New Jersey
ACCUTEST
Laboratories

08/30/04

Technical Report for

ENSR Consulting & Engineering

Former Camp Butner, NC

09090-068

Accutest Job Number: N74646

Sampling Dates: 08/09/04 - 08/10/04

Report to:

ENSR Consulting & Engineering
2 Technology Park Drive
Westford, MA 01886

ATTN: Debbie McGrath

Total number of pages in report: 2069

Volume: 2 of 4

ACCREDITED IN ACCORDANCE WITH nela

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

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GC

GC
SW846 8081A
PESTICIDE

ACCUTEST

GC Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction 8081 PESTICIDE

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
3. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
4. Surrogate Recoveries Meet Criteria (if applicable)		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		*
5. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
6. Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Retention Time Summary for comment.		
7. Extraction Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
8. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		

9. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*

Additional Comments: *see footnote

QC Review Signature: Benedetta M. Pagow Date: 8/18/2004

Form: RG05
Rev. Date: 2/15/00

Semivolatile Surrogate Recovery Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Method: SW846 8081A **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
N74646-1	OA14980.D	96.0	92.0	93.0	100.0
N74646-2	OA14981.D	69.0	66.0	100.0	96.0
N74646-3	OA14982.D	91.0	87.0	91.0	94.0
N74646-4	OA14983.D	94.0	91.0	96.0	97.0
N74646-5	OA14984.D	93.0	89.0	91.0	92.0
N74646-6	OA14985.D	71.0	67.0	98.0	100.0
N74646-8	OA14990.D	95.0	91.0	100.0	99.0
N74646-9	OA14991.D	97.0	93.0	99.0	99.0
N74646-10	OA14992.D	85.0	81.0	80.0	77.0
N74646-11	OA14993.D	95.0	91.0	95.0	98.0
N74646-12	OA14994.D	93.0	89.0	70.0	72.0
N74646-13	OA14995.D	91.0	86.0	96.0	100.0
OP17688-BS1	OA14977.D	94.0	90.0	93.0	91.0
OP17688-BSD	OA14978.D	100.0	95.0	95.0	95.0
OP17688-MB1	OA14976.D	96.0	92.0	84.0	82.0
OP17688-MS	OA14979.D	78.0	76.0	98.0	99.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	35-138%
S2 = Decachlorobiphenyl	19-153%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Blank Spike/Blank Spike Duplicate Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17688-BS1	OA14977.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439
OP17688-BSD	OA14978.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439

The QC reported here applies to the following samples: **Method:** SW846 8081A

N74646-1, N74646-2, N74646-3, N74646-4, N74646-5, N74646-6, N74646-8, N74646-9, N74646-10, N74646-11, N74646-12, N74646-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.50	0.43	86 [a]	0.29	116	39* [b]	72-139/30
319-84-6	alpha-BHC	0.50	0.46	92 [a]	0.30	120	42* [b]	82-138/30
319-85-7	beta-BHC	0.50	0.42	84 [a]	0.29	116	37* [b]	82-140/30
319-86-8	delta-BHC	0.50	0.44	88 [a]	0.29	116	41* [b]	72-141/30
58-89-9	gamma-BHC (Lindane)	0.50	0.46	92 [a]	0.30	120	42* [b]	84-140/30
5103-71-9	alpha-Chlordane	0.50	0.45	90 [c]	0.30	120 [d]	40* [b]	82-138/30
5103-74-2	gamma-Chlordane	0.50	0.47	94 [a]	0.32	128	38* [b]	83-139/30
60-57-1	Dieldrin	0.50	0.48	96 [a]	0.32	128	40* [b]	85-141/30
72-54-8	4,4'-DDD	0.50	0.49	98 [a]	0.32	128	42* [b]	79-153/30
72-55-9	4,4'-DDE	0.50	0.47	94 [a]	0.31	124	41* [b]	84-144/30
50-29-3	4,4'-DDT	0.50	0.49	98 [a]	0.34	136	36* [b]	75-155/30
72-20-8	Endrin	0.50	0.48	96 [a]	0.32	128	40* [b]	83-147/30
1031-07-8	Endosulfan sulfate	0.50	0.47	94 [a]	0.32	128	38* [b]	79-151/30
7421-93-4	Endrin aldehyde	0.50	0.42	84 [a]	0.30	120	33* [b]	78-140/30
53494-70-5	Endrin ketone	0.50	0.49	98 [a]	0.33	132	39* [b]	84-153/30
959-98-8	Endosulfan-I	0.50	0.45	90 [a]	0.30	120	40* [b]	84-141/30
33213-65-9	Endosulfan-II	0.50	0.47	94 [a]	0.32	128	38* [b]	86-145/30
76-44-8	Heptachlor	0.50	0.45	90 [a]	0.30	120	40* [b]	78-138/30
1024-57-3	Heptachlor epoxide	0.50	0.46	92 [a]	0.31	124	39* [b]	83-139/30
72-43-5	Methoxychlor	0.50	0.47	94 [a]	0.35	140	29 [b]	78-156/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	94%	100%	35-138%
877-09-8	Tetrachloro-m-xylene	90%	95%	35-138%
2051-24-3	Decachlorobiphenyl	93%	95%	19-153%
2051-24-3	Decachlorobiphenyl	91%	95%	19-153%

(a) double spiked.
(b) High RPD due to BS double spiked.
(c) Reported from 2nd signal due to interference on 1st signal.double spiled.
(d) Reported from 2nd signal due to interference on 1st signal.

Matrix Spike Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17688-MS	OA14979.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439
N74646-2	OA14981.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439

The QC reported here applies to the following samples: **Method:** SW846 8081A

N74646-1, N74646-2, N74646-3, N74646-4, N74646-5, N74646-6, N74646-8, N74646-9, N74646-10, N74646-11, N74646-12, N74646-13

CAS No.	Compound	N74646-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
309-00-2	Aldrin	ND		0.294	0.29	99	41-145
319-84-6	alpha-BHC	ND		0.294	0.30	102	47-145
319-85-7	beta-BHC	ND		0.294	0.34	116	50-149
319-86-8	delta-BHC	ND		0.294	0.33	112	46-145
58-89-9	gamma-BHC (Lindane)	ND		0.294	0.32	109	51-145
5103-71-9	alpha-Chlordane	ND		0.294	0.34	116	42-156
5103-74-2	gamma-Chlordane	ND		0.294	0.34	116	43-152
60-57-1	Dieldrin	ND		0.294	0.35	119	47-153
72-54-8	4,4'-DDD	ND		0.294	0.37	126	57-152
72-55-9	4,4'-DDE	ND		0.294	0.35	119	43-156
50-29-3	4,4'-DDT	ND		0.294	0.37	126	54-153
72-20-8	Endrin	ND		0.294	0.36	122	56-151
1031-07-8	Endosulfan sulfate	ND		0.294	0.40	136	68-144
7421-93-4	Endrin aldehyde	ND		0.294	0.33	112	46-142
53494-70-5	Endrin ketone	ND		0.294	0.40	136	54-154
959-98-8	Endosulfan-I	ND		0.294	0.33	112	58-142
33213-65-9	Endosulfan-II	ND		0.294	0.35	119	53-150
76-44-8	Heptachlor	ND		0.294	0.31	105	46-149
1024-57-3	Heptachlor epoxide	ND		0.294	0.34	116	49-154
72-43-5	Methoxychlor	ND		0.294	0.40	136	44-160
8001-35-2	Toxaphene	ND			ND		50-150

CAS No.	Surrogate Recoveries	MS	N74646-2	Limits
877-09-8	Tetrachloro-m-xylene	78%	69%	35-138%
877-09-8	Tetrachloro-m-xylene	76%	66%	35-138%
2051-24-3	Decachlorobiphenyl	98%	100%	19-153%
2051-24-3	Decachlorobiphenyl	99%	96%	19-153%

Method Blank Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17688-MB1	OA14976.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439

The QC reported here applies to the following samples: **Method:** SW846 8081A

N74646-1, N74646-2, N74646-3, N74646-4, N74646-5, N74646-6, N74646-8, N74646-9, N74646-10, N74646-11, N74646-12, N74646-13

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.020	0.0079	ug/l	
319-84-6	alpha-BHC	ND	0.020	0.013	ug/l	
319-85-7	beta-BHC	ND	0.020	0.0086	ug/l	
319-86-8	delta-BHC	ND	0.020	0.0098	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.0026	ug/l	
5103-71-9	alpha-Chlordane	ND	0.020	0.018	ug/l	
5103-74-2	gamma-Chlordane	ND	0.020	0.013	ug/l	
60-57-1	Dieldrin	ND	0.020	0.013	ug/l	
72-54-8	4,4'-DDD	ND	0.020	0.017	ug/l	
72-55-9	4,4'-DDE	ND	0.020	0.0041	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.018	ug/l	
72-20-8	Endrin	ND	0.020	0.011	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.020	0.013	ug/l	
7421-93-4	Endrin aldehyde	ND	0.020	0.020	ug/l	
53494-70-5	Endrin ketone	ND	0.050	0.0053	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.0029	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0028	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0059	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.011	ug/l	
72-43-5	Methoxychlor	ND	0.050	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	96%	35-138%
877-09-8	Tetrachloro-m-xylene	92%	35-138%
2051-24-3	Decachlorobiphenyl	84%	19-153%
2051-24-3	Decachlorobiphenyl	82%	19-153%

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GCOA
Method: SW846 8081A

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	OA14705.D	07/31/04 17:26	GOA431-ICC431	OWENM
Std#2	OA14744.D	08/03/04 00:57	GOA432-CC431	OWENM
Std#3	OA14762.D	08/03/04 15:46	GOA432-ECC431	OWENM

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+/- 3*StdDev)
Tetrachloro-m-xylene	1	SURR	6.55	6.58	6.47	6.53	0.057	+/- 0.171
Decachlorobiphenyl	1	SURR	25.37	25.37	25.32	25.35	0.029	+/- 0.087
Tetrachloro-m-xylene	2	SURR	6.20	6.23	6.15	6.19	0.040	+/- 0.121
Decachlorobiphenyl	2	SURR	26.50	26.50	26.46	26.49	0.023	+/- 0.069
alpha-BHC	1	REG	8.85	8.86	8.78	8.83	0.044	+/- 0.131
gamma-BHC (Lindane)	1	REG	10.03	10.04	9.97	10.01	0.038	+/- 0.114
beta-BHC	1	REG	10.38	10.39	10.33	10.37	0.032	+/- 0.096
delta-BHC	1	REG	10.98	10.98	10.92	10.96	0.035	+/- 0.104
Heptachlor	1	REG	11.65	11.65	11.60	11.63	0.029	+/- 0.087
Aldrin	1	REG	12.61	12.61	12.55	12.59	0.035	+/- 0.104
Heptachlor epoxide	1	REG	14.48	14.48	14.43	14.46	0.029	+/- 0.087
gamma-Chlordane	1	REG	14.83	14.84	14.79	14.82	0.026	+/- 0.079
alpha-Chlordane	1	REG	15.23	15.23	15.18	15.21	0.029	+/- 0.087
4,4'-DDE	1	REG	15.50	15.50	15.46	15.49	0.023	+/- 0.069
Endosulfan-I	1	REG	15.62	15.62	15.58	15.61	0.023	+/- 0.069
Dieldrin	1	REG	16.35	16.35	16.30	16.33	0.029	+/- 0.087
Endrin	1	REG	17.05	17.05	17.00	17.03	0.029	+/- 0.087
4,4'-DDD	1	REG	17.30	17.30	17.26	17.29	0.023	+/- 0.069
Endosulfan-II	1	REG	17.76	17.76	17.71	17.74	0.029	+/- 0.087
4,4'-DDT	1	REG	18.17	18.17	18.13	18.16	0.023	+/- 0.069
Endrin aldehyde	1	REG	19.13	19.13	19.08	19.11	0.029	+/- 0.087
Methoxychlor	1	REG	19.79	19.79	19.74	19.77	0.029	+/- 0.087
Endosulfan sulfate	1	REG	20.61	20.60	20.55	20.59	0.032	+/- 0.096
Endrin ketone	1	REG	21.58	21.58	21.52	21.56	0.035	+/- 0.104
alpha-BHC	2	REG	8.75	8.76	8.71	8.74	0.026	+/- 0.079
gamma-BHC (Lindane)	2	REG	10.06	10.07	10.03	10.05	0.021	+/- 0.062
beta-BHC	2	REG	10.42	10.42	10.38	10.41	0.023	+/- 0.069
delta-BHC	2	REG	11.38	11.39	11.35	11.37	0.021	+/- 0.062
Heptachlor	2	REG	11.53	11.53	11.50	11.52	0.017	+/- 0.052
Aldrin	2	REG	12.52	12.53	12.50	12.52	0.015	+/- 0.046
Heptachlor epoxide	2	REG	14.26	14.26	14.23	14.25	0.017	+/- 0.052
gamma-Chlordane	2	REG	14.80	14.81	14.78	14.80	0.015	+/- 0.046
alpha-Chlordane	2	REG	15.23	15.23	15.20	15.22	0.017	+/- 0.052
Endosulfan-I	2	REG	15.36	15.36	15.33	15.35	0.017	+/- 0.052
4,4'-DDE	2	REG	15.79	15.79	15.76	15.78	0.017	+/- 0.052
Dieldrin	2	REG	16.17	16.17	16.14	16.16	0.017	+/- 0.052
Endrin	2	REG	17.07	17.07	17.04	17.06	0.017	+/- 0.052
4,4'-DDD	2	REG	17.52	17.52	17.49	17.51	0.017	+/- 0.052
Endosulfan-II	2	REG	17.74	17.74	17.71	17.73	0.017	+/- 0.052
4,4'-DDT	2	REG	18.50	18.50	18.47	18.49	0.017	+/- 0.052
Endrin aldehyde	2	REG	18.83	18.83	18.80	18.82	0.017	+/- 0.052

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GCOA
Method: SW846 8081A

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	OA14705.D	07/31/04 17:26	GOA431-ICC431	OWENM
Std#2	OA14744.D	08/03/04 00:57	GOA432-CC431	OWENM
Std#3	OA14762.D	08/03/04 15:46	GOA432-ECC431	OWENM

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+/- 3*StdDev)
Endosulfan sulfate	2	REG	19.74	19.74	19.71	19.73	0.017	+/- 0.052
Methoxychlor	2	REG	20.86	20.86	20.83	20.85	0.017	+/- 0.052
Endrin ketone	2	REG	21.56	21.56	21.53	21.55	0.017	+/- 0.052

GC Surrogate Retention Time Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA439-CC433	**Injection Date:**	08/12/04
Lab File ID:	OA14973.D	**Injection Time:**	16:36
Instrument ID:	GCOA	**Method:**	SW846 8081A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	6.49	6.17	25.36	26.53

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP17688-MB1	OA14976.D	08/12/04	18:16	6.47	6.17	25.36	26.53
OP17688-BS1	OA14977.D	08/12/04	18:49	6.47	6.17	25.35	26.53
OP17688-BSD	OA14978.D	08/12/04	19:22	6.48	6.17	25.35	26.53
OP17688-MS	OA14979.D	08/12/04	19:55	6.47	6.17	25.35	26.53
N74646-1	OA14980.D	08/12/04	20:28	6.48	6.17	25.35	26.53
N74646-2	OA14981.D	08/12/04	21:02	6.48	6.17	25.35	26.53
N74646-3	OA14982.D	08/12/04	21:35	6.47	6.16	25.35	26.53
N74646-4	OA14983.D	08/12/04	22:08	6.47	6.17	25.35	26.53
N74646-5	OA14984.D	08/12/04	22:42	6.48	6.17	25.35	26.53
N74646-6	OA14985.D	08/12/04	23:15	6.47	6.17	25.35	26.53

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA439-CC433	**Injection Date:**	08/13/04
Lab File ID:	OA14986.D	**Injection Time:**	00:45
Instrument ID:	GCOA	**Method:**	SW846 8081A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	6.47	6.17	25.36	26.53

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP17667-MB1	OA14989.D	08/13/04	02:58	6.48	6.17	25.35	26.52
N74646-8	OA14990.D	08/13/04	03:31	6.48	6.17	25.36	26.53
N74646-9	OA14991.D	08/13/04	04:05	6.47	6.17	25.36	26.53
N74646-10	OA14992.D	08/13/04	04:38	6.48	6.17	25.35	26.53
N74646-11	OA14993.D	08/13/04	05:11	6.48	6.17	25.36	26.53
N74646-12	OA14994.D	08/13/04	05:44	6.47	6.17	25.36	26.53
N74646-13	OA14995.D	08/13/04	06:17	6.48	6.17	25.36	26.53
ZZZZZZ	OA14996.D	08/13/04	06:51	6.47	6.16	25.35	26.52
ZZZZZZ	OA14997.D	08/13/04	07:24	6.47	6.17	25.35	26.52
ZZZZZZ	OA14998.D	08/13/04	07:57	6.47	6.16	25.35	26.52

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

DDT/Endrin Breakdown Check

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample:	GOA433-DDT1	**Injection Date:**	08/03/04
Lab File ID:	OA14764.D	**Injection Time:**	17:33
Instrument ID:	GCOA		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2927611	4509860
4,4'-DDE	11558238	16099800
4,4'-DDT	811313936	1296326902
DDT Breakdown [a]	1.8 %	1.6 %
Endrin aldehyde	1352083	2092139
Endrin ketone	2397885	3542854
Endrin	465665012	700862160
Endrin Breakdown [b]	0.8 %	0.8 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GOA433-IC433	OA14766.D	08/03/04	18:40	01:07	Initial cal 500
GOA433-IC433	OA14767.D	08/03/04	19:13	01:40	Initial cal 500
GOA433-IC433	OA14768.D	08/03/04	19:46	02:13	Initial cal 100
GOA433-IC433	OA14769.D	08/03/04	20:20	02:47	Initial cal 50
GOA433-ICC433	OA14770.D	08/03/04	20:53	03:20	Initial cal 25
GOA433-IC433	OA14771.D	08/03/04	21:26	03:53	Initial cal 10
GOA433-IC433	OA14772.D	08/03/04	21:59	04:26	Initial cal 5
GOA433-IC433	OA14773.D	08/03/04	22:32	04:59	Initial cal 2

DDT/Endrin Breakdown Check

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample:	GOA439-DDT2	**Injection Date:**	08/12/04
Lab File ID:	OA14974.D	**Injection Time:**	17:09
Instrument ID:	GCOA		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	5627021	5849960
4,4'-DDE	14165704	18272846
4,4'-DDT	799790763	1162238512
DDT Breakdown [a]	2.4 %	2 %
Endrin aldehyde	0	0
Endrin ketone	2260344	0
Endrin	463488013	634343812
Endrin Breakdown [b]	0.5 %	0 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP17688-MB1	OA14976.D	08/12/04	18:16	01:07	Method Blank
OP17688-BS1	OA14977.D	08/12/04	18:49	01:40	Blank Spike
OP17688-BSD	OA14978.D	08/12/04	19:22	02:13	Blank Spike Duplicate
OP17688-MS	OA14979.D	08/12/04	19:55	02:46	Matrix Spike
N74646-1	OA14980.D	08/12/04	20:28	03:19	RW0804-658-LAKEVIEWDR
N74646-2	OA14981.D	08/12/04	21:02	03:53	RW0804-653-LAKEVIEWDR
N74646-3	OA14982.D	08/12/04	21:35	04:26	RW0804-652-LAKEVIEWDR
N74646-4	OA14983.D	08/12/04	22:08	04:59	RWB0804-3536-FLETCHERSWAY
N74646-5	OA14984.D	08/12/04	22:42	05:33	RW0804-NCNG
N74646-6	OA14985.D	08/12/04	23:15	06:06	RW0804-FIELDDUP1
GOA439-CC433	OA14986.D	08/13/04	00:45	07:36	Continuing cal 25

