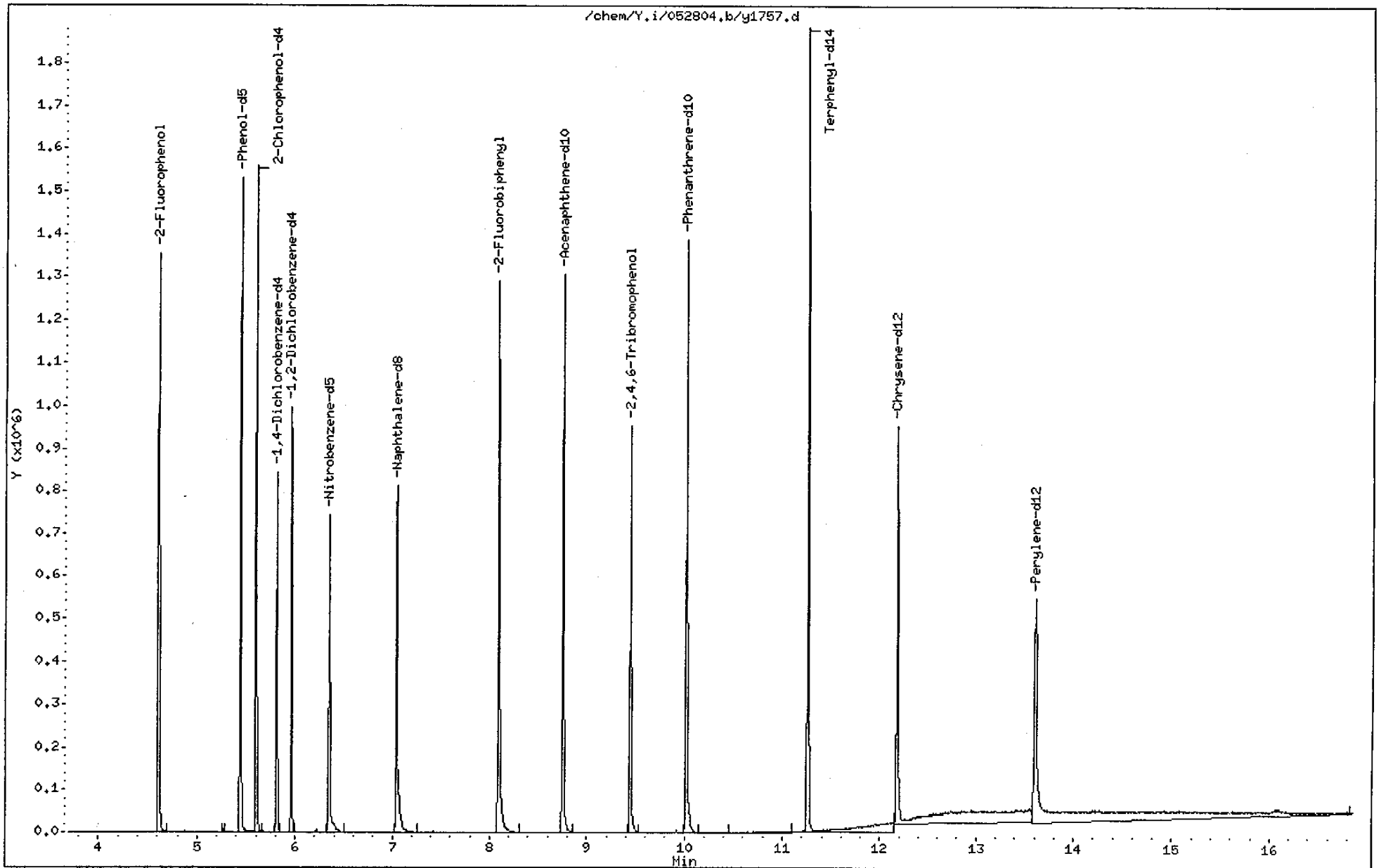
Data File: /chem/Y.i/052804.b/y1757.d
Date : 28-MAY-2004 12:04
Client ID: 01-MW-08
Sample Info: CGJX61AC,,D4E190262-002
Volume Injected (uL): 0.5
Column phase: Rtx-5ms 30m 0.5um

Instrument: Y.i
Operator: todear
Column diameter: 0.25



Data File: /chem/Y.i/052804.b/y1757.d

Date : 28-MAY-2004 12:04

Client ID: 01-MW-08

Instrument: Y.i

Sample Info: GGJX61AC,,D4E190262-002

Volume Injected (uL): 0.5

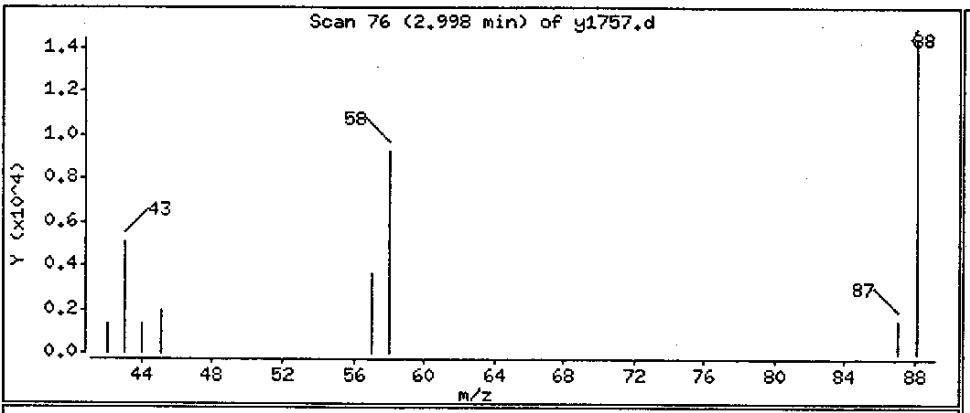
Operator: todear

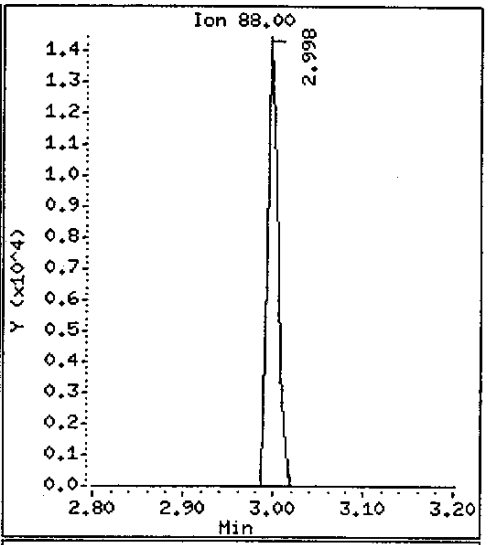
Column phase: Rtx-5ms 30m 0.5um

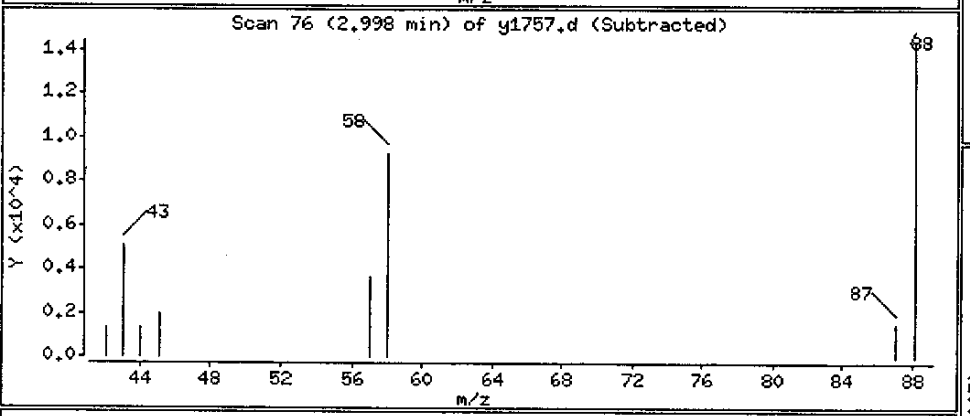
Column diameter: 0.25

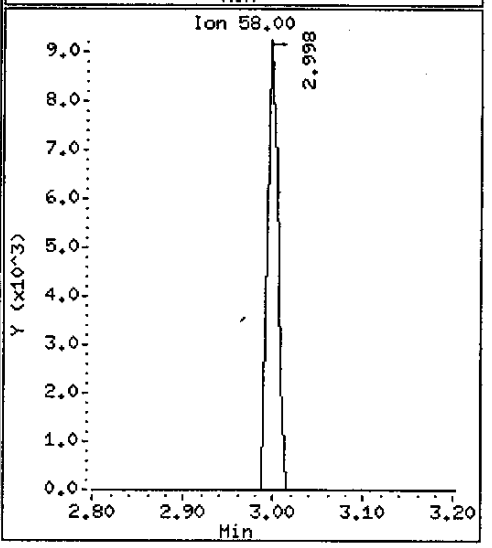
199 1,4-Dioxane

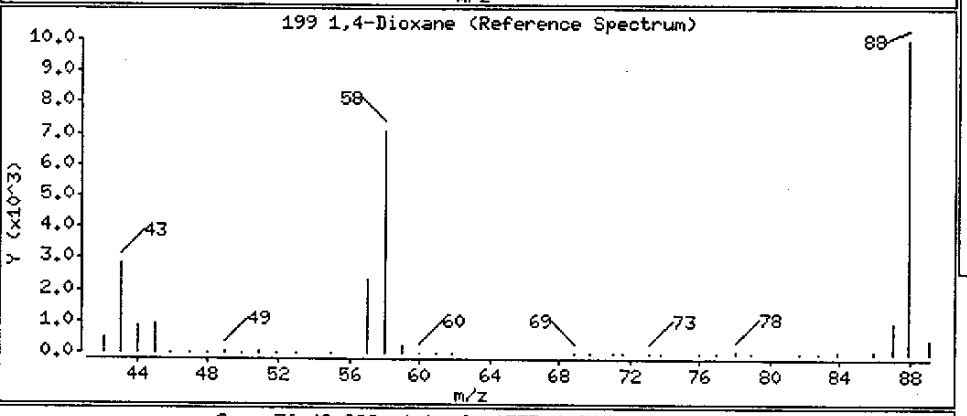
Concentration: 9.08003 ug/L

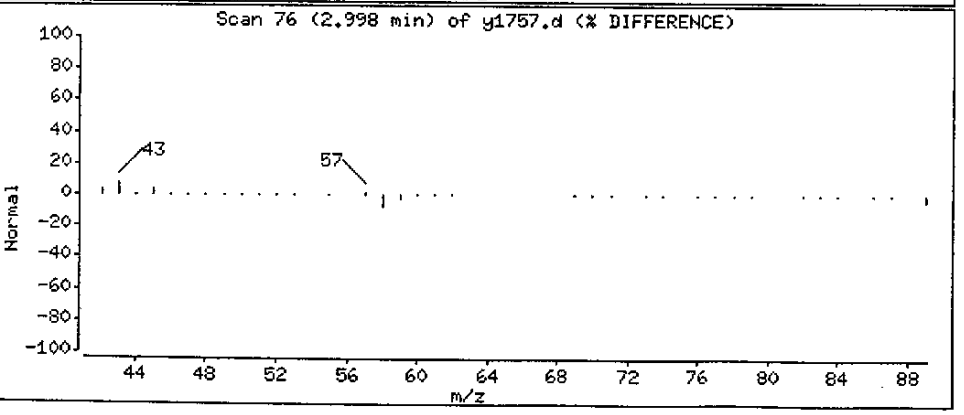












5/28/04

STL-Denver

BNA ANALYSIS QUANTITATION REPORT

Data file : /chem/Y.i/052804.b/y1758.d
Lab Smp Id: GGJX91AC Client Smp ID: 01-MW-09
Inj Date : 28-MAY-2004 12:31
Operator : todear Inst ID: Y.i
Smp Info : GGJX91AC,,D4E190262-004
Misc Info : 4142151
Comment : SOP#CORP-MS-0001DEN, revision1.1
Method : /chem/Y.i/052804.b/8270C.m
Meth Date : 28-May-2004 14:06 todear Quant Type: ISTD
Cal Date : 26-MAY-2004 17:20 Cal File: y1684.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HSL+AP9.sub
Target Version: 3.50
Processing Host: chemsv03

Concentration Formula: Amt * DF * Vf/Vs * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vf	1000.00000	final volume at end of extraction (uL)
Vs	976.00000	volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
* 22	1,4-Dichlorobenzene-d4	152	5.813	5.815	(1.000)	125600	40.0000	
* 49	Naphthalene-d8	136	7.042	7.044	(1.000)	494675	40.0000	
* 83	Acenaphthene-d10	164	8.754	8.757	(1.000)	317476	40.0000	
* 117	Phenanthrene-d10	188	10.021	10.018	(1.000)	572362	40.0000	
* 142	Chrysene-d12	240	12.200	12.165	(1.000)	406408	40.0000	
* 151	Perylene-d12	264	13.639	13.582	(1.000)	309131	40.0000	
$ 36	Nitrobenzene-d5	82	6.350	6.352	(1.092)	245251	59.6341	61.1005
$ 70	2-Fluorobiphenyl	172	8.094	8.091	(0.925)	481468	52.8158	54.1145
$ 133	Terphenyl-d14	244	11.266	11.247	(0.923)	564015	64.1910	65.7695
$ 10	2-Fluorophenol	112	4.610	4.613	(0.793)	359070	95.1309	97.4702
$ 14	Phenol-d5	99	5.448	5.450	(0.937)	444934	95.2383	97.5802
$ 103	2,4,6-Tribromophenol	330	9.447	9.449	(0.943)	101157	95.5564	97.9061
$ 163	1,2-Dichlorobenzene-d4	152	5.963	5.965	(1.026)	132247	50.9013	52.1530
$ 162	2-Chlorophenol-d4	132	5.603	5.606	(0.964)	380496	93.0791	95.3679
4	N-Nitrosodimethylamine	74	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
5	Pyridine	79	Compound Not Detected.					
7	2-Picoline	93	Compound Not Detected.					
8	N-Nitrosomethylethylamine	88	Compound Not Detected.					
9	Methyl methanesulfonate	80	Compound Not Detected.					
11	N-Nitrosodiethylamine	102	Compound Not Detected.					
13	Ethyl methanesulfonate	79	Compound Not Detected.					
15	Phenol	94	Compound Not Detected.					
16	Aniline	93	Compound Not Detected.					
19	Pentachloroethane	117	Compound Not Detected.					
18	Bis(2-chloroethyl) ether	93	Compound Not Detected.					
20	2-Chlorophenol	128	Compound Not Detected.					
21	1,3-Dichlorobenzene	146	Compound Not Detected.					
23	1,4-Dichlorobenzene	146	Compound Not Detected.					
25	1,2-Dichlorobenzene	146	Compound Not Detected.					
24	Benzyl alcohol	108	Compound Not Detected.					
26	2-Methylphenol	108	Compound Not Detected.					
28	2,2'-oxybis(1-chloropropane)	45	Compound Not Detected.					
29	4-Methylphenol	108	Compound Not Detected.					
31	N-Nitrosopyrrolidine	100	Compound Not Detected.					
32	Acetophenone	105	Compound Not Detected.					
34	N-Nitrosomorpholine	116	Compound Not Detected.					
35	o-Toluidine	106	Compound Not Detected.					
30	N-nitrosodi-n-propylamine	70	Compound Not Detected.					
33	Hexachloroethane	117	Compound Not Detected.					
37	Nitrobenzene	77	Compound Not Detected.					
39	N-Nitrosopiperidine	114	Compound Not Detected.					
40	Isophorone	82	Compound Not Detected.					
41	2-Nitrophenol	139	Compound Not Detected.					
44	O,O,O-Triethyl phosphorothio	198	Compound Not Detected.					
42	2,4-Dimethylphenol	107	Compound Not Detected.					
43	Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
45	Benzoic acid	122	Compound Not Detected.					
48	a,a-Dimethylphenethylamine	58	Compound Not Detected.					
46	2,4-Dichlorophenol	162	Compound Not Detected.					
47	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
53	2,6-Dichlorophenol	162	Compound Not Detected.					
54	Hexachloropropene	213	Compound Not Detected.					
50	Naphthalene	128	Compound Not Detected.					
51	4-Chloroaniline	127	Compound Not Detected.					
52	Hexachlorobutadiene	225	Compound Not Detected.					
57	N-Nitrosodi-n-butylamine	84	Compound Not Detected.					
58	p-Phenylenediamine	108	Compound Not Detected.					
61	Safrole	162	Compound Not Detected.					
59	4-Chloro-3-methylphenol	107	Compound Not Detected.					
62	2-Methylnaphthalene	142	Compound Not Detected.					
64	1-Methylnaphthalene	142	Compound Not Detected.					
65	1,2,4,5-Tetrachlorobenzene	216	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
63 Hexachlorocyclopentadiene	237	Compound Not Detected.					
66 Isosafrole (#1)	162	Compound Not Detected.					
72 Isosafrole (#2)	104	Compound Not Detected.					
73 1-Chloronaphthalene	162	Compound Not Detected.					
71 2-Chloronaphthalene	162	Compound Not Detected.					
67 2,4,6-Trichlorophenol	196	Compound Not Detected.					
68 2,4,5-Trichlorophenol	196	Compound Not Detected.					
75 1,4-Naphthoquinone	158	Compound Not Detected.					
74 2-Nitroaniline	65	Compound Not Detected.					
78 1,4-Dinitrobenzene	168	Compound Not Detected.					
80 1,3-Dinitrobenzene	168	Compound Not Detected.					
76 Dimethyl phthalate	163	Compound Not Detected.					
79 2,6-Dinitrotoluene	165	Compound Not Detected.					
81 Acenaphthylene	152	Compound Not Detected.					
82 3-Nitroaniline	138	Compound Not Detected.					
84 Acenaphthene	153	Compound Not Detected.					
89 Pentachlorobenzene	250	Compound Not Detected.					
85 2,4-Dinitrophenol	184	Compound Not Detected.					
86 4-Nitrophenol	109	Compound Not Detected.					
87 2,4-Dinitrotoluene	165	Compound Not Detected.					
88 Dibenzofuran	168	Compound Not Detected.					
90 1-Naphthylamine	143	Compound Not Detected.					
91 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					
92 2-Naphthylamine	143	Compound Not Detected.					
98 Thionazin	97	Compound Not Detected.					
93 Diethyl phthalate	149	Compound Not Detected.					
100 5-Nitro-o-toluidine	152	Compound Not Detected.					
96 Fluorene	166	Compound Not Detected.					
95 4-Chlorophenyl phenyl ether	204	Compound Not Detected.					
97 4-Nitroaniline	138	Compound Not Detected.					
99 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
101 N-nitrosodiphenylamine	169	Compound Not Detected.					
182 Diphenylamine	169	Compound Not Detected.					
102 Azobenzene	77	Compound Not Detected.					
104 Sulfotepp	97	Compound Not Detected.					
105 1,3,5-Trinitrobenzene	213	Compound Not Detected.					
107 Phorate	121	Compound Not Detected.					
109 Phenacetin	108	Compound Not Detected.					
106 Diallate (#1)	86	Compound Not Detected.					
111 Diallate (#2)	86	Compound Not Detected.					
108 4-Bromophenyl phenyl ether	248	Compound Not Detected.					
110 Hexachlorobenzene	284	Compound Not Detected.					
112 Dimethoate	87	Compound Not Detected.					
114 4-Aminobiphenyl	169	Compound Not Detected.					
115 Pentachloronitrobenzene	237	Compound Not Detected.					
116 Pronamide	173	Compound Not Detected.					
113 Pentachlorophenol	266	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)
120	2-secbutyl-4,6-dinitropheno	211	Compound Not Detected.					
121	Disulfoton	88	Compound Not Detected.					
118	Phenanthrene	178	Compound Not Detected.					
122	Anthracene	178	Compound Not Detected.					
123	Carbazole	167	Compound Not Detected.					
124	Methyl parathion	109	Compound Not Detected.					
125	Di-n-butyl phthalate	149	Compound Not Detected.					
126	Parathion	109	Compound Not Detected.					
127	4-Nitroquinoline-1-oxide	190	Compound Not Detected.					
128	Methapyrilene	97	Compound Not Detected.					
129	Isodrin	193	Compound Not Detected.					
130	Fluoranthene	202	Compound Not Detected.					
131	Benzidine	184	Compound Not Detected.					
132	Pyrene	202	Compound Not Detected.					
134	Aramite (#1)	185	Compound Not Detected.					
135	Aramite (#2)	185	Compound Not Detected.					
136	p-Dimethylaminoazobenzene	120	Compound Not Detected.					
138	3,3'-Dimethylbenzidine	212	Compound Not Detected.					
137	Butyl benzyl phthalate	149	Compound Not Detected.					
139	2-Acetylaminofluorene	181	Compound Not Detected.					
140	3 3'-Dichlorobenzidine	252	Compound Not Detected.					
143	Bis(2-ethylhexyl) phthalate	149	Compound Not Detected.					
141	Benzo(a)anthracene	228	Compound Not Detected.					
144	Chrysene	228	Compound Not Detected.					
146	Di-n-octyl phthalate	149	Compound Not Detected.					
149	7,12-Dimethylbenz(a)anthrac	256	Compound Not Detected.					
147	Benzo(b)fluoranthene	252	Compound Not Detected.					
148	Benzo(k)fluoranthene	252	Compound Not Detected.					
150	Benzo(a)pyrene	252	Compound Not Detected.					
152	3-Methylcholanthrene	268	Compound Not Detected.					
153	Dibenz(a,j)acridine	279	Compound Not Detected.					
155	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
156	Dibenz(a,h)anthracene	278	Compound Not Detected.					
157	Benzo(g,h,i)perylene	276	Compound Not Detected.					
M 1	Total Isosafrole	162	Compound Not Detected.					
M 2	Total Diallate	86	Compound Not Detected.					
M 3	Total Aramite	185	Compound Not Detected.					
165	Chlorobenzilate	251	Compound Not Detected.					
168	Methyl Styrene	118	Compound Not Detected.					
27	1H-Indene	116	Compound Not Detected.					
199	1,4-Dioxane	88	3.000	2.999	(0.516)	346423	239.152	245.033(A)
175	Biphenyl	154	Compound Not Detected.					
183	Hexachlorophene	196	Compound Not Detected.					
204	Atrazine	200	Compound Not Detected.					
205	Caprolactam	55	Compound Not Detected.					
202	Alachlor	188	Compound Not Detected.					

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

STL-Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: Y.i
Lab File ID: y1758.d
Lab Smp Id: GGJX91AC
Analysis Type: SV
Quant Type: ISTD
Operator: todear
Method File: /chem/Y.i/052804.b/8270C.m
Misc Info: 4142151

Calibration Date: 28-MAY-2004
Calibration Time: 06:38
Client Smp ID: 01-MW-09
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	123037	61518	246074	125600	2.08
49 Naphthalene-d8	502806	251403	1005612	494675	-1.62
83 Acenaphthene-d10	302617	151308	605234	317476	4.91
117 Phenanthrene-d10	510447	255224	1020894	572362	12.13
142 Chrysene-d12	320588	160294	641176	406408	26.77
151 Perylene-d12	235620	117810	471240	309131	31.20

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
22 1,4-Dichlorobenze	5.82	5.32	6.32	5.81	-0.04
49 Naphthalene-d8	7.04	6.54	7.54	7.04	-0.03
83 Acenaphthene-d10	8.76	8.26	9.26	8.75	-0.03
117 Phenanthrene-d10	10.02	9.52	10.52	10.02	0.03
142 Chrysene-d12	12.17	11.67	12.67	12.20	0.29
151 Perylene-d12	13.58	13.08	14.08	13.64	0.42

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

STL-Denver

RECOVERY REPORT

Client Name: Cabrera Services
Sample Matrix: LIQUID
Lab Smp Id: GGJX91AC
Level: LOW
Data Type: MS DATA
SpikeList File: 02H2O-DCS.spk
Sublist File: HSL+AP9.sub
Method File: /chem/Y.i/052804.b/8270C.m
Misc Info: 4142151

Client SDG: D4E190262
Fraction: SV
Client Smp ID: 01-MW-09
Operator: todear
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 36 Nitrobenzene-d5	102.459	61.1005	59.63	53-107
$ 70 2-Fluorobiphenyl	102.459	54.1145	52.82	31-105
$ 133 Terphenyl-d14	102.459	65.7695	64.19	21-125
$ 10 2-Fluorophenol	153.688	97.4702	63.42	32-116
$ 14 Phenol-d5	153.688	97.5802	63.49	40-111
$ 103 2,4,6-Tribromophen	153.688	97.9061	63.70	42-122
$ 163 1,2-Dichlorobenzen	102.459	52.1530	50.90	20-130
$ 162 2-Chlorophenol-d4	153.688	95.3679	62.05	20-130

STL-Denver

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: Cabrera Services
Lab Smp Id: GGJX91AC
Operator : todear
Sample Location: USDA National Disease Center
Sample Matrix: WATER
Analysis Type: SV

Client SDG: D4E190262
Client Smp ID: 01-MW-09
Sample Date: 18-MAY-2004
Sample Point: e Center
Date Received: 19-MAY-2004 00:00
Level: LOW

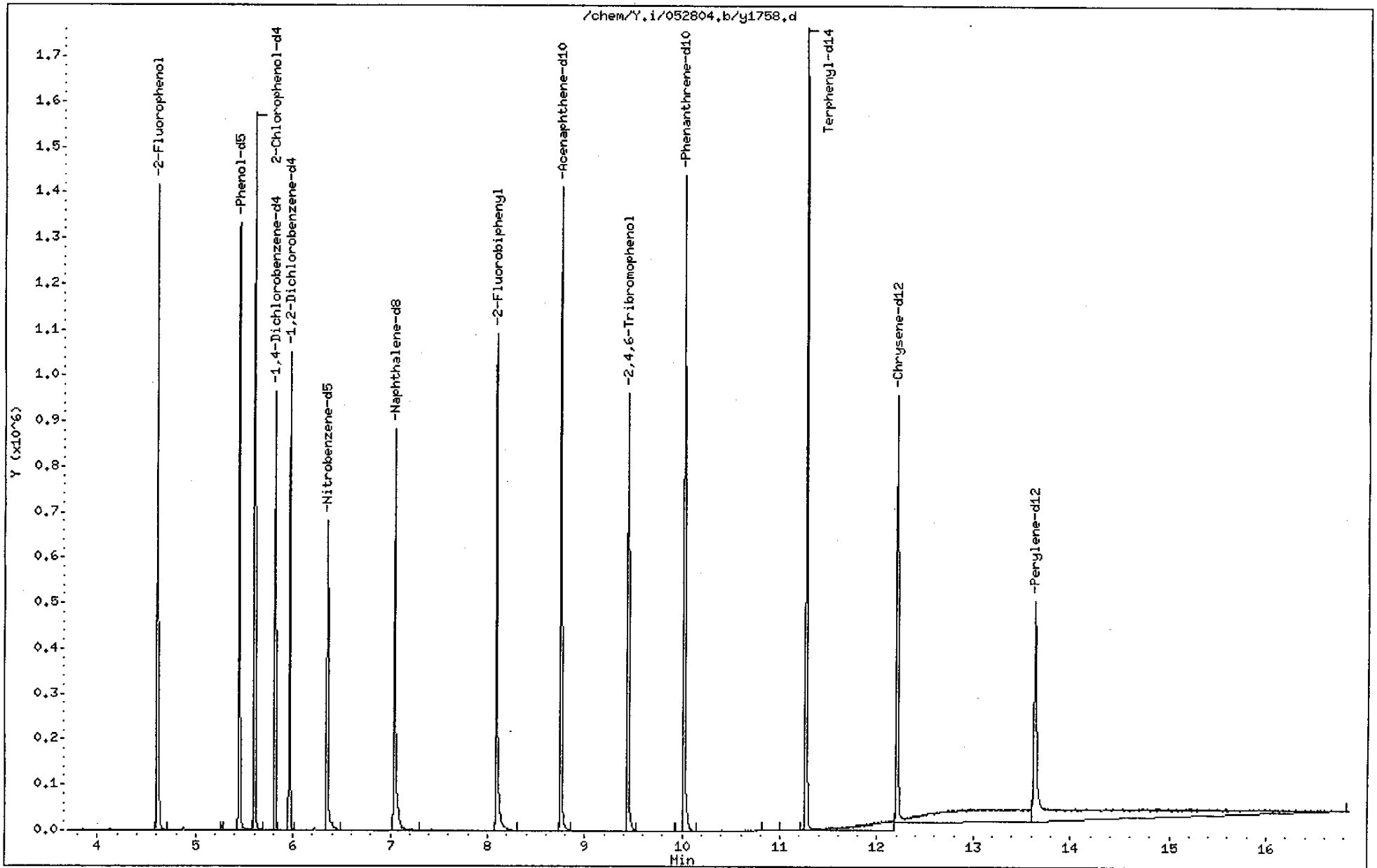
Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Data File: /chem/Y.i/052804.b/y1758.d
Date : 28-MAY-2004 12:31
Client ID: 01-MW-09
Sample Info: GGJX91AC,,D4E190262-004
Volume Injected (uL): 0.5
Column phase: Rtx-5ms 30m 0.5um

Instrument: Y.i
Operator: todear
Column diameter: 0.25



Data File: /chem/Y.i/052804.b/y1758.d

Date : 28-MAY-2004 12:31

Client ID: 01-MW-09

Instrument: Y.i

Sample Info: GCJX91AC,,D4E190262-004

Volume Injected (uL): 0.5

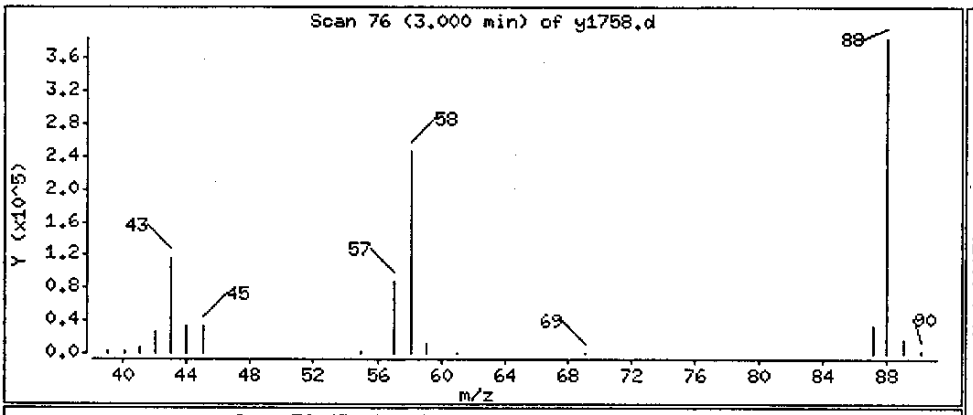
Operator: todear

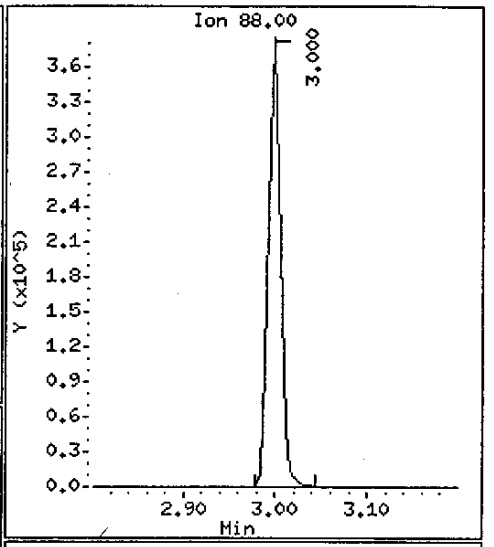
Column phase: Rtx-5ms 30m 0.5um

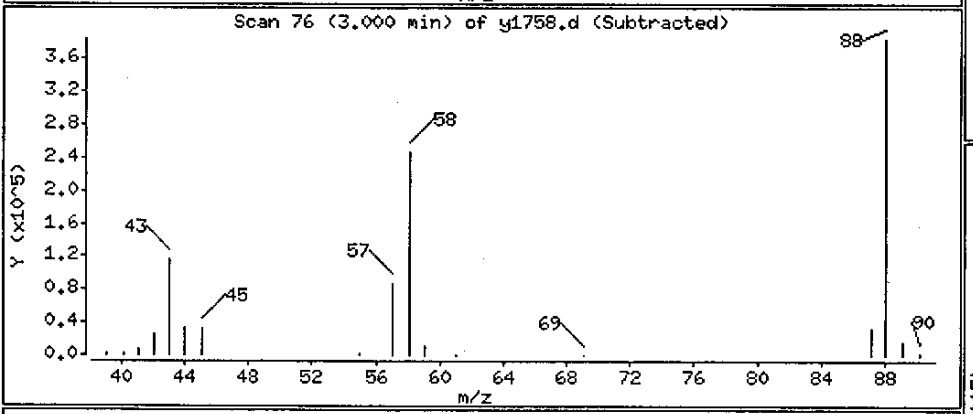
Column diameter: 0.25

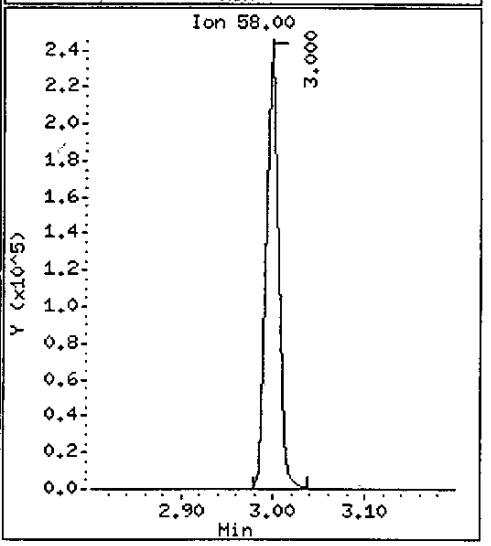
199 1,4-Dioxane

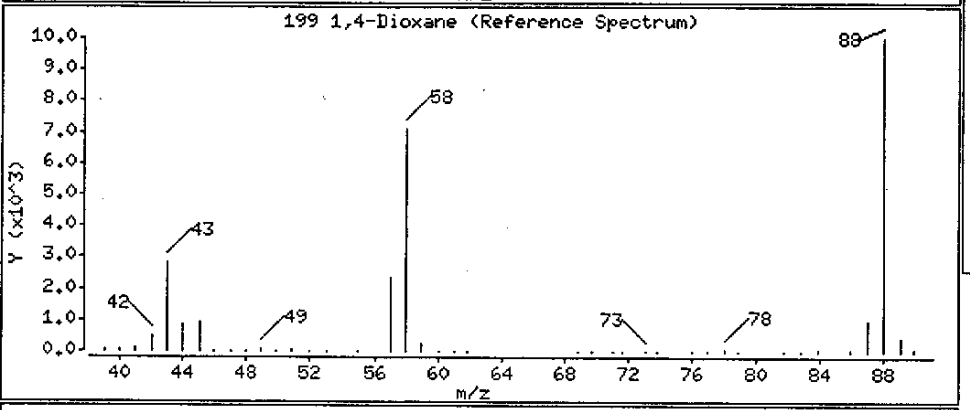
Concentration: 245.033 ug/L

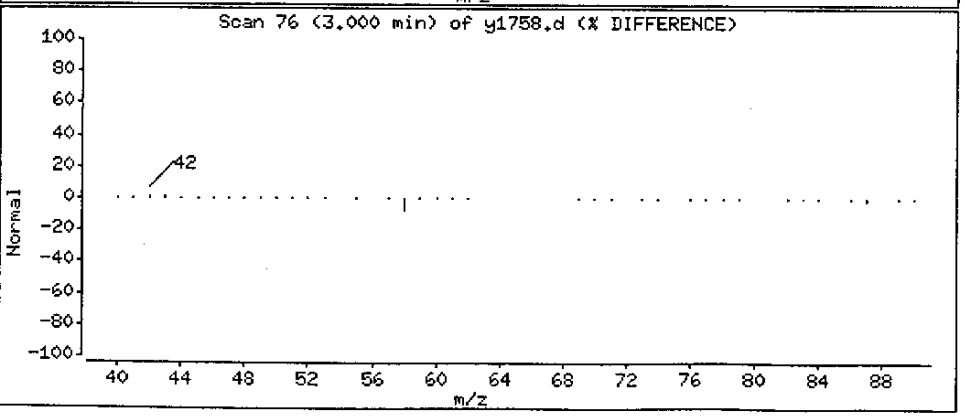












SEVERN TRENT STL

Liquid
Scintillation
Carbon-14

SEVERN TRENT STL

LIQUID SCINTILLATION

Data and Results Reports

Calibration Data
Monthly Quench Curve

Batch Summary Sheets
Run Logs

Raw Data
Prep Data Sheet(s)
Instrument Printouts
QC Acceptance Sheet(s)
Certificate/Standard Sheets

STL Denver

SEVERN TRENT **STL**

Analysis Report for Carbon-14 by LSC

Batch: 4155582 **Operator:** 400697

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Sample Information		Count Information					Results		
Sample ID / Work Order #	Aliquot / Vol Counted	Instrument / Sigma	SampEff / BkgEff	SampCPM / BkgCPM	SampDPM / BkgDPM	RunDateTime / Run Duration	Activity	UncTotal / UncCount	MDA / DLC
D4E190262-001	97.9500 mL	LSC3170	0.8630	4.50	5.22	6/5/2004 4:37:45PM	-8.830E+000	-8.322E+000	1.435E+001
GGJX41AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-8.275E+000	6.818E+000
D4E190262-001X	106.2400 mL	LSC3170	0.8470	5.00	5.90	6/5/2004 4:59:07PM	-5.258E+000	-7.462E+000	1.348E+001
GGJX41AG	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-7.444E+000	6.405E+000
D4E190262-002	104.6800 mL	LSC3170	0.8530	4.35	5.10	6/5/2004 5:20:28PM	-8.778E+000	-7.499E+000	1.359E+001
GGJX61AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-7.447E+000	6.455E+000
D4E190262-004	97.9600 mL	LSC3170	0.8450	4.85	5.74	6/5/2004 5:41:50PM	-6.438E+000	-7.947E+000	1.465E+001
GGJX91AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-7.921E+000	6.963E+000
D4E210325-001	108.9800 mL	LSC3170	0.8450	5.25	6.21	6/5/2004 6:03:12PM	-3.844E+000	-7.234E+000	1.317E+001
GGTEE1AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-7.223E+000	6.259E+000
D4E210325-002	101.1300 mL	LSC3170	0.8800	4.16	4.73	6/5/2004 6:24:32PM	-1.073E+001	-8.187E+000	1.363E+001
GGTE31AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-8.116E+000	6.476E+000
D4E210325-003	100.3600 mL	LSC3170	0.8440	4.75	5.63	6/5/2004 6:45:55PM	-6.777E+000	-7.692E+000	1.432E+001
GGTE61AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-7.662E+000	6.804E+000
D4E210325-004	89.1500 mL	LSC3170	0.8540	5.50	6.44	6/5/2004 7:07:18PM	-3.537E+000	-9.780E+000	1.593E+001
GGTE71AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-9.774E+000	7.570E+000
D4E210325-005	105.5700 mL	LSC3170	0.8680	5.05	5.82	6/5/2004 7:28:39PM	-5.632E+000	-8.411E+000	1.324E+001
GGTFE1AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-8.392E+000	6.290E+000
D4E210325-006	108.1800 mL	LSC3170	0.8770	4.45	5.07	6/5/2004 7:50:07PM	-8.619E+000	-7.854E+000	1.279E+001
GGTFH1AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-7.807E+000	6.075E+000
D4E210325-008	103.3700 mL	LSC3170	0.8770	8.10	9.24	6/5/2004 8:11:29PM	9.151E+000	7.565E+000	1.338E+001
GGTFX1AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	7.510E+000	6.358E+000
D4E210325-009	100.3000 mL	LSC3170	0.8500	5.85	6.88	6/5/2004 8:32:50PM	-1.168E+000	-9.008E+000	1.423E+001
GGTF31AE	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-9.007E+000	6.760E+000
F4F030000-582B	100.0000 mL	LSC3170	0.8670	4.50	5.18	6/5/2004 3:55:00PM	-8.829E+000	-8.321E+000	1.399E+001
GHKVE1AA	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	-8.274E+000	6.648E+000
F4F030000-582C	100.0000 mL	LSC3170	0.8090	1416.95	1752.30	6/5/2004 4:16:21PM	7.861E+003	7.917E+002	1.499E+001
GHKVE1AC	10.0000 mL	2.00	0.8470	6.05	7.14	20	pCi/L	9.399E+001	7.124E+000

Laboratory Control Sample Information

Sample ID	WRKNO	Activity	StdAdded	Recovery
F4F030000-582C	GHKVE1AC	7.861E+003 pCi/L	1.050E+004	74.85%

616

Sample Information		Count Information					Results		
Sample ID	Aliquot	Instrument	SampEff	SampCPM	SampDPM	RunDateTime	Activity	UncTotal	MDA
Work Order #	Vol Counted	Sigma	BkgEff	BkgCPM	BkgDPM	Run Duration		UncCount	DLC

Sample Duplicate Information

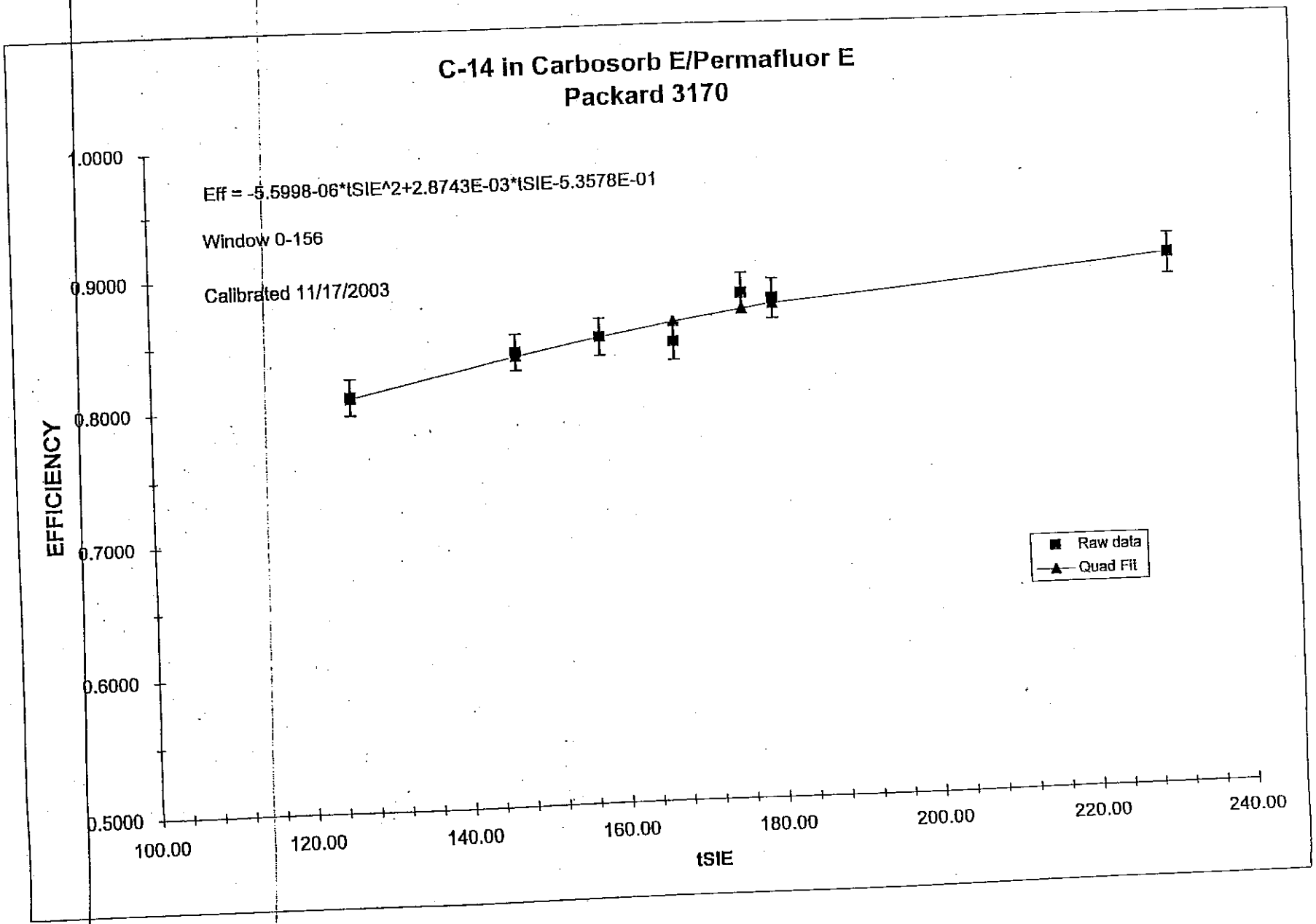
Sample ID	Sample Activity	Dup Sample ID	Dup Activity	RPD	RER
D4E190262-001	-8.830E+000 pCi/L	D4E190262-001X	-5.258E+000 pCi/L	50.71%	0.23

Matrix Spike Information

SampID	SampMSID	Sample Activity	MS Activity	StdAdded	MSRecovery

SEVERN TRENT STL

C14 QUENCH CURVE
LSC 3170


C-14 in Carbosorb E/Permafluor E
Packard 3170
Eff = -5.5998-06*tSIE^2+2.8743E-03*tSIE-5.3578E-01
Window 0-156
Calibrated 11/17/2003
EFFICIENCY
1.0000
0.9000
0.8000
0.7000
0.6000
0.5000
100.00
120.00
140.00
160.00
180.00
200.00
220.00
240.00
tSIE
Raw data
Quad Fit

C-14 Calibration of Packard 3170
C14CAL 17Nov03 3170.XLS
Count Date: 11/17/2003

Spike: 2332 dpm/mL
Ref Date: 8/7/02
C-14 Half Life: 5736

ID	STD VOL (mL)	C-14 DPM	CPMA (0-18.6)	tSIE	C-14 EFF1	NitroMethane (uL)
C14-1	1.0	2332	1886	125.47	0.8089	1 mL
C14-2	1.0	2332	1958	146.67	0.8398	0.5 mL
C14-3	1.0	2332	1980	157.44	0.8492	.1 mL
C14-4	1.0	2332	1966	166.88	0.8432	0
C14-5	1.0	2332	2049	175.66	0.8788	low CO2
C14-6	1.0	2332	2039	179.53	0.8745	med CO2
C14-7	1.0	2332	2098	230.10	0.8998	high CO2

ID	tSIE	tSIE^2	tSIE^3	C-14 EFF1	LnEFF1	Quad Fit	QuadExp Fit	Poly Fit
C14-1	125.47	15743	1975239	0.8089	-0.2121	0.8078	0.8080	0.8098
C14-2	146.67	21512	3155178	0.8398	-0.1746	0.8364	0.8362	0.8335
C14-3	157.44	24787	3902521	0.8492	-0.1635	0.8490	0.8488	0.8469
C14-4	166.88	27849	4647430	0.8432	-0.1706	0.8590	0.8589	0.8586
C14-5	175.66	30856	5420241	0.8788	-0.1292	0.8674	0.8674	0.8690
C14-6	179.53	32231	5786435	0.8745	-0.1341	0.8708	0.8709	0.8733
C14-7	230.10	52946	12182877	0.8998	-0.1056	0.9002	0.9001	0.8995

Quadratic Exponential Fit -

Regression Output:

Multiple R	0.96300
R Square	0.92736
Adjusted R Square	0.89105
Standard Error	0.01167
Observations	7.00000

	Coefficients	Standard Error
Intercept	-5.4436E-01	1.2357E-01
x1	3.5232E-03	1.4002E-03
x2	-7.0062E-06	3.8779E-06

Quadratic Fit -

Regression Output:

Multiple R	0.96237
R Square	0.92616
Adjusted R Square	0.88924
Standard Error	0.01005
Observations	7.00000

	Coefficients	Standard Error
Intercept	5.3578E-01	1.0643E-01
x1	2.8743E-03	1.2059E-03
x2	-5.5998E-06	3.3399E-06

Polynomial Fit -

Regression Output:

Multiple R	0.96489
R Square	0.93100
Adjusted R Square	0.86201
Standard Error	0.01122
Observations	7.00000

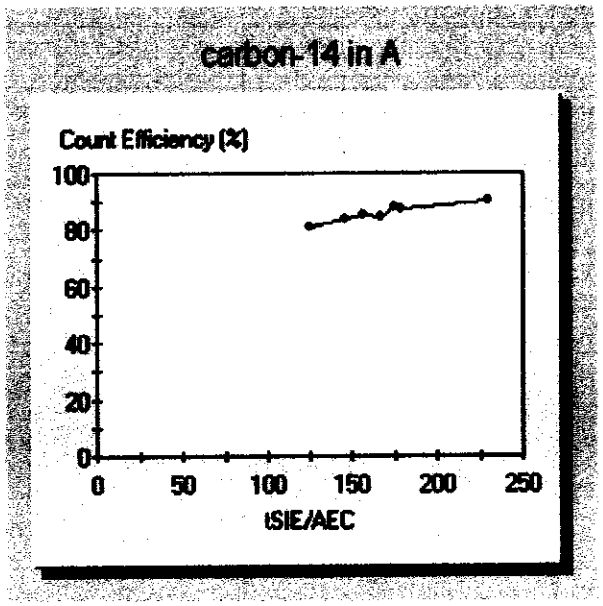
	Coefficients	Standard Error
Intercept	1.0194E+00	1.0609E+00
x1	-5.8188E-03	1.8996E-02
x2	4.5152E-05	1.1068E-04
x3	-9.6127E-08	2.0952E-07

The quadratic fit is chosen for its low coefficient errors and R-squared value.

Matrix is 10 mL Carbosorb E + 10 mL Permafluor E

C-14 standard is 03-008, 23319.5 dpm/mL on 8/7/2002.

Cycle 1 Results
Quench Curve Block Data



Date Acquired: 11/17/2003
Date Modified: 11/20/2003
carbon-14 in A

tSIE/AEC	Count Efficiency (%)
230.10	89.94
179.53	87.39
175.66	87.83
166.88	84.25
157.44	84.87
146.67	83.92
125.47	80.82

PID	S#	SMPL_ID	C.T.	CPMA	DPM1	TIME	DATE	EFF	tSIE	LUM	CPMC	NOTE
13	1	BKG	20	6.05	7.14	3:33:20 PM	6/5/04	0.847	160	15	8	
13	2	F4F030000-582B	20	4.50	5.18	3:55:00 PM	6/5/04	0.867	173	13	7	
13	3	F4F030000-582C	20	1416.95	1752.30	4:16:21 PM	6/5/04	0.809	126	0	1419	

13	4	D4E190262-001	20	4.50	5.22	4:37:45 PM	6/5/04	0.863	172	13	6
13	5	D4E190262-001X	20	5.00	5.90	4:59:07 PM	6/5/04	0.847	160	10	8
13	6	D4E190262-002	20	4.35	5.10	5:20:28 PM	6/5/04	0.853	169	13	6
13	7	D4E190262-004	20	4.85	5.74	5:41:50 PM	6/5/04	0.845	164	12	7
13	8	D4E210325-001	20	5.25	6.21	6:03:12 PM	6/5/04	0.845	163	11	7
13	9	D4E210325-002	20	4.16	4.73	6:24:32 PM	6/5/04	0.880	192	12	6
13	10	D4E210325-003	20	4.75	5.63	6:45:55 PM	6/5/04	0.844	165	12	7
13	11	D4E210325-004	20	5.50	6.44	7:07:18 PM	6/5/04	0.854	170	10	9
13	12	D4E210325-005	20	5.05	5.82	7:28:39 PM	6/5/04	0.868	173	11	7
5	13	D4E210325-006	20	4.45	5.07	7:50:07 PM	6/5/04	0.877	176	13	6
5	14	D4E210325-008	20	8.10	9.24	8:11:29 PM	6/5/04	0.877	177	8	11
5	15	D4E210325-009	20	5.85	6.88	8:32:50 PM	6/5/04	0.850	169	8	11

SEVERN TRENT STL

RUN LOG

Instrument: 3170 Logbook No.: 2489

STL
St. Louis Laboratory

Liquid Scintillation Counter Runlog

Date	Batch #	Sample #	Protocol	Position	Count Time	Analysis	Initials
6-3-9	415411J	B Kg	25	1	15 min	Th	—
		F4F020000-115B		2			
		-115C		3			
		F4E210103-001		4			
		-002		5			
		-0020		6			
		-0025		7			
		F4E210104-001		8			
		-002		9			
		-003		10			
		F4E210282-001		11			
		-002		12			
		-003		13			
		-004		14			
		-005		15			
		-006		16			
		F4E210291-001		17			
		-002		18			
		-003		19			
		-004		20			
		F4E210297-001		21			
		-002		22			
6-4-9	Dual BKG + Source		—	—	60 min BKG	Ra	—
6/4/09	415453	BKgd	5	1	30 min	~~Th~~ Ni	RR
		F4F020000-153B		2			
		+ -153C		3			
		F4E190242-001		4			
		+ -002		5			

Reviewed By: RR Date: 6/4/09

Form: SL-RAD-0027, revised 7/16/03; SOP Reference: STL-RD-0302, current revision
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

55

Instrument: 3170 Logbook No.: 2489

STL
St. Louis Laboratory

Liquid Scintillation Counter Runlog

Date	Batch #	Sample #	Protocol	Position	Count Time	Analysis	Initials
6/4	4164153	FAE190202-003	5	6	30min	Ni	RK
		-004		7			
		-005		8			
		FAE210325-001		9			
		-001S		10			
		-001M		11			
		-002		12			
		-003		13			
		-004		14			
		-005		15			
		-006		16			
		-008		17			
		-009		18			
6/4/04	4155125	Bkgd	22	1	20min	H3	RK
		FAF030000-125B		2			
		-125C		3			
		FAE250252-001		4			
		-002		5			
		-003		6			
		-004		7			
		FAE250272-001		8			
		-002		9			
		FAE250306-001		10			
		-002		11			
		-003		12			
		-004		13			
		FAE260317-001		14			
		-001S		15			

Reviewed By: RR Date: 6/4/04

Form: SL-RAD-0027, revised 7/16/03; SOP Reference: STL-RD-0302, current revision
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Instrument: 3170 Logbook No.: 2489

STL
St. Louis Laboratory

Liquid Scintillation Counter Runlog

Date	Batch #	Sample #	Protocol	Position	Count Time	Analysis	Initials
6/4	415525	FAE260317-002	22	16	30min	H3	RK
		-002X					
		-003					
		-004					
		-005					
		-006					
		-007					
	4155582	BKgd	17	1	20	C14	
		FAE030000-582B		2			
		-582C		3			
		DAE190262-001		4			
		-001X		5			
		-002		6			
		-004		7			
		DAE210825-001		8			
		-002		9			
		-003		10			
		-004		11			
		-005		12			
		-006		13			
		-008		14			
		-009		15			
	4156143	BKgd	21	1	15min	H3	
		FAE040000-143B		2			
		-143C		3			
		FAE180110-001		4			
		-001S		5			
		-001X		6			

Reviewed By: RR Date: 6/4/04

Form: SL-RAD-0027, revised 7/16/03; SOP Reference: STL-RD-0302, current revision

QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

SEVERN TRENT **STL**

Prep Report Carbon-14 by LSC

Batch: 4155582 **Prep Analyst:** 401253

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

SampID	WRKNO	Aliquot	Volume Counted
D4E190262-001	GGJX41AE	97.9500 mL	10.0000 mL
D4E190262-001X	GGJX41AG	106.2400 mL	10.0000 mL
D4E190262-002	GGJX61AE	104.6800 mL	10.0000 mL
D4E190262-004	GGJX91AE	97.9600 mL	10.0000 mL
D4E210325-001	GGTEE1AE	108.9800 mL	10.0000 mL
D4E210325-002	GGTE31AE	101.1300 mL	10.0000 mL
D4E210325-003	GGTE61AE	100.3600 mL	10.0000 mL
D4E210325-004	GGTE71AE	89.1500 mL	10.0000 mL
D4E210325-005	GGTFE1AE	105.5700 mL	10.0000 mL
D4E210325-006	GGTFH1AE	108.1800 mL	10.0000 mL
D4E210325-008	GGTFX1AE	103.3700 mL	10.0000 mL
D4E210325-009	GGTF31AE	100.3000 mL	10.0000 mL
F4F030000-582B	GHKVE1AA	100.0000 mL	10.0000 mL
F4F030000-582C	GHKVE1AC	100 mL	10.0000 mL

Spike Information

Sample ID	Standard ID	Analyte	Std Conc	Aliquot	Ref Date	StdAdded
F4F030000-582C	03-008	C-14	2.332E+004 dpm/mL	0.10 mL	1/1/2003 12:00:00AM	pCi/L

BA
Spiked By

AE
Spike Verified By

6/3/04
Spike Date

Standard Operating Procedures

SOPNumber	Title	Revision
☑ C-14		

Prot#17
3120, 20min.

SampID	WRKNO	Aliquot	Volume Counted

Reviewed By	6-6-4 Review Date		
Analyst/Relenquished By	6/8/04 Release Date	RR Received By	6-4-4 Receipt Date

SEVERN TRENT STL

Instrument Checks

SNC Protocol

Calibration Information
Software Version IC: 2.11
Software Version EC: 1.31
Instrument Model: Tri-Carb 3170TR/SL
Instrument Serial Number: 429670
3H Chi Square: 27.55 Date Processed: 2/27/04 1:05:43 PM
14C Chi Square: 22.31 Date Processed: 2/27/04 1:05:43 PM
3H E^2/B (1-18.6 keV): 1550.43 Date Processed: 6/3/04 3:46:47 AM
14C E^2/B (4-156 keV): 7666.22 Date Processed: 6/3/04 3:46:47 AM
3H Efficiency (0-18.6 keV): 63.17 Date Processed: 6/3/04 3:46:47 AM
14C Efficiency (0-156 keV): 95.78 Date Processed: 6/3/04 3:46:47 AM
IPA Background Date Processed: 6/3/04 3:46:47 AM
3H Background CPM (0-18.6 keV): 2.81 Date Processed: 6/3/04 3:46:47 AM
14C Background CPM (0-156 keV): 3.06 Date Processed: 6/3/04 3:46:47 AM
3H Calibration DPM: 280500
3H Reference Date: 6/4/02
14C Calibration DPM: 120600

SEVERN TRENT STL

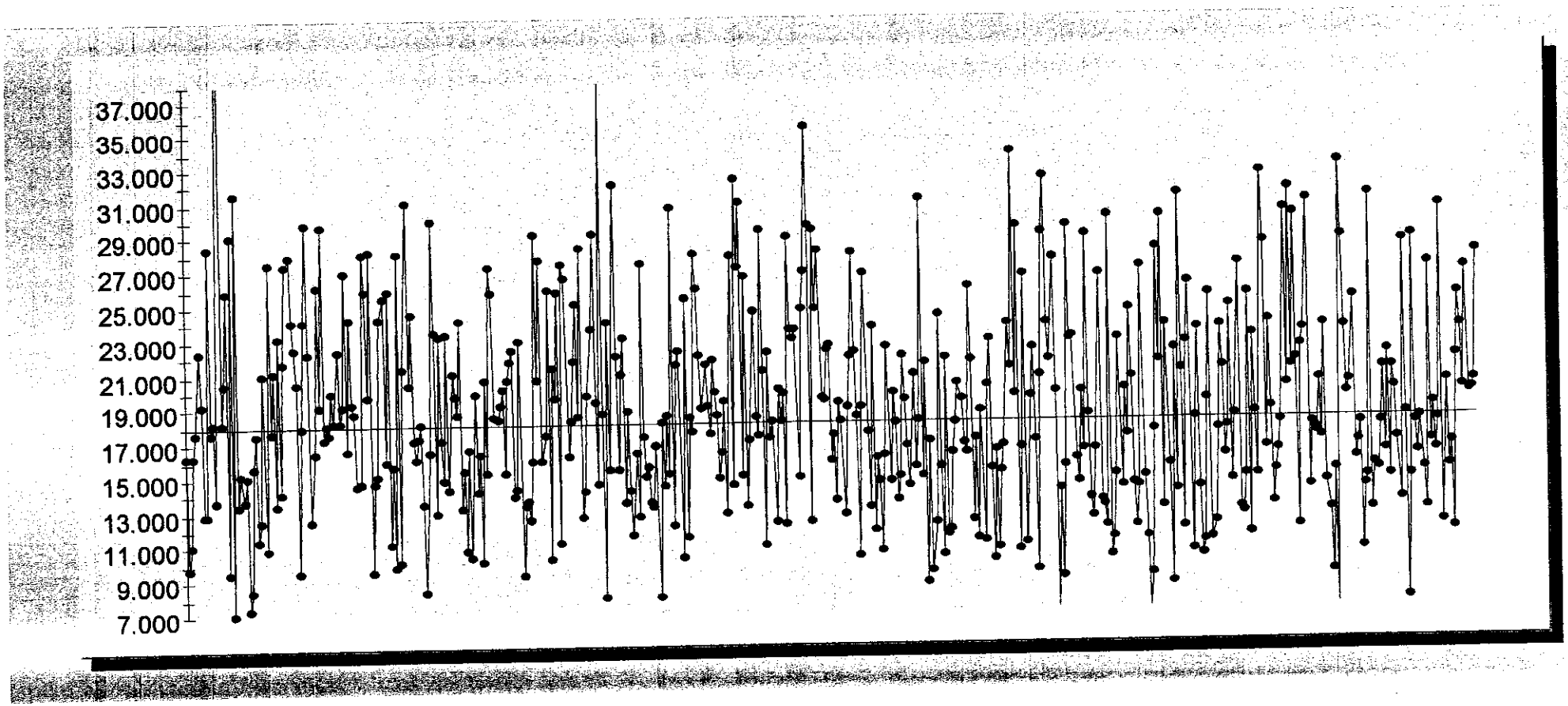
LSC Instrument Check

3170

6/6/04

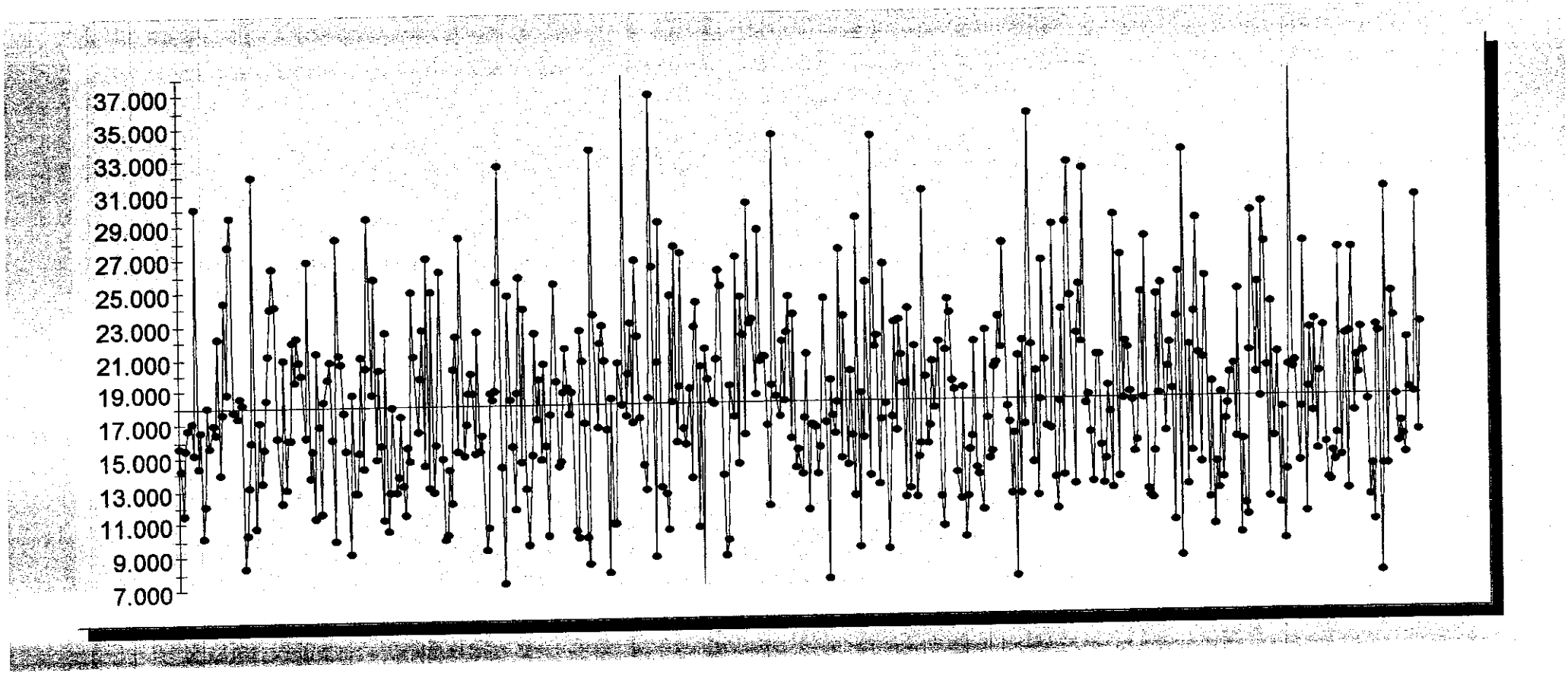
2H Chi Square

Total # pts	: 510
Valid # pts	: 510
Mean	: 18.72
SD	: 6.17

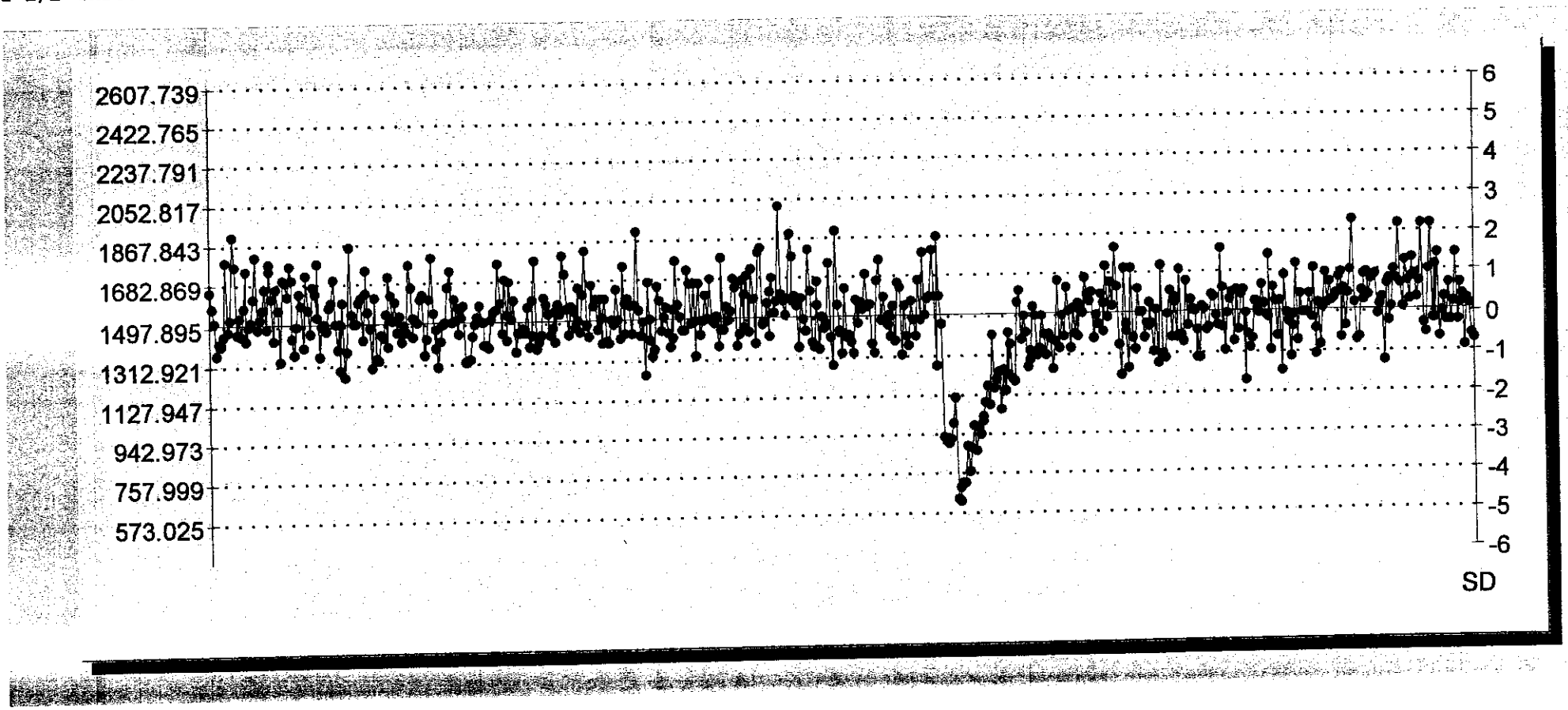


STL Denver

14C Chi Square
Total # pts : 511
Valid # pts : 511
Mean : 18.17
SD : 5.67

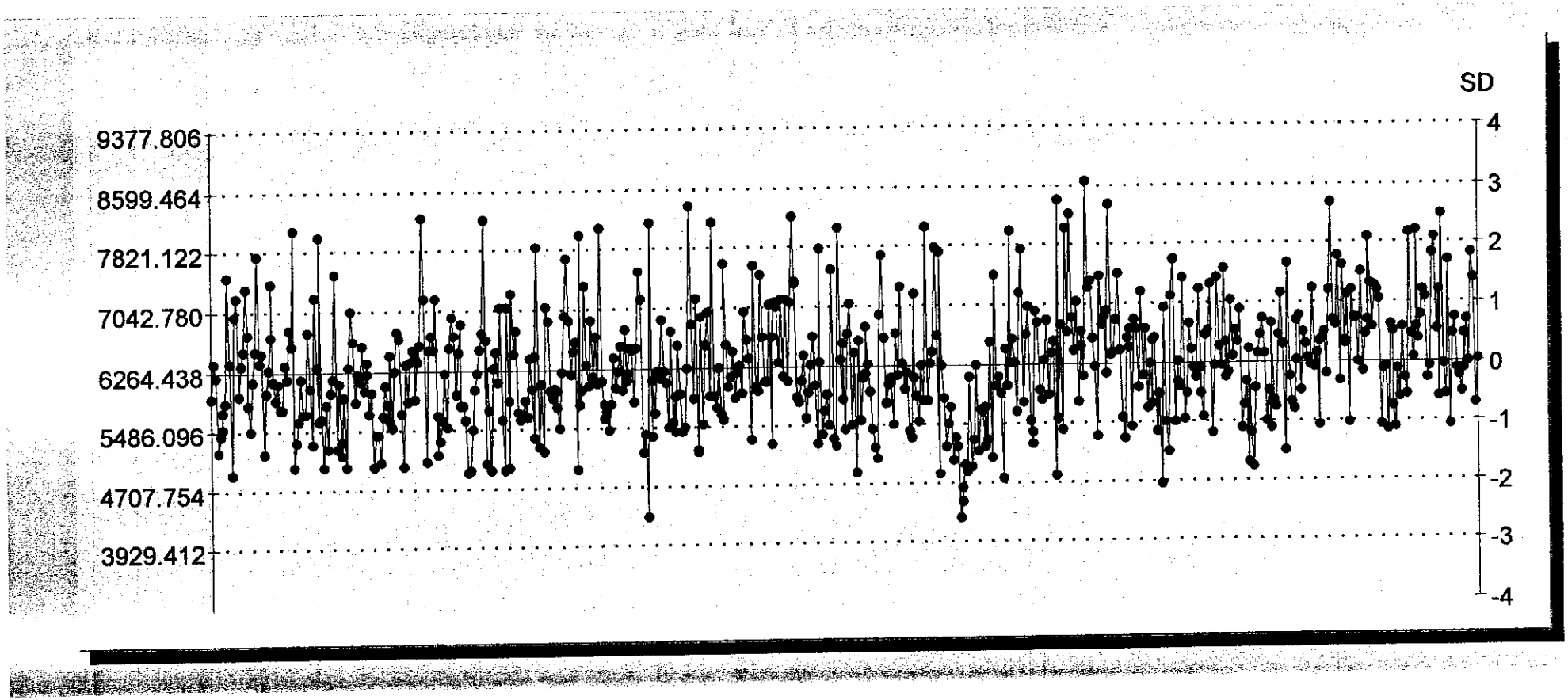


2H E^2/B
Total # pts : 607
Valid # pts : 607
Mean : 1497.90
SD : 184.97
E^2/B Threshold : 180



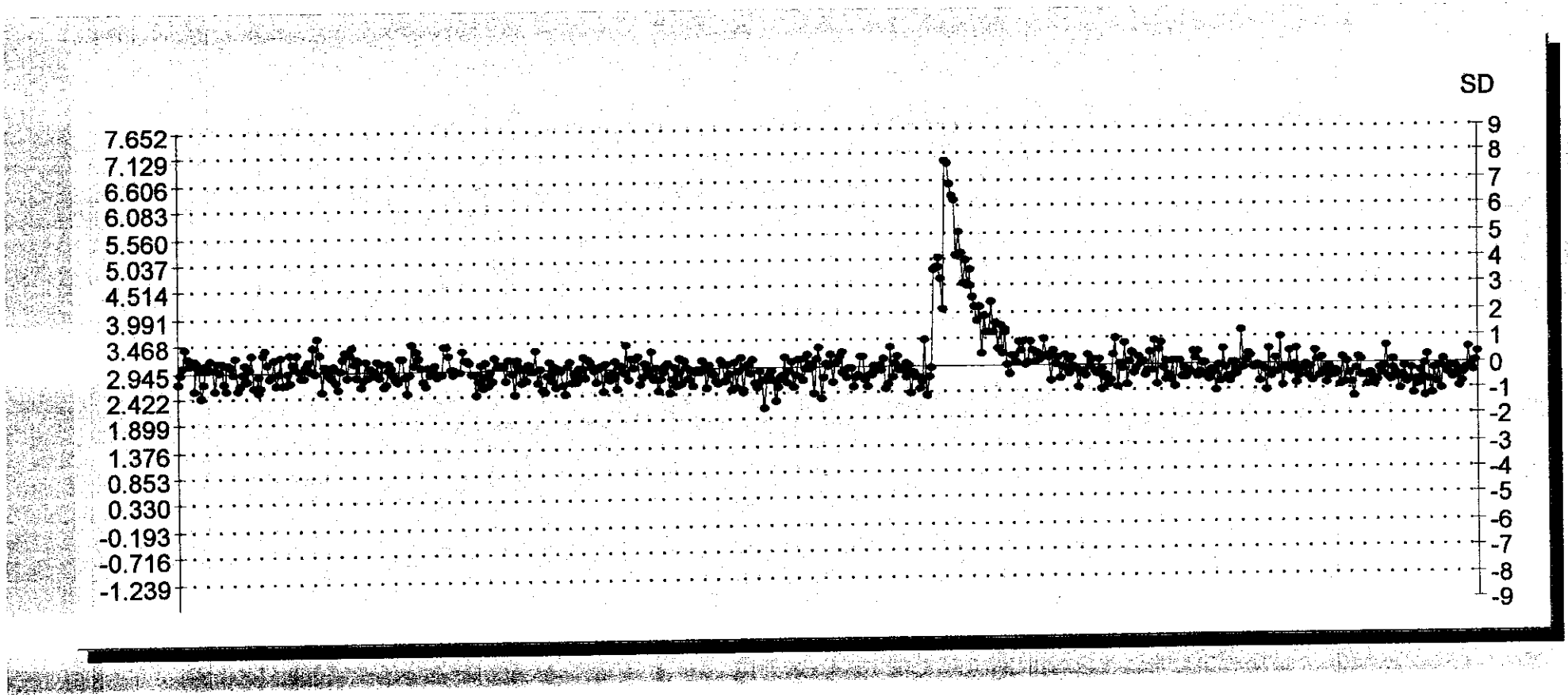
STL Derive

14C E^2/B
Total # pts : 607
Valid # pts : 607
Mean : 6264.44
SD : 778.34
E^2/B Threshold : 380



STL Denver

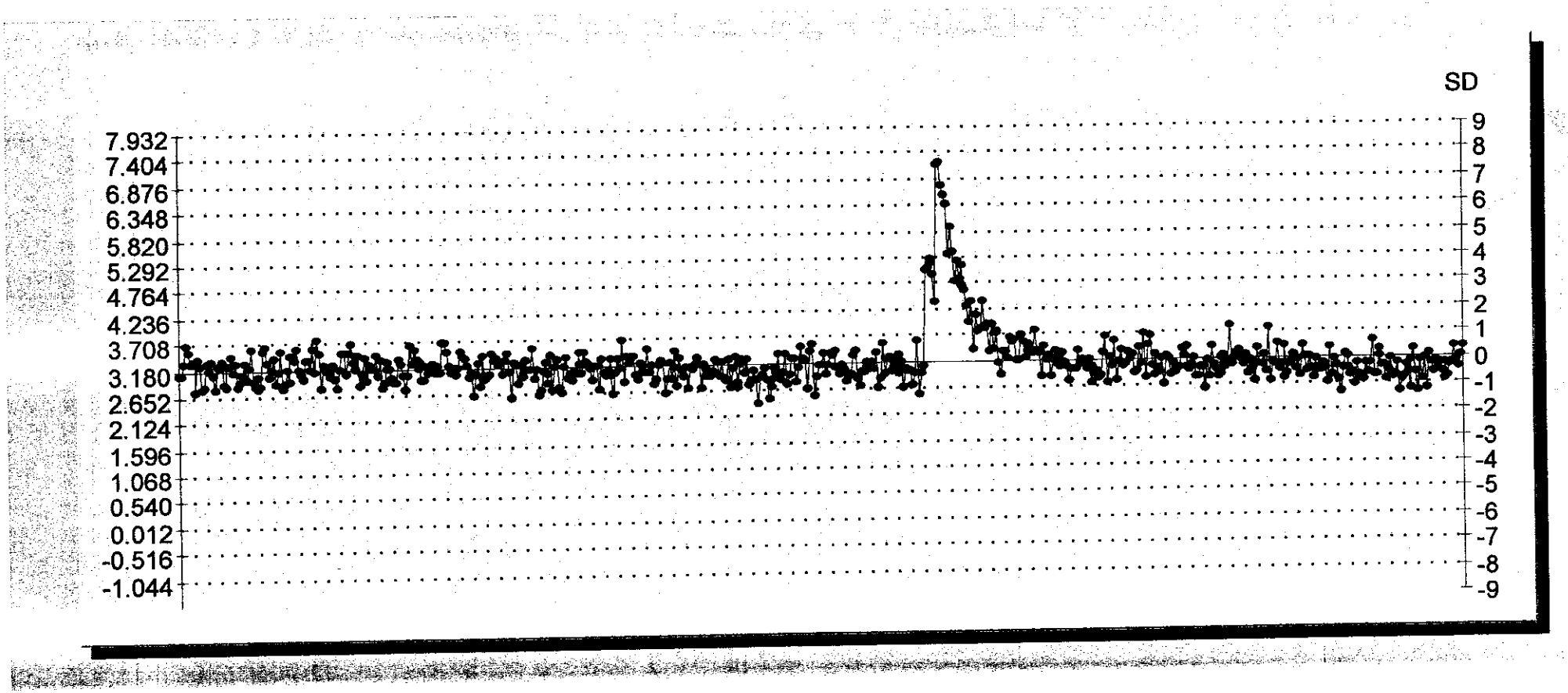
3H Background
Total # pts : 608
Valid # pts : 608
Mean : 2.95
SD : 0.52



STL Denver

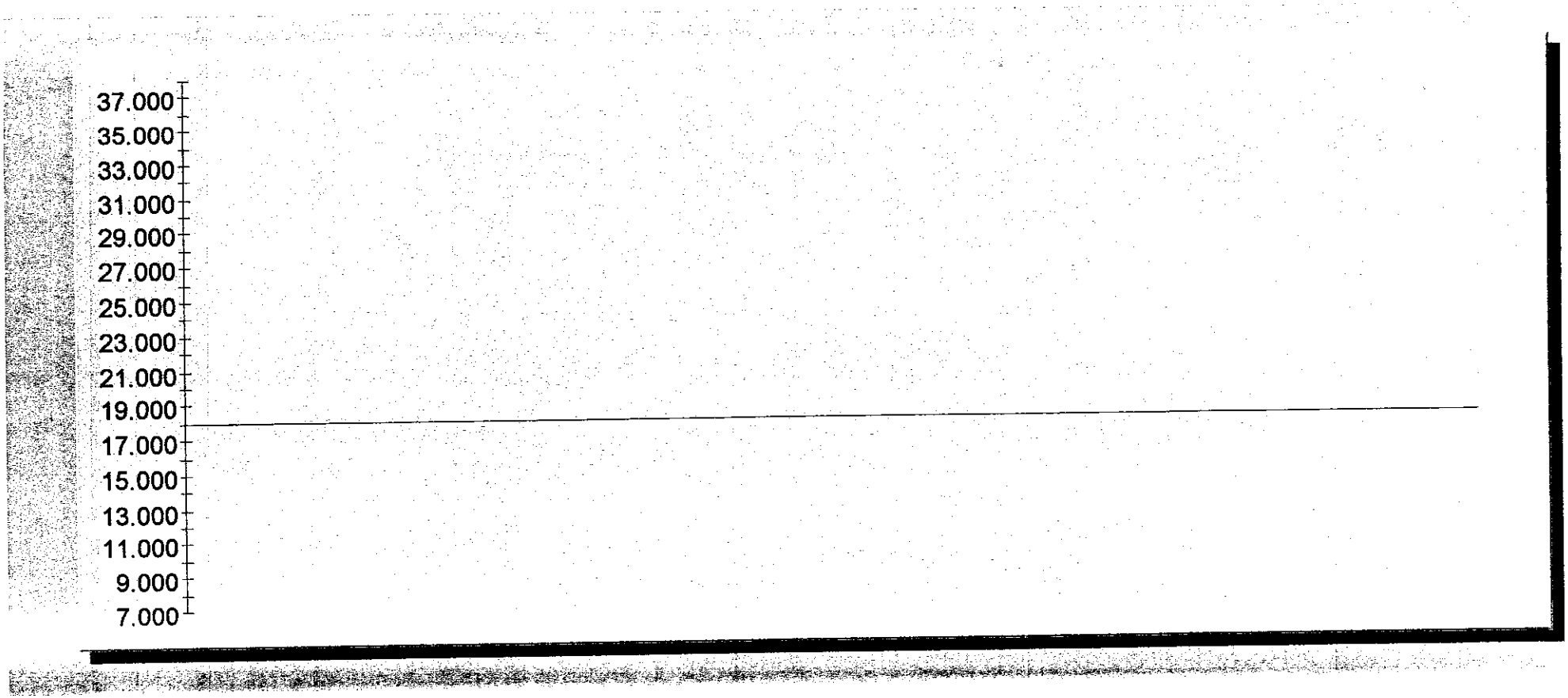
14C Background

Total # pts	: 608
Valid # pts	: 608
Mean	: 3.18
SD	: 0.53



3H Efficiency

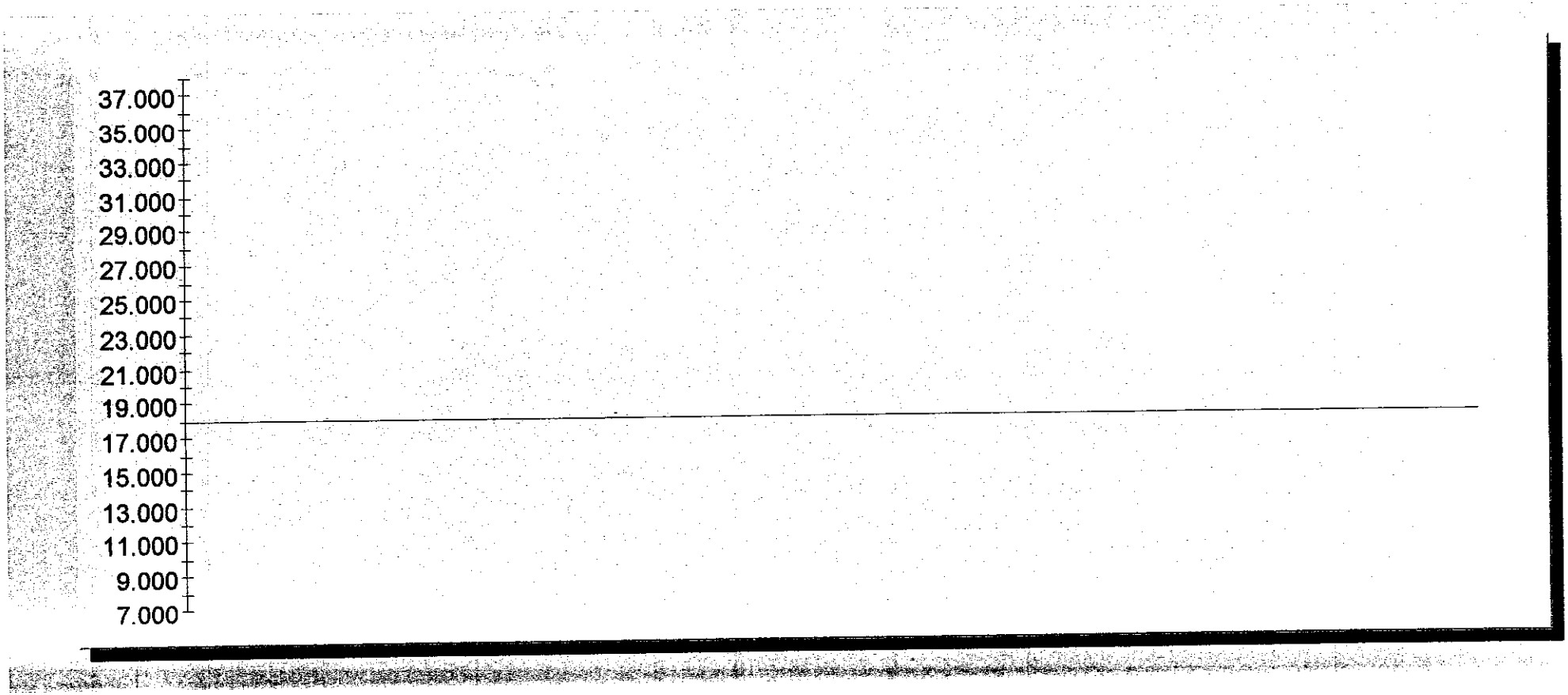
Total # pts	: 612
Valid # pts	: 612
Mean	: 64.11
SD	: 0.81



STL Derive

14C Efficiency

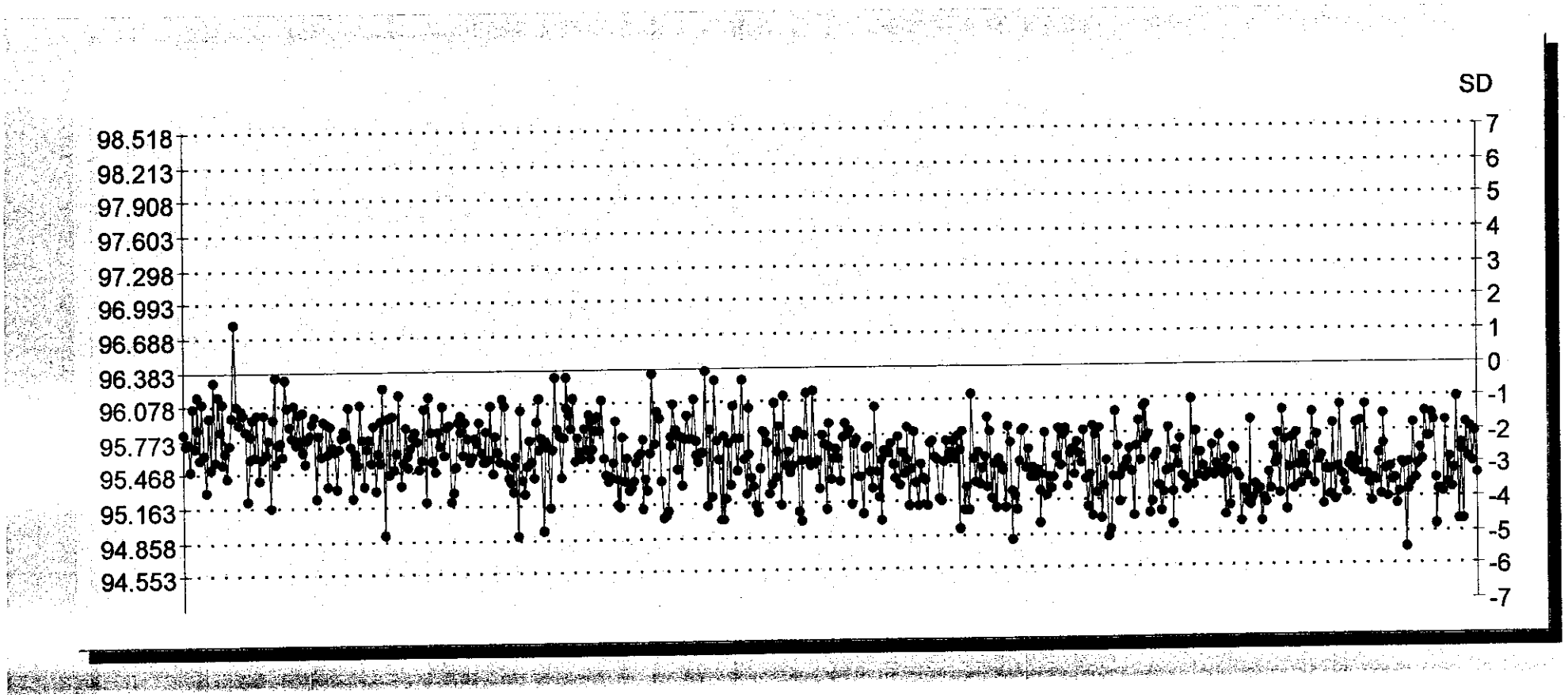
Total # pts	: 615
Valid # pts	: 615
Mean	: 95.57
SD	: 0.31



STL Denver

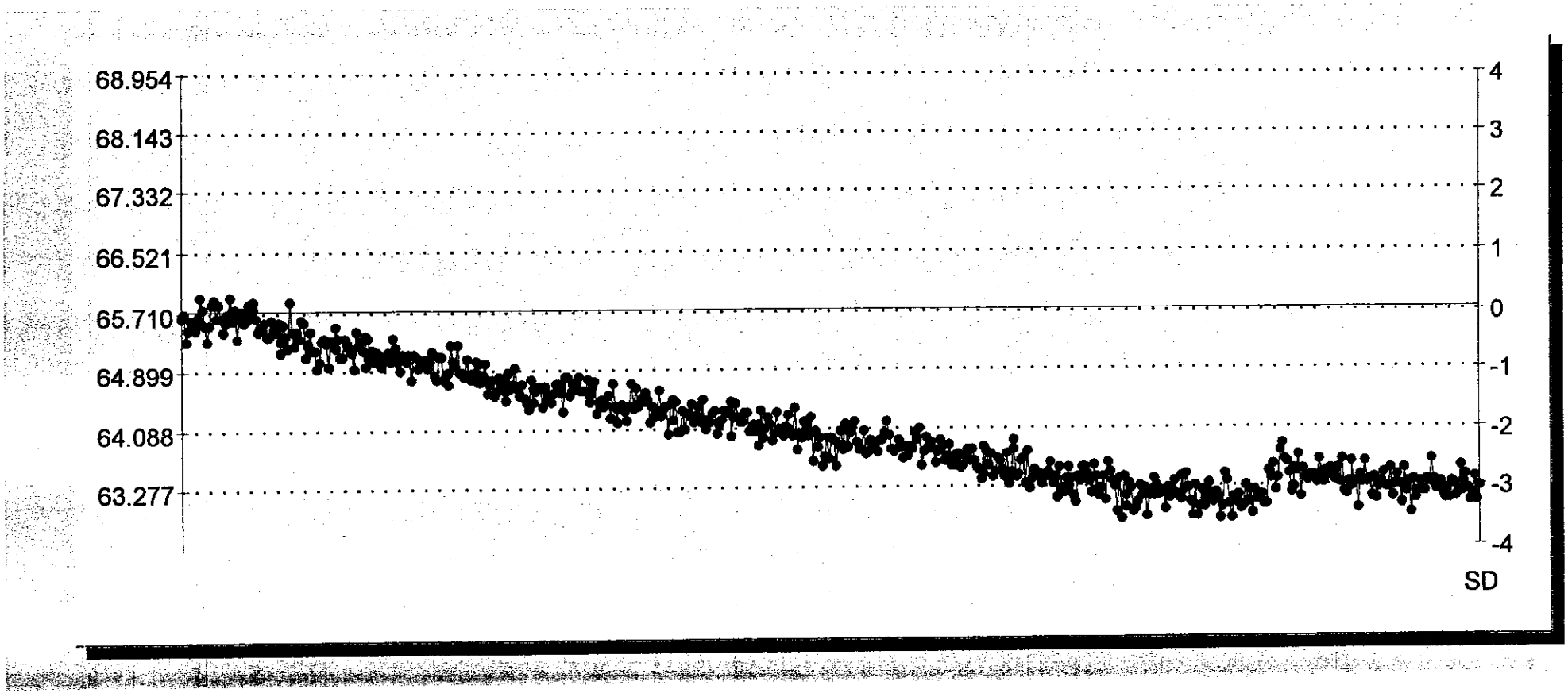
34C Efficiency Baseline Sep 17, 2002 - Present

Total # pts	: 615
Valid # pts	: 615
Mean	: 95.57
Baseline SD	: 0.31
Baseline Mean	: 96.38



BH Efficiency Baseline Oct 08, 2002 - Present

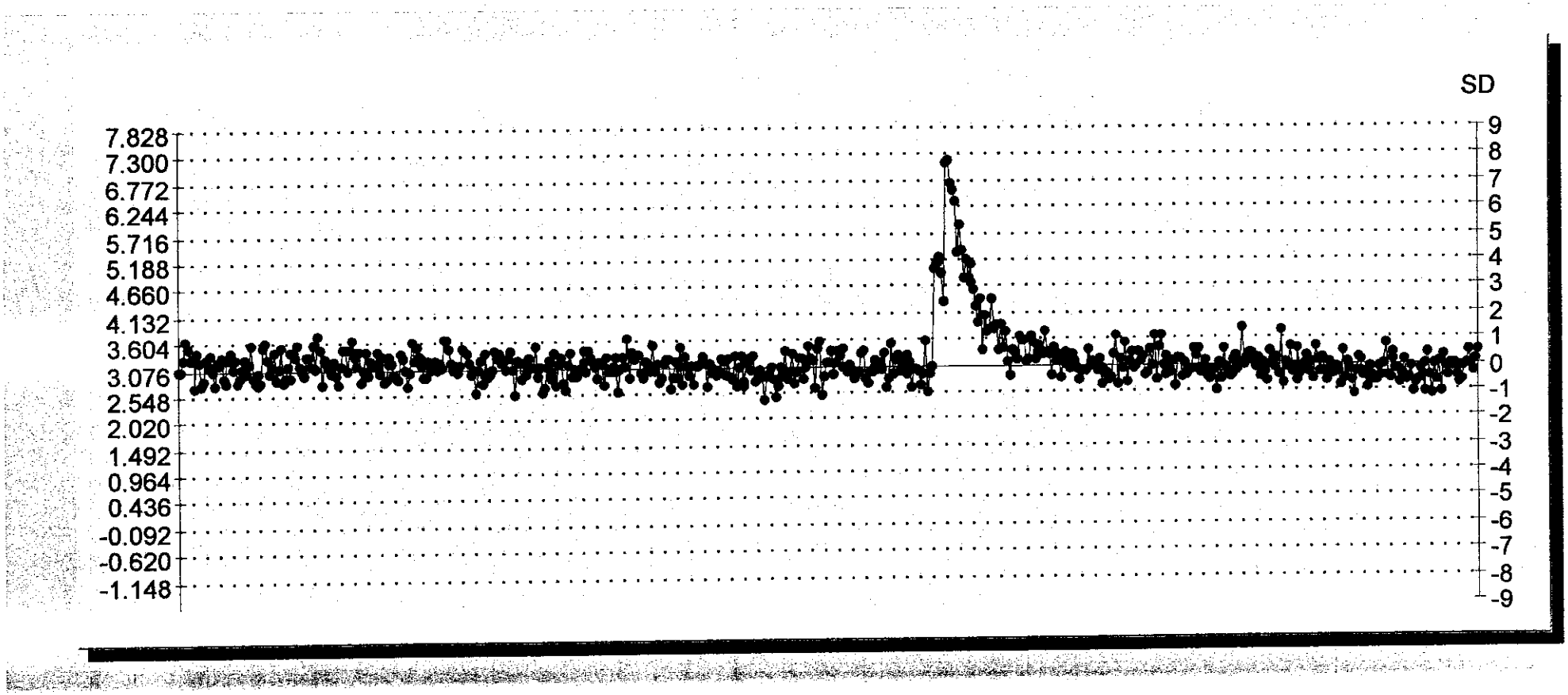
Total # pts	: 612
Valid # pts	: 612
Mean	: 64.11
Baseline SD	: 0.81
Baseline Mean	: 65.71



STL Denver

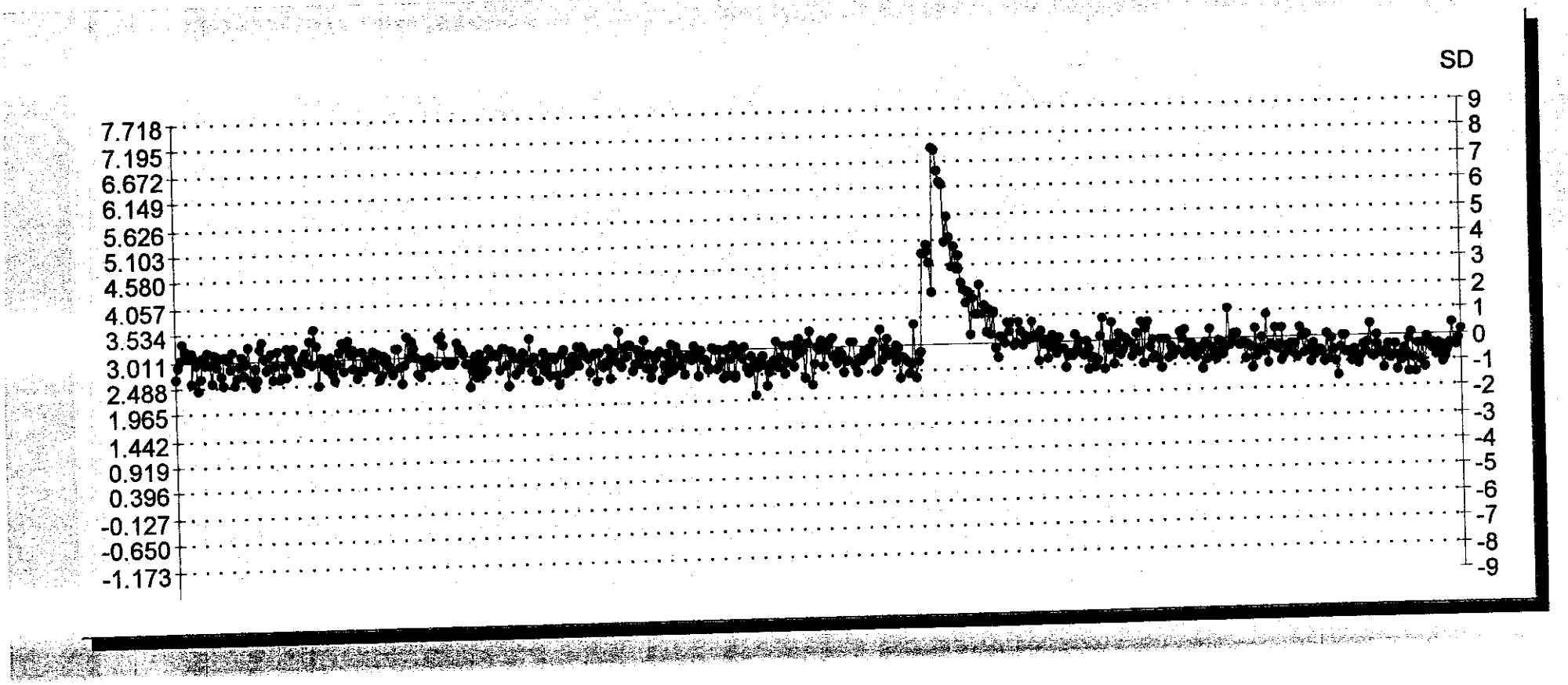
14C Background Baseline Oct 08, 2002 - Present

Total # pts	: 608
Valid # pts	: 608
Mean	: 3.18
Baseline SD	: 0.53
Baseline Mean	: 3.08



H Background Baseline Oct 08, 2002 - Present

otal # pts	: 608
alid # pts	: 608
ean	: 2.95
aseline SD	: 0.52
aseline Mean	: 3.01



SEVERN TRENT STL

Liquid
Scintillation

Nickel-63

SEVERN TRENT STL

LIQUID SCINTILLATION

Data and Results Reports

Calibration Data
Monthly Quench Curve

Batch Summary Sheets
Run Logs

Raw Data
Prep Data Sheet(s)
Instrument Printouts
QC Acceptance Sheet(s)
Certificate/Standard Sheets

SIVERN TRENT **STL**

Analysis Report for Nickel 59/63 by LSC

Batch: 4154153 **Operator:** 60040

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Sample Information				Count Information				Results		
Sample ID / Work Order #	Aliquot / DilFactor	Sigma	Sample Date/Time / Tracer Yield	Instrument / Duration		SampDPM / Bkg DPM	RunDateTime / Decay	Activity	UncTotal / UncCount	MDA / DLC
D4E190262-001	100.0000 mL		5/18/04 13:42	LSC3170	Ni-59:	0.00	6/4/04 11:41	0.000E+000 pCi/L	0.000E+000	1.114E+001
GGJX41AD	1.00	2.00	0.81	30.00		1.09	1.0000		0.000E+000	5.057E+000
					Ni-63:	8.43		-3.547E-001 pCi/L	8.447E-001	2.307E+001
						8.49	0.9997		8.439E-001	1.085E+001
D4E190262-002	100.0000 mL		5/18/04 15:30	LSC3170	Ni-59:	0.00	6/4/04 12:12	0.000E+000 pCi/L	0.000E+000	1.138E+001
GGJX61AD	1.00	2.00	0.88	30.00		1.09	1.0000		0.000E+000	5.167E+000
					Ni-63:	4.90		-1.878E+001 pCi/L	1.560E+001	2.122E+001
						8.49	0.9997		1.549E+001	9.976E+000
D4E190262-003	100.0000 mL		5/18/04 16:00	LSC3170	Ni-59:	0.00	6/4/04 12:43	0.000E+000 pCi/L	0.000E+000	1.109E+001
GGJX81AC	1.00	2.00	0.87	30.00		1.09	1.0000		0.000E+000	5.034E+000
					Ni-63:	6.57		-1.020E+001 pCi/L	2.786E+001	2.159E+001
						8.49	0.9997		2.784E+001	1.015E+001
D4E190262-004	100.0000 mL		5/18/04 17:00	LSC3170	Ni-59:	0.00	6/4/04 13:14	0.000E+000 pCi/L	0.000E+000	1.102E+001
GGJX91AD	1.00	2.00	0.87	30.00		1.09	1.0000		0.000E+000	5.003E+000
					Ni-63:	5.50		-1.580E+001 pCi/L	1.803E+001	2.146E+001
						8.49	0.9997		1.796E+001	1.009E+001
D4E190262-005	100.0000 mL		5/18/04 17:00	LSC3170	Ni-59:	0.00	6/4/04 13:45	0.000E+000 pCi/L	0.000E+000	1.117E+001
GGJ0A1AC	1.00	2.00	0.88	30.00		1.09	1.0000		0.000E+000	5.072E+000
					Ni-63:	5.67		-1.482E+001 pCi/L	1.869E+001	2.129E+001
						8.49	0.9997		1.863E+001	1.001E+001
D4E210325-001	100.0000 mL		5/19/04 10:25	LSC3170	Ni-59:	0.00	6/4/04 14:16	0.000E+000 pCi/L	0.000E+000	1.189E+001
GGTEE1AD	1.00	2.00	0.84	30.00		1.09	1.0000		0.000E+000	5.401E+000
					Ni-63:	6.51		-1.083E+001 pCi/L	2.779E+001	2.218E+001
						8.49	0.9997		2.777E+001	1.043E+001
D4E210325-001D	100.0000 mL		5/19/04 10:25	LSC3170	Ni-59:	344.42	6/4/04 14:46	1.752E+003 pCi/L	1.790E+002	1.059E+001
GGTEE1AK	1.00	2.00	0.91	30.00		1.09	1.0000		3.688E+001	4.807E+000
					Ni-63:	352.15		1.749E+003 pCi/L	1.840E+002	2.062E+001
						8.49	0.9997		5.738E+001	9.694E+000
D4E210325-001S	100.0000 mL		5/19/04 10:25	LSC3170	Ni-59:	366.65	6/4/04 15:17	2.094E+003 pCi/L	2.138E+002	1.189E+001
GGTEE1AJ	1.00	2.00	0.81	30.00		1.09	1.0000		4.320E+001	5.397E+000
					Ni-63:	357.79		1.995E+003 pCi/L	2.098E+002	2.315E+001
						8.49	0.9997		6.492E+001	1.088E+001

STL Denver

Sample Information				Count Information					Results			
Sample ID / Work Order #	Aliquot / DilFactor	Sigma	Sample Date/Time / Tracer Yield	Instrument / Duration		SampDPM / Bkg DPM	RunDateTime / Decay		Activity		UncTotal / UncCount	MDA / DLC
D4E210325-002	100.0000 mL		5/19/04 10:30	LSC3170	Ni-59:	1.50	6/4/04 15:48		7.533E+000	pCi/L	4.231E+000	1.065E+001
GGTE31AD	1.00	2.00	0.92	30.00		1.09	1.0000				4.163E+000	4.838E+000
					Ni-63:	4.11			-2.192E+001	pCi/L	1.382E+001	2.031E+001
						8.49	0.9997				1.364E+001	9.548E+000
D4E210325-003	100.0000 mL		5/19/04 13:30	LSC3170	Ni-59:	0.00	6/4/04 16:19		0.000E+000	pCi/L	0.000E+000	1.038E+001
GGTE61AD	1.00	2.00	0.93	30.00		1.09	1.0000				0.000E+000	4.714E+000
					Ni-63:	5.11			-1.688E+001	pCi/L	1.570E+001	2.022E+001
						8.49	0.9997				1.560E+001	9.506E+000
D4E210325-004	100.0000 mL		5/19/04 13:35	LSC3170	Ni-59:	0.00	6/4/04 16:50		0.000E+000	pCi/L	0.000E+000	1.110E+001
GGTE71AD	1.00	2.00	0.93	30.00		1.09	1.0000				0.000E+000	5.040E+000
					Ni-63:	6.55			-9.698E+000	pCi/L	2.324E+001	2.024E+001
						8.49	0.9997				2.322E+001	9.514E+000
D4E210325-005	100.0000 mL		5/19/04 16:00	LSC3170	Ni-59:	0.00	6/4/04 17:21		0.000E+000	pCi/L	0.000E+000	1.092E+001
GGTFE1AD	1.00	2.00	0.84	30.00		1.09	1.0000				0.000E+000	4.957E+000
					Ni-63:	6.85			-8.962E+000	pCi/L	3.645E+001	2.217E+001
						8.49	0.9997				3.643E+001	1.042E+001
D4E210325-006	100.0000 mL		5/19/04 16:00	LSC3170	Ni-59:	0.00	6/4/04 17:52		0.000E+000	pCi/L	0.000E+000	1.067E+001
GGTFH1AD	1.00	2.00	0.94	30.00		1.09	1.0000				0.000E+000	4.846E+000
					Ni-63:	6.48			-9.872E+000	pCi/L	2.437E+001	1.990E+001
						8.49	0.9997				2.435E+001	9.355E+000
D4E210325-008	100.0000 mL		5/20/04 8:00	LSC3170	Ni-59:	0.00	6/4/04 18:23		0.000E+000	pCi/L	0.000E+000	9.382E+000
GGTFX1AD	1.00	2.00	0.98	30.00		1.09	1.0000				0.000E+000	4.260E+000
					Ni-63:	5.91			-1.211E+001	pCi/L	1.773E+001	1.905E+001
						8.49	0.9997				1.769E+001	8.956E+000
D4E210325-009	100.0000 mL		5/20/04 9:10	LSC3170	Ni-59:	0.00	6/4/04 18:53		0.000E+000	pCi/L	0.000E+000	9.615E+000
GGTF31AD	1.00	2.00	1.01	30.00		1.09	1.0000				0.000E+000	4.366E+000
					Ni-63:	6.99			-6.914E+000	pCi/L	3.853E+001	1.873E+001
						8.49	0.9997				3.852E+001	8.804E+000
F4F020000-153B	100.0000 mL		5/18/04 13:42	LSC3170	Ni-59:	0.00	6/4/04 10:40		0.000E+000	pCi/L	0.000E+000	1.189E+001
GHFEW1AA	1.00	2.00	0.83	30.00		1.09	1.0000				0.000E+000	5.401E+000
					Ni-63:	6.54			-1.093E+001	pCi/L	2.863E+001	2.267E+001
						8.49	0.9997				2.861E+001	1.066E+001
F4F020000-153C	100.0000 mL		5/18/04 13:42	LSC3170	Ni-59:	396.64	6/4/04 11:11		1.946E+003	pCi/L	1.984E+002	1.043E+001
GHFEW1AC	1.00	2.00	0.94	30.00		1.09	1.0000				3.878E+001	4.738E+000
					Ni-63:	398.86			1.916E+003	pCi/L	2.004E+002	1.989E+001
						8.49	0.9997				5.879E+001	9.350E+000

Sample Information				Count Information			Results	
Sample ID	Aliquot		Sample Date/Time	Instrument	SampDPM	RunDateTime	Activity	UncTotal	MDA
Work Order #	DilFactor	Sigma	Tracer Yield	Duration	Bkg DPM	Decay		UncCount	DLC

Laboratory Control Sample Information

SampID	WRKNO	ComponentName	Activity	StdAdded	Recovery
F4F020000-153C	GHFEW1AC	Ni-63	1.916E+003pCi/L	1.934E+003pCi/L	99.09%
F4F020000-153C	GHFEW1AC	Ni-59	1.946E+003pCi/L	2.051E+003pCi/L	94.90%

Sample Duplicate Information

Sample ID	Dup Sample ID		Sample Activity	Dup Activity	RPD	RER
D4E210325-001S	D4E210325-001D	*Ni-59:*	2.094E+003pCi/L	1.967E+003pCi/L	6.25%	3.061E-001
		Ni-63:	1.995E+003pCi/L	1.749E+003pCi/L	13.18%	6.265E-001

Matrix Spike Information

SampID	SampMSID	Sample Activity	MS Activity	StdAdded	MSRecovery
D4E210325-001	D4E210325-001D	-1.083E+001 pCi/L	1.749E+003 pCi/L	1.934E+003	90.43%
D4E210325-001	D4E210325-001D	0.000E+000 pCi/L	1.752E+003 pCi/L	2.051E+003	85.43%
D4E210325-001	D4E210325-001S	-1.083E+001 pCi/L	1.995E+003 pCi/L	1.934E+003	103.19%
D4E210325-001	D4E210325-001S	0.000E+000 pCi/L	2.094E+003 pCi/L	2.051E+003	102.10%

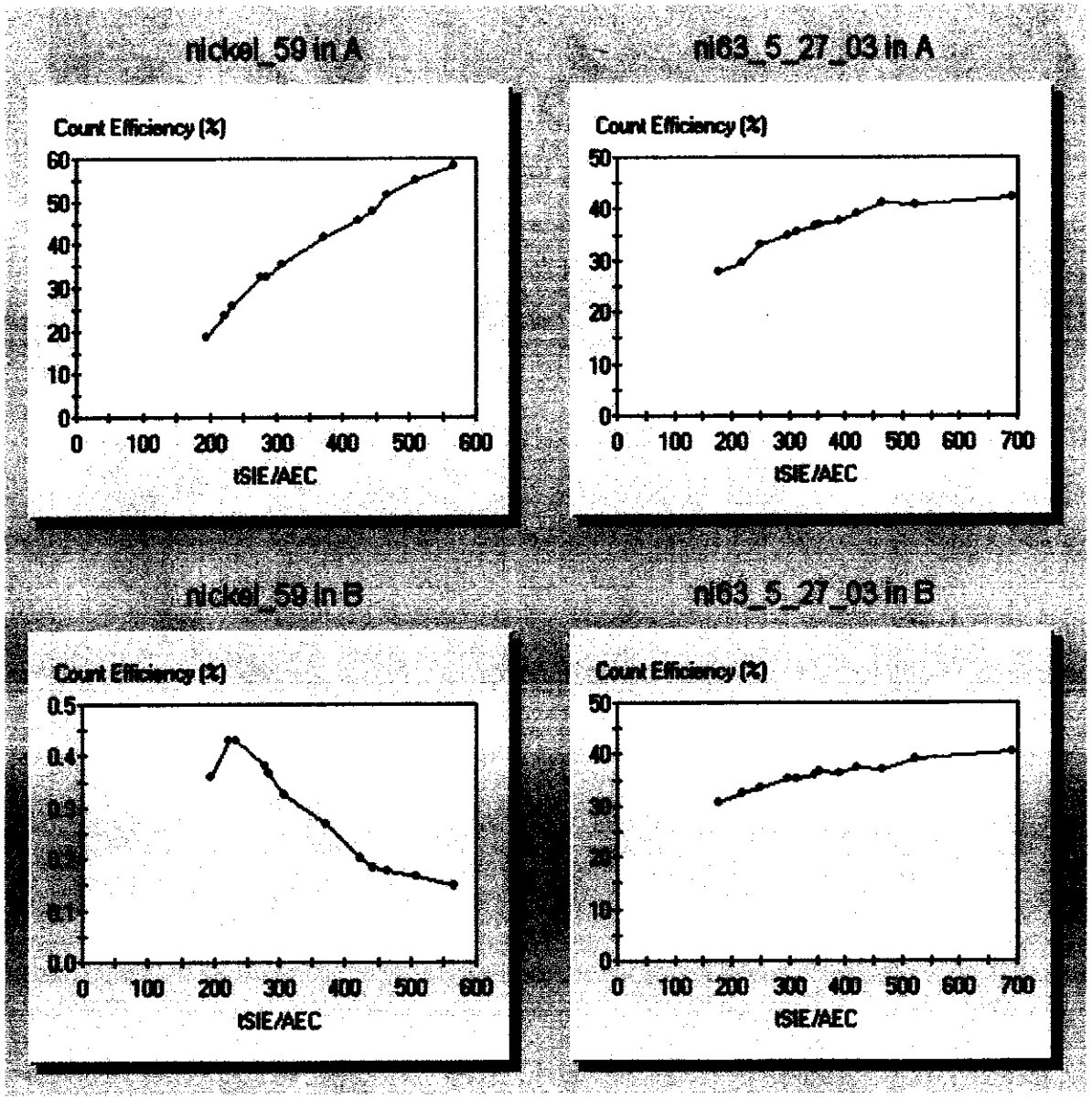
SEVERN TRENT STL

QUENCH CURVE

Ni-59,63

3170

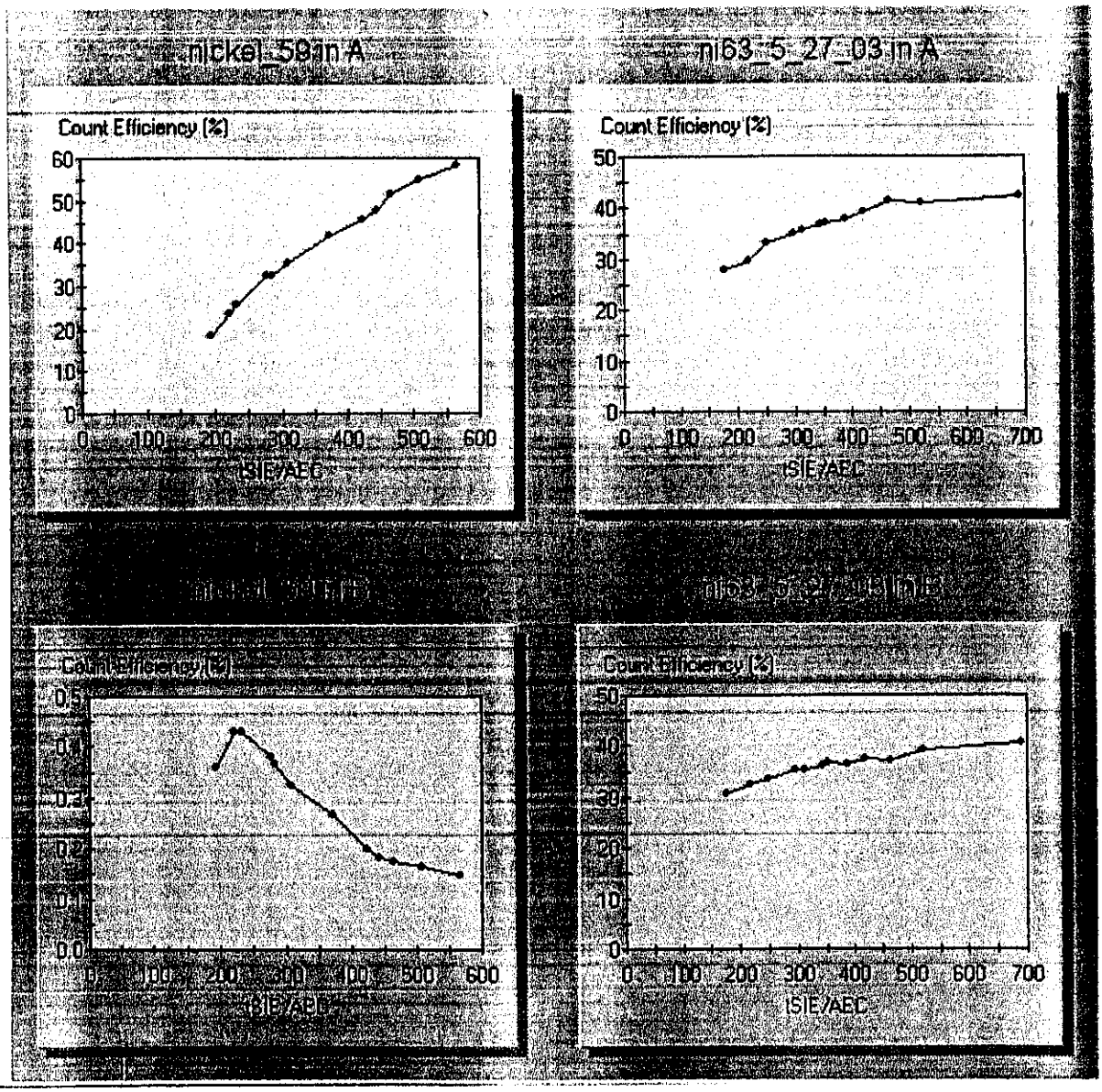
Expires 05-26-04



Date Acquired: 06/02/2003
Date Modified: 08/04/2003

Date Acquired: 05/27/2003
Date Modified: 08/04/2003

Cycle 1 Results
Quench Curve Block Data



Date Acquired: 06/02/2003
Date Modified: 08/04/2003
nickel_59 in A

tSIE/AEC	Count Efficiency (%)
566.40	58.24
510.45	54.96
465.72	51.65
444.20	47.67
424.67	45.62
371.94	42.00
308.62	35.66
283.92	32.51
277.62	32.49

Date Acquired: 05/27/2003
Date Modified: 08/04/2003
ni63_5_27_03 in A

tSIE/AEC	Count Efficiency (%)
691.39	42.38
521.83	40.95
464.64	41.33
420.88	38.97
390.85	37.51
355.79	36.93
344.90	36.68
313.76	35.43
297.06	34.74

234.20	25.74	250.65	33.03
222.92	23.82	219.95	29.65
194.19	18.41	176.97	27.81

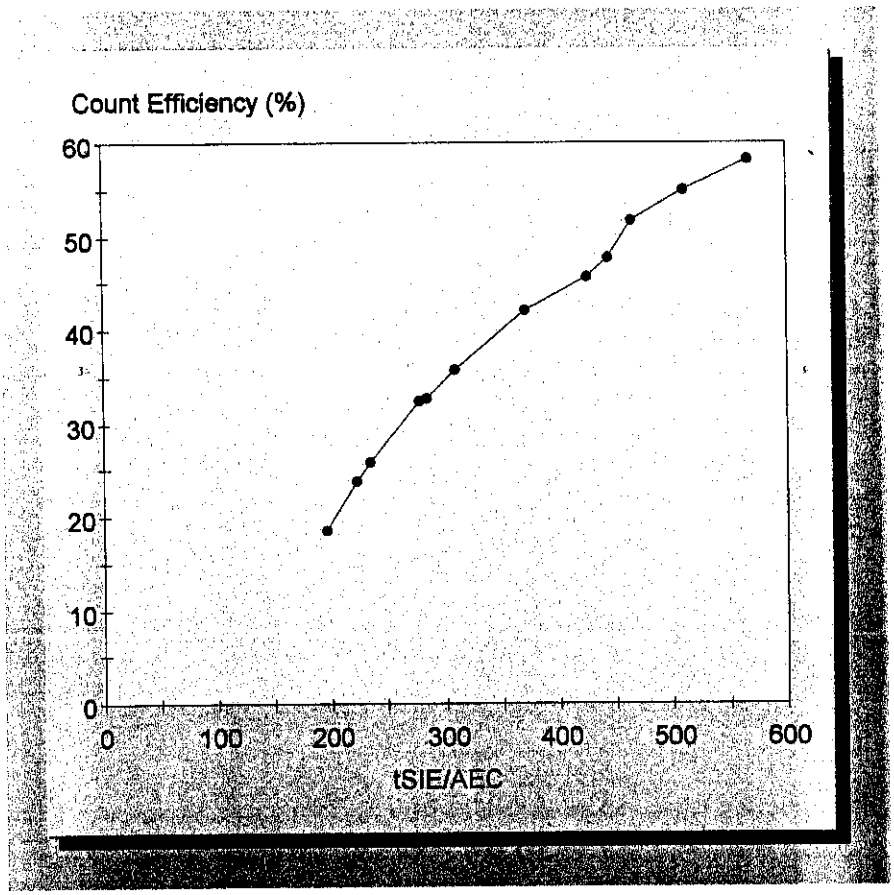
nickel_59 in B

tSIE/AEC	Count Efficiency (%)
566.40	0.15
510.45	0.17
465.72	0.17
444.20	0.18
424.67	0.20
371.94	0.27
308.62	0.32
283.92	0.37
277.62	0.38
234.20	0.43
222.92	0.43
194.19	0.36

ni63_5_27_03 in B

tSIE/AEC	Count Efficiency (%)
691.39	40.55
521.83	39.18
464.64	37.14
420.88	37.36
390.85	36.20
355.79	36.71
344.90	35.99
313.76	35.20
297.06	35.19
250.65	33.58
219.95	32.47
176.97	30.64

Quench Curve - nickel_59

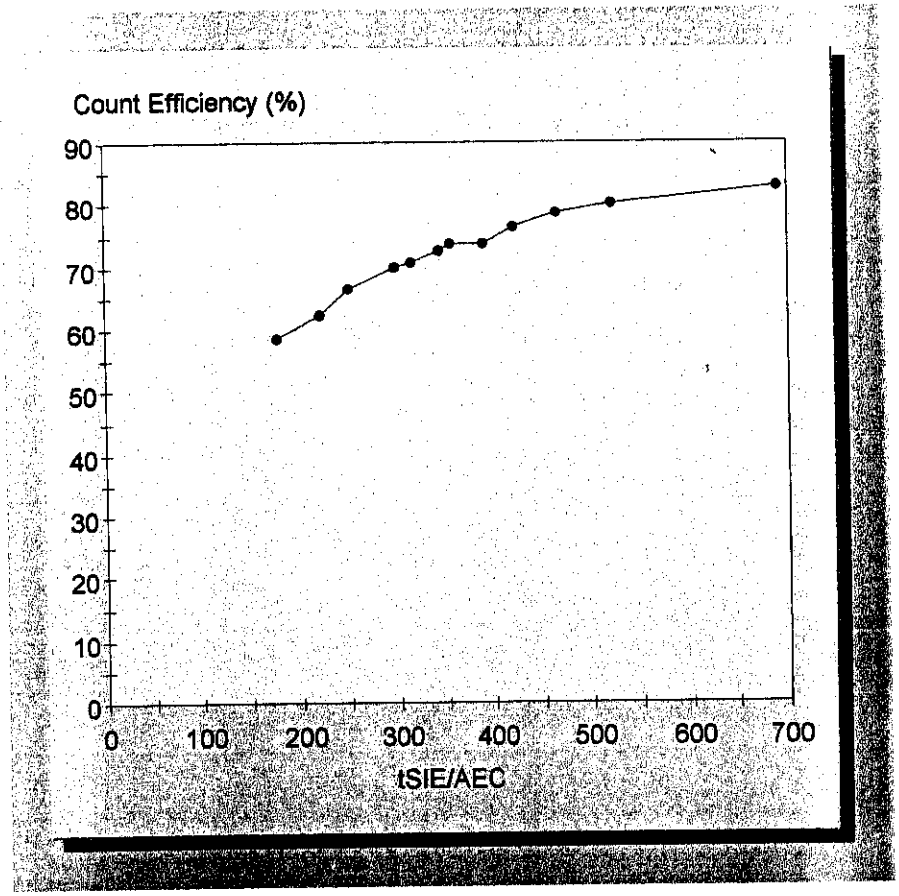


Last Edit Date: 06/03/2003

Quench Indicator: tSIE/AEC

Included	tSIE/AEC	Count Efficiency (%)
Yes	194.19	18.44
Yes	222.92	23.85
Yes	234.20	25.78
Yes	277.62	32.53
Yes	283.92	32.54
Yes	308.62	35.70
Yes	371.94	42.05
Yes	424.67	45.65
Yes	444.20	47.70
Yes	465.72	51.69
Yes	510.45	55.01
Yes	566.40	58.28

Quench Curve - ni63_5_27_03



Last Edit Date: 07/25/2003

Quench Indicator: tSIE/AEC

Included	tSIE/AEC	Count Efficiency (%)
Yes	176.97	58.48
Yes	219.95	62.15
Yes	250.65	66.64
Yes	297.06	69.96
Yes	313.76	70.66
Yes	344.90	72.70
Yes	355.79	73.68
Yes	390.85	73.75
Yes	420.88	76.37
Yes	464.64	78.50
Yes	521.83	80.17
Yes	691.39	82.97

Table: Quench Curve for Ni-59,Ni63

Vial#	Ultima a/b mL	D.I. Water mL	3N HNO3 mL	Tea drops	Nitrometh mL
1	19	3			
2	20	2			
3	21	1			
4	19		3		
5	20		2		
6	21		1		
8	19		1.5		1.5
9	19		3	1	
10	19		2.5	3	
11	19		2	6	
12	19		2	10	
7	Background				

Ni-59 standard used is 03-022 2,276.4
Ni-63 standard used is 03-032 21,643.4 dpm/mL
0.1 mL of Ni-59,Ni-63 added to all standards
Fischer brand disposable pipette used to determine drop

8/2/03

Name: Benjamin J. Adams

nickel_59 in A

tSIE/AEC	Count Efficiency (%)
566.40	58.24
510.45	54.96
465.72	51.65
444.20	47.67
424.67	45.62
371.94	42.00
308.62	35.66
283.92	32.51
277.62	32.49
234.20	25.74
222.92	23.82
194.19	18.41

ni63_5_27_03 in A

tSIE/AEC	Count Efficiency (%)
691.39	42.38
521.83	40.95
464.64	41.33
420.88	38.97
390.85	37.51
355.79	36.93
344.90	36.68
313.76	35.43
297.06	34.74
250.65	33.03
219.95	29.65
176.97	27.81

nickel_59 in B

tSIE/AEC	Count Efficiency (%)
566.40	0.15
510.45	0.17
465.72	0.17
444.20	0.18
424.67	0.20
371.94	0.27
308.62	0.32
283.92	0.37
277.62	0.38
234.20	0.43
222.92	0.43
194.19	0.36

ni63_5_27_03 in B

tSIE/AEC	Count Efficiency (%)
691.39	40.55
521.83	39.18
464.64	37.14
420.88	37.36
390.85	36.20
355.79	36.71
344.90	35.99
313.76	35.20
297.06	35.19
250.65	33.58
219.95	32.47
176.97	30.64

S#	SMPL_ID	C. T.	CPMA	CPMB	DPM1	DPM2	TIME	DATE	Eff1A	Eff1B	Eff2A	Eff2B	tSIE	LUM	NOTE
1	BKG	30	1.0937e+000	2.7542e+000	0.0000e+000	8.4883e+000	10:09:23 AM	6/4/04	24.6	0.4	30.5	32.8	227.71	18	
2	F4F020000-153B	30	1.8635e+000	2.4365e+000	0.0000e+000	6.5358e+000	10:40:16 AM	6/4/04	46.0	0.2	39.4	37.3	428.30	18	
3	F4F020000-153C	30	3.3899e+002	1.4968e+002	3.9664e+002	3.9886e+002	11:11:06 AM	6/4/04	45.9	0.2	39.3	37.3	427.54	0	
4	D4E190262-001	30	1.4960e+000	3.1264e+000	0.0000e+000	8.4260e+000	11:41:57 AM	6/4/04	49.6	0.2	40.8	37.2	454.80	16	
5	D4E190262-002	30	1.6579e+000	1.8087e+000	0.0000e+000	4.9025e+000	12:12:47 PM	6/4/04	44.6	0.2	38.4	36.9	409.32	21	

6	D4E190262-003	30	2.4342e+000	2.4489e+000	0.0000e+000	6.5732e+000	12:43:37 PM	6/4/04	47.2	0.2	40.0
37.3	439.44	14									
7	D4E190262-004	30	1.9165e+000	2.0501e+000	0.0000e+000	5.5039e+000	1:14:27 PM	6/4/04	47.1	0.2	40.0
37.3	439.12	17									
8	D4E190262-005	30	1.8534e+000	2.1133e+000	0.0000e+000	5.6678e+000	1:45:18 PM	6/4/04	46.2	0.2	39.5
37.3	430.57	18									
9	D4E210325-001	30	2.0699e+000	2.4301e+000	0.0000e+000	6.5102e+000	2:16:09 PM	6/4/04	45.4	0.2	39.0
37.4	421.77	15									
10	D4E210325-001D	30	3.0422e+002	1.3185e+002	3.4442e+002	3.5215e+002	2:46:59 PM	6/4/04	47.4	0.2	40.1
37.3	441.27	0									
11	D4E210325-001S	30	3.1645e+002	1.3401e+002	3.6665e+002	3.5779e+002	3:17:49 PM	6/4/04	47.3	0.2	40.0
37.3	440.31	0									
12	D4E210325-002	30	2.3133e+000	1.5385e+000	1.5036e+000	4.1142e+000	3:48:41 PM	6/4/04	46.0	0.2	39.4
37.3	428.79	19									
13	D4E210325-003	30	1.7315e+000	1.9018e+000	0.0000e+000	5.1051e+000	4:19:36 PM	6/4/04	47.0	0.2	39.9
37.3	437.60	19									
14	D4E210325-004	30	1.6257e+000	2.4077e+000	0.0000e+000	6.5463e+000	4:50:26 PM	6/4/04	44.4	0.2	38.3
36.8	407.52	17									
15	D4E210325-005	30	2.5192e+000	2.5474e+000	0.0000e+000	6.8500e+000	5:21:17 PM	6/4/04	49.1	0.2	40.6
37.2	451.88	13									
16	D4E210325-006	30	1.9824e+000	2.4176e+000	0.0000e+000	6.4780e+000	5:52:08 PM	6/4/04	45.3	0.2	39.0
37.4	420.71	16									
17	D4E210325-008	30	1.9451e+000	2.1978e+000	0.0000e+000	5.9119e+000	6:23:00 PM	6/4/04	49.0	0.2	40.6
37.2	451.59	19									
18	D4E210325-009	30	1.8188e+000	2.6025e+000	0.0000e+000	6.9921e+000	6:53:51 PM	6/4/04	47.0	0.2	39.9
37.3	437.83	16									

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	CALBLK	O602IE2	MULTI_E	06/02/04	18:32		X	IR
2	SLOW	O602IE2	MULTI_E	06/02/04	18:36		X	IR
3	SMED	O602IE2	MULTI_E	06/02/04	18:40		X	IR
4	SHIGH	O602IE2	MULTI_E	06/02/04	18:44		X	IR
5	CAL1	O602IE2	MULTI_E	06/02/04	18:48		X	IR
6	SLOW2	O602IE2	MULTI_E	06/02/04	18:52		X	IR
7	SMED2	O602IE2	MULTI_E	06/02/04	18:56		X	IR
8	SHIGH2	O602IE2	MULTI_E	06/02/04	19:00		X	IR
9	CAL2	O602IE2	MULTI_E	06/02/04	19:03		X	IR
10	ICV	O602IE2	MULTI_E	06/02/04	19:07	STL	Q	CONC
11	ICB	O602IE2	MULTI_E	06/02/04	19:11	STL	Q	CONC
12	CCV	O602IE2	MULTI_E	06/02/04	19:16	STL	Q	CONC
13	CCB	O602IE2	MULTI_E	06/02/04	19:20	STL	Q	CONC
14	CRI	O602IE2	MULTI_E	06/02/04	19:24	STL	Q	CONC
15	ICSA	O602IE2	MULTI_E	06/02/04	19:29	STL	Q	CONC
16	ICSAB	O602IE2	MULTI_E	06/02/04	19:33	STL	Q	CONC
17	CCV	O602IE2	MULTI_E	06/02/04	19:41	STL	Q	CONC
18	CCB	O602IE2	MULTI_E	06/02/04	19:45	STL	Q	CONC
19	CCV	O602IE2	MULTI_E	06/02/04	20:09	STL	Q	CONC
20	CCB	O602IE2	MULTI_E	06/02/04	20:14	STL	Q	CONC
21	GGM8DV 5X	O602IE2	MULTI_E	06/02/04	20:18	STL	S	CONC
22	GHEQNB	O602IE2	MULTI_E	06/02/04	20:22	STL	S	CONC
23	GHEQNC	O602IE2	MULTI_E	06/02/04	20:27	STL	S	CONC
24	GG3GLF	O602IE2	MULTI_E	06/02/04	20:31	STL	S	CONC
25	GG3GL	O602IE2	MULTI_E	06/02/04	20:36	STL	S	CONC
26	GG3GLS	O602IE2	MULTI_E	06/02/04	20:40	STL	S	CONC
27	GG3GLD	O602IE2	MULTI_E	06/02/04	20:44	STL	S	CONC
28	GG3GLV 5X	O602IE2	MULTI_E	06/02/04	20:49	STL	S	CONC
29	GG38JF	O602IE2	MULTI_E	06/02/04	20:53	STL	S	CONC
30	GG38J	O602IE2	MULTI_E	06/02/04	20:57	STL	S	CONC
31	CCV	O602IE2	MULTI_E	06/02/04	21:02	STL	Q	CONC
32	CCB	O602IE2	MULTI_E	06/02/04	21:06	STL	Q	CONC
33	GG39HF	O602IE2	MULTI_E	06/02/04	21:12	STL	S	CONC
34	GG39H	O602IE2	MULTI_E	06/02/04	21:17	STL	S	CONC
35	GG6N6	O602IE2	MULTI_E	06/02/04	21:21	STL	S	CONC
36	GG6PJ	O602IE2	MULTI_E	06/02/04	21:25	STL	S	CONC
37	GG6PL	O602IE2	MULTI_E	06/02/04	21:30	STL	S	CONC
38	GG6PP	O602IE2	MULTI_E	06/02/04	21:34	STL	S	CONC
39	GG6PR	O602IE2	MULTI_E	06/02/04	21:38	STL	S	CONC
40	GG66A	O602IE2	MULTI_E	06/02/04	21:43	STL	S	CONC
41	GG812 5x	O602IE2	MULTI_E	06/02/04	21:47	STL	S	CONC
42	GG82E	O602IE2	MULTI_E	06/02/04	21:52	STL	S	CONC
43	CCV	O602IE2	MULTI_E	06/02/04	21:56	STL	Q	CONC
44	CCB	O602IE2	MULTI_E	06/02/04	22:00	STL	Q	CONC
45	GG82F	O602IE2	MULTI_E	06/02/04	22:05	STL	S	CONC
46	GG850	O602IE2	MULTI_E	06/02/04	22:09	STL	S	CONC
47	GG858	O602IE2	MULTI_E	06/02/04	22:13	STL	S	CONC
48	GHARJ	O602IE2	MULTI_E	06/02/04	22:18	STL	S	CONC
49	GHDK8B	O602IE2	MULTI_E	06/02/04	22:22	STL	S	CONC
50	GHDK8C	O602IE2	MULTI_E	06/02/04	22:26	STL	S	CONC
51	GHDK8	O602IE2	MULTI_E	06/02/04	22:31	STL	S	CONC
52	GG8W4	O602IE2	MULTI_E	06/02/04	22:35	STL	S	CONC
53	GG810	O602IE2	MULTI_E	06/02/04	22:39	STL	S	CONC

JB 6/8/04 STD 060704

Analysis Report Summary 6/8 06/08/04 03:27:55 PM page 1

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	CALBLK	O608IE1	MULTI_E	06/08/04	09:29		X	IR
2	SLOW	O608IE1	MULTI_E	06/08/04	09:33		X	IR
3	SMED	O608IE1	MULTI_E	06/08/04	09:37		X	IR
4	SHIGH	O608IE1	MULTI_E	06/08/04	09:42		X	IR
5	CAL1	O608IE1	MULTI_E	06/08/04	09:46		X	IR
6	SLOW2	O608IE1	MULTI_E	06/08/04	09:50		X	IR
7	SMED2	O608IE1	MULTI_E	06/08/04	09:54		X	IR
8	SHIGH2	O608IE1	MULTI_E	06/08/04	09:57		X	IR
9	CAL2	O608IE1	MULTI_E	06/08/04	10:01		X	IR
10	ICV	O608IE1	MULTI_E	06/08/04	10:04	STL	Q	CONC
11	ICB	O608IE1	MULTI_E	06/08/04	10:09	STL	Q	CONC
12	CCV	O608IE1	MULTI_E	06/08/04	10:13	STL	Q	CONC
13	CCB	O608IE1	MULTI_E	06/08/04	10:18	STL	Q	CONC
14	CRI	O608IE1	MULTI_E	06/08/04	10:22	STL	Q	CONC
15	ICSA	O608IE1	MULTI_E	06/08/04	10:26	STL	Q	CONC
16	ICSAB	O608IE1	MULTI_E	06/08/04	10:31	STL	Q	CONC
17	GG7AF 5X	O608IE1	MULTI_E	06/08/04	10:41	STL	S	CONC
18	GF6XM 5X	O608IE1	MULTI_E	06/08/04	10:45	STL	S	CONC
19	CCV	O608IE1	MULTI_E	06/08/04	10:49	STL	Q	CONC
20	CCB	O608IE1	MULTI_E	06/08/04	10:54	STL	Q	CONC
21	GHLXNB	O608IE1	MULTI_E	06/08/04	11:16	STL	S	CONC
22	GHLXNC	O608IE1	MULTI_E	06/08/04	11:21	STL	S	CONC
23	GHJEA	O608IE1	MULTI_E	06/08/04	11:25	STL	S	CONC
24	GHJEAX	O608IE1	MULTI_E	06/08/04	11:29	STL	S	CONC
25	GHJEAS	O608IE1	MULTI_E	06/08/04	11:34	STL	S	CONC
26	GHJEAV 5X	O608IE1	MULTI_E	06/08/04	11:38	STL	S	CONC
27	GHJEQ	O608IE1	MULTI_E	06/08/04	11:42	STL	S	CONC
28	GHJET	O608IE1	MULTI_E	06/08/04	11:47	STL	S	CONC
29	GHJEX	O608IE1	MULTI_E	06/08/04	11:51	STL	S	CONC
30	GHJE0	O608IE1	MULTI_E	06/08/04	11:55	STL	S	CONC
31	CCV	O608IE1	MULTI_E	06/08/04	12:00	STL	Q	CONC
32	CCB	O608IE1	MULTI_E	06/08/04	12:04	STL	Q	CONC
33	GHJE1	O608IE1	MULTI_E	06/08/04	12:08	STL	S	CONC
34	GHJE3	O608IE1	MULTI_E	06/08/04	12:13	STL	S	CONC
35	GHJE5	O608IE1	MULTI_E	06/08/04	12:22	STL	S	CONC
36	GHJE7	O608IE1	MULTI_E	06/08/04	12:26	STL	S	CONC
37	GHJE8	O608IE1	MULTI_E	06/08/04	12:31	STL	S	CONC
38	GHJFA	O608IE1	MULTI_E	06/08/04	12:35	STL	S	CONC
39	GHJFC	O608IE1	MULTI_E	06/08/04	12:39	STL	S	CONC
40	GHJFD	O608IE1	MULTI_E	06/08/04	12:44	STL	S	CONC
41	GHJFF	O608IE1	MULTI_E	06/08/04	12:48	STL	S	CONC
42	GHJFH	O608IE1	MULTI_E	06/08/04	12:52	STL	S	CONC
43	CCV	O608IE1	MULTI_E	06/08/04	12:57	STL	Q	CONC
44	CCB	O608IE1	MULTI_E	06/08/04	13:01	STL	Q	CONC
45	GHJFJ	O608IE1	MULTI_E	06/08/04	13:05	STL	S	CONC
46	BLANK NI	O608IE1	MULTI_E	06/08/04	13:10	STL	S	CONC
47	LCS NI	O608IE1	MULTI_E	06/08/04	13:14	STL	S	CONC
48	262-1 NI	O608IE1	MULTI_E	06/08/04	13:18	STL	S	CONC
49	262-2 NI	O608IE1	MULTI_E	06/08/04	13:23	STL	S	CONC
50	262-3 NI	O608IE1	MULTI_E	06/08/04	13:27	STL	S	CONC
51	262-4 NI	O608IE1	MULTI_E	06/08/04	13:32	STL	S	CONC
52	325-1 NI	O608IE1	MULTI_E	06/08/04	13:36	STL	S	CONC
53	325-1S NI	O608IE1	MULTI_E	06/08/04	13:40	STL	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	325-1D NI	O608IE1	MULTI_E	06/08/04	13:45	STL	S	CONC
55	CCV	O608IE1	MULTI_E	06/08/04	13:49	STL	Q	CONC
56	CCB	O608IE1	MULTI_E	06/08/04	13:53	STL	Q	CONC
57	325-2 NI	O608IE1	MULTI_E	06/08/04	13:58	STL	S	CONC
58	325-3 NI	O608IE1	MULTI_E	06/08/04	14:02	STL	S	CONC
59	325-4 NI	O608IE1	MULTI_E	06/08/04	14:08	STL	S	CONC
60	325-5 NI	O608IE1	MULTI_E	06/08/04	14:13	STL	S	CONC
61	325-6 NI	O608IE1	MULTI_E	06/08/04	14:17	STL	S	CONC
62	325-8 NI	O608IE1	MULTI_E	06/08/04	14:21	STL	S	CONC
63	325-9 NI	O608IE1	MULTI_E	06/08/04	14:26	STL	S	CONC
64	CCB	O608IE1	MULTI_E	06/08/04	14:30	STL	Q	CONC
65	CCB	O608IE1	MULTI_E	06/08/04	14:34	STL	Q	CONC
66	CCV	O608IE1	MULTI_E	06/08/04	15:06	STL	Q	CONC
67	325-9 NI	O608IE1	MULTI_E	06/08/04	15:11	STL	S	CONC
68	CCV	O608IE1	MULTI_E	06/08/04	15:15	STL	Q	CONC
69	CCB	O608IE1	MULTI_E	06/08/04	15:20	STL	Q	CONC

#	Sample Name	Ni
1	CALBLK	.00769
2	SLOW	.1516
3	SMED	.7416
4	SHIGH	1.4914
5	CAL1	14.2024
6	SLOW2	
7	SMED2	
8	SHIGH2	
9	CAL2	
10	ICV	4.8024
11	ICB	-.00152
12	CCV	3.8836
13	CCB	.00034
14	CRI	.07607
15	ICSA	.00262
16	ICSAB	.79567
17	GG7AF 5X	.03403
18	GF6XM 5X	.01550
19	CCV	3.8495
20	CCB	-.00020
21	GHLXNB	L-.00281
22	GHLXNC	L.49740
23	GHJEA	-.00100
24	GHJEAX	-.00130
25	GHJEAS	.23676
26	GHJEAV 5X	-.00060
27	GHJEQ	-.00618
28	GHJET	-.00190
29	GHJEX	.00000
30	GHJE0	-.00466
31	CCV	3.8498
32	CCB	-.00082
33	GHJE1	.00042
34	GHJE3	-.00625
35	GHJE5	.03154
36	GHJE7	.01633
37	GHJE8	.00635
38	GHJFA	.05714
39	GHJFC	.04483
40	GHJFD	.02596
41	GHJFF	-.00286
42	GHJFH	.01406
43	CCV	3.8656
44	CCB	-.00007
45	GHJFJ	.01950
46	BLANK NI	1.4716
47	LCS NI	1.6299
48	262-1 NI	1.4141
49	262-2 NI	1.5211
50	262-3 NI	1.5400
51	262-4 NI	1.5156
52	~~325-1 NI~~ 262-5 NI	1.4998
53	~~325-1S NI~~ 325-1 NI	1.4357

JB 6/8/04

#	Sample Name	Ni
54	~~325-1D NI~~ 325-1S NI	1.3885
55	CCV	3.8268
56	CCB	.00042
57	~~325-2 NI~~ 325-1D NI	1.5246
58	325-3 NI 325-2	1.5534
59	325-4 NI 325-3	1.5991
60	325-5 NI 325-4	1.5965
61	325-6 NI 325-5	1.4214
62	325-8 NI 325-6	1.6200
63	~~325-9 NI~~ 325-8	1.6499
64	CCB	.00035
65	CCB	~~-.00027~~ JB 6/8/04 Autosampler error.
66	CCV	3.8160
67	325-9 NI	1.7039
68	CCV	3.7973
69	CCB	-.00075

SEVERN TRENT STL

RUN LOG

Instrument: 3170 Logbook No.: 2489

STL
St. Louis Laboratory

Liquid Scintillation Counter Runlog

Date	Batch #	Sample #	Protocol	Position	Count Time	Analysis	Initials
6-3-4	415415	B Kg	25	1	15 min	14.3	—
		F4F020000-115B		2			
		-115C		3			
		F4E210103-001		4			
		-002		5			
		-0020		6			
		-0025		7			
		F4E210104-001		8			
		-002		9			
		-003		10			
		F4E210282-001		11			
		-002		12			
		-003		13			
		-004		14			
		-005		15			
		-006		16			
		F4E210292-001		17			
		-002		18			
		-003		19			
		-004		20			
		F4E210297-001		21			
		-002		22			
6-4-4	Dual B	KG + Source	—	—	60 min BKG	RAL	—
6/4/04	415453	Blood	5	1	30 min	RENI	RR
		F4F020000-153B		2		dilution pe	
		-153C		3			
		F4E190242-001		4			
		-002		5			

Reviewed By: RR Date: 6/4/04

Form: SL-RAD-0027, revised 7/16/03; SOP Reference: STL-RD-0302, current revision
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Instrument: 3170 Logbook No.: 2489

STL
St. Louis Laboratory

Liquid Scintillation Counter Runlog

Date	Batch #	Sample #	Protocol	Position	Count Time	Analysis	Initials
6/4	4154153	D4E190262-003	5	6	30min	Ni	RK
		-004		7			
		-005		8			
		D4E210325-001		9			
		-001S		10			
		-001D		11			
		-002		12			
		-003		13			
		-004		14			
		-005		15			
		-006		16			
		-008		17			
		-009		18			
6/4/04	4155125	Bkgd	22	1	20min	H3	RK
		F4P030000-125B		2			
		-125C		3			
		F4E250252-001		4			
		-002		5			
		-003		6			
		-004		7			
		F4E250272-001		8			
		-002		9			
		F4E250305-001		10			
		-002		11			
		-003		12			
		-004		13			
		F4E260317-001		14			
		-001S		15			

Reviewed By: RR Date: 6/4/04

Form: SL-RAD-0027, revised 7/16/03; SOP Reference: STL-RD-0302, current revision
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Sample ID	WRKNO	Sample Aliquot	Dilution Factor	Digestion Volume	Elution Volume	Tracer Split Initial	Tracer Split Final	Tracer Conc. Initial	Tracer Conc. Final	Sample Date/Time
D4E190262-001	GGJX41AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6969 mg/L	1.4141 mg/L	5/18/04 13:42
D4E190262-002	GGJX61AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6894 mg/L	1.5211 mg/L	5/18/04 15:30
D4E190262-003	GGJX81AC	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.7102 mg/L	1.5400 mg/L	5/18/04 16:00
D4E190262-004	GGJX91AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6947 mg/L	1.5156 mg/L	5/18/04 17:00
D4E190262-005	GGJ0A1AC	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6821 mg/L	1.4998 mg/L	5/18/04 17:00
D4E210325-001	GGTEE1AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6801 mg/L	1.4357 mg/L	5/19/04 10:25
D4E210325-001D	GGTEE1AK	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6714 mg/L	1.5246 mg/L	5/19/04 10:25
D4E210325-001S	GGTEE1AJ	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6865 mg/L	1.3885 mg/L	5/19/04 10:25
D4E210325-002	GGTE31AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6738 mg/L	1.5534 mg/L	5/19/04 10:30
D4E210325-003	GGTE61AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6906 mg/L	1.5991 mg/L	5/19/04 13:30
D4E210325-004	GGTE71AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6901 mg/L	1.5965 mg/L	5/19/04 13:35
D4E210325-005	GGTFE1AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6730 mg/L	1.4214 mg/L	5/19/04 16:00
D4E210325-006	GGTFH1AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6886 mg/L	1.6200 mg/L	5/19/04 16:00
D4E210325-008	GGTFX1AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6714 mg/L	1.6499 mg/L	5/20/04 8:00
D4E210325-009	GGTF31AD	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6779 mg/L	1.7039 mg/L	5/20/04 9:10
F4F020000-153B	GHFEW1AA	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.7127 mg/L	1.4716 mg/L	5/18/04 13:42
F4F020000-153C	GHFEW1AC	100.0000 mL	1.00	100.00 mL	4.00 mL	1.00 mL	0.10 mL	0.6924 mg/L	1.6299 mg/L	5/18/04 13:42

Spike Information

Sample ID	Standard ID	Analyte	Std Conc	Aliquot	Ref Date	StdAdded
F4F020000-153C	03-058	Ni-63	4.329E+002dpm/mL	1.00mL	3/1/03 0:00	1.934E+003pCi/L
F4F020000-153C	03-059	Ni-59	4.553E+002dpm/mL	1.00mL	2/10/03 0:00	2.051E+003pCi/L

Spiked By

Spike Verified By

6/4/04
Spike Date

Sample ID	WRKNO	Sample Aliquot	Dilution Factor	Digestion Volume	Elution Volume	Tracer Split Initial	Tracer Split Final	Tracer Conc. Initial	Tracer Conc. Final	Sample Date/Time

Standard Operating Procedures

	SOPNumber	Title	Revision
☑	STL-RC-0003	Drying And Grinding Of Soil And Solid Samples	5.00
☐	STL-RC-0004	Preparation Of Soil, Sludge, And Filter Paper Samples For Radiochemical Analysis	7.00
☑	STL-RC-0055	Determination of Iron-55, Nickel-59 and Nickel-63 by Liquid Scintillation Spectrometry	0.00
☐	STL-RD-0302	Operation and Calibration of a Liquid Scintillation Counter	2.00

RR — Reviewed By; 6/8/04 — Review Date

Analyst/Relenquished By; 6/8/04 — Release Date; ER — Received By; 6/8/04 — Receipt Date

SEVERN TRENT STL

Instrument Checks

SNC Protocol

Calibration Information
Software Version IC: 2.11
Software Version EC: 1.31
Instrument Model: Tri-Carb 3170TR/SL
Instrument Serial Number: 429670
3H Chi Square: 27.55 Date Processed: 2/27/04 1:05:43 PM
14C Chi Square: 22.31 Date Processed: 2/27/04 1:05:43 PM
3H E^2/B (1-18.6 keV): 1550.43 Date Processed: 6/3/04 3:46:47 AM
14C E^2/B (4-156 keV): 7666.22 Date Processed: 6/3/04 3:46:47 AM
3H Efficiency (0-18.6 keV): 63.17 Date Processed: 6/3/04 3:46:47 AM
14C Efficiency (0-156 keV): 95.78 Date Processed: 6/3/04 3:46:47 AM
IPA Background Date Processed: 6/3/04 3:46:47 AM
3H Background CPM (0-18.6 keV): 2.81 Date Processed: 6/3/04 3:46:47 AM
14C Background CPM (0-156 keV): 3.06 Date Processed: 6/3/04 3:46:47 AM
3H Calibration DPM: 280500
3H Reference Date: 6/4/02
14C Calibration DPM: 120600

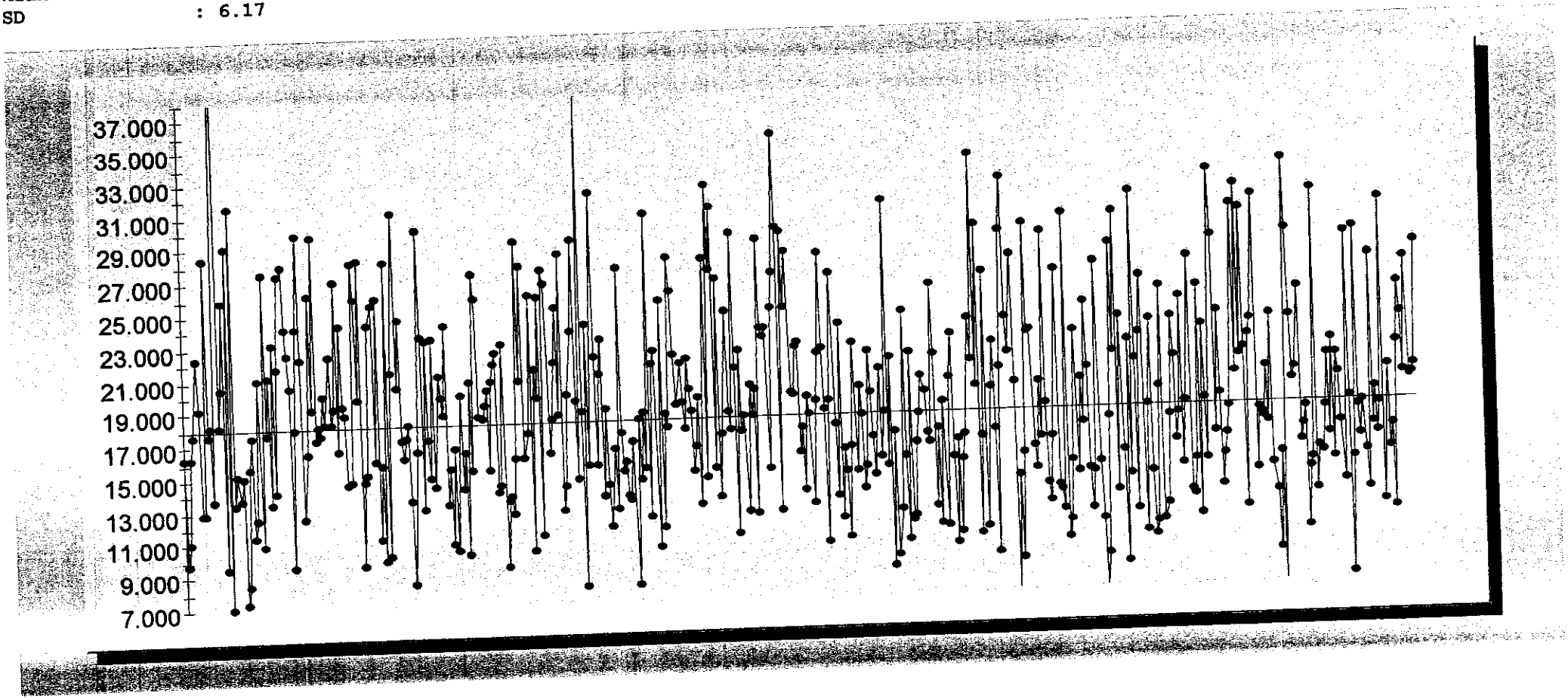
SEVERN TRENT STL

LSC Instrument Check

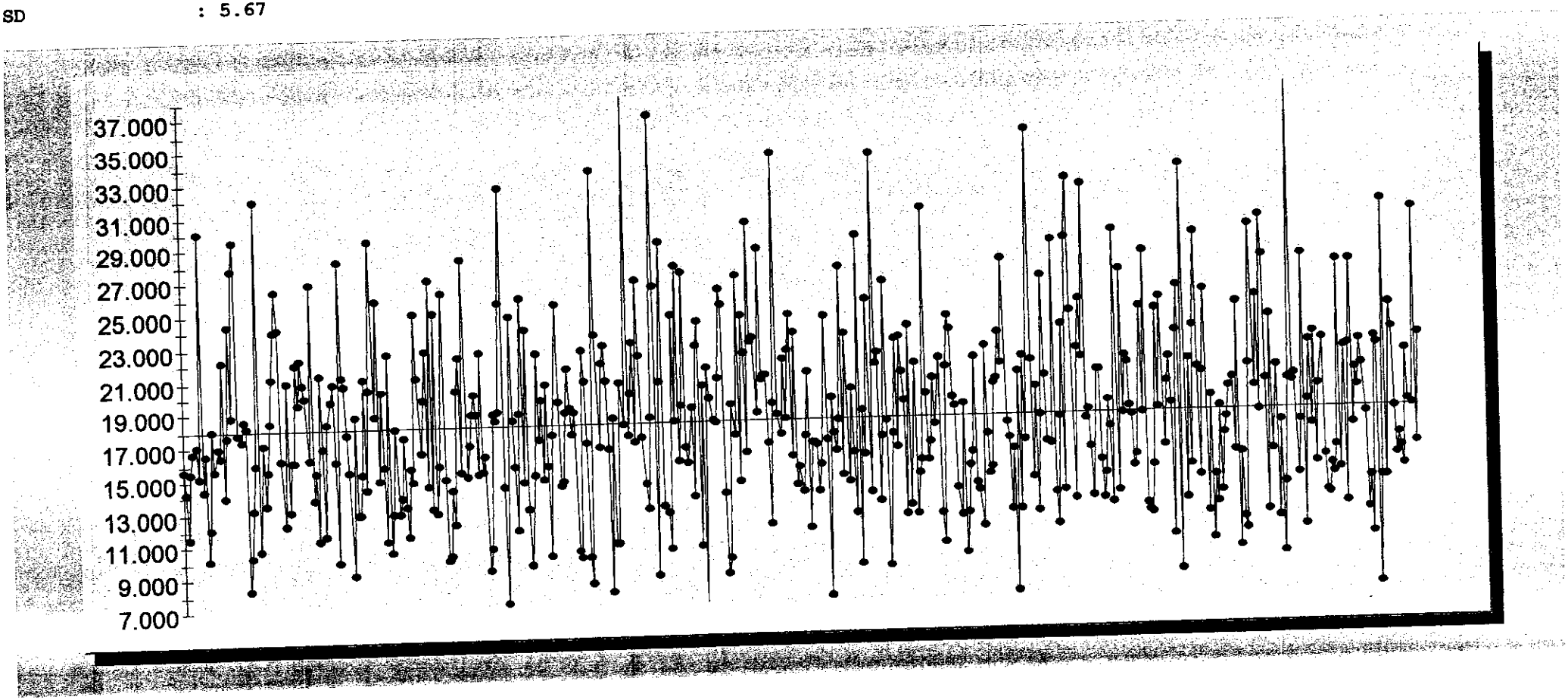
3170

6/6/04

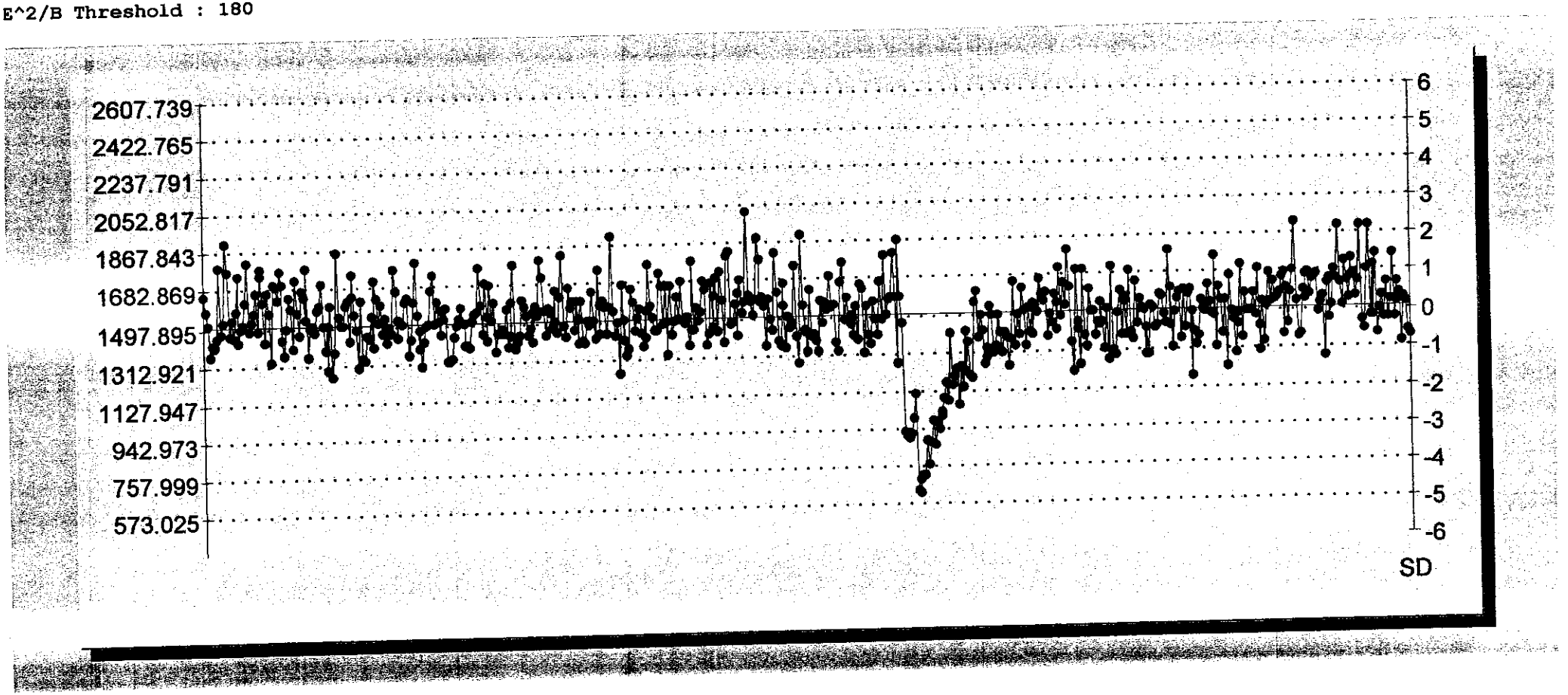
3H Chi Square
Total # pts : 510
Valid # pts : 510
Mean : 18.72
SD : 6.17



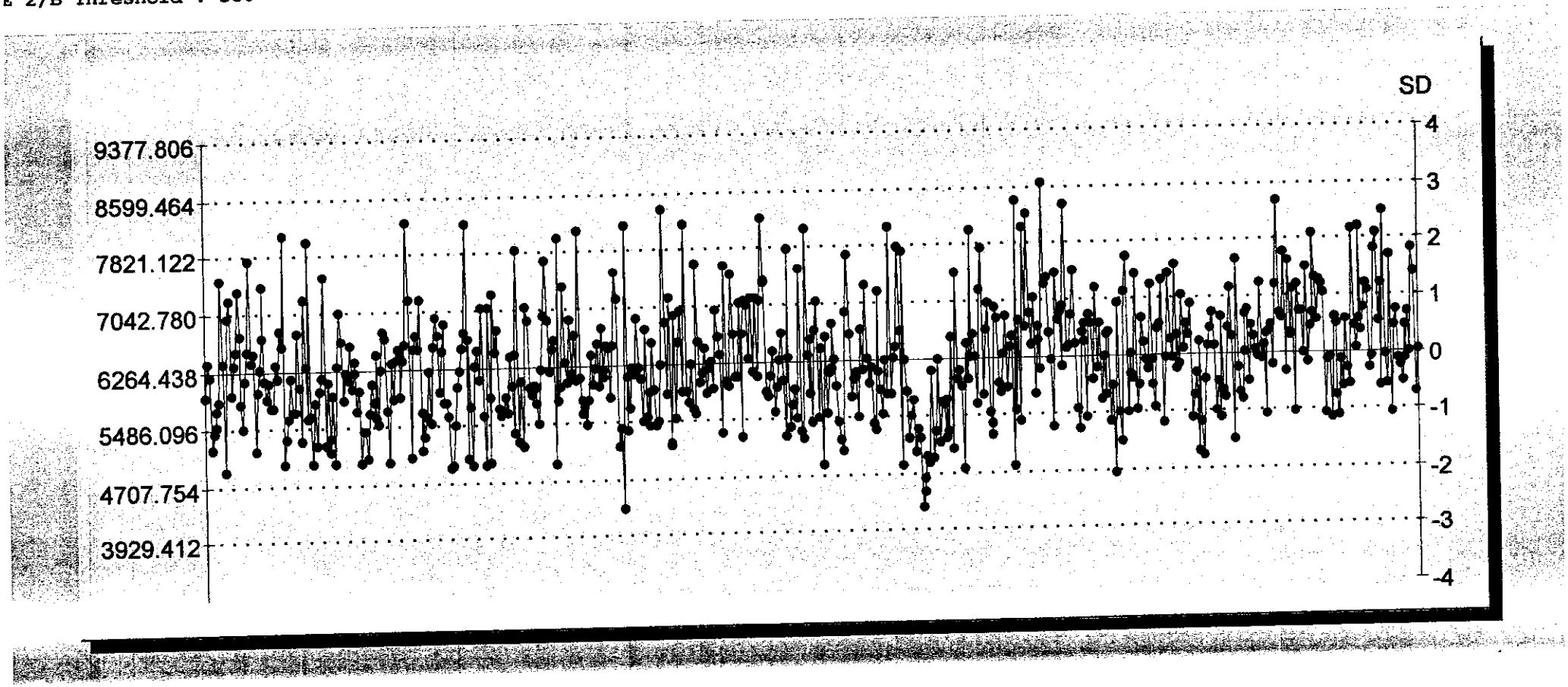
14 Chi Square
Total # pts : 511
Valid # pts : 511
Mean : 18.17
SD : 5.67



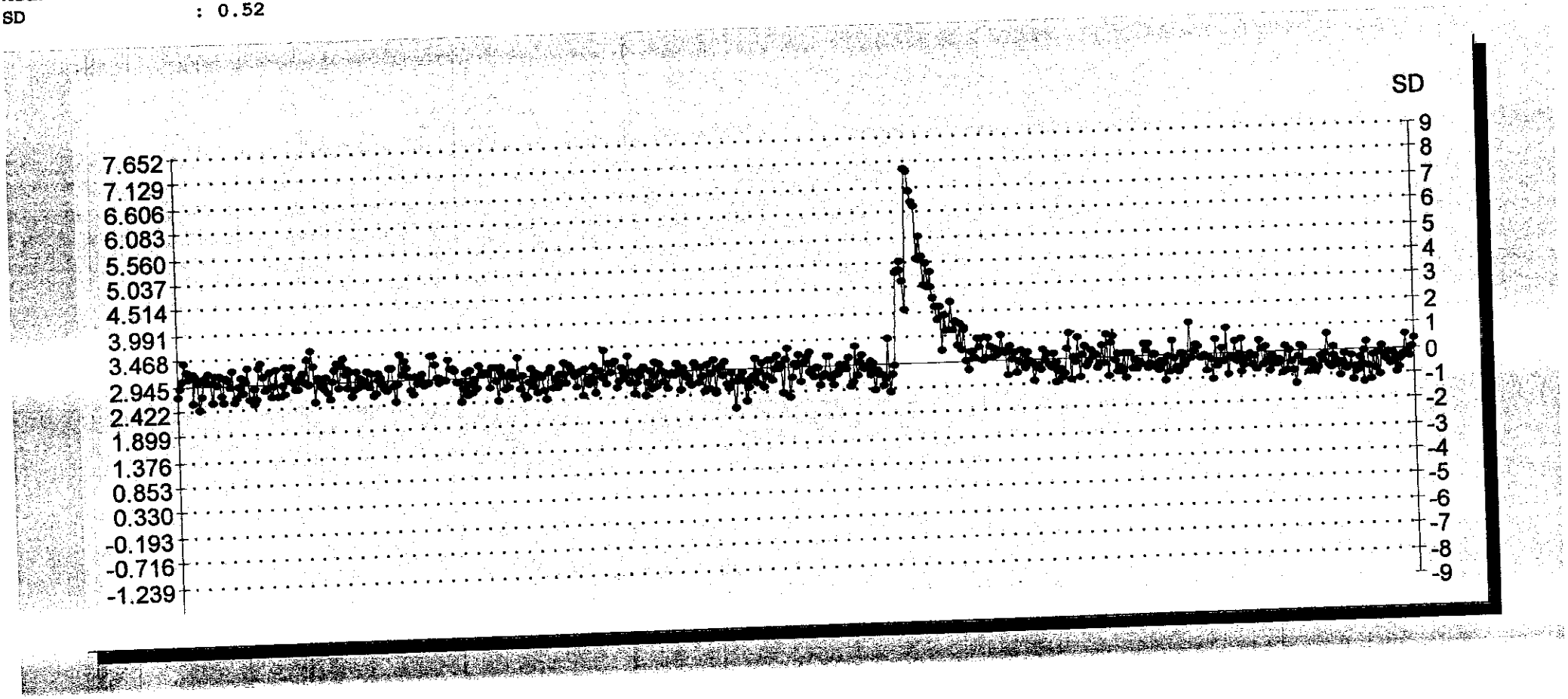
3H2 E^2/B
Total # pts : 607
Valid # pts : 607
Mean : 1497.90
SD : 184.97
E^2/B Threshold : 180



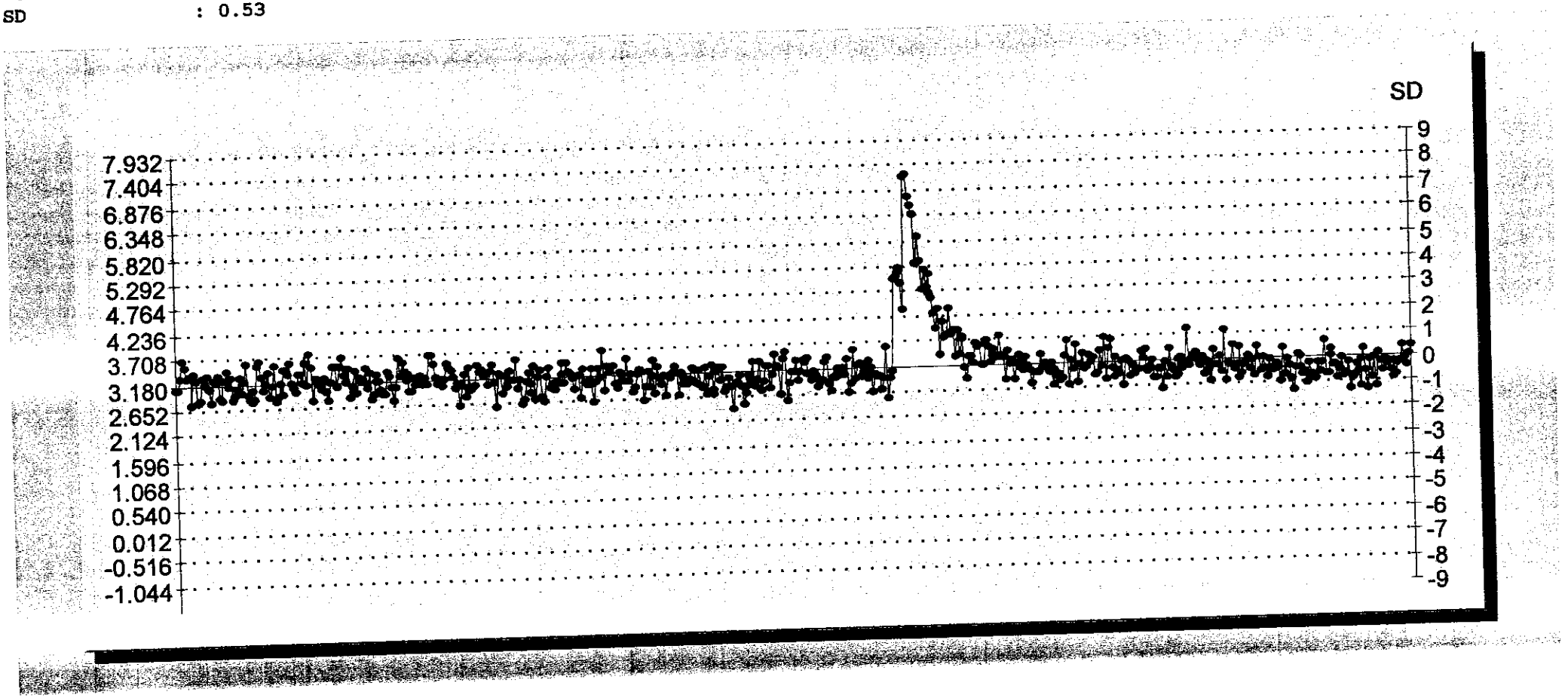
14 E^2/B
Total # pts : 607
Valid # pts : 607
Mean : 6264.44
SD : 778.34
E^2/B Threshold : 380



