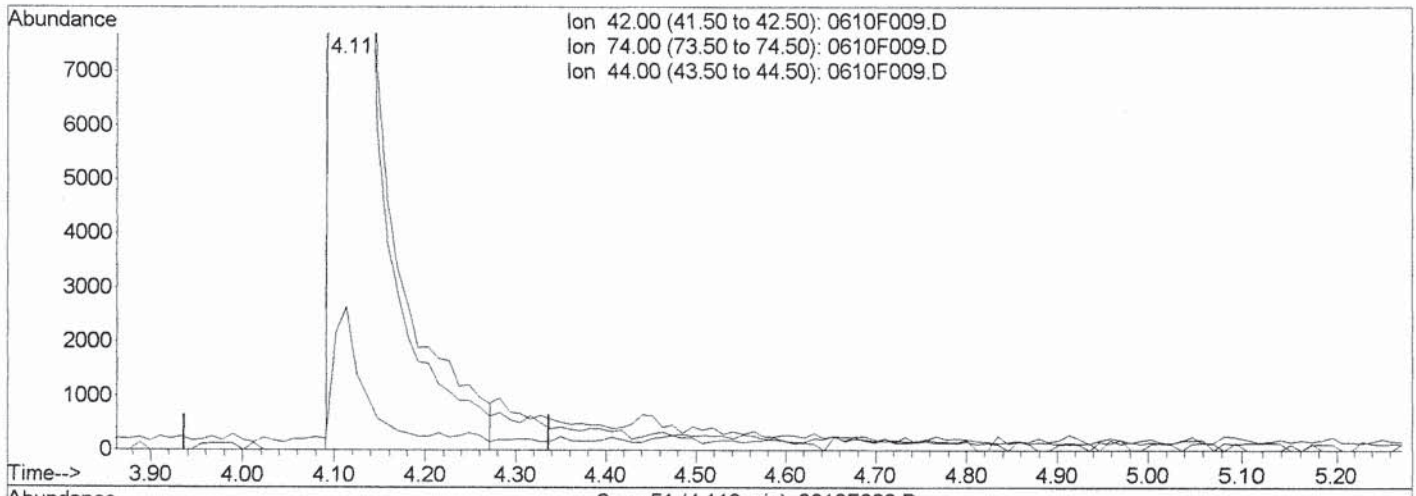


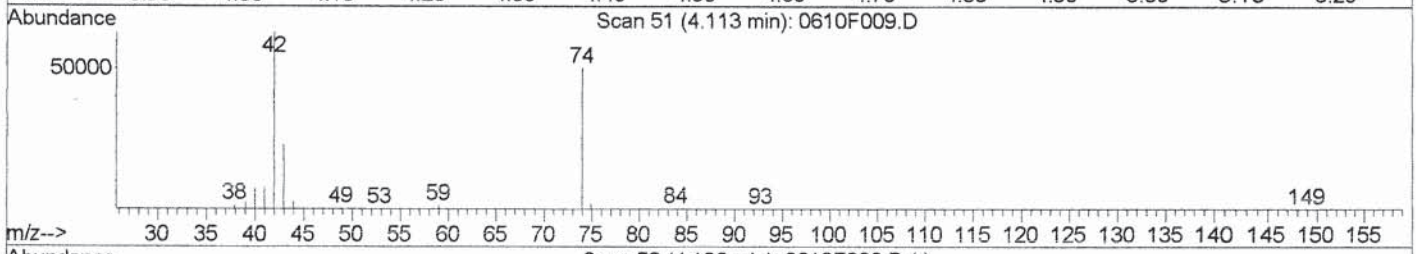
1309

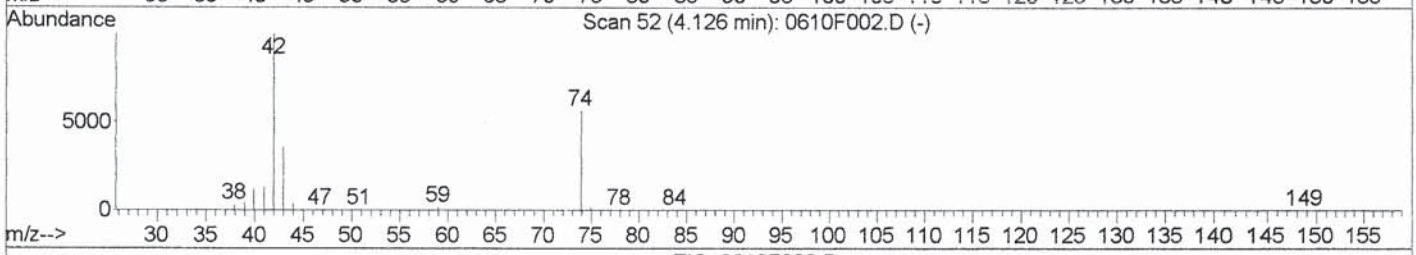
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F009.D Vial: 7
Acq On : 10 Jun 2010 8:18 pm Operator: M.BUTCHER
Sample : KQ5080-4 DLCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:09 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration







TIC: 0610F009.D

(2) N-Nitrosodimethylamine (T)

4.11min 67.49ug/ml

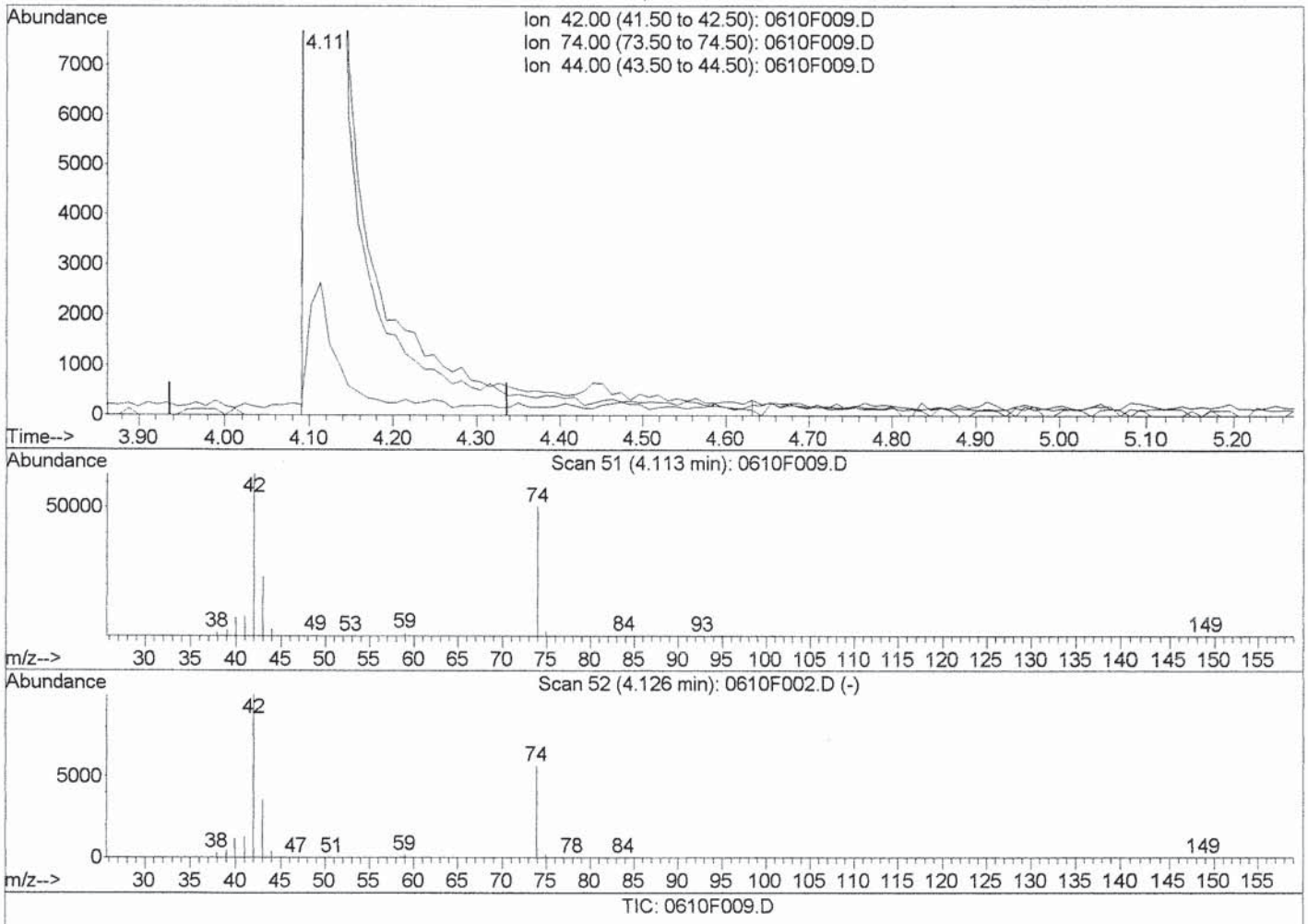
response 133601

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	80.07
44.00	4.40	3.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F009.D Vial: 7
Acq On : 10 Jun 2010 8:18 pm Operator: M.BUTCHER
Sample : KQ5080-4 DLCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:24 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F009.D

(2) N-Nitrosodimethylamine (T)

4.11min 72.38ug/ml m

response 143290

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	80.02
44.00	4.40	4.17
0.00	0.00	0.00

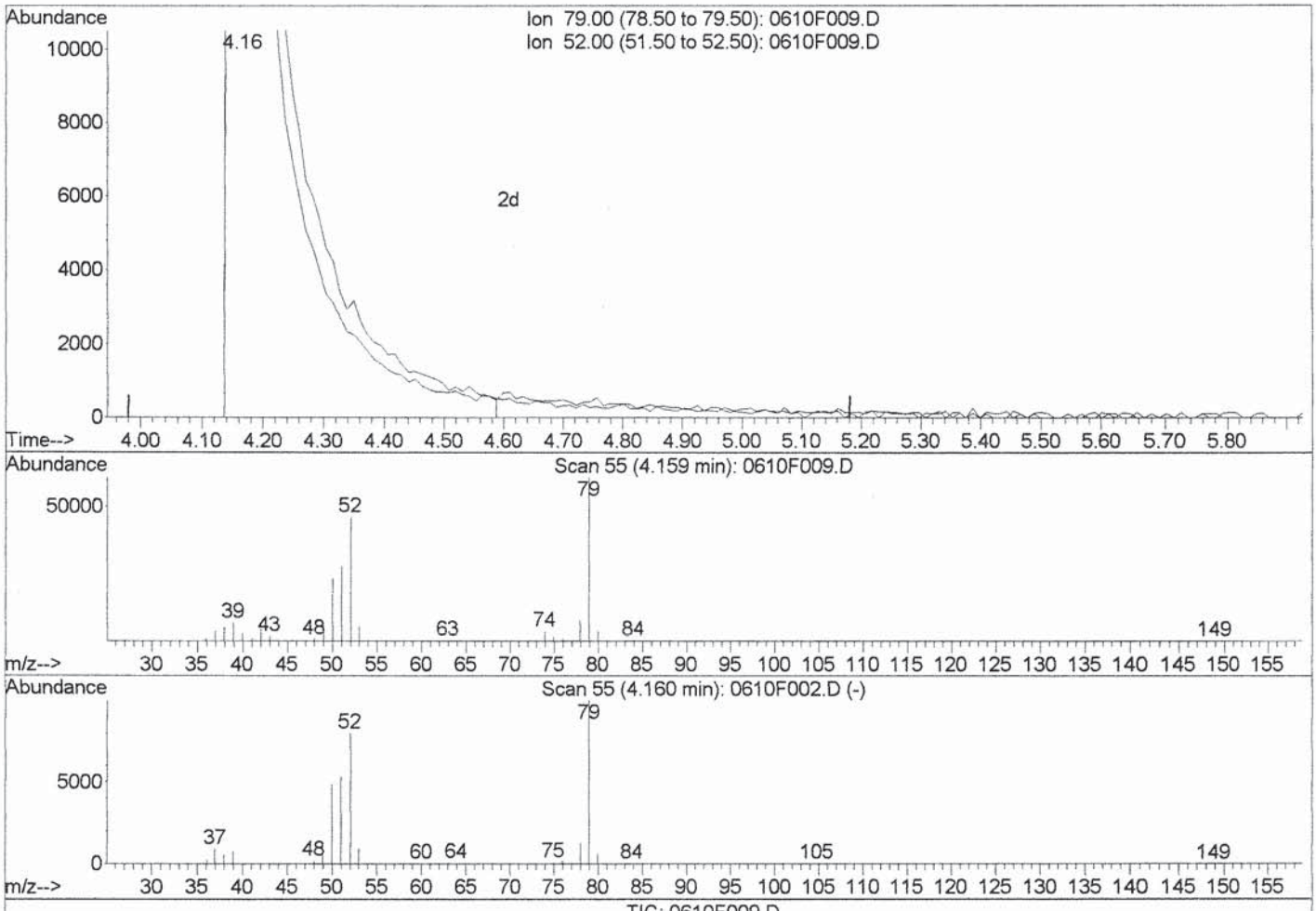
JC 6-11-10

LB 6/14/10

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F009.D Vial: 7
Acq On : 10 Jun 2010 8:18 pm Operator: M.BUTCHER
Sample : KQ5080-4 DLCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:24 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F009.D

(3) Pyridine (T)

4.16min 86.88ug/ml

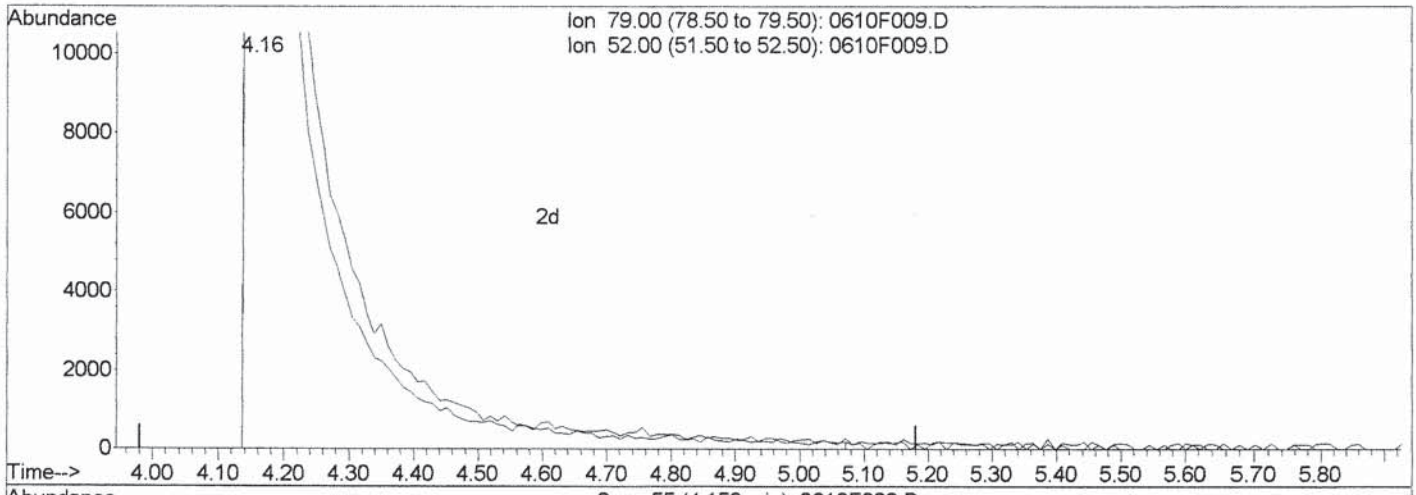
response 243714

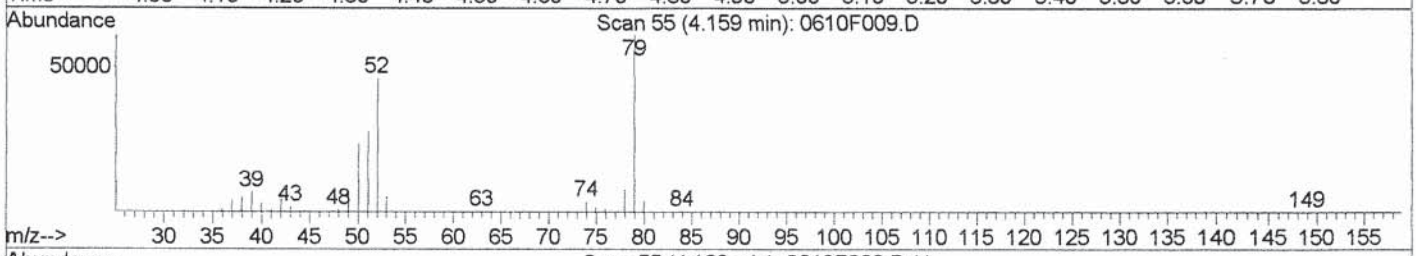
Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.52
0.00	0.00	0.00
0.00	0.00	0.00

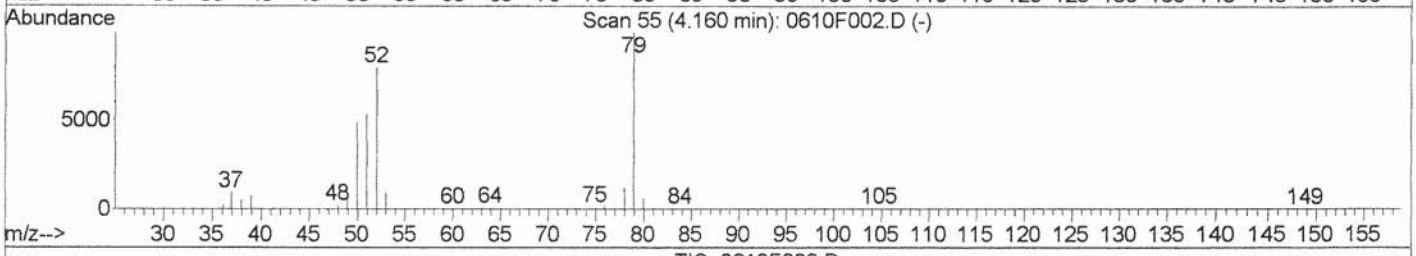
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F009.D Vial: 7
Acq On : 10 Jun 2010 8:18 pm Operator: M.BUTCHER
Sample : KQ5080-4 DLCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:24 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration







TIC: 0610F009.D

(3) Pyridine (T)

4.16min 90.43ug/ml m

response 253679

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.65
0.00	0.00	0.00
0.00	0.00	0.00

DC 6/11/10

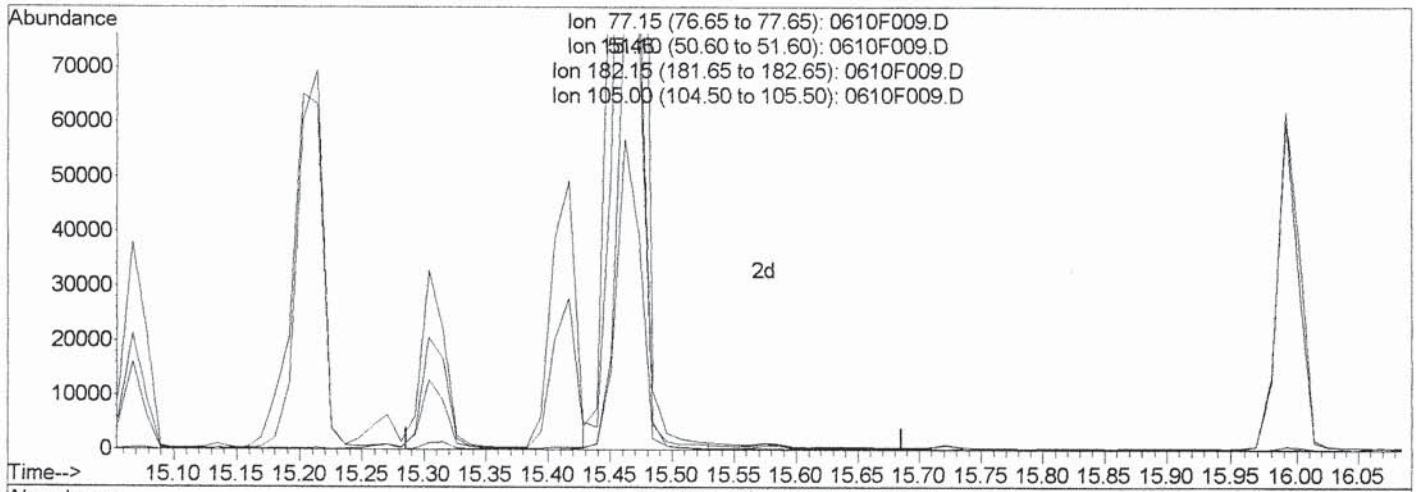
LB 6/14/10

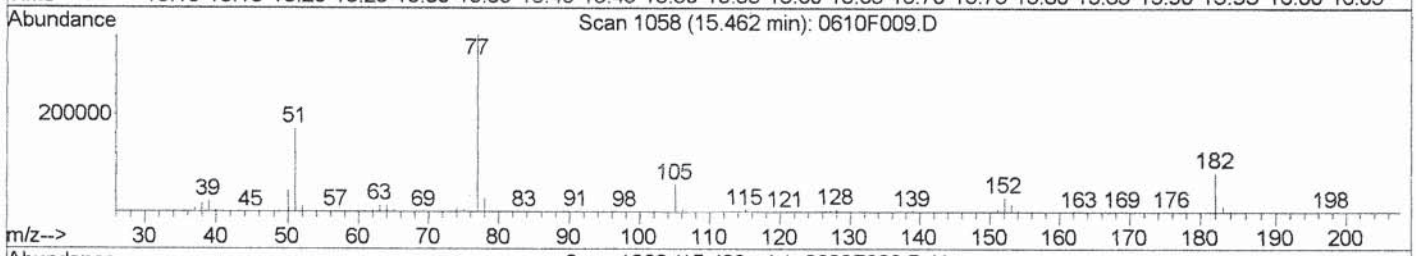
0610F009.D 0602BNC7.M Fri Jun 11 08:24:34 2010

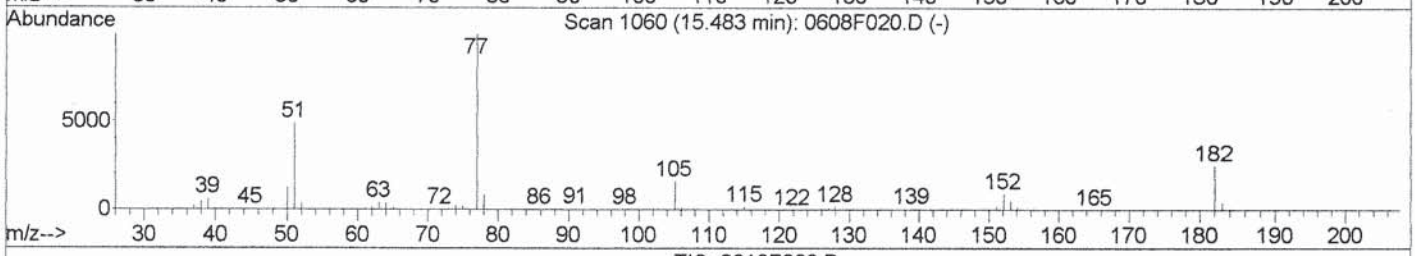
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F009.D Vial: 7
Acq On : 10 Jun 2010 8:18 pm Operator: M.BUTCHER
Sample : KQ5080-4 DLCS Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:24 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration







TIC: 0610F009.D

(57) 1,2-Diphenylhydrazine (T)

15.46min 79.22ug/ml m

response 481810

Ion	Exp%	Act%
77.15	100	100
51.10	43.10	46.81
182.15	27.90	22.23
105.00	16.60	15.49

OE 6-11-10

0610F009.D 0602BNC7.M Fri Jun 11 08:24:58 2010

LB 6/14/10

Organic Analysis:
Semi-Volatile Organic Compounds by GC/MS

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 14:51

Tune Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F001.D
Instrument ID: MS07
Column:

Analysis Method: 8270C
Analysis Lot: KWG1005663

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	30	80	50.5	24239	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	59.4	28517	PASS
70	69	0	2	0.2	47	PASS
127	198	25	75	51.1	24529	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	48018	PASS
199	198	5	9	6.7	3236	PASS
275	198	10	30	22.2	10668	PASS
365	198	1	100	3.0	1439	PASS
441	443	0	100	78.5	3934	PASS
442	198	40	110	55.2	26486	PASS
443	442	15	24	18.9	5012	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1005663-2	J:\MS07\DATA\061010\0610F002.D	06/10/2010	15:32	
Method Blank	KWG1005659-5	J:\MS07\DATA\061010\0610F007.D	06/10/2010	18:58	
Lab Control Sample	KWG1005659-3	J:\MS07\DATA\061010\0610F008.D	06/10/2010	19:38	
Duplicate Lab Control Sample	KWG1005659-4	J:\MS07\DATA\061010\0610F009.D	06/10/2010	20:18	
Batch QCMS	KWG1005659-1	J:\MS07\DATA\061010\0610F010.D	06/10/2010	20:58	
Batch QCDMS	KWG1005659-2	J:\MS07\DATA\061010\0610F011.D	06/10/2010	21:38	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Exception Report

Data File: J:\MS07\DATA\061010\0610F001.D
Lab ID: KWG1005663-1
RunType: TUNE
Matrix: WATER

Date Acquired: 06/10/2010 14:51
Date Quantitated:
Batch ID: KWG1005663
Analysis Method: 8270C
MethodJoinID: MJ250

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: 6-11-10

Secondary Review: 6/14/10

Printed: 06/11/2010 10:12:07
u:\Stealth\Crystal.rpt\except2.rpt

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270C	**Collect Date:**		**Receive Date:**	06/11/2010

Analysis Lot:	KWG1005663	**Prep Lot:**		**Report Group:**	
Analysis Method:	DFTPP	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:		**Report List ID:**	LJ1747
Tune Ref:		**Method ID:**	MJ190
MB Ref:		**Quant based on Report List**	

Data File:	J:\MS07\DATA\061010\0610F001.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 14:51	**Quant Date:**		**Vial:**	1
Run Type:	TUNE			**Dilution:**	1.0
Lab ID:	KWG1005663-1			**Soln Conc. Units:**	

Tune Results

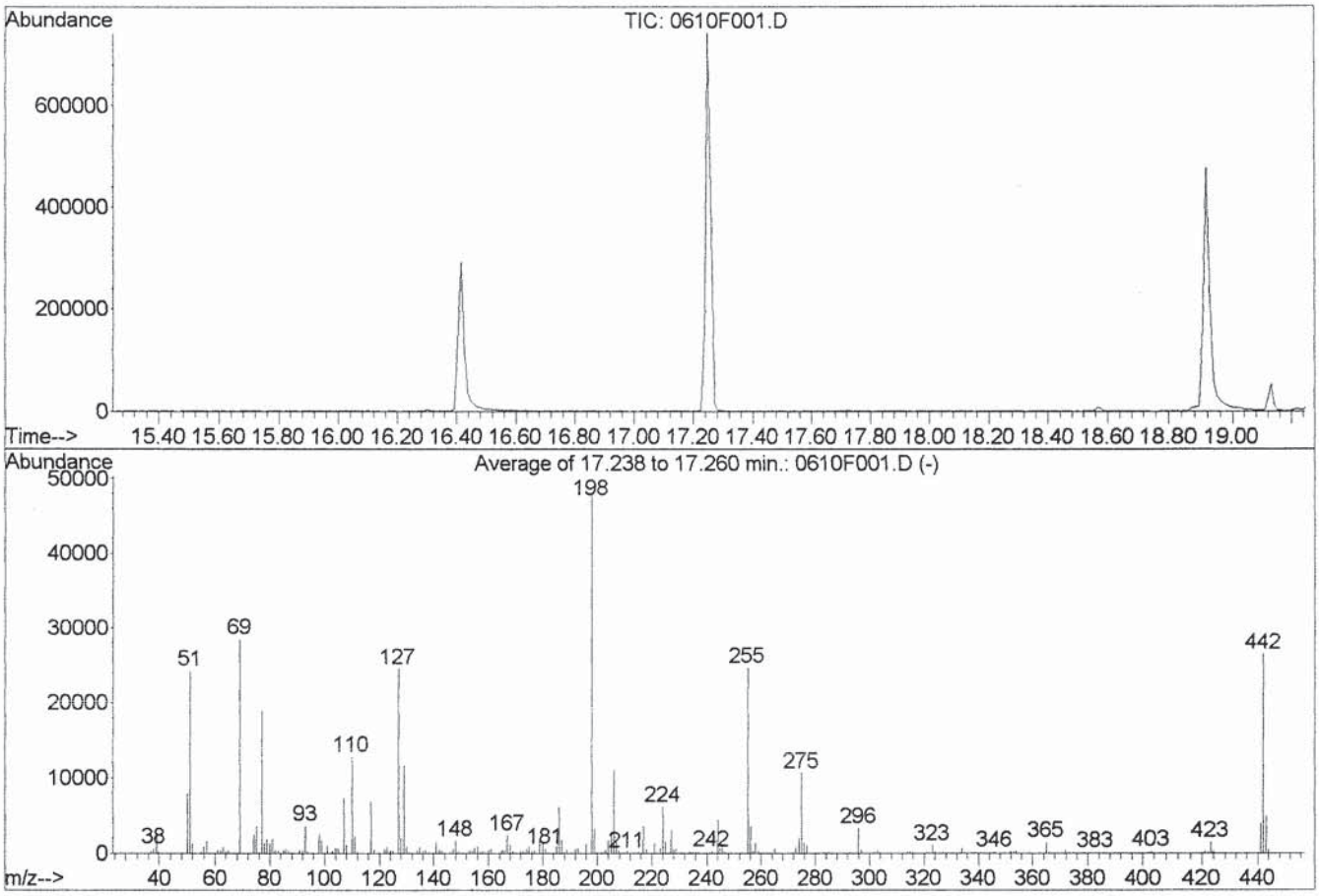
Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	30	80	50.5	24239	Pass
68	69	0	2	0.0	0	Pass
69	198	0	100	59.4	28517	Pass
70	69	0	2	0.2	47	Pass
127	198	25	75	51.1	24529	Pass
197	198	0	1	0.0	0	Pass
198	198	100	100	100.0	48018	Pass
199	198	5	9	6.7	3236	Pass
275	198	10	30	22.2	10668	Pass
365	198	0.75	100	3.0	1439	Pass
441	443	0.01	100	78.5	3934	Pass
442	198	40	110	55.2	26486	Pass
443	442	15	24	18.9	5012	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS07\DATA\061010\0610F001.D Vial: 1
Acq On : 10 Jun 2010 2:51 pm Operator: M.BUTCHER
Sample : 50PPM DFTPP SVM32-14A Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07



Spectrum Information: Average of 17.238 to 17.260 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	80	50.5	24239	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	59.4	28517	PASS
70	69	0.00	2	0.2	47	PASS
127	198	25	75	51.1	24529	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	48018	PASS
199	198	5	9	6.7	3236	PASS
275	198	10	30	22.2	10668	PASS
365	198	0.75	100	3.0	1439	PASS
441	443	0.01	100	78.5	3934	PASS
442	198	40	110	55.2	26486	PASS
443	442	15	24	18.9	5012	PASS

0610F001.D 0602BNC7.M Fri Jun 11 08:01:56 2010

Average of 17.238 to 17.260 min.: 0610F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.95	269	51.00	24239	63.95	150	76.05	200
37.95	596	52.00	1284	64.90	388	77.05	18950
38.95	2636	52.90	48	65.85	34	77.95	1367
39.80	178	54.50	44	66.05	68	78.95	1900
41.05	109	54.90	217	67.05	67	79.95	1374
41.80	33	55.90	862	68.95	28517	80.95	1837
43.00	41	56.90	1594	69.95	47	81.95	466
44.90	53	60.90	403	72.85	50	82.95	328
47.00	37	61.85	56	73.15	76	85.00	414
48.00	68	62.05	365	73.95	2451	85.95	610
50.00	7890	62.95	858	74.95	3523	87.00	313

Average of 17.238 to 17.260 min.: 0610F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.95	111	100.00	96	113.05	76	124.95	385
88.85	75	100.90	1028	113.85	33	127.00	24529
89.90	35	102.00	39	114.65	34	128.00	2025
90.95	467	102.90	380	116.95	6900	129.00	11720
92.00	313	103.90	684	117.95	515	129.90	992
93.00	3621	104.95	668	119.25	49	130.85	185
93.95	255	106.95	7334	120.05	71	132.00	77
95.90	66	107.95	1147	121.95	608	132.20	40
98.00	2519	109.95	12775	122.95	873	133.95	327
99.00	1841	110.95	2196	123.75	63	134.90	840
99.80	46	111.95	282	123.95	388	135.90	288

Average of 17.238 to 17.260 min.: 0610F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.95	435	146.00	62	155.95	940	167.95	1127
138.00	74	146.80	67	157.00	190	168.85	245
138.70	45	147.00	552	157.85	268	169.80	97
139.80	92	147.95	1615	158.90	158	170.90	68
140.10	35	149.00	268	159.95	400	171.90	286
140.90	1484	149.95	61	160.95	584	172.95	258
141.90	425	151.00	138	161.90	159	173.90	523
142.90	301	152.15	35	163.85	56	175.00	923
143.90	61	152.95	431	164.95	567	176.05	299
144.80	42	154.00	300	165.95	331	176.90	487
145.80	186	154.95	693	166.95	2357	178.90	1935

Average of 17.238 to 17.260 min.: 0610F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
179.95	1307	189.90	50	201.40	163	211.65	73
180.95	592	190.90	94	202.95	424	214.95	150
181.70	36	191.15	131	203.95	1707	216.90	3554
182.00	60	191.90	547	205.00	2894	218.00	494
182.70	36	192.95	665	205.95	11013	221.00	1391
183.95	141	194.00	93	206.95	1462	221.90	58
185.00	1050	195.95	1173	207.95	395	222.80	53
185.95	6151	197.95	48018	208.90	129	223.00	728
186.90	1733	198.85	3236	209.90	208	224.00	6139
187.95	193	199.75	54	210.85	315	224.95	1612
188.85	450	199.90	194	211.05	168	226.90	3078

Average of 17.238 to 17.260 min.: 0610F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
227.90	475	238.90	116	252.95	168	270.90	35
228.90	599	239.95	67	255.00	24692	272.90	781
229.90	52	241.00	168	256.00	3630	273.95	2001
230.90	209	241.90	301	256.95	294	274.90	10668
231.60	35	243.95	4419	257.80	131	275.90	1386
231.90	34	244.95	655	257.95	1469	276.95	1041
232.80	40	245.85	1142	258.90	266	277.95	102
233.95	190	246.90	253	260.90	34	282.95	102
234.95	192	248.95	164	264.00	53	283.70	77
235.90	201	250.85	35	264.90	649	284.05	47
236.90	200	252.05	39	265.90	69	284.95	174

Average of 17.238 to 17.260 min.: 0610F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
292.95	214	323.95	173	364.95	1439	420.95	238
293.85	39	326.90	158	365.85	196	422.00	197
295.90	3336	328.05	102	370.95	37	422.95	1499
296.90	452	332.95	69	371.95	478	423.95	371
302.95	349	333.95	675	372.95	118	441.00	3934
303.90	123	334.90	143	382.90	143	442.00	26486
313.90	175	340.85	112	389.80	34	443.00	5012
314.85	330	345.90	215	390.90	36	444.00	513
315.90	183	351.90	292	401.95	171		
320.95	105	352.95	192	402.90	276		
323.00	1071	353.90	285	403.85	112		

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010
Time Analyzed: 22:19

Tune Summary
Semi-Volatile Organic Compounds by GC/MS

File ID: J:\MS07\DATA\061010\0610F012.D
Instrument ID: MS07
Column:

Analysis Method: 8270C
Analysis Lot: KWG1005687

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	30	80	48.7	28256	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	58.7	34033	PASS
70	69	0	2	0.0	0	PASS
127	198	25	75	49.0	28411	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	58006	PASS
199	198	5	9	6.7	3890	PASS
275	198	10	30	20.5	11918	PASS
365	198	1	100	2.7	1563	PASS
441	443	0	100	75.9	4319	PASS
442	198	40	110	49.9	28935	PASS
443	442	15	24	19.7	5688	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1005687-2	J:\MS07\DATA\061010\0610F013.D	06/10/2010	22:59	
Batch QC	K1005175-012	J:\MS07\DATA\061010\0610F015.D	06/11/2010	00:19	
D-4-16	K1005244-003	J:\MS07\DATA\061010\0610F016.D	06/11/2010	01:00	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Exception Report

Data File: J:\MS07\DATA\061010\0610F012.D
Lab ID: KWG1005687-1
RunType: TUNE
Matrix: WATER

Date Acquired: 06/10/2010 22:19
Date Quantitated:
Batch ID: KWG1005687
Analysis Method: 8270C
ListJoinID: LJ11612

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: 6-11-10

Secondary Review: LB 6/14/10

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270C	**Collect Date:**		**Receive Date:**	06/11/2010

Analysis Lot:	KWG1005687	**Prep Lot:**		**Report Group:**	
Analysis Method:	DFTPP	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:		**Report List ID:**	LJ1747
Tune Ref:		**Method ID:**	MJ190
MB Ref:		**Quant based on Report List**	

Data File:	J:\MS07\DATA\061010\0610F012.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 22:19	**Quant Date:**		**Vial:**	10
Run Type:	TUNE			**Dilution:**	1.0
Lab ID:	KWG1005687-1			**Soln Conc. Units:**	

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	30	80	48.7	28256	Pass
68	69	0	2	0.0	0	Pass
69	198	0	100	58.7	34033	Pass
70	69	0	2	0.0	0	Pass
127	198	25	75	49.0	28411	Pass
197	198	0	1	0.0	0	Pass
198	198	100	100	100.0	58006	Pass
199	198	5	9	6.7	3890	Pass
275	198	10	30	20.5	11918	Pass
365	198	0.75	100	2.7	1563	Pass
441	443	0.01	100	75.9	4319	Pass
442	198	40	110	49.9	28935	Pass
443	442	15	24	19.7	5688	Pass

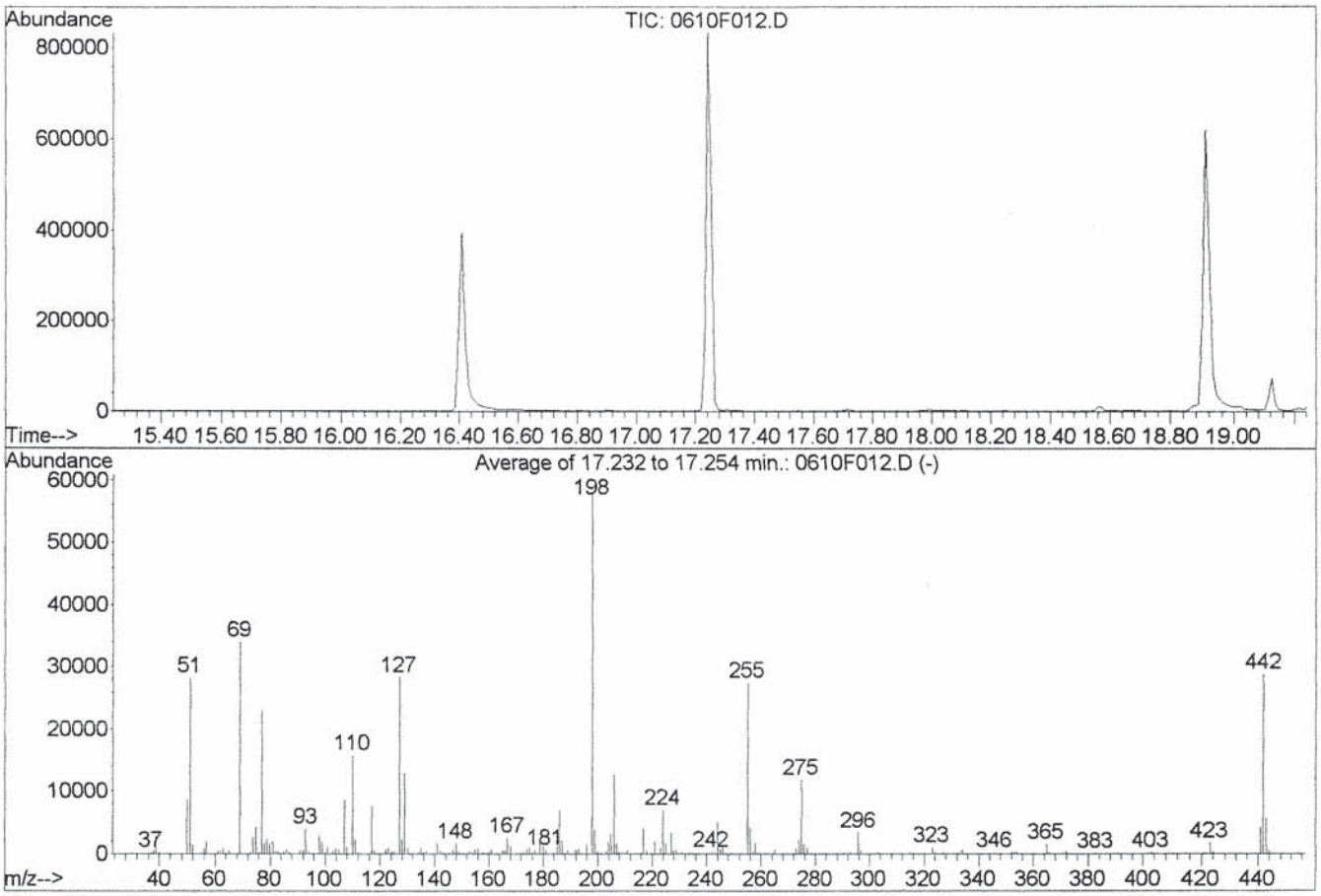
U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS07\DATA\061010\0610F012.D
Acq On : 10 Jun 2010 10:19 pm
Sample : 50PPM DFTPP SVM32-14A
Misc :
MS Integration Params: RTEINT.P
Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07

Vial: 10
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00



Spectrum Information: Average of 17.232 to 17.254 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	80	48.7	28256	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.7	34033	PASS
70	69	0.00	2	0.0	0	PASS
127	198	25	75	49.0	28411	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	58006	PASS
199	198	5	9	6.7	3890	PASS
275	198	10	30	20.5	11918	PASS
365	198	0.75	100	2.7	1563	PASS
441	443	0.01	100	75.9	4319	PASS
442	198	40	110	49.9	28935	PASS
443	442	15	24	19.7	5688	PASS

0610F012.D 0602BNC7.M Fri Jun 11 11:41:13 2010

Average of 17.232 to 17.254 min.: 0610F012.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	246	55.00	265	65.95	115	79.95	1635
37.95	521	56.00	983	67.05	49	80.95	2065
38.95	2797	56.90	1973	68.95	34033	81.75	81
39.95	306	58.00	53	72.85	63	81.95	392
43.85	55	59.90	46	73.00	234	82.90	464
44.90	63	60.90	383	73.95	2657	83.80	41
46.10	43	62.05	444	74.95	4250	84.90	411
48.00	45	62.95	1013	76.05	259	86.00	746
50.00	8697	63.85	163	77.05	23098	86.95	316
51.00	28256	64.05	40	77.95	1652	88.00	75
52.00	1438	65.05	511	78.95	2317	88.90	76

Average of 17.232 to 17.254 min.: 0610F012.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.00	513	101.80	55	112.95	92	128.00	2257
92.00	669	102.10	45	114.65	40	129.00	13069
93.00	4018	102.95	427	116.95	7643	129.95	1083
94.00	322	103.90	838	117.95	581	130.90	174
94.90	58	104.95	729	118.95	86	131.70	35
95.90	153	106.95	8609	119.95	109	132.00	89
96.10	54	107.85	190	121.95	670	132.90	37
98.00	2847	108.00	1100	122.95	944	133.70	54
99.00	1970	109.95	15892	123.95	421	133.95	333
100.00	255	110.95	2396	124.95	430	134.90	940
100.90	1054	111.95	327	127.00	28411	135.80	51

Average of 17.232 to 17.254 min.: 0610F012.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.00	358	146.95	684	154.95	750	162.85	40
136.90	459	147.95	1673	155.85	120	163.75	47
137.80	55	148.95	295	156.00	941	164.05	35
138.95	87	149.95	67	156.95	36	164.95	559
140.00	120	150.20	74	157.15	170	166.00	510
140.90	1624	150.95	155	157.95	314	166.95	2582
141.95	495	151.15	60	158.75	91	167.95	1295
142.90	324	151.95	66	159.05	103	168.90	175
143.75	79	152.85	444	159.95	455	169.95	110
145.00	71	153.85	260	160.95	710	170.95	126
146.00	271	154.05	94	162.00	138	172.00	260

Average of 17.232 to 17.254 min.: 0610F012.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.95	355	183.95	194	195.95	1521	207.95	458
173.95	625	185.00	1125	197.95	58006	208.85	79
175.00	1011	186.00	6996	198.95	3890	209.05	67
175.90	333	186.90	2159	199.90	299	210.05	244
176.95	535	188.00	256	201.45	218	210.85	568
177.90	121	188.90	528	202.95	488	211.95	124
178.90	2162	189.90	47	203.95	1952	214.95	141
179.95	1326	190.95	197	204.95	3285	216.00	221
181.00	646	191.95	715	205.95	12785	216.90	4045
181.90	124	192.95	726	206.95	1743	217.95	507
182.80	39	193.90	198	207.75	37	218.90	36

Average of 17.232 to 17.254 min.: 0610F012.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
221.00	2034	231.90	43	243.95	5096	257.00	397
223.00	938	232.90	78	244.95	742	257.95	1727
224.00	7020	233.90	167	245.90	1165	258.90	270
224.80	156	234.90	227	246.85	216	263.90	45
225.00	1662	235.90	151	248.85	200	264.90	713
225.90	101	236.90	212	250.05	42	265.75	138
226.90	3433	239.00	128	251.80	78	269.70	39
227.90	514	239.90	123	252.75	75	271.90	105
228.90	591	240.85	184	253.05	76	272.90	860
229.90	109	241.95	369	255.00	27530	273.95	2228
230.90	278	243.05	245	256.00	4202	274.90	11918

Average of 17.232 to 17.254 min.: 0610F012.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
275.90	1607	302.95	373	331.95	96	365.90	241
276.95	1051	303.95	136	332.90	127	370.90	92
277.95	172	307.90	40	333.95	669	371.95	503
282.80	119	313.90	83	334.90	158	372.95	121
283.95	88	314.85	398	341.00	122	382.80	147
284.95	177	315.85	187	345.85	227	389.90	61
292.95	249	320.95	142	352.00	349	401.90	221
293.75	35	322.95	1057	352.95	209	402.90	276
294.05	41	323.90	211	353.95	334	403.85	108
295.90	3429	326.90	223	364.75	40	420.95	225
296.85	495	327.90	97	364.95	1563	421.95	195

Average of 17.232 to 17.254 min.: 0610F012.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
422.95	1751						
423.95	373						
441.00	4319						
442.00	28935						
443.00	5688						
444.00	518						

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Level ID	File ID
A	J:\MS07\DATA\060210\0602F004.D
B	J:\MS07\DATA\060210\0602F005.D
C	J:\MS07\DATA\060210\0602F006.D
D	J:\MS07\DATA\060210\0602F007.D
E	J:\MS07\DATA\060210\0602F008.D
F	J:\MS07\DATA\060210\0602F009.D
G	J:\MS07\DATA\060210\0602F010.D
H	J:\MS07\DATA\060210\0602F011.D
I	J:\MS07\DATA\060210\0602F012.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosodimethylamine	A	5.0	0.876	B	10	0.953	C	20	0.933	D	50	0.861	E	80	0.952
	F	100	1.02	G	120	0.995	H	160	1.02	I	200	0.996			
Aniline	A	5.0	1.51	B	10	1.55	C	20	1.58	D	50	1.23	E	80	1.50
	F	100	1.55	G	120	1.50	H	160	1.56	I	200	1.51			
Bis(2-chloroethyl) Ether	A	5.0	1.03	B	10	1.14	C	20	1.20	D	50	1.05	E	80	1.24
	F	100	1.29	G	120	1.32	H	160	1.33	I	200	1.29			
‡ Phenol				B	10	1.36	C	20	1.44	D	50	1.31	E	80	1.54
‡	F	100	1.63	G	120	1.63	H	160	1.62	I	200	1.62			
2-Chlorophenol	A	5.0	1.16	B	10	1.25	C	20	1.33	D	50	1.15	E	80	1.34
	F	100	1.43	G	120	1.36	H	160	1.39	I	200	1.36			
1,3-Dichlorobenzene	A	5.0	1.33	B	10	1.39	C	20	1.45	D	50	1.31	E	80	1.39
	F	100	1.43	G	120	1.43	H	160	1.39	I	200	1.36			
‡ 1,4-Dichlorobenzene	A	5.0	1.37	B	10	1.45	C	20	1.46	D	50	1.28	E	80	1.48
‡	F	100	1.44	G	120	1.45	H	160	1.44	I	200	1.36			
1,2-Dichlorobenzene	A	5.0	1.28	B	10	1.31	C	20	1.36	D	50	1.24	E	80	1.41
	F	100	1.36	G	120	1.40	H	160	1.33	I	200	1.36			
Benzyl Alcohol				B	10	0.704	C	20	0.752	D	50	0.686	E	80	0.838
	F	100	0.843	G	120	0.894	H	160	0.879	I	200	0.839			
Bis(2-chloroisopropyl) Ether				B	10	1.81	C	20	1.82	D	50	1.63	E	80	2.01
	F	100	2.16	G	120	2.18	H	160	2.25	I	200	2.20			
2-Methylphenol	A	5.0	0.981	B	10	0.983	C	20	0.985	D	50	0.838	E	80	1.04
	F	100	1.02	G	120	0.997	H	160	1.05	I	200	0.964			
Hexachloroethane	A	5.0	0.579	B	10	0.644	C	20	0.660	D	50	0.598	E	80	0.692
	F	100	0.699	G	120	0.678	H	160	0.653	I	200	0.590			
† N-Nitrosodi-n-propylamine	A	5.0	0.866	B	10	0.899	C	20	0.946	D	50	0.757	E	80	1.06
†	F	100	1.09	G	120	1.11	H	160	1.11	I	200	1.02			
4-Methylphenol	A	5.0	1.37	B	10	1.36	C	20	1.44	D	50	1.33	E	80	1.63
	F	100	1.63	G	120	1.67	H	160	1.56	I	200	1.45			

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† SPCC Compound

‡ CCC Compound

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Nitrobenzene				B	10	1.24	C	20	1.31	D	50	1.21	E	80	1.40
	F	100	1.46	G	120	1.46	H	160	1.50	I	200	1.33			
Isophorone	A	5.0	0.711	B	10	0.701	C	20	0.765	D	50	0.630	E	80	0.760
	F	100	0.681	G	120	0.768	H	160	0.731	I	200	0.747			
‡ 2-Nitrophenol	A	5.0	0.182	B	10	0.183	C	20	0.204	D	50	0.173	E	80	0.206
‡	F	100	0.190	G	120	0.218	H	160	0.217	I	200	0.217			
2,4-Dimethylphenol	A	5.0	0.264	B	10	0.234	C	20	0.266	D	50	0.245	E	80	0.281
	F	100	0.271	G	120	0.282	H	160	0.273	I	200	0.277			
Bis(2-chloroethoxy)methane	A	5.0	0.391	B	10	0.393	C	20	0.425	D	50	0.375	E	80	0.412
	F	100	0.410	G	120	0.426	H	160	0.395	I	200	0.421			
‡ 2,4-Dichlorophenol	A	5.0	0.273	B	10	0.290	C	20	0.315	D	50	0.286	E	80	0.303
‡	F	100	0.294	G	120	0.341	H	160	0.310	I	200	0.303			
Benzoic Acid							C	20	0.196	D	50	0.203	E	80	0.235
	F	100	0.222	G	120	0.256	H	160	0.241	I	200	0.241			
1,2,4-Trichlorobenzene	A	5.0	0.318	B	10	0.326	C	20	0.339	D	50	0.300	E	80	0.335
	F	100	0.318	G	120	0.332	H	160	0.311	I	200	0.304			
Naphthalene	A	5.0	0.986	B	10	1.00	C	20	1.01	D	50	0.889	E	80	0.980
	F	100	0.935	G	120	1.01	H	160	0.940	I	200	0.884			
4-Chloroaniline	A	5.0	0.433	B	10	0.434	C	20	0.462	D	50	0.407	E	80	0.421
	F	100	0.409	G	120	0.426	H	160	0.405	I	200	0.414			
‡ Hexachlorobutadiene	A	5.0	0.202	B	10	0.201	C	20	0.218	D	50	0.191	E	80	0.218
‡	F	100	0.211	G	120	0.206	H	160	0.191	I	200	0.190			
‡ 4-Chloro-3-methylphenol	A	5.0	0.319	B	10	0.318	C	20	0.322	D	50	0.310	E	80	0.345
‡	F	100	0.299	G	120	0.334	H	160	0.293	I	200	0.294			
2-Methylnaphthalene	A	5.0	0.626	B	10	0.628	C	20	0.658	D	50	0.582	E	80	0.639
	F	100	0.585	G	120	0.646	H	160	0.592	I	200	0.540			
† Hexachlorocyclopentadiene				B	10	0.211	C	20	0.297	D	50	0.327	E	80	0.387
†	F	100	0.465	G	120	0.436	H	160	0.424	I	200	0.438			
‡ 2,4,6-Trichlorophenol	A	5.0	0.373	B	10	0.389	C	20	0.417	D	50	0.388	E	80	0.413
‡	F	100	0.449	G	120	0.429	H	160	0.427	I	200	0.427			
2,4,5-Trichlorophenol	A	5.0	0.418	B	10	0.427	C	20	0.439	D	50	0.438	E	80	0.449
	F	100	0.503	G	120	0.494	H	160	0.479	I	200	0.490			
2-Chloronaphthalene	A	5.0	1.13	B	10	1.08	C	20	1.10	D	50	1.11	E	80	1.18
	F	100	1.25	G	120	1.16	H	160	1.20	I	200	1.20			
2-Nitroaniline	A	5.0	0.332	B	10	0.361	C	20	0.388	D	50	0.353	E	80	0.389
	F	100	0.365	G	120	0.404	H	160	0.401	I	200	0.358			

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† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Acenaphthylene	A	5.0	1.73	B	10	1.76	C	20	1.84	D	50	1.67	E	80	1.79
	F	100	1.89	G	120	1.81	H	160	1.76	I	200	1.78			
Dimethyl Phthalate	A	5.0	1.49	B	10	1.42	C	20	1.48	D	50	1.36	E	80	1.34
	F	100	1.31	G	120	1.33	H	160	1.28	I	200	1.21			
2,6-Dinitrotoluene	A	5.0	0.316	B	10	0.315	C	20	0.320	D	50	0.286	E	80	0.319
	F	100	0.311	G	120	0.303	H	160	0.299	I	200	0.305			
‡ Acenaphthene	A	5.0	1.10	B	10	1.06	C	20	1.04	D	50	0.936	E	80	1.01
‡	F	100	1.02	G	120	1.02	H	160	0.990	I	200	0.982			
3-Nitroaniline	A	5.0	0.312	B	10	0.330	C	20	0.341	D	50	0.318	E	80	0.340
	F	100	0.314	G	120	0.318	H	160	0.317	I	200	0.327			
† 2,4-Dinitrophenol							C	20	0.126	D	50	0.173	E	80	0.191
†	F	100	0.189	G	120	0.188	H	160	0.196	I	200	0.187			
Dibenzofuran	A	5.0	1.62	B	10	1.71	C	20	1.71	D	50	1.60	E	80	1.66
	F	100	1.58	G	120	1.57	H	160	1.55	I	200	1.43			
† 4-Nitrophenol							C	20	0.149	D	50	0.168	E	80	0.186
†	F	100	0.180	G	120	0.179	H	160	0.183	I	200	0.184			
2,4-Dinitrotoluene	A	5.0	0.442	B	10	0.421	C	20	0.412	D	50	0.379	E	80	0.401
	F	100	0.365	G	120	0.362	H	160	0.369	I	200	0.364			
Fluorene	A	5.0	1.34	B	10	1.29	C	20	1.25	D	50	1.20	E	80	1.21
	F	100	1.18	G	120	1.12	H	160	1.16	I	200	1.07			
4-Chlorophenyl Phenyl Ether	A	5.0	0.653	B	10	0.664	C	20	0.646	D	50	0.591	E	80	0.636
	F	100	0.587	G	120	0.605	H	160	0.586	I	200	0.568			
Diethyl Phthalate				B	10	1.52	C	20	1.50	D	50	1.30	E	80	1.41
	F	100	1.23	G	120	1.26	H	160	1.15	I	200	1.15			
4-Nitroaniline	A	5.0	0.264	B	10	0.281	C	20	0.278	D	50	0.284	E	80	0.287
	F	100	0.278	G	120	0.281	H	160	0.284	I	200	0.289			
2-Methyl-4,6-dinitrophenol							C	20	0.188	D	50	0.221	E	80	0.230
	F	100	0.209	G	120	0.215	H	160	0.219	I	200	0.205			
‡ N-Nitrosodiphenylamine	A	5.0	0.904	B	10	0.854	C	20	0.852	D	50	0.892	E	80	0.789
‡	F	100	0.752	G	120	0.753	H	160	0.728	I	200	0.688			
4-Bromophenyl Phenyl Ether	A	5.0	0.213	B	10	0.226	C	20	0.243	D	50	0.218	E	80	0.267
	F	100	0.257	G	120	0.263	H	160	0.250	I	200	0.233			
Hexachlorobenzene	A	5.0	0.269	B	10	0.266	C	20	0.277	D	50	0.257	E	80	0.306
	F	100	0.297	G	120	0.289	H	160	0.281	I	200	0.274			
‡ Pentachlorophenol							C	20	0.125	D	50	0.142	E	80	0.171
‡	F	100	0.158	G	120	0.169	H	160	0.166	I	200	0.169			

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Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Phenanthrene	A	5.0	1.15	B	10	1.14	C	20	1.09	D	50	0.980	E	80	1.15
	F	100	1.00	G	120	1.04	H	160	1.00	I	200	1.01			
Anthracene	A	5.0	1.15	B	10	1.12	C	20	1.10	D	50	1.04	E	80	1.21
	F	100	1.15	G	120	1.13	H	160	1.10	I	200	1.06			
Di-n-butyl Phthalate	A	5.0	1.26	B	10	1.09	C	20	1.15	D	50	1.16	E	80	1.33
	F	100	1.28	G	120	1.25	H	160	1.19	I	200	1.25			
‡ Fluoranthene	A	5.0	0.954	B	10	0.890	C	20	0.817	D	50	0.817	E	80	0.968
‡	F	100	1.04	G	120	1.04	H	160	1.04	I	200	1.10			
Pyrene				B	10	1.28	C	20	1.15	D	50	1.08	E	80	1.03
	F	100	0.965	G	120	0.970	H	160	0.958	I	200	1.11			
Butyl Benzyl Phthalate	A	5.0	0.581	B	10	0.542	C	20	0.606	D	50	0.565	E	80	0.647
	F	100	0.607	G	120	0.626	H	160	0.620	I	200	0.680			
3,3'-Dichlorobenzidine	A	5.0	0.404	B	10	0.399	C	20	0.423	D	50	0.427	E	80	0.465
	F	100	0.430	G	120	0.415	H	160	0.398	I	200	0.402			
Benz(a)anthracene	A	5.0	0.973	B	10	0.885	C	20	0.921	D	50	0.905	E	80	1.02
	F	100	0.963	G	120	0.923	H	160	0.914	I	200	0.952			
Chrysene	A	5.0	1.01	B	10	0.878	C	20	0.894	D	50	0.882	E	80	0.958
	F	100	0.911	G	120	0.877	H	160	0.866	I	200	0.918			
Bis(2-ethylhexyl) Phthalate	A	5.0	0.827	B	10	0.765	C	20	0.860	D	50	0.809	E	80	0.896
	F	100	0.902	G	120	0.924	H	160	0.901	I	200	0.908			
‡ Di-n-octyl Phthalate				B	10	1.37	C	20	1.40	D	50	1.58	E	80	1.81
‡	F	100	1.99	G	120	1.96	H	160	2.00	I	200	1.98			
Benzo(b)fluoranthene				B	10	0.873	C	20	0.966	D	50	0.943	E	80	1.04
	F	100	1.11	G	120	1.04	H	160	1.12	I	200	1.15			
Benzo(k)fluoranthene	A	5.0	0.941	B	10	0.944	C	20	1.03	D	50	1.03	E	80	1.09
	F	100	1.14	G	120	1.18	H	160	1.10	I	200	1.17			
‡ Benzo(a)pyrene				B	10	0.799	C	20	0.843	D	50	0.788	E	80	0.871
‡	F	100	0.874	G	120	0.881	H	160	0.899	I	200	0.891			
Indeno(1,2,3-cd)pyrene	A	5.0	0.706	B	10	0.671	C	20	0.684	D	50	0.687	E	80	0.758
	F	100	0.750	G	120	0.785	H	160	0.813	I	200	0.816			
Dibenz(a,h)anthracene	A	5.0	0.758	B	10	0.689	C	20	0.761	D	50	0.713	E	80	0.812
	F	100	0.819	G	120	0.809	H	160	0.859	I	200	0.885			
Benzo(g,h,i)perylene	A	5.0	0.819	B	10	0.799	C	20	0.777	D	50	0.744	E	80	0.778
	F	100	0.772	G	120	0.832	H	160	0.809	I	200	0.870			
2-Fluorophenol	A	5.0	0.897	B	10	1.01	C	20	1.02	D	50	1.07	E	80	1.08
	F	100	1.15	G	120	1.12	H	160	1.12	I	200	1.11			

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Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Phenol-d6	A	5.0	1.24	B	10	1.40	C	20	1.40	D	50	1.43	E	80	1.52
	F	100	1.60	G	120	1.60	H	160	1.61	I	200	1.55			
Nitrobenzene-d5				B	10	1.27	C	20	1.32	D	50	1.34	E	80	1.50
	F	100	1.55	G	120	1.53	H	160	1.58	I	200	1.50			
2-Fluorobiphenyl	A	5.0	1.21	B	10	1.26	C	20	1.26	D	50	1.31	E	80	1.24
	F	100	1.47	G	120	1.38	H	160	1.35	I	200	1.32			
2,4,6-Tribromophenol				B	10	0.133	C	20	0.155	D	50	0.160	E	80	0.180
	F	100	0.173	G	120	0.175	H	160	0.161	I	200	0.160			
Terphenyl-d14				B	10	0.644	C	20	0.659	D	50	0.674	E	80	0.595
	F	100	0.564	G	120	0.551	H	160	0.587	I	200	0.625			

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosodimethylamine	TRG	AverageRF	% RSD	6.0		≤ 15	0.956		0.01
Aniline	TRG	AverageRF	% RSD	6.9		≤ 15	1.50		0.01
Bis(2-chloroethyl) Ether	TRG	AverageRF	% RSD	9.3		≤ 15	1.21		0.01
‡ Phenol	MS	AverageRF	% RSD	8.7		≤ 15	1.52		0.01
2-Chlorophenol	MS	AverageRF	% RSD	7.6		≤ 15	1.31		0.01
1,3-Dichlorobenzene	TRG	AverageRF	% RSD	3.5		≤ 15	1.39		0.01
‡ 1,4-Dichlorobenzene	MS	AverageRF	% RSD	4.5		≤ 15	1.41		0.01
1,2-Dichlorobenzene	TRG	AverageRF	% RSD	4.1		≤ 15	1.34		0.01
Benzyl Alcohol	TRG	AverageRF	% RSD	9.9		≤ 15	0.804		0.01
Bis(2-chloroisopropyl) Ether	TRG	AverageRF	% RSD	11.5		≤ 15	2.01		0.01
2-Methylphenol	TRG	AverageRF	% RSD	6.2		≤ 15	0.984		0.01
Hexachloroethane	TRG	AverageRF	% RSD	7.0		≤ 15	0.644		0.01
† N-Nitrosodi-n-propylamine	MS	AverageRF	% RSD	12.7		≤ 15	0.985		0.05
4-Methylphenol	TRG	AverageRF	% RSD	8.8		≤ 15	1.49		0.01
Nitrobenzene	TRG	AverageRF	% RSD	7.9		≤ 15	1.36		0.01
Isophorone	TRG	AverageRF	% RSD	6.3		≤ 15	0.722		0.01
‡ 2-Nitrophenol	TRG	AverageRF	% RSD	8.7		≤ 15	0.199		0.01
2,4-Dimethylphenol	TRG	AverageRF	% RSD	6.1		≤ 15	0.266		0.01
Bis(2-chloroethoxy)methane	TRG	AverageRF	% RSD	4.3		≤ 15	0.405		0.01
‡ 2,4-Dichlorophenol	TRG	AverageRF	% RSD	6.5		≤ 15	0.302		0.01
Benzoic Acid	TRG	AverageRF	% RSD	9.6		≤ 15	0.228		0.01
1,2,4-Trichlorobenzene	MS	AverageRF	% RSD	4.3		≤ 15	0.320		0.01
Naphthalene	TRG	AverageRF	% RSD	5.2		≤ 15	0.960		0.01
4-Chloroaniline	TRG	AverageRF	% RSD	4.3		≤ 15	0.423		0.01
‡ Hexachlorobutadiene	TRG	AverageRF	% RSD	5.5		≤ 15	0.203		0.01
‡ 4-Chloro-3-methylphenol	MS	AverageRF	% RSD	5.6		≤ 15	0.315		0.01
2-Methylnaphthalene	TRG	AverageRF	% RSD	6.3		≤ 15	0.611		0.01
† Hexachlorocyclopentadiene	TRG	Quadratic	COD	0.993		≥ 0.990	0.373		0.05
‡ 2,4,6-Trichlorophenol	TRG	AverageRF	% RSD	5.9		≤ 15	0.413		0.01
2,4,5-Trichlorophenol	TRG	AverageRF	% RSD	6.9		≤ 15	0.460		0.01
2-Chloronaphthalene	TRG	AverageRF	% RSD	4.8		≤ 15	1.16		0.01
2-Nitroaniline	TRG	AverageRF	% RSD	6.5		≤ 15	0.372		0.01
Acenaphthylene	TRG	AverageRF	% RSD	3.6		≤ 15	1.78		0.01
Dimethyl Phthalate	TRG	AverageRF	% RSD	6.7		≤ 15	1.36		0.01
2,6-Dinitrotoluene	TRG	AverageRF	% RSD	3.6		≤ 15	0.308		0.01
‡ Acenaphthene	MS	AverageRF	% RSD	4.6		≤ 15	1.02		0.01
3-Nitroaniline	TRG	AverageRF	% RSD	3.4		≤ 15	0.324		0.01
† 2,4-Dinitrophenol	TRG	AverageRF	% RSD	13.5		≤ 15	0.179		0.05
Dibenzofuran	TRG	AverageRF	% RSD	5.4		≤ 15	1.60		0.01
† 4-Nitrophenol	MS	AverageRF	% RSD	7.4		≤ 15	0.176		0.05
2,4-Dinitrotoluene	MS	AverageRF	% RSD	7.5		≤ 15	0.391		0.01
Fluorene	TRG	AverageRF	% RSD	7.0		≤ 15	1.20		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010

Initial Calibration Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration ID: CAL9525
Instrument ID: MS07

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
4-Chlorophenyl Phenyl Ether	TRG	AverageRF	% RSD	5.7		≤ 15	0.615		0.01
Diethyl Phthalate	TRG	AverageRF	% RSD	11.0		≤ 15	1.31		0.01
4-Nitroaniline	TRG	AverageRF	% RSD	2.6		≤ 15	0.281		0.01
2-Methyl-4,6-dinitrophenol	TRG	AverageRF	% RSD	6.4		≤ 15	0.212		0.01
‡ N-Nitrosodiphenylamine	TRG	AverageRF	% RSD	9.6		≤ 15	0.801		0.01
4-Bromophenyl Phenyl Ether	TRG	AverageRF	% RSD	8.1		≤ 15	0.241		0.01
Hexachlorobenzene	TRG	AverageRF	% RSD	5.6		≤ 15	0.280		0.01
‡ Pentachlorophenol	MS	AverageRF	% RSD	11.0		≤ 15	0.157		0.01
Phenanthrene	TRG	AverageRF	% RSD	6.5		≤ 15	1.06		0.01
Anthracene	TRG	AverageRF	% RSD	4.6		≤ 15	1.12		0.01
Di-n-butyl Phthalate	TRG	AverageRF	% RSD	6.2		≤ 15	1.22		0.01
‡ Fluoranthene	TRG	AverageRF	% RSD	10.7		≤ 15	0.964		0.01
Pyrene	MS	AverageRF	% RSD	10.4		≤ 15	1.07		0.01
Butyl Benzyl Phthalate	TRG	AverageRF	% RSD	6.9		≤ 15	0.608		0.01
3,3'-Dichlorobenzidine	TRG	AverageRF	% RSD	5.1		≤ 15	0.418		0.01
Benz(a)anthracene	TRG	AverageRF	% RSD	4.5		≤ 15	0.940		0.01
Chrysene	TRG	AverageRF	% RSD	5.1		≤ 15	0.910		0.01
Bis(2-ethylhexyl) Phthalate	TRG	AverageRF	% RSD	6.3		≤ 15	0.866		0.01
‡ Di-n-octyl Phthalate	TRG	Quadratic	COD	0.998		≥ 0.990	1.76		0.01
Benzo(b)fluoranthene	TRG	AverageRF	% RSD	9.4		≤ 15	1.03		0.01
Benzo(k)fluoranthene	TRG	AverageRF	% RSD	8.3		≤ 15	1.07		0.01
‡ Benzo(a)pyrene	TRG	AverageRF	% RSD	4.9		≤ 15	0.856		0.01
Indeno(1,2,3-cd)pyrene	TRG	AverageRF	% RSD	7.6		≤ 15	0.741		0.01
Dibenz(a,h)anthracene	TRG	AverageRF	% RSD	8.2		≤ 15	0.789		0.01
Benzo(g,h,i)perylene	TRG	AverageRF	% RSD	4.7		≤ 15	0.800		0.01
2-Fluorophenol	SURR	AverageRF	% RSD	7.3		≤ 15	1.06		0.01
Phenol-d6	SURR	AverageRF	% RSD	8.3		≤ 15	1.48		0.01
Nitrobenzene-d5	SURR	AverageRF	% RSD	8.3		≤ 15	1.45		0.01
2-Fluorobiphenyl	SURR	AverageRF	% RSD	6.1		≤ 15	1.31		0.01
2,4,6-Tribromophenol	SURR	AverageRF	% RSD	9.2		≤ 15	0.162		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	7.3		≤ 15	0.612		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010
Date Analyzed: 06/02/2010 - 06/03/2010

Second Source Calibration Verification
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration ID: CAL9525
Units: ug/ml

File ID: J:\MS07\DATA\060210\0602F013.D
J:\MS07\DATA\060210\0602F014.D
J:\MS07\DATA\060210\0602F016.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine	80	76	0.956	0.912	-5	NA	± 30 %	AverageRF
Aniline	80	99	1.50	1.85	23	NA	± 30 %	AverageRF
Bis(2-chloroethyl) Ether	80	85	1.21	1.28	6	NA	± 30 %	AverageRF
‡ Phenol	80	86	1.52	1.64	8	NA	± 20 %	AverageRF
2-Chlorophenol	80	83	1.31	1.36	4	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	80	79	1.39	1.37	-1	NA	± 30 %	AverageRF
‡ 1,4-Dichlorobenzene	80	81	1.41	1.43	1	NA	± 20 %	AverageRF
1,2-Dichlorobenzene	80	83	1.34	1.38	3	NA	± 30 %	AverageRF
Benzyl Alcohol	80	88	0.804	0.884	10	NA	± 30 %	AverageRF
Bis(2-chloroisopropyl) Ether	80	89	2.01	2.24	12	NA	± 30 %	AverageRF
2-Methylphenol	80	81	0.984	0.991	1	NA	± 30 %	AverageRF
Hexachloroethane	80	81	0.644	0.653	1	NA	± 30 %	AverageRF
† N-Nitrosodi-n-propylamine	80	77	0.985	0.949	-4	NA	± 30 %	AverageRF
4-Methylphenol	80	84	1.49	1.57	5	NA	± 30 %	AverageRF
Nitrobenzene	80	79	1.36	1.35	-1	NA	± 30 %	AverageRF
Isophorone	80	76	0.722	0.686	-5	NA	± 30 %	AverageRF
‡ 2-Nitrophenol	80	82	0.199	0.204	3	NA	± 20 %	AverageRF
2,4-Dimethylphenol	80	83	0.266	0.276	4	NA	± 30 %	AverageRF
Bis(2-chloroethoxy)methane	80	86	0.405	0.434	7	NA	± 30 %	AverageRF
‡ 2,4-Dichlorophenol	80	81	0.302	0.306	1	NA	± 20 %	AverageRF
Benzoic Acid	80	78	0.228	0.222	-3	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	80	80	0.320	0.321	0	NA	± 30 %	AverageRF
Naphthalene	80	80	0.960	0.962	0	NA	± 30 %	AverageRF
4-Chloroaniline	80	74	0.423	0.392	-7	NA	± 30 %	AverageRF
‡ Hexachlorobutadiene	80	80	0.203	0.203	0	NA	± 20 %	AverageRF
‡ 4-Chloro-3-methylphenol	80	73	0.315	0.287	-9	NA	± 20 %	AverageRF
2-Methylnaphthalene	80	74	0.611	0.561	-8	NA	± 30 %	AverageRF
† Hexachlorocyclopentadiene	80	65	0.373	0.326	NA	-19	± 30 %	Quadratic
‡ 2,4,6-Trichlorophenol	80	86	0.413	0.445	8	NA	± 20 %	AverageRF
2,4,5-Trichlorophenol	80	81	0.460	0.466	1	NA	± 30 %	AverageRF
2-Chloronaphthalene	80	85	1.16	1.23	6	NA	± 30 %	AverageRF
2-Nitroaniline	80	78	0.372	0.362	-3	NA	± 30 %	AverageRF
Acenaphthylene	80	68	1.78	1.51	-15	NA	± 30 %	AverageRF
Dimethyl Phthalate	80	71	1.36	1.20	-12	NA	± 30 %	AverageRF
2,6-Dinitrotoluene	80	75	0.308	0.288	-7	NA	± 30 %	AverageRF
‡ Acenaphthene	80	77	1.02	0.979	-4	NA	± 20 %	AverageRF
3-Nitroaniline	80	72	0.324	0.293	-10	NA	± 30 %	AverageRF
† 2,4-Dinitrophenol	80	79	0.179	0.176	-2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Calibration Date: 06/02/2010
Date Analyzed: 06/02/2010 - 06/03/2010

Second Source Calibration Verification
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration ID: CAL9525
Units: ug/ml

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Dibenzofuran	80	75	1.60	1.50	-6	NA	± 30 %	AverageRF
† 4-Nitrophenol	80	75	0.176	0.165	-6	NA	± 30 %	AverageRF
2,4-Dinitrotoluene	80	67	0.391	0.325	-17	NA	± 30 %	AverageRF
Fluorene	80	71	1.20	1.07	-11	NA	± 30 %	AverageRF
4-Chlorophenyl Phenyl Ether	80	70	0.615	0.537	-13	NA	± 30 %	AverageRF
Diethyl Phthalate	80	70	1.31	1.14	-13	NA	± 30 %	AverageRF
4-Nitroaniline	80	81	0.281	0.283	1	NA	± 30 %	AverageRF
2-Methyl-4,6-dinitrophenol	80	83	0.212	0.220	3	NA	± 30 %	AverageRF
‡ N-Nitrosodiphenylamine	80	65	0.801	0.653	-18	NA	± 20 %	AverageRF
4-Bromophenyl Phenyl Ether	80	78	0.241	0.234	-3	NA	± 30 %	AverageRF
Hexachlorobenzene	80	76	0.280	0.266	-5	NA	± 30 %	AverageRF
‡ Pentachlorophenol	80	79	0.157	0.155	-1	NA	± 20 %	AverageRF
Phenanthrene	80	81	1.06	1.07	1	NA	± 30 %	AverageRF
Anthracene	80	74	1.12	1.04	-7	NA	± 30 %	AverageRF
Di-n-butyl Phthalate	80	83	1.22	1.26	4	NA	± 30 %	AverageRF
‡ Fluoranthene	80	80	0.964	0.962	0	NA	± 30 %	AverageRF
Pyrene	80	68	1.07	0.905	-15	NA	± 30 %	AverageRF
Butyl Benzyl Phthalate	80	79	0.608	0.604	-1	NA	± 30 %	AverageRF
3,3'-Dichlorobenzidine	80	75	0.418	0.393	-6	NA	± 30 %	AverageRF
Benz(a)anthracene	80	74	0.940	0.866	-8	NA	± 30 %	AverageRF
Chrysene	80	77	0.910	0.880	-3	NA	± 30 %	AverageRF
Bis(2-ethylhexyl) Phthalate	80	83	0.866	0.900	4	NA	± 30 %	AverageRF
‡ Di-n-octyl Phthalate	80	87	1.76	2.07	NA	9	± 20 %	Quadratic
Benzo(b)fluoranthene	80	82	1.03	1.06	3	NA	± 30 %	AverageRF
Benzo(k)fluoranthene	80	83	1.07	1.12	4	NA	± 30 %	AverageRF
‡ Benzo(a)pyrene	80	96	0.856	1.02	20	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	80	82	0.741	0.760	3	NA	± 30 %	AverageRF
Dibenz(a,h)anthracene	80	80	0.789	0.786	0	NA	± 30 %	AverageRF
Benzo(g,h,i)perylene	80	80	0.800	0.796	-1	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Directory: J:\MS07\DATA\060210

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0602f001.d	1.	50PPM DFTPP SVM32-14A		2 Jun 2010 14:14
2	2	0602f002.d	1.	~~80PPM 8270 CCV SVM32-32L~~ NR		2 Jun 2010 14:55
3	1	0602f003.d	1.	IB		2 Jun 2010 16:38
4	2	0602f004.d	1.	5PPM 8270 ICAL SVM32-21C		2 Jun 2010 17:18
5	3	0602f005.d	1.	10PPM 8270 ICAL SVM32-21D		2 Jun 2010 17:58
6	4	0602f006.d	1.	20PPM 8270 ICAL SVM32-21E		2 Jun 2010 18:38
7	5	0602f007.d	1.	50PPM 8270 ICAL SVM32-21F		2 Jun 2010 19:19
8	6	0602f008.d	1.	80PPM 8270 ICAL SVM32-21G		2 Jun 2010 19:59
9	7	0602f009.d	1.	100PPM 8270 ICAL SVM32-21H		2 Jun 2010 20:39
10	8	0602f010.d	1.	120PPM 8270 ICAL SVM32-21I		2 Jun 2010 21:19
11	9	0602f011.d	1.	160PPM 8270 ICAL SVM32-21J		2 Jun 2010 22:00
12	10	0602f012.d	1.	200PPM 8270 ICAL SVM32-21K		2 Jun 2010 22:40
13	11	0602f013.d	1.	80PPM 8270 ICV SVM32-21L		2 Jun 2010 23:20
14	12	0602f014.d	1.	80PPM ANILINE ICV SVM30-7D		3 Jun 2010 00:01
15	13	0602f015.d	1.	~~80PPM HCGPD ICV SVM32-22A~~ NR		3 Jun 2010 00:41
16	14	0602f016.d	1.	50PPM BENZ ICV SVM32-25F		3 Jun 2010 01:21

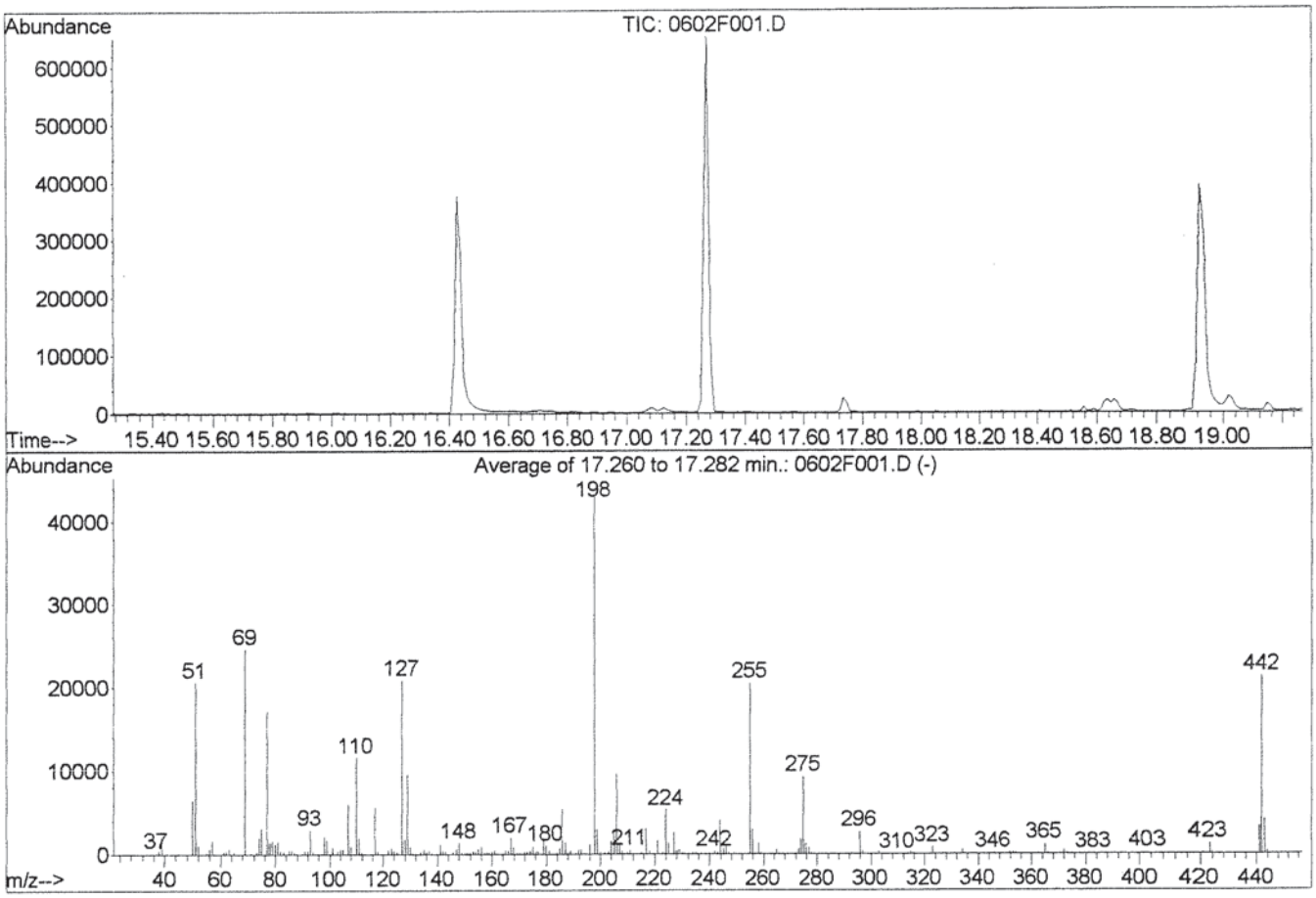
8270/625 ICAL 9525

M 6-3-10

LB
6/4/10

Data File : J:\MS07\DATA\060210\0602F001.D
Acq On : 2 Jun 2010 2:14 pm
Sample : 50PPM DFTPP SVM32-14A
Misc :
MS Integration Params: rteint.p
Method : J:\MS07\METHODS\BNA\0526APIX7.M (RTE Integrator)
Title : Method 8270 (App. IX) MS07

Vial: 1
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00



Spectrum Information: Average of 17.260 to 17.282 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.6	20561	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	56.9	24593	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	48.3	20860	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	43221	PASS
199	198	5	9	6.8	2948	PASS
275	198	10	30	21.4	9252	PASS
365	198	1	100	2.7	1168	PASS
441	443	0.01	100	80.3	3292	PASS
442	198	40	100	49.3	21307	PASS
443	442	17	23	19.2	4101	PASS

0602F001.D 0526APIX7.M Thu Jun 03 10:46:54 2010

LB 6-4-10

6-7-10

Average of 17.260 to 17.282 min.: 0602F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.35	40	44.00	126	60.95	267	75.95	53
35.85	36	44.85	86	61.95	331	76.95	17071
36.15	42	50.00	6492	63.00	740	77.95	1379
36.75	40	51.00	20561	63.85	123	78.85	1609
37.00	170	51.95	1103	64.95	233	79.95	1192
37.95	421	53.00	43	65.85	33	80.95	1525
38.95	2063	54.90	187	68.95	24593	81.90	381
40.85	106	55.60	38	70.95	37	82.95	319
42.00	38	55.95	589	73.00	202	84.95	462
43.00	45	56.90	1642	73.95	1943	85.95	491
43.60	33	57.80	91	74.95	3110	86.70	38

Average of 17.260 to 17.282 min.: 0602F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.95	227	99.95	146	114.95	35	127.95	1764
87.90	92	100.90	803	115.85	34	129.00	9553
90.90	405	102.85	306	116.95	5577	129.95	892
92.00	417	103.90	598	117.95	372	130.85	185
92.90	2888	104.95	528	118.75	41	131.90	67
93.85	276	106.95	6031	119.90	83	132.10	68
94.90	55	107.95	940	121.90	494	133.95	243
95.80	57	109.95	11572	122.90	754	134.90	662
96.00	78	110.95	1890	123.90	348	135.90	267
97.90	2184	111.90	267	124.95	292	136.95	380
98.90	1645	112.75	59	127.00	20860	137.80	45

Average of 17.260 to 17.282 min.: 0602F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
138.00	49	148.95	190	159.85	353	169.90	62
139.00	44	150.05	40	160.95	466	170.60	33
140.00	54	151.05	195	161.65	46	170.90	65
140.90	1177	151.80	90	161.95	86	171.95	223
141.90	382	152.95	394	162.95	34	172.95	238
142.90	302	153.90	282	163.95	62	173.95	441
143.90	52	154.95	616	164.85	490	174.20	40
144.80	61	155.95	915	165.90	401	174.95	846
145.85	216	157.00	159	166.85	1983	175.90	234
146.95	591	157.95	219	167.90	899	176.85	423
147.95	1343	158.85	151	168.90	191	178.85	1611

Average of 17.260 to 17.282 min.: 0602F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
179.95	1018	190.95	176	204.95	2415	221.50	52
180.90	509	191.95	493	205.95	9632	222.90	233
181.80	64	192.90	530	206.95	1258	224.00	5276
182.10	39	194.00	117	207.80	354	224.90	1319
183.85	167	195.95	1131	208.75	74	226.90	2606
184.95	728	197.85	43221	209.95	164	227.85	407
185.90	5399	198.85	2948	210.85	462	228.85	497
186.90	1487	199.90	240	215.00	130	230.00	46
187.90	149	201.50	165	216.90	3015	230.80	181
188.90	379	202.90	327	217.90	348	233.85	149
189.60	50	203.95	1540	220.95	1626	234.85	171

LB 6-14-10

6-4-10

50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
235.85	92	246.90	150	264.90	553	283.95	56
236.90	159	247.75	43	265.75	112	284.90	133
238.85	72	248.90	143	270.80	38	288.95	33
239.95	50	250.75	34	272.90	622	292.85	170
240.45	34	255.00	20460	273.90	1807	293.95	39
240.85	101	255.95	3002	274.90	9252	295.85	2684
241.90	329	256.90	65	275.90	1273	296.85	402
242.95	128	257.90	1280	276.85	816	300.90	33
243.95	4001	258.95	196	277.90	141	302.00	38
244.95	620	260.90	37	278.85	38	302.90	332
245.90	874	263.70	47	282.95	61	303.90	58

Average of 17.260 to 17.282 min.: 0602F001.D
50PPM DFTPP SVM32-14A
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
307.90	34	333.95	574	371.05	33	441.00	3292
309.90	37	334.95	105	371.95	456	441.90	21307
313.90	86	340.90	58	372.95	64	442.95	4101
314.80	297	341.90	34	382.85	74	443.90	369
315.85	186	345.80	139	401.90	109		
320.95	68	346.00	42	402.90	187		
322.95	807	351.90	241	403.80	50		
323.95	86	352.90	153	420.85	162		
326.80	136	354.00	267	421.95	121		
327.85	59	364.95	1168	422.95	1264		
331.85	41	365.95	116	423.85	245		

LB
4/4/10

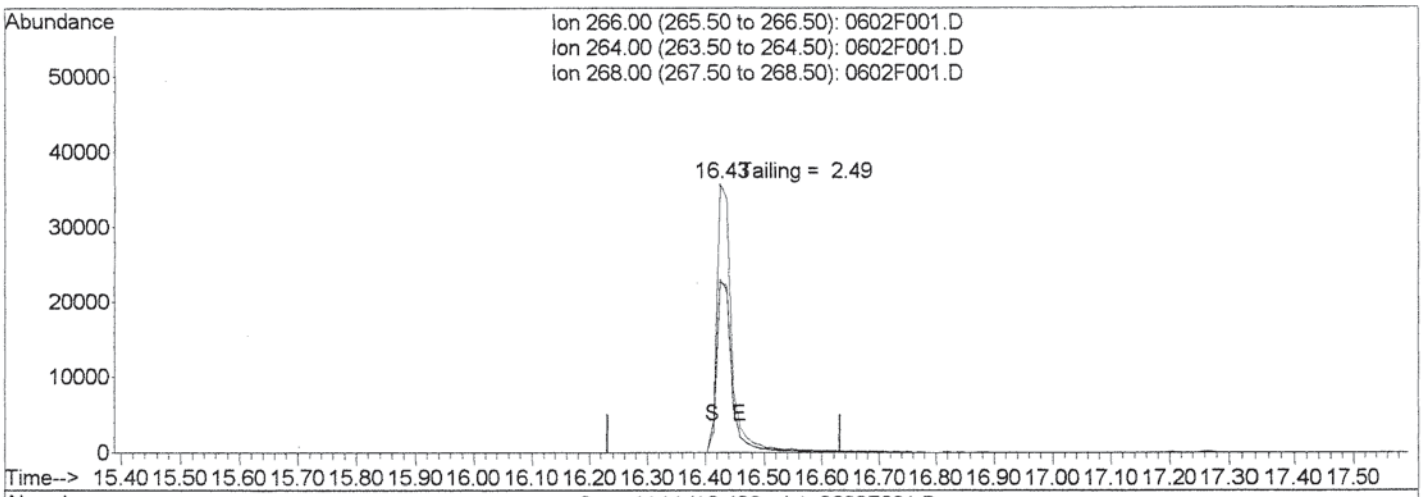
6/4/10

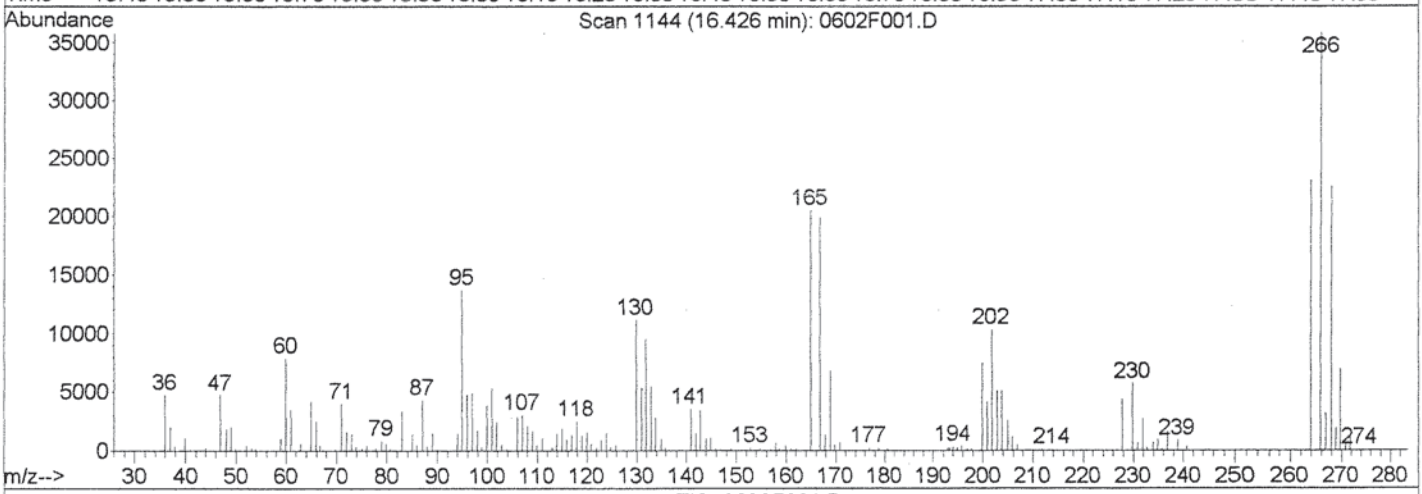
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F001.D
Acq On : 2 Jun 2010 2:14 pm
Sample : 50PPM DFTPP SVM32-14A
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:47 2010

Vial: 1
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 09:52:06 2010
Response via : Single Level Calibration





TIC: 0602F001.D

(62) Pentachlorophenol (TMC)

16.43min 6845.95ug/ml

response 63309

Ion	Exp%	Act%
266.00	100	100
264.00	61.00	64.46
268.00	63.90	63.03
0.00	0.00	0.00

LB
6-14-10

0602F001.D 0602BNC7.M Thu Jun 03 10:47:25 2010

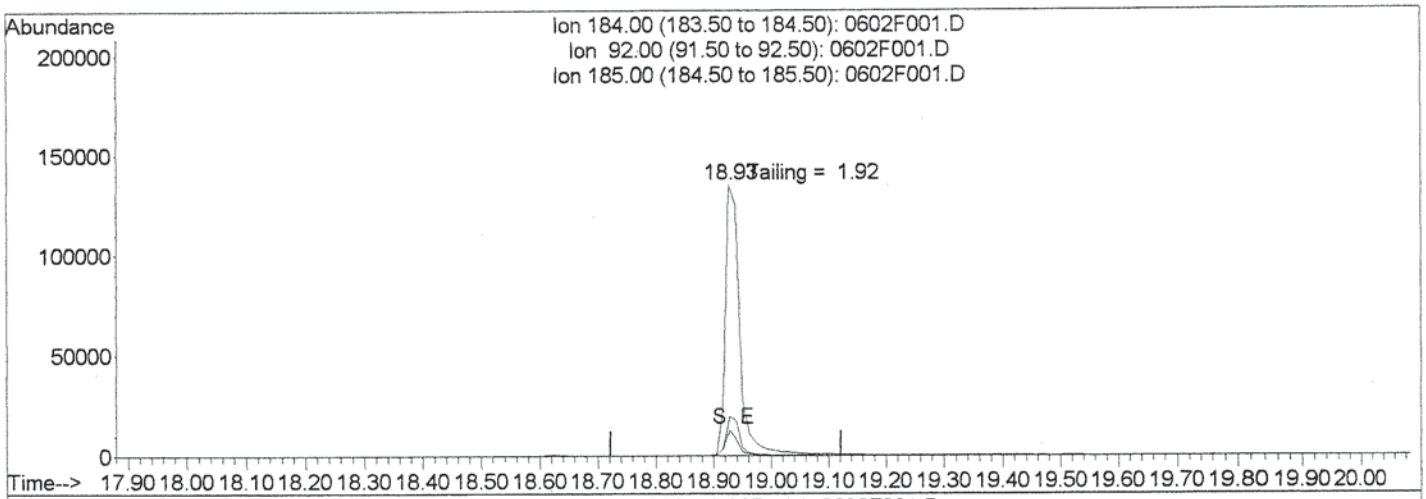
MJ 6-7-10

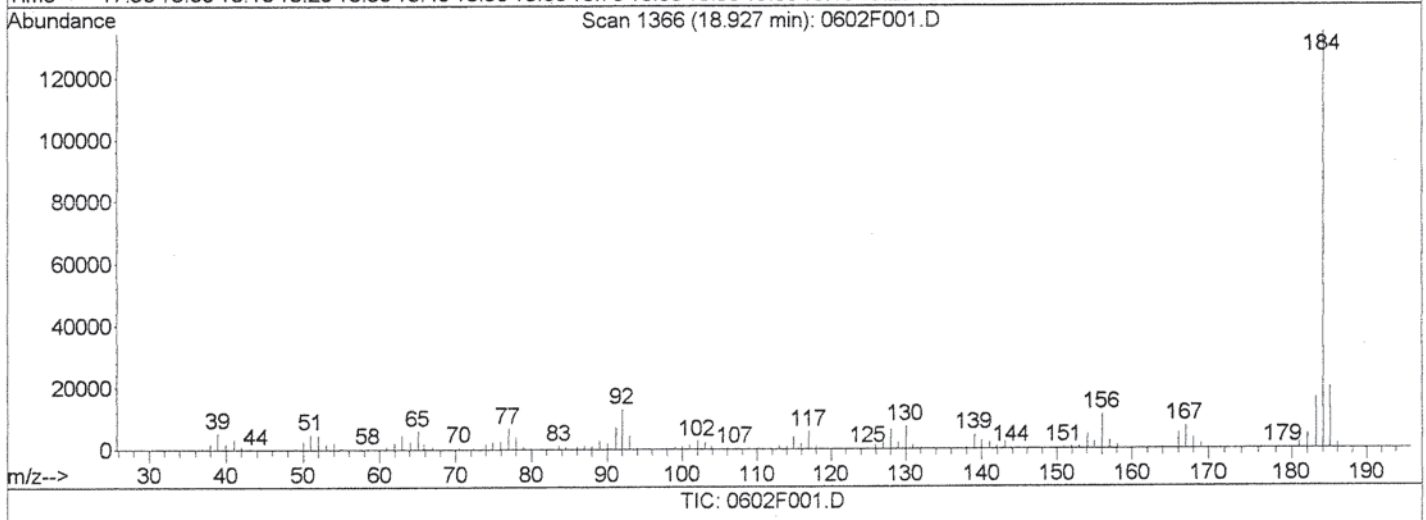
Data File : J:\MS07\DATA\060210\0602F001.D
Acq On : 2 Jun 2010 2:14 pm
Sample : 50PPM DFTPP SVM32-14A
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:47 2010

Vial: 1
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 09:52:06 2010
Response via : Single Level Calibration





TIC: 0602F001.D

(69) Benzidine (T)

18.93min 16523.54ug/ml

response 237944

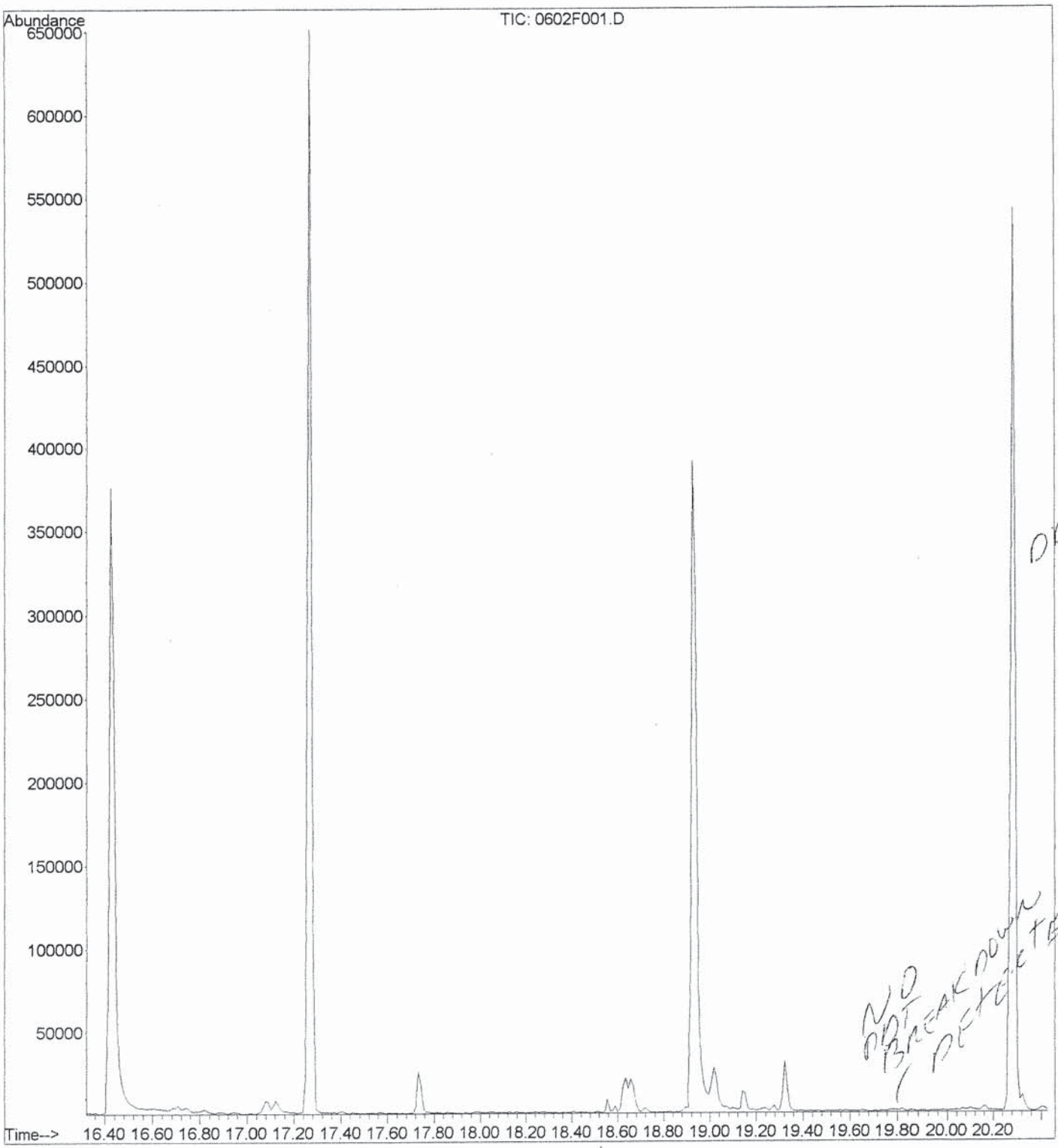
Ion	Exp%	Act%
184.00	100	100
92.00	9.90	9.49
185.00	14.60	14.71
0.00	0.00	0.00

LB
6/4/10

0602F001.D 0602BNC7.M Thu Jun 03 10:47:33 2010

6/4/10

File : J:\MS07\DATA\060210\0602F001.D
Operator : M.BUTCHER
Acquired : 2 Jun 2010 2:14 pm using AcqMethod 8270_1
Instrument : MS07
Sample Name: 50PPM DFTPP SVM32-14A
Misc Info :
Vial Number: 1



LB 6/4/10

M 6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F003.D
Acq On : 2 Jun 2010 4:38 pm
Sample : IB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:47 2010

Vial: 1
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 09:52:06 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.36	152	320704	40.00	ug/ml	0.02
21) Naphthalene-d8	11.46	136	1084699	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.32	164	601819	40.00	ug/ml	0.02
58) Phenanthrene-d10	16.72	188	1100123	40.00	ug/ml	0.02
68) Chrysene-d12	21.15	240	803978	40.00	ug/ml	0.02
77) Perylene-d12	24.35	264	792779	40.00	ug/ml	0.04
System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0	0.00	ug/ml	
Spiked Amount 150.000	Range 21 - 100		Recovery =	0.00%#		
7) Phenol-d6	0.00	99	0	0.00	ug/ml	
Spiked Amount 150.000	Range 10 - 94		Recovery =	0.00%#		
19) Nitrobenzene-d5	0.00	82	0	0.00	ug/ml	
Spiked Amount 100.000	Range 35 - 114		Recovery =	0.00%#		
38) 2-Fluorobiphenyl	0.00	172	0d	0.00	ug/ml	
Spiked Amount 100.000	Range 43 - 116		Recovery =	0.00%#		
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/ml	
Spiked Amount 150.000	Range 10 - 123		Recovery =	0.00%#		
71) Terphenyl-d14	19.32	244	1959	0.16	ug/ml	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery =	0.16%#		
Target Compounds						Qvalue
53) Diethyl Phthalate	15.07	149	1944m	0.10	ug/ml	
63) Phenanthrene	16.75	178	948m	0.03	ug/ml	
64) Anthracene	16.83	178	970	0.03	ug/ml	76
65) Carbazole	17.14	167	1388	0.06	ug/ml	91
66) Di-n-butyl Phthalate	17.73	149	4084m	0.12	ug/ml	
67) Fluoranthene	18.67	202	2380	0.09	ug/ml	96
70) Pyrene	19.03	202	2470	0.12	ug/ml	97
74) Benz(a)anthracene	21.15	228	2323m	0.12	ug/ml	
75) Chrysene	21.18	228	622	0.03	ug/ml	61
76) Bis(2-ethylhexyl) Phthalat	21.32	149	1766	0.10	ug/ml	94

LB
6/4/10

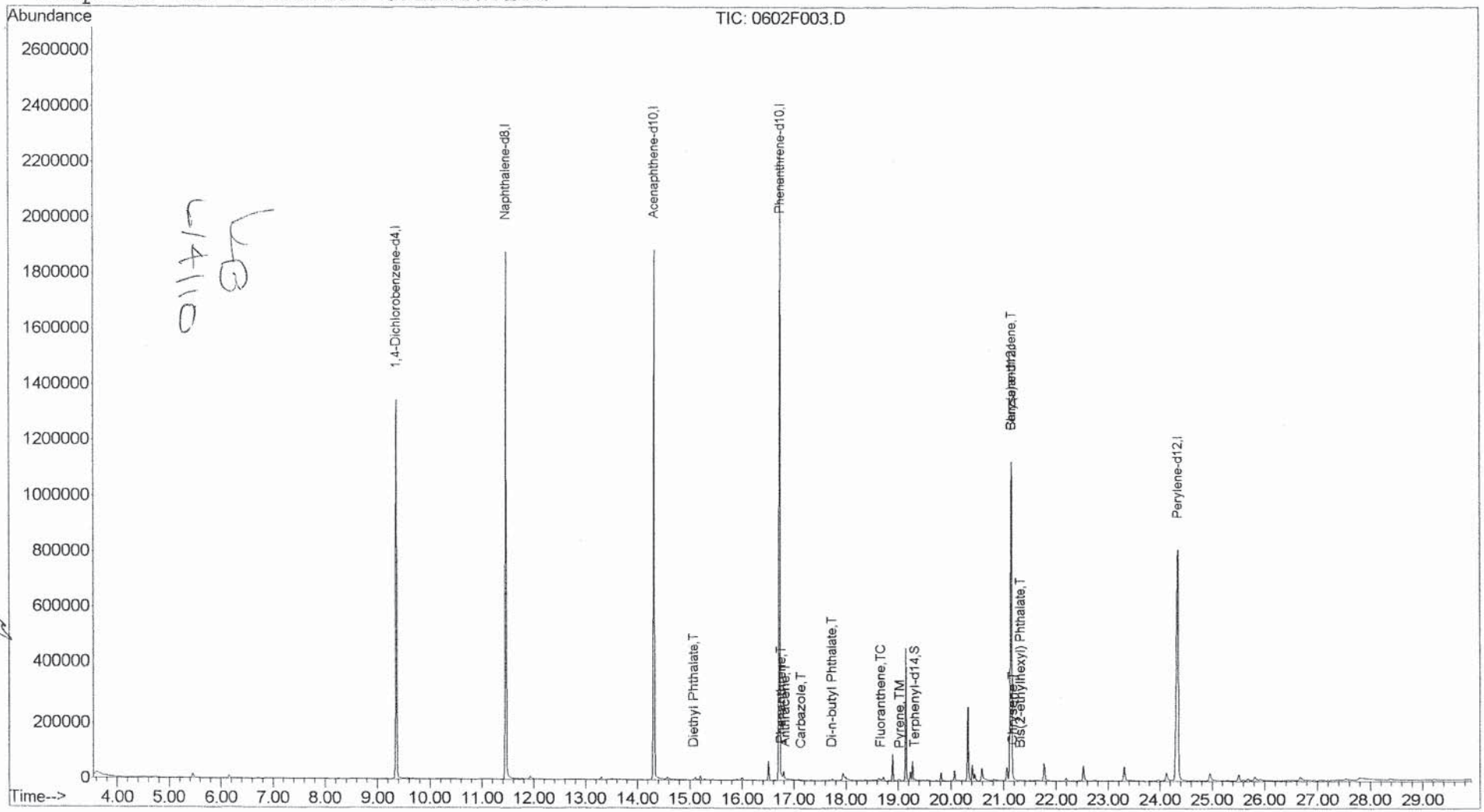
(#) = qualifier out of range (m) = manual integration
0602F003.D 0602BNC7.M Thu Jun 03 11:34:24 2010

6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F003.D Vial: 1
Acq On : 2 Jun 2010 4:38 pm Operator: M.BUTCHER
Sample : IB Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:51 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F004.D Vial: 2
Acq On : 2 Jun 2010 5:18 pm Operator: M.BUTCHER
Sample : 5PPM 8270 ICAL SVM32-21C Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:49 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	105915	40.00	ug/ml	0.00
21) Naphthalene-d8	11.45	136	378911	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.31	164	222578	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.70	188	388712	40.00	ug/ml	0.00
68) Chrysene-d12	21.13	240	251721	40.00	ug/ml	0.00
77) Perylene-d12	24.32	264	274311	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.16	112	11882	4.22	ug/ml	0.02
Spiked Amount 150.000	Range 21 - 100		Recovery =	2.81%#		
7) Phenol-d6	8.88	99	16464	4.19	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 94		Recovery =	2.79%#		
19) Nitrobenzene-d5	10.28	82	15159	3.95	ug/ml	-0.01
Spiked Amount 100.000	Range 35 - 114		Recovery =	3.95%#		
38) 2-Fluorobiphenyl	13.24	172	33732	4.62	ug/ml	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery =	4.62%#		
59) 2,4,6-Tribromophenol	15.60	330	6253	3.97	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery =	2.65%#		
71) Terphenyl-d14	19.32	244	24013	6.23	ug/ml	-0.01
Spiked Amount 100.000	Range 33 - 141		Recovery =	6.23%#		
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.23	42	11593m	4.60	ug/ml	
3) Pyridine	4.37	79	15161m	4.24	ug/ml	
5) Aniline	8.81	93	19993	5.04	ug/ml	88
6) Bis(2-chloroethyl) Ether	8.95	93	13655m	4.22	ug/ml	
8) Phenol	8.90	94	15799m	3.93	ug/ml	
9) 2-Chlorophenol	9.03	128	15360	4.43	ug/ml	90
10) 1,3-Dichlorobenzene	9.24	146	17630	4.79	ug/ml	96
11) 1,4-Dichlorobenzene	9.38	146	18099	4.83	ug/ml	98
12) 1,2-Dichlorobenzene	9.62	146	16923	4.77	ug/ml	98
13) Benzyl Alcohol	9.64	108	8446	3.97	ug/ml	94
14) Bis(2-chloroisopropyl) Eth	9.86	45	23961	4.51	ug/ml	91
15) 2-Methylphenol	9.88	107	12993	4.99	ug/ml	85
16) Hexachloroethane	10.18	117	7664	4.50	ug/ml	96
17) N-Nitrosodi-n-propylamine	10.06	70	11468m	4.33	ug/ml	
18) 4-Methylphenol	10.14	107	18174	4.60	ug/ml	98
20) Nitrobenzene	10.31	77	15225	4.29	ug/ml	95
22) Isophorone	10.72	82	33686	4.93	ug/ml	98
23) 2-Nitrophenol	10.84	139	8608	4.52	ug/ml	95
24) 2,4-Dimethylphenol	10.99	122	12495	4.96	ug/ml	95
25) Bis(2-chloroethoxy)methane	11.11	93	18497	4.82	ug/ml	99

(#) = qualifier out of range (m) = manual integration
0602F004.D 0602BNC7.M Thu Jun 03 11:34:25 2010 Page 1

M 6-3-10

1346 LB 6/4/10

Data File : J:\MS07\DATA\060210\0602F004.D
Acq On : 2 Jun 2010 5:18 pm
Sample : 5PPM 8270 ICAL SVM32-21C
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:49 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.29	162	12917	4.52	ug/ml	99
27)	Benzoic Acid	11.16	122	6190	2.87	ug/ml	93
28)	1,2,4-Trichlorobenzene	11.37	180	15069	4.97	ug/ml	94
29)	Naphthalene	11.48	128	46687	5.14	ug/ml	99
30)	4-Chloroaniline	11.62	127	20515	5.12	ug/ml	98
31)	Hexachlorobutadiene	11.72	225	9544	4.96	ug/ml	96
32)	4-Chloro-3-methylphenol	12.48	107	15122	5.07	ug/ml	95
33)	2-Methylnaphthalene	12.62	142	29645	5.12	ug/ml	99
35)	Hexachlorocyclopentadiene	12.89	237	3783	9.45	ug/ml	92
36)	2,4,6-Trichlorophenol	13.12	196	10389	4.52	ug/ml	97
37)	2,4,5-Trichlorophenol	13.21	196	11627	4.54	ug/ml	96
39)	2-Chloronaphthalene	13.41	162	31360	4.87	ug/ml	97
40)	2-Nitroaniline	13.60	65	9229	4.46	ug/ml	96
41)	Acenaphthylene	14.08	152	48218	4.86	ug/ml	98
42)	Dimethyl Phthalate	13.93	163	41398	5.47	ug/ml	97
43)	2,6-Dinitrotoluene	14.01	165	8804	5.13	ug/ml	88
44)	Acenaphthene	14.36	154	30613	5.41	ug/ml	99
45)	3-Nitroaniline	14.29	138	8692	4.82	ug/ml	90
46)	2,4-Dinitrophenol	14.47	184	1335	1.34	ug/ml	68
47)	Dibenzofuran	14.64	168	45031	5.05	ug/ml	91
49)	2,4-Dinitrotoluene	14.66	165	12303	5.66	ug/ml	95
50)	2,3,4,6-Tetrachlorophenol	14.88	232	8704	4.67	ug/ml	95
51)	Fluorene	15.19	166	37252	5.57	ug/ml	95
52)	4-Chlorophenyl Phenyl Ethe	15.23	204	18167	5.31	ug/ml	98
53)	Diethyl Phthalate	15.08	149	47922	6.55	ug/ml	99
54)	4-Nitroaniline	15.27	138	7347	4.70	ug/ml	86
55)	2-Methyl-4,6-dinitrophenol	15.32	198	4130	3.49	ug/ml	76
56)	N-Nitrosodiphenylamine	15.43	169	25148	5.64	ug/ml	99
57)	1,2-Diphenylhydrazine	15.47	77	42085	5.55	ug/ml	96
60)	4-Bromophenyl Phenyl Ether	16.01	248	10358	4.42	ug/ml	94
61)	Hexachlorobenzene	16.08	284	13085	4.82	ug/ml	90
62)	Pentachlorophenol	16.43	266	3879	2.54	ug/ml	93
63)	Phenanthrene	16.75	178	55741	5.40	ug/ml	99
64)	Anthracene	16.83	178	55696	5.13	ug/ml	99
65)	Carbazole	17.12	167	44064	4.97	ug/ml	98
66)	Di-n-butyl Phthalate	17.74	149	61417	5.19	ug/ml	99
67)	Fluoranthene	18.66	202	46359	4.94	ug/ml	97
69)	Benzidine	18.93	184	16327	7.72	ug/ml	98
70)	Pyrene	19.02	202	46594	6.93	ug/ml	99
72)	Butyl Benzyl Phthalate	20.16	149	18281	4.77	ug/ml	97
73)	3,3'-Dichlorobenzidine	21.11	252	12698	4.83	ug/ml	96

(#) = qualifier out of range (m) = manual integration

M 6-7-10

 LB 414RO

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F004.D
Acq On : 2 Jun 2010 5:18 pm
Sample : 5PPM 8270 ICAL SVM32-21C
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:49 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
74)	Benz(a)anthracene	21.11	228	30630	5.18	ug/ml	99
75)	Chrysene	21.18	228	31713	5.54	ug/ml	98
76)	Bis(2-ethylhexyl) Phthalat	21.31	149	26007	4.77	ug/ml	99
78)	Di-n-octyl Phthalate	22.76	149	47537	3.93	ug/ml	98
79)	Benzo(b)fluoranthene	23.43	252	29572	4.18	ug/ml	98
80)	Benzo(k)fluoranthene	23.50	252	32277	4.40	ug/ml	100
81)	Benzo(a)pyrene	24.17	252	27782	4.73	ug/ml	98
82)	Indeno(1,2,3-cd)pyrene	26.74	276	24221	4.77	ug/ml	98
83)	Dibenz(a,h)anthracene	26.82	278	25997	4.80	ug/ml	99
84)	Benzo(g,h,i)perylene	27.32	276	28084	5.12	ug/ml	96

LB
6/4/10

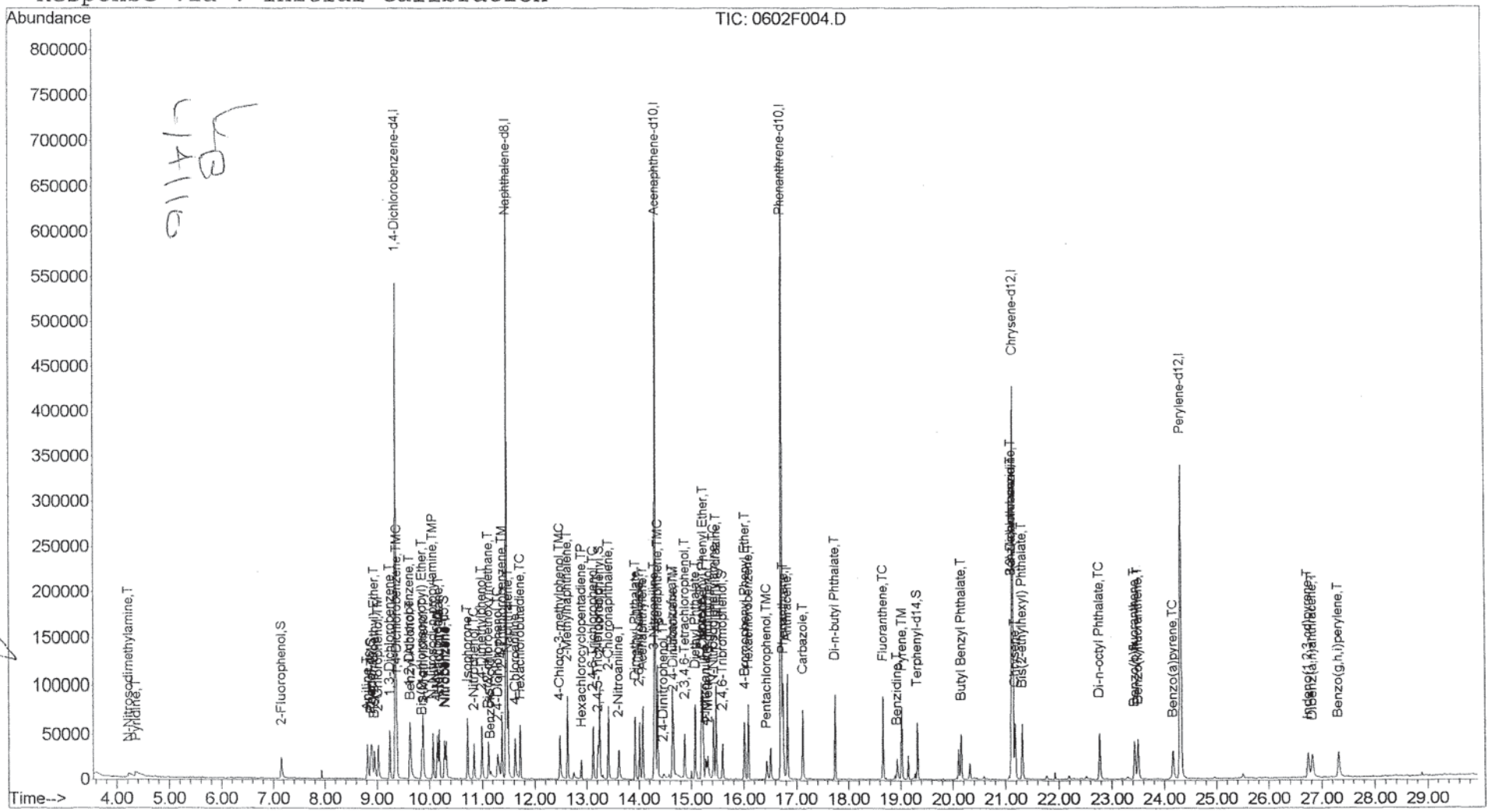
(#) = qualifier out of range (m) = manual integration
0602F004.D 0602BNC7.M Thu Jun 03 11:34:25 2010 Page 3

6-7-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F004.D Vial: 2
Acq On : 2 Jun 2010 5:18 pm Operator: M.BUTCHER
Sample : 5PPM 8270 ICAL SVM32-21C Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:52 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration

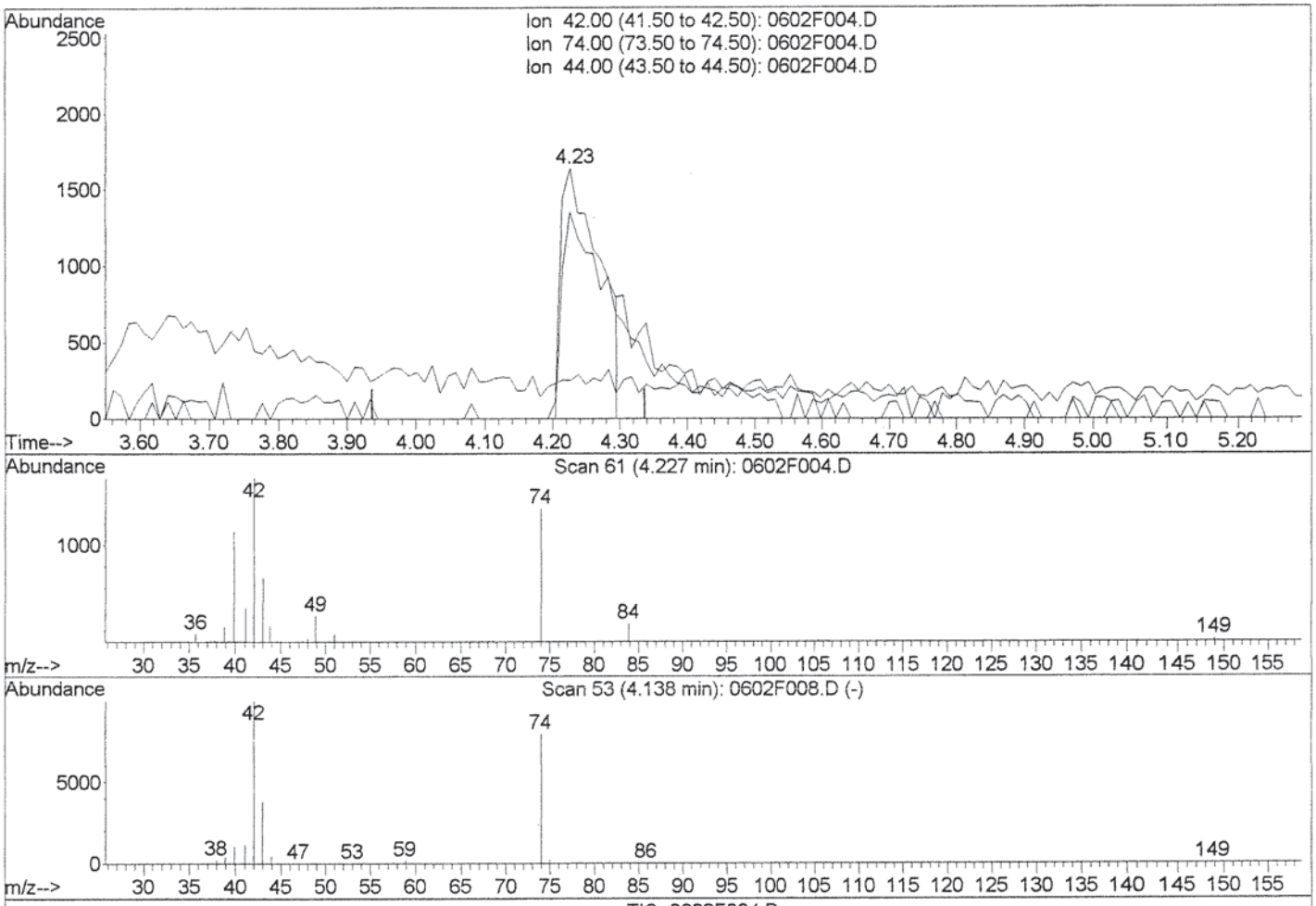


1349

Data File : J:\MS07\DATA\060210\0602F004.D
Acq On : 2 Jun 2010 5:18 pm
Sample : 5PPM 8270 ICAL SVM32-21C
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:48 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F004.D

(2) N-Nitrosodimethylamine (T)

4.23min 2.60ug/ml

response 6565

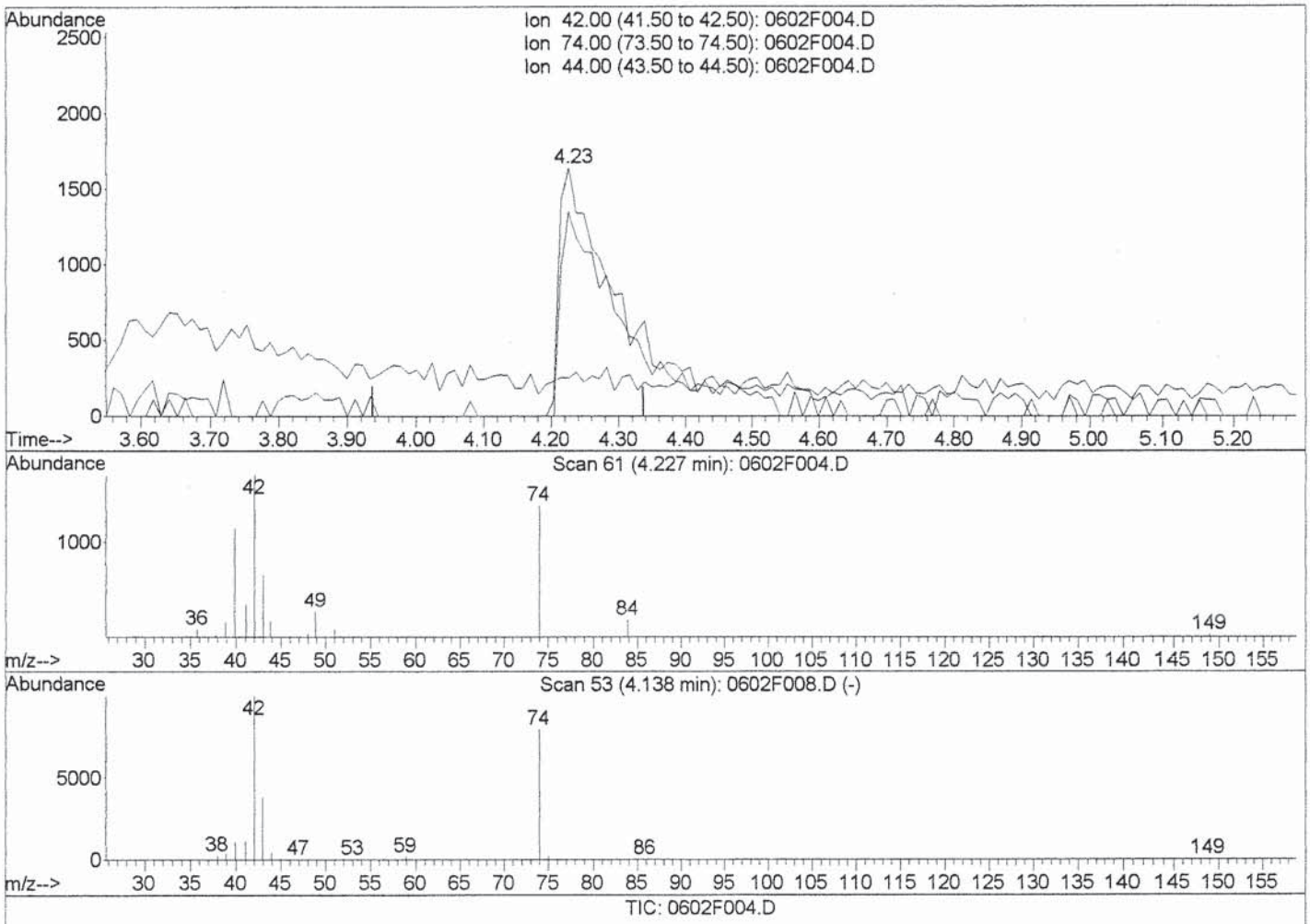
Ion	Exp%	Act%
42.00	100	100
74.00	79.30	81.14
44.00	4.40	7.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F004.D
Acq On : 2 Jun 2010 5:18 pm
Sample : 5PPM 8270 ICAL SVM32-21C
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:51 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F004.D

(2) N-Nitrosodimethylamine (T)

4.23min 4.60ug/ml m

response 11593

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	82.41
44.00	4.40	15.15
0.00	0.00	0.00

LC 6-3-10

LB 6/4/10

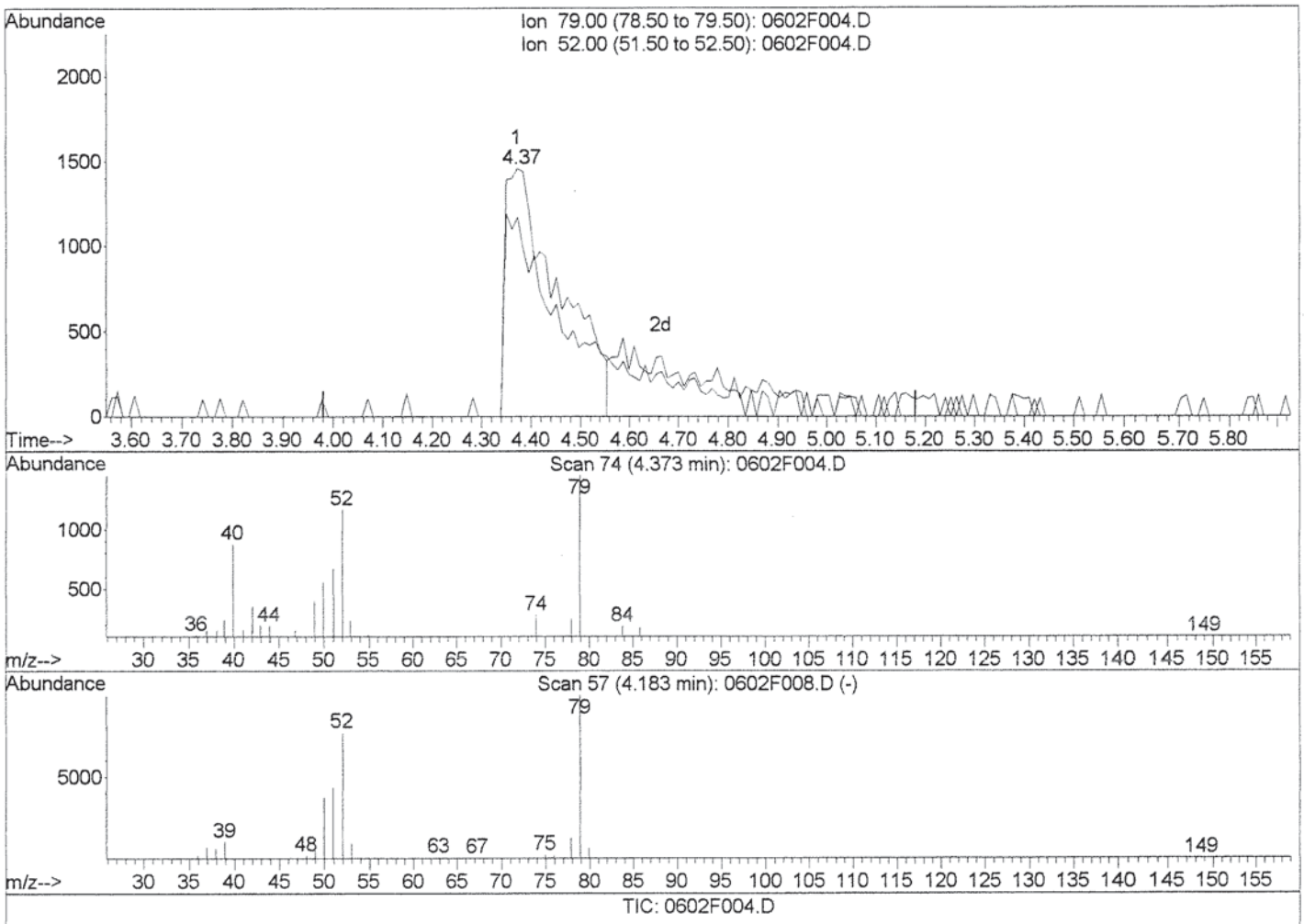
0602F004.D 0602BNC7.M Thu Jun 03 10:51:14 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F004.D
Acq On : 2 Jun 2010 5:18 pm
Sample : 5PPM 8270 ICAL SVM32-21C
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:51 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F004.D

(3) Pyridine (T)

4.37min 3.06ug/ml

response 10936

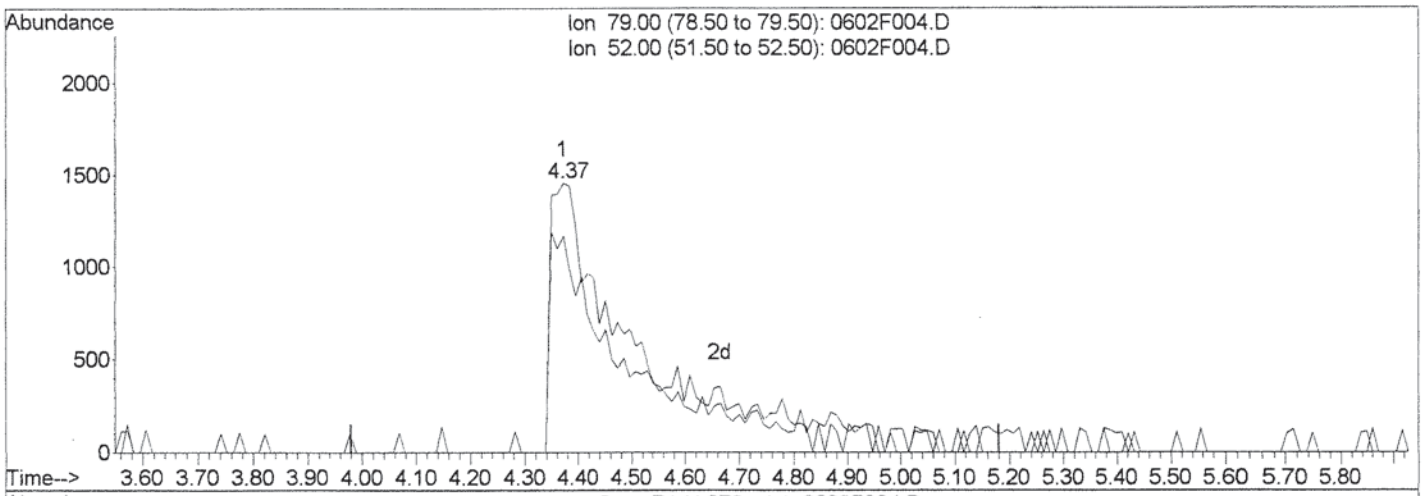
Ion	Exp%	Act%
79.00	100	100
52.00	77.00	76.73
0.00	0.00	0.00
0.00	0.00	0.00

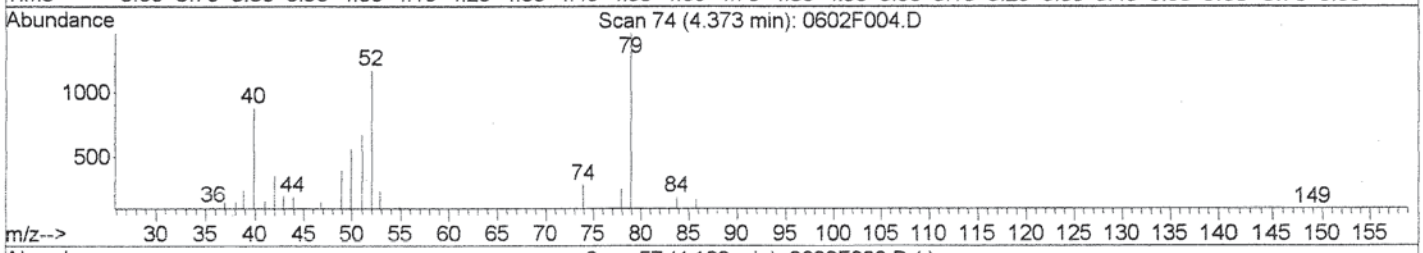
0602F004.D 0602BNC7.M Thu Jun 03 10:51:17 2010

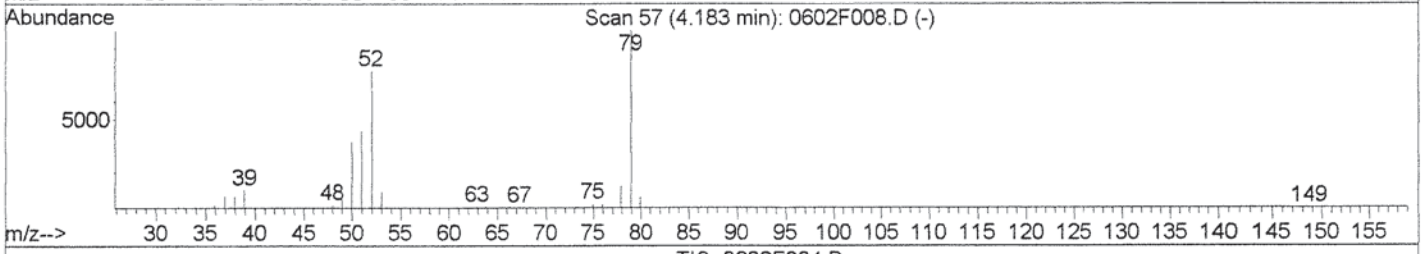
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F004.D Vial: 2
Acq On : 2 Jun 2010 5:18 pm Operator: M.BUTCHER
Sample : 5PPM 8270 ICAL SVM32-21C Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:51 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F004.D

(3) Pyridine (T)

4.37min 4.24ug/ml m

response 15161

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	80.30
0.00	0.00	0.00
0.00	0.00	0.00

SC 6-3-10

LB 6/4/10

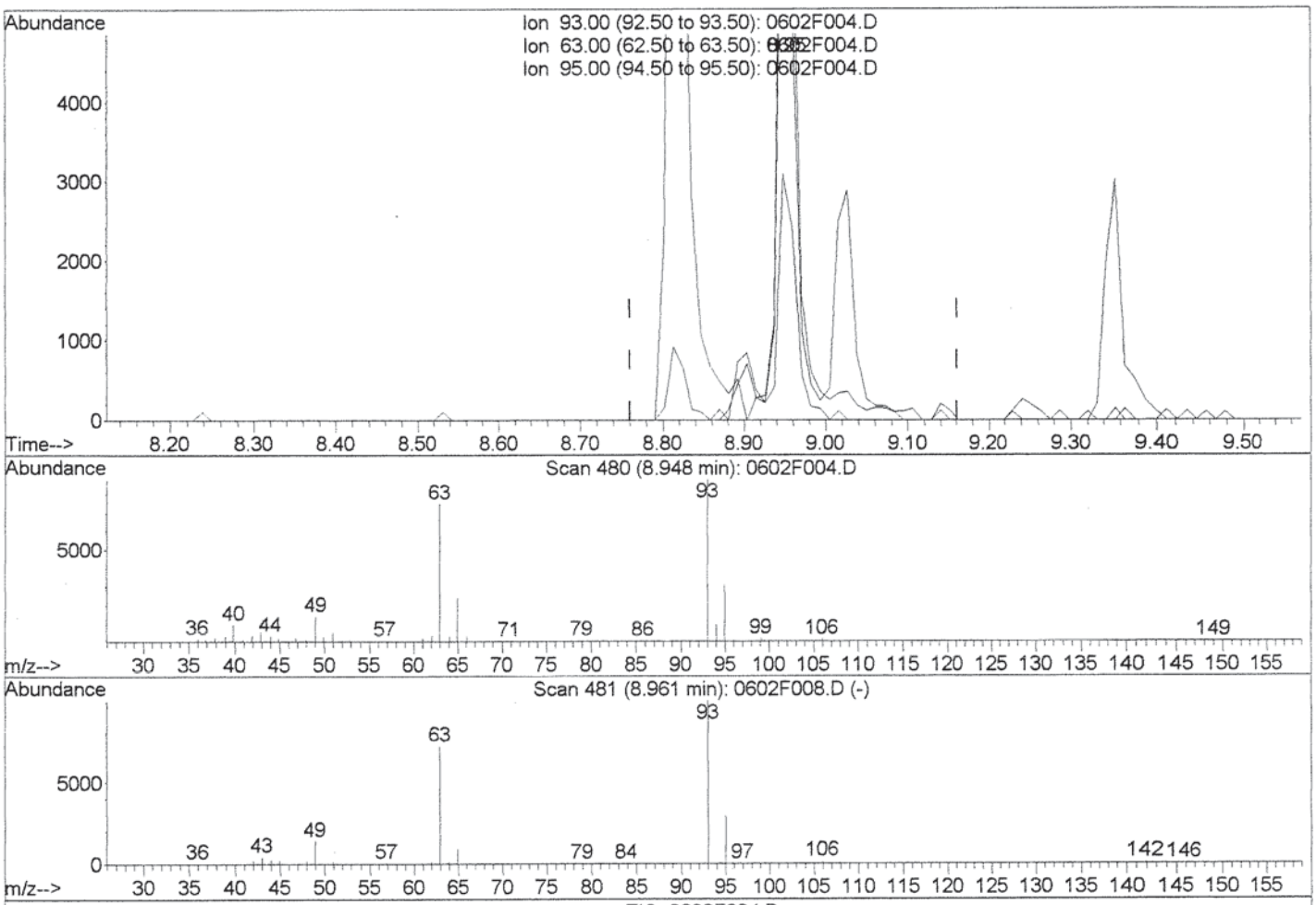
0602F004.D 0602BNC7.M Thu Jun 03 10:51:25 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F004.D
Acq On : 2 Jun 2010 5:18 pm
Sample : 5PPM 8270 ICAL SVM32-21C
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:51 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F004.D

(6) Bis(2-chloroethyl) Ether (T)

8.95min 4.64ug/ml

response 15011

Ion	Exp%	Act%
93.00	100	100
63.00	74.40	79.60
95.00	31.00	31.22
0.00	0.00	0.00

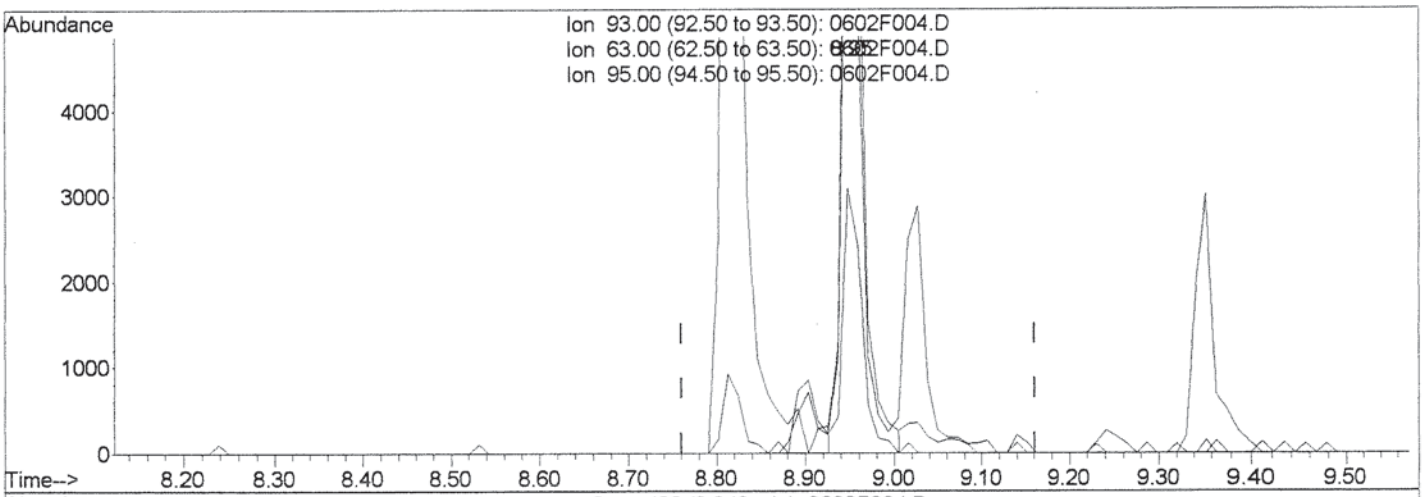
0602F004.D 0602BNC7.M Thu Jun 03 10:51:33 2010

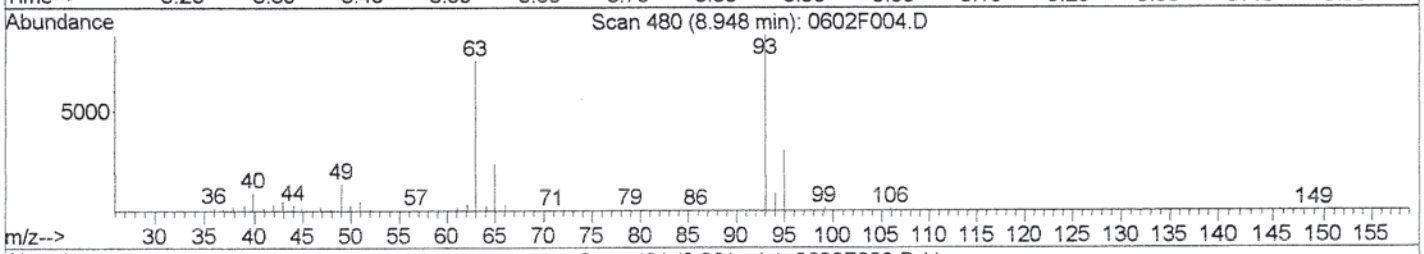
Quantitation Report (Qedit)

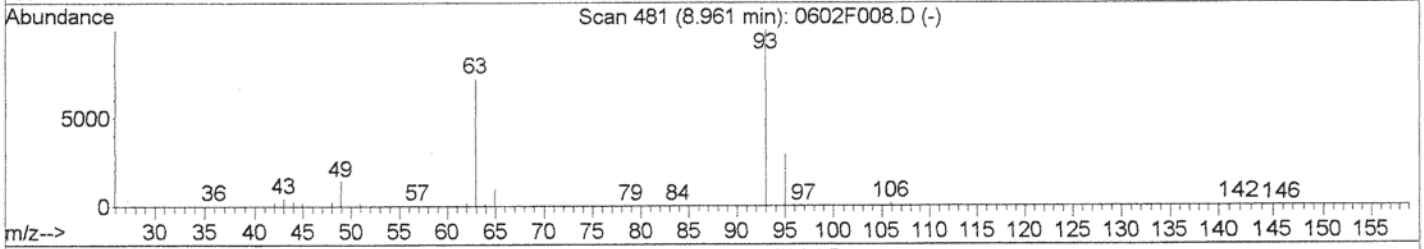
Data File : J:\MS07\DATA\060210\0602F004.D
Acq On : 2 Jun 2010 5:18 pm
Sample : 5PPM 8270 ICAL SVM32-21C
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:51 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F004.D

(6) Bis(2-chloroethyl) Ether (T)

8.95min 4.22ug/ml m

response 13655

Ion	Exp%	Act%
93.00	100	100
63.00	74.40	85.24
95.00	31.00	35.23
0.00	0.00	0.00

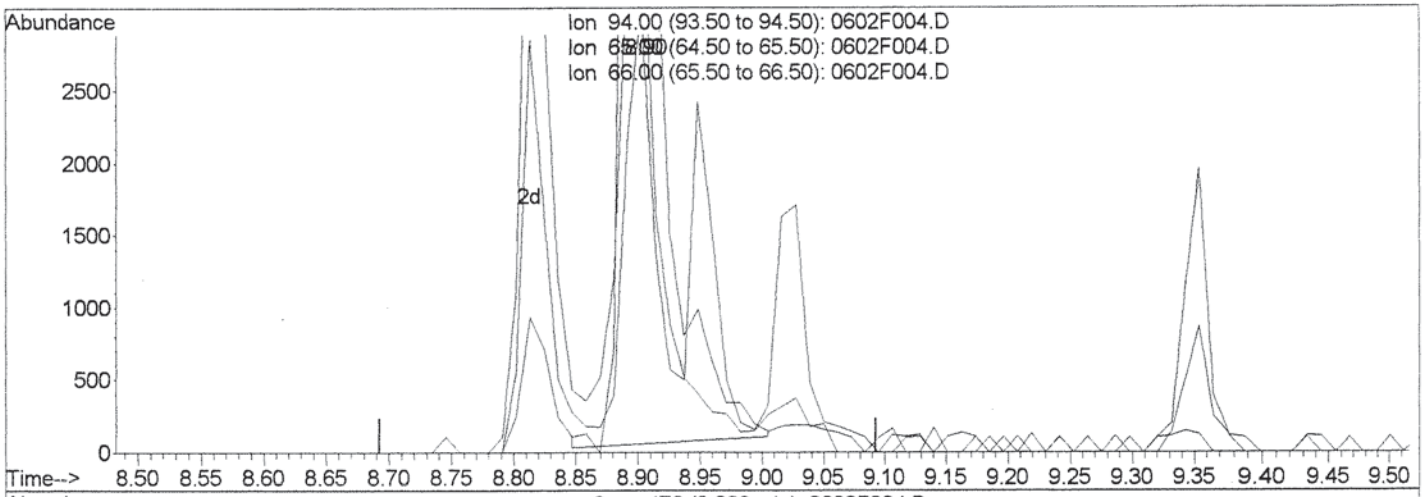
0602F004.D 0602BNC7.M Thu Jun 03 10:51:37 2010

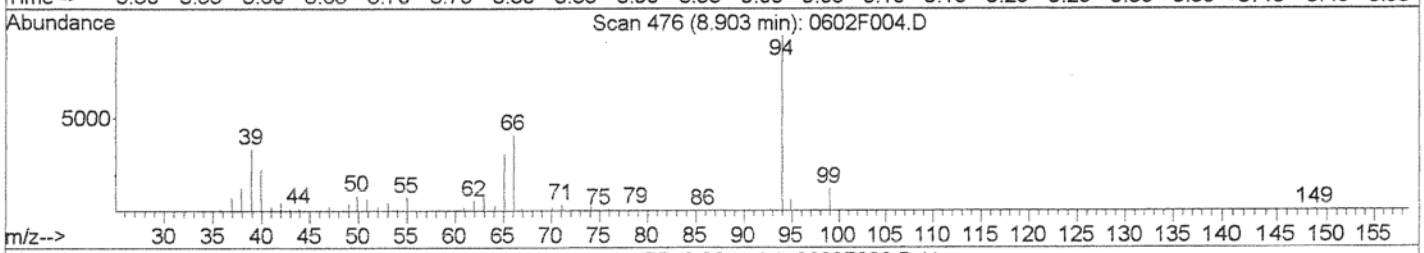
Quantitation Report (Qedit)

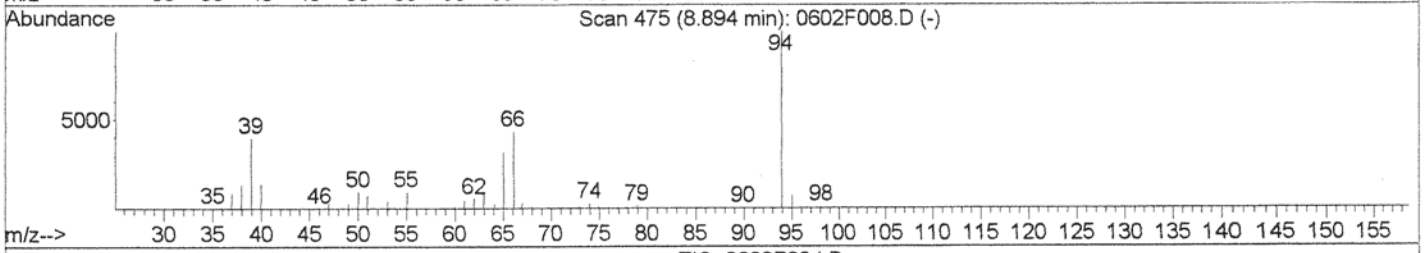
Data File : J:\MS07\DATA\060210\0602F004.D
Acq On : 2 Jun 2010 5:18 pm
Sample : 5PPM 8270 ICAL SVM32-21C
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:51 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F004.D

(8) Phenol (TMC)

8.90min 4.23ug/ml

response 17008

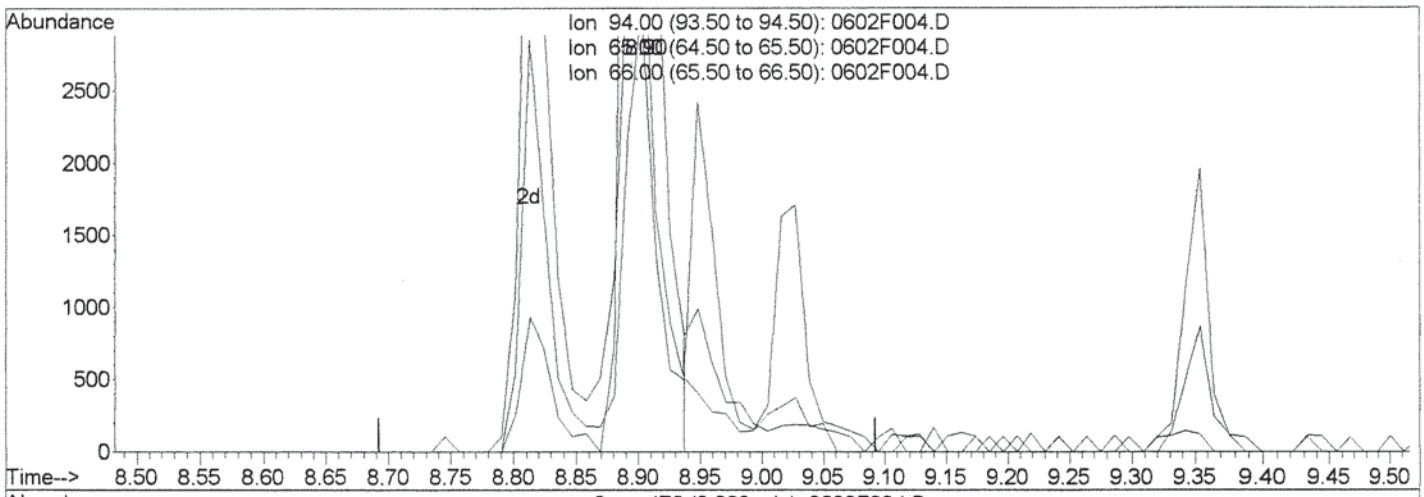
Ion	Exp%	Act%
94.00	100	100
65.00	31.10	30.00
66.00	44.30	40.54
0.00	0.00	0.00

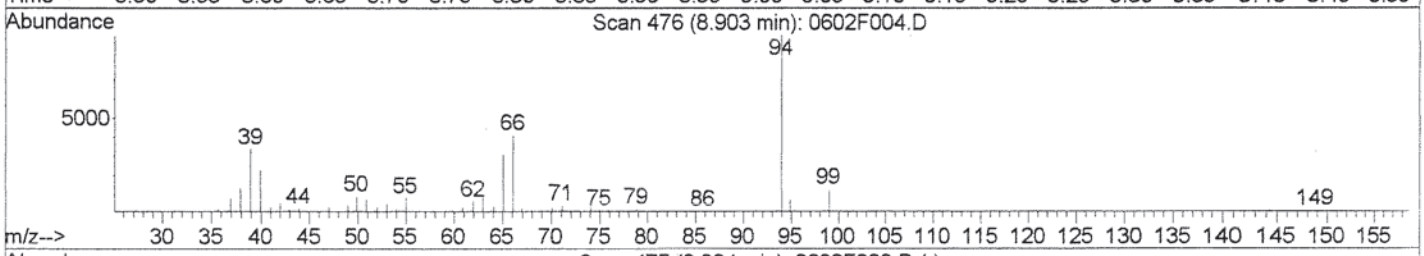
0602F004.D 0602BNC7.M Thu Jun 03 10:51:45 2010

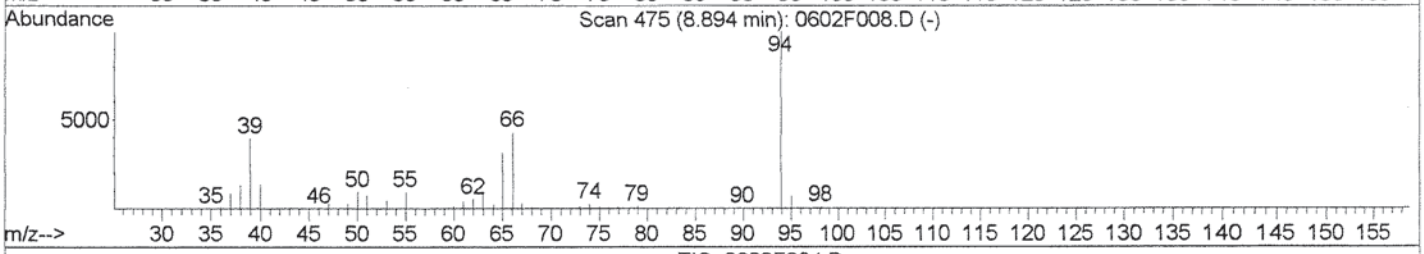
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F004.D Vial: 2
Acq On : 2 Jun 2010 5:18 pm Operator: M.BUTCHER
Sample : 5PPM 8270 ICAL SVM32-21C Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:51 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F004.D

(8) Phenol (TMC)

8.90min 3.93ug/ml m

response 15799

Ion	Exp%	Act%
94.00	100	100
65.00	31.10	32.77
66.00	44.30	43.67
0.00	0.00	0.00

GC
6-7-10

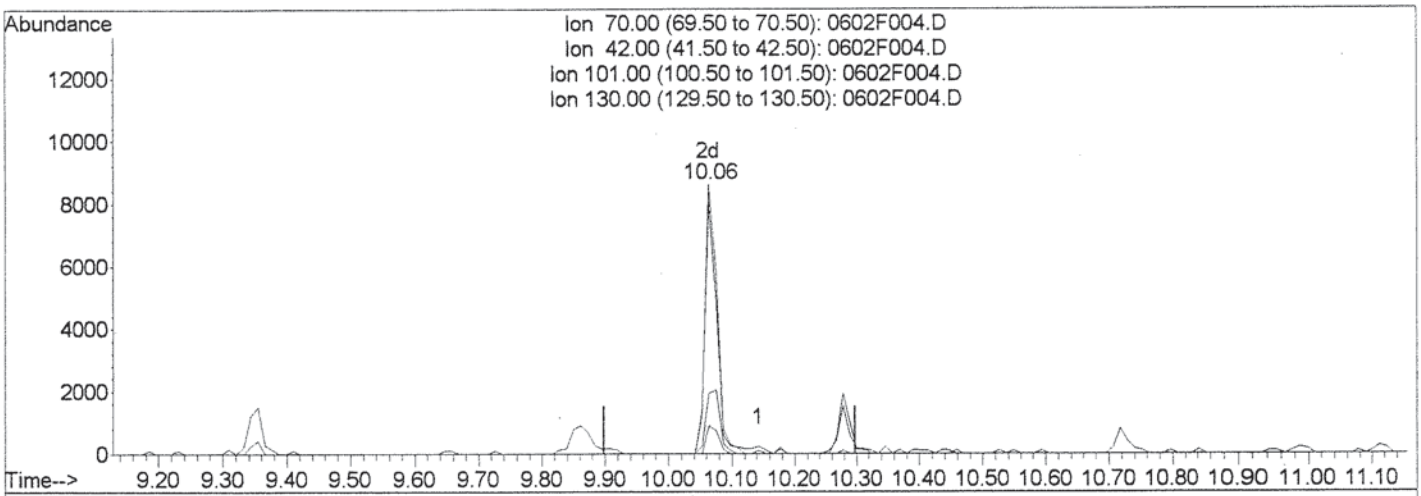
LB
6/14/10

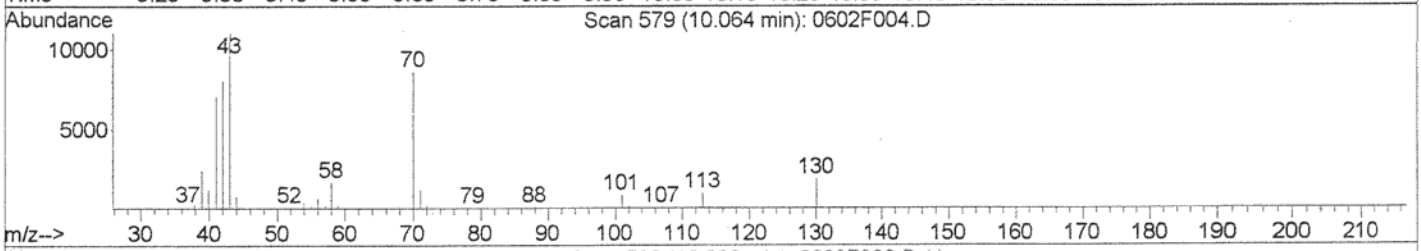
0602F004.D 0602BNC7.M Thu Jun 03 10:51:51 2010

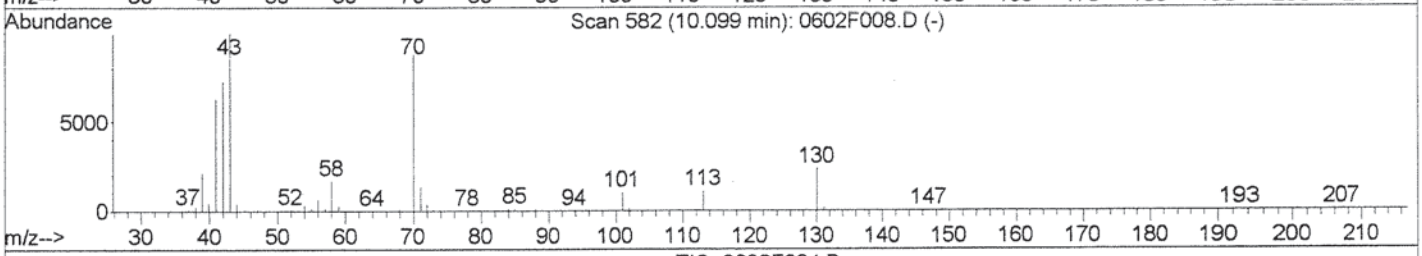
Data File : J:\MS07\DATA\060210\0602F004.D
Acq On : 2 Jun 2010 5:18 pm
Sample : 5PPM 8270 ICAL SVM32-21C
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:51 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F004.D

(17) N-Nitrosodi-n-propylamine (TMP)

10.06min 4.33ug/ml m

response 11468

Ion	Exp%	Act%
70.00	100	100
42.00	82.30	93.49
101.00	11.70	10.47
130.00	26.70	22.39

LP
6-3-10

LB
6/14/10

0602F004.D 0602BNC7.M Thu Jun 03 10:51:59 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F005.D
Acq On : 2 Jun 2010 5:58 pm
Sample : 10PPM 8270 ICAL SVM32-21D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:50 2010

Vial: 3
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	105247	40.00	ug/ml	0.00
21) Naphthalene-d8	11.45	136	391642	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.31	164	226676	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.70	188	357025	40.00	ug/ml	0.00
68) Chrysene-d12	21.13	240	241835	40.00	ug/ml	0.00
77) Perylene-d12	24.32	264	262995	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.15	112	26546	9.49	ug/ml	0.00
Spiked Amount 150.000	Range 21 - 100		Recovery = 6.33%#			
7) Phenol-d6	8.87	99	36844	9.44	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 94		Recovery = 6.29%#			
19) Nitrobenzene-d5	10.28	82	33312	8.74	ug/ml	-0.01
Spiked Amount 100.000	Range 35 - 114		Recovery = 8.74%#			
38) 2-Fluorobiphenyl	13.24	172	71199	9.58	ug/ml	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 9.58%#			
59) 2,4,6-Tribromophenol	15.60	330	11829	8.17	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery = 5.45%#			
71) Terphenyl-d14	19.32	244	38951	10.52	ug/ml	-0.01
Spiked Amount 100.000	Range 33 - 141		Recovery = 10.52%#			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.19	42	25086m	10.01	ug/ml	
3) Pyridine	4.31	79	31358m	8.83	ug/ml	
5) Aniline	8.81	93	40886	10.37	ug/ml	98
6) Bis(2-chloroethyl) Ether	8.95	93	30034	9.35	ug/ml	97
8) Phenol	8.89	94	35818m	8.96	ug/ml	
9) 2-Chlorophenol	9.02	128	32914	9.55	ug/ml	99
10) 1,3-Dichlorobenzene	9.24	146	36641	10.03	ug/ml	98
11) 1,4-Dichlorobenzene	9.38	146	38222	10.27	ug/ml	99
12) 1,2-Dichlorobenzene	9.62	146	34455	9.78	ug/ml	97
13) Benzyl Alcohol	9.64	108	18531	8.76	ug/ml	97
14) Bis(2-chloroisopropyl) Eth	9.85	45	47571	9.01	ug/ml	88
15) 2-Methylphenol	9.87	107	25872	10.00	ug/ml	98
16) Hexachloroethane	10.18	117	16954	10.01	ug/ml	94
17) N-Nitrosodi-n-propylamine	10.06	70	23644	8.99	ug/ml	89
18) 4-Methylphenol	10.14	107	35822	9.11	ug/ml	96
20) Nitrobenzene	10.31	77	32576	9.24	ug/ml	97
22) Isophorone	10.72	82	68596	9.71	ug/ml	97
23) 2-Nitrophenol	10.84	139	17870	9.08	ug/ml	94
24) 2,4-Dimethylphenol	10.99	122	22946	8.82	ug/ml	98
25) Bis(2-chloroethoxy)methane	11.11	93	38509	9.70	ug/ml	97

(#) = qualifier out of range (m) = manual integration

LB 6-14-10

6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F005.D
Acq On : 2 Jun 2010 5:58 pm
Sample : 10PPM 8270 ICAL SVM32-21D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:50 2010

Vial: 3
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	2,4-Dichlorophenol	11.28	162	28397	9.62 ug/ml	97
27)	Benzoic Acid	11.18	122	14734	6.60 ug/ml	93
28)	1,2,4-Trichlorobenzene	11.37	180	31946	10.19 ug/ml	99
29)	Naphthalene	11.48	128	98207	10.45 ug/ml	99
30)	4-Chloroaniline	11.62	127	42506	10.25 ug/ml	98
31)	Hexachlorobutadiene	11.71	225	19642	9.88 ug/ml	98
32)	4-Chloro-3-methylphenol	12.48	107	31095	10.09 ug/ml#	52
33)	2-Methylnaphthalene	12.62	142	61446	10.28 ug/ml	99
35)	Hexachlorocyclopentadiene	12.89	237	11969	12.54 ug/ml	98
36)	2,4,6-Trichlorophenol	13.12	196	22060	9.43 ug/ml	98
37)	2,4,5-Trichlorophenol	13.20	196	24219	9.29 ug/ml	98
39)	2-Chloronaphthalene	13.41	162	61401	9.37 ug/ml	97
40)	2-Nitroaniline	13.60	65	20458	9.70 ug/ml	94
41)	Acenaphthylene	14.08	152	99975	9.90 ug/ml	99
42)	Dimethyl Phthalate	13.93	163	80744	10.48 ug/ml	99
43)	2,6-Dinitrotoluene	14.01	165	17837	10.21 ug/ml	87
44)	Acenaphthene	14.36	154	60029	10.41 ug/ml	99
45)	3-Nitroaniline	14.28	138	18715	10.19 ug/ml	98
46)	2,4-Dinitrophenol	14.46	184	4551	4.49 ug/ml	91
47)	Dibenzofuran	14.64	168	96912	10.66 ug/ml	91
48)	4-Nitrophenol	14.68	109	6093	6.12 ug/ml#	1
49)	2,4-Dinitrotoluene	14.66	165	23833	10.77 ug/ml	96
50)	2,3,4,6-Tetrachlorophenol	14.86	232	18936	9.97 ug/ml#	70
51)	Fluorene	15.19	166	73383	10.78 ug/ml	96
52)	4-Chlorophenyl Phenyl Ethe	15.23	204	37654	10.80 ug/ml	95
53)	Diethyl Phthalate	15.08	149	86042	11.55 ug/ml	98
54)	4-Nitroaniline	15.27	138	15929	10.02 ug/ml	95
55)	2-Methyl-4,6-dinitrophenol	15.32	198	9476	7.87 ug/ml	94
56)	N-Nitrosodiphenylamine	15.42	169	48404	10.66 ug/ml	100
57)	1,2-Diphenylhydrazine	15.47	77	76355	9.89 ug/ml	95
60)	4-Bromophenyl Phenyl Ether	16.01	248	20207	9.39 ug/ml	95
61)	Hexachlorobenzene	16.08	284	23710	9.50 ug/ml	91
62)	Pentachlorophenol	16.43	266	8788	6.27 ug/ml	98
63)	Phenanthrene	16.75	178	101760	10.73 ug/ml	99
64)	Anthracene	16.83	178	99958	10.02 ug/ml	99
65)	Carbazole	17.12	167	78635	9.66 ug/ml	99
66)	Di-n-butyl Phthalate	17.74	149	97039	8.94 ug/ml	98
67)	Fluoranthene	18.66	202	79480	9.23 ug/ml	96
69)	Benzidine	18.93	184	30551	15.05 ug/ml	96
70)	Pyrene	19.02	202	77346	11.98 ug/ml	99
72)	Butyl Benzyl Phthalate	20.16	149	32756	8.91 ug/ml	97

(#) = qualifier out of range (m) = manual integration

6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F005.D
Acq On : 2 Jun 2010 5:58 pm
Sample : 10PPM 8270 ICAL SVM32-21D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:50 2010

Vial: 3
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.11	252	24152	9.56	ug/ml	98
74)	Benz(a)anthracene	21.11	228	53498	9.41	ug/ml	99
75)	Chrysene	21.18	228	53106	9.65	ug/ml	99
76)	Bis(2-ethylhexyl) Phthalat	21.31	149	46281	8.84	ug/ml	99
78)	Di-n-octyl Phthalate	22.76	149	90208	7.79	ug/ml	99
79)	Benzo(b)fluoranthene	23.43	252	57418	8.48	ug/ml	98
80)	Benzo(k)fluoranthene	23.50	252	62067	8.83	ug/ml	99
81)	Benzo(a)pyrene	24.17	252	52544	9.34	ug/ml	97
82)	Indeno(1,2,3-cd)pyrene	26.74	276	44132	9.06	ug/ml	99
83)	Dibenz(a,h)anthracene	26.82	278	45317	8.73	ug/ml	99
84)	Benzo(g,h,i)perylene	27.32	276	52555	9.99	ug/ml	96

LB
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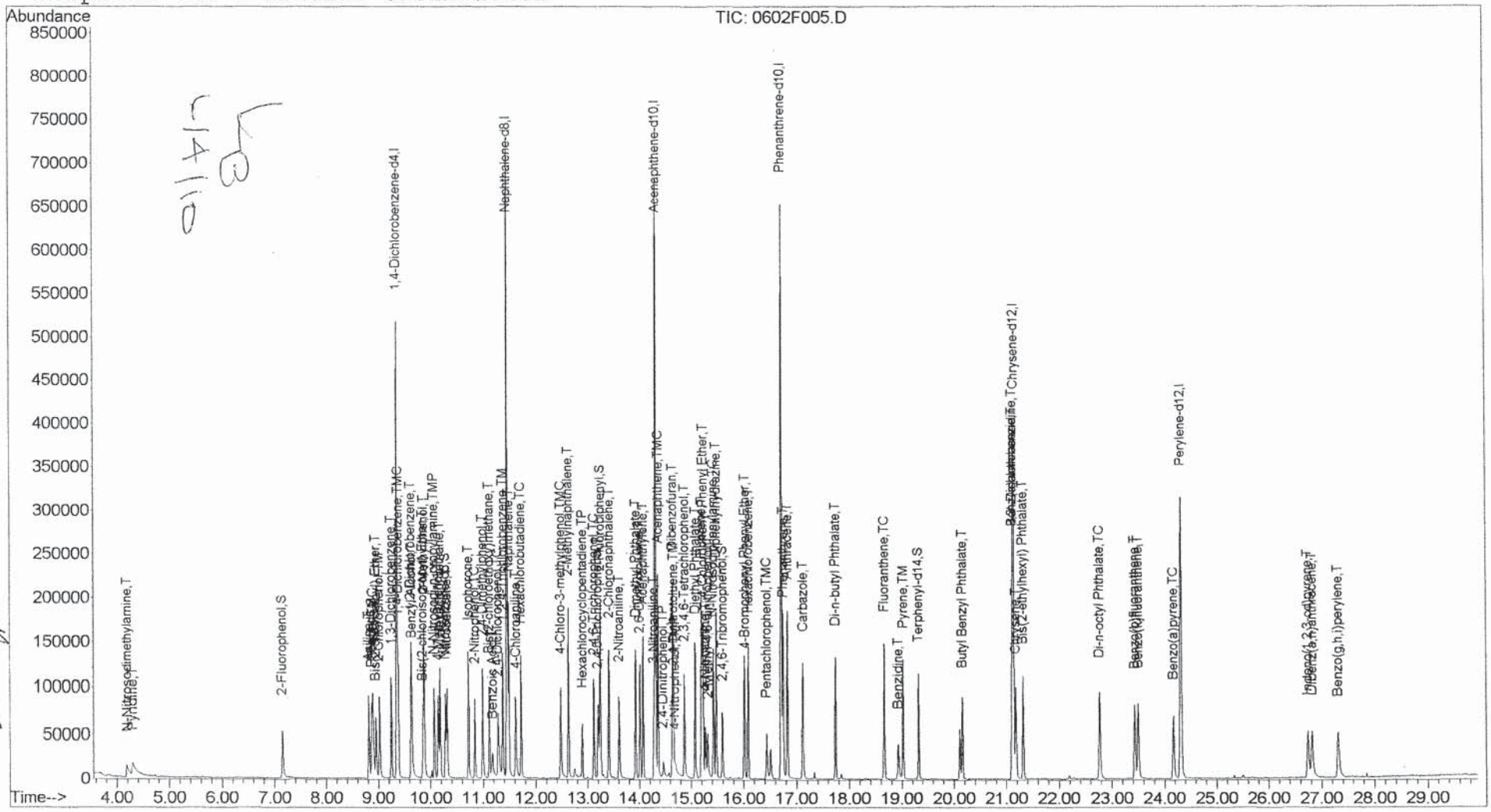
(#) = qualifier out of range (m) = manual integration
0602F005.D 0602BNC7.M Thu Jun 03 11:34:27 2010

6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F005.D Vial: 3
Acq On : 2 Jun 2010 5:58 pm Operator: M.BUTCHER
Sample : 10PPM 8270 ICAL SVM32-21D Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:52 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration



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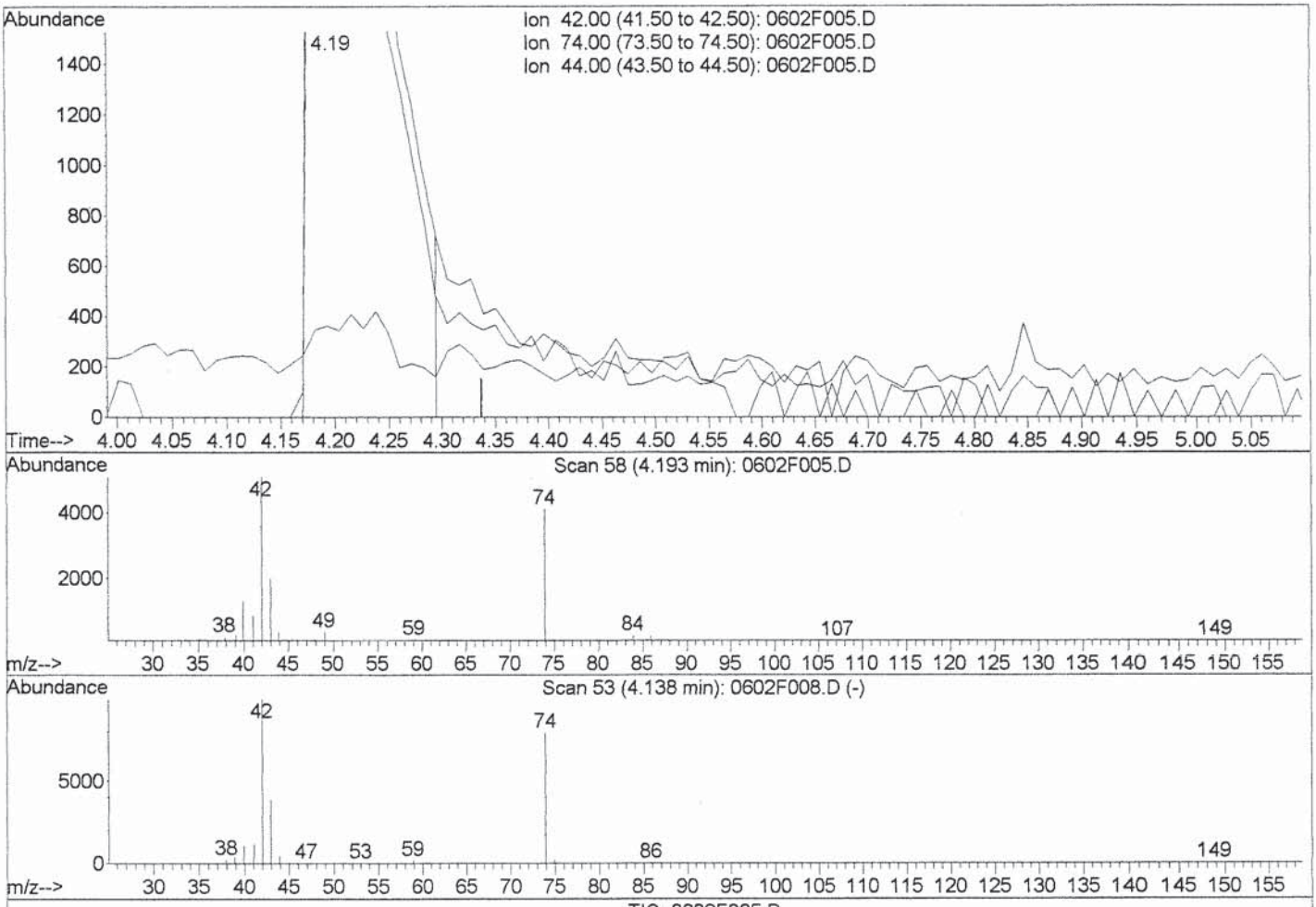
0602F005.D 0602BNC7.M Thu Jun 03 11:34:27 2010 Page 4

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F005.D
Acq On : 2 Jun 2010 5:58 pm
Sample : 10PPM 8270 ICAL SVM32-21D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:48 2010

Vial: 3
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F005.D

(2) N-Nitrosodimethylamine (T)

4.19min 7.60ug/ml

response 19042

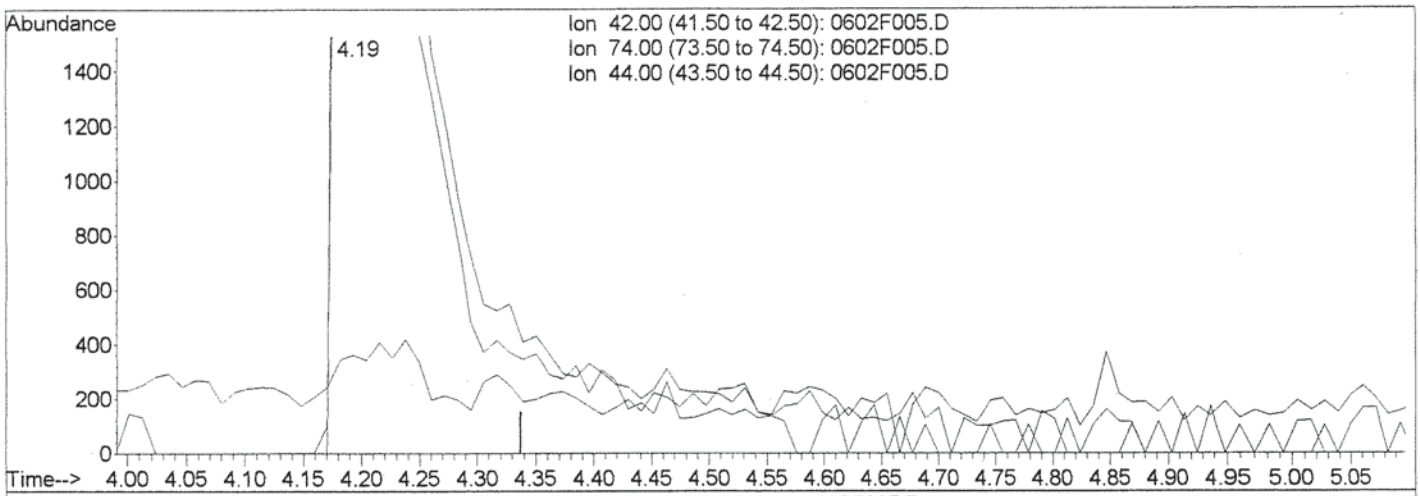
Ion	Exp%	Act%
42.00	100	100
74.00	79.30	82.13
44.00	4.40	3.79
0.00	0.00	0.00

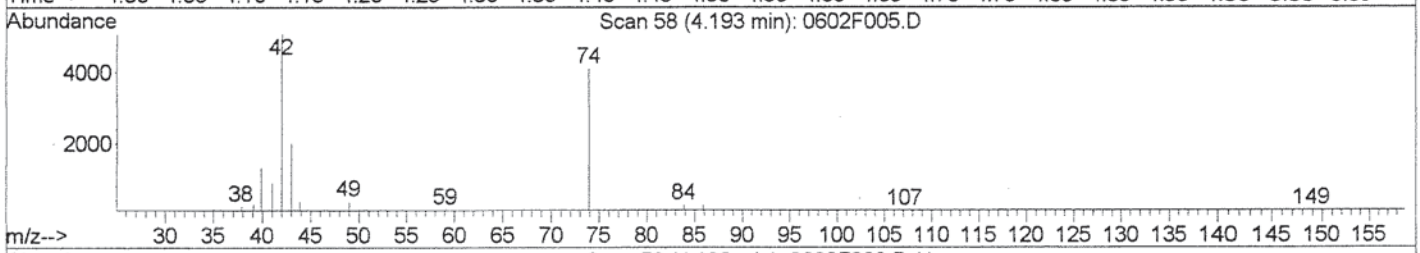
0602F005.D 0602BNC7.M Thu Jun 03 10:52:36 2010

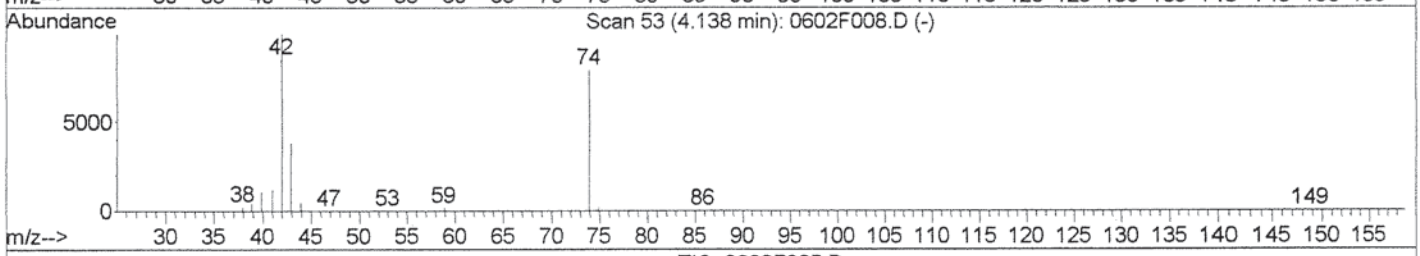
Data File : J:\MS07\DATA\060210\0602F005.D
Acq On : 2 Jun 2010 5:58 pm
Sample : 10PPM 8270 ICAL SVM32-21D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:52 2010

Vial: 3
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F005.D

(2) N-Nitrosodimethylamine (T)

4.19min 10.01ug/ml m

response 25086

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	81.04
44.00	4.40	7.12
0.00	0.00	0.00

IC
6-3-10

0602F005.D 0602BNC7.M Thu Jun 03 10:52:41 2010

LB
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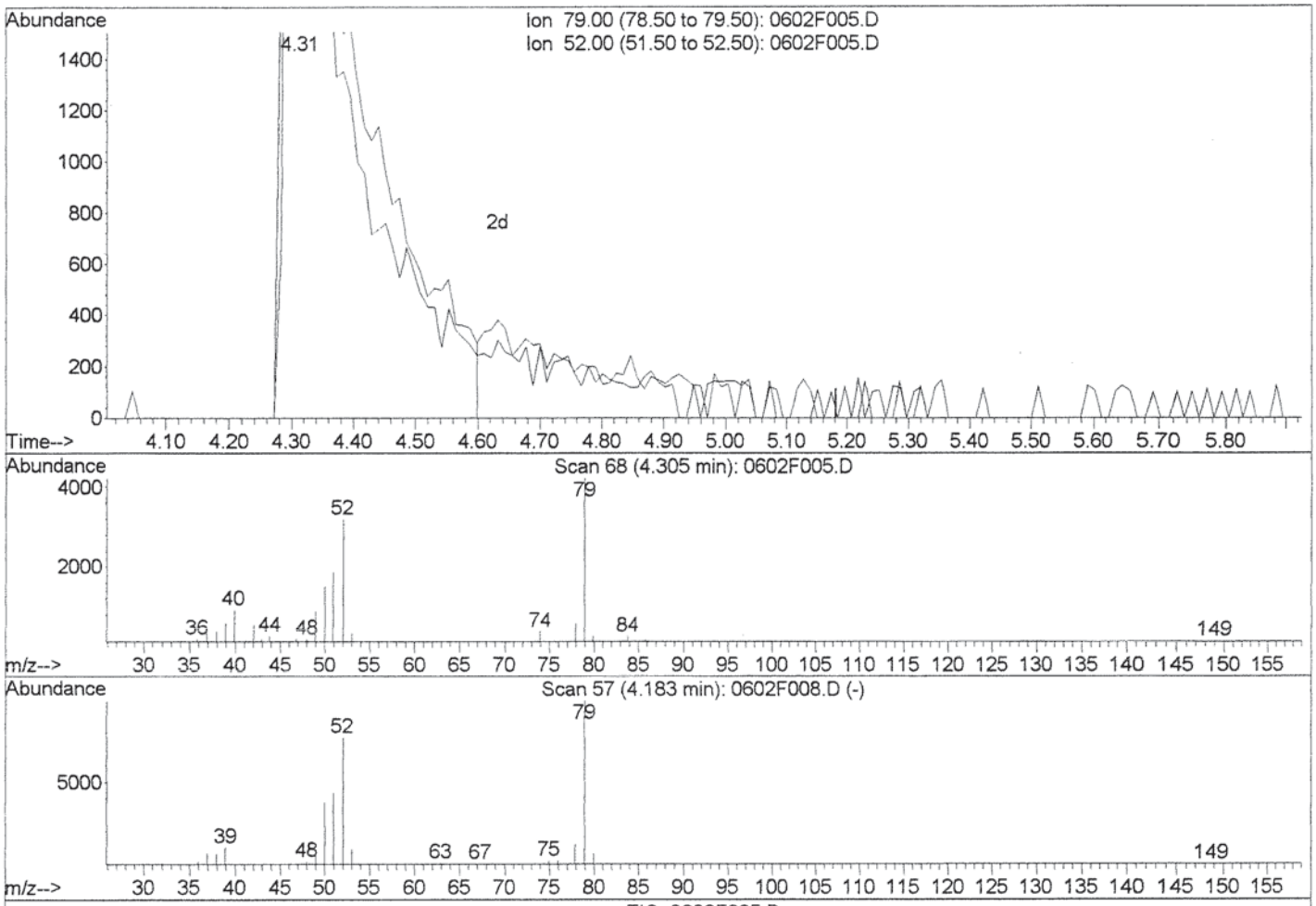
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F005.D Vial: 3
Acq On : 2 Jun 2010 5:58 pm Operator: M.BUTCHER
Sample : 10PPM 8270 ICAL SVM32-21D Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:52 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F005.D

(3) Pyridine (T)

4.31min 7.54ug/ml

response 26783

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.18
0.00	0.00	0.00
0.00	0.00	0.00

0602F005.D 0602BNC7.M Thu Jun 03 10:52:44 2010

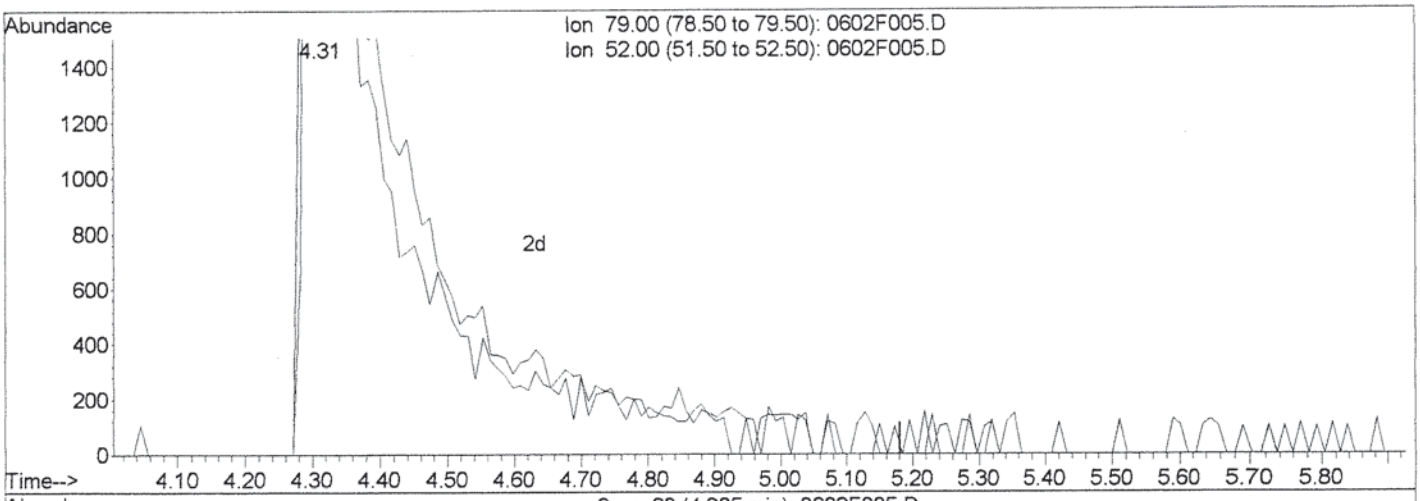
Quantitation Report (Qedit)

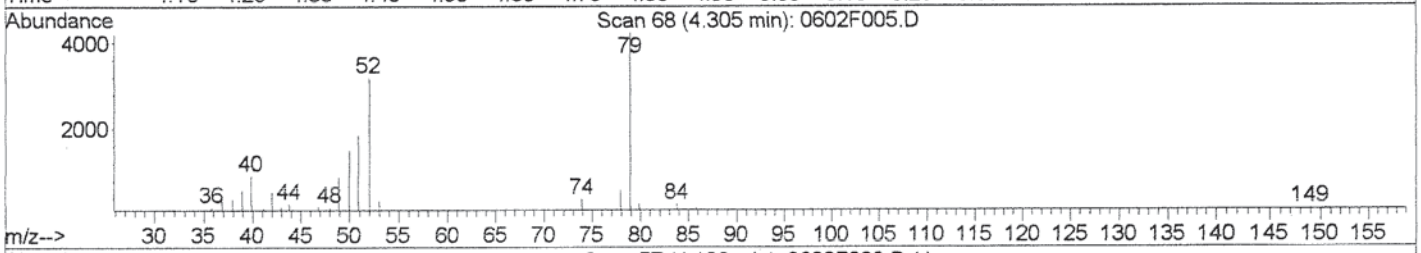
Data File : J:\MS07\DATA\060210\0602F005.D
Acq On : 2 Jun 2010 5:58 pm
Sample : 10PPM 8270 ICAL SVM32-21D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:52 2010

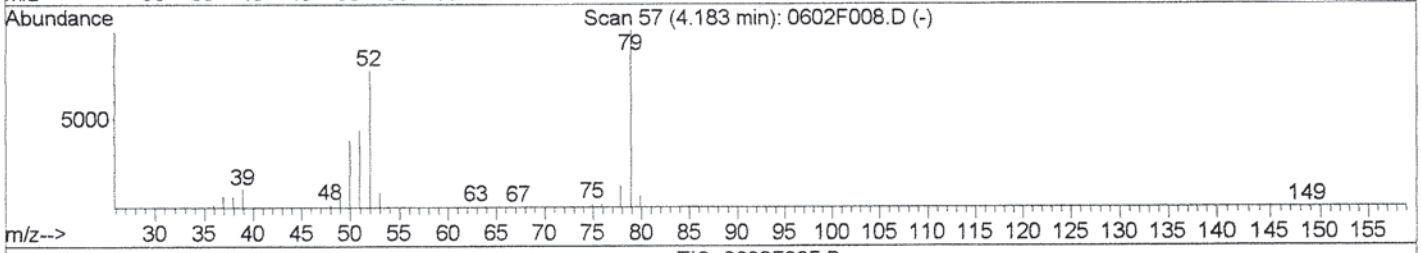
Vial: 3
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F005.D

(3) Pyridine (T)

4.31min 8.83ug/ml m

response 31358

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.44
0.00	0.00	0.00
0.00	0.00	0.00

SC 6-3-10

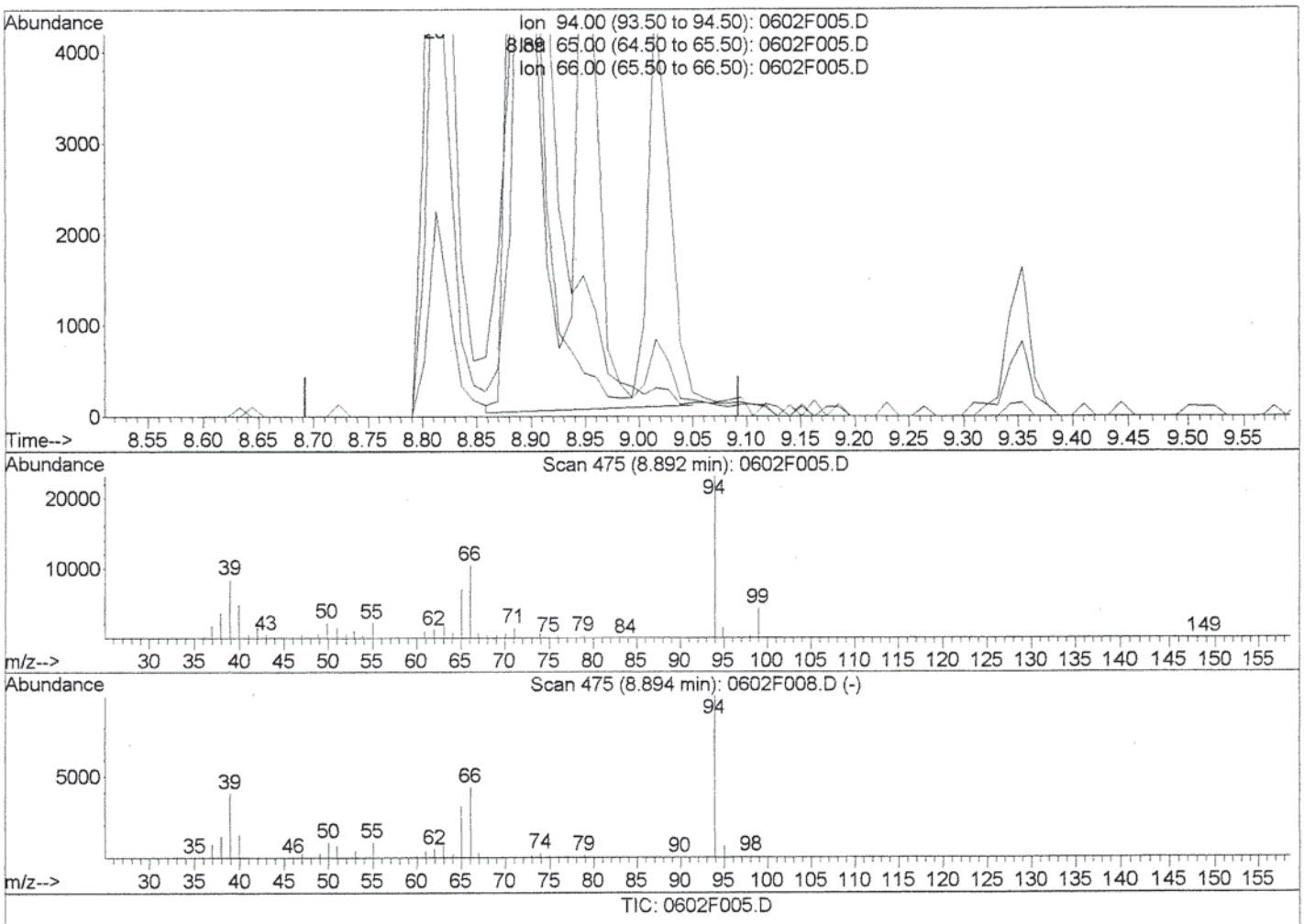
0602F005.D 0602BNC7.M Thu Jun 03 10:52:49 2010

LG 6/4/10

Data File : J:\MS07\DATA\060210\0602F005.D
Acq On : 2 Jun 2010 5:58 pm
Sample : 10PPM 8270 ICAL SVM32-21D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:52 2010

Vial: 3
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F005.D

(8) Phenol (TMC)

8.89min 9.57ug/ml

response 38255

Ion	Exp%	Act%
94.00	100	100
65.00	31.10	29.66
66.00	44.30	43.61
0.00	0.00	0.00

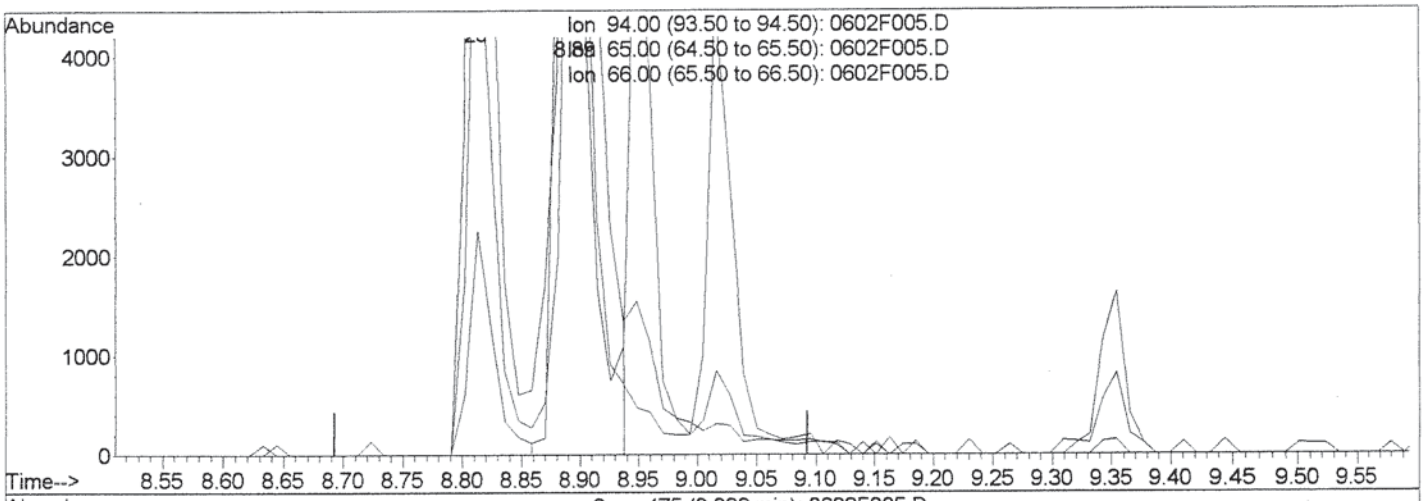
0602F005.D 0602BNC7.M Thu Jun 03 10:52:55 2010

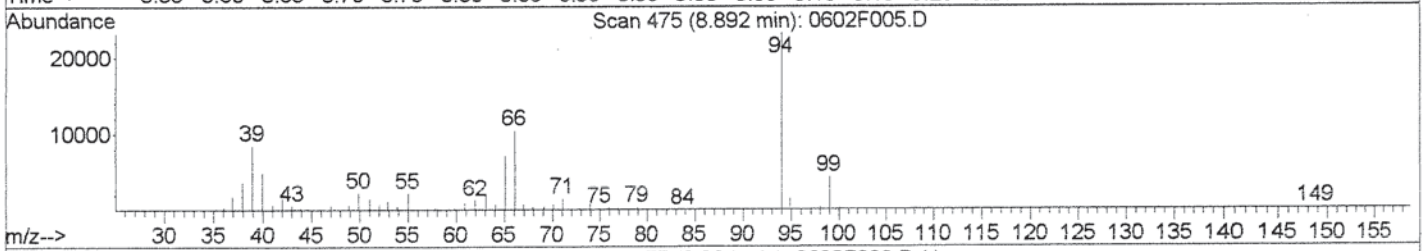
Quantitation Report (Qedit)

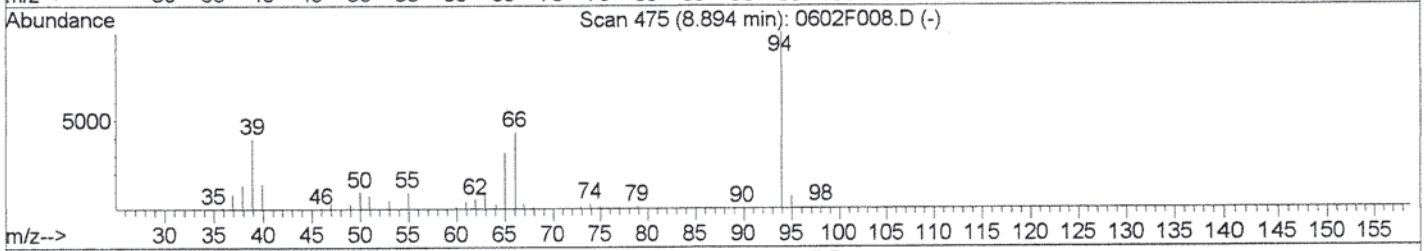
Data File : J:\MS07\DATA\060210\0602F005.D
Acq On : 2 Jun 2010 5:58 pm
Sample : 10PPM 8270 ICAL SVM32-21D
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:52 2010

Vial: 3
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F005.D

(8) Phenol (TMC)

8.89min 8.96ug/ml m

response 35818

Ion	Exp%	Act%
94.00	100	100
65.00	31.10	30.65
66.00	44.30	45.16
0.00	0.00	0.00

OE
6-3-10

LB
6/4/10

0602F005.D 0602BNC7.M Thu Jun 03 10:53:00 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F006.D
Acq On : 2 Jun 2010 6:38 pm
Sample : 20PPM 8270 ICAL SVM32-21E
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:51 2010

Vial: 4
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	107827	40.00	ug/ml	0.00
21) Naphthalene-d8	11.45	136	398983	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.31	164	232100	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.71	188	344754	40.00	ug/ml	0.00
68) Chrysene-d12	21.13	240	241469	40.00	ug/ml	0.00
77) Perylene-d12	24.32	264	276718	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.15	112	55135	19.23	ug/ml	0.02
Spiked Amount 150.000	Range 21 - 100		Recovery = 12.82%#			
7) Phenol-d6	8.87	99	75461	18.87	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 94		Recovery = 12.58%			
19) Nitrobenzene-d5	10.29	82	71229	18.24	ug/ml	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 18.24%#			
38) 2-Fluorobiphenyl	13.24	172	146020	19.19	ug/ml	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 19.19%#			
59) 2,4,6-Tribromophenol	15.59	330	26645	19.07	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery = 12.71%			
71) Terphenyl-d14	19.32	244	79545	21.51	ug/ml	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 21.51%#			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.17	42	50289m	19.58	ug/ml	
3) Pyridine	4.26	79	65653m	18.04	ug/ml	
5) Aniline	8.81	93	85294	21.11	ug/ml	93
6) Bis(2-chloroethyl) Ether	8.96	93	64648	19.64	ug/ml	94
8) Phenol	8.89	94	77609m	18.95	ug/ml	
9) 2-Chlorophenol	9.02	128	71798	20.34	ug/ml	91
10) 1,3-Dichlorobenzene	9.25	146	78347	20.92	ug/ml	97
11) 1,4-Dichlorobenzene	9.38	146	78619	20.61	ug/ml	97
12) 1,2-Dichlorobenzene	9.62	146	73274	20.30	ug/ml	95
13) Benzyl Alcohol	9.63	108	40524	18.69	ug/ml	91
14) Bis(2-chloroisopropyl) Eth	9.87	45	97948	18.11	ug/ml	75
15) 2-Methylphenol	9.88	107	53112	20.03	ug/ml	90
16) Hexachloroethane	10.18	117	35563	20.49	ug/ml	82
17) N-Nitrosodi-n-propylamine	10.07	70	50989	18.93	ug/ml	93
18) 4-Methylphenol	10.14	107	77580	19.27	ug/ml	98
20) Nitrobenzene	10.31	77	70406	19.50	ug/ml	97
22) Isophorone	10.72	82	152700	21.22	ug/ml	98
23) 2-Nitrophenol	10.84	139	40761	20.33	ug/ml	89
24) 2,4-Dimethylphenol	10.98	122	52982	19.98	ug/ml	98
25) Bis(2-chloroethoxy)methane	11.12	93	84795	20.97	ug/ml	98

(#) = qualifier out of range (m) = manual integration

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Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F006.D
Acq On : 2 Jun 2010 6:38 pm
Sample : 20PPM 8270 ICAL SVM32-21E
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:51 2010

Vial: 4
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.28	162	62920	20.91	ug/ml	94
27)	Benzoic Acid	11.21	122	39035	17.18	ug/ml	97
28)	1,2,4-Trichlorobenzene	11.37	180	67561	21.15	ug/ml	98
29)	Naphthalene	11.48	128	202046	21.11	ug/ml	99
30)	4-Chloroaniline	11.62	127	92217	21.84	ug/ml	99
31)	Hexachlorobutadiene	11.72	225	43507	21.47	ug/ml	99
32)	4-Chloro-3-methylphenol	12.46	107	64285	20.47	ug/ml	94
33)	2-Methylnaphthalene	12.62	142	131239	21.55	ug/ml	96
35)	Hexachlorocyclopentadiene	12.89	237	34516	20.83	ug/ml	98
36)	2,4,6-Trichlorophenol	13.11	196	48387	20.21	ug/ml	99
37)	2,4,5-Trichlorophenol	13.19	196	50981	19.11	ug/ml	99
39)	2-Chloronaphthalene	13.41	162	127345	18.97	ug/ml	99
40)	2-Nitroaniline	13.61	65	44993	20.84	ug/ml	84
41)	Acenaphthylene	14.07	152	214017	20.70	ug/ml	99
42)	Dimethyl Phthalate	13.93	163	171907	21.79	ug/ml	100
43)	2,6-Dinitrotoluene	14.02	165	37142	20.77	ug/ml	80
44)	Acenaphthene	14.35	154	120815	20.47	ug/ml	99
45)	3-Nitroaniline	14.27	138	39608	21.05	ug/ml	97
46)	2,4-Dinitrophenol	14.46	184	14657	14.13	ug/ml	93
47)	Dibenzofuran	14.65	168	198067	21.28	ug/ml	90
48)	4-Nitrophenol	14.66	109	17318	17.00	ug/ml#	1
49)	2,4-Dinitrotoluene	14.66	165	47758	21.07	ug/ml	80
50)	2,3,4,6-Tetrachlorophenol	14.87	232	40042	20.58	ug/ml	95
51)	Fluorene	15.20	166	145342	20.84	ug/ml	97
52)	4-Chlorophenyl Phenyl Ethe	15.22	204	74932	20.99	ug/ml	95
53)	Diethyl Phthalate	15.07	149	173708	22.77	ug/ml	99
54)	4-Nitroaniline	15.27	138	32289	19.83	ug/ml	96
55)	2-Methyl-4,6-dinitrophenol	15.31	198	21784	17.67	ug/ml	77
56)	N-Nitrosodiphenylamine	15.42	169	98866	21.26	ug/ml	99
57)	1,2-Diphenylhydrazine	15.47	77	167281	21.16	ug/ml	94
60)	4-Bromophenyl Phenyl Ether	16.01	248	41910	20.16	ug/ml	92
61)	Hexachlorobenzene	16.08	284	47682	19.79	ug/ml	97
62)	Pentachlorophenol	16.43	266	21580	15.94	ug/ml	95
63)	Phenanthrene	16.74	178	188045	20.53	ug/ml	99
64)	Anthracene	16.82	178	189032	19.63	ug/ml	100
65)	Carbazole	17.11	167	144391	18.37	ug/ml	99
66)	Di-n-butyl Phthalate	17.73	149	198519	18.93	ug/ml	98
67)	Fluoranthene	18.66	202	140879	16.94	ug/ml	99
69)	Benzidine	18.93	184	52194	25.74	ug/ml	98
70)	Pyrene	19.02	202	138437	21.48	ug/ml	99
72)	Butyl Benzyl Phthalate	20.16	149	73189	19.93	ug/ml	98

(#) = qualifier out of range (m) = manual integration

LB
6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F006.D
Acq On : 2 Jun 2010 6:38 pm
Sample : 20PPM 8270 ICAL SVM32-21E
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:51 2010

Vial: 4
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73) 3,3'-Dichlorobenzidine	21.10	252	51085	20.24	ug/ml	97
74) Benz(a)anthracene	21.10	228	111232	19.60	ug/ml	99
75) Chrysene	21.18	228	107890	19.64	ug/ml	99
76) Bis(2-ethylhexyl) Phthalat	21.31	149	103877	19.87	ug/ml	98
78) Di-n-octyl Phthalate	22.77	149	193270	15.86	ug/ml	98
79) Benzo(b)fluoranthene	23.44	252	133681	18.75	ug/ml	97
80) Benzo(k)fluoranthene	23.50	252	142980	19.33	ug/ml	97
81) Benzo(a)pyrene	24.17	252	116697	19.71	ug/ml	100
82) Indeno(1,2,3-cd)pyrene	26.74	276	94671	18.46	ug/ml	98
83) Dibenz(a,h)anthracene	26.82	278	105237	19.27	ug/ml	97
84) Benzo(g,h,i)perylene	27.31	276	107472	19.42	ug/ml	99

LB
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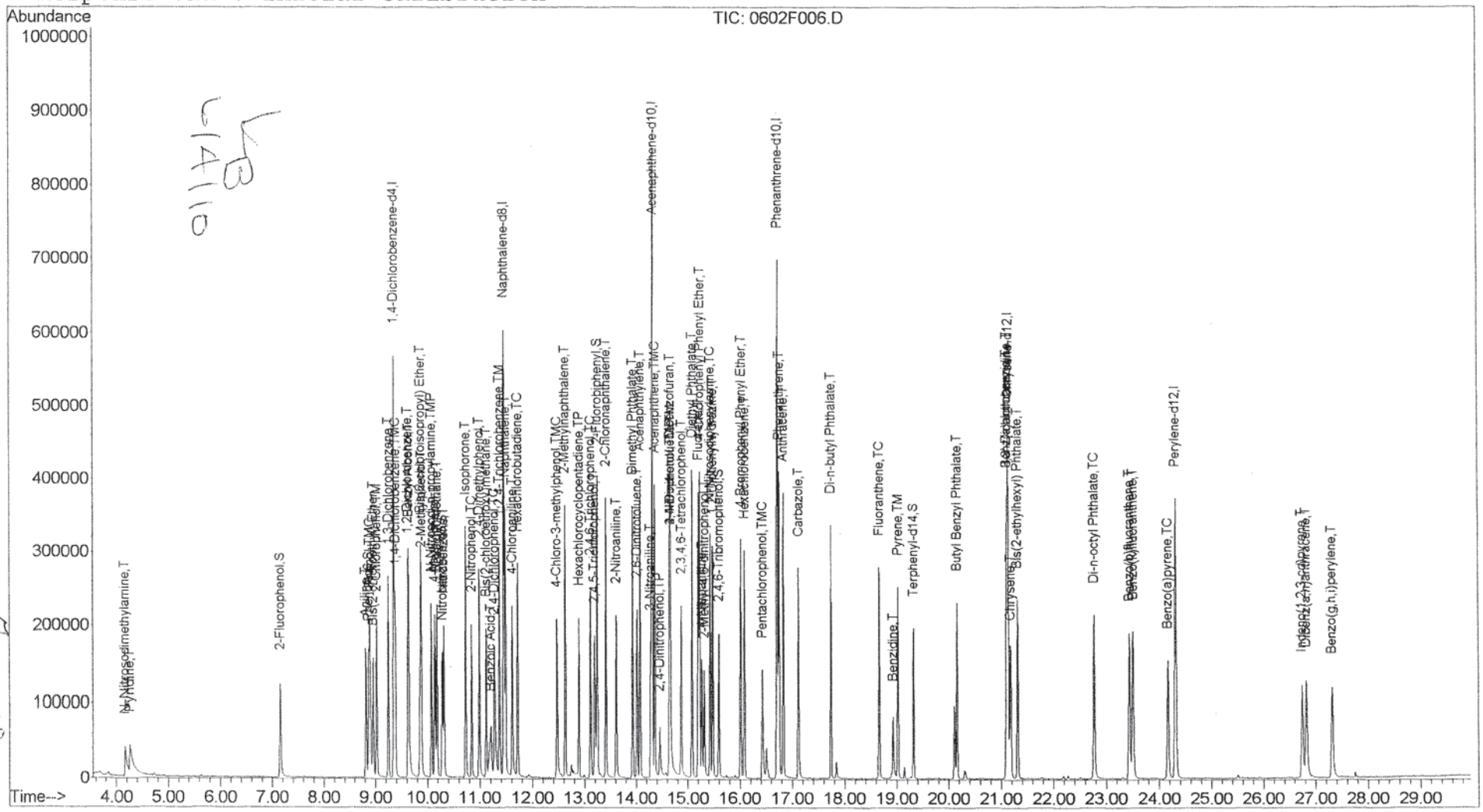
(#) = qualifier out of range (m) = manual integration
0602F006.D 0602BNC7.M Thu Jun 03 11:34:28 2010

6/3-10

Quantitation Report (QT Reviewed)

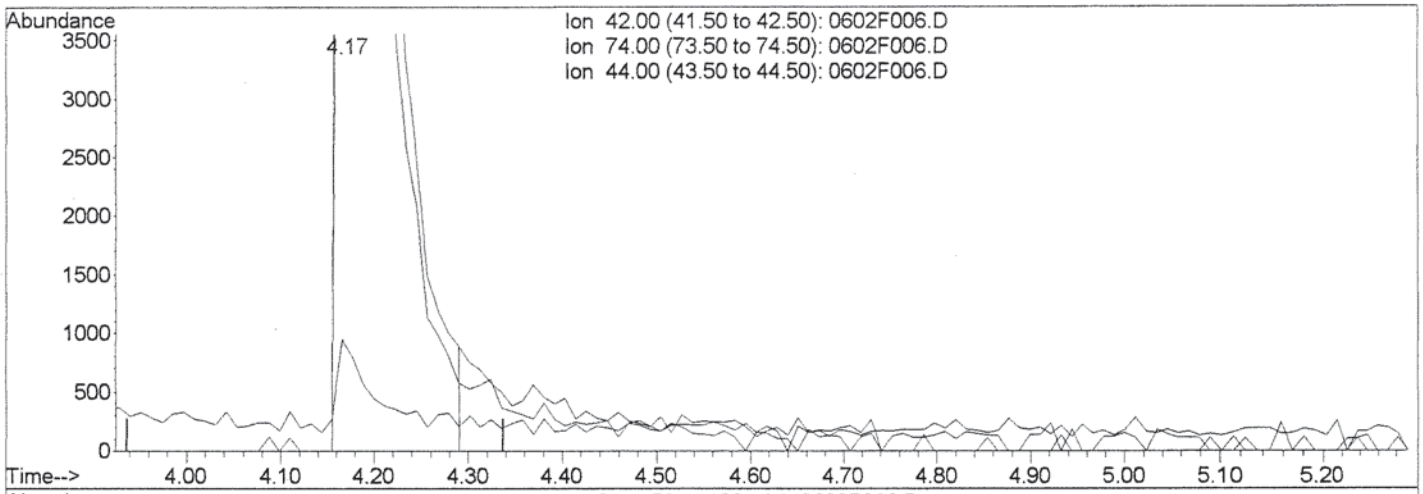
Data File : J:\MS07\DATA\060210\0602F006.D Vial: 4
Acq On : 2 Jun 2010 6:38 pm Operator: M.BUTCHER
Sample : 20PPM 8270 ICAL SVM32-21E Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:53 2010 Quant Results File: 0602BNC7.RES

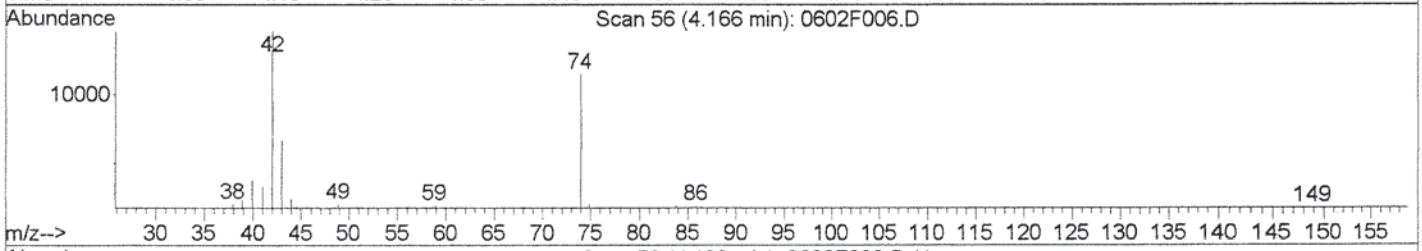
Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration

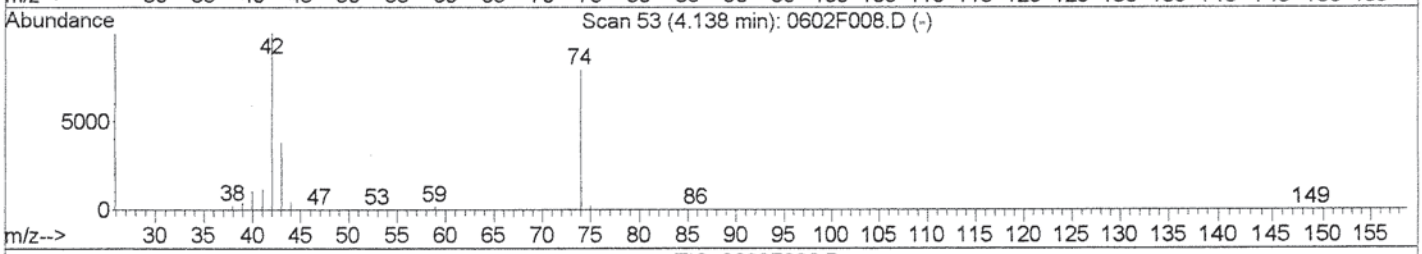


Data File : J:\MS07\DATA\060210\0602F006.D Vial: 4
Acq On : 2 Jun 2010 6:38 pm Operator: M.BUTCHER
Sample : 20PPM 8270 ICAL SVM32-21E Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:48 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F006.D

(2) N-Nitrosodimethylamine (T)

4.17min 16.91ug/ml

response 43432

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	76.23
44.00	4.40	5.09
0.00	0.00	0.00

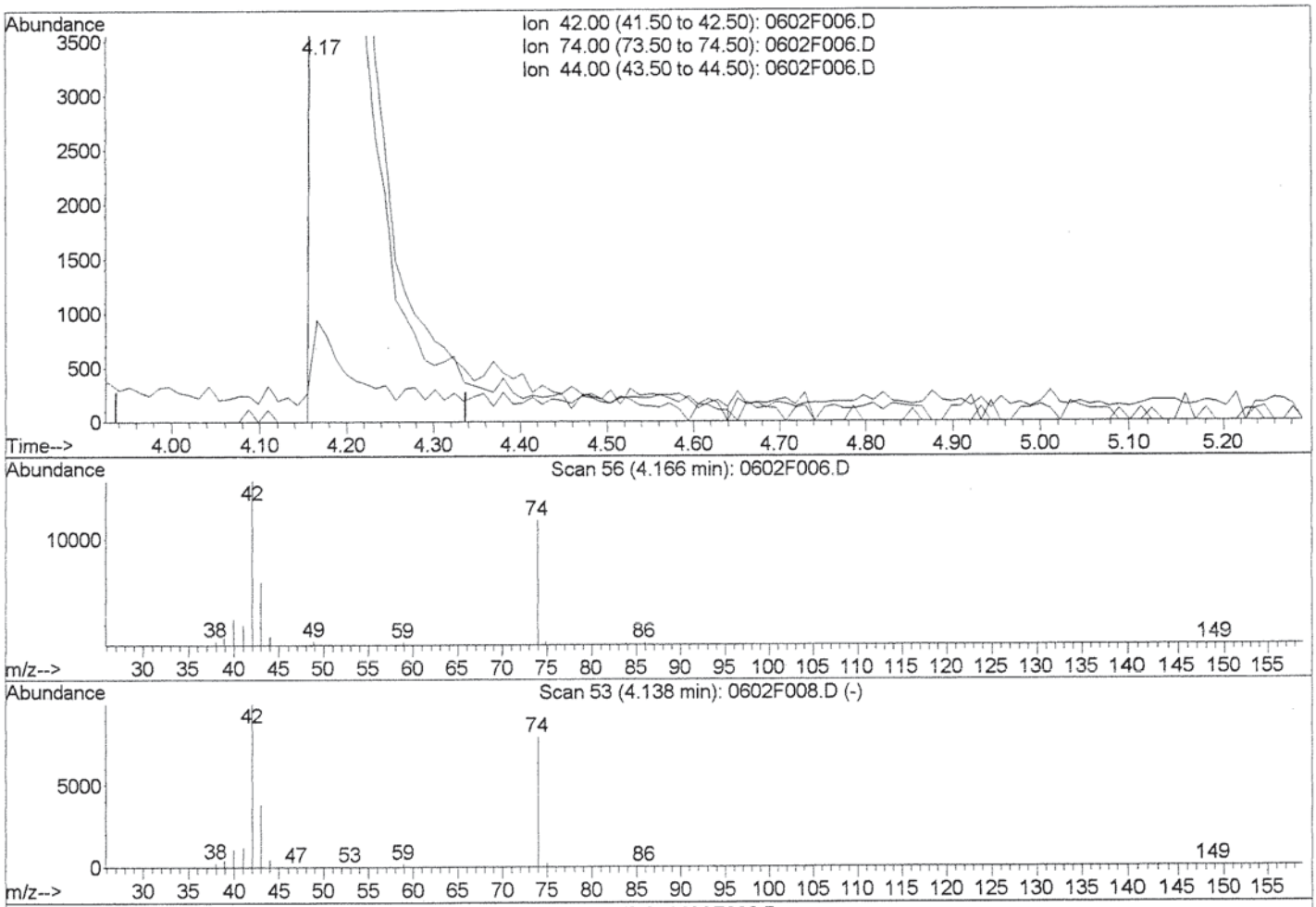
0602F006.D 0602BNC7.M Thu Jun 03 10:53:33 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F006.D
Acq On : 2 Jun 2010 6:38 pm
Sample : 20PPM 8270 ICAL SVM32-21E
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:53 2010

Vial: 4
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F006.D

(2) N-Nitrosodimethylamine (T)

4.17min 19.58ug/ml m

response 50289

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	75.89
44.00	4.40	6.12
0.00	0.00	0.00

JC
6-3-10

LB
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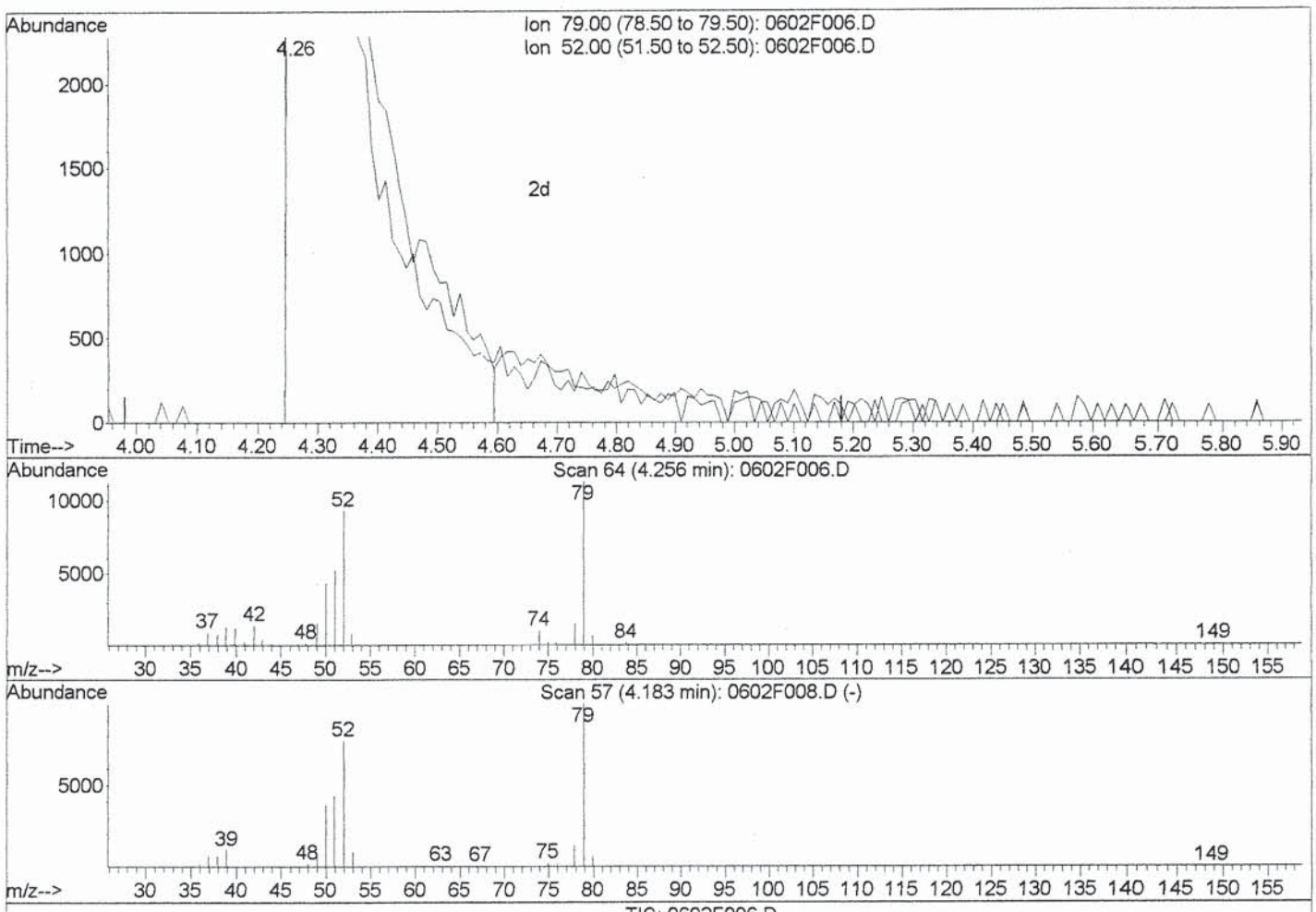
0602F006.D 0602BNC7.M Thu Jun 03 10:53:37 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F006.D
Acq On : 2 Jun 2010 6:38 pm
Sample : 20PPM 8270 ICAL SVM32-21E
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:53 2010

Vial: 4
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F006.D

(3) Pyridine (T)

4.26min 16.53ug/ml

response 60139

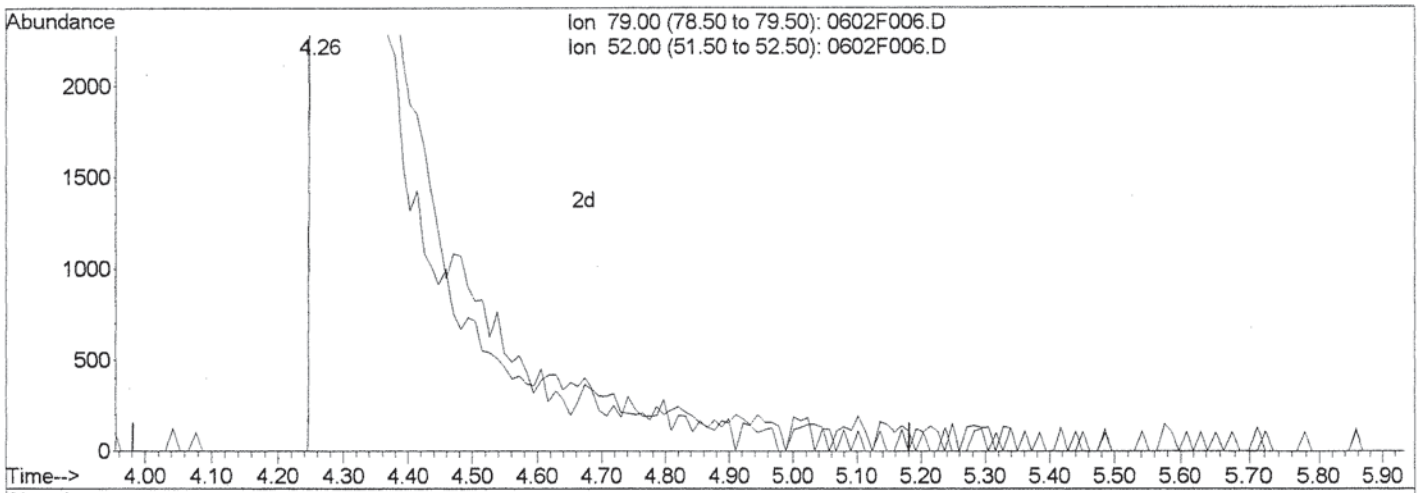
Ion	Exp%	Act%
79.00	100	100
52.00	77.00	81.88
0.00	0.00	0.00
0.00	0.00	0.00

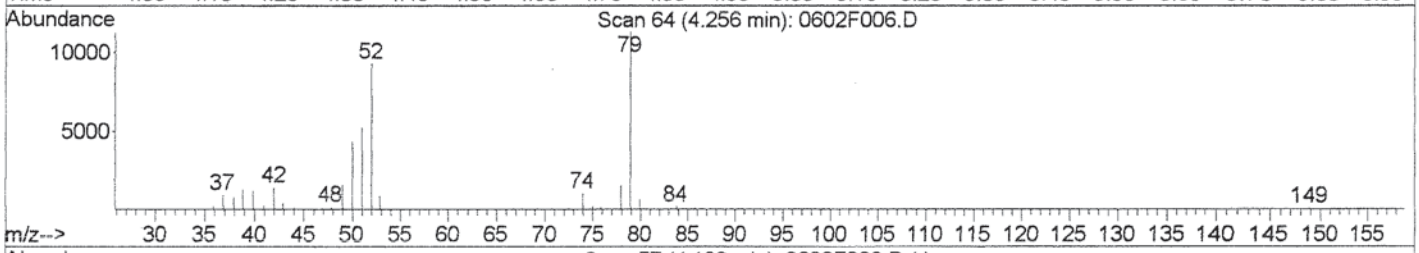
0602F006.D 0602BNC7.M Thu Jun 03 10:53:41 2010

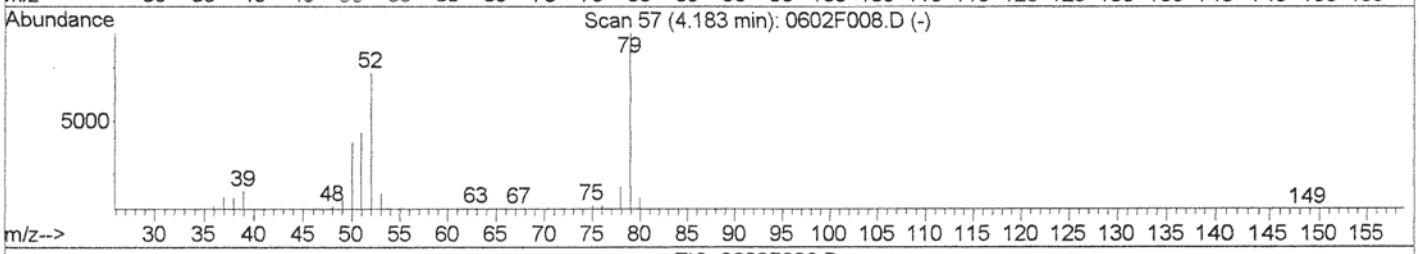
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F006.D Vial: 4
Acq On : 2 Jun 2010 6:38 pm Operator: M.BUTCHER
Sample : 20PPM 8270 ICAL SVM32-21E Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:53 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F006.D

(3) Pyridine (T)

4.26min 18.04ug/ml m

response 65653

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	82.32
0.00	0.00	0.00
0.00	0.00	0.00

JC 6-3-10

LB 6/4/10

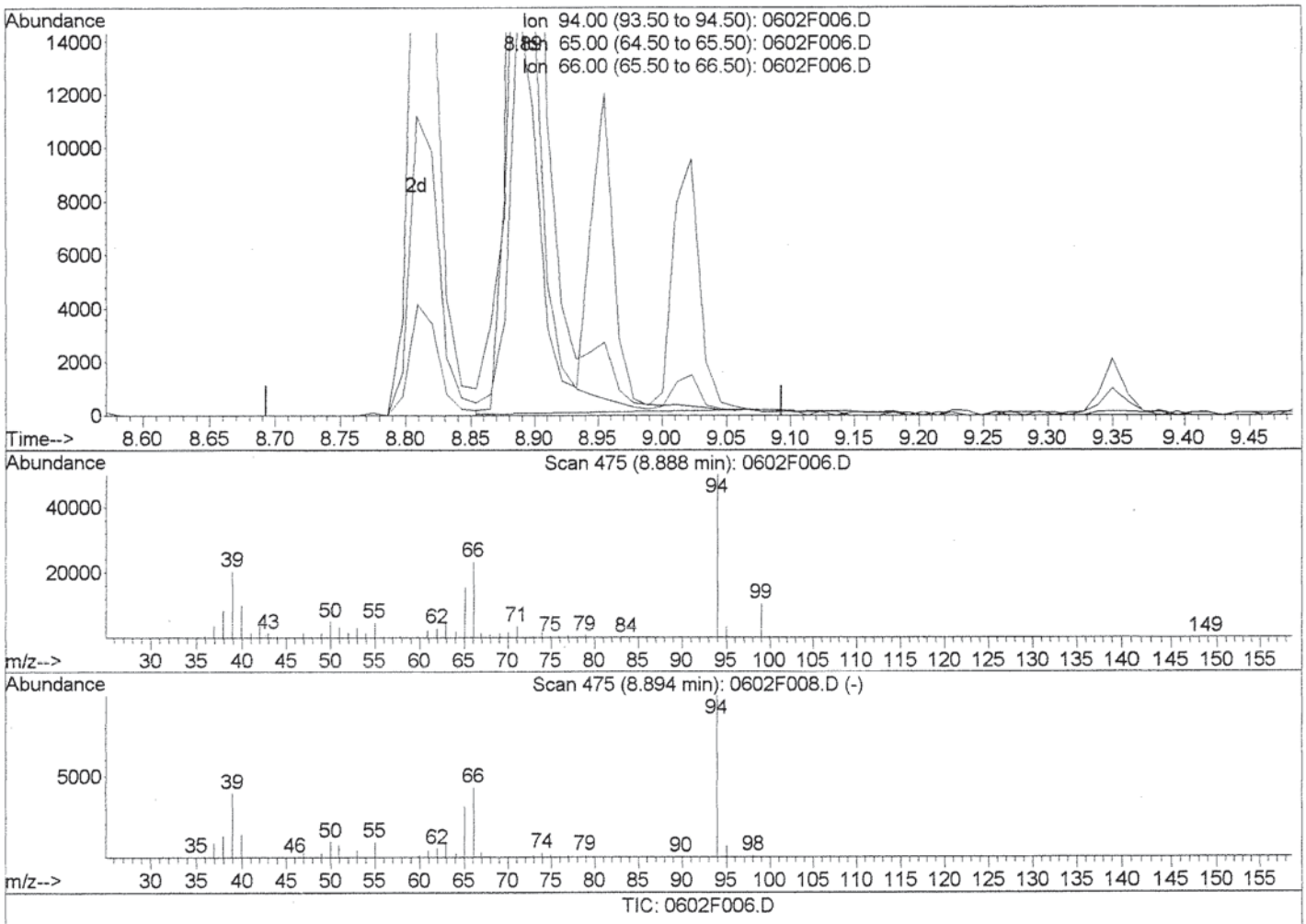
0602F006.D 0602BNC7.M Thu Jun 03 10:53:45 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F006.D
Acq On : 2 Jun 2010 6:38 pm
Sample : 20PPM 8270 ICAL SVM32-21E
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:53 2010

Vial: 4
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F006.D

(8) Phenol (TMC)

8.89min 20.05ug/ml

response 82120

Ion	Exp%	Act%
94.00	100	100
65.00	31.10	30.03
66.00	44.30	45.23
0.00	0.00	0.00

0602F006.D 0602BNC7.M Thu Jun 03 10:53:52 2010

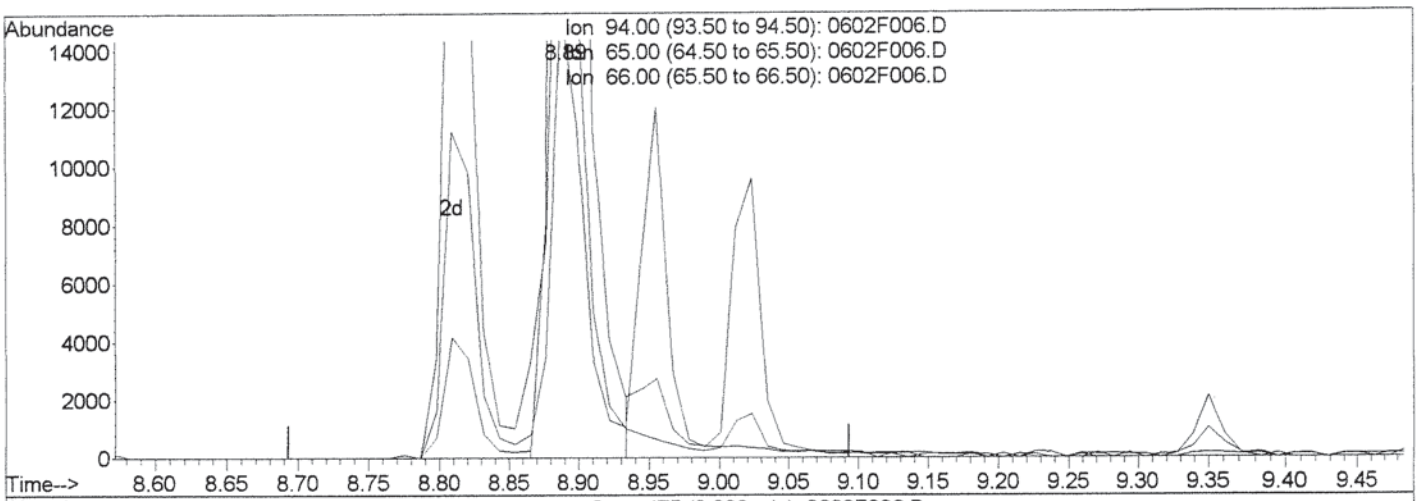
Quantitation Report (Quan)

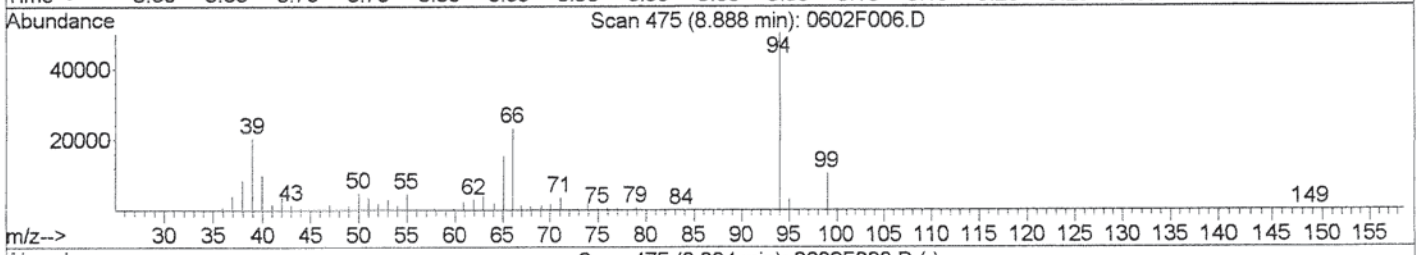
Data File : J:\MS07\DATA\060210\0602F006.D
Acq On : 2 Jun 2010 6:38 pm
Sample : 20PPM 8270 ICAL SVM32-21E
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:53 2010

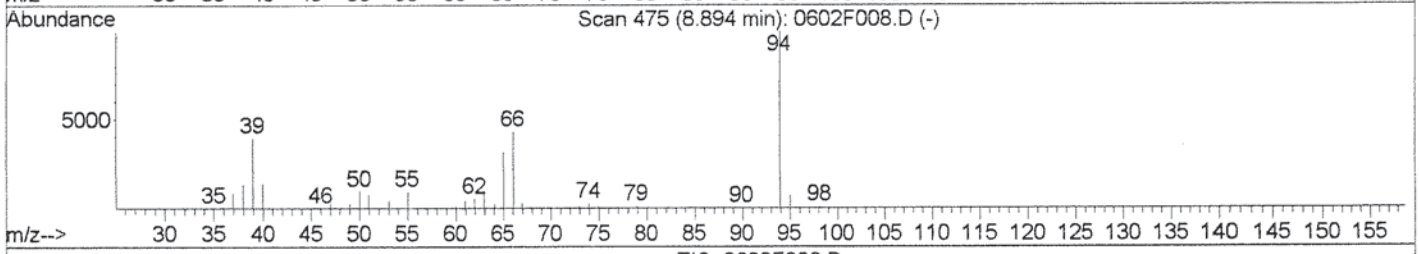
Vial: 4
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F006.D

(8) Phenol (TMC)

8.89min 18.95ug/ml m

response 77609

Ion	Exp%	Act%
94.00	100	100
65.00	31.10	30.87
66.00	44.30	46.32
0.00	0.00	0.00

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0602F006.D 0602BNC7.M Thu Jun 03 10:53:56 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F007.D
Acq On : 2 Jun 2010 7:19 pm
Sample : 50PPM 8270 ICAL SVM32-21F
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:51 2010

Vial: 5
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	109365	40.00	ug/ml	0.00
21) Naphthalene-d8	11.45	136	402061	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.31	164	218097	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.71	188	329281	40.00	ug/ml	0.00
68) Chrysene-d12	21.13	240	257896	40.00	ug/ml	0.00
77) Perylene-d12	24.32	264	260318	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.14	112	146679	50.45	ug/ml	0.00
Spiked Amount 150.000	Range 21 - 100		Recovery = 33.63%			
7) Phenol-d6	8.86	99	195416	48.19	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 94		Recovery = 32.13%			
19) Nitrobenzene-d5	10.28	82	183314	46.28	ug/ml	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 46.28%			
38) 2-Fluorobiphenyl	13.24	172	358232	50.10	ug/ml	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 50.10%			
59) 2,4,6-Tribromophenol	15.59	330	65835	49.33	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery = 32.89%			
71) Terphenyl-d14	19.32	244	217312	55.03	ug/ml	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 55.03%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.14	42	117711m	45.19	ug/ml	
3) Pyridine	4.20	79	161541m	43.77	ug/ml	
5) Aniline	8.81	93	168735	41.17	ug/ml	99
6) Bis(2-chloroethyl) Ether	8.96	93	143459	42.98	ug/ml	98
8) Phenol	8.89	94	178719m	43.03	ug/ml	
9) 2-Chlorophenol	9.02	128	157752	44.05	ug/ml	89
10) 1,3-Dichlorobenzene	9.25	146	178728	47.06	ug/ml	97
11) 1,4-Dichlorobenzene	9.38	146	175355	45.33	ug/ml	97
12) 1,2-Dichlorobenzene	9.62	146	169698	46.34	ug/ml	98
13) Benzyl Alcohol	9.64	108	93759	42.63	ug/ml	98
14) Bis(2-chloroisopropyl) Eth	9.87	45	222174	40.50	ug/ml	88
15) 2-Methylphenol	9.88	107	114618	42.62	ug/ml	90
16) Hexachloroethane	10.17	117	81722	46.43	ug/ml	88
17) N-Nitrosodi-n-propylamine	10.08	70	103499	37.88	ug/ml	87
18) 4-Methylphenol	10.14	107	181709	44.50	ug/ml	100
20) Nitrobenzene	10.32	77	165715	45.26	ug/ml	99
22) Isophorone	10.74	82	316769	43.67	ug/ml	99
23) 2-Nitrophenol	10.84	139	86905	43.02	ug/ml	97
24) 2,4-Dimethylphenol	10.98	122	123093	46.06	ug/ml	98
25) Bis(2-chloroethoxy)methane	11.12	93	188702	46.31	ug/ml	99

(#) = qualifier out of range (m) = manual integration

1379 LAB DATA

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F007.D
Acq On : 2 Jun 2010 7:19 pm
Sample : 50PPM 8270 ICAL SVM32-21F
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:51 2010

Vial: 5
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.28	162	143526	47.34	ug/ml	96
27)	Benzoic Acid	11.25	122	102211	44.63	ug/ml	99
28)	1,2,4-Trichlorobenzene	11.37	180	150578	46.78	ug/ml	99
29)	Naphthalene	11.49	128	447021	46.34	ug/ml	99
30)	4-Chloroaniline	11.61	127	204392	48.03	ug/ml	98
31)	Hexachlorobutadiene	11.72	225	96168	47.10	ug/ml	99
32)	4-Chloro-3-methylphenol	12.46	107	155560	49.16	ug/ml	86
33)	2-Methylnaphthalene	12.62	142	292555	47.66	ug/ml	96
35)	Hexachlorocyclopentadiene	12.89	237	89107	43.36	ug/ml	98
36)	2,4,6-Trichlorophenol	13.11	196	105888	47.06	ug/ml	97
37)	2,4,5-Trichlorophenol	13.18	196	119511	47.67	ug/ml	95
39)	2-Chloronaphthalene	13.41	162	303136	48.06	ug/ml	100
40)	2-Nitroaniline	13.61	65	96099	47.36	ug/ml	97
41)	Acenaphthylene	14.07	152	454687	46.79	ug/ml	99
42)	Dimethyl Phthalate	13.94	163	372031	50.18	ug/ml	99
43)	2,6-Dinitrotoluene	14.02	165	77909	46.37	ug/ml	95
44)	Acenaphthene	14.36	154	255084	46.00	ug/ml	98
45)	3-Nitroaniline	14.29	138	86607	48.99	ug/ml	100
46)	2,4-Dinitrophenol	14.45	184	47282	48.50	ug/ml	98
47)	Dibenzofuran	14.65	168	437168	49.99	ug/ml	99
48)	4-Nitrophenol	14.65	109	45732	47.78	ug/ml#	67
49)	2,4-Dinitrotoluene	14.67	165	103358	48.54	ug/ml	99
50)	2,3,4,6-Tetrachlorophenol	14.87	232	93925	51.38	ug/ml	95
51)	Fluorene	15.20	166	326905	49.89	ug/ml	98
52)	4-Chlorophenyl Phenyl Ethe	15.22	204	161128	48.03	ug/ml	93
53)	Diethyl Phthalate	15.09	149	354895	49.51	ug/ml	99
54)	4-Nitroaniline	15.28	138	77365	50.56	ug/ml	97
55)	2-Methyl-4,6-dinitrophenol	15.32	198	60252	52.02	ug/ml	75
56)	N-Nitrosodiphenylamine	15.42	169	243086	55.64	ug/ml	100
57)	1,2-Diphenylhydrazine	15.48	77	355134	47.82	ug/ml	99
60)	4-Bromophenyl Phenyl Ether	16.01	248	89629	45.15	ug/ml	92
61)	Hexachlorobenzene	16.09	284	105665	45.92	ug/ml	84
62)	Pentachlorophenol	16.43	266	58384	45.15	ug/ml	99
63)	Phenanthrene	16.74	178	403270	46.10	ug/ml	100
64)	Anthracene	16.83	178	428922	46.63	ug/ml	99
65)	Carbazole	17.11	167	343589	45.76	ug/ml	99
66)	Di-n-butyl Phthalate	17.73	149	475794	47.50	ug/ml	100
67)	Fluoranthene	18.66	202	336131	42.33	ug/ml	99
69)	Benzidine	18.93	184	89555	41.36	ug/ml	98
70)	Pyrene	19.02	202	347908	50.54	ug/ml	99
72)	Butyl Benzyl Phthalate	20.16	149	182255	46.46	ug/ml	98

(#) = qualifier out of range (m) = manual integration

LB LIA910

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F007.D Vial: 5
Acq On : 2 Jun 2010 7:19 pm Operator: M.BUTCHER
Sample : 50PPM 8270 ICAL SVM32-21F Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:51 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.11	252	137550	51.04	ug/ml	99
74)	Benz(a)anthracene	21.10	228	291900	48.16	ug/ml	99
75)	Chrysene	21.18	228	284334	48.46	ug/ml	99
76)	Bis(2-ethylhexyl) Phthalat	21.31	149	260935	46.74	ug/ml	99
78)	Di-n-octyl Phthalate	22.77	149	515396	44.95	ug/ml	97
79)	Benzo(b)fluoranthene	23.45	252	306778	45.75	ug/ml	98
80)	Benzo(k)fluoranthene	23.52	252	335944	48.27	ug/ml	98
81)	Benzo(a)pyrene	24.18	252	256282	46.01	ug/ml	98
82)	Indeno(1,2,3-cd)pyrene	26.75	276	223531	46.34	ug/ml	98
83)	Dibenz(a,h)anthracene	26.83	278	231956	45.15	ug/ml	99
84)	Benzo(g,h,i)perylene	27.32	276	242092	46.50	ug/ml	99

LB 6/4/10

(#) = qualifier out of range (m) = manual integration
0602F007.D 0602BNC7.M Thu Jun 03 11:34:29 2010 Page 3

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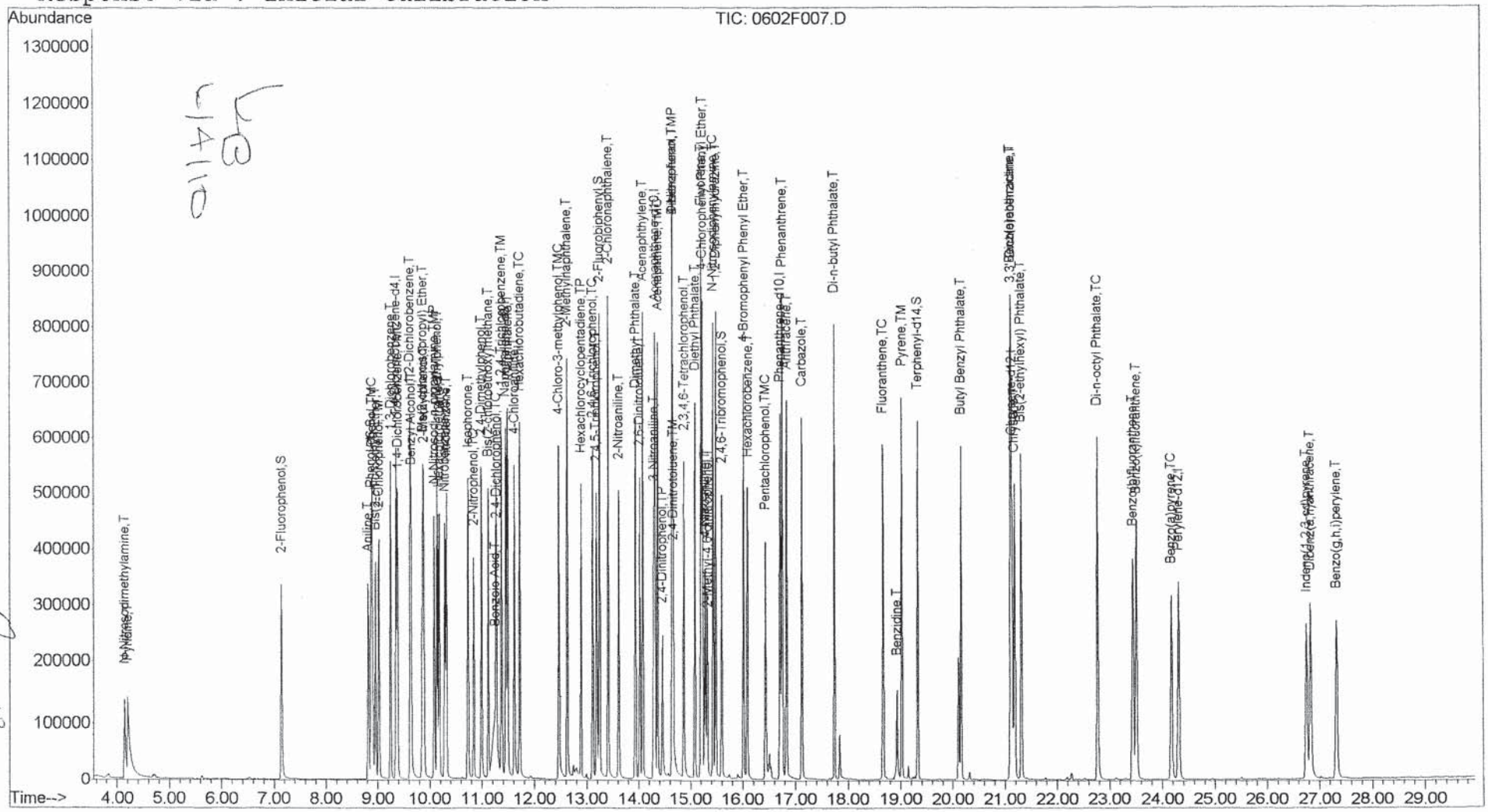
Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F007.D Vial: 5
Acq On : 2 Jun 2010 7:19 pm Operator: M.BUTCHER
Sample : 50PPM 8270 ICAL SVM32-21F Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:54 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration



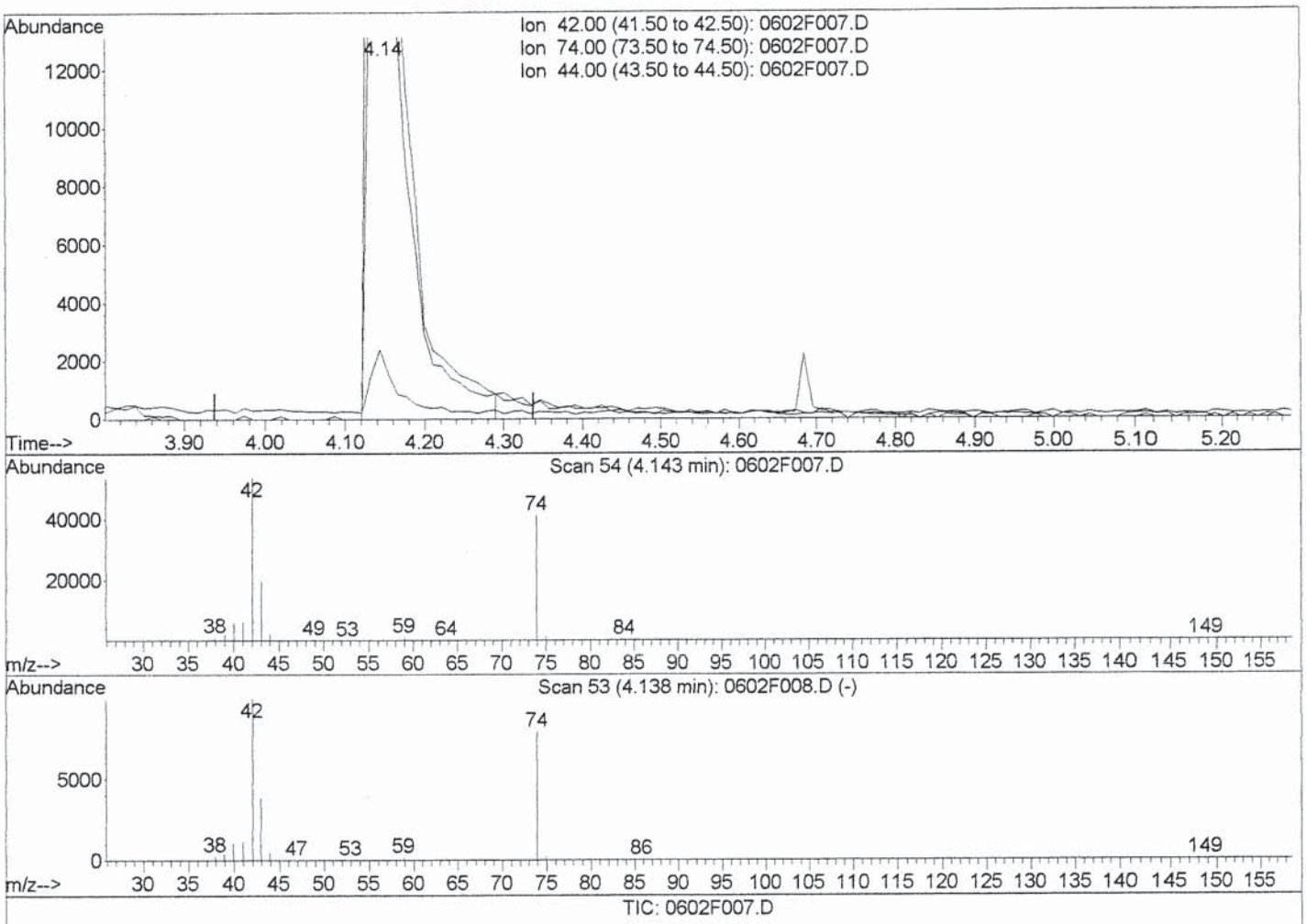
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F007.D
Acq On : 2 Jun 2010 7:19 pm
Sample : 50PPM 8270 ICAL SVM32-21F
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:48 2010

Vial: 5
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F007.D

(2) N-Nitrosodimethylamine (T)

4.14min 42.61ug/ml

response 110997

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	76.71
44.00	4.40	3.96
0.00	0.00	0.00

0602F007.D 0602BNC7.M Thu Jun 03 10:54:33 2010

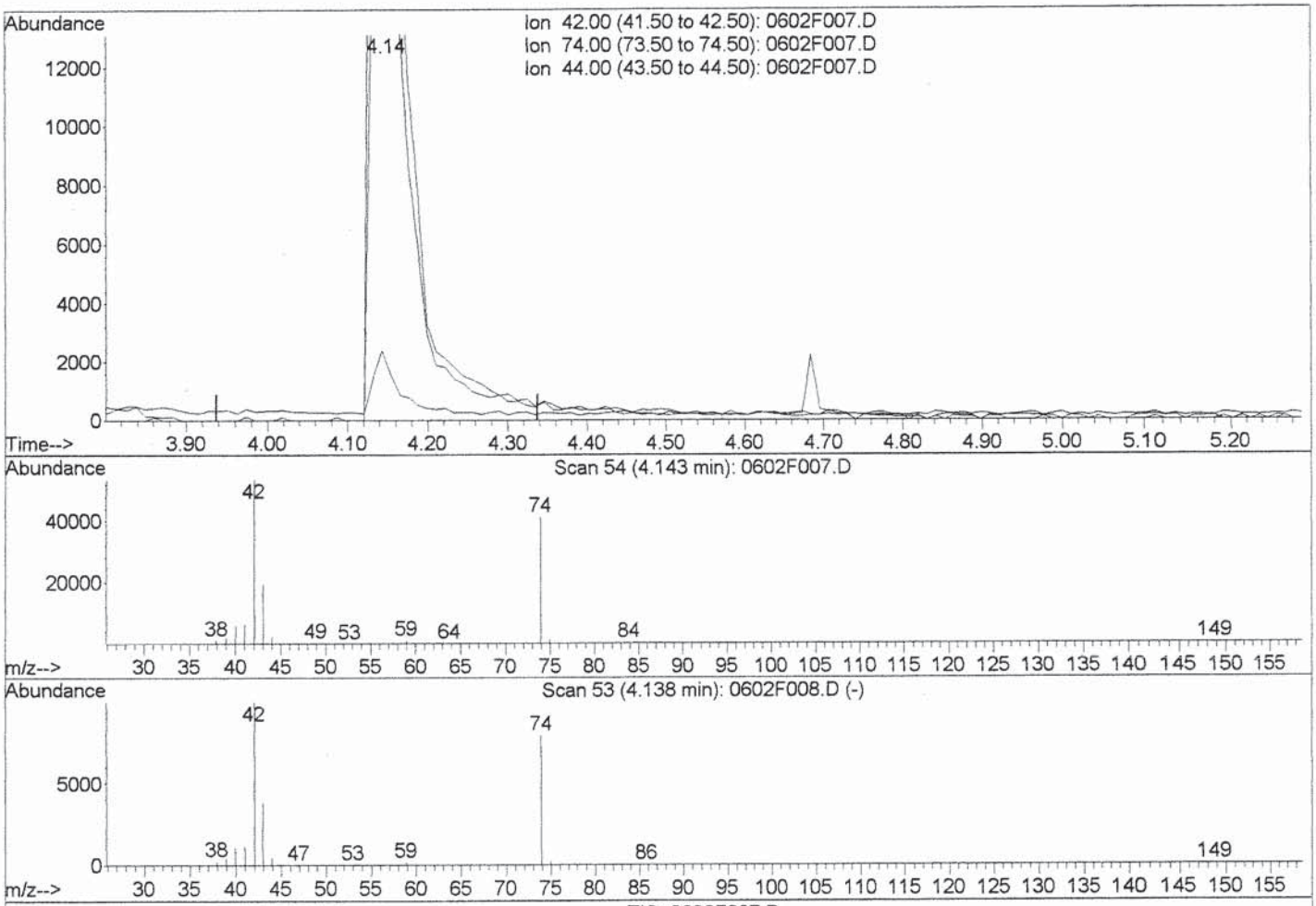
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F007.D
Acq On : 2 Jun 2010 7:19 pm
Sample : 50PPM 8270 ICAL SVM32-21F
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:54 2010