DDT/Endrin Breakdown Check

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample:	GOA439-DDT3	**Injection Date:**	08/13/04
Lab File ID:	OA14987.D	**Injection Time:**	01:52
Instrument ID:	GCOA		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	7069303	8648488
4,4'-DDE	16267556	20540427
4,4'-DDT	803873933	1206368759
DDT Breakdown [a]	2.8 %	2.4 %
Endrin aldehyde	14788183	23397959
Endrin ketone	10209218	13217144
Endrin	448566118	629881913
Endrin Breakdown [b]	5.3 %	5.5 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP17667-MB1	OA14989.D	08/13/04	02:58	01:06	Method Blank
N74646-8	OA14990.D	08/13/04	03:31	01:39	RW0804-CAMPBARHAM
N74646-9	OA14991.D	08/13/04	04:05	02:13	RW0804-4051-RANGERD
N74646-10	OA14992.D	08/13/04	04:38	02:46	RW0804-CAMPEASON
N74646-11	OA14993.D	08/13/04	05:11	03:19	RW0804-750-LITTLEMOUNTAIN
N74646-12	OA14994.D	08/13/04	05:44	03:52	RW0804-191-FALCONLANE
N74646-13	OA14995.D	08/13/04	06:17	04:25	RW0804-4149-RANGERD
ZZZZZZ	OA14996.D	08/13/04	06:51	04:59	(unrelated sample)
ZZZZZZ	OA14997.D	08/13/04	07:24	05:32	(unrelated sample)
ZZZZZZ	OA14998.D	08/13/04	07:57	06:05	(unrelated sample)
GOA439-CC433	OA14999.D	08/13/04	09:06	07:14	Continuing cal 10

GC Identification Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA439-CC433	**Injection Date:**	08/12/04
Lab File ID:	OA14973.D	**Injection Time:**	16:36
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17688-MS	**Injection Date:**	08/12/04
Lab File ID:	OA14979.D	**Injection Time:**	19:55
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	12.57	12.58	0.29		ug/l	0.0
Aldrin	2	12.53	12.53	0.29		ug/l	
alpha-BHC	1 [a]	8.79	8.81	0.30		ug/l	0.0
alpha-BHC	2	8.73	8.74	0.30		ug/l	
beta-BHC	1 [a]	10.34	10.35	0.34		ug/l	6.1
beta-BHC	2	10.41	10.42	0.32		ug/l	
delta-BHC	1 [a]	10.93	10.95	0.33		ug/l	3.1
delta-BHC	2	11.38	11.39	0.32		ug/l	
gamma-BHC (Lindane)	1 [a]	9.98	10.00	0.32		ug/l	3.2
gamma-BHC (Lindane)	2	10.06	10.06	0.31		ug/l	
alpha-Chlordane	1	15.19	15.21	0.65		ug/l	62.6
alpha-Chlordane [b]	2 [a]	15.24	15.24	0.34		ug/l	
gamma-Chlordane	1 [a]	14.81	14.82	0.34		ug/l	2.9
gamma-Chlordane	2	14.81	14.82	0.35		ug/l	
Dieldrin	1 [a]	16.32	16.33	0.35		ug/l	5.6
Dieldrin	2	16.18	16.18	0.37		ug/l	
4,4'-DDD	1 [a]	17.28	17.29	0.37		ug/l	5.3
4,4'-DDD	2	17.54	17.54	0.39		ug/l	
4,4'-DDE	1 [a]	15.48	15.49	0.35		ug/l	2.8
4,4'-DDE	2	15.80	15.81	0.36		ug/l	
4,4'-DDT	1 [a]	18.16	18.16	0.37		ug/l	0.0
4,4'-DDT	2	18.52	18.52	0.37		ug/l	
Endrin	1 [a]	17.03	17.04	0.36		ug/l	5.4
Endrin	2	17.09	17.09	0.38		ug/l	
Endosulfan sulfate	1 [a]	20.58	20.58	0.40		ug/l	7.8
Endosulfan sulfate	2	19.76	19.76	0.37		ug/l	
Endrin aldehyde	1 [a]	19.10	19.11	0.33		ug/l	5.9
Endrin aldehyde	2	18.84	18.84	0.35		ug/l	
Endrin ketone	1 [a]	21.55	21.56	0.40		ug/l	2.5
Endrin ketone	2	21.58	21.58	0.39		ug/l	
Endosulfan-I	1 [a]	15.60	15.60	0.33		ug/l	3.0
Endosulfan-I	2	15.37	15.37	0.34		ug/l	
Endosulfan-II	1 [a]	17.74	17.74	0.35		ug/l	5.6
Endosulfan-II	2	17.75	17.76	0.37		ug/l	
Heptachlor	1 [a]	11.61	11.62	0.31		ug/l	3.3
Heptachlor	2	11.53	11.53	0.30		ug/l	
Heptachlor epoxide	1 [a]	14.45	14.46	0.34		ug/l	0.0
Heptachlor epoxide	2	14.27	14.27	0.34		ug/l	
Methoxychlor	1 [a]	19.77	19.78	0.40		ug/l	10.5
Methoxychlor	2	20.88	20.88	0.36		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA439-CC433	**Injection Date:**	08/12/04
Lab File ID:	OA14973.D	**Injection Time:**	16:36
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17688-MS	**Injection Date:**	08/12/04
Lab File ID:	OA14979.D	**Injection Time:**	19:55
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(b) Reported from 2nd signal due to interference on 1st signal.

GC Identification Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA439-CC433	**Injection Date:**	08/12/04
Lab File ID:	OA14973.D	**Injection Time:**	16:36
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17688-BSD	**Injection Date:**	08/12/04
Lab File ID:	OA14978.D	**Injection Time:**	19:22
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	12.57	12.58	0.29		ug/l	0.0
Aldrin	2 [a]	12.53	12.53	0.29		ug/l	
alpha-BHC	1 [a]	8.79	8.81	0.30		ug/l	0.0
alpha-BHC	2	8.74	8.74	0.30		ug/l	
beta-BHC	1 [a]	10.34	10.35	0.29		ug/l	3.5
beta-BHC	2	10.41	10.42	0.28		ug/l	
delta-BHC	1 [a]	10.94	10.95	0.29		ug/l	3.5
delta-BHC	2	11.38	11.39	0.28		ug/l	
gamma-BHC (Lindane)	1 [a]	9.99	10.00	0.30		ug/l	0.0
gamma-BHC (Lindane)	2	10.06	10.06	0.30		ug/l	
alpha-Chlordane	1	15.19	15.21	0.59		ug/l	65.2
alpha-Chlordane [b]	2 [a]	15.24	15.24	0.30		ug/l	
gamma-Chlordane	1 [a]	14.81	14.82	0.32		ug/l	0.0
gamma-Chlordane	2	14.82	14.82	0.32		ug/l	
Dieldrin	1 [a]	16.32	16.33	0.32		ug/l	0.0
Dieldrin	2	16.18	16.18	0.32		ug/l	
4,4'-DDD	1 [a]	17.28	17.29	0.32		ug/l	3.2
4,4'-DDD	2	17.54	17.54	0.31		ug/l	
4,4'-DDE	1 [a]	15.48	15.49	0.31		ug/l	3.3
4,4'-DDE	2	15.80	15.81	0.30		ug/l	
4,4'-DDT	1 [a]	18.16	18.16	0.34		ug/l	3.0
4,4'-DDT	2	18.52	18.52	0.33		ug/l	
Endrin	1 [a]	17.03	17.04	0.32		ug/l	0.0
Endrin	2	17.09	17.09	0.32		ug/l	
Endosulfan sulfate	1 [a]	20.58	20.58	0.32		ug/l	3.2
Endosulfan sulfate	2	19.76	19.76	0.31		ug/l	
Endrin aldehyde	1 [a]	19.11	19.11	0.30		ug/l	3.4
Endrin aldehyde	2	18.84	18.84	0.29		ug/l	
Endrin ketone	1 [a]	21.55	21.56	0.33		ug/l	0.0
Endrin ketone	2	21.58	21.58	0.33		ug/l	
Endosulfan-I	1 [a]	15.60	15.60	0.30		ug/l	0.0
Endosulfan-I	2	15.37	15.37	0.30		ug/l	
Endosulfan-II	1 [a]	17.74	17.74	0.32		ug/l	3.2
Endosulfan-II	2	17.75	17.76	0.31		ug/l	
Heptachlor	1 [a]	11.61	11.62	0.30		ug/l	0.0
Heptachlor	2	11.53	11.53	0.30		ug/l	
Heptachlor epoxide	1 [a]	14.45	14.46	0.31		ug/l	0.0
Heptachlor epoxide	2	14.27	14.27	0.31		ug/l	
Methoxychlor	1 [a]	19.77	19.78	0.35		ug/l	2.9
Methoxychlor	2	20.88	20.88	0.34		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA439-CC433	**Injection Date:**	08/12/04
Lab File ID:	OA14973.D	**Injection Time:**	16:36
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17688-BSD	**Injection Date:**	08/12/04
Lab File ID:	OA14978.D	**Injection Time:**	19:22
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(b) Reported from 2nd signal due to interference on 1st signal.

GC Identification Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA439-CC433	**Injection Date:**	08/12/04
Lab File ID:	OA14973.D	**Injection Time:**	16:36
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17688-BS1	**Injection Date:**	08/12/04
Lab File ID:	OA14977.D	**Injection Time:**	18:49
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	12.57	12.58	0.42		ug/l	2.4
Aldrin	2 [a]	12.53	12.53	0.43		ug/l	
alpha-BHC	1	8.79	8.81	0.45		ug/l	2.2
alpha-BHC	2 [a]	8.73	8.74	0.46		ug/l	
beta-BHC	1	10.34	10.35	0.42		ug/l	0.0
beta-BHC	2 [a]	10.41	10.42	0.42		ug/l	
delta-BHC	1 [a]	10.93	10.95	0.44		ug/l	0.0
delta-BHC	2	11.38	11.39	0.44		ug/l	
gamma-BHC (Lindane)	1	9.98	10.00	0.45		ug/l	2.2
gamma-BHC (Lindane)	2 [a]	10.06	10.06	0.46		ug/l	
alpha-Chlordane	1	15.19	15.21	0.86		ug/l	62.6
alpha-Chlordane [b]	2 [a]	15.24	15.24	0.45		ug/l	
gamma-Chlordane	1	14.81	14.82	0.46		ug/l	2.2
gamma-Chlordane	2 [a]	14.81	14.82	0.47		ug/l	
Dieldrin	1	16.32	16.33	0.48		ug/l	0.0
Dieldrin	2 [a]	16.18	16.18	0.48		ug/l	
4,4'-DDD	1 [a]	17.28	17.29	0.49		ug/l	4.2
4,4'-DDD	2	17.54	17.54	0.47		ug/l	
4,4'-DDE	1	15.48	15.49	0.47		ug/l	0.0
4,4'-DDE	2 [a]	15.80	15.81	0.47		ug/l	
4,4'-DDT	1 [a]	18.16	18.16	0.49		ug/l	4.2
4,4'-DDT	2	18.52	18.52	0.47		ug/l	
Endrin	1 [a]	17.03	17.04	0.48		ug/l	2.1
Endrin	2	17.09	17.09	0.47		ug/l	
Endosulfan sulfate	1 [a]	20.58	20.58	0.47		ug/l	2.2
Endosulfan sulfate	2	19.76	19.76	0.46		ug/l	
Endrin aldehyde	1 [a]	19.10	19.11	0.42		ug/l	2.4
Endrin aldehyde	2	18.84	18.84	0.41		ug/l	
Endrin ketone	1 [a]	21.55	21.56	0.49		ug/l	0.0
Endrin ketone	2	21.58	21.58	0.49		ug/l	
Endosulfan-I	1	15.60	15.60	0.45		ug/l	0.0
Endosulfan-I	2 [a]	15.37	15.37	0.45		ug/l	
Endosulfan-II	1 [a]	17.74	17.74	0.47		ug/l	0.0
Endosulfan-II	2	17.76	17.76	0.47		ug/l	
Heptachlor	1	11.61	11.62	0.44		ug/l	2.2
Heptachlor	2 [a]	11.53	11.53	0.45		ug/l	
Heptachlor epoxide	1	14.45	14.46	0.45		ug/l	2.2
Heptachlor epoxide	2 [a]	14.27	14.27	0.46		ug/l	
Methoxychlor	1 [a]	19.77	19.78	0.47		ug/l	0.0
Methoxychlor	2	20.88	20.88	0.47		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA439-CC433	**Injection Date:**	08/12/04
Lab File ID:	OA14973.D	**Injection Time:**	16:36
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17688-BS1	**Injection Date:**	08/12/04
Lab File ID:	OA14977.D	**Injection Time:**	18:49
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(b) Reported from 2nd signal due to interference on 1st signal.

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-658-LAKEVIEWDR		
Lab Sample ID:	N74646-1	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14980.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.022	0.0088	ug/l	
319-84-6	alpha-BHC	ND	0.022	0.014	ug/l	
319-85-7	beta-BHC	ND	0.022	0.0095	ug/l	
319-86-8	delta-BHC	ND	0.022	0.011	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.022	0.0029	ug/l	
5103-71-9	alpha-Chlordane	ND	0.022	0.020	ug/l	
5103-74-2	gamma-Chlordane	ND	0.022	0.014	ug/l	
60-57-1	Dieldrin	ND	0.022	0.014	ug/l	
72-54-8	4,4'-DDD	ND	0.022	0.018	ug/l	
72-55-9	4,4'-DDE	ND	0.022	0.0045	ug/l	
50-29-3	4,4'-DDT	ND	0.022	0.020	ug/l	
72-20-8	Endrin	ND	0.022	0.013	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.022	0.015	ug/l	
7421-93-4	Endrin aldehyde	ND	0.022	0.022	ug/l	
53494-70-5	Endrin ketone	ND	0.056	0.0059	ug/l	
959-98-8	Endosulfan-I	ND	0.022	0.0033	ug/l	
33213-65-9	Endosulfan-II	ND	0.022	0.0031	ug/l	
76-44-8	Heptachlor	ND	0.022	0.0065	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.022	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.056	0.013	ug/l	
8001-35-2	Toxaphene	ND	0.28	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		35-138%
877-09-8	Tetrachloro-m-xylene	92%		35-138%
2051-24-3	Decachlorobiphenyl	93%		19-153%
2051-24-3	Decachlorobiphenyl	100%		19-153%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Signal #1 : C:\MSDCHEM\1\DATA\oa14980.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\oa14980.D\ECD2B.CH
Acq On : 12 Aug 2004 8:28 pm Operator: owenm
Sample : n74646-1 Inst : GCOO
Misc : OP17688,GOA439,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 20:59:39 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.48f	6.17	355.2E6	462.4E6	38.337	36.815
Spiked Amount	40.000	Range	30 - 150	Recovery	= 95.84%	92.04%
2) SA Decachlorobiphen	25.35	26.53	242.4E6	395.5E6	37.208	39.859
Spiked Amount	40.000	Range	30 - 150	Recovery	= 93.02%	99.65%

Target Compounds

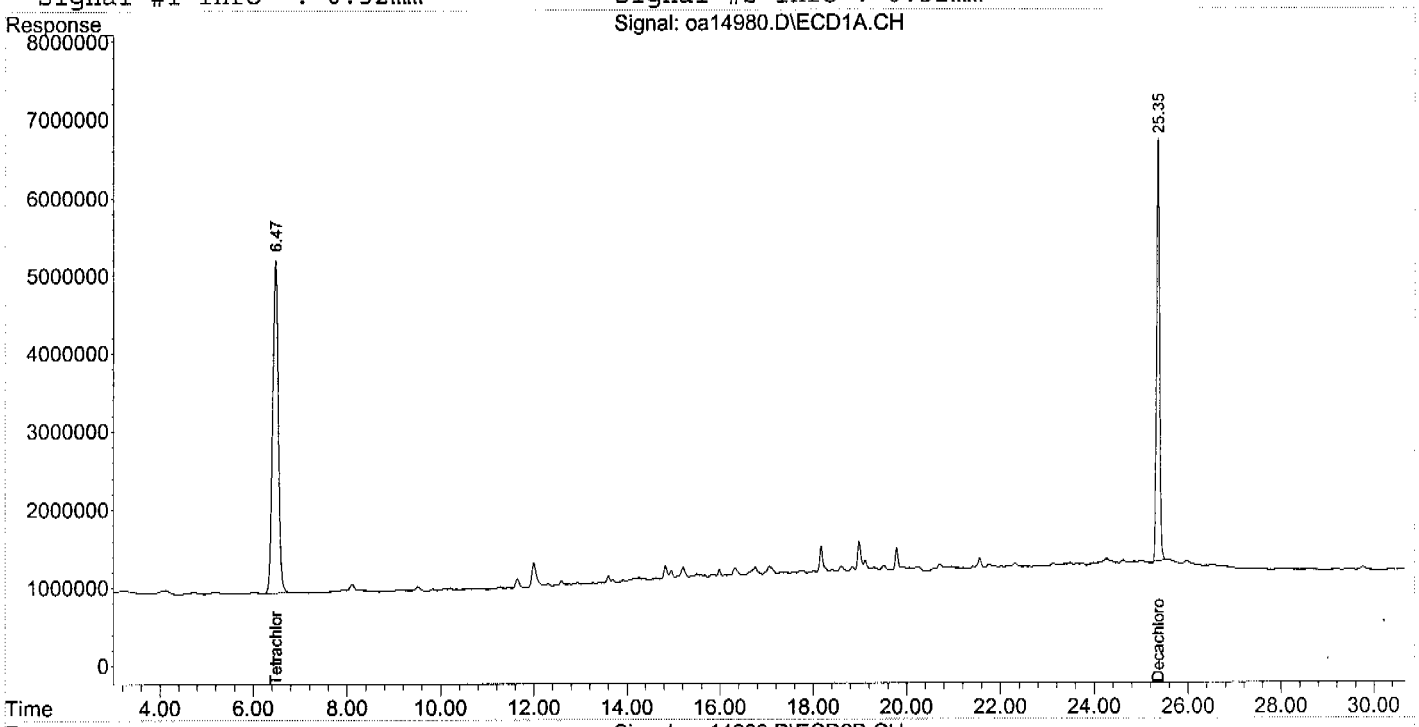
OM 8/14/04

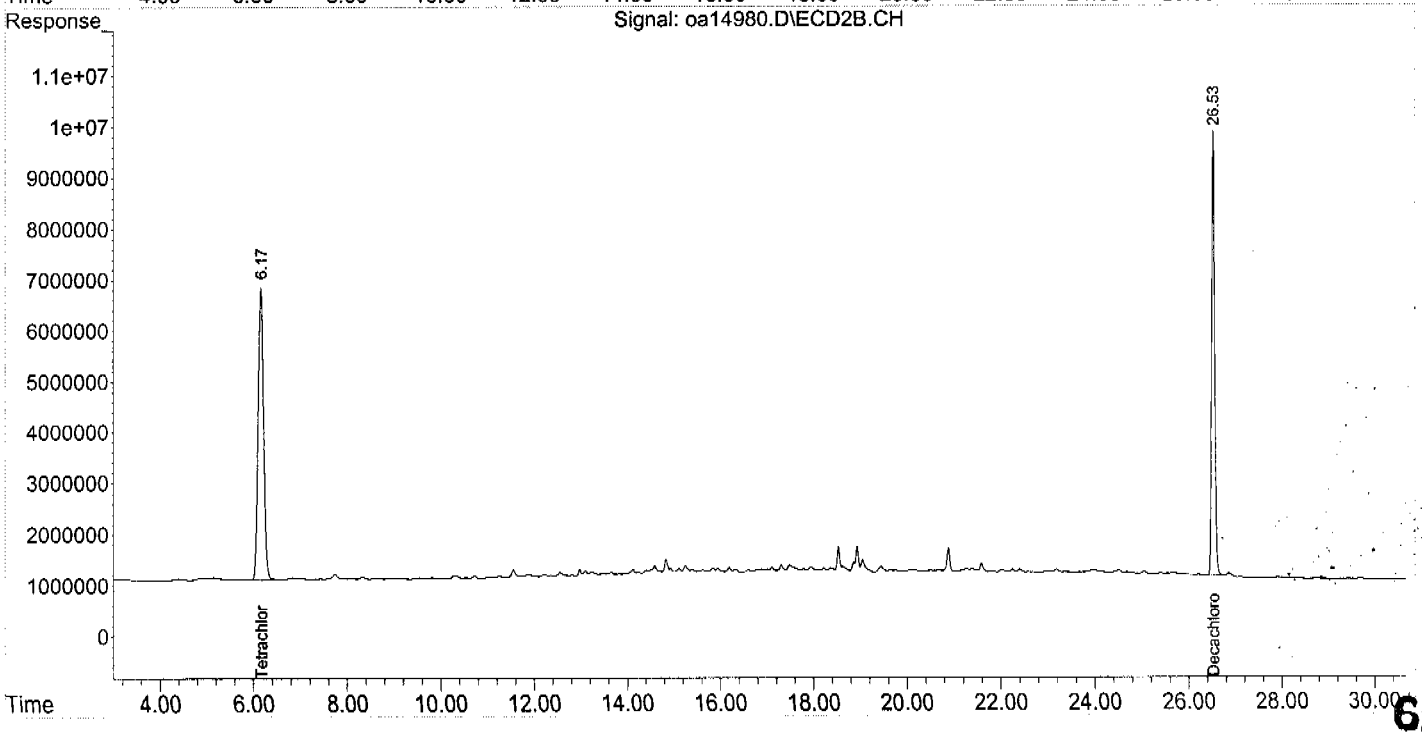
610

Signal #1 : C:\MSDCHEM\1\DATA\oa14980.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\oa14980.D\ECD2B.CH
Acq On : 12 Aug 2004 8:28 pm Operator: owenm
Sample : n74646-1 Inst : GCOO
Misc : OP17688,GOA439,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 10:47 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