3H Background
Total # pts : 608
Valid # pts : 608
Mean : 2.95
SD : 0.52

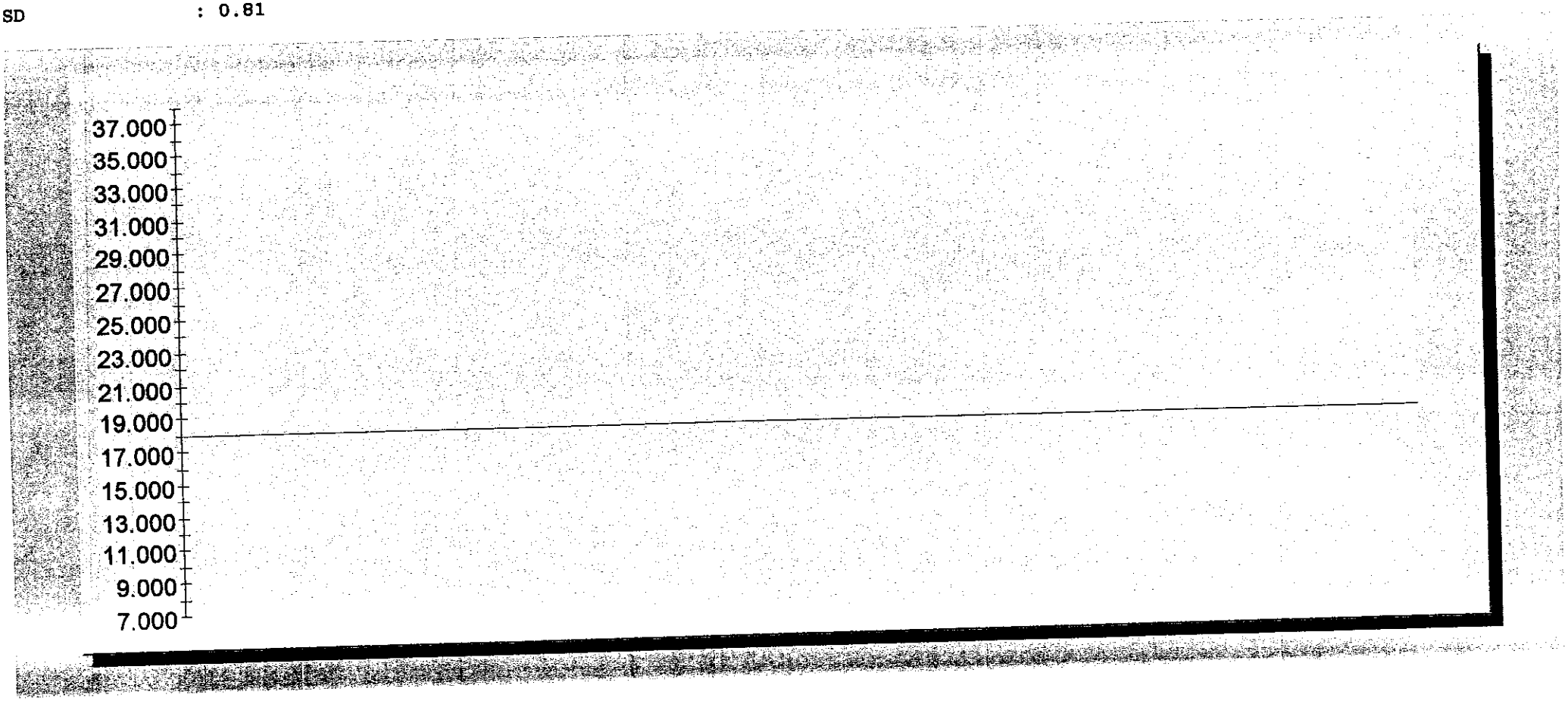


14e Background
Total # pts : 608
Valid # pts : 608
Mean : 3.18
SD : 0.53

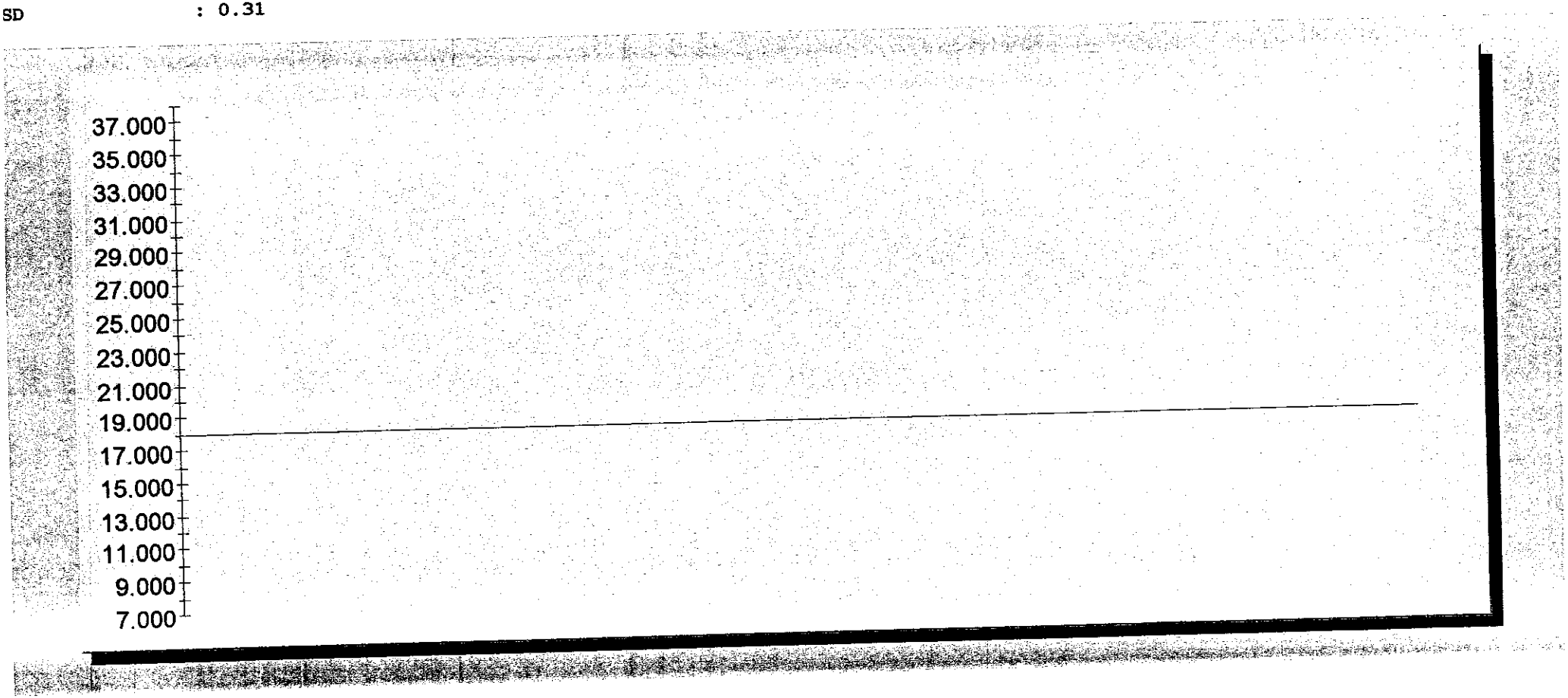


TL Denver

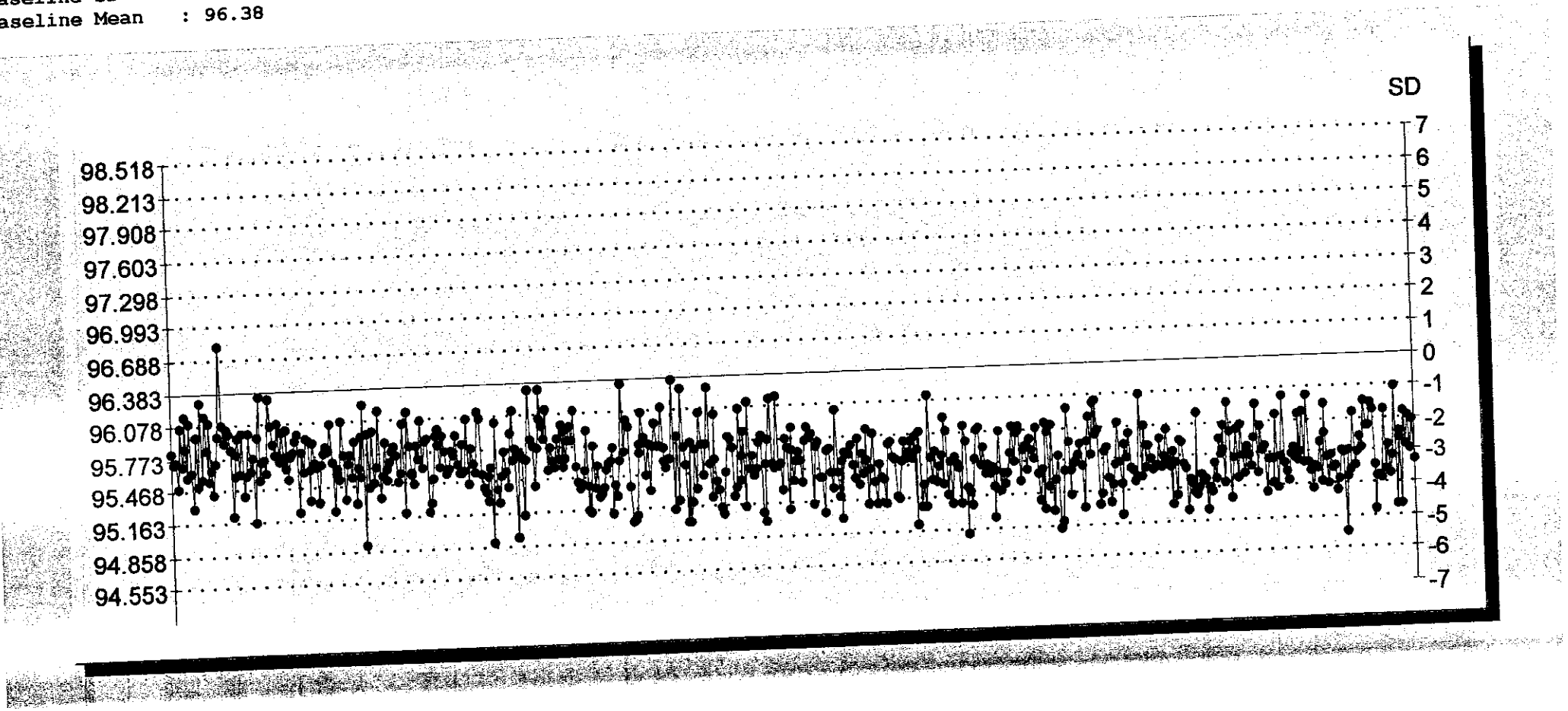
3H Efficiency
Total # pts : 612
Valid # pts : 612
Mean : 64.11
SD : 0.81



14C Efficiency
Total # pts : 615
Valid # pts : 615
Mean : 95.57
SD : 0.31

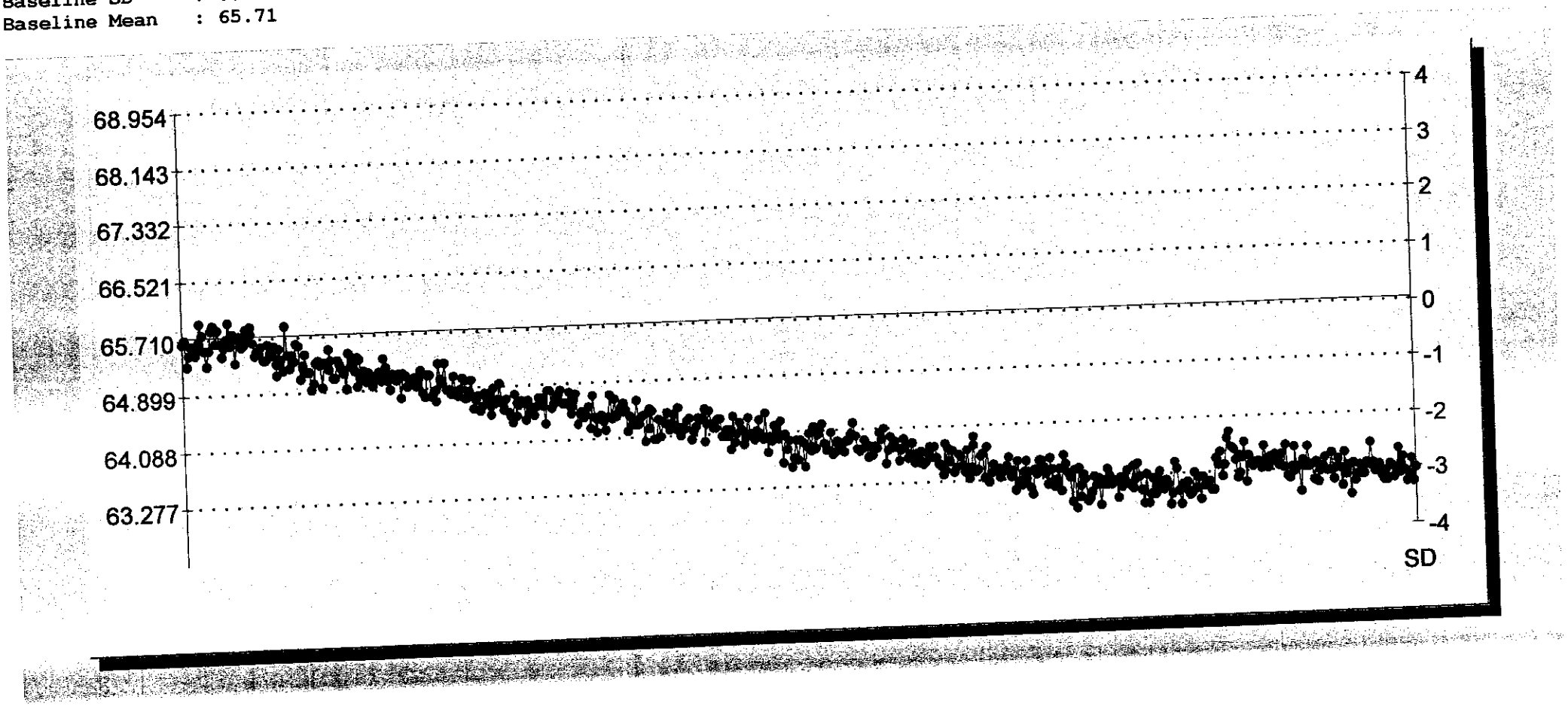


14C Efficiency Baseline Sep 17, 2002 - Present
Total # pts : 615
Valid # pts : 615
Mean : 95.57
Baseline SD : 0.31
Baseline Mean : 96.38



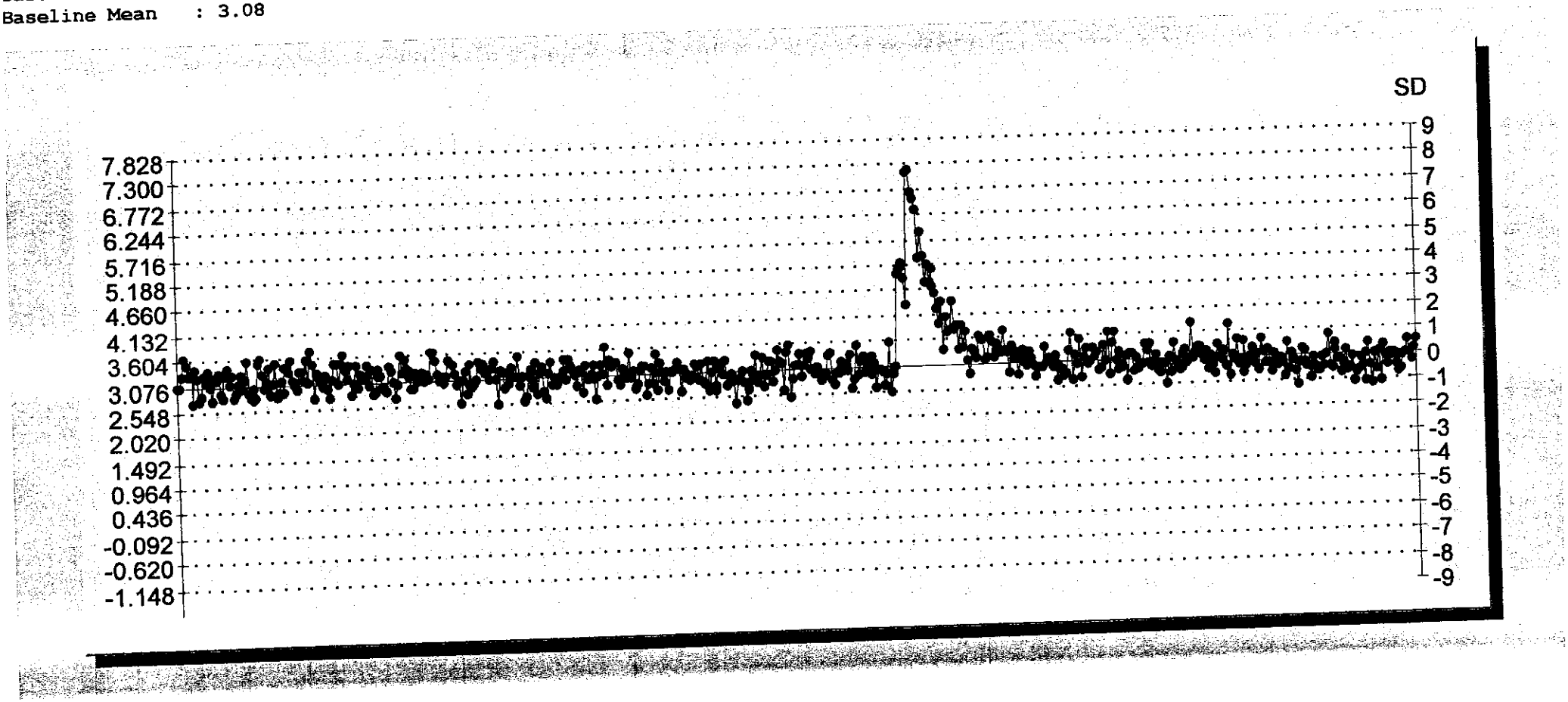
3H Efficiency Baseline Oct 08, 2002 - Present

Total # pts	: 612
Valid # pts	: 612
Mean	: 64.11
Baseline SD	: 0.81
Baseline Mean	: 65.71



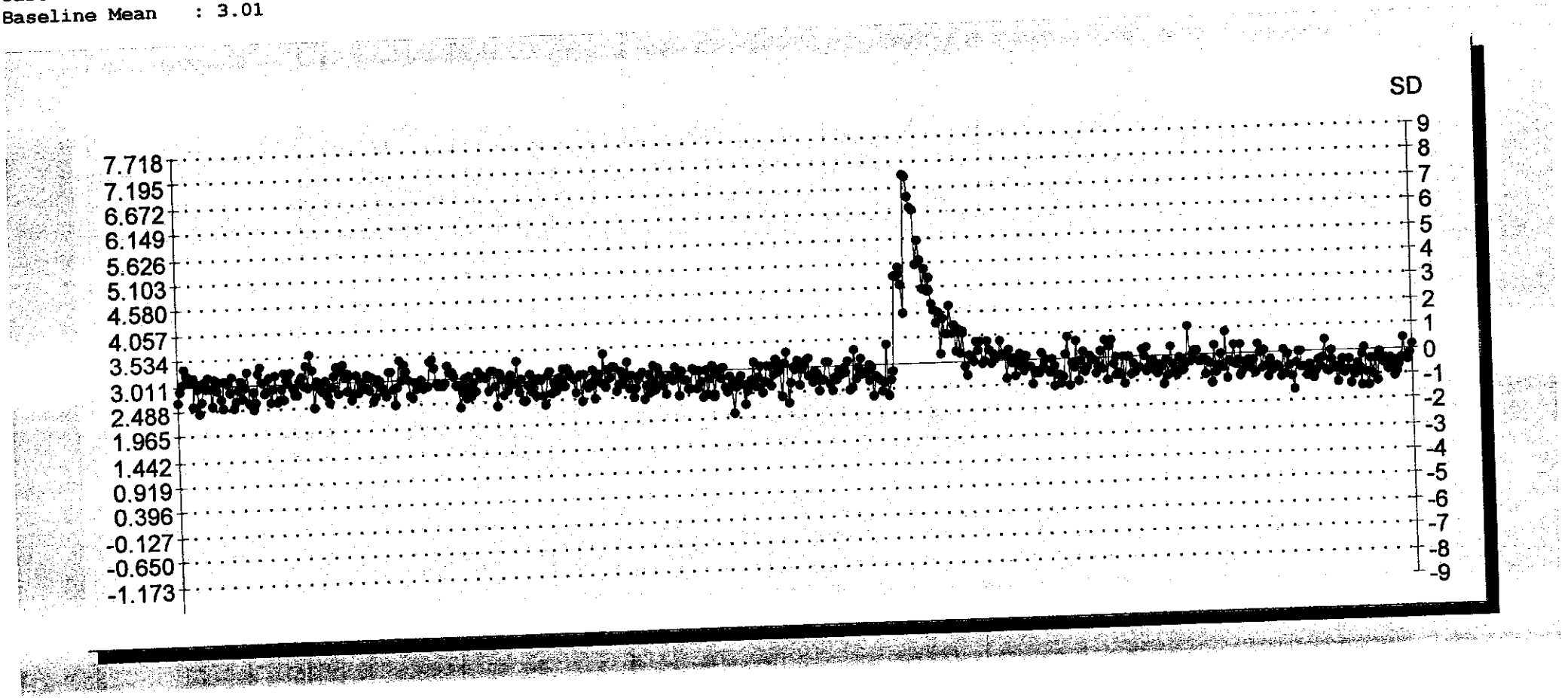
146 Background Baseline Oct 08, 2002 - Present

Total # pts	: 608
Valid # pts	: 608
Mean	: 3.18
Baseline SD	: 0.53
Baseline Mean	: 3.08



3H Background Baseline Oct 08, 2002 - Present

Total # pts	: 608
Valid # pts	: 608
Mean	: 2.95
Baseline SD	: 0.52
Baseline Mean	: 3.01



SEVERN TRENT STL

Liquid Scintillation Tritium

SEVERN TRENT STL

LIQUID SCINTILLATION

Data and Results Reports

Calibration Data
Monthly Quench Curve

Batch Summary Sheets
Run Logs

Raw Data
Prep Data Sheet(s)
Instrument Printouts
QC Acceptance Sheet(s)
Certificate/Standard Sheets

STL Denver

SIVTRN TRENT **STL**

Analysis Report for Tritium in Water by LSC

Batch: 4149150 **Operator:** 400697

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Sample Information			Count Information					Results		
Sample ID / Work Order #	Aliquot Vol Counted	Instrument / Sigma	SampEff / BkgEff	SampCPM / BkgCPM	SampDPM / BkgDPM	RunDateTime / Run Duration		Activity	UncTotal / UncCount	MDA / DLC
D4E190262-001	100.0000 mL	LSC3170	0.2140	0.99	4.59	5/29/04 13:42		-5.000E+001	1.446E+002	2.703E+002
GGJX41AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.445E+002	1.209E+002
D4E190262-002	100.0000 mL	LSC3170	0.2160	1.02	4.72	5/29/04 14:04		-4.414E+001	1.478E+002	2.678E+002
GGJX61AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.477E+002	1.198E+002
D4E190262-004	100.0000 mL	LSC3170	0.2130	1.70	8.00	5/29/04 14:25		1.036E+002	1.653E+002	2.715E+002
GGJX91AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.649E+002	1.215E+002
D4E210325-001	100.0000 mL	LSC3170	0.2150	0.75	3.49	5/29/04 14:46		-9.955E+001	1.333E+002	2.690E+002
GGTEE1AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.330E+002	1.204E+002
D4E210325-002	100.0000 mL	LSC3170	0.2130	1.38	6.45	5/29/04 15:07		3.378E+001	1.523E+002	2.715E+002
GGTE31AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.523E+002	1.215E+002
D4E210325-003	100.0000 mL	LSC3170	0.2160	1.78	8.23	5/29/04 15:28		1.140E+002	1.580E+002	2.678E+002
GGTE61AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.576E+002	1.198E+002
D4E210325-004	100.0000 mL	LSC3170	0.2120	2.59	12.24	5/29/04 15:49		2.946E+002	1.900E+002	2.728E+002
GGTE71AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.877E+002	1.221E+002
D4E210325-005	100.0000 mL	LSC3170	0.2170	1.21	5.59	5/29/04 16:10		-4.955E+000	3.454E+002	2.665E+002
GGTFE1AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	3.454E+002	1.193E+002
D4E210325-006	100.0000 mL	LSC3170	0.2160	1.02	4.75	5/29/04 16:31		-4.279E+001	1.433E+002	2.678E+002
GGTFH1AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.432E+002	1.198E+002
D4E210325-008	100.0000 mL	LSC3170	0.2160	0.86	4.00	5/29/04 16:52		-7.658E+001	1.374E+002	2.678E+002
GGTFX1AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.372E+002	1.198E+002
D4E210325-008S	100.0000 mL	LSC3170	0.2110	41.56	197.00	5/29/04 17:13		8.617E+003	1.064E+003	2.741E+002
GGTFX1AG	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	6.248E+002	1.227E+002
D4E210325-009	100.0000 mL	LSC3170	0.2210	3.07	13.89	5/29/04 17:34		3.689E+002	1.884E+002	2.617E+002
GGTF31AF	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.847E+002	1.171E+002
D4E210325-009X	100.0000 mL	LSC3170	0.2160	3.01	13.91	5/29/04 17:55		3.698E+002	1.936E+002	2.678E+002
GGTF31AG	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.900E+002	1.198E+002
D4E260231-001	100.0000 mL	LSC3170	0.2130	1.05	4.92	5/29/04 18:16		-3.514E+001	1.393E+002	2.715E+002
GG4FQ1AA	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.393E+002	1.215E+002
F4E070121-001	100.0000 mL	LSC3170	0.2120	30.38	143.31	5/29/04 18:37		6.199E+003	8.184E+002	2.728E+002
GFQDR1AE	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	5.344E+002	1.221E+002
F4E120234-001	100.0000 mL	LSC3170	0.2130	1.22	5.72	5/29/04 18:58		9.009E-001	0.000E+000	2.715E+002
GF3551AE	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	0.000E+000	1.215E+002
F4E280000-150B	100.0000 mL	LSC3170	0.2160	1.27	5.87	5/29/04 13:00		7.658E+000	1.081E+002	2.678E+002
GG9A91AA	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	1.081E+002	1.198E+002
F4E280000-150C	100.0000 mL	LSC3170	0.2140	41.41	193.20	5/29/04 13:21		8.446E+003	1.044E+003	2.703E+002
GG9A91AC	10.00	2.00	0.2140	1.22	5.70		20.00	pCi/L	6.136E+002	1.209E+002

Sample Information		Count Information					Results		
Sample ID	Aliquot	Instrument	SampEff	SampCPM	SampDPM	RunDateTime	Activity	UncTotal	MDA
Work Order #	Vol Counted	Sigma	BkgEff	BkgCPM	BkgDPM	Run Duration		UncCount	DLC

Laboratory Control Sample Information

Sample ID	WRKNO	Activity	StdAdded	Recovery
F4E280000-150C	GG9A91AC	8.446E+003 pCi/L	8.191E+003	103.12%

Sample Duplicate Information

Sample ID	Sample Activity	Dup Sample ID	Dup Activity	RPD	RER
D4E210325-009	3.689E+002 pCi/L	D4E210325-009X	3.698E+002 pCi/L	0.24%	0.00

Matrix Spike Information

SampID	SampMSID	Sample Activity	MS Activity	StdAdded	MSRecovery
D4E210325-008	D4E210325-008S	-7.658E+001 pCi/L	8.617E+003 pCi/L	8.190E+003	105.21%

SEVERN TRENT STL

QUENCH CURVE

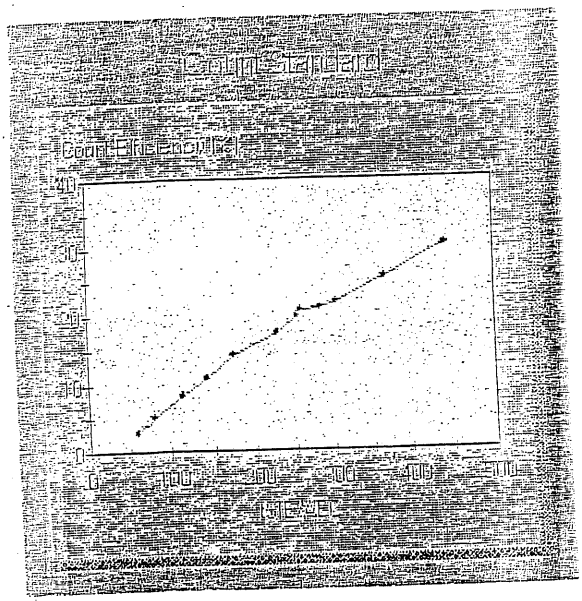
H-3

3170

Cycle 1 Results

S#	Count Time	CPMA	SIS	tSIE	MESSAGES	TIME
1	20.00	220.08	10.02	445.54	S	5:30:15 PM
2	20.00	184.58	8.85	365.83	S	5:51:52 PM
3	20.00	158.34	8.06	304.87	S	6:13:28 PM
4	20.00	153.31	7.88	284.76	S	6:35:04 PM
5	20.00	151.09	7.76	259.85	S	6:56:39 PM
6	20.00	144.79	7.46	254.64	S	7:18:14 PM
7	20.00	126.50	7.18	228.94	S	7:39:49 PM
8	20.00	102.37	6.47	174.11	S	8:01:25 PM
9	20.00	78.96	6.04	142.95	S	8:23:01 PM
10	20.00	60.47	5.54	114.98	S	8:44:42 PM
11	20.00	36.29	5.03	81.42	S	9:06:17 PM
12	20.00	21.37	4.64	60.05	S	9:27:53 PM

Quench Curve Block Data



Date Acquired: 12/11/03
Date Modified:
Count Standard

tSIE/AEC	Count Efficiency (%)
445.54	30.11
365.83	25.25
304.87	21.66
284.76	20.97
259.85	20.67
254.64	19.81
228.94	17.31
174.11	14.00
142.95	10.80
114.98	8.27
81.42	4.96
60.05	2.92

H3 Quench Curve 12/12/03 LSC 3170

Std is 1mL of 00-005 (3152.74 dpm/mL) diluted 4mL to 14mL

Decay corrected to 12/12/03 = 730.66 dpm/mL or 329.125 pCi/mL
Cocktail is Ultima Gold LLT

Std #	mL H2O	mL 00-005	mL UGLLT	uL Nitromethane
1	4	1	15	0
2	7	1	12	0
3	9	1	10	0
4	9	1	10	5
5	9	1	10	10
6	9	1	10	15
7	9	1	10	25
8	9	1	10	50
9	9	1	10	75
10	9	1	10	100
11	9	1	10	150
12	9	1	10	200

Decay Correction

	Tritium				
Initial Activity:	1420.153153	pCi			
Reference Date:	3/10/2000				
Current Date:	12/11/2003				
Elapsed Time:	1371	days			
Half Life:	4540.0575	days			
Exponential Term:	0.811139213				
Corrected Activity:	1151.941911	pCi	2557.311	dpm	1089614

(or date at which you wish to determine activity)

4/14/2003

730.6603 4/14mL

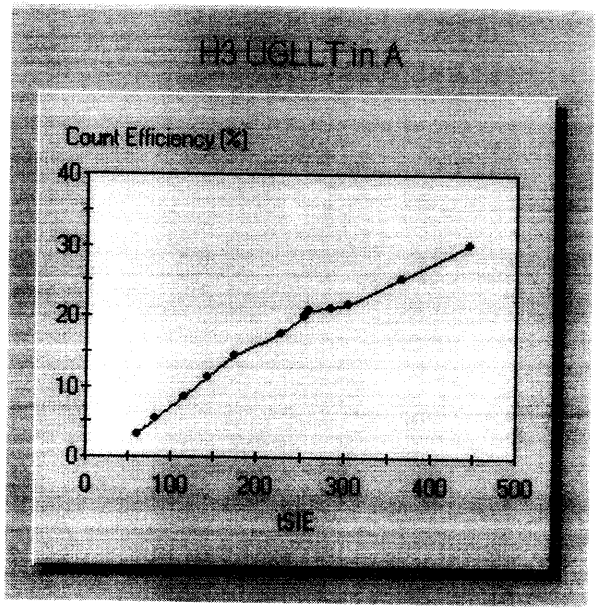
3170

5/29/04 7:19:24 PM
Protocol# 25 - 3H UGLLT 25.lsa

QuantaSmart (TM) - 1.31 - Serial# 429670

User: Chemist

Cycle 1 Results
Quench Curve Block Data



Date Acquired: 12/11/2003
Date Modified: 11/17/2003
H3 UGLLT in A

tSIE	Count Efficiency (%)
445.54	30.19
365.83	25.38
304.87	21.77
284.76	21.11
259.85	20.94
254.64	20.07
228.94	17.55
174.11	14.38
142.95	11.13
114.98	8.56
81.42	5.25
60.05	3.16

STL Denver

P#	PID	S#	C.T.	CPMA	EFF	DPM1	CPMB	CPMC	tSIE	LUM	NOTE	DATE	TIME	SMPL_ID
25	2	1	20	1.2	0.214	5.7	1.4	2	294	44		5/29/04	12:39:46 PM	BKG
25	2	2	20	1.3	0.216	5.9	1.5	2	300	39		5/29/04	1:00:51 PM	F4E280000-150B
25	2	3	20	41.4	0.214	193.2	25.9	42	295	2		5/29/04	1:21:55 PM	F4E280000-150C
25	2	4	20	1.0	0.214	4.6	1.1	2	295	45		5/29/04	1:42:57 PM	D4E190262-001
25	2	5	20	1.0	0.216	4.7	1.2	2	300	45		5/29/04	2:04:00 PM	D4E190262-002
25	2	6	20	1.7	0.213	8.0	1.5	2	291	36		5/29/04	2:25:03 PM	D4E190262-004
25	2	7	20	0.8	0.215	3.5	0.8	2	296	59		5/29/04	2:46:06 PM	D4E210325-001
25	2	8	20	1.4	0.213	6.4	1.5	2	291	37		5/29/04	3:07:09 PM	D4E210325-002
25	2	9	20	1.8	0.216	8.2	1.7	3	301	31		5/29/04	3:28:12 PM	D4E210325-003
25	2	10	20	2.6	0.212	12.2	2.3	3	287	24		5/29/04	3:49:15 PM	D4E210325-004
25	2	11	20	1.2	0.217	5.6	1.2	2	303	40		5/29/04	4:10:18 PM	D4E210325-005
25	2	12	20	1.0	0.216	4.7	1.3	2	299	45		5/29/04	4:31:21 PM	D4E210325-006
25	20	13	20	0.9	0.216	4.0	1.1	1	300	50		5/29/04	4:52:30 PM	D4E210325-008
25	20	14	20	41.6	0.211	197.0	24.1	42	282	2		5/29/04	5:13:34 PM	D4E210325-008S
25	20	15	20	3.1	0.221	13.9	2.5	4	311	19		5/29/04	5:34:38 PM	D4E210325-009
25	20	16	20	3.0	0.216	13.9	2.3	4	300	23		5/29/04	5:55:41 PM	D4E210325-009X
25	20	17	20	1.1	0.213	4.9	1.1	2	292	46		5/29/04	6:16:45 PM	D4E260231-001
25	20	18	20	30.4	0.212	143.3	18.0	31	287	2		5/29/04	6:37:48 PM	F4E070121-001
25	20	19	20	1.2	0.213	5.7	1.3	2	290	45		5/29/04	6:58:51 PM	F4E120234-001

SEVERN TRENT STL

Run Log

Instrument: 3170

Logbook No.: 2489

STL
St. Louis Laboratory

Liquid Scintillation Counter Runlog

Date	Batch #	Sample #	Protocol	Position	Count Time	Analysis	Initials
5-29-4	Daily	Blk & Source			60 min bkg	QA	—
5-29-4	4148316	Blk	23	1	30 min	H3	—
		F4E270000-316B		2			
		-316C		3			
		F4B080143-001		4			
		-001A		5			
		F4C090147-001		6			
		-001A		7			
5-29-4	4146145	BKS	8	1	20"	TC 99	IV
		F4E070250-01					
		02					
		04					
		05					
		06					
		07					
		08					
		09					
		10					
		11					
		12					
		13					
		14					
		15					
		16					
		17					
		18					
		19					
		F4E250000-145B					

Reviewed By: [signature] Date: 5/29/04

Form: SL-RAD-0027, revised 7/16/03; SOP Reference: STL-RD-0302, current revision
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Instrument: 3170 Logbook No.: 2489

STL
St. Louis Laboratory

Liquid Scintillation Counter Runlog

Date	Batch #	Sample #	Protocol	Position	Count Time	Analysis	Initials
5-28-4	4146145	F4E250000-145C	8	12	20"	TC99	IV
	↓	145L	↓	↓	↓		
	4146159	BKG	11	1	20"		
		F4E120263-01					
		01X					
		04					
		06					
		08					
		11					
		12					
		13					
		F4E120268-07					
		08					
		09					
		10					
		11					
		14					
		15					
		17					
		18					
		23					
		26					
		30					
		31					
		F4E250000-159B					
		159C					
5-29-4	Dark	BKG + Source	—	—	60 min BKG	QA	RGN
	4149150	BKG	25	1	20"	3H	L

Reviewed By: RGN Date: 5/29/04

Form: SL-RAD-0027, revised 7/16/03; SOP Reference: STL-RD-0302, current revision
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Instrument: 3170 Logbook No.: 2489

STL
St. Louis Laboratory

Liquid Scintillation Counter Runlog

Date	Batch #	Sample #	Protocol	Position	Count Time	Analysis	Initials
5-29-4	4149150	F4E280000-150B	25	2	20'	3H	RAW
		150C					
		D4E190262-01					
		02					
		04					
		D4E210325-01					
		02					
		03					
		04					
		05					
		06					
		08					
		085					
		09					
		09X					
		D4E260231-01					
		F4E070121-01					
		F4E120234-01					
5-29-4	4149435	BKG	21	1	30'	H^3	RAW
		F4E280000-435B					
		435C					
		F4E140261-01					
		02					
		03					
		04					
		05					
		06					
		07					

Reviewed By: RAW Date: 5/29/4

Form: SL-RAD-0027, revised 7/16/03; SOP Reference: STL-RD-0302, current revision
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

Instrument: 3170 Logbook No.: 2489

STL
St. Louis Laboratory

Liquid Scintillation Counter Runlog

Date	Batch #	Sample #	Protocol	Position	Count Time	Analysis	Initials
5-29-4	4149435	F4E140261-08	21	9	30"	3H	RAN
		09					
		10					
		11					
		12					
		13					
		14					
		15					
		16					
		17					
		17X					
		18					
		18S					
		19					
5.30.04	Daily BKG + Source ✓		—	—	60" BKG	CeA	RAN
	4150037	BKG	#23	1	20"	3H	
		F4E200279-01					
		02					
		03					
		04					
		05					
		06					
		07					
		F4E220125-02					
		02D					
		02S					
		03					
		04					

Reviewed By: RAN Date: 5-30-4

Form: SL-RAD-0027, revised 7/16/03; SOP Reference: STL-RD-0302, current revision
QC Type Suffixes: B=Blank; C=Laboratory Control Sample; L=Laboratory Control Sample Duplicate; S=Matrix Spike; D=Matrix Spike Duplicate; X=Sample Duplicate.

PROT 25 20 min 3170

SEVERN TRENT **STL**

Prep Report for Tritium in Water by LSC

Batch: 4149150 **Prep Analyst:** 402035

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

SampID	WRKNO	Aliquot	Volume Used
D4E190262-001	GGJX41AF	100.0000 mL	10.0000 mL
D4E190262-002	GGJX61AF	100.0000 mL	10.0000 mL
D4E190262-004	GGJX91AF	100.0000 mL	10.0000 mL
D4E210325-001	GGTEE1AF	100.0000 mL	10.0000 mL
D4E210325-002	GGTE31AF	100.0000 mL	10.0000 mL
D4E210325-003	GGTE61AF	100.0000 mL	10.0000 mL
D4E210325-004	GGTE71AF	100.0000 mL	10.0000 mL
D4E210325-005	GGTFE1AF	100.0000 mL	10.0000 mL
D4E210325-006	GGTFH1AF	100.0000 mL	10.0000 mL
D4E210325-008	GGTFX1AF	100.0000 mL	10.0000 mL
D4E210325-008S	GGTFX1AG	100.0000 mL	10.0000 mL
D4E210325-009	GGTF31AF	100.0000 mL	10.0000 mL
D4E210325-009X	GGTF31AG	100.0000 mL	10.0000 mL
D4E260231-001	GG4FQ1AA	100.0000 mL	10.0000 mL
F4E070121-001	GFQDR1AE	100.0000 mL	10.0000 mL
F4E120234-001	GF3551AE	100.0000 mL	10.0000 mL
F4E280000-150B	GG9A91AA	100.0000 mL	10.0000 mL

SampID	WRKNO	Aliquot	Volume Used
F4E280000-150C	GG9A91AC	100.0000 mL	10.0000 mL

Spike Information

Sample ID	Standard ID	Analyte	Std Conc	Aliquot	Ref Date	StdAdded
D4E210325-008S	00034	H-3	2.274E+003 dpm/mL	1.00 mL	6/6/2000 12:00:00AM	8.542E+003 pCi/L
F4E280000-150C	00034	H-3	2.274E+003 dpm/mL	1.00 mL	6/6/2000 12:00:00AM	8.542E+003 pCi/L

BB — Spiked By

PB BB — Spike Verified By

5/28/04 — Spike Date

Standard Operating Procedures

	SOPNumber	Title	Revision
☑	STL-RC-0030	The Determination Of Tritium In Water (and Other Fluids), Soil and Silica Gels	4.00
☐	STL-RC-5048	Radiochemical Determination Of Tritium In Soil, Vegetation And Other Biological Samples Azeotropic Method	0.00

Reviewed By

6-1-4 — Review Date

BB — Analyst/Relenquished By

5/28/04 — Release Date

Received By

5/28/04 — Receipt Date

SEVERN TRENT STL

Instrument Checks

5/29/04 12:05:13 AM

QuantaSmart (TM) - 1.31 - Serial# 429670

SNC Protocol

Calibration Information
Software Version IC: 2.11
Software Version EC: 1.31
Instrument Model: Tri-Carb 3170TR/SL
Instrument Serial Number: 429670
3H Chi Square: 27.55 Date Processed: 2/27/04 1:05:43 PM
14C Chi Square: 22.31 Date Processed: 2/27/04 1:05:43 PM
3H E^2/B (1-18.6 keV): 1618.79 Date Processed: 5/29/04 12:05:09 AM
14C E^2/B (4-156 keV): 6628.39 Date Processed: 5/29/04 12:05:09 AM
3H Efficiency (0-18.6 keV): 63.31 Date Processed: 5/29/04 12:05:09 AM
14C Efficiency (0-156 keV): 95.65 Date Processed: 5/29/04 12:05:09 AM
IPA Background Date Processed: 5/29/04 12:05:09 AM
3H Background CPM (0-18.6 keV): 2.53 Date Processed: 5/29/04 12:05:09 AM
14C Background CPM (0-156 keV): 2.75 Date Processed: 5/29/04 12:05:09 AM
3H Calibration DPM: 280500
3H Reference Date: 6/4/02
14C Calibration DPM: 120600

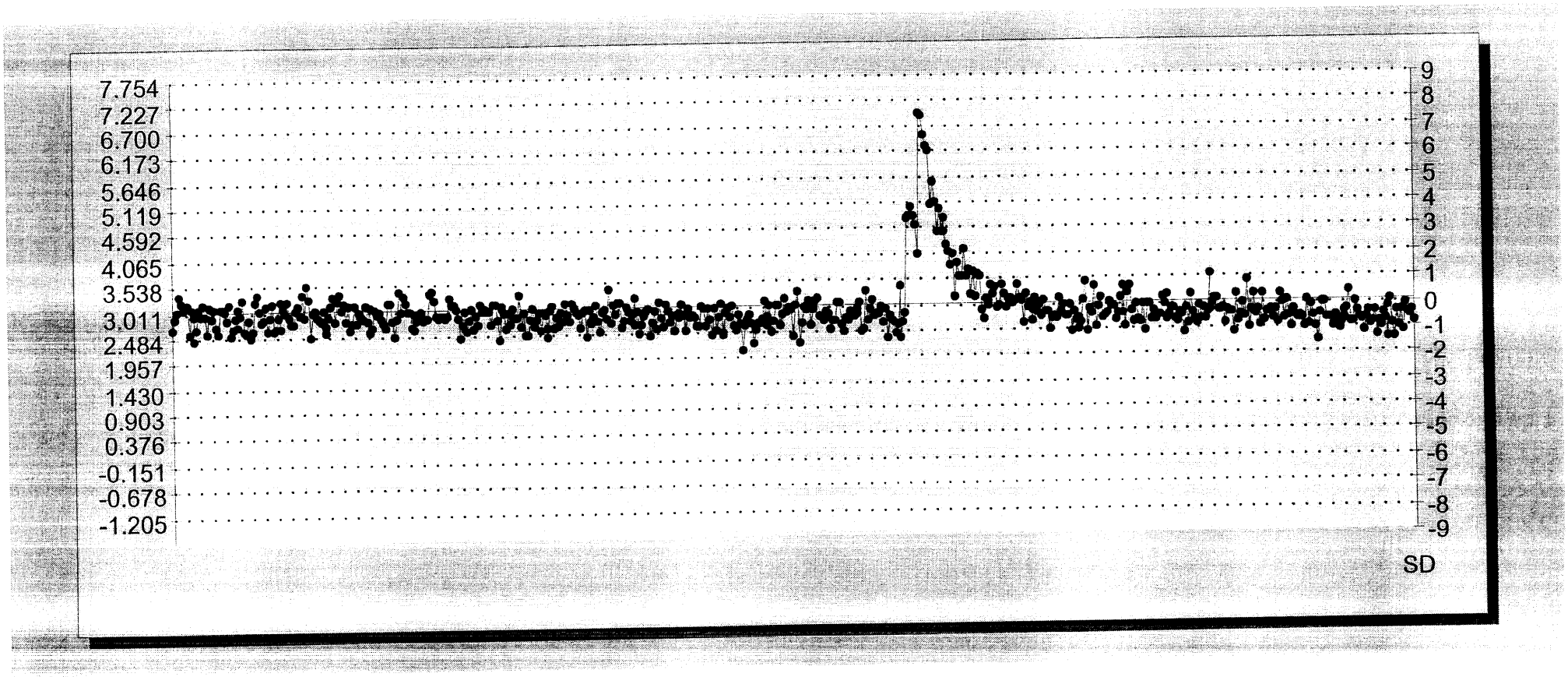
SEVERN TRENT STL

LSC Instrument Check

3170

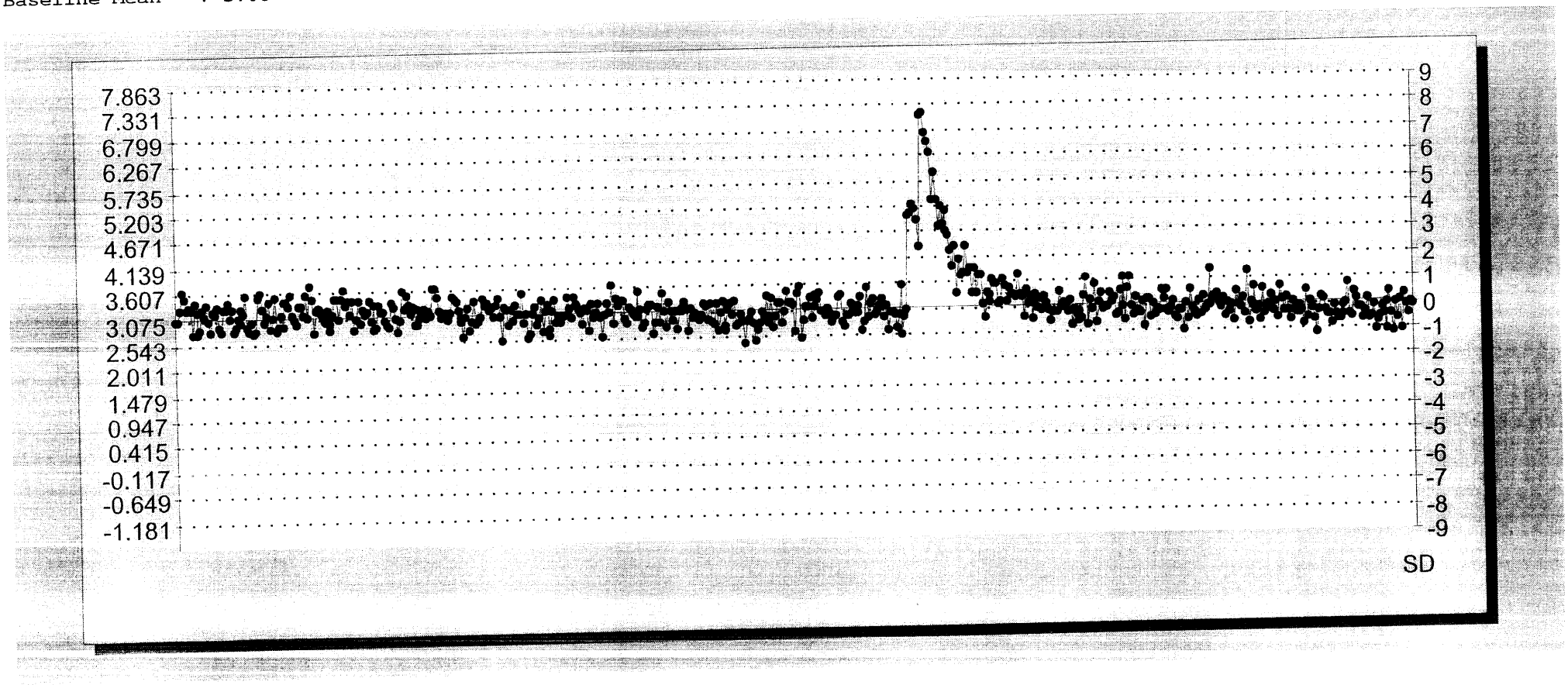
5/23/04

SH Background Baseline Oct 08, 2002 - Present
Total # pts : 596
Valid # pts : 596
Mean : 2.95
Baseline SD : 0.53
Baseline Mean : 3.01



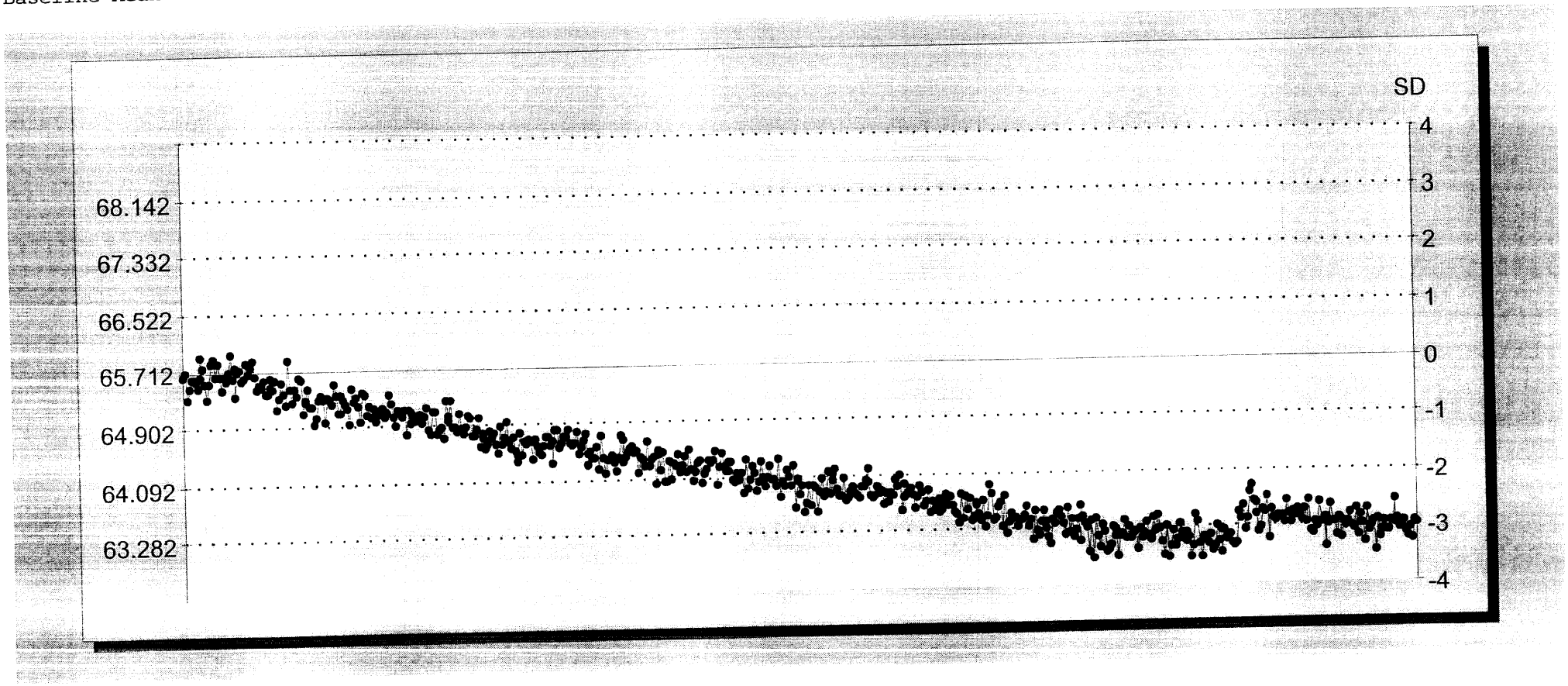
14C Background Baseline Oct 08, 2002 - Present

Total # pts	: 596
Valid # pts	: 596
Mean	: 3.18
Baseline SD	: 0.53
Baseline Mean	: 3.08



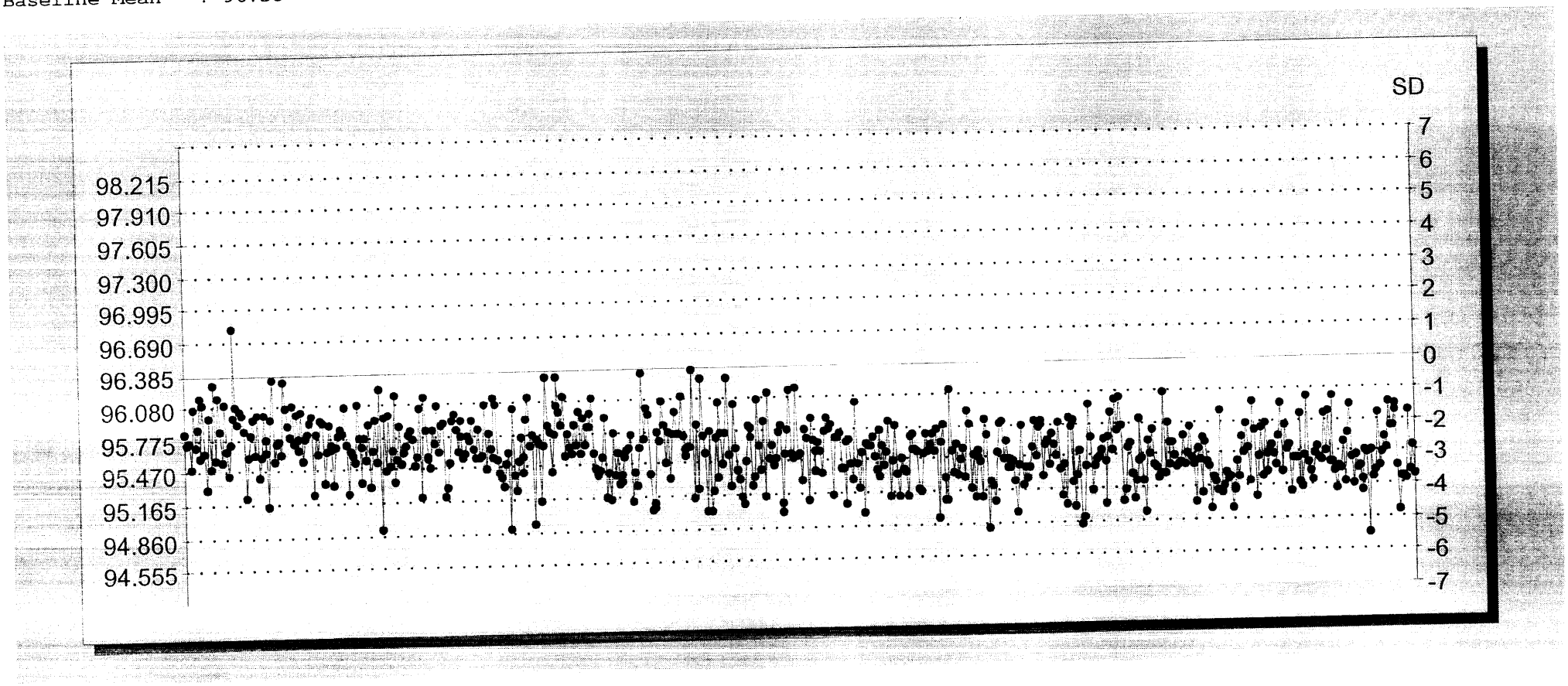
3 Efficiency Baseline Oct 08, 2002 - Present

Total # pts	: 600
Valid # pts	: 600
Mean	: 64.12
Baseline SD	: 0.81
Baseline Mean	: 65.71



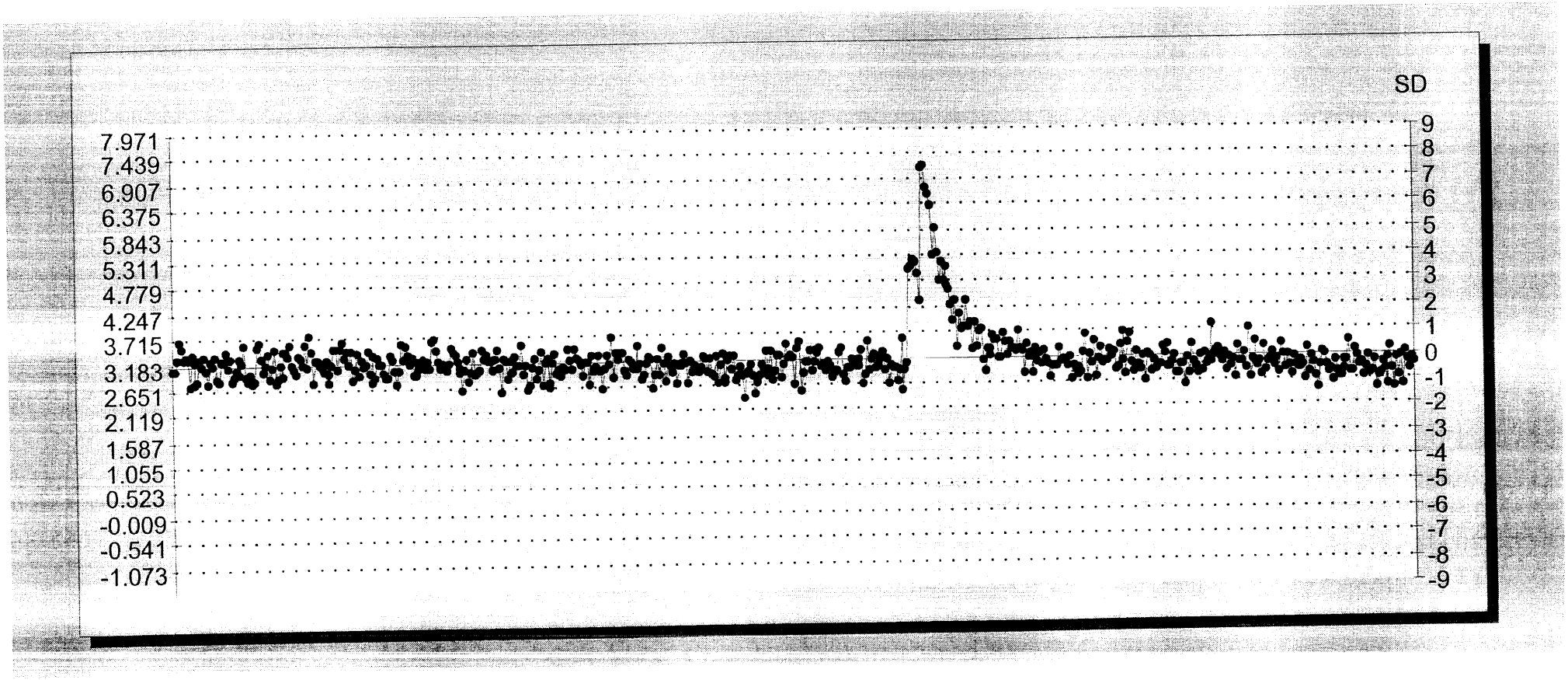
15C Efficiency Baseline Sep 17, 2002 - Present

Total # pts	: 603
Valid # pts	: 603
Mean	: 95.57
Baseline SD	: 0.30
Baseline Mean	: 96.38



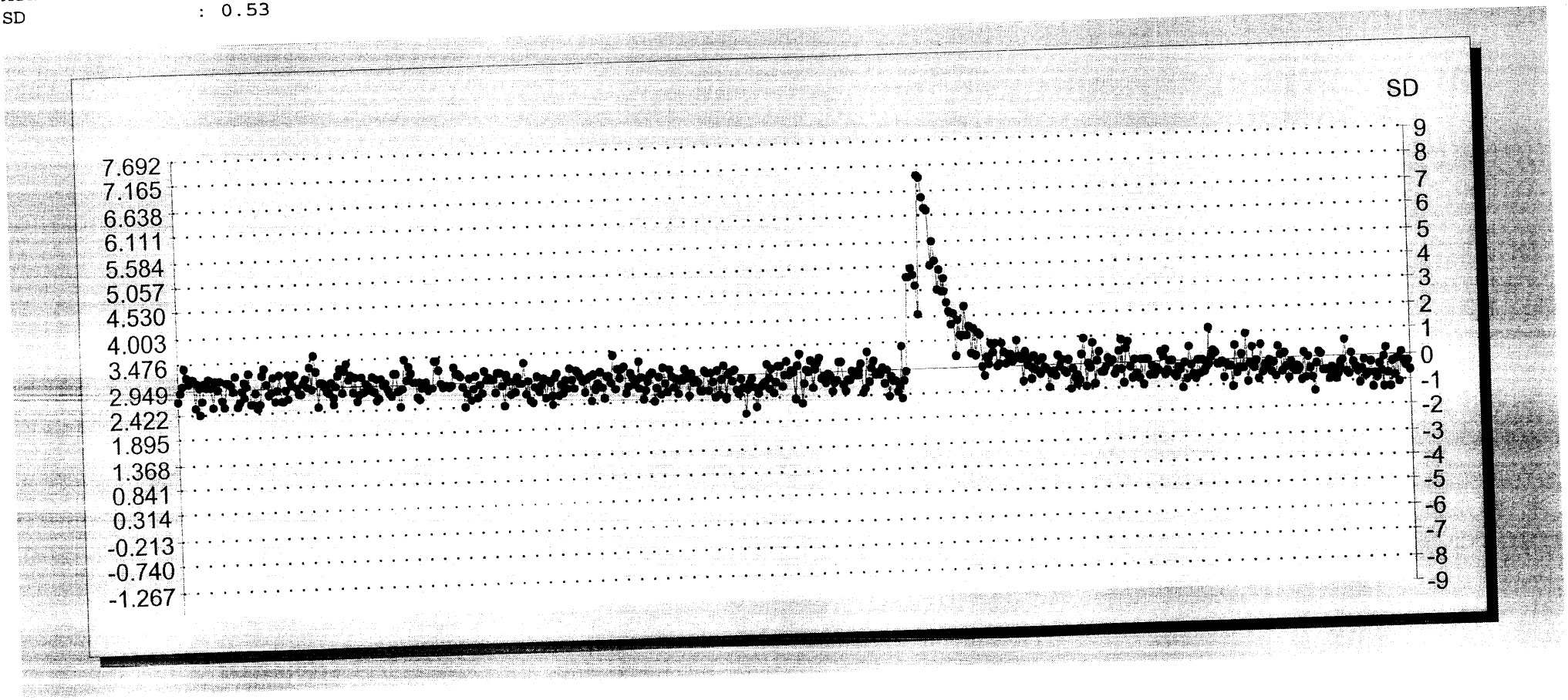
SJL DerVes

HC Background
Total # pts : 596
Valid # pts : 596
Mean : 3.18
SD : 0.53



STL Denver

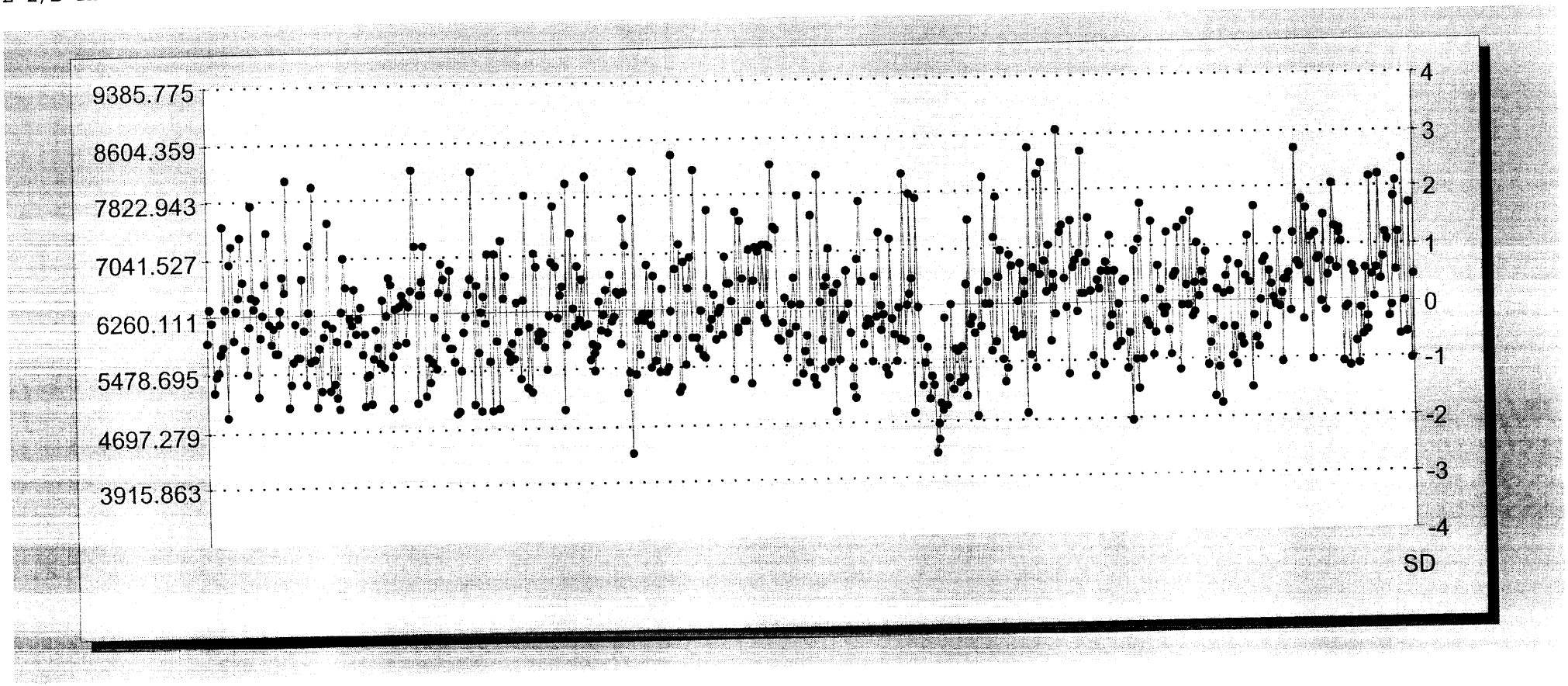
3H Background
Total # pts : 596
Valid # pts : 596
Mean : 2.95
SD : 0.53



SLT Device 1

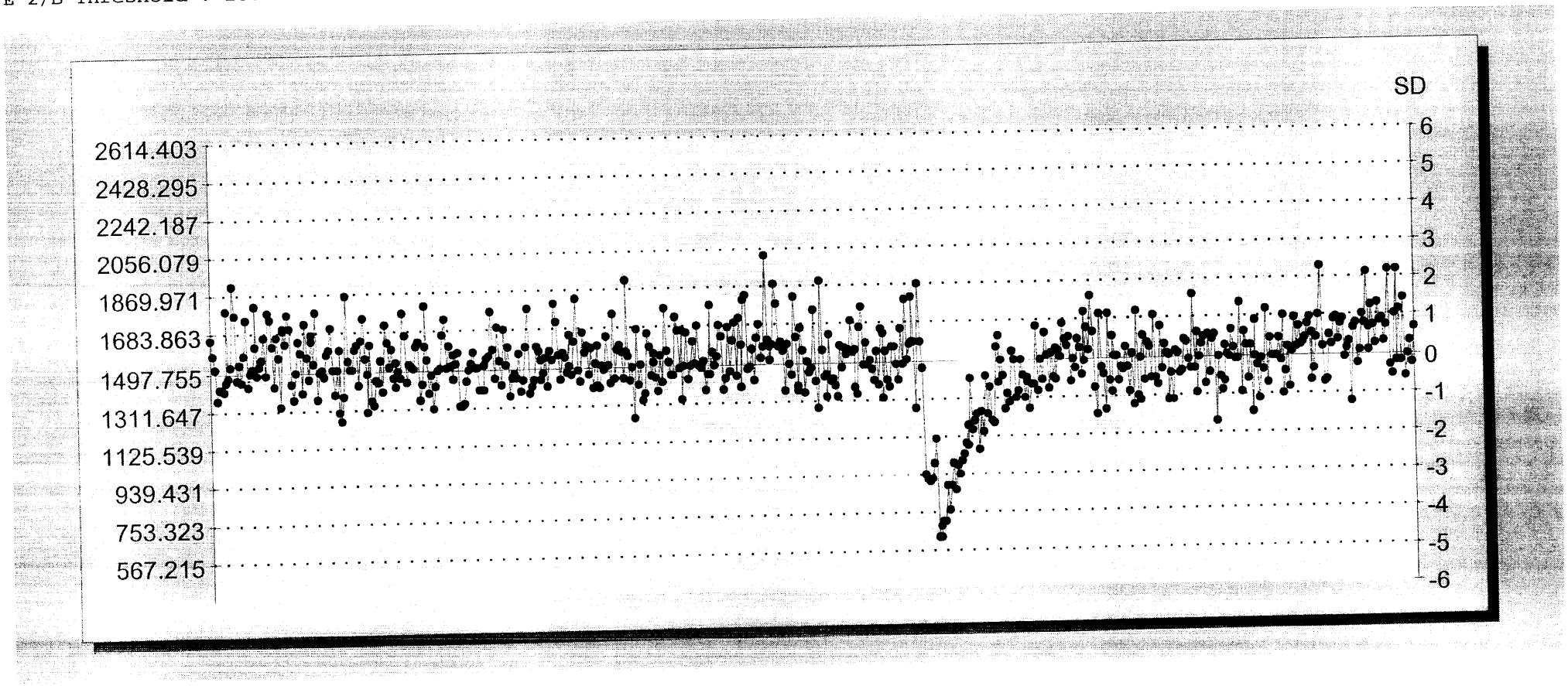
15C E^2/B

Total # pts	: 595
Valid # pts	: 595
Mean	: 6260.11
SD	: 781.42
E^2/B Threshold	: 380



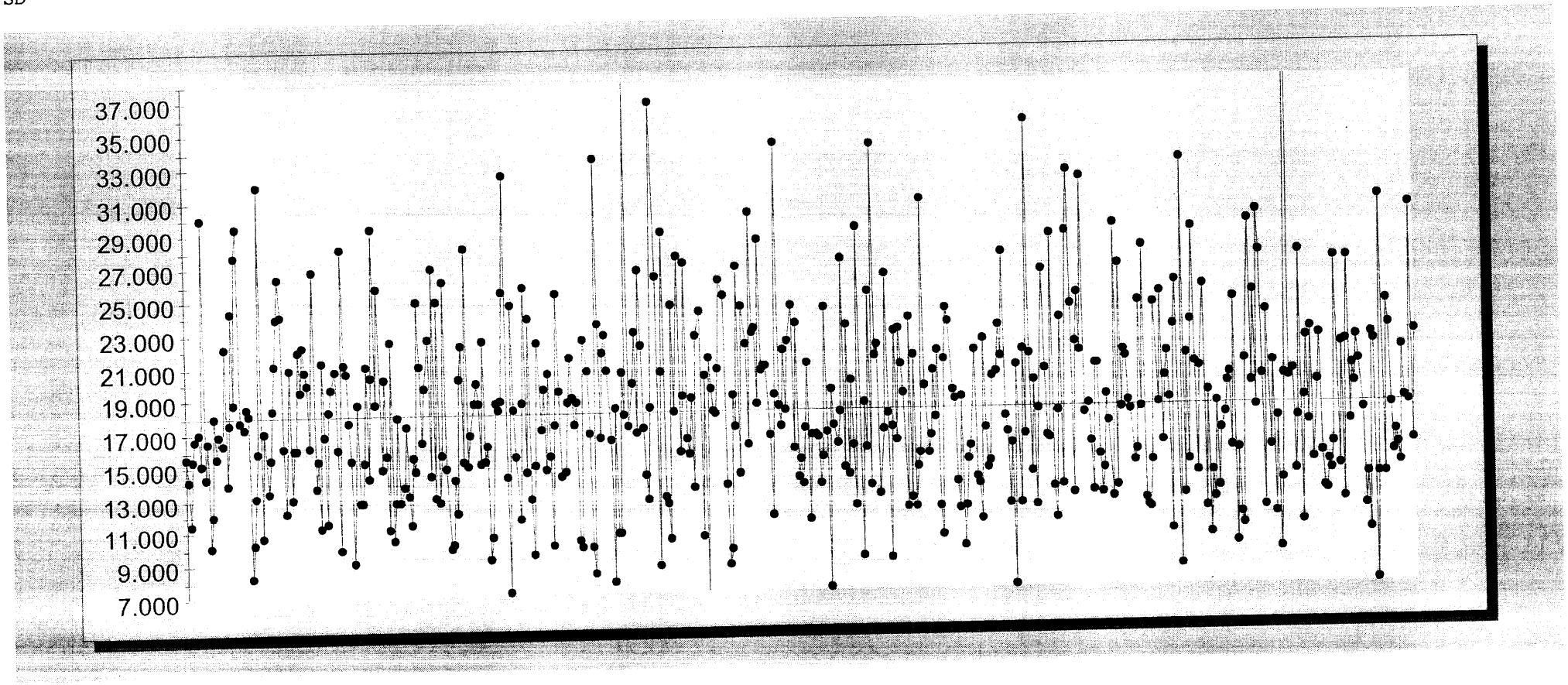
SSL Denver

3 E^2/B
Total # pts : 595
Valid # pts : 595
Mean : 1497.76
SD : 186.11
E^2/B Threshold : 180

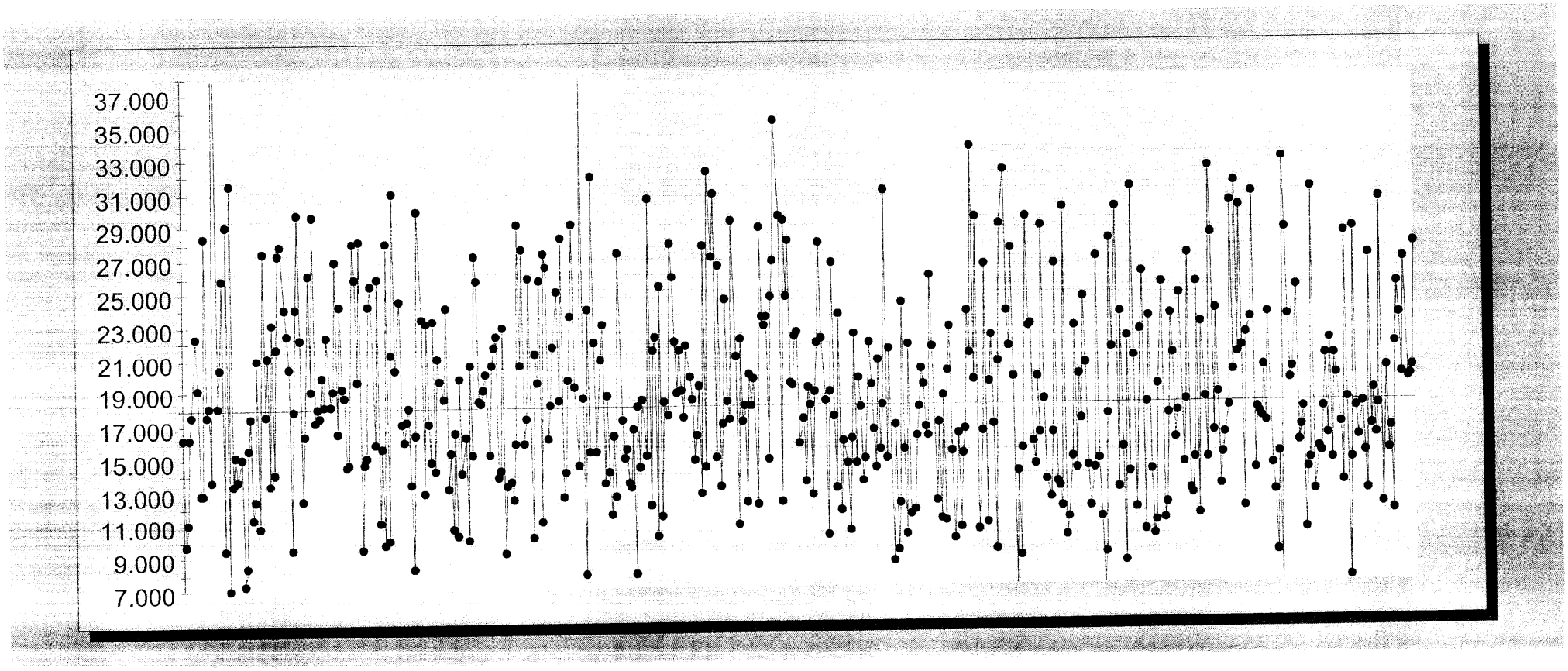


SSL Delta Cal

14C Chi Square
Total # pts : 511
Valid # pts : 511
Mean : 18.17
SD : 5.67



3F Chi Square
Total # pts : 510
Valid # pts : 510
Mean : 18.72
SD : 6.17



D4E190262

CLIENT ANALYSIS SUMMARY

Storage Loc: **40 MTLS SF SUB**

Project Manager: SHD
Quote #: 57122
SDG:
Project: USDA National Disease Center
PO#: JOB#: 03-3040.17
Report to: Carl Young
Client: 1352382 Cabrera Services
#SMPS in LOT: 6

Date Received: 2004-05-19
Analytical Due Date: 2004-06-08
Report Due Date: 2004-06-12
Report Type: D Expanded Deliverable
EDD Code: 00

LOG IN: Rad to be subbed to STL St. Louis attn GC/MS SVOC: execute mass chro search for all samples, for PPO and POPOP.

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	I
1	01-MW-01	2004-05-18 / 1342	GGJX4	WATER

SAMPLE COMMENTS:

XX	3W	DOE	STL-RC-0055	Ni-59 & Ni-63 by Liquid Scint. Spec.	J3	Ion Exchange Resin preconcentration and	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	Carbon 14 by EERF C-01-1	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZC	EPA	906.0 MOD	TRITIUM (Distill) by EPA 906.0 MOD	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	I
2	01-MW-08	2004-05-18 / 1530	GGJX6	WATER

SAMPLE COMMENTS:

XX	3W	DOE	STL-RC-0055	Ni-59 & Ni-63 by Liquid Scint. Spec.	J3	Ion Exchange Resin preconcentration and	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	Carbon 14 by EERF C-01-1	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZC	EPA	906.0 MOD	TRITIUM (Distill) by EPA 906.0 MOD	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	I
3	01-MW-EB	2004-05-18 / 1600	GGJX8	WATER

SAMPLE COMMENTS:

XX	3W	DOE	STL-RC-0055	Ni-59 & Ni-63 by Liquid Scint. Spec.	J3	Ion Exchange Resin preconcentration and	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	I
4	01-MW-09	2004-05-18 / 1700	GGJX9	WATER

SAMPLE COMMENTS:

XX	3W	DOE	STL-RC-0055	Ni-59 & Ni-63 by Liquid Scint. Spec.	J3	Ion Exchange Resin preconcentration and	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	4E	EERF	C-01-1	Carbon 14 by EERF C-01-1	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX	ZC	EPA	906.0 MOD	TRITIUM (Distill) by EPA 906.0 MOD	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	DATE/TIME SAMPLED	WORKORDER	I
5	01-MW-09DUP	2004-05-18 / 1700	GGJ0A	WATER

SAMPLE COMMENTS:

XX	3W	DOE	STL-RC-0055	Ni-59 & Ni-63 by Liquid Scint. Spec.	J3	Ion Exchange Resin preconcentration and	01	STANDARD TEST SET	PROT: A	WRK LOC	06

Severn Trent Laboratories, Inc
SAMPLE ANALYSIS REQUISITION

LABORATORY: STL St Louis
13715 Rider Trail North
Earth City MO 63045-1205,

NEED ANALYTICAL REPORT BY
6/07/04

ATTN:

LAB PURCHASE ORDER: SR059385

CLIENT CODE: 1352382 PROJECT MANAGER: Susan H. Decker

NUMBER OF SAMPLES IN LOT: 0005

SAMPLE I.D.		SAMPLING DATE	ANALYSIS REQUIRED	
D4E190262-001 GGJX4-1-AD	4	5/18/04	Ni-59 & Ni-63 by Liquid Scint. Spec. (NI59/63L) METHOD: STL-RC-0055	500P
D4E190262-001 GGJX4-1-AE	6	5/18/04	Carbon 14 by EERF C-01-1 (RC14DS_L) METHOD: C-01-1	500G
D4E190262-001 GGJX4-1-AF	5	5/18/04	TRITIUM (Distill) by EPA 906.0 MOD (RH3DS_L) METHOD: 906.0 MOD	500G
D4E190262-002 GGJX6-1-AD	4	5/18/04	Ni-59 & Ni-63 by Liquid Scint. Spec. (NI59/63L) METHOD: STL-RC-0055	500P
D4E190262-002 GGJX6-1-AE	6	5/18/04	Carbon 14 by EERF C-01-1 (RC14DS_L) METHOD: C-01-1	500G
D4E190262-002 GGJX6-1-AF	5	5/18/04	TRITIUM (Distill) by EPA 906.0 MOD (RH3DS_L) METHOD: 906.0 MOD	500G
D4E190262-003 GGJX8-1-AC	4	5/18/04	Ni-59 & Ni-63 by Liquid Scint. Spec. (NI59/63L) METHOD: STL-RC-0055	500P
D4E190262-004 GGJX9-1-AD	4	5/18/04	Ni-59 & Ni-63 by Liquid Scint. Spec. (NI59/63L) METHOD: STL-RC-0055	500P
D4E190262-004 GGJX9-1-AE	6	5/18/04	Carbon 14 by EERF C-01-1 (RC14DS_L) METHOD: C-01-1	500G
D4E190262-004 GGJX9-1-AF	5	5/18/04	TRITIUM (Distill) by EPA 906.0 MOD (RH3DS_L) METHOD: 906.0 MOD	500G

****
* CONTINUED *
****

Severn Trent Laboratories, Inc
SAMPLE ANALYSIS REQUISITION

LABORATORY: STL St Louis
13715 Rider Trail North
Earth City MO 63045-1205,

NEED ANALYTICAL REPORT BY
6/07/04
ROUTINE

ATTN:

LAB PURCHASE ORDER: SR059385

CLIENT CODE: 1352382 PROJECT MANAGER: Susan H. Decker

NUMBER OF SAMPLES IN LOT: 0005

SAMPLE I.D.	SAMPLING DATE	ANALYSIS REQUIRED
D4E190262-005 3	5/18/04	Ni-59 & Ni-63 by Liquid Scint. Spec.
GGJ0A-1-AC		(NI59/63L) METHOD: STL-RC-0055

soil

NEED DETECTION LIMIT AND ANALYSIS DATE INCLUDED IN REPORT.

SHIPPING METHOD: FEDEX DATE: 5/19/04

SEND REPORT TO: SUSAN DECKER

SAMPLE RECEIVED BY: _____ DATE: _____

PLEASE SEND A SIGNED COPY OF THIS FORM WITH REPORT AT COMPLETION OF ANALYSIS.

THANK YOU.

STL Denver
INT: _____ 5/19/04 13:33:56
STL St Louis
13715 Rider Trail North
Earth City MO 63045-1205,

RELINQUISHED BY: [signature] DATE/TIME: 5/19/04

RELINQUISHED BY: _____ DATE/TIME: _____

RECEIVED FOR LAB BY: [signature] DATE/TIME: 5/22/04

PLEASE RETURN ORIGINAL SAMPLE ANALYSIS REQUISITION

SEVERN TRENT **STL**

Lot No: D4E190262

Condition Upon Receipt Form
St. Louis Laboratory

Client: STL Denver

Date: 5/22/04 Time: 0800

Quote No: _____

Initiated by: MCW

Shipper/No: ↓

COC/RFA Numbers: N/A

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N	Sample received in undamaged condition?	7.	(Y) N	Sample received with Chain of Custody?
2.	Y (N)	Sample received within 4°C ± 2°C* ?	8.	(Y) N	Chain of Custody matches sample IDs on containers?
		Record all ambient	9.	(Y) N N/A	Custody seal received intact on cooler.?
3.	Y N (N/A)	Sample received with proper pH [1] ?	10.	(Y) N N/A	Custody seal tamper evident on cooler.?
4.	(Y) N	If N/A - Was pH taken by original STL lab?	11.	Y N (N/A)	Custody seal on bottles received intact?
5.	(Y) N	Sample received in proper containers?	12.	Y N (N/A)	Custody seal tamper evident on bottles?
6.	(Y) N	Sample volume sufficient for analysis?	13.	Y (N)	Was CUR (equivalent) rec' d from original STL lab?

*** Temperature Variance Does Not Affect the Following Analyses:** _____

[1]For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes:

Fed Ex 6212 6726 3170
" " 3169
" " 3158

Corrective Action:

☐ Client's Name: _____ Informed by: _____ By: _____

☐ Sample(s) processed "as is". _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: C D Schube Date: 5/24/04

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

Close Report

SEVERN TRENT STL

STL Denver
4955 Yarrow Street
Arvada, CO 80002

Tel: 303 736 0100 Fax: 303 431 7171
www.stl-inc.com

ANALYTICAL REPORT

USDA NADC Site 1

Lot #: D4E210325

Carl Yound

Cabrera Services, Inc.
111 West Monument St
First Floor
Baltimore, MD 21201

STL DENVER

Susan Decker
Project Manager

June 22, 2004

Case Narrative
Lot D4E210325

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits, with any exceptions noted.

The test results presented in this report meet all requirements of NELAC, and any exceptions are noted. This report shall not be reproduced, except in full, without written permission from the laboratory.

Sample Receiving

Nine samples and two trip blanks were received under chain of custody on May 20, 2004 and May 21, 2004. The samples were received at temperatures of 5.6°C, 3.4°C, 13.4°C, and 3.8°C. The cooler with the elevated temperature contained only radiological aliquots, which is not temperature dependent.

One trip blank received at the laboratory was not listed on the associated chain-of-custody. Per client request the sample was labeled as TB-3 and logged for 8260B.

The EPA 906.0 MOD, DOE STL-RC-0055, and EERF C-01-1, analyses presented in this report were performed at the STL St Louis facility, at 13715 Rider Trail North, Earth City, MO 63045, (314) 298-8566.

Radiological Chemistry, EERF C-01-1, DOE STL-RC-0055, EPA 9.06.0 MOD

The reporting limits were not met due to a reduced aliquot used to minimize interference. Analytical results are reported with the MDC achieved.

The LCS demonstrated recoveries above control limits for nickel 59 and nickel 63. This may indicate a high bias in the sample data. Because the samples were undetected at the RL, no corrective action was taken.

The MS/MSD performed on sample D4E210325-001 was in control for nickel 63.

The MS/MSD performed on sample D4E210325-008 was in control for tritium.

The duplicate performed on sample D4E210325-009 was in control for tritium.

The duplicate performed on sample D4E210325-010 was in control for nickel 63 and carbon 14.

All other duplicates were performed on samples from other clients and/or lots.

All other MS/MSDs were performed on samples from other clients and/or lots.

GC/MS Volatiles, SW846 8260B

The method blank associated with batch 4147418 contained 1,2,4-trichlorobenzene, n-butylbenzene, 1,2,4-trimethylbenzene, hexachlorobutadiene, 1,2,3-trichlorobenzene and naphthalene at concentrations above the method detection limit but below reporting limit. The associated positive sample results have been flagged "B".

The method blanks associated with batches 4149504, 4153497, and 4154317 contained methylene chloride at concentrations above the method detection limit but below reporting limit. The associated positive sample results have been flagged "B".

The MS/MSD associated with batch 4149504 was performed on sample D4E210325-001 and was in control.

The MS/MSDs associated with batches 4147418, 4153497, and 4154317 were performed on samples from other clients and/or lots and were in control.

GC/MS Semivolatiles, SW846 8270C

Samples D4E210325-004, 008 and 009 were diluted due to high concentrations of target compounds. The samples were also analyzed undiluted. The results of the undiluted analysis that exceed calibration range are flagged "E." The surrogate recoveries from the diluted analyses could not be calculated.

A MS/MSD associated with batch 4145234 was not request and the laboratory could not designate one due to insufficient sample volume.

A MS/MSD associated with batch 4146358 was performed on a sample from another client and/or lot and was in control.

The second source verification of the initial calibration (ICV) associated with batch 4145234 demonstrated a difference greater than 55% for dibenz(a,h)anthracene, methyl methanesulfonate, and aniline.

General Chemistry, MCAWW 160.3 MOD

The percent moisture duplicate was performed on a sample from another client and/or lot and was in control.

METHODS SUMMARY

D4E210325

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Carbon 14 by LSC	EERF C-01-1	
H-3 by Distillation & LSC	EPA 906.0 MOD	
Ni-59/Ni-63 by Liquid Scint. Spectrometry	DOE STL-RC-0055	
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3520C
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B
Tritium by LSC	EML H3-04-RC MO	
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

DOE "DOE METHODS FOR EVALUATING ENVIRONMENTAL AND WASTE MANAGEMENT SAMPLES" OCTOBER 1994 US DEPARTMENT OF ENERGY

EERF EERF

EML "ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D4E210325

ANALYTICAL METHOD	ANALYST	ANALYST ID
DOE STL-RC-0055	Ivan Vania	400697
DOE STL-RC-0055	Rhonda Rupprecht	060040
EERF C-01-1	Ivan Vania	400697
EML H3-04-RC MOD	Rhonda Rupprecht	060040
EPA 906.0 MOD	Ivan Vania	400697
MCAWW 160.3 MOD	Nicole Dean	008504
SW846 8260B	Dan Appelhans	001008
SW846 8260B	Greg Meier	006004
SW846 8260B	Josh Yanez	001198
SW846 8270C	David Kidd	007536
SW846 8270C	Joann Peterson	011674

References:

DOE "DOE METHODS FOR EVALUATING ENVIRONMENTAL AND WASTE MANAGEMENT SAMPLES" OCTOBER 1994 US DEPARTMENT OF ENERGY

EERF EERF

EML "ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

D4E210325

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GGTEE	001	01-MW-06	05/19/04	10:25
GGTE3	002	01-MW-12	05/19/04	10:30
GGTE6	003	01-MW-04	05/19/04	13:30
GGTE7	004	01-MW-07	05/19/04	13:35
GGTFE	005	01-MW-02	05/19/04	16:00
GGTFH	006	01-MW-03	05/19/04	16:00
GGTFK	007	TB-2	05/19/04	
GGTFX	008	01-MW-11	05/20/04	08:00
GGTF3	009	01-MW-10	05/20/04	09:10
GGTF4	010	01-SC-01	05/20/04	09:30
GGTF6	011	TB-3	05/20/04	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Cabrera Services

Client Sample ID: 01-MW-01

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E190262-001
Work Order: GGJX4
Matrix: WATER

Date Collected: 05/18/04 1342
Date Received: 05/19/04 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	-8.8	U	-8.3	14	06/03/04	06/05/04	4155582	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-01 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E190262-001X
Work Order: GGJX4
Matrix: WATER

Date Collected: 05/18/04 1342
Date Received: 05/19/04 0930

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	-5.3	U	-7.5	13	06/03/04	06/05/04	4155582	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-06

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-001
Work Order: GGTEE
Matrix: WATER

Date Collected: 05/19/04 1025
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/L**	**STL-RC-0055**			
Nickel 63	-11	U	28	22	06/02/04	06/04/04	4154153	84
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	-3.8	U	-7.2	13	06/03/04	06/05/04	4155582	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**			
Tritium	-100	U	130	270	05/28/04	05/29/04	4149150	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-12

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-002
Work Order: GGTE3
Matrix: WATER

Date Collected: 05/19/04 1030
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/L**	**STL-RC-0055**			
Nickel 63	-22	U	14	20	06/02/04	06/04/04	4154153	92
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	-10.7	U	-8.2	14	06/03/04	06/05/04	4155582	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**			
Tritium	30	U	150	270	05/28/04	05/29/04	4149150	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-04

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-003
Work Order: GGTE6
Matrix: WATER

Date Collected: 05/19/04 1330
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/L**	**STL-RC-0055**			
Nickel 63	-17	U	16	20	06/02/04	06/04/04	4154153	93
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	-6.8	U	-7.7	14	06/03/04	06/05/04	4155582	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**			
Tritium	110	U	160	270	05/28/04	05/29/04	4149150	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-07

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-004
Work Order: GGTE7
Matrix: WATER

Date Collected: 05/19/04 1335
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/L**	**STL-RC-0055**			
Nickel 63	-10	U	23	20	06/02/04	06/04/04	4154153	93
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	-3.5	U	-9.8	16	06/03/04	06/05/04	4155582	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**			
Tritium	**290**	**J**	**190**	**270**	**05/28/04**	**05/29/04**	**4149150**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.

U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-02

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-005
Work Order: GGTFE
Matrix: WATER

Date Collected: 05/19/04 1600
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/L**	**STL-RC-0055**			
Nickel 63	-9	U	36	22	06/02/04	06/04/04	4154153	84
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	-5.6	U	-8.4	13	06/03/04	06/05/04	4155582	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**			
Tritium	-5	U	350	270	05/28/04	05/29/04	4149150	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-03

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-006
Work Order: GGTFH
Matrix: WATER

Date Collected: 05/19/04 1600
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/L**	**STL-RC-0055**			
Nickel 63	-10	U	24	20	06/02/04	06/04/04	4154153	94
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	-8.6	U	-7.9	13	06/03/04	06/05/04	4155582	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**			
Tritium	-40	U	140	270	05/28/04	05/29/04	4149150	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-11

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-008
Work Order: GGTFX
Matrix: WATER

Date Collected: 05/20/04 0800
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/L**	**STL-RC-0055**			
Nickel 63	-12	U	18	19	06/02/04	06/04/04	4154153	98
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	9.2	U	7.6	13	06/03/04	06/05/04	4155582	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**			
Tritium	-80	U	140	270	05/28/04	05/29/04	4149150	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-10

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-009
Work Order: GGTF3
Matrix: WATER

Date Collected: 05/20/04 0910
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/L**	**STL-RC-0055**			
Nickel 63	-7	U	39	19	06/02/04	06/04/04	4154153	101
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**			
Carbon 14	-1.2	U	-9.0	14	06/03/04	06/05/04	4155582	
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**			
Tritium	**370**	**J**	**190**	**260**	**05/28/04**	**05/29/04**	**4149150**	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J **Result is greater than sample detection limit but less than stated reporting limit.**
U **Result is less than the sample detection limit.**

Cabrera Services

Client Sample ID: 01-MW-10 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-009X
Work Order: GGTF3
Matrix: WATER

Date Collected: 05/20/04 0910
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**			
Tritium	370	J	190	270	05/28/04	05/29/04	4149150	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

J Result is greater than sample detection limit but less than stated reporting limit.

Cabrera Services

Client Sample ID: 01-SC-01

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-010
Work Order: GGTF4
Matrix: SOLID

Date Collected: 05/20/04 0930
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**	**H3-04-RC MOD**			
Tritium	0.02	U	0.28	0.43	05/27/04	05/28/04	4148318	
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/g**	**STL-RC-0055**			
Nickel 63	0.4	U	2.3	12	06/08/04	06/10/04	4160269	96
Carbon 14 by EERF C-01-1				**pCi/g**	**C-01-1**			
Carbon 14	0.17	U	0.67	0.96	06/09/04	06/10/04	4161180	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-SC-01 DUP

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: D4E210325-010X
Work Order: GGTF4
Matrix: SOLID

Date Collected: 05/20/04 0930
Date Received: 05/21/04 0915

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Batch #	Yld %
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/g**	**STL-RC-0055**			
Nickel 63	-1.1	U	3.4	12	06/08/04	06/10/04	4160269	95
Carbon 14 by EERF C-01-1				**pCi/g**	**C-01-1**			
Carbon 14	0.68	U	0.67	1.0	06/09/04	06/10/04	4161180	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC
U Result is less than the sample detection limit.

Cabrera Services

Client Sample ID: 01-MW-06

GC/MS Volatiles

Lot-Sample #...: D4E210325-001 **Work Order #...:** GGTEE1AA **Matrix.....:** WATER
Date Sampled...: 05/19/04 10:25 **Date Received..:** 05/21/04
Prep Date.....: 05/27/04 **Analysis Date..:** 05/27/04
Prep Batch #...: 4149504 **Analysis Time..:** 17:19
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	ND	1.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.37 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: 01-MW-06

GC/MS Volatiles

Lot-Sample #...: D4E210325-001 **Work Order #...:** GGTEE1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	ND	1.0	ug/L	0.17
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
n-Propylbenzene	ND	1.0	ug/L	0.17
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	ND	2.0	ug/L	0.27
o-Xylene	ND	1.0	ug/L	0.15
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(76 - 116)
1,2-Dichloroethane-d4	96	(59 - 129)
4-Bromofluorobenzene	99	(74 - 114)
Toluene-d8	100	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: 01-MW-12

GC/MS Volatiles

Lot-Sample #...: D4E210325-002	**Work Order #...:** GGTE31AA	**Matrix.....:** WATER
Date Sampled...: 05/19/04 10:30	**Date Received..:** 05/21/04	
Prep Date.....: 05/27/04	**Analysis Date..:** 05/27/04	
Prep Batch #...: 4149504	**Analysis Time..:** 18:35	
Dilution Factor: 1	**Initial Wgt/Vol:** 20 mL	**Final Wgt/Vol..:** 20 mL
	Method.....: SW846 8260B	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**15**	**10**	**ug/L**	**2.5**
Benzene	**0.24 J**	**1.0**	**ug/L**	**0.17**
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	**2.3**	**1.0**	**ug/L**	**0.13**
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	**0.29 J**	**1.0**	**ug/L**	**0.12**
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.44 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	**0.68 J**	**1.0**	**ug/L**	**0.15**
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: 01-MW-12

GC/MS Volatiles

Lot-Sample #...: D4E210325-002 **Work Order #...:** GGTE31AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	**1.5 J**	**2.0**	**ug/L**	**0.41**
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	**0.19 J**	**1.0**	**ug/L**	**0.17**
1,2,4-Trimethylbenzene	**0.79 J**	**1.0**	**ug/L**	**0.15**
1,3,5-Trimethylbenzene	**0.27 J**	**1.0**	**ug/L**	**0.16**
n-Propylbenzene	**0.20 J**	**1.0**	**ug/L**	**0.17**
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	**1.2 J**	**2.0**	**ug/L**	**0.27**
o-Xylene	**0.35 J**	**1.0**	**ug/L**	**0.15**
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(76 - 116)
1,2-Dichloroethane-d4	112	(59 - 129)
4-Bromofluorobenzene	107	(74 - 114)
Toluene-d8	105	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: 01-MW-04

GC/MS Volatiles

Lot-Sample #...:	D4E210325-003	**Work Order #...:**	GGTE61AA	**Matrix.....:**	WATER
Date Sampled...:	05/19/04 13:30	**Date Received..:**	05/21/04		
Prep Date.....:	05/27/04	**Analysis Date..:**	05/27/04		
Prep Batch #...:	4149504	**Analysis Time..:**	19:00		
Dilution Factor:	1	**Initial Wgt/Vol:**	20 mL	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	ND	1.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.42 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: 01-MW-04

GC/MS Volatiles

Lot-Sample #...: D4E210325-003 **Work Order #...:** GGTE61AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	ND	1.0	ug/L	0.17
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
n-Propylbenzene	ND	1.0	ug/L	0.17
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	ND	2.0	ug/L	0.27
o-Xylene	ND	1.0	ug/L	0.15
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(76 - 116)
1,2-Dichloroethane-d4	103	(59 - 129)
4-Bromofluorobenzene	101	(74 - 114)
Toluene-d8	101	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Volatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE71AA **Matrix.....:** WATER
Date Sampled...: 05/19/04 13:35 **Date Received..:** 05/21/04
Prep Date.....: 05/27/04 **Analysis Date..:** 05/28/04
Prep Batch #...: 4149504 **Analysis Time..:** 02:31
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	ND	1.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.52 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Volatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE71AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	ND	1.0	ug/L	0.17
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
n-Propylbenzene	ND	1.0	ug/L	0.17
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	ND	2.0	ug/L	0.27
o-Xylene	ND	1.0	ug/L	0.15
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(76 - 116)
1,2-Dichloroethane-d4	98	(59 - 129)
4-Bromofluorobenzene	98	(74 - 114)
Toluene-d8	101	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: 01-MW-02

GC/MS Volatiles

Lot-Sample #...: D4E210325-005 **Work Order #...:** GGTFE1AA **Matrix.....:** WATER
Date Sampled...: 05/19/04 16:00 **Date Received..:** 05/21/04
Prep Date.....: 05/27/04 **Analysis Date..:** 05/27/04
Prep Batch #...: 4149504 **Analysis Time..:** 19:51
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	ND	1.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.35 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	**0.16 J**	**1.0**	**ug/L**	**0.15**
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: 01-MW-02

GC/MS Volatiles

Lot-Sample #...: D4E210325-005 **Work Order #...:** GGTFE1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	ND	1.0	ug/L	0.17
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
n-Propylbenzene	ND	1.0	ug/L	0.17
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	ND	2.0	ug/L	0.27
o-Xylene	ND	1.0	ug/L	0.15
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(76 - 116)
1,2-Dichloroethane-d4	106	(59 - 129)
4-Bromofluorobenzene	100	(74 - 114)
Toluene-d8	101	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: 01-MW-03

GC/MS Volatiles

Lot-Sample #...:	D4E210325-006	**Work Order #...:**	GGTFH1AA	**Matrix.....:**	WATER
Date Sampled...:	05/19/04 16:00	**Date Received..:**	05/21/04		
Prep Date.....:	05/27/04	**Analysis Date..:**	05/27/04		
Prep Batch #...:	4149504	**Analysis Time..:**	20:16		
Dilution Factor:	1	**Initial Wgt/Vol:**	20 mL	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**3.8 J**	**10**	**ug/L**	**2.5**
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	ND	1.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.43 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	**0.37 J**	**1.0**	**ug/L**	**0.15**
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: 01-MW-03

GC/MS Volatiles

Lot-Sample #...: D4E210325-006 **Work Order #...:** GGTFH1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	ND	1.0	ug/L	0.17
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
n-Propylbenzene	ND	1.0	ug/L	0.17
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	ND	2.0	ug/L	0.27
o-Xylene	ND	1.0	ug/L	0.15
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	109	(76 - 116)
1,2-Dichloroethane-d4	108	(59 - 129)
4-Bromofluorobenzene	101	(74 - 114)
Toluene-d8	98	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: TB-2

GC/MS Volatiles

Lot-Sample #...: D4E210325-007 **Work Order #...:** GGTFK1AA **Matrix.....:** WATER
Date Sampled...: 05/19/04 **Date Received..:** 05/21/04
Prep Date.....: 05/28/04 **Analysis Date..:** 05/28/04
Prep Batch #...: 4153497 **Analysis Time..:** 09:41
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	ND	1.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.53 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: TB-2

GC/MS Volatiles

Lot-Sample #...: D4E210325-007 **Work Order #...:** GGTFK1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	ND	1.0	ug/L	0.17
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
n-Propylbenzene	ND	1.0	ug/L	0.17
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	ND	2.0	ug/L	0.27
o-Xylene	ND	1.0	ug/L	0.15
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(76 - 116)
1,2-Dichloroethane-d4	90	(59 - 129)
4-Bromofluorobenzene	96	(74 - 114)
Toluene-d8	106	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Volatiles

Lot-Sample #...:	D4E210325-008	**Work Order #...:**	GGTFX1AA	**Matrix.....:**	WATER
Date Sampled...:	05/20/04 08:00	**Date Received..:**	05/21/04		
Prep Date.....:	05/29/04	**Analysis Date..:**	05/29/04		
Prep Batch #...:	4154317	**Analysis Time..:**	21:20		
Dilution Factor:	1	**Initial Wgt/Vol:**	20 mL	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**18**	**10**	**ug/L**	**2.5**
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	ND	1.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.47 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Volatiles

Lot-Sample #...: D4E210325-008 **Work Order #...:** GGTFX1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	ND	1.0	ug/L	0.17
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
n-Propylbenzene	ND	1.0	ug/L	0.17
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	ND	2.0	ug/L	0.27
o-Xylene	ND	1.0	ug/L	0.15
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(76 - 116)
1,2-Dichloroethane-d4	107	(59 - 129)
4-Bromofluorobenzene	102	(74 - 114)
Toluene-d8	100	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Volatiles

Lot-Sample #...:	D4E210325-009	**Work Order #...:**	GGTF31AA	**Matrix.....:**	WATER
Date Sampled...:	05/20/04 09:10	**Date Received..:**	05/21/04		
Prep Date.....:	05/29/04	**Analysis Date..:**	05/29/04		
Prep Batch #...:	4154317	**Analysis Time..:**	21:39		
Dilution Factor:	1	**Initial Wgt/Vol:**	20 mL	**Final Wgt/Vol..:**	20 mL
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**4.9 J**	**10**	**ug/L**	**2.5**
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	ND	1.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.50 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Volatiles

Lot-Sample #...: D4E210325-009 **Work Order #...:** GGTF31AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	ND	1.0	ug/L	0.17
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
n-Propylbenzene	ND	1.0	ug/L	0.17
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	ND	2.0	ug/L	0.27
o-Xylene	ND	1.0	ug/L	0.15
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(76 - 116)
1,2-Dichloroethane-d4	104	(59 - 129)
4-Bromofluorobenzene	100	(74 - 114)
Toluene-d8	98	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: 01-SC-01

GC/MS Volatiles

Lot-Sample #...:	D4E210325-010	**Work Order #...:**	GGTF41AE	**Matrix.....:**	SOLID
Date Sampled...:	05/20/04 09:30	**Date Received..:**	05/21/04		
Prep Date.....:	05/25/04	**Analysis Date..:**	05/25/04		
Prep Batch #...:	4147418	**Analysis Time..:**	22:12		
Dilution Factor:	1	**Initial Wgt/Vol:**	5 g	**Final Wgt/Vol..:**	5 mL
% Moisture.....:	17	**Method.....:**	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	24	ug/kg	4.1
Benzene	ND	6.0	ug/kg	0.14
Bromodichloromethane	ND	6.0	ug/kg	0.24
Bromoform	ND	6.0	ug/kg	0.31
Bromomethane	ND	12	ug/kg	0.72
2-Butanone (MEK)	ND	24	ug/kg	3.3
Carbon tetrachloride	ND	6.0	ug/kg	0.22
Chlorobenzene	ND	6.0	ug/kg	0.22
Chloroethane	ND	12	ug/kg	0.28
Chloroform	ND	12	ug/kg	0.30
Chloromethane	ND	12	ug/kg	0.43
Dibromomethane	ND	6.0	ug/kg	0.29
1,2-Dibromoethane (EDB)	ND	6.0	ug/kg	0.27
1,2-Dichlorobenzene	ND	6.0	ug/kg	0.28
1,3-Dichlorobenzene	ND	6.0	ug/kg	0.27
1,4-Dichlorobenzene	ND	6.0	ug/kg	0.41
Dichlorodifluoromethane	ND	12	ug/kg	0.25
1,1-Dichloroethane	ND	6.0	ug/kg	0.25
1,2-Dichloroethane	ND	6.0	ug/kg	0.27
1,1-Dichloroethene	ND	6.0	ug/kg	0.37
1,2-Dichloroethene (total)	**0.41 J**	**6.0**	**ug/kg**	**0.36**
cis-1,2-Dichloroethene	**0.41 J**	**3.0**	**ug/kg**	**0.25**
trans-1,2-Dichloroethene	ND	3.0	ug/kg	0.42
1,2-Dichloropropane	ND	6.0	ug/kg	0.27
cis-1,3-Dichloropropene	ND	6.0	ug/kg	0.43
trans-1,3-Dichloropropene	ND	6.0	ug/kg	0.51
Ethylbenzene	ND	6.0	ug/kg	0.33
2-Hexanone	ND	24	ug/kg	2.8
Methylene chloride	ND	6.0	ug/kg	0.49
4-Methyl-2-pentanone	ND	24	ug/kg	2.4
Styrene	ND	6.0	ug/kg	0.25
1,1,1,2-Tetrachloroethane	ND	6.0	ug/kg	0.25
1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg	0.67
Tetrachloroethene	**1.6 J**	**6.0**	**ug/kg**	**0.30**
Toluene	ND	6.0	ug/kg	0.27
1,2,4-Trichloro-benzene	**0.54 J,B**	**6.0**	**ug/kg**	**0.20**

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Cabrera Services

Client Sample ID: 01-SC-01

GC/MS Volatiles

Lot-Sample #...: D4E210325-010 **Work Order #...:** GGTF41AE **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	6.0	ug/kg	0.31
1,1,2-Trichloroethane	ND	6.0	ug/kg	0.39
Trichloroethene	ND	6.0	ug/kg	0.35
Trichlorofluoromethane	ND	12	ug/kg	0.28
1,2,3-Trichloropropane	ND	6.0	ug/kg	0.96
Vinyl chloride	ND	6.0	ug/kg	0.28
Xylenes (total)	ND	6.0	ug/kg	0.67
n-Butylbenzene	ND	6.0	ug/kg	0.28
sec-Butylbenzene	ND	6.0	ug/kg	0.33
Isopropylbenzene	ND	6.0	ug/kg	0.22
1,2,4-Trimethylbenzene	ND	6.0	ug/kg	0.25
1,3,5-Trimethylbenzene	ND	6.0	ug/kg	0.27
n-Propylbenzene	ND	6.0	ug/kg	0.36
tert-Butylbenzene	ND	6.0	ug/kg	0.29
Dibromochloromethane	ND	6.0	ug/kg	0.24
2-Chlorotoluene	ND	6.0	ug/kg	0.42
4-Chlorotoluene	ND	6.0	ug/kg	0.43
1,2-Dibromo-3-chloropropane (DBCP)	ND	12	ug/kg	0.63
1,3-Dichloropropane	ND	6.0	ug/kg	0.24
2,2-Dichloropropane	ND	6.0	ug/kg	0.17
1,1-Dichloropropene	ND	6.0	ug/kg	0.29
Hexachlorobutadiene	ND	6.0	ug/kg	0.39
4-Isopropyltoluene	ND	6.0	ug/kg	0.31
Methyl tert-butyl ether	ND	24	ug/kg	0.28
1,2,3-Trichlorobenzene	**0.73 J,B**	**6.0**	**ug/kg**	**0.27**
m-Xylene & p-Xylene	ND	3.0	ug/kg	0.51
o-Xylene	ND	3.0	ug/kg	0.28
Bromobenzene	ND	6.0	ug/kg	0.30
Bromochloromethane	ND	6.0	ug/kg	0.40
Naphthalene	**1.2 J,B**	**6.0**	**ug/kg**	**0.48**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(71 - 136)
1,2-Dichloroethane-d4	97	(67 - 131)
4-Bromofluorobenzene	92	(71 - 124)
Toluene-d8	90	(77 - 129)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: TB-3

GC/MS Volatiles

Lot-Sample #...: D4E210325-011 **Work Order #...:** GGTF61AA **Matrix.....:** WATER
Date Sampled...: 05/20/04 **Date Received..:** 05/21/04
Prep Date.....: 05/28/04 **Analysis Date..:** 05/28/04
Prep Batch #...: 4153497 **Analysis Time..:** 10:41
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL **Final Wgt/Vol..:** 20 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	2.5
Benzene	ND	1.0	ug/L	0.17
Bromodichloromethane	ND	1.0	ug/L	0.20
Bromoform	ND	1.0	ug/L	0.23
Bromomethane	ND	2.0	ug/L	0.22
2-Butanone (MEK)	ND	5.0	ug/L	2.0
Carbon tetrachloride	ND	1.0	ug/L	0.20
Chlorobenzene	ND	1.0	ug/L	0.13
Chloroethane	ND	2.0	ug/L	0.18
Chloroform	ND	1.0	ug/L	0.17
Chloromethane	ND	2.0	ug/L	0.91
Dibromomethane	ND	1.0	ug/L	0.31
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	0.18
1,2-Dichlorobenzene	ND	1.0	ug/L	0.15
1,3-Dichlorobenzene	ND	1.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.16
Dichlorodifluoromethane	ND	2.0	ug/L	0.22
1,1-Dichloroethane	ND	1.0	ug/L	0.22
1,2-Dichloroethane	ND	1.0	ug/L	0.26
1,1-Dichloroethene	ND	1.0	ug/L	0.23
1,2-Dichloroethene (total)	ND	1.0	ug/L	0.24
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.14
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.15
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.19
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.20
Ethylbenzene	ND	1.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	1.7
Methylene chloride	**0.66 J,B**	**5.0**	**ug/L**	**0.21**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.98
Styrene	ND	1.0	ug/L	0.14
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.21
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.21
Tetrachloroethene	ND	1.0	ug/L	0.26
Toluene	ND	1.0	ug/L	0.15
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.21

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Cabrera Services

Client Sample ID: TB-3

GC/MS Volatiles

Lot-Sample #...: D4E210325-011 **Work Order #...:** GGTF61AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1,1-Trichloroethane	ND	1.0	ug/L	0.16
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.16
Trichlorofluoromethane	ND	2.0	ug/L	0.24
1,2,3-Trichloropropane	ND	1.0	ug/L	0.33
Vinyl chloride	ND	1.0	ug/L	0.19
Xylenes (total)	ND	2.0	ug/L	0.41
n-Butylbenzene	ND	1.0	ug/L	0.21
sec-Butylbenzene	ND	1.0	ug/L	0.23
Isopropylbenzene	ND	1.0	ug/L	0.17
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.15
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.16
n-Propylbenzene	ND	1.0	ug/L	0.17
tert-Butylbenzene	ND	1.0	ug/L	0.17
Dibromochloromethane	ND	1.0	ug/L	0.19
2-Chlorotoluene	ND	1.0	ug/L	0.17
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	0.47
1,3-Dichloropropane	ND	1.0	ug/L	0.22
2,2-Dichloropropane	ND	5.0	ug/L	0.18
1,1-Dichloropropene	ND	1.0	ug/L	0.19
Hexachlorobutadiene	ND	1.0	ug/L	0.18
4-Isopropyltoluene	ND	1.0	ug/L	0.20
Methyl tert-butyl ether	ND	5.0	ug/L	0.38
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.21
m-Xylene & p-Xylene	ND	2.0	ug/L	0.27
o-Xylene	ND	1.0	ug/L	0.15
Bromobenzene	ND	1.0	ug/L	0.17
Bromochloromethane	ND	1.0	ug/L	0.27
Naphthalene	ND	1.0	ug/L	0.50

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(76 - 116)
1,2-Dichloroethane-d4	94	(59 - 129)
4-Bromofluorobenzene	95	(74 - 114)
Toluene-d8	102	(76 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Cabrera Services

Client Sample ID: 01-MW-06

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-001 **Work Order #...:** GGTEE1AC **Matrix.....:** WATER
Date Sampled...: 05/19/04 10:25 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/02/04
Prep Batch #...: 4145234 **Analysis Time..:** 22:03
Dilution Factor: 1 **Initial Wgt/Vol:** 990 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	0.60
Acenaphthylene	ND	10	ug/L	0.60
Acetophenone	ND	10	ug/L	2.0
2-Acetylaminofluorene	ND	100	ug/L	2.0
4-Aminobiphenyl	ND	50	ug/L	2.0
Aniline	ND	10	ug/L	4.0
Anthracene	ND	10	ug/L	3.0
Aramite	ND	20	ug/L	2.0
Benzo(a)anthracene	ND	10	ug/L	0.80
Benzo(b)fluoranthene	ND	10	ug/L	0.90
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.0
Benzo(a)pyrene	ND	10	ug/L	0.80
Benzyl alcohol	ND	10	ug/L	1.0
bis(2-Chloroethoxy) methane	ND	10	ug/L	0.90
bis(2-Chloroethyl)- ether	ND	10	ug/L	3.0
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.90
4-Bromophenyl phenyl ether	ND	10	ug/L	0.70
Butyl benzyl phthalate	ND	10	ug/L	1.0
4-Chloroaniline	ND	10	ug/L	3.0
Chlorobenzilate	ND	10	ug/L	2.0
4-Chloro-3-methylphenol	ND	10	ug/L	0.80
2-Chloronaphthalene	ND	10	ug/L	0.70
2-Chlorophenol	ND	10	ug/L	0.80
4-Chlorophenyl phenyl ether	ND	10	ug/L	0.60
Chrysene	ND	10	ug/L	0.80
Diallate	ND	20	ug/L	2.0
Dibenz(a,h)anthracene	ND	10	ug/L	0.90
Dibenzofuran	ND	10	ug/L	0.60
Di-n-butyl phthalate	ND	10	ug/L	0.80
1,2-Dichlorobenzene	ND	10	ug/L	0.80
1,3-Dichlorobenzene	ND	10	ug/L	0.80
1,4-Dichlorobenzene	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-06

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-001 **Work Order #...:** GGTEE1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	50	ug/L	8.0
2,4-Dichlorophenol	ND	10	ug/L	0.70
2,6-Dichlorophenol	ND	10	ug/L	2.0
Diethyl phthalate	ND	10	ug/L	0.70
Dimethoate	ND	20	ug/L	2.0
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	3.0
3,3'-Dimethylbenzidine	ND	20	ug/L	4.0
2,4-Dimethylphenol	ND	10	ug/L	4.0
Dimethyl phthalate	ND	10	ug/L	0.80
1,3-Dinitrobenzene	ND	10	ug/L	2.0
4,6-Dinitro-2-methylphenol	ND	50	ug/L	6.0
2,4-Dinitrophenol	ND	50	ug/L	6.0
2,4-Dinitrotoluene	ND	10	ug/L	1.0
2,6-Dinitrotoluene	ND	10	ug/L	0.80
Di-n-octyl phthalate	ND	10	ug/L	1.0
Diphenylamine	ND	10	ug/L	2.0
Disulfoton	ND	50	ug/L	2.0
Ethyl methanesulfonate	ND	10	ug/L	2.0
Fluoranthene	ND	10	ug/L	0.70
Fluorene	ND	10	ug/L	0.60
Hexachlorobenzene	ND	10	ug/L	0.80
Hexachlorobutadiene	ND	10	ug/L	1.0
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	0.80
Hexachloropropene	ND	100	ug/L	1.0
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	0.80
Isodrin	ND	10	ug/L	5.0
Isophorone	ND	10	ug/L	0.90
Isosafrole	ND	20	ug/L	3.0
Methapyrilene	ND	50	ug/L	20
3-Methylcholanthrene	ND	20	ug/L	1.0
Methyl methanesulfonate	ND	10	ug/L	2.0
2-Methylnaphthalene	ND	10	ug/L	0.80
Methyl parathion	ND	50	ug/L	2.0
2-Methylphenol	ND	10	ug/L	0.90
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	0.80
Naphthalene	ND	10	ug/L	0.80
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-06

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-001 **Work Order #...:** GGTEE1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	10	ug/L	1.0
2-Nitroaniline	ND	50	ug/L	0.90
3-Nitroaniline	ND	50	ug/L	0.90
4-Nitroaniline	ND	50	ug/L	6.0
Nitrobenzene	ND	10	ug/L	2.0
2-Nitrophenol	ND	10	ug/L	0.80
4-Nitrophenol	ND	50	ug/L	7.0
4-Nitroquinoline-1-oxide	ND	100	ug/L	5.0
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.0
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	0.80
N-Nitrosodiphenylamine	ND	10	ug/L	1.0
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	0.70
N-Nitrosomethylethylamine	ND	10	ug/L	2.0
N-Nitrosomorpholine	ND	10	ug/L	2.0
N-Nitrosopiperidine	ND	10	ug/L	2.0
N-Nitrosopyrrolidine	ND	10	ug/L	2.0
5-Nitro-o-toluidine	ND	20	ug/L	2.0
Parathion	ND	50	ug/L	2.0
Pentachlorobenzene	ND	10	ug/L	2.0
Pentachloroethane	ND	50	ug/L	2.0
Pentachloronitrobenzene	ND	50	ug/L	2.0
Pentachlorophenol	ND	50	ug/L	5.0
Phenacetin	ND	20	ug/L	2.0
Phenanthrene	ND	10	ug/L	0.70
Phenol	ND	10	ug/L	0.90
Phorate	ND	50	ug/L	2.0
2-Picoline	ND	20	ug/L	3.0
Pronamide	ND	20	ug/L	2.0
Pyrene	ND	10	ug/L	0.80
Pyridine	ND	20	ug/L	10
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	2.0
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	2.0
Thionazin	ND	10	ug/L	2.0
o-Toluidine	ND	10	ug/L	2.0
1,2,4-Trichloro-benzene	ND	10	ug/L	0.90
2,4,5-Trichloro-phenol	ND	10	ug/L	1.0
2,4,6-Trichloro-phenol	ND	10	ug/L	0.80

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Cabrera Services

Client Sample ID: 01-MW-06

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-001 **Work Order #...:** GGTEE1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	50	ug/L	2.0
1,3,5-Trinitrobenzene	ND	50	ug/L	2.0
1,4-Dioxane	**40**	**10**	**ug/L**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	64	(32 - 116)
Phenol-d5	69	(40 - 111)
Nitrobenzene-d5	69	(53 - 107)
2-Fluorobiphenyl	56	(31 - 105)
2,4,6-Tribromophenol	68	(42 - 122)
Terphenyl-d14	67	(21 - 125)

Cabrera Services

01-MW-06

GC/MS Semivolatiles

Lot-Sample #: D4E210325-001 **Work Order #:** GGTEE1AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		6.4 J	M	2.4556	ug/L
Unknown		4.7 J	M	10.393	ug/L
PPO	92-71-1	--	M		ug/L
POPOP	1806-34-4	--	M		ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

Cabrera Services

Client Sample ID: 01-MW-12

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-002 **Work Order #...:** GGTE31AC **Matrix.....:** WATER
Date Sampled...: 05/19/04 10:30 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/02/04
Prep Batch #...: 4145234 **Analysis Time..:** 22:27
Dilution Factor: 1 **Initial Wgt/Vol:** 978 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	0.60
Acenaphthylene	ND	10	ug/L	0.60
Acetophenone	ND	10	ug/L	2.0
2-Acetylaminofluorene	ND	100	ug/L	2.0
4-Aminobiphenyl	ND	50	ug/L	2.0
Aniline	ND	10	ug/L	4.0
Anthracene	ND	10	ug/L	3.0
Aramite	ND	20	ug/L	2.0
Benzo(a)anthracene	ND	10	ug/L	0.80
Benzo(b)fluoranthene	ND	10	ug/L	0.90
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.0
Benzo(a)pyrene	ND	10	ug/L	0.80
Benzyl alcohol	ND	10	ug/L	1.0
bis(2-Chloroethoxy) methane	ND	10	ug/L	0.90
bis(2-Chloroethyl)- ether	ND	10	ug/L	3.0
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.90
4-Bromophenyl phenyl ether	ND	10	ug/L	0.70
Butyl benzyl phthalate	ND	10	ug/L	1.0
4-Chloroaniline	ND	10	ug/L	3.0
Chlorobenzilate	ND	10	ug/L	2.0
4-Chloro-3-methylphenol	ND	10	ug/L	0.80
2-Chloronaphthalene	ND	10	ug/L	0.70
2-Chlorophenol	ND	10	ug/L	0.80
4-Chlorophenyl phenyl ether	ND	10	ug/L	0.60
Chrysene	ND	10	ug/L	0.80
Diallate	ND	20	ug/L	2.0
Dibenz(a,h)anthracene	ND	10	ug/L	0.90
Dibenzofuran	ND	10	ug/L	0.60
Di-n-butyl phthalate	ND	10	ug/L	0.80
1,2-Dichlorobenzene	ND	10	ug/L	0.80
1,3-Dichlorobenzene	ND	10	ug/L	0.80
1,4-Dichlorobenzene	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-12

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-002 **Work Order #...:** GGTE31AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	50	ug/L	8.0
2,4-Dichlorophenol	ND	10	ug/L	0.70
2,6-Dichlorophenol	ND	10	ug/L	2.0
Diethyl phthalate	ND	10	ug/L	0.70
Dimethoate	ND	20	ug/L	2.0
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	3.0
3,3'-Dimethylbenzidine	ND	20	ug/L	4.0
2,4-Dimethylphenol	ND	10	ug/L	4.0
Dimethyl phthalate	ND	10	ug/L	0.80
1,3-Dinitrobenzene	ND	10	ug/L	2.0
4,6-Dinitro-2-methylphenol	ND	50	ug/L	6.0
2,4-Dinitrophenol	ND	50	ug/L	6.0
2,4-Dinitrotoluene	ND	10	ug/L	1.0
2,6-Dinitrotoluene	ND	10	ug/L	0.80
Di-n-octyl phthalate	ND	10	ug/L	1.0
Diphenylamine	ND	10	ug/L	2.0
Disulfoton	ND	50	ug/L	2.0
Ethyl methanesulfonate	ND	10	ug/L	2.0
Fluoranthene	ND	10	ug/L	0.70
Fluorene	ND	10	ug/L	0.60
Hexachlorobenzene	ND	10	ug/L	0.80
Hexachlorobutadiene	ND	10	ug/L	1.0
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	0.80
Hexachloropropene	ND	100	ug/L	1.0
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	0.80
Isodrin	ND	10	ug/L	5.0
Isophorone	ND	10	ug/L	0.90
Isosafrole	ND	20	ug/L	3.0
Methapyrilene	ND	50	ug/L	20
3-Methylcholanthrene	ND	20	ug/L	1.0
Methyl methanesulfonate	ND	10	ug/L	2.0
2-Methylnaphthalene	ND	10	ug/L	0.80
Methyl parathion	ND	50	ug/L	2.0
2-Methylphenol	ND	10	ug/L	0.90
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	0.80
Naphthalene	ND	10	ug/L	0.80
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-12

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-002 **Work Order #...:** GGTE31AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	10	ug/L	1.0
2-Nitroaniline	ND	50	ug/L	0.90
3-Nitroaniline	ND	50	ug/L	0.90
4-Nitroaniline	ND	50	ug/L	6.0
Nitrobenzene	ND	10	ug/L	2.0
2-Nitrophenol	ND	10	ug/L	0.80
4-Nitrophenol	ND	50	ug/L	7.0
4-Nitroquinoline-1-oxide	ND	100	ug/L	5.0
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.0
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	0.80
N-Nitrosodiphenylamine	ND	10	ug/L	1.0
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	0.70
N-Nitrosomethylethylamine	ND	10	ug/L	2.0
N-Nitrosomorpholine	ND	10	ug/L	2.0
N-Nitrosopiperidine	ND	10	ug/L	2.0
N-Nitrosopyrrolidine	ND	10	ug/L	2.0
5-Nitro-o-toluidine	ND	20	ug/L	2.0
Parathion	ND	50	ug/L	2.0
Pentachlorobenzene	ND	10	ug/L	2.0
Pentachloroethane	ND	50	ug/L	2.0
Pentachloronitrobenzene	ND	50	ug/L	2.0
Pentachlorophenol	ND	50	ug/L	5.0
Phenacetin	ND	20	ug/L	2.0
Phenanthrene	ND	10	ug/L	0.70
Phenol	ND	10	ug/L	0.90
Phorate	ND	50	ug/L	2.0
2-Picoline	ND	20	ug/L	3.0
Pronamide	ND	20	ug/L	2.0
Pyrene	ND	10	ug/L	0.80
Pyridine	ND	20	ug/L	10
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	2.0
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	2.0
Thionazin	ND	10	ug/L	2.0
o-Toluidine	ND	10	ug/L	2.0
1,2,4-Trichloro-benzene	ND	10	ug/L	0.90
2,4,5-Trichloro-phenol	ND	10	ug/L	1.0
2,4,6-Trichloro-phenol	ND	10	ug/L	0.80

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Cabrera Services

Client Sample ID: 01-MW-12

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-002 **Work Order #...:** GGTE31AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	50	ug/L	2.0
1,3,5-Trinitrobenzene	ND	50	ug/L	2.0
1,4-Dioxane	**63**	**10**	**ug/L**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	81	(32 - 116)
Phenol-d5	80	(40 - 111)
Nitrobenzene-d5	85	(53 - 107)
2-Fluorobiphenyl	75	(31 - 105)
2,4,6-Tribromophenol	96	(42 - 122)
Terphenyl-d14	39	(21 - 125)

Cabrera Services

01-MW-12

GC/MS Semivolatiles

Lot-Sample #: D4E210325-002 **Work Order #:** GGTE31AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		9.5 J	M	2.4554	ug/L
Unknown		9.9 J	M	2.5788	ug/L
Unknown		8.7 J	M	4.929	ug/L
Unknown		5.1 J	M	4.9584	ug/L
Unknown		7.0 J	M	6.1688	ug/L
Unknown		12 J	M	6.7035	ug/L
Unknown		18 J	M	7.0736	ug/L
Phenol, 4-(1,1-dimethylpropyl)	80-46-6	460 J	M	7.4262	ug/L
Benzoic acid, 2,4-dichloro-	50-84-0	14 J	M	8.002	ug/L
O-hydroxybiphenyl	90-43-7	120 J	M	8.0783	ug/L
Clorophene	120-32-1	110 J	M	9.5179	ug/L
Unknown		27 J	M	10.71	ug/L
PPO	92-71-7	--	M		ug/L
POPOP	1806-34-4	--	M		ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

Cabrera Services

Client Sample ID: 01-MW-04

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-003 **Work Order #...:** GGTE61AC **Matrix.....:** WATER
Date Sampled...: 05/19/04 13:30 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/02/04
Prep Batch #...: 4145234 **Analysis Time..:** 22:50
Dilution Factor: 1 **Initial Wgt/Vol:** 1024 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	0.60
Acenaphthylene	ND	10	ug/L	0.60
Acetophenone	ND	10	ug/L	2.0
2-Acetylaminofluorene	ND	100	ug/L	2.0
4-Aminobiphenyl	ND	50	ug/L	2.0
Aniline	ND	10	ug/L	4.0
Anthracene	ND	10	ug/L	3.0
Aramite	ND	20	ug/L	2.0
Benzo(a)anthracene	ND	10	ug/L	0.80
Benzo(b)fluoranthene	ND	10	ug/L	0.90
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.0
Benzo(a)pyrene	ND	10	ug/L	0.80
Benzyl alcohol	ND	10	ug/L	1.0
bis(2-Chloroethoxy) methane	ND	10	ug/L	0.90
bis(2-Chloroethyl)- ether	ND	10	ug/L	3.0
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.90
4-Bromophenyl phenyl ether	ND	10	ug/L	0.70
Butyl benzyl phthalate	ND	10	ug/L	1.0
4-Chloroaniline	ND	10	ug/L	3.0
Chlorobenzilate	ND	10	ug/L	2.0
4-Chloro-3-methylphenol	ND	10	ug/L	0.80
2-Chloronaphthalene	ND	10	ug/L	0.70
2-Chlorophenol	ND	10	ug/L	0.80
4-Chlorophenyl phenyl ether	ND	10	ug/L	0.60
Chrysene	ND	10	ug/L	0.80
Diallate	ND	20	ug/L	2.0
Dibenz(a,h)anthracene	ND	10	ug/L	0.90
Dibenzofuran	ND	10	ug/L	0.60
Di-n-butyl phthalate	ND	10	ug/L	0.80
1,2-Dichlorobenzene	ND	10	ug/L	0.80
1,3-Dichlorobenzene	ND	10	ug/L	0.80
1,4-Dichlorobenzene	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-04

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-003 **Work Order #...:** GGTE61AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	50	ug/L	8.0
2,4-Dichlorophenol	ND	10	ug/L	0.70
2,6-Dichlorophenol	ND	10	ug/L	2.0
Diethyl phthalate	ND	10	ug/L	0.70
Dimethoate	ND	20	ug/L	2.0
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	3.0
3,3'-Dimethylbenzidine	ND	20	ug/L	4.0
2,4-Dimethylphenol	ND	10	ug/L	4.0
Dimethyl phthalate	ND	10	ug/L	0.80
1,3-Dinitrobenzene	ND	10	ug/L	2.0
4,6-Dinitro-2-methylphenol	ND	50	ug/L	6.0
2,4-Dinitrophenol	ND	50	ug/L	6.0
2,4-Dinitrotoluene	ND	10	ug/L	1.0
2,6-Dinitrotoluene	ND	10	ug/L	0.80
Di-n-octyl phthalate	ND	10	ug/L	1.0
Diphenylamine	ND	10	ug/L	2.0
Disulfoton	ND	50	ug/L	2.0
Ethyl methanesulfonate	ND	10	ug/L	2.0
Fluoranthene	ND	10	ug/L	0.70
Fluorene	ND	10	ug/L	0.60
Hexachlorobenzene	ND	10	ug/L	0.80
Hexachlorobutadiene	ND	10	ug/L	1.0
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	0.80
Hexachloropropene	ND	100	ug/L	1.0
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	0.80
Isodrin	ND	10	ug/L	5.0
Isophorone	ND	10	ug/L	0.90
Isosafrole	ND	20	ug/L	3.0
Methapyrilene	ND	50	ug/L	20
3-Methylcholanthrene	ND	20	ug/L	1.0
Methyl methanesulfonate	ND	10	ug/L	2.0
2-Methylnaphthalene	ND	10	ug/L	0.80
Methyl parathion	ND	50	ug/L	2.0
2-Methylphenol	ND	10	ug/L	0.90
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	0.80
Naphthalene	ND	10	ug/L	0.80
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-04

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-003 **Work Order #...:** GGTE61AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	10	ug/L	1.0
2-Nitroaniline	ND	50	ug/L	0.90
3-Nitroaniline	ND	50	ug/L	0.90
4-Nitroaniline	ND	50	ug/L	6.0
Nitrobenzene	ND	10	ug/L	2.0
2-Nitrophenol	ND	10	ug/L	0.80
4-Nitrophenol	ND	50	ug/L	7.0
4-Nitroquinoline-1-oxide	ND	100	ug/L	5.0
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.0
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	0.80
N-Nitrosodiphenylamine	ND	10	ug/L	1.0
N-Nitrosodi-n-propylamine	ND	10	ug/L	0.70
N-Nitrosomethylethylamine	ND	10	ug/L	2.0
N-Nitrosomorpholine	ND	10	ug/L	2.0
N-Nitrosopiperidine	ND	10	ug/L	2.0
N-Nitrosopyrrolidine	ND	10	ug/L	2.0
5-Nitro-o-toluidine	ND	20	ug/L	2.0
Parathion	ND	50	ug/L	2.0
Pentachlorobenzene	ND	10	ug/L	2.0
Pentachloroethane	ND	50	ug/L	2.0
Pentachloronitrobenzene	ND	50	ug/L	2.0
Pentachlorophenol	ND	50	ug/L	5.0
Phenacetin	ND	20	ug/L	2.0
Phenanthrene	ND	10	ug/L	0.70
Phenol	ND	10	ug/L	0.90
Phorate	ND	50	ug/L	2.0
2-Picoline	ND	20	ug/L	3.0
Pronamide	ND	20	ug/L	2.0
Pyrene	ND	10	ug/L	0.80
Pyridine	ND	20	ug/L	10
1,2,4,5-Tetrachlorobenzene	ND	10	ug/L	2.0
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	2.0
Thionazin	ND	10	ug/L	2.0
o-Toluidine	ND	10	ug/L	2.0
1,2,4-Trichlorobenzene	ND	10	ug/L	0.90
2,4,5-Trichlorophenol	ND	10	ug/L	1.0
2,4,6-Trichlorophenol	ND	10	ug/L	0.80

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Cabrera Services

Client Sample ID: 01-MW-04

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-003 **Work Order #...:** GGTE61AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	50	ug/L	2.0
1,3,5-Trinitrobenzene	ND	50	ug/L	2.0
1,4-Dioxane	**58**	**10**	**ug/L**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	55	(32 - 116)
Phenol-d5	58	(40 - 111)
Nitrobenzene-d5	62	(53 - 107)
2-Fluorobiphenyl	52	(31 - 105)
2,4,6-Tribromophenol	64	(42 - 122)
Terphenyl-d14	61	(21 - 125)

Cabrera Services

01-MW-04

GC/MS Semivolatiles

Lot-Sample #: D4E210325-003 **Work Order #:** GGTE61AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		5.6 J	M	2.4555	ug/L
PPO	92-71-7	--	M		ug/L
POPOP	1806-34-4	--	M		ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE71AC **Matrix.....:** WATER
Date Sampled...: 05/19/04 13:35 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/02/04
Prep Batch #...: 4145234 **Analysis Time..:** 23:13
Dilution Factor: 1 **Initial Wgt/Vol:** 969 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	0.60
Acenaphthylene	ND	10	ug/L	0.60
Acetophenone	ND	10	ug/L	2.0
2-Acetylaminofluorene	ND	100	ug/L	2.0
4-Aminobiphenyl	ND	50	ug/L	2.0
Aniline	ND	10	ug/L	4.0
Anthracene	ND	10	ug/L	3.0
Aramite	ND	20	ug/L	2.0
Benzo(a)anthracene	ND	10	ug/L	0.80
Benzo(b)fluoranthene	ND	10	ug/L	0.90
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.0
Benzo(a)pyrene	ND	10	ug/L	0.80
Benzyl alcohol	ND	10	ug/L	1.0
bis(2-Chloroethoxy) methane	ND	10	ug/L	0.90
bis(2-Chloroethyl)- ether	ND	10	ug/L	3.0
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.90
4-Bromophenyl phenyl ether	ND	10	ug/L	0.70
Butyl benzyl phthalate	ND	10	ug/L	1.0
4-Chloroaniline	ND	10	ug/L	3.0
Chlorobenzilate	ND	10	ug/L	2.0
4-Chloro-3-methylphenol	ND	10	ug/L	0.80
2-Chloronaphthalene	ND	10	ug/L	0.70
2-Chlorophenol	ND	10	ug/L	0.80
4-Chlorophenyl phenyl ether	ND	10	ug/L	0.60
Chrysene	ND	10	ug/L	0.80
Diallate	ND	20	ug/L	2.0
Dibenz(a,h)anthracene	ND	10	ug/L	0.90
Dibenzofuran	ND	10	ug/L	0.60
Di-n-butyl phthalate	ND	10	ug/L	0.80
1,2-Dichlorobenzene	ND	10	ug/L	0.80
1,3-Dichlorobenzene	ND	10	ug/L	0.80
1,4-Dichlorobenzene	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE71AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	50	ug/L	8.0
2,4-Dichlorophenol	ND	10	ug/L	0.70
2,6-Dichlorophenol	ND	10	ug/L	2.0
Diethyl phthalate	ND	10	ug/L	0.70
Dimethoate	ND	20	ug/L	2.0
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	3.0
3,3'-Dimethylbenzidine	ND	20	ug/L	4.0
2,4-Dimethylphenol	ND	10	ug/L	4.0
Dimethyl phthalate	ND	10	ug/L	0.80
1,3-Dinitrobenzene	ND	10	ug/L	2.0
4,6-Dinitro-2-methylphenol	ND	50	ug/L	6.0
2,4-Dinitrophenol	ND	50	ug/L	6.0
2,4-Dinitrotoluene	ND	10	ug/L	1.0
2,6-Dinitrotoluene	ND	10	ug/L	0.80
Di-n-octyl phthalate	ND	10	ug/L	1.0
Diphenylamine	ND	10	ug/L	2.0
Disulfoton	ND	50	ug/L	2.0
Ethyl methanesulfonate	ND	10	ug/L	2.0
Fluoranthene	ND	10	ug/L	0.70
Fluorene	ND	10	ug/L	0.60
Hexachlorobenzene	ND	10	ug/L	0.80
Hexachlorobutadiene	ND	10	ug/L	1.0
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	0.80
Hexachloropropene	ND	100	ug/L	1.0
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	0.80
Isodrin	ND	10	ug/L	5.0
Isophorone	ND	10	ug/L	0.90
Isosafrole	ND	20	ug/L	3.0
Methapyrilene	ND	50	ug/L	20
3-Methylcholanthrene	ND	20	ug/L	1.0
Methyl methanesulfonate	ND	10	ug/L	2.0
2-Methylnaphthalene	ND	10	ug/L	0.80
Methyl parathion	ND	50	ug/L	2.0
2-Methylphenol	ND	10	ug/L	0.90
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	0.80
Naphthalene	ND	10	ug/L	0.80
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE71AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	10	ug/L	1.0
2-Nitroaniline	ND	50	ug/L	0.90
3-Nitroaniline	ND	50	ug/L	0.90
4-Nitroaniline	ND	50	ug/L	6.0
Nitrobenzene	ND	10	ug/L	2.0
2-Nitrophenol	ND	10	ug/L	0.80
4-Nitrophenol	ND	50	ug/L	7.0
4-Nitroquinoline-1-oxide	ND	100	ug/L	5.0
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.0
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	0.80
N-Nitrosodiphenylamine	ND	10	ug/L	1.0
N-Nitrosodi-n-propylamine	ND	10	ug/L	0.70
N-Nitrosomethylethylamine	ND	10	ug/L	2.0
N-Nitrosomorpholine	ND	10	ug/L	2.0
N-Nitrosopiperidine	ND	10	ug/L	2.0
N-Nitrosopyrrolidine	ND	10	ug/L	2.0
5-Nitro-o-toluidine	ND	20	ug/L	2.0
Parathion	ND	50	ug/L	2.0
Pentachlorobenzene	ND	10	ug/L	2.0
Pentachloroethane	ND	50	ug/L	2.0
Pentachloronitrobenzene	ND	50	ug/L	2.0
Pentachlorophenol	ND	50	ug/L	5.0
Phenacetin	ND	20	ug/L	2.0
Phenanthrene	ND	10	ug/L	0.70
Phenol	ND	10	ug/L	0.90
Phorate	ND	50	ug/L	2.0
2-Picoline	ND	20	ug/L	3.0
Pronamide	ND	20	ug/L	2.0
Pyrene	ND	10	ug/L	0.80
Pyridine	ND	20	ug/L	10
1,2,4,5-Tetrachlorobenzene	ND	10	ug/L	2.0
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	2.0
Thionazin	ND	10	ug/L	2.0
o-Toluidine	ND	10	ug/L	2.0
1,2,4-Trichlorobenzene	ND	10	ug/L	0.90
2,4,5-Trichlorophenol	ND	10	ug/L	1.0
2,4,6-Trichlorophenol	ND	10	ug/L	0.80

(Continued on next page)

Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE71AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	50	ug/L	2.0
1,3,5-Trinitrobenzene	ND	50	ug/L	2.0
1,4-Dioxane	**2600 E**	**10**	**ug/L**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	78	(32 - 116)
Phenol-d5	81	(40 - 111)
Nitrobenzene-d5	85	(53 - 107)
2-Fluorobiphenyl	72	(31 - 105)
2,4,6-Tribromophenol	91	(42 - 122)
Terphenyl-d14	84	(21 - 125)

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

Cabrera Services

01-MW-07

GC/MS Semivolatiles

Lot-Sample #: D4E210325-004 **Work Order #:** GGTE71AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		13 J	M	2.4555	ug/L
Unknown		9.4 J	M	4.9292	ug/L
PPO	92-71-7	--	M		ug/L
POPOP	1806-34-4	--	M		ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE72AC **Matrix.....:** WATER
Date Sampled...: 05/19/04 13:35 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/18/04
Prep Batch #...: 4145234 **Analysis Time..:** 14:33
Dilution Factor: 20 **Initial Wgt/Vol:** 969 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	200	ug/L	12
Acenaphthylene	ND	200	ug/L	12
Acetophenone	ND	200	ug/L	40
2-Acetylaminofluorene	ND	2000	ug/L	40
4-Aminobiphenyl	ND	1000	ug/L	40
Aniline	ND	200	ug/L	80
Anthracene	ND	200	ug/L	60
Aramite	ND	400	ug/L	40
Benzo(a)anthracene	ND	200	ug/L	16
Benzo(b)fluoranthene	ND	200	ug/L	18
Benzo(k)fluoranthene	ND	200	ug/L	40
Benzo(ghi)perylene	ND	200	ug/L	20
Benzo(a)pyrene	ND	200	ug/L	16
Benzyl alcohol	ND	200	ug/L	20
bis(2-Chloroethoxy) methane	ND	200	ug/L	18
bis(2-Chloroethyl)- ether	ND	200	ug/L	60
bis(2-Ethylhexyl) phthalate	ND	200	ug/L	18
4-Bromophenyl phenyl ether	ND	200	ug/L	14
Butyl benzyl phthalate	ND	200	ug/L	20
4-Chloroaniline	ND	200	ug/L	60
Chlorobenzilate	ND	200	ug/L	40
4-Chloro-3-methylphenol	ND	200	ug/L	16
2-Chloronaphthalene	ND	200	ug/L	14
2-Chlorophenol	ND	200	ug/L	16
4-Chlorophenyl phenyl ether	ND	200	ug/L	12
Chrysene	ND	200	ug/L	16
Diallate	ND	400	ug/L	40
Dibenz(a,h)anthracene	ND	200	ug/L	18
Dibenzofuran	ND	200	ug/L	12
Di-n-butyl phthalate	ND	200	ug/L	16
1,2-Dichlorobenzene	ND	200	ug/L	16
1,3-Dichlorobenzene	ND	200	ug/L	16
1,4-Dichlorobenzene	ND	200	ug/L	20

(Continued on next page)

Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE72AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	1000	ug/L	160
2,4-Dichlorophenol	ND	200	ug/L	14
2,6-Dichlorophenol	ND	200	ug/L	40
Diethyl phthalate	ND	200	ug/L	14
Dimethoate	ND	400	ug/L	40
7,12-Dimethylbenz(a)-anthracene	ND	400	ug/L	60
3,3'-Dimethylbenzidine	ND	400	ug/L	80
2,4-Dimethylphenol	ND	200	ug/L	80
Dimethyl phthalate	ND	200	ug/L	16
1,3-Dinitrobenzene	ND	200	ug/L	40
4,6-Dinitro-2-methylphenol	ND	1000	ug/L	120
2,4-Dinitrophenol	ND	1000	ug/L	120
2,4-Dinitrotoluene	ND	200	ug/L	20
2,6-Dinitrotoluene	ND	200	ug/L	16
Di-n-octyl phthalate	ND	200	ug/L	20
Diphenylamine	ND	200	ug/L	40
Disulfoton	ND	1000	ug/L	40
Ethyl methanesulfonate	ND	200	ug/L	40
Fluoranthene	ND	200	ug/L	14
Fluorene	ND	200	ug/L	12
Hexachlorobenzene	ND	200	ug/L	16
Hexachlorobutadiene	ND	200	ug/L	20
Hexachlorocyclopenta-diene	ND	1000	ug/L	100
Hexachloroethane	ND	200	ug/L	16
Hexachloropropene	ND	2000	ug/L	20
Indeno(1,2,3-cd)pyrene	ND	200	ug/L	16
Isodrin	ND	200	ug/L	100
Isophorone	ND	200	ug/L	18
Isosafrole	ND	400	ug/L	60
Methapyrilene	ND	1000	ug/L	400
3-Methylcholanthrene	ND	400	ug/L	20
Methyl methanesulfonate	ND	200	ug/L	40
2-Methylnaphthalene	ND	200	ug/L	16
Methyl parathion	ND	1000	ug/L	40
2-Methylphenol	ND	200	ug/L	18
3-Methylphenol & 4-Methylphenol	ND	200	ug/L	16
Naphthalene	ND	200	ug/L	16
1,4-Naphthoquinone	ND	1000	ug/L	40
1-Naphthylamine	ND	200	ug/L	20

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Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE72AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	200	ug/L	20
2-Nitroaniline	ND	1000	ug/L	18
3-Nitroaniline	ND	1000	ug/L	18
4-Nitroaniline	ND	1000	ug/L	120
Nitrobenzene	ND	200	ug/L	40
2-Nitrophenol	ND	200	ug/L	16
4-Nitrophenol	ND	1000	ug/L	140
4-Nitroquinoline-1-oxide	ND	2000	ug/L	100
N-Nitrosodi-n-butylamine	ND	200	ug/L	40
N-Nitrosodiethylamine	ND	200	ug/L	40
N-Nitrosodimethylamine	ND	200	ug/L	16
N-Nitrosodiphenylamine	ND	200	ug/L	20
N-Nitrosodi-n-propyl-amine	ND	200	ug/L	14
N-Nitrosomethylethylamine	ND	200	ug/L	40
N-Nitrosomorpholine	ND	200	ug/L	40
N-Nitrosopiperidine	ND	200	ug/L	40
N-Nitrosopyrrolidine	ND	200	ug/L	40
5-Nitro-o-toluidine	ND	400	ug/L	40
Parathion	ND	1000	ug/L	40
Pentachlorobenzene	ND	200	ug/L	40
Pentachloroethane	ND	1000	ug/L	40
Pentachloronitrobenzene	ND	1000	ug/L	40
Pentachlorophenol	ND	1000	ug/L	100
Phenacetin	ND	400	ug/L	40
Phenanthrene	ND	200	ug/L	14
Phenol	ND	200	ug/L	18
Phorate	ND	1000	ug/L	40
2-Picoline	ND	400	ug/L	60
Pronamide	ND	400	ug/L	40
Pyrene	ND	200	ug/L	16
Pyridine	ND	400	ug/L	200
1,2,4,5-Tetrachloro-benzene	ND	200	ug/L	40
2,3,4,6-Tetrachlorophenol	ND	1000	ug/L	40
Thionazin	ND	200	ug/L	40
o-Toluidine	ND	200	ug/L	40
1,2,4-Trichloro-benzene	ND	200	ug/L	18
2,4,5-Trichloro-phenol	ND	200	ug/L	20
2,4,6-Trichloro-phenol	ND	200	ug/L	16

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Cabrera Services

Client Sample ID: 01-MW-07

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-004 **Work Order #...:** GGTE72AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	1000	ug/L	40
1,3,5-Trinitrobenzene	ND	1000	ug/L	40
1,4-Dioxane	**1900**	**200**	**ug/L**	**40**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	NC,DIL	(32 - 116)
Phenol-d5	NC,DIL	(40 - 111)
Nitrobenzene-d5	NC,DIL	(53 - 107)
2-Fluorobiphenyl	NC,DIL	(31 - 105)
2,4,6-Tribromophenol	NC,DIL	(42 - 122)
Terphenyl-d14	NC,DIL	(21 - 125)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Cabrera Services

01-MW-07

GC/MS Semivolatiles

Lot-Sample #: D4E210325-004 **Work Order #:** GGTE72AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

Cabrera Services

Client Sample ID: 01-MW-02

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-005 **Work Order #...:** GGTFE1AC **Matrix.....:** WATER
Date Sampled...: 05/19/04 16:00 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/02/04
Prep Batch #...: 4145234 **Analysis Time..:** 23:37
Dilution Factor: 1 **Initial Wgt/Vol:** 1025 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	0.60
Acenaphthylene	ND	10	ug/L	0.60
Acetophenone	ND	10	ug/L	2.0
2-Acetylaminofluorene	ND	100	ug/L	2.0
4-Aminobiphenyl	ND	50	ug/L	2.0
Aniline	ND	10	ug/L	4.0
Anthracene	ND	10	ug/L	3.0
Aramite	ND	20	ug/L	2.0
Benzo(a)anthracene	ND	10	ug/L	0.80
Benzo(b)fluoranthene	ND	10	ug/L	0.90
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.0
Benzo(a)pyrene	ND	10	ug/L	0.80
Benzyl alcohol	ND	10	ug/L	1.0
bis(2-Chloroethoxy) methane	ND	10	ug/L	0.90
bis(2-Chloroethyl)-ether	ND	10	ug/L	3.0
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.90
4-Bromophenyl phenyl ether	ND	10	ug/L	0.70
Butyl benzyl phthalate	ND	10	ug/L	1.0
4-Chloroaniline	ND	10	ug/L	3.0
Chlorobenzilate	ND	10	ug/L	2.0
4-Chloro-3-methylphenol	ND	10	ug/L	0.80
2-Chloronaphthalene	ND	10	ug/L	0.70
2-Chlorophenol	ND	10	ug/L	0.80
4-Chlorophenyl phenyl ether	ND	10	ug/L	0.60
Chrysene	ND	10	ug/L	0.80
Diallate	ND	20	ug/L	2.0
Dibenz(a,h)anthracene	ND	10	ug/L	0.90
Dibenzofuran	ND	10	ug/L	0.60
Di-n-butyl phthalate	ND	10	ug/L	0.80
1,2-Dichlorobenzene	ND	10	ug/L	0.80
1,3-Dichlorobenzene	ND	10	ug/L	0.80
1,4-Dichlorobenzene	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-02

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-005 **Work Order #...:** GGTFE1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	50	ug/L	8.0
2,4-Dichlorophenol	ND	10	ug/L	0.70
2,6-Dichlorophenol	ND	10	ug/L	2.0
Diethyl phthalate	ND	10	ug/L	0.70
Dimethoate	ND	20	ug/L	2.0
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	3.0
3,3'-Dimethylbenzidine	ND	20	ug/L	4.0
2,4-Dimethylphenol	ND	10	ug/L	4.0
Dimethyl phthalate	ND	10	ug/L	0.80
1,3-Dinitrobenzene	ND	10	ug/L	2.0
4,6-Dinitro-2-methylphenol	ND	50	ug/L	6.0
2,4-Dinitrophenol	ND	50	ug/L	6.0
2,4-Dinitrotoluene	ND	10	ug/L	1.0
2,6-Dinitrotoluene	ND	10	ug/L	0.80
Di-n-octyl phthalate	ND	10	ug/L	1.0
Diphenylamine	ND	10	ug/L	2.0
Disulfoton	ND	50	ug/L	2.0
Ethyl methanesulfonate	ND	10	ug/L	2.0
Fluoranthene	ND	10	ug/L	0.70
Fluorene	ND	10	ug/L	0.60
Hexachlorobenzene	ND	10	ug/L	0.80
Hexachlorobutadiene	ND	10	ug/L	1.0
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	0.80
Hexachloropropene	ND	100	ug/L	1.0
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	0.80
Isodrin	ND	10	ug/L	5.0
Isophorone	ND	10	ug/L	0.90
Isosafrole	ND	20	ug/L	3.0
Methapyrilene	ND	50	ug/L	20
3-Methylcholanthrene	ND	20	ug/L	1.0
Methyl methanesulfonate	ND	10	ug/L	2.0
2-Methylnaphthalene	ND	10	ug/L	0.80
Methyl parathion	ND	50	ug/L	2.0
2-Methylphenol	ND	10	ug/L	0.90
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	0.80
Naphthalene	ND	10	ug/L	0.80
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-02

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-005 **Work Order #...:** GGTFE1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	10	ug/L	1.0
2-Nitroaniline	ND	50	ug/L	0.90
3-Nitroaniline	ND	50	ug/L	0.90
4-Nitroaniline	ND	50	ug/L	6.0
Nitrobenzene	ND	10	ug/L	2.0
2-Nitrophenol	ND	10	ug/L	0.80
4-Nitrophenol	ND	50	ug/L	7.0
4-Nitroquinoline-1-oxide	ND	100	ug/L	5.0
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.0
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	0.80
N-Nitrosodiphenylamine	ND	10	ug/L	1.0
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	0.70
N-Nitrosomethylethylamine	ND	10	ug/L	2.0
N-Nitrosomorpholine	ND	10	ug/L	2.0
N-Nitrosopiperidine	ND	10	ug/L	2.0
N-Nitrosopyrrolidine	ND	10	ug/L	2.0
5-Nitro-o-toluidine	ND	20	ug/L	2.0
Parathion	ND	50	ug/L	2.0
Pentachlorobenzene	ND	10	ug/L	2.0
Pentachloroethane	ND	50	ug/L	2.0
Pentachloronitrobenzene	ND	50	ug/L	2.0
Pentachlorophenol	ND	50	ug/L	5.0
Phenacetin	ND	20	ug/L	2.0
Phenanthrene	ND	10	ug/L	0.70
Phenol	ND	10	ug/L	0.90
Phorate	ND	50	ug/L	2.0
2-Picoline	ND	20	ug/L	3.0
Pronamide	ND	20	ug/L	2.0
Pyrene	ND	10	ug/L	0.80
Pyridine	ND	20	ug/L	10
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	2.0
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	2.0
Thionazin	ND	10	ug/L	2.0
o-Toluidine	ND	10	ug/L	2.0
1,2,4-Trichloro-benzene	ND	10	ug/L	0.90
2,4,5-Trichloro-phenol	ND	10	ug/L	1.0
2,4,6-Trichloro-phenol	ND	10	ug/L	0.80

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Cabrera Services

Client Sample ID: 01-MW-02

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-005 **Work Order #...:** GGTFE1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	50	ug/L	2.0
1,3,5-Trinitrobenzene	ND	50	ug/L	2.0
1,4-Dioxane	**45**	**10**	**ug/L**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	75	(32 - 116)
Phenol-d5	79	(40 - 111)
Nitrobenzene-d5	82	(53 - 107)
2-Fluorobiphenyl	73	(31 - 105)
2,4,6-Tribromophenol	86	(42 - 122)
Terphenyl-d14	82	(21 - 125)

Cabrera Services

01-MW-02

GC/MS Semivolatiles

Lot-Sample #: D4E210325-005 **Work Order #:** GGTFE1AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		8.2 J	M	2.4613	ug/L
Unknown		4.6 J	M	2.5083	ug/L
Unknown		5.2 J	M	4.929	ug/L
Unknown		4.7 J	M	9.9527	ug/L
PPO	92-71-7	--	M		ug/L
POPOP	1806-34-4	--	M		ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

Cabrera Services

Client Sample ID: 01-MW-03

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-006 **Work Order #...:** GGTFH1AC **Matrix.....:** WATER
Date Sampled...: 05/19/04 16:00 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/03/04
Prep Batch #...: 4145234 **Analysis Time..:** 00:00
Dilution Factor: 1 **Initial Wgt/Vol:** 1051 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	0.60
Acenaphthylene	ND	10	ug/L	0.60
Acetophenone	ND	10	ug/L	2.0
2-Acetylaminofluorene	ND	100	ug/L	2.0
4-Aminobiphenyl	ND	50	ug/L	2.0
Aniline	ND	10	ug/L	4.0
Anthracene	ND	10	ug/L	3.0
Aramite	ND	20	ug/L	2.0
Benzo(a)anthracene	ND	10	ug/L	0.80
Benzo(b)fluoranthene	ND	10	ug/L	0.90
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.0
Benzo(a)pyrene	ND	10	ug/L	0.80
Benzyl alcohol	ND	10	ug/L	1.0
bis(2-Chloroethoxy) methane	ND	10	ug/L	0.90
bis(2-Chloroethyl)-ether	ND	10	ug/L	3.0
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.90
4-Bromophenyl phenyl ether	ND	10	ug/L	0.70
Butyl benzyl phthalate	ND	10	ug/L	1.0
4-Chloroaniline	ND	10	ug/L	3.0
Chlorobenzilate	ND	10	ug/L	2.0
4-Chloro-3-methylphenol	ND	10	ug/L	0.80
2-Chloronaphthalene	ND	10	ug/L	0.70
2-Chlorophenol	ND	10	ug/L	0.80
4-Chlorophenyl phenyl ether	ND	10	ug/L	0.60
Chrysene	ND	10	ug/L	0.80
Diallate	ND	20	ug/L	2.0
Dibenz(a,h)anthracene	ND	10	ug/L	0.90
Dibenzofuran	ND	10	ug/L	0.60
Di-n-butyl phthalate	ND	10	ug/L	0.80
1,2-Dichlorobenzene	ND	10	ug/L	0.80
1,3-Dichlorobenzene	ND	10	ug/L	0.80
1,4-Dichlorobenzene	ND	10	ug/L	1.0

(Continued on next page)

Cabrera Services

Client Sample ID: 01-MW-03

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-006 **Work Order #...:** GGTFH1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	50	ug/L	8.0
2,4-Dichlorophenol	ND	10	ug/L	0.70
2,6-Dichlorophenol	ND	10	ug/L	2.0
Diethyl phthalate	ND	10	ug/L	0.70
Dimethoate	ND	20	ug/L	2.0
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	3.0
3,3'-Dimethylbenzidine	ND	20	ug/L	4.0
2,4-Dimethylphenol	ND	10	ug/L	4.0
Dimethyl phthalate	ND	10	ug/L	0.80
1,3-Dinitrobenzene	ND	10	ug/L	2.0
4,6-Dinitro-2-methylphenol	ND	50	ug/L	6.0
2,4-Dinitrophenol	ND	50	ug/L	6.0
2,4-Dinitrotoluene	ND	10	ug/L	1.0
2,6-Dinitrotoluene	ND	10	ug/L	0.80
Di-n-octyl phthalate	ND	10	ug/L	1.0
Diphenylamine	ND	10	ug/L	2.0
Disulfoton	ND	50	ug/L	2.0
Ethyl methanesulfonate	ND	10	ug/L	2.0
Fluoranthene	ND	10	ug/L	0.70
Fluorene	ND	10	ug/L	0.60
Hexachlorobenzene	ND	10	ug/L	0.80
Hexachlorobutadiene	ND	10	ug/L	1.0
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	0.80
Hexachloropropene	ND	100	ug/L	1.0
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	0.80
Isodrin	ND	10	ug/L	5.0
Isophorone	ND	10	ug/L	0.90
Isosafrole	ND	20	ug/L	3.0
Methapyrilene	ND	50	ug/L	20
3-Methylcholanthrene	ND	20	ug/L	1.0
Methyl methanesulfonate	ND	10	ug/L	2.0
2-Methylnaphthalene	ND	10	ug/L	0.80
Methyl parathion	ND	50	ug/L	2.0
2-Methylphenol	ND	10	ug/L	0.90
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	0.80
Naphthalene	ND	10	ug/L	0.80
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-03

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-006 **Work Order #...:** GGTFH1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	10	ug/L	1.0
2-Nitroaniline	ND	50	ug/L	0.90
3-Nitroaniline	ND	50	ug/L	0.90
4-Nitroaniline	ND	50	ug/L	6.0
Nitrobenzene	ND	10	ug/L	2.0
2-Nitrophenol	ND	10	ug/L	0.80
4-Nitrophenol	ND	50	ug/L	7.0
4-Nitroquinoline-1-oxide	ND	100	ug/L	5.0
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.0
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	0.80
N-Nitrosodiphenylamine	ND	10	ug/L	1.0
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	0.70
N-Nitrosomethylethylamine	ND	10	ug/L	2.0
N-Nitrosomorpholine	ND	10	ug/L	2.0
N-Nitrosopiperidine	ND	10	ug/L	2.0
N-Nitrosopyrrolidine	ND	10	ug/L	2.0
5-Nitro-o-toluidine	ND	20	ug/L	2.0
Parathion	ND	50	ug/L	2.0
Pentachlorobenzene	ND	10	ug/L	2.0
Pentachloroethane	ND	50	ug/L	2.0
Pentachloronitrobenzene	ND	50	ug/L	2.0
Pentachlorophenol	ND	50	ug/L	5.0
Phenacetin	ND	20	ug/L	2.0
Phenanthrene	ND	10	ug/L	0.70
Phenol	ND	10	ug/L	0.90
Phorate	ND	50	ug/L	2.0
2-Picoline	ND	20	ug/L	3.0
Pronamide	ND	20	ug/L	2.0
Pyrene	ND	10	ug/L	0.80
Pyridine	ND	20	ug/L	10
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	2.0
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	2.0
Thionazin	ND	10	ug/L	2.0
o-Toluidine	ND	10	ug/L	2.0
1,2,4-Trichloro-benzene	ND	10	ug/L	0.90
2,4,5-Trichloro-phenol	ND	10	ug/L	1.0
2,4,6-Trichloro-phenol	ND	10	ug/L	0.80

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Cabrera Services

Client Sample ID: 01-MW-03

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-006 **Work Order #...:** GGTFH1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	50	ug/L	2.0
1,3,5-Trinitrobenzene	ND	50	ug/L	2.0
1,4-Dioxane	**26**	**10**	**ug/L**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	55	(32 - 116)
Phenol-d5	60	(40 - 111)
Nitrobenzene-d5	60	(53 - 107)
2-Fluorobiphenyl	52	(31 - 105)
2,4,6-Tribromophenol	72	(42 - 122)
Terphenyl-d14	74	(21 - 125)

Cabrera Services

01-MW-03

GC/MS Semivolatiles

Lot-Sample #: D4E210325-006 **Work Order #:** GGTFH1AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		6.9 J	M	2.4557	ug/L
Unknown		6.3 J	M	4.9293	ug/L
Unknown		6.2 J	M	9.9529	ug/L
PPO	92-71-7	--	M		ug/L
POPOP	1806-34-4	--	M		ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-008 **Work Order #...:** GGTFX1AC **Matrix.....:** WATER
Date Sampled...: 05/20/04 08:00 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/03/04
Prep Batch #...: 4145234 **Analysis Time..:** 00:23
Dilution Factor: 1 **Initial Wgt/Vol:** 1011 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	0.60
Acenaphthylene	ND	10	ug/L	0.60
Acetophenone	ND	10	ug/L	2.0
2-Acetylaminofluorene	ND	100	ug/L	2.0
4-Aminobiphenyl	ND	50	ug/L	2.0
Aniline	ND	10	ug/L	4.0
Anthracene	ND	10	ug/L	3.0
Aramite	ND	20	ug/L	2.0
Benzo(a)anthracene	ND	10	ug/L	0.80
Benzo(b)fluoranthene	ND	10	ug/L	0.90
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.0
Benzo(a)pyrene	ND	10	ug/L	0.80
Benzyl alcohol	ND	10	ug/L	1.0
bis(2-Chloroethoxy) methane	ND	10	ug/L	0.90
bis(2-Chloroethyl)- ether	ND	10	ug/L	3.0
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.90
4-Bromophenyl phenyl ether	ND	10	ug/L	0.70
Butyl benzyl phthalate	ND	10	ug/L	1.0
4-Chloroaniline	ND	10	ug/L	3.0
Chlorobenzilate	ND	10	ug/L	2.0
4-Chloro-3-methylphenol	ND	10	ug/L	0.80
2-Chloronaphthalene	ND	10	ug/L	0.70
2-Chlorophenol	ND	10	ug/L	0.80
4-Chlorophenyl phenyl ether	ND	10	ug/L	0.60
Chrysene	ND	10	ug/L	0.80
Diallate	ND	20	ug/L	2.0
Dibenz(a,h)anthracene	ND	10	ug/L	0.90
Dibenzofuran	ND	10	ug/L	0.60
Di-n-butyl phthalate	ND	10	ug/L	0.80
1,2-Dichlorobenzene	ND	10	ug/L	0.80
1,3-Dichlorobenzene	ND	10	ug/L	0.80
1,4-Dichlorobenzene	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-008 **Work Order #...:** GGTFX1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	50	ug/L	8.0
2,4-Dichlorophenol	ND	10	ug/L	0.70
2,6-Dichlorophenol	ND	10	ug/L	2.0
Diethyl phthalate	ND	10	ug/L	0.70
Dimethoate	ND	20	ug/L	2.0
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	3.0
3,3'-Dimethylbenzidine	ND	20	ug/L	4.0
2,4-Dimethylphenol	ND	10	ug/L	4.0
Dimethyl phthalate	ND	10	ug/L	0.80
1,3-Dinitrobenzene	ND	10	ug/L	2.0
4,6-Dinitro-2-methylphenol	ND	50	ug/L	6.0
2,4-Dinitrophenol	ND	50	ug/L	6.0
2,4-Dinitrotoluene	ND	10	ug/L	1.0
2,6-Dinitrotoluene	ND	10	ug/L	0.80
Di-n-octyl phthalate	ND	10	ug/L	1.0
Diphenylamine	ND	10	ug/L	2.0
Disulfoton	ND	50	ug/L	2.0
Ethyl methanesulfonate	ND	10	ug/L	2.0
Fluoranthene	ND	10	ug/L	0.70
Fluorene	ND	10	ug/L	0.60
Hexachlorobenzene	ND	10	ug/L	0.80
Hexachlorobutadiene	ND	10	ug/L	1.0
Hexachlorocyclopentadiene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	0.80
Hexachloropropene	ND	100	ug/L	1.0
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	0.80
Isodrin	ND	10	ug/L	5.0
Isophorone	ND	10	ug/L	0.90
Isosafrole	ND	20	ug/L	3.0
Methapyrilene	ND	50	ug/L	20
3-Methylcholanthrene	ND	20	ug/L	1.0
Methyl methanesulfonate	ND	10	ug/L	2.0
2-Methylnaphthalene	ND	10	ug/L	0.80
Methyl parathion	ND	50	ug/L	2.0
2-Methylphenol	ND	10	ug/L	0.90
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	0.80
Naphthalene	ND	10	ug/L	0.80
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-008 **Work Order #...:** GGTFX1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	10	ug/L	1.0
2-Nitroaniline	ND	50	ug/L	0.90
3-Nitroaniline	ND	50	ug/L	0.90
4-Nitroaniline	ND	50	ug/L	6.0
Nitrobenzene	ND	10	ug/L	2.0
2-Nitrophenol	ND	10	ug/L	0.80
4-Nitrophenol	ND	50	ug/L	7.0
4-Nitroquinoline-1-oxide	ND	100	ug/L	5.0
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.0
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	0.80
N-Nitrosodiphenylamine	ND	10	ug/L	1.0
N-Nitrosodi-n-propylamine	ND	10	ug/L	0.70
N-Nitrosomethylethylamine	ND	10	ug/L	2.0
N-Nitrosomorpholine	ND	10	ug/L	2.0
N-Nitrosopiperidine	ND	10	ug/L	2.0
N-Nitrosopyrrolidine	ND	10	ug/L	2.0
5-Nitro-o-toluidine	ND	20	ug/L	2.0
Parathion	ND	50	ug/L	2.0
Pentachlorobenzene	ND	10	ug/L	2.0
Pentachloroethane	ND	50	ug/L	2.0
Pentachloronitrobenzene	ND	50	ug/L	2.0
Pentachlorophenol	ND	50	ug/L	5.0
Phenacetin	ND	20	ug/L	2.0
Phenanthrene	ND	10	ug/L	0.70
Phenol	ND	10	ug/L	0.90
Phorate	ND	50	ug/L	2.0
2-Picoline	ND	20	ug/L	3.0
Pronamide	ND	20	ug/L	2.0
Pyrene	ND	10	ug/L	0.80
Pyridine	ND	20	ug/L	10
1,2,4,5-Tetrachlorobenzene	ND	10	ug/L	2.0
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	2.0
Thionazin	ND	10	ug/L	2.0
o-Toluidine	ND	10	ug/L	2.0
1,2,4-Trichlorobenzene	ND	10	ug/L	0.90
2,4,5-Trichlorophenol	ND	10	ug/L	1.0
2,4,6-Trichlorophenol	ND	10	ug/L	0.80

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Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-008 **Work Order #...:** GGTFX1AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	50	ug/L	2.0
1,3,5-Trinitrobenzene	ND	50	ug/L	2.0
1,4-Dioxane	**850 E**	**10**	**ug/L**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	75	(32 - 116)
Phenol-d5	78	(40 - 111)
Nitrobenzene-d5	79	(53 - 107)
2-Fluorobiphenyl	63	(31 - 105)
2,4,6-Tribromophenol	80	(42 - 122)
Terphenyl-d14	71	(21 - 125)

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

Cabrera Services

01-MW-11

GC/MS Semivolatiles

Lot-Sample #: D4E210325-008 **Work Order #:** GGTFX1AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		8.4 J	M	2.4555	ug/L
Unknown		7.3 J	M	4.9292	ug/L
Unknown		5.8 J	M	10.029	ug/L
PPO	92-71-7	--	M		ug/L
POPOP	1806-34-4	--	M		ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-008	**Work Order #...:** GGTFX2AC	**Matrix.....:** WATER
Date Sampled...: 05/20/04 08:00	**Date Received..:** 05/21/04	
Prep Date.....: 05/24/04	**Analysis Date..:** 06/18/04	
Prep Batch #...: 4145234	**Analysis Time..:** 14:57	
Dilution Factor: 10	**Initial Wgt/Vol:** 1011 mL	**Final Wgt/Vol..:** 1 mL
	Method.....: SW846 8270C	

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	100	ug/L	6.0
Acenaphthylene	ND	100	ug/L	6.0
Acetophenone	ND	100	ug/L	20
2-Acetylaminofluorene	ND	1000	ug/L	20
4-Aminobiphenyl	ND	500	ug/L	20
Aniline	ND	100	ug/L	40
Anthracene	ND	100	ug/L	30
Aramite	ND	200	ug/L	20
Benzo(a)anthracene	ND	100	ug/L	8.0
Benzo(b)fluoranthene	ND	100	ug/L	9.0
Benzo(k)fluoranthene	ND	100	ug/L	20
Benzo(ghi)perylene	ND	100	ug/L	10
Benzo(a)pyrene	ND	100	ug/L	8.0
Benzyl alcohol	ND	100	ug/L	10
bis(2-Chloroethoxy) methane	ND	100	ug/L	9.0
bis(2-Chloroethyl)- ether	ND	100	ug/L	30
bis(2-Ethylhexyl) phthalate	ND	100	ug/L	9.0
4-Bromophenyl phenyl ether	ND	100	ug/L	7.0
Butyl benzyl phthalate	ND	100	ug/L	10
4-Chloroaniline	ND	100	ug/L	30
Chlorobenzilate	ND	100	ug/L	20
4-Chloro-3-methylphenol	ND	100	ug/L	8.0
2-Chloronaphthalene	ND	100	ug/L	7.0
2-Chlorophenol	ND	100	ug/L	8.0
4-Chlorophenyl phenyl ether	ND	100	ug/L	6.0
Chrysene	ND	100	ug/L	8.0
Diallate	ND	200	ug/L	20
Dibenz(a,h)anthracene	ND	100	ug/L	9.0
Dibenzofuran	ND	100	ug/L	6.0
Di-n-butyl phthalate	ND	100	ug/L	8.0
1,2-Dichlorobenzene	ND	100	ug/L	8.0
1,3-Dichlorobenzene	ND	100	ug/L	8.0
1,4-Dichlorobenzene	ND	100	ug/L	10

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Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-008 **Work Order #...:** GGTFX2AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	500	ug/L	80
2,4-Dichlorophenol	ND	100	ug/L	7.0
2,6-Dichlorophenol	ND	100	ug/L	20
Diethyl phthalate	ND	100	ug/L	7.0
Dimethoate	ND	200	ug/L	20
7,12-Dimethylbenz(a)-anthracene	ND	200	ug/L	30
3,3'-Dimethylbenzidine	ND	200	ug/L	40
2,4-Dimethylphenol	ND	100	ug/L	40
Dimethyl phthalate	ND	100	ug/L	8.0
1,3-Dinitrobenzene	ND	100	ug/L	20
4,6-Dinitro-2-methylphenol	ND	500	ug/L	60
2,4-Dinitrophenol	ND	500	ug/L	60
2,4-Dinitrotoluene	ND	100	ug/L	10
2,6-Dinitrotoluene	ND	100	ug/L	8.0
Di-n-octyl phthalate	ND	100	ug/L	10
Diphenylamine	ND	100	ug/L	20
Disulfoton	ND	500	ug/L	20
Ethyl methanesulfonate	ND	100	ug/L	20
Fluoranthene	ND	100	ug/L	7.0
Fluorene	ND	100	ug/L	6.0
Hexachlorobenzene	ND	100	ug/L	8.0
Hexachlorobutadiene	ND	100	ug/L	10
Hexachlorocyclopenta-diene	ND	500	ug/L	50
Hexachloroethane	ND	100	ug/L	8.0
Hexachloropropene	ND	1000	ug/L	10
Indeno(1,2,3-cd)pyrene	ND	100	ug/L	8.0
Isodrin	ND	100	ug/L	50
Isophorone	ND	100	ug/L	9.0
Isosafrole	ND	200	ug/L	30
Methapyrilene	ND	500	ug/L	200
3-Methylcholanthrene	ND	200	ug/L	10
Methyl methanesulfonate	ND	100	ug/L	20
2-Methylnaphthalene	ND	100	ug/L	8.0
Methyl parathion	ND	500	ug/L	20
2-Methylphenol	ND	100	ug/L	9.0
3-Methylphenol & 4-Methylphenol	ND	100	ug/L	8.0
Naphthalene	ND	100	ug/L	8.0
1,4-Naphthoquinone	ND	500	ug/L	20
1-Naphthylamine	ND	100	ug/L	10

(Continued on next page)

Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-008 **Work Order #...:** GGTFX2AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	100	ug/L	10
2-Nitroaniline	ND	500	ug/L	9.0
3-Nitroaniline	ND	500	ug/L	9.0
4-Nitroaniline	ND	500	ug/L	60
Nitrobenzene	ND	100	ug/L	20
2-Nitrophenol	ND	100	ug/L	8.0
4-Nitrophenol	ND	500	ug/L	70
4-Nitroquinoline-1-oxide	ND	1000	ug/L	50
N-Nitrosodi-n-butylamine	ND	100	ug/L	20
N-Nitrosodiethylamine	ND	100	ug/L	20
N-Nitrosodimethylamine	ND	100	ug/L	8.0
N-Nitrosodiphenylamine	ND	100	ug/L	10
N-Nitrosodi-n-propyl-amine	ND	100	ug/L	7.0
N-Nitrosomethylethylamine	ND	100	ug/L	20
N-Nitrosomorpholine	ND	100	ug/L	20
N-Nitrosopiperidine	ND	100	ug/L	20
N-Nitrosopyrrolidine	ND	100	ug/L	20
5-Nitro-o-toluidine	ND	200	ug/L	20
Parathion	ND	500	ug/L	20
Pentachlorobenzene	ND	100	ug/L	20
Pentachloroethane	ND	500	ug/L	20
Pentachloronitrobenzene	ND	500	ug/L	20
Pentachlorophenol	ND	500	ug/L	50
Phenacetin	ND	200	ug/L	20
Phenanthrene	ND	100	ug/L	7.0
Phenol	ND	100	ug/L	9.0
Phorate	ND	500	ug/L	20
2-Picoline	ND	200	ug/L	30
Pronamide	ND	200	ug/L	20
Pyrene	ND	100	ug/L	8.0
Pyridine	ND	200	ug/L	100
1,2,4,5-Tetrachloro-benzene	ND	100	ug/L	20
2,3,4,6-Tetrachlorophenol	ND	500	ug/L	20
Thionazin	ND	100	ug/L	20
o-Toluidine	ND	100	ug/L	20
1,2,4-Trichloro-benzene	ND	100	ug/L	9.0
2,4,5-Trichloro-phenol	ND	100	ug/L	10
2,4,6-Trichloro-phenol	ND	100	ug/L	8.0

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Cabrera Services

Client Sample ID: 01-MW-11

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-008 **Work Order #...:** GGTFX2AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	500	ug/L	20
1,3,5-Trinitrobenzene	ND	500	ug/L	20
1,4-Dioxane	**790**	**100**	**ug/L**	**20**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	NC,DIL	(32 - 116)
Phenol-d5	NC,DIL	(40 - 111)
Nitrobenzene-d5	NC,DIL	(53 - 107)
2-Fluorobiphenyl	NC,DIL	(31 - 105)
2,4,6-Tribromophenol	NC,DIL	(42 - 122)
Terphenyl-d14	NC,DIL	(21 - 125)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Cabrera Services

01-MW-11

GC/MS Semivolatiles

Lot-Sample #: D4E210325-008 **Work Order #:** GGTFX2AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-009 **Work Order #...:** GGTF31AC **Matrix.....:** WATER
Date Sampled...: 05/20/04 09:10 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/03/04
Prep Batch #...: 4145234 **Analysis Time..:** 00:47
Dilution Factor: 1 **Initial Wgt/Vol:** 948 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	10	ug/L	0.60
Acenaphthylene	ND	10	ug/L	0.60
Acetophenone	ND	10	ug/L	2.0
2-Acetylaminofluorene	ND	100	ug/L	2.0
4-Aminobiphenyl	ND	50	ug/L	2.0
Aniline	ND	10	ug/L	4.0
Anthracene	ND	10	ug/L	3.0
Aramite	ND	20	ug/L	2.0
Benzo(a)anthracene	ND	10	ug/L	0.80
Benzo(b)fluoranthene	ND	10	ug/L	0.90
Benzo(k)fluoranthene	ND	10	ug/L	2.0
Benzo(ghi)perylene	ND	10	ug/L	1.0
Benzo(a)pyrene	ND	10	ug/L	0.80
Benzyl alcohol	ND	10	ug/L	1.0
bis(2-Chloroethoxy) methane	ND	10	ug/L	0.90
bis(2-Chloroethyl)- ether	ND	10	ug/L	3.0
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	0.90
4-Bromophenyl phenyl ether	ND	10	ug/L	0.70
Butyl benzyl phthalate	ND	10	ug/L	1.0
4-Chloroaniline	ND	10	ug/L	3.0
Chlorobenzilate	ND	10	ug/L	2.0
4-Chloro-3-methylphenol	ND	10	ug/L	0.80
2-Chloronaphthalene	ND	10	ug/L	0.70
2-Chlorophenol	ND	10	ug/L	0.80
4-Chlorophenyl phenyl ether	ND	10	ug/L	0.60
Chrysene	ND	10	ug/L	0.80
Diallate	ND	20	ug/L	2.0
Dibenz(a,h)anthracene	ND	10	ug/L	0.90
Dibenzofuran	ND	10	ug/L	0.60
Di-n-butyl phthalate	ND	10	ug/L	0.80
1,2-Dichlorobenzene	ND	10	ug/L	0.80
1,3-Dichlorobenzene	ND	10	ug/L	0.80
1,4-Dichlorobenzene	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-009 **Work Order #...:** GGTF31AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	50	ug/L	8.0
2,4-Dichlorophenol	ND	10	ug/L	0.70
2,6-Dichlorophenol	ND	10	ug/L	2.0
Diethyl phthalate	ND	10	ug/L	0.70
Dimethoate	ND	20	ug/L	2.0
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	3.0
3,3'-Dimethylbenzidine	ND	20	ug/L	4.0
2,4-Dimethylphenol	ND	10	ug/L	4.0
Dimethyl phthalate	ND	10	ug/L	0.80
1,3-Dinitrobenzene	ND	10	ug/L	2.0
4,6-Dinitro-2-methylphenol	ND	50	ug/L	6.0
2,4-Dinitrophenol	ND	50	ug/L	6.0
2,4-Dinitrotoluene	ND	10	ug/L	1.0
2,6-Dinitrotoluene	ND	10	ug/L	0.80
Di-n-octyl phthalate	ND	10	ug/L	1.0
Diphenylamine	ND	10	ug/L	2.0
Disulfoton	ND	50	ug/L	2.0
Ethyl methanesulfonate	ND	10	ug/L	2.0
Fluoranthene	ND	10	ug/L	0.70
Fluorene	ND	10	ug/L	0.60
Hexachlorobenzene	ND	10	ug/L	0.80
Hexachlorobutadiene	ND	10	ug/L	1.0
Hexachlorocyclopenta-diene	ND	50	ug/L	5.0
Hexachloroethane	ND	10	ug/L	0.80
Hexachloropropene	ND	100	ug/L	1.0
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	0.80
Isodrin	ND	10	ug/L	5.0
Isophorone	ND	10	ug/L	0.90
Isosafrole	ND	20	ug/L	3.0
Methapyrilene	ND	50	ug/L	20
3-Methylcholanthrene	ND	20	ug/L	1.0
Methyl methanesulfonate	ND	10	ug/L	2.0
2-Methylnaphthalene	ND	10	ug/L	0.80
Methyl parathion	ND	50	ug/L	2.0
2-Methylphenol	ND	10	ug/L	0.90
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	0.80
Naphthalene	ND	10	ug/L	0.80
1,4-Naphthoquinone	ND	50	ug/L	2.0
1-Naphthylamine	ND	10	ug/L	1.0

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Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-009 **Work Order #...:** GGTF31AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	10	ug/L	1.0
2-Nitroaniline	ND	50	ug/L	0.90
3-Nitroaniline	ND	50	ug/L	0.90
4-Nitroaniline	ND	50	ug/L	6.0
Nitrobenzene	ND	10	ug/L	2.0
2-Nitrophenol	ND	10	ug/L	0.80
4-Nitrophenol	ND	50	ug/L	7.0
4-Nitroquinoline-1-oxide	ND	100	ug/L	5.0
N-Nitrosodi-n-butylamine	ND	10	ug/L	2.0
N-Nitrosodiethylamine	ND	10	ug/L	2.0
N-Nitrosodimethylamine	ND	10	ug/L	0.80
N-Nitrosodiphenylamine	ND	10	ug/L	1.0
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	0.70
N-Nitrosomethylethylamine	ND	10	ug/L	2.0
N-Nitrosomorpholine	ND	10	ug/L	2.0
N-Nitrosopiperidine	ND	10	ug/L	2.0
N-Nitrosopyrrolidine	ND	10	ug/L	2.0
5-Nitro-o-toluidine	ND	20	ug/L	2.0
Parathion	ND	50	ug/L	2.0
Pentachlorobenzene	ND	10	ug/L	2.0
Pentachloroethane	ND	50	ug/L	2.0
Pentachloronitrobenzene	ND	50	ug/L	2.0
Pentachlorophenol	ND	50	ug/L	5.0
Phenacetin	ND	20	ug/L	2.0
Phenanthrene	ND	10	ug/L	0.70
Phenol	ND	10	ug/L	0.90
Phorate	ND	50	ug/L	2.0
2-Picoline	ND	20	ug/L	3.0
Pronamide	ND	20	ug/L	2.0
Pyrene	ND	10	ug/L	0.80
Pyridine	ND	20	ug/L	10
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	2.0
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	2.0
Thionazin	ND	10	ug/L	2.0
o-Toluidine	ND	10	ug/L	2.0
1,2,4-Trichloro-benzene	ND	10	ug/L	0.90
2,4,5-Trichloro-phenol	ND	10	ug/L	1.0
2,4,6-Trichloro-phenol	ND	10	ug/L	0.80

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Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-009 **Work Order #...:** GGTF31AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	50	ug/L	2.0
1,3,5-Trinitrobenzene	ND	50	ug/L	2.0
1,4-Dioxane	**940 E**	**10**	**ug/L**	**2.0**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	76	(32 - 116)
Phenol-d5	80	(40 - 111)
Nitrobenzene-d5	83	(53 - 107)
2-Fluorobiphenyl	71	(31 - 105)
2,4,6-Tribromophenol	99	(42 - 122)
Terphenyl-d14	77	(21 - 125)

NOTE(S):

E Estimated result. Result concentration exceeds the calibration range.