Vial: 5
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F007.D

(2) N-Nitrosodimethylamine (T)

4.14min 45.19ug/ml m

response 117711

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	76.90
44.00	4.40	4.45
0.00	0.00	0.00

5 c µ 6-3-10

LB 6/4/10

0602F007.D 0602BNC7.M Thu Jun 03 10:54:37 2010

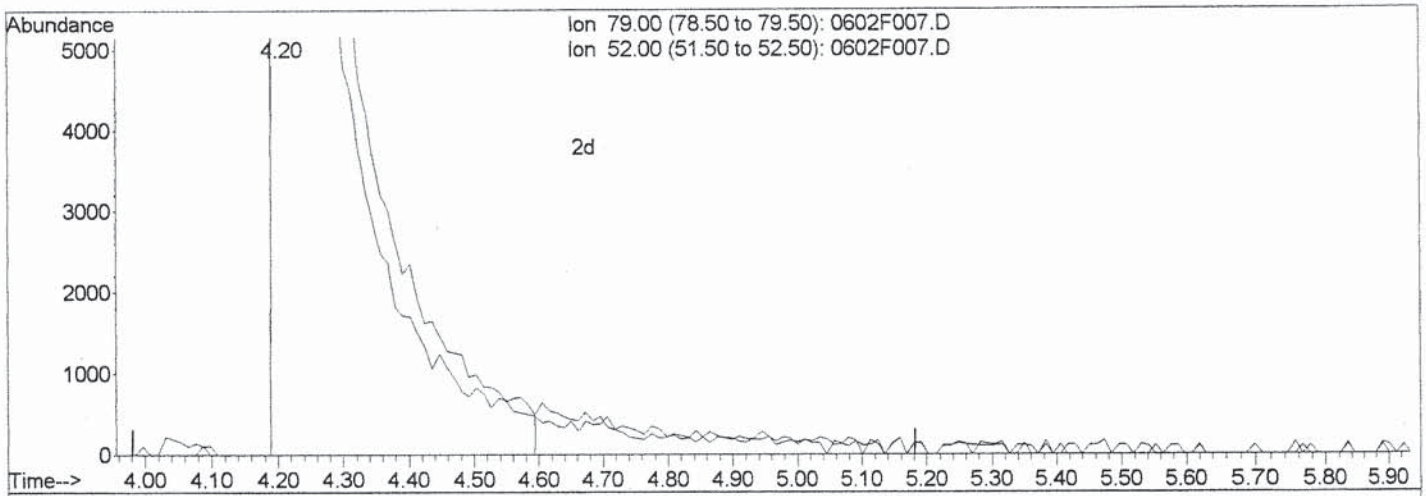
Quantitation Report (Qedit)

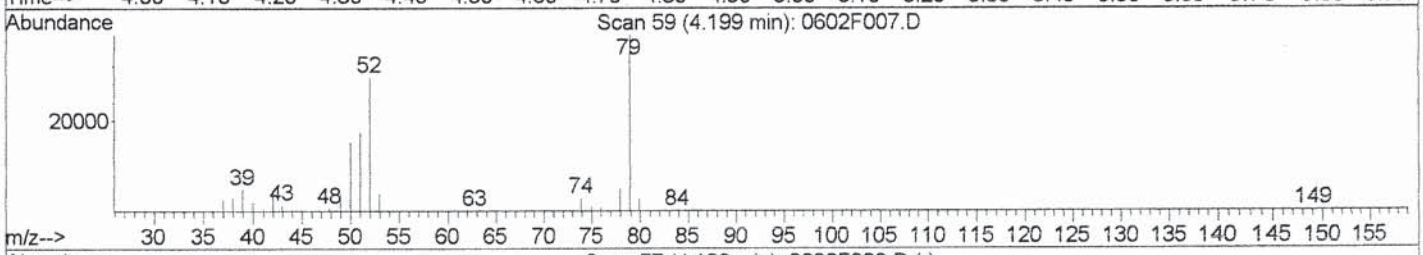
Data File : J:\MS07\DATA\060210\0602F007.D
Acq On : 2 Jun 2010 7:19 pm
Sample : 50PPM 8270 ICAL SVM32-21F
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:54 2010

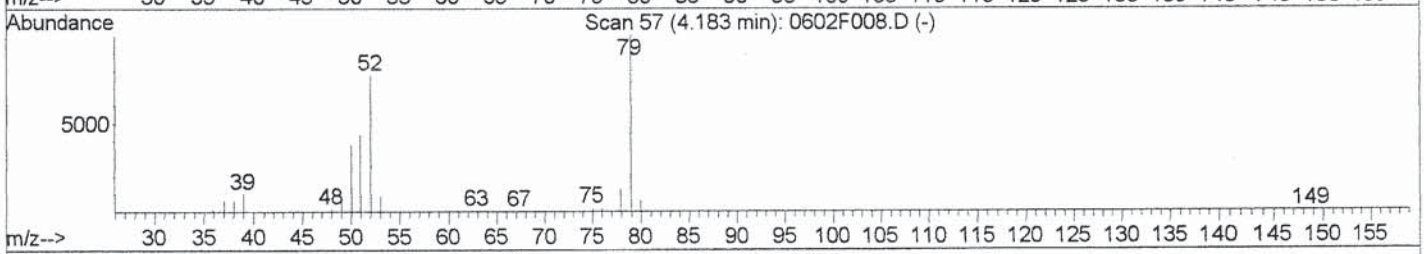
Vial: 5
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F007.D

(3) Pyridine (T)

4.20min 41.69ug/ml

response 153876

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.69
0.00	0.00	0.00
0.00	0.00	0.00

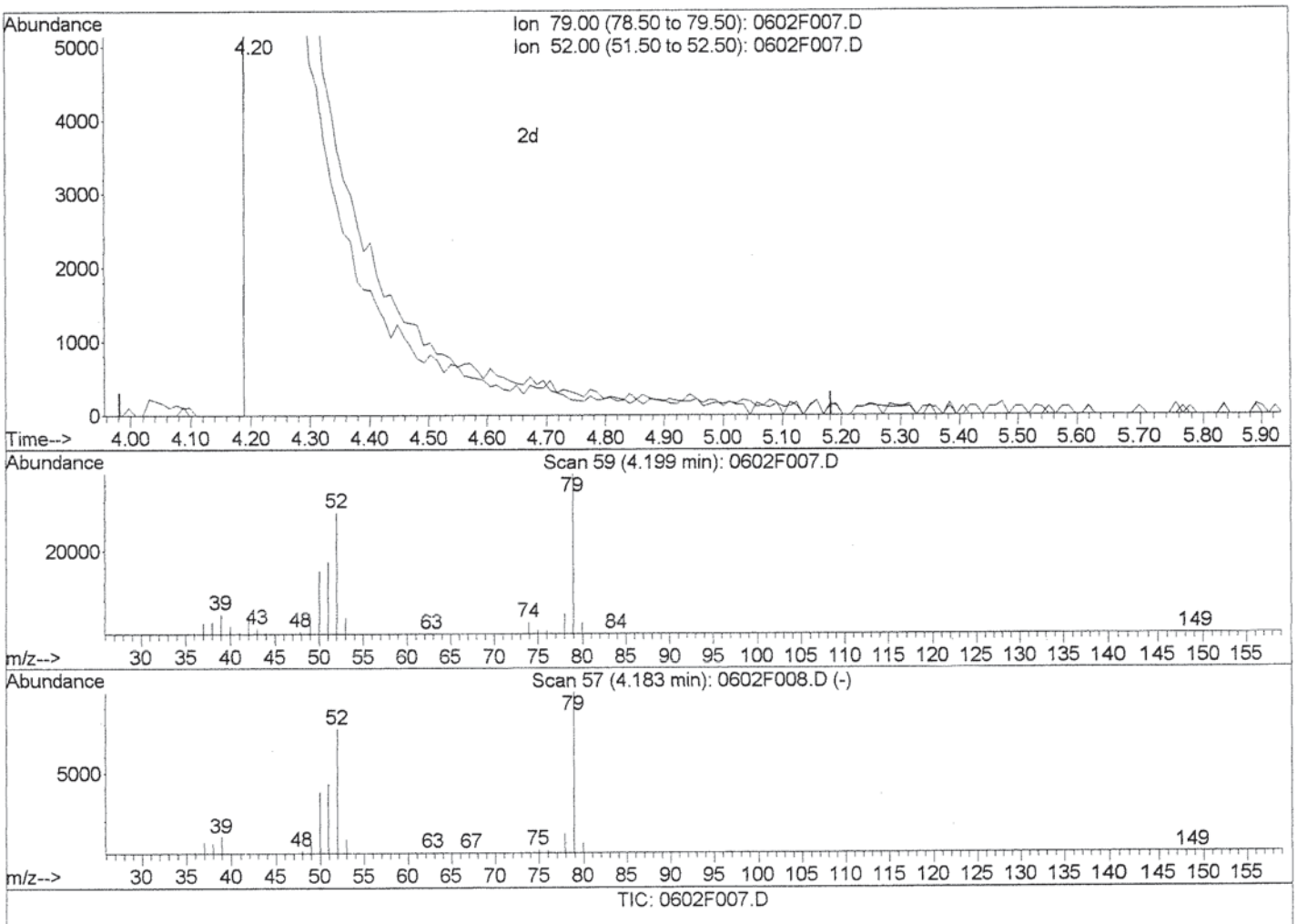
0602F007.D 0602BNC7.M Thu Jun 03 10:54:40 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F007.D
Acq On : 2 Jun 2010 7:19 pm
Sample : 50PPM 8270 ICAL SVM32-21F
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:54 2010

Vial: 5
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F007.D

(3) Pyridine (T)

4.20min 43.77ug/ml m

response 161541

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	75.82
0.00	0.00	0.00
0.00	0.00	0.00

SC 6-3-10

0602F007.D 0602BNC7.M Thu Jun 03 10:54:44 2010

LB 6/4/10

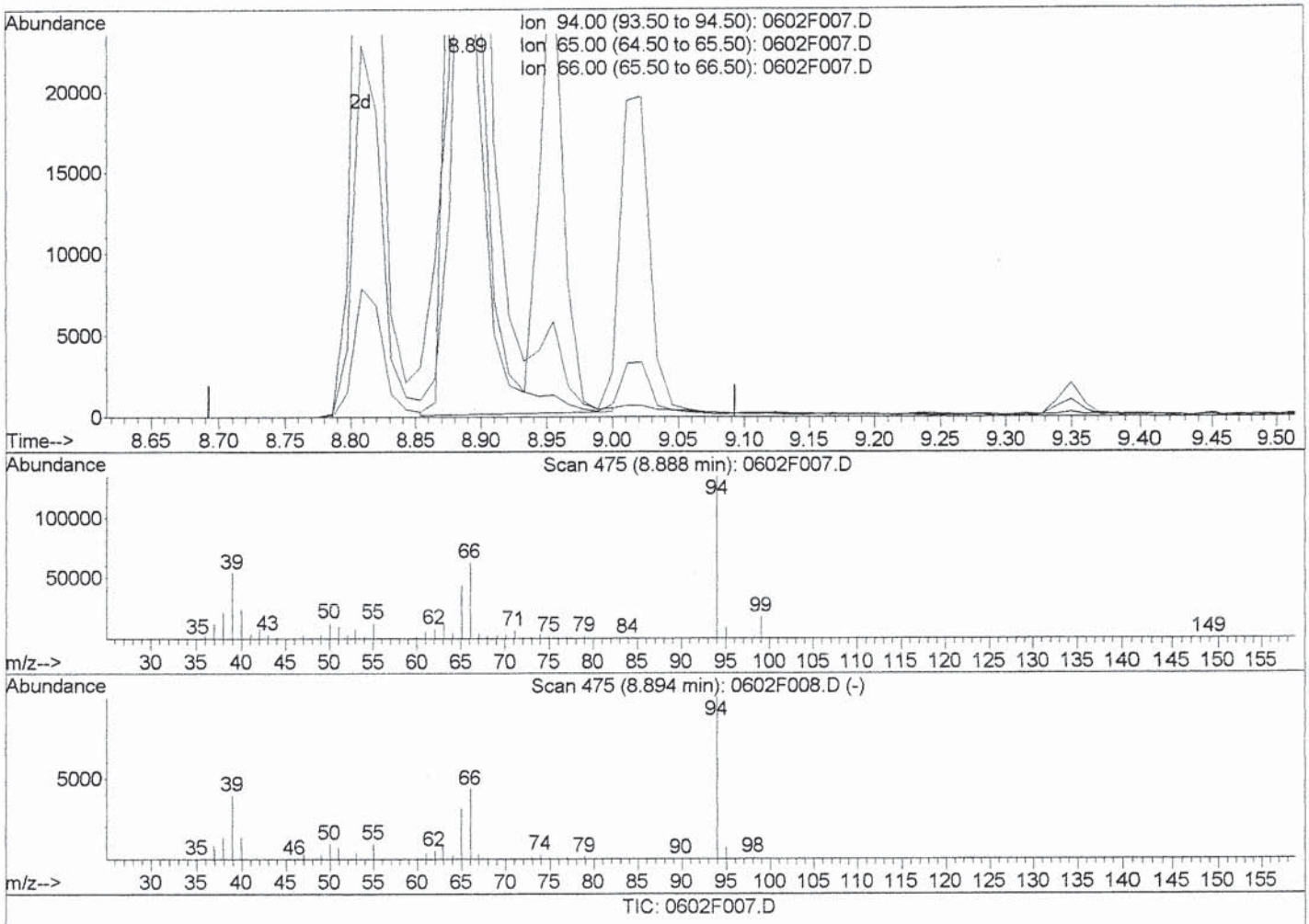
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F007.D
Acq On : 2 Jun 2010 7:19 pm
Sample : 50PPM 8270 ICAL SVM32-21F
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:54 2010

Vial: 5
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F007.D

(8) Phenol (TMC)

8.89min 44.79ug/ml

response 186021

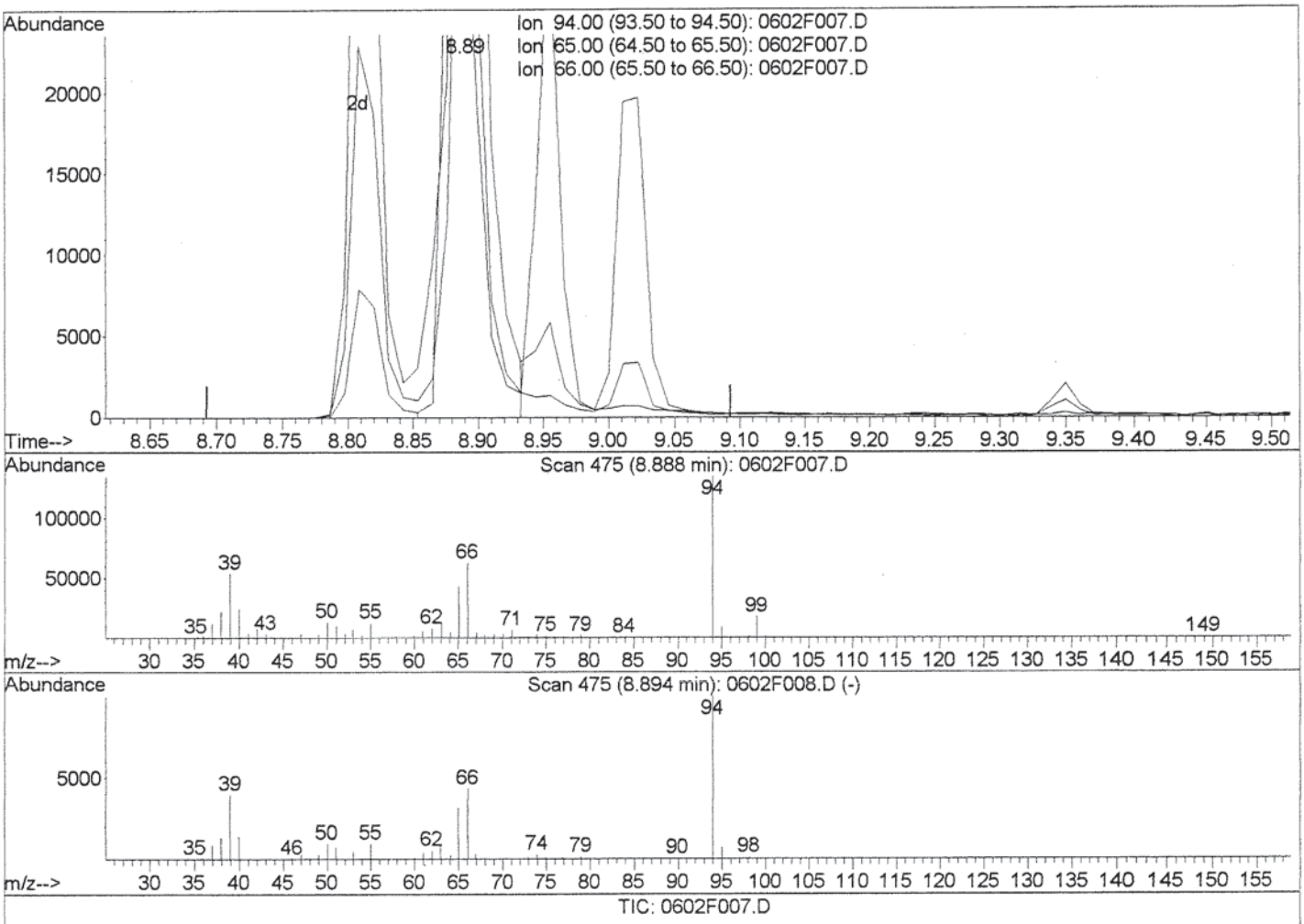
Ion	Exp%	Act%
94.00	100	100
65.00	31.10	30.64
66.00	44.30	45.15
0.00	0.00	0.00

0602F007.D 0602BNC7.M Thu Jun 03 10:54:53 2010

Data File : J:\MS07\DATA\060210\0602F007.D
Acq On : 2 Jun 2010 7:19 pm
Sample : 50PPM 8270 ICAL SVM32-21F
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:54 2010

Vial: 5
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F007.D

(8) Phenol (TMC)

8.89min 43.03ug/ml m

response 178719

Ion	Exp%	Act%
94.00	100	100
65.00	31.10	31.96
66.00	44.30	46.43
0.00	0.00	0.00

DE 6-7-10

0602F007.D 0602BNC7.M Thu Jun 03 10:55:00 2010

LB 6/4/10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F008.D
Acq On : 2 Jun 2010 7:59 pm
Sample : 80PPM 8270 ICAL SVM32-21G
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:52 2010

Vial: 6
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.34	152	103733	40.00	ug/ml	0.00
21) Naphthalene-d8	11.45	136	407774	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.30	164	224107	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.70	188	285196	40.00	ug/ml	0.00
68) Chrysene-d12	21.13	240	279166	40.00	ug/ml	0.00
77) Perylene-d12	24.31	264	255637	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.14	112	223564	81.06	ug/ml	0.00
Spiked Amount 150.000	Range 21 - 100		Recovery = 54.04%			
7) Phenol-d6	8.87	99	315023	81.90	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 94		Recovery = 54.60%			
19) Nitrobenzene-d5	10.29	82	311278	82.84	ug/ml	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 82.84%			
38) 2-Fluorobiphenyl	13.24	172	557707	75.91	ug/ml	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 75.91%			
59) 2,4,6-Tribromophenol	15.60	330	102619	88.77	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery = 59.18%			
71) Terphenyl-d14	19.33	244	332481	77.78	ug/ml	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 77.78%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.14	42	197404m	79.90	ug/ml	
3) Pyridine	4.18	79	304249m	86.91	ug/ml	
5) Aniline	8.81	93	310686	79.91	ug/ml	100
6) Bis(2-chloroethyl) Ether	8.96	93	257472	81.32	ug/ml	100
8) Phenol	8.89	94	318471	80.84	ug/ml	100
9) 2-Chlorophenol	9.02	128	278946	82.13	ug/ml	100
10) 1,3-Dichlorobenzene	9.24	146	289235	80.29	ug/ml	100
11) 1,4-Dichlorobenzene	9.38	146	306571	83.56	ug/ml	100
12) 1,2-Dichlorobenzene	9.63	146	292772	84.30	ug/ml	100
13) Benzyl Alcohol	9.65	108	173852	83.34	ug/ml	100
14) Bis(2-chloroisopropyl) Eth	9.86	45	416792	80.09	ug/ml	100
15) 2-Methylphenol	9.87	107	215850	84.63	ug/ml	100
16) Hexachloroethane	10.18	117	143551	85.99	ug/ml	100
17) N-Nitrosodi-n-propylamine	10.10	70	220097	84.93	ug/ml	100
18) 4-Methylphenol	10.14	107	338574	87.41	ug/ml	100
20) Nitrobenzene	10.32	77	290608	83.67	ug/ml	100
22) Isophorone	10.74	82	619847	84.26	ug/ml	100
23) 2-Nitrophenol	10.84	139	167839	81.92	ug/ml	100
24) 2,4-Dimethylphenol	10.99	122	228884	84.45	ug/ml	100
25) Bis(2-chloroethoxy)methane	11.12	93	335924	81.29	ug/ml	100

(#) = qualifier out of range (m) = manual integration

6-3-10

6/4/10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F008.D
Acq On : 2 Jun 2010 7:59 pm
Sample : 80PPM 8270 ICAL SVM32-21G
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:52 2010

Vial: 6
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.27	162	247060	80.35	ug/ml	100
27)	Benzoic Acid	11.31	122	191801	82.58	ug/ml	100
28)	1,2,4-Trichlorobenzene	11.37	180	273068	83.65	ug/ml	100
29)	Naphthalene	11.49	128	799136	81.68	ug/ml	100
30)	4-Chloroaniline	11.62	127	343208	79.52	ug/ml	100
31)	Hexachlorobutadiene	11.71	225	177888	85.90	ug/ml	100
32)	4-Chloro-3-methylphenol	12.47	107	281018	87.56	ug/ml#	53
33)	2-Methylnaphthalene	12.62	142	521205	83.72	ug/ml	100
35)	Hexachlorocyclopentadiene	12.89	237	173516	75.23	ug/ml	100
36)	2,4,6-Trichlorophenol	13.12	196	185191	80.10	ug/ml	100
37)	2,4,5-Trichlorophenol	13.19	196	201418	78.18	ug/ml	100
39)	2-Chloronaphthalene	13.41	162	530083	81.78	ug/ml	100
40)	2-Nitroaniline	13.62	65	174420	83.65	ug/ml	100
41)	Acenaphthylene	14.08	152	800909	80.21	ug/ml	100
42)	Dimethyl Phthalate	13.94	163	601760	78.99	ug/ml	100
43)	2,6-Dinitrotoluene	14.02	165	143013	82.83	ug/ml	100
44)	Acenaphthene	14.36	154	453532	79.59	ug/ml	100
45)	3-Nitroaniline	14.29	138	152245	83.81	ug/ml	100
46)	2,4-Dinitrophenol	14.46	184	85734	85.58	ug/ml	100
47)	Dibenzofuran	14.65	168	743626	82.76	ug/ml	100
48)	4-Nitrophenol	14.65	109	83574	84.97	ug/ml	100
49)	2,4-Dinitrotoluene	14.67	165	179522	82.05	ug/ml	100
50)	2,3,4,6-Tetrachlorophenol	14.88	232	160056	85.21	ug/ml	100
51)	Fluorene	15.20	166	540443	80.27	ug/ml	100
52)	4-Chlorophenyl Phenyl Ethe	15.23	204	284971	82.67	ug/ml	100
53)	Diethyl Phthalate	15.09	149	630375	85.59	ug/ml	100
54)	4-Nitroaniline	15.29	138	128806	81.92	ug/ml	100
55)	2-Methyl-4,6-dinitrophenol	15.33	198	102961	86.52	ug/ml	100
56)	N-Nitrosodiphenylamine	15.43	169	353714	78.79	ug/ml	100
57)	1,2-Diphenylhydrazine	15.49	77	629514	82.49	ug/ml	100
60)	4-Bromophenyl Phenyl Ether	16.02	248	152517	88.70	ug/ml	100
61)	Hexachlorobenzene	16.08	284	174819	87.72	ug/ml	100
62)	Pentachlorophenol	16.43	266	97469	87.03	ug/ml	100
63)	Phenanthrene	16.75	178	653153	86.20	ug/ml	100
64)	Anthracene	16.83	178	693023	87.00	ug/ml	100
65)	Carbazole	17.12	167	559783	86.08	ug/ml	100
66)	Di-n-butyl Phthalate	17.74	149	758593	87.45	ug/ml	100
67)	Fluoranthene	18.66	202	552331	80.30	ug/ml	100
69)	Benzidine	18.92	184	185568	79.16	ug/ml	100
70)	Pyrene	19.02	202	575978	77.30	ug/ml	100
72)	Butyl Benzyl Phthalate	20.16	149	361324	85.09	ug/ml	100

(#) = qualifier out of range (m) = manual integration

6-3-10

LB 6/4/10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F008.D Vial: 6
Acq On : 2 Jun 2010 7:59 pm Operator: M.BUTCHER
Sample : 80PPM 8270 ICAL SVM32-21G Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:52 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.12	252	259524	88.96	ug/ml	100
74)	Benz(a)anthracene	21.11	228	571803	87.15	ug/ml	100
75)	Chrysene	21.19	228	534824	84.20	ug/ml	100
76)	Bis(2-ethylhexyl) Phthalat	21.31	149	500131	82.76	ug/ml	100
78)	Di-n-octyl Phthalate	22.78	149	927272	82.35	ug/ml	100
79)	Benzo(b)fluoranthene	23.45	252	531245	80.67	ug/ml	100
80)	Benzo(k)fluoranthene	23.52	252	555690	81.31	ug/ml	100
81)	Benzo(a)pyrene	24.19	252	445333	81.42	ug/ml	100
82)	Indeno(1,2,3-cd)pyrene	26.77	276	387546	81.82	ug/ml	100
83)	Dibenz(a,h)anthracene	26.85	278	415299	82.31	ug/ml	100
84)	Benzo(g,h,i)perylene	27.34	276	397579	77.76	ug/ml	100

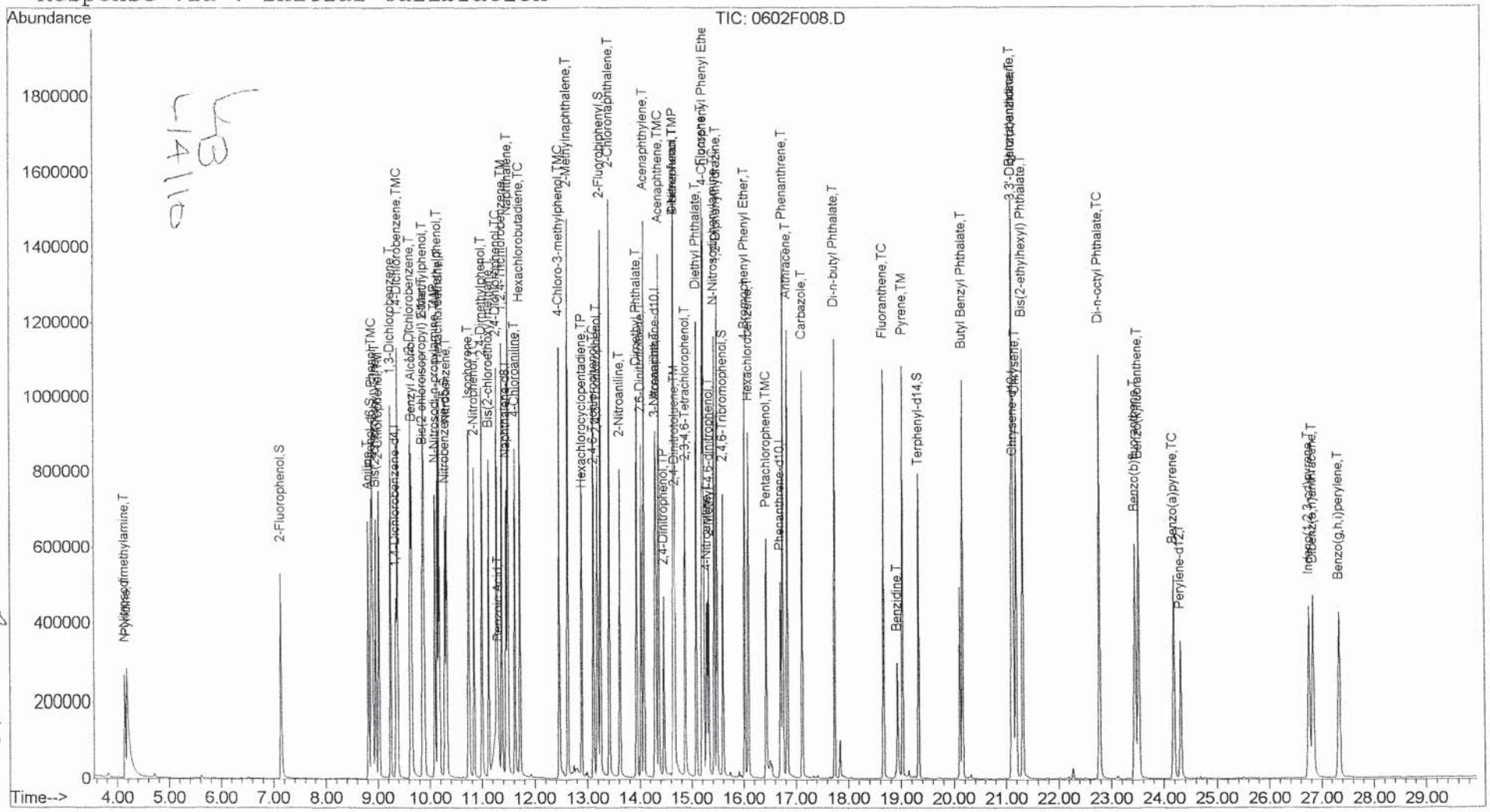
LB
6/4/10

(#) = qualifier out of range (m) = manual integration
0602F008.D 0602BNC7.M Thu Jun 03 11:34:31 2010 6-7-10 Page 3

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F008.D Vial: 6
Acq On : 2 Jun 2010 7:59 pm Operator: M.BUTCHER
Sample : 80PPM 8270 ICAL SVM32-21G Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:55 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration



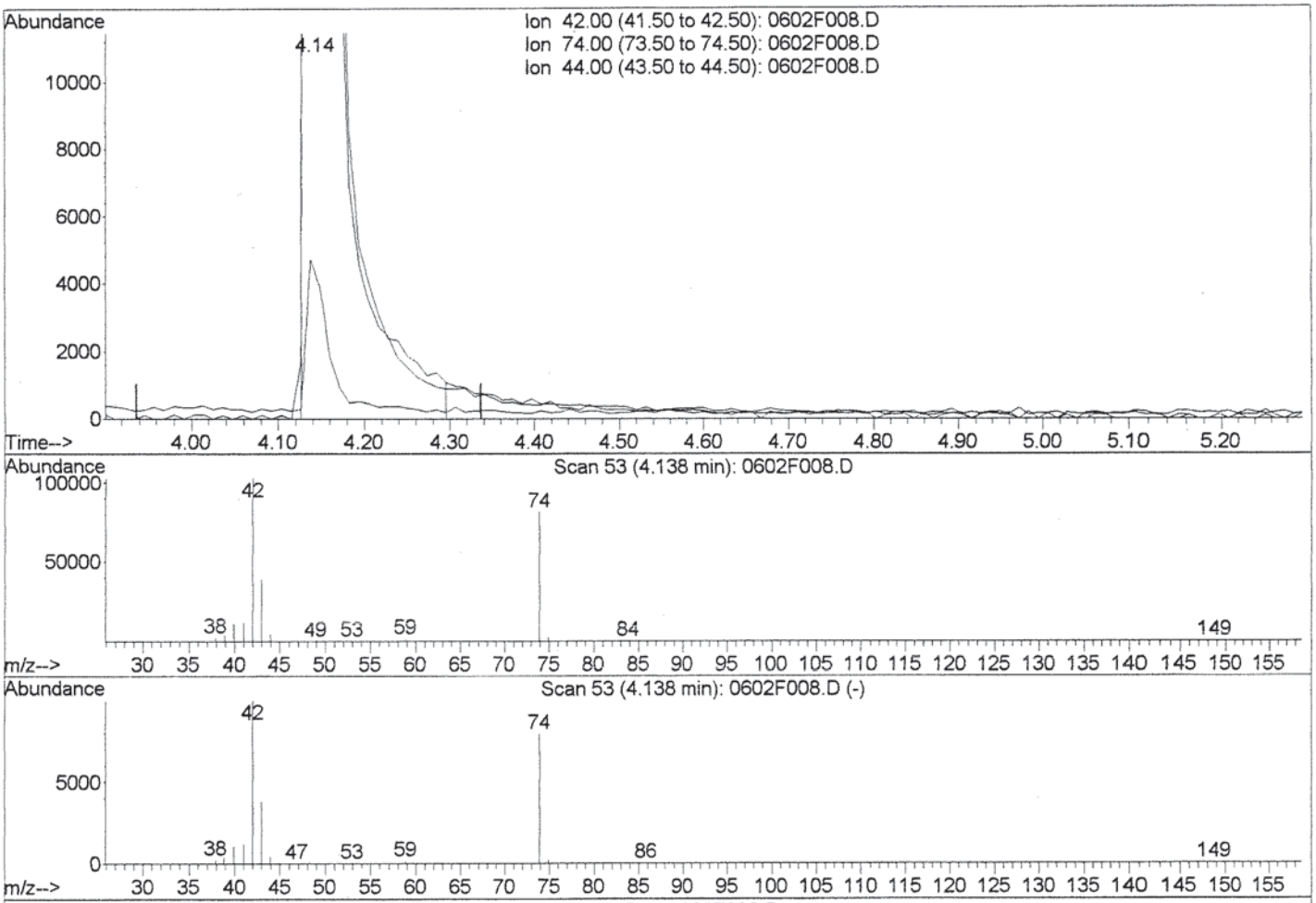
1392

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F008.D
Acq On : 2 Jun 2010 7:59 pm
Sample : 80PPM 8270 ICAL SVM32-21G
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:48 2010

Vial: 6
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F008.D

(2) N-Nitrosodimethylamine (T)

4.14min 76.14ug/ml

response 188109

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	79.28
44.00	4.40	4.41
0.00	0.00	0.00

0602F008.D 0602BNC7.M Thu Jun 03 10:55:33 2010

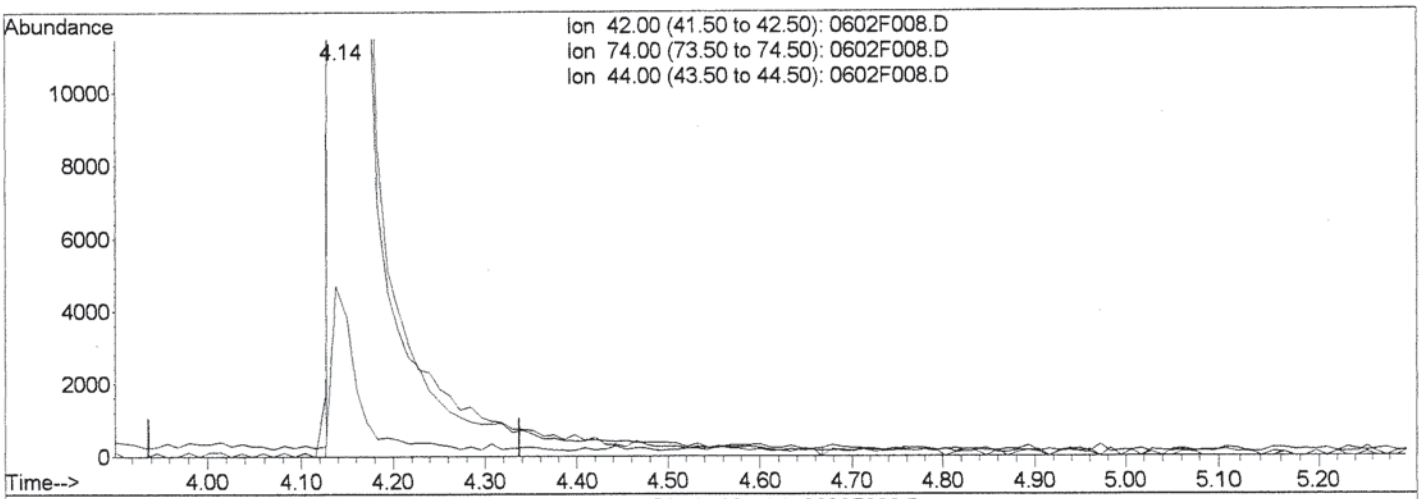
Quantitation Report (Qedit)

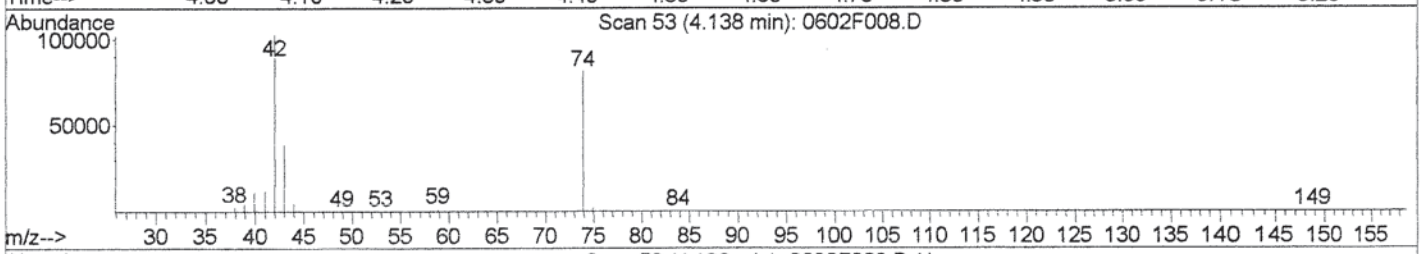
Data File : J:\MS07\DATA\060210\0602F008.D
Acq On : 2 Jun 2010 7:59 pm
Sample : 80PPM 8270 ICAL SVM32-21G
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:55 2010

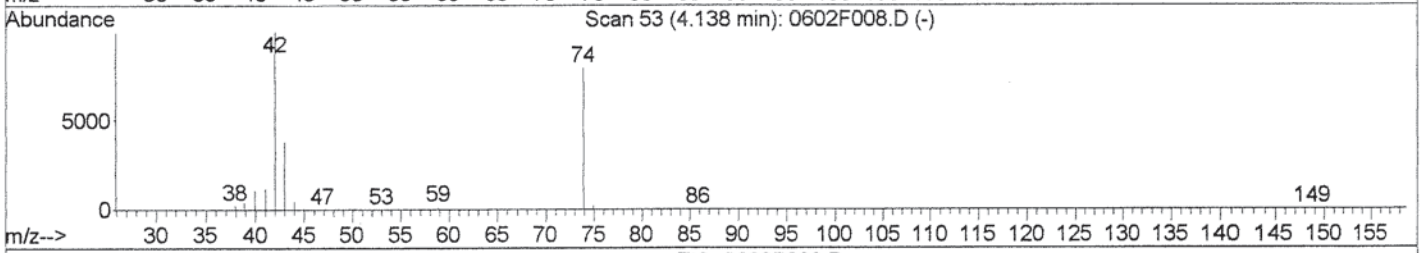
Vial: 6
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F008.D

(2) N-Nitrosodimethylamine (T)

4.14min 79.90ug/ml m

response 197404

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	79.29
44.00	4.40	4.59
0.00	0.00	0.00

DC 6-3-10

LB 6/4/10

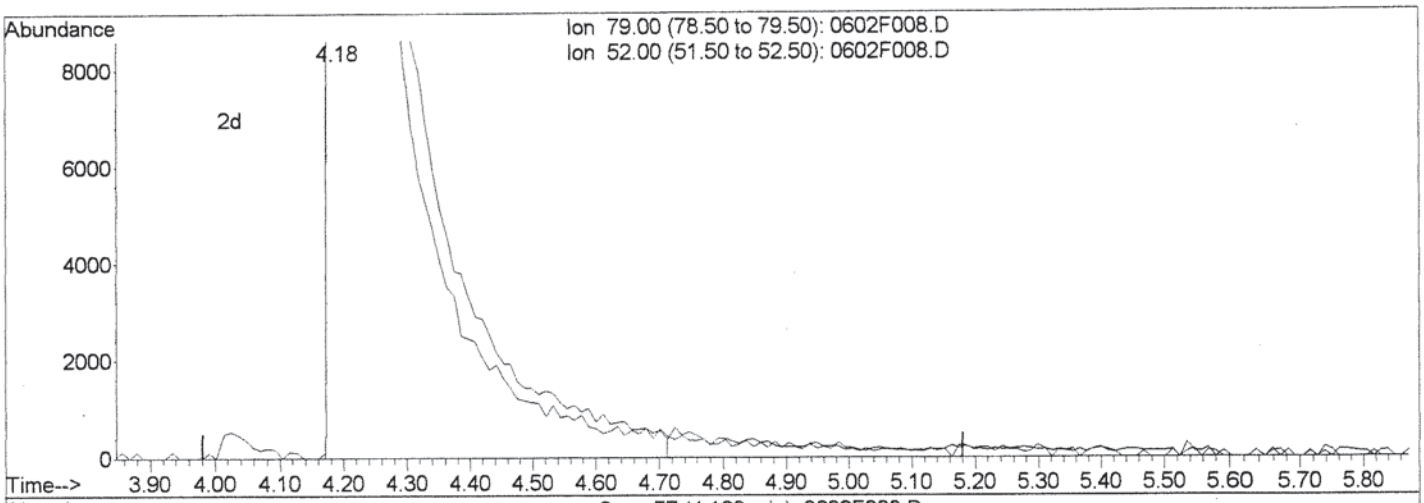
0602F008.D 0602BNC7.M Thu Jun 03 10:55:38 2010

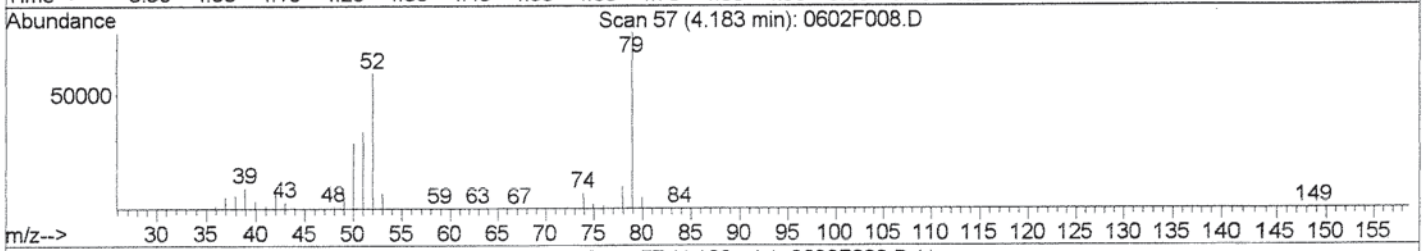
Quantitation Report (Qedit)

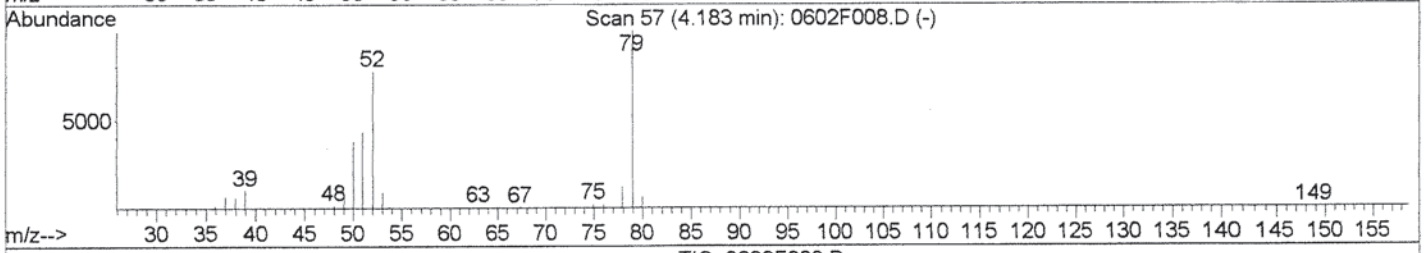
Data File : J:\MS07\DATA\060210\0602F008.D
Acq On : 2 Jun 2010 7:59 pm
Sample : 80PPM 8270 ICAL SVM32-21G
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:55 2010

Vial: 6
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F008.D

(3) Pyridine (T)

4.18min 84.92ug/ml

response 297300

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	77.02
0.00	0.00	0.00
0.00	0.00	0.00

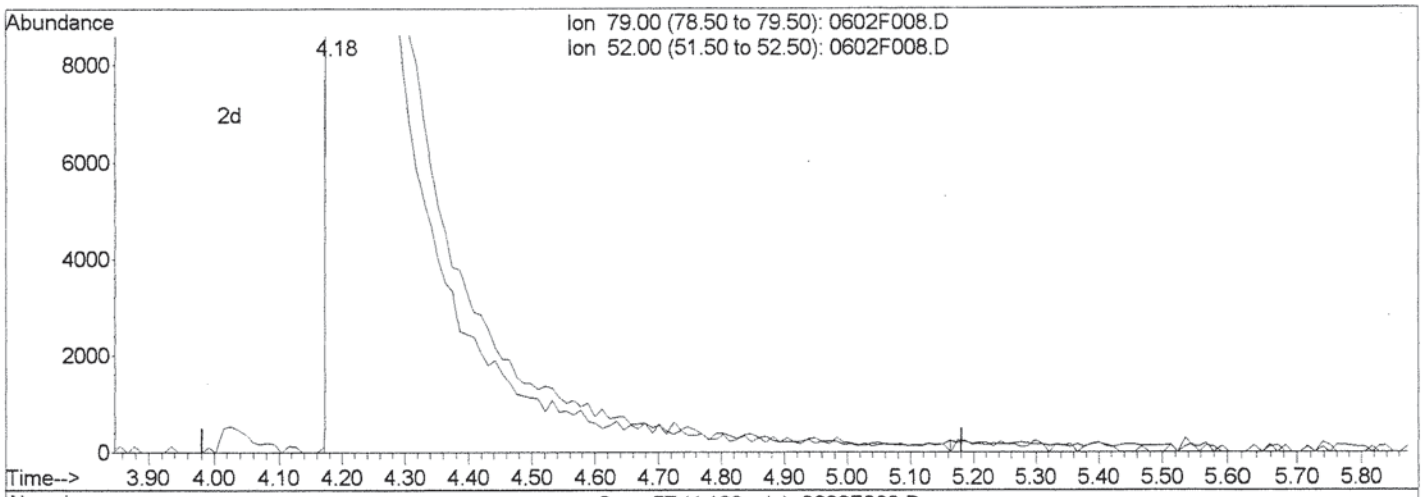
0602F008.D 0602BNC7.M Thu Jun 03 10:55:42 2010

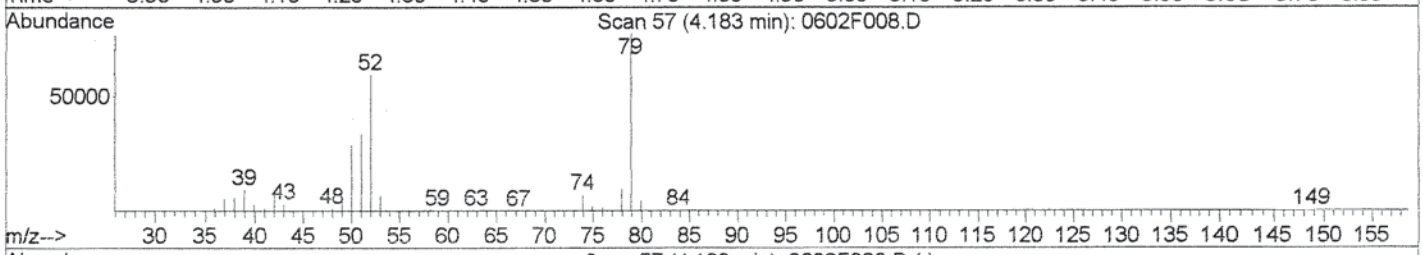
Quantitation Report (Qedit)

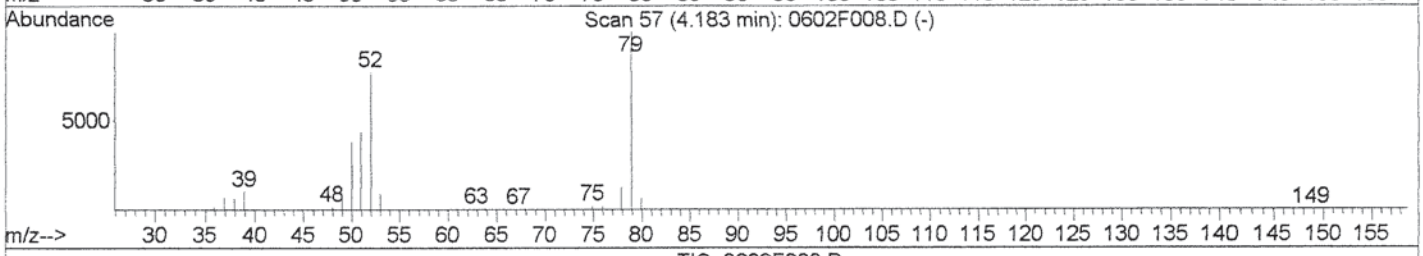
Data File : J:\MS07\DATA\060210\0602F008.D
Acq On : 2 Jun 2010 7:59 pm
Sample : 80PPM 8270 ICAL SVM32-21G
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:55 2010

Vial: 6
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F008.D

(3) Pyridine (T)

4.18min 86.91ug/ml m

response 304249

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	77.12
0.00	0.00	0.00
0.00	0.00	0.00

I.C. 6-3-10

LB 6/4/10

0602F008.D 0602BNC7.M Thu Jun 03 10:55:47 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F009.D Vial: 7
Acq On : 2 Jun 2010 8:39 pm Operator: M.BUTCHER
Sample : 100PPM 8270 ICAL SVM32-21H Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:53 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	116346	40.00	ug/ml	0.00
21) Naphthalene-d8	11.46	136	477905	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.31	164	217694	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.71	188	271937	40.00	ug/ml	0.00
68) Chrysene-d12	21.14	240	311055	40.00	ug/ml	0.00
77) Perylene-d12	24.32	264	253663	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.14	112	334191	108.04	ug/ml	0.00
Spiked Amount 150.000	Range 21 - 100		Recovery = 72.03%			
7) Phenol-d6	8.88	99	464659	107.71	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 94		Recovery = 71.81%			
19) Nitrobenzene-d5	10.30	82	449580	106.68	ug/ml	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 106.68%			
38) 2-Fluorobiphenyl	13.25	172	799895	112.08	ug/ml	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 112.08%			
59) 2,4,6-Tribromophenol	15.61	330	117775	106.85	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery = 71.23%			
71) Terphenyl-d14	19.32	244	438362	92.04	ug/ml	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 92.04%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.14	42	295565m	106.66	ug/ml	
3) Pyridine	4.19	79	408054m	103.92	ug/ml	
5) Aniline	8.82	93	450153	103.24	ug/ml	99
6) Bis(2-chloroethyl) Ether	8.97	93	374058	105.33	ug/ml	99
8) Phenol	8.90	94	474690m	107.43	ug/ml	
9) 2-Chlorophenol	9.02	128	416236	109.26	ug/ml	96
10) 1,3-Dichlorobenzene	9.25	146	416543	103.10	ug/ml	99
11) 1,4-Dichlorobenzene	9.39	146	418565	101.71	ug/ml	98
12) 1,2-Dichlorobenzene	9.62	146	395551	101.54	ug/ml	97
13) Benzyl Alcohol	9.66	108	245296	104.84	ug/ml	96
14) Bis(2-chloroisopropyl) Eth	9.87	45	628031	107.60	ug/ml	91
15) 2-Methylphenol	9.88	107	296022	103.48	ug/ml	94
16) Hexachloroethane	10.19	117	203365	108.62	ug/ml	82
17) N-Nitrosodi-n-propylamine	10.11	70	318086	109.44	ug/ml	98
18) 4-Methylphenol	10.15	107	472826	108.83	ug/ml	99
20) Nitrobenzene	10.33	77	423986	108.84	ug/ml	99
22) Isophorone	10.75	82	813693	94.38	ug/ml	99
23) 2-Nitrophenol	10.85	139	227468	94.74	ug/ml	94
24) 2,4-Dimethylphenol	11.00	122	323457	101.83	ug/ml	99
25) Bis(2-chloroethoxy)methane	11.13	93	490181	101.21	ug/ml	99

(#) = qualifier out of range (m) = manual integration
0602F009.D 0602BNC7.M Thu Jun 03 11:34:32 2010 Page 1

KB 6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F009.D Vial: 7
Acq On : 2 Jun 2010 8:39 pm Operator: M.BUTCHER
Sample : 100PPM 8270 ICAL SVM32-21H Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:53 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.28	162	351125	97.44	ug/ml	97
27)	Benzoic Acid	11.33	122	265560	97.55	ug/ml	94
28)	1,2,4-Trichlorobenzene	11.37	180	379744	99.26	ug/ml	99
29)	Naphthalene	11.49	128	1116954	97.41	ug/ml	99
30)	4-Chloroaniline	11.62	127	488552	96.58	ug/ml	95
31)	Hexachlorobutadiene	11.72	225	252177	103.90	ug/ml	99
32)	4-Chloro-3-methylphenol	12.47	107	357750	95.11	ug/ml#	59
33)	2-Methylnaphthalene	12.63	142	699410	95.86	ug/ml	100
35)	Hexachlorocyclopentadiene	12.89	237	253013	109.24	ug/ml	99
36)	2,4,6-Trichlorophenol	13.12	196	244406	108.83	ug/ml	98
37)	2,4,5-Trichlorophenol	13.18	196	273965	109.47	ug/ml	96
39)	2-Chloronaphthalene	13.42	162	677924	107.68	ug/ml	97
40)	2-Nitroaniline	13.62	65	198747	98.13	ug/ml	89
41)	Acenaphthylene	14.08	152	1029454	106.14	ug/ml	98
42)	Dimethyl Phthalate	13.94	163	712379	96.26	ug/ml	99
43)	2,6-Dinitrotoluene	14.03	165	169101	100.83	ug/ml	86
44)	Acenaphthene	14.37	154	552958	99.89	ug/ml	98
45)	3-Nitroaniline	14.30	138	170723	96.75	ug/ml	97
46)	2,4-Dinitrophenol	14.47	184	102955	105.80	ug/ml	88
47)	Dibenzofuran	14.65	168	858485	98.36	ug/ml	93
48)	4-Nitrophenol	14.65	109	97704	102.26	ug/ml#	89
49)	2,4-Dinitrotoluene	14.67	165	198493	93.39	ug/ml	80
50)	2,3,4,6-Tetrachlorophenol	14.87	232	179206	98.21	ug/ml#	86
51)	Fluorene	15.20	166	640943	98.00	ug/ml	96
52)	4-Chlorophenyl Phenyl Ethe	15.23	204	319628	95.46	ug/ml	92
53)	Diethyl Phthalate	15.09	149	670573	93.73	ug/ml	100
54)	4-Nitroaniline	15.29	138	151045	98.89	ug/ml	96
55)	2-Methyl-4,6-dinitrophenol	15.32	198	114012	98.63	ug/ml#	61
56)	N-Nitrosodiphenylamine	15.44	169	409398	93.88	ug/ml	99
57)	1,2-Diphenylhydrazine	15.48	77	740388	99.87	ug/ml	94
60)	4-Bromophenyl Phenyl Ether	16.01	248	174388	106.37	ug/ml	91
61)	Hexachlorobenzene	16.09	284	201858	106.22	ug/ml	91
62)	Pentachlorophenol	16.43	266	107141	100.33	ug/ml	98
63)	Phenanthrene	16.74	178	683180	94.56	ug/ml	98
64)	Anthracene	16.83	178	782379	103.00	ug/ml	100
65)	Carbazole	17.13	167	655012	105.63	ug/ml	98
66)	Di-n-butyl Phthalate	17.74	149	867148	104.84	ug/ml	100
67)	Fluoranthene	18.67	202	708060	107.96	ug/ml	98
69)	Benzidine	18.93	184	244370	93.56	ug/ml	98
70)	Pyrene	19.03	202	750272	90.37	ug/ml	100
72)	Butyl Benzyl Phthalate	20.16	149	471978	99.76	ug/ml	88

(#) = qualifier out of range (m) = manual integration
0602F009.D 0602BNC7.M Thu Jun 03 11:34:32 2010 Page 2

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LB 6/4/10

Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:53 2010

Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.12	252	334152	102.80	ug/ml	98
74)	Benz(a)anthracene	21.12	228	748559	102.40	ug/ml	100
75)	Chrysene	21.20	228	708399	100.09	ug/ml	100
76)	Bis(2-ethylhexyl) Phthalat	21.32	149	701443	104.18	ug/ml	99
78)	Di-n-octyl Phthalate	22.78	149	1263346	113.08	ug/ml	99
79)	Benzo(b)fluoranthene	23.46	252	704855m	107.87	ug/ml	
80)	Benzo(k)fluoranthene	23.53	252	721871m	106.45	ug/ml	
81)	Benzo(a)pyrene	24.19	252	554160	102.11	ug/ml	99
82)	Indeno(1,2,3-cd)pyrene	26.77	276	475821	101.23	ug/ml	99
83)	Dibenz(a,h)anthracene	26.85	278	519620	103.79	ug/ml	100
84)	Benzo(g,h,i)perylene	27.35	276	489833	96.55	ug/ml	97

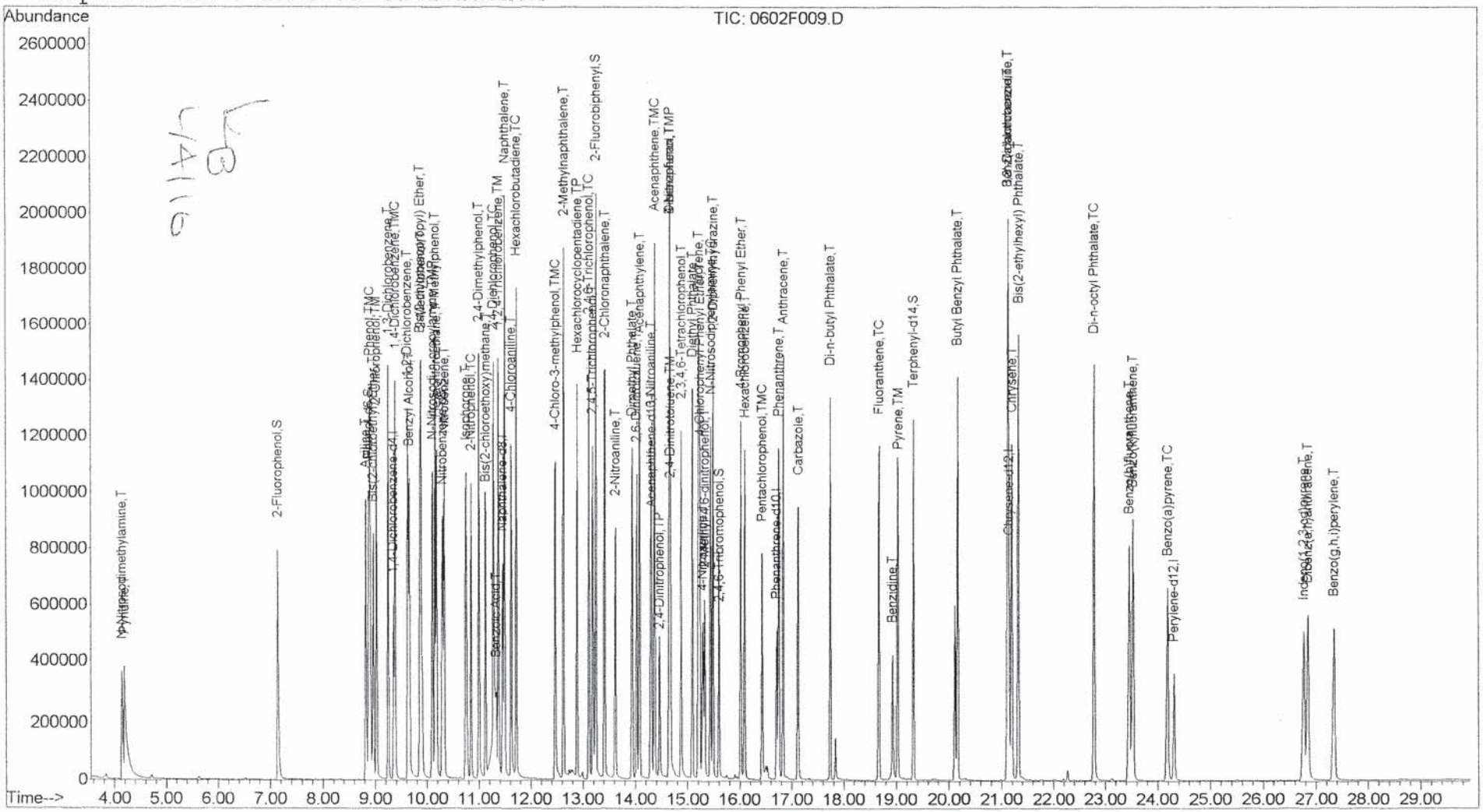
LB 6/14/10

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F009.D Vial: 7
Acq On : 2 Jun 2010 8:39 pm Operator: M.BUTCHER
Sample : 100PPM 8270 ICAL SVM32-21H Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:57 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration

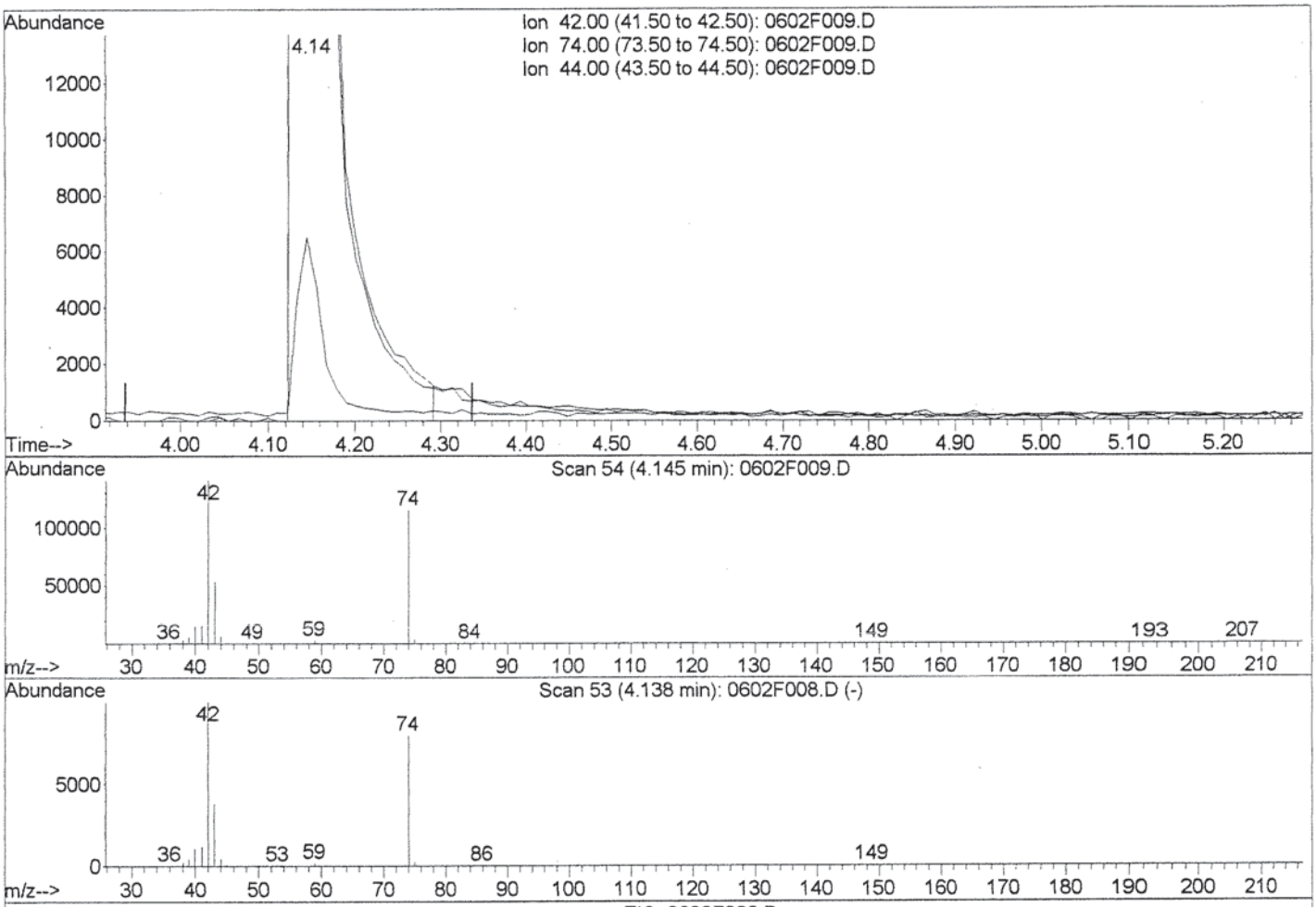


Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:48 2010

Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F009.D

(2) N-Nitrosodimethylamine (T)

4.14min 102.89ug/ml

response 285108

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	81.93
44.00	4.40	4.44
0.00	0.00	0.00

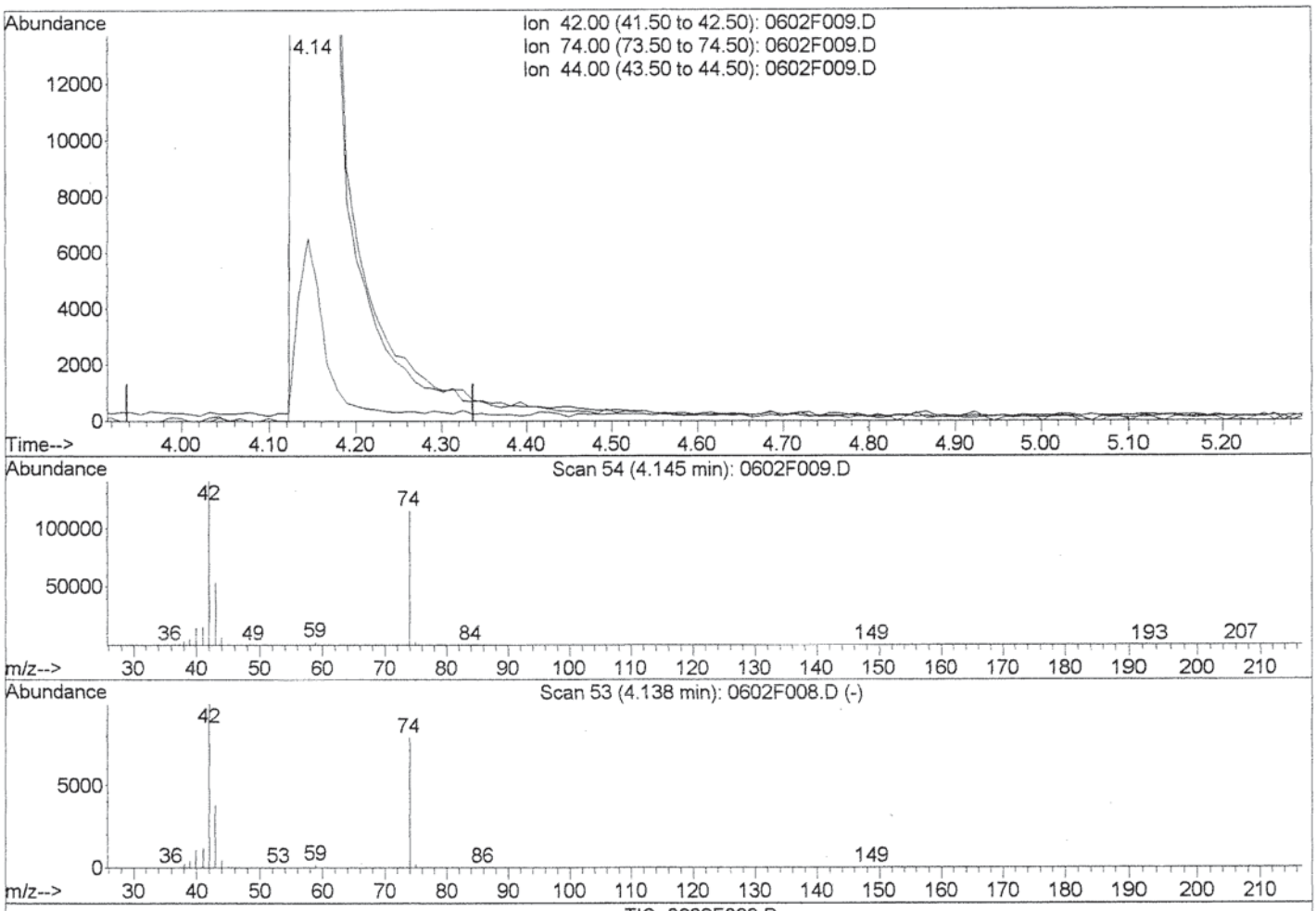
0602F009.D 0602BNC7.M Thu Jun 03 10:56:26 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:56 2010

Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F009.D

(2) N-Nitrosodimethylamine (T)

4.14min 106.66ug/ml m

response 295565

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	81.98
44.00	4.40	4.64
0.00	0.00	0.00

SC 6-3-10

0602F009.D 0602BNC7.M Thu Jun 03 10:56:30 2010

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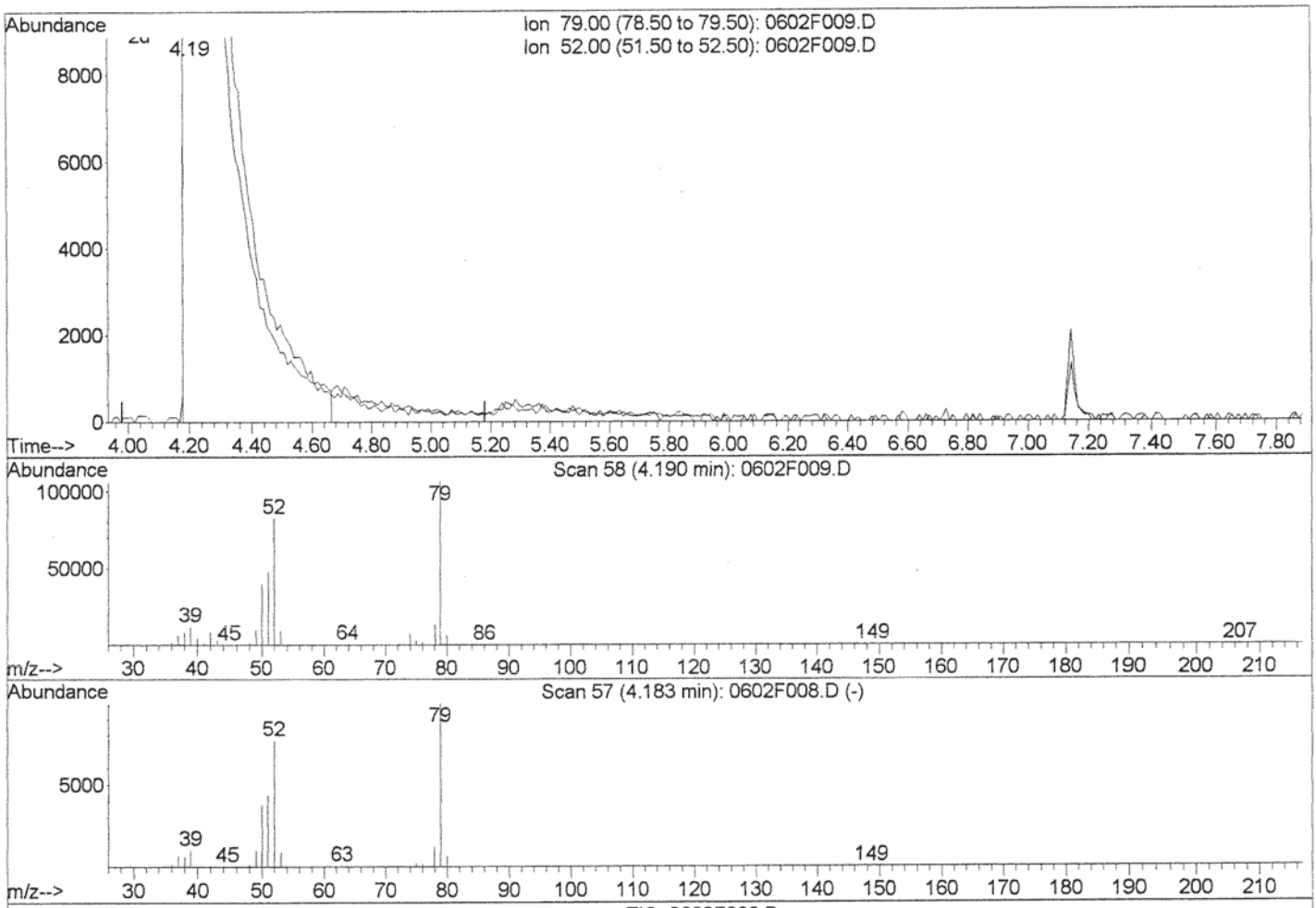
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:56 2010

Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F009.D

(3) Pyridine (T)

4.19min 98.54ug/ml

response 386906

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	77.80
0.00	0.00	0.00
0.00	0.00	0.00

0602F009.D 0602BNC7.M Thu Jun 03 10:56:36 2010

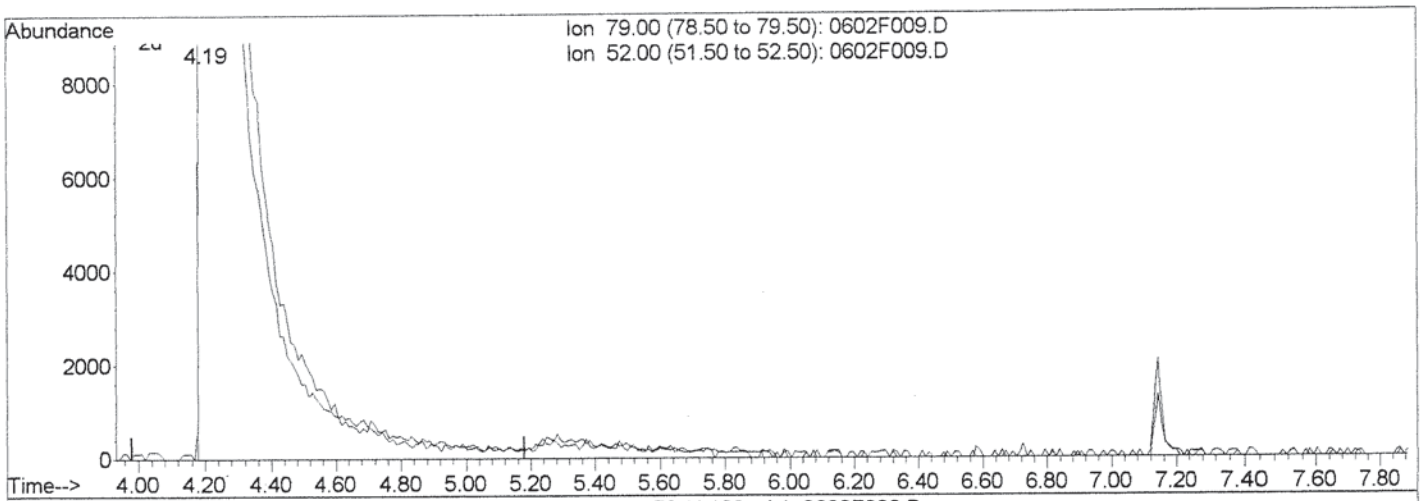
Quantitation Report (Qedit)

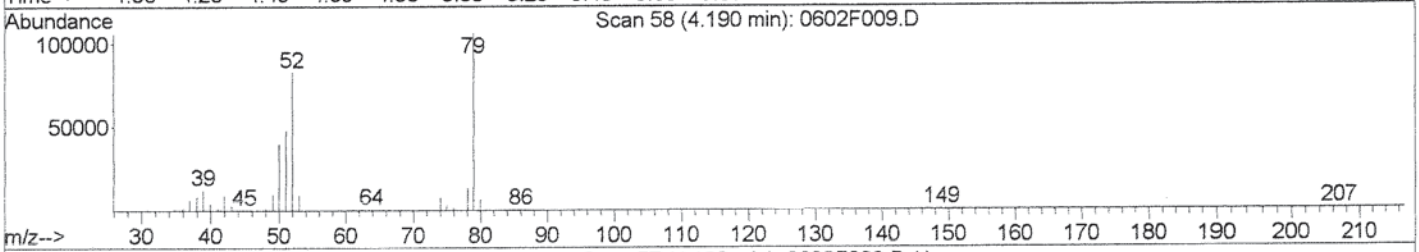
Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:56 2010

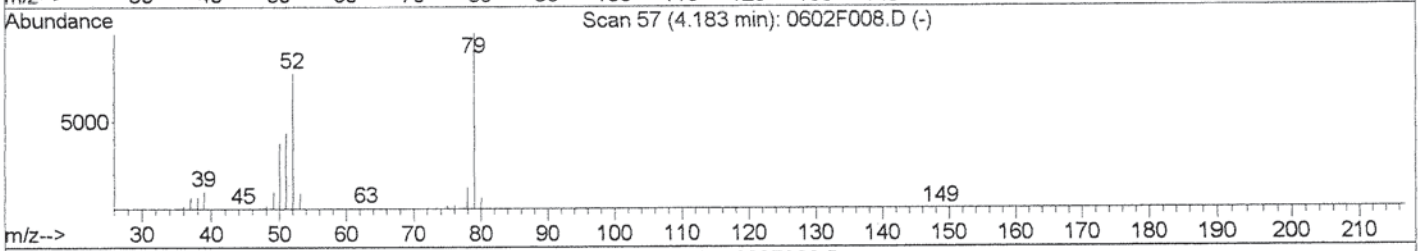
Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F009.D

(3) Pyridine (T)

4.19min 103.92ug/ml m

response 408054

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	77.84
0.00	0.00	0.00
0.00	0.00	0.00

SC 6-3-10

LB 6/4/10

0602F009.D 0602BNC7.M Thu Jun 03 10:56:40 2010

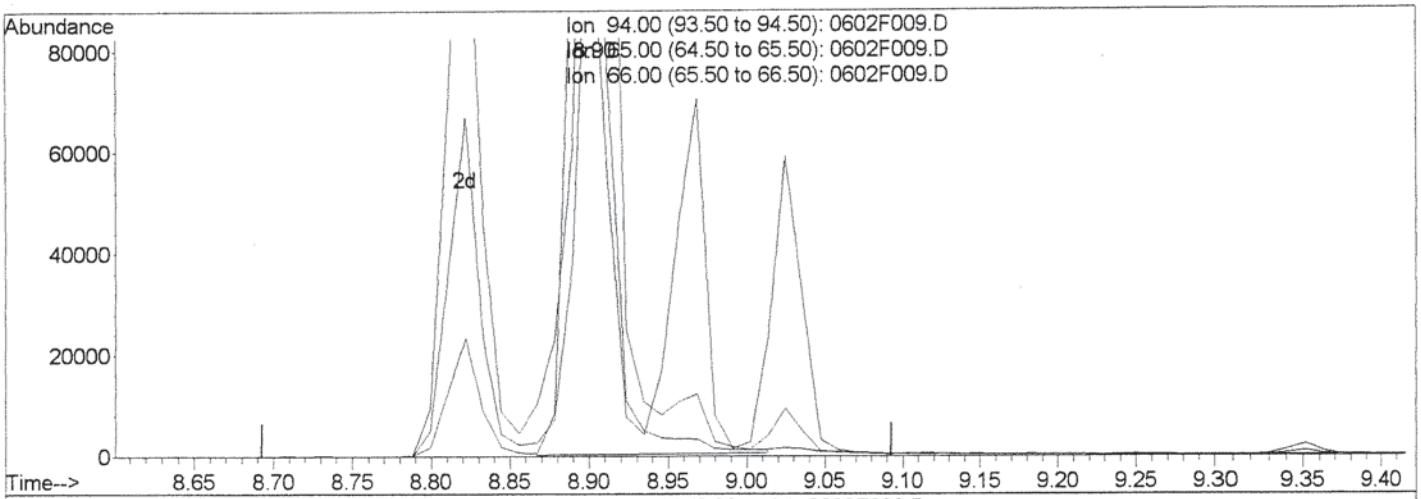
Quantitation Report (Qedit)

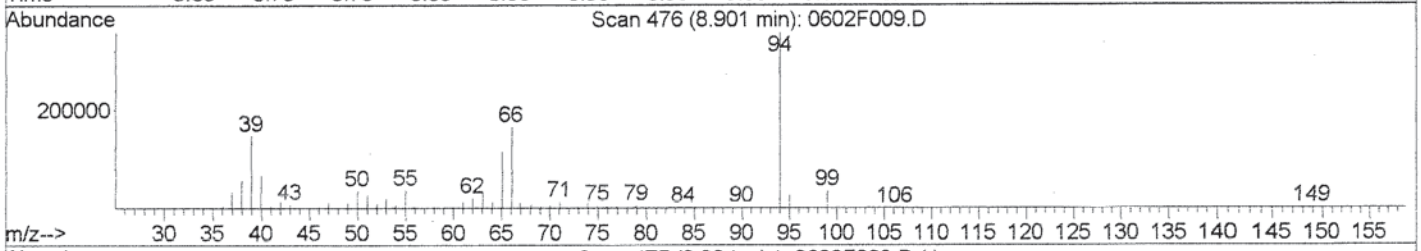
Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:56 2010

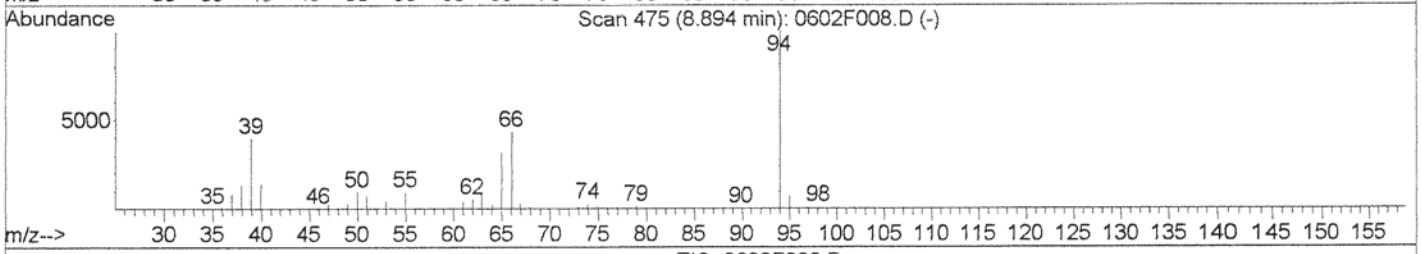
Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F009.D

(8) Phenol (TMC)

8.90min 111.16ug/ml

response 491149

Ion	Exp%	Act%
94.00	100	100
65.00	31.10	28.91
66.00	44.30	44.26
0.00	0.00	0.00

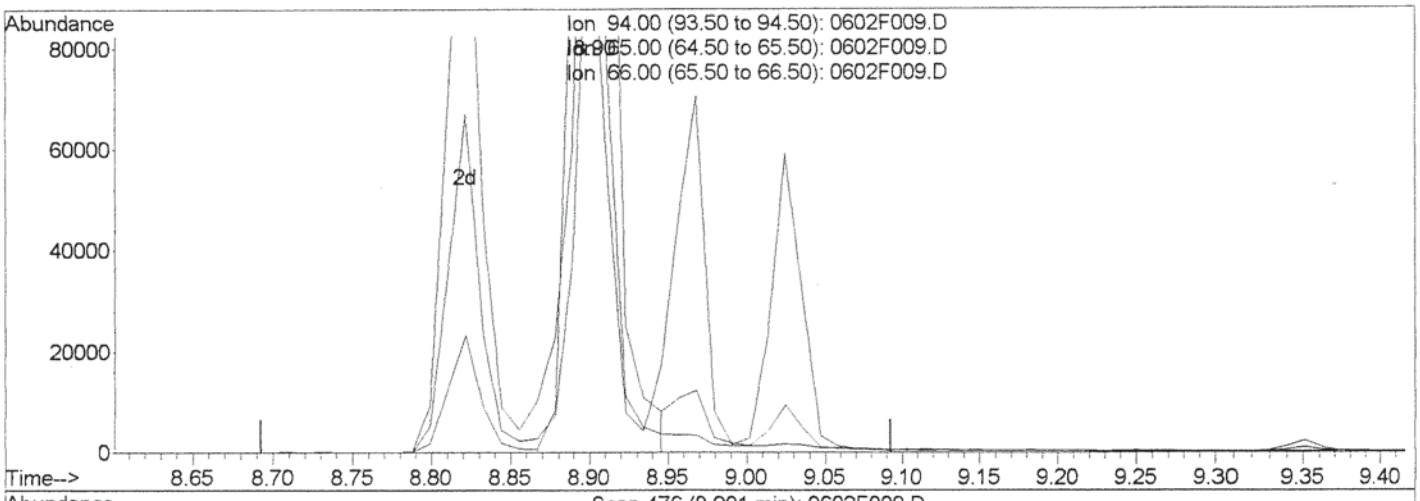
0602F009.D 0602BNC7.M Thu Jun 03 10:56:48 2010

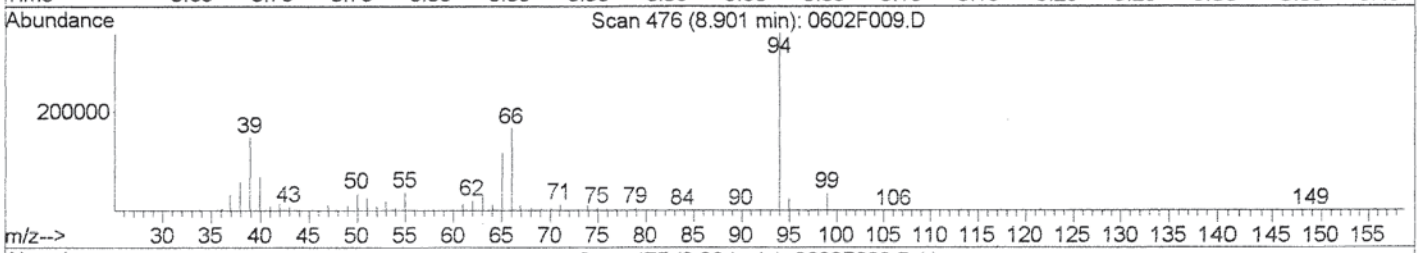
Quantitation Report (Qedit)

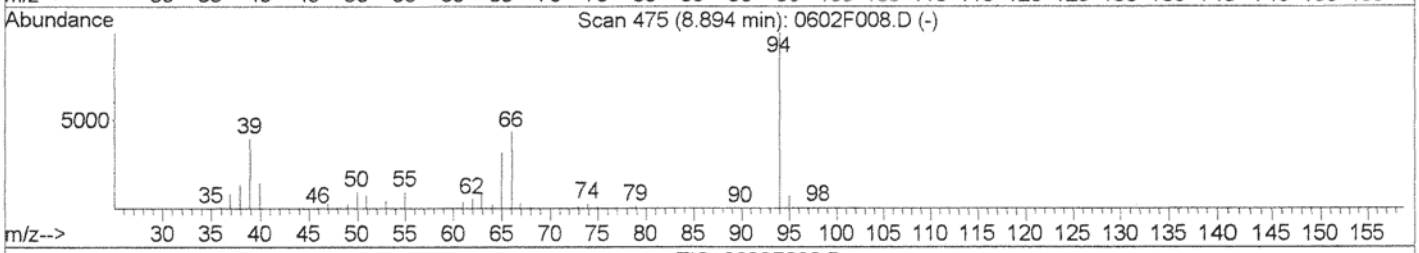
Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:56 2010

Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F009.D

(8) Phenol (TMC)

8.90min 107.43ug/ml m

response 474690

Ion	Exp%	Act%
94.00	100	100
65.00	31.10	32.45
66.00	44.30	46.15
0.00	0.00	0.00

0,5
6-3-10

0602F009.D 0602BNC7.M Thu Jun 03 10:56:52 2010

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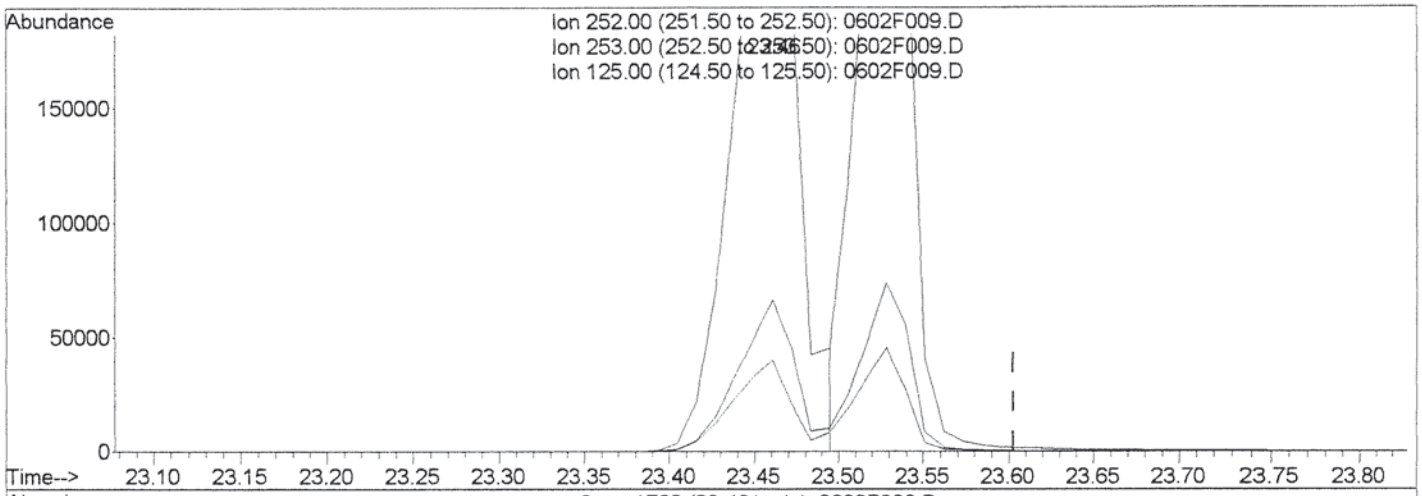
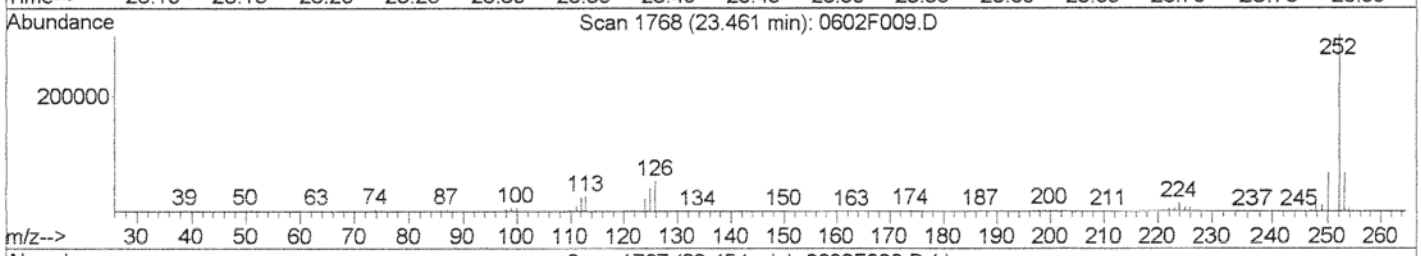
Quantitation Report (Qedit)

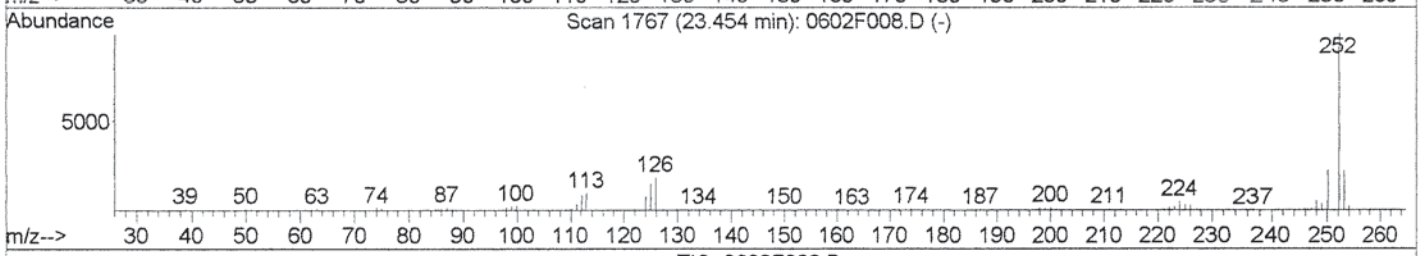
Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:56 2010

Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F009.D

(79) Benzo(b)fluoranthene (T)

23.46min 112.55ug/ml

response 735458

Ion	Exp%	Act%
252.00	100	100
253.00	21.80	21.59
125.00	14.40	12.70
0.00	0.00	0.00

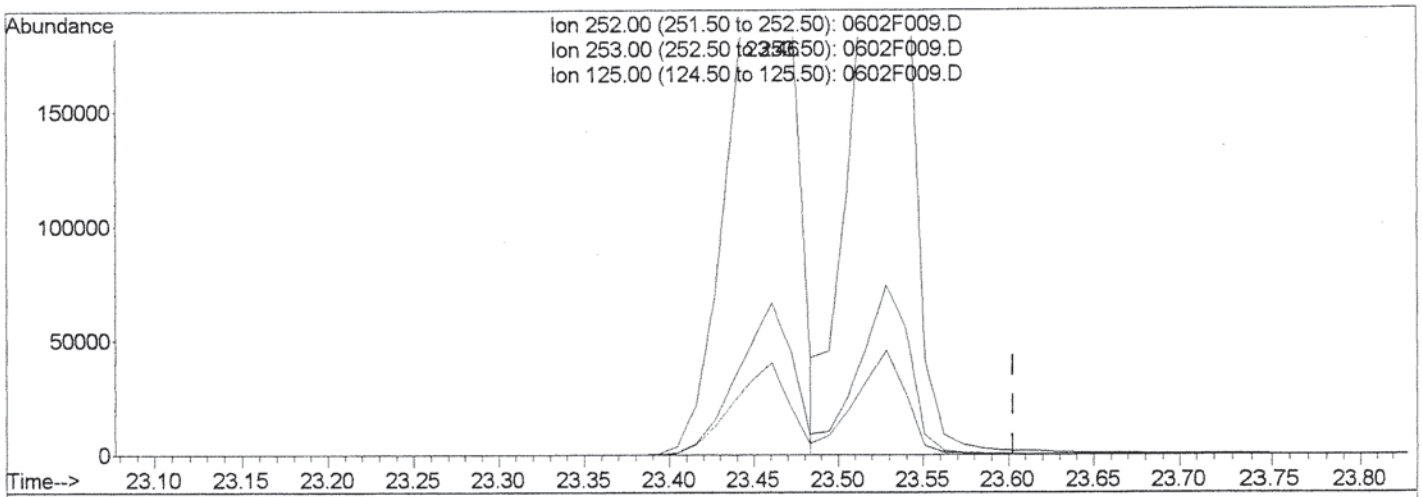
0602F009.D 0602BNC7.M Thu Jun 03 10:57:18 2010

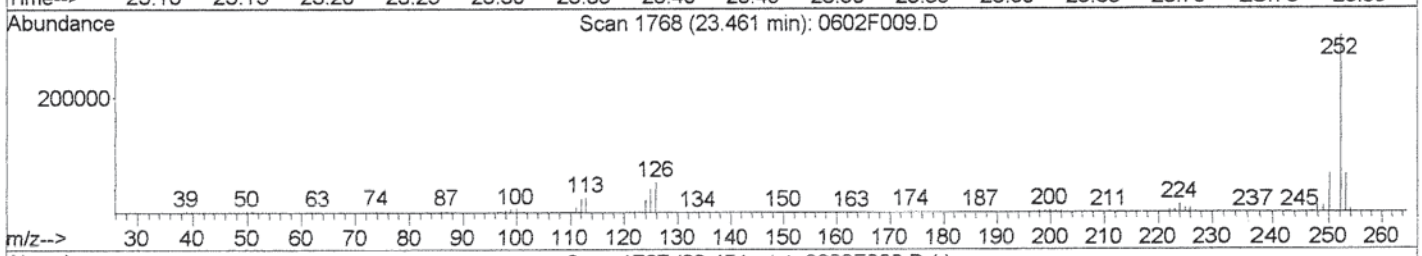
Quantitation Report (Qedit)

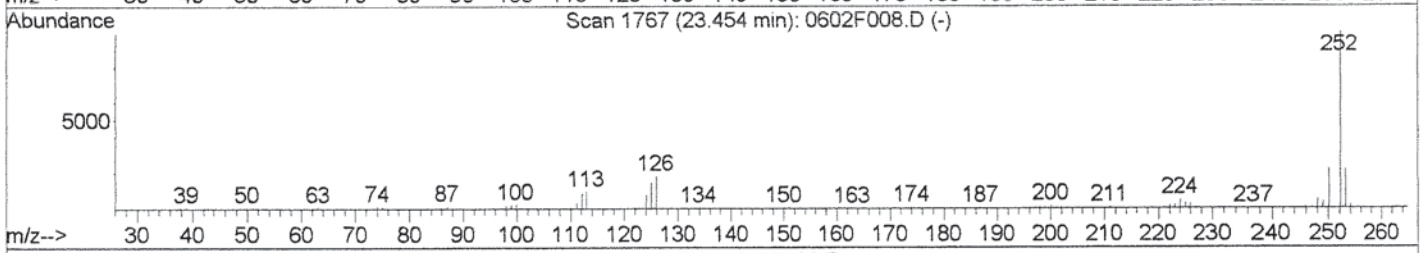
Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:57 2010

Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F009.D

(79) Benzo(b)fluoranthene (T)

23.46min 107.87ug/ml m

response 704855

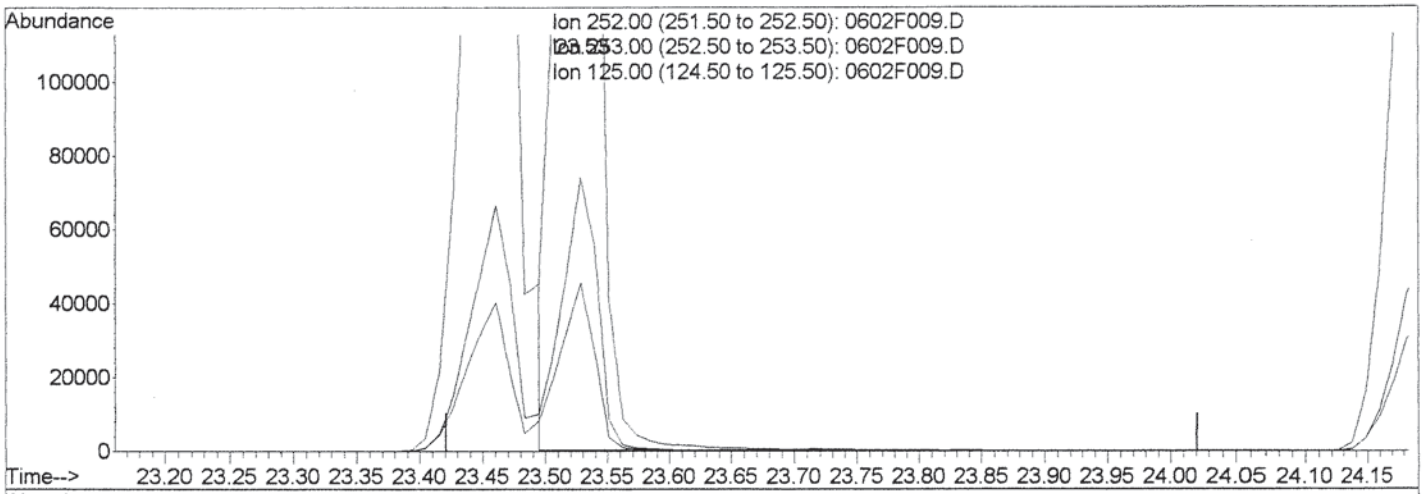
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	21.65
125.00	14.40	13.11
0.00	0.00	0.00

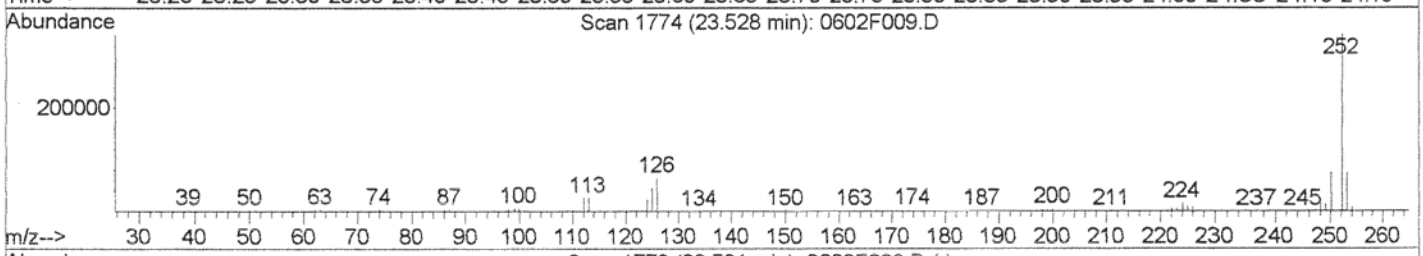
0602F009.D 0602BNC7.M Thu Jun 03 10:57:21 2010

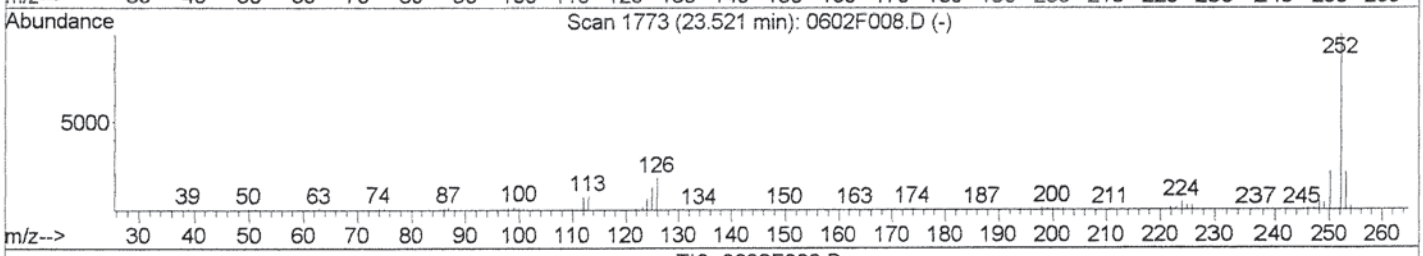
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F009.D Vial: 7
Acq On : 2 Jun 2010 8:39 pm Operator: M.BUTCHER
Sample : 100PPM 8270 ICAL SVM32-21H Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:57 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F009.D

(80) Benzo(k)fluoranthene (T)

23.53min 101.55ug/ml

response 688650

Ion	Exp%	Act%
252.00	100	100
253.00	21.30	21.46
125.00	13.20	12.91
0.00	0.00	0.00

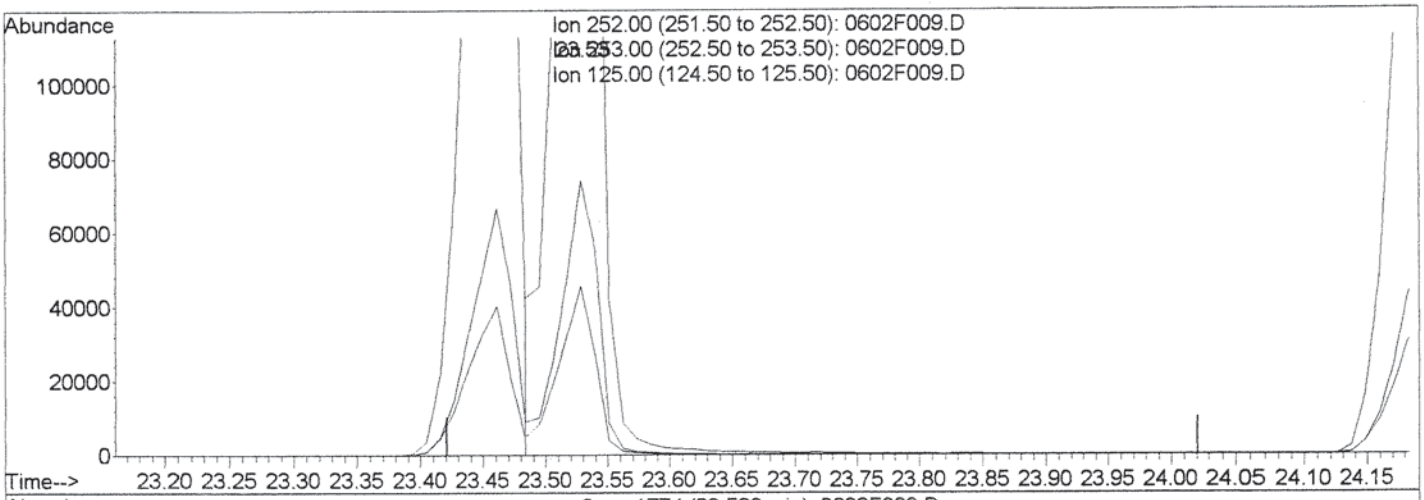
0602F009.D 0602BNC7.M Thu Jun 03 10:57:25 2010

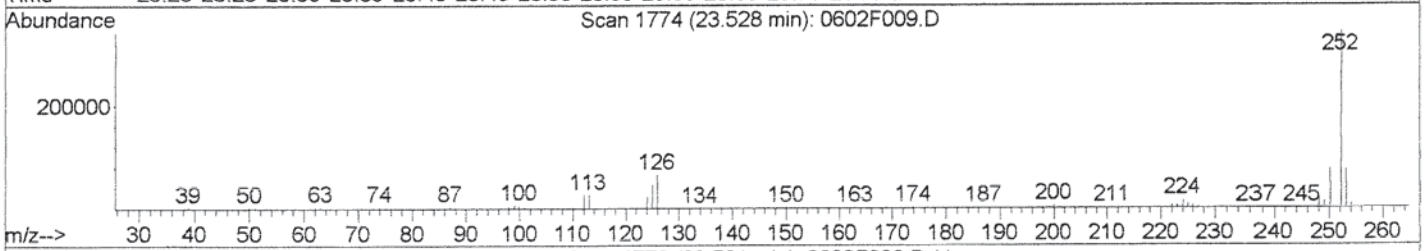
Quantitation Report (Qedit)

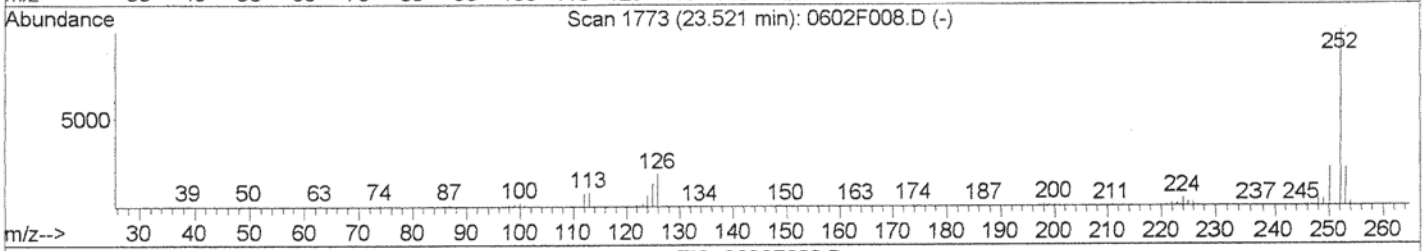
Data File : J:\MS07\DATA\060210\0602F009.D
Acq On : 2 Jun 2010 8:39 pm
Sample : 100PPM 8270 ICAL SVM32-21H
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:57 2010

Vial: 7
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F009.D

(80) Benzo(k)fluoranthene (T)

23.53min 106.45ug/ml m

response 721871

Ion	Exp%	Act%
252.00	100	100
253.00	21.30	21.50
125.00	13.20	13.25
0.00	0.00	0.00

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6-7-10

0602F009.D 0602BNC7.M Thu Jun 03 10:57:29 2010

LB
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Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F010.D Vial: 8
Acq On : 2 Jun 2010 9:19 pm Operator: M.BUTCHER
Sample : 120PPM 8270 ICAL SVM32-21I Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:54 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	107169	40.00	ug/ml	0.00
21) Naphthalene-d8	11.45	136	412368	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.31	164	219449	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.70	188	269634	40.00	ug/ml	0.00
68) Chrysene-d12	21.14	240	300460	40.00	ug/ml	0.00
77) Perylene-d12	24.32	264	239123	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.13	112	358610	125.86	ug/ml	0.00
Spiked Amount 150.000	Range 21 - 100		Recovery = 83.91%			
7) Phenol-d6	8.88	99	512994	129.09	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 94		Recovery = 86.06%			
19) Nitrobenzene-d5	10.29	82	492175	126.79	ug/ml	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 126.79%#			
38) 2-Fluorobiphenyl	13.25	172	908511	126.29	ug/ml	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 126.29%#			
59) 2,4,6-Tribromophenol	15.60	330	141785	129.73	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery = 86.49%			
71) Terphenyl-d14	19.33	244	497027	108.04	ug/ml	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 108.04%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.15	42	319885m	125.32	ug/ml	
3) Pyridine	4.18	79	474189m	131.11	ug/ml	
5) Aniline	8.82	93	480882	119.73	ug/ml	90
6) Bis(2-chloroethyl) Ether	8.97	93	424774	129.86	ug/ml	91
8) Phenol	8.90	94	523383	128.60	ug/ml	98
9) 2-Chlorophenol	9.03	128	438427	124.94	ug/ml	94
10) 1,3-Dichlorobenzene	9.25	146	460785	123.81	ug/ml	95
11) 1,4-Dichlorobenzene	9.38	146	467788	123.41	ug/ml	98
12) 1,2-Dichlorobenzene	9.62	146	451132	125.73	ug/ml	98
13) Benzyl Alcohol	9.66	108	287282	133.30	ug/ml	96
14) Bis(2-chloroisopropyl) Eth	9.87	45	701879	130.55	ug/ml	82
15) 2-Methylphenol	9.88	107	320434	121.60	ug/ml	88
16) Hexachloroethane	10.18	117	218080	126.45	ug/ml	99
17) N-Nitrosodi-n-propylamine	10.10	70	356483	133.15	ug/ml	93
18) 4-Methylphenol	10.15	107	538233	134.50	ug/ml	98
20) Nitrobenzene	10.32	77	468624	130.60	ug/ml	96
22) Isophorone	10.75	82	949856	127.69	ug/ml	98
23) 2-Nitrophenol	10.85	139	269293	129.98	ug/ml	93
24) 2,4-Dimethylphenol	11.00	122	349478	127.51	ug/ml	97
25) Bis(2-chloroethoxy)methane	11.12	93	526605	126.01	ug/ml	99

(#) = qualifier out of range (m) = manual integration
0602F010.D 0602BNC7.M Thu Jun 03 11:34:33 2010 Page 1

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Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F010.D
Acq On : 2 Jun 2010 9:19 pm
Sample : 120PPM 8270 ICAL SVM32-21I
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:54 2010

Vial: 8
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.28	162	421752	135.64	ug/ml	96
27)	Benzoic Acid	11.35	122	316824	134.88	ug/ml	91
28)	1,2,4-Trichlorobenzene	11.37	180	410335	124.30	ug/ml	98
29)	Naphthalene	11.50	128	1246594	126.00	ug/ml	99
30)	4-Chloroaniline	11.62	127	526808	120.69	ug/ml	94
31)	Hexachlorobutadiene	11.72	225	255280	121.90	ug/ml	98
32)	4-Chloro-3-methylphenol	12.46	107	413004	127.24	ug/ml#	52
33)	2-Methylnaphthalene	12.63	142	799450	126.99	ug/ml	98
35)	Hexachlorocyclopentadiene	12.89	237	286789	121.97	ug/ml	98
36)	2,4,6-Trichlorophenol	13.12	196	282420	124.75	ug/ml	98
37)	2,4,5-Trichlorophenol	13.19	196	325010	128.83	ug/ml	99
39)	2-Chloronaphthalene	13.41	162	764123	120.40	ug/ml	99
40)	2-Nitroaniline	13.62	65	265703	130.13	ug/ml	90
41)	Acenaphthylene	14.08	152	1193053	122.02	ug/ml	99
42)	Dimethyl Phthalate	13.94	163	878268	117.73	ug/ml	99
43)	2,6-Dinitrotoluene	14.03	165	199250	117.86	ug/ml	88
44)	Acenaphthene	14.37	154	669820	120.03	ug/ml	98
45)	3-Nitroaniline	14.30	138	209613	117.84	ug/ml	99
46)	2,4-Dinitrophenol	14.46	184	124037	126.45	ug/ml	92
47)	Dibenzofuran	14.65	168	1035863	117.73	ug/ml	93
48)	4-Nitrophenol	14.65	109	118067	122.58	ug/ml	96
49)	2,4-Dinitrotoluene	14.67	165	238539	111.33	ug/ml	76
50)	2,3,4,6-Tetrachlorophenol	14.88	232	225291	122.48	ug/ml	94
51)	Fluorene	15.20	166	735879	111.61	ug/ml	99
52)	4-Chlorophenyl Phenyl Ethe	15.23	204	398548	118.08	ug/ml	96
53)	Diethyl Phthalate	15.09	149	828919	114.93	ug/ml	99
54)	4-Nitroaniline	15.30	138	184736	119.99	ug/ml	95
55)	2-Methyl-4,6-dinitrophenol	15.34	198	141371	121.31	ug/ml#	35
56)	N-Nitrosodiphenylamine	15.44	169	495689	112.76	ug/ml	100
57)	1,2-Diphenylhydrazine	15.48	77	876400m	117.28	ug/ml	
60)	4-Bromophenyl Phenyl Ether	16.01	248	212841	130.93	ug/ml	95
61)	Hexachlorobenzene	16.09	284	233548	123.95	ug/ml	87
62)	Pentachlorophenol	16.43	266	136664	129.07	ug/ml	98
63)	Phenanthrene	16.75	178	843292	117.72	ug/ml	99
64)	Anthracene	16.84	178	910273	120.86	ug/ml	100
65)	Carbazole	17.12	167	736019	119.71	ug/ml	100
66)	Di-n-butyl Phthalate	17.74	149	1009527	123.09	ug/ml	99
67)	Fluoranthene	18.66	202	841477	129.40	ug/ml	99
69)	Benzidine	18.93	184	281129	111.43	ug/ml	99
70)	Pyrene	19.02	202	873938	108.98	ug/ml	99
72)	Butyl Benzyl Phthalate	20.16	149	564627	123.55	ug/ml	93

(#) = qualifier out of range (m) = manual integration

1412 LARO

6-7-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F010.D Vial: 8
Acq On : 2 Jun 2010 9:19 pm Operator: M.BUTCHER
Sample : 120PPM 8270 ICAL SVM32-21I Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:54 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.12	252	374209	119.18	ug/ml	98
74)	Benz(a)anthracene	21.12	228	831988	117.82	ug/ml	100
75)	Chrysene	21.20	228	790321	115.61	ug/ml	99
76)	Bis(2-ethylhexyl) Phthalat	21.31	149	833025	128.08	ug/ml	99
78)	Di-n-octyl Phthalate	22.78	149	1406271	133.52	ug/ml	96
79)	Benzo(b)fluoranthene	23.46	252	744832	120.91	ug/ml	99
80)	Benzo(k)fluoranthene	23.53	252	846656	132.44	ug/ml	99
81)	Benzo(a)pyrene	24.20	252	632102	123.55	ug/ml	99
82)	Indeno(1,2,3-cd)pyrene	26.78	276	563194	127.11	ug/ml	99
83)	Dibenz(a,h)anthracene	26.86	278	580298	122.95	ug/ml	99
84)	Benzo(g,h,i)perylene	27.35	276	597039	124.83	ug/ml	99

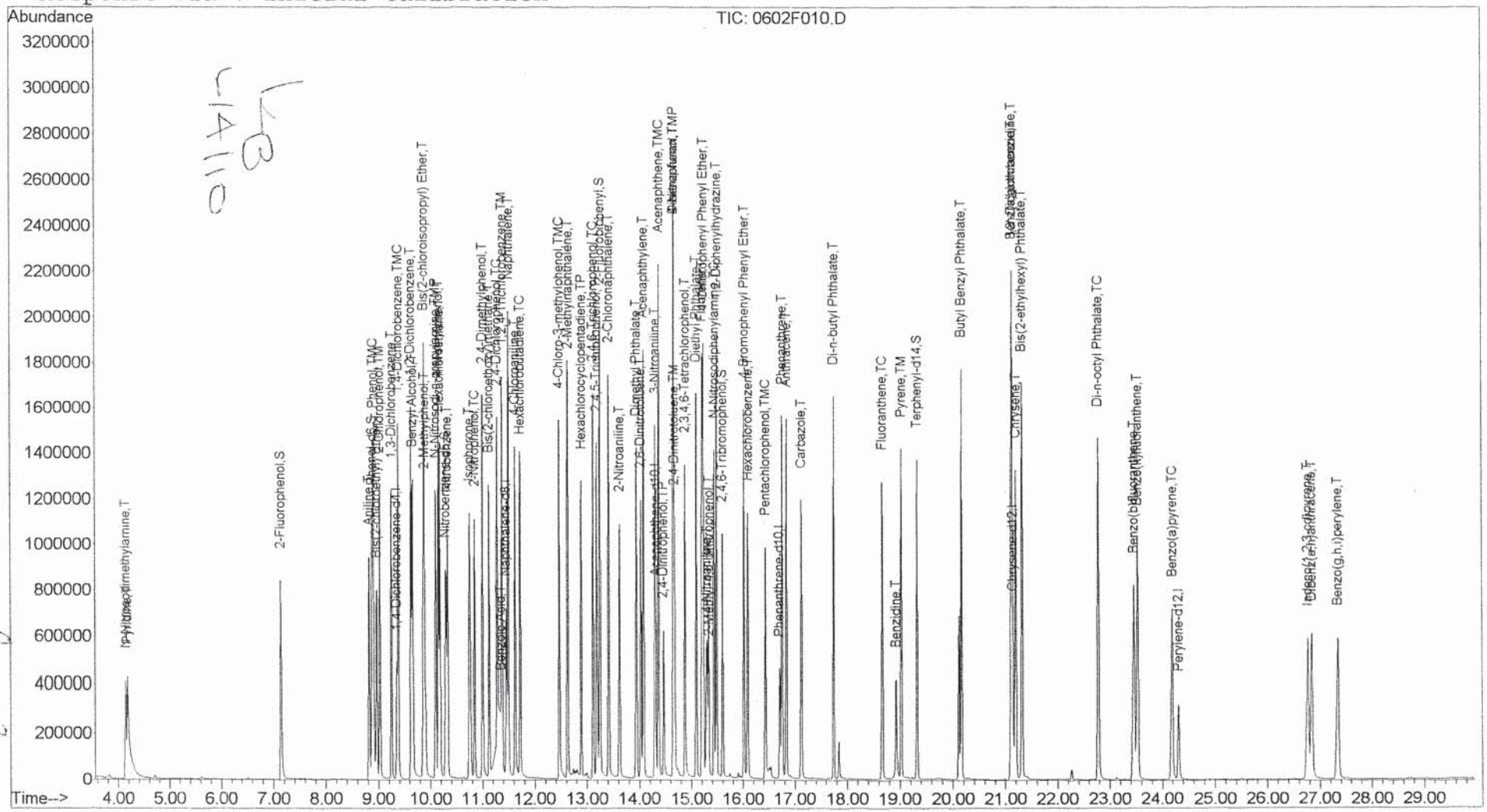
LB 6-4-10

(#) = qualifier out of range (m) = manual integration
0602F010.D 0602BNC7.M Thu Jun 03 11:34:33 2010 6-3-10 Page 3

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F010.D Vial: 8
Acq On : 2 Jun 2010 9:19 pm Operator: M.BUTCHER
Sample : 120PPM 8270 ICAL SVM32-21I Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:58 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration



1414

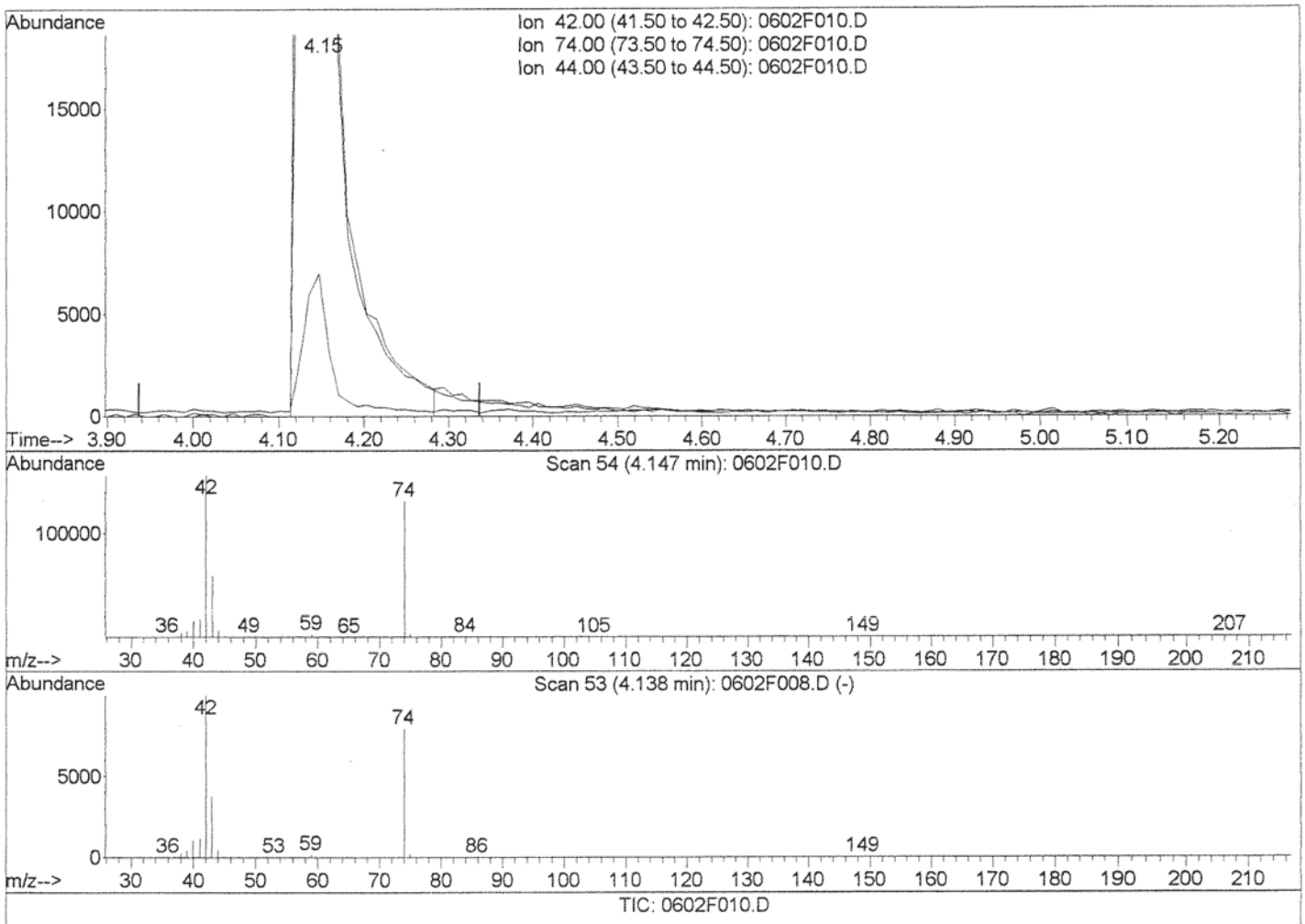
0602F010.D 0602BNC7.M Thu Jun 03 11:34:34 2010 Page 4

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F010.D
Acq On : 2 Jun 2010 9:19 pm
Sample : 120PPM 8270 ICAL SVM32-21I
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:48 2010

Vial: 8
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



(2) N-Nitrosodimethylamine (T)

4.15min 120.79ug/ml

response 308314

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	83.79
44.00	4.40	4.30
0.00	0.00	0.00

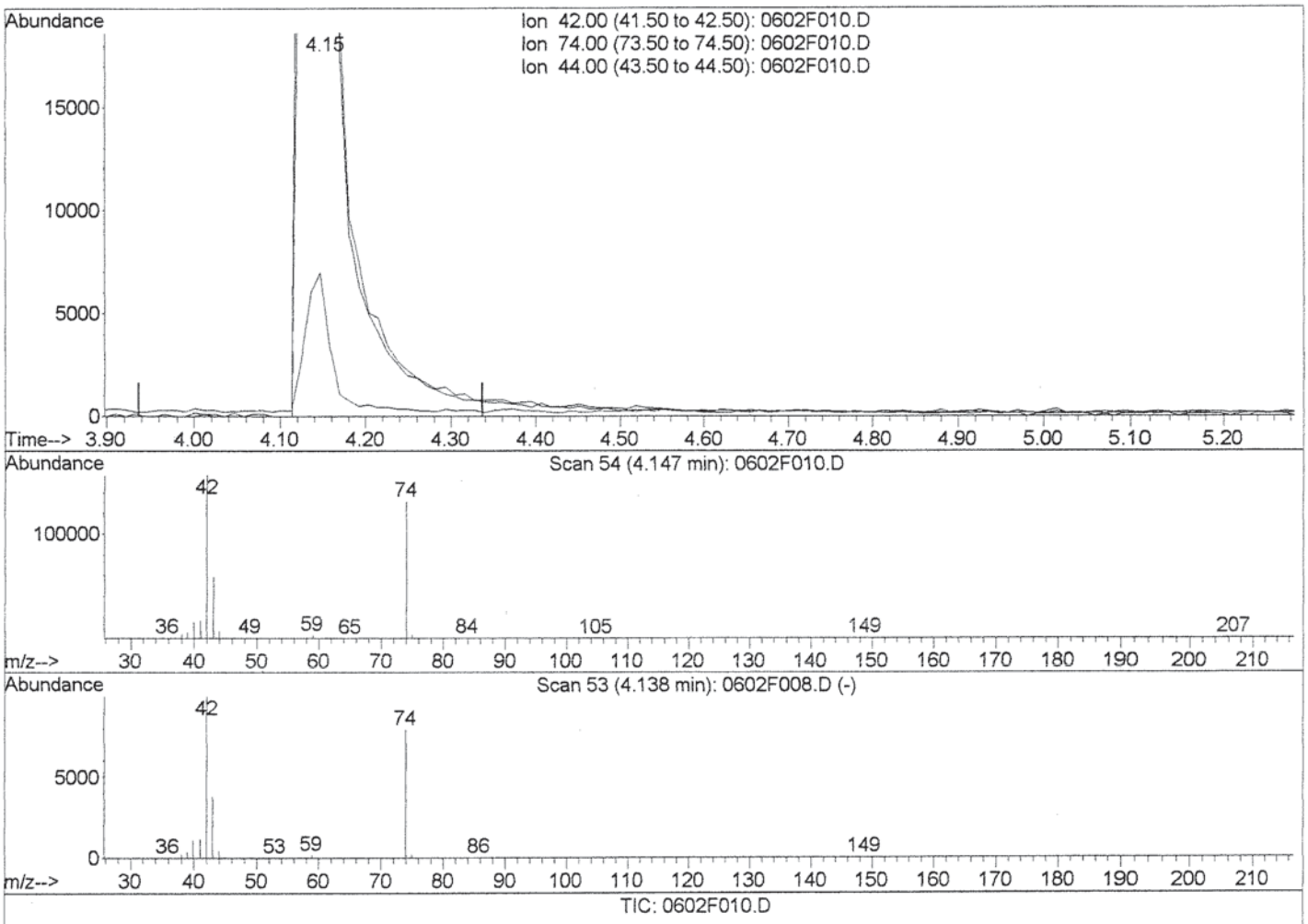
0602F010.D 0602BNC7.M Thu Jun 03 10:57:37 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F010.D
Acq On : 2 Jun 2010 9:19 pm
Sample : 120PPM 8270 ICAL SVM32-21I
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:57 2010

Vial: 8
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F010.D

(2) N-Nitrosodimethylamine (T)

4.15min 125.32ug/ml m

response 319885

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	83.84
44.00	4.40	4.44
0.00	0.00	0.00

IC
6-3-10

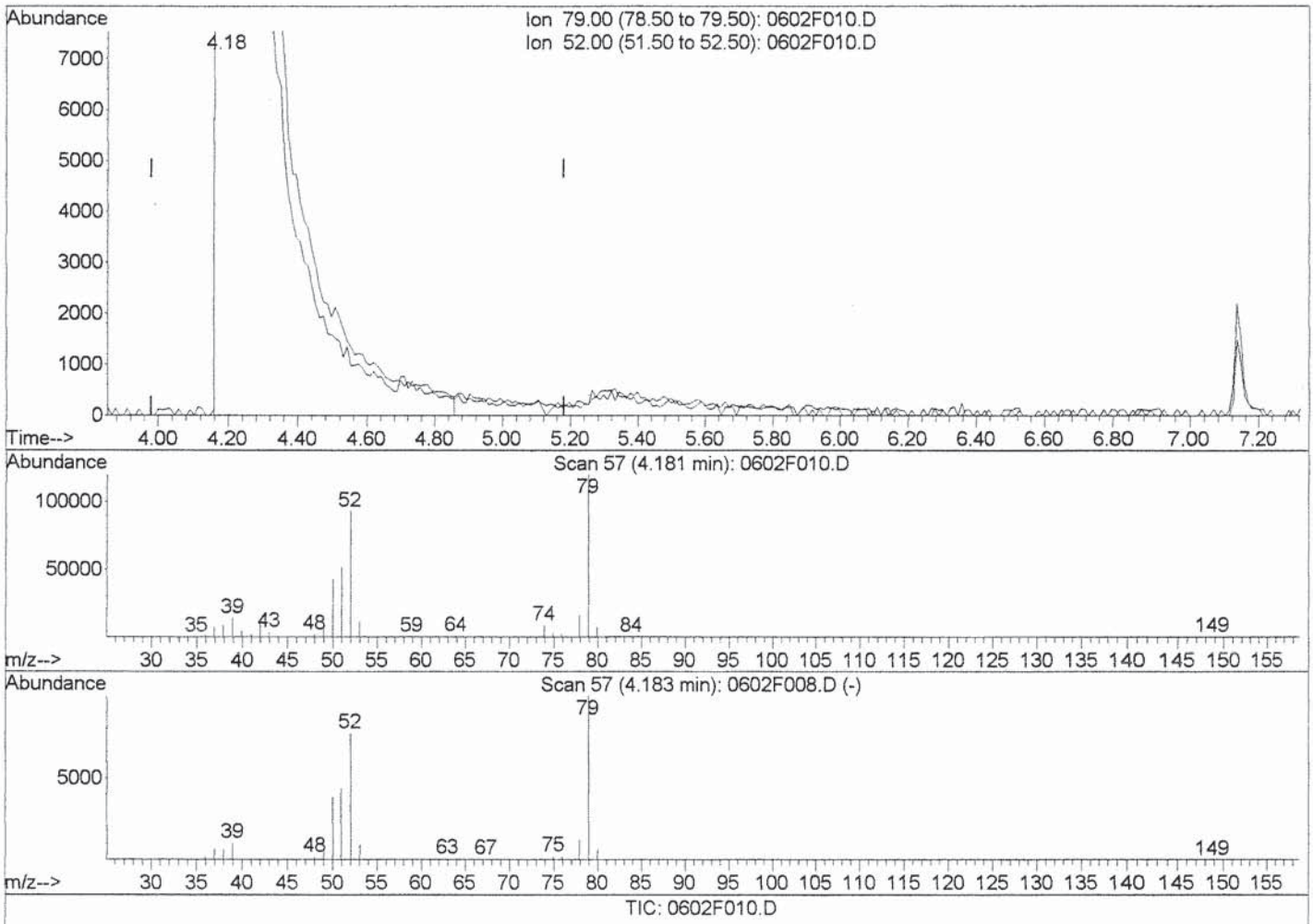
LB
6/4/10

0602F010.D 0602BNC7.M Thu Jun 03 10:57:41 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F010.D Vial: 8
Acq On : 2 Jun 2010 9:19 pm Operator: M.BUTCHER
Sample : 120PPM 8270 ICAL SVM32-21I Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:57 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F010.D

(3) Pyridine (T)

4.18min 126.66ug/ml

response 458112

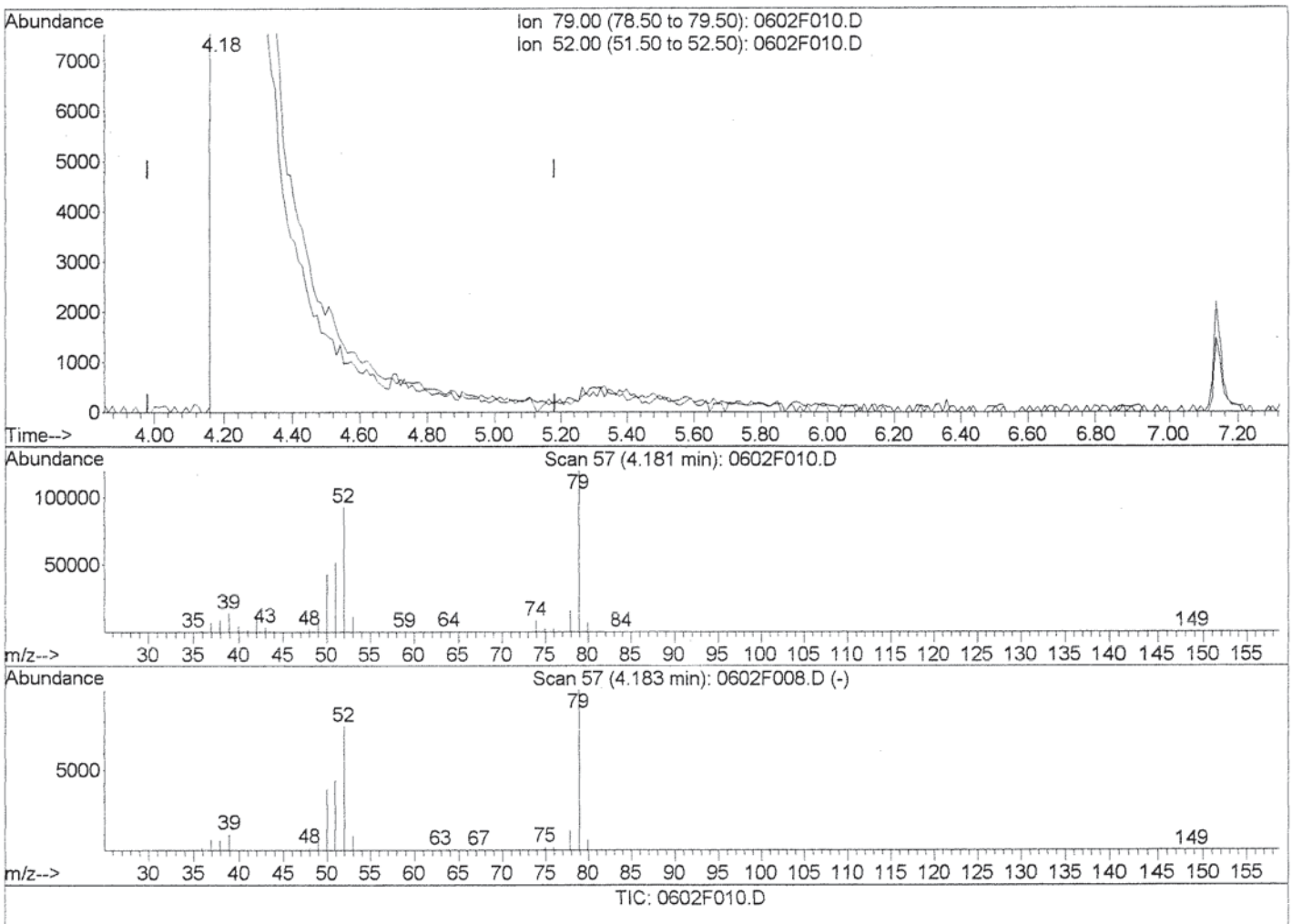
Ion	Exp%	Act%
79.00	100	100
52.00	77.00	77.36
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F010.D
Acq On : 2 Jun 2010 9:19 pm
Sample : 120PPM 8270 ICAL SVM32-21I
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:57 2010

Vial: 8
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F010.D

(3) Pyridine (T)

4.18min 131.11ug/ml m

response 474189

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	77.38
0.00	0.00	0.00
0.00	0.00	0.00

JC 6-3-10

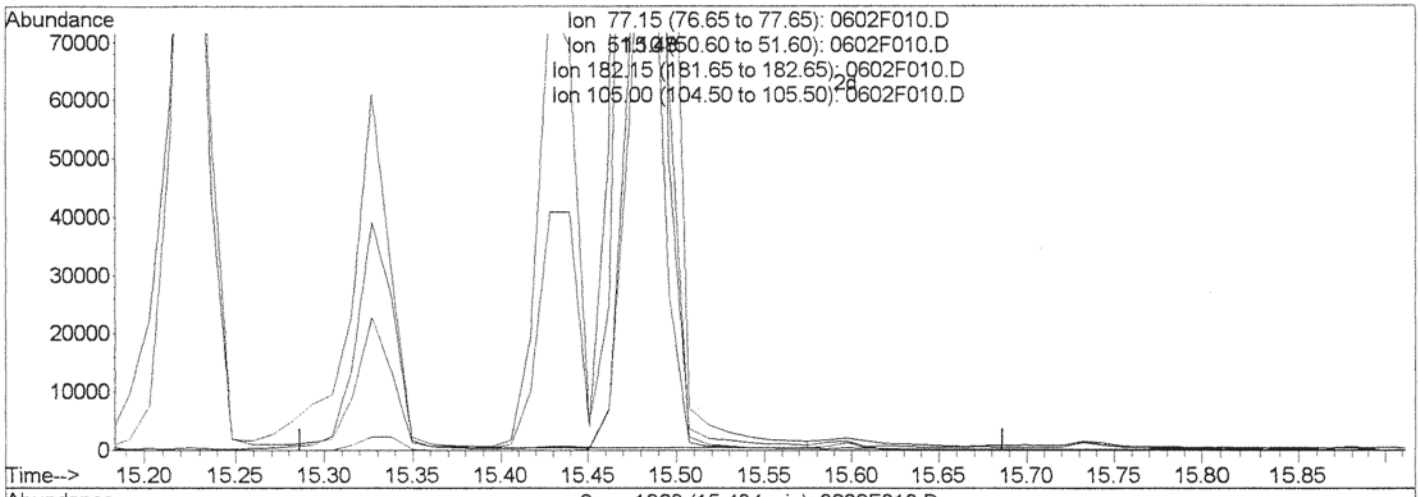
0602F010.D 0602BNC7.M Thu Jun 03 10:57:51 2010

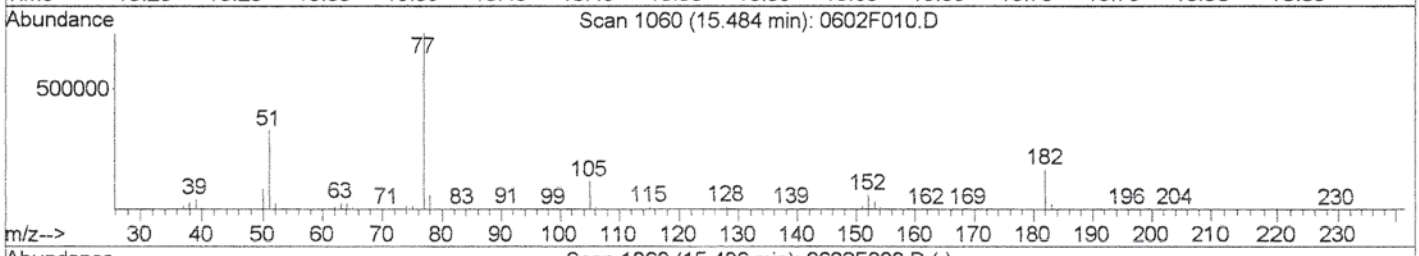
LC 6/4/10

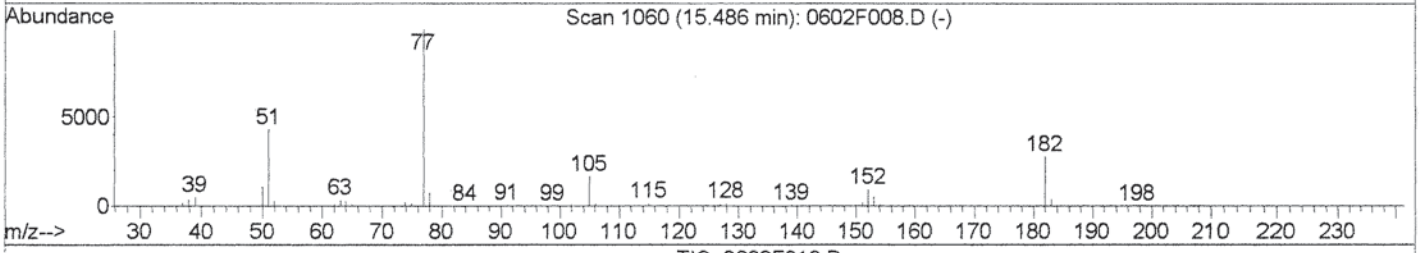
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F010.D Vial: 8
Acq On : 2 Jun 2010 9:19 pm Operator: M.BUTCHER
Sample : 120PPM 8270 ICAL SVM32-21I Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:57 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F010.D

(57) 1,2-Diphenylhydrazine (T)

15.48min 125.66ug/ml

response 939056

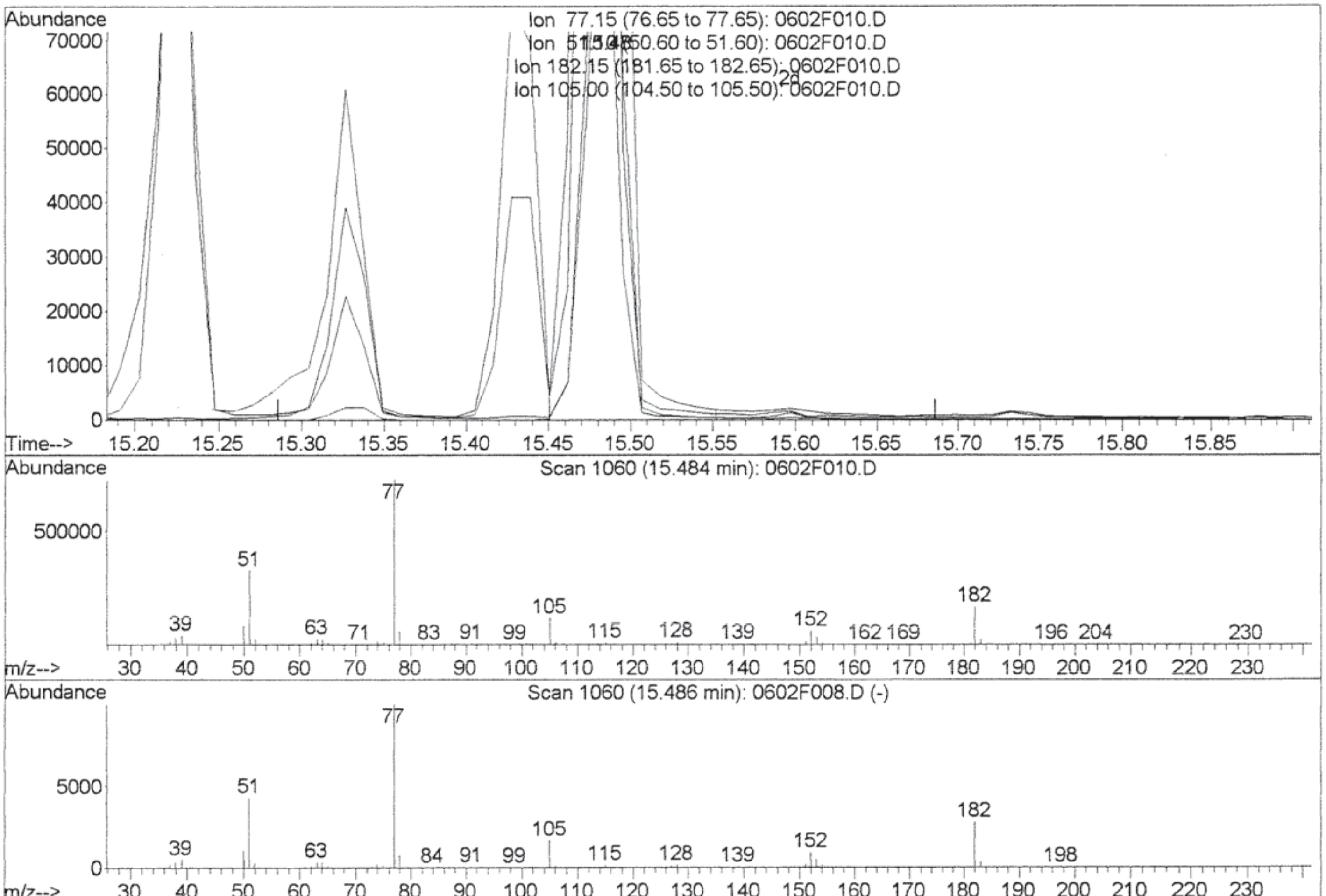
Ion	Exp%	Act%
77.15	100	100
51.10	43.10	44.67
182.15	27.90	22.70
105.00	16.60	15.94

0602F010.D 0602BNC7.M Thu Jun 03 10:58:14 2010

Quantitation Report (Qedit)

```
Data File : J:\MS07\DATA\060210\0602F010.D              Vial: 8
Acq On    :  2 Jun 2010   9:19 pm                   Operator: M.BUTCHER
Sample    : 120PPM 8270 ICAL SVM32-21I              Inst    : MS07
Misc      :                                         Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun  3 10:58 2010              Quant Results File: temp.res

Method        : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title         : BNA Calibration  Rtx-5MS 30m x 0.25mm    MS07
Last Update   : Thu Jun 03 10:48:31 2010
Response via  : Multiple Level Calibration
```



TIC: 0602F010.D

(57) 1,2-Diphenylhydrazine (T)

15.48min 117.28ug/ml m

response 876400

Ion	Exp%	Act%
77.15	100	100
51.10	43.10	44.72
182.15	27.90	22.69
105.00	16.60	15.97

OI
M 6-3-10

LB
6/4/10

0602F010.D 0602BNC7.M Thu Jun 03 10:58:18 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F011.D
Acq On : 2 Jun 2010 10:00 pm
Sample : 160PPM 8270 ICAL SVM32-21J
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:54 2010

Vial: 9
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	109086	40.00	ug/ml	0.00
21) Naphthalene-d8	11.46	136	448361	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.31	164	217211	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.71	188	273850	40.00	ug/ml	0.00
68) Chrysene-d12	21.15	240	312329	40.00	ug/ml	0.02
77) Perylene-d12	24.31	264	231441	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.14	112	488472	168.43	ug/ml	0.00
Spiked Amount 150.000	Range 21 - 100		Recovery = 112.29%#			
7) Phenol-d6	8.89	99	703915	174.03	ug/ml	0.02
Spiked Amount 150.000	Range 10 - 94		Recovery = 116.02%#			
19) Nitrobenzene-d5	10.29	82	690106	174.65	ug/ml	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 174.65%#			
38) 2-Fluorobiphenyl	13.25	172	1173825	164.85	ug/ml	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 164.85%#			
59) 2,4,6-Tribromophenol	15.60	330	176758	159.25	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery = 106.17%			
71) Terphenyl-d14	19.33	244	733803	153.44	ug/ml	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 153.44%#			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.15	42	444553m	171.10	ug/ml	
3) Pyridine	4.18	79	622573m	169.11	ug/ml	
5) Aniline	8.83	93	680212	166.38	ug/ml	66
6) Bis(2-chloroethyl) Ether	8.98	93	579071	173.92	ug/ml	94
8) Phenol	8.91	94	709006	171.14	ug/ml	99
9) 2-Chlorophenol	9.03	128	607699	170.14	ug/ml	94
10) 1,3-Dichlorobenzene	9.25	146	607647	160.40	ug/ml	99
11) 1,4-Dichlorobenzene	9.38	146	627752	162.70	ug/ml	99
12) 1,2-Dichlorobenzene	9.63	146	581957	159.34	ug/ml	99
13) Benzyl Alcohol	9.66	108	383597	174.86	ug/ml	95
14) Bis(2-chloroisopropyl) Eth	9.87	45	983546	179.73	ug/ml	95
15) 2-Methylphenol	9.88	107	456062	170.03	ug/ml	98
16) Hexachloroethane	10.18	117	284893	162.29	ug/ml	90
17) N-Nitrosodi-n-propylamine	10.11	70	486253	178.43	ug/ml	96
18) 4-Methylphenol	10.16	107	679988	166.93	ug/ml	99
20) Nitrobenzene	10.33	77	654697	179.26	ug/ml	96
22) Isophorone	10.76	82	1310662	162.05	ug/ml	98
23) 2-Nitrophenol	10.86	139	389366	172.85	ug/ml	91
24) 2,4-Dimethylphenol	11.00	122	489049	164.11	ug/ml	98
25) Bis(2-chloroethoxy)methane	11.13	93	709117	156.07	ug/ml	98

(#) = qualifier out of range (m) = manual integration
0602F011.D 0602BNC7.M Thu Jun 03 11:34:35 2010 Page 1

6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F011.D
Acq On : 2 Jun 2010 10:00 pm
Sample : 160PPM 8270 ICAL SVM32-21J
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:54 2010

Vial: 9
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	2,4-Dichlorophenol	11.29	162	555411	164.29 ug/ml	96
27)	Benzoic Acid	11.38	122	432469	169.34 ug/ml	99
28)	1,2,4-Trichlorobenzene	11.38	180	557107	155.22 ug/ml	100
29)	Naphthalene	11.49	128	1685511	156.69 ug/ml	99
30)	4-Chloroaniline	11.62	127	726035	152.98 ug/ml	95
31)	Hexachlorobutadiene	11.71	225	343046	150.65 ug/ml	100
32)	4-Chloro-3-methylphenol	12.47	107	525159	148.81 ug/ml#	52
33)	2-Methylnaphthalene	12.63	142	1062245	155.19 ug/ml	98
35)	Hexachlorocyclopentadiene	12.89	237	368442	156.39 ug/ml	96
36)	2,4,6-Trichlorophenol	13.12	196	371381	165.74 ug/ml	98
37)	2,4,5-Trichlorophenol	13.19	196	416064	166.62 ug/ml	99
39)	2-Chloronaphthalene	13.42	162	1046731	166.62 ug/ml	100
40)	2-Nitroaniline	13.63	65	348108	172.25 ug/ml	89
41)	Acenaphthylene	14.08	152	1529431	158.04 ug/ml	99
42)	Dimethyl Phthalate	13.95	163	1114437	150.92 ug/ml	100
43)	2,6-Dinitrotoluene	14.04	165	260093	155.43 ug/ml	87
44)	Acenaphthene	14.37	154	860528	155.80 ug/ml	99
45)	3-Nitroaniline	14.31	138	275708	156.59 ug/ml	98
46)	2,4-Dinitrophenol	14.48	184	170361	175.46 ug/ml	84
47)	Dibenzofuran	14.66	168	1350415	155.06 ug/ml	93
48)	4-Nitrophenol	14.66	109	158591	166.35 ug/ml#	74
49)	2,4-Dinitrotoluene	14.68	165	321008	151.37 ug/ml	78
50)	2,3,4,6-Tetrachlorophenol	14.88	232	284009	156.00 ug/ml	97
51)	Fluorene	15.21	166	1003639	153.79 ug/ml	97
52)	4-Chlorophenyl Phenyl Ethe	15.23	204	509416	152.48 ug/ml	99
53)	Diethyl Phthalate	15.10	149	1001407	140.28 ug/ml	99
54)	4-Nitroaniline	15.31	138	246938	162.04 ug/ml	97
55)	2-Methyl-4,6-dinitrophenol	15.34	198	190402	165.07 ug/ml#	69
56)	N-Nitrosodiphenylamine	15.45	169	632192	145.29 ug/ml	99
57)	1,2-Diphenylhydrazine	15.49	77	1102059m	148.99 ug/ml	
60)	4-Bromophenyl Phenyl Ether	16.02	248	273308	165.54 ug/ml	99
61)	Hexachlorobenzene	16.09	284	308236	161.07 ug/ml	97
62)	Pentachlorophenol	16.44	266	181671	168.94 ug/ml	98
63)	Phenanthrene	16.75	178	1098185	150.94 ug/ml	100
64)	Anthracene	16.83	178	1199856	156.86 ug/ml	99
65)	Carbazole	17.12	167	1051885	168.45 ug/ml	100
66)	Di-n-butyl Phthalate	17.74	149	1300895	156.18 ug/ml	99
67)	Fluoranthene	18.67	202	1143096	173.07 ug/ml	99
69)	Benzidine	18.93	184	421674	160.79 ug/ml	99
70)	Pyrene	19.03	202	1196757	143.56 ug/ml	99
72)	Butyl Benzyl Phthalate	20.17	149	775186	163.18 ug/ml	97

(#) = qualifier out of range (m) = manual integration
0602F011.D 0602BNC7.M Thu Jun 03 11:34:35 2010 Page 2

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Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F011.D Vial: 9
Acq On : 2 Jun 2010 10:00 pm Operator: M.BUTCHER
Sample : 160PPM 8270 ICAL SVM32-21J Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:54 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.12	252	496687	152.18	ug/ml	99
74)	Benz(a)anthracene	21.12	228	1141284	155.48	ug/ml	100
75)	Chrysene	21.20	228	1081446	152.18	ug/ml	100
76)	Bis(2-ethylhexyl) Phthalat	21.32	149	1125298	166.45	ug/ml	99
78)	Di-n-octyl Phthalate	22.79	149	1847807	181.27	ug/ml	98
79)	Benzo(b)fluoranthene	23.47	252	1034745	173.55	ug/ml	98
80)	Benzo(k)fluoranthene	23.55	252	1015032	164.05	ug/ml	98
81)	Benzo(a)pyrene	24.20	252	832627	168.14	ug/ml	99
82)	Indeno(1,2,3-cd)pyrene	26.78	276	752501	175.47	ug/ml	97
83)	Dibenz(a,h)anthracene	26.86	278	795069	174.05	ug/ml	98
84)	Benzo(g,h,i)perylene	27.37	276	748550	161.71	ug/ml	99

LB
6/14/10

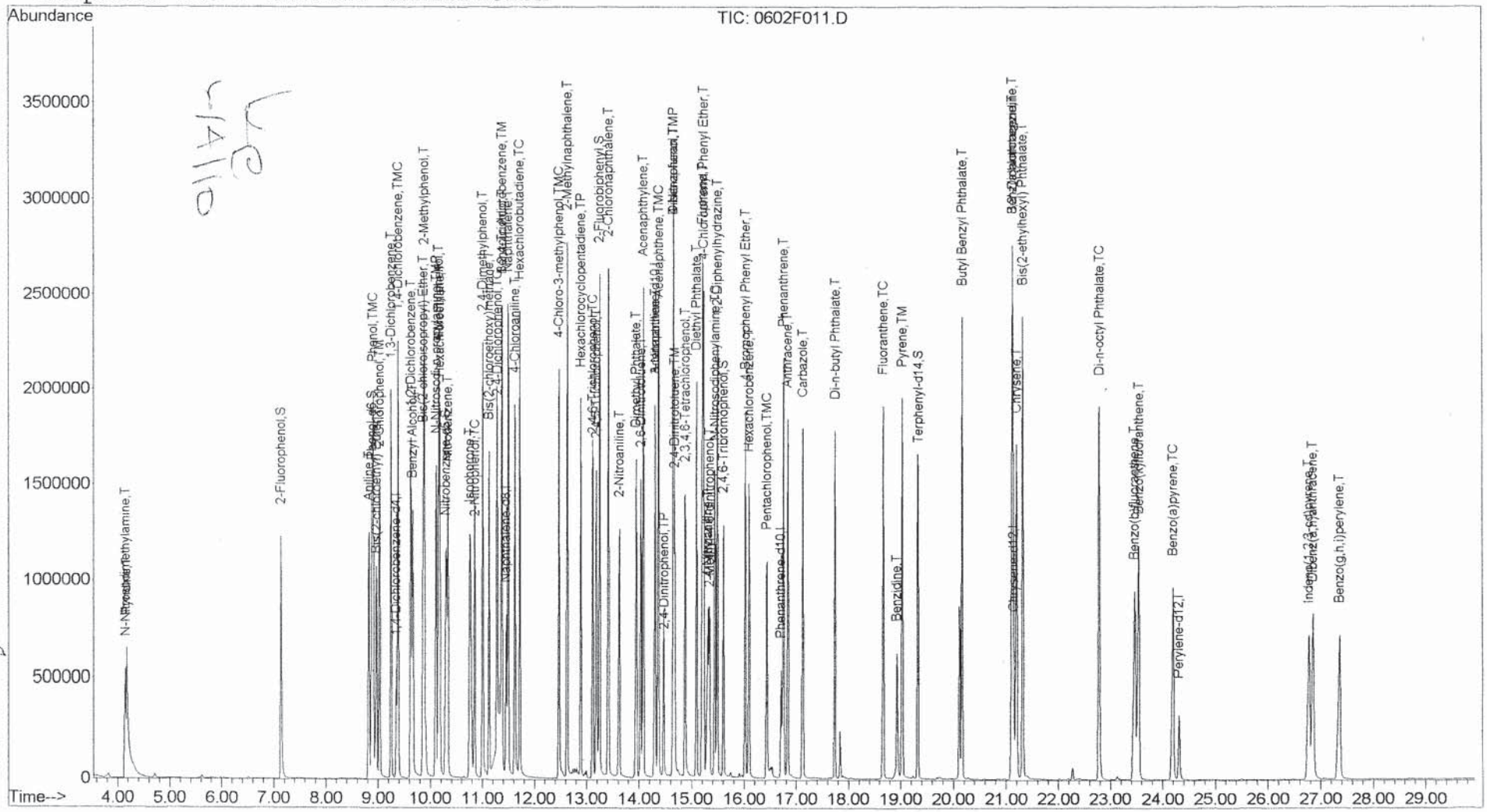
(#) = qualifier out of range (m) = manual integration
0602F011.D 0602BNC7.M Thu Jun 03 11:34:35 2010 Page 3

6-7-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F011.D Vial: 9
Acq On : 2 Jun 2010 10:00 pm Operator: M.BUTCHER
Sample : 160PPM 8270 ICAL SVM32-21J Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:59 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration



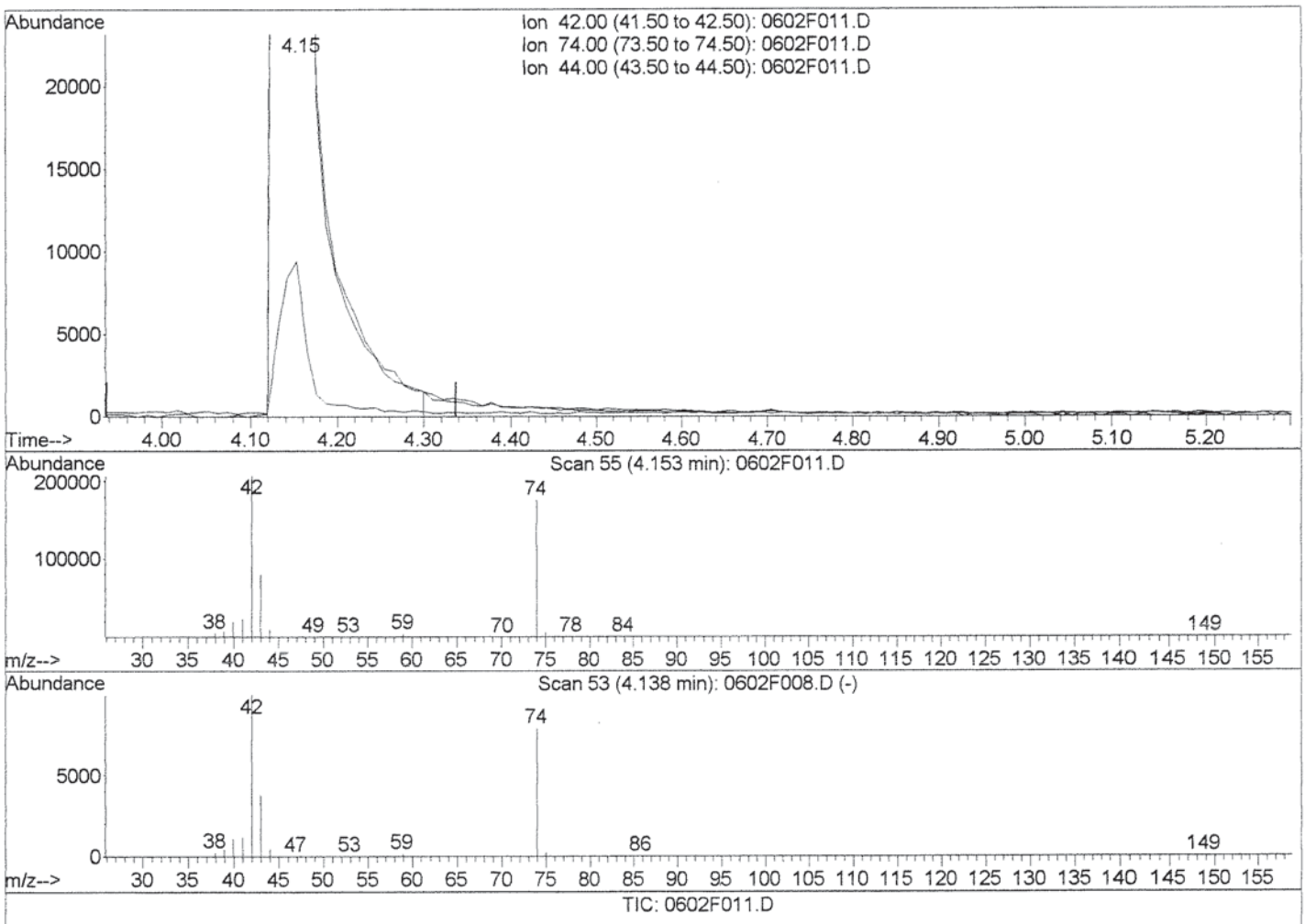
1424

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F011.D
Acq On : 2 Jun 2010 10:00 pm
Sample : 160PPM 8270 ICAL SVM32-21J
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:48 2010

Vial: 9
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F011.D

(2) N-Nitrosodimethylamine (T)

4.15min 166.82ug/ml

response 433435

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	84.43
44.00	4.40	4.43
0.00	0.00	0.00

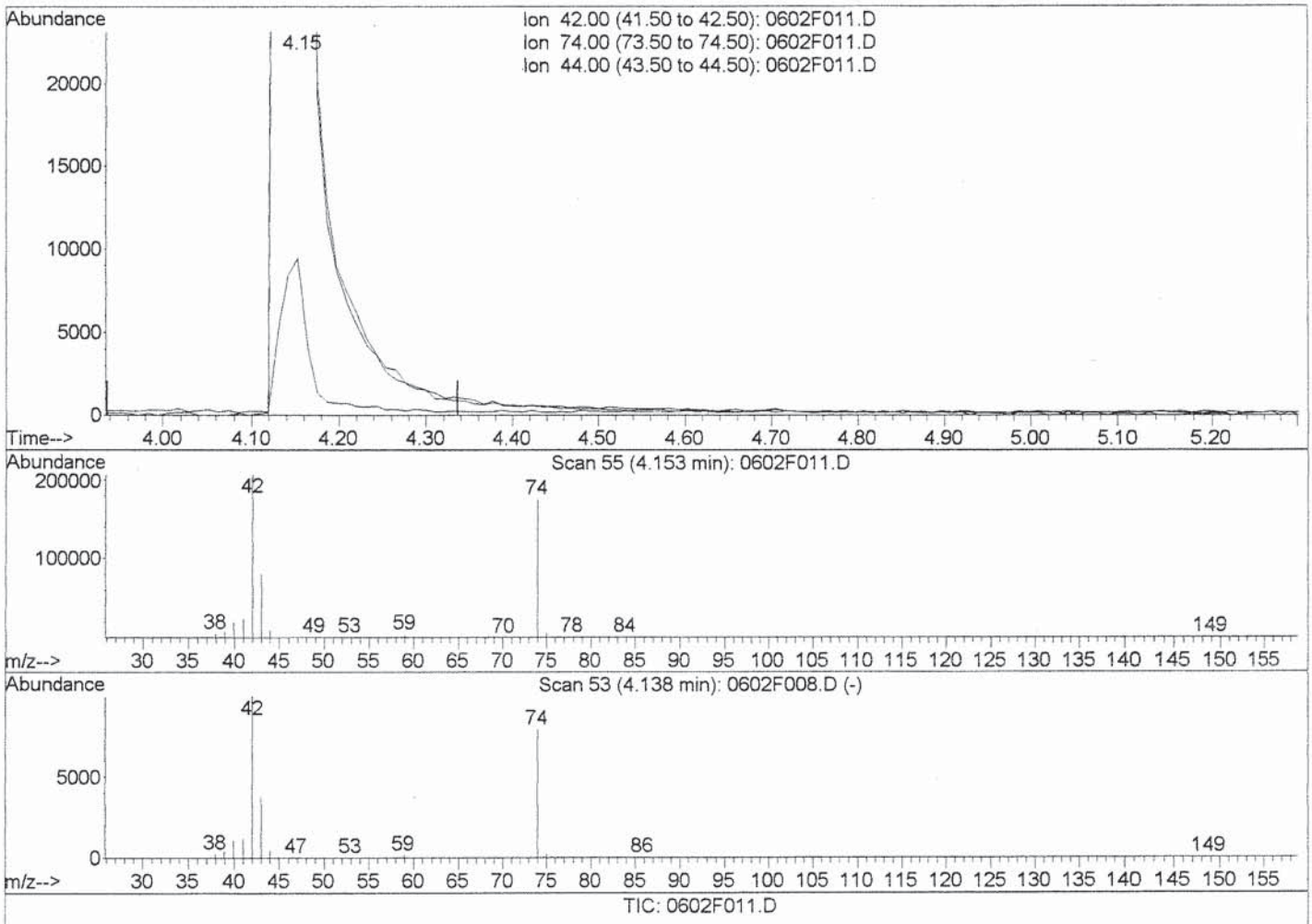
0602F011.D 0602BNC7.M Thu Jun 03 10:58:33 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F011.D
Acq On : 2 Jun 2010 10:00 pm
Sample : 160PPM 8270 ICAL SVM32-21J
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:58 2010

Vial: 9
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F011.D

(2) N-Nitrosodimethylamine (T)

4.15min 171.10ug/ml m

response 444553

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	84.49
44.00	4.40	4.54
0.00	0.00	0.00

IC 6-3-10

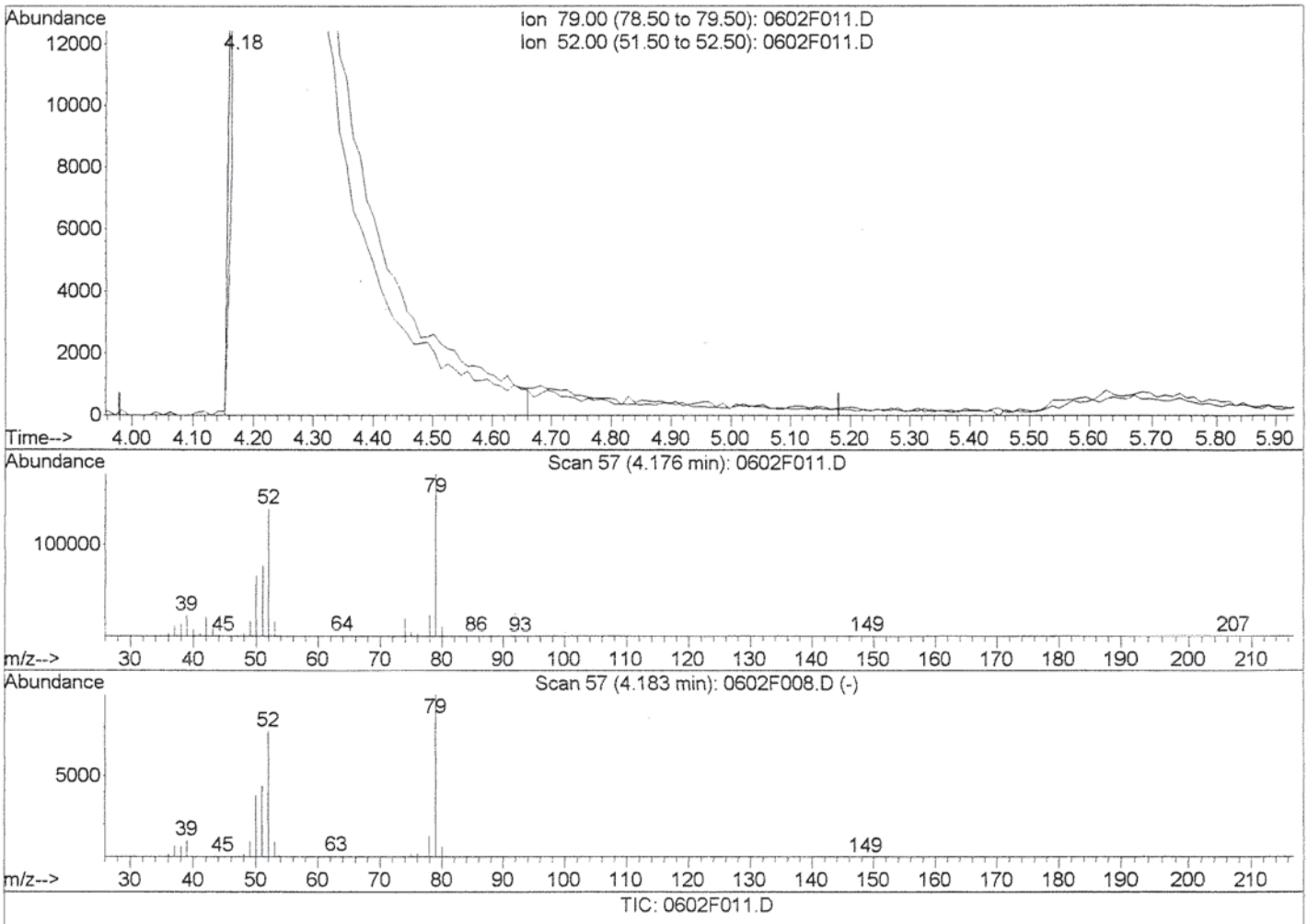
0602F011.D 0602BNC7.M Thu Jun 03 10:58:37 2010

LB 6/4/10

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F011.D Vial: 9
Acq On : 2 Jun 2010 10:00 pm Operator: M.BUTCHER
Sample : 160PPM 8270 ICAL SVM32-21J Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:58 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F011.D

(3) Pyridine (T)

4.18min 164.71ug/ml

response 606392

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	78.27
0.00	0.00	0.00
0.00	0.00	0.00

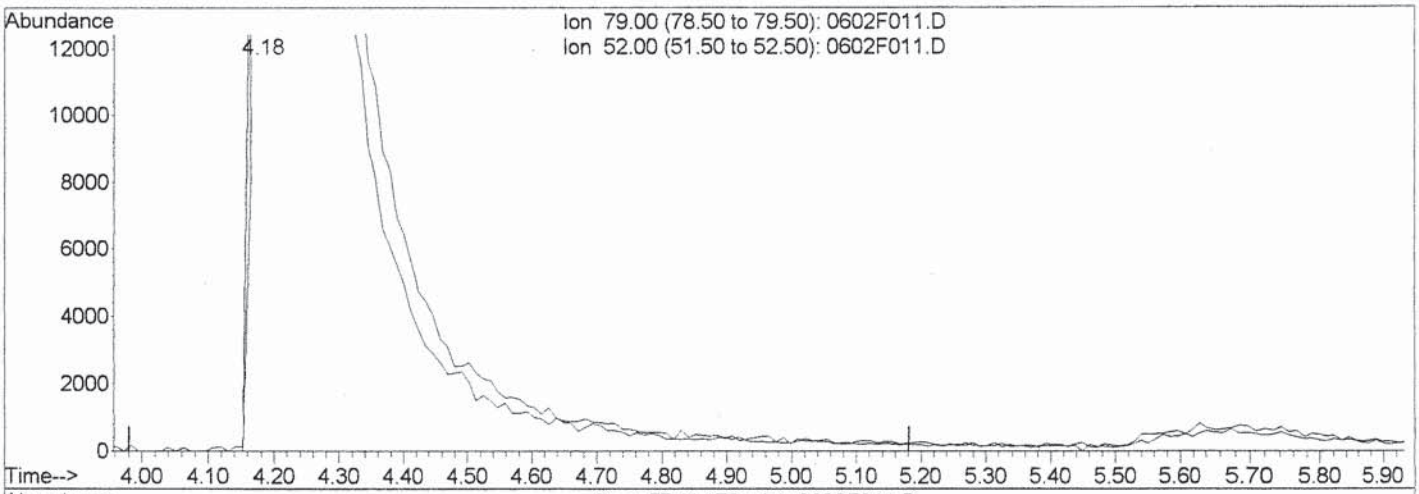
0602F011.D 0602BNC7.M Thu Jun 03 10:58:45 2010

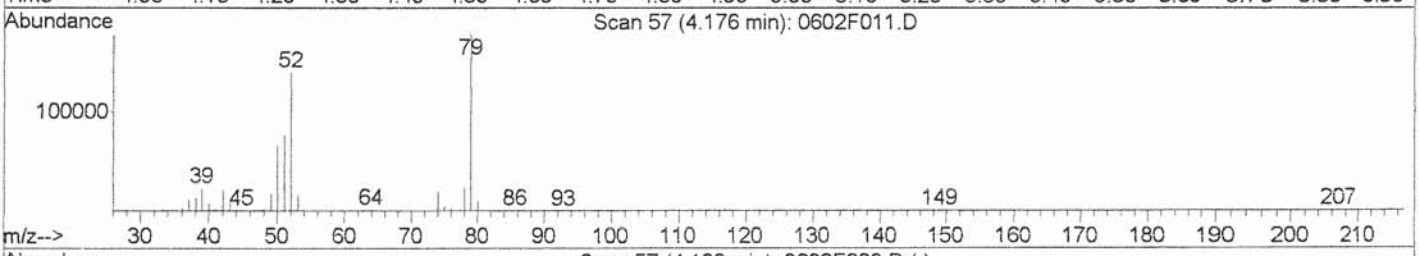
Quantitation Report (Qedit)

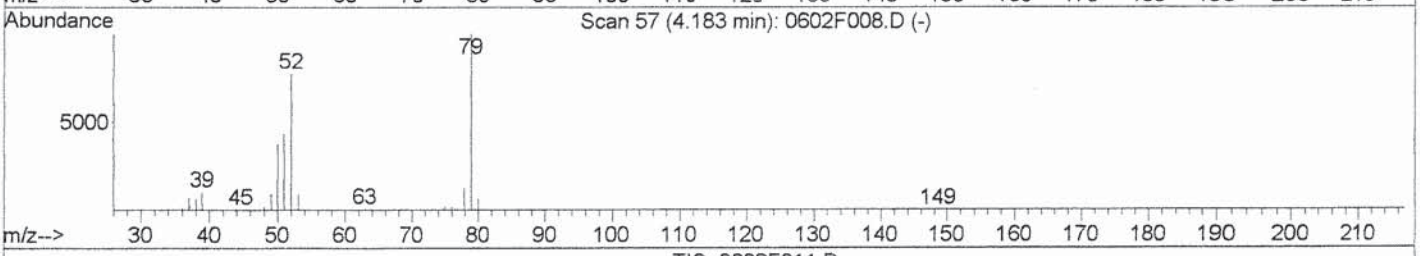
Data File : J:\MS07\DATA\060210\0602F011.D
Acq On : 2 Jun 2010 10:00 pm
Sample : 160PPM 8270 ICAL SVM32-21J
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:58 2010

Vial: 9
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F011.D

(3) Pyridine (T)

4.18min 169.11ug/ml m

response 622573

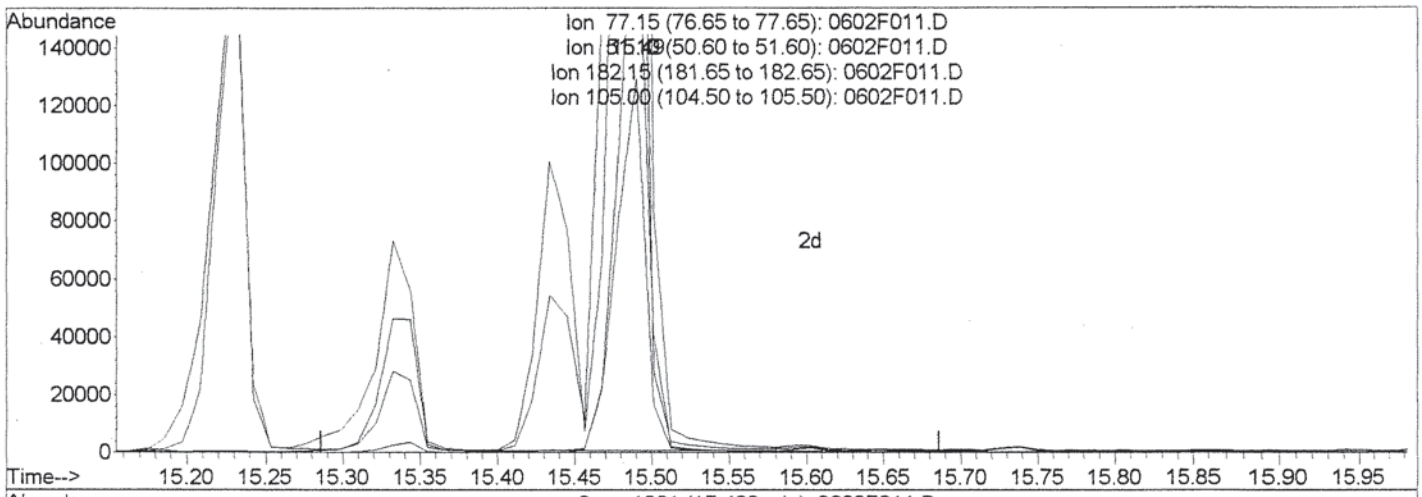
Ion	Exp%	Act%
79.00	100	100
52.00	77.00	78.35
0.00	0.00	0.00
0.00	0.00	0.00

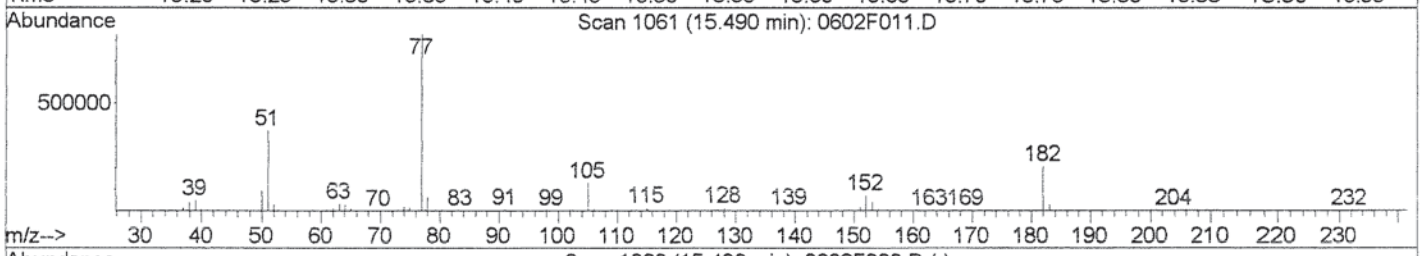
0602F011.D 0602BNC7.M Thu Jun 03 10:58:49 2010

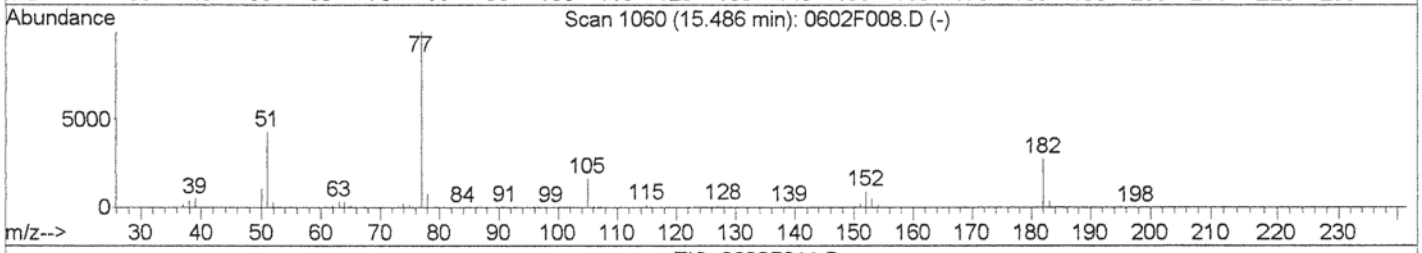
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F011.D Vial: 9
Acq On : 2 Jun 2010 10:00 pm Operator: M.BUTCHER
Sample : 160PPM 8270 ICAL SVM32-21J Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:58 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F011.D

(57) 1,2-Diphenylhydrazine (T)

15.49min 160.44ug/ml

response 1186743

Ion	Exp%	Act%
77.15	100	100
51.10	43.10	44.86
182.15	27.90	25.10
105.00	16.60	15.56

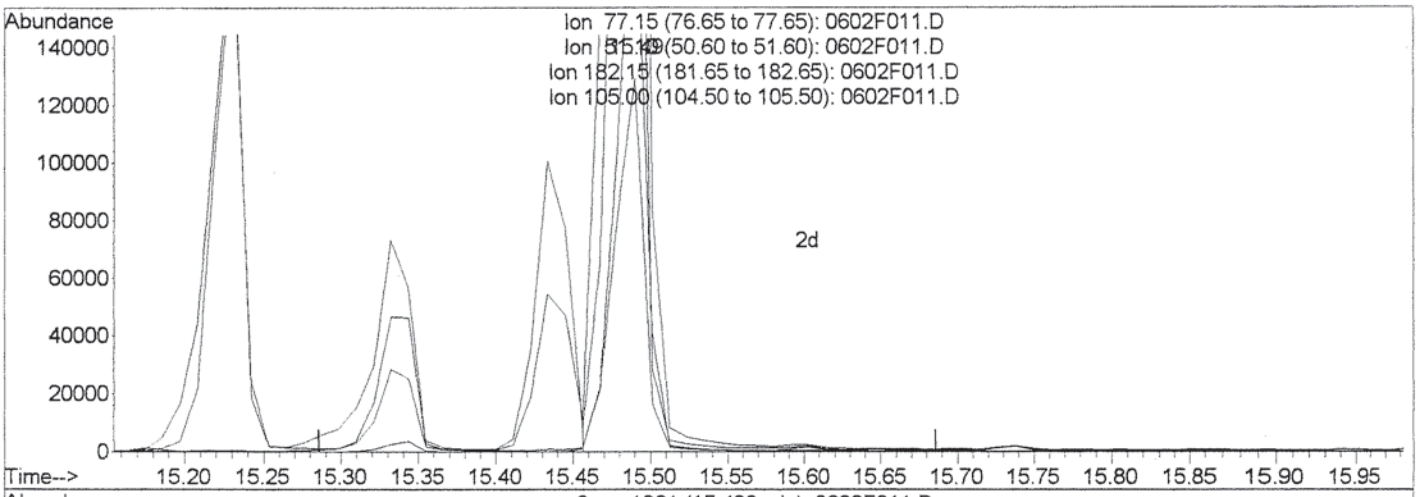
0602F011.D 0602BNC7.M Thu Jun 03 10:59:14 2010

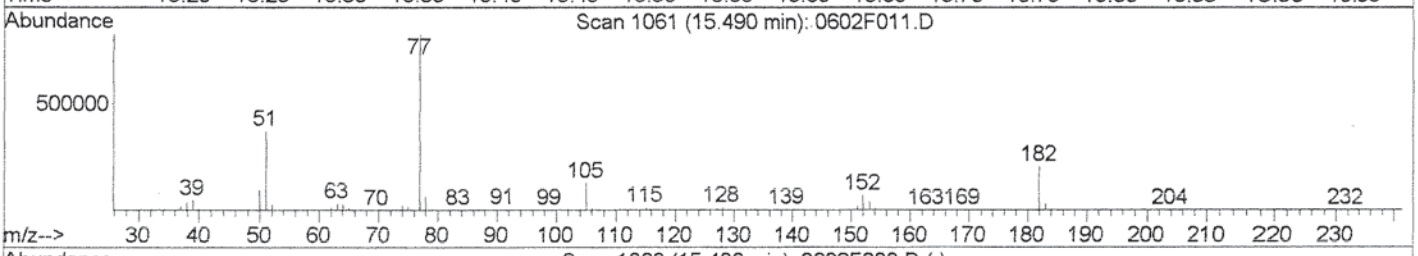
Quantitation Report (Qedit)

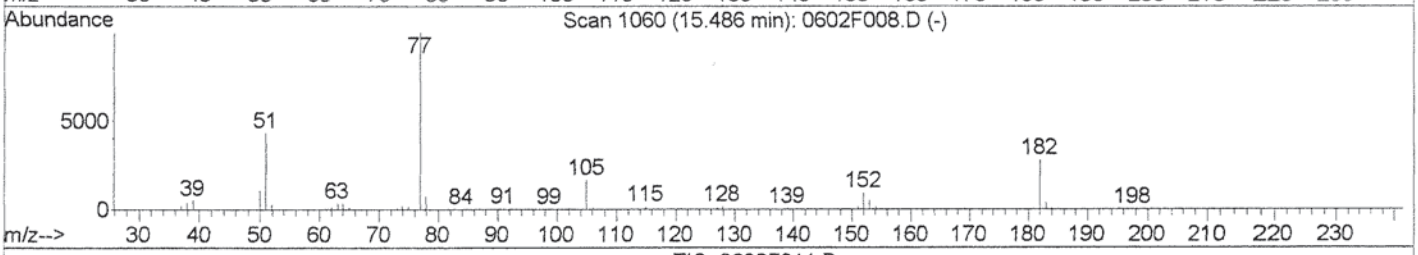
Data File : J:\MS07\DATA\060210\0602F011.D
Acq On : 2 Jun 2010 10:00 pm
Sample : 160PPM 8270 ICAL SVM32-21J
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:59 2010

Vial: 9
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F011.D

(57) 1,2-Diphenylhydrazine (T)

15.49min 148.99ug/ml m

response 1102059

Ion	Exp%	Act%
77.15	100	100
51.10	43.10	44.93
182.15	27.90	25.08
105.00	16.60	15.60

0602F011.D 0602BNC7.M Thu Jun 03 10:59:17 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F012.D Vial: 10
Acq On : 2 Jun 2010 10:40 pm Operator: M.BUTCHER
Sample : 200PPM 8270 ICAL SVM32-21K Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:55 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	116061	40.00	ug/ml	0.00
21) Naphthalene-d8	11.46	136	452844	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.31	164	221365	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.71	188	281460	40.00	ug/ml	0.00
68) Chrysene-d12	21.15	240	298121	40.00	ug/ml	0.02
77) Perylene-d12	24.32	264	225296	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.14	112	642798	208.32	ug/ml	0.00
Spiked Amount 150.000	Range 21 - 100		Recovery = 138.88%#			
7) Phenol-d6	8.89	99	900056	209.14	ug/ml	0.02
Spiked Amount 150.000	Range 10 - 94		Recovery = 139.43%#			
19) Nitrobenzene-d5	10.31	82	872957	207.65	ug/ml	0.02
Spiked Amount 100.000	Range 35 - 114		Recovery = 207.65%#			
38) 2-Fluorobiphenyl	13.26	172	1456119	200.65	ug/ml	0.02
Spiked Amount 100.000	Range 43 - 116		Recovery = 200.65%#			
59) 2,4,6-Tribromophenol	15.60	330	225426	197.60	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery = 131.73%#			
71) Terphenyl-d14	19.33	244	931053	203.96	ug/ml	0.00
Spiked Amount 100.000	Range 33 - 141		Recovery = 203.96%#			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.14	42	578026m	209.10	ug/ml	
3) Pyridine	4.17	79	854297m	218.10	ug/ml	
5) Aniline	8.83	93	877450	201.72	ug/ml	65
6) Bis(2-chloroethyl) Ether	8.98	93	747933	211.14	ug/ml	98
8) Phenol	8.91	94	941008	213.50	ug/ml	98
9) 2-Chlorophenol	9.03	128	788481	207.49	ug/ml	94
10) 1,3-Dichlorobenzene	9.25	146	792102	196.53	ug/ml	98
11) 1,4-Dichlorobenzene	9.38	146	790452	192.55	ug/ml	99
12) 1,2-Dichlorobenzene	9.63	146	787448	202.65	ug/ml	99
13) Benzyl Alcohol	9.68	108	487083	208.69	ug/ml	96
14) Bis(2-chloroisopropyl) Eth	9.87	45	1275373	219.05	ug/ml	93
15) 2-Methylphenol	9.89	107	559226	195.96	ug/ml	89
16) Hexachloroethane	10.18	117	342613	183.44	ug/ml	87
17) N-Nitrosodi-n-propylamine	10.12	70	589162	203.20	ug/ml	91
18) 4-Methylphenol	10.16	107	841682	194.21	ug/ml	99
20) Nitrobenzene	10.34	77	772145	198.71	ug/ml	96
22) Isophorone	10.77	82	1691139	207.02	ug/ml	98
23) 2-Nitrophenol	10.86	139	491319	215.95	ug/ml	98
24) 2,4-Dimethylphenol	11.02	122	628211	208.72	ug/ml	97
25) Bis(2-chloroethoxy)methane	11.13	93	952443	207.54	ug/ml	99

(#) = qualifier out of range (m) = manual integration
0602F012.D 0602BNC7.M Thu Jun 03 11:34:36 2010 Page 1

1431 LABO

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F012.D
Acq On : 2 Jun 2010 10:40 pm
Sample : 200PPM 8270 ICAL SVM32-21K
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:55 2010

Vial: 10
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
26)	2,4-Dichlorophenol	11.29	162	686749	201.13 ug/ml	97
27)	Benzoic Acid	11.39	122	546017	211.68 ug/ml	98
28)	1,2,4-Trichlorobenzene	11.38	180	688642	189.97 ug/ml	99
29)	Naphthalene	11.50	128	2001585	184.23 ug/ml	98
30)	4-Chloroaniline	11.63	127	937251	195.53 ug/ml	95
31)	Hexachlorobutadiene	11.72	225	430003	186.97 ug/ml	100
32)	4-Chloro-3-methylphenol	12.47	107	666276	186.93 ug/ml#	52
33)	2-Methylnaphthalene	12.63	142	1221574	176.70 ug/ml	98
35)	Hexachlorocyclopentadiene	12.89	237	485003	200.45 ug/ml	98
36)	2,4,6-Trichlorophenol	13.12	196	472736	207.01 ug/ml	98
37)	2,4,5-Trichlorophenol	13.19	196	542628	213.23 ug/ml	100
39)	2-Chloronaphthalene	13.42	162	1325997	207.12 ug/ml	100
40)	2-Nitroaniline	13.63	65	396200	192.37 ug/ml	97
41)	Acenaphthylene	14.08	152	1969233	199.67 ug/ml	99
42)	Dimethyl Phthalate	13.96	163	1340665	178.15 ug/ml	100
43)	2,6-Dinitrotoluene	14.04	165	337116	197.68 ug/ml	93
44)	Acenaphthene	14.38	154	1087074	193.12 ug/ml	99
45)	3-Nitroaniline	14.31	138	362314	201.92 ug/ml	96
46)	2,4-Dinitrophenol	14.48	184	206903	209.10 ug/ml	98
47)	Dibenzofuran	14.66	168	1583306	178.39 ug/ml	93
48)	4-Nitrophenol	14.66	109	203750	209.71 ug/ml#	84
49)	2,4-Dinitrotoluene	14.69	165	403304	186.60 ug/ml	92
50)	2,3,4,6-Tetrachlorophenol	14.88	232	360129	194.10 ug/ml	94
51)	Fluorene	15.21	166	1189053	178.78 ug/ml	98
52)	4-Chlorophenyl Phenyl Ethe	15.23	204	628997	184.74 ug/ml	98
53)	Diethyl Phthalate	15.11	149	1272424	174.90 ug/ml	99
54)	4-Nitroaniline	15.32	138	319692	205.84 ug/ml	96
55)	2-Methyl-4,6-dinitrophenol	15.34	198	226975	193.09 ug/ml#	35
56)	N-Nitrosodiphenylamine	15.45	169	761443	171.71 ug/ml	99
57)	1,2-Diphenylhydrazine	15.49	77	1319201m	175.00 ug/ml	
60)	4-Bromophenyl Phenyl Ether	16.02	248	328541	193.61 ug/ml	94
61)	Hexachlorobenzene	16.10	284	385427	195.96 ug/ml	83
62)	Pentachlorophenol	16.44	266	238109	215.44 ug/ml	98
63)	Phenanthrene	16.75	178	1423047	190.31 ug/ml	100
64)	Anthracene	16.84	178	1497529	190.48 ug/ml	99
65)	Carbazole	17.13	167	1313571	204.67 ug/ml	99
66)	Di-n-butyl Phthalate	17.75	149	1759386	205.51 ug/ml	99
67)	Fluoranthene	18.68	202	1547714	228.00 ug/ml	97
69)	Benzidine	18.94	184	514176	205.41 ug/ml	98
70)	Pyrene	19.04	202	1657705	208.33 ug/ml	99
72)	Butyl Benzyl Phthalate	20.17	149	1014128	223.65 ug/ml	92

(#) = qualifier out of range (m) = manual integration
0602F012.D 0602BNC7.M Thu Jun 03 11:34:36 2010 Page 2

6-3-10

LB 6/4/10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F012.D
Acq On : 2 Jun 2010 10:40 pm
Sample : 200PPM 8270 ICAL SVM32-21K
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 03 10:48:55 2010

Vial: 10
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.14	252	599232	192.34	ug/ml	99
74)	Benz(a)anthracene	21.13	228	1419495	202.60	ug/ml	100
75)	Chrysene	21.22	228	1368118	201.70	ug/ml	99
76)	Bis(2-ethylhexyl) Phthalat	21.33	149	1353572	209.75	ug/ml	99
78)	Di-n-octyl Phthalate	22.79	149	2229837	224.71	ug/ml	98
79)	Benzo(b)fluoranthene	23.48	252	1300661	224.11	ug/ml	98
80)	Benzo(k)fluoranthene	23.55	252	1320192	219.19	ug/ml	100
81)	Benzo(a)pyrene	24.21	252	1003724	208.23	ug/ml	99
82)	Indeno(1,2,3-cd)pyrene	26.79	276	918704	220.07	ug/ml	100
83)	Dibenz(a,h)anthracene	26.87	278	997110	224.23	ug/ml	98
84)	Benzo(g,h,i)perylene	27.38	276	980529	217.60	ug/ml	99

LB
6-4-10

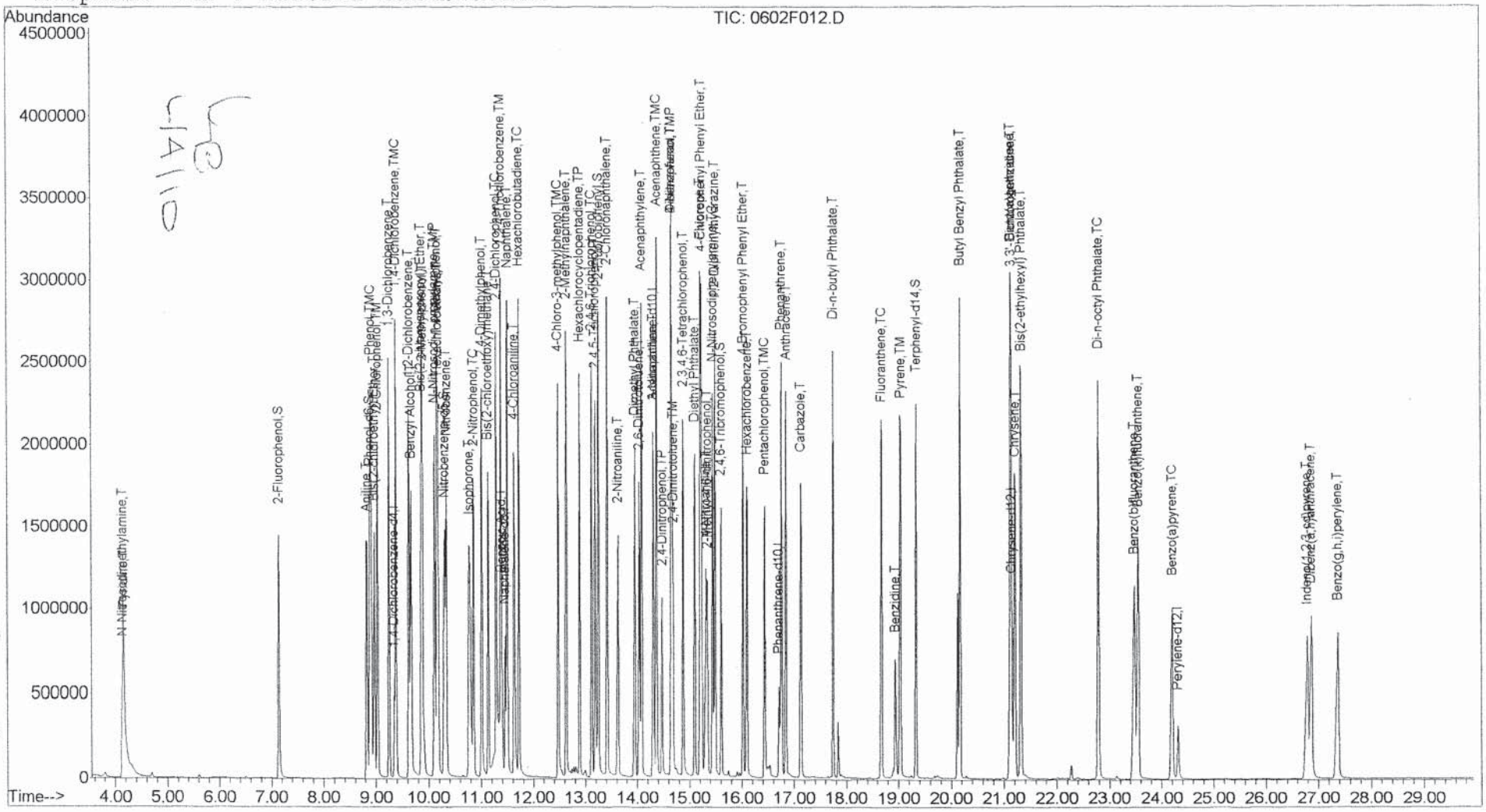
(#) = qualifier out of range (m) = manual integration
0602F012.D 0602BNC7.M Thu Jun 03 11:34:36 2010

6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F012.D Vial: 10
Acq On : 2 Jun 2010 10:40 pm Operator: M.BUTCHER
Sample : 200PPM 8270 ICAL SVM32-21K Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 11:00 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration



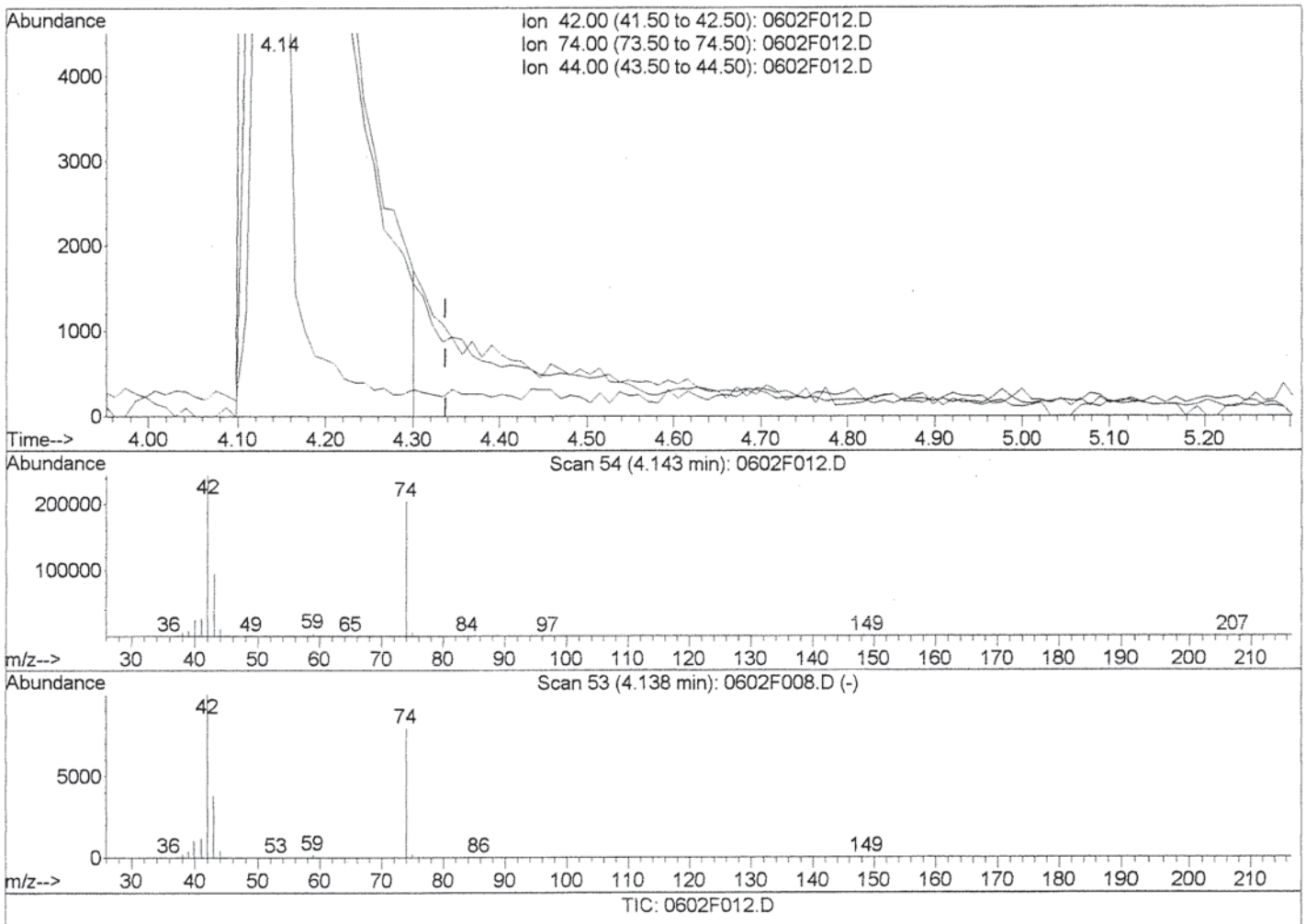
1434

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F012.D
Acq On : 2 Jun 2010 10:40 pm
Sample : 200PPM 8270 ICAL SVM32-21K
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:48 2010

Vial: 10
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F012.D

(2) N-Nitrosodimethylamine (T)

4.14min 202.99ug/ml

response 561118

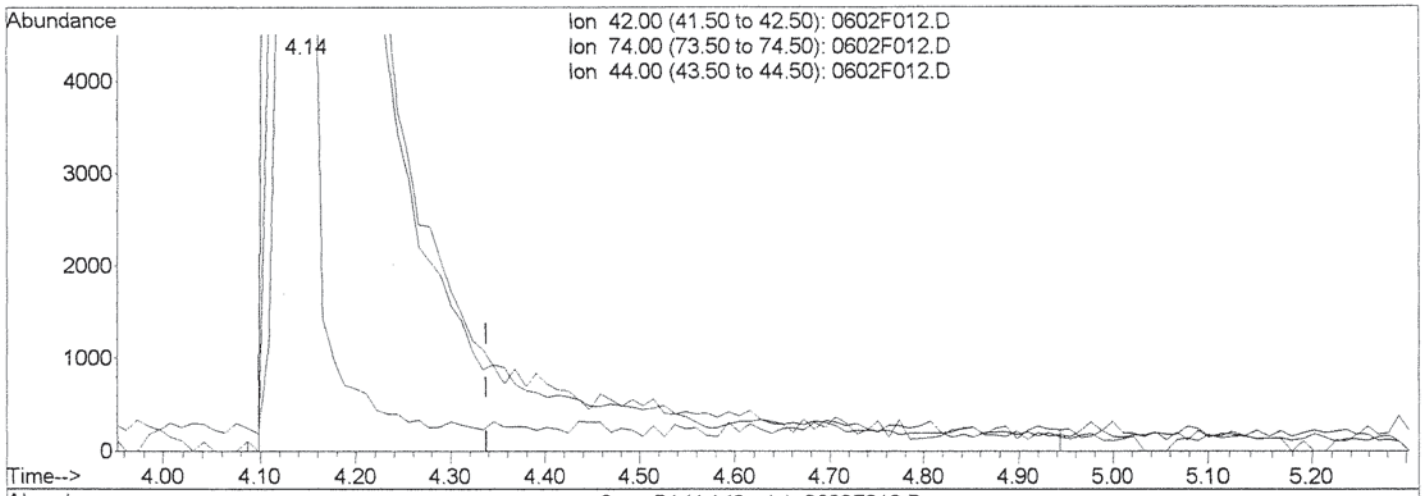
Ion	Exp%	Act%
42.00	100	100
74.00	79.30	83.71
44.00	4.40	4.58
0.00	0.00	0.00

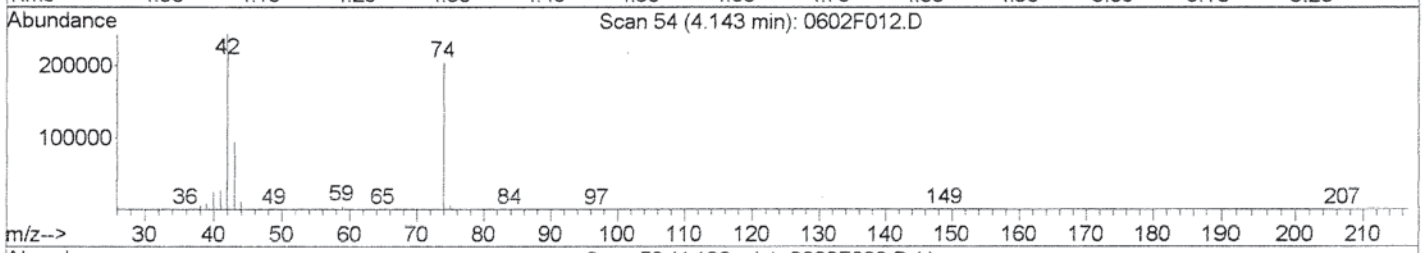
0602F012.D 0602BNC7.M Thu Jun 03 10:59:35 2010

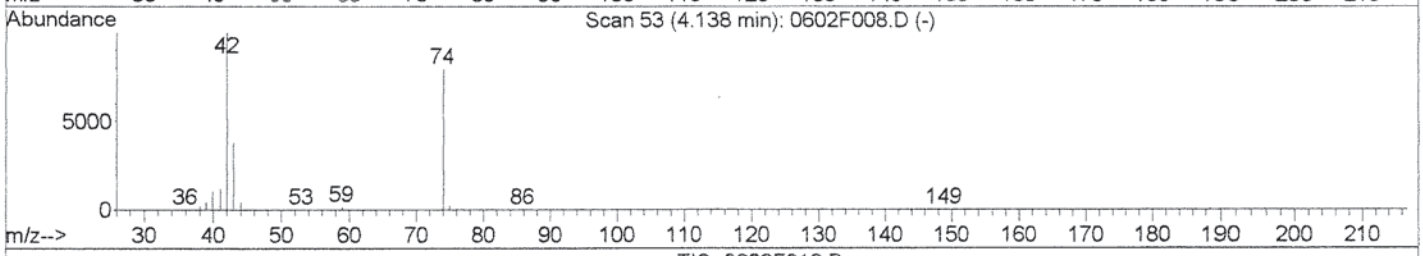
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F012.D Vial: 10
Acq On : 2 Jun 2010 10:40 pm Operator: M.BUTCHER
Sample : 200PPM 8270 ICAL SVM32-21K Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:59 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F012.D

(2) N-Nitrosodimethylamine (T)

4.14min 209.10ug/ml m

response 578026

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	83.74
44.00	4.40	4.69
0.00	0.00	0.00

5 C 6-3-10

LB 6/4/10

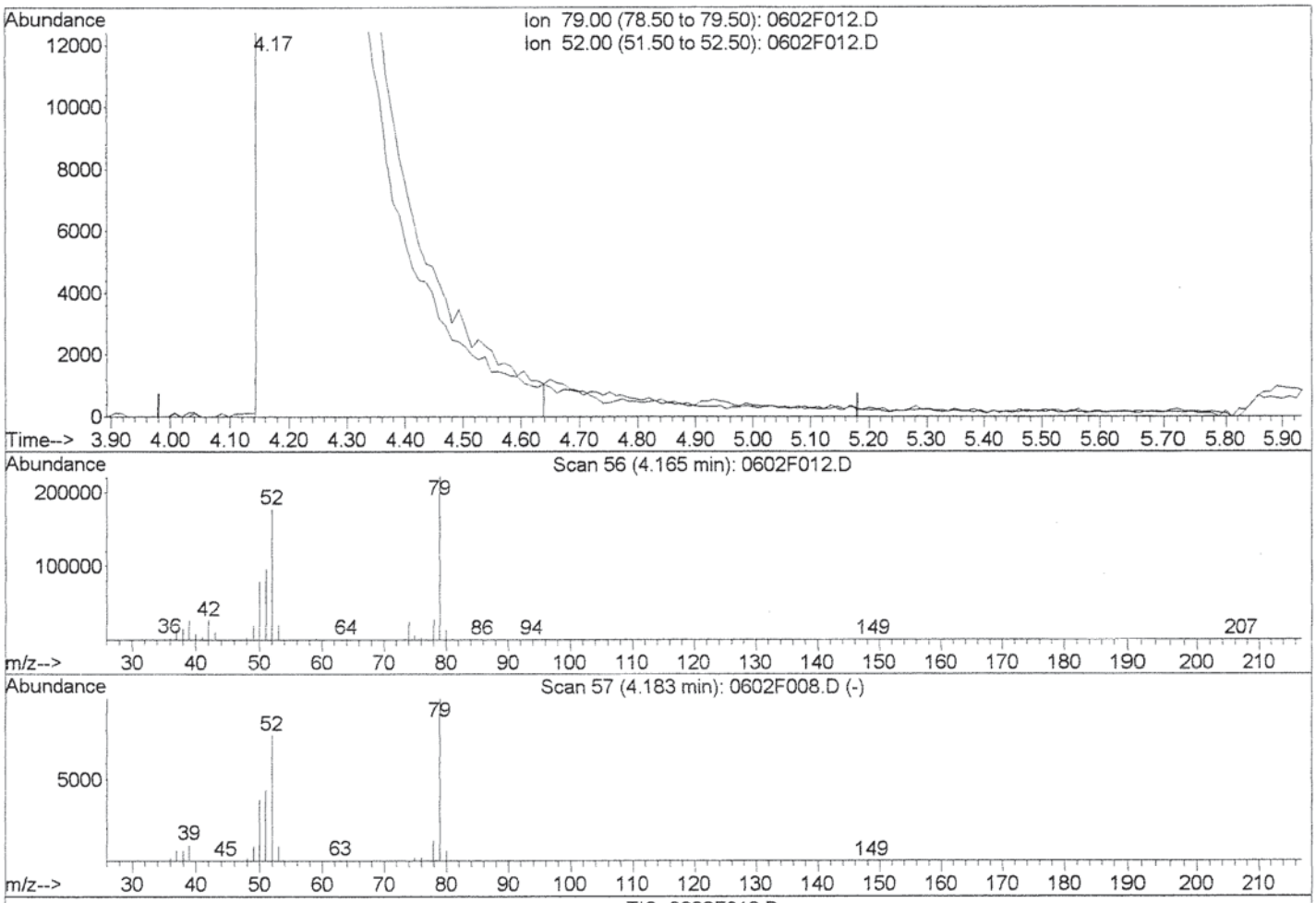
0602F012.D 0602BNC7.M Thu Jun 03 10:59:39 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F012.D
Acq On : 2 Jun 2010 10:40 pm
Sample : 200PPM 8270 ICAL SVM32-21K
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:59 2010

Vial: 10
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration



TIC: 0602F012.D

(3) Pyridine (T)

4.17min 213.05ug/ml

response 834499

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	79.62
0.00	0.00	0.00
0.00	0.00	0.00

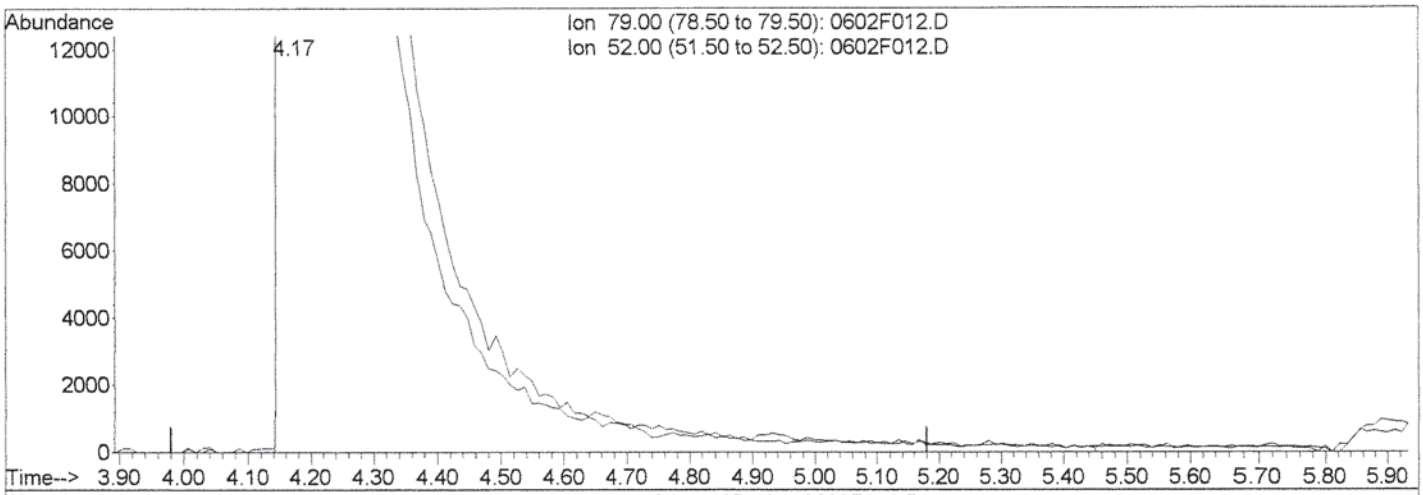
0602F012.D 0602BNC7.M Thu Jun 03 10:59:43 2010

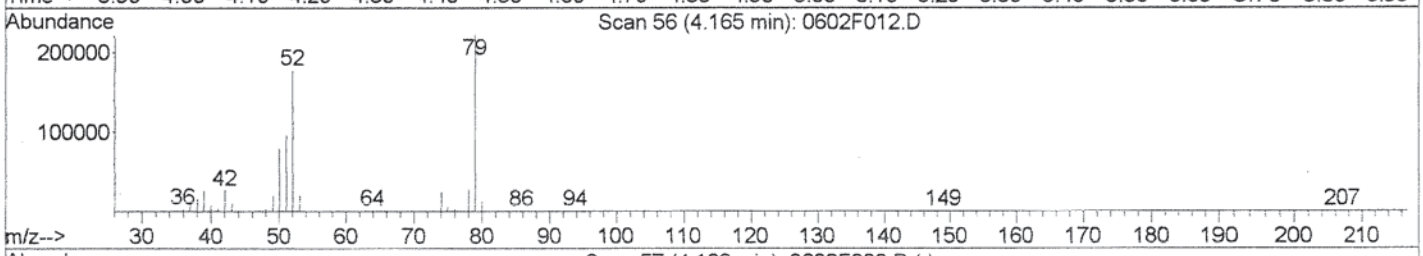
Quantitation Report (Qedit)

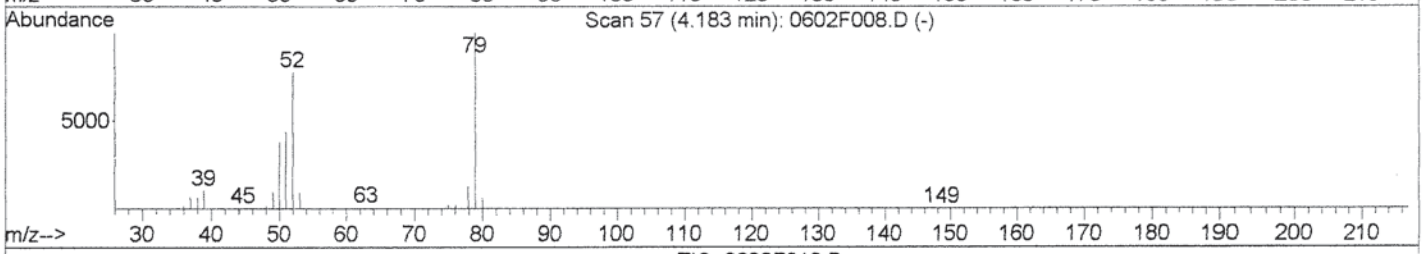
Data File : J:\MS07\DATA\060210\0602F012.D
Acq On : 2 Jun 2010 10:40 pm
Sample : 200PPM 8270 ICAL SVM32-21K
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:59 2010

Vial: 10
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F012.D

(3) Pyridine (T)

4.17min 218.10ug/ml m

response 854297

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	79.70
0.00	0.00	0.00
0.00	0.00	0.00

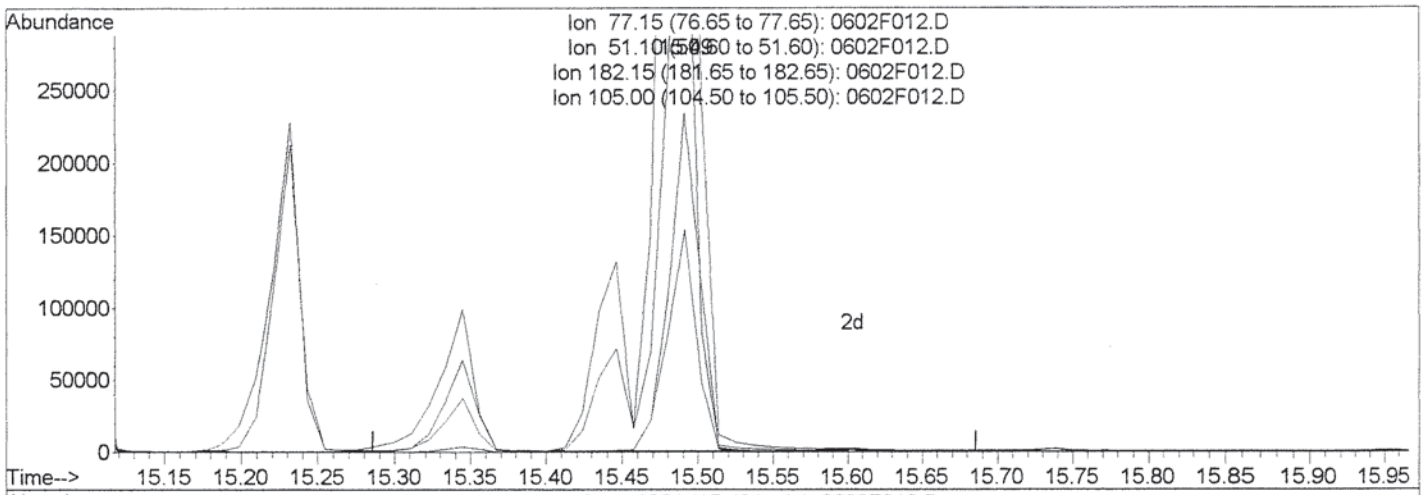
JC 6-3-10

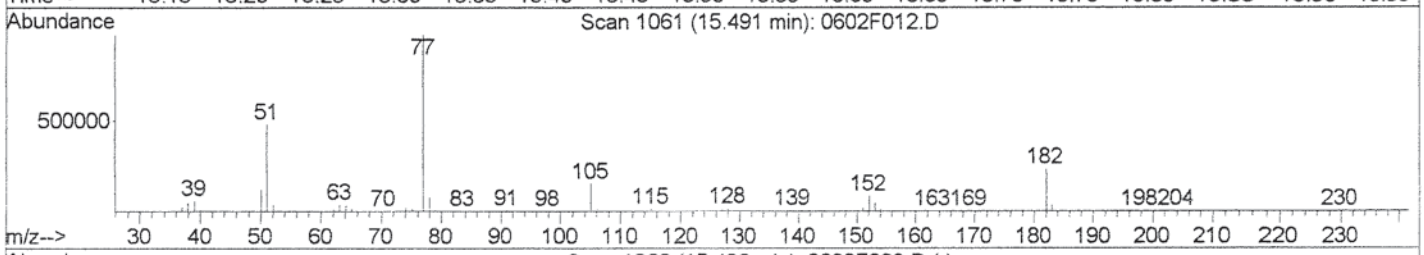
LB 6/4/10

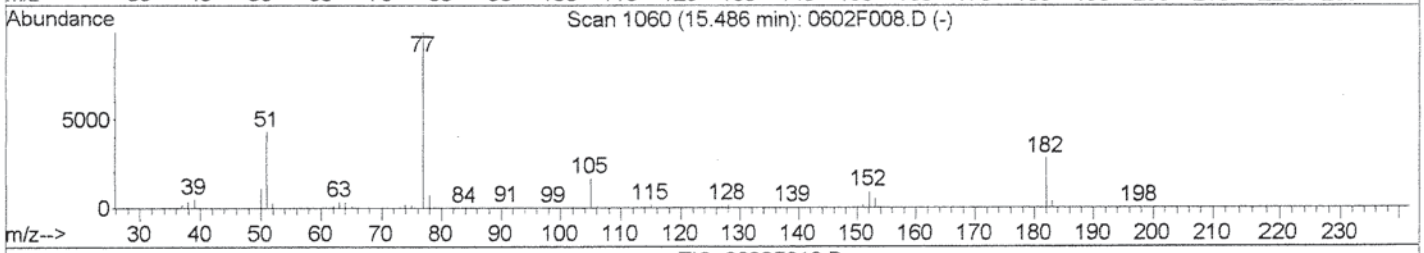
0602F012.D 0602BNC7.M Thu Jun 03 10:59:47 2010

Data File : J:\MS07\DATA\060210\0602F012.D Vial: 10
Acq On : 2 Jun 2010 10:40 pm Operator: M.BUTCHER
Sample : 200PPM 8270 ICAL SVM32-21K Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 10:59 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F012.D

(57) 1,2-Diphenylhydrazine (T)

15.49min 188.68ug/ml

response 1422282

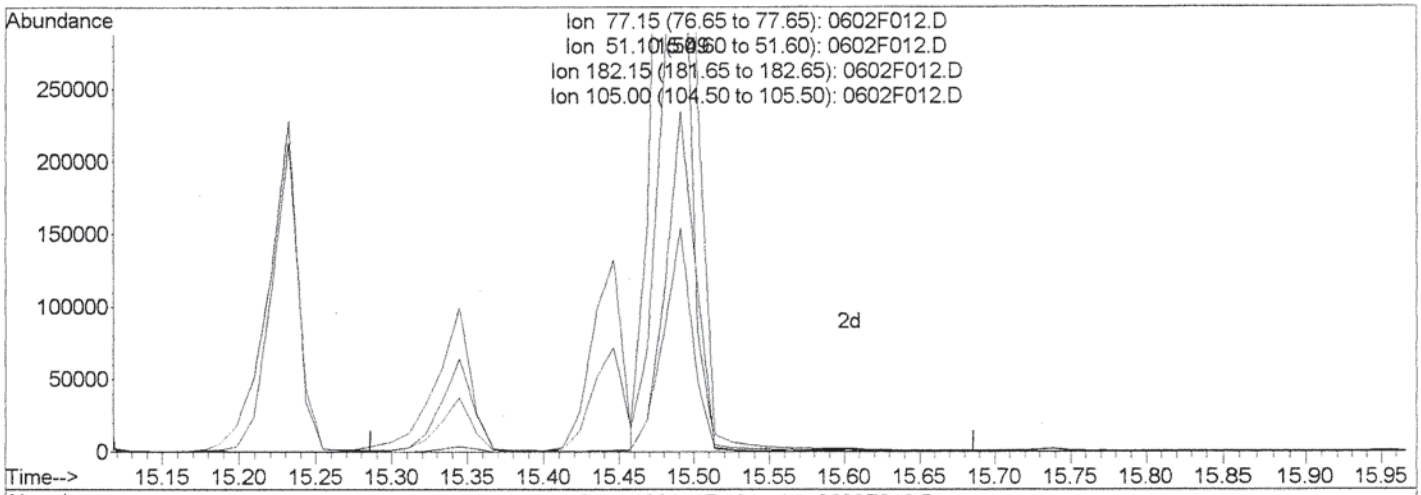
Ion	Exp%	Act%
77.15	100	100
51.10	43.10	48.70
182.15	27.90	23.80
105.00	16.60	15.60

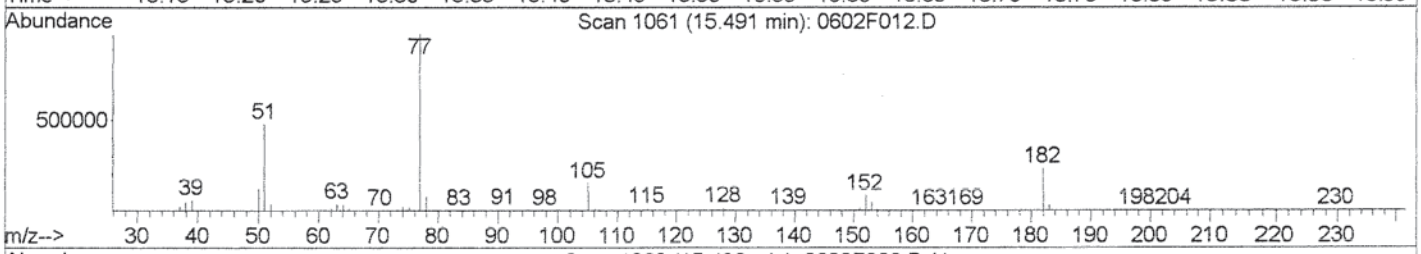
Quantitation Report (Qedit)

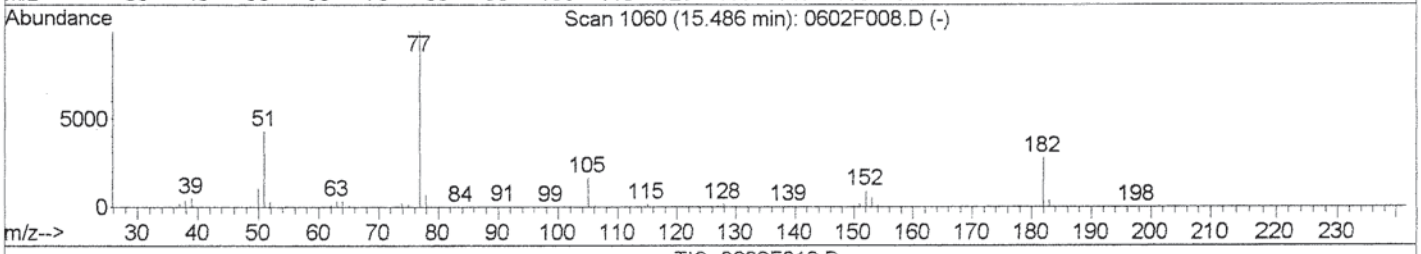
Data File : J:\MS07\DATA\060210\0602F012.D
Acq On : 2 Jun 2010 10:40 pm
Sample : 200PPM 8270 ICAL SVM32-21K
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 11:00 2010

Vial: 10
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 10:48:31 2010
Response via : Multiple Level Calibration







TIC: 0602F012.D

(57) 1,2-Diphenylhydrazine (T)

15.49min 175.00ug/ml m

response 1319201

Ion	Exp%	Act%
77.15	100	100
51.10	43.10	48.76
182.15	27.90	23.78
105.00	16.60	15.64

OE 6-3-10

0602F012.D 0602BNC7.M Thu Jun 03 11:00:13 2010

LB 6/4/10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F013.D Vial: 11
Acq On : 2 Jun 2010 11:20 pm Operator: M.BUTCHER
Sample : 80PPM 8270 ICV SVM32-21L Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 11:06:24 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.34	152	157981	40.00	ug/ml	0.00
21) Naphthalene-d8	11.45	136	589143	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.30	164	263507	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.70	188	329343	40.00	ug/ml	0.00
68) Chrysene-d12	21.13	240	359499	40.00	ug/ml	0.00
77) Perylene-d12	24.31	264	274717	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.13	112	352056	83.82	ug/ml	0.00
Spiked Amount 150.000	Range 21 - 100		Recovery = 55.88%			
7) Phenol-d6	8.87	99	480612	82.05	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 94		Recovery = 54.70%			
19) Nitrobenzene-d5	10.29	82	439915	76.88	ug/ml	0.00
Spiked Amount 100.000	Range 35 - 114		Recovery = 76.88%			
38) 2-Fluorobiphenyl	13.24	172	709474	82.13	ug/ml	0.00
Spiked Amount 100.000	Range 43 - 116		Recovery = 82.13%			
59) 2,4,6-Tribromophenol	15.60	330	98880	74.07	ug/ml	0.00
Spiked Amount 150.000	Range 10 - 123		Recovery = 49.38%			
71) Terphenyl-d14	19.32	244	384726	69.89	ug/ml	-0.01
Spiked Amount 100.000	Range 33 - 141		Recovery = 69.89%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.13	42	288259m	76.38	ug/ml	
3) Pyridine	4.16	79	471901m	88.22	ug/ml	
6) Bis(2-chloroethyl) Ether	8.96	93	404665	84.71	ug/ml	96
8) Phenol	8.89	94	516946	86.18	ug/ml	98
9) 2-Chlorophenol	9.02	128	428586	82.85	ug/ml	98
10) 1,3-Dichlorobenzene	9.24	146	432675	78.87	ug/ml	99
11) 1,4-Dichlorobenzene	9.38	146	450299	80.59	ug/ml	99
12) 1,2-Dichlorobenzene	9.62	146	437025	82.62	ug/ml	99
13) Benzyl Alcohol	9.66	108	279227	87.89	ug/ml	94
14) Bis(2-chloroisopropyl) Eth	9.85	45	708097	89.35	ug/ml	86
15) 2-Methylphenol	9.87	107	312967	80.57	ug/ml	99
16) Hexachloroethane	10.18	117	206278	81.14	ug/ml	97
17) N-Nitrosodi-n-propylamine	10.10	70	299786	77.10	ug/ml	96
18) 4-Methylphenol	10.14	107	496368	84.14	ug/ml	100
20) Nitrobenzene	10.32	77	426035	79.15	ug/ml	98
22) Isophorone	10.74	82	808264	76.05	ug/ml	98
23) 2-Nitrophenol	10.84	139	240573	82.15	ug/ml	96
24) 2,4-Dimethylphenol	11.00	122	325418	83.11	ug/ml	94
25) Bis(2-chloroethoxy)methane	11.12	93	511818	85.73	ug/ml	99
26) 2,4-Dichlorophenol	11.27	162	360053	81.05	ug/ml	99

(#) = qualifier out of range (m) = manual integration
0602F013.D 0602BNC7.M Thu Jun 03 11:34:37 2010 Page 1

6-7-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F013.D Vial: 11
Acq On : 2 Jun 2010 11:20 pm Operator: M.BUTCHER
Sample : 80PPM 8270 ICV SVM32-21L Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 11:06:24 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
27)	Benzoic Acid	11.32	122	261223	77.84 ug/ml	97
28)	1,2,4-Trichlorobenzene	11.37	180	378122	80.18 ug/ml	98
29)	Naphthalene	11.48	128	1133311	80.18 ug/ml	99
30)	4-Chloroaniline	11.62	127	462290	74.13 ug/ml	94
31)	Hexachlorobutadiene	11.71	225	238764	79.80 ug/ml	99
32)	4-Chloro-3-methylphenol	12.46	107	338233	72.94 ug/ml#	53
33)	2-Methylnaphthalene	12.62	142	661531	73.55 ug/ml	100
35)	Hexachlorocyclopentadiene	12.88	237	171811	64.56 ug/ml	97
36)	2,4,6-Trichlorophenol	13.11	196	234694	86.34 ug/ml	96
37)	2,4,5-Trichlorophenol	13.19	196	245630	81.09 ug/ml	100
39)	2-Chloronaphthalene	13.41	162	648374	85.08 ug/ml	98
40)	2-Nitroaniline	13.61	65	190743	77.80 ug/ml	96
41)	Acenaphthylene	14.08	152	795724	67.78 ug/ml	100
42)	Dimethyl Phthalate	13.94	163	631928	70.54 ug/ml	99
43)	2,6-Dinitrotoluene	14.02	165	151624	74.69 ug/ml	92
44)	Acenaphthene	14.36	154	515713	76.97 ug/ml	98
45)	3-Nitroaniline	14.29	138	154301	72.24 ug/ml	97
46)	2,4-Dinitrophenol	14.46	184	92573	78.59 ug/ml	94
47)	Dibenzofuran	14.64	168	791536	74.92 ug/ml	96
48)	4-Nitrophenol	14.64	109	87062	75.28 ug/ml#	68
49)	2,4-Dinitrotoluene	14.66	165	171360	66.61 ug/ml	72
50)	2,3,4,6-Tetrachlorophenol	14.86	232	153545	69.52 ug/ml#	78
51)	Fluorene	15.20	166	564836	71.34 ug/ml	98
52)	4-Chlorophenyl Phenyl Ethe	15.23	204	282899	69.80 ug/ml	99
53)	Diethyl Phthalate	15.09	149	602830	69.61 ug/ml	98
54)	4-Nitroaniline	15.28	138	149019	80.61 ug/ml	96
55)	2-Methyl-4,6-dinitrophenol	15.33	198	115758	82.73 ug/ml	86
56)	N-Nitrosodiphenylamine	15.43	169	344176	65.20 ug/ml	99
57)	1,2-Diphenylhydrazine	15.47	77	640947	72.01 ug/ml	94
60)	4-Bromophenyl Phenyl Ether	16.01	248	154168	77.64 ug/ml	97
61)	Hexachlorobenzene	16.08	284	175262	76.15 ug/ml	97
62)	Pentachlorophenol	16.43	266	102290	79.09 ug/ml	97
63)	Phenanthrene	16.75	178	706354	80.73 ug/ml	100
64)	Anthracene	16.83	178	683892	74.34 ug/ml	100
65)	Carbazole	17.12	167	615984	82.03 ug/ml	99
66)	Di-n-butyl Phthalate	17.74	149	830450	82.90 ug/ml	99
67)	Fluoranthene	18.66	202	633419	79.84 ug/ml	99
70)	Pyrene	19.02	202	650428	67.79 ug/ml	99
72)	Butyl Benzyl Phthalate	20.16	149	434417	79.45 ug/ml	100
73)	3,3'-Dichlorobenzidine	21.12	252	282579	75.22 ug/ml	99
74)	Benz(a)anthracene	21.11	228	622914	73.73 ug/ml	99

(#) = qualifier out of range (m) = manual integration
0602F013.D 0602BNC7.M Thu Jun 03 11:34:37 2010 Page 2

6-3-10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F013.D Vial: 11
Acq On : 2 Jun 2010 11:20 pm Operator: M.BUTCHER
Sample : 80PPM 8270 ICV SVM32-21L Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 11:06:24 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75)	Chrysene	21.19	228	632981	77.39	ug/ml	99
76)	Bis(2-ethylhexyl) Phthalat	21.31	149	647030	83.15	ug/ml	100
78)	Di-n-octyl Phthalate	22.78	149	1138544	87.36	ug/ml	100
79)	Benzo(b)fluoranthene	23.45	252	583521	82.45	ug/ml	99
80)	Benzo(k)fluoranthene	23.52	252	612904	83.45	ug/ml	99
81)	Benzo(a)pyrene	24.18	252	562098	95.63	ug/ml	98
82)	Indeno(1,2,3-cd)pyrene	26.77	276	417715	82.06	ug/ml	97
83)	Dibenz(a,h)anthracene	26.84	278	431654	79.61	ug/ml	99
84)	Benzo(g,h,i)perylene	27.34	276	437301	79.59	ug/ml	100

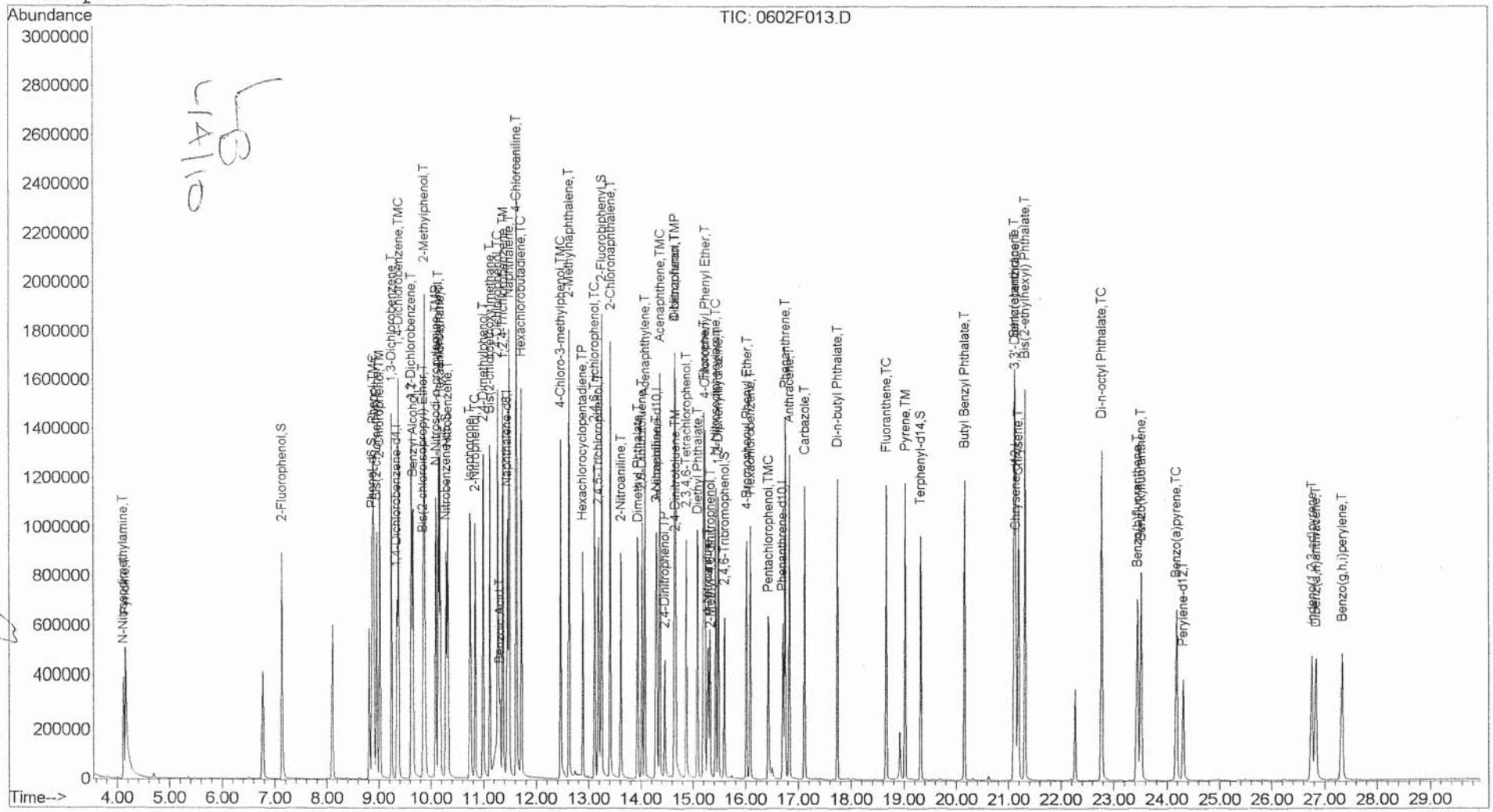
LB
6/4/10

(#) = qualifier out of range (m) = manual integration
0602F013.D 0602BNC7.M Thu Jun 03 11:34:37 2010 6-3-10 Page 3

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F013.D Vial: 11
Acq On : 2 Jun 2010 11:20 pm Operator: M.BUTCHER
Sample : 80PPM 8270 ICV SVM32-21L Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 11:09 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration

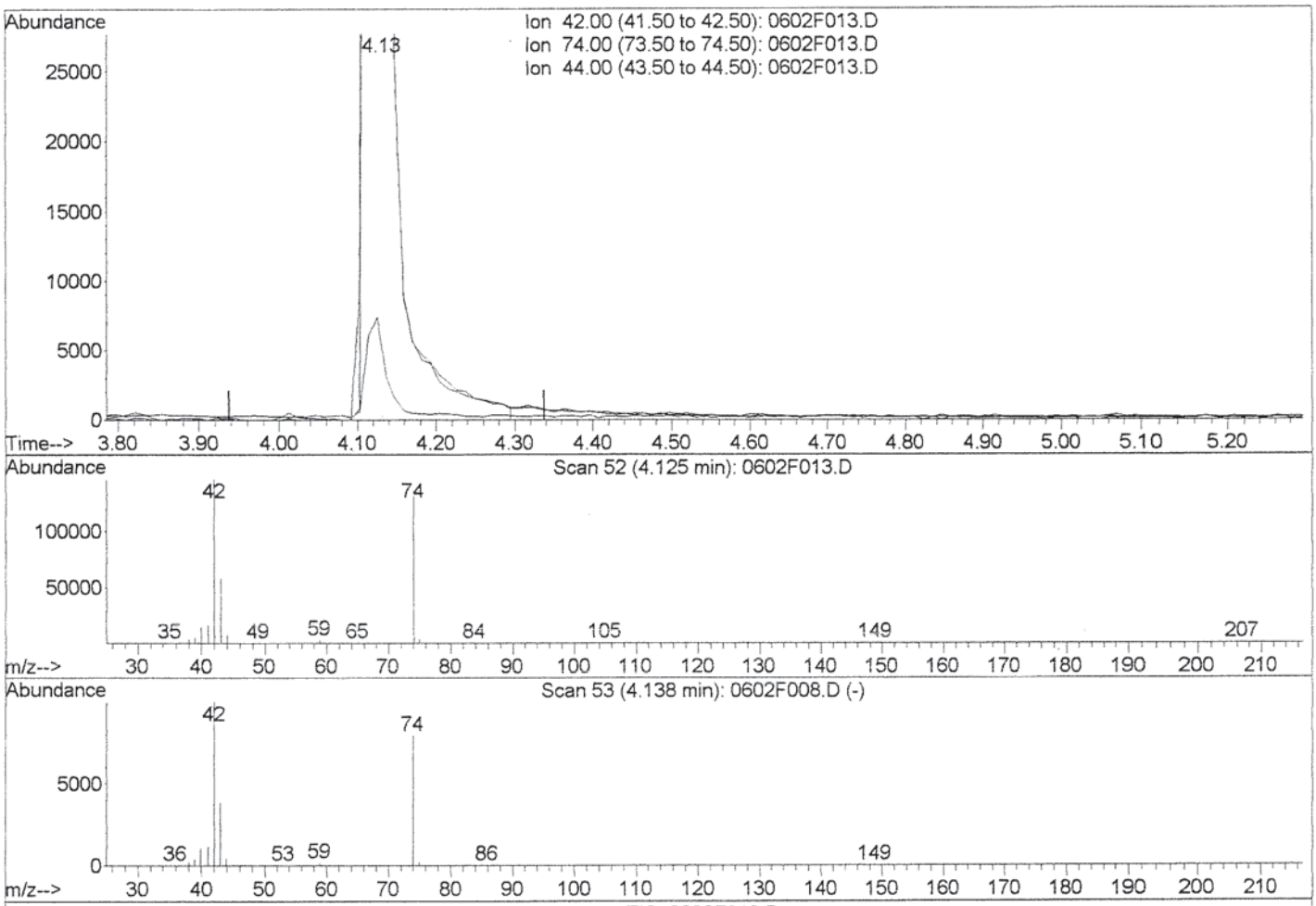


Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F013.D
Acq On : 2 Jun 2010 11:20 pm
Sample : 80PPM 8270 ICV SVM32-21L
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 11:06 2010

Vial: 11
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Multiple Level Calibration



TIC: 0602F013.D

(2) N-Nitrosodimethylamine (T)

4.13min 73.83ug/ml

response 278639

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	89.65
44.00	4.40	4.82
0.00	0.00	0.00

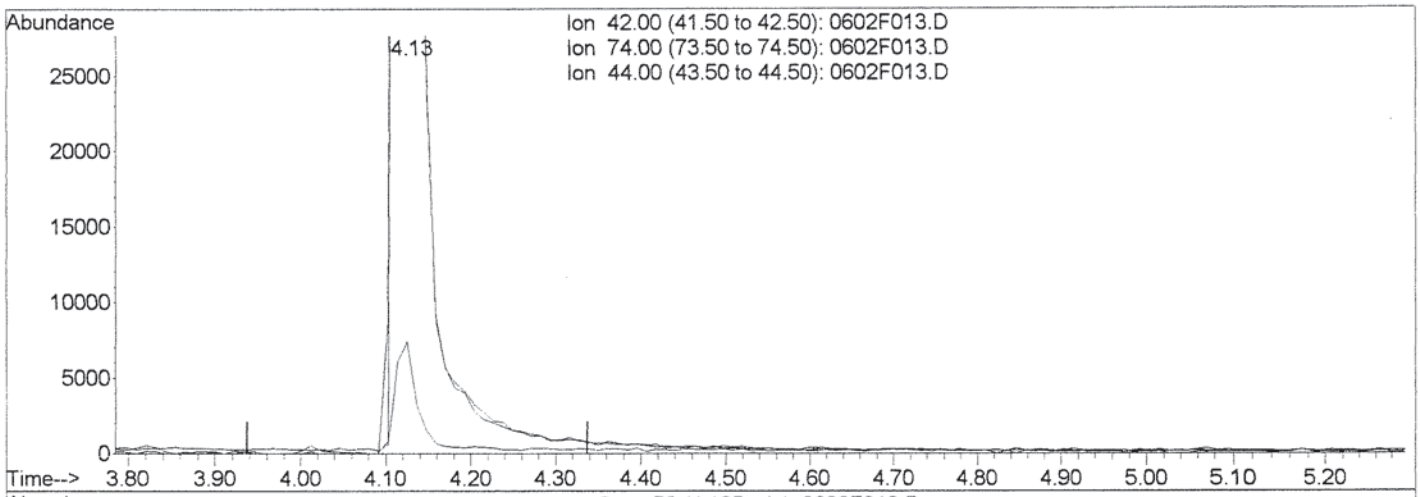
0602F013.D 0602BNC7.M Thu Jun 03 11:08:57 2010

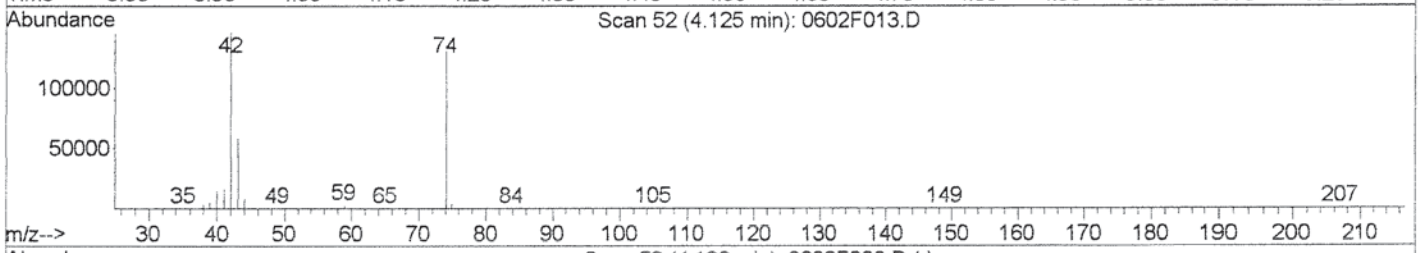
Quantitation Report (Qedit)

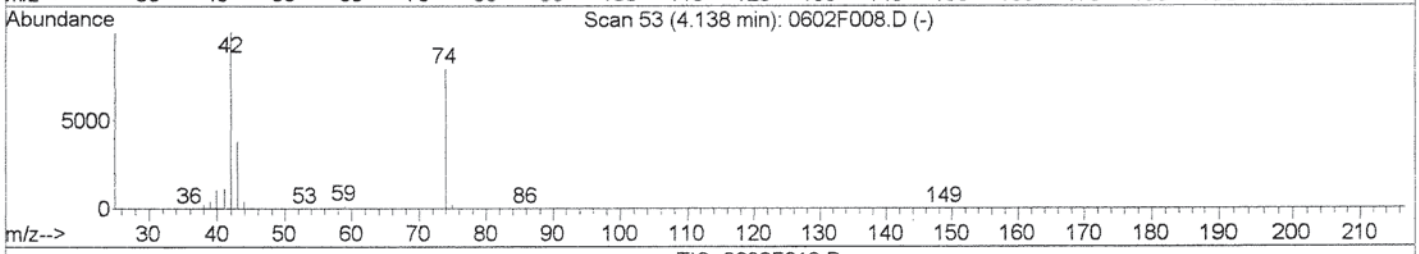
Data File : J:\MS07\DATA\060210\0602F013.D
Acq On : 2 Jun 2010 11:20 pm
Sample : 80PPM 8270 ICV SVM32-21L
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 11:09 2010

Vial: 11
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Multiple Level Calibration







TIC: 0602F013.D

(2) N-Nitrosodimethylamine (T)

4.13min 76.38ug/ml m

response 288259

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	89.65
44.00	4.40	5.02
0.00	0.00	0.00

SC 6-3-10

LB 6/4/10

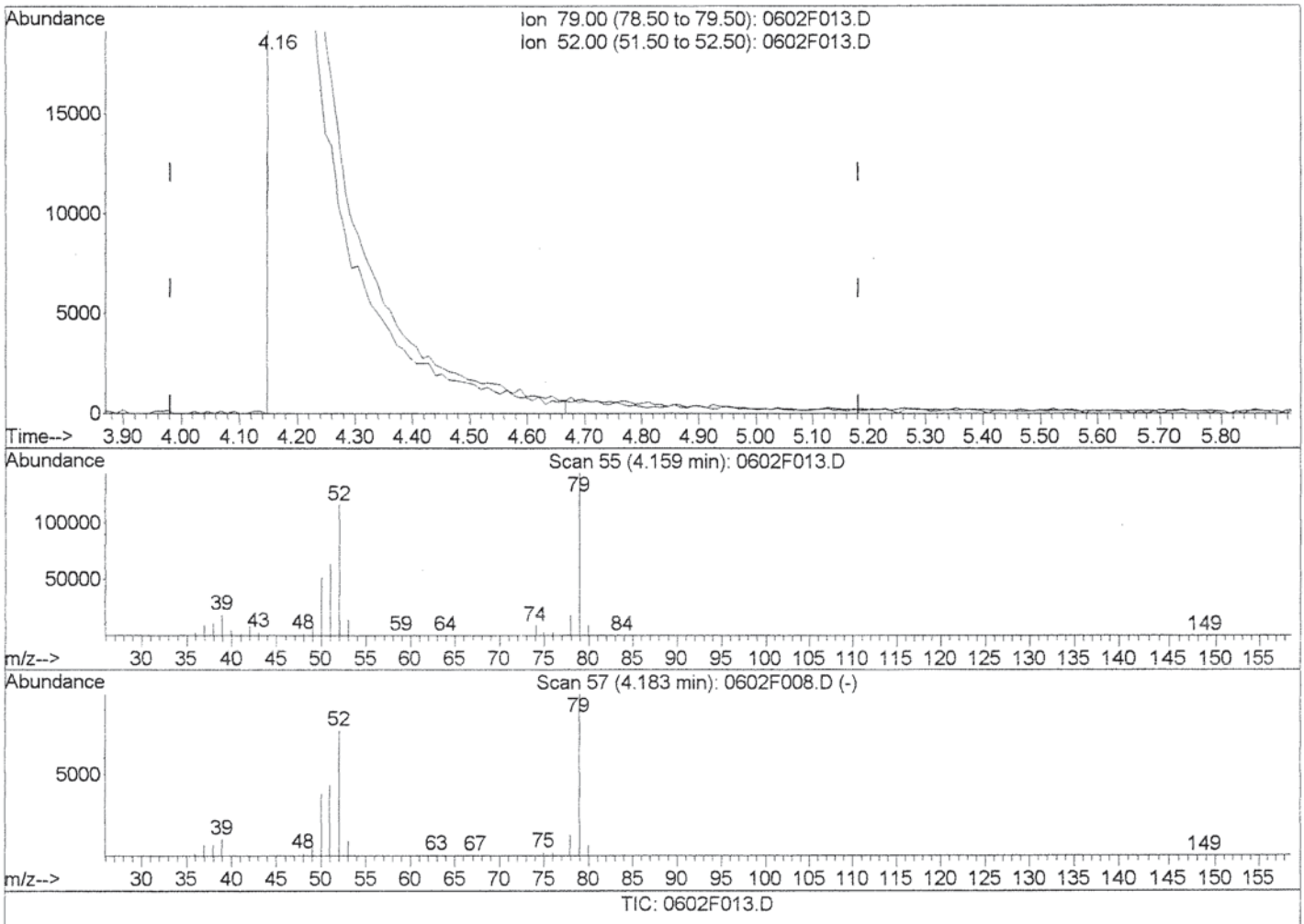
0602F013.D 0602BNC7.M Thu Jun 03 11:09:01 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F013.D
Acq On : 2 Jun 2010 11:20 pm
Sample : 80PPM 8270 ICV SVM32-21L
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 11:09 2010

Vial: 11
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Multiple Level Calibration



TIC: 0602F013.D

(3) Pyridine (T)

4.16min 85.90ug/ml

response 459485

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	80.29
0.00	0.00	0.00
0.00	0.00	0.00

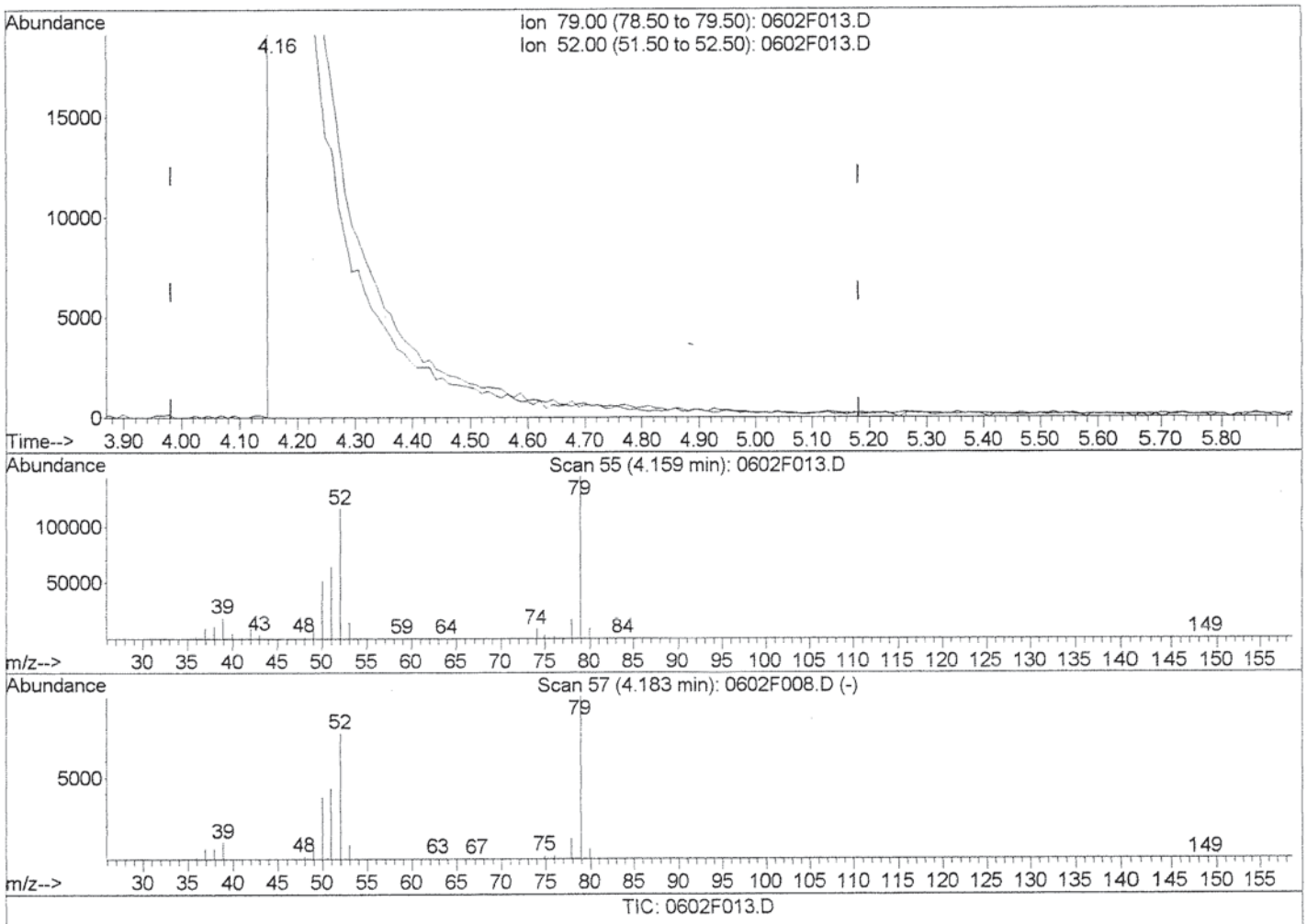
0602F013.D 0602BNC7.M Thu Jun 03 11:09:06 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\060210\0602F013.D
Acq On : 2 Jun 2010 11:20 pm
Sample : 80PPM 8270 ICV SVM32-21L
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 3 11:09 2010

Vial: 11
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Multiple Level Calibration



TIC: 0602F013.D

(3) Pyridine (T)

4.16min 88.22ug/ml m

response 471901

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	80.37
0.00	0.00	0.00
0.00	0.00	0.00

SC 6-7-10

LB 6/4/10

0602F013.D 0602BNC7.M Thu Jun 03 11:09:09 2010

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F014.D Vial: 12
Acq On : 3 Jun 2010 12:01 am Operator: M.BUTCHER
Sample : 80PPM ANILINE ICV SVM30-7D Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 11:06:36 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.34	152	129491	40.00	ug/ml	0.00
21) Naphthalene-d8	11.45	136	455013	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.30	164	243230	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.70	188	413341	40.00	ug/ml	0.00
68) Chrysene-d12	21.12	240	292354	40.00	ug/ml	-0.02
77) Perylene-d12	24.30	264	304583	40.00	ug/ml	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0d	0.00	ug/ml	
Spiked Amount 150.000	Range 21 - 100		Recovery =	0.00%#		
7) Phenol-d6	0.00	99	0	0.00	ug/ml	
Spiked Amount 150.000	Range 10 - 94		Recovery =	0.00%#		
19) Nitrobenzene-d5	0.00	82	0	0.00	ug/ml	
Spiked Amount 100.000	Range 35 - 114		Recovery =	0.00%#		
38) 2-Fluorobiphenyl	0.00	172	0d	0.00	ug/ml	
Spiked Amount 100.000	Range 43 - 116		Recovery =	0.00%#		
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/ml	
Spiked Amount 150.000	Range 10 - 123		Recovery =	0.00%#		
71) Terphenyl-d14	0.00	244	0d	0.00	ug/ml	
Spiked Amount 100.000	Range 33 - 141		Recovery =	0.00%#		