611

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-653-LAKEVIEWDR		
Lab Sample ID:	N74646-2	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14981.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	860 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.023	0.0092	ug/l	
319-84-6	alpha-BHC	ND	0.023	0.015	ug/l	
319-85-7	beta-BHC	ND	0.023	0.0099	ug/l	
319-86-8	delta-BHC	ND	0.023	0.011	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.023	0.0030	ug/l	
5103-71-9	alpha-Chlordane	ND	0.023	0.021	ug/l	
5103-74-2	gamma-Chlordane	ND	0.023	0.015	ug/l	
60-57-1	Dieldrin	ND	0.023	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.023	0.019	ug/l	
72-55-9	4,4'-DDE	ND	0.023	0.0047	ug/l	
50-29-3	4,4'-DDT	ND	0.023	0.020	ug/l	
72-20-8	Endrin	ND	0.023	0.013	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.023	0.015	ug/l	
7421-93-4	Endrin aldehyde	ND	0.023	0.023	ug/l	
53494-70-5	Endrin ketone	ND	0.058	0.0062	ug/l	
959-98-8	Endosulfan-I	ND	0.023	0.0034	ug/l	
33213-65-9	Endosulfan-II	ND	0.023	0.0033	ug/l	
76-44-8	Heptachlor	ND	0.023	0.0068	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.023	0.013	ug/l	
72-43-5	Methoxychlor	ND	0.058	0.013	ug/l	
8001-35-2	Toxaphene	ND	0.29	0.29	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		35-138%
877-09-8	Tetrachloro-m-xylene	66%		35-138%
2051-24-3	Decachlorobiphenyl	100%		19-153%
2051-24-3	Decachlorobiphenyl	96%		19-153%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14981.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\oa14981.D\ECD2B.CH
Acq On : 12 Aug 2004 9:02 pm Operator: owenm
Sample : n74646-2 Inst : GCOO
Misc : OP17688,GOA439,860,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 21:32:49 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.48f	6.17	257.4E6	330.8E6	27.784	26.338
Spiked Amount 40.000 Range 30 - 150 Recovery =					69.46%	65.84%
2) SA Decachlorobiphen	25.35	26.53	259.9E6	381.3E6	39.895	38.428
Spiked Amount 40.000 Range 30 - 150 Recovery =					99.74%	96.07%

Target Compounds

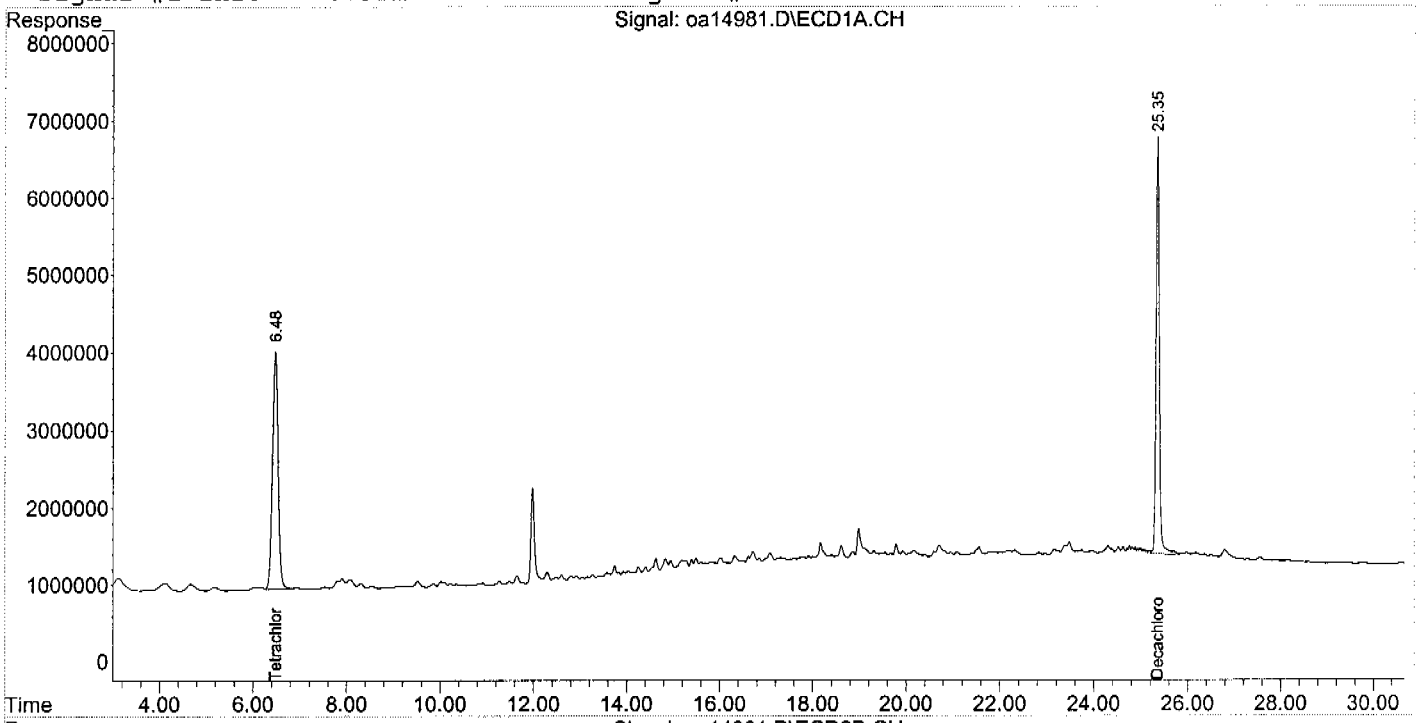
OM 8/14/04

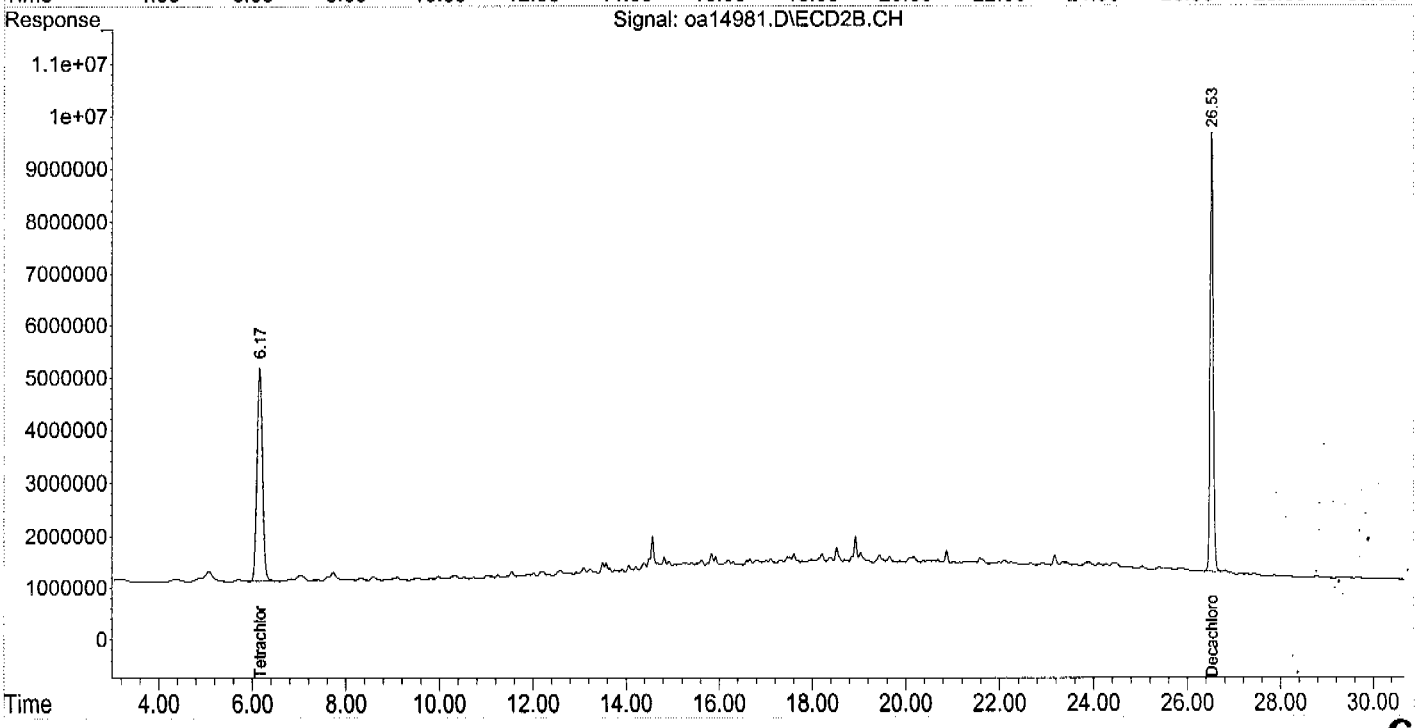
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa14981.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\oa14981.D\ECD2B.CH
Acq On : 12 Aug 2004 9:02 pm Operator: owenm
Sample : n74646-2 Inst : GCOO
Misc : OP17688,GOA439,860,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 13:12 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-652-LAKEVIEWDR		
Lab Sample ID:	N74646-3	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14982.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0084	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.013	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0091	ug/l	
319-86-8	delta-BHC	ND	0.021	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.021	0.019	ug/l	
5103-74-2	gamma-Chlordane	ND	0.021	0.013	ug/l	
60-57-1	Dieldrin	ND	0.021	0.014	ug/l	
72-54-8	4,4'-DDD	ND	0.021	0.018	ug/l	
72-55-9	4,4'-DDE	ND	0.021	0.0043	ug/l	
50-29-3	4,4'-DDT	ND	0.021	0.019	ug/l	
72-20-8	Endrin	ND	0.021	0.012	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.021	0.014	ug/l	
7421-93-4	Endrin aldehyde	ND	0.021	0.021	ug/l	
53494-70-5	Endrin ketone	ND	0.053	0.0057	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0031	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0030	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0063	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.053	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		35-138%
877-09-8	Tetrachloro-m-xylene	87%		35-138%
2051-24-3	Decachlorobiphenyl	91%		19-153%
2051-24-3	Decachlorobiphenyl	94%		19-153%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14982.D\ECD1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\oa14982.D\ECD2B.CH
Acq On : 12 Aug 2004 9:35 pm Operator: owenm
Sample : n74646-3 Inst : GC00
Misc : OP17688,GOA439,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 22:06:05 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.47f	6.16	338.6E6	439.5E6	36.548	34.996
Spiked Amount 40.000 Range 30 - 150 Recovery =					91.37%	87.49%
2) SA Decachlorobiphen	25.35	26.53	237.4E6	374.8E6	36.449	37.777
Spiked Amount 40.000 Range 30 - 150 Recovery =					91.12%	94.44%

Target Compounds

OM
8/14/04

616

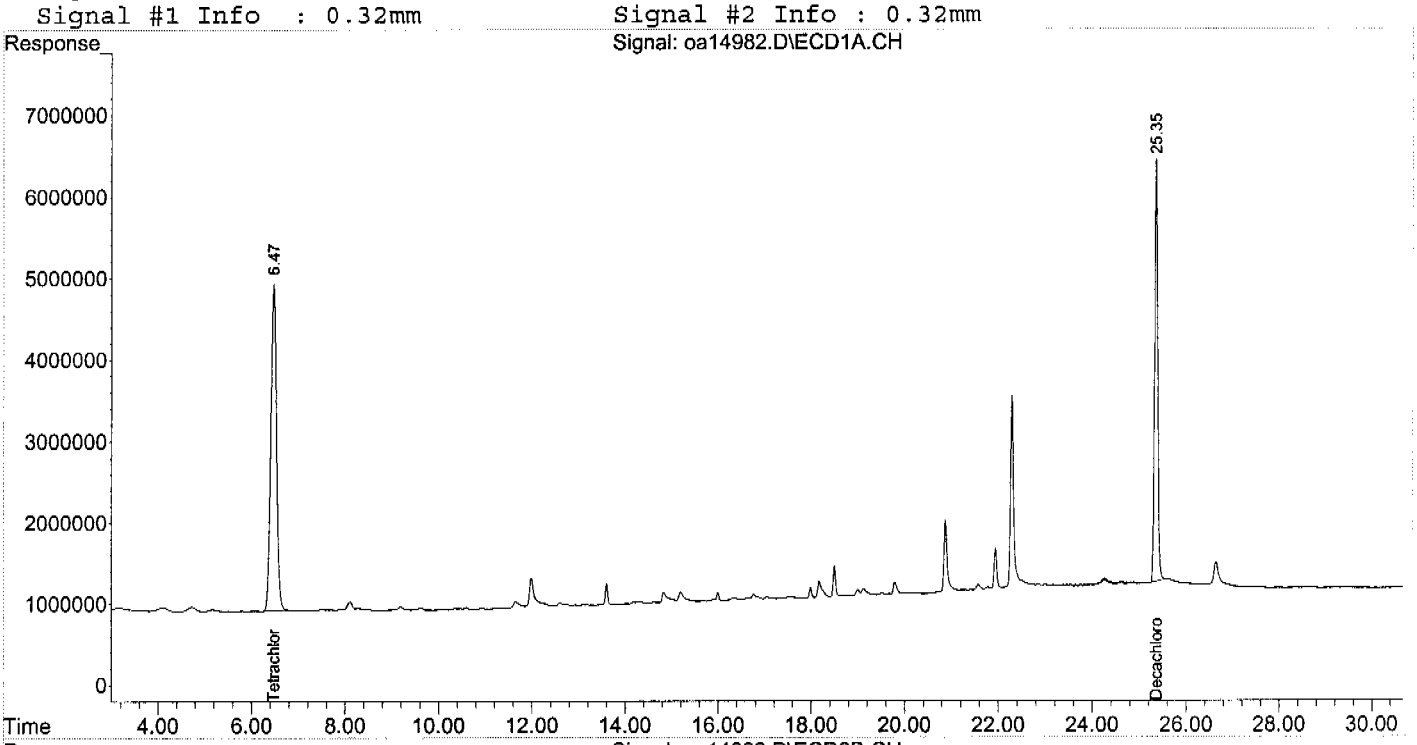
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

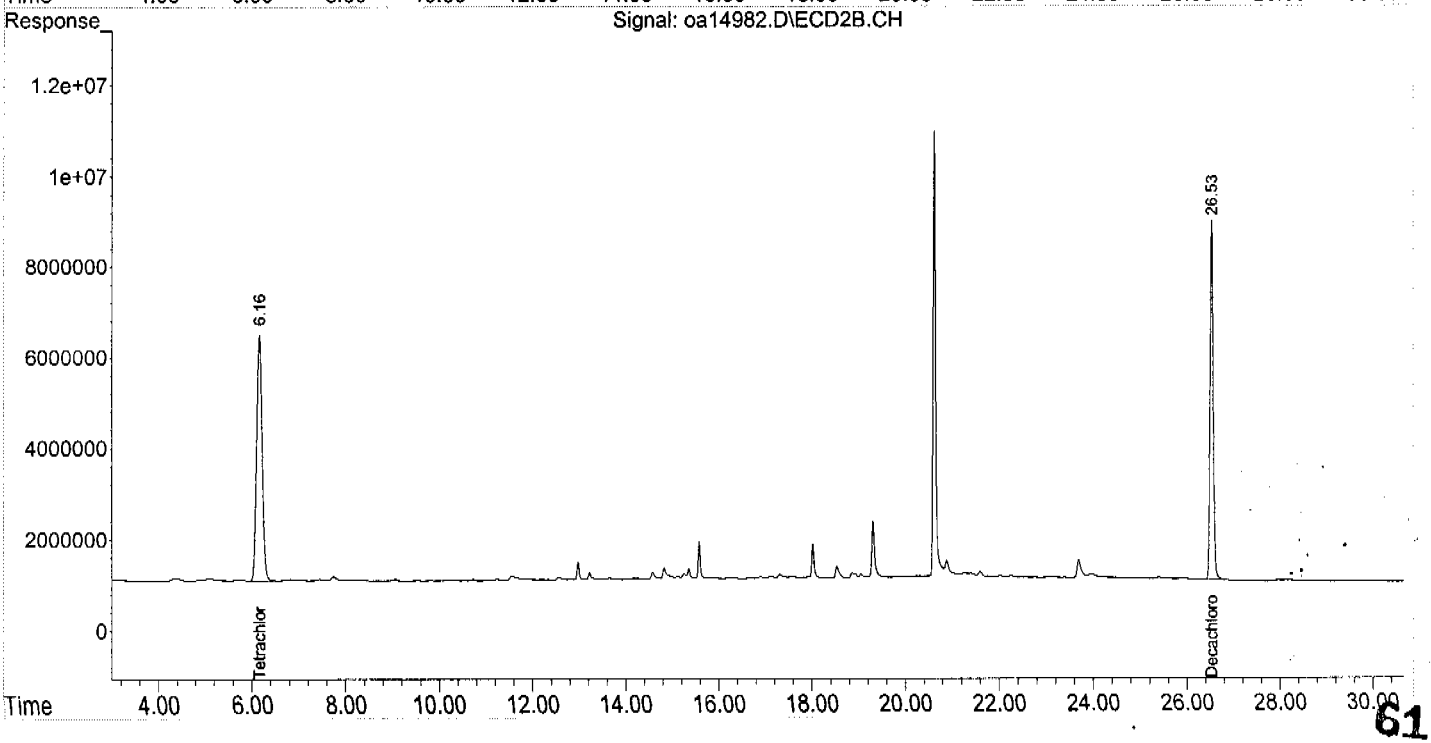
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14982.D\ECD1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\oa14982.D\ECD2B.CH
Acq On : 12 Aug 2004 9:35 pm Operator: owenm
Sample : n74646-3 Inst : GCOO
Misc : OP17688,GOA439,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 13:13 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