Cabrera Services

01-MW-10

GC/MS Semivolatiles

Lot-Sample #: D4E210325-009 **Work Order #:** GGTF31AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown		9.3 J	M	2.4555	ug/L
Unknown		4.6 J	M	6.1688	ug/L
Unknown		5.8 J	M	7.2264	ug/L
Benzoic acid, 2,4-dichloro-	50-84-0	6.2 J	M	7.9961	ug/L
Unknown		14 J	M	10.035	ug/L
PPO	92-71-7	--	M		ug/L
POPOP	1806-34-4	--	M		ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-009 **Work Order #...:** GGTF32AC **Matrix.....:** WATER
Date Sampled...: 05/20/04 09:10 **Date Received..:** 05/21/04
Prep Date.....: 05/24/04 **Analysis Date..:** 06/18/04
Prep Batch #...: 4145234 **Analysis Time..:** 15:22
Dilution Factor: 10 **Initial Wgt/Vol:** 948 mL **Final Wgt/Vol..:** 1 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	100	ug/L	6.0
Acenaphthylene	ND	100	ug/L	6.0
Acetophenone	ND	100	ug/L	20
2-Acetylaminofluorene	ND	1000	ug/L	20
4-Aminobiphenyl	ND	500	ug/L	20
Aniline	ND	100	ug/L	40
Anthracene	ND	100	ug/L	30
Aramite	ND	200	ug/L	20
Benzo(a)anthracene	ND	100	ug/L	8.0
Benzo(b)fluoranthene	ND	100	ug/L	9.0
Benzo(k)fluoranthene	ND	100	ug/L	20
Benzo(ghi)perylene	ND	100	ug/L	10
Benzo(a)pyrene	ND	100	ug/L	8.0
Benzyl alcohol	ND	100	ug/L	10
bis(2-Chloroethoxy) methane	ND	100	ug/L	9.0
bis(2-Chloroethyl)-ether	ND	100	ug/L	30
bis(2-Ethylhexyl) phthalate	ND	100	ug/L	9.0
4-Bromophenyl phenyl ether	ND	100	ug/L	7.0
Butyl benzyl phthalate	ND	100	ug/L	10
4-Chloroaniline	ND	100	ug/L	30
Chlorobenzilate	ND	100	ug/L	20
4-Chloro-3-methylphenol	ND	100	ug/L	8.0
2-Chloronaphthalene	ND	100	ug/L	7.0
2-Chlorophenol	ND	100	ug/L	8.0
4-Chlorophenyl phenyl ether	ND	100	ug/L	6.0
Chrysene	ND	100	ug/L	8.0
Diallate	ND	200	ug/L	20
Dibenz(a,h)anthracene	ND	100	ug/L	9.0
Dibenzofuran	ND	100	ug/L	6.0
Di-n-butyl phthalate	ND	100	ug/L	8.0
1,2-Dichlorobenzene	ND	100	ug/L	8.0
1,3-Dichlorobenzene	ND	100	ug/L	8.0
1,4-Dichlorobenzene	ND	100	ug/L	10

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Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-009 **Work Order #...:** GGTF32AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	500	ug/L	80
2,4-Dichlorophenol	ND	100	ug/L	7.0
2,6-Dichlorophenol	ND	100	ug/L	20
Diethyl phthalate	ND	100	ug/L	7.0
Dimethoate	ND	200	ug/L	20
7,12-Dimethylbenz(a)-anthracene	ND	200	ug/L	30
3,3'-Dimethylbenzidine	ND	200	ug/L	40
2,4-Dimethylphenol	ND	100	ug/L	40
Dimethyl phthalate	ND	100	ug/L	8.0
1,3-Dinitrobenzene	ND	100	ug/L	20
4,6-Dinitro-2-methylphenol	ND	500	ug/L	60
2,4-Dinitrophenol	ND	500	ug/L	60
2,4-Dinitrotoluene	ND	100	ug/L	10
2,6-Dinitrotoluene	ND	100	ug/L	8.0
Di-n-octyl phthalate	ND	100	ug/L	10
Diphenylamine	ND	100	ug/L	20
Disulfoton	ND	500	ug/L	20
Ethyl methanesulfonate	ND	100	ug/L	20
Fluoranthene	ND	100	ug/L	7.0
Fluorene	ND	100	ug/L	6.0
Hexachlorobenzene	ND	100	ug/L	8.0
Hexachlorobutadiene	ND	100	ug/L	10
Hexachlorocyclopenta-diene	ND	500	ug/L	50
Hexachloroethane	ND	100	ug/L	8.0
Hexachloropropene	ND	1000	ug/L	10
Indeno(1,2,3-cd)pyrene	ND	100	ug/L	8.0
Isodrin	ND	100	ug/L	50
Isophorone	ND	100	ug/L	9.0
Isosafrole	ND	200	ug/L	30
Methapyrilene	ND	500	ug/L	200
3-Methylcholanthrene	ND	200	ug/L	10
Methyl methanesulfonate	ND	100	ug/L	20
2-Methylnaphthalene	ND	100	ug/L	8.0
Methyl parathion	ND	500	ug/L	20
2-Methylphenol	ND	100	ug/L	9.0
3-Methylphenol & 4-Methylphenol	ND	100	ug/L	8.0
Naphthalene	ND	100	ug/L	8.0
1,4-Naphthoquinone	ND	500	ug/L	20
1-Naphthylamine	ND	100	ug/L	10

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Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-009 **Work Order #...:** GGTF32AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	100	ug/L	10
2-Nitroaniline	ND	500	ug/L	9.0
3-Nitroaniline	ND	500	ug/L	9.0
4-Nitroaniline	ND	500	ug/L	60
Nitrobenzene	ND	100	ug/L	20
2-Nitrophenol	ND	100	ug/L	8.0
4-Nitrophenol	ND	500	ug/L	70
4-Nitroquinoline-1-oxide	ND	1000	ug/L	50
N-Nitrosodi-n-butylamine	ND	100	ug/L	20
N-Nitrosodiethylamine	ND	100	ug/L	20
N-Nitrosodimethylamine	ND	100	ug/L	8.0
N-Nitrosodiphenylamine	ND	100	ug/L	10
N-Nitrosodi-n-propyl-amine	ND	100	ug/L	7.0
N-Nitrosomethylethylamine	ND	100	ug/L	20
N-Nitrosomorpholine	ND	100	ug/L	20
N-Nitrosopiperidine	ND	100	ug/L	20
N-Nitrosopyrrolidine	ND	100	ug/L	20
5-Nitro-o-toluidine	ND	200	ug/L	20
Parathion	ND	500	ug/L	20
Pentachlorobenzene	ND	100	ug/L	20
Pentachloroethane	ND	500	ug/L	20
Pentachloronitrobenzene	ND	500	ug/L	20
Pentachlorophenol	ND	500	ug/L	50
Phenacetin	ND	200	ug/L	20
Phenanthrene	ND	100	ug/L	7.0
Phenol	ND	100	ug/L	9.0
Phorate	ND	500	ug/L	20
2-Picoline	ND	200	ug/L	30
Pronamide	ND	200	ug/L	20
Pyrene	ND	100	ug/L	8.0
Pyridine	ND	200	ug/L	100
1,2,4,5-Tetrachloro-benzene	ND	100	ug/L	20
2,3,4,6-Tetrachlorophenol	ND	500	ug/L	20
Thionazin	ND	100	ug/L	20
o-Toluidine	ND	100	ug/L	20
1,2,4-Trichloro-benzene	ND	100	ug/L	9.0
2,4,5-Trichloro-phenol	ND	100	ug/L	10
2,4,6-Trichloro-phenol	ND	100	ug/L	8.0

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Cabrera Services

Client Sample ID: 01-MW-10

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-009 **Work Order #...:** GGTF32AC **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	500	ug/L	20
1,3,5-Trinitrobenzene	ND	500	ug/L	20
1,4-Dioxane	**900**	**100**	**ug/L**	**20**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	NC,DIL	(32 - 116)
Phenol-d5	NC,DIL	(40 - 111)
Nitrobenzene-d5	NC,DIL	(53 - 107)
2-Fluorobiphenyl	NC,DIL	(31 - 105)
2,4,6-Tribromophenol	NC,DIL	(42 - 122)
Terphenyl-d14	NC,DIL	(21 - 125)

NOTE(S):

NC The recovery and/or RPD were not calculated.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Cabrera Services

01-MW-10

GC/MS Semivolatiles

Lot-Sample #: D4E210325-009 **Work Order #:** GGTF32AC **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

Cabrera Services

Client Sample ID: 01-SC-01

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-010 **Work Order #...:** GGTF41AD **Matrix.....:** SOLID
Date Sampled...: 05/20/04 09:30 **Date Received..:** 05/21/04
Prep Date.....: 05/25/04 **Analysis Date..:** 06/03/04
Prep Batch #...: 4146358 **Analysis Time..:** 10:18
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g **Final Wgt/Vol..:** 1 mL
% Moisture.....: 17 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acenaphthene	ND	400	ug/kg	36
Acenaphthylene	ND	400	ug/kg	33
Acetophenone	ND	400	ug/kg	69
2-Acetylaminofluorene	ND	4000	ug/kg	71
4-Aminobiphenyl	ND	1900	ug/kg	47
Aniline	ND	400	ug/kg	45
Anthracene	ND	400	ug/kg	28
Aramite	ND	800	ug/kg	70
Benzo(a)anthracene	ND	400	ug/kg	29
Benzo(b)fluoranthene	ND	400	ug/kg	34
Benzo(k)fluoranthene	ND	400	ug/kg	37
Benzo(ghi)perylene	ND	400	ug/kg	31
Benzo(a)pyrene	ND	400	ug/kg	47
Benzyl alcohol	ND	400	ug/kg	100
bis(2-Chloroethoxy) methane	ND	400	ug/kg	41
bis(2-Chloroethyl)- ether	ND	400	ug/kg	29
bis(2-Ethylhexyl) phthalate	ND	400	ug/kg	84
4-Bromophenyl phenyl ether	ND	400	ug/kg	31
Butyl benzyl phthalate	ND	400	ug/kg	77
4-Chloroaniline	ND	400	ug/kg	130
Chlorobenzilate	ND	400	ug/kg	69
4-Chloro-3-methylphenol	ND	400	ug/kg	40
2-Chloronaphthalene	ND	400	ug/kg	41
2-Chlorophenol	ND	400	ug/kg	40
4-Chlorophenyl phenyl ether	ND	400	ug/kg	46
Chrysene	ND	400	ug/kg	33
Diallate	ND	800	ug/kg	100
Dibenz(a,h)anthracene	ND	400	ug/kg	29
Dibenzofuran	ND	400	ug/kg	42
Di-n-butyl phthalate	ND	400	ug/kg	24
1,2-Dichlorobenzene	ND	400	ug/kg	40
1,3-Dichlorobenzene	ND	400	ug/kg	37
1,4-Dichlorobenzene	ND	400	ug/kg	40

(Continued on next page)

Cabrera Services

Client Sample ID: 01-SC-01

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-010 **Work Order #...:** GGTF41AD **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
3,3'-Dichlorobenzidine	ND	1900	ug/kg	120
2,4-Dichlorophenol	ND	400	ug/kg	63
2,6-Dichlorophenol	ND	400	ug/kg	83
Diethyl phthalate	ND	800	ug/kg	36
Dimethoate	ND	800	ug/kg	82
7,12-Dimethylbenz(a)-anthracene	ND	800	ug/kg	51
3,3'-Dimethylbenzidine	ND	800	ug/kg	480
2,4-Dimethylphenol	ND	400	ug/kg	43
Dimethyl phthalate	ND	400	ug/kg	47
1,3-Dinitrobenzene	ND	400	ug/kg	86
4,6-Dinitro-2-methylphenol	ND	1900	ug/kg	190
2,4-Dinitrophenol	ND	1900	ug/kg	450
2,4-Dinitrotoluene	ND	400	ug/kg	190
2,6-Dinitrotoluene	ND	400	ug/kg	190
Di-n-octyl phthalate	ND	400	ug/kg	63
Diphenylamine	ND	400	ug/kg	53
Disulfoton	ND	1900	ug/kg	71
Ethyl methanesulfonate	ND	400	ug/kg	66
Fluoranthene	ND	400	ug/kg	27
Fluorene	ND	400	ug/kg	40
Hexachlorobenzene	ND	400	ug/kg	42
Hexachlorobutadiene	ND	400	ug/kg	55
Hexachlorocyclopenta-diene	ND	1900	ug/kg	140
Hexachloroethane	ND	400	ug/kg	52
Hexachloropropene	ND	4000	ug/kg	58
Indeno(1,2,3-cd)pyrene	ND	400	ug/kg	27
Isodrin	ND	400	ug/kg	98
Isophorone	ND	400	ug/kg	40
Isosafrole	ND	800	ug/kg	120
Methapyrilene	ND	1900	ug/kg	120
3-Methylcholanthrene	ND	800	ug/kg	81
Methyl methanesulfonate	ND	400	ug/kg	80
2-Methylnaphthalene	ND	400	ug/kg	37
Methyl parathion	ND	1900	ug/kg	59
2-Methylphenol	ND	400	ug/kg	48
3-Methylphenol & 4-Methylphenol	ND	400	ug/kg	64
Naphthalene	ND	400	ug/kg	37
1,4-Naphthoquinone	ND	1900	ug/kg	73
1-Naphthylamine	ND	400	ug/kg	60

(Continued on next page)

Cabrera Services

Client Sample ID: 01-SC-01

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-010 **Work Order #...:** GGTF41AD **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Naphthylamine	ND	400	ug/kg	59
2-Nitroaniline	ND	1900	ug/kg	40
3-Nitroaniline	ND	1900	ug/kg	100
4-Nitroaniline	ND	1900	ug/kg	770
Nitrobenzene	ND	400	ug/kg	41
2-Nitrophenol	ND	400	ug/kg	48
4-Nitrophenol	ND	1900	ug/kg	300
4-Nitroquinoline-1-oxide	ND	4000	ug/kg	1900
N-Nitrosodi-n-butylamine	ND	400	ug/kg	180
N-Nitrosodiethylamine	ND	400	ug/kg	78
N-Nitrosodimethylamine	ND	400	ug/kg	230
N-Nitrosodiphenylamine	ND	400	ug/kg	33
N-Nitrosodi-n-propyl-amine	ND	400	ug/kg	27
N-Nitrosomethylethylamine	ND	400	ug/kg	71
N-Nitrosomorpholine	ND	400	ug/kg	140
N-Nitrosopiperidine	ND	400	ug/kg	87
N-Nitrosopyrrolidine	ND	400	ug/kg	77
5-Nitro-o-toluidine	ND	800	ug/kg	75
Parathion	ND	1900	ug/kg	78
Pentachlorobenzene	ND	400	ug/kg	78
Pentachloroethane	ND	1900	ug/kg	76
Pentachloronitrobenzene	ND	1900	ug/kg	100
Pentachlorophenol	ND	1900	ug/kg	130
Phenacetin	ND	800	ug/kg	90
Phenanthrene	ND	400	ug/kg	41
Phenol	ND	400	ug/kg	41
Phorate	ND	1900	ug/kg	71
2-Picoline	ND	800	ug/kg	57
Pronamide	ND	800	ug/kg	55
Pyrene	ND	400	ug/kg	160
Pyridine	ND	800	ug/kg	400
1,2,4,5-Tetrachloro-benzene	ND	400	ug/kg	59
2,3,4,6-Tetrachlorophenol	ND	1900	ug/kg	64
Thionazin	ND	1900	ug/kg	87
o-Toluidine	ND	800	ug/kg	75
1,2,4-Trichloro-benzene	ND	400	ug/kg	30
2,4,5-Trichloro-phenol	ND	400	ug/kg	33
2,4,6-Trichloro-phenol	ND	400	ug/kg	47

(Continued on next page)

Cabrera Services

Client Sample ID: 01-SC-01

GC/MS Semivolatiles

Lot-Sample #...: D4E210325-010 **Work Order #...:** GGTF41AD **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
O,O,O-Triethylphosphoro-thioate	ND	1900	ug/kg	63
1,3,5-Trinitrobenzene	ND	1900	ug/kg	90
1,4-Dioxane	ND	800	ug/kg	67

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	76	(28 - 95)
Phenol-d5	76	(35 - 90)
Nitrobenzene-d5	78	(39 - 89)
2-Fluorobiphenyl	69	(35 - 86)
2,4,6-Tribromophenol	77	(11 - 111)
Terphenyl-d14	72	(30 - 98)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Cabrera Services

01-SC-01

GC/MS Semivolatiles

Lot-Sample #: D4E210325-010 **Work Order #:** GGTF41AD **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
PPO	92-17-7	--	M		ug/kg
POPOP	1806-34-4	--	M		ug/kg
3-Penten-2-one, 4-methyl-	141-79-7	210 J	M	3.6855	ug/kg
Unknown aldol condensate		38000 J	M	4.0363	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

QC DATA ASSOCIATION SUMMARY

D4E210325

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8260B		4149504	4149298
	WATER	SW846 8270C		4145234	
	WATER	EPA 906.0 MOD		4149150	4149094
	WATER	DOE STL-RC-0055		4154153	4154074
	WATER	EERF C-01-1		4155582	4155386
002	WATER	SW846 8260B		4149504	4149298
	WATER	SW846 8270C		4145234	
	WATER	EPA 906.0 MOD		4149150	4149094
	WATER	DOE STL-RC-0055		4154153	4154074
	WATER	EERF C-01-1		4155582	4155386
003	WATER	SW846 8260B		4149504	4149298
	WATER	SW846 8270C		4145234	
	WATER	EPA 906.0 MOD		4149150	4149094
	WATER	DOE STL-RC-0055		4154153	4154074
	WATER	EERF C-01-1		4155582	4155386
004	WATER	SW846 8260B		4149504	4149298
	WATER	SW846 8270C		4145234	
	WATER	EPA 906.0 MOD		4149150	4149094
	WATER	DOE STL-RC-0055		4154153	4154074
	WATER	EERF C-01-1		4155582	4155386
005	WATER	SW846 8260B		4149504	4149298
	WATER	SW846 8270C		4145234	
	WATER	EPA 906.0 MOD		4149150	4149094
	WATER	DOE STL-RC-0055		4154153	4154074
	WATER	EERF C-01-1		4155582	4155386
006	WATER	SW846 8260B		4149504	4149298
	WATER	SW846 8270C		4145234	
	WATER	EPA 906.0 MOD		4149150	4149094
	WATER	DOE STL-RC-0055		4154153	4154074
	WATER	EERF C-01-1		4155582	4155386
007	WATER	SW846 8260B		4153497	4153293
008	WATER	SW846 8260B		4154317	4154182
	WATER	SW846 8270C		4145234	
	WATER	EPA 906.0 MOD		4149150	4149094
	WATER	DOE STL-RC-0055		4154153	4154074
	WATER	EERF C-01-1		4155582	4155386

(Continued on next page)

QC DATA ASSOCIATION SUMMARY

D4E210325

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
009	WATER	SW846 8260B		4154317	4154182
	WATER	SW846 8270C		4145234	
	WATER	EPA 906.0 MOD		4149150	4149094
	WATER	DOE STL-RC-0055		4154153	4154074
	WATER	EERF C-01-1		4155582	4155386
010	SOLID	SW846 8260B		4147418	4149125
	SOLID	SW846 8270C		4146358	4146206
	SOLID	MCAWW 160.3 MOD		4162230	4162123
	SOLID	EML H3-04-RC MOD		4148318	4148170
	SOLID	DOE STL-RC-0055		4160269	4160160
	SOLID	EERF C-01-1		4161180	4161095
011	WATER	SW846 8260B		4153497	4153293

METHOD BLANK REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: D4E210325
Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ+/-)		MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
Tritium by LSC by DOE H3-04-RC MOD.				**pCi/g**	**H3-04-RC MOD**			**F4E270000-318B**	
Tritium	0.06	U	0.13		0.22	05/27/04	05/28/04	4148318	
Ni-59 & Ni-63 by Liquid Scint. Spec.				**pCi/g**	**STL-RC-0055**			**F4F080000-269B**	
Nickel 63	-4.0	U	3.4			06/08/04	06/10/04	4160269	34
Carbon 14 by EERF C-01-1				**pCi/g**	**C-01-1**			**F4F090000-180B**	
Carbon 14	0.40	U	0.82		1.0	06/09/04	06/10/04	4161180	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Severn Trent Laboratories - Radiochemistry

Client Lot ID: D4E210325
Matrix: SOLID

Parameter	Spike Amount	Result		Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec		Lab Sample ID QC Control Limits
Tritium by LSC by DOE H3-04-RC MOD.			**pCi/g**		**H3-04-RC MOD**				**F4E270000-318C**
Tritium	20.5	21.5	J	2.4	0.2		105	J	(70 - 130)
	Batch #:	4148318			**Analysis Date:**	05/28/04			
Ni-59 & Ni-63 by Liquid Scint. Spec.			**pCi/g**		**STL-RC-0055**				**F4F080000-269C**
Nickel 59	205	407	a	42		42	198	a	(70 - 130)
Nickel 63	193	415	a	44		42	215	a	(70 - 130)
	Batch #:	4160269			**Analysis Date:**	06/10/04			
Carbon 14 by EERF C-01-1			**pCi/g**		**C-01-1**				**F4F090000-180C**
Carbon 14	1050	864		87	1		82		(70 - 115)
	Batch #:	4161180			**Analysis Date:**	06/10/04			

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

a Spiked analyte outside of stated QC limits.
J Result is greater than sample detection limit but less than stated reporting limit.

MATRIX SPIKE REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot Id: F4E120257
Matrix: SOLID

Date Sampled: 05/11/04
Date Received: 05/12/04

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
Tritium by LSC by DOE H3-04-RC MOD.			**pCi/g**		**H3-04-RC MOD**			**F4E120257-001**	
Tritium	174	179	J 20		0.8	1.2		102	(70 - 130)
	Batch #:	4148318		Analysis Date:		05/28/04			

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Result is greater than sample detection limit but less than stated reporting limit.

DUPLICATE EVALUATION REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: D4E210325
Matrix: SOLID

Date Sampled: 05/11/04
Date Received: 05/12/04

Parameter	SAMPLE Result		Total Uncert. (2σ +/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ +/-)	% Yld	QC Sample ID Precision	
Tritium by LSC by DOE H3-04-RC MOD.			**pCi/g**		**H3-04-RC MOD**				**F4E120257-001**	
Tritium	0.8	U	1.2		1.7	U	1.3		68	%RPD
	Batch #:		4148318 (Sample)		4148318 (Duplicate)					
Ni-59 & Ni-63 by Liquid Scint. Spec.			**pCi/g**		**STL-RC-0055**				**D4E210325-010**	
Nickel 63	0.4	U	2.3	96	-1.1	U	3.4	95	-453	%RPD
	Batch #:		4160269 (Sample)		4160269 (Duplicate)					
Carbon 14 by EERF C-01-1			**pCi/g**		**C-01-1**				**D4E210325-010**	
Carbon 14	0.17	U	0.67		0.68	U	0.67		122	%RPD
	Batch #:		4161180 (Sample)		4161180 (Duplicate)					

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

METHOD BLANK REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: D4E210325
Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	MDC	Prep Date	Analysis Date	Lab Sample ID Batch #	Yld %
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**906.0 MOD**			**F4E280000-150B**	
Tritium	8	U	110	270	05/28/04	05/29/04	4149150	
Ni-59 & Ni-63 by Liquid Scint. Spec.			**pCi/L**	**STL-RC-0055**			**F4F020000-153B**	
Nickel 63	-11	U	29	23	06/02/04	06/04/04	4154153	83
Carbon 14 by EERF C-01-1			**pCi/L**	**C-01-1**			**F4F030000-582B**	
Carbon 14	-8.8	U	-8.3		06/03/04	06/05/04	4155582	

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only
Bold results are greater than the MDC

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Severn Trent Laboratories - Radiochemistry

Client Lot ID: D4E210325
Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ+/-)	MDC	% Yld	% Rec	Lab Sample ID / QC Control Limits
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**	**906.0 MOD**			**F4E280000-150C**
Tritium	8190	8400	1000	300		103	(81 - 115)
	Batch #:	4149150		**Analysis Date:**	05/29/04		
Ni-59 & Ni-63 by Liquid Scint. Spec.			**pCi/L**	**STL-RC-0055**			**F4F020000-153C**
Nickel 59	2050	1950	200	10	94	95	(70 - 130)
Nickel 63	1930	1920	200	20	94	99	(70 - 130)
	Batch #:	4154153		**Analysis Date:**	06/04/04		
Carbon 14 by EERF C-01-1			**pCi/L**	**C-01-1**			**F4F030000-582C**
Carbon 14	10500	7860	790			75	(70 - 130)
	Batch #:	4155582		**Analysis Date:**	06/05/04		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

a **Spiked analyte outside of stated QC limits.**
J **Result is greater than sample detection limit but less than stated reporting limit.**

MATRIX SPIKE REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot Id: D4E210325
Matrix: WATER

Date Sampled: 05/20/04
Date Received: 05/21/04

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2 σ +/-)	QC Sample ID %YLD	QC Sample ID %REC	QC Control Limits
TRITIUM (Distill) by EPA 906.0 MOD			**pCi/L**		**906.0 MOD**			**D4E210325-008**	
Tritium	8190	8600	1100		-80	140		106	(70 - 130)
	Batch #:	4149150			Analysis Date:	05/29/04			

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: D4E210325
Matrix: WATER

Date Sampled: 05/19/04 1025
Date Received: 05/21/04 0915

Parameter		Spike Amount	SPIKE Result	Total Uncert. (2 σ+/-)	Spike Yld	SAMPLE Result		Total Uncert. (2σ +/-)	QC Sample ID % Yld	%Rec	QC Control Limits
Ni-59 & Ni-63 by Liquid Sci				**pCi/L**		**STL-RC-0055**					**D4E210325-001**
Nickel 63		1930	2000	210	81	-11	U	28	84	104	(70 - 130)
	Spk2	1930	1750	180	91	-11	U	28	84	91	(70 - 130)
									Precision:	13	%RPD

Batch #: 4154074 **Analysis date:** 06/04/04

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off error in calculated results

U Result is less than the sample detection limit.

DUPLICATE EVALUATION REPORT

Severn Trent Laboratories - Radiochemistry

Client Lot ID: D4E210325
Matrix: WATER

Date Sampled: 05/18/04
Date Received: 05/19/04

Parameter	SAMPLE Result		Total Uncert. (2σ +/-)	% Yld	DUPLICATE Result		Total Uncert. (2 σ +/-)	% Yld	QC Sample ID Precision	
Carbon 14 by EERF C-01-1				**pCi/L**	**C-01-1**				**D4E190262-001**	
Carbon 14	**-8.8**	U	**-8.3**		**-5.3**	U	**-7.5**		-51	%RPD
	Batch #:		4155582 (Sample)		4155582 (Duplicate)					
TRITIUM (Distill) by EPA 906.0 MOD				**pCi/L**	**906.0 MOD**				**D4E210325-009**	
Tritium	**370**	J	**190**		**370**	J	**190**		0.2	%RPD
	Batch #:		4149150 (Sample)		4149150 (Duplicate)					

NOTE(S)

Data are incomplete without the case narrative.
Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.
U Result is less than the sample detection limit.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GG9L21AA **Matrix.....:** SOLID
MB Lot-Sample #: D4E260000-418

Prep Date.....: 05/25/04 **Analysis Time..:** 13:01
Analysis Date..: 05/25/04 **Prep Batch #...:** 4147418 **Final Wgt/Vol..:** 5 mL
Dilution Factor: 1 **Initial Wgt/Vol:** 5 g

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	20	ug/kg	SW846 8260B
Benzene	ND	5.0	ug/kg	SW846 8260B
Bromodichloromethane	ND	5.0	ug/kg	SW846 8260B
Bromoform	ND	5.0	ug/kg	SW846 8260B
Bromomethane	ND	10	ug/kg	SW846 8260B
2-Butanone (MEK)	ND	20	ug/kg	SW846 8260B
Carbon tetrachloride	ND	5.0	ug/kg	SW846 8260B
Chlorobenzene	ND	5.0	ug/kg	SW846 8260B
Chloroethane	ND	10	ug/kg	SW846 8260B
Chloroform	ND	10	ug/kg	SW846 8260B
Chloromethane	ND	10	ug/kg	SW846 8260B
Dibromomethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromoethane (EDB)	ND	5.0	ug/kg	SW846 8260B
1,2-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,3-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
1,4-Dichlorobenzene	ND	5.0	ug/kg	SW846 8260B
Dichlorodifluoromethane	ND	10	ug/kg	SW846 8260B
1,1-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloroethene	ND	5.0	ug/kg	SW846 8260B
1,2-Dichloroethene (total)	ND	5.0	ug/kg	SW846 8260B
cis-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
trans-1,2-Dichloroethene	ND	2.5	ug/kg	SW846 8260B
1,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
cis-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
trans-1,3-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Ethylbenzene	ND	5.0	ug/kg	SW846 8260B
2-Hexanone	ND	20	ug/kg	SW846 8260B
Methylene chloride	ND	5.0	ug/kg	SW846 8260B
4-Methyl-2-pentanone	ND	20	ug/kg	SW846 8260B
Styrene	ND	5.0	ug/kg	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	SW846 8260B
Tetrachloroethene	ND	5.0	ug/kg	SW846 8260B
Toluene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trichloro-benzene	**0.66 J**	**5.0**	**ug/kg**	**SW846 8260B**
1,1,1-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
1,1,2-Trichloroethane	ND	5.0	ug/kg	SW846 8260B
Trichloroethene	ND	5.0	ug/kg	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GG9L21AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Trichlorofluoromethane	ND	10	ug/kg	SW846 8260B
1,2,3-Trichloropropane	ND	5.0	ug/kg	SW846 8260B
Vinyl chloride	ND	5.0	ug/kg	SW846 8260B
Xylenes (total)	ND	5.0	ug/kg	SW846 8260B
n-Butylbenzene	**0.36 J**	**5.0**	**ug/kg**	**SW846 8260B**
sec-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Isopropylbenzene	ND	5.0	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	**0.28 J**	**5.0**	**ug/kg**	**SW846 8260B**
1,3,5-Trimethylbenzene	ND	5.0	ug/kg	SW846 8260B
n-Propylbenzene	ND	5.0	ug/kg	SW846 8260B
tert-Butylbenzene	ND	5.0	ug/kg	SW846 8260B
Dibromochloromethane	ND	5.0	ug/kg	SW846 8260B
2-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
4-Chlorotoluene	ND	5.0	ug/kg	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	ug/kg	SW846 8260B
1,3-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/kg	SW846 8260B
1,1-Dichloropropene	ND	5.0	ug/kg	SW846 8260B
Hexachlorobutadiene	**0.34 J**	**5.0**	**ug/kg**	**SW846 8260B**
4-Isopropyltoluene	ND	5.0	ug/kg	SW846 8260B
Methyl tert-butyl ether	ND	20	ug/kg	SW846 8260B
1,2,3-Trichlorobenzene	**0.97 J**	**5.0**	**ug/kg**	**SW846 8260B**
m-Xylene & p-Xylene	ND	2.5	ug/kg	SW846 8260B
o-Xylene	ND	2.5	ug/kg	SW846 8260B
Bromobenzene	ND	5.0	ug/kg	SW846 8260B
Bromochloromethane	ND	5.0	ug/kg	SW846 8260B
Naphthalene	**1.4 J**	**5.0**	**ug/kg**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	118	(71 - 136)
1,2-Dichloroethane-d4	112	(67 - 131)
4-Bromofluorobenzene	105	(71 - 124)
Toluene-d8	101	(77 - 129)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GG9L21AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D4E260000-418 GG9L21AD-LCSD
Prep Date.....: 05/25/04 **Analysis Date..:** 05/25/04
Prep Batch #...: 4147418 **Analysis Time..:** 12:13
Dilution Factor: 1 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 5 g

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**100**	**(72 - 121)**			**SW846 8260B**
	116	**(72 - 121)**	**15**	**(0-25)**	**SW846 8260B**
Chlorobenzene	**96**	**(75 - 115)**			**SW846 8260B**
	105	**(75 - 115)**	**8.6**	**(0-25)**	**SW846 8260B**
1,1-Dichloroethene	**93**	**(60 - 133)**			**SW846 8260B**
	109	**(60 - 133)**	**16**	**(0-25)**	**SW846 8260B**
Toluene	**96**	**(71 - 117)**			**SW846 8260B**
	104	**(71 - 117)**	**8.1**	**(0-25)**	**SW846 8260B**
Trichloroethene	**98**	**(70 - 125)**			**SW846 8260B**
	109	**(70 - 125)**	**11**	**(0-25)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	109	(78 - 118)
	118	(78 - 118)
1,2-Dichloroethane-d4	107	(72 - 120)
	115	(72 - 120)
4-Bromofluorobenzene	101	(76 - 127)
	102	(76 - 127)
Toluene-d8	99	(75 - 120)
	96	(75 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GG9L21AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D4E260000-418 GG9L21AD-LCSD
Prep Date.....: 05/25/04 **Analysis Date..:** 05/25/04
Prep Batch #...: 4147418 **Analysis Time..:** 12:13
Dilution Factor: 1 **Final Wgt/Vol..:** 5 mL
Initial Wgt/Vol: 5 g

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Benzene	**50.0**	**49.8**	**ug/kg**	**100**		**SW846 8260B**
	50.0	**58.0**	**ug/kg**	**116**	**15**	**SW846 8260B**
Chlorobenzene	**50.0**	**48.2**	**ug/kg**	**96**		**SW846 8260B**
	50.0	**52.6**	**ug/kg**	**105**	**8.6**	**SW846 8260B**
1,1-Dichloroethene	**50.0**	**46.5**	**ug/kg**	**93**		**SW846 8260B**
	50.0	**54.5**	**ug/kg**	**109**	**16**	**SW846 8260B**
Toluene	**50.0**	**48.1**	**ug/kg**	**96**		**SW846 8260B**
	50.0	**52.1**	**ug/kg**	**104**	**8.1**	**SW846 8260B**
Trichloroethene	**50.0**	**49.0**	**ug/kg**	**98**		**SW846 8260B**
	50.0	**54.6**	**ug/kg**	**109**	**11**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	109	(78 - 118)
	118	(78 - 118)
1,2-Dichloroethane-d4	107	(72 - 120)
	115	(72 - 120)
4-Bromofluorobenzene	101	(76 - 127)
	102	(76 - 127)
Toluene-d8	99	(75 - 120)
	96	(75 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GG5A41AC-MS **Matrix.....:** SOLID
MS Lot-Sample #: D4E190131-014 GG5A41AD-MSD
Date Sampled...: 05/24/04 07:00 **Date Received..:** 05/24/04
Prep Date.....: 05/25/04 **Analysis Date..:** 05/25/04
Prep Batch #...: 4147418 **Analysis Time..:** 20:59
Dilution Factor: 1 **Initial Wgt/Vol:** 5 g **Final Wgt/Vol..:** 5 mL
% Moisture.....: 0.0

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**91**	**(51 - 133)**			**SW846 8260B**
	107	**(51 - 133)**	**16**	**(0-40)**	**SW846 8260B**
Chlorobenzene	**84**	**(28 - 137)**			**SW846 8260B**
	98	**(28 - 137)**	**15**	**(0-40)**	**SW846 8260B**
1,1-Dichloroethene	**83**	**(49 - 134)**			**SW846 8260B**
	100	**(49 - 134)**	**18**	**(0-40)**	**SW846 8260B**
Toluene	**87**	**(33 - 140)**			**SW846 8260B**
	99	**(33 - 140)**	**13**	**(0-40)**	**SW846 8260B**
Trichloroethene	**89**	**(46 - 135)**			**SW846 8260B**
	106	**(46 - 135)**	**18**	**(0-40)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(71 - 136)
	125	(71 - 136)
1,2-Dichloroethane-d4	105	(67 - 131)
	126	(67 - 131)
4-Bromofluorobenzene	93	(71 - 124)
	114	(71 - 124)
Toluene-d8	91	(77 - 129)
	112	(77 - 129)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GG5A41AC-MS **Matrix.....:** SOLID
MS Lot-Sample #: D4E190131-014 GG5A41AD-MSD
Date Sampled...: 05/24/04 07:00 **Date Received..:** 05/24/04
Prep Date.....: 05/25/04 **Analysis Date..:** 05/25/04
Prep Batch #...: 4147418 **Analysis Time..:** 20:59
Dilution Factor: 1 **Initial Wgt/Vol:** 5 g **Final Wgt/Vol..:** 5 mL
% Moisture.....: 0.0

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Benzene	**ND**	**50.0**	**45.3**	**ug/kg**	**91**		**SW846 8260B**
	ND	**50.0**	**53.3**	**ug/kg**	**107**	**16**	**SW846 8260B**
Chlorobenzene	**ND**	**50.0**	**42.2**	**ug/kg**	**84**		**SW846 8260B**
	ND	**50.0**	**48.9**	**ug/kg**	**98**	**15**	**SW846 8260B**
1,1-Dichloroethene	**ND**	**50.0**	**41.6**	**ug/kg**	**83**		**SW846 8260B**
	ND	**50.0**	**49.9**	**ug/kg**	**100**	**18**	**SW846 8260B**
Toluene	**0.27**	**50.0**	**43.6**	**ug/kg**	**87**		**SW846 8260B**
	0.27	**50.0**	**49.7**	**ug/kg**	**99**	**13**	**SW846 8260B**
Trichloroethene	**ND**	**50.0**	**44.3**	**ug/kg**	**89**		**SW846 8260B**
	ND	**50.0**	**52.9**	**ug/kg**	**106**	**18**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(71 - 136)
	125	(71 - 136)
1,2-Dichloroethane-d4	105	(67 - 131)
	126	(67 - 131)
4-Bromofluorobenzene	93	(71 - 124)
	114	(71 - 124)
Toluene-d8	91	(77 - 129)
	112	(77 - 129)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHCHG1AA **Matrix.....:** WATER
MB Lot-Sample #: D4E280000-504

Prep Date.....: 05/27/04 **Analysis Time..:** 16:54
Analysis Date..: 05/27/04 **Prep Batch #...:** 4149504 **Final Wgt/Vol..:** 20 mL
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Methylene chloride	**0.51 J**	**5.0**	**ug/L**	**SW846 8260B**
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHCHG1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
4-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(76 - 116)
1,2-Dichloroethane-d4	103	(59 - 129)
4-Bromofluorobenzene	97	(74 - 114)
Toluene-d8	100	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHCHG1AC **Matrix.....:** WATER
LCS Lot-Sample#: D4E280000-504
Prep Date.....: 05/27/04 **Analysis Date..:** 05/27/04
Prep Batch #...: 4149504 **Analysis Time..:** 16:29
Dilution Factor: 1 **Final Wgt/Vol..:** 20 mL
Initial Wgt/Vol: 20 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**110**	**(75 - 116)**	**SW846 8260B**
Chlorobenzene	**103**	**(77 - 117)**	**SW846 8260B**
1,1-Dichloroethene	**111**	**(67 - 125)**	**SW846 8260B**
Toluene	**105**	**(74 - 115)**	**SW846 8260B**
Trichloroethene	**110**	**(80 - 123)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(76 - 116)
1,2-Dichloroethane-d4	100	(59 - 129)
4-Bromofluorobenzene	104	(74 - 114)
Toluene-d8	98	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHCHG1AC **Matrix.....:** WATER
LCS Lot-Sample#: D4E280000-504
Prep Date.....: 05/27/04 **Analysis Date..:** 05/27/04
Prep Batch #...: 4149504 **Analysis Time..:** 16:29
Dilution Factor: 1 **Final Wgt/Vol..:** 20 mL
Initial Wgt/Vol: 20 mL

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	**10.0**	**11.0**	**ug/L**	**110**	**SW846 8260B**
Chlorobenzene	**10.0**	**10.3**	**ug/L**	**103**	**SW846 8260B**
1,1-Dichloroethene	**10.0**	**11.1**	**ug/L**	**111**	**SW846 8260B**
Toluene	**10.0**	**10.5**	**ug/L**	**105**	**SW846 8260B**
Trichloroethene	**10.0**	**11.0**	**ug/L**	**110**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(76 - 116)
1,2-Dichloroethane-d4	100	(59 - 129)
4-Bromofluorobenzene	104	(74 - 114)
Toluene-d8	98	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	D4E210325	**Work Order #...:**	GGTEE1AG-MS	**Matrix.....:**	WATER
MS Lot-Sample #:	D4E210325-001		GGTEE1AH-MSD		
Date Sampled...:	05/19/04 10:25	**Date Received..:**	05/21/04		
Prep Date.....:	05/27/04	**Analysis Date..:**	05/27/04		
Prep Batch #...:	4149504	**Analysis Time..:**	17:44		
Dilution Factor:	1	**Initial Wgt/Vol:**	20 mL	**Final Wgt/Vol..:**	20 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**110**	**(75 - 116)**			**SW846 8260B**
	113	**(75 - 116)**	**2.8**	**(0-20)**	**SW846 8260B**
Chlorobenzene	**108**	**(77 - 117)**			**SW846 8260B**
	112	**(77 - 117)**	**3.3**	**(0-20)**	**SW846 8260B**
1,1-Dichloroethene	**112**	**(67 - 125)**			**SW846 8260B**
	113	**(67 - 125)**	**0.96**	**(0-20)**	**SW846 8260B**
Toluene	**108**	**(74 - 115)**			**SW846 8260B**
	110	**(74 - 115)**	**2.4**	**(0-20)**	**SW846 8260B**
Trichloroethene	**109**	**(80 - 123)**			**SW846 8260B**
	112	**(80 - 123)**	**2.9**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(76 - 116)
	105	(76 - 116)
1,2-Dichloroethane-d4	99	(59 - 129)
	100	(59 - 129)
4-Bromofluorobenzene	100	(74 - 114)
	105	(74 - 114)
Toluene-d8	100	(76 - 116)
	103	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GGTEE1AG-MS **Matrix.....:** WATER
MS Lot-Sample #: D4E210325-001 GGTEE1AH-MSD
Date Sampled...: 05/19/04 10:25 **Date Received..:** 05/21/04
Prep Date.....: 05/27/04 **Analysis Date..:** 05/27/04
Prep Batch #...: 4149504 **Analysis Time..:** 17:44
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL **Final Wgt/Vol..:** 20 mL

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Benzene	**ND**	**10.0**	**11.0**	**ug/L**	**110**		**SW846 8260B**
	ND	**10.0**	**11.3**	**ug/L**	**113**	**2.8**	**SW846 8260B**
Chlorobenzene	**ND**	**10.0**	**10.8**	**ug/L**	**108**		**SW846 8260B**
	ND	**10.0**	**11.2**	**ug/L**	**112**	**3.3**	**SW846 8260B**
1,1-Dichloroethene	**ND**	**10.0**	**11.2**	**ug/L**	**112**		**SW846 8260B**
	ND	**10.0**	**11.3**	**ug/L**	**113**	**0.96**	**SW846 8260B**
Toluene	**ND**	**10.0**	**10.8**	**ug/L**	**108**		**SW846 8260B**
	ND	**10.0**	**11.0**	**ug/L**	**110**	**2.4**	**SW846 8260B**
Trichloroethene	**ND**	**10.0**	**10.9**	**ug/L**	**109**		**SW846 8260B**
	ND	**10.0**	**11.2**	**ug/L**	**112**	**2.9**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(76 - 116)
	105	(76 - 116)
1,2-Dichloroethane-d4	99	(59 - 129)
	100	(59 - 129)
4-Bromofluorobenzene	100	(74 - 114)
	105	(74 - 114)
Toluene-d8	100	(76 - 116)
	103	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHEJJ1AA **Matrix.....:** WATER
MB Lot-Sample #: D4F010000-497

Prep Date.....: 05/28/04 **Analysis Time..:** 07:24
Analysis Date..: 05/28/04 **Prep Batch #...:** 4153497 **Final Wgt/Vol..:** 20 mL
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Methylene chloride	**0.22 J**	**5.0**	**ug/L**	**SW846 8260B**
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHEJJ1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
4-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	5.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	1.0	ug/L	SW846 8260B
o-Xylene	ND	2.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(76 - 116)
1,2-Dichloroethane-d4	97	(59 - 129)
4-Bromofluorobenzene	102	(74 - 114)
Toluene-d8	110	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHEJJ1AC **Matrix.....:** WATER
LCS Lot-Sample#: D4F010000-497
Prep Date.....: 05/28/04 **Analysis Date..:** 05/28/04
Prep Batch #...: 4153497 **Analysis Time..:** 07:04
Dilution Factor: 1 **Final Wgt/Vol..:** 20 mL
Initial Wgt/Vol: 20 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**106**	**(75 - 116)**	**SW846 8260B**
Chlorobenzene	**107**	**(77 - 117)**	**SW846 8260B**
1,1-Dichloroethene	**120**	**(67 - 125)**	**SW846 8260B**
Toluene	**110**	**(74 - 115)**	**SW846 8260B**
Trichloroethene	**105**	**(80 - 123)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(76 - 116)
1,2-Dichloroethane-d4	100	(59 - 129)
4-Bromofluorobenzene	101	(74 - 114)
Toluene-d8	111	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHEJJ1AC **Matrix.....:** WATER
LCS Lot-Sample#: D4F010000-497
Prep Date.....: 05/28/04 **Analysis Date..:** 05/28/04
Prep Batch #...: 4153497 **Analysis Time..:** 07:04
Dilution Factor: 1 **Final Wgt/Vol..:** 20 mL
Initial Wgt/Vol: 20 mL

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	**10.0**	**10.6**	**ug/L**	**106**	**SW846 8260B**
Chlorobenzene	**10.0**	**10.7**	**ug/L**	**107**	**SW846 8260B**
1,1-Dichloroethene	**10.0**	**12.0**	**ug/L**	**120**	**SW846 8260B**
Toluene	**10.0**	**11.0**	**ug/L**	**110**	**SW846 8260B**
Trichloroethene	**10.0**	**10.5**	**ug/L**	**105**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(76 - 116)
1,2-Dichloroethane-d4	100	(59 - 129)
4-Bromofluorobenzene	101	(74 - 114)
Toluene-d8	111	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GGMR01CM-MS **Matrix.....:** WATER
MS Lot-Sample #: D4E200184-004 GGMR01CN-MSD
Date Sampled...: 05/19/04 14:45 **Date Received..:** 05/20/04
Prep Date.....: 05/28/04 **Analysis Date..:** 05/28/04
Prep Batch #...: 4153497 **Analysis Time..:** 08:58
Dilution Factor: 100 **Initial Wgt/Vol:** 0.2 mL **Final Wgt/Vol..:** 20 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**102**	**(75 - 116)**			**SW846 8260B**
	100	**(75 - 116)**	**1.9**	**(0-20)**	**SW846 8260B**
Chlorobenzene	**101**	**(77 - 117)**			**SW846 8260B**
	100	**(77 - 117)**	**1.1**	**(0-20)**	**SW846 8260B**
1,1-Dichloroethene	**118**	**(67 - 125)**			**SW846 8260B**
	113	**(67 - 125)**	**4.5**	**(0-20)**	**SW846 8260B**
Toluene	**107**	**(74 - 115)**			**SW846 8260B**
	107	**(74 - 115)**	**0.47**	**(0-20)**	**SW846 8260B**
Trichloroethene	**102**	**(80 - 123)**			**SW846 8260B**
	99	**(80 - 123)**	**2.6**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(76 - 116)
	98	(76 - 116)
1,2-Dichloroethane-d4	94	(59 - 129)
	95	(59 - 129)
4-Bromofluorobenzene	96	(74 - 114)
	92	(74 - 114)
Toluene-d8	107	(76 - 116)
	108	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GGMR01CM-MS **Matrix.....:** WATER
MS Lot-Sample #: D4E200184-004 GGMR01CN-MSD
Date Sampled...: 05/19/04 14:45 **Date Received..:** 05/20/04
Prep Date.....: 05/28/04 **Analysis Date..:** 05/28/04
Prep Batch #...: 4153497 **Analysis Time..:** 08:58
Dilution Factor: 100 **Initial Wgt/Vol:** 0.2 mL **Final Wgt/Vol..:** 20 mL

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Benzene	**23**	**1000**	**1050**	**ug/L**	**102**		**SW846 8260B**
	23	**1000**	**1030**	**ug/L**	**100**	**1.9**	**SW846 8260B**
Chlorobenzene	**ND**	**1000**	**1010**	**ug/L**	**101**		**SW846 8260B**
	ND	**1000**	**997**	**ug/L**	**100**	**1.1**	**SW846 8260B**
1,1-Dichloroethene	**ND**	**1000**	**1180**	**ug/L**	**118**		**SW846 8260B**
	ND	**1000**	**1130**	**ug/L**	**113**	**4.5**	**SW846 8260B**
Toluene	**270**	**1000**	**1340**	**ug/L**	**107**		**SW846 8260B**
	270	**1000**	**1350**	**ug/L**	**107**	**0.47**	**SW846 8260B**
Trichloroethene	**ND**	**1000**	**1020**	**ug/L**	**102**		**SW846 8260B**
	ND	**1000**	**993**	**ug/L**	**99**	**2.6**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(76 - 116)
	98	(76 - 116)
1,2-Dichloroethane-d4	94	(59 - 129)
	95	(59 - 129)
4-Bromofluorobenzene	96	(74 - 114)
	92	(74 - 114)
Toluene-d8	107	(76 - 116)
	108	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHF4A1AA **Matrix.....:** WATER
MB Lot-Sample #: D4F020000-317

Prep Date.....: 05/29/04 **Analysis Time..:** 18:21
Analysis Date..: 05/29/04 **Prep Batch #...:** 4154317 **Final Wgt/Vol..:** 20 mL
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
2-Butanone (MEK)	ND	5.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Dibromomethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromoethane (EDB)	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethene (total)	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Methylene chloride	**0.34 J**	**5.0**	**ug/L**	**SW846 8260B**
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHF4A1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	ug/L	SW846 8260B
1,3-Dichloropropane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
4-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
m-Xylene & p-Xylene	ND	2.0	ug/L	SW846 8260B
o-Xylene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
Naphthalene	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(76 - 116)
1,2-Dichloroethane-d4	105	(59 - 129)
4-Bromofluorobenzene	99	(74 - 114)
Toluene-d8	99	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHF4A1AC **Matrix.....:** WATER
LCS Lot-Sample#: D4F020000-317
Prep Date.....: 05/29/04 **Analysis Date..:** 05/29/04
Prep Batch #...: 4154317 **Analysis Time..:** 17:59
Dilution Factor: 1 **Final Wgt/Vol..:** 20 mL
Initial Wgt/Vol: 20 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**98**	**(75 - 116)**	**SW846 8260B**
Chlorobenzene	**92**	**(77 - 117)**	**SW846 8260B**
1,1-Dichloroethene	**93**	**(67 - 125)**	**SW846 8260B**
Toluene	**89**	**(74 - 115)**	**SW846 8260B**
Trichloroethene	**96**	**(80 - 123)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(76 - 116)
1,2-Dichloroethane-d4	107	(59 - 129)
4-Bromofluorobenzene	100	(74 - 114)
Toluene-d8	97	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GHF4A1AC **Matrix.....:** WATER
LCS Lot-Sample#: D4F020000-317
Prep Date.....: 05/29/04 **Analysis Date..:** 05/29/04
Prep Batch #...: 4154317 **Analysis Time..:** 17:59
Dilution Factor: 1 **Final Wgt/Vol..:** 20 mL
Initial Wgt/Vol: 20 mL

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	**10.0**	**9.77**	**ug/L**	**98**	**SW846 8260B**
Chlorobenzene	**10.0**	**9.17**	**ug/L**	**92**	**SW846 8260B**
1,1-Dichloroethene	**10.0**	**9.28**	**ug/L**	**93**	**SW846 8260B**
Toluene	**10.0**	**8.88**	**ug/L**	**89**	**SW846 8260B**
Trichloroethene	**10.0**	**9.61**	**ug/L**	**96**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(76 - 116)
1,2-Dichloroethane-d4	107	(59 - 129)
4-Bromofluorobenzene	100	(74 - 114)
Toluene-d8	97	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GG8K41AC-MS **Matrix.....:** WATER
MS Lot-Sample #: D4E270388-012 GG8K41AD-MSD
Date Sampled...: 05/27/04 13:45 **Date Received..:** 05/27/04
Prep Date.....: 05/29/04 **Analysis Date..:** 05/29/04
Prep Batch #...: 4154317 **Analysis Time..:** 19:40
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL **Final Wgt/Vol..:** 20 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**104**	**(75 - 116)**			**SW846 8260B**
	103	**(75 - 116)**	**1.2**	**(0-20)**	**SW846 8260B**
Chlorobenzene	**97**	**(77 - 117)**			**SW846 8260B**
	96	**(77 - 117)**	**0.86**	**(0-20)**	**SW846 8260B**
1,1-Dichloroethene	**98**	**(67 - 125)**			**SW846 8260B**
	97	**(67 - 125)**	**1.7**	**(0-20)**	**SW846 8260B**
Toluene	**95**	**(74 - 115)**			**SW846 8260B**
	93	**(74 - 115)**	**1.9**	**(0-20)**	**SW846 8260B**
Trichloroethene	**101**	**(80 - 123)**			**SW846 8260B**
	100	**(80 - 123)**	**0.93**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(76 - 116)
	103	(76 - 116)
1,2-Dichloroethane-d4	105	(59 - 129)
	106	(59 - 129)
4-Bromofluorobenzene	100	(74 - 114)
	100	(74 - 114)
Toluene-d8	99	(76 - 116)
	98	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: D4E210325 **Work Order #...:** GG8K41AC-MS **Matrix.....:** WATER
MS Lot-Sample #: D4E270388-012 GG8K41AD-MSD
Date Sampled...: 05/27/04 13:45 **Date Received..:** 05/27/04
Prep Date.....: 05/29/04 **Analysis Date..:** 05/29/04
Prep Batch #...: 4154317 **Analysis Time..:** 19:40
Dilution Factor: 1 **Initial Wgt/Vol:** 20 mL **Final Wgt/Vol..:** 20 mL

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Benzene	**ND**	**10.0**	**10.4**	**ug/L**	**104**		**SW846 8260B**
	ND	**10.0**	**10.3**	**ug/L**	**103**	**1.2**	**SW846 8260B**
Chlorobenzene	**ND**	**10.0**	**9.65**	**ug/L**	**97**		**SW846 8260B**
	ND	**10.0**	**9.57**	**ug/L**	**96**	**0.86**	**SW846 8260B**
1,1-Dichloroethene	**ND**	**10.0**	**9.83**	**ug/L**	**98**		**SW846 8260B**
	ND	**10.0**	**9.66**	**ug/L**	**97**	**1.7**	**SW846 8260B**
Toluene	**ND**	**10.0**	**9.52**	**ug/L**	**95**		**SW846 8260B**
	ND	**10.0**	**9.34**	**ug/L**	**93**	**1.9**	**SW846 8260B**
Trichloroethene	**ND**	**10.0**	**10.1**	**ug/L**	**101**		**SW846 8260B**
	ND	**10.0**	**9.98**	**ug/L**	**100**	**0.93**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(76 - 116)
	103	(76 - 116)
1,2-Dichloroethane-d4	105	(59 - 129)
	106	(59 - 129)
4-Bromofluorobenzene	100	(74 - 114)
	100	(74 - 114)
Toluene-d8	99	(76 - 116)
	98	(76 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGXHG1AA **Matrix.....:** WATER
MB Lot-Sample #: D4E240000-234

Prep Date.....: 05/24/04 **Analysis Time..:** 18:07
Analysis Date..: 06/02/04 **Prep Batch #...:** 4145234 **Final Wgt/Vol..:** 1 mL
Dilution Factor: 1 **Initial Wgt/Vol:** 1000 mL

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Acetophenone	ND	10	ug/L	SW846 8270C
2-Acetylaminofluorene	ND	100	ug/L	SW846 8270C
4-Aminobiphenyl	ND	50	ug/L	SW846 8270C
Aniline	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Aramite	ND	20	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Benzyl alcohol	ND	10	ug/L	SW846 8270C
bis(2-Chloroethoxy) methane	ND	10	ug/L	SW846 8270C
bis(2-Chloroethyl)- ether	ND	10	ug/L	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	SW846 8270C
4-Bromophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Butyl benzyl phthalate	ND	10	ug/L	SW846 8270C
4-Chloroaniline	ND	10	ug/L	SW846 8270C
Chlorobenzilate	ND	10	ug/L	SW846 8270C
4-Chloro-3-methylphenol	ND	10	ug/L	SW846 8270C
2-Chloronaphthalene	ND	10	ug/L	SW846 8270C
2-Chlorophenol	ND	10	ug/L	SW846 8270C
4-Chlorophenyl phenyl ether	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Diallate	ND	20	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Dibenzofuran	ND	10	ug/L	SW846 8270C
Di-n-butyl phthalate	ND	10	ug/L	SW846 8270C
1,2-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,3-Dichlorobenzene	ND	10	ug/L	SW846 8270C
1,4-Dichlorobenzene	ND	10	ug/L	SW846 8270C
3,3'-Dichlorobenzidine	ND	50	ug/L	SW846 8270C
2,4-Dichlorophenol	ND	10	ug/L	SW846 8270C
2,6-Dichlorophenol	ND	10	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGXHG1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diethyl phthalate	ND	10	ug/L	SW846 8270C
Dimethoate	ND	20	ug/L	SW846 8270C
7,12-Dimethylbenz(a)-anthracene	ND	20	ug/L	SW846 8270C
3,3'-Dimethylbenzidine	ND	20	ug/L	SW846 8270C
2,4-Dimethylphenol	ND	10	ug/L	SW846 8270C
Dimethyl phthalate	ND	10	ug/L	SW846 8270C
1,3-Dinitrobenzene	ND	10	ug/L	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrophenol	ND	50	ug/L	SW846 8270C
2,4-Dinitrotoluene	ND	10	ug/L	SW846 8270C
2,6-Dinitrotoluene	ND	10	ug/L	SW846 8270C
Di-n-octyl phthalate	ND	10	ug/L	SW846 8270C
Diphenylamine	ND	10	ug/L	SW846 8270C
Disulfoton	ND	50	ug/L	SW846 8270C
Ethyl methanesulfonate	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Hexachlorobenzene	ND	10	ug/L	SW846 8270C
Hexachlorobutadiene	ND	10	ug/L	SW846 8270C
Hexachlorocyclopenta-diene	ND	50	ug/L	SW846 8270C
Hexachloroethane	ND	10	ug/L	SW846 8270C
Hexachloropropene	ND	100	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Isodrin	ND	10	ug/L	SW846 8270C
Isophorone	ND	10	ug/L	SW846 8270C
Isosafrole	ND	20	ug/L	SW846 8270C
Methapyrilene	ND	50	ug/L	SW846 8270C
3-Methylcholanthrene	ND	20	ug/L	SW846 8270C
Methyl methanesulfonate	ND	10	ug/L	SW846 8270C
2-Methylnaphthalene	ND	10	ug/L	SW846 8270C
Methyl parathion	ND	50	ug/L	SW846 8270C
2-Methylphenol	ND	10	ug/L	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
1,4-Naphthoquinone	ND	50	ug/L	SW846 8270C
1-Naphthylamine	ND	10	ug/L	SW846 8270C
2-Naphthylamine	ND	10	ug/L	SW846 8270C
2-Nitroaniline	ND	50	ug/L	SW846 8270C
3-Nitroaniline	ND	50	ug/L	SW846 8270C
4-Nitroaniline	ND	50	ug/L	SW846 8270C
Nitrobenzene	ND	10	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGXHG1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Nitrophenol	ND	10	ug/L	SW846 8270C
4-Nitrophenol	ND	50	ug/L	SW846 8270C
4-Nitroquinoline-1-oxide	ND	100	ug/L	SW846 8270C
N-Nitrosodi-n-butylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodiethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodimethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodiphenylamine	ND	10	ug/L	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	10	ug/L	SW846 8270C
N-Nitrosomethylethylamine	ND	10	ug/L	SW846 8270C
N-Nitrosomorpholine	ND	10	ug/L	SW846 8270C
N-Nitrosopiperidine	ND	10	ug/L	SW846 8270C
N-Nitrosopyrrolidine	ND	10	ug/L	SW846 8270C
5-Nitro-o-toluidine	ND	20	ug/L	SW846 8270C
Parathion	ND	50	ug/L	SW846 8270C
Pentachlorobenzene	ND	10	ug/L	SW846 8270C
Pentachloroethane	ND	50	ug/L	SW846 8270C
Pentachloronitrobenzene	ND	50	ug/L	SW846 8270C
Pentachlorophenol	ND	50	ug/L	SW846 8270C
Phenacetin	ND	20	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Phenol	ND	10	ug/L	SW846 8270C
Phorate	ND	50	ug/L	SW846 8270C
2-Picoline	ND	20	ug/L	SW846 8270C
Pronamide	ND	20	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C
Pyridine	ND	20	ug/L	SW846 8270C
1,2,4,5-Tetrachloro-benzene	ND	10	ug/L	SW846 8270C
2,3,4,6-Tetrachlorophenol	ND	50	ug/L	SW846 8270C
Thionazin	ND	10	ug/L	SW846 8270C
o-Toluidine	ND	10	ug/L	SW846 8270C
1,2,4-Trichloro-benzene	ND	10	ug/L	SW846 8270C
2,4,5-Trichloro-phenol	ND	10	ug/L	SW846 8270C
2,4,6-Trichloro-phenol	ND	10	ug/L	SW846 8270C
O,O,O-Triethylphosphoro-thioate	ND	50	ug/L	SW846 8270C
1,3,5-Trinitrobenzene	ND	50	ug/L	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGXHG1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	80	(32 - 116)
Phenol-d5	86	(40 - 111)
Nitrobenzene-d5	90	(53 - 107)
2-Fluorobiphenyl	59	(31 - 105)
2,4,6-Tribromophenol	82	(42 - 122)
Terphenyl-d14	79	(21 - 125)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Cabrera Services

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: D4E240000-234 B **Work Order #:** GGXHG1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
POPOP	1806-34-4	--	M		ug/L
Unknown		6.2 J	M	2.4557	ug/L
Unknown		4.3 J	M	10.123	ug/L
PPO	92-71-7	--	M		ug/L

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGXHG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D4E240000-234 GGXHG1AD-LCSD
Prep Date.....: 05/24/04 **Analysis Date..:** 06/02/04
Prep Batch #...: 4145234 **Analysis Time..:** 18:31
Dilution Factor: 1 **Final Wgt/Vol..:** 1 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**81**	**(55 - 97)**			**SW846 8270C**
	80	**(55 - 97)**	**0.53**	**(0-30)**	**SW846 8270C**
4-Chloro-3-methylphenol	**84**	**(59 - 106)**			**SW846 8270C**
	84	**(59 - 106)**	**0.56**	**(0-40)**	**SW846 8270C**
2-Chlorophenol	**82**	**(59 - 105)**			**SW846 8270C**
	84	**(59 - 105)**	**2.6**	**(0-40)**	**SW846 8270C**
1,4-Dichlorobenzene	**59**	**(31 - 98)**			**SW846 8270C**
	62	**(31 - 98)**	**5.5**	**(0-40)**	**SW846 8270C**
2,4-Dinitrotoluene	**85**	**(57 - 113)**			**SW846 8270C**
	81	**(57 - 113)**	**4.5**	**(0-40)**	**SW846 8270C**
4-Nitrophenol	**81**	**(43 - 118)**			**SW846 8270C**
	79	**(43 - 118)**	**2.7**	**(0-40)**	**SW846 8270C**
N-Nitrosodi-n-propyl-amine	**90**	**(51 - 99)**			**SW846 8270C**
	87	**(51 - 99)**	**2.6**	**(0-40)**	**SW846 8270C**
Pentachlorophenol	**90**	**(48 - 114)**			**SW846 8270C**
	90	**(48 - 114)**	**0.14**	**(0-40)**	**SW846 8270C**
Phenol	**84**	**(56 - 106)**			**SW846 8270C**
	86	**(56 - 106)**	**2.4**	**(0-40)**	**SW846 8270C**
Pyrene	**79**	**(51 - 103)**			**SW846 8270C**
	73	**(51 - 103)**	**8.0**	**(0-40)**	**SW846 8270C**
1,2,4-Trichloro-benzene	**65**	**(36 - 99)**			**SW846 8270C**
	70	**(36 - 99)**	**7.2**	**(0-40)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	80	(54 - 105)
	79	(54 - 105)
Phenol-d5	82	(55 - 106)
	83	(55 - 106)
Nitrobenzene-d5	87	(58 - 108)
	86	(58 - 108)
2-Fluorobiphenyl	70	(53 - 97)
	70	(53 - 97)
2,4,6-Tribromophenol	90	(62 - 113)
	87	(62 - 113)

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGXHG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D4E240000-234 GGXHG1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	85	(55 - 109)
	78	(55 - 109)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGXHG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D4E240000-234 GGXHG1AD-LCSD
Prep Date.....: 05/24/04 **Analysis Date..:** 06/02/04
Prep Batch #...: 4145234 **Analysis Time..:** 18:31
Dilution Factor: 1 **Final Wgt/Vol..:** 1 mL
Initial Wgt/Vol: 1000 mL

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	100	80.8	ug/L	81		SW846 8270C
	100	80.4	ug/L	80	0.53	SW846 8270C
4-Chloro-3-methylphenol	150	126	ug/L	84		SW846 8270C
	150	126	ug/L	84	0.56	SW846 8270C
2-Chlorophenol	150	123	ug/L	82		SW846 8270C
	150	126	ug/L	84	2.6	SW846 8270C
1,4-Dichlorobenzene	100	59.1	ug/L	59		SW846 8270C
	100	62.5	ug/L	62	5.5	SW846 8270C
2,4-Dinitrotoluene	100	85.2	ug/L	85		SW846 8270C
	100	81.4	ug/L	81	4.5	SW846 8270C
4-Nitrophenol	150	121	ug/L	81		SW846 8270C
	150	118	ug/L	79	2.7	SW846 8270C
N-Nitrosodi-n-propyl-amine	100	89.8	ug/L	90		SW846 8270C
	100	87.4	ug/L	87	2.6	SW846 8270C
Pentachlorophenol	150	135	ug/L	90		SW846 8270C
	150	135	ug/L	90	0.14	SW846 8270C
Phenol	150	126	ug/L	84		SW846 8270C
	150	129	ug/L	86	2.4	SW846 8270C
Pyrene	100	78.8	ug/L	79		SW846 8270C
	100	72.7	ug/L	73	8.0	SW846 8270C
1,2,4-Trichloro-benzene	100	65.4	ug/L	65		SW846 8270C
	100	70.3	ug/L	70	7.2	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	80	(54 - 105)
	79	(54 - 105)
Phenol-d5	82	(55 - 106)
	83	(55 - 106)
Nitrobenzene-d5	87	(58 - 108)
	86	(58 - 108)
2-Fluorobiphenyl	70	(53 - 97)
	70	(53 - 97)
2,4,6-Tribromophenol	90	(62 - 113)
	87	(62 - 113)

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGXHG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D4E240000-234 GGXHG1AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	85	(55 - 109)
	78	(55 - 109)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GG1521AA **Matrix.....:** SOLID
MB Lot-Sample #: D4E250000-358

Prep Date.....: 05/25/04 **Analysis Time..:** 07:42
Analysis Date..: 06/03/04 **Prep Batch #...:** 4146358 **Final Wgt/Vol..:** 1 mL
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
Acetophenone	ND	330	ug/kg	SW846 8270C
2-Acetylaminofluorene	ND	3300	ug/kg	SW846 8270C
4-Aminobiphenyl	ND	1600	ug/kg	SW846 8270C
Aniline	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Aramite	ND	660	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Benzyl alcohol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)- ether	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
Chlorobenzilate	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
Diallate	ND	660	ug/kg	SW846 8270C
Dibenz(a,h)anthracene	ND	330	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
2,6-Dichlorophenol	ND	330	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GG1521AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Diethyl phthalate	ND	660	ug/kg	SW846 8270C
Dimethoate	ND	660	ug/kg	SW846 8270C
7,12-Dimethylbenz(a)-anthracene	ND	660	ug/kg	SW846 8270C
3,3'-Dimethylbenzidine	ND	660	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C
1,3-Dinitrobenzene	ND	330	ug/kg	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Diphenylamine	ND	330	ug/kg	SW846 8270C
Disulfoton	ND	1600	ug/kg	SW846 8270C
Ethyl methanesulfonate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopenta-diene	ND	1600	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Hexachloropropene	ND	3300	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Isodrin	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
Isosafrole	ND	660	ug/kg	SW846 8270C
Methapyrilene	ND	1600	ug/kg	SW846 8270C
3-Methylcholanthrene	ND	660	ug/kg	SW846 8270C
Methyl methanesulfonate	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
Methyl parathion	ND	1600	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
3-Methylphenol & 4-Methylphenol	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
1,4-Naphthoquinone	ND	1600	ug/kg	SW846 8270C
1-Naphthylamine	ND	330	ug/kg	SW846 8270C
2-Naphthylamine	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GG1521AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
4-Nitroquinoline-1-oxide	ND	3300	ug/kg	SW846 8270C
N-Nitrosodi-n-butylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodiethylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodimethylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	330	ug/kg	SW846 8270C
N-Nitrosomethylethylamine	ND	330	ug/kg	SW846 8270C
N-Nitrosomorpholine	ND	330	ug/kg	SW846 8270C
N-Nitrosopiperidine	ND	330	ug/kg	SW846 8270C
N-Nitrosopyrrolidine	ND	330	ug/kg	SW846 8270C
5-Nitro-o-toluidine	ND	660	ug/kg	SW846 8270C
Parathion	ND	1600	ug/kg	SW846 8270C
Pentachlorobenzene	ND	330	ug/kg	SW846 8270C
Pentachloroethane	ND	1600	ug/kg	SW846 8270C
Pentachloronitrobenzene	ND	1600	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenacetin	ND	660	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Phenol	ND	330	ug/kg	SW846 8270C
Phorate	ND	1600	ug/kg	SW846 8270C
2-Picoline	ND	660	ug/kg	SW846 8270C
Pronamide	ND	660	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
Pyridine	ND	660	ug/kg	SW846 8270C
1,2,4,5-Tetrachloro-benzene	ND	330	ug/kg	SW846 8270C
2,3,4,6-Tetrachlorophenol	ND	1600	ug/kg	SW846 8270C
Thionazin	ND	1600	ug/kg	SW846 8270C
o-Toluidine	ND	660	ug/kg	SW846 8270C
1,2,4-Trichloro-benzene	ND	330	ug/kg	SW846 8270C
2,4,5-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
2,4,6-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
O,O,O-Triethylphosphoro-thioate	ND	1600	ug/kg	SW846 8270C
1,3,5-Trinitrobenzene	ND	1600	ug/kg	SW846 8270C

(Continued on next page)

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GG1521AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	81	(28 - 95)
Phenol-d5	81	(35 - 90)
Nitrobenzene-d5	83	(39 - 89)
2-Fluorobiphenyl	74	(35 - 86)
2,4,6-Tribromophenol	67	(11 - 111)
Terphenyl-d14	74	(30 - 98)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Cabrera Services

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: D4E250000-358 B **Work Order #:** GG1521AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
3-Penten-2-one, 4-methyl-	141-79-7	180 J	M	3.6804	ug/kg
Unknown aldol condensate		34000 J	M	4.0311	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GG1521AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D4E250000-358 GG1521AD-LCSD
Prep Date.....: 05/25/04 **Analysis Date..:** 06/03/04
Prep Batch #...: 4146358 **Analysis Time..:** 08:08
Dilution Factor: 1 **Final Wgt/Vol..:** 1 mL
Initial Wgt/Vol: 30 g

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**76**	**(49 - 89)**			**SW846 8270C**
	67	**(49 - 89)**	**12**	**(0-40)**	**SW846 8270C**
4-Chloro-3-methylphenol	**79**	**(53 - 93)**			**SW846 8270C**
	72	**(53 - 93)**	**9.3**	**(0-40)**	**SW846 8270C**
2-Chlorophenol	**79**	**(52 - 92)**			**SW846 8270C**
	70	**(52 - 92)**	**12**	**(0-36)**	**SW846 8270C**
1,4-Dichlorobenzene	**74**	**(47 - 87)**			**SW846 8270C**
	65	**(47 - 87)**	**14**	**(0-40)**	**SW846 8270C**
2,4-Dinitrotoluene	**75**	**(51 - 98)**			**SW846 8270C**
	68	**(51 - 98)**	**9.7**	**(0-40)**	**SW846 8270C**
4-Nitrophenol	**59**	**(37 - 103)**			**SW846 8270C**
	57	**(37 - 103)**	**3.4**	**(0-40)**	**SW846 8270C**
N-Nitrosodi-n-propyl-amine	**79**	**(46 - 90)**			**SW846 8270C**
	70	**(46 - 90)**	**12**	**(0-40)**	**SW846 8270C**
Pentachlorophenol	**72**	**(37 - 96)**			**SW846 8270C**
	63	**(37 - 96)**	**14**	**(0-40)**	**SW846 8270C**
Phenol	**78**	**(52 - 92)**			**SW846 8270C**
	70	**(52 - 92)**	**12**	**(0-37)**	**SW846 8270C**
Pyrene	**77**	**(46 - 95)**			**SW846 8270C**
	66	**(46 - 95)**	**16**	**(0-40)**	**SW846 8270C**
1,2,4-Trichloro-benzene	**76**	**(49 - 89)**			**SW846 8270C**
	66	**(49 - 89)**	**14**	**(0-40)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	75	(52 - 92)
	67	(52 - 92)
Phenol-d5	77	(52 - 92)
	69	(52 - 92)
Nitrobenzene-d5	79	(51 - 91)
	71	(51 - 91)
2-Fluorobiphenyl	73	(47 - 88)
	64	(47 - 88)
2,4,6-Tribromophenol	79	(48 - 94)
	64	(48 - 94)

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GG1521AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D4E250000-358 GG1521AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	79	(50 - 103)
	69	(50 - 103)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GG1521AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D4E250000-358 GG1521AD-LCSD
Prep Date.....: 05/25/04 **Analysis Date..:** 06/03/04
Prep Batch #...: 4146358 **Analysis Time..:** 08:08
Dilution Factor: 1 **Final Wgt/Vol..:** 1 mL
Initial Wgt/Vol: 30 g

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acenaphthene	3330	2530	ug/kg	76		SW846 8270C
	3330	2230	ug/kg	67	12	SW846 8270C
4-Chloro-3-methylphenol	5000	3960	ug/kg	79		SW846 8270C
	5000	3610	ug/kg	72	9.3	SW846 8270C
2-Chlorophenol	5000	3940	ug/kg	79		SW846 8270C
	5000	3480	ug/kg	70	12	SW846 8270C
1,4-Dichlorobenzene	3330	2470	ug/kg	74		SW846 8270C
	3330	2150	ug/kg	65	14	SW846 8270C
2,4-Dinitrotoluene	3330	2500	ug/kg	75		SW846 8270C
	3330	2270	ug/kg	68	9.7	SW846 8270C
4-Nitrophenol	5000	2950	ug/kg	59		SW846 8270C
	5000	2850	ug/kg	57	3.4	SW846 8270C
N-Nitrosodi-n-propyl-amine	3330	2640	ug/kg	79		SW846 8270C
	3330	2340	ug/kg	70	12	SW846 8270C
Pentachlorophenol	5000	3590	ug/kg	72		SW846 8270C
	5000	3130	ug/kg	63	14	SW846 8270C
Phenol	5000	3920	ug/kg	78		SW846 8270C
	5000	3480	ug/kg	70	12	SW846 8270C
Pyrene	3330	2570	ug/kg	77		SW846 8270C
	3330	2190	ug/kg	66	16	SW846 8270C
1,2,4-Trichloro-benzene	3330	2520	ug/kg	76		SW846 8270C
	3330	2200	ug/kg	66	14	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	75	(52 - 92)
	67	(52 - 92)
Phenol-d5	77	(52 - 92)
	69	(52 - 92)
Nitrobenzene-d5	79	(51 - 91)
	71	(51 - 91)
2-Fluorobiphenyl	73	(47 - 88)
	64	(47 - 88)
2,4,6-Tribromophenol	79	(48 - 94)
	64	(48 - 94)

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GG1521AC-LCS **Matrix.....:** SOLID
LCS Lot-Sample#: D4E250000-358 GG1521AD-LCSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Terphenyl-d14	79	(50 - 103)
	69	(50 - 103)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...:	D4E210325	**Work Order #...:**	GGCR01CP-MS	**Matrix.....:**	SOLID
MS Lot-Sample #:	D4E150139-009		GGCR01CQ-MSD		
Date Sampled...:	05/12/04	**Date Received..:**	05/15/04		
Prep Date.....:	05/25/04	**Analysis Date..:**	06/03/04		
Prep Batch #...:	4146358	**Analysis Time..:**	15:14		
Dilution Factor:	1	**Initial Wgt/Vol:**	30 g	**Final Wgt/Vol..:**	1 mL
% Moisture.....:	30				

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acenaphthene	**50**	**(25 - 101)**			**SW846 8270C**
	56	**(25 - 101)**	**10**	**(0-40)**	**SW846 8270C**
4-Chloro-3-methylphenol	**60**	**(32 - 97)**			**SW846 8270C**
	67	**(32 - 97)**	**11**	**(0-40)**	**SW846 8270C**
2-Chlorophenol	**52**	**(29 - 95)**			**SW846 8270C**
	57	**(29 - 95)**	**8.1**	**(0-40)**	**SW846 8270C**
1,4-Dichlorobenzene	**42**	**(34 - 81)**			**SW846 8270C**
	49	**(34 - 81)**	**14**	**(0-40)**	**SW846 8270C**
2,4-Dinitrotoluene	**56**	**(31 - 105)**			**SW846 8270C**
	62	**(31 - 105)**	**10**	**(0-40)**	**SW846 8270C**
4-Nitrophenol	**64**	**(10 - 128)**			**SW846 8270C**
	78	**(10 - 128)**	**19**	**(0-40)**	**SW846 8270C**
N-Nitrosodi-n-propyl-amine	**53**	**(33 - 91)**			**SW846 8270C**
	60	**(33 - 91)**	**12**	**(0-40)**	**SW846 8270C**
Pentachlorophenol	**36**	**(10 - 101)**			**SW846 8270C**
	39	**(10 - 101)**	**8.1**	**(0-40)**	**SW846 8270C**
Phenol	**53**	**(34 - 93)**			**SW846 8270C**
	57	**(34 - 93)**	**7.4**	**(0-40)**	**SW846 8270C**
Pyrene	**52**	**(13 - 105)**			**SW846 8270C**
	60	**(13 - 105)**	**13**	**(0-40)**	**SW846 8270C**
1,2,4-Trichloro-benzene	**48**	**(33 - 88)**			**SW846 8270C**
	53	**(33 - 88)**	**9.7**	**(0-40)**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	49	(28 - 95)
	55	(28 - 95)
Phenol-d5	52	(35 - 90)
	58	(35 - 90)
Nitrobenzene-d5	54	(39 - 89)
	61	(39 - 89)
2-Fluorobiphenyl	46	(35 - 86)
	51	(35 - 86)

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGCR01CP-MS **Matrix.....:** SOLID
MS Lot-Sample #: D4E150139-009 GGCR01CQ-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	53	(11 - 111)
	64	(11 - 111)
Terphenyl-d14	50	(30 - 98)
	60	(30 - 98)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGCR01CP-MS **Matrix.....:** SOLID
MS Lot-Sample #: D4E150139-009 GGCR01CQ-MSD
Date Sampled...: 05/12/04 **Date Received..:** 05/15/04
Prep Date.....: 05/25/04 **Analysis Date..:** 06/03/04
Prep Batch #...: 4146358 **Analysis Time..:** 15:14
Dilution Factor: 1 **Initial Wgt/Vol:** 30 g **Final Wgt/Vol..:** 1 mL
% Moisture.....: 30

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acenaphthene	ND	4760	2390	ug/kg	50		SW846 8270C
	ND	4760	2650	ug/kg	56	10	SW846 8270C
4-Chloro-3-methylphenol	ND	7140	4270	ug/kg	60		SW846 8270C
	ND	7140	4770	ug/kg	67	11	SW846 8270C
2-Chlorophenol	ND	7140	3740	ug/kg	52		SW846 8270C
	ND	7140	4060	ug/kg	57	8.1	SW846 8270C
1,4-Dichlorobenzene	ND	4760	2000	ug/kg	42		SW846 8270C
	ND	4760	2310	ug/kg	49	14	SW846 8270C
2,4-Dinitrotoluene	ND	4760	2680	ug/kg	56		SW846 8270C
	ND	4760	2970	ug/kg	62	10	SW846 8270C
4-Nitrophenol	ND	7140	4600	ug/kg	64		SW846 8270C
	ND	7140	5590	ug/kg	78	19	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	4760	2530	ug/kg	53		SW846 8270C
	ND	4760	2870	ug/kg	60	12	SW846 8270C
Pentachlorophenol	ND	7140	2590	ug/kg	36		SW846 8270C
	ND	7140	2810	ug/kg	39	8.1	SW846 8270C
Phenol	ND	7140	3790	ug/kg	53		SW846 8270C
	ND	7140	4090	ug/kg	57	7.4	SW846 8270C
Pyrene	550	4760	3010	ug/kg	52		SW846 8270C
	550	4760	3420	ug/kg	60	13	SW846 8270C
1,2,4-Trichloro-benzene	ND	4760	2290	ug/kg	48		SW846 8270C
	ND	4760	2520	ug/kg	53	9.7	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	49	(28 - 95)
	55	(28 - 95)
Phenol-d5	52	(35 - 90)
	58	(35 - 90)
Nitrobenzene-d5	54	(39 - 89)
	61	(39 - 89)
2-Fluorobiphenyl	46	(35 - 86)
	51	(35 - 86)

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: D4E210325 **Work Order #...:** GGCR01CP-MS **Matrix.....:** SOLID
MS Lot-Sample #: D4E150139-009 GGCR01CQ-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	53	(11 - 111)
	64	(11 - 111)
Terphenyl-d14	50	(30 - 98)
	60	(30 - 98)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: D4E210325 **Work Order #...:** GHMQR-SMP GHMQR-DUP **Matrix.....:** SOLID

Date Sampled...: 06/01/04 14:30 **Date Received..:** 06/04/04

% Moisture.....: 8.2

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #: D4F040270-002		
	8.2	7.4	%	9.9	(0-20)	MCAWW 160.3 MOD	06/09/04	4162230

Dilution Factor: 1 Initial Wgt/Vol: 0 Final Wgt/Vol..: 0

Analysis Time..: 14:45

[redacted]

Chain of Custody Record

5.6°C, 3.4, 13.4
5/21/04
TC

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

STL Denver
4955 Yarrow Street
Arvada, CO 80002

STL-4124 (0901)

Client: Cabrera Services Inc.	Project Manager: Lisa Cundiff	Date: 5/19/04	Chain of Custody Number: 300396
Address: 111 West Monument St. 1ST Floor	Telephone Number (Area Code)/Fax Number: (618) 792-2675	Lab Number:	Page 1 of 1
City: Baltimore / State: MD / Zip Code: 21201	Site Contact: L. Cundiff.	Lab Contact: S. Decker	
Project Name and Location (State): USDA NADC Site 1 Ames, IA	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 03-3040.17-002			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOC 8260B	SVOC 8270	Ni-63	C-14	Tritium
01-MW-06	5/19/04	1025		✓			4		1	3			✓	✓	✓	✓	✓
01-MW-06-MS		1025		✓					1	3			✓		✓		
01-MW-06-MSD		1025		✓					1	3			✓		✓		
01-MW-12		1030		✓			4		1	3			✓	✓	✓	✓	✓
01-MW-04		1330		✓			4		1	3			✓	✓	✓	✓	✓
01-MW-07		1335		✓			4		1	3			✓	✓	✓	✓	✓
01-MW-02		1600		✓			4		1	3			✓	✓	✓	✓	✓
01-MW-03		1600		✓			4		1	3			✓	✓	✓	✓	✓
TB-2	↓	—		✓						3			✓				
										3							

Special Instructions/ Conditions of Receipt

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: Lisa R. Cundiff	Date: 5/19/04	Time: 1730	1. Received By: [signature]	Date: 5/20/04	Time: 0915
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

3.8°C 5/21/04 TC

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

STL Denver
4955 Yarrow Street
Arvada, CO 80002

STL-4124 (0901)

Client: Cabrera Services, Inc.	Project Manager: Lisa Cundiff	Date: 5.20.04	Chain of Custody Number: 300398
Address: 111 West Monument Street 1st floor	Telephone Number (Area Code)/Fax Number: (618) 792-2675	Lab Number:	Page 1 of 1
City: Baltimore / State: MD / Zip Code: 21201	Site Contact: L. Cundiff	Lab Contact: S. Decker	
Project Name and Location (State): USDA NADC Site 1 Ames, IA	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: VOC	SVOC	C-14/H3	Ni-63	Special Instructions/ Conditions of Receipt
01-MW-11	5.20.04	0800		✓			✓		✓	✓			3	2	1	1	C-14 & H3 collected in 1L amber
01-MW-10	5.20.04	0910		✓			✓		✓	✓			3	2	1	1	
01-SC-01	5.20.04	0930				✓	✓						1	1	1	1	Used soil containers provided by lab as directed by S. Decker.

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: Lisa R. Cundiff	Date: 5.20.04	Time: 12:00	1. Received By:	Date: 5/21/04	Time: 0915
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

STL Denver

Sample Receiving Checklist

Lot #: D4E210325 Date/Time Received: 5/21/04 0915

Company Name & Sampling Site: USDA Cabrera Services

*Cooler #(s): 1 2 3 4

Temperatures (°C): 5.6 3.4 13.4 3.8

PM to Complete This Section: *Yes* *No* *Yes* *No*

Residual chlorine check required: ☐ ☐ Quarantined: ☐ ☐ 57122

Time Zone:

• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking & Labeling Check Points:

N/A	Yes	No		Initials
☐	☑	☐	1. Cooler seals intact. (N/A if hand delivered)	
	☑	☐	2. Chain of custody present.	
	☐	☑	3. Bottles broken and/or are leaking, comment if yes.	
	☐	☑	4. Multiphase samples present? If yes, comment below.	
			PHOTOGRAPH BROKEN BOTTLES/MULTIPHASE SAMPLES	
	☑	☐	5. Proper container & preservatives used (ref. Attachment D of SOP# DEN-QA-0003)	
☑	☐	☐	6. pH of all samples checked and meet requirements, note exceptions.	
	☑	☐	7. Chain of custody includes "received by" and "relinquished" by signatures, dates, and times.	
	☐	☑	8. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☑	☐	9. Chain of custody agrees with bottle count, comment if no.	
	☑	☐	10. Chain of custody agrees with labels, comment if no.	
☐	☑	☐	11. VOA samples filled completely, comment if no.	
☐	☑	☐	12. VOA vials preserved, check label. Preservative ☑HCl ☐4±2°C ☐Sodium Thiosulfate	
	☐	☑	13. Did samples require preservation with sodium thiosulfate?	
☑	☐	☐	14. If yes to #13, did the samples contain residual chlorine?	
☑	☐	☐	15. Sediment present in dissolved/filtered bottles.	
	☐	☑	16. Are analyses with short holding times requested?	
	☐	☑	17. Was a quick Turn Around (TAT) requested?	
☐	☑	☐	18. Is extra sample volume provided for MS, MSD or matrix duplicates?	
			DOUBLECHECK METALS,SAMPLE LABELS & SUBCONTRACT	
☒	☑	☐	19. Subcontract COC signed and sent with samples to bottle prep?	
	☑	☐	20. Were sample labels double-checked by a second person?	
☑	☐	☐	21. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?	
☑	☐	☐	22. If applicable, were AFCEE Metals placed in the walkin refrigerator?	
☐	☑	☐	23. Were special instructions read and followed?	

Document any problems or discrepancies and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

Volatile GC/MS

Supporting Documentation

Sample Sequence, Chromatograms/Mass Spectra

SEVERN TRENT STL

Lot ID: D4E210325

Client: Cabrera

Method: 8260

Associated Samples: 10

Batch #(s): 41474 18

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date: [signature] 6/6/04

GC /MS VOLATILE ORGANIC EXTRACTION LOG SHEETS

SEVERN TRENT STL

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 5/28/04
Time: 11:31:48

LEV 1	LEV 2		LEV 1	LEV 2	
_	_	Blank	_	_	Weights/Volumes
_	_	Check	_	_	Spike & Surrogate Worksheet
_	_	MS/MSD	_	_	Vial contains correct volume
			_	_	Labels, greenbars, worksheets
					computer batch: correct & all match
			_	_	Anomalies to Extraction Method

_ Expanded Deliverable
_ COC Completed
_ Bench Sheet Copied
_ Package Submitted to AnalyticalGr
_ Bench Sheet Copied per COC

Extractionist: _____
_____
Concentrationist: _____
_____

****
* *
* QC BATCH: 4147418 *
* *
****

PREP DATE: 5/25/04 10:53
COMP DATE: 5/25/04 10:53

Reviewer/Date: _____ / 0/00/00

Volatile Organics, GC/MS (8260B)
PURGE AND TRAP - 5 mL purge

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	PH"S INIT	PH"S ADJ1	PH"S ADJ2	SOLVENTS EXTRACTION VOL	SOLVENTS EXCHANGE VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	6/10/04	D4E210325-010 **GGTF4-1-AE**	D	15	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-015 **GGTJ4-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-016 **GGTJ5-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-017 **GGTJ6-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-018 **GGTJ8-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-019 **GGTJ9-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-020 **GGTKA-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 5/28/04
Time: 11:31:48

QC BATCH: 4147418

PREP DATE: 5/25/04 10:53
COMP DATE: 5/25/04 10:53

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	PH"S INIT	PH"S ADJ1	PH"S ADJ2	SOLVENTS EXTRACTION VOL	SOLVENTS EXCHANGE VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	5/27/04	D4E210329-021 **GGTKD-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-022 **GGTKE-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-023 **GGTKF-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-024 **GGTKG-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-025 **GGTKH-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-026 **GGTKL-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	5/27/04	D4E210329-027 **GGTKM-1-AA**	R	15	QK	SOLID	**1.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	6/02/04	D4E210434-001 **GGVEH-1-AD**	R	15	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
5/23/04	5/31/04	D4E240111-010 **GGXC1-1-AA**	R	4D	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
5/23/04	5/31/04	D4E240111-011 **GGXC2-1-AA**	R	4D	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 5/28/04
Time: 11:31:48

QC BATCH: 4147418

PREP DATE: 5/25/04 10:53
COMP DATE: 5/25/04 10:53

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	PH"S INIT	PH"S ADJ1	PH"S ADJ2	SOLVENTS EXTRACTION VOL	SOLVENTS EXCHANGE VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	6/07/04	D4E190131-014 **GG5A4-1-AA**		15	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	6/07/04	D4E190131-014 **GG5A4-1-ACS**		15	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	6/07/04	D4E190131-014 **GG5A4-1-ADD**		15	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	0/00/00	D4E260000-418 **GG9L2-1-AA**B		15	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	0/00/00	D4E260000-418 **GG9L2-1-ACC**		15	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													
0/00/00	0/00/00	D4E260000-418 **GG9L2-1-ADL**	R	15	QK	SOLID	**5.0g** 5.00mL	NA	NA	NA	.0	.0	
COMMENTS:													

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD

NUMBER OF WORK ORDERS IN BATCH: 23

GC/MS VOLATILE
INSTRUMENT
LOG SHEETS

SEVERN TRENT STL

STL, Denver

GC/MS Volatile Analysis

Instrument 9
5972 MSD

Column	Phase	Inj. Temp	Init. Time	Ramp Rate	Final Temp	Flow cc/min	Press. Psi	Type	Vac. Range	Source Temp	Mass Range
75M	DB-624	200C	2 min.	5C/min	65C	18	20	MS	10^-6	~175C	35-300/2^2
			0 min.	12C/min	155C						
			0 min.	25C/min	210C						

Comments

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Target Batch (Directory): 9052504.b

QuantIMS Batch: 4147418

Lot #	Sample	W.O.#	Purge vol (ml)	Sample amt (mL/g)	Date 2204	Initials	File Number	IS OK	SS OK	DIL OK	24 hr 12 hr	pH	MSVOA # Comments	ALS
BFB			5 mlDir	Inj	5-25	DA	92495.d						#073-04 (10:53)	
MAINVOSO			5	5.25			96	—					#067/082-04	
SUPPOSO							97	—	—				#011/032-04	
LCS (FULL)		GG9L221AC					98/H	—	—	—	—		#061/077/091-04	
LCSD		AD		12.5			99	—	—	—	—		#109-04	
VBLK		AA		5.0			2500/H	—	—	—	—		IS-#053/SS#034-04	
D4E210329	15	GGTQ41MA		1.0			01	—	↓ DBFM	—	—	(14)	MGN (WTC & Methods)	
	16	5					02	—	↓	—	—			
	17	6					03	—	↓	—	—			
	18	8					04	—	↓	—	—			
	19	9					05	—	↓	—	—			
	20	KA					06	—	↓	—	—			
	21	D					07	—	↓	—	—			
	22	E					08	—	↓	—	—			
	23	F					09	—	↓	—	—			
	24	G					10	—	↓	—	—			
	25	H					11	—	↓	—	—			
	26	L					12	—	↓	—	—			
	27	M					13	—	↓	—	—			
BLK				5			14	—	—	—	—			

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GC/MS Volatile Analysis

STL, Denver

Instrument 9
5972 MSD

Column	Phase	Inj. Temp	Init. Time	Ramp Rate	Final Temp	Flow cc/min	Press. Psi	Type	Vac. Range	Source Temp	Mass Range
75M	DB-624	200C	2 min.	5C/min	65C	18	20	MS	10^-6	~175C	35-300/2^2
			0 min.	12C/min	155C						
			0 min.	25C/min	210C						

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Comments

Target Batch (Directory): 052504.b

QuantIMS Batch:

Lot #	Sample	W.O.#	Purge vol (ml)	Sample amt (mg)	Date 2004	Initials	File Number	IS OK	SS OK	DIL OK	24 hr 12 hr	pH	MSVOA# Comments	ALS
D4E240184	1	GGODRIAA	5	5.0	525	DA	2515.d	—	—	—	—			
	2	T					16	—	1DBFB	—	—		NCM (No hits)	
	3	V					17	—	—	—	—			
D4E240189	1	EC					18	—	—	—	—		(D4E190131-14)	
	1MS						19	—	—	—	—		#061068091-04 (14MS)	
	1SD	↓					20	—	↑	—	—		NCM (GG5A4) (14SD)	
BIK							21	—	—	—	—			
D4E210325	10	GGTF4IAE					22	—	—	—	—			
D4E210434	1	↓ VEHIAD					23	—	—	—	—			
BIK							24	—	—	—	X			
D4E240111	10	GGXC1AA					25	—	—	—	X		(Freezer BIKs)	
↓	11	↓ 2	↓	↓	↓	↓	26	—	—	—	X		↓	
				SA5-25										

2253

Revised 6/3/03

public/QA/forms/VOA Logbookr3.xls

GC/MS VOLATILE
STANDARD DATA

SEVERN TRENT STL

GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date: J 3/19/04 MAIN

Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____

☐ 524.2 ☐ 624 ☒ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☐ 20mL ☒ 5035 Low ☐ 5035 High ☒ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Initial Calibration					
1. BFB/DFTPP meets criteria?	/			/	
2. ICAL date and instrument ID verified?	/			/	
3. Sufficient number of calibration points used?	/			/	
4. Reasons for removal of points documented?	/			/	SOME AS BELOW RL REMOVED
5. %RSD or correlation coefficient within method limits?	/			/	
6. If RRF used for ICAL, were all compounds within 15% RSD?			/	/	List all exceptions below (cpd & RSD)
7. Response factors meet criteria?	/			/	
8. Isomeric pairs checked for correct peak assignment?	/			/	
9. Data checked for detector saturation?	/			/	
10. Standards traceability properly documented?	/			/	
11. Manual integrations documented and checked?	/			/	
12. 2nd source ICV recovery 75-125% for DoD projects, 65-135% (±55% of expected for poor performers) for non-DoD?	/			/	

1st Level Reviewer: [signature] Date: 3/19/04

2nd Level Reviewer: [signature] Date: 3/20/04

GC/MS Volatile Analysis

STL, Denver

Instrument J
5972 MS

Column	Phase	Inj. Temp	Init. Time	Ramp Rate	Final Temp	Flow cc/min	Press. Psi	Type	Vac. Range	Source Temp	Mass Range
75M	DB-624	200C	2 min.	5C/min	65C	18	20	MS	10^-6	~175C	35-300/2^2
			0 min.	12C/min	155C						
			0 min.	25C/min	210C						

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Comments

Main #022/040-04 ICV/MS/SD #291/029/041-04
Supp #011/052-04

Target Batch (Directory): 031904i.b

QuantIMS Batch:

Lot #	Sample	W.O.#	Purge vol (ml)	Sample amt (ml/g)	Date 2004	Initials	File Number	IS OK	SS OK	DIL OK	24 hr 12 hr	pH	Comments	Al
BFB			5.0	2.5 NT	3-19	GM	J0969.d (68)						(1658)	1
MAIN005			5.0	6.25			70 69							
10				1.25			3/4 71 70							2
20				2.5			3/19 72 71		GOOD					3
50				6.25			73 72							4
100				12.5			74 73							5
200				25			75 74							6
Supp005				.625			76 75							7
10				1.25			77 76		GOOD					8
20				2.5			78 77							9
50				6.25			79 78							10
100				12.5			80 79							11
200				25			81 80							12
ICV050				6.25			82 81	—	—					
BLK														

Report Date: 19-Mar-2004 22:11

Calibration History

Method : /chem/J.i/031904i.b/J5030-8260B-soil.m
Start Cal Date: 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
19-MAR-2004 19:38	2-supp	/chem/J.i/031904i.b/j0975.d
19-MAR-2004 17:08	1-main	/chem/J.i/031904i.b/j0969.d
Cal Level: 2 , Cal Amount: 10.0000		
19-MAR-2004 20:03	2-supp	/chem/J.i/031904i.b/j0976.d
19-MAR-2004 17:33	1-main	/chem/J.i/031904i.b/j0970.d
Cal Level: 3 , Cal Amount: 20.0000		
19-MAR-2004 20:28	2-supp	/chem/J.i/031904i.b/j0977.d
19-MAR-2004 17:58	1-main	/chem/J.i/031904i.b/j0971.d
Cal Level: 4 , Cal Amount: 50.0000		
19-MAR-2004 20:53	2-supp	/chem/J.i/031904i.b/j0978.d
19-MAR-2004 18:23	1-main	/chem/J.i/031904i.b/j0972.d
Cal Level: 5 , Cal Amount: 100.000		
19-MAR-2004 21:18	2-supp	/chem/J.i/031904i.b/j0979.d
19-MAR-2004 18:48	1-main	/chem/J.i/031904i.b/j0973.d
Cal Level: 6 , Cal Amount: 200.000		
19-MAR-2004 21:43	2-supp	/chem/J.i/031904i.b/j0980.d
19-MAR-2004 19:13	1-main	/chem/J.i/031904i.b/j0974.d

Continuing Calibration

19-MAR-2004 20:53	2-supp	/chem/J.i/031904i.b/j0978.d
19-MAR-2004 18:23	1-main	/chem/J.i/031904i.b/j0972.d

Report Date : 19-Mar-2004 21:48

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43
Quant Method : ISTD
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/031904i.b/J5030-8260B-soil.m
Cal Date : 19-Mar-2004 21:48 meierg

Calibration File Names:
Level 1: /chem/J.i/031904i.b/j0975.d
Level 2: /chem/J.i/031904i.b/j0976.d
Level 3: /chem/J.i/031904i.b/j0977.d
Level 4: /chem/J.i/031904i.b/j0978.d
Level 5: /chem/J.i/031904i.b/j0979.d
Level 6: /chem/J.i/031904i.b/j0980.d

	Compound	5 Level 1	10 Level 2	20 Level 3	50 Level 4	100 Level 5	200 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
M	1 1,2-Dichloroethene (total)	0.43731	0.45711	0.39050	0.43483	0.43918	0.41744	AVRG		0.42940		5.32221
M	2 Xylene (total)	5.61876	5.92233	5.27035	5.71660	5.67703	5.59794	AVRG		5.63389		3.77023
	3 dichlorodifluoromethane	+++++	0.58754	0.50051	0.68619	0.69500	0.61228	AVRG		0.61631		12.91146
	4 Chloromethane	0.27640	0.26988	0.24859	0.27254	0.28050	0.25492	AVRG		0.26714		4.71870
	6 Vinyl Chloride	0.25790	0.27821	0.23986	0.26538	0.26028	0.24708	AVRG		0.25812		5.24491
	8 Bromomethane	0.30723	0.35016	0.29590	0.32238	0.31437	0.28624	AVRG		0.31272		7.16791
	9 Chloroethane	0.16852	0.19807	0.16541	0.19249	0.18595	0.16978	AVRG		0.18003		7.72551
	11 Trichlorofluoromethane	1.13612	1.16495	1.00743	1.10093	1.11462	1.04604	AVRG		1.09501		5.33581
	12 Ethanol	+++++	0.00202	0.00170	0.00197	0.00204	0.00206	AVRG		0.00196		7.62654

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43
Quant Method : ISTD
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/031904i.b/J5030-8260B-soil.m
Cal Date : 19-Mar-2004 21:48 meierg

Compound	5 Level 1	10 Level 2	20 Level 3	50 Level 4	100 Level 5	200 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
16 Acrolein	0.04078	0.03483	0.03123	0.03739	0.03739	0.03803	AVRG		0.03661		8.87329
17 1,1-Dichloroethene	0.34788	0.37634	0.33418	0.37427	0.36537	0.35557	AVRG		0.35894		4.53595
20 Acetone	104991	173020	263079	706233	1402519	2888887	LINR	-0.10423	0.11596		0.99945
21 Iodomethane	0.67327	0.73170	0.60827	0.68430	0.68726	0.66525	AVRG		0.67501		5.92678
23 Acetonitrile	+++++	0.01273	0.00930	0.01140	0.01328	0.01292	AVRG		0.01192		13.67943
26 Methylene Chloride	73555	105354	189819	493875	984769	1938422	WLINR	-0.04414	0.31275		0.99905
27 tert-Butyl alcohol	0.04901	0.05053	0.03740	0.04555	0.04722	0.04882	AVRG		0.04642		10.20479
28 Acrylonitrile	0.05902	0.06673	0.05321	0.06331	0.06569	0.06681	AVRG		0.06246		8.64279
30 trans-1,2-Dichloroethene	0.43176	0.45256	0.38614	0.43207	0.43486	0.41063	AVRG		0.42467		5.44026
32 1,1-Dichloroethane	0.70339	0.73093	0.63220	0.70731	0.71468	0.70503	AVRG		0.69892		4.89488
34 Isopropyl ether	0.37135	0.37700	0.33614	0.37436	0.37607	0.36918	AVRG		0.36735		4.23816
35 Chloroprene	0.74898	0.81972	0.70585	0.77769	0.78221	0.75609	AVRG		0.76509		4.98968
37 2-Butanone	0.15850	0.17874	0.13258	0.15522	0.16262	0.16706	AVRG		0.15912		9.65544
38 cis-1,2-Dichloroethene	0.44285	0.46165	0.39486	0.43760	0.44350	0.42426	AVRG		0.43412		5.22484
39 2,2-Dichloropropane	0.77252	0.85167	0.70446	0.77170	0.76726	0.72220	AVRG		0.76497		6.69504
41 Propionitrile	0.02538	0.02705	0.02170	0.02626	0.02677	0.02822	AVRG		0.02590		8.71326
42 Methacrylonitrile	0.18474	0.19342	0.15452	0.18515	0.19236	0.19829	AVRG		0.18474		8.49011

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43
Quant Method : ISTD
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/031904i.b/J5030-8260B-soil.m
Cal Date : 19-Mar-2004 21:48 meierg

Compound	5 Level 1	10 Level 2	20 Level 3	50 Level 4	100 Level 5	200 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
43 Bromochloromethane	0.23002	0.23046	0.19337	0.21801	0.22283	0.21960	AVRG		0.21905		6.21109
45 Chloroform	0.91066	0.99218	0.82750	0.94478	0.95289	0.90745	AVRG		0.92257		6.06747
47 1,1,1-Trichloroethane	1.01498	1.15054	0.93589	1.08458	1.07931	1.03638	AVRG		1.05028		6.94427
49 1,1-Dichloropropene	0.62106	0.67112	0.55215	0.62668	0.62993	0.60310	AVRG		0.61734		6.31750
50 Carbon Tetrachloride	0.97703	1.07476	0.91908	1.01253	1.01520	0.97435	AVRG		0.99549		5.23684
51 Isobutanol	0.01403	0.01120	0.00999	0.01337	0.01367	0.01377	AVRG		0.01267		13.16803
54 Benzene	1.00437	1.07747	0.90598	1.03134	1.04441	1.00563	AVRG		1.01153		5.77278
53 1,2-Dichloroethane	0.65558	0.73030	0.61188	0.68786	0.70260	0.68620	AVRG		0.67907		6.02610
57 n-Butanol	0.00986	0.00904	0.00690	0.00897	0.00916	0.00968	AVRG		0.00894		11.84555
58 Trichloroethene	0.45057	0.46346	0.41015	0.45622	0.45046	0.42732	AVRG		0.44303		4.54945
61 1,2-Dichloropropane	0.38756	0.37709	0.32797	0.37092	0.37680	0.36275	AVRG		0.36718		5.68285
64 1,4-Dioxane	+++++	0.00360	0.00265	0.00334	0.00337	0.00353	AVRG		0.00330		11.48771
63 Dibromomethane	0.39833	0.44078	0.36623	0.40970	0.41524	0.40412	AVRG		0.40574		5.98927
65 Bromodichloromethane	0.89119	0.95639	0.81365	0.89194	0.92229	0.89207	AVRG		0.89459		5.28184
68 cis-1,3-Dichloropropene	0.62981	0.69472	0.60751	0.67167	0.68080	0.65332	AVRG		0.65631		5.00923
69 4-Methyl-2-pentanone	1.88771	1.90854	1.56430	1.87375	1.85636	1.87773	AVRG		1.82806		7.13063
71 Toluene	5.56653	6.07411	5.52578	6.05265	5.84196	5.63684	AVRG		5.78298		4.20251

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43
Quant Method : ISTD
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/031904i.b/J5030-8260B-soil.m
Cal Date : 19-Mar-2004 21:48 meierg

Compound	5 Level 1	10 Level 2	20 Level 3	50 Level 4	100 Level 5	200 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
72 trans-1,3-Dichloropropene	2.63227	3.12735	2.60115	2.91685	2.81855	2.75985	AVRG		2.80934		6.93745
74 1,1,2-Trichloroethane	1.86458	1.79258	1.61038	1.71321	1.64939	1.61679	AVRG		1.70782		6.02741
76 Tetrachloroethene	2.03244	2.17801	1.87250	2.10088	2.03297	1.95814	AVRG		2.02916		5.25767
75 1,3-Dichloropropane	2.47569	2.49486	2.32688	2.59346	2.49899	2.44734	AVRG		2.47287		3.51059
77 2-Hexanone	1.28092	1.40311	1.17626	1.37277	1.38157	1.39635	AVRG		1.33516		6.70920
79 Dibromochloromethane	2.91666	3.09402	2.70742	3.03183	2.96554	2.89470	AVRG		2.93503		4.55460
80 1,2-Dibromoethane	2.43007	2.65029	2.36154	2.63894	2.54031	2.51674	AVRG		2.52299		4.50832
81 1-Chlorohexane	3.01924	3.10780	2.73802	3.04760	2.91923	2.78668	AVRG		2.93643		5.06660
83 Chlorobenzene	4.27267	4.61028	4.16335	4.60756	4.48659	4.31956	AVRG		4.41000		4.21650
84 1,1,1,2-Tetrachloroethane	2.14143	2.42472	2.11009	2.32055	2.26564	2.18198	AVRG		2.24073		5.32644
85 Ethylbenzene	2.18311	2.48302	2.24627	2.41703	2.36361	2.21714	AVRG		2.31836		5.19870
86 m and p-Xylene	3.08072	3.33840	2.96546	3.25686	3.16300	3.07750	AVRG		3.14699		4.29007
87 o-Xylene	2.78473	3.15712	2.74800	2.98238	2.95898	2.79560	AVRG		2.90447		5.41205
88 Styrene	4.81221	5.26331	4.78189	5.22195	5.13840	4.91742	AVRG		5.02253		4.21758
89 Bromoform	2.63324	2.81927	2.40129	2.72363	2.71206	2.67537	AVRG		2.66081		5.31506
90 isopropyl benzene	8.92546	10.28026	9.13203	10.06587	9.78960	9.31987	AVRG		9.58551		5.65076
92 Cyclohexanone	0.28101	0.31538	0.24153	0.29455	0.29898	0.29842	AVRG		0.28831		8.81563

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43
Quant Method : ISTD
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/031904i.b/J5030-8260B-soil.m
Cal Date : 19-Mar-2004 21:48 meierg

	Compound	5 Level 1	10 Level 2	20 Level 3	50 Level 4	100 Level 5	200 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
94	1,1,2,2-Tetrachloroethane	1.45885	1.46492	1.26242	1.39959	1.43370	1.47542	AVRG		1.41582		5.64420
95	Bromobenzene	1.30570	1.37286	1.22225	1.38381	1.37852	1.35042	AVRG		1.33559		4.67796
96	1,2,3-Trichloropropane	0.57225	0.57991	0.47931	0.56062	0.53935	0.54713	AVRG		0.54643		6.62118
98	n-Propylbenzene	1.14637	1.22474	1.09889	1.20145	1.18763	1.15078	AVRG		1.16831		3.87819
99	2-Chlorotoluene	0.95114	1.02914	0.86577	0.94843	0.96318	0.92012	AVRG		0.94630		5.66037
100	1,3,5-Trimethylbenzene	4.67061	4.99280	4.46923	4.94470	4.92527	4.78555	AVRG		4.79803		4.16984
101	4-Chlorotoluene	0.88709	1.06810	0.95841	1.03986	1.04836	0.98756	AVRG		0.99823		6.82096
102	tert-Butylbenzene	4.42557	4.78225	4.18808	4.60555	4.57905	4.45537	AVRG		4.50598		4.45697
103	1,2,4-Trimethylbenzene	4.46944	4.79049	4.33774	4.72653	4.72218	4.53235	AVRG		4.59646		3.86192
104	sec-Butylbenzene	6.37022	6.78855	5.89970	6.58231	6.49248	6.34824	AVRG		6.41358		4.65422
105	m-Dichlorobenzene	1.90378	2.06587	1.84093	2.03226	2.03514	1.96769	AVRG		1.97427		4.43018
106	4-Isopropyltoluene	4.84963	5.24377	4.61586	5.12671	5.14952	4.85603	AVRG		4.97359		4.79653
108	p-dichlorobenzene	2.17829	2.36758	2.10845	2.24423	2.30007	2.22469	AVRG		2.23722		4.05763
110	n-Butylbenzene	4.53458	4.89870	4.26810	4.77083	4.80805	4.59404	AVRG		4.64572		4.94261
111	o-Dichlorobenzene	1.79835	1.91840	1.70284	1.86638	1.85877	1.79056	AVRG		1.82255		4.13223
112	1,2-Dibromo-3-chloropropane	+++++	0.41577	0.31632	0.38164	0.38752	0.39386	AVRG		0.37902		9.85562
113	1,2,4-Trichlorobenzene	1.72367	1.91753	1.65571	1.90095	1.90736	1.79871	AVRG		1.81732		6.04672

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43
Quant Method : ISTD
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/031904i.b/J5030-8260B-soil.m
Cal Date : 19-Mar-2004 21:48 meierg

Compound	5 Level 1	10 Level 2	20 Level 3	50 Level 4	100 Level 5	200 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
114 Hexachlorobutadiene	1.26817	1.42976	1.21819	1.38537	1.34911	1.26377	AVRG		1.31906		6.19389
115 Napthalene	1.76593	2.20701	1.92206	2.26172	2.28522	2.26309	AVRG		2.11751		10.34513
116 1,2,3-Trichlorobenzene	1.39897	1.67282	1.43731	1.68006	1.63967	1.55769	AVRG		1.56442		7.79535

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Wt Linear	Amt = b + Rsp/m1	Response

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/031904i.b/J5030-8260B-soil.m
Cal Date : 19-Mar-2004 21:40 meierg
Curve Type : Average

Calibration File Names:
Level 1: /chem/J.i/031904i.b/j0975.d
Level 2: /chem/J.i/031904i.b/j0976.d
Level 3: /chem/J.i/031904i.b/j0977.d
Level 4: /chem/J.i/031904i.b/j0978.d
Level 5: /chem/J.i/031904i.b/j0979.d
Level 6: /chem/J.i/031904i.b/j0980.d

	Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	___ RRF	% RSD	
M	1 1,2-Dichloroethene (total)	0.43731	0.45711	0.39050	0.43483	0.43918	0.41744	0.42940	5.322	
M	2 Xylene (total)	5.61876	5.92233	5.27035	5.71660	5.67703	5.59794	5.63383	3.770	
	3 dichlorodifluoromethane	+++++	0.58754	0.50051	0.68619	0.69500	0.61228	0.61631	12.911	
	4 Chloromethane	0.27640	0.26988	0.24859	0.27254	0.28050	0.25492	0.26714	4.719	
	6 Vinyl Chloride	0.25790	0.27821	0.23986	0.26538	0.26028	0.24708	0.25812	5.245	
	8 Bromomethane	0.30723	0.35016	0.29590	0.32238	0.31437	0.28624	0.31272	7.168	
	9 Chloroethane	0.16852	0.19807	0.16541	0.19249	0.18595	0.16978	0.18003	7.726	
	11 Trichlorofluoromethane	1.13612	1.16495	1.00743	1.10093	1.11462	1.04604	1.09501	5.336	
	12 Ethanol	+++++	0.00202	0.00170	0.00197	0.00204	0.00206	0.00196	7.627	
	16 Acrolein	0.04078	0.03483	0.03123	0.03739	0.03739	0.03803	0.03661	8.873	
	17 1,1-Dichloroethene	0.34788	0.37634	0.33418	0.37427	0.36537	0.35557	0.35894	4.536	
	20 Acetone	0.16616	0.15271	0.10431	0.12013	0.11765	0.11669	0.12961	18.612	LINEAR
	21 Iodomethane	0.67327	0.73170	0.60827	0.68430	0.68726	0.66525	0.67501	5.927	
	23 Acetonitrile	+++++	0.01273	0.00930	0.01140	0.01328	0.01292	0.01192	13.679	
	26 Methylene Chloride	0.46564	0.37195	0.30105	0.33604	0.33043	0.31318	0.35305	17.055	WT. LINEAR
	27 tert-Butyl alcohol	0.04901	0.05053	0.03740	0.04555	0.04722	0.04882	0.04642	10.205	
	28 Acrylonitrile	0.05902	0.06673	0.05321	0.06331	0.06569	0.06681	0.06246	8.643	
	30 trans-1,2-Dichloroethene	0.43176	0.45256	0.38614	0.43207	0.43486	0.41063	0.42467	5.440	
	32 1,1-Dichloroethane	0.70339	0.73093	0.63220	0.70731	0.71468	0.70503	0.69892	4.895	
	34 Isopropyl ether	0.37135	0.37700	0.33614	0.37436	0.37607	0.36918	0.36735	4.238	
	35 Chloroprene	0.74898	0.81972	0.70585	0.77769	0.78221	0.75609	0.76509	4.990	
	37 2-Butanone	0.15850	0.17874	0.13258	0.15522	0.16262	0.16706	0.15912	9.655	
	38 cis-1,2-Dichloroethene	0.44285	0.46165	0.39486	0.43760	0.44350	0.42426	0.43412	5.225	
	39 2,2-Dichloropropane	0.77252	0.85167	0.70446	0.77170	0.76726	0.72220	0.76497	6.695	
	41 Propionitrile	0.02538	0.02705	0.02170	0.02626	0.02677	0.02822	0.02590	8.713	

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/031904i.b/J5030-8260B-soil.m
Cal Date : 19-Mar-2004 21:40 meierg
Curve Type : Average

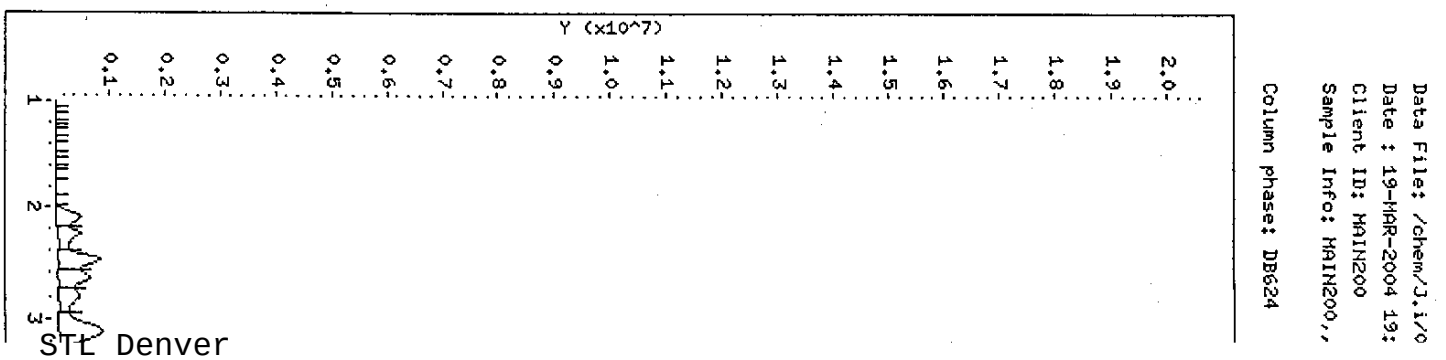
Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
42 Methacrylonitrile	0.18474	0.19342	0.15452	0.18515	0.19236	0.19829	0.18474	8.490
43 Bromochloromethane	0.23002	0.23046	0.19337	0.21801	0.22283	0.21960	0.21905	6.211
45 Chloroform	0.91066	0.99218	0.82750	0.94478	0.95289	0.90745	0.92257	6.067
47 1,1,1-Trichloroethane	1.01498	1.15054	0.93589	1.08458	1.07931	1.03638	1.05028	6.944
49 1,1-Dichloropropene	0.62106	0.67112	0.55215	0.62668	0.62993	0.60310	0.61734	6.317
50 Carbon Tetrachloride	0.97703	1.07476	0.91908	1.01253	1.01520	0.97435	0.99549	5.237
51 Isobutanol	0.01403	0.01120	0.00999	0.01337	0.01367	0.01377	0.01267	13.168
54 Benzene	1.00437	1.07747	0.90598	1.03134	1.04441	1.00563	1.01153	5.773
53 1,2-Dichloroethane	0.65558	0.73030	0.61188	0.68786	0.70260	0.68620	0.67907	6.026
57 n-Butanol	0.00986	0.00904	0.00690	0.00897	0.00916	0.00968	0.00894	11.846
58 Trichloroethene	0.45057	0.46346	0.41015	0.45622	0.45046	0.42732	0.44303	4.549
61 1,2-Dichloropropane	0.38756	0.37709	0.32797	0.37092	0.37680	0.36275	0.36718	5.683
64 1,4-Dioxane	+++++	0.00360	0.00265	0.00334	0.00337	0.00353	0.00330	11.488
63 Dibromomethane	0.39833	0.44078	0.36623	0.40970	0.41524	0.40412	0.40574	5.989
65 Bromodichloromethane	0.89119	0.95639	0.81365	0.89194	0.92229	0.89207	0.89459	5.282
68 cis-1,3-Dichloropropene	0.62981	0.69472	0.60751	0.67167	0.68080	0.65332	0.65631	5.009
69 4-Methyl-2-pentanone	1.88771	1.90854	1.56430	1.87375	1.85636	1.87773	1.82806	7.131
71 Toluene	5.56653	6.07411	5.52578	6.05265	5.84196	5.63684	5.78298	4.203
72 trans-1,3-Dichloropropene	2.63227	3.12735	2.60115	2.91685	2.81855	2.75985	2.80934	6.937
74 1,1,2-Trichloroethane	1.86458	1.79258	1.61038	1.71321	1.64939	1.61679	1.70782	6.027
76 Tetrachloroethene	2.03244	2.17801	1.87250	2.10088	2.03297	1.95814	2.02916	5.258
75 1,3-Dichloropropane	2.47569	2.49486	2.32688	2.59346	2.49899	2.44734	2.47287	3.511
77 2-Hexanone	1.28092	1.40311	1.17626	1.37277	1.38157	1.39635	1.33516	6.709
79 Dibromochloromethane	2.91666	3.09402	2.70742	3.03183	2.96554	2.89470	2.93503	4.555
80 1,2-Dibromoethane	2.43007	2.65029	2.36154	2.63894	2.54031	2.51674	2.52299	4.508
81 1-Chlorohexane	3.01924	3.10780	2.73802	3.04760	2.91923	2.78668	2.93643	5.067
83 Chlorobenzene	4.27267	4.61028	4.16335	4.60756	4.48659	4.31956	4.41000	4.217
84 1,1,1,2-Tetrachloroethane	2.14143	2.42472	2.11009	2.32055	2.26564	2.18198	2.24073	5.326
85 Ethylbenzene	2.18311	2.48302	2.24627	2.41703	2.36361	2.21714	2.31836	5.199
86 m and p-Xylene	3.08072	3.33840	2.96546	3.25686	3.16300	3.07750	3.14699	4.290
87 o-Xylene	2.78473	3.15712	2.74800	2.98238	2.95898	2.79560	2.90447	5.412
88 Styrene	4.81221	5.26331	4.78189	5.22195	5.13840	4.91742	5.02253	4.218
89 Bromoform	2.63324	2.81927	2.40129	2.72363	2.71206	2.67537	2.66081	5.315

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 19-MAR-2004 21:43
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/031904i.b/J5030-8260B-soil.m
Cal Date : 19-Mar-2004 21:40 meierg
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
90 Isopropyl benzene	8.92546	10.28026	9.13203	10.06587	9.78960	9.31987	9.58551	5.651
92 Cyclohexanone	0.28101	0.31538	0.24153	0.29455	0.29898	0.29842	0.28831	8.816
94 1,1,2,2-Tetrachloroethane	1.45885	1.46492	1.26242	1.39959	1.43370	1.47542	1.41582	5.644
95 Bromobenzene	1.30570	1.37286	1.22225	1.38381	1.37852	1.35042	1.33559	4.678
96 1,2,3-Trichloropropane	0.57225	0.57991	0.47931	0.56062	0.53935	0.54713	0.54643	6.621
98 n-Propylbenzene	1.14637	1.22474	1.09889	1.20145	1.18763	1.15078	1.16831	3.878
99 2-Chlorotoluene	0.95114	1.02914	0.86577	0.94843	0.96318	0.92012	0.94630	5.660
100 1,3,5-Trimethylbenzene	4.67061	4.99280	4.46923	4.94470	4.92527	4.78555	4.79803	4.170
101 4-Chlorotoluene	0.88709	1.06810	0.95841	1.03986	1.04836	0.98756	0.99823	6.821
102 tert-Butylbenzene	4.42557	4.78225	4.18808	4.60555	4.57905	4.45537	4.50598	4.457
103 1,2,4-Trimethylbenzene	4.46944	4.79049	4.33774	4.72653	4.72218	4.53235	4.59646	3.862
104 sec-Butylbenzene	6.37022	6.78855	5.89970	6.58231	6.49248	6.34824	6.41358	4.654
105 m-Dichlorobenzene	1.90378	2.06587	1.84093	2.03226	2.03514	1.96769	1.97427	4.430
106 4-Isopropyltoluene	4.84963	5.24377	4.61586	5.12671	5.14952	4.85603	4.97359	4.797
108 p-dichlorobenzene	2.17829	2.36758	2.10845	2.24423	2.30007	2.22469	2.23722	4.058
110 n-Butylbenzene	4.53458	4.89870	4.26810	4.77083	4.80805	4.59404	4.64572	4.943
111 o-Dichlorobenzene	1.79835	1.91840	1.70284	1.86638	1.85877	1.79056	1.82255	4.132
112 1,2-Dibromo-3-chloropropane	+++++	0.41577	0.31632	0.38164	0.38752	0.39386	0.37902	9.856
113 1,2,4-Trichlorobenzene	1.72367	1.91753	1.65571	1.90095	1.90736	1.79871	1.81732	6.047
114 Hexachlorobutadiene	1.26817	1.42976	1.21819	1.38537	1.34911	1.26377	1.31906	6.194
115 Napthalene	1.76593	2.20701	1.92206	2.26172	2.28522	2.26309	2.11751	10.345
116 1,2,3-Trichlorobenzene	1.39897	1.67282	1.43731	1.68006	1.63967	1.55769	1.56442	7.795



Data File: /chem/J.i/031904i.b/j0968.d

Date : 19-MAR-2004 16:58

Client ID: BFB

Instrument: J.i

Sample Info: BFB,, #237-03

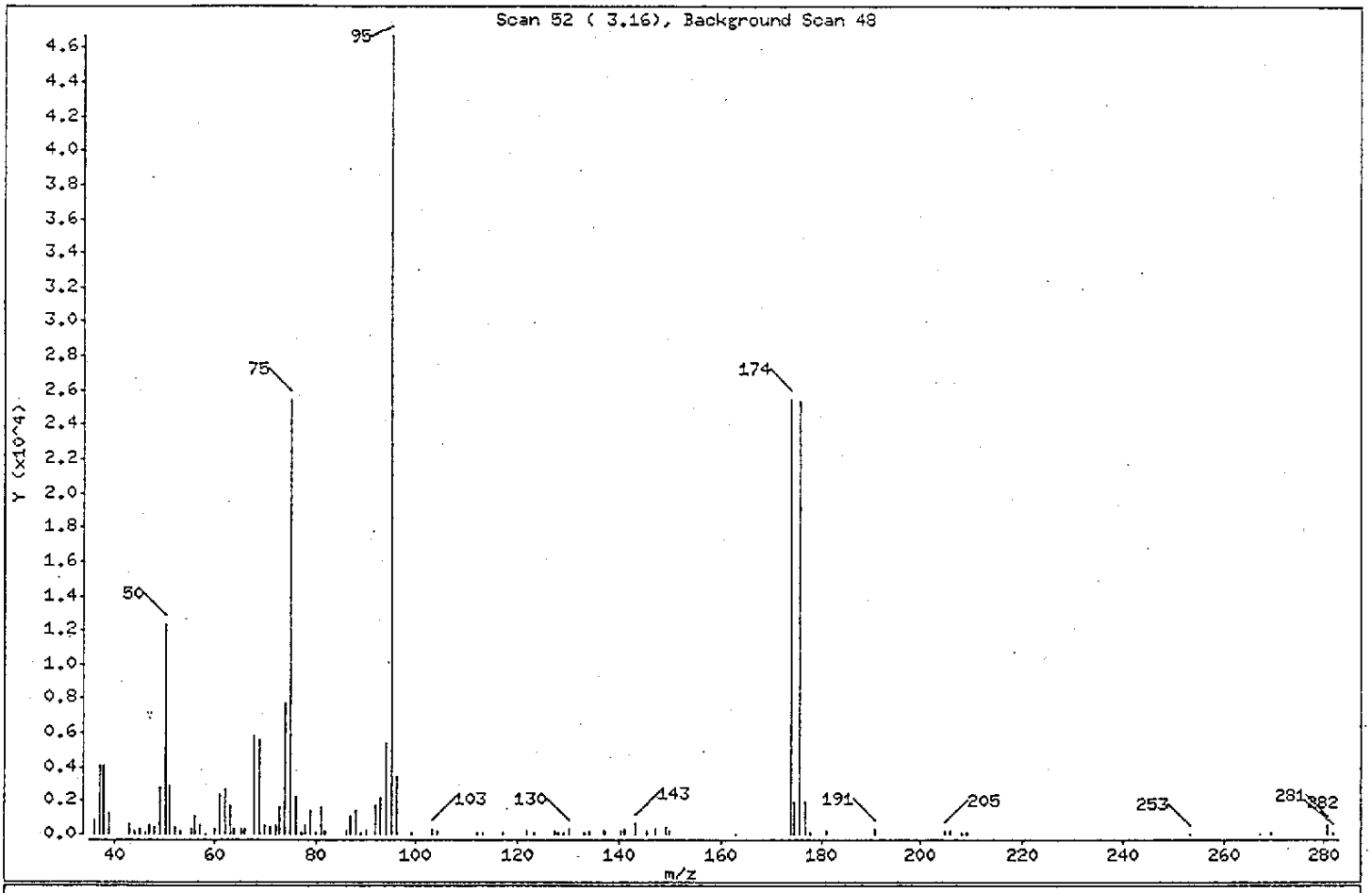
Volume Injected (uL): 1.0

Operator: appelhansd

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	26.48
75	30.00 - 60.00% of mass 95	54.42
96	5.00 - 9.00% of mass 95	7.24
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	54.47
175	5.00 - 9.00% of mass 174	4.22 (7.75)
176	95.00 - 101.00% of mass 174	54.20 (99.50)
177	5.00 - 9.00% of mass 176	4.22 (7.78)

Data File: /chem/J.i/031904i.b/j0968.d

Date : 19-MAR-2004 16:58

Client ID: BFB

Instrument: J.i

Sample Info: BFB,, #237-03

Volume Injected (uL): 1.0

Operator: appelhansd

Column phase: DB624

Column diameter: 0.53

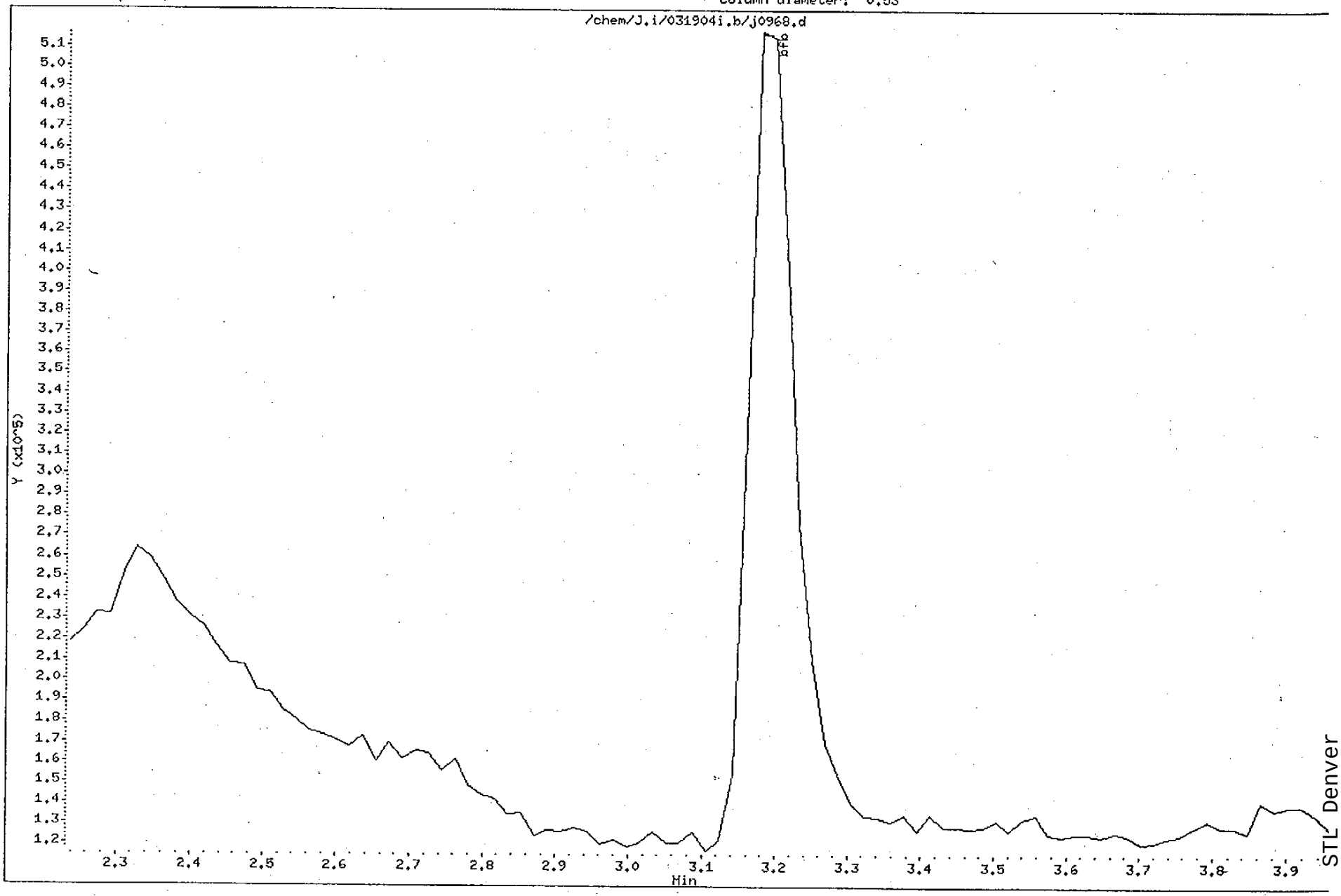
Data File: j0968.d
Spectrum: Scan 52 (3.16), Background Scan 48
Location of Maximum: 95.05
Number of points: 90

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	906	64.00	320	91.95	1710	145.05	202
37.10	4062	65.20	322	92.95	2145	147.05	317
38.10	4070	66.20	273	94.05	5334	149.05	454
39.10	1298	68.00	5774	95.05	46688	150.05	220
43.10	647	69.05	5566	96.15	3381	162.85	14
44.10	256	70.05	539	99.05	112	173.95	25432
45.10	272	71.05	377	103.15	370	174.90	1970
46.10	116	72.05	505	104.10	228	175.90	25304
47.10	561	73.05	1618	112.20	106	176.90	1968
48.00	391	73.95	7754	113.20	151	178.00	63
49.00	2818	75.05	25408	117.10	151	181.20	210
50.10	12361	76.05	2221	121.90	254	191.00	348
51.10	2931	77.05	62	123.10	71	205.10	265
52.00	429	78.05	502	127.30	206	206.20	219
53.00	252	78.95	1440	128.10	56	208.20	153
55.10	354	79.95	142	129.10	92	209.20	116
56.10	1081	81.05	1657	130.00	337	253.10	34
57.10	496	82.05	172	133.00	159	267.10	39
58.20	17	86.25	251	134.20	236	269.20	95
60.00	330	87.05	1057	137.00	258	281.05	487
61.10	2326	88.05	1427	140.25	213	282.05	97
62.00	2635	89.15	121	140.95	334		
63.00	1675	90.05	218	143.05	603		

Data File: /chem/J.i/031904i.b/j0968.d
Date : 19-MAR-2004 16:58
Client ID: BFB
Sample Info: BFB,, #237-03
Volume Injected (uL): 1.0
Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



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VOLATILE REPORT SW-846

Data file : /chem/J.i/031904i.b/j0969.d
Lab Smp Id: MAIN005 Client Smp ID: MAIN005
Inj Date : 19-MAR-2004 17:08
Operator : meierg Inst ID: J.i
Smp Info : MAIN005,,022/040-04
Misc Info :
Comment :
Method : /chem/J.i/031904i.b/J5030-8260B-soil.m
Meth Date : 19-Mar-2004 21:48 meierg Quant Type: ISTD
Cal Date : 19-MAR-2004 17:08 Cal File: j0969.d
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56	Fluorobenzene	96	6.918	6.918	(1.000)	1579660	50.0000	
* 82	Chlorobenzene-d5	119	10.150	10.150	(1.000)	379046	50.0000	
* 107	1,4-Dichlorobenzene-d4	152	13.202	13.202	(1.000)	603516	50.0000	
M 1	1,2-Dichloroethene (total)	96				138160	10.0000	10.0000
M 2	Xylene (total)	106				339101	5.00000	15.0000
3	dichlorodifluoromethane	85	2.512	2.494	(0.363)	85745	5.00000	(a)
4	Chloromethane	50	2.638	2.656	(0.381)	43662	5.00000	5.00000(a)
6	Vinyl Chloride	62	2.765	2.783	(0.400)	40740	5.00000	5.00000(a)
8	Bromomethane	94	3.108	3.071	(0.449)	48532	5.00000	5.00000(a)
9	Chloroethane	64	3.216	3.144	(0.465)	26620	5.00000	5.00000(aM)
11	Trichlorofluoromethane	101	3.415	3.469	(0.494)	179468	5.00000	5.00000(a)
12	Ethanol	45	3.559	3.595	(0.514)	13966	250.000	(a)
16	Acrolein	56	3.830	3.812	(0.554)	64416	50.0000	50.0000(a)
17	1,1-Dichloroethene	96	3.957	3.938	(0.572)	54954	5.00000	5.00000
20	Acetone	43	3.975	3.956	(0.575)	104991	20.0000	20.0000
21	Iodomethane	142	4.137	4.119	(0.598)	106354	5.00000	5.00000

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
23 Acetonitrile	41	4.282	4.263	(0.619)	16313	50.0000	(a)
26 Methylene Chloride	84	4.426	4.426	(0.640)	73555	5.00000	5.00000
27 tert-Butyl alcohol	59	4.498	4.498	(0.650)	154846	100.000	100.000(a)
28 Acrylonitrile	53	4.679	4.661	(0.676)	93233	50.0000	50.0000(a)
30 trans-1,2-Dichloroethene	96	4.715	4.697	(0.682)	68204	5.00000	5.00000
32 1,1-Dichloroethane	63	5.148	5.130	(0.744)	111111	5.00000	5.00000
34 Isopropyl ether	87	5.166	5.166	(0.747)	293302	25.0000	25.0000(a)
35 Chloroprene	53	5.239	5.220	(0.757)	118314	5.00000	5.00000
37 2-Butanone	43	5.744	5.726	(0.830)	100150	20.0000	20.0000
38 cis-1,2-Dichloroethene	96	5.744	5.744	(0.830)	69956	5.00000	5.00000
39 2,2-Dichloropropane	77	5.762	5.744	(0.833)	122032	5.00000	5.00000
41 Propionitrile	54	5.817	5.816	(0.841)	40085	50.0000	50.0000
42 Methacrylonitrile	41	5.961	5.961	(0.862)	291821	50.0000	50.0000
43 Bromochloromethane	128	5.997	5.997	(0.867)	36335	5.00000	5.00000
45 Chloroform	83	6.051	6.051	(0.875)	143853	5.00000	5.00000
47 1,1,1-Trichloroethane	97	6.286	6.268	(0.909)	160333	5.00000	5.00000
49 1,1-Dichloropropene	75	6.431	6.430	(0.930)	98106	5.00000	5.00000
50 Carbon Tetrachloride	117	6.449	6.448	(0.932)	154338	5.00000	5.00000
51 Isobutanol	41	6.467	6.484	(0.935)	44325	100.000	100.000(a)
54 Benzene	78	6.647	6.647	(0.961)	158657	5.00000	5.00000
53 1,2-Dichloroethane	62	6.665	6.665	(0.963)	103560	5.00000	5.00000
57 n-Butanol	56	7.153	7.171	(1.034)	31139	100.000	100.000(a)
58 Trichloroethene	130	7.297	7.297	(1.055)	71175	5.00000	5.00000
61 1,2-Dichloropropane	63	7.532	7.532	(1.089)	61221	5.00000	5.00000
64 1,4-Dioxane	88	7.677	7.676	(1.110)	25450	250.000	(a)
63 Dibromomethane	93	7.677	7.658	(1.110)	62923	5.00000	5.00000
65 Bromodichloromethane	83	7.821	7.803	(1.131)	140777	5.00000	5.00000
68 cis-1,3-Dichloropropene	75	8.254	8.272	(1.193)	99488	5.00000	5.00000
69 4-Methyl-2-pentanone	43	8.399	8.398	(0.827)	286211	20.0000	20.0000
71 Toluene	91	8.616	8.633	(0.849)	210997	5.00000	5.00000
72 trans-1,3-Dichloropropene	75	8.832	8.832	(0.870)	99775	5.00000	5.00000
74 1,1,2-Trichloroethane	97	9.031	9.049	(0.890)	70676	5.00000	5.00000
76 Tetrachloroethene	164	9.211	9.211	(0.907)	77039	5.00000	5.00000
75 1,3-Dichloropropane	76	9.229	9.229	(0.909)	93840	5.00000	5.00000
77 2-Hexanone	43	9.284	9.283	(0.915)	194211	20.0000	20.0000
79 Dibromochloromethane	129	9.482	9.482	(0.934)	110555	5.00000	5.00000
80 1,2-Dibromoethane	107	9.627	9.626	(0.948)	92111	5.00000	5.00000
81 1-Chlorohexane	91	10.114	10.114	(0.996)	114443	5.00000	5.00000
83 Chlorobenzene	112	10.187	10.186	(1.004)	161954	5.00000	5.00000
84 1,1,1,2-Tetrachloroethane	131	10.277	10.295	(1.012)	81170	5.00000	5.00000
85 Ethylbenzene	106	10.313	10.313	(1.016)	82750	5.00000	5.00000
86 m and p-Xylene	106	10.457	10.457	(1.030)	233547	10.0000	10.0000
87 o-Xylene	106	10.999	10.999	(1.084)	105554	5.00000	5.00000
88 Styrene	104	11.017	11.017	(1.085)	182405	5.00000	5.00000
89 Bromoform	173	11.288	11.288	(1.112)	99812	5.00000	5.00000
90 isopropyl benzene	105	11.487	11.486	(1.132)	338316	5.00000	5.00000
92 Cyclohexanone	55	11.631	11.649	(1.146)	426059	200.000	200.000

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
94	1,1,2,2-Tetrachloroethane	83	11.866	11.884	(0.899)	88044	5.00000	5.00000	
95	Bromobenzene	156	11.920	11.920	(0.903)	78801	5.00000	5.00000	
96	1,2,3-Trichloropropane	110	11.938	11.956	(0.904)	34536	5.00000	5.00000	
98	n-Propylbenzene	120	12.028	12.028	(0.911)	69185	5.00000	5.00000	
99	2-Chlorotoluene	126	12.155	12.173	(0.921)	57403	5.00000	5.00000	
100	1,3,5-Trimethylbenzene	105	12.263	12.263	(0.929)	281879	5.00000	5.00000	
101	4-Chlorotoluene	126	12.299	12.317	(0.932)	53537	5.00000	5.00000	
102	tert-Butylbenzene	119	12.697	12.696	(0.962)	267090	5.00000	5.00000	
103	1,2,4-Trimethylbenzene	105	12.751	12.750	(0.966)	269738	5.00000	5.00000	
104	sec-Butylbenzene	105	12.967	12.967	(0.982)	384453	5.00000	5.00000	
105	m-Dichlorobenzene	146	13.130	13.130	(0.995)	114896	5.00000	5.00000	
106	4-Isopropyltoluene	119	13.148	13.148	(0.996)	292683	5.00000	5.00000	
108	p-dichlorobenzene	146	13.238	13.238	(1.003)	131463	5.00000	5.00000	
110	n-Butylbenzene	91	13.636	13.635	(1.033)	273669	5.00000	5.00000	
111	o-Dichlorobenzene	146	13.690	13.689	(1.037)	108533	5.00000	5.00000	
112	1,2-Dibromo-3-chloropropane	157	14.593	14.592	(1.105)	21783	5.00000		(a)
113	1,2,4-Trichlorobenzene	180	15.532	15.531	(1.176)	104026	5.00000	5.00000	
114	Hexachlorobutadiene	225	15.712	15.730	(1.190)	76536	5.00000	5.00000	
115	Napthalene	128	15.839	15.838	(1.200)	106577	5.00000	5.00000	
116	1,2,3-Trichlorobenzene	180	16.146	16.145	(1.223)	84430	5.00000	5.00000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j0969.d
Lab Smp Id: MAIN005
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/J.i/031904i.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 03/19/4
Calibration Time: 2053
Client Smp ID: MAIN005
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1450376	725188	2900752	1579660	8.91
82 Chlorobenzene-d5	340569	170284	681138	379046	11.30
107 1,4-Dichlorobenze	540811	270406	1081622	603516	11.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.94	6.44	7.44	6.92	-0.25
82 Chlorobenzene-d5	10.17	9.67	10.67	10.15	-0.17
107 1,4-Dichlorobenze	13.20	12.70	13.70	13.20	0.01

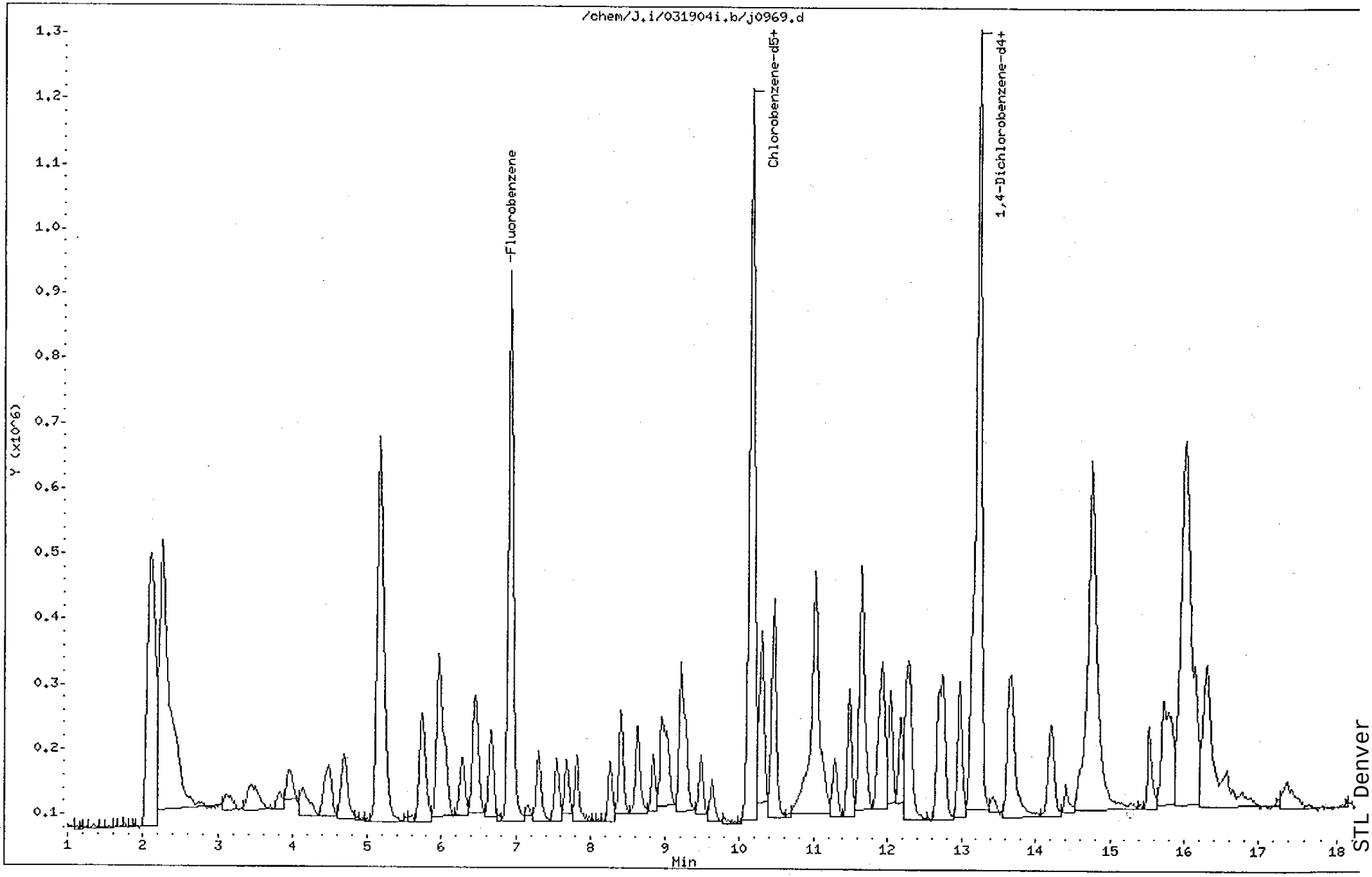
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/031904i.b/j0969.d
Date : 19-MAR-2004 17:08
Client ID: MAIN005
Sample Info: MAIN005,,022/040-04

Column phase: DB624

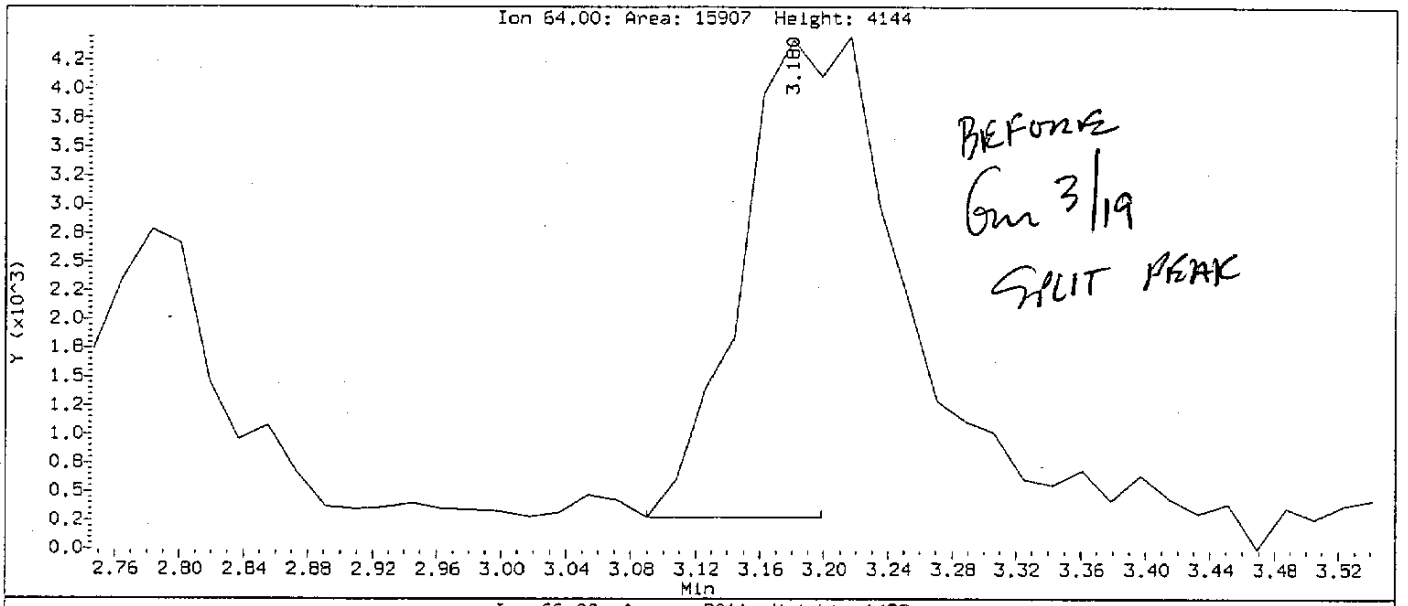
Instrument: J.i

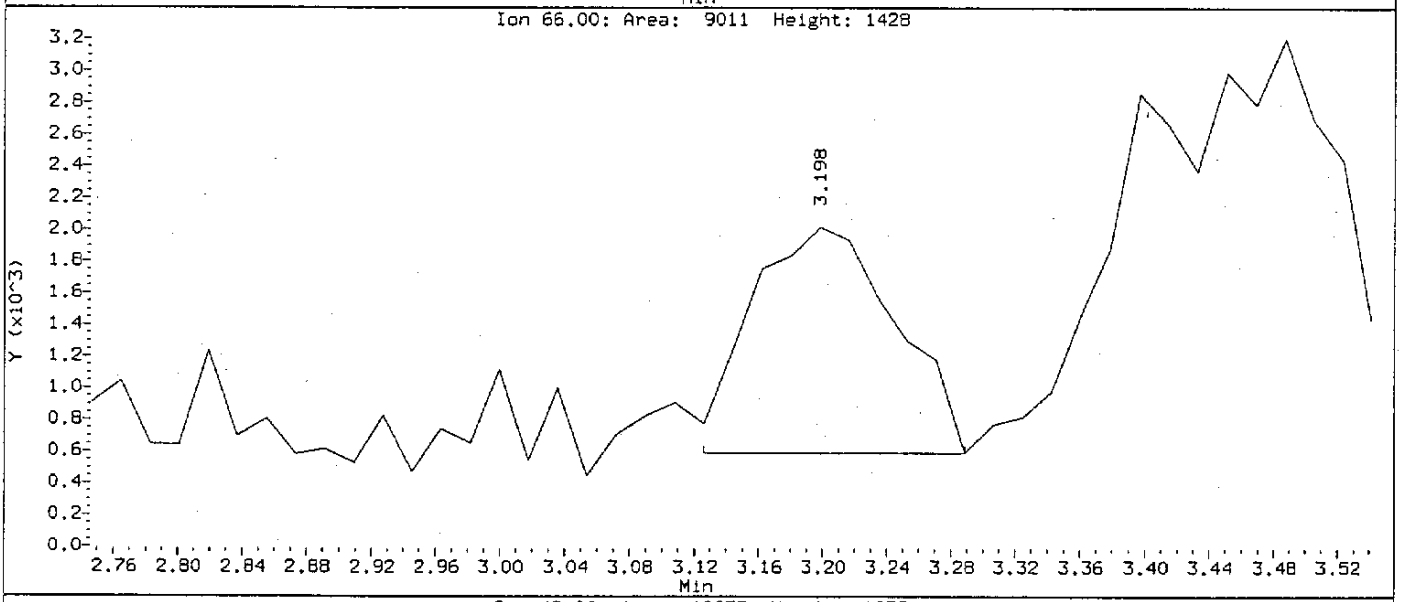
Operator: meierg
Column diameter: 0.53

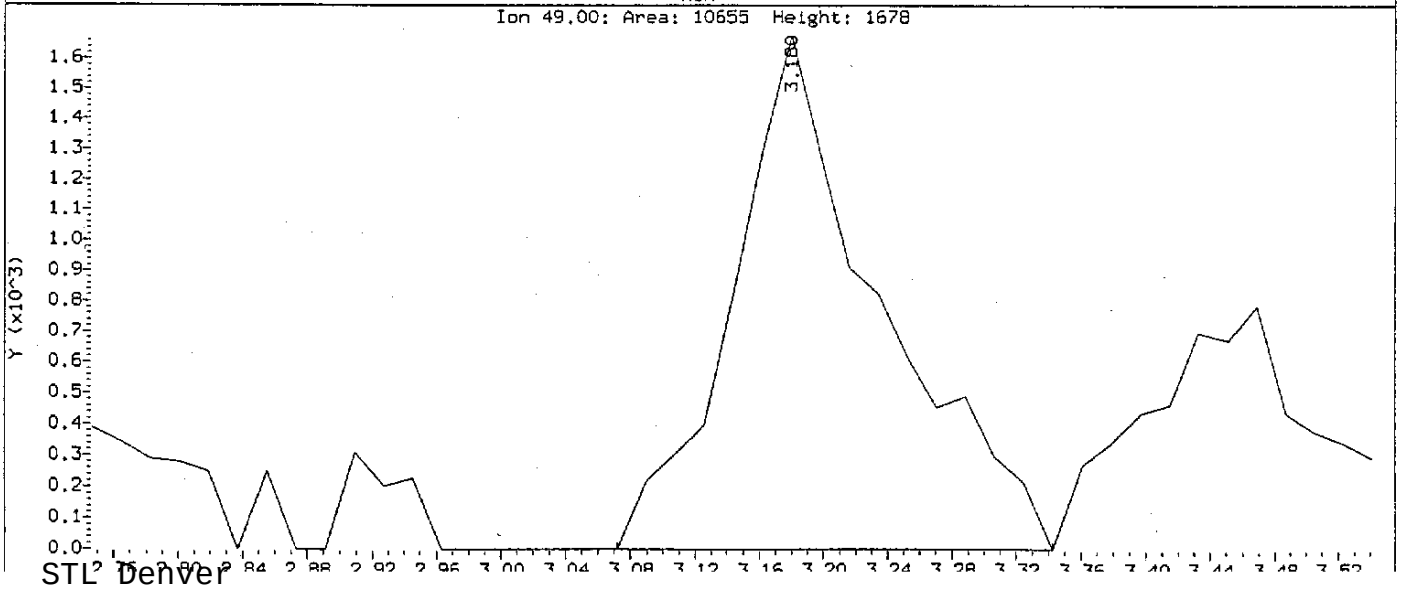


Data File: /chem/J.i/031904i.b/j0969.d
Injection Date: 19-MAR-2004 17:08
Instrument: J.i
Client Sample ID: MAIN005