Target Compounds						Qvalue
5) Aniline	8.81	93	478547	98.61	ug/ml	79

6-7-10

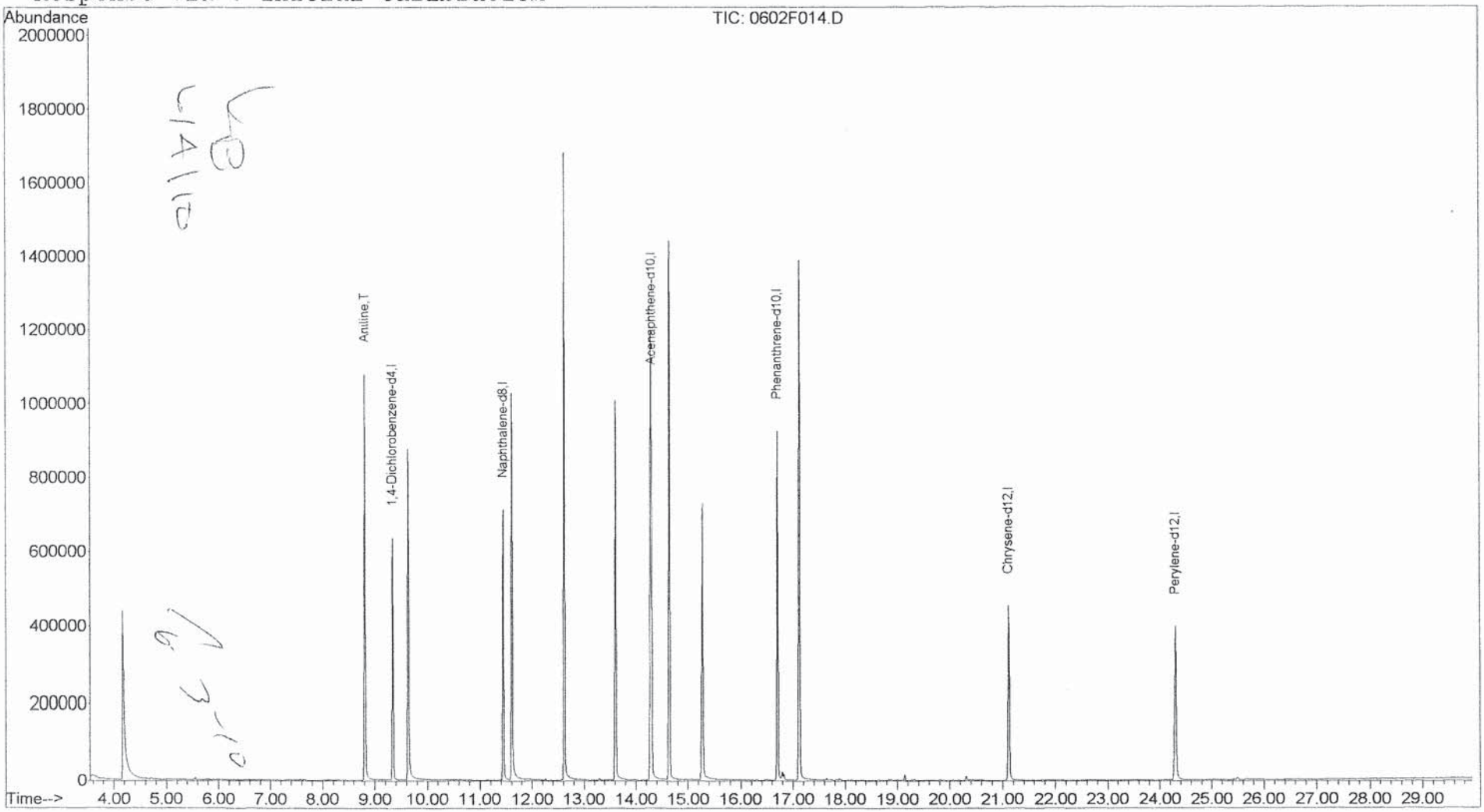
(#) = qualifier out of range (m) = manual integration
0602F014.D 0602BNC7.M Thu Jun 03 11:34:39 2010 Page 1

LB 6/14/10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F014.D Vial: 12
Acq On : 3 Jun 2010 12:01 am Operator: M.BUTCHER
Sample : 80PPM ANILINE ICV SVM30-7D Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 11:06 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration



1450

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F016.D Vial: 14
Acq On : 3 Jun 2010 1:21 am Operator: M.BUTCHER
Sample : 50PPM BENZ ICV SVM32-25F Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 03 11:08:12 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.34	152	114003	40.00	ug/ml	0.00
21) Naphthalene-d8	11.45	136	399588	40.00	ug/ml	0.00
34) Acenaphthene-d10	14.30	164	215228	40.00	ug/ml	0.00
58) Phenanthrene-d10	16.70	188	420025	40.00	ug/ml	0.00
68) Chrysene-d12	21.11	240	274219	40.00	ug/ml	-0.02
77) Perylene-d12	24.30	264	264132	40.00	ug/ml	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0	0.00	ug/ml	
Spiked Amount 150.000	Range 21 - 100		Recovery =	0.00%#		
7) Phenol-d6	0.00	99	0	0.00	ug/ml	
Spiked Amount 150.000	Range 10 - 94		Recovery =	0.00%#		
19) Nitrobenzene-d5	0.00	82	0	0.00	ug/ml	
Spiked Amount 100.000	Range 35 - 114		Recovery =	0.00%#		
38) 2-Fluorobiphenyl	0.00	172	0d	0.00	ug/ml	
Spiked Amount 100.000	Range 43 - 116		Recovery =	0.00%#		
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/ml	
Spiked Amount 150.000	Range 10 - 123		Recovery =	0.00%#		
71) Terphenyl-d14	0.00	244	0d	0.00	ug/ml	
Spiked Amount 100.000	Range 33 - 141		Recovery =	0.00%#		

Target Compounds						Qvalue
69) Benzidine	18.92	184	252849	109.81	ug/ml	97

6-3-10

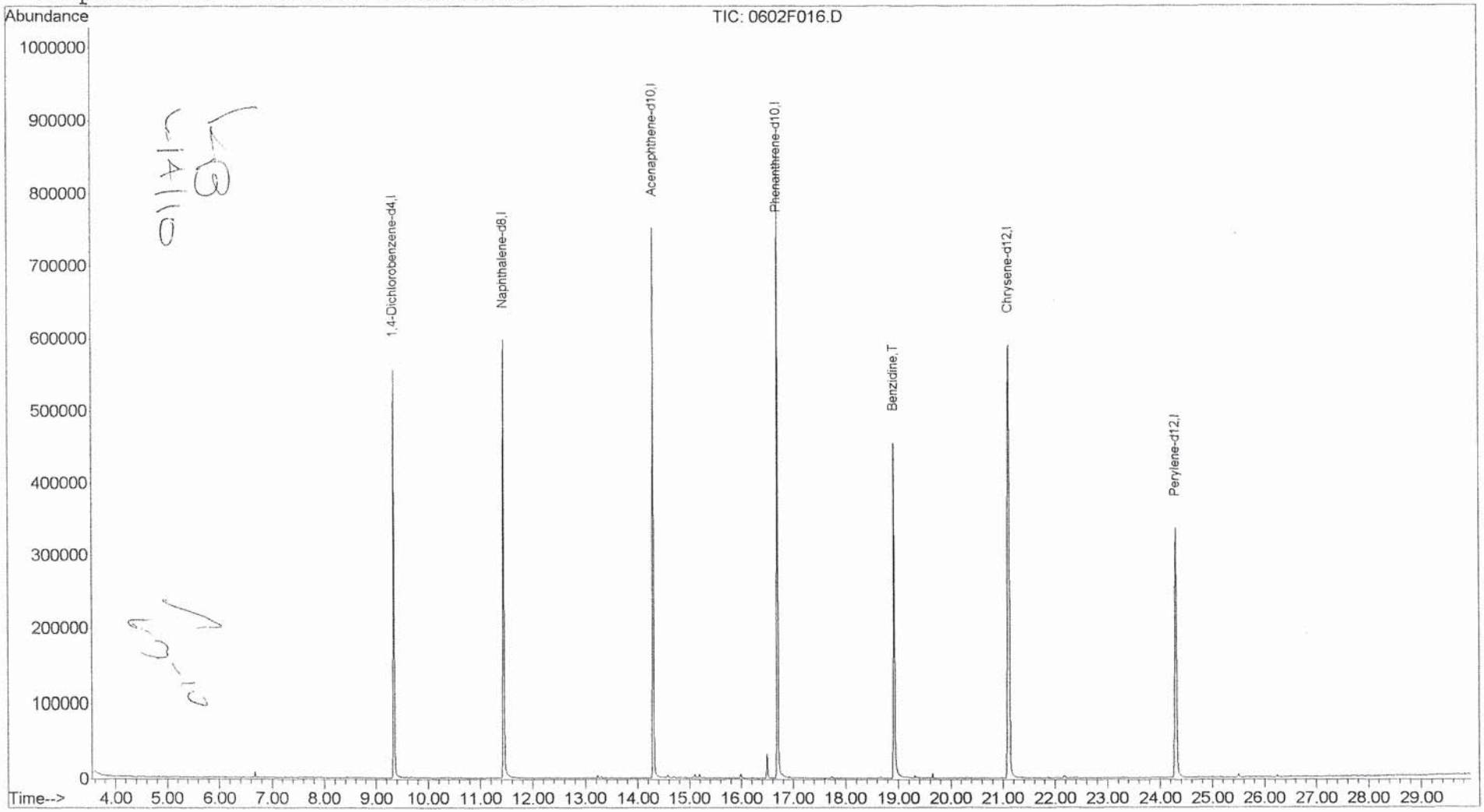
(#) = qualifier out of range (m) = manual integration
0602F016.D 0602BNC7.M Thu Jun 03 11:34:40 2010 Page 1

LB 6/4/10

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\060210\0602F016.D Vial: 14
Acq On : 3 Jun 2010 1:21 am Operator: M.BUTCHER
Sample : 50PPM BENZ ICV SVM32-25F Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 3 11:08 2010 Quant Results File: 0602BNC7.RES

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 03 11:06:06 2010
Response via : Initial Calibration



1452

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010

Continuing Calibration Verification Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration Date: 06/02/2010
Calibration ID: CAL9525
Analysis Lot: KWG1005663
Units: ug/ml

File ID: J:\MS07\DATA\061010\0610F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine	80	86	0.01	0.956	1.03	8	NA	± 30 %	AverageRF
Aniline	80	73	0.01	1.50	1.38	-8	NA	± 30 %	AverageRF
Bis(2-chloroethyl) Ether	80	72	0.01	1.21	1.09	-10	NA	± 30 %	AverageRF
‡ Phenol	80	77	0.01	1.52	1.45	-4	NA	± 20 %	AverageRF
2-Chlorophenol	80	80	0.01	1.31	1.31	0	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	80	86	0.01	1.39	1.50	8	NA	± 30 %	AverageRF
‡ 1,4-Dichlorobenzene	80	84	0.01	1.41	1.49	5	NA	± 20 %	AverageRF
1,2-Dichlorobenzene	80	85	0.01	1.34	1.42	6	NA	± 30 %	AverageRF
Benzyl Alcohol	80	83	0.01	0.804	0.839	4	NA	± 30 %	AverageRF
Bis(2-chloroisopropyl) Ether	80	63	0.01	2.01	1.59	-21	NA	± 30 %	AverageRF
2-Methylphenol	80	78	0.01	0.984	0.954	-3	NA	± 30 %	AverageRF
Hexachloroethane	80	88	0.01	0.644	0.709	10	NA	± 30 %	AverageRF
† N-Nitrosodi-n-propylamine	80	73	0.05	0.985	0.894	-9	NA	± 30 %	AverageRF
4-Methylphenol	80	82	0.01	1.49	1.53	2	NA	± 30 %	AverageRF
Nitrobenzene	80	76	0.01	1.36	1.30	-4	NA	± 30 %	AverageRF
Isophorone	80	69	0.01	0.722	0.625	-13	NA	± 30 %	AverageRF
‡ 2-Nitrophenol	80	84	0.01	0.199	0.210	6	NA	± 20 %	AverageRF
2,4-Dimethylphenol	80	80	0.01	0.266	0.266	0	NA	± 30 %	AverageRF
Bis(2-chloroethoxy)methane	80	73	0.01	0.405	0.372	-8	NA	± 30 %	AverageRF
‡ 2,4-Dichlorophenol	80	87	0.01	0.302	0.327	8	NA	± 20 %	AverageRF
Benzoic Acid	80	82	0.01	0.228	0.234	3	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	80	92	0.01	0.320	0.369	15	NA	± 30 %	AverageRF
Naphthalene	80	85	0.01	0.960	1.02	6	NA	± 30 %	AverageRF
4-Chloroaniline	80	77	0.01	0.423	0.405	-4	NA	± 30 %	AverageRF
‡ Hexachlorobutadiene	80	91	0.01	0.203	0.232	14	NA	± 20 %	AverageRF
‡ 4-Chloro-3-methylphenol	80	84	0.01	0.315	0.331	5	NA	± 20 %	AverageRF
2-Methylnaphthalene	80	82	0.01	0.611	0.624	2	NA	± 30 %	AverageRF
† Hexachlorocyclopentadiene	80	61	0.05	0.373	0.308	NA	-23	± 30 %	Quadratic
‡ 2,4,6-Trichlorophenol	80	92	0.01	0.413	0.473	15	NA	± 20 %	AverageRF
2,4,5-Trichlorophenol	80	88	0.01	0.460	0.508	10	NA	± 30 %	AverageRF
2-Chloronaphthalene	80	80	0.01	1.16	1.15	-1	NA	± 30 %	AverageRF
2-Nitroaniline	80	78	0.01	0.372	0.363	-3	NA	± 30 %	AverageRF
Acenaphthylene	80	83	0.01	1.78	1.85	4	NA	± 30 %	AverageRF
Dimethyl Phthalate	80	85	0.01	1.36	1.44	6	NA	± 30 %	AverageRF
2,6-Dinitrotoluene	80	82	0.01	0.308	0.317	3	NA	± 30 %	AverageRF
‡ Acenaphthene	80	86	0.01	1.02	1.09	8	NA	± 20 %	AverageRF
3-Nitroaniline	80	81	0.01	0.324	0.328	1	NA	± 30 %	AverageRF
† 2,4-Dinitrophenol	80	76	0.05	0.179	0.170	-5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010

Continuing Calibration Verification Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration Date: 06/02/2010
Calibration ID: CAL9525
Analysis Lot: KWG1005663
Units: ug/ml

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dibenzofuran	80	90	0.01	1.60	1.80	12	NA	± 30 %	AverageRF
† 4-Nitrophenol	80	97	0.05	0.176	0.213	22	NA	± 30 %	AverageRF
2,4-Dinitrotoluene	80	85	0.01	0.391	0.417	7	NA	± 30 %	AverageRF
Fluorene	80	86	0.01	1.20	1.30	8	NA	± 30 %	AverageRF
4-Chlorophenyl Phenyl Ether	80	87	0.01	0.615	0.671	9	NA	± 30 %	AverageRF
Diethyl Phthalate	80	87	0.01	1.31	1.43	9	NA	± 30 %	AverageRF
4-Nitroaniline	80	83	0.01	0.281	0.291	4	NA	± 30 %	AverageRF
2-Methyl-4,6-dinitrophenol	80	84	0.01	0.212	0.223	5	NA	± 30 %	AverageRF
‡ N-Nitrosodiphenylamine	80	88	0.01	0.801	0.878	10	NA	± 20 %	AverageRF
4-Bromophenyl Phenyl Ether	80	85	0.01	0.241	0.257	6	NA	± 30 %	AverageRF
Hexachlorobenzene	80	87	0.01	0.280	0.304	9	NA	± 30 %	AverageRF
‡ Pentachlorophenol	80	82	0.01	0.157	0.162	3	NA	± 20 %	AverageRF
Phenanthrene	80	83	0.01	1.06	1.10	3	NA	± 30 %	AverageRF
Anthracene	80	80	0.01	1.12	1.11	0	NA	± 30 %	AverageRF
Di-n-butyl Phthalate	80	82	0.01	1.22	1.24	2	NA	± 30 %	AverageRF
‡ Fluoranthene	80	83	0.01	0.964	0.996	3	NA	± 20 %	AverageRF
Pyrene	80	70	0.01	1.07	0.939	-12	NA	± 30 %	AverageRF
Butyl Benzyl Phthalate	80	74	0.01	0.608	0.563	-7	NA	± 30 %	AverageRF
3,3'-Dichlorobenzidine	80	82	0.01	0.418	0.429	3	NA	± 30 %	AverageRF
Benz(a)anthracene	80	82	0.01	0.940	0.964	3	NA	± 30 %	AverageRF
Chrysene	80	80	0.01	0.910	0.905	-1	NA	± 30 %	AverageRF
Bis(2-ethylhexyl) Phthalate	80	77	0.01	0.866	0.837	-3	NA	± 30 %	AverageRF
‡ Di-n-octyl Phthalate	80	83	0.01	1.76	1.96	NA	4	± 20 %	Quadratic
Benzo(b)fluoranthene	80	90	0.01	1.03	1.16	13	NA	± 30 %	AverageRF
Benzo(k)fluoranthene	80	85	0.01	1.07	1.14	6	NA	± 30 %	AverageRF
‡ Benzo(a)pyrene	80	80	0.01	0.856	0.856	0	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	80	86	0.01	0.741	0.796	7	NA	± 30 %	AverageRF
Dibenz(a,h)anthracene	80	85	0.01	0.789	0.842	7	NA	± 30 %	AverageRF
Benzo(g,h,i)perylene	80	82	0.01	0.800	0.825	3	NA	± 30 %	AverageRF
2-Fluorophenol	80	74	0.01	1.06	0.983	-8	NA	± 30 %	AverageRF
Phenol-d6	80	70	0.01	1.48	1.30	-12	NA	± 30 %	AverageRF
Nitrobenzene-d5	80	75	0.01	1.45	1.35	-7	NA	± 30 %	AverageRF
2-Fluorobiphenyl	80	81	0.01	1.31	1.32	1	NA	± 30 %	AverageRF
2,4,6-Tribromophenol	80	83	0.01	0.162	0.169	4	NA	± 30 %	AverageRF
Terphenyl-d14	80	71	0.01	0.612	0.544	-11	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Exception Report

Data File: J:\MS07\DATA\061010\0610F002.D
Lab ID: KWG1005663-2
RunType: CCV
Matrix: WATER

Date Acquired: 06/10/2010 15:32
Date Quantitated: 06/11/2010 08:07
Batch ID: KWG1005663
Analysis Method: 8270C
MethodJoinID: MJ250

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Benzidine	119.6	NA	30	ND

Primary Review: 6/11/10

Secondary Review: LB 6/14/10

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270C	**Collect Date:**		**Receive Date:**	06/11/2010

Analysis Lot:	KWG1005663	**Prep Lot:**		**Report Group:**	
Analysis Method:	8270C	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:			
Tune Ref:	J:\MS07\DATA\061010\0610F001.D	**Method ID:**	MJ250
MB Ref:		**Quant based on Method**	

Data File:	J:\MS07\DATA\061010\0610F002.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 15:32	**Quant Date:**	06/11/2010 08:07	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1005663-2			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	9.33	-0.01	152	109990	40.00	OK
2	Naphthalene-d8	11.44	-0.01	136	420027	40.00	OK
3	Acenaphthene-d10	14.29	-0.01	164	219736	40.00	OK
4	Phenanthrene-d10	16.70	0.00	188	325013	40.00	OK
5	Chrysene-d12	21.13	0.00	240	353756	40.00	OK
6	Perylene-d12	24.31	0.00	264	274061	40.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	7.11			112	216302	73.97		20-83	NA	
1	Phenol-d6	8.86			99	286873	70.34		23-90	NA	
1	Nitrobenzene-d5	10.28			82	297975	74.79		29-100	NA	
3	2-Fluorobiphenyl	13.23			172	580166	80.54		32-104	NA	
4	2,4,6-Tribromophenol	15.59			330	109916	83.44		20-123	NA	
5	Terphenyl-d14	19.32			244	384621	71.01		37-133	NA	

Target Compounds

Final Conc. Units:

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	4.13			42	226016**m**	86.00			
1	Pyridine	4.16			79	259518**m**	69.69			
1	Aniline	8.80			93	302691	73.43			
1	Bis(2-chloroethyl) Ether	8.95			93	238910	71.83			
1	Phenol	8.88			94	319966	76.60			
1	2-Chlorophenol	9.01			128	287422	79.81			
1	1,3-Dichlorobenzene	9.23			146	329883	86.36			
1	1,4-Dichlorobenzene	9.37			146	327211	84.11			
1	1,2-Dichlorobenzene	9.61			146	313117	85.03			
1	Benzyl Alcohol	9.64			108	184543	83.43			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F002.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 15:32	**Quant Date:**	06/11/2010 08:07	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1005663-2			**Soln Conc. Units:**	ug/ml

Target Compounds

Final Conc. Units:

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Bis(2-chloroisopropyl) Ether	9.85			45	349139	63.28			
1	2-Methylphenol	9.86			107	209921	77.62			
1	Hexachloroethane	10.17			117	155984	88.12			
1	N-Nitrosodi-n-propylamine	10.09			70	196615	72.63			
1	4-Methylphenol	10.13			107	336268	81.87			
1	Nitrobenzene	10.31			77	286452	76.44			
2	Isophorone	10.73			82	525185	69.31			
2	2-Nitrophenol	10.83			139	176255	84.42			
2	2,4-Dimethylphenol	10.98			122	223696	80.13			
2	Bis(2-chloroethoxy)methane	11.11			93	312503	73.42			
2	2,4-Dichlorophenol	11.26			162	274748	86.75			
2	Benzoic Acid	11.33			122	196362	82.07			
2	1,2,4-Trichlorobenzene	11.36			180	310058	92.21			
2	Naphthalene	11.47			128	857536	85.09			
2	4-Chloroaniline	11.61			127	340400	76.56			
2	Hexachlorobutadiene	11.70			225	194917	91.38			
2	4-Chloro-3-methylphenol	12.45			107	278154	84.14			
2	2-Methylnaphthalene	12.61			142	524046	81.72			
3	Hexachlorocyclopentadiene	12.87			237	135426	61.44			
3	2,4,6-Trichlorophenol	13.11			196	207799	91.67			
3	2,4,5-Trichlorophenol	13.18			196	223222	88.37			
3	2-Chloronaphthalene	13.40			162	505419	79.53			
3	2-Nitroaniline	13.60			65	159315	77.93			
3	Acenaphthylene	14.07			152	812961	83.04			
3	Dimethyl Phthalate	13.93			163	634673	84.96			
3	2,6-Dinitrotoluene	14.02			165	139162	82.21			
3	Acenaphthene	14.36			154	481100	86.10			
3	3-Nitroaniline	14.29			138	144085	80.90			
3	2,4-Dinitrophenol	14.46			184	74794	76.15			
3	Dibenzofuran	14.64			168	790795	89.76			
3	4-Nitrophenol	14.63			109	93791	97.25			
3	2,4-Dinitrotoluene	14.66			165	183180	85.38			
3	2,3,4,6-Tetrachlorophenol	14.87			232	178809	97.09			
3	Fluorene	15.19			166	569134	86.21			
3	4-Chlorophenyl Phenyl Ether	15.22			204	294686	87.19			
3	Diethyl Phthalate	15.08			149	630625	87.32			
3	4-Nitroaniline	15.28			138	127947	82.99			
3	2-Methyl-4,6-dinitrophenol	15.33			198	97902	83.90			
3	N-Nitrosodiphenylamine	15.42			169	386072	87.71			
3	1,2-Diphenylhydrazine	15.47			77	601340	81.02			
4	4-Bromophenyl Phenyl Ether	16.00			248	166745	85.10			
4	Hexachlorobenzene	16.08			284	197314	86.88			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F002.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 15:32	**Quant Date:**	06/11/2010 08:07	**Vial:**	2
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1005663-2			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:**

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Pentachlorophenol	16.42			266	105145	82.38			
4	Phenanthrene	16.74			178	713600	82.64			
4	Anthracene	16.83			178	724022	79.75			
4	Carbazole	17.11			167	589682	79.57			
4	Di-n-butyl Phthalate	17.73			149	806004	81.53			
4	Fluoranthene	18.66			202	647583	82.71			
5	Benzidine	18.92			184	154419	51.99			
5	Pyrene	19.02			202	664162	70.34			
5	Butyl Benzyl Phthalate	20.15			149	398535	74.07			
5	3,3'-Dichlorobenzidine	21.11			252	303503	82.10			
5	Benz(a)anthracene	21.11			228	682013	82.03			
5	Chrysene	21.19			228	640374	79.56			
5	Bis(2-ethylhexyl) Phthalate	21.30			149	592197	77.34			
6	Di-n-octyl Phthalate	22.77			149	1074545	83.01			
6	Benzo(b)fluoranthene	23.45			252	635896	90.07			
6	Benzo(k)fluoranthene	23.53			252	623290	85.07			
6	Benzo(a)pyrene	24.19			252	469133	80.01			
6	Indeno(1,2,3-cd)pyrene	26.78			276	436357	85.93			
6	Dibenz(a,h)anthracene	26.85			278	461461	85.31			
6	Benzo(g,h,i)perylene	27.35			276	451980	82.45			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F002.D Vial: 2
Acq On : 10 Jun 2010 3:32 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 10 16:02:42 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 10 12:07:36 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	109990	40.00	ug/ml	-0.01
21) Naphthalene-d8	11.44	136	420027	40.00	ug/ml	-0.01
34) Acenaphthene-d10	14.29	164	219736	40.00	ug/ml	-0.01
58) Phenanthrene-d10	16.70	188	325013	40.00	ug/ml	0.00
68) Chrysene-d12	21.13	240	353756	40.00	ug/ml	0.00
77) Perylene-d12	24.31	264	274061	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.11	112	216302	73.97	ug/ml	-0.02
Spiked Amount 150.000	Range 21 - 100		Recovery = 49.31%			
7) Phenol-d6	8.86	99	286873	70.34	ug/ml	-0.01
Spiked Amount 150.000	Range 10 - 94		Recovery = 46.89%			
19) Nitrobenzene-d5	10.28	82	297975	74.79	ug/ml	-0.01
Spiked Amount 100.000	Range 35 - 114		Recovery = 74.79%			
38) 2-Fluorobiphenyl	13.23	172	580166	80.54	ug/ml	-0.01
Spiked Amount 100.000	Range 43 - 116		Recovery = 80.54%			
59) 2,4,6-Tribromophenol	15.59	330	109916	83.44	ug/ml	-0.01
Spiked Amount 150.000	Range 10 - 123		Recovery = 55.63%			
71) Terphenyl-d14	19.32	244	384621	71.01	ug/ml	-0.01
Spiked Amount 100.000	Range 33 - 141		Recovery = 71.01%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.13	42	226016m	86.00	ug/ml	
3) Pyridine	4.16	79	259518m	69.69	ug/ml	
5) Aniline	8.80	93	302691	73.43	ug/ml	74
6) Bis(2-chloroethyl) Ether	8.95	93	238910	71.83	ug/ml	98
8) Phenol	8.88	94	319966	76.60	ug/ml	96
9) 2-Chlorophenol	9.01	128	287422	79.81	ug/ml	93
10) 1,3-Dichlorobenzene	9.23	146	329883	86.36	ug/ml	99
11) 1,4-Dichlorobenzene	9.37	146	327211	84.11	ug/ml	98
12) 1,2-Dichlorobenzene	9.61	146	313117	85.03	ug/ml	100
13) Benzyl Alcohol	9.64	108	184543	83.43	ug/ml	89
14) Bis(2-chloroisopropyl) Eth	9.85	45	349139	63.28	ug/ml	72
15) 2-Methylphenol	9.86	107	209921	77.62	ug/ml	99
16) Hexachloroethane	10.17	117	155984	88.12	ug/ml	86
17) N-Nitrosodi-n-propylamine	10.09	70	196615	72.63	ug/ml	89
18) 4-Methylphenol	10.13	107	336268	81.87	ug/ml	98
20) Nitrobenzene	10.31	77	286452	76.44	ug/ml	97
22) Isophorone	10.73	82	525185	69.31	ug/ml	98
23) 2-Nitrophenol	10.83	139	176255	84.42	ug/ml	94
24) 2,4-Dimethylphenol	10.98	122	223696	80.13	ug/ml	96
25) Bis(2-chloroethoxy)methane	11.11	93	312503	73.42	ug/ml	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F002.D Vial: 2
Acq On : 10 Jun 2010 3:32 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 10 16:02:42 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 10 12:07:36 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.26	162	274748	86.75	ug/ml	98
27)	Benzoic Acid	11.33	122	196362	82.07	ug/ml	98
28)	1,2,4-Trichlorobenzene	11.36	180	310058	92.21	ug/ml	98
29)	Naphthalene	11.47	128	857536	85.09	ug/ml	99
30)	4-Chloroaniline	11.61	127	340400	76.56	ug/ml	97
31)	Hexachlorobutadiene	11.70	225	194917	91.38	ug/ml	100
32)	4-Chloro-3-methylphenol	12.45	107	278154	84.14	ug/ml	97
33)	2-Methylnaphthalene	12.61	142	524046	81.72	ug/ml	100
35)	Hexachlorocyclopentadiene	12.87	237	135426	61.44	ug/ml	96
36)	2,4,6-Trichlorophenol	13.11	196	207799	91.67	ug/ml	99
37)	2,4,5-Trichlorophenol	13.18	196	223222	88.37	ug/ml	99
39)	2-Chloronaphthalene	13.40	162	505419	79.53	ug/ml	99
40)	2-Nitroaniline	13.60	65	159315	77.93	ug/ml	97
41)	Acenaphthylene	14.07	152	812961	83.04	ug/ml	99
42)	Dimethyl Phthalate	13.93	163	634673	84.96	ug/ml	100
43)	2,6-Dinitrotoluene	14.02	165	139162	82.21	ug/ml	88
44)	Acenaphthene	14.36	154	481100	86.10	ug/ml	98
45)	3-Nitroaniline	14.29	138	144085	80.90	ug/ml	92
46)	2,4-Dinitrophenol	14.46	184	74794	76.15	ug/ml	91
47)	Dibenzofuran	14.64	168	790795	89.76	ug/ml	99
48)	4-Nitrophenol	14.63	109	93791	97.25	ug/ml#	87
49)	2,4-Dinitrotoluene	14.66	165	183180	85.38	ug/ml	73
50)	2,3,4,6-Tetrachlorophenol	14.87	232	178809	97.09	ug/ml	97
51)	Fluorene	15.19	166	569134	86.21	ug/ml	97
52)	4-Chlorophenyl Phenyl Ethe	15.22	204	294686	87.19	ug/ml	95
53)	Diethyl Phthalate	15.08	149	630625	87.32	ug/ml	98
54)	4-Nitroaniline	15.28	138	127947	82.99	ug/ml	83
55)	2-Methyl-4,6-dinitrophenol	15.33	198	97902	83.90	ug/ml#	35
56)	N-Nitrosodiphenylamine	15.42	169	386072	87.71	ug/ml	99
57)	1,2-Diphenylhydrazine	15.47	77	601340	81.02	ug/ml	93
60)	4-Bromophenyl Phenyl Ether	16.00	248	166745	85.10	ug/ml	91
61)	Hexachlorobenzene	16.08	284	197314	86.88	ug/ml	91
62)	Pentachlorophenol	16.42	266	105145	82.38	ug/ml	99
63)	Phenanthrene	16.74	178	713600	82.64	ug/ml	98
64)	Anthracene	16.83	178	724022	79.75	ug/ml	99
65)	Carbazole	17.11	167	589682	79.57	ug/ml	100
66)	Di-n-butyl Phthalate	17.73	149	806004	81.53	ug/ml	99
67)	Fluoranthene	18.66	202	647583	82.71	ug/ml	92
69)	Benzidine	18.92	184	154419	51.99	ug/ml	95
70)	Pyrene	19.02	202	664162	70.34	ug/ml	99
72)	Butyl Benzyl Phthalate	20.15	149	398535	74.07	ug/ml	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F002.D Vial: 2
Acq On : 10 Jun 2010 3:32 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 10 16:02:42 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 10 12:07:36 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

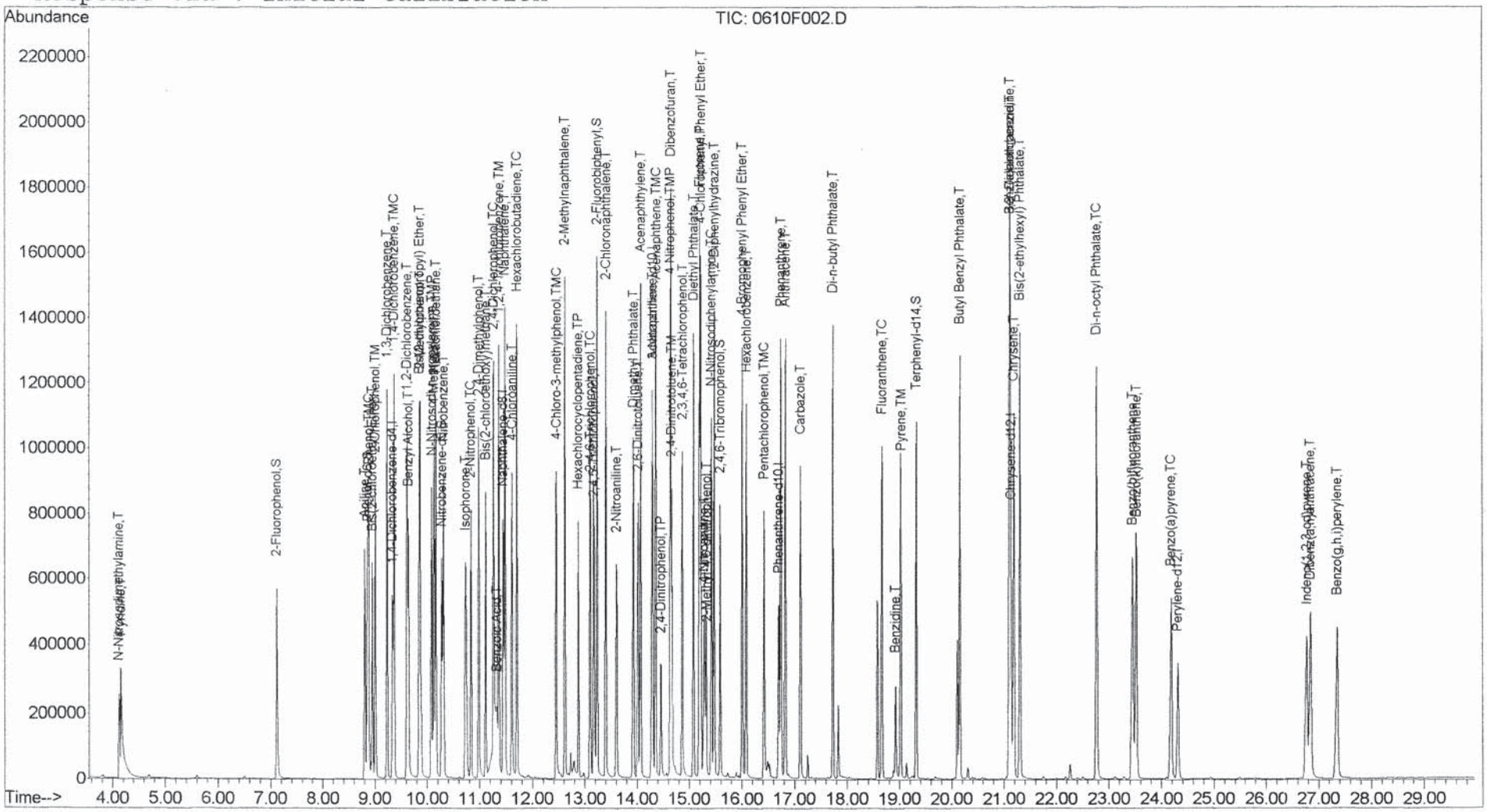
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.11	252	303503	82.10	ug/ml	98
74)	Benz(a)anthracene	21.11	228	682013	82.03	ug/ml	100
75)	Chrysene	21.19	228	640374	79.56	ug/ml	99
76)	Bis(2-ethylhexyl) Phthalat	21.30	149	592197	77.34	ug/ml	99
78)	Di-n-octyl Phthalate	22.77	149	1074545	83.01	ug/ml	99
79)	Benzo(b)fluoranthene	23.45	252	635896	90.07	ug/ml	95
80)	Benzo(k)fluoranthene	23.53	252	623290	85.07	ug/ml	95
81)	Benzo(a)pyrene	24.19	252	469133	80.01	ug/ml	96
82)	Indeno(1,2,3-cd)pyrene	26.78	276	436357	85.93	ug/ml	95
83)	Dibenz(a,h)anthracene	26.85	278	461461	85.31	ug/ml	98
84)	Benzo(g,h,i)perylene	27.35	276	451980	82.45	ug/ml	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F002.D Vial: 2
Acq On : 10 Jun 2010 3:32 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:07 2010 Quant Results File: 0602BNC7.RES

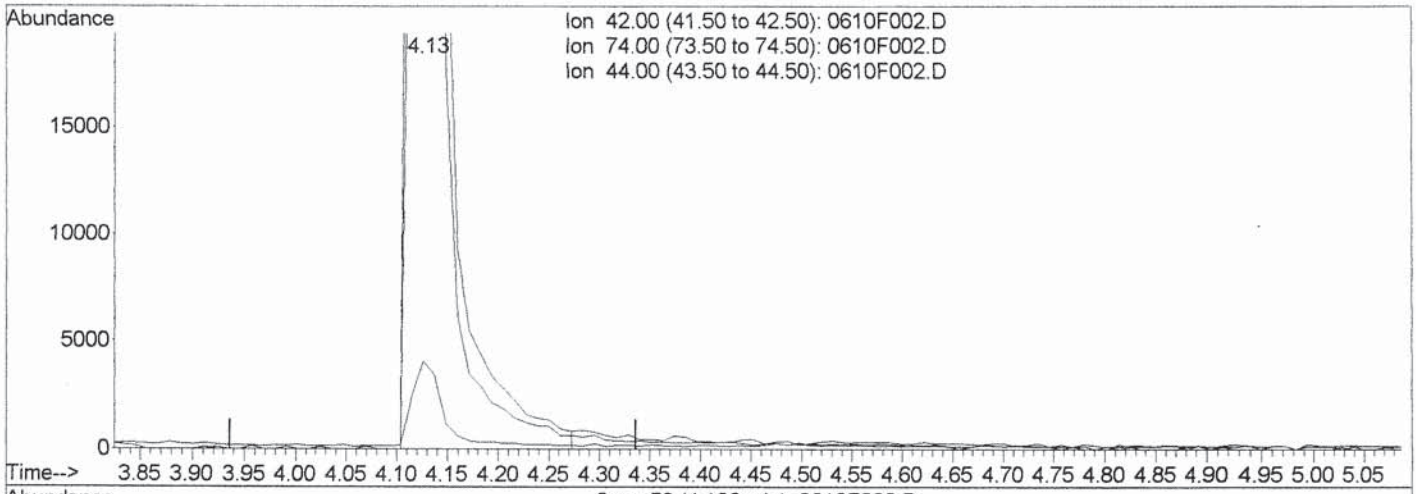
Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Initial Calibration

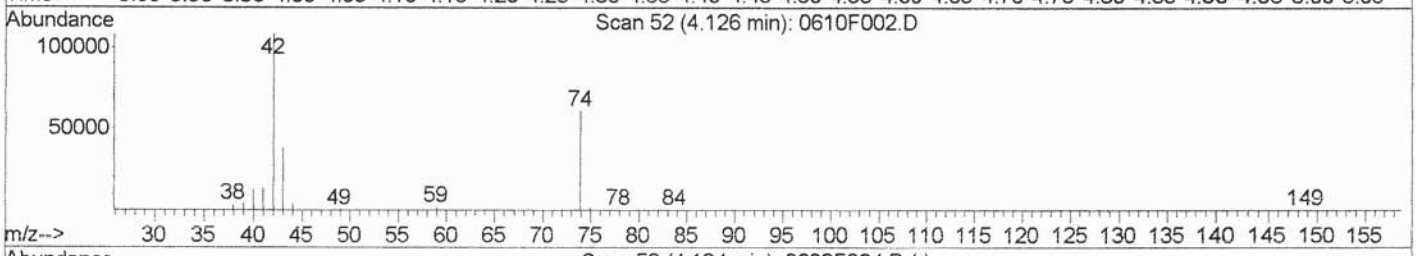


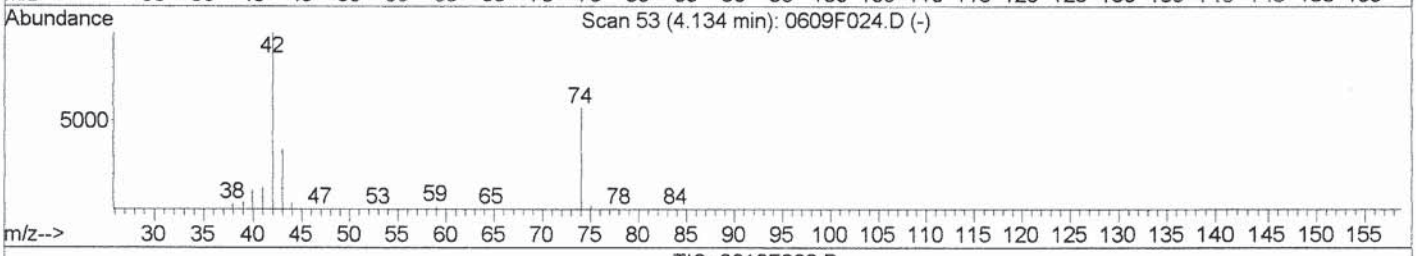
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F002.D Vial: 2
Acq On : 10 Jun 2010 3:32 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 10 16:02 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 10 12:07:36 2010
Response via : Multiple Level Calibration







TIC: 0610F002.D

(2) N-Nitrosodimethylamine (T)

4.13min 83.43ug/ml

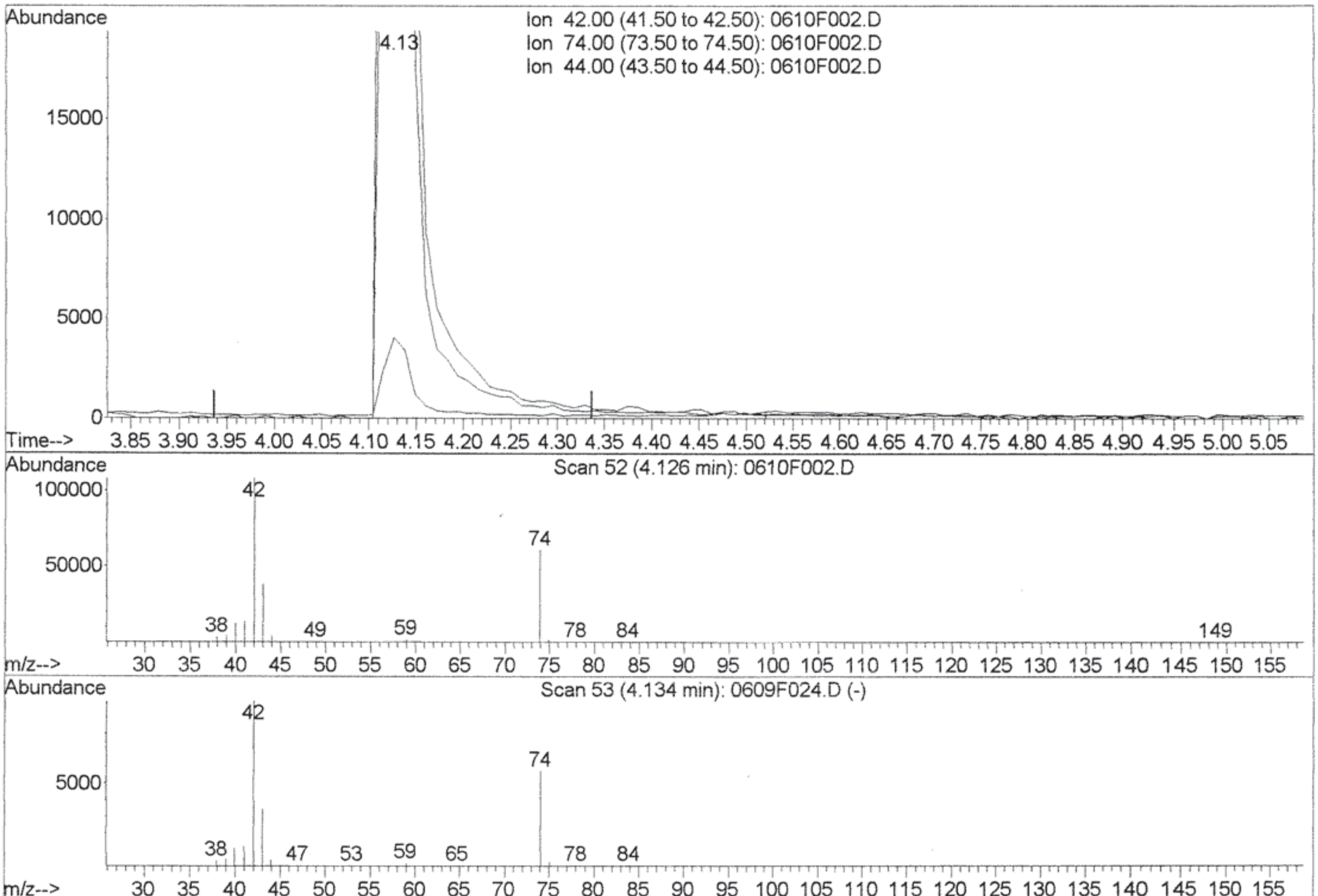
response 219253

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	56.29
44.00	4.40	3.60
0.00	0.00	0.00

Quantitation Report (Qedit)

```
Data File : J:\MS07\DATA\061010\0610F002.D                    Vial: 2
Acq On    : 10 Jun 2010   3:32 pm                          Operator: M.BUTCHER
Sample    : 80PPM 8270 CCV SVM32-40T                       Inst    : MS07
Misc      :                                                Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11  8:07 2010                   Quant Results File: temp.res

Method         : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title          : BNA Calibration  Rtx-5MS 30m x 0.25mm    MS07
Last Update    : Thu Jun 10 12:07:36 2010
Response via   : Multiple Level Calibration
```



TIC: 0610F002.D

(2) N-Nitrosodimethylamine (T)

4.13min 86.00ug/ml m

response 226016

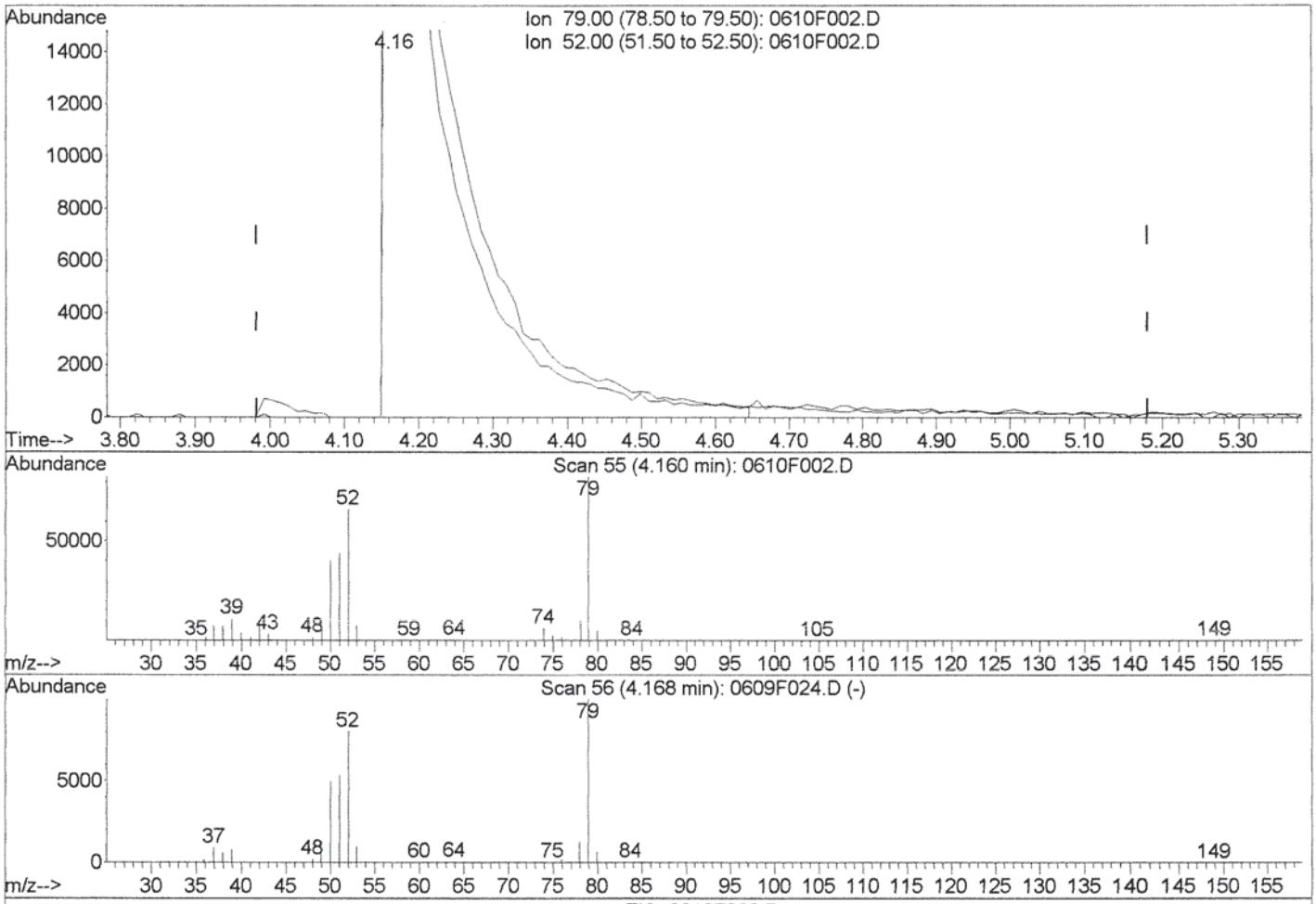
Ion	Exp%	Act%
42.00	100	100
74.00	79.30	56.37
44.00	4.40	3.75
0.00	0.00	0.00

LB 6/14/10

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F002.D Vial: 2
Acq On : 10 Jun 2010 3:32 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:07 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 10 12:07:36 2010
Response via : Multiple Level Calibration



TIC: 0610F002.D

(3) Pyridine (T)

4.16min 67.94ug/ml

response 252993

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	79.68
0.00	0.00	0.00
0.00	0.00	0.00

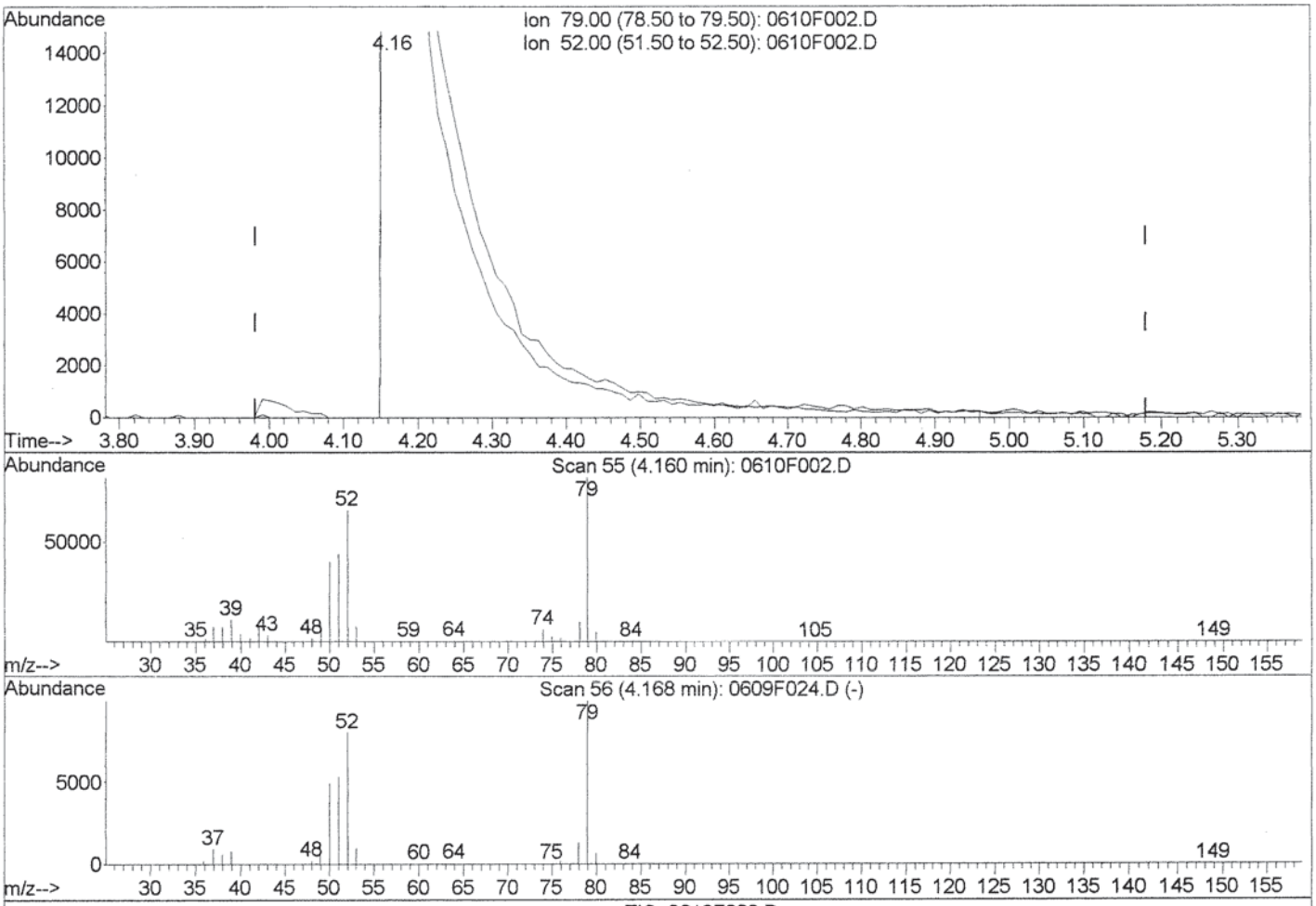
0610F002.D 0602BNC7.M Fri Jun 11 08:07:31 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F002.D
Acq On : 10 Jun 2010 3:32 pm
Sample : 80PPM 8270 CCV SVM32-40T
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 11 8:07 2010

Vial: 2
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 10 12:07:36 2010
Response via : Multiple Level Calibration



TIC: 0610F002.D

(3) Pyridine (T)

4.16min 69.69ug/ml m

response 259518

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	79.76
0.00	0.00	0.00
0.00	0.00	0.00

SC 6-11-10

0610F002.D 0602BNC7.M Fri Jun 11 08:07:35 2010

LB 6/14/10

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010

Continuing Calibration Verification Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration Date: 06/02/2010
Calibration ID: CAL9525
Analysis Lot: KWG1005687
Units: ug/ml

File ID: J:\MS07\DATA\061010\0610F013.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine	80	81	0.01	0.956	0.963	1	NA	± 30 %	AverageRF
Aniline	80	83	0.01	1.50	1.55	3	NA	± 30 %	AverageRF
Bis(2-chloroethyl) Ether	80	76	0.01	1.21	1.15	-5	NA	± 30 %	AverageRF
‡ Phenol	80	84	0.01	1.52	1.60	5	NA	± 20 %	AverageRF
2-Chlorophenol	80	84	0.01	1.31	1.38	5	NA	± 30 %	AverageRF
1,3-Dichlorobenzene	80	83	0.01	1.39	1.45	4	NA	± 30 %	AverageRF
‡ 1,4-Dichlorobenzene	80	82	0.01	1.41	1.46	3	NA	± 20 %	AverageRF
1,2-Dichlorobenzene	80	83	0.01	1.34	1.38	3	NA	± 30 %	AverageRF
Benzyl Alcohol	80	93	0.01	0.804	0.938	17	NA	± 30 %	AverageRF
Bis(2-chloroisopropyl) Ether	80	76	0.01	2.01	1.91	-5	NA	± 30 %	AverageRF
2-Methylphenol	80	83	0.01	0.984	1.02	4	NA	± 30 %	AverageRF
Hexachloroethane	80	83	0.01	0.644	0.665	3	NA	± 30 %	AverageRF
† N-Nitrosodi-n-propylamine	80	77	0.05	0.985	0.951	-3	NA	± 30 %	AverageRF
4-Methylphenol	80	85	0.01	1.49	1.58	6	NA	± 30 %	AverageRF
Nitrobenzene	80	78	0.01	1.36	1.32	-3	NA	± 30 %	AverageRF
Isophorone	80	79	0.01	0.722	0.713	-1	NA	± 30 %	AverageRF
‡ 2-Nitrophenol	80	87	0.01	0.199	0.217	9	NA	± 20 %	AverageRF
2,4-Dimethylphenol	80	87	0.01	0.266	0.289	9	NA	± 30 %	AverageRF
Bis(2-chloroethoxy)methane	80	79	0.01	0.405	0.398	-2	NA	± 30 %	AverageRF
‡ 2,4-Dichlorophenol	80	88	0.01	0.302	0.332	10	NA	± 20 %	AverageRF
Benzoic Acid	80	87	0.01	0.228	0.249	9	NA	± 30 %	AverageRF
1,2,4-Trichlorobenzene	80	85	0.01	0.320	0.340	6	NA	± 30 %	AverageRF
Naphthalene	80	81	0.01	0.960	0.967	1	NA	± 30 %	AverageRF
4-Chloroaniline	80	82	0.01	0.423	0.433	2	NA	± 30 %	AverageRF
‡ Hexachlorobutadiene	80	85	0.01	0.203	0.215	6	NA	± 20 %	AverageRF
‡ 4-Chloro-3-methylphenol	80	84	0.01	0.315	0.331	5	NA	± 20 %	AverageRF
2-Methylnaphthalene	80	82	0.01	0.611	0.625	2	NA	± 30 %	AverageRF
† Hexachlorocyclopentadiene	80	64	0.05	0.373	0.322	NA	-20	± 30 %	Quadratic
‡ 2,4,6-Trichlorophenol	80	87	0.01	0.413	0.450	9	NA	± 20 %	AverageRF
2,4,5-Trichlorophenol	80	84	0.01	0.460	0.485	5	NA	± 30 %	AverageRF
2-Chloronaphthalene	80	83	0.01	1.16	1.20	4	NA	± 30 %	AverageRF
2-Nitroaniline	80	76	0.01	0.372	0.352	-5	NA	± 30 %	AverageRF
Acenaphthylene	80	83	0.01	1.78	1.85	4	NA	± 30 %	AverageRF
Dimethyl Phthalate	80	78	0.01	1.36	1.33	-2	NA	± 30 %	AverageRF
2,6-Dinitrotoluene	80	80	0.01	0.308	0.308	0	NA	± 30 %	AverageRF
‡ Acenaphthene	80	83	0.01	1.02	1.06	4	NA	± 20 %	AverageRF
3-Nitroaniline	80	77	0.01	0.324	0.312	-4	NA	± 30 %	AverageRF
† 2,4-Dinitrophenol	80	72	0.05	0.179	0.161	-10	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Exponent
Project: Heglar - Kronquist/0907194.000.0601

Service Request: K1005244
Date Analyzed: 06/10/2010

Continuing Calibration Verification Summary
Semi-Volatile Organic Compounds by GC/MS

Calibration Type: Internal Standard
Analysis Method: 8270C

Calibration Date: 06/02/2010
Calibration ID: CAL9525
Analysis Lot: KWG1005687
Units: ug/ml

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dibenzofuran	80	81	0.01	1.60	1.63	1	NA	± 30 %	AverageRF
† 4-Nitrophenol	80	84	0.05	0.176	0.184	5	NA	± 30 %	AverageRF
2,4-Dinitrotoluene	80	73	0.01	0.391	0.358	-8	NA	± 30 %	AverageRF
Fluorene	80	80	0.01	1.20	1.21	0	NA	± 30 %	AverageRF
4-Chlorophenyl Phenyl Ether	80	78	0.01	0.615	0.596	-3	NA	± 30 %	AverageRF
Diethyl Phthalate	80	80	0.01	1.31	1.31	0	NA	± 30 %	AverageRF
4-Nitroaniline	80	78	0.01	0.281	0.273	-3	NA	± 30 %	AverageRF
2-Methyl-4,6-dinitrophenol	80	73	0.01	0.212	0.193	-9	NA	± 30 %	AverageRF
‡ N-Nitrosodiphenylamine	80	75	0.01	0.801	0.747	-7	NA	± 20 %	AverageRF
4-Bromophenyl Phenyl Ether	80	88	0.01	0.241	0.265	10	NA	± 30 %	AverageRF
Hexachlorobenzene	80	89	0.01	0.280	0.312	12	NA	± 30 %	AverageRF
‡ Pentachlorophenol	80	82	0.01	0.157	0.161	3	NA	± 20 %	AverageRF
Phenanthrene	80	81	0.01	1.06	1.08	1	NA	± 30 %	AverageRF
Anthracene	80	80	0.01	1.12	1.12	0	NA	± 30 %	AverageRF
Di-n-butyl Phthalate	80	87	0.01	1.22	1.32	9	NA	± 30 %	AverageRF
‡ Fluoranthene	80	82	0.01	0.964	0.992	3	NA	± 20 %	AverageRF
Pyrene	80	70	0.01	1.07	0.940	-12	NA	± 30 %	AverageRF
Butyl Benzyl Phthalate	80	79	0.01	0.608	0.598	-2	NA	± 30 %	AverageRF
3,3'-Dichlorobenzidine	80	80	0.01	0.418	0.420	1	NA	± 30 %	AverageRF
Benz(a)anthracene	80	80	0.01	0.940	0.944	0	NA	± 30 %	AverageRF
Chrysene	80	79	0.01	0.910	0.902	-1	NA	± 30 %	AverageRF
Bis(2-ethylhexyl) Phthalate	80	83	0.01	0.866	0.901	4	NA	± 30 %	AverageRF
‡ Di-n-octyl Phthalate	80	90	0.01	1.76	2.14	NA	12	± 20 %	Quadratic
Benzo(b)fluoranthene	80	87	0.01	1.03	1.12	9	NA	± 30 %	AverageRF
Benzo(k)fluoranthene	80	87	0.01	1.07	1.17	9	NA	± 30 %	AverageRF
‡ Benzo(a)pyrene	80	84	0.01	0.856	0.894	5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	80	87	0.01	0.741	0.802	8	NA	± 30 %	AverageRF
Dibenz(a,h)anthracene	80	83	0.01	0.789	0.815	3	NA	± 30 %	AverageRF
Benzo(g,h,i)perylene	80	84	0.01	0.800	0.843	5	NA	± 30 %	AverageRF
2-Fluorophenol	80	79	0.01	1.06	1.05	-1	NA	± 30 %	AverageRF
Phenol-d6	80	78	0.01	1.48	1.45	-2	NA	± 30 %	AverageRF
Nitrobenzene-d5	80	76	0.01	1.45	1.38	-5	NA	± 30 %	AverageRF
2-Fluorobiphenyl	80	80	0.01	1.31	1.31	0	NA	± 30 %	AverageRF
2,4,6-Tribromophenol	80	84	0.01	0.162	0.169	4	NA	± 30 %	AverageRF
Terphenyl-d14	80	70	0.01	0.612	0.538	-12	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Exception Report

Data File: J:\MS07\DATA\061010\0610F013.D
Lab ID: KWG1005687-2
RunType: CCV
Matrix: WATER

Date Acquired: 06/10/2010 22:59
Date Quantitated: 06/11/2010 11:41
Batch ID: KWG1005687
Analysis Method: 8270C
MethodJoinID: MJ250

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA		x
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Second Source ICAL Verification	Benzidine	119.6	NA	30	NA

Primary Review: 6-11-10

Secondary Review: LB 6/14/10

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8270C	**Collect Date:**		**Receive Date:**	06/11/2010

Analysis Lot:	KWG1005687	**Prep Lot:**	**Report Group:**	
Analysis Method:	8270C	**Prep Method:**		
Prep Ref:		**Prep Date:**		

Quant Method:	J:\MS07\METHODS\8270_625\0602BNC7.M	**Calibration ID:**	CAL9525
Title:			
Tune Ref:	J:\MS07\DATA\061010\0610F012.D	**Method ID:**	MJ250
MB Ref:		**Quant based on Method**	

Data File:	J:\MS07\DATA\061010\0610F013.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 22:59	**Quant Date:**	06/11/2010 11:41	**Vial:**	11
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1005687-2			**Soln Conc. Units:**	ug/ml

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	1,4-Dichlorobenzene-d4	9.33	-0.01	152	142104	40.00	OK
2	Naphthalene-d8	11.44	-0.01	136	539393	40.00	OK
3	Acenaphthene-d10	14.29	-0.01	164	286996	40.00	OK
4	Phenanthrene-d10	16.70	0.00	188	353872	40.00	OK
5	Chrysene-d12	21.13	0.00	240	408000	40.00	OK
6	Perylene-d12	24.31	0.00	264	306648	40.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	2-Fluorophenol	7.11			112	298545	79.02		20-83	NA	
1	Phenol-d6	8.84			99	413286	78.43		23-90	NA	
1	Nitrobenzene-d5	10.28			82	391071	75.98		29-100	NA	
3	2-Fluorobiphenyl	13.23			172	754157	80.16		32-104	NA	
4	2,4,6-Tribromophenol	15.58			330	119877	83.58		20-123	NA	
5	Terphenyl-d14	19.31			244	438850	70.25		37-133	NA	

Target Compounds

Final Conc. Units:

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	N-Nitrosodimethylamine	4.12			42	273733m	80.62			
1	Pyridine	4.15			79	404287m	84.03			
1	Aniline	8.80			93	439422	82.51			
1	Bis(2-chloroethyl) Ether	8.95			93	328020	76.34			
1	Phenol	8.88			94	454902	84.29			
1	2-Chlorophenol	9.00			128	391119	84.06			
1	1,3-Dichlorobenzene	9.23			146	410899	83.26			
1	1,4-Dichlorobenzene	9.36			146	414147	82.40			
1	1,2-Dichlorobenzene	9.60			146	393432	82.69			
1	Benzyl Alcohol	9.63			108	266678	93.32			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F013.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 22:59	**Quant Date:**	06/11/2010 11:41	**Vial:**	11
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1005687-2			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:**

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Bis(2-chloroisopropyl) Ether	9.85			45	542886	76.15			
1	2-Methylphenol	9.86			107	289641	82.89			
1	Hexachloroethane	10.16			117	189065	82.68			
1	N-Nitrosodi-n-propylamine	10.08			70	270319	77.29			
1	4-Methylphenol	10.13			107	450023	84.81			
1	Nitrobenzene	10.31			77	376213	77.70			
2	Isophorone	10.73			82	769026	79.03			
2	2-Nitrophenol	10.83			139	233565	87.11			
2	2,4-Dimethylphenol	10.97			122	311249	86.82			
2	Bis(2-chloroethoxy)methane	11.11			93	429455	78.57			
2	2,4-Dichlorophenol	11.26			162	357860	87.99			
2	Benzoic Acid	11.34			122	268395	87.36			
2	1,2,4-Trichlorobenzene	11.36			180	366994	84.99			
2	Naphthalene	11.47			128	1042668	80.57			
2	4-Chloroaniline	11.61			127	466954	81.79			
2	Hexachlorobutadiene	11.70			225	232418	84.84			
2	4-Chloro-3-methylphenol	12.45			107	356723	84.02			
2	2-Methylnaphthalene	12.61			142	674575	81.92			
3	Hexachlorocyclopentadiene	12.87			237	184583	63.78			
3	2,4,6-Trichlorophenol	13.10			196	258227	87.22			
3	2,4,5-Trichlorophenol	13.17			196	278447	84.40			
3	2-Chloronaphthalene	13.40			162	687781	82.86			
3	2-Nitroaniline	13.60			65	202134	75.70			
3	Acenaphthylene	14.06			152	1061267	83.00			
3	Dimethyl Phthalate	13.93			163	763436	78.25			
3	2,6-Dinitrotoluene	14.02			165	176733	79.93			
3	Acenaphthene	14.36			154	606201	83.07			
3	3-Nitroaniline	14.29			138	179272	77.06			
3	2,4-Dinitrophenol	14.46			184	92333	71.97			
3	Dibenzofuran	14.64			168	933333	81.11			
3	4-Nitrophenol	14.63			109	105863	84.04			
3	2,4-Dinitrotoluene	14.66			165	205374	73.29			
3	2,3,4,6-Tetrachlorophenol	14.86			232	204335	84.94			
3	Fluorene	15.19			166	691904	80.24			
3	4-Chlorophenyl Phenyl Ether	15.21			204	342162	77.51			
3	Diethyl Phthalate	15.08			149	753027	79.84			
3	4-Nitroaniline	15.28			138	156559	77.75			
3	2-Methyl-4,6-dinitrophenol	15.32			198	111013	72.84			
3	N-Nitrosodiphenylamine	15.41			169	428858	74.60			
3	1,2-Diphenylhydrazine	15.47			77	737754	76.10			
4	4-Bromophenyl Phenyl Ether	16.00			248	187349	87.81			
4	Hexachlorobenzene	16.08			284	220922	89.34			

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D: Result from dilution
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d: Compound manually deleted
NR: Analyte not reported from this analysis

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?: Insufficient information to determine acceptance
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c: check for co-elution

Data File:	J:\MS07\DATA\061010\0610F013.D			**Instrument:**	MS07
Acqu Date:	06/10/2010 22:59	**Quant Date:**	06/11/2010 11:41	**Vial:**	11
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1005687-2			**Soln Conc. Units:**	ug/ml

Target Compounds **Final Conc. Units:**

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
4	Pentachlorophenol	16.42			266	114252	82.22			
4	Phenanthrene	16.73			178	761829	81.03			
4	Anthracene	16.82			178	789961	79.92			
4	Carbazole	17.11			167	691672	85.72			
4	Di-n-butyl Phthalate	17.72			149	934447	86.81			
4	Fluoranthene	18.66			202	702275	82.39			
5	Benzidine	18.92			184	200045	58.39			
5	Pyrene	19.01			202	766674	70.40			
5	Butyl Benzyl Phthalate	20.15			149	487675	78.58			
5	3,3'-Dichlorobenzidine	21.11			252	342867	80.42			
5	Benz(a)anthracene	21.11			228	770217	80.32			
5	Chrysene	21.18			228	736216	79.31			
5	Bis(2-ethylhexyl) Phthalate	21.30			149	735519	83.28			
6	Di-n-octyl Phthalate	22.76			149	1311285	89.92			
6	Benzo(b)fluoranthene	23.45			252	689760	87.32			
6	Benzo(k)fluoranthene	23.52			252	714807	87.19			
6	Benzo(a)pyrene	24.18			252	548575	83.61			
6	Indeno(1,2,3-cd)pyrene	26.77			276	492122	86.61			
6	Dibenz(a,h)anthracene	26.84			278	499648	82.55			
6	Benzo(g,h,i)perylene	27.35			276	517172	84.32			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F013.D Vial: 11
Acq On : 10 Jun 2010 10:59 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 07:09:31 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 10 12:07:36 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	142104	40.00	ug/ml	-0.02
21) Naphthalene-d8	11.44	136	539393	40.00	ug/ml	-0.02
34) Acenaphthene-d10	14.29	164	286996	40.00	ug/ml	-0.02
58) Phenanthrene-d10	16.70	188	353872	40.00	ug/ml	0.00
68) Chrysene-d12	21.13	240	408000	40.00	ug/ml	0.00
77) Perylene-d12	24.31	264	306648	40.00	ug/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	7.11	112	298545	79.02	ug/ml	-0.03
Spiked Amount 150.000	Range 21 - 100		Recovery = 52.68%			
7) Phenol-d6	8.84	99	413286	78.43	ug/ml	-0.03
Spiked Amount 150.000	Range 10 - 94		Recovery = 52.29%			
19) Nitrobenzene-d5	10.28	82	391071	75.98	ug/ml	-0.01
Spiked Amount 100.000	Range 35 - 114		Recovery = 75.98%			
38) 2-Fluorobiphenyl	13.23	172	754157	80.16	ug/ml	-0.02
Spiked Amount 100.000	Range 43 - 116		Recovery = 80.16%			
59) 2,4,6-Tribromophenol	15.58	330	119877	83.58	ug/ml	-0.01
Spiked Amount 150.000	Range 10 - 123		Recovery = 55.72%			
71) Terphenyl-d14	19.31	244	438850	70.25	ug/ml	-0.02
Spiked Amount 100.000	Range 33 - 141		Recovery = 70.25%			
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.12	42	273733m	80.62	ug/ml	
3) Pyridine	4.15	79	404287m	84.03	ug/ml	
5) Aniline	8.80	93	439422	82.51	ug/ml	87
6) Bis(2-chloroethyl) Ether	8.95	93	328020	76.34	ug/ml	99
8) Phenol	8.88	94	454902	84.29	ug/ml	95
9) 2-Chlorophenol	9.00	128	391119	84.06	ug/ml	92
10) 1,3-Dichlorobenzene	9.23	146	410899	83.26	ug/ml	99
11) 1,4-Dichlorobenzene	9.36	146	414147	82.40	ug/ml	98
12) 1,2-Dichlorobenzene	9.60	146	393432	82.69	ug/ml	95
13) Benzyl Alcohol	9.63	108	266678	93.32	ug/ml	95
14) Bis(2-chloroisopropyl) Eth	9.85	45	542886	76.15	ug/ml	77
15) 2-Methylphenol	9.86	107	289641	82.89	ug/ml	96
16) Hexachloroethane	10.16	117	189065	82.68	ug/ml	85
17) N-Nitrosodi-n-propylamine	10.08	70	270319	77.29	ug/ml	90
18) 4-Methylphenol	10.13	107	450023	84.81	ug/ml	99
20) Nitrobenzene	10.31	77	376213	77.70	ug/ml	97
22) Isophorone	10.73	82	769026	79.03	ug/ml	99
23) 2-Nitrophenol	10.83	139	233565	87.11	ug/ml	95
24) 2,4-Dimethylphenol	10.97	122	311249	86.82	ug/ml	100
25) Bis(2-chloroethoxy)methane	11.11	93	429455	78.57	ug/ml	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F013.D Vial: 11
Acq On : 10 Jun 2010 10:59 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 07:09:31 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 10 12:07:36 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
26)	2,4-Dichlorophenol	11.26	162	357860	87.99	ug/ml	98
27)	Benzoic Acid	11.34	122	268395	87.36	ug/ml	97
28)	1,2,4-Trichlorobenzene	11.36	180	366994	84.99	ug/ml	99
29)	Naphthalene	11.47	128	1042668	80.57	ug/ml	98
30)	4-Chloroaniline	11.61	127	466954	81.79	ug/ml	98
31)	Hexachlorobutadiene	11.70	225	232418	84.84	ug/ml	100
32)	4-Chloro-3-methylphenol	12.45	107	356723	84.02	ug/ml#	53
33)	2-Methylnaphthalene	12.61	142	674575	81.92	ug/ml	97
35)	Hexachlorocyclopentadiene	12.87	237	184583	63.78	ug/ml	97
36)	2,4,6-Trichlorophenol	13.10	196	258227	87.22	ug/ml	99
37)	2,4,5-Trichlorophenol	13.17	196	278447	84.40	ug/ml	99
39)	2-Chloronaphthalene	13.40	162	687781	82.86	ug/ml	100
40)	2-Nitroaniline	13.60	65	202134	75.70	ug/ml	98
41)	Acenaphthylene	14.06	152	1061267	83.00	ug/ml	99
42)	Dimethyl Phthalate	13.93	163	763436	78.25	ug/ml	99
43)	2,6-Dinitrotoluene	14.02	165	176733	79.93	ug/ml	88
44)	Acenaphthene	14.36	154	606201	83.07	ug/ml	97
45)	3-Nitroaniline	14.29	138	179272	77.06	ug/ml	94
46)	2,4-Dinitrophenol	14.46	184	92333	71.97	ug/ml	93
47)	Dibenzofuran	14.64	168	933333	81.11	ug/ml	99
48)	4-Nitrophenol	14.63	109	105863	84.04	ug/ml#	85
49)	2,4-Dinitrotoluene	14.66	165	205374	73.29	ug/ml	77
50)	2,3,4,6-Tetrachlorophenol	14.86	232	204335	84.94	ug/ml	97
51)	Fluorene	15.19	166	691904	80.24	ug/ml	97
52)	4-Chlorophenyl Phenyl Ethe	15.21	204	342162	77.51	ug/ml	95
53)	Diethyl Phthalate	15.08	149	753027	79.84	ug/ml	99
54)	4-Nitroaniline	15.28	138	156559	77.75	ug/ml	90
55)	2-Methyl-4,6-dinitrophenol	15.32	198	111013	72.84	ug/ml#	36
56)	N-Nitrosodiphenylamine	15.41	169	428858	74.60	ug/ml	99
57)	1,2-Diphenylhydrazine	15.47	77	737754	76.10	ug/ml	96
60)	4-Bromophenyl Phenyl Ether	16.00	248	187349	87.81	ug/ml	96
61)	Hexachlorobenzene	16.08	284	220922	89.34	ug/ml	87
62)	Pentachlorophenol	16.42	266	114252	82.22	ug/ml	98
63)	Phenanthrene	16.73	178	761829	81.03	ug/ml	99
64)	Anthracene	16.82	178	789961	79.92	ug/ml	100
65)	Carbazole	17.11	167	691672	85.72	ug/ml	99
66)	Di-n-butyl Phthalate	17.72	149	934447	86.81	ug/ml	99
67)	Fluoranthene	18.66	202	702275	82.39	ug/ml	95
69)	Benzidine	18.92	184	200045	58.39	ug/ml	95
70)	Pyrene	19.01	202	766674	70.40	ug/ml	99
72)	Butyl Benzyl Phthalate	20.15	149	487675	78.58	ug/ml	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F013.D Vial: 11
Acq On : 10 Jun 2010 10:59 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 07:09:31 2010 Quant Results File: 0602BNC7.RES

Quant Method : J:\MS07\M...\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Thu Jun 10 12:07:36 2010
Response via : Initial Calibration
DataAcq Meth : 8270_1

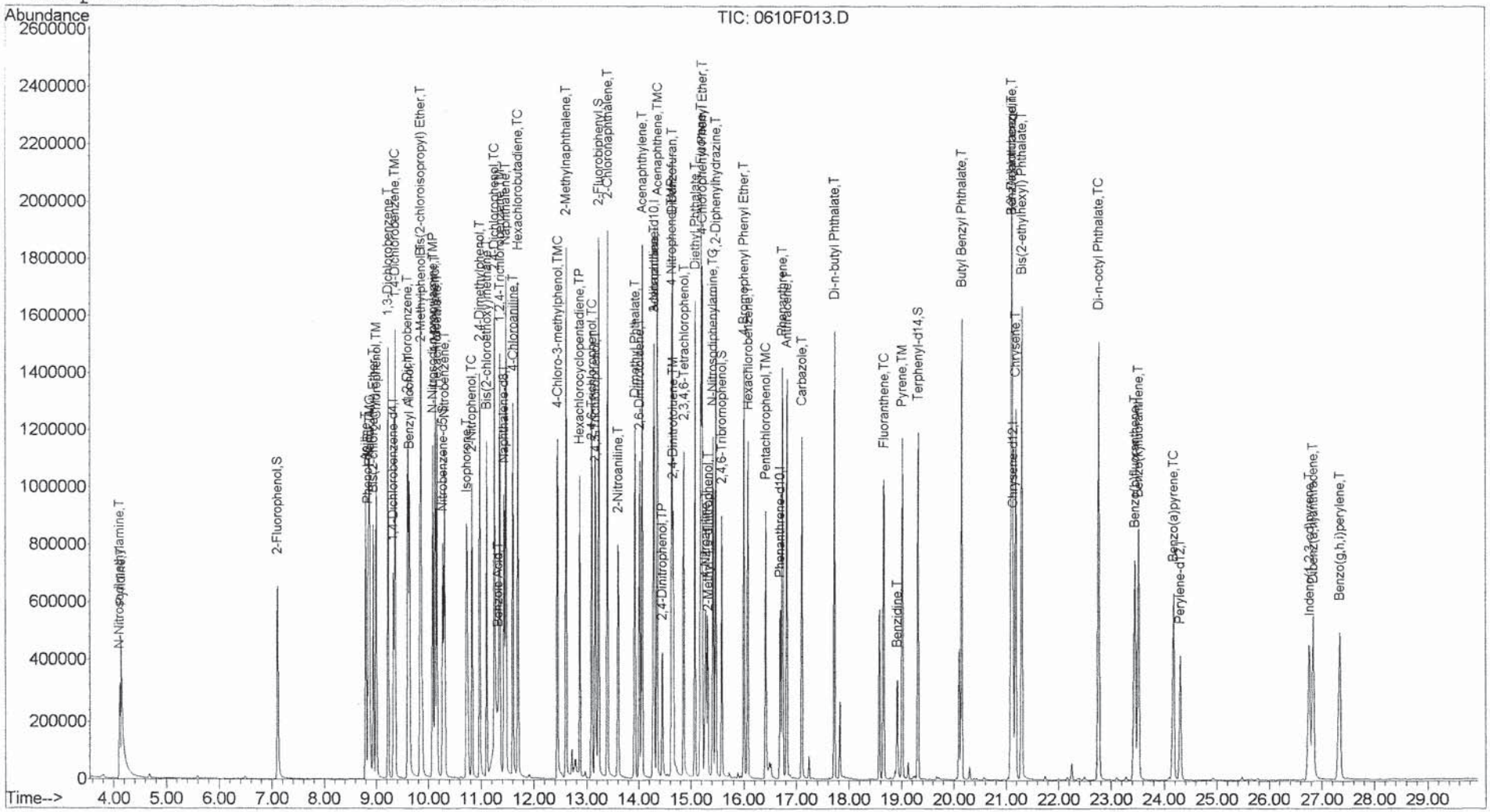
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
73)	3,3'-Dichlorobenzidine	21.11	252	342867	80.42	ug/ml	99
74)	Benz(a)anthracene	21.11	228	770217	80.32	ug/ml	100
75)	Chrysene	21.18	228	736216	79.31	ug/ml	99
76)	Bis(2-ethylhexyl) Phthalat	21.30	149	735519	83.28	ug/ml	99
78)	Di-n-octyl Phthalate	22.76	149	1311285	89.92	ug/ml	100
79)	Benzo(b)fluoranthene	23.45	252	689760	87.32	ug/ml	97
80)	Benzo(k)fluoranthene	23.52	252	714807	87.19	ug/ml	99
81)	Benzo(a)pyrene	24.18	252	548575	83.61	ug/ml	97
82)	Indeno(1,2,3-cd)pyrene	26.77	276	492122	86.61	ug/ml	96
83)	Dibenz(a,h)anthracene	26.84	278	499648	82.55	ug/ml	99
84)	Benzo(g,h,i)perylene	27.35	276	517172	84.32	ug/ml	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS07\DATA\061010\0610F013.D Vial: 11
Acq On : 10 Jun 2010 10:59 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 11:41 2010 Quant Results File: 0602BNC7.RES

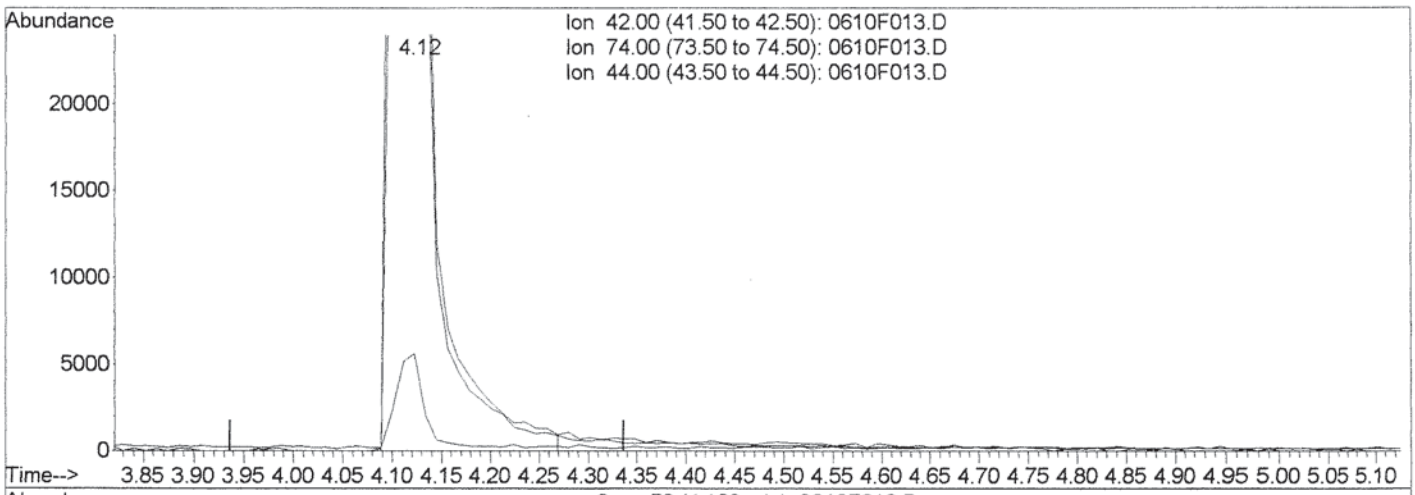
Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 11:42:24 2010
Response via : Initial Calibration

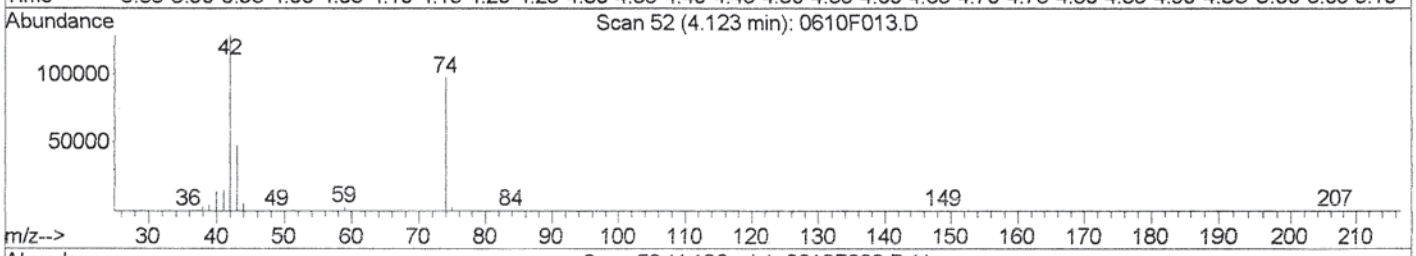


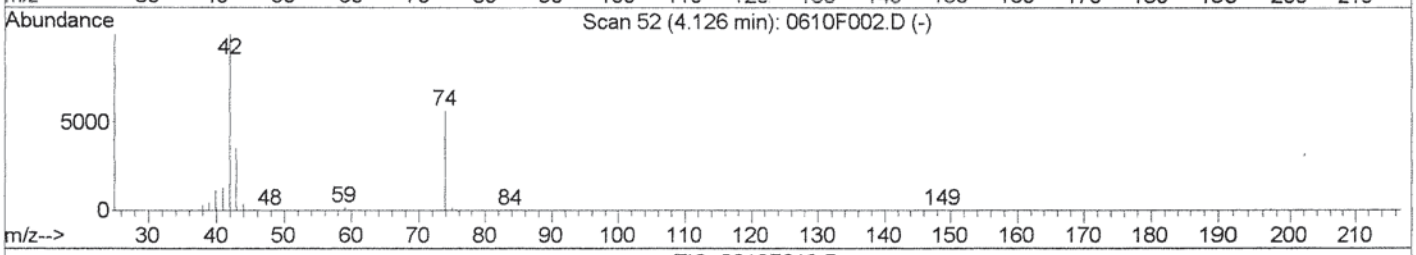
Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F013.D Vial: 11
Acq On : 10 Jun 2010 10:59 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 7:09 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration







TIC: 0610F013.D

(2) N-Nitrosodimethylamine (T)

4.12min 78.11ug/ml

response 265220

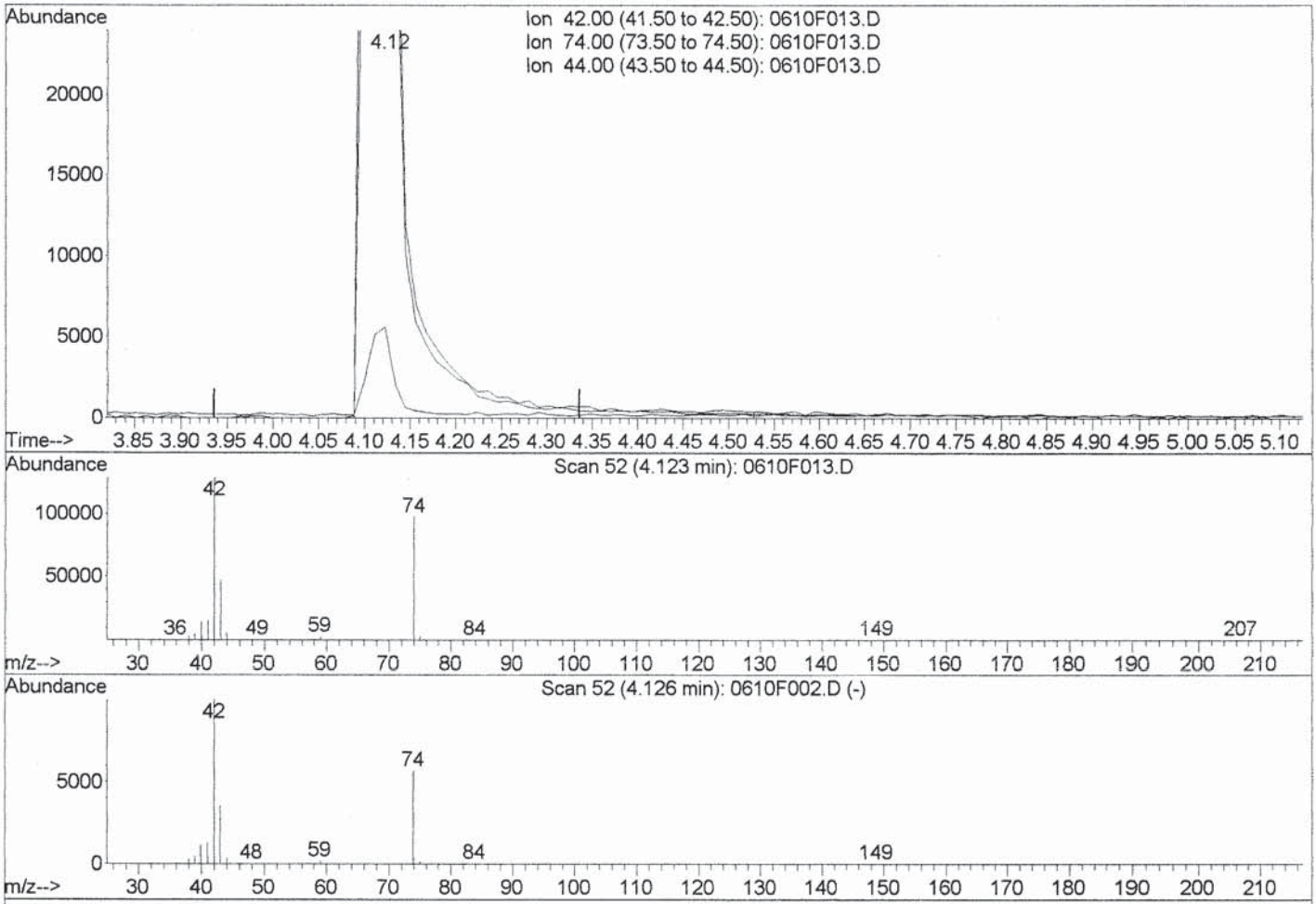
Ion	Exp%	Act%
42.00	100	100
74.00	79.30	75.52
44.00	4.40	4.15
0.00	0.00	0.00

0610F013.D 0602BNC7.M Fri Jun 11 11:41:23 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F013.D Vial: 11
Acq On : 10 Jun 2010 10:59 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 11:41 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F013.D

(2) N-Nitrosodimethylamine (T)

4.12min 80.62ug/ml m

response 273733

Ion	Exp%	Act%
42.00	100	100
74.00	79.30	75.59
44.00	4.40	4.34
0.00	0.00	0.00

JC 6-11-10

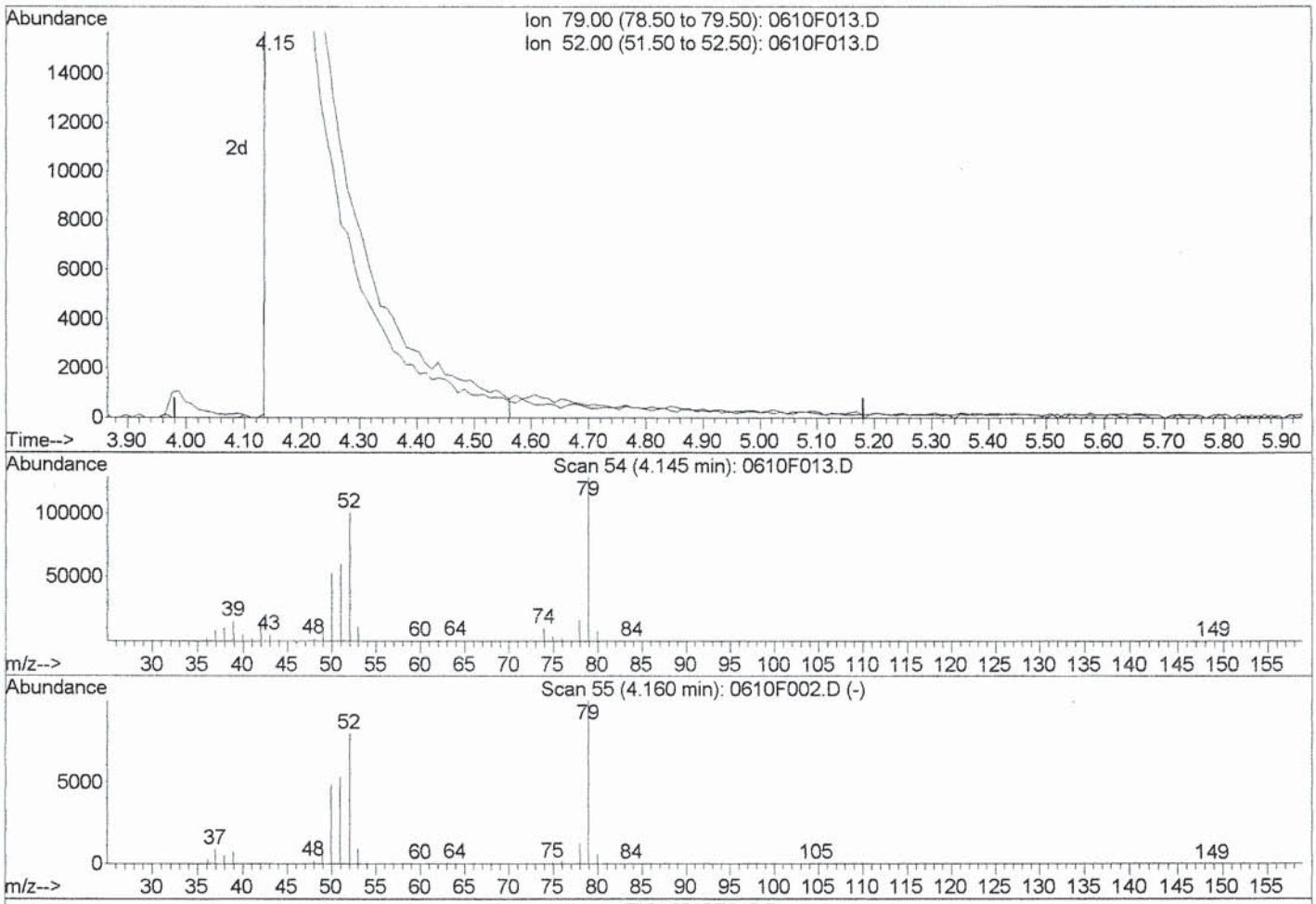
LB 6/14/10

0610F013.D 0602BNC7.M Fri Jun 11 11:41:28 2010

Quantitation Report (Qedit)

Data File : J:\MS07\DATA\061010\0610F013.D Vial: 11
Acq On : 10 Jun 2010 10:59 pm Operator: M.BUTCHER
Sample : 80PPM 8270 CCV SVM32-40T Inst : MS07
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 11 11:41 2010 Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration



TIC: 0610F013.D

(3) Pyridine (T)

4.15min 81.14ug/ml

response 390396

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	78.05
0.00	0.00	0.00
0.00	0.00	0.00

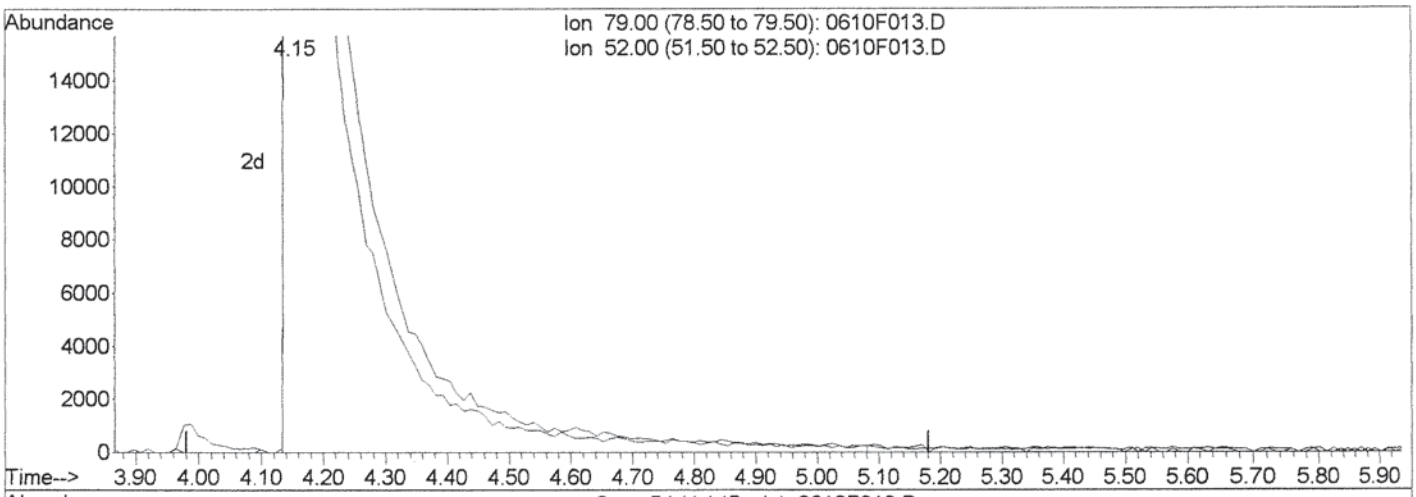
0610F013.D 0602BNC7.M Fri Jun 11 11:41:34 2010

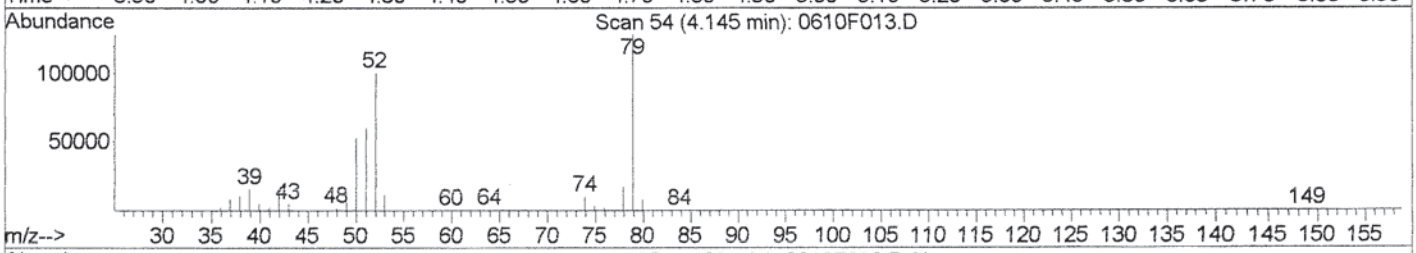
Quantitation Report (Qedit)

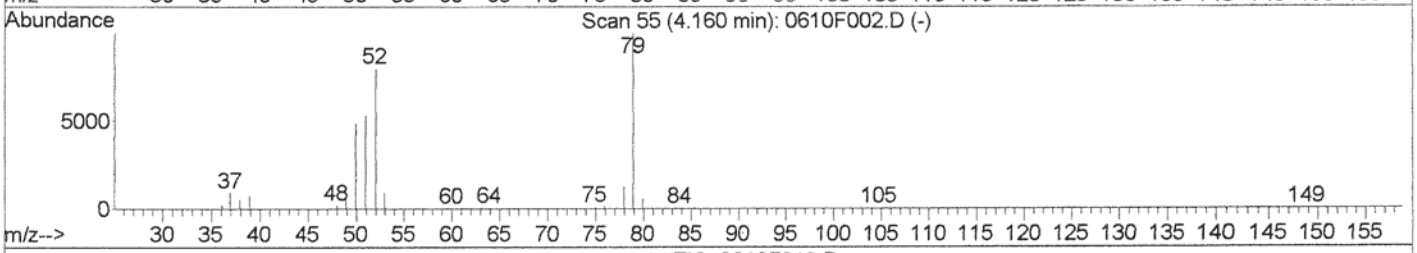
Data File : J:\MS07\DATA\061010\0610F013.D
Acq On : 10 Jun 2010 10:59 pm
Sample : 80PPM 8270 CCV SVM32-40T
Misc :
MS Integration Params: RTEINT.P
Quant Time: Jun 11 11:41 2010

Vial: 11
Operator: M.BUTCHER
Inst : MS07
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS07\METHODS\8270_625\0602BNC7.M (RTE Integrator)
Title : BNA Calibration Rtx-5MS 30m x 0.25mm MS07
Last Update : Fri Jun 11 08:08:42 2010
Response via : Multiple Level Calibration







TIC: 0610F013.D

(3) Pyridine (T)

4.15min 84.03ug/ml m

response 404287

Ion	Exp%	Act%
79.00	100	100
52.00	77.00	78.09
0.00	0.00	0.00
0.00	0.00	0.00

0610F013.D 0602BNC7.M Fri Jun 11 11:41:39 2010

Organic Analysis:
Semi-Volatile Organic Compounds by GC/MS

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID: KWG1005659 **Prep Method:** EPA 3541 **Prep Date:** 06/01/10 05:00
Department: Semivoa GCMS

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.	Solids
K1005175-012	SJSH-040-CR1A-2	8270C SVO	SEDIMENT	40.40g	1mL	
K1005244-003	D-4-16	8270C SVO	MISC. SOL	33.86g	1mL	
K1005282-003	SJNE 050-CR1E	8270C SVO	SEDIMENT	40.09g	1mL	
K1005282-013	SJNE 030-CR1C	8270C SVO	SEDIMENT	40.22g	1mL	
K1005284-006	SJVS 016-GR1	8270C SVO	SEDIMENT	40.47g	1mL	
K1005353-004	SJGB 013 S4	8270C SVO	SEDIMENT	40.56g	1mL	
K1005353-006	SJGB 014 S1	8270C SVO	SEDIMENT	40.82g	1mL	
K1005353-010	SJGB 014 S5	8270C SVO	SEDIMENT	40.12g	1mL	
K1005353-015	SJGB 015 S5	8270C SVO	SEDIMENT	40.43g	1mL	
K1005353-018	SJGB 016 S3	8270C SVO	SEDIMENT	40.11g	1mL	
K1005353-024	SJGB 017 S5	8270C SVO	SEDIMENT	40.79g	1mL	
KWG1005659-1	Matrix Spike	8270C SVO	SEDIMENT	40.35g	1mL	
KWG1005659-2	Duplicate Matrix Spike	8270C SVO	SEDIMENT	40.36g	1mL	
KWG1005659-3	Lab Control Sample	8270C SVO	MISC. SOL	30.00g	1mL	
KWG1005659-4	Duplicate Lab Control Sampl	8270C SVO	MISC. SOL	30.00g	1mL	
KWG1005659-5	Method Blank	8270C SVO	MISC. SOL	40.82g	1mL	

Lab Code	Parent Lab Code	Comments
KWG1005659-1	K1005175-012	KQ1005080-01
KWG1005659-2	K1005175-012	KQ1005080-02
KWG1005659-3		KQ1005080-03
KWG1005659-4		KQ1005080-04
KWG1005659-5		KQ1005080-05

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1005175-012	918258	SVM32-30D	1000uL			RLarsen
K1005244-003	918259	SVM32-30D	1000uL			RLarsen
K1005282-003	918260	SVM32-30D	1000uL			RLarsen
K1005282-013	918261	SVM32-30D	1000uL			RLarsen
K1005284-006	918262	SVM32-30D	1000uL			RLarsen
K1005353-004	918263	SVM32-30D	1000uL			RLarsen
K1005353-006	918264	SVM32-30D	1000uL			RLarsen
K1005353-010	918265	SVM32-30D	1000uL			RLarsen
K1005353-015	918266	SVM32-30D	1000uL			RLarsen
K1005353-018	918267	SVM32-30D	1000uL			RLarsen
K1005353-024	918268	SVM32-30D	1000uL			RLarsen

Comments: ES= 4/M 30 80R

Started By: LBerg Assisted By: Training Yes No
Completed By: LBerg Assisted By: Yes No
Reviewed By: [signature] Date: 6/11/10 Storage: SVM

Chain of Custody

Relinquished By: [signature] Date: 6-10-10
Received By: [signature] Date: 6-11-10

Extracts Examined Yes No

Group ID:	KWG1005659	**Prep Method:**	EPA 3541	**Prep Date:**	06/01/10 05:00
Department:	Semivoa GCMS				

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
KWG1005659-1	918269	SVM32-30D	1000uL	SVM32-19A	1000uL	RLarsen
KWG1005659-2	918270	SVM32-30D	1000uL	SVM32-19A	1000uL	RLarsen
KWG1005659-3	918271	SVM32-30D	1000uL	SVM32-19A	1000uL	RLarsen
KWG1005659-4	918272	SVM32-30D	1000uL	SVM32-19A	1000uL	RLarsen
KWG1005659-5	918273	SVM32-30D	1000uL			RLarsen

Comments:

				Training	
Started By:	LBerg	Assisted By:		Yes	No
Completed By:	LBerg	Assisted By:		Yes	No
Reviewed By:	[signature]	Date:	6/11/10	Storage:	SVM

Chain of Custody

				Extracts Examined	
Relinquished By:	[signature]	Date:	6/10/10		
Received By:	[signature]	Date:	6-11-10	Yes	No

Columbia Analytical Services™ **Preparation Information Benchsheet**

Prep Run: 112691 **Prep Workflow**: OrgExtS (14) **Status**: Prepped **Prep Date**: 06/01/2010 05:00
Team: Semivoa GCMS **Prep Method**: EPA 3541 **Current Step**: Final Volume **Due Date**: 06/09/2010
Analyst: LBerg **Rush/NPDES**: N/A

Lab Code	Client ID	Bottle #	Target Amt	Initial Amt	Final Volume	TestNo List	Comments
K1005175-012	SJSH-040-CR1A-2	.01	34.88 g	40.40 g	1 mL	SVO	
K1005244-003	D-4-16	.03	33.08 g	33.86 g	1 mL	SVO	
K1005282-003	SJNE 050-CR1E	.02	69.61 g	40.09 g	1 mL	SVO	
K1005282-013	SJNE 030-CR1C	.02	41.21 g	40.22 g	1 mL	SVO	
K1005284-006	SJVS 016-GR1	.01	62.50 g	40.47 g	1 mL	SVO	
K1005353-004	SJGB 013 S4	.02	42.74 g	40.56 g	1 mL	SVO	
K1005353-006	SJGB 014 S1	.02	61.86 g	40.82 g	1 mL	SVO	
K1005353-010	SJGB 014 S5	.02	45.87 g	40.12 g	1 mL	SVO	
K1005353-015	SJGB 015 S5	.02	43.60 g	40.43 g	1 mL	SVO	
K1005353-018	SJGB 016 S3	.02	41.38 g	40.11 g	1 mL	SVO	
K1005353-024	SJGB 017 S5	.02	41.15 g	40.79 g	1 mL	SVO	
K1005175-012: KQ1005080-01	Matrix Spike	.01	30.00 g	40.35 g	1 mL	SVO	
K1005175-012: KQ1005080-02	Duplicate Matrix Spike	.01	30.00 g	40.36 g	1 mL	SVO	
KQ1005080-03	Lab Control Sample		30.00 g	30.00 g	1 mL	SVO	
KQ1005080-04	Duplicate Lab Control Sample		30.00 g	30.00 g	1 mL	SVO	
KQ1005080-05	Method Blank		30.00 g	40.82 g	1 mL	SVO	

16 Total Samples consisting of 11 Client Samples, 2 Client QC Samples, 3 Batch QC Samples associated with the current Prep Run.

Spiking Solutions **Witness**: RLarsen

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Extraction	01-JUN-10 05:00	02-JUN-10 08:00	LBerg	RAndrell	N	
	09-JUN-10	09-JUN-10				

Column Clean	00:00	00:00	HBailey	N
Final Volume	10-JUN-10 00:00	10-JUN-10 00:00	LBerg	N

Comments

Review

Reviewed by: HBailey Date: 6/11/10

Chain of Custody

Relinquished By: Lindsay Berg Date: 6.10.10

Received By: _____ Date: _____

Extracts/Digestions Examined

Yes No

Columbia Analytical Services

Preparation Information Benchsheet

Prep Run: 112691 **Prep Workflow:** OrgExtS (14) **Status:** Draft **Prep Date:** 06/01/2010 11:45
Team: Semivoa GCMS **Prep Method:** EPA 3541 **Current Step:** Extraction **Due Date:** 05/31/2010
Analyst: LBERG **Rush/NPDES:** N/A

Lab Code	Client ID	Bottle #	✓	Target Amt	Initial Amount	Inter. Volume	Final Volume	Surr Amt	Spike Amt	TestNo List
K1005175-012	SJSH-040-CR1A-2	.01		30.00 g	40.40	10mL	1mL	1mL	—	SVO
K1005244-003	D-4-16	.03		33.08 g	33.86				—	SVO
K1005282-003	SJNE 050-CR1E	.02		69.61 g	40.09				—	SVO
K1005282-013	SJNE 030-CR1C	.02		41.21 g	40.22				—	SVO
K1005284-006	SJVS 016-GR1	.01		62.50 g	40.47				—	SVO
K1005353-004	SJGB 013 S4	.02		42.74 g	40.56				—	SVO
K1005353-006	SJGB 014 S1	.02		61.86 g	40.82				—	SVO
K1005353-010	SJGB 014 S5	.02		45.87 g	40.12				—	SVO
K1005353-015	SJGB 015 S5	.02		43.60 g	40.43				—	SVO
K1005353-018	SJGB 016 S3	.02		41.38 g	40.11				—	SVO
K1005353-024	SJGB 017 S5	.02		41.15 g	40.79				—	SVO
K1005175-012: KQ1005080-01	Matrix Spike	.01		30.00 g	40.35				1mL	SVO
K1005175-012: KQ1005080-02	Duplicate Matrix Spike	.01		30.00 g	40.36					SVO
KQ1005080-03	Lab Control Sample			30.00 g	30.00					SVO
KQ1005080-04	Duplicate Lab Control Sample			30.00 g	30.00				↓	SVO
KQ1005080-05	Method Blank			30.00 g	40.82	↓	↓	↓	—	SVO

16 Total Samples consisting of 11 Client Samples, 2 Client QC Samples, 3 Batch QC Samples associated with the current Prep Run.

Spiking Solutions **Witness:** Klarsa

SVM32-30D, 100/150ppm, XD 11/21/10, 1mL
SVM 32-194, 100ppm, XD 8/11/10, 1mL

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments

Extraction	1700 2000 LBerg RAndrell
Column Clean	6-9-10 6-9-10 DP
Acid Clean	
Sulfur Clean	
Final Volume	6-10-10 6-10-10 DP

Comments

GPC RUNLOG

Run Date: 6/8/2010 Calibration Date: 6/2/2010

GPC #: 2 Program Number: 1

Lab I.D.	Position	Test	Dilution	Comments
BLANK	1	8270	NA	NA
KQ1005341-MB	2	8270	NA	NA
KQ1005341-LCS	3	8270	NA	NA
KQ1005341-DLCS	4	8270	NA	NA
5812-1	5	8270	NA	NA
BLANK	6	8270	NA	NA
KQ1005080-MB	7	8270	NA	NA
KQ1005080-LCS	8	8270	NA	NA
KQ1005080-DLCS	9	8270	NA	NA
5175-12	10	8270	NA	NA
5244-3	11	8270	NA	NA
5282-3	12	8270	NA	NA
5282-13	13	8270	NA	NA
5284-6	14	8270	NA	NA
5353-4	15	8270	NA	NA
5353-6	16	8270	NA	NA
5353-10	17	8270	NA	NA
5353-15	18	8270	NA	NA
5353-18	19	8270	NA	NA
5353-24	20	8270	NA	NA
5175-12MS	21	8270	NA	NA
5175-12DMS	22	8270	NA	NA
BLANK	23	8270	NA	NA

Final Volume Calculation

Intermediate Volume before GPC: 10 mL

Aliquot taken from intermediate volume: 10 mL

Aliquot diluted up to.... 10 mL

Volume Injected onto column: 5 mL

GPC'd Extract brought to the Final Volume of: 0.5 mL

Calculated True Final Volume: 1 mL

Operator Date and Initial: 6/8/2010 HB

Additional Prep Information For EPA 3541

Service Request K1005175-5244-5282-5284-5353 Workgroup KQ1005080

Sulfate Lot # BC1016 DCM (GC^{2}) Lot # DB093

Soxtherm Start (Time/Date/Initial): 1700/6·1·10/RA

Soxtherm Stop (Time/Date/Initial): 2000/6·1·10/RA

GPC Clean-up (3640): 6·9·10 (Initial/Date)

S-Evap Temp: 75°C

N-Evap Temp: 30°C

Hexane Exchange for Silica Gel: _____ Hexane Lot # _____

Silica Gel Clean-up (3630): _____ (Initial/Date)

Silica Column Lot # _____ 1:1 Hexane/DCM Reagent Lot # _____

Extract Storage: SVM

Date Completed: 6·10·10

Comments/Observations:

Bench Sheet Review Check List

- ☑ Hold Times Met (if no, Reason: _____)
- ☑ Prep date, dept, method, product code correct in stealth
- ☑ Spike Information correct
- ☑ Weights/Volumes and units correct on raw and final bench sheets
- ☑ Sample IDs have been checked—Bottle numbers appended if required
- ☑ Names present for: Started by, Completed by, relinquished by, and witnessed by.
- ☑ Training has been circled
- ☑ Extract Storage recorded
- ☑ Additional Prep Sheet completely filled out (NA or line out Blanks)
- ☑ All clean-ups have been noted on additional prep sheet
- ☑ Signed service request with Form V, if applicable, has been attached

Injection Log

Directory: J:\MS07\DATA\061010

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0610f001.d	1.	50PPM DFTPP SVM32-14A		10 Jun 2010 14:51
2	2	0610f002.d	1.	80PPM 8270 CCV SVM32-40T		10 Jun 2010 15:32
3	1	0610f003.d	1.	KQ5341-5 MB	lkw 4 65-99	10 Jun 2010 16:16
4	2	0610f004.d	1.	KQ5341-3 LCS		10 Jun 2010 16:56
5	3	0610f005.d	1.	KQ5341-4 DLCS		10 Jun 2010 17:37
6	4	0610f006.d	1.	K1005812-1		10 Jun 2010 18:17
7	5	0610f007.d	1.	KQ5080-5 MB	lkw 5659	10 Jun 2010 18:58
8	6	0610f008.d	1.	KQ5080-3 LCS		10 Jun 2010 19:38
9	7	0610f009.d	1.	KQ5080-4 DLCS		10 Jun 2010 20:18
10	8	0610f010.d	1.	KQ5080-1 K1005175-12 MS		10 Jun 2010 20:58
11	9	0610f011.d	1.	KQ5080-2 K1005175-12 DMS		10 Jun 2010 21:38
12	10	0610f012.d	1.	~~50PPM DFTPP SVM32-14A~~		10 Jun 2010 22:19
13	11	0610f013.d	1.	~~80PPM 8270 CCV SVM32-40T~~		10 Jun 2010 22:59
14	5	0610f014.d	1.	IB		10 Jun 2010 23:39
15	12	0610f015.d	1.	K1005175-12		11 Jun 2010 00:19
16	13	0610f016.d	1.	K1005244-3		11 Jun 2010 01:00
17	14	0610f017.d	1.	K1005282-3		11 Jun 2010 01:40
18	15	0610f018.d	1.	K1005282-13		11 Jun 2010 02:20
19	16	0610f019.d	1.	K1005284-6		11 Jun 2010 03:00
20	17	0610f020.d	1.	K1005258-4		11 Jun 2010 03:41
21	18	0610f021.d	1.	K1005353-6		11 Jun 2010 04:21
22	19	0610f022.d	1.	K1005353-15		11 Jun 2010 05:01
23	20	0610f023.d	1.	K1005353-18		11 Jun 2010 05:41
24	21	0610f024.d	1.	~~K1005353-10~~		11 Jun 2010 06:22

STANDARDS # 204432

ICAL 9525

M 6-11-10

LB 6/14/10

11 Jun 2010 07:09

Injection Log

Directory: J:\MS07\DATA\061010

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0610f001.d	1.	50PPM DFTPP SVM32-14A		10 Jun 2010 14:51
2	2	0610f002.d	1.	80PPM 8270 CCV SVM32-40T		10 Jun 2010 15:32
3	1	0610f003.d	1.	KQ5341-5 MB		10 Jun 2010 16:16
4	2	0610f004.d	1.	KQ5341-3 LCS		10 Jun 2010 16:56
5	3	0610f005.d	1.	KQ5341-4 DLCS		10 Jun 2010 17:37
6	4	0610f006.d	1.	K1005812-1		10 Jun 2010 18:17
7	5	0610f007.d	1.	KQ5080-5 MB		10 Jun 2010 18:58
8	6	0610f008.d	1.	KQ5080-3 LCS		10 Jun 2010 19:38
9	7	0610f009.d	1.	KQ5080-4 DLCS		10 Jun 2010 20:18
10	8	0610f010.d	1.	KQ5080-1 K1005175-12 MS		10 Jun 2010 20:58
11	9	0610f011.d	1.	KQ5080-2 K1005175-12 DMS		10 Jun 2010 21:38
12	10	0610f012.d	1.	50PPM DFTPP SVM32-14A		10 Jun 2010 22:19
13	11	0610f013.d	1.	80PPM 8270 CCV SVM32-40T		10 Jun 2010 22:59
14	5	0610f014.d	1.	IB		10 Jun 2010 23:39
15	12	0610f015.d	1.	K1005175-12		11 Jun 2010 00:19
16	13	0610f016.d	1.	K1005244-3		11 Jun 2010 01:00
17	14	0610f017.d	1.	K1005282-3		11 Jun 2010 01:40
18	15	0610f018.d	1.	K1005282-13		11 Jun 2010 02:20
19	16	0610f019.d	1.	K1005284-6 SL		11 Jun 2010 03:00
20	17	0610f020.d	1.	K1005258-4 5353-4		11 Jun 2010 03:41
21	18	0610f021.d	1.	K1005353-6		11 Jun 2010 04:21
22	19	0610f022.d	1.	K1005353-15		11 Jun 2010 05:01
23	20	0610f023.d	1.	K1005353-18		11 Jun 2010 05:41
24	21	0610f024.d	1.	K1005353-10		11 Jun 2010 06:22
25	22	0610f025.d	1.	K1005353-24		11 Jun 2010 07:02
26	23	0610f026.d	1.	K1005012-14		11 Jun 2010 07:41
27	24	0610f027.d	1.	K1005012-15 SL		11 Jun 2010 08:21
28	25	0610f028.d	1.	K1005012-17 SL		11 Jun 2010 09:02
29	26	0610f029.d	1.	K1005012-18 SL		11 Jun 2010 09:42

STARLIMS # 204514

ICAL 9525

M 6-11-10

LB 6/14/10

11 Jun 2010 11:07

Subcontract
Laboratory Results

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Jun 11 2010
COLUMBIA ANALYTICAL SERVICES
1317 SOUTH 13TH AVENUE
KELSO, WA 98626
Attention: Pradeep Divvela

Dear Pradeep Divvela:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
D-4-16	Miscellaneous	10-A008256	NUT

Your sample was received on Tuesday, May 25, 2010. At the time of receipt, the sample was logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Kathy Fugiel
President

PO Number: K1005244

BACT = Bacteriological
CONV = Conventionals
TC=Total Coliforms
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals
APC=Aerobic Plate Count

Columbia Analytical Services, Inc. Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1079

CAS Contact: Pradeep Divvela

Project Number: K1005244
Project Manager: Pradeep Divvela

7.1 Temp

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	MISC_OUT_2 None Amtest	MISC_OUT_3 None Amtest
K1005244-003	D-4-16	1-4oz	Misc. Solid	5/19/10	1245	ACZ Amtest	1	1

8256-72

Use Caution. Open in hood. MSDS included

TKN-S

Test Comments

MISC_OUT_2 - None	K1005244-003	Total Nitrogen Subcontracted to AMtest SM4500 N C per Melissa Kleven's request.
MISC_OUT_3 - None	K1005244-003	TKN by 351.

Folder Comments:
Samples will have strong ammonia smell when opened.

Water contact with deors under certain circumstances is known to produce Hydrogen, methane, Acetylene ad ammonia gases.

1494

Special Instructions/Comments	Turnaround Requirements	Report Requirements	Invoice Information
Please provide the electronic (PDF and EDD) report to the following e-mail address: kelso_data@caslab.com	____ **RUSH** (Surcharges Apply) **PLEASE CIRCLE WORK DAYS** 1 2 3 4 5 ✓ **STANDARD** Requested FAX Date: _____ Requested Report Date: 06/12/10	____ I. Results Only ____ II. Results + QC Summaries ____ III. Results + QC and Calibration Summaries ✓ IV. Data Validation Report with Raw Data PQL/MDL/J Y EDD Y	PO# K1005244 Bill to

Relinquished By: _____ 5/24/10 1435 Received By: _____ 5/25/10 12:00 Airbill Number: _____

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

COLUMBIA ANALYTICAL SERVICES
1317 SOUTH 13TH AVENUE
KELSO, WA 98626
Attention: Pradeep Divvela
PO Number: K1005244
All results reported on an as received basis.

Date Received: 05/25/10
Date Reported: 6/11/10

AMTEST Identification Number **10-A008256**
Client Identification **D-4-16**
Sampling Date **05/19/10, 12:45**

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Nitrogen (TKN)	630	ug/g		5.0	SM 4500N C	KK	06/01/10
Nitrogen (Total)	1400	ug/g			416	KK	05/27/10

Kathy Fugiel
President

AMTEST LABORATORIES

QC Summary for sample number: 10-A008256

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
10-A008256	Total Nitrogen (TKN)	ug/g	630	530	17.
10-A008256	Nitrogen (Total)	ug/g	1400	1600	13.

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Total Nitrogen (TKN)	ug/g	2500	2400	96.0 %
Nitrogen (Total)	ug/g	10000	12000	120. %

BLANKS

ANALYTE	UNITS	RESULT
Total Nitrogen (TKN)	ug/g	< 5
Nitrogen (Total)	ug/g	< 5

Orthophosphate
Edge Analytical, WA

EDGE ANALYTICAL LABORATORIES

Burlington WA | 1620 S Walnut St - 98233
Corporate Office | 800.755.9295 • 360.757.1400 • 360.757.1402fax
Bellingham WA | 805 Orchard Dr Suite 4 - 98225
Microbiology | 360.671.0688 • 360.671.1577fax

May 28, 2010

Pradeep Divvela
Columbia Analytical Services
PO BOX 479
Kelso, WA 98626

RE: 10-07291 - K1005244

Dear Pradeep Divvela,

Your project: K1005244, was received on Tuesday May 25, 2010.
The following comments are reported for your project:

Sample was extracted using 5 grams in 50 mLs DI water. Sample was shaken and settled out. Supernatant was analyzed by SM4500-P F, results are as received.

If you have questions phone me at 800 755-9295.

Respectfully Submitted,

LJH

Lawrence J Henderson, PhD
Director of Laboratories

Enclosures Data Report
QC Reports
Chain of Custody

ANALYTICAL LABORATORIES

Burlington WA | 1620 S Walnut St - 98233
Corporate Office | 800.755.9295 • 360.757.1400 • 360.757.1402fax
Bellingham WA | 805 Orchard Dr Suite 4 - 98225
Microbiology | 360.671.0688 • 360.671.1577fax

Data Report

Client Name: Columbia Analytical Services
PO BOX 479
Kelso, WA 98626

Reference Number: 10-07291
Project: K1005244

Report Date: 5/27/10
Date Received: 5/25/10
Reviewed by: [signature]

Sample Description: K1005244-003 - D-4-16
Lab Number: 15976

Sample Date: 5/19/10
Collected By: Unknown

CAS ID#	Parameter	Result	PQL	MDL	Units	DF	Method	Analyzed	Analyst	Batch	Comment
14265-44-2	**ORTHO-PHOSPHATE**	0.50	0.10		mg/Kg	1.0	SM4500-P F	5/26/10	SPL	OPHOS-100526	

Notes:
ND = Not detected above the listed practical quantitation limit (PQL) or not above the Method Detection Limit (MDL), if requested.
PQL = Practical Quantitation Limit is the lowest level that can be acheived within specified limits of precision and accuracy during routine laboratory operating conditions.
D.F. - Dilution Factor

If you have any questions concerning this report contact Lawrence Henderson at the above phone number.

Form: cRslt_2.rpt

EDGE ANALYTICAL LABORATORIES

Burlington WA Corporate Office | 1620 S Walnut St - 98233
800.755.9295 • 360.757.1400 • 360.757.1402fax
Bellingham WA Microbiology | 805 Orchard Dr Suite 4 - 98225
360.671.0688 • 360.671.1577fax

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Laboratory Fortified Blank

Reference Number: 10-07291
Report Date: 05/27/10

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits	QC Qualifier	Type*	Comment
OPHOS-100526	ORTHO-PHOSPHATE	1.00	1.00	mg/L	SM4500-P F	100	80-120		LFB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

QCS: Quality Control Sample, a solution containing known concentrations of method analytes which is used to fortify an aliquot of reagent matrix. The QCS is obtained from an external source and is used to check lab performance.

LFB: Laboratory Fortified Blank, an aliquot of reagent matrix to which known quantities of method analytes are added in the lab. The LFB is analyzed exactly like a sample, and its purpose is to determine whether method performance is within accepted control limits.

MB or LRB: Method Blank or Laboratory Reagent Blank, an aliquot of reagent matrix is analyzed exactly like a sample, and its purpose is to determine if there is background contamination.

EDGE ANALYTICAL LABORATORIES

Burlington WA Corporate Office | 1620 S Walnut St - 98233
800.755.9295 • 360.757.1400 • 360.757.1402fax
Bellingham WA Microbiology | 805 Orchard Dr Suite 4 - 98225
360.671.0688 • 360.671.1577fax

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Laboratory Reagent Blank

Reference Number: 10-07291
Report Date: 05/27/10

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits	QC Qualifier	Type*	Comment
OPHOS-100526	ORTHO-PHOSPHATE	ND		mg/L	SM4500-P F		0.10000		LRB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

QCS: Quality Control Sample, a solution containing known concentrations of method analytes which is used to fortify an aliquot of reagent matrix. The QCS is obtained from an external source and is used to check lab performance.

LFB: Laboratory Fortified Blank, an aliquot of reagent matrix to which known quantities of method analytes are added in the lab. The LFB is analyzed exactly like a sample, and its purpose is to determine whether method performance is within accepted control limits.

MB or LRB: Method Blank or Laboratory Reagent Blank, an aliquot of reagent matrix is analyzed exactly like a sample, and its purpose is to determine if there is background contamination.

EDGE ANALYTICAL LABORATORIES

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Bellingham WA | 805 Orchard Dr Suite 4 - 98225
Microbiology | 360.671.0688 • 360.671.1577fax

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Method Blank

Reference Number: 10-07291
Report Date: 05/27/10

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits	QC Qualifier	Type*	Comment
OPHOS-100526	ORTHO-PHOSPHATE	ND		mg/L	SM4500-P F		0.10000		MB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

QCS: Quality Control Sample, a solution containing known concentrations of method analytes which is used to fortify an aliquot of reagent matrix. The QCS is obtained from an external source and is used to check lab performance.

LFB: Laboratory Fortified Blank, an aliquot of reagent matrix to which known quantities of method analytes are added in the lab. The LFB is analyzed exactly like a sample, and its purpose is to determine whether method performance is within accepted control limits.

MB or LRB: Method Blank or Laboratory Reagent Blank, an aliquot of reagent matrix is analyzed exactly like a sample, and its purpose is to determine if there is background contamination.

EDGE ANALYTICAL LABORATORIES

Burlington WA Corporate Office | 1620 S Walnut St - 98233
800.755.9295 • 360.757.1400 • 360.757.1402fax
Bellingham WA Microbiology | 805 Orchard Dr Suite 4 - 98225
360.671.0688 • 360.671.1577fax

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Quality Control Sample

Reference Number: 10-07291
Report Date: 05/27/10

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits	QC Qualifier	Type*	Comment
OPHOS-100526	ORTHO-PHOSPHATE	0.50	0.49	mg/L	SM4500-P F	102	80-120		QCS	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

QCS: Quality Control Sample, a solution containing known concentrations of method analytes which is used to fortify an aliquot of reagent matrix. The QCS is obtained from an external source and is used to check lab performance.

LFB: Laboratory Fortified Blank, an aliquot of reagent matrix to which known quantities of method analytes are added in the lab. The LFB is analyzed exactly like a sample, and its purpose is to determine whether method performance is within accepted control limits.

MB or LRB: Method Blank or Laboratory Reagent Blank, an aliquot of reagent matrix is analyzed exactly like a sample, and its purpose is to determine if there is background contamination.

ANALYTICAL LABORATORIES

Burlington WA | 1620 S Walnut St - 98233
Corporate Office | 800.755.9295 • 360.757.1400 • 360.757.1402fax
Bellingham WA | 805 Orchard Dr Suite 4 - 98225
Microbiology | 360.671.0688 • 360.671.1577fax

QUALITY CONTROL REPORT

Duplicate, Matrix Spike/Matrix Spike Duplicate and Confirmation Result Report

Reference Number: 10-07291
Report Date: 5/27/2010

Duplicate

Batch	Sample	Analyte	Result	Duplicate Result	Units	%RPD	Limits	QC Qualifier	Type	Comments
OPHOS-100526										
	15976	ORTHO-PHOSPHATE	0.50	0.50	mg/Kg	**0.0**	0-50		DUP	

1504

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of a analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Reference Number: 10-07291
Report Date: 5/27/2010

Matrix Spike

Batch	Sample	Analyte	Result	Spike Result	Duplicate Spike Result	Spike Conc	Units	Percent Recovery MS	Percent Recovery MSD	Limits	%RPD	Limits	QC Qualifier	Type	Comments
OPHOS-100526															
	15976	ORTHO-PHOSPHATE	0.50	10.6	11.0	10.0	mg/Kg	**101**	**105**	70-130	**3.9**	0-50		LFM	

1505

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of a analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Columbia Analytical Services, Inc. Chain of Custody

1317 South 13th Avenue • Kelso, WA 98626 • 1-360-577-7222 • FAX 1-360-636-1079

CAS Contact: Pradeep Divvela

Project Number: K1005244
Project Manager: Pradeep Divvela

Attn: - Mary Price
Chemist

Lab Code	Sample ID	# of Cont.	Matrix	Sample Date	Sample Time	Lab ID	MISC_OUT_1 None
K1005244-003	D-4-16	1- 2oz	Misc. Solid	5/19/10	1245	Edge Ana.	

Use Caution. open in hood. MSDS included

Test Comments
MISC_OUT_1 - None K1005244-003 Orthophosphate by Method 9056 subcontracted to Edge Analytical per Melissa Kleven's request.

Folder Comments:
Samples will have strong ammonia smell when opened.

Water contact with drum under certain circumstances is known to produce Hydrogen, Methane, Acetylene and Ammonia gases

1506

10-07291
15976

10-07291

Special Instructions/Comments
Please provide the electronic (PDF and EDD) report to the following e-mail address:
kelso_data@caslab.com

Turnaround Requirements
____ **RUSH** (Surcharges Apply)
PLEASE CIRCLE WORK DAYS
1 2 3 4 5
__ **STANDARD**
Requested FAX Date: _____
Requested Report Date: 06/12/10

Report Requirements
____ I. Results Only
____ II. Results + QC Summaries
____ III. Results + QC and Calibration Summaries
__ IV. Data Validation Report with Raw Data
PQL/MDL/J (Y) 4ppm MRL
EDD Y

Invoice Information
PO# K1005244
Bill to

Relinquished By: _____ 5/24/10 1435 Received By: HH UPS 5° on ice Airbill Number: _____
Seal 5-25-10 0850

Columbia Analytical Services, Inc.
1317 S. 13th Avenue, Kelso, WA 98626 360.577.7222 360.636.1068 (fax) www.caslab.com

July 1, 2010 Analytical Report for Service Request No: K1004467

Melissa Kleven
Exponent
15375 Southeast 30th Place, Suite 250
Bellevue, WA 98007

RE: Heglar Kronquist/0907194.000.0601

Dear Melissa:

Enclosed are the additional pages for the samples submitted to our laboratory on May 05, 2010. For your reference, these analyses have been assigned our service request number K1004467.

Results for "Phosphate as Orthophosphate" enclosed.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Pradeep Divvela
Project Chemist

PD/lb

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Phosphate as Orthophosphate

Analysis Method : 365.3
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
BH-13	K1004467-001	0.031	0.013	1	05/05/10 15:00	0.089	
Method Blank	K1004467-MB	0.031	0.013	1	05/05/10 15:00	ND	

Columbia Analytical Services, Inc.
1317 S. 13th Avenue, Kelso, WA 98626 360.577.7222 360.636.1068 (fax) www.caslab.com

June 1, 2010 Analytical Report for Service Request No: K1004467

Melissa Kleven
Exponent
15375 Southeast 30th Place, Suite 250
Bellevue, WA 98007

RE: Heglar Kronquist/0907194.000.0601

Dear Melissa:

Enclosed are the results of the sample submitted to our laboratory on May 05, 2010. For your reference, these analyses have been assigned our service request number K1004467.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Pradeep Divvela
Project Chemist

PD/ln

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value that was detected outside the quantitation range.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value that was detected outside the quantitation range.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value that was detected outside the quantitation range.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Exponent	**Service Request No.:**	K1004467
Project:	Heglar Kronquist	**Date Received:**	05/05/10
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One water sample was received for analysis at Columbia Analytical Services on 05/05/10. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Field filtered containers were used to measure O.Phos, Chloride, Fluoride, Sulfate, NO2, NO3 and pH.

No anomalies associated with the analysis of these samples were observed.

Dissolved Metals

No anomalies associated with the analysis of these samples were observed.

Approved by_____ **Date** 06/02/10

Chain of Custody Documentation

CHAIN OF CUSTODY

Columbia Analytical Services™

1317 South 13th Ave, Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR#: K1004467

PAGE 1 OF 1 COC #

PROJECT NAME: Heglar Kronquist
PROJECT NUMBER: 0907194.000.0601
PROJECT MANAGER: Melissa Kleven
COMPANY/ADDRESS: 15375 SE 30th Pl Suite 250
CITY/STATE/ZIP: Bellevue, WA 98007
E-MAIL ADDRESS: mkleven@exponent.com
PHONE #: 425-519-8774 FAX #: 425-519-8779
SAMPLER'S SIGNATURE: KS, Keri Whetter

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐	Volatile Organics 624☐ 8260☐ 8021☐ BTEX☐	Hydrocarbons (*see below) Gas☐ Diesel☐ Oil☐ ☐Fuel Fingerprint (FIO) ☐NW-HCID Screen	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHS 8310☐ SIM☐	Metals: Total or Dissolved (See list below)	Cyanide☐	pH Cond, Cl, SO_4, PO_4, (F) NO_2 (NO_3) BOD, TSS, TDS (circle)	Hex-Chrom☐ (NH_3-N) COD, Total-P, TKN, TOC, DOC (circle) NO_2+NO_3	TOX 9020☐ AOX 1650☐ 506☐	Alkalinity	Phosphate as orthophosphate			REMARKS
BH-13	5-4-10	1504		L	5									X		X	X		X	X			run phosphate ASAP

8

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
X III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
X V. EDD

INVOICE INFORMATION

P.O. # ____
Bill To: same as above

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: (Al) (As) (Sb) (Ba) (Be) B (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) Mo (Ni) (K) (Ag) (Na) (Se) Sr (Tl) Sn (V) (Zn) (Hg)

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:
- Bar code # T022894
- run phosphate as orthophosphate ASAP, within 24 hr hold time
- 500 mL w/ H_2SO_4 is field filtered
- 1000 mL unpreserved is field filtered
- 500 mL w/ HNO_3 is field filtered

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
KS	5/4/10 16:47	John Jones	5/5/10 0930				
Signature	Date/Time	Signature	Date/Time	Signature	Date/Time	Signature	Date/Time
Keri Whetter	Exponent	John Jones	CAS				
Printed Name	Firm	Printed Name	Firm	Printed Name	Firm	Printed Name	Firm

RCOC #1 03/10

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC PD

Client / Project: Exponent Service Request K10 041467

Received: 5/5/10 Opened: 5/5/10 By: JenV

1. Samples were received via? *Mail* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Cooler Temp °C	Temp Blank °C	Thermometer ID	Cooler/COC ID (NA)	Tracking Number	NA	Filed
-0.2	1.1	273				Y

7. Packing material used. *Inserts* (*Baggies*) (*Bubble Wrap*) *Gel Packs* (*Wet Ice*) *Sleeves* *Other*_____
8. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
9. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
12. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
13. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
14. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
15. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

*Notes, Discrepancies, & Resolutions:*_____

SHORT HOLD TA

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Chloride

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	0.20	0.06	2	05/20/10	11.5	
Method Blank	K1004467-MB	0.20	0.03	1	05/20/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/20/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004923-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chloride	300.0	0.20	9.83	9.76	9.80	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/20/10

Matrix Spike Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004923-002MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	300.0	0.20	3.00	9.83	13.0	106	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/20/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	NONE	300.0	5.00	5.02	100	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Chloride
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/20/2010	5.00	5.12	102
CCV2 Result	5/20/2010	5.00	5.06	101
CCV3 Result	5/20/2010	5.00	5.02	100
CCV4 Result	5/20/2010	5.00	4.97	99
CCV5 Result	5/20/2010	5.00	4.93	99
CCV6 Result	5/20/2010	5.00	4.96	99
CCV7 Result	5/20/2010	5.00	4.93	99
CCV8 Result	5/21/2010	5.00	4.95	99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Chloride
300.0
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/20/2010	0.20	ND
CCB2 Result	5/20/2010	0.20	ND
CCB3 Result	5/20/2010	0.20	ND
CCB4 Result	5/20/2010	0.20	ND
CCB5 Result	5/20/2010	0.20	ND
CCB6 Result	5/20/2010	0.20	ND
CCB7 Result	5/20/2010	0.20	ND
CCB8 Result	5/21/2010	0.20	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Fluoride

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	0.20	0.01	2	05/20/10	0.30	
Method Blank	K1004467-MB	0.20	0.003	1	05/20/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/20/10

Duplicate Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004923-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Fluoride	300.0	0.20	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/20/10

Matrix Spike Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004923-002MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	300.0	0.20	3.00	ND	3.23	108	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/20/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	NONE	300.0	13.5	13.9	103	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Fluoride
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/20/2010	5.00	5.02	100
CCV2 Result	5/20/2010	5.00	4.99	100
CCV3 Result	5/20/2010	5.00	5.00	100
CCV4 Result	5/20/2010	5.00	4.93	99
CCV5 Result	5/20/2010	5.00	4.96	99
CCV6 Result	5/20/2010	5.00	5.00	100
CCV7 Result	5/20/2010	5.00	4.92	98
CCV8 Result	5/21/2010	5.00	4.93	99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Fluoride
300.0
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/20/2010	0.20	ND
CCB2 Result	5/20/2010	0.20	ND
CCB3 Result	5/20/2010	0.20	ND
CCB4 Result	5/20/2010	0.20	ND
CCB5 Result	5/20/2010	0.20	ND
CCB6 Result	5/20/2010	0.20	ND
CCB7 Result	5/20/2010	0.20	ND
CCB8 Result	5/21/2010	0.20	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Sulfate

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	2.0	0.1	10	05/20/10	36.2	
Method Blank	K1004467-MB	0.20	0.01	1	05/20/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/20/10

Duplicate Summary
Inorganic Parameters

Sample Name :	Batch QC	Units :	mg/L
Lab Code :	K1004923-002DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfate	300.0	0.20	7.97	7.85	7.91	2	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/20/10

Matrix Spike Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004923-002MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	300.0	0.20	3.00	7.97	11.3	111	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/20/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	NONE	300.0	5.00	4.84	97	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Sulfate
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/20/2010	5.00	5.05	101
CCV2 Result	5/20/2010	5.00	5.10	102
CCV3 Result	5/20/2010	5.00	4.98	100
CCV4 Result	5/20/2010	5.00	4.93	99
CCV5 Result	5/20/2010	5.00	4.96	99
CCV6 Result	5/20/2010	5.00	4.95	99
CCV7 Result	5/20/2010	5.00	4.94	99
CCV8 Result	5/21/2010	5.00	4.94	99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Sulfate
300.0
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/20/2010	0.20	ND
CCB2 Result	5/20/2010	0.20	ND
CCB3 Result	5/20/2010	0.20	ND
CCB4 Result	5/20/2010	0.20	ND
CCB5 Result	5/20/2010	0.20	ND
CCB6 Result	5/20/2010	0.20	ND
CCB7 Result	5/20/2010	0.20	ND
CCB8 Result	5/21/2010	0.20	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Ammonia as Nitrogen, Dissolved

Analysis Method : 350.1
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	0.050	0.020	1	05/10/10	ND	
Method Blank	K1004467-MB	0.050	0.020	1	05/10/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name :	BatchQC	Units :	mg/L
Lab Code :	K1004455-001DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	350.1	0.050	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Matrix Spike Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004455-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	350.1	0.050	2.00	ND	2.06	103	90-112	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/10/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	NONE	350.1	14.3	14.1	99	90-112	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Ammonia as Nitrogen
350.1
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/10/2010	2.00	1.96	98
CCV2 Result	5/10/2010	2.00	1.96	98
CCV3 Result	5/10/2010	2.00	1.97	99
CCV4 Result	5/10/2010	2.00	1.97	99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Ammonia as Nitrogen
350.1
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/10/2010	0.050	ND
CCB2 Result	5/10/2010	0.050	ND
CCB3 Result	5/10/2010	0.050	ND
CCB4 Result	5/10/2010	0.050	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Nitrite as Nitrogen

Analysis Method : 353.2
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
BH-13	K1004467-001	0.050	0.005	1	05/06/10 08:46	ND	
Method Blank	K1004467-MB	0.050	0.005	1	05/06/10 08:46	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 5/4/2010
Date Received : 5/5/2010
Date Prepared : NA
Date Analyzed : 05/06/10

Duplicate Summary
Inorganic Parameters

Sample Name : BH-13
Lab Code : K1004467-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrite as Nitrogen	353.2	0.050	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 5/4/2010
Date Received : 5/5/2010
Date Prepared : NA
Date Analyzed : 05/06/10

Matrix Spike Summary
Inorganic Parameters

Sample Name : BH-13
Lab Code : K1004467-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	353.2	0.050	2.00	ND	2.00	100	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/06/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	NONE	353.2	4.00	3.99	100	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Nitrite as Nitrogen
353.2
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/6/2010	2.00	1.96	98
CCV2 Result	5/6/2010	2.00	1.99	100

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Nitrite as Nitrogen
353.2
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/6/2010	0.050	ND
CCB2 Result	5/6/2010	0.050	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Nitrate as Nitrogen

Analysis Method : 353.2
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	0.50	0.09	10	04/06/10	9.02	
Method Blank	K1004467-MB	0.050	0.009	1	04/06/10	0.015	J

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 04/06/10

Duplicate Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004201-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrate as Nitrogen	353.2	0.050	0.123	0.126	0.125	2	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 04/06/10

Matrix Spike Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004201-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	353.2	0.050	2.00	0.123	2.16	102	88-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	04/06/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	NONE	353.2	14.8	14.6	99	88-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Nitrate as Nitrogen
353.2
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	4/6/2010	2.00	1.84	92
CCV2 Result	4/6/2010	2.00	1.95	98
CCV3 Result	4/6/2010	2.00	1.97	99
CCV4 Result	4/6/2010	2.00	1.93	97

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Nitrate as Nitrogen
353.2
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	4/6/2010	0.050	0.015 J
CCB2 Result	4/6/2010	0.050	0.013 J
CCB3 Result	4/6/2010	0.050	0.013 J
CCB4 Result	4/6/2010	0.050	0.011 J

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Orthophosphate as Phosphorus

Analysis Method : 365.3
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
BH-13	K1004467-001	0.010	0.004	1	05/05/10 15:00	0.029	
Method Blank	K1004467-MB	0.010	0.004	1	05/05/10 15:00	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 5/4/2010
Date Received : 5/5/2010
Date Prepared : NA
Date Analyzed : 05/05/10

Duplicate Summary
Inorganic Parameters

Sample Name : BH-13
Lab Code : K1004467-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Orthophosphate as Phosphorus	365.3	0.010	0.029	0.029	0.029	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 5/4/2010
Date Received : 5/5/2010
Date Prepared : NA
Date Analyzed : 05/05/10

Matrix Spike Summary
Inorganic Parameters

Sample Name : BH-13
Lab Code : K1004467-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Orthophosphate as Phosphorus	365.3	0.010	0.200	0.029	0.217	94	81-119	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/05/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Orthophosphate as Phosphorus	NONE	365.3	3.57	3.41	96	89-118	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Orthophosphate as Phosphorus
365.3
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/5/2010	0.500	0.480	96
CCV2 Result	5/5/2010	0.500	0.478	96

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004467
Date Collected : NA
Date Received : NA

Orthophosphate as Phosphorus
365.3
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/5/2010	0.010	ND
CCB2 Result	5/5/2010	0.010	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Alkalinity as CaCO3, Total

Analysis Method : SM 2320 B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	2.0	1.0	1	05/10/10	173	
Method Blank	K1004467-MB	2.0	1.0	1	05/10/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004481-005DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Alkalinity as CaCO3, Total	SM 2320 B	2.0	184	182	183	1	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/10/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Alkalinity as CaCO3, Total	NONE	SM 2320 B	67.9	70.4	104	94-106	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Bicarbonate Alkalinity as CaCO3

Analysis Method : SM 2320 B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	2.0	1.0	1	05/10/10	173	
Method Blank	K1004467-MB	2.0	1.0	1	05/10/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004338-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Bicarbonate Alkalinity as CaCO3	SM 2320 B	2.0	216	218	217	<1	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Carbonate Alkalinity as CaCO3

Analysis Method : SM 2320 B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	2.0	1.0	1	05/10/10	ND	
Method Blank	K1004467-MB	2.0	1.0	1	05/10/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004338-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbonate Alkalinity as CaCO3	SM 2320 B	2.0	ND	ND	ND	-	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Hydroxide Alkalinity as CaCO3

Units : mg/L
Analysis Method : SM 2320 B
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	2.0	1.0	1	05/10/10	ND	
Method Blank	K1004467-MB	2.0	1.0	1	05/10/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name :	BatchQC	Units :	mg/L
Lab Code :	K1004338-002DUP	Basis :	NA
Test Notes :			

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Hydroxide Alkalinity as CaCO3	SM 2320 B	2.0	ND	ND	ND	-	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

Solids, Total Dissolved

Analysis Method : SM 2540 C
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-13	K1004467-001	5.0	5.0	1	05/11/10	327	
Method Blank	K1004467-MB	5.0	5.0	1	05/11/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 5/4/2010
Date Received : 5/5/2010
Date Prepared : NA
Date Analyzed : 05/11/10

Duplicate Summary
Inorganic Parameters

Sample Name : BH-13
Lab Code : K1004467-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved	SM 2540 C	5.0	327	326	327	<1	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/11/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Solids, Total Dissolved	NONE	SM 2540 C	750	742	99	83-117	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : 05/04/10
Date Received : 05/05/10

pH

Analysis Method : SM 4500-H+ B
Test Notes :

Units : pH Units
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
BH-13	K1004467-001	-	-	1	05/06/10 15:04	7.46	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004467
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/06/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004548-003DUP
Test Notes :

Units : pH Units
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
pH	SM 4500-H+ B	-	7.88	7.84	7.86	<1	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004467
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/06/10

Laboratory Control Sample Summary
Inorganic Parameters

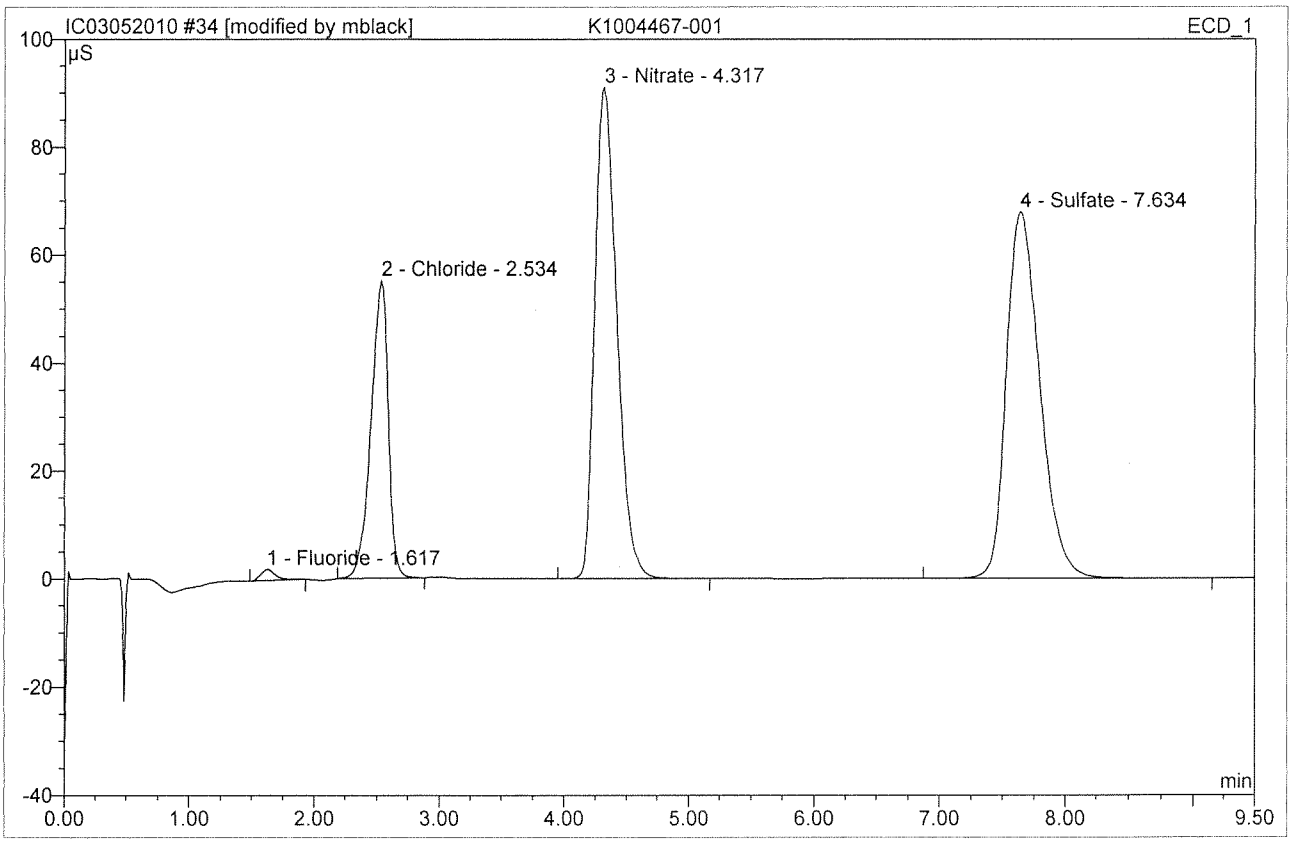
Sample Name :	Lab Control Sample	Units :	pH Units
Lab Code :	K1004467-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
pH	NONE	SM 4500-H+ B	6.46	6.42	99	85-115	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

34 K1004467-001

Sample Name:	**K1004467-001**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

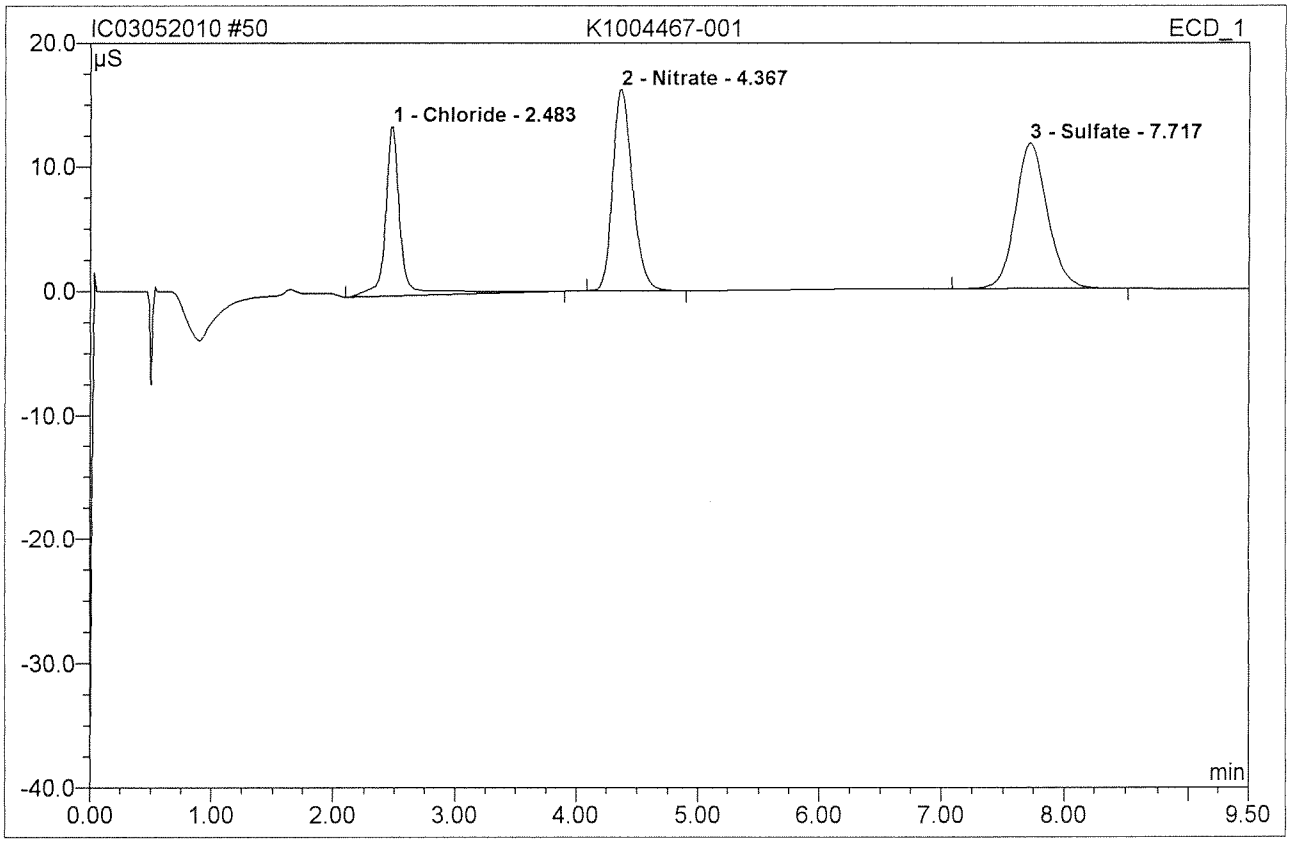


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	2.037	0.283	0.58	0.296	BMB*
2	2.53	Chloride	55.130	8.931	18.23	11.453	BMB*
3	4.32	Nitrate	91.059	18.658	38.08	10.129	BMB
4	7.63	Sulfate	68.006	21.119	43.11	42.922	BMB
Total:			216.232	48.991	100.00	64.800	

5/25/10

50 K1004467-001

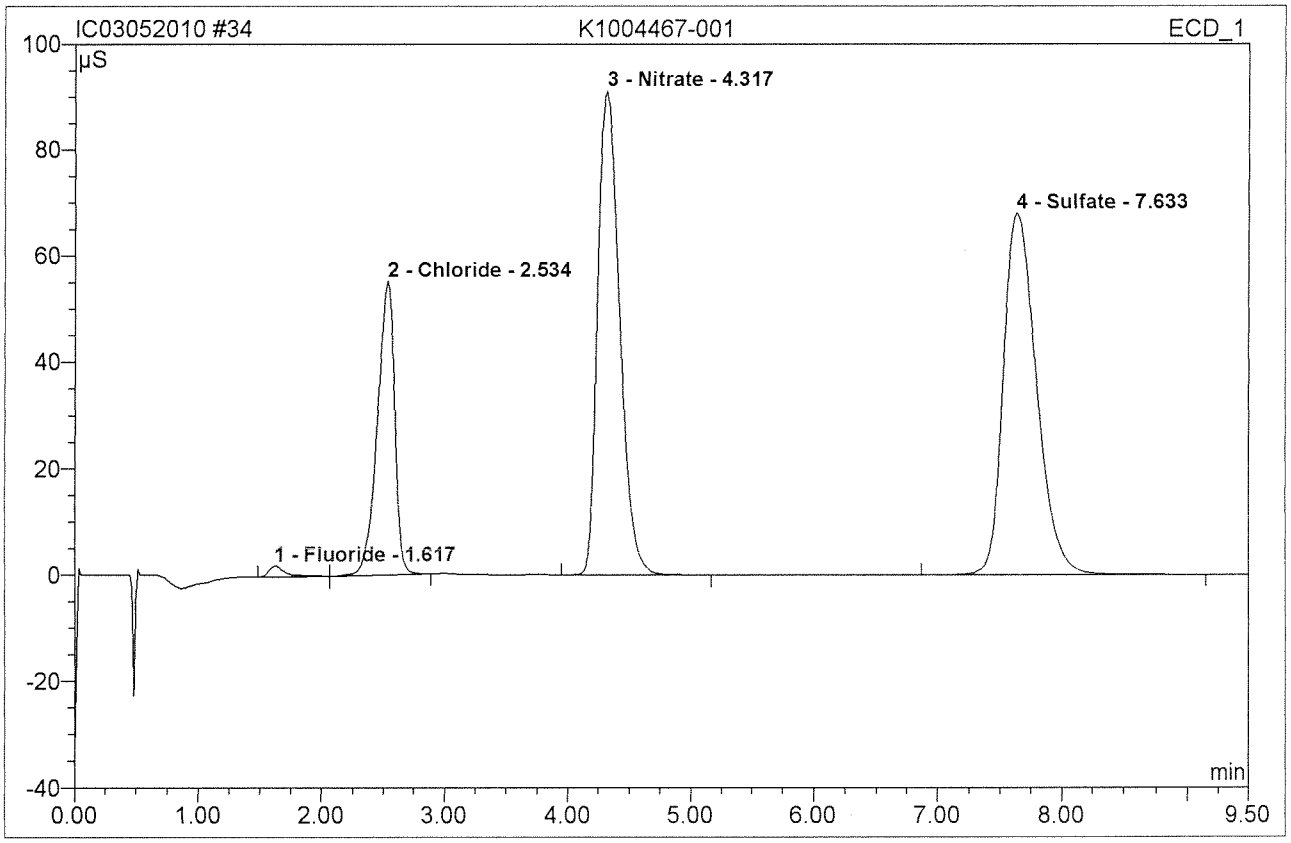
Sample Name:	**K1004467-001**	*Injection Volume:*	**200.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**5/20/2010 18:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.48	Chloride	13.639	2.018	23.38	12.941	BMB
2	4.37	Nitrate	16.198	3.049	35.32	8.277	BMB
3	7.72	Sulfate	11.717	3.565	41.30	36.226	BMB
Total:			41.555	8.632	100.00	57.444	

34 K1004467-001

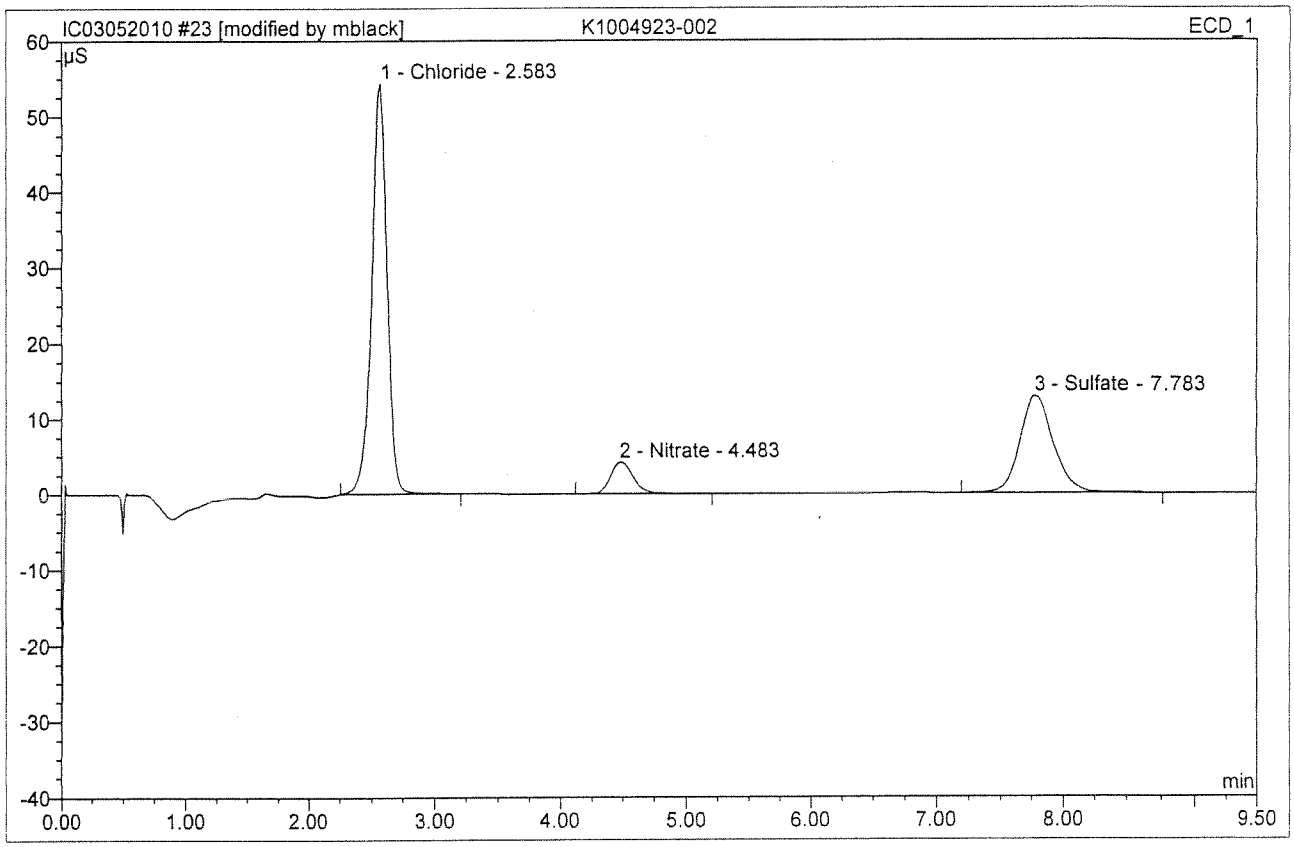
Sample Name:	**K1004467-001**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	2.099	0.343	0.70	0.359	BMb
2	2.53	Chloride	55.235	9.013	18.34	11.559	bMB
3	4.32	Nitrate	91.059	18.658	37.97	10.129	BMB
4	7.63	Sulfate	68.006	21.119	42.98	42.922	BMB
Total:			216.398	49.133	100.00	64.969	

23 K1004923-002

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 12:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.58	Chloride $\bar{x}$=9.80 RPD=21%	54.379	7.667	61.56	9.832	BMB*
2	4.48	Nitrate	4.197	0.867	6.96	0.471	BMB*
3	7.78	Sulfate $\bar{x}$=7.91 RPD=2%	12.889	3.919	31.47	7.966	BMB
Total:			71.464	12.453	100.00	18.269	

MB

MAY 2 3 2010

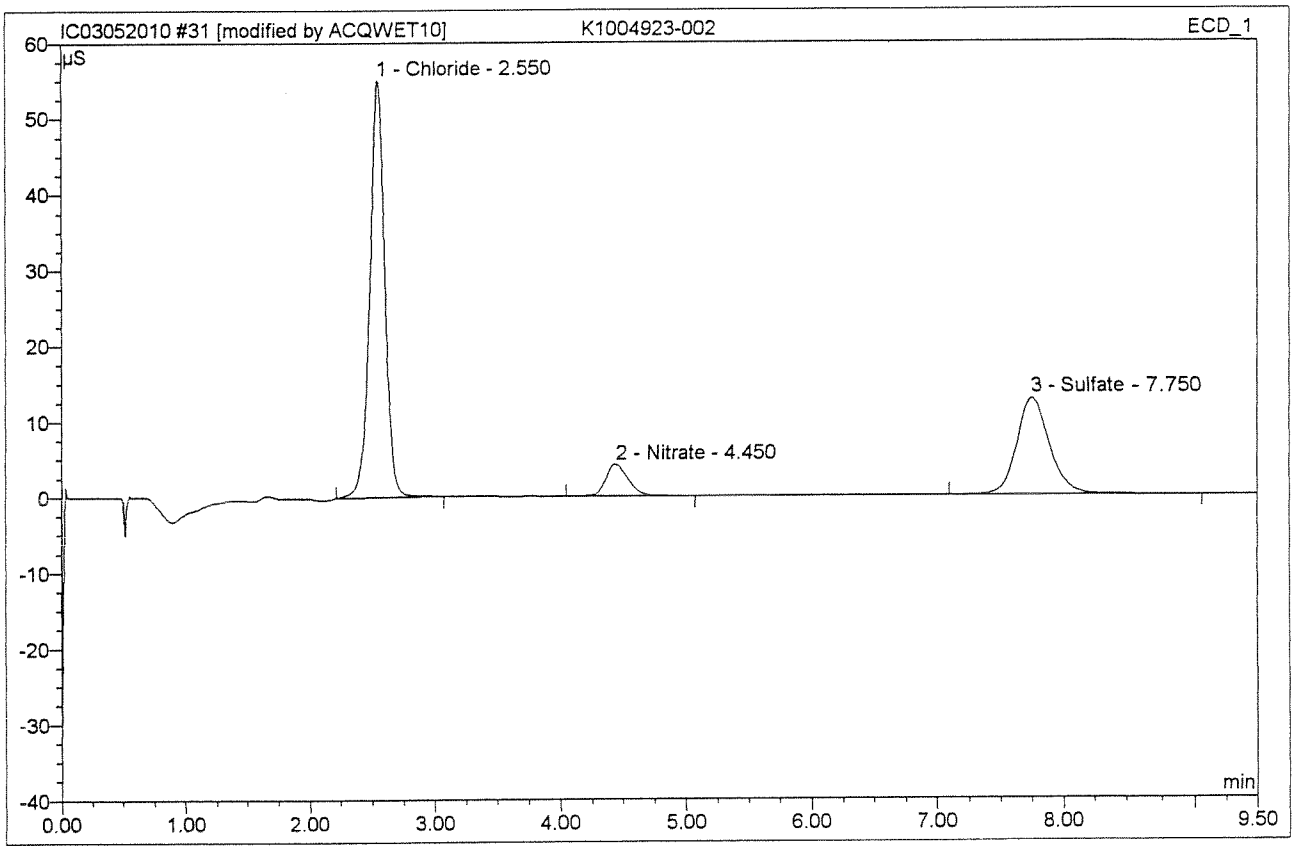
5/25/10

default/Integration

31 K1004923-002

4923-2D

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



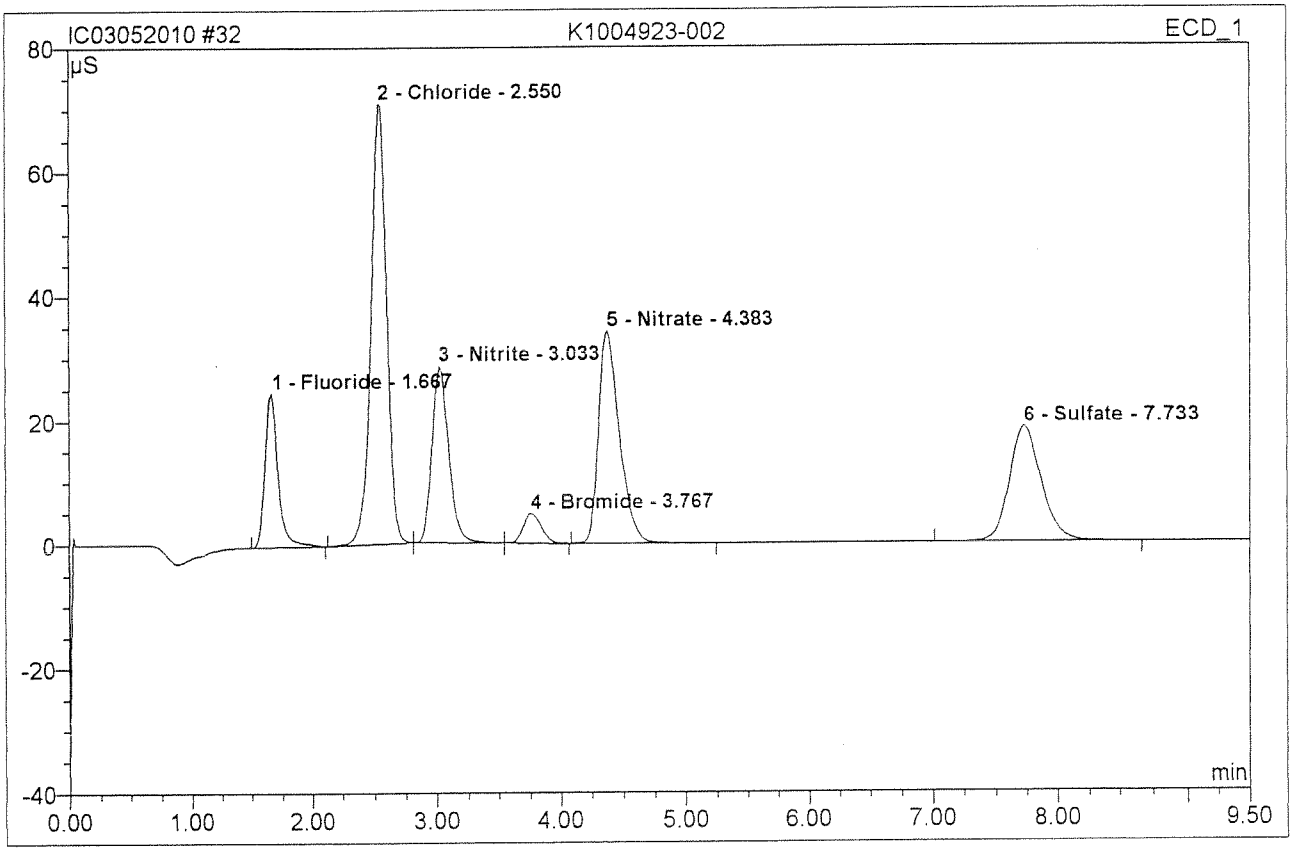
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.55	Chloride	55.040	7.612	61.72	9.762	BMB*
2	4.45	Nitrate	4.215	0.857	6.95	0.465	BMB*
3	7.75	Sulfate	12.806	3.864	31.33	7.852	BMB
Total:			72.061	12.332	100.00	18.079	

5/25/10

32 K1004923-002

4923-2MS

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



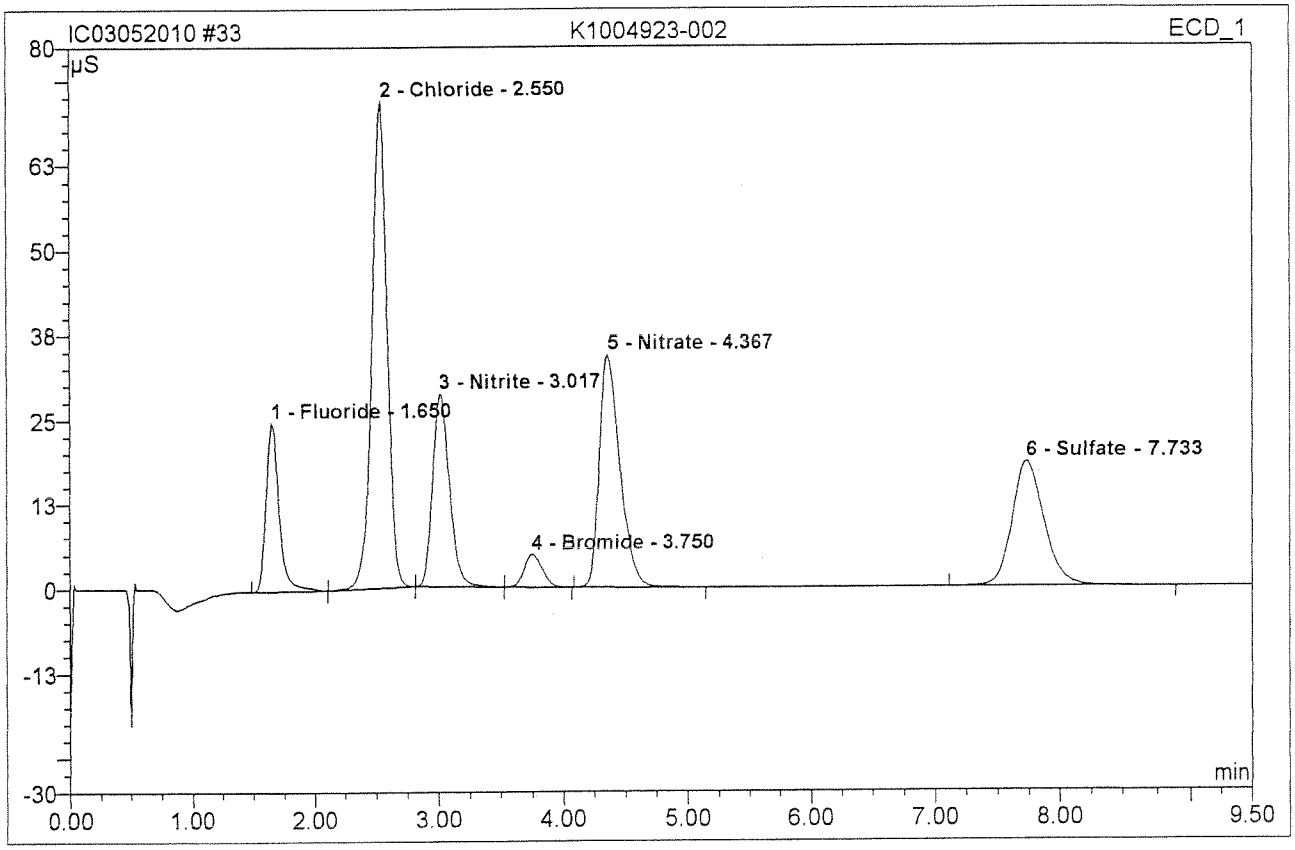
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	24.899	3.092	10.05	3.232 10.85%	BMB
2	2.55	Chloride	70.832	10.158	33.02	13.027 16.67%	BMb
3	3.03	Nitrite	28.406	4.477	14.55	3.101 16.39%	bMb
4	3.77	Bromide	4.834	0.811	2.64	3.027 10.49%	bMB
5	4.38	Nitrate	34.168	6.671	21.68	3.622 18.59%	BMB
6	7.73	Sulfate	18.657	5.557	18.06	11.295 11.19%	BMB
Total:			181.796	30.767	100.00	37.304	

TV=3.00

33 K1004923-002

4923-2MSD

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

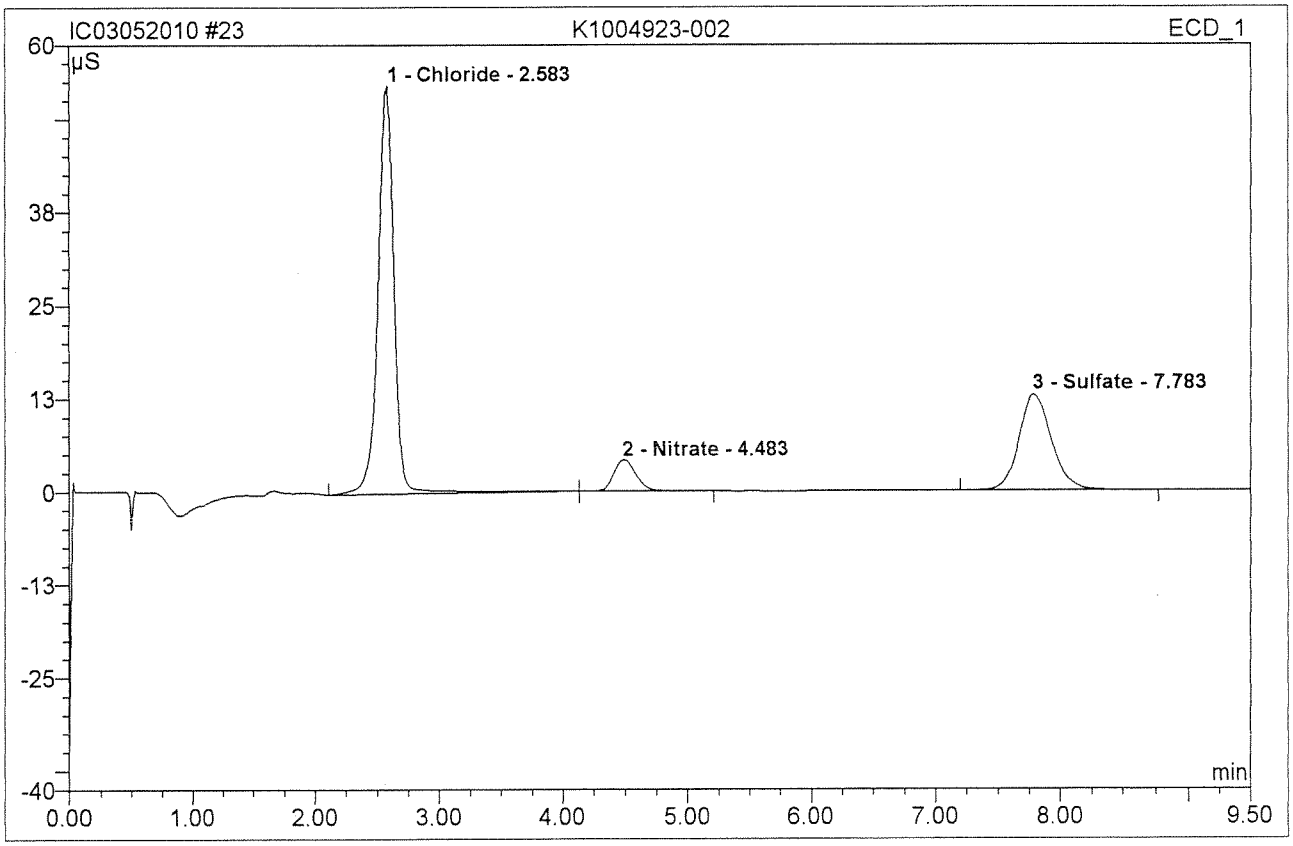


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	25.042	3.091	10.08	3.231	BMB
2	2.55	Chloride	71.836	10.112	32.96	12.968	bMb
3	3.02	Nitrite	28.491	4.492	14.64	3.111	bMb
4	3.75	Bromide	4.858	0.815	2.66	3.041	bMb
5	4.37	Nitrate	34.413	6.676	21.76	3.625	BMB
6	7.73	Sulfate	18.444	5.491	17.90	11.159	BMB
Total:			183.084	30.677	100.00	37.135	

TR=3.02

23 K1004923-002

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 12:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

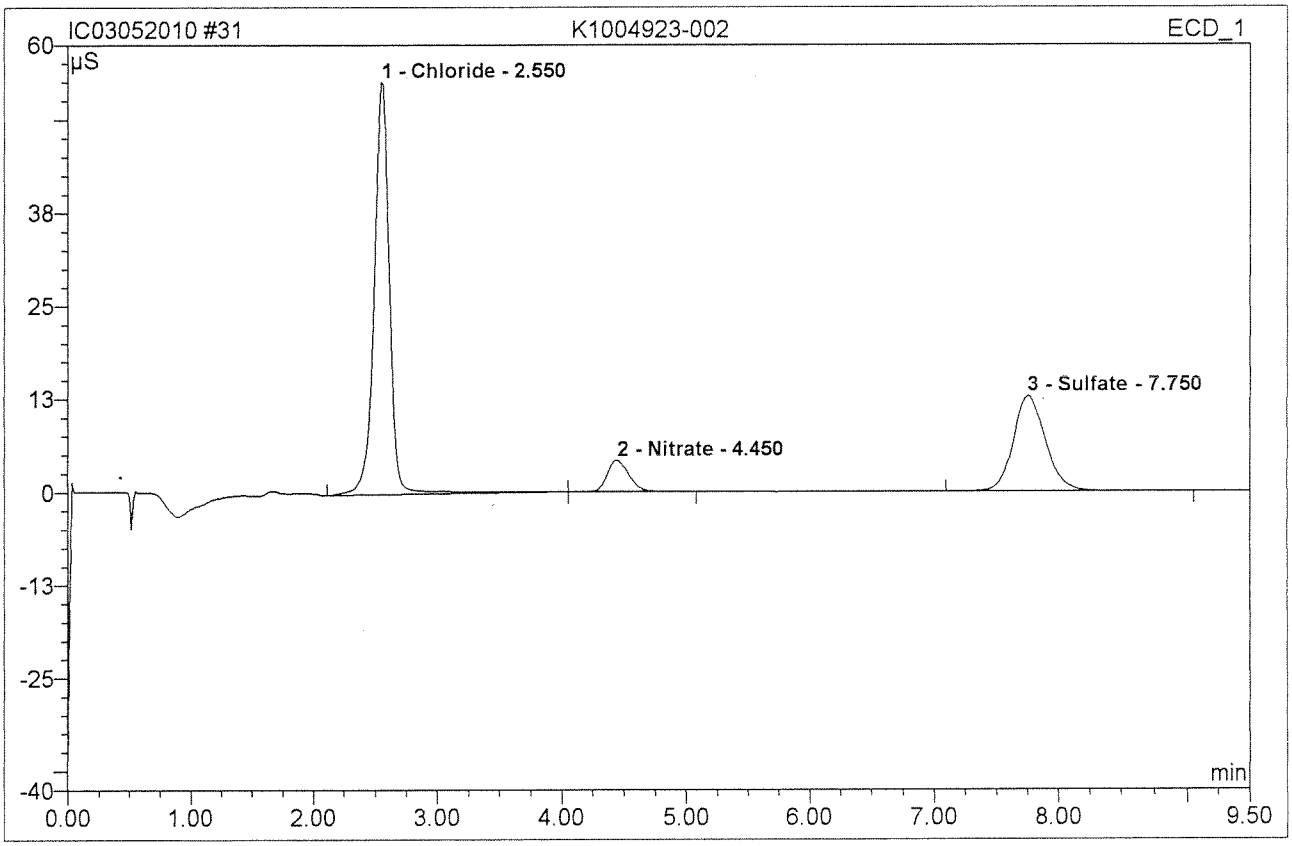


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.58	Chloride	54.735	8.108	62.88	10.398	BMB
2	4.48	Nitrate	4.197	0.867	6.73	0.471	bMB
3	7.78	Sulfate	12.889	3.919	30.40	7.966	BMB
Total:			71.820	12.895	100.00	18.834	

31 K1004923-002

4923-2D

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.55	Chloride	55.323	8.004	62.91	10.265	BMB
2	4.45	Nitrate	4.215	0.857	6.73	0.465	bMB
3	7.75	Sulfate	12.806	3.864	30.36	7.852	BMB
Total:			72.344	12.724	100.00	18.582	

Sequence # IC052010 | Ion Chromatography Data Quality Report Inorganics | Run # 201828

1. Holding times met for all samples analyzed? yes/(no)/NA *
2. Are dilutions within upper limits of the curve? (yes)/no/NA
3. Are analysis/extraction stickers included on report? (yes)/no/NA
4. Are detection limits reported correctly? (yes)/no/NA
5. Are all quality control criteria met? (yes)/no/NA
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? (yes)/no/NA
   b. Are CCV's and CCB's all within acceptance limits? (yes)/no/NA
   c. Are results for Method Blanks all ND? (yes)/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) (yes)/no/NA
   e. Are all exceptions explained? (yes)/no/NA
6. Are all samples labelled correctly? (yes)/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis. K5150, K5161 Received past hld for NO_3

LCS			
Fluoride	True Value = 13.5 ppm	CAS ID # = AN1-33-D	Expires: 7/19/10
Chloride	True Value = 5.0ppm	CAS ID # = ERA#0107-10-02	Expires: 8/10
Nitrite	True Value = 100 ppm	CAS ID # = AN11-27-CC	Expires: 5/20/10
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-33-L	Expires: 10/25/10
Nitrate	True Value = 21.0 ppm	CAS ID # = AN1-33-E	Expires: 7/21/10
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#0107-10-02	Expires: 8/10

CCV	CAS ID # = AN11-20-H		Expires 5/20/10
Fluoride	True Value = 5.0 ppm	10K CAS ID # = AN1-33-M	Expires: 10/25/10
Chloride	True Value = 5.0 ppm	10K CAS ID # = AN1-33-F	Expires: 8/5/10
Nitrite	True Value = 2.0 ppm	10K CAS ID # = AN1-33-N	Expires: 10/25/10
Bromide	True Value = 2.0 ppm	10K CAS ID # = AN1-20-DD	Expires: 6/21/10
Nitrate	True Value = 2.0 ppm	10K CAS ID # = AN1-33-I	Expires: 9/9/10
Sulfate	True Value = 5.0 ppm	10K CAS ID # = AN1-33-G	Expires: 8/5/10

Spike				
1.5ppm X dilution factor	CAS ID# = AN11-10-M		Expires 5/20/10	
Fluoride	10K CAS ID # = AN1-33-M	Expires:	} see 10K CCV IDs	
Chloride	10K CAS ID # = AN1-33-F	Expires:		
Nitrite	10K CAS ID # = AN1-33-N	Expires:		
Bromide	10K CAS ID # = AN1-20-DD	Expires:		
Nitrate	10K CAS ID # = AN1-33-I	Expires:		
Sulfate	10K CAS ID # = AN1-33-G	Expires:		

Analyst: MB Date: 5/20/10

First Review: MB Date: 5/20/10

Final Review: [signature] Date: 5/25/10

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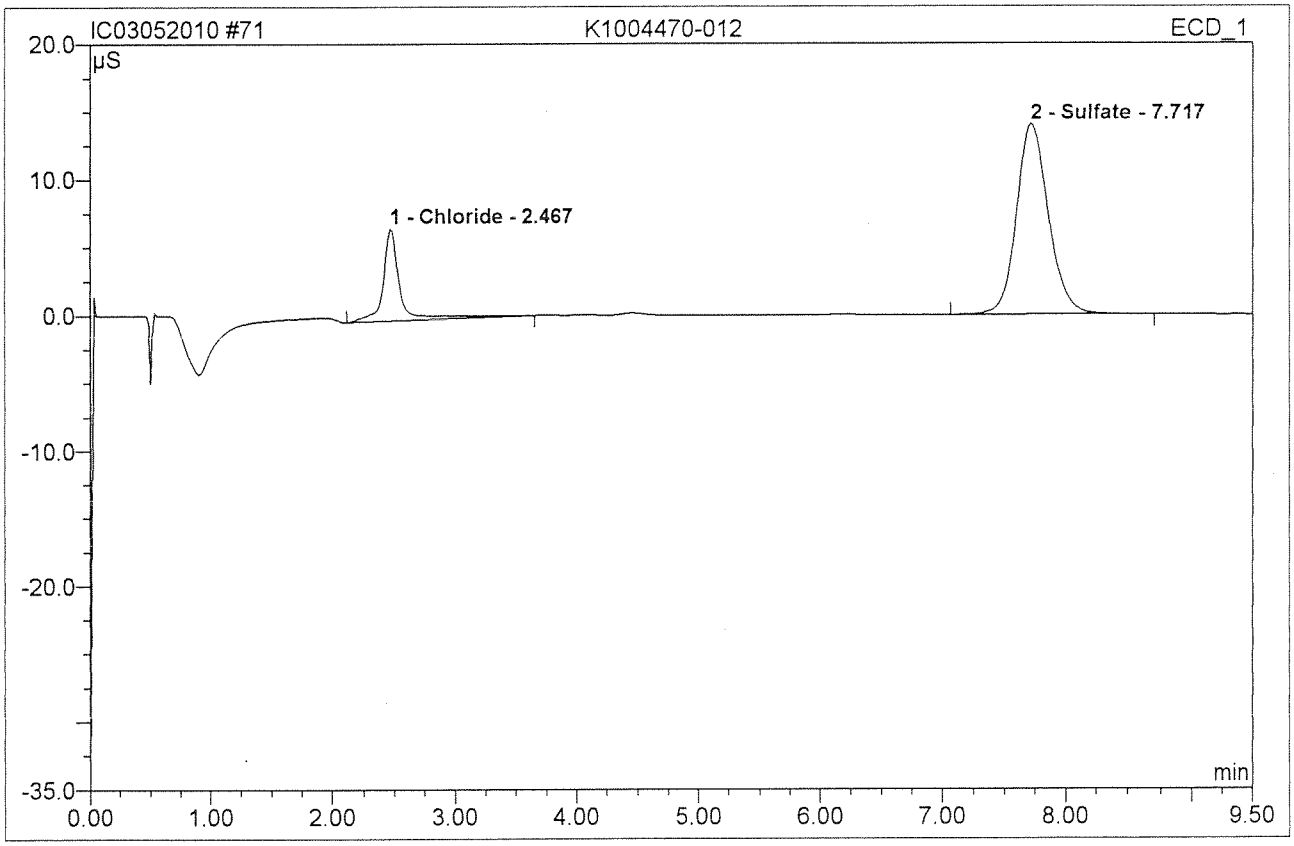
1C05052010 201828

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
K5105-1	I		5/21	6/5	F				
P.P.					CL	2.5/5			✓
					NO2				
					Br				
					NO3				✓
					SO4				✓
K4536-1 Ext					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4		0.25/5		✓
K5149-2	II		5/20 1200	5/31	F	2.5/5			
Coeur Alaska					CL				
					NO2				
					Br				
					NO3				
					SO4		0.25/5		✓
K4923-1	III			5/25	F				
URS					CL	25/5			✓
(MTE)					NO2				
					Br				
					NO3				
					SO4				✓
-2		X			F				
					CL				✓
					NO2				
					Br				
					NO3				
					SO4				✓
-3					F				
					CL		1/5		✓
					NO2				
					Br				
					NO3				
					SO4				✓
-8					F				
					CL		~~1/5~~		✓
					NO2				
					Br				
					NO3				
					SO4				✓
K4967-1	I			5/28	F				
North Star					CL				
					NO2				
					Br				
					NO3				
					SO4	6.1/5			✓
K4711-1	II			5/28	F				
City / Port.					CL	2.5/5			✓
					NO2				
					Br				
					NO3				
					SO4				
K4467-1	III			5/27	F	2.5/5			✓
Exponent					CL				✓
					NO2				
					Br				
					NO3				
					SO4 78		0.5/5		✓

71 K1004470-012

Sample Name:	**K1004470-012**	*Injection Volume:*	**200.0**
Vial Number:	**68**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/20/2010 22:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

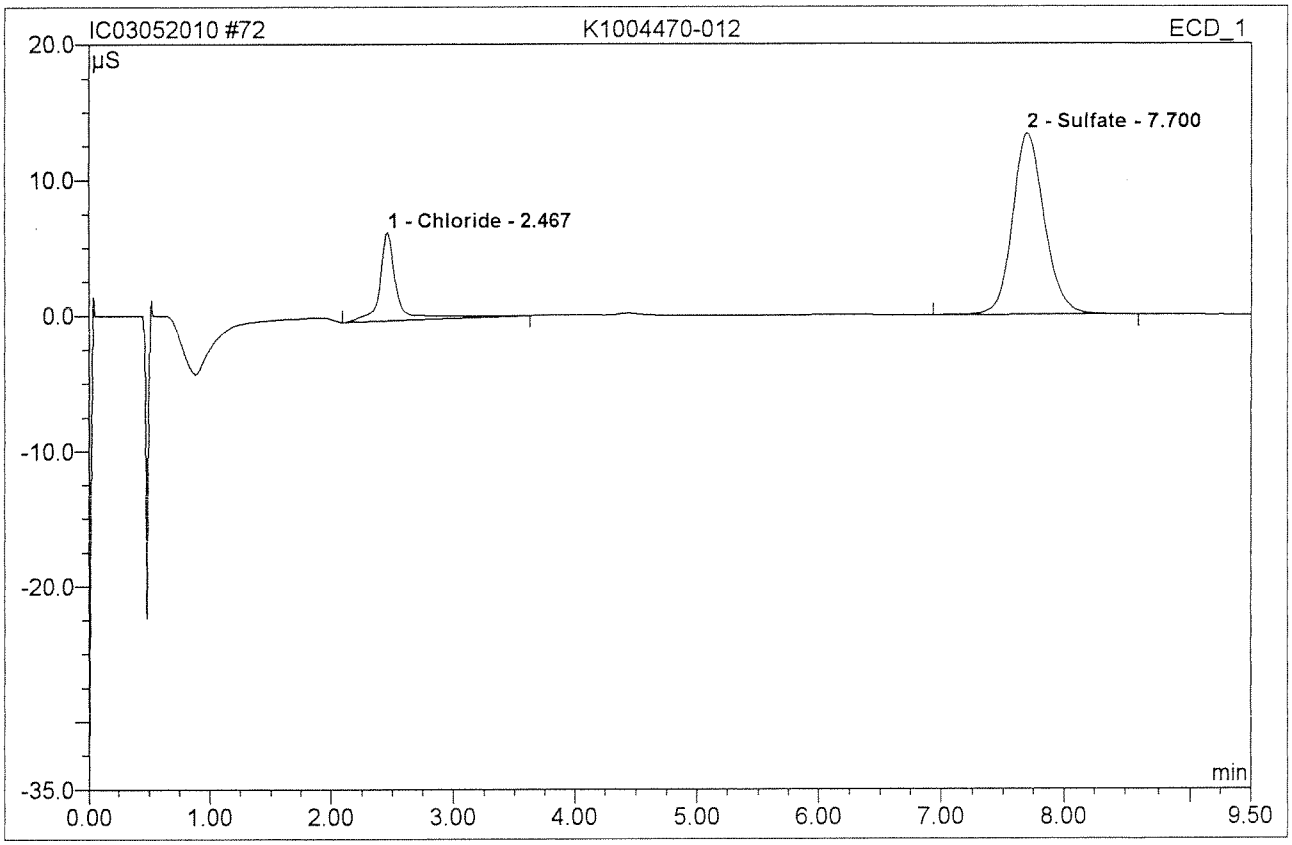


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.47	Chloride	6.791	1.108	20.72	35.508	BMB
2	7.72	Sulfate $\bar{x}$=211 RPD=4%	14.028	4.237	79.28	215.298	BMB
Total:			20.819	5.345	100.00	250.806	

72 K1004470-012

4470-12D

Sample Name:	**K1004470-012**	*Injection Volume:*	**200.0**
Vial Number:	**69**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/20/2010 22:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

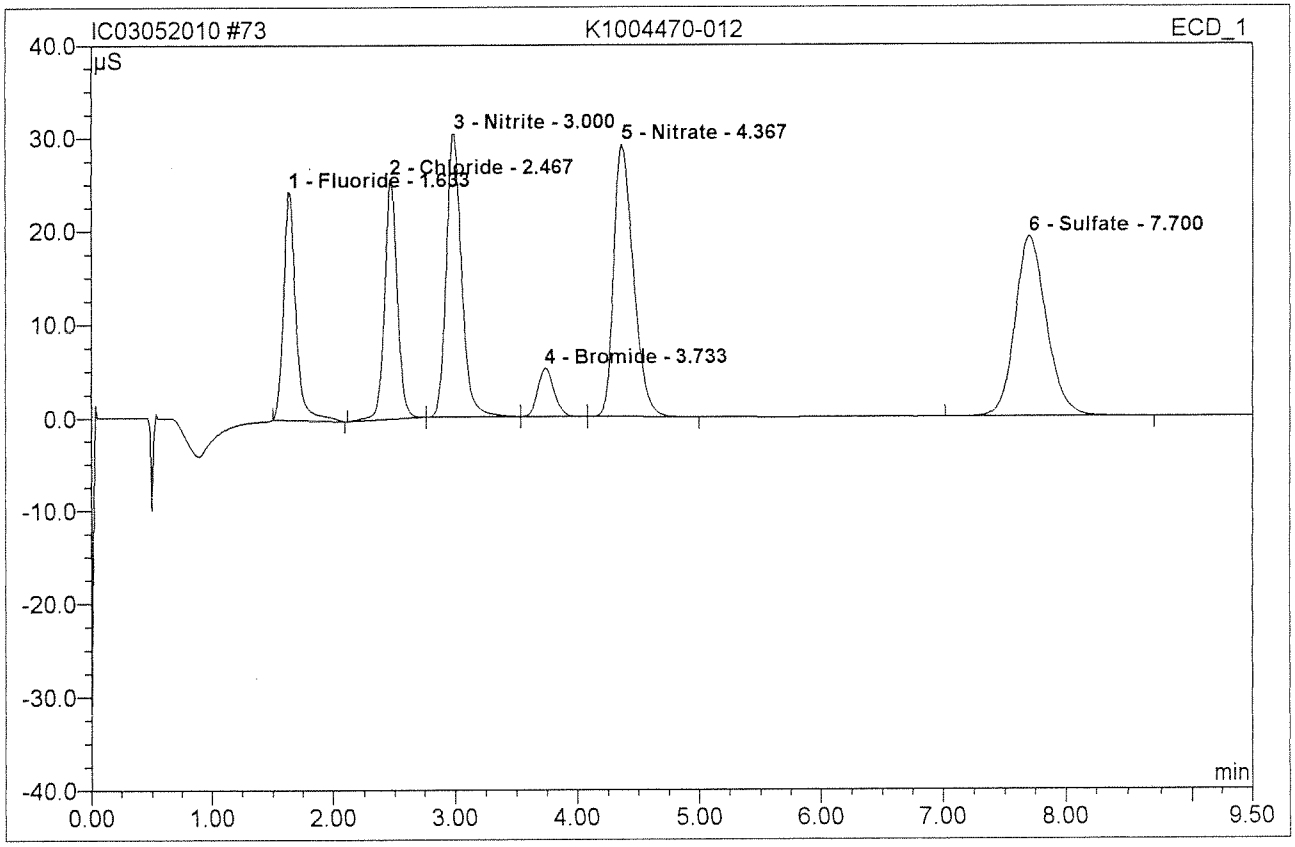


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.47	Chloride	6.534	1.081	21.07	34.658	BMB
2	7.70	Sulfate	13.376	4.050	78.93	205.782	BMB
Total:			19.910	5.131	100.00	240.439	

73 K1004470-012

4470-12MS

Sample Name:	**K1004470-012**	*Injection Volume:*	**200.0**
Vial Number:	**70**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/20/2010 22:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	24.443	2.927	13.01	76.481	BMB
2	2.47	Chloride	25.724	3.085	13.71	98.915	BMB
3	3.00	Nitrite	30.362	4.440	19.73	76.895	bMb
4	3.73	Bromide	5.112	0.807	3.59	75.297	bMb
5	4.37	Nitrate	29.199	5.451	24.22	73.984	bMB
6	7.70	Sulfate	19.274	5.794	25.74	294.369	BMB
Total:			134.114	22.504	100.00	695.941	

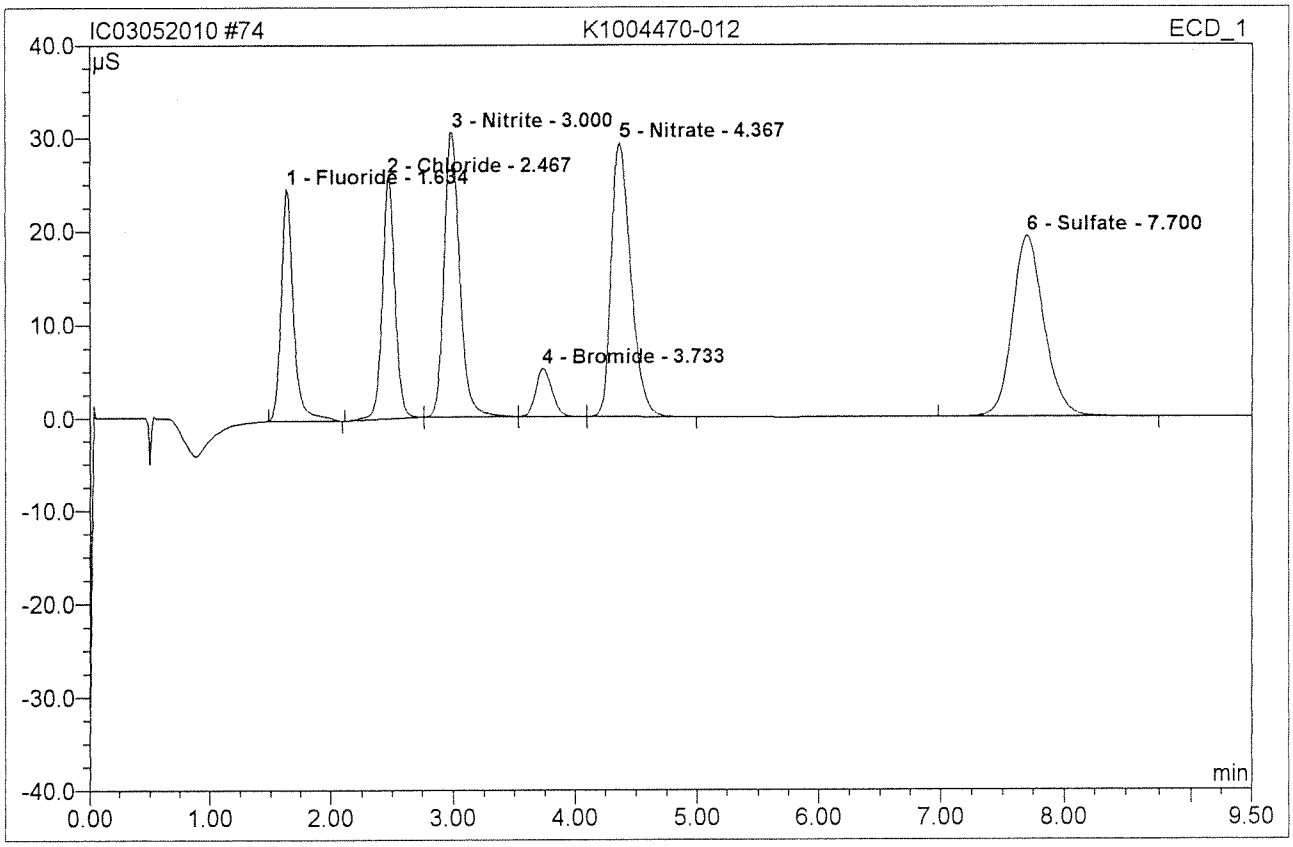
TV=5

105.2

74 K1004470-012

4470-12MSD

Sample Name:	**K1004470-012**	*Injection Volume:*	**200.0**
Vial Number:	**71**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/20/2010 22:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	24.837	2.978	13.13	77.814	BMB
2	2.47	Chloride	25.899	3.112	13.72	99.776	BMb
3	3.00	Nitrite	30.505	4.491	19.81	77.779	bMb
4	3.73	Bromide	5.158	0.807	3.56	75.334	bMb
5	4.37	Nitrate	29.393	5.458	24.07	74.077	bMB
6	7.70	Sulfate	19.378	5.830	25.71	296.209	BMB
Total:			135.170	22.676	100.00	700.988	

TV=75.0

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
K4680-1	I			5/28	F	2.5/5			✓
RJ Lee Group					CL				
					NO2				
					Br				
					NO3				
					SO4				
-2					F				✓
					CL				
					NO2				
					Br				
					NO3				
					SO4				
-3					F				✓
					CL				
					NO2				
					Br				
					NO3				
					SO4				
-4					F				✓
					CL				
					NO2				
					Br				
					NO3				
					SO4				
-5					F				✓
					CL				
					NO2				
					Br				
					NO3				
					SO4				
K5150-1	II		Recid Past	5/31	F				
Coeur Alaska					CL	1/5			✓
					NO2				
					Br				
					NO3	1/5			✓
					SO4	6.5/100			✓
K5161-1	II		Recid Past	5/31	F				
Coeur Alaska					CL	2.5/5			✓
					NO2				
					Br				
					NO3				✓
					SO4				✓
-2					F				
					CL	2.5/5			✓
					NO2				
					Br				
					NO3				✓
					SO4				✓
K4575-1	III			5/29	F	2.5/5			✓
Exponent (MDL)					CL				✓
					NO2				
					Br				
					NO3				
					SO4		1/5		
-2					F	2.5/5			
					CL				
					NO2				
					Br				
					NO3				
					SO4				

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
K4575-3	III			5/29	F	2.5/5			
					CL				
					NO2				
					Br				
					NO3				
					SO4				
-4					F	5/5			
					CL				
					NO2				
					Br				
					NO3				
					SO4				
K5160-1	I			~~5/20~~	F				
P.P					CL	2.5/5			✓
					NO2				
					Br				
					NO3				✓
					SO4				✓
K4470-1	II			5/29	F				
Ban					CL	~~0.5/5~~			
					NO2				
					Br				
					NO3				
					SO4	0.5/5			✓
-2					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	5/5			✓
-3					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.5/5			✓
-4					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	2.5/5	0.25/5		
-5					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.1/5			✓
-6					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.25/5			✓
-7					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	2.5/5			✓

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
E4470-8					F				
					CL	20x	~~0.5/5~~		
					NO2				
					Br				
					NO3				
					SO4	200x	0.5/5		
-9					F				
					CL	~~0.25/5~~			✓
					NO2				
					Br				
					NO3				
					SO4	0.25/5			✓
-10					F				
					CL	0.25/5	25/5		
					NO2				
					Br				
					NO3				
					SO4	0.25/5			✓
-11					F				
					CL	2.5/5	1/5		
					NO2				
					Br				
					NO3				
					SO4	2.5/5			✓
-12					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.1/5			✓
-13					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	200x			✓
-14					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.1/5			✓
					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4				

Sequence: IC03052010
Operator: mblack
Printed: 5/21/2010 3:42:44 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 83
Created: 5/20/2010 8:25:24 AM by ACQWET10
Last Update: 5/20/2010 5:52:45 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status
1	std2/lvl2	Standard	1	200.0	epa300	epa300	Finished
2	std3/lvl3	Standard	2	200.0	epa300	epa300	Finished
3	std4/lvl4	Standard	3	200.0	epa300	epa300	Finished
4	std5/lvl5	Standard	4	200.0	epa300	epa300	Finished
5	std6/lvl6	Standard	5	200.0	epa300	epa300	Finished
6	std7/lvl7	Standard	6	200.0	epa300	epa300	Finished
7	std1/lvl1	Standard	7	200.0	epa300	epa300	Finished
8	CCV AN11-20-H	Unknown	8	200.0	epa300	epa300	Finished
9	CCB	Unknown	9	200.0	epa300	epa300	Finished
10	NO2 AN11-27-CC	Unknown	10	200.0	epa300	epa300	Finished
11	MB	Unknown	11	200.0	epa300	epa300	Finished
12	NO3 AN1-33-E	Unknown	11	200.0	epa300	epa300	Finished
13	CLSO4 ERA #0107-10-02	Unknown	12	200.0	epa300	epa300	Finished
14	F AN1-33-D	Unknown	13	200.0	epa300	epa300	Finished
15	Br AN1-33-L	Unknown	14	200.0	epa300	epa300	Finished
16	SPK AN11-10-M	Unknown	15	200.0	epa300	epa300	Finished
17	CCV2	Unknown	15	200.0	epa300	epa300	Finished
18	CCB2	Unknown	16	200.0	epa300	epa300	Finished
19	K1005105-001	Unknown	17	200.0	epa300	epa300	Finished
20	K1005149-002	Unknown	18	200.0	epa300	epa300	Finished
21	K4536-1 BEXT	Unknown	19	200.0	epa300	epa300	Finished
22	K1004923-001	Unknown	20	200.0	epa300	epa300	Finished
23	K1004923-002	Unknown	21	200.0	epa300	epa300	Finished
24	K1004923-003	Unknown	22	200.0	epa300	epa300	Finished
25	K1004923-008	Unknown	23	200.0	epa300	epa300	Finished
26	K1004711-001	Unknown	24	200.0	epa300	epa300	Finished
27	K1004967-001	Unknown	24	200.0	epa300	epa300	Finished
28	RB	Unknown	25	200.0	epa300	epa300	Finished
29	CCV3	Unknown	26	200.0	epa300	epa300	Finished
30	CCB3	Unknown	27	200.0	epa300	epa300	Finished
31	K1004923-002	Unknown	28	200.0	epa300	epa300	Finished
32	K1004923-002	Unknown	29	200.0	epa300	epa300	Finished
33	K1004923-002	Unknown	30	200.0	epa300	epa300	Finished
34	K1004467-001	Unknown	31	200.0	epa300	epa300	Finished
35	K1004680-001	Unknown	32	200.0	epa300	epa300	Finished
36	K1004680-002	Unknown	33	200.0	epa300	epa300	Finished
37	K1004680-003	Unknown	34	200.0	epa300	epa300	Finished
38	K1004680-004	Unknown	35	200.0	epa300	epa300	Finished
39	K1004680-005	Unknown	36	200.0	epa300	epa300	Finished
40	RB	Unknown	37	200.0	epa300	epa300	Finished
41	CCV4	Unknown	38	200.0	epa300	epa300	Finished
42	CCB4	Unknown	39	200.0	epa300	epa300	Finished

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120 Created: 5/20/2010 8:25:24 AM by ACQWET10
#Samples: 83 Last Update: 5/20/2010 5:52:45 PM by ACQWET10

No.	Name	Inj. Date/Time	Dil. Factor	Comment
1	std2/lvl2	4/26/2010 8:54:58 AM	1.0000	
2	std3/lvl3	4/26/2010 9:12:26 AM	1.0000	
3	std4/lvl4	4/26/2010 9:25:24 AM	1.0000	
4	std5/lvl5	4/26/2010 9:38:21 AM	1.0000	
5	std6/lvl6	4/26/2010 9:51:19 AM	1.0000	
6	std7/lvl7	4/26/2010 10:04:17 AM	1.0000	
7	std1/lvl1	4/26/2010 10:17:14 AM	1.0000	
8	CCV AN11-20-H	5/20/2010 8:54:44 AM	1.0000	CCV1
9	CCB	5/20/2010 9:06:41 AM	1.0000	CCB1
10	NO2 AN11-27-CC	5/20/2010 9:18:38 AM	25.0000	NO2
11	MB	5/20/2010 9:30:36 AM	1.0000	MB
12	NO3 AN1-33-E	5/20/2010 9:42:34 AM	20.0000	NO3
13	CLSO4 ERA #0107-10-02	5/20/2010 9:54:32 AM	1.0000	CLSO4
14	F AN1-33-D	5/20/2010 10:06:30 AM	2.0000	F
15	Br AN1-33-L	5/20/2010 10:18:28 AM	1.0000	Br
16	SPK AN11-10-M	5/20/2010 10:30:26 AM	1.0000	SPK
17	CCV2	5/20/2010 10:42:24 AM	1.0000	CCV2
18	CCB2	5/20/2010 10:54:21 AM	1.0000	CCB2
19	K1005105-001	5/20/2010 11:17:40 AM	2.0000	
20	K1005149-002	5/20/2010 11:54:10 AM	2.0000	
21	K4536-1 BEXT	5/20/2010 12:14:49 PM	20.0000	
22	K1004923-001	5/20/2010 12:26:47 PM	2.0000	
23	K1004923-002	5/20/2010 12:38:45 PM	2.0000	
24	K1004923-003	5/20/2010 12:50:43 PM	2.0000	
25	K1004923-008	5/20/2010 1:02:41 PM	2.0000	
26	K1004711-001	5/20/2010 1:14:40 PM	2.0000	
27	K1004967-001	5/20/2010 1:26:37 PM	50.0000	
28	RB	5/20/2010 1:38:35 PM	1.0000	
29	CCV3	5/20/2010 1:50:33 PM	1.0000	CCV3
30	CCB3	5/20/2010 2:02:31 PM	1.0000	CCB3
31	K1004923-002	5/20/2010 2:14:29 PM	2.0000	4923-2D
32	K1004923-002	5/20/2010 2:26:27 PM	2.0000	4923-2MS
33	K1004923-002	5/20/2010 2:38:25 PM	2.0000	4923-2MSD
34	K1004467-001	5/20/2010 2:50:22 PM	2.0000	
35	K1004680-001	5/20/2010 3:02:20 PM	2.0000	
36	K1004680-002	5/20/2010 3:14:18 PM	2.0000	
37	K1004680-003	5/20/2010 3:26:17 PM	2.0000	
38	K1004680-004	5/20/2010 3:38:15 PM	2.0000	
39	K1004680-005	5/20/2010 3:50:12 PM	2.0000	
40	RB	5/20/2010 4:02:10 PM	1.0000	
41	CCV4	5/20/2010 4:14:07 PM	1.0000	CCV4
42	CCB4	5/20/2010 4:26:05 PM	1.0000	CCB4

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120 Created: 5/20/2010 8:25:24 AM by ACQWET10
#Samples: 83 Last Update: 5/20/2010 5:52:45 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status
43	K1005160-001	Unknown	40	200.0	epa300	epa300	Finished
44	K1005161-001	Unknown	41	200.0	epa300	epa300	Finished
45	K1005161-002	Unknown	42	200.0	epa300	epa300	Finished
46	K1005150-001	Unknown	43	200.0	epa300	epa300	Finished
47	K1005150-001	Unknown	44	200.0	epa300	epa300	Finished
48	K1005149-002	Unknown	45	200.0	epa300	epa300	Finished
49	K1004923-003	Unknown	46	200.0	epa300	epa300	Finished
50	K1004467-001	Unknown	47	200.0	epa300	epa300	Finished
51	K1004575-001	Unknown	48	200.0	epa300	epa300	Finished
52	RB	Unknown	49	200.0	epa300	epa300	Finished
53	CCV5	Unknown	50	200.0	epa300	epa300	Finished
54	CCB5	Unknown	51	200.0	epa300	epa300	Finished
55	MB 2	Unknown	52	200.0	epa300	epa300	Finished
56	CLSO4 2	Unknown	53	200.0	epa300	epa300	Finished
57	K1004470-001	Unknown	54	200.0	epa300	epa300	Finished
58	K1004470-002	Unknown	55	200.0	epa300	epa300	Finished
59	K1004470-003	Unknown	56	200.0	epa300	epa300	Finished
60	K1004470-004	Unknown	57	200.0	epa300	epa300	Finished
61	K1004470-005	Unknown	58	200.0	epa300	epa300	Finished
62	K1004470-006	Unknown	59	200.0	epa300	epa300	Finished
63	K1004470-007	Unknown	60	200.0	epa300	epa300	Finished
64	RB	Unknown	61	200.0	epa300	epa300	Finished
65	CCV6	Unknown	62	200.0	epa300	epa300	Finished
66	CCB6	Unknown	63	200.0	epa300	epa300	Finished
67	K1004470-008	Unknown	64	200.0	epa300	epa300	Finished
68	K1004470-009	Unknown	65	200.0	epa300	epa300	Finished
69	K1004470-010	Unknown	66	200.0	epa300	epa300	Finished
70	K1004470-011	Unknown	67	200.0	epa300	epa300	Finished
71	K1004470-012	Unknown	68	200.0	epa300	epa300	Finished
72	K1004470-012	Unknown	69	200.0	epa300	epa300	Finished
73	K1004470-012	Unknown	70	200.0	epa300	epa300	Finished
74	K1004470-012	Unknown	71	200.0	epa300	epa300	Finished
75	K1004470-013	Unknown	72	200.0	epa300	epa300	Finished
76	RB	Unknown	73	200.0	epa300	epa300	Finished
77	CCV7	Unknown	74	200.0	epa300	epa300	Finished
78	CCB7	Unknown	75	200.0	epa300	epa300	Finished
79	K1004470-014	Unknown	76	200.0	epa300	epa300	Finished
80	RB	Unknown	77	200.0	epa300	epa300	Finished
81	CCV8	Unknown	78	200.0	epa300	epa300	Finished
82	CCB8	Unknown	79	200.0	epa300	epa300	Finished
83	SHUTDOWN	Unknown	80	200.0	shutdown 120	epa300	Finished

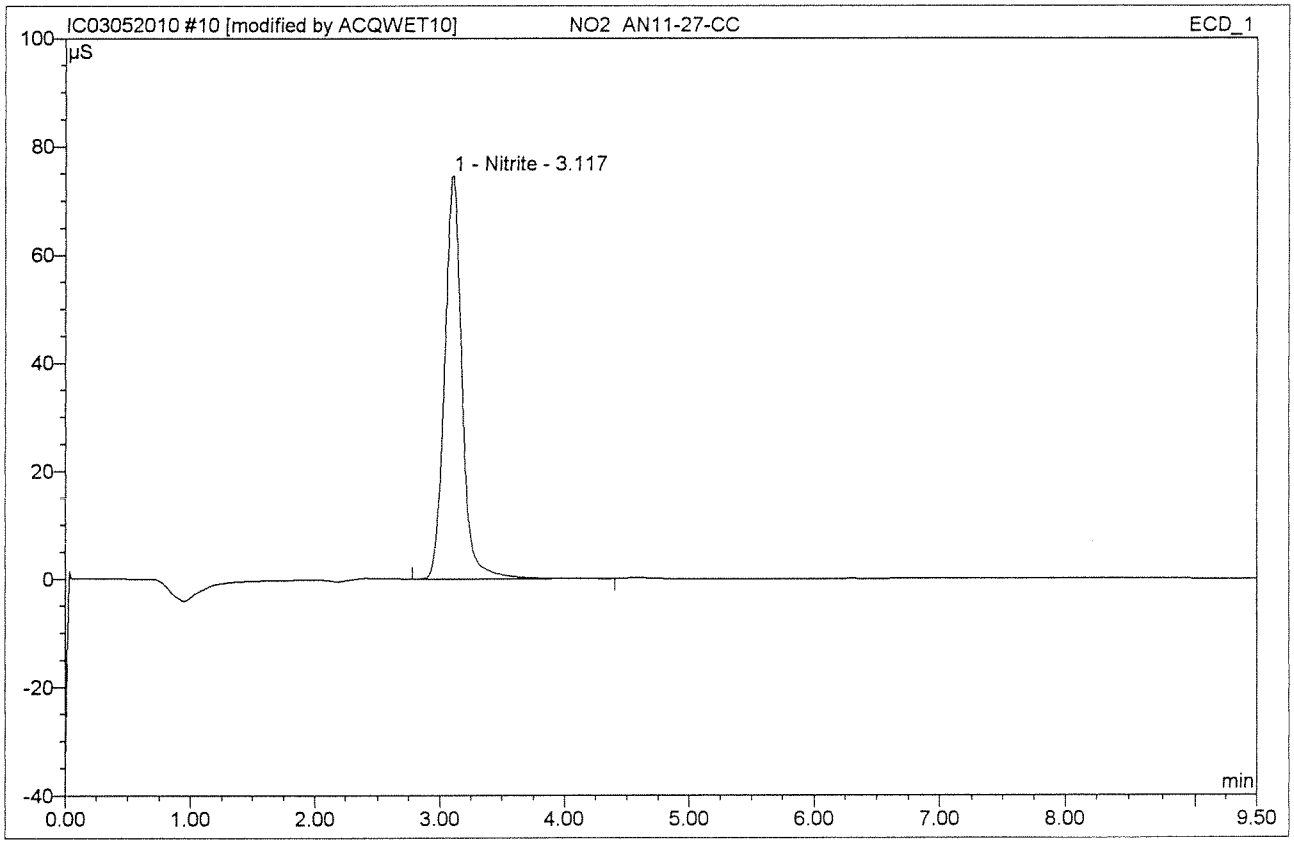
Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120 Created: 5/20/2010 8:25:24 AM by ACQWET10
#Samples: 83 Last Update: 5/20/2010 5:52:45 PM by ACQWET10

No.	Name	Inj. Date/Time	Dil. Factor	Comment
43	K1005160-001	5/20/2010 4:38:02 PM	2.0000	
44	K1005161-001	5/20/2010 4:50:00 PM	2.0000	
45	K1005161-002	5/20/2010 5:01:58 PM	2.0000	
46	K1005150-001	5/20/2010 5:13:55 PM	5.0000	
47	K1005150-001	5/20/2010 5:25:53 PM	200.0000	
48	K1005149-002	5/20/2010 5:37:50 PM	20.0000	
49	K1004923-003	5/20/2010 5:49:48 PM	5.0000	
50	K1004467-001	5/20/2010 6:01:45 PM	10.0000	
51	K1004575-001	5/20/2010 6:13:43 PM	2.0000	
52	RB	5/20/2010 6:25:41 PM	1.0000	
53	CCV5	5/20/2010 6:37:38 PM	1.0000	CCV5
54	CCB5	5/20/2010 6:49:36 PM	1.0000	CCB5
55	MB 2	5/20/2010 7:01:34 PM	1.0000	MB 2
56	CLSO4 2	5/20/2010 7:13:32 PM	1.0000	CLSO4 2
57	K1004470-001	5/20/2010 7:25:30 PM	10.0000	
58	K1004470-002	5/20/2010 7:37:27 PM	1.0000	
59	K1004470-003	5/20/2010 7:49:25 PM	10.0000	
60	K1004470-004	5/20/2010 8:01:23 PM	2.0000	
61	K1004470-005	5/20/2010 8:13:20 PM	50.0000	
62	K1004470-006	5/20/2010 8:25:18 PM	20.0000	
63	K1004470-007	5/20/2010 8:37:15 PM	2.0000	
64	RB	5/20/2010 8:49:13 PM	1.0000	
65	CCV6	5/20/2010 9:01:11 PM	1.0000	CCV6
66	CCB6	5/20/2010 9:13:09 PM	1.0000	CCB6
67	K1004470-008	5/20/2010 9:25:07 PM	200.0000	
68	K1004470-009	5/20/2010 9:37:04 PM	20.0000	
69	K1004470-010	5/20/2010 9:49:02 PM	20.0000	
70	K1004470-011	5/20/2010 10:01:00 PM	2.0000	
71	K1004470-012	5/20/2010 10:12:57 PM	50.0000	
72	K1004470-012	5/20/2010 10:24:55 PM	50.0000	4470-12D
73	K1004470-012	5/20/2010 10:36:53 PM	50.0000	4470-12MS
74	K1004470-012	5/20/2010 10:48:51 PM	50.0000	4470-12MSD
75	K1004470-013	5/20/2010 11:00:48 PM	200.0000	
76	RB	5/20/2010 11:12:46 PM	1.0000	
77	CCV7	5/20/2010 11:24:44 PM	1.0000	CCV7
78	CCB7	5/20/2010 11:36:42 PM	1.0000	CCV7
79	K1004470-014	5/20/2010 11:48:39 PM	50.0000	
80	RB	5/21/2010 12:00:37 AM	1.0000	
81	CCV8	5/21/2010 12:12:34 AM	1.0000	CCV8
82	CCB8	5/21/2010 12:24:33 AM	1.0000	CCB8
83	SHUTDOWN	5/21/2010 12:36:30 AM	1.0000	

10 NO2 AN11-27-CC

NO2

Sample Name:	**NO2 AN11-27-CC**	*Injection Volume:*	**200.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**5/20/2010 9:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



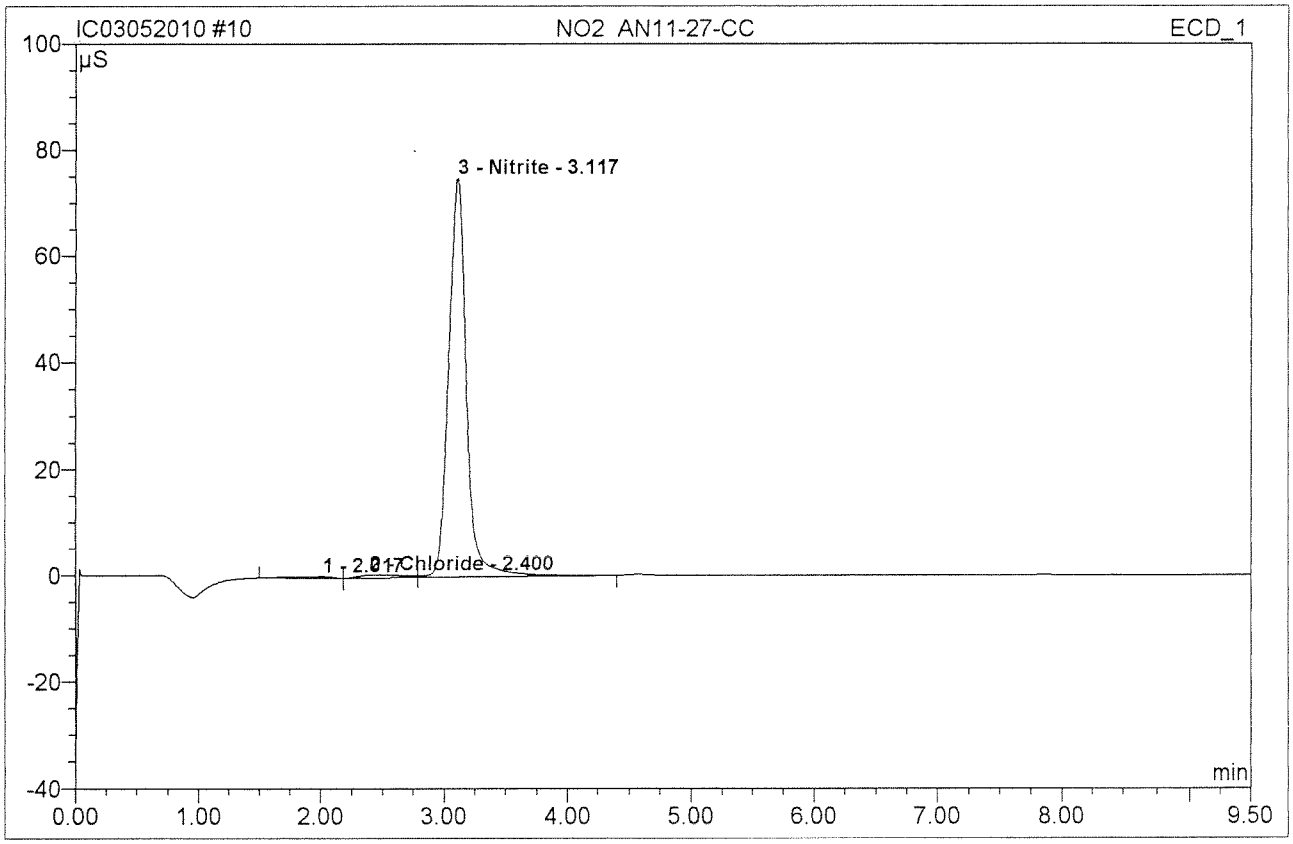
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.12	Nitrite	74.628	12.169	100.00	105.368 105%	BMB*
Total:			74.628	12.169	100.00	105.368	

5/25/10

10 NO2 AN11-27-CC

NO2

Sample Name:	**NO2 AN11-27-CC**	*Injection Volume:*	**200.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**5/20/2010 9:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

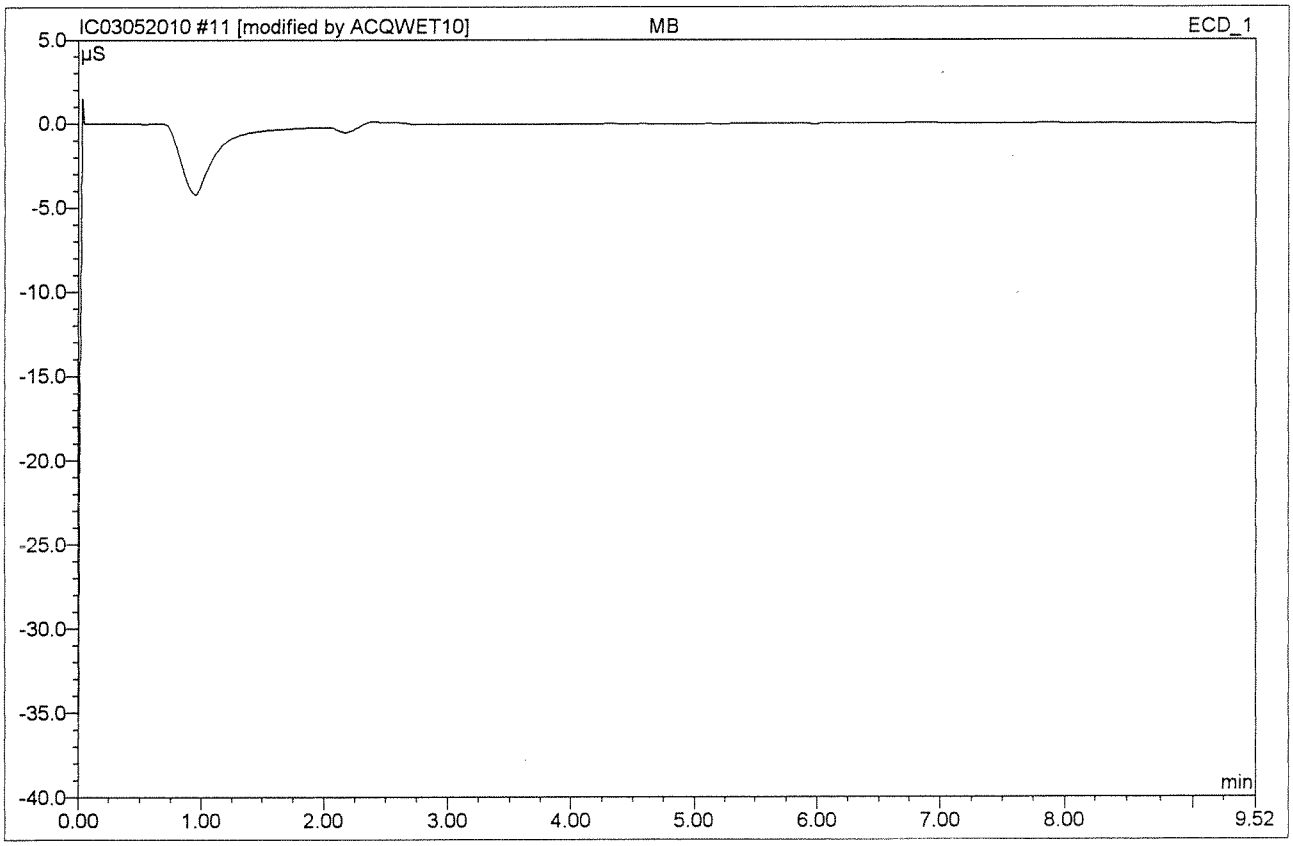


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.02	n.a.	0.313	0.125	0.97	n.a.	BMb
2	2.40	Chloride	0.607	0.249	1.94	3.991	bM
3	3.12	Nitrite	74.912	12.459	97.09	107.876	MB
Total:			75.832	12.833	100.00	111.866	

11 MB

MB

Sample Name:	**MB**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.52**	*Sample Amount:*	**1.0000**



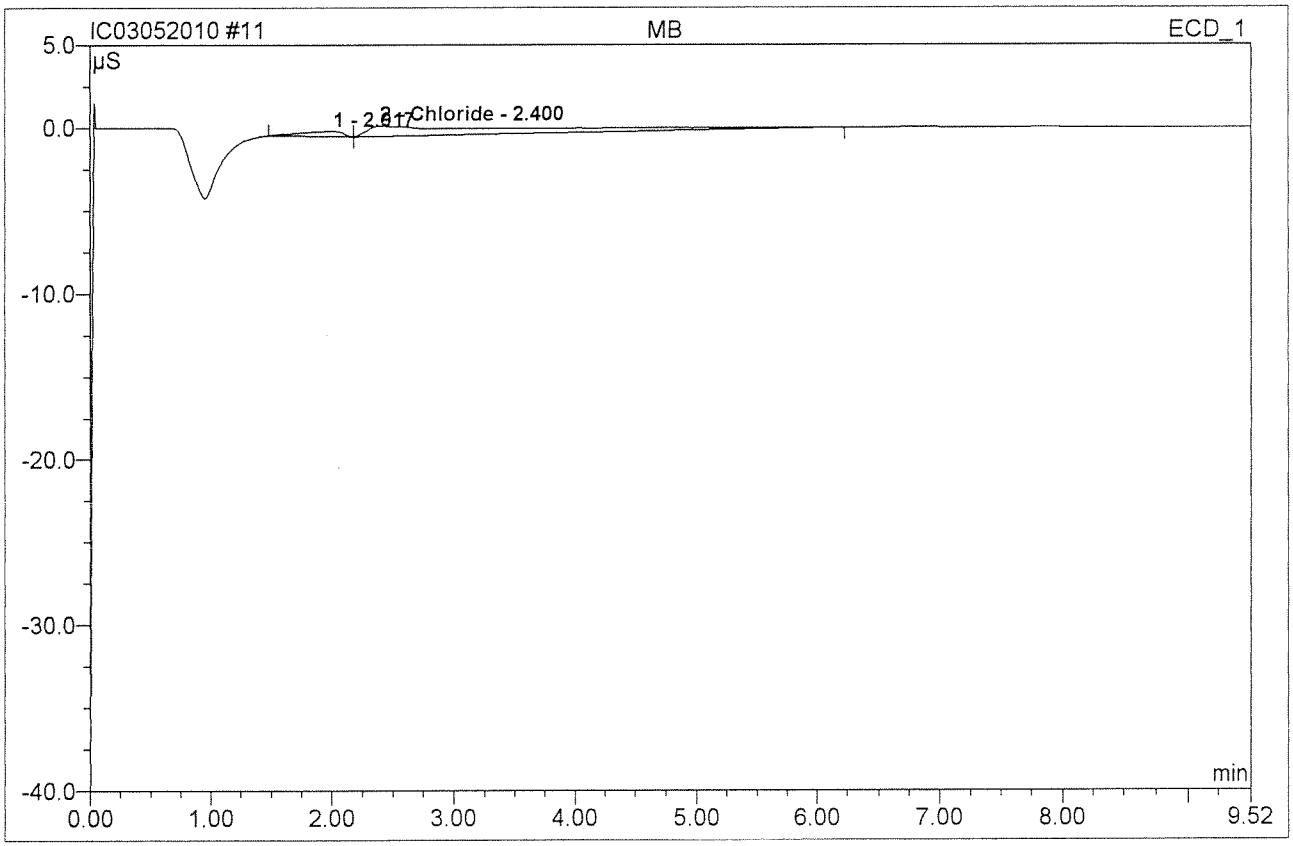
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

5/25/10

11 MB

MB

Sample Name:	**MB**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.52**	*Sample Amount:*	**1.0000**

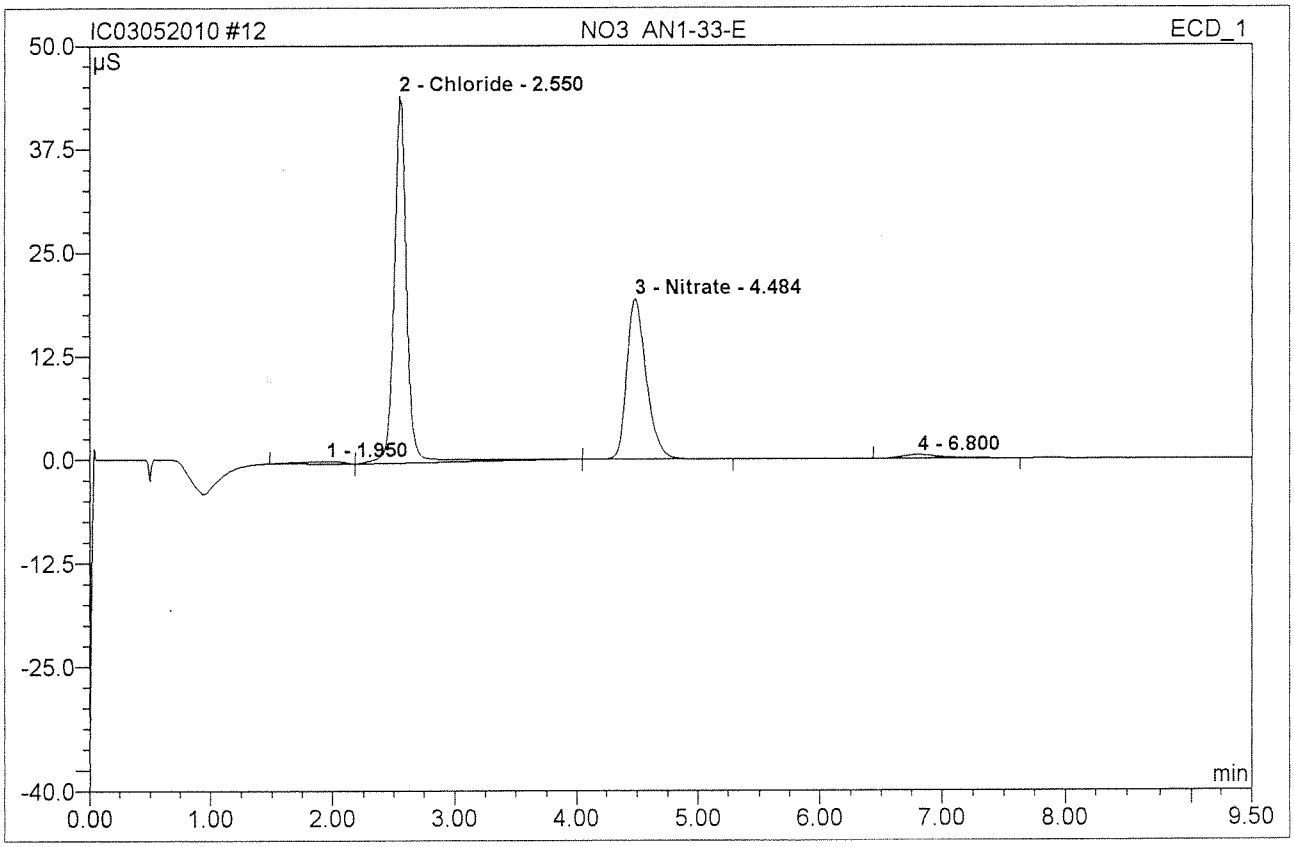


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.02	n.a.	0.302	0.125	11.44	n.a.	BMb
2	2.40	Chloride	0.632	0.968	88.56	0.621	bMB
Total:			0.934	1.093	100.00	0.621	

12 NO3 AN1-33-E

NO3

Sample Name:	**NO3 AN1-33-E**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0000**
Recording Time:	**5/20/2010 9:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

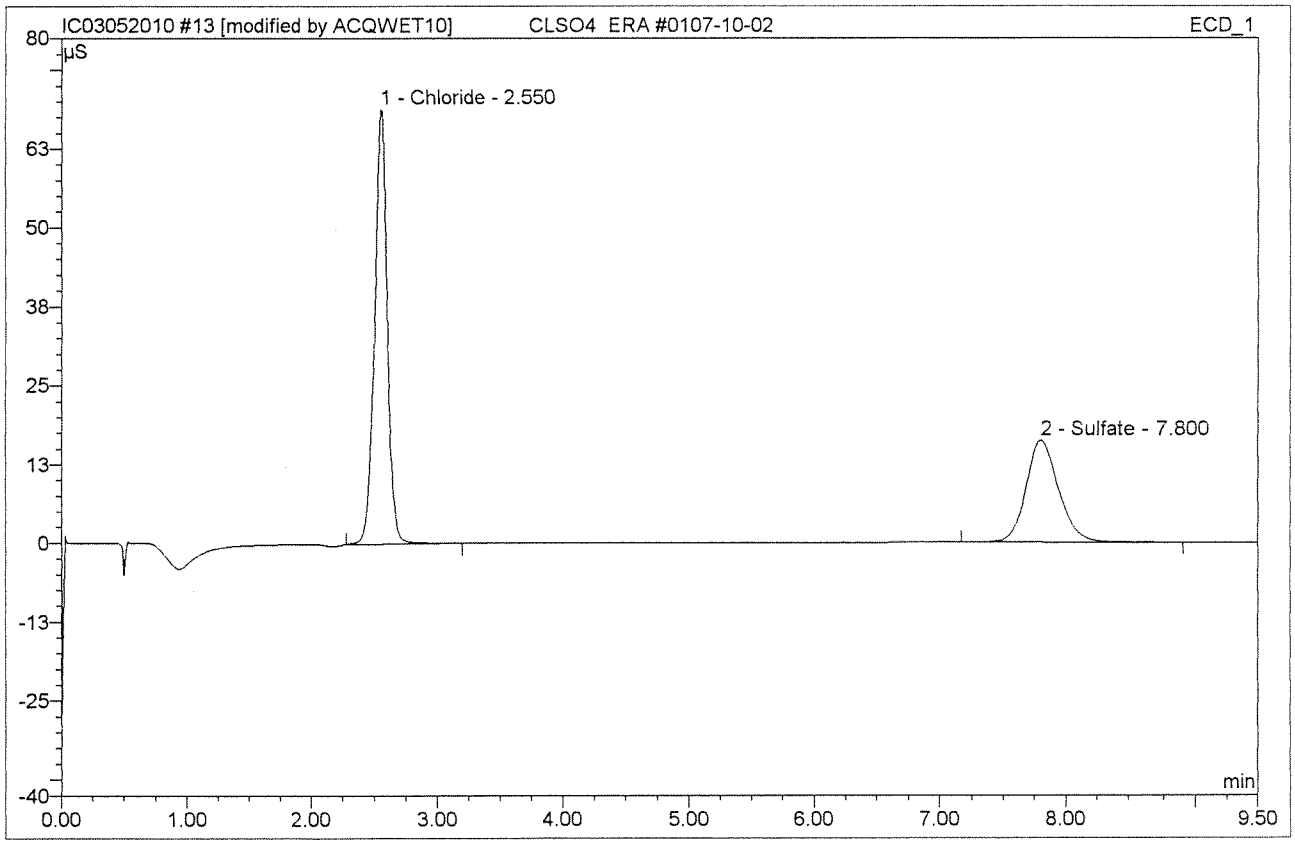


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.95	n.a.	0.316	0.135	1.44	n.a.	BMb
2	2.55	Chloride	44.339	5.399	57.79	69.233	bMB
3	4.48	Nitrate	19.325	3.641	38.97	19.766	bMB
4	6.80	n.a.	0.454	0.168	1.80	n.a.	BMB
Total:			64.435	9.342	100.00	88.999	

13 CLSO4 ERA #0107-10-02

CLSO4

Sample Name:	**CLSO4 ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



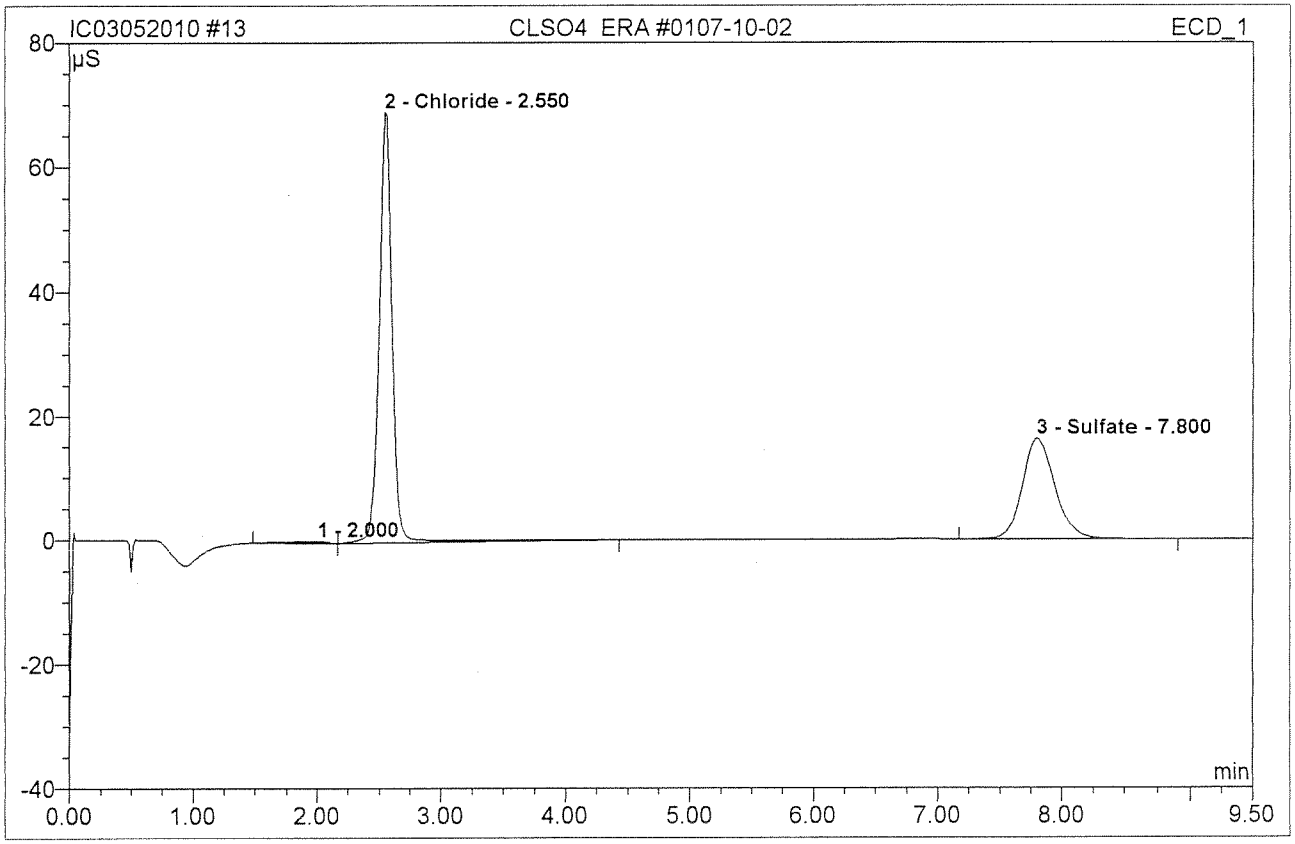
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.55	Chloride	68.863	8.035	62.04	5.152	BMB*
2	7.80	Sulfate	16.224	4.917	37.96	4.996	BMB
Total:			85.087	12.952	100.00	10.149	

5/25/10

13 CLSO4 ERA #0107-10-02

CLSO4

Sample Name:	**CLSO4 ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

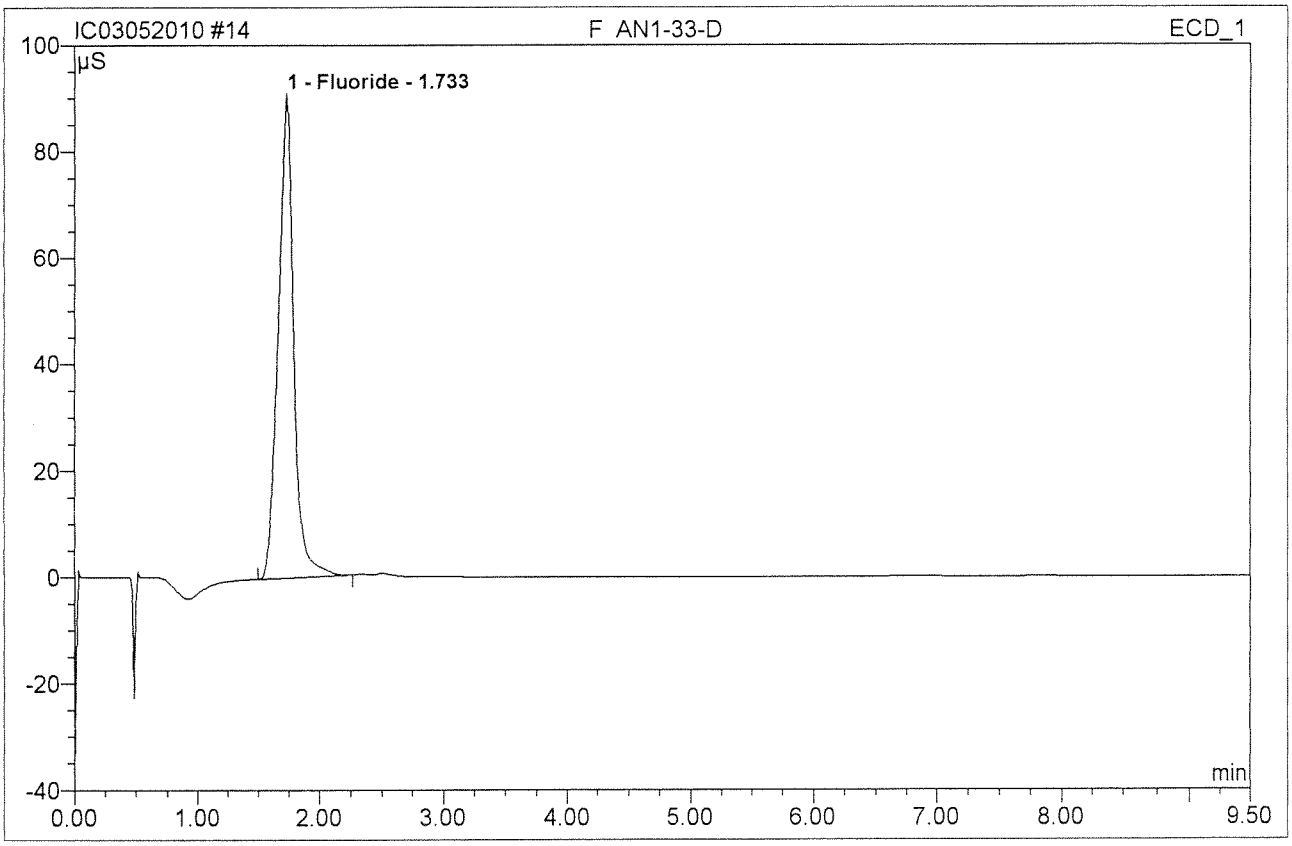


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.00	n.a.	0.310	0.125	0.93	n.a.	BMb
2	2.55	Chloride	69.169	8.481	62.72	5.438	bMB
3	7.80	Sulfate	16.224	4.917	36.36	4.996	BMB
Total:			85.703	13.523	100.00	10.434	

14 F AN1-33-D

F

Sample Name:	**F AN1-33-D**	*Injection Volume:*	**200.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 10:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

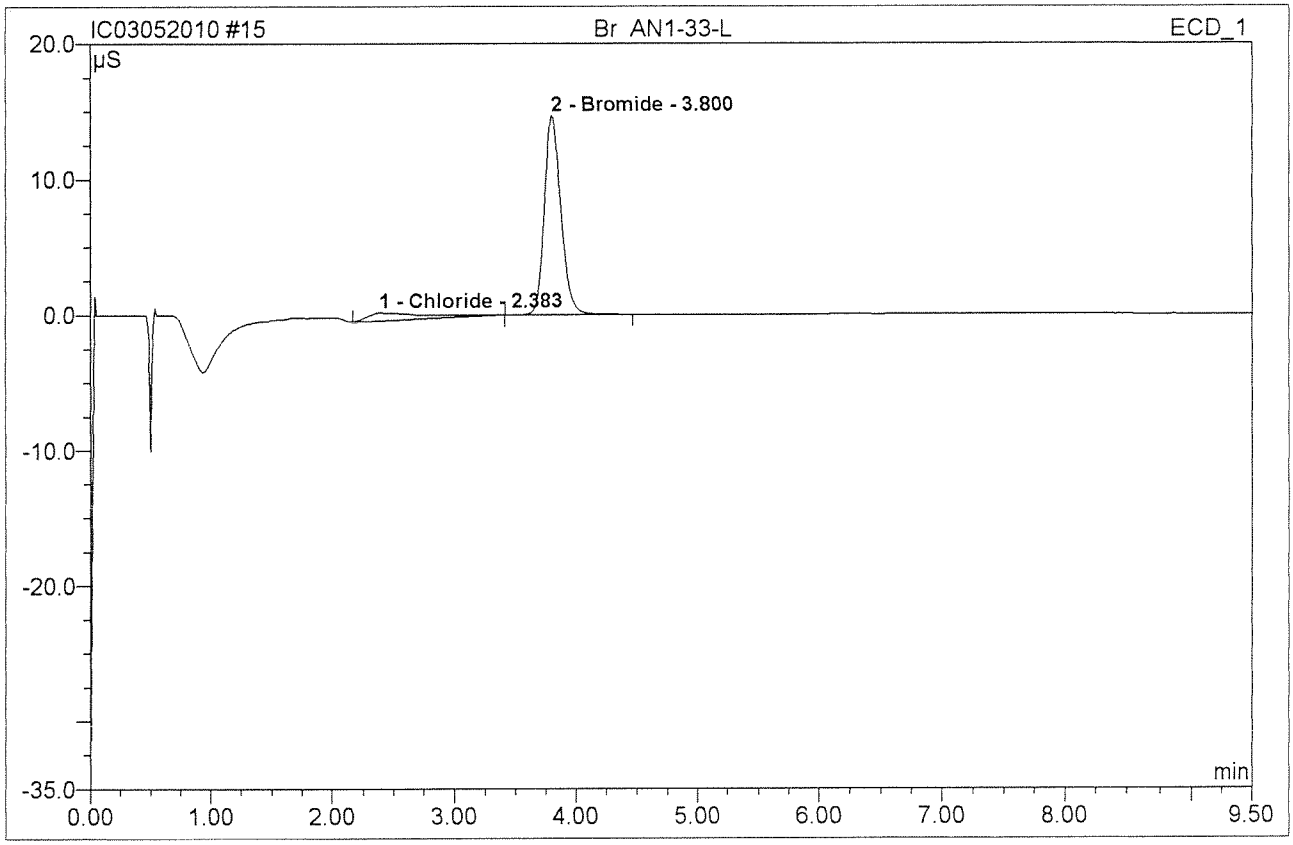


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	90.907	13.326	100.00	13.929/0.37	BMB
Total:			90.907	13.326	100.00	13.929	

15 Br AN1-33-L

Br

Sample Name:	**Br AN1-33-L**	*Injection Volume:*	**200.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

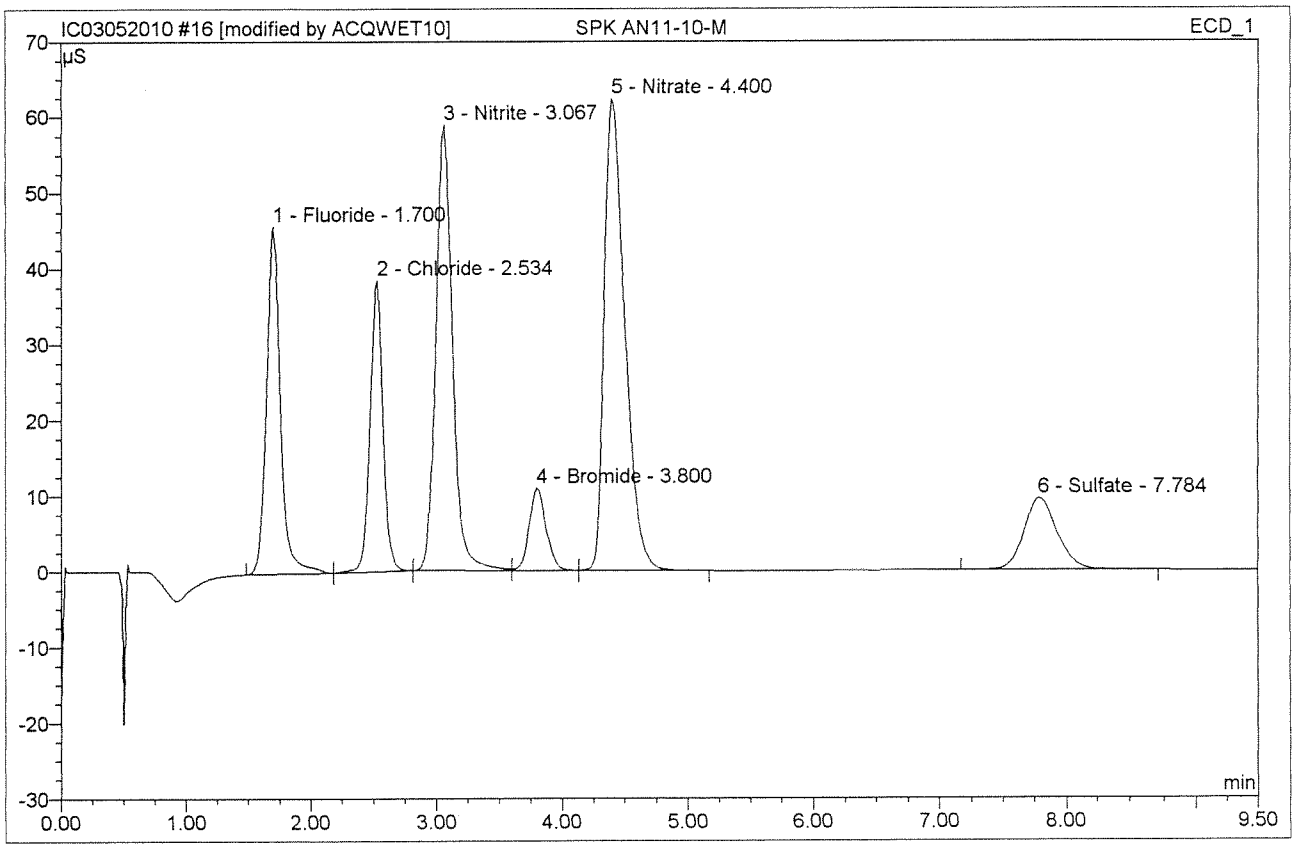


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.38	Chloride	0.595	0.314	11.87	0.201	BMB
2	3.80	Bromide	14.672	2.329	88.13	4.346 (092	bMB
Total:			15.267	2.642	100.00	4.547	

16 SPK AN11-10-M

SPK

Sample Name:	**SPK AN11-10-M**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	45.876	5.850	16.35	3.057	BMb
2	2.53	Chloride	38.469	4.542	12.70	2.912	bMb
3	3.07	Nitrite	58.803	9.013	25.20	3.122	bM *
4	3.80	Bromide	10.919	1.705	4.77	3.182	Mb*
5	4.40	Nitrate	62.250	11.747	32.84	3.189	bMB
6	7.78	Sulfate	9.510	2.915	8.15	2.962	BMB
Total:			225.828	35.772	100.00	18.424	

TV=3.00

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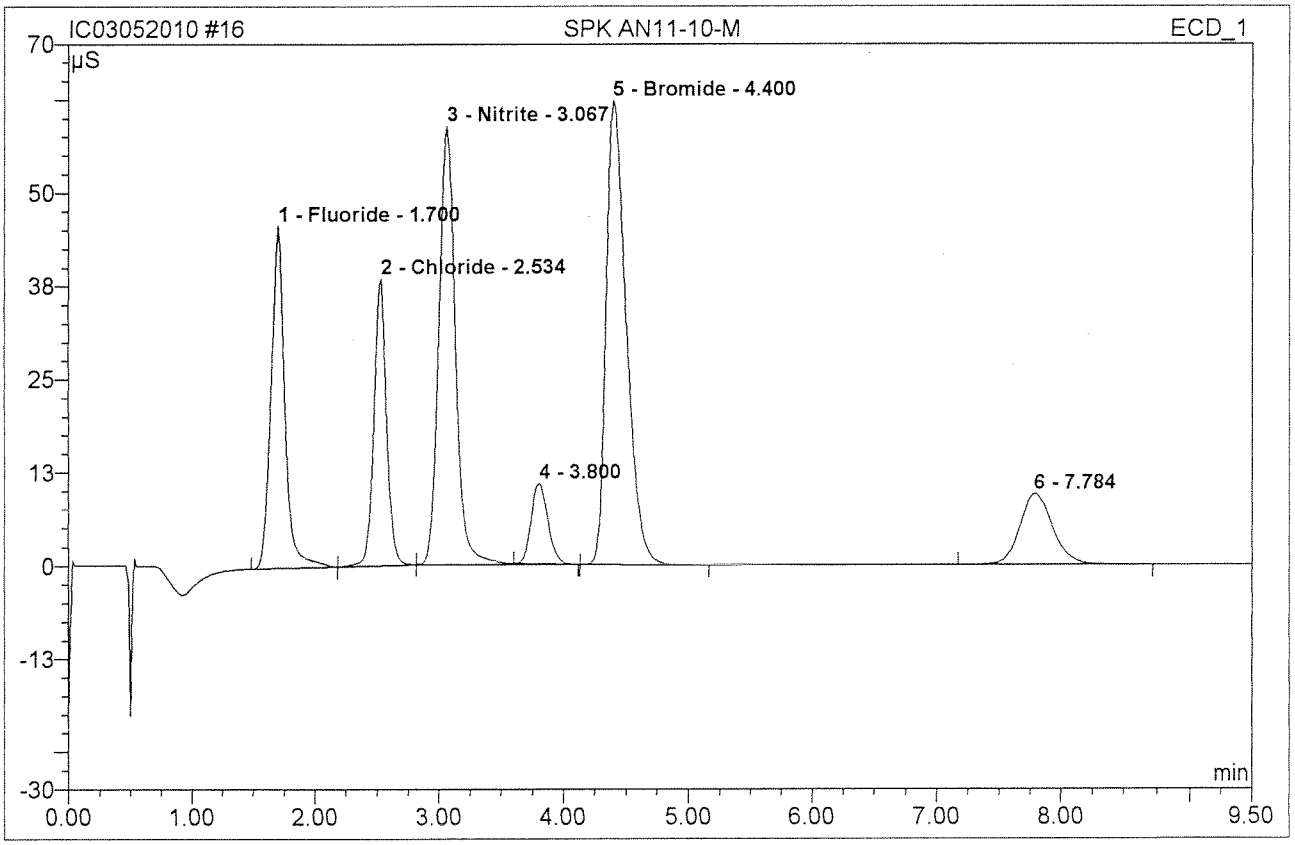
16 SPK AN11-10-M