617

Accutest Laboratories

Report of Analysis

Client Sample ID:	RWB0804-3536-FLETCHERSWAY		
Lab Sample ID:	N74646-4	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14983.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.022	0.0085	ug/l	
319-84-6	alpha-BHC	ND	0.022	0.014	ug/l	
319-85-7	beta-BHC	ND	0.022	0.0092	ug/l	
319-86-8	delta-BHC	ND	0.022	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.022	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.022	0.019	ug/l	
5103-74-2	gamma-Chlordane	ND	0.022	0.013	ug/l	
60-57-1	Dieldrin	ND	0.022	0.014	ug/l	
72-54-8	4,4'-DDD	ND	0.022	0.018	ug/l	
72-55-9	4,4'-DDE	ND	0.022	0.0044	ug/l	
50-29-3	4,4'-DDT	ND	0.022	0.019	ug/l	
72-20-8	Endrin	ND	0.022	0.012	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.022	0.014	ug/l	
7421-93-4	Endrin aldehyde	ND	0.022	0.021	ug/l	
53494-70-5	Endrin ketone	ND	0.054	0.0057	ug/l	
959-98-8	Endosulfan-I	ND	0.022	0.0032	ug/l	
33213-65-9	Endosulfan-II	ND	0.022	0.0030	ug/l	
76-44-8	Heptachlor	ND	0.022	0.0063	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.022	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.054	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		35-138%
877-09-8	Tetrachloro-m-xylene	91%		35-138%
2051-24-3	Decachlorobiphenyl	96%		19-153%
2051-24-3	Decachlorobiphenyl	97%		19-153%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Signal #1 : C:\MSDCHEM\1\DATA\oa14983.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\oa14983.D\ECD2B.CH
Acq On : 12 Aug 2004 10:08 pm Operator: owenm
Sample : n74646-4 Inst : GCOO
Misc : OP17688,GOA439,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 22:39:15 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
SAB Tetrachloro-m-xy	6.47f	6.17	349.2E6	455.0E6	37.689	36.231
Spiked Amount	40.000	Range	30 - 150	Recovery	= 94.22%	90.58%
SA Decachlorobiphen	25.35	26.53	250.7E6	386.7E6	38.482	38.967
Spiked Amount	40.000	Range	30 - 150	Recovery	= 96.20%	97.42%

Target Compounds

OPM 8/19/04

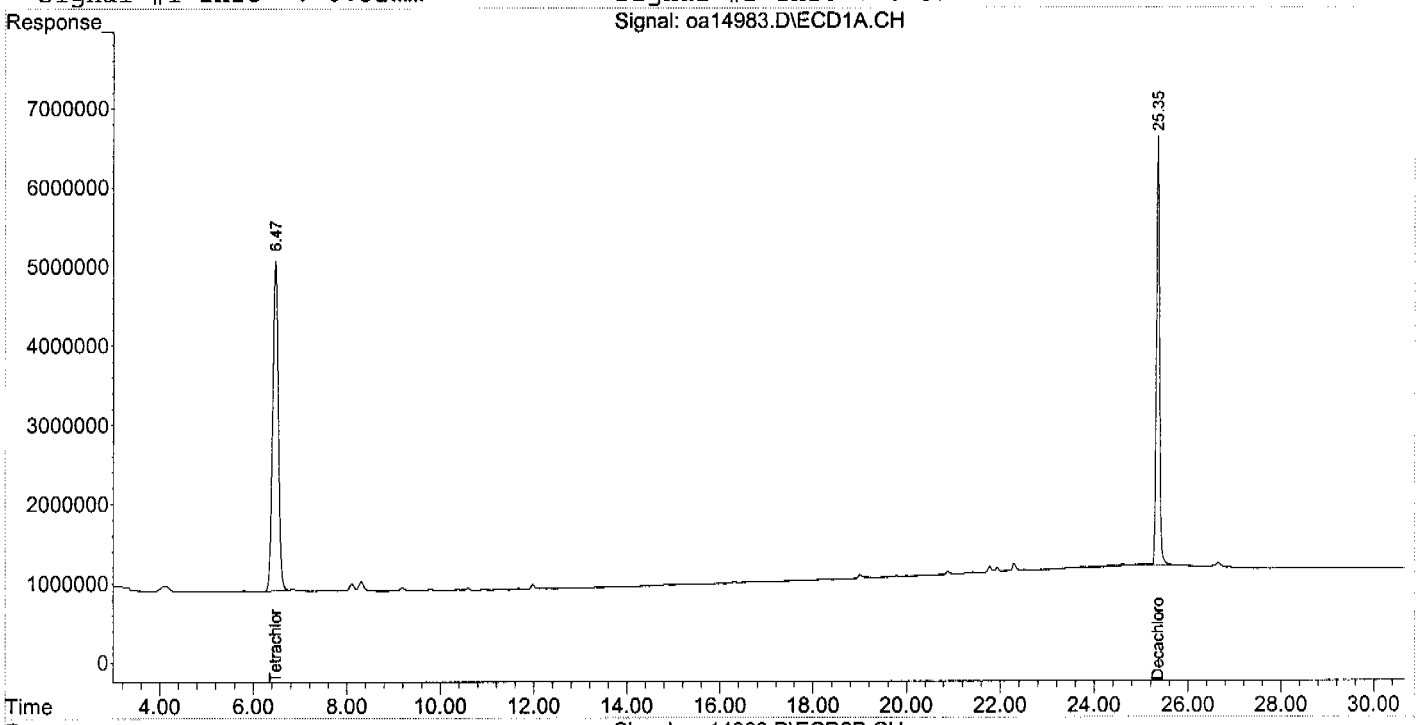
619

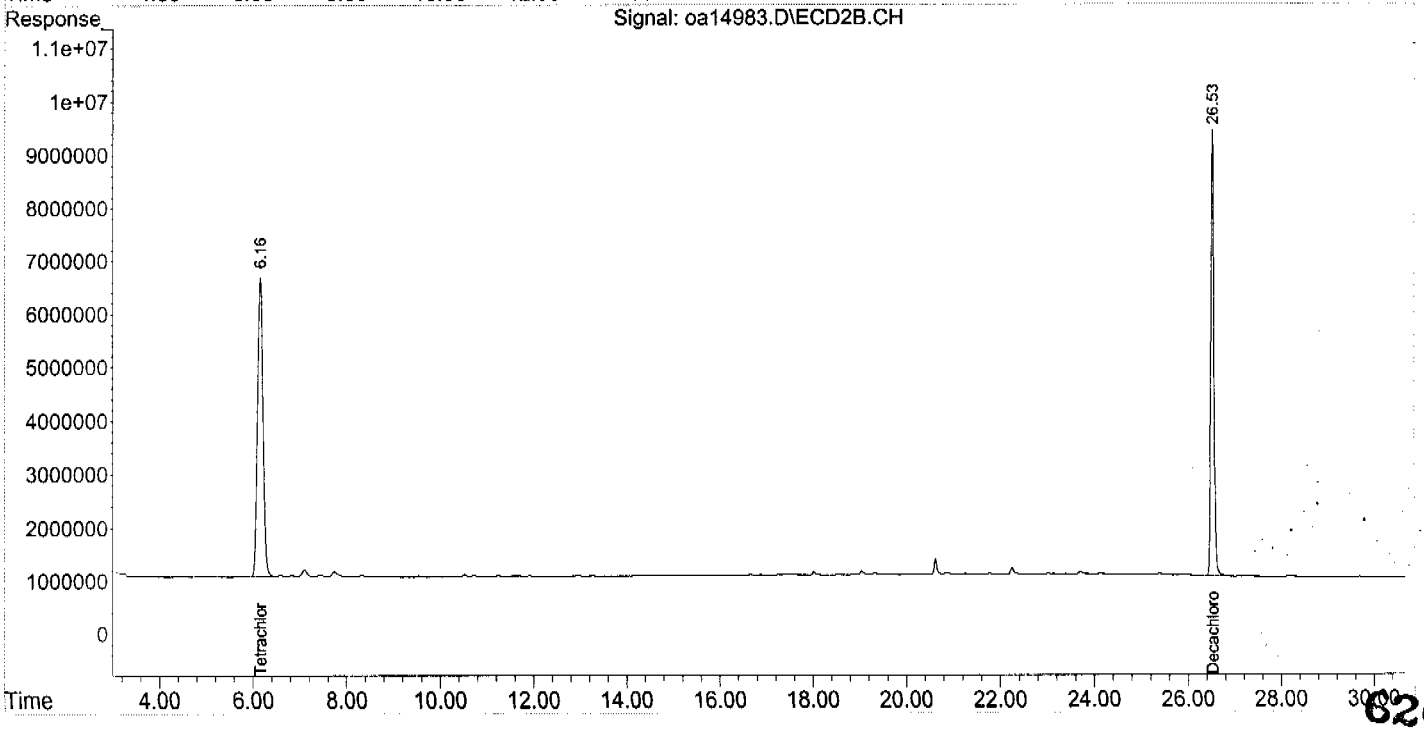
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa14983.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\oa14983.D\ECD2B.CH
Acq On : 12 Aug 2004 10:08 pm Operator: owenm
Sample : n74646-4 Inst : GCOO
Misc : OP17688,GOA439,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 10:50 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-NCNG		
Lab Sample ID:	N74646-5	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14984.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0084	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.013	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0090	ug/l	
319-86-8	delta-BHC	ND	0.021	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.021	0.019	ug/l	
5103-74-2	gamma-Chlordane	ND	0.021	0.013	ug/l	
60-57-1	Dieldrin	ND	0.021	0.013	ug/l	
72-54-8	4,4'-DDD	ND	0.021	0.017	ug/l	
72-55-9	4,4'-DDE	ND	0.021	0.0043	ug/l	
50-29-3	4,4'-DDT	ND	0.021	0.019	ug/l	
72-20-8	Endrin	ND	0.021	0.012	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.021	0.014	ug/l	
7421-93-4	Endrin aldehyde	ND	0.021	0.021	ug/l	
53494-70-5	Endrin ketone	ND	0.053	0.0056	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0031	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0030	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0062	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.053	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.26	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		35-138%
877-09-8	Tetrachloro-m-xylene	89%		35-138%
2051-24-3	Decachlorobiphenyl	91%		19-153%
2051-24-3	Decachlorobiphenyl	92%		19-153%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Signal #1 : C:\MSDCHEM\1\DATA\oa14984.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\oa14984.D\ECD2B.CH
Acq On : 12 Aug 2004 10:42 pm Operator: owenm
Sample : n74646-5 Inst : GCOO
Misc : OP17688,GOA439,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 23:13:03 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) SAB Tetrachloro-m-xy	6.48f	6.17	345.7E6	447.6E6	37.320	35.641
Spiked Amount	40.000	Range	30 - 150	Recovery	= 93.30%	89.10%
1) SA Decachlorobiphen	25.35	26.53	238.0E6	364.8E6	36.539	36.768
Spiked Amount	40.000	Range	30 - 150	Recovery	= 91.35%	91.92%

Target Compounds

OM 8/14/04

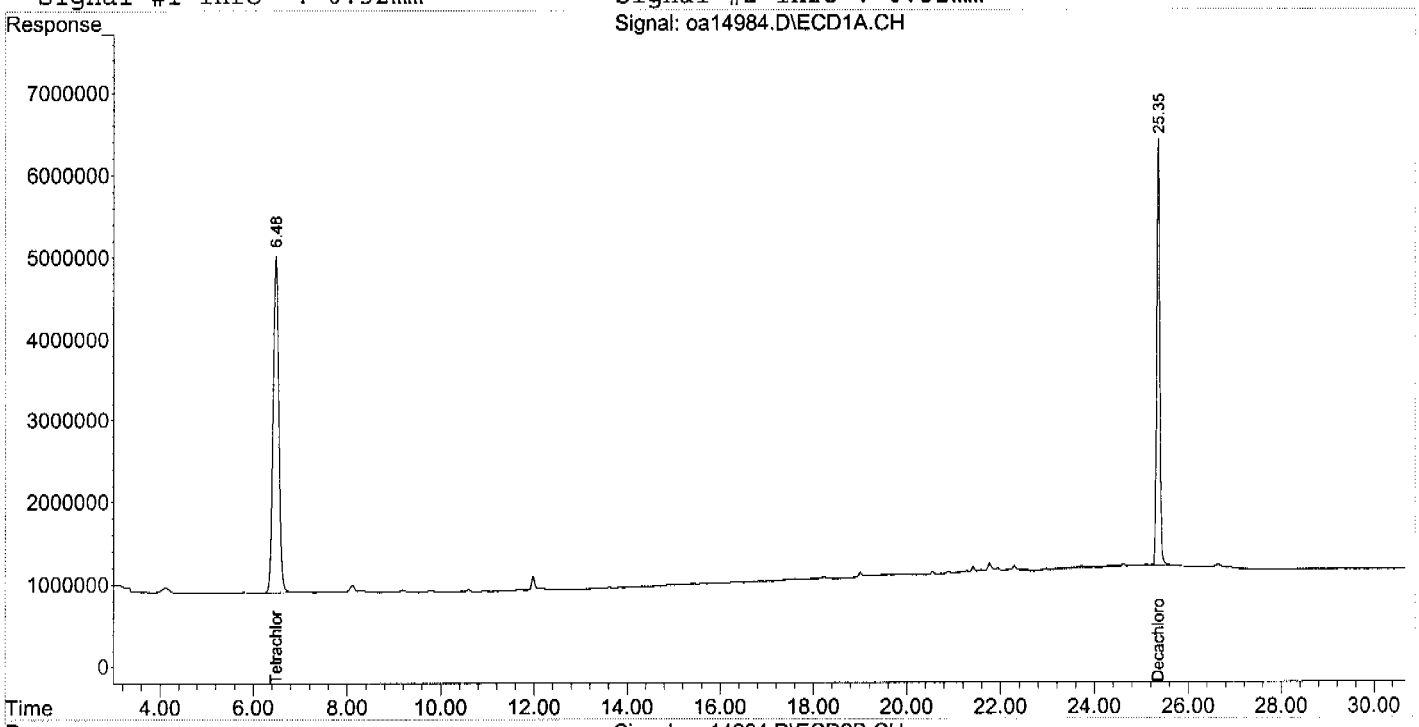
622

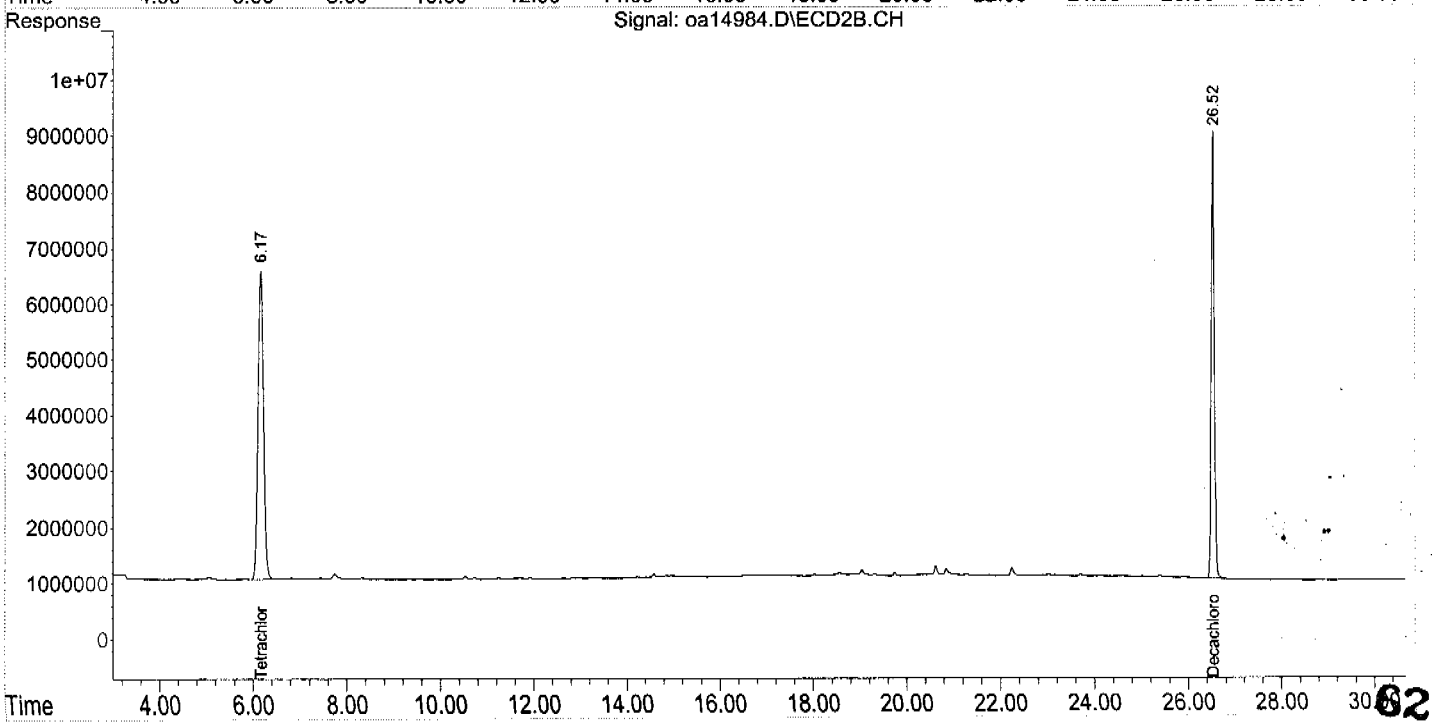
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa14984.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\oa14984.D\ECD2B.CH
Acq On : 12 Aug 2004 10:42 pm Operator: owenm
Sample : n74646-5 Inst : GCOO
Misc : OP17688,GOA439,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 10:51 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-FIELDDUP1		
Lab Sample ID:	N74646-6	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14985.D	1	08/12/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	830 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.024	0.0096	ug/l	
319-84-6	alpha-BHC	ND	0.024	0.015	ug/l	
319-85-7	beta-BHC	ND	0.024	0.010	ug/l	
319-86-8	delta-BHC	ND	0.024	0.012	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.024	0.0032	ug/l	
5103-71-9	alpha-Chlordane	ND	0.024	0.022	ug/l	
5103-74-2	gamma-Chlordane	ND	0.024	0.015	ug/l	
60-57-1	Dieldrin	ND	0.024	0.015	ug/l	
72-54-8	4,4'-DDD	ND	0.024	0.020	ug/l	
72-55-9	4,4'-DDE	ND	0.024	0.0049	ug/l	
50-29-3	4,4'-DDT	ND	0.024	0.021	ug/l	
72-20-8	Endrin	ND	0.024	0.014	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.024	0.016	ug/l	
7421-93-4	Endrin aldehyde	ND	0.024	0.024	ug/l	
53494-70-5	Endrin ketone	ND	0.060	0.0064	ug/l	
959-98-8	Endosulfan-I	ND	0.024	0.0035	ug/l	
33213-65-9	Endosulfan-II	ND	0.024	0.0034	ug/l	
76-44-8	Heptachlor	ND	0.024	0.0071	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.024	0.013	ug/l	
72-43-5	Methoxychlor	ND	0.060	0.014	ug/l	
8001-35-2	Toxaphene	ND	0.30	0.30	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		35-138%
877-09-8	Tetrachloro-m-xylene	67%		35-138%
2051-24-3	Decachlorobiphenyl	98%		19-153%
2051-24-3	Decachlorobiphenyl	100%		19-153%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14985.D\ECD1A.CH Vial: 20
Signal #2 : C:\MSDCHEM\1\DATA\oa14985.D\ECD2B.CH
Acq On : 12 Aug 2004 11:15 pm Operator: owenm
Sample : n74646-6 Inst : GCOO
Misc : OP17688,GOA439,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 23:46:13 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) SAB Tetrachloro-m-xy	6.47f	6.17	262.2E6	338.6E6	28.300	26.958
Spiked Amount	40.000	Range	30 - 150	Recovery	=	70.75% 67.39%
) SA Decachlorobiphen	25.35	26.53	255.2E6	396.9E6	39.168m	39.996
Spiked Amount	40.000	Range	30 - 150	Recovery	=	97.92% 99.99%