Compound: Chloroethane
CAS Number: 75-00-3

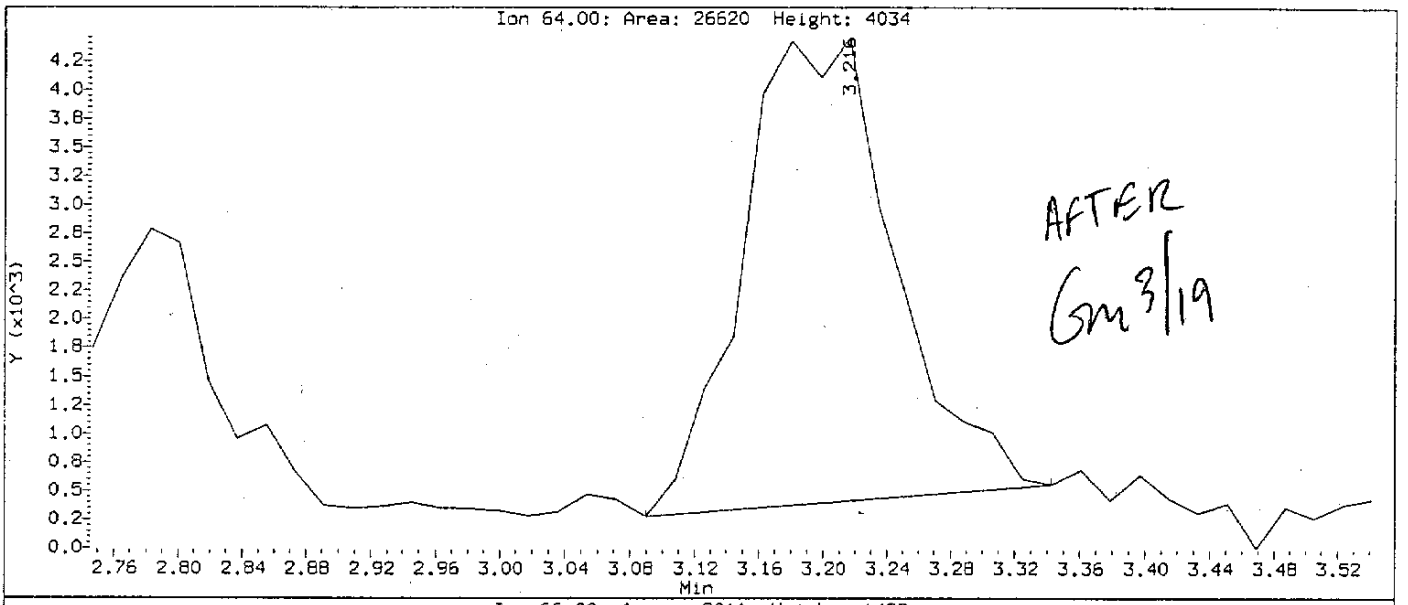


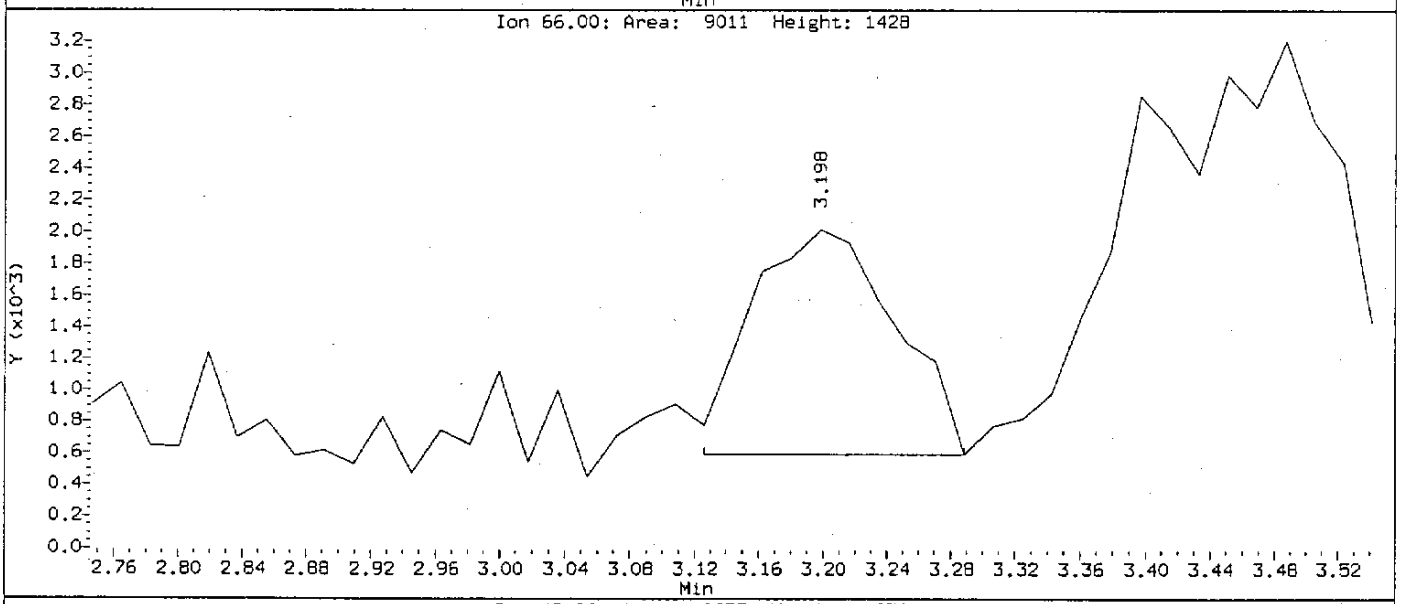


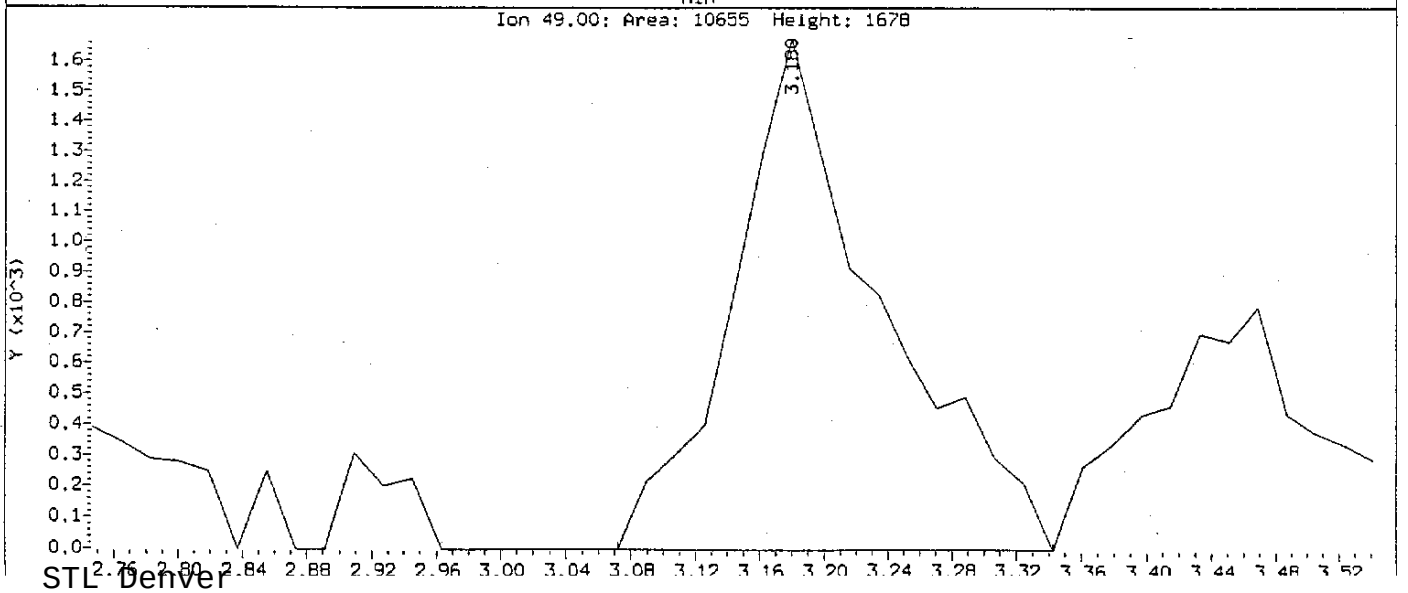


Data File: /chem/J.i/031904i.b/j0969.d
Injection Date: 19-MAR-2004 17:08
Instrument: J.i
Client Sample ID: MAIN005

Compound: Chloroethane
CAS Number: 75-00-3







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VOLATILE REPORT SW-846

Data file : /chem/J.i/031904i.b/j0970.d
Lab Smp Id: MAIN010 Client Smp ID: MAIN010
Inj Date : 19-MAR-2004 17:33
Operator : meierg Inst ID: J.i
Smp Info : MAIN010,,022/040-04
Misc Info :
Comment :
Method : /chem/J.i/031904i.b/J5030-8260B-soil.m
Meth Date : 19-Mar-2004 21:48 meierg Quant Type: ISTD
Cal Date : 19-MAR-2004 17:33 Cal File: j0970.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	56 Fluorobenzene	96	6.917	6.918	(1.000)	1416240	50.0000	
*	82 Chlorobenzene-d5	119	10.168	10.150	(1.000)	333461	50.0000	
*	107 1,4-Dichlorobenzene-d4	152	13.201	13.202	(1.000)	553705	50.0000	
M	1 1,2-Dichloroethene (total)	96				258949	20.0000	20.4430
M	2 Xylene (total)	106				655845	10.0000	31.4296
	3 dichlorodifluoromethane	85	2.493	2.494	(0.360)	166420	10.0000	10.0000
	4 Chloromethane	50	2.620	2.656	(0.379)	76443	10.0000	9.88063(a)
	6 Vinyl Chloride	62	2.782	2.783	(0.402)	78803	10.0000	10.3788
	8 Bromomethane	94	3.107	3.071	(0.449)	99183	10.0000	10.6531
	9 Chloroethane	64	3.197	3.144	(0.462)	56103	10.0000	10.8062
	11 Trichlorofluoromethane	101	3.432	3.469	(0.496)	329969	10.0000	10.1253
	12 Ethanol	45	3.559	3.595	(0.514)	28639	500.000	500.000
	16 Acrolein	56	3.829	3.812	(0.554)	98652	100.000	92.1310(a)
	17 1,1-Dichloroethene	96	3.956	3.938	(0.572)	106597	10.0000	10.3929
	20 Acetone	43	3.974	3.956	(0.574)	173020	40.0000	38.3128
	21 Iodomethane	142	4.136	4.119	(0.598)	207253	10.0000	10.4159

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 Acetonitrile	41	4.263	4.263	(0.616)	36049	100.000	100.000
26 Methylene Chloride	84	4.425	4.426	(0.640)	105354	10.0000	8.88145
27 tert-Butyl alcohol	59	4.498	4.498	(0.650)	286262	200.000	203.053
28 Acrylonitrile	53	4.678	4.661	(0.676)	189000	100.000	106.127
30 trans-1,2-Dichloroethene	96	4.714	4.697	(0.681)	128188	10.0000	10.2352
32 1,1-Dichloroethane	63	5.148	5.130	(0.744)	207034	10.0000	10.1920
34 Isopropyl ether	87	5.166	5.166	(0.747)	533926	50.0000	50.3778
35 Chloroprene	53	5.238	5.220	(0.757)	232185	10.0000	10.4509
37 2-Butanone	43	5.725	5.726	(0.828)	202512	40.0000	42.4008
38 cis-1,2-Dichloroethene	96	5.744	5.744	(0.830)	130761	10.0000	10.2078
39 2,2-Dichloropropane	77	5.762	5.744	(0.833)	241234	10.0000	10.4873
41 Propionitrile	54	5.816	5.816	(0.841)	76618	100.000	103.193
42 Methacrylonitrile	41	5.960	5.961	(0.862)	547859	100.000	102.296
43 Bromochloromethane	128	6.014	5.997	(0.869)	65276	10.0000	10.0095
45 Chloroform	83	6.069	6.051	(0.877)	281032	10.0000	10.4284
47 1,1,1-Trichloroethane	97	6.285	6.268	(0.909)	325889	10.0000	10.6260
49 1,1-Dichloropropene	75	6.430	6.430	(0.930)	190094	10.0000	10.3874
50 Carbon Tetrachloride	117	6.448	6.448	(0.932)	304425	10.0000	10.4763
51 Isobutanol	41	6.484	6.484	(0.937)	63420	200.000	177.524(a)
54 Benzene	78	6.646	6.647	(0.961)	305191	10.0000	10.3511
53 1,2-Dichloroethane	62	6.664	6.665	(0.963)	206856	10.0000	10.5391
57 n-Butanol	56	7.152	7.171	(1.034)	51202	200.000	191.343(a)
58 Trichloroethene	130	7.315	7.297	(1.057)	131273	10.0000	10.1410
61 1,2-Dichloropropane	63	7.549	7.532	(1.091)	106811	10.0000	9.86315
64 1,4-Dioxane	88	7.676	7.676	(1.110)	50949	500.000	500.000
63 Dibromomethane	93	7.676	7.658	(1.110)	124851	10.0000	10.5059
65 Bromodichloromethane	83	7.820	7.803	(1.131)	270895	10.0000	10.3529
68 cis-1,3-Dichloropropene	75	8.272	8.272	(1.196)	196779	10.0000	10.4901
69 4-Methyl-2-pentanone	43	8.416	8.398	(0.828)	509138	40.0000	40.2195
71 Toluene	91	8.633	8.633	(0.849)	405096	10.0000	10.4360
72 trans-1,3-Dichloropropene	75	8.831	8.832	(0.869)	208570	10.0000	10.8596
74 1,1,2-Trichloroethane	97	9.048	9.049	(0.890)	119551	10.0000	9.80313
76 Tetrachloroethene	164	9.211	9.211	(0.906)	145256	10.0000	10.3457
75 1,3-Dichloropropane	76	9.229	9.229	(0.908)	166388	10.0000	10.0386
77 2-Hexanone	43	9.283	9.283	(0.913)	374305	40.0000	41.8209
79 Dibromochloromethane	129	9.481	9.482	(0.932)	206347	10.0000	10.2951
80 1,2-Dibromoethane	107	9.626	9.626	(0.947)	176754	10.0000	10.4335
81 1-Chlorohexane	91	10.114	10.114	(0.995)	207266	10.0000	10.1445
83 Chlorobenzene	112	10.204	10.186	(1.004)	307470	10.0000	10.3801
84 1,1,1,2-Tetrachloroethane	131	10.294	10.295	(1.012)	161710	10.0000	10.6204
85 Ethylbenzene	106	10.312	10.313	(1.014)	165598	10.0000	10.6427
86 m and p-Xylene	106	10.457	10.457	(1.028)	445290	20.0000	20.8028
87 o-Xylene	106	10.998	10.999	(1.082)	210555	10.0000	10.6267
88 Styrene	104	11.016	11.017	(1.083)	351022	10.0000	10.4477
89 Bromoform	173	11.305	11.288	(1.112)	188023	10.0000	10.3412
90 isopropyl benzene	105	11.486	11.486	(1.130)	685613	10.0000	10.7054
92 Cyclohexanone	55	11.648	11.649	(1.146)	841343	400.000	423.056

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94 1,1,2,2-Tetrachloroethane	83	11.883	11.884	(0.900)	162227	10.0000	10.0208
95 Bromobenzene	156	11.919	11.920	(0.903)	152032	10.0000	10.2507
96 1,2,3-Trichloropropane	110	11.955	11.956	(0.906)	64220	10.0000	10.0665
98 n-Propylbenzene	120	12.046	12.028	(0.912)	135629	10.0000	10.3305
99 2-Chlorotoluene	126	12.172	12.173	(0.922)	113968	10.0000	10.3939
100 1,3,5-Trimethylbenzene	105	12.262	12.263	(0.929)	552908	10.0000	10.3334
101 4-Chlorotoluene	126	12.317	12.317	(0.933)	118283	10.0000	10.9258
102 tert-Butylbenzene	119	12.696	12.696	(0.962)	529591	10.0000	10.3874
103 1,2,4-Trimethylbenzene	105	12.750	12.750	(0.966)	530504	10.0000	10.3467
104 sec-Butylbenzene	105	12.967	12.967	(0.982)	751771	10.0000	10.3179
105 m-Dichlorobenzene	146	13.129	13.130	(0.995)	228776	10.0000	10.4083
106 4-Isopropyltoluene	119	13.147	13.148	(0.996)	580700	10.0000	10.3905
108 p-dichlorobenzene	146	13.238	13.238	(1.003)	262188	10.0000	10.4164
110 n-Butylbenzene	91	13.635	13.635	(1.033)	542487	10.0000	10.3860
111 o-Dichlorobenzene	146	13.689	13.689	(1.037)	212445	10.0000	10.3230
112 1,2-Dibromo-3-chloropropane	157	14.592	14.592	(1.105)	46043	10.0000	10.0000
113 1,2,4-Trichlorobenzene	180	15.531	15.531	(1.176)	212349	10.0000	10.5324
114 Hexachlorobutadiene	225	15.729	15.730	(1.192)	158333	10.0000	10.5989
115 Napthalene	128	15.838	15.838	(1.200)	244406	10.0000	11.1102
116 1,2,3-Trichlorobenzene	180	16.145	16.145	(1.223)	185250	10.0000	10.8915

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j0970.d
Lab Smp Id: MAIN010
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/J.i/031904i.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 03/19/4
Calibration Time: 2053
Client Smp ID: MAIN010
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1450376	725188	2900752	1416240	-2.35
82 Chlorobenzene-d5	340569	170284	681138	333461	-2.09
107 1,4-Dichlorobenze	540811	270406	1081622	553705	2.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.94	6.44	7.44	6.92	-0.26
82 Chlorobenzene-d5	10.17	9.67	10.67	10.17	0.00
107 1,4-Dichlorobenze	13.20	12.70	13.70	13.20	0.00

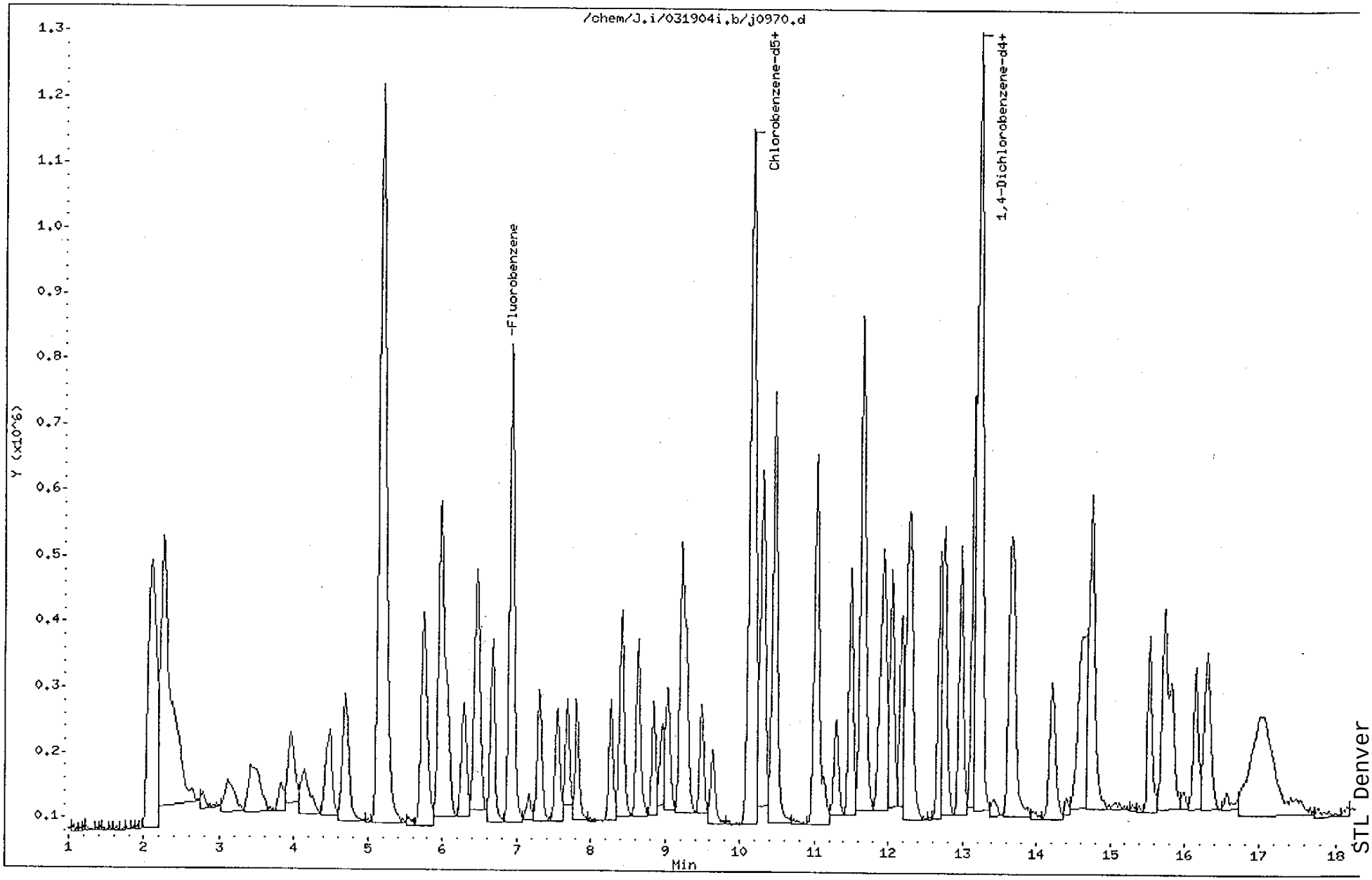
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/031904i.b/j0970.d
Date : 19-MAR-2004 17:33
Client ID: MAIN010
Sample Info: MAIN010,,022/040-04

Column phase: DB624

Instrument: J.i

Operator: meierg
Column diameter: 0.53



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VOLATILE REPORT SW-846

Data file : /chem/J.i/031904i.b/j0971.d
Lab Smp Id: MAIN020 Client Smp ID: MAIN020
Inj Date : 19-MAR-2004 17:58
Operator : meierg Inst ID: J.i
Smp Info : MAIN020,,022/040-04
Misc Info :
Comment :
Method : /chem/J.i/031904i.b/J5030-8260B-soil.m
Meth Date : 19-Mar-2004 21:48 meierg Quant Type: ISTD
Cal Date : 19-MAR-2004 17:58 Cal File: j0971.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	56 Fluorobenzene	96	6.918	6.918	(1.000)	1576286	50.0000	
*	82 Chlorobenzene-d5	119	10.150	10.150	(1.000)	357263	50.0000	
*	107 1,4-Dichlorobenzene-d4	152	13.202	13.202	(1.000)	588322	50.0000	
M	1 1,2-Dichloroethene (total)	96				492434	40.0000	36.4695
M	2 Xylene (total)	106				1240264	20.0000	56.8931
	3 dichlorodifluoromethane	85	2.494	2.494	(0.360)	315581	20.0000	18.4003
	4 Chloromethane	50	2.638	2.656	(0.381)	156741	20.0000	18.7647
	6 Vinyl Chloride	62	2.783	2.783	(0.402)	151234	20.0000	18.5464
	8 Bromomethane	94	3.108	3.071	(0.449)	186571	20.0000	18.6240
	9 Chloroethane	64	3.198	3.144	(0.462)	104291	20.0000	18.6550
	11 Trichlorofluoromethane	101	3.433	3.469	(0.496)	635199	20.0000	18.2699
	12 Ethanol	45	3.559	3.595	(0.514)	53558	1000.00	913.111
	16 Acrolein	56	3.830	3.812	(0.554)	196893	200.000	175.378
	17 1,1-Dichloroethene	96	3.957	3.938	(0.572)	210708	20.0000	18.9446
	20 Acetone	43	3.975	3.956	(0.575)	263079	80.0000	59.1581
	21 Iodomethane	142	4.137	4.119	(0.598)	383525	20.0000	18.1281

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 Acetonitrile	41	4.264	4.263	(0.616)	58618	200.000	168.850
26 Methylene Chloride	84	4.426	4.426	(0.640)	189819	20.0000	15.8638
27 tert-Butyl alcohol	59	4.480	4.498	(0.648)	471584	400.000	327.703
28 Acrylonitrile	53	4.679	4.661	(0.676)	335483	200.000	178.395
30 trans-1,2-Dichloroethene	96	4.715	4.697	(0.682)	243466	20.0000	18.2361
32 1,1-Dichloroethane	63	5.148	5.130	(0.744)	398611	20.0000	18.3555
34 Isopropyl ether	87	5.166	5.166	(0.747)	1059695	100.000	92.9849
35 Chloroprene	53	5.239	5.220	(0.757)	445046	20.0000	18.6194
37 2-Butanone	43	5.744	5.726	(0.830)	334371	80.0000	67.7258
38 cis-1,2-Dichloroethene	96	5.744	5.744	(0.830)	248968	20.0000	18.2334
39 2,2-Dichloropropane	77	5.762	5.744	(0.833)	444173	20.0000	18.1511
41 Propionitrile	54	5.798	5.816	(0.838)	136849	200.000	175.673
42 Methacrylonitrile	41	5.961	5.961	(0.862)	974288	200.000	174.051
43 Bromochloromethane	128	5.997	5.997	(0.867)	121923	20.0000	17.7447
45 Chloroform	83	6.051	6.051	(0.875)	521748	20.0000	18.1845
47 1,1,1-Trichloroethane	97	6.286	6.268	(0.909)	590089	20.0000	18.1056
49 1,1-Dichloropropene	75	6.431	6.430	(0.930)	348137	20.0000	17.9626
50 Carbon Tetrachloride	117	6.449	6.448	(0.932)	579496	20.0000	18.5618
51 Isobutanol	41	6.485	6.484	(0.937)	125938	400.000	340.348
54 Benzene	78	6.647	6.647	(0.961)	571231	20.0000	18.1934
53 1,2-Dichloroethane	62	6.665	6.665	(0.963)	385797	20.0000	18.3769
57 n-Butanol	56	7.153	7.171	(1.034)	87048	400.000	321.097
58 Trichloroethene	130	7.297	7.297	(1.055)	258604	20.0000	18.5843
61 1,2-Dichloropropane	63	7.532	7.532	(1.089)	206791	20.0000	18.0101
64 1,4-Dioxane	88	7.658	7.676	(1.107)	83484	1000.00	847.996
63 Dibromomethane	93	7.676	7.658	(1.110)	230913	20.0000	18.2303
65 Bromodichloromethane	83	7.803	7.803	(1.128)	513016	20.0000	18.3445
68 cis-1,3-Dichloropropene	75	8.272	8.272	(1.196)	383044	20.0000	18.8664
69 4-Methyl-2-pentanone	43	8.399	8.398	(0.827)	894187	80.0000	70.0362
71 Toluene	91	8.634	8.633	(0.851)	789663	20.0000	19.3137
72 trans-1,3-Dichloropropene	75	8.832	8.832	(0.870)	371718	20.0000	18.6668
74 1,1,2-Trichloroethane	97	9.049	9.049	(0.891)	230131	20.0000	18.3430
76 Tetrachloroethene	164	9.211	9.211	(0.907)	267590	20.0000	18.4696
75 1,3-Dichloropropane	76	9.229	9.229	(0.909)	332523	20.0000	19.1318
77 2-Hexanone	43	9.284	9.283	(0.915)	672374	80.0000	73.1299
79 Dibromochloromethane	129	9.482	9.482	(0.934)	386904	20.0000	18.6331
80 1,2-Dibromoethane	107	9.627	9.626	(0.948)	337477	20.0000	19.0398
81 1-Chlorohexane	91	10.114	10.114	(0.996)	391277	20.0000	18.5313
83 Chlorobenzene	112	10.187	10.186	(1.004)	594965	20.0000	19.1473
84 1,1,1,2-Tetrachloroethane	131	10.295	10.295	(1.014)	301543	20.0000	18.9636
85 Ethylbenzene	106	10.313	10.313	(1.016)	321003	20.0000	19.4977
86 m and p-Xylene	106	10.457	10.457	(1.030)	847560	40.0000	37.9192
87 o-Xylene	106	10.999	10.999	(1.084)	392704	20.0000	18.9739
88 Styrene	104	11.017	11.017	(1.085)	683357	20.0000	19.3111
89 Bromoform	173	11.306	11.288	(1.114)	343157	20.0000	18.3449
90 isopropyl benzene	105	11.487	11.486	(1.132)	1305014	20.0000	19.3354
92 Cyclohexanone	55	11.631	11.649	(1.146)	1380618	800.000	691.792

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
94	1,1,2,2-Tetrachloroethane	83	11.884	11.884	(0.900)	297084	20.0000	18.0940
95	Bromobenzene	156	11.920	11.920	(0.903)	287630	20.0000	18.7999
96	1,2,3-Trichloropropane	110	11.956	11.956	(0.906)	112795	20.0000	17.6274
98	n-Propylbenzene	120	12.028	12.028	(0.911)	258600	20.0000	19.0010
99	2-Chlorotoluene	126	12.173	12.173	(0.922)	203741	20.0000	18.2520
100	1,3,5-Trimethylbenzene	105	12.263	12.263	(0.929)	1051738	20.0000	18.9741
101	4-Chlorotoluene	126	12.299	12.317	(0.932)	225542	20.0000	19.7366
102	tert-Butylbenzene	119	12.697	12.696	(0.962)	985577	20.0000	18.7584
103	1,2,4-Trimethylbenzene	105	12.751	12.750	(0.966)	1020796	20.0000	19.1404
104	sec-Butylbenzene	105	12.967	12.967	(0.982)	1388370	20.0000	18.5735
105	m-Dichlorobenzene	146	13.130	13.130	(0.995)	433223	20.0000	19.0094
106	4-Isopropyltoluene	119	13.148	13.148	(0.996)	1086244	20.0000	18.8284
108	p-dichlorobenzene	146	13.238	13.238	(1.003)	496180	20.0000	19.0113
110	n-Butylbenzene	91	13.636	13.635	(1.033)	1004406	20.0000	18.6905
111	o-Dichlorobenzene	146	13.690	13.689	(1.037)	400727	20.0000	18.8521
112	1,2-Dibromo-3-chloropropane	157	14.593	14.592	(1.105)	74439	20.0000	17.2830
113	1,2,4-Trichlorobenzene	180	15.532	15.531	(1.176)	389637	20.0000	18.7549
114	Hexachlorobutadiene	225	15.730	15.730	(1.191)	286676	20.0000	18.6643
115	Napthalene	128	15.839	15.838	(1.200)	452316	20.0000	19.5629
116	1,2,3-Trichlorobenzene	180	16.146	16.145	(1.223)	338241	20.0000	19.1255

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j0971.d
Lab Smp Id: MAIN020
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/J.i/031904i.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 03/19/4
Calibration Time: 2053
Client Smp ID: MAIN020
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1450376	725188	2900752	1576286	8.68
82 Chlorobenzene-d5	340569	170284	681138	357263	4.90
107 1,4-Dichlorobenze	540811	270406	1081622	588322	8.79

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.94	6.44	7.44	6.92	-0.25
82 Chlorobenzene-d5	10.17	9.67	10.67	10.15	-0.17
107 1,4-Dichlorobenze	13.20	12.70	13.70	13.20	0.01

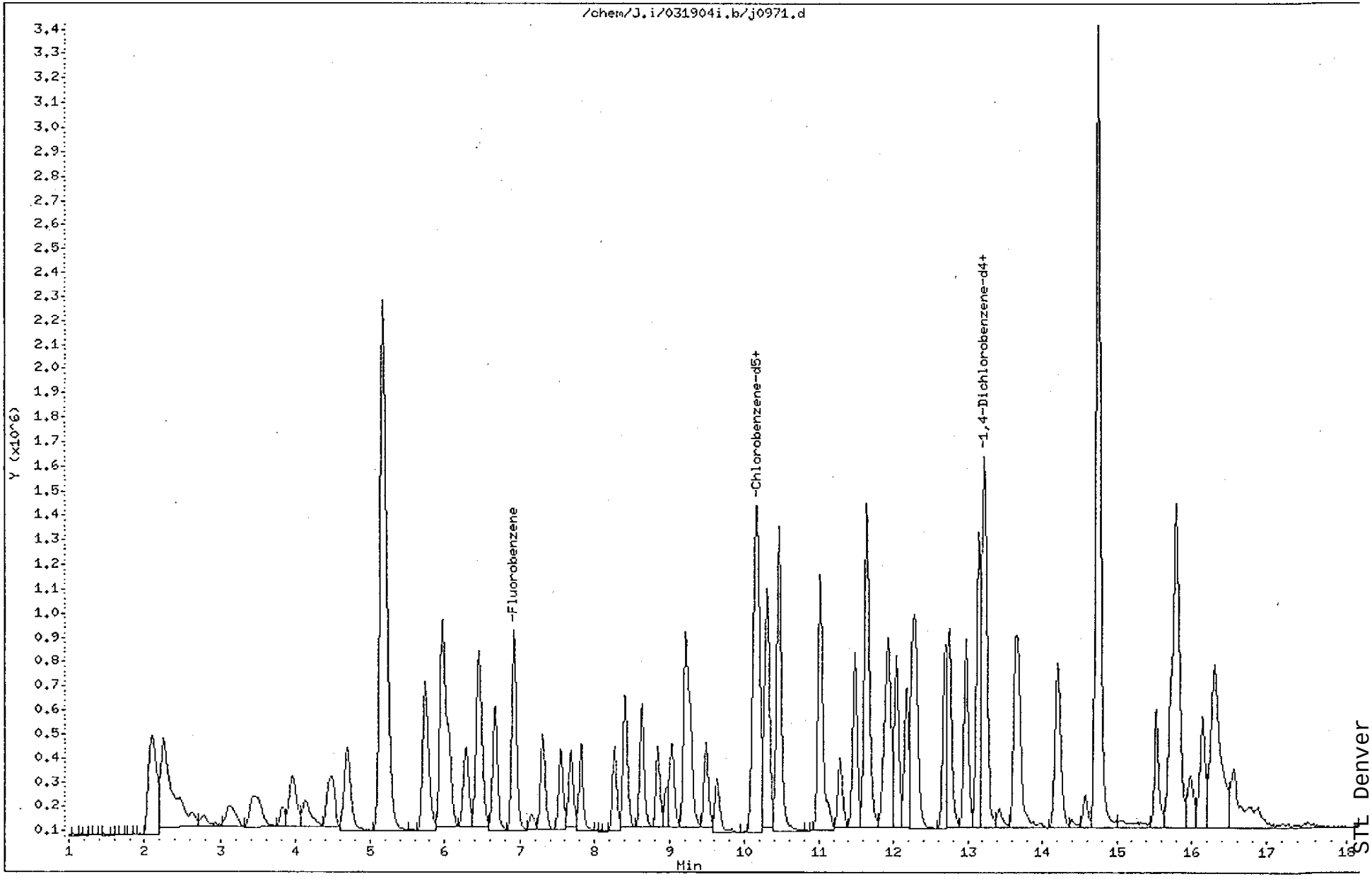
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/031904i.b/j0971.d
Date : 19-MAR-2004 17:58
Client ID: MAIN020
Sample Info: MAIN020,,022/040-04

Column phase: DB624

Instrument: J.i

Operator: meierg
Column diameter: 0.53



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VOLATILE REPORT SW-846

Data file : /chem/J.i/031904i.b/j0972.d
Lab Smp Id: MAIN050 Client Smp ID: MAIN050
Inj Date : 19-MAR-2004 18:23
Operator : meierg Inst ID: J.i
Smp Info : MAIN050,,022/040-04
Misc Info :
Comment :
Method : /chem/J.i/031904i.b/J5030-8260B-soil.m
Meth Date : 19-Mar-2004 21:48 meierg Quant Type: ISTD
Cal Date : 19-MAR-2004 18:23 Cal File: j0972.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	6.917	6.918	(1.000)	1469689	50.0000	
* 82 Chlorobenzene-d5	119	10.150	10.150	(1.000)	340609	50.0000	
* 107 1,4-Dichlorobenzene-d4	152	13.201	13.202	(1.000)	565801	50.0000	
M 1 1,2-Dichloroethene (total)	96				1278140	100.000	101.142
M 2 Xylene (total)	106				3234456	50.0000	154.156
3 dichlorodifluoromethane	85	2.493	2.494	(0.360)	1008482	50.0000	58.0124
4 Chloromethane	50	2.638	2.656	(0.381)	400553	50.0000	51.0659
6 Vinyl Chloride	62	2.782	2.783	(0.402)	390021	50.0000	50.9678
8 Bromomethane	94	3.107	3.071	(0.449)	473804	50.0000	50.5430
9 Chloroethane	64	3.179	3.144	(0.460)	282901	50.0000	53.1386
11 Trichlorofluoromethane	101	3.414	3.469	(0.494)	1618021	50.0000	49.9352
12 Ethanol	45	3.558	3.595	(0.514)	144730	2500.00	2595.78
16 Acrolein	56	3.829	3.812	(0.554)	549490	500.000	518.478
17 1,1-Dichloroethene	96	3.956	3.938	(0.572)	550058	50.0000	52.2474
20 Acetone	43	3.974	3.956	(0.574)	706233	200.000	176.889
21 Iodomethane	142	4.118	4.119	(0.595)	1005715	50.0000	50.7352

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	Acetonitrile	41	4.281	4.263	(0.619)	167542	500.000	511.605
26	Methylene Chloride	84	4.425	4.426	(0.640)	493875	50.0000	45.5746
27	tert-Butyl alcohol	59	4.479	4.498	(0.648)	1338945	1000.00	998.437
28	Acrylonitrile	53	4.660	4.661	(0.674)	930441	500.000	522.643
30	trans-1,2-Dichloroethene	96	4.714	4.697	(0.681)	635006	50.0000	50.7559
32	1,1-Dichloroethane	63	5.148	5.130	(0.744)	1039523	50.0000	50.9988
34	Isopropyl ether	87	5.166	5.166	(0.747)	2750987	250.000	256.615
35	Chloroprene	53	5.238	5.220	(0.757)	1142965	50.0000	50.9587
37	2-Butanone	43	5.725	5.726	(0.828)	912519	200.000	198.672
38	cis-1,2-Dichloroethene	96	5.743	5.744	(0.830)	643134	50.0000	50.3865
39	2,2-Dichloropropane	77	5.762	5.744	(0.833)	1134154	50.0000	49.7813
41	Propionitrile	54	5.798	5.816	(0.838)	385893	500.000	523.113
42	Methacrylonitrile	41	5.960	5.961	(0.862)	2721059	500.000	515.851
43	Bromochloromethane	128	5.996	5.997	(0.867)	320402	50.0000	50.0101
45	Chloroform	83	6.050	6.051	(0.875)	1388533	50.0000	51.4151
47	1,1,1-Trichloroethane	97	6.267	6.268	(0.906)	1594002	50.0000	51.8196
49	1,1-Dichloropropene	75	6.430	6.430	(0.929)	921030	50.0000	50.7228
50	Carbon Tetrachloride	117	6.448	6.448	(0.932)	1488100	50.0000	50.8372
51	Isobutanol	41	6.466	6.484	(0.935)	393059	1000.00	1100.95
54	Benzene	78	6.646	6.647	(0.961)	1515753	50.0000	51.3213
53	1,2-Dichloroethane	62	6.664	6.665	(0.963)	1010933	50.0000	51.2251
57	n-Butanol	56	7.152	7.171	(1.034)	263702	1000.00	1032.11
58	Trichloroethene	130	7.296	7.297	(1.055)	670498	50.0000	51.2491
61	1,2-Dichloropropane	63	7.531	7.532	(1.089)	545143	50.0000	50.6883
64	1,4-Dioxane	88	7.658	7.676	(1.107)	245370	2500.00	2612.82
63	Dibromomethane	93	7.658	7.658	(1.107)	602135	50.0000	50.7356
65	Bromodichloromethane	83	7.802	7.803	(1.128)	1310868	50.0000	50.2053
68	cis-1,3-Dichloropropene	75	8.272	8.272	(1.196)	987150	50.0000	51.5934
69	4-Methyl-2-pentanone	43	8.398	8.398	(0.827)	2552871	200.000	207.208
71	Toluene	91	8.633	8.633	(0.851)	2061586	50.0000	52.1351
72	trans-1,3-Dichloropropene	75	8.831	8.832	(0.870)	993507	50.0000	51.7282
74	1,1,2-Trichloroethane	97	9.030	9.049	(0.890)	583534	50.0000	49.0839
76	Tetrachloroethene	164	9.211	9.211	(0.907)	715578	50.0000	51.3422
75	1,3-Dichloropropane	76	9.229	9.229	(0.909)	883356	50.0000	52.4414
77	2-Hexanone	43	9.283	9.283	(0.915)	1870312	200.000	209.861
79	Dibromochloromethane	129	9.481	9.482	(0.934)	1032667	50.0000	51.6058
80	1,2-Dibromoethane	107	9.626	9.626	(0.948)	898848	50.0000	52.3555
81	1-Chlorohexane	91	10.113	10.114	(0.996)	1038041	50.0000	51.1658
83	Chlorobenzene	112	10.186	10.186	(1.004)	1569378	50.0000	52.1989
84	1,1,1,2-Tetrachloroethane	131	10.276	10.295	(1.012)	790400	50.0000	51.5862
85	Ethylbenzene	106	10.312	10.313	(1.016)	823262	50.0000	51.8152
86	m and p-Xylene	106	10.457	10.457	(1.030)	2218629	100.000	103.053
87	o-Xylene	106	10.998	10.999	(1.084)	1015827	50.0000	51.1022
88	Styrene	104	11.016	11.017	(1.085)	1778643	50.0000	52.0131
89	Bromoform	173	11.287	11.288	(1.112)	927693	50.0000	51.4989
90	isopropyl benzene	105	11.486	11.486	(1.132)	3428525	50.0000	52.4215
92	Cyclohexanone	55	11.630	11.649	(1.146)	4013029	2000.00	2080.76

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94	1,1,2,2-Tetrachloroethane	83	11.865	11.884	(0.899)	791892	50.0000	50.1127
95	Bromobenzene	156	11.919	11.920	(0.903)	782963	50.0000	52.3713
96	1,2,3-Trichloropropane	110	11.955	11.956	(0.906)	317202	50.0000	51.1498
98	n-Propylbenzene	120	12.028	12.028	(0.911)	679784	50.0000	51.4382
99	2-Chlorotoluene	126	12.172	12.173	(0.922)	536622	50.0000	49.9899
100	1,3,5-Trimethylbenzene	105	12.262	12.263	(0.929)	2797715	50.0000	51.8384
101	4-Chlorotoluene	126	12.298	12.317	(0.932)	588352	50.0000	52.6049
102	tert-Butylbenzene	119	12.696	12.696	(0.962)	2605827	50.0000	51.1687
103	1,2,4-Trimethylbenzene	105	12.750	12.750	(0.966)	2674275	50.0000	51.5878
104	sec-Butylbenzene	105	12.967	12.967	(0.982)	3724277	50.0000	51.3425
105	m-Dichlorobenzene	146	13.129	13.130	(0.995)	1149852	50.0000	51.8246
106	4-Isopropyltoluene	119	13.147	13.148	(0.996)	2900699	50.0000	51.6911
108	p-dichlorobenzene	146	13.237	13.238	(1.003)	1269786	50.0000	50.4403
110	n-Butylbenzene	91	13.635	13.635	(1.033)	2699339	50.0000	51.6541
111	o-Dichlorobenzene	146	13.689	13.689	(1.037)	1055999	50.0000	51.2322
112	1,2-Dibromo-3-chloropropane	157	14.592	14.592	(1.105)	215931	50.0000	51.4000
113	1,2,4-Trichlorobenzene	180	15.531	15.531	(1.176)	1075558	50.0000	52.8198
114	Hexachlorobutadiene	225	15.711	15.730	(1.190)	783845	50.0000	52.2635
115	Napthalene	128	15.838	15.838	(1.200)	1279686	50.0000	55.4567
116	1,2,3-Trichlorobenzene	180	16.127	16.145	(1.222)	950577	50.0000	54.2903

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j0972.d
Lab Smp Id: MAIN050
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/J.i/031904i.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 03/19/4
Calibration Time: 2053
Client Smp ID: MAIN050
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1450376	725188	2900752	1469689	1.33
82 Chlorobenzene-d5	340569	170284	681138	340609	0.01
107 1,4-Dichlorobenze	540811	270406	1081622	565801	4.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.94	6.44	7.44	6.92	-0.26
82 Chlorobenzene-d5	10.17	9.67	10.67	10.15	-0.18
107 1,4-Dichlorobenze	13.20	12.70	13.70	13.20	0.00

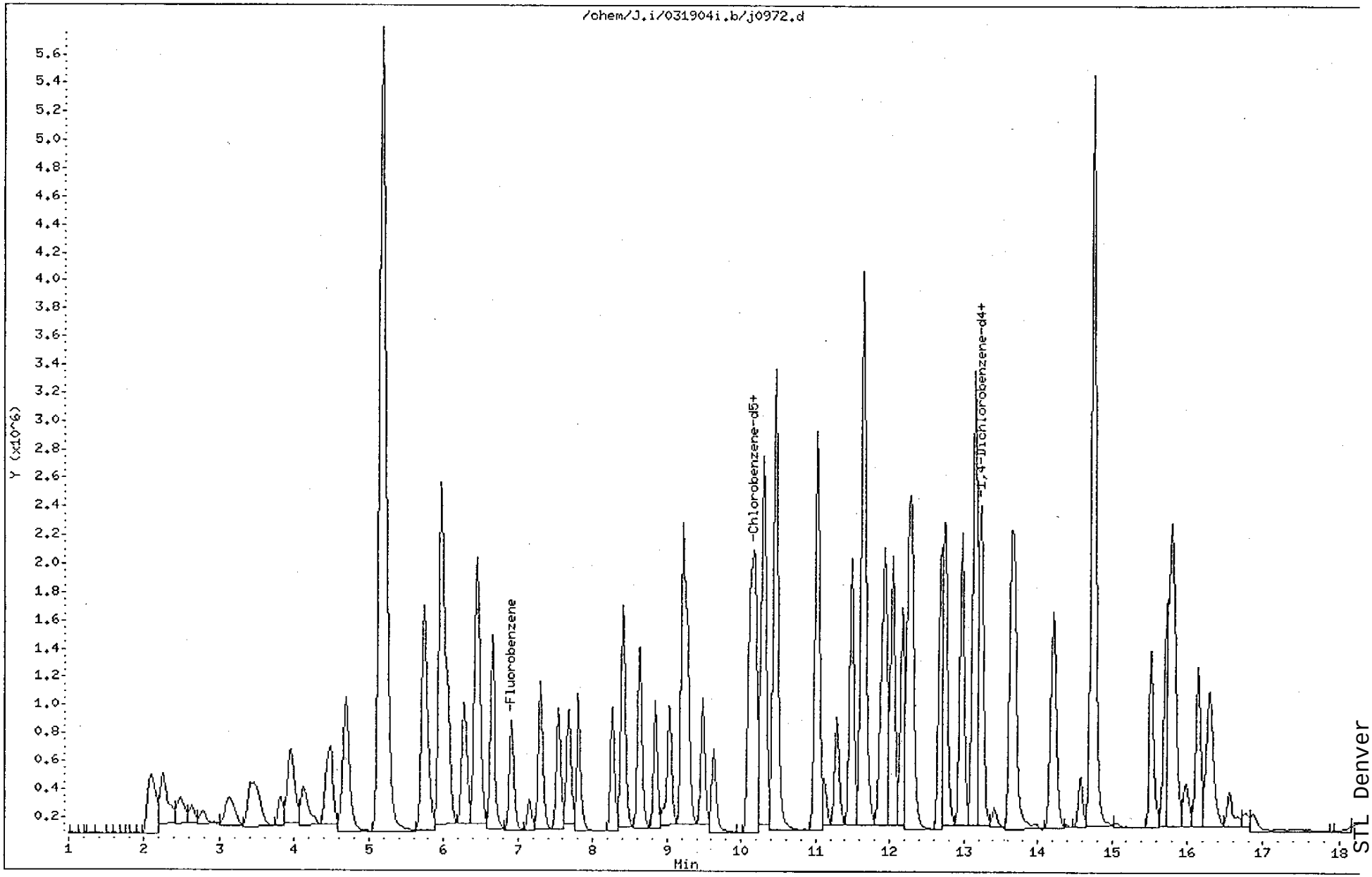
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/031904i.b/j0972.d
Date : 19-MAR-2004 18:23
Client ID: MAIN050
Sample Info: MAIN050,,022/040-04

Column phase: DB624

Instrument: J.i

Operator: meierg
Column diameter: 0.53



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VOLATILE REPORT SW-846

Data file : /chem/J.i/031904i.b/j0973.d
Lab Smp Id: MAIN100 Client Smp ID: MAIN100
Inj Date : 19-MAR-2004 18:48
Operator : meierg Inst ID: J.i
Smp Info : MAIN100,,022/040-04
Misc Info :
Comment :
Method : /chem/J.i/031904i.b/J5030-8260B-soil.m
Meth Date : 19-Mar-2004 21:48 meierg Quant Type: ISTD
Cal Date : 19-MAR-2004 18:48 Cal File: j0973.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
*	56 Fluorobenzene	96	6.917	6.918	(1.000)	1490133	50.0000	
*	82 Chlorobenzene-d5	119	10.150	10.150	(1.000)	358740	50.0000	
*	107 1,4-Dichlorobenzene-d4	152	13.201	13.202	(1.000)	586732	50.0000	
M	1 1,2-Dichloroethene (total)	96				2617745	200.000	203.425
M	2 Xylene (total)	106				6661792	100.000	301.253
	3 dichlorodifluoromethane	85	2.493	2.494	(0.360)	2071295	100.000	112.586
	4 Chloromethane	50	2.638	2.656	(0.381)	835977	100.000	104.051
	6 Vinyl Chloride	62	2.782	2.783	(0.402)	775706	100.000	99.9826
	8 Bromomethane	94	3.107	3.071	(0.449)	936909	100.000	98.8556
	9 Chloroethane	64	3.179	3.144	(0.460)	554175	100.000	102.121
	11 Trichlorofluoromethane	101	3.396	3.469	(0.491)	3321877	100.000	100.888
	12 Ethanol	45	3.559	3.595	(0.514)	303957	5000.00	5277.35
	16 Acrolein	56	3.811	3.812	(0.551)	1114282	1000.00	1029.36
	17 1,1-Dichloroethene	96	3.938	3.938	(0.569)	1088890	100.000	101.601
	20 Acetone	43	3.956	3.956	(0.572)	1402519	400.000	355.995
	21 Iodomethane	142	4.118	4.119	(0.595)	2048227	100.000	101.522

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 Acetonitrile	41	4.263	4.263	(0.616)	395715	1000.00	1137.25
26 Methylene Chloride	84	4.425	4.426	(0.640)	984769	100.000	91.5261
27 tert-Butyl alcohol	59	4.498	4.498	(0.650)	2814385	2000.00	2055.50
28 Acrylonitrile	53	4.660	4.661	(0.674)	1957833	1000.00	1066.60
30 trans-1,2-Dichloroethene	96	4.696	4.697	(0.679)	1295988	100.000	101.726
32 1,1-Dichloroethane	63	5.148	5.130	(0.744)	2129932	100.000	102.433
34 Isopropyl ether	87	5.166	5.166	(0.747)	5603898	500.000	512.376
35 Chloroprene	53	5.238	5.220	(0.757)	2331182	100.000	101.997
37 2-Butanone	43	5.726	5.726	(0.828)	1938618	400.000	412.921
38 cis-1,2-Dichloroethene	96	5.744	5.744	(0.830)	1321757	100.000	101.699
39 2,2-Dichloropropane	77	5.744	5.744	(0.830)	2286638	100.000	99.1904
41 Propionitrile	54	5.816	5.816	(0.841)	797893	1000.00	1052.72
42 Methacrylonitrile	41	5.960	5.961	(0.862)	5732702	1000.00	1056.69
43 Bromochloromethane	128	5.996	5.997	(0.867)	664104	100.000	101.780
45 Chloroform	83	6.051	6.051	(0.875)	2839853	100.000	102.948
47 1,1,1-Trichloroethane	97	6.267	6.268	(0.906)	3216618	100.000	102.492
49 1,1-Dichloropropene	75	6.430	6.430	(0.929)	1877371	100.000	101.571
50 Carbon Tetrachloride	117	6.448	6.448	(0.932)	3025573	100.000	101.548
51 Isobutanol	41	6.484	6.484	(0.937)	814620	2000.00	2195.45
54 Benzene	78	6.647	6.647	(0.961)	3112613	100.000	103.130
53 1,2-Dichloroethane	62	6.665	6.665	(0.963)	2093940	100.000	103.683
57 n-Butanol	56	7.152	7.171	(1.034)	546078	2000.00	2085.47
58 Trichloroethene	130	7.297	7.297	(1.055)	1342490	100.000	100.961
61 1,2-Dichloropropane	63	7.531	7.532	(1.089)	1122971	100.000	102.372
64 1,4-Dioxane	88	7.658	7.676	(1.107)	502412	5000.00	5204.57
63 Dibromomethane	93	7.658	7.658	(1.107)	1237532	100.000	102.262
65 Bromodichloromethane	83	7.802	7.803	(1.128)	2748671	100.000	103.039
68 cis-1,3-Dichloropropene	75	8.272	8.272	(1.196)	2028965	100.000	103.638
69 4-Methyl-2-pentanone	43	8.398	8.398	(0.827)	5327609	400.000	408.411
71 Toluene	91	8.633	8.633	(0.851)	4191487	100.000	100.512
72 trans-1,3-Dichloropropene	75	8.832	8.832	(0.870)	2022255	100.000	99.9758
74 1,1,2-Trichloroethane	97	9.048	9.049	(0.891)	1183406	100.000	95.5601
76 Tetrachloroethene	164	9.211	9.211	(0.907)	1458614	100.000	99.4915
75 1,3-Dichloropropane	76	9.229	9.229	(0.909)	1792978	100.000	100.848
77 2-Hexanone	43	9.283	9.283	(0.915)	3965005	400.000	417.733
79 Dibromochloromethane	129	9.482	9.482	(0.934)	2127718	100.000	100.763
80 1,2-Dibromoethane	107	9.626	9.626	(0.948)	1822623	100.000	100.637
81 1-Chlorohexane	91	10.114	10.114	(0.996)	2094487	100.000	98.4105
83 Chlorobenzene	112	10.186	10.186	(1.004)	3219037	100.000	101.321
84 1,1,1,2-Tetrachloroethane	131	10.294	10.295	(1.014)	1625550	100.000	100.584
85 Ethylbenzene	106	10.312	10.313	(1.016)	1695845	100.000	101.069
86 m and p-Xylene	106	10.457	10.457	(1.030)	4538784	200.000	200.134
87 o-Xylene	106	10.998	10.999	(1.084)	2123008	100.000	101.119
88 Styrene	104	11.017	11.017	(1.085)	3686698	100.000	101.880
89 Bromoform	173	11.287	11.288	(1.112)	1945850	100.000	102.038
90 isopropyl benzene	105	11.486	11.486	(1.132)	7023841	100.000	101.566
92 Cyclohexanone	55	11.630	11.649	(1.146)	8580605	4000.00	4177.36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94	1,1,2,2-Tetrachloroethane	83	11.883	11.884	(0.900)	1682400	100.000	102.123
95	Bromobenzene	156	11.919	11.920	(0.903)	1617645	100.000	103.444
96	1,2,3-Trichloropropane	110	11.956	11.956	(0.906)	632909	100.000	98.7301
98	n-Propylbenzene	120	12.028	12.028	(0.911)	1393645	100.000	101.350
99	2-Chlorotoluene	126	12.172	12.173	(0.922)	1130258	100.000	101.224
100	1,3,5-Trimethylbenzene	105	12.262	12.263	(0.929)	5779631	100.000	102.599
101	4-Chlorotoluene	126	12.299	12.317	(0.932)	1230210	100.000	104.798
102	tert-Butylbenzene	119	12.696	12.696	(0.962)	5373353	100.000	101.394
103	1,2,4-Trimethylbenzene	105	12.750	12.750	(0.966)	5541313	100.000	102.450
104	sec-Butylbenzene	105	12.967	12.967	(0.982)	7618691	100.000	101.024
105	m-Dichlorobenzene	146	13.129	13.130	(0.995)	2388158	100.000	103.014
106	4-Isopropyltoluene	119	13.147	13.148	(0.996)	6042780	100.000	103.050
108	p-dichlorobenzene	146	13.238	13.238	(1.003)	2699046	100.000	102.694
110	n-Butylbenzene	91	13.635	13.635	(1.033)	5642074	100.000	103.264
111	o-Dichlorobenzene	146	13.689	13.689	(1.037)	2181202	100.000	101.631
112	1,2-Dibromo-3-chloropropane	157	14.592	14.592	(1.105)	454746	100.000	103.254
113	1,2,4-Trichlorobenzene	180	15.531	15.531	(1.176)	2238222	100.000	104.740
114	Hexachlorobutadiene	225	15.730	15.730	(1.191)	1583136	100.000	101.428
115	Napthalene	128	15.838	15.838	(1.200)	2681621	100.000	109.425
116	1,2,3-Trichlorobenzene	180	16.145	16.145	(1.223)	1924099	100.000	104.720

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j0973.d
Lab Smp Id: MAIN100
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/J.i/031904i.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 03/19/4
Calibration Time: 2053
Client Smp ID: MAIN100
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1450376	725188	2900752	1490133	2.74
82 Chlorobenzene-d5	340569	170284	681138	358740	5.34
107 1,4-Dichlorobenze	540811	270406	1081622	586732	8.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.94	6.44	7.44	6.92	-0.26
82 Chlorobenzene-d5	10.17	9.67	10.67	10.15	-0.18
107 1,4-Dichlorobenze	13.20	12.70	13.70	13.20	0.00

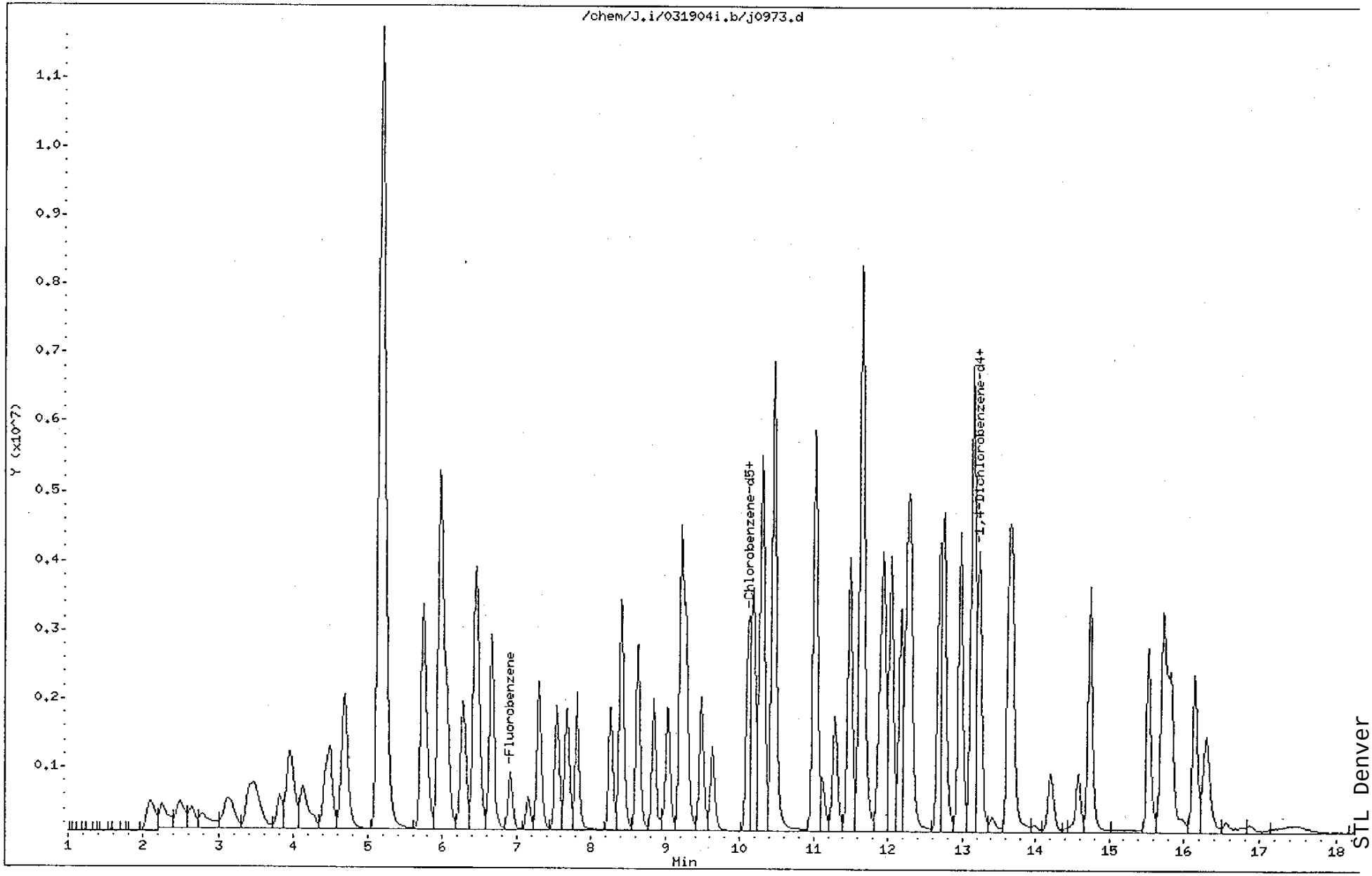
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/031904i.b/j0973.d
Date : 19-MAR-2004 18:48
Client ID: MAIN100
Sample Info: MAIN100,,022/040-04

Column phase: DB624

Instrument: J.i

Operator: meierg
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/031904i.b/j0974.d
Lab Smp Id: MAIN200 Client Smp ID: MAIN200
Inj Date : 19-MAR-2004 19:13
Operator : meierg Inst ID: J.i
Smp Info : MAIN200,,022/040-04
Misc Info :
Comment :
Method : /chem/J.i/031904i.b/J5030-8260B-soil.m
Meth Date : 19-Mar-2004 21:48 meierg Quant Type: ISTD
Cal Date : 19-MAR-2004 19:13 Cal File: j0974.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

		QUANT SIG					AMOUNTS	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
*	56 Fluorobenzene	96	6.918	6.918	(1.000)	1547370	50.0000	
*	82 Chlorobenzene-d5	119	10.150	10.150	(1.000)	374448	50.0000	
*	107 1,4-Dichlorobenzene-d4	152	13.202	13.202	(1.000)	598709	50.0000	
M	1 1,2-Dichloroethene (total)	96				5167529	400.000	388.844
M	2 Xylene (total)	106				13406138	200.000	583.671
	3 dichlorodifluoromethane	85	2.494	2.494	(0.360)	3789712	200.000	198.694
	4 Chloromethane	50	2.656	2.656	(0.384)	1577802	200.000	190.849
	6 Vinyl Chloride	62	2.783	2.783	(0.402)	1529308	200.000	191.448
	8 Bromomethane	94	3.071	3.071	(0.444)	1771682	200.000	183.068
	9 Chloroethane	64	3.144	3.144	(0.454)	1050834	200.000	188.605
	11 Trichlorofluoromethane	101	3.469	3.469	(0.501)	6474449	200.000	191.055
	12 Ethanol	45	3.595	3.595	(0.520)	638672	10000.0	10535.6(A)
	16 Acrolein	56	3.812	3.812	(0.551)	2354018	2000.00	2077.86(A)
	17 1,1-Dichloroethene	96	3.938	3.938	(0.569)	2200787	200.000	198.124
	20 Acetone	43	3.956	3.956	(0.572)	2888887	800.000	720.232
	21 Iodomethane	142	4.119	4.119	(0.595)	4117550	200.000	197.108

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 Acetonitrile	41	4.263	4.263	(0.616)	799551	2000.00	2166.73(A)
26 Methylene Chloride	84	4.426	4.426	(0.640)	1938422	200.000	177.415
27 tert-Butyl alcohol	59	4.498	4.498	(0.650)	6043718	4000.00	4206.83(A)
28 Acrylonitrile	53	4.661	4.661	(0.674)	4135094	2000.00	2139.21(A)
30 trans-1,2-Dichloroethene	96	4.697	4.697	(0.679)	2541571	200.000	193.387
32 1,1-Dichloroethane	63	5.130	5.130	(0.742)	4363758	200.000	201.747(A)
34 Isopropyl ether	87	5.166	5.166	(0.747)	11425171	1000.00	1004.98(A)
35 Chloroprene	53	5.220	5.220	(0.755)	4679797	200.000	197.647
37 2-Butanone	43	5.726	5.726	(0.828)	4135937	800.000	839.896(A)
38 cis-1,2-Dichloroethene	96	5.744	5.744	(0.830)	2625958	200.000	195.457
39 2,2-Dichloropropane	77	5.744	5.744	(0.830)	4470058	200.000	188.819
41 Propionitrile	54	5.816	5.816	(0.841)	1746471	2000.00	2179.24(A)
42 Methacrylonitrile	41	5.961	5.961	(0.862)	12272902	2000.00	2146.60(A)
43 Bromochloromethane	128	5.997	5.997	(0.867)	1359208	200.000	200.504(A)
45 Chloroform	83	6.051	6.051	(0.875)	5616632	200.000	196.721
47 1,1,1-Trichloroethane	97	6.268	6.268	(0.906)	6414675	200.000	197.354
49 1,1-Dichloropropene	75	6.430	6.430	(0.930)	3732855	200.000	195.385
50 Carbon Tetrachloride	117	6.448	6.448	(0.932)	6030691	200.000	195.751
51 Isobutanol	41	6.484	6.484	(0.937)	1704424	4000.00	4346.88(A)
54 Benzene	78	6.647	6.647	(0.961)	6224332	200.000	198.833
53 1,2-Dichloroethane	62	6.665	6.665	(0.963)	4247230	200.000	202.100(A)
57 n-Butanol	56	7.171	7.171	(1.037)	1198748	4000.00	4334.86(A)
58 Trichloroethene	130	7.297	7.297	(1.055)	2644903	200.000	192.909
61 1,2-Dichloropropane	63	7.532	7.532	(1.089)	2245236	200.000	197.585
64 1,4-Dioxane	88	7.676	7.676	(1.110)	1093175	10000.0	10711.5(A)
63 Dibromomethane	93	7.658	7.658	(1.107)	2501306	200.000	199.205
65 Bromodichloromethane	83	7.803	7.803	(1.128)	5521461	200.000	199.438
68 cis-1,3-Dichloropropene	75	8.272	8.272	(1.196)	4043736	200.000	199.091
69 4-Methyl-2-pentanone	43	8.398	8.398	(0.827)	11249790	800.000	821.734(A)
71 Toluene	91	8.633	8.633	(0.851)	8442807	200.000	194.946
72 trans-1,3-Dichloropropene	75	8.832	8.832	(0.870)	4133681	200.000	196.477
74 1,1,2-Trichloroethane	97	9.049	9.049	(0.891)	2421620	200.000	189.340
76 Tetrachloroethene	164	9.211	9.211	(0.907)	2932889	200.000	193.000
75 1,3-Dichloropropane	76	9.229	9.229	(0.909)	3665600	200.000	197.935
77 2-Hexanone	43	9.283	9.283	(0.915)	8365794	800.000	836.664(A)
79 Dibromochloromethane	129	9.482	9.482	(0.934)	4335652	200.000	197.252
80 1,2-Dibromoethane	107	9.626	9.626	(0.948)	3769556	200.000	199.505
81 1-Chlorohexane	91	10.114	10.114	(0.996)	4173865	200.000	189.801
83 Chlorobenzene	112	10.186	10.186	(1.004)	6469803	200.000	195.898
84 1,1,1,2-Tetrachloroethane	131	10.295	10.295	(1.014)	3268146	200.000	194.755
85 Ethylbenzene	106	10.313	10.313	(1.016)	3320816	200.000	191.268
86 m and p-Xylene	106	10.457	10.457	(1.030)	9218917	400.000	391.168
87 o-Xylene	106	10.999	10.999	(1.084)	4187221	200.000	192.503
88 Styrene	104	11.017	11.017	(1.085)	7365278	200.000	195.814
89 Bromoform	173	11.288	11.288	(1.112)	4007143	200.000	201.094(A)
90 isopropyl benzene	105	11.486	11.486	(1.132)	13959233	200.000	194.457
92 Cyclohexanone	55	11.649	11.649	(1.148)	17878845	8000.00	8280.49(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
94 1,1,2,2-Tetrachloroethane	83	11.884	11.884	(0.900)	3533391	200.000	208.419(A)
95 Bromobenzene	156	11.920	11.920	(0.903)	3234046	200.000	202.221(A)
96 1,2,3-Trichloropropane	110	11.956	11.956	(0.906)	1310284	200.000	200.256(A)
98 n-Propylbenzene	120	12.028	12.028	(0.911)	2755928	200.000	196.999
99 2-Chlorotoluene	126	12.173	12.173	(0.922)	2203543	200.000	194.468
100 1,3,5-Trimethylbenzene	105	12.263	12.263	(0.929)	11460605	200.000	199.480
101 4-Chlorotoluene	126	12.317	12.317	(0.933)	2365054	200.000	197.863
102 tert-Butylbenzene	119	12.696	12.696	(0.962)	10669876	200.000	197.754
103 1,2,4-Trimethylbenzene	105	12.750	12.750	(0.966)	10854228	200.000	197.210
104 sec-Butylbenzene	105	12.967	12.967	(0.982)	15202990	200.000	197.962
105 m-Dichlorobenzene	146	13.130	13.130	(0.995)	4712291	200.000	199.333
106 4-Isopropyltoluene	119	13.148	13.148	(0.996)	11629400	200.000	195.273
108 p-dichlorobenzene	146	13.238	13.238	(1.003)	5327758	200.000	198.880
110 n-Butylbenzene	91	13.635	13.635	(1.033)	11001970	200.000	197.775
111 o-Dichlorobenzene	146	13.689	13.689	(1.037)	4288095	200.000	196.490
112 1,2-Dibromo-3-chloropropane	157	14.592	14.592	(1.105)	943239	200.000	207.831(A)
113 1,2,4-Trichlorobenzene	180	15.531	15.531	(1.176)	4307612	200.000	197.952
114 Hexachlorobutadiene	225	15.730	15.730	(1.191)	3026530	200.000	191.617
115 Napthalene	128	15.838	15.838	(1.200)	5419739	200.000	213.751(A)
116 1,2,3-Trichlorobenzene	180	16.145	16.145	(1.223)	3730409	200.000	199.139

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j0974.d
Lab Smp Id: MAIN200
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/J.i/031904i.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 03/19/4
Calibration Time: 2053
Client Smp ID: MAIN200
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1450376	725188	2900752	1547370	6.69
82 Chlorobenzene-d5	340569	170284	681138	374448	9.95
107 1,4-Dichlorobenze	540811	270406	1081622	598709	10.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.94	6.44	7.44	6.92	-0.25
82 Chlorobenzene-d5	10.17	9.67	10.67	10.15	-0.17
107 1,4-Dichlorobenze	13.20	12.70	13.70	13.20	0.00

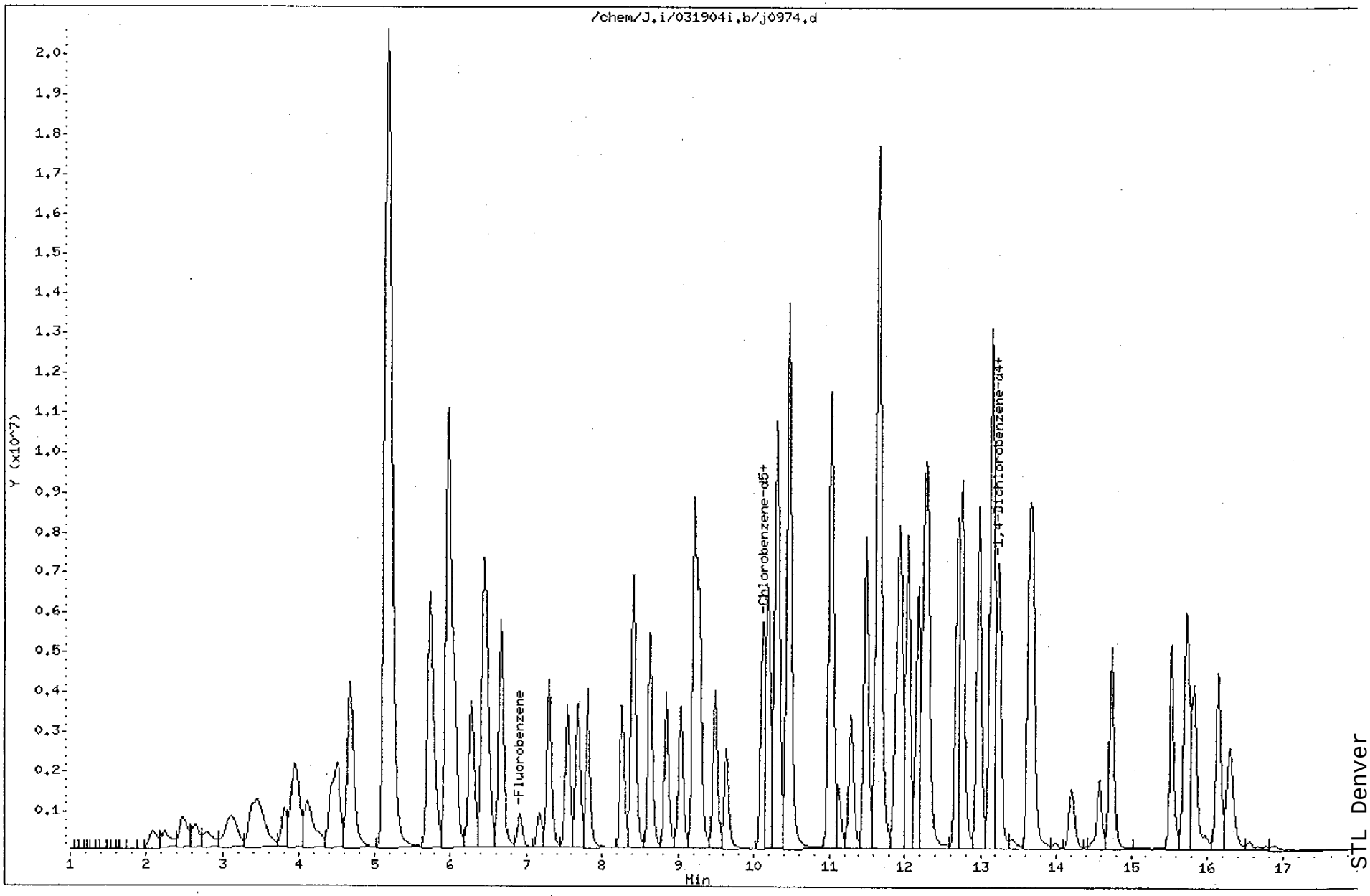
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/031904i.b/j0974.d
Date : 19-MAR-2004 19:13
Client ID: MAIN200
Sample Info: MAIN200,,022/040-04

Column phase: DB624

Instrument: J.i

Operator: meierg
Column diameter: 0.53



INITIAL CALIBRATION VERIFICATION

Instrument ID: J.i
Lab File ID: j0981.d
Analysis Type: SOIL

Injection Date: 19-MAR-2004 22:08
Lab Sample ID: ICV050
Method File: /chem/J.i/031904i.b/J5030-8260B-soil.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
85	1,2-Dichloroethene (total)	100.0000	105.6425	5.6	25.0
83	Xylene (total)	150.0000	161.6823	7.8	25.0
64	dichlorodifluoromethane	50.0000	47.2071	5.6	25.0
1	Chloromethane	50.0000	53.9475	7.9	25.0
4	Vinyl Chloride	50.0000	60.9393	21.9	25.0
2	Bromomethane	50.0000	60.8264	21.7	25.0
5	Chloroethane	50.0000	58.1570	16.3	25.0
11	Trichlorofluoromethane	50.0000	57.2495	14.5	25.0
12	1,1-Dichloroethene	50.0000	56.7540	13.5	25.0
7	Acetone	100.0000	85.8554	14.1	25.0
6	Methylene Chloride	50.0000	53.5502	7.1	25.0
0	trans-1,2-Dichloroethene	50.0000	54.3870	8.8	25.0
15	1,1-Dichloroethane	50.0000	55.4676	10.9	25.0
20	2-Butanone	100.0000	104.4528	4.4	25.0
0	cis-1,2-Dichloroethene	50.0000	51.2555	2.5	25.0
93	2,2-Dichloropropane	50.0000	53.7356	7.5	25.0
13	Bromochloromethane	50.0000	52.7515	5.5	25.0
17	Chloroform	50.0000	52.9885	6.0	25.0
22	1,1,1-Trichloroethane	50.0000	52.6502	5.3	25.0
94	1,1-Dichloropropene	50.0000	54.6160	9.2	25.0
23	Carbon Tetrachloride	50.0000	53.2593	6.5	25.0
30	Benzene	50.0000	54.2074	8.4	25.0
16	1,2-Dichloroethane	50.0000	52.4217	4.8	25.0
90	Fluorobenzene	50.0000	50.0000	0.0	25.0
29	Trichloroethene	50.0000	53.0716	6.1	25.0
26	1,2-Dichloropropane	50.0000	51.7908	3.6	25.0
34	Dibromomethane	50.0000	51.5416	3.1	25.0
25	Bromodichloromethane	50.0000	50.8626	1.7	25.0
28	cis-1,3-Dichloropropene	50.0000	53.5523	7.1	25.0
38	4-Methyl-2-pentanone	100.0000	105.4708	5.5	25.0
45	Toluene	50.0000	54.9068	9.8	25.0
31	trans-1,3-Dichloropropene	50.0000	53.5720	7.1	25.0
32	1,1,2-Trichloroethane	50.0000	50.5341	1.1	25.0
42	Tetrachloroethene	50.0000	54.2464	8.5	25.0
109	1,3-Dichloropropane	50.0000	54.1571	8.3	25.0
43	2-Hexanone	100.0000	100.0162	0.2	25.0
36	Dibromochloromethane	50.0000	51.2159	2.4	25.0
58	1,2-Dibromoethane	50.0000	53.4755	7.0	25.0
92	1-Chlorohexane	50.0000	53.9328	7.9	25.0

INITIAL CALIBRATION VERIFICATION

Instrument ID: J.i
Lab File ID: j0981.d
Analysis Type: SOIL

Injection Date: 19-MAR-2004 22:08
Lab Sample ID: ICV050
Method File: /chem/J.i/031904i.b/J5030-8260B-soil.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
39	Chlorobenzene-d5	50.0000	50.0000	0.0	25.0
46	Chlorobenzene	50.0000	53.8875	7.8	25.0
74	1,1,1,2-Tetrachloroethane	50.0000	52.7694	5.5	25.0
47	Ethylbenzene	50.0000	54.1614	8.3	25.0
0	m and p-Xylene	100.0000	108.3950	8.4	25.0
0	o-Xylene	50.0000	53.2874	6.6	25.0
49	Styrene	50.0000	54.3211	8.6	25.0
37	Bromoform	50.0000	50.9863	2.0	25.0
79	isopropyl benzene	50.0000	51.4433	2.9	25.0
40	1,1,2,2-Tetrachloroethane	50.0000	52.2121	4.4	25.0
95	Bromobenzene	50.0000	53.5300	7.1	25.0
50	1,2,3-Trichloropropane	50.0000	52.2261	4.5	25.0
96	n-Propylbenzene	50.0000	54.3398	8.7	25.0
97	2-Chlorotoluene	50.0000	51.2025	2.4	25.0
98	1,3,5-Trimethylbenzene	50.0000	53.3301	6.7	25.0
99	4-Chlorotoluene	50.0000	53.8390	7.7	25.0
100	tert-Butylbenzene	50.0000	53.0312	6.1	25.0
101	1,2,4-Trimethylbenzene	50.0000	53.0025	6.0	25.0
102	sec-Butylbenzene	50.0000	54.2974	8.6	25.0
61	m-Dichlorobenzene	50.0000	51.2699	2.5	25.0
103	4-Isopropyltoluene	50.0000	51.5866	3.2	25.0
91	1,4-Dichlorobenzene-d4	50.0000	50.0000	0.0	25.0
62	p-dichlorobenzene	50.0000	54.4422	8.9	25.0
104	n-Butylbenzene	50.0000	53.8631	7.7	25.0
63	o-Dichlorobenzene	50.0000	52.8488	5.7	25.0
75	1,2-Dibromo-3-chloropropane	50.0000	49.6642	0.7	25.0
105	1,2,4-Trichlorobenzene	50.0000	49.8510	0.3	25.0
106	Hexachlorobutadiene	50.0000	52.4996	5.0	25.0
107	Napthalene	50.0000	50.0325	0.1	25.0
108	1,2,3-Trichlorobenzene	50.0000	49.4634	1.1	25.0

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VOLATILE REPORT SW-846

Data file : /chem/J.i/031904i.b/j0981.d
Lab Smp Id: ICV050 Client Smp ID: ICV050
Inj Date : 19-MAR-2004 22:08
Operator : meierg Inst ID: J.i
Smp Info : ICV050,,
Misc Info :
Comment :
Method : /chem/J.i/031904i.b/J5030-8260B-soil.m
Meth Date : 19-Mar-2004 21:48 meierg Quant Type: ISTD
Cal Date : 19-MAR-2004 21:43 Cal File: j0980.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ssource.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)	
*	56 Fluorobenzene	96	6.919	6.918	(1.000)	1495593	50.0000		
*	82 Chlorobenzene-d5	119	10.151	10.150	(1.000)	342380	50.0000		
*	107 1,4-Dichlorobenzene-d4	152	13.185	13.202	(1.000)	566751	50.0000		(Q)
M	1 1,2-Dichloroethene (total)	96				1356433	105.643	105.642	
M	2 Xylene (total)	106				3395652	161.682	161.682	
	3 dichlorodifluoromethane	85	2.494	2.494	(0.361)	870256	47.2071	47.2071	
	4 Chloromethane	50	2.639	2.656	(0.381)	431075	53.9475	53.9475	
	6 Vinyl Chloride	62	2.783	2.783	(0.402)	470501	60.9393	60.9393	
	8 Bromomethane	94	3.108	3.071	(0.449)	568964	60.8264	60.8264	
	9 Chloroethane	64	3.199	3.144	(0.462)	313186	58.1570	58.1570	
	11 Trichlorofluoromethane	101	3.397	3.469	(0.491)	1875146	57.2495	57.2495	
	17 1,1-Dichloroethene	96	3.939	3.938	(0.569)	609335	56.7540	56.7540	
	20 Acetone	43	3.957	3.956	(0.572)	315885	85.8554	85.8554	
	26 Methylene Chloride	84	4.409	4.426	(0.637)	521604	53.5502	53.5502	
	30 trans-1,2-Dichloroethene	96	4.698	4.697	(0.679)	690860	54.3870	54.3870	
	32 1,1-Dichloroethane	63	5.131	5.130	(0.742)	1159607	55.4676	55.4676	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
37	2-Butanone	43	5.727	5.726	(0.828)	497150	104.453	104.453
38	cis-1,2-Dichloroethene	96	5.727	5.744	(0.828)	665573	51.2555	51.2555
39	2,2-Dichloropropane	77	5.745	5.744	(0.830)	1229559	53.7356	53.7356
43	Bromochloromethane	128	5.998	5.997	(0.867)	345634	52.7515	52.7515
45	Chloroform	83	6.052	6.051	(0.875)	1462267	52.9885	52.9885
47	1,1,1-Trichloroethane	97	6.269	6.268	(0.906)	1654051	52.6502	52.6502
49	1,1-Dichloropropene	75	6.431	6.430	(0.930)	1008528	54.6160	54.6160
50	Carbon Tetrachloride	117	6.449	6.448	(0.932)	1585904	53.2593	53.2593
54	Benzene	78	6.648	6.647	(0.961)	1640146	54.2074	54.2074
53	1,2-Dichloroethane	62	6.648	6.665	(0.961)	1064803	52.4217	52.4217
58	Trichloroethene	130	7.298	7.297	(1.055)	703295	53.0716	53.0716
61	1,2-Dichloropropane	63	7.533	7.532	(1.089)	568826	51.7908	51.7908
63	Dibromomethane	93	7.659	7.658	(1.107)	625524	51.5416	51.5416
65	Bromodichloromethane	83	7.803	7.803	(1.128)	1361019	50.8626	50.8626
68	cis-1,3-Dichloropropene	75	8.255	8.272	(1.193)	1051303	53.5523	53.5523
69	4-Methyl-2-pentanone	43	8.399	8.398	(0.827)	1320268	105.471	105.471
71	Toluene	91	8.616	8.633	(0.849)	2174281	54.9068	54.9068
72	trans-1,3-Dichloropropene	75	8.833	8.832	(0.870)	1030577	53.5720	53.5720
74	1,1,2-Trichloroethane	97	9.031	9.049	(0.890)	590970	50.5341	50.5341
76	Tetrachloroethene	164	9.212	9.211	(0.907)	753745	54.2464	54.2464
75	1,3-Dichloropropane	76	9.212	9.229	(0.907)	917054	54.1571	54.1571
77	2-Hexanone	43	9.266	9.283	(0.913)	914415	100.016	100.016
79	Dibromochloromethane	129	9.465	9.482	(0.932)	1029331	51.2159	51.2159
80	1,2-Dibromoethane	107	9.609	9.626	(0.947)	923863	53.4755	53.4754
81	1-Chlorohexane	91	10.115	10.114	(0.996)	1084453	53.9328	53.9328
83	Chlorobenzene	112	10.187	10.186	(1.004)	1627291	53.8875	53.8875
84	1,1,1,2-Tetrachloroethane	131	10.277	10.295	(1.012)	809676	52.7694	52.7694
85	Ethylbenzene	106	10.295	10.313	(1.014)	859825	54.1614	54.1614
86	m and p-Xylene	106	10.440	10.457	(1.028)	2335839	108.395	108.395
87	o-Xylene	106	10.982	10.999	(1.082)	1059813	53.2874	53.2874
88	Styrene	104	11.000	11.017	(1.084)	1868228	54.3211	54.3211
89	Bromoform	173	11.289	11.288	(1.112)	928978	50.9863	50.9863
90	isopropyl benzene	105	11.469	11.486	(1.130)	3376621	51.4433	51.4433
94	1,1,2,2-Tetrachloroethane	83	11.866	11.884	(0.900)	837917	52.2121	52.2121
95	Bromobenzene	156	11.921	11.920	(0.904)	810390	53.5300	53.5300(Q)
96	1,2,3-Trichloropropane	110	11.939	11.956	(0.905)	323477	52.2261	52.2261(Q)
98	n-Propylbenzene	120	12.029	12.028	(0.912)	719612	54.3398	54.3398
99	2-Chlorotoluene	126	12.155	12.173	(0.922)	549214	51.2025	51.2025
100	1,3,5-Trimethylbenzene	105	12.246	12.263	(0.929)	2900397	53.3301	53.3301
101	4-Chlorotoluene	126	12.300	12.317	(0.933)	609186	53.8390	53.8390
102	tert-Butylbenzene	119	12.679	12.696	(0.962)	2708588	53.0312	53.0312
103	1,2,4-Trimethylbenzene	105	12.733	12.750	(0.966)	2761480	53.0025	53.0025
104	sec-Butylbenzene	105	12.950	12.967	(0.982)	3947321	54.2974	54.2974
105	m-Dichlorobenzene	146	13.112	13.130	(0.995)	1147340	51.2699	51.2699
106	4-Isopropyltoluene	119	13.130	13.148	(0.996)	2908230	51.5866	51.5866
108	p-dichlorobenzene	146	13.221	13.238	(1.003)	1380593	54.4422	54.4422
110	n-Butylbenzene	91	13.618	13.635	(1.033)	2836392	53.8631	53.8631

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
111 o-Dichlorobenzene	146	13.672	13.689	(1.037)	1091784	52.8488	52.8488
112 1,2-Dibromo-3-chloropropane	157	14.575	14.592	(1.105)	213369	49.6642	49.6642
113 1,2,4-Trichlorobenzene	180	15.514	15.531	(1.177)	1026899	49.8510	49.8510
114 Hexachlorobutadiene	225	15.713	15.730	(1.192)	784954	52.4996	52.4996
115 Napthalene	128	15.821	15.838	(1.200)	1200878	50.0325	50.0325
116 1,2,3-Trichlorobenzene	180	16.128	16.145	(1.223)	877122	49.4634	49.4634

QC Flag Legend

Q - Qualifier signal failed the ratio test.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j0981.d
Lab Smp Id: ICV050
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/J.i/031904i.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 03/19/4
Calibration Time: 2053
Client Smp ID: ICV050
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1450376	725188	2900752	1495593	3.12
82 Chlorobenzene-d5	340569	170284	681138	342380	0.53
107 1,4-Dichlorobenze	540811	270406	1081622	566751	4.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.94	6.44	7.44	6.92	-0.24
82 Chlorobenzene-d5	10.17	9.67	10.67	10.15	-0.16
107 1,4-Dichlorobenze	13.20	12.70	13.70	13.18	-0.13

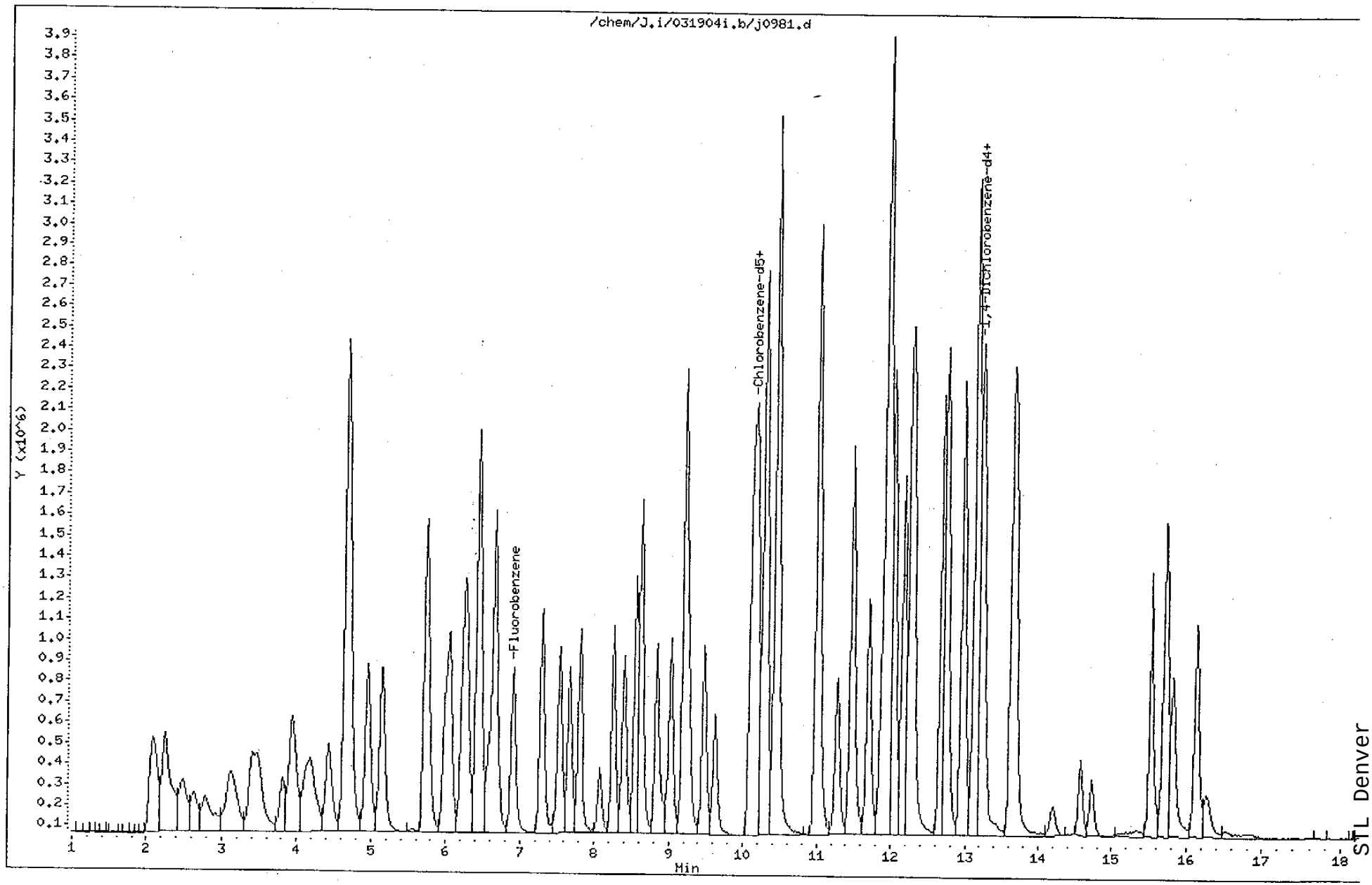
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/031904i.b/j0981.d
Date : 19-MAR-2004 22:08
Client ID: ICV050
Sample Info: ICV050,,

Column phase: DB624

Instrument: J.i

Operator: meierg
Column diameter: 0.53



GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date: 9 4-14-04 Supp. II

Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____

☐ 524.2 ☐ 624 ☒ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☐ 20mL ☒ 5035 Low ☐ 5035 High ☒ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Initial Calibration					
1. BFB/DFTPP meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Sufficient number of calibration points used?	✓			✓	
4. Reasons for removal of points documented?	✓			✓	Some pts below RL removed
5. %RSD or correlation coefficient within method limits?	✓			✓	
6. If RRF used for ICAL, were all compounds within 15% RSD?	✓			✓	List all exceptions below (cpd & RSD)
7. Response factors meet criteria?	✓			✓	
8. Isomeric pairs checked for correct peak assignment?	✓			✓	
9. Data checked for detector saturation?	✓			✓	
10. Standards traceability properly documented?	✓			✓	
11. Manual integrations documented and checked?	✓			✓	
12. 2nd source ICV recovery 75-125% for DoD projects, 65-135% (±55% of expected for poor performers) for non-DoD?			NA	NA	

1st Level Reviewer: DA Date: 4-14-04

2nd Level Reviewer: MM Date: 4/14/04

GC/MS Volatile Analysis

STL, Denver

Instrument 1
5972 MS

Column	Phase	Inj. Temp	Init. Time	Ramp Rate	Final Temp	Flow cc/min	Press. Psi	Type	Vac. Range	Source Temp	Mass Range
75M	DB-624	200C	2 min.	5C/min	65C	18	20	MS	10^-6	~175C	35-300/2^2
			0 min.	12C/min	155C						
			0 min.	25C/min	210C						

Comments

DEN-MS-0010 (8260B/624/524)
(Circle as appropriate)

Target Batch (Directory): 041404.b

QuantIMS Batch:

Lot #	Sample	W.O.#	Purge vol (ml)	Sample amt (ml/g)	Date 2004	Initials	File Number	IS OK	SS OK	DIL OK	24 hr 12 hr	pH	MSVOA# Comments	A
BFB			1ul Direct Inj		4-14	DA	1667.d						#073-04	
MAIN050			5	6.25ml			68	—	NA	—	—		#022/067-04	
SUPP005				0.125			69						#011/052-04	
010				1.25			70						IS #053-04	
020				2.5			71		good				SS #031-04	
050				6.25			72							
100				12.5			73							
200				25			74							
LCS (full)				6.25ml			75	—	—	—	—		#029/061/068-04	
LCSD				12.5			76	—	—	—	—		#044-04	
VBLK				5.0			77	—	—	—	—			

Revised 6/3/03

public/QA/forms/VOA Logbookr3.xls

Report Date: 14-Apr-2004 13:51

Calibration History

Method : /chem/J.i/041404.b/J5030-8260B-soil.m
Start Cal Date: 19-MAR-2004 17:08
End Cal Date : 14-APR-2004 12:39

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
14-APR-2004 10:37	2-supp	/chem/J.i/041404.b/j1669.d
19-MAR-2004 17:08	1-main	/chem/J.i/031904i.b/j0969.d
Cal Level: 2 , Cal Amount: 10.0000		
14-APR-2004 11:01	2-supp	/chem/J.i/041404.b/j1670.d
19-MAR-2004 17:33	1-main	/chem/J.i/031904i.b/j0970.d
Cal Level: 3 , Cal Amount: 20.0000		
14-APR-2004 11:26	2-supp	/chem/J.i/041404.b/j1671.d
19-MAR-2004 17:58	1-main	/chem/J.i/031904i.b/j0971.d
Cal Level: 4 , Cal Amount: 50.0000		
14-APR-2004 11:50	2-supp	/chem/J.i/041404.b/j1672.d
19-MAR-2004 18:23	1-main	/chem/J.i/031904i.b/j0972.d
Cal Level: 5 , Cal Amount: 100.000		
14-APR-2004 12:14	2-supp	/chem/J.i/041404.b/j1673.d
19-MAR-2004 18:48	1-main	/chem/J.i/031904i.b/j0973.d
Cal Level: 6 , Cal Amount: 200.000		
14-APR-2004 12:39	2-supp	/chem/J.i/041404.b/j1674.d
19-MAR-2004 19:13	1-main	/chem/J.i/031904i.b/j0974.d

Continuing Calibration

14-APR-2004 11:50	2-supp	/chem/J.i/041404.b/j1672.d
14-APR-2004 10:01	1-main	/chem/J.i/041404.b/j1668.d

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 14-APR-2004 12:39
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/041404.b/J5030-8260B-soil.m
Cal Date : 14-Apr-2004 13:53 appelhad
Curve Type : Average

Calibration File Names:
Level 1: /chem/J.i/041404.b/j1669.d
Level 2: /chem/J.i/041404.b/j1670.d
Level 3: /chem/J.i/041404.b/j1671.d
Level 4: /chem/J.i/041404.b/j1672.d
Level 5: /chem/J.i/041404.b/j1673.d
Level 6: /chem/J.i/041404.b/j1674.d

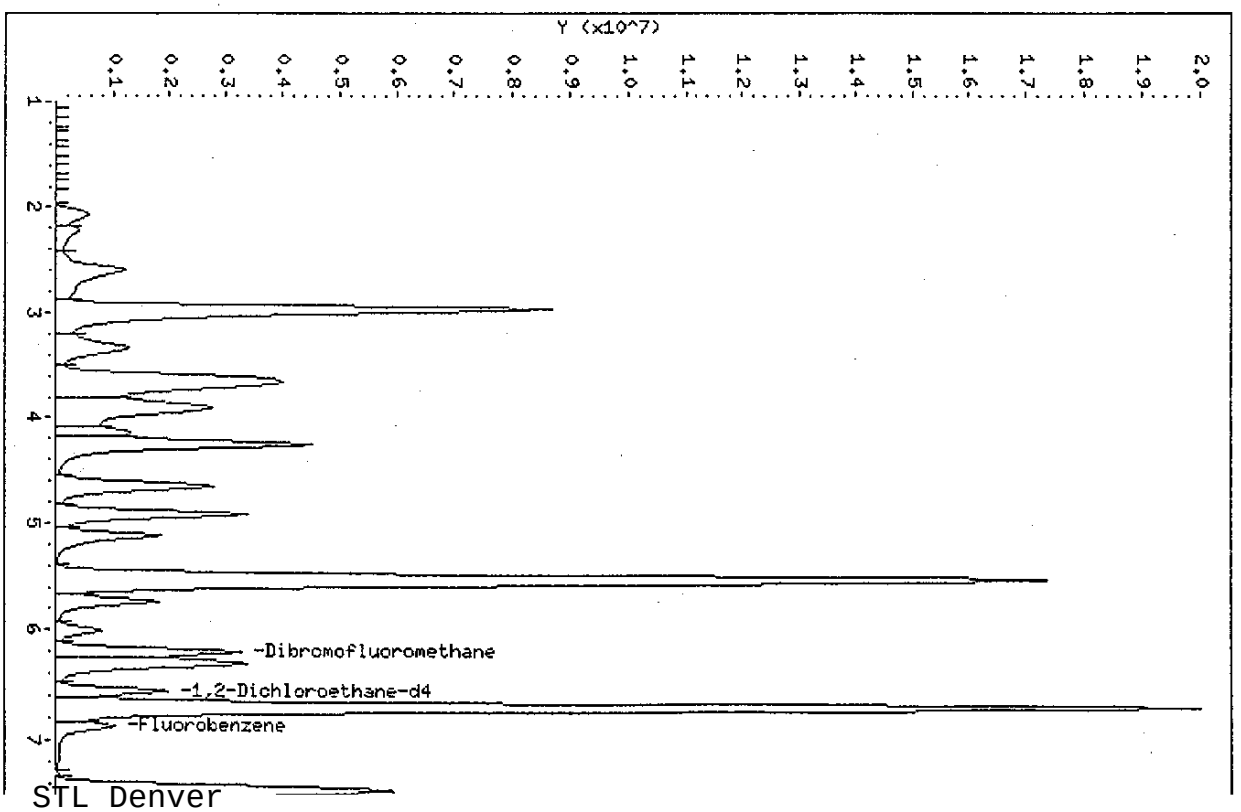
Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
5 Dichlorotetraflouroethane	0.66266	0.47387	0.68189	0.65831	0.64994	0.64483	0.62858	12.228
7 Ethylene Oxide	0.04339	0.04319	0.04627	0.03936	0.03807	0.03920	0.04158	7.662
10 Dichlorofluoromethane	+++++	0.72983	0.71665	0.68312	0.70147	0.68012	0.70224	3.041
13 1,2-dichloro-1,1,2-trifluoro	0.54447	0.55999	0.53509	0.51586	0.52289	0.50447	0.53046	3.804
14 Ethyl Ether	+++++	0.27527	0.27850	0.26599	0.26759	0.25288	0.26805	3.711
15 2,2-dichloro-1,1,1-trofluoro	0.86395	0.87227	0.83931	0.78604	0.79655	0.76416	0.82038	5.412
18 2-Propanol	0.02061	0.02016	0.02131	0.01947	0.02053	0.02119	0.02054	3.311
19 Trichlorotrifluoroethane	+++++	0.56294	0.53697	0.50526	0.51875	0.50159	0.52510	4.817
22 Carbon Disulfide	1.14103	1.15034	1.09613	1.04076	1.06403	1.02999	1.08705	4.678
24 Allyl Chloride	+++++	0.58263	0.53515	0.51899	0.52086	0.50283	0.53209	5.729
25 Methyl Acetate	0.24084	0.24779	0.25477	0.23618	0.24952	0.24785	0.24616	2.687
29 Methyl t-butyl ether	+++++	1.15829	1.16209	1.08626	1.11544	1.08180	1.12078	3.413
31 Hexane	2.66514	2.90492	2.73789	2.58238	2.59137	2.58686	2.67809	4.729
33 Vinyl acetate	0.62968	0.66160	0.67245	0.64221	0.54126	0.50655	0.60896	11.236
36 ETBE	1.52352	1.59688	1.56219	1.47880	1.52574	1.31466	1.50030	6.617
40 Ethyl Acetate	0.34898	0.36071	0.38361	0.35199	0.37296	0.36523	0.36391	3.576
44 Tetrahydrofuran	+++++	0.08109	0.09061	0.07765	0.08133	0.08132	0.08240	5.882
48 Cyclohexane	0.64697	0.66790	0.61957	0.59125	0.60301	0.58449	0.61886	5.305
55 TAME	1.18442	1.23488	1.20925	1.15613	1.20084	1.11151	1.18284	3.692
59 2-Pentanone	0.30542	0.31892	0.33735	0.31133	0.33638	0.33328	0.32378	4.254
60 Methyl Cyclohexane	0.69992	0.71434	0.67117	0.64218	0.65507	0.63806	0.67012	4.662
62 Methyl Methacrylate	0.13535	0.12943	0.13491	0.12783	0.13385	0.13187	0.13221	2.315
66 2-nitropropane	+++++	0.55815	0.60878	0.58202	0.59657	0.61255	0.59161	3.751
67 2-Chloroethyl vinyl ether	+++++	0.15982	0.16443	0.16214	0.16902	0.17220	0.16552	3.050
73 Ethyl methacrylate	2.43608	2.60926	2.68681	2.48377	2.55061	2.62965	2.56603	3.672

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 19-MAR-2004 17:08
End Cal Date : 14-APR-2004 12:39
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : HP RTE
Method file : /chem/J.i/041404.b/J5030-8260B-soil.m
Cal Date : 14-Apr-2004 13:53 appelhad
Curve Type : Average

Compound	5.000 Level 1	10.000 Level 2	20.000 Level 3	50.000 Level 4	100.000 Level 5	200.000 Level 6	RRF	% RSD
78 Tetrahydrothiophene	0.72635	0.71652	0.79902	0.71420	0.74477	0.75541	0.74271	4.301
91 cis-1,4-Dichloro-2-butene	0.69348	0.63132	0.65827	0.61661	0.63886	0.67460	0.65219	4.403
97 t-1,4-Dichloro-2-butene	0.40970	0.42679	0.39647	0.39339	0.39423	0.39412	0.40245	3.334
109 1,2,3-Trimethylbenzene	4.29722	4.39801	4.35945	4.25414	4.22029	4.23754	4.29444	1.657
$ 46 Dibromofluoromethane	0.71309	0.75778	0.73112	0.70470	0.71022	0.69547	0.71873	3.124
$ 52 1,2-Dichloroethane-d4	0.54464	0.54740	0.51635	0.50116	0.50384	0.49731	0.51845	4.302
$ 70 Toluene-d8	6.13021	5.84074	5.74232	5.68467	5.56960	5.69636	5.77732	3.357
$ 93 Bromofluorobenzene	4.43493	4.09963	4.08187	3.87315	3.87438	3.98324	4.05787	5.144



Data File: /chem/J.i/041404.b/j1667.d

Date : 14-APR-2004 09:47

Client ID: BFB

Instrument: J.i

Sample Info: BFB,, #073-04

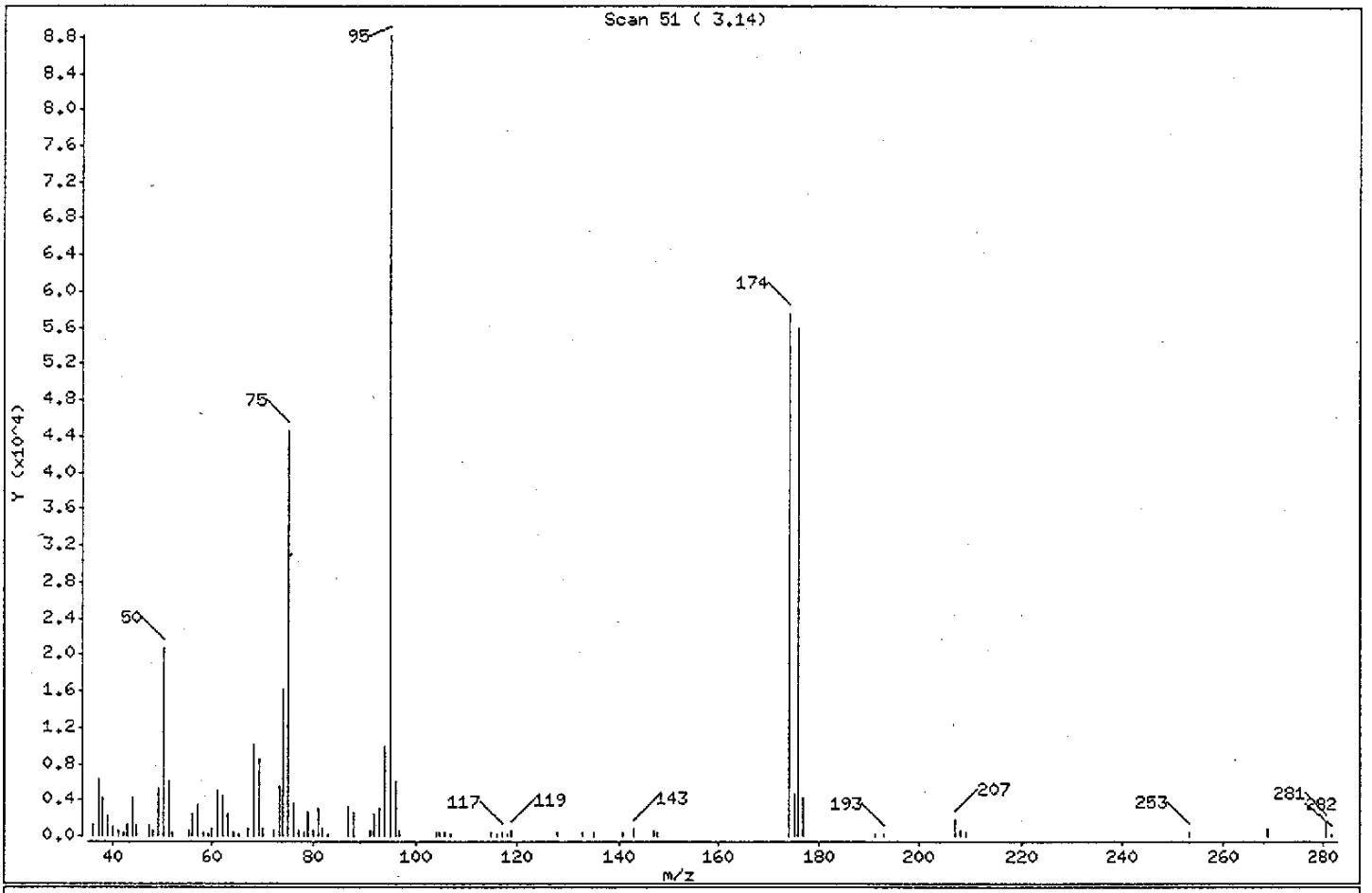
Volume Injected (uL): 1.0

Operator: appelhansd

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.51
75	30.00 - 60.00% of mass 95	50.63
96	5.00 - 9.00% of mass 95	6.86
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	65.21
175	5.00 - 9.00% of mass 174	5.27 (8.08)
176	95.00 - 101.00% of mass 174	63.34 (97.13)
177	5.00 - 9.00% of mass 176	4.91 (7.75)

Data File: /chem/J.i/041404.b/j1667.d

Date : 14-APR-2004 09:47

Client ID: BFB

Instrument: J.i

Sample Info: BFB,, #073-04

Volume Injected (uL): 1.0

Operator: appelhansd

Column phase: DB624

Column diameter: 0.53

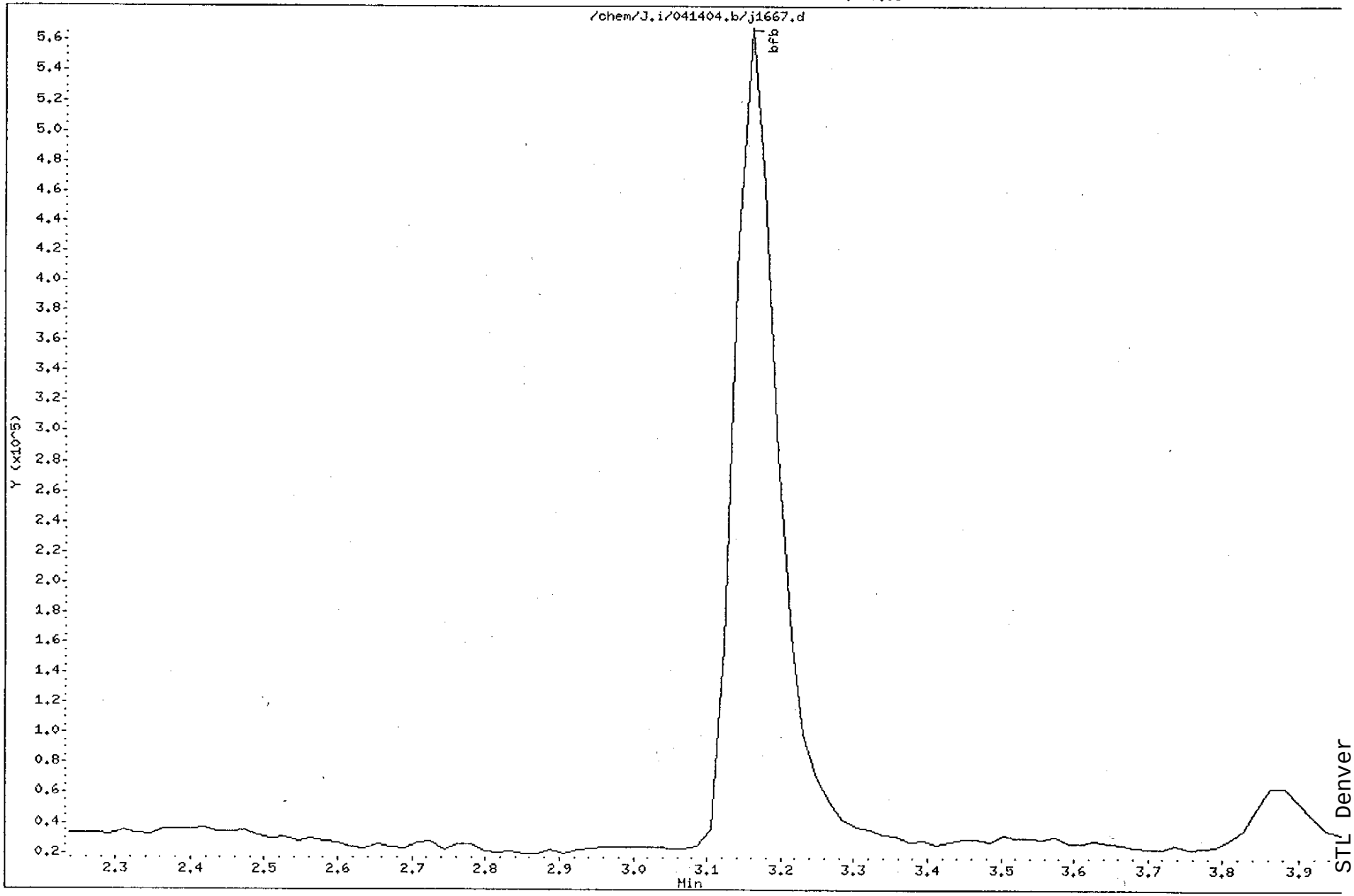
Data File: j1667.d
Spectrum: Scan 51 (3.14)
Location of Maximum: 95.05
Number of points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1301	60.00	810	82.85	257	135.20	402
37.00	6374	61.00	5046	86.95	3147	140.85	499
38.00	4159	62.00	4445	88.05	2537	142.95	733
39.10	2147	63.00	2430	91.05	520	147.05	672
40.00	1008	64.00	325	91.95	2358	147.85	317
41.10	613	65.10	296	92.95	3131	173.95	57488
42.10	327	67.20	769	94.05	9869	174.90	4644
43.00	1267	68.00	10150	95.05	88160	175.90	55840
44.00	4273	69.05	8594	96.05	6049	176.90	4326
44.90	1299	70.05	710	96.95	512	191.10	213
47.10	1156	72.15	527	104.05	390	192.90	286
47.90	582	73.05	5436	104.90	345	207.10	1882
49.00	5197	74.05	16126	105.90	347	208.10	665
50.00	20728	75.05	44632	107.10	205	209.10	388
51.10	6033	76.05	3577	114.90	343	253.10	332
52.00	366	76.95	657	116.10	215	269.10	720
55.10	635	78.15	491	117.00	504	281.05	1325
56.00	2367	78.85	2654	118.00	203	282.05	261
57.10	3374	79.95	606	118.80	597		
58.10	314	80.95	2952	128.00	306		
59.30	231	81.95	714	133.00	307		

Data File: /chem/J.i/041404.b/j1667.d
Date : 14-APR-2004 09:47
Client ID: BFB
Sample Info: BFB,, #073-04
Volume Injected (uL): 1.0
Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/041404.b/j1669.d
Lab Smp Id: SUPP005 Client Smp ID: SUPP005
Inj Date : 14-APR-2004 10:37
Operator : appelhansd Inst ID: J.i
Smp Info : SUPP005,, #011/052-04
Misc Info :
Comment :
Method : /chem/J.i/041404.b/J5030-8260B-soil.m
Meth Date : 14-Apr-2004 13:52 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	6.900	6.882	(1.000)	1795668	50.0000	
* 82 Chlorobenzene-d5	119	10.133	10.133	(1.000)	396365	50.0000	
* 107 1,4-Dichlorobenzene-d4	152	13.184	13.166	(1.000)	654802	50.0000	
$ 46 Dibromofluoromethane	111	6.196	6.196	(0.898)	128048	5.00000	4.96078(a)
$ 52 1,2-Dichloroethane-d4	65	6.557	6.557	(0.950)	97799	5.00000	5.25256
$ 70 Toluene-d8	98	8.525	8.525	(0.841)	242980	5.00000	5.30541
$ 93 Bromofluorobenzene	95	11.685	11.667	(1.153)	175785	5.00000	5.46460
5 Dichlorotetraflouroethane	85	2.620	2.602	(0.380)	118991	5.00000	5.27102
7 Ethylene Oxide	44	3.000	2.964	(0.435)	974033	625.000	652.273
10 Dichlorofluoromethane	67	3.361	3.325	(0.487)	119217	5.00000	4.72714(a)
13 1,2-dichloro-1,1,2-trifluoro	117	3.650	3.632	(0.529)	97769	5.00000	5.13206
14 Ethyl Ether	59	3.632	3.614	(0.526)	47576	5.00000	4.94224(a)
15 2,2-dichloro-1,1,1-trofluoro	83	3.722	3.686	(0.539)	155137	5.00000	5.26556
18 2-Propanol	45	4.029	4.083	(0.584)	74008	100.000	100.307
19 Trichlorotrifluoroethane	151	3.939	3.903	(0.571)	92596	5.00000	4.91014(a)
22 Carbon Disulfide	76	4.155	4.137	(0.602)	204892	5.00000	5.24832

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
24	Allyl Chloride	41	4.264	4.246	(0.618)	99482	5.00000	5.20595(a)
25	Methyl Acetate	43	4.246	4.264	(0.615)	216238	25.0000	24.4602
29	Methyl t-butyl ether	73	4.661	4.661	(0.675)	203637	5.00000	5.05920(a)
31	Hexane	57	4.932	4.914	(0.487)	105637	5.00000	4.97582(a)
33	Vinyl acetate	43	5.112	5.112	(0.741)	226140	10.0000	10.3403
36	ETBE	59	5.510	5.510	(0.798)	1367869	25.0000	25.3870
40	Ethyl Acetate	43	5.744	5.744	(0.833)	125330	10.0000	9.58965(a)
44	Tetrahydrofuran	42	6.015	5.997	(0.872)	30503	10.0000	10.3077(a)
48	Cyclohexane	56	6.304	6.304	(0.914)	116174	5.00000	5.22706
55	TAME	73	6.702	6.702	(0.971)	1063417	25.0000	25.0335
59	2-Pentanone	43	7.424	7.424	(1.076)	219375	20.0000	18.8661
60	Methyl Cyclohexane	83	7.478	7.478	(1.084)	125683	5.00000	5.22234
62	Methyl Methacrylate	100	7.586	7.586	(1.099)	48608	10.0000	10.2376
66	2-nitropropane	41	8.002	8.020	(0.790)	22919	5.00000	4.88688(aQ)
67	2-Chloroethyl vinyl ether	63	8.056	8.056	(1.167)	29733	5.00000	5.00182(a)
73	Ethyl methacrylate	69	8.868	8.868	(0.875)	193115	10.0000	9.49356
78	Tetrahydrothiophene	60	9.446	9.446	(0.932)	28790	5.00000	4.88986(a)
91	cis-1,4-Dichloro-2-butene	53	11.541	11.541	(1.139)	27487	5.00000	5.31653
97	t-1,4-Dichloro-2-butene	53	11.920	11.920	(0.904)	26827	5.00000	5.09002
109	1,2,3-Trimethylbenzene	105	13.257	13.257	(1.005)	281383	5.00000	5.00324

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j1669.d
Lab Smp Id: SUPP005
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/041404.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 04/14/4
Calibration Time: 1150
Client Smp ID: SUPP005
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1691225	845612	3382450	1795668	6.18
82 Chlorobenzene-d5	374794	187397	749588	396365	5.76
107 1,4-Dichlorobenze	607422	303711	1214844	654802	7.80

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	0.01
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	0.01
107 1,4-Dichlorobenze	13.18	12.68	13.68	13.18	0.01

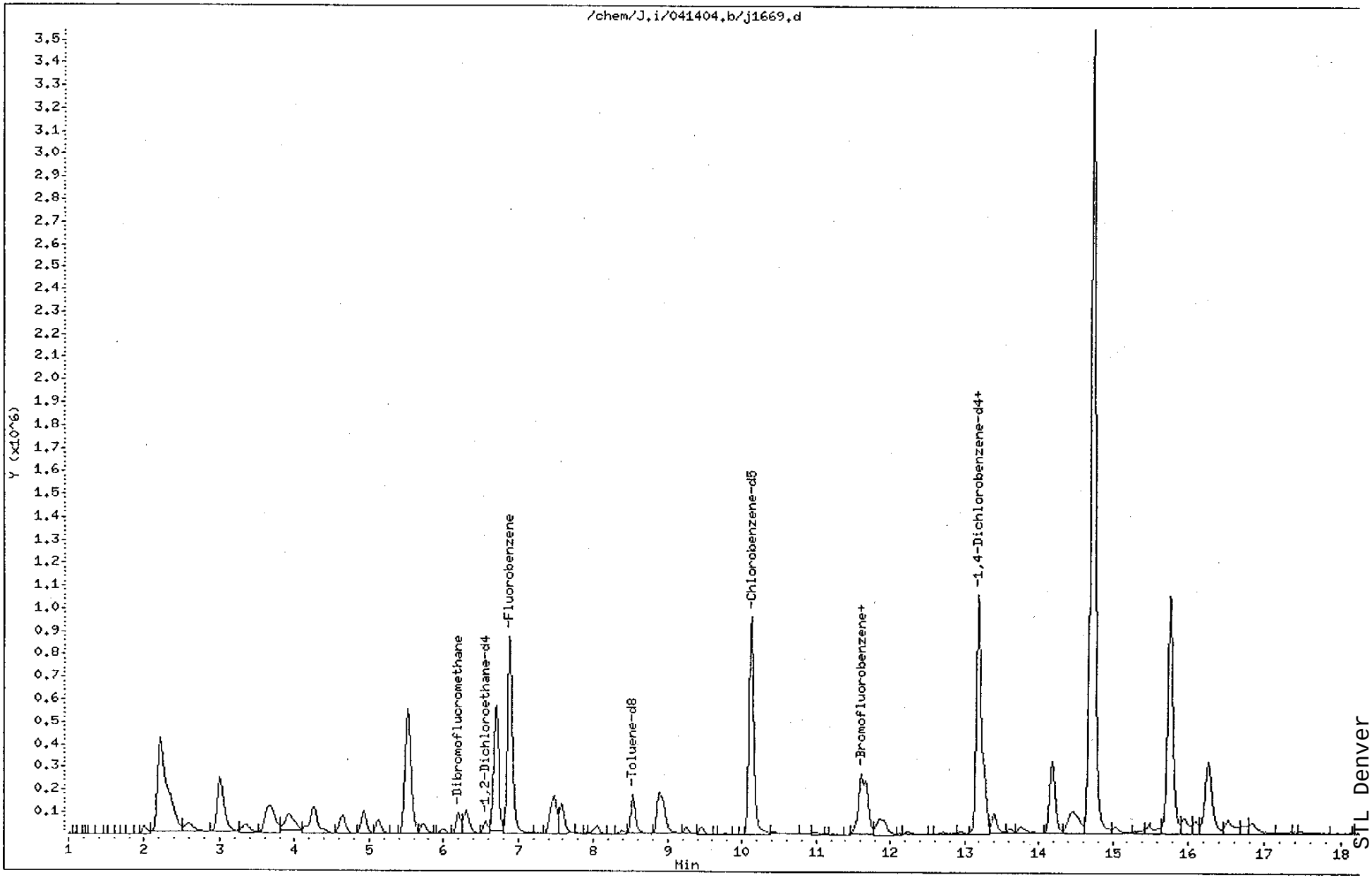
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/041404.b/j1669.d
Date : 14-APR-2004 10:37
Client ID: SUPP005
Sample Info: SUPP005,, #011/052-04

Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/041404.b/j1670.d
Lab Smp Id: SUPP010 Client Smp ID: SUPP010
Inj Date : 14-APR-2004 11:01
Operator : appelhansd Inst ID: J.i
Smp Info : SUPP010,, #011/052-04
Misc Info :
Comment :
Method : /chem/J.i/041404.b/J5030-8260B-soil.m
Meth Date : 14-Apr-2004 13:52 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	6.899	6.882	(1.000)	1721394	50.0000	
* 82 Chlorobenzene-d5	119	10.131	10.133	(1.000)	379126	50.0000	
* 107 1,4-Dichlorobenzene-d4	152	13.165	13.166	(1.000)	621037	50.0000	
$ 46 Dibromofluoromethane	111	6.194	6.196	(0.898)	260888	10.0000	10.5433
$ 52 1,2-Dichloroethane-d4	65	6.556	6.557	(0.950)	188459	10.0000	10.5584
$ 70 Toluene-d8	98	8.524	8.525	(0.841)	442875	10.0000	10.1098
$ 93 Bromofluorobenzene	95	11.666	11.667	(1.151)	310855	10.0000	10.1029
5 Dichlorotetraflouroethane	85	2.619	2.602	(0.380)	163145	10.0000	7.53877
7 Ethylene Oxide	44	3.016	2.964	(0.437)	1858785	1250.00	1298.46
10 Dichlorofluoromethane	67	3.359	3.325	(0.487)	251264	10.0000	10.3929
13 1,2-dichloro-1,1,2-trifluoro	117	3.666	3.632	(0.531)	192793	10.0000	10.5567
14 Ethyl Ether	59	3.648	3.614	(0.529)	94771	10.0000	10.2697
15 2,2-dichloro-1,1,1-trofluoro	83	3.720	3.686	(0.539)	300304	10.0000	10.6325
18 2-Propanol	45	4.046	4.083	(0.586)	138812	200.000	196.257
19 Trichlorotrifluoroethane	151	3.937	3.903	(0.571)	193807	10.0000	10.7205
22 Carbon Disulfide	76	4.172	4.137	(0.605)	396038	10.0000	10.5822

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 Allyl Chloride	41	4.262	4.246	(0.618)	200588	10.0000	10.9498(Q)
25 Methyl Acetate	43	4.262	4.264	(0.618)	426541	50.0000	50.3308
29 Methyl t-butyl ether	73	4.660	4.661	(0.675)	398773	10.0000	10.3347(a)
31 Hexane	57	4.930	4.914	(0.487)	220266	10.0000	10.8470
33 Vinyl acetate	43	5.129	5.112	(0.743)	455547	20.0000	21.7288
36 ETBE	59	5.508	5.510	(0.798)	2748853	50.0000	53.2186
40 Ethyl Acetate	43	5.743	5.744	(0.832)	248370	20.0000	19.8240(a)
44 Tetrahydrofuran	42	5.996	5.997	(0.869)	55835	20.0000	19.6822(a)
48 Cyclohexane	56	6.303	6.304	(0.914)	229943	10.0000	10.7923
55 TAME	73	6.700	6.702	(0.971)	2125722	50.0000	52.2000
59 2-Pentanone	43	7.422	7.424	(1.076)	439195	40.0000	39.4001
60 Methyl Cyclohexane	83	7.477	7.478	(1.084)	245933	10.0000	10.6598
62 Methyl Methacrylate	100	7.585	7.586	(1.099)	89123	20.0000	19.5806
66 2-nitropropane	41	8.000	8.020	(0.790)	42322	10.0000	9.43439(a)
67 2-Chloroethyl vinyl ether	63	8.054	8.056	(1.168)	55021	10.0000	9.65525(a)
73 Ethyl methacrylate	69	8.867	8.868	(0.875)	395696	20.0000	20.3370
78 Tetrahydrothiophene	60	9.445	9.446	(0.932)	54330	10.0000	9.64730
91 cis-1,4-Dichloro-2-butene	53	11.540	11.541	(1.139)	47870	10.0000	9.68002
97 t-1,4-Dichloro-2-butene	53	11.919	11.920	(0.905)	53011	10.0000	10.6049
109 1,2,3-Trimethylbenzene	105	13.255	13.257	(1.007)	546265	10.0000	10.2412

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j1670.d
Lab Smp Id: SUPP010
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/041404.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 04/14/4
Calibration Time: 1150
Client Smp ID: SUPP010
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1691225	845612	3382450	1721394	1.78
82 Chlorobenzene-d5	374794	187397	749588	379126	1.16
107 1,4-Dichlorobenze	607422	303711	1214844	621037	2.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	-0.01
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	-0.01
107 1,4-Dichlorobenze	13.18	12.68	13.68	13.16	-0.14

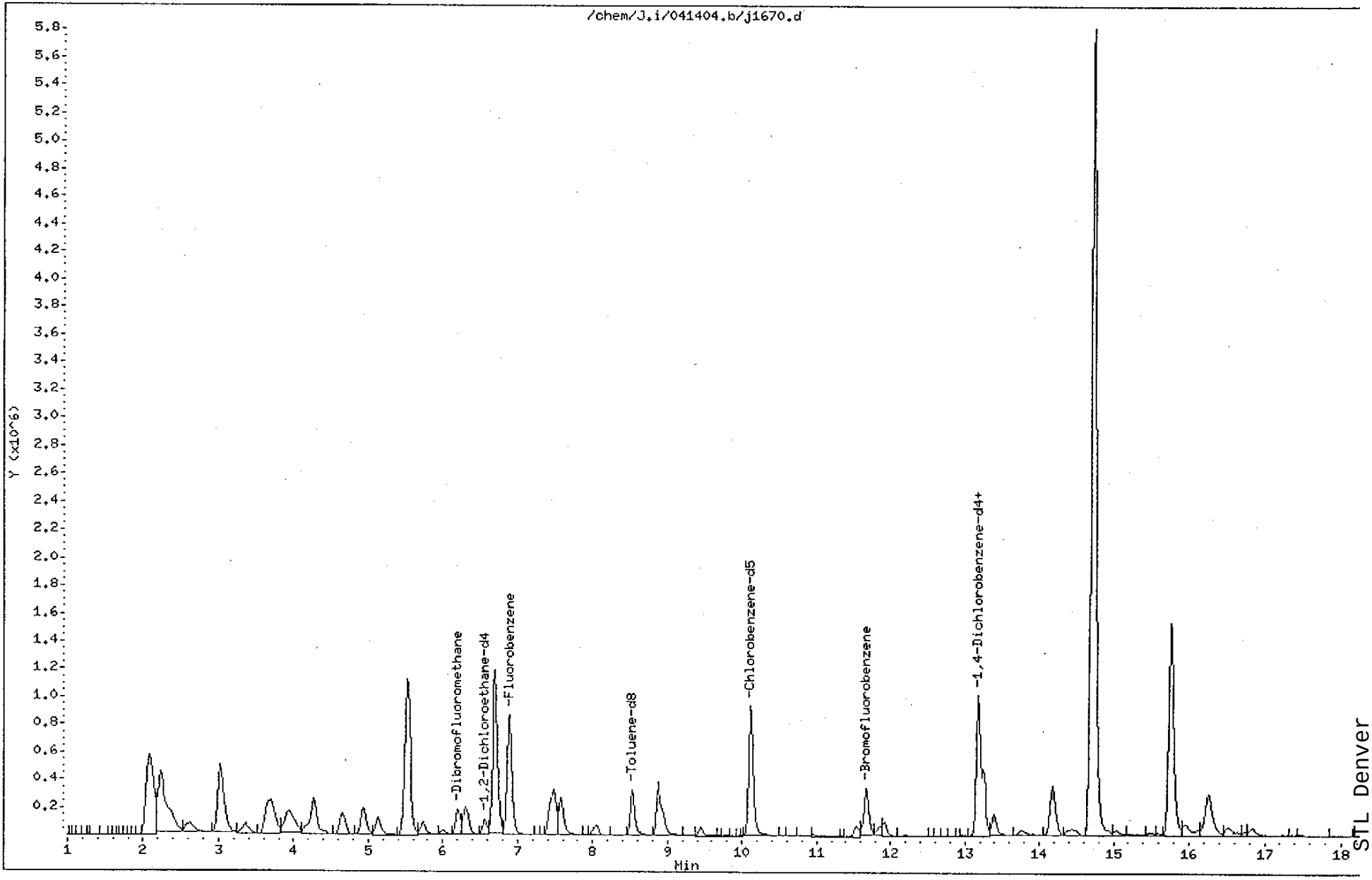
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/041404.b/j1670.d
Date : 14-APR-2004 11:01
Client ID: SUPP010
Sample Info: SUPP010,, #011/052-04

Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/041404.b/j1671.d
Lab Smp Id: SUPP020 Client Smp ID: SUPP020
Inj Date : 14-APR-2004 11:26
Operator : appelhansd Inst ID: J.i
Smp Info : SUPP020,, #011/052-04
Misc Info :
Comment :
Method : /chem/J.i/041404.b/J5030-8260B-soil.m
Meth Date : 14-Apr-2004 13:52 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	56 Fluorobenzene	96	6.899	6.882	(1.000)	1655391	50.0000	
*	82 Chlorobenzene-d5	119	10.131	10.133	(1.000)	365754	50.0000	
*	107 1,4-Dichlorobenzene-d4	152	13.183	13.166	(1.000)	616332	50.0000	
$	46 Dibromofluoromethane	111	6.194	6.196	(0.898)	484115	20.0000	20.3447
$	52 1,2-Dichloroethane-d4	65	6.556	6.557	(0.950)	341906	20.0000	19.9190
$	70 Toluene-d8	98	8.524	8.525	(0.841)	840110	20.0000	19.8788
$	93 Bromofluorobenzene	95	11.666	11.667	(1.151)	597184	20.0000	20.1183
	5 Dichlorotetraflouroethane	85	2.619	2.602	(0.380)	451517	20.0000	21.6960
	7 Ethylene Oxide	44	3.016	2.964	(0.437)	3829350	2500.00	2781.67
	10 Dichlorofluoromethane	67	3.359	3.325	(0.487)	474534	20.0000	20.4105
	13 1,2-dichloro-1,1,2-trifluoro	117	3.666	3.632	(0.531)	354311	20.0000	20.1744
	14 Ethyl Ether	59	3.648	3.614	(0.529)	184409	20.0000	20.7799
	15 2,2-dichloro-1,1,1-trofluoro	83	3.720	3.686	(0.539)	555752	20.0000	20.4614
	18 2-Propanol	45	4.045	4.083	(0.586)	282260	400.000	414.980
	19 Trichlorotrifluoroethane	151	3.937	3.903	(0.571)	355561	20.0000	20.4522
	22 Carbon Disulfide	76	4.172	4.137	(0.605)	725807	20.0000	20.1670

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
24	Allyl Chloride	41	4.262	4.246	(0.618)	354355	20.0000	20.1150(Q)
25	Methyl Acetate	43	4.262	4.264	(0.618)	843491	100.000	103.498
29	Methyl t-butyl ether	73	4.659	4.661	(0.675)	769485	20.0000	20.7372
31	Hexane	57	4.930	4.914	(0.487)	400557	20.0000	20.4465
33	Vinyl acetate	43	5.129	5.112	(0.743)	890538	40.0000	44.1707
36	ETBE	59	5.526	5.510	(0.801)	5172084	100.000	104.126
40	Ethyl Acetate	43	5.743	5.744	(0.832)	508014	40.0000	42.1647
44	Tetrahydrofuran	42	5.996	5.997	(0.869)	119992	40.0000	43.9844
48	Cyclohexane	56	6.303	6.304	(0.914)	410252	20.0000	20.0228
55	TAME	73	6.700	6.702	(0.971)	4003551	100.000	102.233
59	2-Pentanone	43	7.422	7.424	(1.076)	893511	80.0000	83.3528
60	Methyl Cyclohexane	83	7.476	7.478	(1.084)	444417	20.0000	20.0311
62	Methyl Methacrylate	100	7.585	7.586	(1.099)	178665	40.0000	40.8184
66	2-nitropropane	41	8.000	8.020	(0.790)	89066	20.0000	20.5804
67	2-Chloroethyl vinyl ether	63	8.054	8.056	(1.168)	108881	20.0000	19.8686(a)
73	Ethyl methacrylate	69	8.867	8.868	(0.875)	786169	40.0000	41.8827
78	Tetrahydrothiophene	60	9.445	9.446	(0.932)	116898	20.0000	21.5163
91	cis-1,4-Dichloro-2-butene	53	11.539	11.541	(1.139)	96306	20.0000	20.1865
97	t-1,4-Dichloro-2-butene	53	11.919	11.920	(0.904)	97742	20.0000	19.7026
109	1,2,3-Trimethylbenzene	105	13.255	13.257	(1.005)	1074747	20.0000	20.3027

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j1671.d
Lab Smp Id: SUPP020
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/041404.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 04/14/4
Calibration Time: 1150
Client Smp ID: SUPP020
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1691225	845612	3382450	1655391	-2.12
82 Chlorobenzene-d5	374794	187397	749588	365754	-2.41
107 1,4-Dichlorobenze	607422	303711	1214844	616332	1.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	-0.01
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	-0.01
107 1,4-Dichlorobenze	13.18	12.68	13.68	13.18	-0.01

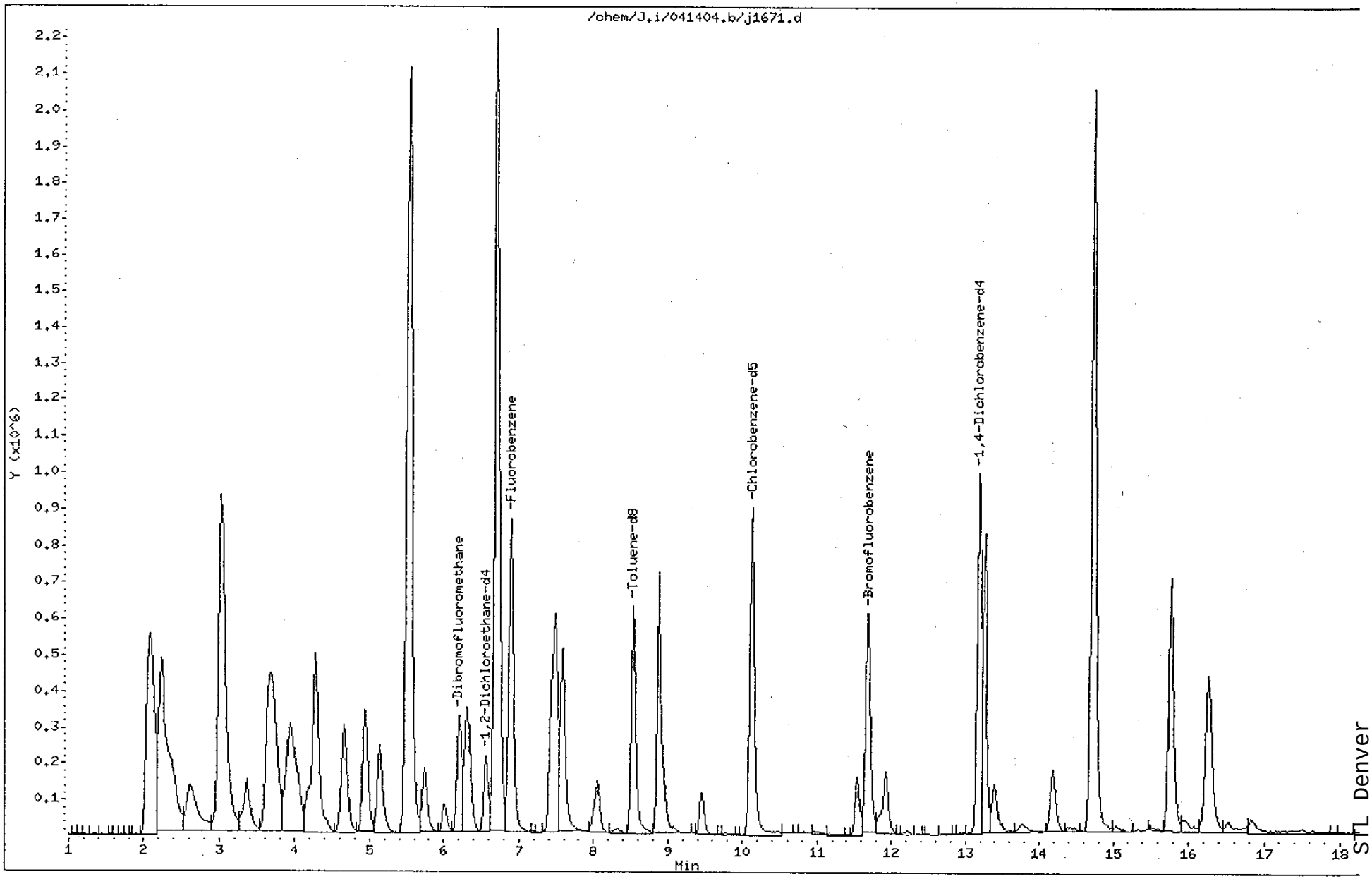
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/041404.b/j1671.d
Date : 14-APR-2004 11:26
Client ID: SUPP020
Sample Info: SUPP020,, #011/052-04

Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/041404.b/j1672.d
Lab Smp Id: SUPP050 Client Smp ID: SUPP050
Inj Date : 14-APR-2004 11:50
Operator : appelhansd Inst ID: J.i
Smp Info : SUPP050,, #011/052-04
Misc Info :
Comment :
Method : /chem/J.i/041404.b/J5030-8260B-soil.m
Meth Date : 14-Apr-2004 13:53 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	6.899	6.899	(1.000)	1691225	50.0000	
* 82 Chlorobenzene-d5	119	10.132	10.132	(1.000)	374794	50.0000	
* 107 1,4-Dichlorobenzene-d4	152	13.184	13.184	(1.000)	607422	50.0000	
$ 46 Dibromofluoromethane	111	6.195	6.195	(0.898)	953448	40.0000	39.2192
$ 52 1,2-Dichloroethane-d4	65	6.556	6.556	(0.950)	678060	40.0000	38.6660
$ 70 Toluene-d8	98	8.525	8.525	(0.841)	1704465	40.0000	39.3586
$ 93 Bromofluorobenzene	95	11.685	11.685	(1.153)	1161308	40.0000	38.1792
5 Dichlorotetraflouroethane	85	2.602	2.602	(0.377)	1113358	50.0000	52.3649
7 Ethylene Oxide	44	2.999	2.999	(0.435)	8320410	6250.00	5915.96
10 Dichlorofluoromethane	67	3.360	3.360	(0.487)	1155305	50.0000	48.6386
13 1,2-dichloro-1,1,2-trifluoro	117	3.667	3.667	(0.531)	872436	50.0000	48.6238
14 Ethyl Ether	59	3.649	3.649	(0.529)	449843	50.0000	49.6159
15 2,2-dichloro-1,1,1-trofluoro	83	3.721	3.721	(0.539)	1329365	50.0000	47.9069
18 2-Propanol	45	4.046	4.046	(0.586)	658551	1000.00	947.691
19 Trichlorotrifluoroethane	151	3.938	3.938	(0.571)	854502	50.0000	48.1104
22 Carbon Disulfide	76	4.173	4.173	(0.605)	1760163	50.0000	47.8711

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24	Allyl Chloride	41	4.263	4.263	(0.618)	877732	50.0000	48.7688(Q)
25	Methyl Acetate	43	4.263	4.263	(0.618)	1997201	250.000	239.869
29	Methyl t-butyl ether	73	4.660	4.660	(0.675)	1837118	50.0000	48.4604
31	Hexane	57	4.931	4.931	(0.487)	967861	50.0000	48.2130
33	Vinyl acetate	43	5.130	5.130	(0.744)	2172251	100.000	105.461
36	ETBE	59	5.527	5.527	(0.801)	12504899	250.000	246.417
40	Ethyl Acetate	43	5.744	5.744	(0.832)	1190579	100.000	96.7232
44	Tetrahydrofuran	42	6.015	6.015	(0.872)	262634	100.000	94.2315
48	Cyclohexane	56	6.304	6.304	(0.914)	999929	50.0000	47.7686
55	TAME	73	6.701	6.701	(0.971)	9776367	250.000	244.355
59	2-Pentanone	43	7.423	7.423	(1.076)	2106092	200.000	192.308
60	Methyl Cyclohexane	83	7.477	7.477	(1.084)	1086071	50.0000	47.9150
62	Methyl Methacrylate	100	7.586	7.586	(1.099)	432377	100.000	96.6893
66	2-nitropropane	41	8.019	8.019	(0.791)	218136	50.0000	49.1888
67	2-Chloroethyl vinyl ether	63	8.055	8.055	(1.167)	274221	50.0000	48.9795(a)
73	Ethyl methacrylate	69	8.868	8.868	(0.875)	1861803	100.000	96.7942
78	Tetrahydrothiophene	60	9.446	9.446	(0.932)	267679	50.0000	48.0808
91	cis-1,4-Dichloro-2-butene	53	11.540	11.540	(1.139)	231101	50.0000	47.2722
97	t-1,4-Dichloro-2-butene	53	11.919	11.919	(0.904)	238956	50.0000	48.8748
109	1,2,3-Trimethylbenzene	105	13.256	13.256	(1.005)	2584060	50.0000	49.5308

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j1672.d
Lab Smp Id: SUPP050
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Calibration Date: 04/14/4
Calibration Time: 1150
Client Smp ID: SUPP050
Level: LOW
Sample Type: SOIL
Method File: /chem/J.i/041404.b/J5030-8260B-soil.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1691225	845612	3382450	1691225	0.00
82 Chlorobenzene-d5	374794	187397	749588	374794	0.00
107 1,4-Dichlorobenze	607422	303711	1214844	607422	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	0.00
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	0.00
107 1,4-Dichlorobenze	13.18	12.68	13.68	13.18	0.00

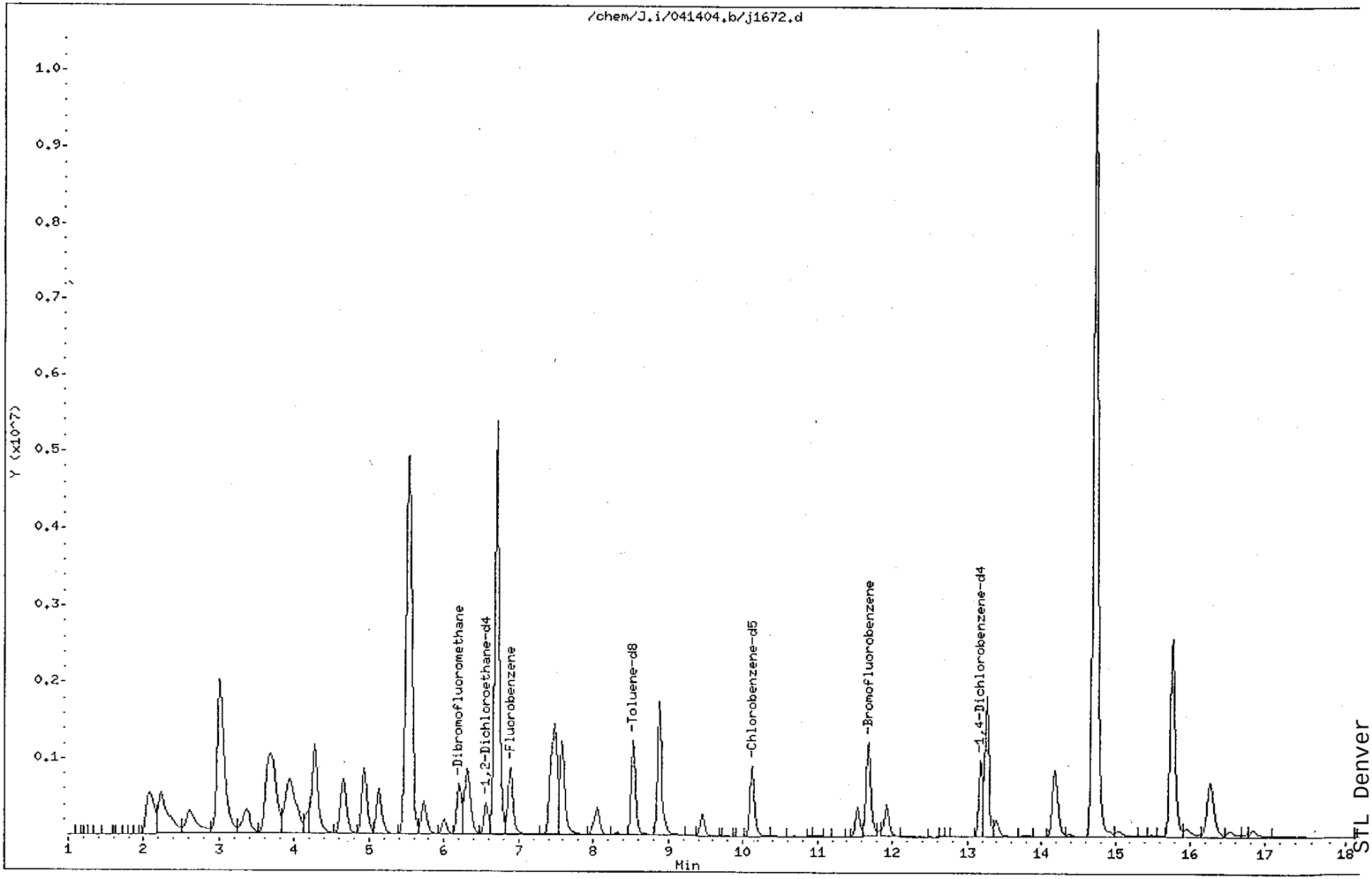
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/041404.b/j1672.d
Date : 14-APR-2004 11:50
Client ID: SUPP050
Sample Info: SUPP050,, #011/052-04

Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/041404.b/j1673.d
Lab Smp Id: SUPP100 Client Smp ID: SUPP100
Inj Date : 14-APR-2004 12:14
Operator : appelhansd Inst ID: J.i
Smp Info : SUPP100,, #011/052-04
Misc Info :
Comment :
Method : /chem/J.i/041404.b/J5030-8260B-soil.m
Meth Date : 14-Apr-2004 13:53 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	6.899	6.899	(1.000)	1655286	50.0000	
* 82 Chlorobenzene-d5	119	10.132	10.132	(1.000)	372029	50.0000	
* 107 1,4-Dichlorobenzene-d4	152	13.165	13.184	(1.000)	628909	50.0000	
$ 46 Dibromofluoromethane	111	6.195	6.195	(0.898)	2351228	100.000	98.8156
$ 52 1,2-Dichloroethane-d4	65	6.556	6.556	(0.950)	1668002	100.000	97.1820
$ 70 Toluene-d8	98	8.525	8.525	(0.841)	4144105	100.000	96.4046
$ 93 Bromofluorobenzene	95	11.685	11.685	(1.153)	2882761	100.000	95.4782
5 Dichlorotetraflouroethane	85	2.620	2.602	(0.380)	2151670	100.000	103.397
7 Ethylene Oxide	44	2.981	2.999	(0.432)	15754895	12500.0	11445.2
10 Dichlorofluoromethane	67	3.360	3.360	(0.487)	2322265	100.000	99.8907
13 1,2-dichloro-1,1,2-trifluoro	117	3.667	3.667	(0.531)	1731054	100.000	98.5722
14 Ethyl Ether	59	3.631	3.649	(0.526)	885863	100.000	99.8286
15 2,2-dichloro-1,1,1-trofluoro	83	3.721	3.721	(0.539)	2637044	100.000	97.0956
18 2-Propanol	45	4.064	4.046	(0.589)	1359130	2000.00	1998.33
19 Trichlorotrifluoroethane	151	3.938	3.938	(0.571)	1717348	100.000	98.7900
22 Carbon Disulfide	76	4.173	4.173	(0.605)	3522543	100.000	97.8825

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 Allyl Chloride	41	4.263	4.263	(0.618)	1724355	100.000	97.8892(Q)
25 Methyl Acetate	43	4.263	4.263	(0.618)	4130291	500.000	506.829
29 Methyl t-butyl ether	73	4.660	4.660	(0.675)	3692752	100.000	99.5241
31 Hexane	57	4.931	4.931	(0.487)	1928128	100.000	96.7617
33 Vinyl acetate	43	5.130	5.130	(0.744)	3583762	200.000	177.766
36 ETBE	59	5.527	5.527	(0.801)	25255392	500.000	508.480
40 Ethyl Acetate	43	5.744	5.744	(0.832)	2469423	200.000	204.973
44 Tetrahydrofuran	42	6.014	6.015	(0.872)	538524	200.000	197.414
48 Cyclohexane	56	6.303	6.304	(0.914)	1996314	100.000	97.4385
55 TAME	73	6.701	6.701	(0.971)	19877309	500.000	507.609
59 2-Pentanone	43	7.423	7.423	(1.076)	4454431	400.000	415.566
60 Methyl Cyclohexane	83	7.477	7.477	(1.084)	2168665	100.000	97.7540
62 Methyl Methacrylate	100	7.586	7.586	(1.099)	886229	200.000	202.484
66 2-nitropropane	41	8.019	8.019	(0.791)	443880	100.000	100.837
67 2-Chloroethyl vinyl ether	63	8.055	8.055	(1.167)	559539	100.000	102.111
73 Ethyl methacrylate	69	8.868	8.868	(0.875)	3795607	200.000	198.798
78 Tetrahydrothiophene	60	9.445	9.446	(0.932)	554152	100.000	100.277
91 cis-1,4-Dichloro-2-butene	53	11.540	11.540	(1.139)	475348	100.000	97.9561
97 t-1,4-Dichloro-2-butene	53	11.919	11.919	(0.905)	495866	100.000	97.9567
109 1,2,3-Trimethylbenzene	105	13.256	13.256	(1.007)	5308361	100.000	98.2734

QC Flag Legend

Q - Qualifier signal failed the ratio test.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j1673.d
Lab Smp Id: SUPP100
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/041404.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 04/14/4
Calibration Time: 1150
Client Smp ID: SUPP100
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1691225	845612	3382450	1655286	-2.13
82 Chlorobenzene-d5	374794	187397	749588	372029	-0.74
107 1,4-Dichlorobenze	607422	303711	1214844	628909	3.54

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	0.00
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	0.00
107 1,4-Dichlorobenze	13.18	12.68	13.68	13.17	-0.14

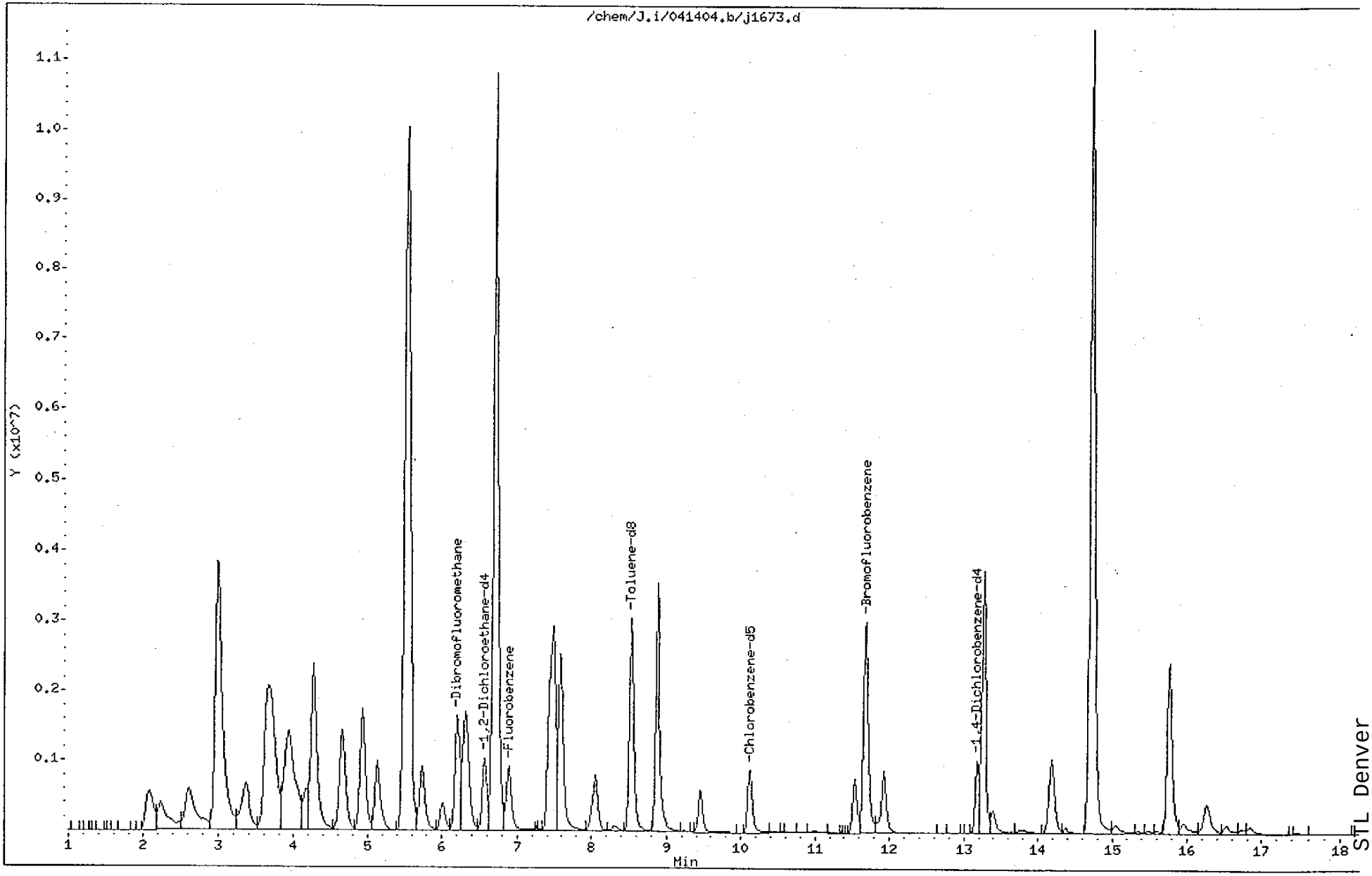
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/041404.b/j1673.d
Date : 14-APR-2004 12:14
Client ID: SUPP100
Sample Info: SUPP100,, #011/052-04

Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/041404.b/j1674.d
Lab Smp Id: SUPP200 Client Smp ID: SUPP200
Inj Date : 14-APR-2004 12:39
Operator : appelhansd Inst ID: J.i
Smp Info : SUPP200,, #011/052-04
Misc Info :
Comment :
Method : /chem/J.i/041404.b/J5030-8260B-soil.m
Meth Date : 14-Apr-2004 13:53 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	56 Fluorobenzene	96	6.882	6.899	(1.000)	1691131	50.0000	
*	82 Chlorobenzene-d5	119	10.133	10.132	(1.000)	366629	50.0000	
*	107 1,4-Dichlorobenzene-d4	152	13.166	13.184	(1.000)	638074	50.0000	
$	46 Dibromofluoromethane	111	6.196	6.195	(0.900)	4704538	200.000	193.528
$	52 1,2-Dichloroethane-d4	65	6.557	6.556	(0.953)	3364066	200.000	191.845
$	70 Toluene-d8	98	8.525	8.525	(0.841)	8353807	200.000	197.198
$	93 Bromofluorobenzene	95	11.667	11.685	(1.151)	5841487	200.000	196.322
	5 Dichlorotetraflouroethane	85	2.602	2.602	(0.378)	4361957	200.000	205.169(A)
	7 Ethylene Oxide	44	2.964	2.999	(0.431)	33146095	25000.0	23568.8
	10 Dichlorofluoromethane	67	3.325	3.360	(0.483)	4600699	200.000	193.701
	13 1,2-dichloro-1,1,2-trifluoro	117	3.632	3.667	(0.528)	3412482	200.000	190.200
	14 Ethyl Ether	59	3.614	3.649	(0.525)	1710632	200.000	188.686
	15 2,2-dichloro-1,1,1-trofluoro	83	3.686	3.721	(0.536)	5169168	200.000	186.294
	18 2-Propanol	45	4.083	4.046	(0.593)	2866547	4000.00	4125.35(A)
	19 Trichlorotrifluoroethane	151	3.903	3.938	(0.567)	3393005	200.000	191.045
	22 Carbon Disulfide	76	4.137	4.173	(0.601)	6967393	200.000	189.502

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 Allyl Chloride	41	4.246	4.263	(0.617)	3401415	200.000	189.001
25 Methyl Acetate	43	4.264	4.263	(0.620)	8382862	1000.00	1006.86(A)
29 Methyl t-butyl ether	73	4.661	4.660	(0.677)	7317867	200.000	193.045
31 Hexane	57	4.914	4.931	(0.485)	3793676	200.000	193.187
33 Vinyl acetate	43	5.112	5.130	(0.743)	6853133	400.000	332.732
36 ETBE	59	5.510	5.527	(0.801)	44465142	1000.00	876.264(M)
40 Ethyl Acetate	43	5.744	5.744	(0.835)	4941206	400.000	401.448(A)
44 Tetrahydrofuran	42	5.997	6.015	(0.871)	1100176	400.000	394.758
48 Cyclohexane	56	6.304	6.304	(0.916)	3953812	200.000	188.892
55 TAME	73	6.702	6.701	(0.974)	37594094	1000.00	939.695
59 2-Pentanone	43	7.424	7.423	(1.079)	9017805	800.000	823.463(A)
60 Methyl Cyclohexane	83	7.478	7.477	(1.087)	4316163	200.000	190.430
62 Methyl Methacrylate	100	7.586	7.586	(1.102)	1784039	400.000	398.974
66 2-nitropropane	41	8.020	8.019	(0.791)	898321	200.000	207.079(A)
67 2-Chloroethyl vinyl ether	63	8.056	8.055	(1.171)	1164850	200.000	208.069(A)
73 Ethyl methacrylate	69	8.868	8.868	(0.875)	7712857	400.000	409.918(A)
78 Tetrahydrothiophene	60	9.446	9.446	(0.932)	1107821	200.000	203.419(A)
91 cis-1,4-Dichloro-2-butene	53	11.541	11.540	(1.139)	989311	200.000	206.872(A)
97 t-1,4-Dichloro-2-butene	53	11.920	11.919	(0.905)	1005920	200.000	195.862
109 1,2,3-Trimethylbenzene	105	13.257	13.256	(1.007)	10815459	200.000	197.350

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j1674.d
Lab Smp Id: SUPP200
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/041404.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 04/14/4
Calibration Time: 1150
Client Smp ID: SUPP200
Level: LOW
Sample Type: SOIL

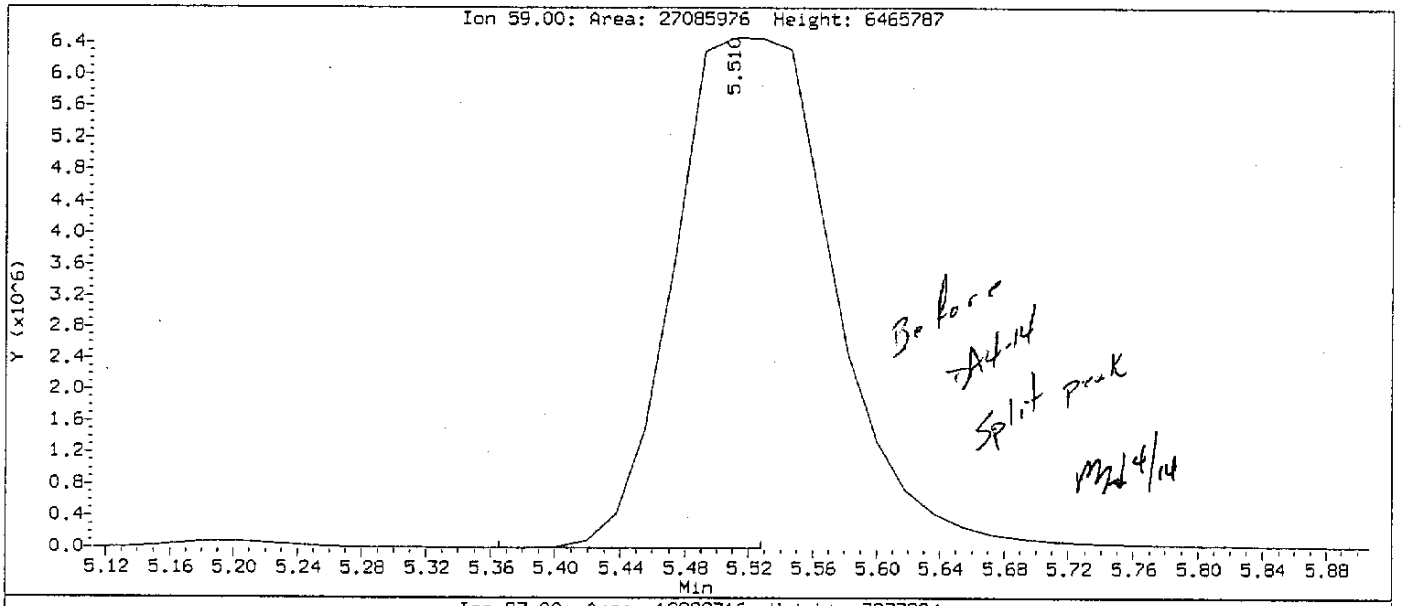
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1691225	845612	3382450	1691131	-0.01
82 Chlorobenzene-d5	374794	187397	749588	366629	-2.18
107 1,4-Dichlorobenze	607422	303711	1214844	638074	5.05

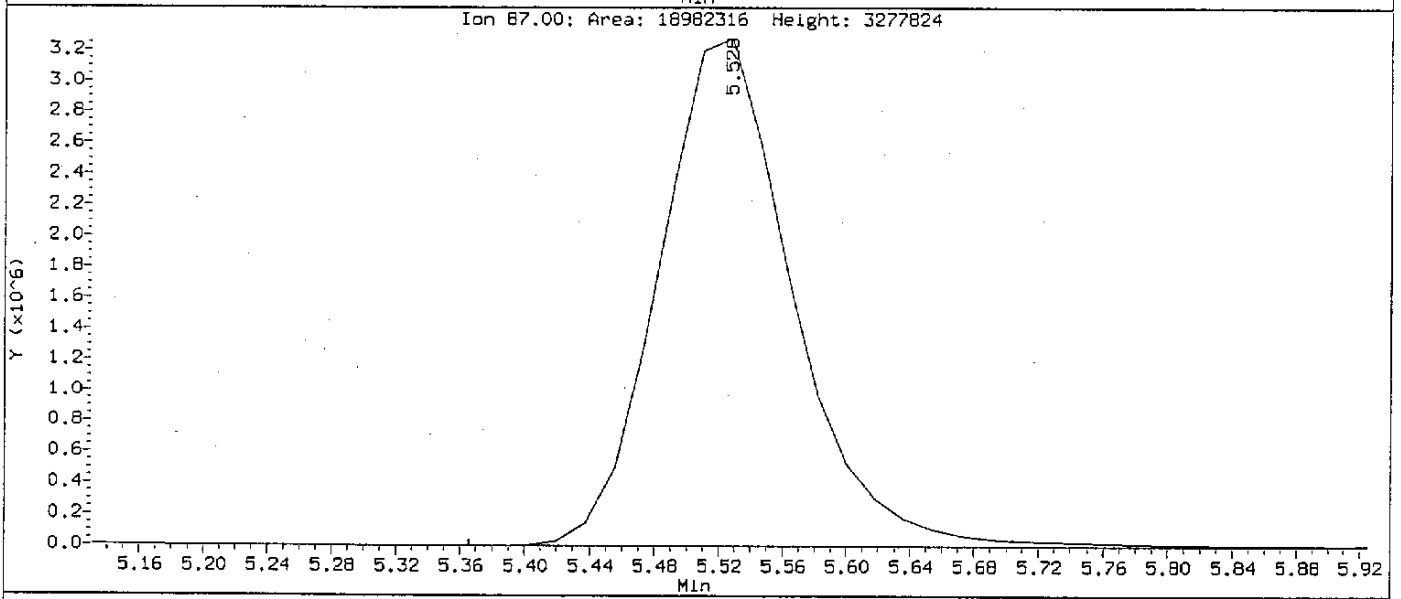
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.88	-0.25
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	0.01
107 1,4-Dichlorobenze	13.18	12.68	13.68	13.17	-0.13

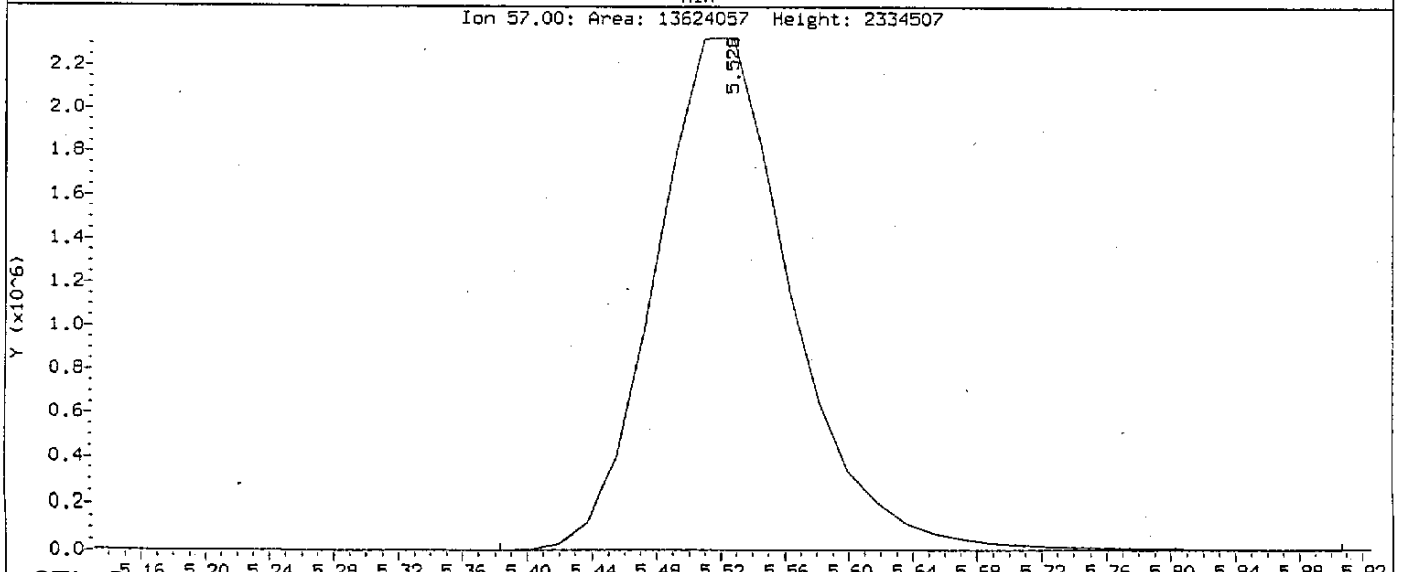
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem/J.i/041404.b/j1674.d
Injection Date: 14-APR-2004 12:39
Instrument: J.i
Client Sample ID: SUPP200