SPK

Sample Name:	**SPK AN11-10-M**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

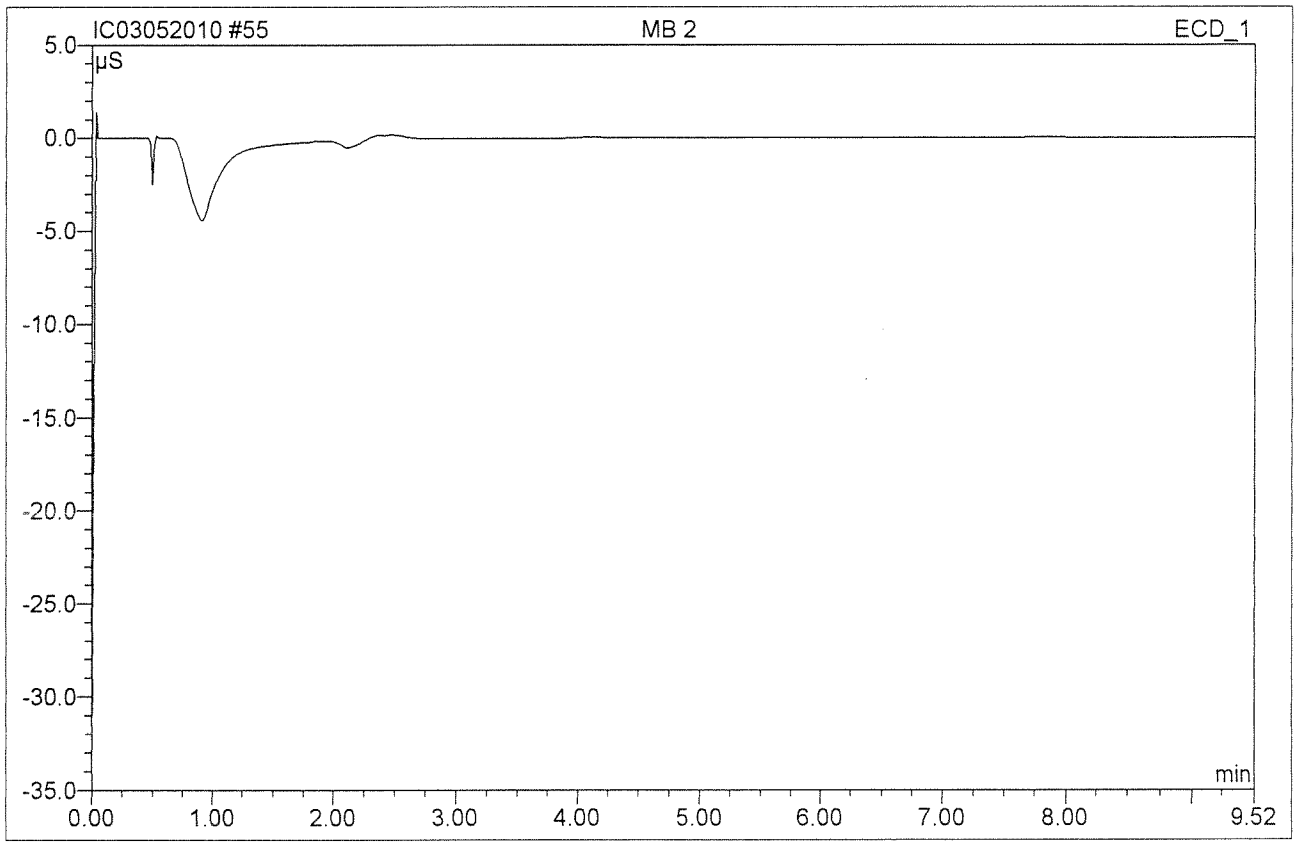


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	45.876	5.850	16.35	3.057	BMb
2	2.53	Chloride	38.469	4.542	12.70	2.912	bMb
3	3.07	Nitrite	58.803	9.060	25.33	3.138	bMb
4	3.80	n.a.	10.810	1.659	4.64	n.a.	Rd
5	4.40	Bromide	62.250	11.747	32.84	21.924	bMB
6	7.78	n.a.	9.510	2.915	8.15	n.a.	BMB
Total:			225.718	35.772	100.00	31.031	

55 MB 2

MB 2

Sample Name:	**MB 2**	*Injection Volume:*	**200.0**
Vial Number:	**52**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 19:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.52**	*Sample Amount:*	**1.0000**

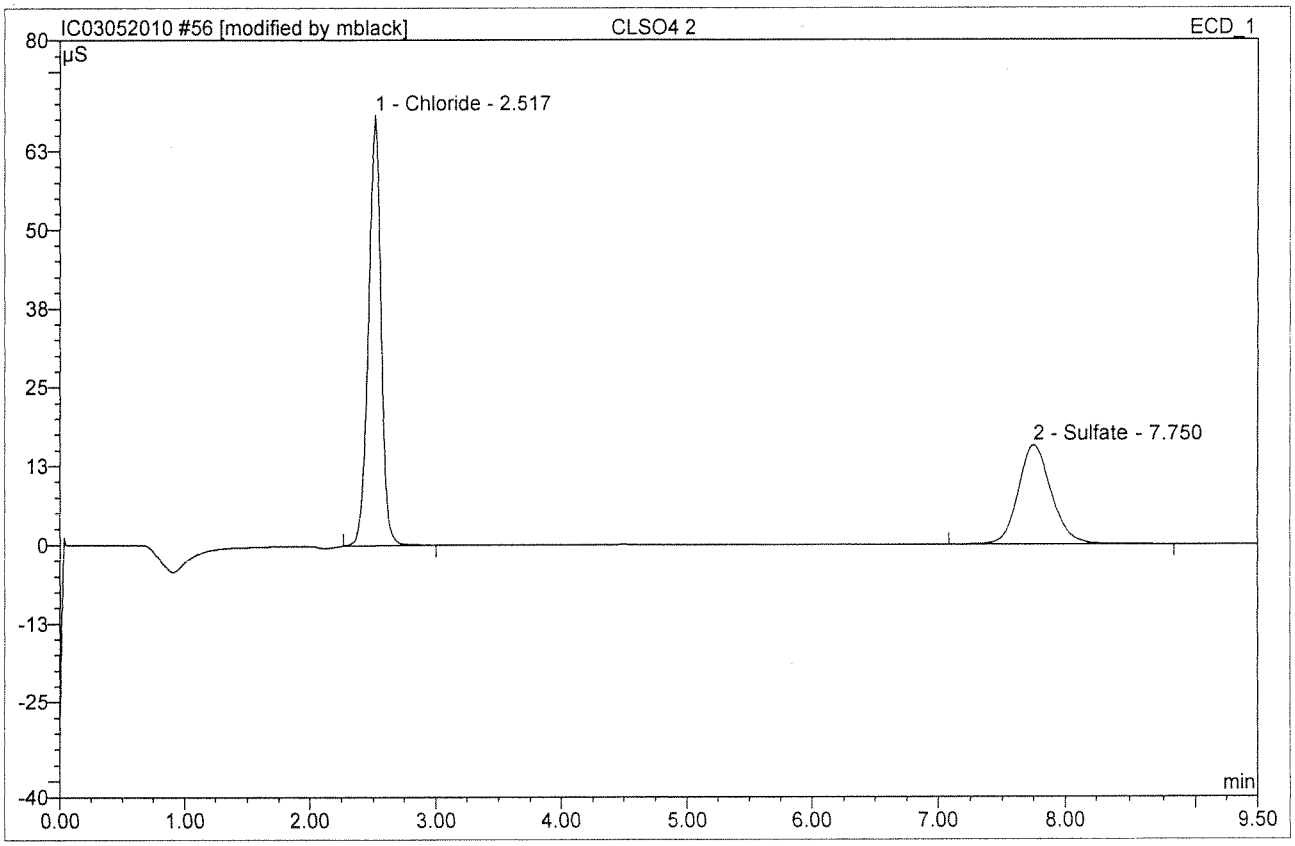


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

56 CLSO4 2

CLSO4 2

Sample Name:	**CLSO4 2**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 19:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.52	Chloride	68.281	7.836	62.20	5.025 101%	BMB*
2	7.75	Sulfate	15.768	4.763	37.80	4.840 97%	BMB
Total:			84.049	12.599	100.00	9.864	

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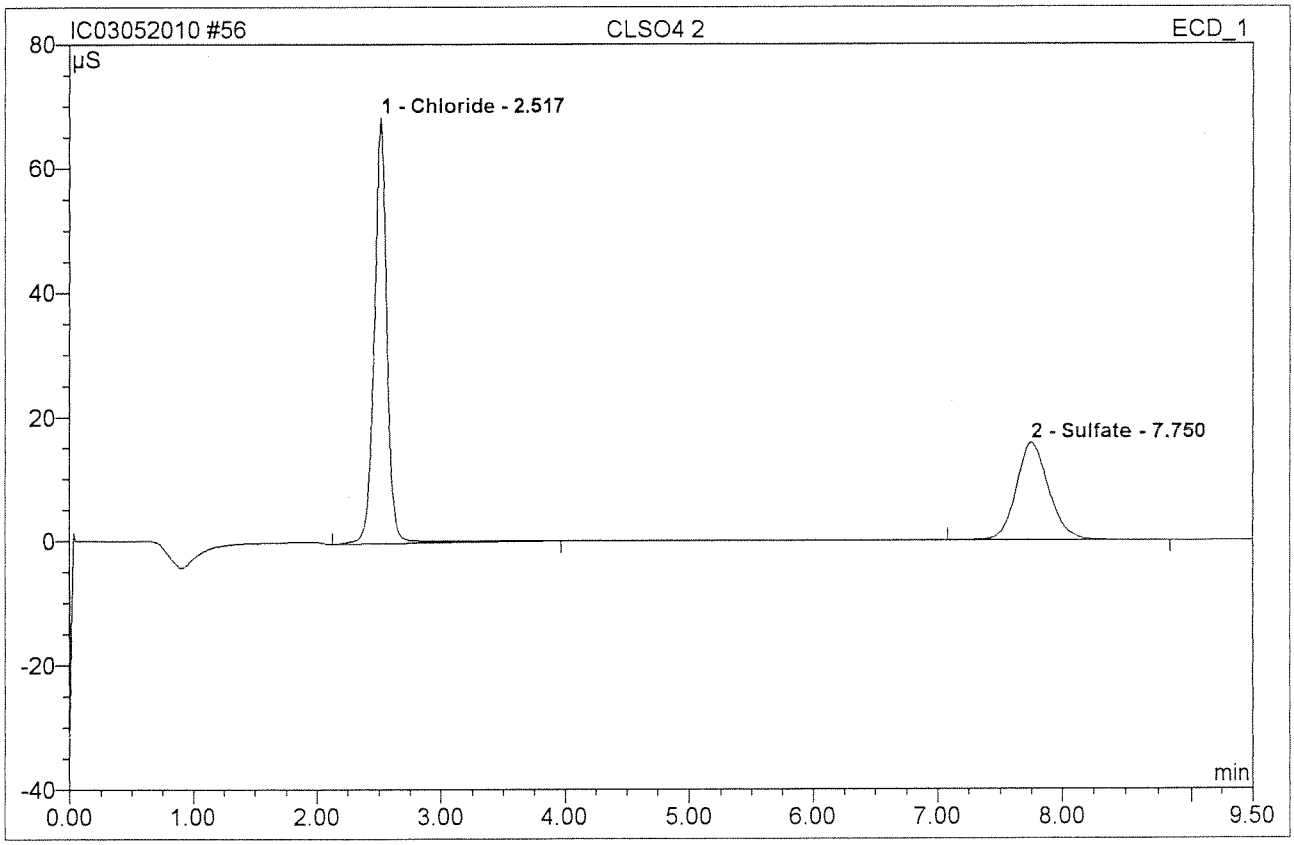
56 CLSO4 2

CLSO4 2

Sample Name:	**CLSO4 2**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 19:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.52	Chloride	68.621	8.218	63.31	5.270	BMB
2	7.75	Sulfate	15.768	4.763	36.69	4.840	BMB
Total:			84.388	12.981	100.00	10.109	

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

Sequence: IC03042610 **Date: 04/26/10**

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9846	1.9134
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9661	1.5595
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9925	2.8873
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9591	0.5358
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9043	3.6839
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9690	0.9841

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

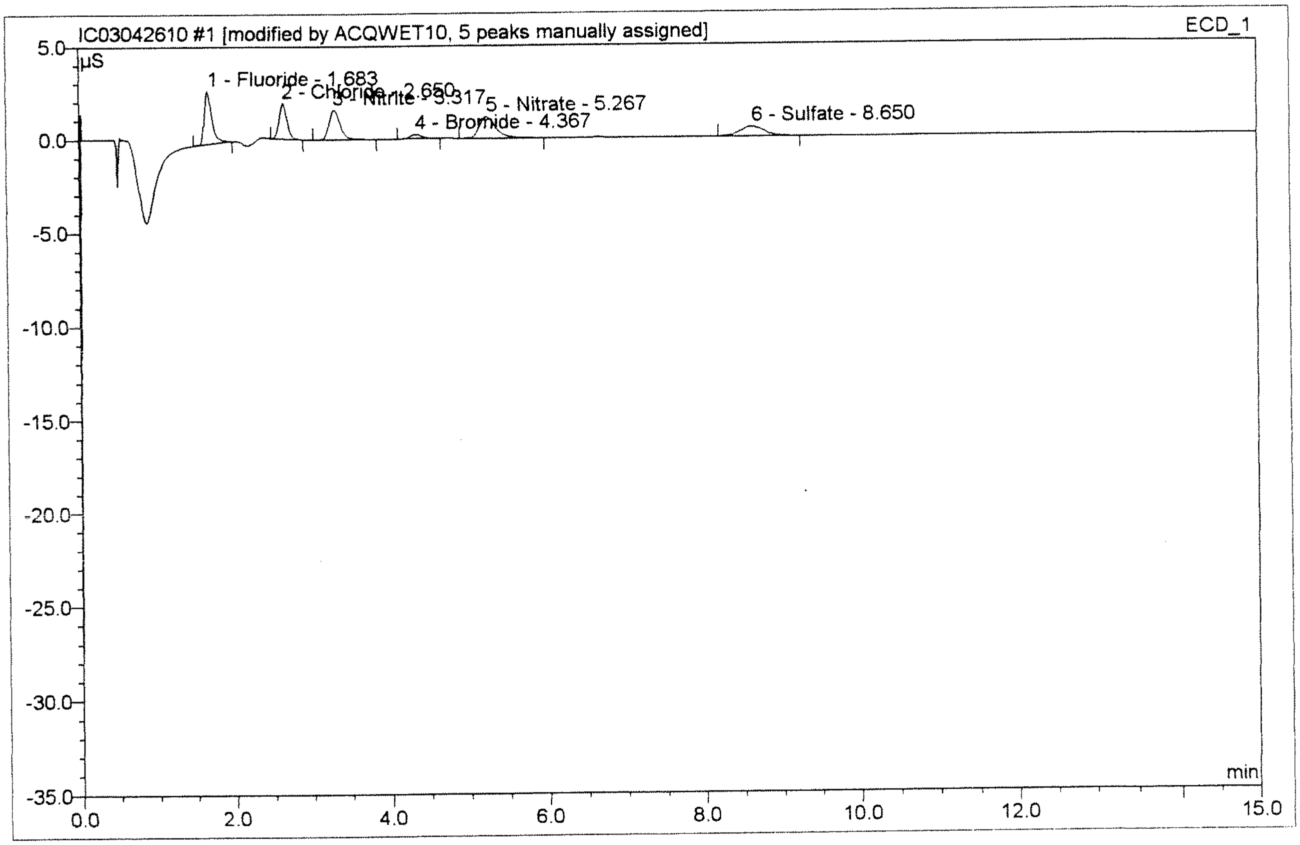
Sequence: IC03042610 **Date: 04/26/10**

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9846	1.9134
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9661	1.5595
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9925	2.8873
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9591	0.5358
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9043	3.6839
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9690	0.9841

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	2.860	0.324	24.73	0.169	BMB*
2	2.65	Chloride	1.892	0.229	17.47	0.147	BMB^
3	3.32	Nitrite	1.586	0.259	19.78	0.090	BMB^
4	4.37	Bromide	0.244	0.043	3.25	0.080	BMB*^
5	5.27	Nitrate	1.144	0.279	21.26	0.076	BMB^
6	8.65	Sulfate	0.507	0.177	13.51	0.180	BMB^
Total:			8.233	1.311	100.00	0.742	

MB

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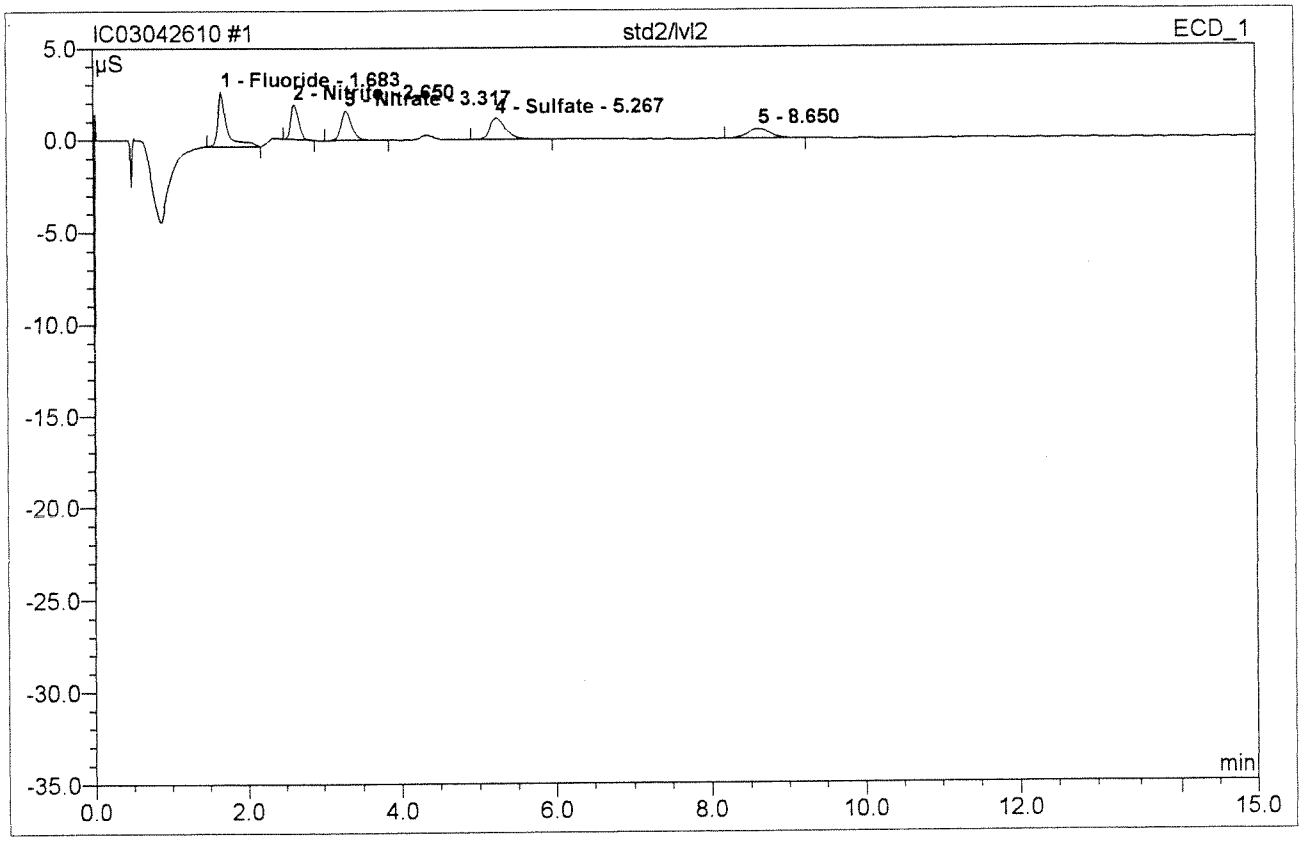
1 std2/lvl2

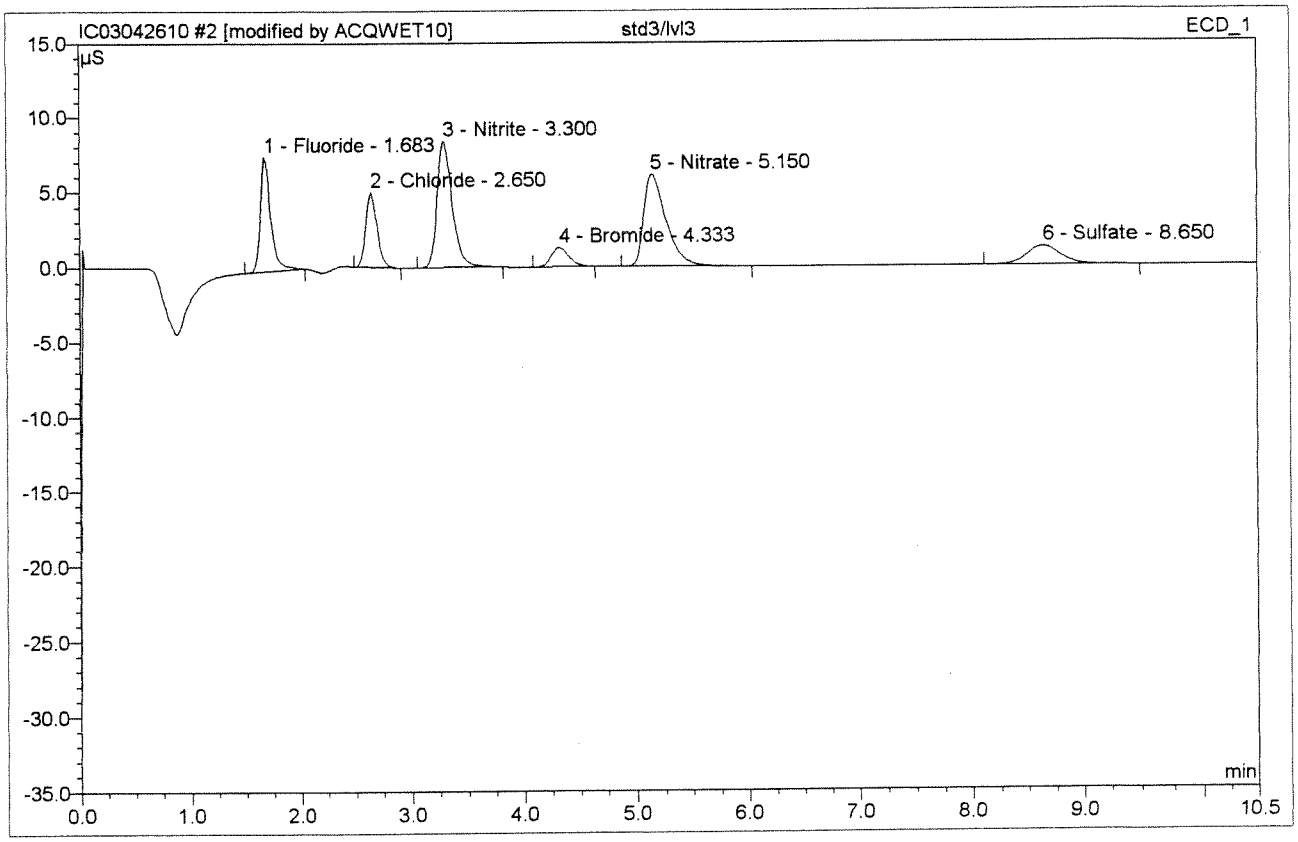
Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	2.953	0.421	30.83	0.200	BMB
2	2.65	Nitrite	1.892	0.229	16.78	0.100	BMB
3	3.32	Nitrate	1.586	0.259	19.00	0.100	BMB
4	5.27	Sulfate	1.144	0.279	20.42	0.200	BMB
5	8.65	n.a.	0.507	0.177	12.97	n.a.	BMB
Total:			8.081	1.366	100.00	0.600	

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	7.622	0.844	17.37	0.441	BMB*
2	2.65	Chloride	4.937	0.589	12.12	0.378	BMB
3	3.30	Nitrite	8.365	1.329	27.34	0.460	BMB*
4	4.33	Bromide	1.271	0.229	4.72	0.428	BMB*
5	5.15	Nitrate	6.087	1.425	29.30	0.387	BMB
6	8.65	Sulfate	1.253	0.445	9.16	0.452	BMB
Total:			29.536	4.862	100.00	2.547	

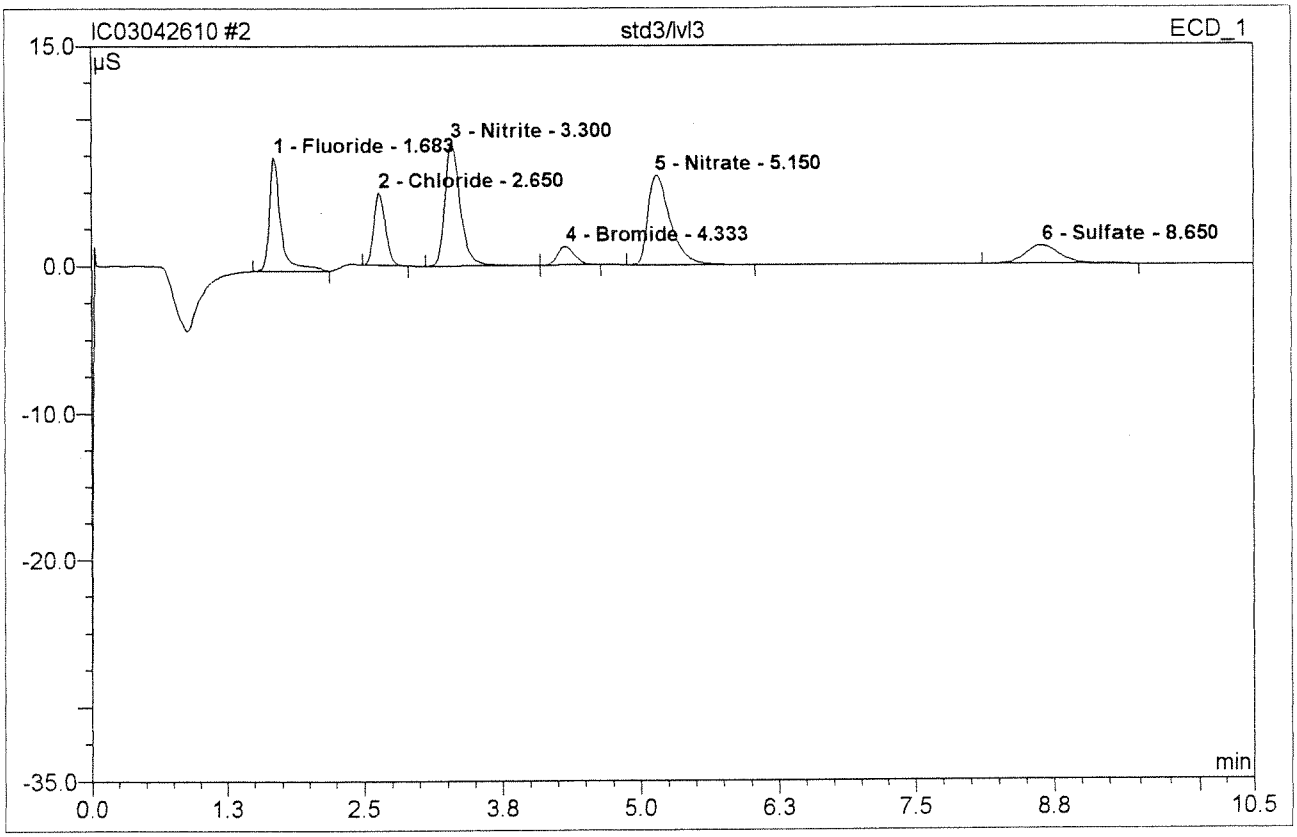
MB

APR 2 [illegible] 2010

default/Integration

2 std3/lvl3

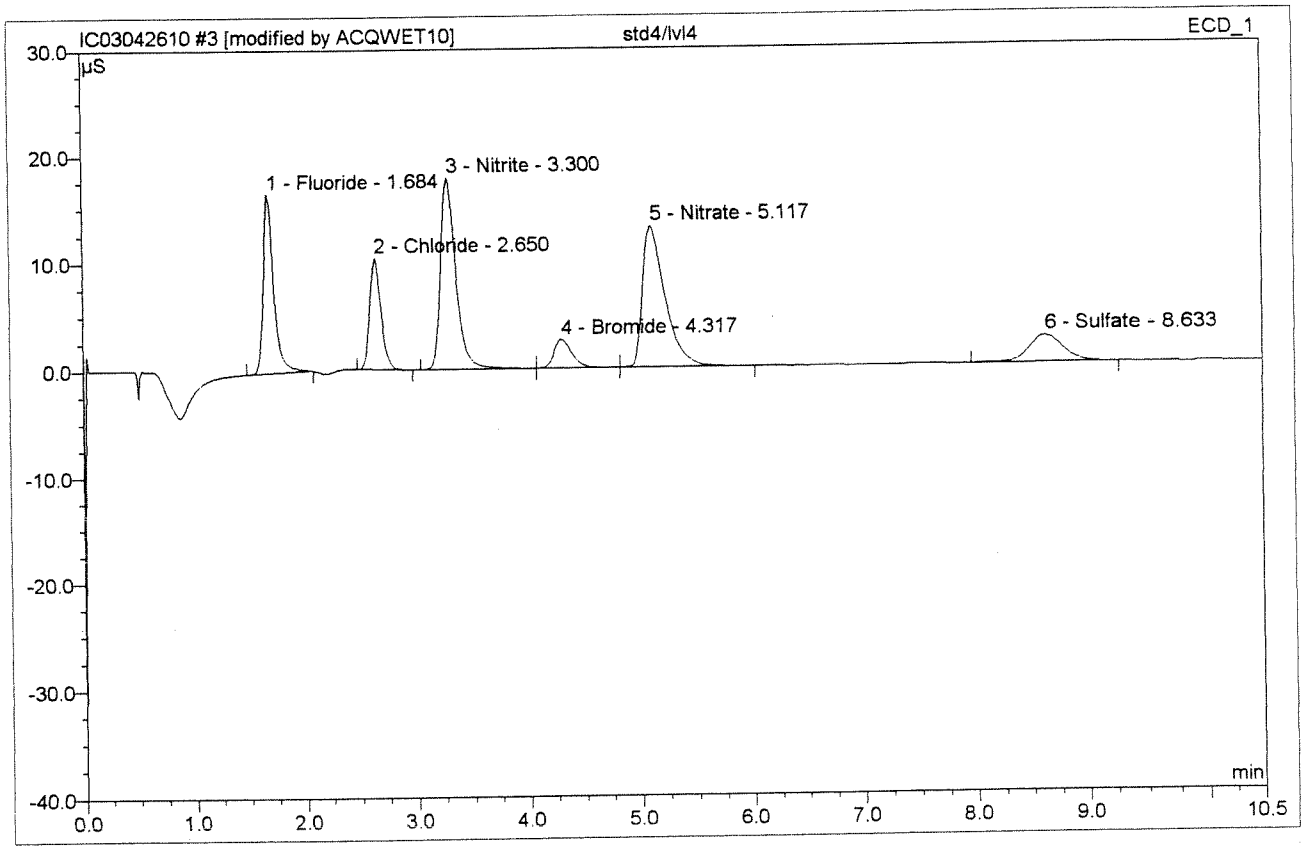
Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	7.720	0.949	19.04	0.510	BMB
2	2.65	Chloride	4.937	0.589	11.82	0.502	BMB
3	3.30	Nitrite	8.377	1.347	27.02	0.501	BMB
4	4.33	Bromide	1.271	0.229	4.60	0.501	bMB
5	5.15	Nitrate	6.087	1.425	28.59	0.500	BMB
6	8.65	Sulfate	1.253	0.445	8.93	0.500	BMB
Total:			29.644	4.984	100.00	3.015	

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	16.676	1.811	17.64	0.947	BMB*
2	2.65	Chloride	10.365	1.223	11.91	0.784	BMB
3	3.30	Nitrite	17.874	2.814	27.40	0.975	BMb
4	4.32	Bromide	2.661	0.487	4.74	0.908	bMb
5	5.12	Nitrate	13.149	3.046	29.66	0.827	bMB
6	8.63	Sulfate	2.522	0.888	8.65	0.903	BMB
Total:			63.248	10.270	100.00	5.343	

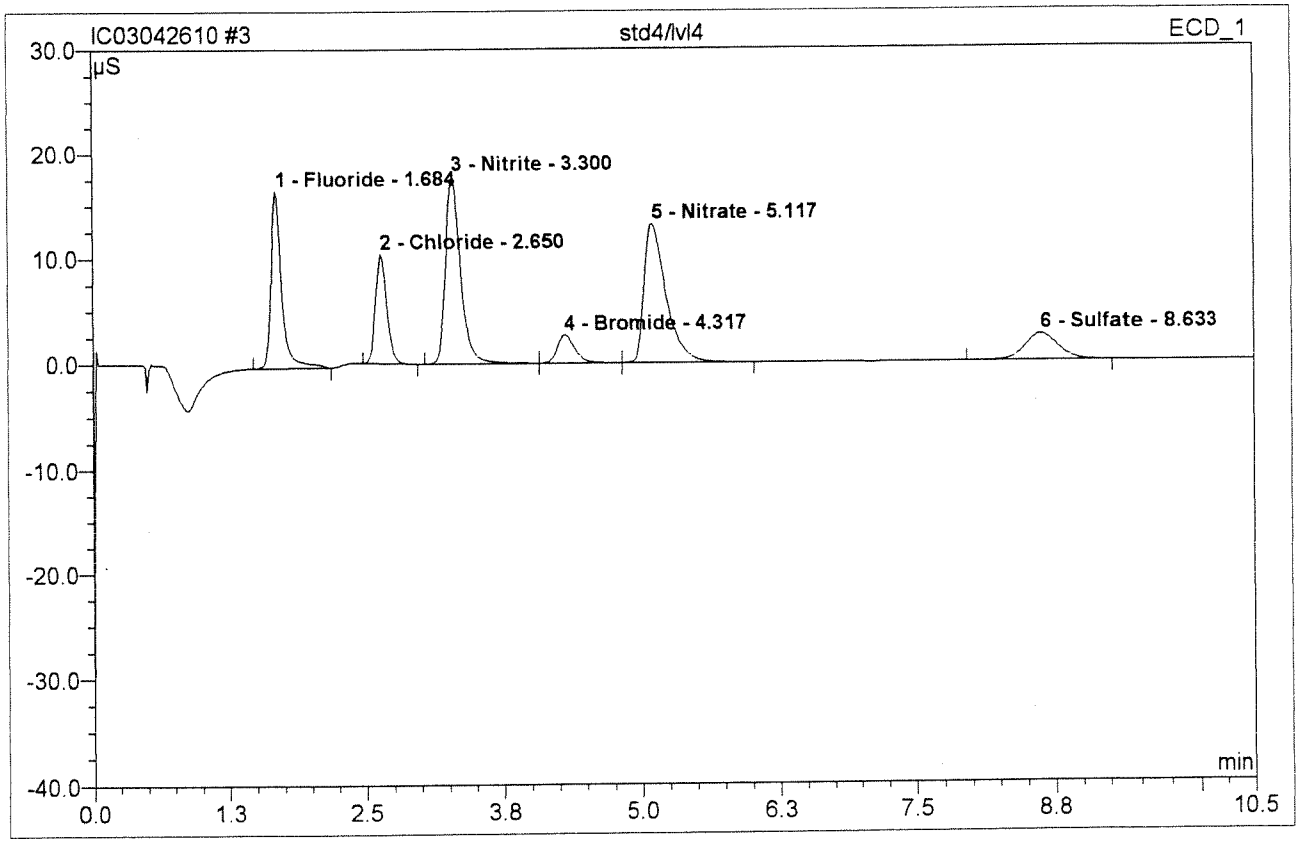
APR 2 9 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	16.774	1.915	18.46	1.007	BMB
2	2.65	Chloride	10.365	1.223	11.79	1.009	BMB
3	3.30	Nitrite	17.874	2.814	27.13	1.009	BMb
4	4.32	Bromide	2.661	0.487	4.69	1.012	bMb
5	5.12	Nitrate	13.149	3.046	29.36	1.014	bMB
6	8.63	Sulfate	2.522	0.888	8.56	1.000	BMB
Total:			63.346	10.374	100.00	6.051	

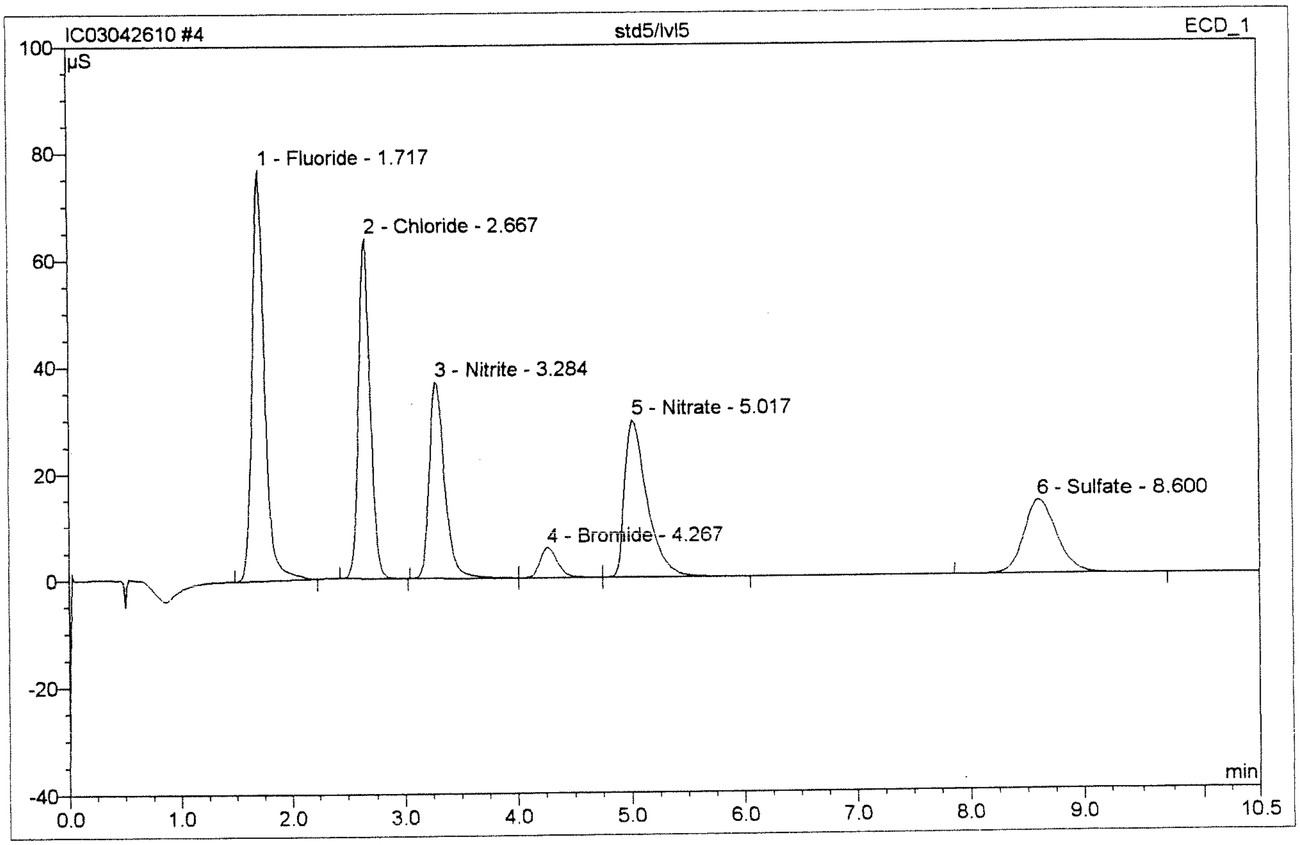
Before

APR 2 6 2010

default/Integration

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	76.994	9.731	27.38	5.086	BMB
2	2.67	Chloride	63.721	7.472	21.02	4.791	BMB
3	3.28	Nitrite	36.986	5.862	16.49	2.030	BMb
4	4.27	Bromide	5.677	1.007	2.83	1.879	bMb
5	5.02	Nitrate	29.541	6.754	19.00	1.833	bMB
6	8.60	Sulfate	13.884	4.718	13.27	4.795	BMB
Total:			226.803	35.544	100.00	20.415	

Analyst Initials (MB)

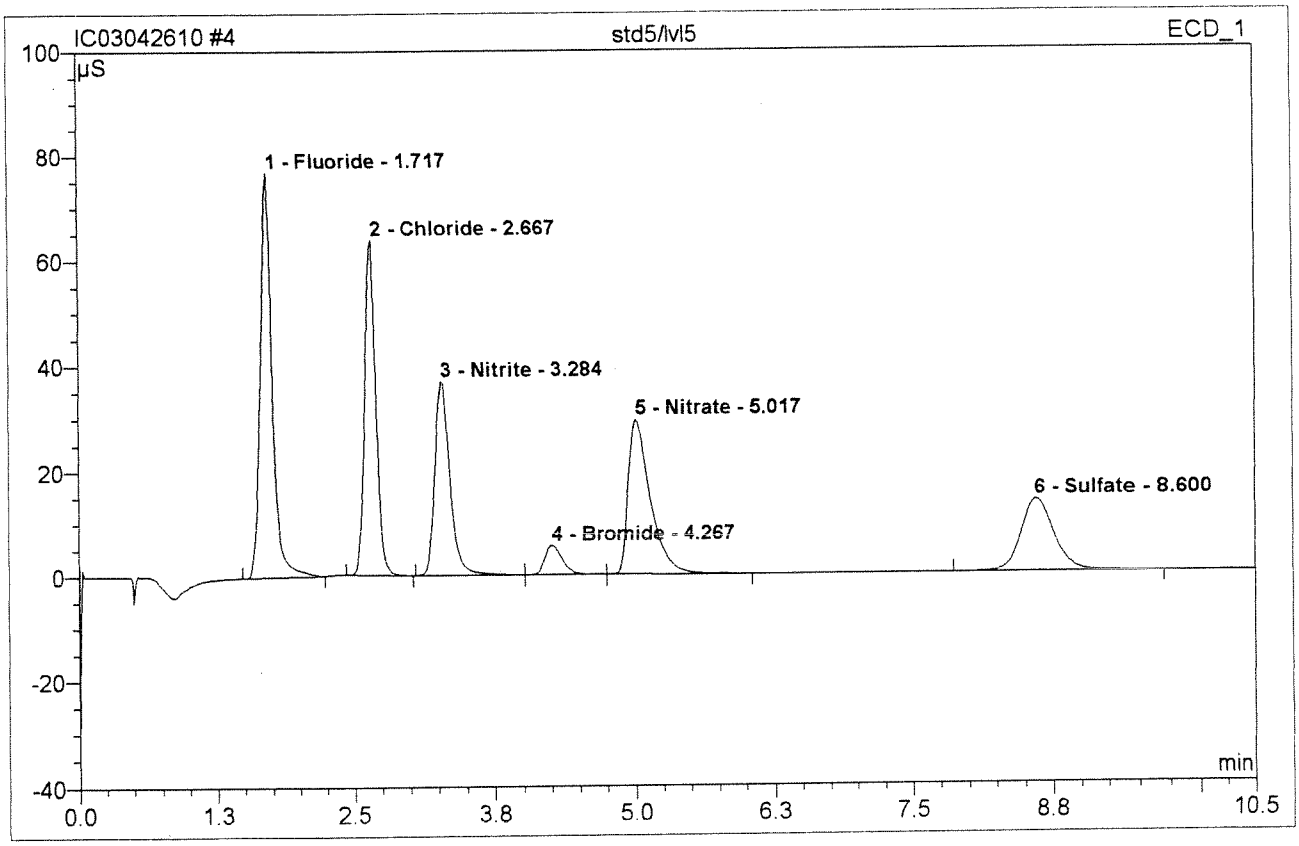
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	76.994	9.731	27.38	5.005	BMB
2	2.67	Chloride	63.721	7.472	21.02	5.047	BMB
3	3.28	Nitrite	36.986	5.862	16.49	2.024	BMb
4	4.27	Bromide	5.677	1.007	2.83	2.022	bMb
5	5.02	Nitrate	29.541	6.754	19.00	2.054	bMB
6	8.60	Sulfate	13.884	4.718	13.27	5.014	BMB
Total:			226.803	35.544	100.00	21.166	

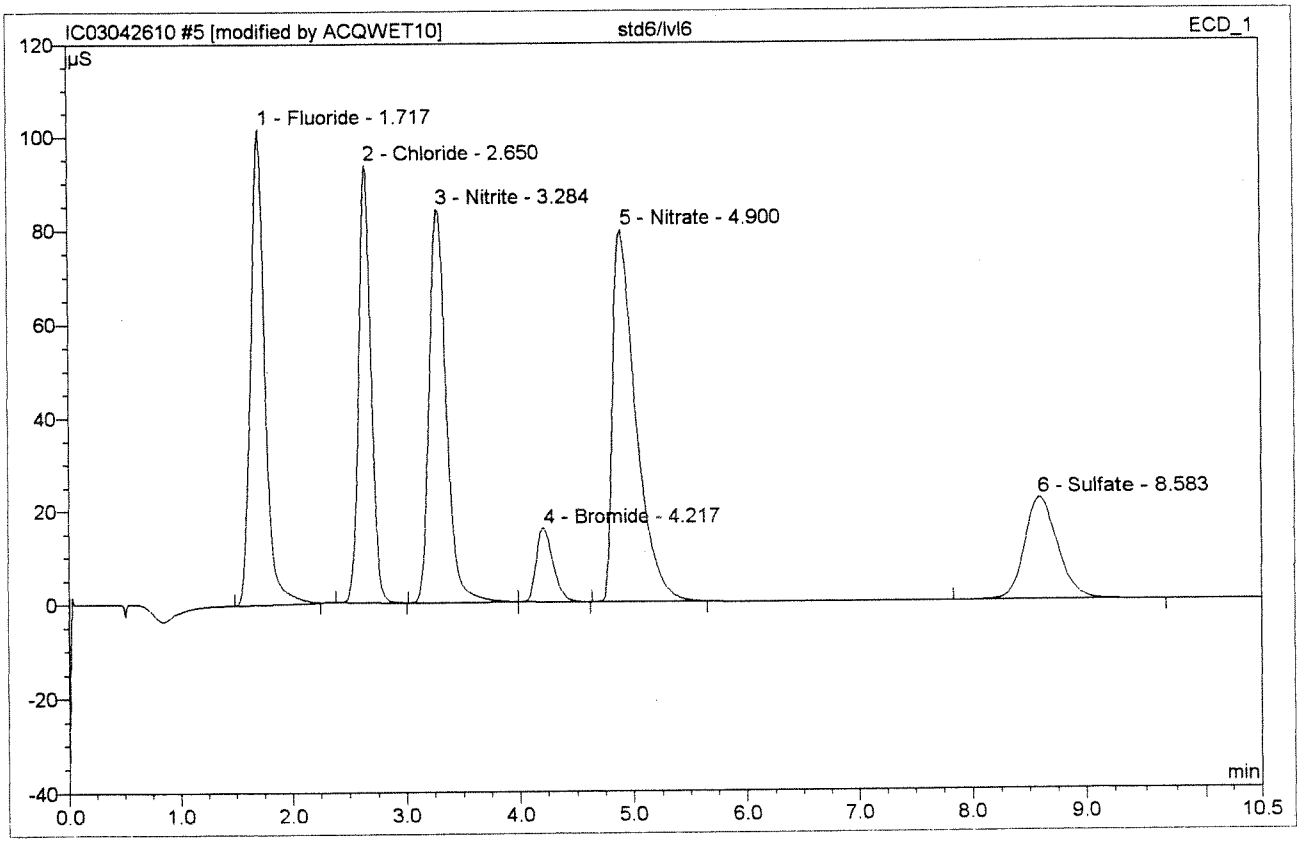
Before

APR 2 6 2010

default/Integration

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	101.686	14.494	20.88	7.575	BMB*
2	2.65	Chloride	93.434	11.601	16.71	7.439	BMB*
3	3.28	Nitrite	84.060	14.428	20.79	4.997	BMb
4	4.22	Bromide	15.785	2.719	3.92	5.074	bMB
5	4.90	Nitrate	79.649	18.837	27.14	5.113	BMB*
6	8.58	Sulfate	21.861	7.333	10.56	7.452	BMB
Total:			396.475	69.412	100.00	37.650	

MB

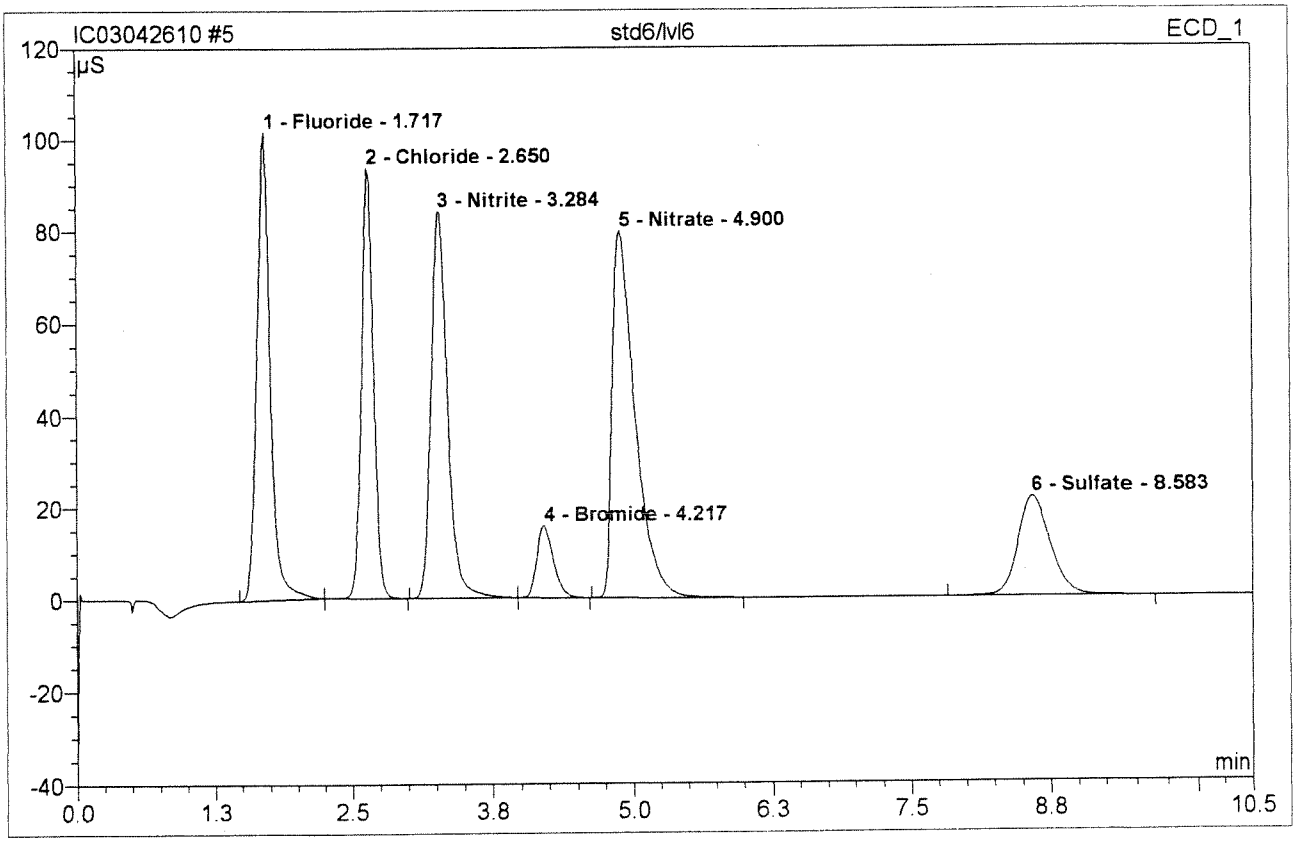
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



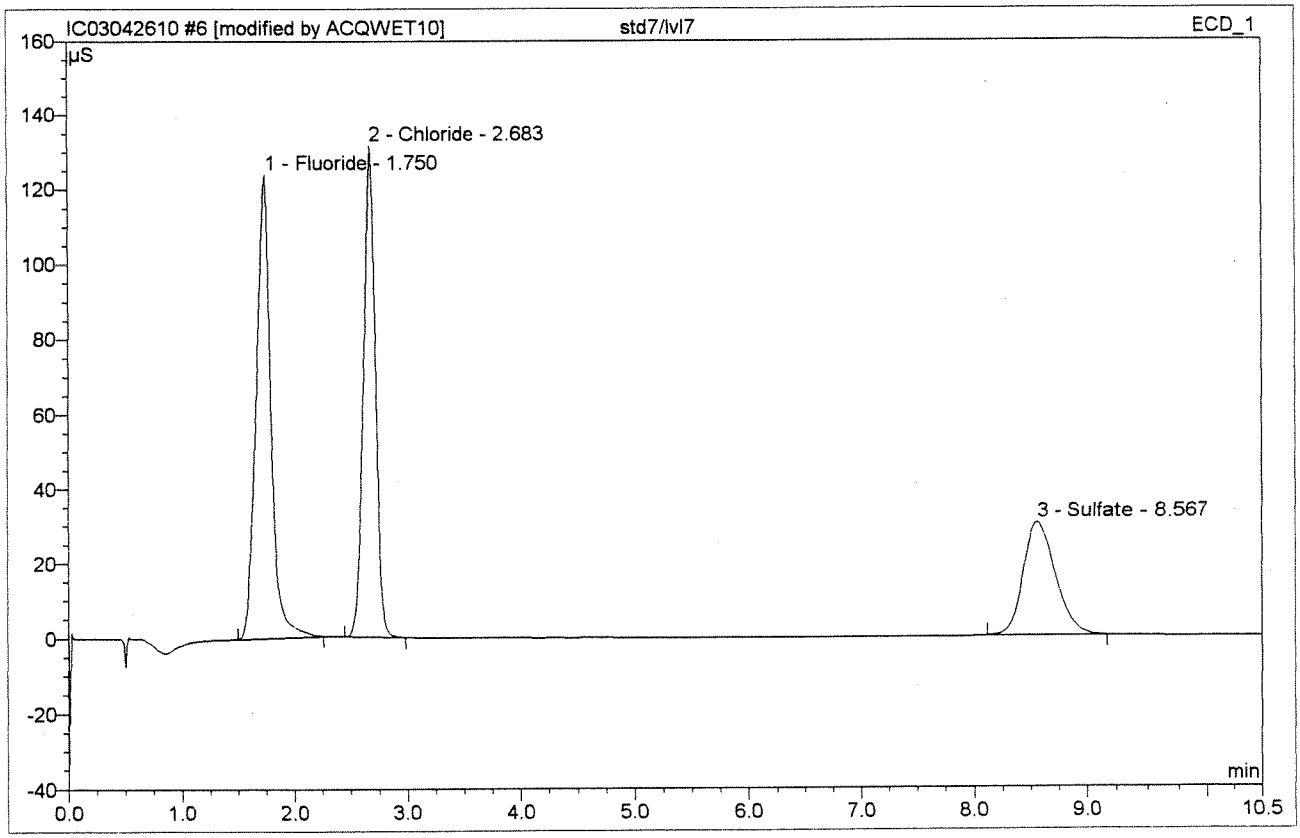
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	101.686	14.494	20.85	7.486	BMb
2	2.65	Chloride	93.503	11.647	16.75	7.613	bMB
3	3.28	Nitrite	84.060	14.428	20.76	4.997	BMb
4	4.22	Bromide	15.785	2.719	3.91	5.074	bMB
5	4.90	Nitrate	79.672	18.892	27.18	5.115	BMB
6	8.58	Sulfate	21.861	7.333	10.55	7.591	BMB
Total:			396.568	69.512	100.00	37.876	

Before

APR 2 6 2010

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.75	Fluoride	123.905	18.962	42.30	9.910	BMB*
2	2.68	Chloride	131.265	15.874	35.41	10.179	BMB*
3	8.57	Sulfate	30.278	9.990	22.29	10.151	BMB*
Total:			285.448	44.826	100.00	30.240	

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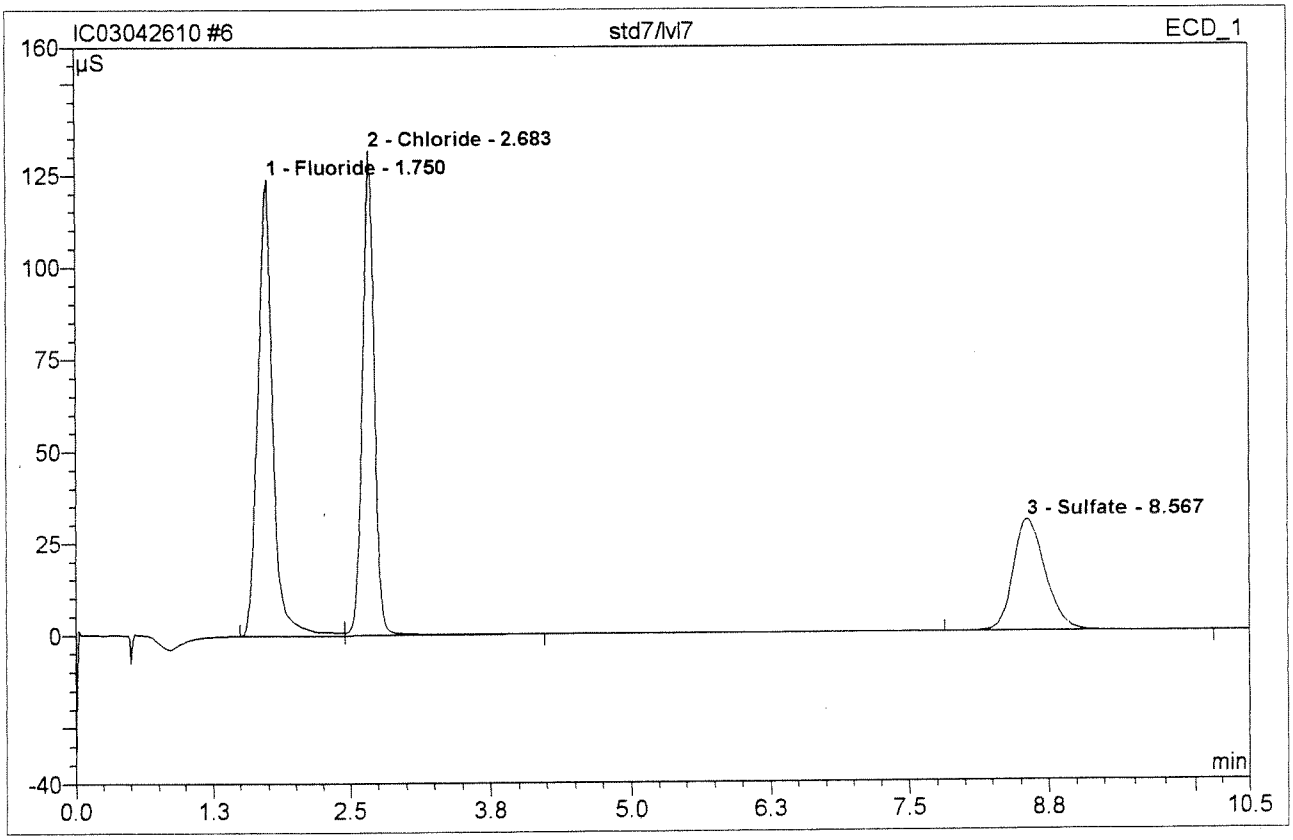
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.75	Fluoride	124.185	19.437	42.28	10.022	BM
2	2.68	Chloride	131.836	16.307	35.47	10.300	MB
3	8.57	Sulfate	30.454	10.233	22.26	10.259	BMB
Total:			286.475	45.977	100.00	30.581	

Before

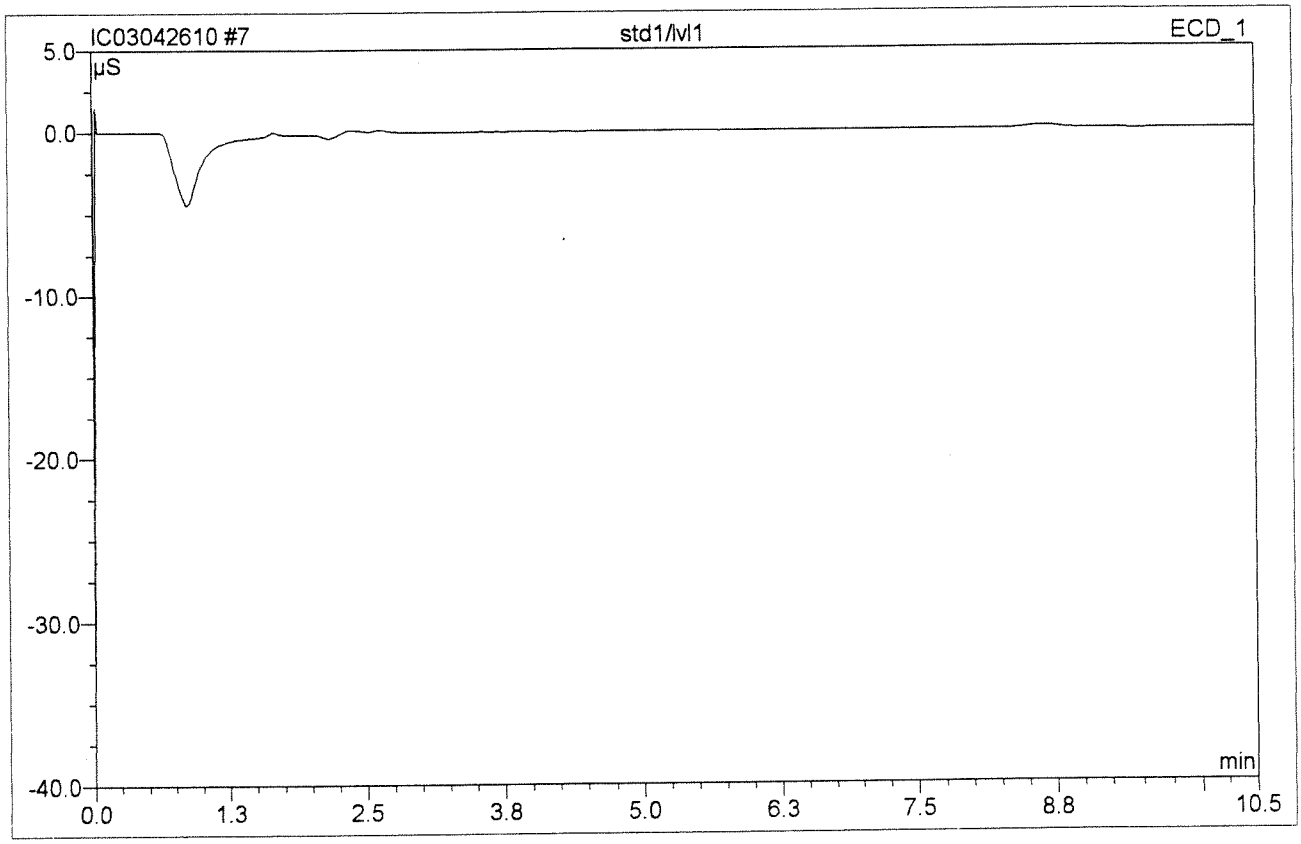
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

7 std1/lvl1

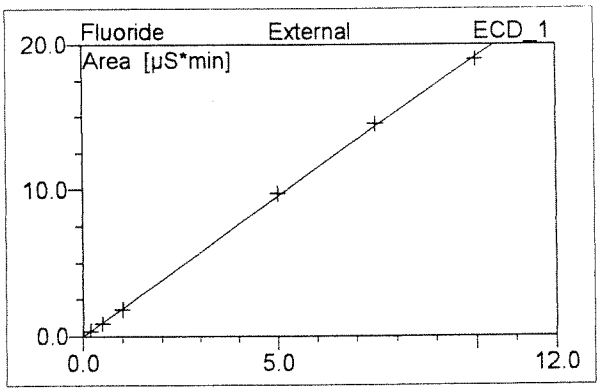
Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

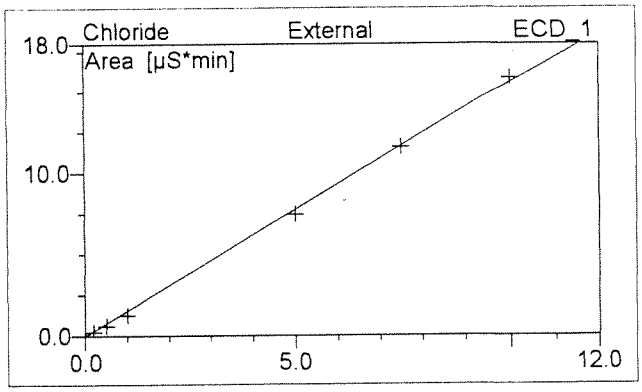


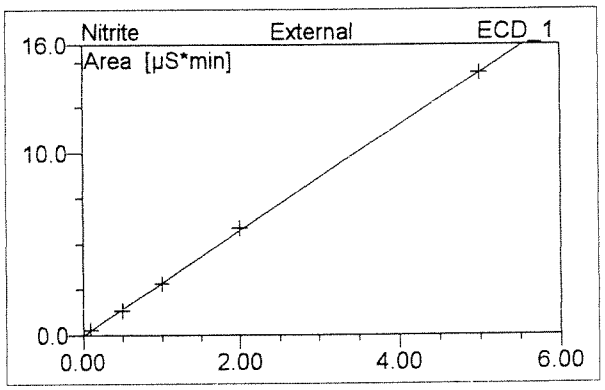
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

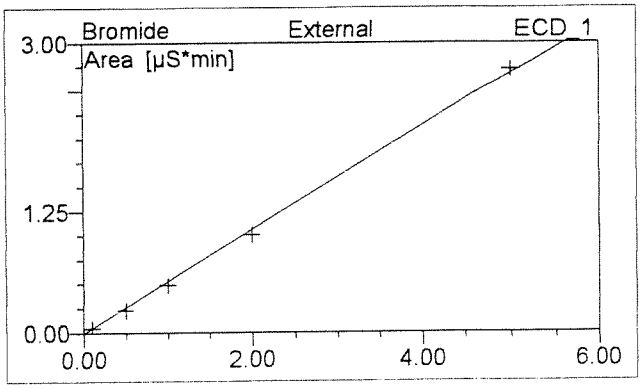
7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**







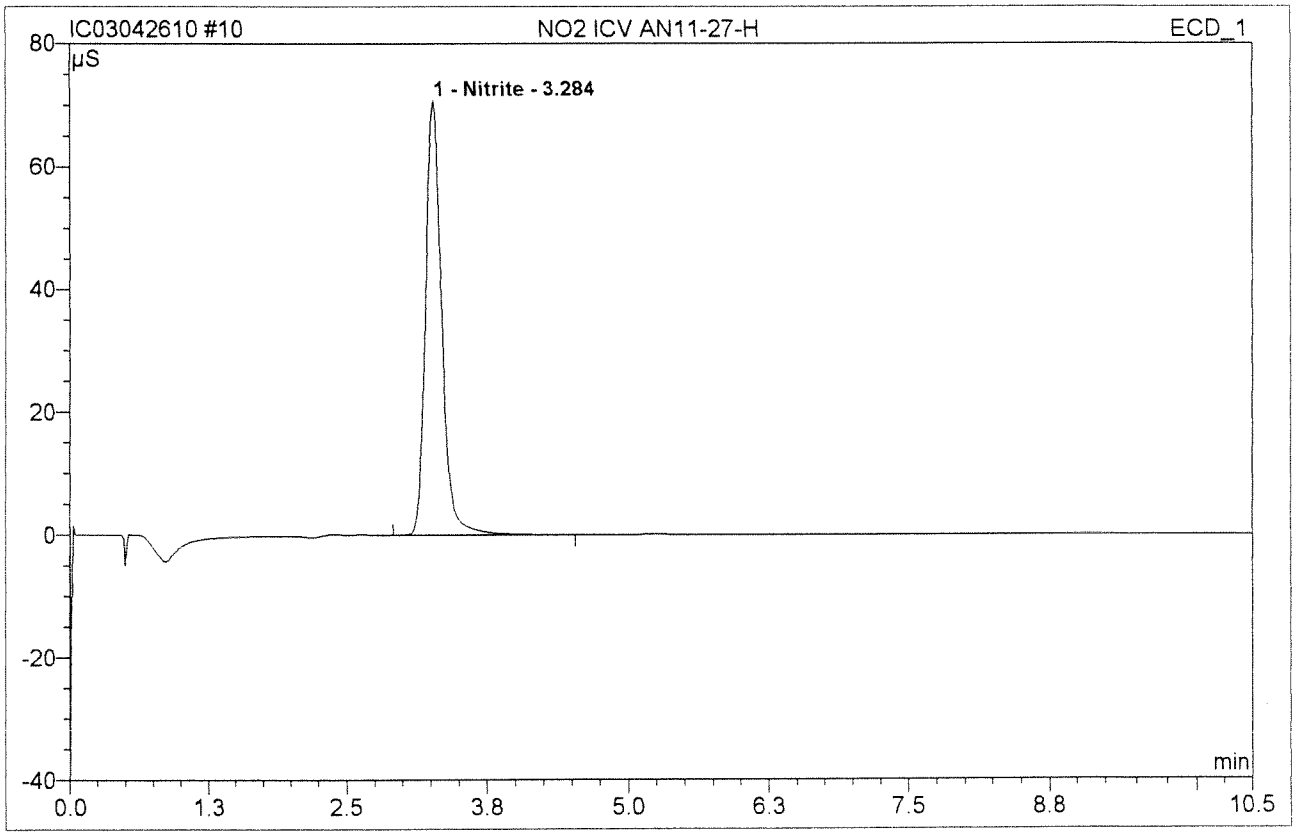


No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
Average:					n.a.	n.a.	n.a.	n.a.

10 NO2 ICV AN11-27-H

NO2 ICV

Sample Name:	**NO2 ICV AN11-27-H**	*Injection Volume:*	**200.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**4/26/2010 11:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

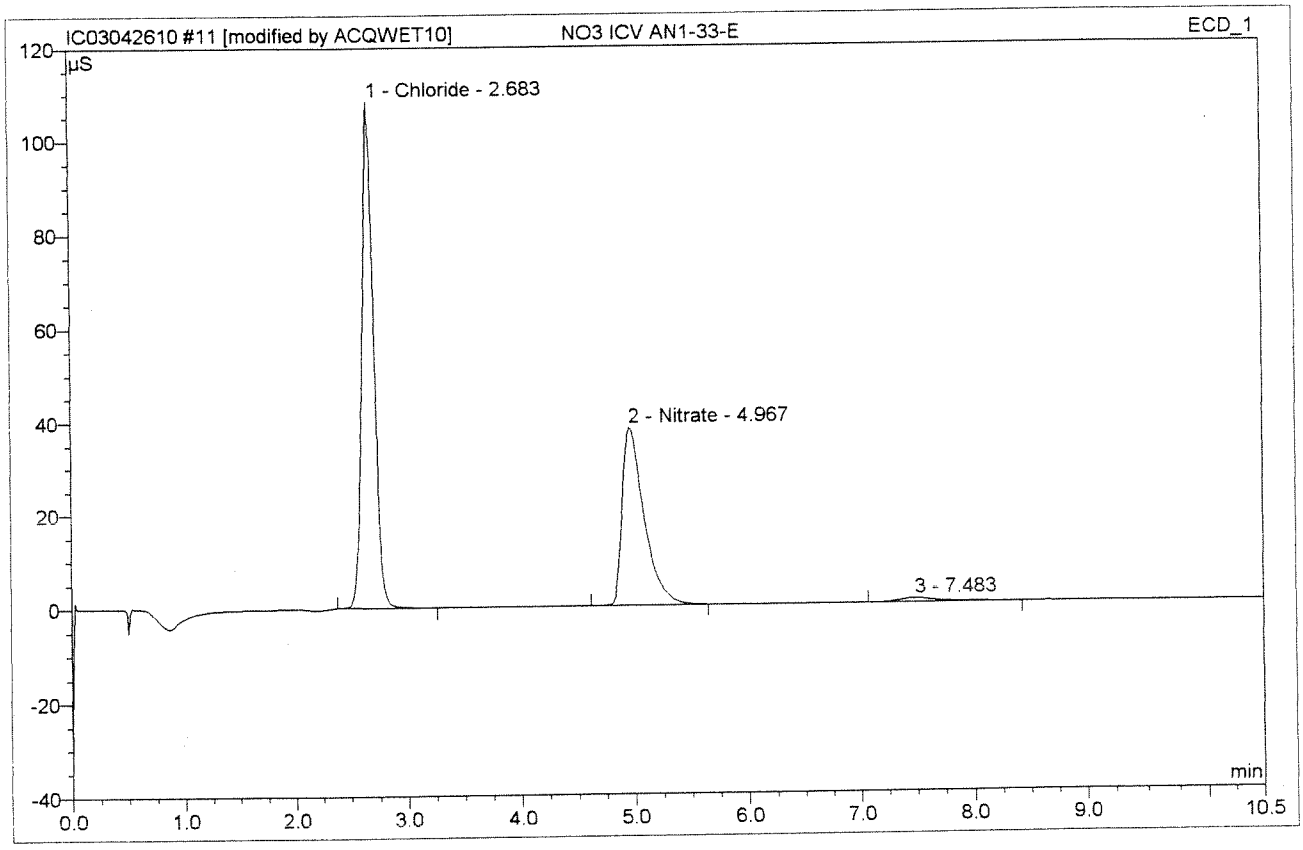


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.28	Nitrite	70.856	11.827	100.00	102.405 102?	BMB
Total:			70.856	11.827	100.00	102.405	

11 NO3 ICV AN1-33-E

NO3 ICV

Sample Name:	**NO3 ICV AN1-33-E**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**4/26/2010 11:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



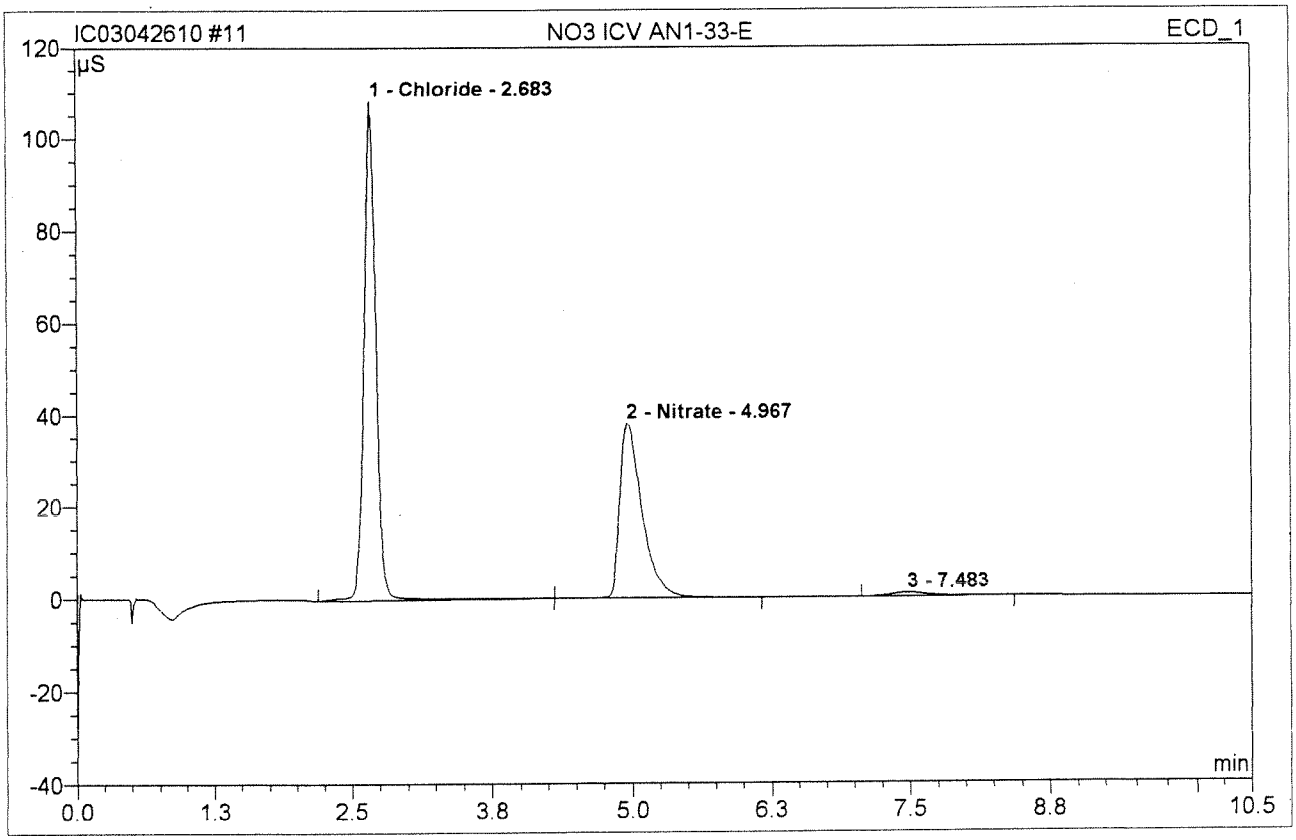
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.68	Chloride	108.172	12.864	59.17	82.484	BMB*
2	4.97	Nitrate	38.103	8.551	39.33	23.211	BMB*
3	7.48	n.a.	0.823	0.326	1.50	n.a.	BMB
Total:			147.098	21.741	100.00	105.695	

default/Integration

11 NO3 ICV AN1-33-E

NO3 ICV

Sample Name:	**NO3 ICV AN1-33-E**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**4/26/2010 11:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.68	Chloride	108.576	13.345	59.83	85.571	BMB
2	4.97	Nitrate	38.156	8.633	38.70	23.433	bMB
3	7.48	n.a.	0.823	0.326	1.46	n.a.	BMB
Total:			147.556	22.304	100.00	109.004	

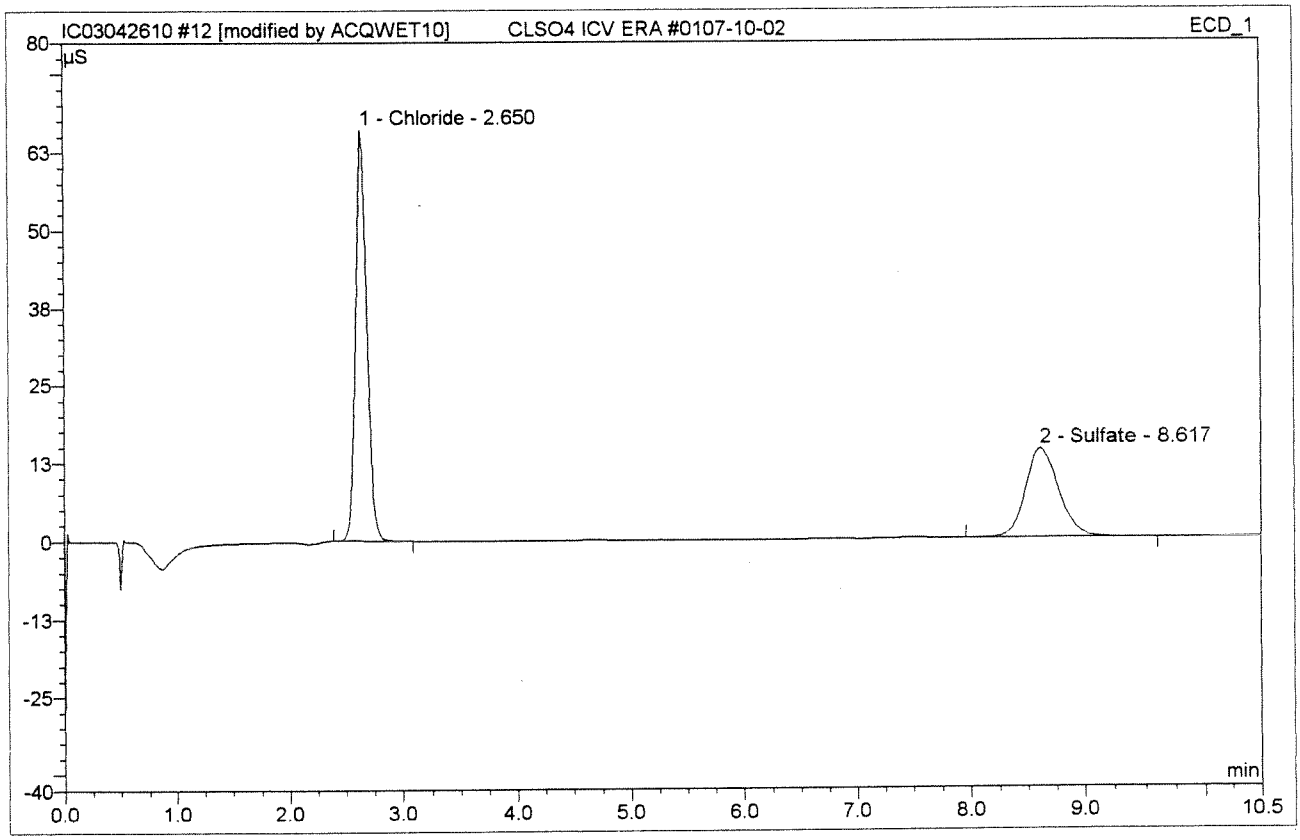
Before

APR 2 6 2010

12 CLSO4 ICV ERA #0107-10-02

CLSO4 ICV

Sample Name:	**CLSO4 ICV ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 11:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.65	Chloride	65.962	7.498	61.00	4.808962	BMB*
2	8.62	Sulfate	14.257	4.794	39.00	4.871972	BMB
Total:			80.219	12.292	100.00	9.679	

After initials

APR 2 6 2010

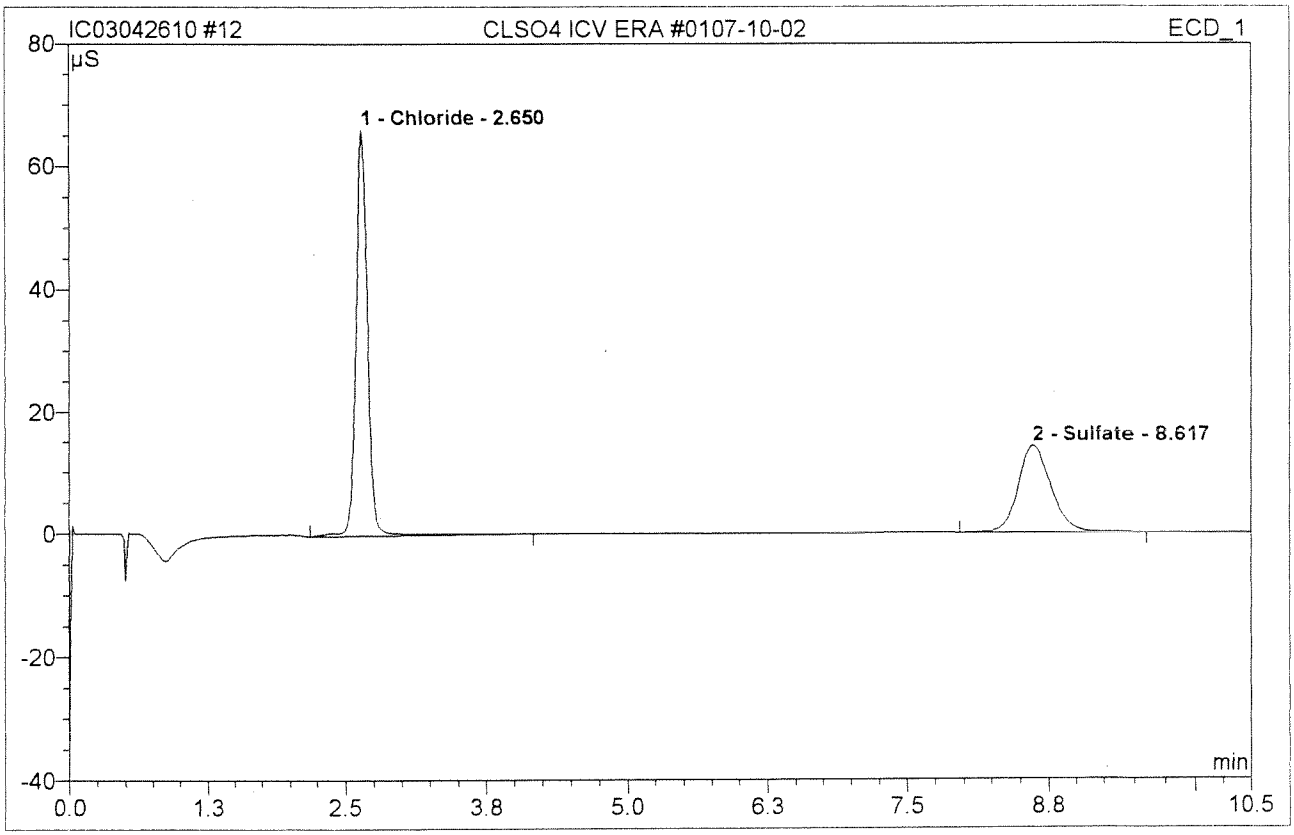
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

12 CLSO4 ICV ERA #0107-10-02

CLSO4 ICV

Sample Name:	**CLSO4 ICV ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 11:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.65	Chloride	66.369	7.929	62.32	5.084	BMB
2	8.62	Sulfate	14.257	4.794	37.68	4.871	BMB
Total:			80.625	12.723	100.00	9.956	

Before

APR 2 6 2010

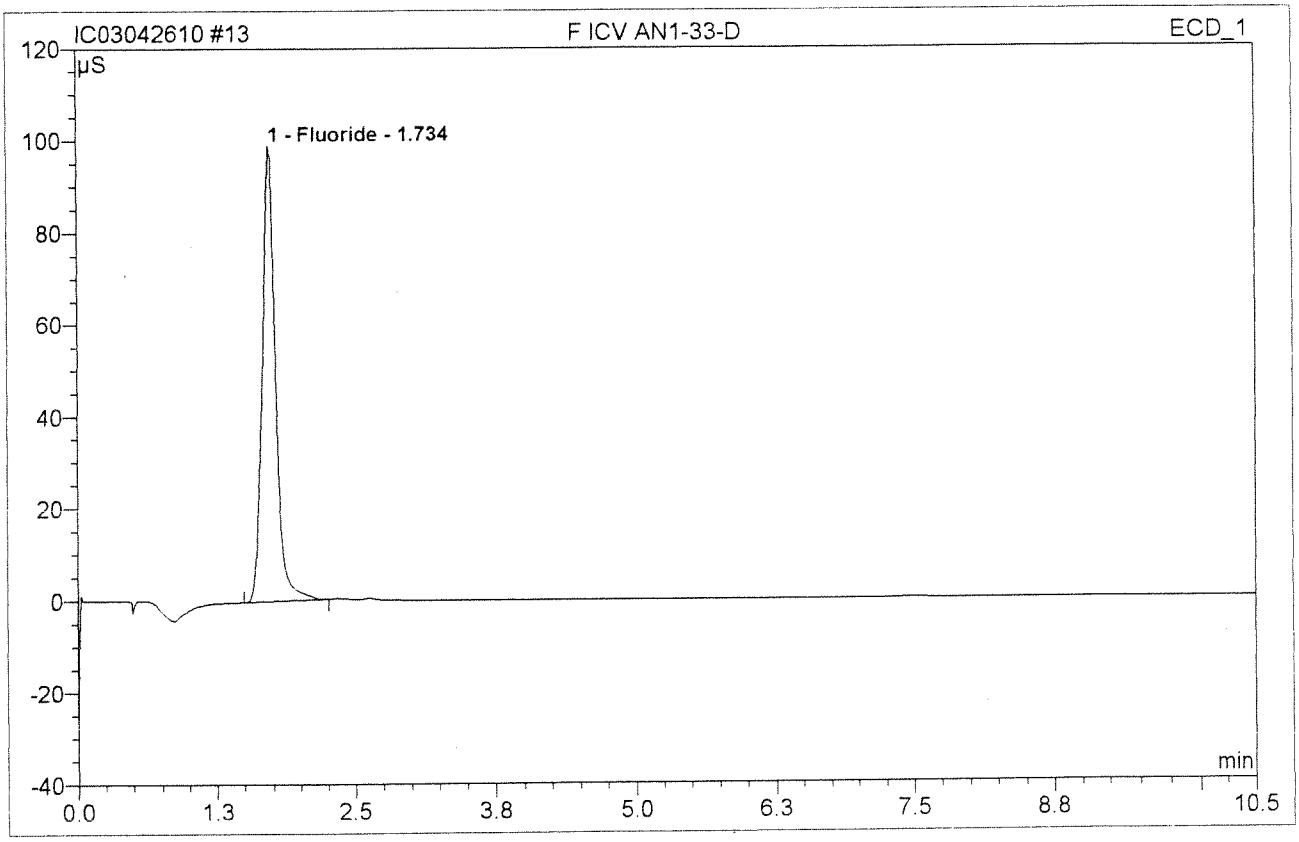
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

13 F ICV AN1-33-D

F ICV

Sample Name:	**F ICV AN1-33-D**	*Injection Volume:*	**200.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**4/26/2010 11:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

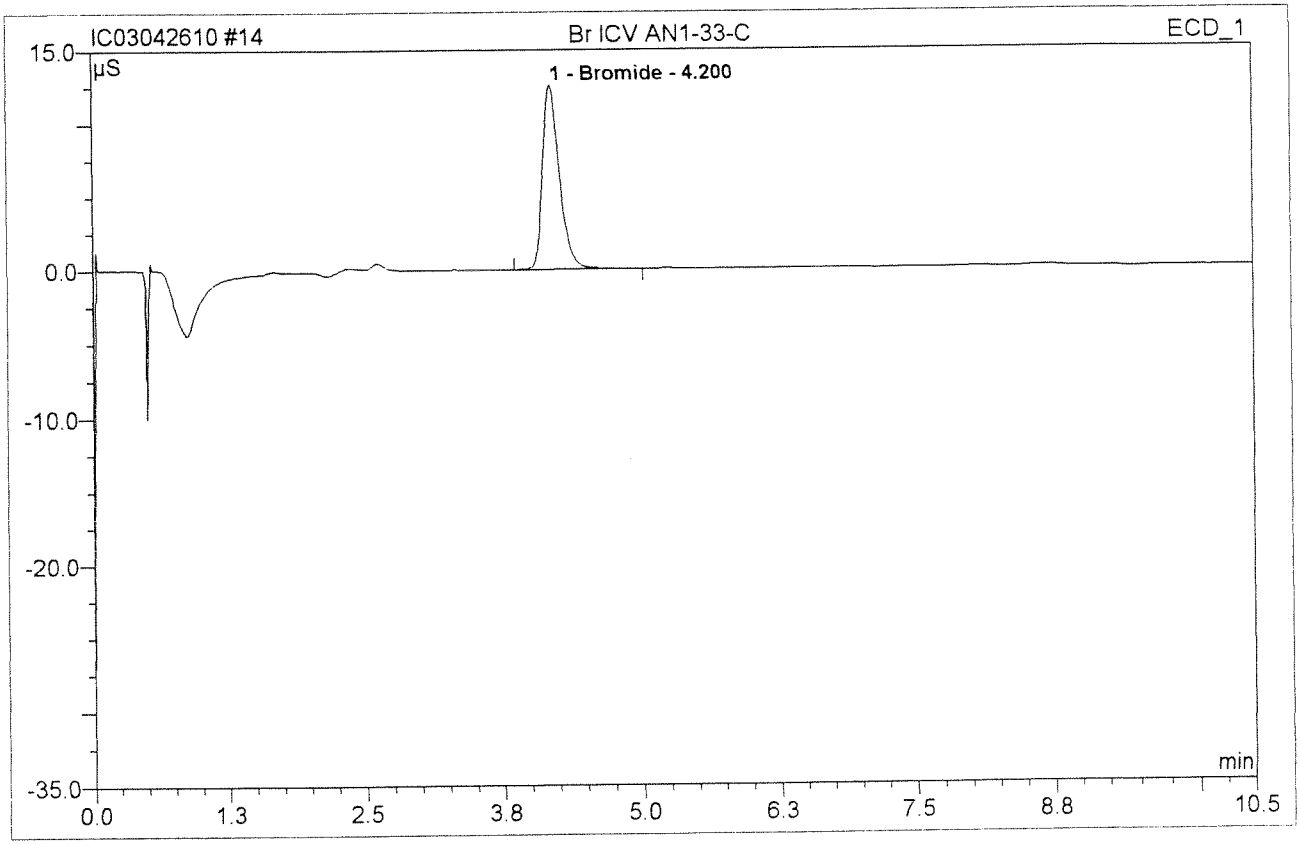


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	98.959	13.315	100.00	13.917 1032	BMB
Total:			98.959	13.315	100.00	13.917	

14 Br ICV AN1-33-C

Br ICV

Sample Name:	**Br ICV AN1-33-C**	*Injection Volume:*	**200.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 11:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

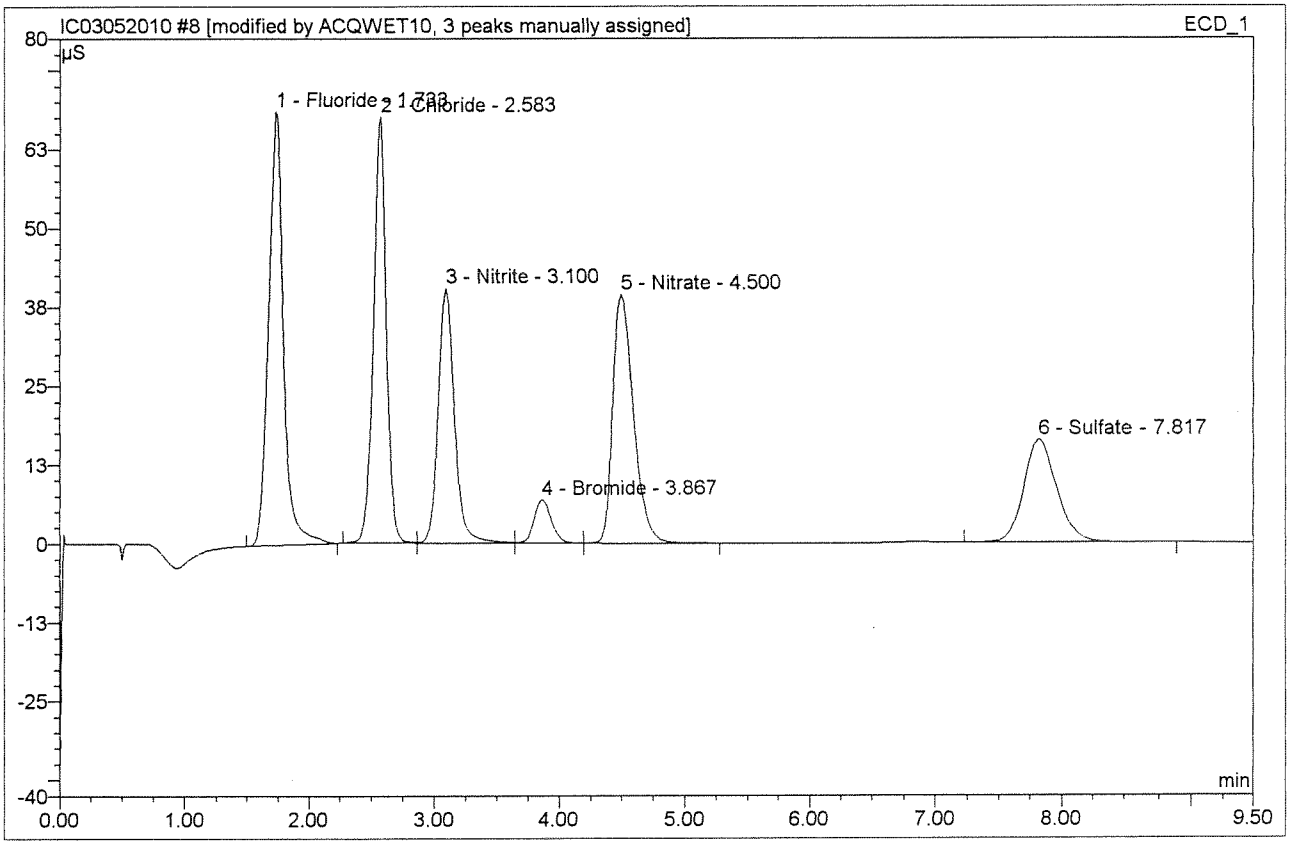


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	4.20	Bromide	12.583	2.210	100.00	4.124103%	BMB
Total:			12.583	2.210	100.00	4.124	

8 CCV AN11-20-H

CCV1

Sample Name:	**CCV AN11-20-H**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	68.651	9.603	25.90	5.019/100%	BMB*
2	2.58	Chloride	67.491	7.989	21.55	5.123/102%	BM *
3	3.10	Nitrite	40.257	5.982	16.13	2.072/104%	M *
4	3.87	Bromide	6.870	1.092	2.95	2.039/102%	M *^
5	4.50	Nitrate	39.326	7.441	20.07	2.020/101%	MB*^
6	7.82	Sulfate	16.292	4.974	13.41	5.055/101%	BMB^
Total:			238.888	37.082	100.00	21.327	

MB

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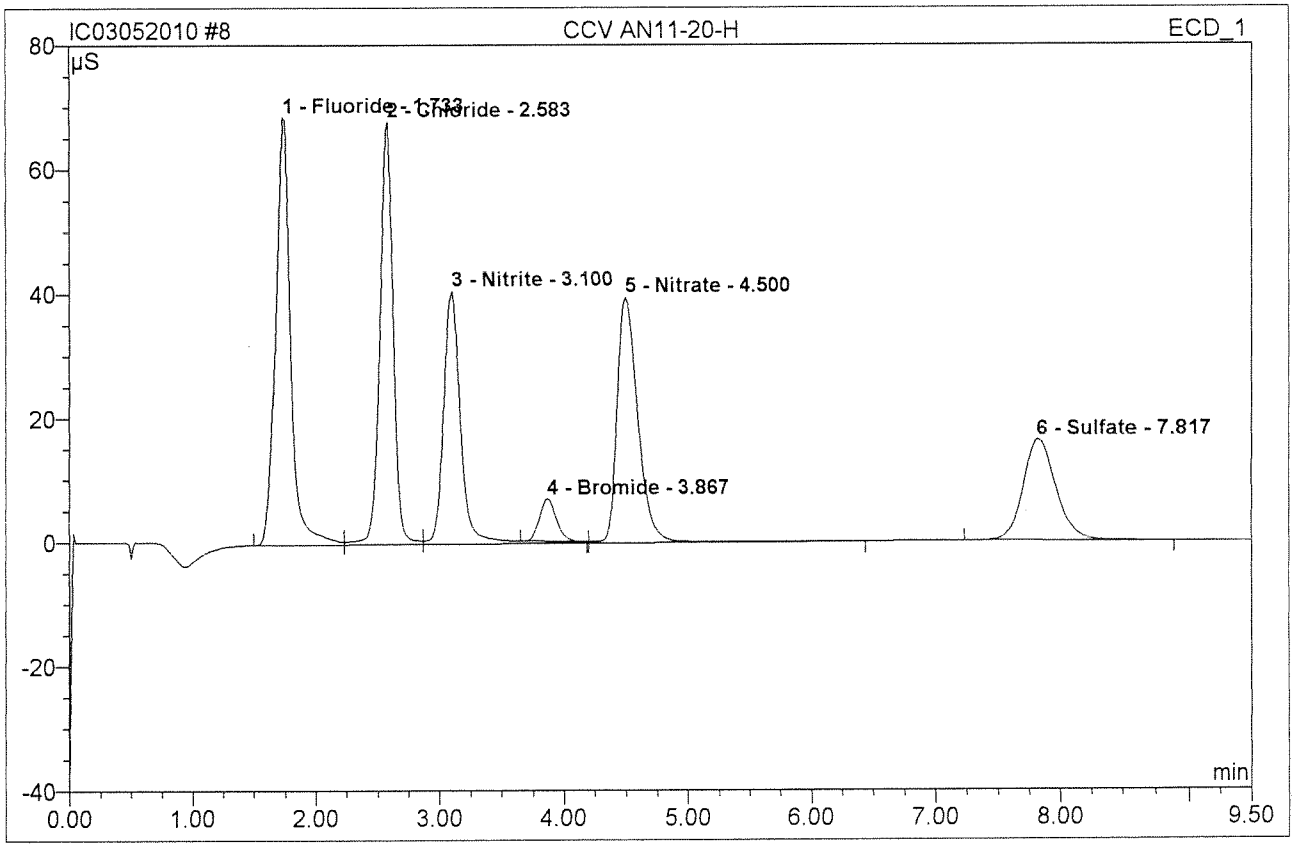
8 CCV AN11-20-H

CCV1

Sample Name:	**CCV AN11-20-H**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

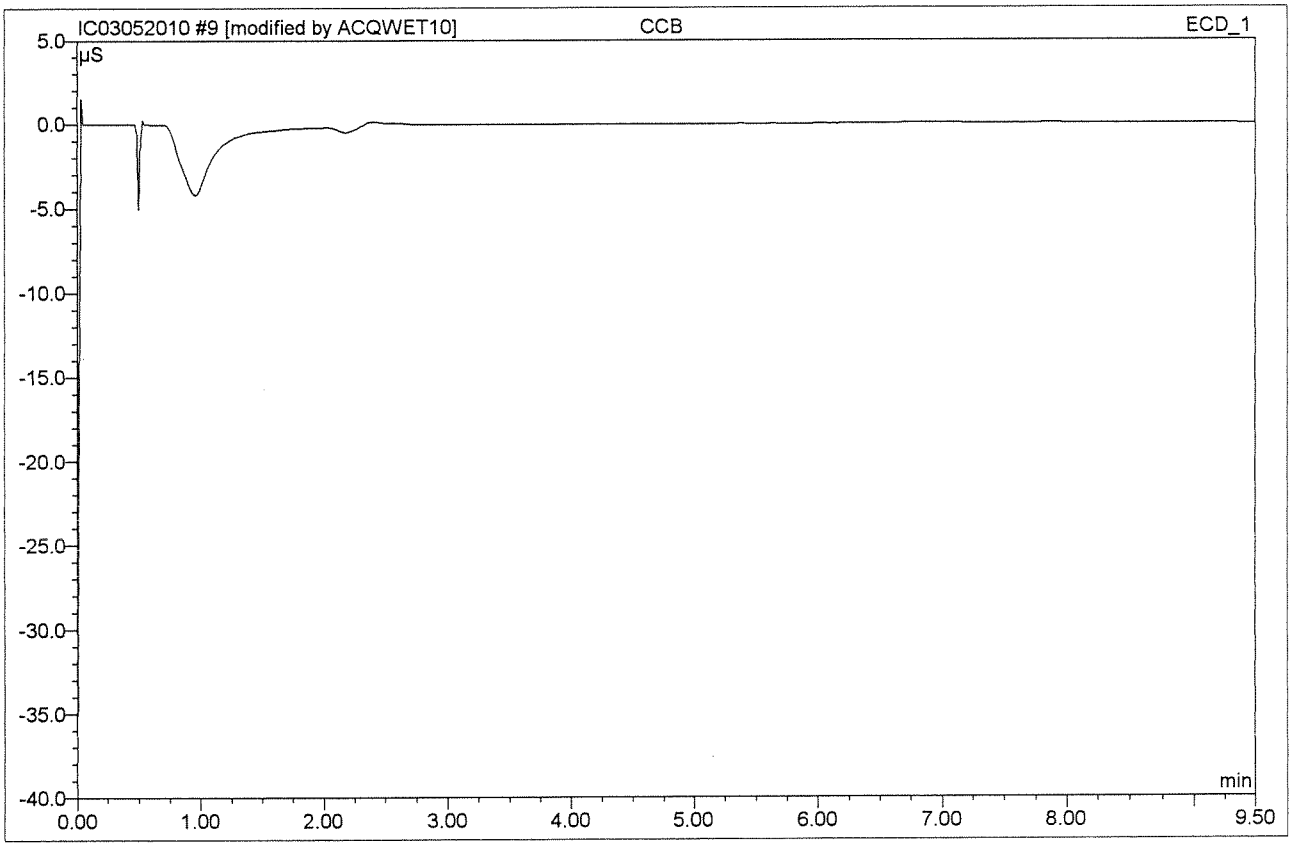


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	68.792	9.765	25.54	5.104	BM
2	2.58	Chloride	67.960	8.287	21.68	5.314	M
3	3.10	Nitrite	40.654	6.446	16.86	2.233	M
4	3.87	Bromide	6.836	1.078	2.82	2.012	Rd
5	4.50	Nitrate	39.529	7.678	20.08	2.084	MB
6	7.82	Sulfate	16.292	4.974	13.01	5.055	BMB
Total:			240.065	38.229	100.00	21.801	

9 CCB

CCB1

Sample Name:	**CCB**	*Injection Volume:*	**200.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

MB

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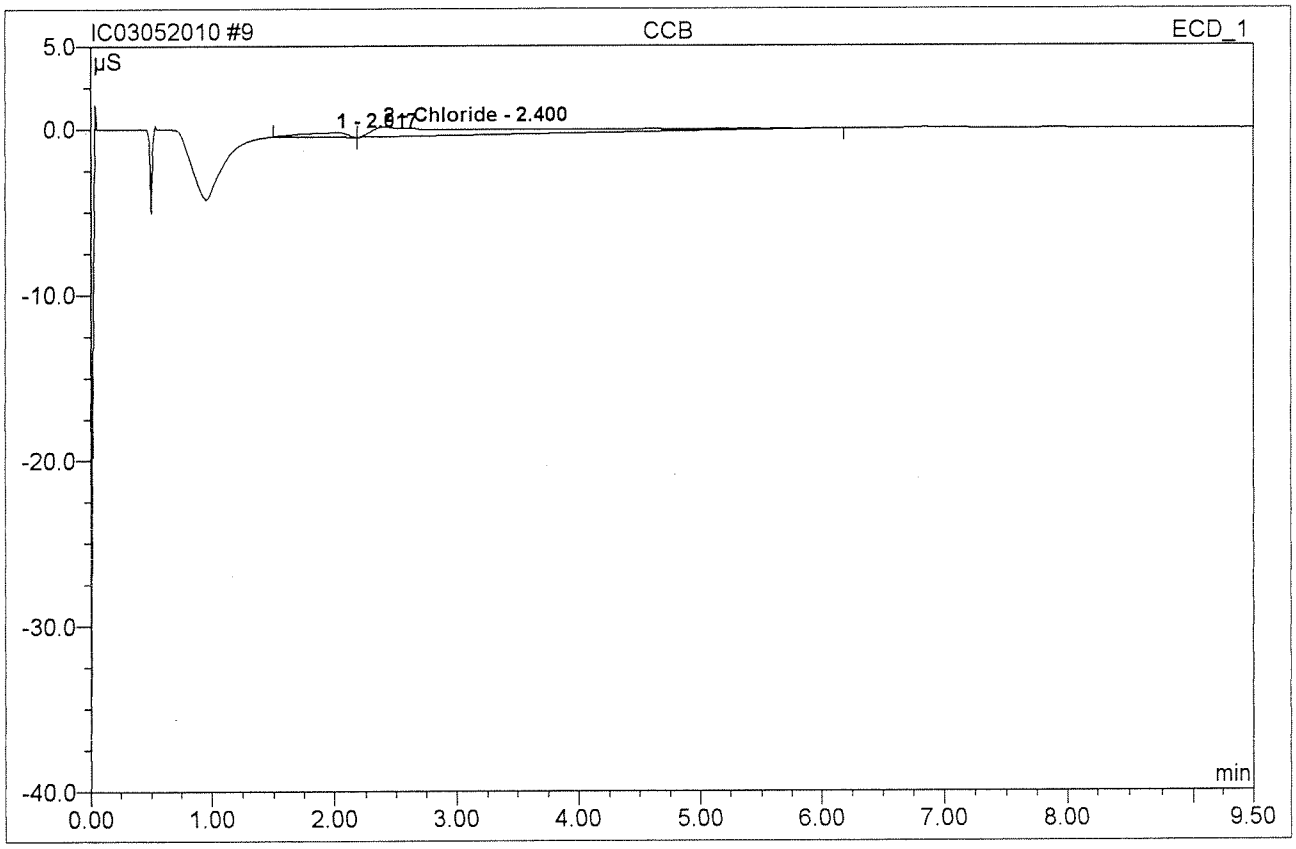
9 CCB

CCB1

Sample Name:	**CCB**	*Injection Volume:*	**200.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

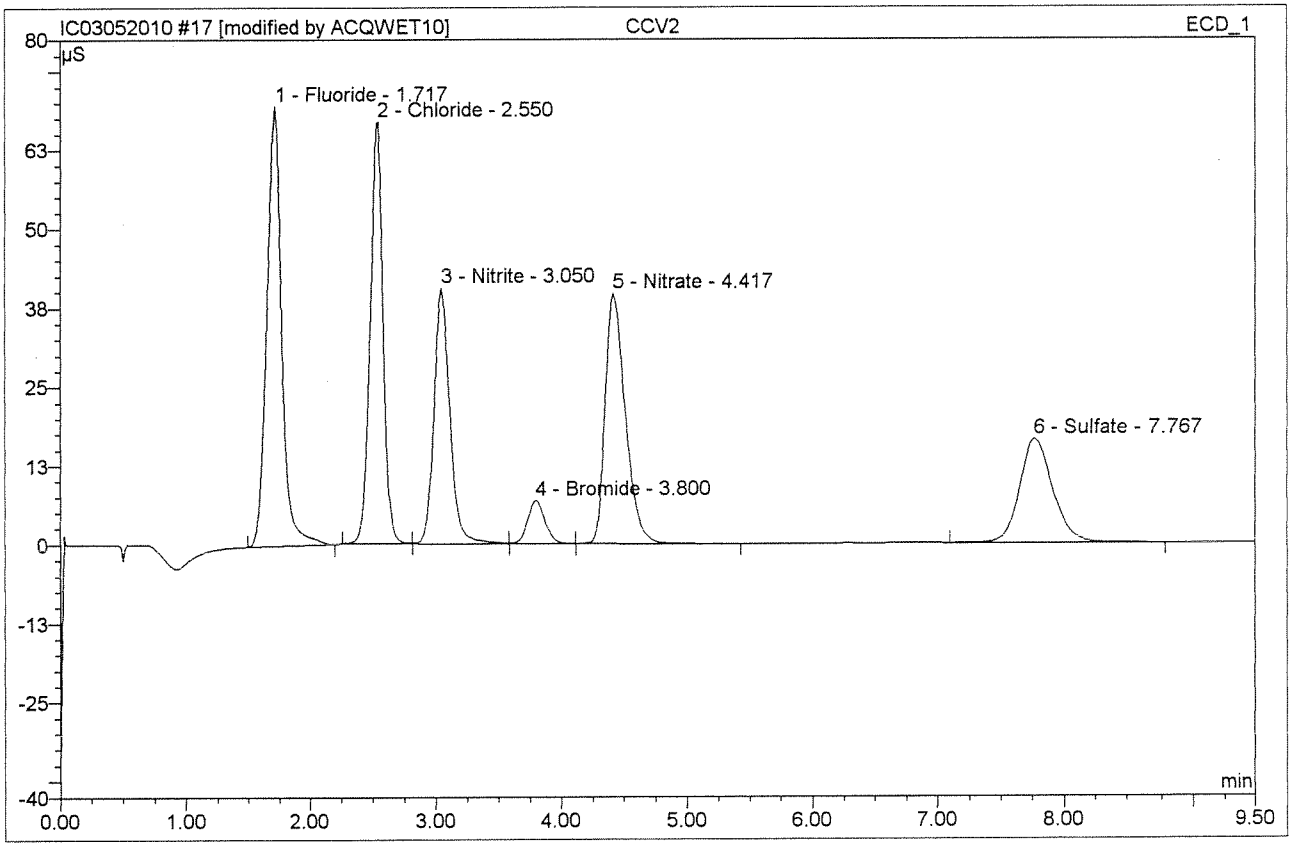


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.02	n.a.	0.294	0.123	11.64	n.a.	BMb
2	2.40	Chloride	0.611	0.937	88.36	0.601	bMB
Total:			0.905	1.060	100.00	0.601	

17 CCV2

CCV2

Sample Name:	**CCV2**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	69.729	9.557	25.95	4.994 100%	BMB*
2	2.55	Chloride	66.784	7.890	21.43	5.059 101%	BM *
3	3.05	Nitrite	40.519	5.918	16.07	2.050 103%	M *
4	3.80	Bromide	6.886	1.076	2.92	2.009 101%	M *
5	4.42	Nitrate	39.593	7.361	19.99	1.998 100%	MB*
6	7.77	Sulfate	16.591	5.020	13.63	5.101 102%	BMB
Total:			240.102	36.822	100.00	21.211	

MB

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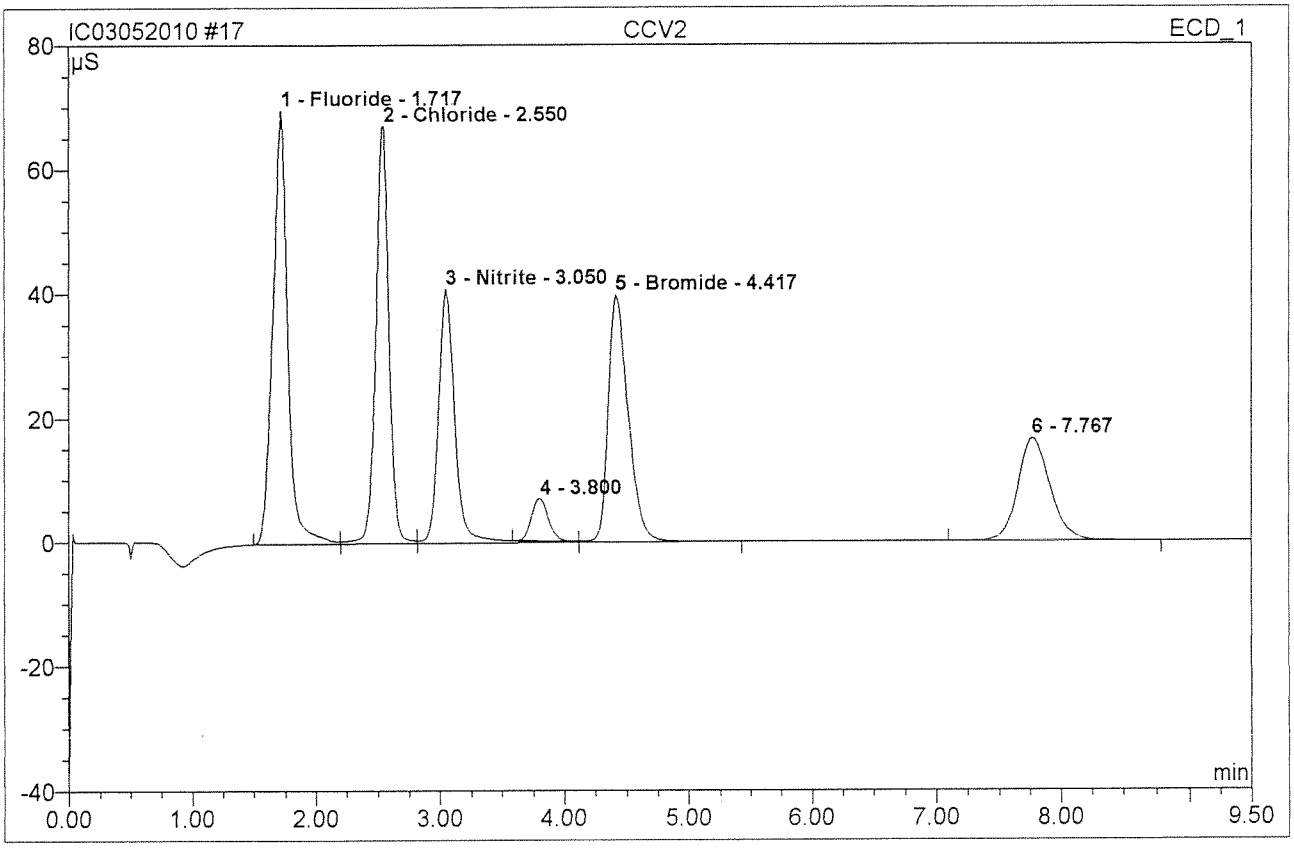
default/Integration

17 CCV2

CCV2

Sample Name:	**CCV2**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

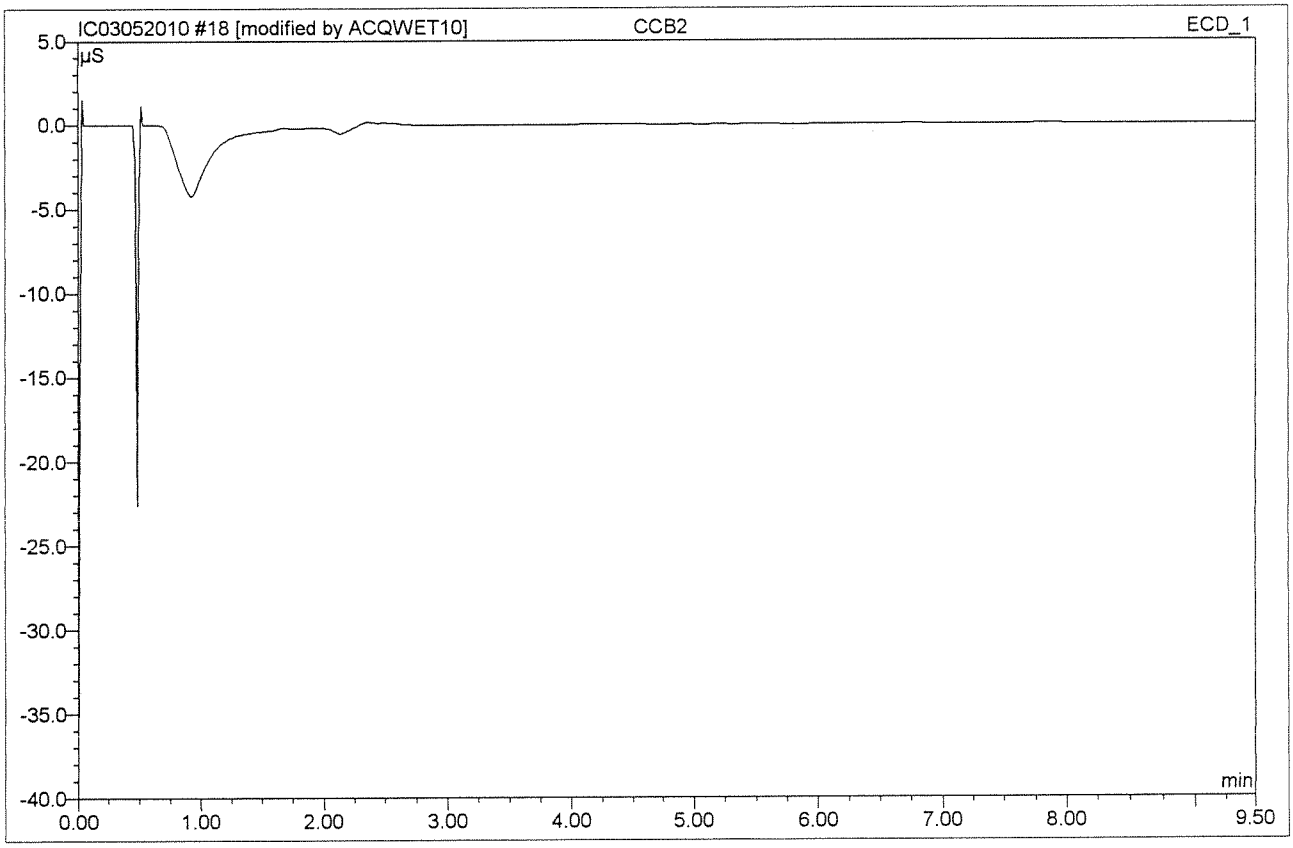


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	69.845	9.687	25.68	5.063	BM
2	2.55	Chloride	67.214	8.155	21.61	5.229	M
3	3.05	Nitrite	40.874	6.315	16.74	2.187	M
4	3.80	n.a.	6.848	1.061	2.81	n.a.	Rd
5	4.42	Bromide	39.745	7.491	19.85	13.980	MB
6	7.77	n.a.	16.591	5.020	13.31	n.a.	BMB
Total:			241.117	37.729	100.00	26.459	

18 CCB2

CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

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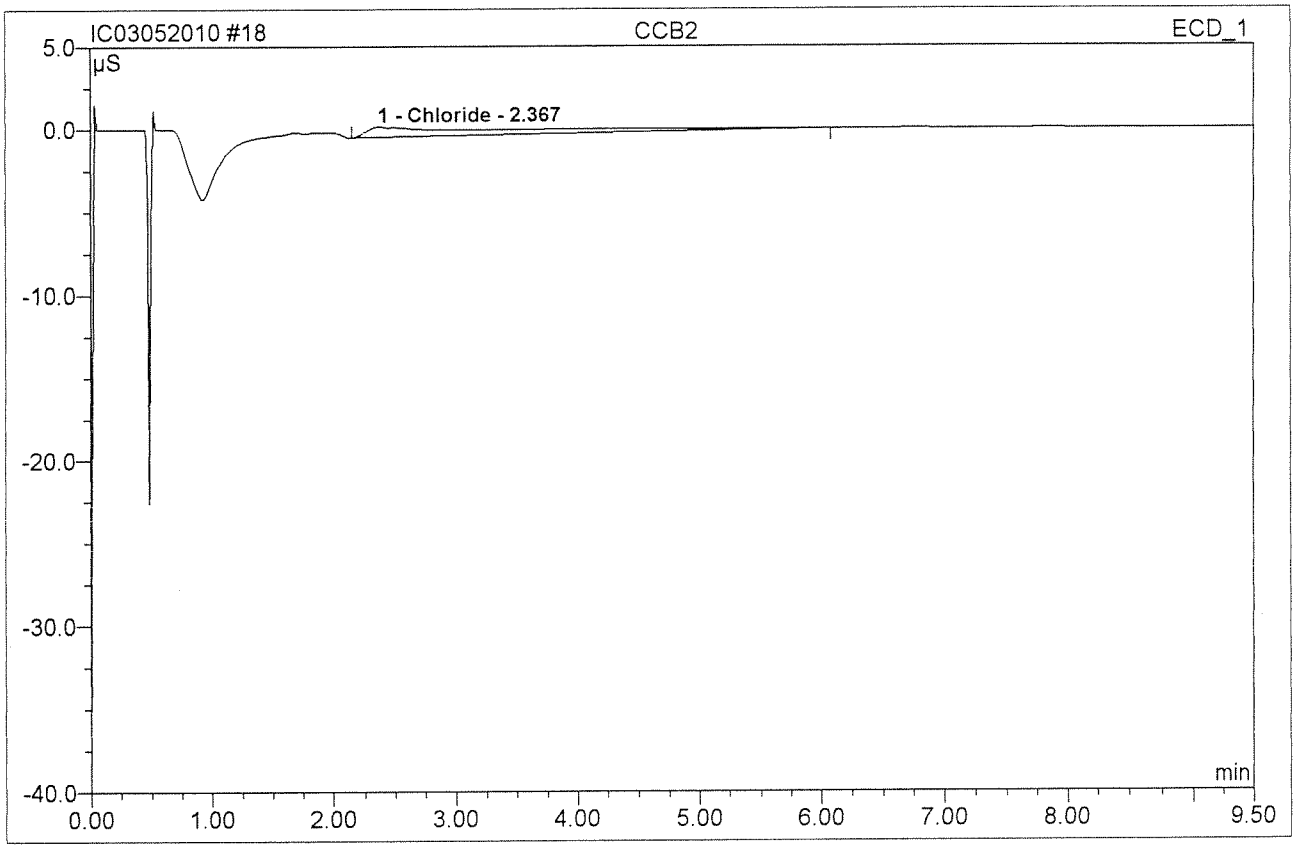
18 CCB2

CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

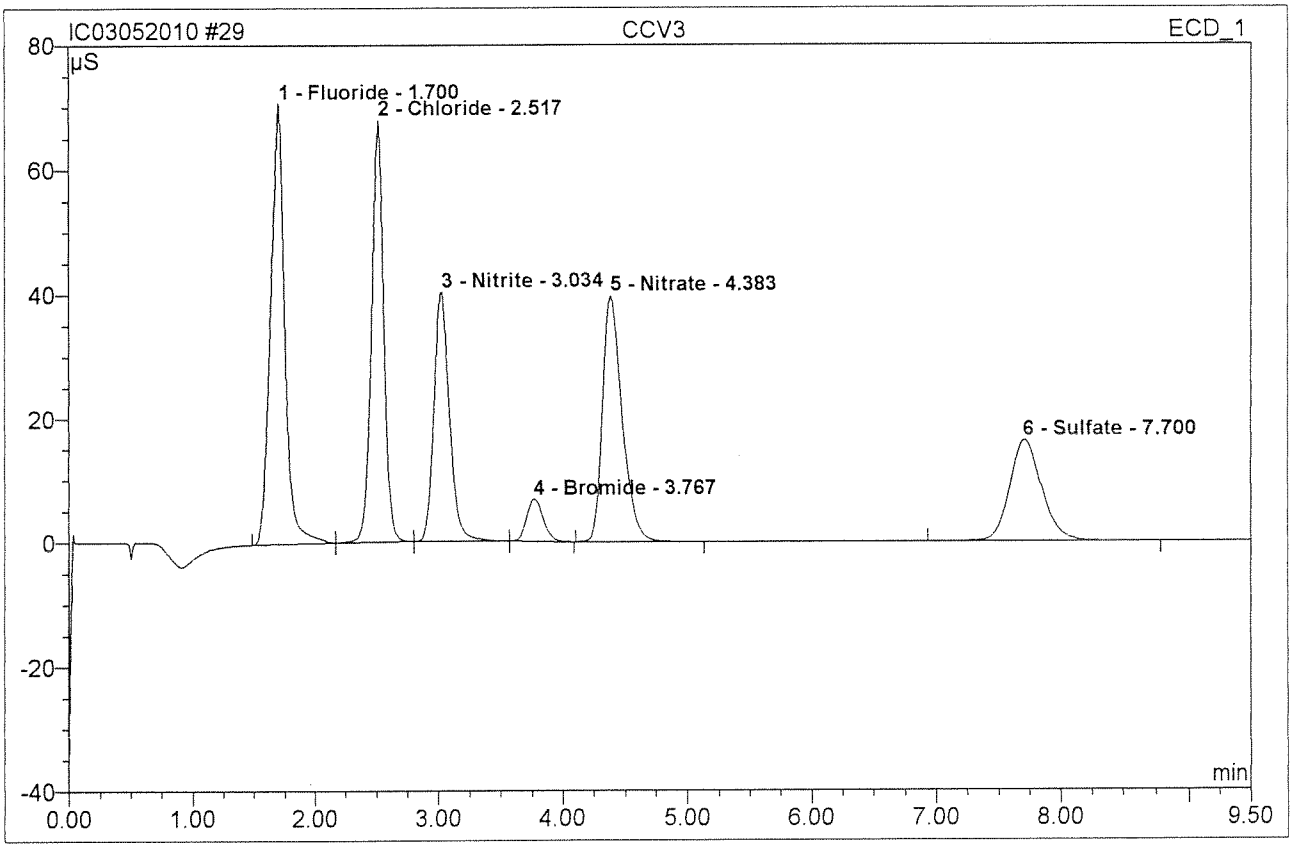


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.37	Chloride	0.642	0.970	100.00	0.622	BMB
Total:			0.642	0.970	100.00	0.622	

29 CCV3

CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 13:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	70.840	9.559	26.16	4.996/100%	BMb
2	2.52	Chloride	67.871	7.827	21.42	5.019/100%	bMb
3	3.03	Nitrite	40.169	5.866	16.05	2.032/102%	bMb
4	3.77	Bromide	6.870	1.054	2.88	1.967 99%	bMB
5	4.38	Nitrate	39.641	7.330	20.06	100% 1.990 99%	BMB
6	7.70	Sulfate	16.325	4.905	13.42	4.984/100%	BMB
Total:			241.716	36.541	100.00	20.987	

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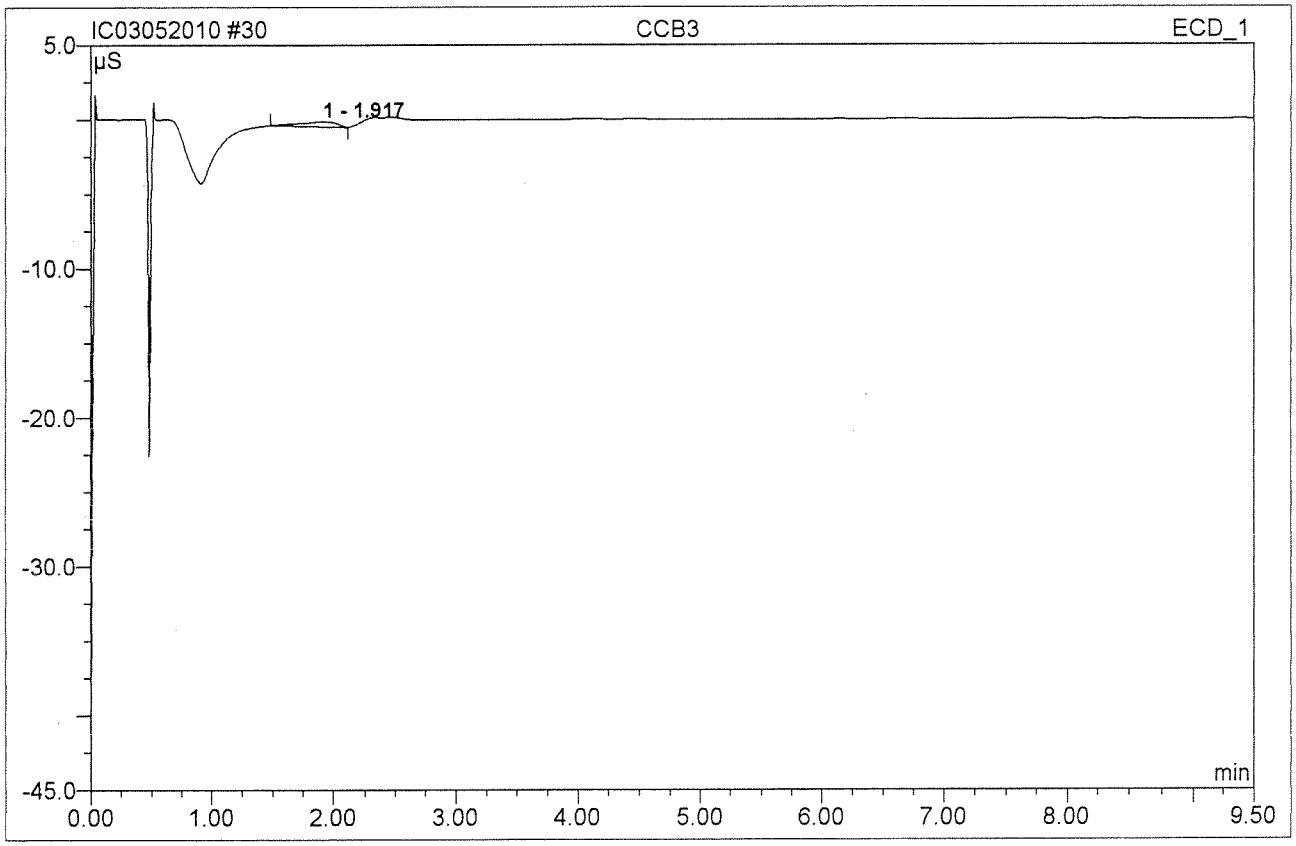
30 CCB3

CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 14:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

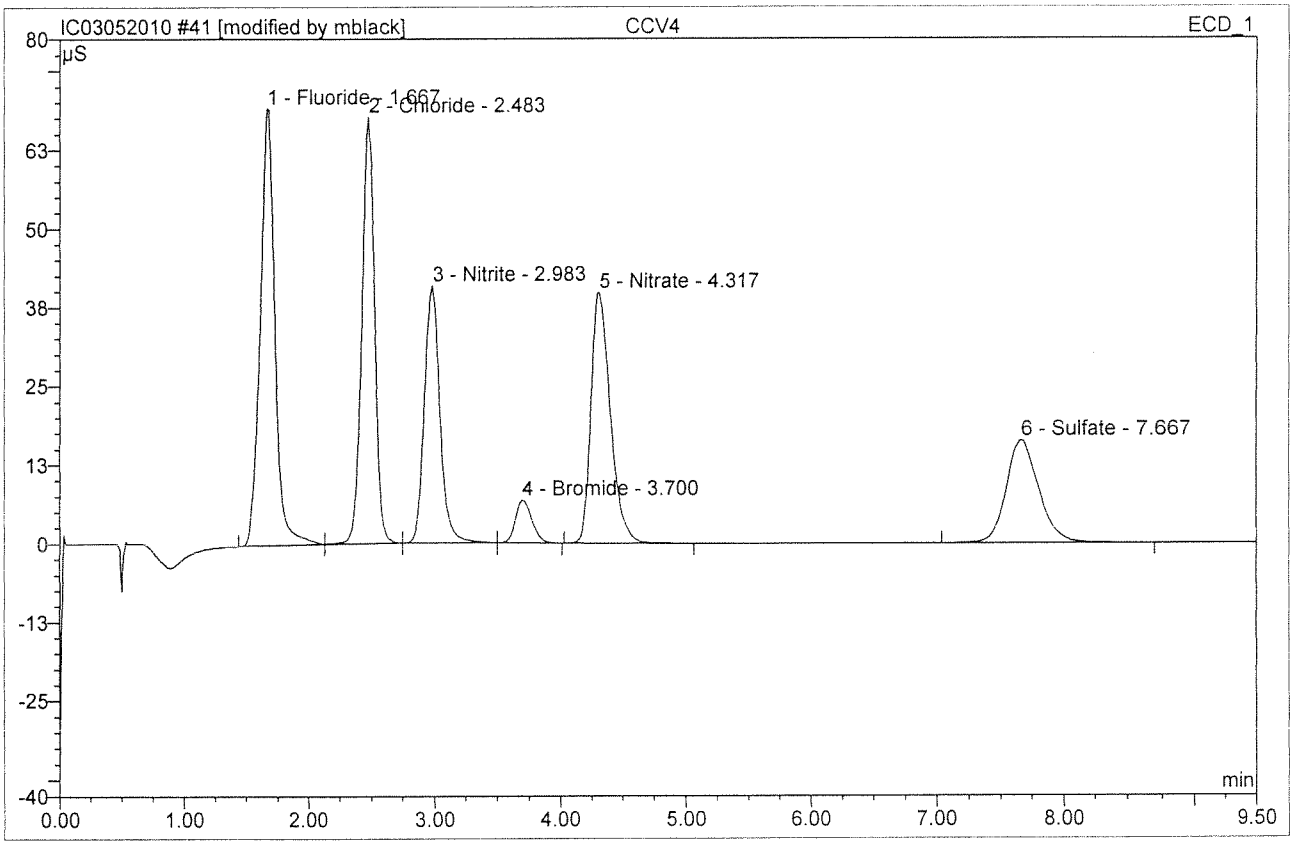


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	n.a.	0.327	0.119	100.00	n.a.	BMB
Total:			0.327	0.119	100.00	0.000	

41 CCV4

CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 16:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	69.318	9.441	26.15	4.934 ppm	BMb*
2	2.48	Chloride	67.648	7.750	21.47	4.970 ppm	bMb
3	2.98	Nitrite	40.787	5.806	16.08	2.011 ppm	bMb
4	3.70	Bromide	6.853	1.040	2.88	1.941 ppm	bMB
5	4.32	Nitrate	39.774	7.203	19.96	1.955 ppm	BMB
6	7.67	Sulfate	16.335	4.856	13.45	4.935 ppm	BMB
Total:			240.715	36.097	100.00	20.746	

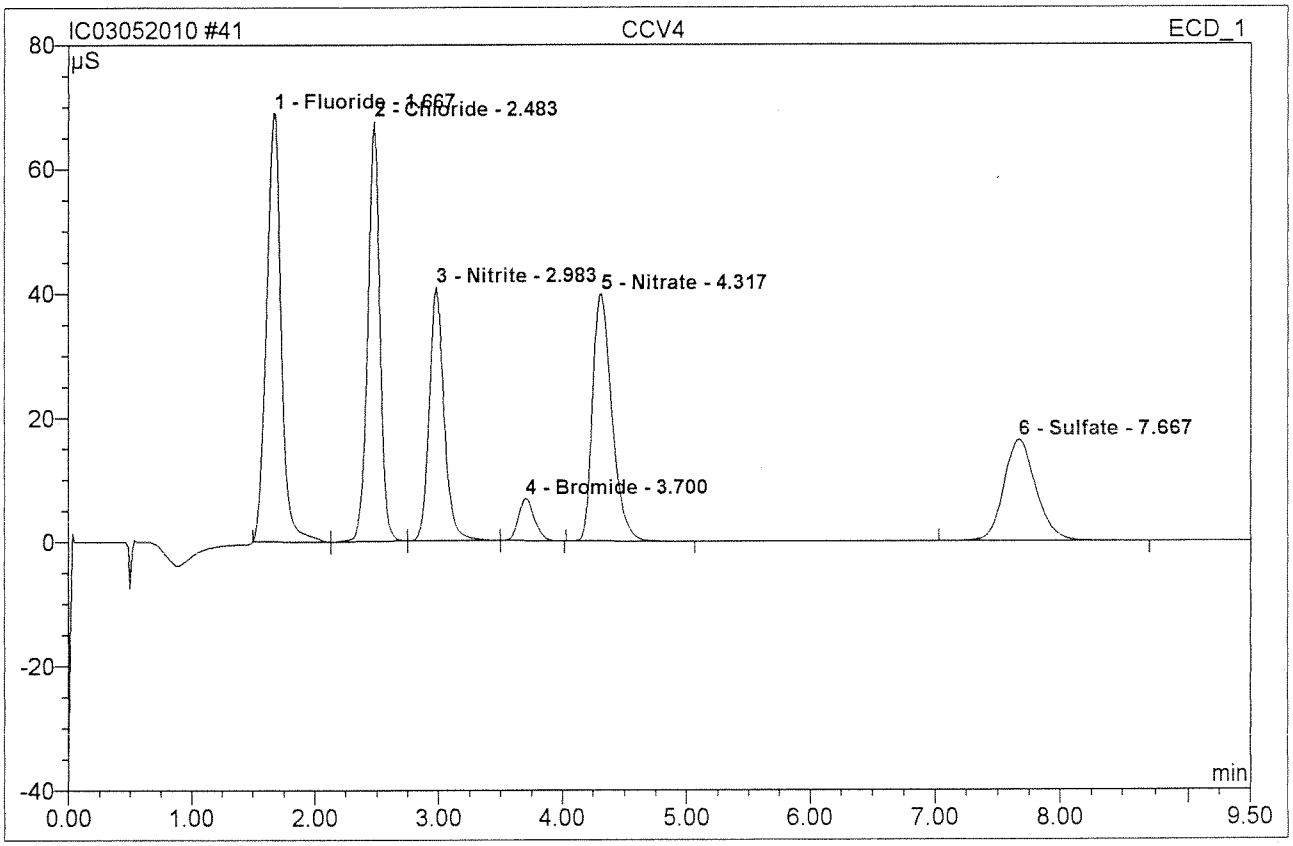
MB

5/25/10

41 CCV4

CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 16:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

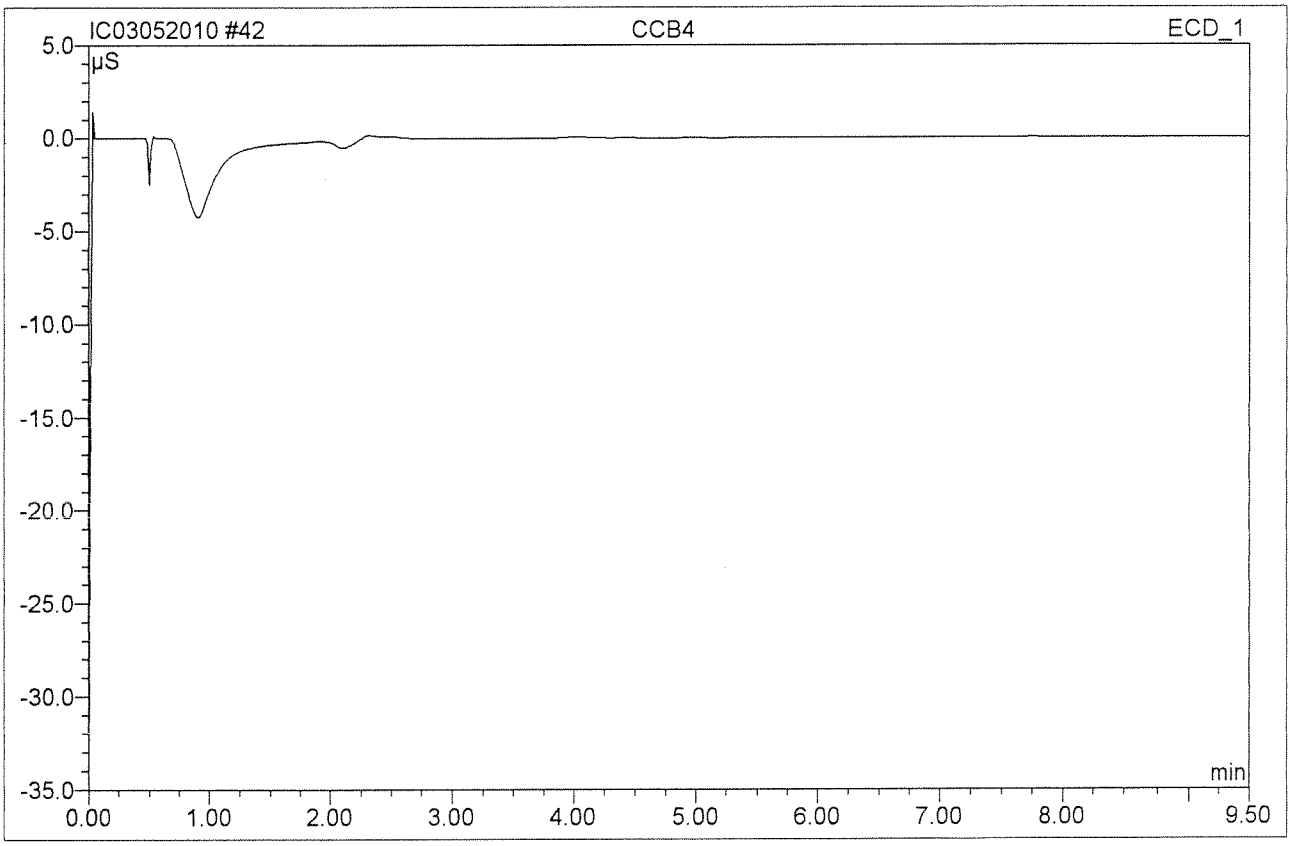


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	68.954	9.278	25.82	4.849	BMb
2	2.48	Chloride	67.648	7.750	21.57	4.970	bMb
3	2.98	Nitrite	40.787	5.806	16.16	2.011	bMb
4	3.70	Bromide	6.853	1.040	2.89	1.941	bMB
5	4.32	Nitrate	39.774	7.203	20.05	1.955	BMB
6	7.67	Sulfate	16.335	4.856	13.51	4.935	BMB
Total:			240.351	35.933	100.00	20.661	

42 CCB4

CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 16:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

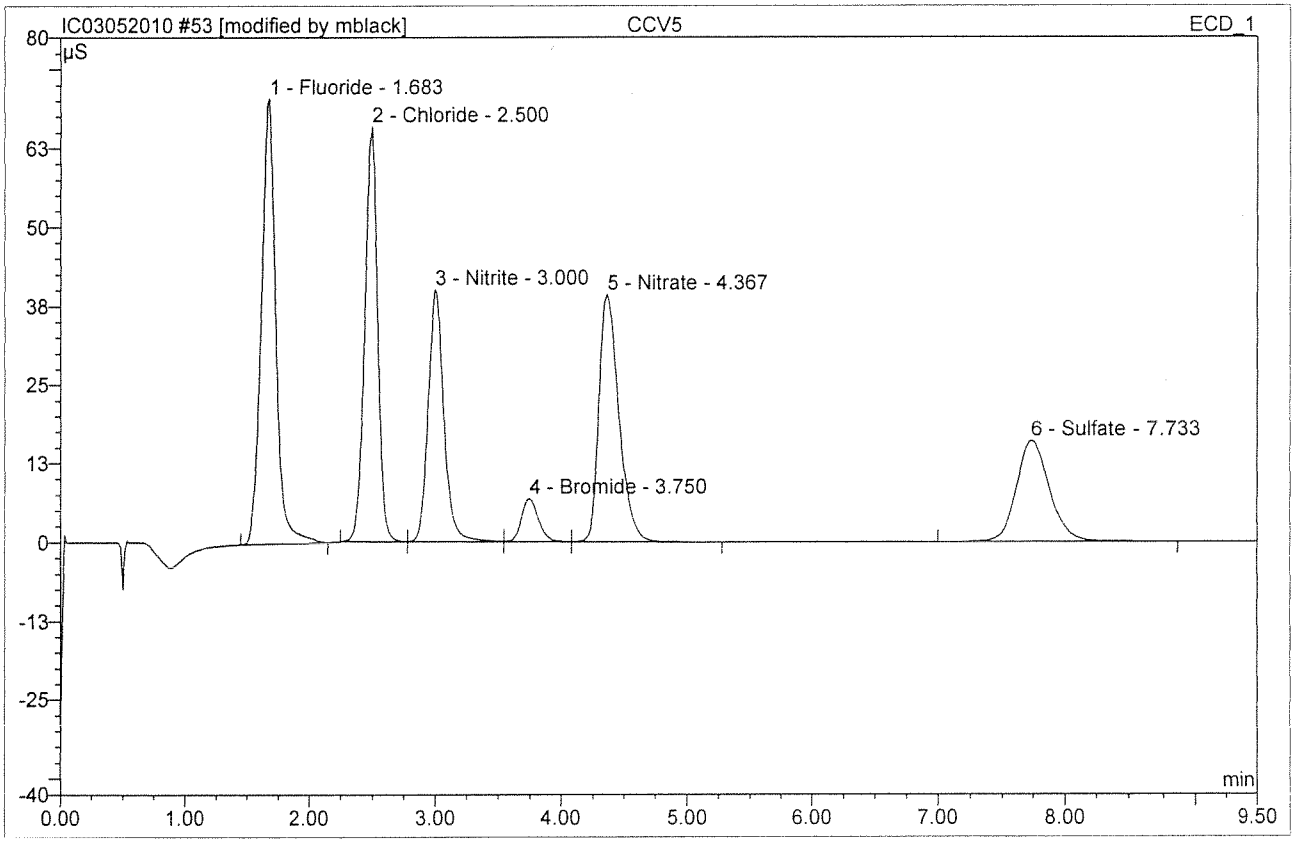


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

53 CCV5

CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 18:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	70.654	9.482	26.17	4.955 ???	BMB*
2	2.50	Chloride	65.846	7.688	21.22	4.929 ???	BM *
3	3.00	Nitrite	39.967	5.862	16.18	2.030 ???	M *
4	3.75	Bromide	6.849	1.071	2.96	1.999 ???	M *
5	4.37	Nitrate	39.230	7.245	20.00	1.967 ???	MB*
6	7.73	Sulfate	16.116	4.885	13.48	4.964 ???	BMB
Total:			238.661	36.232	100.00	20.845	

MB

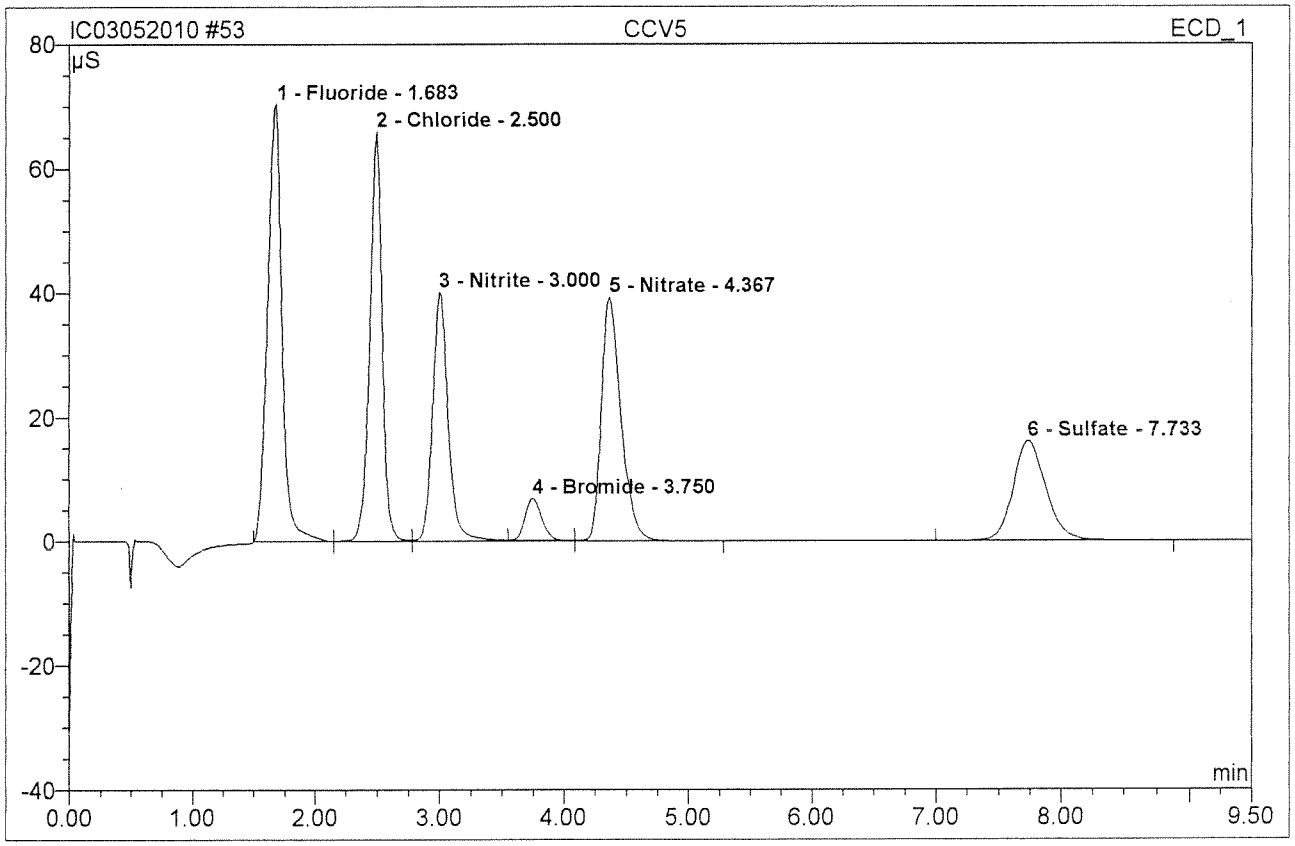
5/21/2010

gu 5/25/10

53 CCV5

CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 18:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

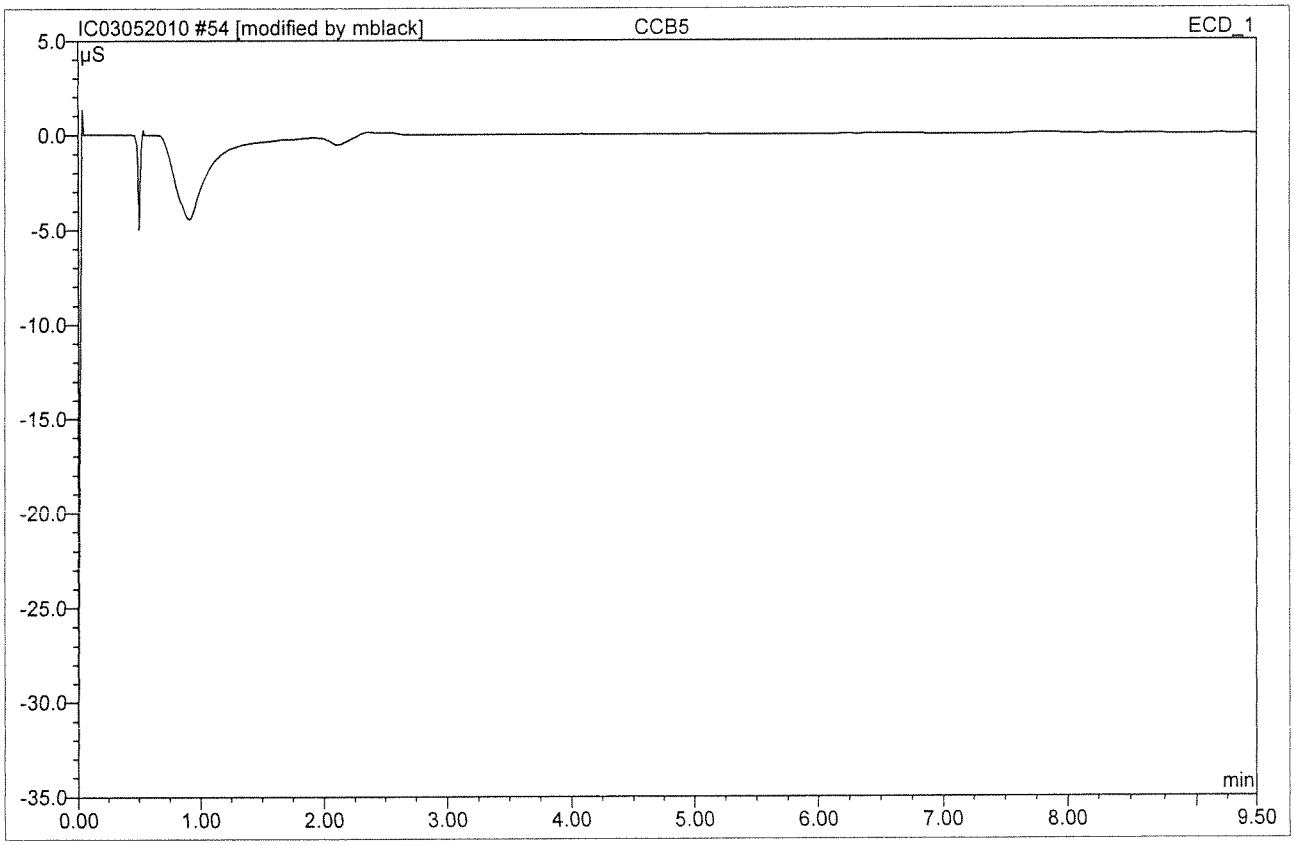


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	70.433	9.383	25.77	4.904	BM
2	2.50	Chloride	66.008	7.782	21.37	4.990	M
3	3.00	Nitrite	40.101	6.031	16.56	2.089	M
4	3.75	Bromide	6.791	1.043	2.86	1.946	Rd
5	4.37	Nitrate	39.283	7.287	20.01	1.978	MB
6	7.73	Sulfate	16.116	4.885	13.42	4.964	BMB
Total:			238.732	36.411	100.00	20.872	

54 CCB5

CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**51**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 18:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



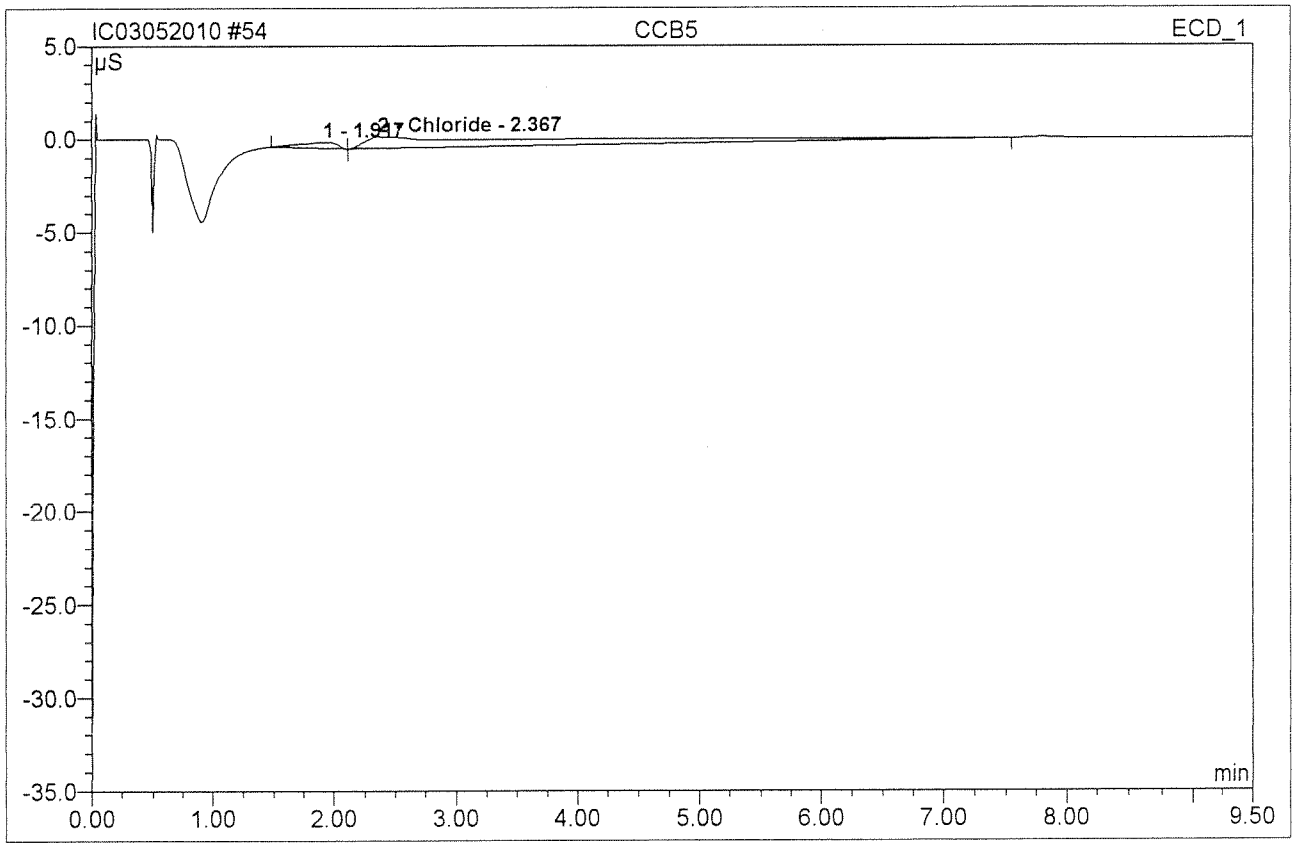
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

MB 5/25/10

54 CCB5

CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**51**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 18:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

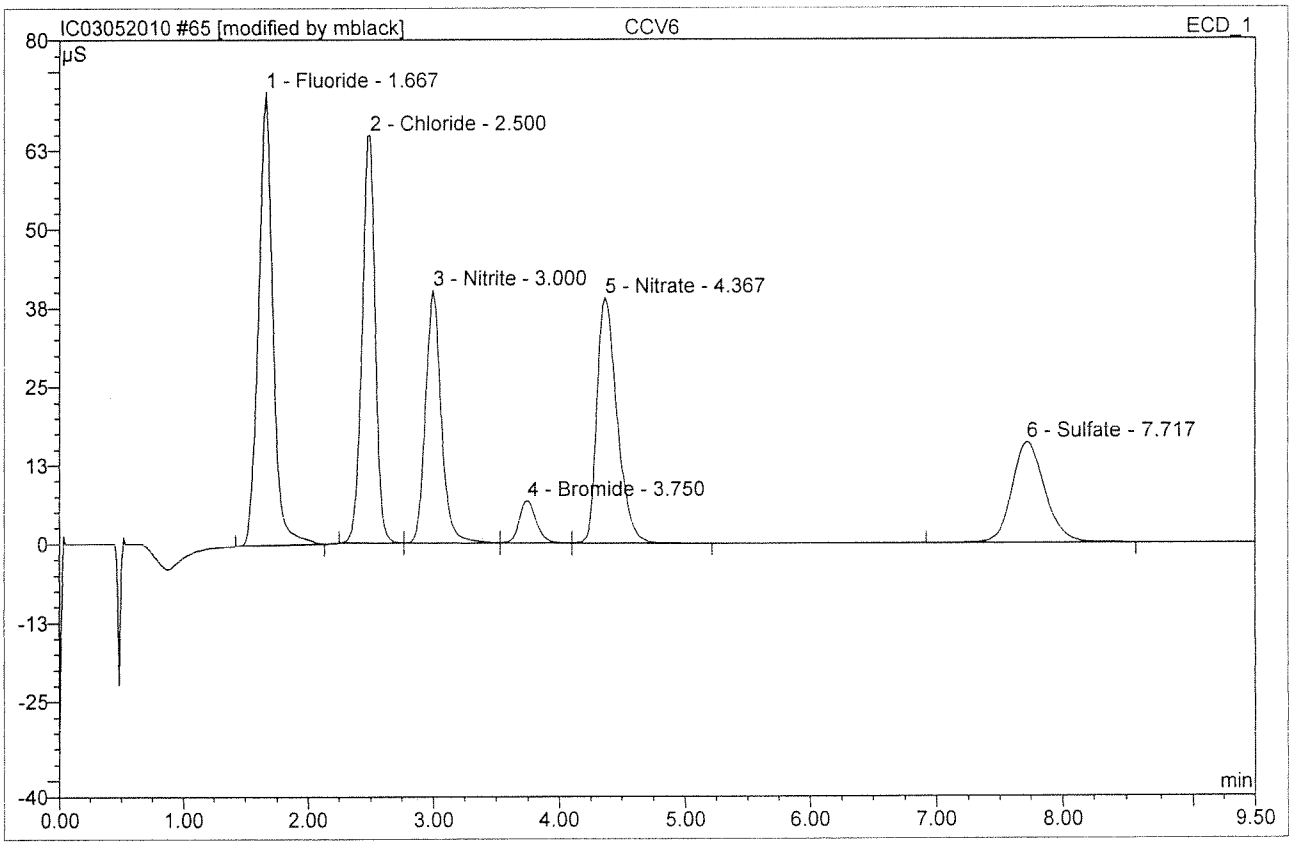


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	n.a.	0.319	0.118	7.92	n.a.	BMb
2	2.37	Chloride	0.637	1.374	92.08	0.881	bMB
Total:			0.956	1.493	100.00	0.881	

65 CCV6

CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**62**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 21:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	72.127	9.575	26.32	5.004 100%	BMB*
2	2.50	Chloride	64.810	7.733	21.25	4.958 99%	BM *
3	3.00	Nitrite	40.147	5.870	16.13	2.033 102%	M *
4	3.75	Bromide	6.815	1.073	2.95	2.002 100%	M *
5	4.37	Nitrate	39.002	7.269	19.98	1.973 99%	MB*
6	7.72	Sulfate	16.129	4.867	13.38	4.946 95%	BMB
Total:			239.030	36.386	100.00	20.917	

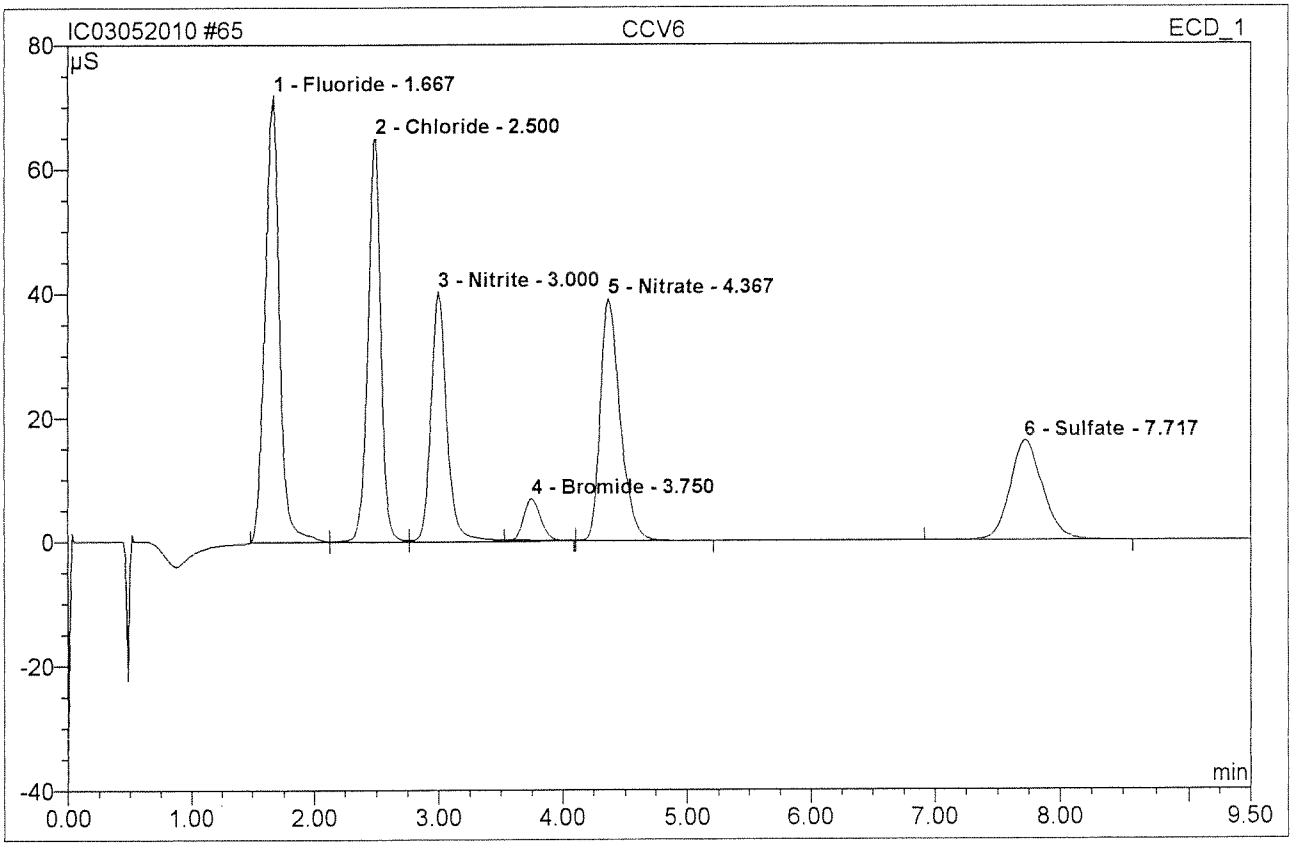
MB

5/25/10

65 CCV6

CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**62**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 21:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

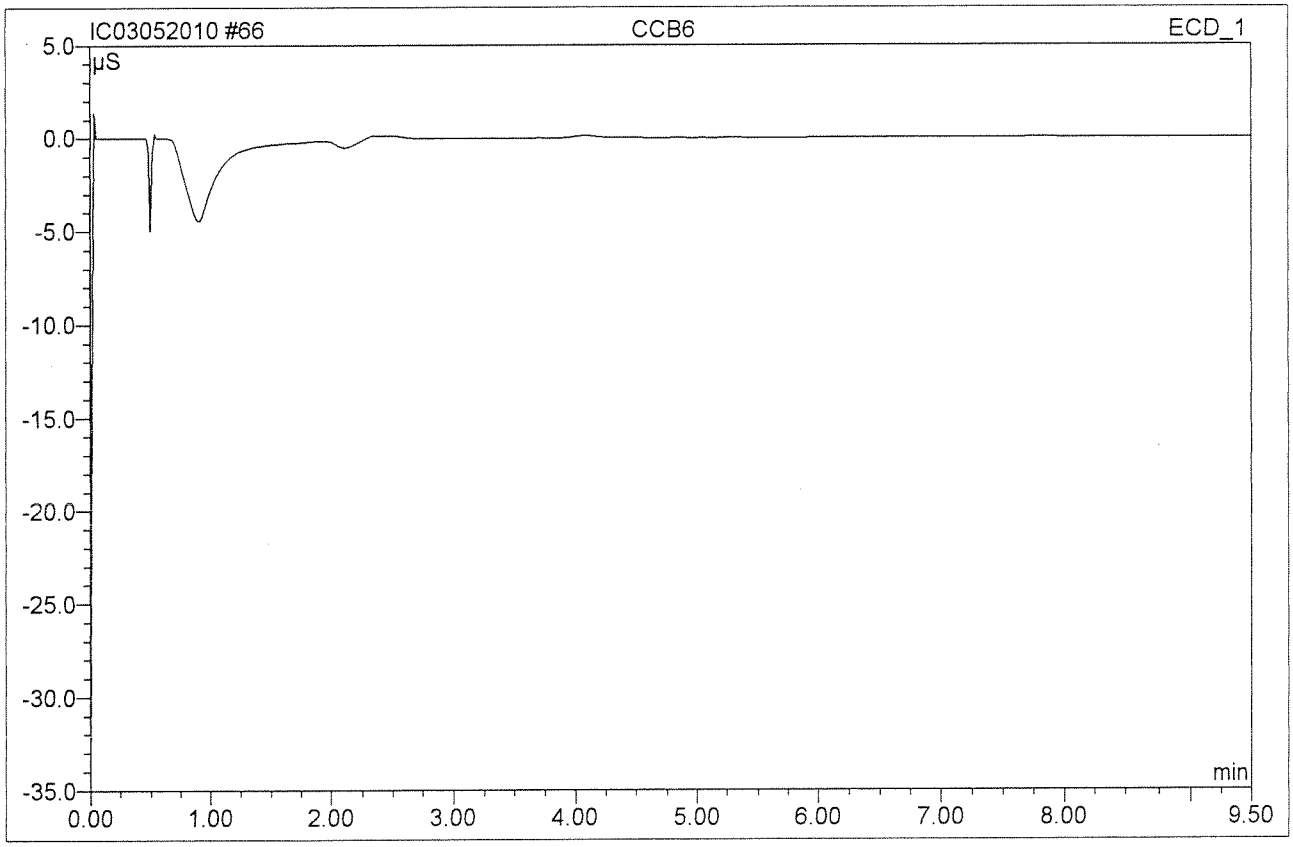


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	71.995	9.531	25.94	4.981	BM
2	2.50	Chloride	65.050	7.875	21.43	5.049	M
3	3.00	Nitrite	40.343	6.110	16.63	2.116	M
4	3.75	Bromide	6.756	1.043	2.84	1.947	Rd
5	4.37	Nitrate	39.077	7.324	19.93	1.988	MB
6	7.72	Sulfate	16.129	4.867	13.24	4.946	BMB
Total:			239.351	36.750	100.00	21.027	

66 CCB6

CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**63**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 21:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

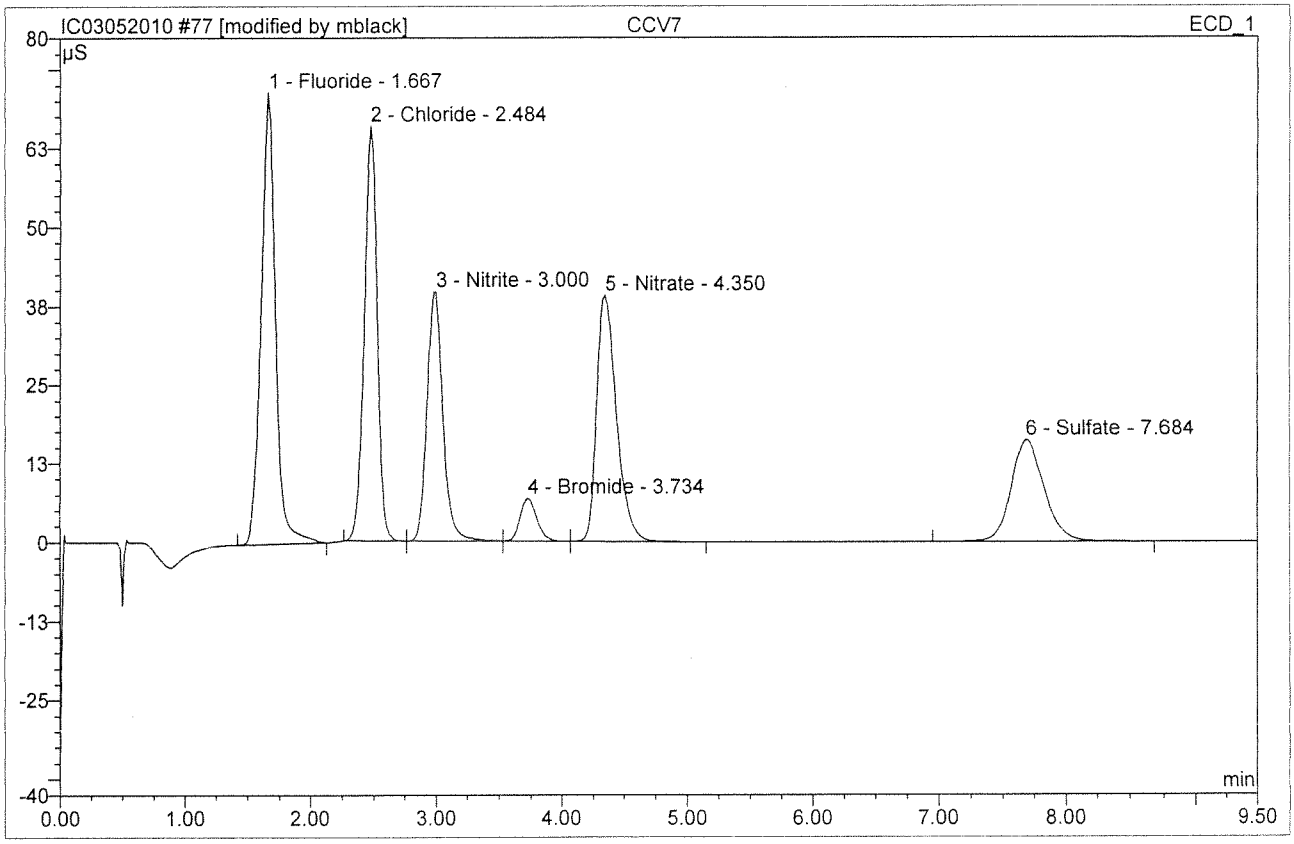


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

77 CCV7

CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**74**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 23:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



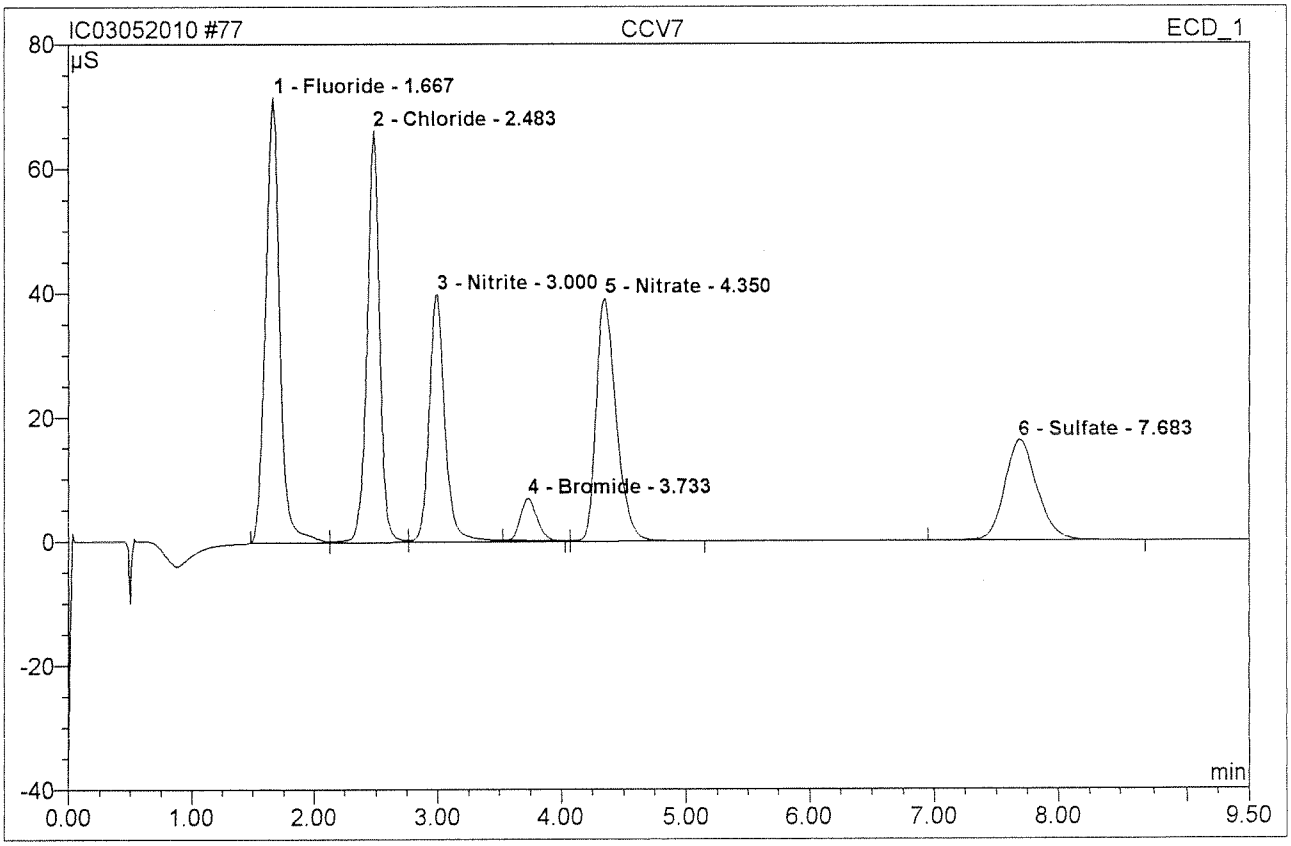
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	71.716	9.412	26.12	4.919 98%	BMB*
2	2.48	Chloride	65.906	7.682	21.32	4.926 99%	BM *
3	3.00	Nitrite	39.609	5.811	16.13	2.013 101%	M *
4	3.73	Bromide	6.802	1.047	2.91	1.954 98%	M *
5	4.35	Nitrate	39.082	7.221	20.04	1.960 98%	MB*
6	7.68	Sulfate	16.147	4.862	13.49	4.941 99%	BMB
Total:			239.262	36.036	100.00	20.713	

5/25/10

77 CCV7

CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**74**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 23:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

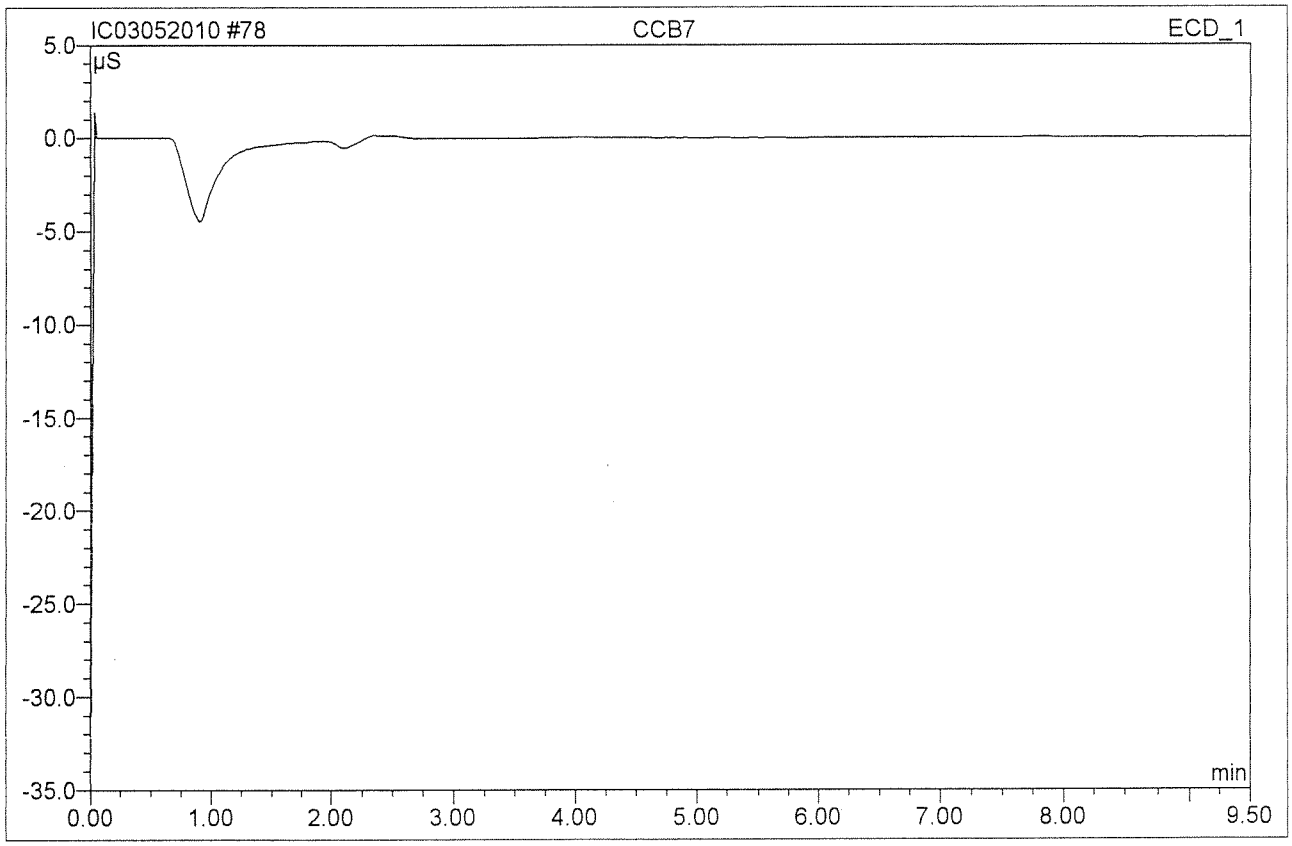


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	71.631	9.398	25.68	4.912	BM
2	2.48	Chloride	66.257	7.885	21.54	5.056	M
3	3.00	Nitrite	39.892	6.116	16.71	2.118	M
4	3.73	Bromide	6.779	1.038	2.84	1.938	Rd
5	4.35	Nitrate	39.187	7.298	19.94	1.981	MB
6	7.68	Sulfate	16.147	4.862	13.29	4.941	BMB
Total:			239.894	36.598	100.00	20.946	

78 CCB7

CCV7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**75**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 23:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

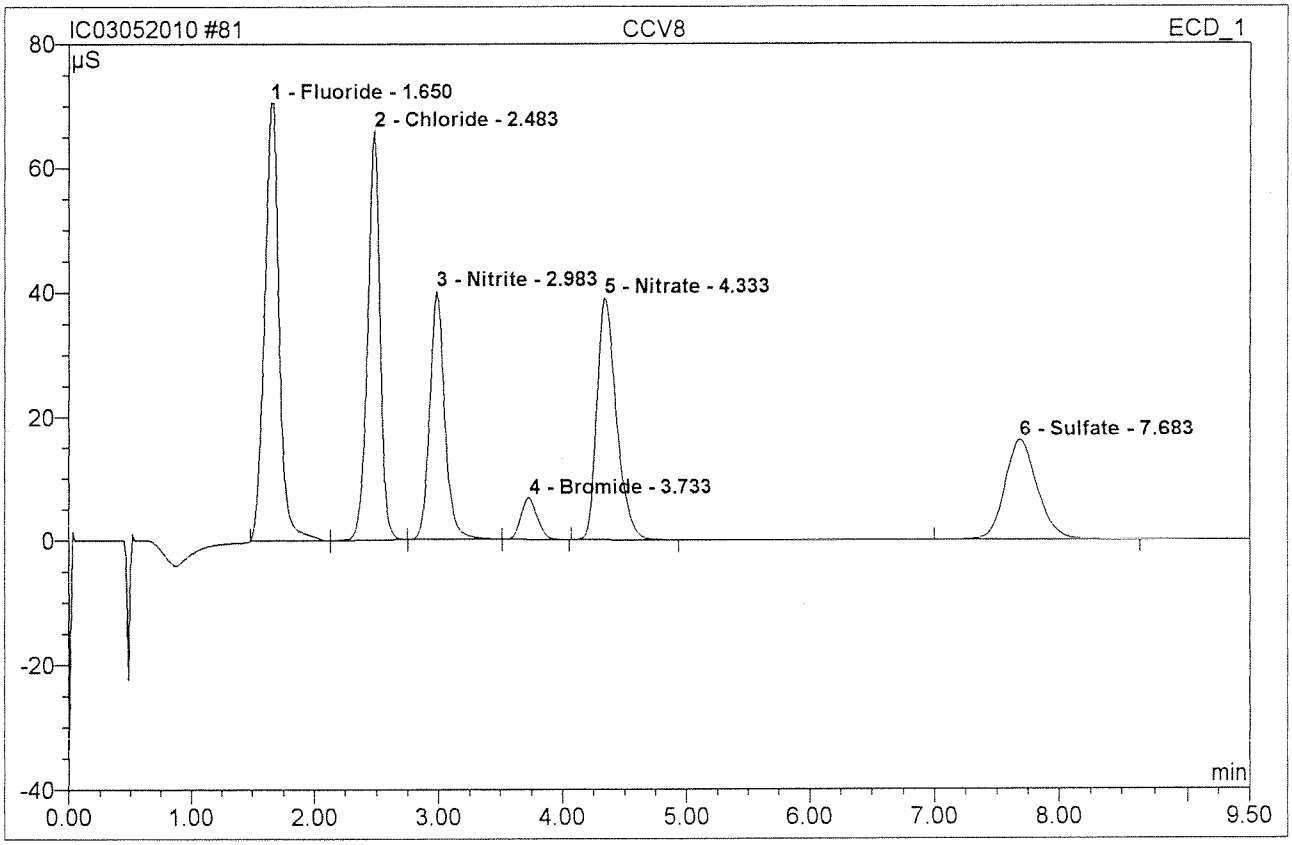


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

81 CCV8

CCV8

Sample Name:	**CCV8**	*Injection Volume:*	**200.0**
Vial Number:	**78**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/21/2010 0:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

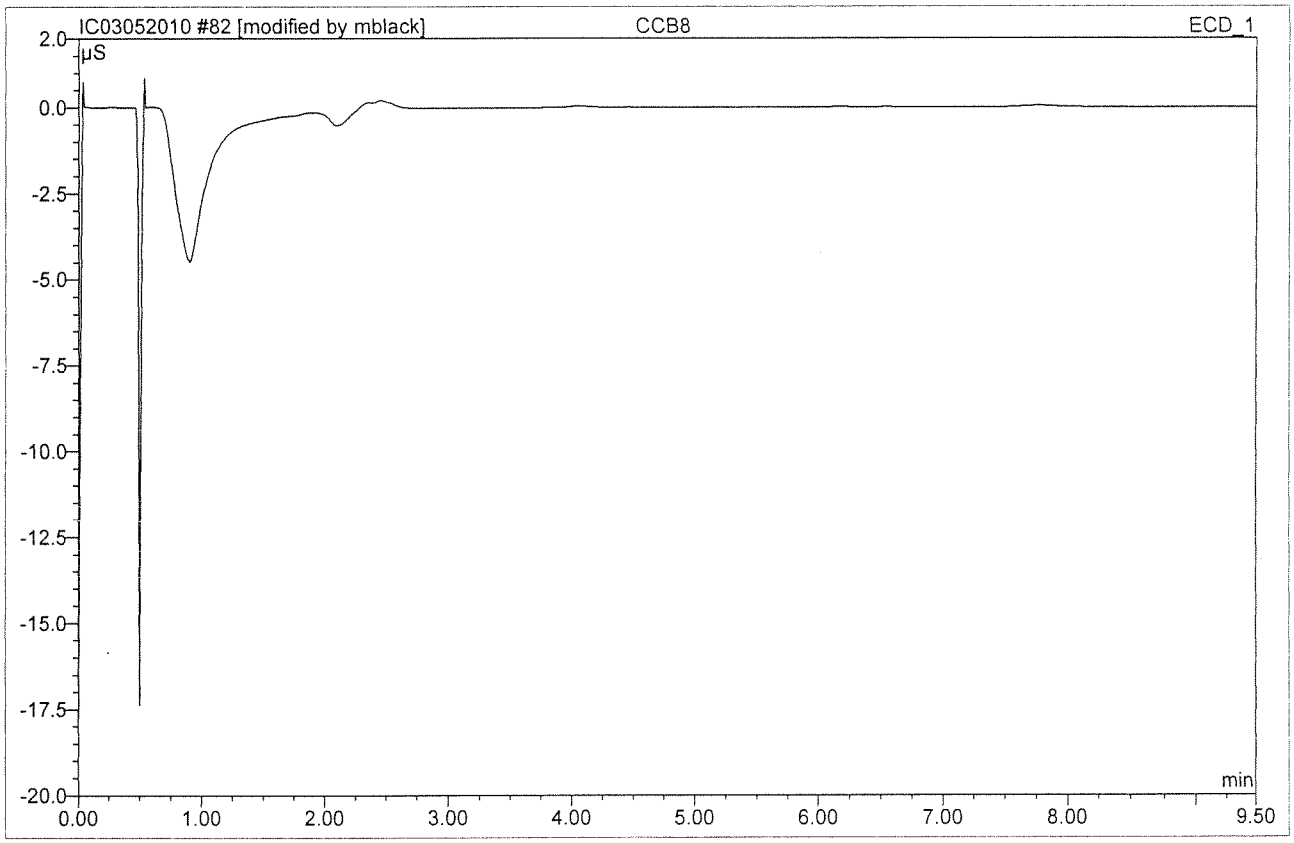


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	70.499	9.430	26.15	4.928 99%	BMb
2	2.48	Chloride	65.942	7.716	21.40	4.948 99%	bMb
3	2.98	Nitrite	40.008	5.785	16.04	2.003 100%	bMb
4	3.73	Bromide	6.713	1.039	2.88	1.940 97%	bMB
5	4.33	Nitrate	39.007	7.218	20.02	1.959 98%	BMB
6	7.68	Sulfate	16.167	4.866	13.50	4.945 99%	BMB
Total:			238.336	36.055	100.00	20.723	

82 CCB8

CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**200.0**
Vial Number:	**79**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/21/2010 0:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

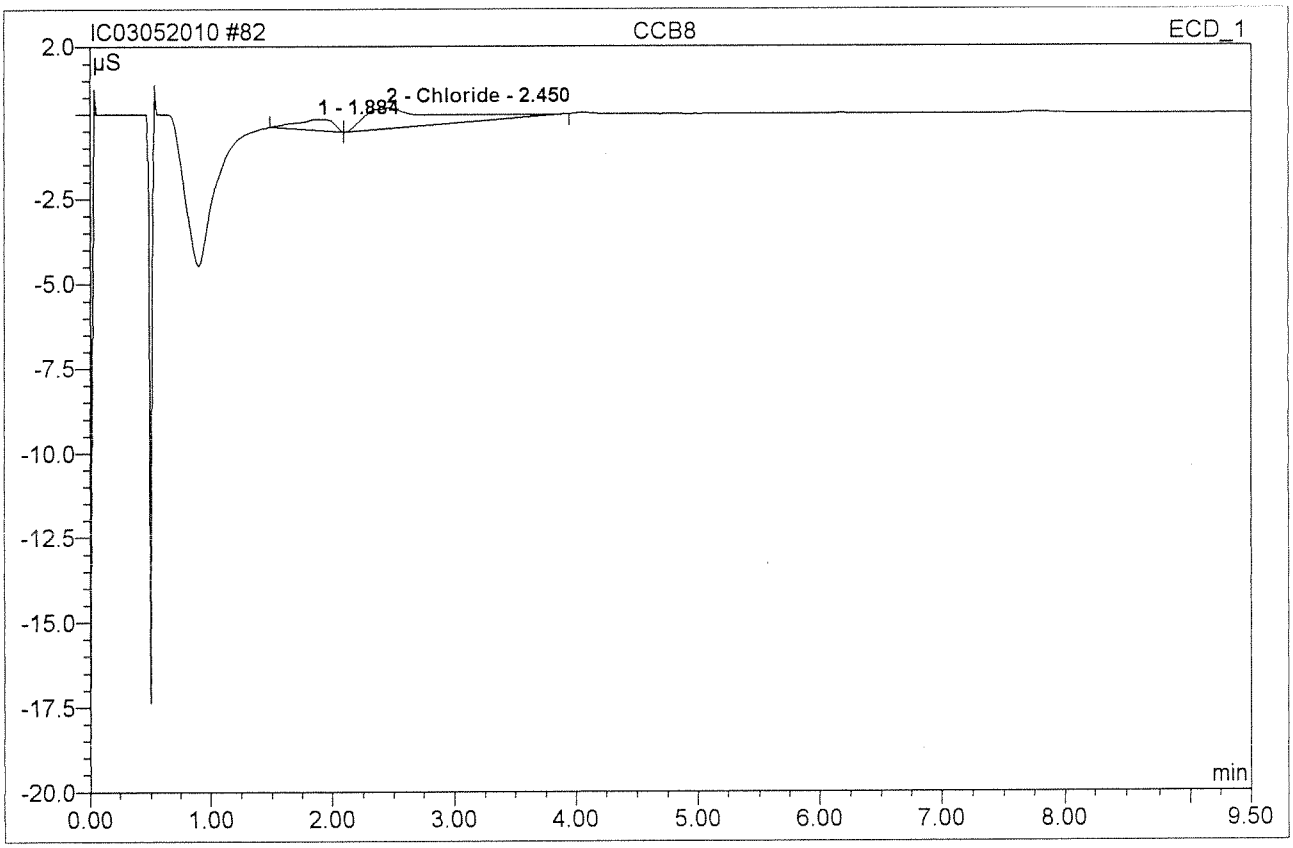
5/25/10

AB

82 CCB8

CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**200.0**
Vial Number:	**79**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/21/2010 0:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.88	n.a.	0.332	0.119	21.04	n.a.	BMb
2	2.45	Chloride	0.622	0.446	78.96	0.286	bMB
Total:			0.954	0.565	100.00	0.286	

Work Request # (Original K3898) K4455 K4467 K4574

Tier: III III III I

Date Analyzed: 05/10/10

Analyst: Thuyen

Analysis: NH_3 – 350.1 / SM4500-NH_3 G 199824

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		yes/no/NA
2.	Holding times met for all analyses and for all samples?		yes/no/NA
3.	Are calculations correct?		yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/NA
5.	All quality control criteria met?		yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?		yes/no/NA
7.	Are all samples labelled correctly?		yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		yes/no/NA
9.	Are detection limits and units reported correctly?		yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/NA
11.	Is the unused space on the benchsheet crossed out?		yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		yes/no/NA

COMMENTS: 12. K3898 - due date 05/10/10

Final Approved by: _____ Date: 5/11/10

DQREPORT

OTH 05/10/10

III III III IV I
K3898, K4455, K4467, K4574

BRAN+LUEBBE

Post-run report

Name of Run	: 100510B	Name of Analysis	:Ammonia
Date of Report	: 5/10/2010	System No.	:1
Date of Run	: 5/10/2010	Type of System	:AA3
Operator	:	Start/Stop time	:10:02 - 11:09
Comment	:		

LCS ID#: B+LNH3/,-34-II T.V.=14.3
Spike ID#: B+LNH3/,-72-II T.V.=2.00
Curve, CCV ID#: B+LNH3/,-55-I T.V.=2.00
MBMS=2.00

Channel	:	2
Method	:	Method 2
Unit	:	mg/L
Calibr. Fit	:	Linear
Corr. Coeff.	:	1.0000
Base	:	-20223
Gain	:	20
Sensitivity	:	0.4382
Sample Limit 1	:	
Sample Limit 2	:	

Pk	Cup		Sample Id	Value		
0	0	B	Baseline	-0.0126		
1	1	P	Primer	4.9888		
2	1	D	Drift	4.9964		
3	1	C	5.00	5.0040		
4	2	C	2.00	1.9890		
5	3	C	0.50	0.5032		
6	4	C	0.05	0.0524		
7	5	C	0	0.0013		
8	0	B	Baseline	-0.0126		
9	1	H1	High	4.9989		
10	0	L1	Low	-0.0106		
11	0	L1	Low	-0.0106		
12	5	QC2	CCB1	-0.0018	<0.020	98%
13	2	QC1	CCV1	1.9610	1.96	99%
14	10	QC3	LCS1*10	1.4124	14.1	99%
15	10	QC3	LCS1dup*10	1.4102	14.1	99%
16	11	S	MB MS	2.0248	2.02	101%
17	0	N	Null	-0.0131N		
18	5	QC2	MB1	-0.0059	<0.020	
19	12	S	k1003898-001	2.9587	2.96	$\bar{x}$ = 2.96 · RPD < 1%
20	13	S	k1003898-001d	2.9528	2.95	
21	49	S	k1003898-001ms*2	3.4651	6.93	99% (Spike = 0.1ml x 100ppm/2.50 = 4.00ppm)
22	50	S	k1003898-001msd*2	3.4760	6.95	100%
23	0	B	baseline	-0.0126		
24	5	QC2	CCB2	0.0058	<0.020	98%
25	2	QC1	CCV2	1.9637	1.96	
26	16	S	k1003898-002	3.6456	3.65	

5/10/10
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27	17	S	k1003898-003	3.0367	3.04
28	18	S	k1003898-004	3.3603	3.36
29	19	S	k1003898-005	3.0344	3.03
30	51	S	k1003898-006*25	1.1572	28.9
31	52	S	k1003898-007*25	0.9865	24.7
32	53	S	k1003898-008*25	1.0969	27.4
33	54	S	k1003898-009*25	1.1434	28.6
34	55	S	k1003898-010*25	1.2065	30.2
35	0	B	BASELINE	-0.0126	
36	5	QC2	CCB-3	-0.0029	<0.020
37	2	QC1	CCV-3	1.9651	1.97 99%
38	25	S	k1004455-001	-0.0003	<0.020 X = ND RPD = —
39	26	S	k1004455-001d	-0.0006	<0.020
40	27	S	k1004455-001ms	2.0642	2.06 103%
41	28	S	k1004455-001msd	2.0607	2.06 103%
42	29	S	k1004455-002	0.0287	0.029 J (filtered in the field)
43	30	S	k1004467-001~~diss.~~ on 5/12/10	0.0009	<0.020
44	31	S	k1004574-001	0.0016	<0.020
45	56	S	k1004574-002*25	0.7448	18.6
46	33	S	k1004574-003	0.0006	<0.020
47	0	B	Baseline	-0.0126	
48	5	QC2	CCB4	-0.0045	<0.020
49	2	QC1	CCV4	1.9654	1.97 99%
50	1	D	Drift	4.9964	
51	0	B	Baseline	-0.0126	
52	0	B	FinalBase	-0.0126	

QC Limits

Channel	:	2
QC 1	Unused	
QC 2	Unused	
QC 3	Unused	
QC 4	Unused	
QC 5	Unused	
QC 6	Unused	
QC 7	Unused	
QC 8	Unused	
QC 9	Unused	
QC10	Unused	

CORRECTIONS

Channel	:	2
Baseline	:	Yes
Drift	:	Yes
Carry over	:	Yes
%:		0.3

5/10/10

05/10/10

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* ... Sample offscale
\+ ... Result higher than sample limit

- ... Result lower than sample limit
P ... Standard passed
F ... Standard failed
N ... Value not calculated or not used
R ... Resample after offscale
M ... Peak marker moved manually
D ... Diluted sample

** <END OF REPORT> **

5/11/10

05/10/10

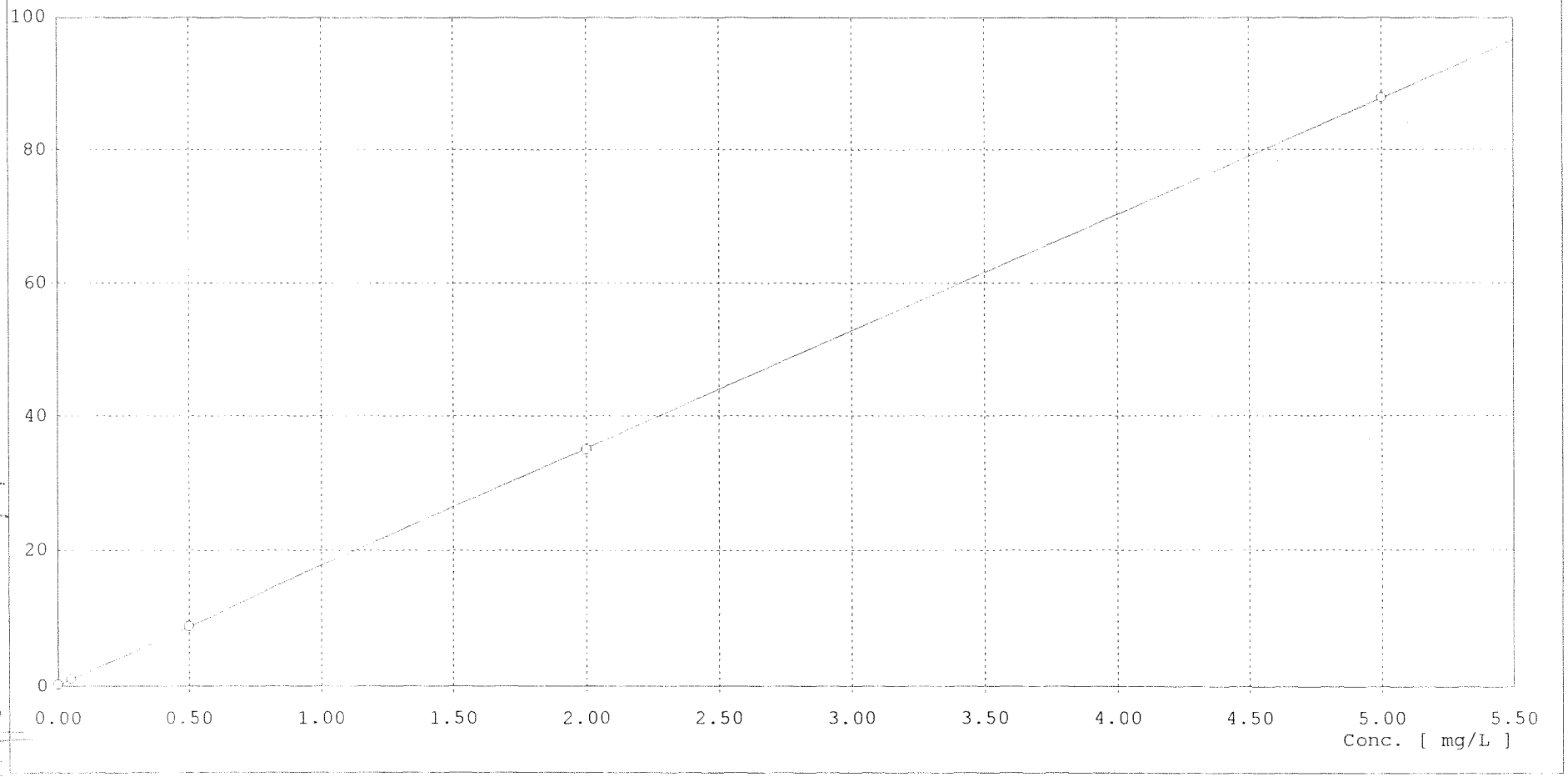
BRAN+LUEBBE

Calibration Curve

Name of run :100510B.run
Comment :

Name of analysis :Ammonia

Channel :2
Method :Method 2
Curve fit :linear a=-2.5828E-001 b=8.7087E-005
Corr. coeff. :1.0000



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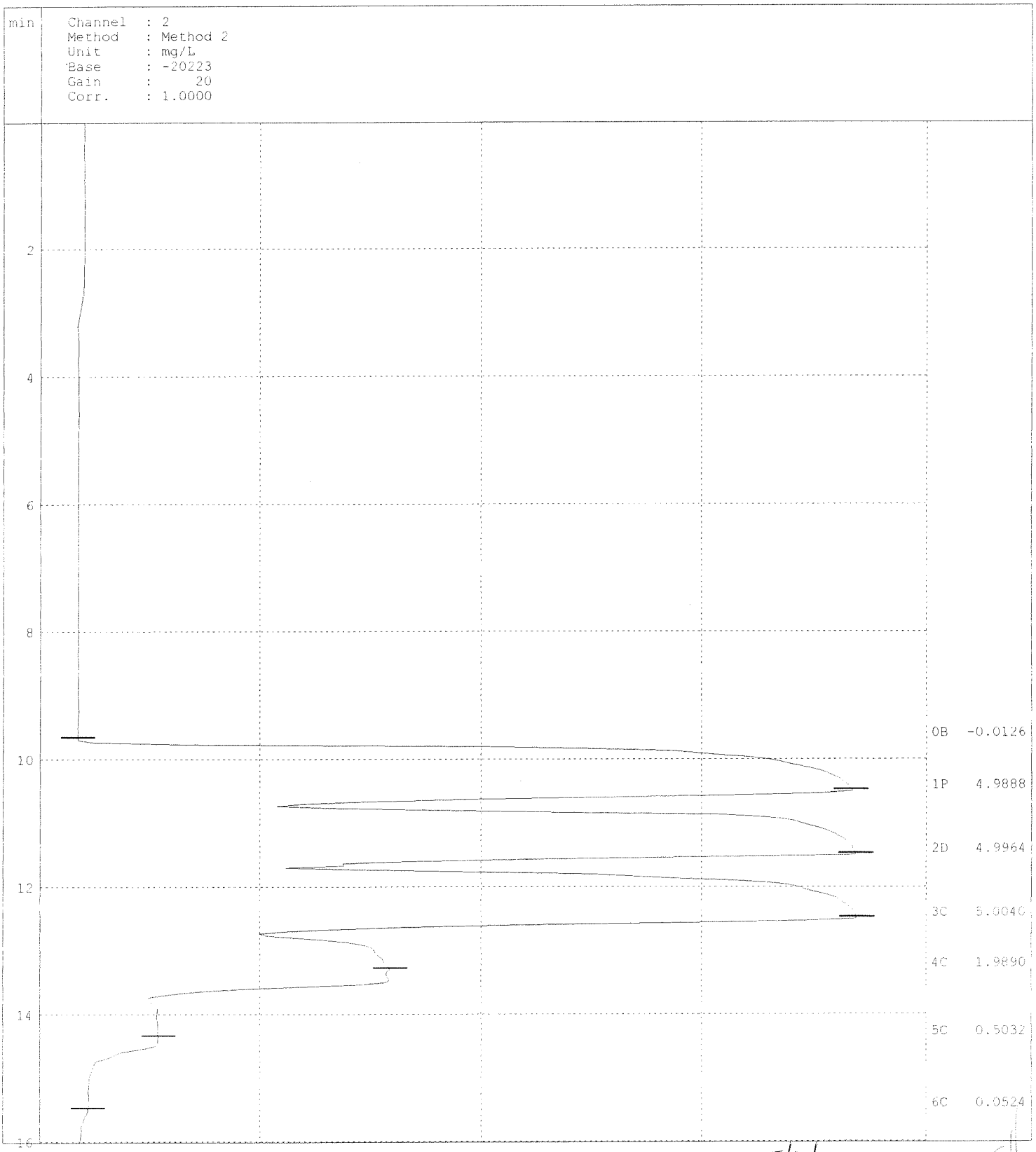
05/10/10 Approved

BRAN+LUEBBE

Post-run chart

Name of run :100510B.RUN
Comment :

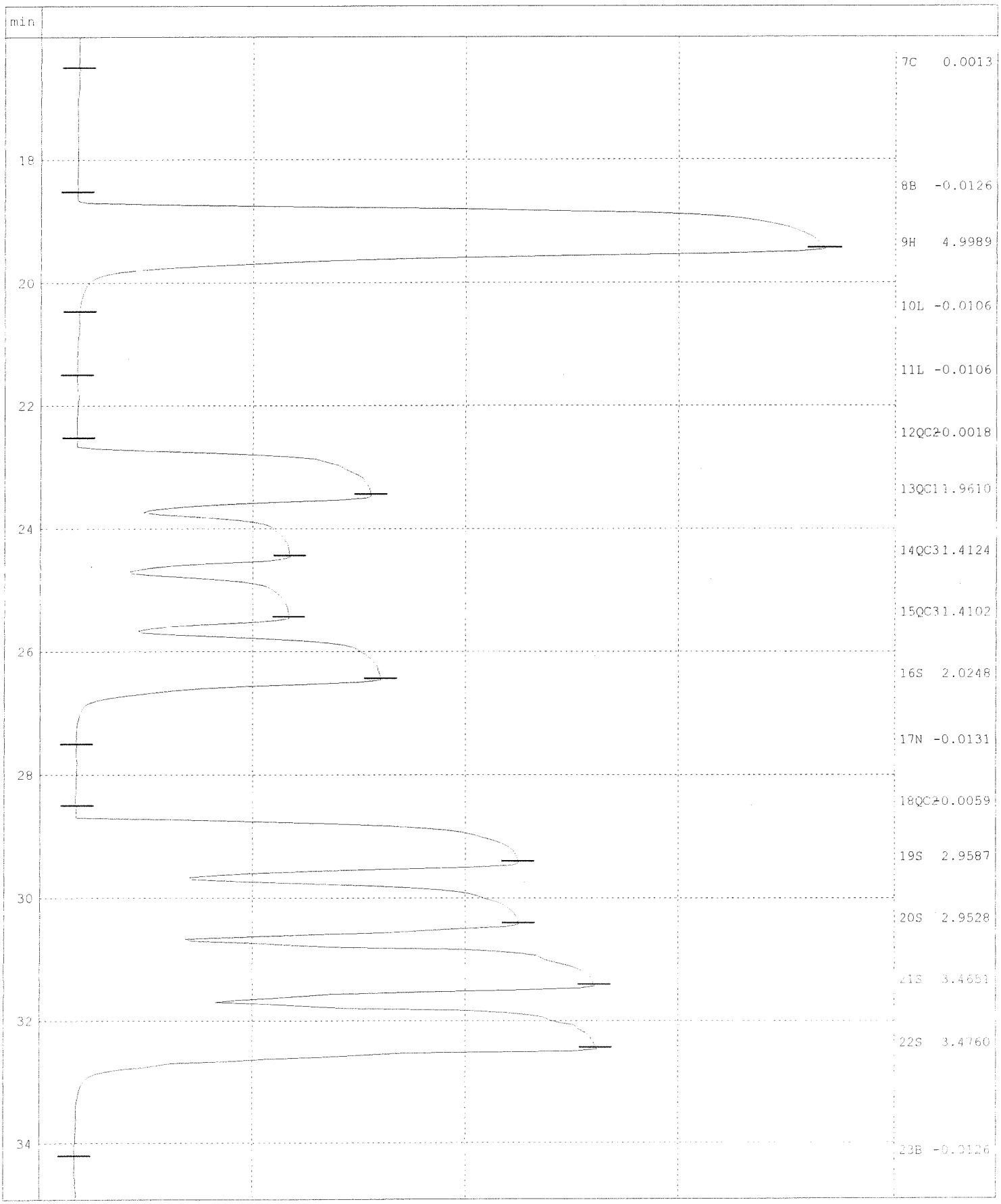
Name of analysis :Ammonia



05/10/10

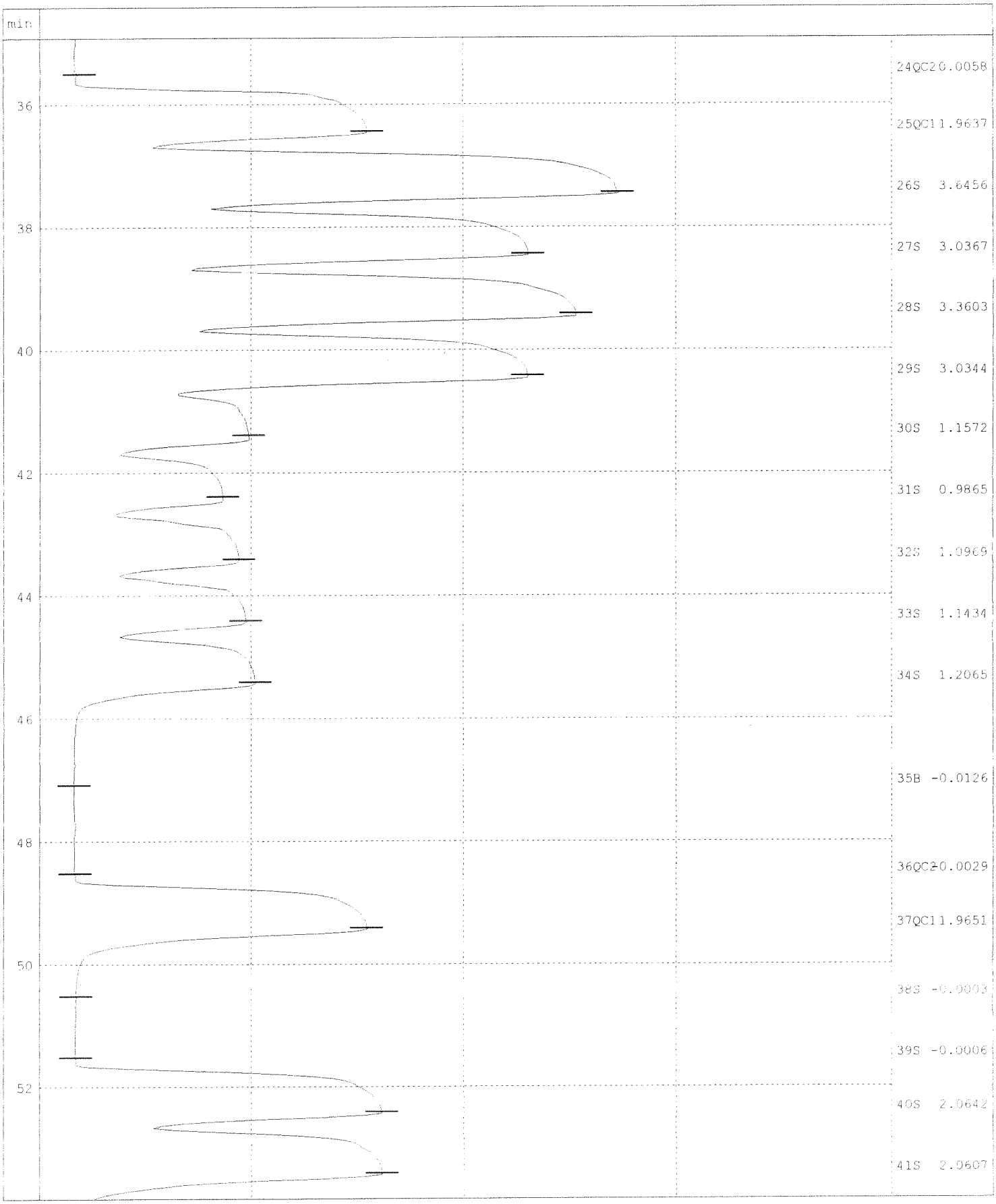
Name of run :100510B.RUN
Comment :

Name of analysis :Ammonia



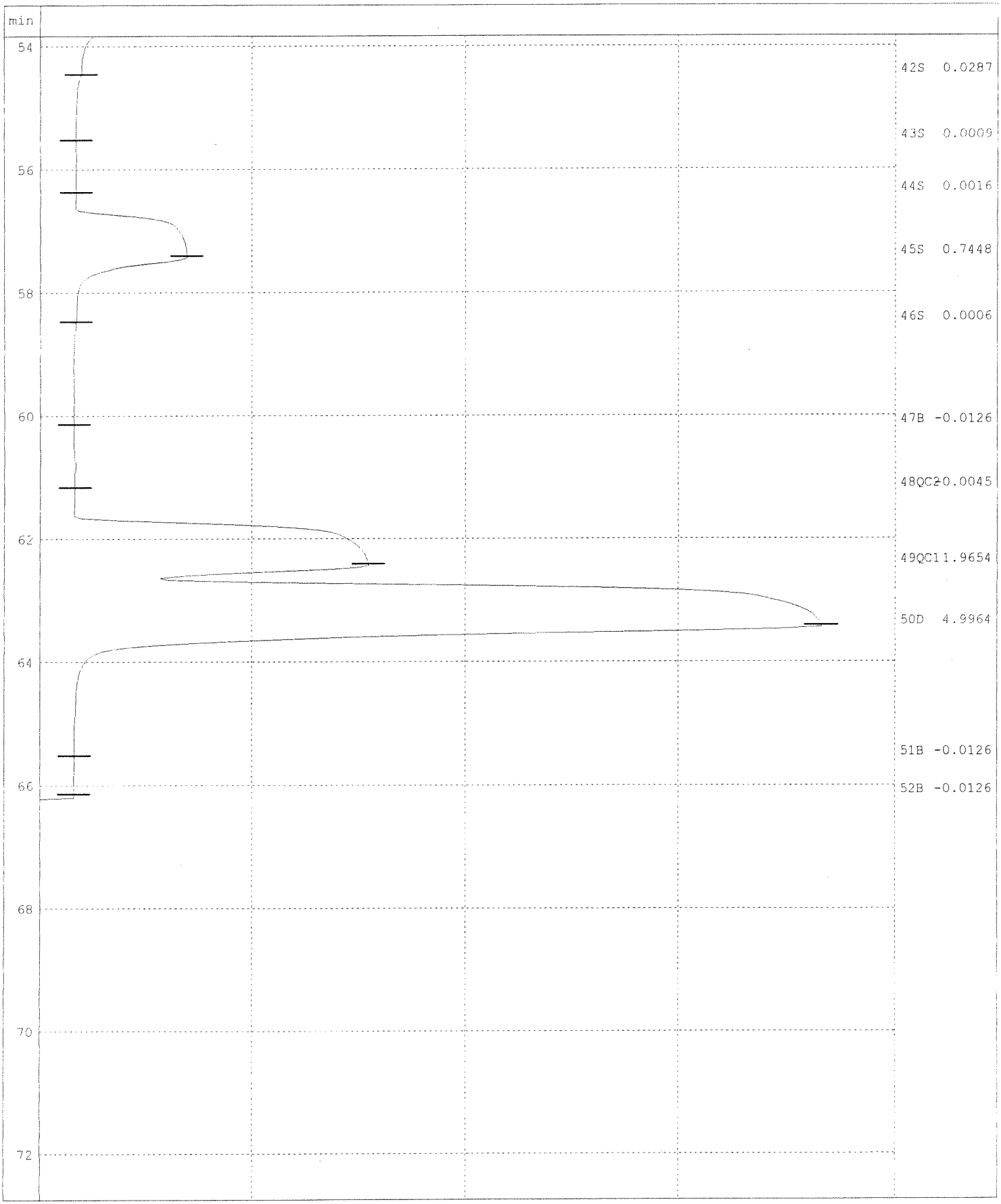
Name of run :100510B.RUN
Comment :

Name of analysis :Ammonia



Name of run :100510B.RUN
Comment :

Name of analysis :Ammonia



Work Request # Original (K4467)

Tier: D

Date Analyzed: 05/06/10

Analyst: Huyen

Analysis: NO_2 - 353.2

199434

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		yes/no/NA
2.	Holding times met for all analyses and for all samples?		yes/no/NA
3.	Are calculations correct?		yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/NA
5.	All quality control criteria met?		yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?		yes/no/NA
7.	Are all samples labelled correctly?		yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		yes/no/NA
9.	Are detection limits and units reported correctly?		yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/NA
11.	Is the unused space on the benchsheet crossed out?		yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		yes/no/NA

COMMENTS:

Final Approved by: _____ Date: 5/7/10

DQREPORT

K4467

BRAN+LUEBBE

Post-run report

Name of Run	: 100506A	Name of Analysis	:Nitrite.ANL
Date of Report	: 5/6/2010	System No.	:1
Date of Run	: 5/6/2010	Type of System	:AA3
Operator	:	Start/Stop time	:08:46 - 09:22
Comment	:		

Channel	:	2
Method	:	Method 2
Unit	:	
Calibr. Fit	:	Linear
Corr. Coeff.	:	1.0000
Base	:	-21488
Gain	:	5
Sensitivity	:	1.5640
Sample Limit 1	:	
Sample Limit 2	:	

LCS ID#: AN/1,-27-Q T.V.=4.00
(0.4mL x 100ppm/10mL = 4.00ppm)
Spike ID#: B+LNO3/1,-94-F T.V.=2.00
Curve, CCV ID#: B+LNO3/1,-80-Q T.V.=2.00

Pk	Cup		Sample Id	Value	
0	0	B	Baseline	0.0045	
1	1	P	Primer	4.9557	
2	1	D	Drift	5.0118	
3	1	C	5.00	5.0102	
4	2	C	2.00	1.9751	
5	3	C	0.50	0.4943	
6	4	C	0.05	0.0574	
7	5	C	0	0.0129	
8	1	H1	High	4.9834	
9	0	L1	Low	0.0226	
10	0	L1	Low	0.0175	
11	5	QC2	CCB1	0.0179	<0.050
12	2	QC1	CCV1	1.9559	1.96 98%
13	10	QC3	LCS1	3.9888	3.99 100%
14	0	N	Null	0.0253N	
15	5	QC2	MB1	0.0182	<0.050
16	11	S	k1004467-001	0.0348	<0.050
17	12	S	k1004467-001d	0.0397	<0.050
18	13	S	k1004467-001ms	1.9964	2.00 100%
19	14	S	k1004467-001msd	2.0464	2.05 103%
20	0	B	Baseline	0.0188	
21	5	QC2	CCB2	0.0210	<0.050
22	2	QC1	CCV2	1.9866	1.99 100%
23	1	D	Drift	5.0587	
24	0	B	Baseline	0.0211	
25	0	B	FinalBase	0.0212	

$\bar{x}$ = ND RPD = -

5x 5/x/10

05/06/10

QC Limits

Channel :	2
QC 1	Unused
QC 2	Unused
QC 3	Unused
QC 4	Unused
QC 5	Unused
QC 6	Unused
QC 7	Unused
QC 8	Unused
QC 9	Unused
QC10	Unused

CORRECTIONS

Channel :	2
Baseline :	No
Drift :	No
Carry over :	No
%:	0.0

* ... Sample offscale
\+ ... Result higher than sample limit
\- ... Result lower than sample limit
P ... Standard passed
F ... Standard failed
N ... Value not calculated or not used
R ... Resample after offscale
M ... Peak marker moved manually
D ... Diluted sample

** <END OF REPORT> **

Std 5/1/10

05/06/10

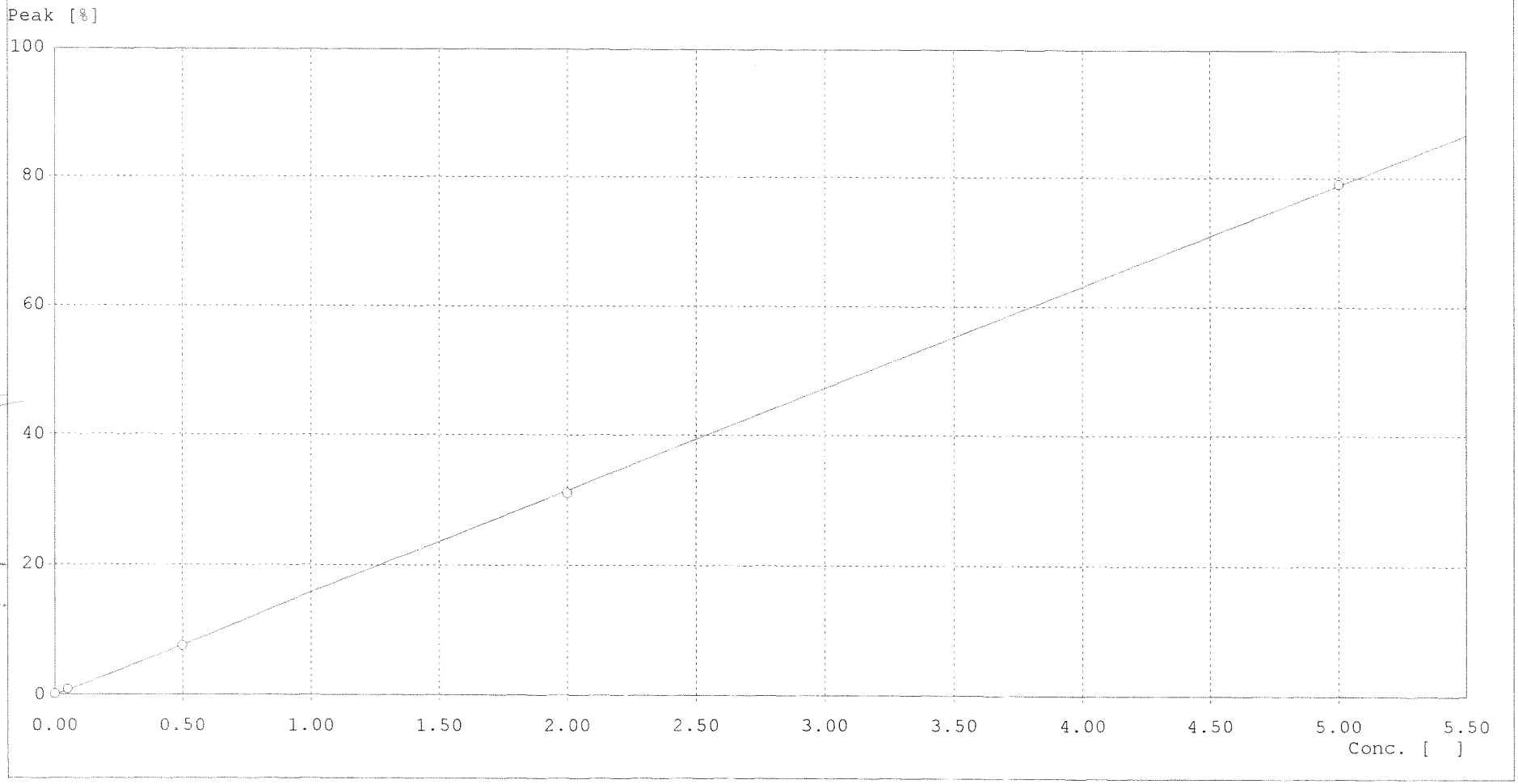
BRAN+LUEBBE

Calibration Curve

Name of run :100506A.run
Comment :

Name of analysis :Nitrite.ANL

Channel :2
Method :Method 2
Curve fit :linear a=-3.2544E-001 b=9.6610E-005
Corr. coeff. :1.0000



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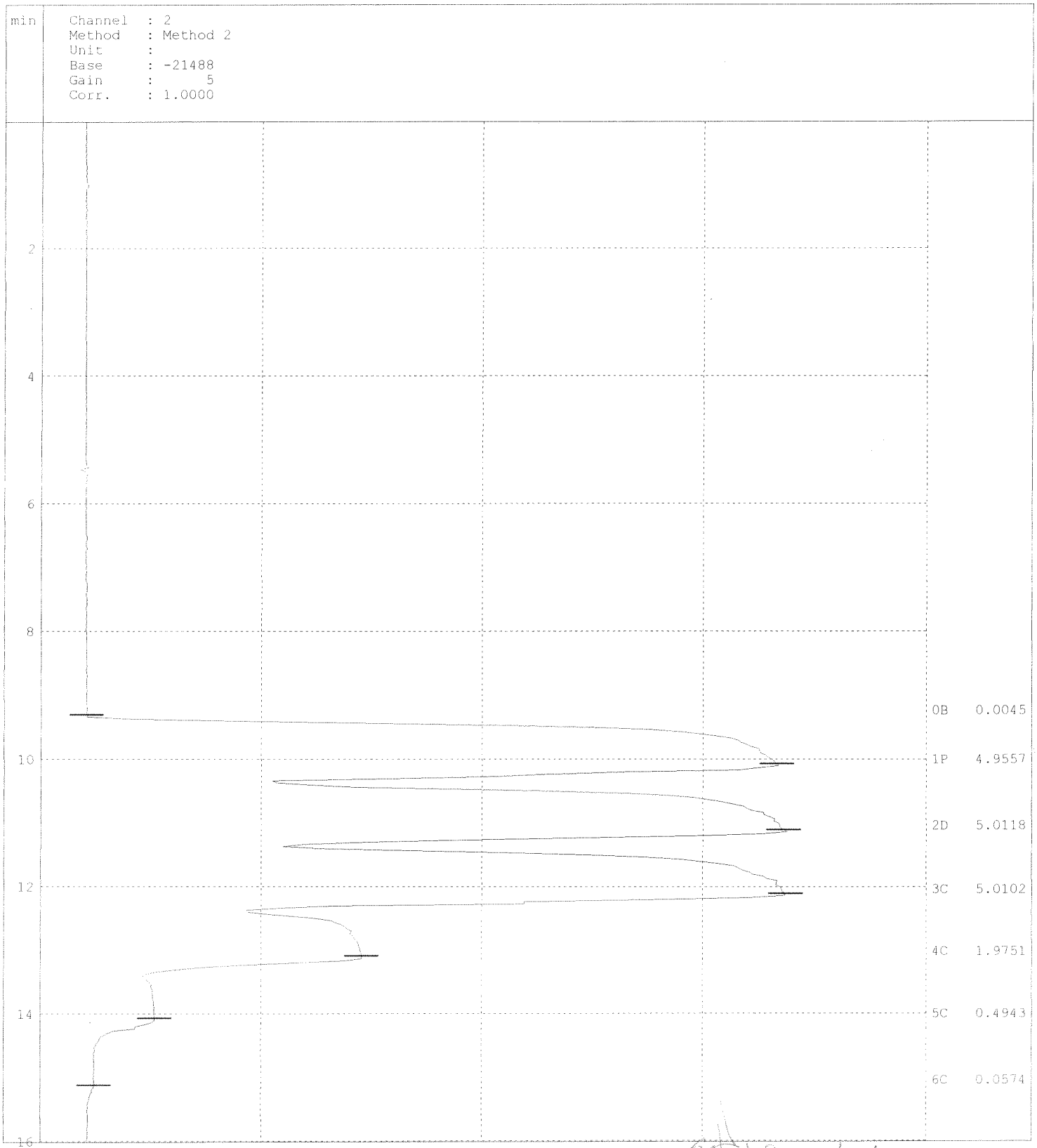
BRAN+LUEBBE

Post-run chart

Name of run :100506A.RUN
Comment :

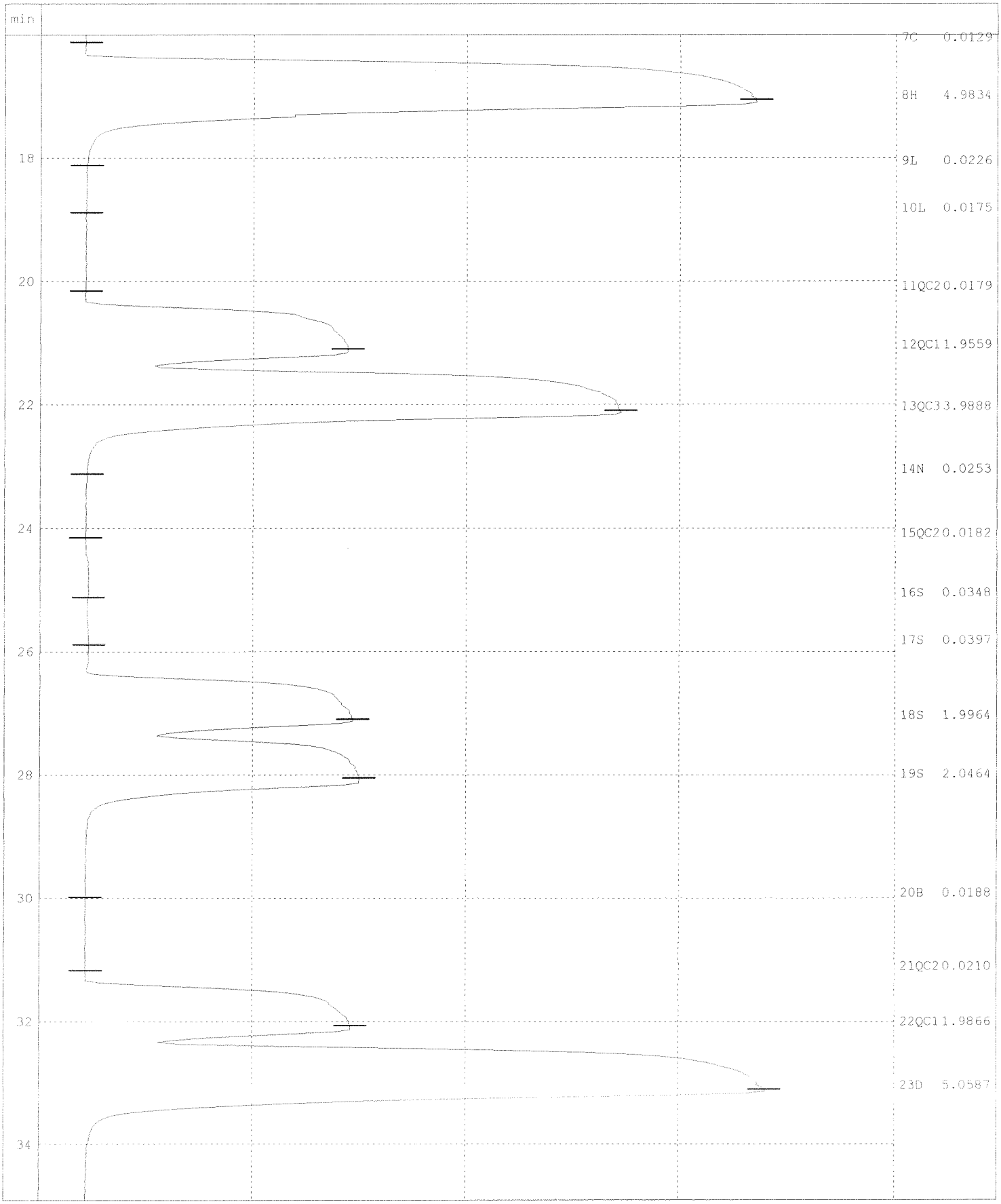
Name of analysis :Nitrite.ANL



05/06/10

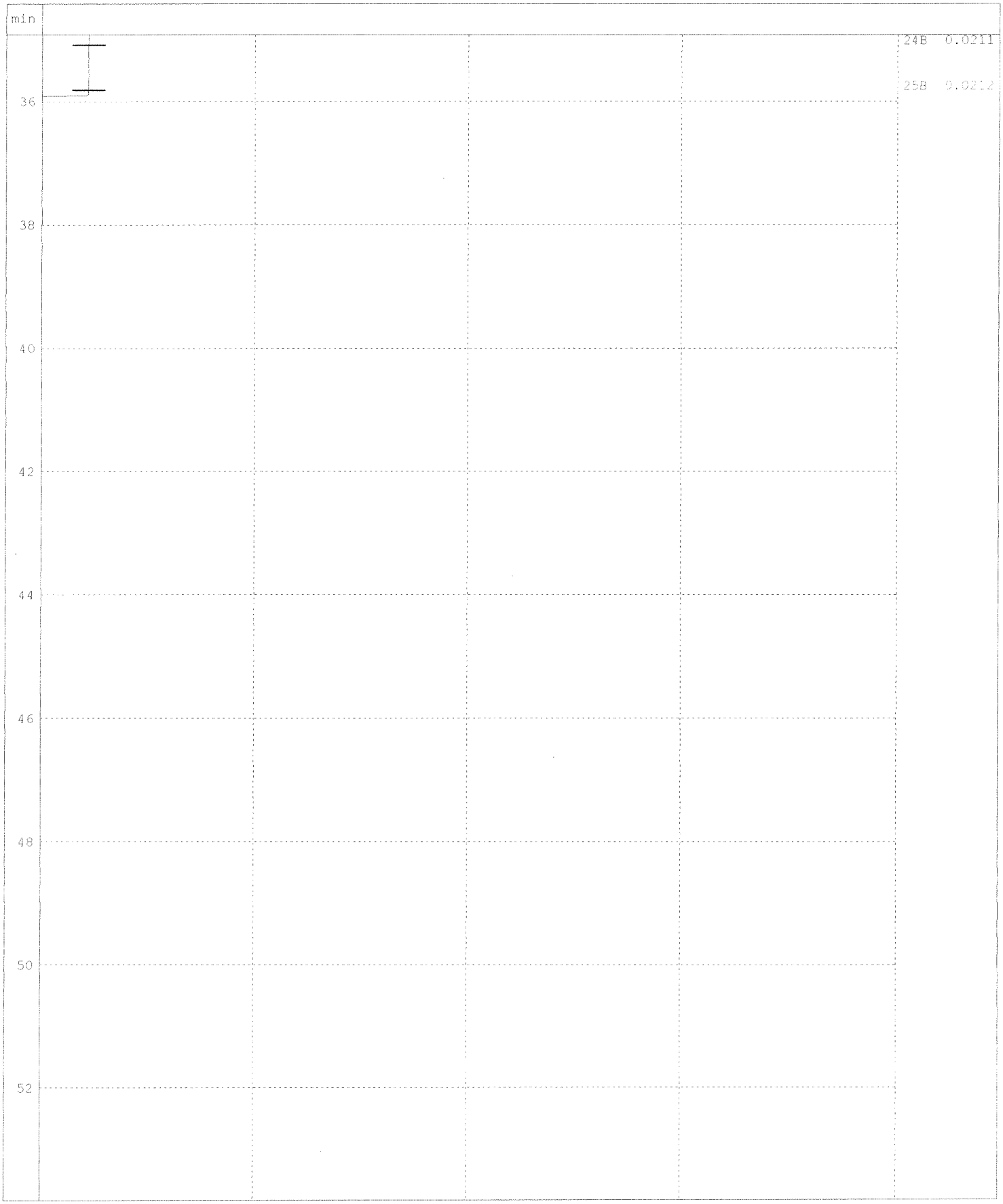
Name of run :100506A.RUN
Comment :

Name of analysis :Nitrite.ANL



Name of run :100506A.RUN
Comment :

Name of analysis :Nitrite.ANL



Work Request # (Original K4057) K4201 K4378 K4428 K4444 K4452 K4467

Tier: I III J I V II V

Date Analyzed: 05/06/10

Analyst: Thuyen

Analysis: NO_2/NO_3 - 353.2

199437

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	(yes)/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	(yes)/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
d.	Are results for methods blanks all ND?	(yes)/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
f.	Are all exceptions explained?	yes/no/(NA)
6.	Are all service requests that apply attached?	(yes)/no/NA
7.	Are all samples labelled correctly?	(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes)/no/NA
9.	Are detection limits and units reported correctly?	(yes)/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	(yes)/no/NA
11.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes)/no/NA

COMMENTS:

Final Approved by: _____ Date: 5/7/10

DQREPORT

I III I I IV III V
K4097, K4201, K4378, K4428, K4444, K4452, K4466,
↓ diss.

BRAN+LUEBBE

Post-run report

Name of Run	:	100506C	Name of Analysis	:	NO2+NO3.ANL
Date of Report	:	5/6/2010	System No.	:	1
Date of Run	:	5/6/2010	Type of System	:	AA3
Operator	:		Start/Stop time	:	10:25 - 11:28
Comment	:				

Channel	:	2	LCS ID#: B+LNO3/, -94-U T.V=14.8
Method	:	Method 2	Spike ID#: X→B+LNH3/, -34-I T.V.=2.00
Unit	:	mg/L	Curve, CCV ID#: B+LNO3/, -85-T T.V=2.00
Calibr. Fit	:	Linear	ICV ID#: B+LNO3/, -80-Q T.V.=2.00
Corr. Coeff.	:	0.9999	MBMS = 2.00
Base	:	-22018	
Gain	:	5	
Sensitivity	:	1.5547	
Sample Limit 1	:		
Sample Limit 2	:		

Pk	Cup		Sample Id	Value	
0	0	B	Baseline	0.0084	
1	1	P	primer	5.0095	
2	1	D	Drift	5.0185	
3	1	C	5.00	5.0186	K4444 = 10mℓ = 13.91g
4	2	C	2.00	1.9516	
5	3	C	0.50	0.5000	
6	4	C	0.05	0.0631	
7	5	C	0	0.0167	
8	1	H1	High	5.0304	
9	0	L1	Low	0.0260	
10	0	L1	Low	0.0260	
11	9	QC3	ICV	1.9407	1.94 97%
12	5	QC2	ICB	0.0213	0.021 J
13	5	QC2	CCB1	0.0152	0.015 J
14	2	QC1	CCV1	1.9407	1.94 97%
15	10	QC4	LCS1*10	1.4615	14.6 99%
16	10	QC4	LCS1dup*10	1.4584	14.6 99%
17	11	S	MB MS	1.9591	1.96 98%
18	0	N	Null	0.0156N	
19	5	QC2	MB1	0.0152	0.015 J
20	12	S	k1004057-001diss.	0.0506	0.051
21	13	S	k1004201-001	0.1234	0.123 $\bar{x}$ = 0.125 RPD=2%
22	14	S	k1004201-001d	0.1262	0.126
23	15	S	k1004201-001ms	2.1643	2.16 102%
24	0	B	Baseline	0.0084	
25	5	QC2	CCB2	0.0133	0.013 J
26	2	QC1	CCV2	1.9490	1.95 98%

5% 5/7/10

05/06/10

27	16	S	k1004201-001msd	2.1579	2.16 102%
28	17	S	k1004201-002	0.0537	0.054
29	18	S	k1004378-001	1.7113	1.71
30	19	S	k1004428-001*5	1.1304	5.65
31	20	S	k1004444-001*200	0.0327	NR
32	21	S	k1004444-001*100	0.0203	<5.00
33	22	S	k1004444-001*10	-0.0268	NR
34	23	S	rinse	0.0114	
35	24	S	k1004452-001	0.3733	0.373
36	0	B	Baseline	0.0084	
37	5	QC2	CCB3	0.0129	0.013
38	2	QC1	CCV3	1.9651	1.97 99%
39	25	S	k1004467-001*50	0.1904	
40	26	S	k1004467*10	0.9021	9.02
41	27	S	rinse	0.0176	
42	28	S	k1004109-001*50	0.0193	NR
43	29	S	rinse	0.0170	
44	0	B	Baseline	0.0084	
45	5	QC2	CCB4	0.0105	0.011
46	2	QC1	CCV4	1.9321	1.93 97%
47	1	D	Drift	5.0185	
48	0	B	Baseline	0.0084	
49	0	B	FinalBase	0.0084	

QC Limits

Channel :	2
QC 1	Unused
QC 2	Unused
QC 3	Unused
QC 4	Unused
QC 5	Unused
QC 6	Unused
QC 7	Unused
QC 8	Unused
QC 9	Unused
QC10	Unused

CORRECTIONS

Channel :	2
Baseline :	Yes
Drift :	Yes
Carry over :	Yes
%:	0.1

SAL 5/12/10

---

* ... Sample offscale
\+ ... Result higher than sample limit
\- ... Result lower than sample limit
P ... Standard passed
F ... Standard failed

05/06/10

N ... Value not calculated or not used
R ... Resample after offscale
M ... Peak marker moved manually
D ... Diluted sample

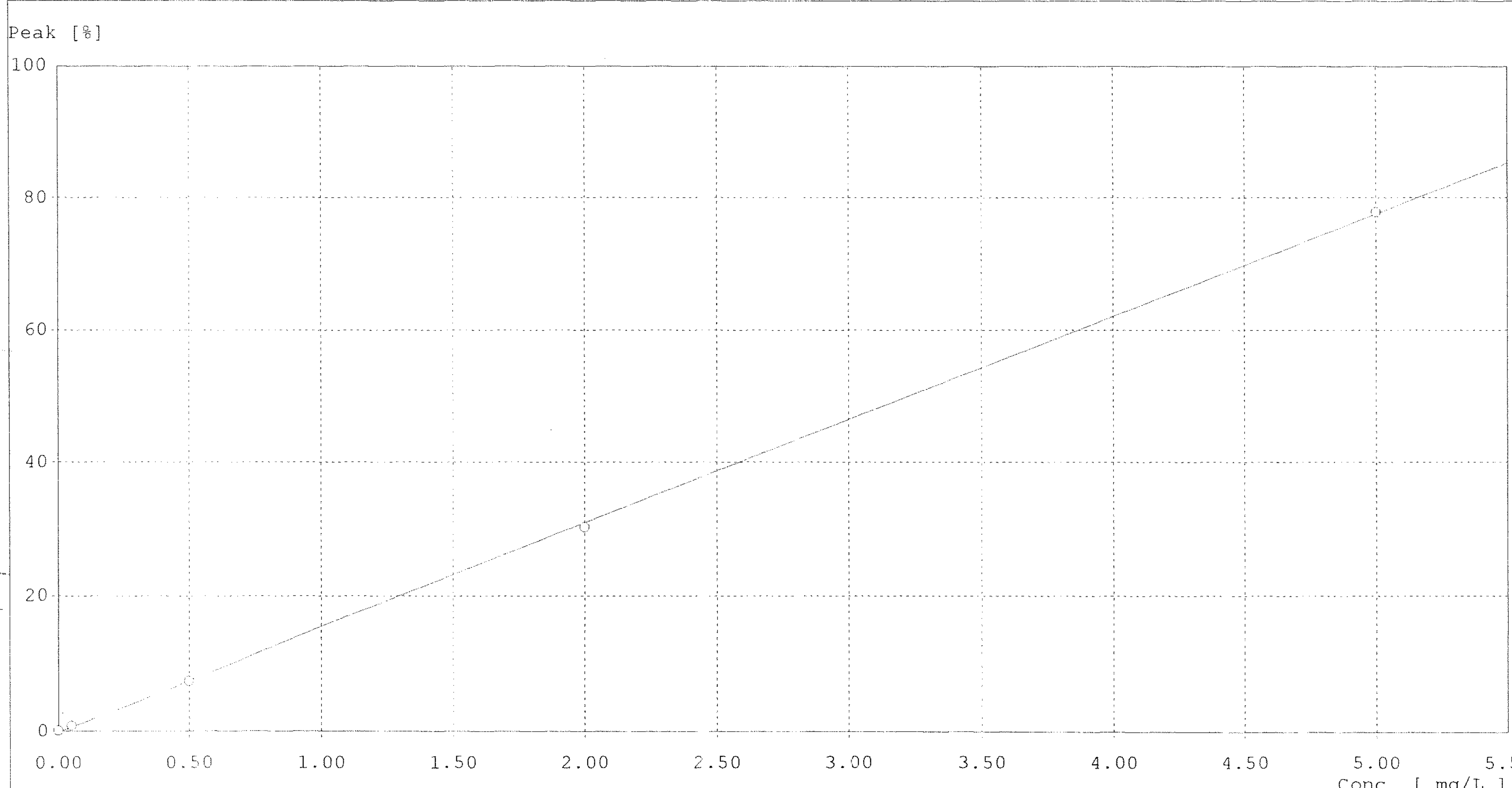
** <END OF REPORT> **

BRAN+LUEBBE
Calibration Curve

Name of run :100506C.run
Comment :

Name of analysis :NO2+NO3.ANL

Channel	:2		
Method	:Method 2		
Curve fit	:linear	a=-3.0349E-001	b=9.8166E-005
Corr. coeff.	:0.9999		



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SAL 5/7/10

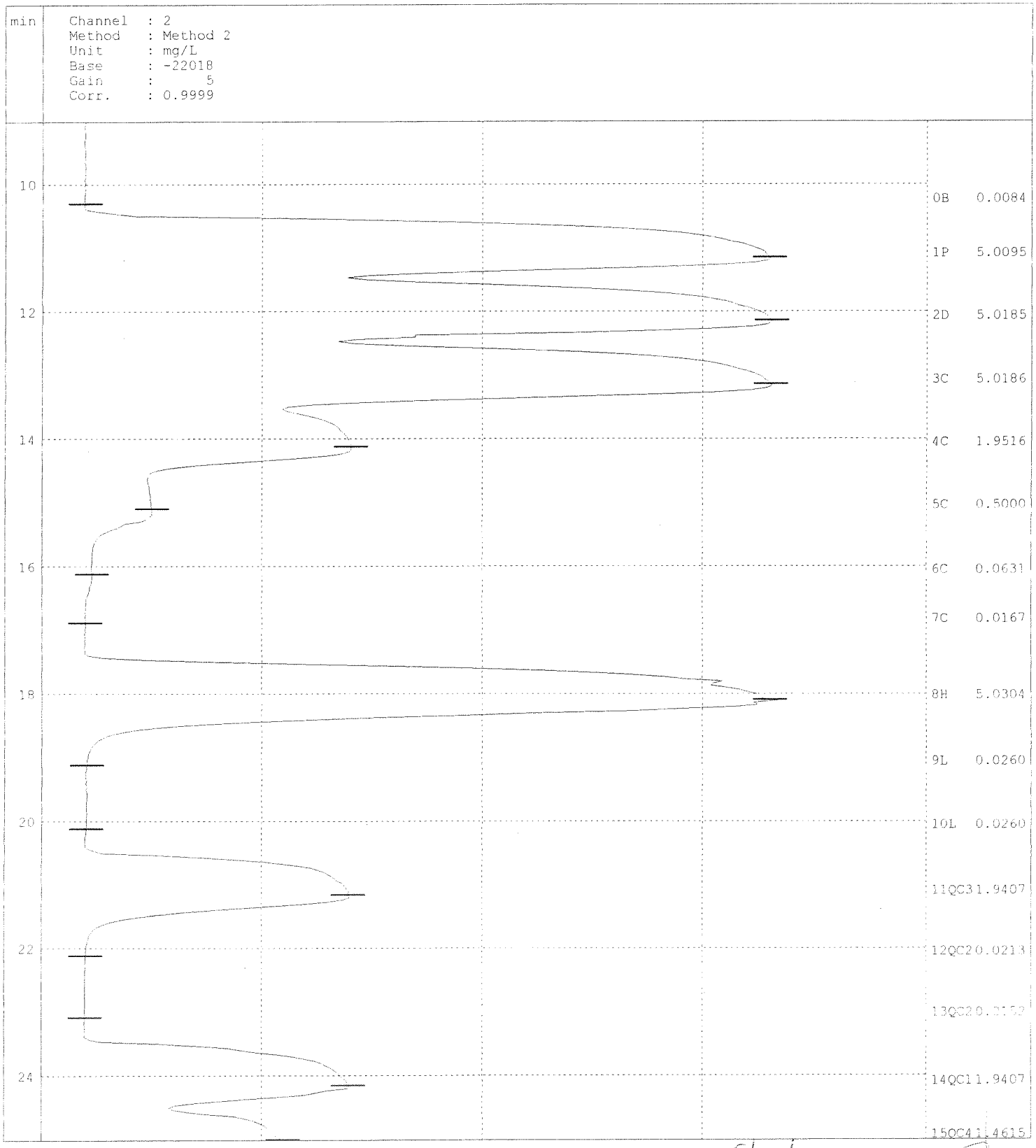
05/06/10

BRAN+LUEBBE

Post-run chart

Name of run :100506C.RUN
Comment :

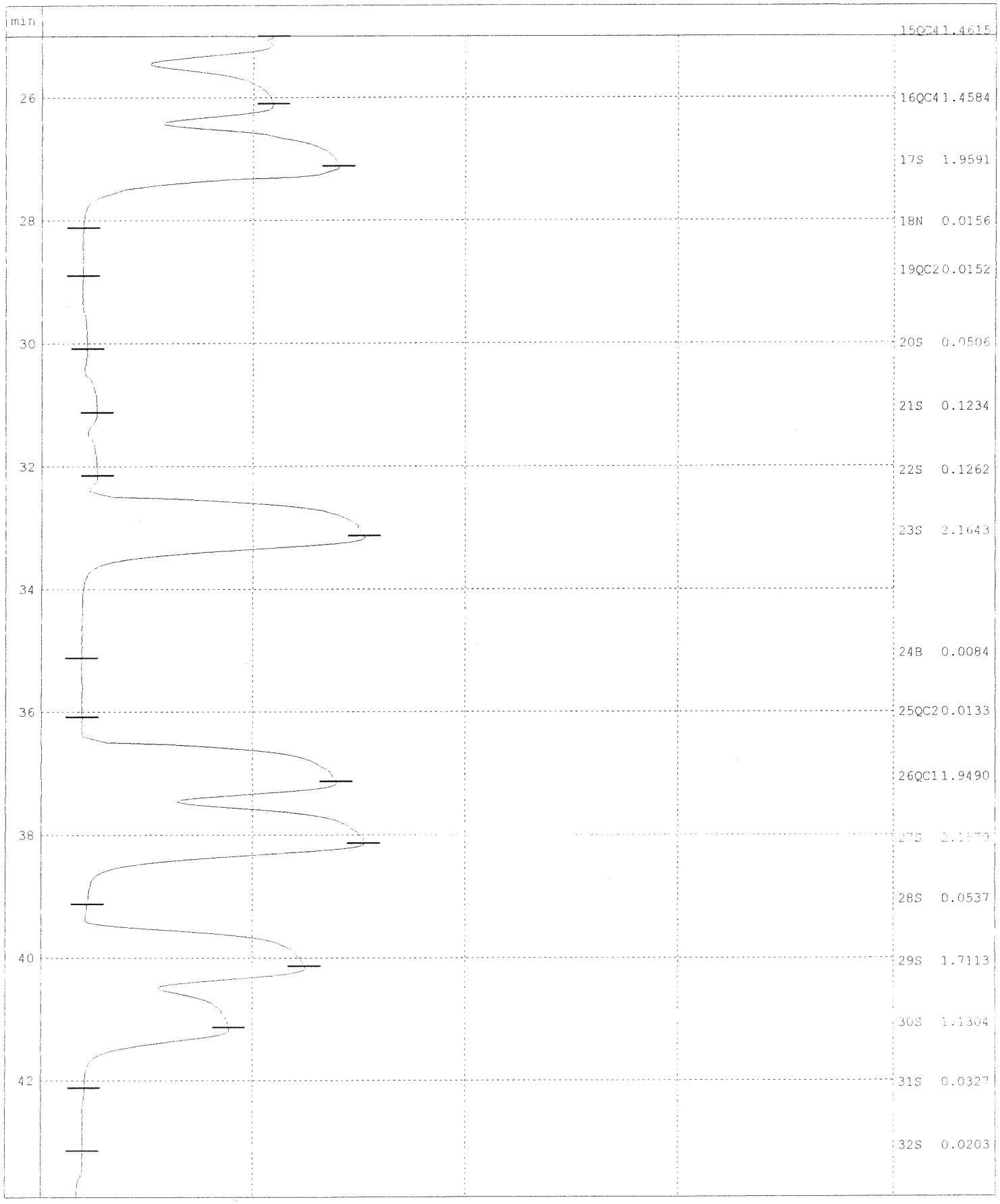
Name of analysis :NO2+NO3.ANL



05/06/10

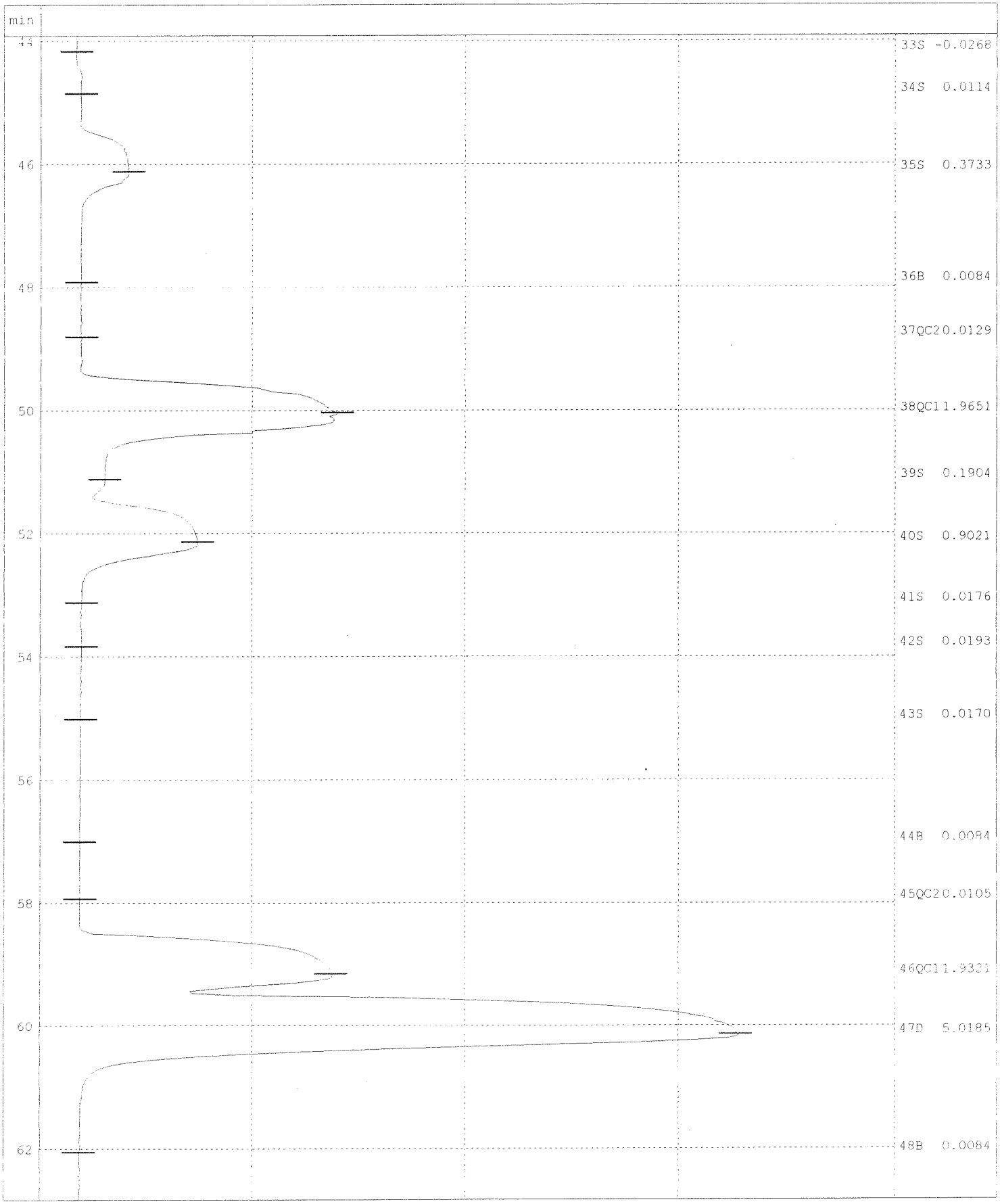
Name of run :100506C.RUN
Comment :

Name of analysis :NO2+NO3.ANL



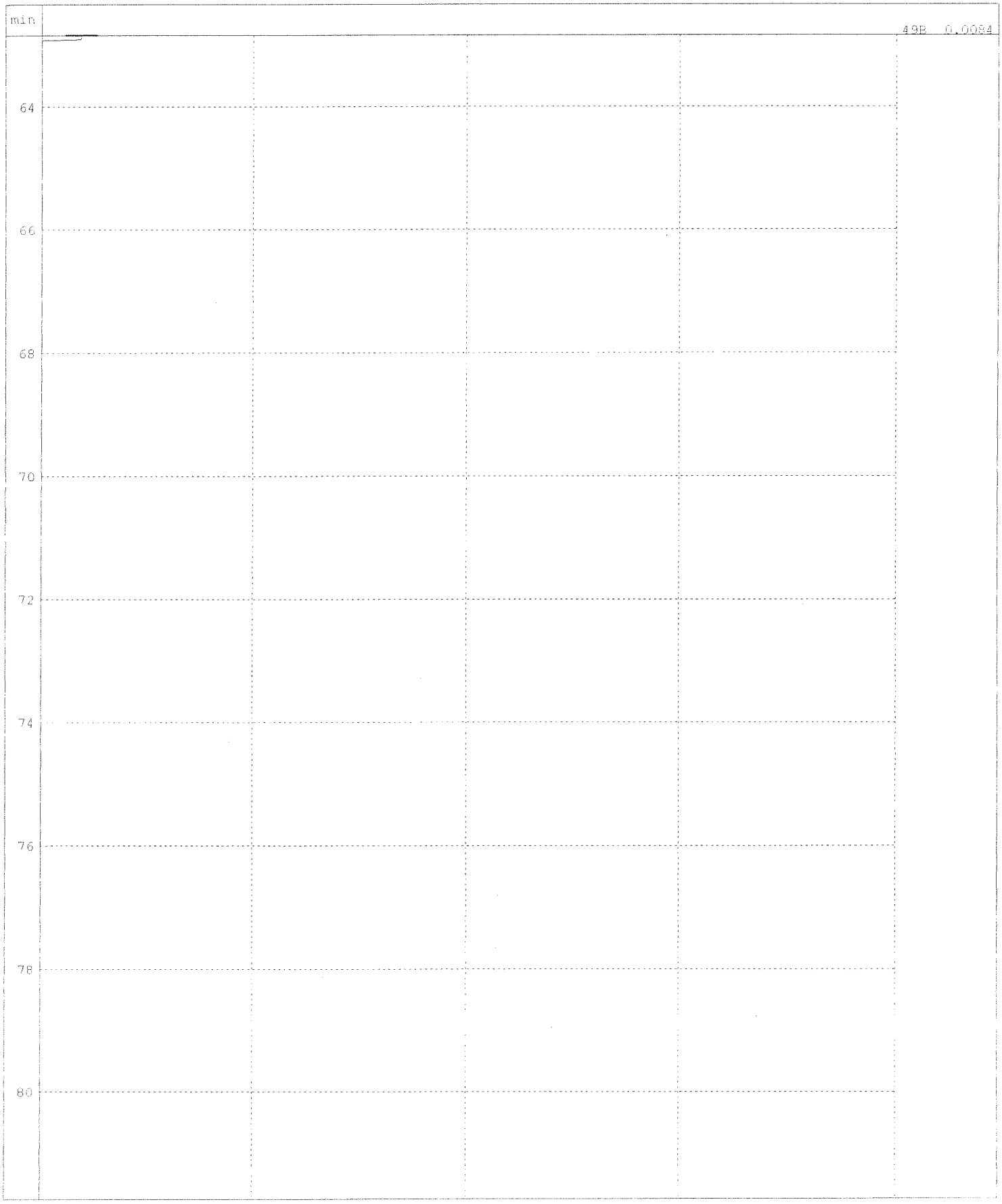
Name of run :100506C.RUN
Comment :

Name of analysis :NO2+NO3.ANL



Name of run :100506C.RUN
Comment :

Name of analysis :NO2+NO3.ANL



Work Request # (Original) K4467

Tier: I

Date Analyzed: 5/5/10

Analyst: gs

Analysis: ophos (H_2O)

199329

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
	a. Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b. MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c. Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d. Are results for methods blanks all ND?	yes/no/NA
	e. Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f. Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Final Approved by: _____ Date: 5/5/10

DQREPORT

Analytical Results Summary

Instrument Name: K-UV-VIS-01 **Analyst:** SSINHA **Analysis Lot:** 199329 **Method/Testcode:** 365.3/O Phos T

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K1004467-001	Orthophosphate as Phosphorus	N/A		Water	0.03 mg/L	50 mL	0.029 mg/L	1	0.004	0.010			5/5/10 15:00:00	N	V
KQ1003965-01	Orthophosphate as Phosphorus	MS	K1004467-001	Water	0.22 mg/L	50 mL	0.217 mg/L	1	0.004	0.010	94		5/5/10 15:00:00	N	V
KQ1003965-02	Orthophosphate as Phosphorus	DMS	K1004467-001	Water	0.41 mg/L	50 mL	0.410 mg/L	1	0.004	0.010	95	62*	5/5/10 15:00:00	N	V
KQ1003965-03	Orthophosphate as Phosphorus	DUP	K1004467-001	Water	0.03 mg/L	50 mL	0.029 mg/L	1	0.004	0.010		<1	5/5/10 15:00:00	N	V
KQ1003965-04	Orthophosphate as Phosphorus	MB		Water	0.00 mg/L	50 mL	0.010 mg/L U	1	0.004	0.010			5/5/10 15:00:00	N	V
KQ1003965-05	Orthophosphate as Phosphorus	LCS		Water	0.34 mg/L	5 mL	3.41 mg/L	1	0.04	0.10	96		5/5/10 15:00:00	N	V
KQ1003965-06	Orthophosphate as Phosphorus	CCB		Water	0.00 mg/L	50 mL	0.010 mg/L U	1	0.004	0.010			5/5/10 15:00:00	N	V
KQ1003965-07	Orthophosphate as Phosphorus	CCB		Water	0.00 mg/L	50 mL	0.010 mg/L U	1	0.004	0.010			5/5/10 15:00:00	N	V
KQ1003965-08	Orthophosphate as Phosphorus	CCV		Water	0.48 mg/L	50 mL	0.480 mg/L	1	0.004	0.010	96		5/5/10 15:00:00	N	V
KQ1003965-09	Orthophosphate as Phosphorus	CCV		Water	0.48 mg/L	50 mL	0.478 mg/L	1	0.004	0.010	96		5/5/10 15:00:00	N	V

K4467-1MS = 0.1ml x 100ppm / 50 ml = 0.2 mg/L

J -1MSD = 0.2ml x 100ppm / 50 ml = 0.4 mg/L

LCS TV = 3.57 mg/L

179

5/5/10

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Ophos (H_2O)
5/4/10 15:00
SS

DU520 S/N: 0112U2001732 1.03
05-MAY-10 15:47:03 SCA Group 0756
Wavelength: 650.0 nm
Formula: A=a+bC a: -0.0031 b: 2.0727

Sample		Net A	Dil X	mg/L	
0001	CCB-1	-0.000	1.0000	0.0015	
0002	CCV-1	0.993	1.0000	0.4803	
0003	MB	-0.001	1.0000	0.0013	
0004	LCS	0.704 5/5 SS	1.0000	0.3414	
0005	K4467-1	0.057	1.0000	0.0291	
0006	-1d	0.057	1.0000	0.0291	
0007	-1MS	0.446	1.0000	0.2168	
0008	-1MSD	0.847	1.0000	0.4104	
0009		~~0.061~~	~~1.0000~~	~~0.0308~~	NR
0010	CCB-2	-0.001	1.0000	0.0008	
0011	CCV-2	0.987	1.0000	0.4778	

CCV = P03|3-24-I
Curve = P03|3-4-I
spike ~~LCS~~ ① = P03|3-77-A
LCS ~~Spike~~ ① = P03|3-79-B

@ SS 5/5/10

SS
5/5/10

ophos (H_2O)
CS 5/4/10

DU520 S/N: 0112U2001732 1.03
05-MAY-10 15:46:52 SCA
Wavelength: 650.0 nm
Formula: A=a+bC a: -0.0031 b: 2.0727

mg/L	Net A	r2=1.000 Var=0.0001
0.0000	-0.000	
0.0100	0.020	
0.0500	0.102	
0.1000	0.208	
0.2000	0.406	
0.5000	1.013	
0.7000	1.463	

5/5/10

Work Request # (Original 4091) 4445 4480 4516 4576 4252 4538 4481 39979

Tier: V II I II II II II V

Date Analyzed: 5.10.10 4483 4484 4455 4467 4591 4575

Analyst: mb V II V V V V

Analysis: alk, bicarb, carb, OH- 4635 V

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.		Is the method name and number correct and appropriate?	yes/no/NA
2.		Holding times met for all analyses and for all samples?	yes/no/NA
3.		Are calculations correct?	yes/no/NA
4.		Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.		All quality control criteria met?	yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.		Are all service requests that apply attached?	yes/no/NA
7.		Are all samples labelled correctly?	yes/no/NA
8.		Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.		Are detection limits and units reported correctly?	yes/no/NA
10.		Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.		Is the unused space on the benchsheet crossed out?	yes/no/NA
12.		Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Alk, 4445 due 5.12

Final Approved by: _____ Date: 5/10/10

DQREPORT

Columbia Analytical Services, Inc.