Target Compounds

OPM 8/14/04

625

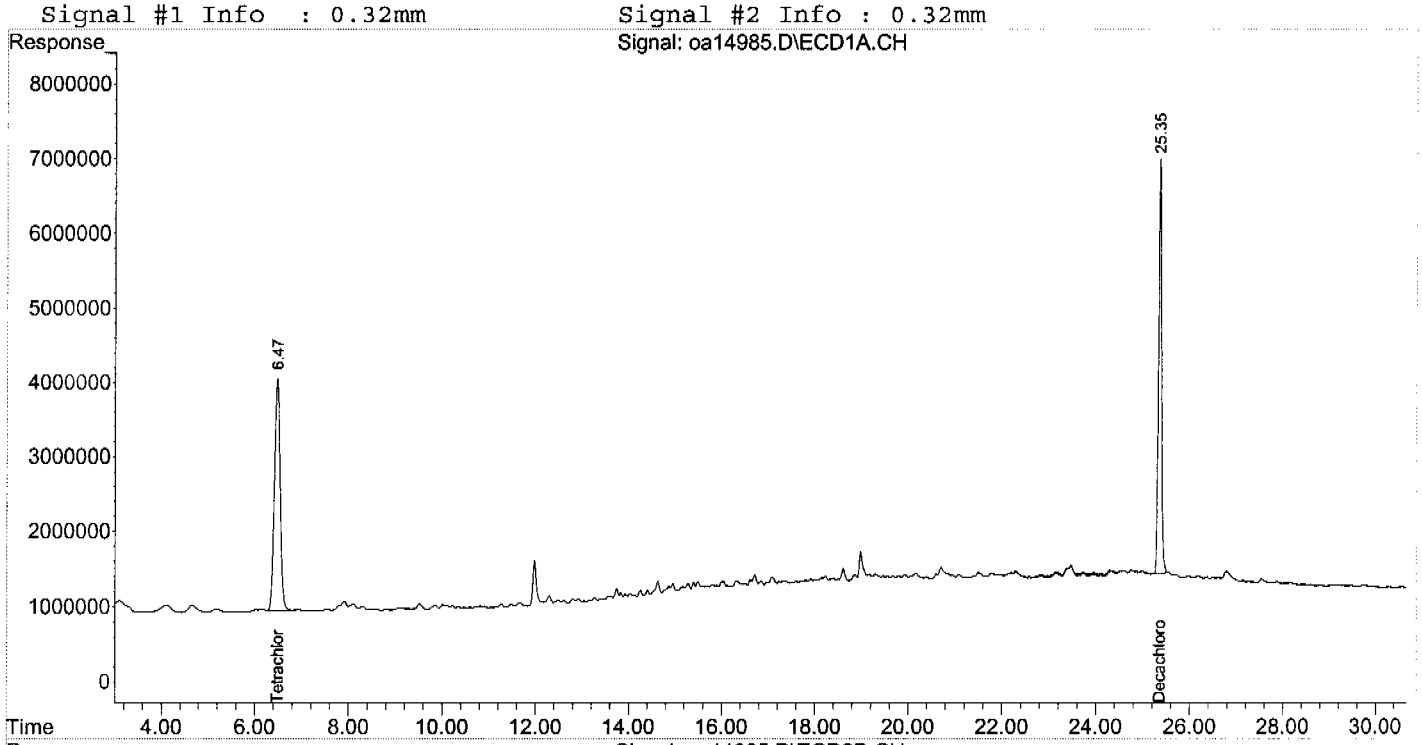
)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

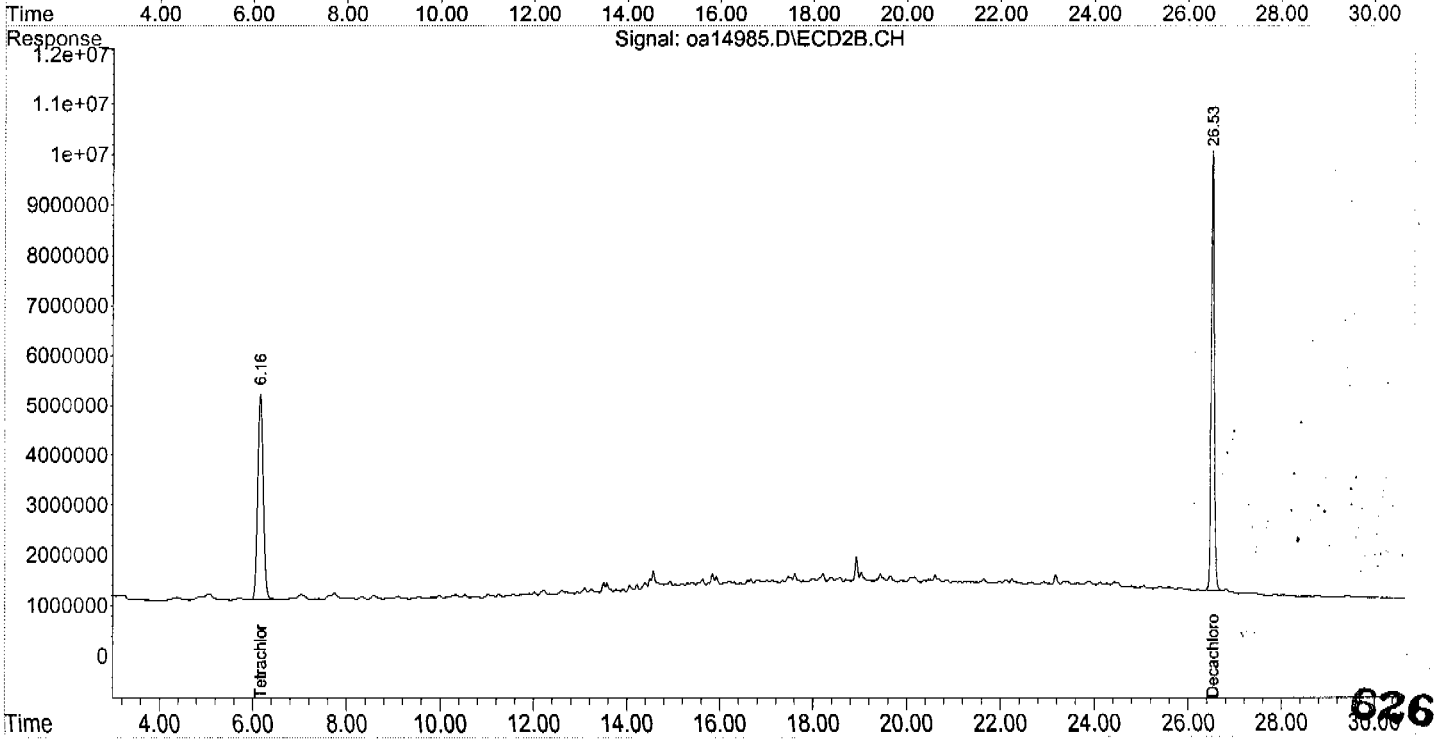
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14985.D\ECD1A.CH Vial: 20
Signal #2 : C:\MSDCHEM\1\DATA\oa14985.D\ECD2B.CH
Acq On : 12 Aug 2004 11:15 pm Operator: owenm
Sample : n74646-6 Inst : GCOO
Misc : OP17688,GOA439,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 10:52 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



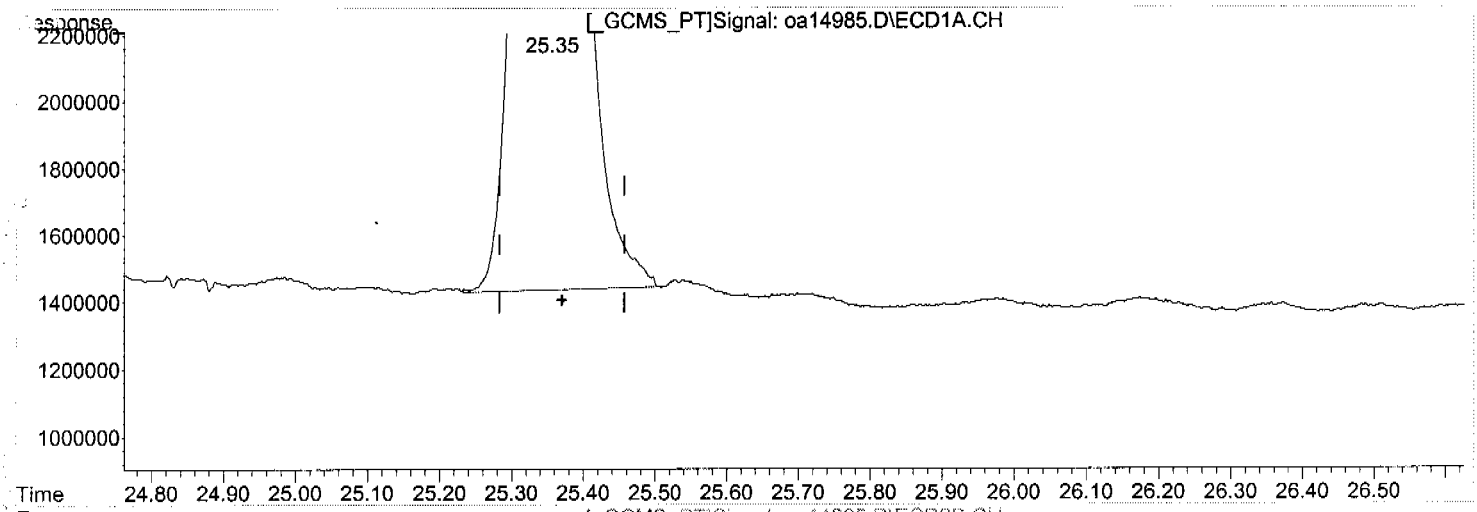


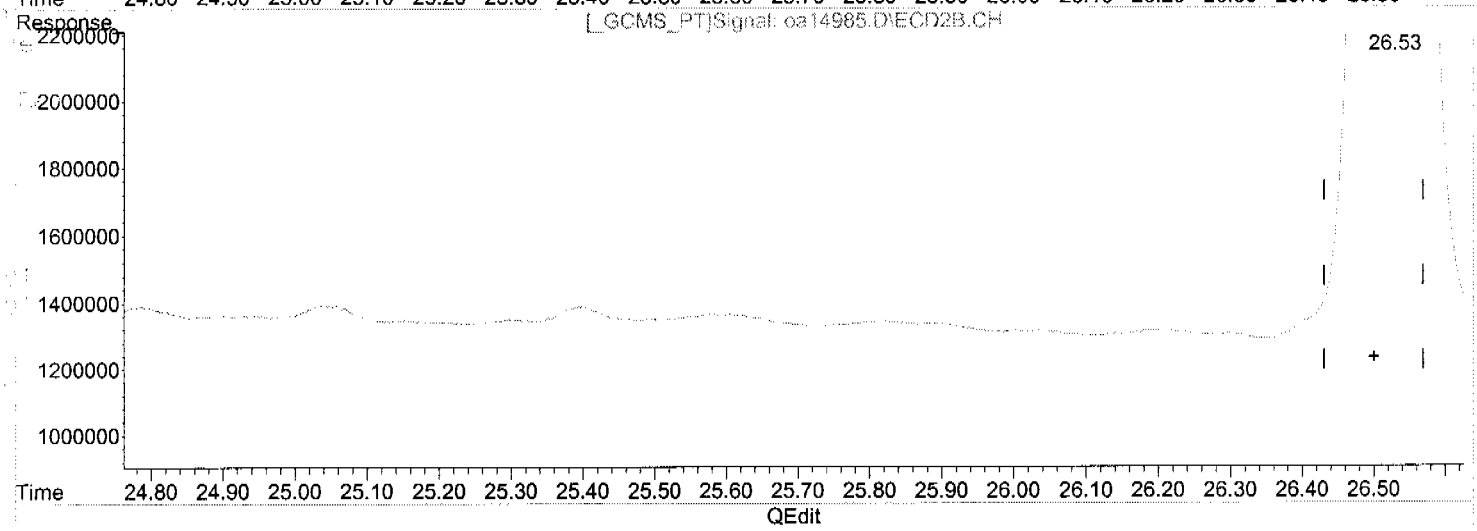
626

Quantitation Report (QEdit)

Signal #1 : C:\MSDCHEM\1\DATA\oa14985.D\ECD1A.CH Vial: 20
Signal #2 : C:\MSDCHEM\1\DATA\oa14985.D\ECD2B.CH
Acq On : 12 Aug 2004 11:15 pm Operator: owenm
Sample : n74646-6 Inst : GCOO
Misc : OP17688,GOA439,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 13:14 2004 Quant Results File: PST433.RES

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration





(32) Decachlorobiphenyl (SA)

25.35min 39.168PPB m

response 255152501

(32) Decachlorobiphenyl #2 (SA)

26.53min 39.996PPB

response 396859302

627

(+) = Expected Retention Time

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-CAMPBARHAM		
Lab Sample ID:	N74646-8	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14990.D	1	08/13/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.022	0.0087	ug/l	
319-84-6	alpha-BHC	ND	0.022	0.014	ug/l	
319-85-7	beta-BHC	ND	0.022	0.0094	ug/l	
319-86-8	delta-BHC	ND	0.022	0.011	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.022	0.0029	ug/l	
5103-71-9	alpha-Chlordane	ND	0.022	0.020	ug/l	
5103-74-2	gamma-Chlordane	ND	0.022	0.014	ug/l	
60-57-1	Dieldrin	ND	0.022	0.014	ug/l	
72-54-8	4,4'-DDD	ND	0.022	0.018	ug/l	
72-55-9	4,4'-DDE	ND	0.022	0.0045	ug/l	
50-29-3	4,4'-DDT	ND	0.022	0.019	ug/l	
72-20-8	Endrin	ND	0.022	0.013	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.022	0.014	ug/l	
7421-93-4	Endrin aldehyde	ND	0.022	0.022	ug/l	
53494-70-5	Endrin ketone	ND	0.055	0.0059	ug/l	
959-98-8	Endosulfan-I	ND	0.022	0.0032	ug/l	
33213-65-9	Endosulfan-II	ND	0.022	0.0031	ug/l	
76-44-8	Heptachlor	ND	0.022	0.0065	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.022	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.055	0.013	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		35-138%
877-09-8	Tetrachloro-m-xylene	91%		35-138%
2051-24-3	Decachlorobiphenyl	100%		19-153%
2051-24-3	Decachlorobiphenyl	99%		19-153%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14990.D\ECD1A.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\oa14990.D\ECD2B.CH
Acq On : 13 Aug 2004 3:31 am Operator: owenm
Sample : n74646-8 Inst : GC00
Misc : OP17688,GOA439,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 04:02:37 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.48f	6.17	352.5E6	458.7E6	38.050	36.521
Spiked Amount	40.000	Range	30 - 150	Recovery	= 95.13%	91.30%
2) SA Decachlorobiphen	25.36	26.53	259.6E6	393.5E6	39.849	39.662
Spiked Amount	40.000	Range	30 - 150	Recovery	= 99.62%	99.15%

Target Compounds

CM
8/14/04

629

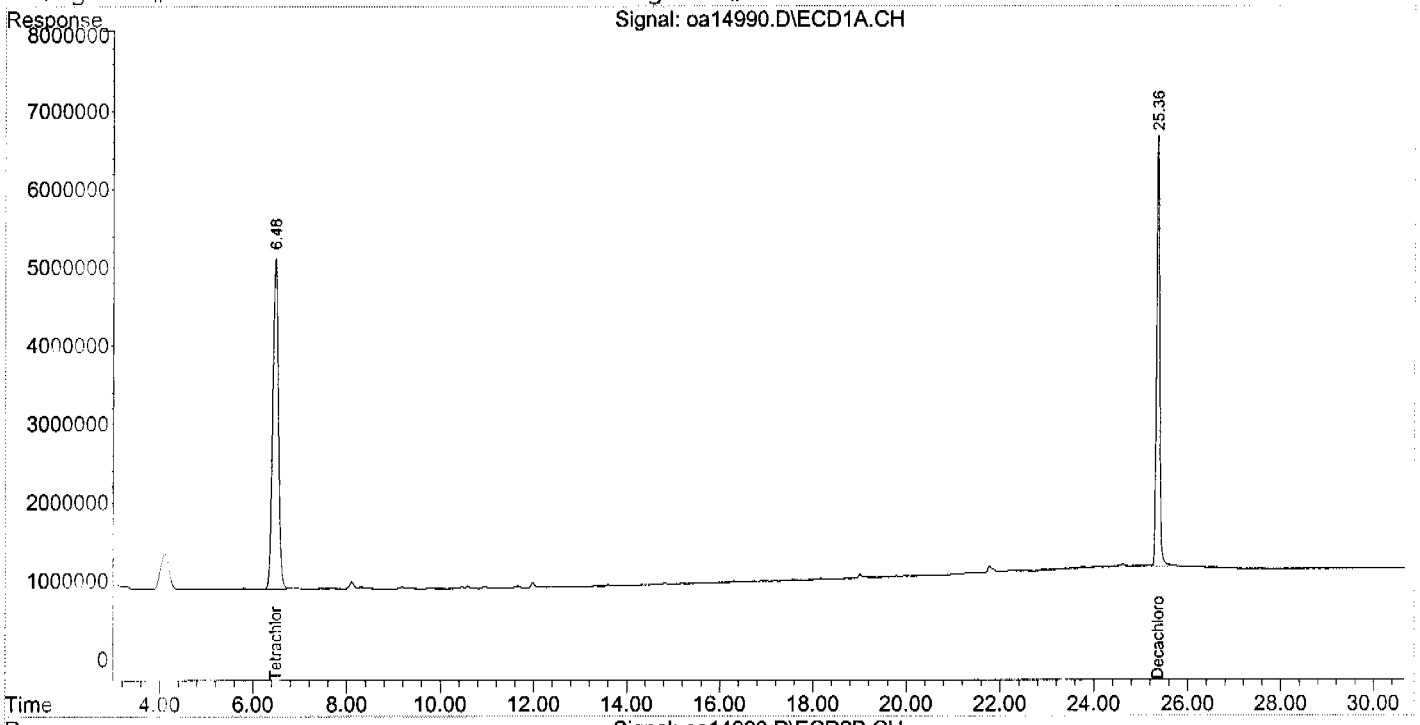
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