Compound: ETBE
CAS Number: 637-92-3

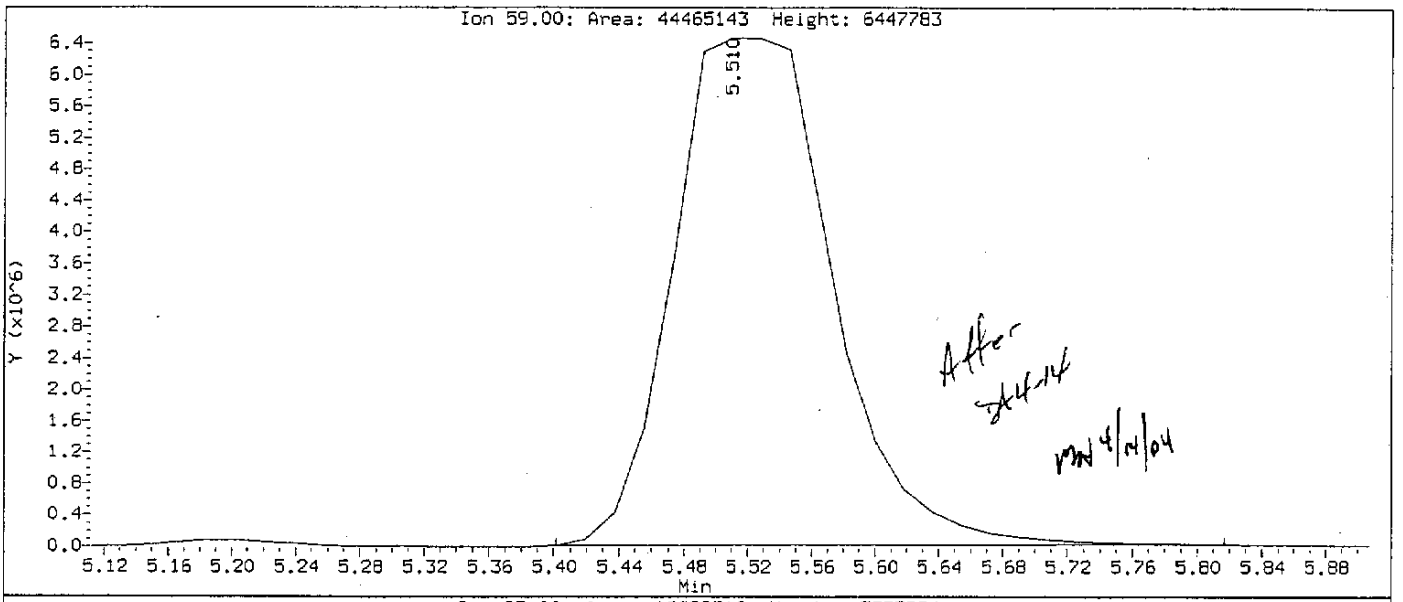


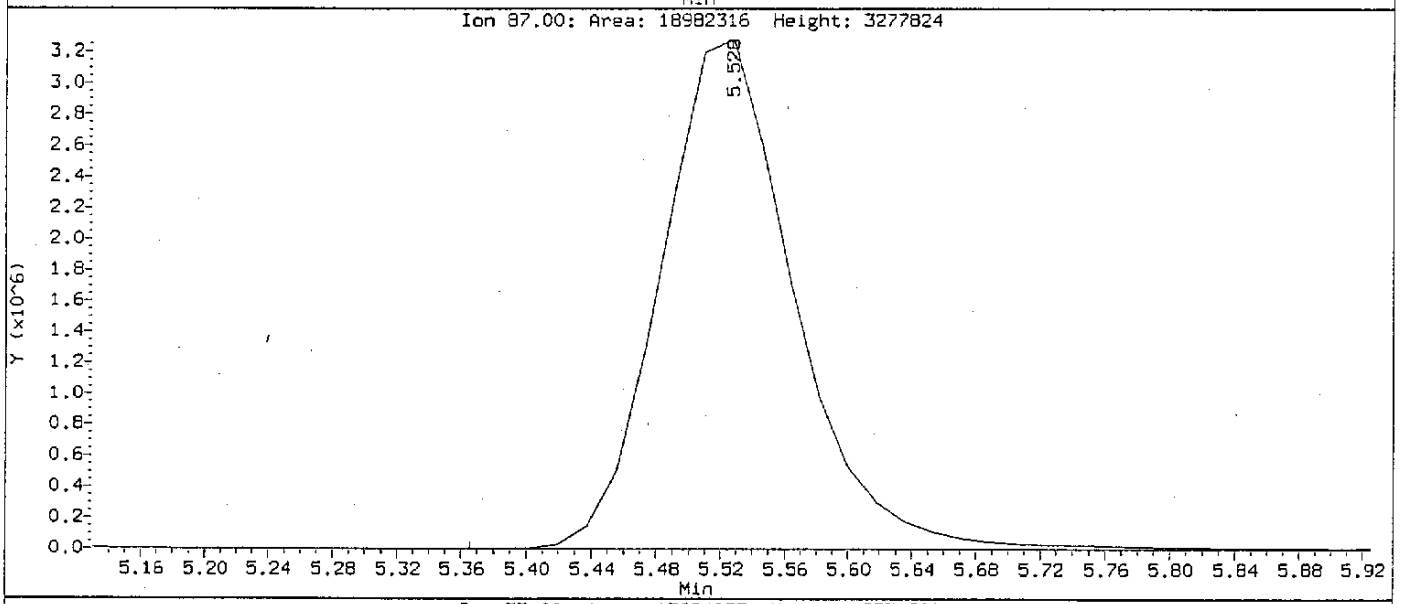


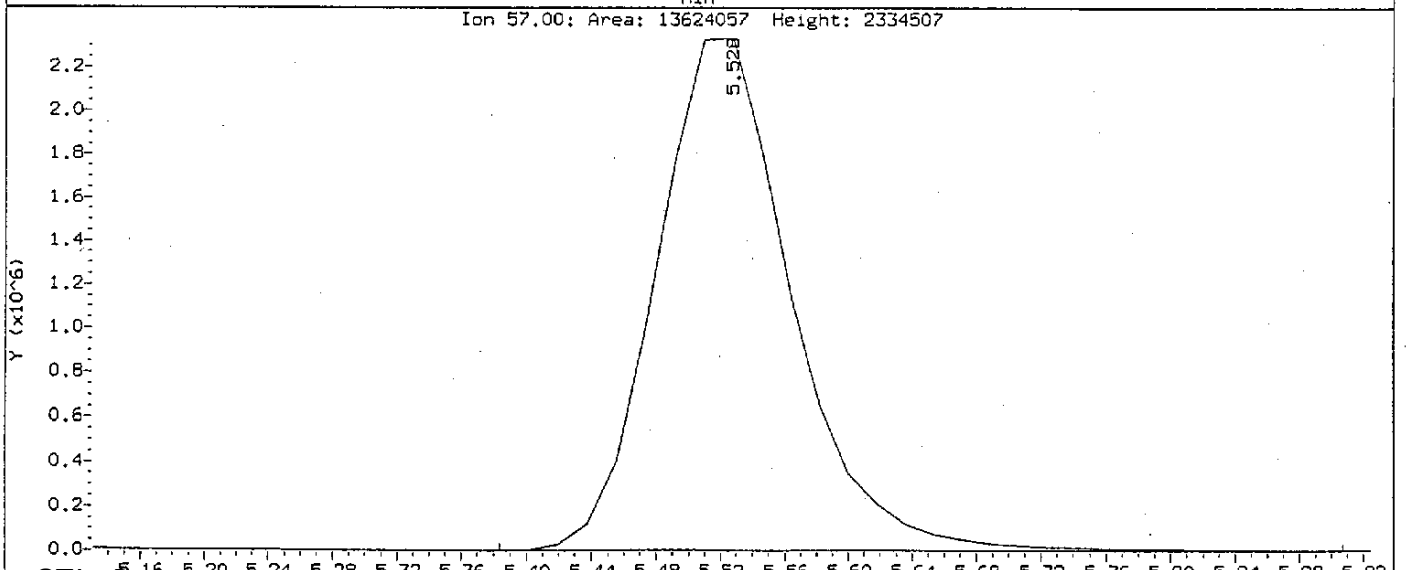


Data File: /chem/J.i/041404.b/j1674.d
Injection Date: 14-APR-2004 12:39
Instrument: J.i
Client Sample ID: SUPP200

Compound: ETBE
CAS Number: 637-92-3





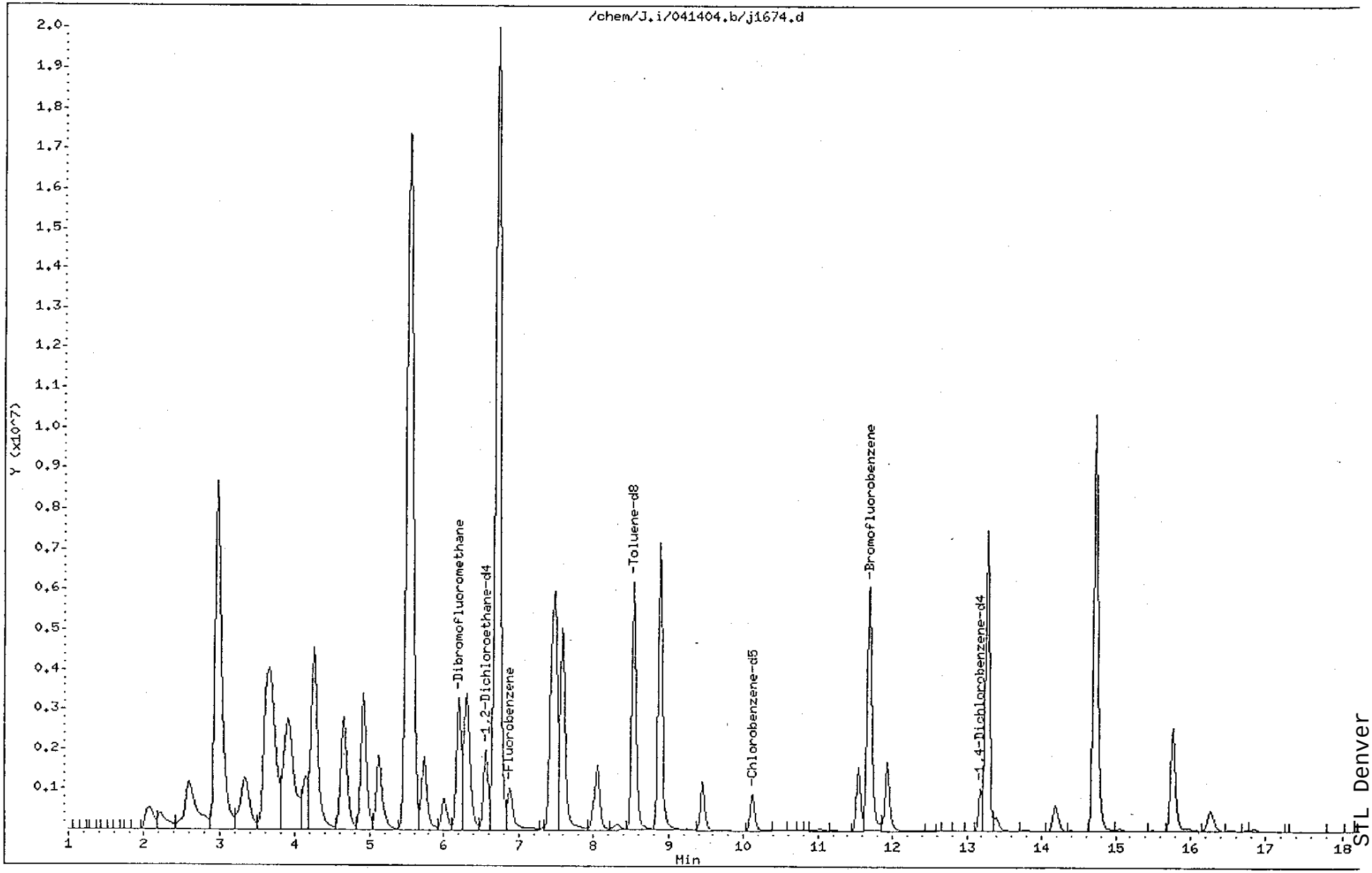


Data File: /chem/J.i/041404.b/j1674.d
Date : 14-APR-2004 12:39
Client ID: SUPP200
Sample Info: SUPP200,, #011/052-04

Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



GC/MS Continuing Calibration Review Checklist

STL Denver

Instrument ID and Date: J 5-25-04

Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____

☐ 524.2 ☐ 624 ☑ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☐ 20mL ☑ 5035 Low ☐ 5035 High ☑ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Continuing Calibration					
1. BFB/DFTPP meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Do SPCC RRFs and CCC %Ds meet method criteria?	✓			✓	
4. Does %D meet criteria for non-CCC compounds?	✓			✓	
5. Isomeric pairs checked for correct peak assignment?	✓			✓	
6. Standards traceability properly documented?	✓			✓	
7. Manual integrations documented and checked?			✓	NA	
8. Do the Internal Standards meet criteria for %D against ICAL?	✓			✓	

1st Level Reviewer: DA Date: 5-26-04

2nd Level Reviewer: MH Date: 5/28/04

Report Date: 26-May-2004 09:11

Calibration History

Method : /chem/J.i/052504.b/J5030-8260B-soil.m
Start Cal Date: 19-MAR-2004 17:08
End Cal Date : 14-APR-2004 12:39

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 5.00000		
14-APR-2004 10:37	2-supp	/chem/J.i/041404.b/j1669.d
19-MAR-2004 17:08	1-main	/chem/J.i/031904i.b/j0969.d
Cal Level: 2 , Cal Amount: 10.0000		
14-APR-2004 11:01	2-supp	/chem/J.i/041404.b/j1670.d
19-MAR-2004 17:33	1-main	/chem/J.i/031904i.b/j0970.d
Cal Level: 3 , Cal Amount: 20.0000		
14-APR-2004 11:26	2-supp	/chem/J.i/041404.b/j1671.d
19-MAR-2004 17:58	1-main	/chem/J.i/031904i.b/j0971.d
Cal Level: 4 , Cal Amount: 50.0000		
14-APR-2004 11:50	2-supp	/chem/J.i/041404.b/j1672.d
19-MAR-2004 18:23	1-main	/chem/J.i/031904i.b/j0972.d
Cal Level: 5 , Cal Amount: 100.000		
14-APR-2004 12:14	2-supp	/chem/J.i/041404.b/j1673.d
19-MAR-2004 18:48	1-main	/chem/J.i/031904i.b/j0973.d
Cal Level: 6 , Cal Amount: 200.000		
14-APR-2004 12:39	2-supp	/chem/J.i/041404.b/j1674.d
19-MAR-2004 19:13	1-main	/chem/J.i/031904i.b/j0974.d

Continuing Calibration

25-MAY-2004 11:49	2-supp	/chem/J.i/052504.b/j2497.d
25-MAY-2004 11:09	1-main	/chem/J.i/052504.b/j2496.d

Data File: /chem/J.i/052504.b/j2495.d

Date : 25-MAY-2004 10:53

Client ID: BFB

Instrument: J.i

Sample Info: BFB,, #073-04

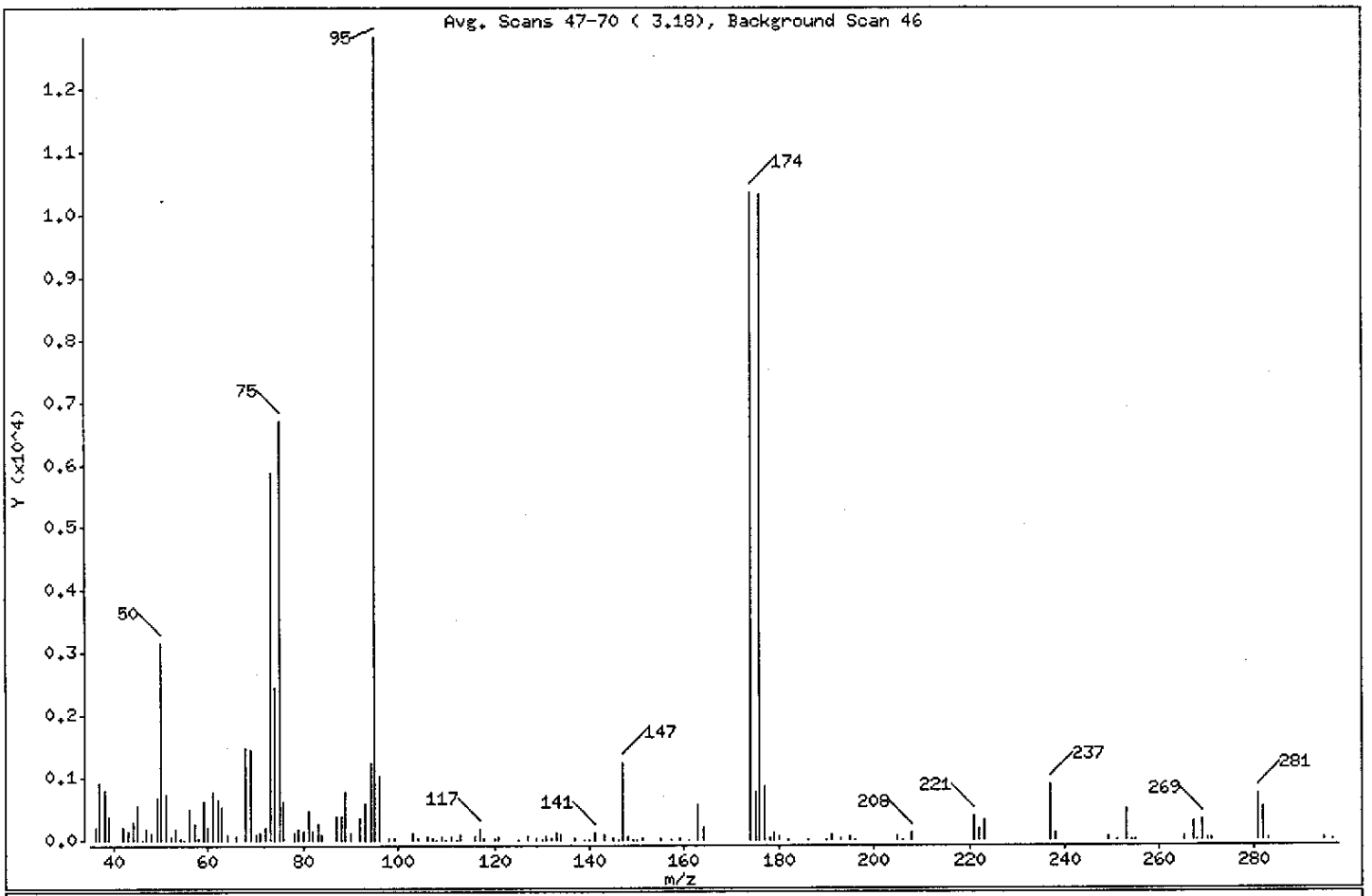
Volume Injected (uL): 1.0

Operator: appelhansd

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	24.49
75	30.00 - 60.00% of mass 95	52.15
96	5.00 - 9.00% of mass 95	7.94
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	80.59
175	5.00 - 9.00% of mass 174	5.98 (7.42)
176	95.00 - 101.00% of mass 174	80.43 (99.80)
177	5.00 - 9.00% of mass 176	6.69 (8.32)

DK5-26

Date : 25-MAY-2004 10:53

Client ID: BFB Instrument: J.i

Sample Info: BFB,, #073-04

Volume Injected (uL): 1.0 Operator: appelhansd

Column phase: DB624 Column diameter: 0.53

Data File: j2495.d
Spectrum: Avg. Scans 47-70 (3.18), Background Scan 46
Location of Maximum: 95.00
Number of points: 134

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	205	74.00	2449	120.00	17	180.00	54
37.00	905	75.00	6689	121.00	60	182.00	8
38.00	783	76.00	617	125.00	11	186.00	8
39.00	376	78.00	111	127.00	51	190.00	10
42.00	216	79.00	166	129.00	26	191.00	86
43.00	135	80.00	143	130.00	12	193.00	16
44.00	298	81.00	485	131.00	57	195.00	46
45.00	563	82.00	150	132.00	26	196.00	8
46.00	9	83.00	267	133.00	121	205.00	72
47.00	178	84.00	103	134.00	86	206.00	11
48.00	120	87.00	380	137.00	29	208.00	116
49.00	679	88.00	380	139.00	12	221.00	382
50.00	3141	89.00	762	140.00	8	222.00	176
51.00	723	90.00	105	141.00	132	223.00	317
52.00	48	92.00	363	143.00	100	237.00	884
53.00	184	93.00	580	145.00	29	238.00	121
54.00	40	94.00	1228	146.00	11	249.00	52
55.00	14	95.00	12826	147.00	1249	251.00	8
56.00	490	96.00	1018	148.00	72	253.00	490
57.00	270	98.00	37	149.00	9	254.00	11
58.00	40	99.00	18	150.00	8	255.00	11
59.00	619	103.00	129	151.00	15	265.00	51
60.00	215	104.00	43	155.00	32	267.00	301
61.00	771	106.00	48	157.00	8	268.00	12
62.00	655	107.00	35	159.00	28	269.00	322
63.00	524	108.00	11	161.00	12	270.00	33
64.00	90	109.00	53	163.00	559	271.00	20
66.00	67	110.00	8	164.00	217	281.00	728
68.00	1481	111.00	65	174.00	10337	282.00	528
69.00	1459	112.00	8	175.00	767	283.00	35
70.00	88	113.00	76	176.00	10316	295.00	19
71.00	111	116.00	54	177.00	858	297.00	8
72.00	195	117.00	186	178.00	39		
73.00	5870	118.00	26	179.00	109		

Data File: /chem/J.i/052504.b/j2495.d

Date : 25-MAY-2004 10:53

Client ID: BFB

Instrument: J.i

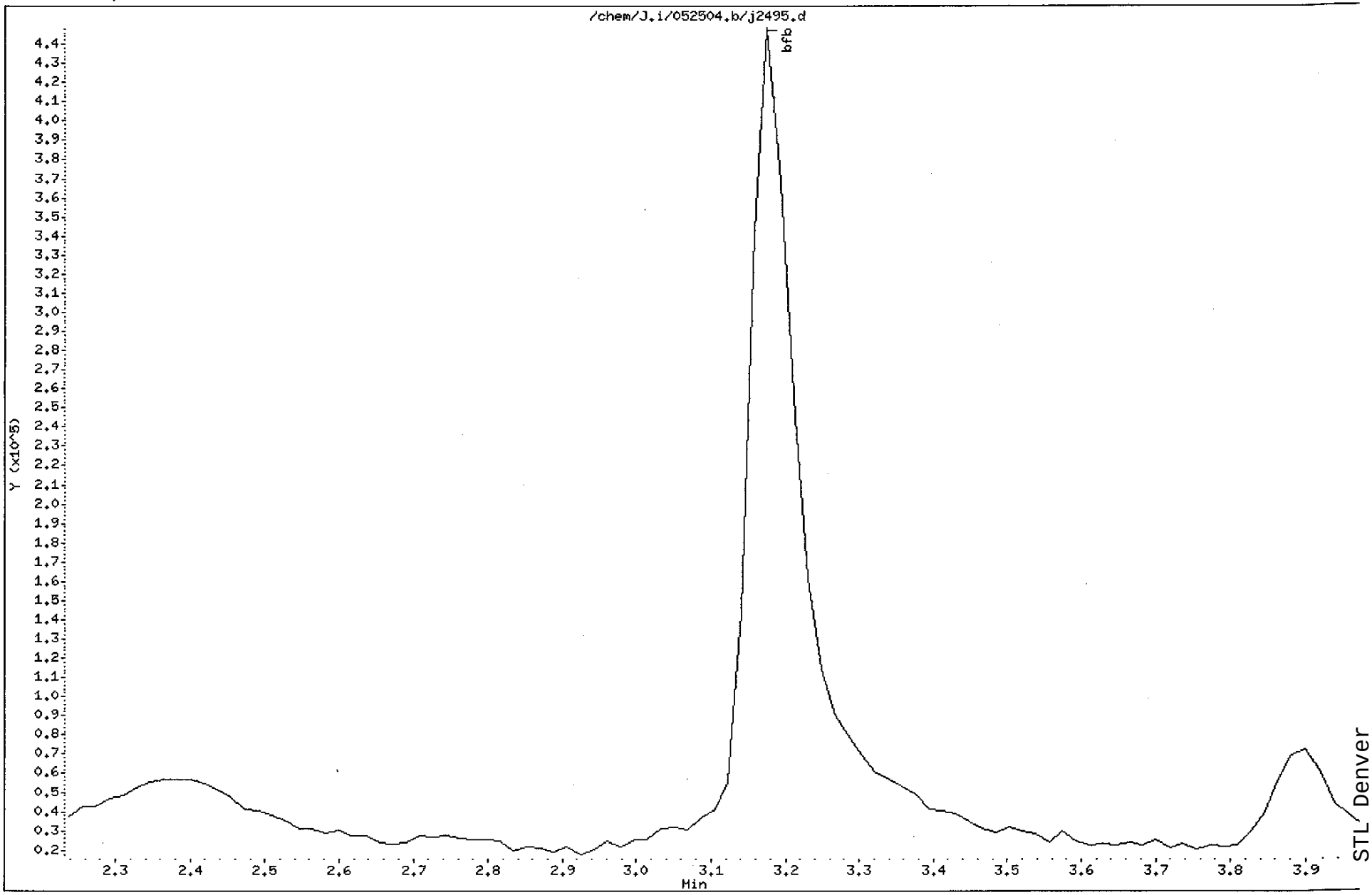
Sample Info: BFB,, #073-04

Volume Injected (uL): 1.0

Operator: appelhansd

Column phase: DB624

Column diameter: 0.53



CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: J.i Injection Date: 25-MAY-2004 11:09
Lab File ID: j2496.d Lab Sample ID: MAIN050
Analysis Type: SOIL Method File: /chem/J.i/052504.b/J5030-8260B-soil.m

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
85	1,2-Dichloroethene (total)	100.0000	93.9776	6.0	50.0
83	Xylene (total)	150.0000	145.3979	3.1	50.0
64	dichlorodifluoromethane	50.0000	41.3446	17.3	50.0
1	Chloromethane	50.0000	38.1162	23.8	50.0
4	Vinyl Chloride	50.0000	42.0300	15.9	20.0
2	Bromomethane	50.0000	41.9756	16.0	50.0
5	Chloroethane	50.0000	41.5957	16.8	50.0
11	Trichlorofluoromethane	50.0000	45.6960	8.6	50.0
3	Ethanol	2500.0000	2051.9098	17.9	50.0
8	Acrolein	500.0000	419.5180	16.1	50.0
12	1,1-Dichloroethene	50.0000	46.6777	6.6	20.0
7	Acetone	200.0000	127.6435	36.2	50.0
21	Iodomethane	50.0000	48.7212	2.6	50.0
68	Acetonitrile	500.0000	492.1143	1.6	50.0
6	Methylene Chloride	50.0000	48.3353	3.3	50.0
86	tert-Butyl alcohol	1000.0000	843.6673	15.6	50.0
9	Acrylonitrile	500.0000	463.8067	7.2	50.0
0	trans-1,2-Dichloroethene	50.0000	45.7563	8.5	50.0
15	1,1-Dichloroethane	50.0000	48.4200	3.2	50.0
84	Isopropyl ether	250.0000	244.8807	2.0	50.0
69	Chloroprene	50.0000	44.8642	10.3	50.0
20	2-Butanone	200.0000	159.6092	20.2	50.0
0	cis-1,2-Dichloroethene	50.0000	48.2213	3.6	50.0
93	2,2-Dichloropropane	50.0000	44.9875	10.0	50.0
70	Propionitrile	500.0000	441.5732	11.7	50.0
72	Methacrylonitrile	500.0000	443.1044	11.4	50.0
13	Bromochloromethane	50.0000	50.0097	0.0	50.0
17	Chloroform	50.0000	46.4344	7.1	20.0
22	1,1,1-Trichloroethane	50.0000	45.8663	8.3	50.0
94	1,1-Dichloropropene	50.0000	47.9325	4.1	50.0
23	Carbon Tetrachloride	50.0000	45.6642	8.7	50.0
71	Isobutanol	1000.0000	893.6460	10.6	50.0
16	1,2-Dichloroethane	50.0000	47.0488	5.9	50.0
30	Benzene	50.0000	50.3749	0.7	50.0
88	n-Butanol	1000.0000	829.0510	17.1	50.0
29	Trichloroethene	50.0000	50.4978	1.0	50.0
26	1,2-Dichloropropane	50.0000	47.5733	4.9	20.0
34	Dibromomethane	50.0000	47.3903	5.2	50.0
57	1,4-Dioxane	2500.0000	2299.7272	8.0	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: J.i
Lab File ID: j2496.d
Analysis Type: SOIL

Injection Date: 25-MAY-2004 11:09
Lab Sample ID: MAIN050
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
25	Bromodichloromethane	50.0000	47.0652	5.9	50.0	
28	cis-1,3-Dichloropropene	50.0000	48.0061	4.0	50.0	
38	4-Methyl-2-pentanone	200.0000	165.8850	17.1	50.0	
45	Toluene	50.0000	48.8867	2.2	20.0	
31	trans-1,3-Dichloropropene	50.0000	44.5972	10.8	50.0	
32	1,1,2-Trichloroethane	50.0000	45.6044	8.8	50.0	
42	Tetrachloroethene	50.0000	51.0198	2.0	50.0	
109	1,3-Dichloropropane	50.0000	45.6173	8.8	50.0	
43	2-Hexanone	200.0000	153.3156	23.3	50.0	
36	Dibromochloromethane	50.0000	47.2164	5.6	50.0	
58	1,2-Dibromoethane	50.0000	46.1984	7.6	50.0	
92	1-Chlorohexane	50.0000	48.2713	3.5	50.0	
46	Chlorobenzene	50.0000	48.9290	2.1	50.0	
74	1,1,1,2-Tetrachloroethane	50.0000	47.3949	5.2	50.0	
47	Ethylbenzene	50.0000	49.0663	1.9	20.0	
0	m and p-Xylene	100.0000	97.0524	2.9	50.0	
0	o-Xylene	50.0000	48.3455	3.3	50.0	
49	Styrene	50.0000	48.0149	4.0	50.0	
37	Bromoform	50.0000	46.1956	7.6	50.0	
79	isopropyl benzene	50.0000	46.1107	7.8	50.0	
76	Cyclohexanone	2000.0000	472.4174	76.4	50.0	<-
40	1,1,2,2-Tetrachloroethane	50.0000	42.6980	14.6	50.0	
95	Bromobenzene	50.0000	45.5934	8.8	50.0	
50	1,2,3-Trichloropropane	50.0000	38.8592	22.3	50.0	
96	n-Propylbenzene	50.0000	45.0225	10.0	50.0	
97	2-Chlorotoluene	50.0000	42.9849	14.0	50.0	
98	1,3,5-Trimethylbenzene	50.0000	41.4626	17.1	50.0	
99	4-Chlorotoluene	50.0000	45.8562	8.3	50.0	
100	tert-Butylbenzene	50.0000	41.9273	16.1	50.0	
101	1,2,4-Trimethylbenzene	50.0000	41.4491	17.1	50.0	
102	sec-Butylbenzene	50.0000	41.3363	17.3	50.0	
61	m-Dichlorobenzene	50.0000	47.6471	4.7	50.0	
103	4-Isopropyltoluene	50.0000	42.9713	14.1	50.0	
62	p-dichlorobenzene	50.0000	45.9783	8.0	50.0	
104	n-Butylbenzene	50.0000	44.0994	11.8	50.0	
63	o-Dichlorobenzene	50.0000	46.2308	7.5	50.0	
75	1,2-Dibromo-3-chloropropane	50.0000	41.9464	16.1	50.0	
105	1,2,4-Trichlorobenzene	50.0000	48.2180	3.6	50.0	
106	Hexachlorobutadiene	50.0000	45.0588	9.9	50.0	

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: J.i
Lab File ID: j2496.d
Analysis Type: SOIL

Injection Date: 25-MAY-2004 11:09
Lab Sample ID: MAIN050
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
107 Napthalene	50.0000	44.2534	11.5	50.0
108 1,2,3-Trichlorobenzene	50.0000	46.7421	6.5	50.0

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: J.i
Lab File ID: j2496.d
Analysis Type: SOIL
Lab Sample ID: MAIN050
Quant Type: ISTD

Injection Date: 25-MAY-2004 11:09
Init. Calibration Date(s): 03/19/4 04/14/4
Init. Calibration Times: 17:08 12:39
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
M	1 1,2-Dichloroethene (total)	0.429	0.404	0.010	6.0	50.0
M	2 Xylene (total)	5.634	4.824	0.010	14.4	50.0
	3 dichlorodifluoromethane	0.616	0.510	0.010	17.3	50.0
	4 Chloromethane	0.267	0.204	0.100	23.8	50.0
	6 Vinyl Chloride	0.258	0.217	0.020	15.9	20.0
	8 Bromomethane	0.313	0.263	0.010	16.0	50.0
	9 Chloroethane	0.180	0.150	0.010	16.8	50.0
	11 Trichlorofluoromethane	1.095	1.001	0.010	8.6	50.0
	12 Ethanol	0.002	0.002	0.000	17.9	50.0
	16 Acrolein	0.037	0.031	0.005	16.1	50.0
	17 1,1-Dichloroethene	0.359	0.335	0.020	6.6	20.0
	20 Acetone	0.116	0.077	0.010	N/A	N/A
	21 Iodomethane	0.675	0.658	0.010	2.6	50.0
	23 Acetonitrile	0.012	0.012	0.001	1.6	50.0
	26 Methylene Chloride	0.313	0.316	0.010	N/A	N/A
	27 tert-Butyl alcohol	0.046	0.039	0.001	15.6	50.0
	28 Acrylonitrile	0.062	0.058	0.010	7.2	50.0
	30 trans-1,2-Dichloroethene	0.425	0.389	0.010	8.5	50.0
	32 1,1-Dichloroethane	0.699	0.677	0.100	3.2	50.0
	34 Isopropyl ether	0.367	0.360	0.010	2.0	50.0
	35 Chloroprene	0.765	0.687	0.010	10.3	50.0
	37 2-Butanone	0.159	0.127	0.010	20.2	50.0
	38 cis-1,2-Dichloroethene	0.434	0.419	0.010	3.6	50.0
	39 2,2-Dichloropropane	0.765	0.688	0.010	10.0	50.0
	41 Propionitrile	0.026	0.023	0.001	11.7	50.0
	42 Methacrylonitrile	0.185	0.164	0.010	11.4	50.0
	43 Bromochloromethane	0.219	0.219	0.010	0.0	50.0
	45 Chloroform	0.923	0.857	0.020	7.1	20.0
	47 1,1,1-Trichloroethane	1.050	0.963	0.010	8.3	50.0
	49 1,1-Dichloropropene	0.617	0.592	0.010	4.1	50.0
	50 Carbon Tetrachloride	0.995	0.909	0.010	8.7	50.0
	51 Isobutanol	0.013	0.011	0.000	10.6	50.0
	54 Benzene	1.012	1.019	0.010	-0.7	50.0
	53 1,2-Dichloroethane	0.679	0.639	0.010	5.9	50.0
	57 n-Butanol	0.009	0.007	0.000	17.1	50.0

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: J.i Injection Date: 25-MAY-2004 11:09
Lab File ID: j2496.d Init. Calibration Date(s): 03/19/4 04/14/4
Analysis Type: SOIL Init. Calibration Times: 17:08 12:39
Lab Sample ID: MAIN050 Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Quant Type: ISTD

	COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D	
58	Trichloroethene	0.443	0.447	0.010	-1.0	50.0	
61	1,2-Dichloropropane	0.367	0.349	0.020	4.9	20.0	
64	1,4-Dioxane	0.003	0.003	0.000	8.0	50.0	
63	Dibromomethane	0.406	0.385	0.010	5.2	50.0	
65	Bromodichloromethane	0.895	0.842	0.010	5.9	50.0	
68	cis-1,3-Dichloropropene	0.656	0.630	0.010	4.0	50.0	
69	4-Methyl-2-pentanone	1.828	1.516	0.010	17.1	50.0	
71	Toluene	5.783	5.654	0.020	2.2	20.0	
72	trans-1,3-Dichloropropene	2.809	2.506	0.010	10.8	50.0	
74	1,1,2-Trichloroethane	1.708	1.558	0.010	8.8	50.0	
76	Tetrachloroethene	2.029	2.071	0.010	-2.0	50.0	
75	1,3-Dichloropropane	2.473	2.256	0.010	8.8	50.0	
77	2-Hexanone	1.335	1.024	0.010	23.3	50.0	
79	Dibromochloromethane	2.935	2.772	0.010	5.6	50.0	
80	1,2-Dibromoethane	2.523	2.331	0.010	7.6	50.0	
81	1-Chlorohexane	2.936	2.835	0.010	3.5	50.0	
83	Chlorobenzene	4.410	4.316	0.300	2.1	50.0	
84	1,1,1,2-Tetrachloroethane	2.241	2.124	0.010	5.2	50.0	
85	Ethylbenzene	2.318	2.275	0.010	1.9	20.0	
86	m and p-Xylene	3.147	3.054	0.010	2.9	50.0	
87	o-Xylene	2.904	2.808	0.010	3.3	50.0	
88	Styrene	5.023	4.823	0.010	4.0	50.0	
89	Bromoform	2.661	2.458	0.101	7.6	50.0	
90	isopropyl benzene	9.586	8.840	0.010	7.8	50.0	
92	Cyclohexanone	0.288	0.068	0.005	76.4	50.0	<-
94	1,1,2,2-Tetrachloroethane	1.416	1.209	0.300	14.6	50.0	
95	Bromobenzene	1.336	1.218	0.010	8.8	50.0	
96	1,2,3-Trichloropropane	0.546	0.425	0.010	22.3	50.0	
98	n-Propylbenzene	1.168	1.052	0.010	10.0	50.0	
99	2-Chlorotoluene	0.946	0.814	0.010	14.0	50.0	
100	1,3,5-Trimethylbenzene	4.798	3.979	0.010	17.1	50.0	
101	4-Chlorotoluene	0.998	0.916	0.010	8.3	50.0	
102	tert-Butylbenzene	4.506	3.778	0.010	16.1	50.0	
103	1,2,4-Trimethylbenzene	4.596	3.810	0.010	17.1	50.0	
104	sec-Butylbenzene	6.414	5.302	0.010	17.3	50.0	

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: J.i Injection Date: 25-MAY-2004 11:09
Lab File ID: j2496.d Init. Calibration Date(s): 03/19/4 04/14/4
Analysis Type: SOIL Init. Calibration Times: 17:08 12:39
Lab Sample ID: MAIN050 Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Quant Type: ISTD

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
105 m-Dichlorobenzene	1.974	1.881	0.010	4.7	50.0
106 4-Isopropyltoluene	4.974	4.274	0.010	14.1	50.0
108 p-dichlorobenzene	2.237	2.057	0.010	8.0	50.0
110 n-Butylbenzene	4.646	4.097	0.010	11.8	50.0
111 o-Dichlorobenzene	1.823	1.685	0.010	7.5	50.0
112 1,2-Dibromo-3-chloropropane	0.379	0.318	0.010	16.1	50.0
113 1,2,4-Trichlorobenzene	1.817	1.753	0.010	3.6	50.0
114 Hexachlorobutadiene	1.319	1.189	0.010	9.9	50.0
115 Napthalene	2.118	1.874	0.010	11.5	50.0
116 1,2,3-Trichlorobenzene	1.564	1.462	0.010	6.5	50.0

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/052504.b/j2496.d
Lab Smp Id: MAIN050 Client Smp ID: MAIN050
Inj Date : 25-MAY-2004 11:09
Operator : appelhansd Inst ID: J.i
Smp Info : MAIN050,, #067/082-04
Misc Info :
Comment :
Method : /chem/J.i/052504.b/J5030-8260B-soil.m
Meth Date : 25-May-2004 11:26 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
* 56 Fluorobenzene	96	6.901	6.901	(1.000)	1521162	50.0000		
* 82 Chlorobenzene-d5	119	10.133	10.133	(1.000)	367906	50.0000		
* 107 1,4-Dichlorobenzene-d4	152	13.185	13.185	(1.000)	680082	50.0000		(Q)
M 1 1,2-Dichloroethene (total)	96				1228042	100.000	93.9776	
M 2 Xylene (total)	106				3280550	50.0000	145.398	
3 dichlorodifluoromethane	85	2.477	2.477	(0.359)	775212	50.0000	41.3446	
4 Chloromethane	50	2.621	2.621	(0.380)	309780	50.0000	38.1162	
6 Vinyl Chloride	62	2.766	2.766	(0.401)	330054	50.0000	42.0300	
8 Bromomethane	94	3.091	3.091	(0.448)	399348	50.0000	41.9756	
9 Chloroethane	64	3.145	3.145	(0.456)	227830	50.0000	41.5957	
11 Trichlorofluoromethane	101	3.380	3.380	(0.490)	1522312	50.0000	45.6960	
12 Ethanol	45	3.524	3.524	(0.511)	122281	2500.00	2051.91	
16 Acrolein	56	3.795	3.795	(0.550)	467223	500.000	419.518	
17 1,1-Dichloroethene	96	3.922	3.922	(0.568)	509719	50.0000	46.6777	
20 Acetone	43	3.940	3.940	(0.571)	468715	200.000	127.644	
21 Iodomethane	142	4.102	4.102	(0.594)	1000540	50.0000	48.7212	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
23 Acetonitrile	41	4.247	4.247	(0.615)	178521	500.000	492.114
26 Methylene Chloride	84	4.391	4.391	(0.636)	480902	50.0000	48.3353
27 tert-Butyl alcohol	59	4.463	4.463	(0.647)	1191521	1000.00	843.667
28 Acrylonitrile	53	4.644	4.644	(0.673)	881354	500.000	463.807
30 trans-1,2-Dichloroethene	96	4.680	4.680	(0.678)	591164	50.0000	45.7563
32 1,1-Dichloroethane	63	5.113	5.113	(0.741)	1029576	50.0000	48.4200
34 Isopropyl ether	87	5.149	5.149	(0.746)	2736778	250.000	244.881
35 Chloroprene	53	5.204	5.204	(0.754)	1044282	50.0000	44.8642
37 2-Butanone	43	5.709	5.709	(0.827)	772658	200.000	159.609
38 cis-1,2-Dichloroethene	96	5.727	5.727	(0.830)	636878	50.0000	48.2213
39 2,2-Dichloropropane	77	5.727	5.727	(0.830)	1046987	50.0000	44.9875
41 Propionitrile	54	5.782	5.782	(0.838)	347889	500.000	441.573
42 Methacrylonitrile	41	5.944	5.944	(0.861)	2490479	500.000	443.104
43 Bromochloromethane	128	5.980	5.980	(0.867)	333271	50.0000	50.0097
45 Chloroform	83	6.034	6.034	(0.874)	1303306	50.0000	46.4344
47 1,1,1-Trichloroethane	97	6.251	6.251	(0.906)	1465563	50.0000	45.8663
49 1,1-Dichloropropene	75	6.414	6.414	(0.929)	900244	50.0000	47.9325
50 Carbon Tetrachloride	117	6.432	6.432	(0.932)	1382990	50.0000	45.6642
51 Isobutanol	41	6.450	6.450	(0.935)	344466	1000.00	893.646
54 Benzene	78	6.630	6.630	(0.961)	1550244	50.0000	50.3749
53 1,2-Dichloroethane	62	6.630	6.630	(0.961)	972005	50.0000	47.0488
57 n-Butanol	56	7.136	7.136	(1.034)	225380	1000.00	829.051
58 Trichloroethene	130	7.280	7.280	(1.055)	680629	50.0000	50.4978
61 1,2-Dichloropropane	63	7.515	7.515	(1.089)	531437	50.0000	47.5733
64 1,4-Dioxane	88	7.660	7.660	(1.110)	230726	2500.00	2299.73
63 Dibromomethane	93	7.641	7.641	(1.107)	584976	50.0000	47.3903
65 Bromodichloromethane	83	7.786	7.786	(1.128)	1280937	50.0000	47.0652
68 cis-1,3-Dichloropropene	75	8.237	8.237	(1.194)	958535	50.0000	48.0060
69 4-Methyl-2-pentanone	43	8.382	8.382	(0.827)	2231339	200.000	165.885
71 Toluene	91	8.599	8.599	(0.849)	2080221	50.0000	48.8867
72 trans-1,3-Dichloropropene	75	8.815	8.815	(0.870)	921888	50.0000	44.5972
74 1,1,2-Trichloroethane	97	9.014	9.014	(0.889)	573081	50.0000	45.6044
76 Tetrachloroethene	164	9.194	9.194	(0.907)	761765	50.0000	51.0198
75 1,3-Dichloropropane	76	9.212	9.212	(0.909)	830037	50.0000	45.6173
77 2-Hexanone	43	9.267	9.267	(0.914)	1506218	200.000	153.316
79 Dibromochloromethane	129	9.465	9.465	(0.934)	1019699	50.0000	47.2164
80 1,2-Dibromoethane	107	9.610	9.610	(0.948)	857647	50.0000	46.1984
81 1-Chlorohexane	91	10.097	10.097	(0.996)	1042977	50.0000	48.2712
83 Chlorobenzene	112	10.170	10.170	(1.004)	1587715	50.0000	48.9290
84 1,1,1,2-Tetrachloroethane	131	10.260	10.260	(1.012)	781427	50.0000	47.3948
85 Ethylbenzene	106	10.296	10.296	(1.016)	837012	50.0000	49.0663
86 m and p-Xylene	106	10.440	10.440	(1.030)	2247338	100.000	97.0524
87 o-Xylene	106	10.982	10.982	(1.084)	1033212	50.0000	48.3455
88 Styrene	104	11.000	11.000	(1.086)	1774457	50.0000	48.0149
89 Bromoform	173	11.271	11.271	(1.112)	904444	50.0000	46.1956
90 isopropyl benzene	105	11.470	11.470	(1.132)	3252248	50.0000	46.1107
92 Cyclohexanone	55	11.614	11.614	(1.146)	1002201	2000.00	472.417

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94 1,1,2,2-Tetrachloroethane	83	11.849	11.849	(0.899)	822256	50.0000	42.6980
95 Bromobenzene	156	11.903	11.903	(0.903)	828262	50.0000	45.5934
96 1,2,3-Trichloropropane	110	11.921	11.921	(0.904)	288814	50.0000	38.8592(Q)
98 n-Propylbenzene	120	12.011	12.011	(0.911)	715450	50.0000	45.0225
99 2-Chlorotoluene	126	12.138	12.138	(0.921)	553267	50.0000	42.9849
100 1,3,5-Trimethylbenzene	105	12.246	12.246	(0.929)	2705890	50.0000	41.4626
101 4-Chlorotoluene	126	12.282	12.282	(0.932)	622616	50.0000	45.8562
102 tert-Butylbenzene	119	12.680	12.680	(0.962)	2569667	50.0000	41.9272
103 1,2,4-Trimethylbenzene	105	12.734	12.734	(0.966)	2591373	50.0000	41.4491
104 sec-Butylbenzene	105	12.950	12.950	(0.982)	3605984	50.0000	41.3363
105 m-Dichlorobenzene	146	13.113	13.113	(0.995)	1279485	50.0000	47.6471
106 4-Isopropyltoluene	119	13.131	13.131	(0.996)	2906963	50.0000	42.9713
108 p-dichlorobenzene	146	13.203	13.203	(1.001)	1399110	50.0000	45.9783
110 n-Butylbenzene	91	13.619	13.619	(1.033)	2786610	50.0000	44.0994
111 o-Dichlorobenzene	146	13.673	13.673	(1.037)	1146046	50.0000	46.2308
112 1,2-Dibromo-3-chloropropane	157	14.576	14.576	(1.105)	216248	50.0000	41.9464
113 1,2,4-Trichlorobenzene	180	15.515	15.515	(1.177)	1191878	50.0000	48.2180
114 Hexachlorobutadiene	225	15.695	15.695	(1.190)	808420	50.0000	45.0588
115 Napthalene	128	15.822	15.822	(1.200)	1274568	50.0000	44.2534
116 1,2,3-Trichlorobenzene	180	16.111	16.111	(1.222)	994610	50.0000	46.7421

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Report Date: 05/25/2004

Internal Standard Check Report

Instrument ID: J.i
Lab File ID: j2496.d
Analysis Type: SOIL

Injection Date: 25-MAY-2004 11:09
Lab Sample ID: MAIN050
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m

INTERNAL STANDARD	ICAL AREA	SAMP AREA	ICAL RT	SAMP RT	%R
Fluorobenzene	1469689	1521162	6.917	6.901	103.5
Chlorobenzene-d5	340609	367906	10.150	10.133	108.0
1,4-Dichlorobenzene-d4	565801	680082	13.201	13.185	120.2

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j2496.d
Lab Smp Id: MAIN050
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 1109
Client Smp ID: MAIN050
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1521162	760581	3042324	1521162	0.00
82 Chlorobenzene-d5	367906	183953	735812	367906	0.00
107 1,4-Dichlorobenze	680082	340041	1360164	680082	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	0.00
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	0.00
107 1,4-Dichlorobenze	13.19	12.69	13.69	13.19	0.00

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

Data File: /chem/J.i/052504.b/j2496.d

Date : 25-MAY-2004 11:09

Client ID: MAIN050

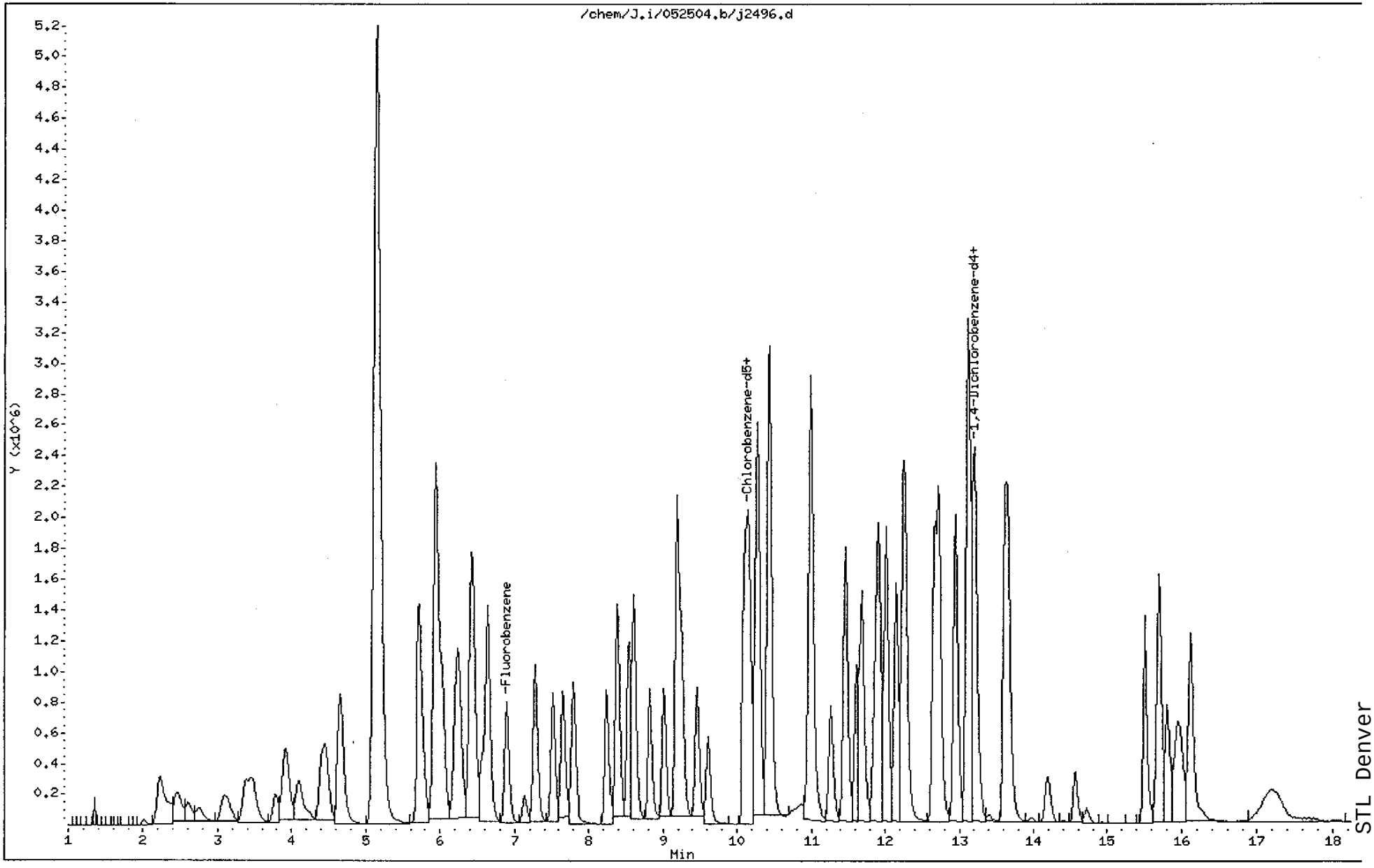
Instrument: J.i

Sample Info: MAIN050,, #067/082-04

Operator: appelhansd

Column phase: DB624

Column diameter: 0.53



CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: J.i
Lab File ID: j2497.d
Analysis Type: SOIL

Injection Date: 25-MAY-2004 11:49
Lab Sample ID: SUPP050
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
118	Dichlorotetraflouroethane	50.0000	39.9902	20.0	80.0
112	Ethylene Oxide	6250.0000	5045.9759	19.3	50.0
87	Dichlorofluoromethane	50.0000	51.2811	2.6	50.0
77	Ethyl Ether	50.0000	48.4967	3.0	50.0
126	1,2-dichloro-1,1,2-trifluoro	50.0000	50.4157	0.8	50.0
127	2,2-dichloro-1,1,1-trofluoro	50.0000	48.9128	2.2	50.0
65	Trichlorotrifluoroethane	50.0000	50.3885	0.8	50.0
128	2-Propanol	1000.0000	913.6294	8.6	50.0
10	Carbon Disulfide	50.0000	44.6879	10.6	50.0
120	Methyl Acetate	250.0000	228.8110	8.5	50.0
67	Allyl Chloride	50.0000	45.6846	8.6	50.0
53	Methyl t-butyl ether	50.0000	51.3715	2.7	50.0
54	Hexane	50.0000	40.7574	18.5	50.0
24	Vinyl acetate	100.0000	100.6763	0.7	50.0
121	ETBE	250.0000	258.2837	3.3	50.0
78	Ethyl Acetate	100.0000	96.2719	3.7	50.0
56	Tetrahydrofuran	100.0000	90.9813	9.0	50.0
89	Dibromofluoromethane	40.0000	42.3525	5.9	50.0
115	Cyclohexane	50.0000	46.5472	6.9	50.0
303	1,2-Dichloroethane-d4	40.0000	40.9471	2.4	50.0
122	TAME	250.0000	260.0010	4.0	50.0
116	2-Pentanone	200.0000	188.4036	5.8	50.0
123	Methyl Cyclohexane	50.0000	47.9309	4.1	50.0
73	Methyl Methacrylate	100.0000	103.6298	3.6	50.0
82	2-nitropropane	50.0000	46.6856	6.6	50.0
35	2-Chloroethyl vinyl ether	50.0000	54.7457	9.5	50.0
301	Toluene-d8	40.0000	37.9192	5.2	50.0
41	Ethyl methacrylate	100.0000	91.1724	8.8	50.0
125	Tetrahydrothiophene	50.0000	45.3747	9.3	50.0
117	cis-1,4-Dichloro-2-butene	50.0000	50.1986	0.4	50.0
302	Bromofluorobenzene	40.0000	39.0169	2.5	50.0
60	t-1,4-Dichloro-2-butene	50.0000	45.6846	8.6	50.0
119	1,2,3-Trimethylbenzene	50.0000	46.1871	7.6	50.0

JK 5-26

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: J.i Injection Date: 25-MAY-2004 11:49
Lab File ID: j2497.d Init. Calibration Date(s): 03/19/4 04/14/4
Analysis Type: SOIL Init. Calibration Times: 17:08 12:39
Lab Sample ID: SUPP050 Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Quant Type: ISTD

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
$ 46 Dibromofluoromethane	0.719	0.761	0.010	-5.9	50.0
$ 52 1,2-Dichloroethane-d4	0.518	0.531	0.010	-2.4	50.0
$ 70 Toluene-d8	5.777	5.477	0.010	5.2	50.0
$ 93 Bromofluorobenzene	4.058	3.958	0.010	2.5	50.0
5 Dichlorotetraflouroethane	0.629	0.503	0.010	20.0	80.0
7 Ethylene Oxide	0.042	0.034	0.010	19.3	50.0
10 Dichlorofluoromethane	0.702	0.720	0.010	-2.6	50.0
13 1,2-dichloro-1,1,2-trifluor	0.530	0.535	0.010	-0.8	50.0
14 Ethyl Ether	0.268	0.260	0.010	3.0	50.0
15 2,2-dichloro-1,1,1-trofluor	0.820	0.803	0.010	2.2	50.0
18 2-Propanol	0.021	0.019	0.010	8.6	50.0
19 Trichlorotrifluoroethane	0.525	0.529	0.010	-0.8	50.0
22 Carbon Disulfide	1.087	0.972	0.010	10.6	50.0
24 Allyl Chloride	0.532	0.486	0.010	8.6	50.0
25 Methyl Acetate	0.246	0.225	0.010	8.5	50.0
29 Methyl t-butyl ether	1.121	1.152	0.010	-2.7	50.0
31 Hexane	2.678	2.183	0.010	18.5	50.0
33 Vinyl acetate	0.609	0.613	0.010	-0.7	50.0
36 ETBE	1.500	1.550	0.010	-3.3	50.0
40 Ethyl Acetate	0.364	0.350	0.010	3.7	50.0
44 Tetrahydrofuran	0.082	0.075	0.010	9.0	50.0
48 Cyclohexane	0.619	0.576	0.010	6.9	50.0
55 TAME	1.183	1.230	0.010	-4.0	50.0
59 2-Pentanone	0.324	0.305	0.010	5.8	50.0
60 Methyl Cyclohexane	0.670	0.642	0.010	4.1	50.0
62 Methyl Methacrylate	0.132	0.137	0.010	-3.6	50.0
66 2-nitropropane	0.592	0.552	0.010	6.6	50.0
67 2-Chloroethyl vinyl ether	0.166	0.181	0.002	-9.5	50.0
73 Ethyl methacrylate	2.566	2.340	0.010	8.8	50.0
78 Tetrahydrothiophene	0.743	0.674	0.010	9.3	50.0
91 cis-1,4-Dichloro-2-butene	0.652	0.655	0.010	-0.4	50.0
97 t-1,4-Dichloro-2-butene	0.402	0.368	0.010	8.6	50.0
109 1,2,3-Trimethylbenzene	4.294	3.967	0.010	7.6	50.0

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/052504.b/j2497.d
Lab Smp Id: SUPP050 Client Smp ID: SUPP050
Inj Date : 25-MAY-2004 11:49
Operator : appelhansd Inst ID: J.i
Smp Info : SUPP050,, #011/052-04
Misc Info :
Comment :
Method : /chem/J.i/052504.b/J5030-8260B-soil.m
Meth Date : 25-May-2004 12:41 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 56 Fluorobenzene	96	6.902	6.902	(1.000)	1399858	50.0000	
* 82 Chlorobenzene-d5	119	10.135	10.135	(1.000)	333740	50.0000	
* 107 1,4-Dichlorobenzene-d4	152	13.187	13.187	(1.000)	571705	50.0000	
$ 46 Dibromofluoromethane	111	6.198	6.198	(0.898)	852236	40.0000	42.3525
$ 52 1,2-Dichloroethane-d4	65	6.559	6.559	(0.950)	594353	40.0000	40.9471
$ 70 Toluene-d8	98	8.528	8.528	(0.841)	1462257	40.0000	37.9192
$ 93 Bromofluorobenzene	95	11.670	11.670	(1.151)	1056789	40.0000	39.0169
5 Dichlorotetraflouroethane	85	2.605	2.605	(0.377)	703769	50.0000	39.9902
7 Ethylene Oxide	44	3.002	3.002	(0.435)	5874183	6250.00	5045.98
10 Dichlorofluoromethane	67	3.345	3.345	(0.485)	1008220	50.0000	51.2811
13 1,2-dichloro-1,1,2-trifluoro	117	3.652	3.652	(0.529)	748743	50.0000	50.4157
14 Ethyl Ether	59	3.616	3.616	(0.524)	363944	50.0000	48.4967
15 2,2-dichloro-1,1,1-trofluoro	83	3.688	3.688	(0.534)	1123444	50.0000	48.9128
18 2-Propanol	45	4.049	4.049	(0.587)	525503	1000.00	913.629
19 Trichlorotrifluoroethane	151	3.923	3.923	(0.568)	740778	50.0000	50.3885
22 Carbon Disulfide	76	4.158	4.158	(0.602)	1360042	50.0000	44.6879

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
24 Allyl Chloride	41	4.248	4.248	(0.615)	680570	50.0000	45.6846(Q)
25 Methyl Acetate	43	4.248	4.248	(0.615)	1576911	250.000	228.811
29 Methyl t-butyl ether	73	4.645	4.645	(0.673)	1611963	50.0000	51.3715
31 Hexane	57	4.916	4.916	(0.485)	728568	50.0000	40.7574
33 Vinyl acetate	43	5.115	5.115	(0.741)	1716443	100.000	100.676
36 ETBE	59	5.512	5.512	(0.799)	10848969	250.000	258.284
40 Ethyl Acetate	43	5.747	5.747	(0.833)	980866	100.000	96.2719
44 Tetrahydrofuran	42	6.000	6.000	(0.869)	209889	100.000	90.9813
48 Cyclohexane	56	6.306	6.306	(0.914)	806497	50.0000	46.5472
55 TAME	73	6.704	6.704	(0.971)	8610223	250.000	260.001
59 2-Pentanone	43	7.426	7.426	(1.076)	1707861	200.000	188.404
60 Methyl Cyclohexane	83	7.480	7.480	(1.084)	899258	50.0000	47.9308
62 Methyl Methacrylate	100	7.589	7.589	(1.099)	383576	100.000	103.630
66 2-nitropropane	41	8.022	8.022	(0.792)	184357	50.0000	46.6856
67 2-Chloroethyl vinyl ether	63	8.058	8.058	(1.167)	253699	50.0000	54.7457
73 Ethyl methacrylate	69	8.871	8.871	(0.875)	1561577	100.000	91.1724
78 Tetrahydrothiophene	60	9.449	9.449	(0.932)	224943	50.0000	45.3747
91 cis-1,4-Dichloro-2-butene	53	11.543	11.543	(1.139)	218526	50.0000	50.1986
97 t-1,4-Dichloro-2-butene	53	11.922	11.922	(0.904)	210225	50.0000	45.6846
109 1,2,3-Trimethylbenzene	105	13.259	13.259	(1.005)	2267928	50.0000	46.1871

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Internal Standard Check Report

Instrument ID: J.i
Lab File ID: j2497.d
Analysis Type: SOIL

Injection Date: 25-MAY-2004 11:49
Lab Sample ID: SUPP050
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m

INTERNAL STANDARD	ICAL AREA	SAMP AREA	ICAL RT	SAMP RT	%R
Fluorobenzene	1691225	1399858	6.899	6.902	82.8
Chlorobenzene-d5	374794	333740	10.132	10.135	89.0
1,4-Dichlorobenzene-d4	607422	571705	13.184	13.187	94.1

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j2497.d
Lab Smp Id: SUPP050
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 1109
Client Smp ID: SUPP050
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1521162	760581	3042324	1399858	-7.97
82 Chlorobenzene-d5	367906	183953	735812	333740	-9.29
107 1,4-Dichlorobenze	680082	340041	1360164	571705	-15.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	0.02
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	0.01
107 1,4-Dichlorobenze	13.19	12.69	13.69	13.19	0.01

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

Data File: /chem/J.i/052504.b/j2497.d

Date : 25-MAY-2004 11:49

Client ID: SUPP050

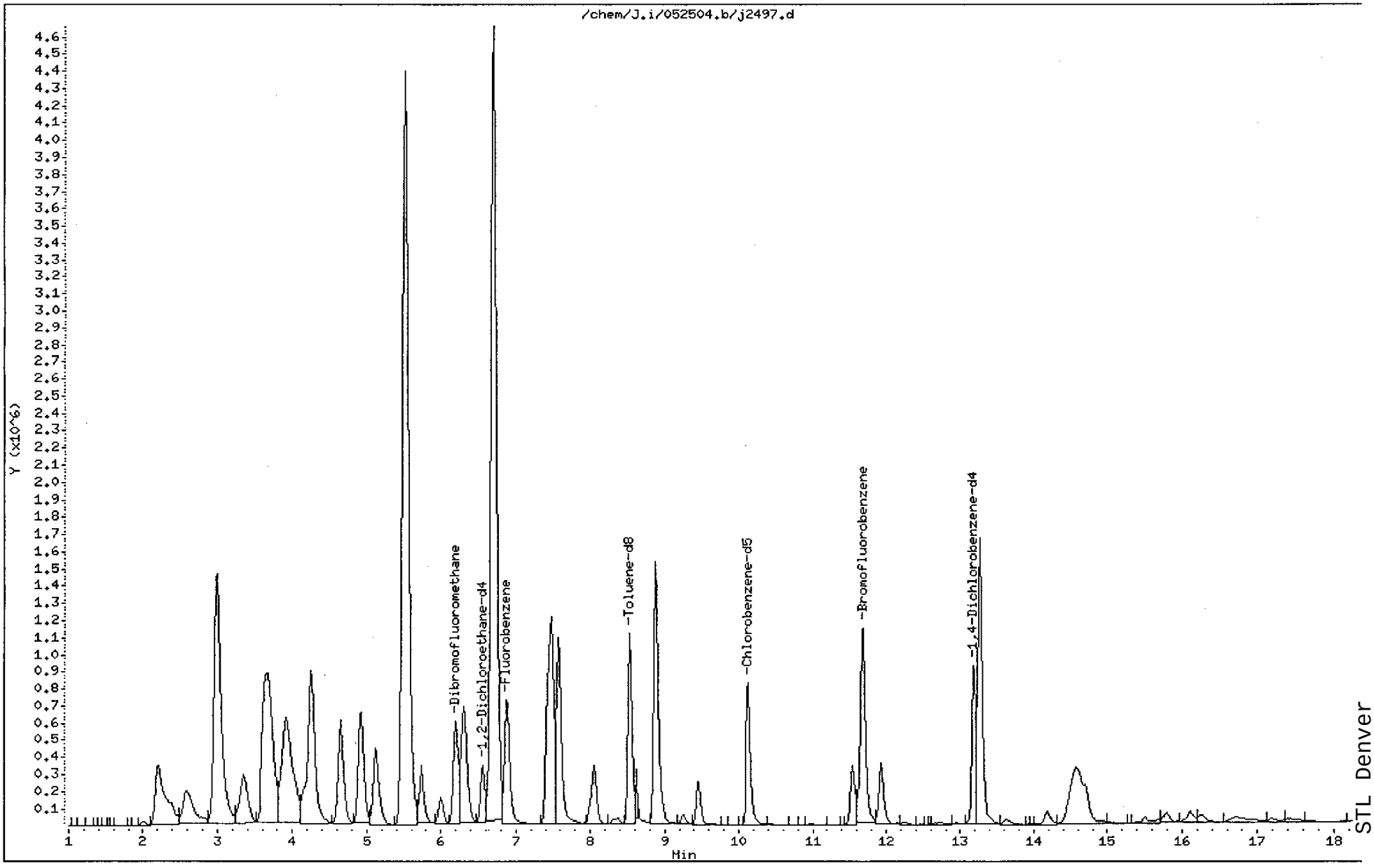
Sample Info: SUPP050,, #011/052-04

Column phase: DB624

Instrument: J.i

Operator: appelhansd

Column diameter: 0.53



GC/MS VOLATILE
SAMPLE DATA

SEVERN TRENT STL

LCSD Report

LCS SAMPLE
Data File : /chem/J.i/052504.b/j2498.d
Samp Info : LCS,, #061/068/091-04
Inj Date : 25-MAY-2004 12:13
Sample Amt : 5.0g

LCSD SAMPLE
Data File : /chem/J.i/052504.b/j2499.d
Samp Info : LCSD,, #109-04
Inj Date : 25-MAY-2004 12:37
Sample Amt : 5.0g

Sample #	Sample #	Sample #	Sample #	Sample #

	Concentration			%Recovery			RPD	
	Measured							
Spiked	LCS	LCSD	Avg.	Meas.	Min	Max	Meas.	Max
1,1-Dichloroethene								
50.0000	46.5449	54.5323	50.5	101.1	60	133	16	25
Trichloroethene								
50.0000	49.0450	54.6144	51.8	103.7	70	125	11	25
Benzene								
50.0000	49.8070	57.9723	53.9	107.8	72	121	15	25
Toluene								
50.0000	48.0716	52.1227	50.1	100.2	71	117	8	25
Chlorobenzene								
50.0000	48.2422	52.5915	50.4	100.8	75	115	9	25

100.0 Percent of recoveries are within control limits.
100.0 Percent of RPD values are within control limits.

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/052504.b/j2498.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 25-MAY-2004 12:13
Operator : appelhansd Inst ID: J.i
Smp Info : LCS,, #061/068/091-04
Misc Info :
Comment :
Method : /chem/J.i/052504.b/J5030-8260B-soil.m
Meth Date : 25-May-2004 12:41 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: dcs.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)	
* 56 Fluorobenzene	96	6.900	6.902	(1.000)	1473232	50.0000		
* 82 Chlorobenzene-d5	119	10.132	10.135	(1.000)	346964	50.0000		
* 107 1,4-Dichlorobenzene-d4	152	13.166	13.187	(1.000)	618370	50.0000		(Q)
$ 46 Dibromofluoromethane	111	6.195	6.198	(0.898)	922617	43.5666	43.5666	
$ 52 1,2-Dichloroethane-d4	65	6.557	6.559	(0.950)	651922	42.6763	42.6763	
$ 70 Toluene-d8	98	8.525	8.528	(0.841)	1580112	39.4137	39.4137	
$ 93 Bromofluorobenzene	95	11.667	11.670	(1.151)	1132083	40.2037	40.2037	
17 1,1-Dichloroethene	96	3.920	3.922	(0.568)	492254	46.5449	46.5449	
54 Benzene	78	6.629	6.630	(0.961)	1484472	49.8070	49.8070	
58 Trichloroethene	130	7.279	7.280	(1.055)	640218	49.0450	49.0450	
71 Toluene	91	8.597	8.599	(0.849)	1929101	48.0717	48.0716	
83 Chlorobenzene	112	10.168	10.170	(1.004)	1476320	48.2422	48.2422	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j2498.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 1149
Client Smp ID: LCS
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1399858	699929	2799716	1473232	5.24
82 Chlorobenzene-d5	333740	166870	667480	346964	3.96
107 1,4-Dichlorobenze	571705	285852	1143410	618370	8.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	-0.04
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	-0.03
107 1,4-Dichlorobenze	13.19	12.69	13.69	13.17	-0.16

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

STL Denver

RECOVERY REPORT

Client Name: Client SDG: 052504
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: appelhansd
Data Type: MS DATA SampleType: LCS
SpikeList File: dcs.spk Quant Type: ISTD
Sublist File: dcs.sub
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
17 1,1-Dichloroethene	50.0000	46.5449	93.09	60-133
54 Benzene	50.0000	49.8070	99.61	72-121
58 Trichloroethene	50.0000	49.0450	98.09	70-125
71 Toluene	50.0000	48.0716	96.14	71-117
83 Chlorobenzene	50.0000	48.2422	96.48	75-115

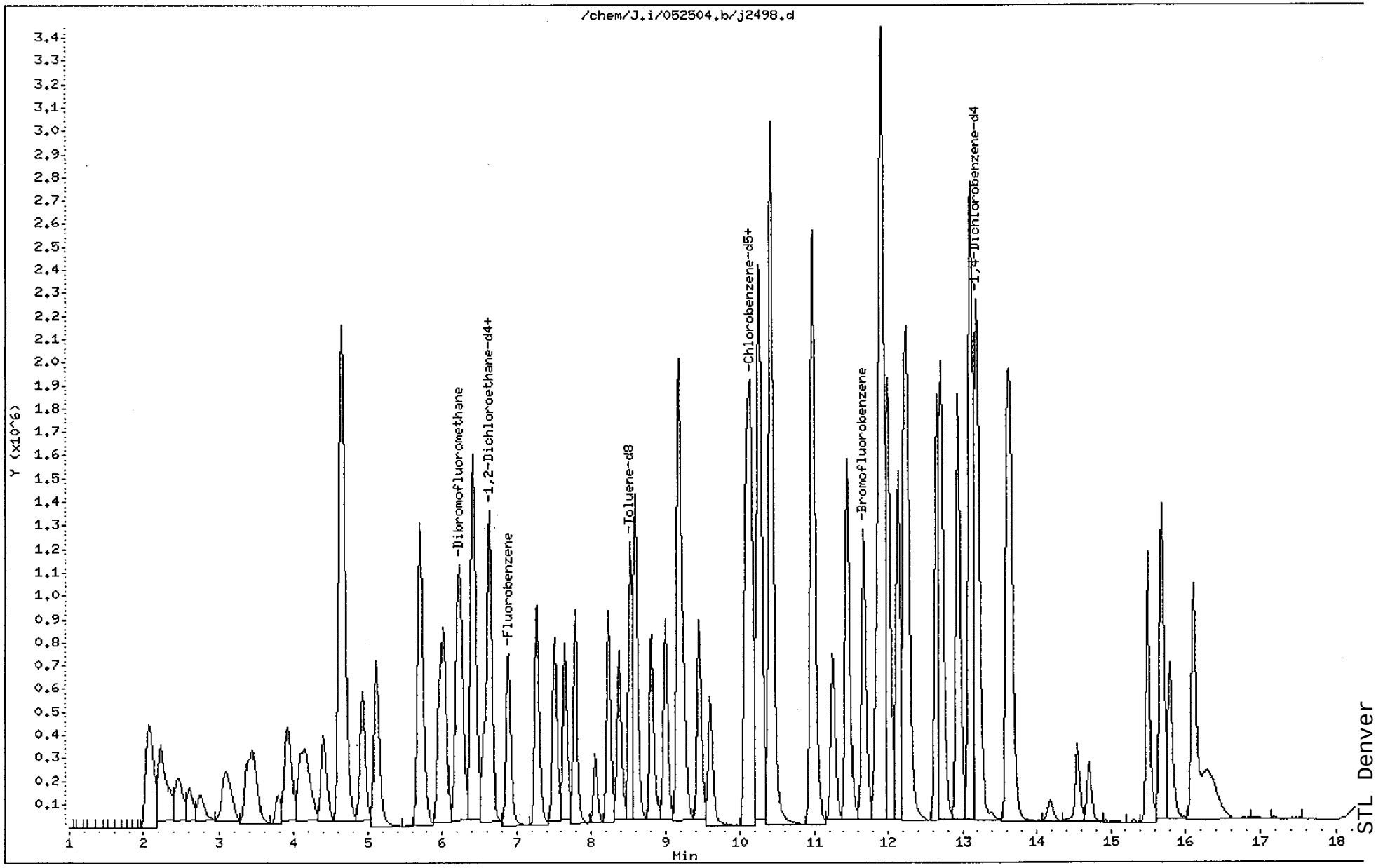
SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 46 Dibromofluorometha	40.0000	43.5666	108.92	78-118
$ 52 1,2-Dichloroethane	40.0000	42.6763	106.69	72-120
$ 70 Toluene-d8	40.0000	39.4137	98.53	75-120
$ 93 Bromofluorobenzene	40.0000	40.2037	100.51	76-127

Data File: /chem/J.i/052504.b/j2498.d
Date : 25-MAY-2004 12:13
Client ID: LCS
Sample Info: LCS,, #061/068/091-04

Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/052504.b/j2499.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 25-MAY-2004 12:37
Operator : appelhansd Inst ID: J.i
Smp Info : LCSD,, #109-04
Misc Info : j2498.d
Comment :
Method : /chem/J.i/052504.b/J5030-8260B-soil.m
Meth Date : 25-May-2004 13:19 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: dcs.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

DK 5-26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 56 Fluorobenzene	96	6.900	6.902	(1.000)	1344330	50.0000	
* 82 Chlorobenzene-d5	119	10.133	10.135	(1.000)	345547	50.0000	
* 107 1,4-Dichlorobenzene-d4	152	13.166	13.187	(1.000)	572179	50.0000	
$ 46 Dibromofluoromethane	111	6.196	6.198	(0.898)	909629	47.0719	47.0719
$ 52 1,2-Dichloroethane-d4	65	6.557	6.559	(0.950)	639750	45.8952	45.8952
$ 70 Toluene-d8	98	8.526	8.528	(0.841)	1532558	38.3843	38.3843
$ 93 Bromofluorobenzene	95	11.668	11.670	(1.151)	1141546	40.7060	40.7060
17 1,1-Dichloroethene	96	3.921	3.922	(0.568)	526267	54.5323	54.5323
54 Benzene	78	6.630	6.630	(0.961)	1576654	57.9723	57.9723
58 Trichloroethene	130	7.280	7.280	(1.055)	650542	54.6144	54.6144
71 Toluene	91	8.598	8.599	(0.849)	2083126	52.1227	52.1227
83 Chlorobenzene	112	10.151	10.170	(1.002)	1602845	52.5915	52.5915

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j2499.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info: j2498.d

Calibration Date: 05/25/4
Calibration Time: 1149
Client Smp ID: LCSD
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1399858	699929	2799716	1344330	-3.97
82 Chlorobenzene-d5	333740	166870	667480	345547	3.54
107 1,4-Dichlorobenze	571705	285852	1143410	572179	0.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	-0.03
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	-0.02
107 1,4-Dichlorobenze	13.19	12.69	13.69	13.17	-0.15

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

STL Denver

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: LCSD
Level: LOW
Data Type: MS DATA
SpikeList File: dcs.spk
Sublist File: dcs.sub
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info: j2498.d

Client SDG: 052504
Fraction: VOA
Client Smp ID: LCSD
Operator: appelhansd
SampleType: LCSD
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
17 1,1-Dichloroethene	50.0000	54.5323	109.06	60-133
54 Benzene	50.0000	57.9723	115.94	72-121
58 Trichloroethene	50.0000	54.6144	109.23	70-125
71 Toluene	50.0000	52.1227	104.25	71-117
83 Chlorobenzene	50.0000	52.5915	105.18	75-115

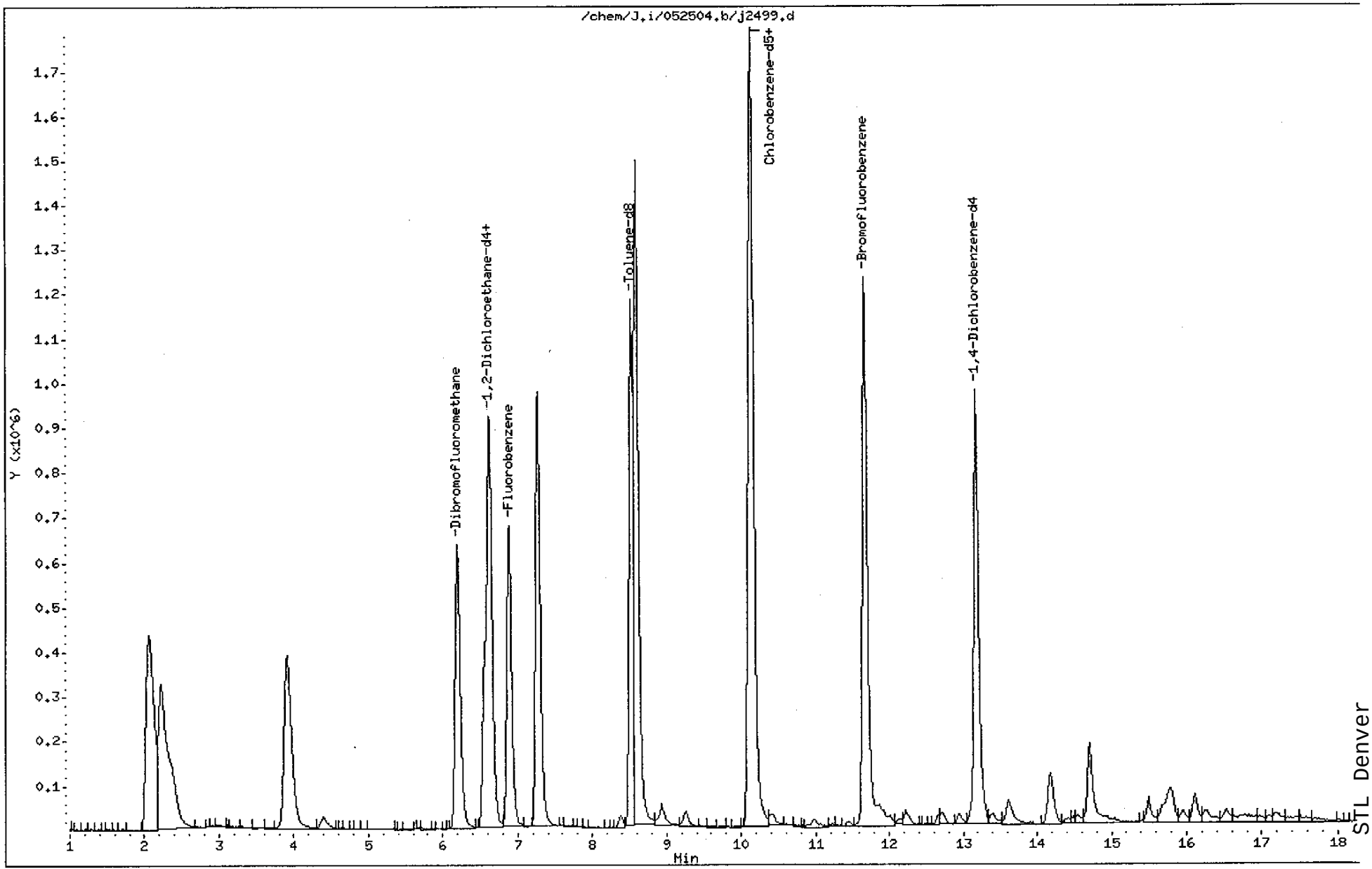
SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 46 Dibromofluorometha	40.0000	47.0719	117.68	78-118
$ 52 1,2-Dichloroethane	40.0000	45.8952	114.74	72-120
$ 70 Toluene-d8	40.0000	38.3843	95.96	75-120
$ 93 Bromofluorobenzene	40.0000	40.7060	101.77	76-127

Data File: /chem/J.i/052504.b/j2499.d
Date : 25-MAY-2004 12:37
Client ID: LCSD
Sample Info: LCSD,, #109-04

Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/052504.b/j2500.d
Lab Smp Id: VBLK Client Smp ID: VBLK
Inj Date : 25-MAY-2004 13:01
Operator : appelhansd Inst ID: J.i
Smp Info : VBLK
Misc Info :
Comment :
Method : /chem/J.i/052504.b/J5030-8260B-soil.m
Meth Date : 25-May-2004 13:19 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allj.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
* 56	Fluorobenzene	96	6.900	6.902	(1.000)	1320639	50.0000	
* 82	Chlorobenzene-d5	119	10.133	10.135	(1.000)	325396	50.0000	
* 107	1,4-Dichlorobenzene-d4	152	13.184	13.187	(1.000)	555352	50.0000	
$ 46	Dibromofluoromethane	111	6.196	6.198	(0.898)	892977	47.0392	47.0392
$ 52	1,2-Dichloroethane-d4	65	6.557	6.559	(0.950)	611624	44.6645	44.6645
$ 70	Toluene-d8	98	8.526	8.528	(0.841)	1518427	40.3855	40.3855
$ 93	Bromofluorobenzene	95	11.668	11.670	(1.151)	1104878	41.8383	41.8383
M 1	1,2-Dichloroethene (total)	96.00	Compound Not Detected.					
M 2	Xylene (total)	106.00	Compound Not Detected.					
3	dichlorodifluoromethane	85.00	Compound Not Detected.					
5	Dichlorotetraflouroethane	85.00	Compound Not Detected.					
4	Chloromethane	50.00	Compound Not Detected.					
6	Vinyl Chloride	62.00	Compound Not Detected.					
7	Ethylene Oxide	44.00	Compound Not Detected.					
8	Bromomethane	94.00	Compound Not Detected.					
9	Chloroethane	64.00	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
10 Dichlorofluoromethane	67.00	Compound Not Detected.					
11 Trichlorofluoromethane	101.00	Compound Not Detected.					
12 Ethanol	45.00	Compound Not Detected.					
13 1,2-dichloro-1,1,2-trifluoro	117.00	Compound Not Detected.					
14 Ethyl Ether	59.00	Compound Not Detected.					
15 2,2-dichloro-1,1,1-trofluoro	83.00	Compound Not Detected.					
16 Acrolein	56.00	Compound Not Detected.					
17 1,1-Dichloroethene	96.00	Compound Not Detected.					
18 2-Propanol	45.00	Compound Not Detected.					
20 Acetone	43.00	Compound Not Detected.					
19 Trichlorotrifluoroethane	151.00	Compound Not Detected.					
21 Iodomethane	142.00	Compound Not Detected.					
22 Carbon Disulfide	76.00	Compound Not Detected.					
23 Acetonitrile	41.00	Compound Not Detected.					
24 Allyl Chloride	41.00	Compound Not Detected.					
25 Methyl Acetate	43.00	Compound Not Detected.					
26 Methylene Chloride	84.00	Compound Not Detected.					
27 tert-Butyl alcohol	59.00	Compound Not Detected.					
28 Acrylonitrile	53.00	Compound Not Detected.					
30 trans-1,2-Dichloroethene	96.00	Compound Not Detected.					
29 Methyl t-butyl ether	73.00	Compound Not Detected.					
31 Hexane	57.00	Compound Not Detected.					
32 1,1-Dichloroethane	63.00	Compound Not Detected.					
33 Vinyl acetate	43.00	Compound Not Detected.					
34 Isopropyl ether	87.00	Compound Not Detected.					
35 Chloroprene	53.00	Compound Not Detected.					
36 ETBE	59.00	Compound Not Detected.					
37 2-Butanone	43.00	Compound Not Detected.					
38 cis-1,2-Dichloroethene	96.00	Compound Not Detected.					
39 2,2-Dichloropropane	77.00	Compound Not Detected.					
41 Propionitrile	54.00	Compound Not Detected.					
40 Ethyl Acetate	43.00	Compound Not Detected.					
42 Methacrylonitrile	41.00	Compound Not Detected.					
43 Bromochloromethane	128.00	Compound Not Detected.					
45 Chloroform	83.00	Compound Not Detected.					
44 Tetrahydrofuran	42.00	Compound Not Detected.					
47 1,1,1-Trichloroethane	97.00	Compound Not Detected.					
48 Cyclohexane	56.00	Compound Not Detected.					
49 1,1-Dichloropropene	75.00	Compound Not Detected.					
50 Carbon Tetrachloride	117.00	Compound Not Detected.					
51 Isobutanol	41.00	Compound Not Detected.					
53 1,2-Dichloroethane	62.00	Compound Not Detected.					
54 Benzene	78.00	Compound Not Detected.					
55 TAME	73.00	Compound Not Detected.					
57 n-Butanol	56.00	Compound Not Detected.					
58 Trichloroethene	130.00	Compound Not Detected.					
59 2-Pentanone	43.00	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
61	1,2-Dichloropropane	63.00	Compound Not Detected.					
60	Methyl Cyclohexane	83.00	Compound Not Detected.					
62	Methyl Methacrylate	100.00	Compound Not Detected.					
63	Dibromomethane	93.00	Compound Not Detected.					
64	1,4-Dioxane	88.00	Compound Not Detected.					
65	Bromodichloromethane	83.00	Compound Not Detected.					
66	2-nitropropane	41.00	Compound Not Detected.					
67	2-Chloroethyl vinyl ether	63.00	Compound Not Detected.					
68	cis-1,3-Dichloropropene	75.00	Compound Not Detected.					
69	4-Methyl-2-pentanone	43.00	Compound Not Detected.					
71	Toluene	91.00	Compound Not Detected.					
72	trans-1,3-Dichloropropene	75.00	Compound Not Detected.					
73	Ethyl methacrylate	69.00	Compound Not Detected.					
74	1,1,2-Trichloroethane	97.00	Compound Not Detected.					
75	1,3-Dichloropropane	76.00	Compound Not Detected.					
76	Tetrachloroethene	164.00	Compound Not Detected.					
77	2-Hexanone	43.00	Compound Not Detected.					
79	Dibromochloromethane	129.00	Compound Not Detected.					
80	1,2-Dibromoethane	107.00	Compound Not Detected.					
81	1-Chlorohexane	91.00	Compound Not Detected.					
83	Chlorobenzene	112.00	Compound Not Detected.					
84	1,1,1,2-Tetrachloroethane	131.00	Compound Not Detected.					
85	Ethylbenzene	106.00	Compound Not Detected.					
86	m and p-Xylene	106.00	Compound Not Detected.					
87	o-Xylene	106.00	Compound Not Detected.					
88	Styrene	104.00	Compound Not Detected.					
89	Bromoform	173.00	Compound Not Detected.					
90	isopropyl benzene	105.00	Compound Not Detected.					
92	Cyclohexanone	55.00	Compound Not Detected.					
91	cis-1,4-Dichloro-2-butene	53.00	Compound Not Detected.					
94	1,1,2,2-Tetrachloroethane	83.00	Compound Not Detected.					
95	Bromobenzene	156.00	Compound Not Detected.					
96	1,2,3-Trichloropropane	110.00	Compound Not Detected.					
97	t-1,4-Dichloro-2-butene	53.00	Compound Not Detected.					
98	n-Propylbenzene	120.00	Compound Not Detected.					
99	2-Chlorotoluene	126.00	Compound Not Detected.					
100	1,3,5-Trimethylbenzene	105.00	Compound Not Detected.					
101	4-Chlorotoluene	126.00	Compound Not Detected.					
102	tert-Butylbenzene	119.00	Compound Not Detected.					
103	1,2,4-Trimethylbenzene	105	12.733	12.734	(0.966)	14292	0.27994	0.279944(aQ)
104	sec-Butylbenzene	105.00	Compound Not Detected.					
105	m-Dichlorobenzene	146.00	Compound Not Detected.					
106	4-Isopropyltoluene	119.00	Compound Not Detected.					
108	p-dichlorobenzene	146.00	Compound Not Detected.					
109	1,2,3-Trimethylbenzene	105.00	Compound Not Detected.					
110	n-Butylbenzene	91	13.618	13.619	(1.033)	18768	0.36372	0.363720(a)
111	o-Dichlorobenzene	146.00	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
112 1,2-Dibromo-3-chloropropane	157.00	Compound Not Detected.					
113 1,2,4-Trichlorobenzene	180	15.496	15.515	(1.175)	13224	0.65514	0.655138(a)
114 Hexachlorobutadiene	225	15.713	15.695	(1.192)	4972	0.33937	0.339365(a)
115 Napthalene	128	15.803	15.822	(1.199)	32231	1.37041	1.37041(a)
116 1,2,3-Trichlorobenzene	180	16.110	16.111	(1.222)	16890	0.97203	0.972026(a)

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j2500.d
Lab Smp Id: VBLK
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 1149
Client Smp ID: VBLK
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1399858	699929	2799716	1320639	-5.66
82 Chlorobenzene-d5	333740	166870	667480	325396	-2.50
107 1,4-Dichlorobenze	571705	285852	1143410	555352	-2.86

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.90	-0.03
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	-0.02
107 1,4-Dichlorobenze	13.19	12.69	13.69	13.18	-0.02

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

STL Denver

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: VBLK
Level: LOW
Data Type: MS DATA
SpikeList File: dcs.spk
Sublist File: allj.sub
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info:

Client SDG: 052504
Fraction: VOA
Client Smp ID: VBLK
Operator: appelhansd
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 46 Dibromofluorometha	40.0000	47.0392	117.60	71-136
$ 52 1,2-Dichloroethane	40.0000	44.6645	111.66	67-131
$ 70 Toluene-d8	40.0000	40.3855	100.96	77-129
$ 93 Bromofluorobenzene	40.0000	41.8383	104.60	71-124

Data File: /chem/J.i/052504.b/j2500.d

Date : 25-MAY-2004 13:01

Client ID: VBLK

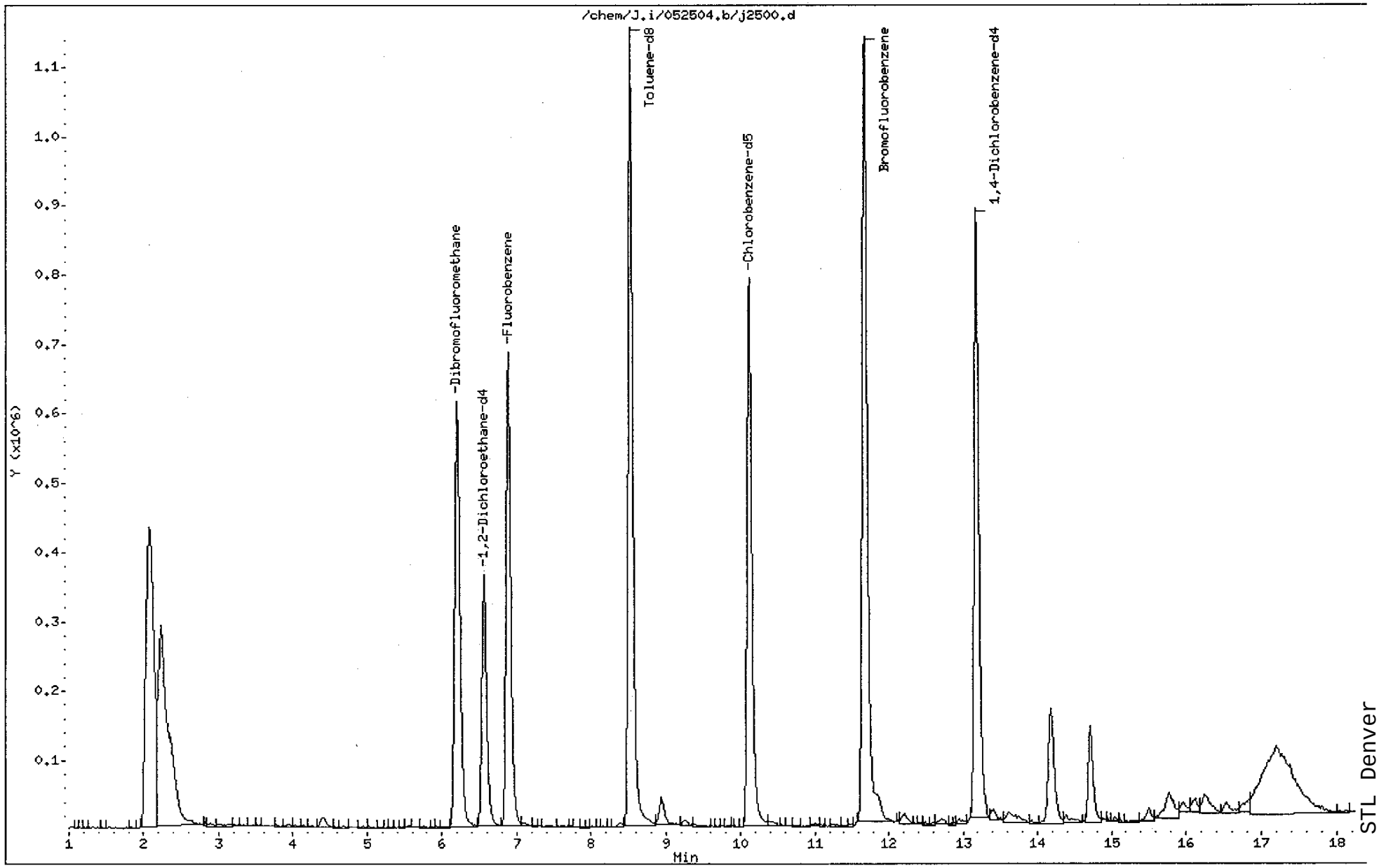
Sample Info: VBLK

Column phase: DB624

Instrument: J.i

Operator: appelhansd

Column diameter: 0.53



Data File: /chem/J.i/052504.b/j2500.d

Date : 25-MAY-2004 13:01

Client ID: VBLK

Instrument: J.i

Sample Info: VBLK

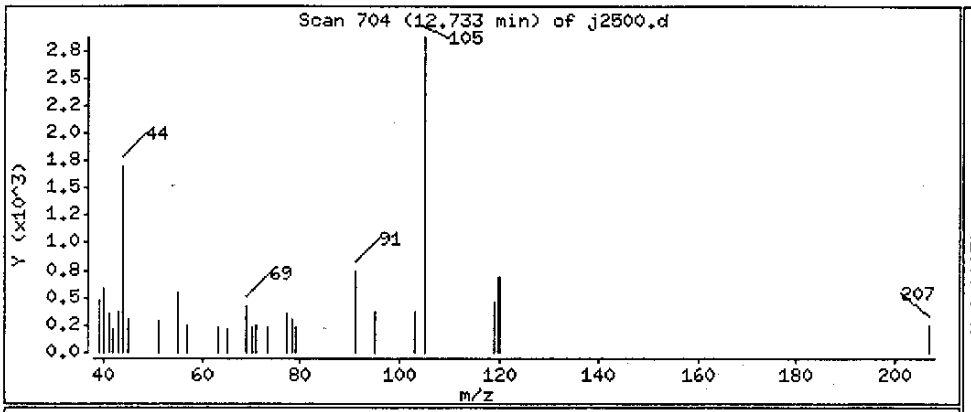
Operator: appelhansd

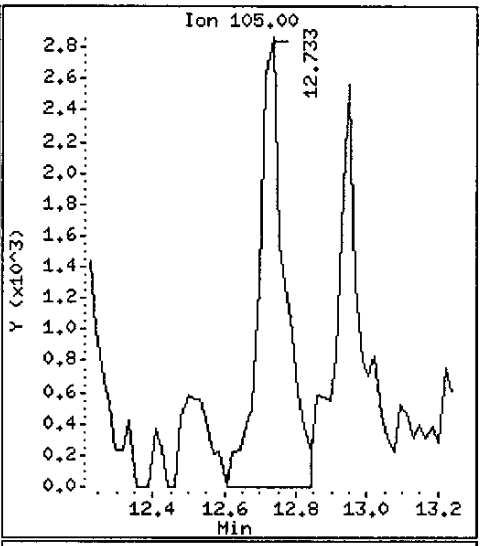
Column phase: DB624

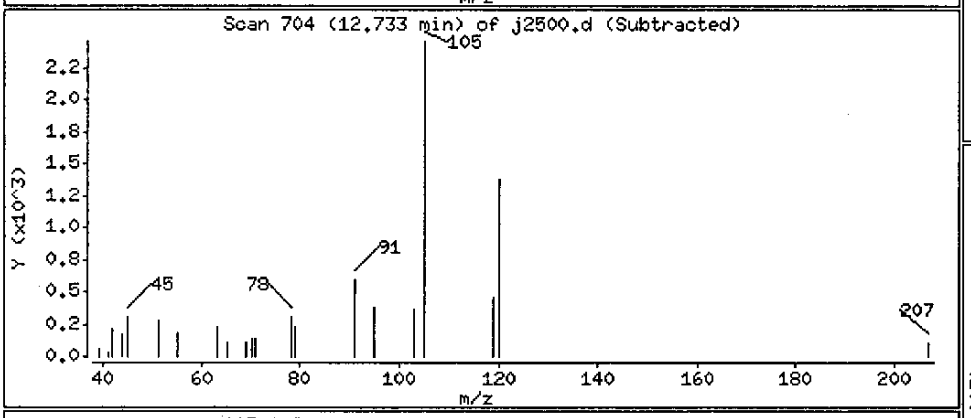
Column diameter: 0.53

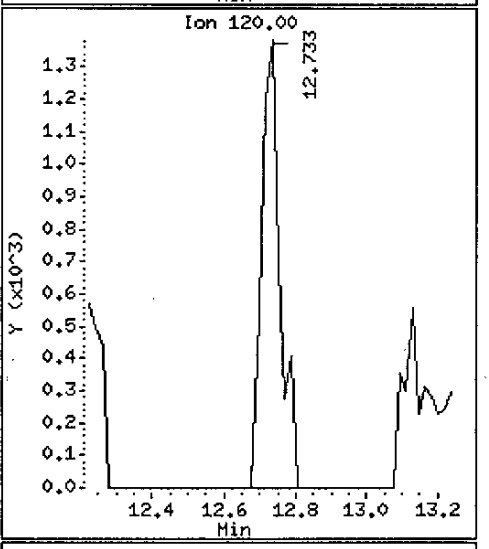
103 1,2,4-Trimethylbenzene

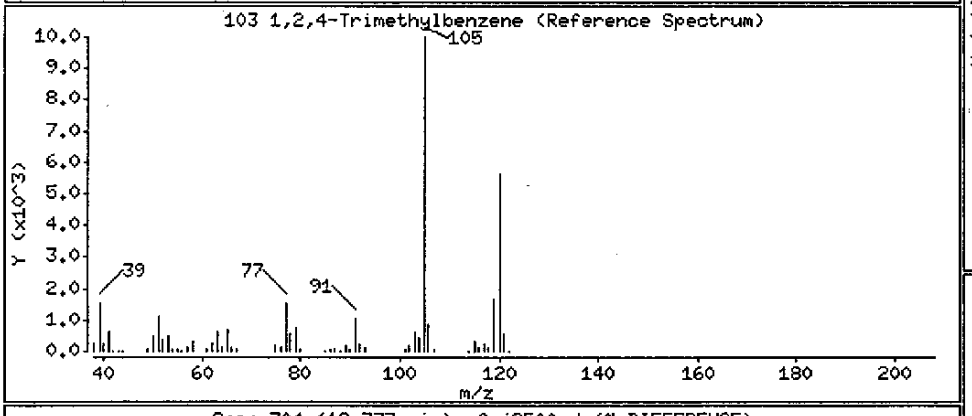
Concentration: 0.279944 ug/Kg

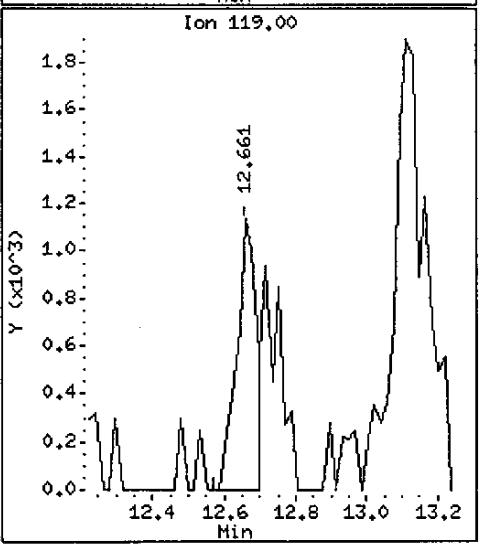


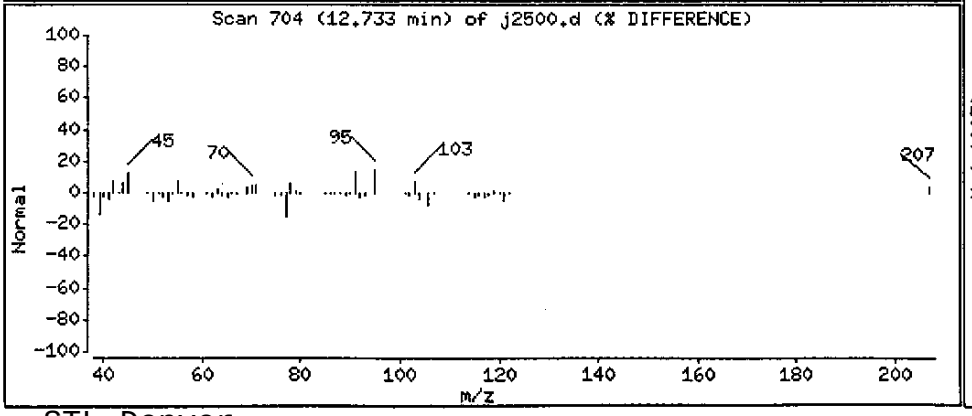












Data File: /chem/J.i/052504.b/j2500.d

Date : 25-MAY-2004 13:01

Client ID: VBLK

Instrument: J.i

Sample Info: VBLK

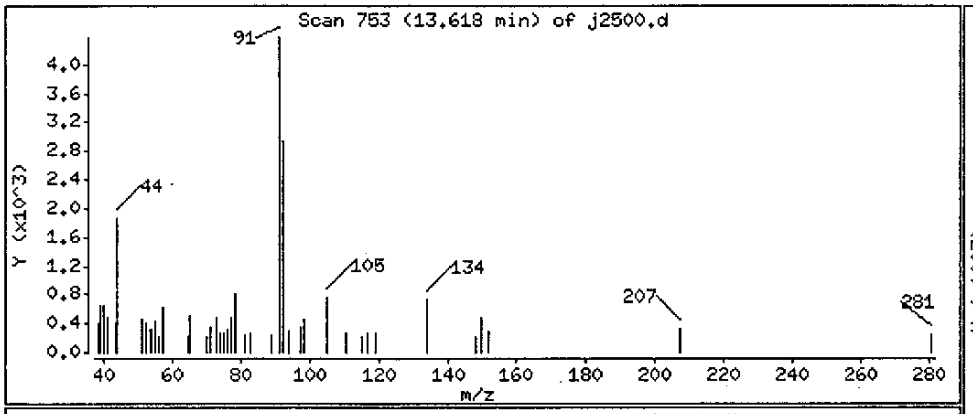
Operator: appelhansd

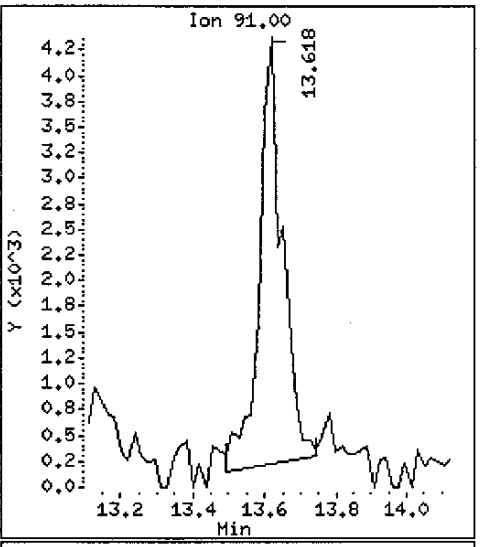
Column phase: DB624

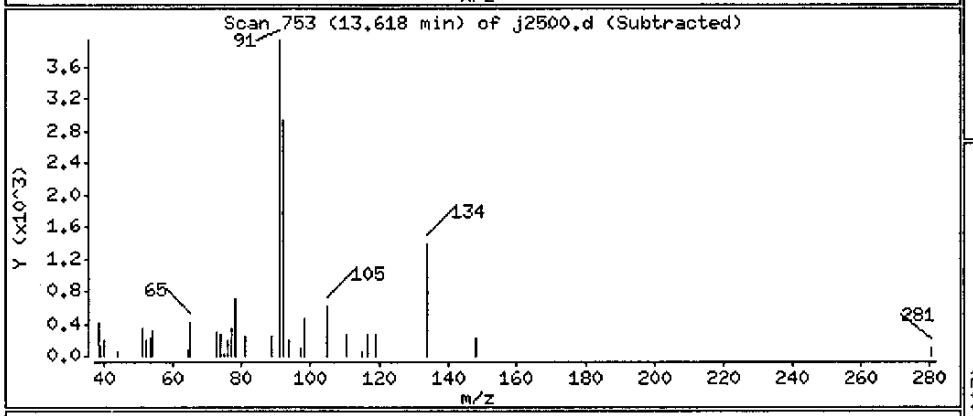
Column diameter: 0.53

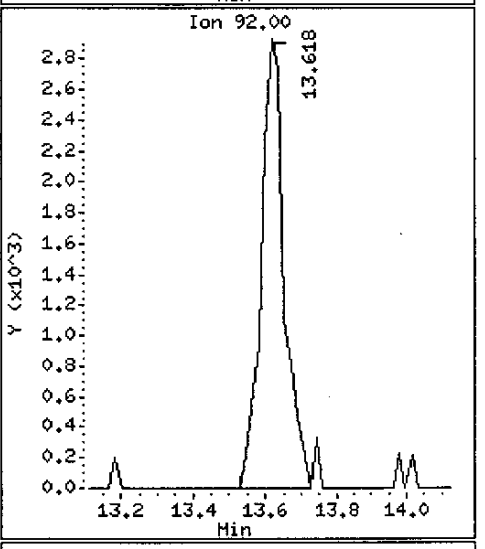
110 n-Butylbenzene

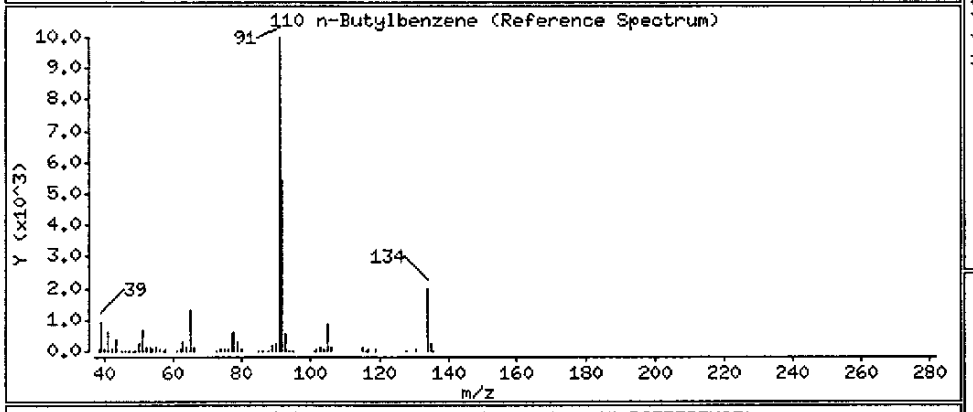
Concentration: 0.363720 ug/Kg

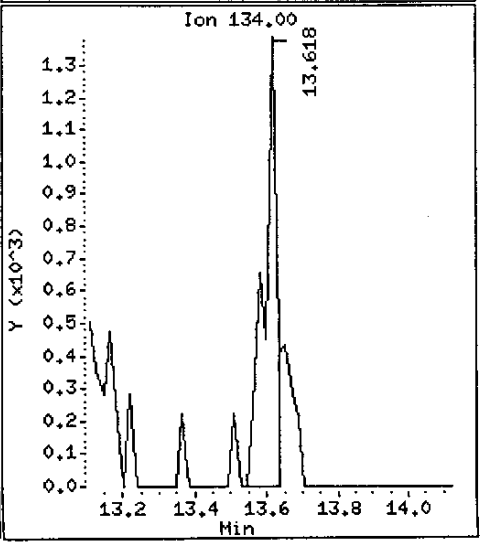


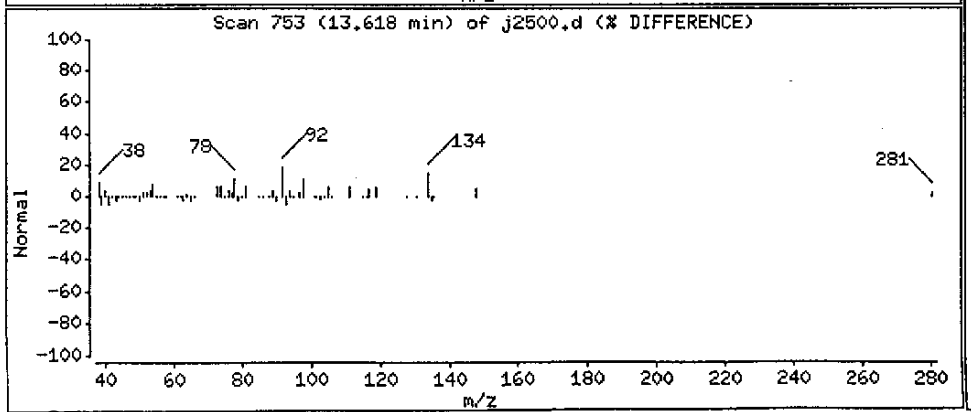












Data File: /chem/J.i/052504.b/j2500.d

Date : 25-MAY-2004 13:01

Client ID: VBLK

Instrument: J.i

Sample Info: VBLK

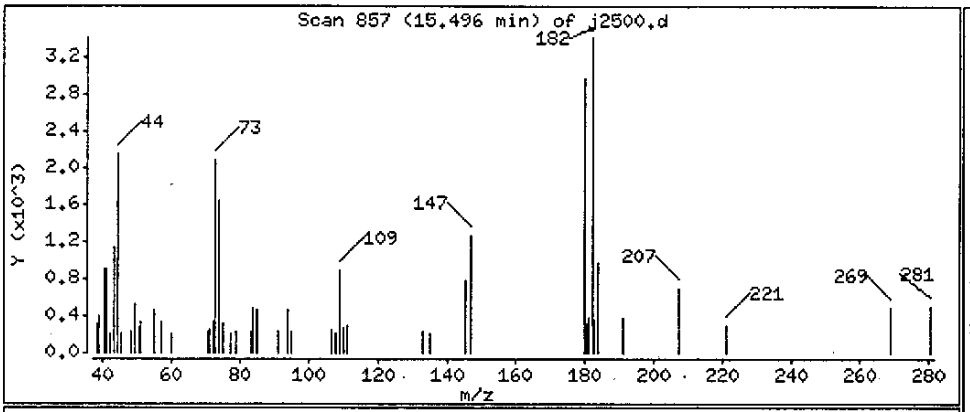
Operator: appelhansd

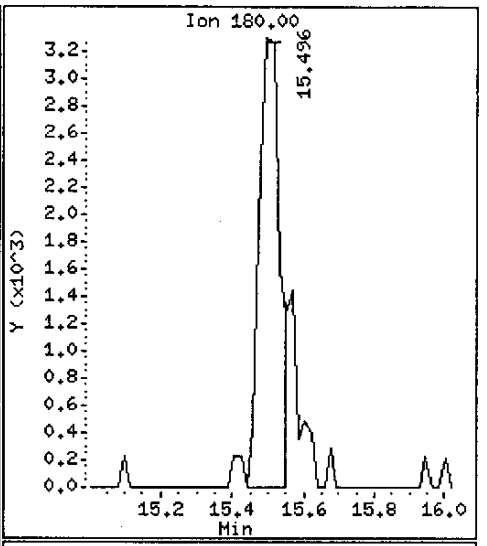
Column phase: DB624

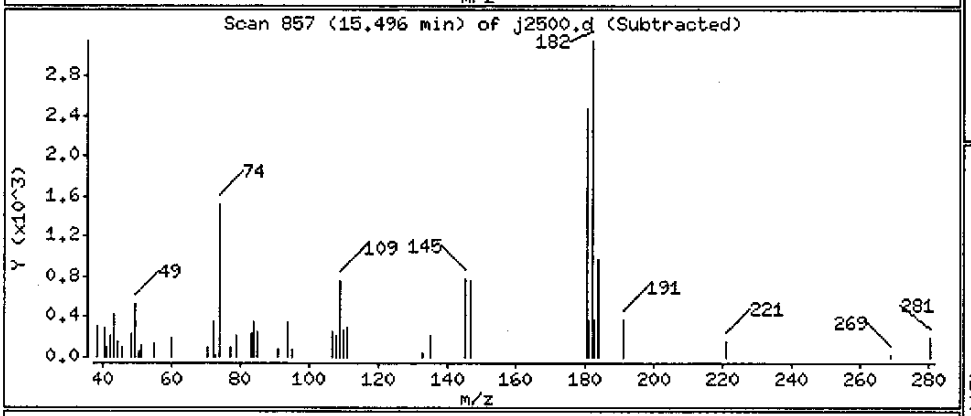
Column diameter: 0.53

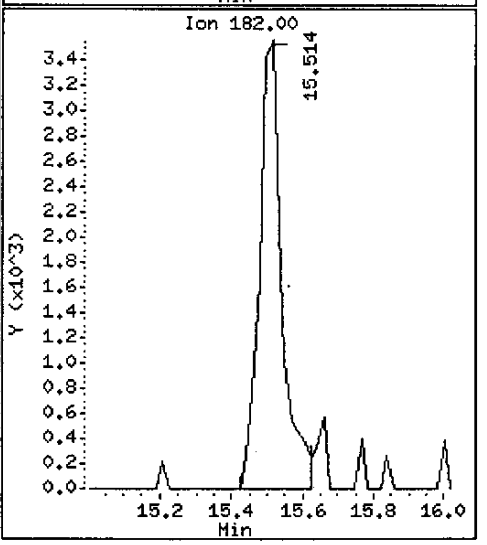
113 1,2,4-Trichlorobenzene

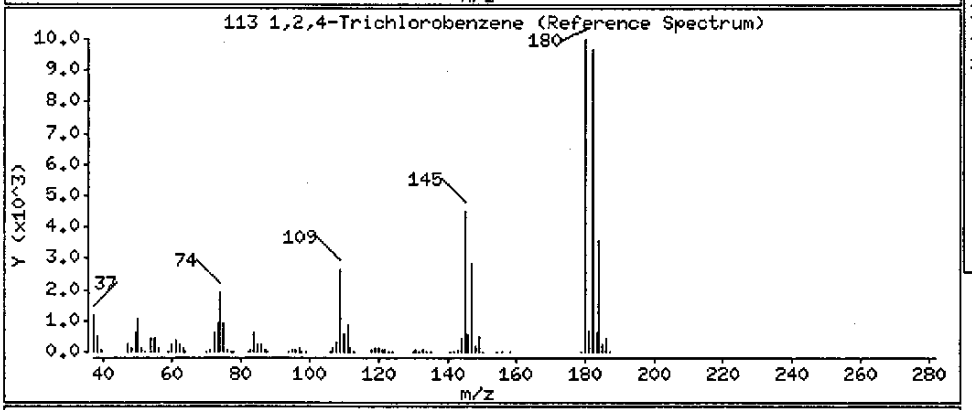
Concentration: 0.655138 ug/Kg

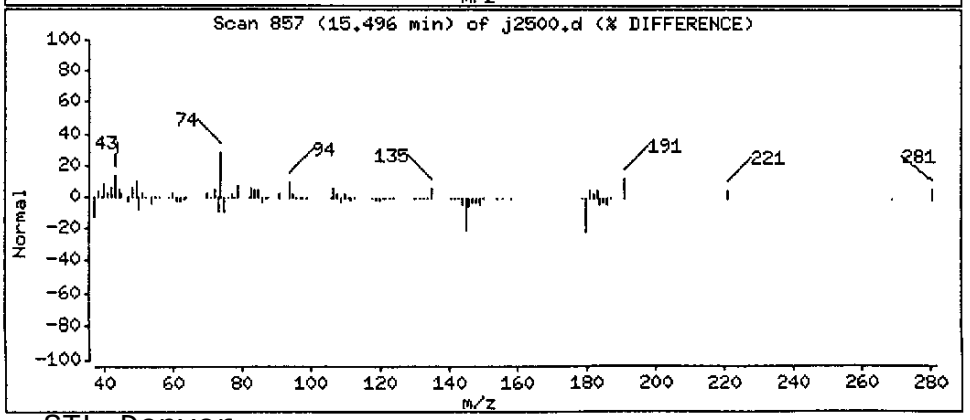












Data File: /chem/J.i/052504.b/j2500.d

Date : 25-MAY-2004 13:01

Client ID: VBLK

Instrument: J.i

Sample Info: VBLK

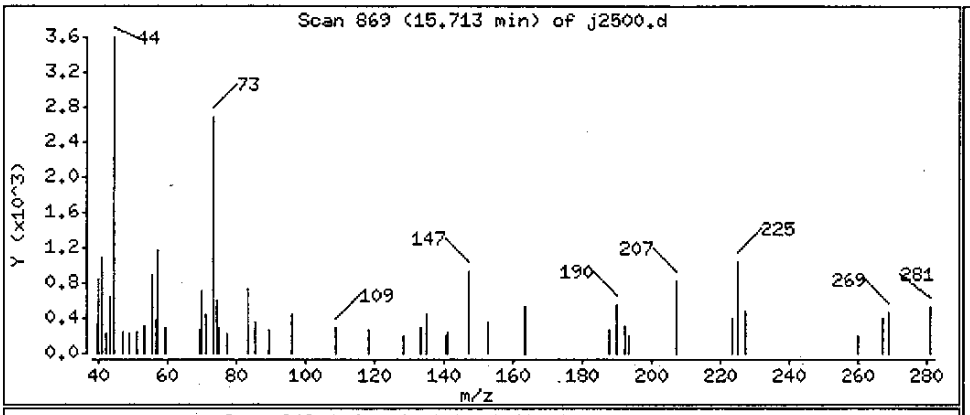
Operator: appelhansd

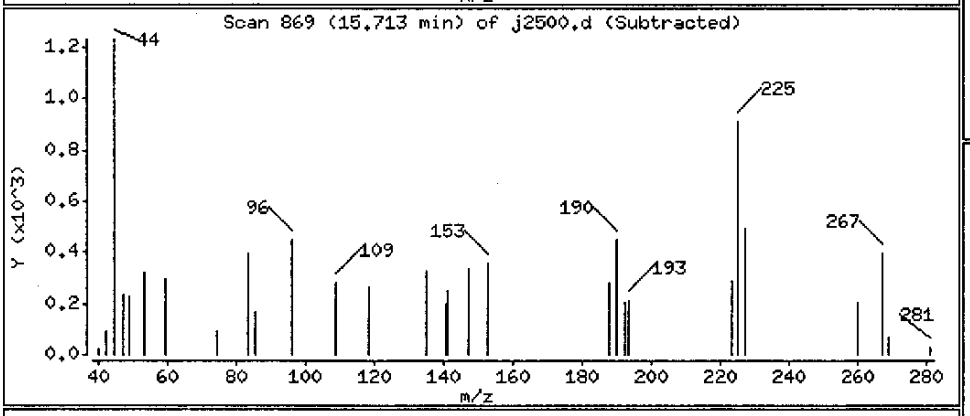
Column phase: DB624

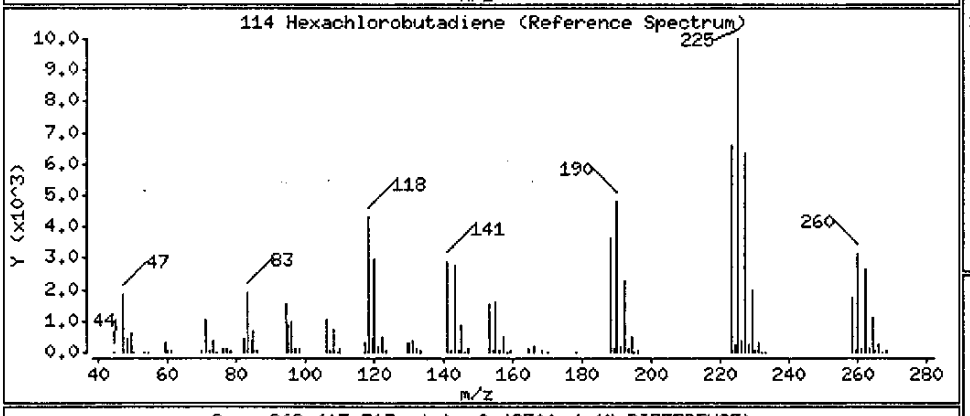
Column diameter: 0.53

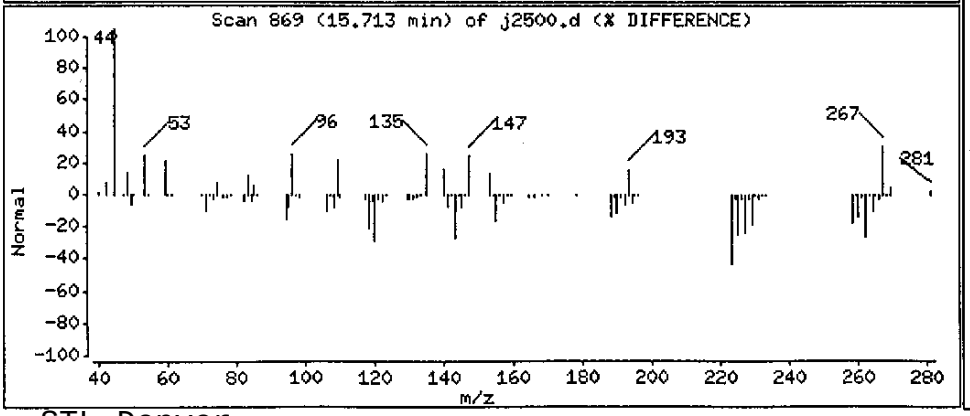
114 Hexachlorobutadiene

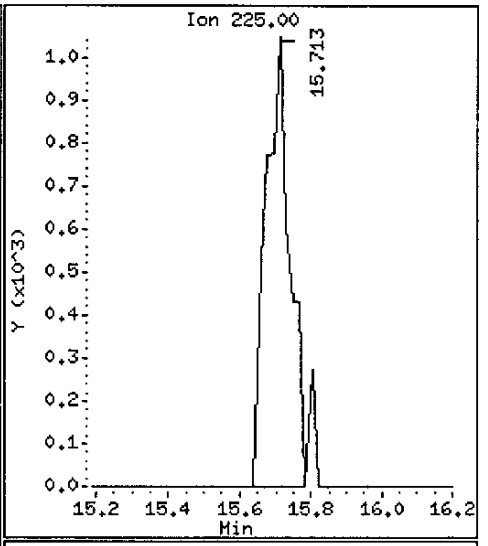
Concentration: 0.339365 ug/Kg

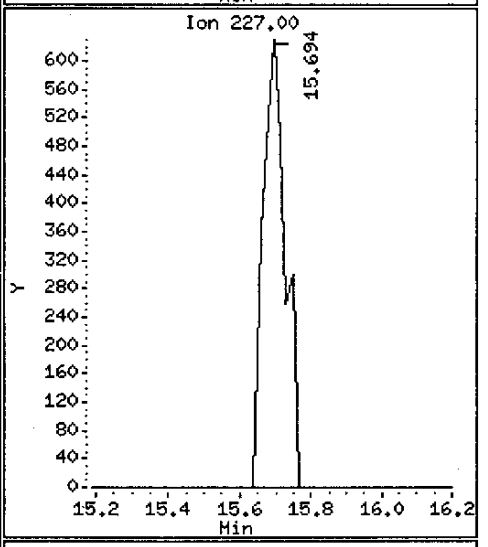


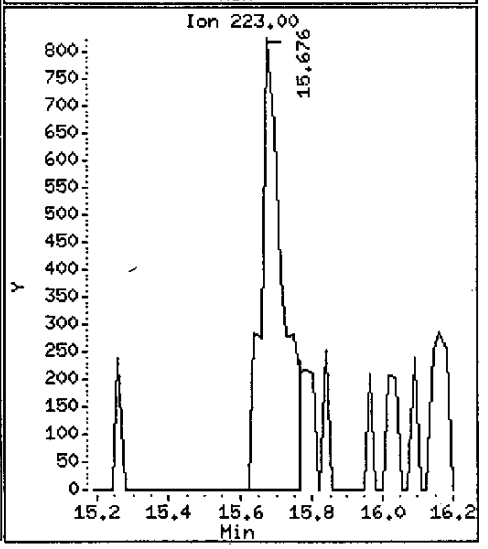












Data File: /chem/J.i/052504.b/j2500.d

Date : 25-MAY-2004 13:01

Client ID: VBLK

Instrument: J.i

Sample Info: VBLK

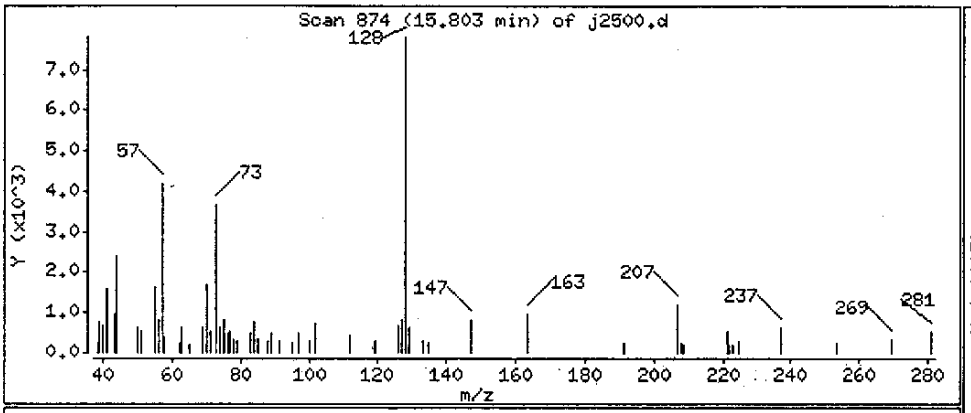
Operator: appelhansd

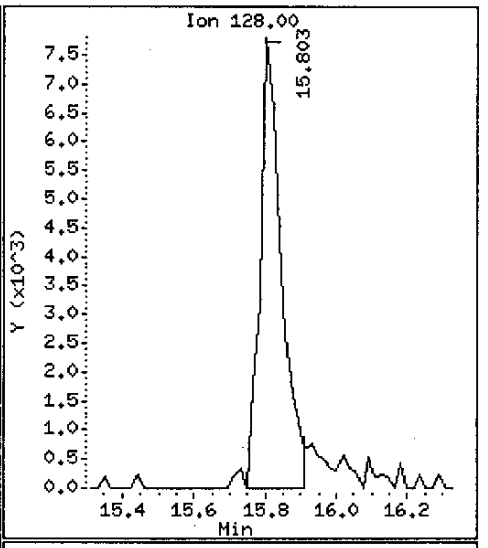
Column phase: DB624

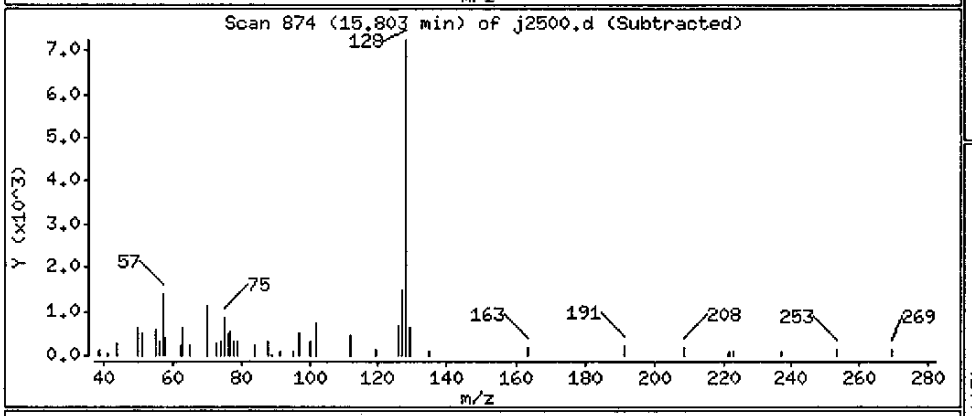
Column diameter: 0.53

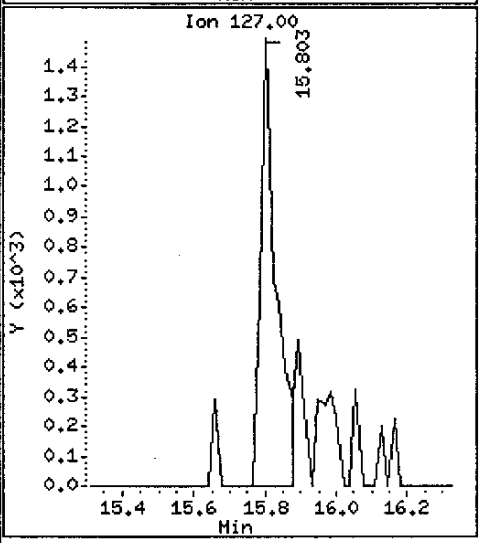
115 Napthalene

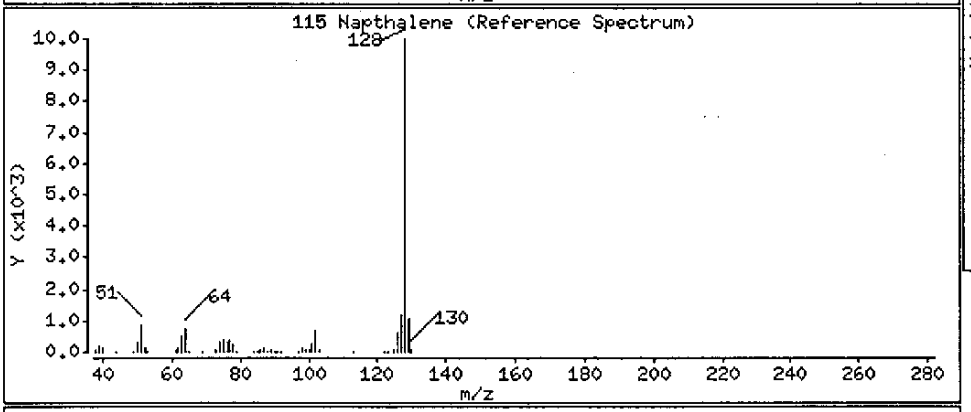
Concentration: 1.37041 ug/Kg

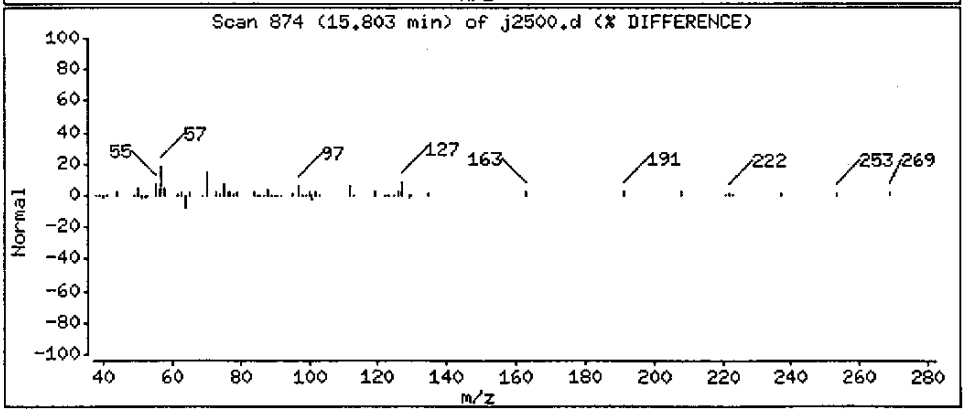












Data File: /chem/J.i/052504.b/j2500.d

Date : 25-MAY-2004 13:01

Client ID: VBLK

Instrument: J.i

Sample Info: VBLK

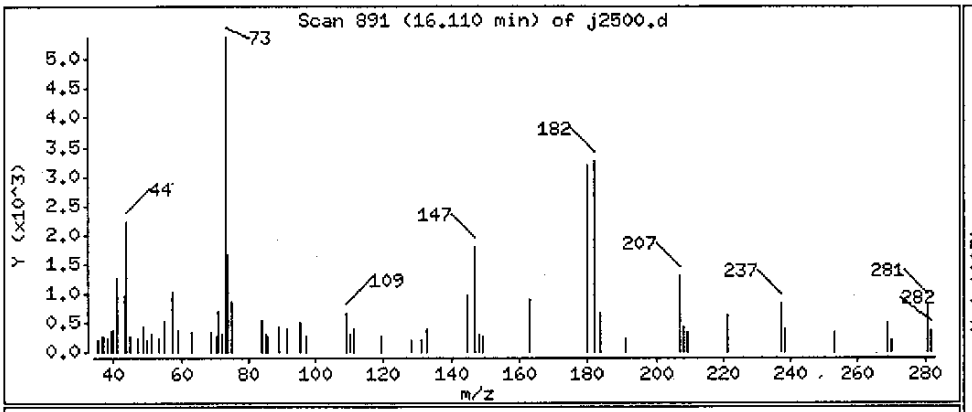
Operator: appelhansd

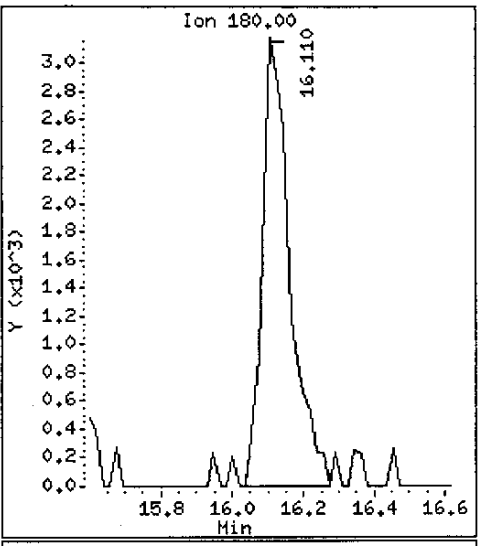
Column phase: DB624

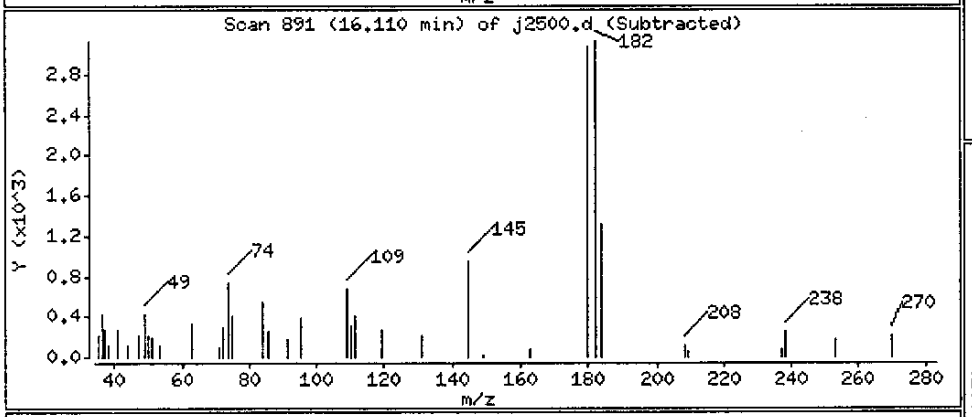
Column diameter: 0.53

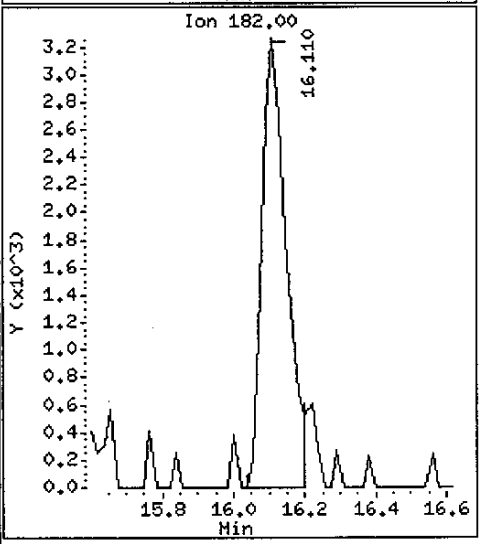
116 1,2,3-Trichlorobenzene

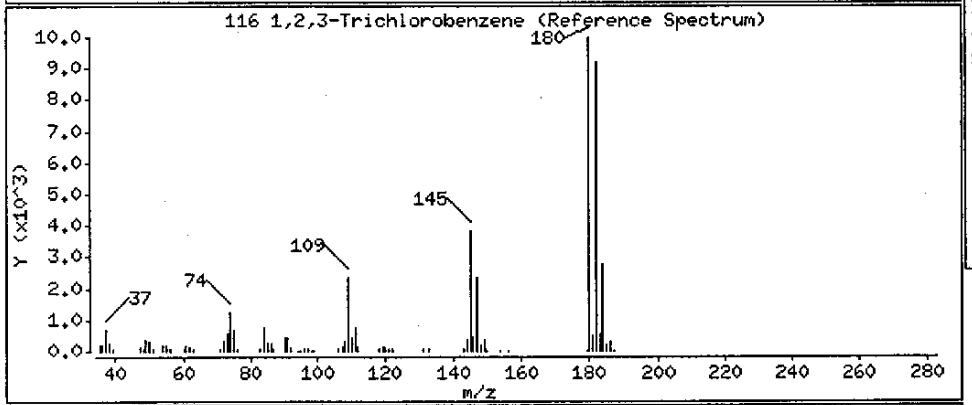
Concentration: 0.972026 ug/Kg

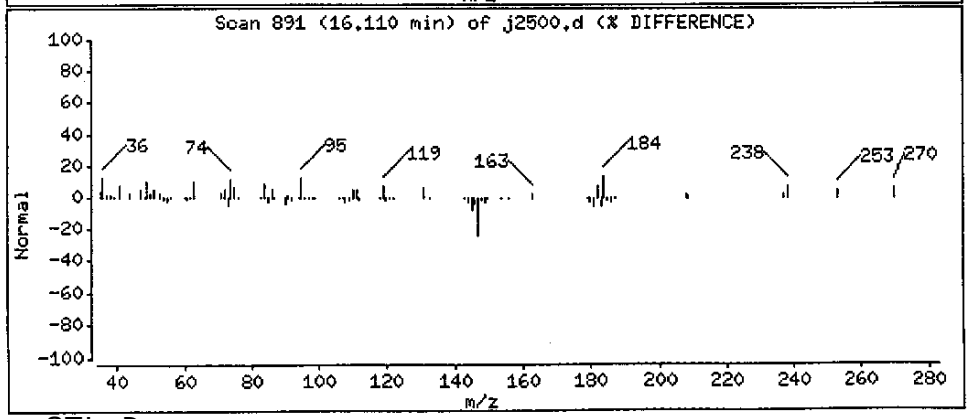












Matrix Spike Report

UNSPIKED SAMPLE
Data File : /chem/J.i/052504.b/j2518.d
Samp Info : GG0EC1AA,,D4E240189-001
Inj Date : 25-MAY-2004 20:35
Sample Amt : 5.0g

SPIKE SAMPLE
Data File : /chem/J.i/052504.b/j2519.d
Samp Info : GG0EC1A,,D4E240189-001MS
Inj Date : 25-MAY-2004 20:59
Sample Amt : 5.0g

SPIKE DUPLICATE SAMPLE
Data File : /chem/J.i/052504.b/j2520.d
Samp Info : GG0EC1A,,D4E240189-001MSD
Inj Date : 25-MAY-2004 21:24
Sample Amt : 5.0g

	Concentration				%Recovery				RPD	
	Sample	MS		MSD		Measured		Limits		
	Measured	Spiked	Measured	Spiked	Measured	MS	MSD	Min	Max	Mes	Max
m and p-Xylene	0.2602	100.0000	80.0300	100.0000	89.7928	80	90	74	114	11	30
trans-1,2-Dichloroethene	0.0000	50.0000	42.6211	50.0000	50.1329	85	100	72	125	16	30
o-Xylene	0.0000	50.0000	40.6402	50.0000	45.9282	81	92	74	114	12	30
cis-1,2-Dichloroethene	0.0000	50.0000	43.5205	50.0000	52.6331	87	105	74	116	19	30
Chloromethane	0.0000	50.0000	48.5996	50.0000	55.5719	97	111	47	130	13	30
Bromomethane	0.0000	50.0000	52.1066	50.0000	60.5992	104	121	63	143	15	30
Vinyl Chloride	0.0000	50.0000	50.5067	50.0000	52.9387	101	106	61	135	5	30
Chloroethane	0.0000	50.0000	47.1607	50.0000	52.5093	94	105	61	141	11	30
Methylene Chloride	0.0000	50.0000	45.9106	50.0000	57.8727	92	116	69	123	23	30
Acetone	0.0000	100.0000	68.8268	100.0000	79.3681	69	79	30	164	14	30
Carbon Disulfide	0.0000	50.0000	33.1088	50.0000	39.9044	66	80	49	138	19	30
Trichlorofluoromethane	0.0000	50.0000	42.5234	50.0000	49.5860	85	99	62	146	15	30
1,1-Dichloroethene	0.0000	50.0000	41.6155	50.0000	49.9221	83	100	60	133	18	30
Bromochloromethane	0.0000	50.0000	48.8031	50.0000	59.6665	98	119	73	127	20	30
1,1-Dichloroethane	0.0000	50.0000	43.4266	50.0000	52.1328	87	104	75	125	18	30
1,2-Dichloroethane	0.0000	50.0000	45.3478	50.0000	53.5677	91	107	76	122	17	30
Chloroform	0.0000	50.0000	43.1934	50.0000	52.1882	86	104	77	120	19	30
2-Butanone											

0.0000	100.0000	76.9793	100.0000	87.8069	77	88	58	138	13	30
1,1,1-Trichloroethane										
0.0000	50.0000	39.6659	50.0000	47.7117	79	95	73	118	18	30
Carbon Tetrachloride										
0.0000	50.0000	39.5816	50.0000	47.0050	79	94	70	125	17	30
Vinyl acetate										
0.0000	50.0000	5.7497	50.0000	2.7558	11*	6*	65	169	70*	30
Bromodichloromethane										
0.0000	50.0000	42.7755	50.0000	51.5683	86	103	78	123	19	30
1,2-Dichloropropane										
0.0000	50.0000	44.5937	50.0000	54.3906	89	109	74	123	20	30
cis-1,3-Dichloropropene										
0.0000	50.0000	44.3218	50.0000	53.9178	89	108	77	126	20	30
Trichloroethene										
0.0000	50.0000	44.2567	50.0000	52.9292	89	106	70	125	18	30
Benzene										
0.0000	50.0000	45.2834	50.0000	53.3175	91	107	72	121	16	30
trans-1,3-Dichloropropene										
0.0000	50.0000	42.2174	50.0000	50.0015	84	100	77	122	17	30
1,1,2-Trichloroethane										
0.0000	50.0000	44.9469	50.0000	53.7202	90	107	71	116	18	30
Dibromomethane										
0.0000	50.0000	47.1960	50.0000	54.4523	94	109	76	120	14	30
2-Chloroethyl vinyl ether										
0.0000	50.0000	47.5245	50.0000	53.6208	95	107	46	137	12	30
Dibromochloromethane										
0.0000	50.0000	45.3070	50.0000	52.4815	91	105	77	117	15	30
Bromoform										
0.0000	50.0000	44.6571	50.0000	53.2795	89	107	71	119	18	30
4-Methyl-2-pentanone										
0.0000	100.0000	83.1895	100.0000	99.0537	83	99	60	135	17	30
1,1,2,2-Tetrachloroethane										
0.0000	50.0000	43.1517	50.0000	48.9268	86	98	57	133	13	30
Tetrachloroethene										
1.0726	50.0000	42.0635	50.0000	47.9371	82	94	69	118	13	30
2-Hexanone										
0.0000	100.0000	73.5409	100.0000	87.6875	74	88	55	136	18	30
Toluene										
0.2675	50.0000	43.5856	50.0000	49.7141	87	99	71	117	13	30
Chlorobenzene										
0.0000	50.0000	42.2144	50.0000	48.9139	84	98	75	115	15	30
Ethylbenzene										
0.0000	50.0000	40.1616	50.0000	45.8854	80	92	74	114	13	30
Styrene										
0.0000	50.0000	40.4162	50.0000	44.8778	81	90	75	115	10	30
1,2,3-Trichloropropane										
0.0000	50.0000	40.3992	50.0000	45.4726	81	91	66	121	12	30
Methyl t-butyl ether										
0.0000	100.0000	92.8546	100.0000	110.3640	93	110	83	125	17	30
1,2-Dibromoethane										
0.0000	50.0000	44.7849	50.0000	53.3711	90	107	75	117	17	30
m-Dichlorobenzene										
0.0000	50.0000	37.3405	50.0000	41.2000	75	82	74	117	10	30
p-dichlorobenzene										
0.0000	50.0000	38.2043	50.0000	40.6869	76	81	75	117	6	30
o-Dichlorobenzene										
0.0000	50.0000	38.9868	50.0000	42.7992	78	86	76	116	9	30
dichlorodifluoromethane										
0.0000	50.0000	39.3315	50.0000	47.6615	79	95	44	146	19	30
1,1,1,2-Tetrachloroethane										

0.0000	50.0000	44.1701	50.0000	52.5485	88	105	78	118	17	30
1,2-Dibromo-3-chloropropane										
0.0000	50.0000	41.0623	50.0000	45.4845	82	91	62	117	10	30
isopropyl benzene										
0.0000	50.0000	35.5369	50.0000	39.5857	71	79	71	111	11	30
2,2-Dichloropropane										
0.0000	50.0000	37.6398	50.0000	45.7775	75	92	72	124	20	30
1,1-Dichloropropene										
0.0000	50.0000	40.8431	50.0000	47.6928	82	95	70	125	15	30
Bromobenzene										
0.0000	50.0000	42.1446	50.0000	47.6262	84	95	74	116	12	30
n-Propylbenzene										
0.0000	50.0000	36.7232	50.0000	40.1204	73	80	70	121	9	30
2-Chlorotoluene										
0.0000	50.0000	38.4173	50.0000	41.3845	77	83	73	118	7	30
1,3,5-Trimethylbenzene										
0.0000	50.0000	34.3408	50.0000	37.5143	69*	75	70	119	9	30
4-Chlorotoluene										
0.0000	50.0000	38.6095	50.0000	41.5288	77	83	74	120	7	30
tert-Butylbenzene										
0.0000	50.0000	35.6989	50.0000	39.4540	71*	79	73	115	10	30
1,2,4-Trimethylbenzene										
0.0000	50.0000	34.4058	50.0000	37.4093	69*	75	71	120	8	30
sec-Butylbenzene										
0.0000	50.0000	34.1542	50.0000	36.8722	68	74	68	123	8	30
4-Isopropyltoluene										
0.0000	50.0000	31.7042	50.0000	33.4306	63*	67*	69	117	5	30
n-Butylbenzene										
0.0000	50.0000	31.0996	50.0000	32.5837	62*	65*	66	125	5	30
1,2,4-Trichlorobenzene										
0.0000	50.0000	30.2005	50.0000	32.7270	60*	65*	75	116	8	30
Hexachlorobutadiene										
0.0000	50.0000	27.3396	50.0000	26.8562	55*	54*	68	119	2	30
Napthalene										
0.0000	50.0000	33.8633	50.0000	39.2765	68	79	63	118	15	30
1,2,3-Trichlorobenzene										
0.0000	50.0000	30.7769	50.0000	34.0181	62*	68*	73	114	10	30
1,3-Dichloropropane										
0.0000	50.0000	45.5891	50.0000	53.2782	91	107	72	122	16	30
2-Pentanone										

********** Compound Not Found **********

87.5 Percent of recoveries are within control limits.

97.1 Percent of RPD values are within control limits.

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/J.i/052504.b/j2522.d
Lab Smp Id: GGTF41AE Client Smp ID: 01-SC-01
Inj Date : 25-MAY-2004 22:12
Operator : appelhansd Inst ID: J.i
Smp Info : GGTF41AE,,D4E210325-010
Misc Info :
Comment :
Method : /chem/J.i/052504.b/J5030-8260B-soil.m
Meth Date : 26-May-2004 08:01 appelhad Quant Type: ISTD
Cal Date : 14-APR-2004 12:39 Cal File: j1674.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: allj.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Ws

Name	Value	Description
DF	1.000	Dilution Factor
Vp	5.000	Purge Volume (mL)
Ws	5.000	Weight of sample (g)

DK 5-26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 56 Fluorobenzene	96	6.918	6.902	(1.000)	1498287	50.0000	
* 82 Chlorobenzene-d5	119	10.132	10.135	(1.000)	360457	50.0000	
* 107 1,4-Dichlorobenzene-d4	152	13.184	13.187	(1.000)	586331	50.0000	
$ 46 Dibromofluoromethane	111	6.214	6.198	(0.898)	886171	41.1459	41.1458
$ 52 1,2-Dichloroethane-d4	65	6.575	6.559	(0.950)	601965	38.7471	38.7470
$ 70 Toluene-d8	98	8.543	8.528	(0.843)	1506868	36.1798	36.1798
$ 93 Bromofluorobenzene	95	11.685	11.670	(1.153)	1072719	36.6695	36.6695
M 1 1,2-Dichloroethene (total)	96				4435	0.34092	0.340923(a)
M 2 Xylene (total)	106.00	Compound Not Detected.					
3 dichlorodifluoromethane	85.00	Compound Not Detected.					
5 Dichlorotetraflouroethane	85.00	Compound Not Detected.					
4 Chloromethane	50.00	Compound Not Detected.					
6 Vinyl Chloride	62.00	Compound Not Detected.					
7 Ethylene Oxide	44.00	Compound Not Detected.					
8 Bromomethane	94.00	Compound Not Detected.					
9 Chloroethane	64.00	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
10 Dichlorofluoromethane	67.00	Compound Not Detected.					
11 Trichlorofluoromethane	101.00	Compound Not Detected.					
12 Ethanol	45.00	Compound Not Detected.					
13 1,2-dichloro-1,1,2-trifluoro	117.00	Compound Not Detected.					
14 Ethyl Ether	59.00	Compound Not Detected.					
15 2,2-dichloro-1,1,1-trofluoro	83.00	Compound Not Detected.					
16 Acrolein	56.00	Compound Not Detected.					
17 1,1-Dichloroethene	96.00	Compound Not Detected.					
18 2-Propanol	45.00	Compound Not Detected.					
20 Acetone	43.00	Compound Not Detected.					
19 Trichlorotrifluoroethane	151.00	Compound Not Detected.					
21 Iodomethane	142.00	Compound Not Detected.					
22 Carbon Disulfide	76.00	Compound Not Detected.					
23 Acetonitrile	41.00	Compound Not Detected.					
24 Allyl Chloride	41.00	Compound Not Detected.					
25 Methyl Acetate	43.00	Compound Not Detected.					
26 Methylene Chloride	84.00	Compound Not Detected.					
27 tert-Butyl alcohol	59.00	Compound Not Detected.					
28 Acrylonitrile	53.00	Compound Not Detected.					
30 trans-1,2-Dichloroethene	96.00	Compound Not Detected.					
29 Methyl t-butyl ether	73.00	Compound Not Detected.					
31 Hexane	57.00	Compound Not Detected.					
32 1,1-Dichloroethane	63.00	Compound Not Detected.					
33 Vinyl acetate	43.00	Compound Not Detected.					
34 Isopropyl ether	87.00	Compound Not Detected.					
35 Chloroprene	53.00	Compound Not Detected.					
36 ETBE	59.00	Compound Not Detected.					
37 2-Butanone	43.00	Compound Not Detected.					
38 cis-1,2-Dichloroethene	96	5.726	5.727	(0.828)	4435	0.34092	0.340923(aQ)
39 2,2-Dichloropropane	77.00	Compound Not Detected.					
41 Propionitrile	54.00	Compound Not Detected.					
40 Ethyl Acetate	43.00	Compound Not Detected.					
42 Methacrylonitrile	41.00	Compound Not Detected.					
43 Bromochloromethane	128.00	Compound Not Detected.					
45 Chloroform	83.00	Compound Not Detected.					
44 Tetrahydrofuran	42.00	Compound Not Detected.					
47 1,1,1-Trichloroethane	97.00	Compound Not Detected.					
48 Cyclohexane	56.00	Compound Not Detected.					
49 1,1-Dichloropropene	75.00	Compound Not Detected.					
50 Carbon Tetrachloride	117.00	Compound Not Detected.					
51 Isobutanol	41.00	Compound Not Detected.					
53 1,2-Dichloroethane	62.00	Compound Not Detected.					
54 Benzene	78.00	Compound Not Detected.					
55 TAME	73.00	Compound Not Detected.					
57 n-Butanol	56.00	Compound Not Detected.					
58 Trichloroethene	130	7.279	7.280	(1.052)	3018	0.22733	0.227333(aQ)
59 2-Pentanone	43.00	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
61	1,2-Dichloropropane	63.00	Compound Not Detected.					
60	Methyl Cyclohexane	83.00	Compound Not Detected.					
62	Methyl Methacrylate	100.00	Compound Not Detected.					
63	Dibromomethane	93.00	Compound Not Detected.					
64	1,4-Dioxane	88	7.658	7.660	(1.107)	10029	101.489	101.489(a)
65	Bromodichloromethane	83.00	Compound Not Detected.					
66	2-nitropropane	41.00	Compound Not Detected.					
67	2-Chloroethyl vinyl ether	63.00	Compound Not Detected.					
68	cis-1,3-Dichloropropene	75.00	Compound Not Detected.					
69	4-Methyl-2-pentanone	43.00	Compound Not Detected.					
71	Toluene	91.00	Compound Not Detected.					
72	trans-1,3-Dichloropropene	75.00	Compound Not Detected.					
73	Ethyl methacrylate	69.00	Compound Not Detected.					
74	1,1,2-Trichloroethane	97.00	Compound Not Detected.					
75	1,3-Dichloropropane	76.00	Compound Not Detected.					
76	Tetrachloroethene	164	9.211	9.194	(0.909)	19196	1.31224	1.31224(a)
77	2-Hexanone	43.00	Compound Not Detected.					
79	Dibromochloromethane	129.00	Compound Not Detected.					
80	1,2-Dibromoethane	107.00	Compound Not Detected.					
81	1-Chlorohexane	91.00	Compound Not Detected.					
83	Chlorobenzene	112.00	Compound Not Detected.					
84	1,1,1,2-Tetrachloroethane	131.00	Compound Not Detected.					
85	Ethylbenzene	106.00	Compound Not Detected.					
86	m and p-Xylene	106.00	Compound Not Detected.					
87	o-Xylene	106.00	Compound Not Detected.					
88	Styrene	104.00	Compound Not Detected.					
89	Bromoform	173.00	Compound Not Detected.					
90	isopropyl benzene	105.00	Compound Not Detected.					
92	Cyclohexanone	55.00	Compound Not Detected.					
91	cis-1,4-Dichloro-2-butene	53.00	Compound Not Detected.					
94	1,1,2,2-Tetrachloroethane	83.00	Compound Not Detected.					
95	Bromobenzene	156.00	Compound Not Detected.					
96	1,2,3-Trichloropropane	110.00	Compound Not Detected.					
97	t-1,4-Dichloro-2-butene	53.00	Compound Not Detected.					
98	n-Propylbenzene	120.00	Compound Not Detected.					
99	2-Chlorotoluene	126.00	Compound Not Detected.					
100	1,3,5-Trimethylbenzene	105.00	Compound Not Detected.					
101	4-Chlorotoluene	126.00	Compound Not Detected.					
102	tert-Butylbenzene	119.00	Compound Not Detected.					
103	1,2,4-Trimethylbenzene	105.00	Compound Not Detected.					
104	sec-Butylbenzene	105.00	Compound Not Detected.					
105	m-Dichlorobenzene	146.00	Compound Not Detected.					
106	4-Isopropyltoluene	119.00	Compound Not Detected.					
108	p-dichlorobenzene	146.00	Compound Not Detected.					
109	1,2,3-Trimethylbenzene	105.00	Compound Not Detected.					
110	n-Butylbenzene	91.00	Compound Not Detected.					
111	o-Dichlorobenzene	146.00	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
112 1,2-Dibromo-3-chloropropane	157.00	Compound Not Detected.					
113 1,2,4-Trichlorobenzene	180	15.531	15.515	(1.178)	9567	0.44892	0.448922(a)
114 Hexachlorobutadiene	225.00	Compound Not Detected.					
115 Napthalene	128	15.820	15.822	(1.200)	24591	0.99033	0.990327(a)
116 1,2,3-Trichlorobenzene	180	16.127	16.111	(1.223)	11187	0.60980	0.609800(a)

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: J.i
Lab File ID: j2522.d
Lab Smp Id: GGTF41AE
Analysis Type: VOA
Quant Type: ISTD
Operator: appelhansd
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info:

Calibration Date: 05/25/4
Calibration Time: 1149
Client Smp ID: 01-SC-01
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1399858	699929	2799716	1498287	7.03
82 Chlorobenzene-d5	333740	166870	667480	360457	8.01
107 1,4-Dichlorobenze	571705	285852	1143410	586331	2.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	6.90	6.40	7.40	6.92	0.22
82 Chlorobenzene-d5	10.13	9.63	10.63	10.13	-0.03
107 1,4-Dichlorobenze	13.19	12.69	13.69	13.18	-0.02

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

STL Denver

RECOVERY REPORT

Client Name: Cabrera Services
Client SDG: D4E210325
Sample Matrix: SOLID
Fraction: VOA
Lab Smp Id: GGTF41AE
Client Smp ID: 01-SC-01
Level: LOW
Operator: appelhansd
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: dcs.spk
Quant Type: ISTD
Sublist File: allj.sub
Method File: /chem/J.i/052504.b/J5030-8260B-soil.m
Misc Info:

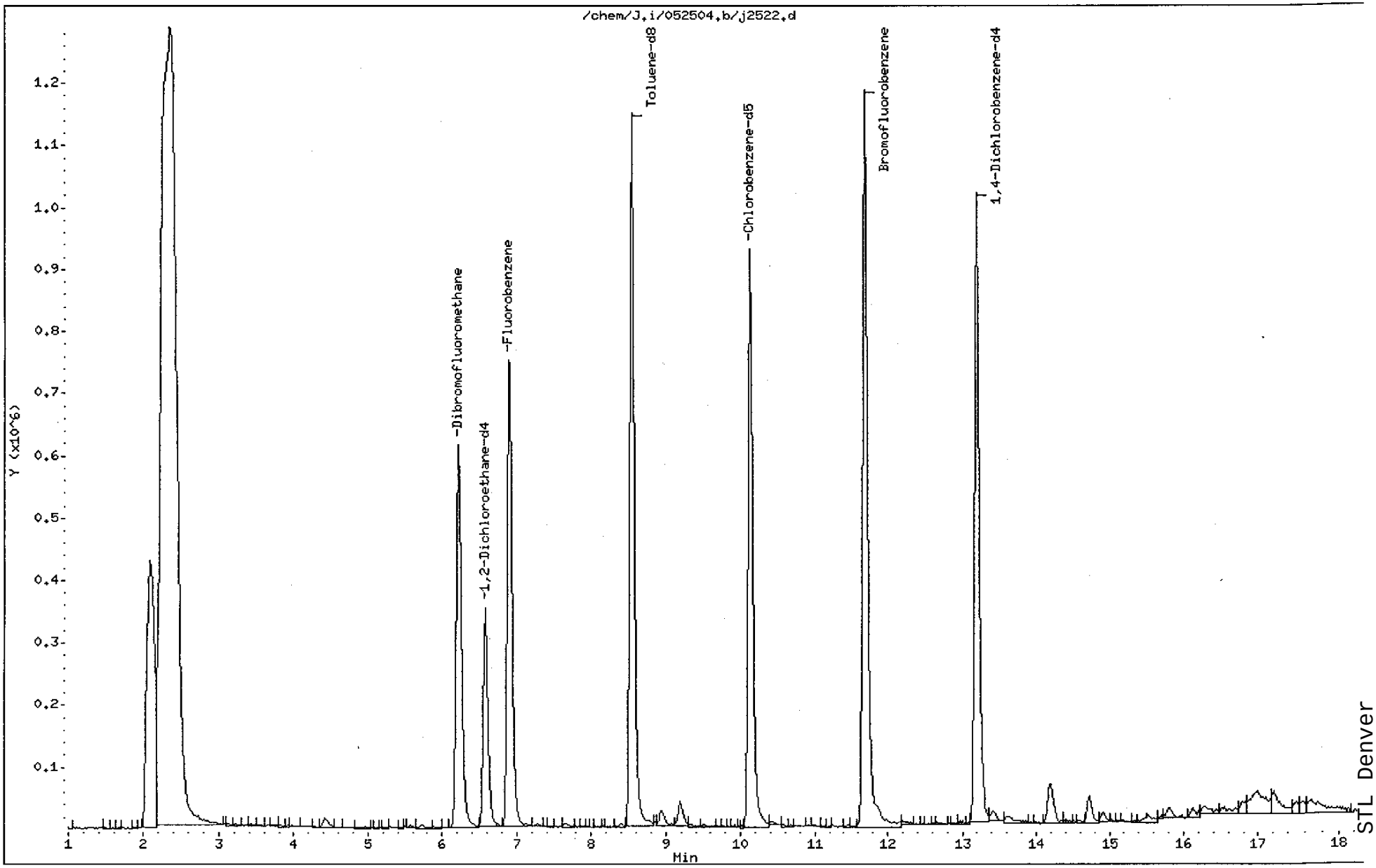
SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 46 Dibromofluorometha	40.0000	41.1458	102.86	71-136
$ 52 1,2-Dichloroethane	40.0000	38.7470	96.87	67-131
$ 70 Toluene-d8	40.0000	36.1798	90.45	77-129
$ 93 Bromofluorobenzene	40.0000	36.6695	91.67	71-124

Data File: /chem/J.i/052504.b/j2522.d
Date : 25-MAY-2004 22:12
Client ID: 01-SC-01
Sample Info: GGTF41AE,,D4E210325-010