99979

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

pH Meter Calibration	Sample #	MB	LCS	LCSD	4201-1	4201-1d	4201-2	4201-5
pH 12.45	Initial pH	5.37	4.95	8.93	7.44	7.37	6.02	7.39
	Titrant used to pH 8.3							
pH 10.00	Titrant used to pH 4.5	0.11	3.27	3.39	2.96	2.99	0.33	5.08
10.00	Titrant used to pH 4.2	0.31					0.59	
pH 7.00	Sample Volume	100	50	50	50	50	100	53
7.00	Alkalinity	<2	65.4	67.8	59.2	59.8	<2.0	45.8
pH 4.00	Bicarbonate							
4.00	Carbonate							
pH 4.00 Chk.	Hydroxide							
4.04								

Sample #	4180-1	4216-1	4216-2	BV	4216-3	4216-4	4216-5	4216 6
Initial pH	7.03	6.46	7.39	4.03	6.81	7.14	6.80	6.74
Titrant used to pH 8.3								
Titrant used to pH 4.5	1.31	2.76	17.71		14.88	40.66	15.78	17.89
Titrant used to pH 4.2								
Sample Volume	50	50	50		50	51	53	50
Alkalinity	26.2	55.2	554		298	798	298	358
Bicarbonate								
Carbonate								
Hydroxide								

LCS : ~~APG~~ EPA = _____ Lot # = 5161-698 True Value = 67.9 % Rec. = 96/100 10-194

Probe ID#: NU1 Titrant Manf: RCC 1903615

Calculations : Alkalinity = $\frac{A \times N \times 50{,}000}{\text{Volume (mls)}}$ A = mls standard titrant used; N = Normality of standard acid 0.02 / 0.1 N(HCL)

Comments: 0.1N 5.10 4201-1/1d = 59.5 RPD = 1

Analyzed By: [illegible] Date: 5.10.16

Reveiwed By: [illegible] Date: 5/11/16

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	4376-1	4376-1d	4376-8	4376-9	4252-1*	4252-1s*	BC	4252-2*
Initial pH	6.73	6.71	7.55	6.81	6.62	6.56	4.04	6.94
Titrant used to pH 8.3								
Titrant used to pH 4.5	10.59	9.72	10.62	10.58	8.49	8.33		13.29
Titrant used to pH 4.2								
Sample Volume	54	50	51	50	~~50~~ 50	50		52
Alkalinity	196	194	208	212	849	833		1280
Bicarbonate								
Carbonate								
Hydroxide								

Sample #	4252-3*	4252-4*	4252-5*	4252-6*	4252-7	4252-8*	4338-1	4338-2
Initial pH	7.01	7.06	7.48	6.91	7.11	6.86	7.74	7.77
Titrant used to pH 8.3								
Titrant used to pH 4.5	18.02	12.59	15.06	23.72	1.91	25.21	13.09	10.81
Titrant used to pH 4.2								
Sample Volume	50	52	10	50	50	50	50	50
Alkalinity	1800	1210	7530	2370	38.2	2520	262	216
Bicarbonate							262	216
Carbonate							<2	<2
Hydroxide								

Sample #	4338-2d	BC	MB	LCS	4481-3	4481-4	4481-5	4481-5d
Initial pH	7.79	4.03	5.66	8.98	6.62	6.69	7.22	7.25
Titrant used to pH 8.3								
Titrant used to pH 4.5	10.89		0.19	2.52	20.41	25.88	9.21	9.08
Titrant used to pH 4.2			0.38					
Sample Volume	50		100	50	50	50	50	50
Alkalinity	218		<2	70.4	408	518	184	182
Bicarbonate	218							
Carbonate	<2							
Hydroxide								

Comments: Lab 5.10

4376-1 1d $\bar{x}$ = 195 RPD = 1

4252* 1 1d $\bar{x}$ = 841 RPD = 2

4339-2 2d $\bar{x}$ = 217 RPD < 1

4481-5 5d $\bar{x}$ = 183 RPD = 1

Analyzed By: nb	Date: 5.10.16
Reveiwed By:	Date: 5/11/16

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	4483-2	4414-1	4455-1	4455-2	BV	4467-1	4591-1	4575-1
Initial pH	6.85	6.62	7.71	6.26	4.04	7.27	7.17	6.81
Titrant used to pH 8.3								
Titrant used to pH 4.5	3.71	1.06	2.98	0.35		8.98	3.68	13.13
Titrant used to pH 4.2				0.58				
Sample Volume	50	100	50	100		52	50	50
Alkalinity	74.2	10.6	59.6	<2		173	71.6	263
Bicarbonate						173		263
Carbonate						<2		<2
Hydroxide						<2		<2

Sample #	4575-2	4575-3	4575-4	4635-1	4635-2	4635-3	MB*	BV
Initial pH	7.11	7.07	8.58	7.57	6.83	7.11	5.39	4.03
Titrant used to pH 8.3			0.04					
Titrant used to pH 4.5	10.98	10.72	7.71	13.81	0.16	16.12	0.01	
Titrant used to pH 4.2			0.91		0.37		0.02	
Sample Volume	50	50	100	50	100	52	100	
Alkalinity	220	214	5.1	276	<2	310	<2	
Bicarbonate	220	214	~~74.3~~	276	<2	310		
Carbonate	<2	<2	~~0.8~~ <2	<2	<2	<2		
Hydroxide	<2	<2	~~0.5~~ <2	<2	<2	<2		

Sample #	LCS*	BV						
Initial pH	8.88	4.04						
Titrant used to pH 8.3								
Titrant used to pH 4.5	0.64							
Titrant used to pH 4.2								
Sample Volume	50							
Alkalinity	64.0							
Bicarbonate								
Carbonate								
Hydroxide								

Comments: anb 5.10

Analyzed By: nb	Date: 5.10.10
Reveiwed By:	Date: 5/11/10

DSA 5/11/10 RE

Work Request # (Original) 4455, 4467, 4483, 4593, 4488, 4587, 4590, 4591

Tier: III III II I I I I II

Date Analyzed: 5/11/10

Analyst: CES

Analysis: TDS

200127

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	(yes)/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/(NA)
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/(NA)
d.	Are results for methods blanks all ND?	(yes)/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
f.	Are all exceptions explained?	(yes)/no/NA
6.	Are all service requests that apply attached?	(yes)/no/NA
7.	Are all samples labelled correctly?	(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes)/no/NA
9.	Are detection limits and units reported correctly?	(yes)/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/(NA)
11.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes)/no/NA

COMMENTS:

Final Approved by: [signature] Date: 5/17/10

DQREPORT

Analytical Results Summary

Instrument Name: K-Balance-31 **Analyst:** CSETHE **Analysis Lot:** 200127 **Method/Testcode:** SM 2540 C/TDS

ab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
1004455-001	Solids, Total Dissolved	N/A		Water	87.00 mg/L	100 ml	87.0 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004455-002	Solids, Total Dissolved	N/A		Water	0.00 mg/L	200 ml	5.0 mg/L U	1	5.0	5.0			5/11/10 14:00	N	V
1004467-001	Solids, Total Dissolved	N/A		Water	327.00 mg/L	100 ml	327 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004483-001	Solids, Total Dissolved	N/A		Water	193.00 mg/L	100 ml	193 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004483-002	Solids, Total Dissolved	N/A		Water	222.00 mg/L	100 ml	222 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004488-002	Solids, Total Dissolved	N/A		Water	224.00 mg/L	100 ml	224 mg/L	1	5.0	5.0			5/11/10 14:00	N	I
1004587-001	Solids, Total Dissolved	N/A		Water	137.00 mg/L	100 ml	137 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004587-002	Solids, Total Dissolved	N/A		Water	136.00 mg/L	100 ml	136 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004590-001	Solids, Total Dissolved	N/A		Water	237.00 mg/L	100 ml	237 mg/L	1	5.0	5.0			5/11/10 14:00	N	I
1004591-001	Solids, Total Dissolved	N/A		Water	202.00 mg/L	100 ml	202 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-001	Solids, Total Dissolved	N/A		Water	71.00 mg/L	100 ml	71.0 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-002	Solids, Total Dissolved	N/A		Water	172.00 mg/L	100 ml	172 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-003	Solids, Total Dissolved	N/A		Water	239.00 mg/L	100 ml	239 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-004	Solids, Total Dissolved	N/A		Water	119.00 mg/L	100 ml	119 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-005	Solids, Total Dissolved	N/A		Water	199.00 mg/L	100 ml	199 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-006	Solids, Total Dissolved	N/A		Water	198.00 mg/L	100 ml	198 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-007	Solids, Total Dissolved	N/A		Water	197.00 mg/L	100 ml	197 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-008	Solids, Total Dissolved	N/A		Water	98.00 mg/L	100 ml	98.0 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-009	Solids, Total Dissolved	N/A		Water	81.00 mg/L	100 ml	81.0 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
1004593-010	Solids, Total Dissolved	N/A		Water	123.00 mg/L	100 ml	123 mg/L	1	5.0	5.0			5/11/10 14:00	N	V
Q1004214-01	Solids, Total Dissolved	MB		Water	-1.00 mg/L	200 ml	5.0 mg/L U	1	5.0	5.0			5/11/10 14:00	N	V
Q1004214-02	Solids, Total Dissolved	MB		Water	2.50 mg/L	200 ml	5.0 mg/L U	1	5.0	5.0			5/11/10 14:00	N	V
Q1004214-03	Solids, Total Dissolved	LCS		Water	742.00 mg/L	50 ml	742 mg/L	1	5.0	5.0	99		5/11/10 14:00	N	V
Q1004214-04	Solids, Total Dissolved	DLCS		Water	726.00 mg/L	50 ml	726 mg/L	1	5.0	5.0	97	2	5/11/10 14:00	N	V
Q1004214-05	Solids, Total Dissolved	DUP	K1004455-001	Water	80.00 mg/L	100 ml	80.0 mg/L	1	5.0	5.0		8	5/11/10 14:00	N	V
Q1004214-06	Solids, Total Dissolved	DUP	K1004467-001	Water	326.00 mg/L	100 ml	326 mg/L	1	5.0	5.0		<1	5/11/10 14:00	N	V

187

CES 5/15/10

5/11/10

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.: _____ Method: EPA SM 2540 C

Analysis: Total Dissolved Solids

200127

Sample #	Crucible #	Conductivity	Sample Volume (ml)	Wt, Cru. + Dry sample (1) (g)	Wt, Cru. + Dry sample (2) (g)	Wt, Cru. + Dry sample (3) (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	TDS (mg/L)	TDS (mg/L) reported
MB	X10		200	121.0098	121.0103		121.0100	-0.0002	-1	<5.0
MB	Sarah P		200	96.8631	96.8635		96.8626	0.0005	3	<5.0
LCS	Cooter		50	69.5135	69.5132		69.4764	0.0371	742	742
DLCS	21 S		50	75.4957	75.4957		75.4594	0.0363	726	726
K1004455-001	Onyx	136	100	70.6467	70.6470		70.6380	0.0087	87	87.0
K1004455-002	C5	2	200	75.4064	75.4067		75.4064	0.0000	0	<5.0
K1004467-001	16 S	488	100	84.8401	84.8399		84.8074	0.0327	327	327
K1004483-001	28 C	326	100	75.9014	75.9010		75.8821	0.0193	193	193
K1004483-002	4 S	353	100	80.2548	80.2543		80.2326	0.0222	222	222
K1004593-001	DE	72	100	67.9878	67.9876		67.9807	0.0071	71	71.0
K1004593-002	III	273	100	73.7428	73.7430		73.7256	0.0172	172	172
K1004593-003	1 S	494	100	75.7927	75.7925		75.7688	0.0239	239	239
K1004593-004	Mona	180	100	71.8558	71.8560		71.8439	0.0119	119	119
K1004593-005	18 S	359	100	84.1876	84.1874		84.1677	0.0199	199	199
K1004593-006	1/9/2008	303	100	82.6702	82.6699		82.6504	0.0198	198	198
K1004593-007	44 S	337	100	81.7349	81.7347		81.7152	0.0197	197	197
K1004593-008	NC2	135	100	86.0087	86.0092		85.9989	0.0098	98	98.0
K1004593-009	K1	89	100	76.3256	76.3257		76.3175	0.0081	81	81.0
K1004593-010	G16	155	100	78.0708	78.0712		78.0585	0.0123	123	123
K1004488-002	XIV	270	100	74.8887	74.8888		74.8663	0.0224	224	224
K1004587-001	31 C	201	100	78.7742	78.7743		78.7605	0.0137	137	137
K1004587-002	23 C	180	100	75.0051	75.0047		74.9915	0.0136	136	136
K1004590-001	3 C	322	100	71.2018	71.2022		71.1781	0.0237	237	237
K1004591-001	pig	361	100	77.2845	77.2840		77.2643	0.0202	202	202
K1004455-001d	Maxwell	136	100	67.2697	67.2692		67.2617	0.0080	80	80.0

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml) Balance#31

APG #:4033 Lot# 041109 ID# TDS/1-25-A T.V. = 750 % Rec =

Wt (1)	Start	1630		Wt (2)	Start 1030		Wt (3)	Start 1330
5/13/10	Stop	1030		5/14/10	Stop 1055		5/15/10	Stop 1030
Wt (1)	Start	105		Wt (2)	Start 180		Wt (3)	Start 180
Temp	Stop	105		Temp	Stop 180		Temp	Stop 180

Analyzed By:	CES		Date Analyzed:	5/11/2010	14:00
Reviewed By:	SM		Date Reviewed:	5/17/10	

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.:

Method: EPA SM 2540 C

Analysis: Total Dissolved Solids

200127

Sample #	Crucible #	Conductivity	Sample Volume (ml)	Wt, Cru. + Dry sample (1) (g)	Wt, Cru. + Dry sample (2) (g)	Wt, Cru. + Dry sample (3) (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	TDS (mg/L)	TDS (mg/L) reported
K1004467-001d	duck	488	100	68.6113	68.6110		68.5787	0.0326	326	326
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
					CES	5/15/10		0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml)

			date	time
Analyzed By:	CES	Date Analyzed:	5/11/2010	14:00
Reviewed By:	[illegible]	Date Reviewed:	5/17/10	

199573

Work Request # (Original K4467) 4150, 4548

Tier: V II V

Date Analyzed: 5/6/10

Analyst: K Cuevas

Analysis: pH 4500

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.		Is the method name and number correct and appropriate?	yes/no/NA
2.		Holding times met for all analyses and for all samples?	yes/no/NA
3.		Are calculations correct?	yes/no/NA
4.		Is the reporting basis correct (Dry Weight)?	yes/no/NA
5		All quality control criteria met?	yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs, all within acceptance limits?	yes/no/NA
	d.	Are results for method blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS %Rec, MS/DMS %Rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.		Are all service requests that apply attached?	yes/no/NA
7.		Are all samples labeled correctly?	yes/no/NA
8.		Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.		Are detection limits and units reported correctly?	yes/no/NA
10.		Are proper Analytical Batch stickers included on report?	yes/no/NA
11.		Is the unused space on the benchsheet crossed out?	yes/no/NA
12.		Was analysis turned in by the due date (n-2)? If not, record SR#.	yes/no/NA

COMMENTS:

RPH

4467
4510

Final Approval By: [signature] Date: 5/7/10

DQREPORT

① KC 5/6/10 tc

199573

K4467, 4150, 4548

Method: SM 4500 H+B

Sample #	pH	Time Analyzed	Temp, C
pH 12.45 Buffer			
pH 10.00 Buffer	10.00	1428	25.2
pH 7.00 Buffer	7.00	1427	25.4
pH 4.00 Buffer	4.00	1426	24.7
pH 1.00 Buffer			
Buffer Check	6.42	1503	24.1
LCS	↓ 4.03	↓ 1502	↓ 24.1
4467-1	7.46	1504	25.6
4150-4	6.24	1505	25.5
① ↓ 4d			
4548-3	7.88	1512	25.3
↓ 3d	7.84	1513	26.1
BC	4.01	1514	24.4
Buffer Check			

Sample #	pH	Time Analyzed	Temp, C
Buffer Check			
Buffer Check			

ERA

LCS = APG 4063 Lot# 129934 ID# = Cond-1-54-pR ① T.V. = 6.46 % REC = 99

pH 4.00 buffer Cond/1-75-K pH 7.00 buffer Cond/1-77-N pH 10.00 buffer Cond/1-79-K

ph 1.00 buffer Cond/1-73-____ pH 12.45 buffer Cond/1-81-____

4150-4|4d $\bar{x}$= RPD= ①

4548-3|3d $\bar{x}$=7.86 RPD=<1%

Analyzed by: KC	Date: 5/6/10
Reviewed by:	Date: 5/7/10

PH

Metals

Columbia Analytical Services

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Exponent
Project Name: Heglar Kronquist
Project No.: 0907194.000.0601

Service Request: K1004467

Sample Name:	Lab Code:
Batch QCD	K1004452-001D
Batch QCS	K1004452-001S
BH-13	K1004467-001 DISS
BH-13D	K1004467-001D DISS
BH-13S	K1004467-001S DISS
Method Blank	K1004467-MB

Comments:

Approved By: JC **Date:** 5/28/10

METALS

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Exponent	**Service Request:**	K1004467
Project No.:	0907194.000.0601	**Date Collected:**	5/4/2010
Project Name:	Heglar Kronquist	**Date Received:**	5/5/2010
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: BH-13 **Lab Code:** K1004467-001 DISS

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50.0	2.0	1.0	05/08/10	05/11/10	1350		
Antimony	200.8	0.05	0.02	1.0	05/08/10	05/12/10	0.39		
Arsenic	200.8	0.50	0.07	1.0	05/08/10	05/12/10	1.98		
Barium	200.7	5.0	0.4	1.0	05/08/10	05/11/10	47.3		
Beryllium	200.8	0.020	0.003	1.0	05/08/10	05/12/10	0.074		
Cadmium	200.8	0.020	0.003	1.0	05/08/10	05/12/10	0.070		
Calcium	200.7	50	6.0	1.0	05/08/10	05/11/10	54600		
Chromium	200.8	0.20	0.04	1.0	05/08/10	05/12/10	2.02		
Cobalt	200.8	0.020	0.003	1.0	05/08/10	05/12/10	2.470		
Copper	200.8	0.10	0.02	1.0	05/08/10	05/12/10	4.24		
Iron	200.7	20.0	3.0	1.0	05/08/10	05/11/10	2570		
Lead	200.8	0.020	0.005	1.0	05/08/10	05/12/10	2.300		
Magnesium	200.7	20.0	2.0	1.0	05/08/10	05/11/10	17900		
Manganese	200.7	5.0	0.2	1.0	05/08/10	05/11/10	218		
Mercury	245.1	0.20	0.02	1.0	05/10/10	05/12/10	0.02	U	
Nickel	200.8	0.20	0.03	1.0	05/08/10	05/12/10	5.22		
Potassium	200.7	400	50	1.0	05/08/10	05/11/10	5170		
Selenium	200.8	1.0	0.3	1.0	05/08/10	05/12/10	0.3	J	
Silver	200.8	0.020	0.004	1.0	05/08/10	05/12/10	0.010	J	
Sodium	200.7	200	20	1.0	05/08/10	05/11/10	17800		
Thallium	200.8	0.020	0.002	1.0	05/08/10	05/12/10	0.015	J	
Vanadium	200.8	0.20	0.03	1.0	05/08/10	05/12/10	4.00		
Zinc	200.8	0.50	0.20	1.0	05/08/10	05/12/10	7.73		

% Solids: 0.0

Comments:

METALS

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Exponent	**Service Request:**	K1004467
Project No.:	0907194.000.0601	**Date Collected:**	
Project Name:	Heglar Kronquist	**Date Received:**	
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: Method Blank **Lab Code:** K1004467-MB

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50.0	2.0	1.0	05/08/10	05/11/10	2.0	U	
Antimony	200.8	0.05	0.02	1.0	05/08/10	05/12/10	0.02	U	
Arsenic	200.8	0.50	0.07	1.0	05/08/10	05/12/10	0.08	J	
Barium	200.7	5.0	0.4	1.0	05/08/10	05/11/10	0.4	U	
Beryllium	200.8	0.020	0.003	1.0	05/08/10	05/12/10	0.003	U	
Cadmium	200.8	0.020	0.003	1.0	05/08/10	05/12/10	0.003	U	
Calcium	200.7	50	6.0	1.0	05/08/10	05/11/10	7.2	J	
Chromium	200.8	0.20	0.04	1.0	05/08/10	05/12/10	0.10	J	
Cobalt	200.8	0.020	0.003	1.0	05/08/10	05/12/10	0.003	U	
Copper	200.8	0.10	0.02	1.0	05/08/10	05/12/10	0.02	U	
Iron	200.7	20.0	3.0	1.0	05/08/10	05/11/10	3.0	J	
Lead	200.8	0.020	0.005	1.0	05/08/10	05/12/10	0.005	U	
Magnesium	200.7	20.0	2.0	1.0	05/08/10	05/11/10	2.0	U	
Manganese	200.7	5.0	0.2	1.0	05/08/10	05/11/10	0.2	U	
Mercury	245.1	0.20	0.02	1.0	05/10/10	05/12/10	0.02	U	
Nickel	200.8	0.20	0.03	1.0	05/08/10	05/12/10	0.03	U	
Potassium	200.7	400	50	1.0	05/08/10	05/11/10	50	U	
Selenium	200.8	1.0	0.3	1.0	05/08/10	05/12/10	0.3	U	
Silver	200.8	0.020	0.004	1.0	05/08/10	05/12/10	0.004	U	
Sodium	200.7	200	20	1.0	05/08/10	05/11/10	20	U	
Thallium	200.8	0.020	0.002	1.0	05/08/10	05/12/10	0.002	U	
Vanadium	200.8	0.20	0.03	1.0	05/08/10	05/12/10	0.03	U	
Zinc	200.8	0.50	0.20	1.0	05/08/10	05/12/10	0.20	U	

% Solids: 0.0

Comments:

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS Mixed

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4957	99	10000	9692	97	9778	98	200.7
Antimony	25.0	23.7	95	25.0	25.5	102	25.3	101	200.8
Arsenic	25.0	25.5	102	25.0	25.0	100	25.6	102	200.8
Barium	5000	5151	103	10000	9939	99	9852	99	200.7
Beryllium	2.5	2.6	104	25.0	24.8	99	26.6	106	200.8
Cadmium	12.5	12.7	102	25.0	25.4	102	25.4	102	200.8
Calcium	12500	12900	103	10000	10140	101	9969	100	200.7
Chromium	10.0	10.1	101	25.0	24.8	99	23.7	95	200.8
Cobalt	25.0	25.1	100	25.0	24.9	100	24.4	98	200.8
Copper	12.5	12.9	103	25.0	25.2	101	25.3	101	200.8
Iron	2500	2615	105	10000	10190	102	10010	100	200.7
Lead	25.0	24.5	98	25.0	24.4	98	25.1	100	200.8
Magnesium	12500	12650	101	10000	10050	100	9773	98	200.7
Magnesium	12500	12770	102	10000	10060	101	10010	100	200.7
Manganese	1250	1272	102	250	247	99	249	100	200.7
Manganese	1250	1269	102	250	246	98	243	97	200.7
Mercury	5.00	5.03	101	5.00	5.29	106	5.23	105	245.1
Nickel	25.0	25.2	101	25.0	24.6	98	24.6	98	200.8
Potassium	12500	12830	103	10000	10040	100	10060	101	200.7
Selenium	25.0	25.5	102	25.0	24.6	98	25.8	103	200.8
Silver	12.5	12.6	101	25.0	25.5	102	25.9	104	200.8
Sodium	12500	12670	101	10000	10060	101	10060	101	200.7
Thallium	25.0	24.4	98	25.0	24.1	96	25.0	100	200.8
Vanadium	25.0	25.9	104	25.0	25.2	101	24.2	97	200.8
Zinc	25.0	25.5	102	25.0	25.0	100	25.1	100	200.8

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS Mixed

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				10000	9738	97	9772	98	200.7
Antimony				25.0	25.0	100			200.8
Arsenic				25.0	25.8	103			200.8
Barium				10000	10000	100	10080	101	200.7
Beryllium				25.0	25.6	102			200.8
Cadmium				25.0	26.2	105			200.8
Calcium				10000	10030	100	10030	100	200.7
Chromium				25.0	25.7	103			200.8
Cobalt				25.0	25.4	102			200.8
Copper				25.0	26.2	105			200.8
Iron				10000	10020	100	10090	101	200.7
Lead				25.0	24.4	98			200.8
Magnesium				10000	9795	98	9953	100	200.7
Magnesium				10000	9978	100	10020	100	200.7
Manganese				250	251	100	252	101	200.7
Manganese				250	244	98	236	94	200.7
Nickel				25.0	25.6	102			200.8
Potassium				10000	10060	101	10160	102	200.7
Selenium				25.0	25.9	104			200.8
Silver				25.0	25.8	103			200.8
Sodium				10000	9968	100	10050	100	200.7
Thallium				25.0	24.7	99			200.8
Vanadium				25.0	26.5	106			200.8
Zinc				25.0	25.9	104			200.8

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP Initial			CRDL Standard for ICP Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50.0	48.5	97		
Antimony				0.05	0.03	60		
Arsenic				0.50	0.67	134		
Barium				5.0	5.0	100		
Beryllium				0.020	0.026	130		
Cadmium				0.020	0.022	110		
Calcium				50.0	51.4	103		
Chromium				0.20	0.27	135		
Cobalt				0.020	0.018	90		
Copper				0.10	0.14	140		
Iron				20.0	22.9	114		
Lead				0.020	0.026	130		
Magnesium				20.0	21.4	107		
Manganese				5.0	5.2	104		
Mercury	0.20	0.21	105					
Nickel				0.20	0.37	185		
Potassium				400.0	451.1	113		
Selenium				1.0	1.2	120		
Silver				0.020	0.022	110		
Sodium				200.0	215.9	108		
Thallium				0.020	0.024	120		
Vanadium				0.20	0.25	125		
Zinc				0.50	0.81	162		

METALS

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BLANKS

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	Initial Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Method
Aluminum	-4.0	J	2.0	U	2.0	U	2.0	U	200.7
Antimony	-0.023	J	-0.024	J	-0.031	J	-0.024	J	200.8
Arsenic	0.09	J	0.07	J	0.11	J	0.07	U	200.8
Barium	0.4	U	0.4	U	0.5	J	0.4	U	200.7
Beryllium	0.003	U	0.003	U	0.003	U	0.008	J	200.8
Cadmium	0.003	U	0.003	U	0.003	U	0.008	J	200.8
Calcium	6.0	U	6.0	U	-9.3	J	6.0	U	200.7
Chromium	0.04	U	0.04	U	0.04	U	0.04	U	200.8
Cobalt	-0.012	J	-0.008	J	0.003	U	0.003	U	200.8
Copper	0.02	U	0.02	U	0.02	U	0.02	U	200.8
Iron	9.6	J	7.2	J	7.2	J	3.0	U	200.7
Lead	0.005	U	0.005	U	0.005	U	0.008	J	200.8
Magnesium	2.0	U	2.0	U	2.0	U	-4.9	J	200.7
Manganese	0.3	J	0.2	U	0.2	U	0.2	U	200.7
Mercury	0.02	U	0.02	U	0.02	U			245.1
Nickel	0.09	J	0.03	J	0.03	U	0.03	U	200.8
Potassium	50	U	50	U	50	U	50	U	200.7
Selenium	0.3	U	0.3	U	0.3	U	0.3	U	200.8
Silver	-0.006	J	-0.006	J	-0.004	J	0.009	J	200.8
Sodium	20.0	U	20.0	U	-21.9	J	20.0	U	200.7
Thallium	0.002	U	0.002	U	0.002	U	0.010	J	200.8
Vanadium	0.03	U	0.03	U	0.03	U	0.03	U	200.8
Zinc	0.2	U	0.2	U	0.2	U	0.2	U	200.8

METALS

- 3 -

BLANKS

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	Initial Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Method
Aluminum			2.0	U					200.7
Barium			0.4	U					200.7
Calcium			6.0	U					200.7
Iron			5.5	J					200.7
Magnesium			2.0	U					200.7
Manganese			0.2	U					200.7
Potassium			50	U					200.7
Sodium			20.0	U					200.7

METALS

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ICP INTERFERENCE CHECK SAMPLE

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-03 **ICS Source:** Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	488000	484500	97			
Barium		500	0	507	101			
Calcium	500000	500000	476600	481000	96			
Iron	200000	200000	183600	185900	93			
Magnesium	500000	500000	487300	491600	98			
Manganese		500	21	520	104			
Potassium			-69	-62				

80-120% control criteria is not applicable to interfering elements (Al,Ca,Fe,Mg).

METALS

- 5A -

SPIKE SAMPLE RECOVERY

Client:	Exponent	Service Request:	K1004467
Project No.:	0907194.000.0601	Units:	UG/L
Project Name:	Heglar Kronquist	Basis:	N/A
Matrix:	WATER	% Solids:	0.0

Sample Name: Batch QCS Lab Code: K1004452-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Mercury	70 - 130	1.02		0.02	U	1.00	102.0		245.1

An empty field in the Control Limit column indicates the control limit is not applicable

METALS

- 5A -

SPIKE SAMPLE RECOVERY

Client: Exponent

Service Request: K1004467

Project No.: 0907194.000.0601

Units: UG/L

Project Name: Heglar Kronquist

Basis: N/A

Matrix: WATER

% Solids: 0.0

Sample Name: BH-13S

Lab Code: K1004467-001S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	3570		1350		2000.00	111.0		200.7
Antimony	70 - 130	19.6		0.39		20.00	96.0		200.8
Arsenic	70 - 130	23.0		1.98		20.00	105.1		200.8
Barium	70 - 130	2010		47.3		2000.00	98.1		200.7
Beryllium	70 - 130	20.9		0.074		20.00	104.1		200.8
Cadmium	70 - 130	21.2		0.070		20.00	105.6		200.8
Chromium	70 - 130	21.4		2.02		20.00	96.9		200.8
Cobalt	70 - 130	22.4		2.470		20.00	99.6		200.8
Copper	70 - 130	24.1		4.24		20.00	99.3		200.8
Iron	70 - 130	3700		2570		1000.00	113.0		200.7
Lead	70 - 130	21.4		2.300		20.00	95.5		200.8
Manganese	70 - 130	703		218		500.00	97.0		200.7
Nickel	70 - 130	24.3		5.22		20.00	95.4		200.8
Selenium	70 - 130	21.1		0.3	J	20.00	104.0		200.8
Silver	70 - 130	20.1		0.010	J	20.00	100.4		200.8
Thallium	70 - 130	19.4		0.015	J	20.00	96.9		200.8
Vanadium	70 - 130	23.2		4.00		20.00	96.0		200.8
Zinc	70 - 130	27.9		7.73		20.00	100.8		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

METALS

- 5B -

POST SPIKE SAMPLE RECOVERY

Client: Exponent

Service Request: K1004467

Project No.: 0907194.000.0601

Units: UG/L

Project Name: Heglar Kronquist

Basis: N/A

Matrix: WATER

Sample Name: Batch QCA

Lab Code: K1004452-001A

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Mercury	85 - 115	1.07		0.02	U	1.00	107		245.1

METALS

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DUPLICATES

Client: Exponent
Service Request: K1004467
Project No.: 0907194.000.0601
Units: UG/L
Project Name: Heglar Kronquist
Basis: N/A
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QCD
Lab Code: K1004452-001D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury		0.02	U	0.02	U			245.1

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

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DUPLICATES

Client: Exponent

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Matrix: WATER

Service Request: K1004467

Units: UG/L

Basis: N/A

% Solids: 0.0

Sample Name: BH-13D

Lab Code: K1004467-001D DISS

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	20	1350		1370		1.5		200.7
Antimony	20	0.39		0.37		5.3		200.8
Arsenic		1.98		1.96		1.0		200.8
Barium	20	47.3		48.2		1.9		200.7
Beryllium		0.074		0.073		1.4		200.8
Cadmium		0.070		0.072		2.8		200.8
Calcium	20	54600		56100		2.7		200.7
Chromium	20	2.02		2.02		0.0		200.8
Cobalt	20	2.470		2.470		0.0		200.8
Copper	20	4.24		4.21		0.7		200.8
Iron	20	2570		2620		1.9		200.7
Lead	20	2.300		2.330		1.3		200.8
Magnesium	20	17900		18400		2.8		200.7
Manganese	20	218		224		2.7		200.7
Nickel	20	5.22		5.18		0.8		200.8
Potassium	20	5170		5350		3.4		200.7
Selenium		0.3	J	0.4	J	28.6		200.8
Silver		0.010	J	0.004	U	200.0		200.8
Sodium	20	17800		18200		2.2		200.7
Thallium		0.015	J	0.014	J	6.9		200.8
Vanadium	20	4.00		3.95		1.3		200.8
Zinc	20	7.73		7.70		0.4		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

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LABORATORY CONTROL SAMPLE

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Aqueous LCS Source: Inorganic Ventures **Solid LCS Source:**

Analyte	Aqueous: ug/L			Solid: mg/kg				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	5000	5020	100.4					
Antimony	20	20.6	103.0					
Arsenic	20	21.1	105.5					
Barium	5000	5280	105.6					
Beryllium	20	21.5	107.5					
Cadmium	20	21.1	105.5					
Calcium	12500	13100	104.8					
Chromium	20	21.0	105.0					
Cobalt	20	21.0	105.0					
Copper	20	21.4	107.0					
Iron	2500	2630	105.2					
Lead	20	20.3	101.5					
Magnesium	12500	13000	104.0					
Manganese	1250	1310	104.8					
Mercury	5	5.24	104.8					
Nickel	20	20.9	104.5					
Potassium	12500	13100	104.8					
Selenium	20	21.4	107.0					
Silver	20	21.0	105.0					
Sodium	12500	12700	101.6					
Thallium	20	20.5	102.5					
Vanadium	20	20.7	103.5					
Zinc	20	21.7	108.5					

METALS

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ICP SERIAL DILUTIONS

Client: Exponent

Service Request: K1004467

Project No.: 0907194.000.0601

Units: UG/L

Project Name: Heglar Kronquist

Sample Name: BH-13L

Lab Code: K1004467-001L DISS

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	1349.0		1547.5		14.7	E	P
Barium	47.3		49.0		3.6		P
Calcium	54550		55700		2.1		P
Iron	2571.0		2699.0		5.0		P
Magnesium	17860.0		18015.0		0.9		P
Manganese	218.1		224.0		2.7		P
Potassium	5172		5255		1.6		P
Sodium	17800		17750		0.3		P

METALS

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DETECTION LIMITS

Client: Exponent

Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP/ICP-MS ID #:

GFAA ID #:

AA ID #:

Analyte	Wave-length (nm)	Back-ground	MRL ug/L	MDL ug/L	M
Aluminum	394.4		50	2.0	P
Barium	455.4		5.0	0.4	P
Calcium	315.8		50	6.0	P
Iron	259.9		20	3.0	P
Magnesium	285.2		20	2.0	P
Manganese	257.6		5.0	0.2	P
Potassium	766.5		400	50	P
Sodium	589.5		200	20.0	P

Comments:

METALS

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DETECTION LIMITS

Client: Exponent

Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP/ICP-MS ID #: K-ICP-MS-02

GFAA ID #:

AA ID #:

Analyte	Isotope	Back-ground	MRL ug/L	MDL ug/L	M
Antimony	123		0.05	0.02	MS
Arsenic	75		0.5	0.07	MS
Beryllium	9		0.02	0.003	MS
Cadmium	111		0.02	0.003	MS
Chromium	52		0.2	0.04	MS
Cobalt	59		0.02	0.003	MS
Copper	65		0.1	0.02	MS
Lead	208		0.02	0.005	MS
Nickel	60		0.2	0.03	MS
Selenium	82		1.0	0.3	MS
Silver	107		0.02	0.004	MS
Thallium	205		0.02	0.002	MS
Vanadium	51		0.2	0.03	MS
Zinc	66		0.5	0.20	MS

Comments:

METALS

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DETECTION LIMITS

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: K-CVAA-01

Analyte	Wave-length (nm)	Back-ground	MRL ug/L	MDL ug/L	M
Mercury	253.70		0.2	0.02	CV

Comments:

METALS

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ICP INTERELEMENT CORRECTION FACTORS

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Co
Aluminum	167.079	0.0000000	0.0000000	0.0019280	0.0000000	0.0000000
Aluminum	394.401	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0000000	0.0000000	-0.0000650	0.0000000	0.0000000
Arsenic	189.042	0.0000430	0.0000000	0.0000000	0.0000000	0.0000000
Barium	455.403	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000080	0.0000000	0.0000000
Boron	249.678	0.0000000	0.0000000	-0.0001930	0.0000000	0.0019780
Cadmium	226.502	0.0000000	0.0000000	0.0000910	0.0000000	-0.0001330
Calcium	315.887	0.0000000	0.0000000	0.0000000	0.0000000	0.0018230
Calcium	393.366	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000070	0.0000000
Cobalt	230.786	0.0000000	0.0000000	0.0000140	0.0000000	0.0000000
Copper	327.396	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0000370	0.0000000	0.0000000	0.0000000	0.0000000
Lithium	670.784	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.553	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.213	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	221.647	0.0000060	0.0000000	0.0000130	0.0000000	0.0000000
Phosphorus	214.914	-0.0008250	0.0000000	0.0009490	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.611	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	588.995	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	407.771	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0000000	0.0000000	0.0000000	0.0000000	0.0016260

Comments:

METALS

- 11A -

ICP INTERELEMENT CORRECTION FACTORS

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-03

Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	336.121	0.0000000	0.0000000	0.0000000	0.0000000	0.0000280
Vanadium	292.402	0.0000000	0.0000000	0.0000220	0.0000000	0.0000000
Zinc	206.2	0.0000000	0.0000000	-0.0000570	0.0000000	0.0000000

Comments:

METALS

- 11B -

ICP INTERELEMENT CORRECTION FACTORS

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Cr	Mn	Mo	Ni	Si
Aluminum	167.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Aluminum	394.401	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.833	0.0126720	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0005400	0.0000000	0.0004600	0.0000000	0.0000000
Barium	455.403	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	-0.0000220	-0.0001550	-0.0000290	0.0000000
Boron	249.678	0.0002310	0.0000000	-0.0008330	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000360	0.0000000	0.0000000
Calcium	315.887	0.0000000	0.0000000	-0.0013850	0.0000000	0.0000000
Calcium	393.366	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000920	0.0000000	0.0000000	0.0000000
Cobalt	230.786	-0.0000550	0.0000310	-0.0082200	0.0004230	0.0000000
Copper	327.396	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	-0.0002380	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	-0.0064070	0.0000000	0.0001690
Lithium	670.784	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.079	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.553	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.213	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000490	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	221.647	-0.0002770	0.0000000	0.0000000	0.0000000	0.0002490
Phosphorus	214.914	0.0000000	-0.0011200	0.0084760	0.0000000	0.0000000
Potassium	766.491	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0010370	0.0000000	0.0000000	0.0000000
Silicon	251.611	0.0000000	0.0000000	0.0078910	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	588.995	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	407.771	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.856	0.0002230	0.0007110	0.0000000	0.0000000	0.0000000

Comments:

METALS

- 11B -

ICP INTERELEMENT CORRECTION FACTORS

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-03

Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	336.121	0.0000000	0.0000000	0.0000380	0.0001210	0.0000000
Vanadium	292.402	0.0000000	0.0000000	-0.0078980	0.0000000	0.0000000
Zinc	206.2	-0.0001370	0.0000000	0.0005030	0.0000000	0.0000000

Comments:

Columbia Analytical Services

METALS

- 11B -

ICP INTERELEMENT CORRECTION FACTORS

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ti	V			
Aluminum	167.079	0.0000000	0.0000000			
Aluminum	394.401	0.0000000	0.0006800			
Antimony	206.833	0.0002810	0.0000000			
Arsenic	189.042	0.0000000	0.0000000			
Barium	455.403	0.0000000	0.0000000			
Beryllium	234.861	0.0000000	0.0000000			
Boron	249.678	0.0000000	0.0000000			
Cadmium	226.502	0.0000300	0.0000000			
Calcium	315.887	0.0000000	0.0000000			
Calcium	393.366	0.0000000	0.0000000			
Chromium	267.716	0.0000000	-0.0000780			
Cobalt	230.786	0.0000000	0.0000000			
Copper	327.396	0.0000840	-0.0000420			
Iron	259.94	0.0000000	0.0000000			
Lead	220.353	-0.0005950	0.0000000			
Lithium	670.784	0.0000000	0.0000000			
Magnesium	279.079	0.0000000	0.0000000			
Magnesium	279.553	0.0000000	0.0000000			
Magnesium	285.213	0.0000000	0.0000000			
Manganese	257.61	0.0000000	0.0000000			
Molybdenum	202.03	0.0000000	0.0000000			
Nickel	221.647	-0.0006910	0.0000000			
Phosphorus	214.914	0.0000000	-0.0043120			
Potassium	766.491	0.0000000	0.0000000			
Selenium	196.0	0.0000000	0.0000000			
Silicon	251.611	0.0000000	0.0000000			
Silver	328.068	-0.0001050	0.0000730			
Sodium	588.995	0.0000000	0.0000000			
Sodium	589.592	0.0000000	0.0000000			
Strontium	407.771	0.0000000	0.0000000			
Thallium	190.856	-0.0008150	-0.0087710			

Comments:

METALS

- 11B -

ICP INTERELEMENT CORRECTION FACTORS

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-03

Tin	189.989	-0.0012350	0.0000000			
Titanium	336.121	0.0000000	0.0000000			
Vanadium	292.402	0.0003520	0.0000000			
Zinc	206.2	0.0000000	0.0000000			

Comments:

METALS
-12-
ICP LINEAR RANGES (QUARTERLY)

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-03

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	15.000	900000	200.7
Barium	15.000	45000	200.7
Calcium	15.000	900000	200.7
Iron	15.000	360000	200.7
Magnesium	15.000	540000	200.7
Manganese	15.000	180000	200.7
Potassium	15.000	900000	200.7
Sodium	15.000	900000	200.7

Comments:

METALS
-12-
ICP LINEAR RANGES (QUARTERLY)

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-MS-02

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.000	900	200.8
Arsenic	15.000	900	200.8
Beryllium	15.000	450	200.8
Cadmium	15.000	900	200.8
Chromium	15.000	900	200.8
Cobalt	15.000	900	200.8
Copper	15.000	900	200.8
Lead	15.000	900	200.8
Nickel	15.000	900	200.8
Selenium	15.000	900	200.8
Silver	15.000	270	200.8
Thallium	15.000	450	200.8
Vanadium	15.000	900	200.8
Zinc	15.000	900	200.8

Comments:

METALS
-13-
PREPARATION LOG

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Method: MS

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
K1004467-001 DISS	5/8/2010	50.0	50.0
K1004467-001D DISS	5/8/2010	50.0	50.0
K1004467-001S DISS	5/8/2010	50.0	50.0
K1004467-MB	5/8/2010	50.0	50.0
LCSW	5/8/2010	50.0	50.0

METALS
-13-
PREPARATION LOG

Client: Exponent Service Request: K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Method: P

Sample ID	Preparation Date	Initial Volume	Final Volume (mL)
K1004467-001 DISS	5/8/2010	50.0	50.0
K1004467-001D DISS	5/8/2010	50.0	50.0
K1004467-001S DISS	5/8/2010	50.0	50.0
K1004467-MB	5/8/2010	50.0	50.0
LCSW	5/8/2010	50.0	50.0

METALS
-13-
PREPARATION LOG

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Method: CV

Sample ID	Preparation Date	Initial Volume	Final Volume (mL)
K1004452-001D	5/10/2010	20.0	20.0
K1004452-001S	5/10/2010	20.0	20.0
K1004467-001 DISS	5/10/2010	20.0	20.0
K1004467-MB	5/10/2010	20.0	20.0
LCSW	5/10/2010	20.0	20.0

METALS
- 14 -
ANALYSIS RUN LOG

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Instrument ID Number: K-ICP-AES-03 **Method:** P

Start Date: 5/11/2010 **End Date:** 5/11/2010

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
BLK	1	12:00		X			X			X				X		X	X			X			X							
STD A	1	12:03															X													
STD B	1	12:06		X			X			X				X		X				X			X							
ICV1	1	12:10		X			X			X				X		X	X			X			X							
ZZZZZZ	1	12:13																												
ICB1	1	12:16		X			X			X				X		X	X			X			X							
CCV1	1	12:19															X													
CCV1	1	12:24		X			X			X				X		X				X			X							
CCB1	1	12:32		X			X			X				X		X	X			X			X							
CRDL1	1	12:35		X			X			X				X		X	X			X			X							
ZZZZZZ	1	12:38																												
ICSA	1	12:40		X			X			X				X		X	X			X										
ICSAB	1	12:45		X			X			X				X		X	X			X										
ZZZZZZ	1	12:48																												
CCV2	1	12:56															X													
CCV2	1	12:59		X			X			X				X		X				X			X							
CCB2	1	13:06		X			X			X				X		X	X			X			X							
ZZZZZZ	1	13:11																												
ZZZZZZ	1	13:15																												
ZZZZZZ	1	13:19																												
K1004467-MB	1	13:22		X			X			X				X		X	X			X			X							
LCSW	1	13:24		X			X			X				X		X	X			X			X							
ZZZZZZ	1	13:28																												
ZZZZZZ	1	13:31																												
ZZZZZZ	1	13:34																												
ZZZZZZ	1	13:37																												
ZZZZZZ	1	13:41																												
CCV3	1	13:44															X													
CCV3	1	13:47		X			X			X				X		X				X			X							
CCB3	1	13:51		X			X			X				X		X	X			X			X							
ZZZZZZ	1	13:53																												
K1004467-001 DISS	1	13:56		X			X			X				X		X	X			X			X							

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Instrument ID Number: K-ICP-AES-03 **Method:** P

Start Date: 5/11/2010 **End Date:** 5/11/2010

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
K1004467-001D DISS	1	14:00		X			X			X				X		X	X			X			X							
K1004467-001L DISS	5	14:03		X			X			X				X		X	X			X			X							
K1004467-001S DISS	1	14:07		X			X							X			X													
ZZZZZZ	1	14:10																												
ZZZZZZ	1	14:13																												
ZZZZZZ	1	14:17																												
ZZZZZZ	1	14:21																												
ZZZZZZ	1	14:24																												
CCV4	1	14:27															X													
CCV4	1	14:30		X			X			X				X		X				X			X							
CCB4	1	14:33		X			X			X				X		X	X			X			X							
ZZZZZZ	1	14:36																												
ZZZZZZ	1	14:39																												
ZZZZZZ	1	14:42																												
ZZZZZZ	1	14:45																												
ZZZZZZ	1	14:48																												
ZZZZZZ	1	14:51																												
ZZZZZZ	1	14:55																												
ZZZZZZ	1	14:58																												
ZZZZZZ	1	15:01																												
ZZZZZZ	1	15:04																												
ZZZZZZ	1	15:07																												
ZZZZZZ	1	15:10																												
ZZZZZZ	1	15:13																												
ZZZZZZ	1	15:16																												
ZZZZZZ	1	15:19																												
ZZZZZZ	1	15:22																												
ZZZZZZ	1	15:25																												
ZZZZZZ	1	15:28																												
ZZZZZZ	1	15:31																												
ZZZZZZ	1	15:34																												
ZZZZZZ	1	15:38																												

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Instrument ID Number: K-ICP-AES-03 **Method:** P

Start Date: 5/11/2010 **End Date:** 5/11/2010

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1	17:26																										
ZZZZZZ	1	17:29																										
ZZZZZZ	1	17:33																										
ZZZZZZ	1	17:35																										
ZZZZZZ	1	17:46																										
ZZZZZZ	1	17:49																										
ZZZZZZ	1	17:52																										
ZZZZZZ	1	17:57																										
ZZZZZZ	1	18:00																										
ZZZZZZ	1	18:03																										
ZZZZZZ	1	18:06																										
ZZZZZZ	1	18:14																										
ZZZZZZ	1	18:17																										
ZZZZZZ	1	18:20																										
ZZZZZZ	1	18:23																										
ZZZZZZ	1	18:26																										
ZZZZZZ	1	18:29																										
ZZZZZZ	1	18:32																										
ZZZZZZ	1	18:35																										
ZZZZZZ	1	18:38																										
ZZZZZZ	1	18:43																										
ZZZZZZ	1	18:46																										
ZZZZZZ	1	18:49																										
ZZZZZZ	1	18:52																										
ZZZZZZ	1	19:00																										
ZZZZZZ	1	19:09																										
ZZZZZZ	1	19:18																										
ZZZZZZ	1	19:21																										
ZZZZZZ	1	19:24																										
ZZZZZZ	1	19:27																										

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Instrument ID Number: K-ICP-MS-02 **Method:** MS

Start Date: 5/12/2010 **End Date:** 5/12/2010

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Cal. Blk	1	13:10			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
Cal. Stn	1	13:15			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
ICV1	1	13:20			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
CCV1	1	13:24			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
ICB1	1	13:54			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
CCB1	1	13:58			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
CRDL1	1	14:03			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
ZZZZZZ	1	14:08																									
ZZZZZZ	1	14:13																									
ZZZZZZ	1	14:18																									
ZZZZZZ	1	14:23																									
ZZZZZZ	1	14:27																									
ZZZZZZ	1	14:32																									
ZZZZZZ	1	14:37																									
CCV2	1	14:41			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
CCB2	1	14:58			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
K1004467-MB	1	15:03			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
K1004467-001 DISS	1	15:09			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
K1004467-001D DISS	1	15:13			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
K1004467-001S DISS	1	15:18			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
LCSW	1	15:22			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
ZZZZZZ	1	15:30																									
ZZZZZZ	1	15:36																									
ZZZZZZ	1	15:41																									
ZZZZZZ	1	15:49																									
ZZZZZZ	1	15:56																									
CCV3	1	16:02			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
CCB3	1	16:17			X	X		X	X		X	X	X		X				X		X	X		X	X	X	
ZZZZZZ	1	16:22																									
ZZZZZZ	1	16:27																									
ZZZZZZ	1	16:34																									
ZZZZZZ	1	16:40																									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: Exponent **Service Request:** K1004467

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Instrument ID Number: K-CVAA-01 **Method:** CV

Start Date: 5/12/2010 **End Date:** 5/12/2010

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Standard #1	1	14:10																X									
Standard #2	1	14:11																X									
Standard #3	1	14:13																X									
Standard #4	1	14:15																X									
Standard #5	1	14:17																X									
ICV1	1	14:18																X									
ICB1	1	14:20																X									
CCV1	1	14:22																X									
CCB1	1	14:24																X									
CRDL1	1	14:25																X									
K1004467-MB	1	14:27																X									
LCSW	1	14:29																X									
ZZZZZZ	1	14:31																									
K1004452-001A	1	14:33																X									
K1004452-001D	1	14:34																X									
K1004452-001S	1	14:36																X									
ZZZZZZ	1	14:38																									
K1004467-001 DISS	1	14:40																X									
ZZZZZZ	1	14:41																									
CCV2	1	14:43																X									
CCB2	1	14:45																X									
ZZZZZZ	1	14:47																									
ZZZZZZ	1	14:49																									
ZZZZZZ	1	14:50																									
ZZZZZZ	1	14:52																									
ZZZZZZ	1	14:54																									
ZZZZZZ	1	14:56																									
ZZZZZZ	1	14:57																									
ZZZZZZ	1	14:59																									
ZZZZZZ	1	15:01																									
ZZZZZZ	1	15:03																									
ZZZZZZ	1	15:05																									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Columbia Analytical Services

Preparation Information Benchsheet

Prep Run: 110987
Team: Metals
Analyst: B.SHELDON

Prep Workflow: MetDigAqICP
Prep Method: EPA 3010A,EPA CLP-METALS ILM04.0,
Rush/NPDES: NPDES

Status: Prepped
Current Step: Digestion

Prep Date: 05/08/2010 09:00
Due Date: 05/16/2010

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	TestNo List	Comments
KQ1004066-01	Method Blank		50 mL	50 mL			Metals T	1%HNO3,5%HCl
KQ1004066-02	Lab Control Sample		50 mL	50 mL	0.25 mL 0.25 mL 0.25 mL 0.5 mL	12778 12779 14972 16626	Metals T	1%HNO3,5%HCl
KQ1004066-03	Lab Control Sample		50 mL	50 mL	0.5 mL	15209	Metals D, Metals T, Metals T	1%HNO3,5%HCl
K1004381-001	Stormwater	.03	50 mL	50 mL			Metals T	1%HNO3,5%HCl
K1004407-001	INF-050410	.04	50 mL	50 mL			Metals T	1%HNO3,5%HCl
K1004407-002	EFF-050410	.04	50 mL	50 mL			Metals T	1%HNO3,5%HCl
K1004407-003	EFFD-050410	.04	50 mL	50 mL			Metals T	1%HNO3,5%HCl
K1004414-001	BRUVPilot1:BA92292	.03	50 mL	50 mL			Metals T	1%HNO3,5%HCl
K1004467-001	BH-13	.05	50 mL	50 mL			Metals D	1%HNO3,5%HCl
K1004467-001: KQ1004066-04	Duplicate	.05	50 mL	50 mL			Metals D	1%HNO3,5%HCl
K1004467-001: KQ1004066-05	Matrix Spike	.05	50 mL	50 mL	0.5 mL 0.5 mL 0.5 mL 0.5 mL 0.5 mL	15209 16626 16678 17064 17544	Metals D	1%HNO3,5%HCl
K1004469-010	S9Z	.01	50 mL	50 mL			Metals T	1%HNO3,5%HCl
K1004488-002	OF 002	.05	50 mL	50 mL			Metals T	1%HNO3,5%HCl
K1004502-005	Set 1-4 Composite	.11	50 mL	50 mL			Metals T	1%HNO3,5%HCl

14 Total Samples consisting of 9 Client Samples, 2 Client QC Samples, 3 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET QCP-CICV-1	Spike	12779	10/1/2010	K-MET SS3	Spike	17064	12/1/2010
K-MET QCP-CICV-2	Spike	12778	7/1/2010	K-MET SS4	Spike	16626	10/1/2010
K-MET QCP-CICV-3	Spike	14972	1/28/2011	K-MET SS5	Spike	16678	5/19/2010
K-MET SS1	Spike	17544	9/11/2010	Silicon 1000 ug/mL Si	Spike	15209	10/26/2010

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	K-MET HNO3	15193	Digestion	K-MET 50ml Centrifuge Tube	16850
Digestion	K-MET HCL	16810			

Preparation Hardware / Equipment

Step	Name	Property	Value	
Digestion	K-BlockDigester-06	Temperature	95	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	08-MAY-10 09:00	08-MAY-10 12:00	B.SHELDON	W.SCHUMAN	N	

Comments

Review

Reviewed by: _____ Date: 5/10/10

ICP

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc mg/L	Enter mls Added
K-MET SS1	HNO3	50.0	1000ml	-	05
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	200	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb	50	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS2	HNO3	25.0	500ml	-	
	As	2.0	500ml	4	
	Cd	2.0	500ml	4	
	Pb	2.0	500ml	4	
	Se	2.0	500ml	4	
	Tl	2.0	500ml	4	
	Cu	2.0	500ml	4	
K-MET SS3	HNO3	25.0	500ml	-	05
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	50.0	500ml	100	
K-MET SS4	HNO3	25	500ml	-	05
	B	50	500ml	100	
	Mo	50	500ml	100	
K-MET SS5	HNO3	10.0	200ml	-	05
	K**	20	200ml	1000	
	Na**	20	200ml	1000	
	Mg**	20	200ml	1000	
	Ca**	20	200ml	1000	

K-MET QFLCRW	HNO3	10.0	1000ml	-	
	As, Pb, Se, Tl	5.0	1000ml	2.5	
	Cd	-	-	1.25	
	Cu	2.5	1000ml	2.5	
K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	0.25
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-2	Sb	no dilution	-	500	0.25
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	0.25
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.

** Denotes 10.000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date
Sb	0.5	1000	MET 1-750	6/6/11

Analytical Services Preparation Information Benchsheet

Prep Run: 110986
Team: Metals
Analyst: B.SHELDON

Prep Workflow: MetDigAqMS
Prep Method: EPA CLP-METALS ILM04.0
Rush/NPDES: Both

Status: Prepped
Current Step: Digestion

Prep Date: 05/08/2010 09:00
Due Date: 05/10/2010

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	TestNo List	Comments
KQ1004065-01	Method Blank		50 mL	50 mL			Metals D, Metals T	1%HNO3
KQ1004065-02	Lab Control Sample		50 mL	50 mL	1 mL 1 mL	11605 17425	Metals D, Metals T	1%HNO3
K1004375-001	SW-1-0510-1	.05	50 mL	50 mL			Metals D	1%HNO3
K1004375-001	SW-1-0510-1	.04	50 mL	50 mL			Metals T	1%HNO3
K1004375-002	SW-3-0510-1	.05	50 mL	50 mL			Metals D	1%HNO3
K1004375-002	SW-3-0510-1	.04	50 mL	50 mL			Metals T	1%HNO3
K1004375-003	SW-5-0510-1	.05	50 mL	50 mL			Metals D	1%HNO3
K1004375-003	SW-5-0510-1	.04	50 mL	50 mL			Metals T	1%HNO3
K1004375-005	STW-001-0510-1	.04	50 mL	50 mL			Metals T	1%HNO3
K1004414-001	BRUVPilot1:BA92292	.03	50 mL	50 mL			Metals T	1%HNO3
K1004417-001	Outfall 01	.04	50 mL	50 mL			Metals T	1%HNO3
K1004467-001	BH-13	.05	50 mL	50 mL			Metals D	1%HNO3
K1004467-001: KQ1004065-03	Duplicate	.05	50 mL	50 mL			Metals D	1%HNO3
K1004467-001: KQ1004065-04	Matrix Spike	.05	50 mL	50 mL	1 mL 1 mL	11605 17425	Metals D	1%HNO3
K1004496-001	ED	.04	50 mL	50 mL			Metals T	1%HNO3
K1004499-001	May Compliance	.01	50 mL	50 mL			Metals T	1%HNO3
K1004502-005	Set 1-4 Composite	.11	50 mL	50 mL			Metals T	1%HNO3
K1004508-001	002 Composite	.01	50 mL	50 mL			Metals T	1%HNO3
K1004586-001	Roof Drain	.01	50 mL	50 mL			Metals T	1%HNO3
K1004586-001: KQ1004065-05	Duplicate	.01	50 mL	50 mL			Metals T	1%HNO3
K1004586-001: KQ1004065-06	Matrix Spike	.01	50 mL	50 mL	1 mL 1 mL	11605 17425	Metals T	1%HNO3
K1004589-001	100502	.01	50 mL	50 mL			Metals T	1%HNO3
K1004589-002	100503	.01	50 mL	50 mL			Metals T	1%HNO3
K1004589-003	100504	.01	50 mL	50 mL			Metals T	1%HNO3

K1004589-004	100506	.01	50 mL	50 mL			Metals T	1%HNO3

22 Total Samples consisting of 16 Client Samples, 4 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET 200.8 1000ug/L Stock	Spike	17425	10/24/2010	K-MET Ag 1000 ppb Stock	Spike	11605	8/17/2010

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	K-MET HN03 ULTREX	16811	Digestion	K-MET 50ml Centrifuge Tube	16850

Preparation Hardware / Equipment

Step	Name	Property	Value	
Digestion	K-BlockDigester-06	Temperature	95	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	08-MAY-10 09:00	08-MAY-10 12:00	B.SHELDON	W.SCHUMAN	N	

Comments

Review

Reviewed by: _____ Date: 5/10/10

CVAA Mercury Data Review Form

Element: Hg

Analysis Lot #: 200301

Cal. STD/CCV Source: HG1-91-U

Service Request Numbers:

K1004452, K1004467, K1004502, K1004571, K1004575, K1004635, K1004516, K1004573

	Yes	No	NA
1) Appropriate standardization completed	X		
2) ICV within 10% of true value	X		
3) CCVs in control	X		
4) CCBs and or ICBs below MRL	X		
5) All reported samples within calibration range	X		
6) Calculations correct	X		

Comments:

Data reviewed against service request(s) to ensure no samples were omitted: ML (initials)

Primary Reviewed By: MAS Date: 5/12/10

Secondary Reviewed By: JDB Date: 5/12/10

COLUMBIA ANALYTICAL SERVICES, INC. PRINTOUT WITH:_____
ANALYTICAL WORKSHEET

Method: (Circle One) 7470A 7471A (245.1)	Service Request # : K1004452, K1004467, K1004502, K1004571, K1004575, K1004635, K1004516, K1004573
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	Measured (µg/L)	Sample Actual (mg/kg)	Sample Actual (µg/L)
1	ICV1	~	~	~	5.03		101%
2	ICB1	~	~	~	0.00		< 0.2
3	CCV1	~	~	~	5.29		106%
4	CCB1	~	~	~	0.00		< 0.2
5	CRA1	~	~	~	0.21		105%
6	K1004452-MB	100	100	~	0.00		0.00
7	LCSW K1004452	100	100	~	5.24		105%
8	K1004452-001	100	100	~	0.00		0.00
9	K1004452-001A	100	100	~	1.07		107%
10	K1004452-001D	100	100	~	0.00		0.00
11	K1004452-001S	100	100	~	1.02		102%
12	K1004452-004	100	100	~	0.05		0.05
13	K1004467-001	100	100	~	0.00		0.00
14	K1004502-005	100	100	~	0.00		0.00
15	CCV2	~	~	~	5.23		105%
16	CCB2	~	~	~	0.00		< 0.2
17	K1004571-003	100	100	~	0.03		0.03
18	K1004571-004	100	100	~	0.01		0.01
19	K1004575-001	100	100	~	0.01		0.01
20	K1004575-002	100	100	~	0.00		0.00
21	K1004575-002D	100	100	~	0.00		0.00
22	K1004575-003	100	100	~	0.00		0.00
23	K1004575-003S	100	100	~	1.04		104%
24	K1004575-004	100	100	~	0.00		0.00
25	K1004635-001	100	100	~	0.00		0.00

Comments: Reporting Levels:

Soil/Tissue Spike Level:

Post Spike Level: 1.0 ppb

Method	Spike Level	MRL	LCS Limit	MS Limit	RPD
7470A Water	1.0 µg/L	0.2 µg/L	83-117%	76-126%	20%
245.1 Water	1.0 µg/L	0.2 µg/L	85-115%	70-130%	20%
7470A TCLP	5.0 µg/L	1.0 µg/L	85-115%	75-125%	20%
7471A Soil LCSS	6.80 mg/kg	0.02 mg/kg	72-128%	60-130%	30%
7471A Tissue Tort	0.27 mg/kg	0.02 mg/kg	63-130%	60-130%	30%

Analyst:	Date:	Page Number:
[signature]	5/12/10	1

[Controlled - HgWaterRunForm 2-18-10] HG1.XLS

COLUMBIA ANALYTICAL SERVICES, INC. PRINTOUT WITH:_____
ANALYTICAL WORKSHEET

Method: (Circle One) 7470A 7471A (245.1)	Service Request # :
Analysis For: Hg	

DATA

Pos.	SAMPLE NUMBER	Initial Sample (g) or (mL)	Initial Dilution (mL)	Dilution Factor	Measured (µg/L)	Sample Actual (mg/kg)	Sample Actual (µg/L)
26	K1004635-002	100	100	~	0.01		0.01
27	CCV3	~	~	~	5.13		103%
28	CCB3	~	~	~	-0.01		< 0.2
29	K1004635-003	100	100	~	0.01		0.01
30	K1004516-001	100	100	~	0.01		0.01
31	K1004516-002	100	100	~	0.00		0.00
32	K1004573-001	100	100	~	0.00		0.00
33	K1004573-002	100	100	~	0.01		0.01
34	CCV4	~	~	~	5.40		108%
35	CCB4	~	~	~	0.00		< 0.2
36							
37							
38							
39							
40							
41							
42			MS 5/12/10				
43							
44							
45							
46							
47							
48							
49							
50							

Comments: Reporting Levels:

Soil/Tissue Spike Level:

Post Spike Level:

Method	Spike Level	MRL	LCS Limit	MS Limit	RPD
7470A Water	1.0 µg/L	0.2 µg/L	83-117%	76-126%	20%
245.1 Water	1.0 µg/L	0.2 µg/L	85-115%	70-130%	20%
7470A TCLP	5.0 µg/L	1.0 µg/L	85-115%	75-125%	20%
7471A Soil LCSS	6.80 mg/kg	0.02 mg/kg	72-128%	60-130%	30%
7471A Tissue Tort	0.27 mg/kg	0.02 mg/kg	63-130%	60-130%	30%

Analyst:	Date:	Page Number:
	5/12/10	2

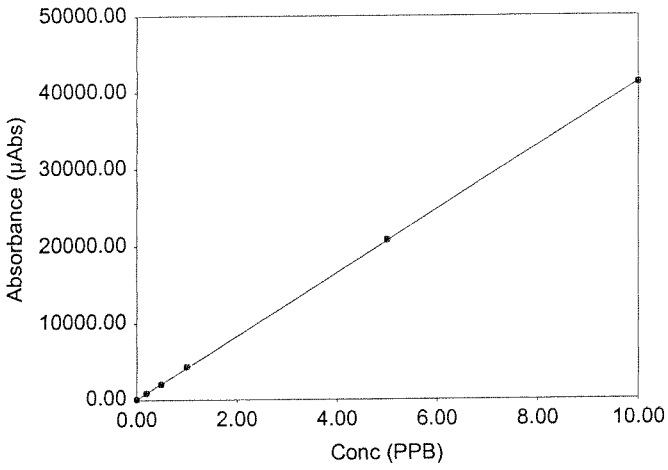
[Controlled - HgWaterRunForm 2-18-10] HG2.XLS

CETAC Hg Analysis Report - 10051202.DB - Wednesday, May 12, 2010, 3:34:37 PM

Analyst M SMITH
Date Started Wednesday, May 12, 2010, 14:08:19
Worksheet Hg 051210C
Comment K-CVAA-01

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
Calibration Zero	12-May-2010, 14:08	0.00	4.19	68.20	70	71	67	65	
Standard #1	12-May-2010, 14:10	0.20	0.71	877.00	875	883	881	869	
Standard #2	12-May-2010, 14:11	0.50	1.97	2050.00	2003	2025	2069	2092	
Standard #3	12-May-2010, 14:13	1.00	2.96	4330.00	4164	4293	4414	4445	
Standard #4	12-May-2010, 14:15	5.00	0.47	20800.00	20668	20782	20859	20888	
Standard #5	12-May-2010, 14:17	10.00	0.58	41200.00	40889	41100	41387	41371	

Calibration Data



Int.	0.000
Slope	4128.529
Correlation	0.99997

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICV1	12-May-2010, 14:18	5.03	0.24	20800.00	20711	20730	20767	20823	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
ICB1	12-May-2010, 14:20	-0.00	30.20	-10.80	-10	-8	-10	-16	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV1	12-May-2010, 14:22	5.29	2.28	21800.00	21131	21801	22124	22239	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB1	12-May-2010, 14:24	-0.00	25.40	-17.20	-14	-24	-15	-16	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CRA1	12-May-2010, 14:25	0.21	0.93	872.00	871	866	866	883	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K1004452-MB	12-May-2010, 14:27	0.00	45.50	14.30	20	8	10	20	
LCSW K1004452	12-May-2010, 14:29	5.24	0.51	21600.00	21557	21525	21670	21768	
K1004452-001	12-May-2010, 14:31	-0.00	26.30	-16.90	-18	-19	-10	-21	
K1004452-001A	12-May-2010, 14:33	1.07	1.47	4410.00	4447	4439	4434	4310	
K1004452-001D	12-May-2010, 14:34	0.00	25.50	17.70	14	24	17	16	
K1004452-001S	12-May-2010, 14:36	1.02	0.69	4230.00	4254	4212	4195	4252	
K1004452-004	12-May-2010, 14:38	0.05	4.08	198.00	193	192	210	198	
K1004467-001	12-May-2010, 14:40	0.00	113.00	8.88	16	19	3	-2	
K1004502-005	12-May-2010, 14:41	0.00	80.80	10.70	0	17	7	18	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV2	12-May-2010, 14:43	5.23	0.88	21600.00	21329	21541	21670	21768	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB2	12-May-2010, 14:45	-0.00	66.50	-11.00	-3	-8	-14	-20	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K1004571-003	12-May-2010, 14:47	0.03	4.52	108.00	107	108	114	102	
K1004571-004	12-May-2010, 14:49	0.01	20.70	59.10	42	72	61	61	
K1004575-001	12-May-2010, 14:50	0.01	16.40	33.60	40	36	29	29	
K1004575-002	12-May-2010, 14:52	0.00	45.70	15.10	13	25	15	8	
K1004575-002D	12-May-2010, 14:54	0.00	26.90	14.20	13	12	16	17	

Analyst M SMITH
Date Started Wednesday, May 12, 2010, 14:56:10
Worksheet Hg 051210C
Comment K-CVAA-01

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K1004575-003	12-May-2010, 14:56	0.00	29.80	17.00	13	14	17	24	
K1004575-003S	12-May-2010, 14:57	1.04	0.35	4280.00	4260	4294	4283	4290	
K1004575-004	12-May-2010, 14:59	-0.00	27.40	-7.83	-7	-5	-9	-10	
K1004635-001	12-May-2010, 15:01	0.00	26.60	8.91	11	8	10	6	
K1004635-002	12-May-2010, 15:03	0.01	13.80	22.60	26	21	19	24	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV3	12-May-2010, 15:05	5.13	0.52	21200.00	21040	21154	21265	21278	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB3	12-May-2010, 15:06	-0.01	31.90	-20.80	-20	-13	-29	-21	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
K1004635-003	12-May-2010, 15:08	0.01	26.20	24.40	25	33	17	22	
K1004516-001	12-May-2010, 15:10	0.01	39.10	23.50	20	21	37	16	
K1004516-002	12-May-2010, 15:12	0.00	220.00	2.81	12	0	-0	-1	
K1004573-001	12-May-2010, 15:13	0.00	107.00	5.50	4	9	11	-2	
K1004573-002	12-May-2010, 15:15	0.01	4.99	28.10	29	28	26	29	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCV4	12-May-2010, 15:17	5.40	0.23	22300.00	22352	22257	22233	22298	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Readings				Flags
CCB4	12-May-2010, 15:19	0.00	36.50	8.23	12	9	4	8	

Columbia Analytical Services

EPA METHOD 7470A

Service Request Number(s) :	K1004452, K1004467, K1004502, K1004571, K1004575,
PREP RUN: 111086 , 111087	K1004635, K1004516, K1004573

Sample	Initial Volume	Final Volume	Sample	Initial Volume	Final Volume
MB	100	100			
LCSW	7	7			
K1004452-001					
K1004452-001D					
K1004452-001S					
K1004452-004					
K1004467-001					
K1004467-001D MS 5/10/10					
K1004467-001S					
K1004502-005					
K1004571-003					
K1004571-004					
K1004575-001					
K1004575-002 MS 5/10/10					
K1004575-003 3					
K1004575-004 4					
K1004635-001					
K1004635-002					
K1004635-003					
K1004516-001					
K1004516-002					
K1004573-001					
K1004573-002					
K1004575-002D					
-035	↓	↓			
Std. 0.2	0.1 *				50
Std. 0.5	0.25 *				50
Std. 1.0	0.5 *				50
Std. 5.0	2.5*				50
Std. 10.0	5.0 *				50
ICV	0.25 **				50

Start Time: 9:30 **Finish Time:** 3:20 **Waterbath Temp.:** 95° C **Balance#:** 1

Lot # of Reagents Used:

HNO_3: H14024	$K_2S_2O_8$: G19476	NaCl : G28620
H_2SO_4: 47269	$KMnO_4$: G25592	NH_2OH-HCL: E31591
HCL: 201002101	$SnCl_2$: H45642	ERA CLP Soil: D065540

* Source Standard: HG191-U 100 ppb Spike = 1.0 ml * Source Standard

**Source Standard: ICV HG191- 1000 ppb LCSW= 0.5 ml ICV **Source Standard

Comments:	
Analyst:	Date:
	5/10/10

Service Request # K1004467
Instrument ID# K-ICP-AES-03

ICP-OES Data Review Form

	Yes	No
1. Standardization completed	✓	
2. ICV within 10 % of true value	✓	
3. ICB below MRL	✓	
4. CRI standard analyzed.	✓	
5. ICS standards within 20% of true value	✓	
6. All preceding CCVs within 10 % of true value	✓	
7. Following CCV within 10 % of true value	✓	
8. Bracketing CCBs below MRL	✓	
9. Method Blank below MRL	✓	
10. MS-MSD or Dup-MS and LCS within CAS control limits	✓	
11. All analytes within instrument linear range	✓	
12. Adequate rinse out time allowed between samples to eliminate memory effect	✓	

Comments:
StarLIMS Run # 199983 Saved under 051110BICP03
Report Cd2265, Cu3273, Zn2138.

Primary Review by [signature] Date 5/11/10

Secondary Review by SC Date 5/12/10

Sample Name: BLK Acquired: 5/11/2010 12:00:43 Type: Cal
Method: 2010a2007(v18) Mode: IR Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0006**	**-53.96**	**7.307**	**3.408**	**.0424**	**.19686**	**.9995**
Stddev	.0003	24.98	.638	.192	.0016	7.8339	4.094
%RSD	54.98	46.29	8.727	5.626	3.823	3979.5	409.6
#1	.0004	-71.63	6.856	3.273	.0413	5.7362	-1.895
#2	.0008	-36.30	7.758	3.544	.0435	-5.3425	3.895

Elem	Cd2144	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0001**	**-.0002**	**2.695**	**.0038**	**.0000**	**.0013**	**.0011**
Stddev	.0000	.0001	.002	.0004	.0002	.0001	.0001
%RSD	48.57	45.71	.0901	10.74	894.0	4.556	10.31
#1	.0001	-.0002	2.697	.0035	-.0001	.0012	.0012
#2	.0000	-.0001	2.694	.0041	.0001	.0013	.0010

Elem	Cu3273	Fe2599	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-41.55**	**-.0005**	**.0023**	**-.0005**	**4.700**	**.0002**	**.0000**
Stddev	5.29	.0006	.0009	.0011	5.940	.0001	.000
%RSD	12.73	119.6	41.00	243.2	126.4	65.38	61.22
#1	-37.81	-.0010	.0030	.0003	.5000	.0001	.0000
#2	-45.29	-.0001	.0016	-.0012	8.900	.0003	-.0001

Elem	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0014**	**.0003**	**64.85**	**.8022**	**-3.312**	**46.67**	**.0019**
Stddev	.0001	.0002	3.04	.3568	18.17	19.55	.0017
%RSD	8.964	55.52	4.689	44.48	548.6	41.88	88.79
#1	.0015	.0004	67.00	.5499	-16.16	60.50	.0030
#2	.0013	.0002	62.70	1.054	9.537	32.85	.0007

Sample Name: BLK Acquired: 5/11/2010 12:00:43 Type: Cal
Method: 2010a2007(v18) Mode: IR Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0008**	**.0009**	**3.505**	**4.058**	**.0864**	**.0020**	**-.0050**
Stddev	.0002	.0008	.799	1.717	.0386	.0000	.0004
%RSD	26.11	90.09	22.81	42.30	44.66	.8068	7.351
#1	.0007	.0014	2.939	5.272	.0591	.0020	-.0053
#2	.0010	.0003	4.070	2.844	.1136	.0020	-.0047

Elem	Li6707	Sr4077
Units	Cts/S	Cts/S
Avg	**-7.100**	**-.00507**
Stddev	10.96	.00286
%RSD	154.4	56.474
#1	-14.85	-.00709
#2	.6500	-.00304

5/11/10

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2975.9**	**66160.**	**3145.1**	**765.58**
Stddev	13.4	84.	10.2	1.63
%RSD	.45037	.12709	.32330	.21309
#1	2985.4	66101.	3152.3	766.73
#2	2966.4	66220.	3137.9	764.42

Sample Name: STD A Acquired: 5/11/2010 12:03:52 Type: Cal
Method: 2010a2007(v18) Mode: IR Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B ICP7-34-A

Elem	Al1670	Sb2068	Be2348	B_2496	Cd2144	Cd2265	Cd2288	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.5563**	**348.5**	**42052.**	**3018.**	**16.14**	**3.633**	**5480.**	**.1547**
Stddev	.0002	1.8	86.	16.	.05	.009	13.	.0004
%RSD	.0385	.5076	.20345	.5290	.3213	.2413	.2410	.2400
#1	.5561	349.7	42113.	3030.	16.10	3.627	5489.	.1544
#2	.5564	347.2	41992.	3007.	16.17	3.639	5471.	.1550

Elem	Co2307	Cu2247	Cu3273	Pb2203	Mn2576	Mn2605	Mo2020	Ni2216
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.099**	**2.388**	**6465.**	**1.015**	**.7715**	**.0070**	**.8869**	**1.308**
Stddev	.003	.005	14.	.010	.0023	.0001	.0039	.000
%RSD	.2505	.2173	.2237	.9835	.2965	1.550	.4381	.0310
#1	1.097	2.385	6455.	1.008	.7698	.0069	.8841	1.308
#2	1.101	2.392	6475.	1.022	.7731	.0071	.8896	1.308

Elem	Se1960	Ag3280	Sn1899	V_2924	Zn2062	Zn2138	Ti3361	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**252.6**	**11580.**	**.6915**	**.1652**	**4.523**	**8211.**	**.6028**	**.5689**
Stddev	2.2	23.	.0038	.0004	.023	6.	.0010	.0007
%RSD	.8690	.1991	.5447	.2719	.5114	.0775	.1616	.1143
#1	251.0	11560.	.6888	.1649	4.506	8215.	.6021	.5685
#2	254.1	11590.	.6942	.1655	4.539	8206.	.6035	.5694

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2973.6**	**65729.**	**3127.2**	**769.88**
Stddev	8.9	197.	7.1	3.08
%RSD	.29991	.30001	.22809	.40058
#1	2979.9	65868.	3132.3	772.06
#2	2967.3	65589.	3122.2	767.70

Sample Name: STD B Acquired: 5/11/2010 12:06:54 Type: Cal
Method: 2010a2007(v18) Mode: IR Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B ICP7-37-A

Elem	Al3944	As1890	Ba4554	Ca3158	Fe2599	Mg2790	Mg2852	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**90660.**	**973.6**	**256.3**	**3.942**	**2.777**	**.5680**	**23800.**	**11550.**
Stddev	850.	.3	.0	.012	.004	.0012	5.	31.
%RSD	.9370	.0284	.0186	.3067	.1318	.2181	.0221	.2678
#1	90050.	973.4	256.3	3.950	2.780	.5689	23800.	11570.
#2	91260.	973.8	256.3	3.933	2.774	.5671	23800.	11520.

Elem	Na5895	P_2149	Si2516	Li6707	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**33670.**	**8278.**	**1794.**	**21550.**	**44.884**
Stddev	23.	16.	6.	67.	.081
%RSD	.0668	.1969	.3122	.3099	.18134
#1	33660.	8289.	1790.	21600.	44.941
#2	33690.	8266.	1798.	21500.	44.826

Int. Std.	Y_2243	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S
Avg	**2965.0**	**3154.9**	**750.22**
Stddev	14.0	2.5	1.73
%RSD	.47212	.07990	.23045
#1	2974.9	3153.1	751.44
#2	2955.1	3156.7	748.99

Sample Name: ICV1 Acquired: 5/11/2010 12:10:24 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B ICP7-31-B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.363**	**4.957**	**2.481**	**2.530**	**5.151**	**.12920**	**.0009**	**1.254**	**1.244**
Stddev	.019	.018	.005	.004	.017	.00010	.0001	.013	.008
%RSD	.4335	.3656	.2009	.1752	.3211	.07818	15.07	1.044	.6346
#1	4.349	4.944	2.478	2.527	5.163	.12913	.0010	1.244	1.238
#2	4.376	4.970	2.485	2.533	5.139	.12927	.0008	1.263	1.250
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.248**	**12.90**	**.5117**	**1.253**	**.6404**	**.6404**	**2.615**	**2.518**	**12.65**
Stddev	.001	.05	.0009	.009	.0059	.0005	.027	.031	.10
%RSD	.0869	.3533	.1707	.7374	.9218	.0828	1.045	1.217	.7964
#1	1.249	12.94	.5123	1.246	.6362	.6400	2.634	2.496	12.73
#2	1.247	12.87	.5111	1.259	.6445	.6408	2.595	2.539	12.58
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.77**	**1.272**	**1.269**	**2.058**	**1.249**	**12.83**	**2.480**	**.6450**	**12.67**
Stddev	.00	.000	.012	.010	.006	.03	.002	.0003	.00
%RSD	.0214	.0092	.9639	.5046	.5103	.2626	.0805	.0447	.0127
#1	12.77	1.272	1.278	2.050	1.244	12.81	2.478	.6448	12.67
#2	12.77	1.272	1.260	2.065	1.253	12.86	2.481	.6452	12.67
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICV1 Acquired: 5/11/2010 12:10:24 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B ICP7-31-B

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0013**	**1.281**	**1.252**	**1.245**	**-.0099**	**.0099**	**2.063**	**2.562**	**.0018**
Stddev	.0005	.003	.016	.001	.0037	.0220	.000	.028	.0018
%RSD	40.70	.1949	1.311	.0855	37.00	221.6	.0052	1.106	99.82
#1	-.0017	1.280	1.241	1.246	-.0125	.0255	2.063	2.542	.0032
#2	-.0009	1.283	1.264	1.244	-.0073	-.0056	2.063	2.582	.0005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value									
Range									

Elem	Sr4077
Units	ppm
Avg	**.00088**
Stddev	.00001
%RSD	1.4656
#1	.00089
#2	.00087
Check ?	None
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2951.3**	**65036.**	**3106.6**	**756.33**
Stddev	13.2	82.	13.2	7.59
%RSD	.44578	.12642	.42432	1.0029
#1	2960.6	64978.	3097.3	761.70
#2	2942.0	65094.	3115.9	750.97

Sample Name: ICVB1 Acquired: 5/11/2010 12:13:32 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B ICP7-32-B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9992	.9858	.0014	-.0007	.0004	.00034	2.058	.0000	.0001
Stddev	.0005	.0040	.0033	.0004	.0002	.00005	.003	.000	.0001
%RSD	.0509	.4085	231.8	53.61	50.20	15.042	.1656	70.97	90.18
#1	.9989	.9887	.0038	-.0010	.0003	.00031	2.055	-.0001	.0000
#2	.9996	.9830	-.0009	-.0004	.0006	.00038	2.060	.0000	.0001
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	5.133	-.0026	-.0004	-.0002	-.0014	10.17	.0008	5.097
Stddev	.0000	.025	.0004	.0003	.0004	.0004	.04	.0007	.016
%RSD	40.81	.4852	14.99	60.81	256.4	26.87	.3523	92.64	.3117
#1	.0001	5.150	-.0023	-.0002	-.0005	-.0017	10.15	.0003	5.109
#2	.0001	5.115	-.0029	-.0006	.0001	-.0011	10.20	.0013	5.086
Check ?	None	None	None	None	None	None	None	None	None
Value									
Range									

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.075	9.554	9.935	.0028	-.0031	.0102	-.0002	-.0008	.0137
Stddev	.054	.016	.057	.0005	.0001	.0097	.0001	.0005	.0051
%RSD	1.065	.1627	.5746	16.70	2.911	95.09	23.84	60.07	37.01
#1	5.114	9.565	9.975	.0031	-.0030	.0170	-.0003	-.0011	.0173
#2	5.037	9.543	9.894	.0024	-.0031	.0033	-.0002	-.0004	.0102
Check ?	None	None	None	None	None	None	None	None	None
Value									
Range									

Sample Name: ICVB1 Acquired: 5/11/2010 12:13:32 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B ICP7-32-B

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.087**	**-.0052**	**-.0008**	**-.0004**	**4.920**	**5.119**	**-.0001**	**.0038**	**2.039**
Stddev	.020	.0003	.0003	.0001	.002	.006	.0002	.0006	.017
%RSD	.3835	5.972	33.16	13.36	.0420	.1086	107.8	15.85	.8157
#1	5.074	-.0054	-.0010	-.0004	4.922	5.115	.0000	.0042	2.051
#2	5.101	-.0049	-.0006	-.0005	4.919	5.123	-.0002	.0034	2.027
Check ?	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	None	Chk Pass
Value									
Range									

Elem	Sr4077
Units	ppm
Avg	**2.0721**
Stddev	.0009
%RSD	.04448
#1	2.0728
#2	2.0715
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2989.9**	**65867.**	**3141.3**	**767.42**
Stddev	2.5	208.	23.1	.06
%RSD	.08270	.31563	.73496	.00720
#1	2988.1	66014.	3157.6	767.46
#2	2991.6	65720.	3124.9	767.38

Sample Name: ICB Acquired: 5/11/2010 12:16:49 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0040**	**-.0023**	**-.0001**	**.0000**	**-.00001**	**.0042**	**.0000**
Stddev	.0001	.0051	.0002	.0001	.0001	.00002	.0013	.000
%RSD	172.4	128.9	8.241	174.7	1209.	212.59	29.81	151.1
#1	.0001	-.0076	-.0024	-.0002	-.0001	-.00003	.0051	-.0001
#2	.0000	-.0004	-.0022	.0000	.0001	.00001	.0033	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**-.0036**	**-.0006**	**-.0001**	**.0000**	**-.0004**	**.0096**
Stddev	.0001	.0001	.0044	.0009	.0003	.001	.0002	.0012
%RSD	423.4	3010.	121.6	157.2	453.8	1975.	40.98	12.05
#1	-.0001	.0001	-.0068	-.0013	-.0003	-.0005	-.0006	.0105
#2	.0001	-.0001	-.0005	.0001	.0001	.0004	-.0003	.0088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0210**	**.0003**	**.0003**	**-.0016**	**.0005**	**.0003**	**-.0048**
Stddev	.0002	.0182	.0025	.0001	.0051	.0001	.0001	.0280
%RSD	38.55	86.72	990.5	45.50	308.0	18.97	30.12	590.0
#1	-.0004	.0081	.0020	.0003	.0019	.0006	.0002	-.0246
#2	-.0006	.0339	-.0015	.0002	-.0052	.0005	.0004	.0151
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB Acquired: 5/11/2010 12:16:49 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Se1960	Ag3280	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0004	.0058	.0012	-.0002	-.0001	-.0001	.0021
Stddev	.0016	.0003	.0128	.0003	.0007	.0003	.0000	.0021
%RSD	1808.	70.78	218.2	26.57	359.3	428.1	34.98	97.84
#1	-.0010	.0006	.0149	.0010	.0003	.0001	.0000	.0036
#2	.0012	.0002	-.0032	.0014	-.0007	-.0002	-.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Si2516	Ti3361	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0098	-.0001	-.0001	.0009	.00004
Stddev	.0057	.0001	.0015	.0002	.00018
%RSD	58.07	116.0	1325.	22.87	423.12
#1	-.0138	.0000	.0009	.0007	.00017
#2	-.0058	-.0002	-.0012	.0010	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2959.1	65204.	3096.8	761.29
Stddev	6.9	82.	6.0	3.74
%RSD	.23348	.12624	.19283	.49173
#1	2963.9	65146.	3092.6	763.94
#2	2954.2	65263.	3101.1	758.65

Sample Name: CCVA1 Acquired: 5/11/2010 12:19:55 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2490**	**.2349**	**.2476**	**.2510**	**.2499**	**.25096**	**.2534**	**.2484**
Stddev	.0011	.0037	.0005	.0019	.0011	.00081	.0021	.0012
%RSD	.4282	1.573	.1959	.7542	.4220	.32122	.8264	.4890
#1	.2503	.2351	.2479	.2514	.2510	.25118	.2534	.2489
#2	.2495	.2378	.2476	.2495	.2492	.25181	.2558	.2493
#3	.2482	.2369	.2479	.2536	.2507	.25096	.2538	.2486
#4	.2481	.2296	.2469	.2497	.2489	.24988	.2507	.2466
Check ?	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2475**	**.2520**	**.2500**	**.2486**	**.2460**	**.2475**	**.2505**	**.2537**
Stddev	.0008	.0006	.0043	.0003	.0010	.0013	.0025	.0047
%RSD	.3196	.2248	1.715	.1273	.4213	.5217	1.006	1.841
#1	.2480	.2520	.2506	.2487	.2470	.2485	.2509	.2467
#2	.2484	.2523	.2441	.2485	.2466	.2480	.2522	.2555
#3	.2472	.2524	.2544	.2482	.2456	.2478	.2520	.2566
#4	.2466	.2512	.2509	.2489	.2447	.2456	.2468	.2558
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Sample Name: CCVA1 Acquired: 5/11/2010 12:19:55 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2463**	**.2603**	**.2535**	**.2466**	**.2457**	**.2480**	**.2477**	**2.556**
Stddev	.0011	.0175	.0031	.0006	.0032	.0004	.0009	.024
%RSD	.4323	6.736	1.224	.2346	1.301	.1698	.3545	.9286
#1	.2475	.2546	.2554	.2461	.2417	.2486	.2481	2.563
#2	.2469	.2567	.2554	.2474	.2466	.2481	.2486	2.572
#3	.2455	.2853	.2542	.2462	.2452	.2480	.2472	2.520
#4	.2453	.2444	.2489	.2466	.2494	.2475	.2467	2.567
Check ?	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Elem	Se1960	Ag3280	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2521**	**.2506**	**.2389**	**.2483**	**.2476**	**.2456**	**.2524**	**-.0007**
Stddev	.0006	.0010	.0077	.0008	.0007	.0009	.0007	.0012
%RSD	.2260	.4059	3.226	.3137	.2762	.3628	.2926	173.4
#1	.2516	.2501	.2333	.2477	.2470	.2464	.2524	.0003
#2	.2527	.2520	.2345	.2488	.2486	.2454	.2527	-.0010
#3	.2524	.2508	.2377	.2492	.2473	.2460	.2531	.0002
#4	.2516	.2496	.2501	.2476	.2477	.2444	.2513	-.0022
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Sample Name: CCVA1 Acquired: 5/11/2010 12:19:55 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Si2516	Ti3361	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1525**	**.2487**	**.2465**	**.0025**	**-.00008**
Stddev	.0203	.0004	.0008	.0009	.00003
%RSD	13.34	.1488	.3260	36.37	42.369
#1	.1457	.2493	.2468	.0031	-.00007
#2	.1499	.2485	.2454	.0023	-.00011
#3	.1811	.2484	.2473	.0034	-.00003
#4	.1333	.2487	.2467	.0013	-.00009
Check ?	None	Chk Pass	Chk Pass	None	None
Value					
Range					

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3019.6**	**66580.**	**3144.9**	**783.15**
Stddev	7.5	268.	9.8	2.28
%RSD	.24879	.40223	.31251	.29071
#1	3011.6	66638.	3155.4	781.56
#2	3014.8	66755.	3135.3	782.12
#3	3025.2	66740.	3137.9	782.39
#4	3026.8	66185.	3151.2	786.52

Sample Name: CCVB1 Acquired: 5/11/2010 12:24:43 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.315**	**9.692**	**-.0047**	**1.004**	**9.939**	**.00004**	**.0041**	**.0000**	**.0000**
Stddev	.022	.050	.0021	.001	.116	.00005	.0012	.0000	.0001
%RSD	.3058	.5178	44.57	.1182	1.164	106.14	28.72	117.8	157.3
#1	7.331	9.632	-.0048	1.004	9.943	.00008	.0041	.0000	.0001
#2	7.332	9.751	-.0063	1.004	9.780	.00007	.0024	.0000	.0001
#3	7.312	9.679	-.0059	1.002	9.980	-.00002	.0049	.0000	.0000
#4	7.284	9.708	-.0017	1.005	10.05	.00004	.0049	.0001	.0000
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None	None	None	None
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048**	**10.14**	**.0004**	**-.0001**	**-.0004**	**-.0003**	**10.19**	**.0000**	**10.05**
Stddev	.0001	.04	.0004	.0001	.0004	.0011	.04	.000	.05
%RSD	1.259	.3959	107.4	102.5	88.57	341.0	.4373	1164.	.4903
#1	.0049	10.14	.0002	-.0001	-.0007	.0009	10.14	.0000	10.05
#2	.0048	10.10	.0008	.0000	.0000	-.0017	10.16	.0003	9.984
#3	.0049	10.13	.0007	.0000	-.0002	.0000	10.20	-.0002	10.08
#4	.0048	10.19	-.0001	-.0001	-.0008	-.0005	10.24	-.0002	10.09
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	Chk Pass
Value									
Range									

Sample Name: CCVB1 Acquired: 5/11/2010 12:24:43 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.06**	**.0003**	**.0014**	**.0001**	**-.0055**	**10.04**	**-.0001**	**.0004**	**10.06**
Stddev	.06	.0001	.0020	.0002	.0001	.08	.0030	.0004	.06
%RSD	.5699	16.39	147.7	144.8	1.968	.7666	3727.	91.54	.6364
#1	10.03	.0003	-.0008	.0002	-.0055	10.05	.0008	.0009	10.05
#2	10.14	.0004	.0010	.0003	-.0056	10.11	-.0016	.0000	10.15
#3	10.01	.0004	.0041	.0001	-.0053	9.933	.0037	.0003	10.03
#4	10.08	.0004	.0013	-.0001	-.0054	10.08	-.0031	.0005	10.00
Check ?	Chk Pass	None	None	None	None	Chk Pass	None	None	Chk Pass
Value									
Range									

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0005**	**.0002**	**.0003**	**10.04**	**9.995**	**.0003**	**.0006**	**1.000**
Stddev	.001	.0002	.0001	.0001	.02	.053	.0002	.0008	.005
%RSD	2762.	39.67	46.52	22.31	.2150	.5341	53.66	145.9	.5116
#1	.0008	-.0006	.0003	.0004	10.07	9.964	.0003	.0014	.9986
#2	-.0006	-.0006	.0001	.0002	10.03	10.06	.0005	-.0005	1.008
#3	-.0005	-.0004	.0003	.0004	10.03	9.941	.0001	.0003	.9969
#4	.0001	-.0002	.0002	.0004	10.04	10.02	.0003	.0010	.9982
Check ?	None	None	None	None	Chk Pass	Chk Pass	None	None	Chk Pass
Value									
Range									

Sample Name: CCVB1 Acquired: 5/11/2010 12:24:43 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Sr4077
Units	ppm
Avg	**1.0105**
Stddev	.0041
%RSD	.40263
#1	1.0092
#2	1.0068
#3	1.0098
#4	1.0163
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2994.7**	**65243.**	**3115.7**	**762.88**
Stddev	6.2	235.	25.2	1.38
%RSD	.20675	.36035	.80871	.18152
#1	2989.6	65066.	3121.9	762.39
#2	2990.8	65425.	3148.3	762.09
#3	2995.3	65016.	3101.2	762.10
#4	3003.3	65466.	3091.3	764.95

Sample Name: CCB1 Acquired: 5/11/2010 12:32:48 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0003	-.0049	-.0010	-.0003	.00003	.0002	.0000
Stddev	.0002	.0009	.0028	.0001	.0001	.00002	.0015	.000
%RSD	288.7	276.3	57.14	6.314	39.31	53.804	661.2	967.7
#1	.0001	-.0009	-.0068	-.0010	-.0004	.00002	.0013	-.0001
#2	-.0003	.0003	-.0029	-.0009	-.0002	.00004	-.0008	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0001	-.0021	.0000	-.0004	-.0003	.0004	.0072
Stddev	.0001	.0001	.0078	.0004	.0003	.0002	.0008	.0060
%RSD	97.70	172.0	375.8	1285.	72.84	96.89	188.0	84.21
#1	.0002	.0000	.0035	-.0002	-.0002	-.0001	.0010	.0114
#2	.0000	-.0001	-.0076	.0003	-.0006	-.0004	-.0001	.0029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0142	.0000	.0000	.0015	-.0005	.0002	.0388
Stddev	.0005	.0129	.0023	.0000	.0006	.0001	.0003	.0143
%RSD	139.3	91.00	10890.	235.0	41.54	17.87	160.4	36.87
#1	-.0007	.0233	-.0016	.0000	.0010	-.0005	.0004	.0287
#2	.0000	.0051	.0016	.0001	.0019	-.0006	.0000	.0489
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB1 Acquired: 5/11/2010 12:32:48 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Se1960	Ag3280	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**-.0062**	**.0000**	**-.0006**	**-.0001**	**-.0001**	**-.0012**
Stddev	.0001	.0001	.0097	.000	.0005	.0001	.0000	.0036
%RSD	63.22	104.9	156.2	672.2	88.54	80.10	59.45	297.2
#1	.0003	.0002	.0006	-.0001	-.0010	-.0001	-.0001	-.0038
#2	.0001	.0000	-.0130	.0001	-.0002	-.0002	.0000	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Si2516	Ti3361	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0089**	**-.0002**	**-.0003**	**.0013**	**-.00009**
Stddev	.0126	.0000	.0007	.0007	.00013
%RSD	142.1	18.49	244.0	52.56	145.54
#1	.0178	-.0002	-.0008	.0018	.00000
#2	.0000	-.0002	.0002	.0008	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2959.0**	**65510.**	**3082.3**	**766.16**
Stddev	19.5	266.	3.0	.19
%RSD	.65846	.40561	.09888	.02525
#1	2972.8	65698.	3084.4	766.30
#2	2945.2	65322.	3080.1	766.03

Sample Name: CRI Acquired: 5/11/2010 12:35:23 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B ICP7-32-A

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0566**	**.0485**	**.0497**	**.1038**	**.0050**	**.00505**	**.0520**	**.0052**	**.0053**
Stddev	.0006	.0032	.0015	.0024	.0003	.00013	.0022	.0000	.0001
%RSD	1.035	6.619	3.060	2.350	6.010	2.5917	4.231	.8142	2.159
#1	.0561	.0507	.0508	.1056	.0052	.00495	.0505	.0052	.0052
#2	.0570	.0462	.0486	.1021	.0048	.00514	.0536	.0053	.0053
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0058**	**.0514**	**.0050**	**.0103**	**.0100**	**.0102**	**.0229**	**.0498**	**.0516**
Stddev	.0001	.0091	.0004	.0001	.0003	.0002	.0039	.0012	.0336
%RSD	1.244	17.78	7.007	1.095	2.641	2.137	17.10	2.319	65.11
#1	.0057	.0578	.0053	.0102	.0098	.0101	.0202	.0490	.0754
#2	.0058	.0449	.0048	.0104	.0102	.0104	.0257	.0506	.0279
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value									
Range									

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0214**	**.0052**	**.0058**	**.0095**	**.0202**	**.4511**	**.1022**	**.0109**	**.2159**
Stddev	.0047	.0001	.0023	.0002	.0001	.0548	.0007	.0004	.0075
%RSD	21.95	1.436	39.95	1.819	.6414	12.15	.6450	3.479	3.477
#1	.0247	.0051	.0074	.0094	.0201	.4123	.1017	.0107	.2106
#2	.0181	.0052	.0042	.0096	.0203	.4899	.1027	.0112	.2212
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CRI Acquired: 5/11/2010 12:35:23 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B ICP7-32-A

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0528**	**.0100**	**.0103**	**.0104**	**.1935**	**.3932**	**.0100**	**.1990**	**.0113**
Stddev	.0001	.0003	.0002	.0000	.0022	.0220	.0001	.0011	.0009
%RSD	.1444	2.948	2.138	.0828	1.139	5.606	.7919	.5308	7.899
#1	.0528	.0098	.0101	.0104	.1919	.4088	.0099	.1983	.0106
#2	.0529	.0102	.0104	.0104	.1950	.3776	.0100	.1998	.0119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sr4077
Units	ppm
Avg	**.01030**
Stddev	.00017
%RSD	1.6826
#1	.01017
#2	.01042
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2991.5**	**65611.**	**3098.6**	**775.31**
Stddev	15.7	485.	16.8	2.48
%RSD	.52327	.73960	.54107	.31970
#1	3002.6	65268.	3086.7	777.06
#2	2980.4	65954.	3110.5	773.56

Sample Name: CRI Acquired: 5/11/2010 12:38:29 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0024**	**.0008**	**.0069**	**.0091**	**.0018**	**.00018**	**.0115**	**.0005**	**.0005**
Stddev	.0000	.0042	.0008	.0005	.0002	.00007	.0012	.0000	.0000
%RSD	.3079	516.7	11.61	5.687	10.12	37.208	10.45	4.203	7.727
#1	.0024	.0038	.0063	.0094	.0019	.00013	.0106	.0005	.0006
#2	.0024	-.0022	.0075	.0087	.0017	.00023	.0123	.0005	.0005
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0069**	**.0019**	**.0006**	**.0016**	**.0023**	**.0071**	**.0100**	**.0404**
Stddev	.0001	.0013	.0000	.0002	.0002	.0013	.0035	.0007	.0046
%RSD	16.85	19.24	2.587	25.92	14.15	58.94	49.07	6.730	11.32
#1	.0006	.0078	.0019	.0007	.0015	.0032	.0096	.0095	.0437
#2	.0005	.0059	.0018	.0005	.0018	.0013	.0046	.0105	.0372
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value									
Range									

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**.0006**	**-.0034**	**.0018**	**.0025**	**.0556**	**.0184**	**.0022**	**.1840**
Stddev	.0010	.0000	.0029	.0001	.0001	.0344	.0004	.0004	.0011
%RSD	115.2	5.646	84.07	2.976	2.925	61.91	2.282	19.30	.6114
#1	-.0016	.0006	-.0014	.0017	.0025	.0800	.0186	.0019	.1848
#2	-.0002	.0006	-.0054	.0018	.0024	.0313	.0181	.0025	.1832
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CRI Acquired: 5/11/2010 12:38:29 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0087	.0017	.0018	.0019	.0202	.0621	.0009	.0097	.0087
Stddev	.0002	.0002	.0000	.0000	.0006	.0127	.0001	.0004	.0006
%RSD	2.588	12.41	1.385	.7839	2.802	20.49	17.35	4.573	7.304
#1	.0088	.0016	.0017	.0019	.0198	.0711	.0007	.0094	.0092
#2	.0085	.0019	.0018	.0020	.0206	.0531	.0010	.0100	.0083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sr4077
Units	ppm
Avg	.00018
Stddev	.00010
%RSD	57.008
#1	.00011
#2	.00025
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2976.7	65974.	3118.6	770.56
Stddev	3.1	145.	20.9	1.17
%RSD	.10382	.21991	.67058	.15240
#1	2978.9	65871.	3133.4	771.39
#2	2974.5	66076.	3103.8	769.73

Sample Name: ICSA Acquired: 5/11/2010 12:40:59 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.58**	**488.0**	**.0004**	**.0023**	**.0003**	**-.00010**	**.0159**	**.0010**
Stddev	.09	2.1	.0009	.0019	.0001	.00002	.0013	.0002
%RSD	.4525	.4249	263.0	83.66	26.09	18.569	7.980	20.02
#1	19.51	486.6	.0010	.0009	.0004	-.00009	.0168	.0009
#2	19.64	489.5	-.0003	.0036	.0003	-.00011	.0150	.0011
Check ?	None	Chk Pass	None	None	None	None	None	None
Value								
Range								

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0027**	**-.0002**	**476.6**	**.0036**	**-.0006**	**.0025**	**.0021**	**183.6**
Stddev	.0001	.0003	.2	.0002	.0000	.0026	.0001	.5
%RSD	2.012	166.4	.0399	6.059	7.225	106.6	3.544	.2528
#1	.0027	-.0004	476.4	.0038	-.0006	.0006	.0021	184.0
#2	.0028	.0000	476.7	.0035	-.0007	.0043	.0020	183.3
Check ?	None	None	Chk Pass	None	None	None	None	Chk Pass
Value								
Range								

Elem	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018**	**487.3**	**426.9**	**.0174**	**.0206**	**-.0001**	**.0025**	**-.0693**
Stddev	.0011	1.4	2.5	.0001	.0011	.0001	.0005	.0458
%RSD	60.28	.2961	.5815	.3637	5.204	110.6	20.24	66.04
#1	.0010	488.3	425.1	.0175	.0213	.0000	.0022	-.0369
#2	.0025	486.3	428.6	.0174	.0198	-.0002	.0029	-.1016
Check ?	None	Chk Pass	None	None	None	None	None	None
Value								
Range								

Sample Name: ICSA Acquired: 5/11/2010 12:40:59 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Se1960	Ag3280	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0120**	**.0034**	**.0313**	**.0025**	**.0012**	**-.0001**	**.0012**	**.0193**
Stddev	.0016	.0003	.0017	.0002	.0006	.0002	.0001	.0066
%RSD	13.56	8.110	5.571	8.943	52.36	121.1	6.730	34.29
#1	.0131	.0032	.0301	.0023	.0007	-.0003	.0012	.0146
#2	.0108	.0036	.0326	.0027	.0016	.0000	.0013	.0240
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Elem	Si2516	Ti3361	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0104**	**.0047**	**-.0058**	**.0003**	**.00565**
Stddev	.0205	.0000	.0042	.0040	.00011
%RSD	196.9	.0574	72.78	1258.	1.8842
#1	-.0041	.0047	-.0087	-.0025	.00557
#2	.0249	.0047	-.0028	.0032	.00573
Check ?	None	None	None	None	None
Value					
Range					

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2722.8**	**59586.**	**3049.3**	**664.33**
Stddev	15.8	70.	8.7	4.03
%RSD	.57922	.11748	.28406	.60720
#1	2733.9	59635.	3055.4	667.18
#2	2711.6	59536.	3043.1	661.48

Sample Name: ICSAB Acquired: 5/11/2010 12:45:08 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.86**	**484.5**	**.9499**	**.0003**	**.5065**	**.47658**	**.0129**	**.9498**	**.9030**
Stddev	.08	3.9	.0098	.0066	.0020	.00253	.0006	.0046	.0072
%RSD	.3866	.8046	1.026	2032.	.3947	.53080	4.304	.4860	.7961
#1	19.81	481.7	.9431	.0050	.5051	.47479	.0133	.9466	.8979
#2	19.91	487.2	.9568	-.0043	.5079	.47837	.0125	.9531	.9081
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9056**	**481.0**	**.4934**	**.4529**	**.4678**	**.4851**	**185.9**	**.9608**	**491.6**
Stddev	.0047	2.5	.0014	.0041	.0017	.0060	1.1	.0039	1.9
%RSD	.5162	.5262	.2805	.9104	.3606	1.233	.5948	.4024	.3943
#1	.9023	479.2	.4925	.4499	.4666	.4808	185.1	.9581	490.2
#2	.9089	482.8	.4944	.4558	.4690	.4893	186.7	.9635	493.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**424.1**	**.4988**	**.5203**	**-.0006**	**.8941**	**-.0619**	**.0118**	**.9835**	**.0286**
Stddev	6.3	.0023	.0027	.0004	.0079	.0213	.0037	.0073	.0078
%RSD	1.490	.4668	.5154	61.46	.8783	34.50	31.63	.7438	27.46
#1	428.6	.4972	.5222	-.0008	.8886	-.0770	.0092	.9784	.0341
#2	419.7	.5005	.5185	-.0003	.8997	-.0468	.0145	.9887	.0230
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	None
Value									
Range									

Sample Name: ICSAB Acquired: 5/11/2010 12:45:08 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0015**	**.5077**	**.9183**	**.8824**	**.0028**	**.0061**	**.0049**	**-.0088**	**.0005**
Stddev	.0007	.0013	.0022	.0040	.0026	.0266	.0000	.0006	.0020
%RSD	45.27	.2576	.2350	.4501	94.81	434.9	.3911	6.643	404.8
#1	.0019	.5067	.9168	.8796	.0009	-.0127	.0049	-.0092	-.0009
#2	.0010	.5086	.9198	.8852	.0046	.0249	.0049	-.0083	.0019
Check ?	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	None	None
Value									
Range									

Elem	Sr4077
Units	ppm
Avg	**.00587**
Stddev	.00019
%RSD	3.3036
#1	.00601
#2	.00574
Check ?	None
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2683.0**	**58562.**	**3019.0**	**661.03**
Stddev	10.0	217.	.4	.11
%RSD	.37395	.37032	.01407	.01703
#1	2690.1	58409.	3018.7	661.11
#2	2675.9	58716.	3019.3	660.95

Sample Name: RB Acquired: 5/11/2010 12:48:32 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0130**	**.0165**	**-.0025**	**-.0010**	**.0000**	**-.00004**	**-.0001**	**.0001**
#1	.0137	.0191	-.0032	-.0019	.0000	-.00004	.0007	.0000
#2	.0123	.0138	-.0018	-.0002	.0000	-.00005	-.0009	.0001

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0001**	**.0226**	**-.0002**	**-.0002**	**-.0002**	**-.0008**	**.0183**
#1	.0001	.0001	.0238	-.0001	-.0004	-.0003	-.0004	.0225
#2	.0001	.0001	.0215	-.0004	-.0001	-.0001	-.0012	.0141

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.0275**	**.0000**	**-.0004**	**.0002**	**-.0293**	**-.0041**	**.0004**
#1	-.0008	.0272	.0000	-.0004	.0002	-.0164	-.0035	.0007
#2	-.0004	.0278	.0000	-.0005	.0003	-.0423	-.0047	.0001

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0361**	**-.0002**	**-.0004**	**.0001**	**.0001**	**.0032**	**-.0131**	**-.0001**
#1	-.0356	-.0006	-.0008	-.0001	.0001	.0069	-.0039	-.0002
#2	-.0365	.0003	-.0001	.0002	.0001	-.0005	-.0223	-.0001

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.0001**	**-.0008**	**-.00007**
#1	-.0001	-.0022	-.00004
#2	-.0001	.0007	-.00010

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2978.1**	**65926.**	**3083.8**	**772.19**
#1	2982.5	66019.	3097.2	775.87
#2	2973.7	65834.	3070.4	768.50

Sample Name: CCVA2 Acquired: 5/11/2010 12:56:35 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2486**	**.2372**	**.2492**	**.2513**	**.2501**	**.25099**	**.2513**	**.2477**
Stddev	.0005	.0017	.0017	.0002	.0006	.00013	.0012	.0005
%RSD	.2114	.7277	.6786	.0980	.2455	.05075	.4606	.1899
#1	.2490	.2384	.2480	.2511	.2497	.25108	.2504	.2473
#2	.2482	.2360	.2504	.2514	.2505	.25090	.2521	.2480
Check ?	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2474**	**.2525**	**.2525**	**.2485**	**.2454**	**.2468**	**.2516**	**.2622**
Stddev	.0000	.0006	.0082	.0004	.0002	.0005	.0002	.0015
%RSD	.0056	.2389	3.239	.1689	.0860	.1920	.0715	.5897
#1	.2475	.2521	.2582	.2488	.2455	.2465	.2515	.2633
#2	.2474	.2529	.2467	.2482	.2452	.2471	.2517	.2611
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Elem	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2451**	**.2649**	**.2514**	**.2487**	**.2431**	**.2469**	**.2480**	**2.539**
Stddev	.0011	.0460	.0016	.0007	.0007	.0000	.0010	.042
%RSD	.4478	17.38	.6229	.2969	.3068	.0199	.3962	1.650
#1	.2459	.2974	.2526	.2482	.2436	.2469	.2487	2.569
#2	.2444	.2323	.2503	.2492	.2425	.2469	.2473	2.510
Check ?	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Sample Name: CCVA2 Acquired: 5/11/2010 12:56:35 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Se1960	Ag3280	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2498**	**.2523**	**.2379**	**.2468**	**.2491**	**.2437**	**.2530**	**-.0046**
Stddev	.0002	.0006	.0120	.0005	.0007	.0007	.0002	.0017
%RSD	.0993	.2200	5.042	.1872	.2745	.2807	.0769	37.24
#1	.2499	.2519	.2463	.2464	.2486	.2432	.2529	-.0058
#2	.2496	.2527	.2294	.2471	.2496	.2442	.2532	-.0034
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Elem	Si2516	Ti3361	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1273**	**.2482**	**.2434**	**-.0010**	**-.00006**
Stddev	.0092	.0006	.0023	.0013	.00008
%RSD	7.216	.2343	.9581	122.6	140.56
#1	.1338	.2478	.2418	-.0019	.00000
#2	.1208	.2486	.2451	-.0001	-.00012
Check ?	None	Chk Pass	Chk Pass	None	None
Value					
Range					

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3022.5**	**66603.**	**3140.6**	**787.21**
Stddev	12.3	13.	27.2	.29
%RSD	.40649	.01976	.86529	.03730
#1	3013.8	66594.	3159.8	787.42
#2	3031.2	66613.	3121.4	787.00

Sample Name: CCVB2 Acquired: 5/11/2010 12:59:16 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.339**	**9.778**	**-.0049**	**1.004**	**9.852**	**.00001**	**.0018**	**.0001**	**.0000**
Stddev	.004	.019	.0000	.007	.057	.00003	.0003	.0000	.0000
%RSD	.0559	.1978	.6434	.6937	.5803	303.60	13.89	3.229	39.44
#1	7.336	9.764	-.0049	.9995	9.892	-.00001	.0017	.0001	.0000
#2	7.342	9.791	-.0049	1.009	9.812	.00003	.0020	.0001	.0000
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None	None	None	None
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0049**	**9.969**	**.0002**	**.0000**	**-.0013**	**-.0005**	**10.01**	**.0000**	**9.773**
Stddev	.0001	.014	.0001	.000	.0002	.0011	.05	.000	.033
%RSD	1.968	.1404	22.22	208.2	14.29	202.6	.4731	2070.	.3329
#1	.0048	9.959	.0003	-.0001	-.0014	-.0013	10.04	-.0002	9.796
#2	.0049	9.979	.0002	.0000	-.0012	.0002	9.977	.0002	9.750
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	Chk Pass
Value									
Range									

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.01**	**.0003**	**-.0007**	**.0000**	**-.0051**	**10.06**	**-.0001**	**.0002**	**10.06**
Stddev	.01	.0001	.0003	.001	.0003	.05	.0032	.0002	.03
%RSD	.1275	25.31	43.77	4142.	6.786	.4591	2901.	100.9	.2658
#1	10.00	.0003	-.0005	.0003	-.0053	10.03	.0022	.0004	10.04
#2	10.02	.0004	-.0010	-.0003	-.0048	10.09	-.0024	.0001	10.08
Check ?	Chk Pass	None	None	None	None	Chk Pass	None	None	Chk Pass
Value									
Range									

Sample Name: CCVB2 Acquired: 5/11/2010 12:59:16 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0004**	**.0001**	**.0004**	**10.04**	**9.881**	**.0003**	**.0004**	**1.003**
Stddev	.0008	.0001	.0001	.0001	.02	.024	.0000	.0014	.002
%RSD	560.1	35.55	88.69	30.86	.2098	.2444	8.878	320.0	.1640
#1	-.0007	-.0003	.0000	.0003	10.03	9.864	.0003	-.0006	1.002
#2	.0004	-.0005	.0002	.0005	10.06	9.898	.0002	.0015	1.004
Check ?	None	None	None	None	Chk Pass	Chk Pass	None	None	Chk Pass
Value									
Range									

Elem	Sr4077
Units	ppm
Avg	**.99785**
Stddev	.00042
%RSD	.04231
#1	.99815
#2	.99755
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2992.2**	**66042.**	**3164.0**	**769.00**
Stddev	4.4	90.	8.8	1.95
%RSD	.14851	.13687	.27671	.25329
#1	2989.0	66106.	3157.8	767.62
#2	2995.3	65978.	3170.2	770.38

Sample Name: CCB2 Acquired: 5/11/2010 13:06:34 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0004**	**-.0035**	**.0027**	**.0005**	**.00001**	**.0000**	**.0000**
Stddev	.0002	.0012	.0017	.0014	.0002	.00003	.0008	.000
%RSD	68.40	274.9	48.10	50.18	39.72	476.79	2659.	175.9
#1	.0004	.0004	-.0047	.0037	.0004	-.00001	-.0006	.0000
#2	.0001	-.0013	-.0023	.0018	.0007	.00003	.0006	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**-.0093**	**.0001**	**-.0003**	**-.0008**	**-.0018**	**.0072**
Stddev	.000	.000	.0068	.0002	.0001	.0001	.0004	.0017
%RSD	470.2	2674.	72.56	188.6	27.15	17.92	22.44	22.98
#1	.0000	-.0001	-.0141	.0000	-.0004	-.0007	-.0015	.0060
#2	.0000	.0001	-.0045	.0002	-.0002	-.0009	-.0021	.0084
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**-.0055**	**-.0017**	**-.0001**	**.0008**	**-.0003**	**.0002**	**-.0156**
Stddev	.0010	.0210	.0013	.0000	.0021	.0002	.0001	.0123
%RSD	130.9	379.6	76.97	36.32	270.8	63.95	93.87	78.99
#1	-.0014	-.0204	-.0008	-.0001	-.0007	-.0002	.0001	-.0243
#2	-.0001	.0093	-.0026	-.0001	.0022	-.0005	.0003	-.0069
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB2 Acquired: 5/11/2010 13:06:34 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Se1960	Ag3280	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.0002**	**-.0219**	**.0001**	**-.0002**	**-.0001**	**-.0001**	**.0001**
Stddev	.0008	.0002	.0094	.0004	.0004	.0000	.0000	.0024
%RSD	110.2	99.80	42.71	570.0	220.0	29.81	1.189	1689.
#1	-.0014	.0000	-.0153	-.0002	.0001	-.0001	-.0001	-.0016
#2	-.0002	.0003	-.0286	.0003	-.0004	-.0002	-.0001	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Si2516	Ti3361	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0071**	**-.0002**	**.0006**	**.0000**	**-.00007**
Stddev	.0022	.0000	.0011	.0014	.00007
%RSD	30.99	31.93	181.6	4050.	103.91
#1	-.0086	-.0002	.0014	.0010	-.00002
#2	-.0055	-.0001	-.0002	-.0010	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2977.0**	**65563.**	**3093.8**	**773.53**
Stddev	.1	245.	9.4	3.53
%RSD	.00411	.37302	.30420	.45588
#1	2976.9	65736.	3100.5	776.02
#2	2977.1	65390.	3087.2	771.04

Sample Name: K1004338-002D Acquired: 5/11/2010 13:11:44 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0932	.0927	-.0045	.0107	.0388	-.00002	F .0195	.0000
#1	.0923	.0901	-.0028	.0114	.0387	-.00004	.0188	-.0001
#2	.0940	.0954	-.0061	.0100	.0389	.00001	.0201	.0001

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0003	F 96.78	F .0048	-.0001	-.0004	.0001	.0851
#1	.0000	-.0002	96.93	.0045	-.0001	-.0008	-.0006	.0906
#2	.0000	-.0004	96.63	.0051	.0000	.0000	.0008	.0796

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	F 61.16	.0031	.0019	-.0133	4.002	.0100	.0002
#1	.0008	61.00	.0030	.0019	-.0133	3.958	.0097	-.0001
#2	.0004	61.31	.0031	.0018	-.0132	4.045	.0104	.0005

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 55.10	.0002	.0507	F .0006	F .0010	.2755	26.07	.0017
#1	55.03	.0000	.0509	.0006	.0009	.2762	26.03	.0017
#2	55.17	.0004	.0505	.0006	.0011	.2749	26.12	.0017

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0022	.0064	1.2062
#1	-.0021	.0045	1.2073
#2	-.0022	.0083	1.2051

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2885.0	64100.	3083.2	722.32
#1	2895.8	64219.	3071.7	724.45
#2	2874.2	63982.	3094.7	720.19

Sample Name: K1004338-002S Acquired: 5/11/2010 13:15:09 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.311**	**.4779**	**1.017**	**1.991**	**.04740**	**1.074**	**.0486**	**.0459**
#1	2.311	.4780	1.016	1.991	.04740	1.073	.0484	.0457
#2	2.311	.4778	1.018	1.991	.04740	1.076	.0489	.0461

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0508**	F **106.1**	**.1970**	**.4507**	**.2398**	**.2355**	**1.096**	**.4798**
#1	.0506	106.0	.1972	.4482	.2389	.2347	1.100	.4772
#2	.0509	106.1	.1969	.4531	.2406	.2362	1.092	.4823

Elem	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **70.40**	**.4772**	**1.023**	**.4342**	F **14.13**	**.9472**	**.0475**	F **80.78**
#1	70.33	.4767	1.018	.4321	14.13	.9441	.0480	80.87
#2	70.47	.4776	1.028	.4363	14.13	.9504	.0470	80.69

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.59**	**.5481**	**.4744**	F **.4619**	**.2948**	**36.50**	**.0033**	**1.004**
#1	10.56	.5495	.4713	.4613	.2979	36.43	.0031	.9987
#2	10.63	.5466	.4774	.4625	.2916	36.57	.0034	1.009

Elem	Li6707	Sr4077
Units	ppm	ppm
Avg	**.0079**	**1.1997**
#1	.0082	1.1997
#2	.0077	1.1998

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2856.3**	**63293.**	**3076.3**	**707.07**
#1	2863.8	63185.	3071.4	708.93
#2	2848.8	63402.	3081.2	705.20

Sample Name: K1004229-001 Acquired: 5/11/2010 13:19:09 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B RERUN

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039	F .0034	-.0007	.0046	.0020	-.00009	F .0427	-.0001
#1	.0036	.0054	-.0031	.0033	.0020	-.00009	.0423	-.0001
#2	.0041	.0014	.0016	.0059	.0021	-.00009	.0430	-.0002

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0002	.2652	F -.0004	-.0005	.0019	.0012	F .0126
#1	.0000	.0001	.2602	-.0003	-.0006	.0019	.0009	.0208
#2	.0000	.0002	.2703	-.0005	-.0004	.0019	.0016	.0044

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0019	.0313	.0001	.0008	-.0033	F .0580	.0055	-.0004
#1	-.0021	.0319	.0001	.0009	-.0034	.0669	.0060	-.0004
#2	-.0017	.0307	.0001	.0007	-.0032	.0492	.0050	-.0004

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5797	.0036	-.0005	F .0057	F .0063	.0375	6.654	-.0005
#1	.5908	.0036	-.0006	.0053	.0060	.0375	6.643	-.0005
#2	.5686	.0036	-.0004	.0062	.0065	.0374	6.665	-.0006

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0047	.0011	.00115
#1	-.0054	.0025	.00111
#2	-.0039	-.0003	.00119

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2969.4	66352.	3058.8	784.04
#1	2984.8	66191.	3065.4	786.64
#2	2954.0	66513.	3052.2	781.44

Sample Name: K1004381-MB Acquired: 5/11/2010 13:22:16 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**-.0013**	**-.0032**	**.0004**	**-.0001**	**-.00001**	**.0016**	**.0000**
#1	.0010	-.0031	-.0025	.0014	.0000	.00000	.0015	.0000
#2	.0010	.0005	-.0039	-.0005	-.0002	-.00003	.0016	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0000**	**.0072**	**-.0002**	**-.0003**	**-.0001**	**-.0001**	**.0030**
#1	.0000	-.0001	.0075	-.0001	-.0001	-.0001	-.0001	.0072
#2	.0001	.0000	.0070	-.0003	-.0005	-.0002	-.0002	-.0013

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0018**	**-.0004**	**.0000**	**-.0001**	**-.0001**	**-.0095**	**-.0002**	**.0003**
#1	-.0014	-.0015	-.0001	-.0001	-.0002	.0232	-.0003	.0001
#2	-.0021	.0008	.0000	-.0001	.0000	-.0421	-.0001	.0006

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0257**	**.0018**	**-.0003**	**.0000**	**.0001**	F **.2528**	**.0209**	**-.0002**
#1	-.0340	.0021	-.0002	.0001	.0001	.2491	.0411	-.0002
#2	-.0175	.0015	-.0004	-.0001	.0001	.2565	.0008	-.0002

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	**-.0001**	**.0005**	**-.00010**
#1	.0010	.0006	-.00015
#2	-.0013	.0004	-.00004

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2950.5	65269.	3100.6	769.77
#1	2959.7	65094.	3097.3	773.41
#2	2941.2	65443.	3103.8	766.14

Sample Name: LCSW Acquired: 5/11/2010 13:24:54 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.015**	**2.565**	**2.533**	**5.282**	**.12850**	F **.0019**	**1.261**	**1.245**
#1	4.983	2.561	2.530	5.242	.12782	.0026	1.258	1.240
#2	5.046	2.570	2.537	5.321	.12919	.0012	1.264	1.249

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.247**	**13.08**	**.5216**	**1.256**	**.6542**	**.6492**	**2.630**	**2.514**
#1	1.246	13.04	.5245	1.251	.6530	.6456	2.624	2.509
#2	1.248	13.12	.5188	1.262	.6555	.6528	2.635	2.520

Elem	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.97**	**1.309**	F **-.0010**	**1.270**	**13.11**	**2.451**	**.6571**	**12.69**
#1	12.90	1.315	-.0010	1.266	13.16	2.453	.6521	12.73
#2	13.03	1.303	-.0010	1.274	13.07	2.448	.6621	12.66

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**1.318**	**1.247**	**1.258**	**.2701**	**.0053**	**-.0001**	**2.525**
#1	.0002	1.325	1.243	1.257	.2726	.0117	.0000	2.519
#2	.0012	1.312	1.251	1.258	.2676	-.0012	-.0002	2.530

Elem	Li6707	Sr4077
Units	ppm	ppm
Avg	**-.0001**	**.00057**
#1	.0013	.00069
#2	-.0016	.00046

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2928.2**	**64576.**	**3079.8**	**752.92**
#1	2935.3	64030.	3094.1	753.93
#2	2921.1	65122.	3065.5	751.90

Sample Name: LCSW Acquired: 5/11/2010 13:28:03 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B SILICON

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0056	F .0060	-.0022	.0010	F .0001	.00002	F .0022	.0000
#1	.0055	.0104	-.0013	.0016	.0002	.00003	.0011	.0000
#2	.0057	.0017	-.0031	.0004	.0000	.00001	.0033	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	F -.0058	F .0050	-.0003	-.0007	.0000	.0395
#1	.0000	.0001	-.0051	.0051	-.0004	-.0009	.0003	.0383
#2	.0000	.0001	-.0065	.0049	-.0002	-.0006	-.0003	.0406

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	F .0001	.0001	-.0007	-.0029	F .0108	.0018	.0002
#1	.0011	-.0019	.0001	-.0007	-.0028	.0023	.0020	.0006
#2	.0007	.0021	.0001	-.0008	-.0029	.0192	.0017	-.0003

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 16.69	-.0001	-.0006	F .0000	F .0002	.2568	9.939	.0002
#1	16.63	-.0002	-.0005	-.0001	.0003	.2575	9.867	.0002
#2	16.76	.0000	-.0007	.0001	.0001	.2561	10.01	.0002

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0003	.0009	-.00004
#1	-.0007	-.0001	.00006
#2	.0001	.0020	-.00013

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2953.7	65908.	3119.2	768.98
#1	2971.9	65998.	3098.1	772.67
#2	2935.5	65817.	3140.2	765.28

Sample Name: K1004381-001 Acquired: 5/11/2010 13:31:24 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3059	.2878	-.0039	.0024	.0160	.00000	F .0042	.0000
#1	.3070	.2863	-.0029	.0033	.0161	-.00003	.0038	.0000
#2	.3048	.2894	-.0049	.0015	.0159	.00003	.0046	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0001	2.126	F .0005	.0000	.0001	-.0001	.5042
#1	.0001	.0001	2.121	.0005	.0000	-.0004	.0008	.5006
#2	.0002	.0001	2.130	.0006	.0001	.0006	-.0011	.5079

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0012	1.217	.0196	-.0006	-.0032	F .5536	-.0006	-.0005
#1	-.0010	1.216	.0197	-.0006	-.0031	.5258	-.0008	.0000
#2	-.0013	1.219	.0195	-.0006	-.0034	.5815	-.0004	-.0009

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.380	-.0002	.0006	F .0012	F .0016	.2769	6.536	.0170
#1	3.378	-.0006	.0004	.0011	.0016	.2707	6.481	.0168
#2	3.383	.0002	.0008	.0013	.0016	.2830	6.590	.0172

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0007	.0010	.02577
#1	.0016	.0013	.02566
#2	-.0003	.0006	.02587

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2986.4	66335.	3137.8	778.75
#1	3002.2	66038.	3132.3	783.23
#2	2970.6	66632.	3143.4	774.28

Sample Name: K1004407-001 Acquired: 5/11/2010 13:34:29 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025	F -.0017	-.0045	-.0007	.0156	-.00004	F .0414	-.0001
#1	.0026	-.0049	-.0030	-.0001	.0157	-.00006	.0412	-.0001
#2	.0025	.0014	-.0059	-.0013	.0154	-.00002	.0415	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	F 34.85	.0635	.0000	.0009	.0009	F .0116
#1	.0000	.0000	34.77	.0635	-.0002	.0006	-.0001	.0148
#2	.0001	.0000	34.94	.0635	.0001	.0012	.0019	.0084

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	F 14.64	.0151	-.0005	-.0148	2.927	.0005	-.0001
#1	.0009	14.61	.0150	-.0006	-.0152	2.918	.0007	-.0003
#2	-.0003	14.68	.0152	-.0003	-.0145	2.935	.0003	.0000

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.683	.0004	.0090	F .0080	F .0084	.3877	29.79	-.0001
#1	8.654	.0003	.0088	.0079	.0083	.3878	29.75	-.0001
#2	8.713	.0005	.0091	.0081	.0085	.3876	29.82	.0000

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0018	.0038	.08298
#1	-.0012	.0046	.08284
#2	-.0023	.0031	.08312

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2924.6	64334.	3095.1	751.48
#1	2931.4	64219.	3089.2	751.22
#2	2917.8	64449.	3100.9	751.74

Sample Name: K1004407-002 Acquired: 5/11/2010 13:37:57 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	F -.0045	-.0055	.0012	.0155	-.00003	F .0416	.0000
#1	.0011	-.0036	-.0061	.0019	.0158	-.00007	.0427	.0000
#2	.0011	-.0053	-.0048	.0005	.0152	.00001	.0406	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0001	F 34.38	F .0014	-.0002	.0000	-.0008	F .0119
#1	.0000	-.0001	34.39	.0013	-.0001	.0004	-.0018	.0076
#2	.0001	-.0002	34.37	.0014	-.0004	-.0005	.0001	.0161

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F 14.62	.0054	-.0008	-.0150	2.860	.0001	.0005
#1	.0004	14.53	.0053	-.0006	-.0147	2.852	.0006	.0004
#2	-.0001	14.70	.0054	-.0009	-.0152	2.868	-.0004	.0005

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.592	.0002	.0001	F .0054	F .0058	.3742	29.49	-.0001
#1	8.557	.0009	.0002	.0052	.0058	.3727	29.33	.0000
#2	8.627	-.0005	-.0001	.0055	.0058	.3757	29.65	-.0002

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0017	.0027	.08169
#1	-.0011	.0023	.08151
#2	-.0023	.0031	.08187

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2954.1	65115.	3121.4	761.08
#1	2963.0	65095.	3100.8	762.33
#2	2945.3	65135.	3141.9	759.82

Sample Name: K1004407-003 Acquired: 5/11/2010 13:41:26 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	F -.0004	-.0038	.0022	.0159	-.00008	F .0423	.0000
#1	.0011	.0021	-.0027	.0020	.0162	-.00006	.0418	.0000
#2	.0010	-.0029	-.0049	.0024	.0157	-.00010	.0428	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0001	F 34.81	F .0010	-.0002	-.0005	.0006	F .0028
#1	.0000	.0000	34.87	.0010	.0001	-.0006	.0005	.0003
#2	.0000	-.0001	34.74	.0011	-.0004	-.0004	.0007	.0052

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	F 14.73	.0053	-.0008	-.0153	2.907	-.0021	.0005
#1	-.0006	14.67	.0052	-.0009	-.0154	2.892	-.0019	.0009
#2	.0007	14.79	.0053	-.0006	-.0153	2.922	-.0023	.0000

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.694	-.0006	.0001	F .0027	F .0031	.3538	29.82	-.0002
#1	8.665	-.0001	.0002	.0027	.0031	.3521	29.72	-.0002
#2	8.722	-.0011	-.0001	.0026	.0030	.3555	29.91	-.0002

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0002	.0031	.08289
#1	-.0010	.0030	.08295
#2	.0015	.0031	.08282

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2944.1	64900.	3108.4	760.65
#1	2946.4	64903.	3087.1	761.15
#2	2941.9	64896.	3129.7	760.16

Sample Name: CCVA3 Acquired: 5/11/2010 13:44:55 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2524**	**.2334**	**.2443**	**.2470**	**.2545**	**.24813**	**.2479**	**.2503**	**.2503**
Stddev	.0004	.0026	.0016	.0002	.0001	.00062	.0012	.0002	.0012
%RSD	.1635	1.109	.6466	.0742	.0539	.25094	.4883	.0830	.4713
#1	.2521	.2353	.2432	.2471	.2546	.24857	.2488	.2501	.2495
#2	.2527	.2316	.2454	.2468	.2544	.24769	.2471	.2504	.2512
Check ?	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2514**	**.2508**	**.2494**	**.2475**	**.2502**	**.2478**	**.2541**	**.2478**	**.2546**
Stddev	.0000	.0001	.0004	.0009	.0000	.0025	.0011	.0001	.0253
%RSD	.0048	.0482	.1523	.3595	.0105	1.003	.4317	.0217	9.937
#1	.2514	.2507	.2491	.2468	.2502	.2496	.2549	.2477	.2367
#2	.2514	.2509	.2496	.2481	.2502	.2461	.2533	.2478	.2725
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None
Value									
Range									

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2500**	**.2510**	**.2438**	**.2501**	**.2503**	**2.503**	**.2508**	**.2516**	**.2361**
Stddev	.0024	.0001	.0037	.0009	.0006	.067	.0012	.0005	.0206
%RSD	.9518	.0236	1.528	.3703	.2326	2.685	.4755	.1853	8.743
#1	.2484	.2510	.2465	.2494	.2499	2.455	.2500	.2519	.2507
#2	.2517	.2509	.2412	.2507	.2507	2.550	.2517	.2513	.2215
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value									
Range									

Sample Name: CCVA3 Acquired: 5/11/2010 13:44:55 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2507**	**.2520**	**.2445**	**.2527**	**-.0009**	**.1521**	**.2494**	**.2457**	**-.0017**
Stddev	.0015	.0004	.0004	.0002	.0002	.0030	.0004	.0001	.0004
%RSD	.6124	.1610	.1527	.0779	20.52	2.005	.1561	.0545	26.92
#1	.2518	.2517	.2442	.2529	-.0008	.1499	.2492	.2458	-.0020
#2	.2497	.2523	.2448	.2526	-.0010	.1542	.2497	.2456	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value									
Range									

Elem	Sr4077
Units	ppm
Avg	**.00009**
Stddev	.00010
%RSD	112.96
#1	.00015
#2	.00002
Check ?	None
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2969.2**	**65628.**	**3077.6**	**775.09**
Stddev	6.0	134.	16.8	.34
%RSD	.20219	.20378	.54658	.04409
#1	2973.4	65722.	3065.7	774.85
#2	2965.0	65533.	3089.5	775.33

Sample Name: CCVB3 Acquired: 5/11/2010 13:47:49 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.316**	**9.738**	**-.0052**	**.9977**	**10.00**	**-.00004**	**.0015**	**.0001**
Stddev	.030	.005	.0013	.0009	.00	.00009	.0024	.0000
%RSD	.4064	.0472	25.22	.0918	.0416	199.77	159.4	22.62
#1	7.295	9.734	-.0061	.9983	10.00	-.00010	.0033	.0001
#2	7.337	9.741	-.0043	.9970	9.997	.00002	-.0002	.0000
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None	None	None
Value								
Range								

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0049**	**10.03**	**.0002**	**.0001**	**-.0009**	**-.0002**	**10.02**
Stddev	.0000	.0001	.02	.0003	.0006	.0000	.0009	.03
%RSD	6.153	1.446	.1955	128.4	493.6	4.487	510.4	.3240
#1	.0000	.0050	10.05	.0004	-.0003	-.0010	.0004	10.05
#2	.0000	.0049	10.02	.0000	.0005	-.0009	-.0008	9.999
Check ?	None	None	Chk Pass	None	None	None	None	Chk Pass
Value								
Range								

Elem	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**9.795**	**9.978**	**.0003**	**.0005**	**.0004**	**-.0049**	**10.06**
Stddev	.0005	.051	.075	.0001	.0004	.0001	.0002	.04
%RSD	36.81	.5157	.7515	21.80	71.48	16.75	3.482	.4276
#1	.0010	9.830	10.03	.0002	.0003	.0004	-.0051	10.09
#2	.0018	9.759	9.925	.0003	.0008	.0003	-.0048	10.03
Check ?	None	Chk Pass	Chk Pass	None	None	None	None	Chk Pass
Value								
Range								

Sample Name: CCVB3 Acquired: 5/11/2010 13:47:49 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Se1960	Ag3280	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0008	9.968	-.0006	-.0004	.0001	.0004	9.970
Stddev	.0011	.0007	.022	.0002	.0004	.0001	.0000	.041
%RSD	230.8	96.99	.2231	31.69	93.76	68.72	2.616	.4082
#1	.0013	.0002	9.983	-.0004	-.0001	.0001	.0004	9.941
#2	-.0003	.0013	9.952	-.0007	-.0007	.0000	.0004	9.999
Check ?	None	None	Chk Pass	None	None	None	None	Chk Pass
Value								
Range								

Elem	Si2516	Ti3361	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	9.757	.0002	.0007	1.005	1.0127
Stddev	.009	.0002	.0004	.011	.0014
%RSD	.0948	148.3	53.24	1.114	.13407
#1	9.763	.0003	.0009	1.013	1.0136
#2	9.750	.0000	.0004	.9969	1.0117
Check ?	Chk Pass	None	None	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2977.6	65505.	3115.3	763.25
Stddev	3.0	102.	15.3	2.73
%RSD	.10128	.15566	.49090	.35779
#1	2979.8	65432.	3126.1	761.32
#2	2975.5	65577.	3104.5	765.19

Sample Name: CCB3 Acquired: 5/11/2010 13:51:15 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0002	-.0046	-.0005	.0002	-.00002	-.0006	.0000
Stddev	.0000	.0020	.0016	.0005	.0002	.00002	.0000	.0001
%RSD	2.794	980.8	33.52	96.14	69.71	126.97	4.885	1657.
#1	.0004	-.0012	-.0035	-.0009	.0003	-.00003	-.0006	.0000
#2	.0004	.0017	-.0057	-.0002	.0001	.00000	-.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0001	.0017	.0002	-.0003	-.0001	-.0001	.0011
Stddev	.0001	.0000	.0070	.0002	.0002	.0004	.0005	.0082
%RSD	99.63	29.07	403.5	107.7	63.38	513.7	875.8	722.0
#1	.0000	-.0001	-.0032	.0000	-.0002	-.0003	.0003	.0070
#2	-.0001	-.0001	.0067	.0003	-.0005	.0002	-.0004	-.0047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0016	.0220	-.0049	.0000	.0008	-.0004	.0001	.0030
Stddev	.0009	.0106	.0012	.000	.0004	.0001	.0001	.0081
%RSD	56.95	47.87	24.17	624.0	50.60	17.76	41.87	268.5
#1	-.0009	.0295	-.0041	.0000	.0005	-.0005	.0001	.0087
#2	-.0022	.0146	-.0058	.0000	.0011	-.0004	.0002	-.0027
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB3 Acquired: 5/11/2010 13:51:15 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Se1960	Ag3280	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0004**	**-.0027**	**-.0008**	**-.0006**	**-.0002**	**.0000**	**-.0024**
Stddev	.0007	.0002	.0111	.0009	.0001	.0001	.000	.0001
%RSD	91.40	49.14	416.1	112.8	9.125	67.24	184.4	4.427
#1	.0013	.0003	-.0105	-.0014	-.0007	-.0003	.0000	-.0023
#2	.0003	.0006	.0052	-.0002	-.0006	-.0001	.0000	-.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Si2516	Ti3361	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0086**	**-.0001**	**-.0003**	**.0007**	**-.00001**
Stddev	.0274	.0000	.0013	.0002	.00012
%RSD	318.0	6.632	426.4	23.89	1083.8
#1	-.0280	-.0001	-.0012	.0005	-.00009
#2	.0108	-.0001	.0006	.0008	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2952.6**	**65271.**	**3096.8**	**765.03**
Stddev	18.6	116.	11.7	7.62
%RSD	.62989	.17846	.37904	.99616
#1	2965.8	65353.	3105.1	770.42
#2	2939.5	65188.	3088.5	759.64

Sample Name: K1004414-001 Acquired: 5/11/2010 13:53:52 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0279	.0234	-.0046	-.0009	F .0008	.00000	F .0006	.0000
#1	.0276	.0192	-.0069	-.0003	.0008	-.00004	.0005	.0000
#2	.0283	.0277	-.0023	-.0014	.0007	.00004	.0007	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0001	1.540	F .0002	-.0003	.0172	.0177	.0284
#1	-.0001	-.0002	1.543	.0001	-.0002	.0171	.0173	.0251
#2	.0001	.0000	1.537	.0002	-.0005	.0174	.0181	.0317

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.5977	.0023	-.0004	-.0020	F .1850	-.0003	.0003
#1	-.0008	.5964	.0023	-.0003	-.0021	.1717	-.0004	.0005
#2	-.0005	.5991	.0023	-.0005	-.0019	.1983	-.0002	.0001

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.211	-.0006	-.0004	F .0003	F .0006	.2373	3.776	.0002
#1	1.209	-.0006	-.0006	.0004	.0005	.2362	3.806	.0002
#2	1.212	-.0007	-.0002	.0002	.0006	.2383	3.746	.0002

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0000	.0019	.01309
#1	.0001	.0012	.01315
#2	-.0001	.0025	.01303

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2990.2	66541.	3132.4	781.29
#1	3003.0	66361.	3127.5	783.55
#2	2977.4	66722.	3137.4	779.04

Sample Name: K1004467-001 Acquired: 5/11/2010 13:56:58 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.311	1.349	-.0029	.0025	.0473	.00011	F .0088	.0000
#1	1.301	1.356	-.0011	.0009	.0472	.00007	.0094	.0001
#2	1.321	1.342	-.0047	.0042	.0475	.00014	.0081	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0000	F 54.55	F .0017	.0019	.0038	.0036	2.571
#1	.0001	.0000	54.52	.0015	.0018	.0037	.0038	2.589
#2	.0001	.0000	54.58	.0019	.0020	.0038	.0034	2.552

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	F 17.86	.2181	.0260	-.0079	5.172	-.0013	.0002
#1	.0022	17.85	.2170	.0257	-.0083	5.160	-.0007	.0002
#2	.0016	17.88	.2191	.0264	-.0076	5.184	-.0018	.0002

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 17.80	.0003	.0043	F .0083	F .0088	.4566	22.84	.0747
#1	17.84	.0000	.0043	.0082	.0088	.4566	22.86	.0756
#2	17.76	.0006	.0043	.0084	.0089	.4567	22.83	.0739

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0001	.0073	.22027
#1	.0002	.0080	.21954
#2	-.0004	.0066	.22100

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2952.6	65661.	3167.1	748.77
#1	2966.5	65708.	3166.2	751.33
#2	2938.6	65614.	3168.0	746.21

Sample Name: K1004467-001D Acquired: 5/11/2010 14:00:25 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.334	1.369	-.0024	.0028	.0482	.00006	F .0088	.0000
#1	1.334	1.370	-.0037	.0032	.0483	.00001	.0089	.0000
#2	1.335	1.368	-.0010	.0025	.0481	.00010	.0086	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0001	F 56.11	F .0023	.0023	.0032	.0033	2.620
#1	.0000	.0000	56.22	.0022	.0018	.0034	.0033	2.614
#2	.0000	-.0001	56.00	.0023	.0029	.0031	.0032	2.626

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033	F 18.45	.2245	.0268	-.0081	5.347	.0022	.0006
#1	.0024	18.42	.2256	.0267	-.0080	5.326	.0023	.0005
#2	.0041	18.47	.2235	.0270	-.0081	5.367	.0021	.0008

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 18.23	.0008	.0048	F .0084	F .0090	.4744	23.49	.0761
#1	18.14	.0012	.0049	.0084	.0090	.4721	23.38	.0759
#2	18.33	.0004	.0046	.0083	.0090	.4767	23.61	.0764

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0020	.0096	.22634
#1	-.0017	.0090	.22663
#2	-.0022	.0103	.22605

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2962.1	65229.	3174.5	751.68
#1	2959.4	65152.	3165.8	752.26
#2	2964.9	65306.	3183.2	751.09

Sample Name: K1004467-001L Acquired: 5/11/2010 14:03:52 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B 1/5

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3375	.3095	-.0058	.0000	.0098	-.00004	F .0011	.0001
#1	.3345	.3105	-.0062	.0009	.0095	-.00001	.0015	.0001
#2	.3404	.3085	-.0055	-.0009	.0101	-.00007	.0007	.0001

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	F 11.14	F .0001	.0005	.0002	.0006	.5398
#1	.0000	.0000	11.15	-.0003	.0005	.0005	.0004	.5359
#2	.0000	.0001	11.14	.0005	.0004	-.0001	.0009	.5438

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	3.603	.0448	.0050	-.0013	F 1.051	.0007	.0003
#1	.0018	3.605	.0449	.0050	-.0013	1.050	.0006	.0005
#2	.0006	3.600	.0446	.0049	-.0013	1.052	.0007	.0002

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.550	.0004	.0007	F .0022	F .0023	.0948	4.670	.0188
#1	3.539	.0011	.0005	.0022	.0024	.0986	4.654	.0177
#2	3.560	-.0003	.0010	.0022	.0023	.0909	4.686	.0199

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	.0003	.0011	.04461
#1	.0002	.0007	.04468
#2	.0003	.0014	.04454

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2982.3	66065.	3122.1	775.16
#1	2985.7	65922.	3132.2	775.71
#2	2979.0	66208.	3112.1	774.60

Sample Name: K1004467-001S Acquired: 5/11/2010 14:07:14 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.566**	**.4784**	**1.020**	**2.006**	**.04845**	**1.073**	**.0479**	**.0462**
#1	3.572	.4783	1.018	2.006	.04850	1.076	.0477	.0459
#2	3.560	.4784	1.022	2.007	.04840	1.069	.0481	.0465

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0515**	F **56.09**	**.1938**	**.4625**	**.2427**	**.2427**	**3.699**	**.4751**
#1	.0515	56.14	.1939	.4597	.2422	.2446	3.703	.4738
#2	.0515	56.04	.1938	.4654	.2431	.2408	3.695	.4763

Elem	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **18.20**	**.7032**	**1.034**	**.4474**	**5.234**	**.9636**	**.0486**	F **34.66**
#1	18.21	.7028	1.030	.4457	5.297	.9593	.0487	34.68
#2	18.19	.7036	1.038	.4491	5.170	.9680	.0486	34.65

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.4968**	**.4778**	F **.4804**	**.4773**	**33.85**	**.0829**	**1.010**
#1	.0000	.4969	.4761	.4799	.4784	33.83	.0834	1.008
#2	.0014	.4966	.4794	.4809	.4761	33.88	.0824	1.012

Elem	Li6707	Sr4077
Units	ppm	ppm
Avg	**.0096**	**.22638**
#1	.0078	.22635
#2	.0113	.22641

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2929.2**	**64367.**	**3130.8**	**742.26**
#1	2938.6	64531.	3129.6	743.11
#2	2919.8	64203.	3132.1	741.42

Sample Name: K1004469-010 Acquired: 5/11/2010 14:10:24 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0048	F .0011	-.0043	.0152	.1150	.00002	.0764	.0000
#1	.0049	.0003	-.0041	.0142	.1152	-.00002	.0758	-.0001
#2	.0048	.0020	-.0046	.0161	.1148	.00006	.0770	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0002	F 60.80	F .0000	.0011	.0035	.0040	.0476
#1	.0001	-.0002	60.76	.0006	.0009	.0038	.0048	.0420
#2	-.0001	-.0002	60.85	-.0006	.0013	.0032	.0032	.0533

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F 41.36	1.235	.0025	-.0098	F 1.369	.0011	.0003
#1	-.0006	41.39	1.240	.0029	-.0101	1.347	.0028	.0005
#2	.0011	41.32	1.231	.0021	-.0094	1.390	-.0007	.0002

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 45.74	-.0005	.0040	F .0018	F .0019	.2207	26.46	-.0003
#1	45.88	-.0004	.0040	.0017	.0019	.2205	26.58	-.0005
#2	45.60	-.0006	.0040	.0018	.0019	.2208	26.34	.0000

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0011	.0040	.61188
#1	-.0012	.0049	.61120
#2	-.0011	.0031	.61257

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2906.2	64610.	3133.4	727.90
#1	2905.7	64394.	3146.5	728.38
#2	2906.7	64826.	3120.3	727.42

Sample Name: K1004488-002 Acquired: 5/11/2010 14:13:51 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065	F .0020	-.0033	.0022	.0821	.00001	F .0065	.0000
#1	.0065	.0027	-.0045	.0020	.0821	.00004	.0063	.0000
#2	.0066	.0013	-.0021	.0024	.0821	-.00001	.0067	.0000

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	F 23.91	F -.0001	-.0003	-.0006	-.0008	1.367
#1	.0001	.0001	23.95	-.0004	-.0002	-.0005	-.0004	1.356
#2	.0000	.0001	23.86	.0003	-.0005	-.0008	-.0012	1.377

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	F 13.15	.2688	.0008	-.0243	4.199	.0013	.0001
#1	.0012	13.08	.2689	.0010	-.0243	4.168	.0018	-.0002
#2	.0013	13.21	.2686	.0007	-.0243	4.231	.0009	.0005

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 12.50	-.0006	-.0001	F .0038	F .0042	.4206	45.63	.0005
#1	12.44	-.0006	.0001	.0038	.0042	.4180	45.40	.0006
#2	12.57	-.0006	-.0003	.0038	.0042	.4233	45.85	.0005

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0004	.0060	.11776
#1	-.0003	.0082	.11788
#2	-.0006	.0038	.11764

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2960.8	65191.	3122.7	759.52
#1	2973.8	64847.	3104.0	764.48
#2	2947.8	65536.	3141.4	754.56

Sample Name: K1004502-005 Acquired: 5/11/2010 14:17:14 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0360	.0280	-.0072	-.0006	.0077	.00004	.0530	.0003
#1	.0358	.0277	-.0058	-.0006	.0075	.00004	.0527	.0003
#2	.0362	.0284	-.0086	-.0007	.0078	.00004	.0533	.0003

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0003	F 249.2	F .0005	.0032	.0205	.0208	.6043
#1	.0002	.0003	250.2	.0005	.0032	.0202	.0217	.6147
#2	.0002	.0003	248.3	.0005	.0032	.0207	.0198	.5939

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036	5.595	.0283	.1631	-.0100	F 52.59	-.0016	.0003
#1	.0037	5.612	.0286	.1622	-.0101	52.67	-.0033	-.0002
#2	.0034	5.577	.0281	.1640	-.0098	52.51	.0001	.0007

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 349.7	-.0003	.0000	.0400	F .0383	.5022	25.88	-.0010
#1	346.7	.0003	.0002	.0397	.0383	.4993	25.84	-.0008
#2	352.8	-.0009	-.0002	.0403	.0384	.5050	25.92	-.0011

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0022	.0172	.48048
#1	-.0033	.0151	.48221
#2	-.0010	.0193	.47874

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2809.3	62172.	3123.5	684.44
#1	2824.6	61947.	3121.4	687.14
#2	2793.9	62397.	3125.5	681.75

Sample Name: K1004300-MB Acquired: 5/11/2010 14:21:29 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	.0035	-.0031	-.0014	-.0001	-.00017	.0027	-.0001
#1	.0020	.0058	-.0009	-.0035	-.0003	-.00021	.0021	-.0001
#2	.0019	.0012	-.0052	.0006	.0001	-.00014	.0033	-.0001

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0003	.0362	.0009	-.0002	.0000	.0001	.0048
#1	.0001	.0003	.0437	.0009	-.0002	-.0003	.0001	.0045
#2	.0000	.0002	.0286	.0009	-.0002	.0004	.0001	.0050

Elem	Pb2203	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0033	.0000	-.0002	.0001	-.0037	.0026	.0002
#1	.0008	.0005	.0001	.0000	.0001	.0064	.0023	.0011
#2	-.0013	.0061	.0000	-.0003	.0000	-.0138	.0030	-.0008

Elem	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0885	.0005	-.0002	F .0058	F .0064	-.0021	F .2720	-.0008
#1	.0923	.0006	.0002	.0058	.0064	-.0017	.2859	-.0009
#2	.0848	.0003	-.0006	.0059	.0063	-.0024	.2582	-.0006

Elem	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm
Avg	-.0027	-.0008	.00010
#1	-.0025	-.0002	.00015
#2	-.0028	-.0014	.00005

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2916.0	65354.	3072.9	765.11
#1	2921.8	65269.	3070.6	766.24
#2	2910.3	65438.	3075.2	763.98

Sample Name: LCS Acquired: 5/11/2010 14:24:36 Type: Unk
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.285**	**.8860**	**1.813**	**3.843**	**.08408**	**1.829**	**.0879**	**.0886**
#1	3.290	.8859	1.809	3.842	.08390	1.830	.0873	.0883
#2	3.280	.8862	1.816	3.843	.08427	1.828	.0886	.0890

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0945**	F **.0112**	**.3758**	**.9099**	**.4472**	**.4644**	**1.902**	**.8904**
#1	.0944	.0063	.3760	.9058	.4445	.4649	1.903	.8847
#2	.0946	.0160	.3756	.9139	.4499	.4638	1.901	.8961

Elem	Mg2852	Mn2576	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0041**	**.9257**	**1.974**	**.9159**	F **.0384**	**1.605**	**.0894**	F **.0909**
#1	.0010	.9247	1.964	.9110	.0413	1.605	.0899	.0982
#2	.0072	.9268	1.984	.9207	.0354	1.605	.0888	.0837

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.9462**	**.8505**	**.8531**	**-.0088**	**.7722**	**-.0011**	**1.841**
#1	-.0011	.9470	.8454	.8530	-.0077	.8057	-.0014	1.831
#2	.0000	.9454	.8556	.8531	-.0099	.7388	-.0009	1.850

Elem	Li6707	Sr4077
Units	ppm	ppm
Avg	**.0006**	**.00041**
#1	-.0002	.00033
#2	.0014	.00049

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2919.5**	**65170.**	**3036.8**	**770.63**
#1	2930.4	65103.	3044.0	774.36
#2	2908.5	65238.	3029.7	766.91

Sample Name: CCVA4 Acquired: 5/11/2010 14:27:28 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2528**	**.2349**	**.2488**	**.2561**	**.2507**	**.25166**	**.2567**	**.2475**	**.2483**
Stddev	.0001	.0011	.0002	.0008	.0008	.00072	.0020	.0016	.0012
%RSD	.0560	.4741	.0662	.3042	.3091	.28448	.7613	.6661	.4768
#1	.2527	.2356	.2490	.2556	.2502	.25115	.2581	.2464	.2475
#2	.2529	.2341	.2487	.2567	.2512	.25216	.2553	.2487	.2492
Check ?	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2555**	**.2500**	**.2492**	**.2442**	**.2471**	**.2515**	**.2551**	**.2430**	**.2523**
Stddev	.0001	.0048	.0003	.0015	.0013	.0002	.0040	.0025	.0149
%RSD	.0337	1.939	.1248	.6024	.5140	.0661	1.584	1.020	5.915
#1	.2556	.2465	.2490	.2431	.2462	.2516	.2580	.2412	.2628
#2	.2554	.2534	.2495	.2452	.2480	.2513	.2523	.2447	.2417
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None
Value									
Range									

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2512**	**.2515**	**.2360**	**.2507**	**.2495**	**2.524**	**.2532**	**.2563**	**.2624**
Stddev	.0020	.0005	.0013	.0003	.0009	.051	.0020	.0003	.0101
%RSD	.8052	.1910	.5348	.1142	.3770	2.009	.7798	.1021	3.854
#1	.2498	.2519	.2369	.2505	.2488	2.560	.2518	.2561	.2553
#2	.2527	.2512	.2351	.2509	.2501	2.489	.2546	.2565	.2696
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value									
Range									

Sample Name: CCVA4 Acquired: 5/11/2010 14:27:28 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2474**	**.2516**	**.2401**	**.2564**	**-.0045**	**.1870**	**.2466**	**.2407**	**-.0001**
Stddev	.0020	.0007	.0025	.0004	.0038	.0077	.0004	.0021	.0017
%RSD	.8195	.2857	1.032	.1415	83.99	4.115	.1756	.8817	2333.
#1	.2460	.2521	.2383	.2561	-.0018	.1815	.2463	.2392	.0011
#2	.2489	.2511	.2418	.2566	-.0072	.1924	.2469	.2422	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value									
Range									

Elem	Sr4077
Units	ppm
Avg	**.00008**
Stddev	.00022
%RSD	269.15
#1	-.00007
#2	.00024
Check ?	None
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3033.6**	**67191.**	**3145.9**	**799.56**
Stddev	6.3	46.	1.8	4.88
%RSD	.20683	.06911	.05696	.61000
#1	3038.0	67158.	3147.1	803.01
#2	3029.1	67224.	3144.6	796.11

Sample Name: CCVB4 Acquired: 5/11/2010 14:30:22 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.389**	**9.772**	**-.0049**	**1.011**	**10.08**	**.00006**	**.0047**	**.0001**	**.0001**
Stddev	.012	.051	.0003	.011	.22	.00001	.0006	.0001	.0001
%RSD	.1568	.5252	6.202	1.087	2.192	20.826	12.20	98.42	147.2
#1	7.398	9.735	-.0051	1.003	9.921	.00005	.0043	.0001	.0000
#2	7.381	9.808	-.0047	1.019	10.23	.00007	.0051	.0000	.0002
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None	None	None	None
Value									
Range									

Elem	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599	Pb2203	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050**	**10.03**	**.0006**	**.0001**	**-.0008**	**-.0010**	**10.09**	**.0004**	**9.953**
Stddev	.0001	.06	.0000	.0002	.0001	.0014	.10	.0000	.085
%RSD	2.960	.6144	.1818	191.6	9.747	148.4	.9568	6.061	.8527
#1	.0051	9.985	.0006	.0000	-.0009	-.0020	10.02	.0005	9.893
#2	.0049	10.07	.0006	.0002	-.0008	.0000	10.15	.0004	10.01
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	Chk Pass
Value									
Range									

Elem	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664	Se1960	Ag3280	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.02**	**.0003**	**.0014**	**.0010**	**-.0052**	**10.16**	**.0020**	**.0007**	**10.05**
Stddev	.01	.0000	.0007	.0001	.0002	.08	.0011	.0001	.02
%RSD	.1073	5.783	52.27	6.830	3.808	.7906	54.42	11.49	.1906
#1	10.02	.0003	.0009	.0009	-.0051	10.22	.0012	.0006	10.07
#2	10.01	.0004	.0019	.0010	-.0053	10.11	.0027	.0007	10.04
Check ?	Chk Pass	None	None	None	None	Chk Pass	None	None	Chk Pass
Value									
Range									

Sample Name: CCVB4 Acquired: 5/11/2010 14:30:22 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Sn1899	V_2924	Zn2062	Zn2138	P_2149	Si2516	Ti3361	Tl1908	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0001**	**.0002**	**.0004**	**10.05**	**9.781**	**.0000**	**.0006**	**1.006**
Stddev	.0002	.0003	.0002	.0000	.03	.036	.0000	.0027	.004
%RSD	166.7	330.0	126.7	.9636	.3087	.3640	377.1	466.4	.4457
#1	.0000	.0003	.0000	.0004	10.03	9.806	.0000	.0025	1.009
#2	-.0003	-.0001	.0003	.0004	10.07	9.756	.0000	-.0013	1.003
Check ?	None	None	None	None	Chk Pass	Chk Pass	None	None	Chk Pass
Value									
Range									

Elem	Sr4077
Units	ppm
Avg	**1.0150**
Stddev	.0060
%RSD	.59045
#1	1.0108
#2	1.0193
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2999.8**	**65978.**	**3122.8**	**770.55**
Stddev	4.9	148.	29.5	.69
%RSD	.16375	.22405	.94505	.08916
#1	2996.3	65873.	3143.7	770.07
#2	3003.3	66082.	3101.9	771.04

Sample Name: CCB4 Acquired: 5/11/2010 14:33:47 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Al1670	Al3944	Sb2068	As1890	Ba4554	Be2348	B_2496	Cd2144
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0014**	**-.0048**	**.0004**	**.0003**	**-.00001**	**.0016**	**.0000**
Stddev	.0001	.0026	.0005	.0005	.0001	.00001	.0005	.000
%RSD	14.28	192.0	9.632	132.1	21.81	57.670	33.37	111.4
#1	.0005	.0033	-.0045	.0007	.0004	-.00001	.0012	.0000
#2	.0004	-.0005	-.0052	.0000	.0003	-.00002	.0019	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2265	Cd2288	Ca3158	Cr2677	Co2307	Cu2247	Cu3273	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0000**	**.0009**	**.0002**	**-.0002**	**-.0004**	**-.0010**	**.0055**
Stddev	.0000	.000	.0062	.0001	.0001	.0006	.0007	.0039
%RSD	37.96	1003.	659.2	23.60	49.00	145.0	74.62	70.01
#1	.0001	-.0001	-.0034	.0003	-.0002	.0000	-.0005	.0028
#2	.0001	.0001	.0053	.0002	-.0001	-.0008	-.0015	.0082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Pb2203	Mg2790	Mg2852	Mn2576	Mn2605	Mo2020	Ni2216	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0015**	**.0289**	**-.0015**	**-.0001**	**-.0003**	**-.0001**	**.0001**	**-.0181**
Stddev	.0008	.0251	.0019	.0000	.0008	.0001	.0000	.0303
%RSD	51.21	86.63	129.5	43.73	240.1	64.29	46.10	167.3
#1	-.0020	.0112	-.0029	.0000	.0002	-.0001	.0001	.0033
#2	-.0010	.0467	-.0001	-.0001	-.0009	-.0002	.0000	-.0396
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB4 Acquired: 5/11/2010 14:33:47 Type: QC
Method: 2010a2007(v18) Mode: CONC Corr. Factor: 1.000000
User: admin : : :
Comment: 051110B

Elem	Se1960	Ag3280	Na5895	Sn1899	V_2924	Zn2062	Zn2138	P_2149
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0017**	**.0003**	**.0142**	**-.0002**	**-.0006**	**.0000**	**-.0001**	**.0019**
Stddev	.0030	.0002	.0030	.0001	.0001	.000	.0001	.0009
%RSD	176.3	79.42	21.41	70.06	16.94	262.9	46.42	47.87
#1	-.0039	.0004	.0163	-.0002	-.0007	-.0001	-.0002	.0012
#2	.0004	.0001	.0120	-.0001	-.0005	.0000	-.0001	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Si2516	Ti3361	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0352**	**-.0002**	**.0006**	**-.0003**	**-.00001**
Stddev	.0166	.0001	.0001	.0005	.00004
%RSD	47.14	73.36	13.92	184.9	491.79
#1	.0235	-.0003	.0007	.0001	-.00004
#2	.0469	-.0001	.0006	-.0006	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3600	Y_3600-2	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3035.5**	**67110.**	**3095.5**	**789.10**
Stddev	11.1	84.	26.4	1.03
%RSD	.36573	.12498	.85432	.13102
#1	3043.4	67170.	3076.8	789.83
#2	3027.7	67051.	3114.2	788.36

Service Request K1004467_____
Calibration _____051210B_____
QC in calibration 051210B_____
QC Service Request # K104467_____
STARLIMS Batch # 200241_____

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV within 10 % of true value	X		
3. CCV's in control	X		
4. CCB's and/or ICB's below MRL	X		
5. Method blank below MRL	X		
6. LCS in control	X		
7. Spike and duplicate in control	X		
8. All analytes within instrument linear range	X		
9. Adequate rinse out time allowed	X		
10. Internal standards in control	X		
11. Interferences checked	X		
12. Se over MRL		X	
13. CRA run	X		
14. ICSA and ICSAB in control			X
15. Serial dilution run			X
16. Post spike in control			X

Comments: Report Al & Mn/6010B.

Primary Review by _____ Date 5/12/10
Secondary Review by _____ Date 5/13/10
R:\icp\misc\data review forms\PQ ExCell review form

Sample List

Num	Label	Type	Weight	Volume	Dilution	Rack	Row	Column	Height
1	Cal. Blk	Blank	0 kg	0 ml	1.00	0	1	1	145
2	Cal. Stn	Fully Quant Standard	0 kg	0 ml	1.00	0	1	2	145
3	ICV1	Unknown	0 kg	0 ml	1.00	0	1	3	145
4	CCV1	Unknown	0 kg	0 ml	1.00	0	1	2	145
5	ICB1	Unknown	0 kg	0 ml	1.00	0	1	1	145
6	CCB1	Unknown	0 kg	0 ml	1.00	0	1	1	145
7	WATER CRA	Unknown	0 kg	0 ml	1.00	0	1	4	145
8	K1003436-049 1/100	Unknown	0 kg	0 ml	1.00	1	4	8	145
9	K1004641-001 1/20	Unknown	0 kg	0 ml	1.00	1	4	2	145
10	K1004641-MB	Unknown	0 kg	0 ml	1.00	1	4	3	145
11	K1004642-001	Unknown	0 kg	0 ml	1.00	1	4	4	145
12	K1004642-001D	Unknown	0 kg	0 ml	1.00	1	4	5	145
13	K1004642-001S	Unknown	0 kg	0 ml	1.00	1	4	6	145
14	LCSW K1004642	Unknown	0 kg	0 ml	1.00	1	4	7	145
15	CCV2	Unknown	0 kg	0 ml	1.00	0	1	2	145
16	CCB2	Unknown	0 kg	0 ml	1.00	0	1	1	145
17	K1004467-MB	Unknown	0 kg	0 ml	1.00	1	1	1	145
18	K1004467-001	Unknown	0 kg	0 ml	1.00	1	1	3	145
19	K1004467-001D	Unknown	0 kg	0 ml	1.00	1	1	4	145
20	K1004467-001S	Unknown	0 kg	0 ml	1.00	1	1	5	145
21	LCSW K1004467	Unknown	0 kg	0 ml	1.00	1	1	2	145
22	K1004496-001	Unknown	0 kg	0 ml	1.00	1	1	6	145
23	K1004499-001	Unknown	0 kg	0 ml	1.00	1	1	7	145
24	K1004502-005	Unknown	0 kg	0 ml	1.00	1	1	8	145
25	K1004508-001	Unknown	0 kg	0 ml	1.00	1	1	9	145
26	CCV3	QC Sample	0 kg	0 ml	1.00	0	1	2	145
27	CCB3	QC Sample	0 kg	0 ml	1.00	0	1	1	145
28	K1004589-001 1/2	Unknown	0 kg	0 ml	1.00	1	1	10	145
29	K1004589-002 1/2	Unknown	0 kg	0 ml	1.00	1	1	11	145
30	K1004589-003 1/2	Unknown	0 kg	0 ml	1.00	1	1	12	145
31	K1004589-004	Unknown	0 kg	0 ml	1.00	1	2	1	145
32	K1004171-MB	Unknown	0 kg	0 ml	1.00	1	2	2	145
33	LCSW K1004171	Unknown	0 kg	0 ml	1.00	1	2	3	145
34	K1004171-001	Unknown	0 kg	0 ml	1.00	1	2	4	145
35	K1004171-001D	Unknown	0 kg	0 ml	1.00	1	2	5	145
36	K1004171-001S	Unknown	0 kg	0 ml	1.00	1	2	6	145
37	CCV4	QC Sample	0 kg	0 ml	1.00	0	1	2	145
38	CCB4	QC Sample	0 kg	0 ml	1.00	0	1	1	145
39	K1004047-MB	Unknown	0 kg	0 ml	1.00	1	2	7	145
40	LCSW K1004047	Unknown	0 kg	0 ml	1.00	1	2	8	145
41	K1004047-001	Unknown	0 kg	0 ml	1.00	1	2	9	145
42	K1004047-001D	Unknown	0 kg	0 ml	1.00	1	2	10	145
43	K1004047-001S	Unknown	0 kg	0 ml	1.00	1	2	11	145
44	K1004047-002	Unknown	0 kg	0 ml	1.00	1	2	12	145
45	K1004047-003	Unknown	0 kg	0 ml	1.00	1	3	1	145
46	K1004047-004	Unknown	0 kg	0 ml	1.00	1	3	2	145
47	K1004047-005	Unknown	0 kg	0 ml	1.00	1	3	3	145
48	K1004047-006	Unknown	0 kg	0 ml	1.00	1	3	4	145

49	CCV5	QC Sample	0 kg	0 ml	1.00	0	1	2	145
50	CCB5	QC Sample	0 kg	0 ml	1.00	0	1	1	145
51	K1004047-007	Unknown	0 kg	0 ml	1.00	1	3	5	145
52	K1004047-008	Unknown	0 kg	0 ml	1.00	1	3	6	145
53	K1004047-009	Unknown	0 kg	0 ml	1.00	1	3	7	145
54	K1004047-010	Unknown	0 kg	0 ml	1.00	1	3	8	145
55	K1004047-011	Unknown	0 kg	0 ml	1.00	1	3	9	145
56	K1004047-012	Unknown	0 kg	0 ml	1.00	1	3	10	145
57	K1004047-013	Unknown	0 kg	0 ml	1.00	1	3	11	145
58	K1004047-013D	Unknown	0 kg	0 ml	1.00	1	3	12	145
59	K1004047-013S	Unknown	0 kg	0 ml	1.00	1	4	1	145
60	CCV6	QC Sample	0 kg	0 ml	1.00	0	1	2	145
61	CCB6	QC Sample	0 kg	0 ml	1.00	0	1	1	145
62	250 ml #1	Unknown	0 kg	0 ml	1.00	1	4	9	145
63	250 ml #2	Unknown	0 kg	0 ml	1.00	1	4	10	145
64	250 ml #3	Unknown	0 kg	0 ml	1.00	1	4	11	145
65	250 ml #4	Unknown	0 kg	0 ml	1.00	1	4	12	145
66	250 ml #5	Unknown	0 kg	0 ml	1.00	1	5	1	145
67	250 ml #6	Unknown	0 kg	0 ml	1.00	1	5	2	145
68	250 ml #7	Unknown	0 kg	0 ml	1.00	1	5	3	145
69	500 ml #1	Unknown	0 kg	0 ml	1.00	1	5	4	145
70	500 ml #2	Unknown	0 kg	0 ml	1.00	1	5	5	145
71	500 ml #3	Unknown	0 kg	0 ml	1.00	1	5	6	145
72	CCV7	QC Sample	0 kg	0 ml	1.00	0	1	2	145
73	CCB7	QC Sample	0 kg	0 ml	1.00	0	1	1	145
74	500 ml #4	Unknown	0 kg	0 ml	1.00	1	5	7	145
75	500 ml #5	Unknown	0 kg	0 ml	1.00	1	5	8	145
76	500 ml #6	Unknown	0 kg	0 ml	1.00	1	5	9	145
77	500 ml #7	Unknown	0 kg	0 ml	1.00	1	5	10	145
78	1000 ml #1	Unknown	0 kg	0 ml	1.00	1	5	11	145
79	1000 ml #2	Unknown	0 kg	0 ml	1.00	1	5	12	145
80	1000 ml #3	Unknown	0 kg	0 ml	1.00	2	1	1	145
81	1000 ml #4	Unknown	0 kg	0 ml	1.00	2	1	2	145
82	1000 ml #5	Unknown	0 kg	0 ml	1.00	2	1	3	145
83	1000 ml #6	Unknown	0 kg	0 ml	1.00	2	1	4	145
84	CCV8	QC Sample	0 kg	0 ml	1.00	0	1	2	145
85	CCB8	QC Sample	0 kg	0 ml	1.00	0	1	1	145
86	1000 ml #7	Unknown	0 kg	0 ml	1.00	2	1	5	145
87	CCV9	QC Sample	0 kg	0 ml	1.00	0	1	2	145
88	CCB9	QC Sample	0 kg	0 ml	1.00	0	1	1	145

Instrument Setup - Configurations

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 9:59:10 5/12/10
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-700.00
Lens1	5.00
Lens2	-75.00
Lens3	-25.00
Pole Bias	5.00
Sampling Depth	400.00
Horizontal	10.00
Vertical	85.00
Cool	13.00
Auxiliary	0.80
Nebuliser	0.82
Forward power	1,350.00
HT1 Voltage	1,900.00
HT2 Voltage	2,600.00
D1	-40.00
Focus	8.00

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 9:59:10 5/12/10
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-700.00
Lens1	5.00
Lens2	-75.00
Lens3	-25.00
Pole Bias	5.00
Sampling Depth	400.00
Horizontal	10.00
Vertical	85.00
Cool	13.00
Auxiliary	0.80

ExCell Mass Calibration

Date: 5/12/2010

Mass	Mass DAC	Peak Width (AMU)	Error (AMU)	Include	Masses in Tune Solution
6.015	1293	0.766	-0.012	TRUE	
7.016	1547	0.715	-0.015	TRUE	Li-7
9.012	2060	0.766	0.005	TRUE	Be-9
23.985	5874	0.715	0.021	TRUE	Mg-24
24.986	6134	0.715	0.042	TRUE	Co-59
26.982	6628	0.715	-0.013	TRUE	In-115
43.956	10957	0.766	0.022	TRUE	Ce-140
51.94	12985	0.766	0.004	TRUE	Pb-208
53.949	13492	0.766	-0.013	TRUE	Bi-209
55.935	13999	0.766	-0.007	TRUE	U-238
56.935	14259	0.766	0.013	TRUE	
57.934	14513	0.715	0.012	TRUE	
58.933	14753	0.766	-0.044	TRUE	
75.92	19082	0.766	-0.028	TRUE	
112.904	28503	0.714	-0.02	TRUE	
114.904	29010	0.714	-0.029	TRUE	
128.905	32591	0.663	0.026	TRUE	
131.905	33352	0.714	0.013	TRUE	
139.905	35393	0.714	0.023	TRUE	
141.908	35900	0.714	0.01	TRUE	
155.923	39468	0.663	-0.004	TRUE	
205.974	52228	0.612	0.001	TRUE	
206.976	52488	0.612	0.019	TRUE	
207.977	52735	0.612	-0.013	TRUE	
208.98	52995	0.612	0.003	TRUE	
238.051	60405	0.612	-0.013	TRUE	

Excluded In Calib | Excluded In Results | Peak Part Excluded | Multi Element | Setup Chang | Internal Standard | Standard Addition

Uncorrected ICPS Per Mass

S-Calibration Has Edited Standard
F-Interference Correction Failed
E-Calibration Edited
T-Tripped
I-Invalid Calibration
P-Pulse Counting
V-Valley Integration Failed
M-Result Over Max

Run	Label	TimeStamp	6Li	7Li	9Be	59Co	115In	208Pb
1	Stability 05-12-2010	5/12/2010 10:10:06 A	(P)1.833	(P)16473.164	(P)3502.596	(P)19191.718	(P)32678.513	(P)15812.081
2	Stability 05-12-2010	5/12/2010 10:11:21 A	(P)1.833	(P)16223.207	(P)3461.420	(P)18942.551	(P)32375.153	(P)15442.680
3	Stability 05-12-2010	5/12/2010 10:12:36 A	(P)0.667	(P)16624.503	(P)3513.599	(P)19318.389	(P)32652.626	(P)15673.928
4	Stability 05-12-2010	5/12/2010 10:13:51 A	(P)0.833	(P)16098.236	(P)3458.585	(P)19099.094	(P)32615.370	(P)15455.857
5	Stability 05-12-2010	5/12/2010 10:15:06 A	(P)0.667	(P)15878.488	(P)3411.407	(P)18999.126	(P)32706.744	(P)15439.342
	Mean of Stability 05-12	5/12/2010 10:10:06 A	(P)1.167	(P)16259.520	(P)3469.521	(P)19110.176	(P)32605.681	(P)15564.778
	SD of Stability 05-12-20		(P)0.612	(P)296.384	(P)40.618	(P)150.462	(P)133.191	(P)169.984
	%RSD of Stability 05		(P)52.489	(P)1.823	(P)1.171	(P)0.787	(P)0.408	(P)1.092

Run	Label	TimeStamp	209Bi	232Th	238U
1	Stability 05-12-2010	5/12/2010 10:10:06 A	(P)25465.347	(P)0.000	(P)32690.704
2	Stability 05-12-2010	5/12/2010 10:11:21 A	(P)24900.189	(P)0.000	(P)32324.200
3	Stability 05-12-2010	5/12/2010 10:12:36 A	(P)25272.009	(P)0.333	(P)32565.249
4	Stability 05-12-2010	5/12/2010 10:13:51 A	(P)24749.762	(P)0.000	(P)32152.653
5	Stability 05-12-2010	5/12/2010 10:15:06 A	(P)24710.858	(P)0.000	(P)31895.072
	Mean of Stability 05-12	5/12/2010 10:10:06 A	(P)25019.633	(P)0.067	(P)32325.576
	SD of Stability 05-12-20		(P)333.464	(P)0.149	(P)318.590
	%RSD of Stability 05		(P)1.333	(P)223.607	(P)0.986

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		Cal. Blk			Mean	SD	%RSD
TimeStamp		5/12/10 13:10					
Aluminum	27	-0.0033	-0.0059	0.0091	**0**	0.008	0
Antimony	121	0.0071	-0.0048	-0.0023	**0**	0.0063	0
Antimony	123	0.0089	0.0012	-0.0101	**0**	0.0095	0
Arsenic	75	0.0453	-0.0048	-0.0405	**0**	0.0431	0
Barium	135	-0.0009	-0.0003	0.0012	**0**	0.0011	0
Barium	137	-0.0009	0.001	0	**0**	0.001	0
Barium	138	-0.0012	0.0013	-0.0001	**0**	0.0012	0
Beryllium	9	-0.0025	0.001	0.0015	**0**	0.0022	0
Cadmium	111	-0.002	0.0021	0	**0**	0.002	0
Cadmium	114	0.0001	-0.0005	0.0004	**0**	0.0004	0
Chromium	52	0.0102	-0.0101	-0.0002	**0**	0.0101	0
Chromium	53	-0.05	0.0372	0.0127	**0**	0.0449	0
Cobalt	59	-0.0025	0.0051	-0.0027	**0**	0.0045	0
Copper	63	-0.0013	0.0043	-0.003	**0**	0.0038	0
Copper	65	0.0023	-0.0006	-0.0017	**0**	0.0021	0
Lead	206	0.0011	0.0002	-0.0013	**0**	0.0012	0
Lead	207	-0.0004	0.0043	-0.0039	**0**	0.0041	0
Lead	208	0.0008	0.0012	-0.002	**0**	0.0018	0
Manganese	55	0.0015	-0.0006	-0.0009	**0**	0.0013	0
Molybdenum	95	0.0038	-0.002	-0.0018	**0**	0.0033	0
Molybdenum	97	-0.0004	-0.0014	0.0019	**0**	0.0017	0
Molybdenum	98	0.0046	-0.0016	-0.003	**0**	0.0041	0
Nickel	60	-0.0082	0.0074	0.0008	**0**	0.0079	0
Nickel	62	0.0723	-0.0131	-0.0593	**0**	0.0668	0
Selenium	77	-0.0114	0.0148	-0.0034	**0**	0.0134	0
Selenium	78	-0.0995	0.0516	0.048	**0**	0.0862	0
Selenium	82	0.1294	-0.0041	-0.1253	**0**	0.1274	0
Silver	107	0.0006	0.0011	-0.0018	**0**	0.0015	0
Silver	109	0.0015	-0.0004	-0.001	**0**	0.0013	0
Thallium	203	-0.0001	-0.0002	0.0003	**0**	0.0003	0
Thallium	205	0.0001	0.0003	-0.0005	**0**	0.0004	0
Tin	118	0.0053	0.0032	-0.0085	**0**	0.0074	0
Tin	120	0.002	-0.0008	-0.0012	**0**	0.0018	0
Uranium	238	0.0003	-0.0003	0	**0**	0.0003	0
Vanadium	51	0.0186	-0.0086	-0.01	**0**	0.0161	0
Zinc	66	-0.0156	0.026	-0.0104	**0**	0.0227	0
Zinc	67	-0.0428	-0.0055	0.0482	**0**	0.0457	0
Zinc	68	0.0065	-0.0265	0.02	**0**	0.0239	0

Internal Standard Factors:

Lithium	6	0.914	1.024	1.076	**0.914**	n/a	n/a
Scandium	45	0.921	1.024	1.066	**0.921**	n/a	n/a
Gallium	71	0.907	1.02	1.089	**0.907**	n/a	n/a
Rhodium	103	0.911	1.037	1.066	**0.911**	n/a	n/a
Indium	115	0.936	1.008	1.064	**0.936**	n/a	n/a
Lutetium	175	0.911	1.04	1.064	**0.911**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		Cal. Stn			Mean	SD	%RSD
TimeStamp		5/12/10 13:15					
Aluminum	27	24.78	25.14	25.09	**25**	0.1933	0.7734
Antimony	121	25.35	25.15	24.49	**25**	0.4494	1.798
Antimony	123	25.37	24.83	24.8	**25**	0.3202	1.281
Arsenic	75	25.08	24.89	25.03	**25**	0.1004	0.4015
Barium	135	25.16	25.18	24.66	**25**	0.2917	1.167
Barium	137	24.93	25.3	24.77	**25**	0.2723	1.089
Barium	138	25.65	25.27	24.07	**25**	0.826	3.304
Beryllium	9	24.89	24.67	25.44	**25**	0.3969	1.588
Cadmium	111	25.05	24.6	25.35	**25**	0.3786	1.515
Cadmium	114	25.42	24.9	24.68	**25**	0.3835	1.534
Chromium	52	25	25.35	24.65	**25**	0.353	1.412
Chromium	53	24.75	25.45	24.8	**25**	0.3899	1.56
Cobalt	59	24.85	25.19	24.96	**25**	0.173	0.6922
Copper	63	24.81	25.27	24.92	**25**	0.2386	0.9545
Copper	65	25.17	24.99	24.85	**25**	0.161	0.6439
Lead	206	25.35	25.12	24.52	**25**	0.429	1.716
Lead	207	25.57	24.73	24.7	**25**	0.4949	1.98
Lead	208	25.4	24.99	24.62	**25**	0.3896	1.558
Manganese	55	24.88	25.44	24.68	**25**	0.3968	1.587
Molybdenum	95	24.86	24.85	25.29	**25**	0.2499	0.9995
Molybdenum	97	25.14	24.83	25.03	**25**	0.153	0.6119
Molybdenum	98	24.65	25.35	25.01	**25**	0.3521	1.408
Nickel	60	25.33	25.1	24.56	**25**	0.3961	1.584
Nickel	62	24.95	25.03	25.02	**25**	0.0442	0.1769
Selenium	77	24.94	25	25.06	**25**	0.0611	0.2443
Selenium	78	24.48	24.98	25.54	**25**	0.5325	2.13
Selenium	82	25.61	24.82	24.58	**25**	0.5382	2.153
Silver	107	24.9	24.88	25.22	**25**	0.1873	0.749
Silver	109	24.76	24.95	25.29	**25**	0.2726	1.09
Thallium	203	25.86	24.93	24.22	**25**	0.8243	3.297
Thallium	205	25.79	24.63	24.58	**25**	0.6872	2.749
Tin	118	24.89	24.87	25.24	**25**	0.2041	0.8164
Tin	120	25.13	24.62	25.25	**25**	0.3353	1.341
Uranium	238	25.8	25.26	23.93	**25**	0.9614	3.846
Vanadium	51	25.3	24.74	24.95	**25**	0.2834	1.134
Zinc	66	24.93	24.83	25.24	**25**	0.218	0.8719
Zinc	67	24.72	25.36	24.92	**25**	0.3283	1.313
Zinc	68	25.03	24.82	25.14	**25**	0.1631	0.6524

Internal Standard Factors:

Lithium	6	0.973	1.05	1.095	**0.973**	n/a	n/a
Scandium	45	0.974	1.064	1.03	**0.974**	n/a	n/a
Gallium	71	0.942	1.046	1.062	**0.942**	n/a	n/a
Rhodium	103	0.948	1.018	1.041	**0.948**	n/a	n/a
Indium	115	0.938	1.009	1.019	**0.938**	n/a	n/a
Lutetium	175	0.95	1.006	1.01	**0.95**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		ICV1			Mean	SD	%RSD
TimeStamp		5/12/10 13:20					
Aluminum	27	94.04	94.77	96.62	**95.14**	1.331	1.399
Antimony	121	23.54	23.27	24.38	**23.73**	0.5817	2.452
Antimony	123	22.88	23.61	24.58	**23.69**	0.8551	3.61
Arsenic	75	25.74	25.35	25.34	**25.48**	0.2321	0.9111
Barium	135	102.1	99.76	104	**102**	2.131	2.09
Barium	137	98.19	101	99.56	**99.59**	1.417	1.423
Barium	138	98.46	101	103.4	**100.9**	2.446	2.423
Beryllium	9	2.66	2.565	2.694	**2.64**	0.0666	2.524
Cadmium	111	12.64	12.84	12.74	**12.74**	0.0966	0.7586
Cadmium	114	12.92	12.78	13.49	**13.06**	0.3721	2.849
Chromium	52	10.08	9.965	10.19	**10.08**	0.1102	1.093
Chromium	53	10.51	10.63	10.29	**10.47**	0.1727	1.649
Cobalt	59	24.82	25.34	25.23	**25.13**	0.2745	1.092
Copper	63	12.75	13.04	12.97	**12.92**	0.1499	1.16
Copper	65	13.04	12.63	13.05	**12.9**	0.2384	1.847
Lead	206	23.02	22.89	23.33	**23.08**	0.227	0.9834
Lead	207	25.8	25.27	25.63	**25.56**	0.2709	1.06
Lead	208	24.32	24.31	24.75	**24.46**	0.2523	1.032
Manganese	55	25.13	25.22	26.04	**25.46**	0.505	1.983
Molybdenum	95	25.6	25.34	26.05	**25.66**	0.3607	1.406
Molybdenum	97	25.22	25.33	25.69	**25.41**	0.2459	0.9678
Molybdenum	98	25.41	25.11	25.92	**25.48**	0.4136	1.623
Nickel	60	25.29	25.27	25.13	**25.23**	0.0909	0.3601
Nickel	62	25.05	25.13	25.04	**25.07**	0.0508	0.2027
Selenium	77	25.7	25.9	25.48	**25.69**	0.2078	0.8088
Selenium	78	24.85	25.53	25.5	**25.29**	0.3868	1.529
Selenium	82	25.33	25.56	25.66	**25.52**	0.172	0.6742
Silver	107	12.78	12.29	12.78	**12.61**	0.2828	2.242
Silver	109	12.46	12.52	12.48	**12.49**	0.0262	0.2095
Thallium	203	24.31	24.29	24.61	**24.4**	0.1814	0.7432
Thallium	205	23.86	24.35	24.92	**24.38**	0.5336	2.189
Tin	118	22.57	22.66	23.06	**22.76**	0.2599	1.142
Tin	120	22.58	23.09	23.6	**23.09**	0.5096	2.207
Uranium	238	23.64	24.42	24.91	**24.32**	0.6446	2.65
Vanadium	51	25.88	25.74	26.04	**25.89**	0.1514	0.5847
Zinc	66	25.52	25.83	25.1	**25.48**	0.3632	1.425
Zinc	67	29.2	27.96	28.3	**28.49**	0.6414	2.251
Zinc	68	28.58	27.6	28.01	**28.06**	0.492	1.753

Internal Standard Factors:

Lithium	6	1.003	1.079	1.099	**1.003**	n/a	n/a
Scandium	45	0.986	1.083	1.086	**0.986**	n/a	n/a
Gallium	71	0.968	1.065	1.065	**0.968**	n/a	n/a
Rhodium	103	0.953	1.026	1.052	**0.953**	n/a	n/a
Indium	115	0.936	1.016	1.037	**0.936**	n/a	n/a
Lutetium	175	0.901	0.988	1.021	**0.901**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		CCV1			Mean	SD	%RSD
TimeStamp		5/12/10 13:24					
Aluminum	27	24.15	24.35	24.54	**24.35**	0.1981	0.8137
Antimony	121	26.15	25.89	25.02	**25.69**	0.5932	2.309
Antimony	123	25.36	25.95	25.32	**25.54**	0.3545	1.388
Arsenic	75	24.94	23.93	26.07	**24.98**	1.07	4.284
Barium	135	24.54	25.06	25.07	**24.89**	0.304	1.221
Barium	137	24.32	24.91	24.33	**24.52**	0.3376	1.377
Barium	138	24.84	25.24	25.03	**25.03**	0.1986	0.7934
Beryllium	9	25.05	24.6	24.62	**24.76**	0.2546	1.028
Cadmium	111	25.31	25.3	25.62	**25.41**	0.1811	0.7127
Cadmium	114	24.24	24.72	24.77	**24.58**	0.2921	1.188
Chromium	52	24.71	24.76	24.9	**24.79**	0.0942	0.3801
Chromium	53	24.87	25.51	25.62	**25.33**	0.4036	1.593
Cobalt	59	24.83	24.68	25.19	**24.9**	0.2593	1.042
Copper	63	24.86	24.17	24.6	**24.55**	0.347	1.414
Copper	65	24.79	25.41	25.47	**25.22**	0.3778	1.498
Lead	206	25.07	25.24	24.34	**24.89**	0.4777	1.919
Lead	207	24.03	24.17	24.22	**24.14**	0.0969	0.4012
Lead	208	24.59	24.51	24.13	**24.41**	0.2503	1.026
Manganese	55	24.4	24.83	25.36	**24.86**	0.4789	1.926
Molybdenum	95	25.03	26.08	26.12	**25.74**	0.6203	2.409
Molybdenum	97	25.31	24.52	25.31	**25.05**	0.4535	1.811
Molybdenum	98	25.19	25.83	25.34	**25.45**	0.336	1.32
Nickel	60	24.55	24.38	24.98	**24.63**	0.3089	1.254
Nickel	62	24.96	24.38	24.37	**24.57**	0.3375	1.374
Selenium	77	24.69	25.22	24.73	**24.88**	0.2904	1.167
Selenium	78	25.15	24.08	24.66	**24.63**	0.5356	2.174
Selenium	82	25.03	23.59	25.21	**24.61**	0.8864	3.602
Silver	107	25.41	25.94	25.13	**25.49**	0.415	1.628
Silver	109	24.67	25.21	25.08	**24.98**	0.2811	1.125
Thallium	203	24.48	24.63	24.4	**24.5**	0.116	0.4734
Thallium	205	24.11	23.9	24.25	**24.09**	0.1774	0.7364
Tin	118	24.65	24.99	25.4	**25.01**	0.3768	1.506
Tin	120	24.63	26.08	25.31	**25.34**	0.7274	2.87
Uranium	238	24.45	24.68	24.29	**24.47**	0.1994	0.8148
Vanadium	51	24.9	25.19	25.47	**25.18**	0.2828	1.123
Zinc	66	25.09	24.67	25.35	**25.04**	0.3442	1.375
Zinc	67	24.54	23.55	24.8	**24.3**	0.6598	2.715
Zinc	68	24.72	24.24	24.96	**24.64**	0.3693	1.499

Internal Standard Factors:

Lithium	6	1.004	1.068	1.093	**1.004**	n/a	n/a
Scandium	45	0.991	1.1	1.103	**0.991**	n/a	n/a
Gallium	71	0.981	1.061	1.111	**0.981**	n/a	n/a
Rhodium	103	0.978	1.079	1.088	**0.978**	n/a	n/a
Indium	115	0.945	1.05	1.051	**0.945**	n/a	n/a
Lutetium	175	0.935	1.026	1.052	**0.935**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		ICB1			Mean	SD	%RSD
TimeStamp		5/12/10 13:54					
Aluminum	27	0.087	0.0777	0.1153	**0.0934**	0.0196	20.99
Antimony	121	-0.0223	-0.0205	-0.0211	**-0.0213**	0.0009	4.349
Antimony	123	-0.025	-0.0186	-0.0257	**-0.0231**	0.0039	16.8
Arsenic	75	0.0624	0.1149	0.0823	**0.0865**	0.0265	30.62
Barium	135	0.0028	0.0049	-0.0016	**0.002**	0.0033	163.2
Barium	137	0.0009	0.0023	0.0051	**0.0028**	0.0021	76.73
Barium	138	0.0004	0.0027	0.0035	**0.0022**	0.0016	73.8
Beryllium	9	0.0013	-0.0004	0.0023	**0.001**	0.0014	130.5
Cadmium	111	0	0.0074	-0.0012	**0.0021**	0.0046	223
Cadmium	114	-0.0009	0	0.0022	**0.0004**	0.0016	371.5
Chromium	52	0.0191	0.0271	0.0057	**0.0173**	0.0108	62.54
Chromium	53	-0.0238	0.0199	-0.09	**-0.0313**	0.0553	177
Cobalt	59	-0.0163	-0.0057	-0.0131	**-0.0117**	0.0054	46.16
Copper	63	0.0051	0.0097	0.0113	**0.0087**	0.0032	36.99
Copper	65	0.0087	0.0031	0.0113	**0.0077**	0.0042	54.02
Lead	206	0.0032	0.0023	0.0004	**0.0019**	0.0014	74.41
Lead	207	-0.0003	0.0035	-0.0027	**0.0001**	0.0031	2126
Lead	208	0.0014	0.0026	0.0001	**0.0014**	0.0013	94.57
Manganese	55	0.0008	0.0032	0.0031	**0.0024**	0.0013	55.88
Molybdenum	95	-0.0017	-0.0038	-0.0016	**-0.0024**	0.0013	53.47
Molybdenum	97	0.0054	0.0049	0.0069	**0.0057**	0.001	18.04
Molybdenum	98	-0.0004	-0.0019	-0.0036	**-0.0019**	0.0016	80.8
Nickel	60	0.1487	0.0759	0.0577	**0.0941**	0.0482	51.21
Nickel	62	0.2062	0.1298	0.1196	**0.1519**	0.0473	31.17
Selenium	77	-0.0339	-0.1905	-0.0848	**-0.1031**	0.0799	77.48
Selenium	78	-0.0906	0.3429	0.2005	**0.151**	0.2209	146.4
Selenium	82	0.1595	0.1995	0.158	**0.1723**	0.0235	13.64
Silver	107	-0.0052	-0.0061	-0.0061	**-0.0058**	0.0005	8.68
Silver	109	-0.0061	-0.0066	-0.005	**-0.0059**	0.0008	13.48
Thallium	203	-0.0007	-0.0013	-0.001	**-0.001**	0.0003	33.16
Thallium	205	0.0003	0.0005	0.0001	**0.0003**	0.0002	73.58
Tin	118	0.0122	0.0042	0.01	**0.0088**	0.0041	46.91
Tin	120	0.0158	0.0189	0.0156	**0.0168**	0.0019	11.28
Uranium	238	-0.0001	0.0007	-0.0006	**0**	0.0007	7361
Vanadium	51	0.0199	0.0074	0.0339	**0.0204**	0.0133	64.93
Zinc	66	-0.0205	-0.0408	0.0854	**0.008**	0.0678	843.4
Zinc	67	0.0004	-0.0502	0.043	**-0.0023**	0.0467	2032
Zinc	68	-0.0417	0.0081	0.0697	**0.012**	0.0558	464

Internal Standard Factors:

Lithium	6	0.98	1.059	1.092	**0.98**	n/a	n/a
Scandium	45	1.047	1.115	1.125	**1.047**	n/a	n/a
Gallium	71	1.006	1.161	1.208	**1.006**	n/a	n/a
Rhodium	103	1.065	1.15	1.187	**1.065**	n/a	n/a
Indium	115	1.075	1.165	1.236	**1.075**	n/a	n/a
Lutetium	175	1.159	1.232	1.257	**1.159**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		CCB1			Mean	SD	%RSD
TimeStamp		5/12/10 13:58					
Aluminum	27	0.086	0.134	0.1416	**0.1205**	0.0302	25.01
Antimony	121	-0.0259	-0.0267	-0.0272	**-0.0266**	0.0007	2.453
Antimony	123	-0.0237	-0.0225	-0.0253	**-0.0238**	0.0014	5.845
Arsenic	75	0.0907	0.0422	0.0915	**0.0748**	0.0283	37.8
Barium	135	-0.0035	0.0052	-0.0003	**0.0005**	0.0044	973
Barium	137	0.0031	0.008	0.0017	**0.0043**	0.0033	77.05
Barium	138	0.0018	0.0023	0.0009	**0.0017**	0.0007	43.73
Beryllium	9	0.001	0.0012	0.0017	**0.0013**	0.0004	29.23
Cadmium	111	-0.0016	-0.0021	-0.003	**-0.0023**	0.0007	32.77
Cadmium	114	0.0008	-0.0002	0.0001	**0.0002**	0.0005	229.2
Chromium	52	0.0315	-0.0012	0.0432	**0.0245**	0.023	93.77
Chromium	53	-0.0076	-0.0208	0.0265	**-0.0006**	0.0244	3957
Cobalt	59	-0.0119	-0.006	-0.0061	**-0.008**	0.0034	42.21
Copper	63	-0.007	0.0012	0.0069	**0.0004**	0.007	1926
Copper	65	0.0004	-0.0047	0.0045	**0.0001**	0.0046	9212
Lead	206	0.0019	-0.0022	-0.0019	**-0.0008**	0.0023	303.6
Lead	207	-0.0027	-0.0004	-0.0001	**-0.0011**	0.0014	133.4
Lead	208	0.0001	-0.0008	-0.0014	**-0.0007**	0.0008	116.7
Manganese	55	0.0056	0.0048	0.0065	**0.0056**	0.0009	15.21
Molybdenum	95	-0.0065	-0.011	-0.0022	**-0.0066**	0.0044	66.36
Molybdenum	97	0.0115	-0.0034	0.0015	**0.0032**	0.0076	239.9
Molybdenum	98	-0.003	-0.0028	0.0034	**-0.0008**	0.0036	450
Nickel	60	0.0317	0.0283	0.0435	**0.0345**	0.008	23.11
Nickel	62	0.131	0.0724	0.1026	**0.102**	0.0293	28.74
Selenium	77	0.0341	0.0608	0.0928	**0.0626**	0.0294	47.01
Selenium	78	0.1864	-0.0537	0.1069	**0.0799**	0.1223	153.1
Selenium	82	0.3537	0.1501	0.3776	**0.2938**	0.125	42.56
Silver	107	-0.0071	-0.0063	-0.0051	**-0.0062**	0.001	16.64
Silver	109	-0.0059	-0.0077	-0.0075	**-0.007**	0.001	14.16
Thallium	203	-0.0004	-0.0011	0.0007	**-0.0003**	0.0009	304
Thallium	205	-0.0001	-0.0004	0.001	**0.0002**	0.0008	486.8
Tin	118	0.004	0.0015	0.0072	**0.0042**	0.0028	67.51
Tin	120	0.0085	0.0077	0.0013	**0.0058**	0.0039	67.64
Uranium	238	-0.0007	-0.0005	0.0008	**-0.0001**	0.0008	650.8
Vanadium	51	0.0119	0.0027	-0.011	**0.0012**	0.0115	956.5
Zinc	66	-0.0462	-0.038	-0.0335	**-0.0392**	0.0064	16.33
Zinc	67	-0.0353	-0.0513	-0.0437	**-0.0434**	0.008	18.5
Zinc	68	-0.0124	-0.0124	-0.0345	**-0.0197**	0.0128	64.83

Internal Standard Factors:

Lithium	6	1.017	1.107	1.095	**1.017**	n/a	n/a
Scandium	45	1.038	1.151	1.155	**1.038**	n/a	n/a
Gallium	71	1.06	1.172	1.18	**1.06**	n/a	n/a
Rhodium	103	1.073	1.164	1.19	**1.073**	n/a	n/a
Indium	115	1.084	1.201	1.183	**1.084**	n/a	n/a
Lutetium	175	1.143	1.239	1.283	**1.143**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		WATER CRA			Mean	SD	%RSD
TimeStamp		5/12/10 14:03					
Aluminum	27	2.388	2.497	2.508	**2.464**	0.0665	2.7
Antimony	121	0.0323	0.0265	0.0371	**0.0319**	0.0053	16.48
Antimony	123	0.0295	0.0277	0.0332	**0.0301**	0.0028	9.318
Arsenic	75	0.7585	0.7388	0.5184	**0.6719**	0.1333	19.83
Barium	135	0.0664	0.0808	0.0813	**0.0761**	0.0084	11.09
Barium	137	0.0723	0.0622	0.0703	**0.0683**	0.0054	7.882
Barium	138	0.0664	0.0711	0.0669	**0.0681**	0.0026	3.795
Beryllium	9	0.0332	0.0308	0.013	**0.0257**	0.011	42.94
Cadmium	111	0.0227	0.0117	0.0316	**0.022**	0.01	45.39
Cadmium	114	0.0221	0.0329	0.0297	**0.0282**	0.0056	19.72
Chromium	52	0.2831	0.2537	0.2841	**0.2736**	0.0173	6.307
Chromium	53	0.2356	0.2283	0.2808	**0.2483**	0.0285	11.46
Cobalt	59	0.0129	0.0165	0.0239	**0.0178**	0.0056	31.39
Copper	63	0.1486	0.1641	0.145	**0.1526**	0.0101	6.638
Copper	65	0.1402	0.1407	0.1307	**0.1372**	0.0056	4.116
Lead	206	0.028	0.0194	0.0246	**0.024**	0.0043	17.99
Lead	207	0.0199	0.0268	0.032	**0.0262**	0.0061	23.13
Lead	208	0.0249	0.023	0.0285	**0.0255**	0.0028	11.03
Manganese	55	0.0659	0.0746	0.0677	**0.0694**	0.0046	6.578
Molybdenum	95	0.0566	0.0431	0.0522	**0.0506**	0.0069	13.64
Molybdenum	97	0.0496	0.0538	0.0554	**0.0529**	0.003	5.659
Molybdenum	98	0.0481	0.049	0.0472	**0.0481**	0.0009	1.864
Nickel	60	0.3764	0.3468	0.3755	**0.3662**	0.0168	4.592
Nickel	62	0.2701	0.3785	0.2602	**0.3029**	0.0656	21.66
Selenium	77	1.092	0.8566	1.121	**1.023**	0.145	14.17
Selenium	78	1.443	1.388	1.218	**1.35**	0.1175	8.707
Selenium	82	1.498	1.236	0.8554	**1.196**	0.3232	27.01
Silver	107	0.0238	0.0196	0.0229	**0.0221**	0.0022	10.05
Silver	109	0.0187	0.0239	0.0228	**0.0218**	0.0027	12.43
Thallium	203	0.0209	0.0232	0.024	**0.0227**	0.0016	7.02
Thallium	205	0.0254	0.0234	0.0235	**0.0241**	0.0012	4.789
Tin	118	0.069	0.0564	0.0689	**0.0648**	0.0072	11.18
Tin	120	0.0664	0.0652	0.0668	**0.0661**	0.0009	1.286
Uranium	238	0.0248	0.025	0.0235	**0.0245**	0.0008	3.424
Vanadium	51	0.2695	0.2554	0.2324	**0.2525**	0.0187	7.412
Zinc	66	0.8358	0.8326	0.7586	**0.809**	0.0437	5.398
Zinc	67	0.7974	0.8468	0.741	**0.7951**	0.0529	6.658
Zinc	68	0.8255	0.7895	0.7839	**0.7996**	0.0226	2.827

Internal Standard Factors:

Lithium	6	1.013	1.088	1.098	**1.013**	n/a	n/a
Scandium	45	1.042	1.133	1.157	**1.042**	n/a	n/a
Gallium	71	1.053	1.171	1.154	**1.053**	n/a	n/a
Rhodium	103	1.027	1.156	1.142	**1.027**	n/a	n/a
Indium	115	1.057	1.156	1.161	**1.057**	n/a	n/a
Lutetium	175	1.12	1.254	1.265	**1.12**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1003436-049 1/100			Mean	SD	%RSD
TimeStamp		5/12/10 14:08					
Aluminum	27	11.83	11.94	11.63	**11.8**	0.1573	1.333
Antimony	121	0.0156	0.0154	0.0193	**0.0167**	0.0022	13.12
Antimony	123	0.0163	0.012	0.0133	**0.0139**	0.0022	15.96
Arsenic	75	0.3459	0.5625	0.549	**0.4858**	0.1214	24.98
Barium	135	6.991	6.973	7.251	**7.072**	0.1556	2.201
Barium	137	7.291	7.051	7.232	**7.191**	0.1248	1.736
Barium	138	7.113	7.14	7.335	**7.196**	0.1212	1.684
Beryllium	9	-0.0008	0.0059	-0.0008	**0.0014**	0.0039	278
Cadmium	111	0.6868	0.6619	0.6343	**0.661**	0.0263	3.973
Cadmium	114	0.6581	0.6758	0.6705	**0.6681**	0.0091	1.361
Chromium	52	0.0546	0.1091	0.0977	**0.0872**	0.0287	32.96
Chromium	53	0.4708	0.4465	0.5482	**0.4885**	0.0531	10.87
Cobalt	59	0.1384	0.1466	0.1442	**0.1431**	0.0042	2.951
Copper	63	0.476	0.4417	0.4473	**0.455**	0.0184	4.041
Copper	65	0.4896	0.4562	0.4539	**0.4666**	0.02	4.287
Lead	206	0.0874	0.0887	0.0951	**0.0904**	0.0041	4.549
Lead	207	0.1195	0.1086	0.1142	**0.1141**	0.0054	4.76
Lead	208	0.1065	0.0995	0.1077	**0.1046**	0.0044	4.209
Manganese	55	24.8	25.15	24.75	**24.9**	0.2197	0.8821
Molybdenum	95	0.0078	0.0177	0.0031	**0.0096**	0.0074	77.61
Molybdenum	97	0.0178	0.0175	0.0174	**0.0176**	0.0002	1.329
Molybdenum	98	0.0133	0.0162	0.0046	**0.0114**	0.006	52.97
Nickel	60	0.8779	0.9019	0.8848	**0.8882**	0.0124	1.393
Nickel	62	1.093	1.123	0.9067	**1.041**	0.1171	11.25
Selenium	77	0.1143	0.0919	0.0022	**0.0695**	0.0593	85.41
Selenium	78	-0.0136	0.1473	0.1446	**0.0928**	0.0921	99.29
Selenium	82	-0.1644	0.3213	0.4599	**0.2056**	0.3278	159.5
Silver	107	-0.0018	-0.0051	-0.0056	**-0.0042**	0.0021	50.34
Silver	109	-0.0029	-0.0071	-0.0054	**-0.0051**	0.0021	41.44
Thallium	203	0.0002	0.001	-0.0003	**0.0003**	0.0007	200.8
Thallium	205	0.0012	0.0013	0.0007	**0.0011**	0.0003	32.42
Tin	118	0.0007	-0.0041	-0.008	**-0.0038**	0.0043	114.9
Tin	120	0.0045	0.0014	-0.0032	**0.0009**	0.0038	421.5
Uranium	238	0.0022	0.0044	0.0028	**0.0031**	0.0011	36.34
Vanadium	51	0.0852	0.1394	0.0994	**0.108**	0.0281	26.01
Zinc	66	41.69	41.29	40.39	**41.12**	0.6657	1.619
Zinc	67	38.76	37.03	37.46	**37.75**	0.9008	2.386
Zinc	68	40.67	41.14	38.96	**40.26**	1.146	2.848

Internal Standard Factors:

Lithium	6	1.006	1.083	1.086	**1.006**	n/a	n/a
Scandium	45	0.991	1.097	1.109	**0.991**	n/a	n/a
Gallium	71	1.034	1.106	1.092	**1.034**	n/a	n/a
Rhodium	103	1.053	1.099	1.123	**1.053**	n/a	n/a
Indium	115	1.051	1.103	1.123	**1.051**	n/a	n/a
Lutetium	175	1.119	1.15	1.231	**1.119**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004641-001 1/20			Mean	SD	%RSD
TimeStamp		5/12/10 14:13					
Aluminum	27	68.98	71.54	71.76	**70.76**	1.548	2.187
Antimony	121	-0.0095	-0.0124	-0.0131	**-0.0117**	0.0019	16.56
Antimony	123	-0.0086	-0.0135	-0.0088	**-0.0103**	0.0028	26.84
Arsenic	75	137.2	137.7	141.5	**138.8**	2.382	1.716
Barium	135	177.1	177.5	182.8	**179.1**	3.178	1.774
Barium	137	177.5	177.7	179.9	**178.4**	1.325	0.7431
Barium	138	173.1	176.6	180.1	**176.6**	3.477	1.969
Beryllium	9	0.1609	0.1363	0.139	**0.1454**	0.0135	9.274
Cadmium	111	0.0894	0.0784	0.0871	**0.085**	0.0058	6.821
Cadmium	114	0.0893	0.0974	0.103	**0.0966**	0.0069	7.103
Chromium	52	0.8467	0.8482	0.8244	**0.8398**	0.0134	1.592
Chromium	53	0.6994	0.6523	0.6436	**0.6651**	0.03	4.511
Cobalt	59	0.3487	0.3558	0.3583	**0.3543**	0.005	1.404
Copper	63	3.355	3.32	3.417	**3.364**	0.0491	1.461
Copper	65	3.376	3.301	3.495	**3.391**	0.0975	2.877
Lead	206	0.4035	0.3976	0.3874	**0.3962**	0.0081	2.053
Lead	207	0.4675	0.4239	0.4298	**0.4404**	0.0236	5.366
Lead	208	0.4284	0.4125	0.4189	**0.4199**	0.008	1.899
Manganese	55	12790	12790	12600	**12720**	110.1	0.8652
Molybdenum	95	0.555	0.4936	0.5256	**0.5247**	0.0307	5.851
Molybdenum	97	0.3521	0.3739	0.3627	**0.3629**	0.0109	3.001
Molybdenum	98	0.3241	0.3185	0.3434	**0.3287**	0.0131	3.983
Nickel	60	0.8023	0.8226	0.8062	**0.8103**	0.0108	1.334
Nickel	62	0.782	0.9097	0.8272	**0.8397**	0.0648	7.712
Selenium	77	0.6681	0.2835	0.2647	**0.4054**	0.2277	56.16
Selenium	78	0.2169	0.1174	0.1832	**0.1725**	0.0506	29.35
Selenium	82	0.481	0.381	0.2165	**0.3595**	0.1335	37.15
Silver	107	-0.0012	-0.005	-0.0046	**-0.0036**	0.0021	58.03
Silver	109	-0.0034	-0.0047	-0.0054	**-0.0045**	0.0011	23.44
Thallium	203	0.018	0.0153	0.0168	**0.0167**	0.0013	8.033
Thallium	205	0.015	0.0164	0.0129	**0.0148**	0.0017	11.81
Tin	118	0.3382	0.3185	0.3193	**0.3253**	0.0111	3.417
Tin	120	0.3323	0.3391	0.3248	**0.3321**	0.0071	2.152
Uranium	238	0.3265	0.3014	0.3144	**0.3141**	0.0125	3.988
Vanadium	51	2.198	2.263	2.24	**2.234**	0.0332	1.486
Zinc	66	18.12	18.34	17.96	**18.14**	0.1946	1.073
Zinc	67	24.27	24.6	24.88	**24.59**	0.3086	1.255
Zinc	68	24.41	24.71	24.19	**24.44**	0.2587	1.059

Internal Standard Factors:

Lithium	6	1.3	1.437	1.473	**1.3**	n/a	n/a
Scandium	45	1.103	1.245	1.278	**1.103**	n/a	n/a
Gallium	71	1.272	1.424	1.479	**1.272**	n/a	n/a
Rhodium	103	1.22	1.349	1.406	**1.22**	n/a	n/a
Indium	115	1.183	1.305	1.361	**1.183**	n/a	n/a
Lutetium	175	1.142	1.265	1.348	**1.142**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004641-MB			Mean	SD	%RSD
TimeStamp		5/12/10 14:18					
Aluminum	27	0.0902	0.1129	0.0974	**0.1002**	0.0116	11.61
Antimony	121	-0.0318	-0.0309	-0.0329	**-0.0319**	0.001	3.185
Antimony	123	-0.0279	-0.0267	-0.0318	**-0.0288**	0.0027	9.346
Arsenic	75	0.2725	0.1091	0.1081	**0.1632**	0.0946	57.96
Barium	135	0.0179	0.0119	0.0165	**0.0155**	0.0031	20.34
Barium	137	0.0128	0.0097	0.0156	**0.0127**	0.0029	22.93
Barium	138	0.013	0.0135	0.0121	**0.0129**	0.0007	5.525
Beryllium	9	-0.0019	-0.0021	-0.0002	**-0.0014**	0.001	75.63
Cadmium	111	-0.0017	-0.0015	0.0003	**-0.001**	0.0011	109.5
Cadmium	114	-0.0014	0.0012	0.0006	**0.0002**	0.0014	816.4
Chromium	52	0.1028	0.1256	0.1271	**0.1185**	0.0136	11.5
Chromium	53	-0.1276	-0.1468	-0.133	**-0.1358**	0.0099	7.284
Cobalt	59	-0.0069	-0.0135	-0.0047	**-0.0084**	0.0046	55.05
Copper	63	-0.0029	-0.0062	0.0065	**-0.0009**	0.0066	727.3
Copper	65	-0.002	-0.0019	-0.0031	**-0.0024**	0.0007	28.45
Lead	206	-0.0038	-0.0043	-0.0047	**-0.0043**	0.0005	10.67
Lead	207	-0.0006	-0.003	-0.0033	**-0.0023**	0.0015	62.97
Lead	208	-0.0023	-0.0041	-0.0033	**-0.0033**	0.0009	27.72
Manganese	55	1.012	0.9782	1.197	**1.062**	0.1177	11.08
Molybdenum	95	-0.0069	-0.0092	-0.0069	**-0.0077**	0.0014	17.79
Molybdenum	97	0.0017	-0.008	0.0017	**-0.0015**	0.0056	371.6
Molybdenum	98	-0.0013	-0.0046	-0.0031	**-0.003**	0.0017	55.73
Nickel	60	0.0227	-0.0006	0.0179	**0.0133**	0.0123	92.21
Nickel	62	0.0712	0.228	0.1378	**0.1457**	0.0787	54.01
Selenium	77	-0.0826	0.0469	-0.0495	**-0.0284**	0.0673	236.8
Selenium	78	-0.143	0.222	0.3548	**0.1446**	0.2578	178.2
Selenium	82	0.5421	0.126	0.0744	**0.2475**	0.2565	103.6
Silver	107	-0.0074	-0.0071	-0.0089	**-0.0078**	0.001	12.38
Silver	109	-0.0084	-0.0089	-0.0095	**-0.0089**	0.0006	6.221
Thallium	203	-0.001	-0.0012	-0.0011	**-0.0011**	0.0001	6.925
Thallium	205	-0.0004	-0.0014	-0.001	**-0.0009**	0.0005	50.39
Tin	118	-0.0023	-0.0057	-0.0097	**-0.0059**	0.0037	62.43
Tin	120	-0.0004	-0.0012	-0.0074	**-0.003**	0.0038	126.2
Uranium	238	0.0011	-0.0003	-0.0003	**0.0002**	0.0008	438.2
Vanadium	51	0.0432	0.0407	0.0621	**0.0487**	0.0117	24.04
Zinc	66	0.0053	0.0287	-0.0303	**0.0012**	0.0297	2434
Zinc	67	-0.0455	0.0209	-0.058	**-0.0276**	0.0424	153.9
Zinc	68	0.0244	0.0671	-0.0233	**0.0227**	0.0452	199.1

Internal Standard Factors:

Lithium	6	1.019	1.086	1.089	**1.019**	n/a	n/a
Scandium	45	1.052	1.135	1.163	**1.052**	n/a	n/a
Gallium	71	1.038	1.116	1.163	**1.038**	n/a	n/a
Rhodium	103	1.036	1.105	1.12	**1.036**	n/a	n/a
Indium	115	1.039	1.111	1.129	**1.039**	n/a	n/a
Lutetium	175	1.082	1.146	1.221	**1.082**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004642-001			Mean	SD	%RSD
TimeStamp		5/12/10 14:23					
Aluminum	27	0.8629	0.8432	0.9308	**0.879**	0.046	5.232
Antimony	121	-0.0304	-0.0273	-0.029	**-0.0289**	0.0015	5.289
Antimony	123	-0.0289	-0.0289	-0.0288	**-0.0289**	0.0001	0.3013
Arsenic	75	3.633	3.767	3.653	**3.684**	0.0725	1.968
Barium	135	0.67	0.6554	0.6195	**0.6483**	0.026	4.009
Barium	137	0.6221	0.7366	0.6567	**0.6718**	0.0587	8.744
Barium	138	0.7026	0.6616	0.6665	**0.6769**	0.0224	3.31
Beryllium	9	0.004	0	-0.005	**-0.0003**	0.0045	1407
Cadmium	111	0.0001	-0.0013	-0.0002	**-0.0005**	0.0007	158.3
Cadmium	114	-0.0002	0.0012	0.0011	**0.0007**	0.0008	110.8
Chromium	52	0.0767	0.0506	0.0702	**0.0658**	0.0136	20.69
Chromium	53	0.5501	0.6033	0.539	**0.5641**	0.0344	6.091
Cobalt	59	0.0215	0.0164	0.0249	**0.0209**	0.0043	20.55
Copper	63	0.1488	0.1324	0.1506	**0.1439**	0.01	6.967
Copper	65	0.0553	0.0382	0.035	**0.0429**	0.0109	25.44
Lead	206	-0.0034	-0.0036	-0.0027	**-0.0033**	0.0005	15.23
Lead	207	-0.0023	-0.0054	0.0001	**-0.0025**	0.0028	110.4
Lead	208	-0.0024	-0.0022	-0.0029	**-0.0025**	0.0003	12.86
Manganese	55	1.269	1.37	1.368	**1.336**	0.0576	4.311
Molybdenum	95	1.224	1.265	1.155	**1.215**	0.0557	4.583
Molybdenum	97	1.102	1.157	1.133	**1.131**	0.0272	2.402
Molybdenum	98	1.175	1.191	1.154	**1.173**	0.0188	1.603
Nickel	60	0.396	0.4073	0.4317	**0.4117**	0.0183	4.439
Nickel	62	0.2273	0.1884	0.2807	**0.2322**	0.0463	19.96
Selenium	77	0.2025	-0.0256	-0.0027	**0.0581**	0.1256	216.2
Selenium	78	0.2425	-0.0052	0.256	**0.1644**	0.1471	89.46
Selenium	82	0.3092	0.2484	0.2909	**0.2828**	0.0312	11.03
Silver	107	-0.0043	-0.0014	-0.0073	**-0.0043**	0.0029	68.03
Silver	109	-0.0013	-0.0062	-0.008	**-0.0052**	0.0035	66.79
Thallium	203	-0.001	-0.0008	-0.0002	**-0.0007**	0.0004	59.7
Thallium	205	0.0002	-0.0009	-0.0001	**-0.0003**	0.0006	223
Tin	118	0.002	-0.0025	-0.0018	**-0.0008**	0.0025	313.3
Tin	120	0.0003	-0.0033	-0.0018	**-0.0016**	0.0018	114.5
Uranium	238	0.0056	0.0087	0.0064	**0.0069**	0.0017	23.97
Vanadium	51	0.0785	0.0596	0.0895	**0.0759**	0.0151	19.9
Zinc	66	0.0678	0.0854	0.0605	**0.0712**	0.0128	17.93
Zinc	67	0.0886	0.1332	0.0692	**0.097**	0.0328	33.86
Zinc	68	0.2968	0.399	0.3497	**0.3485**	0.0511	14.66

Internal Standard Factors:

Lithium	6	1.039	1.125	1.165	**1.039**	n/a	n/a
Scandium	45	0.929	1.012	1.08	**0.929**	n/a	n/a
Gallium	71	1.065	1.18	1.247	**1.065**	n/a	n/a
Rhodium	103	1.068	1.196	1.219	**1.068**	n/a	n/a
Indium	115	1.099	1.176	1.246	**1.099**	n/a	n/a
Lutetium	175	1.1	1.203	1.259	**1.1**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004642-001D			Mean	SD	%RSD
TimeStamp		5/12/10 14:27					
Aluminum	27	0.8724	0.8611	0.8995	**0.8777**	0.0197	2.249
Antimony	121	-0.0317	-0.0334	-0.0293	**-0.0314**	0.0021	6.518
Antimony	123	-0.0286	-0.029	-0.0306	**-0.0294**	0.0011	3.59
Arsenic	75	3.774	3.633	3.728	**3.712**	0.0717	1.933
Barium	135	0.6202	0.6847	0.6543	**0.6531**	0.0323	4.941
Barium	137	0.6952	0.6648	0.656	**0.672**	0.0205	3.057
Barium	138	0.6598	0.6786	0.6538	**0.6641**	0.0129	1.946
Beryllium	9	-0.0021	0.0009	0.0022	**0.0003**	0.0022	702.5
Cadmium	111	0.0005	0.0039	0.0009	**0.0018**	0.0018	105.3
Cadmium	114	-0.0007	0.0021	0.0011	**0.0008**	0.0014	163
Chromium	52	0.0904	0.0831	0.0611	**0.0782**	0.0153	19.5
Chromium	53	0.5575	0.4806	0.4846	**0.5076**	0.0433	8.534
Cobalt	59	0.0164	0.0178	0.0257	**0.0199**	0.005	25.19
Copper	63	0.1342	0.1354	0.1487	**0.1394**	0.008	5.754
Copper	65	0.0445	0.0383	0.0399	**0.0409**	0.0032	7.801
Lead	206	-0.0011	-0.0045	-0.0008	**-0.0021**	0.002	95.28
Lead	207	-0.0035	-0.0059	0.0002	**-0.0031**	0.0031	99.12
Lead	208	-0.0019	-0.0044	-0.0015	**-0.0026**	0.0016	61.01
Manganese	55	1.239	1.248	1.252	**1.246**	0.0064	0.5161
Molybdenum	95	1.246	1.177	1.212	**1.212**	0.0348	2.872
Molybdenum	97	1.241	1.169	1.173	**1.195**	0.0405	3.387
Molybdenum	98	1.21	1.237	1.284	**1.243**	0.0377	3.035
Nickel	60	0.4344	0.3744	0.4221	**0.4103**	0.0317	7.719
Nickel	62	0.1313	0.1237	0.185	**0.1467**	0.0334	22.77
Selenium	77	0.2607	0.0701	0.0461	**0.1256**	0.1176	93.58
Selenium	78	0.3162	0.1907	0.0223	**0.1764**	0.1475	83.6
Selenium	82	0.3896	0.0239	0.3154	**0.243**	0.1933	79.56
Silver	107	-0.0075	-0.0067	-0.0062	**-0.0068**	0.0006	9.42
Silver	109	-0.0104	-0.0079	-0.009	**-0.0091**	0.0012	13.32
Thallium	203	-0.0011	-0.0013	-0.0018	**-0.0014**	0.0004	26.5
Thallium	205	-0.0006	-0.0008	-0.0008	**-0.0007**	0.0001	18.62
Tin	118	-0.0056	-0.0047	-0.004	**-0.0047**	0.0008	16.61
Tin	120	0.0033	0.0004	-0.0046	**-0.0003**	0.004	1458
Uranium	238	0.0072	0.0074	0.0066	**0.0071**	0.0004	6.023
Vanadium	51	0.0838	0.0744	0.0837	**0.0806**	0.0054	6.658
Zinc	66	0.1606	0.1057	0.1258	**0.1307**	0.0278	21.25
Zinc	67	0.1388	0.2153	0.2215	**0.1919**	0.0461	24.02
Zinc	68	0.4043	0.3994	0.3758	**0.3932**	0.0153	3.884

Internal Standard Factors:

Lithium	6	1.083	1.156	1.159	**1.083**	n/a	n/a
Scandium	45	1.012	1.085	1.082	**1.012**	n/a	n/a
Gallium	71	1.195	1.278	1.294	**1.195**	n/a	n/a
Rhodium	103	1.206	1.295	1.285	**1.206**	n/a	n/a
Indium	115	1.171	1.283	1.254	**1.171**	n/a	n/a
Lutetium	175	1.189	1.271	1.262	**1.189**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004642-001S			Mean	SD	%RSD
TimeStamp		5/12/10 14:32					
Aluminum	27	18.85	19.18	19.28	**19.1**	0.2262	1.184
Antimony	121	20.17	19.87	20.65	**20.23**	0.3947	1.951
Antimony	123	20.26	21.04	20.76	**20.69**	0.3945	1.907
Arsenic	75	24.45	24.37	24.9	**24.57**	0.2838	1.155
Barium	135	20.67	21.23	21.32	**21.07**	0.3531	1.675
Barium	137	20.5	20.81	20.78	**20.7**	0.1698	0.8202
Barium	138	20.74	21.28	21.04	**21.02**	0.2738	1.303
Beryllium	9	20.45	20.15	20.42	**20.34**	0.1687	0.8293
Cadmium	111	20.49	20.09	21.06	**20.55**	0.4898	2.384
Cadmium	114	19.83	20.11	19.81	**19.92**	0.1679	0.843
Chromium	52	18.25	18.58	19.22	**18.69**	0.4925	2.635
Chromium	53	18.3	17.86	19.14	**18.43**	0.6513	3.533
Cobalt	59	19.14	19.41	19.88	**19.48**	0.3733	1.916
Copper	63	19.61	19.88	19.92	**19.81**	0.1675	0.8456
Copper	65	20.15	19.76	20.69	**20.2**	0.4662	2.308
Lead	206	19.06	19.16	19.25	**19.16**	0.0933	0.487
Lead	207	18.94	19.7	18.41	**19.02**	0.6491	3.413
Lead	208	18.68	19.54	18.71	**18.98**	0.4916	2.591
Manganese	55	19.54	19.27	20.29	**19.7**	0.5283	2.681
Molybdenum	95	21.78	23.57	22.33	**22.56**	0.9148	4.055
Molybdenum	97	22.31	21.96	21.56	**21.95**	0.3724	1.697
Molybdenum	98	22.37	23.3	22.19	**22.62**	0.5923	2.619
Nickel	60	19.47	18.92	19.45	**19.28**	0.3129	1.623
Nickel	62	19.07	18.94	20.26	**19.42**	0.7303	3.76
Selenium	77	21.94	21.88	22.05	**21.96**	0.0857	0.3905
Selenium	78	21.23	21.05	21.65	**21.31**	0.3068	1.439
Selenium	82	21.65	22.45	20.89	**21.66**	0.782	3.61
Silver	107	20.05	20.72	19.82	**20.2**	0.4724	2.339
Silver	109	19.72	19.88	19.93	**19.84**	0.111	0.5596
Thallium	203	18.92	19.59	18.85	**19.12**	0.4097	2.142
Thallium	205	19.03	19.9	18.7	**19.21**	0.6192	3.224
Tin	118	0.0039	0.0054	0.0075	**0.0056**	0.0018	31.99
Tin	120	0.0093	0.0099	0.012	**0.0104**	0.0014	13.47
Uranium	238	19.59	20.34	19.33	**19.76**	0.5228	2.646
Vanadium	51	18.74	19.38	19.55	**19.22**	0.4276	2.224
Zinc	66	20.04	20.14	19.86	**20.01**	0.143	0.7145
Zinc	67	19.96	19.57	20.92	**20.15**	0.6955	3.452
Zinc	68	20.23	20.35	21.01	**20.53**	0.4194	2.043

Internal Standard Factors:

Lithium	6	0.998	1.064	1.1	**0.998**	n/a	n/a
Scandium	45	0.9	0.996	1.027	**0.9**	n/a	n/a
Gallium	71	1.014	1.126	1.187	**1.014**	n/a	n/a
Rhodium	103	1.032	1.15	1.127	**1.032**	n/a	n/a
Indium	115	0.995	1.085	1.142	**0.995**	n/a	n/a
Lutetium	175	0.965	1.094	1.076	**0.965**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		LCSW K1004642			Mean	SD	%RSD
TimeStamp		5/12/10 14:37					
Aluminum	27	20.62	21.11	20.8	**20.84**	0.2523	1.211
Antimony	121	21.15	19.39	21.15	**20.56**	1.014	4.932
Antimony	123	20.88	20.22	20.83	**20.64**	0.3705	1.795
Arsenic	75	21.37	19.81	20.93	**20.7**	0.8041	3.884
Barium	135	20.82	19.73	20.34	**20.3**	0.5419	2.67
Barium	137	20.32	19.83	19.74	**19.96**	0.3152	1.579
Barium	138	20.88	19.98	20.46	**20.44**	0.4485	2.194
Beryllium	9	21.2	21.56	21.66	**21.47**	0.2446	1.139
Cadmium	111	21.04	19.99	20.11	**20.38**	0.5738	2.816
Cadmium	114	20.07	19.8	19.8	**19.89**	0.1573	0.7907
Chromium	52	21.05	20.74	21.09	**20.96**	0.1943	0.9268
Chromium	53	20.19	20.55	19.64	**20.13**	0.4582	2.276
Cobalt	59	21.03	20.69	21.57	**21.1**	0.4462	2.115
Copper	63	21.51	21.24	21.82	**21.52**	0.2908	1.351
Copper	65	22.05	21.35	21.36	**21.59**	0.4015	1.86
Lead	206	20.74	20.48	19.97	**20.39**	0.3905	1.915
Lead	207	20.93	20.02	20.1	**20.35**	0.5041	2.477
Lead	208	20.49	20.12	20.02	**20.21**	0.2495	1.235
Manganese	55	21.1	20.97	20.97	**21.01**	0.0763	0.363
Molybdenum	95	20.58	20.48	21.5	**20.85**	0.5599	2.685
Molybdenum	97	20.58	20.27	19.98	**20.28**	0.3002	1.481
Molybdenum	98	20.57	19.89	20.73	**20.4**	0.4441	2.177
Nickel	60	21.34	19.94	21.08	**20.79**	0.7471	3.594
Nickel	62	21.63	20.77	20.9	**21.1**	0.4662	2.21
Selenium	77	21.65	20.57	21.03	**21.08**	0.5437	2.579
Selenium	78	21.49	20.41	21.49	**21.13**	0.624	2.953
Selenium	82	21.99	20.81	20.68	**21.16**	0.7225	3.414
Silver	107	20.67	20	20.65	**20.44**	0.3832	1.875
Silver	109	20.97	20.44	20.21	**20.54**	0.39	1.899
Thallium	203	20.56	19.85	20.61	**20.34**	0.4254	2.091
Thallium	205	20.49	19.59	19.94	**20.01**	0.4507	2.253
Tin	118	0.0032	-0.0002	0.0026	**0.0019**	0.0018	95.04
Tin	120	0.0027	0.0045	0.0054	**0.0042**	0.0014	33.43
Uranium	238	20.22	19.66	19.8	**19.89**	0.295	1.483
Vanadium	51	20.83	20.58	21.58	**20.99**	0.5198	2.476
Zinc	66	21.54	20.99	20.68	**21.07**	0.4334	2.057
Zinc	67	20.89	20.33	20.65	**20.62**	0.2816	1.365
Zinc	68	21.29	20.4	20.91	**20.87**	0.4427	2.122

Internal Standard Factors:

Lithium	6	0.97	1.037	1.055	**0.97**	n/a	n/a
Scandium	45	1.014	1.104	1.116	**1.014**	n/a	n/a
Gallium	71	0.981	1.037	1.078	**0.981**	n/a	n/a
Rhodium	103	0.971	1.03	1.051	**0.971**	n/a	n/a
Indium	115	0.976	0.999	1.035	**0.976**	n/a	n/a
Lutetium	175	0.974	1.033	1.064	**0.974**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		CCV2			Mean	SD	%RSD
TimeStamp		5/12/10 14:41					
Aluminum	27	23.85	24	25.47	**24.44**	0.8974	3.672
Antimony	121	25.51	23.87	24.47	**24.62**	0.8294	3.369
Antimony	123	25.33	25.8	24.79	**25.31**	0.5074	2.005
Arsenic	75	25.4	25.63	25.68	**25.57**	0.1494	0.5844
Barium	135	25.35	24.95	25.19	**25.16**	0.2048	0.8137
Barium	137	25.18	24.16	24.68	**24.68**	0.5073	2.056
Barium	138	25.06	24.45	24.86	**24.79**	0.3075	1.24
Beryllium	9	26.37	26.76	26.68	**26.6**	0.2058	0.7735
Cadmium	111	25.36	25.74	24.96	**25.35**	0.3903	1.54
Cadmium	114	25.02	25.39	24.41	**24.94**	0.4923	1.974
Chromium	52	23.83	22.95	24.17	**23.65**	0.6319	2.672
Chromium	53	22.95	23.86	23.81	**23.54**	0.5109	2.17
Cobalt	59	24.3	23.84	24.96	**24.36**	0.5654	2.321
Copper	63	24.29	24.6	25.52	**24.8**	0.6369	2.568
Copper	65	24.37	25.45	25.93	**25.25**	0.7994	3.166
Lead	206	25.78	24.19	25.76	**25.24**	0.9071	3.593
Lead	207	25.47	24.36	24.73	**24.85**	0.568	2.285
Lead	208	25.56	24.23	25.36	**25.05**	0.7219	2.882
Manganese	55	23.59	23.24	24.98	**23.94**	0.9163	3.828
Molybdenum	95	25.3	24.08	24.81	**24.73**	0.61	2.467
Molybdenum	97	24.63	23.87	24.46	**24.32**	0.3997	1.644
Molybdenum	98	24.23	24.79	25	**24.67**	0.3985	1.615
Nickel	60	23.85	24.81	25.12	**24.59**	0.662	2.692
Nickel	62	25.06	24.48	25.26	**24.93**	0.4064	1.63
Selenium	77	25	24.38	26.34	**25.24**	1.005	3.981
Selenium	78	25.35	25.64	26.24	**25.74**	0.4534	1.761
Selenium	82	25.69	25.68	26.09	**25.82**	0.2332	0.9031
Silver	107	26.01	25.56	26.15	**25.91**	0.3092	1.194
Silver	109	25.41	25.35	25.02	**25.26**	0.21	0.8313
Thallium	203	25.68	24.31	25.22	**25.07**	0.6966	2.779
Thallium	205	25.19	24.74	25.07	**25**	0.2338	0.9353
Tin	118	24.83	24.6	25.9	**25.11**	0.691	2.752
Tin	120	24.83	25.31	24.94	**25.03**	0.2533	1.012
Uranium	238	25.01	24.49	24.81	**24.77**	0.2612	1.055
Vanadium	51	24.25	23.63	24.64	**24.17**	0.5099	2.109
Zinc	66	25.55	24.79	25.07	**25.14**	0.3842	1.528
Zinc	67	24.91	24.1	25.73	**24.91**	0.8158	3.275
Zinc	68	24.85	24.92	25.69	**25.16**	0.4679	1.86

Internal Standard Factors:

Lithium	6	0.963	1.018	1.072	**0.963**	n/a	n/a
Scandium	45	0.901	0.988	1.092	**0.901**	n/a	n/a
Gallium	71	0.949	1.024	1.095	**0.949**	n/a	n/a
Rhodium	103	0.96	1.024	1.073	**0.96**	n/a	n/a
Indium	115	0.955	1	1.047	**0.955**	n/a	n/a
Lutetium	175	0.977	1.014	1.094	**0.977**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		CCB2			Mean	SD	%RSD
TimeStamp		5/12/10 14:58					
Aluminum	27	-0.1679	-0.168	-0.1543	**-0.1634**	0.0079	4.833
Antimony	121	-0.0341	-0.0309	-0.0361	**-0.0337**	0.0026	7.765
Antimony	123	-0.0287	-0.0334	-0.0301	**-0.0308**	0.0024	7.842
Arsenic	75	0.0771	0.1501	0.1062	**0.1112**	0.0367	33.02
Barium	135	-0.0004	0.0027	0.0032	**0.0018**	0.0019	106.4
Barium	137	0.0041	-0.0034	0.0034	**0.0014**	0.0041	297.8
Barium	138	0.0017	0.0007	0.0017	**0.0013**	0.0006	44.42
Beryllium	9	-0.0016	0.0036	-0.0009	**0.0004**	0.0028	739.1
Cadmium	111	-0.0026	0	-0.004	**-0.0022**	0.002	93.33
Cadmium	114	-0.0002	0.0001	0.0018	**0.0005**	0.0011	199.1
Chromium	52	-0.0222	-0.0175	0.0002	**-0.0132**	0.0118	89.78
Chromium	53	-0.1214	-0.1066	-0.1053	**-0.1111**	0.009	8.066
Cobalt	59	-0.0019	-0.0026	0	**-0.0015**	0.0014	90.22
Copper	63	-0.009	0.0064	0.0097	**0.0024**	0.01	422.5
Copper	65	-0.0146	0.0038	-0.0043	**-0.005**	0.0092	182.7
Lead	206	-0.001	-0.0043	0.0025	**-0.0009**	0.0034	366.1
Lead	207	-0.0006	-0.0009	-0.0011	**-0.0009**	0.0003	30.68
Lead	208	-0.0011	-0.0022	-0.0004	**-0.0012**	0.0009	72.83
Manganese	55	0.3726	0.3556	0.3381	**0.3554**	0.0173	4.854
Molybdenum	95	0.0064	0.0109	0.0044	**0.0073**	0.0033	45.9
Molybdenum	97	0.0125	0.0177	0.0151	**0.0151**	0.0026	17.3
Molybdenum	98	0.0151	0.0149	0.0103	**0.0134**	0.0027	19.94
Nickel	60	-0.0071	-0.0073	-0.0043	**-0.0063**	0.0017	26.91
Nickel	62	0.0461	0.1345	0.0961	**0.0922**	0.0443	48.06
Selenium	77	-0.0532	-0.1699	-0.099	**-0.1074**	0.0588	54.74
Selenium	78	-0.0656	0.2428	-0.0844	**0.0309**	0.1837	593.9
Selenium	82	0.2033	0.3021	0.2854	**0.2636**	0.0529	20.05
Silver	107	-0.003	-0.0041	-0.0052	**-0.0041**	0.0011	26.21
Silver	109	-0.0058	-0.0085	-0.0065	**-0.0069**	0.0014	20.07
Thallium	203	0.0008	-0.0005	-0.0004	**0**	0.0007	3681
Thallium	205	0	0.0001	0.0004	**0.0002**	0.0002	136.6
Tin	118	0.0066	-0.0015	0.0043	**0.0032**	0.0042	132.6
Tin	120	0.0046	0.002	-0.0007	**0.0019**	0.0027	137.2
Uranium	238	0.0002	-0.0001	-0.0006	**-0.0002**	0.0004	230.5
Vanadium	51	-0.0049	-0.0134	-0.0006	**-0.0063**	0.0065	104.1
Zinc	66	-0.0796	-0.0461	-0.0626	**-0.0628**	0.0168	26.73
Zinc	67	-0.0914	-0.0521	-0.0529	**-0.0655**	0.0224	34.26
Zinc	68	-0.0432	-0.0344	-0.0586	**-0.0454**	0.0122	26.95

Internal Standard Factors:

Lithium	6	0.982	1.038	1.079	**0.982**	n/a	n/a
Scandium	45	1.012	1.077	1.144	**1.012**	n/a	n/a
Gallium	71	0.994	1.1	1.124	**0.994**	n/a	n/a
Rhodium	103	1.018	1.082	1.124	**1.018**	n/a	n/a
Indium	115	0.999	1.071	1.145	**0.999**	n/a	n/a
Lutetium	175	1.015	1.137	1.151	**1.015**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004467-MB			Mean	SD	%RSD
TimeStamp		5/12/10 15:03					
Aluminum	27	0.1835	0.1259	0.1694	**0.1596**	0.03	18.82
Antimony	121	-0.0331	-0.0337	-0.0326	**-0.0331**	0.0005	1.627
Antimony	123	-0.03	-0.0316	-0.0325	**-0.0314**	0.0013	4.03
Arsenic	75	0.0659	0.1003	0.0844	**0.0835**	0.0173	20.65
Barium	135	0.0034	-0.0021	0.0054	**0.0022**	0.0039	177
Barium	137	0.0031	0.0025	0.0046	**0.0034**	0.001	30.86
Barium	138	0.0051	0.0039	0.0034	**0.0041**	0.0009	21.91
Beryllium	9	-0.0021	-0.0046	0.0033	**-0.0011**	0.004	351.8
Cadmium	111	-0.001	-0.0031	-0.0007	**-0.0016**	0.0013	82.81
Cadmium	114	0.0008	0.0013	-0.0002	**0.0006**	0.0008	123.3
Chromium	52	0.1167	0.078	0.0965	**0.0971**	0.0193	19.94
Chromium	53	-0.0899	-0.0924	-0.0738	**-0.0854**	0.0101	11.85
Cobalt	59	-0.0074	-0.0071	-0.0077	**-0.0074**	0.0003	4.007
Copper	63	-0.0001	-0.0065	-0.0042	**-0.0036**	0.0032	88.88
Copper	65	-0.01	-0.006	-0.0054	**-0.0072**	0.0025	34.98
Lead	206	-0.0048	-0.0032	-0.0034	**-0.0038**	0.0009	23.71
Lead	207	-0.0002	-0.0009	0.0011	**0**	0.001	118900
Lead	208	-0.0032	-0.001	-0.0017	**-0.0019**	0.0011	58.07
Manganese	55	0.6244	0.6487	0.6505	**0.6412**	0.0146	2.274
Molybdenum	95	0.0127	0.0157	0.0074	**0.0119**	0.0042	35.32
Molybdenum	97	0.0129	0.0184	0.0213	**0.0176**	0.0043	24.42
Molybdenum	98	0.0193	0.0192	0.0185	**0.019**	0.0004	2.209
Nickel	60	-0.0125	-0.006	-0.0036	**-0.0074**	0.0046	62.45
Nickel	62	0.0091	-0.0201	0.0869	**0.0253**	0.0553	218.3
Selenium	77	-0.1306	-0.0687	-0.2278	**-0.1424**	0.0802	56.36
Selenium	78	-0.0512	0.1622	-0.0042	**0.0356**	0.1121	314.9
Selenium	82	0.0809	0.2566	0.0609	**0.1328**	0.1077	81.1
Silver	107	-0.0053	-0.0072	-0.0054	**-0.006**	0.001	17.33
Silver	109	-0.0081	-0.0084	-0.0078	**-0.0081**	0.0003	3.602
Thallium	203	0.0004	-0.0005	-0.0012	**-0.0004**	0.0008	187.9
Thallium	205	0.0007	0	0.0003	**0.0003**	0.0004	120
Tin	118	-0.009	-0.0016	0.0008	**-0.0032**	0.0051	158.3
Tin	120	-0.002	-0.0029	0.0003	**-0.0015**	0.0017	109.9
Uranium	238	-0.0007	0.0008	0.0007	**0.0003**	0.0008	313.8
Vanadium	51	0.0373	0.0147	0.0269	**0.0263**	0.0113	42.96
Zinc	66	-0.0316	-0.0733	-0.0575	**-0.0541**	0.0211	38.92
Zinc	67	0.0025	-0.0746	-0.1069	**-0.0597**	0.0562	94.18
Zinc	68	-0.0269	-0.0228	-0.0452	**-0.0316**	0.0119	37.68

Internal Standard Factors:

Lithium	6	0.981	1.058	1.062	**0.981**	n/a	n/a
Scandium	45	1.112	1.131	1.147	**1.112**	n/a	n/a
Gallium	71	1.03	1.099	1.11	**1.03**	n/a	n/a
Rhodium	103	1.047	1.128	1.112	**1.047**	n/a	n/a
Indium	115	1.011	1.117	1.087	**1.011**	n/a	n/a
Lutetium	175	1.09	1.135	1.155	**1.09**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Correction for mc0

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004467-001			Mean	SD	%RSD
TimeStamp		5/12/10 15:09					
					0.0359		
Aluminum	27	870.6	889.9	866.9	**875.8**	12.34	1.409
Antimony	121	0.4079	0.4119	0.3876	**0.4025**	0.0131	3.247
Antimony	123	0.3845	0.4147	0.3805	**0.3932**	0.0187	4.761
Arsenic	75	2.055	1.994	1.894	**1.981**	0.0811	4.091
Barium	135	47.98	49.12	48.98	**48.69**	0.6181	1.269
Barium	137	47.9	48.01	47.85	**47.92**	0.0837	0.1746
Barium	138	48.86	48.4	48.76	**48.68**	0.2442	0.5016
Beryllium	9	0.0756	0.079	0.0683	**0.0743**	0.0055	7.368
Cadmium	111	0.0673	0.0553	0.086	**0.0695**	0.0155	22.24
Cadmium	114	0.0859	0.0896	0.0921	**0.0892**	0.0031	3.49
Chromium	52	2.026	2.025	2.002	**2.018**	0.0135	0.6686
Chromium	53	2.391	2.288	2.093	**2.258**	0.1513	6.704
Cobalt	59	2.468	2.413	2.52	**2.467**	0.0533	2.16
Copper	63	4.484	4.259	4.268	**4.337**	0.1273	2.934
Copper	65	4.195	4.255	4.266	**4.239**	0.0386	0.9101
Lead	206	2.159	2.174	2.127	**2.153**	0.0236	1.096
Lead	207	2.217	2.528	2.393	**2.379**	0.1562	6.564
Lead	208	2.258	2.363	2.289	**2.303**	0.0537	2.332
Manganese	55	220.3	213.9	206.1	**213.4**	7.095	3.324
Molybdenum	95	28.02	27.49	28.49	**28**	0.501	1.79
Molybdenum	97	26.78	27.19	27.06	**27.01**	0.2093	0.7749
Molybdenum	98	28.38	26.68	27.44	**27.5**	0.8505	3.093
Nickel	60	5.342	5.084	5.238	**5.221**	0.1302	2.494
Nickel	62	5.067	4.655	4.636	**4.786**	0.2434	5.086
Selenium	77	0.2178	0.2394	0.2284	**0.2285**	0.0108	4.724
Selenium	78	0.1241	-0.0897	-0.1033	**-0.023**	0.1275	555.6
Selenium	82	0.2287	0.444	0.2387	**0.3038**	0.1215	39.99
Silver	107	0.0168	0.0102	0.0015	**0.0095**	0.0076	80.31
Silver	109	0.0085	0.0002	-0.0017	**0.0023**	0.0054	231
Thallium	203	0.0119	0.0193	0.0138	**0.015**	0.0038	25.64
Thallium	205	0.0149	0.0147	0.0142	**0.0146**	0.0003	2.239
Tin	118	0.6122	0.6179	0.6279	**0.6193**	0.008	1.286
Tin	120	0.5969	0.5979	0.598	**0.5976**	0.0006	0.102
Uranium	238	6.08	6.342	6.315	**6.246**	0.144	2.306
Vanadium	51	4.104	3.915	3.984	**4.001**	0.0959	2.396
Zinc	66	7.801	7.627	7.754	**7.727**	0.09	1.164
Zinc	67	9.448	8.935	8.919	**9.101**	0.3013	3.31
Zinc	68	9.527	8.86	9.102	**9.163**	0.3378	3.686

Internal Standard Factors:

Lithium	6	1.017	1.13	1.124	**1.017**	n/a	n/a
Scandium	45	1.049	1.137	1.123	**1.049**	n/a	n/a
Gallium	71	1.09	1.159	1.209	**1.09**	n/a	n/a
Rhodium	103	1.089	1.182	1.217	**1.089**	n/a	n/a
Indium	115	1.038	1.15	1.17	**1.038**	n/a	n/a
Lutetium	175	0.98	1.097	1.11	**0.98**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004467-001D			Mean	SD	%RSD
TimeStamp		5/12/10 15:13					
					0.0376		
Aluminum	27	881.6	869.1	871.5	**874.1**	6.599	0.755
Antimony	121	0.3983	0.3983	0.4037	**0.4001**	0.0031	0.7785
Antimony	123	0.3649	0.3746	0.3628	**0.3675**	0.0063	1.704
Arsenic	75	2.011	1.945	1.925	**1.96**	0.0449	2.291
Barium	135	49.53	48.97	46.85	**48.45**	1.414	2.919
Barium	137	47.64	46.77	46.97	**47.13**	0.454	0.9634
Barium	138	49.04	47.42	48.34	**48.27**	0.8138	1.686
Beryllium	9	0.0823	0.0728	0.0644	**0.0732**	0.0089	12.23
Cadmium	111	0.0676	0.0796	0.07	**0.0724**	0.0064	8.776
Cadmium	114	0.0905	0.0872	0.0945	**0.0907**	0.0036	3.997
Chromium	52	2.031	1.979	2.057	**2.023**	0.0396	1.958
Chromium	53	2.244	2.295	2.125	**2.221**	0.0876	3.943
Cobalt	59	2.522	2.48	2.409	**2.47**	0.0573	2.322
Copper	63	4.381	4.254	4.277	**4.304**	0.0678	1.575
Copper	65	4.268	4.159	4.204	**4.21**	0.0547	1.298
Lead	206	2.164	2.199	2.17	**2.178**	0.0184	0.8457
Lead	207	2.488	2.385	2.404	**2.426**	0.0552	2.276
Lead	208	2.376	2.306	2.314	**2.332**	0.0381	1.635
Manganese	55	214.2	206.1	205.8	**208.7**	4.745	2.274
Molybdenum	95	27.91	27.14	27.06	**27.37**	0.4723	1.726
Molybdenum	97	27.62	28.08	27.42	**27.71**	0.3391	1.224
Molybdenum	98	26.53	27.96	27.34	**27.28**	0.7195	2.638
Nickel	60	5.22	5.165	5.16	**5.182**	0.0333	0.6424
Nickel	62	4.694	4.942	4.589	**4.742**	0.181	3.818
Selenium	77	0.2657	0.1572	0.2113	**0.2114**	0.0542	25.65
Selenium	78	0.0855	-0.0705	-0.0698	**-0.0183**	0.0899	491.9
Selenium	82	0.4263	0.2393	0.4215	**0.3624**	0.1066	29.43
Silver	107	0.0011	-0.0004	-0.0022	**-0.0005**	0.0017	317.1
Silver	109	-0.0043	-0.0031	-0.002	**-0.0031**	0.0012	37.37
Thallium	203	0.0164	0.0166	0.0152	**0.016**	0.0008	4.768
Thallium	205	0.0149	0.0144	0.0121	**0.0138**	0.0015	10.9
Tin	118	0.608	0.6008	0.5802	**0.5963**	0.0144	2.416
Tin	120	0.5854	0.6097	0.5938	**0.5963**	0.0124	2.073
Uranium	238	6.333	6.145	6.225	**6.234**	0.0946	1.518
Vanadium	51	3.991	3.999	3.855	**3.949**	0.0807	2.044
Zinc	66	7.735	7.653	7.709	**7.699**	0.0417	0.5416
Zinc	67	9.716	9.382	9.144	**9.414**	0.2874	3.052
Zinc	68	9.223	9.1	8.933	**9.086**	0.1457	1.603

Internal Standard Factors:

Lithium	6	1.079	1.142	1.153	**1.079**	n/a	n/a
Scandium	45	1.06	1.148	1.161	**1.06**	n/a	n/a
Gallium	71	1.129	1.254	1.278	**1.129**	n/a	n/a
Rhodium	103	1.108	1.265	1.279	**1.108**	n/a	n/a
Indium	115	1.09	1.201	1.206	**1.09**	n/a	n/a
Lutetium	175	1.041	1.149	1.169	**1.041**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004467-001S			Mean	SD	%RSD
TimeStamp		5/12/10 15:18					
Aluminum	27	836.6	849.7	846	**844.1**	6.75	0.7996
Antimony	121	18.92	19.8	20.47	**19.73**	0.7768	3.937
Antimony	123	19.39	19.6	19.69	**19.56**	0.155	0.7926
Arsenic	75	23.39	21.92	23.56	**22.95**	0.9014	3.927
Barium	135	68.47	69.79	69.16	**69.14**	0.6576	0.9511
Barium	137	67.26	68.11	70.2	**68.52**	1.511	2.206
Barium	138	67.27	71.02	69.35	**69.21**	1.88	2.717
Beryllium	9	21.17	20.76	20.65	**20.86**	0.2768	1.327
Cadmium	111	21.4	20.78	21.39	**21.19**	0.3537	1.669
Cadmium	114	19.81	20.1	20.65	**20.19**	0.4274	2.117
Chromium	52	21.49	21.61	21.03	**21.38**	0.309	1.445
Chromium	53	21.25	21.13	21.13	**21.17**	0.0702	0.3314
Cobalt	59	22.48	22.07	22.52	**22.36**	0.2472	1.106
Copper	63	24.08	23.39	23.79	**23.75**	0.347	1.461
Copper	65	24	23.87	24.39	**24.08**	0.273	1.133
Lead	206	21.19	21.76	20.83	**21.26**	0.4694	2.208
Lead	207	21.73	21.73	21.13	**21.53**	0.3454	1.604
Lead	208	21.21	21.72	21.29	**21.41**	0.2758	1.288
Manganese	55	230.6	228.3	228	**228.9**	1.416	0.6185
Molybdenum	95	48.56	48.1	48.27	**48.31**	0.2318	0.4798
Molybdenum	97	47.81	47.87	46.4	**47.36**	0.8329	1.759
Molybdenum	98	49.4	48.88	48.96	**49.08**	0.2827	0.5759
Nickel	60	24.07	24.48	24.46	**24.34**	0.2273	0.9339
Nickel	62	24.94	23.94	24.31	**24.4**	0.5057	2.073
Selenium	77	20.86	20.51	21.29	**20.89**	0.3927	1.88
Selenium	78	20.61	20.07	20.73	**20.47**	0.355	1.735
Selenium	82	22.21	20.16	20.83	**21.06**	1.044	4.958
Silver	107	20.31	20.04	19.91	**20.09**	0.2051	1.021
Silver	109	19.77	20.31	20.13	**20.07**	0.2748	1.369
Thallium	203	19.33	19.38	19.02	**19.24**	0.1945	1.011
Thallium	205	19.42	19.46	19.19	**19.36**	0.1424	0.7355
Tin	118	0.5653	0.6032	0.6368	**0.6017**	0.0358	5.948
Tin	120	0.5598	0.6366	0.6182	**0.6048**	0.0401	6.629
Uranium	238	26.33	27.1	27.02	**26.82**	0.4243	1.582
Vanadium	51	22.97	23.98	22.7	**23.21**	0.6743	2.905
Zinc	66	27.34	27.96	28.28	**27.86**	0.4784	1.717
Zinc	67	28.57	28.96	28.88	**28.8**	0.2039	0.7079
Zinc	68	28.68	28.39	28.69	**28.59**	0.1722	0.6024

Internal Standard Factors:

Lithium	6	1.061	1.13	1.136	**1.061**	n/a	n/a
Scandium	45	1.067	1.177	1.124	**1.067**	n/a	n/a
Gallium	71	1.111	1.186	1.221	**1.111**	n/a	n/a
Rhodium	103	1.15	1.196	1.179	**1.15**	n/a	n/a
Indium	115	1.076	1.156	1.175	**1.076**	n/a	n/a
Lutetium	175	1.014	1.107	1.097	**1.014**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		LCSW K1004467			Mean	SD	%RSD
TimeStamp		5/12/10 15:22					
Aluminum	27	20.92	21.5	21.24	**21.22**	0.2876	1.355
Antimony	121	20.17	20.22	20.88	**20.42**	0.3965	1.942
Antimony	123	20.39	20.21	21.31	**20.64**	0.5907	2.862
Arsenic	75	21.54	20.87	20.8	**21.07**	0.4052	1.923
Barium	135	20.68	20.39	20.26	**20.44**	0.2152	1.053
Barium	137	20.56	19.64	19.87	**20.02**	0.4759	2.377
Barium	138	20.28	20.44	20.5	**20.41**	0.1147	0.5622
Beryllium	9	21.86	21.71	20.91	**21.49**	0.508	2.363
Cadmium	111	20.94	20.88	21.52	**21.11**	0.3566	1.689
Cadmium	114	20.36	19.47	20.32	**20.05**	0.5045	2.516
Chromium	52	20.61	21.24	21.05	**20.96**	0.3224	1.538
Chromium	53	19.99	20.94	20.44	**20.46**	0.4722	2.308
Cobalt	59	21.03	21.28	20.68	**21**	0.3044	1.449
Copper	63	21.72	21.28	21.07	**21.36**	0.3289	1.54
Copper	65	21.78	21.23	21.09	**21.37**	0.3672	1.719
Lead	206	20.87	20.87	19.65	**20.46**	0.7046	3.444
Lead	207	21.05	19.96	19.89	**20.3**	0.6543	3.223
Lead	208	20.69	20.41	19.81	**20.3**	0.4516	2.224
Manganese	55	21.13	21.35	21.09	**21.19**	0.1384	0.653
Molybdenum	95	21.07	20.52	21.01	**20.87**	0.3004	1.44
Molybdenum	97	21.85	21.31	20.66	**21.27**	0.5961	2.802
Molybdenum	98	21.52	20.79	20.34	**20.88**	0.5973	2.86
Nickel	60	21.4	20.98	20.32	**20.9**	0.5451	2.608
Nickel	62	21.48	21.24	20.43	**21.05**	0.5512	2.619
Selenium	77	21.49	21.55	20.82	**21.29**	0.4081	1.917
Selenium	78	21.52	21.93	21.43	**21.62**	0.2657	1.229
Selenium	82	21.93	20.89	21.39	**21.4**	0.5228	2.442
Silver	107	21.62	20.58	20.72	**20.97**	0.5634	2.686
Silver	109	20.89	20.54	20.74	**20.72**	0.1743	0.8411
Thallium	203	20.33	20.56	19.86	**20.25**	0.3602	1.779
Thallium	205	20.57	20.87	19.92	**20.45**	0.4828	2.36
Tin	118	0.009	0.0024	0.0017	**0.0044**	0.004	91.6
Tin	120	0.0076	0.0093	0.0097	**0.0089**	0.0011	12.51
Uranium	238	20.55	20.43	19.78	**20.25**	0.4152	2.05
Vanadium	51	20.79	20.94	20.46	**20.73**	0.2456	1.185
Zinc	66	22.13	21.39	21.63	**21.72**	0.3742	1.723
Zinc	67	22.07	21.37	20.48	**21.31**	0.794	3.727
Zinc	68	21.31	21	20.57	**20.96**	0.3712	1.771

Internal Standard Factors:

Lithium	6	0.987	1.032	1.042	**0.987**	n/a	n/a
Scandium	45	1.054	1.133	1.107	**1.054**	n/a	n/a
Gallium	71	1.029	1.071	1.065	**1.029**	n/a	n/a
Rhodium	103	1.027	1.062	1.051	**1.027**	n/a	n/a
Indium	115	0.985	1.008	1.034	**0.985**	n/a	n/a
Lutetium	175	1.003	1.065	1.059	**1.003**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		50 ppb Mo			Mean	SD	%RSD
TimeStamp		5/12/10 15:30					
Aluminum	27	4.131	4.114	4.148	**4.131**	0.017	0.4127
Antimony	121	-0.0115	-0.014	-0.0203	**-0.0153**	0.0045	29.72
Antimony	123	-0.0123	-0.016	-0.02	**-0.0161**	0.0039	23.98
Arsenic	75	-0.0485	0.0159	0.1328	**0.0334**	0.0919	275
Barium	135	0.0354	0.0394	0.04	**0.0383**	0.0025	6.481
Barium	137	0.0445	0.0417	0.0453	**0.0438**	0.0018	4.219
Barium	138	0.035	0.0372	0.0369	**0.0364**	0.0012	3.351
Beryllium	9	0.0065	0	-0.001	**0.0018**	0.0041	221.7
Cadmium	111	0.0751	0.0734	0.074	**0.0742**	0.0009	1.165
Cadmium	114	0.0519	0.0476	0.0543	**0.0512**	0.0034	6.639
Chromium	52	0.0152	0.0029	0.0195	**0.0125**	0.0086	68.9
Chromium	53	-0.1692	-0.1527	-0.1941	**-0.172**	0.0209	12.12
Cobalt	59	-0.0025	0.0009	0.0037	**0.0007**	0.0031	444.3
Copper	63	5.817	5.813	5.921	**5.85**	0.0612	1.047
Copper	65	6.045	6.088	5.677	**5.936**	0.226	3.807
Lead	206	0.1486	0.1605	0.18	**0.163**	0.0159	9.721
Lead	207	0.1734	0.177	0.1821	**0.1775**	0.0044	2.478
Lead	208	0.1684	0.1702	0.1863	**0.175**	0.0099	5.648
Manganese	55	1.509	1.436	1.359	**1.434**	0.075	5.23
Molybdenum	95	57.39	57.69	59.96	**58.35**	1.407	2.412
Molybdenum	97	56.08	55.89	55.91	**55.96**	0.1025	0.1831
Molybdenum	98	58.37	56.23	56.57	**57.06**	1.152	2.019
Nickel	60	0.1677	0.1684	0.1759	**0.1707**	0.0045	2.651
Nickel	62	0.1703	0.1153	0.1146	**0.1334**	0.0319	23.94
Selenium	77	-0.0584	0.0152	-0.0901	**-0.0444**	0.054	121.6
Selenium	78	-0.0113	0.1776	-0.2157	**-0.0165**	0.1967	1194
Selenium	82	-0.2853	-0.0129	0.2944	**-0.0013**	0.29	23020
Silver	107	0.0069	0.0085	0.0034	**0.0063**	0.0026	42.27
Silver	109	0.0061	0.0057	0.0026	**0.0048**	0.0019	40.29
Thallium	203	0.003	0.0041	0.003	**0.0034**	0.0007	19.4
Thallium	205	0.0059	0.0029	0.003	**0.0039**	0.0017	43.74
Tin	118	0.0408	0.0301	0.0377	**0.0362**	0.0055	15.15
Tin	120	0.0411	0.0367	0.0289	**0.0356**	0.0062	17.45
Uranium	238	0.0046	0.0057	0.0046	**0.005**	0.0006	12.68
Vanadium	51	-0.0082	-0.0112	0.0004	**-0.0064**	0.006	94.42
Zinc	66	3.249	3.165	3.112	**3.175**	0.0692	2.18
Zinc	67	2.874	2.633	2.736	**2.748**	0.1208	4.396
Zinc	68	3.23	3.023	2.951	**3.068**	0.1446	4.712

$\frac{0.0742\ g/l}{58.35\ g/mol} = 1.2716\ E^{-3}$

Internal Standard Factors:							
Lithium	6	0.93	1.035	1.064	**0.93**	n/a	n/a
Scandium	45	0.936	1.077	1.115	**0.936**	n/a	n/a
Gallium	71	0.968	1.08	1.113	**0.968**	n/a	n/a
Rhodium	103	0.937	1.041	1.118	**0.937**	n/a	n/a
Indium	115	0.957	1.074	1.081	**0.957**	n/a	n/a
Lutetium	175	0.969	1.089	1.201	**0.969**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004496-001			Mean	SD	%RSD
TimeStamp		5/12/10 15:36					
Aluminum	27	3.496	3.567	3.516	**3.527**	0.0366	1.039
Antimony	121	0.882	0.8338	0.9173	**0.8777**	0.0419	4.777
Antimony	123	0.8286	0.9226	0.8417	**0.8643**	0.0509	5.887
Arsenic	75	15.68	15.22	15.01	**15.3**	0.3426	2.239
Barium	135	28.2	29.11	28.84	**28.71**	0.4667	1.625
Barium	137	28.04	29.19	28.08	**28.43**	0.6518	2.292
Barium	138	29.38	29.17	28.71	**29.09**	0.343	1.179
Beryllium	9	-0.0003	-0.0002	0.0015	**0.0003**	0.001	310.4
Cadmium	111	0.0183	0.0174	0.0281	**0.0213**	0.0059	27.91
Cadmium	114	0.0216	0.0198	0.0159	**0.0191**	0.0029	15.26
Chromium	52	0.5019	0.4921	0.4844	**0.4928**	0.0088	1.784
Chromium	53	1.383	1.307	1.333	**1.341**	0.0388	2.896
Cobalt	59	0.0967	0.0915	0.085	**0.091**	0.0058	6.418
Copper	63	1.335	1.281	1.275	**1.297**	0.0332	2.561
Copper	65	1.188	1.194	1.238	**1.207**	0.0276	2.285
Lead	206	0.0255	0.0224	0.0214	**0.0231**	0.0021	9.279
Lead	207	0.03	0.0284	0.0229	**0.0271**	0.0037	13.78
Lead	208	0.0267	0.0267	0.0255	**0.0263**	0.0007	2.6
Manganese	55	653.2	622.1	625.7	**633.7**	17	2.683
Molybdenum	95	4.472	4.367	4.189	**4.343**	0.1428	3.288
Molybdenum	97	4.475	4.103	4.332	**4.303**	0.1878	4.365
Molybdenum	98	4.379	4.316	4.272	**4.322**	0.0539	1.246
Nickel	60	1.024	1.051	1.006	**1.027**	0.0224	2.183
Nickel	62	1.047	1.463	1.374	**1.295**	0.219	16.91
Selenium	77	0.2963	0.2839	0.1434	**0.2412**	0.085	35.23
Selenium	78	-0.0176	0.0329	0.5115	**0.1756**	0.292	166.3
Selenium	82	0.4556	0.2639	0.1924	**0.3039**	0.1361	44.78
Silver	107	0.0047	0.002	0.0028	**0.0032**	0.0014	44.71
Silver	109	0.0037	-0.0052	-0.0028	**-0.0014**	0.0046	316.9
Thallium	203	0	-0.0008	0.0003	**-0.0002**	0.0006	351.3
Thallium	205	0.001	0.0021	0.0017	**0.0016**	0.0006	34.44
Tin	118	0.0046	0.0052	0.0039	**0.0046**	0.0007	14.93
Tin	120	0.0002	0.0056	0.0041	**0.0033**	0.0028	85.02
Uranium	238	0.0056	0.0064	0.0046	**0.0055**	0.0009	17.06
Vanadium	51	0.2015	0.211	0.1511	**0.1879**	0.0322	17.13
Zinc	66	4.142	4.164	4.094	**4.133**	0.0358	0.8658
Zinc	67	4.942	4.953	4.907	**4.934**	0.0237	0.4802
Zinc	68	5.206	5.135	5.192	**5.178**	0.0376	0.7259

Internal Standard Factors:

Lithium	6	1.085	1.197	1.232	**1.085**	n/a	n/a
Scandium	45	0.967	1.055	1.109	**0.967**	n/a	n/a
Gallium	71	1.234	1.419	1.457	**1.234**	n/a	n/a
Rhodium	103	1.222	1.373	1.417	**1.222**	n/a	n/a
Indium	115	1.165	1.333	1.348	**1.165**	n/a	n/a
Lutetium	175	1.119	1.24	1.259	**1.119**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004499-001			Mean	SD	%RSD
TimeStamp		5/12/10 15:41					
Aluminum	27	42.99	43.46	43.96	**43.47**	0.4847	1.115
Antimony	121	0.2863	0.3061	0.2817	**0.2914**	0.0129	4.443
Antimony	123	0.2915	0.2675	0.2689	**0.276**	0.0135	4.877
Arsenic	75	2.107	2.187	1.73	**2.008**	0.2444	12.17
Barium	135	319.8	317.8	316.2	**318**	1.806	0.5681
Barium	137	317.2	328.7	309.4	**318.4**	9.732	3.056
Barium	138	302.4	313.6	302	**306**	6.593	2.155
Beryllium	9	0.0362	0.0295	0.028	**0.0313**	0.0044	13.93
Cadmium	111	0.0158	0.0135	0.0098	**0.013**	0.003	23.27
Cadmium	114	0.0115	0.0144	0.0127	**0.0128**	0.0014	11.27
Chromium	52	2.785	2.883	2.738	**2.802**	0.074	2.639
Chromium	53	1.76	1.968	1.884	**1.871**	0.1047	5.596
Cobalt	59	0.062	0.0646	0.062	**0.0629**	0.0015	2.362
Copper	63	7.031	7.137	6.871	**7.013**	0.1339	1.91
Copper	65	6.714	6.991	6.83	**6.845**	0.1393	2.035
Lead	206	1.132	1.114	1.07	**1.105**	0.0317	2.866
Lead	207	1.266	1.282	1.22	**1.256**	0.0322	2.561
Lead	208	1.387	1.384	1.35	**1.373**	0.0204	1.489
Manganese	55	4.437	4.614	4.472	**4.508**	0.0938	2.081
Molybdenum	95	0.2311	0.1949	0.2061	**0.2107**	0.0186	8.802
Molybdenum	97	0.2119	0.2158	0.1818	**0.2032**	0.0186	9.135
Molybdenum	98	0.2269	0.2155	0.218	**0.2201**	0.006	2.73
Nickel	60	1.952	1.868	1.822	**1.881**	0.066	3.51
Nickel	62	1.738	1.89	2.012	**1.88**	0.1372	7.3
Selenium	77	12.69	13.15	13.36	**13.06**	0.3398	2.601
Selenium	78	9.596	9.735	10.33	**9.887**	0.3905	3.95
Selenium	82	10.62	11.01	9.973	**10.54**	0.5256	4.989
Silver	107	-0.0036	-0.0018	-0.0037	**-0.003**	0.0011	35.55
Silver	109	-0.0064	-0.0054	-0.004	**-0.0053**	0.0012	22.88
Thallium	203	-0.0003	0.0001	-0.001	**-0.0004**	0.0006	142
Thallium	205	-0.0003	0.0011	-0.0001	**0.0002**	0.0008	310.8
Tin	118	0.0447	0.0517	0.0444	**0.0469**	0.0041	8.777
Tin	120	0.0552	0.0491	0.0624	**0.0556**	0.0066	11.95
Uranium	238	0.0769	0.0711	0.0657	**0.0712**	0.0056	7.852
Vanadium	51	0.3531	0.3159	0.3179	**0.329**	0.0209	6.351
Zinc	66	61.91	62.03	61.1	**61.68**	0.5047	0.8182
Zinc	67	66.58	67.13	66.76	**66.82**	0.2789	0.4174
Zinc	68	66.68	67.5	66.17	**66.78**	0.6728	1.007

Internal Standard Factors:

Lithium	6	1.036	1.122	1.135	**1.036**	n/a	n/a
Scandium	45	1.146	1.199	1.231	**1.146**	n/a	n/a
Gallium	71	0.862	0.956	0.949	**0.862**	n/a	n/a
Rhodium	103	1.069	1.182	1.18	**1.069**	n/a	n/a
Indium	115	1.051	1.148	1.128	**1.051**	n/a	n/a
Lutetium	175	0.983	1.081	1.076	**0.983**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004502-005			Mean	SD	%RSD
TimeStamp		5/12/10 15:49					
Aluminum	27	25.05	25.52	25.54	**25.37**	0.2744	1.081
Antimony	121	0.3188	0.3395	0.3354	**0.3312**	0.011	3.317
Antimony	123	0.2921	0.301	0.3769	**0.3233**	0.0466	14.42
Arsenic	75	0.3219	-0.0412	0.0882	**0.1229**	0.1841	149.7
Barium	135	8.743	8.457	8.558	**8.586**	0.1449	1.687
Barium	137	8.699	8.398	8.467	**8.521**	0.1572	1.845
Barium	138	8.726	8.633	8.665	**8.674**	0.0474	0.5467
Beryllium	9	0.0039	-0.0001	0.0058	**0.0032**	0.003	94.25
Cadmium	111	0.4678	0.4595	0.4535	**0.4603**	0.0072	1.563
Cadmium	114	0.3895	0.3812	0.3865	**0.3857**	0.0042	1.089
Chromium	52	0.4369	0.4275	0.4167	**0.4271**	0.0101	2.365
Chromium	53	14.66	14.62	14.85	**14.71**	0.1251	0.8508
Cobalt	59	3.317	3.315	3.269	**3.301**	0.0271	0.8224
Copper	63	7.285	7.827	7.611	**7.574**	0.2728	3.601
Copper	65	4.26	4.38	4.407	**4.349**	0.0781	1.797
Lead	206	2.584	2.621	2.419	**2.541**	0.1079	4.244
Lead	207	2.839	2.642	2.671	**2.717**	0.1066	3.922
Lead	208	2.734	2.62	2.574	**2.643**	0.0822	3.109
Manganese	55	28.14	26.39	25.59	**26.71**	1.305	4.886
Molybdenum	95	181.3	178.4	179.8	**179.8**	1.425	0.7923
Molybdenum	97	175.1	179.3	179	**177.8**	2.352	1.323
Molybdenum	98	184.5	178.8	181.9	**181.7**	2.849	1.568
Nickel	60	5.041	4.94	5.033	**5.005**	0.0561	1.121
Nickel	62	3.769	3.838	3.811	**3.806**	0.0346	0.9101
Selenium	77	9.282	9.973	9.513	**9.589**	0.3514	3.664
Selenium	78	0.5659	0.7376	0.3169	**0.5401**	0.2116	39.17
Selenium	82	1.192	0.8419	0.9062	**0.9801**	0.1865	19.03
Silver	107	-0.0068	-0.0078	-0.007	**-0.0072**	0.0005	7.299
Silver	109	-0.0088	-0.007	-0.0114	**-0.0091**	0.0022	24.37
Thallium	203	0.0042	0.0028	0.0013	**0.0028**	0.0014	52.12
Thallium	205	0.0033	0.0025	0.0022	**0.0027**	0.0006	21.75
Tin	118	0.0221	0.0124	0.0208	**0.0184**	0.0053	28.58
Tin	120	0.0342	0.0284	0.0226	**0.0284**	0.0058	20.51
Uranium	238	0.0779	0.0745	0.0747	**0.0757**	0.0019	2.488
Vanadium	51	0.6392	0.551	0.3789	**0.523**	0.1324	25.3
Zinc	66	32.32	32.59	32.6	**32.5**	0.1597	0.4913
Zinc	67	32.25	33.4	33.22	**32.95**	0.6181	1.876
Zinc	68	33.93	33.53	32.82	**33.43**	0.5631	1.685

Internal Standard Factors:

Lithium	6	1.462	1.638	1.694	**1.462**	n/a	n/a
Scandium	45	1.001	1.097	1.125	**1.001**	n/a	n/a
Gallium	71	1.537	1.795	1.831	**1.537**	n/a	n/a
Rhodium	103	1.464	1.639	1.728	**1.464**	n/a	n/a
Indium	115	1.294	1.488	1.527	**1.294**	n/a	n/a
Lutetium	175	1.139	1.261	1.322	**1.139**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		K1004508-001			Mean	SD	%RSD
TimeStamp		5/12/10 15:56					
Aluminum	27	29.63	29.91	30.06	**29.87**	0.2206	0.7388
Antimony	121	0.0388	0.034	0.0205	**0.0311**	0.0095	30.61
Antimony	123	0.0256	0.0263	0.0363	**0.0294**	0.006	20.35
Arsenic	75	1.378	1.288	1.478	**1.381**	0.0949	6.872
Barium	135	1.657	1.702	1.708	**1.689**	0.0281	1.662
Barium	137	1.708	1.741	1.664	**1.705**	0.0388	2.279
Barium	138	1.674	1.643	1.736	**1.684**	0.0471	2.799
Beryllium	9	0.0023	0.0018	0	**0.0013**	0.0012	91.97
Cadmium	111	0.0085	0.0138	0.0114	**0.0112**	0.0027	23.71
Cadmium	114	0.0212	0.0181	0.0183	**0.0192**	0.0017	8.967
Chromium	52	0.1986	0.1878	0.2114	**0.1993**	0.0118	5.94
Chromium	53	0.8232	0.8302	0.8073	**0.8202**	0.0118	1.433
Cobalt	59	17.53	17.19	17.41	**17.38**	0.1731	0.996
Copper	63	13.23	13.15	13.61	**13.33**	0.2438	1.829
Copper	65	11.24	11.37	11.32	**11.31**	0.0654	0.5783
Lead	206	0.0237	0.0236	0.0208	**0.0227**	0.0016	7.242
Lead	207	0.0228	0.0231	0.021	**0.0223**	0.0012	5.246
Lead	208	0.0229	0.0264	0.0227	**0.024**	0.0021	8.633
Manganese	55	7.031	6.99	7.029	**7.017**	0.0232	0.3308
Molybdenum	95	2.572	2.569	2.654	**2.598**	0.0486	1.873
Molybdenum	97	2.405	2.494	2.362	**2.42**	0.0672	2.778
Molybdenum	98	2.444	2.369	2.259	**2.357**	0.0929	3.942
Nickel	60	16.09	16.14	15.86	**16.03**	0.1509	0.9413
Nickel	62	17.66	17.65	18.33	**17.88**	0.392	2.192
Selenium	77	0.366	0.6049	0.4102	**0.4604**	0.1271	27.62
Selenium	78	1.341	1.691	1.637	**1.556**	0.1886	12.12
Selenium	82	0.9242	0.81	1.051	**0.9284**	0.1205	12.98
Silver	107	-0.0055	-0.0038	-0.0073	**-0.0055**	0.0017	31.4
Silver	109	-0.0073	-0.0067	-0.0094	**-0.0078**	0.0014	18.2
Thallium	203	0.0017	0.0039	0.002	**0.0025**	0.0012	48.54
Thallium	205	0.0037	0.0031	0.0046	**0.0038**	0.0007	18.94
Tin	118	0.3966	0.3644	0.3902	**0.3837**	0.017	4.437
Tin	120	0.3692	0.3894	0.3963	**0.385**	0.0141	3.649
Uranium	238	0.0142	0.0098	0.0102	**0.0114**	0.0024	21.29
Vanadium	51	1.885	1.802	1.769	**1.819**	0.0596	3.278
Zinc	66	7.399	7.813	7.551	**7.587**	0.2094	2.76
Zinc	67	6.533	6.523	6.876	**6.644**	0.2011	3.027
Zinc	68	7.459	7.534	7.354	**7.449**	0.0906	1.216

5/12/10 B

Internal Standard out of control

Internal Standard Factors:

Lithium	6	1.438	1.611	1.619	**1.438**	n/a	n/a
Scandium	45	1.378	1.51	1.472	**1.378**	n/a	n/a
Gallium	71	1.555	1.779	1.792	**1.555**	n/a	n/a
Rhodium	103	1.584	1.777	1.763	**1.584**	n/a	n/a
Indium	115	1.423	1.591	1.604	**1.423**	n/a	n/a
Lutetium	175	1.256	1.386	1.43	**1.256**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		CCV3			Mean	SD	%RSD
TimeStamp		5/12/10 16:02					
Aluminum	27	25.18	25.34	25.42	**25.31**	0.1206	0.4764
Antimony	121	25.07	24.97	25.02	**25.02**	0.0521	0.2084
Antimony	123	25.14	25.47	24.34	**24.98**	0.5817	2.328
Arsenic	75	25.43	25.48	26.6	**25.84**	0.6625	2.564
Barium	135	25.78	25.75	26.17	**25.9**	0.2363	0.9123
Barium	137	25.19	25.14	24.79	**25.04**	0.2197	0.8776
Barium	138	24.54	25.35	25.63	**25.18**	0.5648	2.243
Beryllium	9	26.23	25.41	25.16	**25.6**	0.5641	2.204
Cadmium	111	26.55	26.33	25.83	**26.24**	0.3692	1.407
Cadmium	114	25.76	26.36	25.19	**25.77**	0.5816	2.257
Chromium	52	25.04	25.8	26.23	**25.69**	0.5992	2.332
Chromium	53	25.48	25.34	25.74	**25.52**	0.2057	0.806
Cobalt	59	25.03	26.05	25.09	**25.39**	0.5762	2.269
Copper	63	25.74	26.06	26.76	**26.19**	0.5203	1.987
Copper	65	25.24	26.64	26.57	**26.15**	0.7864	3.007
Lead	206	24.62	23.58	24.99	**24.4**	0.7316	2.999
Lead	207	24.58	24.29	24.77	**24.55**	0.2453	0.9995
Lead	208	24.43	23.98	24.76	**24.39**	0.39	1.599
Manganese	55	25.29	25.42	25.62	**25.44**	0.1656	0.6509
Molybdenum	95	25.23	25.86	25.67	**25.59**	0.3246	1.269
Molybdenum	97	25.28	24.84	25	**25.04**	0.2202	0.8793
Molybdenum	98	24.88	24.38	25.78	**25.01**	0.7109	2.842
Nickel	60	25.18	25.5	26.01	**25.56**	0.4157	1.626
Nickel	62	26.93	27.52	27.04	**27.16**	0.3155	1.161
Selenium	77	25.77	25.93	26.81	**26.17**	0.5626	2.15
Selenium	78	26.42	26.97	27.22	**26.87**	0.409	1.522
Selenium	82	25.95	25.51	26.16	**25.87**	0.3312	1.28
Silver	107	25.7	25.93	25.73	**25.78**	0.1287	0.499
Silver	109	25.39	25.5	25.17	**25.35**	0.1688	0.6658
Thallium	203	24.28	24.57	24.7	**24.51**	0.214	0.873
Thallium	205	24.51	24.62	25.01	**24.71**	0.2635	1.066
Tin	118	25.39	24.93	24.97	**25.1**	0.2506	0.9984
Tin	120	25.47	25.7	25.29	**25.49**	0.2083	0.8171
Uranium	238	24.33	24.31	24.79	**24.47**	0.2729	1.115
Vanadium	51	26.31	26.83	26.36	**26.5**	0.2906	1.097
Zinc	66	25.43	25.72	26.46	**25.87**	0.5291	2.045
Zinc	67	25.19	25.27	25.78	**25.42**	0.3222	1.268
Zinc	68	24.85	26.09	26.34	**25.76**	0.8026	3.115

Internal Standard Factors:

Lithium	6	1.021	1.091	1.111	**1.021**	n/a	n/a
Scandium	45	1.105	1.234	1.284	**1.105**	n/a	n/a
Gallium	71	1.035	1.179	1.247	**1.035**	n/a	n/a
Rhodium	103	1.044	1.11	1.179	**1.044**	n/a	n/a
Indium	115	1.031	1.116	1.142	**1.031**	n/a	n/a
Lutetium	175	1.013	1.097	1.176	**1.013**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 05-12-10B
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #200241

Sample Name:		CCB3			Mean	SD	%RSD
TimeStamp		5/12/10 16:17					
Aluminum	27	-0.1692	-0.1647	-0.1649	**-0.1663**	0.0025	1.514
Antimony	121	-0.0245	-0.0263	-0.0253	**-0.0254**	0.0009	3.433
Antimony	123	-0.0213	-0.0246	-0.0273	**-0.0244**	0.003	12.29
Arsenic	75	0.0637	0.0162	0.0606	**0.0468**	0.0266	56.7
Barium	135	0.0084	0.0136	0.0159	**0.0127**	0.0038	30.38
Barium	137	0.0273	0.0125	0.0113	**0.017**	0.0089	52.27
Barium	138	0.0165	0.0172	0.0114	**0.015**	0.0032	21.25
Beryllium	9	0.0085	0.0099	0.005	**0.0078**	0.0025	32.34
Cadmium	111	0.0084	0.01	0.0055	**0.008**	0.0023	28.36
Cadmium	114	0.0102	0.011	0.0085	**0.0099**	0.0013	13.17
Chromium	52	-0.0288	-0.0116	-0.0249	**-0.0217**	0.009	41.6
Chromium	53	0.0274	-0.0054	-0.0751	**-0.0177**	0.0523	295.5
Cobalt	59	-0.0005	0.0069	-0.0014	**0.0017**	0.0045	273.7
Copper	63	0.0447	0.06	0.0544	**0.053**	0.0077	14.61
Copper	65	0.0137	0.0178	0.0271	**0.0195**	0.0069	35.16
Lead	206	0.0118	0.0074	0.0042	**0.0078**	0.0038	48.81
Lead	207	0.0114	0.0069	0.0049	**0.0077**	0.0033	42.8
Lead	208	0.0115	0.0071	0.0047	**0.0077**	0.0034	44.25
Manganese	55	0.1278	0.1279	0.1177	**0.1245**	0.0059	4.7
Molybdenum	95	0.0445	0.0474	0.0382	**0.0434**	0.0047	10.8
Molybdenum	97	0.0489	0.0413	0.0308	**0.0403**	0.0091	22.58
Molybdenum	98	0.0407	0.0514	0.0355	**0.0425**	0.0081	18.98
Nickel	60	0.0019	0.0022	0.0079	**0.004**	0.0034	84.43
Nickel	62	0.3677	0.4979	0.4271	**0.4309**	0.0652	15.13
Selenium	77	-0.1363	-0.0865	-0.1019	**-0.1082**	0.0255	23.56
Selenium	78	0.0134	0.3016	0.0639	**0.1263**	0.1539	121.8
Selenium	82	0.1162	-0.0323	0.1487	**0.0775**	0.0965	124.4
Silver	107	0.0107	0.0114	0.0032	**0.0085**	0.0045	53.56
Silver	109	0.0077	0.0056	0.0016	**0.005**	0.0031	62.04
Thallium	203	0.0142	0.005	0.0022	**0.0071**	0.0063	87.57
Thallium	205	0.0124	0.0113	0.0056	**0.0097**	0.0037	37.47
Tin	118	0.02	0.0149	0.0128	**0.0159**	0.0037	23.29
Tin	120	0.0192	0.0248	0.0131	**0.0191**	0.0058	30.67
Uranium	238	0.0087	0.0081	0.0054	**0.0074**	0.0017	23.3
Vanadium	51	-0.0217	0.001	0.0082	**-0.0042**	0.0156	374.1
Zinc	66	-0.0519	-0.0303	-0.0527	**-0.045**	0.0127	28.22
Zinc	67	-0.1058	-0.056	-0.1093	**-0.0904**	0.0298	32.98
Zinc	68	-0.0456	-0.0288	-0.0432	**-0.0392**	0.0091	23.08

Internal Standard Factors:

Lithium	6	0.949	1.061	1.109	**0.949**	n/a	n/a
Scandium	45	1.019	1.17	1.182	**1.019**	n/a	n/a
Gallium	71	0.952	1.171	1.195	**0.952**	n/a	n/a
Rhodium	103	0.967	1.115	1.183	**0.967**	n/a	n/a
Indium	115	0.987	1.088	1.133	**0.987**	n/a	n/a
Lutetium	175	0.979	1.055	1.131	**0.979**	n/a	n/a

Columbia Analytical Services, Inc.
1317 S. 13th Avenue, Kelso, WA 98626 360.577.7222 360.636.1068 (fax) www.caslab.com

July 1, 2010 Analytical Report for Service Request No: K1004575

Melissa Kleven
Exponent
15375 Southeast 30th Place, Suite 250
Bellevue, WA 98007

RE: Heglar Kronquist/0907194.000.0601

Dear Melissa:

Enclosed are the additional pages for the samples submitted to our laboratory on May 07, 2010. For your reference, these analyses have been assigned our service request number K1004575.