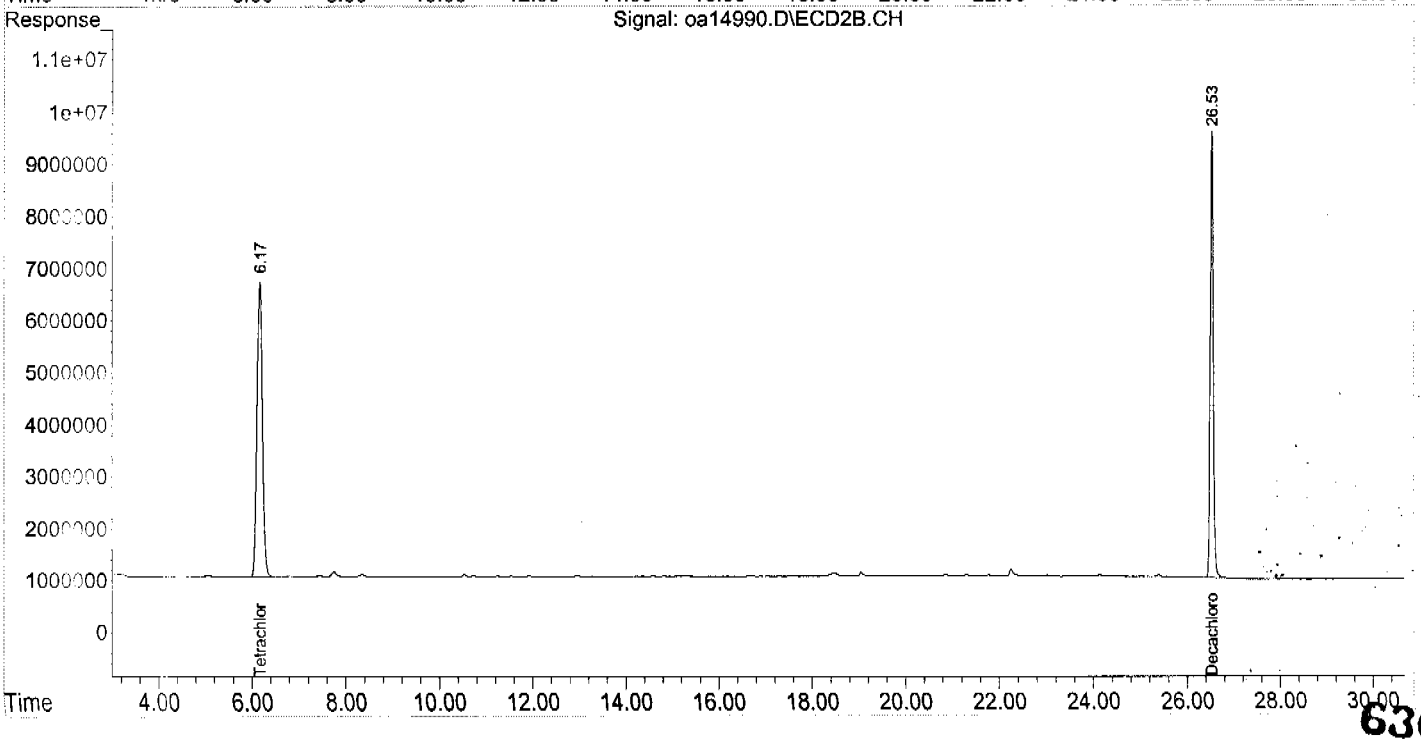
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14990.D\ECD1A.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\oa14990.D\ECD2B.CH
Acq On : 13 Aug 2004 3:31 am Operator: owenm
Sample : n74646-8 Inst : GCOO
Misc : OP17688,GOA439,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 4:02 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4051-RANGERD		
Lab Sample ID:	N74646-9	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14991.D	1	08/13/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0084	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.013	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0091	ug/l	
319-86-8	delta-BHC	ND	0.021	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.021	0.019	ug/l	
5103-74-2	gamma-Chlordane	ND	0.021	0.013	ug/l	
60-57-1	Dieldrin	ND	0.021	0.014	ug/l	
72-54-8	4,4'-DDD	ND	0.021	0.018	ug/l	
72-55-9	4,4'-DDE	ND	0.021	0.0043	ug/l	
50-29-3	4,4'-DDT	ND	0.021	0.019	ug/l	
72-20-8	Endrin	ND	0.021	0.012	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.021	0.014	ug/l	
7421-93-4	Endrin aldehyde	ND	0.021	0.021	ug/l	
53494-70-5	Endrin ketone	ND	0.053	0.0057	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0031	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0030	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0063	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.053	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		35-138%
877-09-8	Tetrachloro-m-xylene	93%		35-138%
2051-24-3	Decachlorobiphenyl	99%		19-153%
2051-24-3	Decachlorobiphenyl	99%		19-153%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14991.D\ECD1A.CH Vial: 26
Signal #2 : C:\MSDCHEM\1\DATA\oa14991.D\ECD2B.CH
Acq On : 13 Aug 2004 4:05 am Operator: owenm
Sample : n74646-9 Inst : GCOO
Misc : OP17688,GOA439,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 04:35:47 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.47f	6.17	358.5E6	466.5E6	38.696	37.147
Spiked Amount	40.000	Range 30 - 150		Recovery =	96.74%	92.87%
2) SA Decachlorobiphen	25.36	26.53	256.9E6	391.0E6	39.438	39.409
Spiked Amount	40.000	Range 30 - 150		Recovery =	98.60%	98.52%

Target Compounds

OPM
8/14/04

632

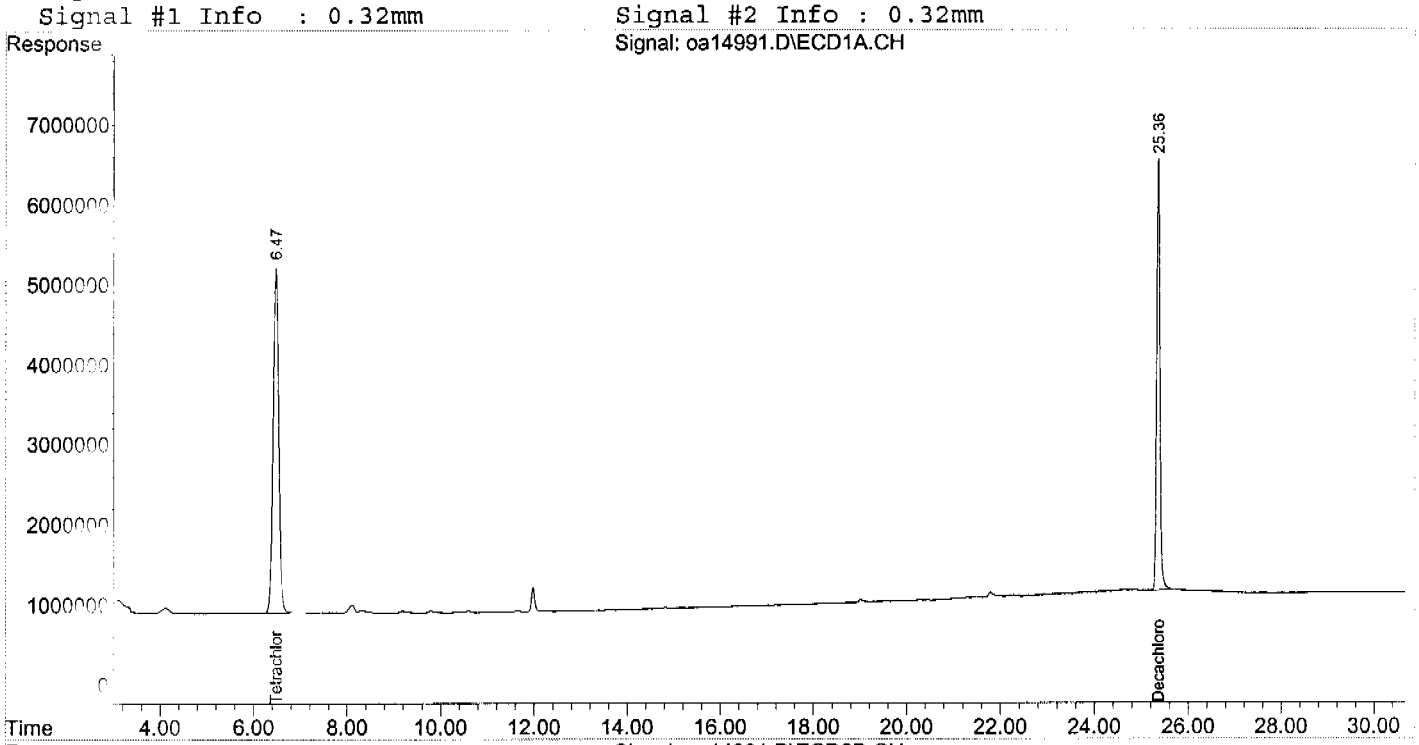
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

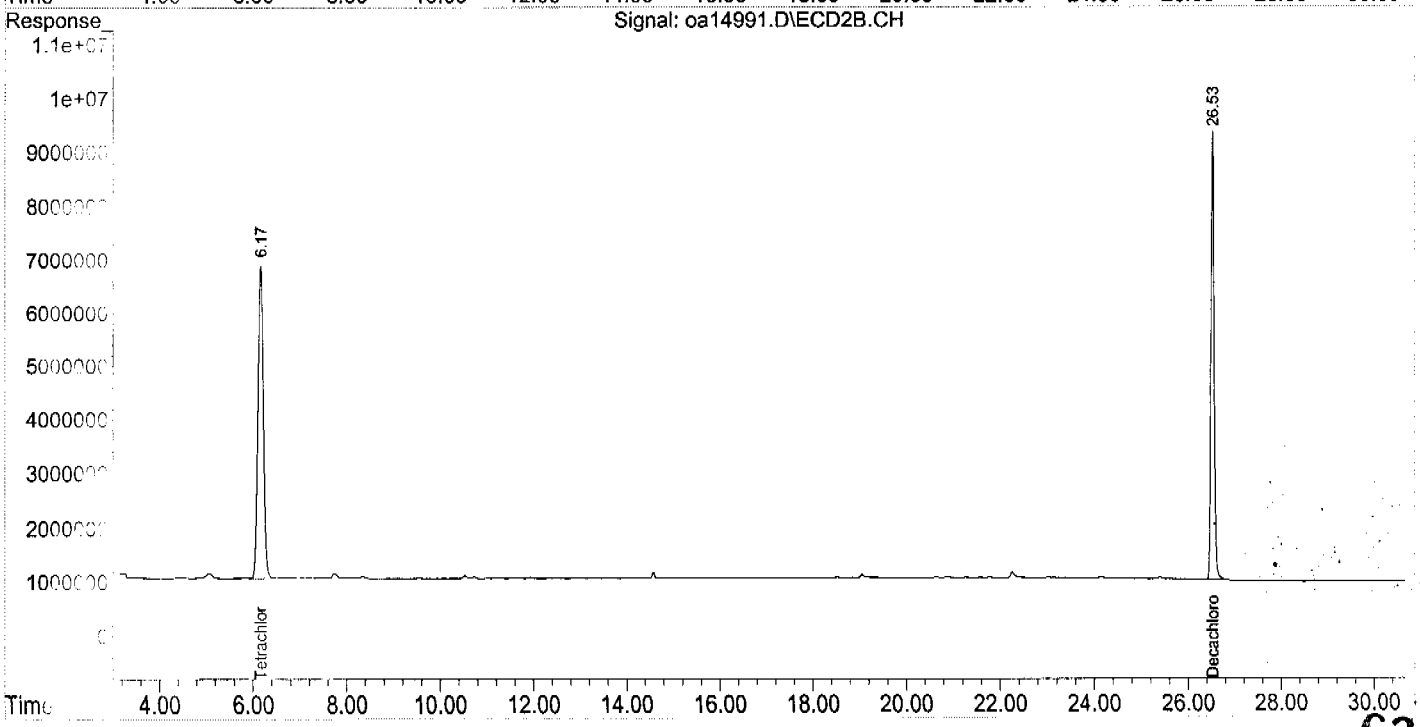
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14991.D\ECD1A.CH Vial: 26
Signal #2 : C:\MSDCHEM\1\DATA\oa14991.D\ECD2B.CH
Acq On : 13 Aug 2004 4:05 am Operator: owenm
Sample : n74646-9 Inst : GCOO
Misc : OP17688,GOA439,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 4:35 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-CAMPEASON		
Lab Sample ID:	N74646-10	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14992.D	1	08/13/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0084	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.013	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0091	ug/l	
319-86-8	delta-BHC	ND	0.021	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.021	0.019	ug/l	
5103-74-2	gamma-Chlordane	ND	0.021	0.013	ug/l	
60-57-1	Dieldrin	ND	0.021	0.014	ug/l	
72-54-8	4,4'-DDD	ND	0.021	0.018	ug/l	
72-55-9	4,4'-DDE	ND	0.021	0.0043	ug/l	
50-29-3	4,4'-DDT	ND	0.021	0.019	ug/l	
72-20-8	Endrin	ND	0.021	0.012	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.021	0.014	ug/l	
7421-93-4	Endrin aldehyde	ND	0.021	0.021	ug/l	
53494-70-5	Endrin ketone	ND	0.053	0.0057	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0031	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0030	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0063	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.053	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		35-138%
877-09-8	Tetrachloro-m-xylene	81%		35-138%
2051-24-3	Decachlorobiphenyl	80%		19-153%
2051-24-3	Decachlorobiphenyl	77%		19-153%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14992.D\ECD1A.CH Vial: 27
Signal #2 : C:\MSDCHEM\1\DATA\oa14992.D\ECD2B.CH
Acq On : 13 Aug 2004 4:38 am Operator: owenm
Sample : n74646-10 Inst : GCOO
Misc : OP17688,GOA439,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 05:09:06 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.48f	6.17	315.2E6	404.7E6	34.025	32.225
Spiked Amount	40.000	Range 30 - 150		Recovery =	85.06%	80.56%
2) SA Decachlorobiphen	25.35	26.53	207.7E6	305.3E6	31.877	30.767
Spiked Amount	40.000	Range 30 - 150		Recovery =	79.69%	76.92%

Target Compounds

CM
8/14/04

S35

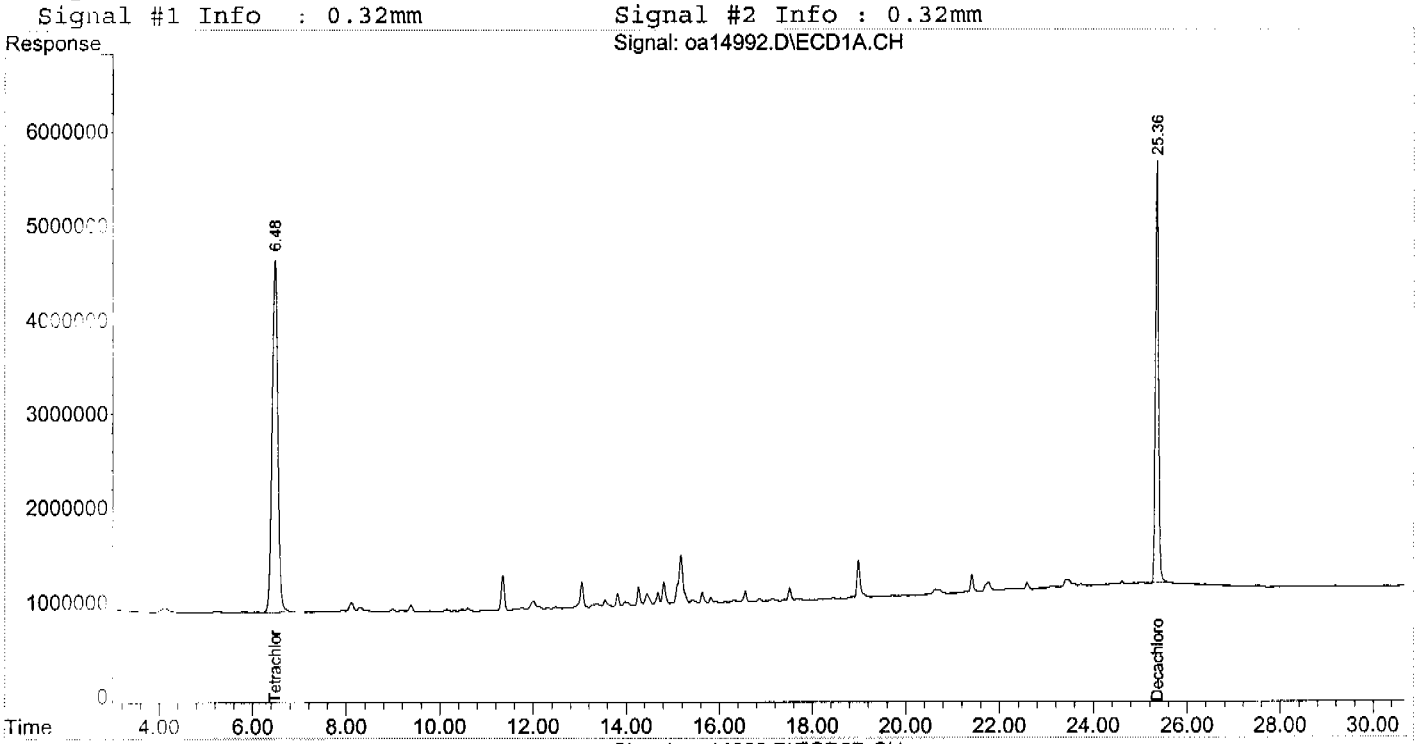
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