Column phase: DB624

Instrument: J.i

Operator: appelhansd
Column diameter: 0.53



Data File: /chem/J.i/052504.b/j2522.d

Date : 25-MAY-2004 22:12

Client ID: 01-SC-01

Instrument: J.i

Sample Info: GGTF41AE,,D4E210325-010

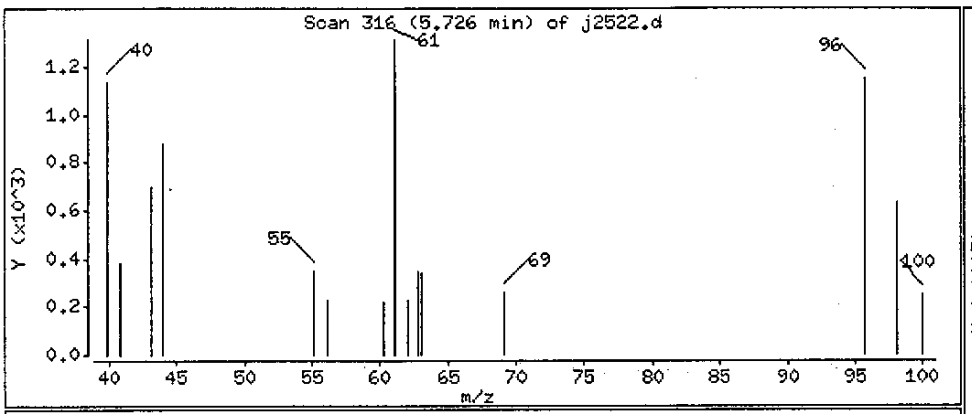
Operator: appelhansd

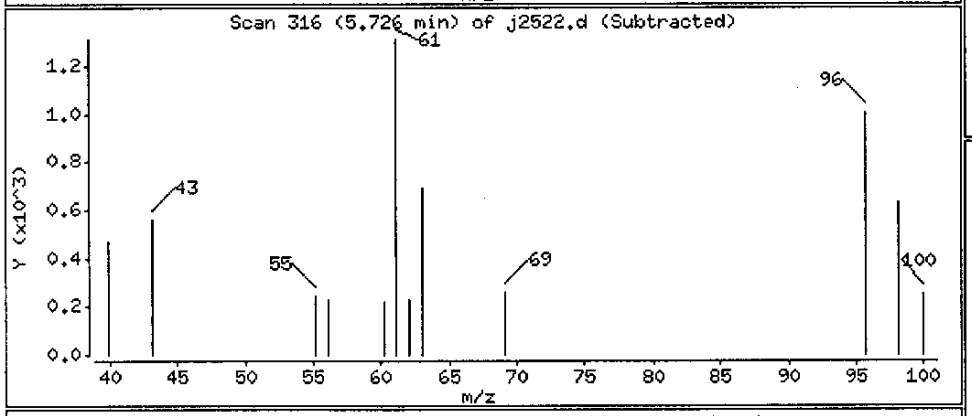
Column phase: DB624

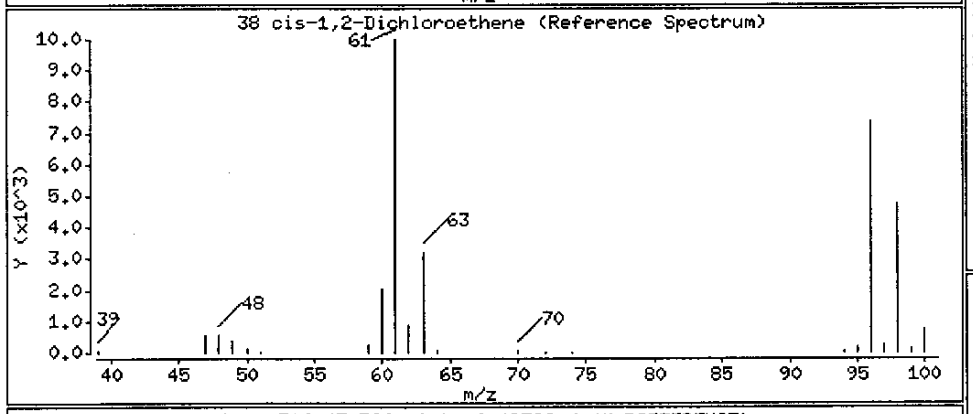
Column diameter: 0.53

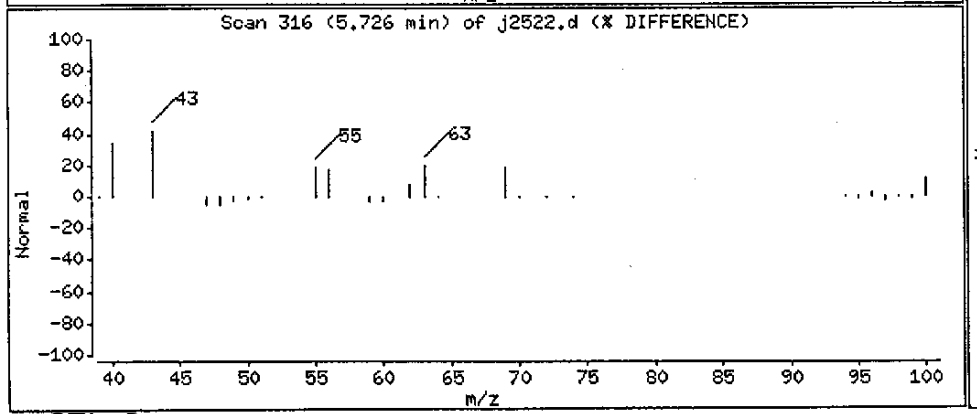
38 cis-1,2-Dichloroethene

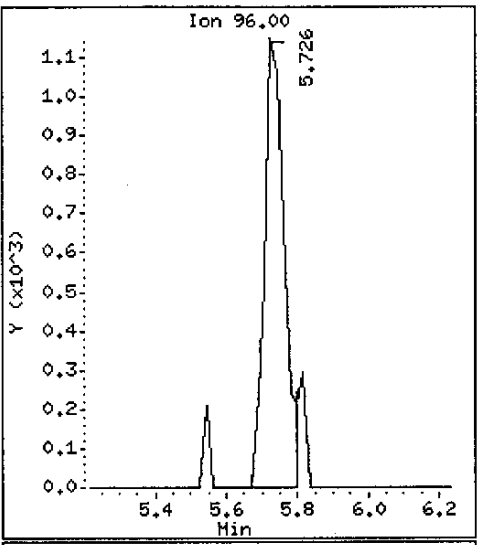
Concentration: 0.340923 ug/Kg

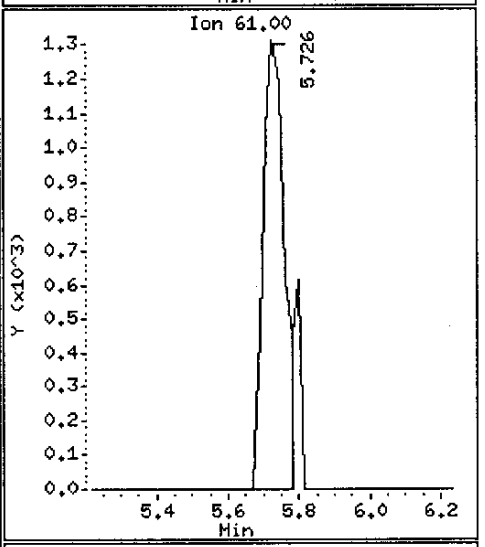


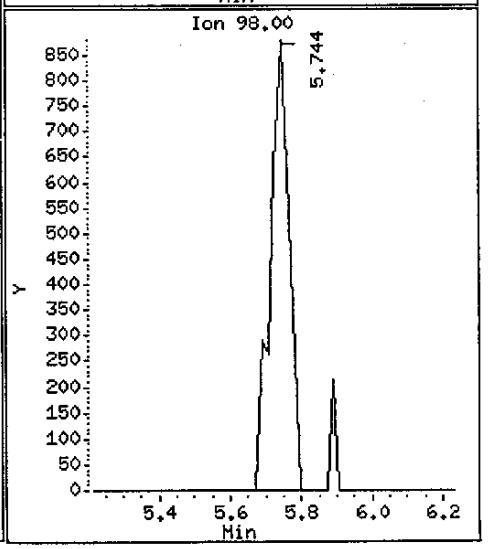












Data File: /chem/J.i/052504.b/j2522.d

Date : 25-MAY-2004 22:12

Client ID: 01-SC-01

Instrument: J.i

Sample Info: GGTF41AE,,D4E210325-010

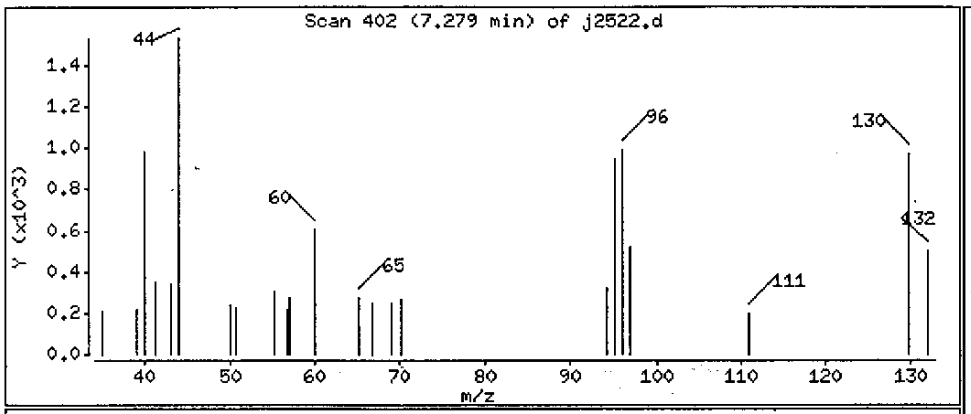
Operator: appelhansd

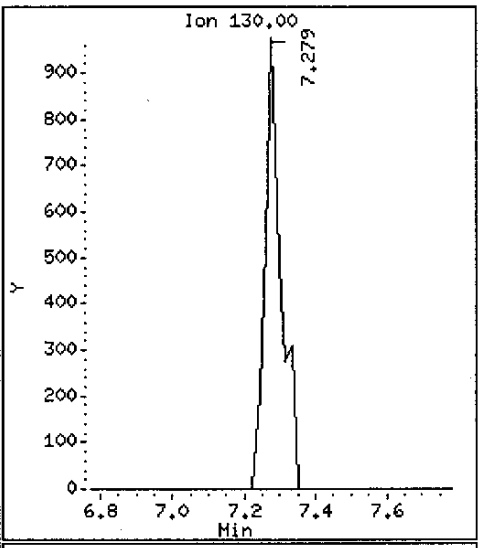
Column phase: DB624

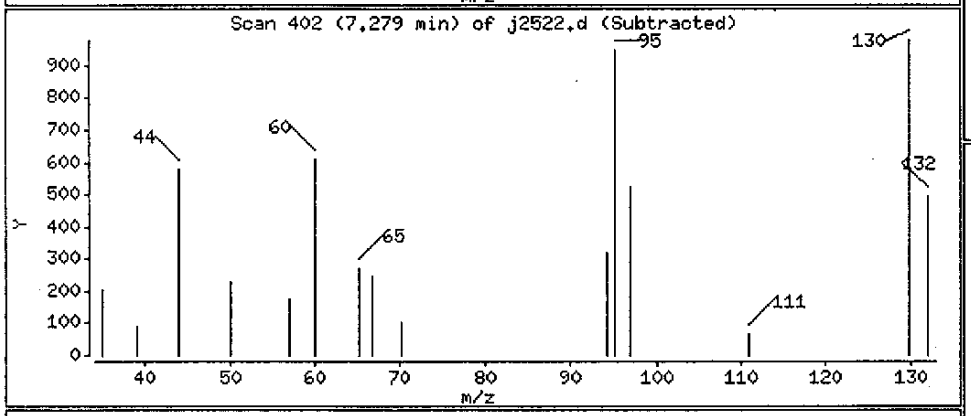
Column diameter: 0.53

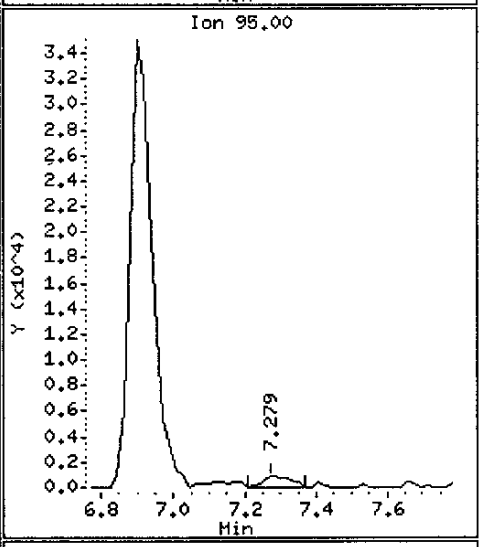
58 Trichloroethene

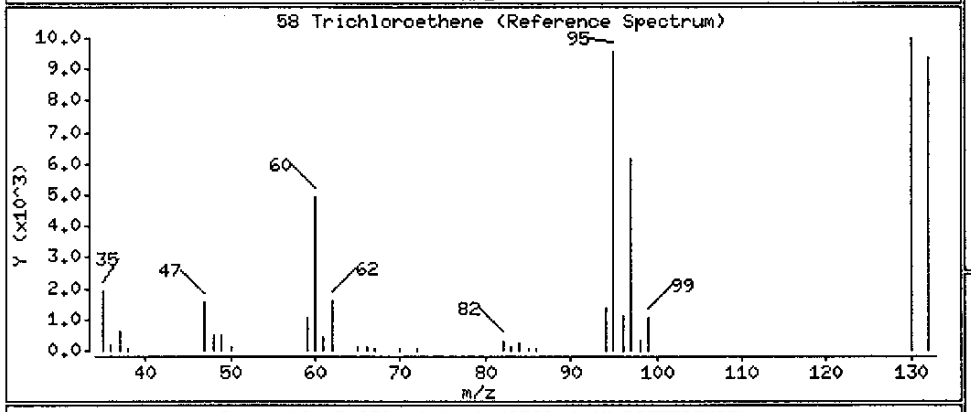
Concentration: 0.227333 ug/Kg

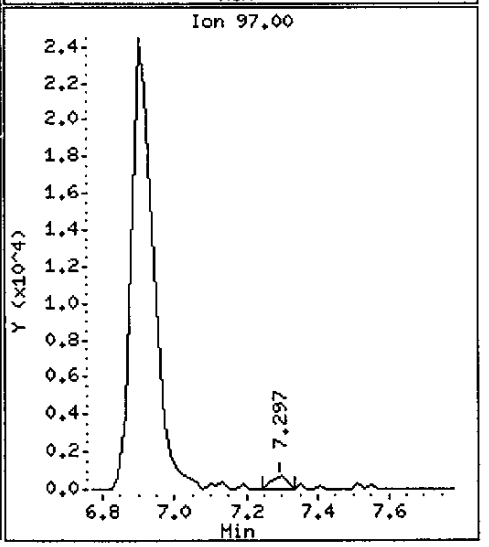


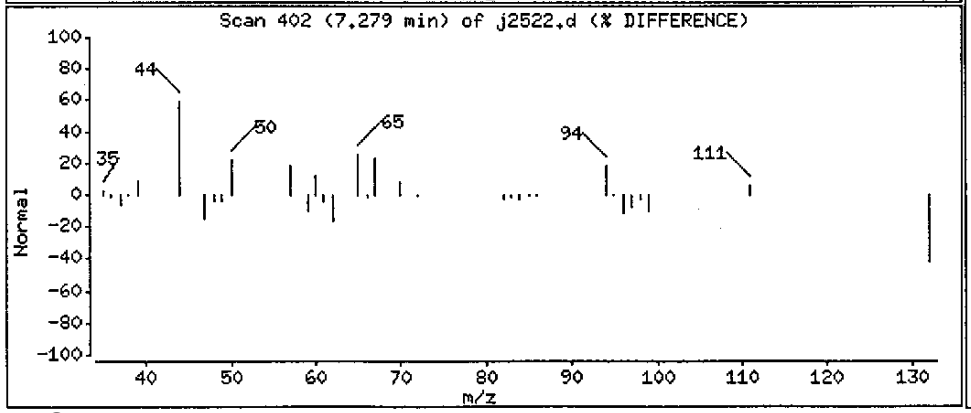












Data File: /chem/J.i/052504.b/j2522.d

Date : 25-MAY-2004 22:12

Client ID: 01-SC-01

Instrument: J.i

Sample Info: GGTF41AE,,D4E210325-010

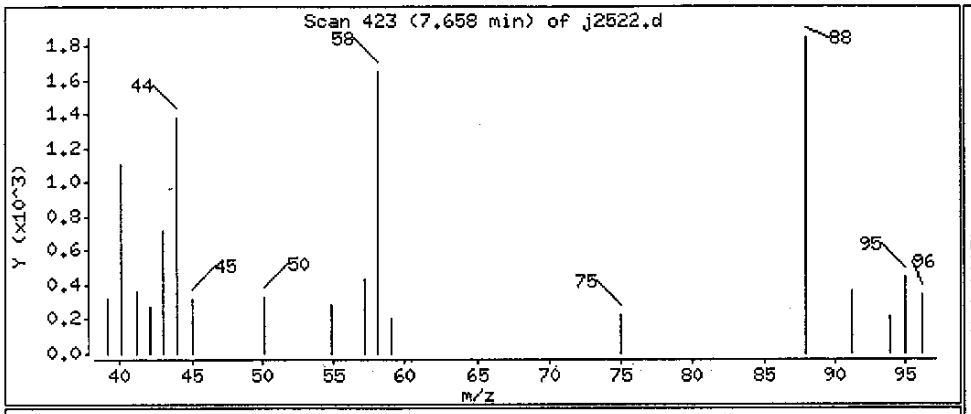
Operator: appelhansd

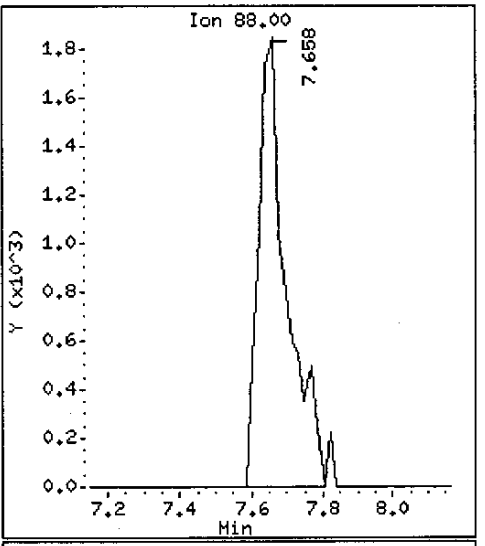
Column phase: DB624

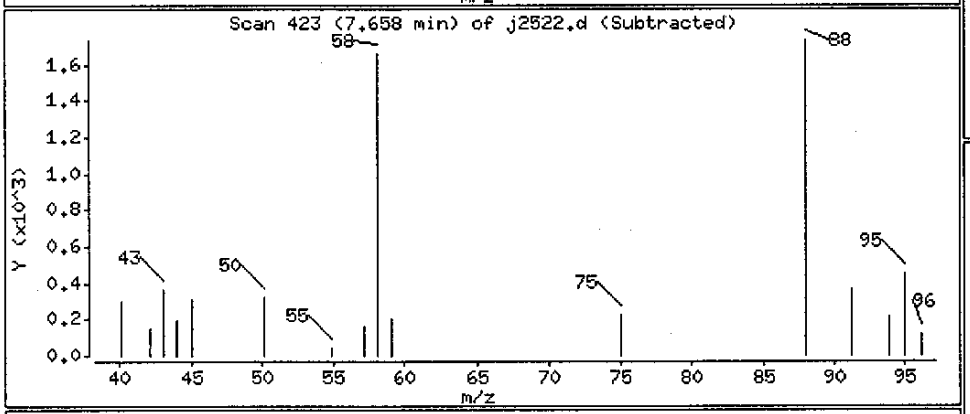
Column diameter: 0.53

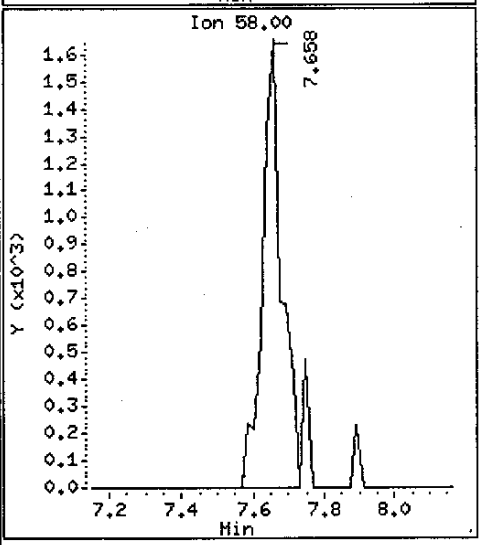
64 1,4-Dioxane

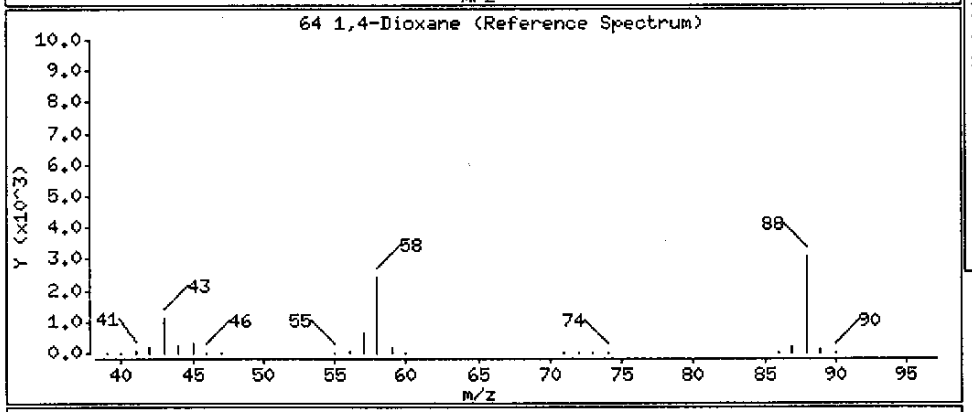
Concentration: 101.489 ug/Kg

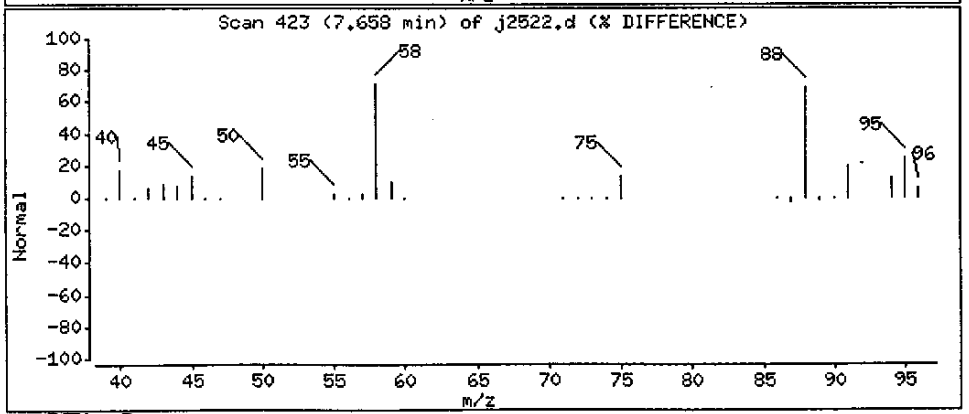












Data File: /chem/J.i/052504.b/j2522.d

Date : 25-MAY-2004 22:12

Client ID: 01-SC-01

Instrument: J.i

Sample Info: GGTF41AE,,D4E210325-010

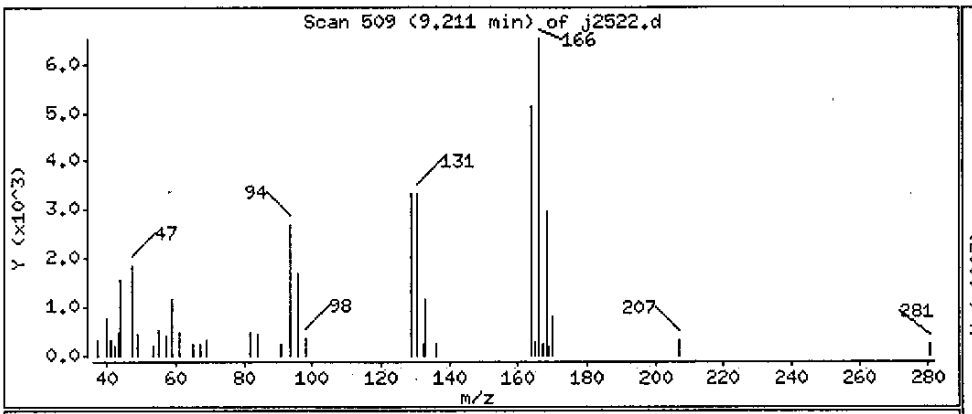
Operator: appelhansd

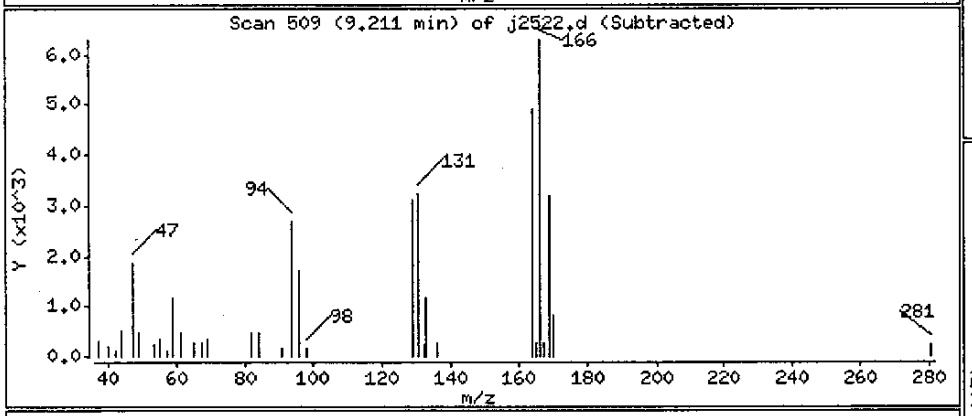
Column phase: DB624

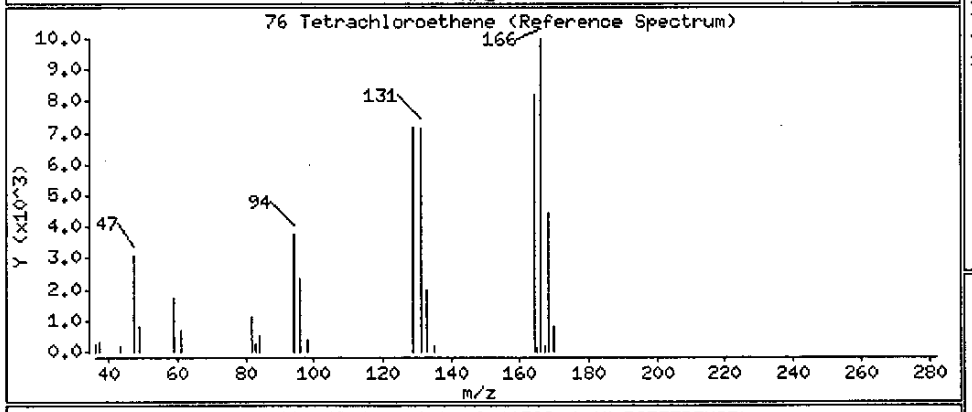
Column diameter: 0.53

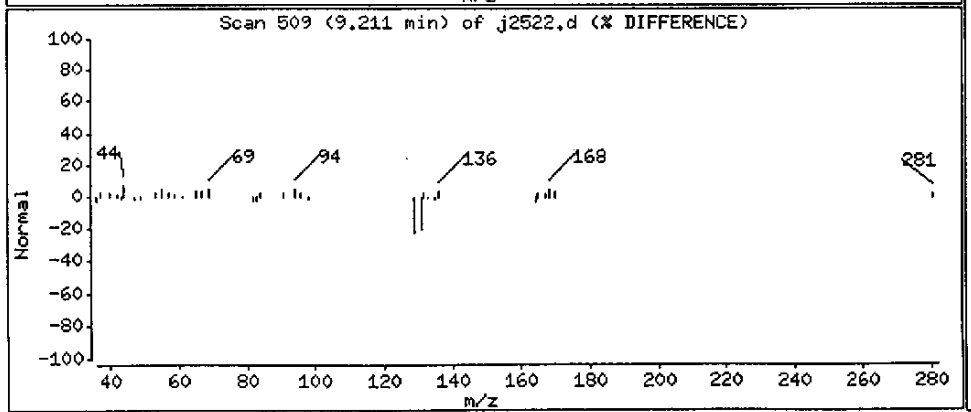
76 Tetrachloroethene

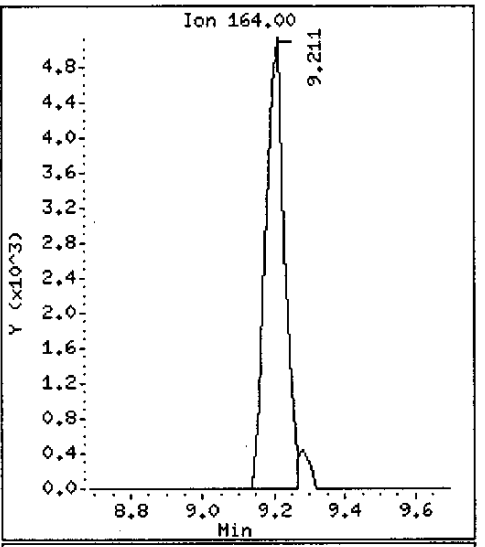
Concentration: 1.31224 ug/Kg

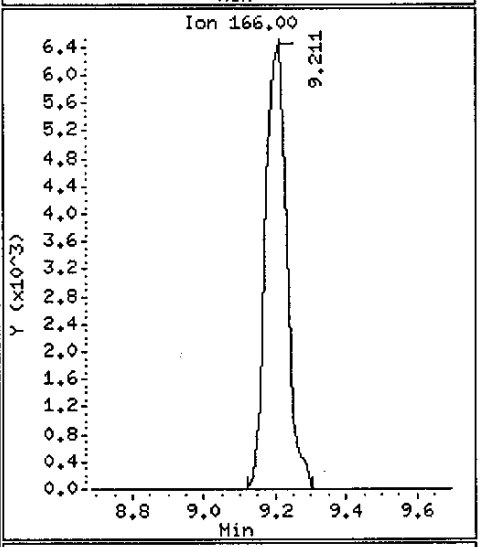


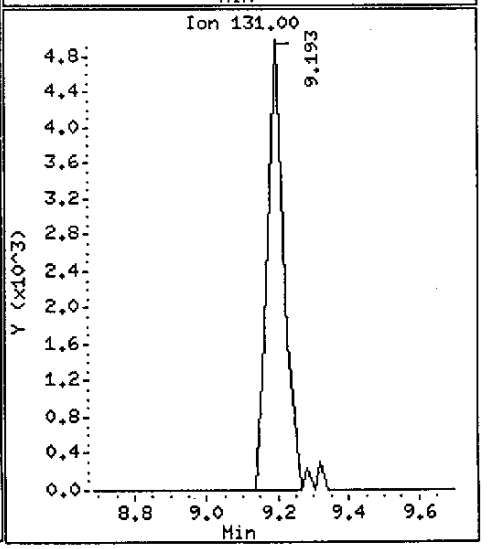












Data File: /chem/J.i/052504.b/j2522.d

Date : 25-MAY-2004 22:12

Client ID: 01-SC-01

Instrument: J.i

Sample Info: GGTF41AE,,D4E210325-010

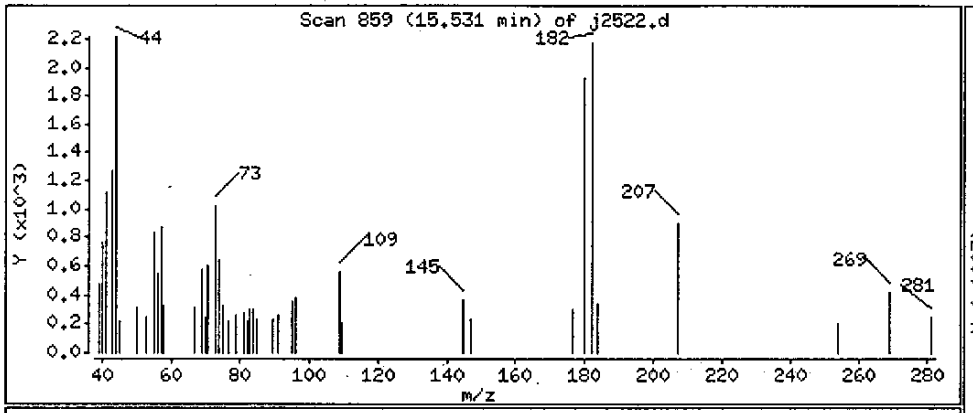
Operator: appelhansd

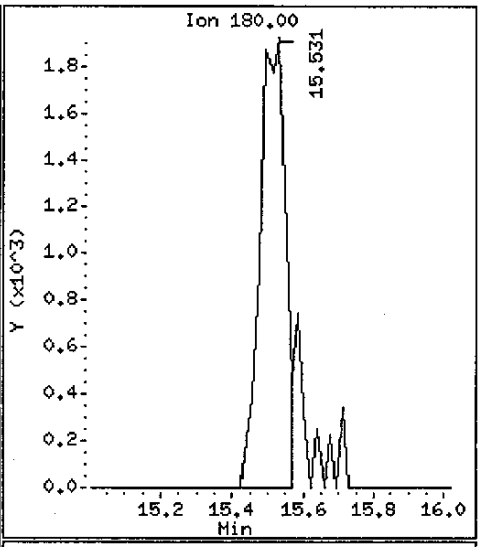
Column phase: DB624

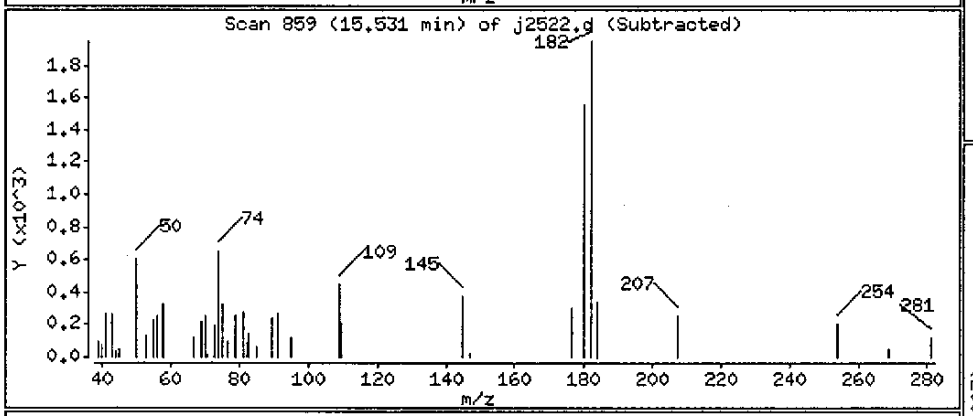
Column diameter: 0.53

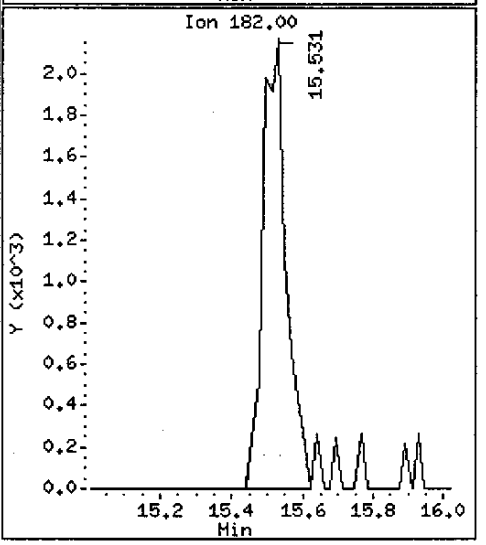
113 1,2,4-Trichlorobenzene

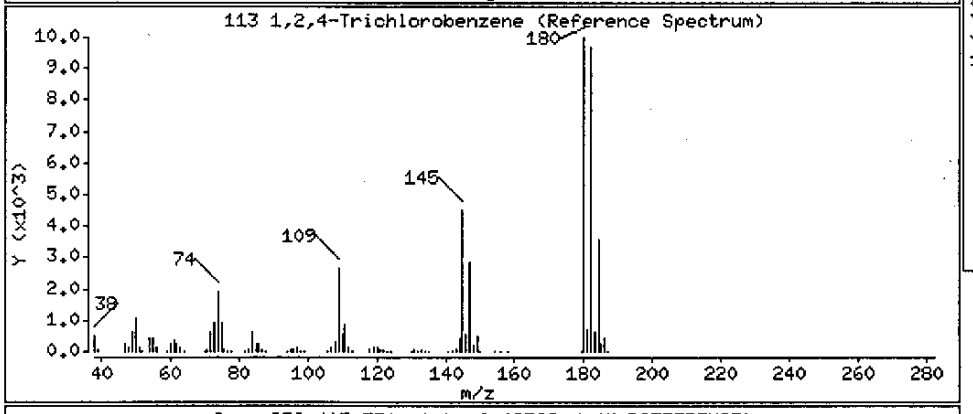
Concentration: 0.448922 ug/Kg

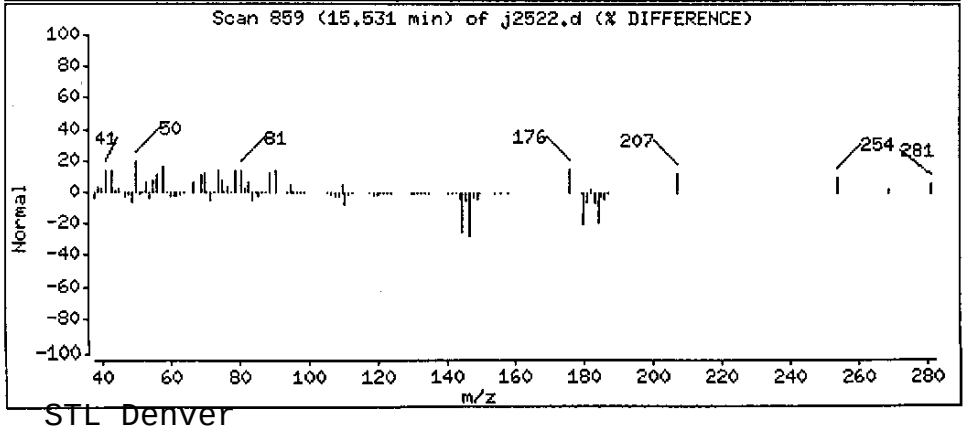












Data File: /chem/J.i/052504.b/j2522.d

Date : 25-MAY-2004 22:12

Client ID: 01-SC-01

Instrument: J.i

Sample Info: GGTF41AE,,D4E210325-010

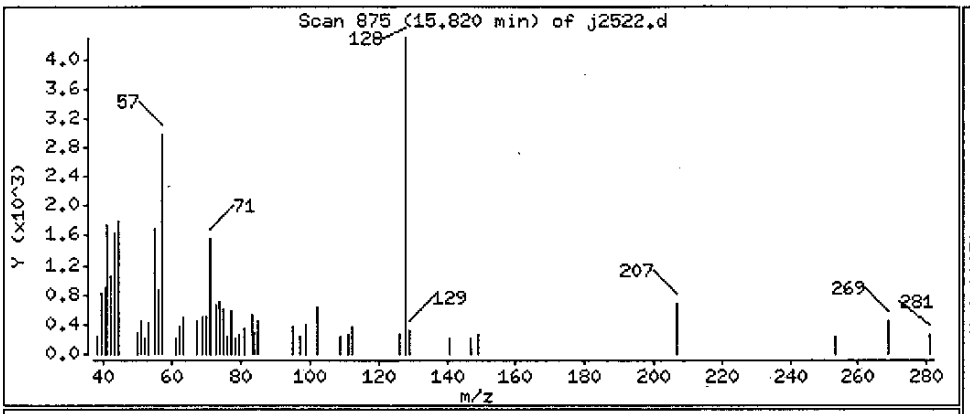
Operator: appelhansd

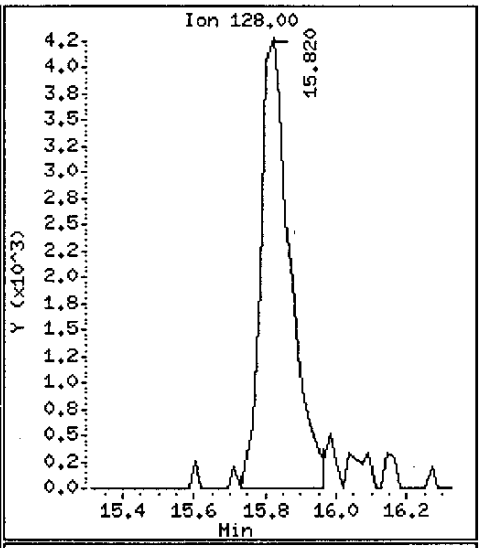
Column phase: DB624

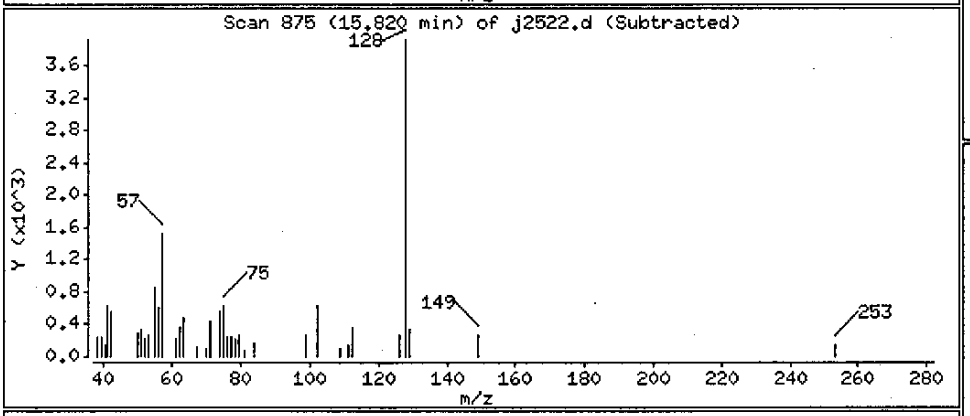
Column diameter: 0.53

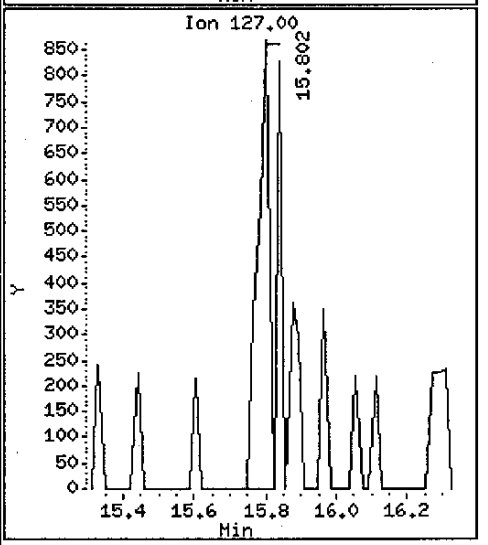
115 Napthalene

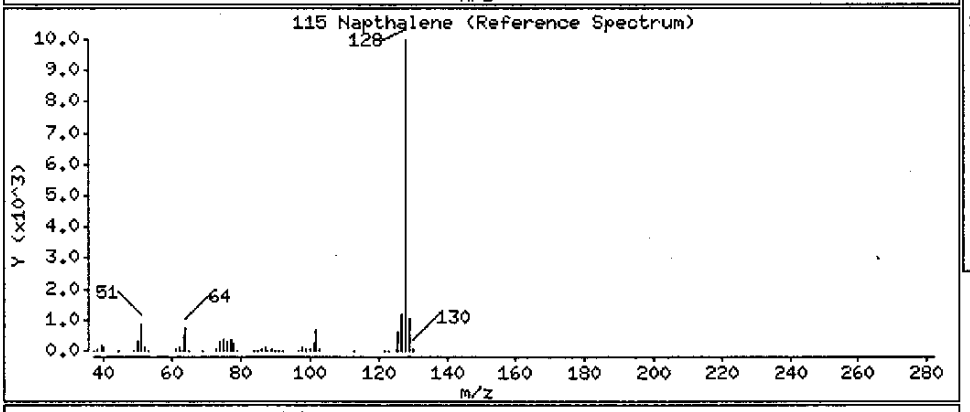
Concentration: 0.990327 ug/Kg

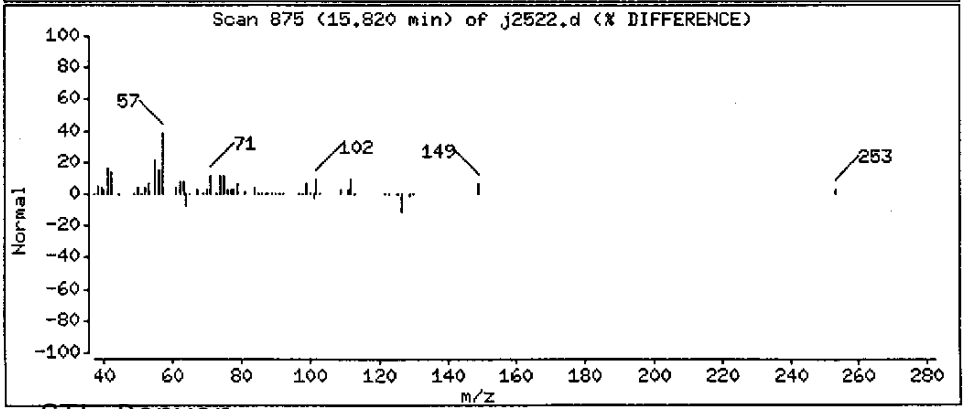












Data File: /chem/J.i/052504.b/j2522.d

Date : 25-MAY-2004 22:12

Client ID: 01-SC-01

Instrument: J.i

Sample Info: GGTF41AE,,D4E210325-010

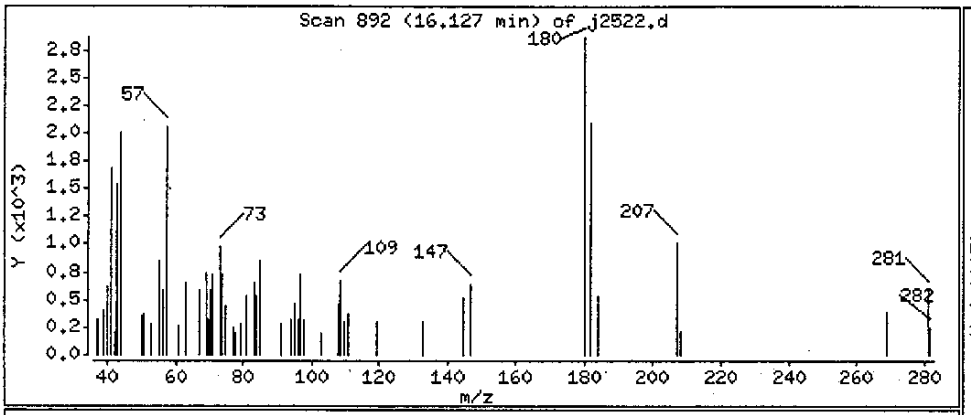
Operator: appelhansd

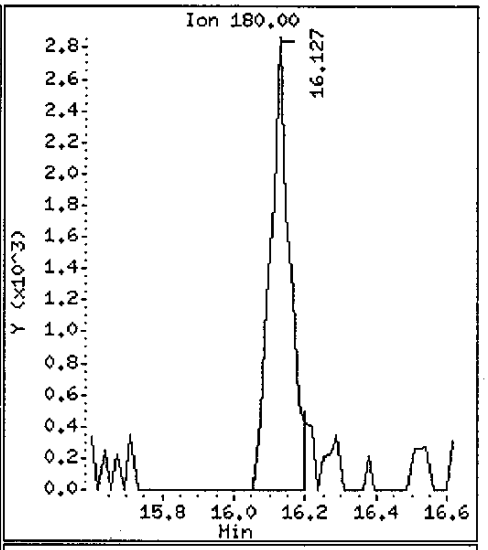
Column phase: DB624

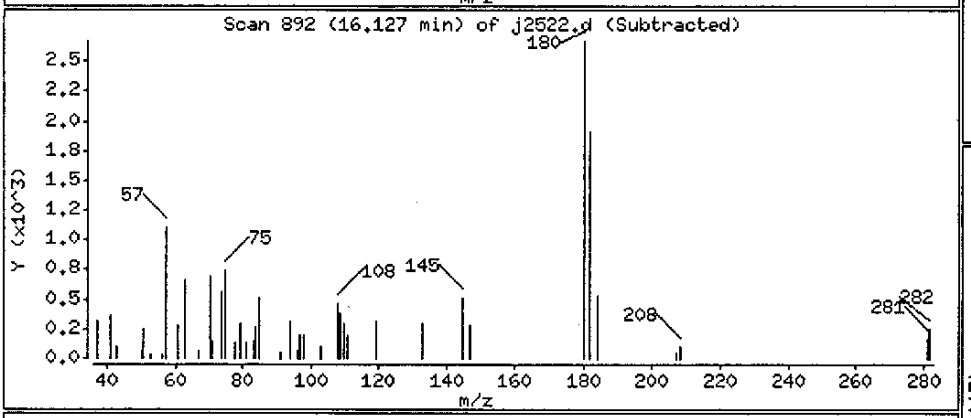
Column diameter: 0.53

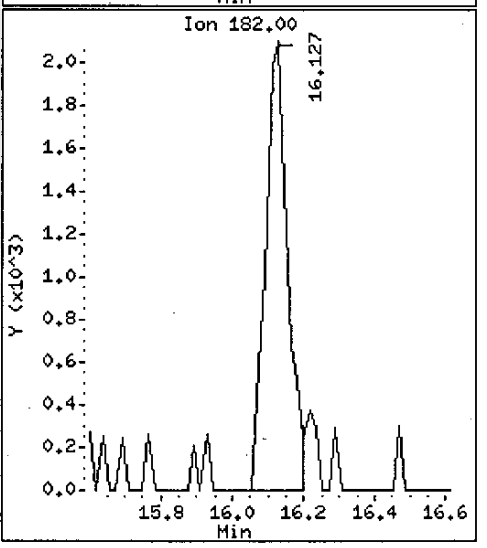
116 1,2,3-Trichlorobenzene

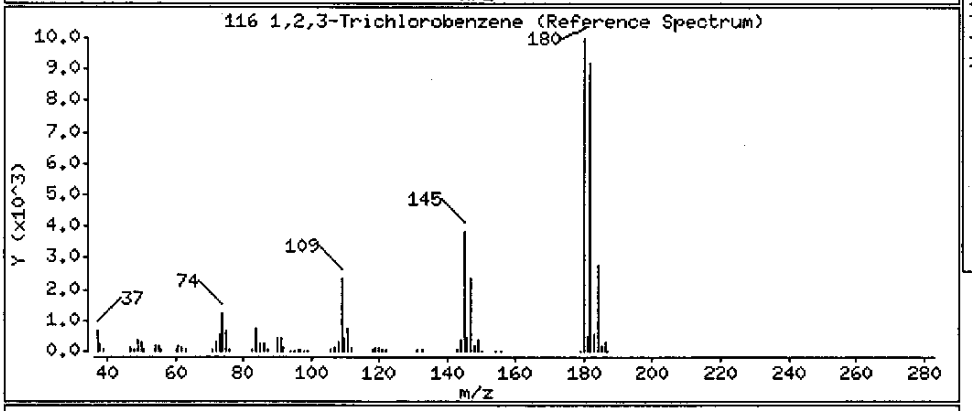
Concentration: 0.609800 ug/Kg

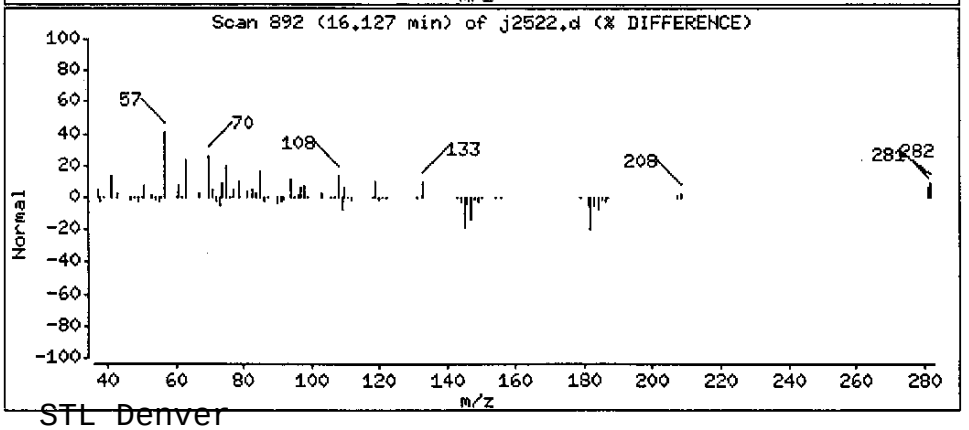












Volatile GC/MS

Supporting Documentation

Sample Sequence, Chromatograms/Mass Spectra

SEVERN TRENT STL

Lot ID: D4EZ10325

Client: Cabrera Services

Method: 8260B

Associated Samples: 7, 11

Batch #(s): 4153497

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date: 6.8.04

GC /MS VOLATILE ORGANIC EXTRACTION LOG SHEETS

SEVERN TRENT STL

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 6/01/04
Time: 16:02:35

LEV 1	LEV 2		LEV 1	LEV 2	
_	_	Blank	_	_	Weights/Volumes
_	_	Check	_	_	Spike & Surrogate Worksheet
_	_	MS/MSD	_	_	Vial contains correct volume
			_	_	Labels, greenbars, worksheets
			_	_	computer batch: correct & all match
			_	_	Anomalies to Extraction Method

_ Expanded Deliverable
_ COC Completed
_ Bench Sheet Copied
_ Package Submitted to AnalyticalGrou
_ Bench Sheet Copied per COC

Extractionist: _____
_____
Concentrationist: _____
_____

Reviewer/Date: _____ / 0/00/00

****
* *
* QC BATCH: 4153497 *
* *
****

PREP DATE: 5/28/04 6:09
COMP DATE: 5/28/04 6:09

Volatile Organics, GC/MS (8260B)
PURGE AND TRAP - 25 mL purge (Waters)

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	PH"S INIT	PH"S ADJT	ADJ2	SOLVENTS EXTRACTION	SOLVENTS VOL	SOLVENTS EXCHANGE	SOLVENTS VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	5/31/04	D4E190317-001 GGKDK-1-AA	R	25	QK	WATER	5 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/01/04	D4E200184-004 GGMR0-1-AP	R	25	QK	WATER	0.20mL 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/01/04	D4E200184-004 GGMR0-1-CMS	R	25	QK	WATER	0.20mL 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/01/04	D4E200184-004 GGMR0-1-CND	R	25	QK	WATER	0.20mL 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/01/04	D4E200235-001 GGM9E-1-CC	R	25	QK	WATER	20mL 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/01/04	D4E200235-002 GGM9X-1-CC	R	25	QK	WATER	20mL 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210201-001 GGQ0H-1-AP	R	25	QK	WATER	20mL 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 6/01/04
Time: 16:02:35

QC BATCH: 4153497

PREP DATE: 5/28/04 6:09
COMP DATE: 5/28/04 6:09

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	PH"S INIT	PH"S ADJI	PH"S ADJ2	SOLVENTS EXTRACTION	SOLVENTS VOL	SOLVENTS EXCHANGE	SOLVENTS VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	6/03/04	D4E210200-001 **GGQ00-1-AA**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210201-002 **GGQ26-1-A2**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210201-003 **GGQ3X-1-A2**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210201-004 **GGQ32-1-A2**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210203-001 **GGQ4P-1-AD**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210203-003 **GGQ6J-1-AP**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210203-005 **GGQ6M-1-AP**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210203-007 **GGQ6P-1-AP**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210203-009 **GGQ6V-1-AP**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/03/04	D4E210203-011 **GGQ65-1-AP**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															

RQC058

Severn Trent Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 6/01/04
Time: 16:02:35

QC BATCH: 4153497

PREP DATE: 5/28/04 6:09
COMP DATE: 5/28/04 6:09

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	PH"S INIT	PH"S ADJ1	PH"S ADJ2	SOLVENTS EXTRACTION	SOLVENTS VOL	SOLVENTS EXCHANGE	SOLVENTS VOL	SPIKE STANDARD/ SURROGATE ID
0/00/00	6/03/04	D4E210203-013 **GGQ67-1-AP**	R	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/10/04	D4E210325-007 **GGTFK-1-AA**	D	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	6/10/04	D4E210325-011 **GGTF6-1-AA**	D	25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	0/00/00	D4F010000-497 **GHEJJ-1-AAB**		25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															
0/00/00	0/00/00	D4F010000-497 **GHEJJ-1-ACC**		25	QK	WATER	**20mL** 20.00mL	NA	NA	NA		.0		.0	
COMMENTS:															

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD

NUMBER OF WORK ORDERS IN BATCH: 22

GC/MS VOLATILE
INSTRUMENT
LOG SHEETS

SEVERN TRENT STL

STL, Denver

GC/MS Volatile Analysis

Instrument C
5972 MSD

Column	Phase	Inj. Temp	Init. Time	Ramp Rate	Final Temp	Flow cc/min	Press. Psi	Type	Vac. Range	Source Temp	Mass Range
75M	DB-624	200C	2 min.	5C/min	65C	18	20	MS	10^-6	~175C	35-300/2^2
			0 min.	12C/min	155C						
			0 min.	25C/min	210C						

Comments

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Target Batch (Directory): C 052804.b

QuantIMS Batch: 4153497

Lot #	Sample	W.O.#	Purge vol (ml)	Sample amt (ml/g)	Date	Initials	File Number	IS OK	SS OK	DIL OK	24 hr 12 hr	pH	Comments	ALS
BFB	—	—	1µL DFTPP Inj.		05/28/04	JPY	C1130	—	—				073-04 (06-09)	
MAINOLO	—	—	20mL	5µL			31	—	—			P/A	067/082-04	1
SUPPOLO	—	—		↓			32	—	—			↓	011/052-04	2
LCS	—	GHEJJIAC		10µL			33	—	—	—	—		109-04	3
VBLK	—	↓ IAA		20mL			34	—	—	—	—	↓	IS/SS 105/099-04	4
D4E200184	004	GGMROIAP		200µL			35	—	—	—	—	(4)	NCMpH	5
D4E200235	001	9EICC		20mL			36	—	—	—	—	(7)		6
↓	002	9X ↓		↓			37	—	—	—	—	(7)		7
D4E200184	4MS	ROICM		200µL			38	—	—	—	—	(4)		8
↓	4MSD	↓ ICN		↓			39	—	—	—	—	(4)	↓	9
D4E210325	007	GGTFKIAA		20mL			40	—	—	—	—	<2		10
↓	008	FX		2mL			41	—	—	X	—	<2	RE 20mL	11
	009	F3		5mL			42	—	—	X	—	<2	RE 20mL	12
↓	011	F6		20mL			43	—	—	—	—	<2		13
D4E210200	001	GGQ00					44	—	—	—	—	<2		14
D4E210201	001	OHIAP					45	—	—	—	—	<2		15
↓	002	26IA2					46	—	—	—	—	<2		16
	003	3X ↓					47	—	—	—	—	<2		17
↓	004	32					48	—	—	—	—	<2		18
D4E210203	001	4PIAD					49	—	—	—	—	<2		19

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STL, Denver

GC/MS Volatile Analysis

Instrument C 336
5972 MSD

Column	Phase	Inj. Temp	Init. Time	Ramp Rate	Final Temp	Flow cc/min	Press. Psi	Type	Vac. Range	Source Temp	Mass Range
75M	DB-624	200C	2 min.	5C/min	65C	18	20	MS	10^-6	~175C	35-300/2^2
			0 min.	12C/min	155C						
			0 min.	25C/min	210C						

Comments

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Target Batch (Directory): C 052804.b

QuantIMS Batch: 4153497

Lot #	Sample	W.O.#	Purge vol (ml)	Sample amt (ml/g)	Date	Initials	File Number	IS OK	SS OK	DIL OK	24 hr 12 hr	pH	Comments	ALS
D4E210203	003	GGQ6J1AP	20mL	20mL	5/28/04	JPH	C1150	✓	✓	✓	✓	<2		20
↓	005	6M	↓	↓	↓	↓	51	✓	✓	✓	✓	<2		21
	007	6P					52	✓	✓	✓	✓	<2		22
	009	6V					53	✓	✓	✓	✓	<2		23
	011	65					54	✓	✓	✓	✓	<2		24
	013	67 ↓					55	✓	✓	✓	✓	<2		25
D4E190317	001	GGKDK1AA	↓	5mL	↓	↓	56	✓	✓	NTC	✓	<2	(Report data)	26

Jen 05/29/04

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STL Denver

Instrument C
5972 MSD

Column	Phase	Inj. Temp
75M	DB-624	200C

Init. Time	Ramp Rate	Final Temp	Flow cc/min
2 min.	5C/min	65C	18
0 min.	12C/min	155C	
0 min.	25C/min	210C	

Press. Psi	Type	Vac. Range	Source Temp	Mass Range
20	MS	10^-6	~175C	35-300/2^2

Comments

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Target Batch (Directory): C050504i.b IS #97 / SS #054-04

QuantIMS Batch:

Lot #	Sample	W.O.#	Purge vol (ml)	Sample amt (ml/g)	Date	Initials	File Number	IS OK	SS OK	DIL OK	24 hr 12 hr	pH	Comments	ALS
BFB		lul dir inj	~	~	5/05/04	JH	C0302.d				✓		#079-04 1235	—
Blk			25	~			3						~~#79-04/dlk~~	1
Main 001				0.5			4						#97/67-04.	2
2				1			5							3
5				2.5			6							4
10				5			7							5
30				15			8							6
60				30			9							7
Supp 010				5ul			10						#	8
354030				15ul			11	—	—				#52/11-04	9
CLNUP				~			12						#68/61/91-04	10
Blk				20			13							11
Supp 001				0.5ul			14						#011/052-04	12
002				1.0ul			15							13
005				2.5ul			16							14
010				5.0ul			17							15
030				15ul			18							16
060			↓	30ul	↓	↓	19							17

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STL, Denver

GC/MS Volatile Analysis

Instrument C
5972 MSD

Column	Phase	Inj. Temp	Init. Time	Ramp Rate	Final Temp	Flow cc/min	Press. Psi	Type	Vac. Range	Source Temp	Mass Range
75M	DB-624	200C	2 min.	5C/min	65C	18	20	MS	10^-6	~175C	35-300/2^2
			0 min.	12C/min	155C						
			0 min.	25C/min	210C						

Comments

DEN-MS-0010 (8260B/624/524.2)
(Circle as appropriate)

Target Batch (Directory): C051004.b IS/SS 98/ QuantIMS Batch:

Lot #	Sample	W.O.#	Purge vol (ml)	Sample amt (ml/g)	Date	Initials	File Number	IS OK	SS OK	DIL OK	24 hr 12 hr	pH	Comments	ALS
BFB		1ul dir inj	~	~	5/10/04	DM	C0451.d			N/A	✓		#07504 1809	
MAN010			20				52	✓			✓		#BT/67-04	
SUPP001				0.5µl			53	✓	✓		✓		#52/11-04	
2				1			54	✓	✓		✓		~~#6~~	
5				2.5			55	✓	✓		✓			
10				5			56	✓	✓		✓			
30				15			57	✓	✓		✓			
60				30			58	✓	✓		✓			
LCS				10µl			59	↓	↑		✓			
VBLK				20			60	✓	✓		✓			
LCS				10µl			61	✓	✓	↓	✓	↓	#64-04	
DAD290397	3			20		/	62	↓			✓			
↓	3S			↓			63				✓			
	3D						64				✓			
	4						65				✓			
↓	3						66				✓			
DAD290233	3						67				✓			
↓	4						68				✓			
	5						69				✓			
↓	6		↓	↓	↓	↓	70				✓			

Revised 6/3/03

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GC/MS VOLATILE
STANDARD DATA

SEVERN TRENT STL

GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date: C Main 5/5/04

Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____

☐ 524.2 ☐ 624 ☑ 8260B ☐ Other VOA _

VOA Preparation ☐ 5mL ☑ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Initial Calibration					
1. BFB/DFTPP meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Sufficient number of calibration points used?	✓			✓	
4. Reasons for removal of points documented?	✓			✓	*
5. %RSD or correlation coefficient within method limits?	✓			✓	
6. If RRF used for ICAL, were all compounds within 15% RSD?			✓	✓	List all exceptions below (cpd & RSD)
7. Response factors meet criteria?	✓			✓	
8. Isomeric pairs checked for correct peak assignment?	✓			✓	
9. Data checked for detector saturation?	✓			✓	
10. Standards traceability properly documented?	✓			✓	
11. Manual integrations documented and checked?	✓			✓	
12. 2nd source ICV recovery 75-125% for DoD projects, 65-135% (±55% of expected for poor performers) for non-DoD?	✓			✓	

* High pt chloroethane = 30 ppb
bromoform = 30 ppb
Some pts < RL removed

1st Level Reviewer: _____ Date: 5/6/04

2nd Level Reviewer: _____ Date: 5/6/04

Report Date: 06-May-2004 21:58

Calibration History

Method : /chem/C.i/050504i.b/C-20ml-AQ.m
Start Cal Date: 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 19:57

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
05-MAY-2004 18:04	2-supp	/chem/C.i/050504i.b/c0314.d
05-MAY-2004 13:47	1-main	/chem/C.i/050504i.b/c0304.d
Cal Level: 2 , Cal Amount: 2.00000		
05-MAY-2004 18:26	2-supp	/chem/C.i/050504i.b/c0315.d
05-MAY-2004 14:11	1-main	/chem/C.i/050504i.b/c0305.d
Cal Level: 3 , Cal Amount: 5.00000		
05-MAY-2004 18:49	2-supp	/chem/C.i/050504i.b/c0316.d
05-MAY-2004 14:35	1-main	/chem/C.i/050504i.b/c0306.d
Cal Level: 4 , Cal Amount: 10.0000		
05-MAY-2004 19:12	2-supp	/chem/C.i/050504i.b/c0317.d
05-MAY-2004 14:59	1-main	/chem/C.i/050504i.b/c0307.d
Cal Level: 5 , Cal Amount: 30.0000		
05-MAY-2004 19:35	2-supp	/chem/C.i/050504i.b/c0318.d
05-MAY-2004 15:23	1-main	/chem/C.i/050504i.b/c0308.d
Cal Level: 6 , Cal Amount: 60.0000		
05-MAY-2004 19:57	2-supp	/chem/C.i/050504i.b/c0319.d
05-MAY-2004 15:46	1-main	/chem/C.i/050504i.b/c0309.d

Continuing Calibration

05-MAY-2004 19:12	2-supp	/chem/C.i/050504i.b/c0317.d
05-MAY-2004 16:09	2-supp	/chem/C.i/050504i.b/c0310.d

Report Date : 05-May-2004 16:12

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 15:46
Quant Method : ISTD
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/050504i.b/C-20ml-AQ.m
Cal Date : 05-May-2004 16:11 meierg

Calibration File Names:
Level 1: /chem/C.i/0401904p.b/c0270.d
Level 2: /chem/C.i/0401904p.b/c0271.d
Level 3: /chem/C.i/0401904p.b/c0272.d
Level 4: /chem/C.i/0401904p.b/c0273.d
Level 5: /chem/C.i/0401904p.b/c0274.d
Level 6: /chem/C.i/0401904p.b/c0275.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	30 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
M 12 1,2-Dichloroethene (total)	0.30512	0.28595	0.27497	0.27980	0.27781	0.27893	AVRG		0.28376		3.90119
M 18 Xylene (total)	2.95627	2.93453	2.74341	2.84029	2.94347	2.86967	AVRG		2.88127		2.82605
1 dichlorodifluoromethane	0.31688	0.25035	0.25120	0.25102	0.23943	0.22834	AVRG		0.25620		12.12537
3 Chloromethane	0.36978	0.27623	0.27992	0.26635	0.26171	0.26005	AVRG		0.28567		14.68623
4 Vinyl Chloride	0.29714	0.22673	0.23727	0.24123	0.23095	0.21948	AVRG		0.24213		11.57163
6 Bromomethane	15612	28466	76280	154214	443351	825005	WLINR	-0.05502	0.07275		0.99566
7 Chloroethane	0.15904	0.13563	0.14123	0.13698	0.12644	+++++	AVRG		0.13986		8.58027
9 Trichlorofluoromethane	0.36507	0.30251	0.32074	0.32265	0.29034	0.28766	AVRG		0.31483		9.10593
10 Ethanol	+++++	0.00102	0.00100	0.00095	0.00113	0.00099	AVRG		0.00102		6.61146

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 15:46
Quant Method : ISTD
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/050504i.b/C-20ml-AQ.m
Cal Date : 05-May-2004 16:11 meierg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	30 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
15 Acrolein	0.02465	0.02229	0.02229	0.02200	0.02203	0.02130	AVRG		0.02243		5.11903
17 1,1-Dichloroethene	0.28217	0.25923	0.25670	0.25439	0.23793	0.23241	AVRG		0.25380		6.94331
19 Acetone	+++++	0.03363	0.03032	0.02956	0.02849	0.02835	AVRG		0.03007		7.13480
20 Iodomethane	0.31396	0.26962	0.26074	0.26675	0.25334	0.25579	AVRG		0.27003		8.29540
25 Acetonitrile	+++++	0.01360	0.01284	0.01259	0.01246	0.01220	AVRG		0.01274		4.19731
26 Methylene Chloride	+++++	0.26365	0.23528	0.21860	0.20857	0.20570	AVRG		0.22636		10.53133
27 tert-Butyl alcohol	0.00979	0.00958	0.00907	0.00979	0.01017	0.01021	AVRG		0.00977		4.28383
30 Acrylonitrile	0.04552	0.04169	0.04256	0.04357	0.04455	0.04502	AVRG		0.04382		3.39197
29 trans-1,2-Dichloroethene	0.32097	0.29215	0.28624	0.29017	0.28381	0.28356	AVRG		0.29282		4.85358
32 1,1-Dichloroethane	0.65302	0.60545	0.58354	0.59485	0.60661	0.57762	AVRG		0.60352		4.45149
34 Chloroprene	0.66167	0.61041	0.62045	0.61735	0.62379	0.61921	AVRG		0.62548		2.92229
33 Isopropyl ether	0.19849	0.19062	0.18557	0.18813	0.18237	0.17451	AVRG		0.18661		4.31982
38 cis-1,2-Dichloroethene	0.28927	0.27976	0.26370	0.26942	0.27181	0.27430	AVRG		0.27471		3.23688
37 2,2-Dichloropropane	0.45097	0.41167	0.38891	0.40118	0.39389	0.38715	AVRG		0.40563		5.90795
39 2-Butanone	0.04835	0.04759	0.04402	0.04534	0.04677	0.04719	AVRG		0.04654		3.41479
41 Propionitrile	0.01470	0.01401	0.01484	0.01519	0.01574	0.01563	AVRG		0.01502		4.28451
44 Methacrylonitrile	0.07393	0.07246	0.07256	0.07364	0.07533	0.07637	AVRG		0.07405		2.08832

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 15:46
Quant Method : ISTD
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/050504i.b/C-20ml-AQ.m
Cal Date : 05-May-2004 16:11 meierg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	30 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
42 Bromochloromethane	0.07561	0.07334	0.07333	0.07760	0.07528	0.07394	AVRG		0.07485		2.21659
45 Chloroform	0.46871	0.45298	0.43753	0.43999	0.44442	0.44736	AVRG		0.44850		2.52126
47 1,1,1-Trichloroethane	0.48199	0.44724	0.44372	0.44924	0.44837	0.44334	AVRG		0.45231		3.25803
50 1,1-Dichloropropene	0.49289	0.45716	0.44431	0.43932	0.44797	0.45613	AVRG		0.45630		4.20556
49 Carbon Tetrachloride	0.41181	0.38747	0.38026	0.38945	0.38777	0.39355	AVRG		0.39172		2.74263
53 Isobutanol	0.00288	0.00292	0.00284	0.00293	0.00331	0.00323	AVRG		0.00302		6.58890
51 Benzene	1.23481	1.16719	1.14231	1.16639	1.20021	1.24428	AVRG		1.19253		3.43122
54 1,2-Dichloroethane	0.27933	0.26686	0.26868	0.26704	0.27145	0.27118	AVRG		0.27076		1.71202
57 Trichloroethene	0.25666	0.26148	0.25309	0.26261	0.25840	0.26441	AVRG		0.25944		1.61639
59 n-Butanol	5410	12999	36462	84547	319977	676492	WLINR	1.22536	0.00284		0.99556
60 1,2-Dichloropropane	0.26597	0.27297	0.26410	0.27452	0.27803	0.28321	AVRG		0.27313		2.64258
62 Dibromomethane	0.07899	0.07595	0.07652	0.07754	0.08003	0.07894	AVRG		0.07799		2.02987
63 1,4-Dioxane	0.00074	0.00076	0.00073	0.00079	0.00085	0.00078	AVRG		0.00078		5.58699
65 Bromodichloromethane	0.24159	0.25102	0.25456	0.26496	0.27435	0.27889	AVRG		0.26089		5.50618
68 cis-1,3-Dichloropropene	1.73562	1.75350	1.76969	1.90162	2.04602	2.09141	AVRG		1.88298		8.28508
70 4-Methyl-2-pentanone	0.67174	0.63992	0.60733	0.60207	0.65615	0.67431	AVRG		0.64192		4.89130
71 Toluene	7.83841	7.57905	7.13413	7.30329	7.71907	7.70497	AVRG		7.54649		3.60647

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 15:46
Quant Method : ISTD
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/050504i.b/C-20ml-AQ.m
Cal Date : 05-May-2004 16:11 meierg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	30 Level 5	60 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
72 trans-1,3-Dichloropropene	1.14502	1.21874	1.24866	1.32596	1.48892	1.52254	AVRG		1.32497		11.46619
74 1,1,2-Trichloroethane	0.75390	0.67880	0.67529	0.67955	0.68779	0.66487	AVRG		0.69003		4.66023
75 Tetrachloroethene	1.17633	1.24501	1.16409	1.19444	1.19379	1.18376	AVRG		1.19290		2.34324
76 1,3-Dichloropropane	1.24394	1.34073	1.29553	1.32079	1.37549	1.37848	AVRG		1.32583		3.86214
78 2-Hexanone	0.33595	0.36312	0.36545	0.39484	0.43296	0.44479	AVRG		0.38952		10.96229
79 Dibromochloromethane	0.59046	0.67266	0.69369	0.73272	0.77234	0.79875	AVRG		0.71010		10.58100
80 1,2-Dibromoethane	0.54585	0.56109	0.53250	0.56253	0.58755	0.58481	AVRG		0.56239		3.81740
82 Chlorobenzene	3.85573	3.79520	3.59181	3.69915	3.78456	3.86209	AVRG		3.76475		2.74206
83 1-Chlorohexane	2.63575	2.55677	2.52132	2.60014	2.66486	2.66969	AVRG		2.60809		2.30119
84 1,1,1,2-Tetrachloroethane	1.00458	1.05640	1.00266	1.01286	1.04595	1.01176	AVRG		1.02237		2.23975
85 Ethylbenzene	2.46228	2.53155	2.35588	2.44338	2.43917	2.40281	AVRG		2.43918		2.41467
86 m and p-Xylene	3.03002	3.07114	2.86484	2.95860	3.05065	2.95617	AVRG		2.98857		2.57658
87 o-Xylene	2.80879	2.66131	2.50054	2.60366	2.72909	2.69667	AVRG		2.66668		3.98954
88 Styrene	3.65325	3.93925	3.83896	4.08220	4.34231	4.41357	AVRG		4.04492		7.27297
89 Bromoform	0.25320	0.27698	0.25581	0.29140	0.32653	+++++	AVRG		0.28078		10.69060
90 isopropyl benzene	7.73967	7.77346	7.44009	7.79394	8.34123	7.06039	AVRG		7.69146		5.52580
91 Cyclohexanone	0.02360	0.02266	0.02339	0.02455	0.02773	0.02701	AVRG		0.02482		8.35757

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 15:46
Quant Method : ISTD
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/050504i.b/C-20ml-AQ.m
Cal Date : 05-May-2004 16:11 meierg

	Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	30 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
94	Bromobenzene	0.89717	0.89836	0.84317	0.86786	0.89501	0.93444	AVRG		0.88933		3.48463
95	1,1,2,2-Tetrachloroethane	0.63146	0.58148	0.57537	0.57636	0.60552	0.56736	AVRG		0.58959		4.11536
96	1,2,3-Trichloropropane	0.14812	0.13906	0.15223	0.13707	0.14390	0.14221	AVRG		0.14377		3.93361
97	n-Propylbenzene	1.56420	1.56959	1.50106	1.51447	1.53084	1.55802	AVRG		1.53970		1.84571
99	2-Chlorotoluene	1.14139	1.20267	1.11188	1.14150	1.14924	1.16808	AVRG		1.15246		2.65024
100	4-Chlorotoluene	1.14564	1.17922	1.09618	1.10627	1.09633	1.09736	AVRG		1.12017		3.09068
101	1,3,5-Trimethylbenzene	4.88625	5.08435	4.88142	5.07604	5.17132	5.12556	AVRG		5.03749		2.45675
102	tert-Butylbenzene	3.86519	3.92747	3.68928	3.89569	4.00842	4.13278	AVRG		3.91980		3.78355
103	1,2,4-Trimethylbenzene	4.69119	4.76928	4.56024	4.68559	4.89613	4.94111	AVRG		4.75726		2.99568
104	sec-Butylbenzene	1.17275	1.19747	1.14537	1.19021	1.15581	1.15646	AVRG		1.16968		1.77748
105	m-Dichlorobenzene	1.92095	1.94627	1.79656	1.82571	1.86203	1.93749	AVRG		1.88150		3.32701
106	4-Isopropyltoluene	5.01404	4.83718	4.67652	4.89353	5.07739	5.04695	AVRG		4.92427		3.09933
108	p-dichlorobenzene	1.80393	1.85007	1.70879	1.73845	1.73780	1.81639	AVRG		1.77590		3.11323
110	o-Dichlorobenzene	1.49842	1.39516	1.37149	1.42611	1.40790	1.42533	AVRG		1.42073		3.04031
111	n-Butylbenzene	5.47951	5.31779	5.03845	5.19763	5.32715	5.17349	AVRG		5.25567		2.90288
112	1,2-Dibromo-3-chloropropane	0.04506	0.04806	0.05234	0.05264	0.05688	0.06162	AVRG		0.05277		11.28116
113	1,2,4-Trichlorobenzene	0.97872	0.79377	0.79134	0.78315	0.77841	0.82233	AVRG		0.82462		9.34121

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 15:46
Quant Method : ISTD
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/050504i.b/C-20ml-AQ.m
Cal Date : 05-May-2004 16:11 meierg

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	30 Level 5	60 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
114 Hexachlorobutadiene	0.70588	0.63675	0.59778	0.59630	0.56670	0.57289	AVRG		0.61272		8.46605
115 Naphthalene	1.30478	1.13258	1.10272	1.14595	1.20874	1.30019	AVRG		1.19916		7.27186
116 1,2,3-Trichlorobenzene	0.72836	0.63935	0.58468	0.60828	0.60295	0.63981	AVRG		0.63390		8.05152

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Data File: /chem/C.i/050504.b/c0299.d

Date : 05-MAY-2004 11:03

Client ID: BFB

Instrument: C.i

Sample Info: bfb

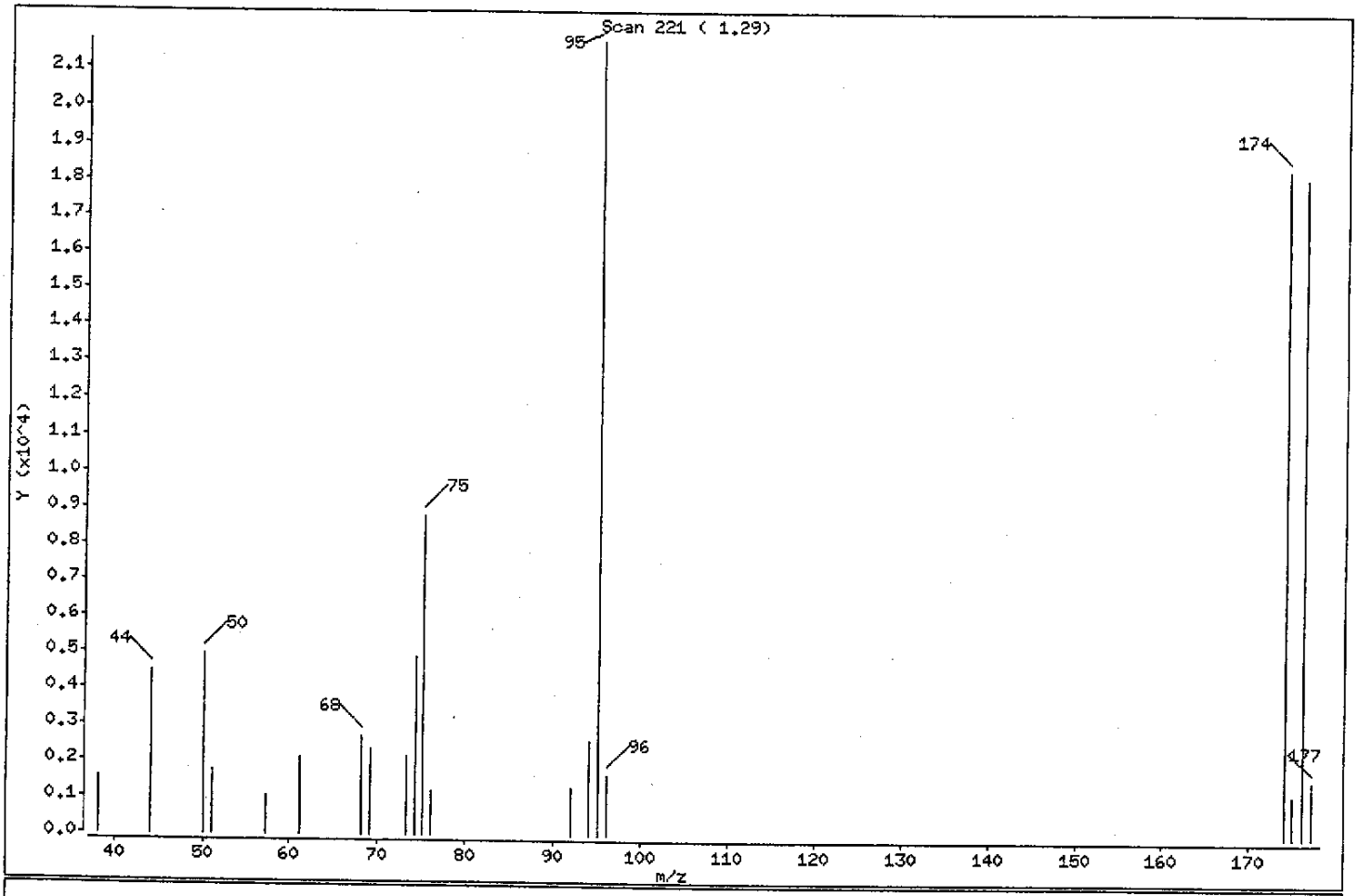
Volume Injected (uL): 1.0

Operator: reinharj

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.77
75	30.00 - 60.00% of mass 95	40.56
96	5.00 - 9.00% of mass 95	7.53
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	84.44
175	5.00 - 9.00% of mass 174	5.18 (6.14)
176	95.00 - 101.00% of mass 174	83.30 (98.65)
177	5.00 - 9.00% of mass 176	7.03 (8.44)

Data File: /chem/C.i/050504.b/c0299.d

Date : 05-MAY-2004 11:03

Client ID: BFB

Instrument: C.i

Sample Info: bfb

Volume Injected (uL): 1.0

Operator: reinharj

Column phase: DB624

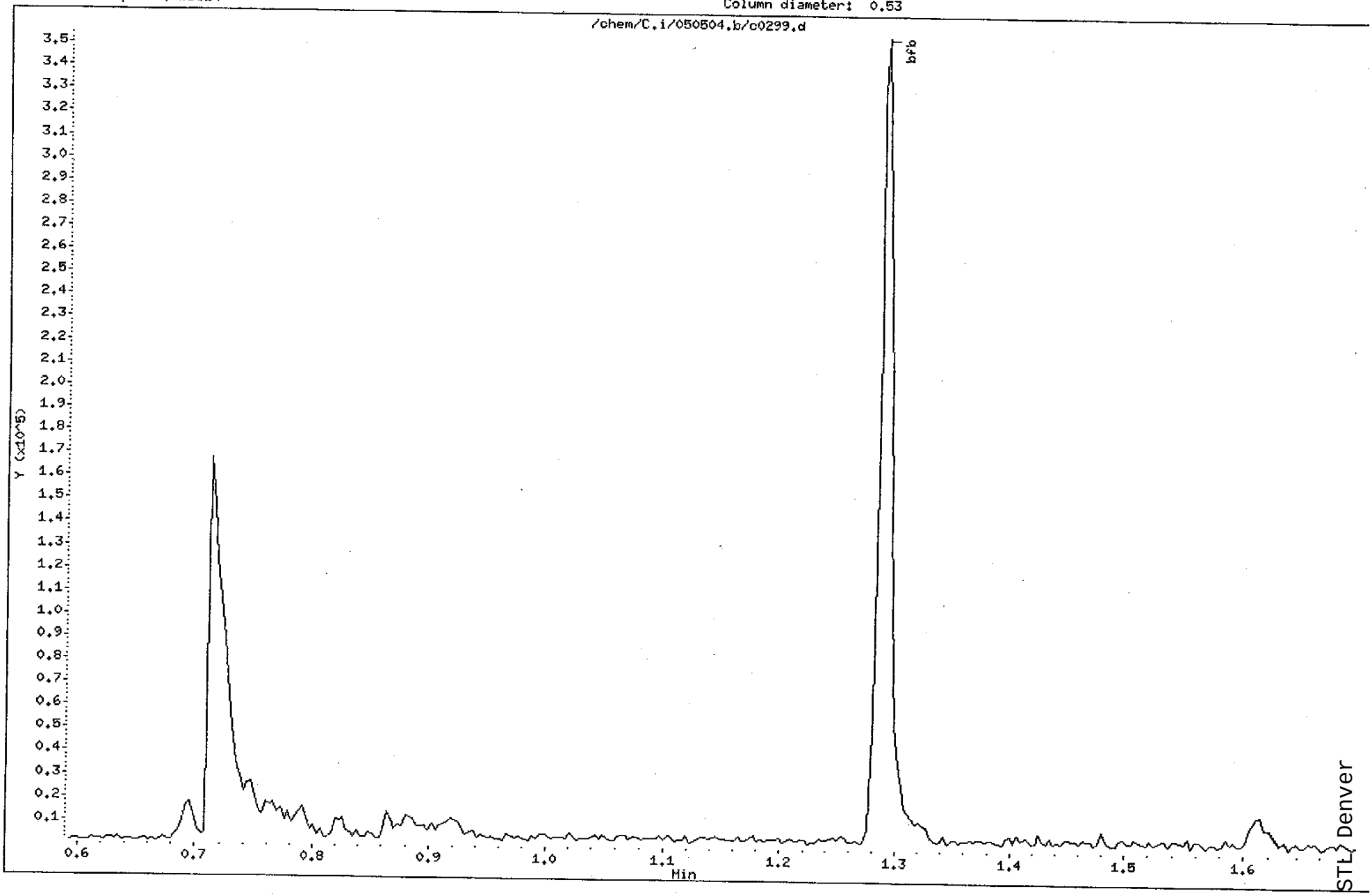
Column diameter: 0.53

Data File: c0299.d
Spectrum: Scan 221 (1.29)
Location of Maximum: 95.10
Number of points: 20

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.20	1572	68.15	2691	92.00	1324	176.00	18112
44.15	4500	69.05	2334	94.00	2588	177.10	1528
50.10	4952	73.15	2152	95.10	21744		
51.10	1728	74.20	4901	96.05	1637		
57.15	1068	75.10	8820	174.00	18360		
61.10	2097	76.00	1179	174.80	1127		

Data File: /chem/C.i/050504.b/c0299.d
Date : 05-MAY-2004 11:03
Client ID: BFB
Sample Info: bfb
Volume Injected (uL): 1.0
Column phase: DB624

Instrument: C.i
Operator: reinharj
Column diameter: 0.53



STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 15:46
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/050504i.b/C-20ml-AQ.m
Cal Date : 05-May-2004 16:06 meierg
Curve Type : Average

Calibration File Names:
Level 1: /chem/C.i/0401904p.b/c0270.d
Level 2: /chem/C.i/0401904p.b/c0271.d
Level 3: /chem/C.i/0401904p.b/c0272.d
Level 4: /chem/C.i/0401904p.b/c0273.d
Level 5: /chem/C.i/0401904p.b/c0274.d
Level 6: /chem/C.i/0401904p.b/c0275.d

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	30.000 Level 5	60.000 Level 6	___ RRF	% RSD	
M 12 1,2-Dichloroethene (total)	0.30512	0.28595	0.27497	0.27980	0.27781	0.27893	0.28376	3.901	
M 18 Xylene (total)	2.95627	2.93453	2.74341	2.84029	2.94347	2.86967	2.88127	2.826	
1 dichlorodifluoromethane	0.31688	0.25035	0.25120	0.25102	0.23943	0.22834	0.25620	12.125	
3 Chloromethane	0.36978	0.27623	0.27992	0.26635	0.26171	0.26005	0.28567	14.686	
4 Vinyl Chloride	0.29714	0.22673	0.23727	0.24123	0.23095	0.21948	0.24213	11.572	
6 Bromomethane	0.11225	0.08053	0.08603	0.08434	0.07737	0.07002	0.08509	17.004	<- WT. LINEAR
7 Chloroethane	0.15904	0.13563	0.14123	0.13698	0.12644	+++++	0.13986	8.580	
9 Trichlorofluoromethane	0.36507	0.30251	0.32074	0.32265	0.29034	0.28766	0.31483	9.106	
10 Ethanol	+++++	0.00102	0.00100	0.00095	0.00113	0.00099	0.00102	6.611	
15 Acrolein	0.02465	0.02229	0.02229	0.02200	0.02203	0.02130	0.02243	5.119	
17 1,1-Dichloroethene	0.28217	0.25923	0.25670	0.25439	0.23793	0.23241	0.25380	6.943	
19 Acetone	+++++	0.03363	0.03032	0.02956	0.02849	0.02835	0.03007	7.135	
20 Iodomethane	0.31396	0.26962	0.26074	0.26675	0.25334	0.25579	0.27003	8.295	
25 Acetonitrile	+++++	0.01360	0.01284	0.01259	0.01246	0.01220	0.01274	4.197	
26 Methylene Chloride	+++++	0.26365	0.23528	0.21860	0.20857	0.20570	0.22636	10.531	
27 tert-Butyl alcohol	0.00979	0.00958	0.00907	0.00979	0.01017	0.01021	0.00977	4.284	
30 Acrylonitrile	0.04552	0.04169	0.04256	0.04357	0.04455	0.04502	0.04382	3.392	
29 trans-1,2-Dichloroethene	0.32097	0.29215	0.28624	0.29017	0.28381	0.28356	0.29282	4.854	
32 1,1-Dichloroethane	0.65302	0.60545	0.58354	0.59485	0.60661	0.57762	0.60352	4.451	
34 Chloroprene	0.66167	0.61041	0.62045	0.61735	0.62379	0.61921	0.62548	2.922	
33 Isopropyl ether	0.19849	0.19062	0.18557	0.18813	0.18237	0.17451	0.18661	4.320	
38 cis-1,2-Dichloroethene	0.28927	0.27976	0.26370	0.26942	0.27181	0.27430	0.27471	3.237	
37 2,2-Dichloropropane	0.45097	0.41167	0.38891	0.40118	0.39389	0.38715	0.40563	5.908	
39 2-Butanone	0.04835	0.04759	0.04402	0.04534	0.04677	0.04719	0.04654	3.415	
41 Propionitrile	0.01470	0.01401	0.01484	0.01519	0.01574	0.01563	0.01502	4.285	

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 15:46
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/050504i.b/C-20ml-AQ.m
Cal Date : 05-May-2004 16:06 meierg
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	30.000 Level 5	60.000 Level 6	RRF	% RSD
44 Methacrylonitrile	0.07393	0.07246	0.07256	0.07364	0.07533	0.07637	0.07405	2.088
42 Bromochloromethane	0.07561	0.07334	0.07333	0.07760	0.07528	0.07394	0.07485	2.217
45 Chloroform	0.46871	0.45298	0.43753	0.43999	0.44442	0.44736	0.44850	2.521
47 1,1,1-Trichloroethane	0.48199	0.44724	0.44372	0.44924	0.44837	0.44334	0.45231	3.258
50 1,1-Dichloropropene	0.49289	0.45716	0.44431	0.43932	0.44797	0.45613	0.45630	4.206
49 Carbon Tetrachloride	0.41181	0.38747	0.38026	0.38945	0.38777	0.39355	0.39172	2.743
53 Isobutanol	0.00288	0.00292	0.00284	0.00293	0.00331	0.00323	0.00302	6.589
51 Benzene	1.23481	1.16719	1.14231	1.16639	1.20021	1.24428	1.19253	3.431
54 1,2-Dichloroethane	0.27933	0.26686	0.26868	0.26704	0.27145	0.27118	0.27076	1.712
57 Trichloroethene	0.25666	0.26148	0.25309	0.26261	0.25840	0.26441	0.25944	1.616
59 n-Butanol	0.00194	0.00184	0.00206	0.00231	0.00279	0.00287	0.00230	19.093
60 1,2-Dichloropropane	0.26597	0.27297	0.26410	0.27452	0.27803	0.28321	0.27313	2.643
62 Dibromomethane	0.07899	0.07595	0.07652	0.07754	0.08003	0.07894	0.07799	2.030
63 1,4-Dioxane	0.00074	0.00076	0.00073	0.00079	0.00085	0.00078	0.00078	5.587
65 Bromodichloromethane	0.24159	0.25102	0.25456	0.26496	0.27435	0.27889	0.26089	5.506
68 cis-1,3-Dichloropropene	1.73562	1.75350	1.76969	1.90162	2.04602	2.09141	1.88298	8.285
70 4-Methyl-2-pentanone	0.67174	0.63992	0.60733	0.60207	0.65615	0.67431	0.64192	4.891
71 Toluene	7.83841	7.57905	7.13413	7.30329	7.71907	7.70497	7.54649	3.606
72 trans-1,3-Dichloropropene	1.14502	1.21874	1.24866	1.32596	1.48892	1.52254	1.32497	11.466
74 1,1,2-Trichloroethane	0.75390	0.67880	0.67529	0.67955	0.68779	0.66487	0.69003	4.660
75 Tetrachloroethene	1.17633	1.24501	1.16409	1.19444	1.19379	1.18376	1.19290	2.343
76 1,3-Dichloropropane	1.24394	1.34073	1.29553	1.32079	1.37549	1.37848	1.32583	3.862
78 2-Hexanone	0.33595	0.36312	0.36545	0.39484	0.43296	0.44479	0.38952	10.962
79 Dibromochloromethane	0.59046	0.67266	0.69369	0.73272	0.77234	0.79875	0.71010	10.581
80 1,2-Dibromoethane	0.54585	0.56109	0.53250	0.56253	0.58755	0.58481	0.56239	3.817
82 Chlorobenzene	3.85573	3.79520	3.59181	3.69915	3.78456	3.86209	3.76475	2.742
83 1-Chlorohexane	2.63575	2.55677	2.52132	2.60014	2.66486	2.66969	2.60809	2.301
84 1,1,1,2-Tetrachloroethane	1.00458	1.05640	1.00266	1.01286	1.04595	1.01176	1.02237	2.240
85 Ethylbenzene	2.46228	2.53155	2.35588	2.44338	2.43917	2.40281	2.43918	2.415
86 m and p-Xylene	3.03002	3.07114	2.86484	2.95860	3.05065	2.95617	2.98857	2.577
87 o-Xylene	2.80879	2.66131	2.50054	2.60366	2.72909	2.69667	2.66668	3.990
88 Styrene	3.65325	3.93925	3.83896	4.08220	4.34231	4.41357	4.04492	7.273
89 Bromoform	0.25320	0.27698	0.25581	0.29140	0.32653	+++++	0.28078	10.691

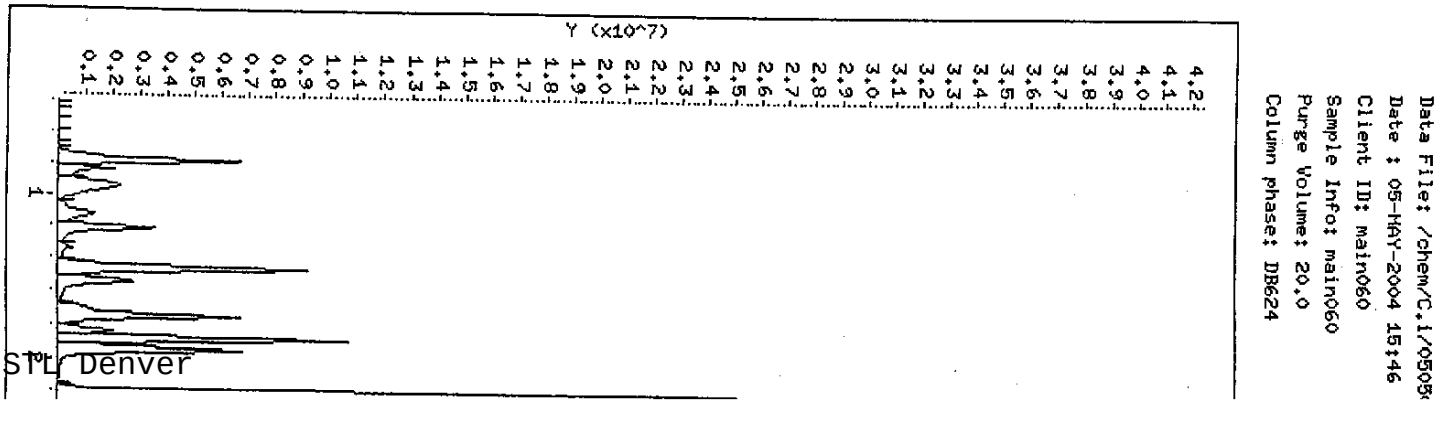
<-WT. LINEAR

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 05-MAY-2004 15:46
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/050504i.b/C-20ml-AQ.m
Cal Date : 05-May-2004 16:06 meierg
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	30.000 Level 5	60.000 Level 6	___ RRF	% RSD
90 isopropyl benzene	7.73967	7.77346	7.44009	7.79394	8.34123	7.06039	7.69146	5.526
91 Cyclohexanone	0.02360	0.02266	0.02339	0.02455	0.02773	0.02701	0.02482	8.358
94 Bromobenzene	0.89717	0.89836	0.84317	0.86786	0.89501	0.93444	0.88933	3.485
95 1,1,2,2-Tetrachloroethane	0.63146	0.58148	0.57537	0.57636	0.60552	0.56736	0.58959	4.115
96 1,2,3-Trichloropropane	0.14812	0.13906	0.15223	0.13707	0.14390	0.14221	0.14377	3.934
97 n-Propylbenzene	1.56420	1.56959	1.50106	1.51447	1.53084	1.55802	1.53970	1.846
99 2-Chlorotoluene	1.14139	1.20267	1.11188	1.14150	1.14924	1.16808	1.15246	2.650
100 4-Chlorotoluene	1.14564	1.17922	1.09618	1.10627	1.09633	1.09736	1.12017	3.091
101 1,3,5-Trimethylbenzene	4.88625	5.08435	4.88142	5.07604	5.17132	5.12556	5.03749	2.457
102 tert-Butylbenzene	3.86519	3.92747	3.68928	3.89569	4.00842	4.13278	3.91980	3.784
103 1,2,4-Trimethylbenzene	4.69119	4.76928	4.56024	4.68559	4.89613	4.94111	4.75726	2.996
104 sec-Butylbenzene	1.17275	1.19747	1.14537	1.19021	1.15581	1.15646	1.16968	1.777
105 m-Dichlorobenzene	1.92095	1.94627	1.79656	1.82571	1.86203	1.93749	1.88150	3.327
106 4-Isopropyltoluene	5.01404	4.83718	4.67652	4.89353	5.07739	5.04695	4.92427	3.099
108 p-dichlorobenzene	1.80393	1.85007	1.70879	1.73845	1.73780	1.81639	1.77590	3.113
110 o-Dichlorobenzene	1.49842	1.39516	1.37149	1.42611	1.40790	1.42533	1.42073	3.040
111 n-Butylbenzene	5.47951	5.31779	5.03845	5.19763	5.32715	5.17349	5.25567	2.903
112 1,2-Dibromo-3-chloropropane	0.04506	0.04806	0.05234	0.05264	0.05688	0.06162	0.05277	11.281
113 1,2,4-Trichlorobenzene	0.97872	0.79377	0.79134	0.78315	0.77841	0.82233	0.82462	9.341
114 Hexachlorobutadiene	0.70588	0.63675	0.59778	0.59630	0.56670	0.57289	0.61272	8.466
115 Naphthalene	1.30478	1.13258	1.10272	1.14595	1.20874	1.30019	1.19916	7.272
116 1,2,3-Trichlorobenzene	0.72836	0.63935	0.58468	0.60828	0.60295	0.63981	0.63390	8.052



INITIAL CALIBRATION REPORT

Instrument ID: C.i
Lab File ID: c0309.d
Analysis Type: WATER

Injection Date: 05-MAY-2004 15:46
Lab Sample ID: main060
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m

COMPOUND	%RSD
dichlorodifluoromethane	12.1
Chloromethane	14.7
Vinyl Chloride	11.6
Bromomethane	17.0
Chloroethane	8.6
Trichlorofluoromethane	9.1
Ethanol	6.6
Acrolein	5.1
1,1-Dichloroethene	6.9
1,2-Dichloroethene (total)	3.9
Acetone	7.1
Iodomethane	8.3
Xylene (total)	2.8
Acetonitrile	4.2
Methylene Chloride	10.5
tert-Butyl alcohol	4.3
trans-1,2-Dichloroethene	4.9
Acrylonitrile	3.4
1,1-Dichloroethane	4.5
Isopropyl ether	4.3
Chloroprene	2.9
2,2-Dichloropropane	5.9
cis-1,2-Dichloroethene	3.2
2-Butanone	3.4
Propionitrile	4.3
Bromochloromethane	2.2
Methacrylonitrile	2.1
Chloroform	2.5
1,1,1-Trichloroethane	3.3
Carbon Tetrachloride	2.7
1,1-Dichloropropene	4.2
Benzene	3.4
Isobutanol	6.6
1,2-Dichloroethane	1.7
Trichloroethene	1.6
n-Butanol	19.1
1,2-Dichloropropane	2.6
Dibromomethane	2.0
1,4-Dioxane	5.6

INITIAL CALIBRATION REPORT

Instrument ID: C.i
Lab File ID: c0309.d
Analysis Type: WATER

Injection Date: 05-MAY-2004 15:46
Lab Sample ID: main060
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m

COMPOUND	%RSD
Bromodichloromethane	5.5
cis-1,3-Dichloropropene	8.3
4-Methyl-2-pentanone	4.9
Toluene	3.6
trans-1,3-Dichloropropene	11.5
Tetrachloroethene	2.3
1,1,2-Trichloroethane	4.7
1,3-Dichloropropane	3.9
2-Hexanone	11.0
Dibromochloromethane	10.6
1,2-Dibromoethane	3.8
Chlorobenzene	2.7
1-Chlorohexane	2.3
1,1,1,2-Tetrachloroethane	2.2
Ethylbenzene	2.4
m and p-Xylene	2.6
o-Xylene	4.0
Styrene	7.3
Bromoform	10.7
isopropyl benzene	5.5
Cyclohexanone	8.4
Bromobenzene	3.5
1,1,2,2-Tetrachloroethane	4.1
n-Propylbenzene	1.8
1,2,3-Trichloropropane	3.9
2-Chlorotoluene	2.7
4-Chlorotoluene	3.1
1,3,5-Trimethylbenzene	2.5
tert-Butylbenzene	3.8
1,2,4-Trimethylbenzene	3.0
sec-Butylbenzene	1.8
m-Dichlorobenzene	3.3
4-Isopropyltoluene	3.1
p-dichlorobenzene	3.1
o-Dichlorobenzene	3.0
n-Butylbenzene	2.9
1,2-Dibromo-3-chloropropane	11.3
1,2,4-Trichlorobenzene	9.3
Hexachlorobutadiene	8.5

INITIAL CALIBRATION REPORT

Instrument ID: C.i
Lab File ID: c0309.d
Analysis Type: WATER

Injection Date: 05-MAY-2004 15:46
Lab Sample ID: main060
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m

COMPOUND	%RSD
Naphthalene	7.3
1,2,3-Trichlorobenzene	8.1

The average of all %RSD's in the initial calibration is 5.5

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/050504i.b/c0304.d
Lab Smp Id: main001 Client Smp ID: main001
Inj Date : 05-MAY-2004 13:47
Operator : reinharj Inst ID: C.i
Smp Info : main001
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/050504i.b/C-20ml-AQ.m
Meth Date : 05-May-2004 16:11 meierg Quant Type: ISTD
Cal Date : 19-APR-2004 21:44 Cal File: c0274.d
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	56 Fluorobenzene	96	4.108	4.107	(1.000)	1390765	10.0000	
*	81 Chlorobenzene-d5	119	7.564	7.564	(1.000)	226144	10.0000	
*	107 1,4-Dichlorobenzene-d4	152	9.722	9.721	(1.000)	280315	10.0000	
M	12 1,2-Dichloroethene (total)	96				84870	2.00000	2.07733
M	18 Xylene (total)	106				200563	3.00000	3.05888
	1 dichlorodifluoromethane	85	0.836	0.836	(0.203)	44070	1.00000	1.14260(a)
	3 Chloromethane	50	0.918	0.930	(0.223)	51428	1.00000	1.17372(a)
	4 Vinyl Chloride	62	0.953	0.966	(0.232)	41325	1.00000	1.09142(a)
	6 Bromomethane	94	1.106	1.107	(0.269)	15612	1.00000	1.21124(a)
	7 Chloroethane	64	1.118	1.130	(0.272)	22119	1.00000	1.13712(a)
	9 Trichlorofluoromethane	101	1.212	1.224	(0.295)	50772	1.00000	1.05052(a)
	10 Ethanol	45	1.329	1.342	(0.324)	9038	50.0000	60.6541(a)
	15 Acrolein	56	1.447	1.447	(0.352)	34284	10.0000	10.1608(a)
	17 1,1-Dichloroethene	96	1.459	1.459	(0.355)	39243	1.00000	1.05023
	19 Acetone	43	1.529	1.530	(0.372)	23358	4.00000	4.99350(a)
	20 Iodomethane	142	1.541	1.553	(0.375)	43665	1.00000	1.11310

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
25 Acetonitrile	41	1.705	1.718	(0.415)	22741	10.0000	11.9752(a)
26 Methylene Chloride	84	1.752	1.753	(0.427)	46768	1.00000	1.39624
27 tert-Butyl alcohol	59	1.835	1.835	(0.447)	27234	20.0000	19.0099(a)
30 Acrylonitrile	53	1.952	1.953	(0.475)	63301	10.0000	9.85629(a)
29 trans-1,2-Dichloroethene	96	1.893	1.894	(0.461)	44639	1.00000	1.04542
32 1,1-Dichloroethane	63	2.211	2.211	(0.538)	90820	1.00000	1.06792
34 Chloroprene	53	2.258	2.258	(0.550)	92023	1.00000	1.04644
33 Isopropyl ether	87	2.234	2.235	(0.544)	138023	5.00000	5.29936(a)
38 cis-1,2-Dichloroethene	96	2.712	2.717	(0.660)	40231	1.00000	1.03191
37 2,2-Dichloropropane	77	2.681	2.687	(0.653)	62720	1.00000	1.05828(a)
39 2-Butanone	43	2.778	2.778	(0.676)	26896	4.00000	4.04314(a)
41 Propionitrile	54	2.893	2.899	(0.704)	20445	10.0000	9.57682
44 Methacrylonitrile	41	3.020	3.020	(0.735)	102825	10.0000	9.83620
42 Bromochloromethane	128	2.953	2.953	(0.719)	10516	1.00000	0.994610(a)
45 Chloroform	83	3.050	3.056	(0.743)	65187	1.00000	1.02459
47 1,1,1-Trichloroethane	97	3.183	3.189	(0.775)	67033	1.00000	1.03772
50 1,1-Dichloropropene	75	3.395	3.394	(0.826)	68550	1.00000	1.06081(a)
49 Carbon Tetrachloride	117	3.328	3.334	(0.810)	57273	1.00000	1.04479
53 Isobutanol	41	3.781	3.775	(0.921)	8024	20.0000	19.1599
51 Benzene	78	3.642	3.642	(0.887)	171733	1.00000	1.01070
54 1,2-Dichloroethane	62	3.787	3.787	(0.922)	38848	1.00000	1.00649
57 Trichloroethene	130	4.603	4.609	(1.121)	35696	1.00000	0.988948(a)
59 n-Butanol	56	4.797	4.784	(1.168)	5410	20.0000	16.6501(a)
60 1,2-Dichloropropane	63	4.954	4.947	(1.206)	36990	1.00000	0.951739(a)
62 Dibromomethane	93	5.087	5.086	(1.238)	10985	1.00000	0.995976(a)
63 1,4-Dioxane	88	5.153	5.141	(1.254)	5135	50.0000	47.8426(a)
65 Bromodichloromethane	83	5.310	5.316	(1.293)	33599	1.00000	0.913646(a)
68 cis-1,3-Dichloropropene	75	5.860	5.866	(0.775)	39250	1.00000	0.898548(a)
70 4-Methyl-2-pentanone	43	6.090	6.089	(0.805)	60764	4.00000	4.15774(a)
71 Toluene	91	6.150	6.156	(0.813)	177261	1.00000	1.01409
72 trans-1,3-Dichloropropene	75	6.519	6.518	(0.862)	25894	1.00000	0.842548(a)
74 1,1,2-Trichloroethane	97	6.688	6.688	(0.884)	17049	1.00000	1.07546
75 Tetrachloroethene	164	6.688	6.688	(0.884)	26602	1.00000	0.984519(a)
76 1,3-Dichloropropane	76	6.845	6.845	(0.905)	28131	1.00000	0.919814(a)
78 2-Hexanone	43	6.984	6.984	(0.923)	30389	4.00000	3.44196(a)
79 Dibromochloromethane	129	7.020	7.020	(0.928)	13353	1.00000	0.832693(a)
80 1,2-Dibromoethane	107	7.105	7.105	(0.939)	12344	1.00000	0.964003(a)
82 Chlorobenzene	112	7.588	7.588	(1.003)	87195	1.00000	1.01921
83 1-Chlorohexane	91	7.625	7.630	(1.008)	59606	1.00000	1.00656(a)
84 1,1,1,2-Tetrachloroethane	131	7.697	7.703	(1.018)	22718	1.00000	0.969340(a)
85 Ethylbenzene	106	7.703	7.709	(1.018)	55683	1.00000	1.00448
86 m and p-Xylene	106	7.830	7.830	(1.035)	137044	2.00000	2.01163
87 o-Xylene	106	8.193	8.192	(1.083)	63519	1.00000	1.04724
88 Styrene	104	8.223	8.223	(1.087)	82616	1.00000	0.900119(a)
89 Bromoform	173	8.368	8.368	(1.106)	5726	1.00000	0.901768(a)
90 isopropyl benzene	105	8.543	8.543	(1.129)	175028	1.00000	0.971822(a)
91 Cyclohexanone	55	8.646	8.639	(1.143)	21345	40.0000	23.1872(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94 Bromobenzene	156	8.791	8.791	(0.904)	25149	1.00000	1.01117(a)
95 1,1,2,2-Tetrachloroethane	83	8.894	8.899	(1.176)	14280	1.00000	1.05039
96 1,2,3-Trichloropropane	110	8.918	8.917	(0.917)	4152	1.00000	1.02085
97 n-Propylbenzene	120	8.918	8.917	(0.917)	43847	1.00000	1.01266(a)
99 2-Chlorotoluene	126	8.978	8.984	(0.924)	31995	1.00000	0.981199(a)
100 4-Chlorotoluene	126	9.093	9.093	(0.935)	32114	1.00000	1.01812(a)
101 1,3,5-Trimethylbenzene	105	9.099	9.099	(0.936)	136969	1.00000	0.951376(a)
102 tert-Butylbenzene	119	9.365	9.365	(0.963)	108347	1.00000	0.973046(a)
103 1,2,4-Trimethylbenzene	105	9.425	9.425	(0.970)	131501	1.00000	0.970963(a)
104 sec-Butylbenzene	134	9.564	9.570	(0.984)	32874	1.00000	0.994009(a)
105 m-Dichlorobenzene	146	9.649	9.649	(0.993)	53847	1.00000	1.02626
106 4-Isopropyltoluene	119	9.709	9.715	(0.999)	140551	1.00000	1.00822(a)
108 p-dichlorobenzene	146	9.740	9.745	(1.002)	50567	1.00000	1.02202
110 o-Dichlorobenzene	146	10.060	10.060	(1.035)	42003	1.00000	1.05670
111 n-Butylbenzene	91	10.072	10.072	(1.036)	153599	1.00000	1.02373(a)
112 1,2-Dibromo-3-chloropropane	157	10.767	10.773	(1.108)	1263	1.00000	0.863403(a)
113 1,2,4-Trichlorobenzene	180	11.432	11.431	(1.176)	27435	1.00000	1.18664(a)
114 Hexachlorobutadiene	225	11.546	11.540	(1.188)	19787	1.00000	1.15669(a)
115 Naphthalene	128	11.595	11.594	(1.193)	36575	1.00000	1.06808
116 1,2,3-Trichlorobenzene	180	11.758	11.758	(1.209)	20417	1.00000	1.14218(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0304.d
Lab Smp Id: main001
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/05/4
Calibration Time: 1459
Client Smp ID: main001
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1828430	914215	3656860	1390765	-23.94
81 Chlorobenzene-d5	300471	150236	600942	226144	-24.74
107 1,4-Dichlorobenze	353909	176954	707818	280315	-20.79

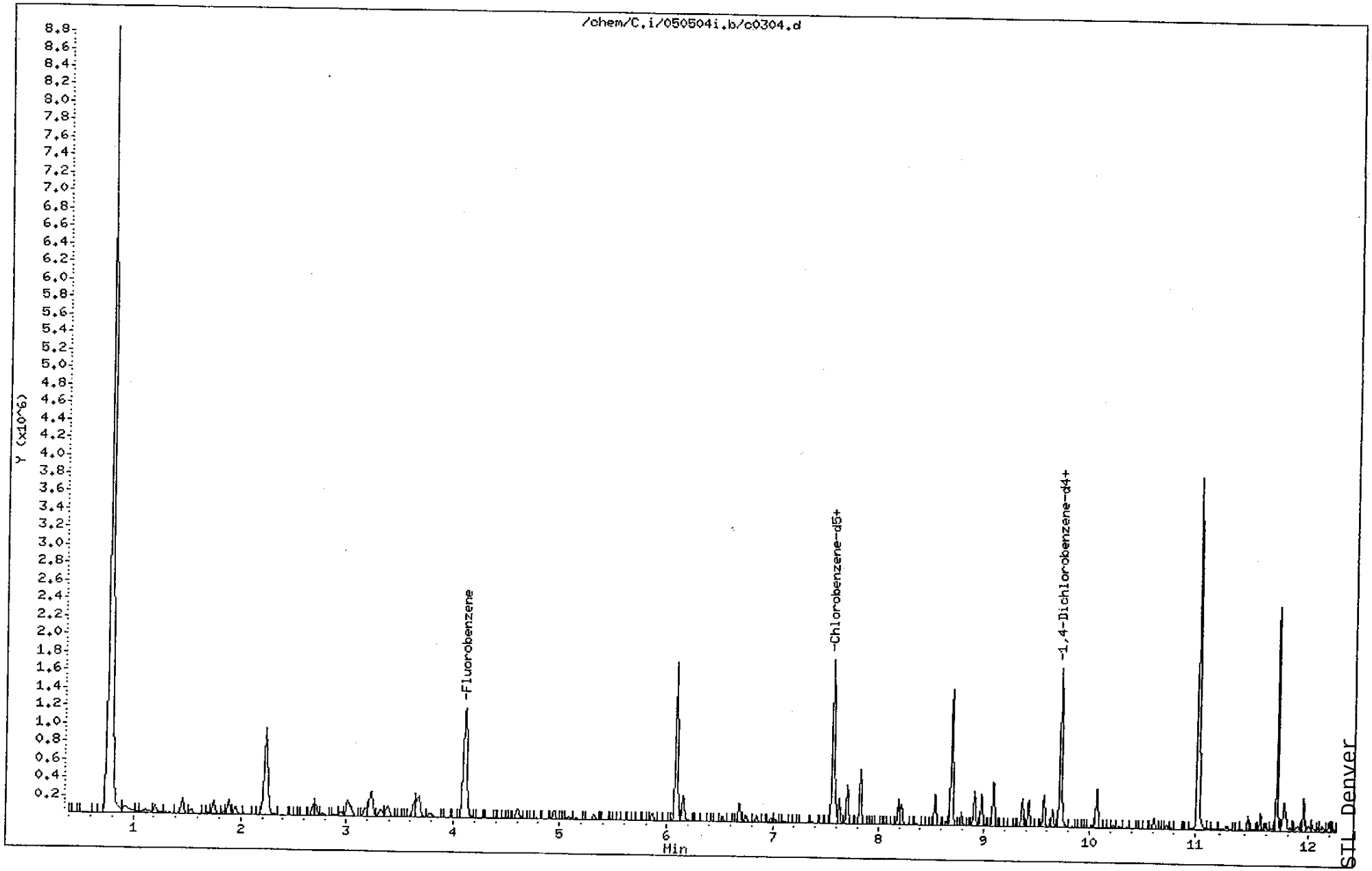
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.01
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.00
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

Data File: /chem/C.i/050504i.b/c0304.d
Date : 05-MAY-2004 13:47
Client ID: main001
Sample Info: main001
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i

Operator: reinharj
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/050504i.b/c0305.d
Lab Smp Id: main002 Client Smp ID: main002
Inj Date : 05-MAY-2004 14:11
Operator : reinharj Inst ID: C.i
Smp Info : main002
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/050504i.b/C-20ml-AQ.m
Meth Date : 05-May-2004 16:11 meierg Quant Type: ISTD
Cal Date : 19-APR-2004 21:44 Cal File: c0274.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.108	4.107	(1.000)	1767357	10.0000	
* 81 Chlorobenzene-d5	119	7.564	7.564	(1.000)	280311	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.722	9.721	(1.000)	327729	10.0000	
M 12 1,2-Dichloroethene (total)	96				202153	4.00000	3.89906
M 18 Xylene (total)	106				493549	6.00000	6.06239
1 dichlorodifluoromethane	85	0.838	0.836	(0.204)	88490	2.00000	1.80540(a)
3 Chloromethane	50	0.920	0.930	(0.224)	97638	2.00000	1.75354(a)
4 Vinyl Chloride	62	0.944	0.966	(0.230)	80143	2.00000	1.66562(a)
6 Bromomethane	94	1.097	1.107	(0.267)	28466	2.00000	1.73792(a)
7 Chloroethane	64	1.120	1.130	(0.273)	47942	2.00000	1.93948(a)
9 Trichlorofluoromethane	101	1.214	1.224	(0.296)	106928	2.00000	1.74100(a)
10 Ethanol	45	1.343	1.342	(0.327)	17958	100.000	94.8364(a)
15 Acrolein	56	1.449	1.447	(0.353)	78774	20.0000	18.3716(a)
17 1,1-Dichloroethene	96	1.461	1.459	(0.356)	91632	2.00000	1.92974
19 Acetone	43	1.532	1.530	(0.373)	47545	8.00000	7.99841(a)
20 Iodomethane	142	1.543	1.553	(0.376)	95303	2.00000	1.91178

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
25 Acetonitrile	41	1.708	1.718	(0.416)	48076	20.0000	19.9220(a)
26 Methylene Chloride	84	1.755	1.753	(0.427)	93191	2.00000	2.18934
27 tert-Butyl alcohol	59	1.837	1.835	(0.447)	67704	40.0000	37.1888(a)
30 Acrylonitrile	53	1.955	1.953	(0.476)	147360	20.0000	18.0556(a)
29 trans-1,2-Dichloroethene	96	1.896	1.894	(0.462)	103267	2.00000	1.90313
32 1,1-Dichloroethane	63	2.213	2.211	(0.539)	214011	2.00000	1.98027
34 Chloroprene	53	2.260	2.258	(0.550)	215764	2.00000	1.93076
33 Isopropyl ether	87	2.237	2.235	(0.544)	336898	10.0000	10.1789
38 cis-1,2-Dichloroethene	96	2.718	2.717	(0.662)	98886	2.00000	1.99593
37 2,2-Dichloropropane	77	2.688	2.687	(0.654)	145515	2.00000	1.93211(a)
39 2-Butanone	43	2.778	2.778	(0.676)	67281	8.00000	7.95890
41 Propionitrile	54	2.899	2.899	(0.706)	49533	20.0000	18.2582
44 Methacrylonitrile	41	3.014	3.020	(0.734)	256129	20.0000	19.2804
42 Bromochloromethane	128	2.954	2.953	(0.719)	25925	2.00000	1.92952
45 Chloroform	83	3.050	3.056	(0.743)	160114	2.00000	1.98038
47 1,1,1-Trichloroethane	97	3.183	3.189	(0.775)	158086	2.00000	1.92582
50 1,1-Dichloropropene	75	3.395	3.394	(0.826)	161593	2.00000	1.96780(a)
49 Carbon Tetrachloride	117	3.328	3.334	(0.810)	136961	2.00000	1.96610
53 Isobutanol	41	3.781	3.775	(0.921)	20649	40.0000	38.8000
51 Benzene	78	3.636	3.642	(0.885)	412569	2.00000	1.91072
54 1,2-Dichloroethane	62	3.781	3.787	(0.921)	94329	2.00000	1.92316
57 Trichloroethene	130	4.609	4.609	(1.122)	92424	2.00000	2.01497
59 n-Butanol	56	4.785	4.784	(1.165)	12999	40.0000	31.4817(a)
60 1,2-Dichloropropane	63	4.954	4.947	(1.206)	96488	2.00000	1.95360
62 Dibromomethane	93	5.087	5.086	(1.238)	26847	2.00000	1.91546
63 1,4-Dioxane	88	5.147	5.141	(1.253)	13476	100.000	98.8017(a)
65 Bromodichloromethane	83	5.316	5.316	(1.294)	88728	2.00000	1.89864
68 cis-1,3-Dichloropropene	75	5.860	5.866	(0.775)	98305	2.00000	1.81561
70 4-Methyl-2-pentanone	43	6.090	6.089	(0.805)	143502	8.00000	7.92161
71 Toluene	91	6.150	6.156	(0.813)	424898	2.00000	1.96107
72 trans-1,3-Dichloropropene	75	6.519	6.518	(0.862)	68325	2.00000	1.79358
74 1,1,2-Trichloroethane	97	6.688	6.688	(0.884)	38055	2.00000	1.93665
75 Tetrachloroethene	164	6.688	6.688	(0.884)	69798	2.00000	2.08400
76 1,3-Dichloropropane	76	6.845	6.845	(0.905)	75164	2.00000	1.98276(a)
78 2-Hexanone	43	6.984	6.984	(0.923)	81429	8.00000	7.44069
79 Dibromochloromethane	129	7.020	7.020	(0.928)	37711	2.00000	1.89722
80 1,2-Dibromoethane	107	7.105	7.105	(0.939)	31456	2.00000	1.98185
82 Chlorobenzene	112	7.589	7.588	(1.003)	212767	2.00000	2.00642
83 1-Chlorohexane	91	7.625	7.630	(1.008)	143338	2.00000	1.95279(a)
84 1,1,1,2-Tetrachloroethane	131	7.703	7.703	(1.018)	59224	2.00000	2.03868
85 Ethylbenzene	106	7.703	7.709	(1.018)	141924	2.00000	2.06548
86 m and p-Xylene	106	7.830	7.830	(1.035)	344350	4.00000	4.07787
87 o-Xylene	106	8.193	8.192	(1.083)	149199	2.00000	1.98452
88 Styrene	104	8.223	8.223	(1.087)	220843	2.00000	1.94117
89 Bromoform	173	8.368	8.368	(1.106)	15528	2.00000	1.97289
90 isopropyl benzene	105	8.537	8.543	(1.129)	435797	2.00000	1.95213
91 Cyclohexanone	55	8.646	8.639	(1.143)	50814	80.0000	44.5328(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94 Bromobenzene	156	8.791	8.791	(0.904)	58884	2.00000	2.02503(a)
95 1,1,2,2-Tetrachloroethane	83	8.900	8.899	(1.177)	32599	2.00000	1.93451
96 1,2,3-Trichloropropane	110	8.912	8.917	(0.917)	9115	2.00000	1.91686
97 n-Propylbenzene	120	8.918	8.917	(0.917)	102880	2.00000	2.03230(a)
99 2-Chlorotoluene	126	8.978	8.984	(0.924)	78830	2.00000	2.06775(a)
100 4-Chlorotoluene	126	9.093	9.093	(0.935)	77293	2.00000	2.09593(a)
101 1,3,5-Trimethylbenzene	105	9.099	9.099	(0.936)	333258	2.00000	1.97989(a)
102 tert-Butylbenzene	119	9.365	9.365	(0.963)	257429	2.00000	1.97745(a)
103 1,2,4-Trimethylbenzene	105	9.426	9.425	(0.970)	312606	2.00000	1.97425(a)
104 sec-Butylbenzene	134	9.565	9.570	(0.984)	78489	2.00000	2.02992(a)
105 m-Dichlorobenzene	146	9.649	9.649	(0.993)	127570	2.00000	2.07957
106 4-Isopropyltoluene	119	9.710	9.715	(0.999)	317057	2.00000	1.94531(a)
108 p-dichlorobenzene	146	9.740	9.745	(1.002)	121264	2.00000	2.09631
110 o-Dichlorobenzene	146	10.060	10.060	(1.035)	91447	2.00000	1.96777
111 n-Butylbenzene	91	10.072	10.072	(1.036)	348559	2.00000	1.98703(a)
112 1,2-Dibromo-3-chloropropane	157	10.773	10.773	(1.108)	3150	2.00000	1.84184(a)
113 1,2,4-Trichlorobenzene	180	11.432	11.431	(1.176)	52028	2.00000	1.92478(a)
114 Hexachlorobutadiene	225	11.541	11.540	(1.187)	41736	2.00000	2.08679(a)
115 Naphthalene	128	11.595	11.594	(1.193)	74236	2.00000	1.85423
116 1,2,3-Trichlorobenzene	180	11.764	11.758	(1.210)	41907	2.00000	2.00521(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0305.d
Lab Smp Id: main002
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/05/4
Calibration Time: 1459
Client Smp ID: main002
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1828430	914215	3656860	1767357	-3.34
81 Chlorobenzene-d5	300471	150236	600942	280311	-6.71
107 1,4-Dichlorobenze	353909	176954	707818	327729	-7.40

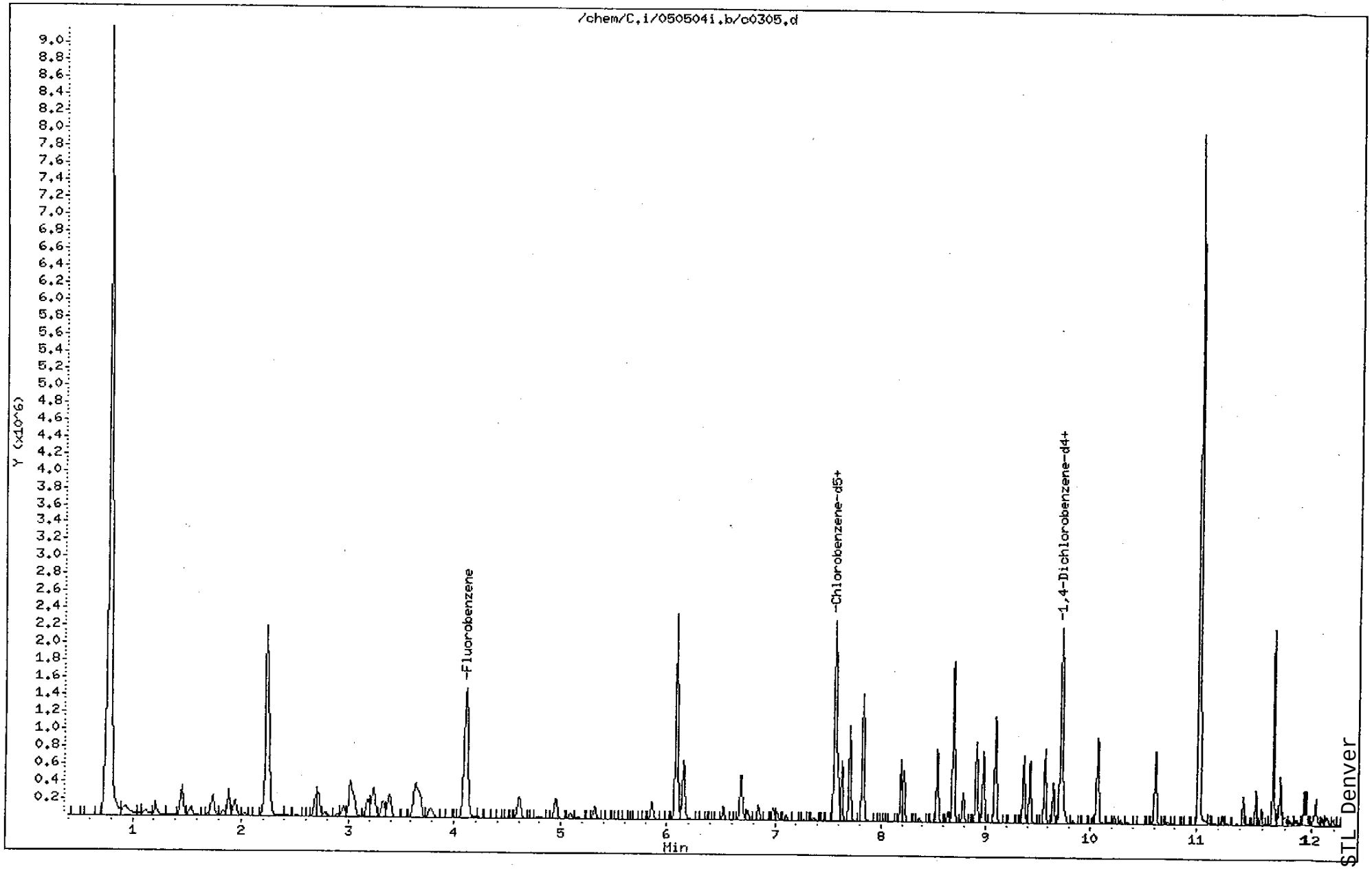
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.01
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.01
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

Data File: /chem/C.i/050504i.b/c0305.d
Date : 05-MAY-2004 14:11
Client ID: main002
Sample Info: main002
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i

Operator: reinharj
Column diameter: 0.53



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VOLATILE REPORT SW-846

Data file : /chem/C.i/050504i.b/c0306.d
Lab Smp Id: main005 Client Smp ID: main005
Inj Date : 05-MAY-2004 14:35
Operator : reinharj Inst ID: C.i
Smp Info : main005
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/050504i.b/C-20ml-AQ.m
Meth Date : 05-May-2004 16:11 meierg Quant Type: ISTD
Cal Date : 19-APR-2004 21:44 Cal File: c0274.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.106	4.107	(1.000)	1773271	10.0000	
* 81 Chlorobenzene-d5	119	7.563	7.564	(1.000)	292881	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.720	9.721	(1.000)	345178	10.0000	
M 12 1,2-Dichloroethene (total)	96				487599	10.0000	9.36504
M 18 Xylene (total)	106				1205237	15.0000	14.1714
1 dichlorodifluoromethane	85	0.836	0.836	(0.204)	222724	5.00000	4.52893
3 Chloromethane	50	0.930	0.930	(0.226)	248189	5.00000	4.44250
4 Vinyl Chloride	62	0.953	0.966	(0.232)	210369	5.00000	4.35754
6 Bromomethane	94	1.106	1.107	(0.269)	76280	5.00000	4.64154
7 Chloroethane	64	1.130	1.130	(0.275)	125218	5.00000	5.04878
9 Trichlorofluoromethane	101	1.224	1.224	(0.298)	284380	5.00000	4.61483
10 Ethanol	45	1.341	1.342	(0.327)	44376	250.000	233.569
15 Acrolein	56	1.447	1.447	(0.352)	197636	50.0000	45.9388
17 1,1-Dichloroethene	96	1.459	1.459	(0.355)	227601	5.00000	4.77722
19 Acetone	43	1.529	1.530	(0.372)	107517	20.0000	18.0271
20 Iodomethane	142	1.553	1.553	(0.378)	231177	5.00000	4.62195

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
25 Acetonitrile	41	1.705	1.718	(0.415)	113803	50.0000	47.0011
26 Methylene Chloride	84	1.752	1.753	(0.427)	208612	5.00000	4.88459
27 tert-Butyl alcohol	59	1.835	1.835	(0.447)	160858	100.000	88.0624
30 Acrylonitrile	53	1.952	1.953	(0.475)	377367	50.0000	46.0835
29 trans-1,2-Dichloroethene	96	1.893	1.894	(0.461)	253794	5.00000	4.66162
32 1,1-Dichloroethane	63	2.211	2.211	(0.538)	517385	5.00000	4.77146
34 Chloroprene	53	2.258	2.258	(0.550)	550113	5.00000	4.90625
33 Isopropyl ether	87	2.234	2.235	(0.544)	822660	25.0000	24.7726
38 cis-1,2-Dichloroethene	96	2.717	2.717	(0.662)	233805	5.00000	4.70341
37 2,2-Dichloropropane	77	2.686	2.687	(0.654)	344819	5.00000	4.56315(a)
39 2-Butanone	43	2.777	2.778	(0.676)	156123	20.0000	18.4067
41 Propionitrile	54	2.898	2.899	(0.706)	131605	50.0000	48.3488
44 Methacrylonitrile	41	3.013	3.020	(0.734)	643351	50.0000	48.2675
42 Bromochloromethane	128	2.952	2.953	(0.719)	65015	5.00000	4.82274
45 Chloroform	83	3.055	3.056	(0.744)	387932	5.00000	4.78216
47 1,1,1-Trichloroethane	97	3.188	3.189	(0.776)	393414	5.00000	4.77663
50 1,1-Dichloropropene	75	3.393	3.394	(0.826)	393940	5.00000	4.78121(a)
49 Carbon Tetrachloride	117	3.333	3.334	(0.812)	337150	5.00000	4.82370
53 Isobutanol	41	3.780	3.775	(0.921)	50281	100.000	94.1642
51 Benzene	78	3.641	3.642	(0.887)	1012814	5.00000	4.67496
54 1,2-Dichloroethane	62	3.792	3.787	(0.923)	238224	5.00000	4.84066
57 Trichloroethene	130	4.608	4.609	(1.122)	224402	5.00000	4.87595
59 n-Butanol	56	4.789	4.784	(1.166)	36462	100.000	88.0113
60 1,2-Dichloropropane	63	4.946	4.947	(1.205)	234160	5.00000	4.72525
62 Dibromomethane	93	5.085	5.086	(1.238)	67848	5.00000	4.82464
63 1,4-Dioxane	88	5.146	5.141	(1.253)	32411	250.000	236.834
65 Bromodichloromethane	83	5.315	5.316	(1.294)	225703	5.00000	4.81357
68 cis-1,3-Dichloropropene	75	5.865	5.866	(0.775)	259154	5.00000	4.58092
70 4-Methyl-2-pentanone	43	6.088	6.089	(0.805)	355753	20.0000	18.7955
71 Toluene	91	6.149	6.156	(0.813)	1044726	5.00000	4.61488
72 trans-1,3-Dichloropropene	75	6.524	6.518	(0.863)	182854	5.00000	4.59403
74 1,1,2-Trichloroethane	97	6.687	6.688	(0.884)	98890	5.00000	4.81660
75 Tetrachloroethene	164	6.687	6.688	(0.884)	170470	5.00000	4.87138
76 1,3-Dichloropropane	76	6.850	6.845	(0.906)	189718	5.00000	4.78980(a)
78 2-Hexanone	43	6.983	6.984	(0.923)	214068	20.0000	18.7212
79 Dibromochloromethane	129	7.019	7.020	(0.928)	101584	5.00000	4.89131
80 1,2-Dibromoethane	107	7.104	7.105	(0.939)	77979	5.00000	4.70212
82 Chlorobenzene	112	7.587	7.588	(1.003)	525986	5.00000	4.74724
83 1-Chlorohexane	91	7.629	7.630	(1.009)	369223	5.00000	4.81428(a)
84 1,1,1,2-Tetrachloroethane	131	7.702	7.703	(1.018)	146830	5.00000	4.83743
85 Ethylbenzene	106	7.702	7.709	(1.018)	344996	5.00000	4.80537
86 m and p-Xylene	106	7.829	7.830	(1.035)	839057	10.0000	9.50986
87 o-Xylene	106	8.191	8.192	(1.083)	366180	5.00000	4.66158
88 Styrene	104	8.222	8.223	(1.087)	562179	5.00000	4.72938
89 Bromoform	173	8.373	8.368	(1.107)	37461	5.00000	4.55530
90 isopropyl benzene	105	8.542	8.543	(1.129)	1089530	5.00000	4.67102
91 Cyclohexanone	55	8.645	8.639	(1.143)	137007	200.000	114.918

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94 Bromobenzene	156	8.790	8.791	(0.904)	145522	5.00000	4.75154(a)
95 1,1,2,2-Tetrachloroethane	83	8.898	8.899	(1.177)	84258	5.00000	4.78549
96 1,2,3-Trichloropropane	110	8.917	8.917	(0.917)	26273	5.00000	5.24585
97 n-Propylbenzene	120	8.917	8.917	(0.917)	259066	5.00000	4.85892(a)
99 2-Chlorotoluene	126	8.977	8.984	(0.924)	191899	5.00000	4.77915(a)
100 4-Chlorotoluene	126	9.092	9.093	(0.935)	189189	5.00000	4.87084(a)
101 1,3,5-Trimethylbenzene	105	9.098	9.099	(0.936)	842480	5.00000	4.75218(a)
102 tert-Butylbenzene	119	9.364	9.365	(0.963)	636729	5.00000	4.64381(a)
103 1,2,4-Trimethylbenzene	105	9.424	9.425	(0.970)	787047	5.00000	4.71930(a)
104 sec-Butylbenzene	134	9.563	9.570	(0.984)	197678	5.00000	4.85400(a)
105 m-Dichlorobenzene	146	9.648	9.649	(0.993)	310067	5.00000	4.79902
106 4-Isopropyltoluene	119	9.714	9.715	(0.999)	807116	5.00000	4.70174(a)
108 p-dichlorobenzene	146	9.744	9.745	(1.002)	294918	5.00000	4.84058
110 o-Dichlorobenzene	146	10.059	10.060	(1.035)	236704	5.00000	4.83595
111 n-Butylbenzene	91	10.071	10.072	(1.036)	869581	5.00000	4.70663(a)
112 1,2-Dibromo-3-chloropropane	157	10.772	10.773	(1.108)	9033	5.00000	5.01471
113 1,2,4-Trichlorobenzene	180	11.430	11.431	(1.176)	136576	5.00000	4.79724(a)
114 Hexachlorobutadiene	225	11.545	11.540	(1.188)	103170	5.00000	4.89772(a)
115 Naphthalene	128	11.600	11.594	(1.193)	190317	5.00000	4.51334
116 1,2,3-Trichlorobenzene	180	11.763	11.758	(1.210)	100909	5.00000	4.58433(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0306.d
Lab Smp Id: main005
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/05/4
Calibration Time: 1459
Client Smp ID: main005
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1828430	914215	3656860	1773271	-3.02
81 Chlorobenzene-d5	300471	150236	600942	292881	-2.53
107 1,4-Dichlorobenze	353909	176954	707818	345178	-2.47

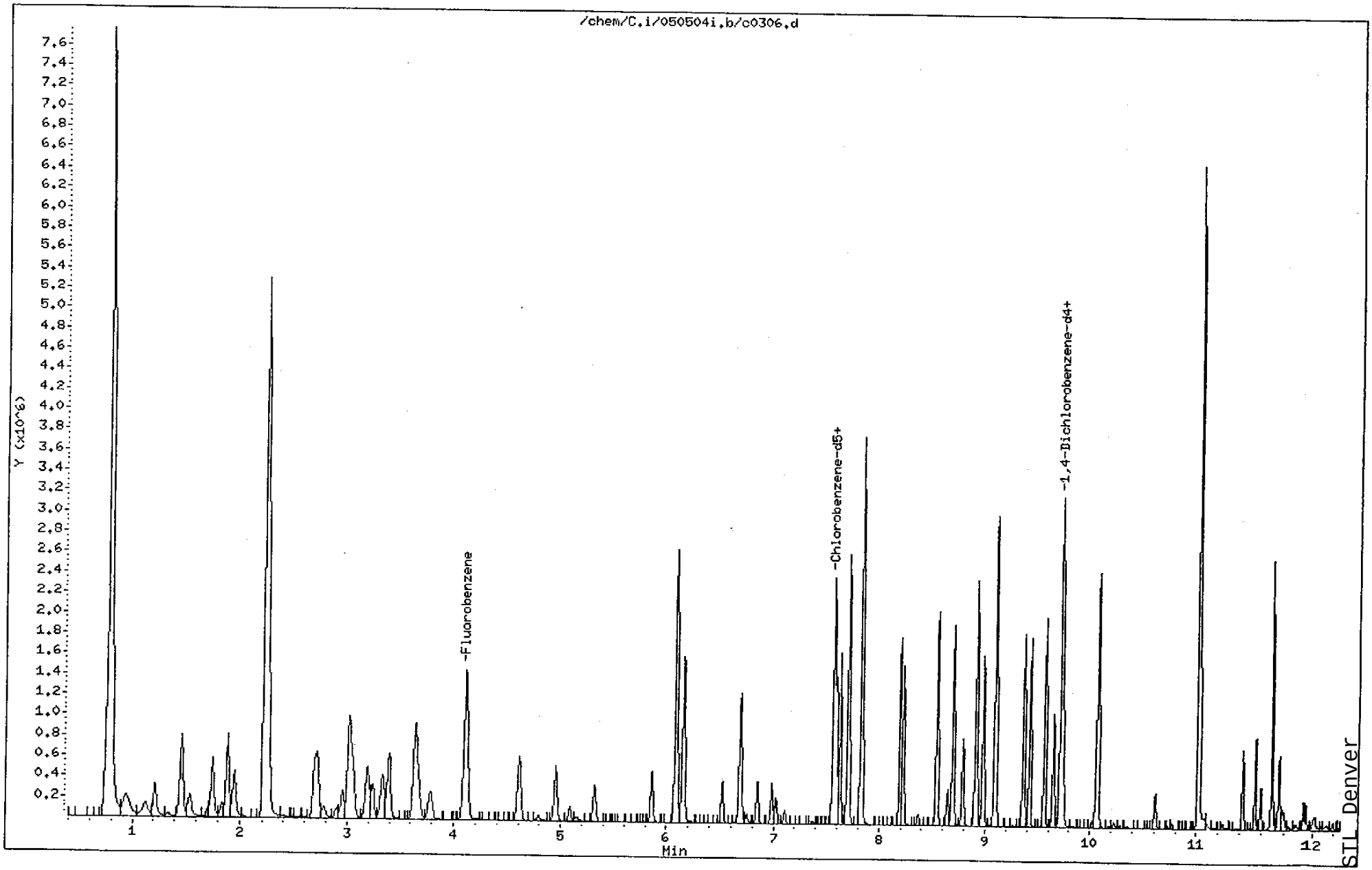
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	-0.02
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	-0.01
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	-0.01

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

Data File: /chem/C.i/050504i.b/c0306.d
Date : 05-MAY-2004 14:35
Client ID: main005
Sample Info: main005
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i

Operator: reinharj
Column diameter: 0.53



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VOLATILE REPORT SW-846

Data file : /chem/C.i/050504i.b/c0307.d
Lab Smp Id: main010 Client Smp ID: main010
Inj Date : 05-MAY-2004 14:59
Operator : reinharj Inst ID: C.i
Smp Info : main010
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/050504i.b/C-20ml-AQ.m
Meth Date : 05-May-2004 16:11 meierg Quant Type: ISTD
Cal Date : 19-APR-2004 21:44 Cal File: c0274.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.107	4.107	(1.000)	1828430	10.0000	
* 81 Chlorobenzene-d5	119	7.564	7.564	(1.000)	300471	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.721	9.721	(1.000)	353909	10.0000	
M 12 1,2-Dichloroethene (total)	96				1023172	20.0000	19.0620
M 18 Xylene (total)	106				2560273	30.0000	29.3498
1 dichlorodifluoromethane	85	0.836	0.836	(0.203)	458965	10.0000	9.05117
3 Chloromethane	50	0.930	0.930	(0.226)	487008	10.0000	8.45431
4 Vinyl Chloride	62	0.953	0.966	(0.232)	441065	10.0000	8.86052
6 Bromomethane	94	1.106	1.107	(0.269)	154214	10.0000	9.10065
7 Chloroethane	64	1.130	1.130	(0.275)	250450	10.0000	9.79348
9 Trichlorofluoromethane	101	1.224	1.224	(0.298)	589950	10.0000	9.28472
10 Ethanol	45	1.341	1.342	(0.327)	87064	500.000	444.428
15 Acrolein	56	1.447	1.447	(0.352)	402271	100.000	90.6836
17 1,1-Dichloroethene	96	1.459	1.459	(0.355)	465126	10.0000	9.46823
19 Acetone	43	1.529	1.530	(0.372)	216178	40.0000	35.1525
20 Iodomethane	142	1.553	1.553	(0.378)	487732	10.0000	9.45711

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
25 Acetonitrile	41	1.705	1.718	(0.415)	230176	100.000	92.1957
26 Methylene Chloride	84	1.752	1.753	(0.427)	399694	10.0000	9.07640
27 tert-Butyl alcohol	59	1.835	1.835	(0.447)	358159	200.000	190.160
30 Acrylonitrile	53	1.952	1.953	(0.475)	796654	100.000	94.3513
29 trans-1,2-Dichloroethene	96	1.893	1.894	(0.461)	530555	10.0000	9.45111
32 1,1-Dichloroethane	63	2.211	2.211	(0.538)	1087650	10.0000	9.72799
34 Chloroprene	53	2.258	2.258	(0.550)	1128775	10.0000	9.76343
33 Isopropyl ether	87	2.234	2.235	(0.544)	1719906	50.0000	50.2288
38 cis-1,2-Dichloroethene	96	2.717	2.717	(0.662)	492617	10.0000	9.61094
37 2,2-Dichloropropane	77	2.687	2.687	(0.654)	733523	10.0000	9.41421
39 2-Butanone	43	2.778	2.778	(0.676)	331568	40.0000	37.9122
41 Propionitrile	54	2.893	2.899	(0.704)	277708	100.000	98.9460
44 Methacrylonitrile	41	3.014	3.020	(0.734)	1346532	100.000	97.9762
42 Bromochloromethane	128	2.953	2.953	(0.719)	141894	10.0000	10.2080
45 Chloroform	83	3.050	3.056	(0.743)	804482	10.0000	9.61792
47 1,1,1-Trichloroethane	97	3.189	3.189	(0.776)	821395	10.0000	9.67210
50 1,1-Dichloropropene	75	3.394	3.394	(0.826)	803270	10.0000	9.45509
49 Carbon Tetrachloride	117	3.334	3.334	(0.812)	712075	10.0000	9.88052
53 Isobutanol	41	3.775	3.775	(0.919)	107271	200.000	194.832
51 Benzene	78	3.636	3.642	(0.885)	2132666	10.0000	9.54703
54 1,2-Dichloroethane	62	3.781	3.787	(0.921)	488255	10.0000	9.62193
57 Trichloroethene	130	4.603	4.609	(1.121)	480170	10.0000	10.1187
59 n-Butanol	56	4.778	4.784	(1.163)	84547	200.000	197.921
60 1,2-Dichloropropane	63	4.947	4.947	(1.204)	501941	10.0000	9.82339
62 Dibromomethane	93	5.080	5.086	(1.237)	141785	10.0000	9.77810
63 1,4-Dioxane	88	5.141	5.141	(1.252)	72603	500.000	514.522
65 Bromodichloromethane	83	5.316	5.316	(1.294)	484462	10.0000	10.0204
68 cis-1,3-Dichloropropene	75	5.866	5.866	(0.775)	571383	10.0000	9.84490
70 4-Methyl-2-pentanone	43	6.089	6.089	(0.805)	723617	40.0000	37.2651
71 Toluene	91	6.150	6.156	(0.813)	2194427	10.0000	9.44860
72 trans-1,3-Dichloropropene	75	6.518	6.518	(0.862)	398412	10.0000	9.75686
74 1,1,2-Trichloroethane	97	6.688	6.688	(0.884)	204186	10.0000	9.69399
75 Tetrachloroethene	164	6.688	6.688	(0.884)	358894	10.0000	9.99674
76 1,3-Dichloropropane	76	6.845	6.845	(0.905)	396858	10.0000	9.76635
78 2-Hexanone	43	6.984	6.984	(0.923)	474548	40.0000	40.4531
79 Dibromochloromethane	129	7.020	7.020	(0.928)	220160	10.0000	10.3330
80 1,2-Dibromoethane	107	7.105	7.105	(0.939)	169025	10.0000	9.93472
82 Chlorobenzene	112	7.588	7.588	(1.003)	1111486	10.0000	9.77821
83 1-Chlorohexane	91	7.624	7.630	(1.008)	781268	10.0000	9.92960
84 1,1,1,2-Tetrachloroethane	131	7.703	7.703	(1.018)	304336	10.0000	9.77331
85 Ethylbenzene	106	7.703	7.709	(1.018)	734166	10.0000	9.96772
86 m and p-Xylene	106	7.830	7.830	(1.035)	1777948	20.0000	19.6422
87 o-Xylene	106	8.192	8.192	(1.083)	782325	10.0000	9.70765
88 Styrene	104	8.223	8.223	(1.087)	1226582	10.0000	10.0581
89 Bromoform	173	8.368	8.368	(1.106)	87557	10.0000	10.3781
90 isopropyl benzene	105	8.537	8.543	(1.129)	2341854	10.0000	9.78636
91 Cyclohexanone	55	8.640	8.639	(1.142)	295118	400.000	241.284

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94 Bromobenzene	156	8.791	8.791	(0.904)	307142	10.0000	9.78129
95 1,1,2,2-Tetrachloroethane	83	8.899	8.899	(1.177)	173179	10.0000	9.58737
96 1,2,3-Trichloropropane	110	8.911	8.917	(0.917)	48512	10.0000	9.44728
97 n-Propylbenzene	120	8.918	8.917	(0.917)	535983	10.0000	9.80464
99 2-Chlorotoluene	126	8.978	8.984	(0.924)	403987	10.0000	9.81289
100 4-Chlorotoluene	126	9.093	9.093	(0.935)	391519	10.0000	9.83133
101 1,3,5-Trimethylbenzene	105	9.099	9.099	(0.936)	1796458	10.0000	9.88329
102 tert-Butylbenzene	119	9.365	9.365	(0.963)	1378720	10.0000	9.80725
103 1,2,4-Trimethylbenzene	105	9.425	9.425	(0.970)	1658274	10.0000	9.69806
104 sec-Butylbenzene	134	9.564	9.570	(0.984)	421227	10.0000	10.0881
105 m-Dichlorobenzene	146	9.649	9.649	(0.993)	646136	10.0000	9.75378
106 4-Isopropyltoluene	119	9.709	9.715	(0.999)	1731864	10.0000	9.83985
108 p-dichlorobenzene	146	9.739	9.745	(1.002)	615253	10.0000	9.84920
110 o-Dichlorobenzene	146	10.060	10.060	(1.035)	504712	10.0000	10.0571
111 n-Butylbenzene	91	10.072	10.072	(1.036)	1839487	10.0000	9.71064
112 1,2-Dibromo-3-chloropropane	157	10.773	10.773	(1.108)	18629	10.0000	10.0868
113 1,2,4-Trichlorobenzene	180	11.431	11.431	(1.176)	277163	10.0000	9.49519
114 Hexachlorobutadiene	225	11.540	11.540	(1.187)	211036	10.0000	9.77122
115 Naphthalene	128	11.595	11.594	(1.193)	405561	10.0000	9.38056
116 1,2,3-Trichlorobenzene	180	11.758	11.758	(1.209)	215274	10.0000	9.53869

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0307.d
Lab Smp Id: main010
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/05/4
Calibration Time: 1459
Client Smp ID: main010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1828430	914215	3656860	1828430	0.00
81 Chlorobenzene-d5	300471	150236	600942	300471	0.00
107 1,4-Dichlorobenze	353909	176954	707818	353909	0.00

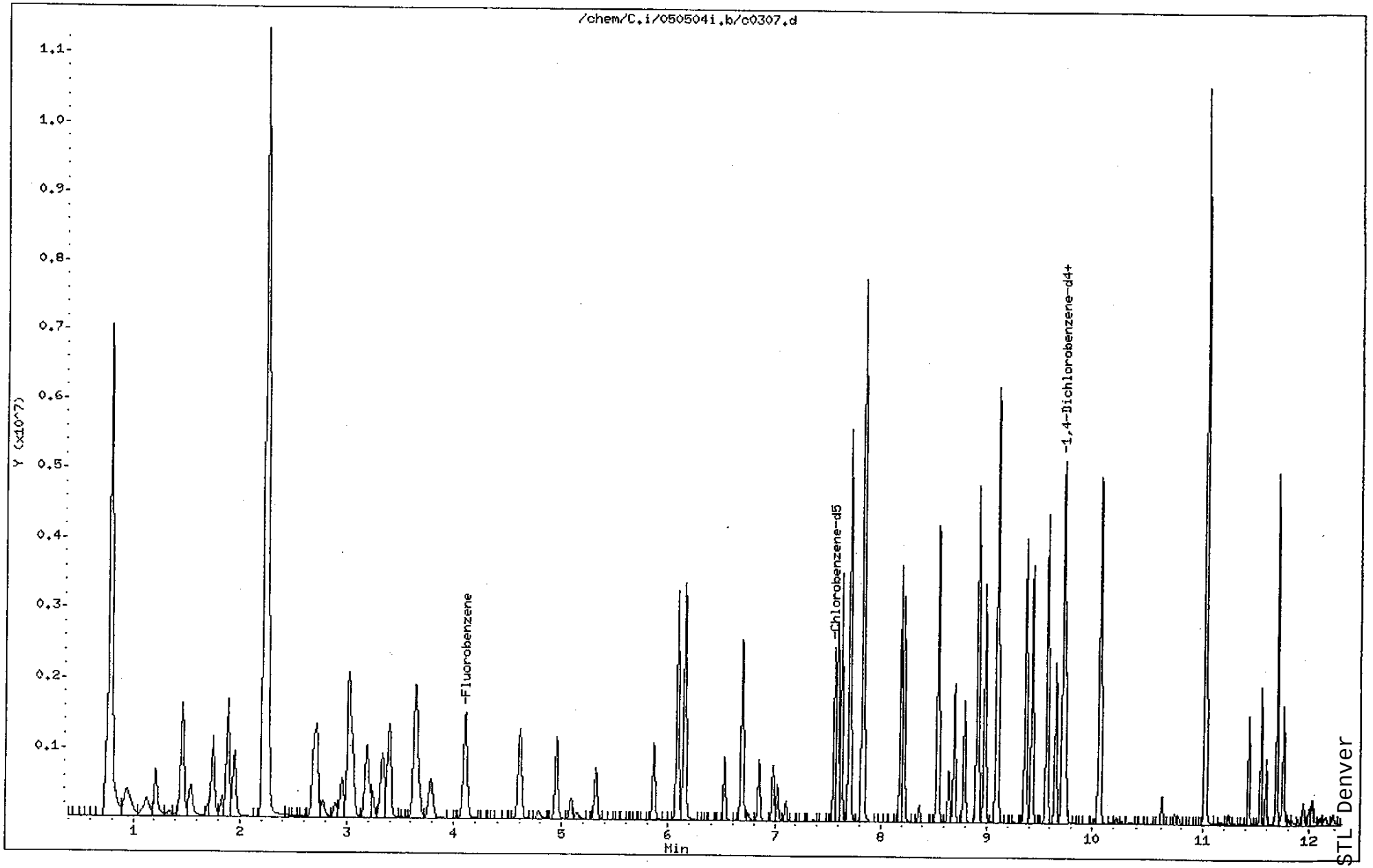
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.00
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.00
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

Data File: /chem/C.i/050504i.b/c0307.d
Date : 05-MAY-2004 14:59
Client ID: main010
Sample Info: main010
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i

Operator: reinharj
Column diameter: 0.53



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VOLATILE REPORT SW-846

Data file : /chem/C.i/050504i.b/c0308.d
Lab Smp Id: main030 Client Smp ID: main030
Inj Date : 05-MAY-2004 15:23
Operator : reinharj Inst ID: C.i
Smp Info : main030
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/050504i.b/C-20ml-AQ.m
Meth Date : 05-May-2004 16:11 meierg Quant Type: ISTD
Cal Date : 19-APR-2004 21:44 Cal File: c0274.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.107	4.107	(1.000)	1909989	10.0000	
* 81 Chlorobenzene-d5	119	7.563	7.564	(1.000)	306001	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.720	9.721	(1.000)	364971	10.0000	
M 12 1,2-Dichloroethene (total)	96				3183692	60.0000	56.8205
M 18 Xylene (total)	106				8106332	90.0000	91.2859
1 dichlorodifluoromethane	85	0.836	0.836	(0.203)	1371904	30.0000	25.8998
3 Chloromethane	50	0.930	0.930	(0.226)	1499562	30.0000	24.9203
4 Vinyl Chloride	62	0.965	0.966	(0.235)	1323363	30.0000	25.4497
6 Bromomethane	94	1.118	1.107	(0.272)	443351	30.0000	25.0463
7 Chloroethane	64	1.118	1.130	(0.272)	724507	30.0000	27.1210
9 Trichlorofluoromethane	101	1.212	1.224	(0.295)	1663661	30.0000	25.0649
10 Ethanol	45	1.341	1.342	(0.327)	324361	1500.00	1585.04
15 Acrolein	56	1.447	1.447	(0.352)	1262510	300.000	272.454
17 1,1-Dichloroethene	96	1.458	1.459	(0.355)	1363310	30.0000	26.5669
19 Acetone	43	1.529	1.530	(0.372)	653029	120.000	101.654
20 Iodomethane	142	1.552	1.553	(0.378)	1451624	30.0000	26.9450

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
25 Acetonitrile	41	1.705	1.718	(0.415)	714217	300.000	273.860
26 Methylene Chloride	84	1.752	1.753	(0.427)	1195107	30.0000	25.9801
27 tert-Butyl alcohol	59	1.835	1.835	(0.447)	1165025	600.000	592.144
30 Acrylonitrile	53	1.952	1.953	(0.475)	2552812	300.000	289.431
29 trans-1,2-Dichloroethene	96	1.893	1.894	(0.461)	1626245	30.0000	27.7323
32 1,1-Dichloroethane	63	2.211	2.211	(0.538)	3475836	30.0000	29.7605(M)
34 Chloroprene	53	2.258	2.258	(0.550)	3574270	30.0000	29.5958
33 Isopropyl ether	87	2.234	2.235	(0.544)	5224932	150.000	146.075
38 cis-1,2-Dichloroethene	96	2.717	2.717	(0.662)	1557447	30.0000	29.0882
37 2,2-Dichloropropane	77	2.686	2.687	(0.654)	2256956	30.0000	27.7294
39 2-Butanone	43	2.771	2.778	(0.675)	1072027	120.000	117.344
41 Propionitrile	54	2.892	2.899	(0.704)	901946	300.000	307.636
44 Methacrylonitrile	41	3.019	3.020	(0.735)	4316407	300.000	300.659
42 Bromochloromethane	128	2.952	2.953	(0.719)	431333	30.0000	29.7056
45 Chloroform	83	3.049	3.056	(0.742)	2546516	30.0000	29.1446
47 1,1,1-Trichloroethane	97	3.188	3.189	(0.776)	2569125	30.0000	28.9602
50 1,1-Dichloropropene	75	3.394	3.394	(0.826)	2566879	30.0000	28.9239
49 Carbon Tetrachloride	117	3.333	3.334	(0.812)	2221925	30.0000	29.5142
53 Isobutanol	41	3.774	3.775	(0.919)	379337	600.000	659.555
51 Benzene	78	3.641	3.642	(0.887)	6877176	30.0000	29.4715
54 1,2-Dichloroethane	62	3.786	3.787	(0.922)	1555404	30.0000	29.3431
57 Trichloroethene	130	4.608	4.609	(1.122)	1480617	30.0000	29.8689
59 n-Butanol	56	4.783	4.784	(1.165)	319977	600.000	717.069
60 1,2-Dichloropropane	63	4.947	4.947	(1.205)	1593131	30.0000	29.8475
62 Dibromomethane	93	5.080	5.086	(1.237)	458542	30.0000	30.2727
63 1,4-Dioxane	88	5.140	5.141	(1.252)	243470	1500.00	1651.74
65 Bromodichloromethane	83	5.315	5.316	(1.294)	1571992	30.0000	31.1261
68 cis-1,3-Dichloropropene	75	5.865	5.866	(0.775)	1878254	30.0000	31.7774
70 4-Methyl-2-pentanone	43	6.089	6.089	(0.805)	2409384	120.000	121.837
71 Toluene	91	6.149	6.156	(0.813)	7086125	30.0000	29.9595
72 trans-1,3-Dichloropropene	75	6.518	6.518	(0.862)	1366833	30.0000	32.8680
74 1,1,2-Trichloroethane	97	6.687	6.688	(0.884)	631396	30.0000	29.4346
75 Tetrachloroethene	164	6.687	6.688	(0.884)	1095902	30.0000	29.9739
76 1,3-Dichloropropane	76	6.844	6.845	(0.905)	1262706	30.0000	30.5126
78 2-Hexanone	43	6.983	6.984	(0.923)	1589829	120.000	133.077
79 Dibromochloromethane	129	7.019	7.020	(0.928)	709009	30.0000	32.6753
80 1,2-Dibromoethane	107	7.104	7.105	(0.939)	539370	30.0000	31.1294
82 Chlorobenzene	112	7.587	7.588	(1.003)	3474238	30.0000	30.0120
83 1-Chlorohexane	91	7.630	7.630	(1.009)	2446353	30.0000	30.5302
84 1,1,1,2-Tetrachloroethane	131	7.702	7.703	(1.018)	960181	30.0000	30.2776
85 Ethylbenzene	106	7.708	7.709	(1.019)	2239162	30.0000	29.8516
86 m and p-Xylene	106	7.829	7.830	(1.035)	5601017	60.0000	60.7600
87 o-Xylene	106	8.192	8.192	(1.083)	2505315	30.0000	30.5259
88 Styrene	104	8.222	8.223	(1.087)	3986257	30.0000	32.0969
89 Bromoform	173	8.367	8.368	(1.106)	299754	30.0000	34.8876
90 isopropyl benzene	105	8.542	8.543	(1.129)	7657270	30.0000	31.4206
91 Cyclohexanone	55	8.639	8.639	(1.142)	1018108	1200.00	817.349

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94 Bromobenzene	156	8.790	8.791	(0.904)	979956	30.0000	30.2619
95 1,1,2,2-Tetrachloroethane	83	8.899	8.899	(1.177)	555868	30.0000	30.2173
96 1,2,3-Trichloropropane	110	8.917	8.917	(0.917)	157559	30.0000	29.7532
97 n-Propylbenzene	120	8.917	8.917	(0.917)	1676141	30.0000	29.7320
99 2-Chlorotoluene	126	8.977	8.984	(0.924)	1258322	30.0000	29.6384
100 4-Chlorotoluene	126	9.092	9.093	(0.935)	1200387	30.0000	29.2290
101 1,3,5-Trimethylbenzene	105	9.098	9.099	(0.936)	5662150	30.0000	30.2064
102 tert-Butylbenzene	119	9.370	9.365	(0.964)	4388866	30.0000	30.2731
103 1,2,4-Trimethylbenzene	105	9.424	9.425	(0.970)	5360831	30.0000	30.4014
104 sec-Butylbenzene	134	9.569	9.570	(0.984)	1265511	30.0000	29.3895
105 m-Dichlorobenzene	146	9.648	9.649	(0.993)	2038765	30.0000	29.8435
106 4-Isopropyltoluene	119	9.714	9.715	(0.999)	5559297	30.0000	30.6286
108 p-dichlorobenzene	146	9.745	9.745	(1.002)	1902742	30.0000	29.5366
110 o-Dichlorobenzene	146	10.059	10.060	(1.035)	1541529	30.0000	29.7860
111 n-Butylbenzene	91	10.071	10.072	(1.036)	5832766	30.0000	29.8579
112 1,2-Dibromo-3-chloropropane	157	10.772	10.773	(1.108)	62279	30.0000	32.6994
113 1,2,4-Trichlorobenzene	180	11.431	11.431	(1.176)	852288	30.0000	28.3131
114 Hexachlorobutadiene	225	11.545	11.540	(1.188)	620484	30.0000	27.8584
115 Naphthalene	128	11.594	11.594	(1.193)	1323460	30.0000	29.6836
116 1,2,3-Trichlorobenzene	180	11.757	11.758	(1.210)	660173	30.0000	28.3653

QC Flag Legend

M - Compound response manually integrated.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0308.d
Lab Smp Id: main030
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/05/4
Calibration Time: 1459
Client Smp ID: main030
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1828430	914215	3656860	1909989	4.46
81 Chlorobenzene-d5	300471	150236	600942	306001	1.84
107 1,4-Dichlorobenze	353909	176954	707818	364971	3.13

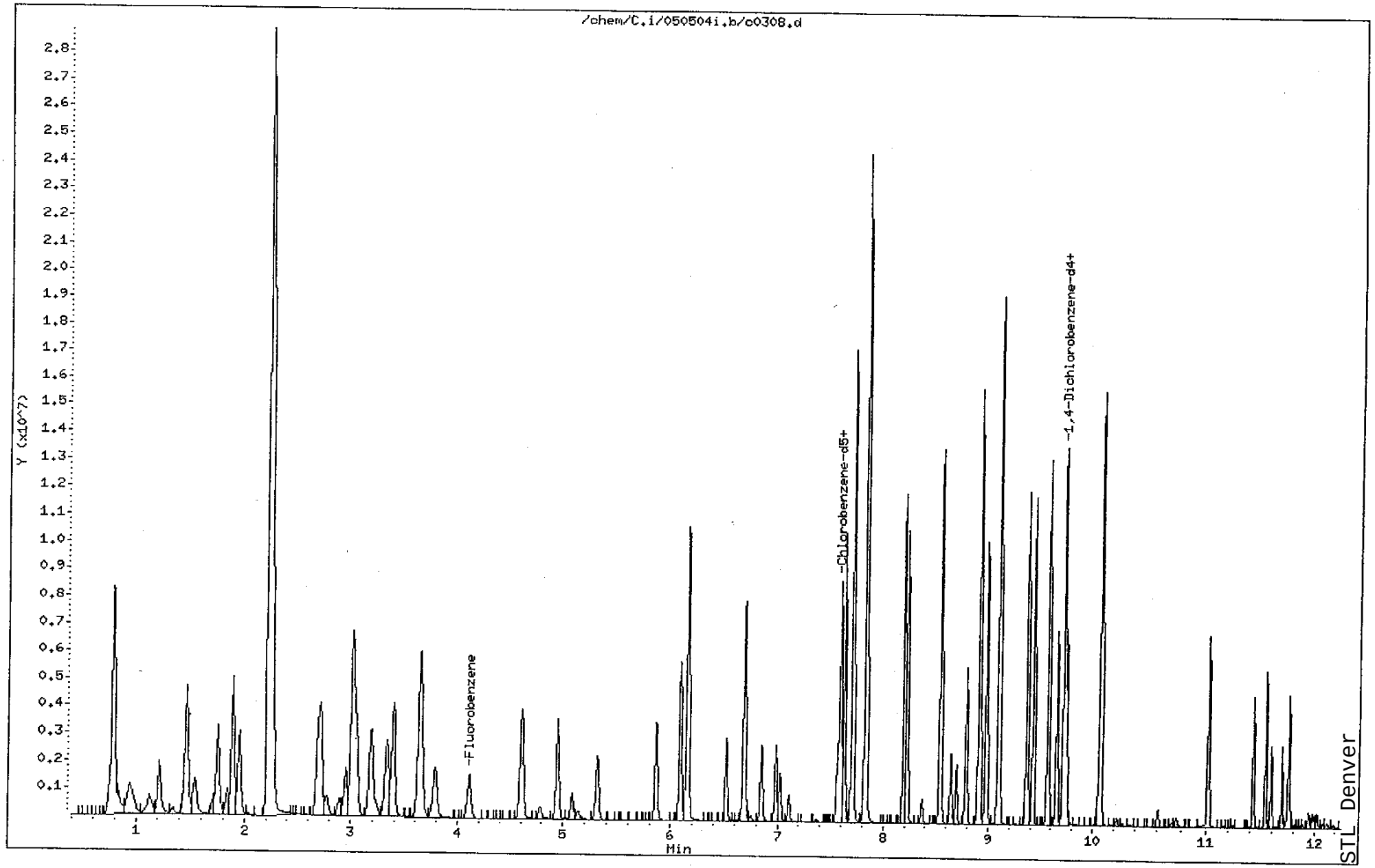
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	-0.02
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	-0.01
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	-0.01

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

Data File: /chem/C.i/050504i.b/c0308.d
Date : 05-MAY-2004 15:23
Client ID: main030
Sample Info: main030
Purge Volume: 20.0
Column phase: DB624

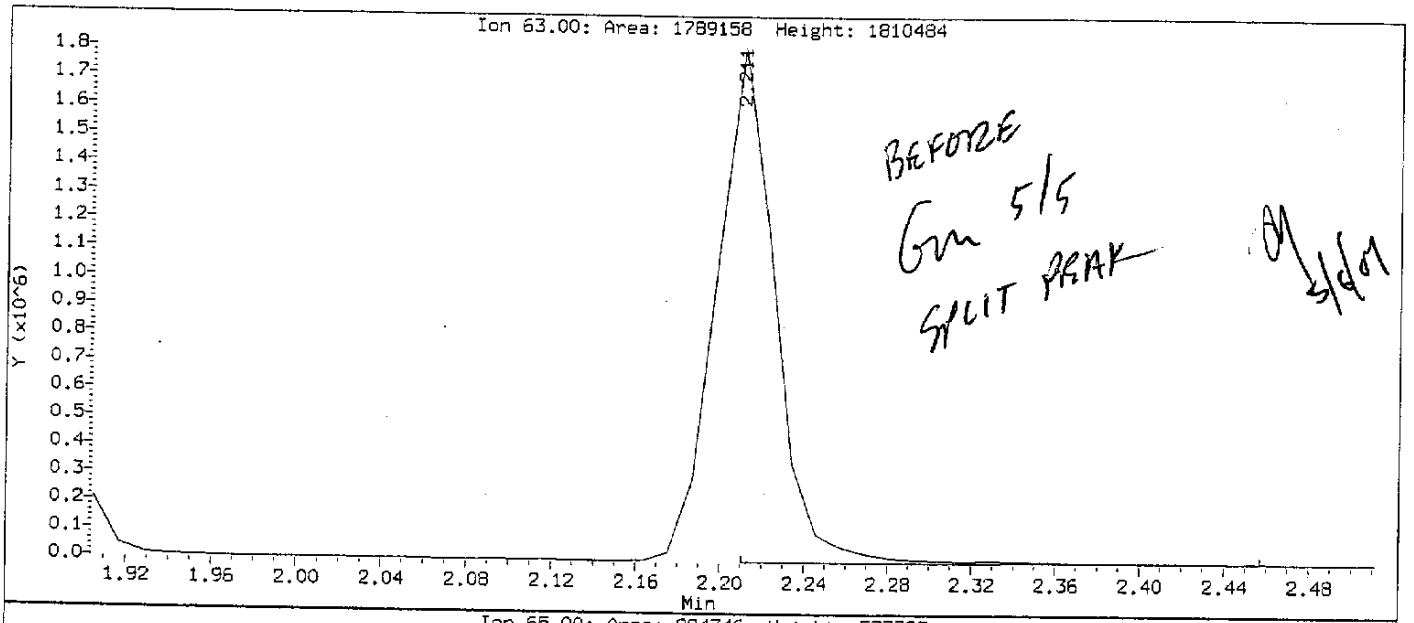
Instrument: C.i

Operator: reinharj
Column diameter: 0.53

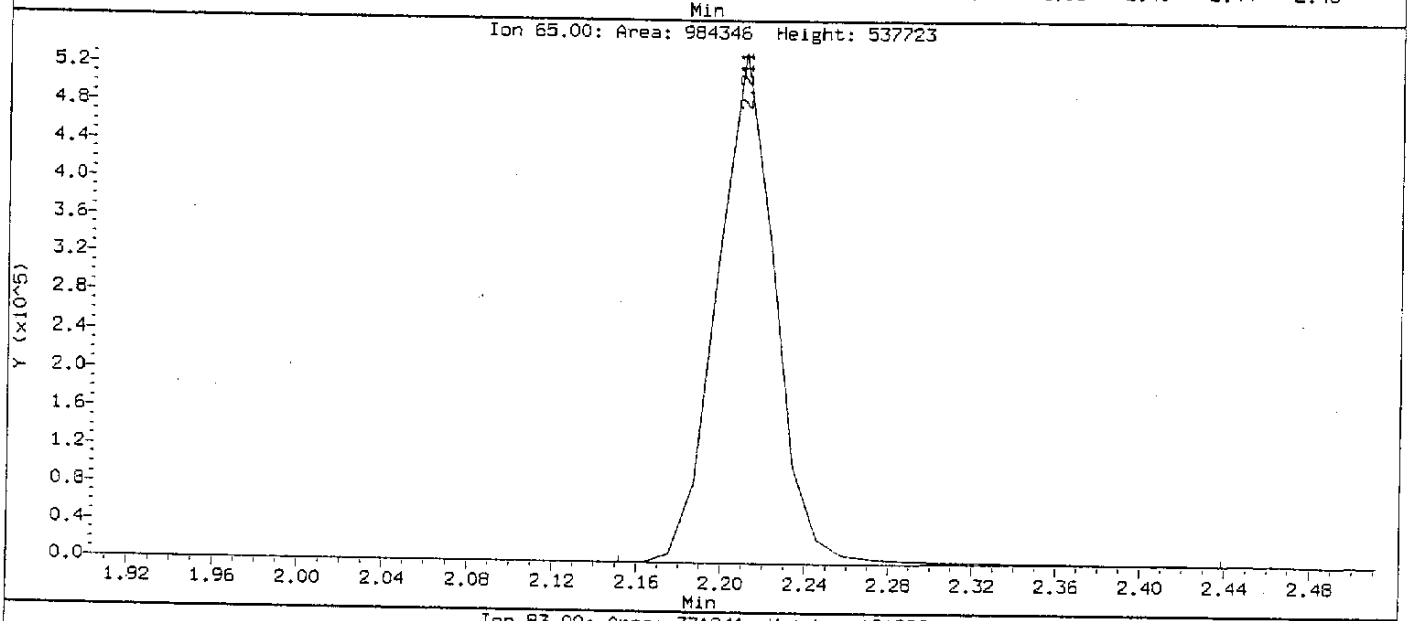


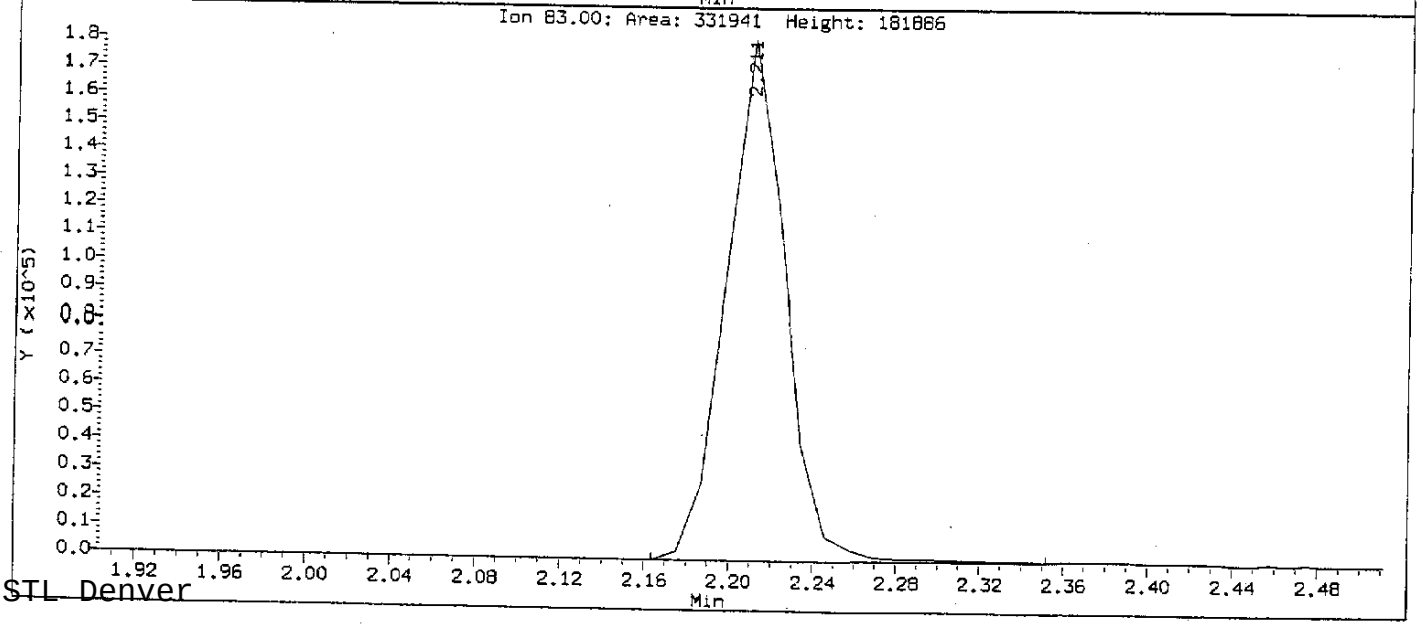
Data File: /chem/C.i/0505041.b/c0308.d
Injection Date: 05-MAY-2004 15:23
Instrument: C.i
Client Sample ID: main030