Results for "Phosphate as Orthophosphate" enclosed.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Pradeep Divvela
Project Chemist

PD/lb

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Exponent	**Service Request No.:**	K1004575
Project:	Heglar Kronquist	**Date Received:**	05/07/10
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Four water samples were received for analysis at Columbia Analytical Services on 05/07/10. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Field filtered containers were used for the analysis of Chloride, Nitrate, Nitrite, Fluoride, Sulfate and O. Phos

No anomalies associated with the analysis of these samples were observed.

Dissolved Metals

No anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 06/30/10

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Phosphate as Orthophosphate

Analysis Method : 365.3
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	0.031	0.013	1	05/07/10	0.147	
BH-10	K1004575-002	0.031	0.013	1	05/07/10	0.083	
BH-14	K1004575-003	0.031	0.013	1	05/07/10	0.064	
EB-050610	K1004575-004	0.031	0.013	1	05/07/10	ND	
Method Blank	K1004575-MB	0.031	0.013	1	05/07/10	ND	

Columbia Analytical Services, INC
1317 S. 13th Avenue, Kelso, WA 98626 360.577.7222 360.636.1068 (fax) www.caslab.com

June 7, 2010 Analytical Report for Service Request No: K1004575

Melissa Kleven
Exponent
15375 Southeast 30th Place, Suite 250
Bellevue, WA 98007

RE: Heglar Kronquist/0907194.000.0601

Dear Melissa:

Enclosed are the results of the samples submitted to our laboratory on May 07, 2010. For your reference, these analyses have been assigned our service request number K1004575.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Pradeep Divvela
Project Chemist

PD/bk

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value that was detected outside the quantitation range.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition*: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value that was detected outside the quantitation range.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition*: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value that was detected outside the quantitation range.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition*: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Exponent	**Service Request No.:**	K1004575
Project:	Heglar Kronquist	**Date Received:**	05/07/10
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 05/07/10. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Field filtered containers were used for the analysis of Chloride, Nitrate, Nitrite, Fluoride, Sulfate and O. Phos

No anomalies associated with the analysis of these samples were observed.

Dissolved Metals

No anomalies associated with the analysis of these samples were observed.

Approved by_____ **Date** 6/9/10

Chain of Custody

Columbia Analytical Services INC

CHAIN OF CUSTODY

1317 South 13th Ave, Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR#: K1004575

PAGE 1 OF 1 COC #

PROJECT NAME: Heglar Kronquist

PROJECT NUMBER: 0907194.000 0601

PROJECT MANAGER: Melissa Kleven

COMPANY/ADDRESS: 15375 SE 30th Pl, (KW) ~~Sue~~ Suite 250

CITY/STATE/ZIP: Bellevue, WA 98007

E-MAIL ADDRESS: mkleven@exponent.com

PHONE #: 425-519-8774 | FAX #: 425-519-8799

SAMPLER'S SIGNATURE: [signature] / Keri Whetter

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐	Volatile Organics 624☐ 8260☐	Hydrocarbons (*see below) Gas☐ 8021☐ Diesel☐ Oil☐ BTEX☐	Fuel Fingerprint (FIQ) ☐ NW-HCID Screen ☐	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHS 8310☐ SIM☐	Metals, Total or Dissolved (See list below)	Cyanide☐	pH, Cond., Cl, SO4, PO4, F, NO2, Hex-Chrom☐ NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020☐ AOX 1650☐ 506☐	alkalinity	phosphate as orthophosphate	pH		REMARKS
BH-12	5/6/10	0900		L	5										X		X	X		X	X	X		
BH-10	↓	1405		↓	5										X		X	X		X	X	X		
BH-14	↓	1515		↓	5										X		X	X		X	X	X		
EB-050610	↓	1620		↓	5										X		X	X		X	X			

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required

___ II. Report Dup., MS, MSD as required

X III. Data Validation Report (includes all raw data)

___ IV. CLP Deliverable Report

X V. EDD

INVOICE INFORMATION

P.O. #

Bill To: Same as above

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.

___ 5 Day

X Standard (10-15 working days)

___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS: - run pH ASAP

- run phosphate as orthophosphate ASAP, within 48 hr hold time
- 500 mL w/ H_2SO_4 is field-filtered
- 1L unpreserved are field filtered
- 500 mL w/ HNO_3 are field filtered

[redacted]

BAR CODE #T022894

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: [signature] Date/Time: 5-6-10/1819	Signature: [signature] Date/Time: 5/7/10 0950	Signature: Date/Time:	Signature: Date/Time:
Printed Name: Keri Whetter Firm: Exponent	Printed Name: Les Kennedy Firm: CAS	Printed Name: Firm:	Printed Name: Firm:

RCOC #1 03/10

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC PD

Client / Project: Exponent Service Request K10 04575

Received: 5/7/10 Opened: 5/7/10 By: IM

1. Samples were received via? *Mail* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Cooler Temp °C	Temp Blank °C	Thermometer ID	Cooler/COC ID (NA)	Tracking Number	NA	Filed
-0.1	4.0	265		8684 6000 9745		

7. Packing material used. *Inserts* (*Baggies*) *Bubble Wrap* (*Gel Packs*) (*Wet Ice*) *Sleeves* *Other* _____
8. Were custody papers properly filled out (ink, signed, etc.)? IM 5/7/10 NA (Y) N
9. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
12. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
13. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA (Y) N
14. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
15. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

SHORT HOLD TIME

Notes, Discrepancies, & Resolutions: _____

Page 1 of _____

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Chloride

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	0.20	0.06	2	05/20/10	15.8	
BH-10	K1004575-002	10	2	50	05/24/10	385	
BH-14	K1004575-003	10	2	50	05/24/10	388	
EB-050610	K1004575-004	0.20	0.06	2	05/24/10	0.14	J
Method Blank	K1004575-MB	0.20	0.03	1	05/24/10	ND	
Method Blank	K1004575-MB	0.20	0.03	1	05/20/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/20/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004923-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chloride	300.0	0.20	9.83	9.76	9.80	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/20/10

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name :	Batch QC		Units :	mg/L
Lab Code :	K1004923-002MS	K1004923-002DMS	Basis :	NA
Test Notes :				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chloride	NONE	300.0	0.20	3.00	3.00	9.83	13.0	13.0	106	106	80-120	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/20/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	NONE	300.0	5.00	5.02	100	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/24/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride	NONE	300.0	5.00	4.94	99	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Chloride
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/20/2010	5.00	5.12	102
CCV2 Result	5/20/2010	5.00	5.06	101
CCV3 Result	5/20/2010	5.00	5.02	100
CCV4 Result	5/20/2010	5.00	4.97	99
CCV5 Result	5/20/2010	5.00	4.93	99
CCV6 Result	5/20/2010	5.00	4.96	99
CCV7 Result	5/20/2010	5.00	4.93	99
CCV8 Result	5/21/2010	5.00	4.95	99
CCV1 Result	5/24/2010	5.00	5.18	104
CCV2 Result	5/24/2010	5.00	5.09	102
CCV3 Result	5/24/2010	5.00	5.02	100
CCV4 Result	5/24/2010	5.00	5.10	102
CCV5 Result	5/24/2010	5.00	5.08	102
CCV6 Result	5/24/2010	5.00	5.07	101

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Chloride
300.0
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/20/2010	0.20	ND
CCB2 Result	5/20/2010	0.20	ND
CCB3 Result	5/20/2010	0.20	ND
CCB4 Result	5/20/2010	0.20	ND
CCB5 Result	5/20/2010	0.20	ND
CCB6 Result	5/20/2010	0.20	ND
CCB7 Result	5/20/2010	0.20	ND
CCB8 Result	5/21/2010	0.20	ND
CCB1 Result	5/24/2010	0.20	ND
CCB2 Result	5/24/2010	0.20	ND
CCB3 Result	5/24/2010	0.20	ND
CCB4 Result	5/24/2010	0.20	ND
CCB5 Result	5/24/2010	0.20	ND
CCB6 Result	5/24/2010	0.20	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Fluoride

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	0.20	0.01	2	05/20/10	0.34	
BH-10	K1004575-002	0.20	0.01	2	05/24/10	0.23	
BH-14	K1004575-003	0.20	0.01	2	05/24/10	0.23	
EB-050610	K1004575-004	0.20	0.01	2	05/24/10	ND	
Method Blank	K1004575-MB	0.20	0.003	1	05/20/10	ND	
Method Blank	K1004575-MB	0.20	0.003	1	05/24/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/24/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1005179-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Fluoride	300.0	0.20	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/24/10

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name :	Batch QC		Units :	mg/L
Lab Code :	K1005179-001MS	K1005179-001DMS	Basis :	NA
Test Notes :				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Fluoride	NONE	300.0	0.20	3.00	3.00	ND	2.97	3.00	99	100	80-120	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/20/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	NONE	300.0	13.5	13.9	103	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/24/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride	NONE	300.0	13.5	13.6	101	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Fluoride
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/20/2010	5.00	5.02	100
CCV2 Result	5/20/2010	5.00	4.99	100
CCV3 Result	5/20/2010	5.00	5.00	100
CCV4 Result	5/20/2010	5.00	4.93	99
CCV5 Result	5/20/2010	5.00	4.96	99
CCV6 Result	5/20/2010	5.00	5.00	100
CCV7 Result	5/20/2010	5.00	4.92	98
CCV8 Result	5/21/2010	5.00	4.93	99
CCV1 Result	5/24/2010	5.00	4.83	97
CCV2 Result	5/24/2010	5.00	4.76	95
CCV3 Result	5/24/2010	5.00	4.79	96
CCV4 Result	5/24/2010	5.00	4.81	96
CCV5 Result	5/24/2010	5.00	4.78	96
CCV6 Result	5/24/2010	5.00	4.84	97

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Fluoride
300.0
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/20/2010	0.20	ND
CCB2 Result	5/20/2010	0.20	ND
CCB3 Result	5/20/2010	0.20	ND
CCB4 Result	5/20/2010	0.20	ND
CCB5 Result	5/20/2010	0.20	ND
CCB6 Result	5/20/2010	0.20	ND
CCB7 Result	5/20/2010	0.20	ND
CCB8 Result	5/21/2010	0.20	ND
CCB1 Result	5/24/2010	0.20	ND
CCB2 Result	5/24/2010	0.20	ND
CCB3 Result	5/24/2010	0.20	ND
CCB4 Result	5/24/2010	0.20	ND
CCB5 Result	5/24/2010	0.20	ND
CCB6 Result	5/24/2010	0.20	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Sulfate

Analysis Method : 300.0
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	1.0	0.1	5	05/24/10	30.8	
BH-10	K1004575-002	10	1	50	05/24/10	46	
BH-14	K1004575-003	10	1	50	05/24/10	47	
EB-050610	K1004575-004	0.20	0.02	2	05/24/10	0.04	J
Method Blank	K1004575-MB	0.20	0.01	1	05/24/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/24/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1005179-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfate	300.0	0.20	2.05	2.06	2.06	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/24/10

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name :	Batch QC		Units :	mg/L
Lab Code :	K1005179-001MS	K1005179-001DMS	Basis :	NA
Test Notes :				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Sulfate	NONE	300.0	0.20	3.00	3.00	2.05	4.98	5.02	98	99	80-120	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/24/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA

Test Notes :

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate	NONE	300.0	5.00	4.85	97	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Sulfate
300.0
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/24/2010	5.00	4.96	99
CCV2 Result	5/24/2010	5.00	4.93	99
CCV3 Result	5/24/2010	5.00	4.88	98
CCV4 Result	5/24/2010	5.00	4.91	98
CCV5 Result	5/24/2010	5.00	4.90	98
CCV6 Result	5/24/2010	5.00	4.91	98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Sulfate
300.0
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/24/2010	0.20	ND
CCB2 Result	5/24/2010	0.20	ND
CCB3 Result	5/24/2010	0.20	ND
CCB4 Result	5/24/2010	0.20	ND
CCB5 Result	5/24/2010	0.20	ND
CCB6 Result	5/24/2010	0.20	0.01 J

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Ammonia as Nitrogen, Dissolved

Units : mg/L
Analysis Method 350.1 Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	0.050	0.020	1	05/10/10	ND	
BH-10	K1004575-002	0.050	0.020	1	05/10/10	0.437	
BH-14	K1004575-003	0.050	0.020	1	05/10/10	0.442	
EB-050610	K1004575-004	0.050	0.020	1	05/10/10	ND	
Method Blank	K1004575-MB	0.050	0.020	1	05/10/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004635-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen, Dissolved	350.1	0.050	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Matrix Spike Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004635-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen, Dissolved	350.1	0.050	2.00	ND	2.07	104	90-112	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/10/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA

Test Notes :

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen, Dissolved	NONE	350.1	14.3	14.1	99	90-112	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Ammonia as Nitrogen, Dissolved
350.1
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/10/2010	2.00	1.97	99
CCV2 Result	5/10/2010	2.00	1.96	98
CCV3 Result	5/10/2010	2.00	1.97	99
CCV4 Result	5/10/2010	2.00	1.97	99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Ammonia as Nitrogen, Dissolved
350.1
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/10/2010	0.050	ND
CCB2 Result	5/10/2010	0.050	ND
CCB3 Result	5/10/2010	0.050	ND
CCB4 Result	5/10/2010	0.050	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Nitrite as Nitrogen

Units : mg/L
Analysis Method : 353.2
Basis : NA
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
BH-12	K1004575-001	0.050	0.005	1	05/07/10 16:02	ND	
BH-10	K1004575-002	0.050	0.005	1	05/07/10 16:02	0.069	
BH-14	K1004575-003	0.050	0.005	1	05/07/10 16:02	0.074	
EB-050610	K1004575-004	0.050	0.005	1	05/07/10 16:02	ND	
Method Blank	K1004575-MB	0.050	0.005	1	05/07/10 16:02	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	5/6/2010
Project Number :	0907194.000.0601	**Date Received :**	5/7/2010
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/07/10

Duplicate Summary
Inorganic Parameters

Sample Name :	BH-10	Units :	mg/L
Lab Code :	K1004575-002DUP	Basis :	NA

Test Notes :

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrite as Nitrogen	353.2	0.050	0.069	0.070	0.070	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	5/6/2010
Project Number :	0907194.000.0601	**Date Received :**	5/7/2010
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/07/10

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name :	BH-10		Units :	mg/L
Lab Code :	K1004575-002MS	K1004575-002DMS	Basis :	NA
Test Notes :				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Nitrite as Nitrogen	NONE	353.2	0.050	2.00	2.00	0.069	2.100	2.07	102	100	90-110	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/07/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA

Test Notes :

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen	NONE	353.2	4.00	3.98	100	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Nitrite as Nitrogen
353.2
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/7/2010	2.00	1.95	98
CCV2 Result	5/7/2010	2.00	1.96	98
CCV3 Result	5/7/2010	2.00	1.96	98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Nitrite as Nitrogen
353.2
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/7/2010	0.050	ND
CCB2 Result	5/7/2010	0.050	ND
CCB3 Result	5/7/2010	0.050	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Nitrate as Nitrogen

Analysis Method : 353.2
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	0.050	0.009	1	05/11/10	ND	
BH-10	K1004575-002	1.3	0.2	25	05/11/10	51.7	
BH-14	K1004575-003	1.3	0.2	25	05/11/10	52.2	
EB-050610	K1004575-004	0.050	0.009	1	05/11/10	ND	
Method Blank	K1004575-MB	0.050	0.009	1	05/11/10	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/11/10

Duplicate Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004455-001DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrate as Nitrogen	353.2	0.050	0.011	0.011	0.011	<1	J

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/11/10

Matrix Spike Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004455-001MS
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	353.2	0.050	2.00	0.011	2.00	99	88-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/11/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA

Test Notes :

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrate as Nitrogen	NONE	353.2	14.8	14.4	97	88-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Nitrate as Nitrogen
353.2
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/11/2010	2.00	1.93	97
CCV2 Result	5/11/2010	2.00	1.93	97
CCV3 Result	5/11/2010	2.00	1.91	96
CCV4 Result	5/11/2010	2.00	1.92	96
CCV5 Result	5/11/2010	2.00	1.93	97
CCV6 Result	5/11/2010	2.00	1.92	96

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Nitrate as Nitrogen
353.2
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/11/2010	0.050	ND
CCB2 Result	5/11/2010	0.050	ND
CCB3 Result	5/11/2010	0.050	ND
CCB4 Result	5/11/2010	0.050	ND
CCB5 Result	5/11/2010	0.050	ND
CCB6 Result	5/11/2010	0.050	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Orthophosphate as Phosphorus

Analysis Method : 365.3
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
BH-12	K1004575-001	0.010	0.004	1	05/07/10 04:00	0.048	
BH-10	K1004575-002	0.010	0.004	1	05/07/10 04:00	0.027	
BH-14	K1004575-003	0.010	0.004	1	05/07/10 04:00	0.021	
EB-050610	K1004575-004	0.010	0.004	1	05/07/10 04:00	ND	
Method Blank	K1004575-MB	0.010	0.004	1	05/07/10 04:00	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 5/6/2010
Date Received : 5/7/2010
Date Prepared : NA
Date Analyzed : 05/07/10

Duplicate Summary
Inorganic Parameters

Sample Name : EB-050610
Lab Code : K1004575-004DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Orthophosphate as Phosphorus	365.3	0.010	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	5/6/2010
Project Number :	0907194.000.0601	**Date Received :**	5/7/2010
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/07/10

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name :	EB-050610		Units :	mg/L
Lab Code :	K1004575-004MS	K1004575-004DMS	Basis :	NA
Test Notes :				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Orthophosphate as Phosphorus	NONE	365.3	0.010	0.200	0.400	ND	0.189	0.385	95	96	81-119	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/07/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Orthophosphate as Phosphorus	NONE	365.3	3.57	3.48	97	89-118	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Orthophosphate as Phosphorus
365.3
Units: mg/L

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	5/7/2010	0.500	0.479	96
CCV2 Result	5/7/2010	0.500	0.476	95
CCV3 Result	5/7/2010	0.500	0.464	93

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project : Heglar Kronquist

Service Request : K1004575
Date Collected : NA
Date Received : NA

Orthophosphate as Phosphorus
365.3
Units: mg/L

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	5/7/2010	0.010	ND
CCB2 Result	5/7/2010	0.010	ND
CCB3 Result	5/7/2010	0.010	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Alkalinity as CaCO3, Total

Analysis Method : SM 2320 B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	2.0	1.0	1	05/10/10	263	
BH-10	K1004575-002	2.0	1.0	1	05/10/10	220	
BH-14	K1004575-003	2.0	1.0	1	05/10/10	214	
EB-050610	K1004575-004	2.0	1.0	1	05/10/10	5.1	
Method Blank	K1004575-MB	2.0	1.0	1	05/10/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004481-005DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Alkalinity as CaCO3, Total	SM 2320 B	2.0	184	182	183	1	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/10/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Alkalinity as CaCO3, Total	NONE	SM 2320 B	67.9	70.4	104	94-106	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Bicarbonate Alkalinity as CaCO3

Analysis Method : SM 2320 B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	2.0	1.0	1	05/10/10	263	
BH-10	K1004575-002	2.0	1.0	1	05/10/10	220	
BH-14	K1004575-003	2.0	1.0	1	05/10/10	214	
EB-050610	K1004575-004	2.0	1.0	1	05/10/10	6.3	
Method Blank	K1004575-MB	2.0	1.0	1	05/10/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004338-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Bicarbonate Alkalinity as CaCO3	SM 2320 B	2.0	216	218	217	<1	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Carbonate Alkalinity as CaCO3

Analysis Method : SM 2320 B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	2.0	1.0	1	05/10/10	ND	
BH-10	K1004575-002	2.0	1.0	1	05/10/10	ND	
BH-14	K1004575-003	2.0	1.0	1	05/10/10	ND	
EB-050610	K1004575-004	2.0	1.0	1	05/10/10	ND	
Method Blank	K1004575-MB	2.0	1.0	1	05/10/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : K1004338-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbonate Alkalinity as CaCO3	SM 2320 B	2.0	ND	ND	ND	-	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Hydroxide Alkalinity as CaCO3

Analysis Method : SM 2320 B
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	2.0	1.0	1	05/10/10	ND	
BH-10	K1004575-002	2.0	1.0	1	05/10/10	ND	
BH-14	K1004575-003	2.0	1.0	1	05/10/10	ND	
EB-050610	K1004575-004	2.0	1.0	1	05/10/10	ND	
Method Blank	K1004575-MB	2.0	1.0	1	05/10/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/10/10

Duplicate Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004338-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Hydroxide Alkalinity as CaCO3	SM 2320 B	2.0	ND	ND	ND	-	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

Solids, Total Dissolved

Analysis Method : SM 2540 C
Test Notes :

Units : mg/L
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
BH-12	K1004575-001	5.0	5.0	1	05/13/10	378	
BH-10	K1004575-002	5.0	5.0	1	05/13/10	1330	
BH-14	K1004575-003	5.0	5.0	1	05/13/10	1160	
EB-050610	K1004575-004	5.0	5.0	1	05/13/10	ND	
Method Blank	K1004575-MB	5.0	5.0	1	05/13/10	ND	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 5/6/2010
Date Received : 5/7/2010
Date Prepared : NA
Date Analyzed : 05/13/10

Duplicate Summary
Inorganic Parameters

Sample Name : BH-10
Lab Code : K1004575-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved	SM 2540 C	5.0	1330	1210	1270	9	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/13/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	mg/L
Lab Code :	K1004575-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Solids, Total Dissolved	NONE	SM 2540 C	750	692	92	83-117	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : 05/06/10
Date Received : 05/07/10

pH

Analysis Method : SM 4500-H+ B
Test Notes :

Units : pH Units
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
BH-12	K1004575-001	-	1	05/07/10 16:30	6.91	
BH-10	K1004575-002	-	1	05/07/10 16:31	7.34	
BH-14	K1004575-003	-	1	05/07/10 16:32	7.33	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Exponent
Project Name : Heglar Kronquist
Project Number : 0907194.000.0601
Sample Matrix : WATER

Service Request : K1004575
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 05/07/10

Duplicate Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K1004575-004DUP
Test Notes :

Units : pH Units
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
pH	SM 4500-H+ B	-	6.76	6.74	6.75	<1	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Exponent	**Service Request :**	K1004575
Project Name :	Heglar Kronquist	**Date Collected :**	NA
Project Number :	0907194.000.0601	**Date Received :**	NA
Sample Matrix :	WATER	**Date Prepared :**	NA
		Date Analyzed :	05/07/10

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Lab Control Sample	Units :	pH Units
Lab Code :	K1004575-LCS	Basis :	NA

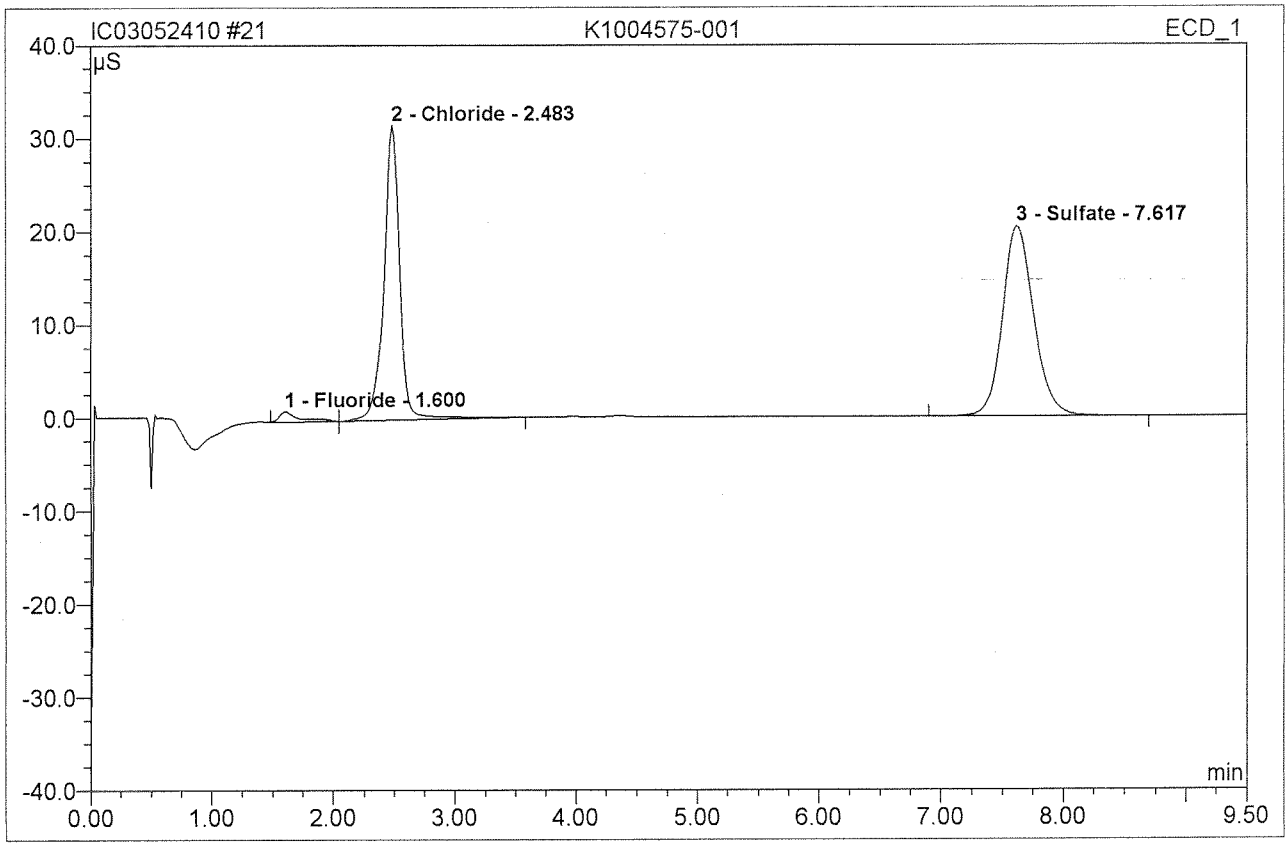
Test Notes :

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
pH	NONE	SM 4500-H+ B	6.46	6.38	99	85-115	

SM Standard Methods for the Examination of Water and Wastewater, 20th Ed., 1998.

21 K1004575-001

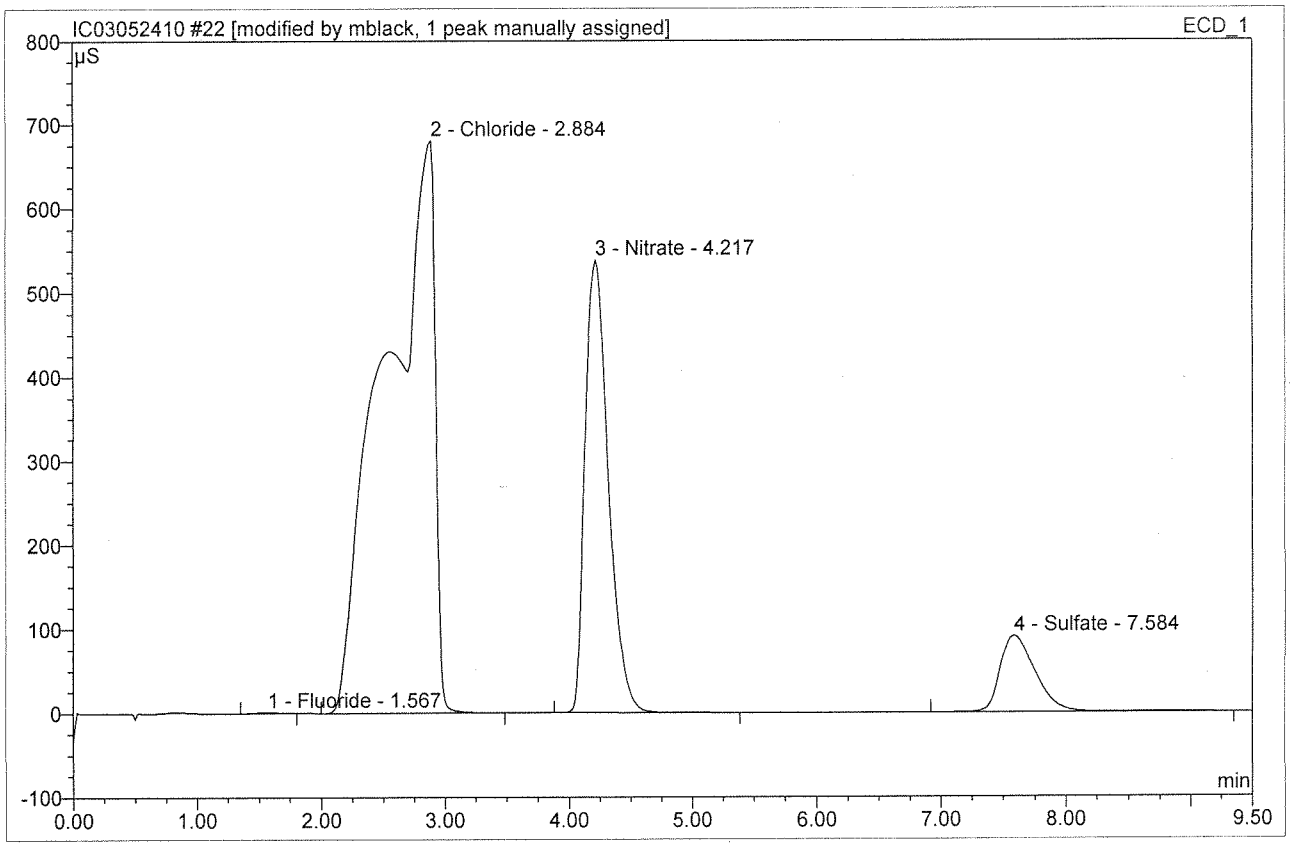
Sample Name:	**K1004575-001**	*Injection Volume:*	**200.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0000**
Recording Time:	**5/24/2010 12:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride	1.046	0.210	1.89	0.548	BMB
2	2.48	Chloride	31.659	4.809	43.37	15.419	bMB
3	7.62	Sulfate	20.478	6.069	54.74	30.838	BMB
Total:			53.184	11.088	100.00	46.805	

22 K1004575-002

Sample Name:	**K1004575-002**	*Injection Volume:*	**200.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 12:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.57	Fluoride	0.955	0.220	0.05	0.230	BMB*
2	2.88	Chloride	680.807	317.143	68.34	406.713	BMB*^
3	4.22	Nitrate	538.616	117.565	25.33	63.826	BMB
4	7.58	Sulfate	90.660	29.126	6.28	59.195	BMB
Total:			1311.038	464.054	100.00	529.964	

After Initials MB

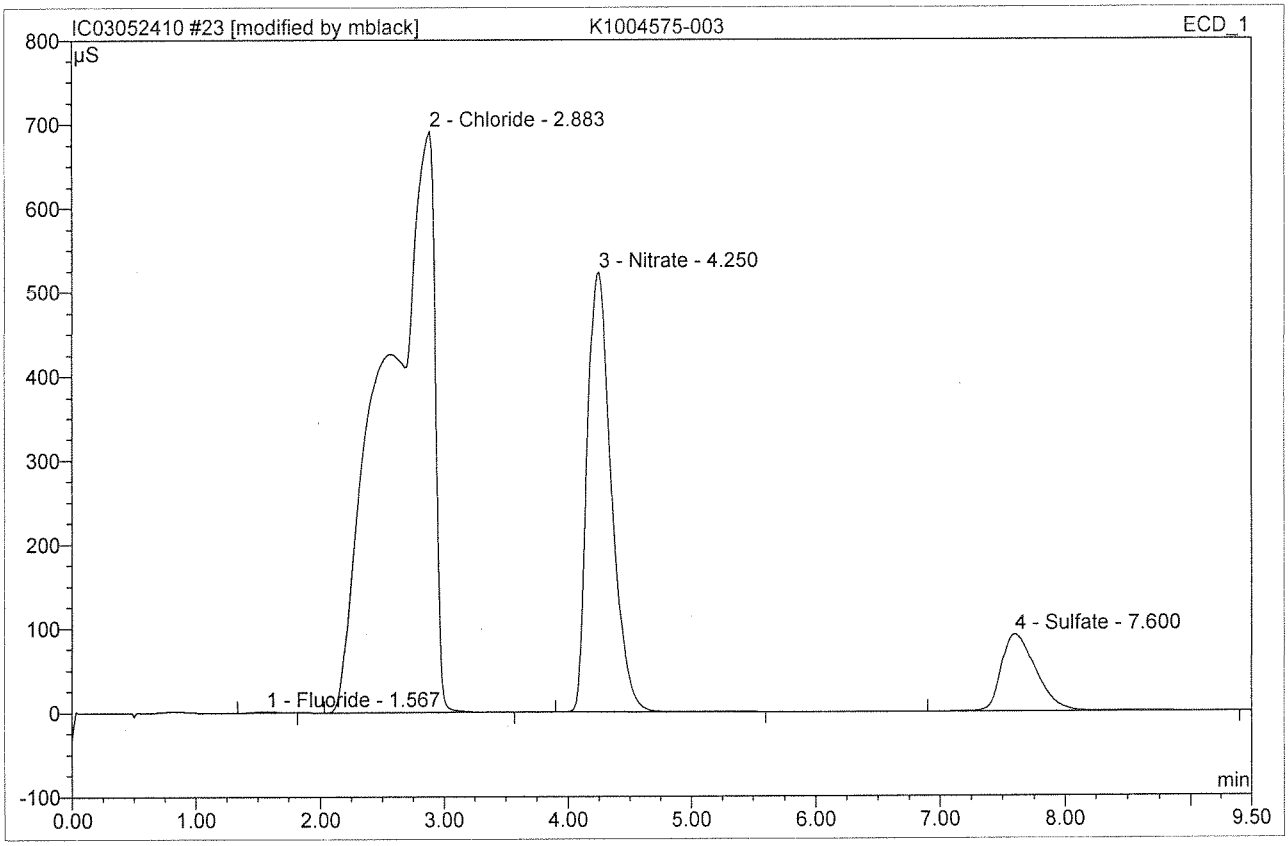
MAY 2 4 2010

Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Other

5/25/10

23 K1004575-003

Sample Name:	**K1004575-003**	*Injection Volume:*	**200.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 12:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.57	Fluoride	0.982	0.225	0.05	0.235	BMB*
2	2.88	Chloride	691.967	318.790	68.39	408.825	BMB*
3	4.25	Nitrate	523.195	118.060	25.33	64.094	BMB
4	7.60	Sulfate	91.105	29.092	6.24	59.125	BMB
Total:			1307.249	466.166	100.00	532.279	

After Initials HB

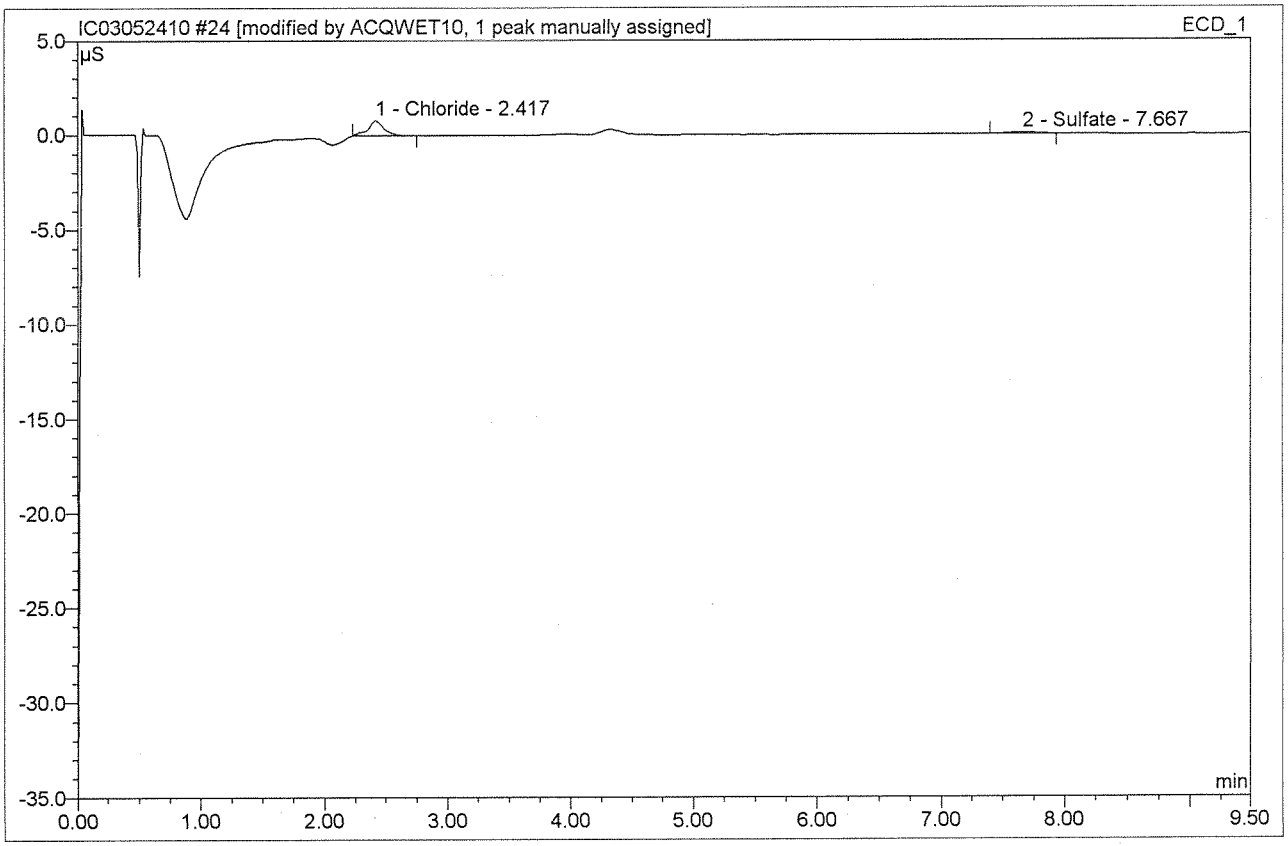
MAY 2 4 2010

Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Other

5/25/10

24 K1004575-004

Sample Name:	**K1004575-004**	*Injection Volume:*	**200.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 12:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.42	Chloride	0.770	0.113	84.29	0.145	BMB*^
2	7.67	Sulfate	0.085	0.021	15.71	0.043	BMB*
Total:			0.855	0.134	100.00	0.187	

Fluoride - ND <0.006

After Initials LB

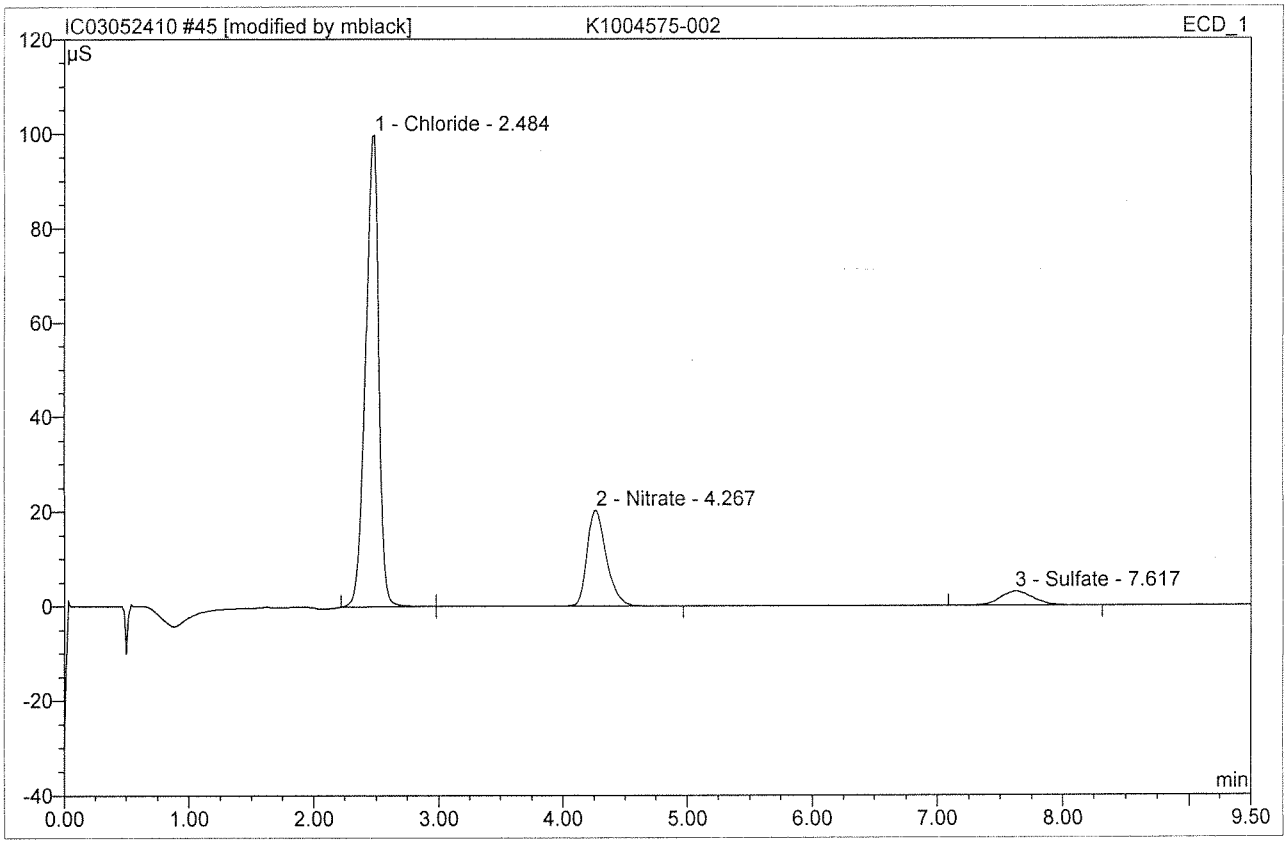
MAY 24 2010

Wrong Peak/Peak not Found
Baseline/Shoulder Incorrect

5/25/10

45 K1004575-002

Sample Name:	**K1004575-002**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/24/2010 17:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.48	Chloride	99.764	12.017	72.58	385.289	BMb*
2	4.27	Nitrate	20.252	3.626	21.90	49.215	bMB*
3	7.62	Sulfate	3.002	0.915	5.53	46.490	BMB
Total:			123.018	16.559	100.00	480.994	

After Initials NB

MAY 2 5 2010

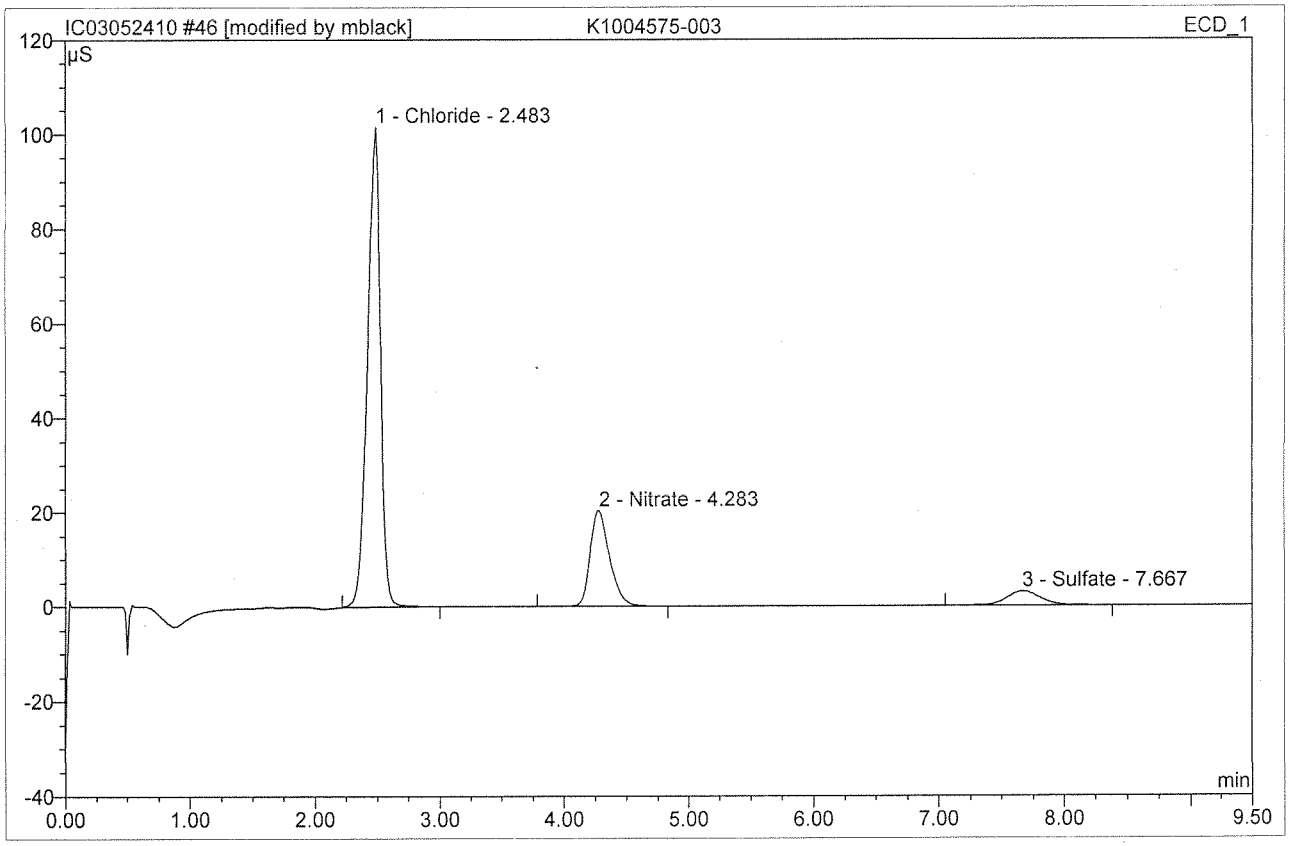
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

5/25/10

default/Integration

46 K1004575-003

Sample Name:	**K1004575-003**	*Injection Volume:*	**200.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/24/2010 17:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.48	Chloride	101.488	12.088	72.43	387.540	BMB*
2	4.28	Nitrate	20.252	3.677	22.03	49.910	BMB*
3	7.67	Sulfate	3.017	0.925	5.54	46.978	BMB
Total:			124.757	16.690	100.00	484.428	

After Initials MB

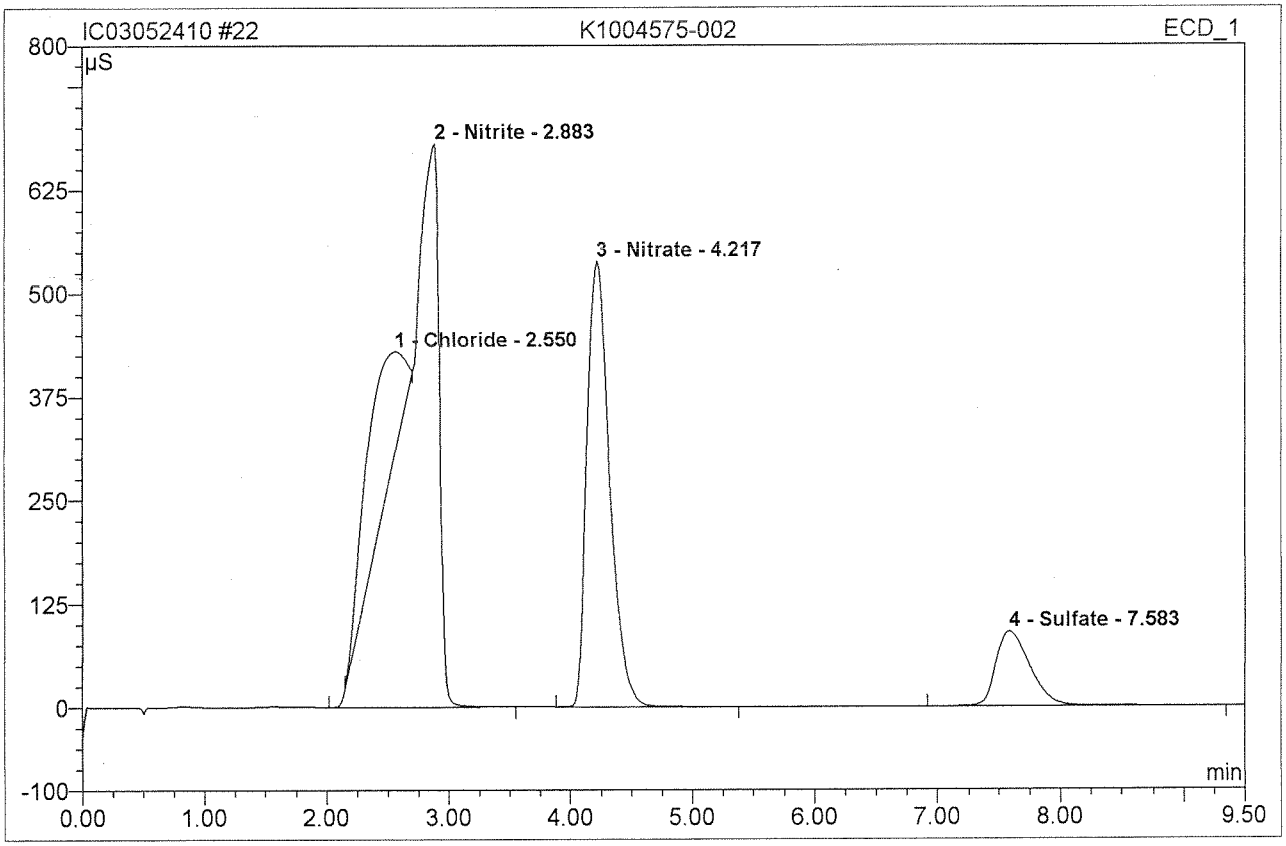
MAY 25 2010

☐ Wrong Peak/Peak not Found
☑ Co-eluter/shoulder incorrect
☐ Other

5/25/10

22 K1004575-002

Sample Name:	**K1004575-002**	*Injection Volume:*	**200.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 12:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



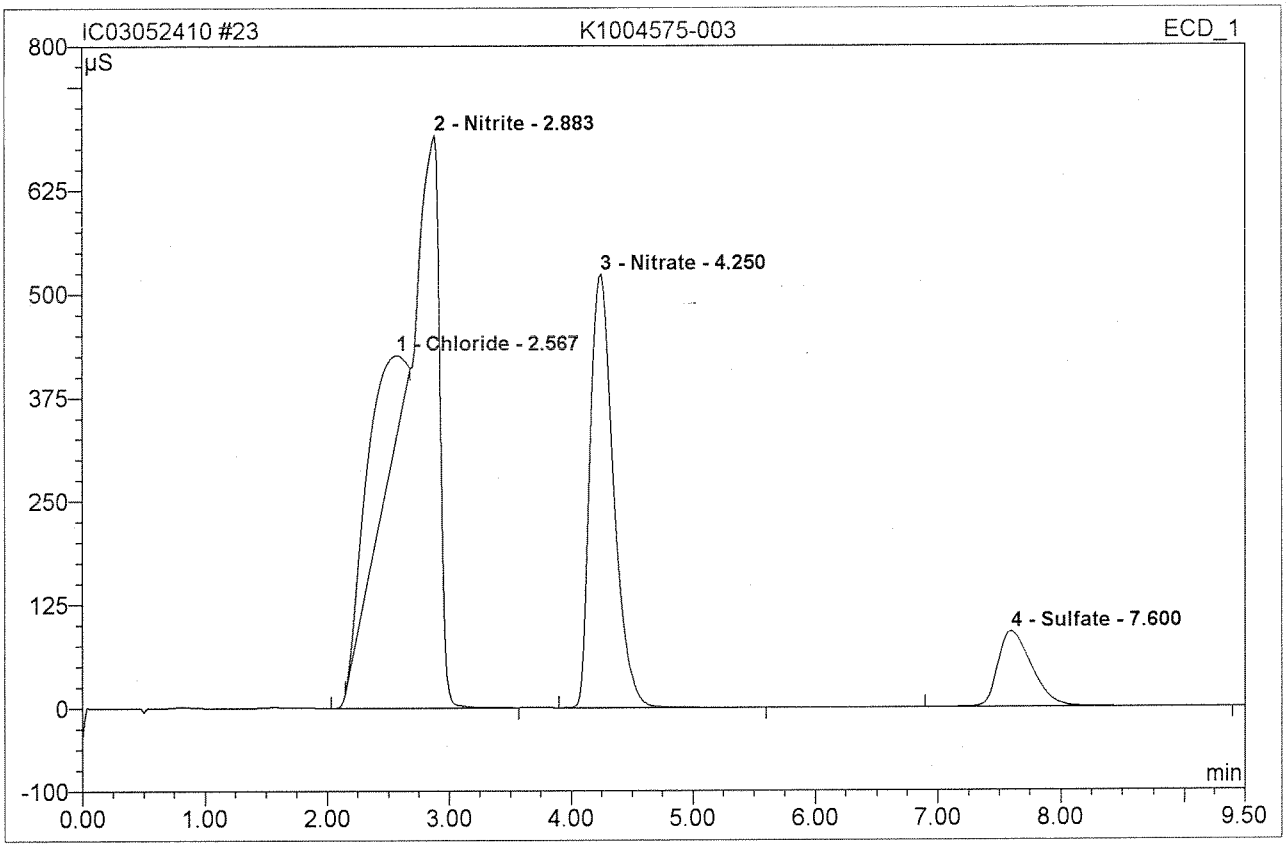
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.55	Chloride	128.051	59.054	12.73	75.733	Ru
2	2.88	Nitrite	680.846	258.145	55.65	178.812	BMB
3	4.22	Nitrate	538.616	117.565	25.34	63.826	BMB
4	7.58	Sulfate	90.660	29.126	6.28	59.195	BMB
Total:			1438.174	463.891	100.00	377.566	

Before

MAY 2 4 2010

23 K1004575-003

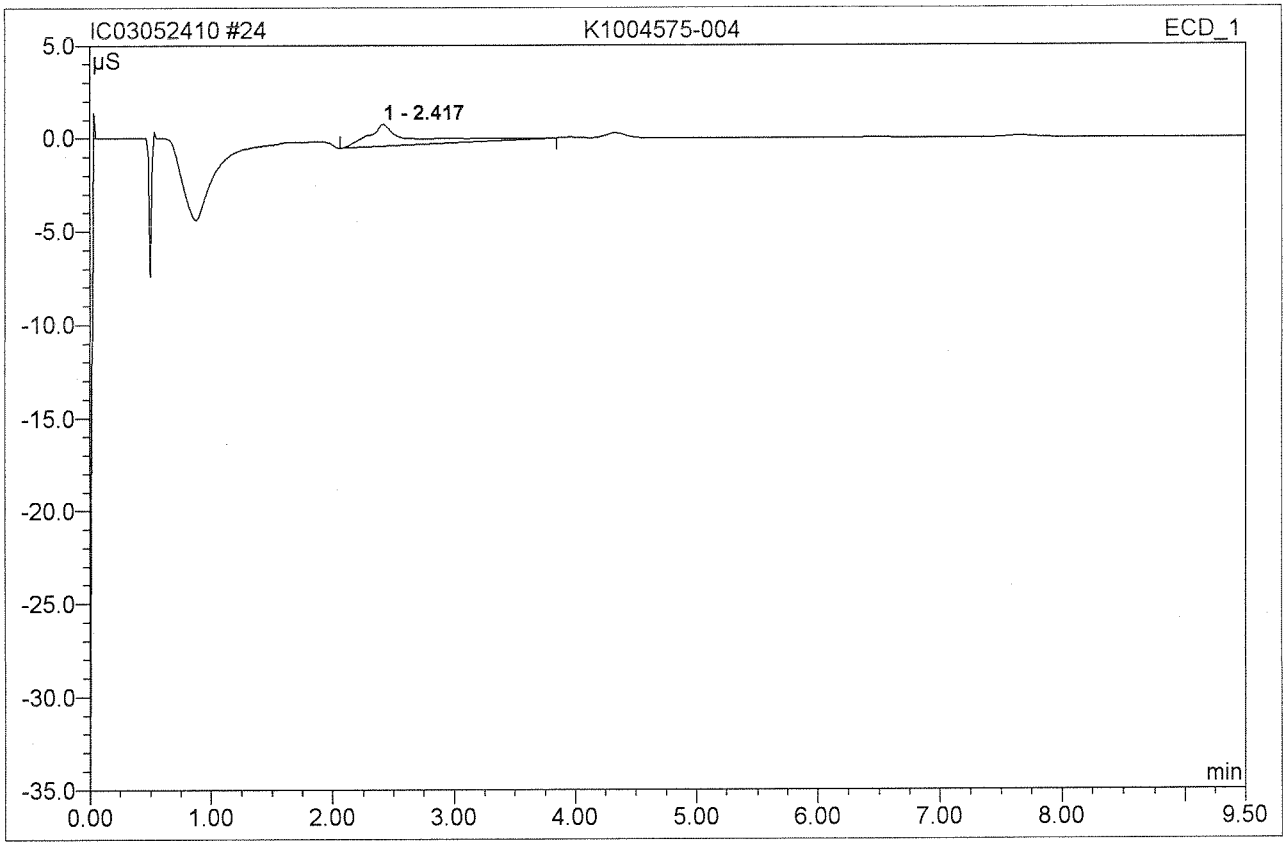
Sample Name:	**K1004575-003**	*Injection Volume:*	**200.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 12:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.57	Chloride	101.347	51.584	11.07	66.153	Ru
2	2.88	Nitrite	691.967	267.205	57.35	185.088	BMB
3	4.25	Nitrate	523.195	118.060	25.34	64.094	BMB
4	7.60	Sulfate	91.105	29.092	6.24	59.125	BMB
Total:			1407.614	465.941	100.00	374.461	

24 K1004575-004

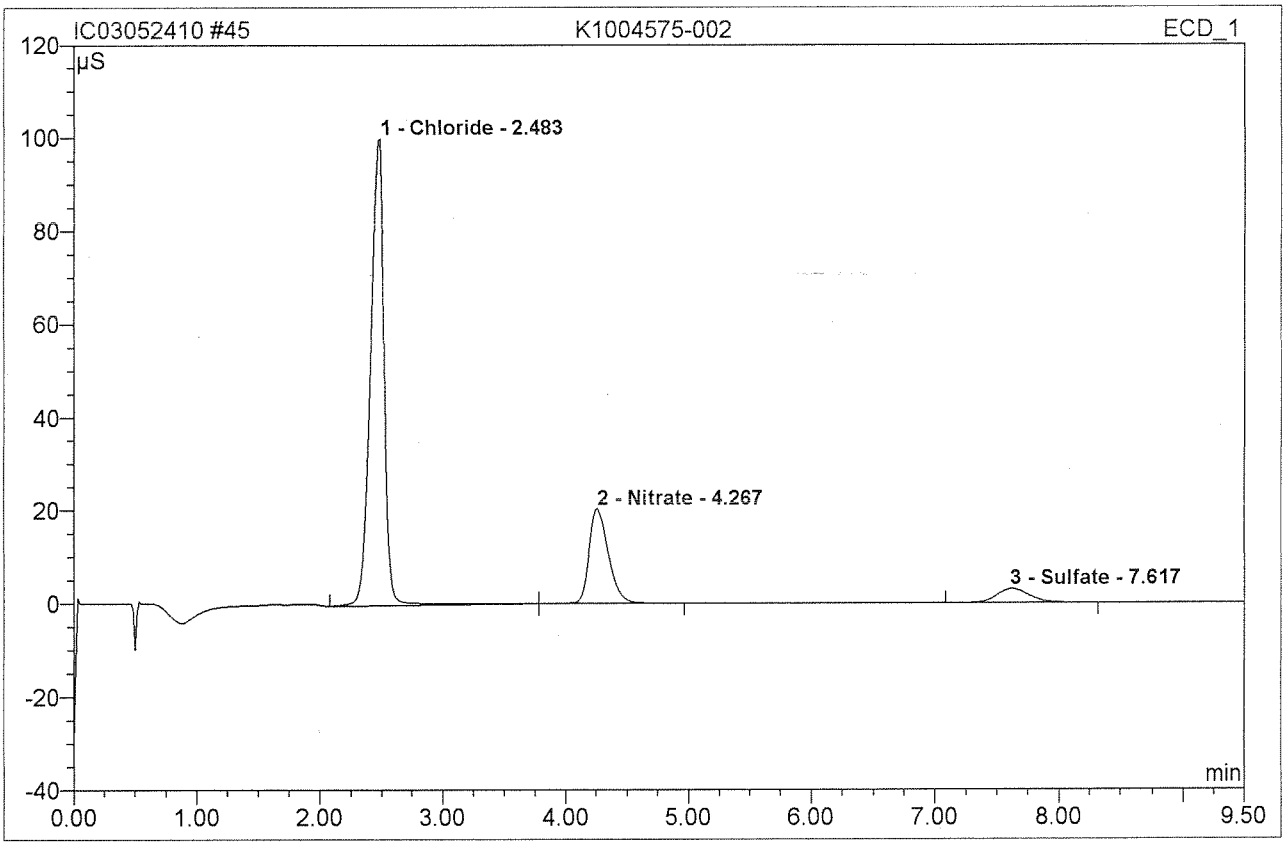
Sample Name:	**K1004575-004**	*Injection Volume:*	**200.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 12:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.42	n.a.	1.170	0.496	100.00	n.a.	BMB
Total:			1.170	0.496	100.00	0.000	

45 K1004575-002

Sample Name:	**K1004575-002**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/24/2010 17:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



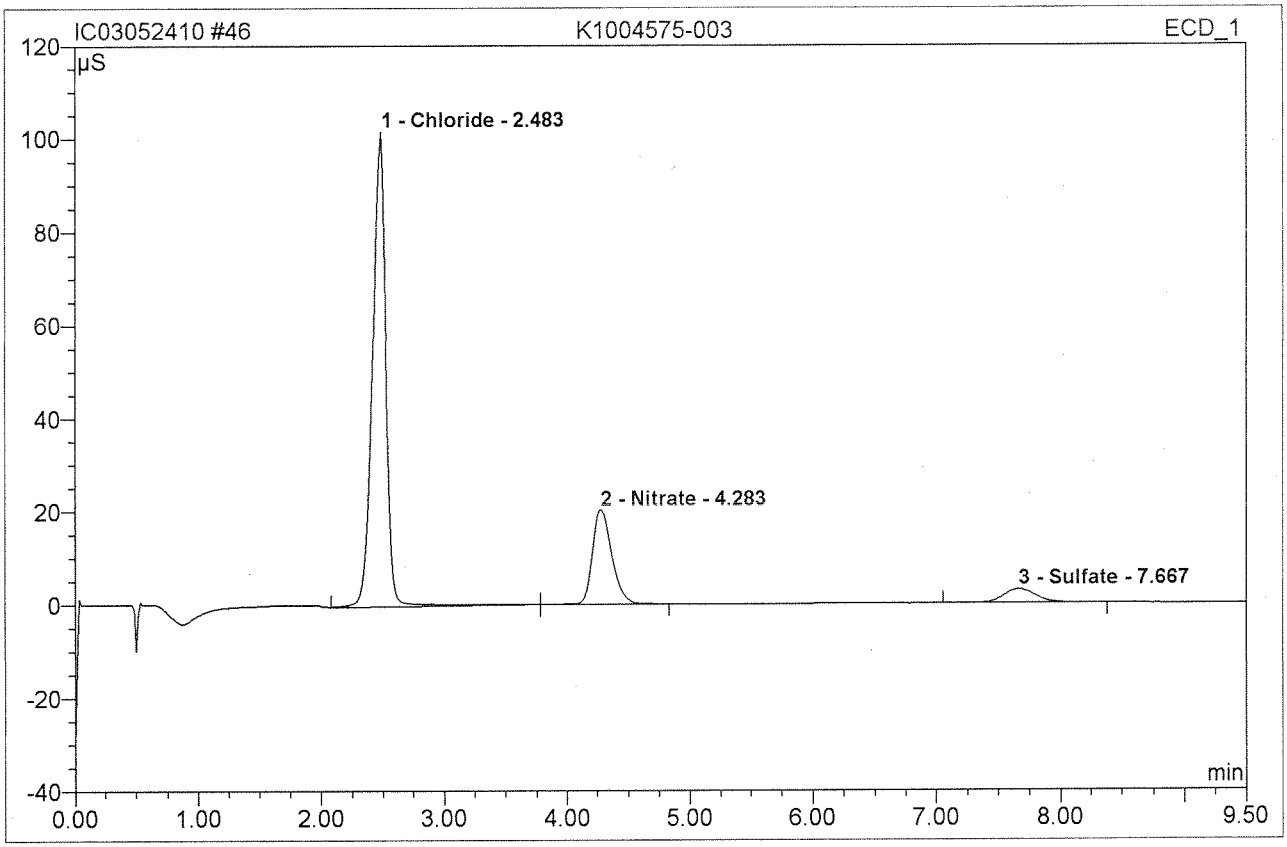
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.48	Chloride	100.104	12.391	73.04	397.258	BMB
2	4.27	Nitrate	20.266	3.659	21.57	49.659	bMB
3	7.62	Sulfate	3.002	0.915	5.39	46.490	BMB
Total:			123.372	16.965	100.00	493.408	

Before

MAY 25 2010

46 K1004575-003

Sample Name:	**K1004575-003**	*Injection Volume:*	**200.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/24/2010 17:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



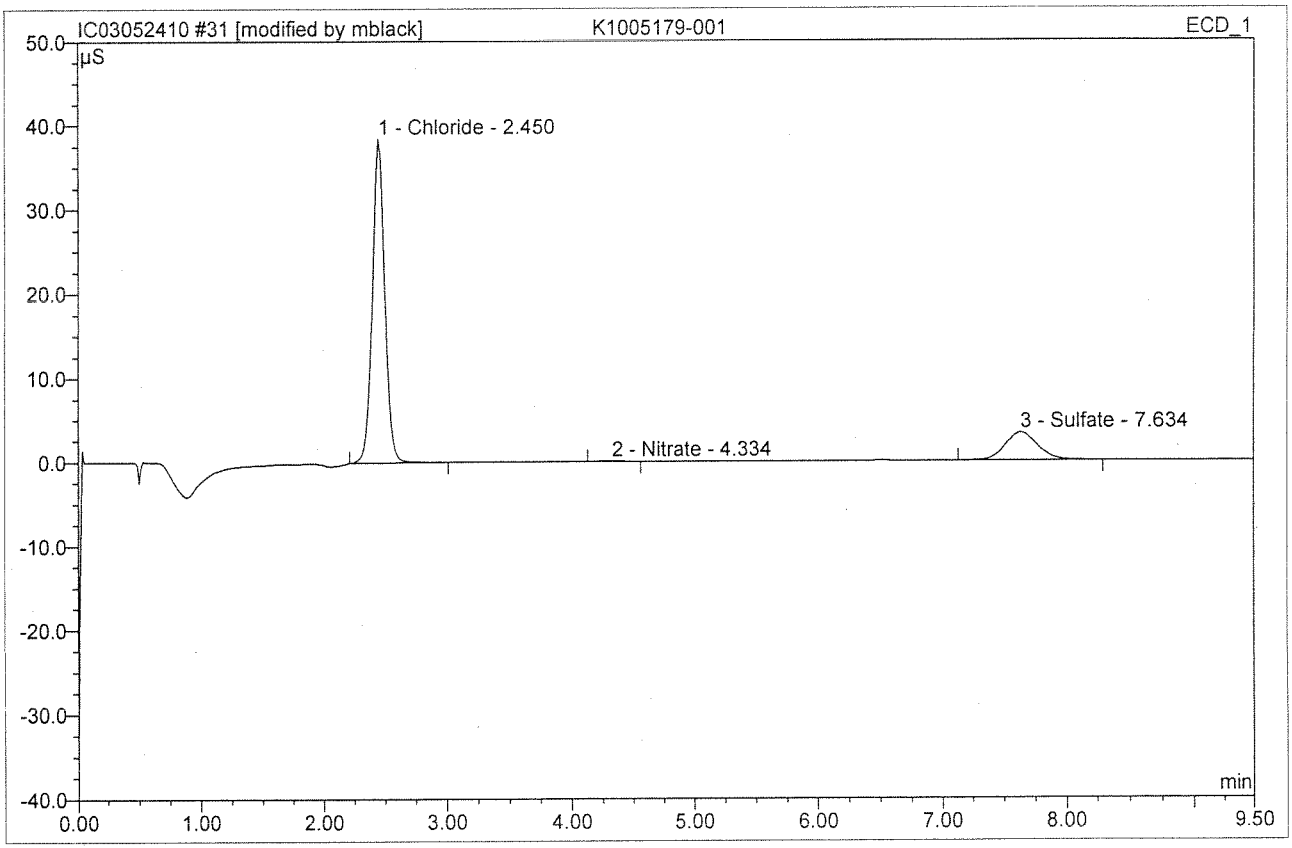
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.48	Chloride	101.803	12.436	72.99	398.704	BMB
2	4.28	Nitrate	20.252	3.677	21.58	49.910	bMB
3	7.67	Sulfate	3.017	0.925	5.43	46.978	BMB
Total:			125.071	17.038	100.00	495.592	

Before

MAY 2 5 2010

31 K1005179-001

Sample Name:	**K1005179-001**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 14:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.45	Chloride ~~V~~ = 5.94 RPD = 10%	38.489	4.402	81.07	5.645	BMB*
2	4.33	~~Nitrate NR~~	0.105	0.018	0.33	~~0.010 NR~~	BMB*
3	7.63	Sulfate V = 2.06 RPD = <1%	3.323	1.009	18.59	2.051	BMB
Total:			41.917	5.429	100.00	7.706	

Fluoride = ND <0.006

Bromide = ND <0.008

V = ND RPD = —

Author Initials MB

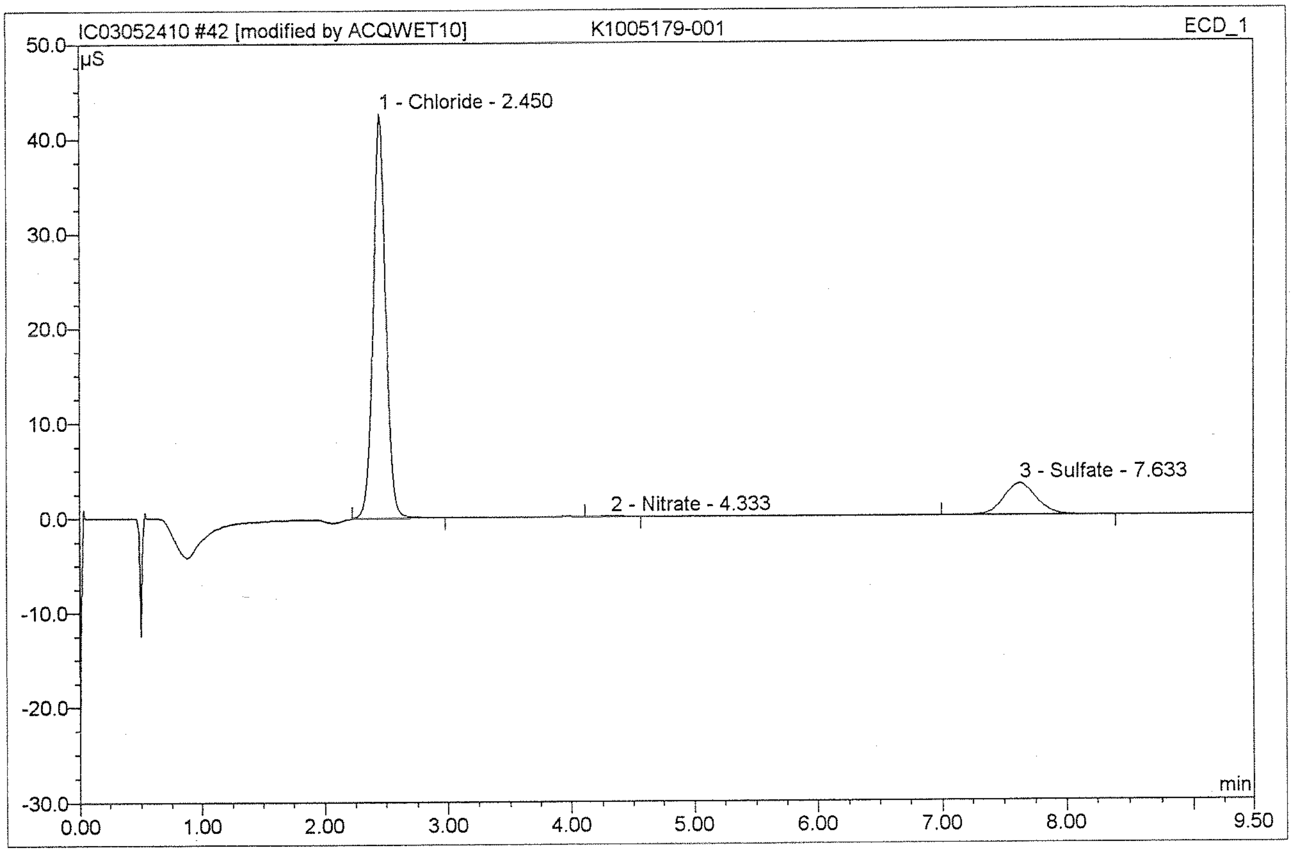
5/25/10

MAY 2 4 2010

42 K1005179-001

5179-1D

Sample Name:	**K1005179-001**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 16:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.45	Chloride	42.581	4.858	82.45	6.230	BMB*
2	4.33	Nitrate	0.101	0.018	0.30	0.010	BMB*
3	7.63	Sulfate	3.330	1.016	17.24	2.064	BMB
Total:			46.013	5.891	100.00	8.304	

Fluoride = ND <0.016

Bromide = ND <0.008

After Initials (MB)

MAY 24 2010

JL 5/25/10

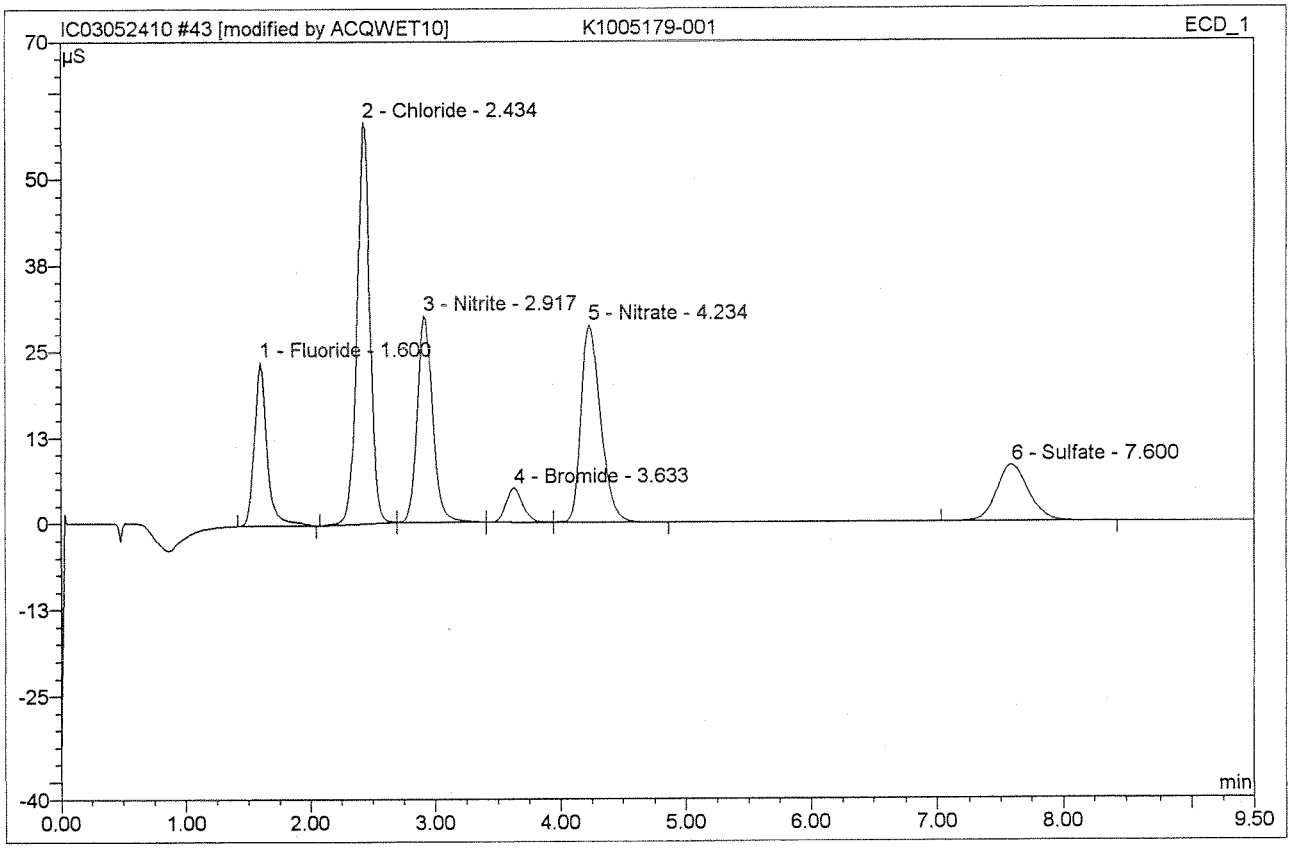
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

43 K1005179-001

5179-1MS

Sample Name:	**K1005179-001**	*Injection Volume:*	**200.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 16:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride	23.880	2.844	12.64	2.973 99%	BMB*
2	2.43	Chloride	58.245	6.938	30.83	8.898 168%	BMb
3	2.92	Nitrite	30.027	4.290	19.06	2.972 99%	bMb
4	3.63	Bromide	4.984	0.764	3.39	2.850 95%	bMb
5	4.23	Nitrate	28.677	5.220	23.19	2.834 94%	bMB
6	7.60	Sulfate	8.245	2.451	10.89	4.981 98%	BMB
Total:			154.058	22.507	100.00	25.507	

TV = 3.00

After initials MB

MAY 24 2010

5/25/10

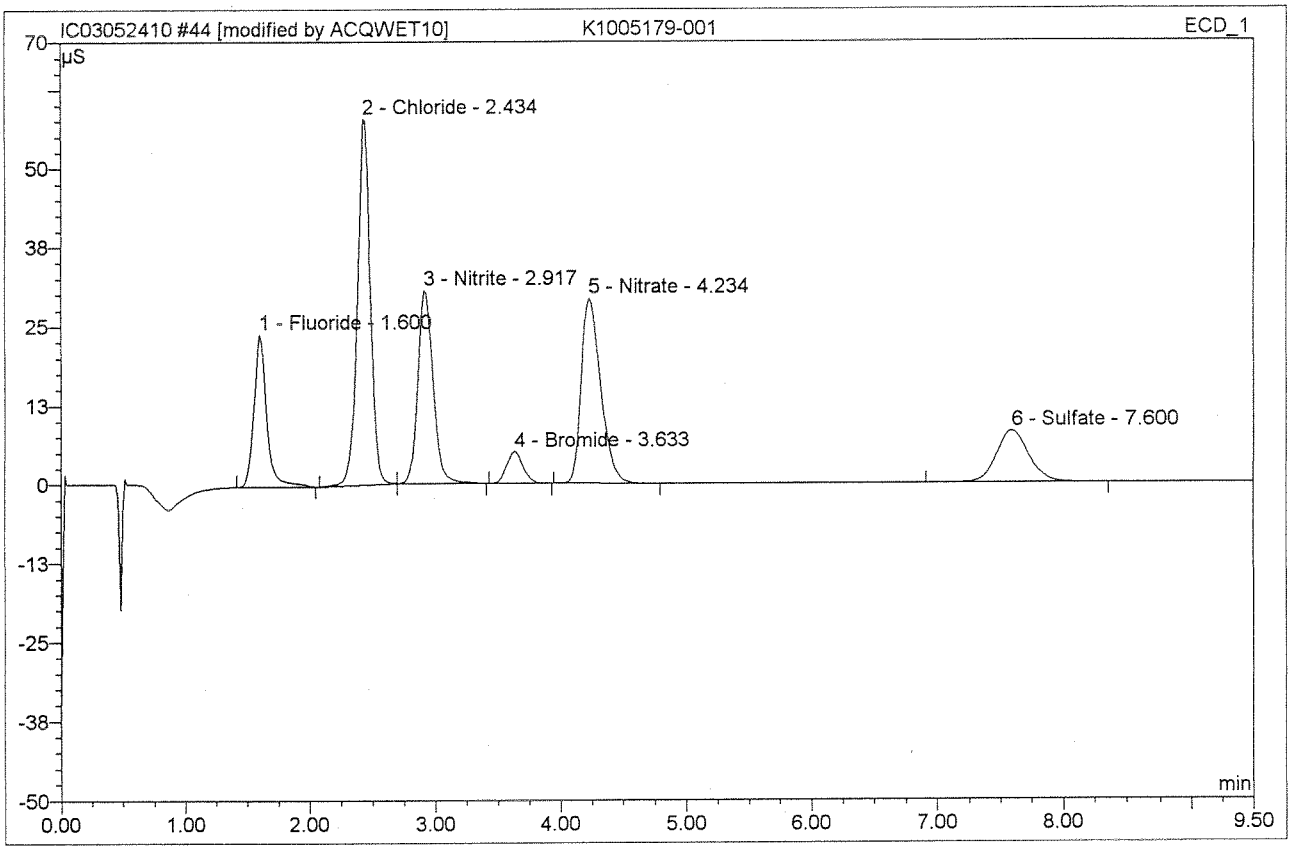
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

44 K1005179-001

5179-1MSD

Sample Name:	**K1005179-001**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 16:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride	24.078	2.874	12.63	3.004 100%	BMB*
2	2.43	Chloride	57.833	6.968	30.63	8.936 110%	BMb
3	2.92	Nitrite	30.414	4.341	19.08	3.007 100%	bMB
4	3.63	Bromide	5.067	0.778	3.42	2.905 97%	BMB
5	4.23	Nitrate	29.257	5.317	23.37	2.886 96%	BMB
6	7.60	Sulfate	8.247	2.470	10.86	5.021 99%	BMB
Total:			154.897	22.749	100.00	25.759	

N=3.00

After Rinse MB

MAY 24 2010

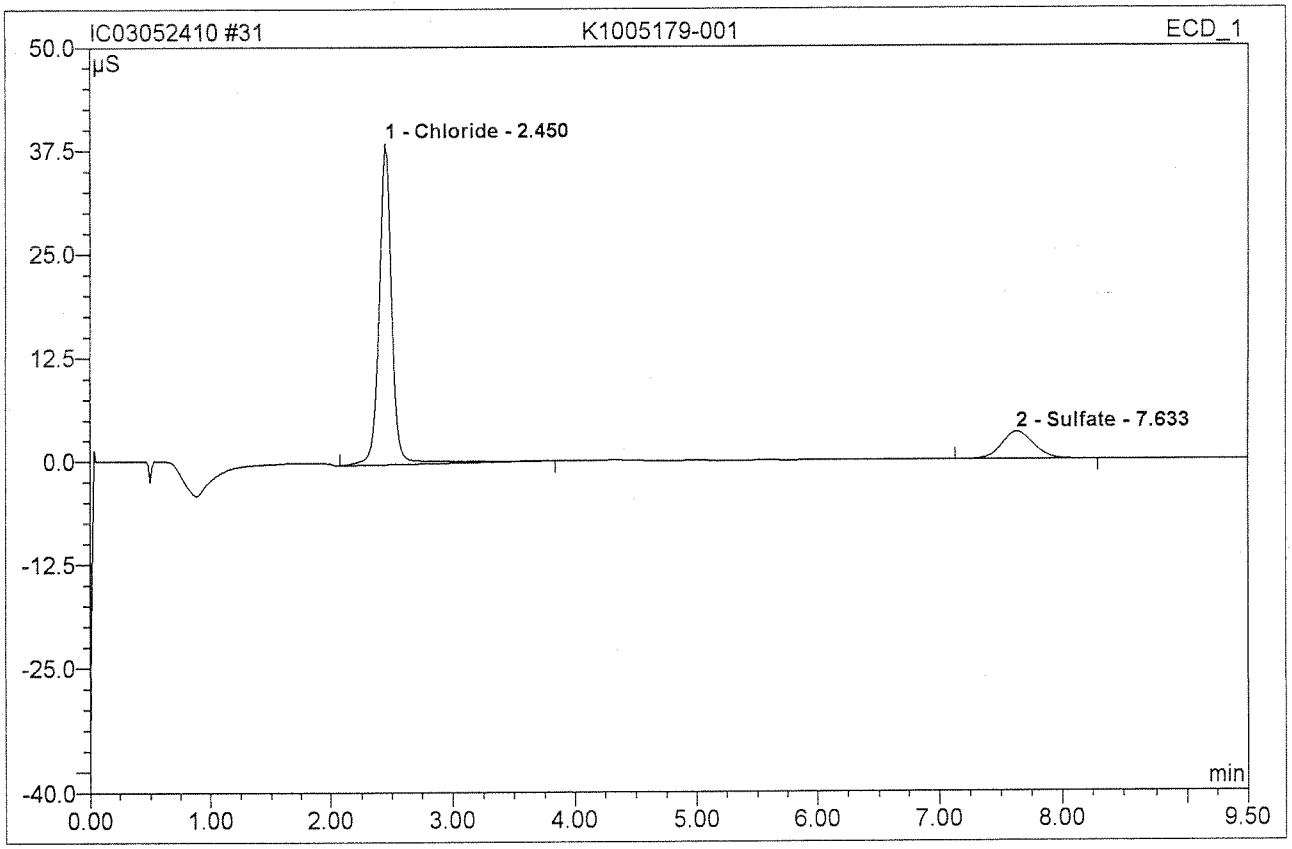
5/25/10

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

default/Integration

31 K1005179-001

Sample Name:	**K1005179-001**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 14:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

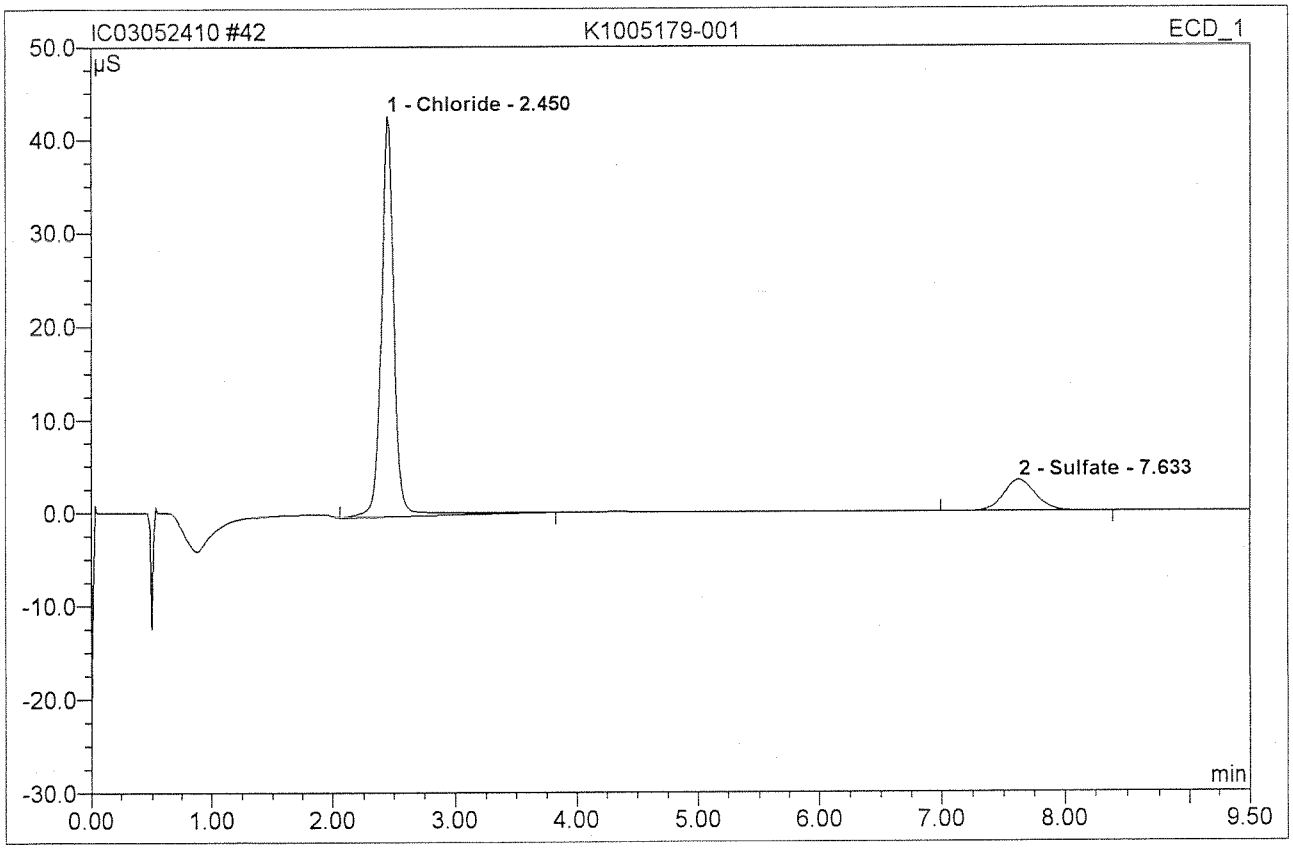


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.45	Chloride	38.806	4.743	82.45	6.083	BMB
2	7.63	Sulfate	3.323	1.009	17.55	2.051	BMB
Total:			42.129	5.753	100.00	8.134	

42 K1005179-001

5179-1D

Sample Name:	**K1005179-001**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 16:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

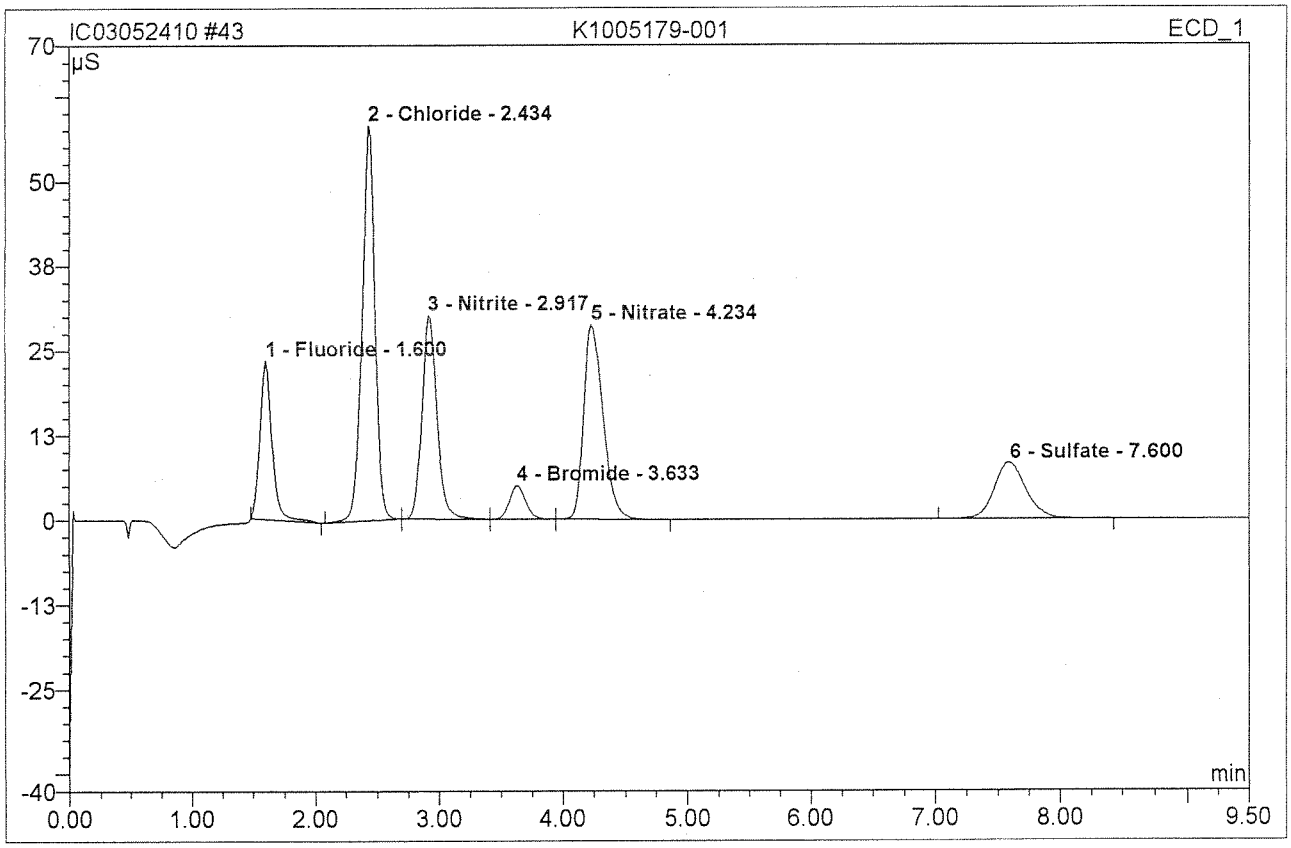


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.45	Chloride	42.955	5.235	83.75	6.713	BMB
2	7.63	Sulfate	3.330	1.016	16.25	2.064	BMB
Total:			46.285	6.251	100.00	8.778	

43 K1005179-001

5179-1MS

Sample Name:	**K1005179-001**	*Injection Volume:*	**200.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 16:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

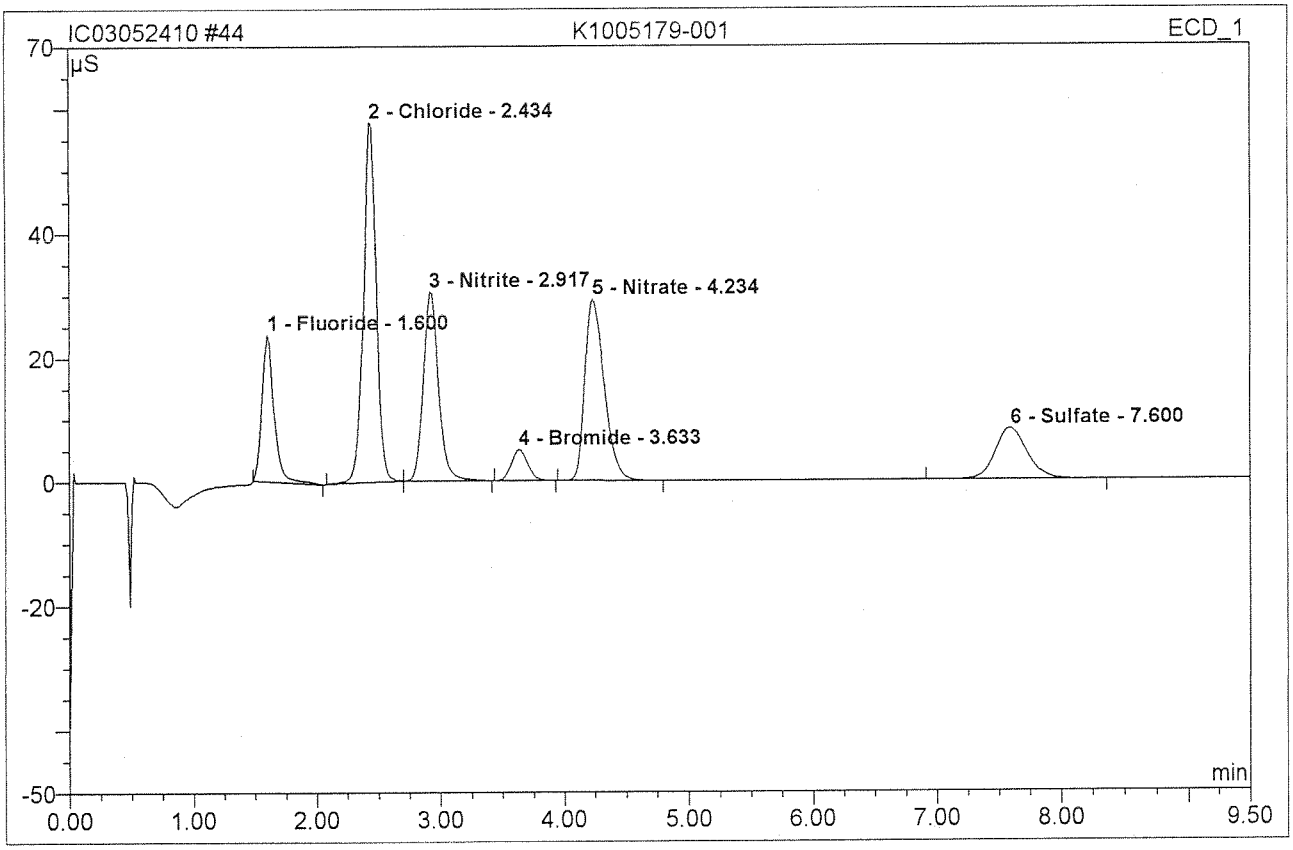


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride	23.341	2.641	11.84	2.761	BMB
2	2.43	Chloride	58.245	6.938	31.11	8.898	BMb
3	2.92	Nitrite	30.027	4.290	19.23	2.972	bMb
4	3.63	Bromide	4.984	0.764	3.42	2.850	bMb
5	4.23	Nitrate	28.677	5.220	23.41	2.834	bMB
6	7.60	Sulfate	8.245	2.451	10.99	4.981	BMB
Total:			153.519	22.304	100.00	25.295	

44 K1005179-001

5179-1MSD

Sample Name:	**K1005179-001**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 16:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride	23.578	2.685	11.90	2.806	BMB
2	2.43	Chloride	57.833	6.968	30.89	8.936	BMb
3	2.92	Nitrite	30.414	4.341	19.24	3.007	bMB
4	3.63	Bromide	5.067	0.778	3.45	2.905	BMB
5	4.23	Nitrate	29.257	5.317	23.57	2.886	BMB
6	7.60	Sulfate	8.247	2.470	10.95	5.021	BMB
Total:			154.397	22.560	100.00	25.562	

Sequence # I C030524 10 | Ion Chromatography Data Quality Report Inorganics | Run # 202095

1. Holding times met for all samples analyzed? (yes)/no/NA
2. Are dilutions within upper limits of the curve? (yes)/no/NA
3. Are analysis/extraction stickers included on report? (yes)/no/NA
4. Are detection limits reported correctly? (yes)/no/NA
5. Are all quality control criteria met? (yes)/no/NA
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? (yes)/no/NA
   b. Are CCV's and CCB's all within acceptance limits? (yes)/no/NA
   c. Are results for Method Blanks all ND? (yes)/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) (yes)/no/NA
   e. Are all exceptions explained? (yes)/no/NA
6. Are all samples labelled correctly? (yes)/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.

LCS

Fluoride	True Value = 13.5 ppm	CAS ID # = AN1-33-D	Expires: 7/19/10
Chloride	True Value = 5.0ppm	CAS ID # = ERA#0107-10-02	Expires: 8/10
Nitrite	True Value = 100 ppm	CAS ID # = NR	Expires: NR
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-33-L	Expires: 10/28/10
Nitrate	True Value = 21.0 ppm	CAS ID # = AN1-33-E	Expires: NR
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#0107-10-02	Expires: 8/10

CCV — CAS ID # = AN11-20-J — Expires 5/24/10

Fluoride	True Value = 5.0 ppm	10K CAS ID # = AN1-33-M	Expires: 10/28/10
Chloride	True Value = 5.0 ppm	10K CAS ID # = AN1-33-F	Expires: 8/5/10
Nitrite	True Value = 2.0 ppm	10K CAS ID # = AN1-33-N	Expires: NR
Bromide	True Value = 2.0 ppm	10K CAS ID # = AN1-20-DD	Expires: 6/21/10
Nitrate	True Value = 2.0 ppm	10K CAS ID # = AN1-33-I	Expires: NR
Sulfate	True Value = 5.0 ppm	10K CAS ID # = AN1-33-G	Expires: 8/5/10

Spike — 1.5ppm X dilution factor — CAS ID# = AN11-10-O — Expires 5/24/10

Fluoride	10K CAS ID # = AN1-33-M	Expires:
Chloride	10K CAS ID # = AN1-33-F	Expires:
Nitrite	10K CAS ID # = AN1-33-N	Expires:
Bromide	10K CAS ID # = AN1-20-DD	Expires:
Nitrate	10K CAS ID # = AN1-33-I	Expires:
Sulfate	10K CAS ID # = AN1-33-G	Expires:

See 10K CCV ID's

Analyst: MB Date: 5/24/10

First Review: MB Date: 5/24/10

Final Review: [signature] Date: 5/25/10

t:\wet\ic\icdqs.xls

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
K4470-4	II			5/29	F				
Barr					CL				
					NO2				
					Br				
					NO3				
					SO4	0.25/5			✓
-8					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	1/5	2.5/5		✓
K4575-1	II			5/29	F				
Exponent					CL				
(Nitrate)					NO2				
					Br				
					NO3				
					SO4		1/5		✓
-2					F	2.5/5			✓
					CL		0.1/5 ◦		✓
					NO2				
					Br				
					NO3				
					SO4		0.1/5 ◦		✓
-3					F	2.5/5			✓
					CL		0.1/5 ◦		✓
					NO2				
					Br				
					NO3				
					SO4		0.1/5 ◦		✓
-4					F	2.5/5			✓
					CL				✓
					NO2				
					Br				
					NO3				
					SO4				✓
K4776-3	I			5/29	F	2.5/5			✓
City of Longview					CL				
					NO2				
					Br				
					NO3				
					SO4				
K4839-1	II			5/30	F				
Accos					CL				
					NO2				
					Br	2.5/5			✓
					NO3				
					SO4				
K5179-1	III	X		5/30	F	2.5/5		2.5/5 —	✓
Integral					CL			—	✓
(MDL)		(Rush)			NO2			—	
					Br			—	✓
					NO3			—	
					SO4			—	✓
-2					F	2.5/5			✓
					CL				✓
					NO2				
					Br				✓
					NO3				
					SO4		0.25/5 ◦		✓

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
K5179-3	III			5/30	F	2.5/5			✓
Integral					CL				✓
					NO2				
					Br				✓
					NO3				
					SO4				✓
-4					F	2.5/5			✓
					CL				✓
					NO2				
					Br				✓
					NO3				
					SO4		0.25/5		✓
K5182-1	III			5/30	F				
Integral					CL	2.5/5 ·			✓
(HDC) (Rush)					NO2				
					Br				
					NO3				
					SO4	0.25/5 ·			✓
-2					F				
					CL	2.5/5 ·			✓
					NO2				
					Br				
					NO3				
					SO4	0.5/5 ·			✓
-3					F				
					CL	2.5/5 ·			✓
					NO2				
					Br				
					NO3				
					SO4	1/5 ·	0.1/5		
K4896-1	II			5/31	F				
Douglas Co.					CL	1000 x ·	1/5		✓
					NO2				
					Br				
					NO3				
					SO4	5 x ·			✓
-2					F				
					CL	500 x ·			✓
					NO2				
					Br				
					NO3				
					SO4	2.5/5 ·			✓
-3					F				
					CL	2.5/5 ·	1000 x		
					NO2				
					Br				
					NO3				
					SO4	0.25/5 ·	2.5/5		✓
-4					F				
					CL	0.1/5 ·	500 x		
					NO2				
					Br				
					NO3				
					SO4	1/5 ·			✓
-5					F				
					CL	2.5/5 ·			✓
					NO2				
					Br				
					NO3				
					SO4	2.5/5 ·			✓

Sequence: IC03052410
Operator: mblack
Printed: 5/25/2010 9:15:53 AM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 66

Created: 5/24/2010 9:08:20 AM by ACQWET10
Last Update: 5/24/2010 4:50:27 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	std2/lvl2	Standard	1	200.0	epa300	epa300	Finished	4/26/2010 8:54:58 AM
2	std3/lvl3	Standard	2	200.0	epa300	epa300	Finished	4/26/2010 9:12:26 AM
3	std4/lvl4	Standard	3	200.0	epa300	epa300	Finished	4/26/2010 9:25:24 AM
4	std5/lvl5	Standard	4	200.0	epa300	epa300	Finished	4/26/2010 9:38:21 AM
5	std6/lvl6	Standard	5	200.0	epa300	epa300	Finished	4/26/2010 9:51:19 AM
6	std7/lvl7	Standard	6	200.0	epa300	epa300	Finished	4/26/2010 10:04:17 AM
7	std1/lvl1	Standard	7	200.0	epa300	epa300	Finished	4/26/2010 10:17:14 AM
8	CCV AN11-20-J	Unknown	8	200.0	epa300	epa300	Finished	5/24/2010 9:13:14 AM
9	CCB	Unknown	9	200.0	epa300	epa300	Finished	5/24/2010 9:25:12 AM
10	NO3 AN1-33-E	Unknown	11	200.0	epa300	epa300	Finished	5/24/2010 9:37:10 AM
11	MB	Unknown	11	200.0	epa300	epa300	Finished	5/24/2010 9:49:07 AM
12	CLSO4 ERA# 0107-10-02	Unknown	12	200.0	epa300	epa300	Finished	5/24/2010 10:01:05 AM
13	F AN1-33-D	Unknown	13	200.0	epa300	epa300	Finished	5/24/2010 10:13:03 AM
14	Br AN1-33-L	Unknown	14	200.0	epa300	epa300	Finished	5/24/2010 10:25:00 AM
15	SPK AN11-10-O	Unknown	16	200.0	epa300	epa300	Finished	5/24/2010 10:36:58 AM
16	CCV2	Unknown	15	200.0	epa300	epa300	Finished	5/24/2010 10:48:56 AM
17	CCB2	Unknown	16	200.0	epa300	epa300	Finished	5/24/2010 11:00:54 AM
18	NO2 AN11-27-EE	Unknown	17	200.0	epa300	epa300	Finished	5/24/2010 11:39:53 AM
19	K1004470-004	Unknown	18	200.0	epa300	epa300	Finished	5/24/2010 11:51:51 AM
20	K1004470-008	Unknown	19	200.0	epa300	epa300	Finished	5/24/2010 12:03:48 PM
21	K1004575-001	Unknown	20	200.0	epa300	epa300	Finished	5/24/2010 12:15:46 PM
22	K1004575-002	Unknown	21	200.0	epa300	epa300	Finished	5/24/2010 12:27:44 PM
23	K1004575-003	Unknown	22	200.0	epa300	epa300	Finished	5/24/2010 12:39:42 PM
24	K1004575-004	Unknown	23	200.0	epa300	epa300	Finished	5/24/2010 12:51:39 PM
25	K1004776-003	Unknown	24	200.0	epa300	epa300	Finished	5/24/2010 1:03:37 PM
26	K1004839-001	Unknown	25	200.0	epa300	epa300	Finished	5/24/2010 1:15:35 PM
27	RB	Unknown	26	200.0	epa300	epa300	Finished	5/24/2010 1:27:32 PM
28	CCV3	Unknown	27	200.0	epa300	epa300	Finished	5/24/2010 1:39:29 PM
29	CCB3	Unknown	28	200.0	epa300	epa300	Finished	5/24/2010 1:51:27 PM
30	K1004470-008	Unknown	29	200.0	epa300	epa300	Finished	5/24/2010 2:03:25 PM
31	K1005179-001	Unknown	30	200.0	epa300	epa300	Finished	5/24/2010 2:15:23 PM
32	K1005179-002	Unknown	31	200.0	epa300	epa300	Finished	5/24/2010 2:27:20 PM
33	K1005179-003	Unknown	32	200.0	epa300	epa300	Finished	5/24/2010 2:39:18 PM
34	K1005179-004	Unknown	33	200.0	epa300	epa300	Finished	5/24/2010 2:51:16 PM
35	K1005179-004	Unknown	34	200.0	epa300	epa300	Finished	5/24/2010 3:03:13 PM
36	K1005182-001	Unknown	35	200.0	epa300	epa300	Finished	5/24/2010 3:15:11 PM
37	K1005182-001	Unknown	36	200.0	epa300	epa300	Finished	5/24/2010 3:27:09 PM
38	K1005182-002	Unknown	37	200.0	epa300	epa300	Finished	5/24/2010 3:39:06 PM
39	RB	Unknown	38	200.0	epa300	epa300	Finished	5/24/2010 3:51:04 PM
40	CCV4	Unknown	39	200.0	epa300	epa300	Finished	5/24/2010 4:03:02 PM
41	CCB4	Unknown	40	200.0	epa300	epa300	Finished	5/24/2010 4:14:59 PM
42	K1005179-001	Unknown	41	200.0	epa300	epa300	Finished	5/24/2010 4:26:57 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 66
Created: 5/24/2010 9:08:20 AM by ACQWET10
Last Update: 5/24/2010 4:50:27 PM by ACQWET10

No.	Name	Dil. Factor	Comment
1	std2/lvl2	1.0000	
2	std3/lvl3	1.0000	
3	std4/lvl4	1.0000	
4	std5/lvl5	1.0000	
5	std6/lvl6	1.0000	
6	std7/lvl7	1.0000	
7	std1/lvl1	1.0000	
8	CCV AN11-20-J	1.0000	CCV1
9	CCB	1.0000	CCB1
10	NO3 AN1-33-E	20.0000	NO3
11	MB	1.0000	MB
12	CLSO4 ERA# 0107-10-02	1.0000	CLSO4
13	F AN1-33-D	2.0000	F
14	Br AN1-33-L	1.0000	Br
15	SPK AN11-10-O	1.0000	SPK
16	CCV2	1.0000	CCV2
17	CCB2	1.0000	CCB2
18	NO2 AN11-27-EE	25.0000	NO2
19	K1004470-004	20.0000	
20	K1004470-008	5.0000	
21	K1004575-001	5.0000	
22	K1004575-002	2.0000	
23	K1004575-003	2.0000	
24	K1004575-004	2.0000	
25	K1004776-003	2.0000	
26	K1004839-001	2.0000	F
27	RB	1.0000	
28	CCV3	1.0000	CCV3
29	CCB3	1.0000	CCB3
30	K1004470-008	2.0000	
31	K1005179-001	2.0000	
32	K1005179-002	2.0000	
33	K1005179-003	2.0000	
34	K1005179-004	2.0000	
35	K1005179-004	20.0000	
36	K1005182-001	20.0000	
37	K1005182-001	2.0000	
38	K1005182-002	10.0000	
39	RB	1.0000	
40	CCV4	1.0000	CCV4
41	CCB4	1.0000	CCB4
42	K1005179-001	2.0000	5179-1D

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 66
Created: 5/24/2010 9:08:20 AM by ACQWET10
Last Update: 5/24/2010 4:50:27 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	K1005179-001	Unknown	42	200.0	epa300	epa300	Finished	5/24/2010 4:38:55 PM
44	K1005179-001	Unknown	43	200.0	epa300	epa300	Finished	5/24/2010 4:50:54 PM
45	K1004575-002	Unknown	44	200.0	epa300	epa300	Finished	5/24/2010 5:02:52 PM
46	K1004575-003	Unknown	45	200.0	epa300	epa300	Finished	5/24/2010 5:14:50 PM
47	K1005179-002	Unknown	46	200.0	epa300	epa300	Finished	5/24/2010 5:26:48 PM
48	K1004890-001	Unknown	47	200.0	epa300	epa300	Finished	5/24/2010 5:38:47 PM
49	K1004890-001	Unknown	48	200.0	epa300	epa300	Finished	5/24/2010 5:50:46 PM
50	K1004890-002	Unknown	49	200.0	epa300	epa300	Finished	5/24/2010 6:02:43 PM
51	RB	Unknown	50	200.0	epa300	epa300	Finished	5/24/2010 6:14:41 PM
52	CCV5	Unknown	51	200.0	epa300	epa300	Finished	5/24/2010 6:26:39 PM
53	CCB5	Unknown	52	200.0	epa300	epa300	Finished	5/24/2010 6:38:36 PM
54	K1005182-002	Unknown	53	200.0	epa300	epa300	Finished	5/24/2010 6:50:35 PM
55	K1005182-003	Unknown	54	200.0	epa300	epa300	Finished	5/24/2010 7:02:33 PM
56	K1005182-003	Unknown	55	200.0	epa300	epa300	Finished	5/24/2010 7:14:31 PM
57	K1004890-002	Unknown	56	200.0	epa300	epa300	Finished	5/24/2010 7:26:29 PM
58	K1004890-003	Unknown	57	200.0	epa300	epa300	Finished	5/24/2010 7:38:26 PM
59	K1004890-003	Unknown	58	200.0	epa300	epa300	Finished	5/24/2010 7:50:24 PM
60	K1004890-004	Unknown	59	200.0	epa300	epa300	Finished	5/24/2010 8:02:21 PM
61	K1004890-004	Unknown	60	200.0	epa300	epa300	Finished	5/24/2010 8:14:19 PM
62	K1004890-005	Unknown	61	200.0	epa300	epa300	Finished	5/24/2010 8:26:16 PM
63	RB	Unknown	62	200.0	epa300	epa300	Finished	5/24/2010 8:38:14 PM
64	CCV6	Unknown	63	200.0	epa300	epa300	Finished	5/24/2010 8:50:12 PM
65	CCB6	Unknown	64	200.0	epa300	epa300	Finished	5/24/2010 9:02:10 PM
66	SHUTDOWN	Unknown	65	200.0	shutdown 120	epa300	Finished	5/24/2010 9:14:08 PM

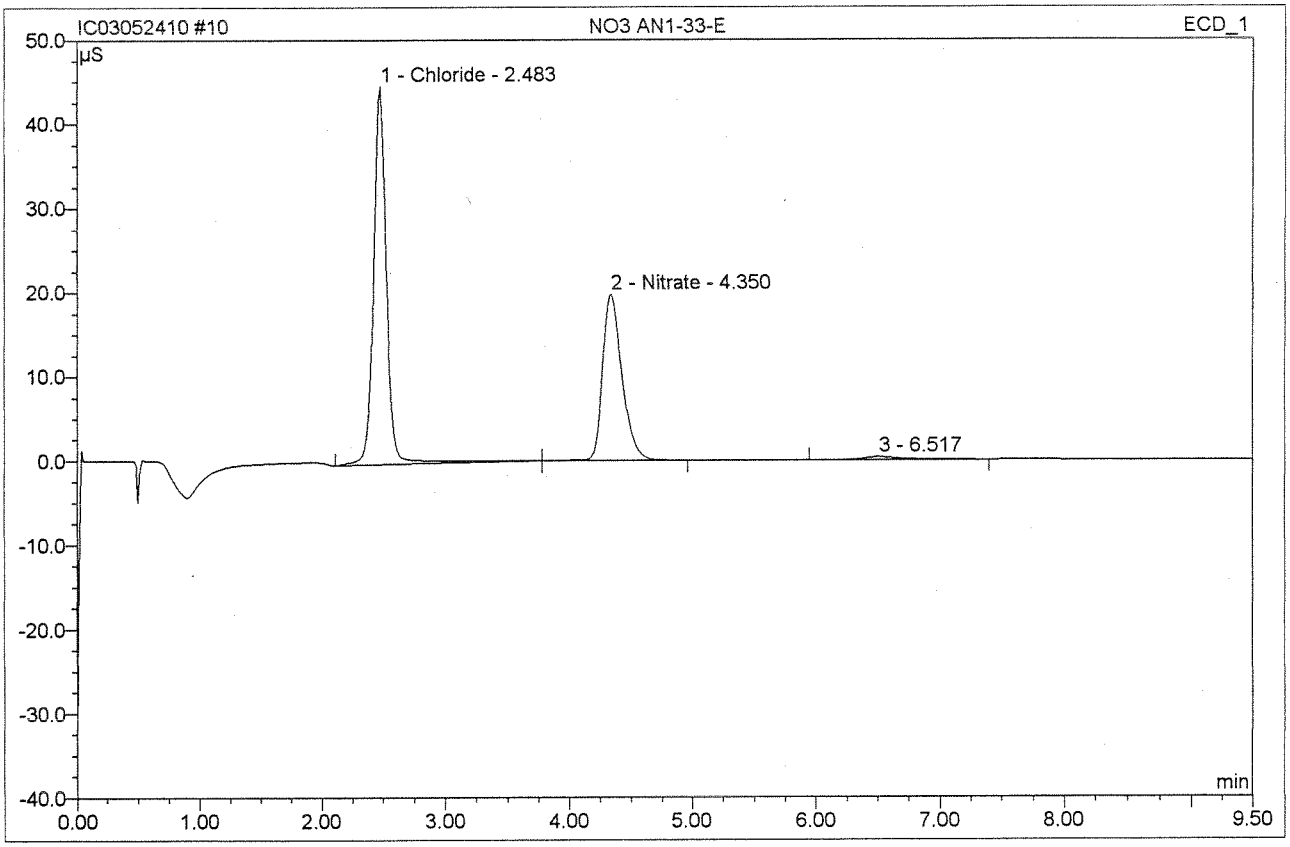
Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 66
Created: 5/24/2010 9:08:20 AM by ACQWET10
Last Update: 5/24/2010 4:50:27 PM by ACQWET10

No.	Name	Dil. Factor	Comment
43	K1005179-001	2.0000	5179-1MS
44	K1005179-001	2.0000	5179-1MSD
45	K1004575-002	50.0000	
46	K1004575-003	50.0000	
47	K1005179-002	20.0000	
48	K1004890-001	1000.0000	
49	K1004890-001	5.0000	
50	K1004890-002	2.0000	
51	RB	1.0000	
52	CCV5	1.0000	CCV5
53	CCB5	1.0000	CCB5
54	K1005182-002	2.0000	
55	K1005182-003	5.0000	
56	K1005182-003	2.0000	
57	K1004890-002	500.0000	
58	K1004890-003	20.0000	
59	K1004890-003	2.0000	
60	K1004890-004	50.0000	
61	K1004890-004	5.0000	
62	K1004890-005	2.0000	
63	RB	1.0000	
64	CCV6	1.0000	CCV6
65	CCB6	1.0000	CCB6
66	SHUTDOWN	1.0000	

10 NO3 AN1-33-E

NO3

Sample Name:	**NO3 AN1-33-E**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0000**
Recording Time:	**5/24/2010 9:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

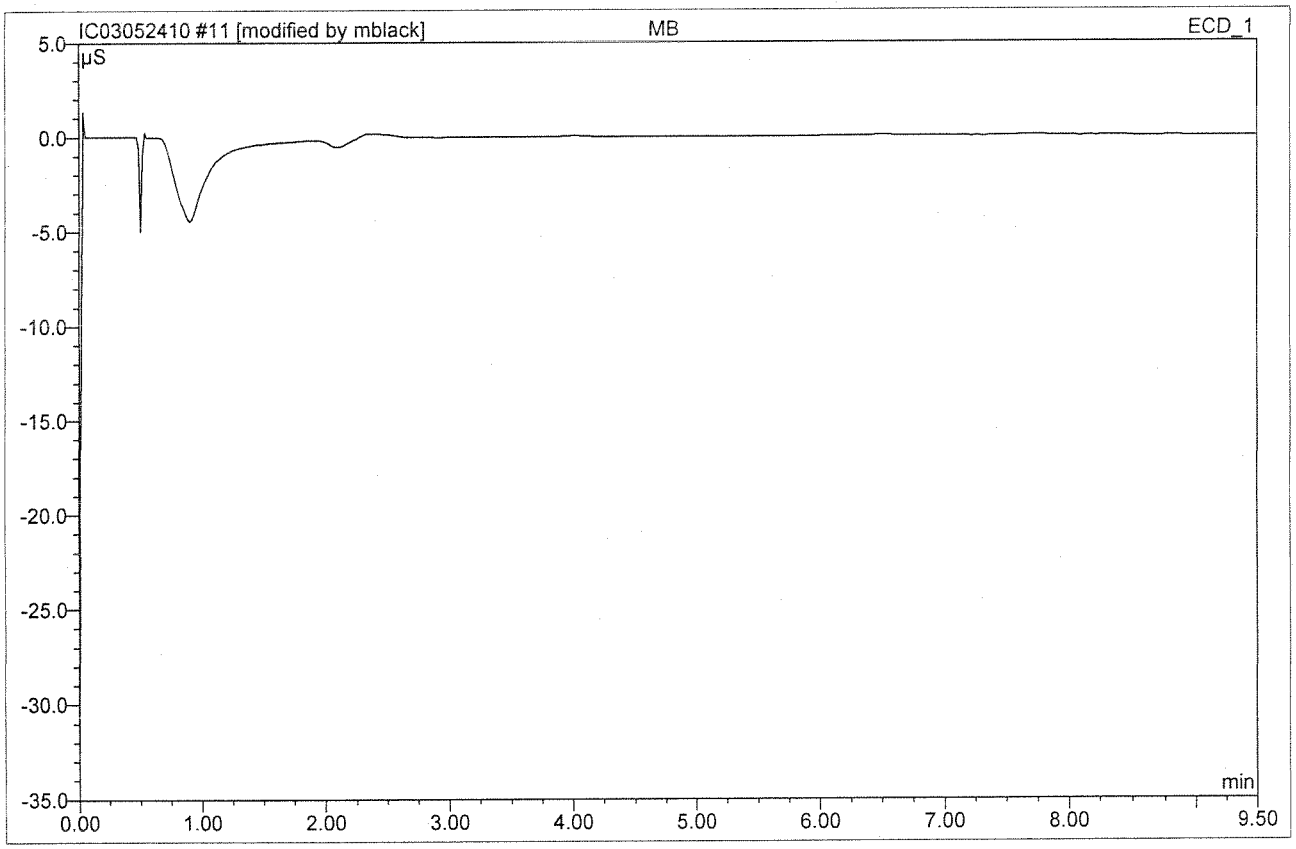


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.48	Chloride	44.869	5.313	58.66	68.140	BMB
2	4.35	Nitrate	19.676	3.606	39.81	19.579	bMB
3	6.52	n.a.	0.352	0.138	1.53	n.a.	BMB
Total:			64.897	9.058	100.00	87.720	

11 MB

MB

Sample Name:	**MB**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 9:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

After initials MB

MAY 2 4 2010

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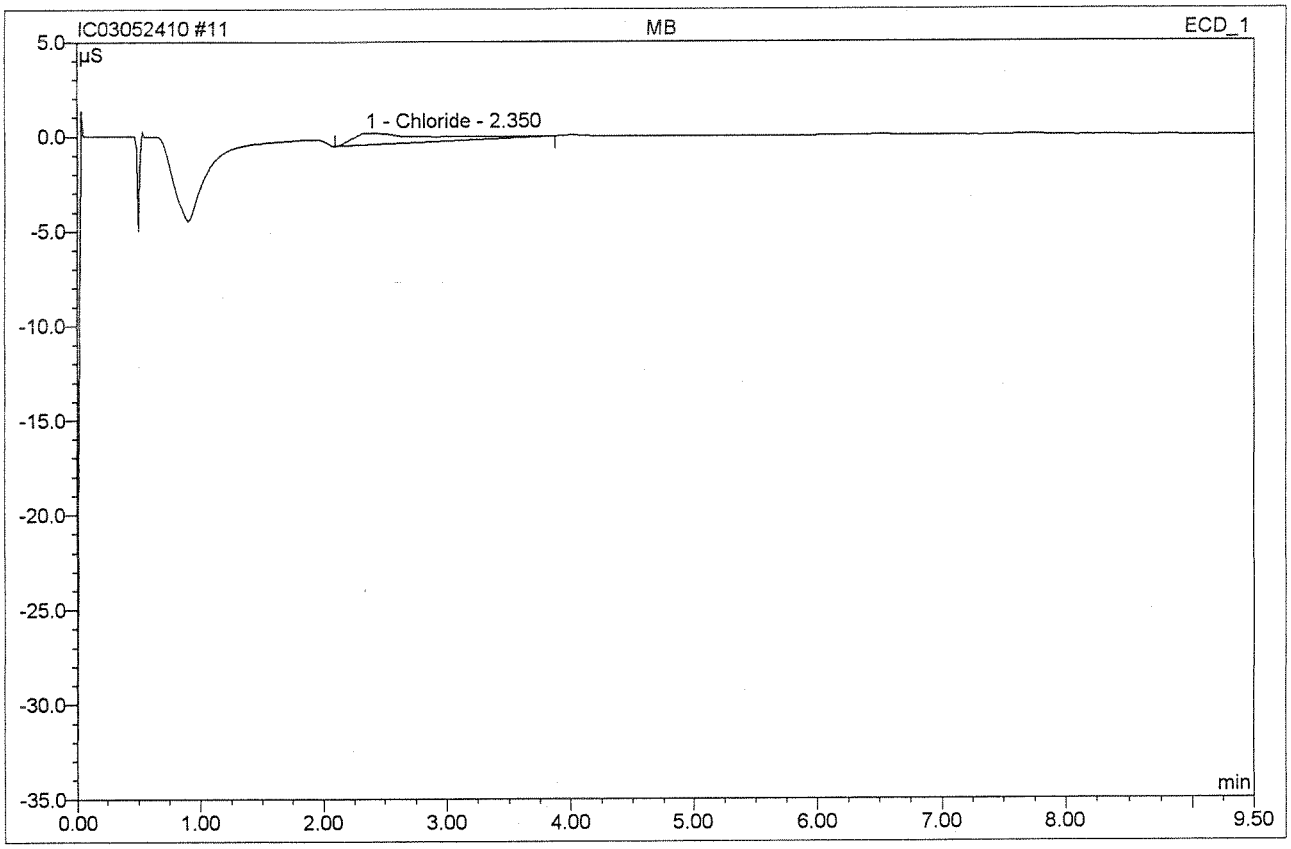
11 MB

MB

Sample Name:	**MB**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 9:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.35	Chloride	0.621	0.446	100.00	0.286	BMB
Total:			0.621	0.446	100.00	0.286	

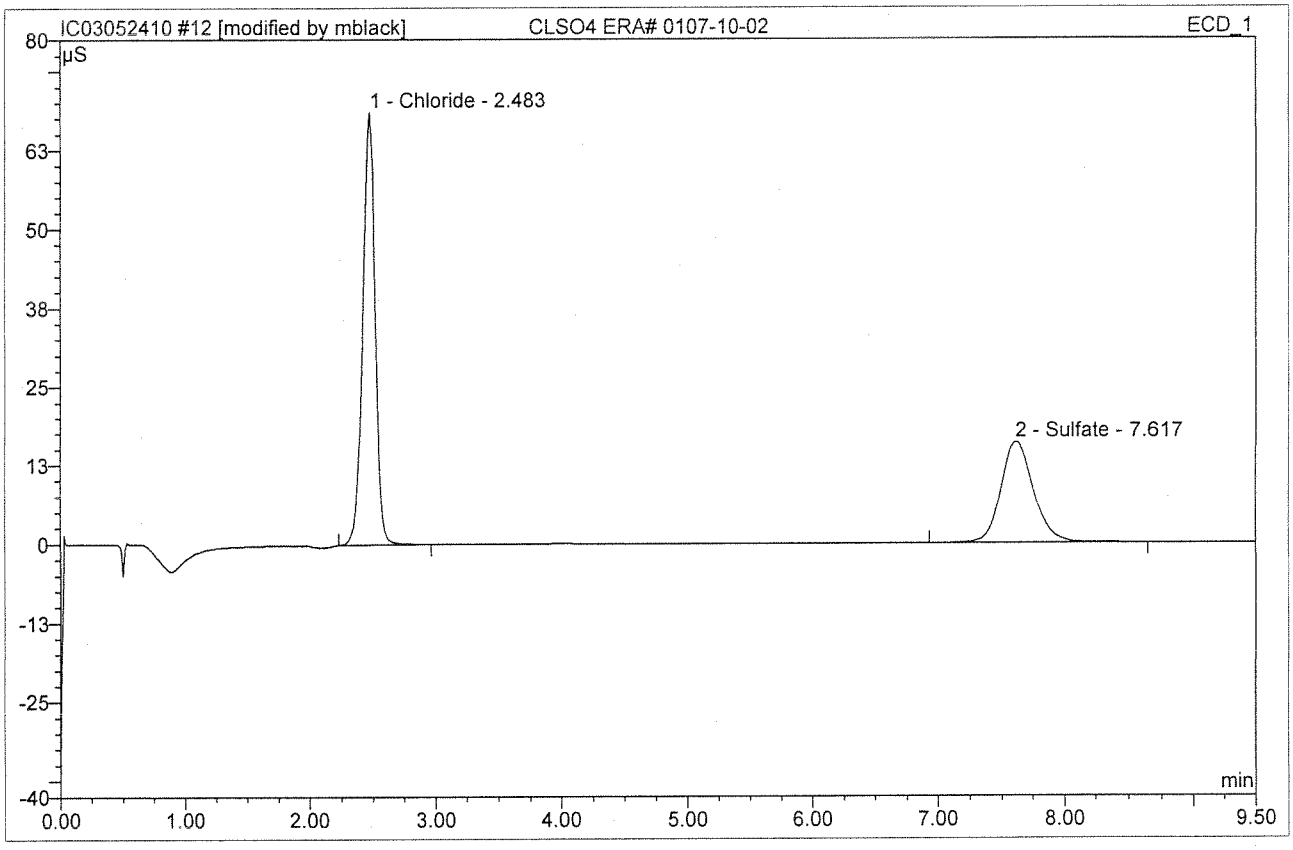
Before

MAY 2 4 2010

12 CLSO4 ERA# 0107-10-02

CLSO4

Sample Name:	**CLSO4 ERA# 0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 10:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.48	Chloride	68.619	7.702	61.76	4.939 99%	BMB*
2	7.62	Sulfate	16.029	4.769	38.24	4.846 97%	BMB
Total:			84.648	12.471	100.00	9.785	

After Initials MB

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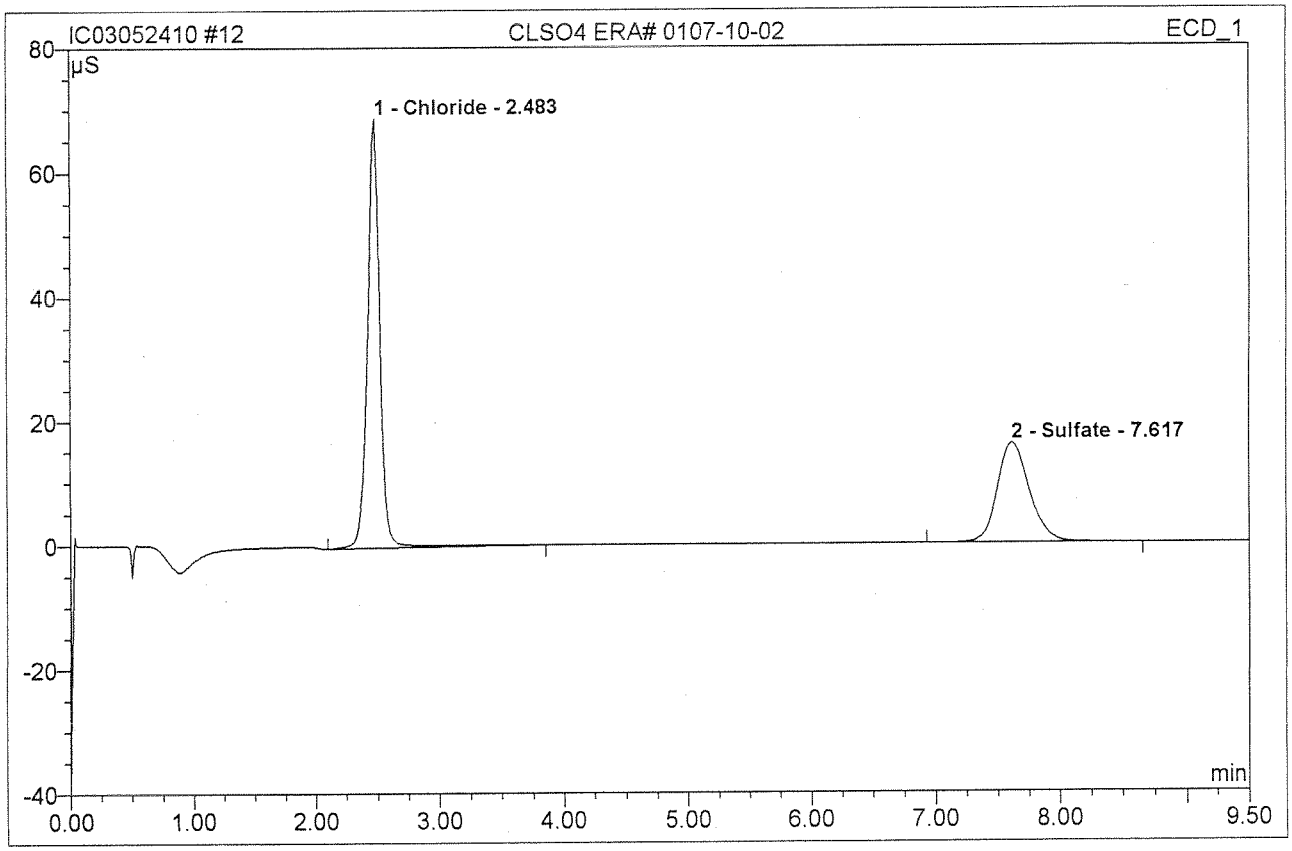
12 CLSO4 ERA# 0107-10-02

CLSO4

Sample Name:	**CLSO4 ERA# 0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 10:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.48	Chloride	68.948	8.064	62.84	5.171	BMB
2	7.62	Sulfate	16.029	4.769	37.16	4.846	BMB
Total:			84.977	12.832	100.00	10.016	

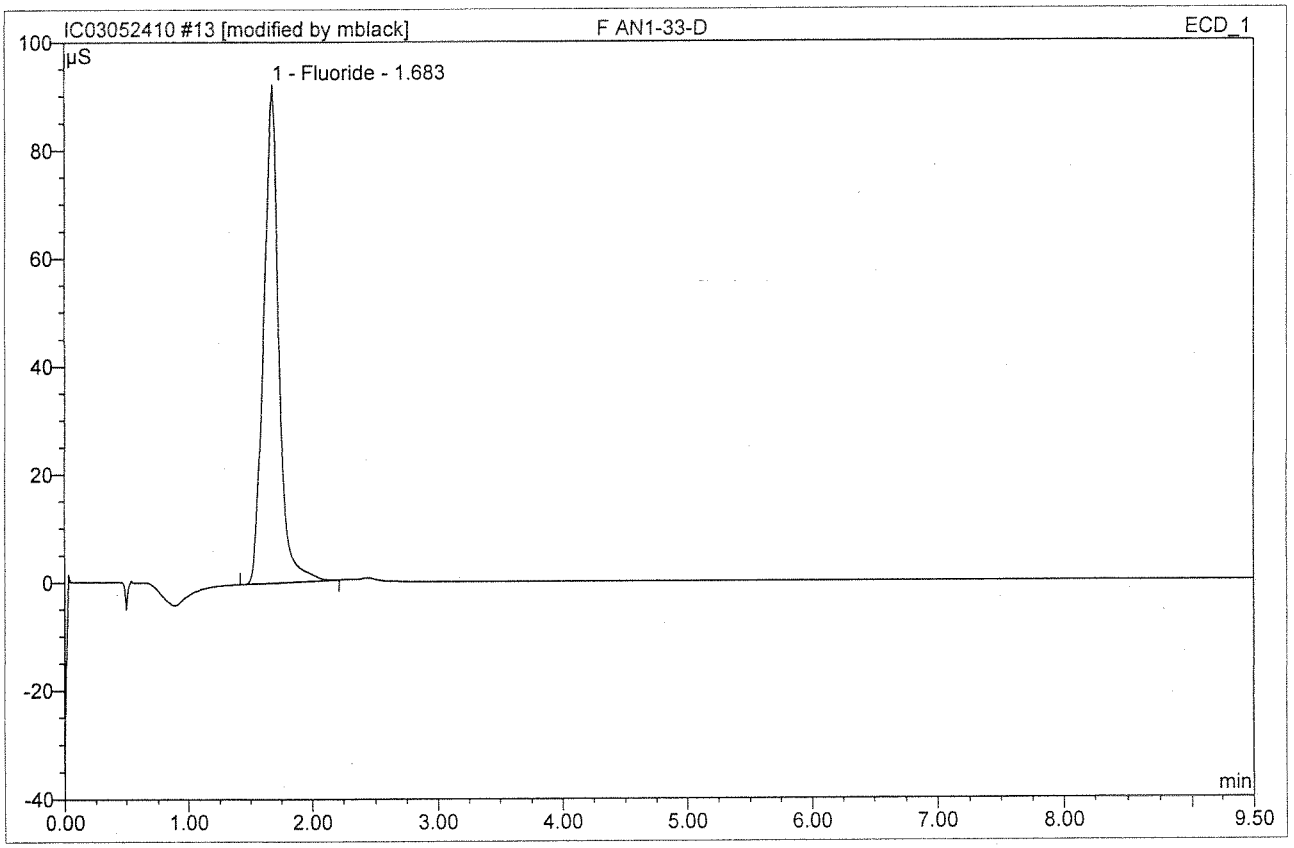
Before

MAY 24 2010

13 F AN1-33-D

F

Sample Name:	**F AN1-33-D**	*Injection Volume:*	**200.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 10:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	92.326	13.008	100.00	13.596/0.92	BMB*
Total:			92.326	13.008	100.00	13.596	

After Initials MB

MAY 2 4 2010

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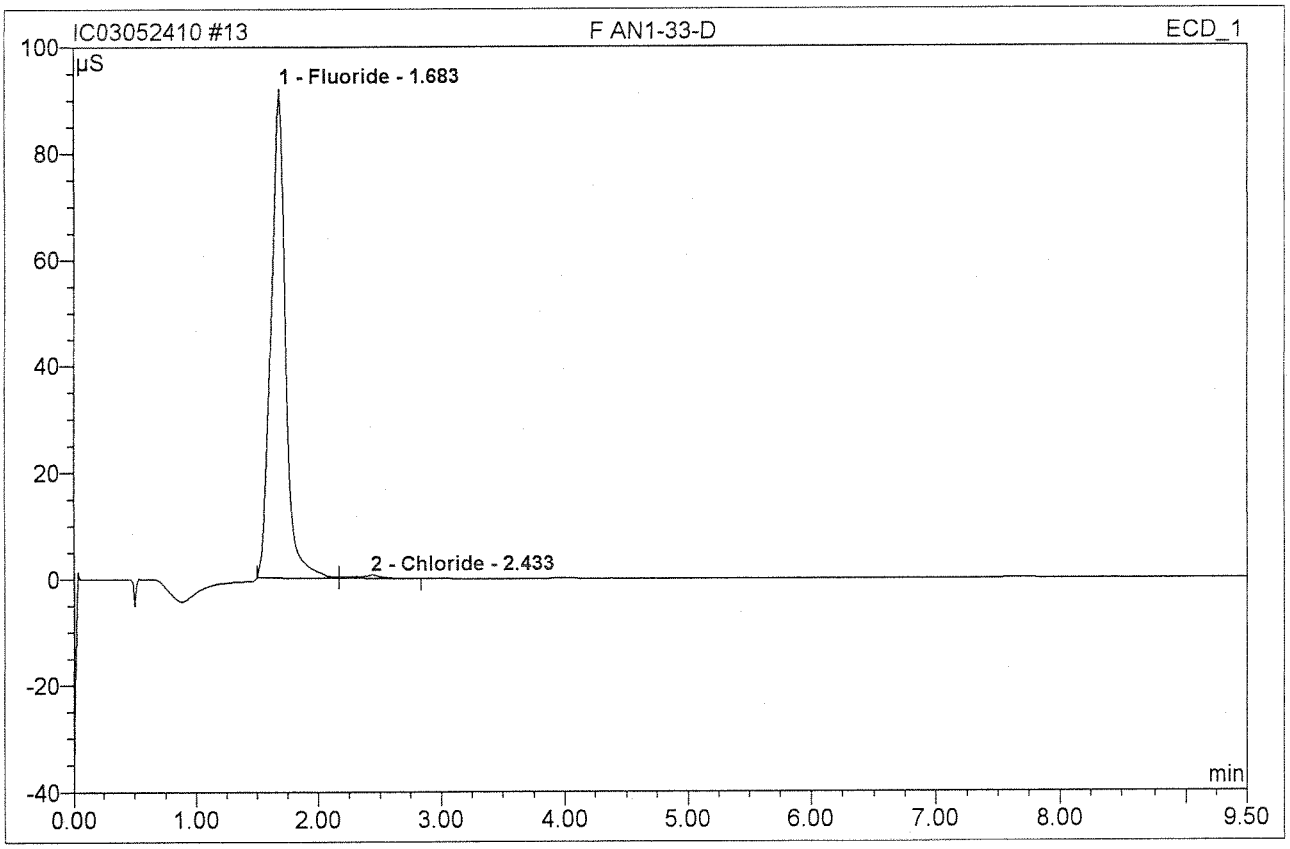
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

13 F AN1-33-D

F

Sample Name:	**F AN1-33-D**	*Injection Volume:*	**200.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/24/2010 10:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	91.858	12.816	98.89	13.396	BM
2	2.43	Chloride	0.621	0.144	1.11	0.185	MB
Total:			92.479	12.960	100.00	13.581	

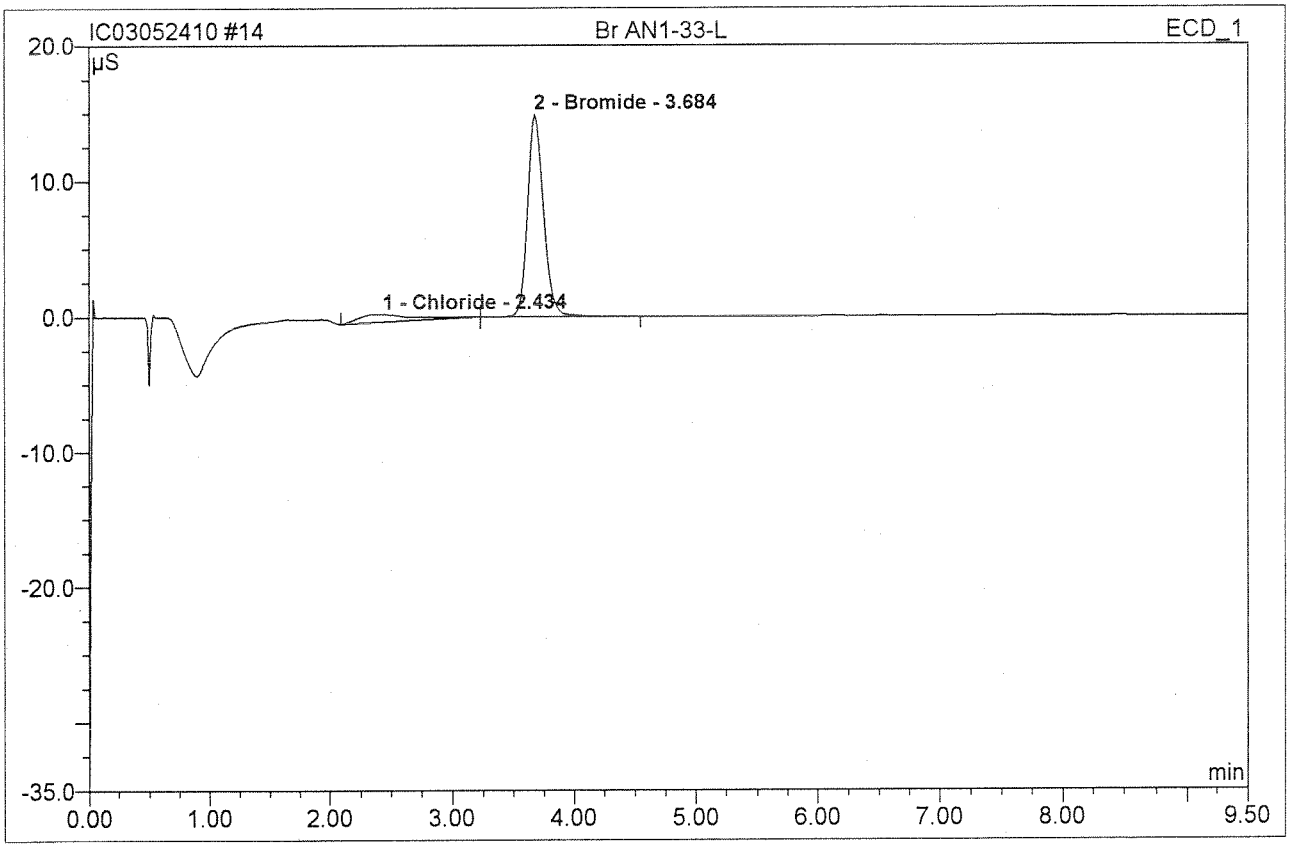
Before

MAY 24 2010

14 Br AN1-33-L

Br

Sample Name:	**Br AN1-33-L**	*Injection Volume:*	**200.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 10:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

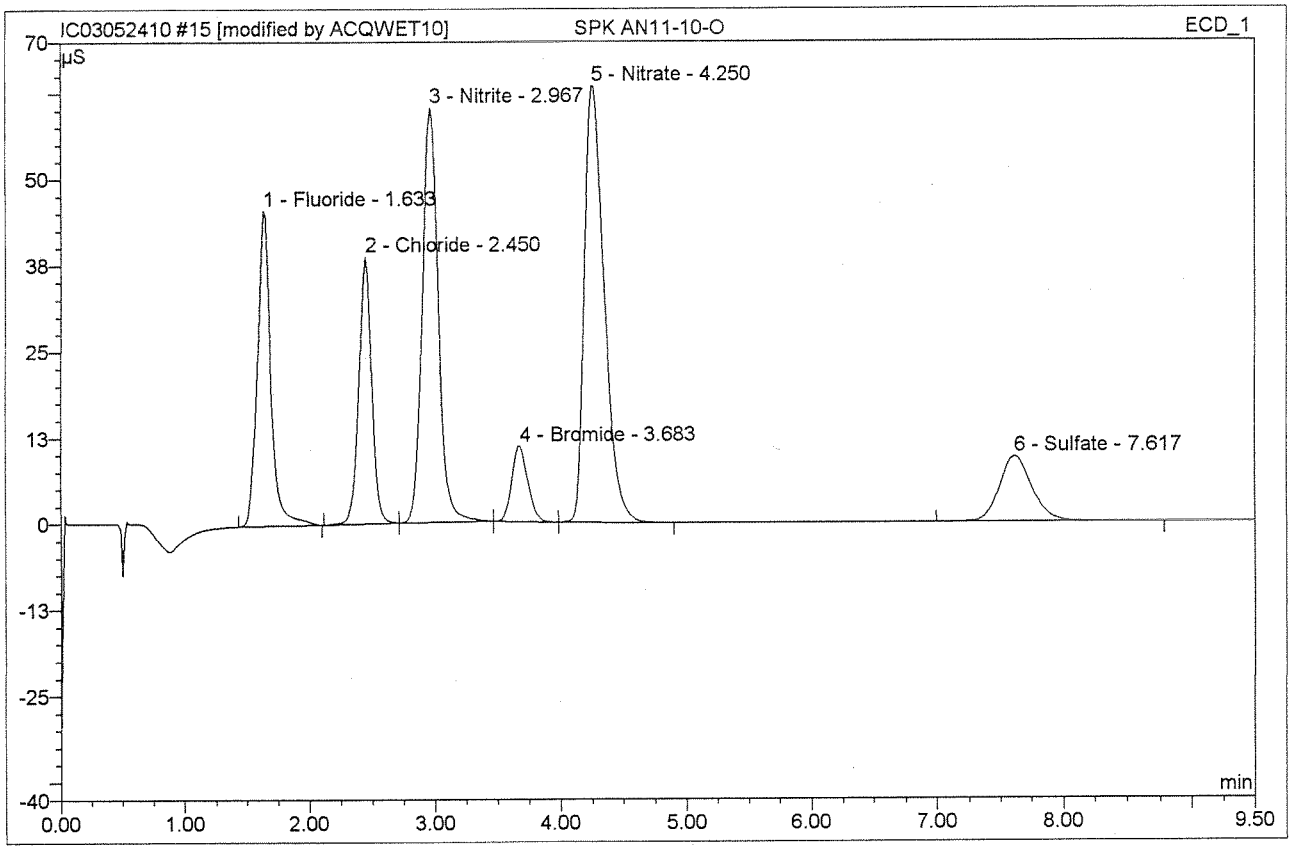


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.43	Chloride	0.566	0.297	11.45	0.190	BMB
2	3.68	Bromide	14.938	2.296	88.55	4.284	bMB
Total:			15.505	2.592	100.00	4.475	

15 SPK AN11-10-O

SPK

Sample Name:	**SPK AN11-10-O**	*Injection Volume:*	**200.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 10:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	45.733	5.749	16.36	3.005	BMB*
2	2.45	Chloride	38.732	4.480	12.75	2.873	BMb
3	2.97	Nitrite	60.115	8.870	25.24	3.072	bMb
4	3.68	Bromide	10.960	1.640	4.67	3.061	bMb
5	4.25	Nitrate	63.324	11.539	32.84	3.132	bMB
6	7.62	Sulfate	9.494	2.861	8.14	2.907	BMB
Total:			228.358	35.140	100.00	18.050	

TV = 3.07

After initials MB

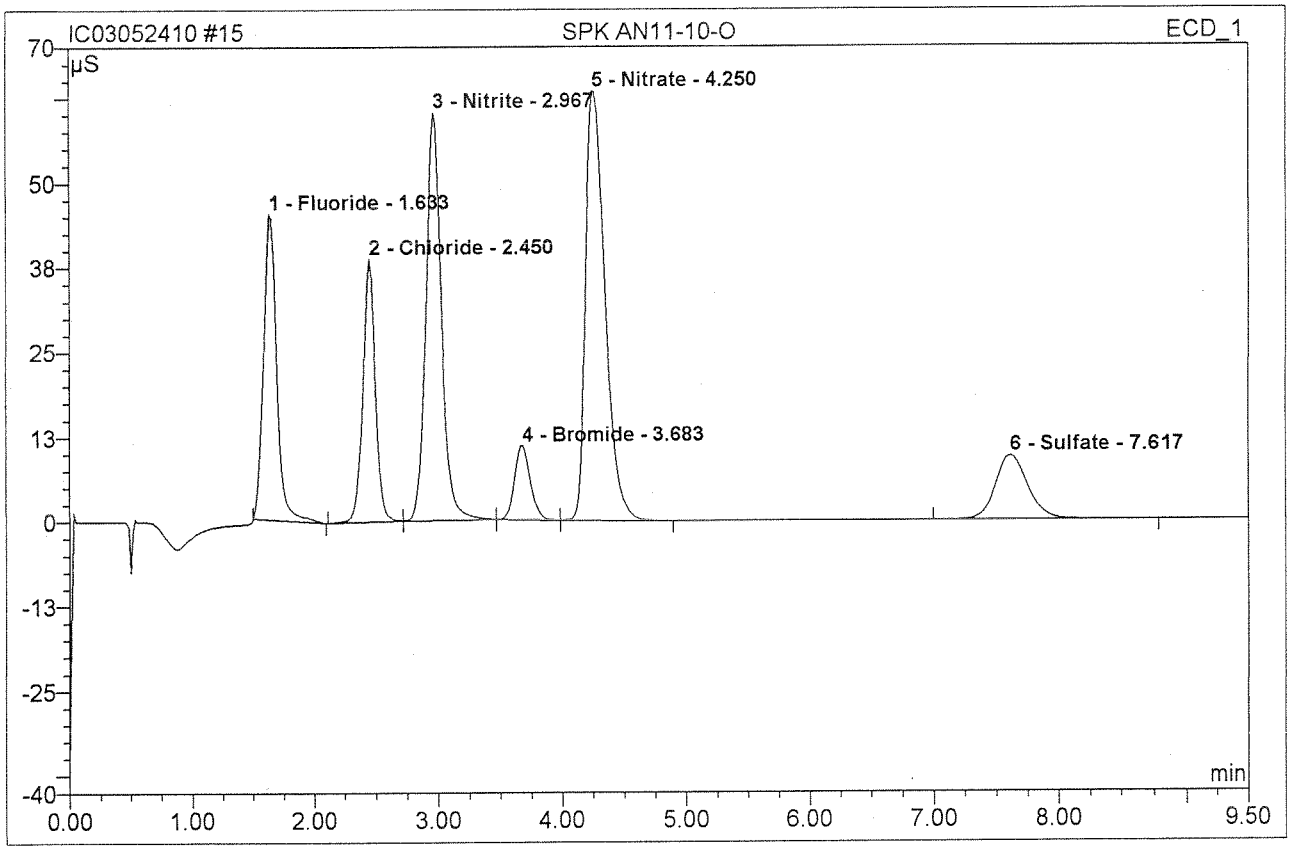
MAY 24 2010

5/25/10

15 SPK AN11-10-O

SPK

Sample Name:	**SPK AN11-10-O**	*Injection Volume:*	**200.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 10:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	45.102	5.493	15.75	2.871	BMB
2	2.45	Chloride	38.732	4.480	12.84	2.873	BMb
3	2.97	Nitrite	60.115	8.870	25.43	3.072	bMb
4	3.68	Bromide	10.960	1.640	4.70	3.061	bMb
5	4.25	Nitrate	63.324	11.539	33.08	3.132	bMB
6	7.62	Sulfate	9.494	2.861	8.20	2.907	BMB
Total:			227.727	34.884	100.00	17.916	

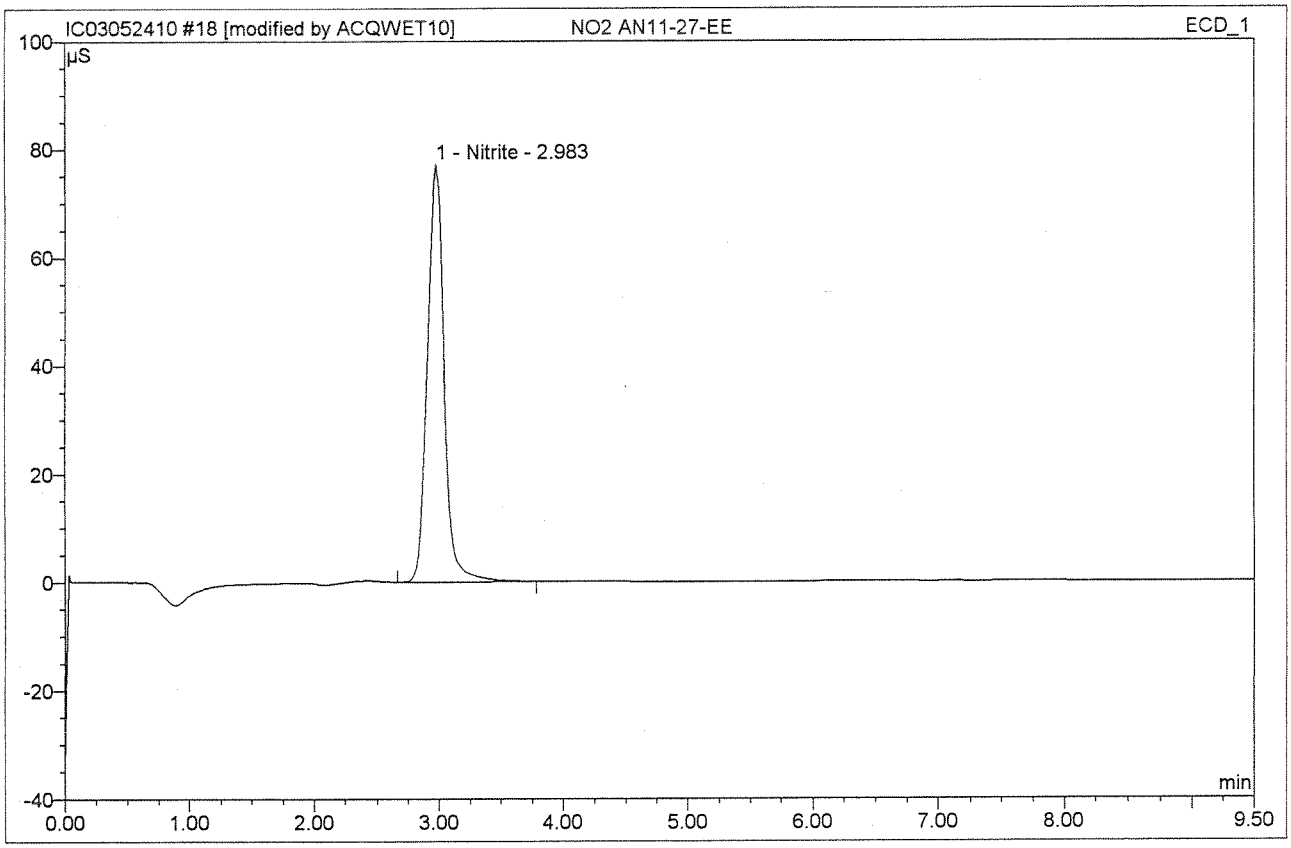
Before

MAY 2 4 2010

18 NO2 AN11-27-EE

NO2

Sample Name:	**NO2 AN11-27-EE**	*Injection Volume:*	**200.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**5/24/2010 11:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.98	Nitrite	77.147	11.997	100.00	103.875 1049	BMB*
Total:			77.147	11.997	100.00	103.875	

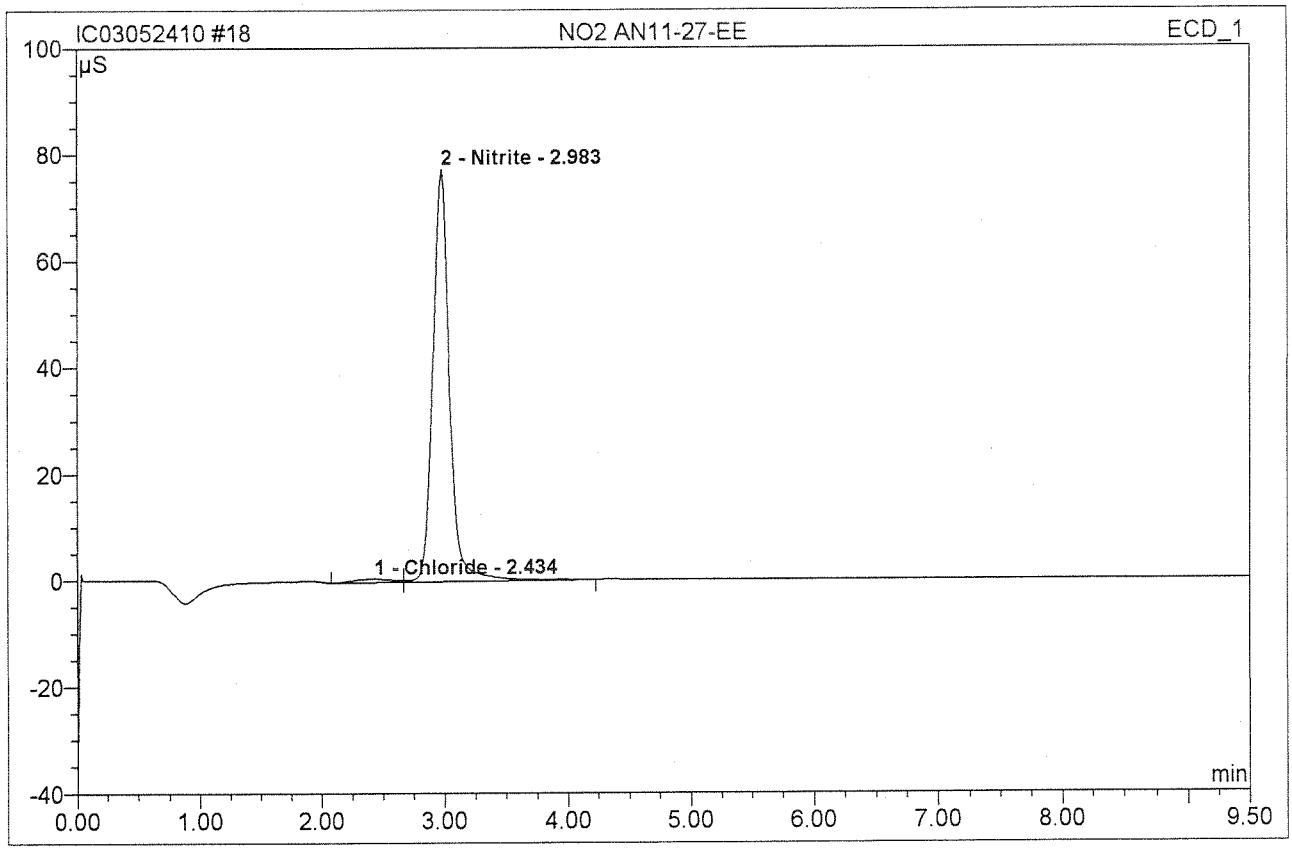
After MB 5/24/10 Baseline.

5/25/10

18 NO2 AN11-27-EE

NO2

Sample Name:	**NO2 AN11-27-EE**	*Injection Volume:*	**200.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**5/24/2010 11:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.43	Chloride	0.760	0.273	2.17	4.383	BM
2	2.98	Nitrite	77.467	12.337	97.83	106.820	MB
Total:			78.228	12.610	100.00	111.203	

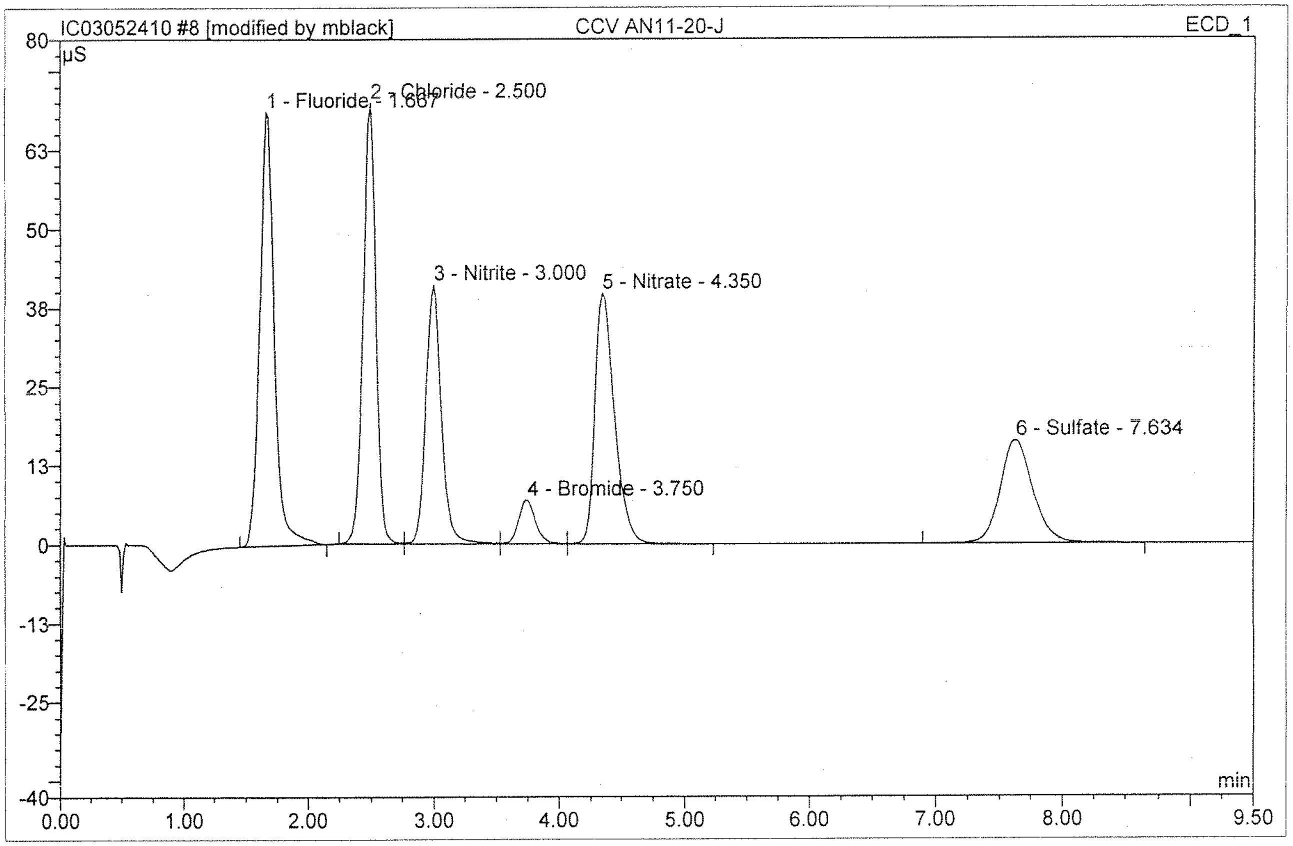
Before

MAY 24 2010

8 CCV AN11-20-J

CCV1

Sample Name:	**CCV AN11-20-J**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 9:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	68.785	9.250	25.42	4.834 97%	BMB*
2	2.50	Chloride	69.746	8.084	22.21	5.183 104%	BM *
3	3.00	Nitrite	41.009	5.865	16.12	2.031 102%	M *
4	3.75	Bromide	6.847	1.061	2.92	1.980 99%	M *
5	4.35	Nitrate	39.636	7.252	19.93	1.969 99%	MB*
6	7.63	Sulfate	16.332	4.877	13.40	4.956 99%	BMB
Total:			242.354	36.390	100.00	20.954	

After Initials (WS)

BA 5/25/10

MAY 2 4 2010

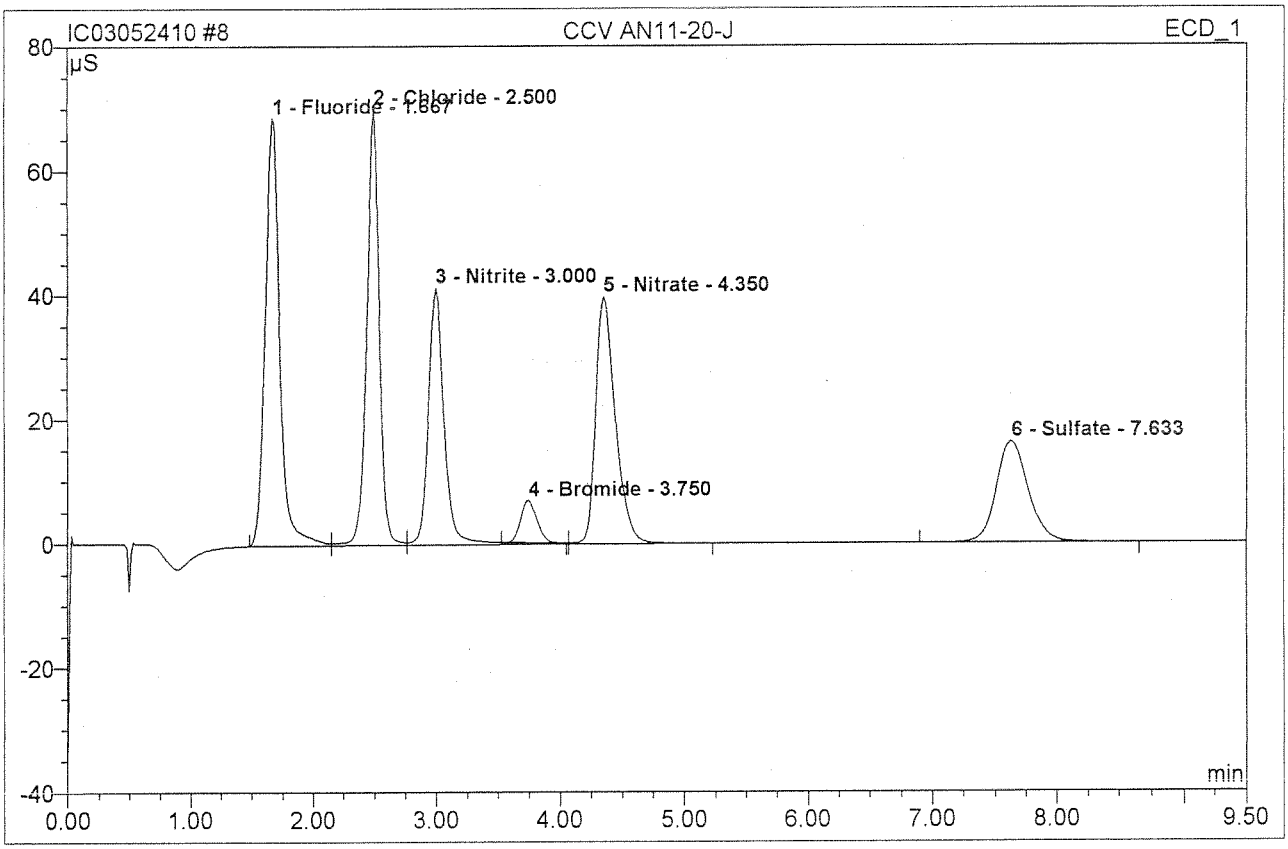
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

8 CCV AN11-20-J

CCV1

Sample Name:	**CCV AN11-20-J**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 9:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

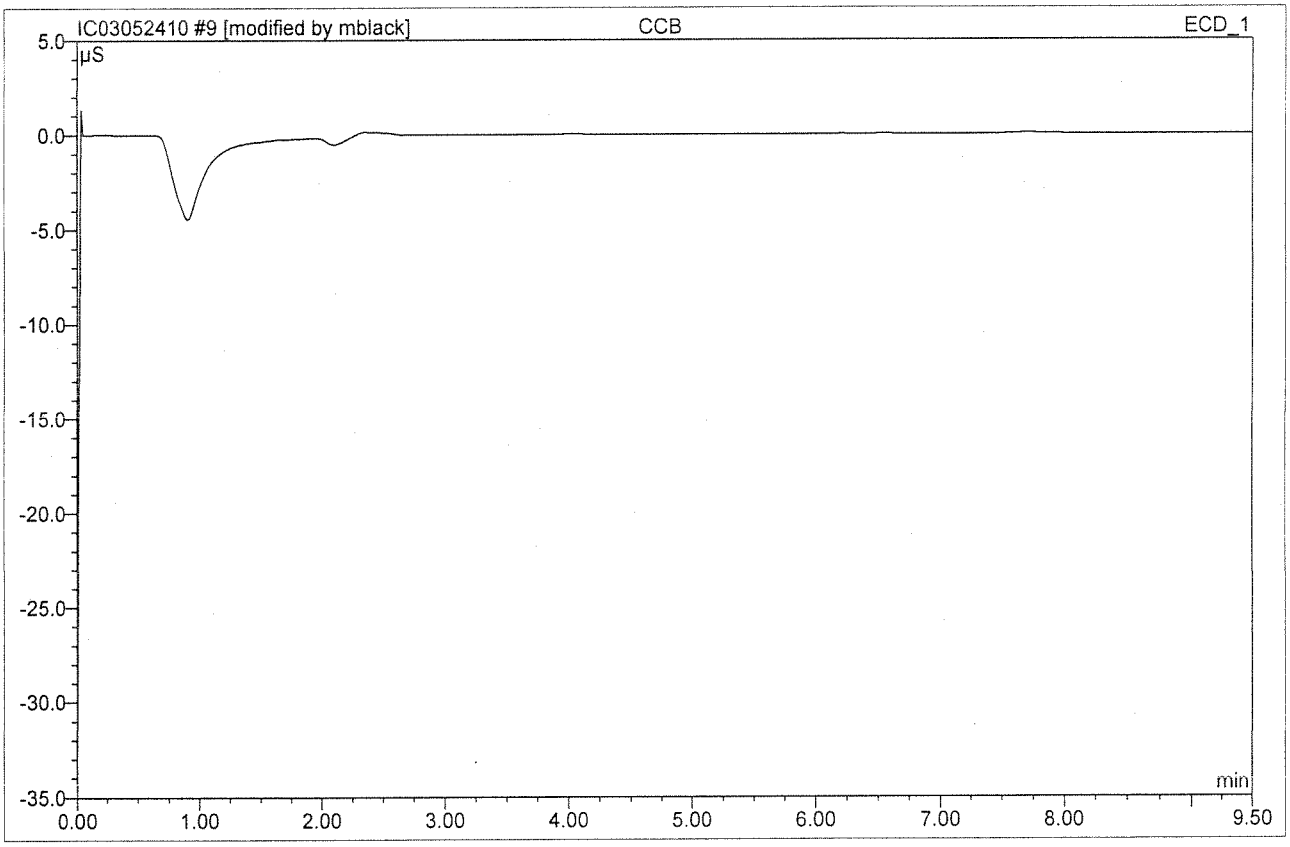


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	68.802	9.316	25.10	4.869	BM
2	2.50	Chloride	70.127	8.313	22.40	5.331	M
3	3.00	Nitrite	41.321	6.212	16.74	2.151	M
4	3.75	Bromide	6.812	1.044	2.81	1.948	Rd
5	4.35	Nitrate	39.759	7.347	19.80	1.994	MB
6	7.63	Sulfate	16.332	4.877	13.14	4.956	BMB
Total:			243.153	37.109	100.00	21.249	

9 CCB

CCB1

Sample Name:	**CCB**	*Injection Volume:*	**200.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 9:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

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Chromeleon (c) Dionex 1996-2001
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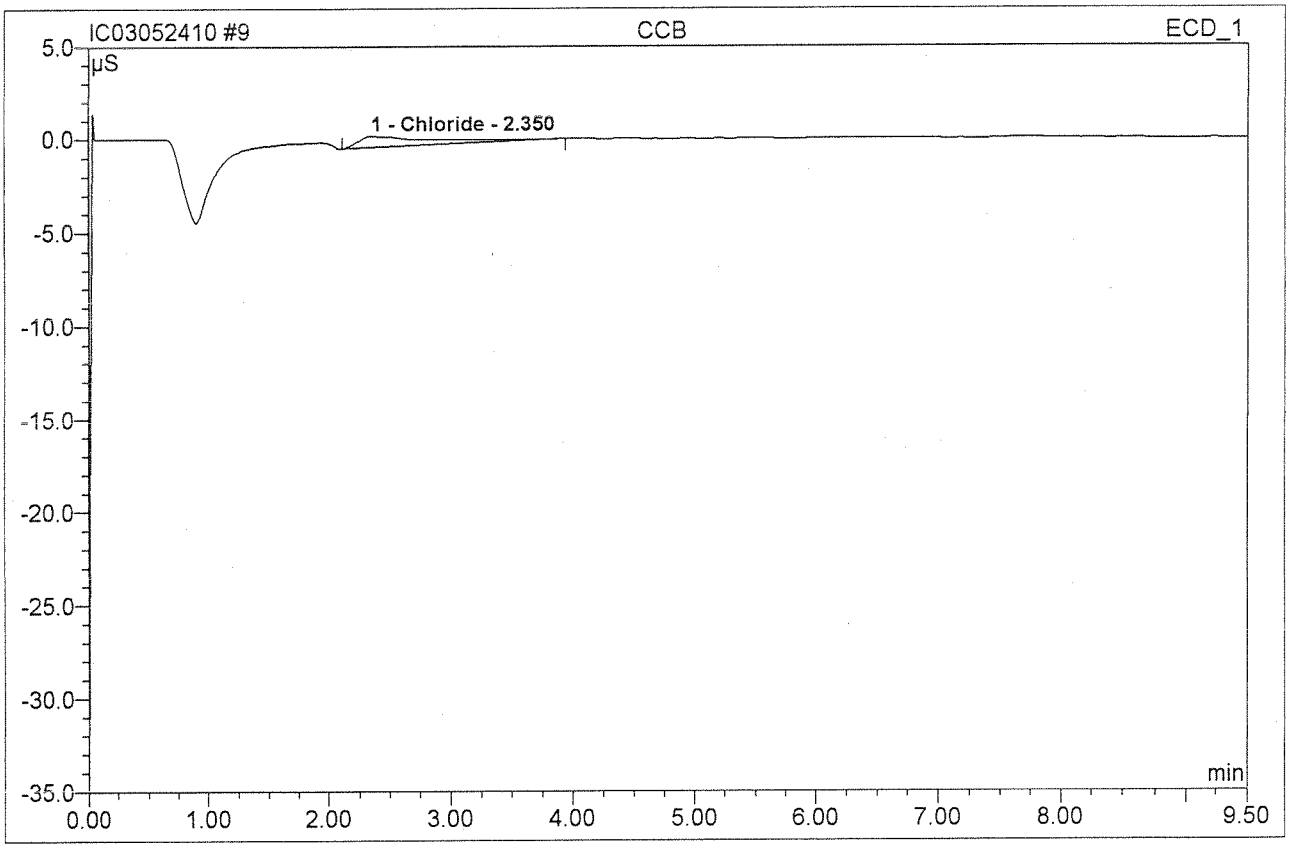
9 CCB

CCB1

Sample Name:	**CCB**	*Injection Volume:*	**200.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 9:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.35	Chloride	0.607	0.440	100.00	0.282	BMB
Total:			0.607	0.440	100.00	0.282	

Before

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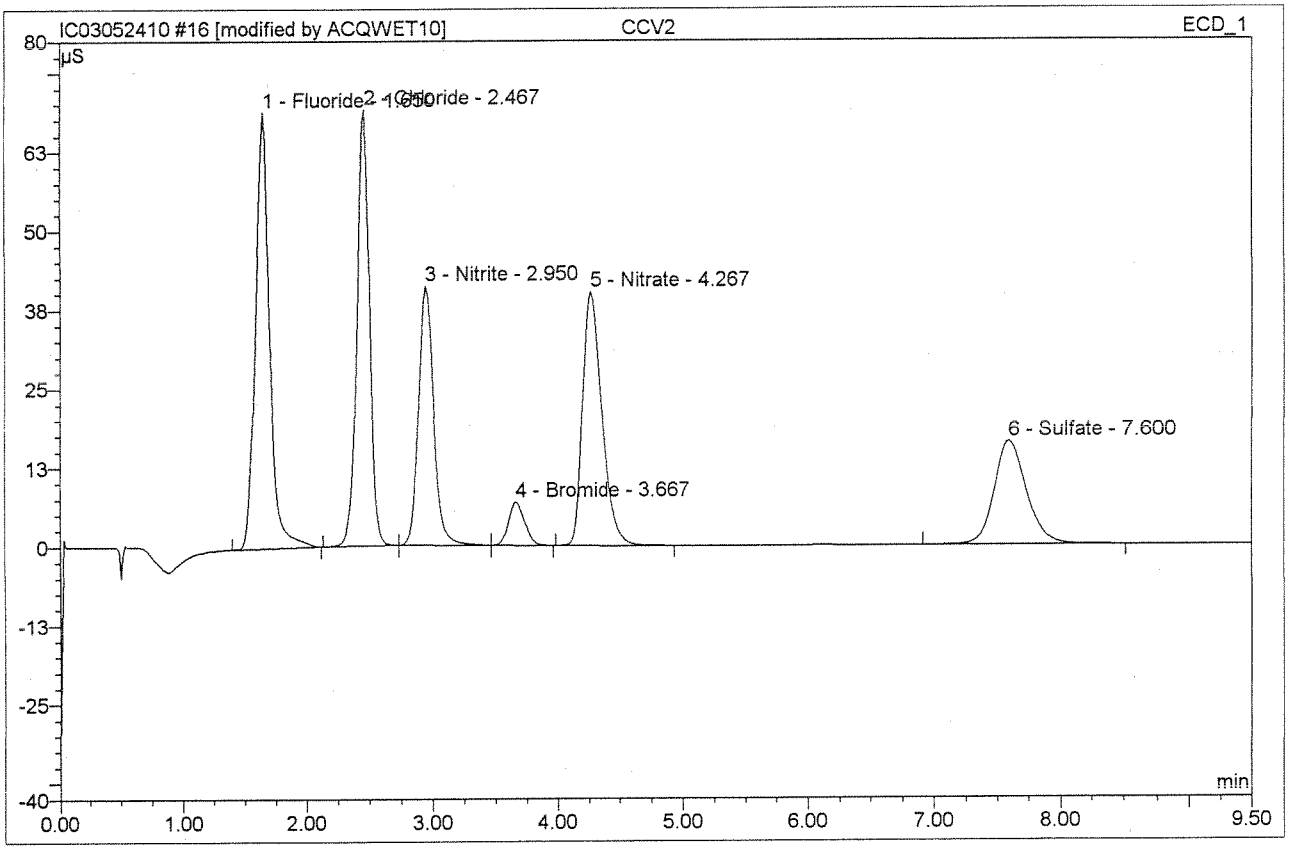
16 CCV2

CCV2

Sample Name:	**CCV2**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 10:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	69.011	9.112	25.39	4.762	BMB*
2	2.47	Chloride	68.975	7.936	22.12	5.089	BMb
3	2.95	Nitrite	40.998	5.729	15.96	1.984	bMb
4	3.67	Bromide	6.911	1.036	2.89	1.934	bMB
5	4.27	Nitrate	40.177	7.225	20.13	1.961	BMB
6	7.60	Sulfate	16.384	4.847	13.51	4.925	BMB
Total:			242.456	35.886	100.00	20.656	

After Initials MB

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default/Integration

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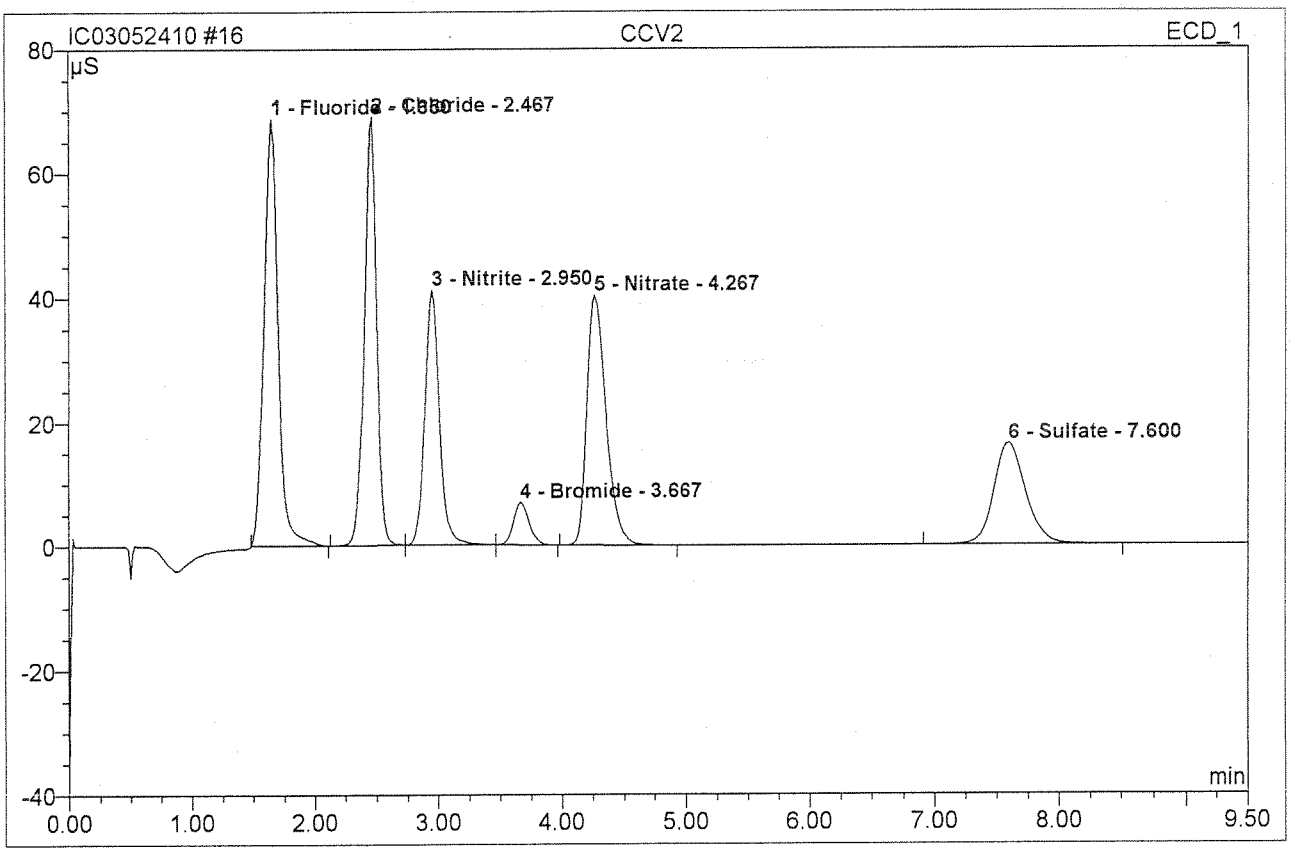
Version 6.50 SP1 Build 956

16 CCV2

CCV2

Sample Name:	**CCV2**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 10:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

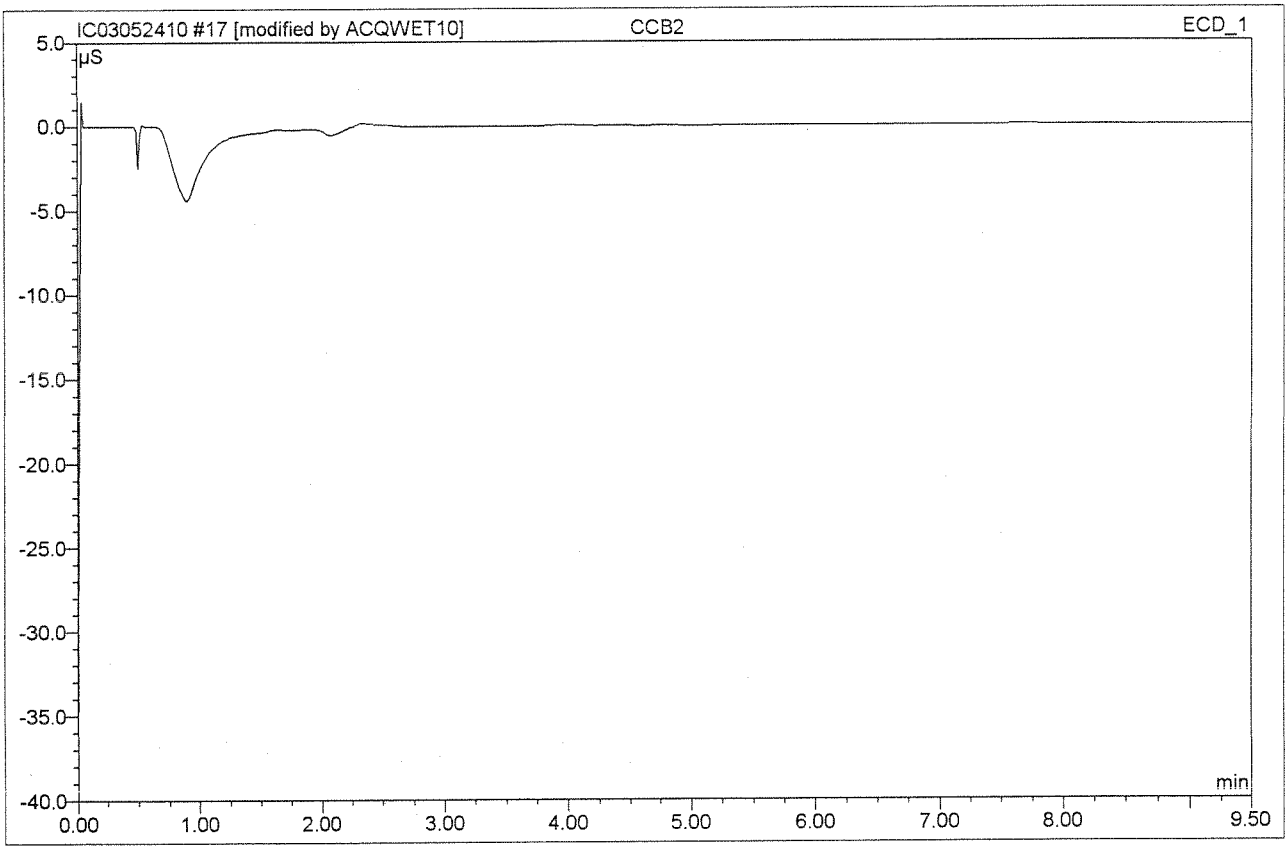


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	68.650	8.950	25.05	4.677	BMB
2	2.47	Chloride	68.975	7.936	22.22	5.089	BMb
3	2.95	Nitrite	40.998	5.729	16.04	1.984	bMb
4	3.67	Bromide	6.911	1.036	2.90	1.934	bMB
5	4.27	Nitrate	40.177	7.225	20.22	1.961	BMB
6	7.60	Sulfate	16.384	4.847	13.57	4.925	BMB
Total:			242.095	35.723	100.00	20.571	

17 CCB2

CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 11:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

After Initials

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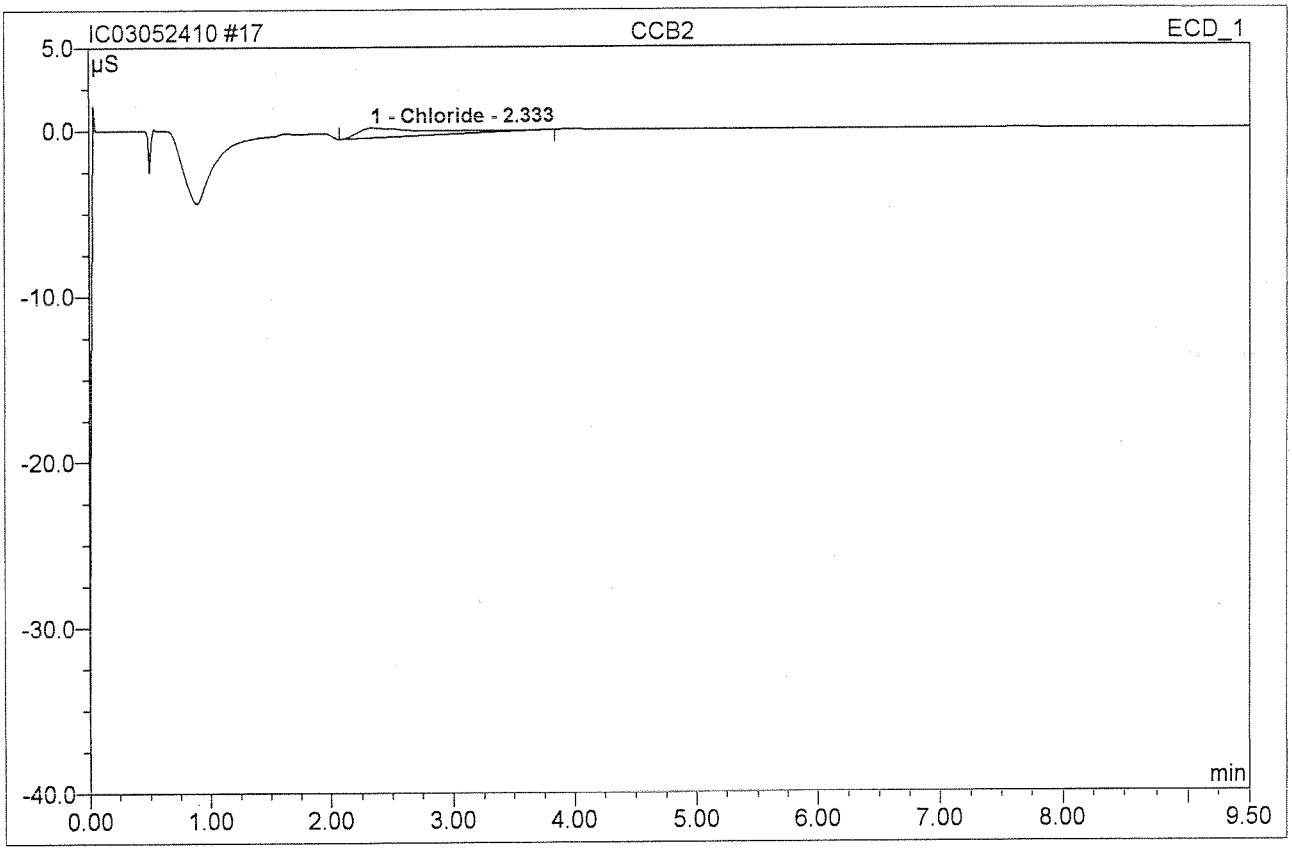
17 CCB2

CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 11:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.33	Chloride	0.621	0.432	100.00	0.277	BMB
Total:			0.621	0.432	100.00	0.277	

Before

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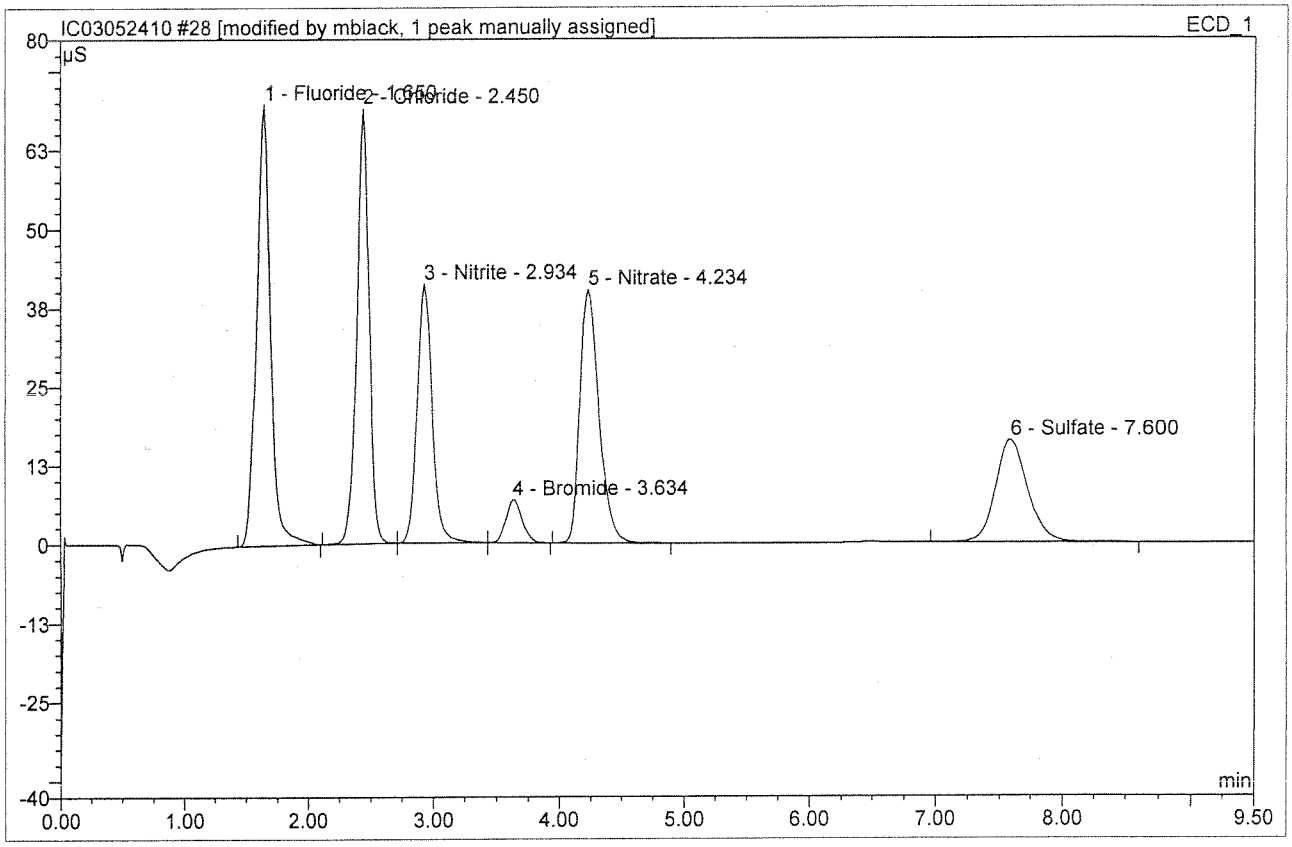
28 CCV3

CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 13:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	69.993	9.160	25.66	4.787 96%	BMB*
2	2.45	Chloride	69.051	7.835	21.95	5.024 100%	BMb^
3	2.93	Nitrite	41.064	5.738	16.07	1.987 100%	bMb
4	3.63	Bromide	6.839	1.026	2.87	1.915 96%	bMB
5	4.23	Nitrate	40.206	7.140	20.00	1.938 97%	BMB
6	7.60	Sulfate	16.263	4.798	13.44	4.876 98%	BMB
Total:			243.416	35.697	100.00	20.527	

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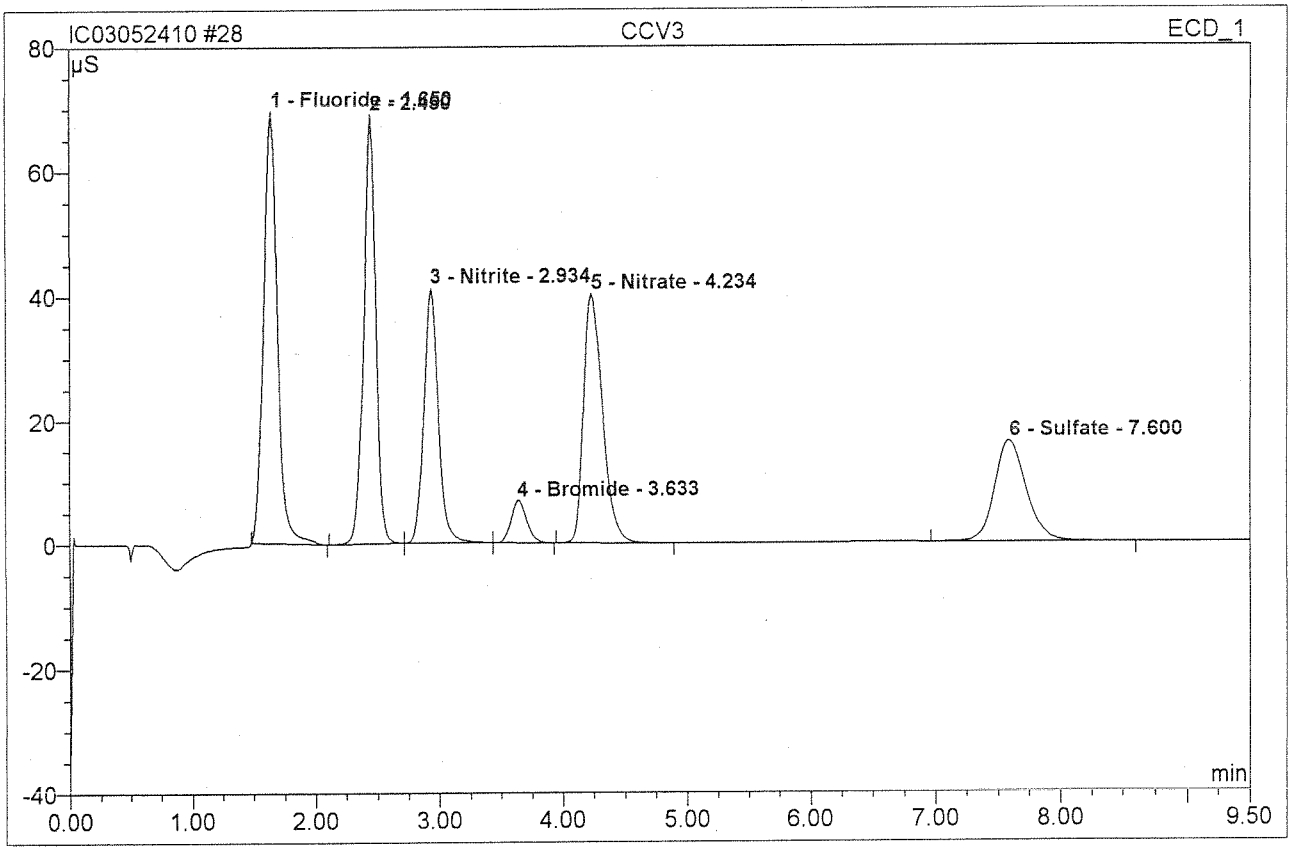
28 CCV3

CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 13:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

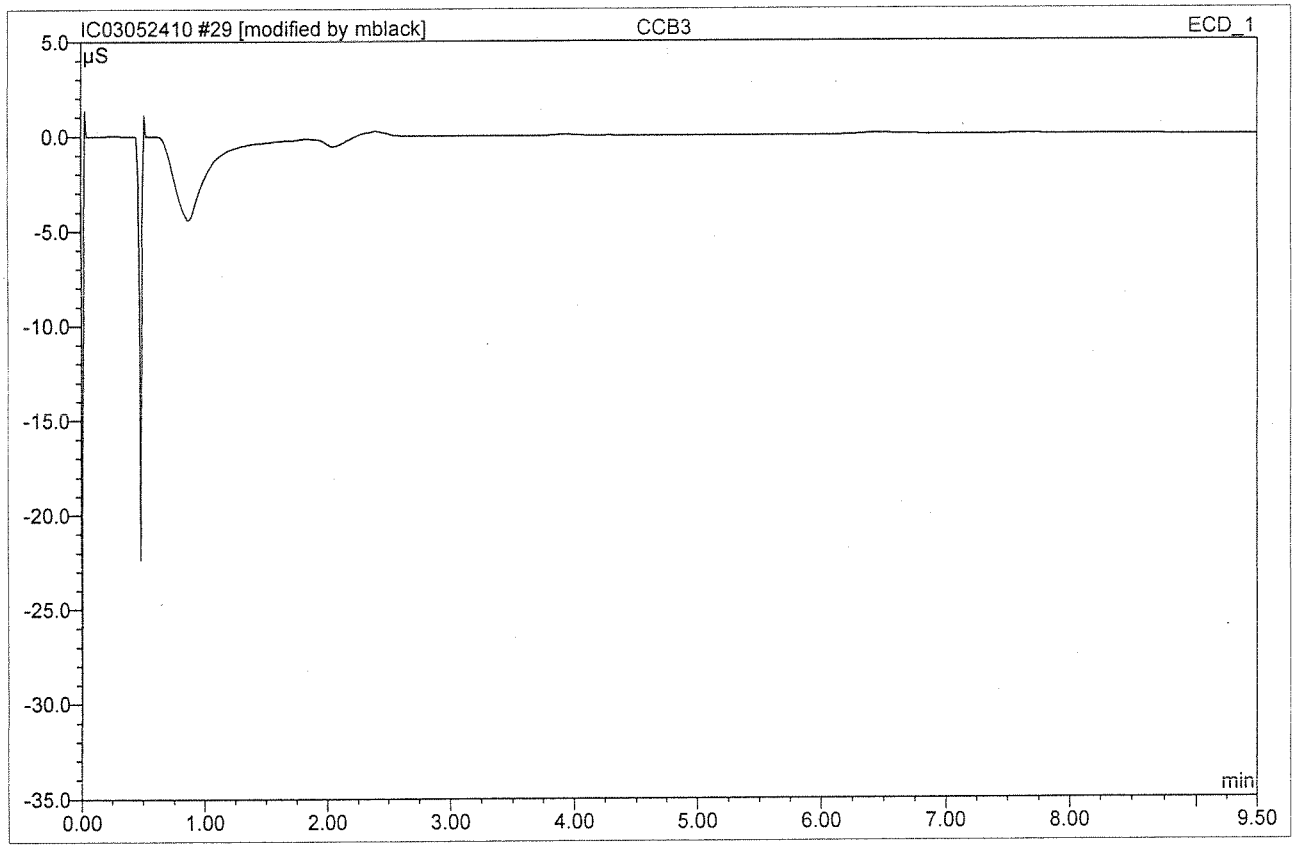


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	69.517	8.950	25.22	4.677	BMB
2	2.45	n.a.	69.051	7.835	22.08	n.a.	BMb
3	2.93	Nitrite	41.064	5.738	16.17	1.987	bMb
4	3.63	Bromide	6.839	1.026	2.89	1.915	bMB
5	4.23	Nitrate	40.206	7.140	20.12	1.938	BMB
6	7.60	Sulfate	16.263	4.798	13.52	4.876	BMB
Total:			242.940	35.487	100.00	15.393	

29 CCB3

CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 13:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

After initials

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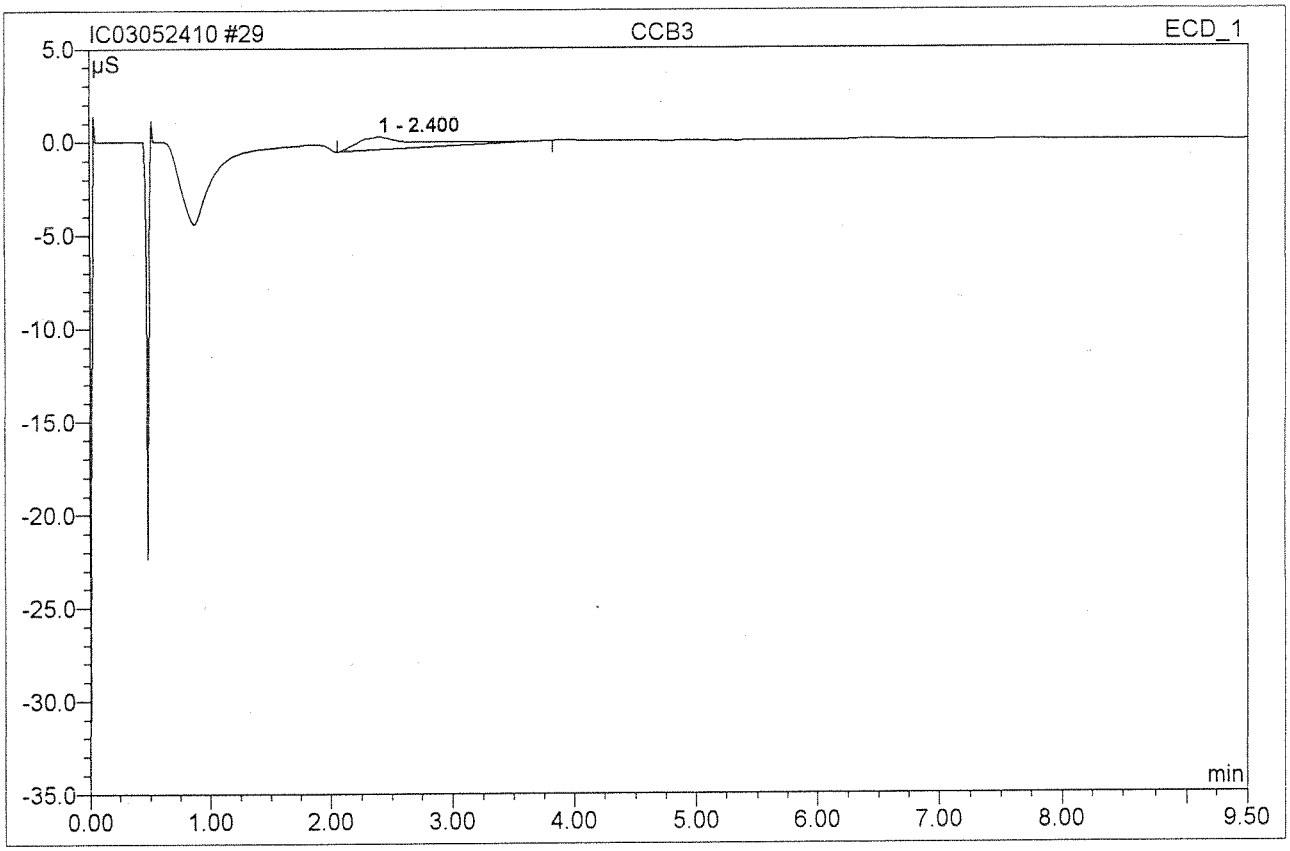
29 CCB3

CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 13:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

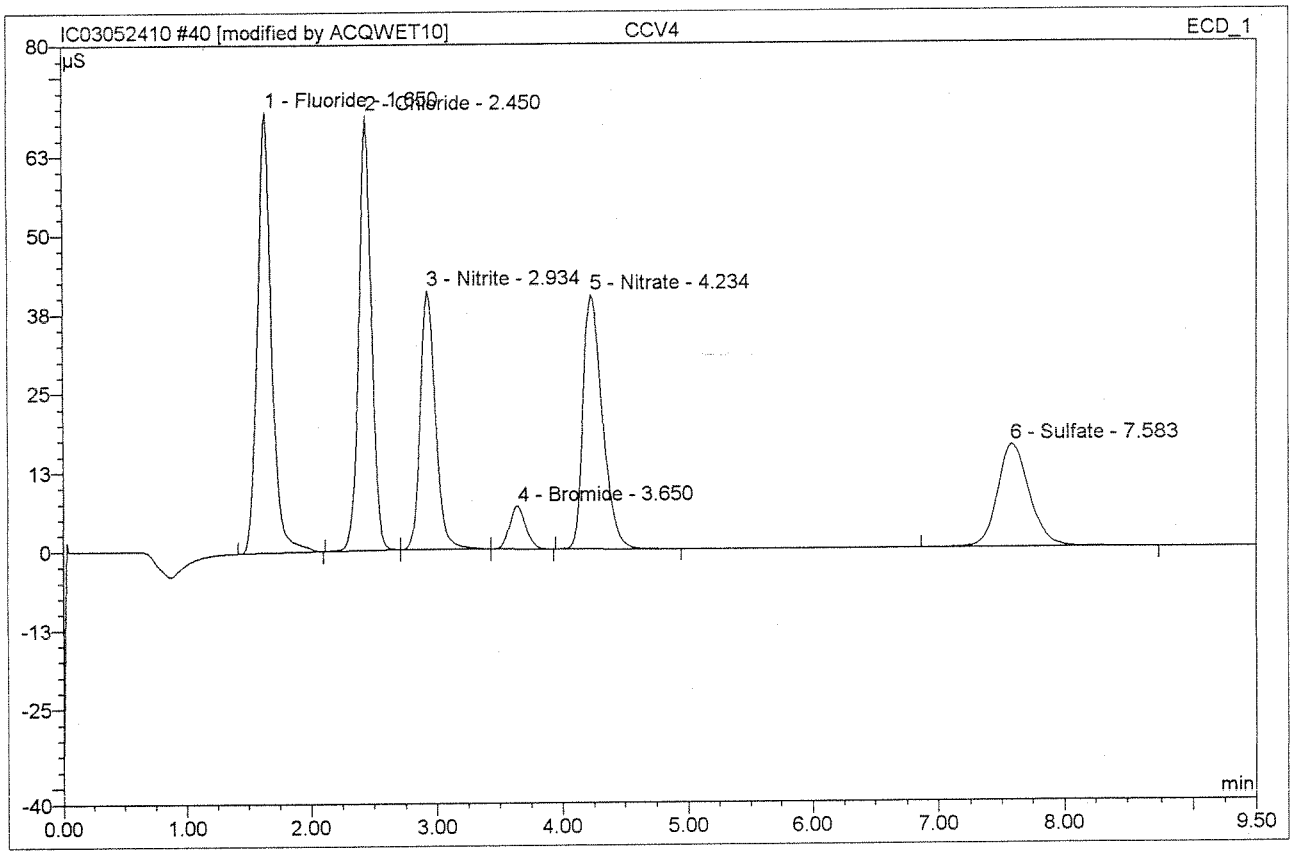


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.40	n.a.	0.697	0.451	100.00	n.a.	BMB
Total:			0.697	0.451	100.00	0.000	

40 CCV4

CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 16:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	69.729	9.205	25.64	4.811 96?	BMB*
2	2.45	Chloride	68.721	7.953	22.15	5.100 102?	BMb
3	2.93	Nitrite	40.861	5.727	15.95	1.983 99?	bMb
4	3.65	Bromide	6.827	1.026	2.86	1.915 96?	bMB
5	4.23	Nitrate	40.183	7.166	19.96	1.945 98?	BMB
6	7.58	Sulfate	16.299	4.828	13.45	4.906 98?	BMB
Total:			242.620	35.905	100.00	20.660	

MB

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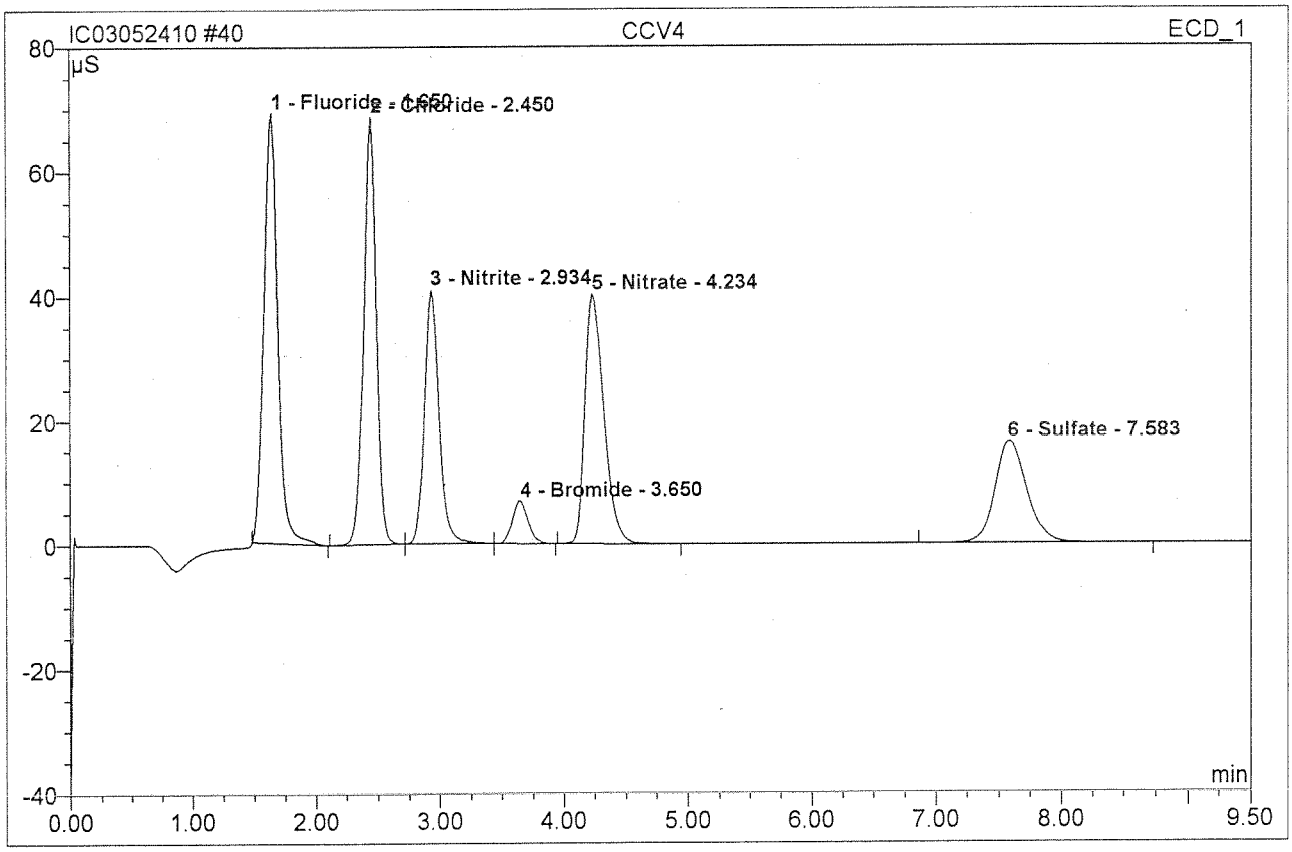
40 CCV4

CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 16:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

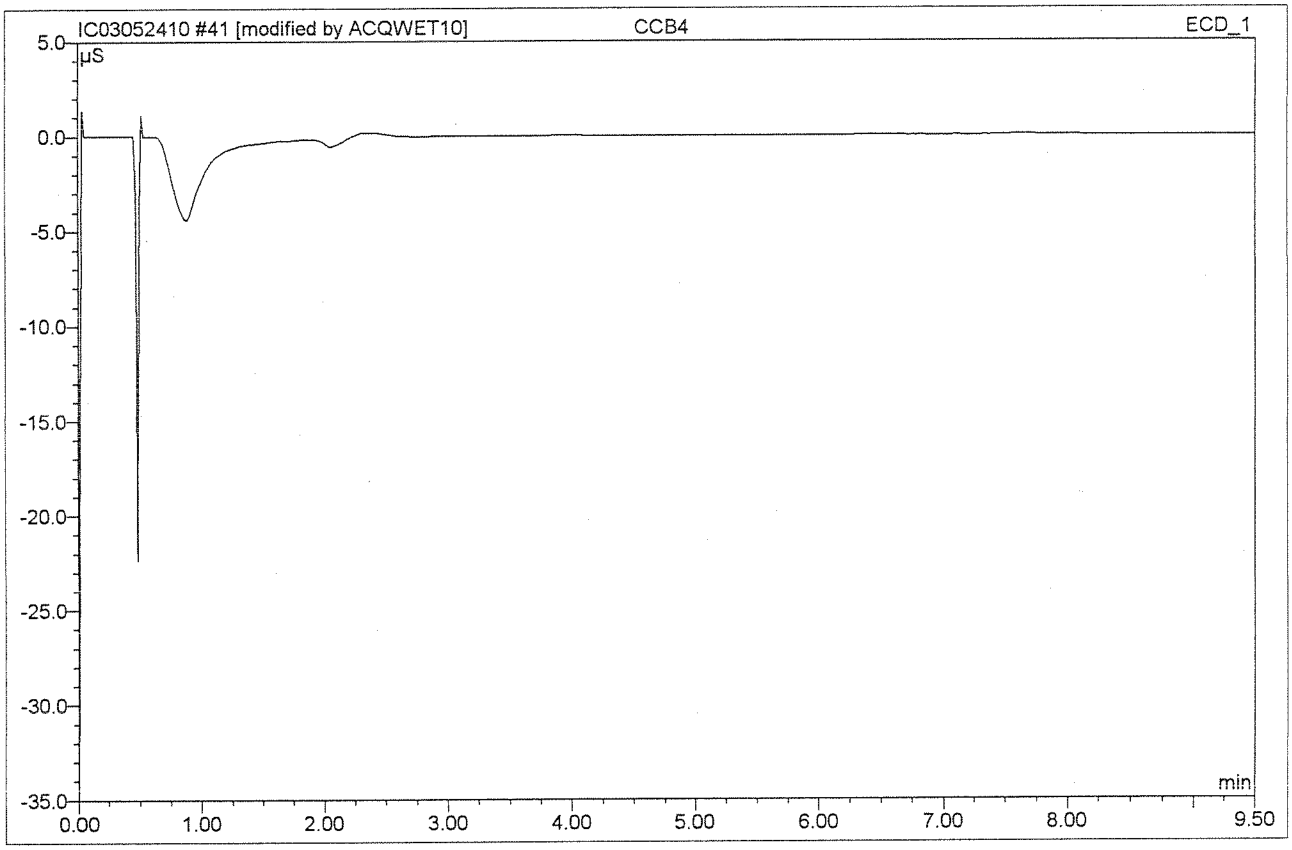


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	69.101	8.927	25.06	4.665	BMB
2	2.45	Chloride	68.721	7.953	22.32	5.100	BMb
3	2.93	Nitrite	40.861	5.727	16.07	1.983	bMb
4	3.65	Bromide	6.827	1.026	2.88	1.915	bMB
5	4.23	Nitrate	40.183	7.166	20.12	1.945	BMB
6	7.58	Sulfate	16.299	4.828	13.55	4.906	BMB
Total:			241.992	35.627	100.00	20.515	

41 CCB4

CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 16:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

After Initials (MB)

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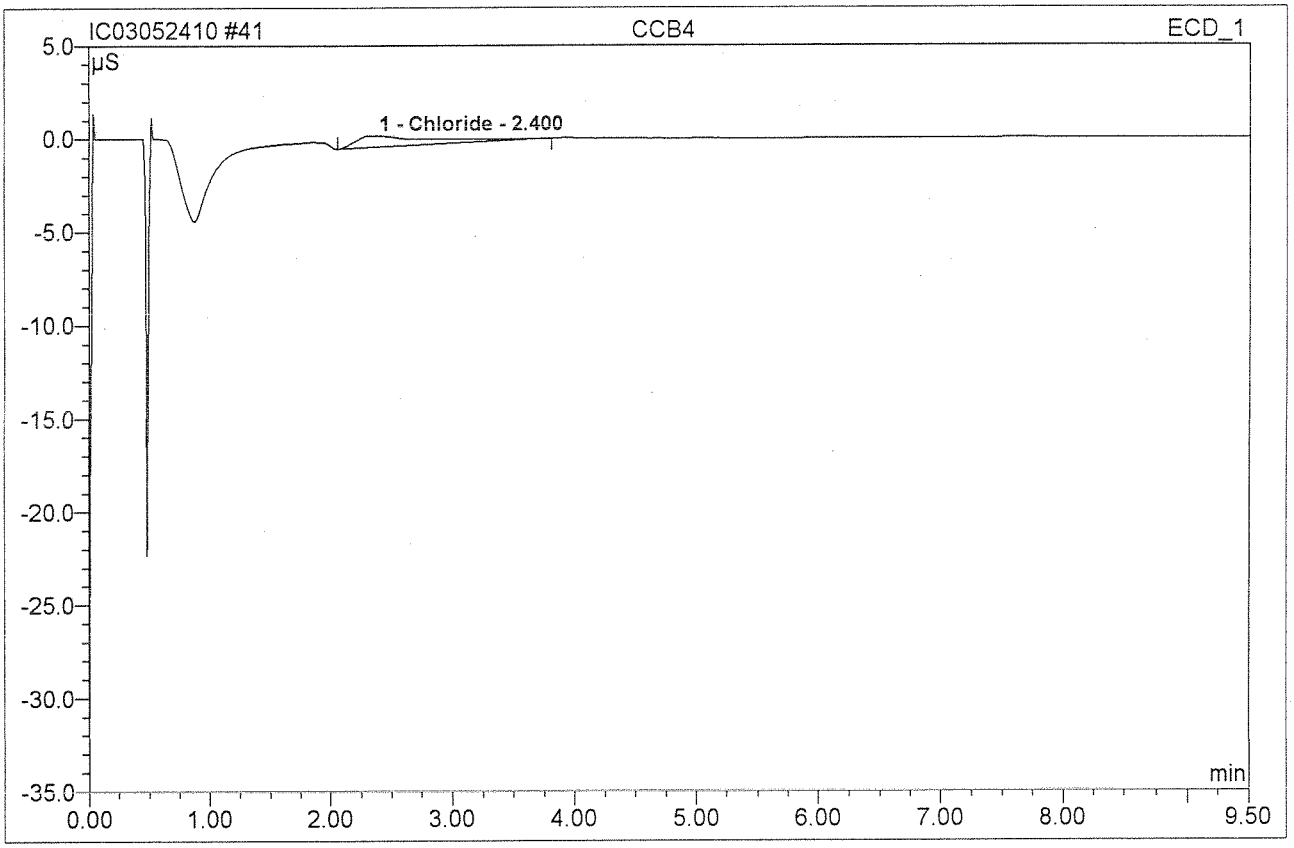
41 CCB4

CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 16:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

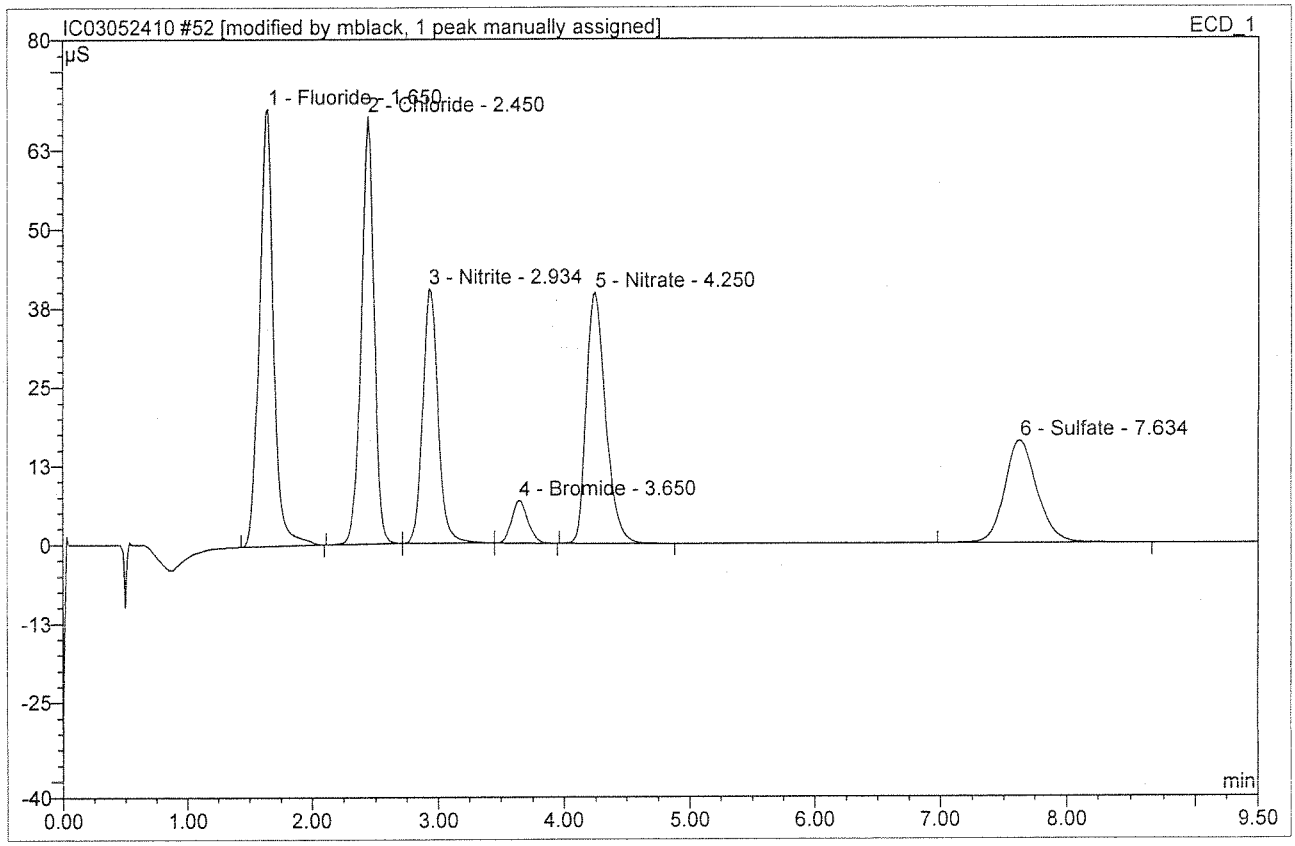


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.40	Chloride	0.612	0.446	100.00	0.286	BMB
Total:			0.612	0.446	100.00	0.286	

52 CCV5

CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**51**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 18:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	69.325	9.138	25.54	4.776 96%	BMB*
2	2.45	Chloride	67.776	7.929	22.16	5.084 102%	BMb^
3	2.93	Nitrite	40.297	5.713	15.97	1.979 99%	bMb
4	3.65	Bromide	6.856	1.023	2.86	1.910 96%	bMB
5	4.25	Nitrate	39.847	7.149	19.98	1.941 97%	BMB
6	7.63	Sulfate	16.279	4.826	13.49	4.904 98%	BMB
Total:			240.380	35.778	100.00	20.593	

After Initials MB

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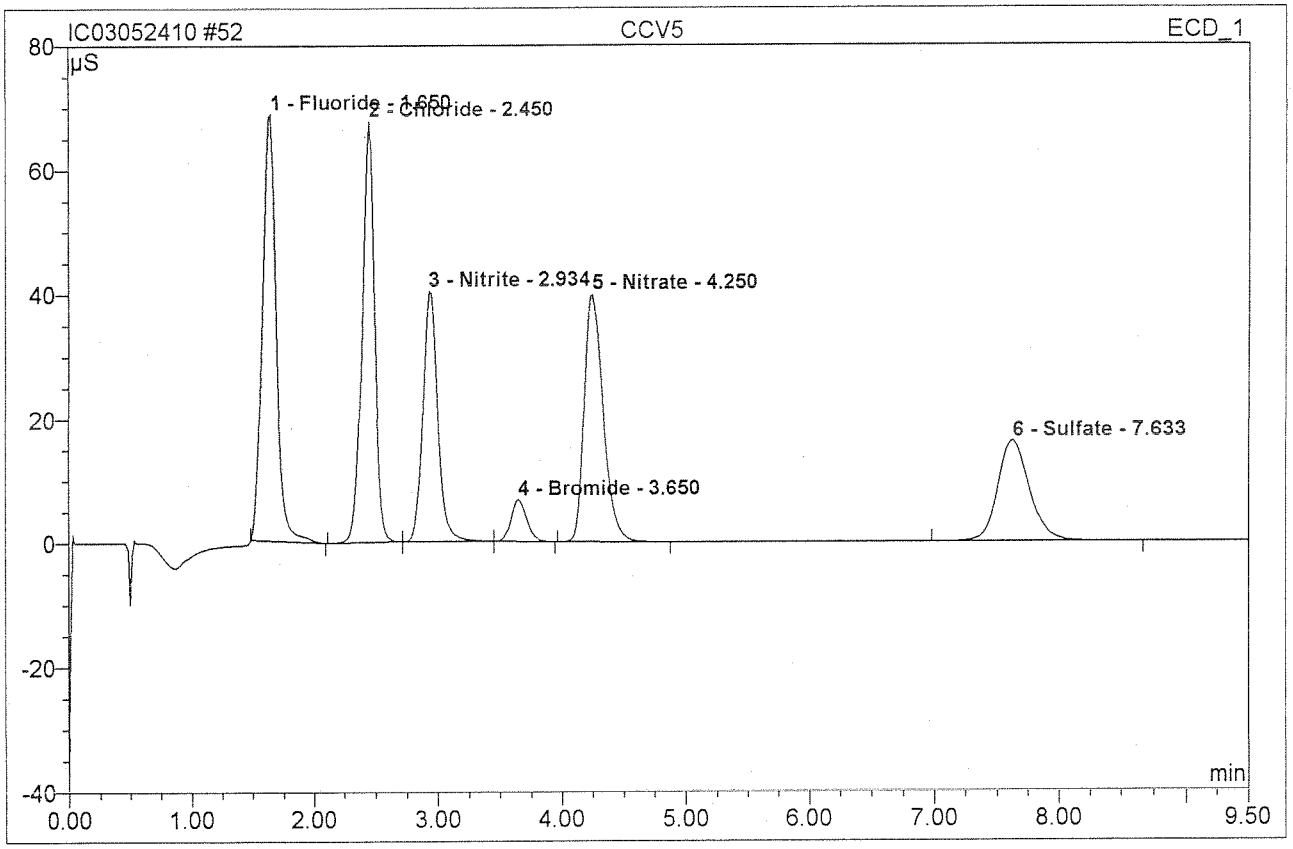
52 CCV5

CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**51**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 18:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