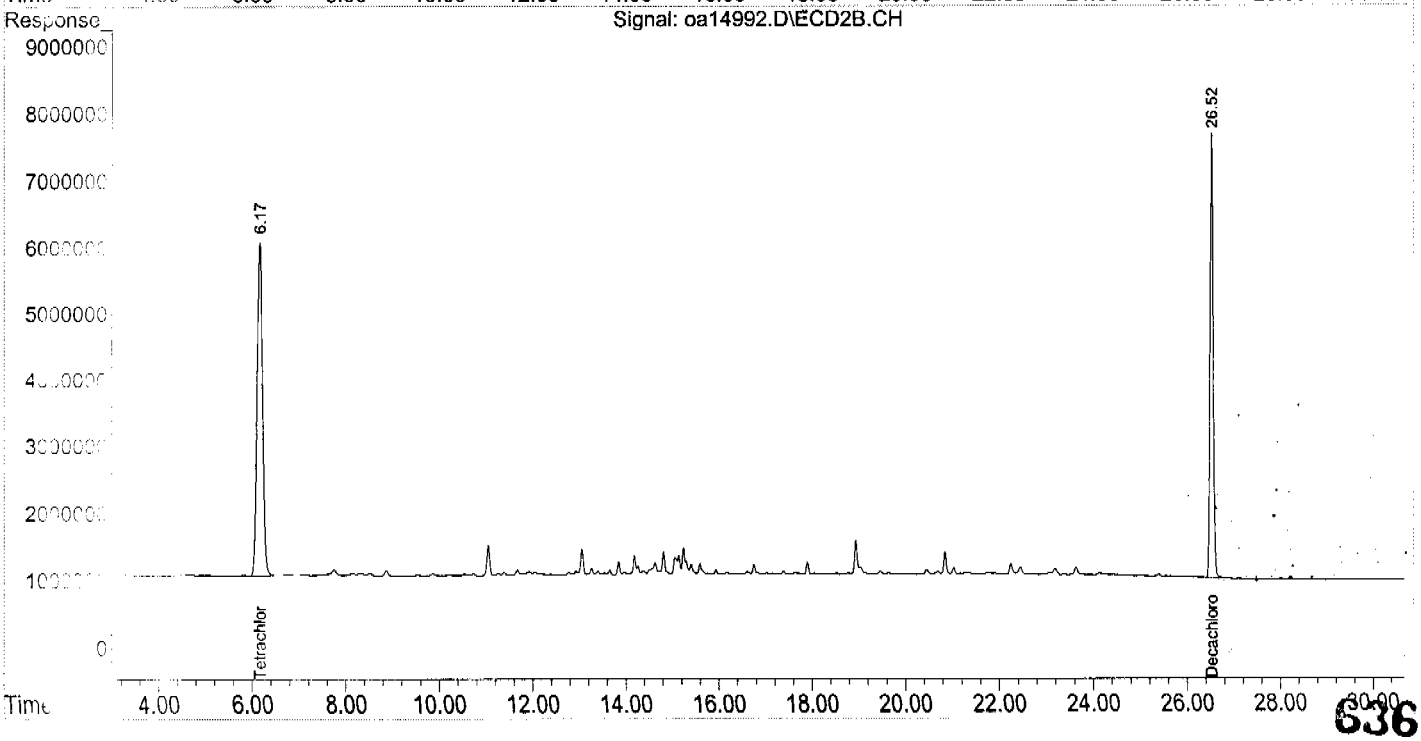
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14992.D\ECD1A.CH Vial: 27
Signal #2 : C:\MSDCHEM\1\DATA\oa14992.D\ECD2B.CH
Acq On : 13 Aug 2004 4:38 am Operator: owenm
Sample : n74646-10 Inst : GCOO
Misc : OP17688,GOA439,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 13:15 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-750-LITTLEMOUNTAIN		
Lab Sample ID:	N74646-11	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14993.D	1	08/13/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0084	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.013	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0090	ug/l	
319-86-8	delta-BHC	ND	0.021	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.021	0.019	ug/l	
5103-74-2	gamma-Chlordane	ND	0.021	0.013	ug/l	
60-57-1	Dieldrin	ND	0.021	0.013	ug/l	
72-54-8	4,4'-DDD	ND	0.021	0.017	ug/l	
72-55-9	4,4'-DDE	ND	0.021	0.0043	ug/l	
50-29-3	4,4'-DDT	ND	0.021	0.019	ug/l	
72-20-8	Endrin	ND	0.021	0.012	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.021	0.014	ug/l	
7421-93-4	Endrin aldehyde	ND	0.021	0.021	ug/l	
53494-70-5	Endrin ketone	ND	0.053	0.0056	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0031	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0030	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0062	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.053	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.26	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		35-138%
877-09-8	Tetrachloro-m-xylene	91%		35-138%
2051-24-3	Decachlorobiphenyl	95%		19-153%
2051-24-3	Decachlorobiphenyl	98%		19-153%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14993.D\ECD1A.CH Vial: 28
Signal #2 : C:\MSDCHEM\1\DATA\oa14993.D\ECD2B.CH
Acq On : 13 Aug 2004 5:11 am Operator: owenm
Sample : n74646-11 Inst : GC00
Misc : OP17688,GOA439,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 05:42:15 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.48f	6.17	351.4E6	455.7E6	37.927	36.283
Spiked Amount	40.000	Range 30 - 150		Recovery =	94.82%	90.71%
2) SA Decachlorobiphen	25.36	26.53	248.3E6	388.7E6	38.118	39.169
Spiked Amount	40.000	Range 30 - 150		Recovery =	95.30%	97.92%

Target Compounds

OM
8/14/04

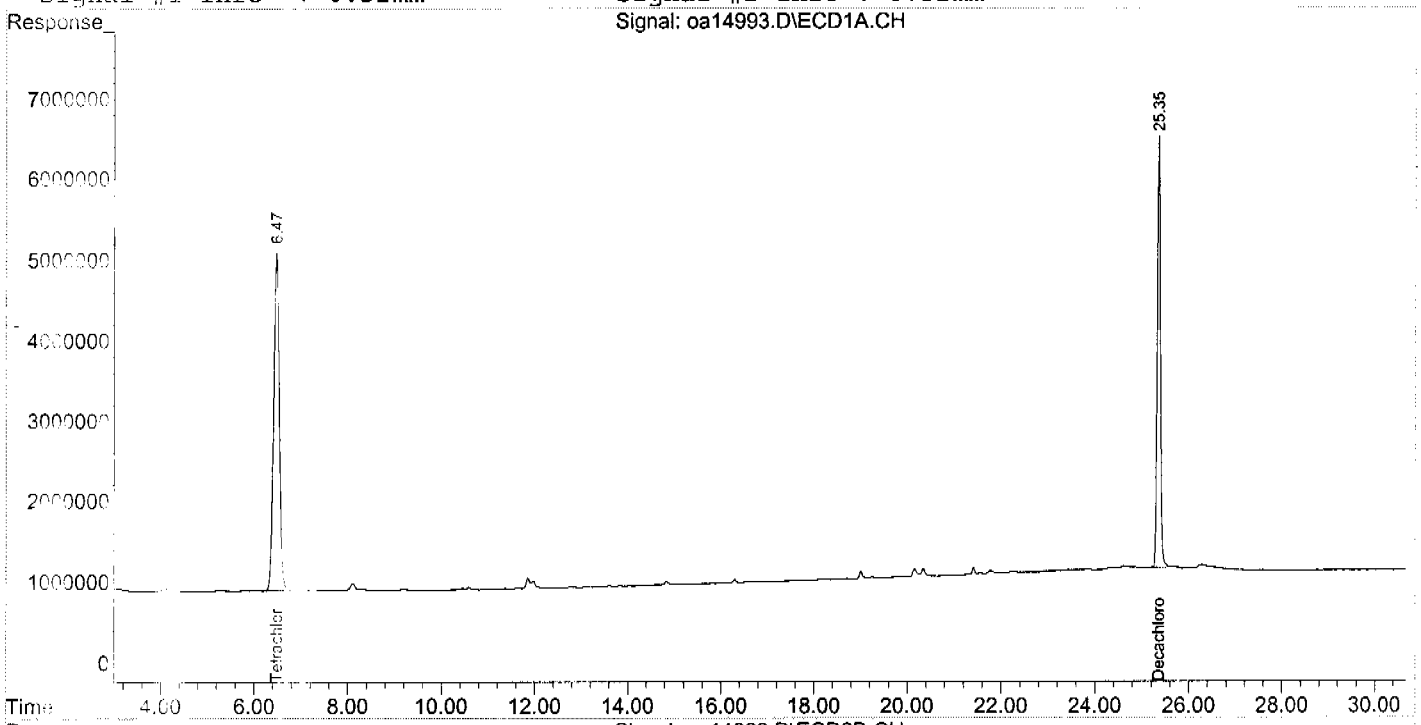
638

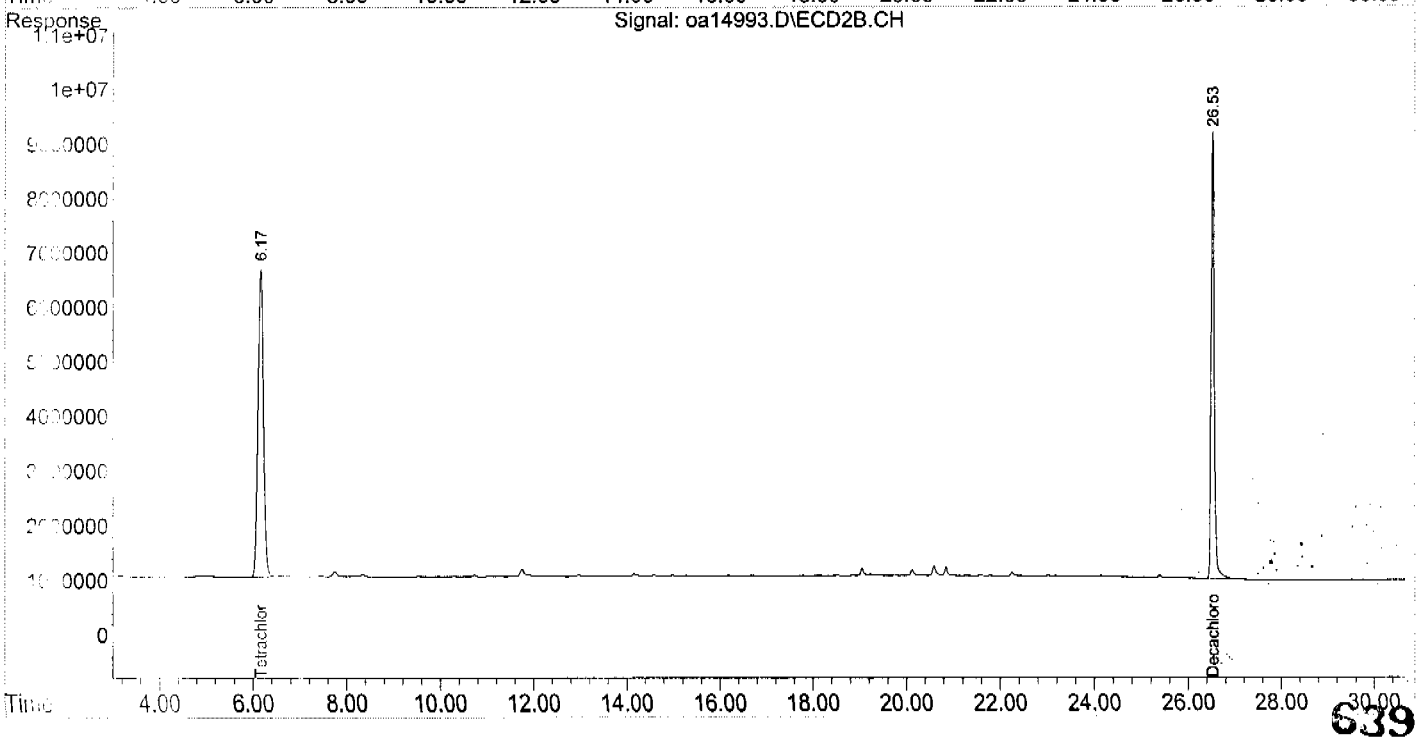
(E)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa14993.D\ECD1A.CH Vial: 28
Signal #2 : C:\MSDCHEM\1\DATA\oa14993.D\ECD2B.CH
Acq On : 13 Aug 2004 5:11 am Operator: owenm
Sample : n74646-11 Inst : GC00
Misc : OP17688,GOA439,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 10:54 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-191-FALCONLANE		
Lab Sample ID:	N74646-12	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14994.D	1	08/13/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.022	0.0088	ug/l	
319-84-6	alpha-BHC	ND	0.022	0.014	ug/l	
319-85-7	beta-BHC	ND	0.022	0.0095	ug/l	
319-86-8	delta-BHC	ND	0.022	0.011	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.022	0.0029	ug/l	
5103-71-9	alpha-Chlordane	ND	0.022	0.020	ug/l	
5103-74-2	gamma-Chlordane	ND	0.022	0.014	ug/l	
60-57-1	Dieldrin	ND	0.022	0.014	ug/l	
72-54-8	4,4'-DDD	ND	0.022	0.018	ug/l	
72-55-9	4,4'-DDE	ND	0.022	0.0045	ug/l	
50-29-3	4,4'-DDT	ND	0.022	0.020	ug/l	
72-20-8	Endrin	ND	0.022	0.013	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.022	0.015	ug/l	
7421-93-4	Endrin aldehyde	ND	0.022	0.022	ug/l	
53494-70-5	Endrin ketone	ND	0.056	0.0059	ug/l	
959-98-8	Endosulfan-I	ND	0.022	0.0033	ug/l	
33213-65-9	Endosulfan-II	ND	0.022	0.0031	ug/l	
76-44-8	Heptachlor	ND	0.022	0.0065	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.022	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.056	0.013	ug/l	
8001-35-2	Toxaphene	ND	0.28	0.27	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		35-138%
877-09-8	Tetrachloro-m-xylene	89%		35-138%
2051-24-3	Decachlorobiphenyl	70%		19-153%
2051-24-3	Decachlorobiphenyl	72%		19-153%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14994.D\ECD1A.CH Vial: 29
Signal #2 : C:\MSDCHEM\1\DATA\oa14994.D\ECD2B.CH
Acq On : 13 Aug 2004 5:44 am Operator: owenm
Sample : n74646-12 Inst : GCOO
Misc : OP17688,GOA439,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 06:15:31 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
SAB Tetrachloro-m-xy	6.47f	6.17	346.3E6	448.3E6	37.375	35.699
Spiked Amount 40.000 Range 30 - 150 Recovery =					93.44%	89.25%
SA Decachlorobiphen	25.36	26.53	181.2E6	287.5E6	27.813	28.971
Spiked Amount 40.000 Range 30 - 150 Recovery =					69.53%	72.43%

Target Compounds

CM 8/14/04

641

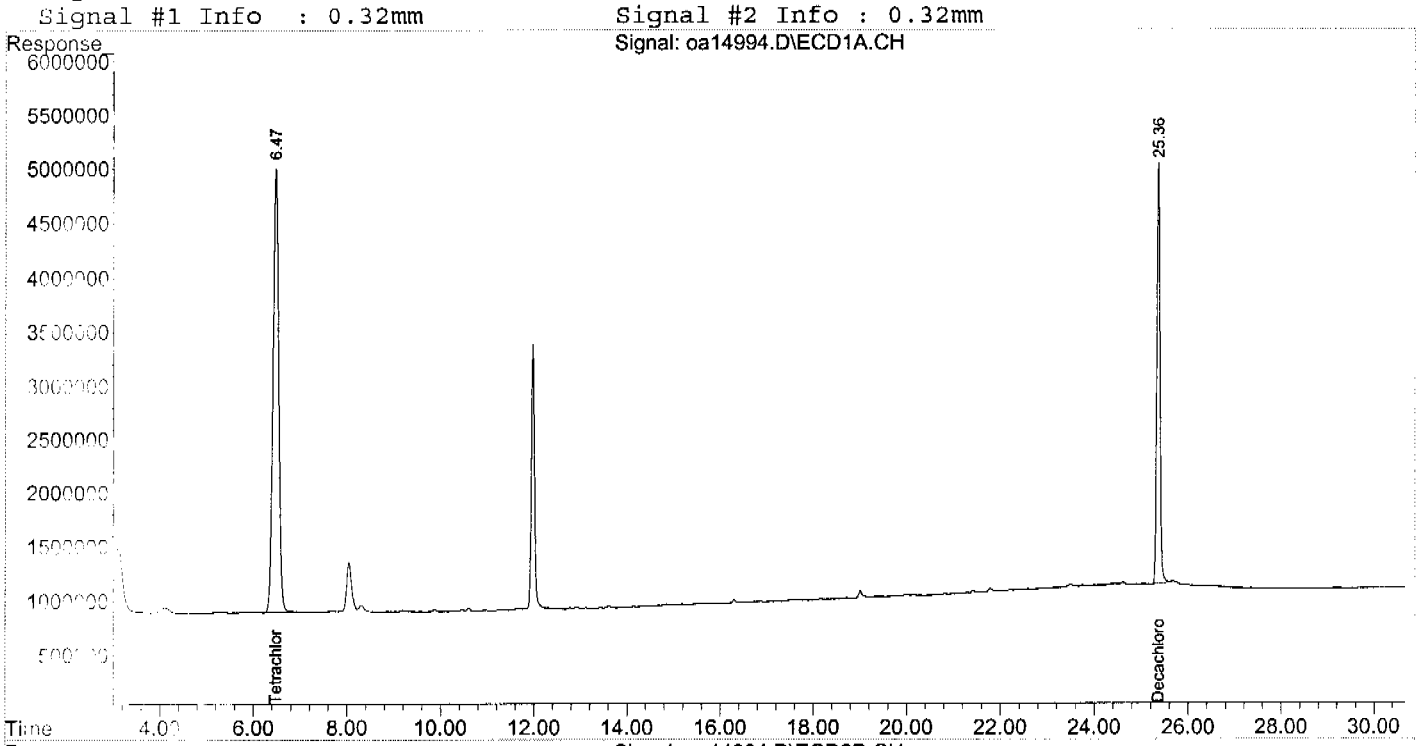
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

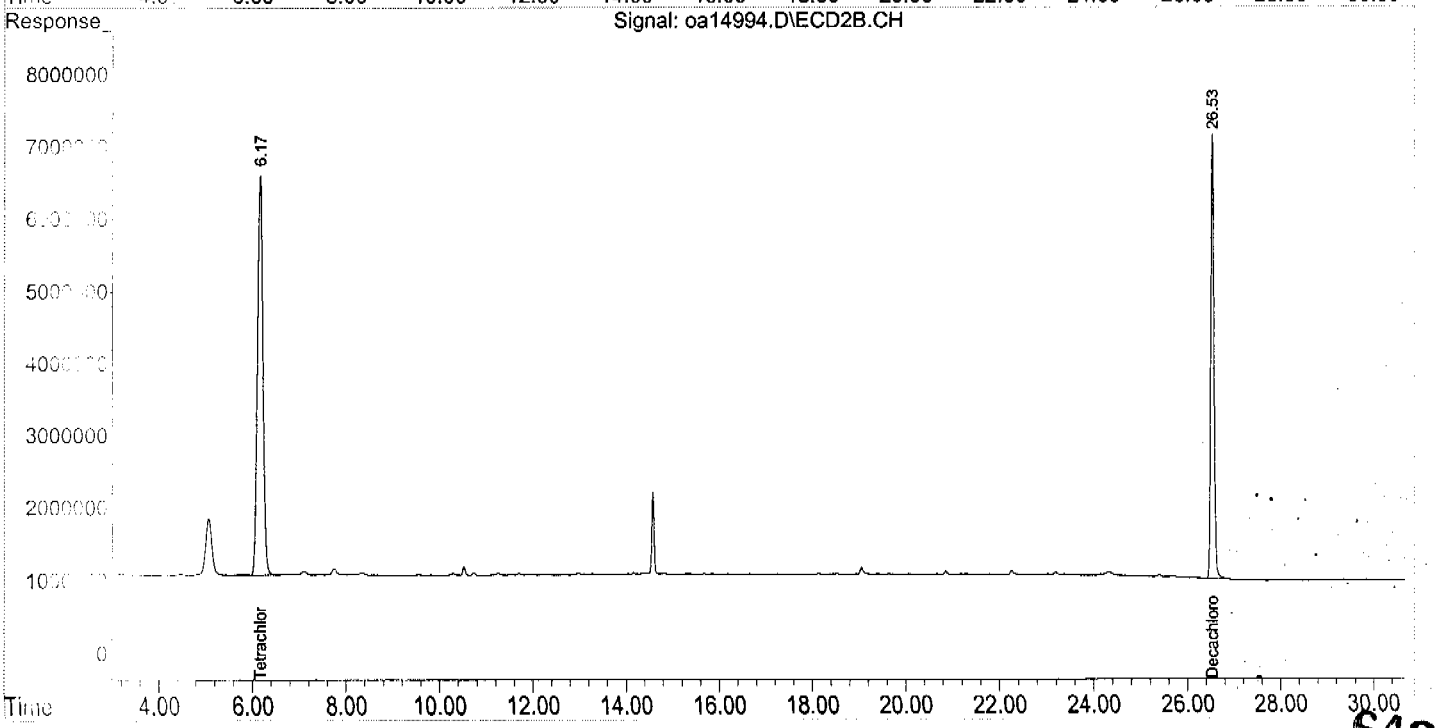
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14994.D\ECD1A.CH Vial: 29
Signal #2 : C:\MSDCHEM\1\DATA\oa14994.D\ECD2B.CH
Acq On : 13 Aug 2004 5:44 am Operator: owenm
Sample : n74646-12 Inst : GCOO
Misc : OP17688,GOA439,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 6:15 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4149-RANGERD		
Lab Sample ID:	N74646-13	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8081A SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OA14995.D	1	08/13/04	OPM	08/11/04	OP17688	GOA439
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0084	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.013	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0091	ug/l	
319-86-8	delta-BHC	ND	0.021	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.021	0.019	ug/l	
5103-74-2	gamma-Chlordane	ND	0.021	0.013	ug/l	
60-57-1	Dieldrin	ND	0.021	0.014	ug/l	
72-54-8	4,4'-DDD	ND	0.021	0.018	ug/l	
72-55-9	4,4'-DDE	ND	0.021	0.0043	ug/l	
50-29-3	4,4'-DDT	ND	0.021	0.019	ug/l	
72-20-8	Endrin	ND	0.021	0.012	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.021	0.014	ug/l	
7421-93-4	Endrin aldehyde	ND	0.021	0.021	ug/l	
53494-70-5	Endrin ketone	ND	0.053	0.0057	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0031	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0030	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0063	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.053	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		35-138%
877-09-8	Tetrachloro-m-xylene	86%		35-138%
2051-24-3	Decachlorobiphenyl	96%		19-153%
2051-24-3	Decachlorobiphenyl	100%		19-153%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Signal #1 : C:\MSDCHEM\1\DATA\oa14995.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\oa14995.D\ECD2B.CH
Acq On : 13 Aug 2004 6:17 am Operator: owenm
Sample : n74646-13 Inst : GCOO
Misc : OP17688,GOA439,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 06:48:41 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
SAB Tetrachloro-m-xy	6.48f	6.17	335.6E6	433.3E6	36.222	34.499
Spiked Amount 40.000 Range 30 - 150 Recovery =					90.56%	86.25%
SA Decachlorobiphen	25.36	26.53	250.6E6	395.4E6	38.466	39.848
Spiked Amount 40.000 Range 30 - 150 Recovery =					96.17%	99.62%