Compound: 1,1-Dichloroethane
CAS Number: 75-34-3



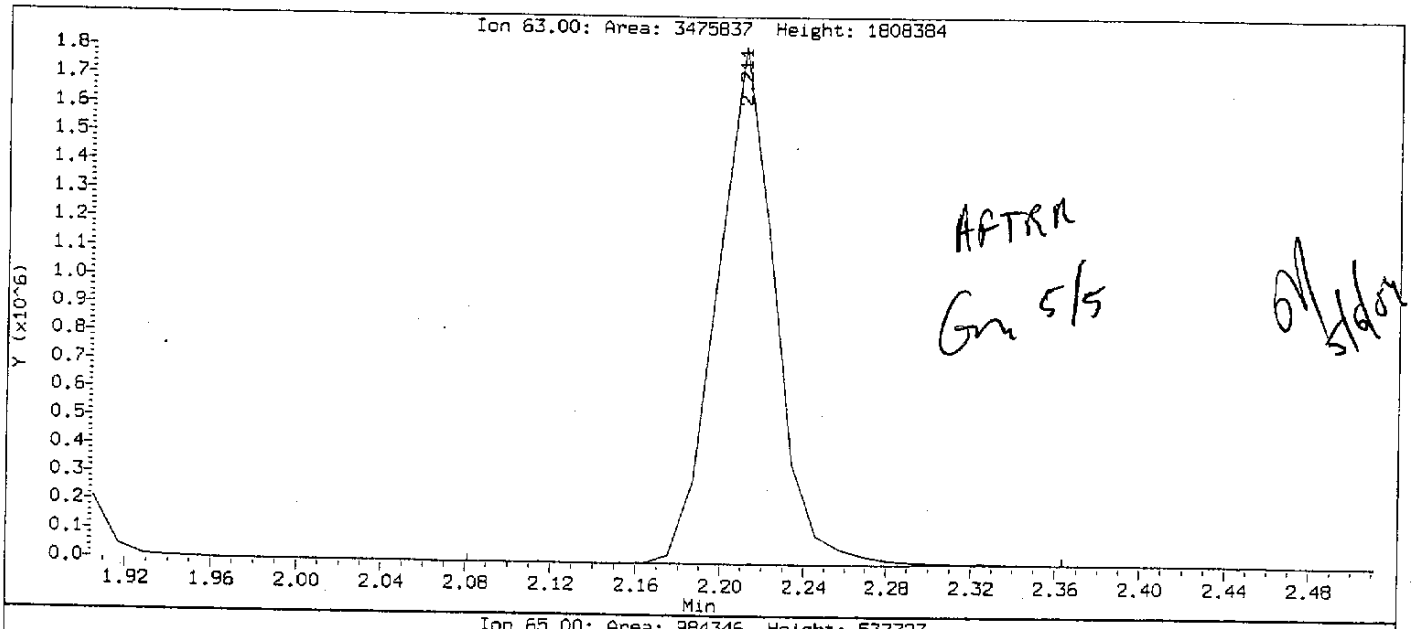
BEFORE
GM 5/5
SPLIT PEAK
5/6/04



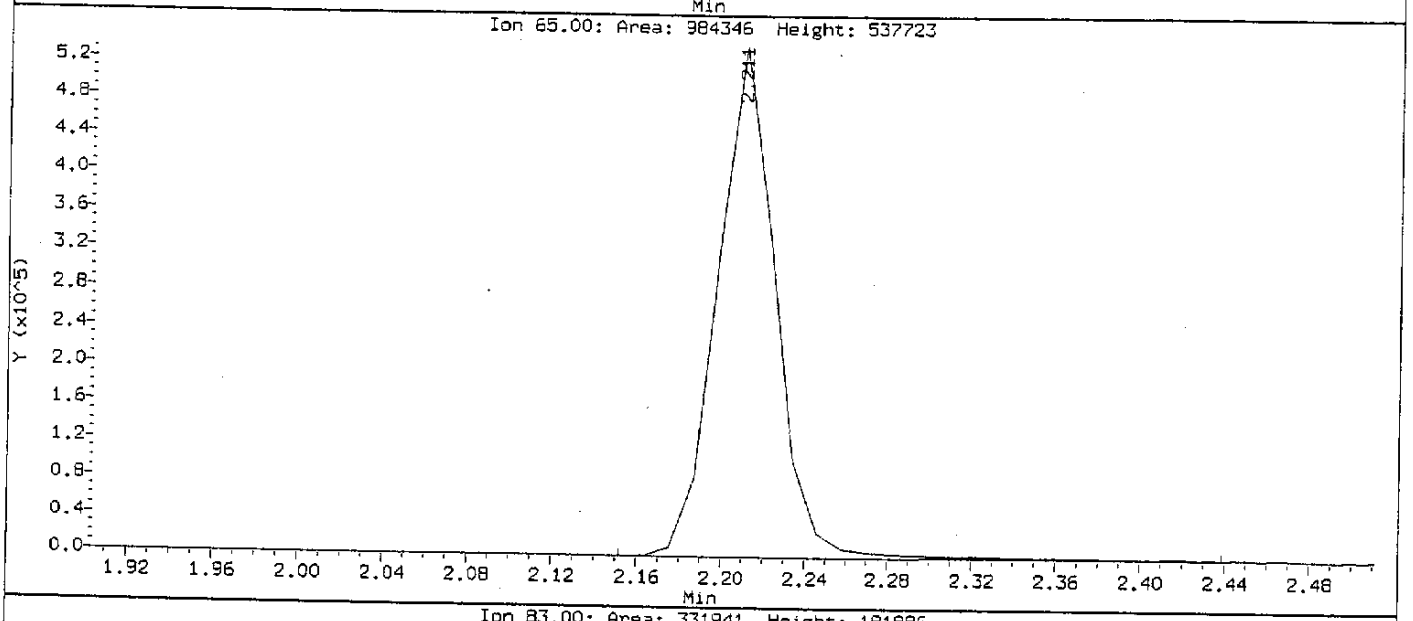


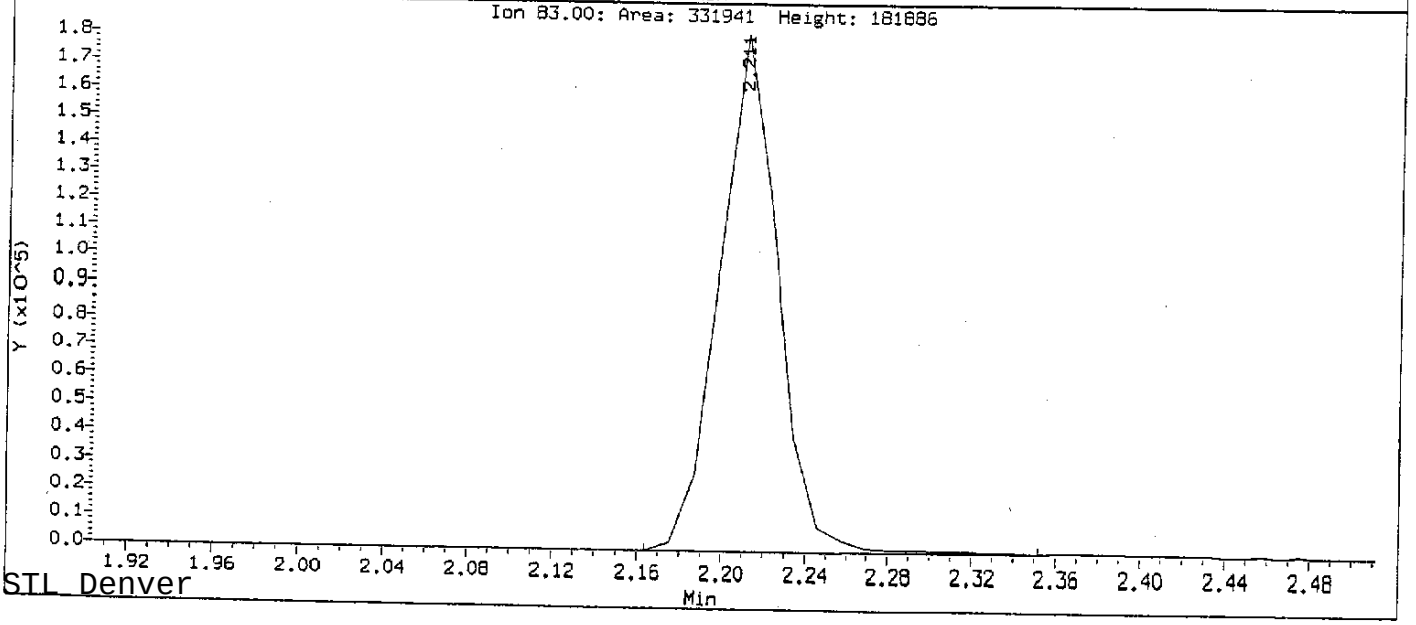
Data File: /chem/C.i/050504i.b/c0308.d
Injection Date: 05-MAY-2004 15:23
Instrument: C.i
Client Sample ID: main030

Compound: 1,1-Dichloroethane
CAS Number: 75-34-3



AFTER
Gm 5/5
5/5/04





STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/050504i.b/c0309.d
Lab Smp Id: main060 Client Smp ID: main060
Inj Date : 05-MAY-2004 15:46
Operator : reinharj Inst ID: C.i
Smp Info : main060
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/050504i.b/C-20ml-AQ.m
Meth Date : 05-May-2004 16:11 meierg Quant Type: ISTD
Cal Date : 19-APR-2004 22:04 Cal File: c0275.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.107	4.107	(1.000)	1963745	10.0000	
* 81 Chlorobenzene-d5	119	7.564	7.564	(1.000)	313013	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.721	9.721	(1.000)	351409	10.0000	
M 12 1,2-Dichloroethene (total)	96				6572958	120.000	118.014
M 18 Xylene (total)	106				16168411	180.000	179.374
1 dichlorodifluoromethane	85	0.836	0.836	(0.204)	2690407	60.0000	53.4752
3 Chloromethane	50	0.930	0.930	(0.227)	3064024	60.0000	54.6183
4 Vinyl Chloride	62	0.966	0.966	(0.235)	2586064	60.0000	54.3875
6 Bromomethane	94	1.107	1.107	(0.269)	825005	60.0000	49.3718
7 Chloroethane	64	1.130	1.130	(0.275)	1395392	60.0000	50.8049
9 Trichlorofluoromethane	101	1.224	1.224	(0.298)	3389353	60.0000	54.8223
10 Ethanol	45	1.342	1.342	(0.327)	586072	3000.00	2928.01
15 Acrolein	56	1.447	1.447	(0.352)	2509770	600.000	569.869
17 1,1-Dichloroethene	96	1.459	1.459	(0.355)	2738317	60.0000	54.9415
19 Acetone	43	1.530	1.530	(0.372)	1336332	240.000	226.310
20 Iodomethane	142	1.553	1.553	(0.378)	3013843	60.0000	56.8354 (M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
25 Acetonitrile	41	1.718	1.718	(0.418)	1437196	600.000	574.575
26 Methylene Chloride	84	1.753	1.753	(0.427)	2423703	60.0000	54.5246
27 tert-Butyl alcohol	59	1.835	1.835	(0.447)	2405583	1200.00	1254.10(A)
30 Acrylonitrile	53	1.953	1.953	(0.475)	5305005	600.000	616.509(A)
29 trans-1,2-Dichloroethene	96	1.894	1.894	(0.461)	3340987	60.0000	58.1023
32 1,1-Dichloroethane	63	2.211	2.211	(0.538)	6805823	60.0000	57.4257
34 Chloroprene	53	2.258	2.258	(0.550)	7295799	60.0000	59.3984
33 Isopropyl ether	87	2.235	2.235	(0.544)	10280662	300.000	280.538
38 cis-1,2-Dichloroethene	96	2.717	2.717	(0.662)	3231971	60.0000	59.9112
37 2,2-Dichloropropane	77	2.687	2.687	(0.654)	4561628	60.0000	57.2672
39 2-Butanone	43	2.778	2.778	(0.676)	2223893	240.000	243.326(A)
41 Propionitrile	54	2.899	2.899	(0.706)	1841967	600.000	624.496(A)
44 Methacrylonitrile	41	3.020	3.020	(0.735)	8998649	600.000	618.819(A)
42 Bromochloromethane	128	2.953	2.953	(0.719)	871196	60.0000	59.2698
45 Chloroform	83	3.056	3.056	(0.744)	5271014	60.0000	59.8478
47 1,1,1-Trichloroethane	97	3.189	3.189	(0.776)	5223591	60.0000	58.8092
50 1,1-Dichloropropene	75	3.394	3.394	(0.826)	5374287	60.0000	59.9774
49 Carbon Tetrachloride	117	3.334	3.334	(0.812)	4637017	60.0000	60.2808(A)
53 Isobutanol	41	3.775	3.775	(0.919)	761112	1200.00	1283.77(A)
51 Benzene	78	3.642	3.642	(0.887)	14660676	60.0000	62.6035(A)
54 1,2-Dichloroethane	62	3.787	3.787	(0.922)	3195228	60.0000	60.0946(A)
57 Trichloroethene	130	4.609	4.609	(1.122)	3115353	60.0000	61.1480(A)
59 n-Butanol	56	4.784	4.784	(1.165)	676492	1200.00	1496.18(A)
60 1,2-Dichloropropane	63	4.947	4.947	(1.204)	3336929	60.0000	62.2136(A)
62 Dibromomethane	93	5.086	5.086	(1.238)	930077	60.0000	60.7252(A)
63 1,4-Dioxane	88	5.141	5.141	(1.252)	457872	3000.00	3006.47(A)
65 Bromodichloromethane	83	5.316	5.316	(1.294)	3286034	60.0000	64.1391(A)
68 cis-1,3-Dichloropropene	75	5.866	5.866	(0.775)	3927835	60.0000	66.6416(A)
70 4-Methyl-2-pentanone	43	6.089	6.089	(0.805)	5065646	240.000	252.110(A)
71 Toluene	91	6.156	6.156	(0.814)	14470531	60.0000	61.2600(A)
72 trans-1,3-Dichloropropene	75	6.518	6.518	(0.862)	2859446	60.0000	68.9466(A)
74 1,1,2-Trichloroethane	97	6.688	6.688	(0.884)	1248682	60.0000	57.8120
75 Tetrachloroethene	164	6.688	6.688	(0.884)	2223190	60.0000	59.5400
76 1,3-Dichloropropane	76	6.845	6.845	(0.905)	2588901	60.0000	62.3830(A)
78 2-Hexanone	43	6.984	6.984	(0.923)	3341417	240.000	274.057(A)
79 Dibromochloromethane	129	7.020	7.020	(0.928)	1500111	60.0000	67.4900(A)
80 1,2-Dibromoethane	107	7.105	7.105	(0.939)	1098316	60.0000	62.3921(A)
82 Chlorobenzene	112	7.588	7.588	(1.003)	7253297	60.0000	61.5512(A)
83 1-Chlorohexane	91	7.630	7.630	(1.009)	5013893	60.0000	61.4172(A)
84 1,1,1,2-Tetrachloroethane	131	7.703	7.703	(1.018)	1900156	60.0000	59.3772
85 Ethylbenzene	106	7.709	7.709	(1.019)	4512656	60.0000	59.1053
86 m and p-Xylene	106	7.830	7.830	(1.035)	11103852	120.000	118.699
87 o-Xylene	106	8.192	8.192	(1.083)	5064559	60.0000	60.6749(A)
88 Styrene	104	8.223	8.223	(1.087)	8289024	60.0000	65.4683(A)
89 Bromoform	173	8.368	8.368	(1.106)	616683	60.0000	70.1662(A)
90 isopropyl benzene	105	8.543	8.543	(1.129)	13259957	60.0000	55.0771
91 Cyclohexanone	55	8.639	8.639	(1.142)	2029027	2400.00	2611.42(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94 Bromobenzene	156	8.791	8.791	(0.904)	1970221	60.0000	63.0430(A)
95 1,1,2,2-Tetrachloroethane	83	8.899	8.899	(1.177)	1065545	60.0000	57.7376
96 1,2,3-Trichloropropane	110	8.917	8.917	(0.917)	299837	60.0000	59.3495
97 n-Propylbenzene	120	8.917	8.917	(0.917)	3285019	60.0000	60.7141(A)
99 2-Chlorotoluene	126	8.984	8.984	(0.924)	2462842	60.0000	60.8131(A)
100 4-Chlorotoluene	126	9.093	9.093	(0.935)	2313732	60.0000	58.7783
101 1,3,5-Trimethylbenzene	105	9.099	9.099	(0.936)	10807018	60.0000	61.0490(A)
102 tert-Butylbenzene	119	9.365	9.365	(0.963)	8713779	60.0000	63.2600(A)
103 1,2,4-Trimethylbenzene	105	9.425	9.425	(0.970)	10418106	60.0000	62.3188(A)
104 sec-Butylbenzene	134	9.570	9.570	(0.984)	2438352	60.0000	59.3221
105 m-Dichlorobenzene	146	9.649	9.649	(0.993)	4085118	60.0000	61.7855(A)
106 4-Isopropyltoluene	119	9.715	9.715	(0.999)	10641268	60.0000	61.4948(A)
108 p-dichlorobenzene	146	9.745	9.745	(1.002)	3829774	60.0000	61.3678(A)
110 o-Dichlorobenzene	146	10.060	10.060	(1.035)	3005239	60.0000	60.1940(A)
111 n-Butylbenzene	91	10.072	10.072	(1.036)	10908067	60.0000	59.0618
112 1,2-Dibromo-3-chloropropane	157	10.773	10.773	(1.108)	129928	60.0000	70.0712(A)
113 1,2,4-Trichlorobenzene	180	11.431	11.431	(1.176)	1733843	60.0000	59.8335
114 Hexachlorobutadiene	225	11.540	11.540	(1.187)	1207919	60.0000	56.1003
115 Naphthalene	128	11.594	11.594	(1.193)	2741393	60.0000	65.0551(A)
116 1,2,3-Trichlorobenzene	180	11.758	11.758	(1.209)	1349020	60.0000	60.5594(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0309.d
Lab Smp Id: main060
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/05/4
Calibration Time: 1459
Client Smp ID: main060
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1828430	914215	3656860	1963745	7.40
81 Chlorobenzene-d5	300471	150236	600942	313013	4.17
107 1,4-Dichlorobenze	353909	176954	707818	351409	-0.71

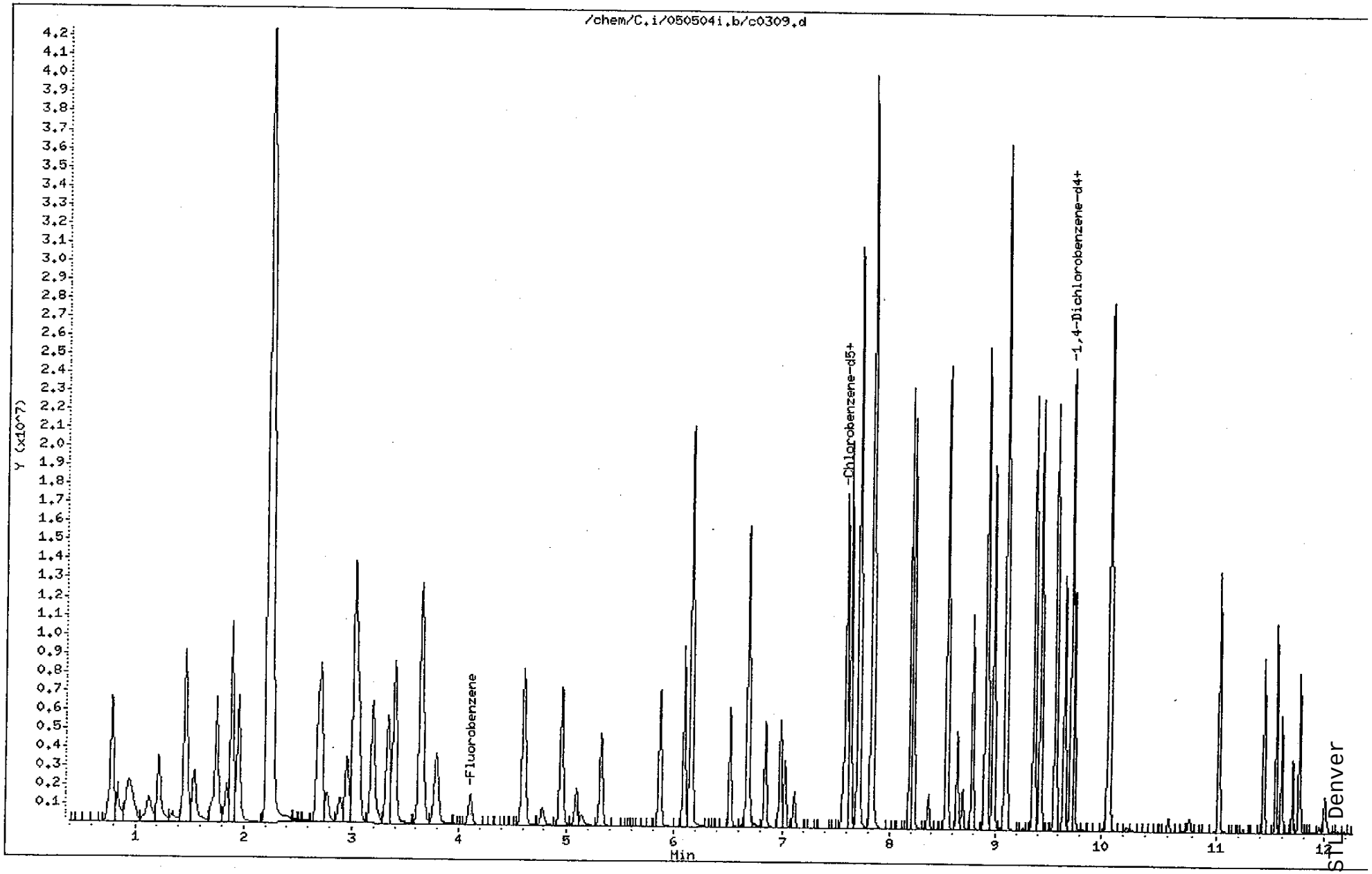
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.00
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.00
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

Data File: /chem/C.i/050504i.b/c0309.d
Date : 05-MAY-2004 15:46
Client ID: main060
Sample Info: main060
Purge Volume: 20.0
Column phase: DB624

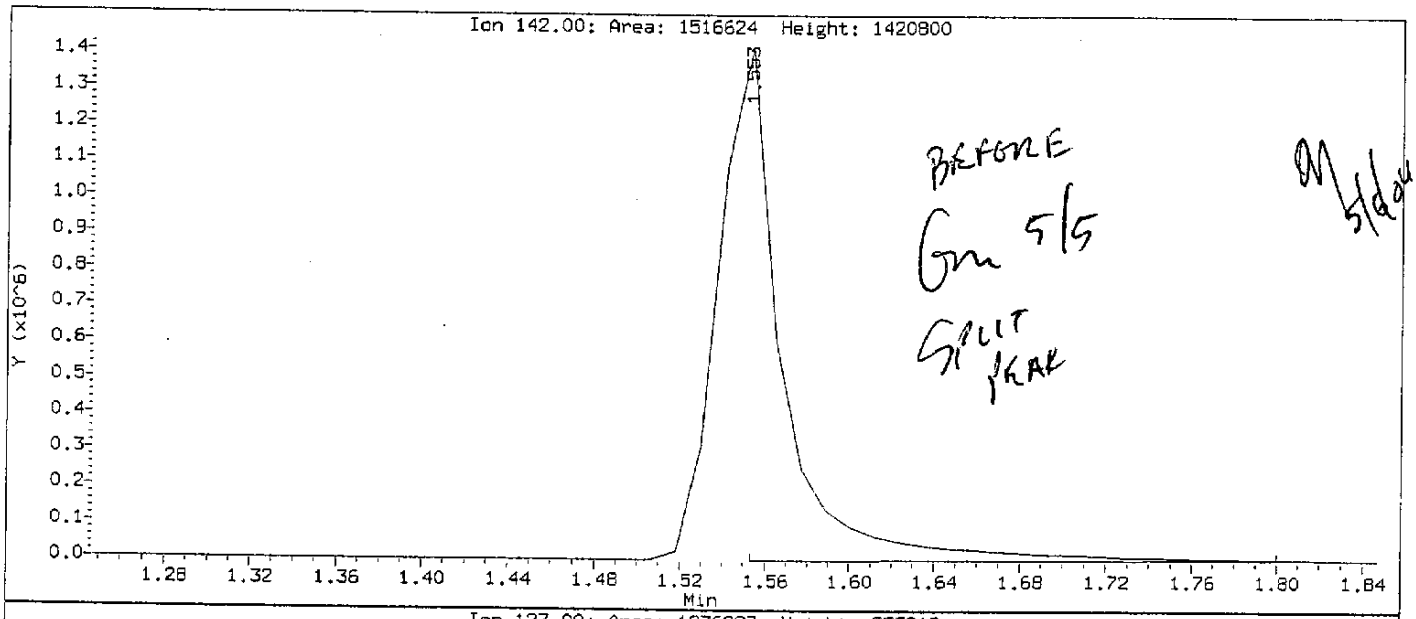
Instrument: C.i

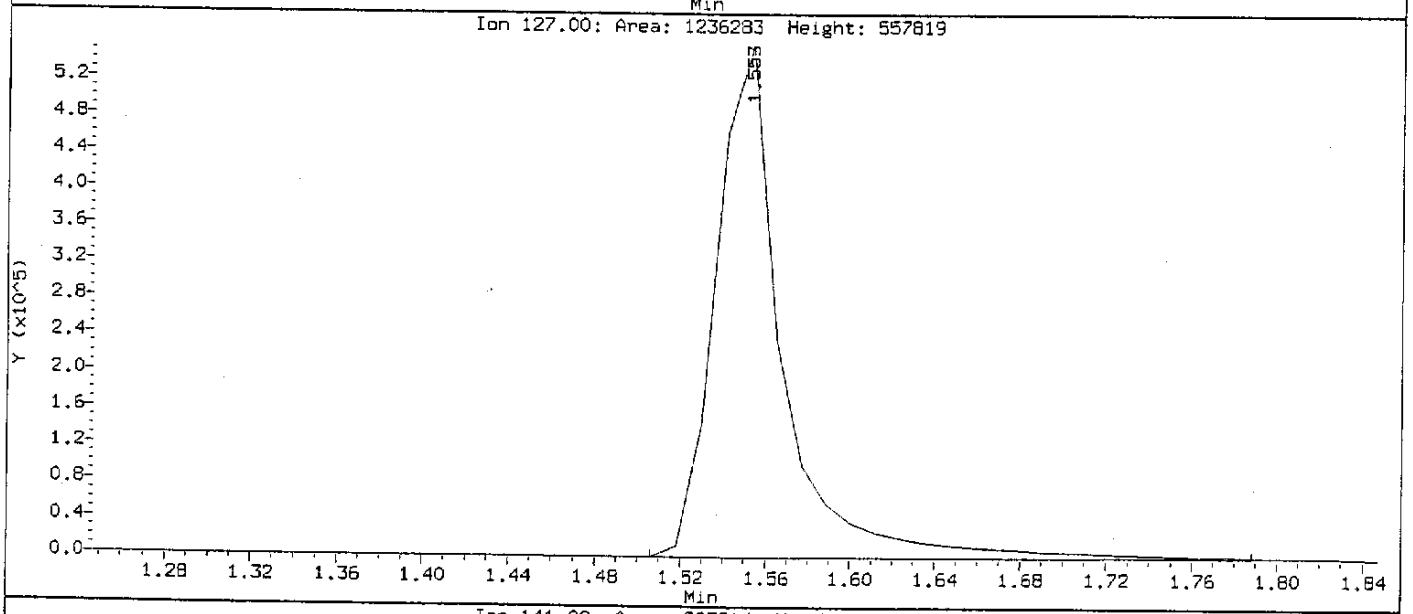
Operator: reinharj
Column diameter: 0.53

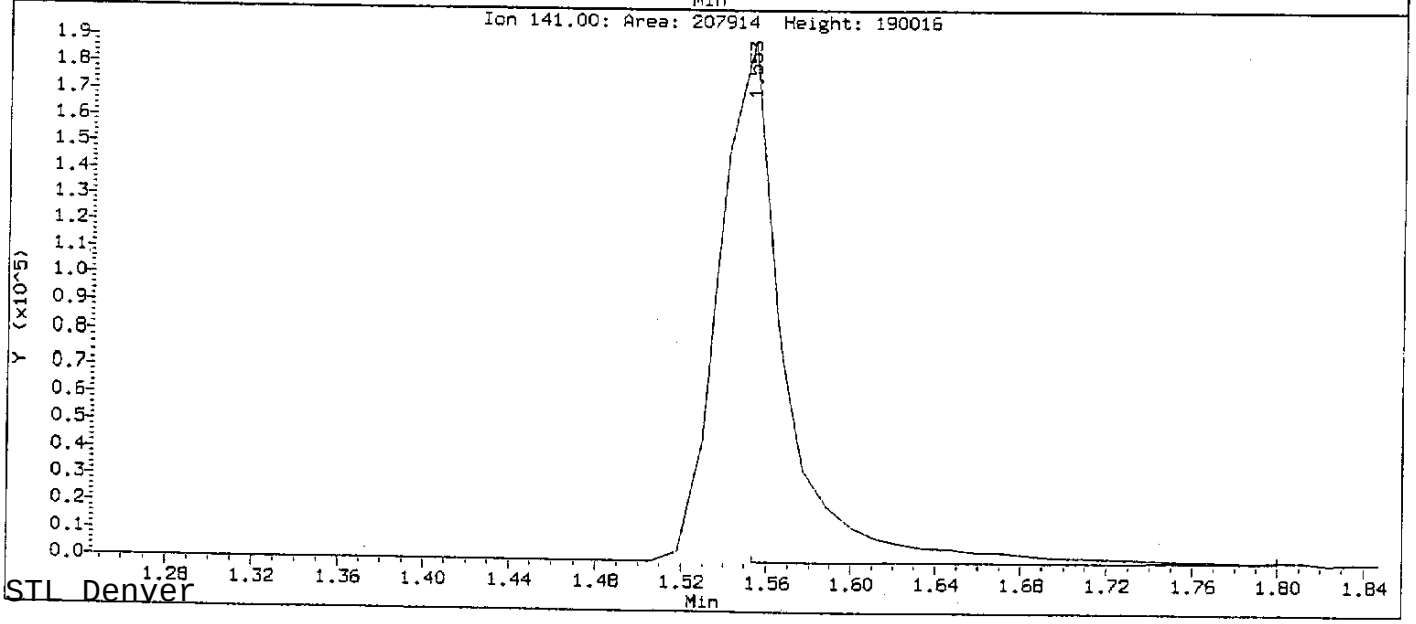


Data File: /chem/C.i/050504i.b/c0309.d
Injection Date: 05-MAY-2004 15:46
Instrument: C.i
Client Sample ID: main060

Compound: Iodomethane
CAS Number: 74-88-4

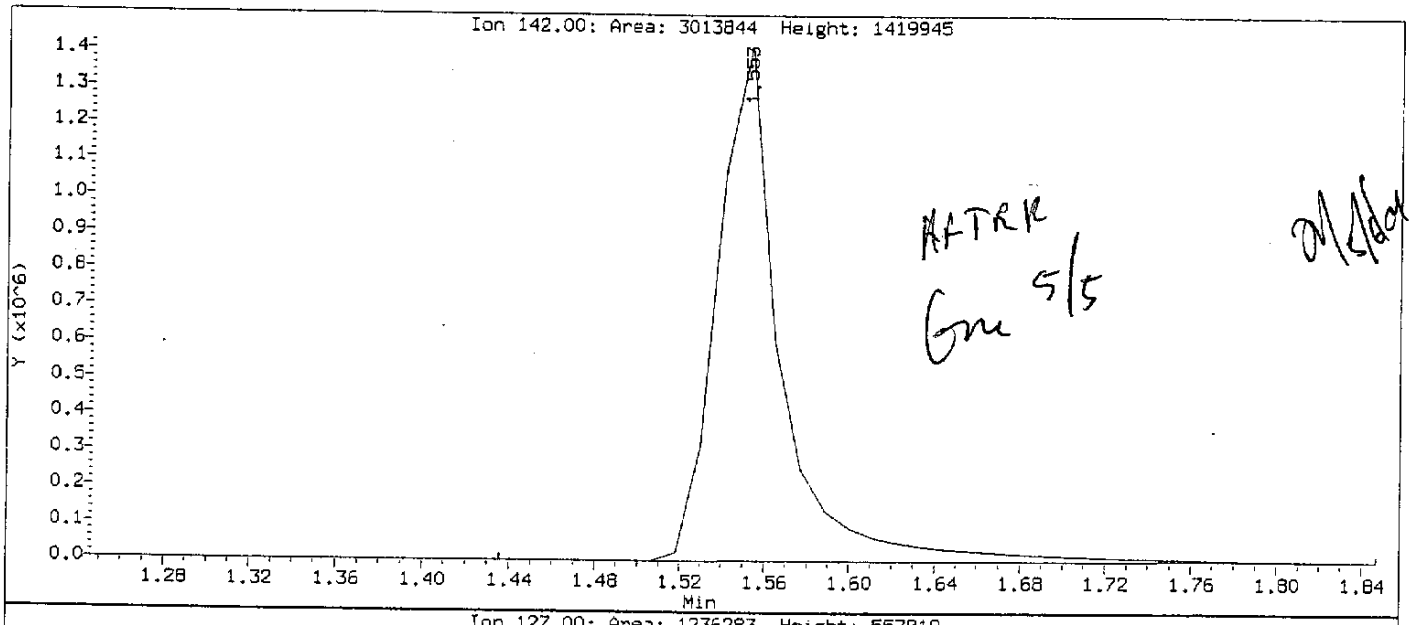






Data File: /chem/C.i/0505041.b/c0309.d
Injection Date: 05-MAY-2004 15:46
Instrument: C.i
Client Sample ID: main060

Compound: Iodomethane
CAS Number: 74-88-4



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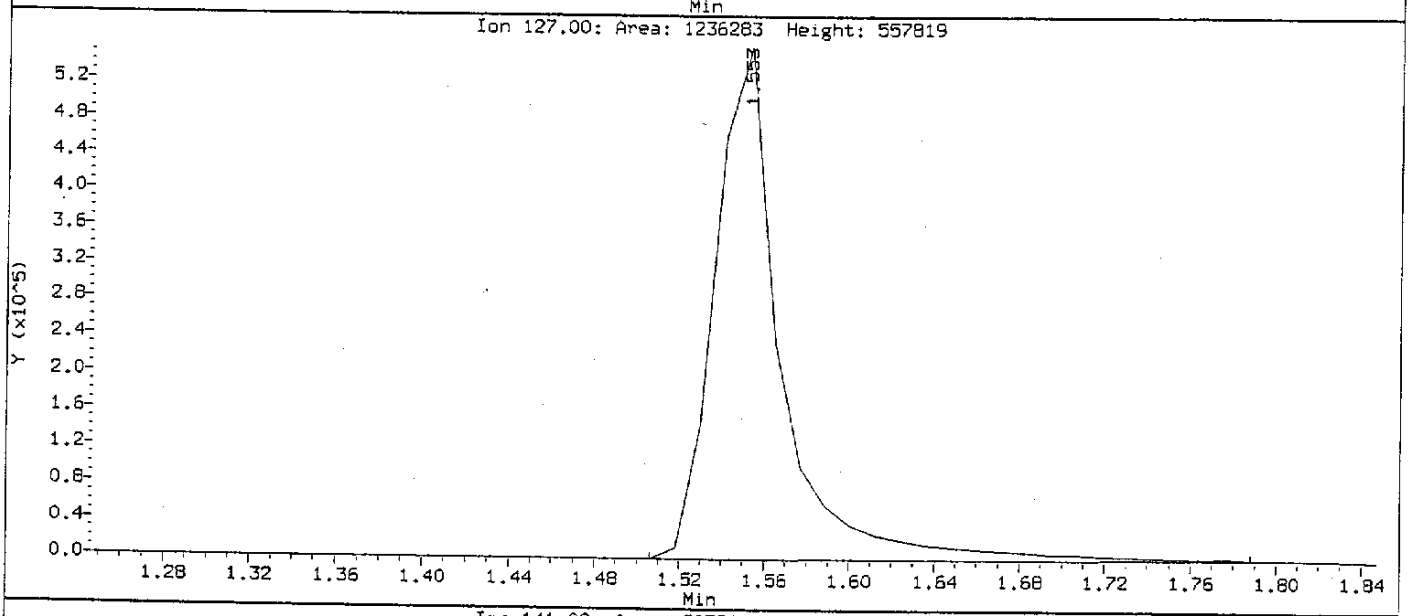
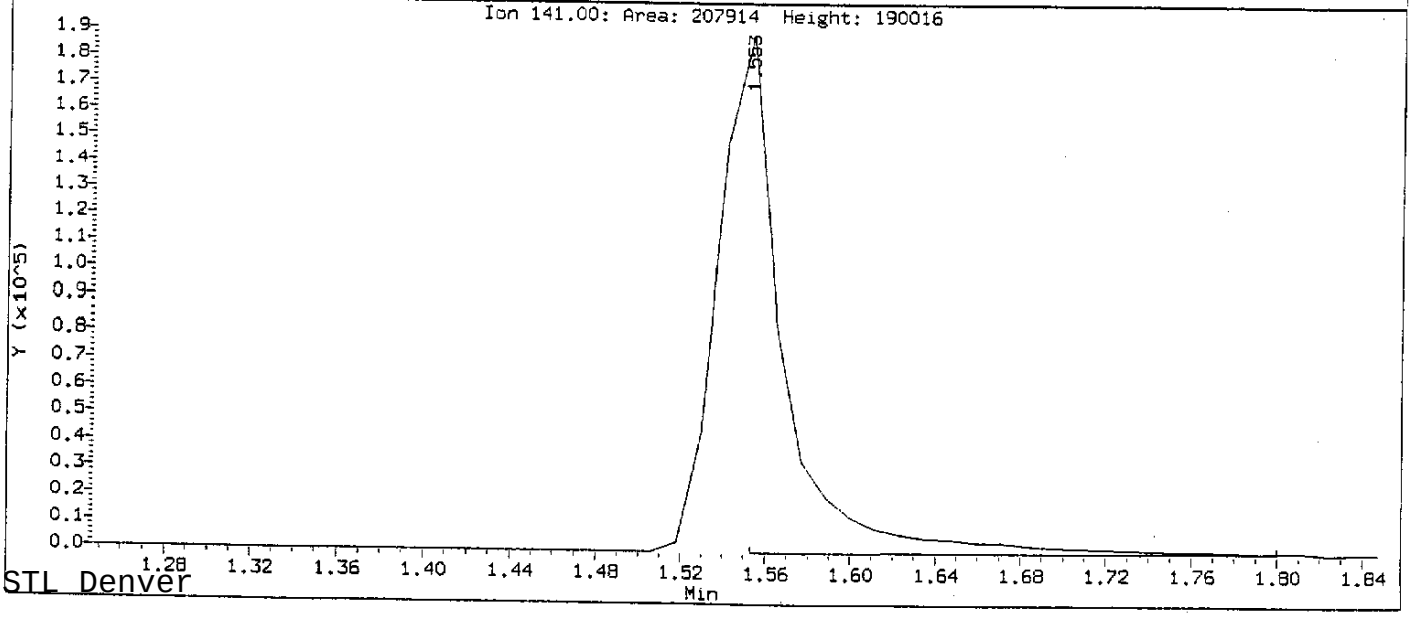
21/5/04





INITIAL CALIBRATION VERIFICATION

Instrument ID: C.i
Lab File ID: c0311.d
Analysis Type: WATER

Injection Date: 05-MAY-2004 16:32
Lab Sample ID: SSV 030/lcs
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
64	dichlorodifluoromethane	30.0000	27.4197	8.6	25.0	
1	Chloromethane	30.0000	30.2584	0.9	25.0	
4	Vinyl Chloride	30.0000	32.3221	7.7	25.0	
2	Bromomethane	30.0000	35.7387	19.1	25.0	
5	Chloroethane	30.0000	28.9953	3.3	25.0	
11	Trichlorofluoromethane	30.0000	29.8140	0.6	25.0	
12	1,1-Dichloroethene	30.0000	31.0124	3.4	25.0	
85	1,2-Dichloroethene (total)	60.0000	62.2598	3.8	25.0	
7	Acetone	60 ~~120~~.0000	64.4308	46.3	25.0	<- 7.4% ON 5/6/04
118	Xylene (total)	90.0000	95.5629	6.2	25.0	
6	Methylene Chloride	30.0000	29.8475	0.5	25.0	
0	trans-1,2-Dichloroethene	30.0000	31.8251	6.1	25.0	
15	1,1-Dichloroethane	30.0000	32.4447	8.1	25.0	
93	2,2-Dichloropropane	30.0000	31.6828	5.6	25.0	
0	cis-1,2-Dichloroethene	30.0000	30.4348	1.4	25.0	
20	2-Butanone	60 ~~120~~.0000	63.3107	47.2	25.0	<- 5.5% ON 5/6/04
13	Bromochloromethane	30.0000	32.2594	7.5	25.0	
17	Chloroform	30.0000	31.1527	3.8	25.0	
22	1,1,1-Trichloroethane	30.0000	30.9639	3.2	25.0	
23	Carbon Tetrachloride	30.0000	31.0003	3.3	25.0	
94	1,1-Dichloropropene	30.0000	30.9366	3.1	25.0	
30	Benzene	30.0000	31.7306	5.8	25.0	
16	1,2-Dichloroethane	30.0000	31.1915	4.0	25.0	
90	Fluorobenzene	10.0000	10.0000	0.0	25.0	
29	Trichloroethene	30.0000	31.8845	6.3	25.0	
26	1,2-Dichloropropane	30.0000	31.4002	4.7	25.0	
34	Dibromomethane	30.0000	31.0835	3.6	25.0	
25	Bromodichloromethane	30.0000	32.4208	8.1	25.0	
28	cis-1,3-Dichloropropene	30.0000	33.8908	13.0	25.0	
38	4-Methyl-2-pentanone	60 ~~120~~.0000	60.2756	49.8	25.0	<- 0.4% ON 5/6/04
45	Toluene	30.0000	31.8110	6.0	25.0	
31	trans-1,3-Dichloropropene	30.0000	34.6413	15.5	25.0	
42	Tetrachloroethene	30.0000	31.1983	4.0	25.0	
32	1,1,2-Trichloroethane	30.0000	30.3728	1.2	25.0	
109	1,3-Dichloropropane	30.0000	32.0322	6.8	25.0	
43	2-Hexanone	60 ~~120~~.0000	64.9579	45.9	25.0	<- 8.3% ON 5/6/04
36	Dibromochloromethane	30.0000	33.1123	10.4	25.0	
58	1,2-Dibromoethane	30.0000	31.9222	6.4	25.0	
39	Chlorobenzene-d5	10.0000	10.0000	0.0	25.0	

INITIAL CALIBRATION VERIFICATION

Instrument ID: C.i
Lab File ID: c0311.d
Analysis Type: WATER

Injection Date: 05-MAY-2004 16:32
Lab Sample ID: SSV 030/lcs
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
46	Chlorobenzene	30.0000	31.1185	3.7	25.0
92	1-Chlorohexane	30.0000	31.1653	3.9	25.0
74	1,1,1,2-Tetrachloroethane	30.0000	31.7260	5.8	25.0
47	Ethylbenzene	30.0000	31.3449	4.5	25.0
0	m and p-Xylene	60.0000	64.0753	6.8	25.0
0	o-Xylene	30.0000	31.4876	5.0	25.0
49	Styrene	30.0000	33.2412	10.8	25.0
37	Bromoform	30.0000	35.0936	17.0	25.0
79	isopropyl benzene	30.0000	31.6213	5.4	25.0
95	Bromobenzene	30.0000	30.8594	2.9	25.0
40	1,1,2,2-Tetrachloroethane	30.0000	30.7606	2.5	25.0
96	n-Propylbenzene	30.0000	30.8313	2.8	25.0
50	1,2,3-Trichloropropane	30.0000	29.3383	2.2	25.0
97	2-Chlorotoluene	30.0000	33.6779	12.3	25.0
99	4-Chlorotoluene	30.0000	30.1270	0.4	25.0
98	1,3,5-Trimethylbenzene	30.0000	31.4910	5.0	25.0
100	tert-Butylbenzene	30.0000	31.6084	5.4	25.0
101	1,2,4-Trimethylbenzene	30.0000	32.0773	6.9	25.0
102	sec-Butylbenzene	30.0000	31.8218	6.1	25.0
61	m-Dichlorobenzene	30.0000	30.6795	2.3	25.0
103	4-Isopropyltoluene	30.0000	30.9886	3.3	25.0
91	1,4-Dichlorobenzene-d4	10.0000	10.0000	0.0	25.0
62	p-dichlorobenzene	30.0000	31.4418	4.8	25.0
63	o-Dichlorobenzene	30.0000	30.8843	2.9	25.0
104	n-Butylbenzene	30.0000	32.2620	7.5	25.0
75	1,2-Dibromo-3-chloropropane	30.0000	33.9235	13.1	25.0
105	1,2,4-Trichlorobenzene	30.0000	32.5546	8.5	25.0
106	Hexachlorobutadiene	30.0000	30.7780	2.6	25.0
130	Naphthalene	30.0000	33.1659	10.6	25.0
108	1,2,3-Trichlorobenzene	30.0000	32.7138	9.0	25.0

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/050504i.b/c0311.d
Lab Smp Id: SSV_030/lcs Client Smp ID: SSV_030
Inj Date : 05-MAY-2004 16:32
Operator : meierg Inst ID: C.i
Smp Info : SSV_030/lcs
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/050504i.b/C-20ml-AQ.m
Meth Date : 06-May-2004 22:04 reinharj Quant Type: ISTD
Cal Date : 05-MAY-2004 19:57 Cal File: c0319.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICV.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
* 56 Fluorobenzene	96	4.107	4.107	(1.000)	1851111	10.0000		
* 81 Chlorobenzene-d5	119	7.563	7.564	(1.000)	298658	10.0000		
* 107 1,4-Dichlorobenzene-d4	152	9.721	9.721	(1.000)	357181	10.0000		(Q)
M 12 1,2-Dichloroethene (total)	96				3272700	62.2598	62.2598	
M 18 Xylene (total)	106				8226839	95.5629	95.5629	
1 dichlorodifluoromethane	85	0.834	0.836	(0.203)	1300397	27.4197	27.4197	(M)
3 Chloromethane	50	0.928	0.930	(0.226)	1600104	30.2584	30.2584	
4 Vinyl Chloride	62	0.952	0.966	(0.232)	1448728	32.3221	32.3221	
6 Bromomethane	94	1.104	1.107	(0.269)	488702	35.7387	35.7387	
7 Chloroethane	64	1.128	1.130	(0.275)	750699	28.9953	28.9953	
9 Trichlorofluoromethane	101	1.222	1.224	(0.298)	1737512	29.8140	29.8140	
17 1,1-Dichloroethene	96	1.469	1.459	(0.358)	1457021	31.0124	31.0124	
19 Acetone	43	1.527	1.530	(0.372)	358634	64.4308	64.4308	
26 Methylene Chloride	84	1.751	1.753	(0.426)	1250669	29.8475	29.8475	
29 trans-1,2-Dichloroethene	96	1.892	1.894	(0.461)	1725035	31.8251	31.8251	
32 1,1-Dichloroethane	63	2.209	2.211	(0.538)	3596613	32.4447	32.4447	(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
38 cis-1,2-Dichloroethene	96	2.717	2.717	(0.662)	1547665	30.4348	30.4348
39 2-Butanone	43	2.777	2.778	(0.676)	545442	63.3107	63.3107
37 2,2-Dichloropropane	77	2.687	2.687	(0.654)	2378947	31.6828	31.6828(M)
42 Bromochloromethane	128	2.952	2.953	(0.719)	446978	32.2594	32.2594
45 Chloroform	83	3.055	3.056	(0.744)	2584945	31.1527	31.1527
47 1,1,1-Trichloroethane	97	3.188	3.189	(0.776)	2592556	30.9639	30.9639
50 1,1-Dichloropropene	75	3.394	3.394	(0.826)	2613087	30.9366	30.9366
49 Carbon Tetrachloride	117	3.333	3.334	(0.812)	2247882	31.0003	31.0003
51 Benzene	78	3.641	3.642	(0.887)	6996763	31.7306	31.7306(M)
54 1,2-Dichloroethane	62	3.786	3.787	(0.922)	1563327	31.1915	31.1915
57 Trichloroethene	130	4.608	4.609	(1.122)	1529351	31.8845	31.8845
60 1,2-Dichloropropane	63	4.947	4.947	(1.205)	1587597	31.4002	31.4002
62 Dibromomethane	93	5.086	5.086	(1.238)	448734	31.0835	31.0835
65 Bromodichloromethane	83	5.315	5.316	(1.294)	1565739	32.4208	32.4208
68 cis-1,3-Dichloropropene	75	5.865	5.866	(0.775)	1905910	33.8908	33.8908
70 4-Methyl-2-pentanone	43	6.089	6.089	(0.805)	1155573	60.2756	60.2756
71 Toluene	91	6.149	6.156	(0.813)	7170306	31.8110	31.8110
72 trans-1,3-Dichloropropene	75	6.518	6.518	(0.862)	1370803	34.6413	34.6413
74 1,1,2-Trichloroethane	97	6.687	6.688	(0.884)	625936	30.3728	30.3728
76 1,3-Dichloropropane	76	6.844	6.845	(0.905)	1268373	32.0322	32.0322
75 Tetrachloroethene	164	6.687	6.688	(0.884)	1111501	31.1983	31.1983
78 2-Hexanone	43	6.983	6.984	(0.923)	755669	64.9579	64.9579
79 Dibromochloromethane	129	7.019	7.020	(0.928)	702239	33.1123	33.1123
80 1,2-Dibromoethane	107	7.104	7.105	(0.939)	536171	31.9222	31.9222
83 1-Chlorohexane	91	7.630	7.630	(1.009)	2427570	31.1653	31.1653
82 Chlorobenzene	112	7.587	7.588	(1.003)	3498885	31.1185	31.1185
84 1,1,1,2-Tetrachloroethane	131	7.702	7.703	(1.018)	968711	31.7260	31.7260
85 Ethylbenzene	106	7.708	7.709	(1.019)	2283408	31.3449	31.3449
86 m and p-Xylene	106	7.829	7.830	(1.035)	5719088	64.0753	64.0753(Q)
87 o-Xylene	106	8.192	8.192	(1.083)	2507751	31.4876	31.4876
88 Styrene	104	8.222	8.223	(1.087)	4015688	33.2412	33.2412
89 Bromoform	173	8.367	8.368	(1.106)	294287	35.0936	35.0936
90 isopropyl benzene	105	8.542	8.543	(1.129)	7263759	31.6213	31.6213
95 1,1,2,2-Tetrachloroethane	83	8.899	8.899	(1.177)	541651	30.7606	30.7606
94 Bromobenzene	156	8.790	8.791	(0.904)	980262	30.8594	30.8594
96 1,2,3-Trichloropropane	110	8.917	8.917	(0.917)	151084	29.3383	29.3383
97 n-Propylbenzene	120	8.917	8.917	(0.917)	1695567	30.8313	30.8312(Q)
99 2-Chlorotoluene	126	8.977	8.984	(0.924)	1385963	33.6779	33.6779
101 1,3,5-Trimethylbenzene	105	9.098	9.099	(0.936)	5666146	31.4910	31.4910
100 4-Chlorotoluene	126	9.092	9.093	(0.935)	1205391	30.1270	30.1270
102 tert-Butylbenzene	119	9.364	9.365	(0.963)	4425410	31.6084	31.6084
103 1,2,4-Trimethylbenzene	105	9.424	9.425	(0.970)	5450575	32.0773	32.0773
104 sec-Butylbenzene	134	9.569	9.570	(0.984)	1329472	31.8218	31.8218(Q)
105 m-Dichlorobenzene	146	9.648	9.649	(0.993)	2061773	30.6795	30.6795
106 4-Isopropyltoluene	119	9.715	9.715	(0.999)	5450484	30.9886	30.9886
108 p-dichlorobenzene	146	9.745	9.745	(1.002)	1994413	31.4418	31.4418
111 n-Butylbenzene	91	10.071	10.072	(1.036)	6056325	32.2620	32.2620

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
110	o-Dichlorobenzene	146	10.059	10.060	(1.035)	1567259	30.8843	30.8843
112	1,2-Dibromo-3-chloropropane	157	10.772	10.773	(1.108)	63935	33.9235	33.9235
113	1,2,4-Trichlorobenzene	180	11.431	11.431	(1.176)	958857	32.5546	32.5546
114	Hexachlorobutadiene	225	11.540	11.540	(1.187)	673578	30.7780	30.7780
115	Naphthalene	128	11.594	11.594	(1.193)	1420551	33.1659	33.1659
116	1,2,3-Trichlorobenzene	180	11.757	11.758	(1.210)	740703	32.7138	32.7138

QC Flag Legend

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

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0311.d
Lab Smp Id: SSV_030/lcs
Analysis Type: VOA
Quant Type: ISTD
Operator: meierg
Method File: /chem/C.i/050504i.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/05/4
Calibration Time: 1912
Client Smp ID: SSV_030
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1808046	904023	3616092	1851111	2.38
81 Chlorobenzene-d5	285569	142784	571138	298658	4.58
107 1,4-Dichlorobenze	333646	166823	667292	357181	7.05

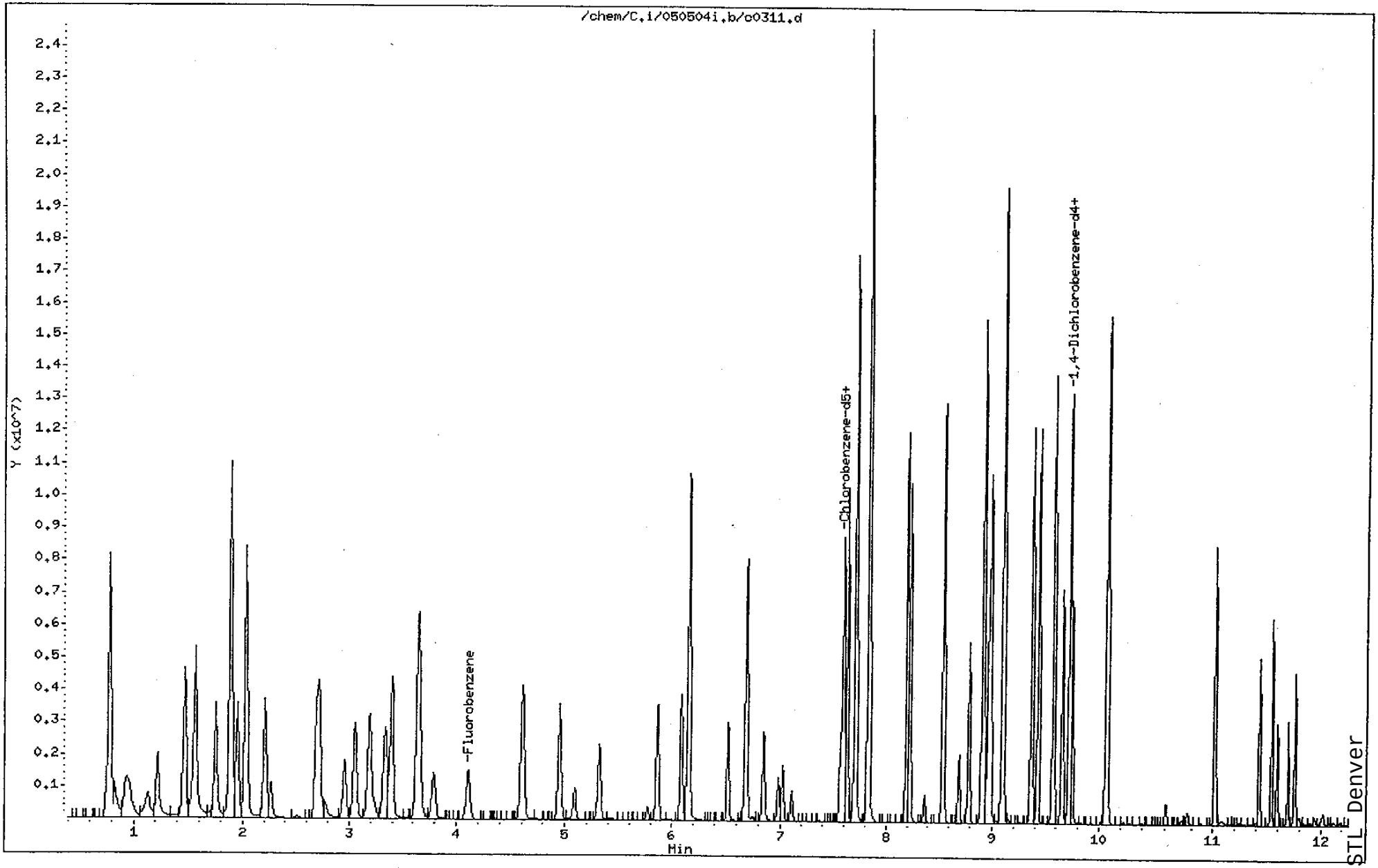
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.02
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.01
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.01

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

Data File: /chem/C.i/050504i.b/c0311.d
Date : 05-MAY-2004 16:32
Client ID: SSV_030
Sample Info: SSV_030/los
Purge Volume: 20.0
Column phase: DB624

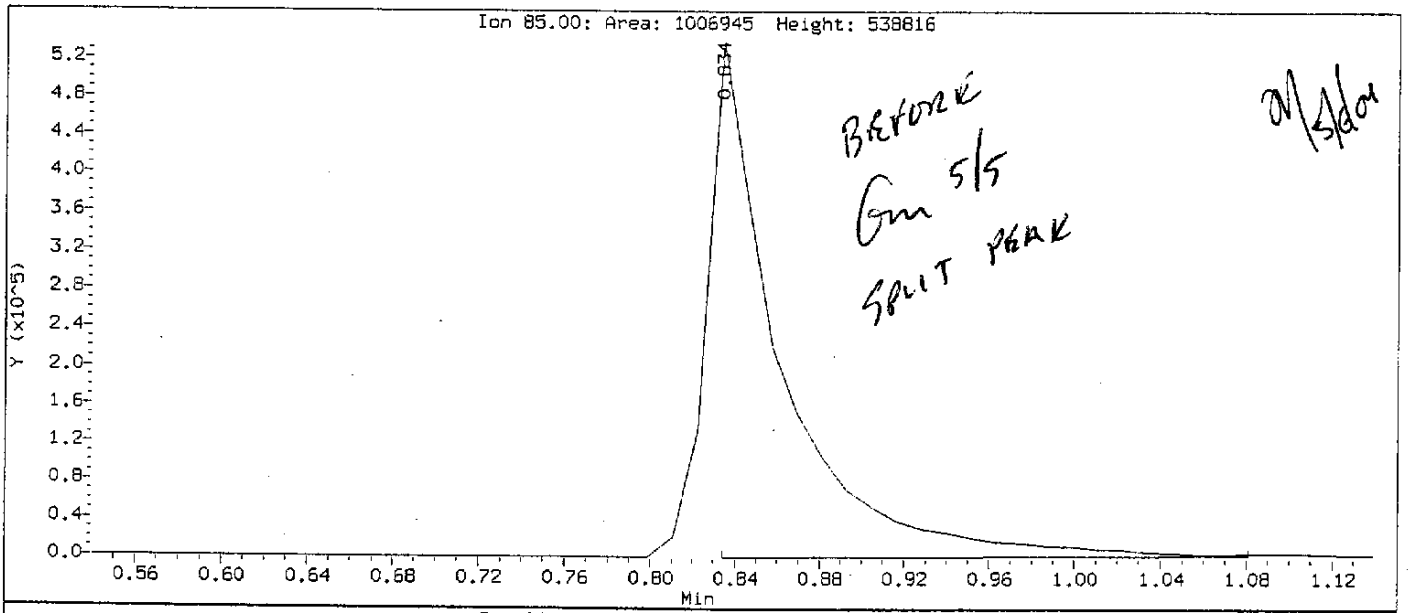
Instrument: C.i

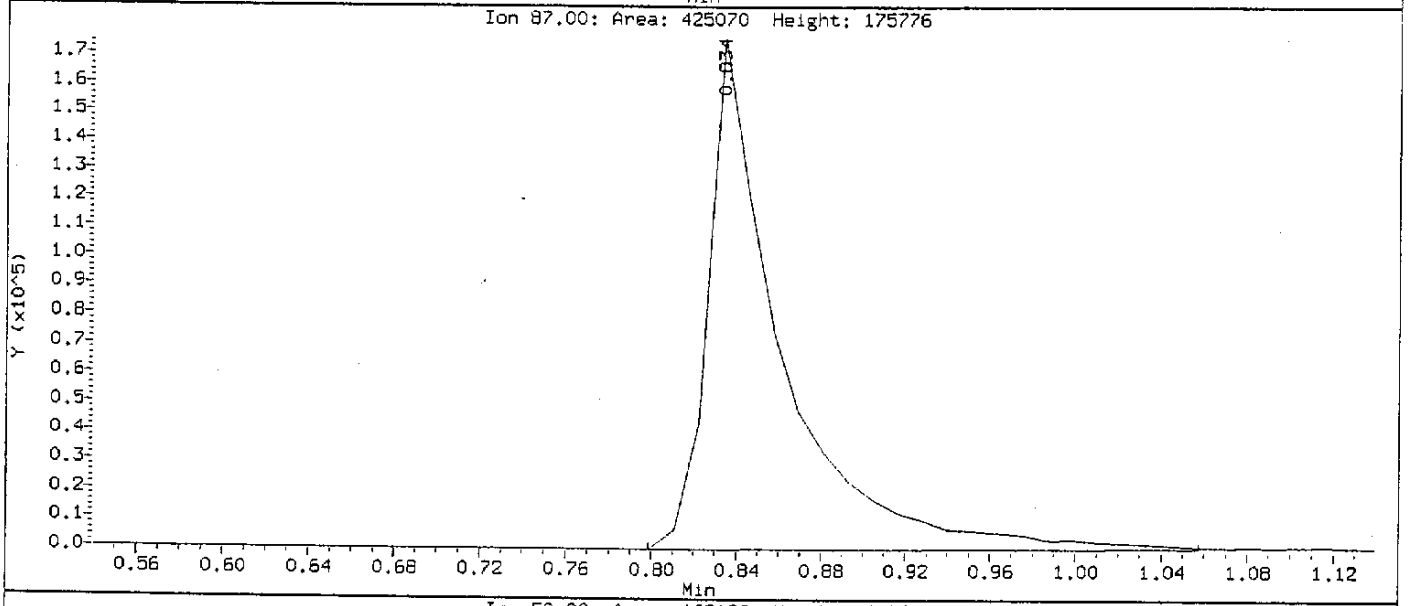
Operator: meierg
Column diameter: 0.53

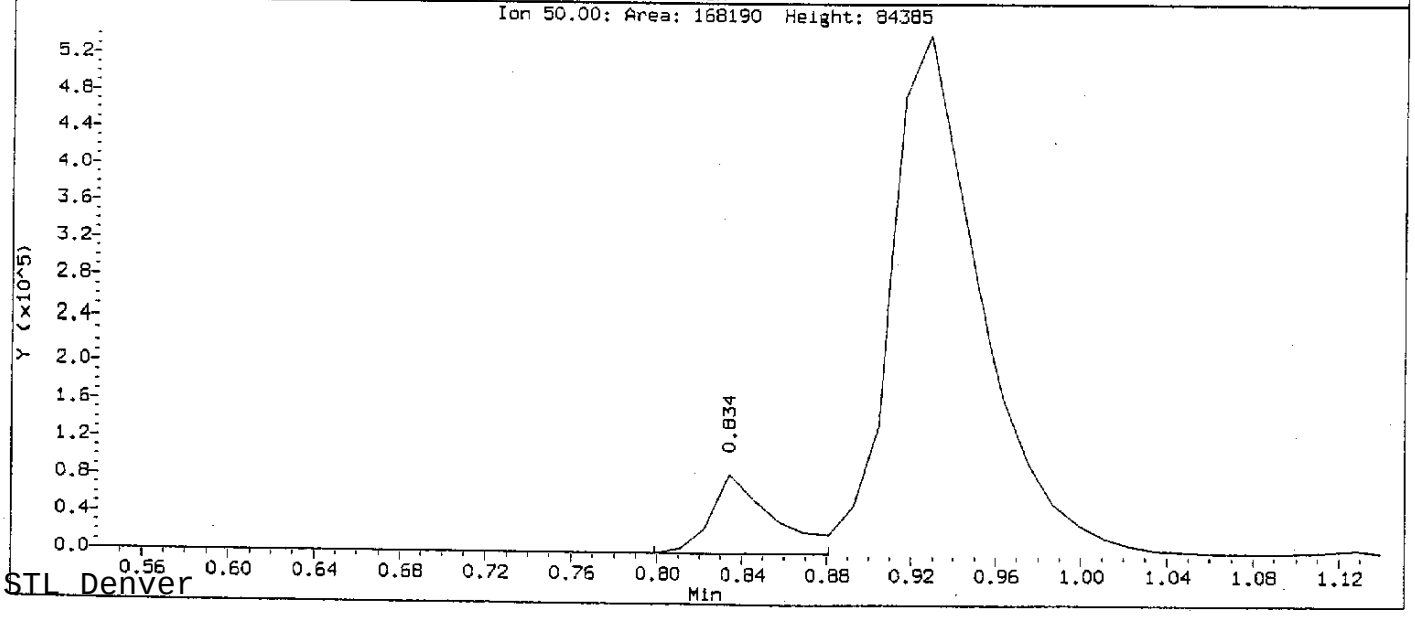


Data File: /chem/C.i/050504i.b/c0311.d
Injection Date: 05-MAY-2004 16:32
Instrument: C.i
Client Sample ID: SSV_030

Compound: dichlorodifluoromethane
CAS Number: 75-71-8

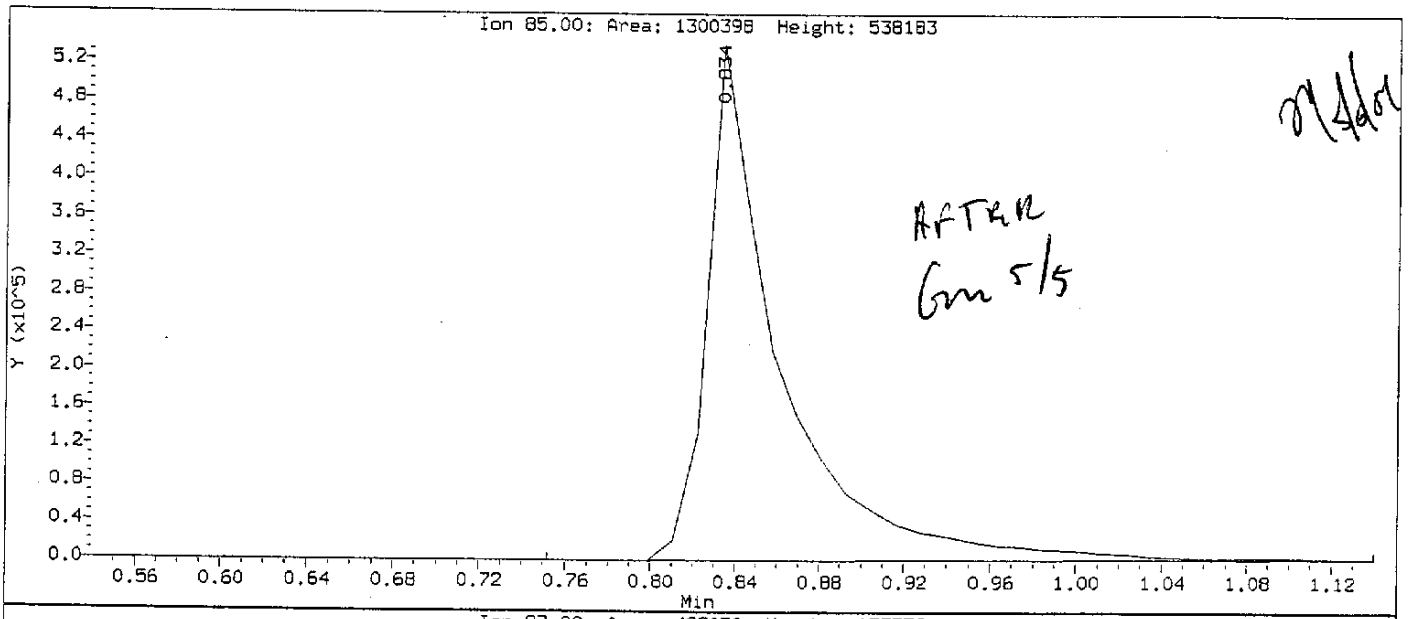


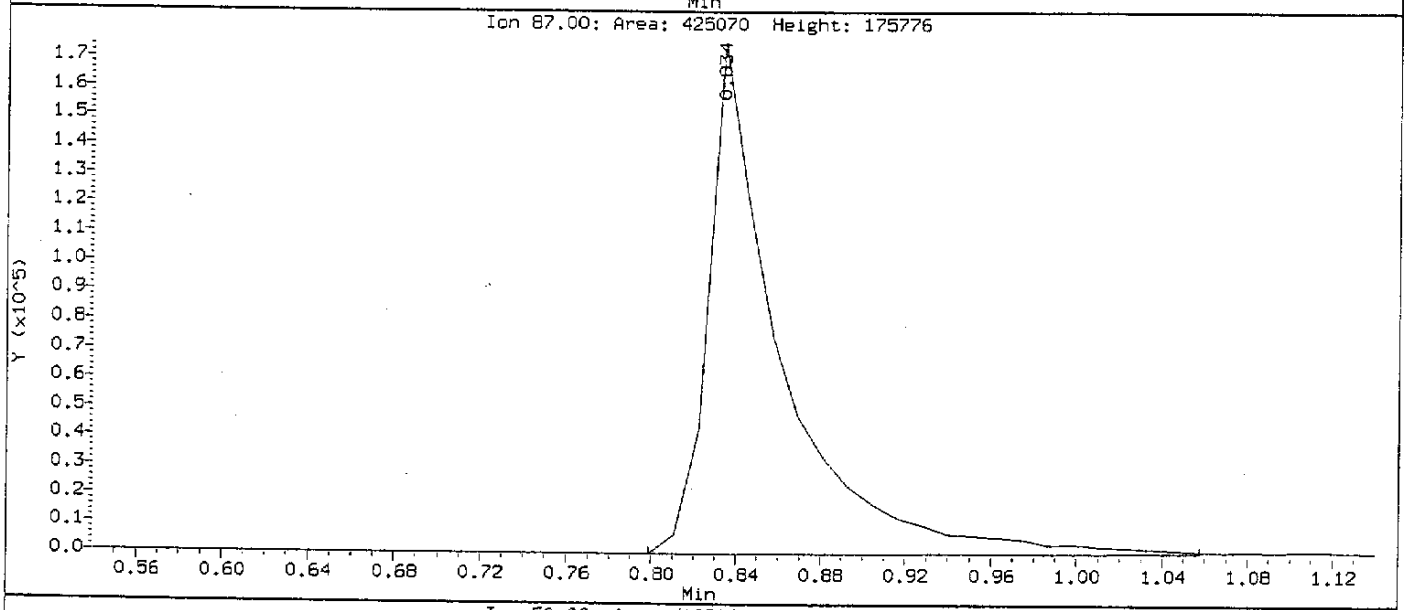


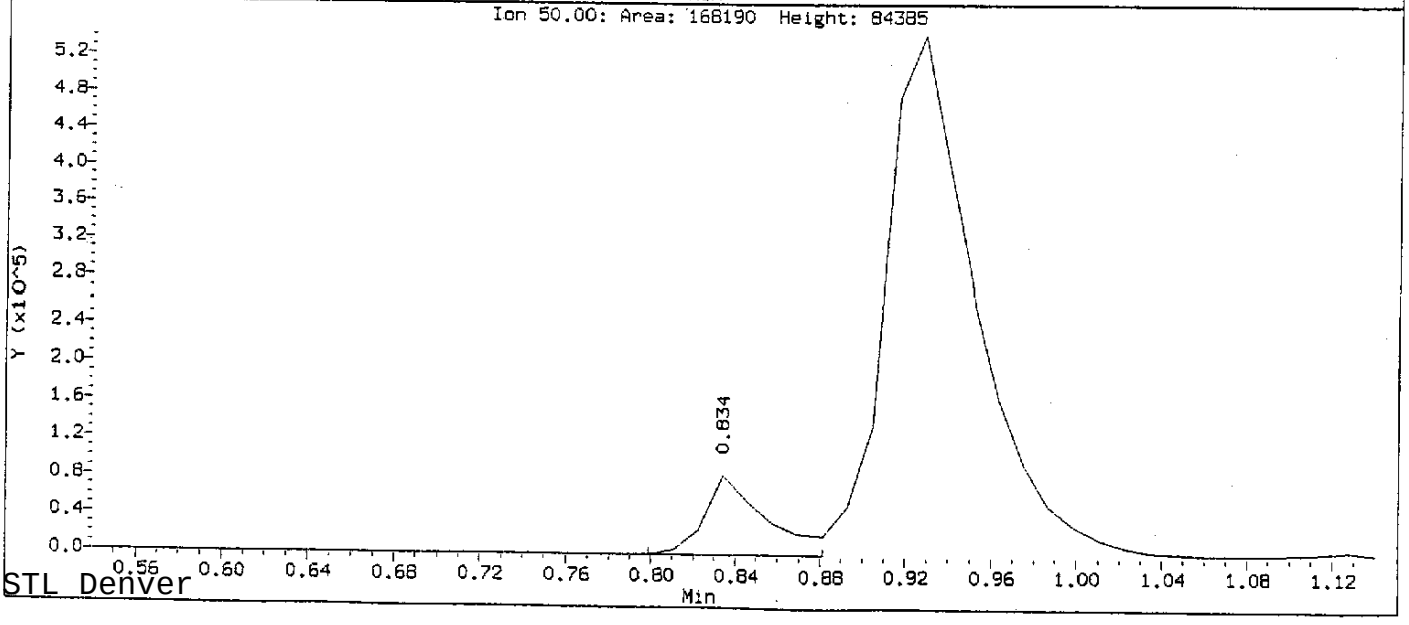


Data File: /chem/C.i/050504i.b/c0311.d
Injection Date: 05-MAY-2004 16:32
Instrument: C.i
Client Sample ID: SSV_030

Compound: dichlorodifluoromethane
CAS Number: 75-71-8

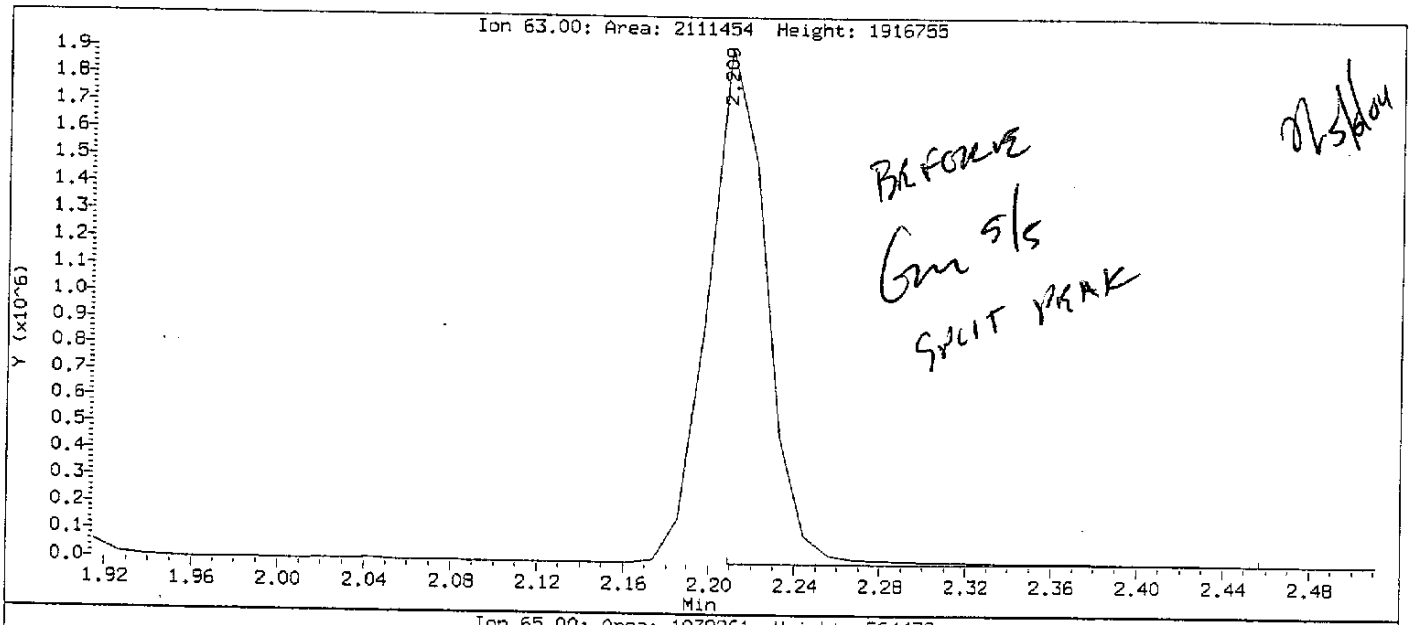






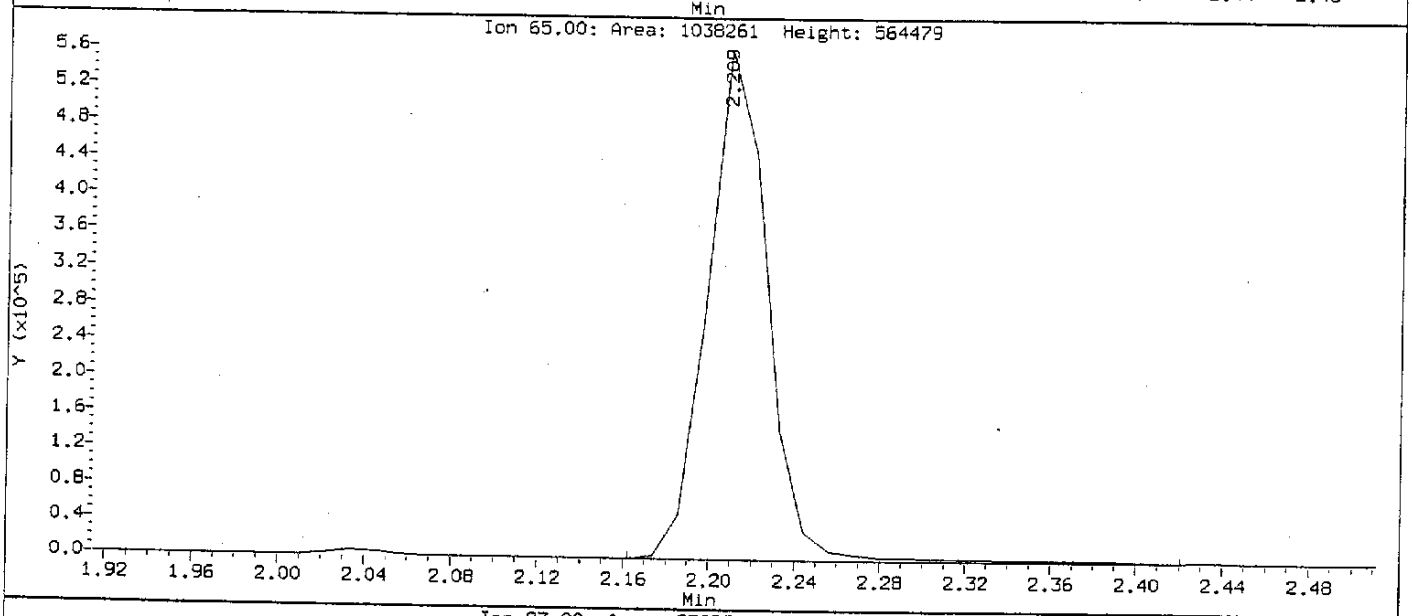
Data File: /chem/C.i/050504i.b/c0311.d
Injection Date: 05-MAY-2004 16:32
Instrument: C.i
Client Sample ID: SSV_030

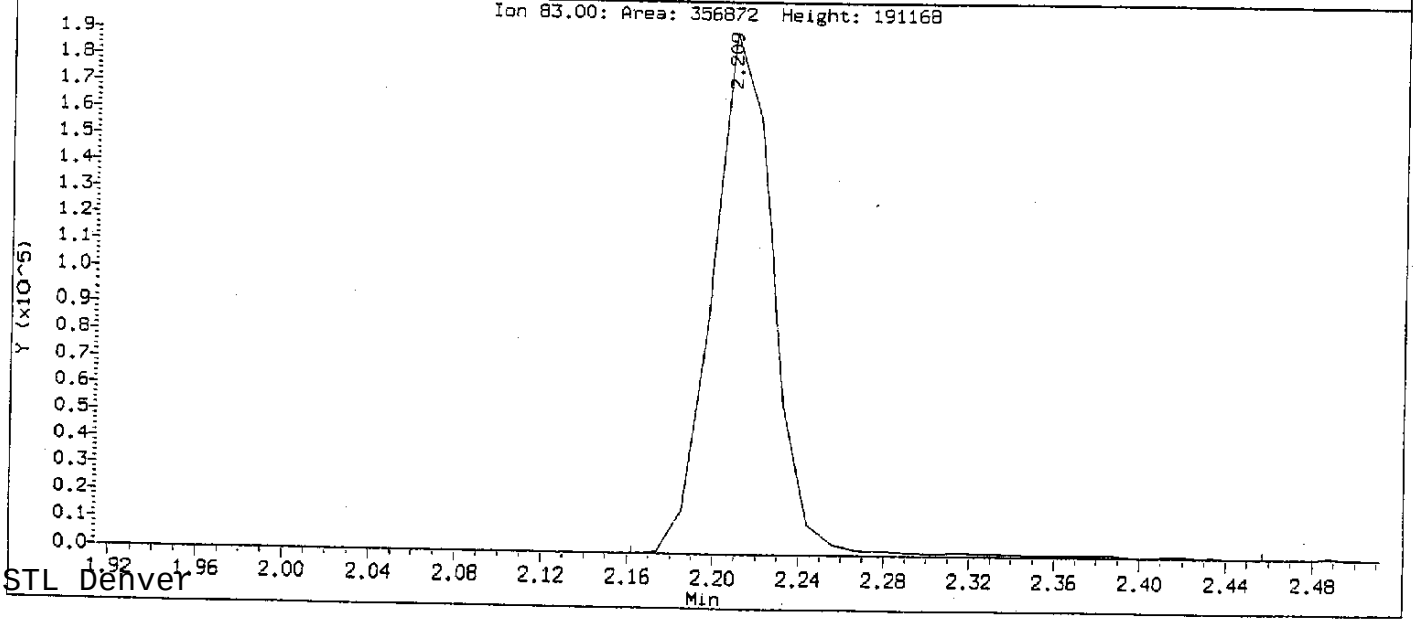
Compound: 1,1-Dichloroethane
CAS Number: 75-34-3



BEFORE
GM 5/5
SPLIT PEAK

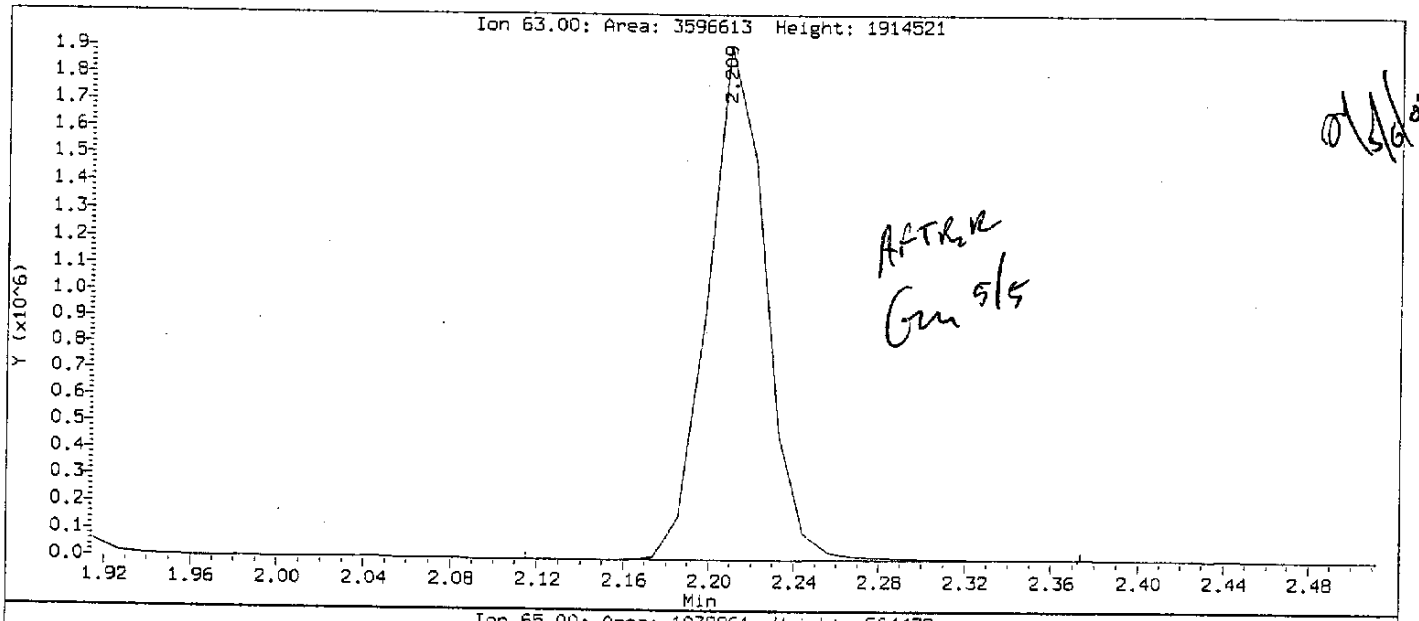
5/5/04





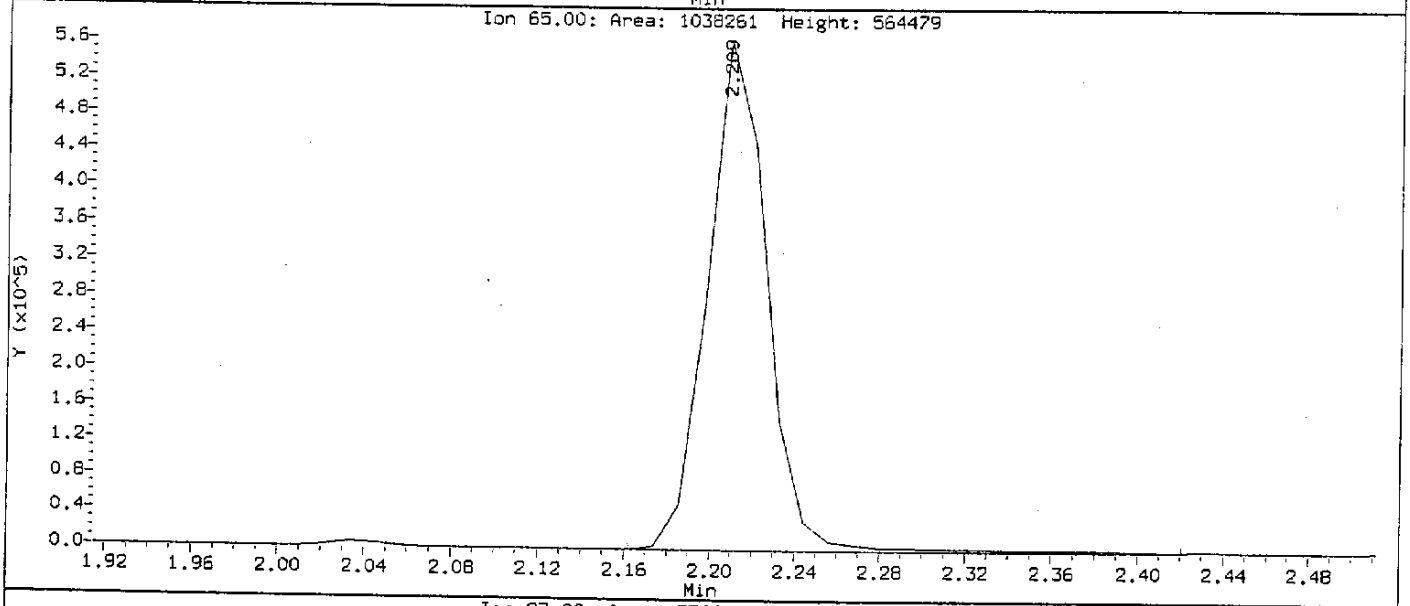
Data File: /chem/C.i/0505041.b/c0311.d
Injection Date: 05-MAY-2004 16:32
Instrument: C.i
Client Sample ID: SSV_030

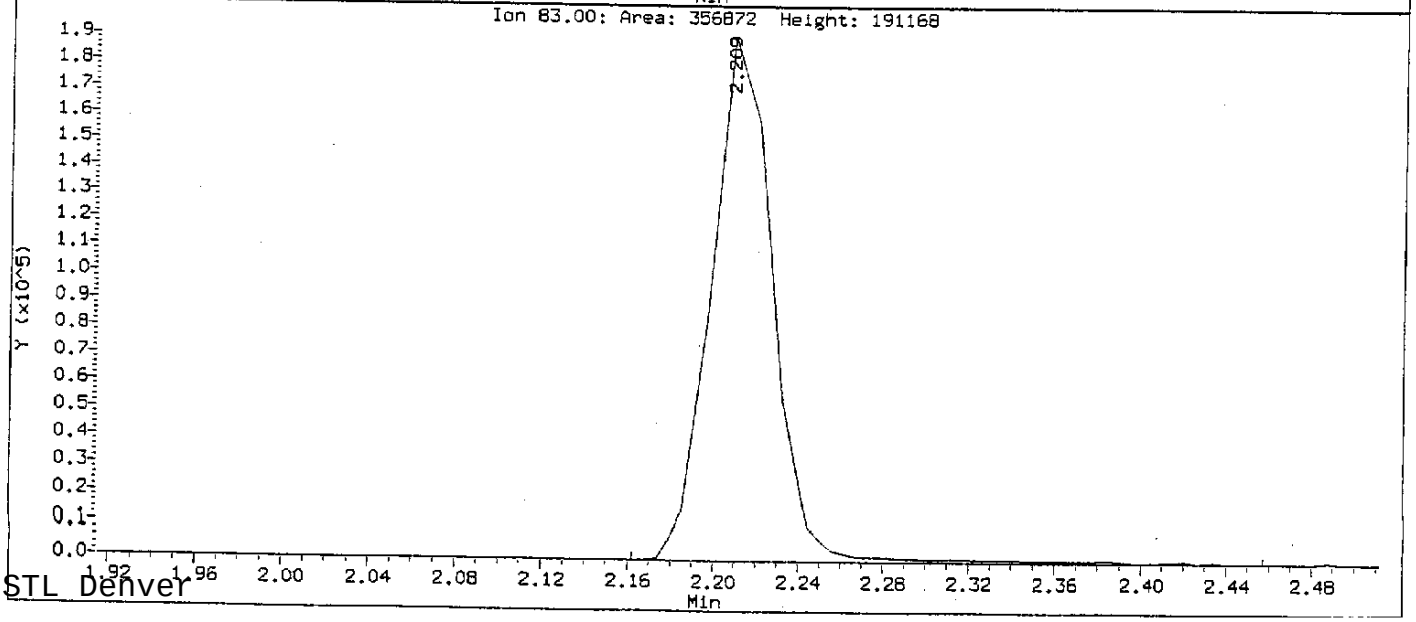
Compound: 1,1-Dichloroethane
CAS Number: 75-34-3



01/6/04

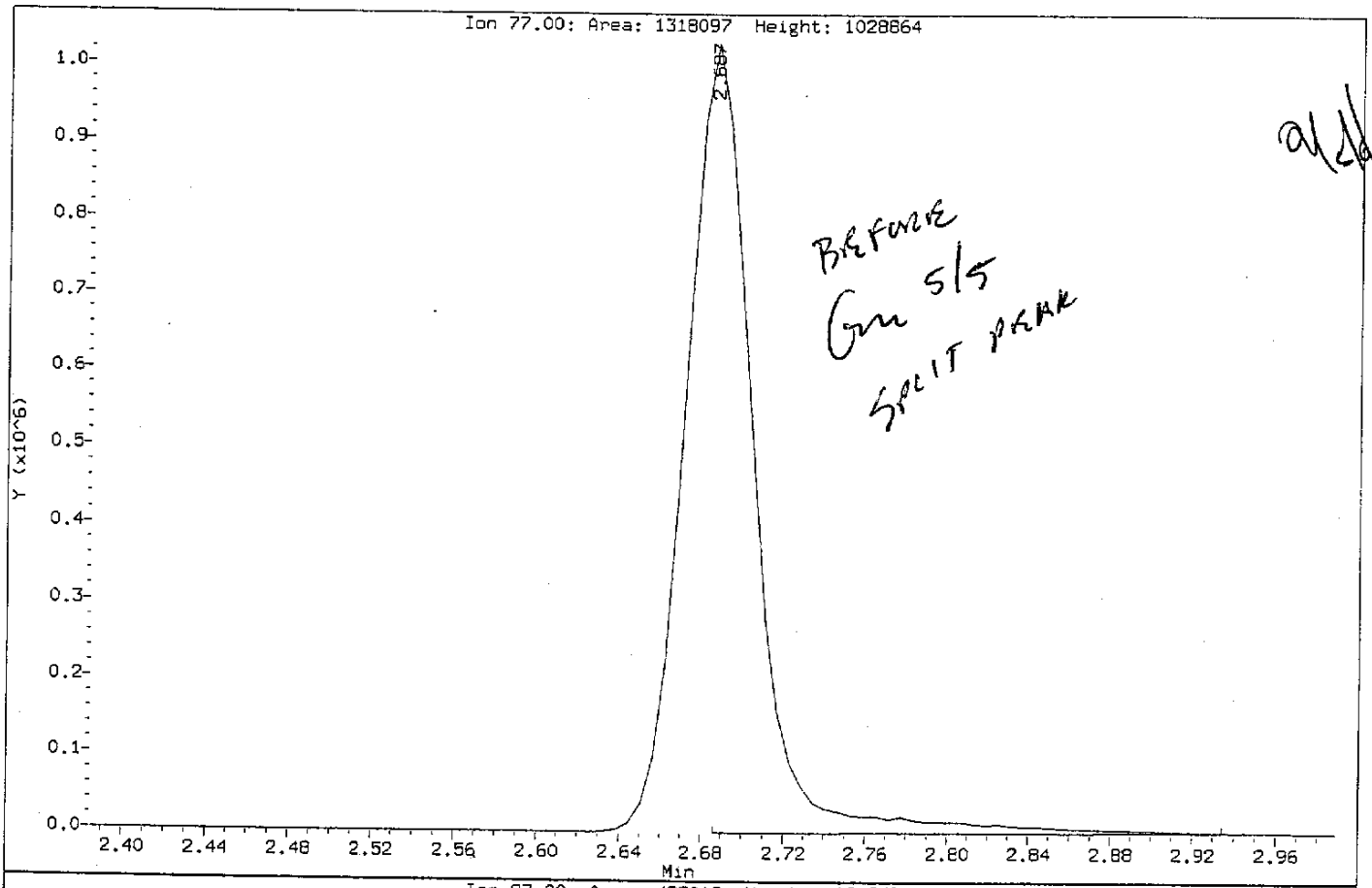
AFTER
Gm 5/5

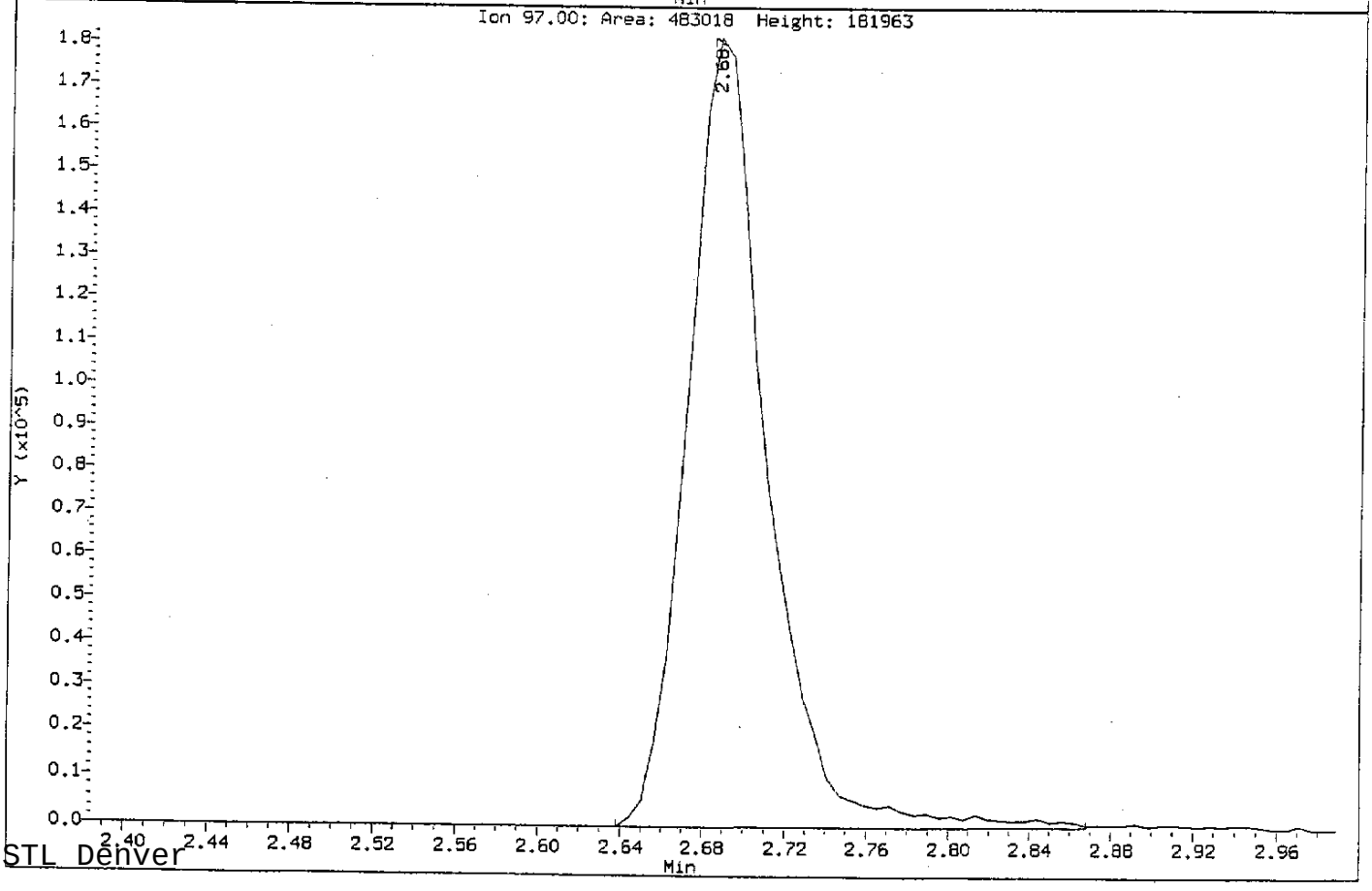




Data File: /chem/C.i/050504i.b/c0311.d
Injection Date: 05-MAY-2004 16:32
Instrument: C.i
Client Sample ID: SSV_030

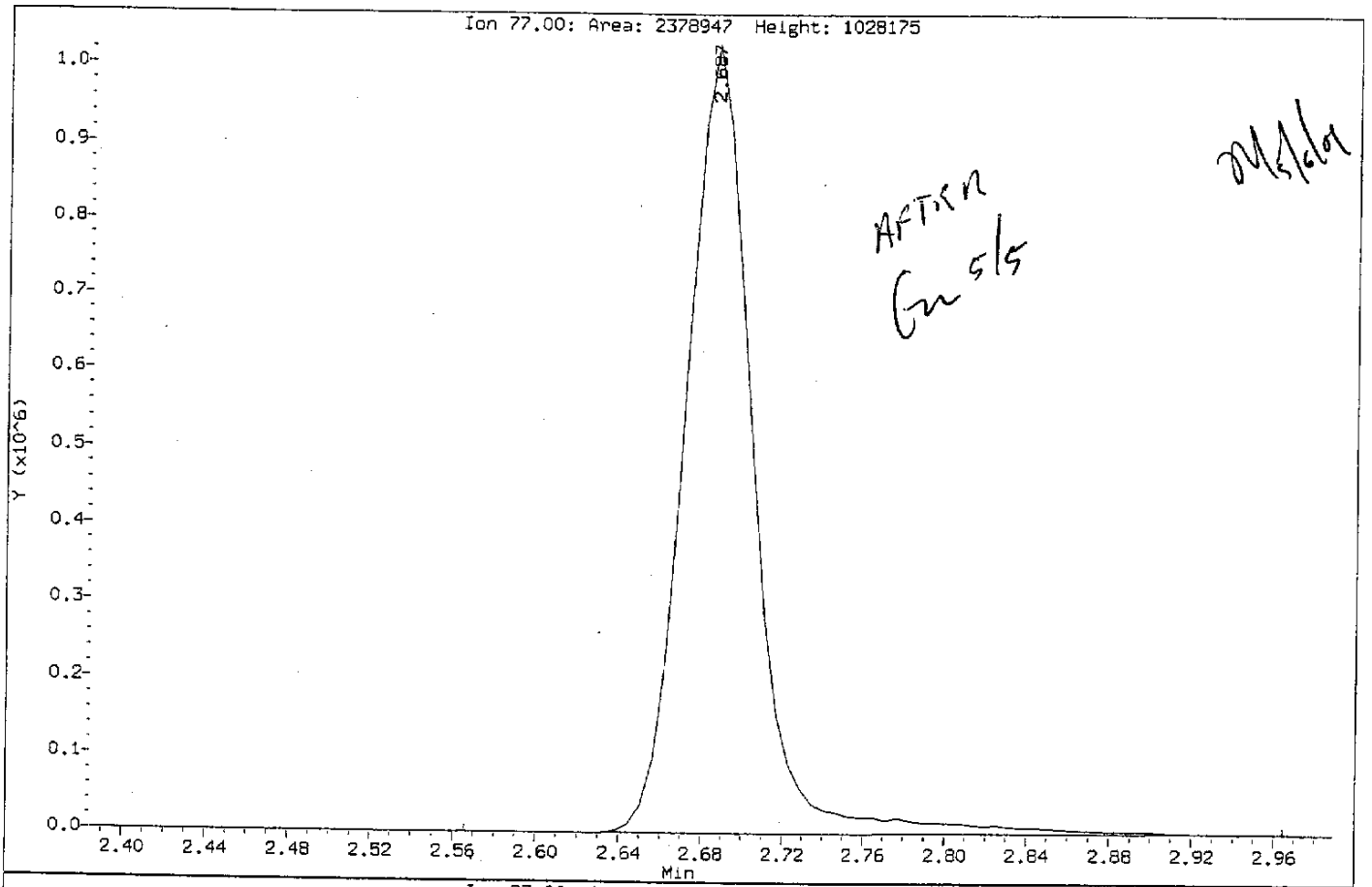
Compound: 2,2-Dichloropropane
CAS Number: 594-20-7



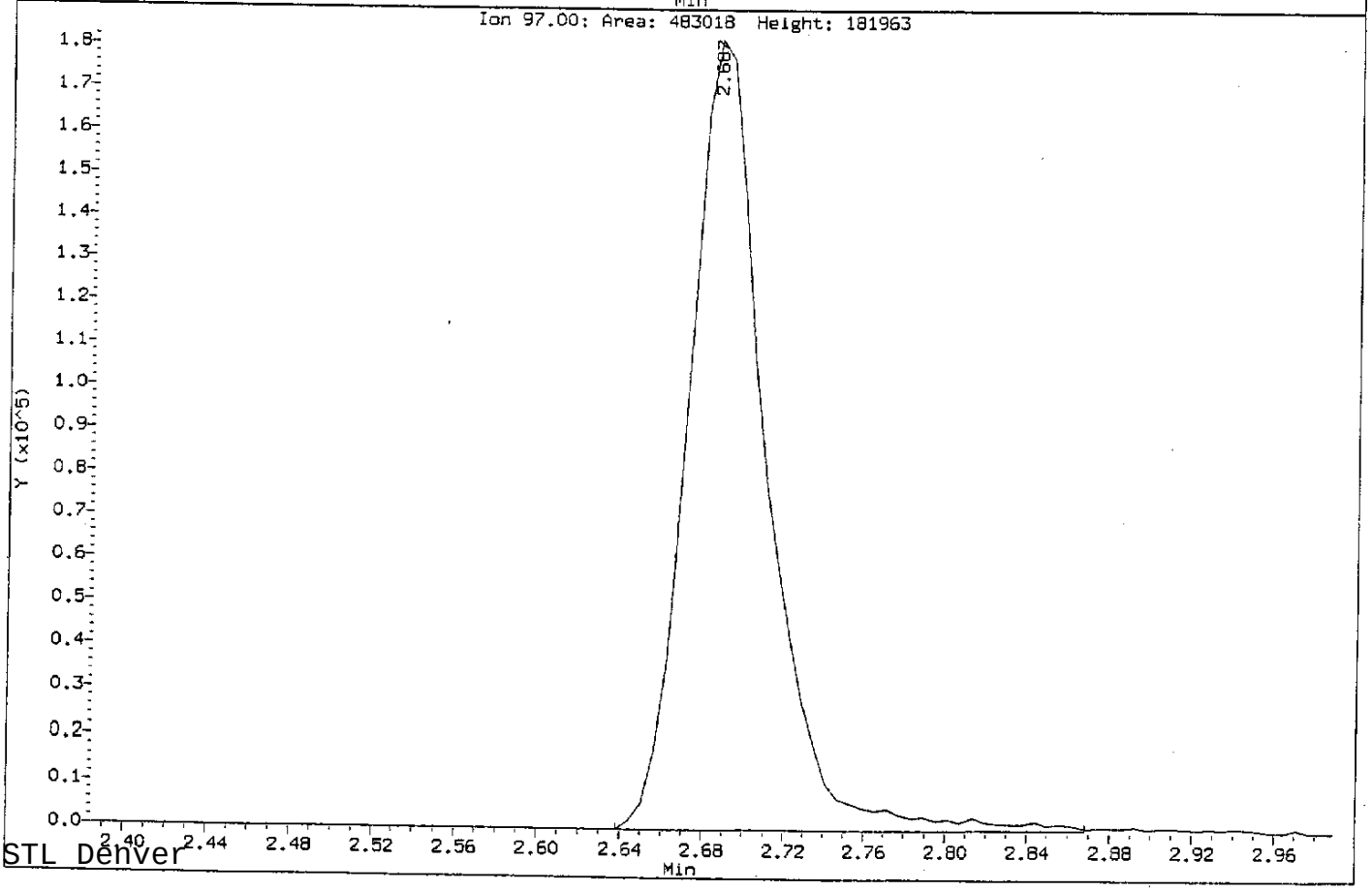


Data File: /chem/C.i/0505041.b/c0311.d
Injection Date: 05-MAY-2004 16:32
Instrument: C.i
Client Sample ID: SSV_030

Compound: 2,2-Dichloropropane
CAS Number: 594-20-7

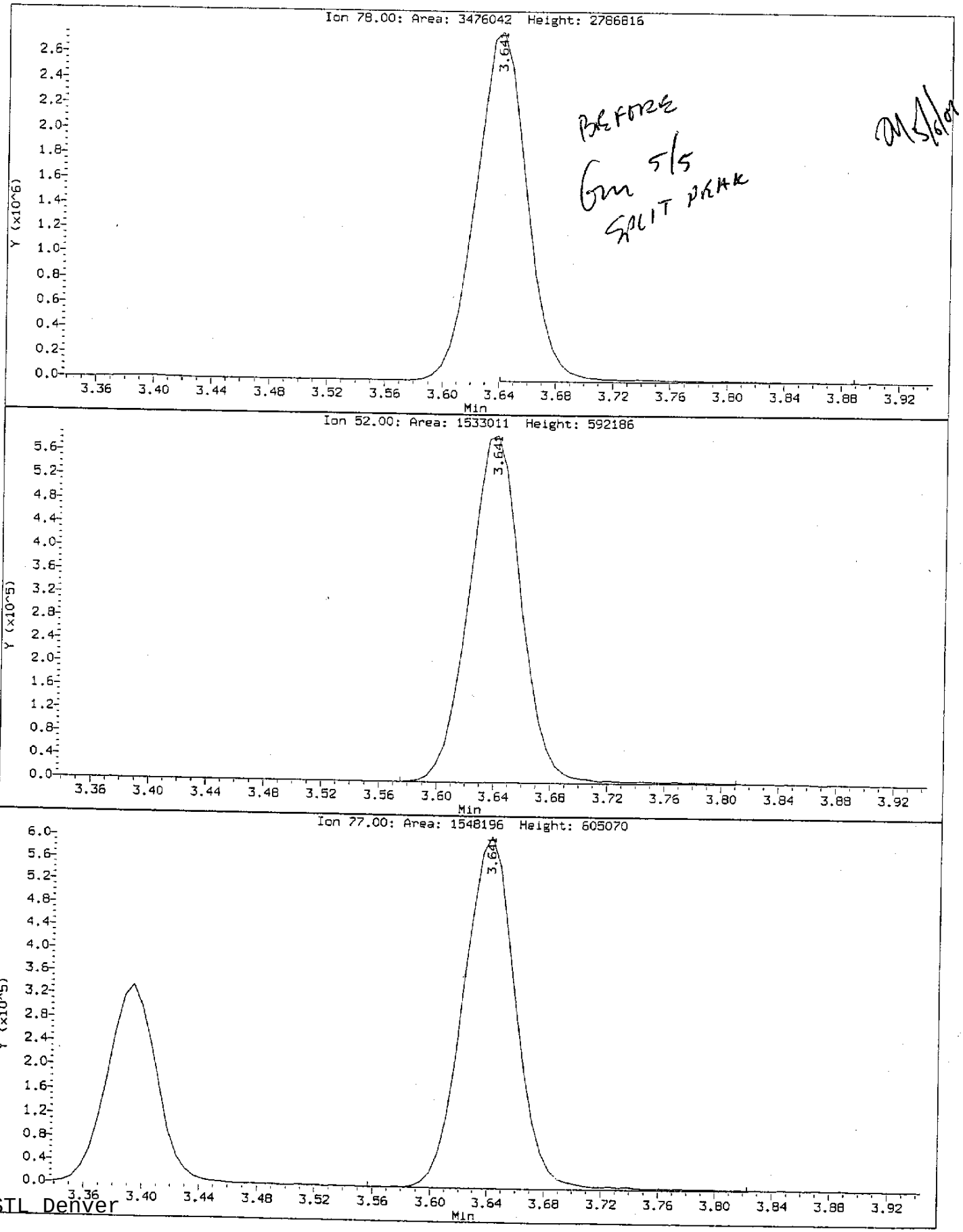


AFTER
Cn 5/5
5/5/04



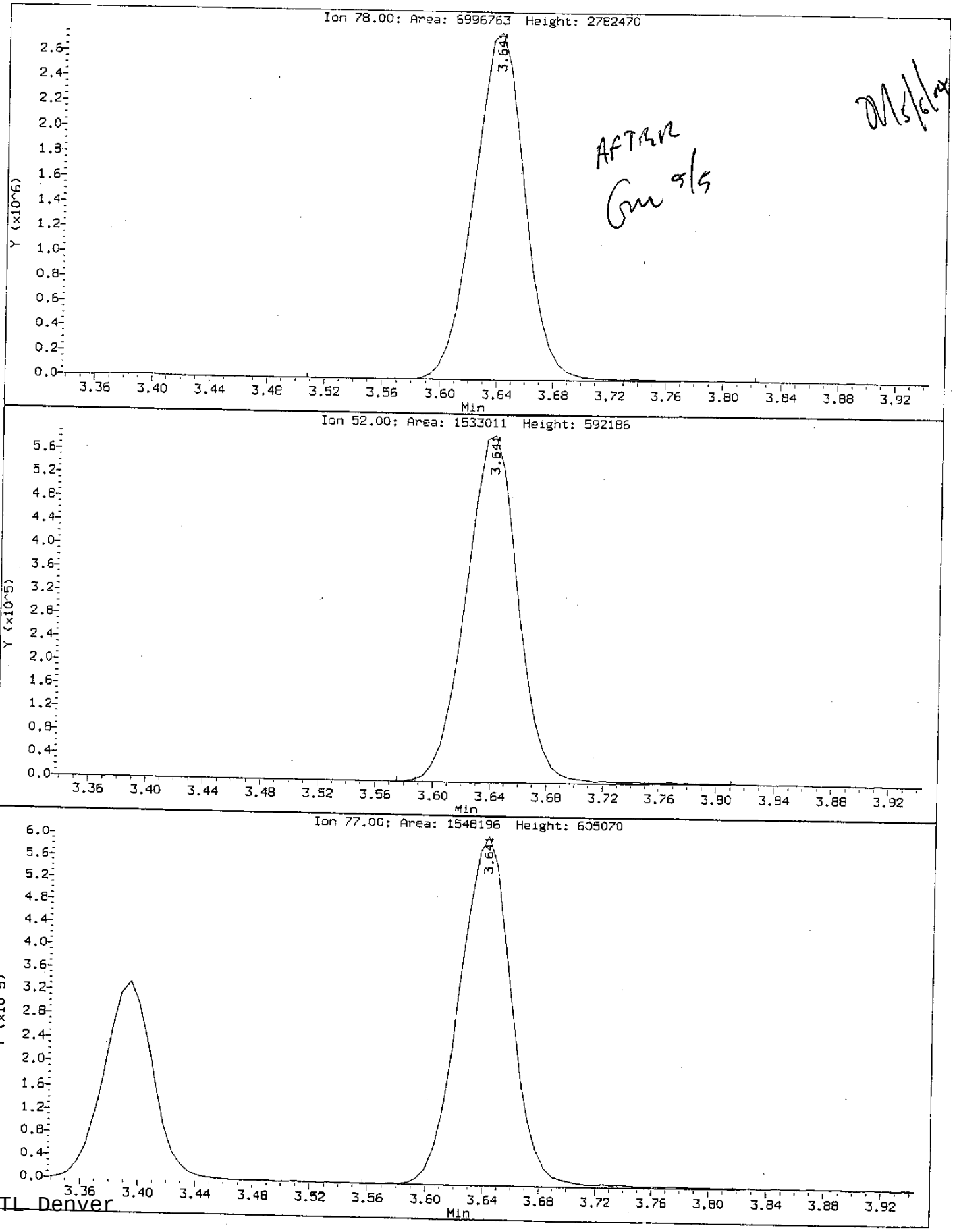
Data File: /chem/C.i/050504i.b/c0311.d
Injection Date: 05-MAY-2004 16:32
Instrument: C.i
Client Sample ID: SSV_030

Compound: Benzene
CAS Number: 71-43-2



Data File: /chem/C.i/050504i.b/c0311.d
Injection Date: 05-MAY-2004 16:32
Instrument: C.i
Client Sample ID: SSV_030

Compound: Benzene
CAS Number: 71-43-2



GC/MS Initial Calibration Review Checklist

STL Denver

Instrument ID and Date: C Supp 5/10/04

Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____

☐ 524.2 ☐ 624 ☑ 8260B ☐ Other VOA _____

VOA Preparation ☐ 5mL ☑ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Initial Calibration					
1. BFB/DFTPP meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Sufficient number of calibration points used?	✓			✓	
4. Reasons for removal of points documented?	✓			✓	
5. %RSD or correlation coefficient within method limits?	✓			✓	*
6. If RRF used for ICAL, were all compounds within 15% RSD?			✓	NA	List all exceptions below (cpd & RSD)
7. Response factors meet criteria?	✓			✓	
8. Isomeric pairs checked for correct peak assignment?	✓			✓	
9. Data checked for detector saturation?	✓			✓	
10. Standards traceability properly documented?	✓			✓	
11. Manual integrations documented and checked?	✓			✓	
12. 2nd source ICV recovery 75-125% for DoD projects, 65-135% (±55% of expected for poor performers) for non-DoD?			✓	NA	

High pt ETBE = 150
Some pts < RL REMOVED

1st Level Reviewer: [signature] Date: 5/10/04

2nd Level Reviewer: [signature] Date: 5-11-04

Report Date: 10-May-2004 22:46

Calibration History

Method : /chem/C.i/051004.b/C-20ml-AQ.m
Start Cal Date: 02-MAR-2004 00:09
End Cal Date : 10-MAY-2004 20:33

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
10-MAY-2004 18:45	2-supp	/chem/C.i/051004.b/c0453.d
05-MAY-2004 13:47	1-main	/chem/C.i/050504i.b/c0304.d
Cal Level: 2 , Cal Amount: 2.00000		
10-MAY-2004 19:07	2-supp	/chem/C.i/051004.b/c0454.d
05-MAY-2004 14:11	1-main	/chem/C.i/050504i.b/c0305.d
Cal Level: 3 , Cal Amount: 5.00000		
10-MAY-2004 19:29	2-supp	/chem/C.i/051004.b/c0455.d
05-MAY-2004 14:35	1-main	/chem/C.i/050504i.b/c0306.d
Cal Level: 4 , Cal Amount: 10.0000		
10-MAY-2004 19:50	2-supp	/chem/C.i/051004.b/c0456.d
05-MAY-2004 14:59	1-main	/chem/C.i/050504i.b/c0307.d
Cal Level: 5 , Cal Amount: 30.0000		
10-MAY-2004 20:11	2-supp	/chem/C.i/051004.b/c0457.d
05-MAY-2004 15:23	1-main	/chem/C.i/050504i.b/c0308.d
Cal Level: 6 , Cal Amount: 60.0000		
10-MAY-2004 20:33	2-supp	/chem/C.i/051004.b/c0458.d
05-MAY-2004 15:46	1-main	/chem/C.i/050504i.b/c0309.d

Continuing Calibration

10-MAY-2004 19:50	2-supp	/chem/C.i/051004.b/c0456.d
10-MAY-2004 18:23	1-main	/chem/C.i/051004.b/c0452.d

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 10-MAY-2004 20:33
Quant Method : ISTD
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/051004.b/C-20ml-AQ.m
Cal Date : 10-May-2004 21:32 reinharj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	30 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
23 Allyl Chloride	0.76785	0.74396	0.68083	0.65045	0.66163	0.68393	AVRG		0.69811		6.73930
22 2-Propanol	0.00667	0.00635	0.00547	0.00536	0.00529	0.00519	AVRG		0.00572		10.96636
28 Methyl t-butyl ether	0.41470	0.41856	0.37751	0.36113	0.36795	0.35811	AVRG		0.38300		7.02861
31 Hexane	5.96681	5.91297	5.10944	4.83367	4.85367	5.12178	AVRG		5.29972		9.64016
35 Vinyl acetate	+++++	0.22314	0.20376	0.19581	0.17460	0.20444	AVRG		0.20035		8.75623
36 ETBE	0.88364	0.90316	0.82045	0.80684	0.83936	+++++	AVRG		0.85069		4.84846
40 Ethyl Acetate	0.11302	0.10861	0.09251	0.08709	0.09017	0.08817	AVRG		0.09660		11.64866
43 Tetrahydrofuran	+++++	0.03109	0.02609	0.02584	0.02612	0.02533	AVRG		0.02689		8.80332
46 Cyclohexane	0.94794	0.93312	0.81074	0.77553	0.77658	0.80111	AVRG		0.84084		9.34409
55 TAME	0.44051	0.44866	0.40845	0.40364	0.42377	0.40926	AVRG		0.42238		4.41466
61 2-Pentanone	0.39552	0.43815	0.40111	0.40255	0.43522	0.43374	AVRG		0.41772		4.76297
58 Methyl Cyclohexane	0.79494	0.80510	0.70068	0.66515	0.67145	0.68395	AVRG		0.72021		8.75845
64 Methyl Methacrylate	0.02111	0.02295	0.02225	0.02248	0.02415	0.02359	AVRG		0.02275		4.70116
66 2-nitropropane	+++++	0.08993	0.09368	0.09347	0.10508	0.11373	AVRG		0.09918		10.01907
67 2-Chloroethyl vinyl ether	1214	3277	9350	24413	122259	356487	QUAD	0.16479	7.58220	-2.33963	0.99840
73 Ethyl methacrylate	0.68972	0.77911	0.76495	0.77816	0.86326	0.85275	AVRG		0.78799		8.07075
77 Tetrahydrothiophene	0.26530	0.27164	0.27775	0.28598	0.32856	0.32893	AVRG		0.29303		9.72622

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 10-MAY-2004 20:33
Quant Method : ISTD
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/051004.b/C-20ml-AQ.m
Cal Date : 10-May-2004 21:32 reinharj

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	30 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
92 cis-1,4-dichloro-2-butene	0.12309	0.11294	0.10217	0.10681	0.12007	0.12661	AVRG		0.11528		8.33322
98 t-1,4-Dichloro-2-butene	0.12612	0.12902	0.11069	0.10731	0.12536	0.12894	AVRG		0.12124		7.96407
109 1,2,3-Trimethylbenzene	4.46222	4.46160	3.95926	3.84987	4.13287	4.23051	AVRG		4.18272		6.06135
$ 48 Dibromofluoromethane	0.22421	0.22071	0.20857	0.20151	0.20530	+++++	AVRG		0.21206		4.66727
$ 52 1,2-Dichloroethane-d4	0.23695	0.23890	0.22324	0.21810	0.21698	+++++	AVRG		0.22683		4.59290
$ 69 Toluene-d8	6.09920	6.13077	5.53320	5.32046	5.45798	+++++	AVRG		5.70832		6.64212
$ 93 Bromofluorobenzene	1.87554	1.83786	1.66841	1.57803	1.64487	+++++	AVRG		1.72094		7.49467

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

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 10-MAY-2004 20:33
Quant Method : ISTD
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/051004.b/C-20ml-AQ.m
Cal Date : 10-May-2004 21:32 reinharj

Calibration File Names:
Level 1: /chem/C.i/051004.b/c0453.d
Level 2: /chem/C.i/051004.b/c0454.d
Level 3: /chem/C.i/051004.b/c0455.d
Level 4: /chem/C.i/051004.b/c0456.d
Level 5: /chem/C.i/051004.b/c0457.d
Level 6: /chem/C.i/051004.b/c0458.d

Compound	1 Level 1	2 Level 2	5 Level 3	10 Level 4	30 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
2 Dichlorotetrafluoroethane	0.27634	0.25597	0.22205	0.20408	0.19726	0.20373	AVRG		0.22657		14.29966
5 Ethylene Oxide	58380	92125	232701	424014	1292749	2312276	LINR	-15.23272	0.00182		0.99532
8 Dichlorofluoromethane	0.45440	0.44625	0.37883	0.36042	0.33873	0.33675	AVRG		0.38590		13.55144
11 Ethyl Ether	0.20248	0.20102	0.18157	0.14453	0.17544	0.14576	AVRG		0.17513		14.57707
13 1,2-dichloro-1,1,2-trifluoroe	47436	92677	204924	313619	1103775	2207212	LINR	-0.05346	0.21461		0.99916
14 2,2-dichloro-1,1,1-trifluoroe	0.49680	0.48832	0.41616	0.38616	0.37138	0.36912	AVRG		0.42132		13.70360
16 Trichlorotrifluoroethane	0.21021	0.21059	0.18052	0.16879	0.16171	0.16026	AVRG		0.18201		12.70557
21 Carbon Disulfide	1.25874	1.25862	1.09048	1.02048	1.02787	1.07120	AVRG		1.12123		9.77829
24 Methyl Acetate	0.10147	0.10041	0.08762	0.08549	0.08703	0.08658	AVRG		0.09143		8.09649

Data File: /chem/C.i/051004.b/c0451.d

Date : 10-MAY-2004 18:09

Client ID: BFB

Instrument: C.i

Sample Info: bfb

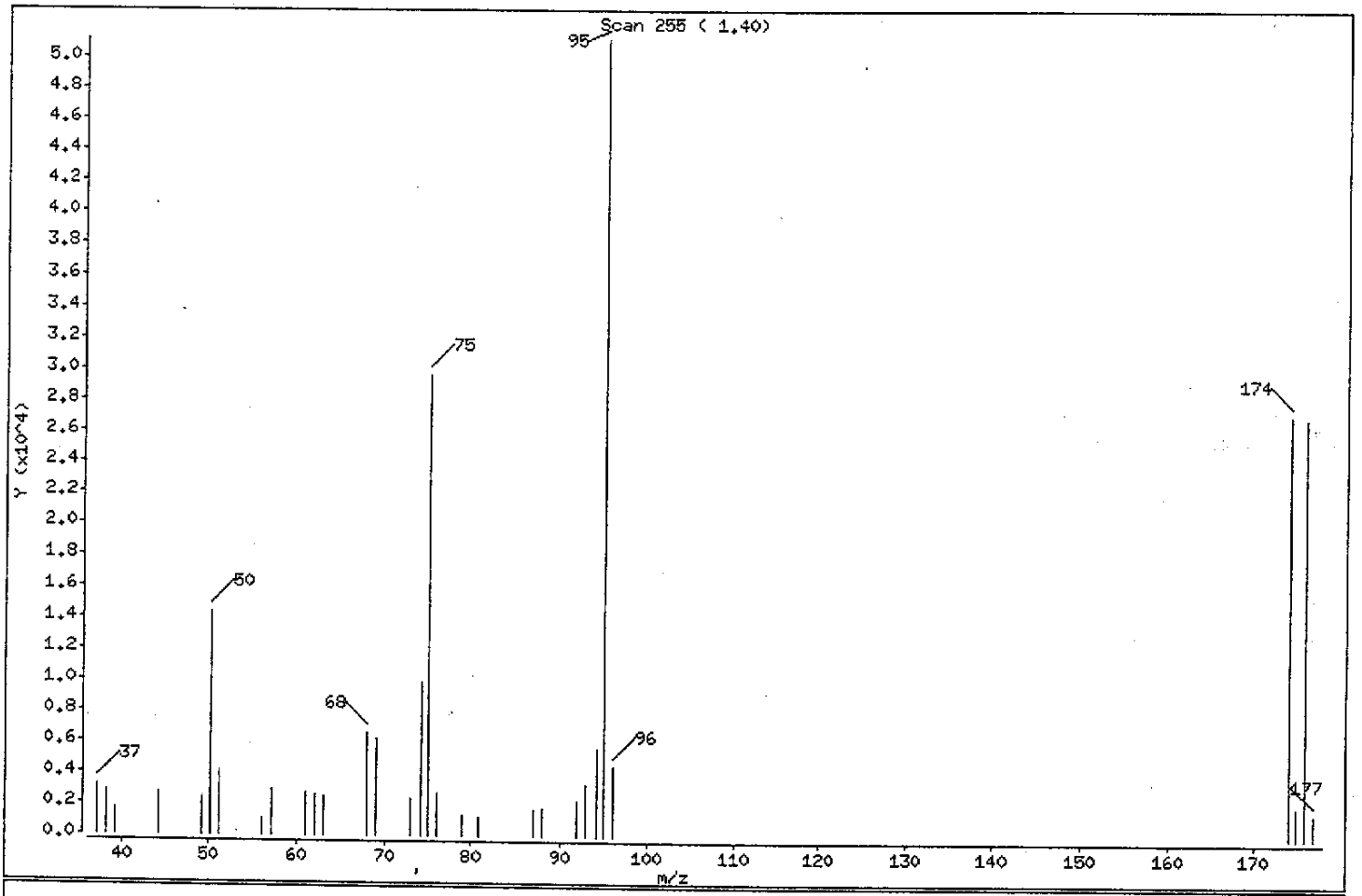
Volume Injected (uL): 1.0

Operator: reinharj

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	28.12
75	30.00 - 60.00% of mass 95	58.00
96	5.00 - 9.00% of mass 95	8.65
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	53.06
175	5.00 - 9.00% of mass 174	3.96 (7.45)
176	95.00 - 101.00% of mass 174	52.67 (99.26)
177	5.00 - 9.00% of mass 176	3.09 (5.86)

Data File: /chem/C.i/051004.b/c0451.d

Date : 10-MAY-2004 18:09

Client ID: BFB

Instrument: C.i

Sample Info: bfb

Volume Injected (uL): 1.0

Operator: reinharj

Column phase: DB624

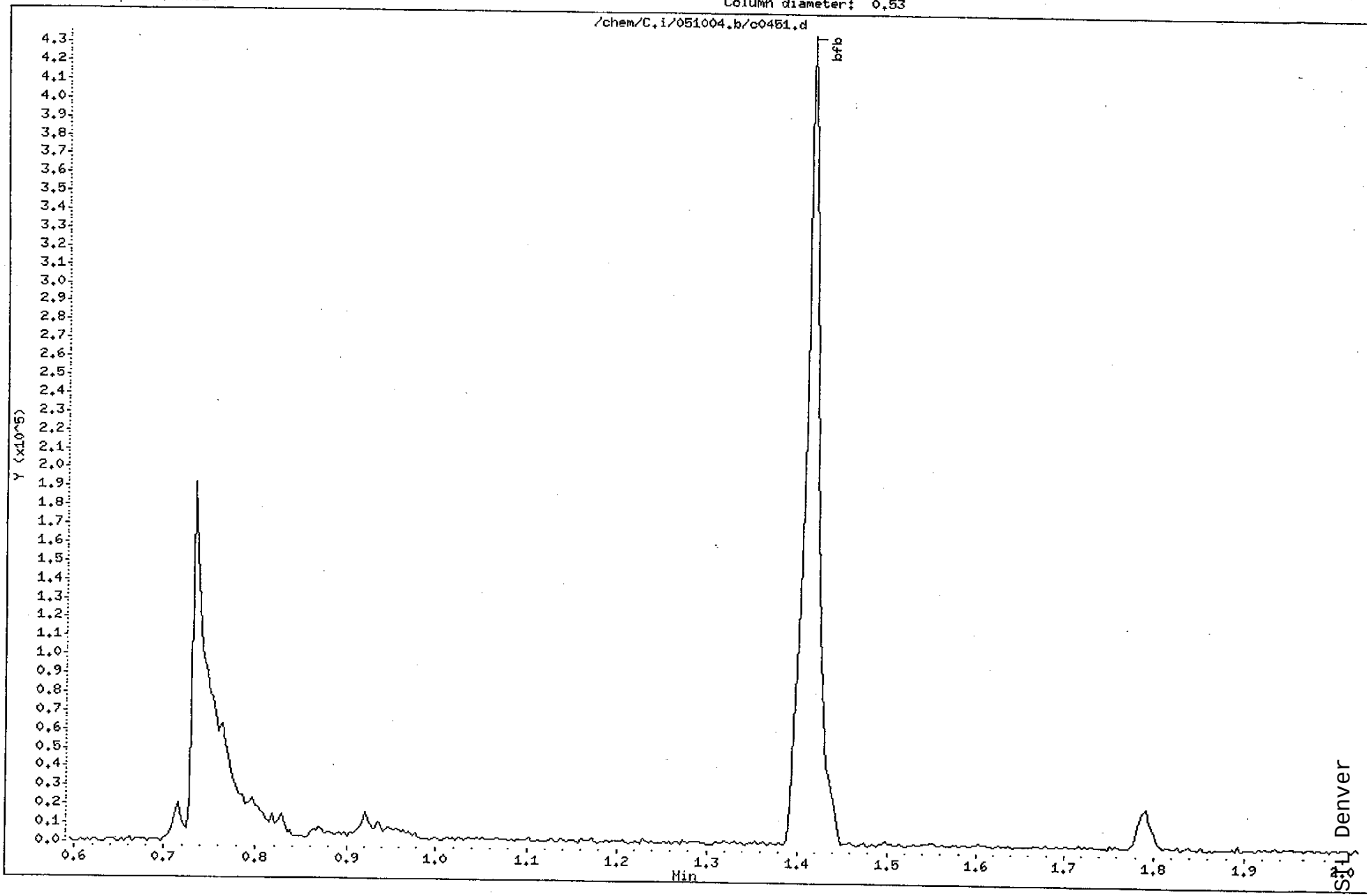
Column diameter: 0.53

Data File: c0451.d
Spectrum: Scan 255 (1.40)
Location of Maximum: 95.00
Number of points: 31

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.10	3200	57.15	2964	75.10	29672	94.10	5645
38.20	2856	61.10	2742	76.10	2752	95.00	51160
39.25	1703	62.10	2644	78.90	1305	96.05	4427
44.05	2753	63.10	2464	80.80	1148	174.00	27144
49.10	2405	68.05	6546	87.05	1655	175.00	2022
50.10	14386	69.15	6227	88.05	1754	176.00	26944
51.10	4164	73.05	2363	92.00	2176	177.00	1580
56.15	1098	74.10	9902	93.00	3267		

Data File: /chem/C.i/051004.b/c0451.d
Date : 10-MAY-2004 18:09
Client ID: BFB
Sample Info: bfb
Volume Injected (uL): 1.0
Column phase: DB624

Instrument: C.i
Operator: reinharj
Column diameter: 0.53



STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 10-MAY-2004 20:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/051004.b/C-20ml-AQ.m
Cal Date : 10-May-2004 21:24 reinharj
Curve Type : Average

Calibration File Names:
Level 1: /chem/C.i/051004.b/c0453.d
Level 2: /chem/C.i/051004.b/c0454.d
Level 3: /chem/C.i/051004.b/c0455.d
Level 4: /chem/C.i/051004.b/c0456.d
Level 5: /chem/C.i/051004.b/c0457.d
Level 6: /chem/C.i/051004.b/c0458.d

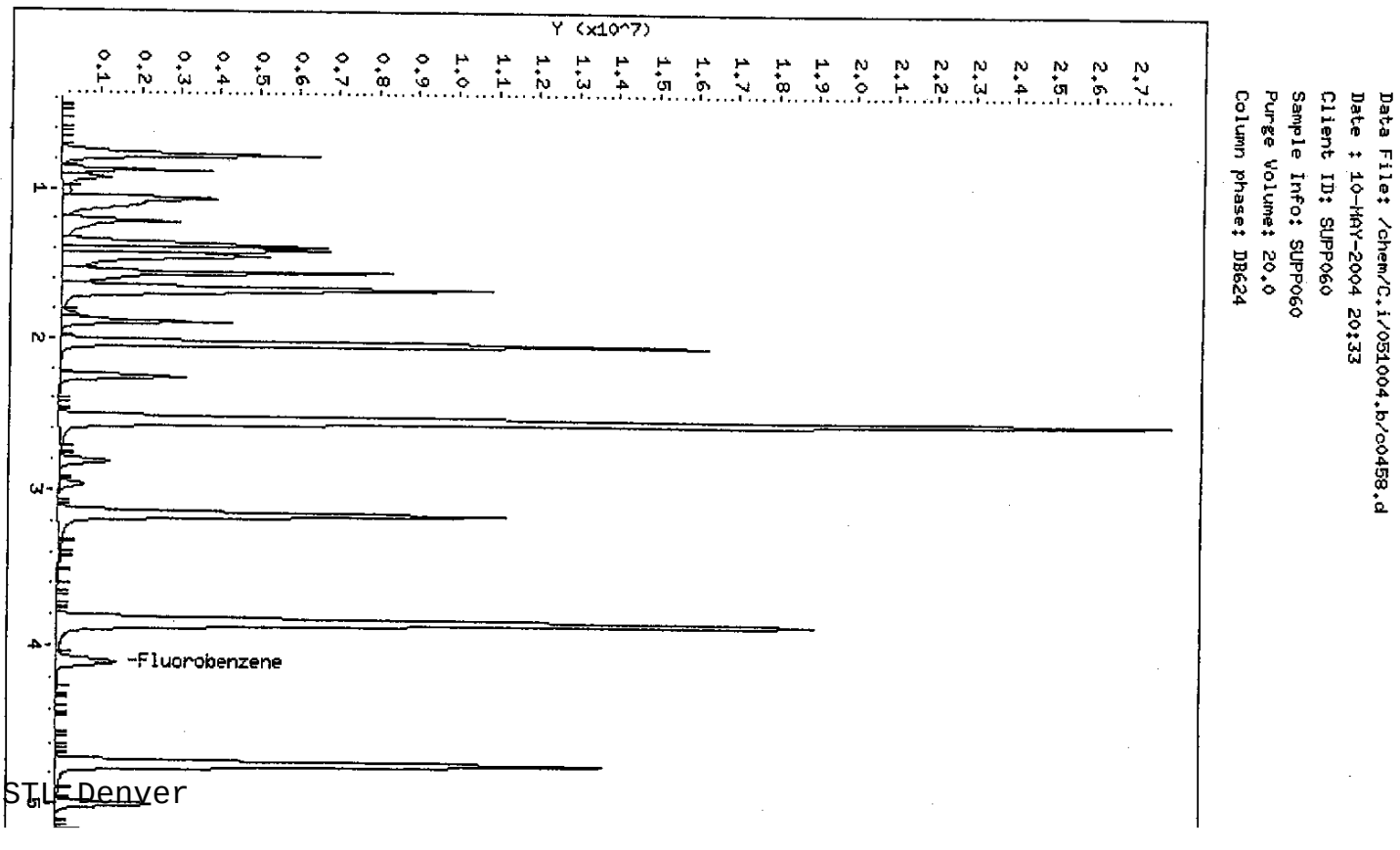
Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	30.000 Level 5	60.000 Level 6	RRF	% RSD	
2 Dichlorotetrafluoroethane	0.27634	0.25597	0.22205	0.20408	0.19726	0.20373	0.22657	14.300	
5 Ethylene Oxide	0.00310	0.00246	0.00195	0.00216	0.00207	0.00181	0.00226	20.740	<-
8 Dichlorofluoromethane	0.45440	0.44625	0.37883	0.36042	0.33873	0.33675	0.38590	13.551	
11 Ethyl Ether	0.20248	0.20102	0.18157	0.14453	0.17544	0.14576	0.17513	14.577	
13 1,2-dichloro-1,1,2-trifluoroe	0.31531	0.30930	0.26570	0.19952	0.22124	0.21619	0.25454	19.582	<-
14 2,2-dichloro-1,1,1-trifluoroe	0.49680	0.48832	0.41616	0.38616	0.37138	0.36912	0.42132	13.704	
16 Trichlorotrifluoroethane	0.21021	0.21059	0.18052	0.16879	0.16171	0.16026	0.18201	12.706	
21 Carbon Disulfide	1.25874	1.25862	1.09048	1.02048	1.02787	1.07120	1.12123	9.778	
24 Methyl Acetate	0.10147	0.10041	0.08762	0.08549	0.08703	0.08658	0.09143	8.096	
23 Allyl Chloride	0.76785	0.74396	0.68083	0.65045	0.66163	0.68393	0.69811	6.739	
22 2-Propanol	0.00667	0.00635	0.00547	0.00536	0.00529	0.00519	0.00572	10.966	
28 Methyl t-butyl ether	0.41470	0.41856	0.37751	0.36113	0.36795	0.35811	0.38300	7.029	
31 Hexane	5.96681	5.91297	5.10944	4.83367	4.85367	5.12178	5.29972	9.640	
35 Vinyl acetate	+++++	0.22314	0.20376	0.19581	0.17460	0.20444	0.20035	8.756	
36 ETBE	0.88364	0.90316	0.82045	0.80684	0.83936	+++++	0.85069	4.848	
40 Ethyl Acetate	0.11302	0.10861	0.09251	0.08709	0.09017	0.08817	0.09660	11.649	
43 Tetrahydrofuran	+++++	0.03109	0.02609	0.02584	0.02612	0.02533	0.02689	8.803	
46 Cyclohexane	0.94794	0.93312	0.81074	0.77553	0.77658	0.80111	0.84084	9.344	
55 TAME	0.44051	0.44866	0.40845	0.40364	0.42377	0.40926	0.42238	4.415	
61 2-Pentanone	0.39552	0.43815	0.40111	0.40255	0.43522	0.43374	0.41772	4.763	
58 Methyl Cyclohexane	0.79494	0.80510	0.70068	0.66515	0.67145	0.68395	0.72021	8.758	
64 Methyl Methacrylate	0.02111	0.02295	0.02225	0.02248	0.02415	0.02359	0.02275	4.701	
66 2-nitropropane	+++++	0.08993	0.09368	0.09347	0.10508	0.11373	0.09918	10.019	
67 2-Chloroethyl vinyl ether	0.04927	0.06694	0.07276	0.09329	0.14665	0.20912	0.10634	56.885	<-
73 Ethyl methacrylate	0.68972	0.77911	0.76495	0.77816	0.86326	0.85275	0.78799	8.071	

STL Denver

INITIAL CALIBRATION DATA

Start Cal Date : 02-MAR-2004 00:09
End Cal Date : 10-MAY-2004 20:33
Quant Method : ISTD
Origin : Disabled
Target Version : 3.40
Integrator : Falcon
Method file : /chem/C.i/051004.b/C-20ml-AQ.m
Cal Date : 10-May-2004 21:24 reinharj
Curve Type : Average

Compound	1.000 Level 1	2.000 Level 2	5.000 Level 3	10.000 Level 4	30.000 Level 5	60.000 Level 6	RRF	% RSD
77 Tetrahydrothiophene	0.26530	0.27164	0.27775	0.28598	0.32856	0.32893	0.29303	9.726
92 cis-1,4-dichloro-2-butene	0.12309	0.11294	0.10217	0.10681	0.12007	0.12661	0.11528	8.333
98 t-1,4-Dichloro-2-butene	0.12612	0.12902	0.11069	0.10731	0.12536	0.12894	0.12124	7.964
109 1,2,3-Trimethylbenzene	4.46222	4.46160	3.95926	3.84987	4.13287	4.23051	4.18272	6.061
$ 48 Dibromofluoromethane	0.22421	0.22071	0.20857	0.20151	0.20530	+++++	0.21206	4.667
$ 52 1,2-Dichloroethane-d4	0.23695	0.23890	0.22324	0.21810	0.21698	+++++	0.22683	4.593
$ 69 Toluene-d8	6.09920	6.13077	5.53320	5.32046	5.45798	+++++	5.70832	6.642
$ 93 Bromofluorobenzene	1.87554	1.83786	1.66841	1.57803	1.64487	+++++	1.72094	7.495



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/051004.b/c0453.d
Lab Smp Id: SUPP001 Client Smp ID: SUPP001
Inj Date : 10-MAY-2004 18:45
Operator : reinharj Inst ID: C.i
Smp Info : SUPP010
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/051004.b/C-20ml-AQ.m
Meth Date : 10-May-2004 21:31 reinharj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.106	4.106	(1.000)	1504412	10.0000	
* 81 Chlorobenzene-d5	119	7.563	7.563	(1.000)	246398	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.720	9.720	(1.000)	280367	10.0000	
$ 48 Dibromofluoromethane	111	3.236	3.236	(0.788)	33731	1.00000	1.05732
$ 52 1,2-Dichloroethane-d4	65	3.677	3.677	(0.896)	35647	1.00000	1.04460
$ 69 Toluene-d8	98	6.082	6.082	(0.804)	150283	1.00000	1.06847
$ 93 Bromofluorobenzene	95	8.693	8.693	(1.149)	46213	1.00000	1.08983
2 Dichlorotetrafluoroethane	85	0.872	0.872	(0.212)	41573	1.00000	1.21966
5 Ethylene Oxide	43	1.072	1.072	(0.261)	58380	125.000	60.3691(a)
8 Dichlorofluoromethane	67	1.213	1.213	(0.295)	68361	1.00000	1.17752
11 Ethyl Ether	59	1.354	1.354	(0.330)	30461	1.00000	1.15614(a)
13 1,2-dichloro-1,1,2-trifluoroet	117	1.378	1.378	(0.335)	47436	1.00000	0.934602(a)
14 2,2-dichloro-1,1,1-trifluoroet	83	1.413	1.413	(0.344)	74739	1.00000	1.17914
16 Trichlorotrifluoroethane	151	1.460	1.460	(0.356)	31624	1.00000	1.15492
21 Carbon Disulfide	76	1.566	1.566	(0.381)	189366	1.00000	1.12264
24 Methyl Acetate	43	1.695	1.695	(0.413)	76323	5.00000	5.54863

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 Allyl Chloride	41	1.671	1.671	(0.407)	115517	1.00000	1.09990(a)
22 2-Propanol	45	1.601	1.601	(0.390)	20071	20.0000	23.3152
28 Methyl t-butyl ether	73	1.895	1.895	(0.461)	62388	1.00000	1.08278(a)
31 Hexane	57	2.036	2.036	(0.269)	147021	1.00000	1.12587
35 Vinyl acetate	43	2.259	2.259	(0.550)	71936	2.00000	2.38668
36 ETBE	59	2.541	2.541	(0.619)	664680	5.00000	5.19367
40 Ethyl Acetate	43	2.819	2.819	(0.687)	34005	2.00000	2.34001(a)
43 Tetrahydrofuran	42	2.988	2.988	(0.728)	10326	2.00000	2.55209(a)
46 Cyclohexane	56	3.164	3.164	(0.770)	142609	1.00000	1.12737
55 TAME	73	3.853	3.853	(0.938)	331351	5.00000	5.21456
61 2-Pentanone	43	5.013	5.013	(0.663)	38982	4.00000	3.78743
58 Methyl Cyclohexane	55	4.741	4.741	(1.155)	119591	1.00000	1.10375
64 Methyl Methacrylate	100	5.200	5.200	(1.266)	6351	2.00000	1.85526
66 2-nitropropane	41	5.702	5.702	(0.754)	2067	1.00000	0.845856(a)
67 2-Chloroethyl vinyl ether	63	5.768	5.768	(0.763)	1214	1.00000	2.02089
73 Ethyl methacrylate	69	6.632	6.632	(0.877)	33989	2.00000	1.75057
77 Tetrahydrothiophene	60	6.947	6.947	(0.918)	6537	1.00000	0.905382(a)
92 cis-1,4-dichloro-2-butene	53	8.681	8.681	(0.893)	3451	1.00000	1.06772
98 t-1,4-Dichloro-2-butene	53	8.959	8.959	(0.922)	3536	1.00000	1.04025
109 1,2,3-Trimethylbenzene	105	9.787	9.787	(1.007)	125106	1.00000	1.06682

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0453.d
Lab Smp Id: SUPP001
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/051004.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/10/4
Calibration Time: 1823
Client Smp ID: SUPP001
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1685615	842808	3371230	1504412	-10.75
81 Chlorobenzene-d5	278883	139442	557766	246398	-11.65
107 1,4-Dichlorobenze	321860	160930	643720	280367	-12.89

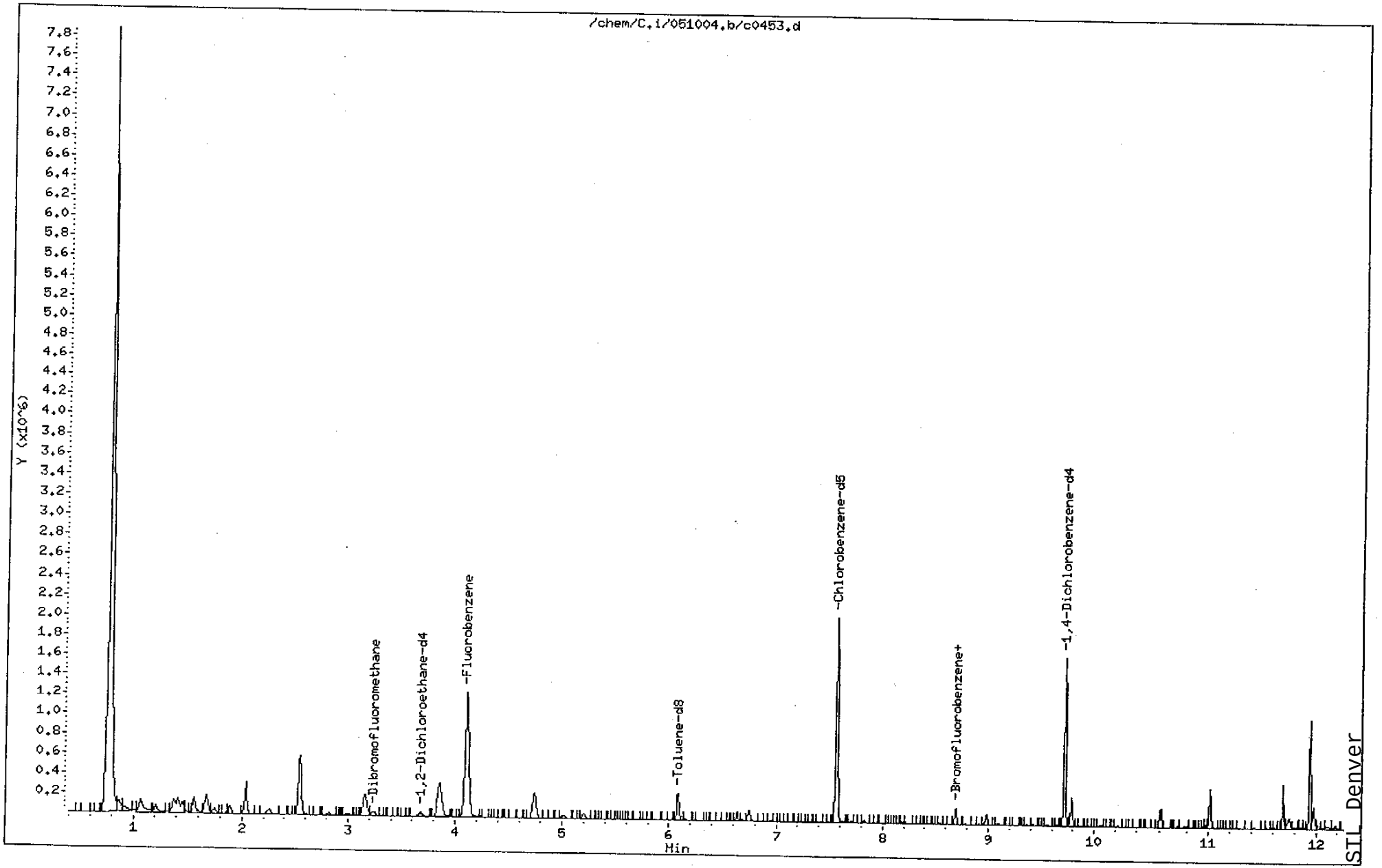
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	-0.01
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	-0.01
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

Data File: /chem/C.i/051004.b/c0453.d
Date : 10-MAY-2004 18:45
Client ID: SUPP001
Sample Info: SUPP010
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i

Operator: reinharj
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/051004.b/c0454.d
Lab Smp Id: SUPP002 Client Smp ID: SUPP002
Inj Date : 10-MAY-2004 19:07
Operator : reinharj Inst ID: C.i
Smp Info : SUPP002
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/051004.b/C-20ml-AQ.m
Meth Date : 10-May-2004 21:31 reinharj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.107	4.107	(1.000)	1498155	10.0000	
* 81 Chlorobenzene-d5	119	7.564	7.564	(1.000)	244757	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.721	9.721	(1.000)	280811	10.0000	
$ 48 Dibromofluoromethane	111	3.237	3.237	(0.788)	66131	2.00000	2.08157
$ 52 1,2-Dichloroethane-d4	65	3.684	3.684	(0.897)	71581	2.00000	2.10637
$ 69 Toluene-d8	98	6.083	6.083	(0.804)	300110	2.00000	2.14801
$ 93 Bromofluorobenzene	95	8.694	8.694	(1.149)	89966	2.00000	2.13588
2 Dichlorotetrafluoroethane	85	0.882	0.882	(0.215)	76696	2.00000	2.25949
5 Ethylene Oxide	43	1.070	1.070	(0.261)	92125	250.000	184.714
8 Dichlorofluoromethane	67	1.211	1.211	(0.295)	133709	2.00000	2.31277
11 Ethyl Ether	59	1.352	1.352	(0.329)	60232	2.00000	2.29564
13 1,2-dichloro-1,1,2-trifluoroet	117	1.375	1.375	(0.335)	92677	2.00000	2.34784
14 2,2-dichloro-1,1,1-trifluoroet	83	1.411	1.411	(0.343)	146315	2.00000	2.31802
16 Trichlorotrifluoroethane	151	1.458	1.458	(0.355)	63098	2.00000	2.31398
21 Carbon Disulfide	76	1.564	1.564	(0.381)	377122	2.00000	2.24507
24 Methyl Acetate	43	1.693	1.693	(0.412)	150429	10.0000	10.9818

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	Allyl Chloride	41	1.669	1.669	(0.406)	222912	2.00000	2.13134
22	2-Propanol	45	1.599	1.599	(0.389)	38081	40.0000	44.4211
28	Methyl t-butyl ether	73	1.893	1.893	(0.461)	125413	2.00000	2.18571(a)
31	Hexane	57	2.034	2.034	(0.269)	289448	2.00000	2.23142
35	Vinyl acetate	43	2.257	2.257	(0.549)	133717	4.00000	4.45497
36	ETBE	59	2.542	2.542	(0.619)	1353075	10.0000	10.6168
40	Ethyl Acetate	43	2.820	2.820	(0.687)	65083	4.00000	4.49730
43	Tetrahydrofuran	42	2.983	2.983	(0.726)	18632	4.00000	4.62416(a)
46	Cyclohexane	56	3.158	3.158	(0.769)	279593	2.00000	2.21951
55	TAME	73	3.853	3.853	(0.938)	672160	10.0000	10.6221
61	2-Pentanone	43	5.008	5.008	(0.662)	85792	8.00000	8.39131
58	Methyl Cyclohexane	55	4.742	4.742	(1.154)	241232	2.00000	2.23573
64	Methyl Methacrylate	100	5.201	5.201	(1.266)	13753	4.00000	4.03433
66	2-nitropropane	41	5.703	5.703	(0.754)	4402	2.00000	1.81346(a)
67	2-Chloroethyl vinyl ether	63	5.769	5.769	(0.763)	3277	2.00000	2.65885
73	Ethyl methacrylate	69	6.633	6.633	(0.877)	76277	4.00000	3.95492
77	Tetrahydrothiophene	60	6.947	6.947	(0.918)	13297	2.00000	1.85400
92	cis-1,4-dichloro-2-butene	53	8.682	8.682	(0.893)	6343	2.00000	1.95939
98	t-1,4-Dichloro-2-butene	53	8.960	8.960	(0.922)	7246	2.00000	2.12833
109	1,2,3-Trimethylbenzene	105	9.788	9.788	(1.007)	250573	2.00000	2.13335

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0454.d
Lab Smp Id: SUPP002
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/051004.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/10/4
Calibration Time: 1823
Client Smp ID: SUPP002
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1685615	842808	3371230	1498155	-11.12
81 Chlorobenzene-d5	278883	139442	557766	244757	-12.24
107 1,4-Dichlorobenze	321860	160930	643720	280811	-12.75

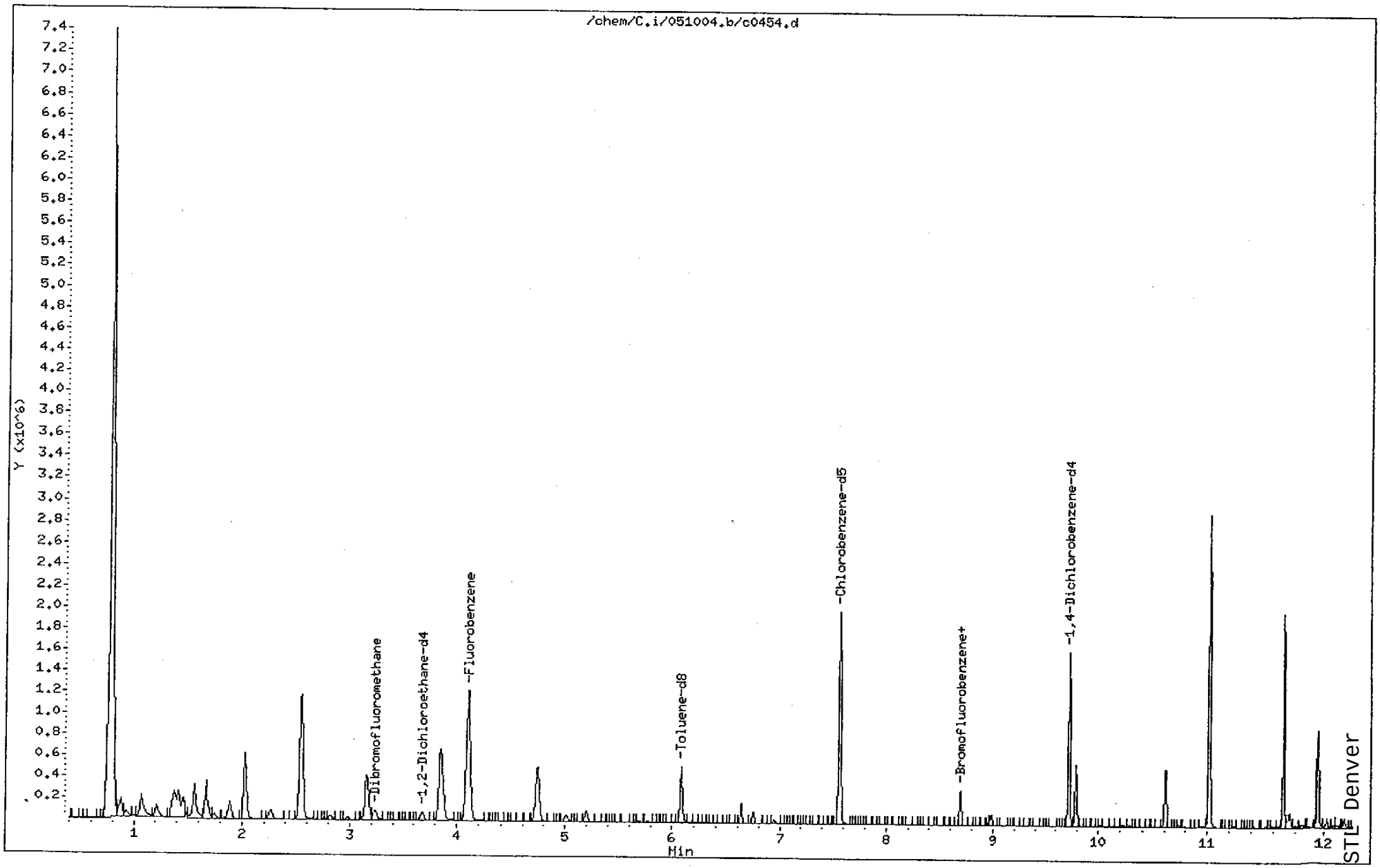
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.01
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.00
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

Data File: /chem/C.i/051004.b/c0454.d
Date : 10-MAY-2004 19:07
Client ID: SUPP002
Sample Info: SUPP002
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i

Operator: reinharj
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/051004.b/c0455.d
Lab Smp Id: SUPP005 Client Smp ID: SUPP005
Inj Date : 10-MAY-2004 19:29
Operator : reinharj Inst ID: C.i
Smp Info : SUPP005
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/051004.b/C-20ml-AQ.m
Meth Date : 10-May-2004 21:31 reinharj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.107	4.107	(1.000)	1542527	10.0000	
* 81 Chlorobenzene-d5	119	7.563	7.563	(1.000)	257013	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.721	9.721	(1.000)	295496	10.0000	
$ 48 Dibromofluoromethane	111	3.237	3.237	(0.788)	160863	5.00000	4.91776
$ 52 1,2-Dichloroethane-d4	65	3.678	3.678	(0.896)	172175	5.00000	4.92075
$ 69 Toluene-d8	98	6.083	6.083	(0.804)	711052	5.00000	4.84661
$ 93 Bromofluorobenzene	95	8.693	8.693	(1.149)	214402	5.00000	4.84738
2 Dichlorotetrafluoroethane	85	0.882	0.882	(0.215)	171261	5.00000	4.90028
5 Ethylene Oxide	43	1.070	1.070	(0.261)	232701	775.000	674.525
8 Dichlorofluoromethane	67	1.211	1.211	(0.295)	292175	5.00000	4.90838
11 Ethyl Ether	59	1.352	1.352	(0.329)	140037	5.00000	5.18374
13 1,2-dichloro-1,1,2-trifluoroet	117	1.375	1.375	(0.335)	204924	5.00000	5.65564
14 2,2-dichloro-1,1,1-trifluoroet	83	1.411	1.411	(0.343)	320967	5.00000	4.93871
16 Trichlorotrifluoroethane	151	1.458	1.458	(0.355)	139228	5.00000	4.95900
21 Carbon Disulfide	76	1.563	1.563	(0.381)	841050	5.00000	4.86289
24 Methyl Acetate	43	1.693	1.693	(0.412)	337899	25.0000	23.9580

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 Allyl Chloride	41	1.669	1.669	(0.406)	525101	5.00000	4.87625
22 2-Propanol	45	1.599	1.599	(0.389)	84453	100.000	95.6798
28 Methyl t-butyl ether	73	1.892	1.892	(0.461)	291163	5.00000	4.92844(a)
31 Hexane	57	2.034	2.034	(0.269)	656596	5.00000	4.82048
35 Vinyl acetate	43	2.257	2.257	(0.550)	314299	10.0000	10.1701(M)
36 ETBE	59	2.542	2.542	(0.619)	3163905	25.0000	24.1112
40 Ethyl Acetate	43	2.820	2.820	(0.687)	142703	10.0000	9.57726
43 Tetrahydrofuran	42	2.977	2.977	(0.725)	40248	10.0000	9.70157
46 Cyclohexane	56	3.158	3.158	(0.769)	625295	5.00000	4.82103
55 TAME	73	3.847	3.847	(0.937)	1575131	25.0000	24.1758
61 2-Pentanone	43	5.007	5.007	(0.662)	206182	20.0000	19.2050
58 Methyl Cyclohexane	55	4.741	4.741	(1.155)	540406	5.00000	4.86439
64 Methyl Methacrylate	100	5.201	5.201	(1.266)	34320	10.0000	9.77788
66 2-nitropropane	41	5.696	5.696	(0.753)	12038	5.00000	4.72272
67 2-Chloroethyl vinyl ether	63	5.769	5.769	(0.763)	9350	5.00000	4.37528
73 Ethyl methacrylate	69	6.633	6.633	(0.877)	196601	10.0000	9.70755
77 Tetrahydrothiophene	60	6.947	6.947	(0.918)	35693	5.00000	4.73935
92 cis-1,4-dichloro-2-butene	53	8.681	8.681	(0.893)	15095	5.00000	4.43120
98 t-1,4-Dichloro-2-butene	53	8.959	8.959	(0.922)	16354	5.00000	4.56485
109 1,2,3-Trimethylbenzene	105	9.787	9.787	(1.007)	584973	5.00000	4.73288

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0455.d
Lab Smp Id: SUPP005
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/051004.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/10/4
Calibration Time: 1823
Client Smp ID: SUPP005
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1685615	842808	3371230	1542527	-8.49
81 Chlorobenzene-d5	278883	139442	557766	257013	-7.84
107 1,4-Dichlorobenze	321860	160930	643720	295496	-8.19

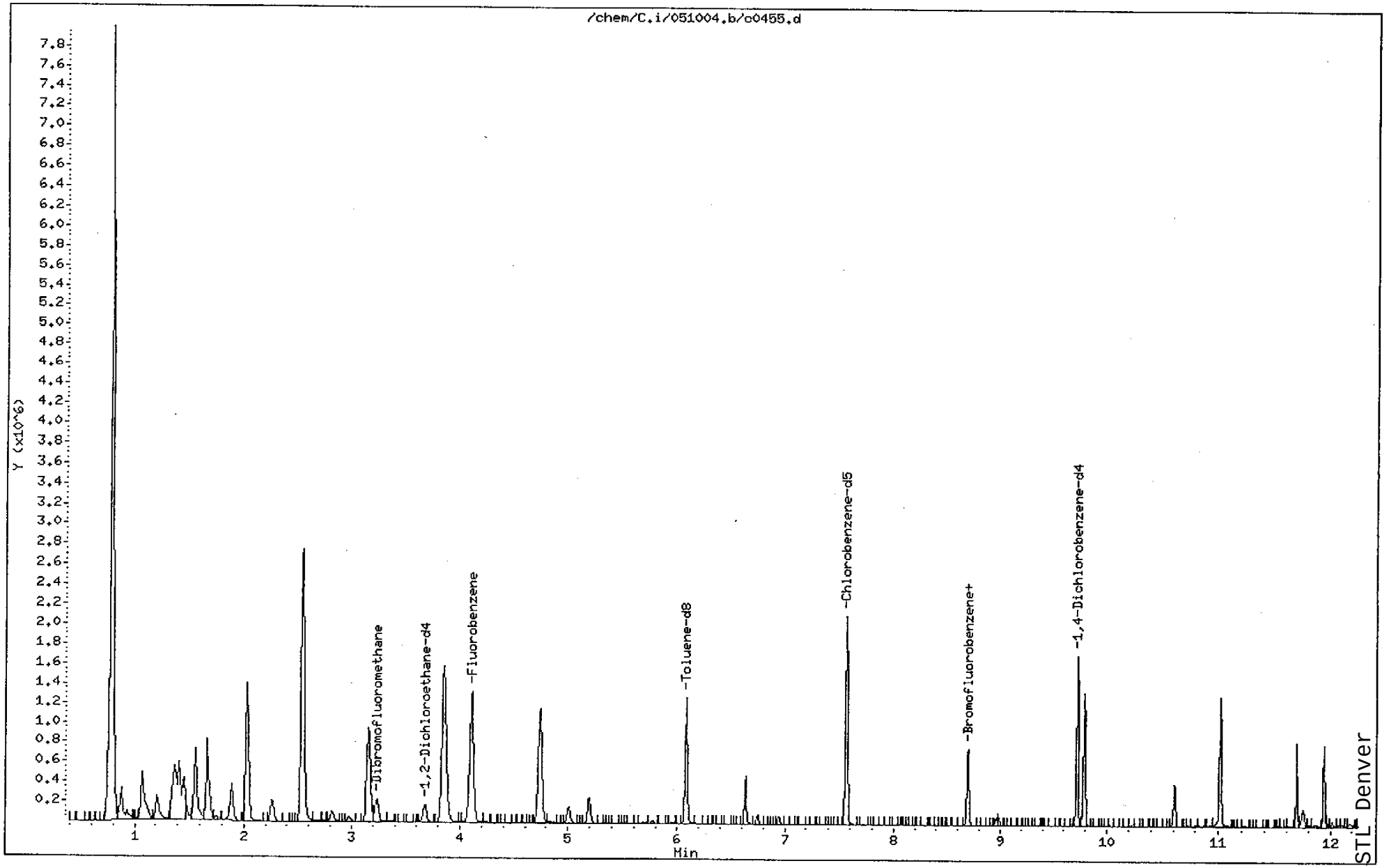
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.00
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.00
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

Data File: /chem/C.i/051004.b/c0455.d
Date : 10-MAY-2004 19:29
Client ID: SUPP005
Sample Info: SUPP005
Purge Volume: 20.0
Column phase: DB624

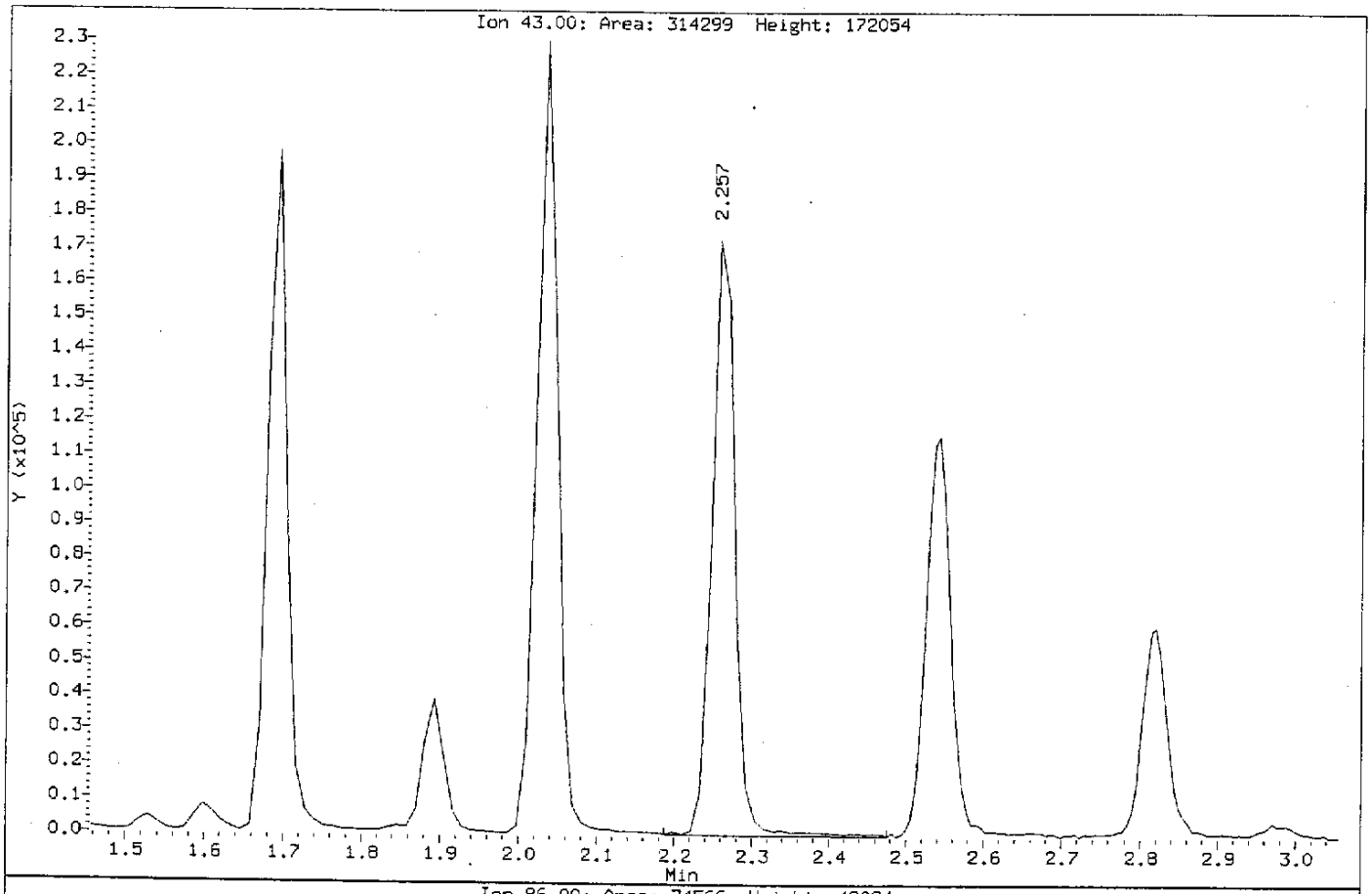
Instrument: C.i

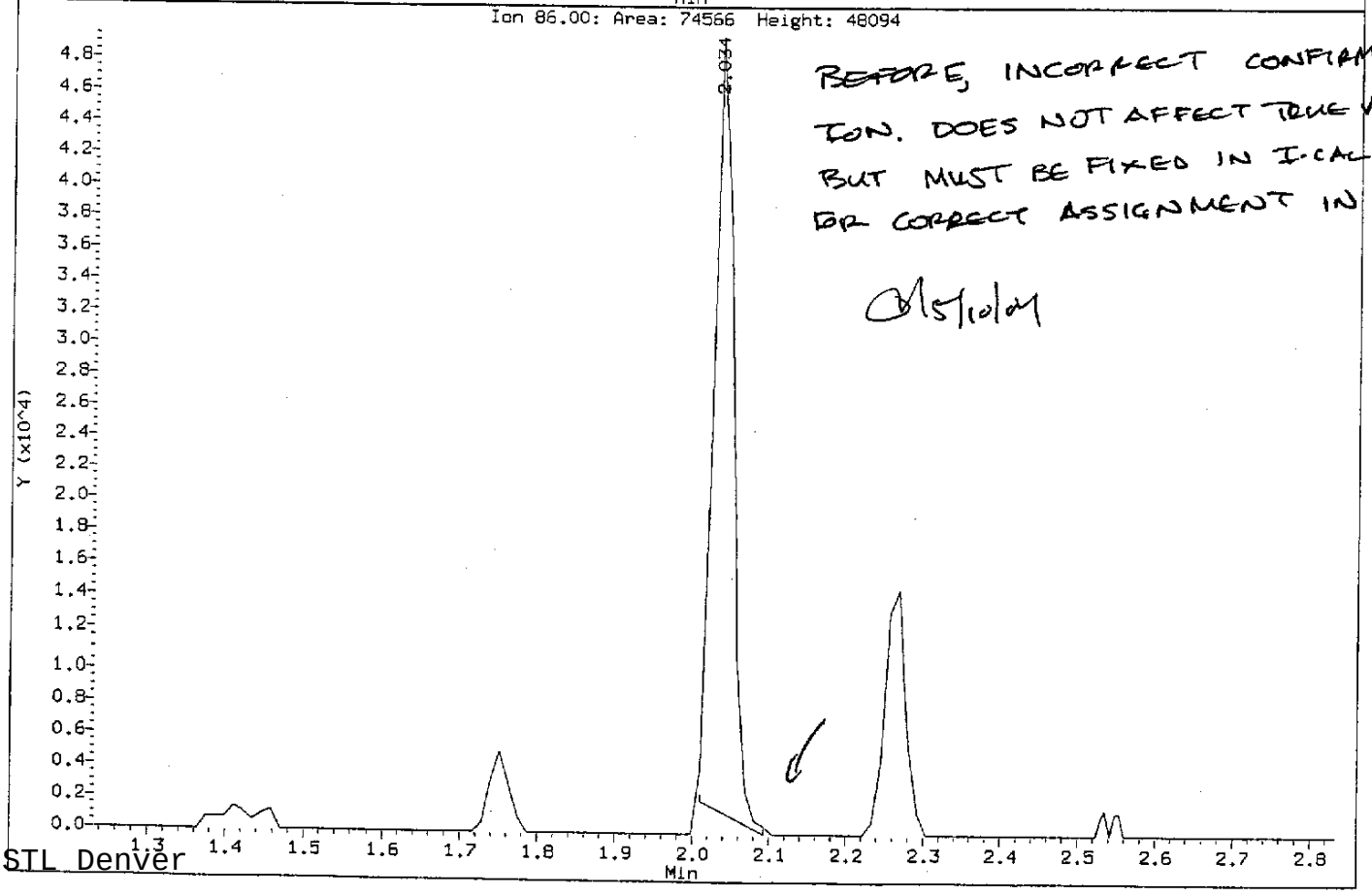
Operator: reinharj
Column diameter: 0.53