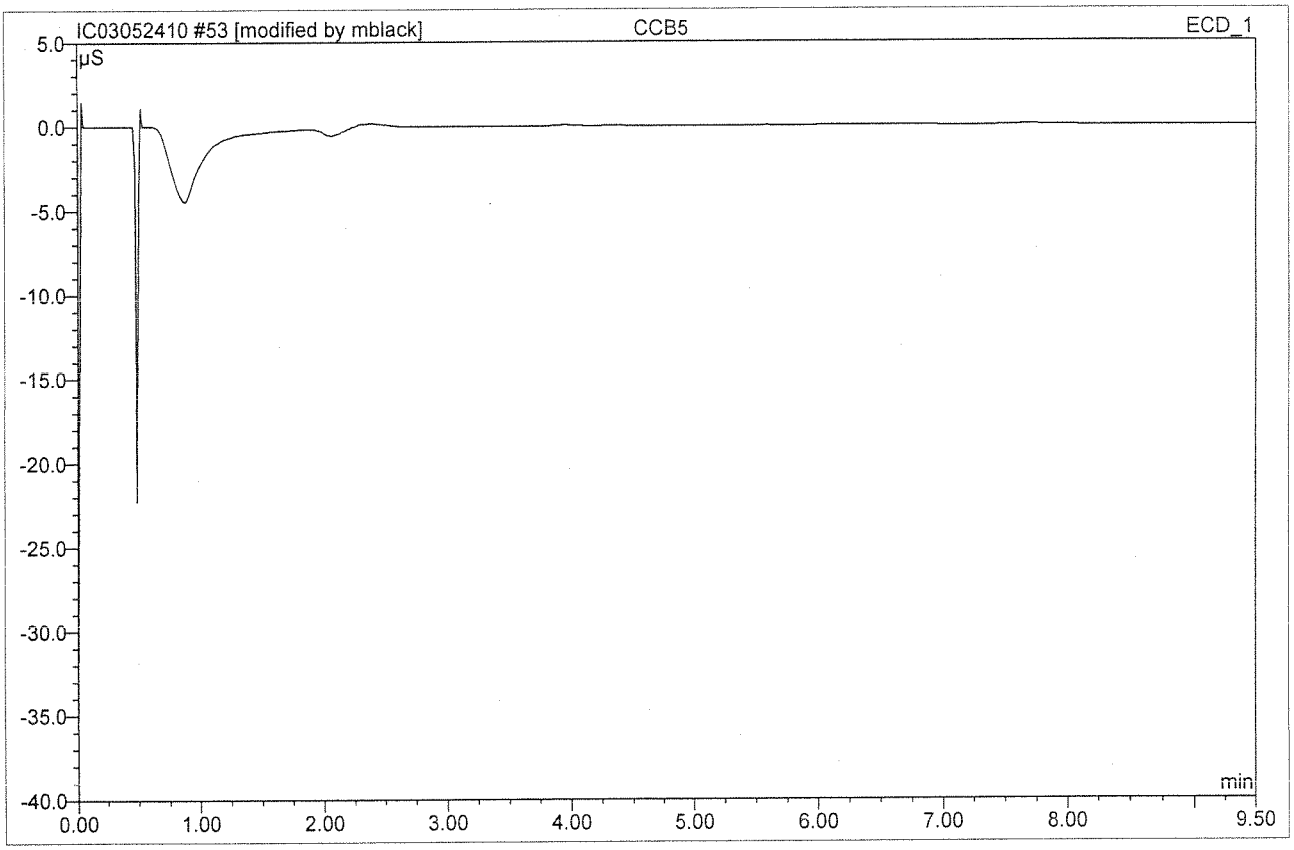


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	68.706	8.864	24.97	4.633	BMB
2	2.45	Chloride	67.776	7.929	22.33	5.084	BMb
3	2.93	Nitrite	40.297	5.713	16.09	1.979	bMb
4	3.65	Bromide	6.856	1.023	2.88	1.910	bMB
5	4.25	Nitrate	39.847	7.149	20.14	1.941	BMB
6	7.63	Sulfate	16.279	4.826	13.59	4.904	BMB
Total:			239.761	35.504	100.00	20.450	

53 CCB5

CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**52**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 18:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

After Initials

MAY 25 2010

5/25/10

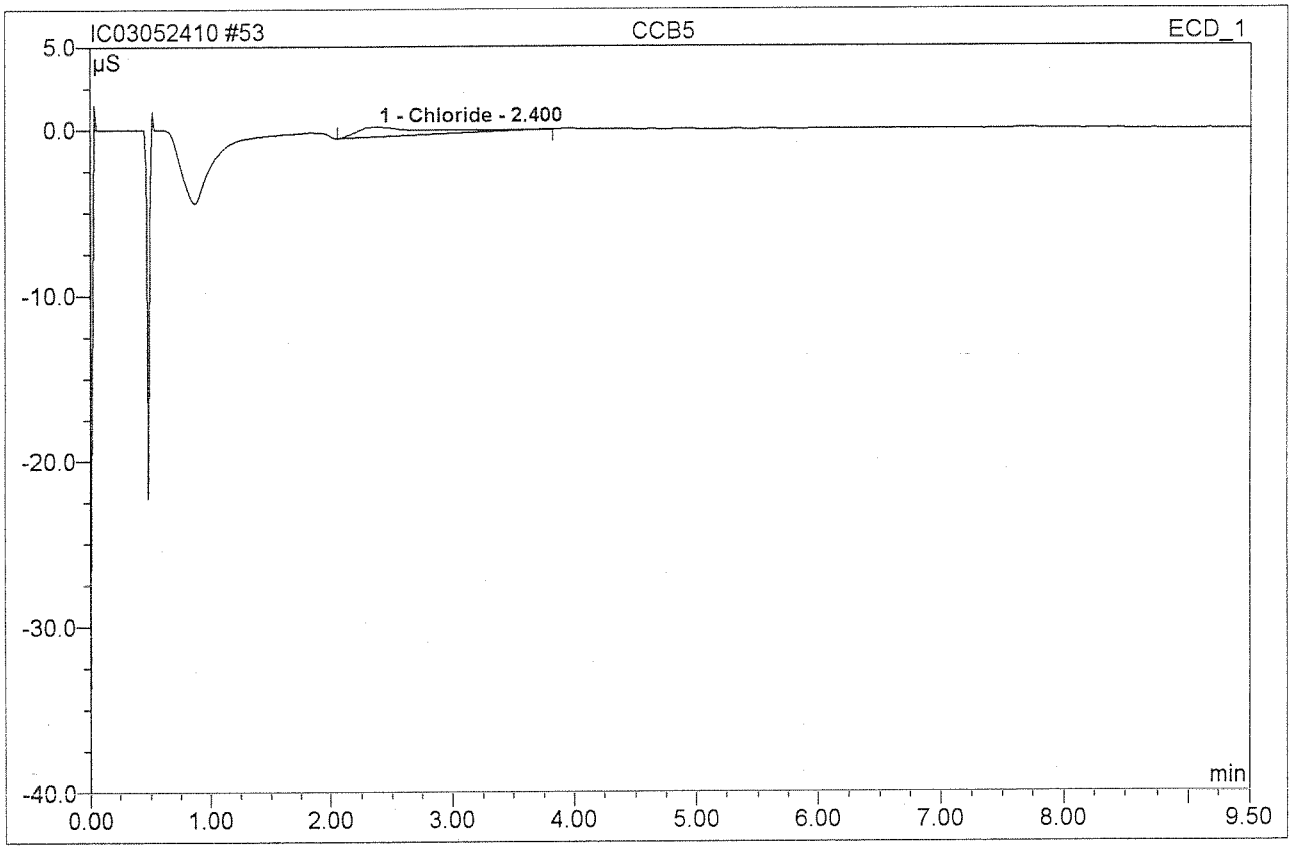
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

53 CCB5

CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**52**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 18:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.40	Chloride	0.605	0.439	100.00	0.282	BMB
Total:			0.605	0.439	100.00	0.282	

Before

MAY 2 5 2010

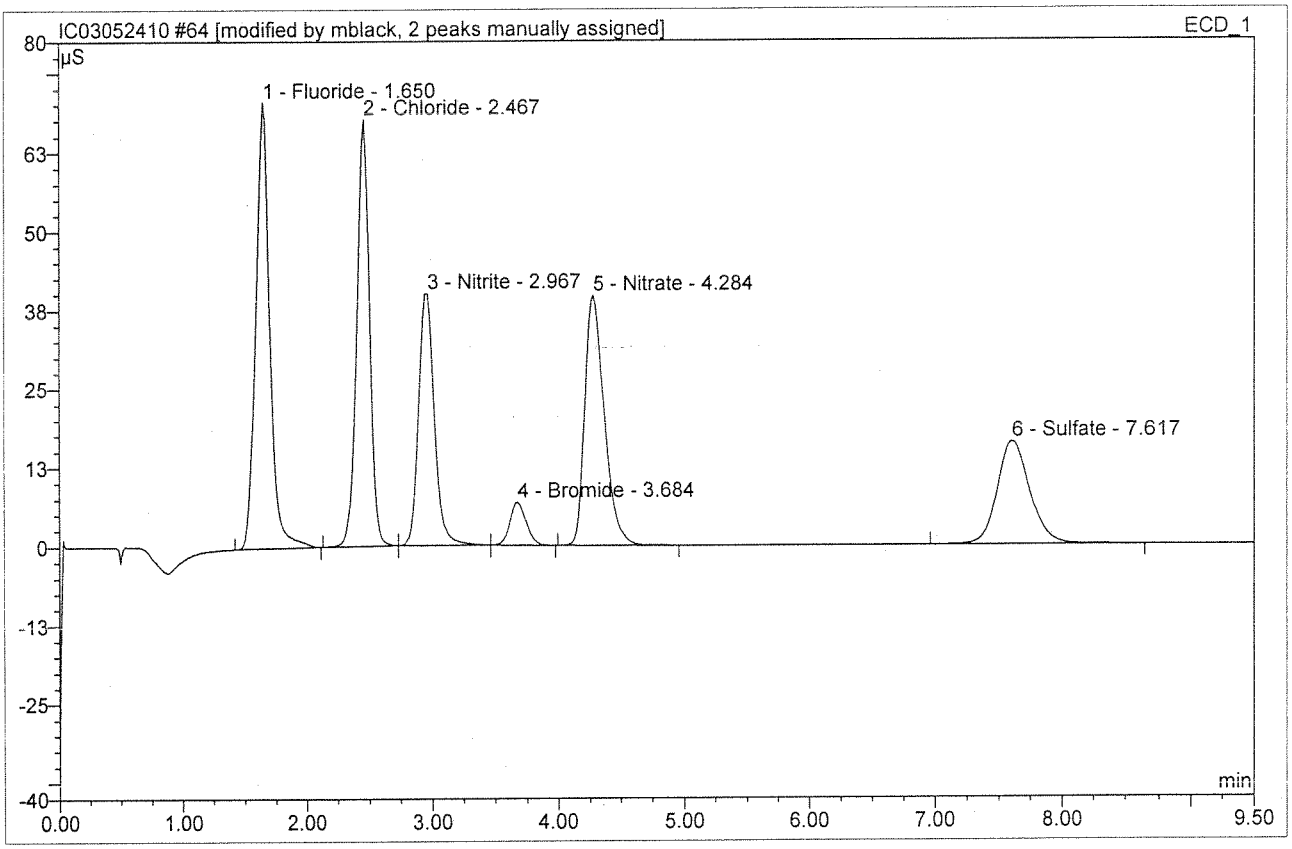
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

64 CCV6

CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**63**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 20:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	70.694	9.259	25.75	4.839	BMB*
2	2.47	Chloride	67.675	7.901	21.97	5.066	BMb
3	2.97	Nitrite	39.920	5.747	15.98	1.990	bMb^
4	3.68	Bromide	6.822	1.030	2.87	1.923	bMB
5	4.28	Nitrate	39.634	7.187	19.99	1.951	BMB^
6	7.62	Sulfate	16.319	4.832	13.44	4.910	BMB
Total:			241.065	35.956	100.00	20.679	

After Initials

MAY 25 2010

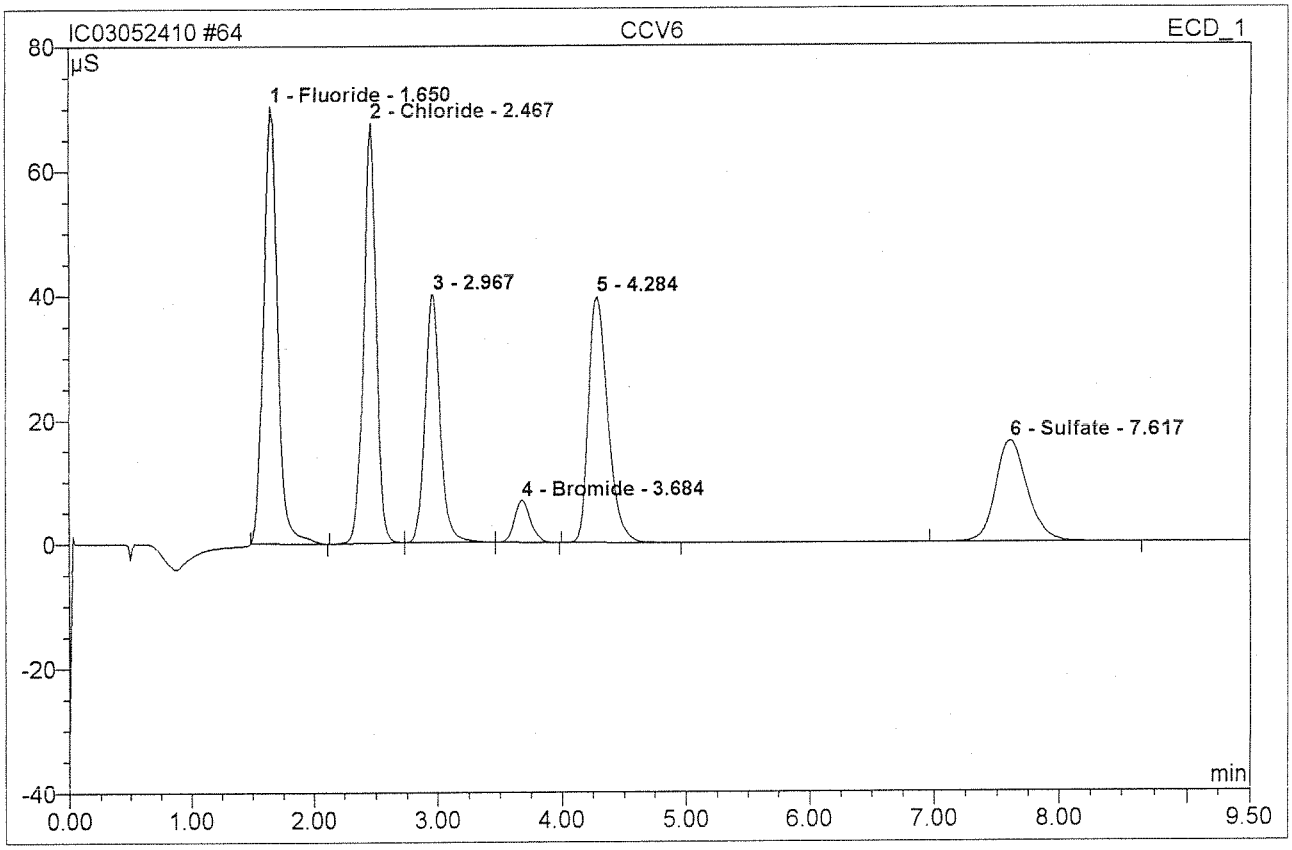
5/25/10

default/Integration

64 CCV6

CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**63**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 20:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	70.386	9.120	25.46	4.766	BMB
2	2.47	Chloride	67.675	7.901	22.06	5.066	BMb
3	2.97	n.a.	39.920	5.747	16.05	n.a.	bMb
4	3.68	Bromide	6.822	1.030	2.88	1.923	bMB
5	4.28	n.a.	39.634	7.187	20.07	n.a.	BMB
6	7.62	Sulfate	16.319	4.832	13.49	4.910	BMB
Total:			240.756	35.817	100.00	16.665	

Before

MAY 25 2010

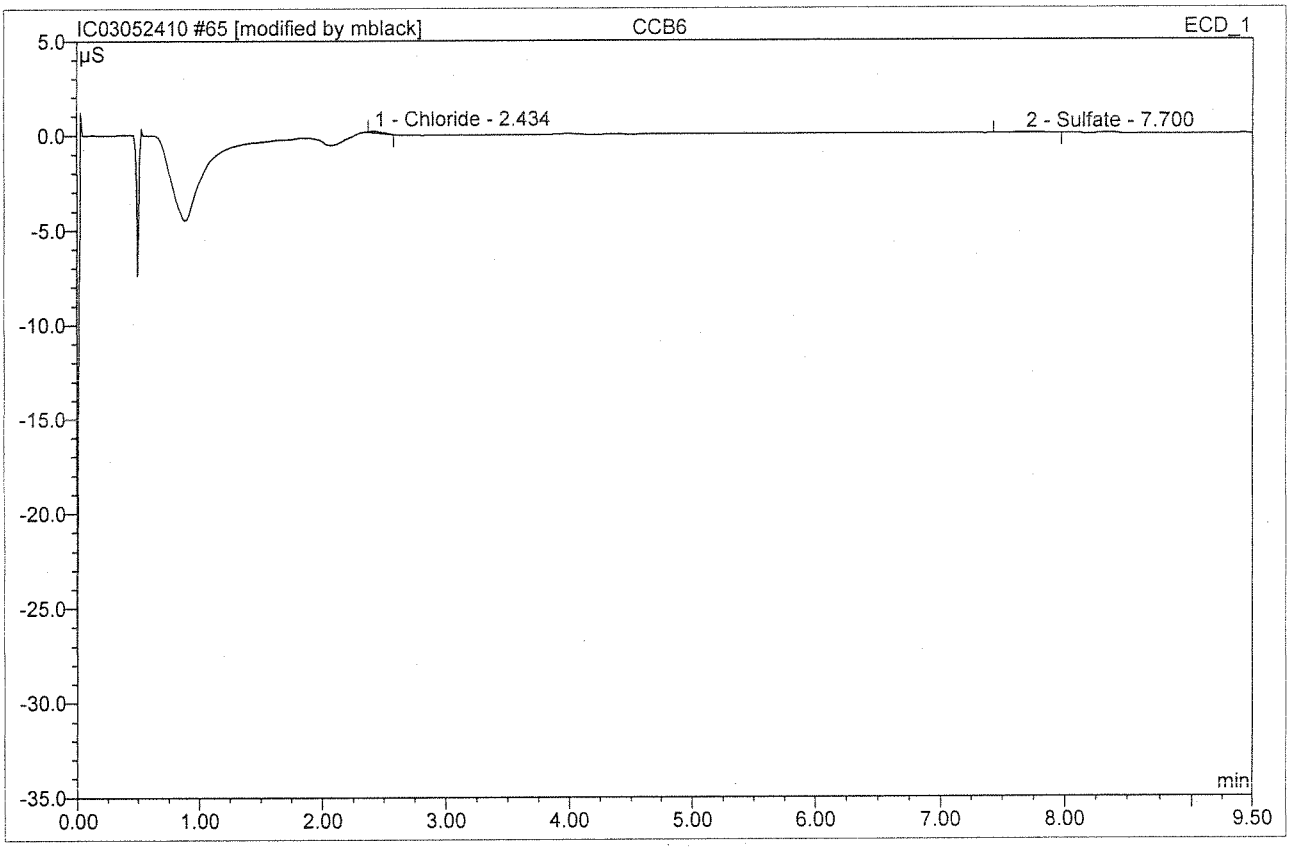
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

65 CCB6

CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**64**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 21:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.43	Chloride 20.20	0.081	0.009	39.97	0.006	BMB*
2	7.70	Sulfate 20.20	0.050	0.014	60.03	0.014	BMB*
Total:			0.131	0.023	100.00	0.019	

After Initials MB

MAY 25 2010

Strong Peak/Pairs not Found
Calculation Incorrect

JM 5/25/10

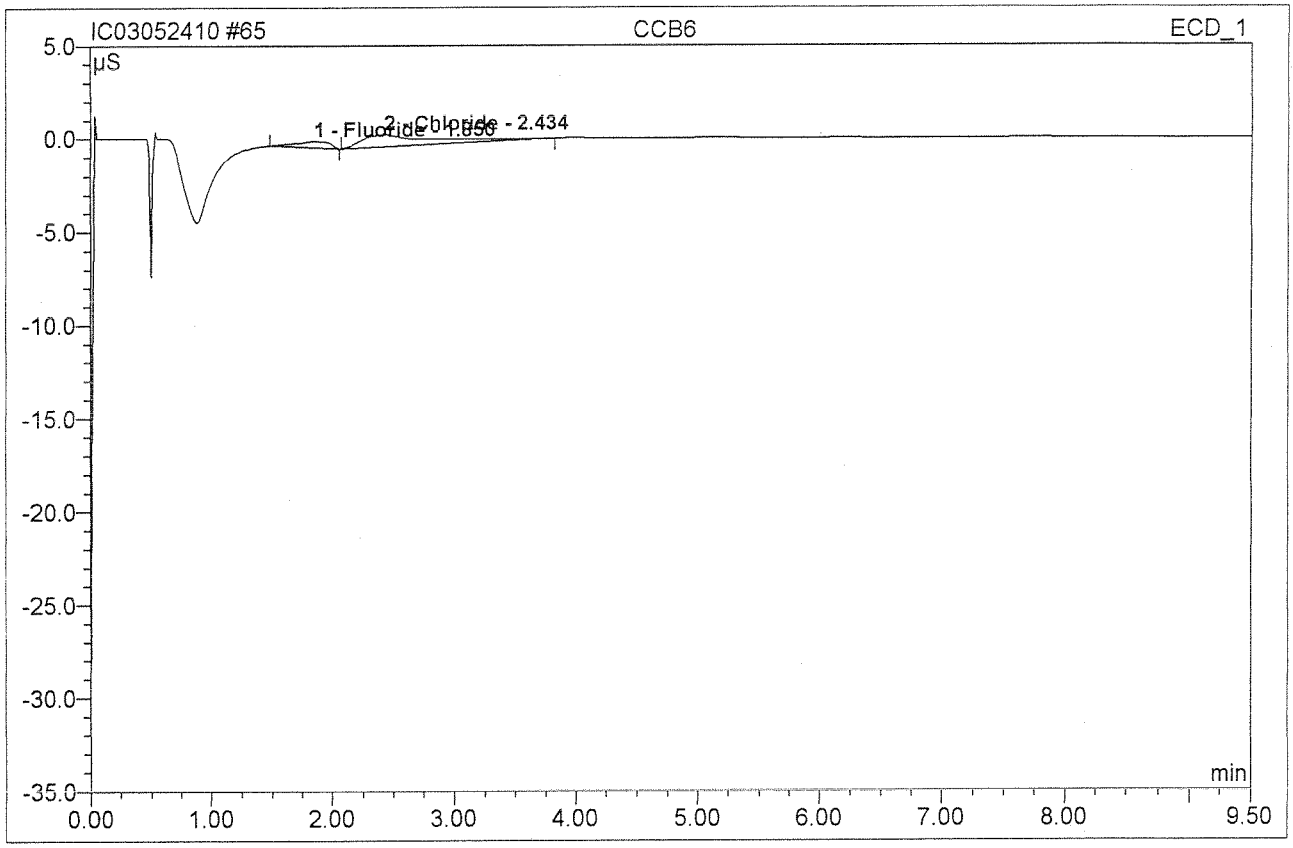
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

65 CCB6

CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**64**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/24/2010 21:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.85	Fluoride	0.336	0.114	20.67	0.060	BMB
2	2.43	Chloride	0.649	0.438	79.33	0.281	BMB
Total:			0.985	0.552	100.00	0.340	

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

Sequence: IC03042610 **Date: 04/26/10**

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9846	1.9134
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9661	1.5595
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9925	2.8873
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9591	0.5358
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9043	3.6839
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9690	0.9841

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

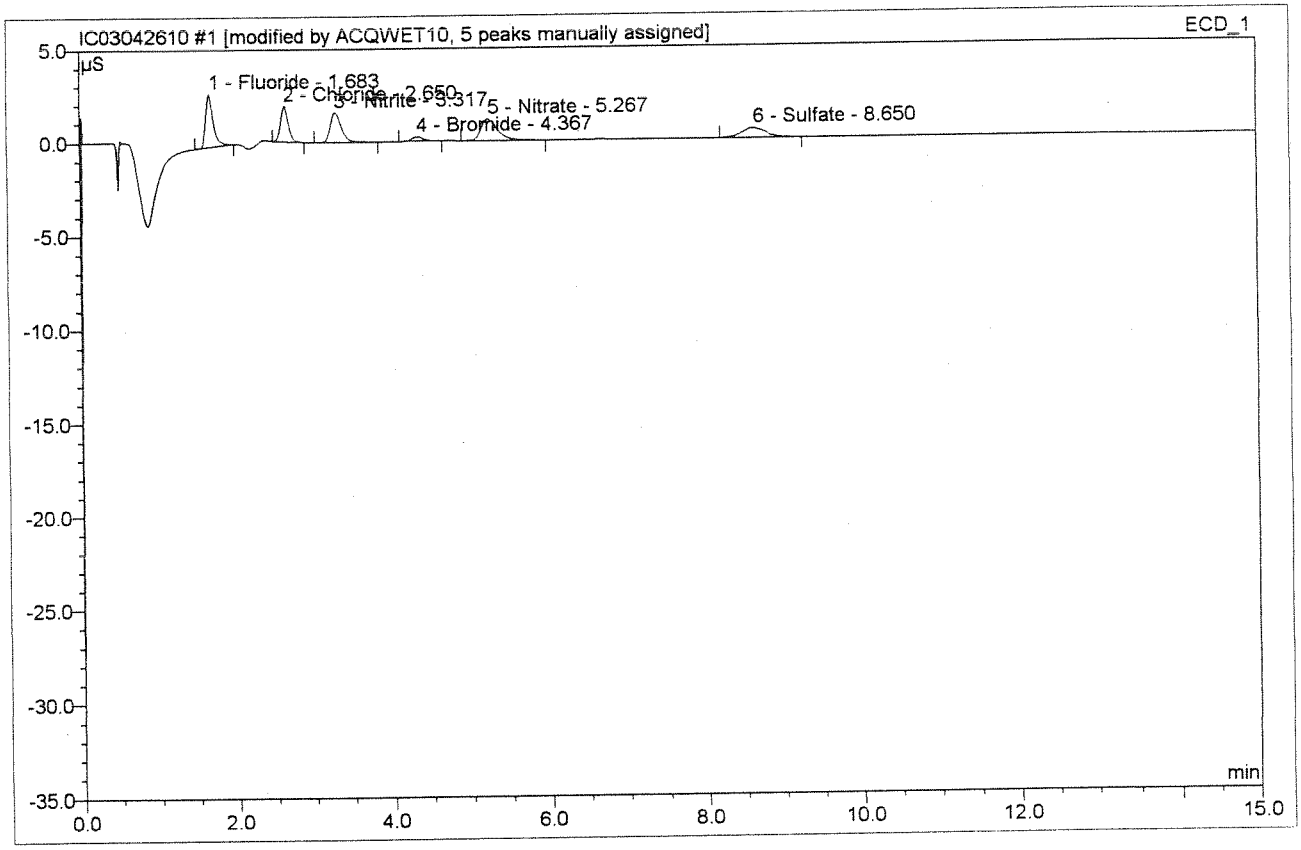
Sequence: IC03042610 **Date: 04/26/10**

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9846	1.9134
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9661	1.5595
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9925	2.8873
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9591	0.5358
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9043	3.6839
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9690	0.9841

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	2.860	0.324	24.73	0.169	BMB*
2	2.65	Chloride	1.892	0.229	17.47	0.147	BMB^
3	3.32	Nitrite	1.586	0.259	19.78	0.090	BMB^
4	4.37	Bromide	0.244	0.043	3.25	0.080	BMB*^
5	5.27	Nitrate	1.144	0.279	21.26	0.076	BMB^
6	8.65	Sulfate	0.507	0.177	13.51	0.180	BMB^
Total:			8.233	1.311	100.00	0.742	

After Initials MB

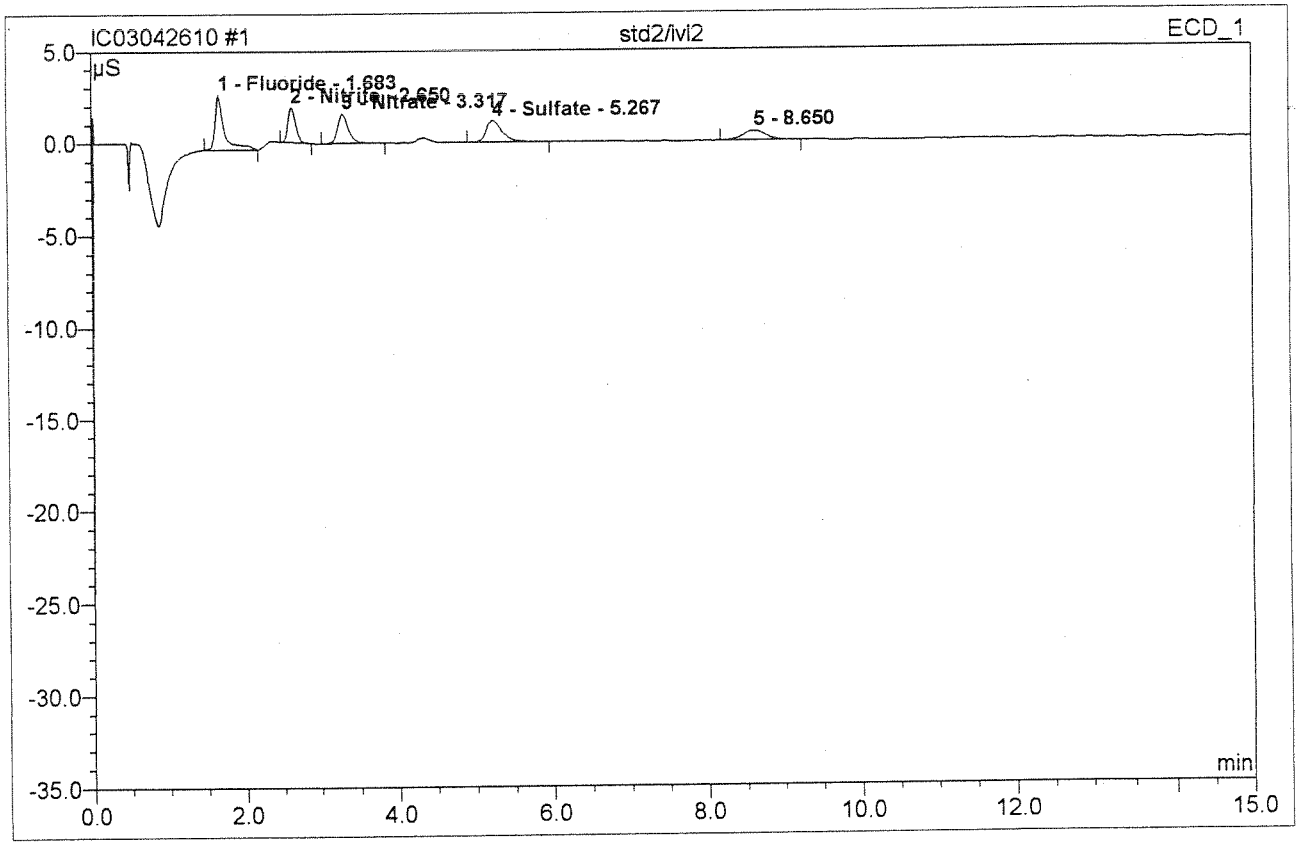
APR 2 5 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**

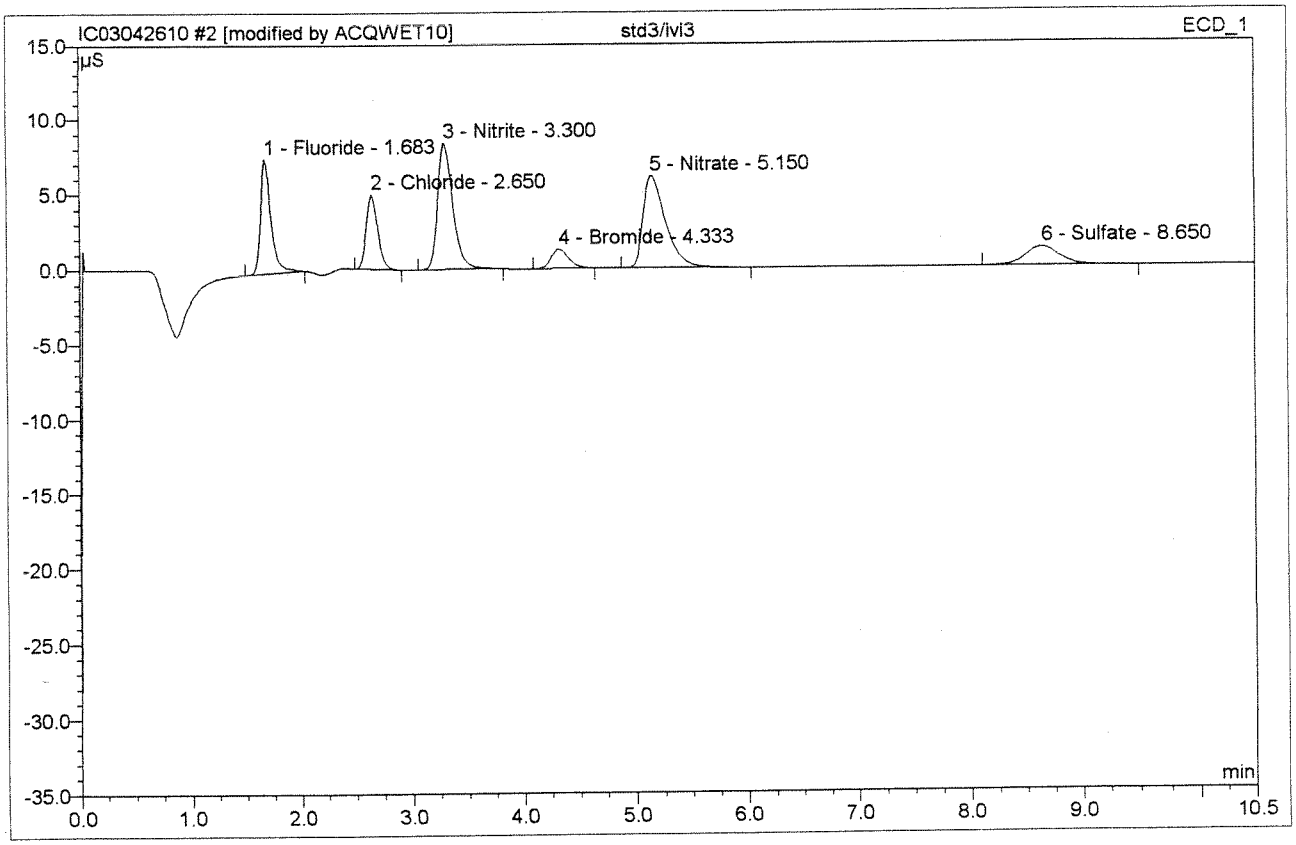


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	2.953	0.421	30.83	0.200	BMB
2	2.65	Nitrite	1.892	0.229	16.78	0.100	BMB
3	3.32	Nitrate	1.586	0.259	19.00	0.100	BMB
4	5.27	Sulfate	1.144	0.279	20.42	0.200	BMB
5	8.65	n.a.	0.507	0.177	12.97	n.a.	BMB
Total:			8.081	1.366	100.00	0.600	

default/Integration

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	7.622	0.844	17.37	0.441	BMB*
2	2.65	Chloride	4.937	0.589	12.12	0.378	BMB
3	3.30	Nitrite	8.365	1.329	27.34	0.460	BMB*
4	4.33	Bromide	1.271	0.229	4.72	0.428	BMB*
5	5.15	Nitrate	6.087	1.425	29.30	0.387	BMB
6	8.65	Sulfate	1.253	0.445	9.16	0.452	BMB
Total:			29.536	4.862	100.00	2.547	

Analyst MB

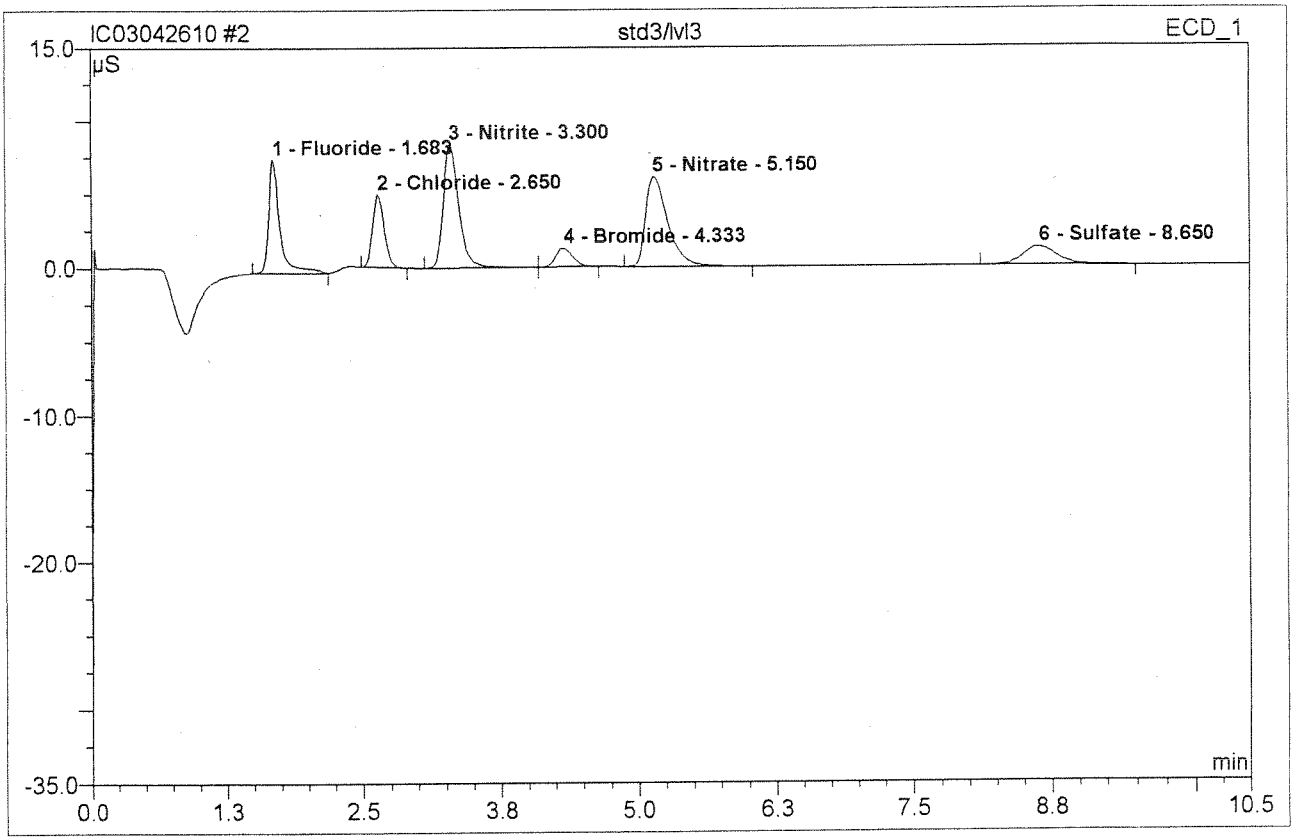
APR 2 5 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

2 std3/lvl3

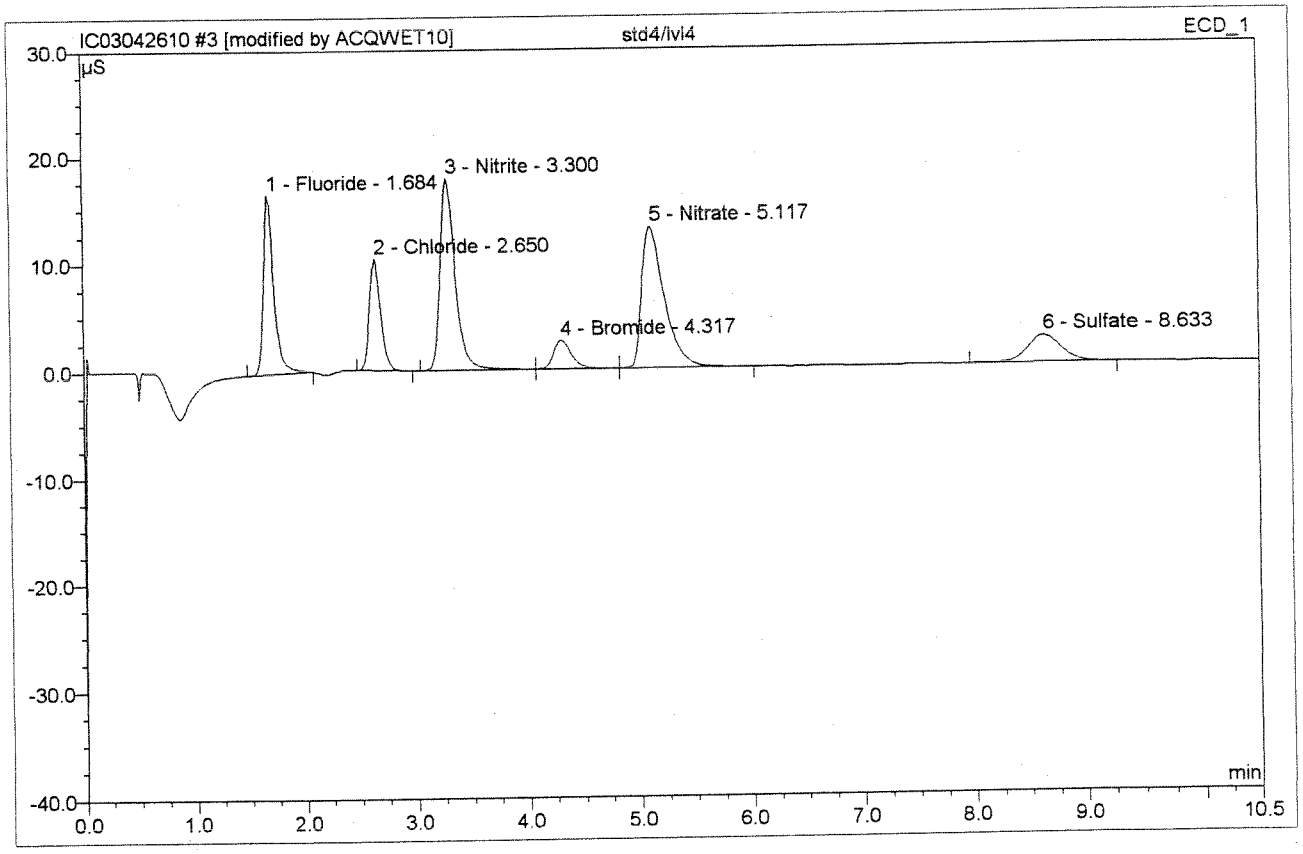
Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	7.720	0.949	19.04	0.510	BMB
2	2.65	Chloride	4.937	0.589	11.82	0.502	BMB
3	3.30	Nitrite	8.377	1.347	27.02	0.501	BMB
4	4.33	Bromide	1.271	0.229	4.60	0.501	bMB
5	5.15	Nitrate	6.087	1.425	28.59	0.500	BMB
6	8.65	Sulfate	1.253	0.445	8.93	0.500	BMB
Total:			29.644	4.984	100.00	3.015	

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	16.676	1.811	17.64	0.947	BMB*
2	2.65	Chloride	10.365	1.223	11.91	0.784	BMB
3	3.30	Nitrite	17.874	2.814	27.40	0.975	BMb
4	4.32	Bromide	2.661	0.487	4.74	0.908	bMb
5	5.12	Nitrate	13.149	3.046	29.66	0.827	bMB
6	8.63	Sulfate	2.522	0.888	8.65	0.903	BMB
Total:			63.248	10.270	100.00	5.343	

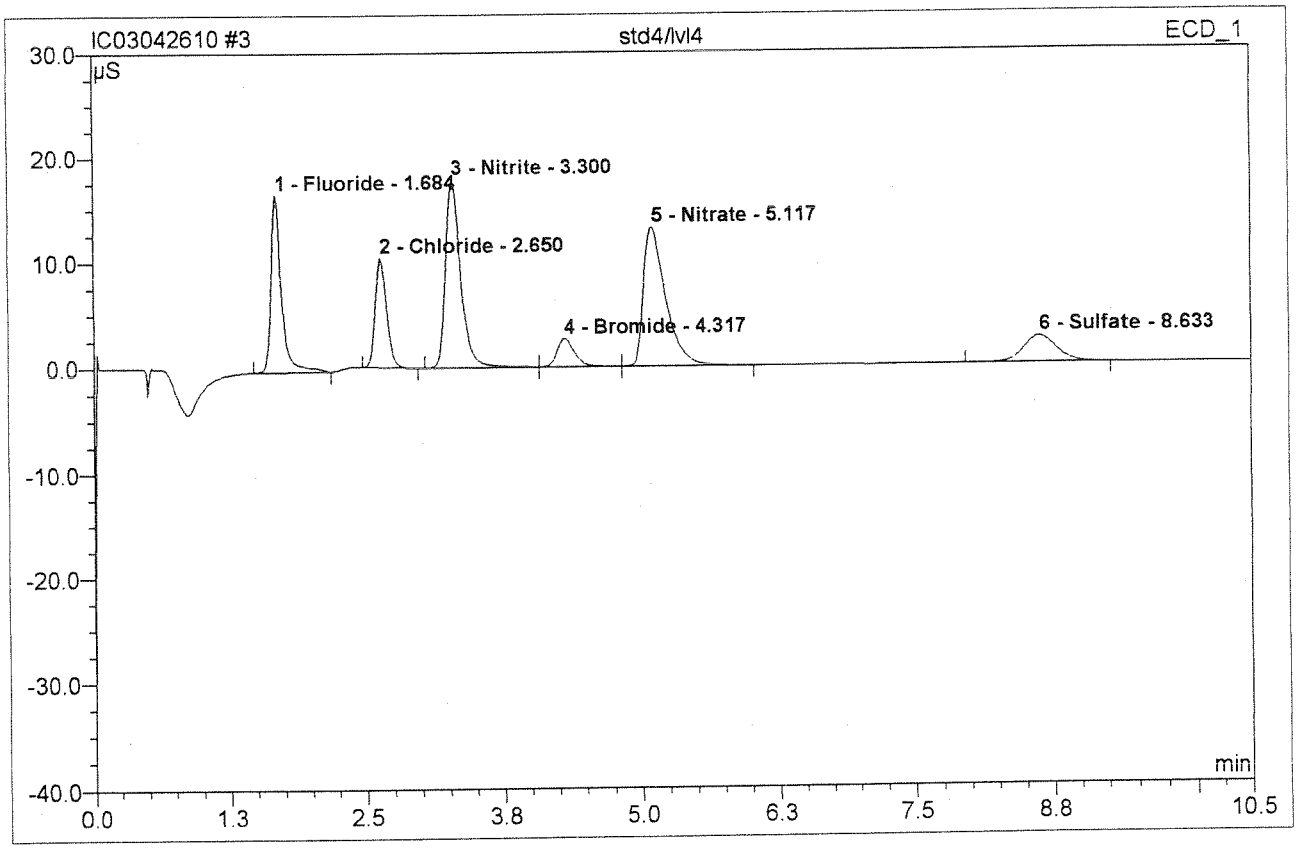
After Initials

APR 2 6 2010

default/Integration

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

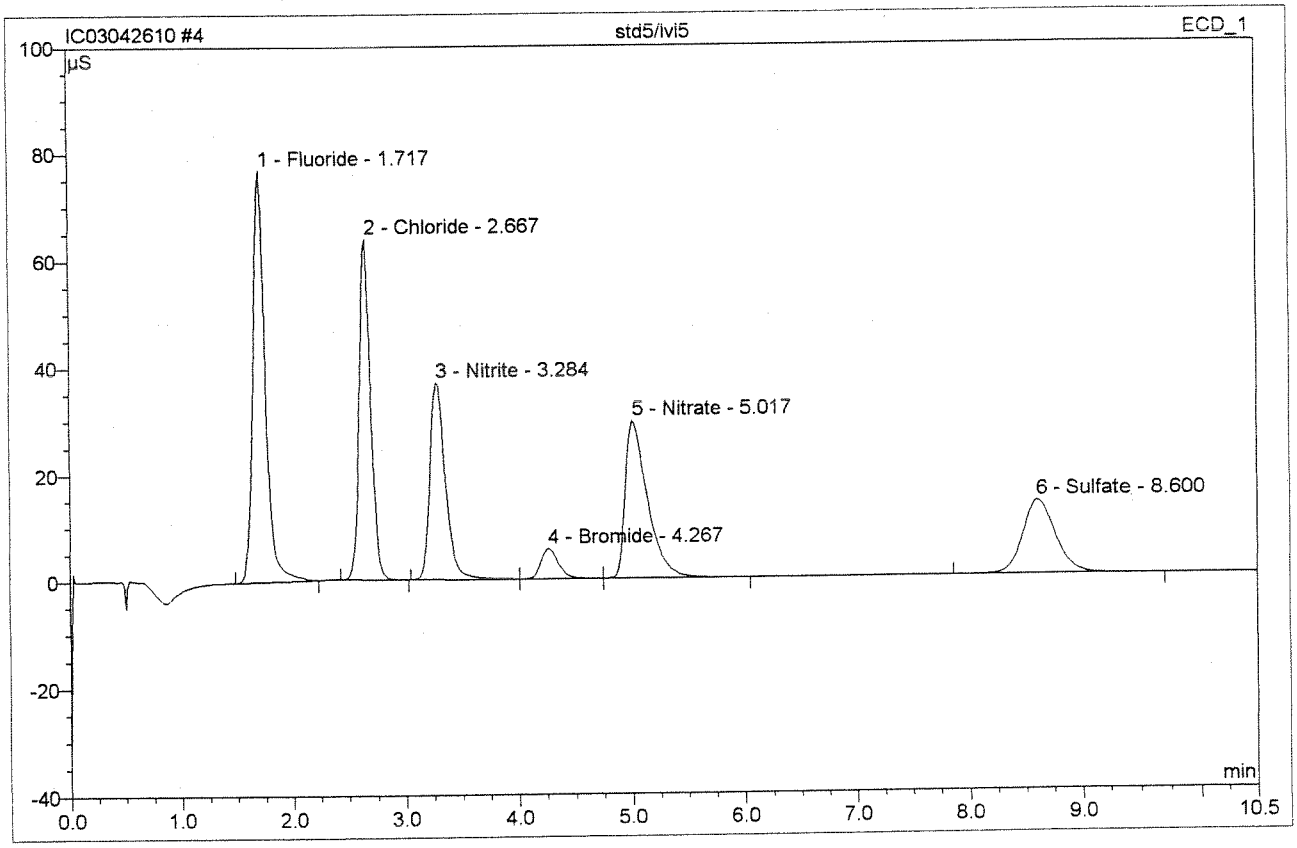


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	16.774	1.915	18.46	1.007	BMB
2	2.65	Chloride	10.365	1.223	11.79	1.009	BMB
3	3.30	Nitrite	17.874	2.814	27.13	1.009	BMb
4	4.32	Bromide	2.661	0.487	4.69	1.012	bMb
5	5.12	Nitrate	13.149	3.046	29.36	1.014	bMB
6	8.63	Sulfate	2.522	0.888	8.56	1.000	BMB
Total:			63.346	10.374	100.00	6.051	

default/Integration

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	76.994	9.731	27.38	5.086	BMB
2	2.67	Chloride	63.721	7.472	21.02	4.791	BMB
3	3.28	Nitrite	36.986	5.862	16.49	2.030	BMb
4	4.27	Bromide	5.677	1.007	2.83	1.879	bMb
5	5.02	Nitrate	29.541	6.754	19.00	1.833	bMB
6	8.60	Sulfate	13.884	4.718	13.27	4.795	BMB
Total:			226.803	35.544	100.00	20.415	

After Initials

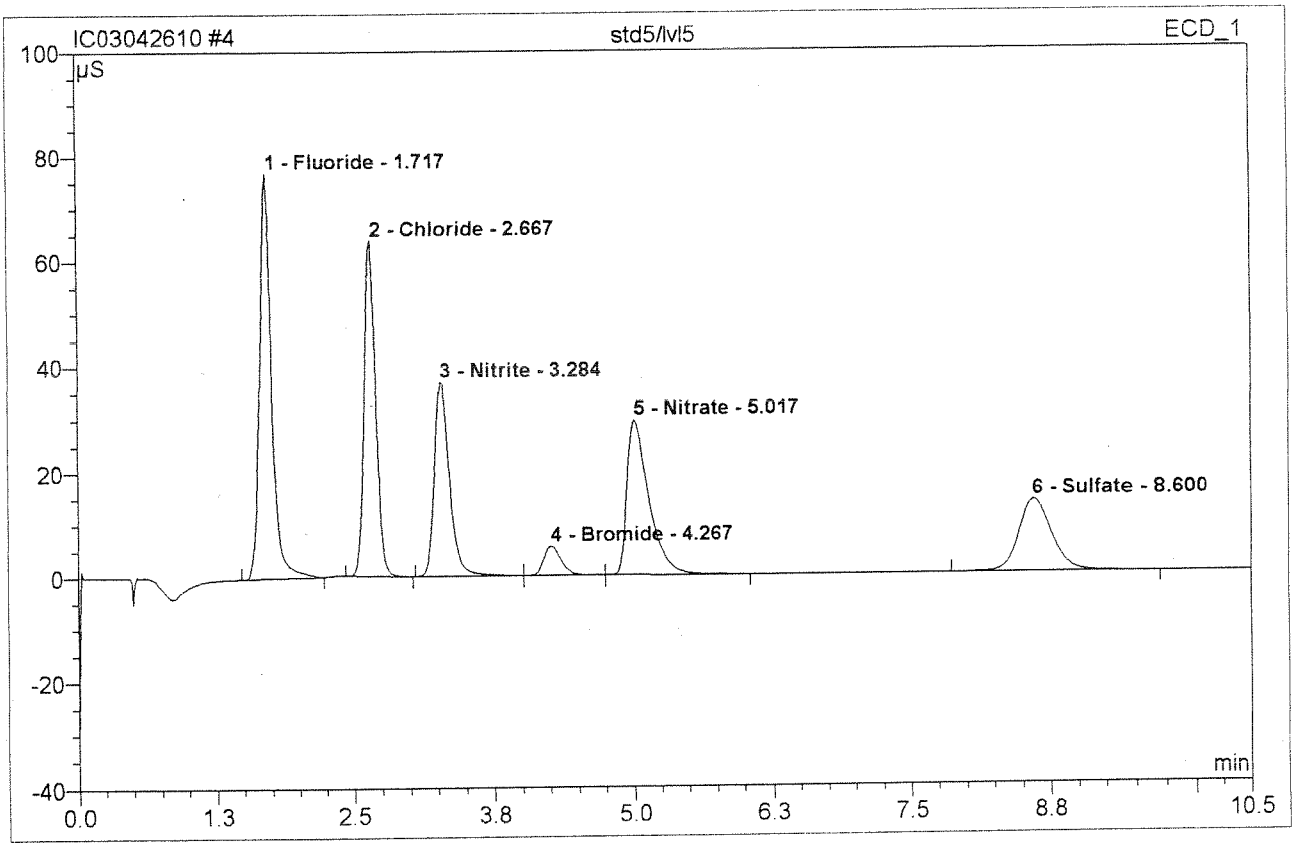
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	76.994	9.731	27.38	5.005	BMB
2	2.67	Chloride	63.721	7.472	21.02	5.047	BMB
3	3.28	Nitrite	36.986	5.862	16.49	2.024	BMb
4	4.27	Bromide	5.677	1.007	2.83	2.022	bMb
5	5.02	Nitrate	29.541	6.754	19.00	2.054	bMB
6	8.60	Sulfate	13.884	4.718	13.27	5.014	BMB
Total:			226.803	35.544	100.00	21.166	

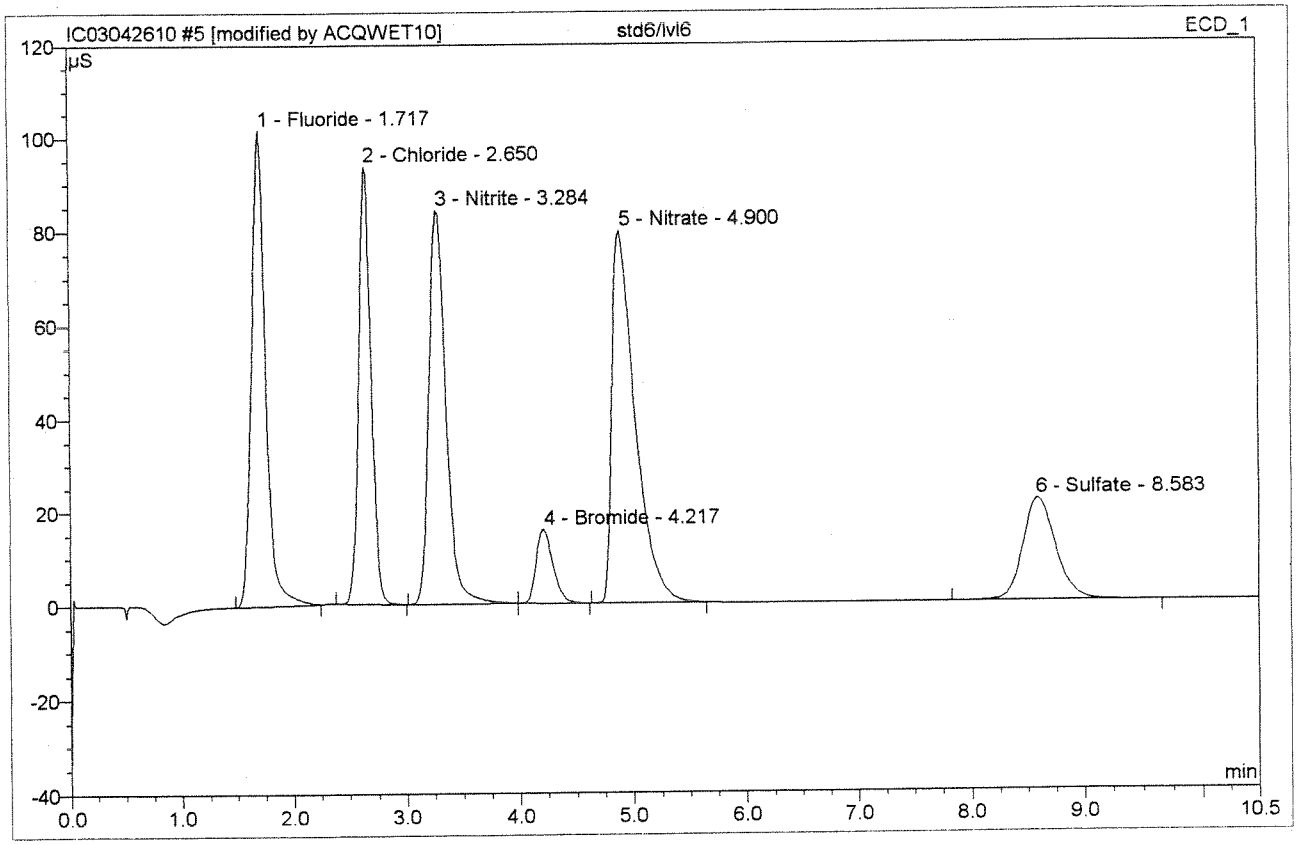
Before

APR 2 6 2010

default/Integration

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	101.686	14.494	20.88	7.575	BMB*
2	2.65	Chloride	93.434	11.601	16.71	7.439	BMB*
3	3.28	Nitrite	84.060	14.428	20.79	4.997	BMb
4	4.22	Bromide	15.785	2.719	3.92	5.074	bMB
5	4.90	Nitrate	79.649	18.837	27.14	5.113	BMB*
6	8.58	Sulfate	21.861	7.333	10.56	7.452	BMB
Total:			396.475	69.412	100.00	37.650	

After Initials MB

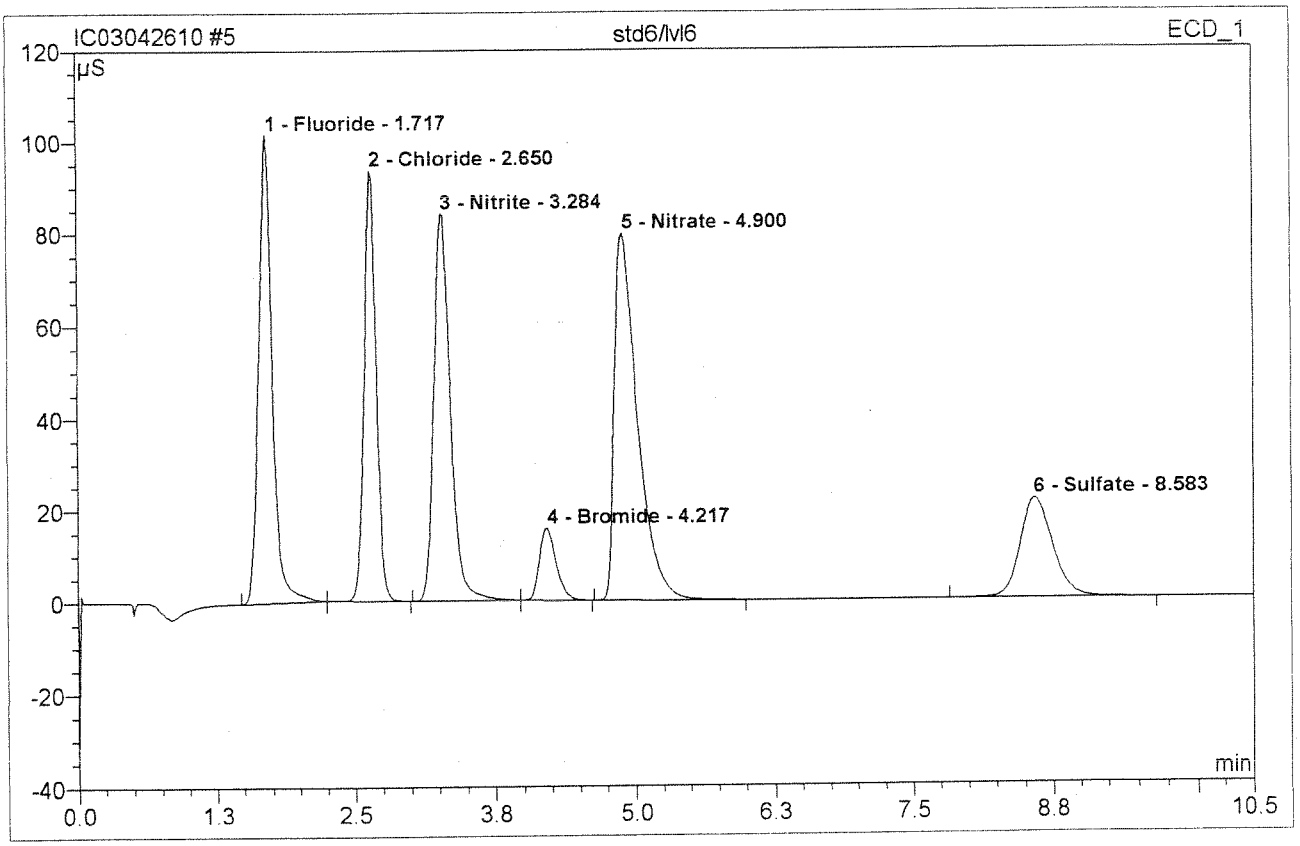
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

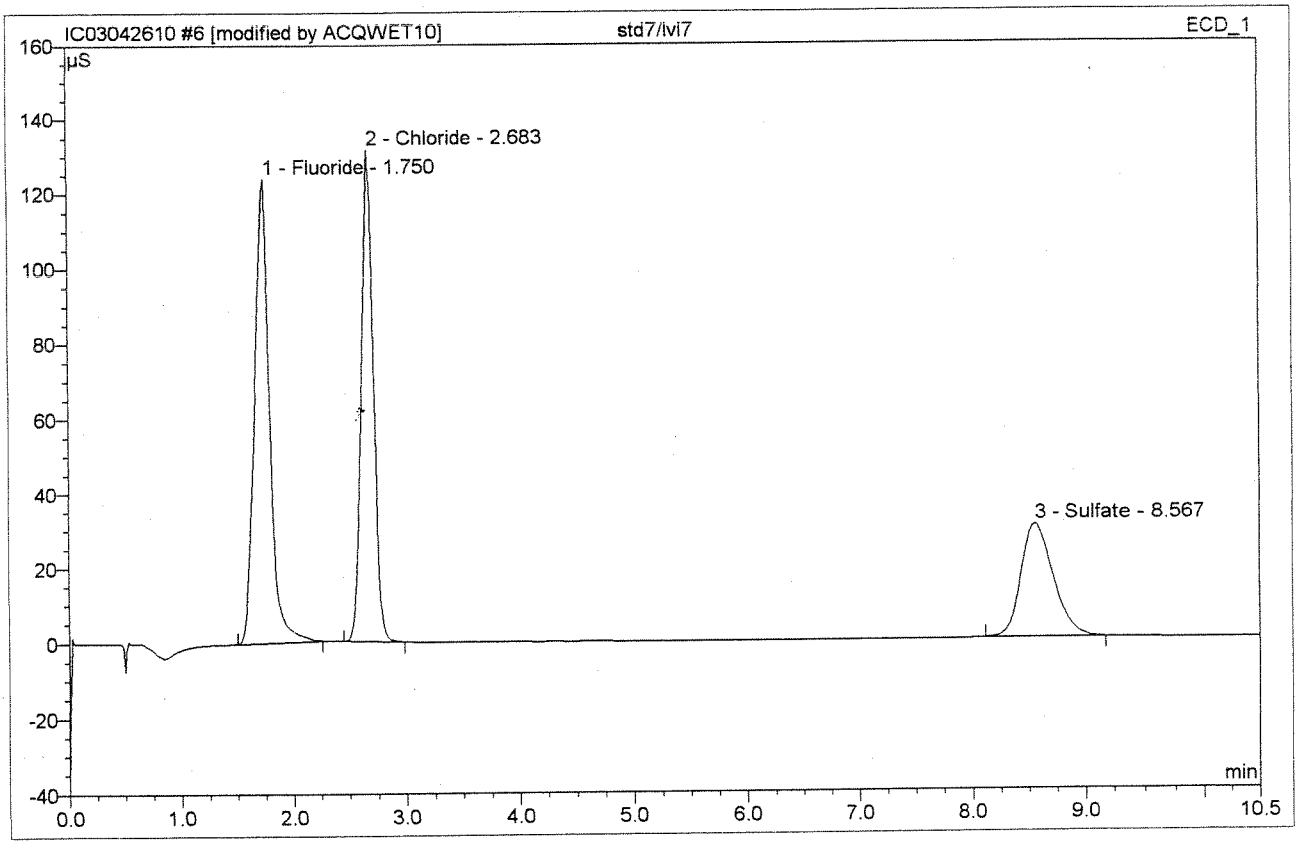


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	101.686	14.494	20.85	7.486	BMb
2	2.65	Chloride	93.503	11.647	16.75	7.613	bMB
3	3.28	Nitrite	84.060	14.428	20.76	4.997	BMb
4	4.22	Bromide	15.785	2.719	3.91	5.074	bMB
5	4.90	Nitrate	79.672	18.892	27.18	5.115	BMB
6	8.58	Sulfate	21.861	7.333	10.55	7.591	BMB
Total:			396.568	69.512	100.00	37.876	

default/Integration

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.75	Fluoride	123.905	18.962	42.30	9.910	BMB*
2	2.68	Chloride	131.265	15.874	35.41	10.179	BMB*
3	8.57	Sulfate	30.278	9.990	22.29	10.151	BMB*
Total:			285.448	44.826	100.00	30.240	

After initials

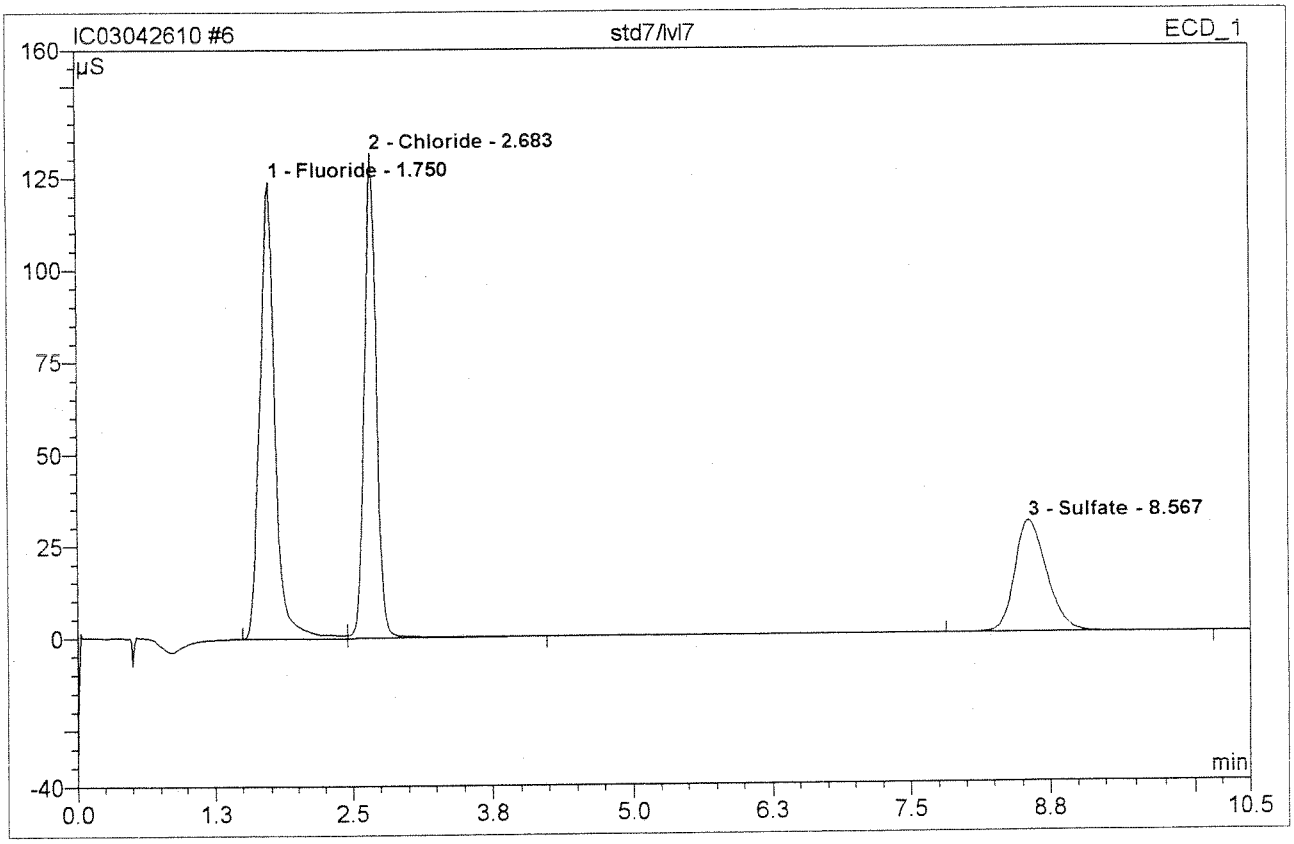
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

6 std7/lvl7

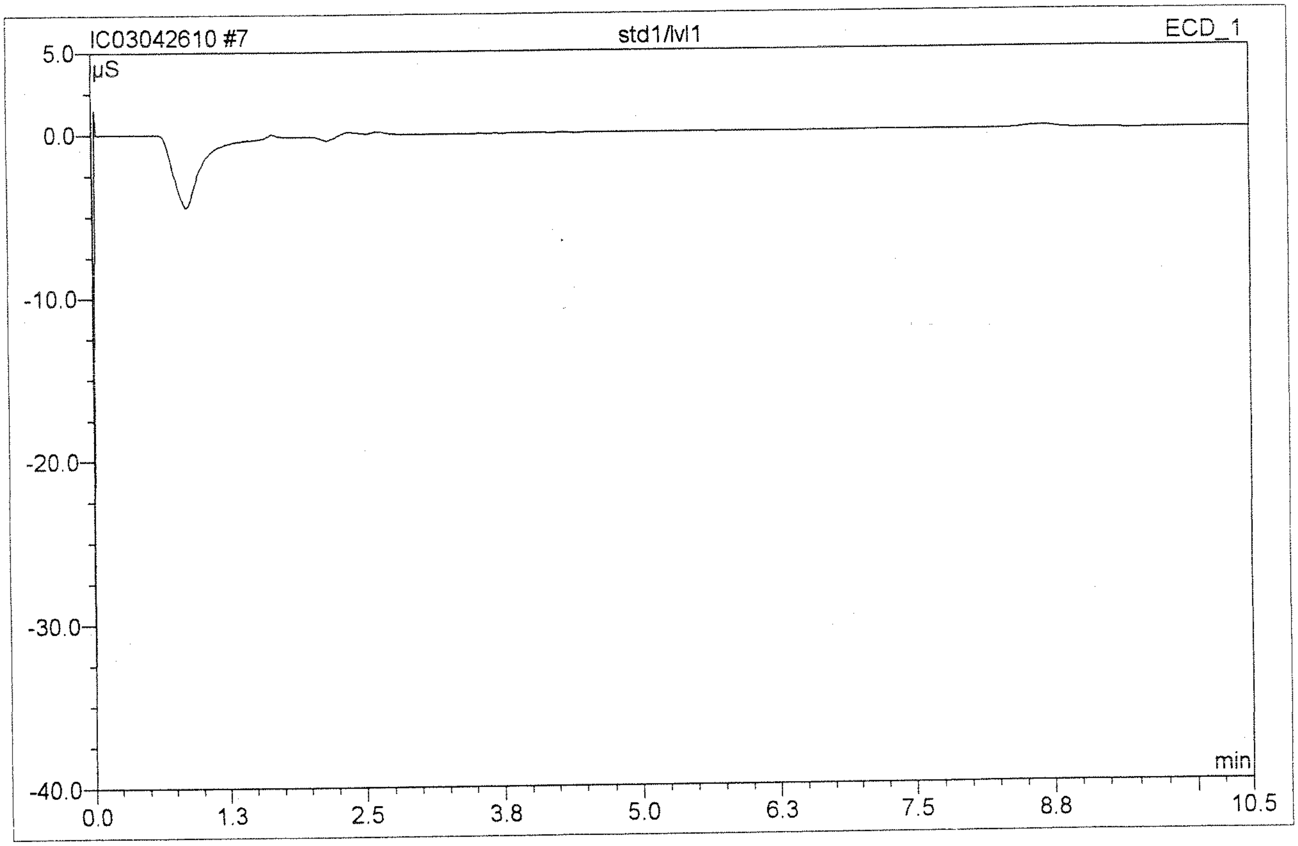
Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.75	Fluoride	124.185	19.437	42.28	10.022	BM
2	2.68	Chloride	131.836	16.307	35.47	10.300	MB
3	8.57	Sulfate	30.454	10.233	22.26	10.259	BMB
Total:			286.475	45.977	100.00	30.581	

7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

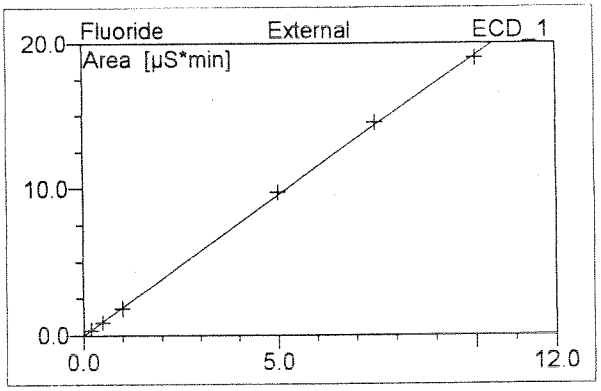
6AY04/10

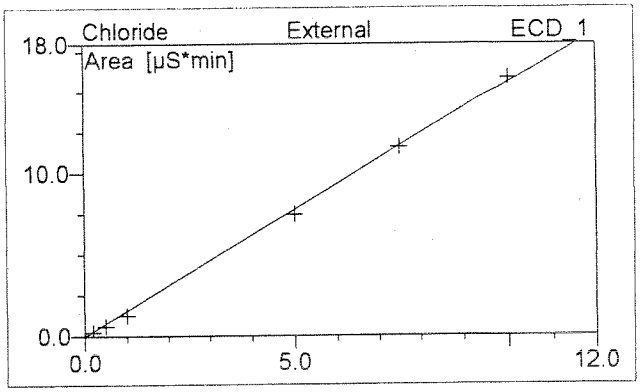
default/Integration

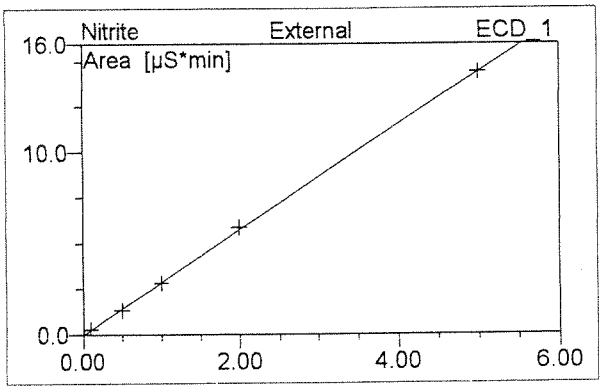
Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

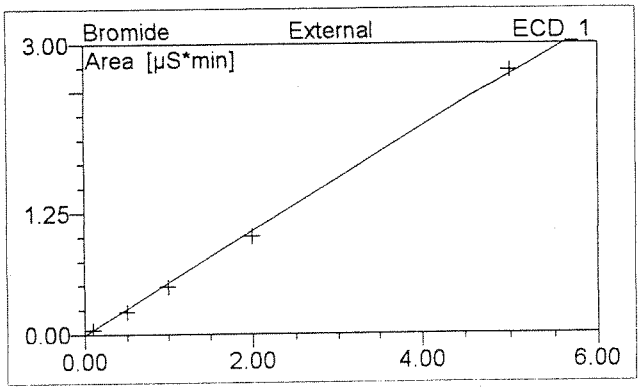
7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**







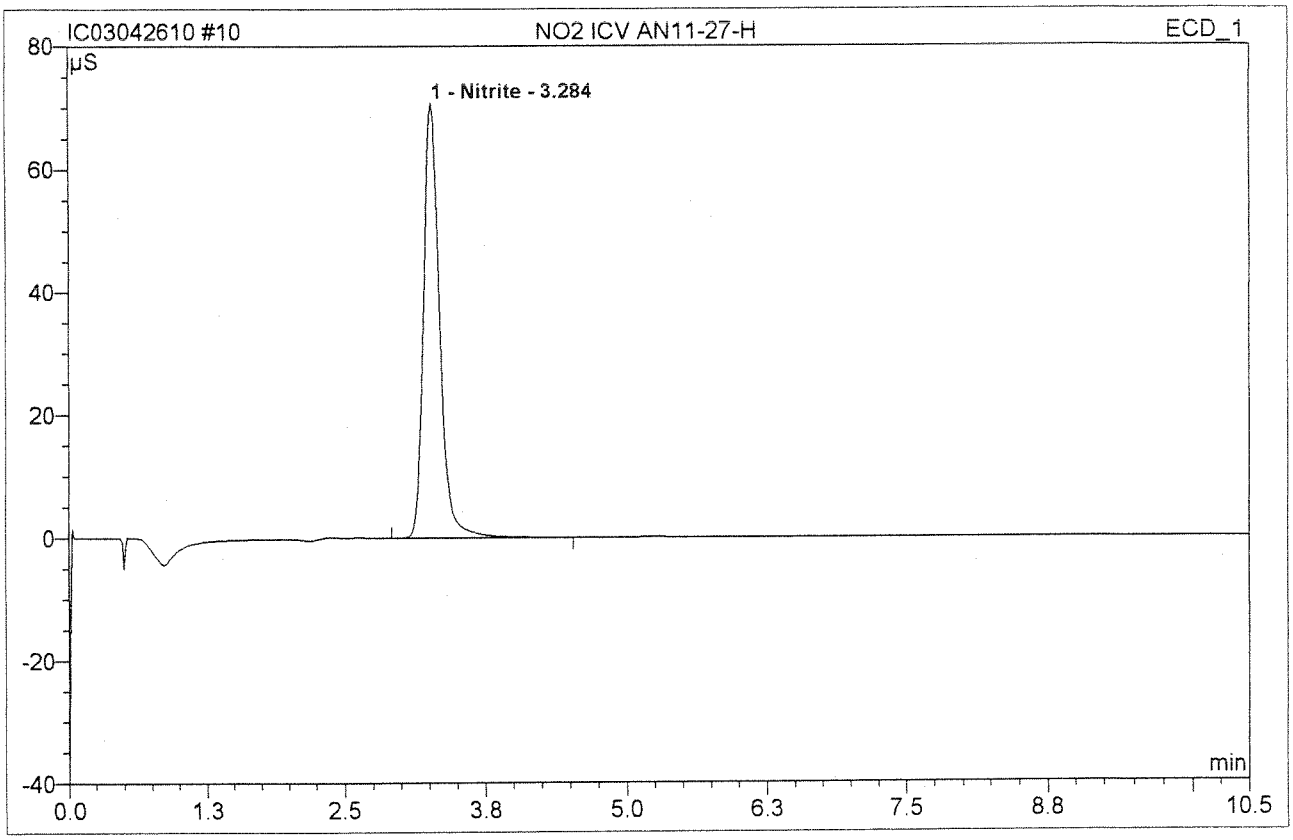


No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
Average:					n.a.	n.a.	n.a.	n.a.

10 NO2 ICV AN11-27-H

NO2 ICV

Sample Name:	**NO2 ICV AN11-27-H**	*Injection Volume:*	**200.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**4/26/2010 11:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

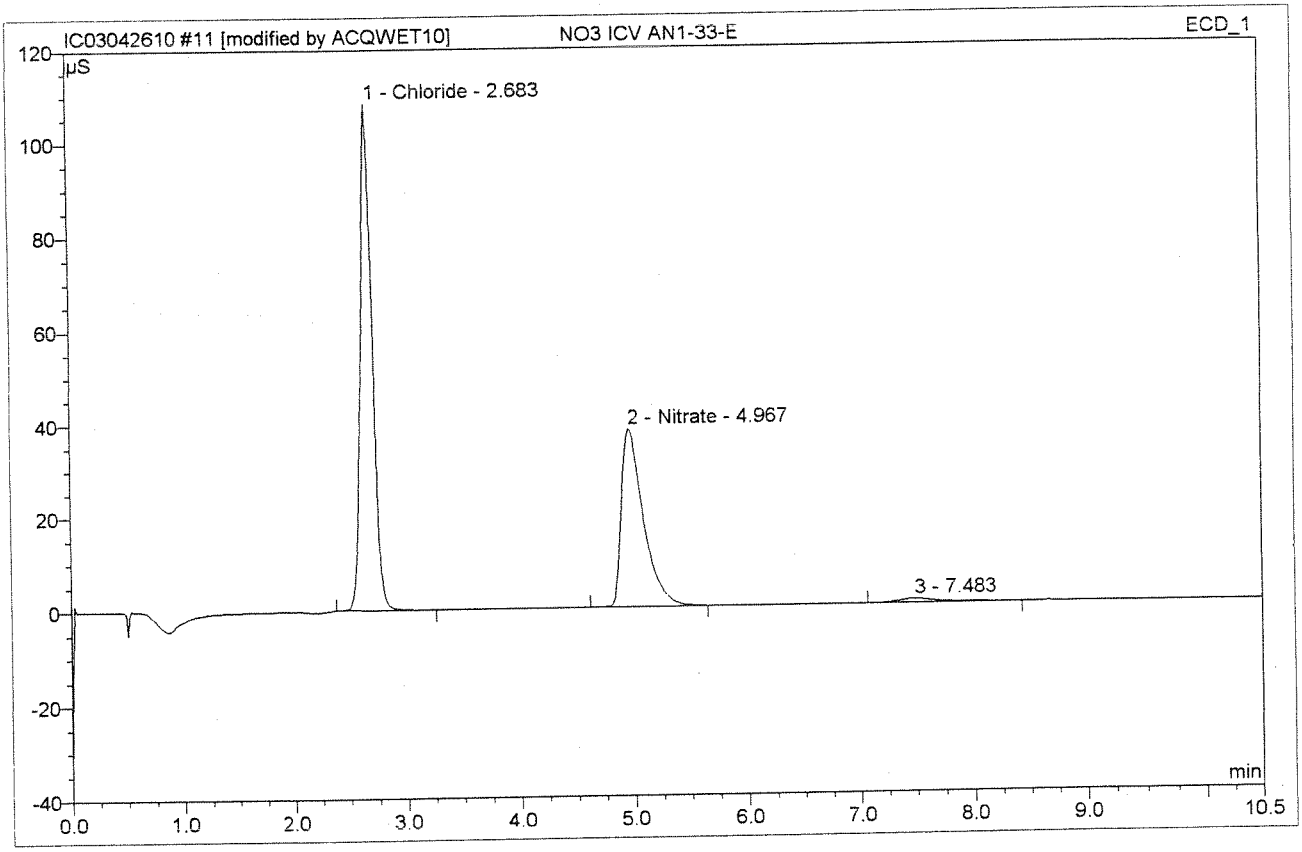


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.28	Nitrite	70.856	11.827	100.00	102.405 102?	BMB
Total:			70.856	11.827	100.00	102.405	

11 NO3 ICV AN1-33-E

NO3 ICV

Sample Name:	**NO3 ICV AN1-33-E**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**4/26/2010 11:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.68	Chloride	108.172	12.864	59.17	82.484	BMB*
2	4.97	Nitrate	38.103	8.551	39.33	23.211 mg/L	BMB*
3	7.48	n.a.	0.823	0.326	1.50	n.a.	BMB
Total:			147.098	21.741	100.00	105.695	

APR 2 5 2010

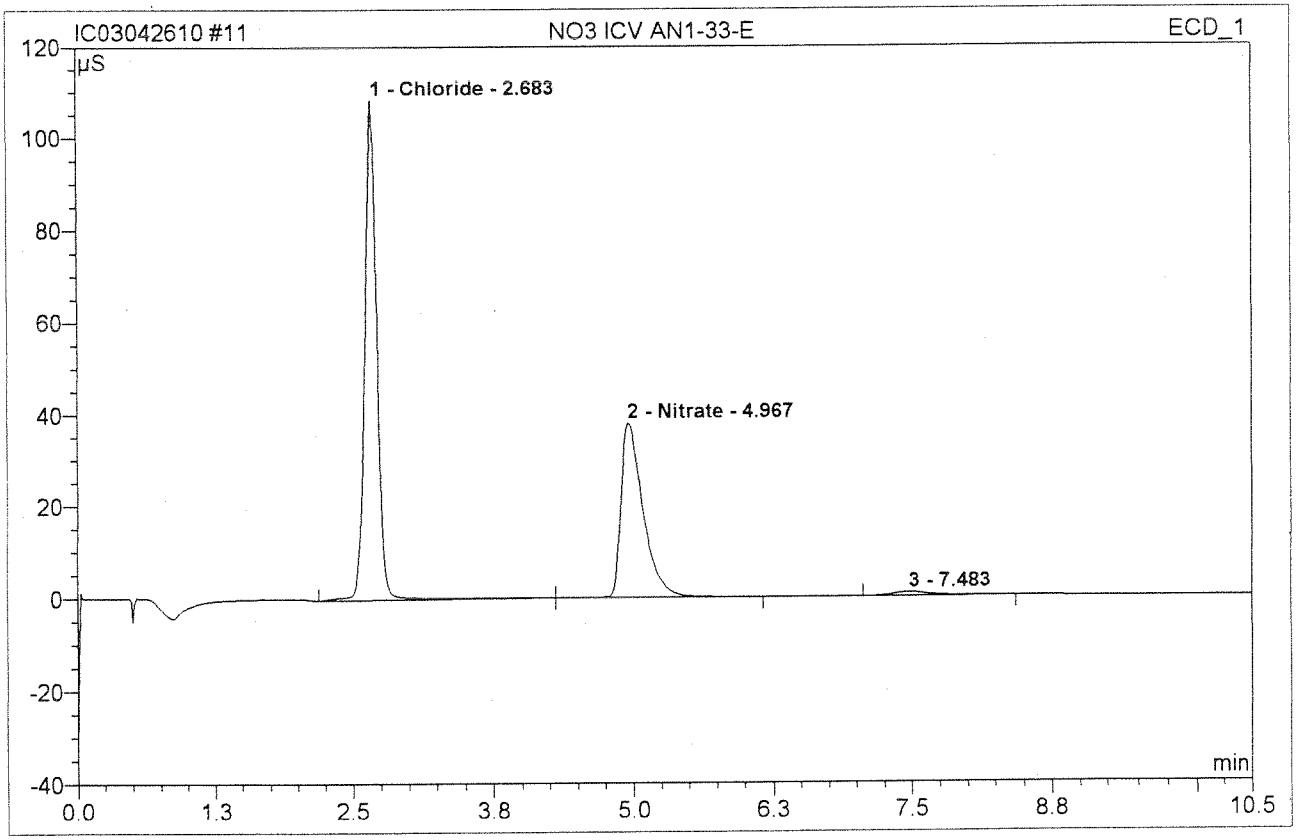
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

11 NO3 ICV AN1-33-E

NO3 ICV

Sample Name:	**NO3 ICV AN1-33-E**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**4/26/2010 11:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.68	Chloride	108.576	13.345	59.83	85.571	BMB
2	4.97	Nitrate	38.156	8.633	38.70	23.433	bMB
3	7.48	n.a.	0.823	0.326	1.46	n.a.	BMB
Total:			147.556	22.304	100.00	109.004	

Before

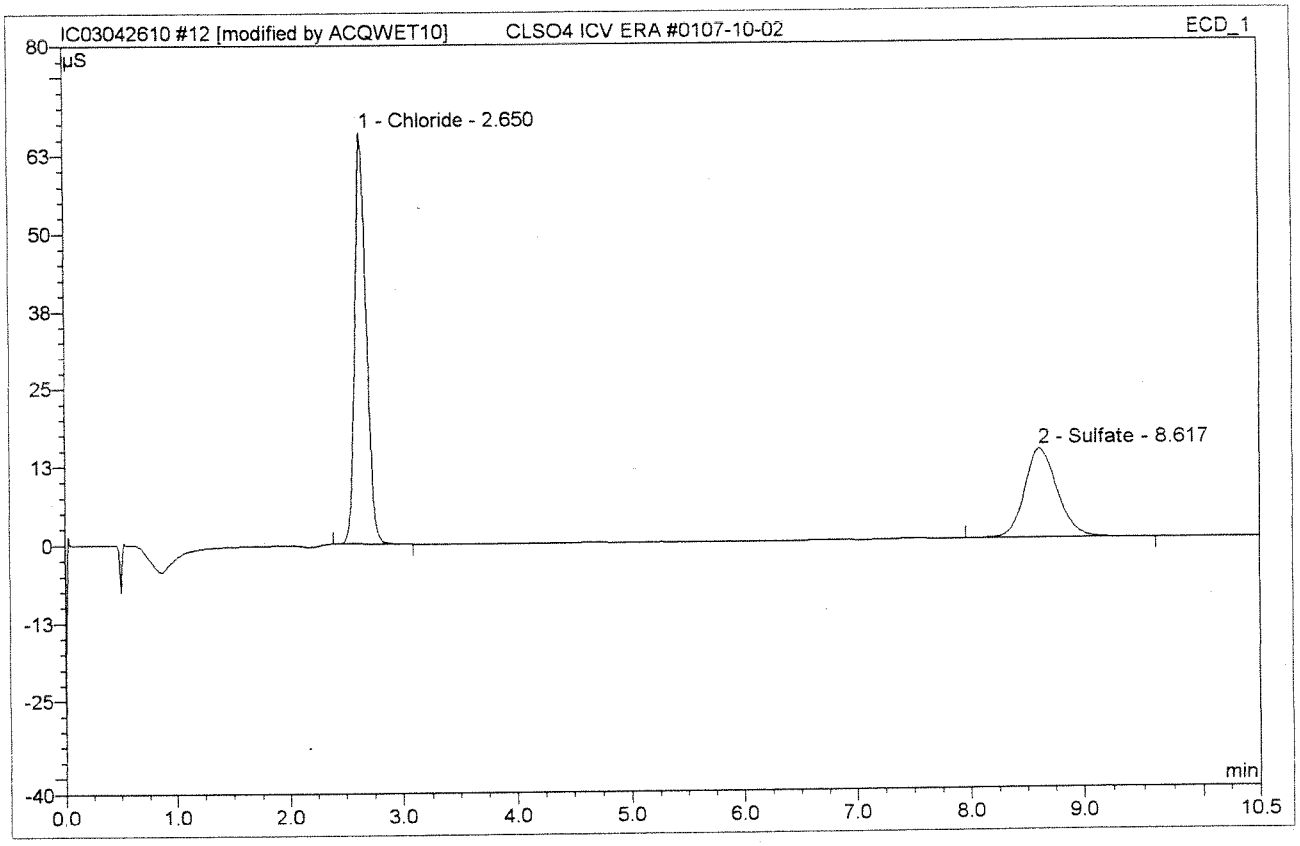
APR 2 6 2010

default/Integration

12 CLSO4 ICV ERA #0107-10-02

CLSO4 ICV

Sample Name:	**CLSO4 ICV ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 11:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.65	Chloride	65.962	7.498	61.00	4.808962	BMB*
2	8.62	Sulfate	14.257	4.794	39.00	4.871972	BMB
Total:			80.219	12.292	100.00	9.679	

After Initials: MB

APR 2 6 2010

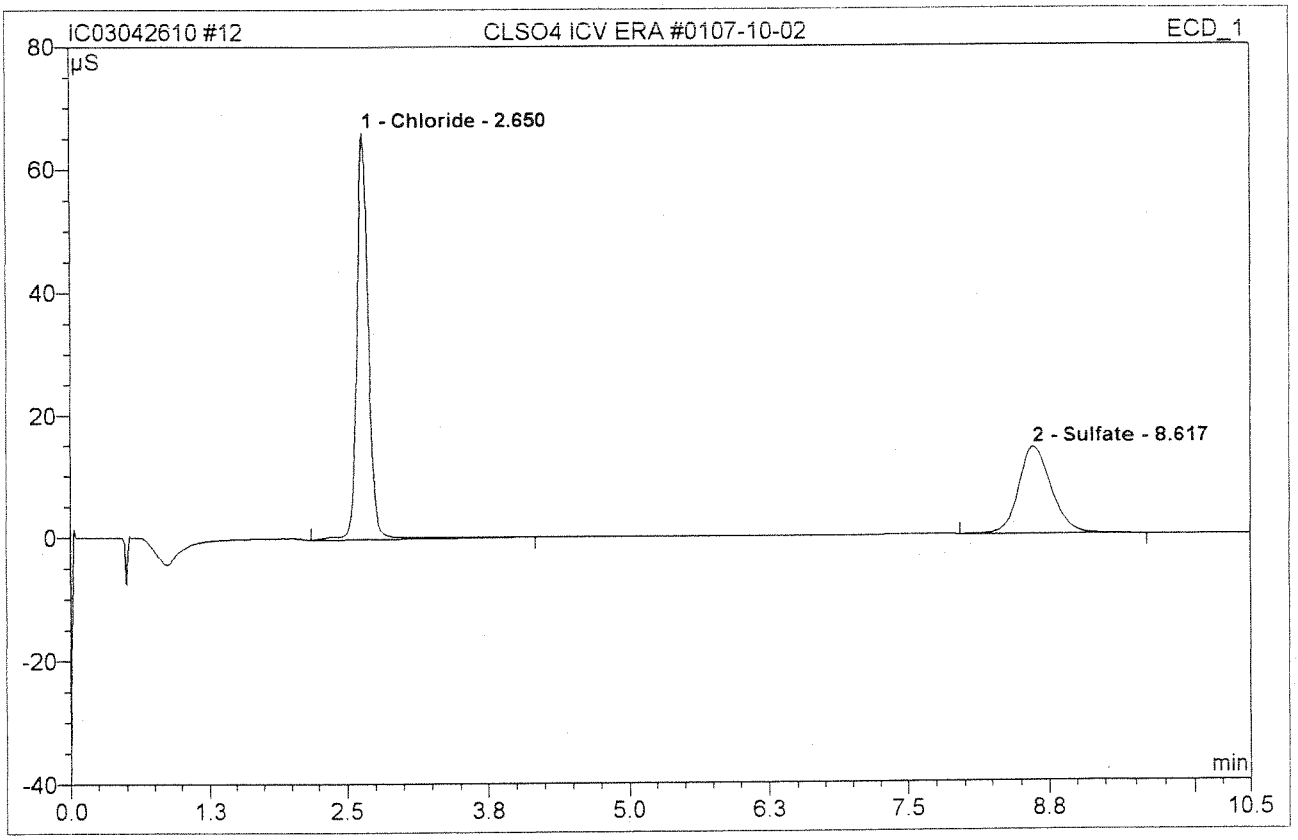
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

12 CLSO4 ICV ERA #0107-10-02

CLSO4 ICV

Sample Name:	**CLSO4 ICV ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 11:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.65	Chloride	66.369	7.929	62.32	5.084	BMB
2	8.62	Sulfate	14.257	4.794	37.68	4.871	BMB
Total:			80.625	12.723	100.00	9.956	

Before

APR 26 2010

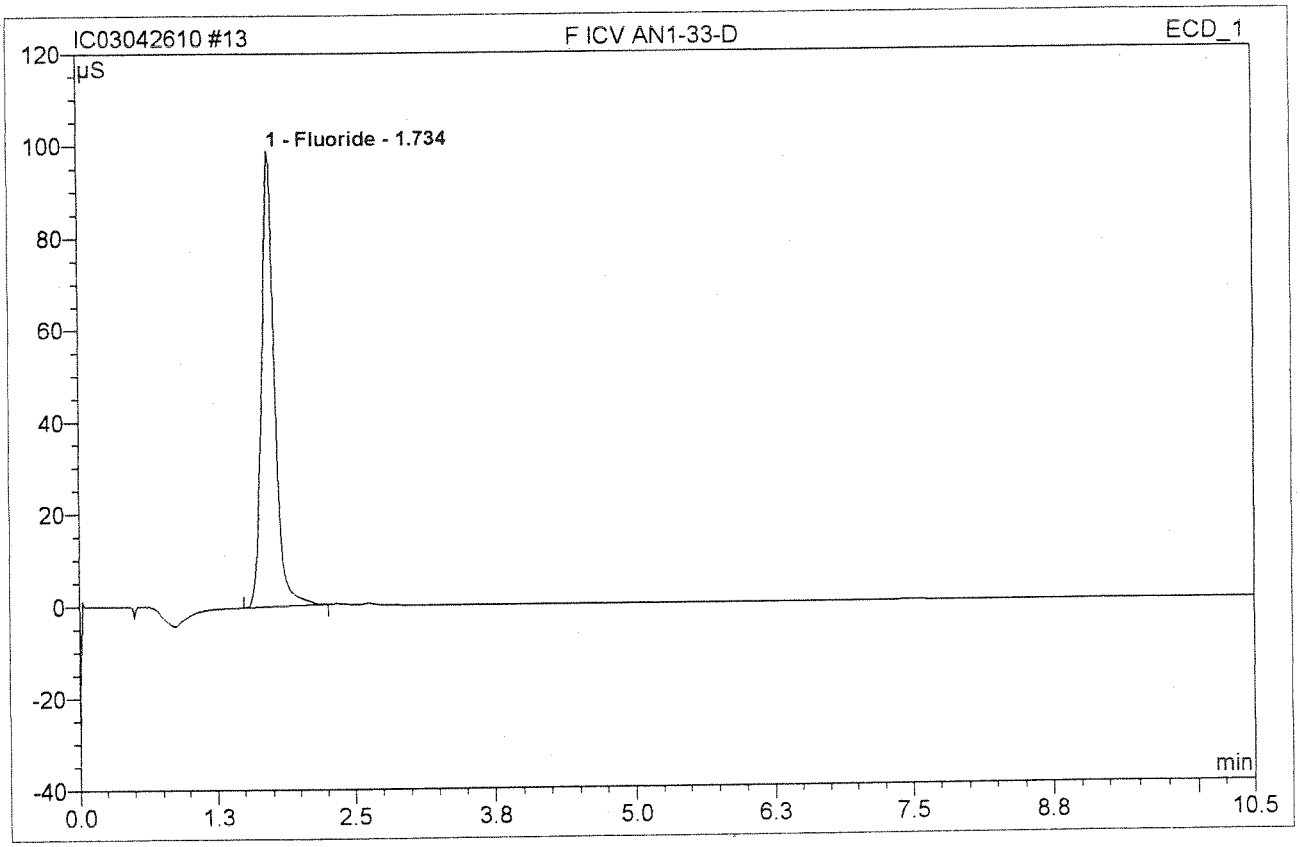
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

13 F ICV AN1-33-D

F ICV

Sample Name:	**F ICV AN1-33-D**	*Injection Volume:*	**200.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**4/26/2010 11:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



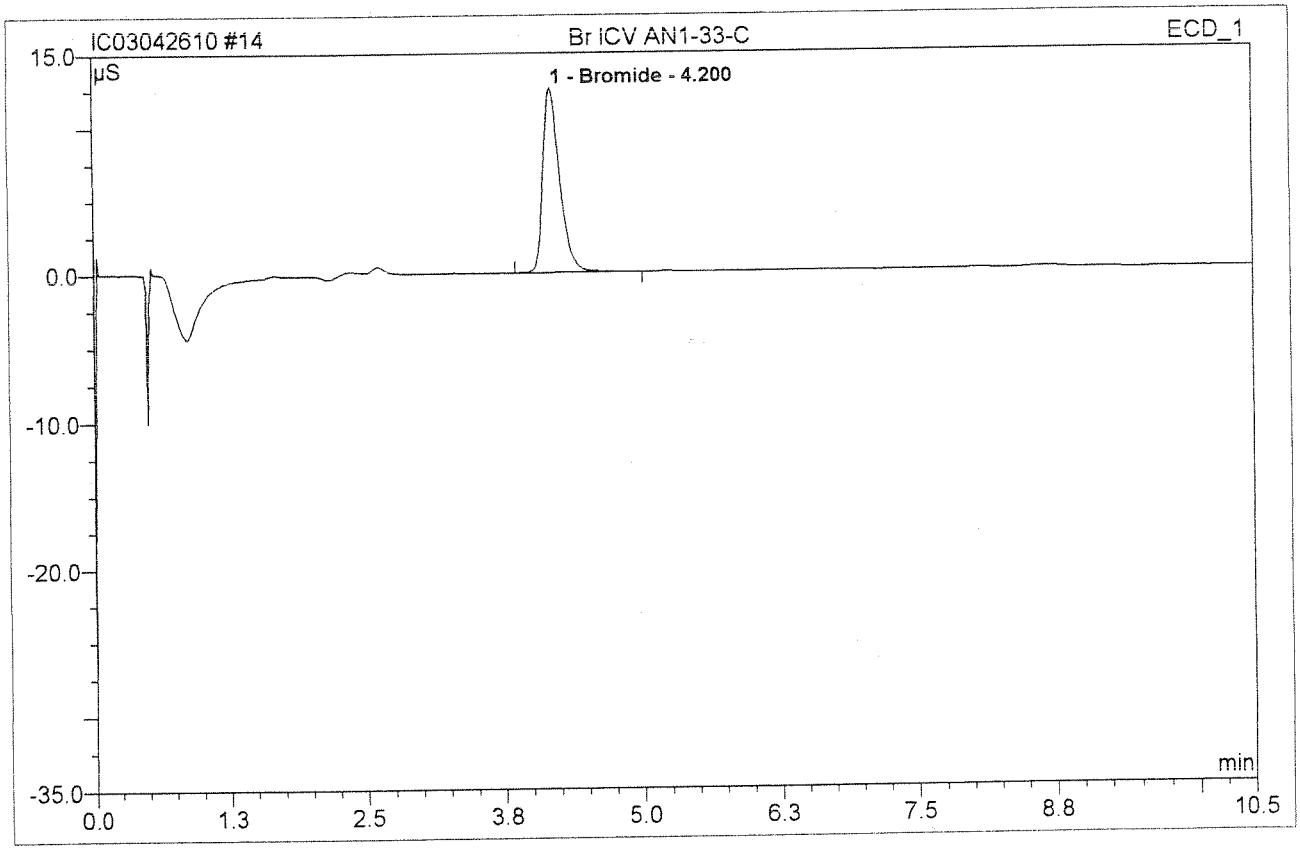
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	98.959	13.315	100.00	13.917 1032	BMB
Total:			98.959	13.315	100.00	13.917	

default/Integration

14 Br ICV AN1-33-C

Br ICV

Sample Name:	**Br ICV AN1-33-C**	*Injection Volume:*	**200.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 11:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



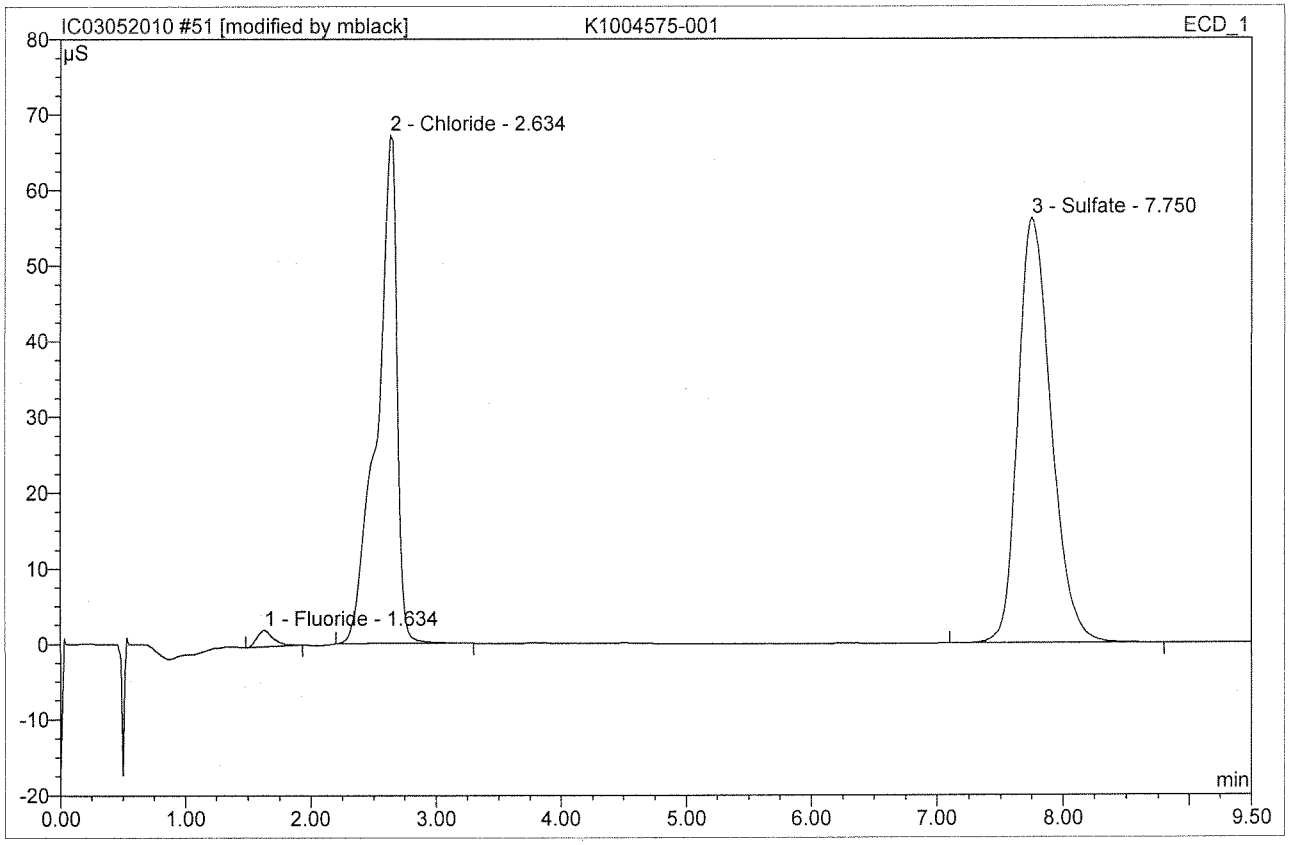
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	4.20	Bromide	12.583	2.210	100.00	4.124 103%	BMB
Total:			12.583	2.210	100.00	4.124	

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

51 K1004575-001

Sample Name:	**K1004575-001**	*Injection Volume:*	**200.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 18:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	2.196	0.330	1.10	0.344	BMB*
2	2.63	Chloride	67.225	12.290	41.19	15.761	BMB*
3	7.75	Sulfate	56.207	17.218	57.71	34.992	BMB
Total:			125.627	29.837	100.00	51.098	

After Initials MB

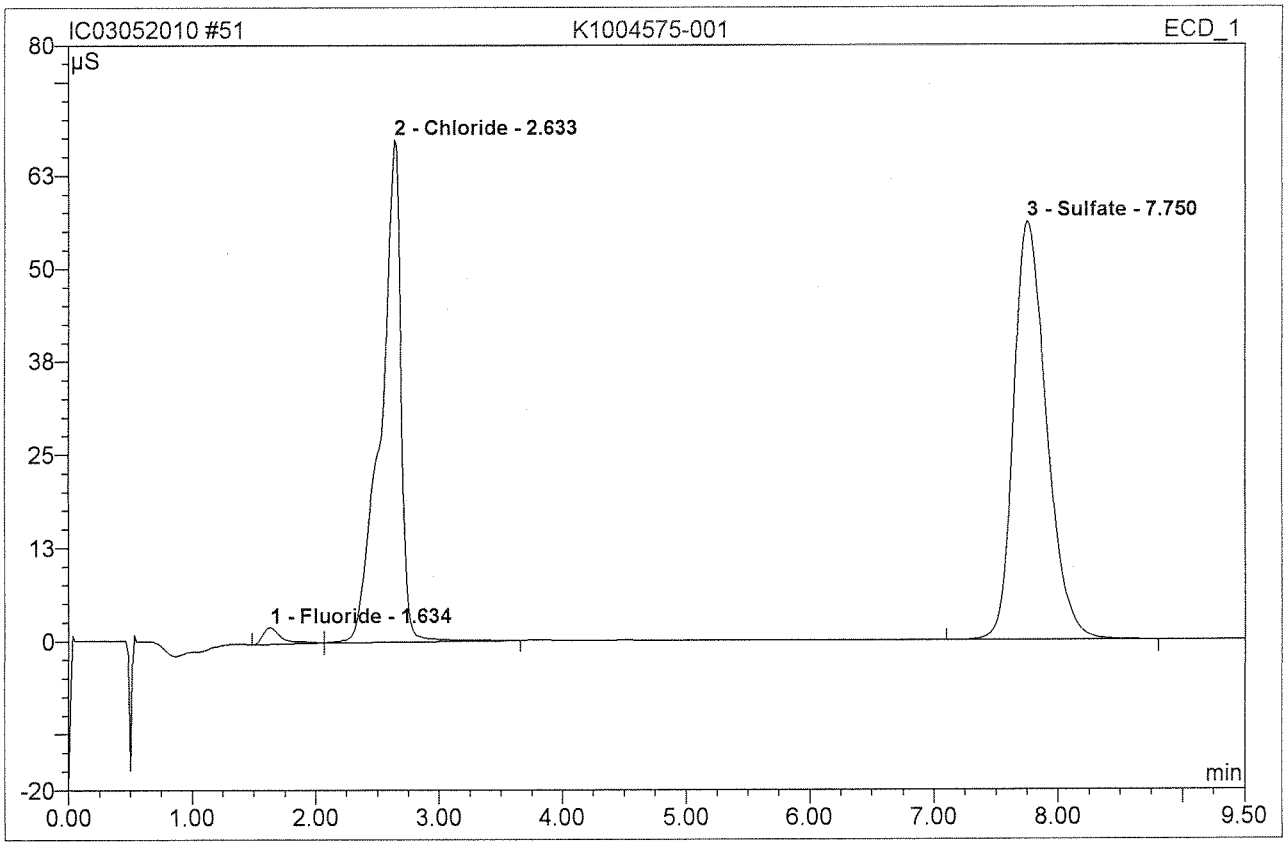
MAY 21 2010

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect
☐ Other

jm 5/25/10

51 K1004575-001

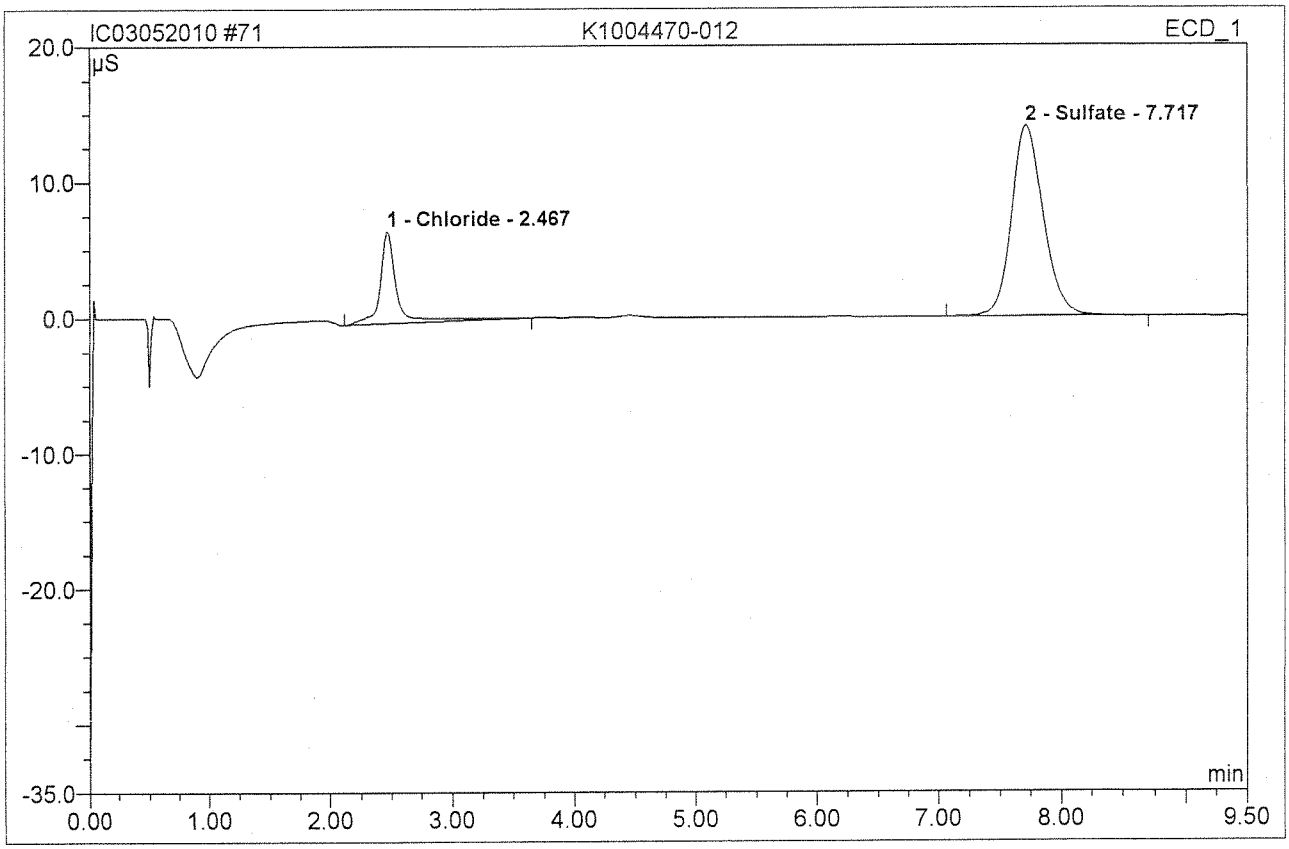
Sample Name:	**K1004575-001**	*Injection Volume:*	**200.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 18:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	2.254	0.380	1.26	0.397	BMB
2	2.63	Chloride	67.399	12.494	41.52	16.022	bMB
3	7.75	Sulfate	56.207	17.218	57.22	34.992	BMB
Total:			125.860	30.091	100.00	51.411	

71 K1004470-012

Sample Name:	**K1004470-012**	*Injection Volume:*	**200.0**
Vial Number:	**68**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/20/2010 22:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

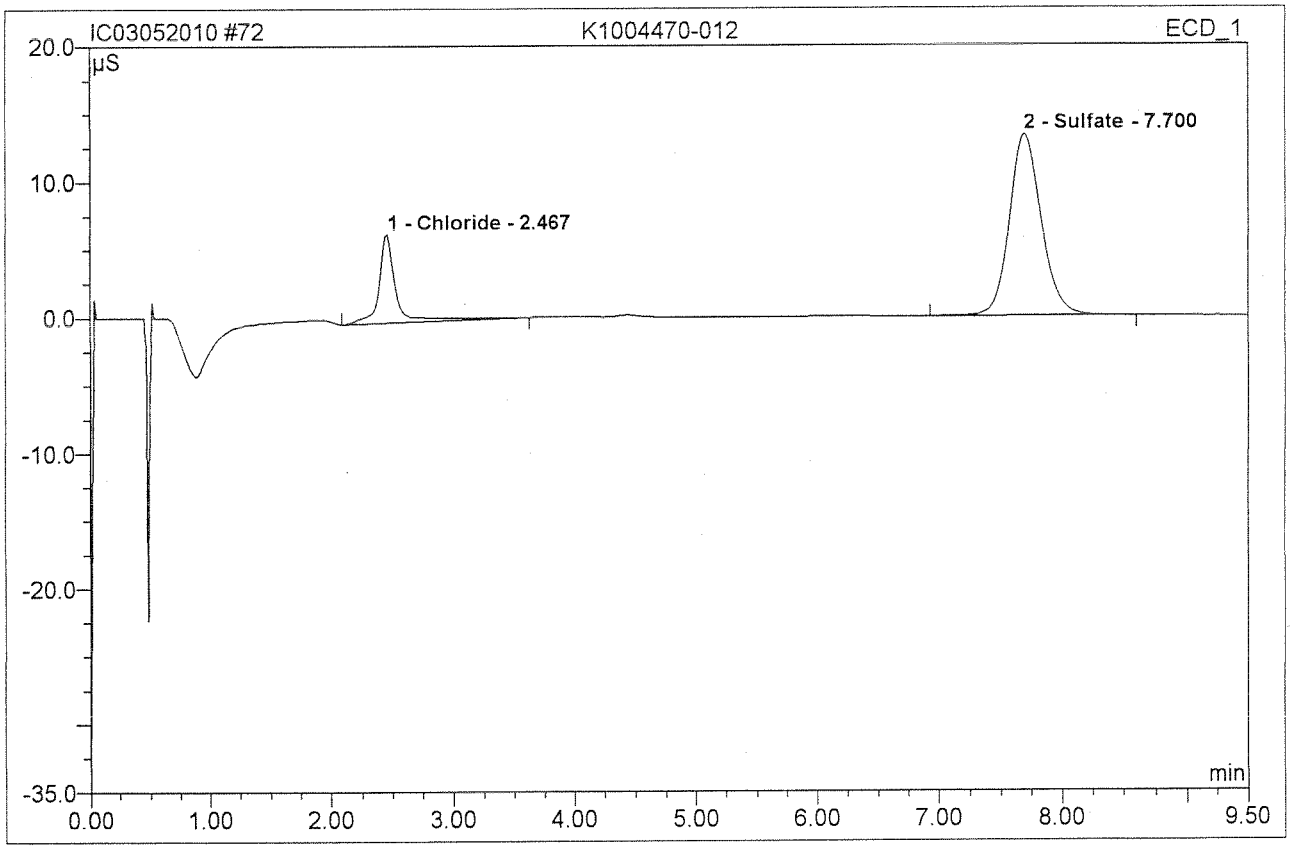


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.47	Chloride	6.791	1.108	20.72	35.508	BMB
2	7.72	Sulfate K=211 RPD=4%	14.028	4.237	79.28	215.298	BMB
Total:			20.819	5.345	100.00	250.806	

72 K1004470-012

4470-12D

Sample Name:	**K1004470-012**	*Injection Volume:*	**200.0**
Vial Number:	**69**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/20/2010 22:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

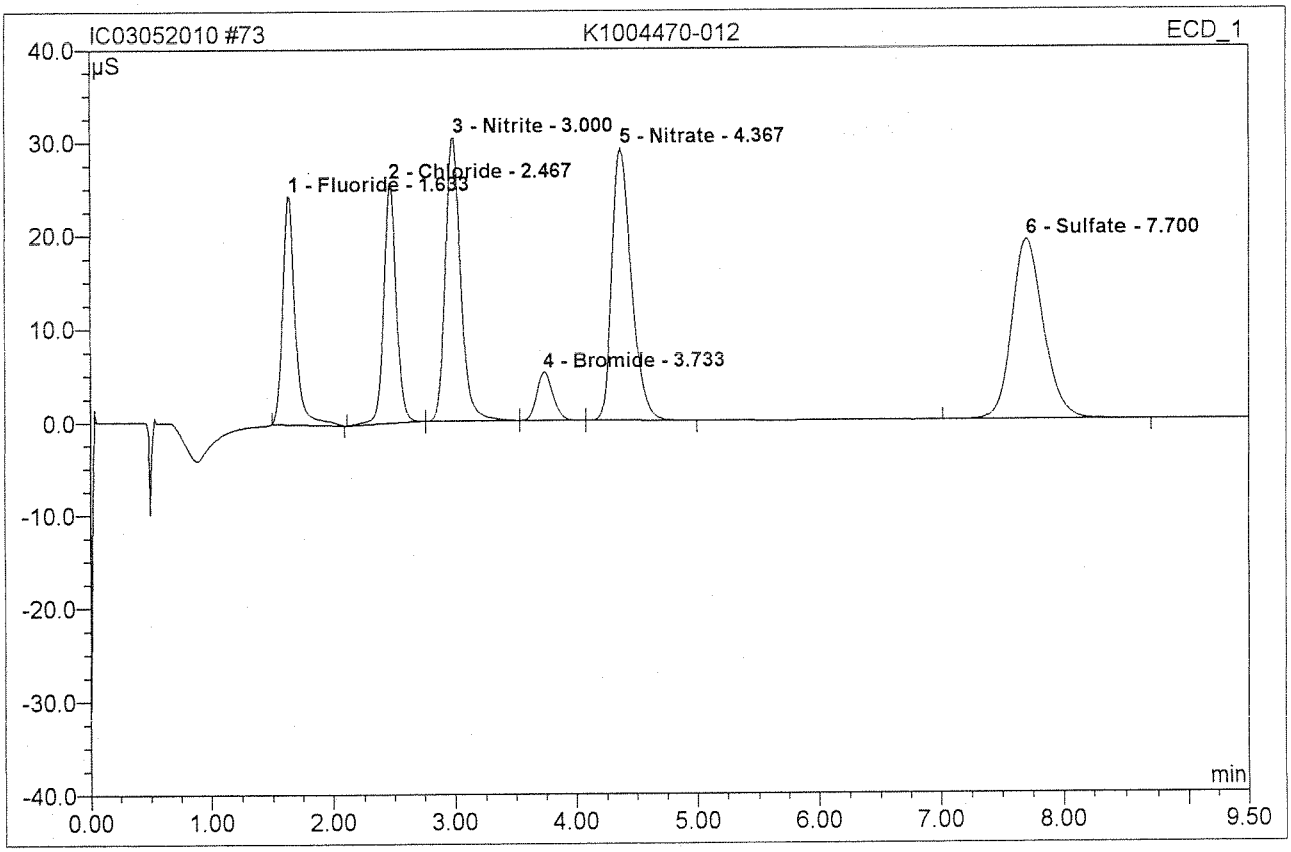


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.47	Chloride	6.534	1.081	21.07	34.658	BMB
2	7.70	Sulfate	13.376	4.050	78.93	205.782	BMB
Total:			19.910	5.131	100.00	240.439	

73 K1004470-012

4470-12MS

Sample Name:	**K1004470-012**	*Injection Volume:*	**200.0**
Vial Number:	**70**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/20/2010 22:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	24.443	2.927	13.01	76.481	BMB
2	2.47	Chloride	25.724	3.085	13.71	98.915	BMB
3	3.00	Nitrite	30.362	4.440	19.73	76.895	bMb
4	3.73	Bromide	5.112	0.807	3.59	75.297	bMb
5	4.37	Nitrate	29.199	5.451	24.22	73.984	bMB
6	7.70	Sulfate	19.274	5.794	25.74	294.369	BMB
Total:			134.114	22.504	100.00	695.941	

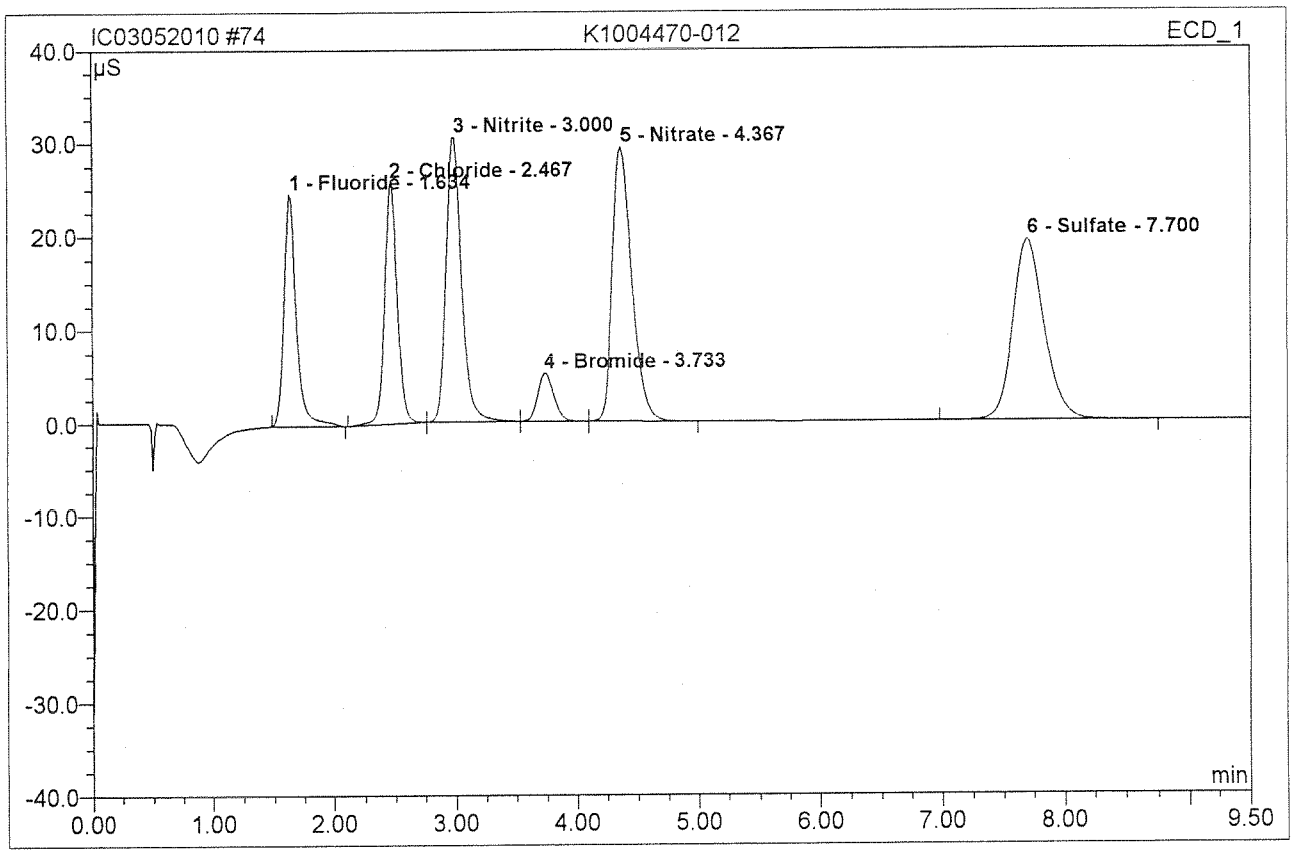
TV: 75

105%

74 K1004470-012

4470-12MSD

Sample Name:	**K1004470-012**	*Injection Volume:*	**200.0**
Vial Number:	**71**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**50.0000**
Recording Time:	**5/20/2010 22:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

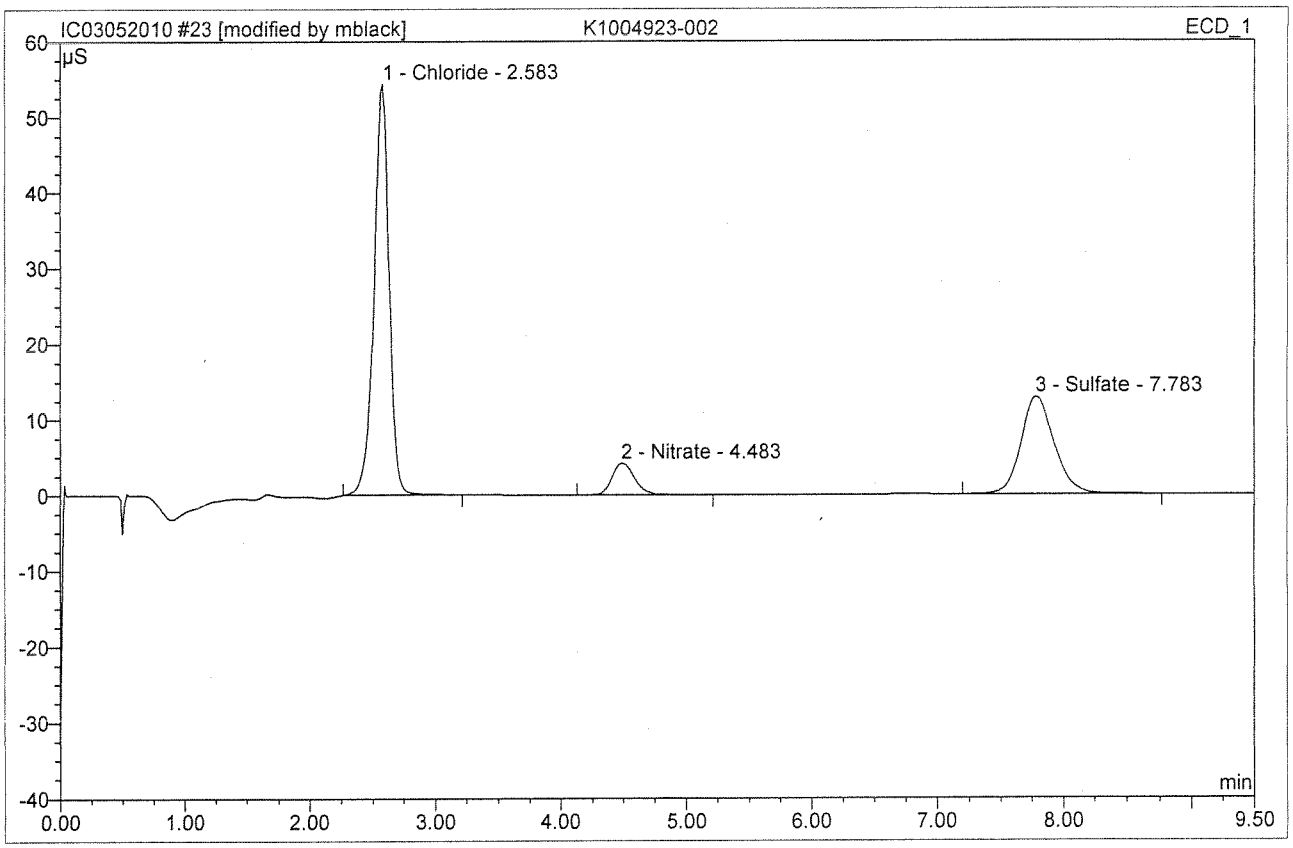


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	24.837	2.978	13.13	77.814	BMB
2	2.47	Chloride	25.899	3.112	13.72	99.776	BMb
3	3.00	Nitrite	30.505	4.491	19.81	77.779	bMb
4	3.73	Bromide	5.158	0.807	3.56	75.334	bMb
5	4.37	Nitrate	29.393	5.458	24.07	74.077	bMB
6	7.70	Sulfate	19.378	5.830	25.71	296.209	BMB
Total:			135.170	22.676	100.00	700.988	

TV = 75.0

23 K1004923-002

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 12:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.58	Chloride $\bar{x}$=9.80 RPD=4.1%	54.379	7.667	61.56	9.832	BMB*
2	4.48	Nitrate	4.197	0.867	6.96	0.471	BMB*
3	7.78	Sulfate $\bar{x}$=7.91 RPD=2%	12.889	3.919	31.47	7.966	BMB
Total:			71.464	12.453	100.00	18.269	

After initials MB

MAY 2 0 2010

5/25/10

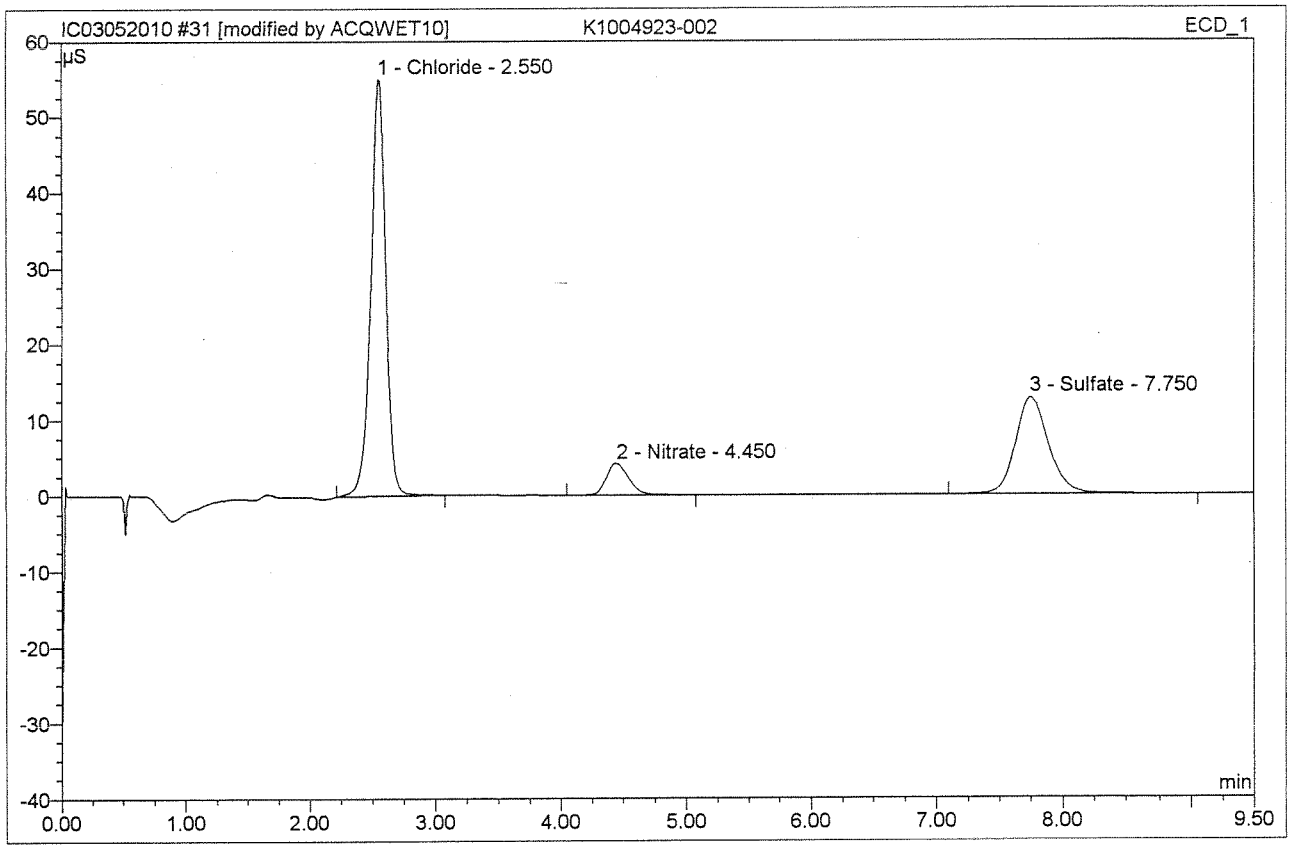
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

31 K1004923-002

4923-2D

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.55	Chloride	55.040	7.612	61.72	9.762	BMB*
2	4.45	Nitrate	4.215	0.857	6.95	0.465	BMB*
3	7.75	Sulfate	12.806	3.864	31.33	7.852	BMB
Total:			72.061	12.332	100.00	18.079	

After Initials

MAY 2 8 2010

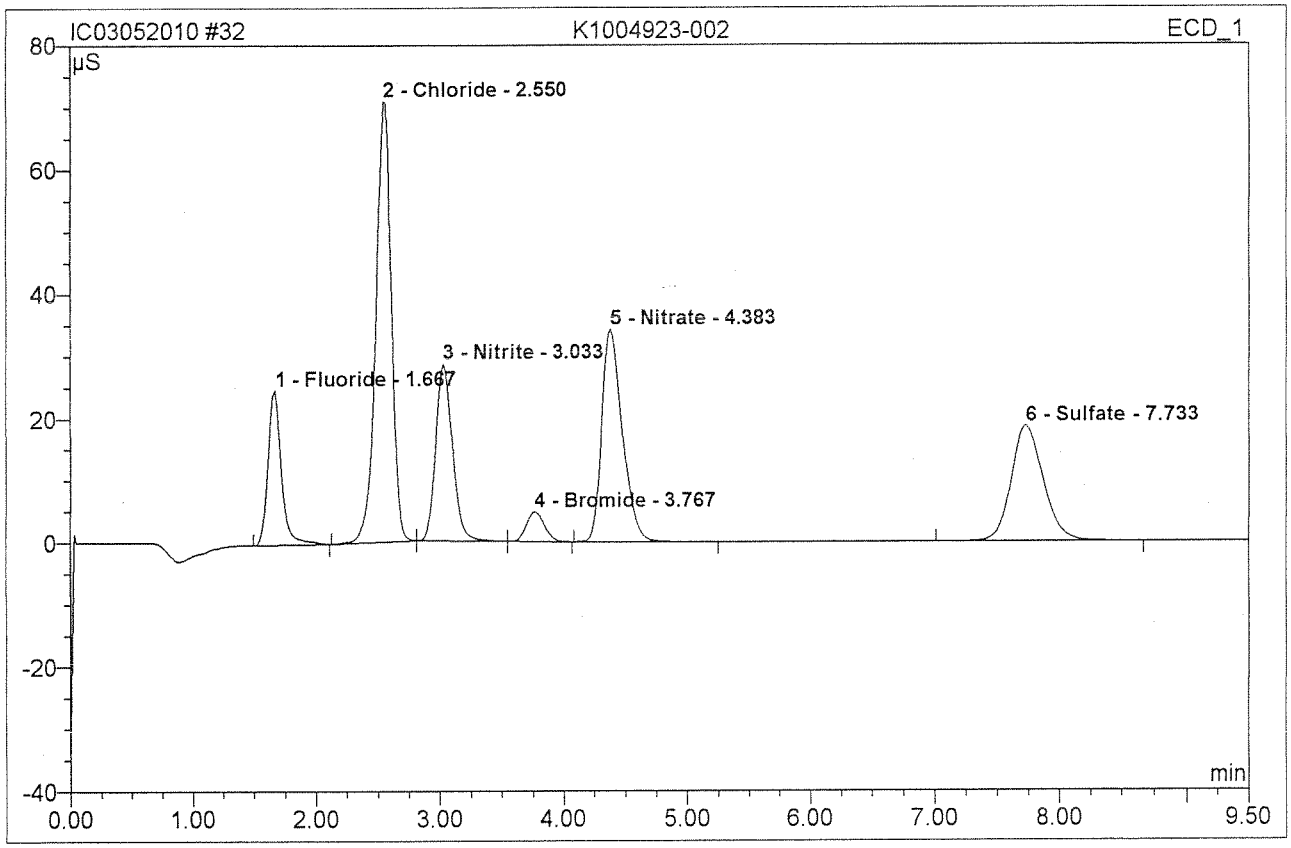
5/25/10

default/Integration

32 K1004923-002

4923-2MS

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



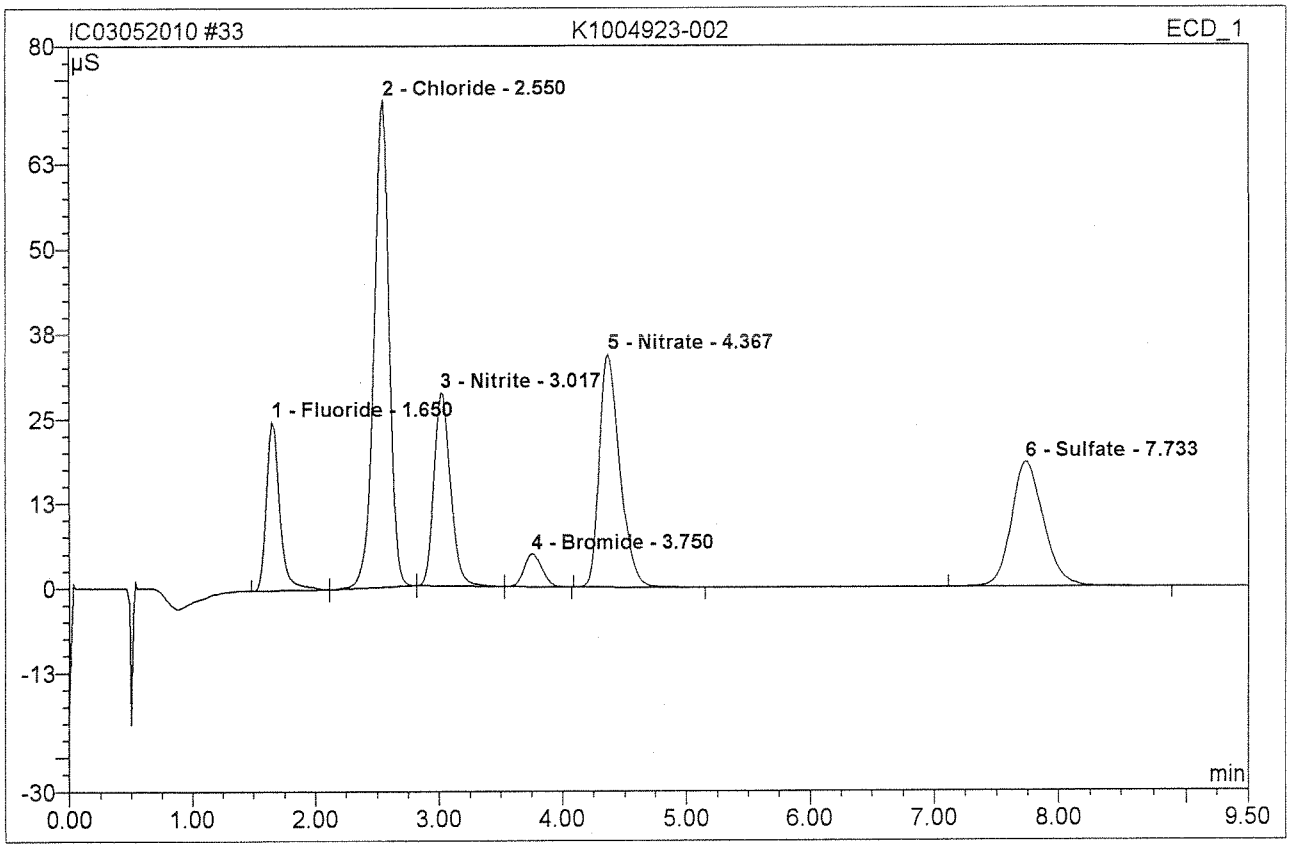
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	24.899	3.092	10.05	3.232 10.85%	BMB
2	2.55	Chloride	70.832	10.158	33.02	13.027 16.67%	BMb
3	3.03	Nitrite	28.406	4.477	14.55	3.101 10.32%	bMb
4	3.77	Bromide	4.834	0.811	2.64	3.027 10.19%	bMB
5	4.38	Nitrate	34.168	6.671	21.68	3.622 18.52%	BMB
6	7.73	Sulfate	18.657	5.557	18.06	11.295 11.19%	BMB
Total:			181.796	30.767	100.00	37.304	

TV=3.00

33 K1004923-002

4923-2MSD

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

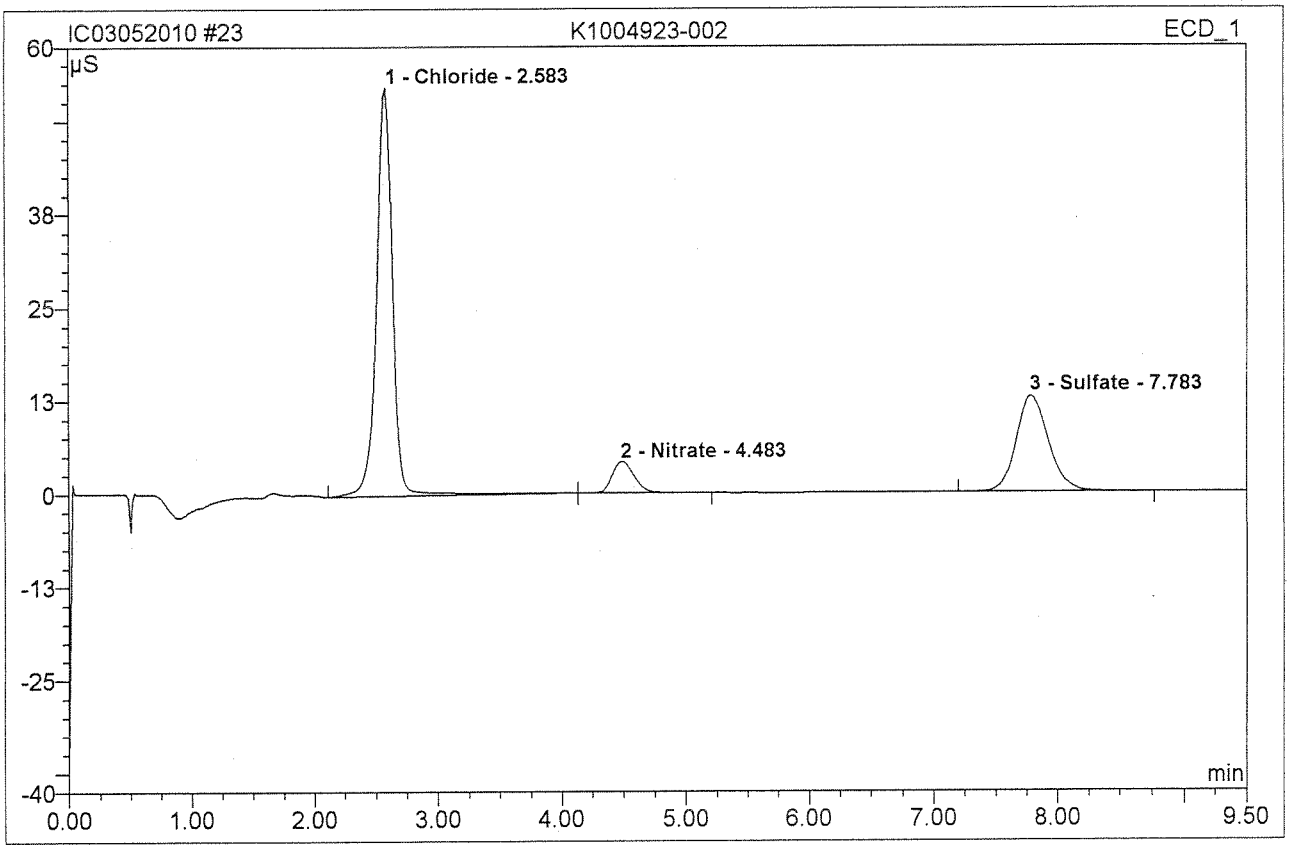


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	25.042	3.091	10.08	3.231	BMB
2	2.55	Chloride	71.836	10.112	32.96	12.968	bMb
3	3.02	Nitrite	28.491	4.492	14.64	3.111	bMb
4	3.75	Bromide	4.858	0.815	2.66	3.041	bMB
5	4.37	Nitrate	34.413	6.676	21.76	3.625	BMB
6	7.73	Sulfate	18.444	5.491	17.90	11.159	BMB
Total:			183.084	30.677	100.00	37.135	

TR=3.02

23 K1004923-002

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 12:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.58	Chloride	54.735	8.108	62.88	10.398	BMB
2	4.48	Nitrate	4.197	0.867	6.73	0.471	bMB
3	7.78	Sulfate	12.889	3.919	30.40	7.966	BMB
Total:			71.820	12.895	100.00	18.834	

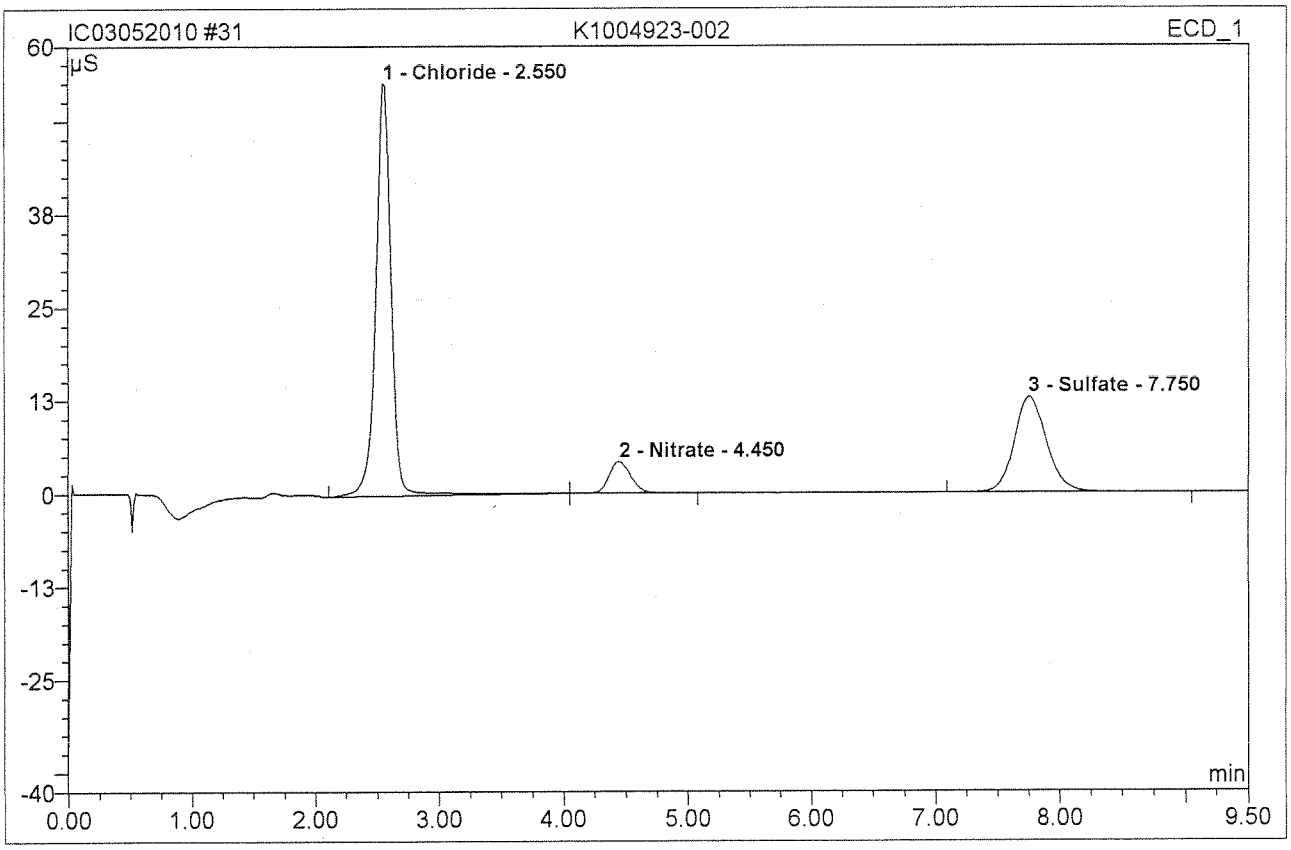
Before

MAY 20 2010

31 K1004923-002

4923-2D

Sample Name:	**K1004923-002**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 14:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.55	Chloride	55.323	8.004	62.91	10.265	BMB
2	4.45	Nitrate	4.215	0.857	6.73	0.465	bMB
3	7.75	Sulfate	12.806	3.864	30.36	7.852	BMB
Total:			72.344	12.724	100.00	18.582	

Sequence # IC030520 10 | Ion Chromatography Data Quality Report Inorganics | Run # 201828

1. Holding times met for all samples analyzed? yes/no/NA *
2. Are dilutions within upper limits of the curve? yes/no/NA
3. Are analysis/extraction stickers included on report? yes/no/NA
4. Are detection limits reported correctly? yes/no/NA
5. Are all quality control criteria met? yes/no/NA
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? yes/no/NA
   b. Are CCV's and CCB's all within acceptance limits? yes/no/NA
   c. Are results for Method Blanks all ND? yes/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) yes/no/NA
   e. Are all exceptions explained? yes/no/NA
6. Are all samples labelled correctly? yes/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis. K5150, K5161 received past hld for NO3

LCS			
Fluoride	True Value = 13.5 ppm	CAS ID # = AN1-33-D	Expires: 7/19/10
Chloride	True Value = 5.0ppm	CAS ID # = ERA#0107-10-02	Expires: 8/10
Nitrite	True Value = 100 ppm	CAS ID # = AN11-27-cc	Expires: 5/26/10
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-33-L	Expires: 10/25/10
Nitrate	True Value = 21.0 ppm	CAS ID # = AN1-33-E	Expires: 7/21/10
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#0107-10-02	Expires: 8/10

CCV	CAS ID # = AN11-23-H	Expires 5/20/10	
Fluoride	True Value = 5.0 ppm	10K CAS ID # = AN1-33-M	Expires: 10/25/10
Chloride	True Value = 5.0 ppm	10K CAS ID # = AN1-33-F	Expires: 8/5/10
Nitrite	True Value = 2.0 ppm	10K CAS ID # = AN1-33-N	Expires: 10/25/10
Bromide	True Value = 2.0 ppm	10K CAS ID # = AN1-20-DD	Expires: 6/21/10
Nitrate	True Value = 2.0 ppm	10K CAS ID # = AN1-33-I	Expires: 9/9/10
Sulfate	True Value = 5.0 ppm	10K CAS ID # = AN1-33-G	Expires: 8/5/10

Spike 1.5ppm X dilution factor	CAS ID# = AN11-10-M	Expires 5/20/10	
Fluoride	10K CAS ID # = AN1-33-M	Expires:	see 10K CCV IDs
Chloride	10K CAS ID # = AN1-33-F	Expires:	
Nitrite	10K CAS ID # = AN1-33-N	Expires:	
Bromide	10K CAS ID # = AN1-20-DD	Expires:	
Nitrate	10K CAS ID # = AN1-33-I	Expires:	
Sulfate	10K CAS ID # = AN1-33-G	Expires:	

Analyst: MB Date: 5/20/10

First Review: MB Date: 5/20/10

Final Review: [signature] Date: 5/25/10

t:\wet\ic\icdqs.xls

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
K5105-1	I		5/21	6/5	F				
P.P.					CL	25/5			✓
					NO2				
					Br				
					NO3				✓
					SO4				✓
K4536-1 Ext					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4		0.25/5		✓
K5149-2	II		5/20 1200	5/31	F	2.5/5			
Coeur Alaska					CL				
					NO2				
					Br				
					NO3				
					SO4		0.25/5 u		✓
K4923-1	III			5/25	F				
URS					CL	25/5			✓
MTR					NO2				
					Br				
					NO3				
					SO4				✓
-2		X			F				
					CL				✓
					NO2				
					Br				
					NO3				
					SO4				✓
-3					F				
					CL		1/5 °		✓
					NO2				
					Br				
					NO3				
					SO4				✓
-8					F				
					CL		~~1/5~~		✓
					NO2				
					Br				
					NO3				
					SO4				✓
K4967-1	I			5/28	F				
North Star					CL				
					NO2				
					Br				
					NO3				
					SO4	6.1/5			✓
K4711-1	II			5/28	F				
City / Port.					CL	2.5/5			✓
					NO2				
					Br				
					NO3				
					SO4				
K4467-1	III			5/27	F	2.5/5			✓
Exponent					CL				✓
					NO2				
					Br				
					NO3				
					SO4		0.5/5 °		✓

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
K4680-1	I			5/28	F	2.5/5			✓
RJ Lee Group					CL				
					NO2				
					Br				
					NO3				
					SO4				
-2					F				✓
					CL				
					NO2				
					Br				
					NO3				
					SO4				
-3					F				✓
					CL				
					NO2				
					Br				
					NO3				
					SO4				
-4					F				✓
					CL				
					NO2				
					Br				
					NO3				
					SO4				
-5					F				✓
					CL				
					NO2				
					Br				
					NO3				
					SO4				
K5150-1	II		Recd Past	5/31	F				
Coeur					CL	1/5			✓
Alaska					NO2				
					Br				
					NO3	1/5			✓
					SO4	0.5/100			✓
K5161-1	II		Recd Past	5/31	F				
Coeur					CL	2.5/5			✓
Alaska					NO2				
					Br				
					NO3				✓
					SO4				✓
-2					F				
					CL	2.5/5			✓
					NO2				
					Br				
					NO3				✓
					SO4				✓
K4575-1	III			5/29	F	2.5/5			✓
Exponent					CL				✓
MDL					NO2				
					Br				
					NO3				
					SO4		1/5		
-2					F	2.5/5			
					CL				
					NO2				
					Br				
					NO3				
					SO4				

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
K4575-3	III			5/29	F	2.5/5			
					CL				
					NO2				
					Br				
					NO3				
					SO4				
-4					F	5/5			
					CL				
					NO2				
					Br				
					NO3				
					SO4				
K5160-1	I			~~5/20~~	F				
P.P					CL	2.5/5			✓
					NO2				
					Br				
					NO3				✓
					SO4				✓
K4470-1	II			5/29	F				
Barr					~~CL~~	~~0.5/5~~			
					NO2				
					Br				
					NO3				
					SO4	0.5/5			✓
-2					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	5/5			✓
-3					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.5/5			✓
-4					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	25/5	0.25/5		
-5					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.1/5			✓
-6					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.25/5			✓
-7					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	2.5/5			✓

Service Request	Tier	QC	Hold Time	Due Date	Anion	Initial	Final	QC DILUTION	Done?
E4470-8					F				
					~~CL~~	200x	~~0.5/5~~		
					NO2				
					Br				
					NO3				
					SO4	200x	0.5/5		
-9					F				
					~~CL~~	~~0.25/5~~			✓
					NO2				
					Br				
					NO3				
					SO4	0.25/5			✓
-10					F				
					~~CL~~	0.25/5	~~2.5/5~~		
					NO2				
					Br				
					NO3				
					SO4	0.25/5			✓
-11					F				
					~~CL~~	2.5/5	~~1/5~~		
					NO2				
					Br				
					NO3				
					SO4	2.5/5			✓
-12					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.1/5			✓
-13					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	200x			✓
-14					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4	0.1/5			✓
					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					CL				
					NO2				
					Br				
					NO3				
					SO4				

Sequence: IC03052010
Operator: mblack
Printed: 5/21/2010 3:42:44 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 83

Created: 5/20/2010 8:25:24 AM by ACQWET10
Last Update: 5/20/2010 5:52:45 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status
1	std2/lvl2	Standard	1	200.0	epa300	epa300	Finished
2	std3/lvl3	Standard	2	200.0	epa300	epa300	Finished
3	std4/lvl4	Standard	3	200.0	epa300	epa300	Finished
4	std5/lvl5	Standard	4	200.0	epa300	epa300	Finished
5	std6/lvl6	Standard	5	200.0	epa300	epa300	Finished
6	std7/lvl7	Standard	6	200.0	epa300	epa300	Finished
7	std1/lvl1	Standard	7	200.0	epa300	epa300	Finished
8	CCV AN11-20-H	Unknown	8	200.0	epa300	epa300	Finished
9	CCB	Unknown	9	200.0	epa300	epa300	Finished
10	NO2 AN11-27-CC	Unknown	10	200.0	epa300	epa300	Finished
11	MB	Unknown	11	200.0	epa300	epa300	Finished
12	NO3 AN1-33-E	Unknown	11	200.0	epa300	epa300	Finished
13	CLSO4 ERA #0107-10-02	Unknown	12	200.0	epa300	epa300	Finished
14	F AN1-33-D	Unknown	13	200.0	epa300	epa300	Finished
15	Br AN1-33-L	Unknown	14	200.0	epa300	epa300	Finished
16	SPK AN11-10-M	Unknown	15	200.0	epa300	epa300	Finished
17	CCV2	Unknown	15	200.0	epa300	epa300	Finished
18	CCB2	Unknown	16	200.0	epa300	epa300	Finished
19	K1005105-001	Unknown	17	200.0	epa300	epa300	Finished
20	K1005149-002	Unknown	18	200.0	epa300	epa300	Finished
21	K4536-1 BEXT	Unknown	19	200.0	epa300	epa300	Finished
22	K1004923-001	Unknown	20	200.0	epa300	epa300	Finished
23	K1004923-002	Unknown	21	200.0	epa300	epa300	Finished
24	K1004923-003	Unknown	22	200.0	epa300	epa300	Finished
25	K1004923-008	Unknown	23	200.0	epa300	epa300	Finished
26	K1004711-001	Unknown	24	200.0	epa300	epa300	Finished
27	K1004967-001	Unknown	24	200.0	epa300	epa300	Finished
28	RB	Unknown	25	200.0	epa300	epa300	Finished
29	CCV3	Unknown	26	200.0	epa300	epa300	Finished
30	CCB3	Unknown	27	200.0	epa300	epa300	Finished
31	K1004923-002	Unknown	28	200.0	epa300	epa300	Finished
32	K1004923-002	Unknown	29	200.0	epa300	epa300	Finished
33	K1004923-002	Unknown	30	200.0	epa300	epa300	Finished
34	K1004467-001	Unknown	31	200.0	epa300	epa300	Finished
35	K1004680-001	Unknown	32	200.0	epa300	epa300	Finished
36	K1004680-002	Unknown	33	200.0	epa300	epa300	Finished
37	K1004680-003	Unknown	34	200.0	epa300	epa300	Finished
38	K1004680-004	Unknown	35	200.0	epa300	epa300	Finished
39	K1004680-005	Unknown	36	200.0	epa300	epa300	Finished
40	RB	Unknown	37	200.0	epa300	epa300	Finished
41	CCV4	Unknown	38	200.0	epa300	epa300	Finished
42	CCB4	Unknown	39	200.0	epa300	epa300	Finished

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 83
Created: 5/20/2010 8:25:24 AM by ACQWET10
Last Update: 5/20/2010 5:52:45 PM by ACQWET10

No.	Name	Inj. Date/Time	Dil. Factor	Comment
1	std2/lvl2	4/26/2010 8:54:58 AM	1.0000	
2	std3/lvl3	4/26/2010 9:12:26 AM	1.0000	
3	std4/lvl4	4/26/2010 9:25:24 AM	1.0000	
4	std5/lvl5	4/26/2010 9:38:21 AM	1.0000	
5	std6/lvl6	4/26/2010 9:51:19 AM	1.0000	
6	std7/lvl7	4/26/2010 10:04:17 AM	1.0000	
7	std1/lvl1	4/26/2010 10:17:14 AM	1.0000	
8	CCV AN11-20-H	5/20/2010 8:54:44 AM	1.0000	CCV1
9	CCB	5/20/2010 9:06:41 AM	1.0000	CCB1
10	NO2 AN11-27-CC	5/20/2010 9:18:38 AM	25.0000	NO2
11	MB	5/20/2010 9:30:36 AM	1.0000	MB
12	NO3 AN1-33-E	5/20/2010 9:42:34 AM	20.0000	NO3
13	CLSO4 ERA #0107-10-02	5/20/2010 9:54:32 AM	1.0000	CLSO4
14	F AN1-33-D	5/20/2010 10:06:30 AM	2.0000	F
15	Br AN1-33-L	5/20/2010 10:18:28 AM	1.0000	Br
16	SPK AN11-10-M	5/20/2010 10:30:26 AM	1.0000	SPK
17	CCV2	5/20/2010 10:42:24 AM	1.0000	CCV2
18	CCB2	5/20/2010 10:54:21 AM	1.0000	CCB2
19	K1005105-001	5/20/2010 11:17:40 AM	2.0000	
20	K1005149-002	5/20/2010 11:54:10 AM	2.0000	
21	K4536-1 BEXT	5/20/2010 12:14:49 PM	20.0000	
22	K1004923-001	5/20/2010 12:26:47 PM	2.0000	
23	K1004923-002	5/20/2010 12:38:45 PM	2.0000	
24	K1004923-003	5/20/2010 12:50:43 PM	2.0000	
25	K1004923-008	5/20/2010 1:02:41 PM	2.0000	
26	K1004711-001	5/20/2010 1:14:40 PM	2.0000	
27	K1004967-001	5/20/2010 1:26:37 PM	50.0000	
28	RB	5/20/2010 1:38:35 PM	1.0000	
29	CCV3	5/20/2010 1:50:33 PM	1.0000	CCV3
30	CCB3	5/20/2010 2:02:31 PM	1.0000	CCB3
31	K1004923-002	5/20/2010 2:14:29 PM	2.0000	4923-2D
32	K1004923-002	5/20/2010 2:26:27 PM	2.0000	4923-2MS
33	K1004923-002	5/20/2010 2:38:25 PM	2.0000	4923-2MSD
34	K1004467-001	5/20/2010 2:50:22 PM	2.0000	
35	K1004680-001	5/20/2010 3:02:20 PM	2.0000	
36	K1004680-002	5/20/2010 3:14:18 PM	2.0000	
37	K1004680-003	5/20/2010 3:26:17 PM	2.0000	
38	K1004680-004	5/20/2010 3:38:15 PM	2.0000	
39	K1004680-005	5/20/2010 3:50:12 PM	2.0000	
40	RB	5/20/2010 4:02:10 PM	1.0000	
41	CCV4	5/20/2010 4:14:07 PM	1.0000	CCV4
42	CCB4	5/20/2010 4:26:05 PM	1.0000	CCB4

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 83
Created: 5/20/2010 8:25:24 AM by ACQWET10
Last Update: 5/20/2010 5:52:45 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status
43	K1005160-001	Unknown	40	200.0	epa300	epa300	Finished
44	K1005161-001	Unknown	41	200.0	epa300	epa300	Finished
45	K1005161-002	Unknown	42	200.0	epa300	epa300	Finished
46	K1005150-001	Unknown	43	200.0	epa300	epa300	Finished
47	K1005150-001	Unknown	44	200.0	epa300	epa300	Finished
48	K1005149-002	Unknown	45	200.0	epa300	epa300	Finished
49	K1004923-003	Unknown	46	200.0	epa300	epa300	Finished
50	K1004467-001	Unknown	47	200.0	epa300	epa300	Finished
51	K1004575-001	Unknown	48	200.0	epa300	epa300	Finished
52	RB	Unknown	49	200.0	epa300	epa300	Finished
53	CCV5	Unknown	50	200.0	epa300	epa300	Finished
54	CCB5	Unknown	51	200.0	epa300	epa300	Finished
55	MB 2	Unknown	52	200.0	epa300	epa300	Finished
56	CLSO4 2	Unknown	53	200.0	epa300	epa300	Finished
57	K1004470-001	Unknown	54	200.0	epa300	epa300	Finished
58	K1004470-002	Unknown	55	200.0	epa300	epa300	Finished
59	K1004470-003	Unknown	56	200.0	epa300	epa300	Finished
60	K1004470-004	Unknown	57	200.0	epa300	epa300	Finished
61	K1004470-005	Unknown	58	200.0	epa300	epa300	Finished
62	K1004470-006	Unknown	59	200.0	epa300	epa300	Finished
63	K1004470-007	Unknown	60	200.0	epa300	epa300	Finished
64	RB	Unknown	61	200.0	epa300	epa300	Finished
65	CCV6	Unknown	62	200.0	epa300	epa300	Finished
66	CCB6	Unknown	63	200.0	epa300	epa300	Finished
67	K1004470-008	Unknown	64	200.0	epa300	epa300	Finished
68	K1004470-009	Unknown	65	200.0	epa300	epa300	Finished
69	K1004470-010	Unknown	66	200.0	epa300	epa300	Finished
70	K1004470-011	Unknown	67	200.0	epa300	epa300	Finished
71	K1004470-012	Unknown	68	200.0	epa300	epa300	Finished
72	K1004470-012	Unknown	69	200.0	epa300	epa300	Finished
73	K1004470-012	Unknown	70	200.0	epa300	epa300	Finished
74	K1004470-012	Unknown	71	200.0	epa300	epa300	Finished
75	K1004470-013	Unknown	72	200.0	epa300	epa300	Finished
76	RB	Unknown	73	200.0	epa300	epa300	Finished
77	CCV7	Unknown	74	200.0	epa300	epa300	Finished
78	CCB7	Unknown	75	200.0	epa300	epa300	Finished
79	K1004470-014	Unknown	76	200.0	epa300	epa300	Finished
80	RB	Unknown	77	200.0	epa300	epa300	Finished
81	CCV8	Unknown	78	200.0	epa300	epa300	Finished
82	CCB8	Unknown	79	200.0	epa300	epa300	Finished
83	SHUTDOWN	Unknown	80	200.0	shutdown 120	epa300	Finished

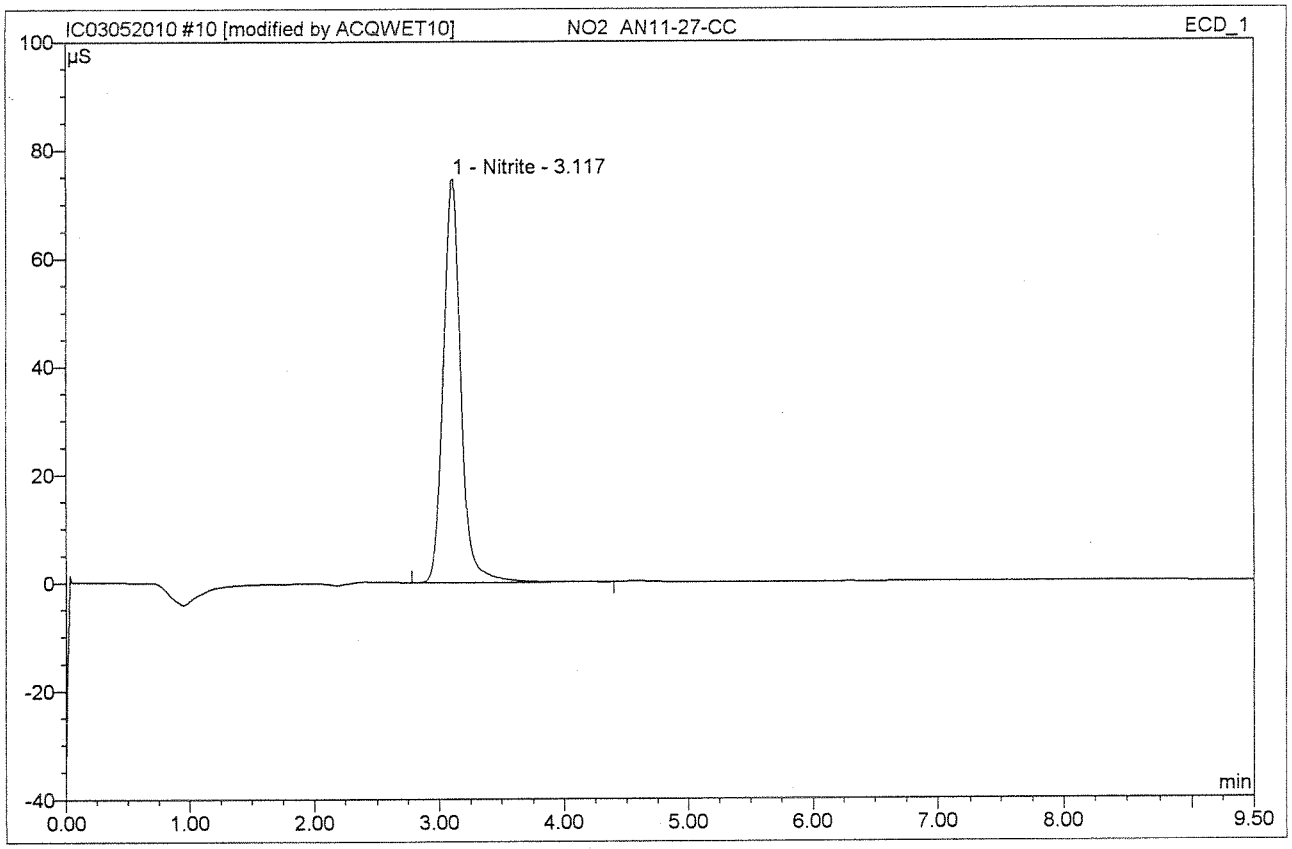
Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 83
Created: 5/20/2010 8:25:24 AM by ACQWET10
Last Update: 5/20/2010 5:52:45 PM by ACQWET10

No.	Name	Inj. Date/Time	Dil. Factor	Comment
43	K1005160-001	5/20/2010 4:38:02 PM	2.0000	
44	K1005161-001	5/20/2010 4:50:00 PM	2.0000	
45	K1005161-002	5/20/2010 5:01:58 PM	2.0000	
46	K1005150-001	5/20/2010 5:13:55 PM	5.0000	
47	K1005150-001	5/20/2010 5:25:53 PM	200.0000	
48	K1005149-002	5/20/2010 5:37:50 PM	20.0000	
49	K1004923-003	5/20/2010 5:49:48 PM	5.0000	
50	K1004467-001	5/20/2010 6:01:45 PM	10.0000	
51	K1004575-001	5/20/2010 6:13:43 PM	2.0000	
52	RB	5/20/2010 6:25:41 PM	1.0000	
53	CCV5	5/20/2010 6:37:38 PM	1.0000	CCV5
54	CCB5	5/20/2010 6:49:36 PM	1.0000	CCB5
55	MB 2	5/20/2010 7:01:34 PM	1.0000	MB 2
56	CLSO4 2	5/20/2010 7:13:32 PM	1.0000	CLSO4 2
57	K1004470-001	5/20/2010 7:25:30 PM	10.0000	
58	K1004470-002	5/20/2010 7:37:27 PM	1.0000	
59	K1004470-003	5/20/2010 7:49:25 PM	10.0000	
60	K1004470-004	5/20/2010 8:01:23 PM	2.0000	
61	K1004470-005	5/20/2010 8:13:20 PM	50.0000	
62	K1004470-006	5/20/2010 8:25:18 PM	20.0000	
63	K1004470-007	5/20/2010 8:37:15 PM	2.0000	
64	RB	5/20/2010 8:49:13 PM	1.0000	
65	CCV6	5/20/2010 9:01:11 PM	1.0000	CCV6
66	CCB6	5/20/2010 9:13:09 PM	1.0000	CCB6
67	K1004470-008	5/20/2010 9:25:07 PM	200.0000	
68	K1004470-009	5/20/2010 9:37:04 PM	20.0000	
69	K1004470-010	5/20/2010 9:49:02 PM	20.0000	
70	K1004470-011	5/20/2010 10:01:00 PM	2.0000	
71	K1004470-012	5/20/2010 10:12:57 PM	50.0000	
72	K1004470-012	5/20/2010 10:24:55 PM	50.0000	4470-12D
73	K1004470-012	5/20/2010 10:36:53 PM	50.0000	4470-12MS
74	K1004470-012	5/20/2010 10:48:51 PM	50.0000	4470-12MSD
75	K1004470-013	5/20/2010 11:00:48 PM	200.0000	
76	RB	5/20/2010 11:12:46 PM	1.0000	
77	CCV7	5/20/2010 11:24:44 PM	1.0000	CCV7
78	CCB7	5/20/2010 11:36:42 PM	1.0000	CCV7
79	K1004470-014	5/20/2010 11:48:39 PM	50.0000	
80	RB	5/21/2010 12:00:37 AM	1.0000	
81	CCV8	5/21/2010 12:12:34 AM	1.0000	CCV8
82	CCB8	5/21/2010 12:24:33 AM	1.0000	CCB8
83	SHUTDOWN	5/21/2010 12:36:30 AM	1.0000	

10 NO2 AN11-27-CC

NO2

Sample Name:	**NO2 AN11-27-CC**	*Injection Volume:*	**200.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**5/20/2010 9:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.12	Nitrite	74.628	12.169	100.00	105.368 *105?*	BMB*
Total:			74.628	12.169	100.00	105.368	

JM 5/25/10

After Initials

MAY 2 6 2010

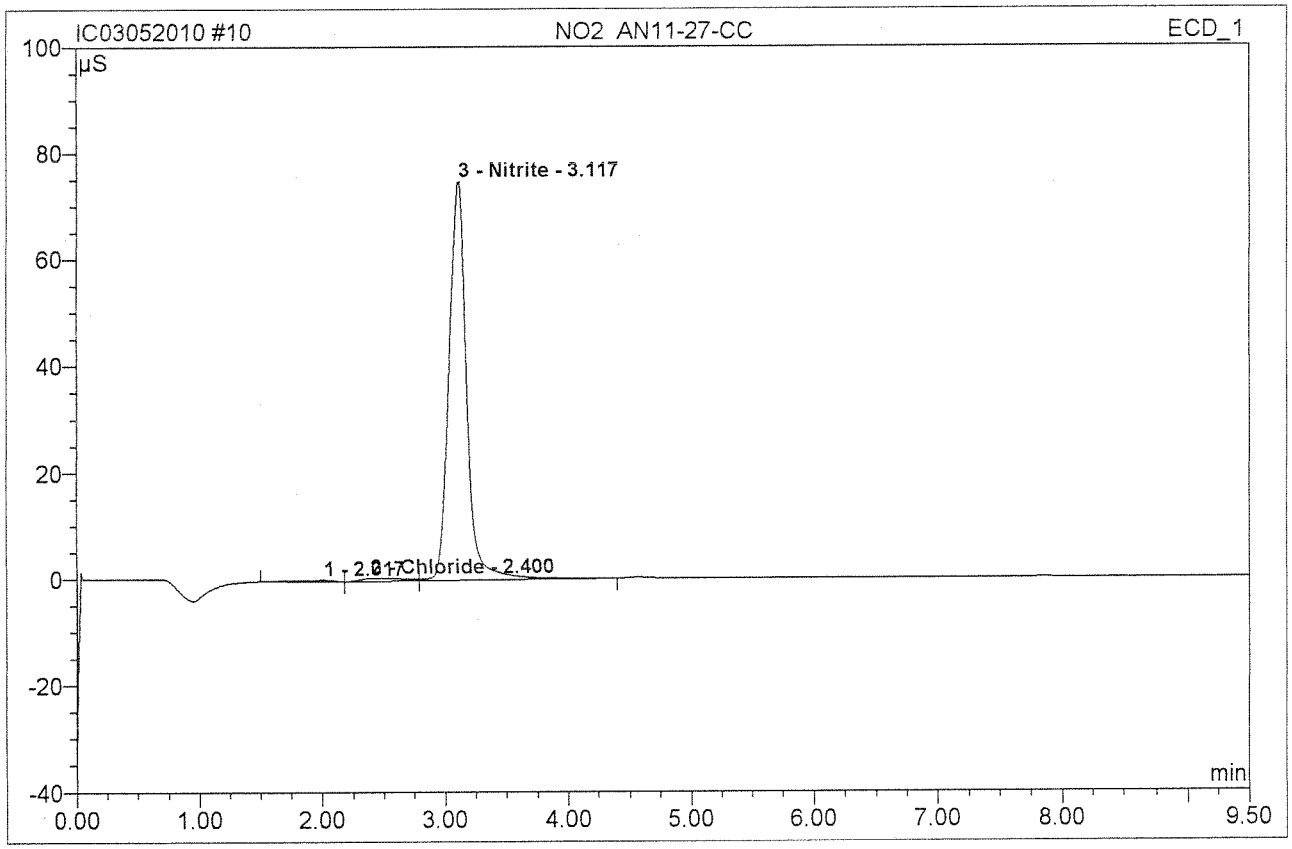
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

10 NO2 AN11-27-CC

NO2

Sample Name:	**NO2 AN11-27-CC**	*Injection Volume:*	**200.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**5/20/2010 9:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

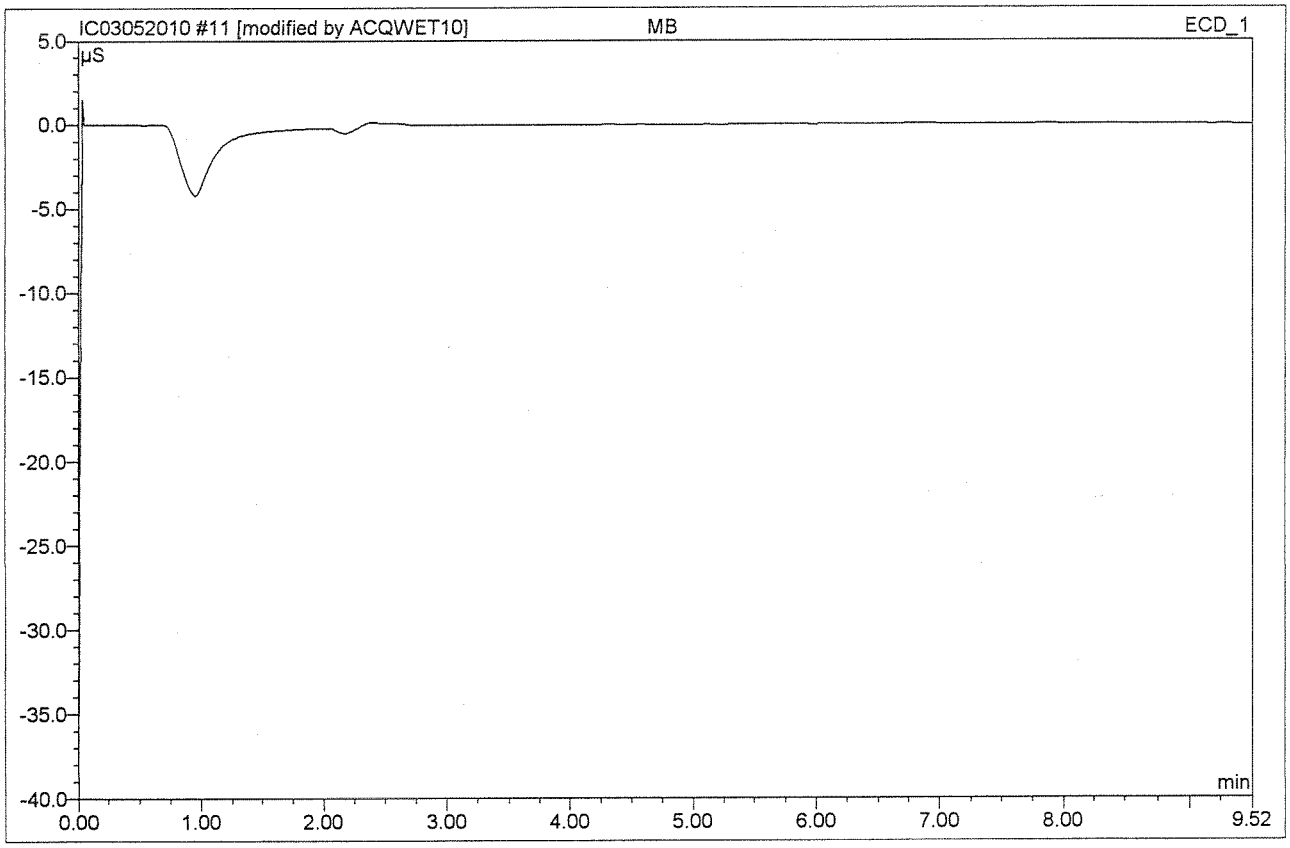


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.02	n.a.	0.313	0.125	0.97	n.a.	BMb
2	2.40	Chloride	0.607	0.249	1.94	3.991	bM
3	3.12	Nitrite	74.912	12.459	97.09	107.876	MB
Total:			75.832	12.833	100.00	111.866	

11 MB

MB

Sample Name:	**MB**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.52**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

5/25/10

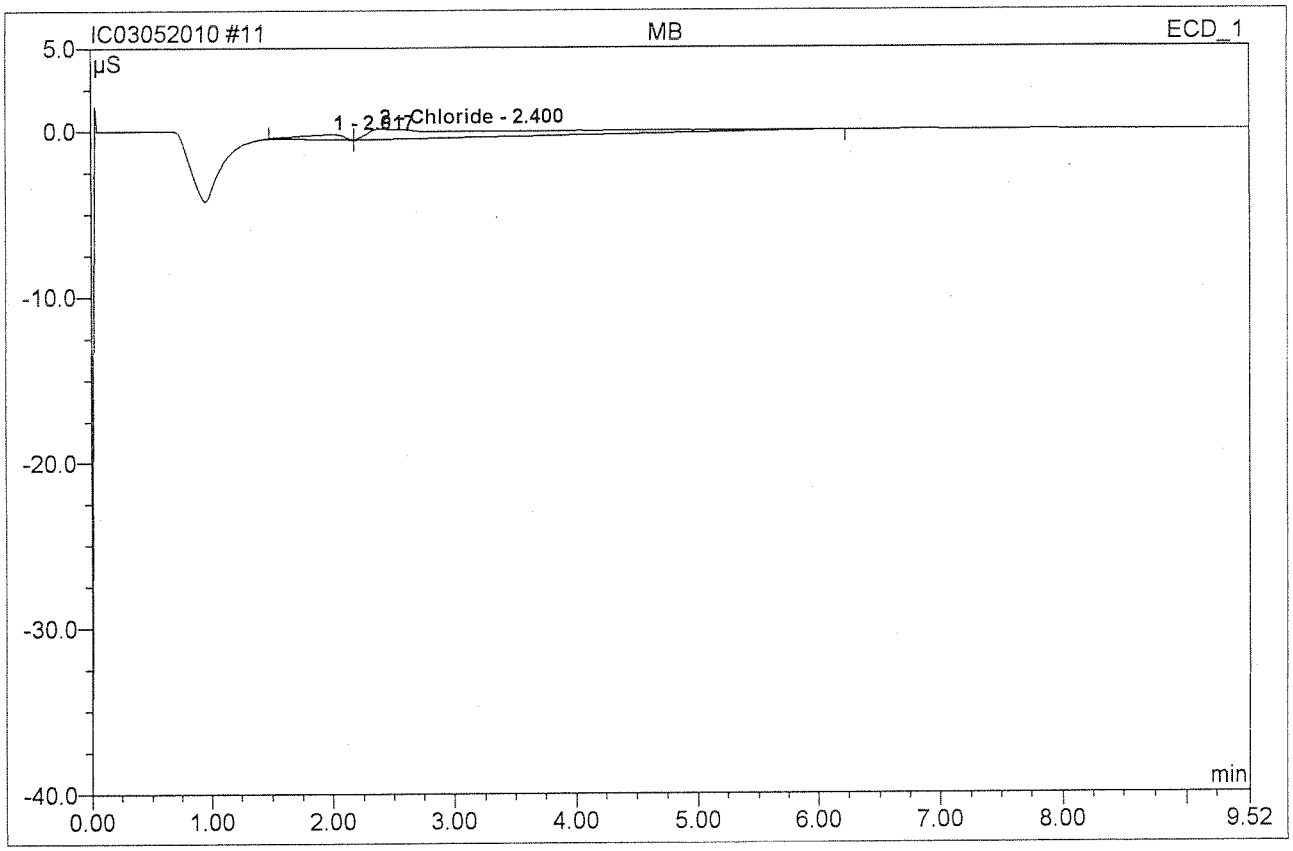
After initials MB

MAY 2 0 2010

11 MB

MB

Sample Name:	**MB**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.52**	*Sample Amount:*	**1.0000**

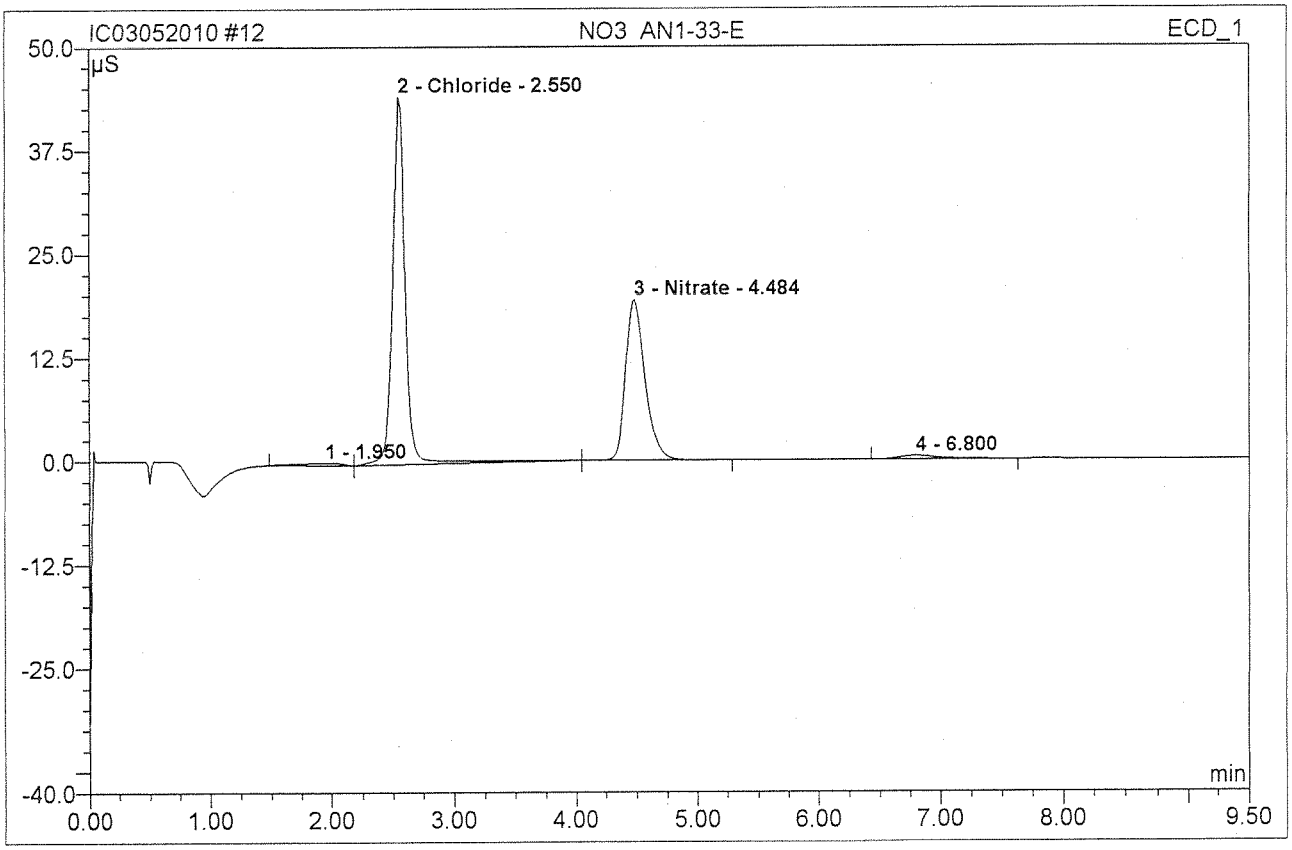


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.02	n.a.	0.302	0.125	11.44	n.a.	BMb
2	2.40	Chloride	0.632	0.968	88.56	0.621	bMB
Total:			0.934	1.093	100.00	0.621	

12 NO3 AN1-33-E

NO3

Sample Name:	**NO3 AN1-33-E**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**20.0000**
Recording Time:	**5/20/2010 9:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

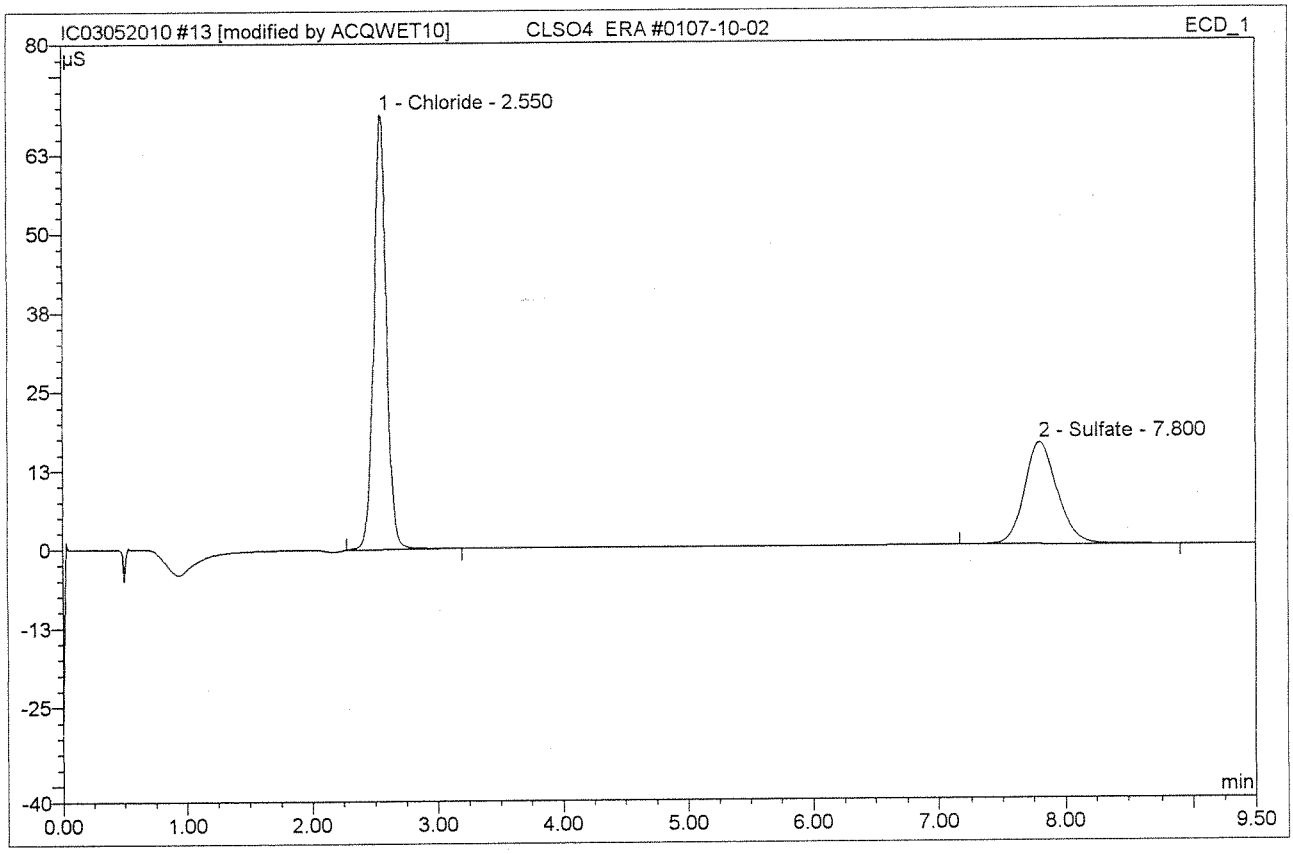


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.95	n.a.	0.316	0.135	1.44	n.a.	BMb
2	2.55	Chloride	44.339	5.399	57.79	69.233	bMB
3	4.48	Nitrate	19.325	3.641	38.97	19.766 94?	bMB
4	6.80	n.a.	0.454	0.168	1.80	n.a.	BMB
Total:			64.435	9.342	100.00	88.999	

13 CLSO4 ERA #0107-10-02

CLSO4

Sample Name:	**CLSO4 ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.55	Chloride	68.863	8.035	62.04	5.152 1032	BMB*
2	7.80	Sulfate	16.224	4.917	37.96	4.996 1002	BMB
Total:			85.087	12.952	100.00	10.149	

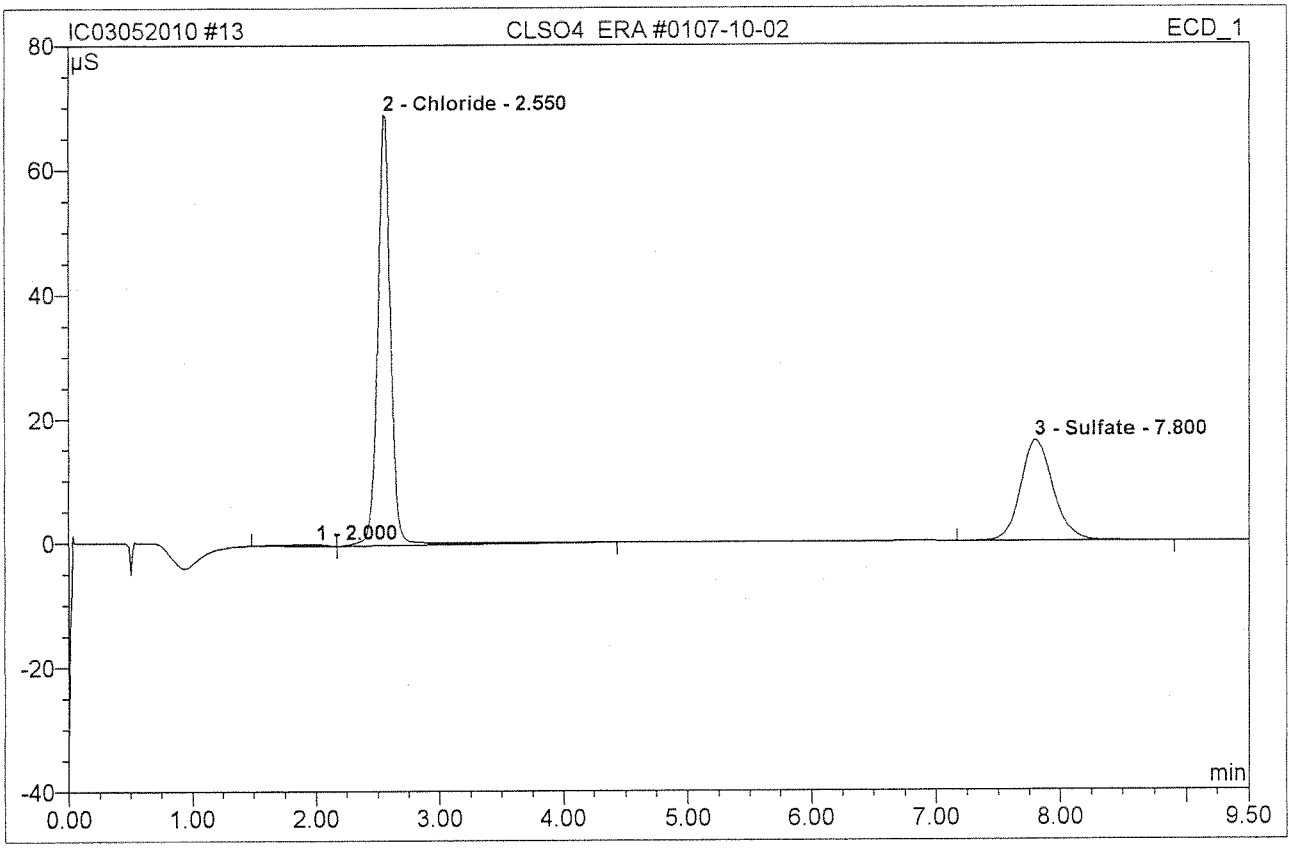
5/25/10

MAY 2 3 2010

13 CLSO4 ERA #0107-10-02

CLSO4

Sample Name:	**CLSO4 ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

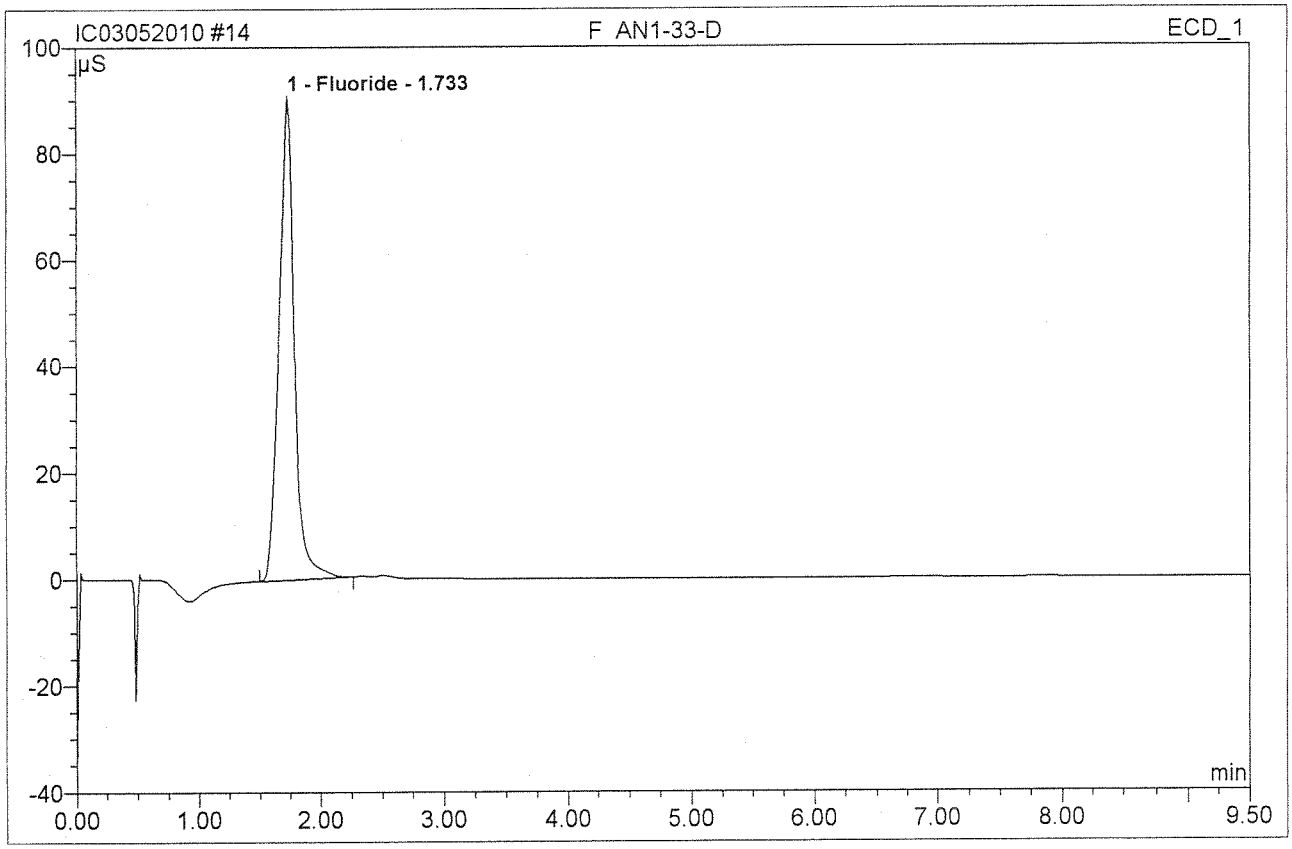


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.00	n.a.	0.310	0.125	0.93	n.a.	BMb
2	2.55	Chloride	69.169	8.481	62.72	5.438	bMB
3	7.80	Sulfate	16.224	4.917	36.36	4.996	BMB
Total:			85.703	13.523	100.00	10.434	

14 F AN1-33-D

F

Sample Name:	**F AN1-33-D**	*Injection Volume:*	**200.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**5/20/2010 10:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

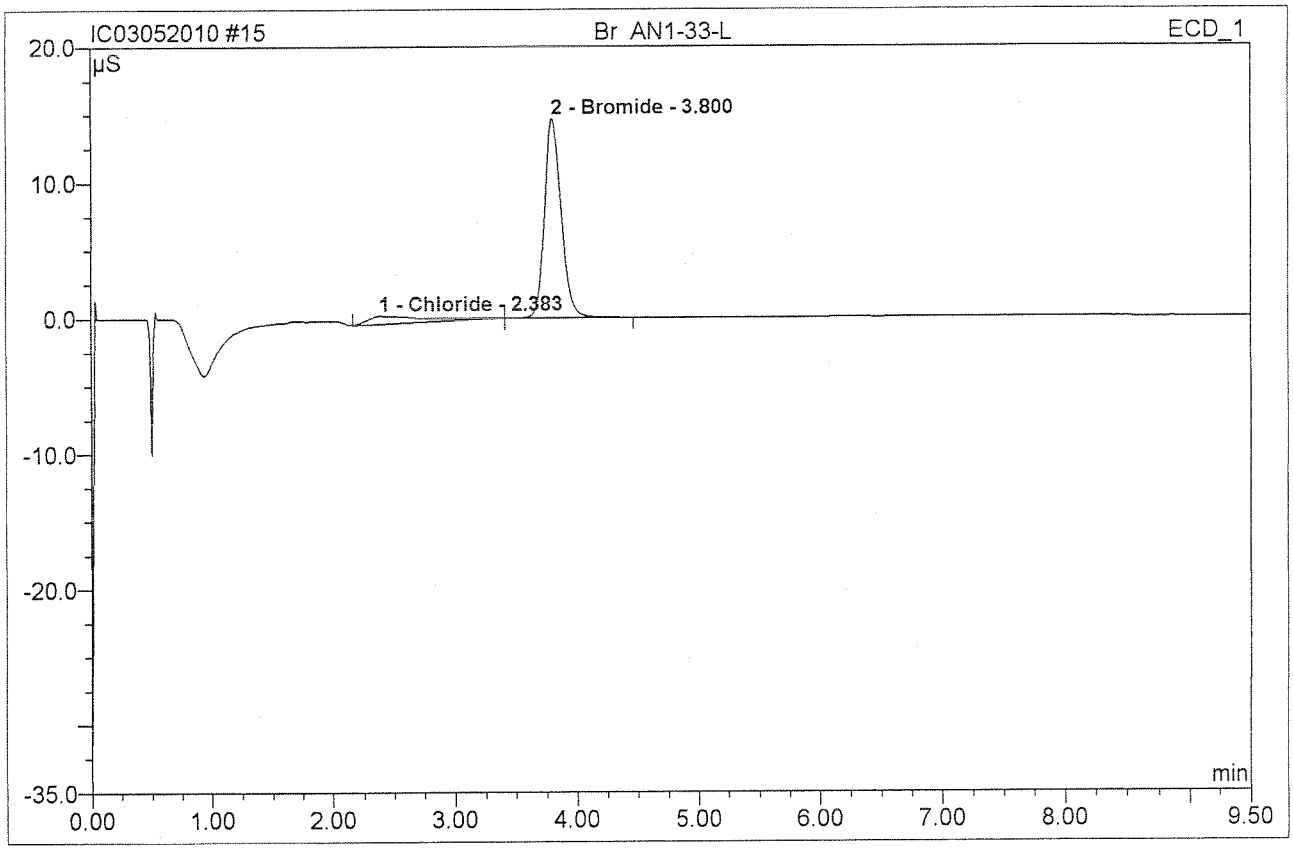


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	90.907	13.326	100.00	13.929/037	BMB
Total:			90.907	13.326	100.00	13.929	

15 Br AN1-33-L

Br

Sample Name:	**Br AN1-33-L**	*Injection Volume:*	**200.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

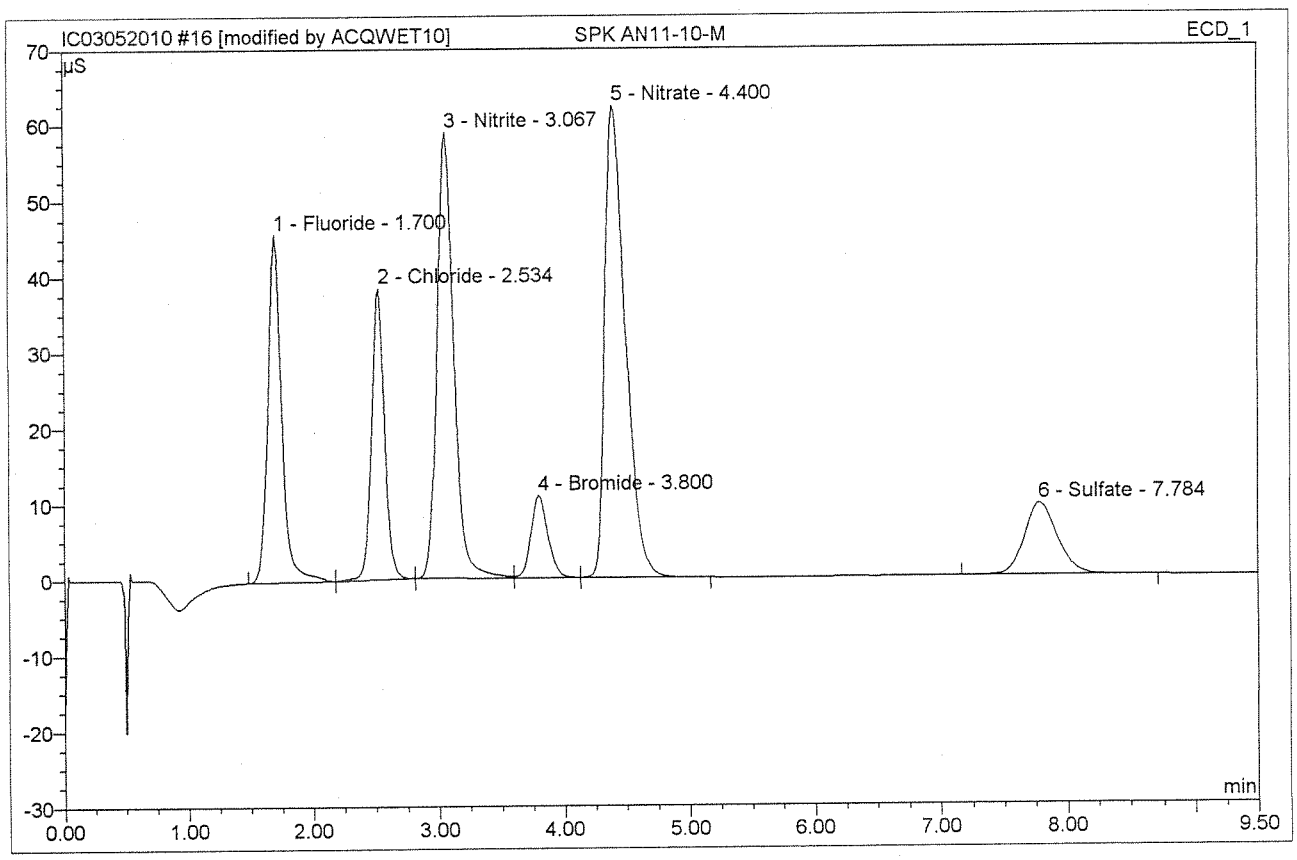


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.38	Chloride	0.595	0.314	11.87	0.201	BMB
2	3.80	Bromide	14.672	2.329	88.13	4.346 (097?	bMB
Total:			15.267	2.642	100.00	4.547	

16 SPK AN11-10-M

SPK

Sample Name:	**SPK AN11-10-M**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	45.876	5.850	16.35	3.057	BMb
2	2.53	Chloride	38.469	4.542	12.70	2.912	bMb
3	3.07	Nitrite	58.803	9.013	25.20	3.122	bM *
4	3.80	Bromide	10.919	1.705	4.77	3.182	Mb*
5	4.40	Nitrate	62.250	11.747	32.84	3.189	bMB
6	7.78	Sulfate	9.510	2.915	8.15	2.962	BMB
Total:			225.828	35.772	100.00	18.424	

RT=3.00

After Initials

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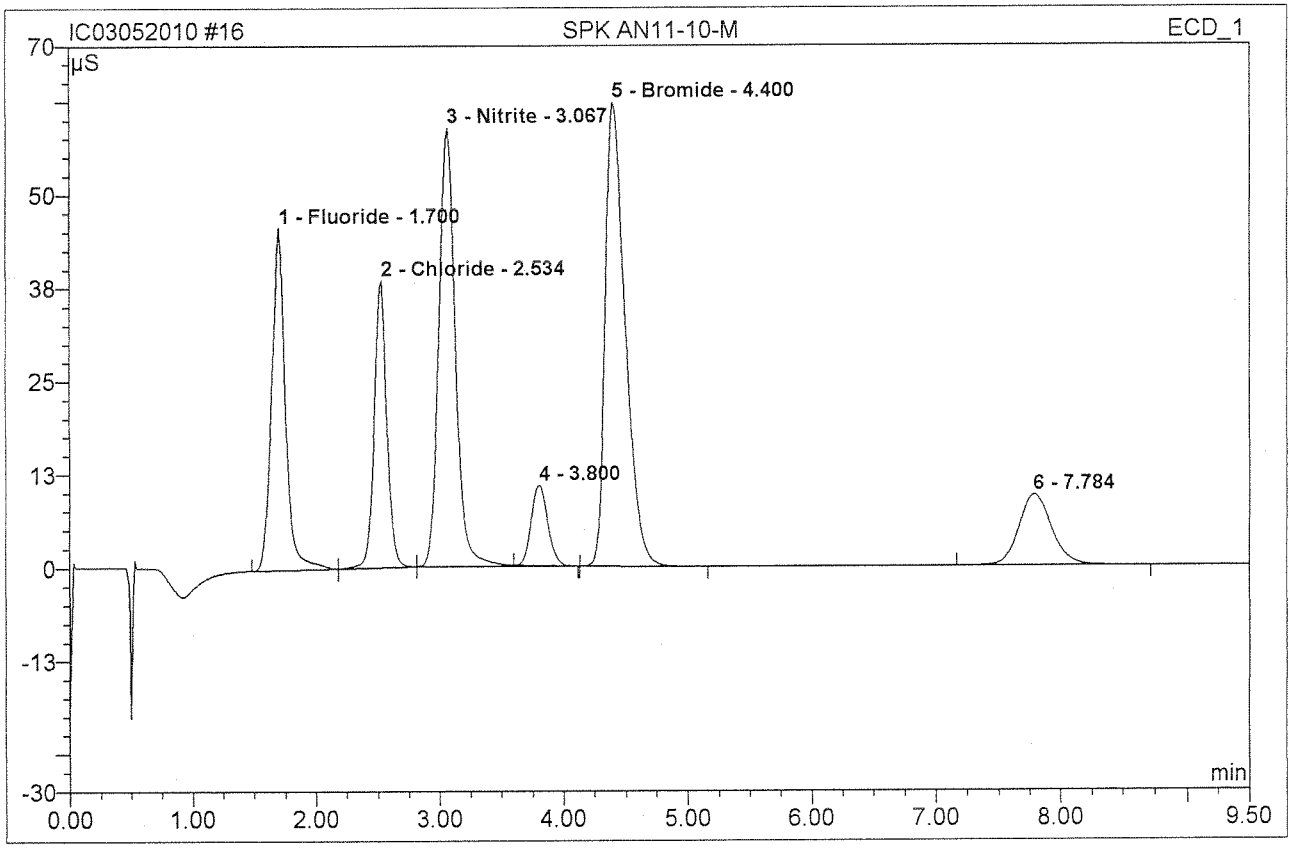
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

16 SPK AN11-10-M

SPK

Sample Name:	**SPK AN11-10-M**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

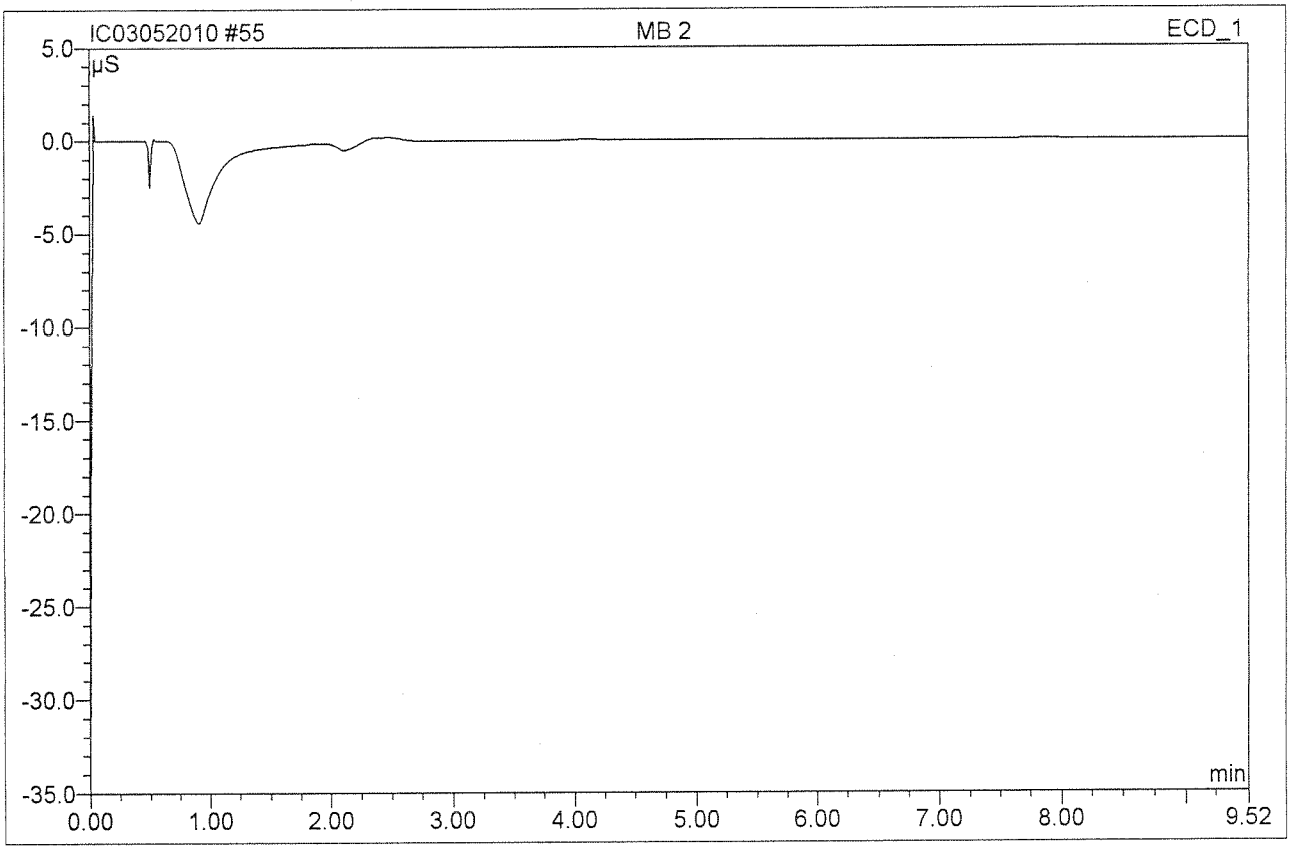


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	45.876	5.850	16.35	3.057	BMb
2	2.53	Chloride	38.469	4.542	12.70	2.912	bMb
3	3.07	Nitrite	58.803	9.060	25.33	3.138	bMb
4	3.80	n.a.	10.810	1.659	4.64	n.a.	Rd
5	4.40	Bromide	62.250	11.747	32.84	21.924	bMB
6	7.78	n.a.	9.510	2.915	8.15	n.a.	BMB
Total:			225.718	35.772	100.00	31.031	

55 MB 2

MB 2

Sample Name:	**MB 2**	*Injection Volume:*	**200.0**
Vial Number:	**52**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 19:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.52**	*Sample Amount:*	**1.0000**

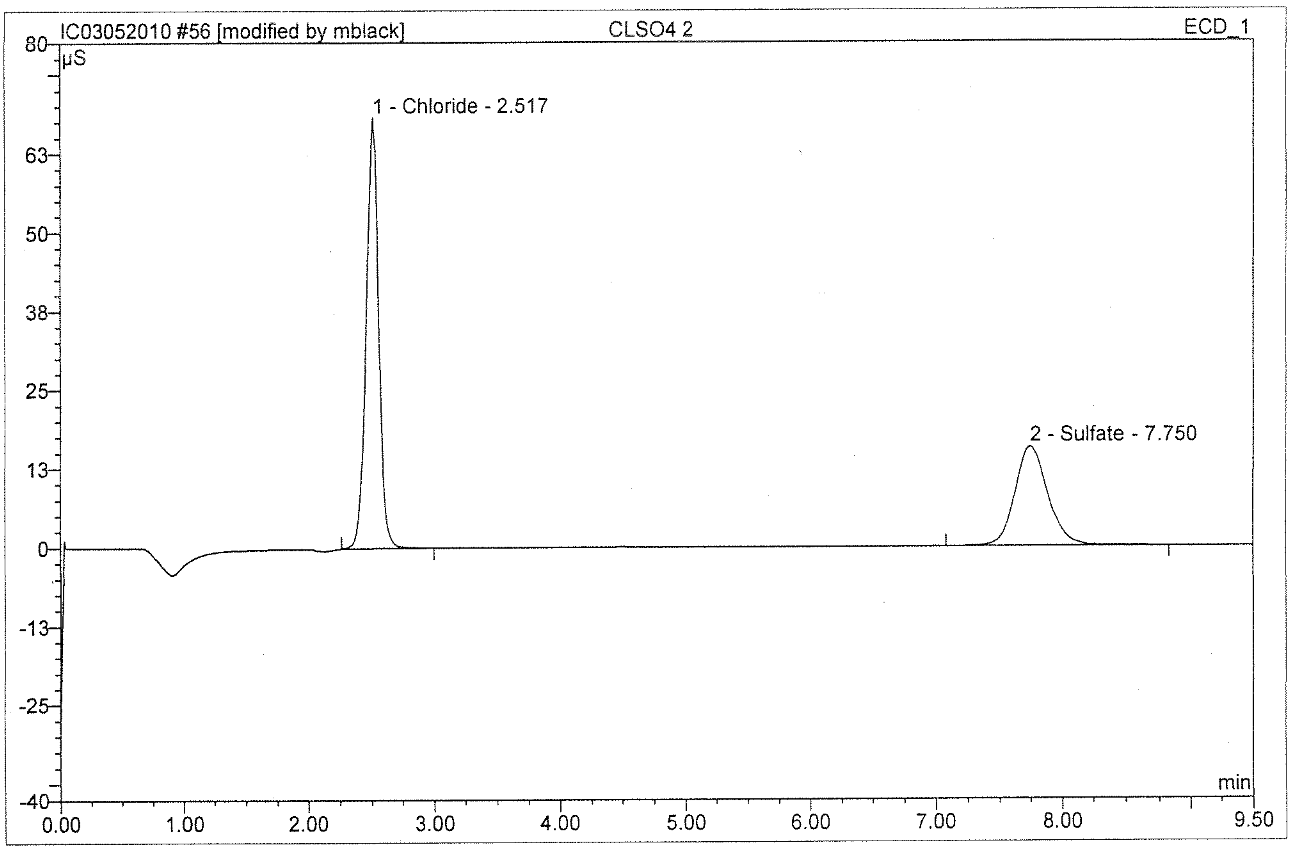


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

56 CLSO4 2

CLSO4 2

Sample Name:	**CLSO4 2**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 19:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.52	Chloride	68.281	7.836	62.20	5.025 101%	BMB*
2	7.75	Sulfate	15.768	4.763	37.80	4.840 97%	BMB
Total:			84.049	12.599	100.00	9.864	

MB

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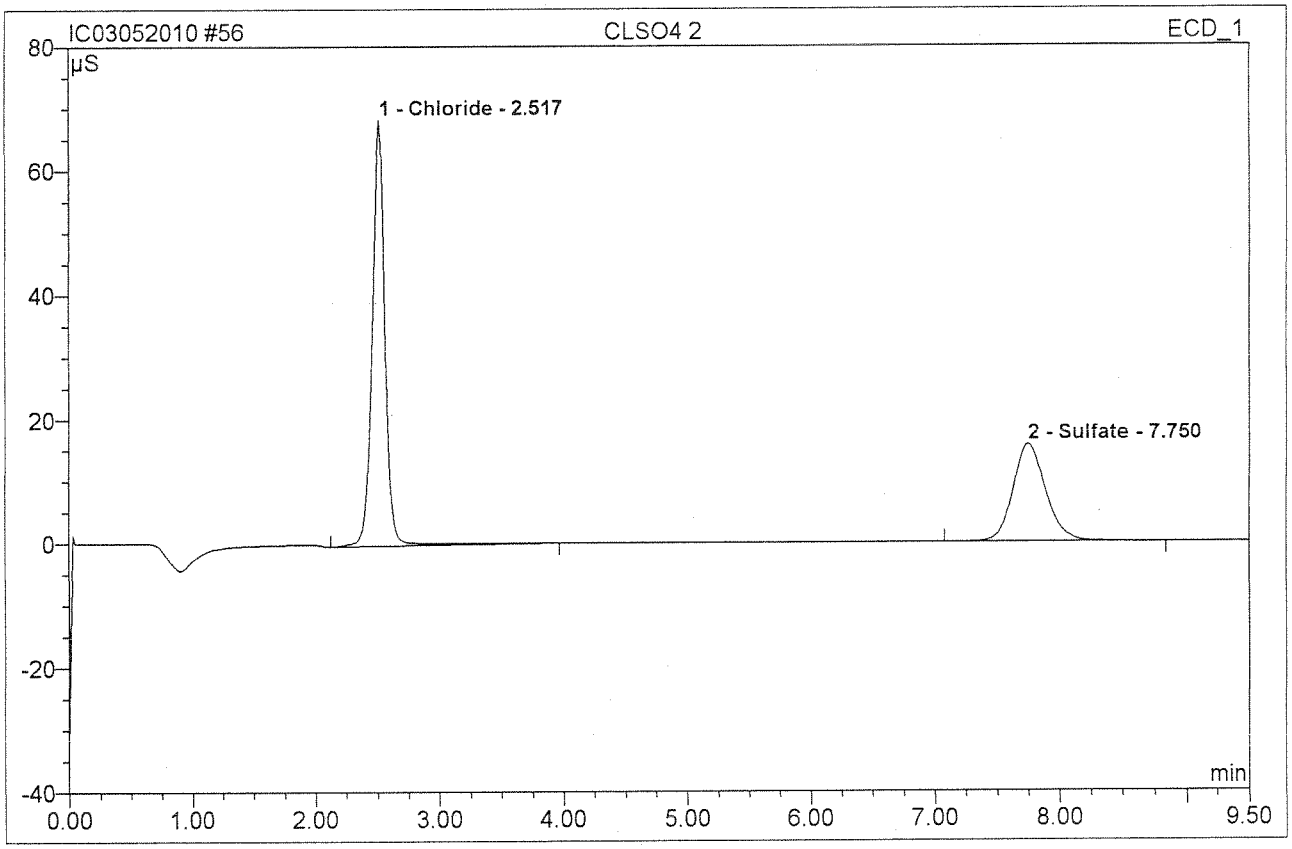
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

56 CLSO4 2

CLSO4 2

Sample Name:	**CLSO4 2**	*Injection Volume:*	**200.0**
Vial Number:	**53**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 19:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

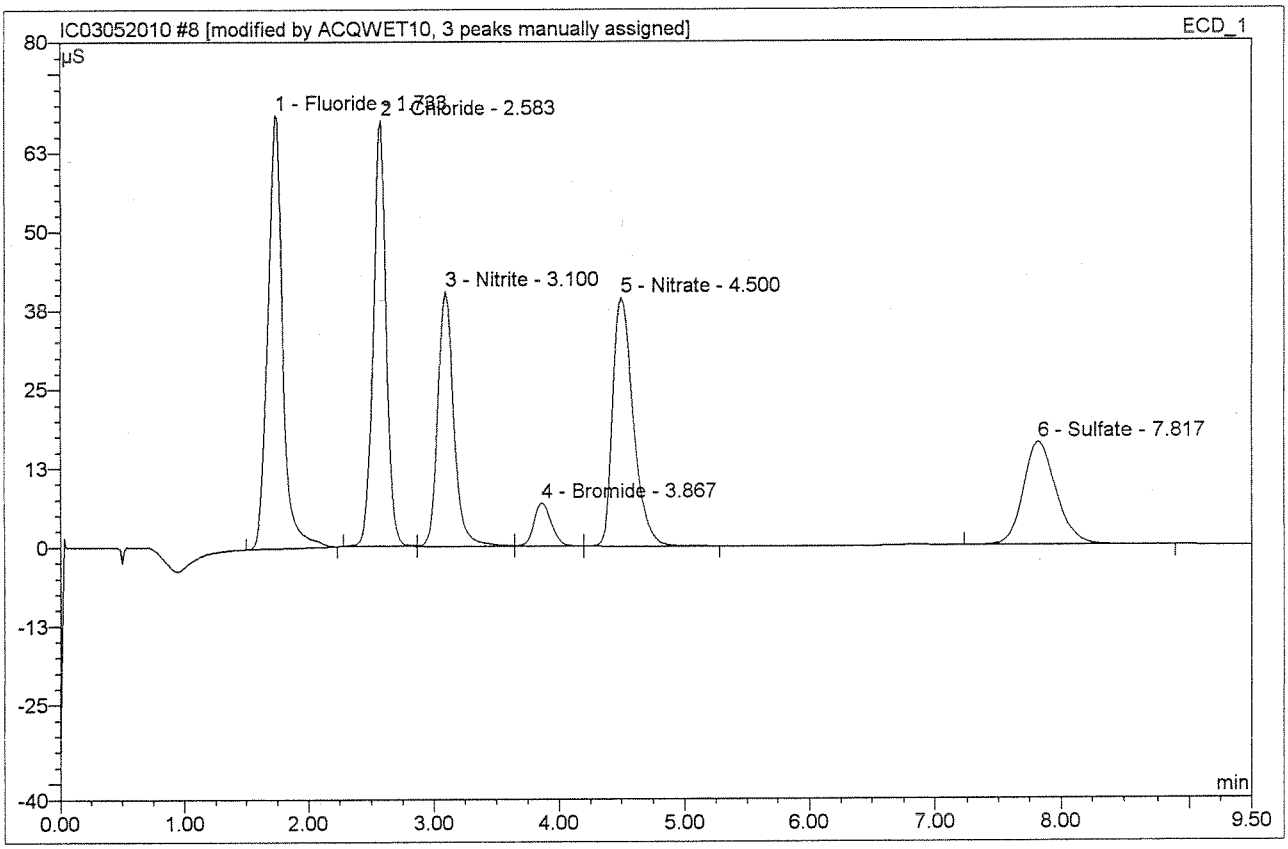


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.52	Chloride	68.621	8.218	63.31	5.270	BMB
2	7.75	Sulfate	15.768	4.763	36.69	4.840	BMB
Total:			84.388	12.981	100.00	10.109	

8 CCV AN11-20-H

CCV1

Sample Name:	**CCV AN11-20-H**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	68.651	9.603	25.90	5.019 100%	BMB*
2	2.58	Chloride	67.491	7.989	21.55	5.123 102%	BM *
3	3.10	Nitrite	40.257	5.982	16.13	2.072 104%	M *
4	3.87	Bromide	6.870	1.092	2.95	2.039 102%	M *^
5	4.50	Nitrate	39.326	7.441	20.07	2.020 101%	MB*^
6	7.82	Sulfate	16.292	4.974	13.41	5.055 101%	BMB^
Total:			238.888	37.082	100.00	21.327	

After Initials MB

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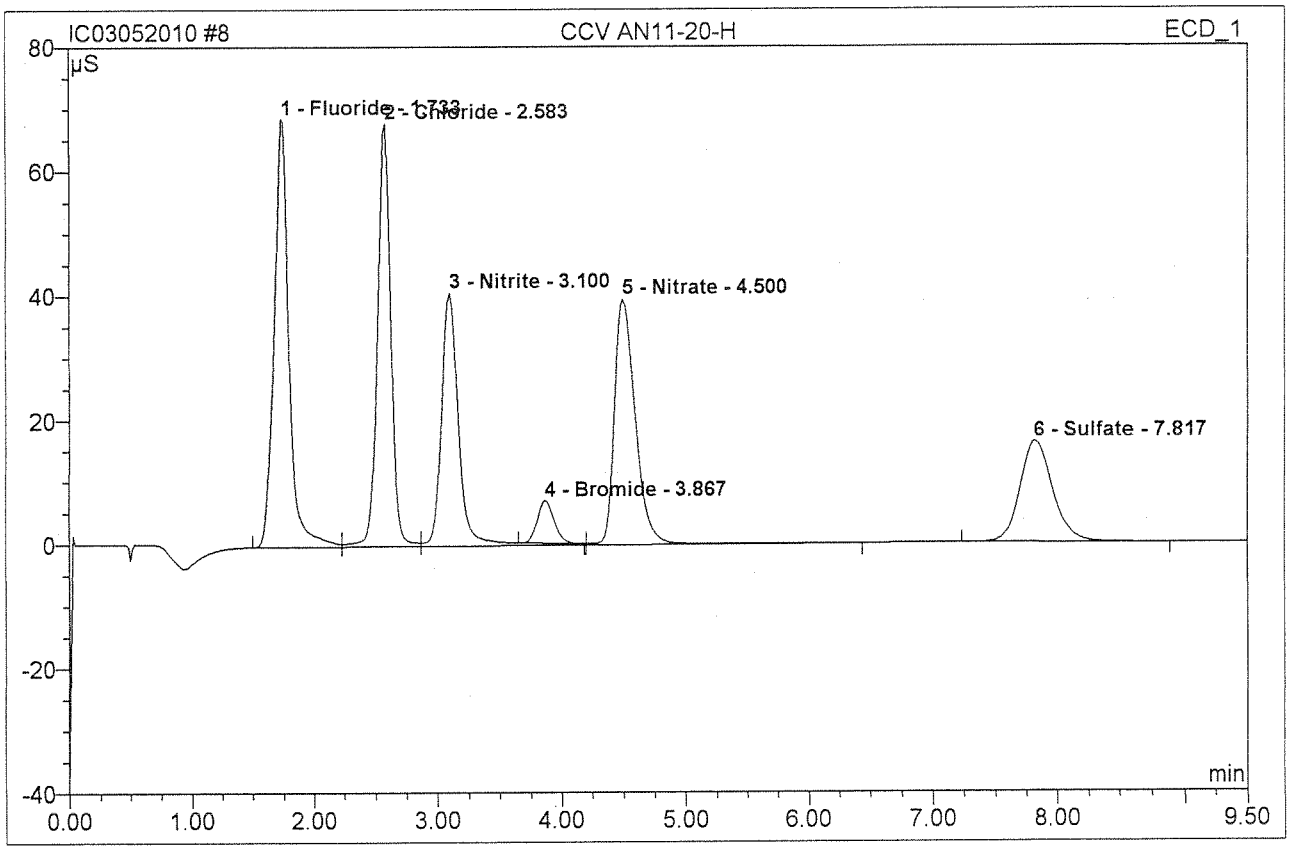
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

8 CCV AN11-20-H

CCV1

Sample Name:	**CCV AN11-20-H**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	68.792	9.765	25.54	5.104	BM
2	2.58	Chloride	67.960	8.287	21.68	5.314	M
3	3.10	Nitrite	40.654	6.446	16.86	2.233	M
4	3.87	Bromide	6.836	1.078	2.82	2.012	Rd
5	4.50	Nitrate	39.529	7.678	20.08	2.084	MB
6	7.82	Sulfate	16.292	4.974	13.01	5.055	BMB
Total:			240.065	38.229	100.00	21.801	

Before

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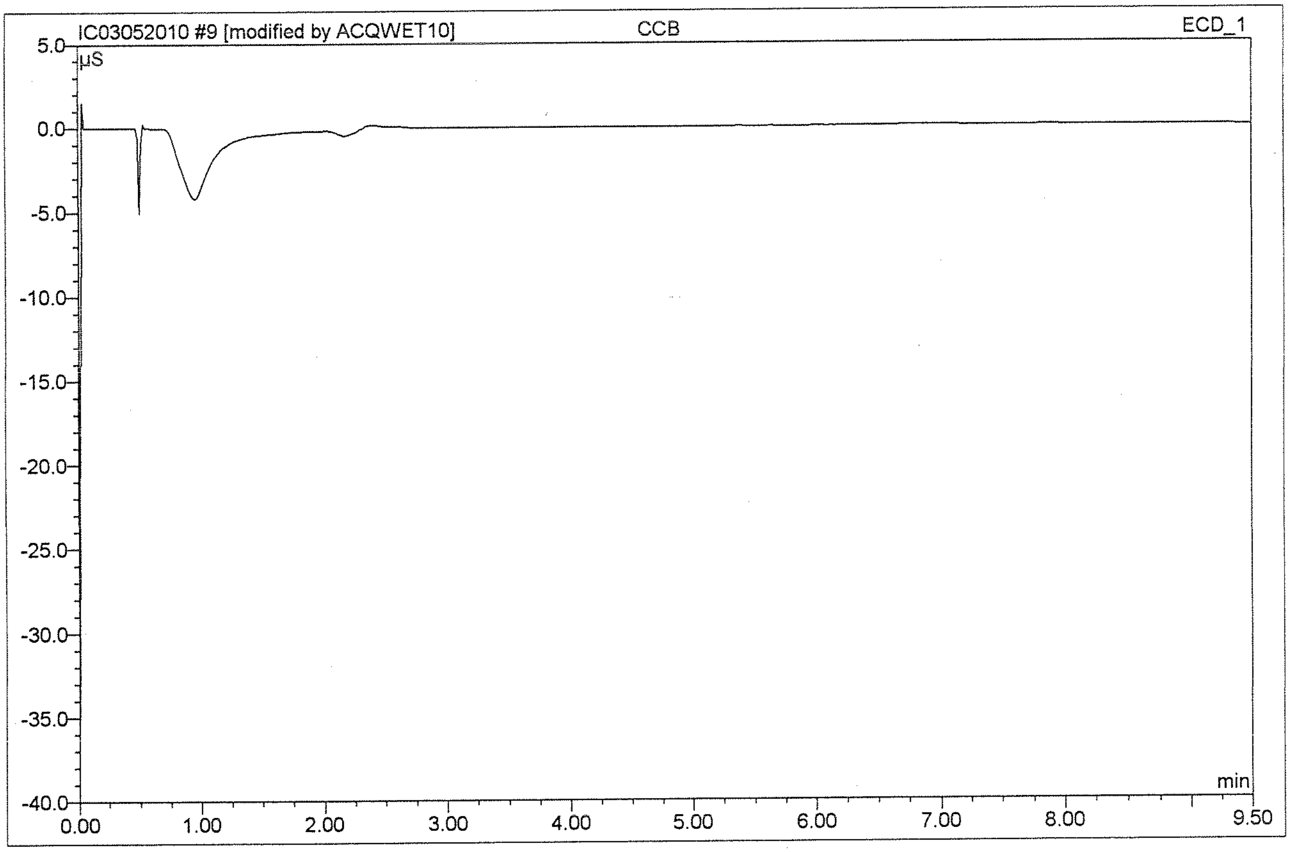
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

9 CCB

CCB1

Sample Name:	**CCB**	*Injection Volume:*	**200.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

After Initials (AB)

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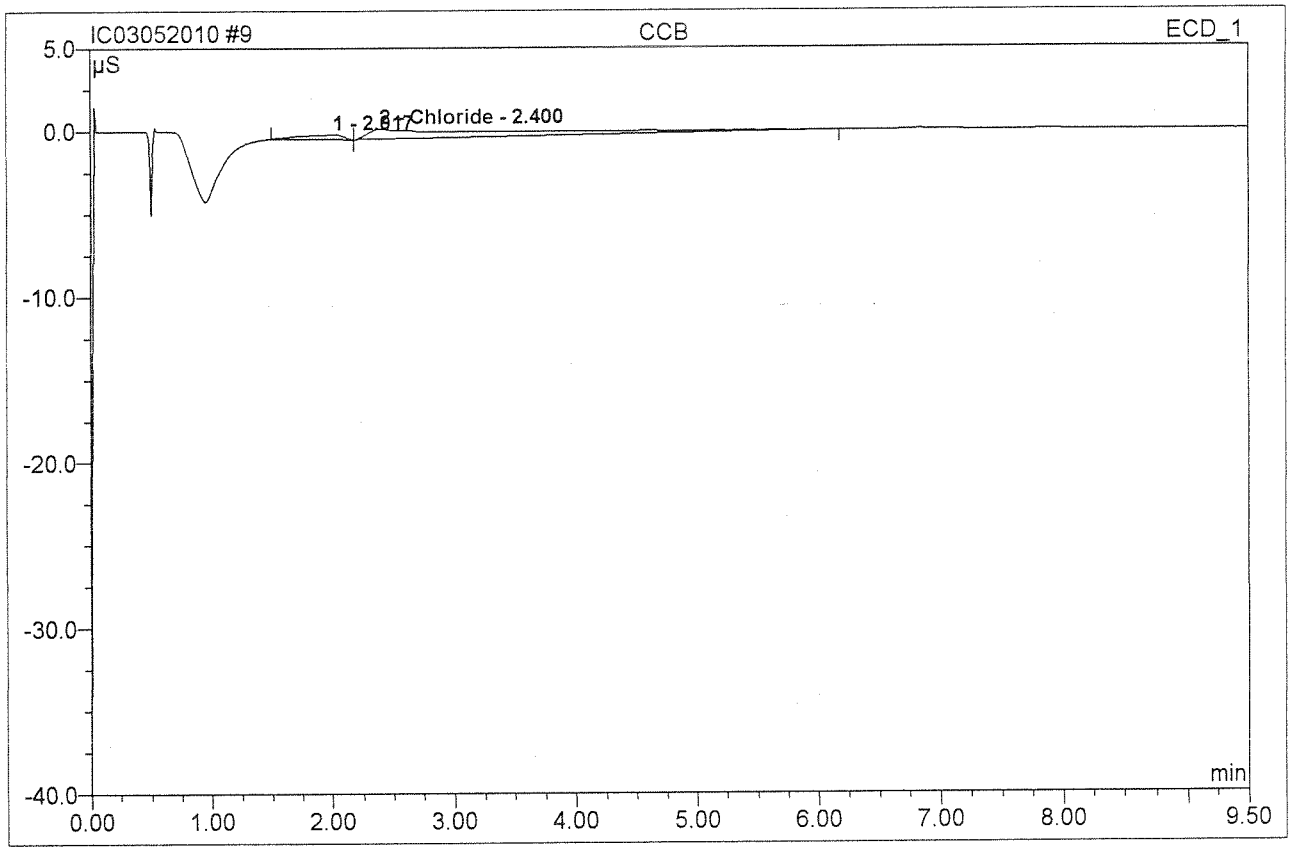
9 CCB

CCB1

Sample Name:	**CCB**	*Injection Volume:*	**200.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 9:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

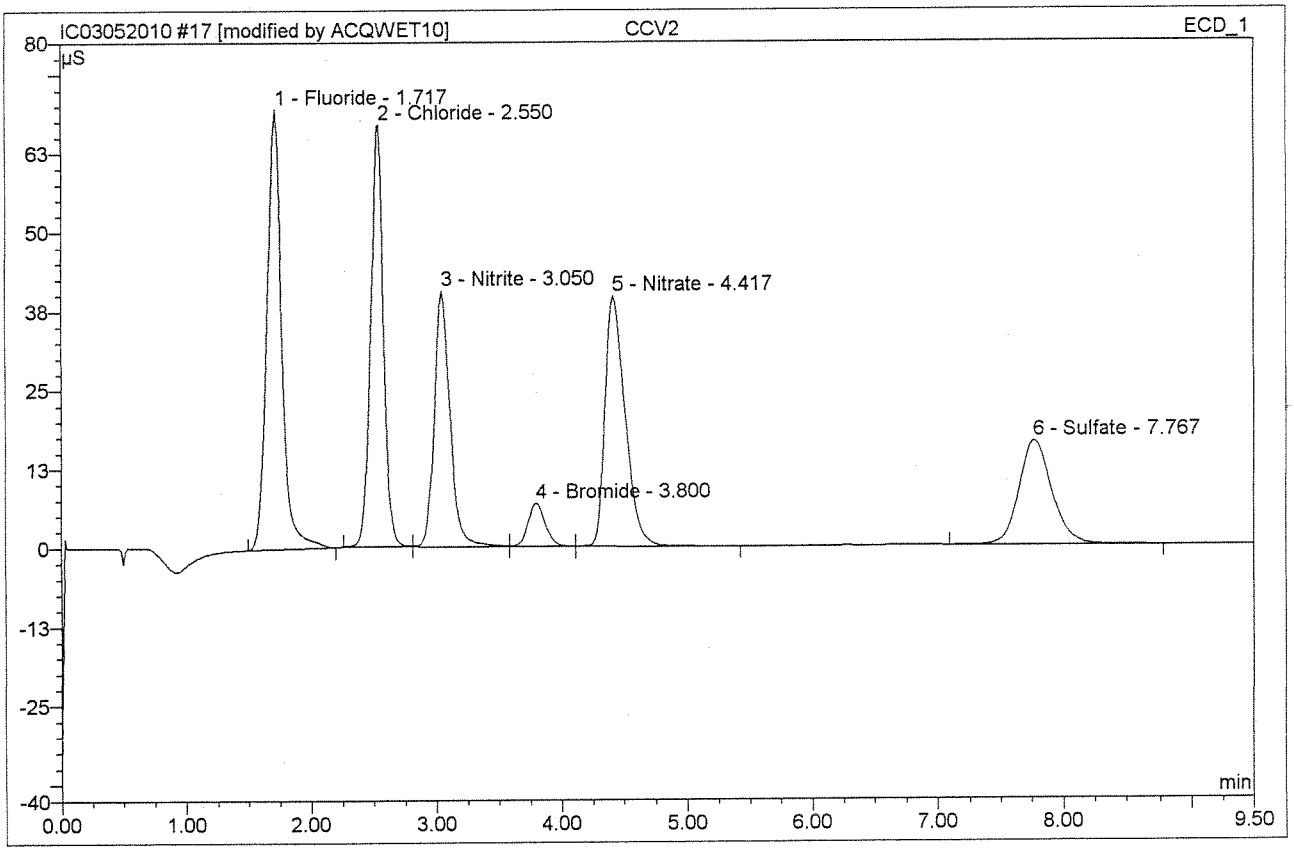


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.02	n.a.	0.294	0.123	11.64	n.a.	BMb
2	2.40	Chloride	0.611	0.937	88.36	0.601	bMB
Total:			0.905	1.060	100.00	0.601	

17 CCV2

CCV2

Sample Name:	**CCV2**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	69.729	9.557	25.95	4.994 100%	BMB*
2	2.55	Chloride	66.784	7.890	21.43	5.059 101%	BM *
3	3.05	Nitrite	40.519	5.918	16.07	2.050 103%	M *
4	3.80	Bromide	6.886	1.076	2.92	2.009 101%	M *
5	4.42	Nitrate	39.593	7.361	19.99	1.998 100%	MB*
6	7.77	Sulfate	16.591	5.020	13.63	5.101 102%	BMB
Total:			240.102	36.822	100.00	21.211	

After Initials AB

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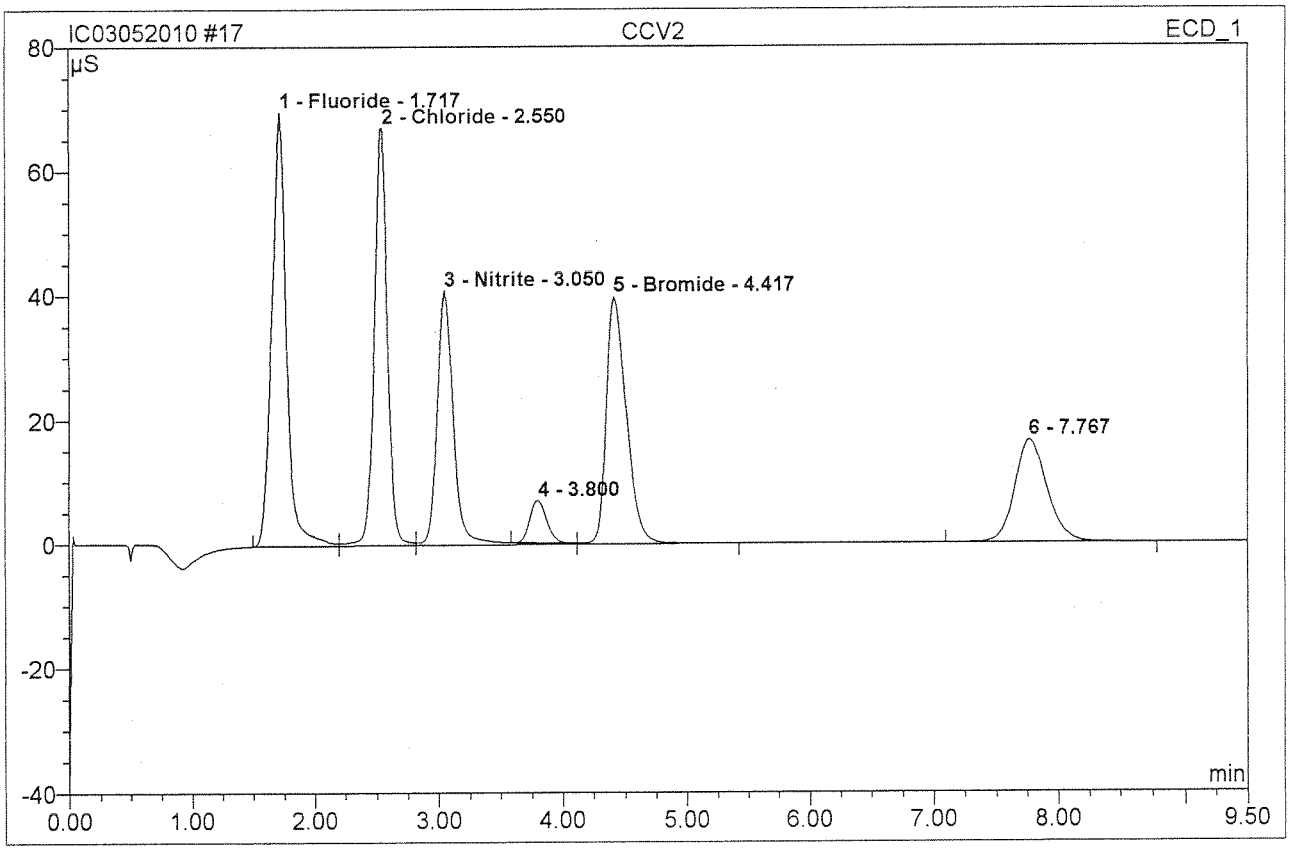
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

17 CCV2

CCV2

Sample Name:	**CCV2**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

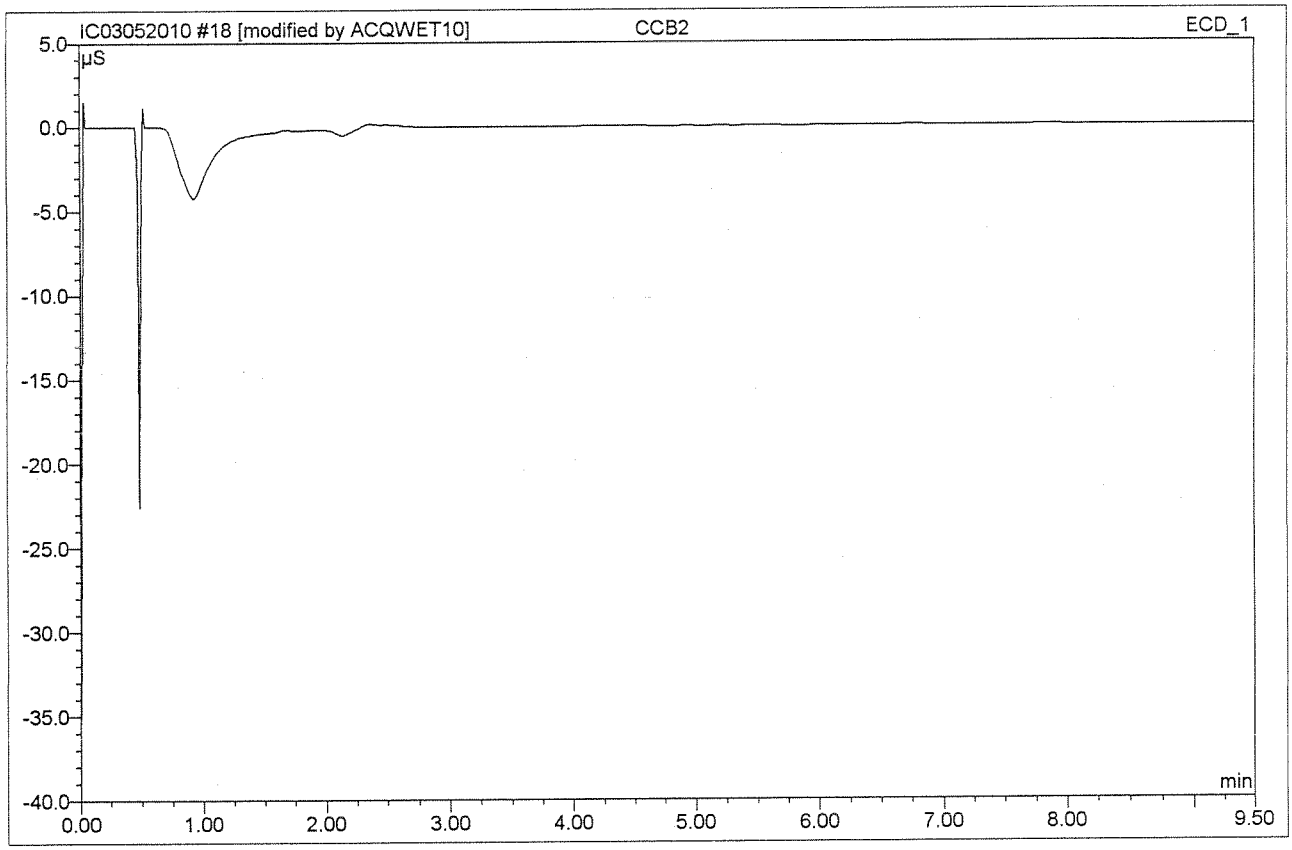


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	69.845	9.687	25.68	5.063	BM
2	2.55	Chloride	67.214	8.155	21.61	5.229	M
3	3.05	Nitrite	40.874	6.315	16.74	2.187	M
4	3.80	n.a.	6.848	1.061	2.81	n.a.	Rd
5	4.42	Bromide	39.745	7.491	19.85	13.980	MB
6	7.77	n.a.	16.591	5.020	13.31	n.a.	BMB
Total:			241.117	37.729	100.00	26.459	

18 CCB2

CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

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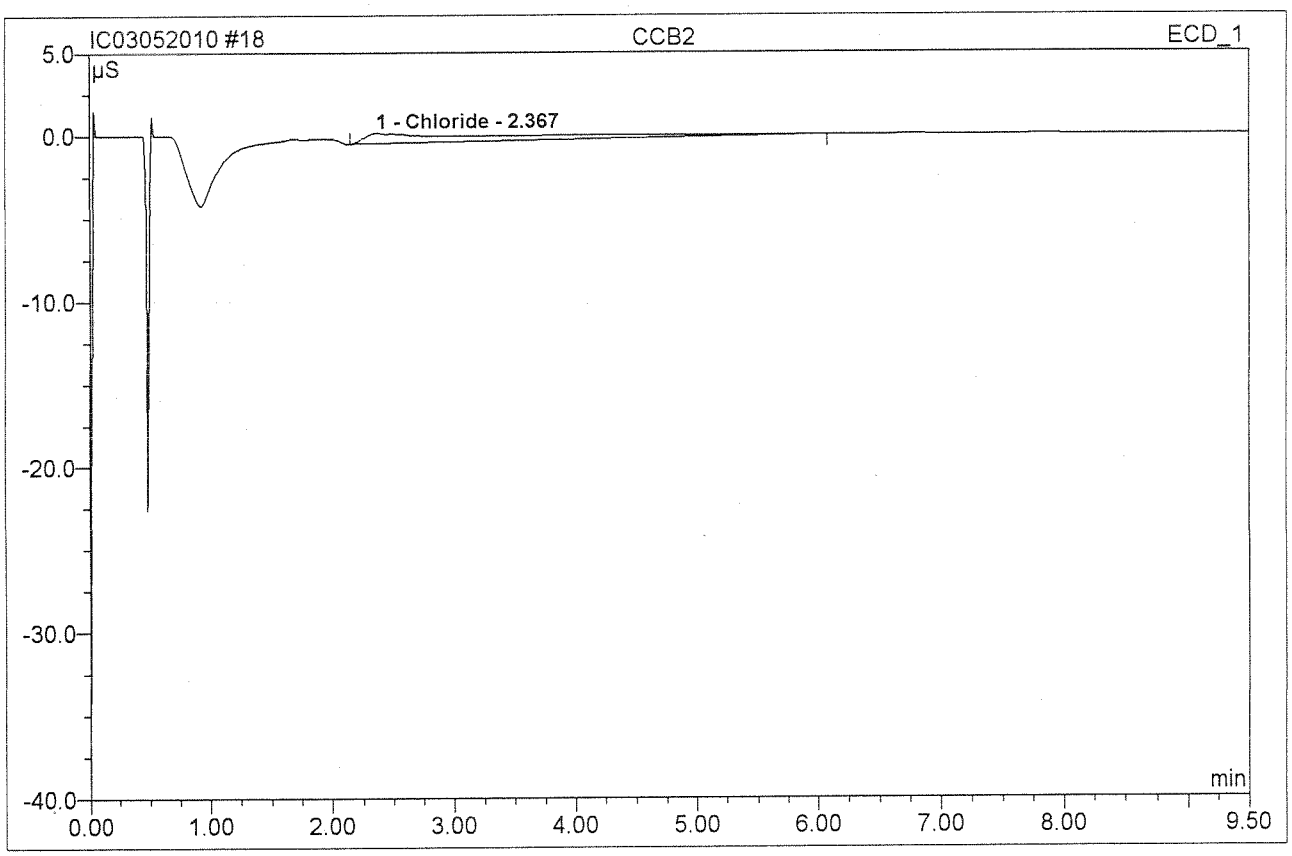
18 CCB2

CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 10:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

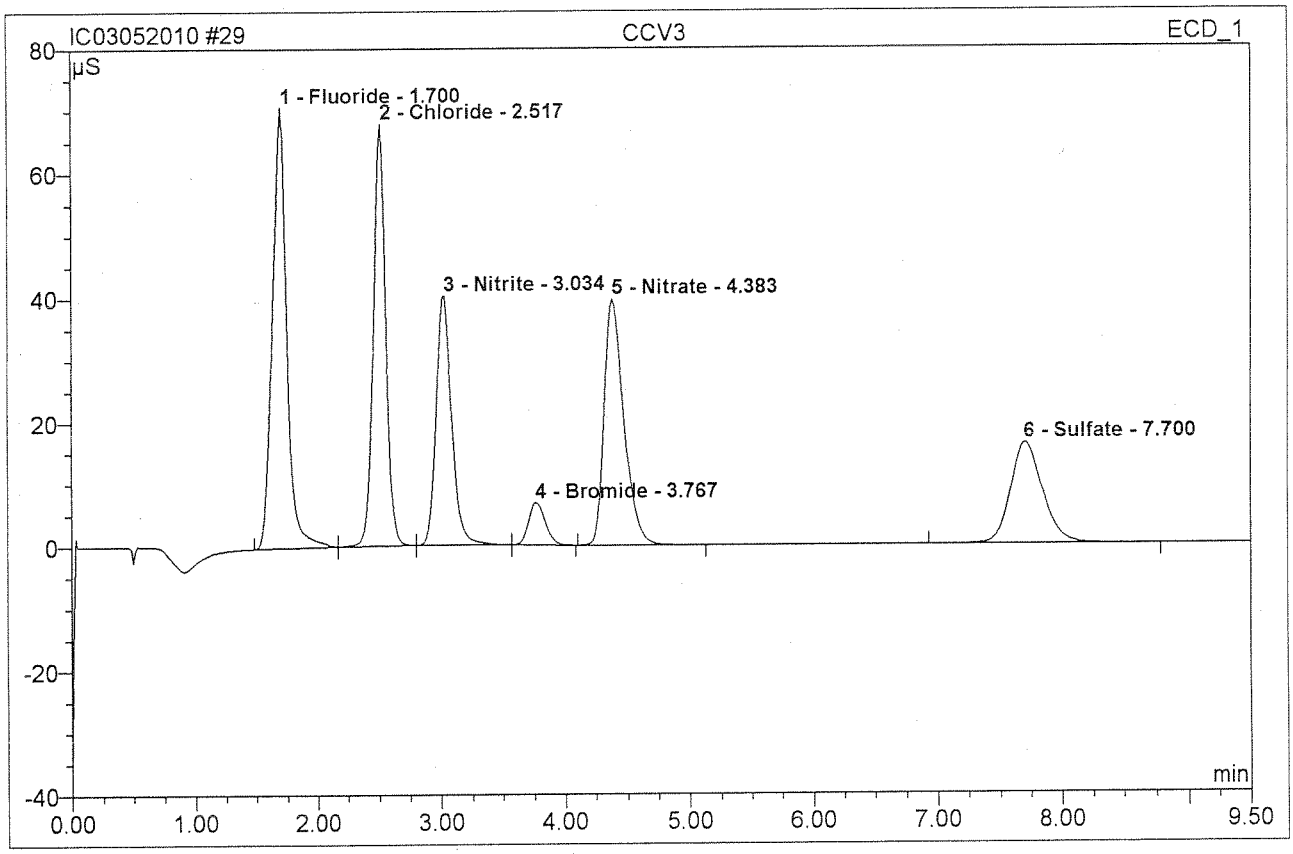


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.37	Chloride	0.642	0.970	100.00	0.622	BMB
Total:			0.642	0.970	100.00	0.622	

29 CCV3

CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 13:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



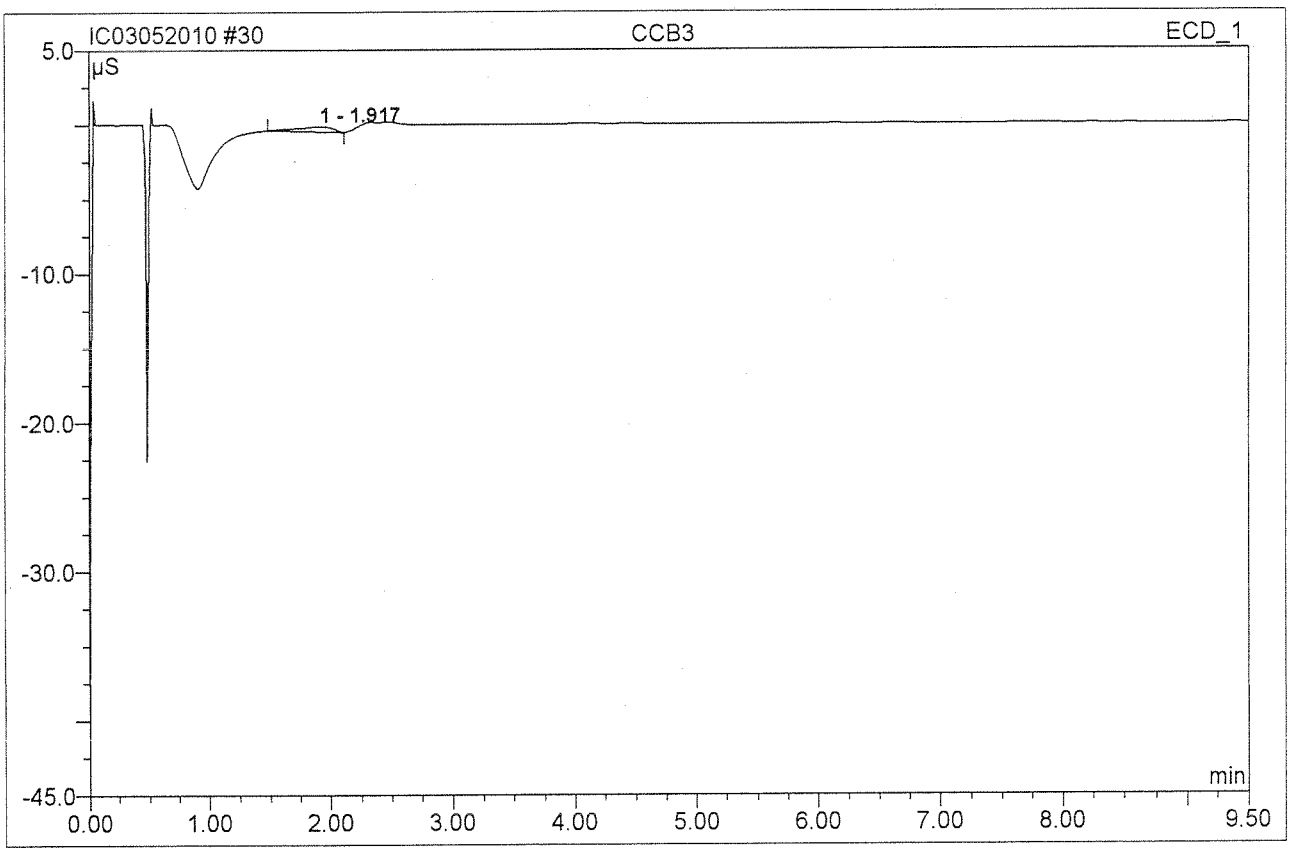
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	70.840	9.559	26.16	4.996/100%	BMb
2	2.52	Chloride	67.871	7.827	21.42	5.019/100%	bMb
3	3.03	Nitrite	40.169	5.866	16.05	2.032/102%	bMb
4	3.77	Bromide	6.870	1.054	2.88	1.967 99%	bMB
5	4.38	Nitrate	39.641	7.330	20.06	100% 1.990 ~~99~~ 101	BMB
6	7.70	Sulfate	16.325	4.905	13.42	4.984/100%	BMB
Total:			241.716	36.541	100.00	20.987	

D MB 5/20/10

30 CCB3

CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 14:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

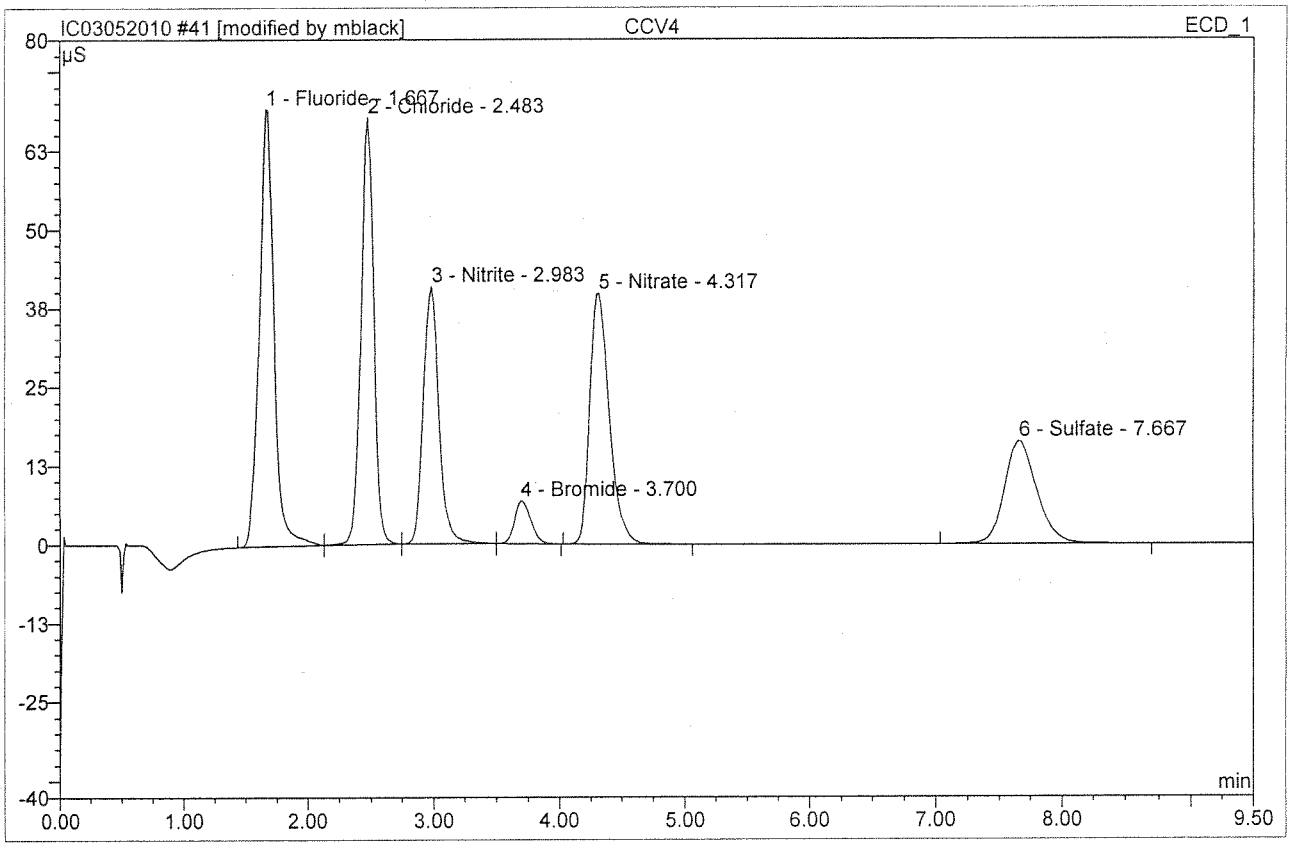


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	n.a.	0.327	0.119	100.00	n.a.	BMB
Total:			0.327	0.119	100.00	0.000	

41 CCV4

CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 16:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	69.318	9.441	26.15	4.934 99%	BMb*
2	2.48	Chloride	67.648	7.750	21.47	4.970 99%	bMb
3	2.98	Nitrite	40.787	5.806	16.08	2.011 10%	bMb
4	3.70	Bromide	6.853	1.040	2.88	1.941 7%	bMB
5	4.32	Nitrate	39.774	7.203	19.96	1.955 8%	BMB
6	7.67	Sulfate	16.335	4.856	13.45	4.935 9%	BMB
Total:			240.715	36.097	100.00	20.746	

MB

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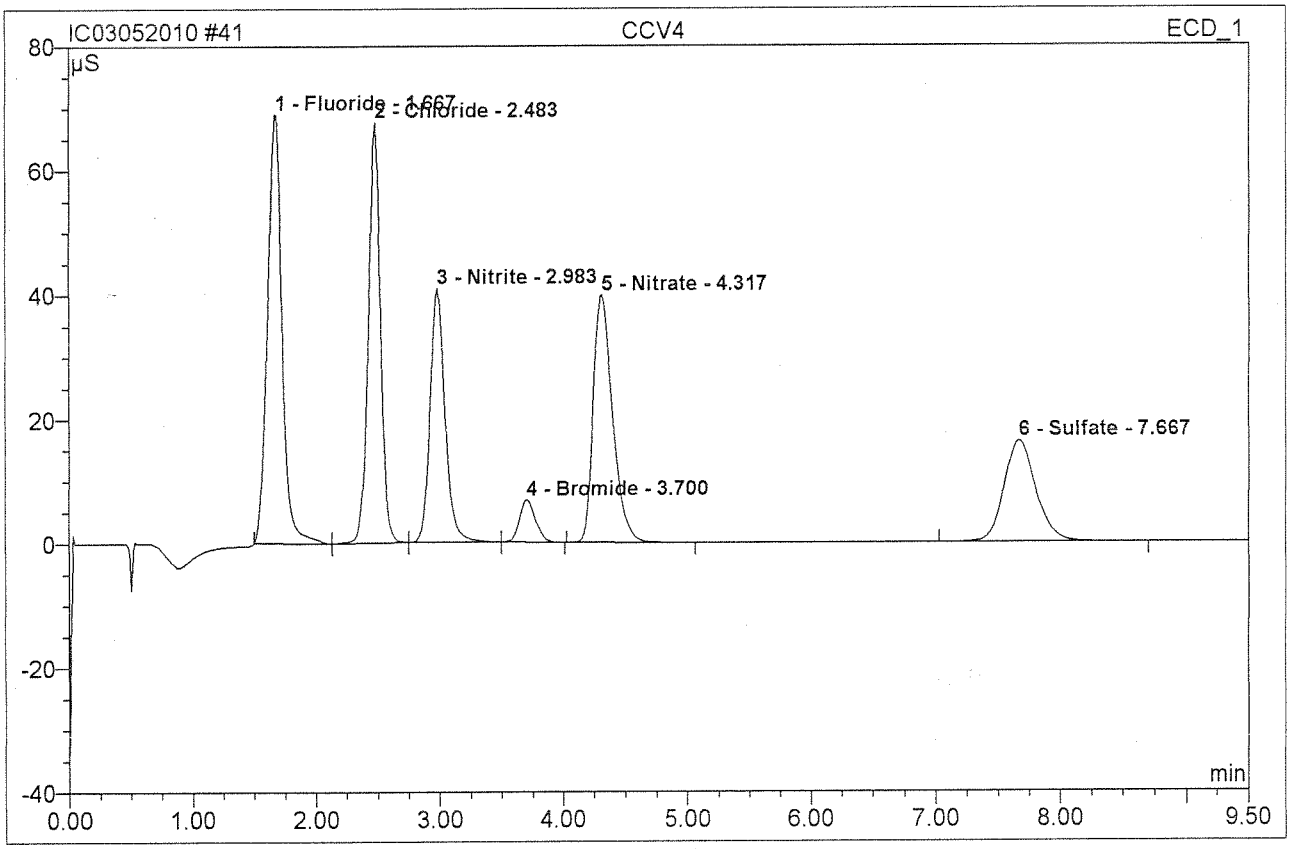
41 CCV4

CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 16:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

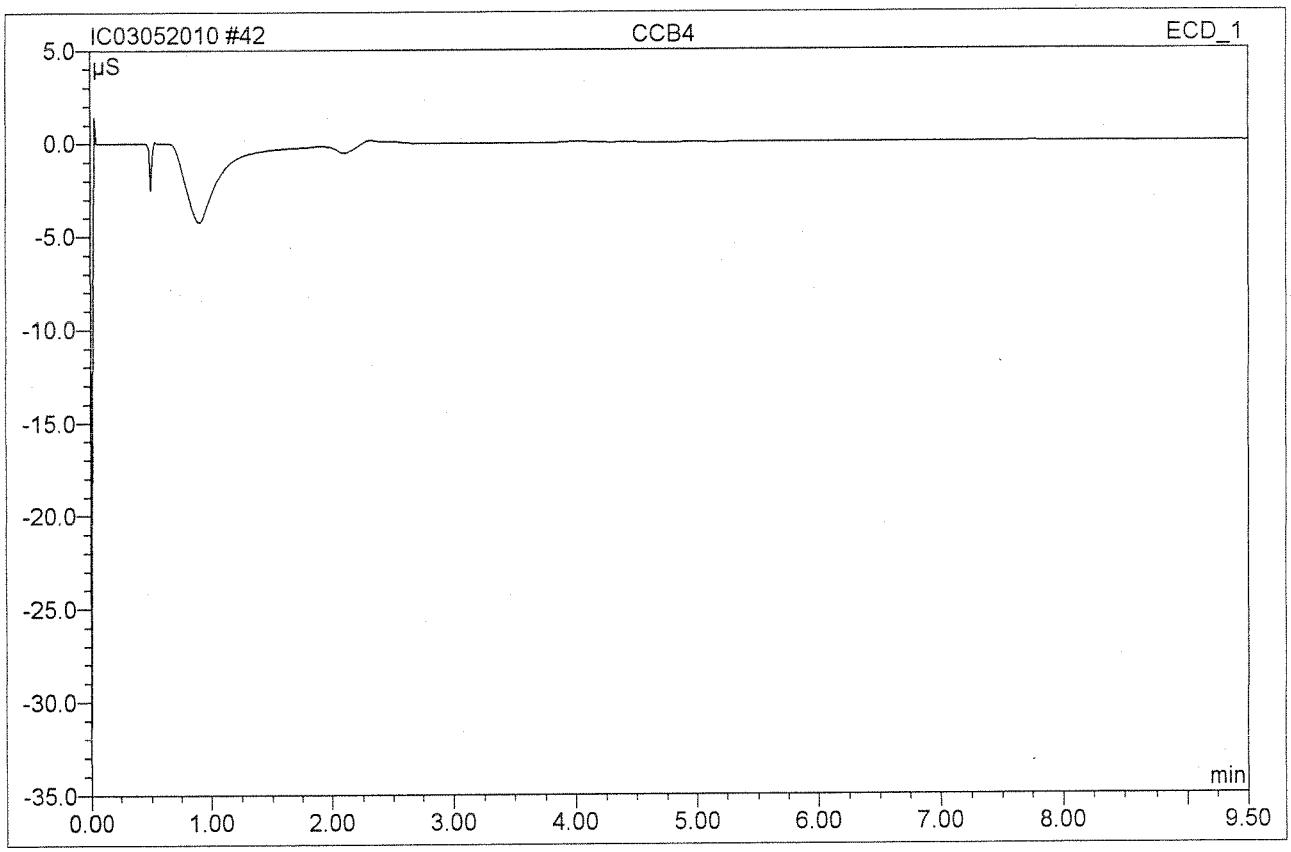


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	68.954	9.278	25.82	4.849	BMb
2	2.48	Chloride	67.648	7.750	21.57	4.970	bMb
3	2.98	Nitrite	40.787	5.806	16.16	2.011	bMb
4	3.70	Bromide	6.853	1.040	2.89	1.941	bMB
5	4.32	Nitrate	39.774	7.203	20.05	1.955	BMB
6	7.67	Sulfate	16.335	4.856	13.51	4.935	BMB
Total:			240.351	35.933	100.00	20.661	

42 CCB4

CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 16:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

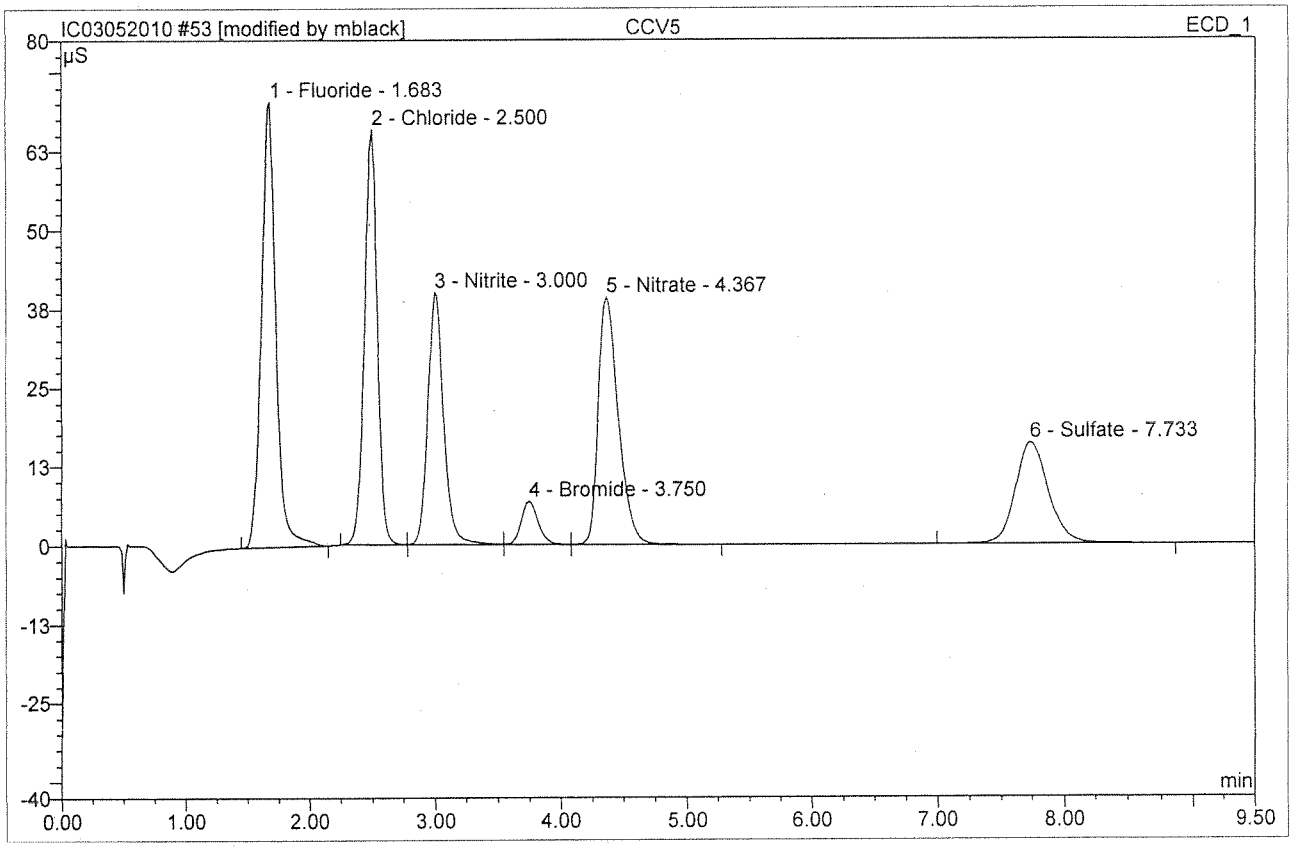


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

53 CCV5

CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 18:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	70.654	9.482	26.17	4.955 ???	BMB*
2	2.50	Chloride	65.846	7.688	21.22	4.929 ???	BM *
3	3.00	Nitrite	39.967	5.862	16.18	2.030 ???	M *
4	3.75	Bromide	6.849	1.071	2.96	1.999 ???	M *
5	4.37	Nitrate	39.230	7.245	20.00	1.967 ???	MB*
6	7.73	Sulfate	16.116	4.885	13.48	4.964 ???	BMB
Total:			238.661	36.232	100.00	20.845	

MB

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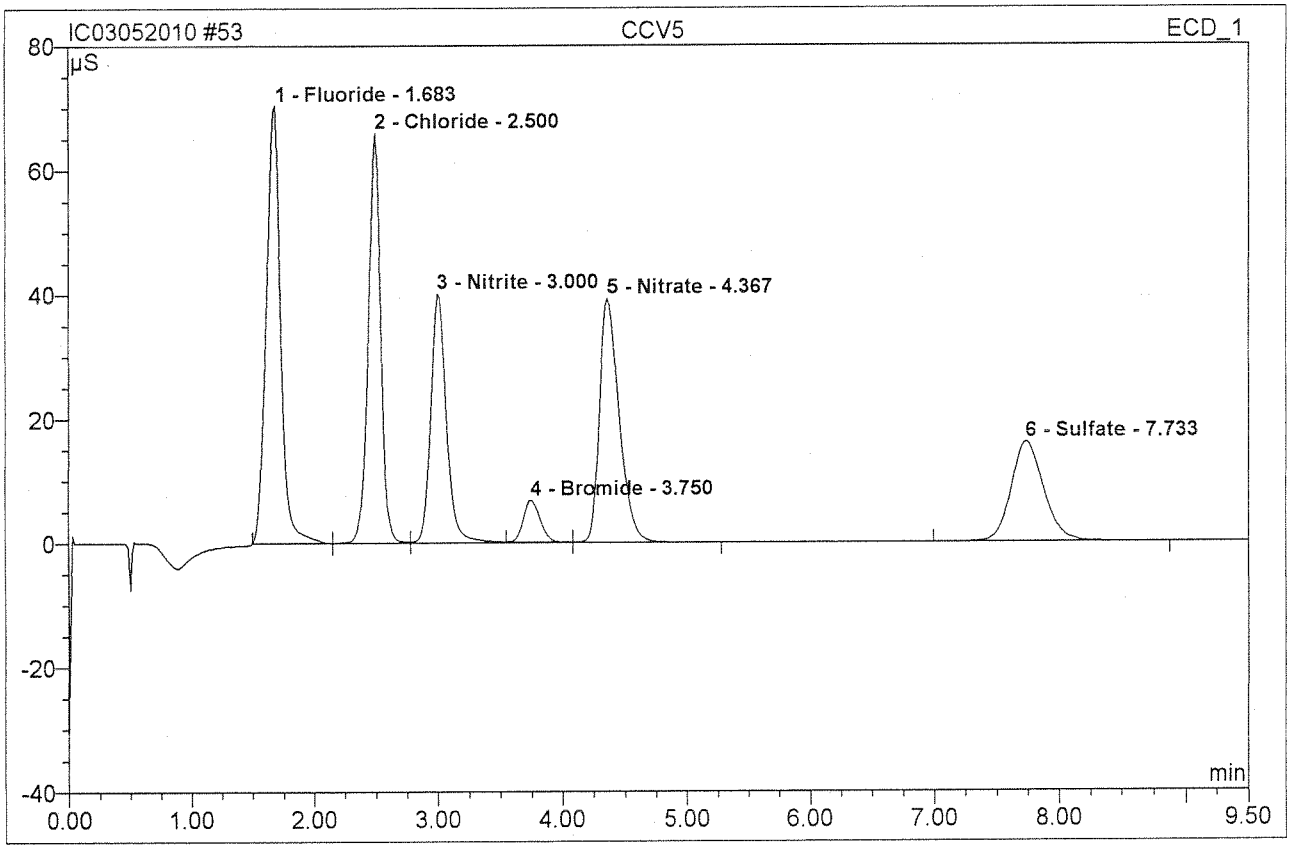
53 CCV5

CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 18:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

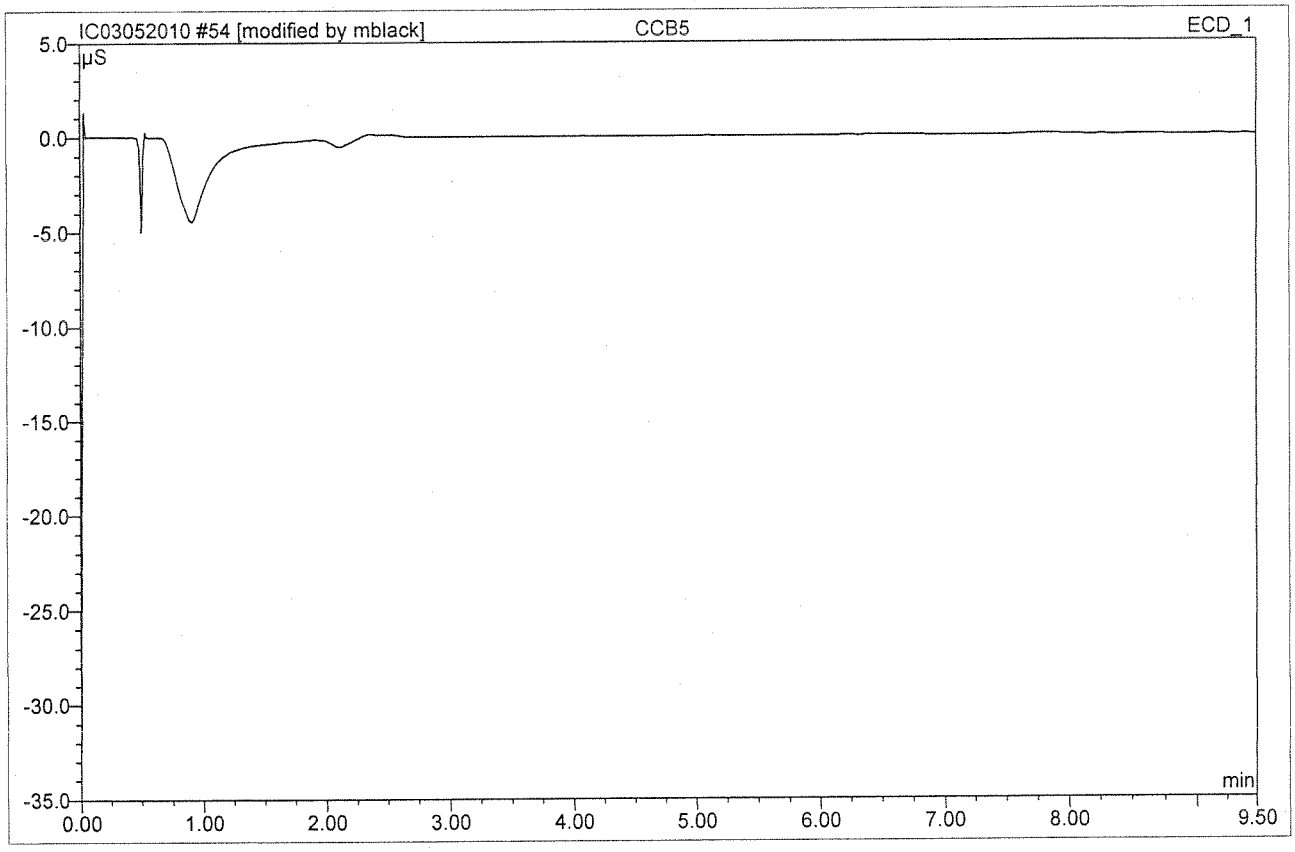


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	70.433	9.383	25.77	4.904	BM
2	2.50	Chloride	66.008	7.782	21.37	4.990	M
3	3.00	Nitrite	40.101	6.031	16.56	2.089	M
4	3.75	Bromide	6.791	1.043	2.86	1.946	Rd
5	4.37	Nitrate	39.283	7.287	20.01	1.978	MB
6	7.73	Sulfate	16.116	4.885	13.42	4.964	BMB
Total:			238.732	36.411	100.00	20.872	

54 CCB5

CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**51**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 18:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

After Initials HB

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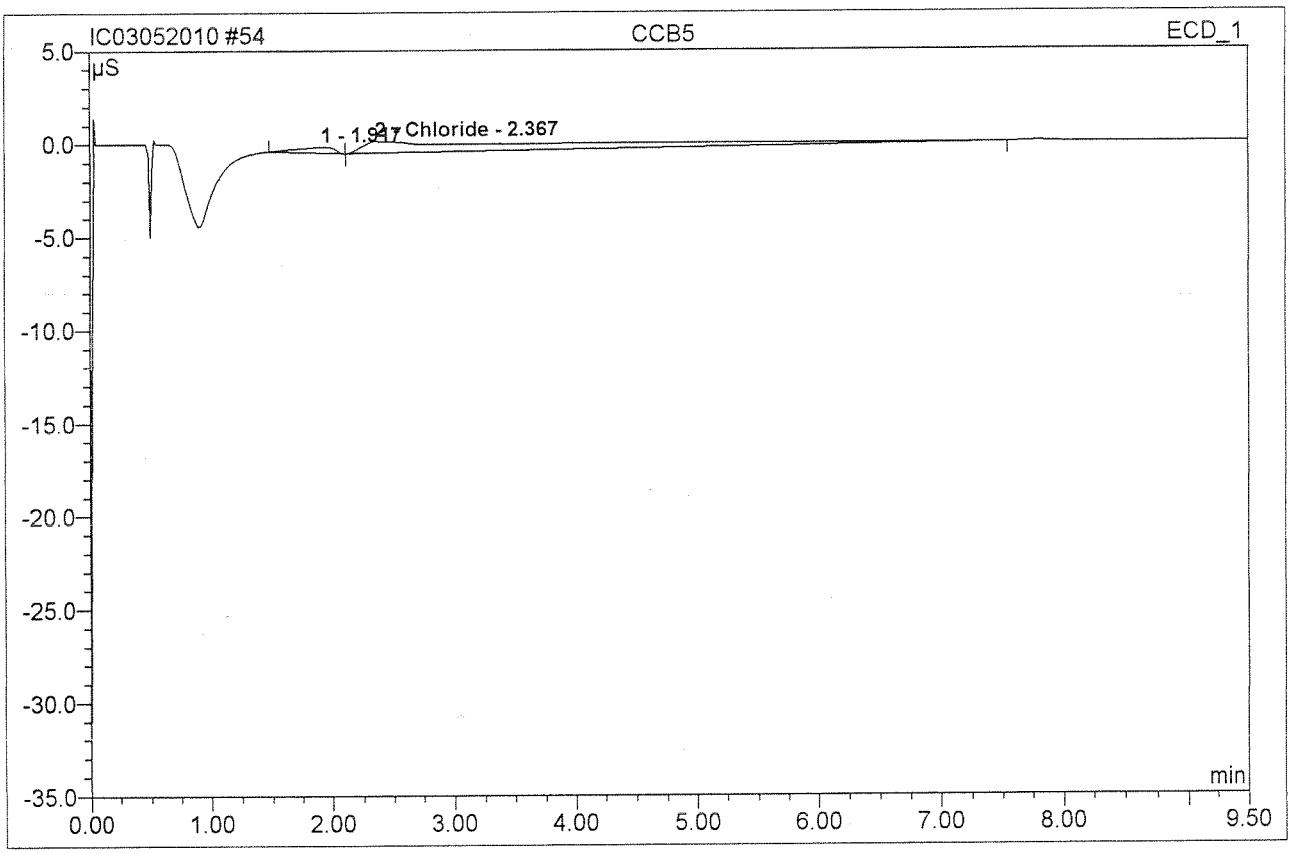
54 CCB5

CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**51**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 18:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

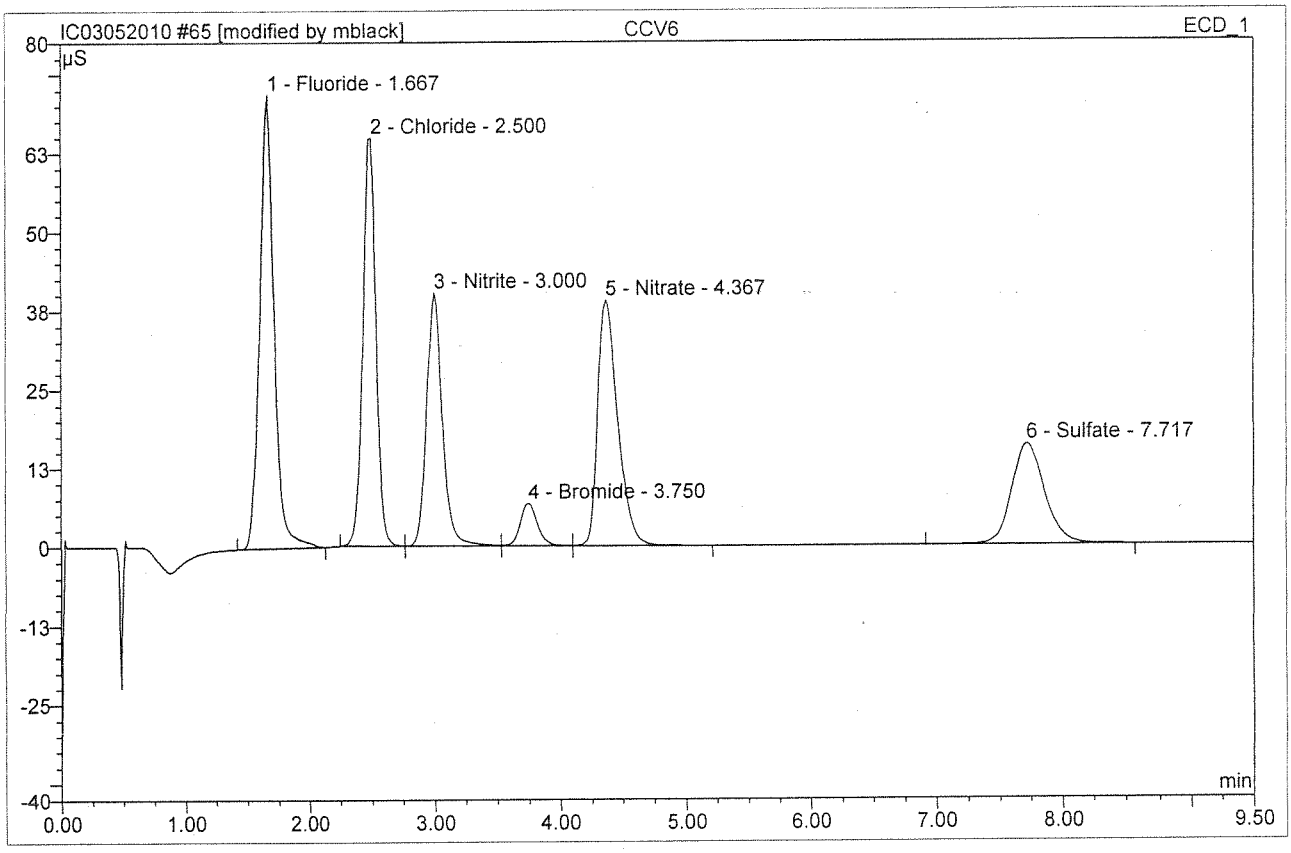


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.92	n.a.	0.319	0.118	7.92	n.a.	BMb
2	2.37	Chloride	0.637	1.374	92.08	0.881	bMB
Total:			0.956	1.493	100.00	0.881	

65 CCV6

CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**62**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 21:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	72.127	9.575	26.32	5.004 100%	BMB*
2	2.50	Chloride	64.810	7.733	21.25	4.958 99%	BM *
3	3.00	Nitrite	40.147	5.870	16.13	2.033 102%	M *
4	3.75	Bromide	6.815	1.073	2.95	2.002 100%	M *
5	4.37	Nitrate	39.002	7.269	19.98	1.973 99%	MB*
6	7.72	Sulfate	16.129	4.867	13.38	4.946 95%	BMB
Total:			239.030	36.386	100.00	20.917	

MB

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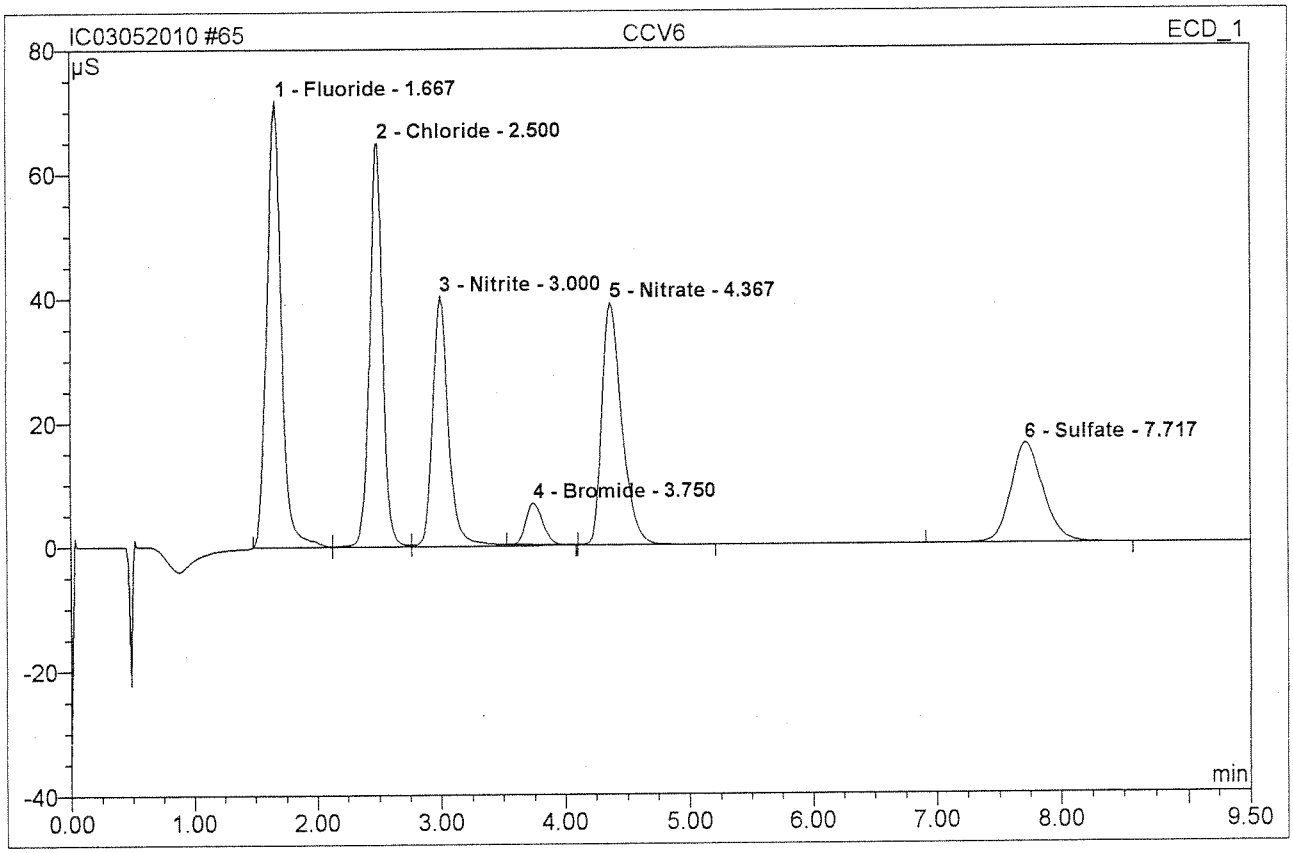
65 CCV6

CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**62**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 21:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

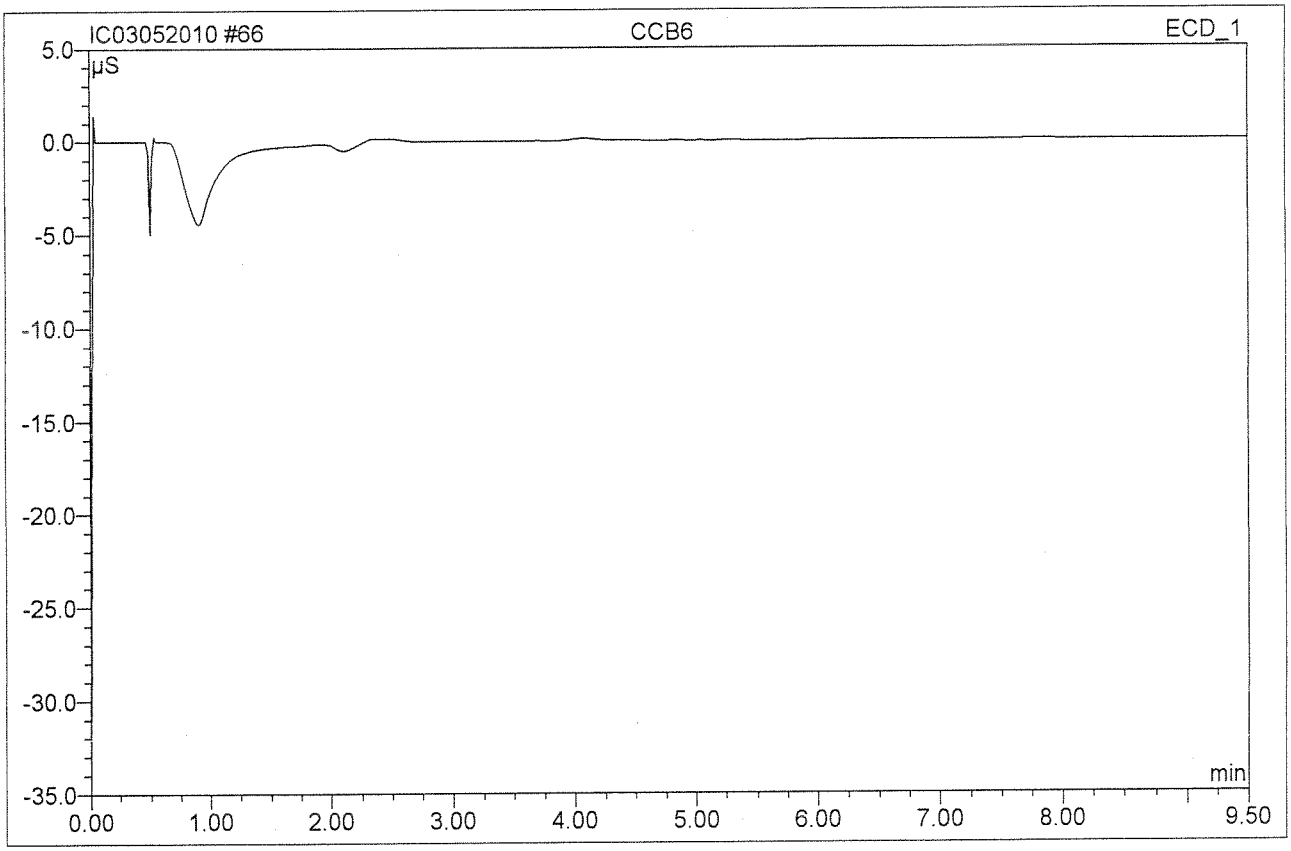


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	71.995	9.531	25.94	4.981	BM
2	2.50	Chloride	65.050	7.875	21.43	5.049	M
3	3.00	Nitrite	40.343	6.110	16.63	2.116	M
4	3.75	Bromide	6.756	1.043	2.84	1.947	Rd
5	4.37	Nitrate	39.077	7.324	19.93	1.988	MB
6	7.72	Sulfate	16.129	4.867	13.24	4.946	BMB
Total:			239.351	36.750	100.00	21.027	

66 CCB6

CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**63**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 21:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

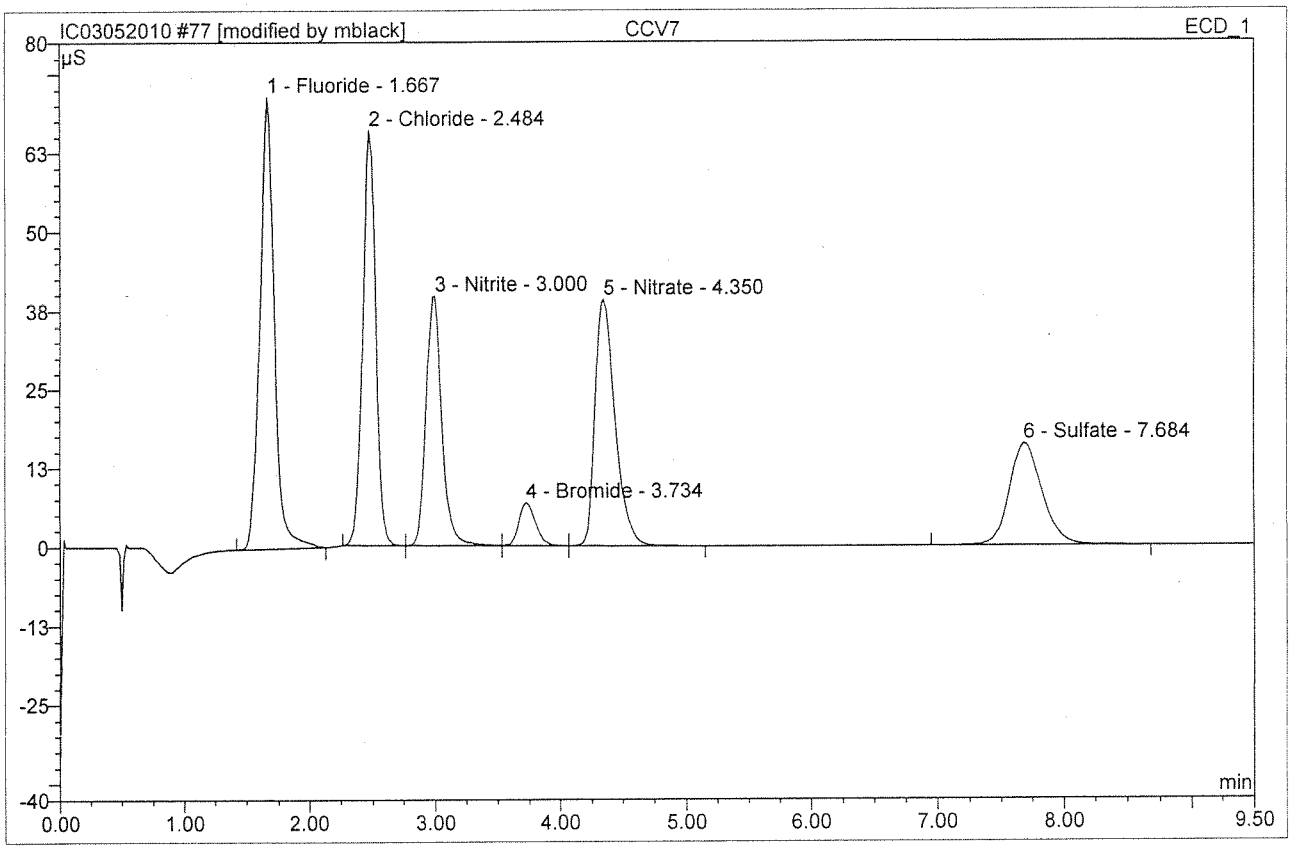


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

77 CCV7

CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**74**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 23:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	71.716	9.412	26.12	4.919 98%	BMB*
2	2.48	Chloride	65.906	7.682	21.32	4.926 99%	BM *
3	3.00	Nitrite	39.609	5.811	16.13	2.013 101%	M *
4	3.73	Bromide	6.802	1.047	2.91	1.954 98%	M *
5	4.35	Nitrate	39.082	7.221	20.04	1.960 98%	MB*
6	7.68	Sulfate	16.147	4.862	13.49	4.941 99%	BMB
Total:			239.262	36.036	100.00	20.713	

After Initials

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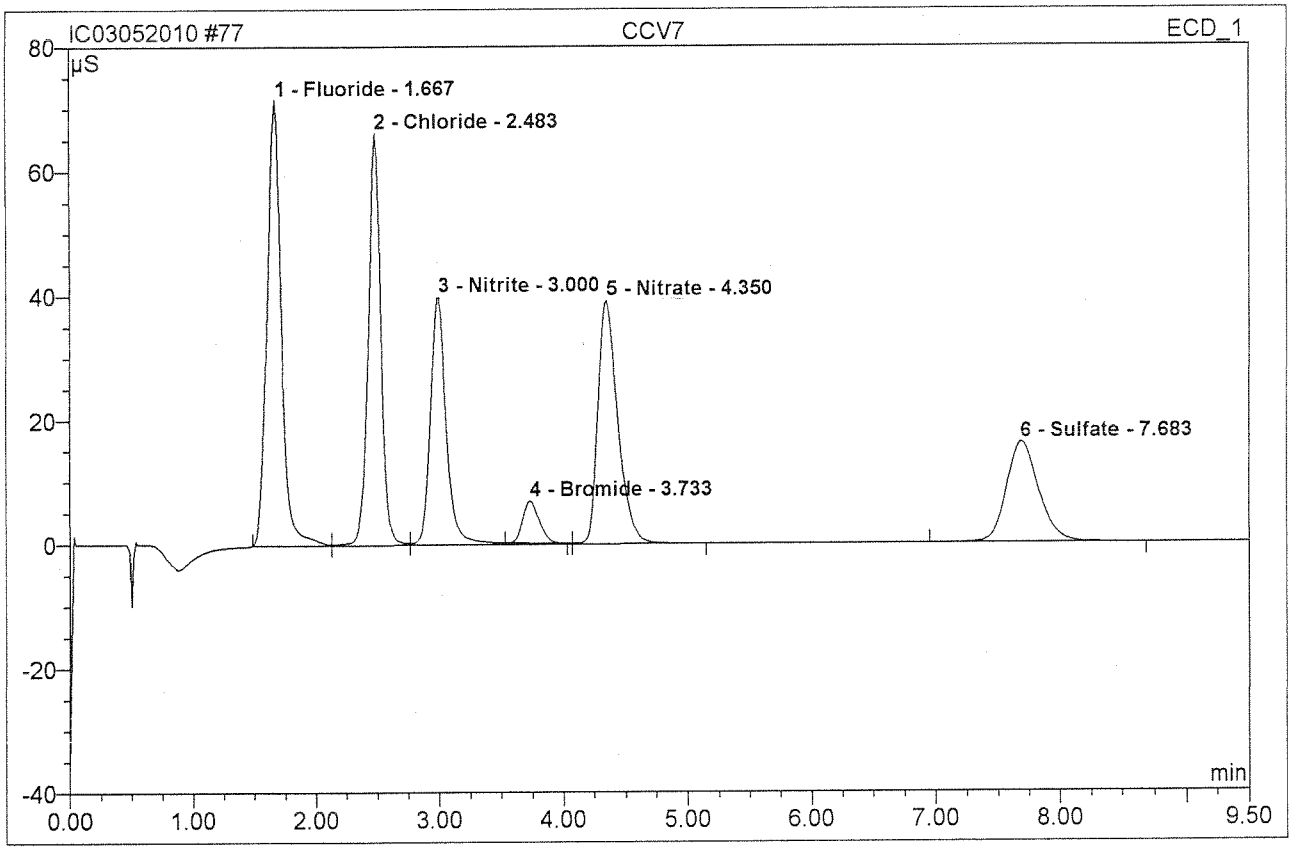
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

77 CCV7

CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**74**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 23:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

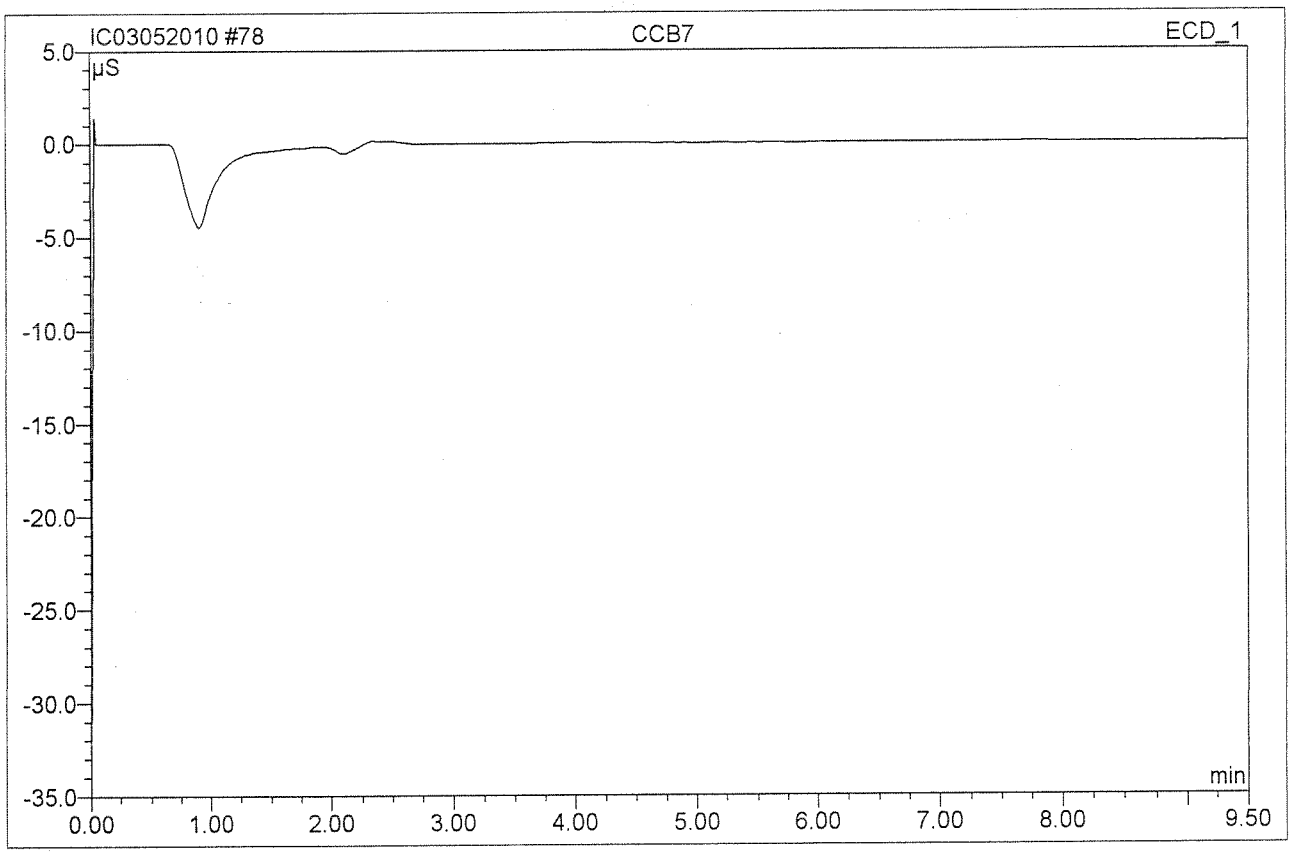


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	Fluoride	71.631	9.398	25.68	4.912	BM
2	2.48	Chloride	66.257	7.885	21.54	5.056	M
3	3.00	Nitrite	39.892	6.116	16.71	2.118	M
4	3.73	Bromide	6.779	1.038	2.84	1.938	Rd
5	4.35	Nitrate	39.187	7.298	19.94	1.981	MB
6	7.68	Sulfate	16.147	4.862	13.29	4.941	BMB
Total:			239.894	36.598	100.00	20.946	

78 CCB7

CCV7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**75**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/20/2010 23:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

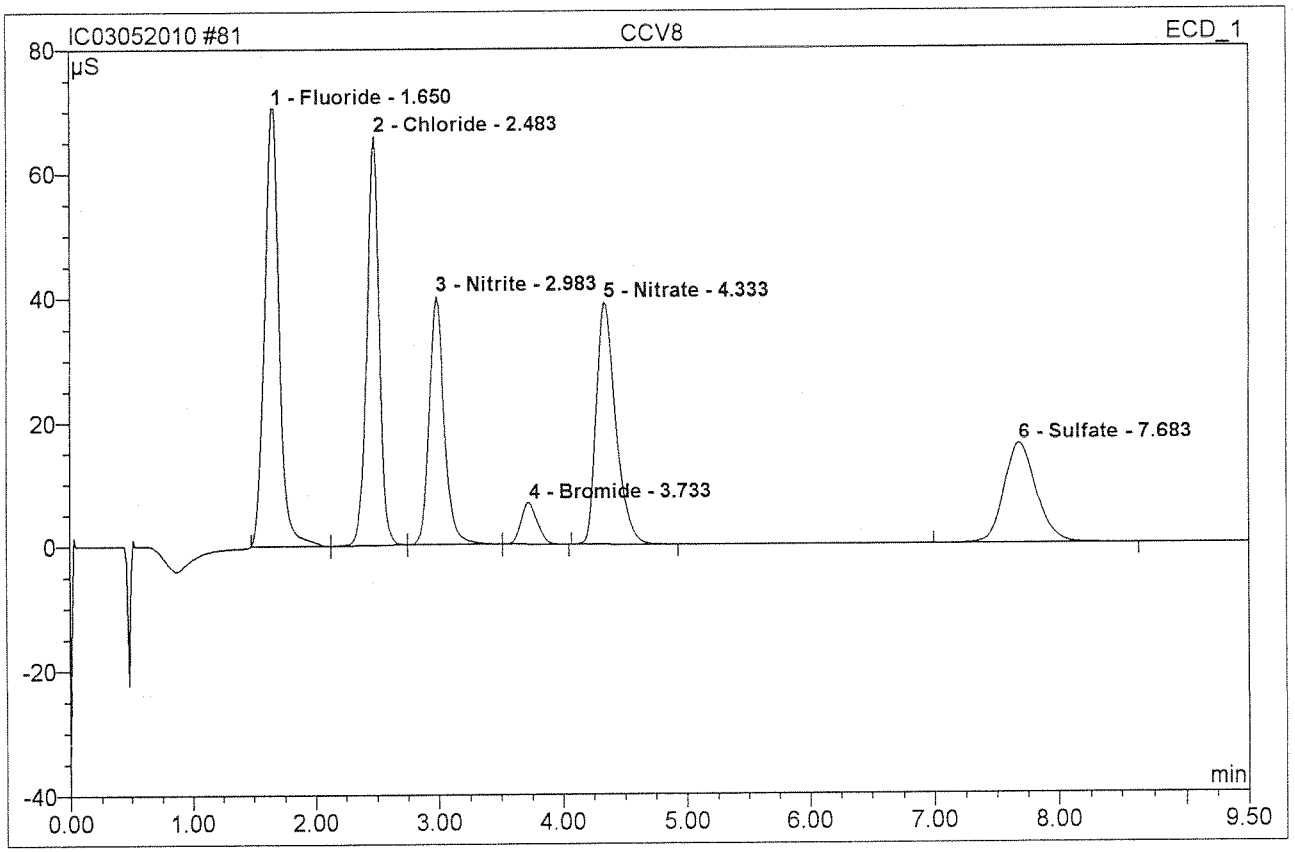


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

81 CCV8

CCV8

Sample Name:	**CCV8**	*Injection Volume:*	**200.0**
Vial Number:	**78**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/21/2010 0:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**

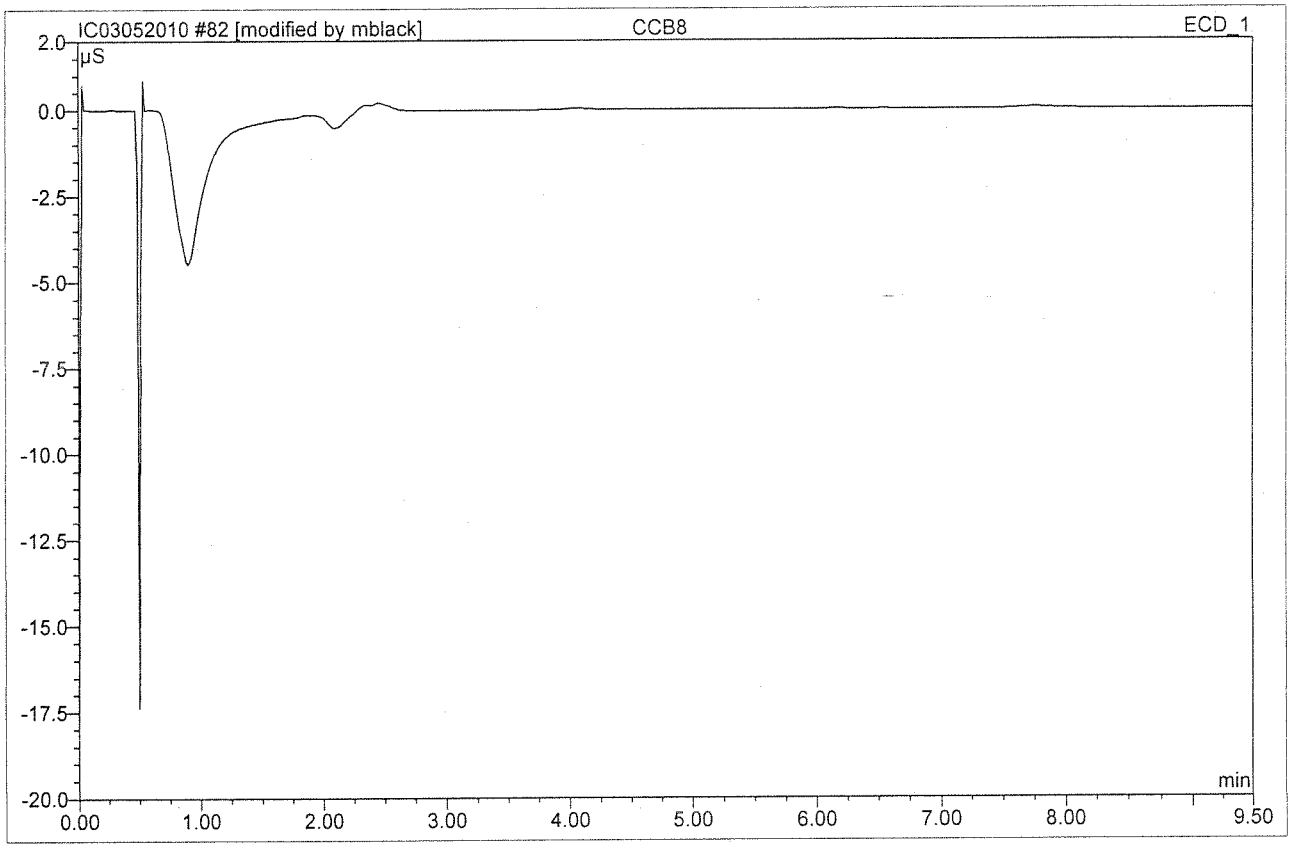


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	Fluoride	70.499	9.430	26.15	4.928 99%	BMb
2	2.48	Chloride	65.942	7.716	21.40	4.948 99%	bMb
3	2.98	Nitrite	40.008	5.785	16.04	2.003 100%	bMb
4	3.73	Bromide	6.713	1.039	2.88	1.940 97%	bMB
5	4.33	Nitrate	39.007	7.218	20.02	1.959 98%	BMB
6	7.68	Sulfate	16.167	4.866	13.50	4.945 99%	BMB
Total:			238.336	36.055	100.00	20.723	

82 CCB8

CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**200.0**
Vial Number:	**79**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/21/2010 0:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

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MB

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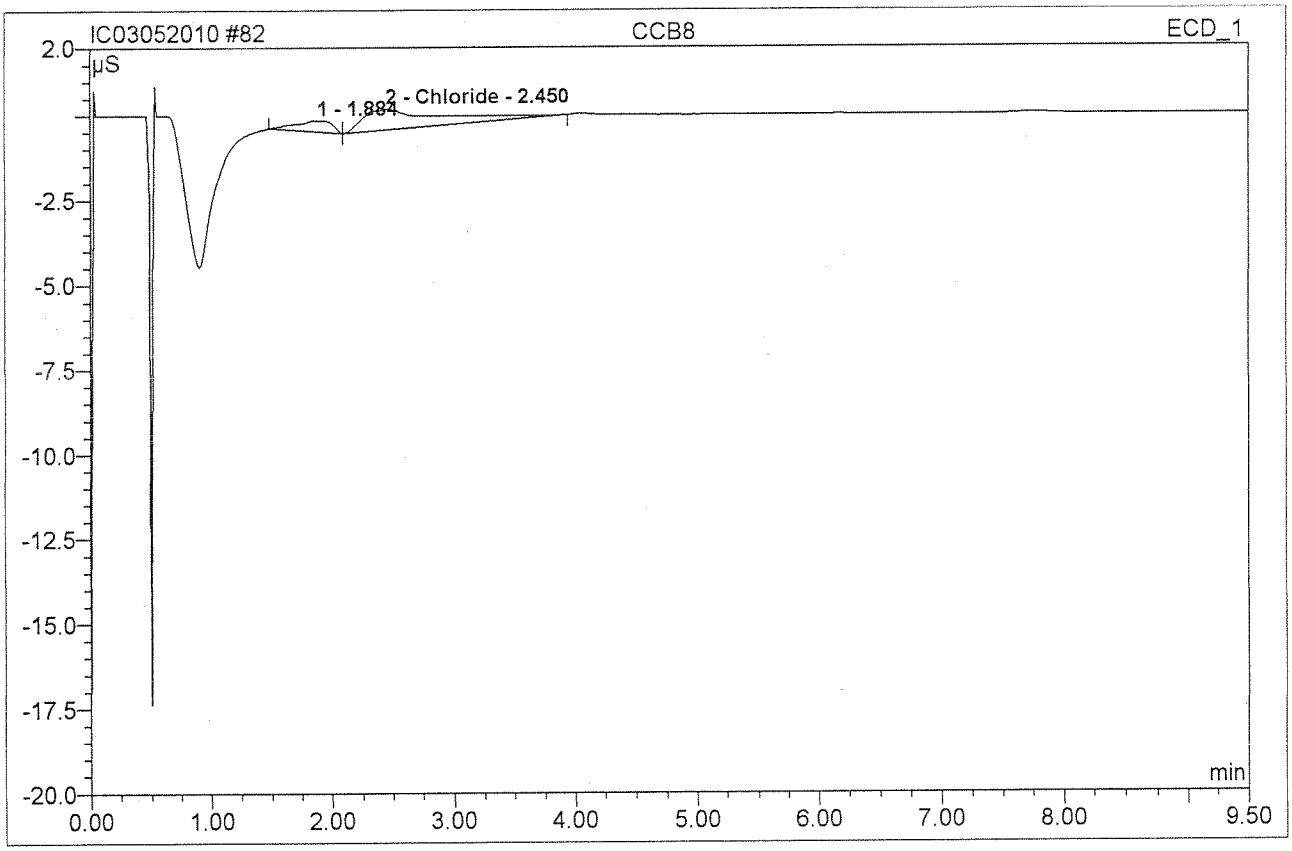
82 CCB8

CCB8

Sample Name:	**CCB8**	*Injection Volume:*	**200.0**
Vial Number:	**79**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/21/2010 0:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**9.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.88	n.a.	0.332	0.119	21.04	n.a.	BMb
2	2.45	Chloride	0.622	0.446	78.96	0.286	bMB
Total:			0.954	0.565	100.00	0.286	

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

Sequence: IC03042610 **Date: 04/26/10**

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9846	1.9134
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9661	1.5595
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9925	2.8873
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9591	0.5358
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9043	3.6839
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9690	0.9841

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

COLUMBIA ANALYTICAL SERVICES, INC.

Ion Chromatography Calibration Data

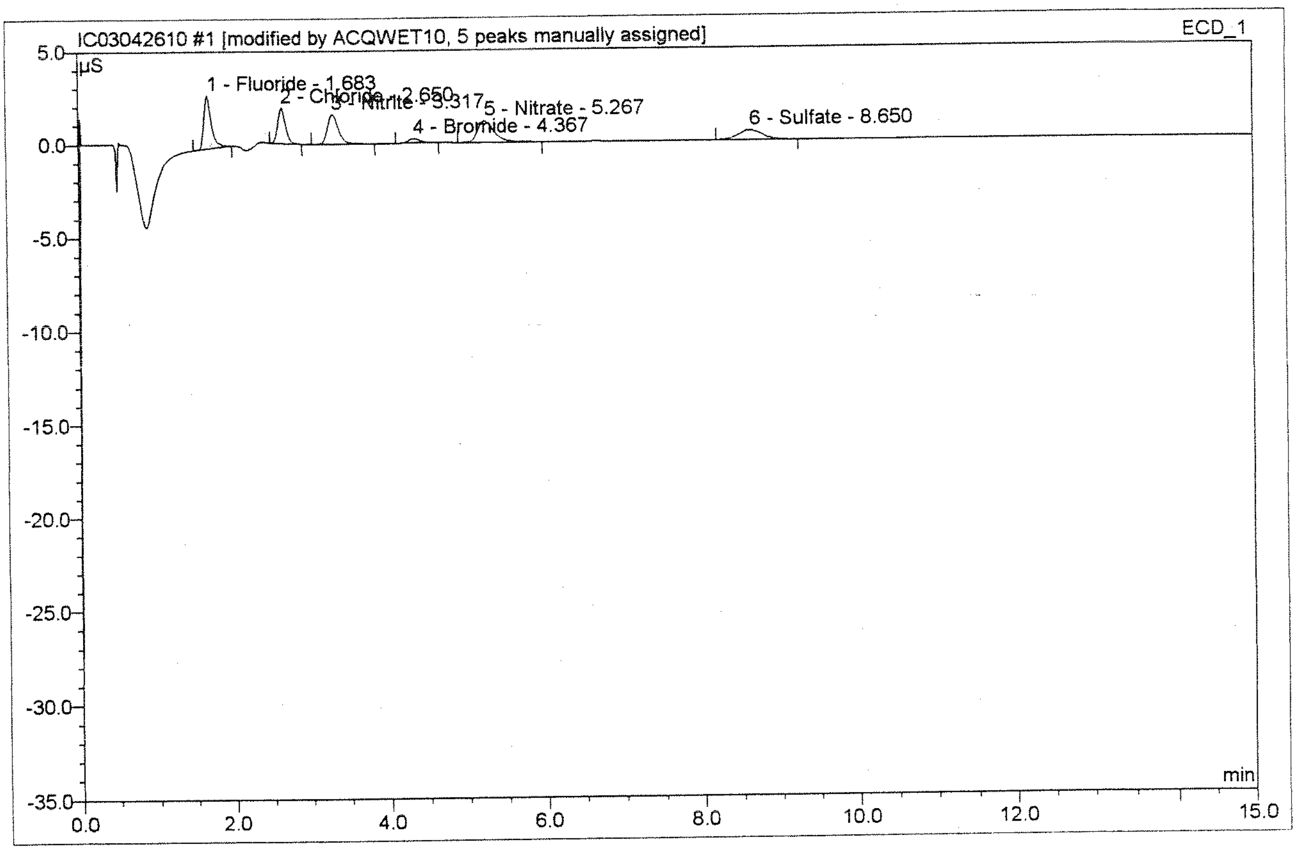
Sequence: IC03042610 **Date: 04/26/10**

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Corr.Coeff.	Slope
F	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9846	1.9134
Cl	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9661	1.5595
NO2	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9925	2.8873
Br	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9591	0.5358
NO3	0.0	0.1	0.5	1.0	2.0	5.0	-	99.9043	3.6839
SO4	0.0	0.2	0.5	1.0	5.0	7.5	10.0	99.9690	0.9841

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	2.860	0.324	24.73	0.169	BMB*
2	2.65	Chloride	1.892	0.229	17.47	0.147	BMB^
3	3.32	Nitrite	1.586	0.259	19.78	0.090	BMB^
4	4.37	Bromide	0.244	0.043	3.25	0.080	BMB*^
5	5.27	Nitrate	1.144	0.279	21.26	0.076	BMB^
6	8.65	Sulfate	0.507	0.177	13.51	0.180	BMB^
Total:			8.233	1.311	100.00	0.742	

After Initials MB

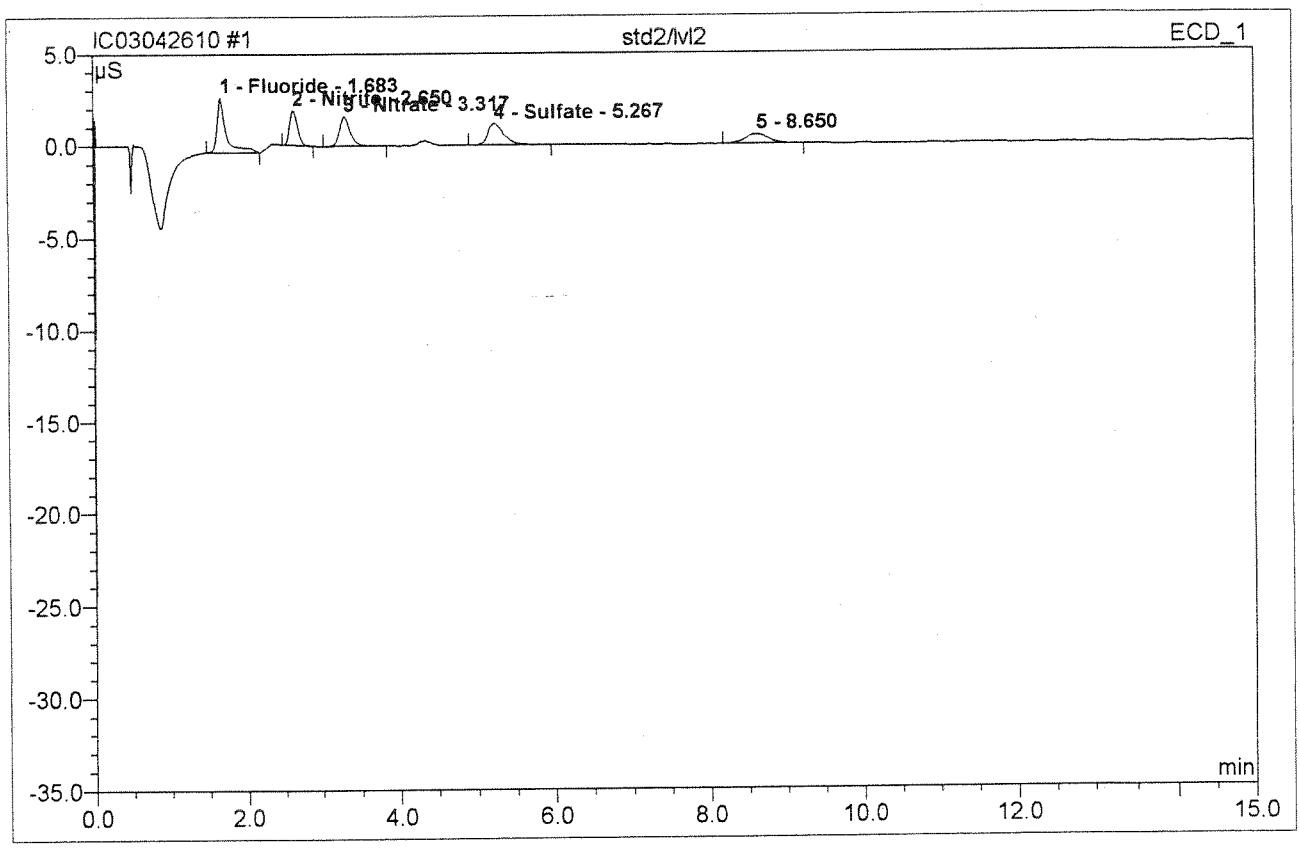
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 8:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**15.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	2.953	0.421	30.83	0.200	BMB
2	2.65	Nitrite	1.892	0.229	16.78	0.100	BMB
3	3.32	Nitrate	1.586	0.259	19.00	0.100	BMB
4	5.27	Sulfate	1.144	0.279	20.42	0.200	BMB
5	8.65	n.a.	0.507	0.177	12.97	n.a.	BMB
Total:			8.081	1.366	100.00	0.600	

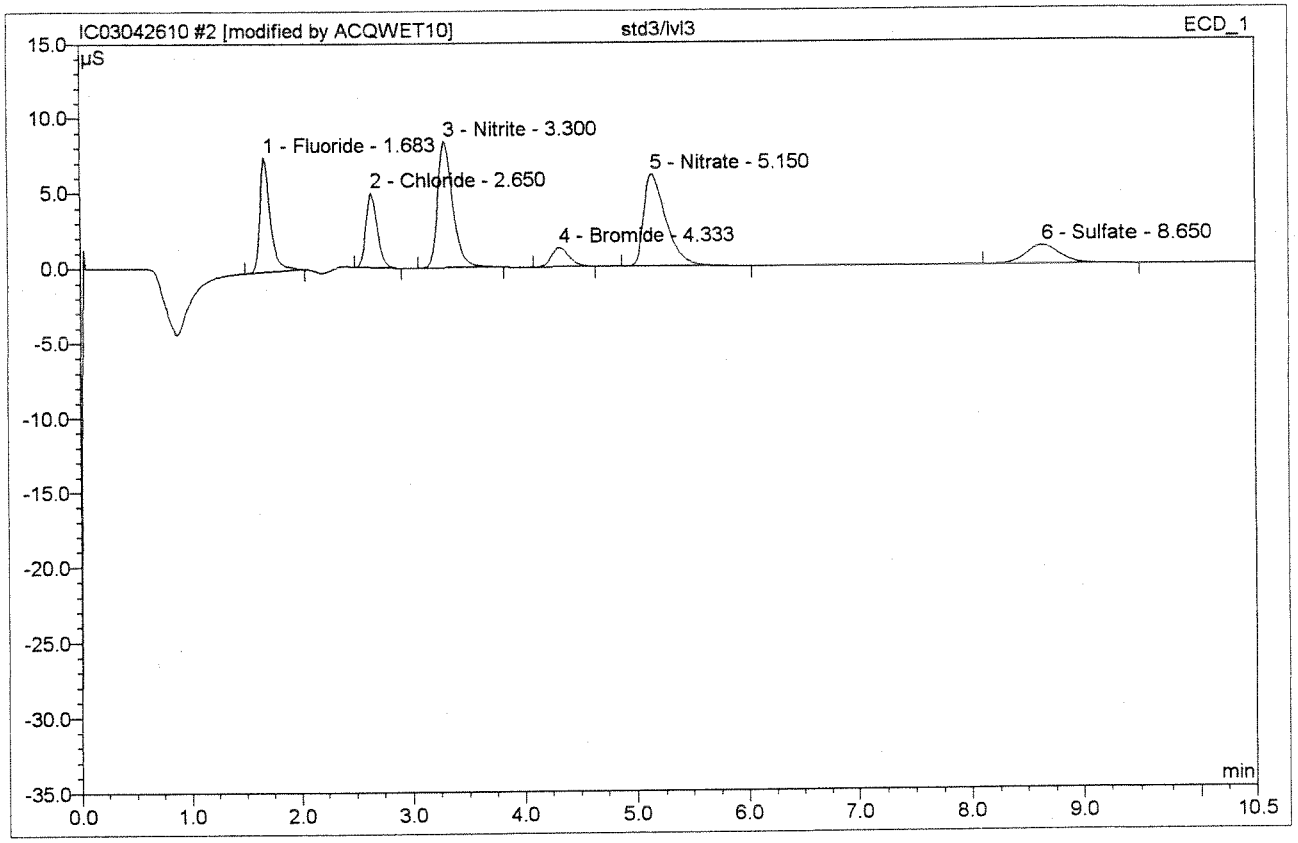
Before

APR 2 6 2010

default/Integration

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	7.622	0.844	17.37	0.441	BMB*
2	2.65	Chloride	4.937	0.589	12.12	0.378	BMB
3	3.30	Nitrite	8.365	1.329	27.34	0.460	BMB*
4	4.33	Bromide	1.271	0.229	4.72	0.428	BMB*
5	5.15	Nitrate	6.087	1.425	29.30	0.387	BMB
6	8.65	Sulfate	1.253	0.445	9.16	0.452	BMB
Total:			29.536	4.862	100.00	2.547	

After Initials LB

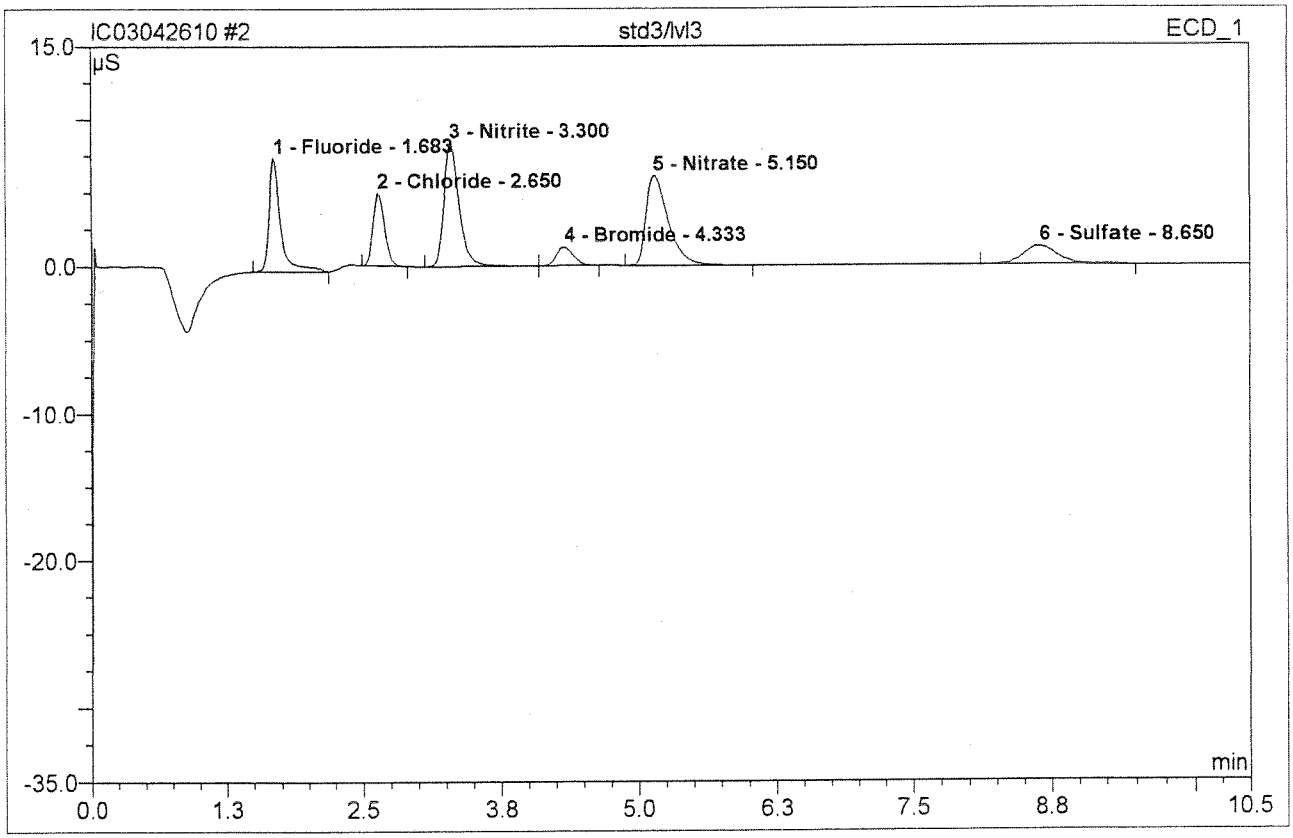
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	7.720	0.949	19.04	0.510	BMB
2	2.65	Chloride	4.937	0.589	11.82	0.502	BMB
3	3.30	Nitrite	8.377	1.347	27.02	0.501	BMB
4	4.33	Bromide	1.271	0.229	4.60	0.501	bMB
5	5.15	Nitrate	6.087	1.425	28.59	0.500	BMB
6	8.65	Sulfate	1.253	0.445	8.93	0.500	BMB
Total:			29.644	4.984	100.00	3.015	

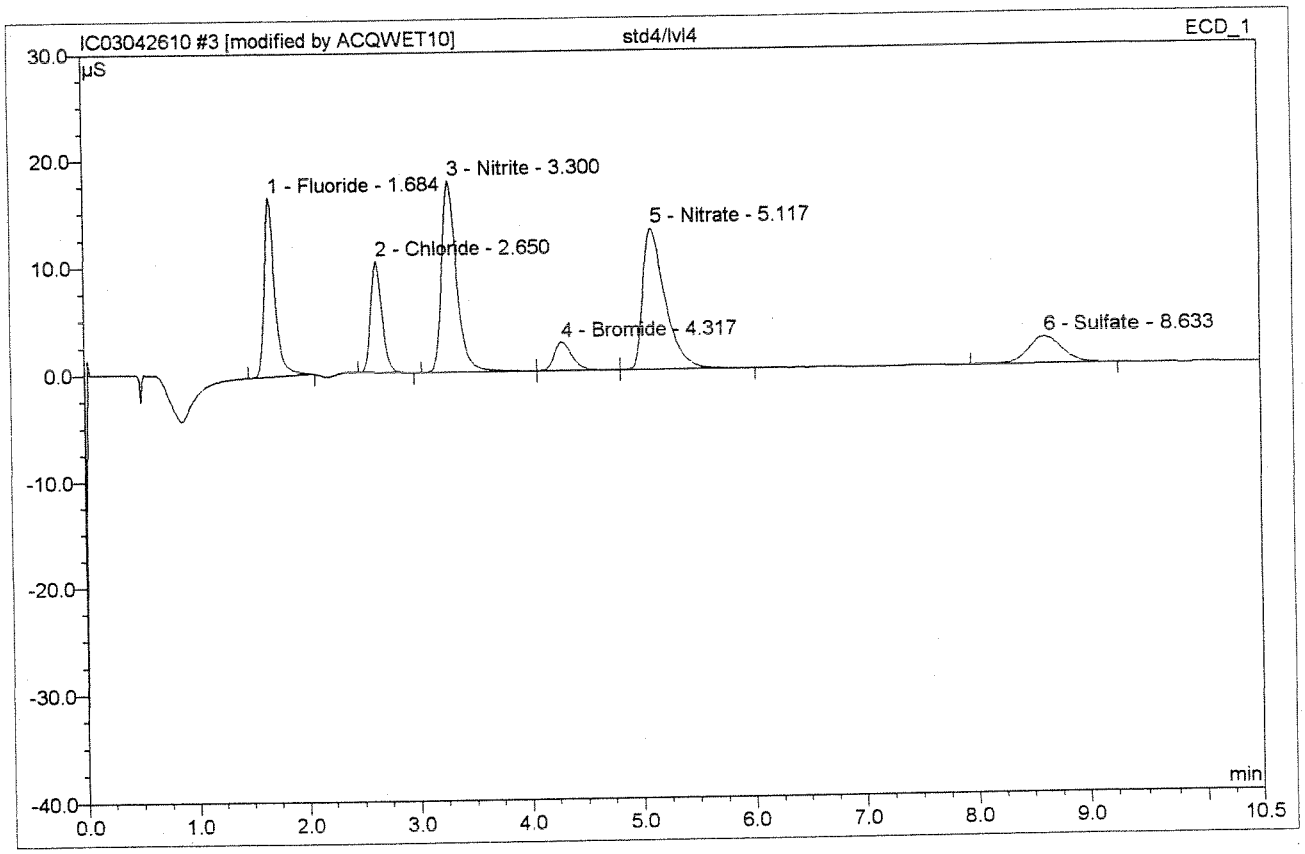
Before

APR 2 6 2010

default/Integration

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	16.676	1.811	17.64	0.947	BMB*
2	2.65	Chloride	10.365	1.223	11.91	0.784	BMB
3	3.30	Nitrite	17.874	2.814	27.40	0.975	BMb
4	4.32	Bromide	2.661	0.487	4.74	0.908	bMb
5	5.12	Nitrate	13.149	3.046	29.66	0.827	bMB
6	8.63	Sulfate	2.522	0.888	8.65	0.903	BMB
Total:			63.248	10.270	100.00	5.343	

After Initials

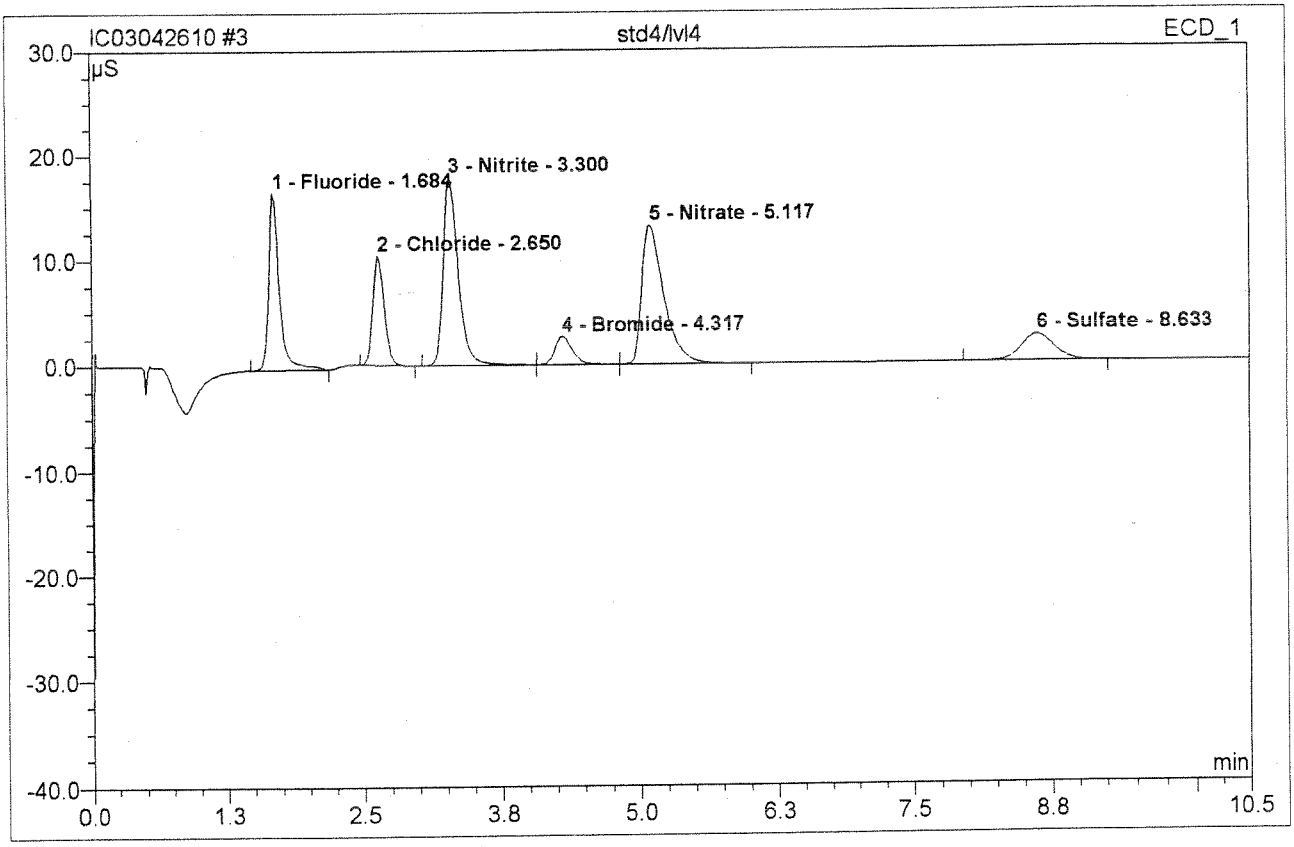
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

3 std4/lvl4

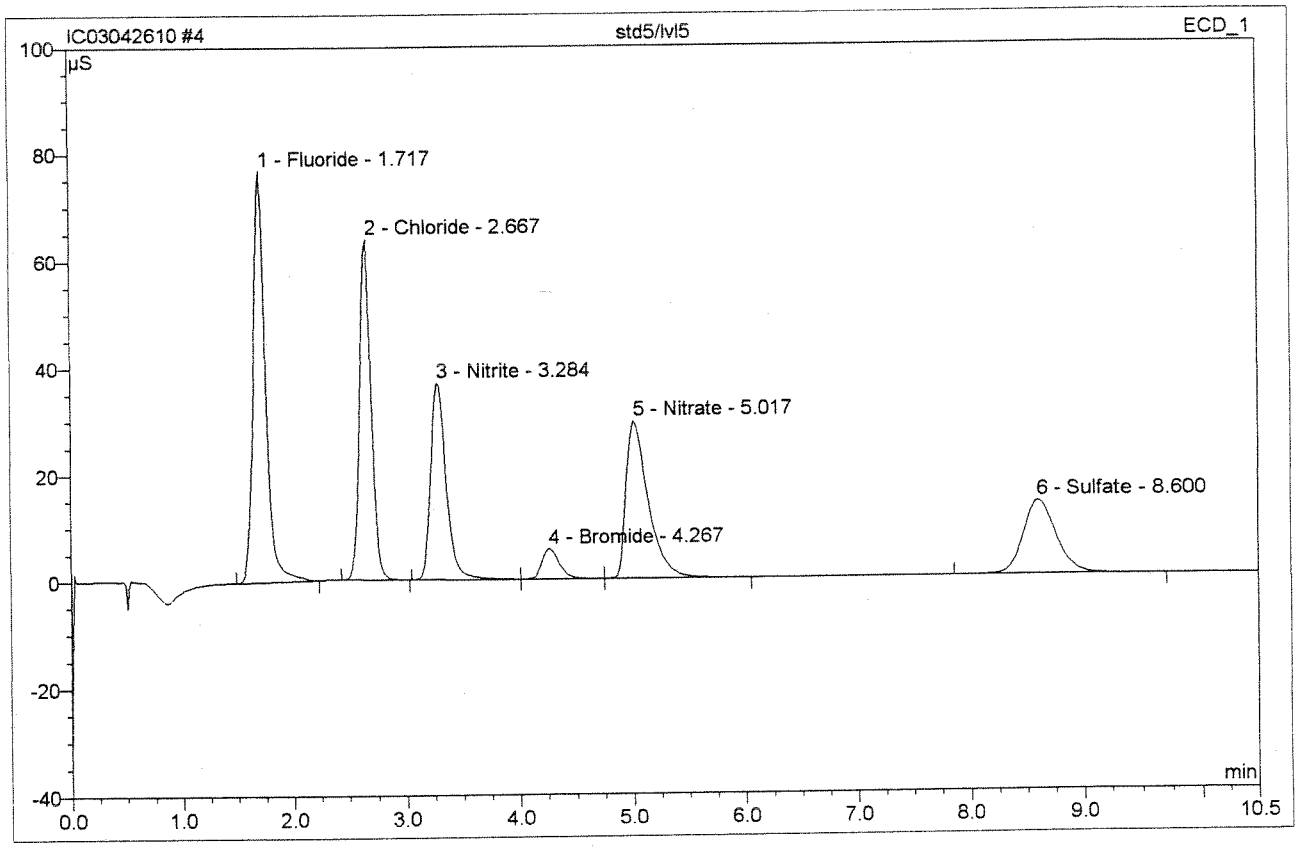
Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	16.774	1.915	18.46	1.007	BMB
2	2.65	Chloride	10.365	1.223	11.79	1.009	BMB
3	3.30	Nitrite	17.874	2.814	27.13	1.009	BMb
4	4.32	Bromide	2.661	0.487	4.69	1.012	bMb
5	5.12	Nitrate	13.149	3.046	29.36	1.014	bMB
6	8.63	Sulfate	2.522	0.888	8.56	1.000	BMB
Total:			63.346	10.374	100.00	6.051	

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	76.994	9.731	27.38	5.086	BMB
2	2.67	Chloride	63.721	7.472	21.02	4.791	BMB
3	3.28	Nitrite	36.986	5.862	16.49	2.030	BMb
4	4.27	Bromide	5.677	1.007	2.83	1.879	bMb
5	5.02	Nitrate	29.541	6.754	19.00	1.833	bMB
6	8.60	Sulfate	13.884	4.718	13.27	4.795	BMB
Total:			226.803	35.544	100.00	20.415	

After Initials MA

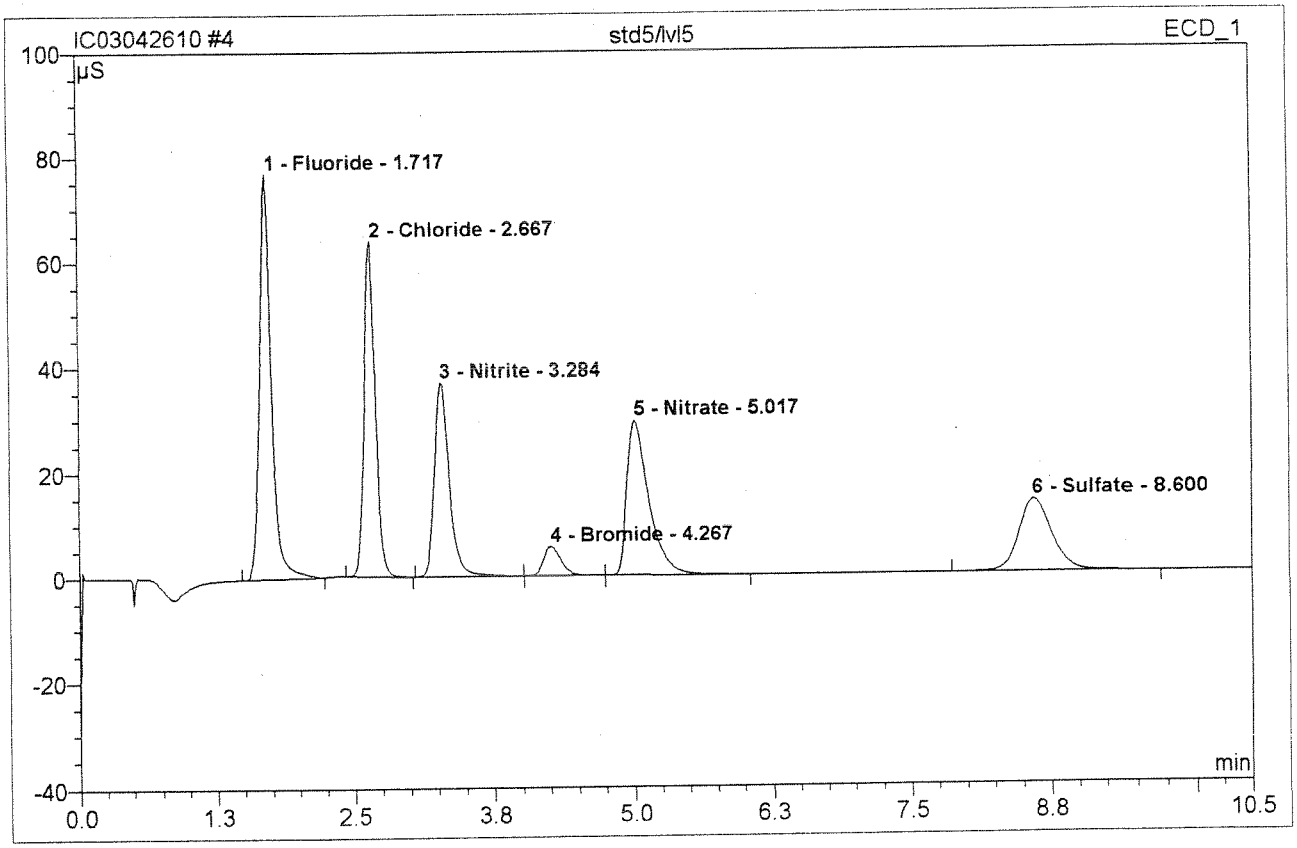
APR 2 5 2010

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

default/Integration

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	76.994	9.731	27.38	5.005	BMB
2	2.67	Chloride	63.721	7.472	21.02	5.047	BMB
3	3.28	Nitrite	36.986	5.862	16.49	2.024	BMb
4	4.27	Bromide	5.677	1.007	2.83	2.022	bMb
5	5.02	Nitrate	29.541	6.754	19.00	2.054	bMB
6	8.60	Sulfate	13.884	4.718	13.27	5.014	BMB
Total:			226.803	35.544	100.00	21.166	

Before

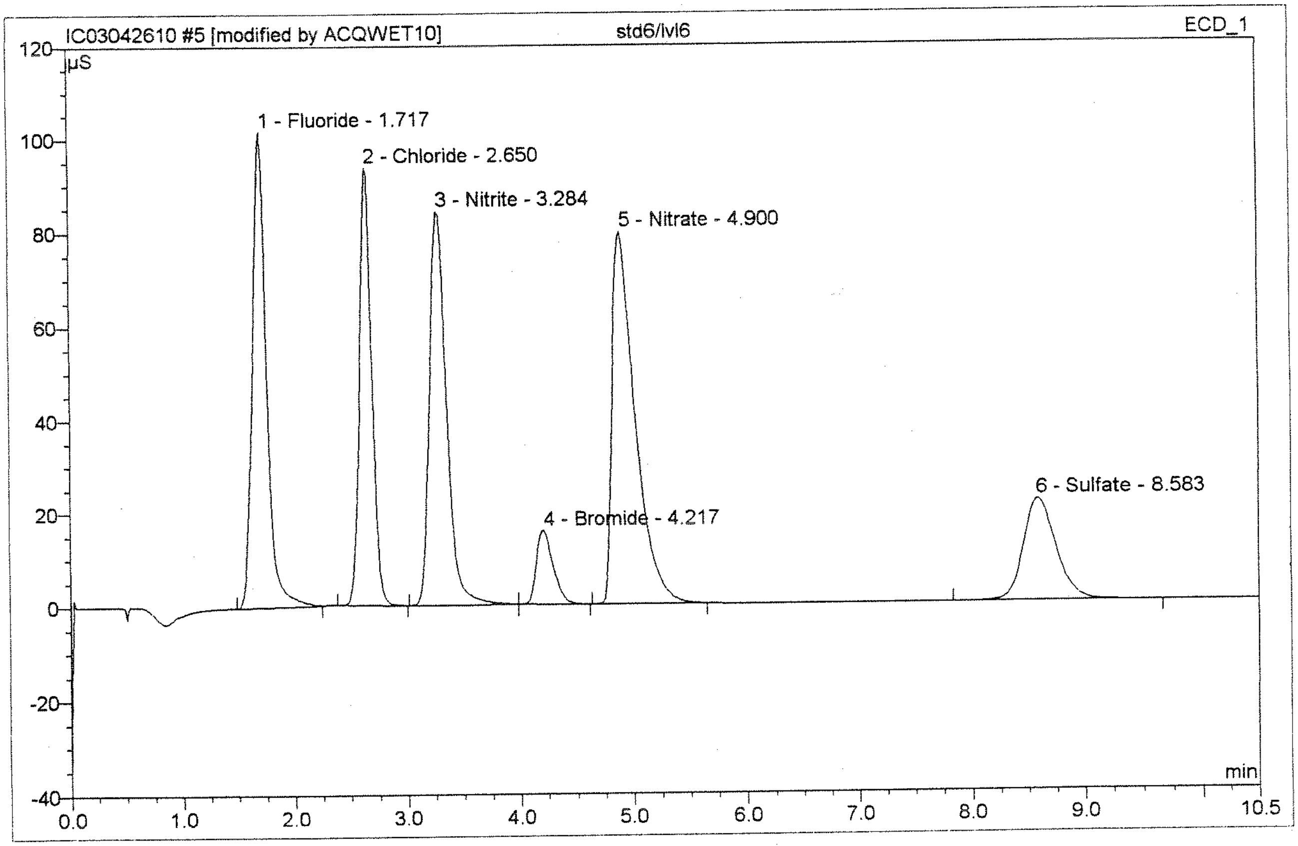
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	101.686	14.494	20.88	7.575	BMB*
2	2.65	Chloride	93.434	11.601	16.71	7.439	BMB*
3	3.28	Nitrite	84.060	14.428	20.79	4.997	BMb
4	4.22	Bromide	15.785	2.719	3.92	5.074	bMB
5	4.90	Nitrate	79.649	18.837	27.14	5.113	BMB*
6	8.58	Sulfate	21.861	7.333	10.56	7.452	BMB
Total:			396.475	69.412	100.00	37.650	

After Initials MB

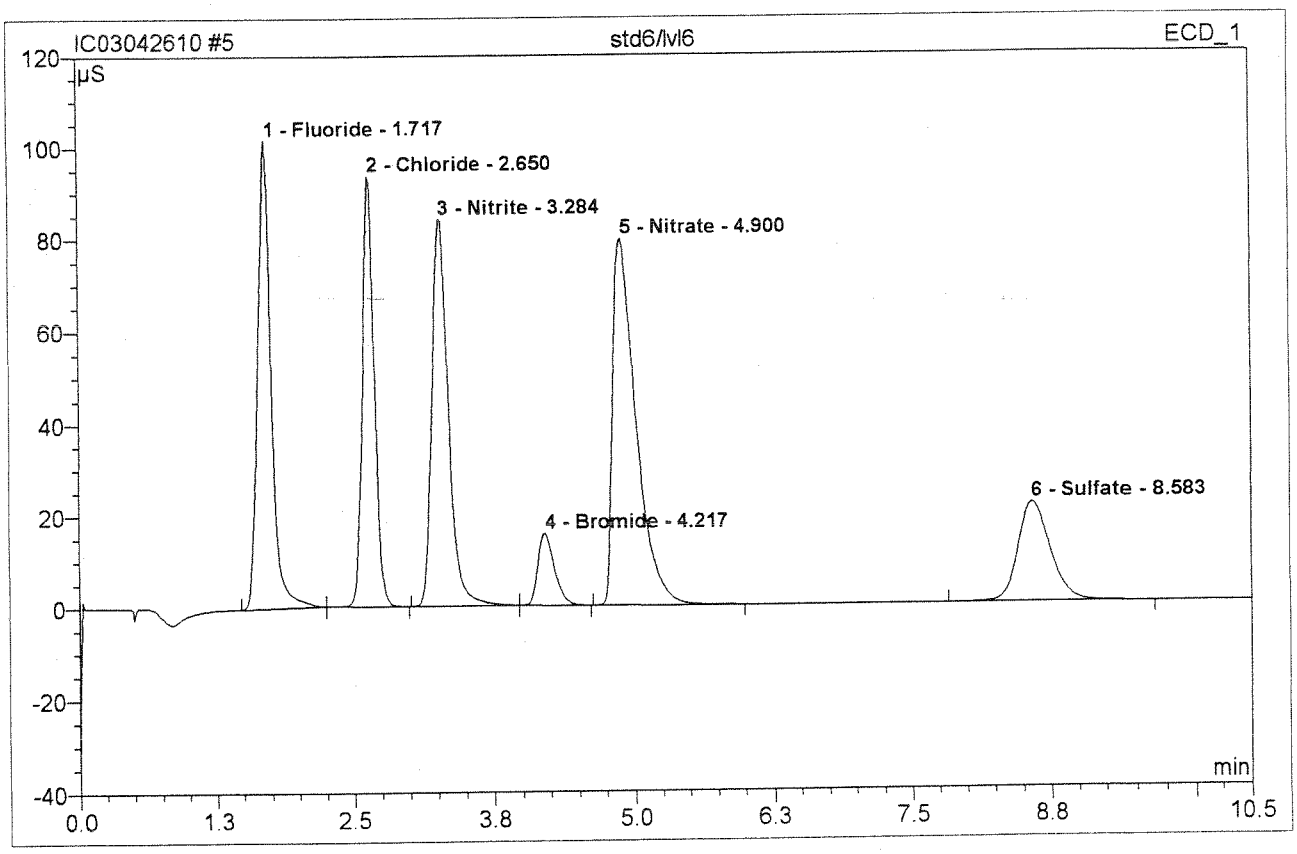
APR 26 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 9:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	101.686	14.494	20.85	7.486	BMb
2	2.65	Chloride	93.503	11.647	16.75	7.613	bMB
3	3.28	Nitrite	84.060	14.428	20.76	4.997	BMb
4	4.22	Bromide	15.785	2.719	3.91	5.074	bMB
5	4.90	Nitrate	79.672	18.892	27.18	5.115	BMB
6	8.58	Sulfate	21.861	7.333	10.55	7.591	BMB
Total:			396.568	69.512	100.00	37.876	

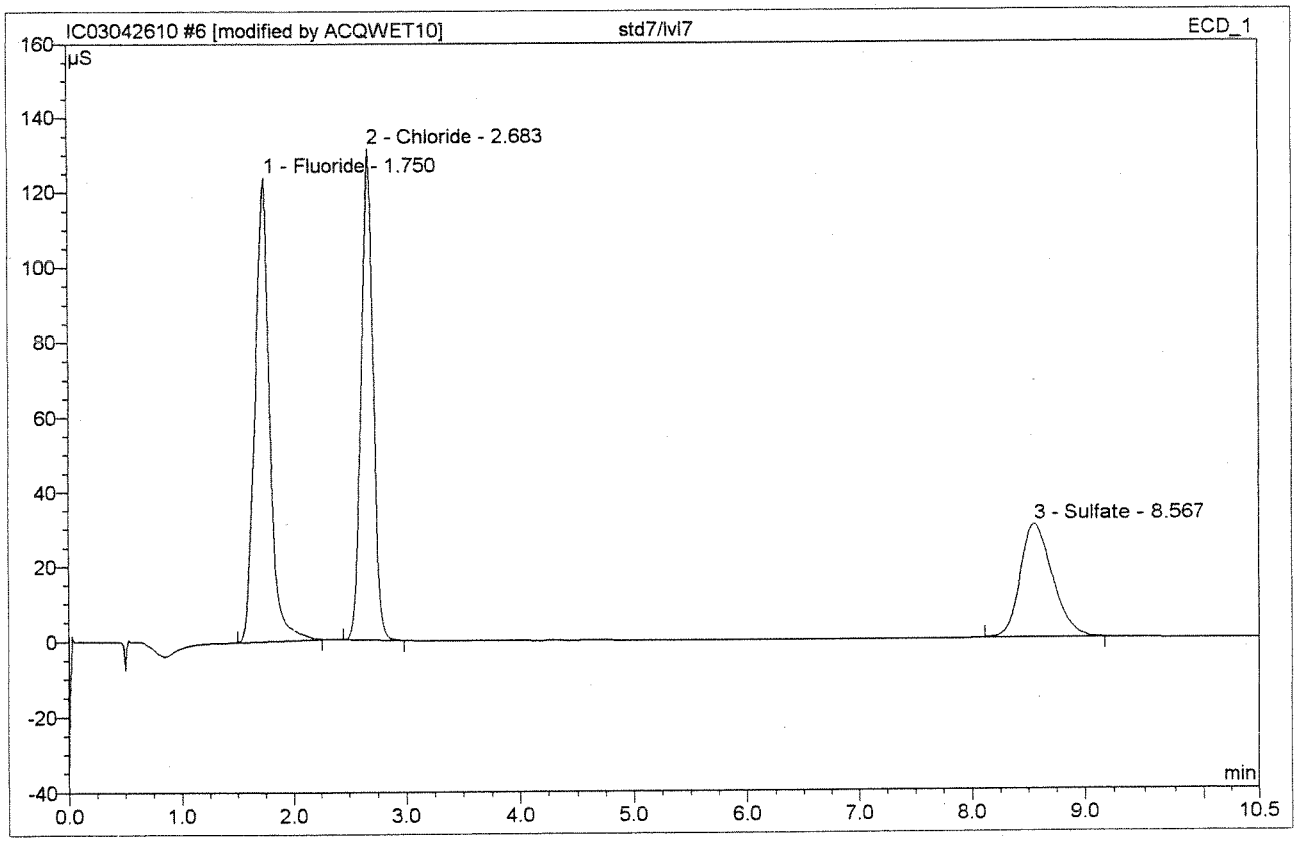
Before

APR 26 2010

default/Integration

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.75	Fluoride	123.905	18.962	42.30	9.910	BMB*
2	2.68	Chloride	131.265	15.874	35.41	10.179	BMB*
3	8.57	Sulfate	30.278	9.990	22.29	10.151	BMB*
Total:			285.448	44.826	100.00	30.240	

After Initials MB

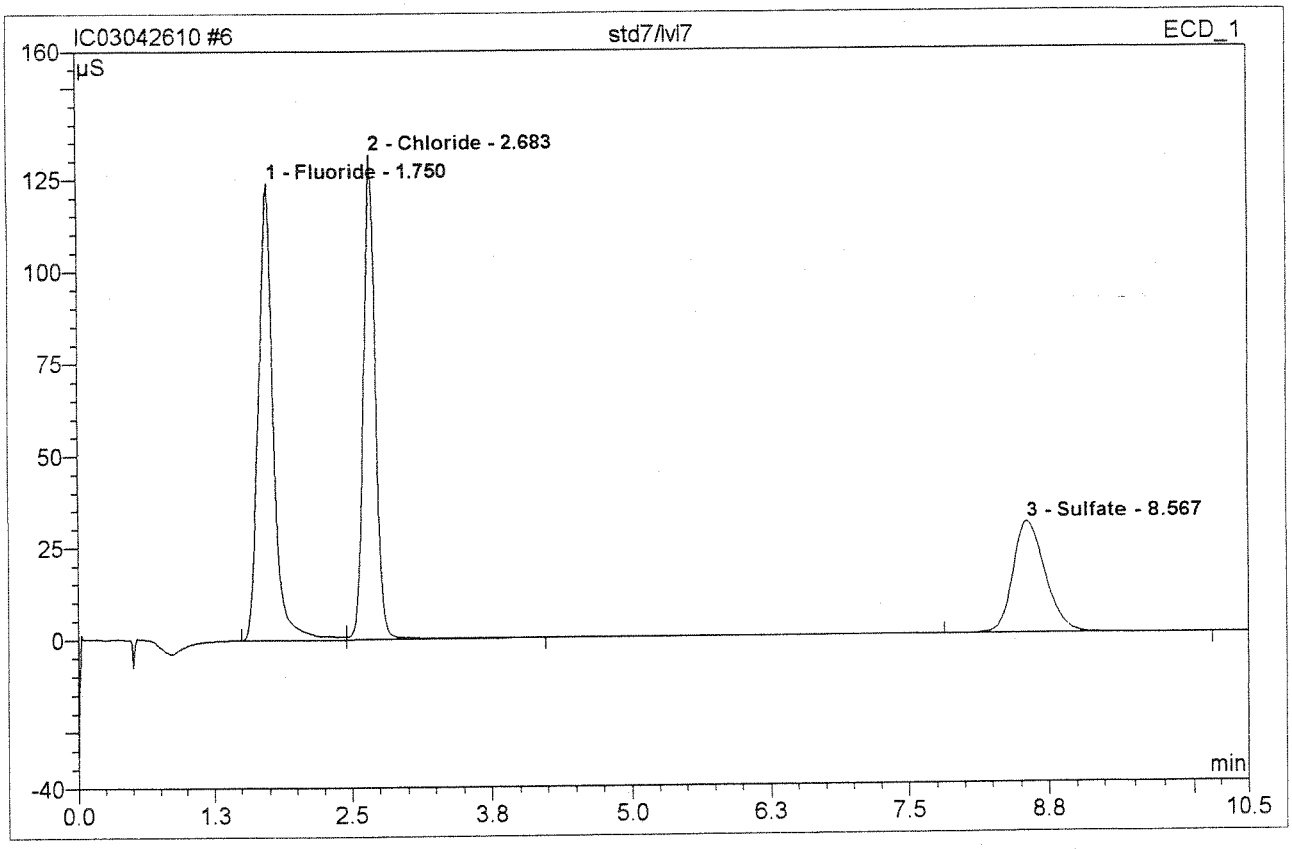
APR 2 6 2010

default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.75	Fluoride	124.185	19.437	42.28	10.022	BM
2	2.68	Chloride	131.836	16.307	35.47	10.300	MB
3	8.57	Sulfate	30.454	10.233	22.26	10.259	BMB
Total:			286.475	45.977	100.00	30.581	

Before

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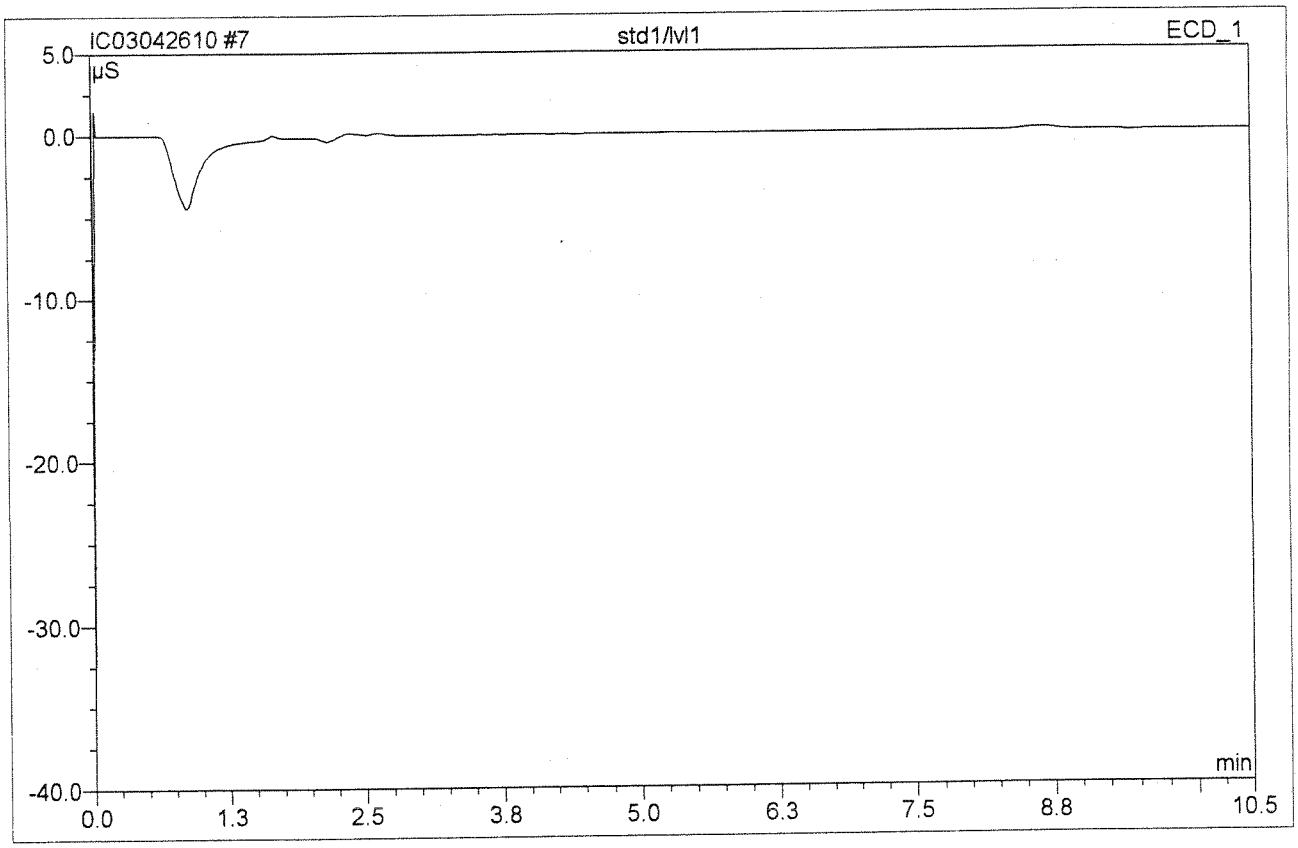
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

7 std1/lvl1

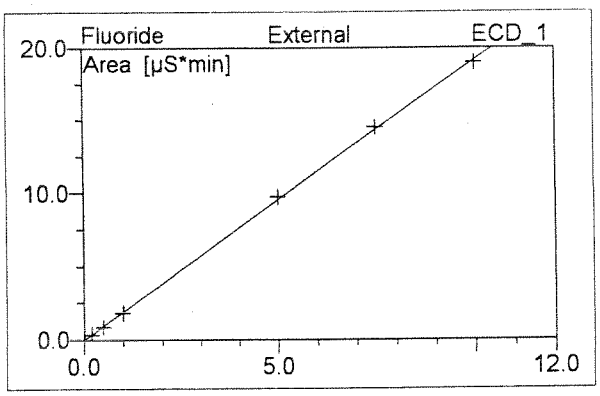
Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

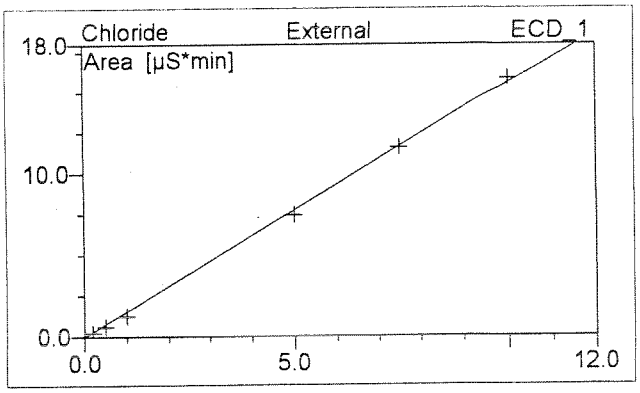


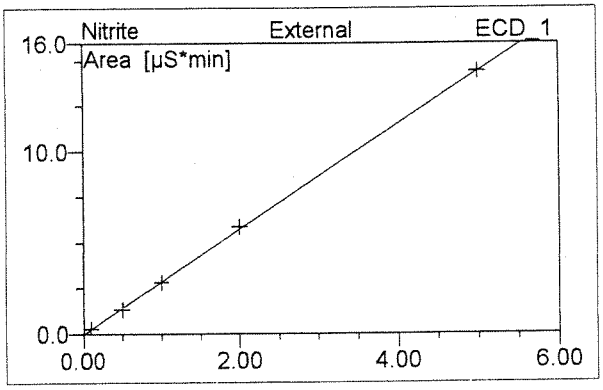
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

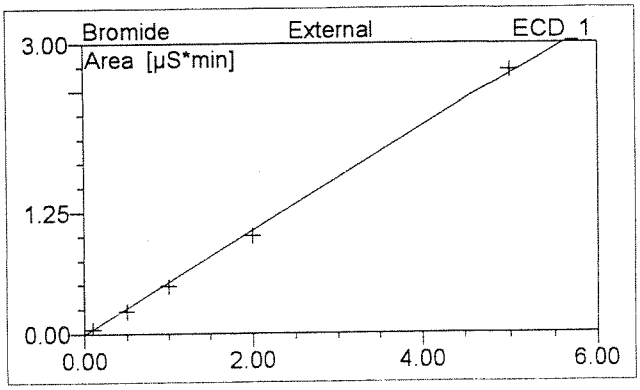
7 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 10:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**







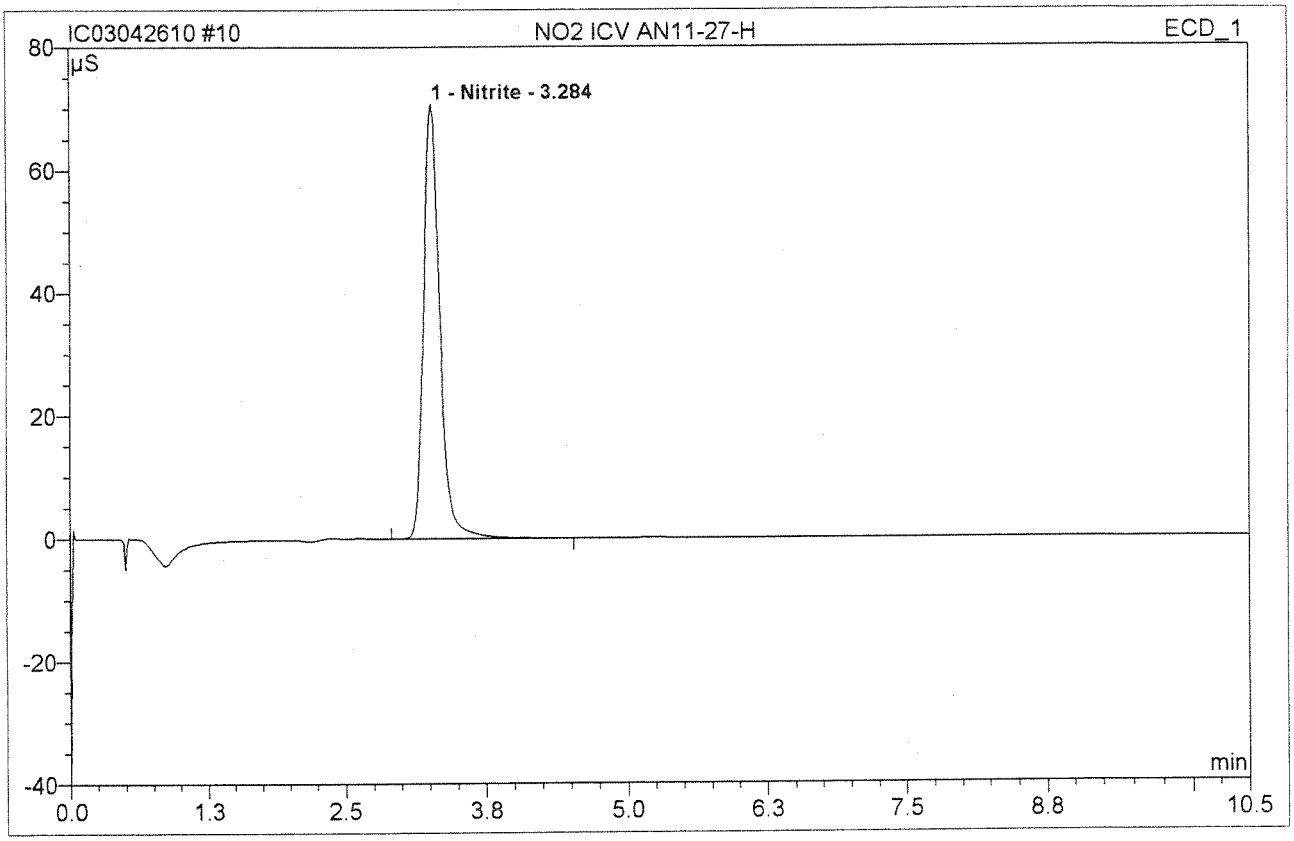


No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
Average:					n.a.	n.a.	n.a.	n.a.

10 NO2 ICV AN11-27-H

NO2 ICV

Sample Name:	**NO2 ICV AN11-27-H**	*Injection Volume:*	**200.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**4/26/2010 11:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

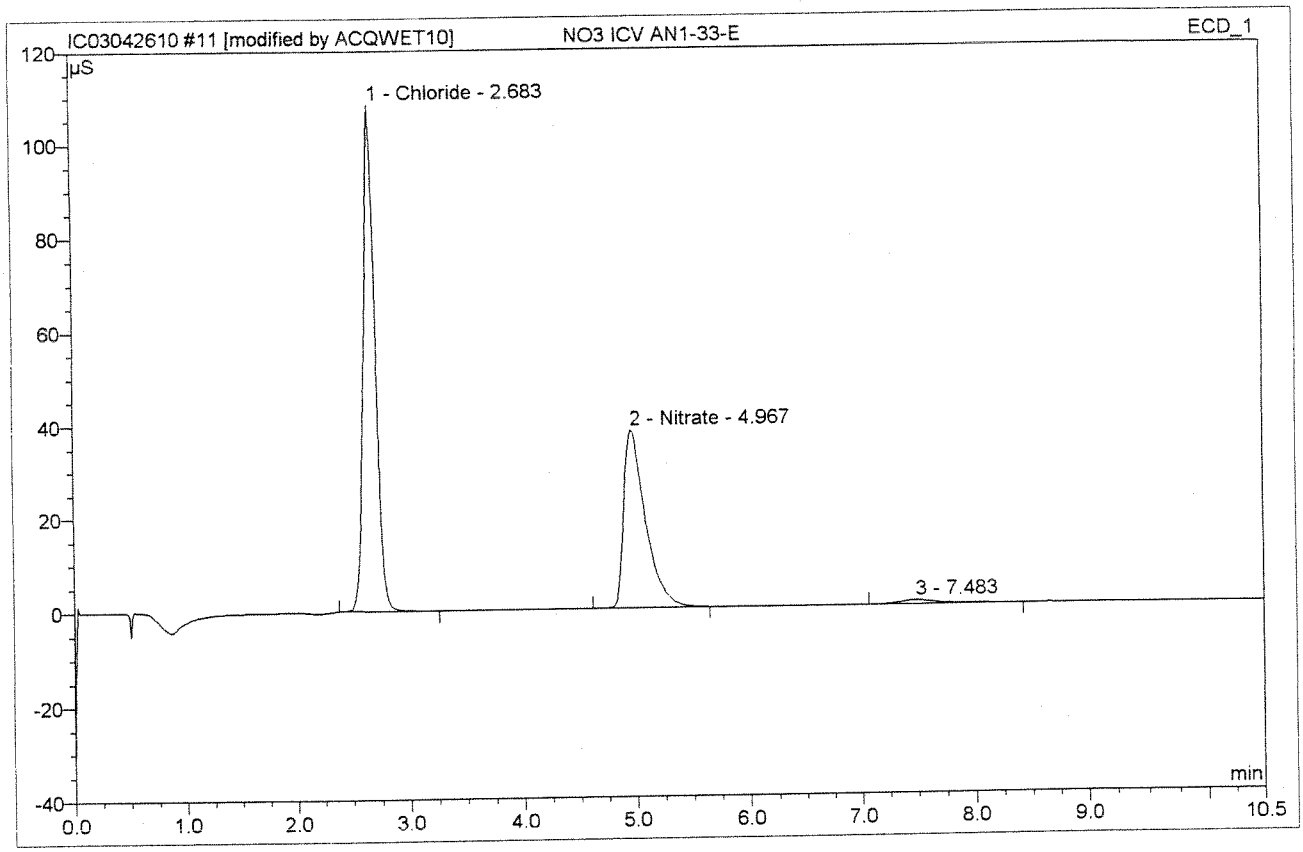


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.28	Nitrite	70.856	11.827	100.00	102.405 102?	BMB
Total:			70.856	11.827	100.00	102.405	

11 NO3 ICV AN1-33-E

NO3 ICV

Sample Name:	**NO3 ICV AN1-33-E**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**4/26/2010 11:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.68	Chloride	108.172	12.864	59.17	82.484	BMB*
2	4.97	Nitrate	38.103	8.551	39.33	23.211 mg/L	BMB*
3	7.48	n.a.	0.823	0.326	1.50	n.a.	BMB
Total:			147.098	21.741	100.00	105.695	

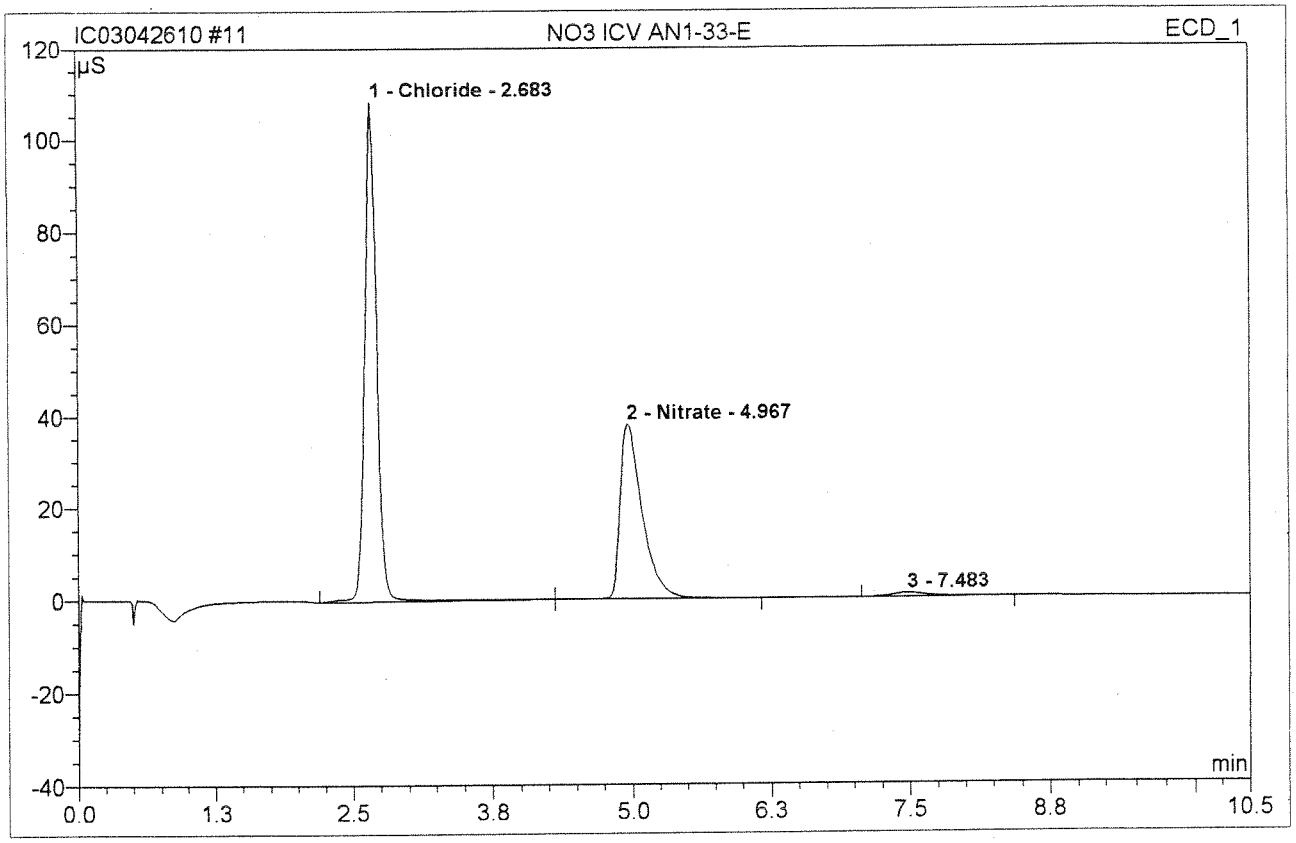
APR 2 5 2010

default/Integration

11 NO3 ICV AN1-33-E

NO3 ICV

Sample Name:	**NO3 ICV AN1-33-E**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**4/26/2010 11:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.68	Chloride	108.576	13.345	59.83	85.571	BMB
2	4.97	Nitrate	38.156	8.633	38.70	23.433	bMB
3	7.48	n.a.	0.823	0.326	1.46	n.a.	BMB
Total:			147.556	22.304	100.00	109.004	

Before

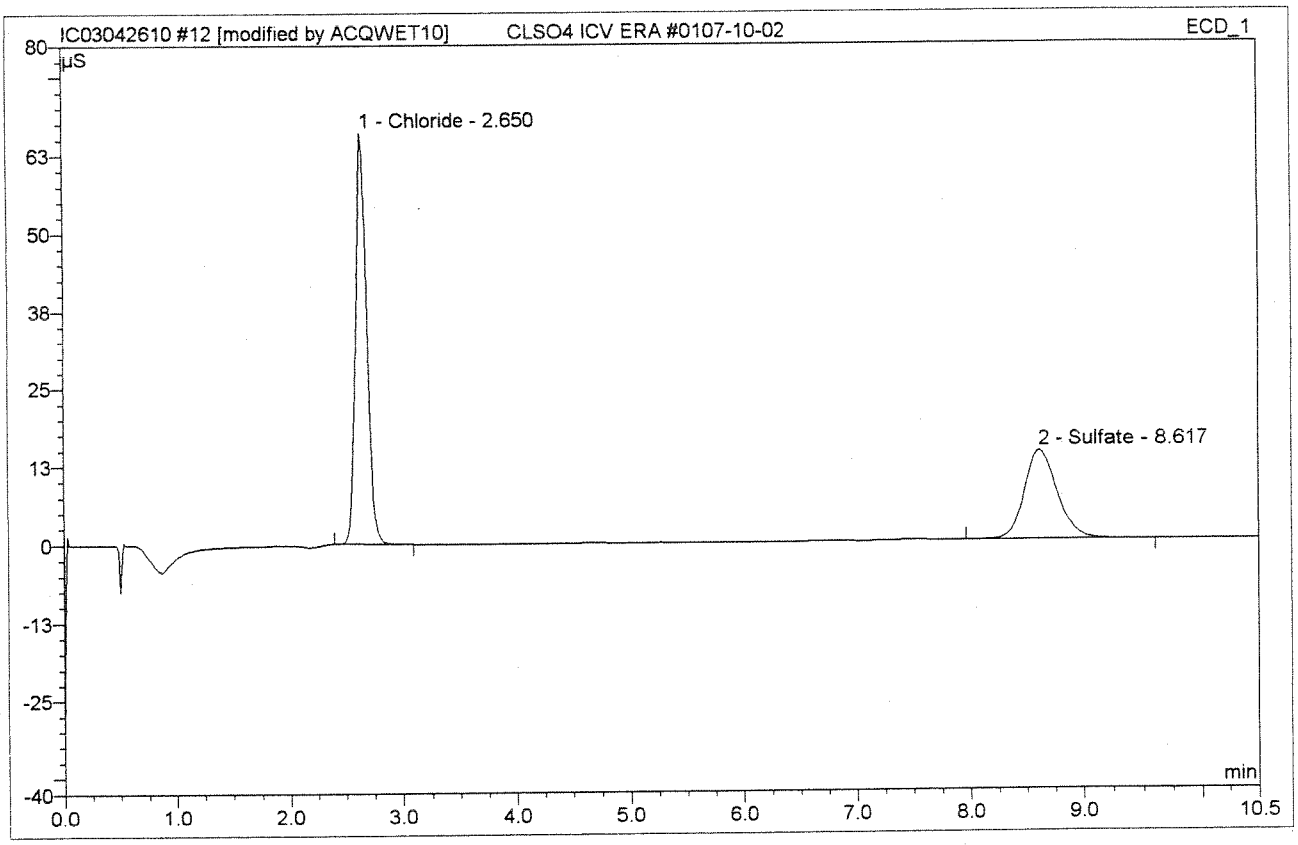
APR 2 6 2010

default/Integration

12 CLSO4 ICV ERA #0107-10-02

CLSO4 ICV

Sample Name:	**CLSO4 ICV ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 11:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.65	Chloride	65.962	7.498	61.00	4.808962	BMB*
2	8.62	Sulfate	14.257	4.794	39.00	4.871972	BMB
Total:			80.219	12.292	100.00	9.679	

After initials

APR 2 6 2010

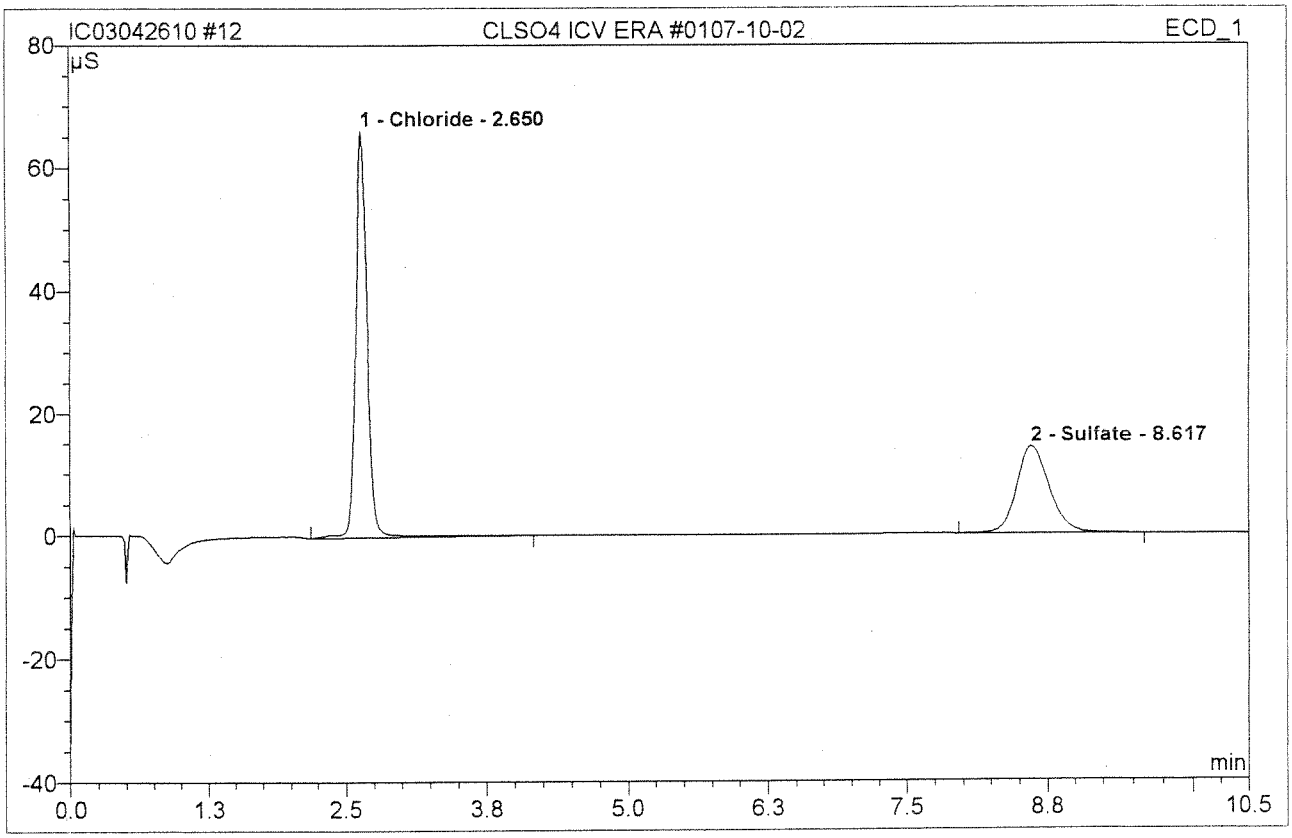
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

12 CLSO4 ICV ERA #0107-10-02

CLSO4 ICV

Sample Name:	**CLSO4 ICV ERA #0107-10-02**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 11:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.65	Chloride	66.369	7.929	62.32	5.084	BMB
2	8.62	Sulfate	14.257	4.794	37.68	4.871	BMB
Total:			80.625	12.723	100.00	9.956	

Before

APR 2 6 2010

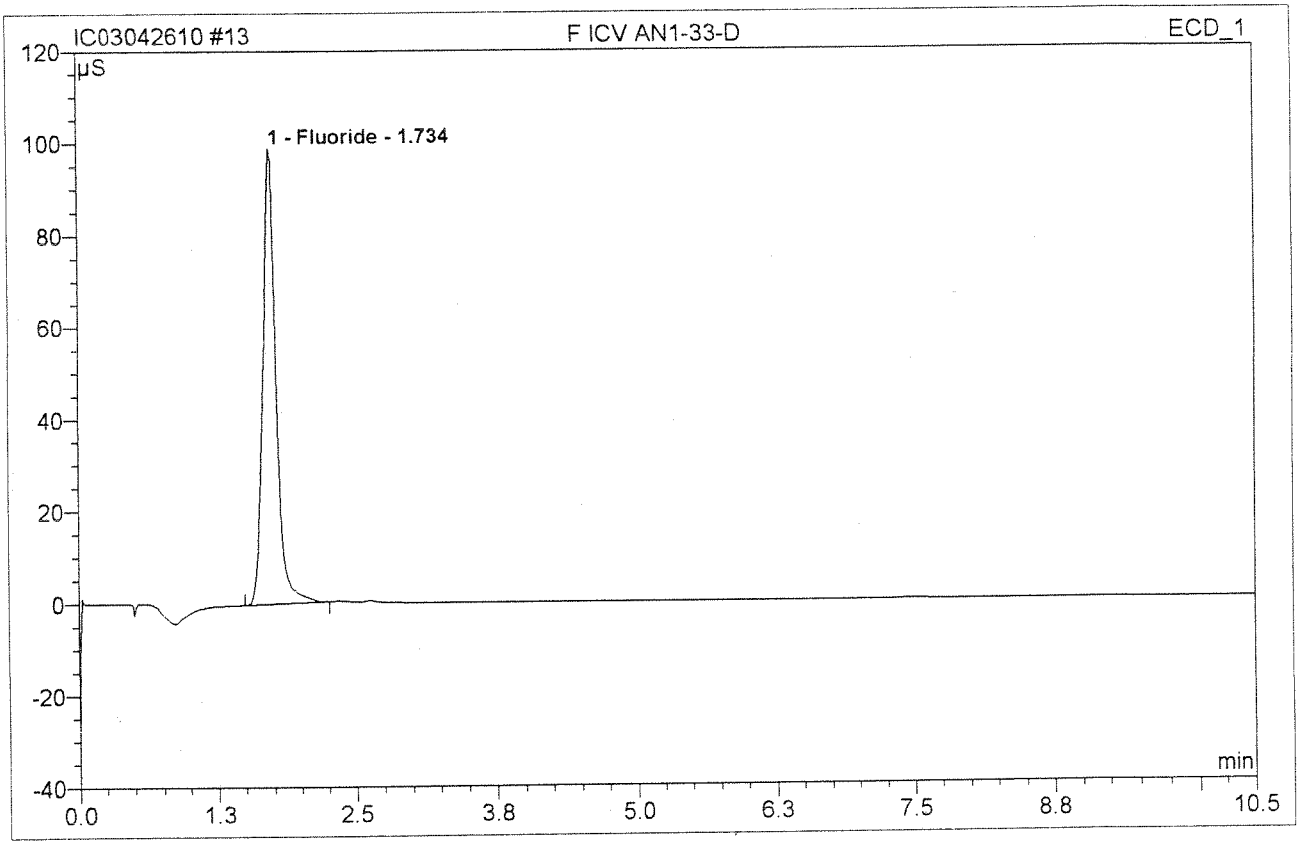
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.50 SP1 Build 956

13 F ICV AN1-33-D

F ICV

Sample Name:	**F ICV AN1-33-D**	*Injection Volume:*	**200.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**4/26/2010 11:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**

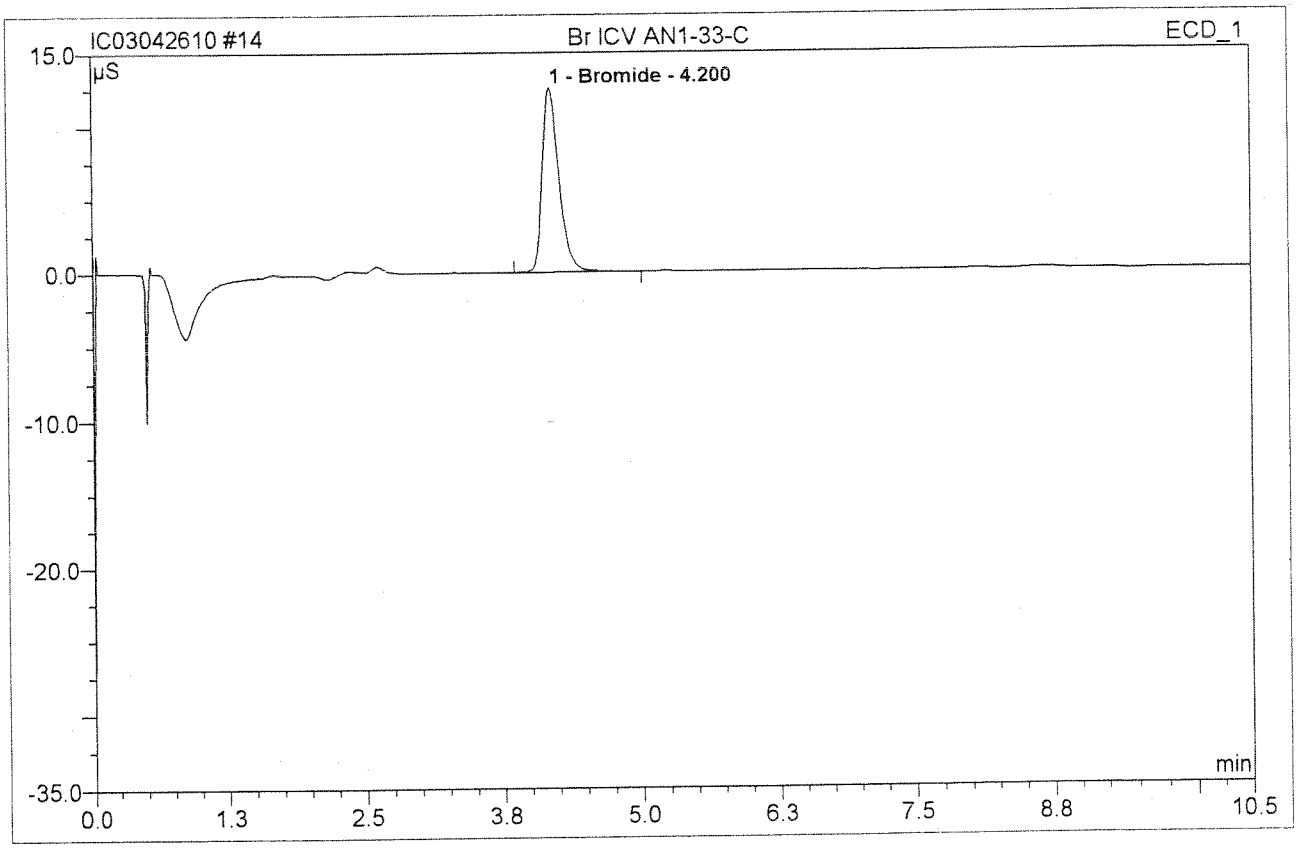


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	98.959	13.315	100.00	13.917 1032	BMB
Total:			98.959	13.315	100.00	13.917	

14 Br ICV AN1-33-C

Br ICV

Sample Name:	**Br ICV AN1-33-C**	*Injection Volume:*	**200.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/26/2010 11:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	4.20	Bromide	12.583	2.210	100.00	4.124103%	BMB
Total:			12.583	2.210	100.00	4.124	

Work Request # Original (K4575) K4587 K4590 K4591 K4607 K4635

Tier: V I I IIA II V

Date Analyzed: 05/10/10

Analyst: Flournoy

Analysis: NH_3 - 350.1 / SM 4500-NH_3 G

199842

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes/no/NA)
2.	Holding times met for all analyses and for all samples?	(yes/no/NA)
3.	Are calculations correct?	(yes/no/NA)
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	(yes/no/NA)
	a. Is the calibration curve correlation coefficient ≥ 0.995?	(yes/no/NA)
	b. MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes/no/NA)
	c. Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes/no/NA)
	d. Are results for methods blanks all ND?	(yes/no/NA)
	e. Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes/no/NA)
	f. Are all exceptions explained?	yes/no/(NA)
6.	Are all service requests that apply attached?	(yes/no/NA)
7.	Are all samples labelled correctly?	(yes/no/NA)
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes/no/NA)
9.	Are detection limits and units reported correctly?	(yes/no/NA)
10.	Are proper Analysis/Extraction stickers included on report?	(yes/no/NA)
11.	Is the unused space on the benchsheet crossed out?	(yes/no/NA)
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes/no/NA)

COMMENTS:

Final Approved by: _____ Date: 5/10/10

DQREPORT

D. I I DA II, D.
K4575, K4587, K4590, K4591, K4607, K4635

BRAN+LUEBBE

Post-run report

199842

Name of Run : 100510C
Date of Report : 5/10/2010
Date of Run : 5/10/2010
Operator :
Comment :

Name of Analysis :Ammonia
System No. :1
Type of System :AA3
Start/Stop time :11:11 - 12:09

LCS ID#: B+LNH3/-34-I T.V.=14.3
Spike ID#: B+LNH3/-72-II T.V.=2.00
Curve, CCV ID#: B+LNH3/-55-T T.V.=2.00
MB MS = 2.00

Channel : 2
Method : Method 2
Unit : mg/L
Calibr. Fit : Linear
Corr. Coeff. : 1.0000
Base : -19737
Gain : 20
Sensitivity : 0.4382
Sample Limit 1 :
Sample Limit 2 :

Pk	Cup		Sample Id	Value	
0	0	B	Baseline	-0.0122	
1	1	P	Primer	5.0010	
2	1	D	Drift	5.0038	
3	1	C	5.00	5.0091	
4	2	C	2.00	1.9771	
5	3	C	0.50	0.4987	
6	4	C	0.05	0.0470	
7	5	C	0	0.0181	
8	0	B	Baseline	-0.0122	
9	1	H1	High	4.9788	
10	0	L1	Low	-0.0070	
11	0	L1	Low	-0.0070	
12	5	QC2	CCB1	0.0005	<0.020
13	2	QC1	CCV1	1.9705	1.97 99%
14	10	QC3	LCS1*10	1.4148	14.1 99%
15	11	S	MB MS	2.0361	2.04 102%
16	0	N	Null	-0.0086N	
17	5	QC2	MB1	0.0020	<0.020
18	34	S	k1004575-001diss.	0.0067	<0.020
19	35	S	k1004575-002diss.	0.4366	0.437
20	36	S	k1004575-003diss.	0.4419	0.442
21	37	S	k1004575-004diss.	-0.0111	<0.020
22	38	S	k1004587-001	-0.0020	<0.050
23	0	B	Baseline	-0.0122	
24	5	QC2	CCB2	0.0094	<0.020
25	2	QC1	CCV2	1.9645	1.96 98%
26	39	S	k1004587-002	0.0044	<0.050

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27	40	S	k1004590-001diss.	0.2440	0.244
28	41	S	k1004591-001	0.2145	0.215
29	42	S	k1004607-001	1.6869	1.69
30	43	S	k1004635-001diss.	-0.0004	<0.020 $\bar{x}$ = ND RPD = —
31	44	S	k1004635-001ddiss.	-0.0002	<0.020
32	45	S	k1004635-001msdiss.	2.0665	2.07 104%
33	46	S	k1004635-001msddiss	2.1433	2.14 107%
34	47	S	k1004635-002 diss.	0.0177	<0.020
35	0	B	BASELINE	-0.0122	
36	5	QC2	CCB-3	-0.0009	<0.020
37	2	QC1	CCV-3	1.9652	1.97 99%
38	48	S	k1004635-003diss.	0.0212	0.021J
39	0	B	Baseline	-0.0122	
40	5	QC2	CCB4	-0.0011	<0.020
41	2	QC1	CCV4	1.9679	1.97 99%
42	1	D	Drift	5.0038	
43	0	B	Baseline	-0.0122	
44	0	B	FinalBase	-0.0122	

QC Limits

Channel :	2
QC 1	Unused
QC 2	Unused
QC 3	Unused
QC 4	Unused
QC 5	Unused
QC 6	Unused
QC 7	Unused
QC 8	Unused
QC 9	Unused
QC10	Unused

CORRECTIONS

Channel :	2
Baseline :	Yes
Drift :	Yes
Carry over :	Yes
%:	0.3

* ... Sample offscale
\+ ... Result higher than sample limit
\- ... Result lower than sample limit
P ... Standard passed
F ... Standard failed
N ... Value not calculated or not used
R ... Resample after offscale
M ... Peak marker moved manually
D ... Diluted sample

SM 5/10/10

05/10/10

** <END OF REPORT> **

5/10/10

05/10/10

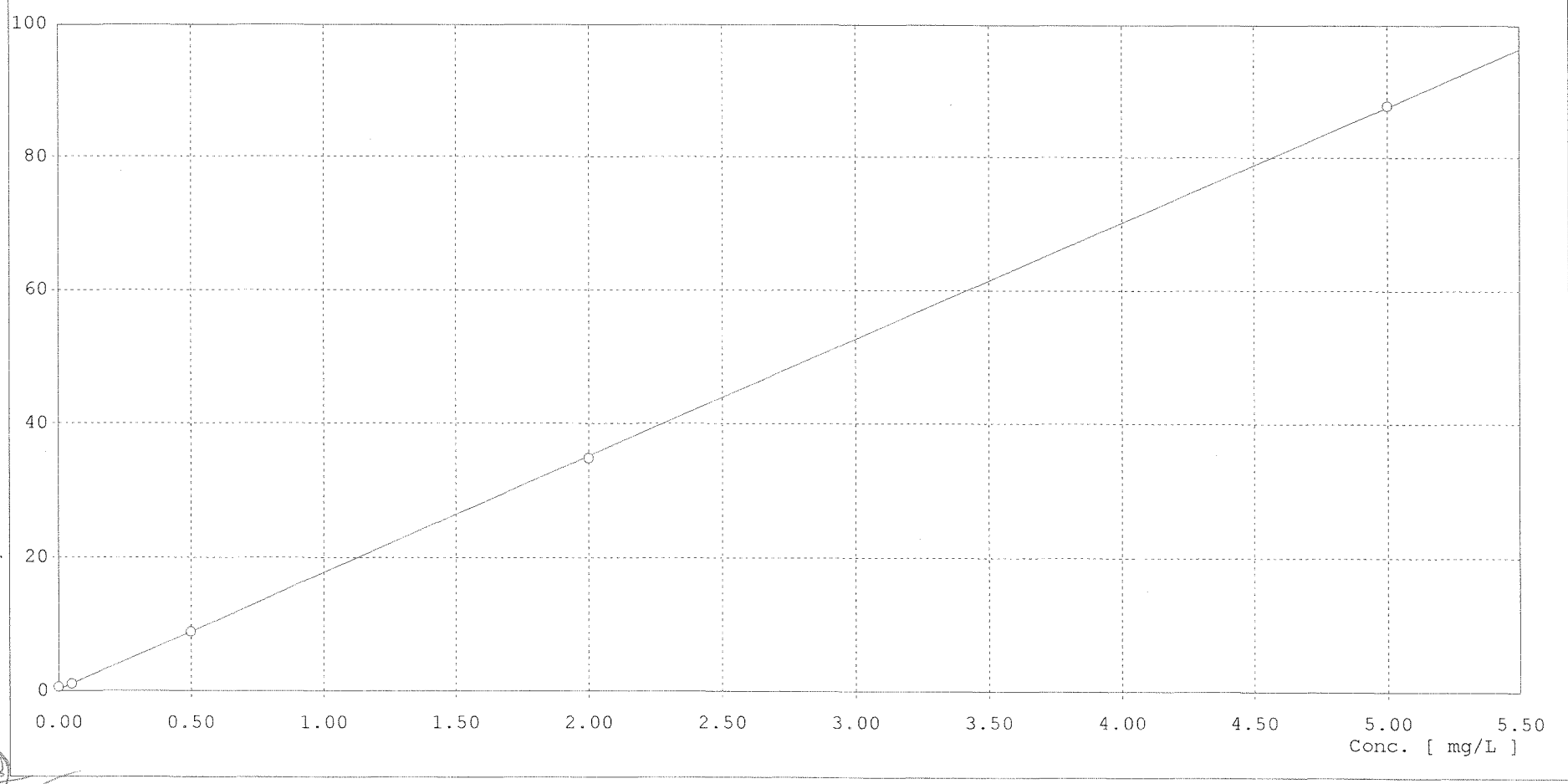
BRAN+LUEBBE

Calibration Curve

Name of run :100510C.run
Comment :

Name of analysis :Ammonia

Channel :2
Method :Method 2
Curve fit :linear a=-2.9480E-001 b=8.7276E-005
Corr. coeff. :1.0000



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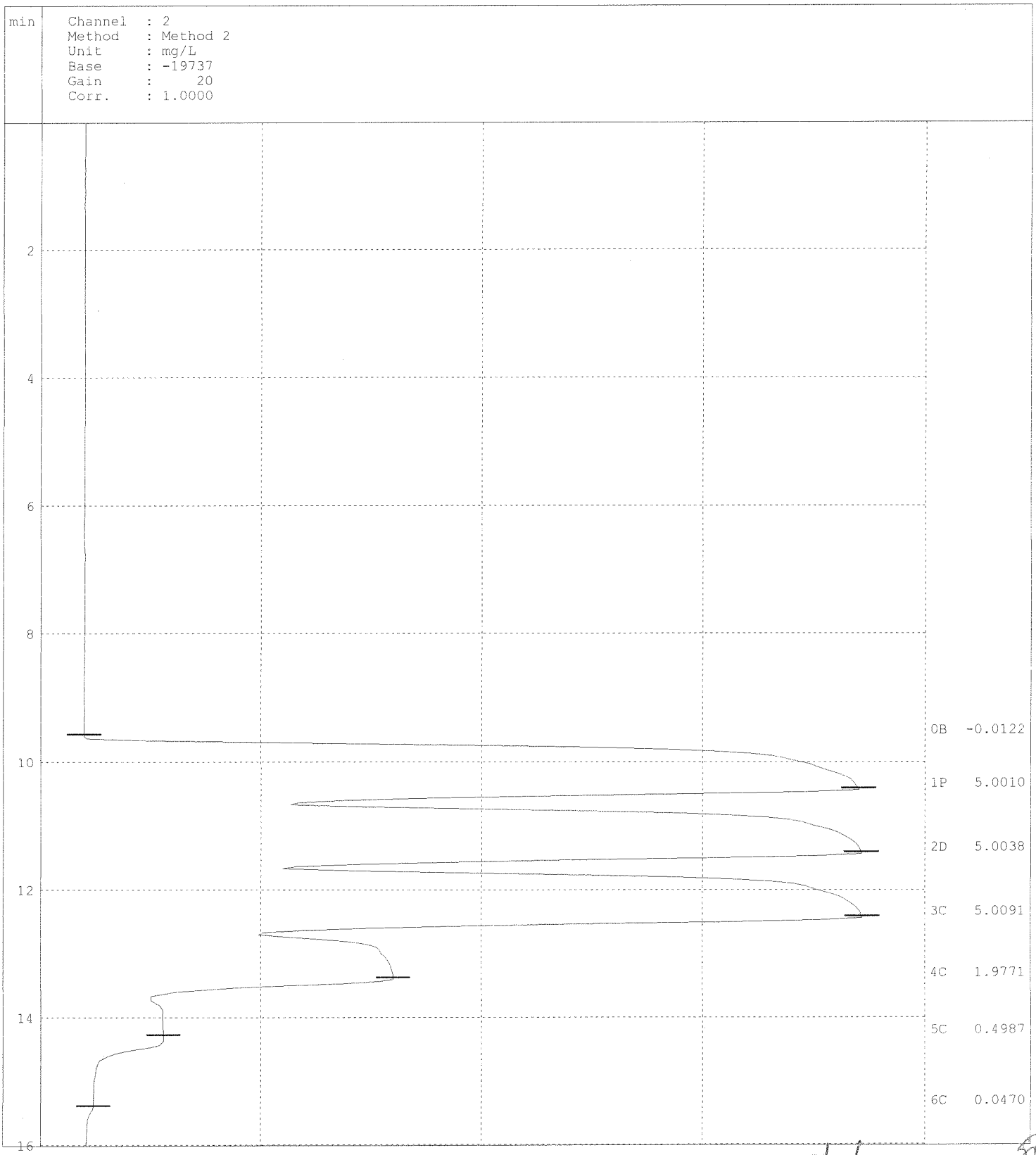
5/10/10

BRAN+LUEBBE

Post-run chart

Name of run :100510C.RUN
Comment :

Name of analysis :Ammonia

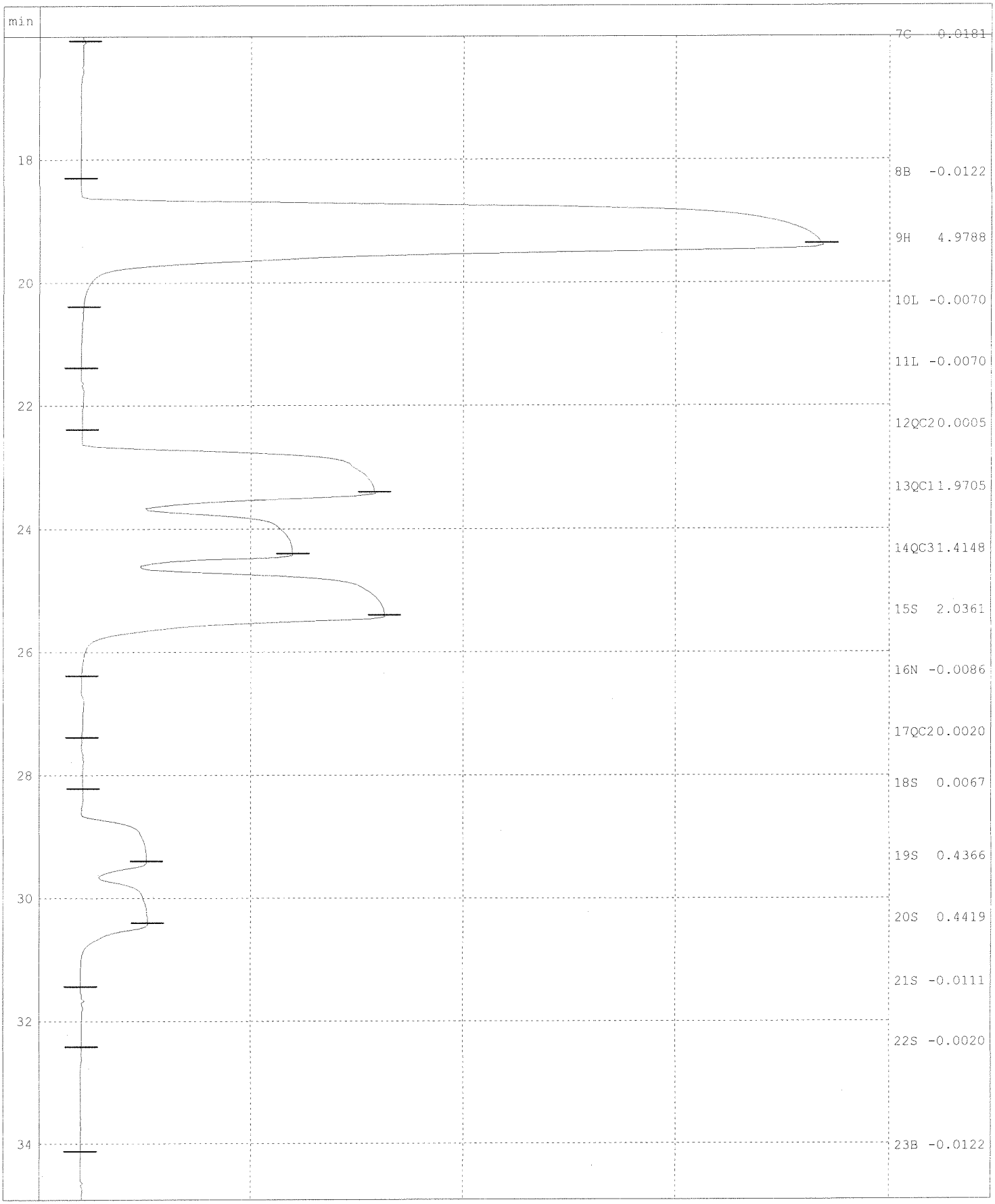


05/10/10

5/10/10

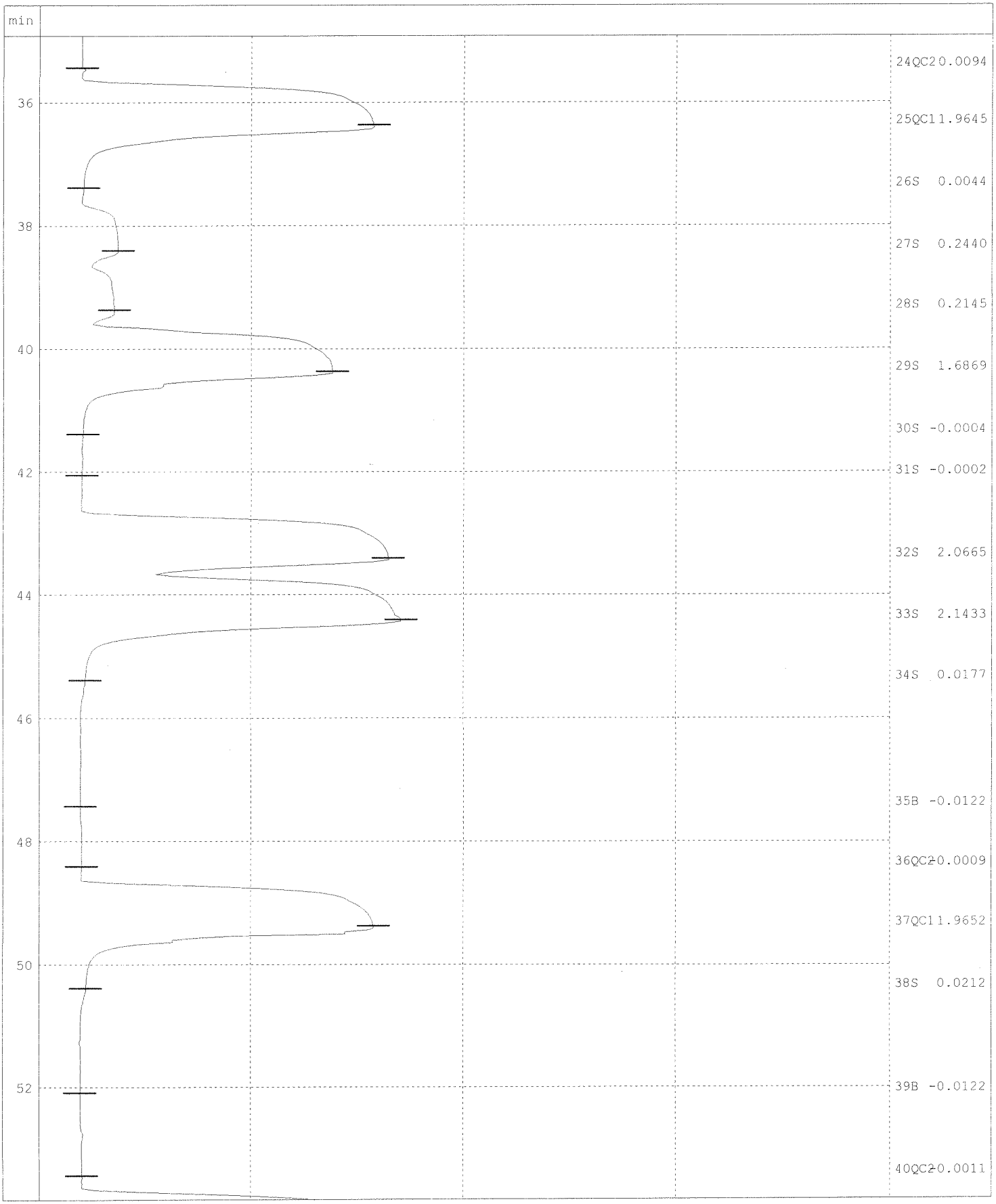
Name of run :100510C.RUN
Comment :

Name of analysis :Ammonia



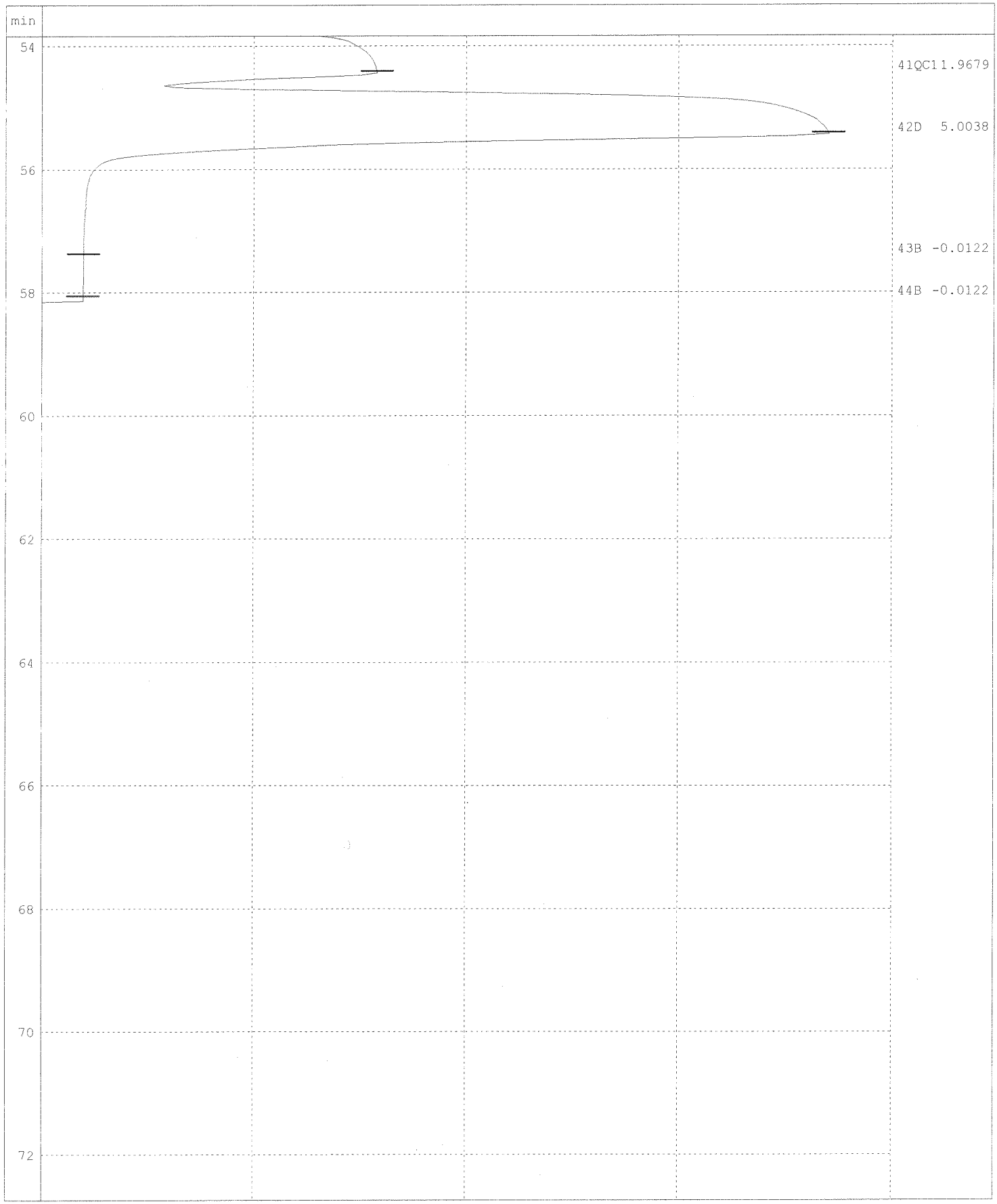
Name of run :100510C.RUN
Comment :

Name of analysis :Ammonia



Name of run :100510C.RUN
Comment :

Name of analysis :Ammonia



Work Request # Original (K4575)

Tier: V

Date Analyzed: 05/07/10

Analyst: Hawyeu

Analysis: NO_2 L 353.2

199723

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	(yes)/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	(yes)/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
d.	Are results for methods blanks all ND?	(yes)/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
f.	Are all exceptions explained?	yes/no/(NA)
6.	Are all service requests that apply attached?	(yes)/no/NA
7.	Are all samples labelled correctly?	(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes)/no/NA
9.	Are detection limits and units reported correctly?	(yes)/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	(yes)/no/NA
11.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes)/no/NA

COMMENTS:

Final Approved by: [signature] Date: 5/10/10 DQREPORT

K4575

BRAN+LUEBBE

Post-run report

Name of Run	: 100507D	Name of Analysis	:Nitrite.ANL
Date of Report	: 5/7/2010	System No.	:1
Date of Run	: 5/7/2010	Type of System	:AA3
Operator	:	Start/Stop time	:16:02 - 16:45
Comment	:		

LCS ID#: AN/11-27-R T.V. =4.00
(0.4ml x 100ppm / 10ml = 4.00)
Spike ID#: B+LNO3/,-94-T T.V. =2.00
Curve, CCV ID#: B+LNO3/,-80-G T.V.=2.00

Channel	:	2
Method	:	Method 2
Unit	:	
Calibr. Fit	:	Linear
Corr. Coeff.	:	1.0000
Base	:	-20595
Gain	:	5
Sensitivity	:	1.5908
Sample Limit 1	:	
Sample Limit 2	:	

Pk	Cup		Sample Id	Value	
0	0	B	Baseline	0.0130	
1	1	P	Primer	4.9988	
2	1	D	Drift	5.0081	
3	1	C	5.00	5.0124	
4	2	C	2.00	1.9700	
5	3	C	0.50	0.4918	
6	4	C	0.05	0.0604	
7	5	C	0	0.0154	
8	1	H1	High	5.0052	
9	0	L1	Low	0.0238	
10	0	L1	Low	0.0148	
11	5	QC2	CCB1	0.0120	<0.050
12	2	QC1	CCV1	1.9466	1.95 98%
13	10	QC3	LCS1	3.9776	3.98 100%
14	0	N	Null	0.0225N	
15	5	QC2	MB1	0.0162	<0.050
16	11	S	k1004575-001	0.0144	<0.050
17	12	S	k1004575-002	0.0691	0.069 $\bar{x}$ = 0.070, RPD=1%
18	13	S	k1004575-002d	0.0696	0.070
19	14	S	k1004575-002ms	2.0975	2.10 102%
20	15	S	k1004575-002msd	2.0709	2.07 100%
21	16	S	k1004575-003	0.0736	0.074
22	0	B	Baseline	0.0109	
23	5	QC2	CCB2	0.0119	<0.050
24	2	QC1	CCV2	1.9600	1.96 98%
25	17	S	k1004575-004	0.0175	<0.050
26	0	B	Baseline	0.0116	

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27	5	QC2	CCB3	0.0121	<0.050
28	2	QC1	CCV3	1.9557	1.96 98%
29	1	D	Drift	5.0401	
30	0	B	Baseline	0.0096	
31	0	B	FinalBase	0.0097	

QC Limits

Channel :	2
QC 1	Unused
QC 2	Unused
QC 3	Unused
QC 4	Unused
QC 5	Unused
QC 6	Unused
QC 7	Unused
QC 8	Unused
QC 9	Unused
QC10	Unused

CORRECTIONS

Channel :	2
Baseline :	No
Drift :	No
Carry over :	No
%:	0.0

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* ... Sample offscale
\+ ... Result higher than sample limit
\- ... Result lower than sample limit
P ... Standard passed
F ... Standard failed
N ... Value not calculated or not used
R ... Resample after offscale
M ... Peak marker moved manually
D ... Diluted sample

** <END OF REPORT> **

5/10/10

05/07/10

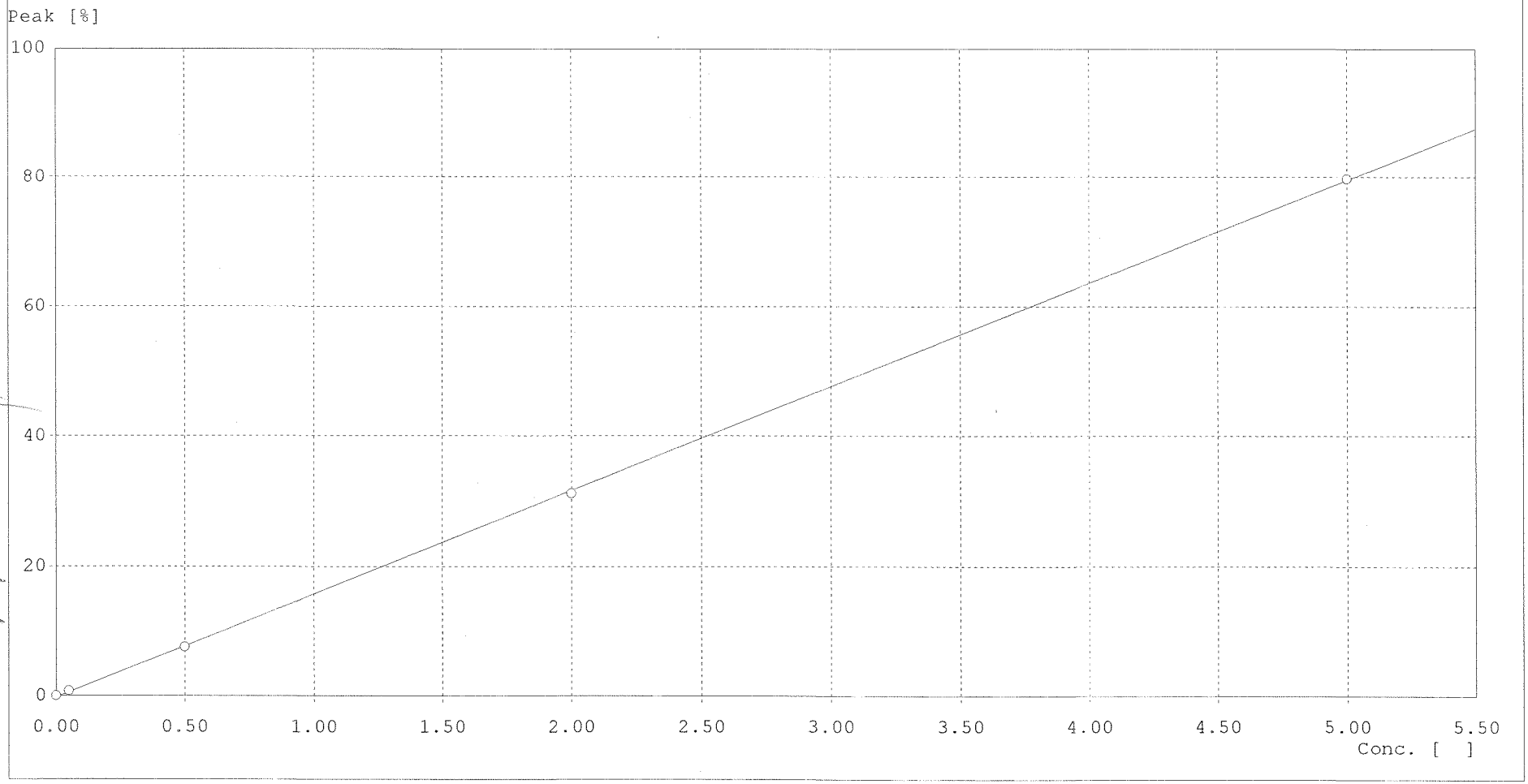
BRAN+LUEBBE

Calibration Curve

Name of run :100507D.run
Comment :

Name of analysis :Nitrite.ANL

Channel :2
Method :Method 2
Curve fit :linear a=-2.8000E-001 b=9.5660E-005
Corr. coeff. :1.0000



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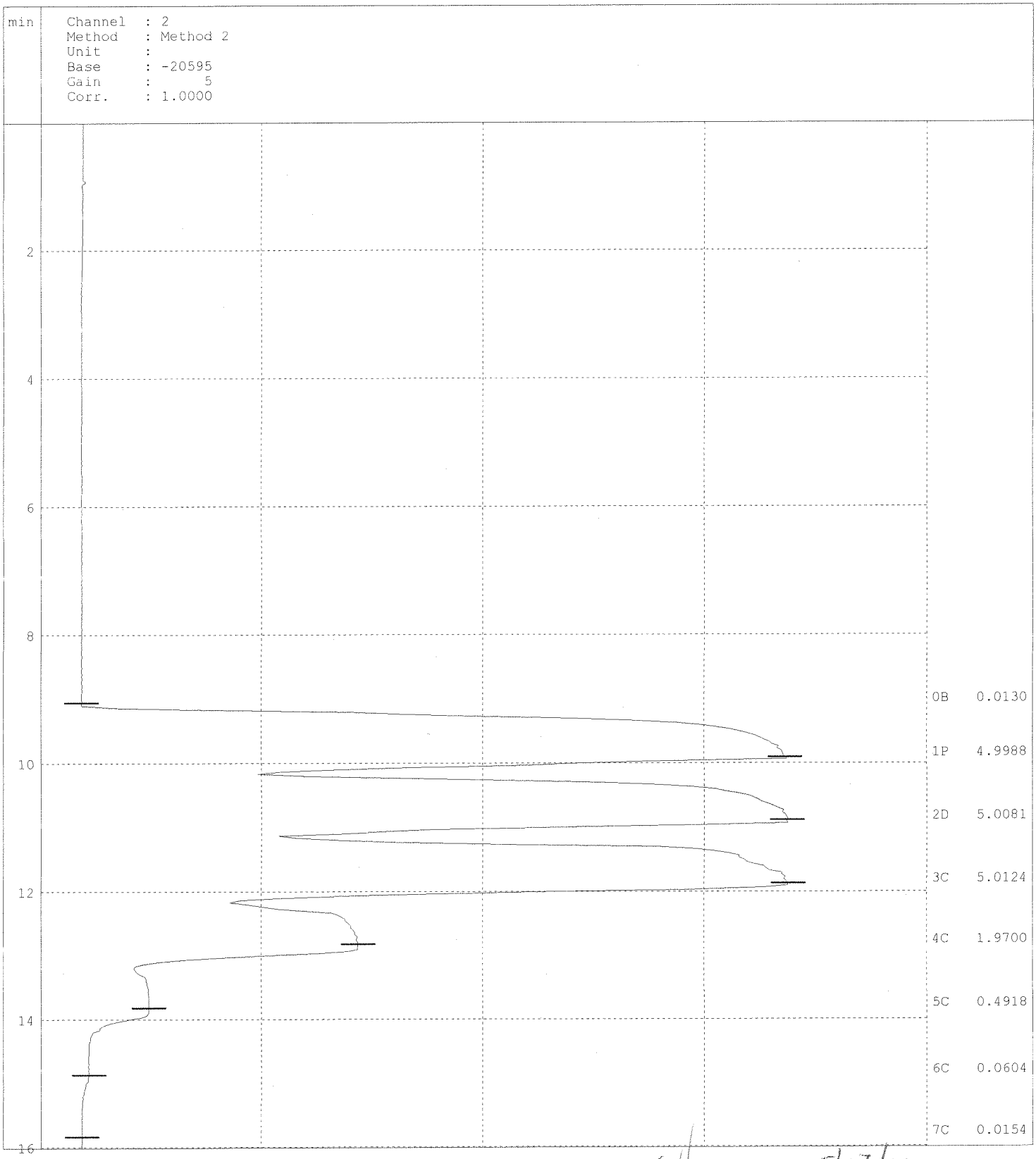
Post-run chart

Name of run :100507D.RUN
Comment :

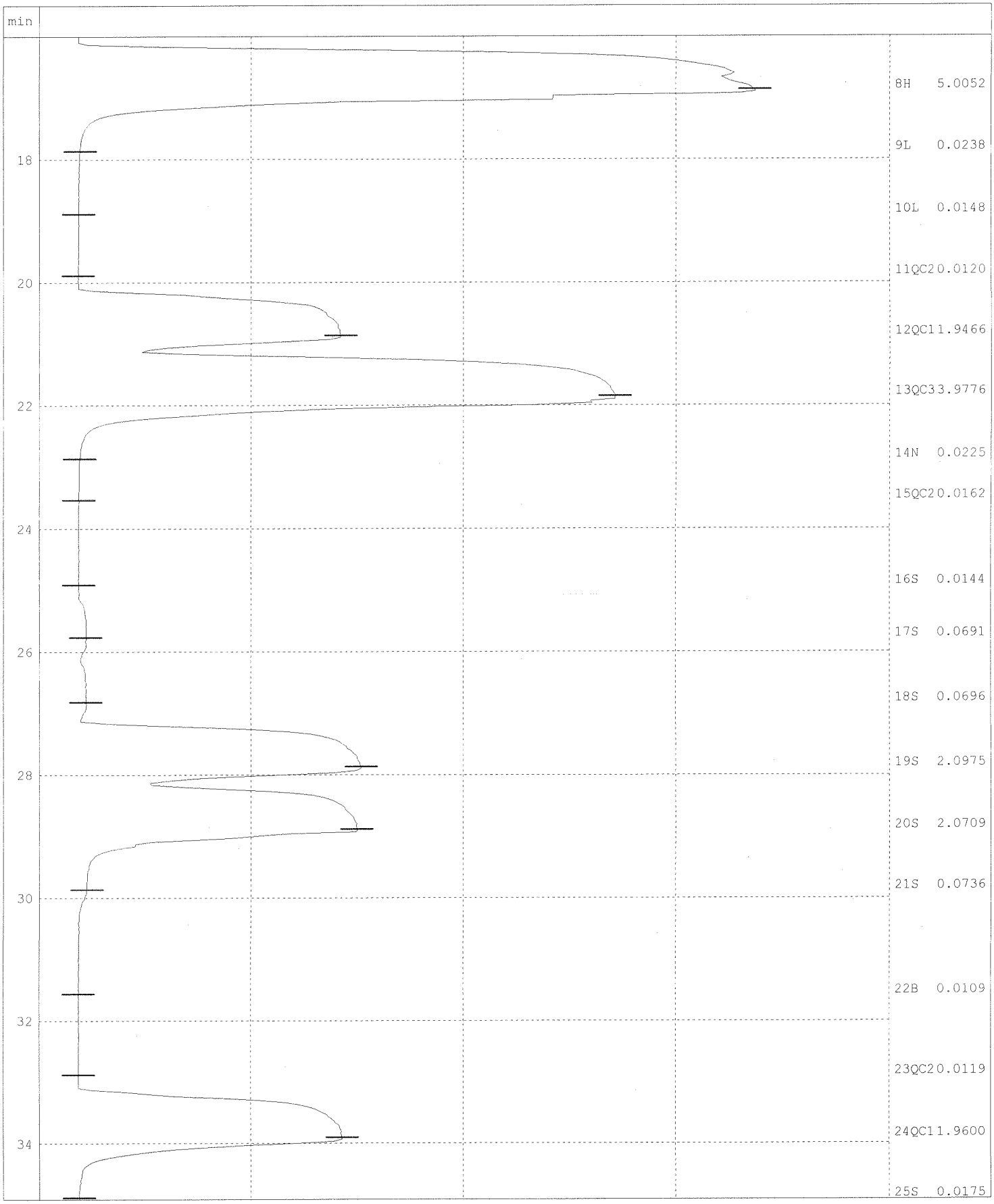
Name of analysis :Nitrite.ANL



5/10/10 05/07/10

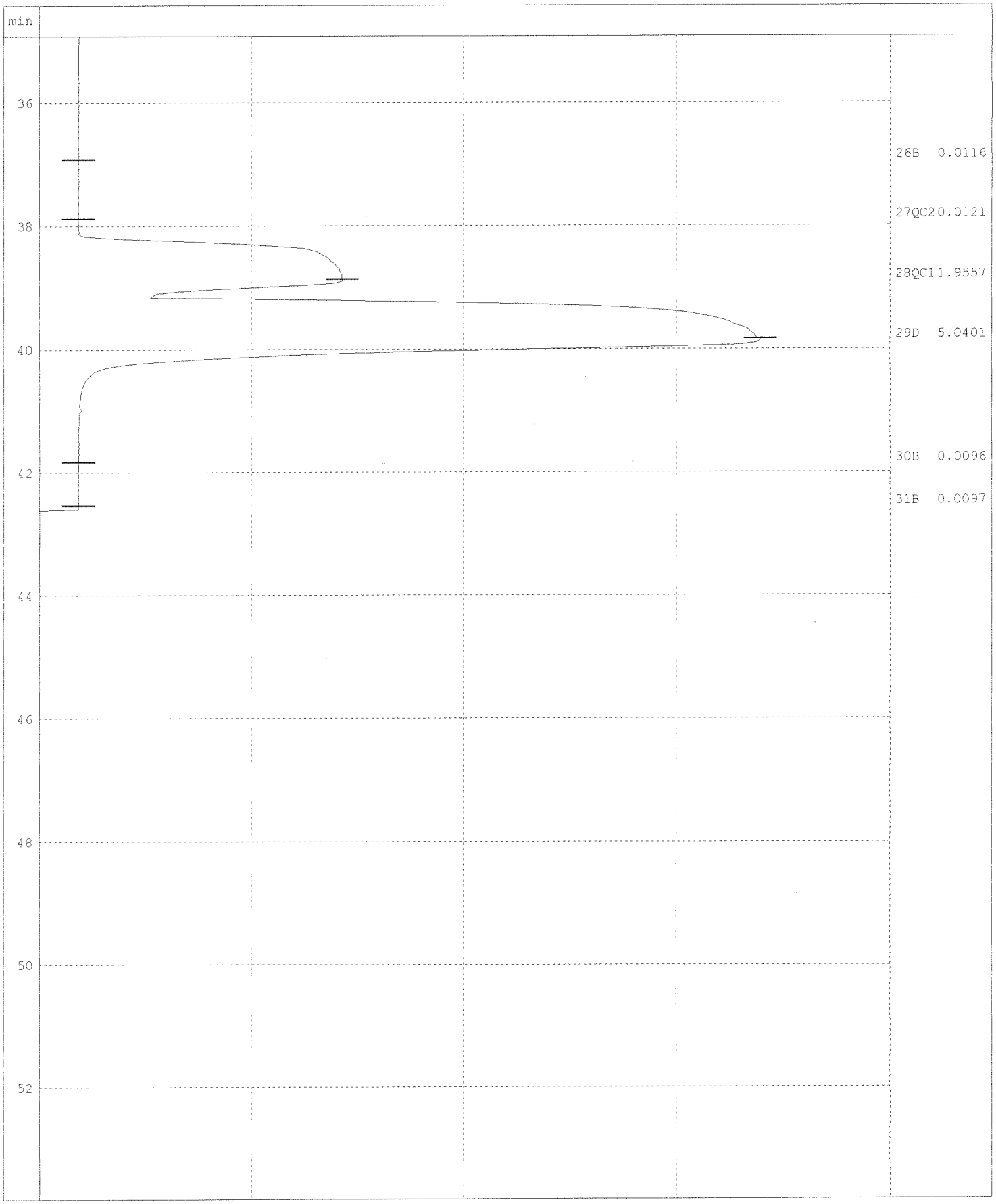
Name of run :100507D.RUN
Comment :

Name of analysis :Nitrite.ANL



Name of run :100507D.RUN
Comment :

Name of analysis :Nitrite.ANL



Work Request # Original (K4422) K4423 K4424 K4425 K4427 K4455 K4587 K4590 K4666 K4575 K4635

Tier: II II II II II III IV I III III III

Date Analyzed: 05/11/10

Analyst: Hongowu

Analysis: NO_2/NO_3 - 353.2

200087

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	yes/(no)/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	(yes)/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	(yes)/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
d.	Are results for methods blanks all ND?	(yes)/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
f.	Are all exceptions explained?	yes/no/(NA)
6.	Are all service requests that apply attached?	(yes)/no/NA
7.	Are all samples labelled correctly?	(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes)/no/NA
9.	Are detection limits and units reported correctly?	(yes)/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	(yes)/no/NA
11.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes)/no/NA

COMMENTS: 2. K4666 - rec'd past hold time

Final Approved by: [signature] Date: 5/12/10

DQREPORT

II. K4422, II. K4423, II. K4424, II. K4425, II. K4427, III. K4455, IV K4587, I K4590 diss., III: K4666 rec'd past hold time, II: K4575, III. K4635

BRAN+LUEBBE

Post-run report

Name of Run	:	100511C	Name of Analysis	:NO2+NO3.ANL
Date of Report	:	5/11/2010	System No.	:1
Date of Run	:	5/11/2010	Type of System	:AA3
Operator	:		Start/Stop time	:13:11 - 14:42
Comment	:			

Channel	:	2
Method	:	Method 2
Unit	:	mg/L
Calibr. Fit	:	Linear
Corr. Coeff.	:	0.9999
Base	:	-21372
Gain	:	6
Sensitivity	:	1.5173
Sample Limit 1	:	
Sample Limit 2	:	

LCS ID#: B+LNH3/-34-I T.V. = 14.8
Spike ID#: B+LNO3/-94-Y T.V. = 2.00
Curve, CCV ID#: B+LNO3/-85-V T.V. = 2.00
ICV ID#: B+LNO3/-80-S T.V. = 2.00
MB MS = 2.00

Pk	Cup		Sample Id	Value		
0	0	B	Baseline	0.0081		
1	1	P	primer	5.0036		
2	1	D	Drift	4.9797		
3	1	C	5.00	5.0161		
4	2	C	2.00	1.9579		
5	3	C	0.50	0.5019		
6	4	C	0.05	0.0612		
7	5	C	0	0.0130		
8	1	H1	High	4.9965		
9	0	L1	Low	0.0269		
10	0	L1	Low	0.0513		
11	9	QC3	ICV	1.9433	1.94	97%
12	5	QC2	ICB	0.0179	0.018J	
13	5	QC2	CCB1	0.0124	0.012J	
14	2	QC1	CCV1	1.9298	1.93	97%
15	10	QC4	LCS1*10	1.4552	14.6	99%
16	11	S	MB MS	1.9840	1.98	99%
17	0	N	Null	0.0168N		
18	5	QC2	MB1	0.0092	0.009J	
19	12	S	k1004422-001	0.1661	0.166	$\bar{x}$ = 0.167 RPD < 1%
20	13	S	k1004422-001d	0.1666	0.167	
21	14	S	k1004422-001ms	2.1539	2.15	99%
22	15	S	k1004422-001msd	2.1575	2.16	100%
23	16	S	k1004422-002	0.1818	0.182	
24	0	B	Baseline	0.0081		
25	5	QC2	CCB2	0.0104	0.010J	97%
26	2	QC1	CCV2	1.9269	1.93	

SM 5/12/10

05/11/10 Hongwei

27	17	S	k1004422-003	0.1795	0.180
28	18	S	k1004423-001	0.1516	0.152
29	19	S	k1004423-002	0.1588	0.159
30	20	S	k1004423-003	0.1520	0.152
31	21	S	k1004424-001	0.2296	0.230
32	22	S	k1004424-002	0.2278	0.228
33	23	S	k1004424-003	0.2288	0.229
34	24	S	k1004425-001	0.1435	0.144
35	25	S	k1004425-002	0.1560	0.156
36	0	B	Baseline	0.0081	
37	5	QC2	CCB3	0.0118	0.012J
38	2	QC1	CCV3	1.9083	1.91 96%
39	26	S	k1004425-003	0.1427	0.143
40	27	S	k1004427-001	0.1502	0.150
41	28	S	k1004427-002	0.1455	0.146
42	29	S	k1004427-003	0.1579	0.158
43	30	S	k1004455-001	0.0113	0.011J $\bar{x}$ = 0.011J RPD < 1%
44	31	S	k1004455-001d	0.0107	0.011J
45	32	S	k1004455-001ms	2.0008	2.00 99%
46	33	S	k1004455-001msd	2.0038	2.00 99%
47	34	S	k1004455-002	0.0185	0.019J
48	0	B	Baseline	0.0081	
49	5	QC2	CCB4	0.0121	0.012J 96%
50	2	QC1	CCV4	1.9233	1.92 96%
51	10	QC4	LCS2*10	1.4390	14.4 97%
52	10	QC4	LCS2dup*10	1.4427	14.4 97%
53	0	N	Null	0.0159N	
54	5	QC2	MB2	0.0135	0.014J
55	35	S	k1004587-001	0.5898	0.590
56	36	S	k1004587-002	0.0605	0.061
57	37	S	k1004590-001diss.	0.0329	<0.050
58	38	S	k1004666-001	2.2671	2.27
59	39	S	k1004666-002	2.8851	2.89
60	0	B	Baseline	0.0081	
61	5	QC2	CCB5	0.0130	0.013J 97%
62	2	QC1	CCV5	1.9268	1.93
63	40	S	k1004575-001	0.0449	0.045J
64	41	S	k1004575-002*25	2.0673	51.7
65	42	S	k1004575-003*25	2.0871	52.2
66	43	S	k1004575-004	0.0303	0.030J
67	44	S	k1004635-001*10	0.9934	9.93
68	45	S	k1004635-002	0.0423	0.042J
69	46	S	k1004635-003*5	1.3185	6.59
70	0	B	Baseline	0.0081	
71	5	QC2	CCB6	0.0118	0.012J 96%
72	2	QC1	CCV6	1.9241	1.92
73	1	D	Drift	4.9797	
74	0	B	Baseline	0.0081	
75	0	B	FinalBase	0.0081	

SM 5/12/10

QC Limits

05/11/10

Channel :	2
QC 1	Unused
QC 2	Unused
QC 3	Unused
QC 4	Unused
QC 5	Unused
QC 6	Unused
QC 7	Unused
QC 8	Unused
QC 9	Unused
QC10	Unused

CORRECTIONS

Channel :	2
Baseline :	Yes
Drift :	Yes
Carry over :	No
%:	Negative

---

* ... Sample offscale
\+ ... Result higher than sample limit
\- ... Result lower than sample limit
P ... Standard passed
F ... Standard failed
N ... Value not calculated or not used
R ... Resample after offscale
M ... Peak marker moved manually
D ... Diluted sample

** <END OF REPORT> **

5/12/10

05/11/10

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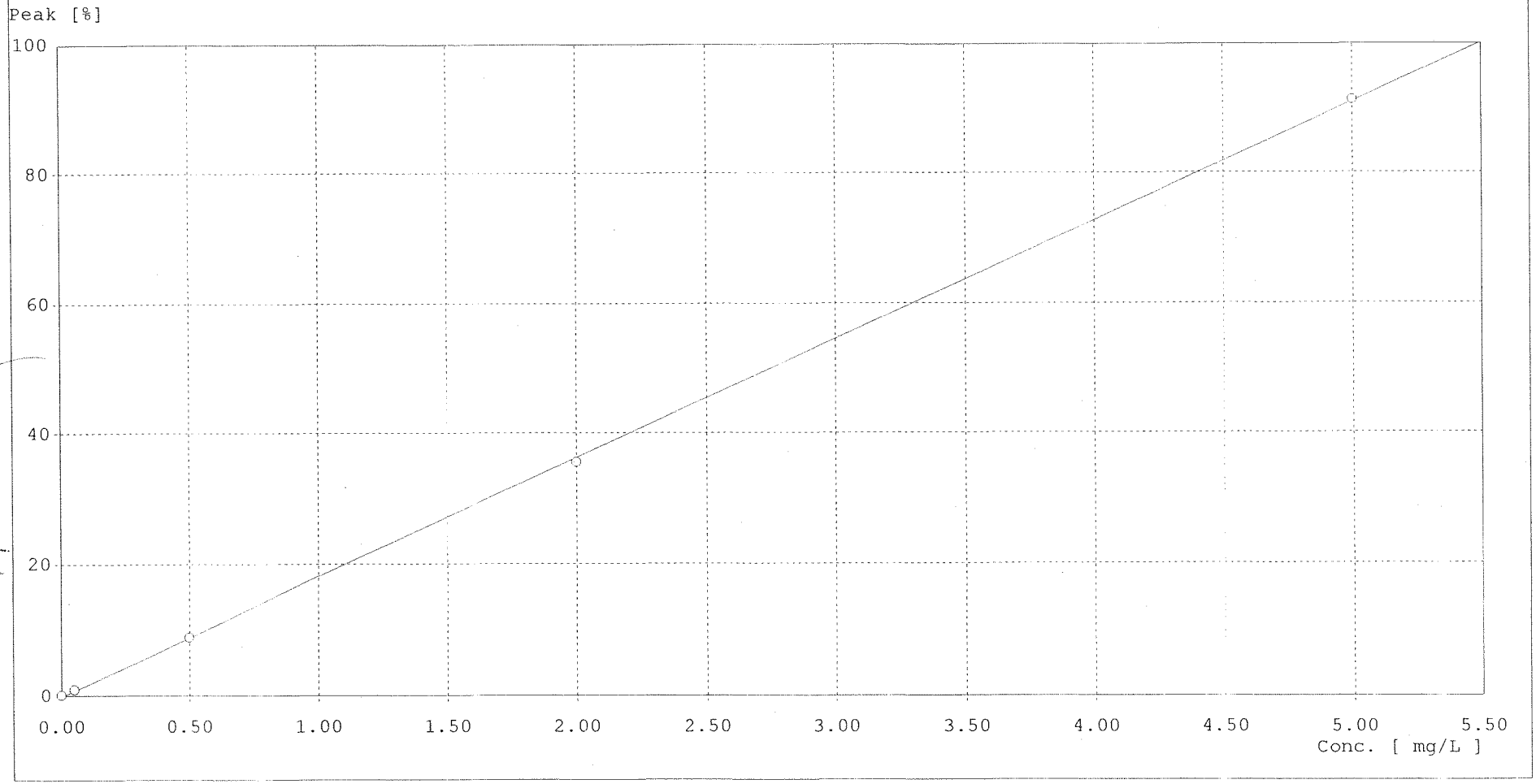
Calibration Curve

Name of run :100511C.run
Comment :

Name of analysis :NO2+NO3.ANL

Channel :2
Method :Method 2
Curve fit :linear a=-2.5321E-001 b=8.3719E-005
Corr. coeff. :0.9999



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Ed 5/12/10

05/11/10 Thompson

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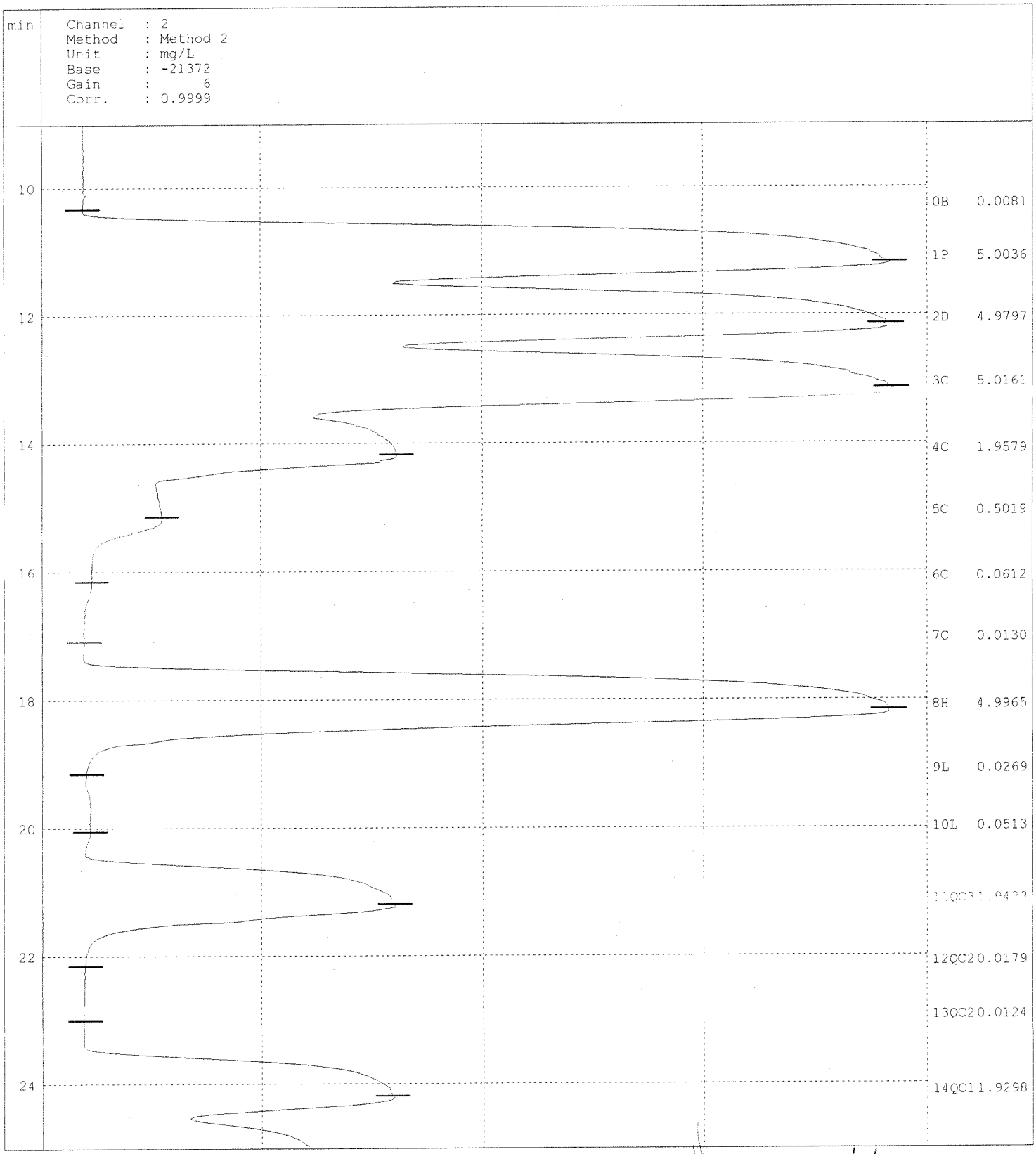
Post-run chart

Name of run :100511C.RUN
Comment :

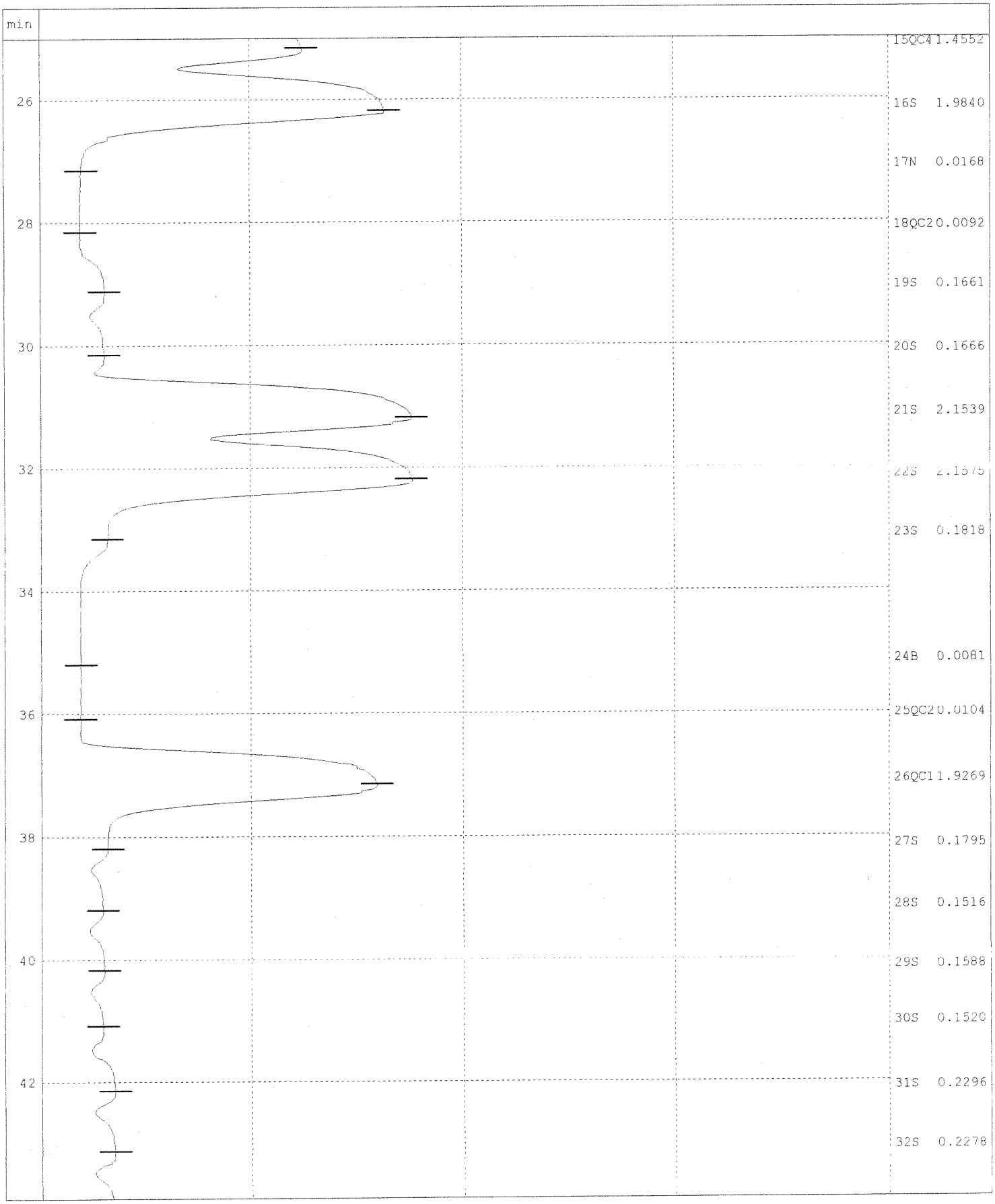
Name of analysis :NO2+NO3.ANL



5/12/10 05/11/10

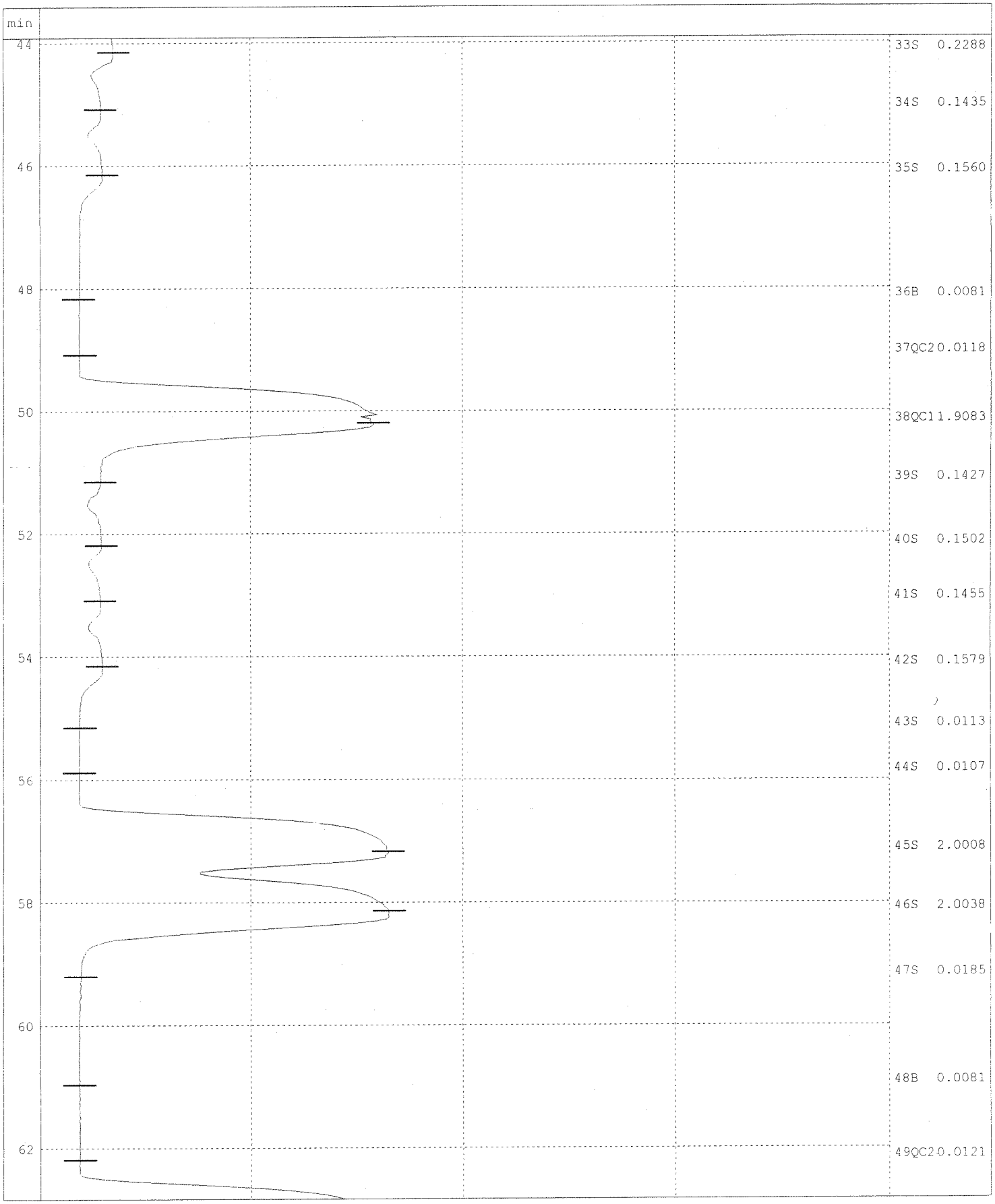
Name of run :100511C.RUN
Comment :

Name of analysis :NO2+NO3.ANL



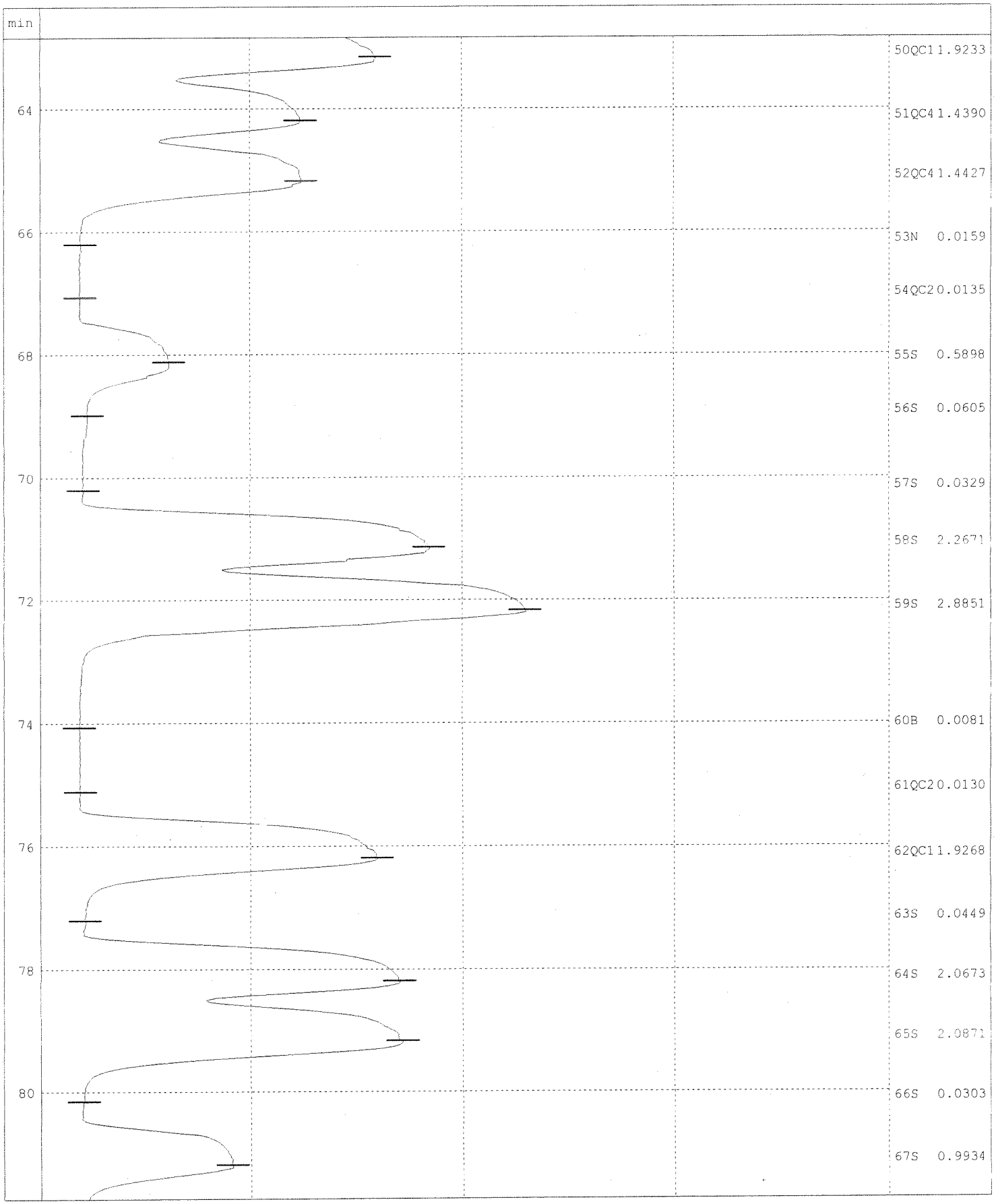
Name of run :100511C.RUN
Comment :

Name of analysis :NO2+NO3.ANL



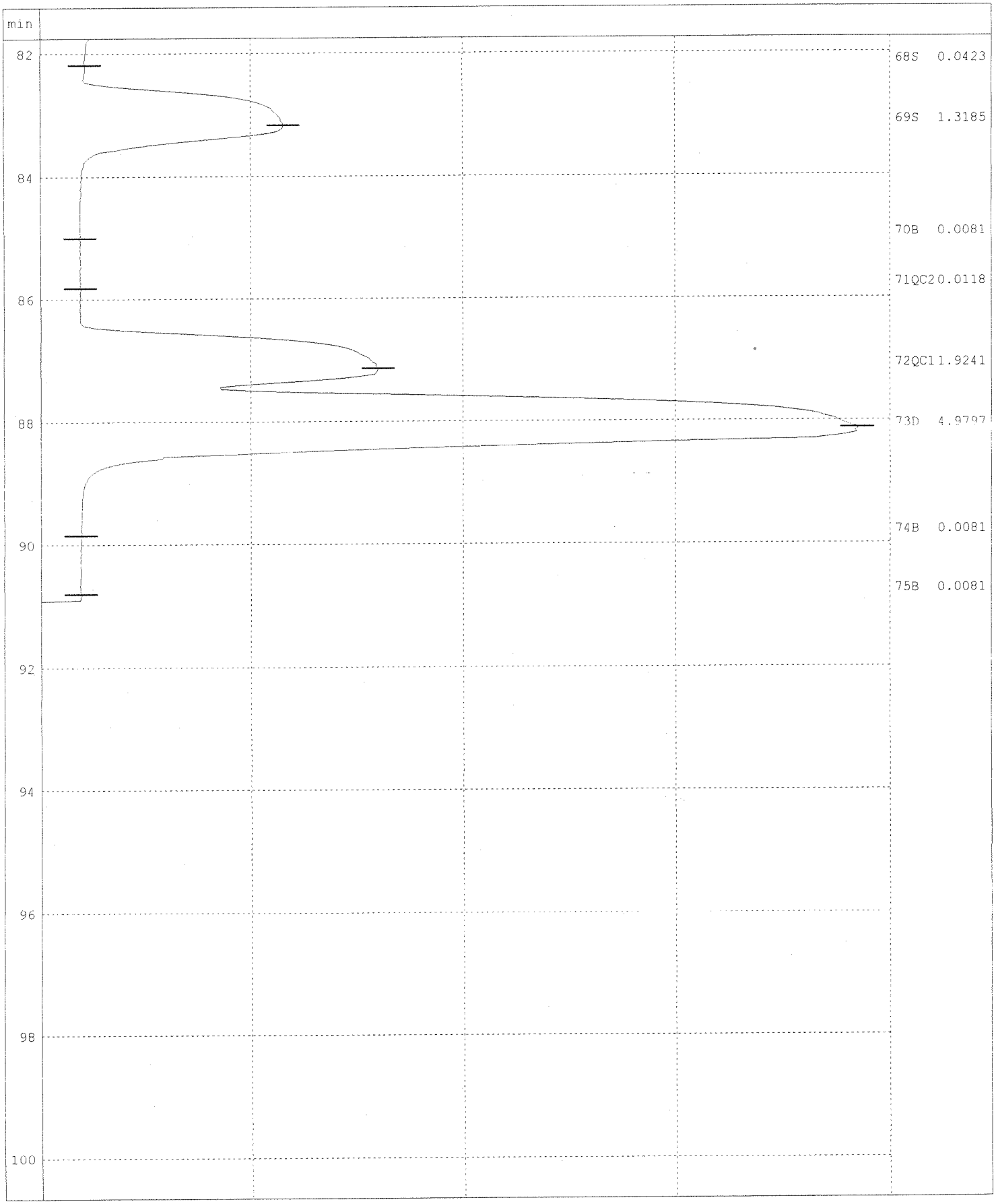
Name of run :100511C.RUN
Comment :

Name of analysis :NO2+NO3.ANL



Name of run :100511C.RUN
Comment :

Name of analysis :NO2+NO3.ANL



Work Request # (Original) K4343, K4575, K4587, K4590

Tier: I III 5/10/10 I I

Date Analyzed: 5/7/10

Analyst: [illegible]

Analysis: 365.3 ORho4

200181

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	(yes)/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	(yes)/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
d.	Are results for methods blanks all ND?	(yes)/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
f.	Are all exceptions explained?	(yes)/no/NA
6.	Are all service requests that apply attached?	(yes)/no/NA
7.	Are all samples labelled correctly?	(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes)/no/NA
9.	Are detection limits and units reported correctly?	(yes)/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/(NA)
11.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes)/no/NA

COMMENTS:

Final Approved by: [signature] Date: 5/12/10

DQREPORT

Analytical Results Summary

Instrument Name: K-UV-VIS-01 **Analyst:** SARWOOD **Analysis Lot:** 200181 **Method/Testcode:** 365.3/O Phos T

ab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
1004343-016	Orthophosphate as Phosphorus	N/A		Water	0.53 mg/L	50 mL	0.526 mg/L	1	0.004	0.010			5/7/10 04:00:00	N	I
1004575-001	Orthophosphate as Phosphorus	N/A		Water	0.05 mg/L	50 mL	0.048 mg/L	1	0.004	0.010			5/7/10 04:00:00	N	V
1004575-002	Orthophosphate as Phosphorus	N/A		Water	0.03 mg/L	50 mL	0.027 mg/L	1	0.004	0.010			5/7/10 04:00:00	N	V
1004575-003	Orthophosphate as Phosphorus	N/A		Water	0.02 mg/L	50 mL	0.021 mg/L	1	0.004	0.010			5/7/10 04:00:00	N	V
1004575-004	Orthophosphate as Phosphorus	N/A		Water	0.00 mg/L	50 mL	0.010 mg/L U	1	0.004	0.010			5/7/10 04:00:00	N	V
1004587-001	Orthophosphate as Phosphorus	N/A		Water	0.07 mg/L	50 mL	0.072 mg/L	1	0.004	0.010			5/7/10 04:00:00	N	V
1004587-002	Orthophosphate as Phosphorus	N/A		Water	0.06 mg/L	50 mL	0.064 mg/L	1	0.004	0.010			5/7/10 04:00:00	N	V
1004590-001	Orthophosphate as Phosphorus	N/A		Water	0.53 mg/L	50 mL	0.527 mg/L	1	0.004	0.010			5/7/10 04:00:00	N	I
Q1004219-01	Orthophosphate as Phosphorus	CCB		Water	0.01 mg/L	50 mL	0.005 mg/L J	1	0.004	0.010			5/7/10 04:00:00	N	I
Q1004219-02	Orthophosphate as Phosphorus	CCB		Water	0.00 mg/L	50 mL	0.010 mg/L U	1	0.004	0.010			5/7/10 04:00:00	N	I
Q1004219-03	Orthophosphate as Phosphorus	CCB		Water	0.00 mg/L	50 mL	0.010 mg/L U	1	0.004	0.010			5/7/10 04:00:00	N	I
Q1004219-04	Orthophosphate as Phosphorus	CCV		Water	0.46 mg/L	0.5 mL	46.4 mg/L	1	0.4	1.0			5/7/10 04:00:00	N	I
Q1004219-05	Orthophosphate as Phosphorus	CCV		Water	0.48 mg/L	0.5 mL	47.6 mg/L	1	0.4	1.0			5/7/10 04:00:00	N	I
Q1004219-06	Orthophosphate as Phosphorus	CCV		Water	0.48 mg/L	0.5 mL	47.9 mg/L	1	0.4	1.0			5/7/10 04:00:00	N	I
Q1004219-07	Orthophosphate as Phosphorus	MS	K1004575-004	Water	0.19 mg/L	50 mL	0.189 mg/L	1	0.004	0.010	95		5/7/10 04:00:00	N	V
Q1004219-08	Orthophosphate as Phosphorus	DMS	K1004575-004	Water	0.38 mg/L	50 mL	0.385 mg/L	1	0.004	0.010	96	68*	5/7/10 04:00:00	N	V
Q1004219-09	Orthophosphate as Phosphorus	DUP	K1004575-004	Water	0.00 mg/L	50 mL	0.010 mg/L U	1	0.004	0.010		NC	5/7/10 04:00:00	N	V
Q1004219-10	Orthophosphate as Phosphorus	LCS		Water	0.35 mg/L	5 mL	3.48 mg/L	1	0.04	0.10	97		5/7/10 04:00:00	N	I
Q1004219-11	Orthophosphate as Phosphorus	MB		Water	0.00 mg/L	50 mL	0.010 mg/L U	1	0.004	0.010			5/7/10 04:00:00	N	I

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indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

DU520 S/N: 0112U2001732 1.03
07-MAY-10 16:44:54 SCA Group 0779
Wavelength: 650.0 nm
Formula: A=a+bC a: -0.0049 b: 2.0667

Sample	Net A	Dil X	mg/L	
0001	0.000	1.0000	0.0024	CCB-1
0002	0.986	1.0000	0.4793	CCV-1
0003	0.001	1.0000	0.0028	MB-1
0004	0.714	1.0000 5/50	0.3479	LCS-1
0005	0.094	1.0000	0.0478	K4575-1
0006	0.051	1.0000	0.0270	-2
0007	0.039	1.0000	0.0211	-3
0008	0.002	1.0000	0.0032	-4
0009	0.003	1.0000	0.0036	-4d
0010	~~0.356~~	~~1.0000~~	~~0.1744~~ ~~4ms~~	NR
0011	0.790	1.0000	0.3846	-4msd
0012	0.144	1.0000	0.0721	K4587 ~~1~~ 1
0013	0.002	1.0000	0.0033	-CCB-2
0014	0.979	1.0000	0.4762	CCV-2
0015	~~0.127~~	~~1.0000~~	~~0.0638~~	~~K4587-2~~ ~~NR~~
0016	~~0.000~~	~~1.0000~~	~~0.0024~~	NR
0017	1.082	1.0000	0.5259	-K4343-10
0018	0.386	1.0000	0.1893	-K4575-4msd
0019	~~0.014~~	~~1.0000~~	~~0.0091~~	
0020	~~0.000~~	~~1.0000~~	~~0.0025~~	
0021	~~0.975~~	~~1.0000~~	~~0.4741~~	
0022	1.095	1.0000	0.5321	K4590-1 - 0.5271
0023	0.048	1.0000	0.0257	-BG CHECK
0024	0.006	1.0000	0.0050	CCB-3
0025	0.955	1.0000	0.4642	CCV-3

K4587-2 ACCIDENTALLY CROSSED LINE OUT, STILL VALID. 5/7/10

5/12/10

DTE 5/7/10

4:00pm
5/7/10

K4575, K4587, K4590, K4343

DU520 S/N: 0112U2001732 1.03
07-MAY-10 16:44:42 SCA
Wavelength: 650.0 nm
Formula: A=a+bC a: -0.0049 b: 2.0667

mg/L	Net A	r2=1.000 Var=0.0002
0.0000	-0.000	
0.0100	0.021	
0.0500	0.102	
0.1000	0.199	
0.2000	0.401	
0.5000	1.007	
0.7000	1.460	

CURVE ID#: $PO_3/_3-4-J$

CCV ID#: $PO_3/_3-24-J$

5/12/10

199979

Work Request # (Original 4391) 4445 4180 4216 4376 4252 4338 4481

Tier: V II I II II II II V

Date Analyzed: 5.10.10 4483 4414 4455 4467 4591 4575

Analyst: mb V II V V V V

Analysis: alk, bicarb, carb, OH- 4635 V

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.		Is the method name and number correct and appropriate?	yes/no/NA
2.		Holding times met for all analyses and for all samples?	yes/no/NA
3.		Are calculations correct?	yes/no/NA
4.		Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.		All quality control criteria met?	yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.		Are all service requests that apply attached?	yes/no/NA
7.		Are all samples labelled correctly?	yes/no/NA
8.		Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.		Are detection limits and units reported correctly?	yes/no/NA
10.		Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.		Is the unused space on the benchsheet crossed out?	yes/no/NA
12.		Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/no/NA

COMMENTS:

Rush, 4445 due 5.12

Final Approved by: _____ Date: 5/11/10

DQREPORT

199979

Vice Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

pH Meter Calibration	Sample #	MB	LCS	LCSD	4201-1	4201-1d	4201-2	4445-5
pH 12.45	Initial pH	5.37	8.95	8.93	7.44	7.37	6.02	7.39
	Titrant used to pH 8.3							
pH 10.00	Titrant used to pH 4.5	0.11	3.27	3.39	2.96	2.99	0.33	5.08
10.00	Titrant used to pH 4.2	0.31					0.59	
pH 7.00	Sample Volume	100	50	50	50	50	100	53
7.00	Alkalinity	<2	65.4	67.8	59.2	59.8	<2.0	95.8
pH 4.00	Bicarbonate							
4.00	Carbonate							
pH 4.00 Chk.	Hydroxide							
4.04								

Sample #	4180-1	4216-1	4216-2	BV	4216-3	4216-4	4216-5	4216 6
Initial pH	7.03	6.46	7.39	4.03	6.81	7.14	6.80	6.74
Titrant used to pH 8.3				7				
Titrant used to pH 4.5	1.31	2.76	17.71		14.88	40.68	15.78	17.89
Titrant used to pH 4.2								
Sample Volume	50	50	50		50	51	53	50
Alkalinity	26.2	55.2	554		298	798	298	358
Bicarbonate								
Carbonate								
Hydroxide				L				

LCS : ~~APG~~ EPA = _____ Lot # = 5161-698 True Value = 67.9 % Rec. = 96, 100, 104, 94

Probe ID#: NU1 Titrant Manf: RCC 1909615

Calculations : Alkalinity = $\frac{A \times N \times 50{,}000}{\text{Volume (mls)}}$ A = mls standard titrant used; N = Normality of standard acid 0.02 / 0.1 N(HCL)

Comments: 0.1N 5.10 4201-1/1d x̄ = 59.5 RPD = 1

Analyzed By: ab	Date: 5.10.10
Reveiwed By:	Date: 5/11/10

Columbia Analytical Services, Inc.

Service Request #: _____ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	4376-1	4376-1d	4376-8	4376-9	4252-1*	4252-10*	BC	4252-2*
Initial pH	6.73	6.71	7.58	6.81	6.62	6.56	4.04	6.94
Titrant used to pH 8.3								
Titrant used to pH 4.5	10.59	9.72	10.62	10.58	8.49	8.33		13.29
Titrant used to pH 4.2								
Sample Volume	54	50	51	50	~~55~~ 50	50		52
Alkalinity	196	194	208	212	849	833		1280
Bicarbonate								
Carbonate								
Hydroxide								

Sample #	4252-3*	4252-4*	4252-5*	4252-6*	4252-7	4252-8*	4338-1	4338-2
Initial pH	7.01	7.06	7.48	6.91	7.11	6.86	7.74	7.77
Titrant used to pH 8.3								
Titrant used to pH 4.5	18.02	12.59	15.06	23.72	1.91	25.21	13.09	10.81
Titrant used to pH 4.2								
Sample Volume	50	52	10	50	50	50	50	50
Alkalinity	1800	1210	7530	2370	38.2	2520	262	216
Bicarbonate							262	216
Carbonate							<2	<2
Hydroxide								

Sample #	4338-2d	BC	MB	LCS	4481-3	4481-4	4481-5	4481-5d
Initial pH	7.79	4.03	5.66	8.93	6.62	6.64	7.22	7.25
Titrant used to pH 8.3								
Titrant used to pH 4.5	10.89		0.19	3.52	20.41	25.88	9.21	9.08
Titrant used to pH 4.2			0.38					
Sample Volume	50		100	50	50	50	50	50
Alkalinity	218		<2	70.4	408	518	184	182
Bicarbonate	218							
Carbonate	<2							
Hydroxide								

Comments: ab 5.16

4316-1/1d $\bar{x}$ = 195 RPD = 1

4252-1/1d $\bar{x}$ = 841 RPD = 2

4338-2/2d $\bar{x}$ = 217 RPD < 1

4481-5/5d $\bar{x}$ = 183 RPD = 1

Analyzed By: nb	Date: 5.10.16
Reveiwed By:	Date: 5/11/16

Columbia Analytical Services, Inc.

Service Request #: ______ Method : EPA 310.1 / SM 2320B

Analysis For: Alkalinity as $CaCO_3$: Total / Bicarbonate / Carbonate / Hydroxide

Sample #	4483-2	4414-1	4455-1	4455-2	BV	4467-1	4591-1	4575-1
Initial pH	6.85	6.62	7.71	6.26	4.04	7.27	7.17	6.81
Titrant used to pH 8.3								
Titrant used to pH 4.5	3.71	1.06	2.98	0.35		8.98	3.58	13.13
Titrant used to pH 4.2				0.58				
Sample Volume	50	100	50	100		52	50	50
Alkalinity	74.2	10.6	59.6	<2		173	71.6	263
Bicarbonate						173		263
Carbonate						<2		<2
Hydroxide						<2		<2

Sample #	4575-2	4575-3	4575-4	4635-1	4635-2	4635-3	MB*	BV
Initial pH	7.11	7.07	8.58	7.57	6.83	7.11	5.39	4.03
Titrant used to pH 8.3			0.04					
Titrant used to pH 4.5	10.98	10.72	7.71	13.81	0.16	16.12	0.01	
Titrant used to pH 4.2			0.91		0.37		0.02	
Sample Volume	50	50	100	50	100	52	100	
Alkalinity	220	214	5.1	276	<2	310	<2	
Bicarbonate	220	214	~~[illegible]~~ 5.0	276	<2	310		
Carbonate	<2	<2	~~[illegible]~~ <2	<2	<2	<2		
Hydroxide	<2	<2	~~[illegible]~~ <2	<2	<2	<2		

Sample #	LCS*	BV						
Initial pH	5.88	4.04						
Titrant used to pH 8.3								
Titrant used to pH 4.5	0.64							
Titrant used to pH 4.2								
Sample Volume	50							
Alkalinity	64.0							
Bicarbonate								
Carbonate								
Hydroxide								

Comments: nb 5.10

Analyzed By: nb	Date: 5.10.10
Reveiwed By: [signature]	Date: 5/11/10

[initials] 5/11/10 RE

Work Request # Original (4573) 4575 4635 4664 4711 4744 4743 (20052)

Tier: 1 V V 1 II V V

Date Analyzed: 5,13,10 4782 4765

Analyst: nh/nb for CFS 1 1

Analysis: TDS

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		yes/no/NA
2.	Holding times met for all analyses and for all samples?		yes/no/NA
3.	Are calculations correct?		yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/NA
5.	All quality control criteria met?		yes/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d.	Are results for methods blanks all ND?	yes/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f.	Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?		yes/no/NA
7.	Are all samples labelled correctly?		yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		yes/no/NA
9.	Are detection limits and units reported correctly?		yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/NA
11.	Is the unused space on the benchsheet crossed out?		yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		yes/no/NA

COMMENTS:

Final Approved by: _____ Date: 5/18/10

DQREPORT

COLUMBIA ANALYTICAL SERVICES, INC.

200521

Work Order #.: _____ Method: EPA SM 2540 C

Analysis: Total Dissolved Solids

Sample #	Crucible #	Conductivity	Sample Volume (ml)	Wt, Cru. + Dry sample (1) (g)	Wt, Cru. + Dry sample (2) (g)	Wt, Cru. + Dry sample (3) (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	TDS (mg/L)	TDS (mg/L) reported
MB	R41		200	130.1162	130.1166		130.1164	-0.0002	-1	<5
MB	2713		200	122.0077	122.0078		122.0074	0.0003	2	<5
LCS	115 S		50	86.6122	86.6127		86.5776	0.0346	692	692
DLCS	J6		50	70.7345	70.7348		70.6993	0.0352	704	704
K1004573-001	3/31/2008	272	100	84.9862	84.9864		84.9683	0.0179	179	179
K1004573-002	J12	293	100	77.4013	77.4015		77.3824	0.0189	189	189
K1004575-001	J16	553	100	75.0907	75.0910		75.0529	0.0378	378	378
K1004575-002	17 S	2020	75	78.9659	78.9655		78.8659	0.1000	1333	1330
K1004575-003	48A	1990	75	63.9294	63.9297		63.8425	0.0869	1159	1160
K1004575-004	36A	6	200	75.0045	75.0049		75.0039	0.0006	3	<5
K1004635-001	316	894	100	81.4212	81.4210		81.3677	0.0535	535	535
K1004635-002	42 S	3	200	73.2099	73.2095		73.2060	0.0039	20	19.5
K1004635-003	A18	1720	75	75.7609	75.7606		75.6884	0.0725	967	967
K1004664-001	22A	8190	50	77.9003	77.9003		77.6929	0.2074	4148	4150
K1004711-001	B2	21	200	71.3374	71.3369		71.3324	0.0050	25	25.0
K1004744-001	DC	601	100	60.4562	60.4566		60.4187	0.0375	375	375
K1004744-002	MM	3050	50	81.4618	81.4615		81.3664	0.0954	1908	1910
K1004744-003	9 S	2	200	80.4051	80.4055		80.4033	0.0018	9	9.00
K1004744-004	20 C	809	100	73.5827	73.5825		73.5336	0.0491	491	491
K1004743-001	EE	139	100	79.3228	79.3232		79.3150	0.0078	78	78.0
K1004743-002	C16	1	200	85.9841	85.9836		85.9825	0.0016	8	8.00
K1004782-001	Jayla	800	100	73.3139	73.3139		73.2601	0.0538	538	538
K1004782-002	Simon	777	100	70.0817	70.0821		70.0253	0.0564	564	564
K1004765-001	2 C	273	100	73.3259	73.3258		73.3024	0.0235	235	235
K1004743-001d	20A	139	100	67.7393	67.7393		67.7320	0.0073	73	73.0

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml) 92 Balance#31

APG #:4033 Lot# 041109 ID# TDS/1-25-H T.V. = 750 % Rec = 93, 94

Wt (1)	Start	1600		Wt (2)	Start			Wt (3)	Start 1110	
	Stop				Stop 0910	5.17			Stop 1300	4743-1/1d X=76 RPD=7
Wt (1)	Start	105		Wt (2)	Start			Wt (3)	Start 178	4575-2/2d X=1270 RPD=9
Temp	Stop			Temp	Stop 180			Temp	Stop 180	date time

Analyzed By: mb/mhtor CS Date Analyzed: 5/13/2010 13:00

Reviewed By: Date Reviewed: 5/18/10

OSH 5/18/10 RE

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.:

Method: EPA SM 2540 C

Analysis: Total Dissolved Solids

Sample #	Crucible #	Conductivity	Sample Volume (ml)	Wt, Cru. + Dry sample (1) (g)	Wt, Cru. + Dry sample (2) (g)	Wt, Cru. + Dry sample (3) (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	TDS (mg/L)	TDS (mg/L) reported
K1004575-002d	G27	2020	75	78.5702	78.5705		78.4791	0.0911	1215	1210
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!
								0.0000	#DIV/0!	#DIV/0!

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml)

		date	time
Analyzed By: nb/nb/ol CES	Date Analyzed:	5/13/2010	13:00
Reviewed By: [illegible]	Date Reviewed:	5/18/10	

5-13-10

199875

Work Request # (Original K4591) K4575

Tier: I V

Date Analyzed: 5/7/10

Analyst: NB

Analysis: pH 4500H+B

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	yes/(no)/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct (Dry Weight)?	(yes)/no/NA
5	All quality control criteria met?	(yes)/no/NA
a.	Is the calibration curve correlation coefficient ≥0.995?	(yes)/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes analyzed at proper frequency?	(yes)/no/NA
c.	Are ICVs, CCVs, and CCBs, all within acceptance limits?	(yes)/no/NA
d.	Are results for method blanks all ND?	(yes)/no/NA
e.	Are all QC samples within acceptance criteria? (LCS %Rec, MS/DMS %Rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
f.	Are all exceptions explained?	(yes)/no/NA
6.	Are all service requests that apply attached?	(yes)/no/NA
7.	Are all samples labeled correctly?	(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes)/no/NA
9.	Are detection limits and units reported correctly?	(yes)/no/NA
10.	Are proper Analytical Batch stickers included on report?	(yes)/no/NA
11.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
12.	Was analysis turned in by the due date (n-2)? If not, record SR#.	(yes)/no/NA

COMMENTS:

4591 - RPH

4575 - RPH

Final Approval By: [signature] Date: 5/10/10

DQREPORT

K4591, 4575

Method: SM 4500 H+B

Sample #	pH	Time Analyzed	Temp. C
pH 12.45 Buffer			
pH 10.00 Buffer	10.00	0930	25.0
pH 7.00 Buffer	7.00	0929	25.1
pH 4.00 Buffer	4.00	0928	25.4
pH 1.00 Buffer			
~~LCS~~			
Buffer Check	4.01	0931	25.1
LCS	6.38	1628	28
4591-1	7.29	1629	26
4575-1	6.91	1630	26
2	7.34	1631	25
3	7.33	1632	26
4	6.76	1633	26
4d	6.74	1634	26
BV	4.02	1635	26
Buffer Check			

Sample #	pH	Time Analyzed	Temp. C
Buffer Check			
Buffer Check			

LCS = ~~APG 4063~~ DERA Lot# 129934 ID# = Cond-1-54-R T.V. = 6.46 % REC = ~~88~~ 99

pH 4.00 buffer Cond/1-75-K pH 7.00 buffer Cond/1-77-N pH 10.00 buffer Cond/1-79-K

ph 1.00 buffer Cond/1-73-___ pH 12.45 buffer Cond/1-81-___

4575/4-4d $\bar{x}$=6.75 RPD = 2.1%

DKC shifted

DKC 5/7/10

Analyzed by:	NB	Date:	5/7/10
Reviewed by:	SAN	Date:	5/10/10

PH

Metals

Columbia Analytical Services

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Exponent
Project Name: Heglar Kronquist
Project No.: 0907194.000.0601

Service Request: K1004575

Sample Name:	Lab Code:
BH-12	K1004575-001 DISS
BH-12D	K1004575-001D DISS
BH-12S	K1004575-001S DISS
BH-10	K1004575-002 DISS
BH-10D	K1004575-002D DISS
BH-14	K1004575-003 DISS
BH-14S	K1004575-003S DISS
EB-050610	K1004575-004 DISS
Method Blank	K1004575-MB

Comments:

Approved By: 3C **Date:** 5/28/10

METALS

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Exponent	**Service Request:**	K1004575
Project No.:	0907194.000.0601	**Date Collected:**	5/6/2010
Project Name:	Heglar Kronquist	**Date Received:**	5/7/2010
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: BH-12 **Lab Code:** K1004575-001 DISS

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50	30	1.0	05/13/10	05/26/10	1070		
Antimony	200.8	0.050	0.005	1.0	05/13/10	05/14/10	0.082		
Arsenic	200.8	0.5	0.1	1.0	05/13/10	05/14/10	2.1		
Barium	200.7	5.0	0.6	1.0	05/13/10	05/26/10	150		
Beryllium	200.8	0.020	0.006	1.0	05/13/10	05/14/10	0.042		
Cadmium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.051		
Calcium	200.7	50.0	6.0	1.0	05/13/10	05/26/10	58000		
Chromium	200.8	0.20	0.02	1.0	05/13/10	05/14/10	1.39		
Cobalt	200.8	0.020	0.006	1.0	05/13/10	05/14/10	4.230		
Copper	200.8	0.10	0.02	1.0	05/13/10	05/18/10	2.56		
Iron	200.7	20.0	0.8	1.0	05/13/10	05/26/10	2070		
Lead	200.8	0.020	0.005	1.0	05/13/10	05/18/10	0.684		
Magnesium	200.7	20.0	0.3	1.0	05/13/10	05/26/10	22800		
Manganese	200.7	5.0	0.2	1.0	05/13/10	05/26/10	560		
Mercury	245.1	0.20	0.02	1.0	05/10/10	05/12/10	0.02	U	
Nickel	200.8	0.20	0.02	1.0	05/13/10	05/14/10	5.27		
Potassium	200.7	400	40	1.0	05/13/10	05/26/10	7220		
Selenium	200.8	1.0	0.3	1.0	05/13/10	05/14/10	0.5	J	
Silver	200.8	0.020	0.004	1.0	05/13/10	05/14/10	0.004	U	
Sodium	200.7	100	20	1.0	05/13/10	05/26/10	31900		
Thallium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.006	J	
Vanadium	200.8	0.20	0.03	1.0	05/13/10	05/18/10	1.89		
Zinc	200.8	0.5	0.2	1.0	05/13/10	05/14/10	5.4		

% Solids: 0.0

Comments:

METALS

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Exponent	**Service Request:**	K1004575
Project No.:	0907194.000.0601	**Date Collected:**	5/6/2010
Project Name:	Heglar Kronquist	**Date Received:**	5/7/2010
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: BH-10 **Lab Code:** K1004575-002 DISS

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50	30	1.0	05/13/10	05/26/10	132		
Antimony	200.8	0.050	0.005	1.0	05/13/10	05/14/10	0.103		
Arsenic	200.8	0.5	0.1	1.0	05/13/10	05/14/10	0.2	J	
Barium	200.7	5.0	0.6	1.0	05/13/10	05/26/10	99.0		
Beryllium	200.8	0.020	0.006	1.0	05/13/10	05/14/10	0.006	U	
Cadmium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.016	J	
Calcium	200.7	50.0	6.0	1.0	05/13/10	05/26/10	151000		
Chromium	200.8	0.20	0.02	1.0	05/13/10	05/14/10	0.25		
Cobalt	200.8	0.020	0.006	1.0	05/13/10	05/14/10	12.4		
Copper	200.8	0.10	0.02	1.0	05/13/10	05/18/10	1.42		
Iron	200.7	20.0	0.8	1.0	05/13/10	05/26/10	199		
Lead	200.8	0.020	0.005	1.0	05/13/10	05/18/10	0.038		
Magnesium	200.7	20.0	0.3	1.0	05/13/10	05/26/10	52600		
Manganese	200.7	5.0	0.2	1.0	05/13/10	05/26/10	1200		
Mercury	245.1	0.20	0.02	1.0	05/10/10	05/12/10	0.02	U	
Nickel	200.8	0.20	0.02	1.0	05/13/10	05/14/10	15.3		
Potassium	200.7	400	40	1.0	05/13/10	05/26/10	14700		
Selenium	200.8	1.0	0.3	1.0	05/13/10	05/14/10	0.6	J	
Silver	200.8	0.020	0.004	1.0	05/13/10	05/14/10	0.010	J	
Sodium	200.7	100	20	1.0	05/13/10	05/26/10	139000		
Thallium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.012	J	
Vanadium	200.8	0.20	0.03	1.0	05/13/10	05/18/10	0.71		
Zinc	200.8	0.5	0.2	1.0	05/13/10	05/14/10	1.3		

% Solids: 0.0

Comments:

METALS

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Exponent	**Service Request:**	K1004575
Project No.:	0907194.000.0601	**Date Collected:**	5/6/2010
Project Name:	Heglar Kronquist	**Date Received:**	5/7/2010
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: BH-14 **Lab Code:** K1004575-003 DISS

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50	30	1.0	05/13/10	05/26/10	127		
Antimony	200.8	0.050	0.005	1.0	05/13/10	05/14/10	0.107		
Arsenic	200.8	0.5	0.1	1.0	05/13/10	05/14/10	0.1	U	
Barium	200.7	5.0	0.6	1.0	05/13/10	05/26/10	98.6		
Beryllium	200.8	0.020	0.006	1.0	05/13/10	05/14/10	0.006	U	
Cadmium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.022		
Calcium	200.7	50.0	6.0	1.0	05/13/10	05/26/10	152000		
Chromium	200.8	0.20	0.02	1.0	05/13/10	05/14/10	0.23		
Cobalt	200.8	0.020	0.006	1.0	05/13/10	05/14/10	12.5		
Copper	200.8	0.10	0.02	1.0	05/13/10	05/18/10	1.51		
Iron	200.7	20.0	0.8	1.0	05/13/10	05/26/10	180		
Lead	200.8	0.020	0.005	1.0	05/13/10	05/18/10	0.060		
Magnesium	200.7	20.0	0.3	1.0	05/13/10	05/26/10	53000		
Manganese	200.7	5.0	0.2	1.0	05/13/10	05/26/10	1210		
Mercury	245.1	0.20	0.02	1.0	05/10/10	05/12/10	0.02	U	
Nickel	200.8	0.20	0.02	1.0	05/13/10	05/14/10	15.6		
Potassium	200.7	400	40	1.0	05/13/10	05/26/10	14900		
Selenium	200.8	1.0	0.3	1.0	05/13/10	05/14/10	0.7	J	
Silver	200.8	0.020	0.004	1.0	05/13/10	05/14/10	0.004	J	
Sodium	200.7	100	20	1.0	05/13/10	05/26/10	140000		
Thallium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.009	J	
Vanadium	200.8	0.20	0.03	1.0	05/13/10	05/18/10	0.70		
Zinc	200.8	0.5	0.2	1.0	05/13/10	05/14/10	1.5		

% Solids: 0.0

Comments:

METALS

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Exponent	**Service Request:**	K1004575
Project No.:	0907194.000.0601	**Date Collected:**	5/6/2010
Project Name:	Heglar Kronquist	**Date Received:**	5/7/2010
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: EB-050610 **Lab Code:** K1004575-004 DISS

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50	30	1.0	05/13/10	05/26/10	30	U	
Antimony	200.8	0.050	0.005	1.0	05/13/10	05/14/10	0.007	J	
Arsenic	200.8	0.5	0.1	1.0	05/13/10	05/14/10	0.1	J	
Barium	200.7	5.0	0.6	1.0	05/13/10	05/26/10	0.6	U	
Beryllium	200.8	0.020	0.006	1.0	05/13/10	05/14/10	0.006	U	
Cadmium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.005	U	
Calcium	200.7	50.0	6.0	1.0	05/13/10	05/26/10	87.7		
Chromium	200.8	0.20	0.02	1.0	05/13/10	05/14/10	0.10	J	
Cobalt	200.8	0.020	0.006	1.0	05/13/10	05/14/10	0.006	U	
Copper	200.8	0.10	0.02	1.0	05/13/10	05/18/10	0.06	J	
Iron	200.7	20.0	0.8	1.0	05/13/10	05/26/10	2.6	J	
Lead	200.8	0.020	0.005	1.0	05/13/10	05/18/10	0.014	J	
Magnesium	200.7	20.0	0.3	1.0	05/13/10	05/26/10	7.5	J	
Manganese	200.7	5.0	0.2	1.0	05/13/10	05/26/10	0.2	U	
Mercury	245.1	0.20	0.02	1.0	05/10/10	05/12/10	0.02	U	
Nickel	200.8	0.20	0.02	1.0	05/13/10	05/14/10	0.02	U	
Potassium	200.7	400	40	1.0	05/13/10	05/26/10	40	U	
Selenium	200.8	1.0	0.3	1.0	05/13/10	05/14/10	0.4	J	
Silver	200.8	0.020	0.004	1.0	05/13/10	05/14/10	0.004	U	
Sodium	200.7	100	20	1.0	05/13/10	05/26/10	26	J	
Thallium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.005	U	
Vanadium	200.8	0.20	0.03	1.0	05/13/10	05/18/10	0.03	U	
Zinc	200.8	0.5	0.2	1.0	05/13/10	05/14/10	0.4	J	

% Solids: 0.0

Comments:

METALS

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: Exponent
Project No.: 0907194.000.0601
Project Name: Heglar Kronquist
Matrix: WATER

Service Request: K1004575
Date Collected:
Date Received:
Units: ug/L
Basis: N/A

Sample Name: Method Blank
Lab Code: K1004575-MB

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50	30	1.0	05/13/10	05/26/10	30	U	
Antimony	200.8	0.050	0.005	1.0	05/13/10	05/14/10	0.010	J	
Arsenic	200.8	0.5	0.1	1.0	05/13/10	05/14/10	0.1	J	
Barium	200.7	5.0	0.6	1.0	05/13/10	05/26/10	0.6	U	
Beryllium	200.8	0.020	0.006	1.0	05/13/10	05/14/10	0.006	U	
Cadmium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.005	U	
Calcium	200.7	50.0	6.0	1.0	05/13/10	05/26/10	6.0	U	
Chromium	200.8	0.20	0.02	1.0	05/13/10	05/14/10	0.08	J	
Cobalt	200.8	0.020	0.006	1.0	05/13/10	05/14/10	0.006	U	
Copper	200.8	0.10	0.02	1.0	05/13/10	05/17/10	0.02	U	
Iron	200.7	20.0	0.8	1.0	05/13/10	05/26/10	0.8	U	
Lead	200.8	0.020	0.005	1.0	05/13/10	05/17/10	0.005	U	
Magnesium	200.7	20.0	0.3	1.0	05/13/10	05/26/10	0.3	U	
Manganese	200.7	5.0	0.2	1.0	05/13/10	05/26/10	0.2	U	
Mercury	245.1	0.20	0.02	1.0	05/10/10	05/12/10	0.02	U	
Nickel	200.8	0.20	0.02	1.0	05/13/10	05/14/10	0.02	U	
Potassium	200.7	400	40	1.0	05/13/10	05/26/10	40	U	
Selenium	200.8	1.0	0.3	1.0	05/13/10	05/14/10	0.3	U	
Silver	200.8	0.020	0.004	1.0	05/13/10	05/14/10	0.004	U	
Sodium	200.7	100	20	1.0	05/13/10	05/26/10	20	U	
Thallium	200.8	0.020	0.005	1.0	05/13/10	05/14/10	0.005	U	
Vanadium	200.8	0.20	0.03	1.0	05/13/10	05/17/10	0.10	J	
Zinc	200.8	0.5	0.2	1.0	05/13/10	05/14/10	0.2	U	

% Solids: 0.0

Comments:

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures CCV Source: CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	5026	101	5000	4972	99	5028	101	200.7
Antimony	25.0	23.7	95	25.0	24.5	98	24.2	97	200.8
Arsenic	25.0	23.2	93	25.0	24.1	96	23.8	95	200.8
Barium	5000	5240	105	2500	2493	100	2491	100	200.7
Beryllium	2.50	2.49	100	25.00	24.76	99	24.52	98	200.8
Cadmium	12.5	12.3	98	25.0	24.8	99	24.2	97	200.8
Calcium	5000	5124	102	2500	2457	98	2400	96	200.7
Calcium	12500	12572	101	25000	25355	101	25669	103	200.7
Chromium	10.0	9.6	96	25.0	24.9	100	24.3	97	200.8
Cobalt	25.0	24.3	97	25.0	25.2	101	24.9	100	200.8
Iron	2500	2508	100	500	490	98	499	100	200.7
Iron	10000	9883	99	25000	24836	99	25195	101	200.7
Magnesium	5000	5021	100	2000	1980	99	1964	98	200.7
Magnesium	12500	12464	100	25000	25038	100	24961	100	200.7
Manganese	1250	1210	97	1000	960	96	966	97	200.7
Manganese	10000	10051	101	5000	4964	99	4925	98	200.7
Mercury	5.00	5.03	101	5.00	5.29	106	5.23	105	245.1
Nickel	25.0	24.4	98	25.0	25.0	100	24.9	100	200.8
Potassium	12500	12620	101	10000	9995	100	9906	99	200.7
Selenium	25.0	23.3	93	25.0	24.7	99	24.8	99	200.8
Silver	12.5	12.3	98	25.0	24.8	99	24.5	98	200.8
Sodium	12500	12259	98	10000	9738	97	9805	98	200.7
Thallium	25.0	24.3	97	25.0	24.7	99	24.5	98	200.8
Zinc	25.0	25.3	101	25.0	25.0	100	24.5	98	200.8

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent Service Request: K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures CCV Source: CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5032	101			200.7
Antimony				25.0	24.4	98	24.1	96	200.8
Arsenic				25.0	24.1	96	23.9	96	200.8
Barium				2500	2491	100			200.7
Beryllium				25.00	24.36	97	24.20	97	200.8
Cadmium				25.0	24.8	99	24.3	97	200.8
Calcium				2500	2425	97			200.7
Calcium				25000	25335	101			200.7
Chromium				25.0	24.5	98	24.2	97	200.8
Cobalt				25.0	24.4	98	23.9	96	200.8
Iron				500	504	101			200.7
Iron				25000	25133	101			200.7
Magnesium				2000	1980	99			200.7
Magnesium				25000	25119	100			200.7
Manganese				1000	963	96			200.7
Manganese				5000	4957	99			200.7
Mercury				5.00	5.13	103			245.1
Nickel				25.0	24.5	98	24.3	97	200.8
Potassium				10000	9956	100			200.7
Selenium				25.0	25.5	102	25.2	101	200.8
Silver				25.0	24.6	98	24.4	98	200.8
Sodium				10000	9780	98			200.7
Thallium				25.0	24.5	98	24.4	98	200.8
Zinc				25.0	24.4	98	24.5	98	200.8

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				25.0	24.6	98	24.8	99	200.8
Arsenic				25.0	23.7	95	23.8	95	200.8
Beryllium				25.00	25.04	100	24.82	99	200.8
Cadmium				25.0	24.6	98	24.5	98	200.8
Chromium				25.0	24.8	99	24.5	98	200.8
Cobalt				25.0	25.1	100	24.9	100	200.8
Nickel				25.0	25.3	101	25.2	101	200.8
Selenium				25.0	25.9	104	25.5	102	200.8
Silver				25.0	24.8	99	24.8	99	200.8
Thallium				25.0	24.3	97	24.5	98	200.8
Zinc				25.0	25.3	101	24.9	100	200.8

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				25.0	24.1	96	24.3	97	200.8
Arsenic				25.0	24.0	96	23.8	95	200.8
Beryllium				25.00	24.21	97	24.82	99	200.8
Cadmium				25.0	24.2	97	24.3	97	200.8
Chromium				25.0	23.9	96	24.5	98	200.8
Cobalt				25.0	24.2	97	24.7	99	200.8
Nickel				25.0	24.2	97	24.7	99	200.8
Selenium				25.0	25.4	102	24.1	96	200.8
Silver				25.0	24.6	98	24.6	98	200.8
Thallium				25.0	24.2	97	24.2	97	200.8
Zinc				25.0	24.4	98	24.5	98	200.8

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Copper	12.5	12.6	101	25.0	24.4	98	25.0	100	200.8
Lead	25.0	24.8	99	25.0	24.6	98	24.6	98	200.8
Vanadium	25.0	24.8	99	25.0	24.7	99	24.7	99	200.8

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Copper				25.0	24.7	99			200.8
Lead				25.0	24.4	98			200.8
Vanadium				25.0	25.1	100			200.8

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Copper	12.5	12.6	101	25.0	24.4	98	25.8	103	200.8
Lead	25.0	25.0	100	25.0	24.9	100	25.3	101	200.8
Vanadium	25.0	24.9	100	25.0	24.3	97	25.1	100	200.8

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Copper				25.0	26.3	105			200.8
Lead				25.0	26.0	104			200.8
Vanadium				25.0	26.1	104			200.8

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Exponent

Service Request: K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50.00	60.45	121		
Antimony				0.05	0.05	100		
Arsenic				0.5	0.60	120		
Barium				5.00	4.64	93		
Beryllium				0.02	0.019	95		
Cadmium				0.020	0.022	110		
Calcium				50.00	42.86	86		
Chromium				0.20	0.26	130		
Cobalt				0.02	0.02	100		
Iron				20.00	20.42	102		
Magnesium				20.00	17.37	87		
Manganese				5.00	4.69	94		
Mercury	0.20	0.21	105					
Nickel				0.20	0.20	100		
Potassium				400.00	406.92	102		
Selenium				1.0	1.10	110		
Silver				0.02	0.020	100		
Sodium				200.00	201.27	101		
Thallium				0.02	0.02	100		
Zinc				0.50	0.47	94		

METALS

- 2b -

CRDL STANDARD FOR AA AND ICP

Client: Exponent **Service Request:** K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Copper				0.10	0.14	140		
Lead				0.02	0.019	95		
Vanadium				0.20	0.17	85		

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Exponent

Service Request: K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Copper				0.10	0.09	90		
Lead				0.02	0.018	90		
Vanadium				0.20	0.16	80		

METALS

- 3 -

BLANKS

Client: Exponent

Service Request: K1004575

Project No.: 0907194.000.0601

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	Initial Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Method
Aluminum	30	U	30	U	30	U	30	U	200.7
Antimony	0.005	U	0.005	U	0.005	U	0.005	U	200.8
Arsenic	0.13	J	0.21	J	0.10	U	0.16	J	200.8
Barium	0.6	U	0.6	U	0.6	U	0.6	U	200.7
Beryllium	0.006	U	0.006	U	0.006	U	0.006	U	200.8
Cadmium	0.005	U	0.005	U	0.005	U	0.005	U	200.8
Calcium	6.0	U	6.0	U	6.0	U	9.1	J	200.7
Chromium	0.02	J	0.03	J	0.04	J	0.04	J	200.8
Cobalt	0.006	U	0.006	U	0.006	U	0.006	U	200.8
Iron	2.6	J	0.8	U	2.3	J	3.6	J	200.7
Magnesium	0.3	U	0.3	U	0.3	J	2.8	J	200.7
Manganese	1.0	J	0.7	J	0.8	J	0.8	J	200.7
Mercury	0.02	U	0.02	U	0.02	U	0.02	U	245.1
Nickel	0.02	U	0.02	U	0.02	U	0.02	U	200.8
Potassium	40	U	40	U	40	U	40	U	200.7
Selenium	0.4	J	0.4	J	0.3	U	0.4	J	200.8
Silver	0.004	U	0.004	U	0.004	U	0.004	U	200.8
Sodium	20	U	20	U	20	U	20	U	200.7
Thallium	0.005	U	0.005	U	0.005	U	0.005	U	200.8
Zinc	0.20	U	0.20	U	0.20	U	0.20	U	200.8