Data File: /chem/C.i/051004.b/c0455.d
Injection Date: 10-MAY-2004 19:29
Instrument: C.i
Client Sample ID: SUPP005

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



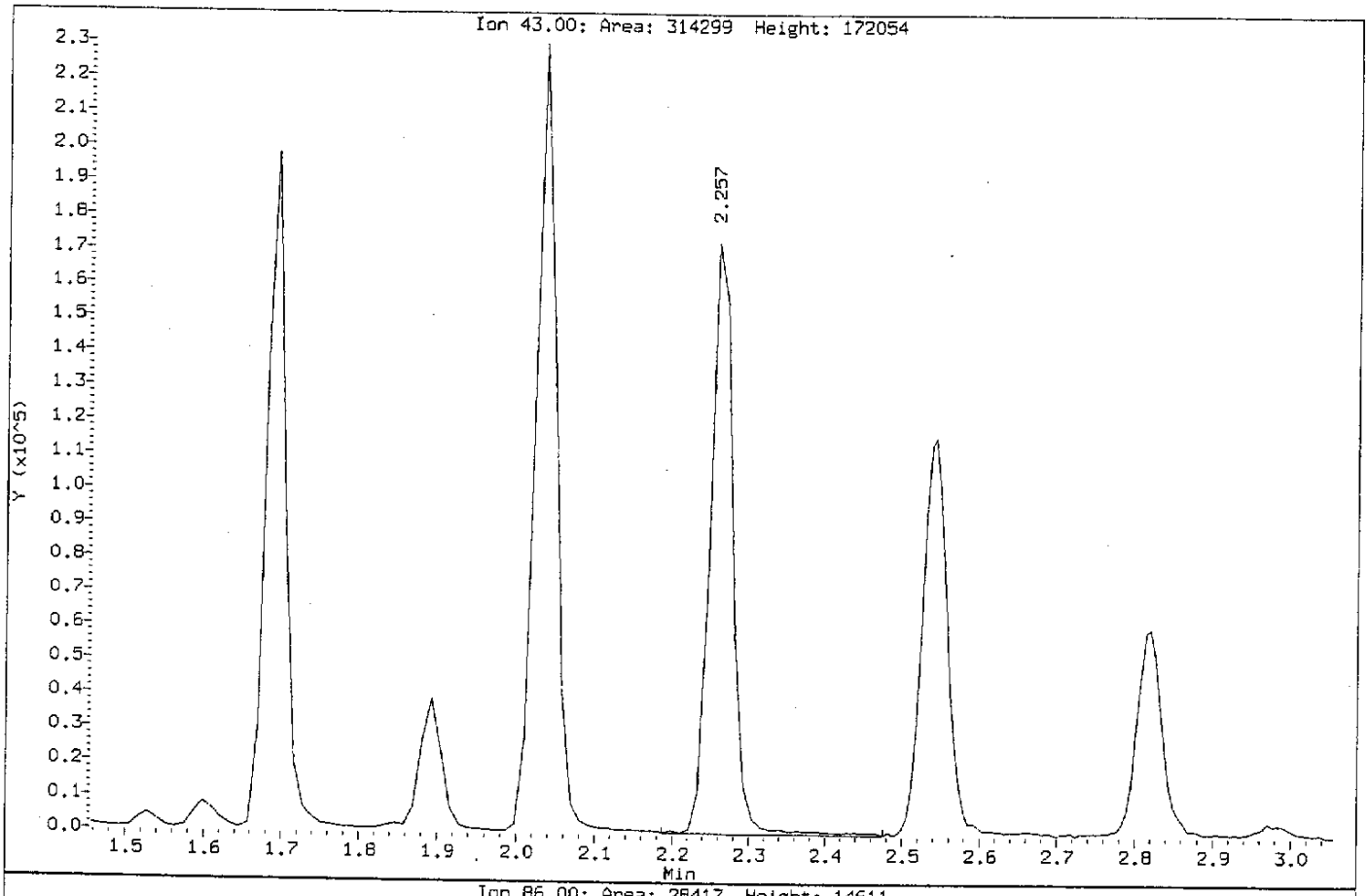


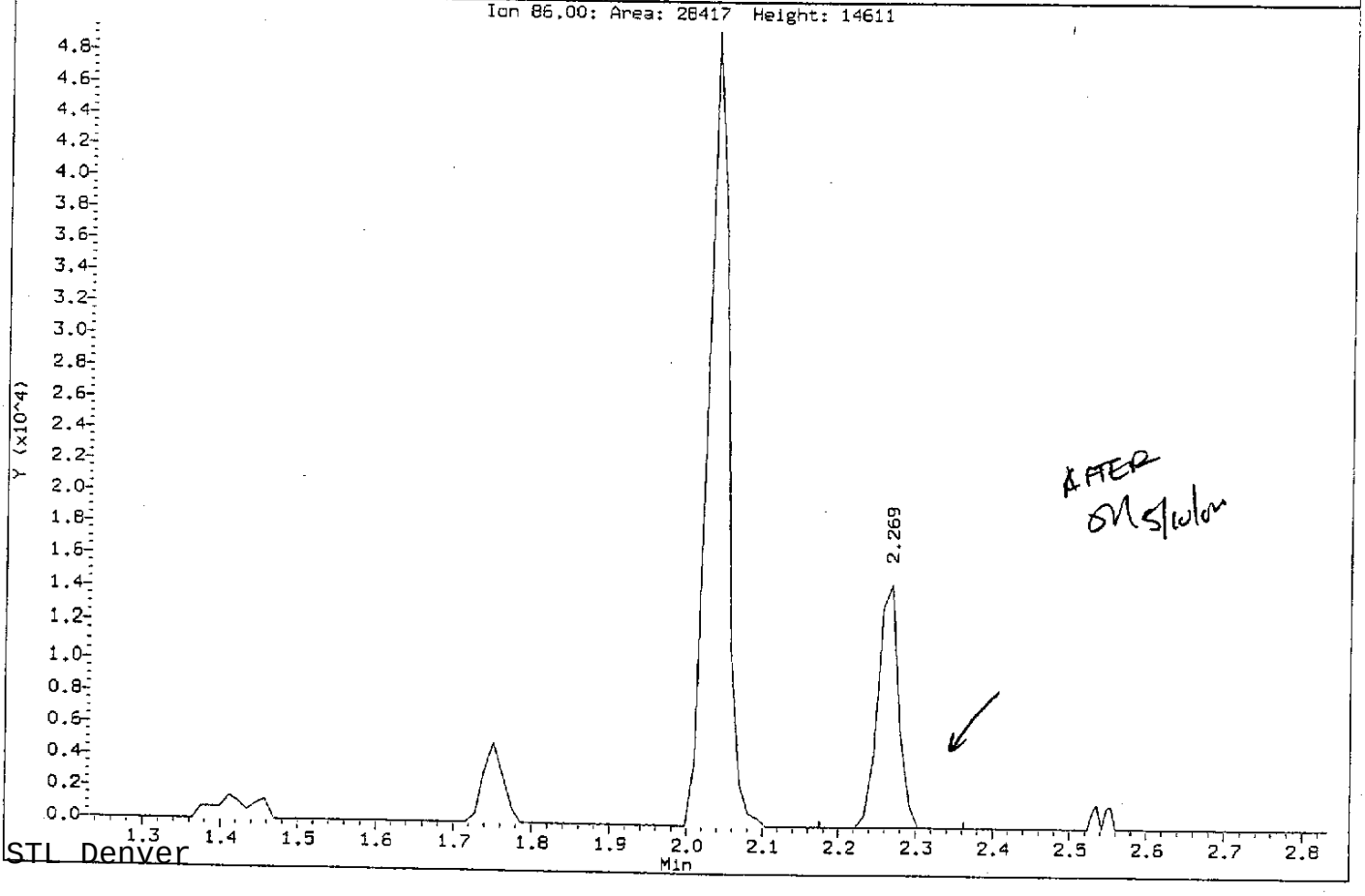
BEFORE, INCORRECT CONFIRMATION ION. DOES NOT AFFECT TRUE VALUE BUT MUST BE FIXED IN I-CAL FOR CORRECT ASSIGNMENT IN FUTURE

05/10/04

Data File: /chem/C.i/051004.b/c0455.d
Injection Date: 10-MAY-2004 19:29
Instrument: C.i
Client Sample ID: SUPP005

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





STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/051004.b/c0456.d
Lab Smp Id: SUPP010 Client Smp ID: SUPP010
Inj Date : 10-MAY-2004 19:50
Operator : reinharj Inst ID: C.i
Smp Info : SUPP010
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/051004.b/C-20ml-AQ.m
Meth Date : 10-May-2004 21:31 reinharj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.101	4.101	(1.000)	1571830	10.0000	
* 81 Chlorobenzene-d5	119	7.563	7.563	(1.000)	261684	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.720	9.720	(1.000)	297440	10.0000	
$ 48 Dibromofluoromethane	111	3.230	3.230	(0.788)	316732	10.0000	9.50233
$ 52 1,2-Dichloroethane-d4	65	3.678	3.678	(0.897)	342809	10.0000	9.61481
$ 69 Toluene-d8	98	6.083	6.083	(0.804)	1392278	10.0000	9.32052
$ 93 Bromofluorobenzene	95	8.693	8.693	(1.149)	412945	10.0000	9.16956
2 Dichlorotetrafluoroethane	85	0.881	0.881	(0.215)	320783	10.0000	9.00743
5 Ethylene Oxide	43	1.069	1.069	(0.261)	424014	1250.00	1326.23(M)
8 Dichlorofluoromethane	67	1.210	1.210	(0.295)	566525	10.0000	9.33989
11 Ethyl Ether	59	1.351	1.351	(0.330)	227175	10.0000	8.25254
13 1,2-dichloro-1,1,2-trifluoroet	117	1.387	1.387	(0.338)	313619	10.0000	8.76245
14 2,2-dichloro-1,1,1-trifluoroet	83	1.410	1.410	(0.344)	606976	10.0000	9.16540
16 Trichlorotrifluoroethane	151	1.457	1.457	(0.355)	265307	10.0000	9.27350
21 Carbon Disulfide	76	1.563	1.563	(0.381)	1604014	10.0000	9.10139
24 Methyl Acetate	43	1.692	1.692	(0.413)	671858	50.0000	46.7486

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 Allyl Chloride	41	1.669	1.669	(0.407)	1022403	10.0000	9.31736
22 2-Propanol	45	1.598	1.598	(0.390)	168428	200.000	187.261
28 Methyl t-butyl ether	73	1.892	1.892	(0.461)	567641	10.0000	9.42919
31 Hexane	57	2.033	2.033	(0.269)	1264895	10.0000	9.12061
35 Vinyl acetate	43	2.256	2.256	(0.550)	615562	20.0000	19.5470
36 ETBE	59	2.541	2.541	(0.620)	6341076	50.0000	47.4226
40 Ethyl Acetate	43	2.813	2.813	(0.686)	273790	20.0000	18.0324
43 Tetrahydrofuran	42	2.970	2.970	(0.724)	81238	20.0000	19.2169
46 Cyclohexane	56	3.158	3.158	(0.770)	1219004	10.0000	9.22332
55 TAME	73	3.847	3.847	(0.938)	3172249	50.0000	47.7813
61 2-Pentanone	43	5.001	5.001	(0.661)	421368	40.0000	38.5480
58 Methyl Cyclohexane	55	4.741	4.741	(1.156)	1045506	10.0000	9.23553
64 Methyl Methacrylate	100	5.194	5.194	(1.267)	70673	20.0000	19.7596
66 2-nitropropane	41	5.696	5.696	(0.753)	24460	10.0000	9.42481
67 2-Chloroethyl vinyl ether	63	5.762	5.762	(0.762)	24413	10.0000	8.51783
73 Ethyl methacrylate	69	6.632	6.632	(0.877)	407266	20.0000	19.7506
77 Tetrahydrothiophene	60	6.947	6.947	(0.918)	74836	10.0000	9.75942
92 cis-1,4-dichloro-2-butene	53	8.681	8.681	(0.893)	31770	10.0000	9.26527
98 t-1,4-Dichloro-2-butene	53	8.959	8.959	(0.922)	31917	10.0000	8.85069
109 1,2,3-Trimethylbenzene	105	9.787	9.787	(1.007)	1145105	10.0000	9.20422

QC Flag Legend

M - Compound response manually integrated.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0456.d
Lab Smp Id: SUPP010
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/051004.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/10/4
Calibration Time: 1950
Client Smp ID: SUPP010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1571830	785915	3143660	1571830	0.00
81 Chlorobenzene-d5	261684	130842	523368	261684	0.00
107 1,4-Dichlorobenze	297440	148720	594880	297440	0.00

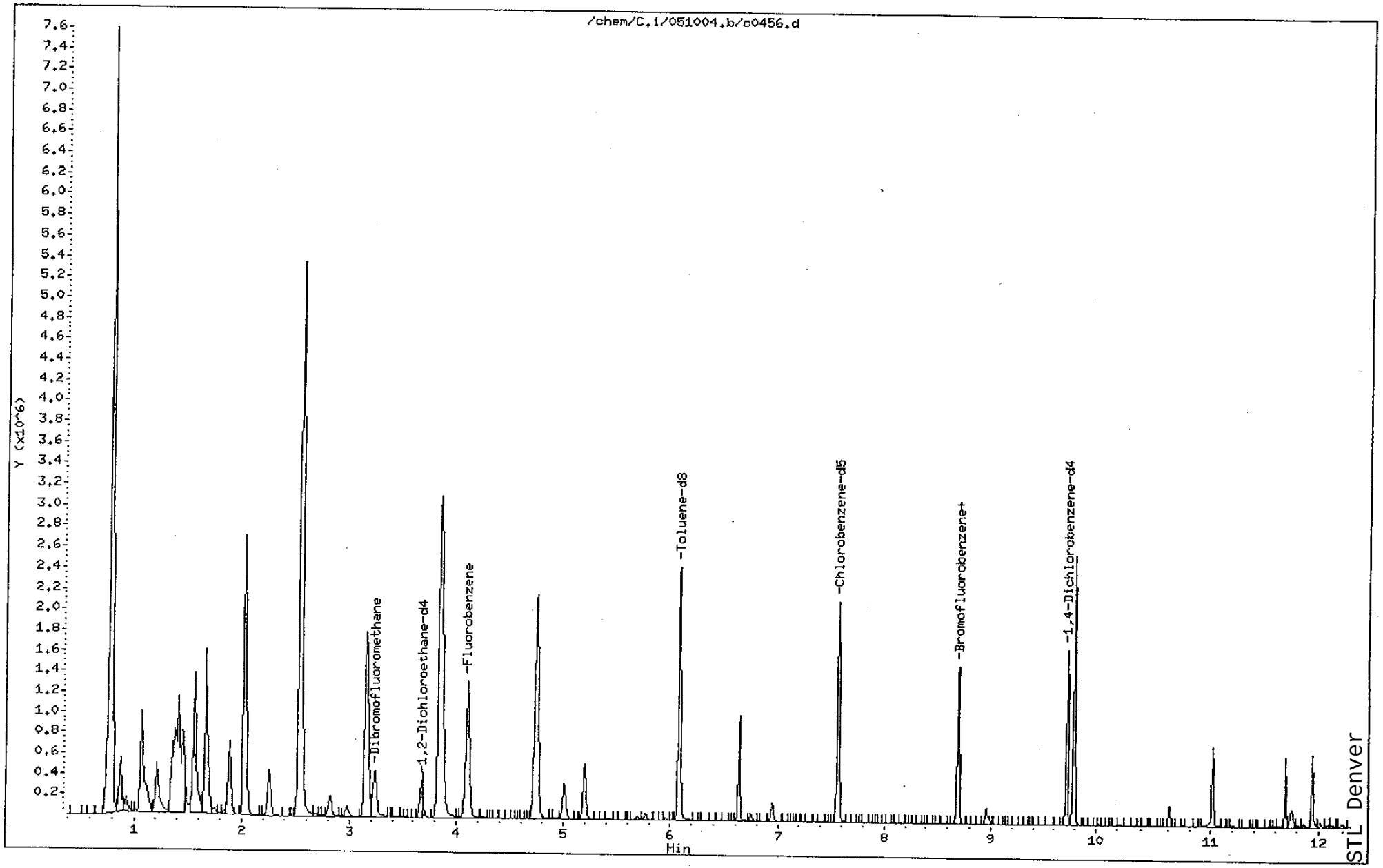
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.10	3.60	4.60	4.10	0.00
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.00
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

Data File: /chem/C.i/051004.b/c0456.d
Date : 10-MAY-2004 19:50
Client ID: SUPP010
Sample Info: SUPP010
Purge Volume: 20.0
Column phase: DB624

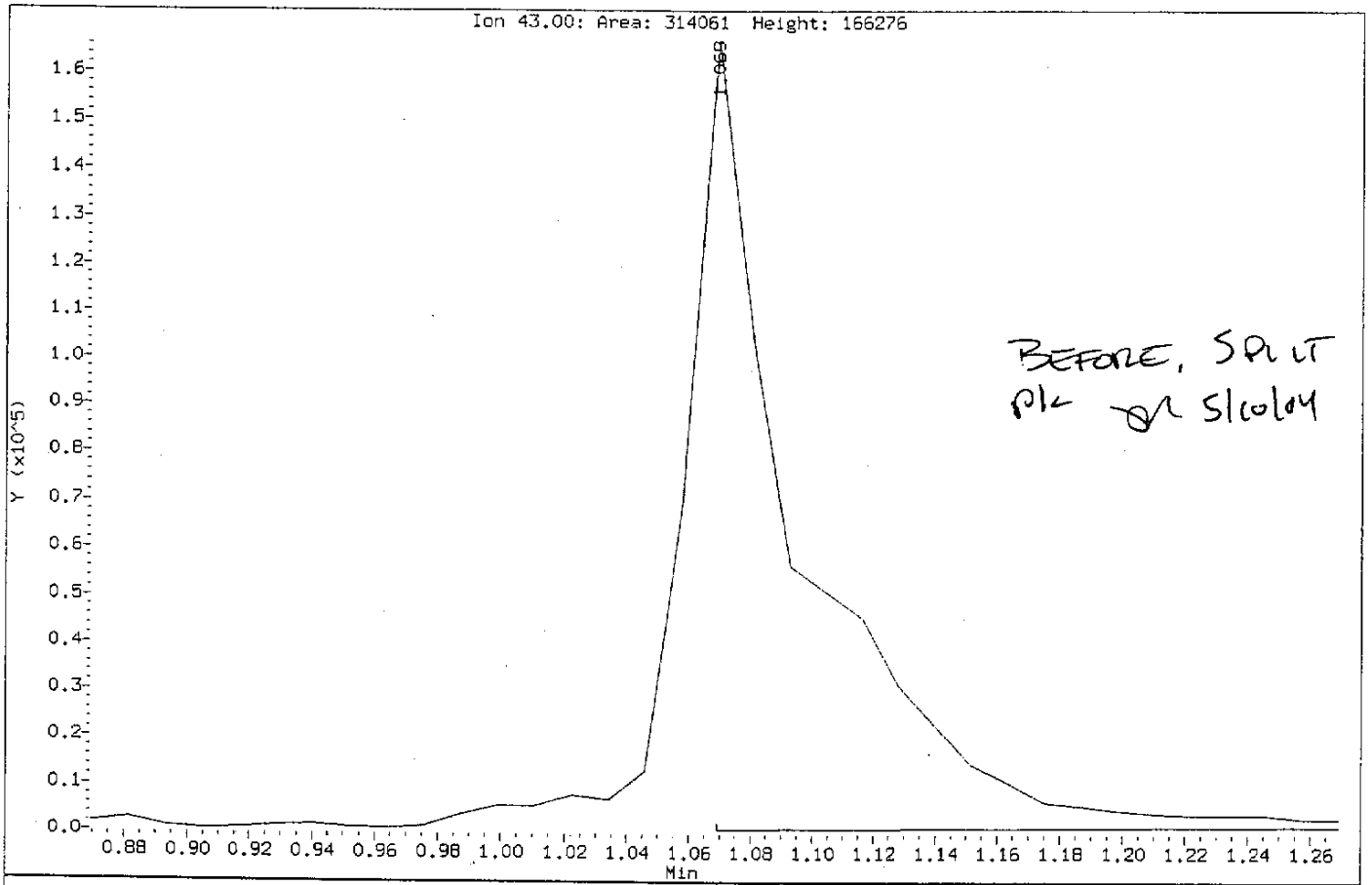
Instrument: C.i

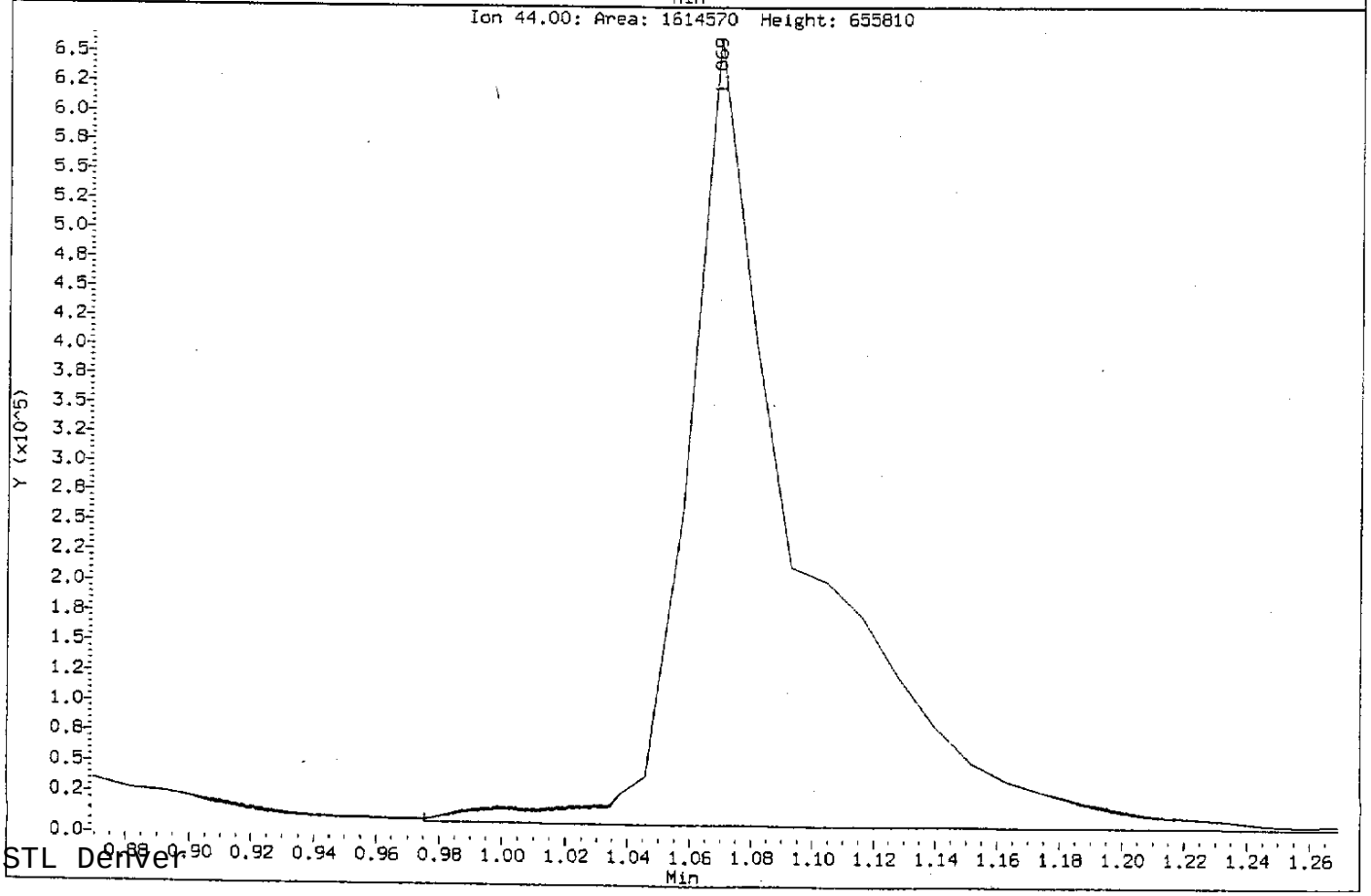
Operator: reinharj
Column diameter: 0.53



Data File: /chem/C.i/051004.b/c0456.d
Injection Date: 10-MAY-2004 19:50
Instrument: C.i
Client Sample ID: SUPP010

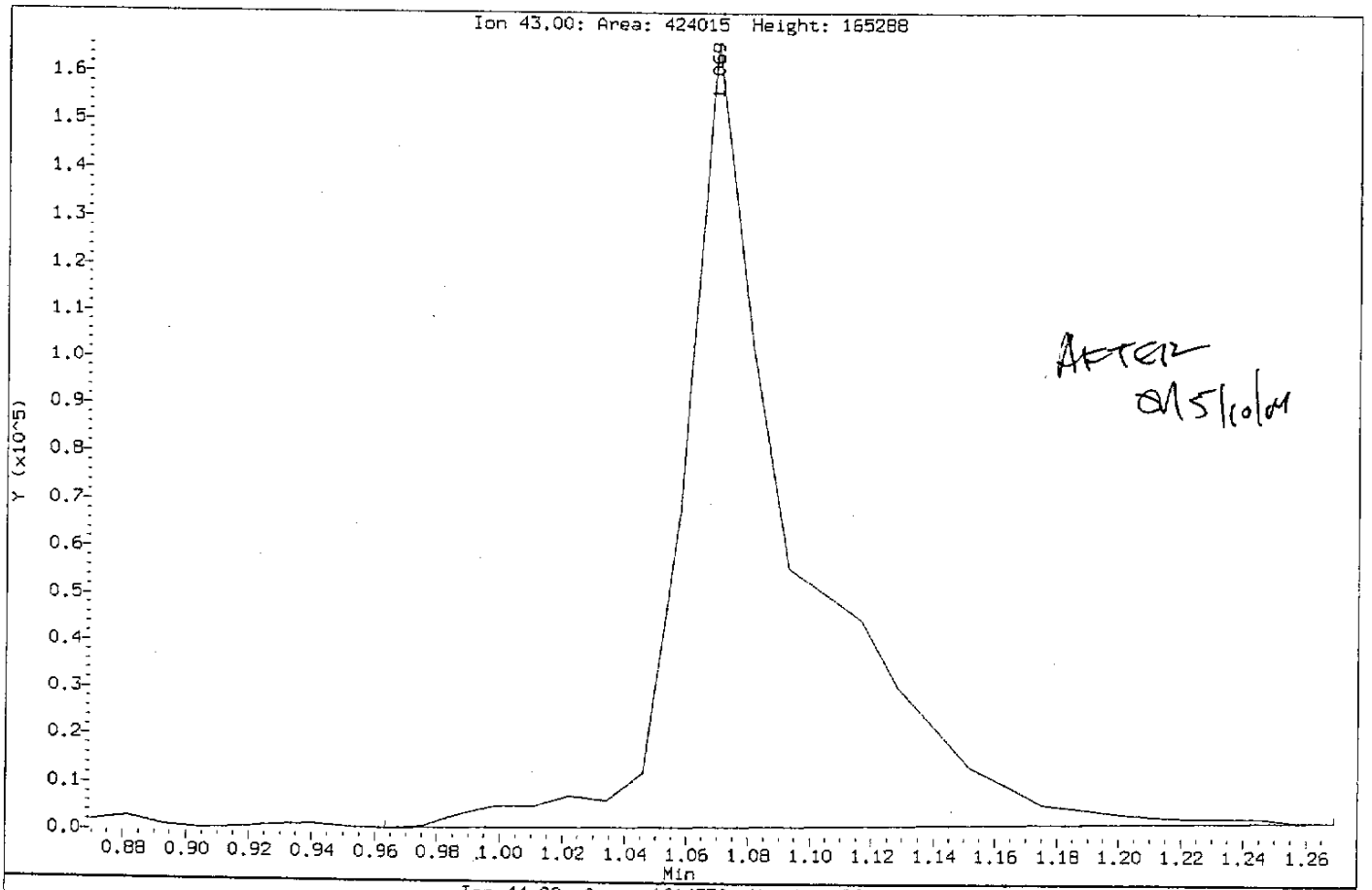
Compound: Ethylene Oxide
CAS Number: 75-21-98

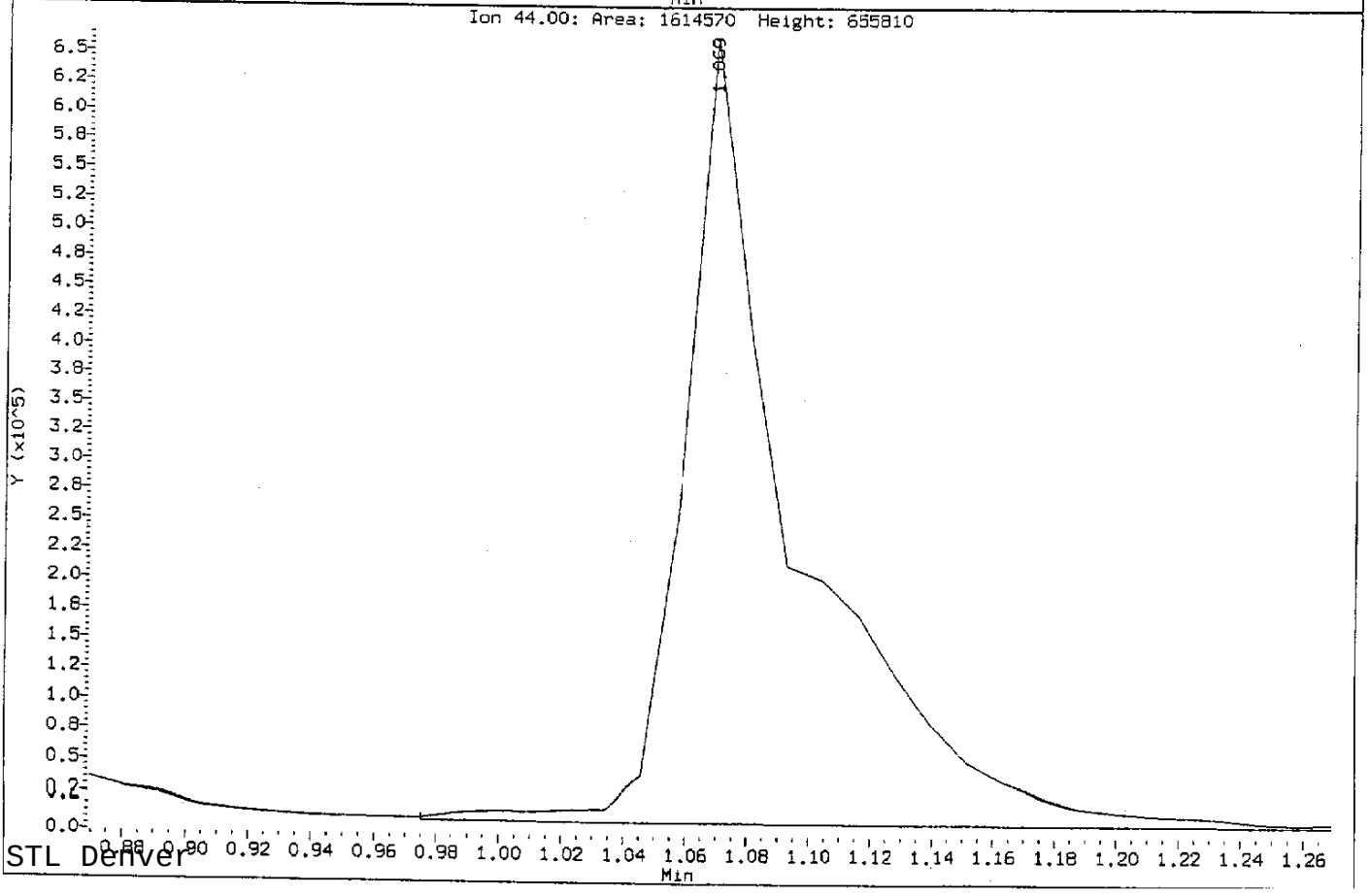




Data File: /chem/C.i/051004.b/c0456.d
Injection Date: 10-MAY-2004 19:50
Instrument: C.i
Client Sample ID: SUPP010

Compound: Ethylene Oxide
CAS Number: 75-21-98





STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/051004.b/c0457.d
Lab Smp Id: SUPP030 Client Smp ID: SUPP030
Inj Date : 10-MAY-2004 20:11
Operator : reinharj Inst ID: C.i
Smp Info : SUPP030
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/051004.b/C-20ml-AQ.m
Meth Date : 10-May-2004 21:31 reinharj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 56 Fluorobenzene	96	4.102	4.102	(1.000)	1663040	10.0000	
* 81 Chlorobenzene-d5	119	7.564	7.564	(1.000)	277894	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.722	9.722	(1.000)	319080	10.0000	
$ 48 Dibromofluoromethane	111	3.237	3.237	(0.789)	682832	20.0000	19.3622
$ 52 1,2-Dichloroethane-d4	65	3.679	3.679	(0.897)	721708	20.0000	19.1317
$ 69 Toluene-d8	98	6.078	6.078	(0.803)	3033480	20.0000	19.1229
$ 93 Bromofluorobenzene	95	8.694	8.694	(1.149)	914199	20.0000	19.1159
2 Dichlorotetrafluoroethane	85	0.873	0.873	(0.213)	984151	30.0000	26.1188
5 Ethylene Oxide	43	1.073	1.073	(0.262)	1292749	3750.00	4108.31(M)
8 Dichlorofluoromethane	67	1.214	1.214	(0.296)	1689982	30.0000	26.3334
11 Ethyl Ether	59	1.355	1.355	(0.330)	875285	30.0000	30.0524
13 1,2-dichloro-1,1,2-trifluoroet	117	1.378	1.378	(0.336)	1103775	30.0000	30.3916
14 2,2-dichloro-1,1,1-trifluoroet	83	1.413	1.413	(0.345)	1852843	30.0000	26.4437
16 Trichlorotrifluoroethane	151	1.460	1.460	(0.356)	806768	30.0000	26.6530
21 Carbon Disulfide	76	1.566	1.566	(0.382)	5128146	30.0000	27.5019
24 Methyl Acetate	43	1.684	1.684	(0.411)	2171095	150.000	142.782

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23 Allyl Chloride	41	1.660	1.660	(0.405)	3300963	30.0000	28.4324
22 2-Propanol	45	1.602	1.602	(0.390)	527822	600.000	554.655
28 Methyl t-butyl ether	73	1.895	1.895	(0.462)	1835763	30.0000	28.8217
31 Hexane	57	2.036	2.036	(0.269)	4046421	30.0000	27.4750
35 Vinyl acetate	43	2.260	2.260	(0.551)	1742229	60.0000	52.2898
36 ETBE	59	2.536	2.536	(0.618)	20938410	150.000	148.003
40 Ethyl Acetate	43	2.814	2.814	(0.686)	899766	60.0000	56.0103
43 Tetrahydrofuran	42	2.972	2.972	(0.724)	260657	60.0000	58.2770
46 Cyclohexane	56	3.159	3.159	(0.770)	3874457	30.0000	27.7074
55 TAME	73	3.848	3.848	(0.938)	10571196	150.000	150.494
61 2-Pentanone	43	5.002	5.002	(0.661)	1451356	120.000	125.030
58 Methyl Cyclohexane	55	4.742	4.742	(1.156)	3349945	30.0000	27.9689
64 Methyl Methacrylate	100	5.195	5.195	(1.267)	240951	60.0000	63.6732
66 2-nitropropane	41	5.697	5.697	(0.753)	87603	30.0000	31.7858
67 2-Chloroethyl vinyl ether	63	5.769	5.769	(0.763)	122259	30.0000	30.4772
73 Ethyl methacrylate	69	6.634	6.634	(0.877)	1439363	60.0000	65.7310
77 Tetrahydrothiophene	60	6.948	6.948	(0.918)	273918	30.0000	33.6382
92 cis-1,4-dichloro-2-butene	53	8.682	8.682	(0.893)	114936	30.0000	31.2462
98 t-1,4-Dichloro-2-butene	53	8.960	8.960	(0.922)	120004	30.0000	31.0206
109 1,2,3-Trimethylbenzene	105	9.788	9.788	(1.007)	3956145	30.0000	29.6424

QC Flag Legend

M - Compound response manually integrated.

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0457.d
Lab Smp Id: SUPP030
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/051004.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/10/4
Calibration Time: 1950
Client Smp ID: SUPP030
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1571830	785915	3143660	1663040	5.80
81 Chlorobenzene-d5	261684	130842	523368	277894	6.19
107 1,4-Dichlorobenze	297440	148720	594880	319080	7.28

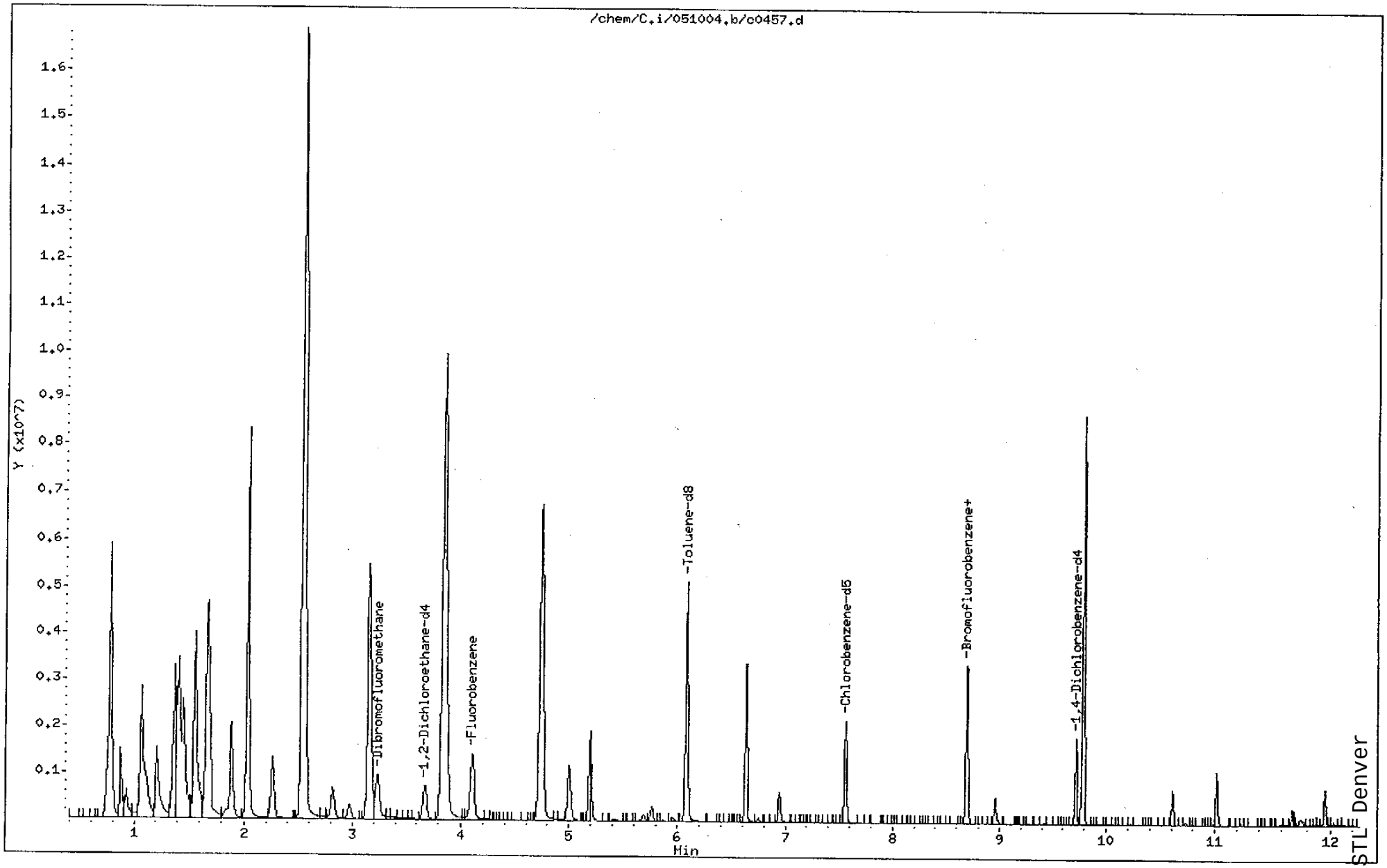
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.10	3.60	4.60	4.10	0.03
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.01
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.01

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

Data File: /chem/C.i/051004.b/c0457.d
Date : 10-MAY-2004 20:11
Client ID: SUPP030
Sample Info: SUPP030
Purge Volume: 20.0
Column phase: DB624

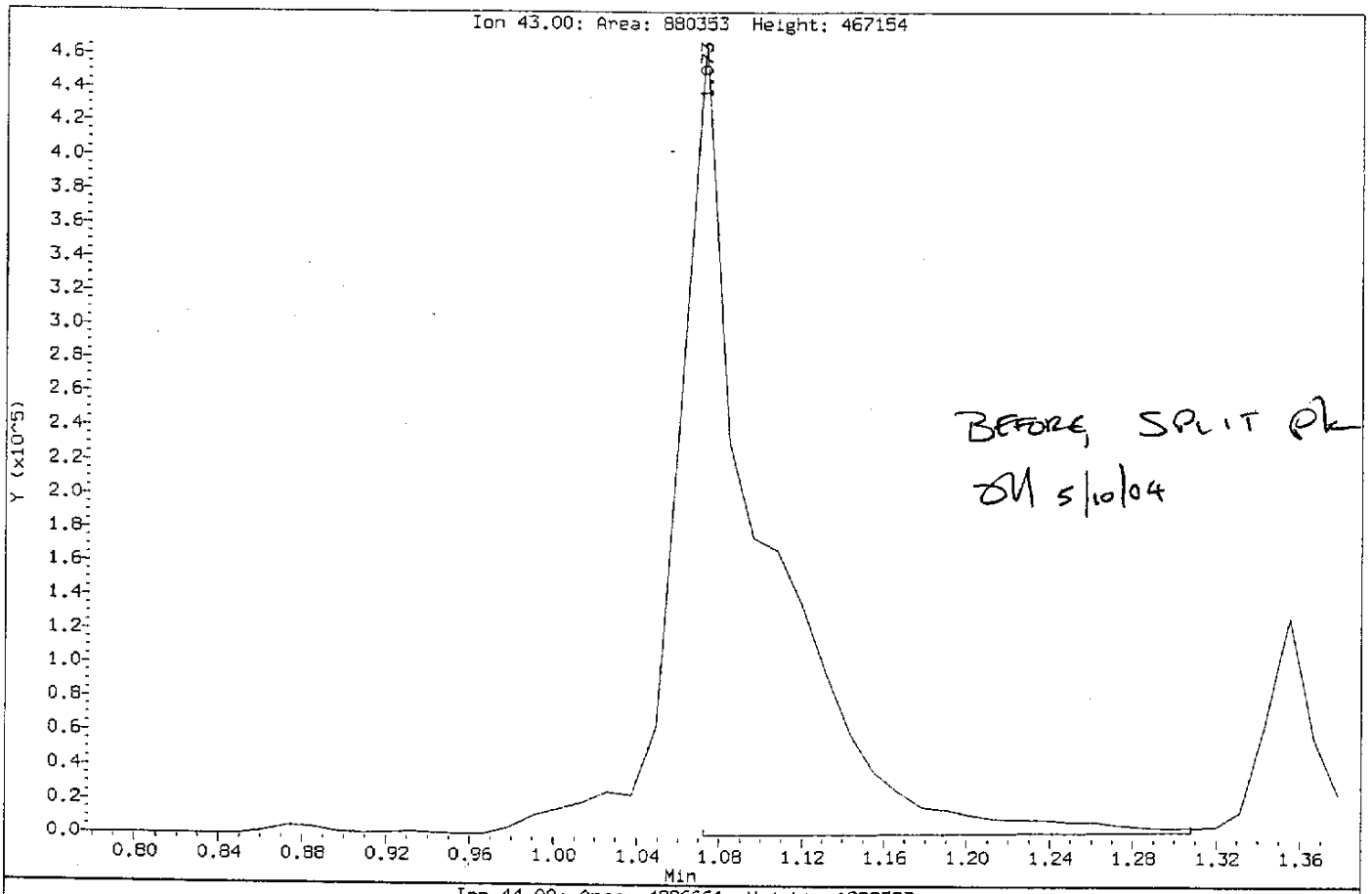
Instrument: C.i

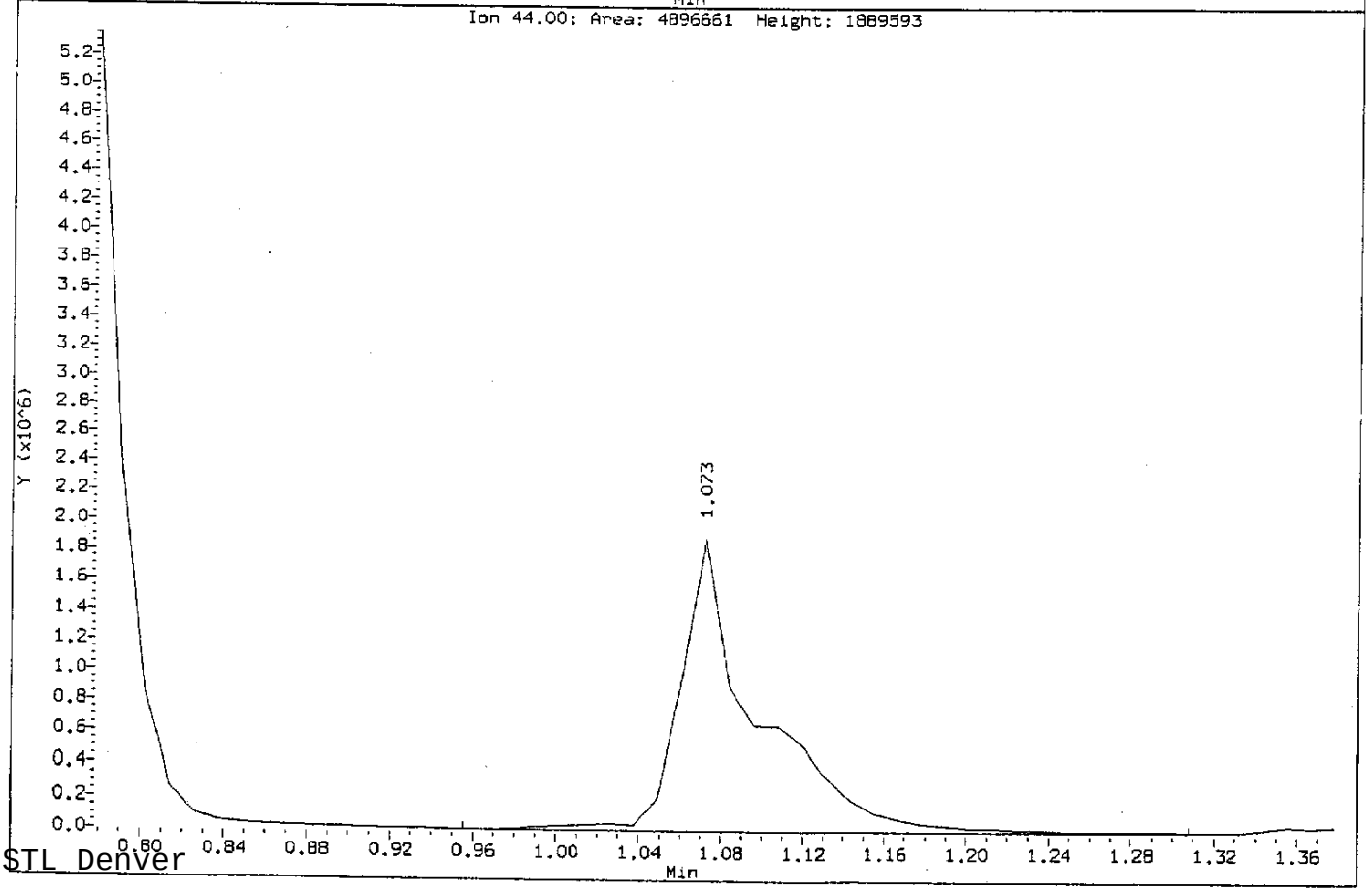
Operator: reinharj
Column diameter: 0.53



Data File: /chem/C.i/051004.b/c0457.d
Injection Date: 10-MAY-2004 20:11
Instrument: C.i
Client Sample ID: SUPP030

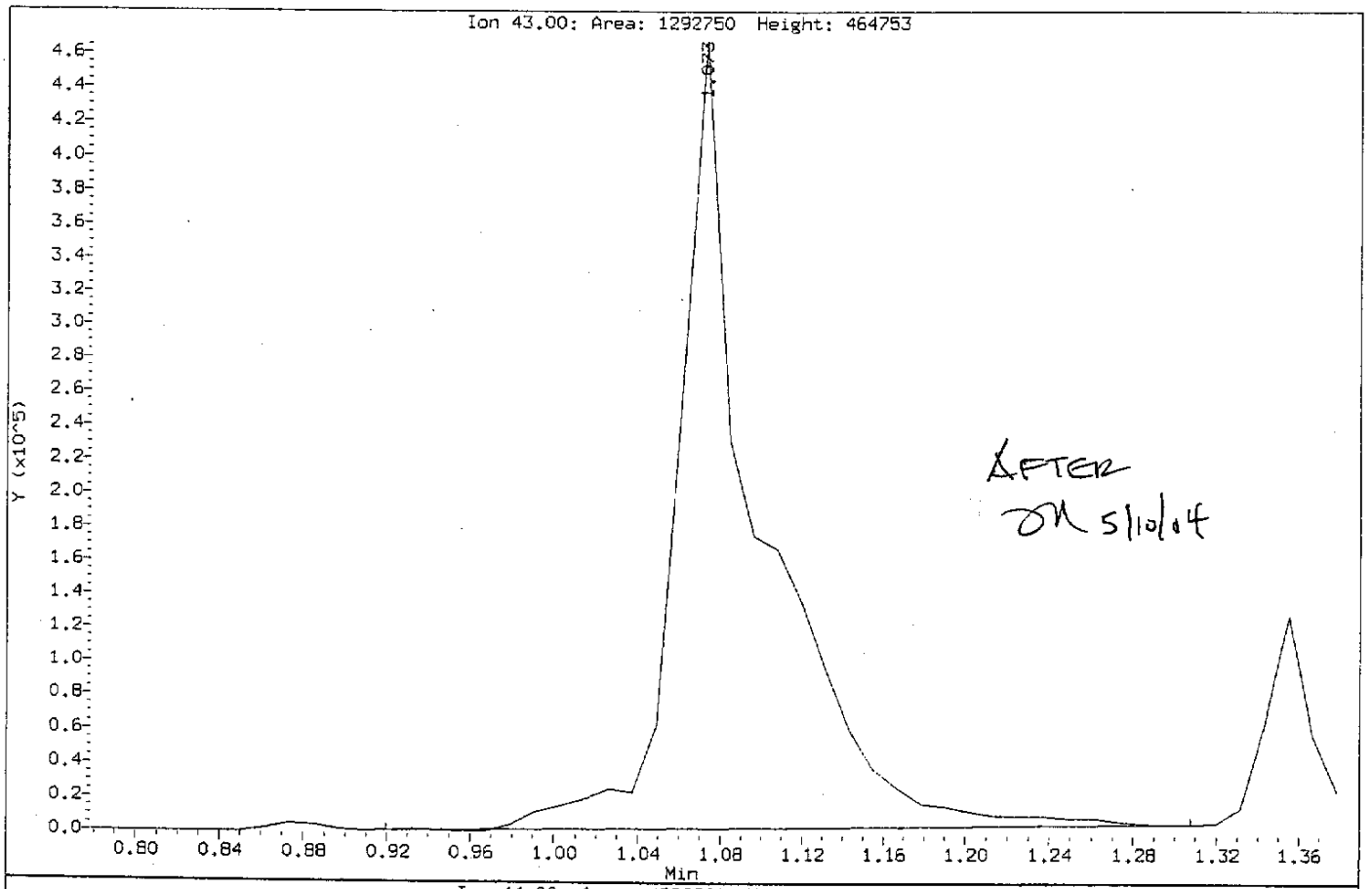
Compound: Ethylene Oxide
CAS Number: 75-21-98



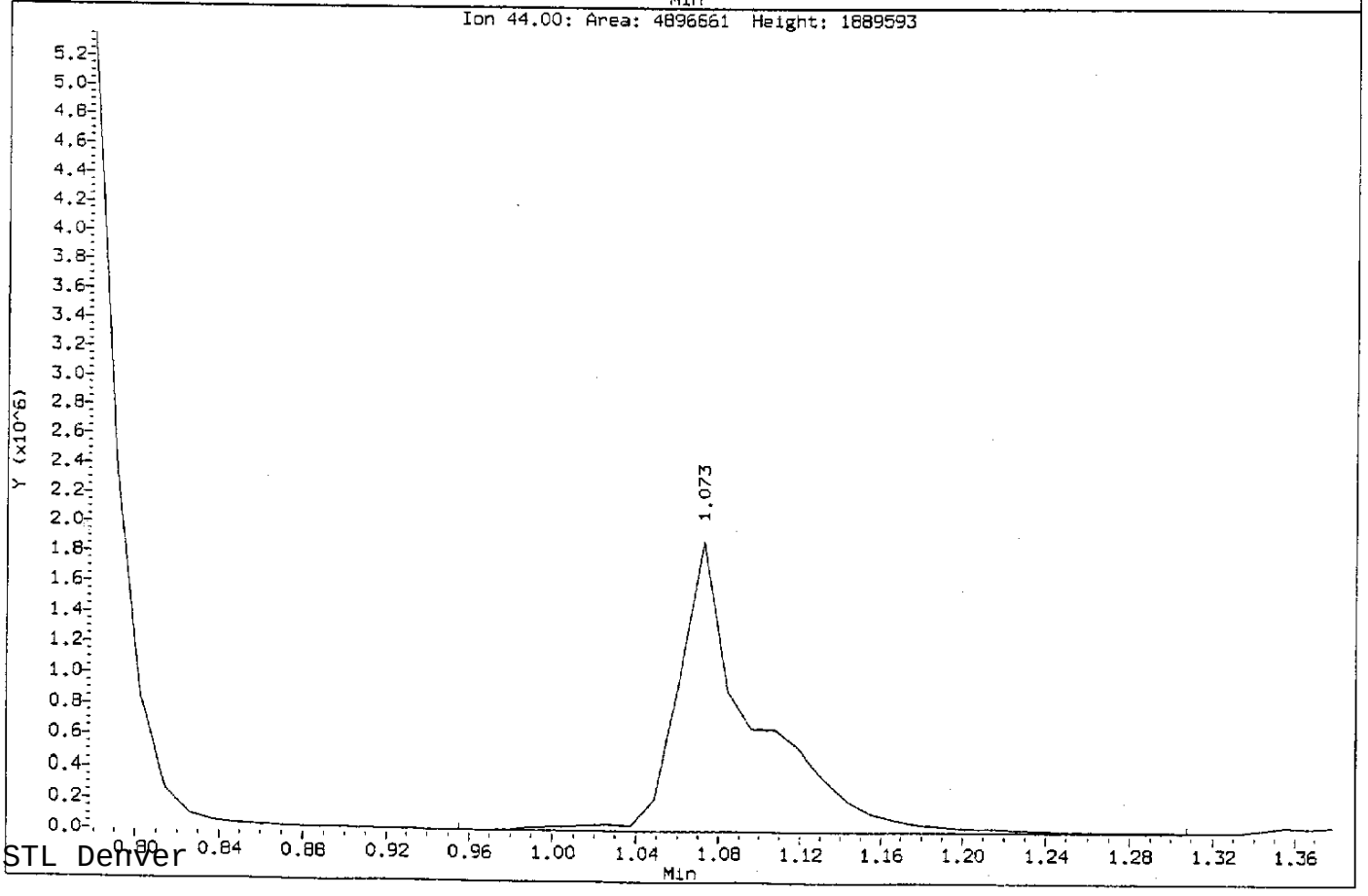


Data File: /chem/C.i/051004.b/c0457.d
Injection Date: 10-MAY-2004 20:11
Instrument: C.i
Client Sample ID: SUPP030

Compound: Ethylene Oxide
CAS Number: 75-21-98



AFTER
DR 5/10/04



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/051004.b/c0458.d
Lab Smp Id: SUPP060 Client Smp ID: SUPP060
Inj Date : 10-MAY-2004 20:33
Operator : reinharj Inst ID: C.i
Smp Info : SUPP060
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/051004.b/C-20ml-AQ.m
Meth Date : 10-May-2004 21:32 reinharj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 56 Fluorobenzene	96	4.102	4.102	(1.000)	1701578	10.0000	
* 81 Chlorobenzene-d5	119	7.559	7.559	(1.000)	284116	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.722	9.722	(1.000)	327600	10.0000	
$ 48 Dibromofluoromethane	111.00	Compound Not Detected.					
$ 52 1,2-Dichloroethane-d4	65.00	Compound Not Detected.					
$ 69 Toluene-d8	98.00	Compound Not Detected.					
$ 93 Bromofluorobenzene	95.00	Compound Not Detected.					
2 Dichlorotetrafluoroethane	85	0.874	0.874	(0.213)	2079924	60.0000	53.9499
5 Ethylene Oxide	43	1.074	1.074	(0.262)	2312276	7500.00	7295.86(M)
8 Dichlorofluoromethane	67	1.215	1.215	(0.296)	3438052	60.0000	52.3587
11 Ethyl Ether	59	1.356	1.356	(0.330)	1488147	60.0000	49.9375
13 1,2-dichloro-1,1,2-trifluoroet	117	1.379	1.379	(0.336)	2207212	60.0000	59.9078
14 2,2-dichloro-1,1,1-trifluoroet	83	1.415	1.415	(0.345)	3768559	60.0000	52.5665
16 Trichlorotrifluoroethane	151	1.450	1.450	(0.353)	1636195	60.0000	52.8304
21 Carbon Disulfide	76	1.556	1.556	(0.379)	10936377	60.0000	57.3227
24 Methyl Acetate	43	1.685	1.685	(0.411)	4419684	300.000	284.077

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	Allyl Chloride	41	1.661	1.661	(0.405)	6982564	60.0000	58.7813
22	2-Propanol	45	1.603	1.603	(0.391)	1058794	1200.00	1087.42
28	Methyl t-butyl ether	73	1.885	1.885	(0.459)	3656152	60.0000	56.1020
31	Hexane	57	2.037	2.037	(0.270)	8731085	60.0000	57.9855
35	Vinyl acetate	43	2.261	2.261	(0.551)	4174354	120.000	122.448(A)
36	ETBE	59	2.549	2.549	(0.621)	30437874	300.000	210.276(H)
40	Ethyl Acetate	43	2.815	2.815	(0.686)	1800434	120.000	109.538
43	Tetrahydrofuran	42	2.966	2.966	(0.723)	517132	120.000	113.000
46	Cyclohexane	56	3.154	3.154	(0.769)	8178921	60.0000	57.1652
55	TAME	73	3.848	3.848	(0.938)	20891380	300.000	290.678
61	2-Pentanone	43	5.003	5.003	(0.662)	2957596	240.000	249.208(A)
58	Methyl Cyclohexane	55	4.737	4.737	(1.155)	6982758	60.0000	56.9792
64	Methyl Methacrylate	100	5.196	5.196	(1.267)	481722	120.000	124.416(A)
66	2-nitropropane	41	5.692	5.692	(0.753)	193870	60.0000	68.8031
67	2-Chloroethyl vinyl ether	63	5.764	5.764	(0.763)	356487	60.0000	59.9500
73	Ethyl methacrylate	69	6.628	6.628	(0.877)	2907355	120.000	129.862(A)
77	Tetrahydrothiophene	60	6.942	6.942	(0.918)	560733	60.0000	67.3521(A)
92	cis-1,4-dichloro-2-butene	53	8.683	8.683	(0.893)	248866	60.0000	65.8964(A)
98	t-1,4-Dichloro-2-butene	53	8.955	8.955	(0.921)	253447	60.0000	63.8113(A)
109	1,2,3-Trimethylbenzene	105	9.789	9.789	(1.007)	8315482	60.0000	60.6855(A)

QC Flag Legend

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

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c0458.d
Lab Smp Id: SUPP060
Analysis Type: VOA
Quant Type: ISTD
Operator: reinharj
Method File: /chem/C.i/051004.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/10/4
Calibration Time: 1950
Client Smp ID: SUPP060
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1571830	785915	3143660	1701578	8.25
81 Chlorobenzene-d5	261684	130842	523368	284116	8.57
107 1,4-Dichlorobenze	297440	148720	594880	327600	10.14

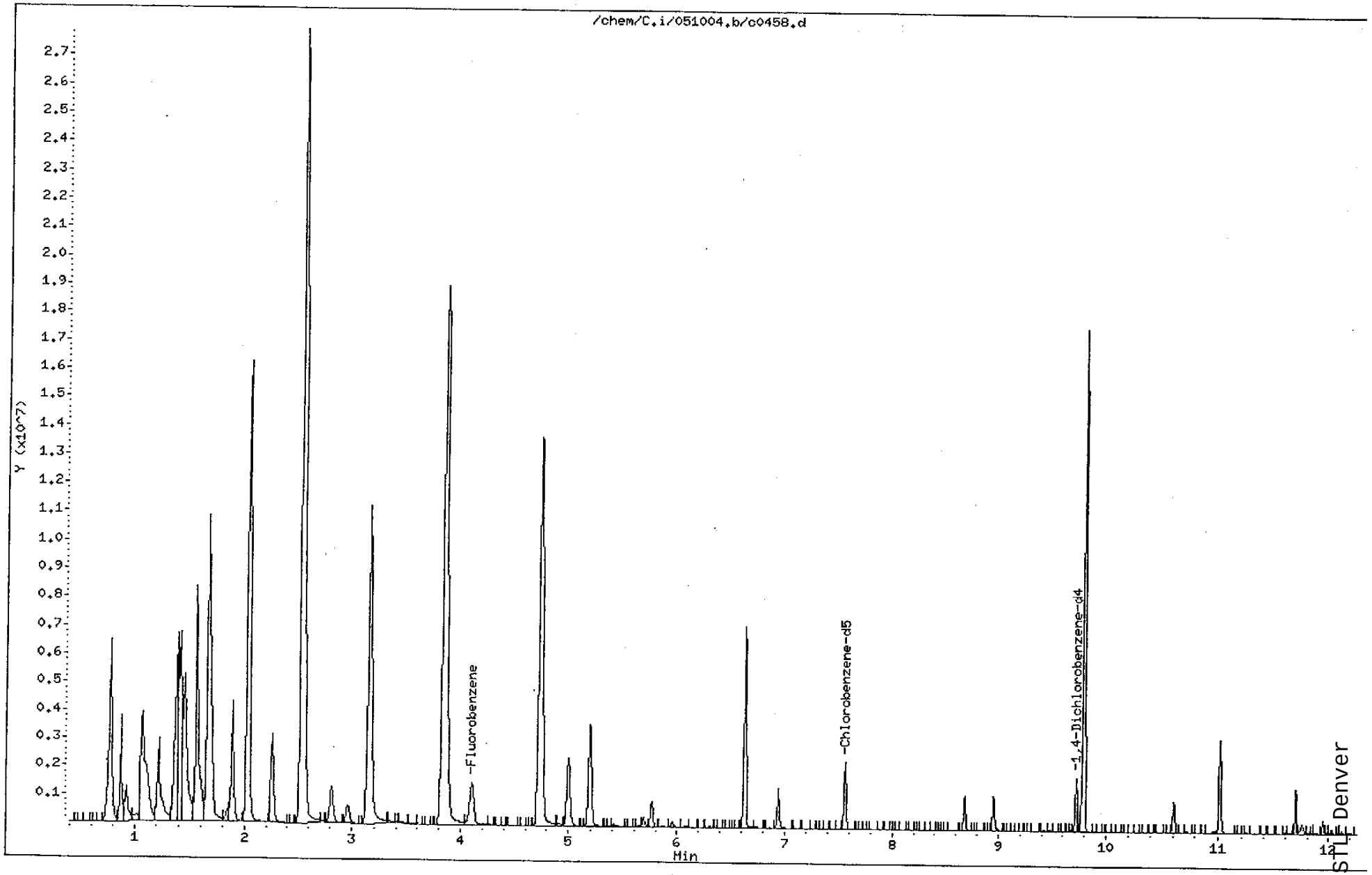
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.10	3.60	4.60	4.10	0.04
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	-0.06
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.02

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

Data File: /chem/C.i/051004.b/c0458.d
Date : 10-MAY-2004 20:33
Client ID: SUPP060
Sample Info: SUPP060
Purge Volume: 20.0
Column phase: DB624

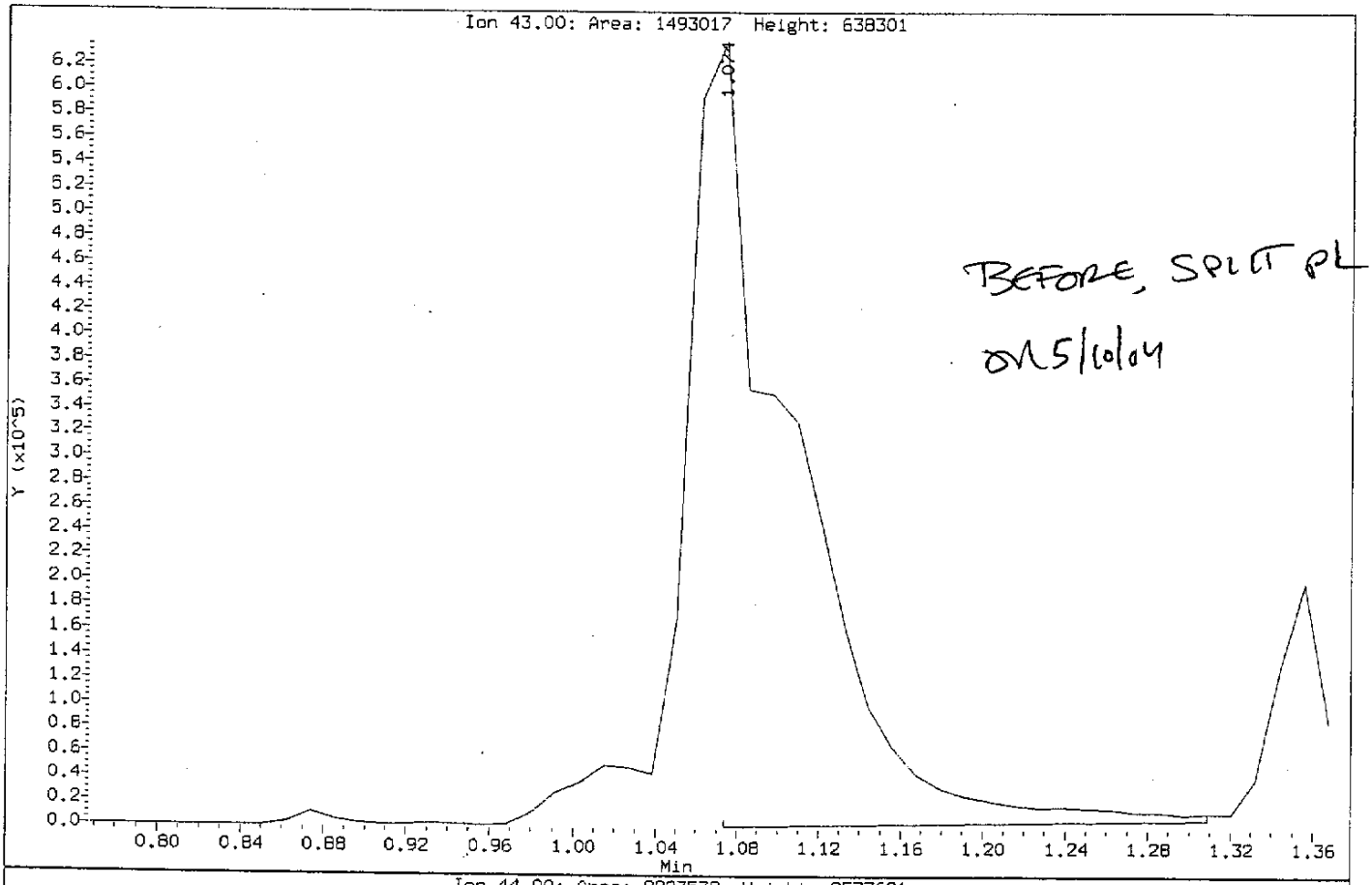
Instrument: C.i

Operator: reinharj
Column diameter: 0.53

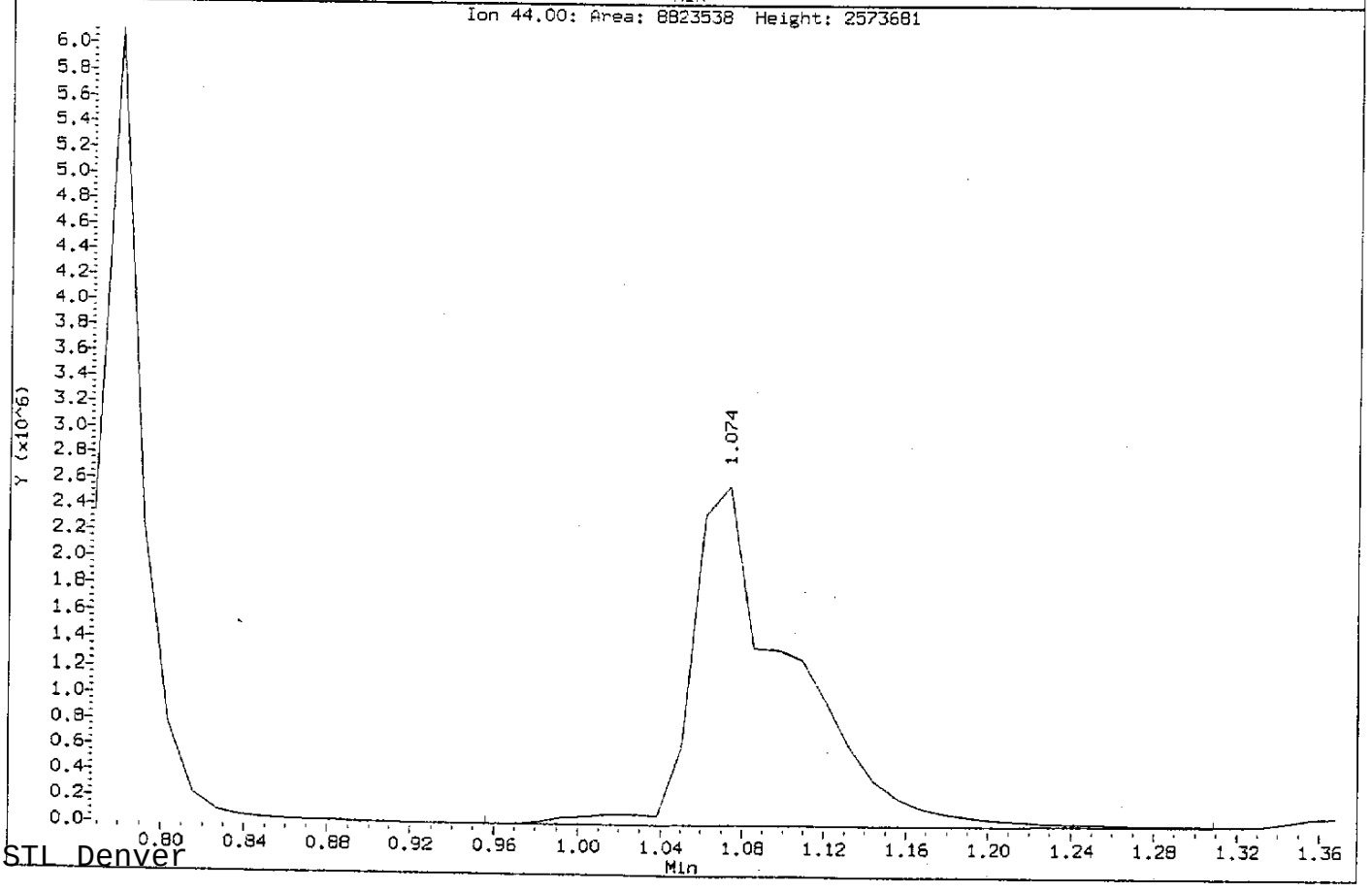


Data File: /chem/C.i/051004.b/c0458.d
Injection Date: 10-MAY-2004 20:33
Instrument: C.i
Client Sample ID: SUPP060

Compound: Ethylene Oxide
CAS Number: 75-21-98

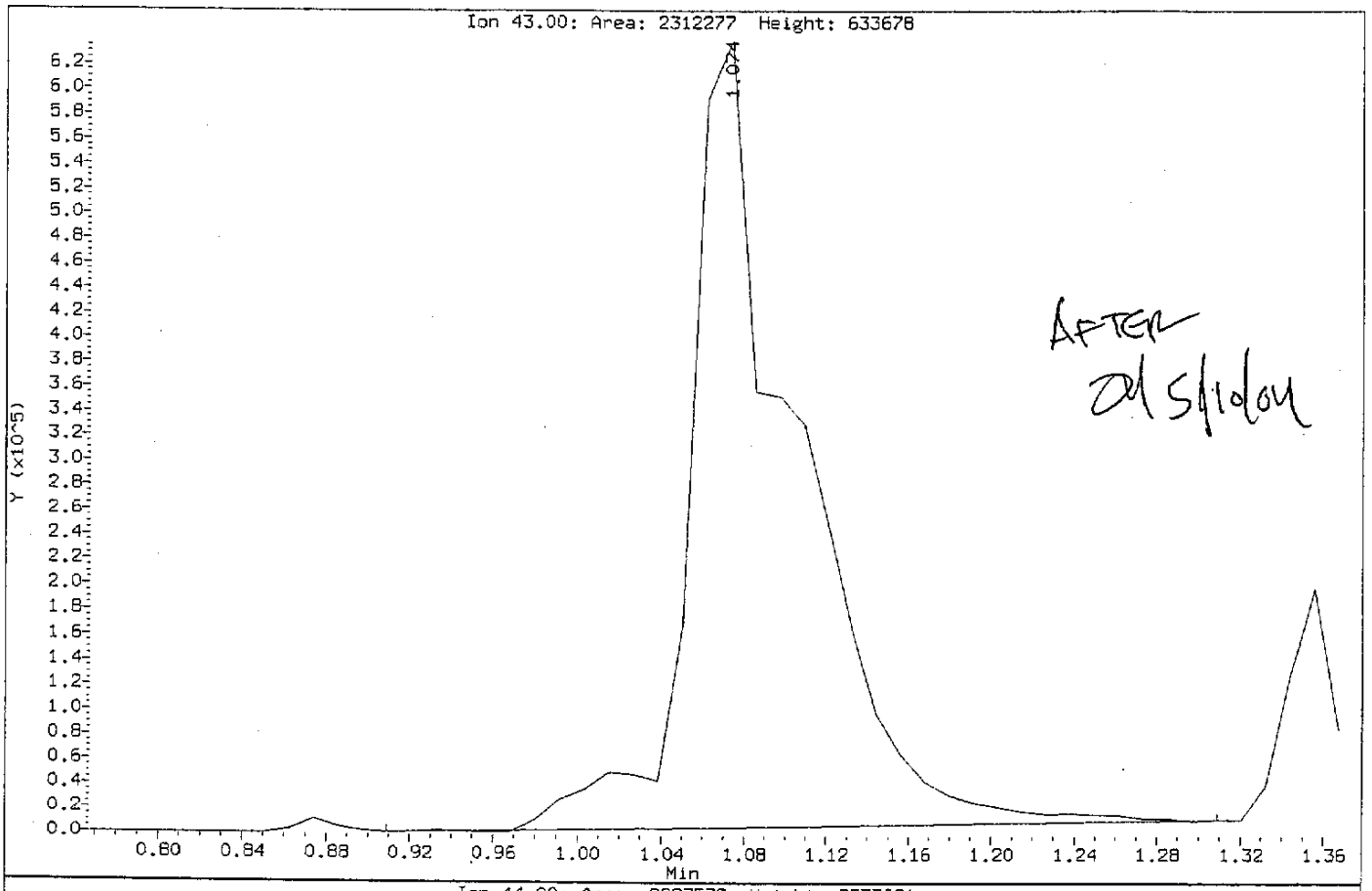


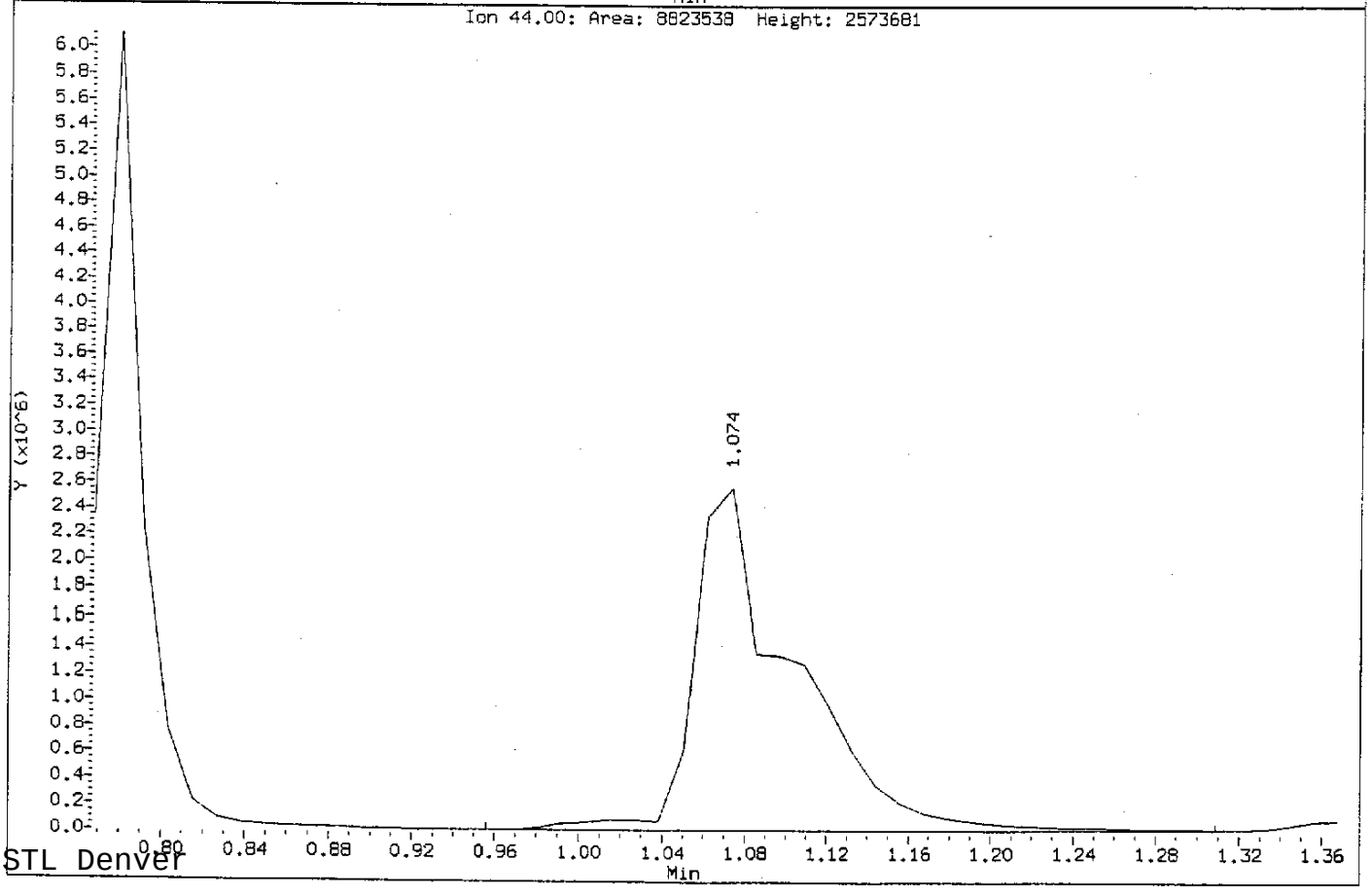
BEFORE, SPLIT PL
ON 5/10/04



Data File: /chem/C.i/051004.b/c0458.d
Injection Date: 10-MAY-2004 20:33
Instrument: C.i
Client Sample ID: SUPP060

Compound: Ethylene Oxide
CAS Number: 75-21-98





GC/MS Continuing Calibration Review Checklist

STL Denver

Instrument ID and Date: C 05/28/04

Check Method Used: Analysis ☐ 625 ☐ 8270 ☐ Other SV _____

☐ 524.2 ☐ 624 ☒ 8260B ☐ Other VOA

VOA Preparation ☐ 5mL ☒ 20mL ☐ 5035 Low ☐ 5035 High ☐ 5030 Low ☐ 5030 High

Review Items	Level 1 Yes	Level 1 No	Level 1 N/A	Level 2	Comments
Continuing Calibration					
1. BFB/DFTPP meets criteria?	✓			✓	
2. ICAL date and instrument ID verified?	✓			✓	
3. Do SPCC RRFs and CCC %Ds meet method criteria?	✓			✓	
4. Does %D meet criteria for non-CCC compounds?	✓			✓	Ethylene Oxide +76.07.
5. Isomeric pairs checked for correct peak assignment?	✓			✓	
6. Standards traceability properly documented?	✓			✓	
7. Manual integrations documented and checked?			✓	NA	
8. Do the Internal Standards meet criteria for %D against ICAL?	✓			✓	

1st Level Reviewer: [signature] Date: 05/28/04

2nd Level Reviewer: MH Date: 5/28/04

Report Date: 28-May-2004 07:12

Calibration History

Method : /chem/C.i/052804.b/C-20ml-AQ.m
Start Cal Date: 02-MAR-2004 00:09
End Cal Date : 10-MAY-2004 20:33

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 1.00000		
10-MAY-2004 18:45	2-supp	/chem/C.i/051004.b/c0453.d
05-MAY-2004 13:47	1-main	/chem/C.i/050504i.b/c0304.d
Cal Level: 2 , Cal Amount: 2.00000		
10-MAY-2004 19:07	2-supp	/chem/C.i/051004.b/c0454.d
05-MAY-2004 14:11	1-main	/chem/C.i/050504i.b/c0305.d
Cal Level: 3 , Cal Amount: 5.00000		
10-MAY-2004 19:29	2-supp	/chem/C.i/051004.b/c0455.d
05-MAY-2004 14:35	1-main	/chem/C.i/050504i.b/c0306.d
Cal Level: 4 , Cal Amount: 10.0000		
10-MAY-2004 19:50	2-supp	/chem/C.i/051004.b/c0456.d
05-MAY-2004 14:59	1-main	/chem/C.i/050504i.b/c0307.d
Cal Level: 5 , Cal Amount: 30.0000		
10-MAY-2004 20:11	2-supp	/chem/C.i/051004.b/c0457.d
05-MAY-2004 15:23	1-main	/chem/C.i/050504i.b/c0308.d
Cal Level: 6 , Cal Amount: 60.0000		
10-MAY-2004 20:33	2-supp	/chem/C.i/051004.b/c0458.d
05-MAY-2004 15:46	1-main	/chem/C.i/050504i.b/c0309.d

Continuing Calibration

28-MAY-2004 06:44	2-supp	/chem/C.i/052804.b/c1132.d
28-MAY-2004 06:23	1-main	/chem/C.i/052804.b/c1131.d

Data File: /chem/C.i/052804.b/c1130.d

Date : 28-MAY-2004 06:09

Client ID: BFB

Instrument: C.i

Sample Info: BFB,,

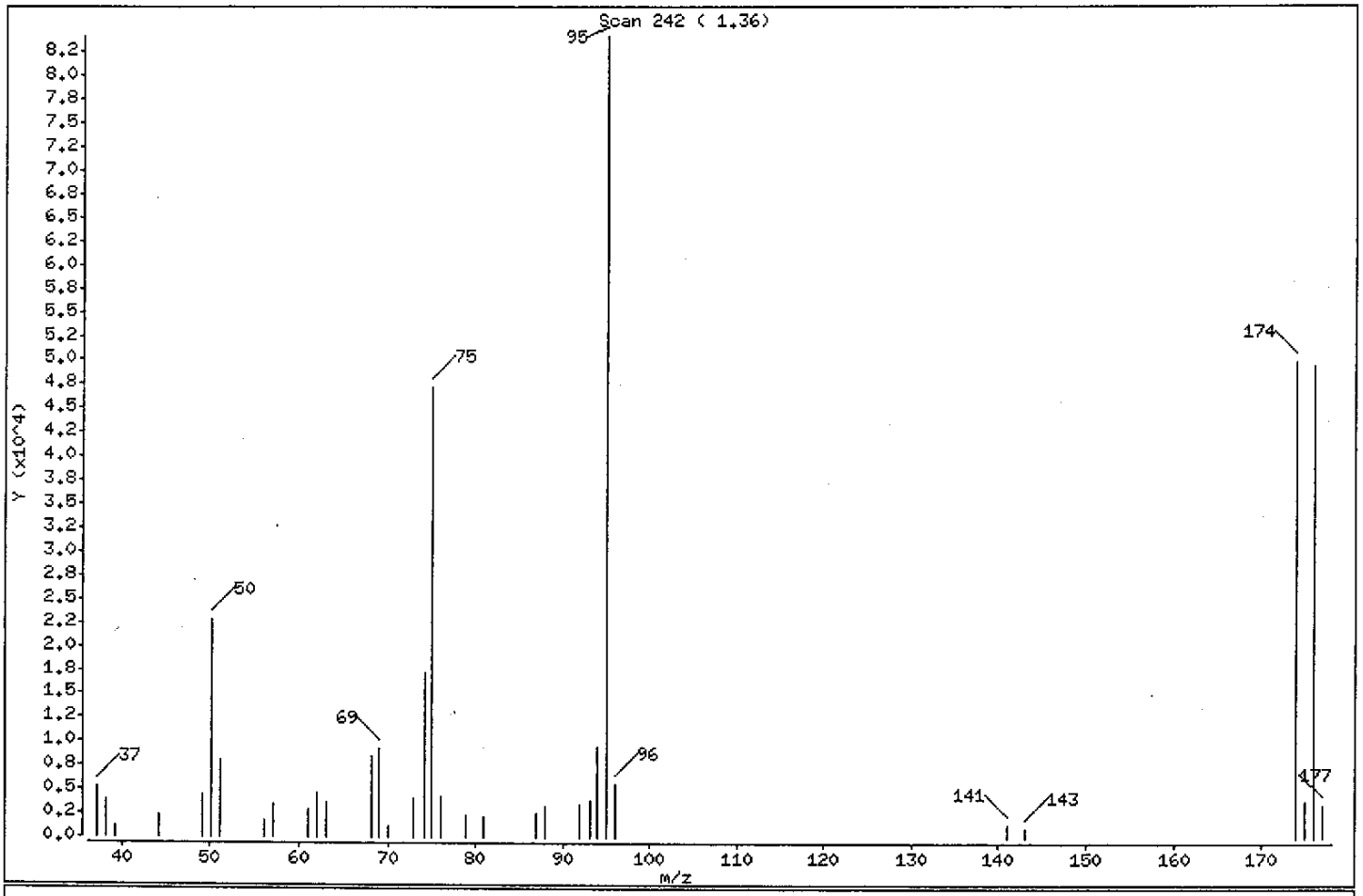
Volume Injected (uL): 1.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	27.08
75	30.00 - 60.00% of mass 95	56.01
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	59.22
175	5.00 - 9.00% of mass 174	4.60 (7.77)
176	95.00 - 101.00% of mass 174	58.93 (99.52)
177	5.00 - 9.00% of mass 176	4.03 (6.84)

Data File: /chem/C.i/052804.b/c1130.d

Date : 28-MAY-2004 06:09

Client ID: BFB

Instrument: C.i

Sample Info: BFB,,

Volume Injected (uL): 1.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Data File: c1130.d
Spectrum: Scan 242 (1.36)
Location of Maximum: 95.00
Number of points: 34

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.10	5200	61.10	2824	76.10	4182	96.05	5620
38.20	3892	62.10	4620	78.90	2398	140.95	1362
39.25	1091	63.10	3689	81.00	2143	142.95	1008
44.15	2323	68.15	8573	86.95	2425	173.90	49824
49.10	4473	69.05	9366	87.95	3309	175.00	3870
50.10	22784	70.15	1107	92.00	3578	175.90	49584
51.10	8043	73.05	3967	93.10	3898	177.00	3393
56.05	1653	74.10	17280	94.00	9431		
57.05	3568	75.10	47128	95.00	84136		

Data File: /chem/C.i/052804.b/c1130.d

Page 1

Date : 28-MAY-2004 06:09

Client ID: BFB

Instrument: C.i

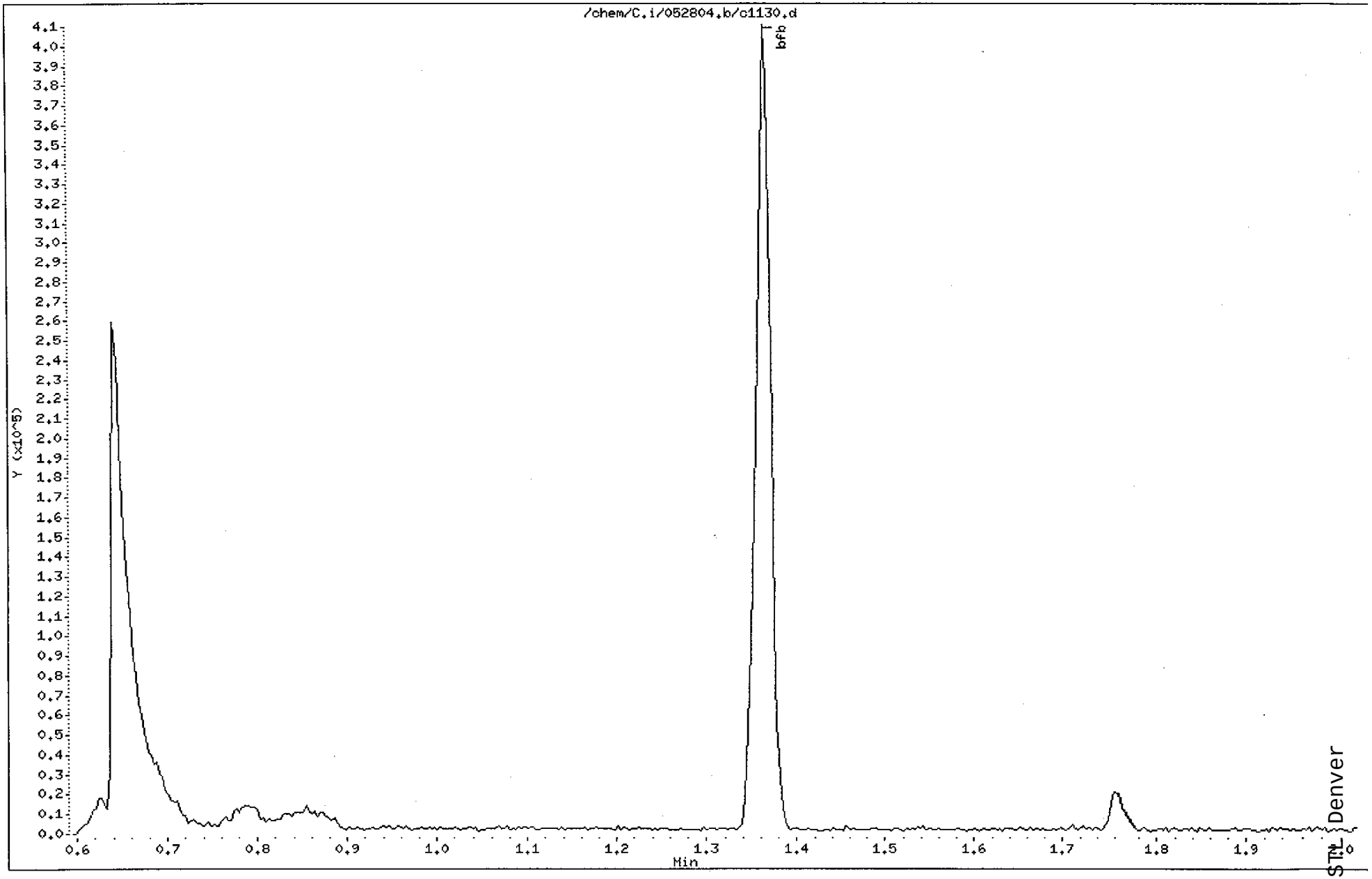
Sample Info: BFB,,

Volume Injected (uL): 1.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1131.d
Lab Smp Id: MAIN010 Client Smp ID: MAIN010
Inj Date : 28-MAY-2004 06:23
Operator : yanezj Inst ID: C.i
Smp Info : MAIN010,,067/082-04
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/052804.b/C-20ml-AQ.m
Meth Date : 28-May-2004 07:00 C Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-main.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	56 Fluorobenzene	96	4.106	4.106	(1.000)	1293775	10.0000	
*	81 Chlorobenzene-d5	119	7.562	7.563	(1.000)	191214	10.0000	
*	107 1,4-Dichlorobenzene-d4	152	9.720	9.720	(1.000)	239951	10.0000	
M	12 1,2-Dichloroethene (total)	96				718182	20.0000	19.5499
M	18 Xylene (total)	106				1668408	30.0000	30.2696
	1 dichlorodifluoromethane	85	0.827	0.827	(0.201)	380678	10.0000	11.4847
	3 Chloromethane	50	0.921	0.921	(0.224)	435910	10.0000	11.7942
	4 Vinyl Chloride	62	0.944	0.944	(0.230)	349005	10.0000	11.1408
	6 Bromomethane	94	1.097	1.097	(0.267)	131957	10.0000	13.4694
	7 Chloroethane	64	1.121	1.121	(0.273)	233108	10.0000	12.8823
	9 Trichlorofluoromethane	101	1.215	1.215	(0.296)	504619	10.0000	12.3888
	10 Ethanol	45	1.332	1.332	(0.324)	62663	500.000	475.180
	15 Acrolein	56	1.450	1.450	(0.353)	169870	100.000	58.5442
	17 1,1-Dichloroethene	96	1.461	1.461	(0.356)	361057	10.0000	10.9956
	19 Acetone	43	1.520	1.520	(0.370)	135856	40.0000	34.9217
	20 Iodomethane	142	1.544	1.544	(0.376)	371114	10.0000	10.6226

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
25 Acetonitrile	41	1.708	1.708	(0.416)	149815	100.000	90.9512
26 Methylene Chloride	84	1.755	1.755	(0.427)	290999	10.0000	9.93645
27 tert-Butyl alcohol	59	1.838	1.838	(0.448)	179004	200.000	141.644
30 Acrylonitrile	53	1.943	1.943	(0.473)	447623	100.000	78.9573
29 trans-1,2-Dichloroethene	96	1.896	1.896	(0.462)	377666	10.0000	9.96903
32 1,1-Dichloroethane	63	2.214	2.214	(0.539)	778655	10.0000	10.0501
34 Chloroprene	53	2.261	2.261	(0.551)	823149	10.0000	10.1720
33 Isopropyl ether	87	2.237	2.237	(0.545)	1057773	50.0000	43.8116(Q)
38 cis-1,2-Dichloroethene	96	2.716	2.716	(0.661)	340516	10.0000	9.58086
37 2,2-Dichloropropane	77	2.686	2.686	(0.654)	576985	10.0000	10.9945
39 2-Butanone	43	2.776	2.776	(0.676)	178731	40.0000	29.6826
41 Propionitrile	54	2.891	2.891	(0.704)	157012	100.000	80.7995
44 Methacrylonitrile	41	3.012	3.012	(0.734)	758729	100.000	79.1951
42 Bromochloromethane	128	2.958	2.958	(0.720)	85514	10.0000	8.83041
45 Chloroform	83	3.054	3.054	(0.744)	560297	10.0000	9.66133
47 1,1,1-Trichloroethane	97	3.187	3.187	(0.776)	589329	10.0000	10.0707
50 1,1-Dichloropropene	75	3.393	3.393	(0.826)	574299	10.0000	9.72817
49 Carbon Tetrachloride	117	3.332	3.332	(0.812)	516783	10.0000	10.1970
53 Isobutanol	41	3.779	3.779	(0.921)	55400	200.000	141.746
51 Benzene	78	3.640	3.640	(0.887)	1480651	10.0000	9.60745
54 1,2-Dichloroethane	62	3.785	3.785	(0.922)	308545	10.0000	8.80803
57 Trichloroethene	130	4.607	4.607	(1.122)	314016	10.0000	9.36696
59 n-Butanol	56	4.783	4.783	(1.165)	36630	200.000	111.464
60 1,2-Dichloropropane	63	4.952	4.952	(1.206)	312725	10.0000	8.84969
62 Dibromomethane	93	5.085	5.085	(1.238)	82357	10.0000	8.16234
63 1,4-Dioxane	88	5.145	5.145	(1.253)	37876	500.000	377.490
65 Bromodichloromethane	83	5.314	5.314	(1.294)	297796	10.0000	8.82261
68 cis-1,3-Dichloropropene	75	5.864	5.864	(0.775)	316287	10.0000	8.78447
70 4-Methyl-2-pentanone	43	6.088	6.088	(0.805)	401114	40.0000	32.6788
71 Toluene	91	6.148	6.148	(0.813)	1443473	10.0000	10.0024
72 trans-1,3-Dichloropropene	75	6.517	6.517	(0.862)	204405	10.0000	8.06798
74 1,1,2-Trichloroethane	97	6.686	6.686	(0.884)	108405	10.0000	8.21596
75 Tetrachloroethene	164	6.686	6.686	(0.884)	232216	10.0000	10.1805
76 1,3-Dichloropropane	76	6.843	6.843	(0.905)	215073	10.0000	8.48359
78 2-Hexanone	43	6.982	6.982	(0.923)	231163	40.0000	31.0365
79 Dibromochloromethane	129	7.018	7.018	(0.928)	116378	10.0000	8.57097
80 1,2-Dibromoethane	107	7.103	7.103	(0.939)	88125	10.0000	8.19488
82 Chlorobenzene	112	7.587	7.587	(1.003)	678269	10.0000	9.42206
83 1-Chlorohexane	91	7.623	7.623	(1.008)	472107	10.0000	9.46662
84 1,1,1,2-Tetrachloroethane	131	7.701	7.701	(1.018)	195250	10.0000	9.98771
85 Ethylbenzene	106	7.701	7.701	(1.018)	477772	10.0000	10.2437
86 m and p-Xylene	106	7.828	7.828	(1.035)	1160032	20.0000	20.2996
87 o-Xylene	106	8.191	8.191	(1.083)	508376	10.0000	9.97000
88 Styrene	104	8.221	8.221	(1.087)	717412	10.0000	9.27556
89 Bromoform	173	8.366	8.366	(1.106)	42712	10.0000	7.95538
90 isopropyl benzene	105	8.541	8.541	(1.129)	1576470	10.0000	10.7191
91 Cyclohexanone	55	8.644	8.644	(1.143)	166665	400.000	351.137

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
94 Bromobenzene	156	8.789	8.789	(0.904)	186030	10.0000	8.71755
95 1,1,2,2-Tetrachloroethane	83	8.898	8.898	(1.177)	93139	10.0000	8.26154
96 1,2,3-Trichloropropane	110	8.910	8.910	(0.917)	26429	10.0000	7.63947(Q)
97 n-Propylbenzene	120	8.916	8.916	(0.917)	366137	10.0000	9.91028
99 2-Chlorotoluene	126	8.976	8.976	(0.924)	270026	10.0000	9.76708
100 4-Chlorotoluene	126	9.091	9.091	(0.935)	253376	10.0000	9.42668
101 1,3,5-Trimethylbenzene	105	9.097	9.097	(0.936)	1220013	10.0000	10.0932
102 tert-Butylbenzene	119	9.363	9.363	(0.963)	976070	10.0000	10.3776
103 1,2,4-Trimethylbenzene	105	9.424	9.424	(0.970)	1141815	10.0000	10.0027
104 sec-Butylbenzene	134	9.563	9.563	(0.984)	298831	10.0000	10.6472
105 m-Dichlorobenzene	146	9.647	9.647	(0.993)	420732	10.0000	9.31921
106 4-Isopropyltoluene	119	9.708	9.708	(0.999)	1249384	10.0000	10.5738
108 p-dichlorobenzene	146	9.738	9.738	(1.002)	391834	10.0000	9.19517
110 o-Dichlorobenzene	146	10.058	10.058	(1.035)	327897	10.0000	9.61836
111 n-Butylbenzene	91	10.070	10.070	(1.036)	1399035	10.0000	11.0937
112 1,2-Dibromo-3-chloropropane	157	10.771	10.771	(1.108)	10276	10.0000	8.11619
113 1,2,4-Trichlorobenzene	180	11.430	11.430	(1.176)	208830	10.0000	10.5540
114 Hexachlorobutadiene	225	11.539	11.539	(1.187)	174979	10.0000	11.9016
115 Naphthalene	128	11.593	11.593	(1.193)	243680	10.0000	8.46877
116 1,2,3-Trichlorobenzene	180	11.756	11.756	(1.210)	155930	10.0000	10.2514

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Internal Standard Check Report

Instrument ID: C.i
Lab File ID: c1131.d
Analysis Type: WATER

Injection Date: 28-MAY-2004 06:23
Lab Sample ID: MAIN010
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

INTERNAL STANDARD	ICAL AREA	SAMP AREA	ICAL RT	SAMP RT	%R
Fluorobenzene	1828430	1293775	4.107	4.106	70.8
Chlorobenzene-d5	300471	191214	7.564	7.562	63.6
1,4-Dichlorobenzene-d4	353909	239951	9.721	9.720	67.8

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c1131.d
Lab Smp Id: MAIN010
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/28/4
Calibration Time: 0623
Client Smp ID: MAIN010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1293775	646888	2587550	1293775	0.00
81 Chlorobenzene-d5	191214	95607	382428	191214	0.00
107 1,4-Dichlorobenze	239951	119976	479902	239951	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.00
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.00
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: C.i
Lab File ID: c1131.d
Analysis Type: WATER

Injection Date: 28-MAY-2004 06:23
Lab Sample ID: MAIN010
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
64	dichlorodifluoromethane	10.0000	11.4847	14.8	50.0
1	Chloromethane	10.0000	11.7942	17.9	50.0
4	Vinyl Chloride	10.0000	11.1408	11.4	20.0
2	Bromomethane	10.0000	13.4694	34.7	50.0
5	Chloroethane	10.0000	12.8823	28.8	50.0
11	Trichlorofluoromethane	10.0000	12.3888	23.9	50.0
3	Ethanol	500.0000	475.1805	5.0	50.0
8	Acrolein	100.0000	58.5442	41.5	50.0
12	1,1-Dichloroethene	10.0000	10.9956	10.0	20.0
85	1,2-Dichloroethene (total)	20.0000	19.5499	2.3	50.0
7	Acetone	40.0000	34.9217	12.7	50.0
21	Iodomethane	10.0000	10.6226	6.2	50.0
118	Xylene (total)	30.0000	30.2696	0.9	50.0
68	Acetonitrile	100.0000	90.9512	9.0	50.0
6	Methylene Chloride	10.0000	9.9364	0.6	50.0
86	tert-Butyl alcohol	200.0000	141.6444	29.2	50.0
0	trans-1,2-Dichloroethene	10.0000	9.9690	0.3	50.0
9	Acrylonitrile	100.0000	78.9573	21.0	50.0
15	1,1-Dichloroethane	10.0000	10.0501	0.5	50.0
84	Isopropyl ether	50.0000	43.8116	12.4	50.0
69	Chloroprene	10.0000	10.1720	1.7	50.0
93	2,2-Dichloropropane	10.0000	10.9945	9.9	50.0
0	cis-1,2-Dichloroethene	10.0000	9.5809	4.2	50.0
20	2-Butanone	40.0000	29.6826	25.8	50.0
70	Propionitrile	100.0000	80.7995	19.2	50.0
13	Bromochloromethane	10.0000	8.8304	11.7	50.0
72	Methacrylonitrile	100.0000	79.1951	20.8	50.0
17	Chloroform	10.0000	9.6613	3.4	20.0
22	1,1,1-Trichloroethane	10.0000	10.0707	0.7	50.0
23	Carbon Tetrachloride	10.0000	10.1970	2.0	50.0
94	1,1-Dichloropropene	10.0000	9.7282	2.7	50.0
30	Benzene	10.0000	9.6074	3.9	50.0
71	Isobutanol	200.0000	141.7466	29.1	50.0
16	1,2-Dichloroethane	10.0000	8.8080	11.9	50.0
29	Trichloroethene	10.0000	9.3670	6.3	50.0
88	n-Butanol	200.0000	111.4643	44.3	50.0
26	1,2-Dichloropropane	10.0000	8.8497	11.5	20.0
34	Dibromomethane	10.0000	8.1623	18.4	50.0
57	1,4-Dioxane	500.0000	377.4896	24.5	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: C.i
Lab File ID: c1131.d
Analysis Type: WATER

Injection Date: 28-MAY-2004 06:23
Lab Sample ID: MAIN010
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
25	Bromodichloromethane	10.0000	8.8226	11.8	50.0
28	cis-1,3-Dichloropropene	10.0000	8.7845	12.2	50.0
38	4-Methyl-2-pentanone	40.0000	32.6788	18.3	50.0
45	Toluene	10.0000	10.0024	0.0	20.0
31	trans-1,3-Dichloropropene	10.0000	8.0680	19.3	50.0
42	Tetrachloroethene	10.0000	10.1805	1.8	50.0
32	1,1,2-Trichloroethane	10.0000	8.2160	17.8	50.0
109	1,3-Dichloropropane	10.0000	8.4836	15.2	50.0
43	2-Hexanone	40.0000	31.0365	22.4	50.0
36	Dibromochloromethane	10.0000	8.5710	14.3	50.0
58	1,2-Dibromoethane	10.0000	8.1949	18.1	50.0
46	Chlorobenzene	10.0000	9.4221	5.8	50.0
92	1-Chlorohexane	10.0000	9.4666	5.3	50.0
74	1,1,1,2-Tetrachloroethane	10.0000	9.9877	0.1	50.0
47	Ethylbenzene	10.0000	10.2437	2.4	20.0
0	m and p-Xylene	20.0000	20.2996	1.5	50.0
0	o-Xylene	10.0000	9.9700	0.3	50.0
49	Styrene	10.0000	9.2756	7.2	50.0
37	Bromoform	10.0000	7.9554	20.4	50.0
79	isopropyl benzene	10.0000	10.7191	7.2	50.0
76	Cyclohexanone	400.0000	351.1367	12.2	50.0
95	Bromobenzene	10.0000	8.7175	12.8	50.0
40	1,1,2,2-Tetrachloroethane	10.0000	8.2615	17.4	50.0
50	1,2,3-Trichloropropane	10.0000	7.6395	23.6	50.0
96	n-Propylbenzene	10.0000	9.9103	0.9	50.0
97	2-Chlorotoluene	10.0000	9.7671	2.3	50.0
99	4-Chlorotoluene	10.0000	9.4267	5.7	50.0
98	1,3,5-Trimethylbenzene	10.0000	10.0932	0.9	50.0
100	tert-Butylbenzene	10.0000	10.3776	3.8	50.0
101	1,2,4-Trimethylbenzene	10.0000	10.0027	0.0	50.0
102	sec-Butylbenzene	10.0000	10.6472	6.5	50.0
61	m-Dichlorobenzene	10.0000	9.3192	6.8	50.0
103	4-Isopropyltoluene	10.0000	10.5738	5.7	50.0
62	p-dichlorobenzene	10.0000	9.1952	8.0	50.0
63	o-Dichlorobenzene	10.0000	9.6184	3.8	50.0
104	n-Butylbenzene	10.0000	11.0937	10.9	50.0
75	1,2-Dibromo-3-chloropropane	10.0000	8.1162	18.8	50.0
105	1,2,4-Trichlorobenzene	10.0000	10.5540	5.5	50.0
106	Hexachlorobutadiene	10.0000	11.9016	19.0	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: C.i
Lab File ID: c1131.d
Analysis Type: WATER

Injection Date: 28-MAY-2004 06:23
Lab Sample ID: MAIN010
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
130 Naphthalene	10.0000	8.4688	15.3	50.0
108 1,2,3-Trichlorobenzene	10.0000	10.2514	2.5	50.0

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: C.i
Lab File ID: c1131.d
Analysis Type: WATER
Lab Sample ID: MAIN010
Quant Type: ISTD

Injection Date: 28-MAY-2004 06:23
Init. Calibration Date(s): 03/02/4 05/10/4
Init. Calibration Times: 00:09 20:33
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

	COMPOUND	RRF	RF10	MIN RRF	%D	MAX %D
M	12 1,2-Dichloroethene (total)	0.284	0.278	0.010	2.2	50.0
M	18 Xylene (total)	2.881	2.908	0.010	-0.9	50.0
	1 dichlorodifluoromethane	0.256	0.294	0.010	-14.8	50.0
	3 Chloromethane	0.286	0.337	0.100	-17.9	50.0
	4 Vinyl Chloride	0.242	0.270	0.020	-11.4	20.0
	6 Bromomethane	0.073	0.102	0.010	N/A	N/A
	7 Chloroethane	0.140	0.180	0.010	-28.8	50.0
	9 Trichlorofluoromethane	0.315	0.390	0.010	-23.9	50.0
	10 Ethanol	0.001	0.001	0.000	5.0	50.0
	15 Acrolein	0.022	0.013	0.001	41.5	50.0
	17 1,1-Dichloroethene	0.254	0.279	0.020	-10.0	20.0
	19 Acetone	0.030	0.026	0.001	12.7	50.0
	20 Iodomethane	0.270	0.287	0.010	-6.2	50.0
	25 Acetonitrile	0.013	0.012	0.000	9.0	50.0
	26 Methylene Chloride	0.226	0.225	0.010	0.6	50.0
	27 tert-Butyl alcohol	0.010	0.007	0.001	29.2	50.0
	30 Acrylonitrile	0.044	0.035	0.001	21.0	50.0
	29 trans-1,2-Dichloroethene	0.293	0.292	0.010	0.3	50.0
	32 1,1-Dichloroethane	0.599	0.602	0.100	-0.5	50.0
	34 Chloroprene	0.625	0.636	0.010	-1.7	50.0
	33 Isopropyl ether	0.187	0.164	0.010	12.4	50.0
	38 cis-1,2-Dichloroethene	0.275	0.263	0.010	4.2	50.0
	37 2,2-Dichloropropane	0.406	0.446	0.010	-9.9	50.0
	39 2-Butanone	0.047	0.035	0.010	25.8	50.0
	41 Propionitrile	0.015	0.012	0.001	19.2	50.0
	44 Methacrylonitrile	0.074	0.059	0.010	20.8	50.0
	42 Bromochloromethane	0.075	0.066	0.010	11.7	50.0
	45 Chloroform	0.448	0.433	0.020	3.4	20.0
	47 1,1,1-Trichloroethane	0.452	0.456	0.010	-0.7	50.0
	50 1,1-Dichloropropene	0.456	0.444	0.010	2.7	50.0
	49 Carbon Tetrachloride	0.392	0.399	0.010	-2.0	50.0
	53 Isobutanol	0.003	0.002	0.000	29.1	50.0
	51 Benzene	1.191	1.144	0.010	3.9	50.0
	54 1,2-Dichloroethane	0.271	0.238	0.010	11.9	50.0
	57 Trichloroethene	0.259	0.243	0.010	6.3	50.0

STL Denver

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: C.i
Lab File ID: c1131.d
Analysis Type: WATER
Lab Sample ID: MAIN010
Quant Type: ISTD

Injection Date: 28-MAY-2004 06:23
Init. Calibration Date(s): 03/02/4 05/10/4
Init. Calibration Times: 00:09 20:33
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

	COMPOUND	RRF	RF10	MIN RRF	%D	MAX %D
59	n-Butanol	0.003	0.001	0.000	N/A	N/A
60	1,2-Dichloropropane	0.273	0.242	0.020	11.5	20.0
62	Dibromomethane	0.078	0.064	0.010	18.4	50.0
63	1,4-Dioxane	0.001	0.001	0.000	24.5	50.0
65	Bromodichloromethane	0.261	0.230	0.010	11.8	50.0
68	cis-1,3-Dichloropropene	1.883	1.654	0.010	12.2	50.0
70	4-Methyl-2-pentanone	0.642	0.524	0.010	18.3	50.0
71	Toluene	7.547	7.549	0.020	0.0	20.0
72	trans-1,3-Dichloropropene	1.325	1.069	0.010	19.3	50.0
74	1,1,2-Trichloroethane	0.690	0.567	0.010	17.8	50.0
75	Tetrachloroethene	1.193	1.214	0.010	-1.8	50.0
76	1,3-Dichloropropane	1.326	1.125	0.010	15.2	50.0
78	2-Hexanone	0.390	0.302	0.010	22.4	50.0
79	Dibromochloromethane	0.710	0.609	0.010	14.3	50.0
80	1,2-Dibromoethane	0.562	0.461	0.010	18.1	50.0
82	Chlorobenzene	3.765	3.547	0.300	5.8	50.0
83	1-Chlorohexane	2.608	2.469	0.010	5.3	50.0
84	1,1,1,2-Tetrachloroethane	1.022	1.021	0.010	0.1	50.0
85	Ethylbenzene	2.439	2.499	0.010	-2.4	20.0
86	m and p-Xylene	2.989	3.033	0.010	-1.5	50.0
87	o-Xylene	2.667	2.659	0.010	0.3	50.0
88	Styrene	4.045	3.752	0.010	7.2	50.0
89	Bromoform	0.281	0.223	0.101	20.4	50.0
90	isopropyl benzene	7.691	8.245	0.010	-7.2	50.0
91	Cyclohexanone	0.025	0.022	0.001	12.2	50.0
94	Bromobenzene	0.889	0.775	0.010	12.8	50.0
95	1,1,2,2-Tetrachloroethane	0.590	0.487	0.300	17.4	50.0
96	1,2,3-Trichloropropane	0.144	0.110	0.010	23.6	50.0
97	n-Propylbenzene	1.540	1.526	0.010	0.9	50.0
99	2-Chlorotoluene	1.152	1.125	0.010	2.3	50.0
100	4-Chlorotoluene	1.120	1.056	0.010	5.7	50.0
101	1,3,5-Trimethylbenzene	5.037	5.084	0.010	-0.9	50.0
102	tert-Butylbenzene	3.920	4.068	0.010	-3.8	50.0
103	1,2,4-Trimethylbenzene	4.757	4.759	0.010	0.0	50.0
104	sec-Butylbenzene	1.170	1.245	0.010	-6.5	50.0

STL Denver

CONTINUING CALIBRATION COMPOUNDS

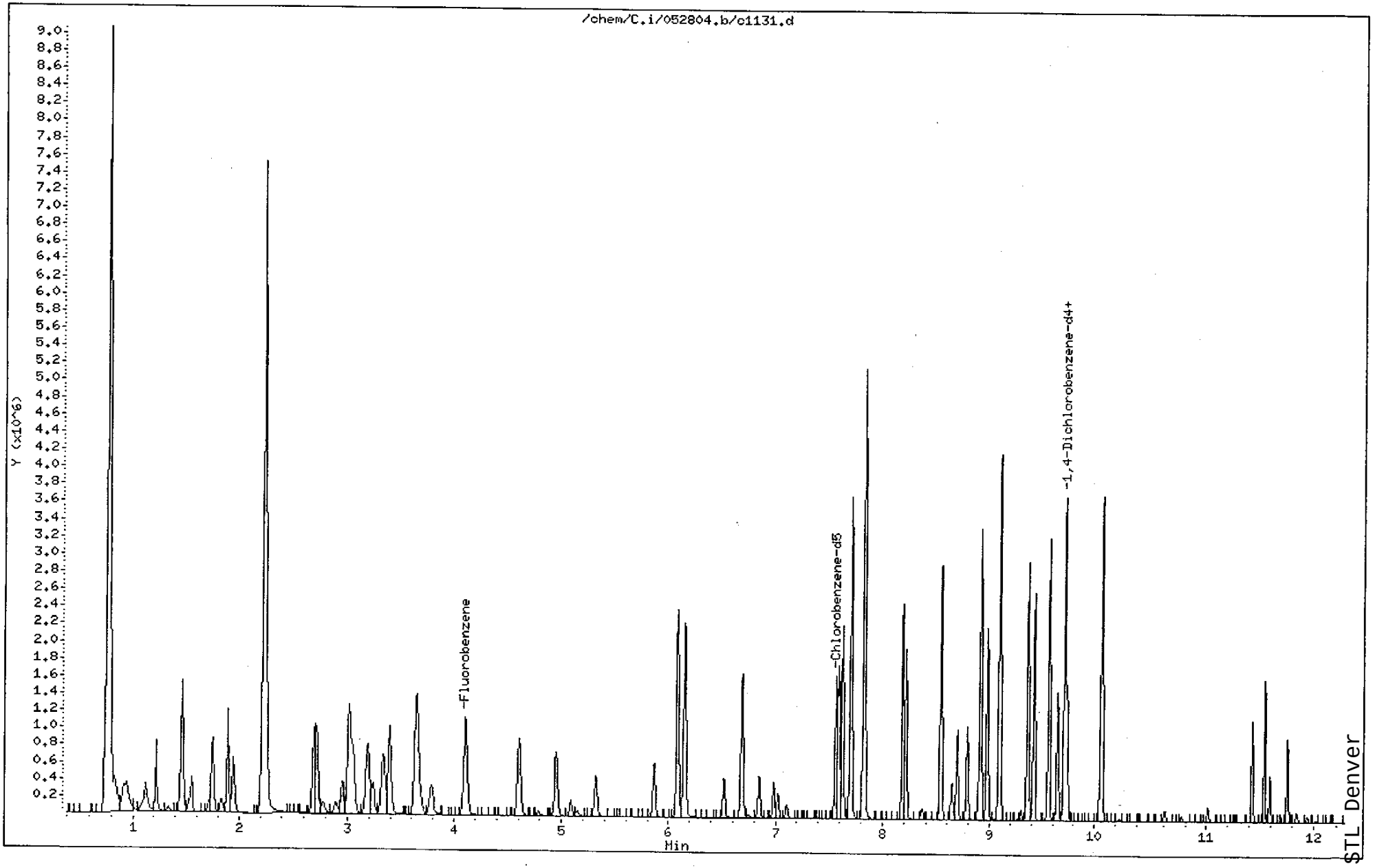
Instrument ID: C.i
Lab File ID: c1131.d
Analysis Type: WATER
Lab Sample ID: MAIN010
Quant Type: ISTD

Injection Date: 28-MAY-2004 06:23
Init. Calibration Date(s): 03/02/4 05/10/4
Init. Calibration Times: 00:09 20:33
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

COMPOUND	RRF	RF10	MIN RRF	%D	MAX %D
105 m-Dichlorobenzene	1.881	1.753	0.010	6.8	50.0
106 4-Isopropyltoluene	4.924	5.207	0.010	-5.7	50.0
108 p-dichlorobenzene	1.776	1.633	0.010	8.0	50.0
110 o-Dichlorobenzene	1.421	1.367	0.010	3.8	50.0
111 n-Butylbenzene	5.256	5.831	0.010	-10.9	50.0
112 1,2-Dibromo-3-chloropropane	0.053	0.043	0.010	18.8	50.0
113 1,2,4-Trichlorobenzene	0.825	0.870	0.010	-5.5	50.0
114 Hexachlorobutadiene	0.613	0.729	0.010	-19.0	50.0
115 Naphthalene	1.199	1.016	0.010	15.3	50.0
116 1,2,3-Trichlorobenzene	0.634	0.650	0.010	-2.5	50.0

Data File: /chem/C.i/052804.b/c1131.d
Date : 28-MAY-2004 06:23
Client ID: MAIN010
Sample Info: MAIN010,,067/082-04
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i
Operator: yanezj
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1132.d
Lab Smp Id: SUPP010 Client Smp ID: SUPP010
Inj Date : 28-MAY-2004 06:44
Operator : yanezj Inst ID: C.i
Smp Info : SUPP010,,011/052-04
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/052804.b/C-20ml-AQ.m
Meth Date : 28-May-2004 07:00 C Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-supp.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 56 Fluorobenzene	96	4.106	4.106	(1.000)	1480865	10.0000	
* 81 Chlorobenzene-d5	119	7.563	7.563	(1.000)	202798	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.720	9.720	(1.000)	221202	10.0000	
$ 48 Dibromofluoromethane	111	3.236	3.236	(0.788)	278553	10.0000	8.87025
$ 52 1,2-Dichloroethane-d4	65	3.677	3.677	(0.895)	271596	10.0000	8.08541
$ 69 Toluene-d8	98	6.082	6.082	(0.804)	1144713	10.0000	9.88837
$ 93 Bromofluorobenzene	95	8.693	8.693	(1.149)	281003	10.0000	8.05157
2 Dichlorotetrafluoroethane	85	0.883	0.883	(0.215)	297382	10.0000	8.86327
5 Ethylene Oxide	43	1.071	1.071	(0.261)	635544	1250.00	2199.97
8 Dichlorofluoromethane	67	1.212	1.212	(0.295)	712146	10.0000	12.4618
11 Ethyl Ether	59	1.353	1.353	(0.329)	244581	10.0000	9.43062
13 1,2-dichloro-1,1,2-trifluoroet	117	1.376	1.376	(0.335)	404429	10.0000	12.1909
14 2,2-dichloro-1,1,1-trifluoroet	83	1.412	1.412	(0.344)	691866	10.0000	11.0890
16 Trichlorotrifluoroethane	151	1.459	1.459	(0.355)	331443	10.0000	12.2968
21 Carbon Disulfide	76	1.564	1.564	(0.381)	1683788	10.0000	10.1409
24 Methyl Acetate	43	1.694	1.694	(0.412)	603924	50.0000	44.6030

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
23	Allyl Chloride	41	1.670	1.670	(0.407)	1046632	10.0000	10.1241(Q)
22	2-Propanol	45	1.600	1.600	(0.390)	147767	200.000	174.381
28	Methyl t-butyl ether	73	1.893	1.893	(0.461)	525339	10.0000	9.26255
31	Hexane	57	2.034	2.034	(0.269)	1221923	10.0000	11.3691
35	Vinyl acetate	43	2.258	2.258	(0.550)	556697	20.0000	18.7637
36	ETBE	59	2.541	2.541	(0.619)	5593616	50.0000	44.4023
40	Ethyl Acetate	43	2.819	2.819	(0.687)	229548	20.0000	16.0472
43	Tetrahydrofuran	42	2.982	2.982	(0.726)	68319	20.0000	17.1536
46	Cyclohexane	56	3.163	3.163	(0.770)	1304140	10.0000	10.4736
55	TAME	73	3.852	3.852	(0.938)	2737982	50.0000	43.7735
61	2-Pentanone	43	5.006	5.006	(0.662)	359049	40.0000	42.3846
58	Methyl Cyclohexane	55	4.740	4.740	(1.155)	1068061	10.0000	10.0143
64	Methyl Methacrylate	100	5.200	5.200	(1.266)	52259	20.0000	15.5087
66	2-nitropropane	41	5.695	5.695	(0.753)	22310	10.0000	11.0925
67	2-Chloroethyl vinyl ether	63	5.774	5.774	(0.763)	15988	10.0000	7.48005
73	Ethyl methacrylate	69	6.632	6.632	(0.877)	323339	20.0000	20.2336
77	Tetrahydrothiophene	60	6.946	6.946	(0.918)	43724	10.0000	7.35778
92	cis-1,4-dichloro-2-butene	53	8.680	8.680	(0.893)	22028	10.0000	8.63826(Q)
98	t-1,4-Dichloro-2-butene	53	8.958	8.958	(0.922)	23858	10.0000	8.89609
109	1,2,3-Trimethylbenzene	105	9.786	9.786	(1.007)	1091856	10.0000	11.8010

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Internal Standard Check Report

Instrument ID: C.i
Lab File ID: c1132.d
Analysis Type: WATER

Injection Date: 28-MAY-2004 06:44
Lab Sample ID: SUPP010
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

INTERNAL STANDARD	ICAL AREA	SAMP AREA	ICAL RT	SAMP RT	%R
Fluorobenzene	1571830	1480865	4.101	4.106	94.2
Chlorobenzene-d5	261684	202798	7.563	7.563	77.5
1,4-Dichlorobenzene-d4	297440	221202	9.720	9.720	74.4

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c1132.d
Lab Smp Id: SUPP010
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/28/4
Calibration Time: 0623
Client Smp ID: SUPP010
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1293775	646888	2587550	1480865	14.46
81 Chlorobenzene-d5	191214	95607	382428	202798	6.06
107 1,4-Dichlorobenze	239951	119976	479902	221202	-7.81

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.00
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.00
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.00

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

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: C.i
Lab File ID: c1132.d
Analysis Type: WATER

Injection Date: 28-MAY-2004 06:44
Lab Sample ID: SUPP010
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
123	Dichlorotetrafluoroethane	10.0000	8.8633	11.4	50.0	
110	Ethylene Oxide	1250.0000	2199.9733	76.0	50.0	<-
87	Dichlorofluoromethane	10.0000	12.4618	24.6	50.0	
77	Ethyl Ether	10.0000	9.4306	5.7	50.0	
116	1,2-dichloro-1,1,2-trifluoroeth	10.0000	12.1909	21.9	50.0	
114	2,2-dichloro-1,1,1-trifluoroeth	10.0000	11.0890	10.9	50.0	
65	Trichlorotrifluoroethane	10.0000	12.2969	23.0	50.0	
10	Carbon Disulfide	10.0000	10.1409	1.4	50.0	
117	2-Propanol	200.0000	174.3813	12.8	50.0	
67	Allyl Chloride	10.0000	10.1241	1.2	50.0	
125	Methyl Acetate	50.0000	44.6030	10.8	50.0	
53	Methyl t-butyl ether	10.0000	9.2625	7.4	50.0	
54	Hexane	10.0000	11.3691	13.7	50.0	
24	Vinyl acetate	20.0000	18.7637	6.2	50.0	
126	ETBE	50.0000	44.4023	11.2	50.0	
78	Ethyl Acetate	20.0000	16.0472	19.8	50.0	
56	Tetrahydrofuran	20.0000	17.1537	14.2	50.0	
119	Cyclohexane	10.0000	10.4736	4.7	50.0	
89	Dibromofluoromethane	10.0000	8.8703	11.3	50.0	
303	1,2-Dichloroethane-d4	10.0000	8.0854	19.1	50.0	
127	TAME	50.0000	43.7735	12.5	50.0	
128	Methyl Cyclohexane	10.0000	10.0143	0.1	50.0	
120	2-Pentanone	40.0000	42.3846	6.0	50.0	
73	Methyl Methacrylate	20.0000	15.5087	22.5	50.0	
82	2-nitropropane	10.0000	11.0925	10.9	50.0	
35	2-Chloroethyl vinyl ether	10.0000	7.4801	25.2	50.0	
301	Toluene-d8	10.0000	9.8884	1.1	50.0	
41	Ethyl methacrylate	20.0000	20.2336	1.2	50.0	
129	Tetrahydrothiophene	10.0000	7.3578	26.4	50.0	
121	cis-1,4-dichloro-2-butene	10.0000	8.6383	13.6	50.0	
302	Bromofluorobenzene	10.0000	8.0516	19.5	50.0	
60	t-1,4-Dichloro-2-butene	10.0000	8.8961	11.0	50.0	
124	1,2,3-Trimethylbenzene	10.0000	11.8010	18.0	50.0	

STL Denver

CONTINUING CALIBRATION COMPOUNDS

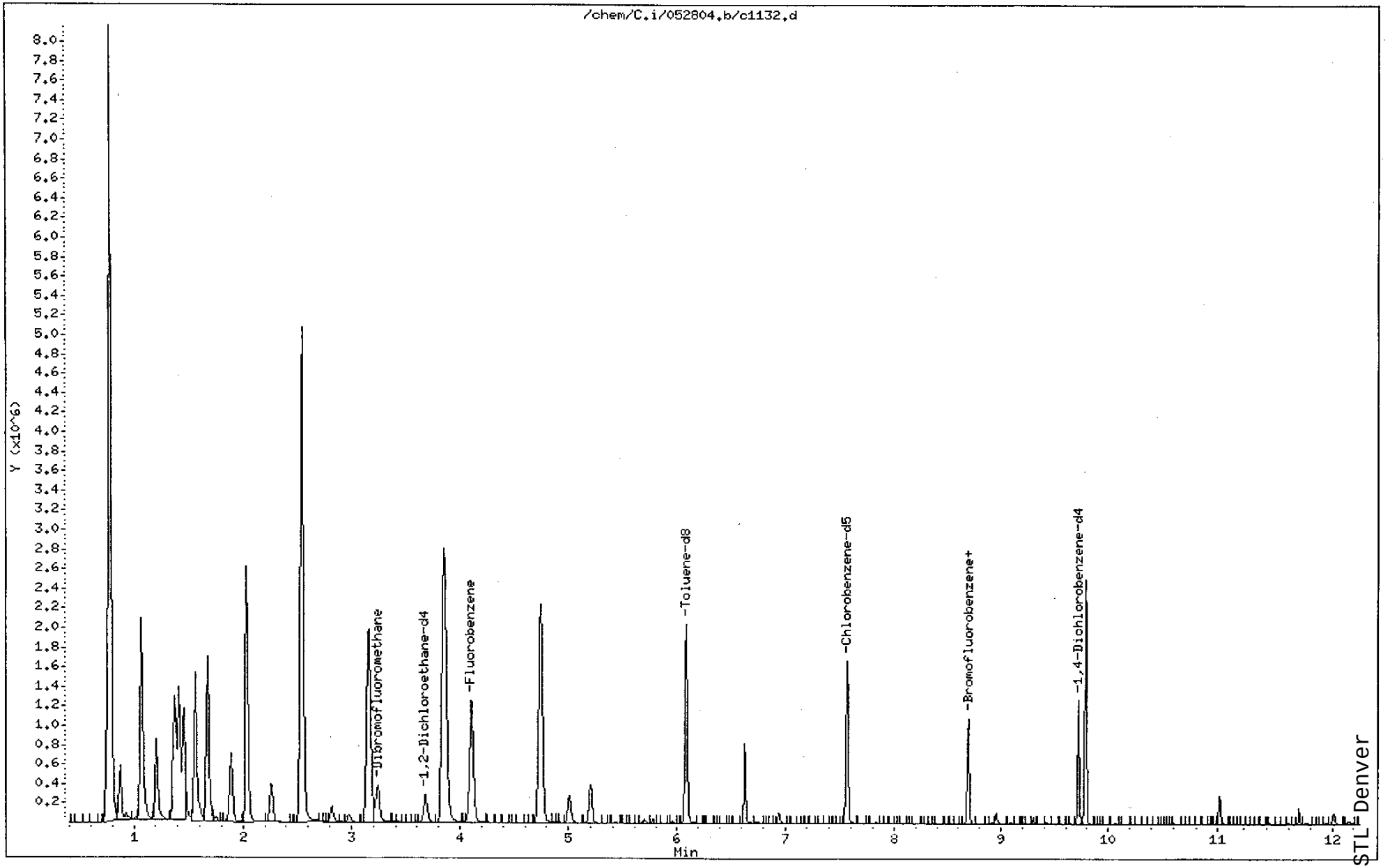
Instrument ID: C.i
Lab File ID: c1132.d
Analysis Type: WATER
Lab Sample ID: SUPP010
Quant Type: ISTD

Injection Date: 28-MAY-2004 06:44
Init. Calibration Date(s): 03/02/4 05/10/4
Init. Calibration Times: 00:09 20:33
Method File: /chem/C.i/052804.b/C-20ml-AQ.m

COMPOUND	RRF	RF10	MIN RRF	%D	MAX %D
$ 48 Dibromofluoromethane	0.212	0.188	0.010	11.3	50.0
$ 52 1,2-Dichloroethane-d4	0.227	0.183	0.010	19.1	50.0
$ 69 Toluene-d8	5.708	5.645	0.010	1.1	50.0
$ 93 Bromofluorobenzene	1.721	1.386	0.010	19.5	50.0
2 Dichlorotetrafluoroethane	0.227	0.201	0.010	11.4	50.0
5 Ethylene Oxide	0.002	0.003	0.001	N/A	N/A
8 Dichlorofluoromethane	0.386	0.481	0.010	-24.6	50.0
11 Ethyl Ether	0.175	0.165	0.010	5.7	50.0
13 1,2-dichloro-1,1,2-trifluor	0.215	0.273	0.001	N/A	N/A
14 2,2-dichloro-1,1,1-trifluor	0.421	0.467	0.001	-10.9	50.0
16 Trichlorotrifluoroethane	0.182	0.224	0.010	-23.0	50.0
21 Carbon Disulfide	1.121	1.137	0.010	-1.4	50.0
24 Methyl Acetate	0.091	0.082	0.010	10.8	50.0
23 Allyl Chloride	0.698	0.707	0.010	-1.2	50.0
22 2-Propanol	0.006	0.005	0.001	12.8	50.0
28 Methyl t-butyl ether	0.383	0.355	0.010	7.4	50.0
31 Hexane	5.300	6.025	0.010	-13.7	50.0
35 Vinyl acetate	0.200	0.188	0.010	6.2	50.0
36 ETBE	0.851	0.755	0.010	11.2	50.0
40 Ethyl Acetate	0.097	0.078	0.010	19.8	50.0
43 Tetrahydrofuran	0.027	0.023	0.003	14.2	50.0
46 Cyclohexane	0.841	0.881	0.010	-4.7	50.0
55 TAME	0.422	0.370	0.010	12.5	50.0
61 2-Pentanone	0.418	0.443	0.010	-6.0	50.0
58 Methyl Cyclohexane	0.720	0.721	0.010	-0.1	50.0
64 Methyl Methacrylate	0.023	0.018	0.010	22.5	50.0
66 2-nitropropane	0.099	0.110	0.010	-10.9	50.0
67 2-Chloroethyl vinyl ether	7.582	0.079	0.010	N/A	N/A
73 Ethyl methacrylate	0.788	0.797	0.010	-1.2	50.0
77 Tetrahydrothiophene	0.293	0.216	0.010	26.4	50.0
92 cis-1,4-dichloro-2-butene	0.115	0.100	0.010	13.6	50.0
98 t-1,4-Dichloro-2-butene	0.121	0.108	0.010	11.0	50.0
109 1,2,3-Trimethylbenzene	4.183	4.936	0.010	-18.0	50.0

Data File: /chem/C.i/052804.b/c1132.d
Date : 28-MAY-2004 06:44
Client ID: SUPP010
Sample Info: SUPP010,,011/052-04
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i
Operator: yanezj
Column diameter: 0.53



GC/MS VOLATILE
SAMPLE DATA

SEVERN TRENT STL

LCS SAMPLE
Data File : /chem/C.i/052804.b/c1133.d
Samp Info : LCS,,109-04
Inj Date : 28-MAY-2004 07:04
Sample Amt : 20mL

Sample #	Sample #	Sample #	Sample #	Sample #

Compound	Concentration Spiked	Measured	%Recovery Meas.	Min	Max
1,1-Dichloroethene	10.0000	11.9516	120	67	125
Benzene	10.0000	10.6488	106	75	116
Trichloroethene	10.0000	10.4933	105	80	123
Toluene	10.0000	10.9515	110	74	115
Chlorobenzene	10.0000	10.6898	107	77	117

100.0 Percent of recoveries are within control limits.

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1133.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 28-MAY-2004 07:04
Operator : yanezj Inst ID: C.i
Smp Info : LCS,,109-04
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/052804.b/C-20ml-AQ.m
Meth Date : 28-May-2004 07:12 yanezj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dcs.sub
Target Version: 3.40
Processing Host: chemsv02

05/29/04

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 56 Fluorobenzene	96	4.107	4.106	(1.000)	1207268	10.0000	
* 81 Chlorobenzene-d5	119	7.563	7.563	(1.000)	177383	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.720	9.720	(1.000)	220550	10.0000	
$ 48 Dibromofluoromethane	111	3.236	3.236	(0.788)	227932	8.90318	8.90318
$ 52 1,2-Dichloroethane-d4	65	3.678	3.677	(0.896)	240638	8.78728	8.78728
$ 69 Toluene-d8	98	6.083	6.082	(0.804)	985579	9.73355	9.73354
$ 93 Bromofluorobenzene	95	8.693	8.693	(1.149)	269561	8.83036	8.83036
17 1,1-Dichloroethene	96	1.458	1.461	(0.355)	366207	11.9516	11.9516(Q)
51 Benzene	78	3.641	3.640	(0.887)	1531411	10.6488	10.6488
57 Trichloroethene	130	4.608	4.607	(1.122)	328255	10.4933	10.4933
71 Toluene	91	6.149	6.148	(0.813)	1466131	10.9515	10.9515
82 Chlorobenzene	112	7.587	7.587	(1.003)	713870	10.6898	10.6898

QC Flag Legend

Q - Qualifier signal failed the ratio test.

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1133.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 28-MAY-2004 07:04
Operator : yanezj Inst ID: C.i
Smp Info : LCS,,109-04
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/052804.b/C-20ml-AQ.m
Meth Date : 28-May-2004 07:12 yanezj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: dcs.sub
Target Version: 3.40
Processing Host: chemsv02

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c1133.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/28/4
Calibration Time: 0644
Client Smp ID: LCS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1480865	740432	2961730	1207268	-18.48
81 Chlorobenzene-d5	202798	101399	405596	177383	-12.53
107 1,4-Dichlorobenze	221202	110601	442404	220550	-0.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.01
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.01
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.01

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

STL Denver

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: LCS
Level: LOW
Data Type: MS DATA
SpikeList File: dcs-h20.spk
Sublist File: dcs.sub
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

Client SDG: 052804
Fraction: VOA
Client Smp ID: LCS
Operator: yanezj
SampleType: LCS
Quant Type: ISTD

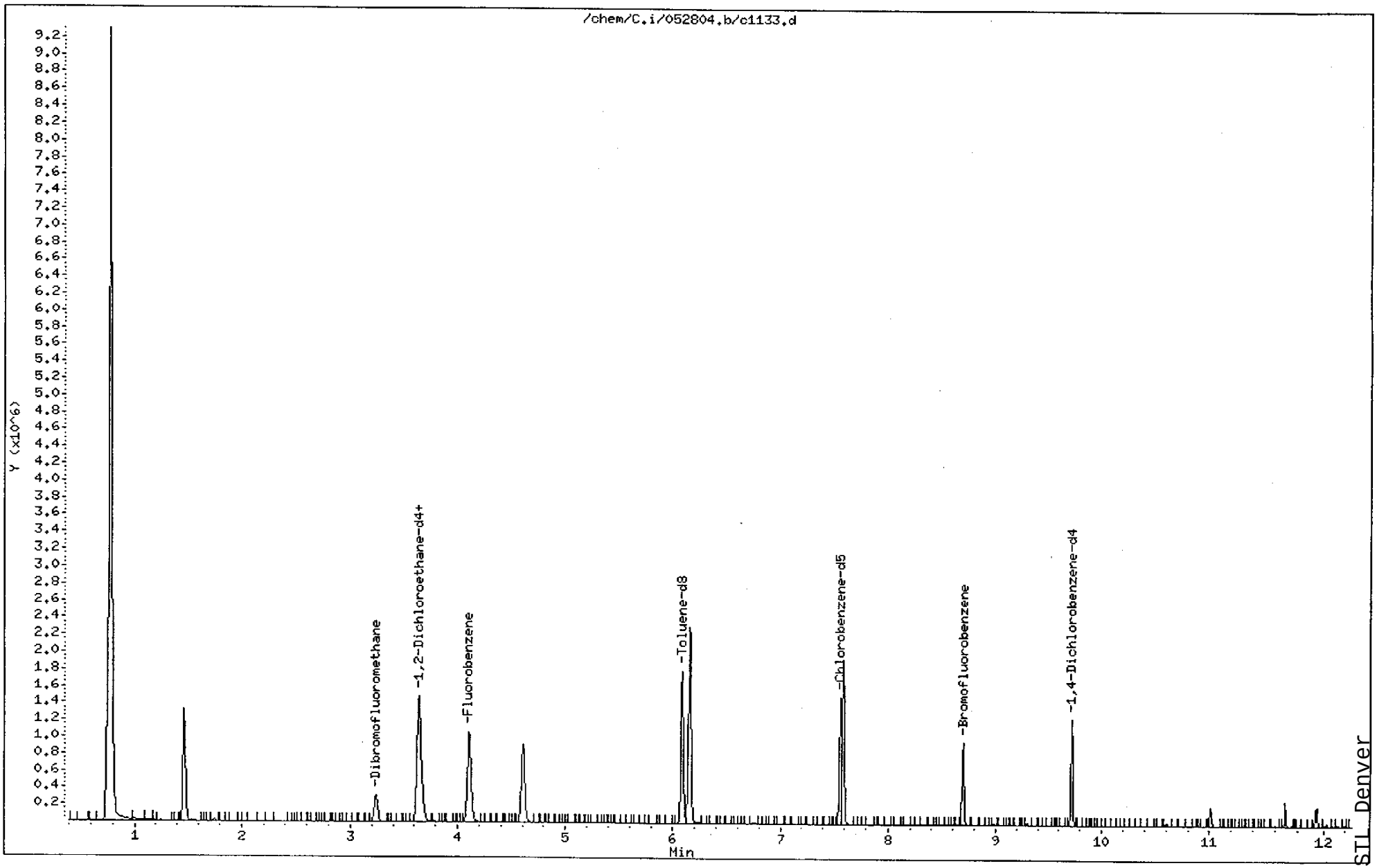
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
17 1,1-Dichloroethene	10.0000	11.9516	119.52	67-125
57 Trichloroethene	10.0000	10.4933	104.93	80-123
51 Benzene	10.0000	10.6488	106.49	75-116
71 Toluene	10.0000	10.9515	109.52	74-115
82 Chlorobenzene	10.0000	10.6898	106.90	77-117

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 48 Dibromofluorometha	8.75000	8.90318	101.75	76-116
$ 52 1,2-Dichloroethane	8.75000	8.78728	100.43	59-129
$ 69 Toluene-d8	8.75000	9.73354	111.24	76-116
$ 93 Bromofluorobenzene	8.75000	8.83036	100.92	74-114

Data File: /chem/C.i/052804.b/c1133.d
Date : 28-MAY-2004 07:04
Client ID: LCS
Sample Info: LCS,,109-04
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i

Operator: ganezj
Column diameter: 0.53



STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1134.d
Lab Smp Id: VBLK Client Smp ID: VBLK
Inj Date : 28-MAY-2004 07:24
Operator : yanezj Inst ID: C.i
Smp Info : VBLK,,105/099-04
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/052804.b/C-20ml-AQ.m
Meth Date : 28-May-2004 07:12 yanezj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QK-01.sub
Target Version: 3.40
Processing Host: chemsv02

05/29/04

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 56 Fluorobenzene	96	4.107	4.106	(1.000)	1101165	10.0000	
* 81 Chlorobenzene-d5	119	7.563	7.563	(1.000)	167593	10.0000	
* 107 1,4-Dichlorobenzene-d4	152	9.720	9.720	(1.000)	214469	10.0000	
$ 48 Dibromofluoromethane	111	3.236	3.236	(0.788)	202008	8.65087	8.65087
$ 52 1,2-Dichloroethane-d4	65	3.678	3.677	(0.896)	211163	8.45394	8.45394
$ 69 Toluene-d8	98	6.083	6.082	(0.804)	923465	9.65286	9.65286
$ 93 Bromofluorobenzene	95	8.693	8.693	(1.149)	256837	8.90502	8.90502
1 dichlorodifluoromethane	85.00	Compound Not Detected.					
2 dichlorotetrafluoroethane	85.00	Compound Not Detected.					
3 Chloromethane	50.00	Compound Not Detected.					
4 Vinyl Chloride	62.00	Compound Not Detected.					
5 Ethylene Oxide	43.00	Compound Not Detected.					
6 Bromomethane	94.00	Compound Not Detected.					
7 Chloroethane	64.00	Compound Not Detected.					
8 Dichlorofluoromethane	67.00	Compound Not Detected.					
9 Trichlorofluoromethane	101.00	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	10 Ethanol	45.00	Compound Not Detected.					
	11 Ethyl Ether	59.00	Compound Not Detected.					
M	12 1,2-Dichloroethene (total)	96.00	Compound Not Detected.					
	13 1,2-dichloro-1,1,2-trifluoroet	117.00	Compound Not Detected.					
	14 2,2-dichloro-1,1,1-trifluoroet	83.00	Compound Not Detected.					
	15 Acrolein	56.00	Compound Not Detected.					
	16 Trichlorotrifluoroethane	151.00	Compound Not Detected.					
	17 1,1-Dichloroethene	96.00	Compound Not Detected.					
M	18 Xylene (total)	106.00	Compound Not Detected.					
	19 Acetone	43.00	Compound Not Detected.					
	20 Iodomethane	142.00	Compound Not Detected.					
	21 Carbon Disulfide	76.00	Compound Not Detected.					
	22 2-Propanol	45.00	Compound Not Detected.					
	23 Allyl Chloride	41.00	Compound Not Detected.					
	24 Methyl acetate	43.00	Compound Not Detected.					
	25 Acetonitrile	41.00	Compound Not Detected.					
	26 Methylene Chloride	84	1.751	1.755	(0.426)	5401	0.21668	0.216681(a)
	27 tert-Butyl alcohol	59.00	Compound Not Detected.					
	28 Methyl t-butyl ether	73.00	Compound Not Detected.					
	29 trans-1,2-Dichloroethene	96.00	Compound Not Detected.					
	30 Acrylonitrile	53.00	Compound Not Detected.					
	31 Hexane	57.00	Compound Not Detected.					
	32 1,1-Dichloroethane	63.00	Compound Not Detected.					
	33 Isopropyl ether	87.00	Compound Not Detected.					
	34 Chloroprene	53.00	Compound Not Detected.					
	35 Vinyl acetate	43.00	Compound Not Detected.					
	36 ETBE	59.00	Compound Not Detected.					
	37 2,2-Dichloropropane	77.00	Compound Not Detected.					
	38 cis-1,2-Dichloroethene	96.00	Compound Not Detected.					
	39 2-Butanone	43.00	Compound Not Detected.					
	40 Ethyl Acetate	43.00	Compound Not Detected.					
	41 Propionitrile	54.00	Compound Not Detected.					
	42 Bromochloromethane	128.00	Compound Not Detected.					
	43 Tetrahydrofuran	42.00	Compound Not Detected.					
	44 Methacrylonitrile	41.00	Compound Not Detected.					
	45 Chloroform	83.00	Compound Not Detected.					
	46 Cyclohexane	56.00	Compound Not Detected.					
	47 1,1,1-Trichloroethane	97.00	Compound Not Detected.					
	49 Carbon Tetrachloride	117.00	Compound Not Detected.					
	50 1,1-Dichloropropene	75.00	Compound Not Detected.					
	51 Benzene	78.00	Compound Not Detected.					
	53 Isobutanol	41.00	Compound Not Detected.					
	54 1,2-Dichloroethane	62.00	Compound Not Detected.					
	55 TAME	73.00	Compound Not Detected.					
	57 Trichloroethene	130.00	Compound Not Detected.					
	58 Methyl cyclohexane	55.00	Compound Not Detected.					
	59 n-Butanol	56.00	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
60 1,2-Dichloropropane	63.00	Compound Not Detected.					
61 2-Pentanone	43.00	Compound Not Detected.					
62 Dibromomethane	93.00	Compound Not Detected.					
63 1,4-Dioxane	88.00	Compound Not Detected.					
64 Methyl Methacrylate	100.00	Compound Not Detected.					
65 Bromodichloromethane	83.00	Compound Not Detected.					
66 2-nitropropane	41.00	Compound Not Detected.					
67 2-Chloroethyl vinyl ether	63.00	Compound Not Detected.					
68 cis-1,3-Dichloropropene	75.00	Compound Not Detected.					
70 4-Methyl-2-pentanone	43.00	Compound Not Detected.					
71 Toluene	91.00	Compound Not Detected.					
72 trans-1,3-Dichloropropene	75.00	Compound Not Detected.					
73 Ethyl methacrylate	69.00	Compound Not Detected.					
74 1,1,2-Trichloroethane	97.00	Compound Not Detected.					
75 Tetrachloroethene	164.00	Compound Not Detected.					
76 1,3-Dichloropropane	76.00	Compound Not Detected.					
77 Tetrahydrothiophene	60.00	Compound Not Detected.					
78 2-Hexanone	43.00	Compound Not Detected.					
79 Dibromochloromethane	129.00	Compound Not Detected.					
80 1,2-Dibromoethane	107.00	Compound Not Detected.					
82 Chlorobenzene	112.00	Compound Not Detected.					
83 1-Chlorohexane	91.00	Compound Not Detected.					
84 1,1,1,2-Tetrachloroethane	131.00	Compound Not Detected.					
85 Ethylbenzene	106.00	Compound Not Detected.					
86 m and p-Xylene	106.00	Compound Not Detected.					
87 o-Xylene	106.00	Compound Not Detected.					
88 Styrene	104.00	Compound Not Detected.					
89 Bromoform	173.00	Compound Not Detected.					
90 isopropyl benzene	105.00	Compound Not Detected.					
91 Cyclohexanone	55.00	Compound Not Detected.					
92 cis-1,4-dichloro-2-butene	53.00	Compound Not Detected.					
94 Bromobenzene	156.00	Compound Not Detected.					
95 1,1,2,2-Tetrachloroethane	83.00	Compound Not Detected.					
96 1,2,3-Trichloropropane	110.00	Compound Not Detected.					
97 n-Propylbenzene	120.00	Compound Not Detected.					
98 t-1,4-Dichloro-2-butene	53.00	Compound Not Detected.					
99 2-Chlorotoluene	126.00	Compound Not Detected.					
100 4-Chlorotoluene	126.00	Compound Not Detected.					
101 1,3,5-Trimethylbenzene	105.00	Compound Not Detected.					
102 tert-Butylbenzene	119.00	Compound Not Detected.					
103 1,2,4-Trimethylbenzene	105.00	Compound Not Detected.					
104 sec-Butylbenzene	134.00	Compound Not Detected.					
105 m-Dichlorobenzene	146.00	Compound Not Detected.					
106 4-Isopropyltoluene	119.00	Compound Not Detected.					
108 p-dichlorobenzene	146.00	Compound Not Detected.					
109 1,2,3-Trimethylbenzene	105.00	Compound Not Detected.					
110 o-Dichlorobenzene	146.00	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
111 n-Butylbenzene	91.00	Compound Not Detected.					
112 1,2-Dibromo-3-chloropropane	157.00	Compound Not Detected.					
113 1,2,4-Trichlorobenzene	180.00	Compound Not Detected.					
114 Hexachlorobutadiene	225.00	Compound Not Detected.					
115 Naphthalene	128.00	Compound Not Detected.					
116 1,2,3-Trichlorobenzene	180.00	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

STL Denver

VOLATILE REPORT SW-846

Data file : /chem/C.i/052804.b/c1134.d
Lab Smp Id: VBLK Client Smp ID: VBLK
Inj Date : 28-MAY-2004 07:24
Operator : yanezj Inst ID: C.i
Smp Info : VBLK,,105/099-04
Misc Info :
Comment : Purge and Trap Analysis
Method : /chem/C.i/052804.b/C-20ml-AQ.m
Meth Date : 28-May-2004 07:12 yanezj Quant Type: ISTD
Cal Date : 10-MAY-2004 20:33 Cal File: c0458.d
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: QK-01.sub
Target Version: 3.40
Processing Host: chemsv02

Concentration Formula: Amt * DF * Vp/Vs

Name	Value	Description
DF	1.000	Dilution Factor
Vp	20.000	Final Purge Volume (ml)
Vs	20.000	Sample Volume (ml)

ISTD	RT	AREA	AMOUNT
* 107 1,4-Dichlorobenzene-d4	9.720	1693207	10.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
Acetic acid, 2-ethylhexyl ester				CAS #: 103-09-3			
11.014	730098	4.31192406	4.31192	86	NBS75K.1	15793	107
Unknown				CAS #:			
11.690	763340	4.50824973	4.50825	0		0	107
Unknown				CAS #:			
11.944	417177	2.46382752	2.46383	0		0	107

STL Denver

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: C.i
Lab File ID: c1134.d
Lab Smp Id: VBLK
Analysis Type: VOA
Quant Type: ISTD
Operator: yanezj
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

Calibration Date: 05/28/4
Calibration Time: 0644
Client Smp ID: VBLK
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	1480865	740432	2961730	1101165	-25.64
81 Chlorobenzene-d5	202798	101399	405596	167593	-17.36
107 1,4-Dichlorobenze	221202	110601	442404	214469	-3.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
56 Fluorobenzene	4.11	3.61	4.61	4.11	0.02
81 Chlorobenzene-d5	7.56	7.06	8.06	7.56	0.01
107 1,4-Dichlorobenze	9.72	9.22	10.22	9.72	0.01

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

STL Denver

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: VBLK
Level: LOW
Data Type: MS DATA
SpikeList File: dcs-h20.spk
Sublist File: QK-01.sub
Method File: /chem/C.i/052804.b/C-20ml-AQ.m
Misc Info:

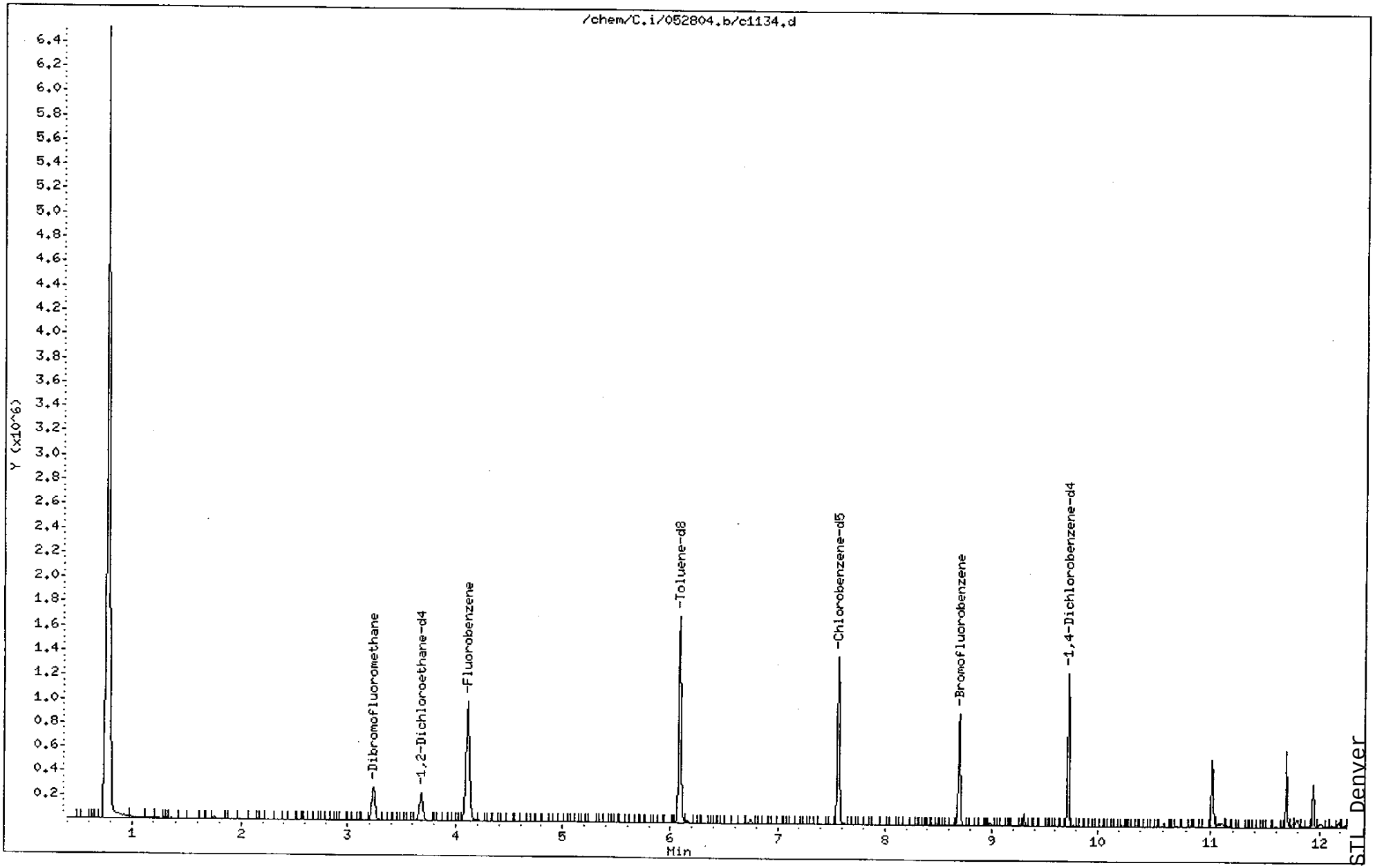
Client SDG: 052804
Fraction: VOA
Client Smp ID: VBLK
Operator: yanezj
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 48 Dibromofluorometha	8.75000	8.65087	98.87	76-116
$ 52 1,2-Dichloroethane	8.75000	8.45394	96.62	59-129
$ 69 Toluene-d8	8.75000	9.65286	110.32	76-116
$ 93 Bromofluorobenzene	8.75000	8.90502	101.77	74-114

Data File: /chem/C.i/052804.b/c1134.d
Date : 28-MAY-2004 07:24
Client ID: VBLK
Sample Info: VBLK,,105/099-04
Purge Volume: 20.0
Column phase: DB624

Instrument: C.i

Operator: yanezj
Column diameter: 0.53



Data File: /chem/C.i/052804.b/c1134.d

Date : 28-MAY-2004 07:24

Client ID: VBLK

Instrument: C.i

Sample Info: VBLK,,105/099-04

Purge Volume: 20.0

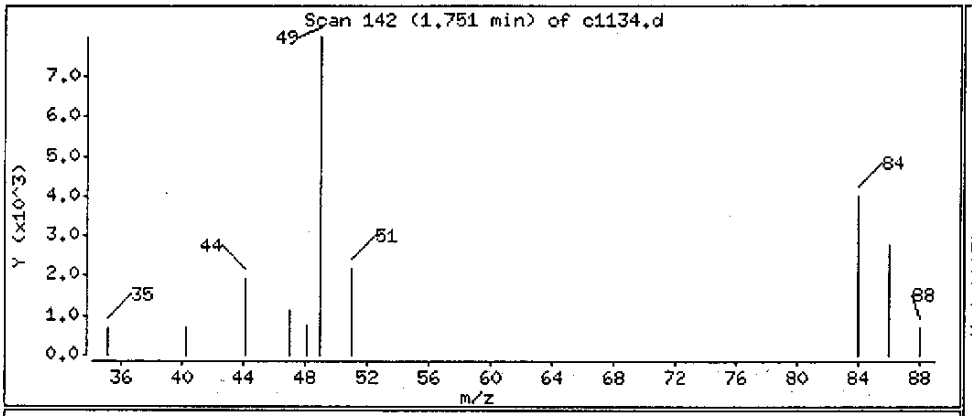
Operator: yanezj

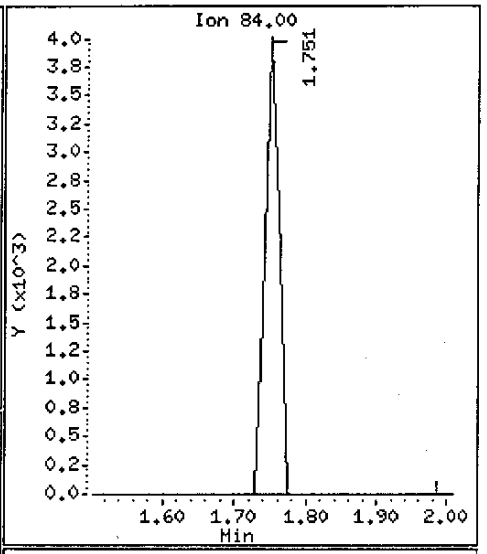
Column phase: DB624

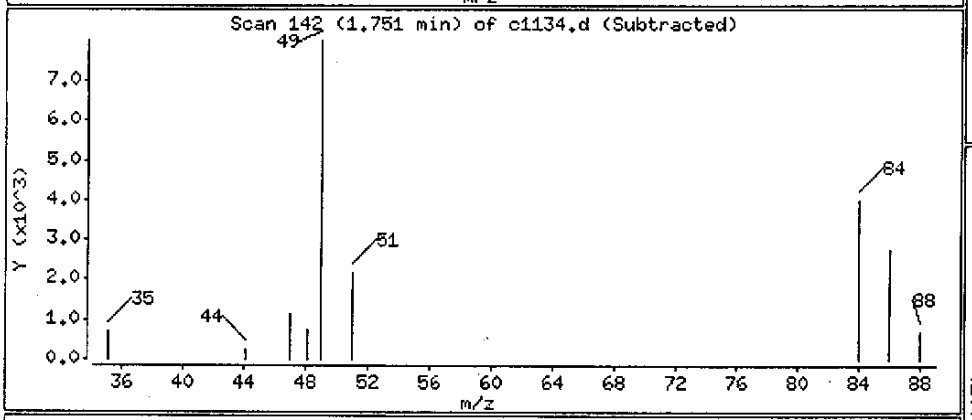
Column diameter: 0.53

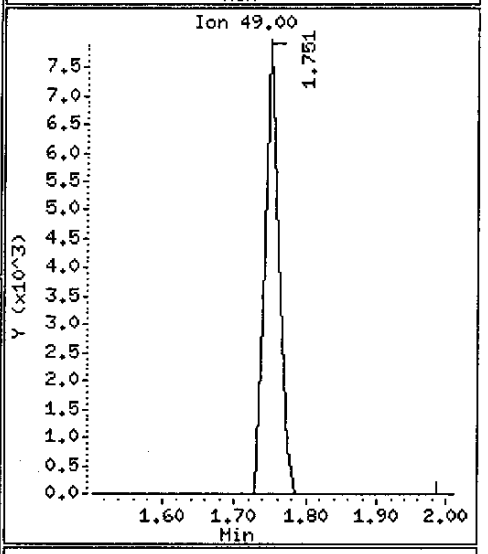
26 Methylene Chloride

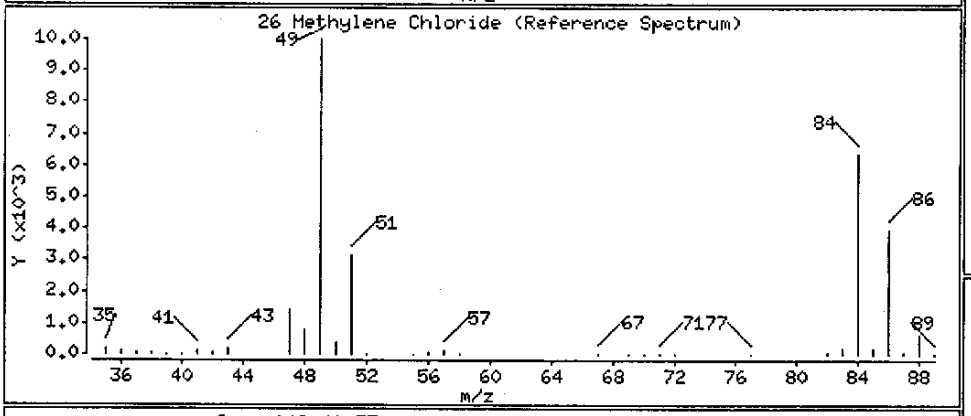
Concentration: 0.216681 ug/L

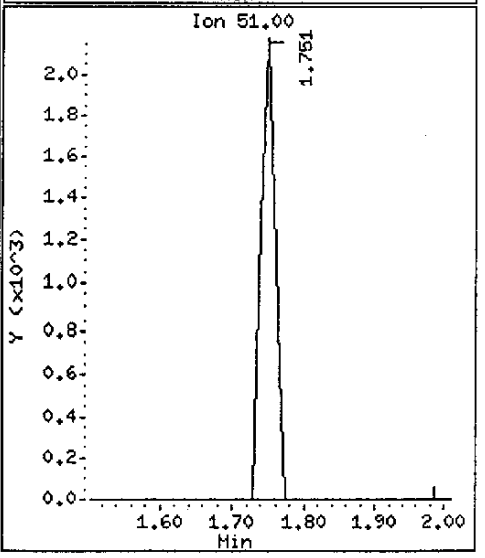


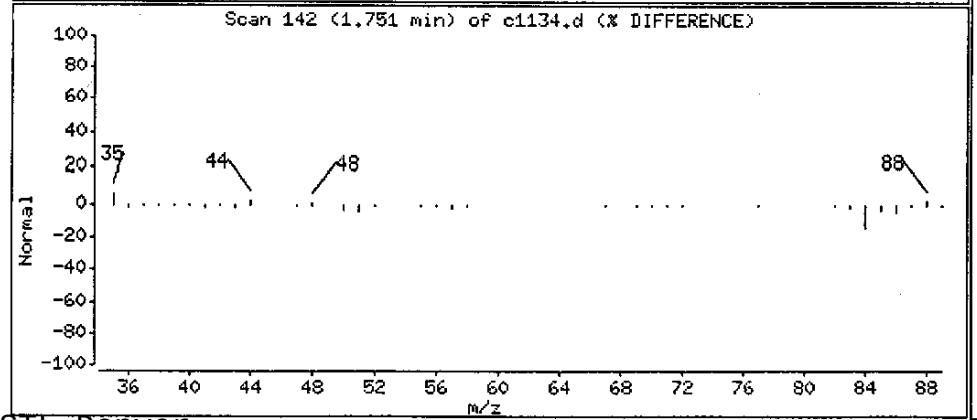












Data File: /chem/C.i/052804.b/c1134.d

Date : 28-MAY-2004 07:24

Client ID: VBLK

Instrument: C.i

Sample Info: VBLK,,105/099-04

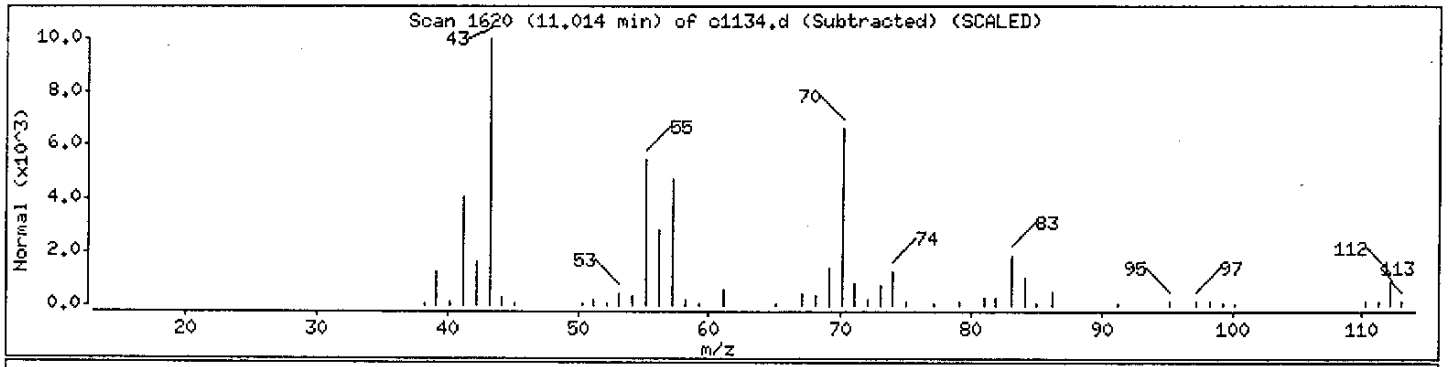
Purge Volume: 20.0

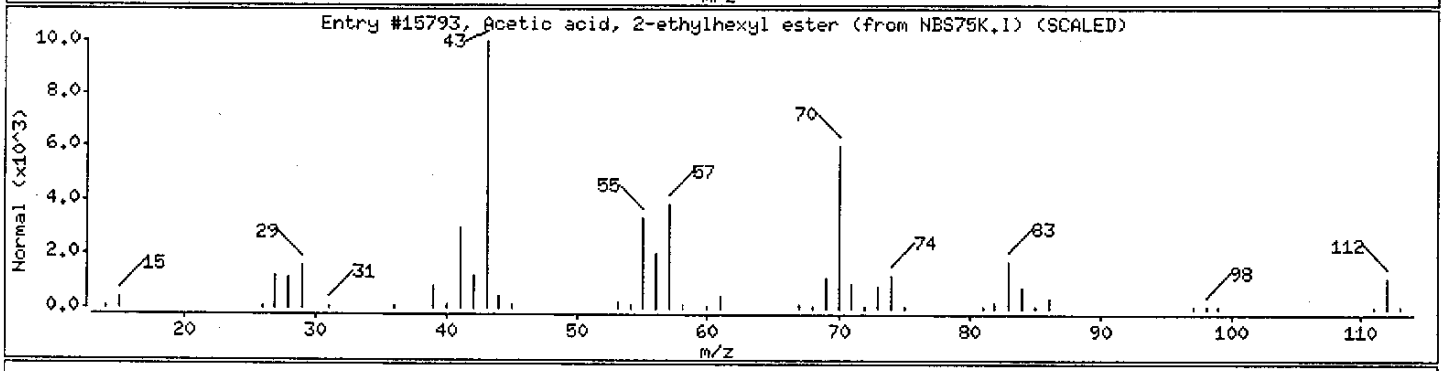
Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Acetic acid, 2-ethylhexyl ester	103-09-3	NBS75K.l	15793	86	C10H2002	172





Data File: /chem/C.i/052804.b/c1134.d

Date : 28-MAY-2004 07:24

Client ID: VBLK

Instrument: C.i

Sample Info: VBLK,,105/099-04

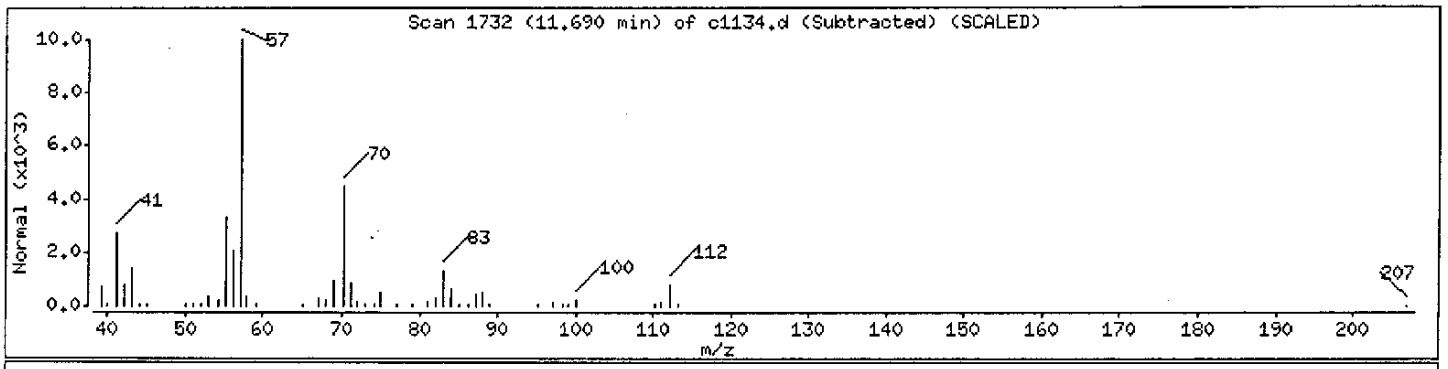
Purge Volume: 20.0

Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0



Data File: /chem/C.i/052804.b/c1134.d

Date : 28-MAY-2004 07:24

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Operator: yanezj

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown			0	0		0