Target Compounds

OM 8/14/04

644

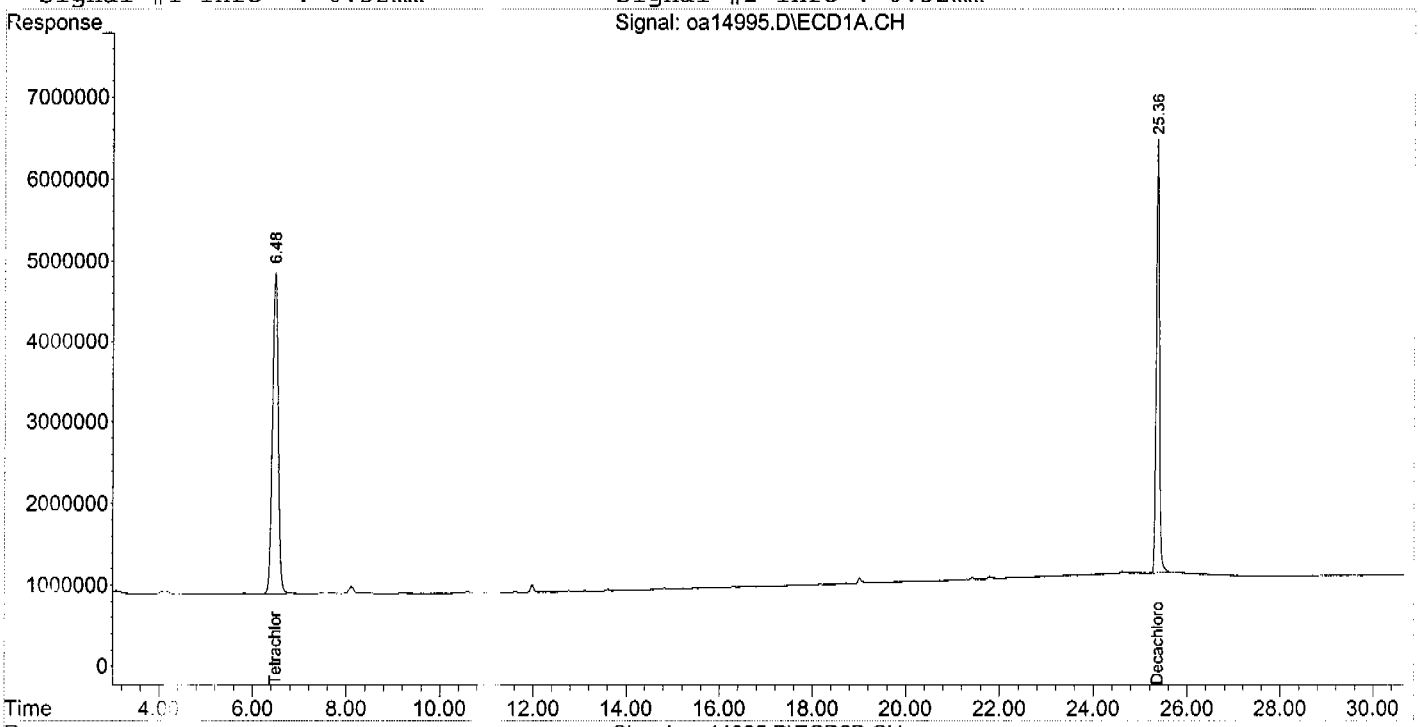
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

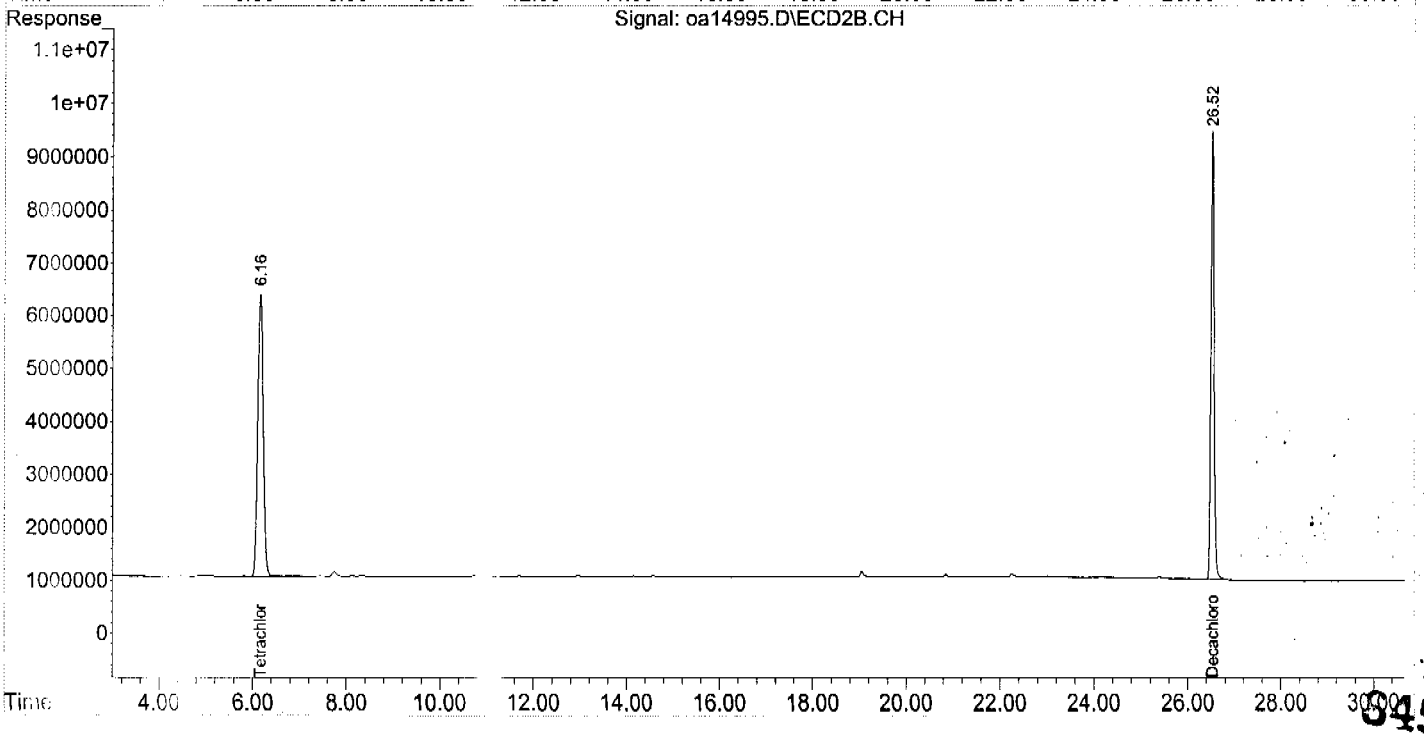
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14995.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\oa14995.D\ECD2B.CH
Acq On : 13 Aug 2004 6:17 am Operator: owenm
Sample : n74646-13 Inst : GCOO
Misc : OP17688,GOA439,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 6:48 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Initial Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC
Sample: GOA433-ICC433
Lab FileID: OA14770.D

Response Factor Report GCOO

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Aug 04 08:46:11 2004
Response via : Initial Calibration

Calibration Files
2 =OA14773.D 5 =OA14772.D 10 =OA14771.D 25 =OA14770.D
50 =OA14769.D 100 =OA14768.D

		Compound	2	5	10	25	50	100	Avg		%RSD
1)	SAB	Tetrachloro-m-xylen	1.043	0.982	0.922	0.877	0.863	0.871	0.926	E7	7.82
2)	A	alpha-BHC	1.334	1.336	1.340	1.361	1.392	1.423	1.364	E7	2.67
3)	MA	gamma-BHC	1.311	1.297	1.271	1.268	1.280	1.298	1.288	E7	1.32
4)	MA	Heptachlor	1.381	1.323	1.266	1.227	1.215	1.210	1.271	E7	5.41
5)	B	beta-BHC	7.359	6.783	6.374	5.833	5.535	5.500	6.231	E6	11.96
6)	B	delta-BHC	1.093	1.124	1.114	1.139	1.189	1.229	1.148	E7	4.47
7)	MB	Aldrin	1.228	1.209	1.161	1.125	1.127	1.121	1.162	E7	4.00
8)	B	Heptachlor Epoxide	1.194	1.140	1.085	1.036	1.016	1.003	1.079	E7	7.02
9)	B	gamma-Chlordane	1.144	1.088	1.048	1.007	0.995	0.992	1.046	E7	5.80
10)	B	alpha-Chlordane	1.157	1.105	1.047	0.994	0.975	0.969	1.041	E7	7.35
11)	A	Endosulfan I	1.112	1.079	1.016	0.970	0.951	0.945	1.012	E7	6.89
12)	B	4,4'-DDE	0.985	1.001	0.972	0.963	0.964	0.973	0.976	E7	1.46
13)	MA	Dieldrin	1.100	1.082	1.058	1.031	1.025	1.020	1.053	E7	3.13
14)	MA	Endrin	9.660	9.794	9.325	9.215	9.219	9.280	9.416	E6	2.64
15)	A	4,4'-DDD	7.972	8.129	8.143	8.115	8.127	8.214	8.117	E6	0.97
16)	B	Endosulfan II	0.992	1.015	0.929	0.889	0.879	0.877	0.930	E7	6.50
17)	MA	4,4'-DDT	8.315	8.810	8.362	8.244	8.246	8.370	8.391	E6	2.53
18)	B	Endrin Aldehyde	7.359	7.874	7.492	7.052	6.865	6.562	7.201	E6	6.53
19)	B	Endosulfan Sulfate	8.003	8.234	7.617	7.269	7.165	7.155	7.574	E6	6.07
20)	A	Methoxychlor	5.227	5.445	4.941	4.616	4.433	4.404	4.844	E6	8.91
21)	B	Endrin Ketone	9.915	9.916	9.408	8.958	8.800	8.775	9.295	E6	5.72
22)	L8	Toxaphene{A}					2.640		2.640	E5	0.00
23)	L8	Toxaphene{B}					1.818		1.818	E5	0.00
24)	L8	Toxaphene{C}					2.647		2.647	E5	0.00
25)	L8	Toxaphene{D}					1.099		1.099	E5	0.00
26)	L8	Toxaphene{E}					2.339		2.339	E5	0.00
27)		Chlordane {A}					6.382		6.382	E5	0.00
28)		Chlordane {B}					3.931		3.931	E5	0.00
29)		Chlordane {C}					1.308		1.308	E6	0.00
30)		Chlordane {D}					2.146		2.146	E6	0.00
31)		Chlordane {E}					3.411		3.411	E5	0.00
32)	SA	Decachlorobiphenyl	7.724	7.109	6.620	6.104	5.826	5.703	6.514	E6	12.14

Signal #2

1)	SAB	Tetrachloro-m-xylen	1.264	1.243	1.229	1.230	1.261	1.309	1.256	E7	2.37
2)	A	alpha-BHC	1.595	1.664	1.737	1.881	2.032	2.189	1.850	E7	12.36
3)	MA	gamma-BHC	1.583	1.631	1.670	1.769	1.879	1.996	1.755	E7	9.04
4)	MA	Heptachlor	1.621	1.619	1.625	1.705	1.775	1.851	1.699	E7	5.70
5)	B	beta-BHC	8.901	9.074	8.371	8.027	8.029	8.205	8.434	E6	5.34
6)	B	delta-BHC	1.331	1.418	1.478	1.617	1.754	1.899	1.583	E7	13.60
7)	MB	Aldrin	1.539	1.542	1.562	1.621	1.710	1.781	1.626	E7	6.14
8)	B	Heptachlor Epoxide	1.528	1.508	1.478	1.498	1.532	1.573	1.520	E7	2.16
9)	B	gamma-Chlordane	1.502	1.449	1.472	1.506	1.563	1.632	1.521	E7	4.38
10)	B	alpha-Chlordane	1.510	1.482	1.461	1.477	1.519	1.580	1.505	E7	2.82
11)	A	Endosulfan I	1.415	1.395	1.378	1.392	1.429	1.470	1.413	E7	2.35
12)	B	4,4'-DDE	1.336	1.361	1.388	1.448	1.525	1.582	1.440	E7	6.4[illegible]

646

Initial Calibration Summary

Job Number: N74646 **Sample:** GOA433-ICC433
Account: ENSRMAA ENSR Consulting & Engineering **Lab FileID:** OA14770.D
Project: Former Camp Butner, NC

13)	MA	Dieldrin	1.503	1.444	1.449	1.507	1.563	1.627	1.516	E7	4.63
14)	MA	Endrin	1.278	1.296	1.262	1.312	1.361	1.416	1.321	E7	4.37
15)	A	4,4'-DDD	1.119	1.139	1.136	1.164	1.205	1.256	1.170	E7	4.43
16)	B	Endosulfan II	1.329	1.348	1.312	1.306	1.329	1.366	1.332	E7	1.69
17)	MA	4,4'-DDT	1.165	1.194	1.173	1.213	1.263	1.331	1.223	E7	5.17
18)	B	Endrin Aldehyde	1.103	1.084	1.041	1.018	1.015	1.034	1.049	E7	3.45
19)	B	Endosulfan Sulfate	1.128	1.124	1.061	1.055	1.082	1.124	1.096	E7	3.07
20)	A	Methoxychlor	7.251	7.092	6.948	6.655	6.534	6.599	6.847	E6	4.28
21)	B	Endrin Ketone	1.342	1.364	1.319	1.304	1.321	1.353	1.334	E7	1.71
22)	L8	Toxaphene{A}					2.984		2.984	E5	0.00
23)	L8	Toxaphene{B}					3.642		3.642	E5	0.00
24)	L8	Toxaphene{C}					6.318		6.318	E5	0.00
25)	L8	Toxaphene{D}					4.062		4.062	E5	0.00
26)	L8	Toxaphene{E}					3.312		3.312	E5	0.00
27)		Chlordane {A}					8.917		8.917	E5	0.00
28)		Chlordane {B}					4.960		4.960	E5	0.00
29)		Chlordane {C}					1.944		1.944	E6	0.00
30)		Chlordane {D}					2.025		2.025	E6	0.00
31)		Chlordane {E}					4.951		4.951	E5	0.00
32)	SA	Decachlorobiphenyl	1.120	1.055	0.988	0.934	0.921	0.937	0.992	E7	8.04

(#) = Out of Range

PST433.M Wed Aug 04 10:16:22 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14766.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\OA14766.D\ECD2B.CH
Acq On : 03 Aug 2004 6:40 pm Operator: owenm
Sample : ic433-500 tox Inst : GC00
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 03 19:11:05 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.47	6.15	420.9E6	585.4E6	42.005	42.177
Spiked Amount 40.000 Range 30 - 150 Recovery = 105.01% 105.44%						
3) SA Decachlorobiphen	25.31	26.46	286.1E6	439.8E6	38.358	39.290
Spiked Amount 40.000 Range 30 - 150 Recovery = 95.89% 98.22%						
Target Compounds						
22) L8 Toxaphene{A}	17.68	16.08	132.0E6	149.2E6	438.264	520.559
23) L8 Toxaphene{B}	18.07	17.67	90894317	182.1E6	286.463	506.270 #
24) L8 Toxaphene{C}	18.78	17.98	132.3E6	315.9E6	438.842	504.600
25) L8 Toxaphene{D}	19.92f	18.84	54940062	203.1E6	435.332	516.621
26) L8 Toxaphene{E}	20.19f	20.52	117.0E6	165.6E6	451.043	515.846

648

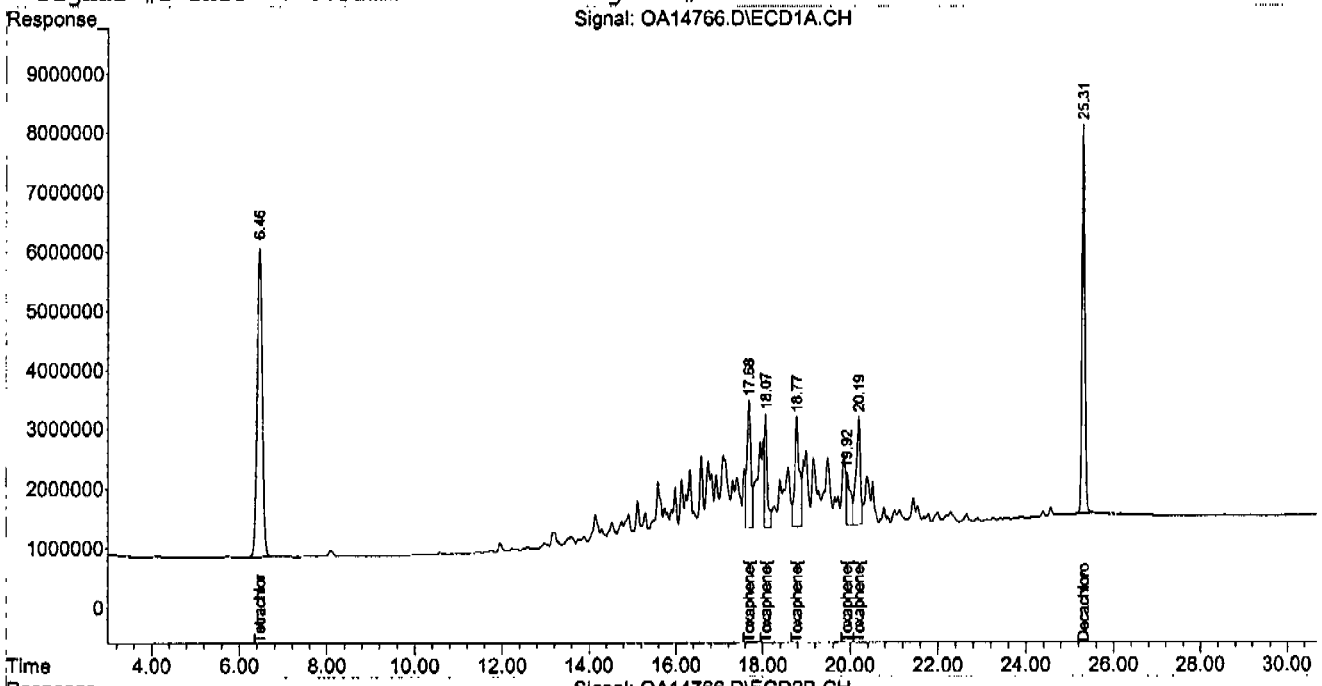
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

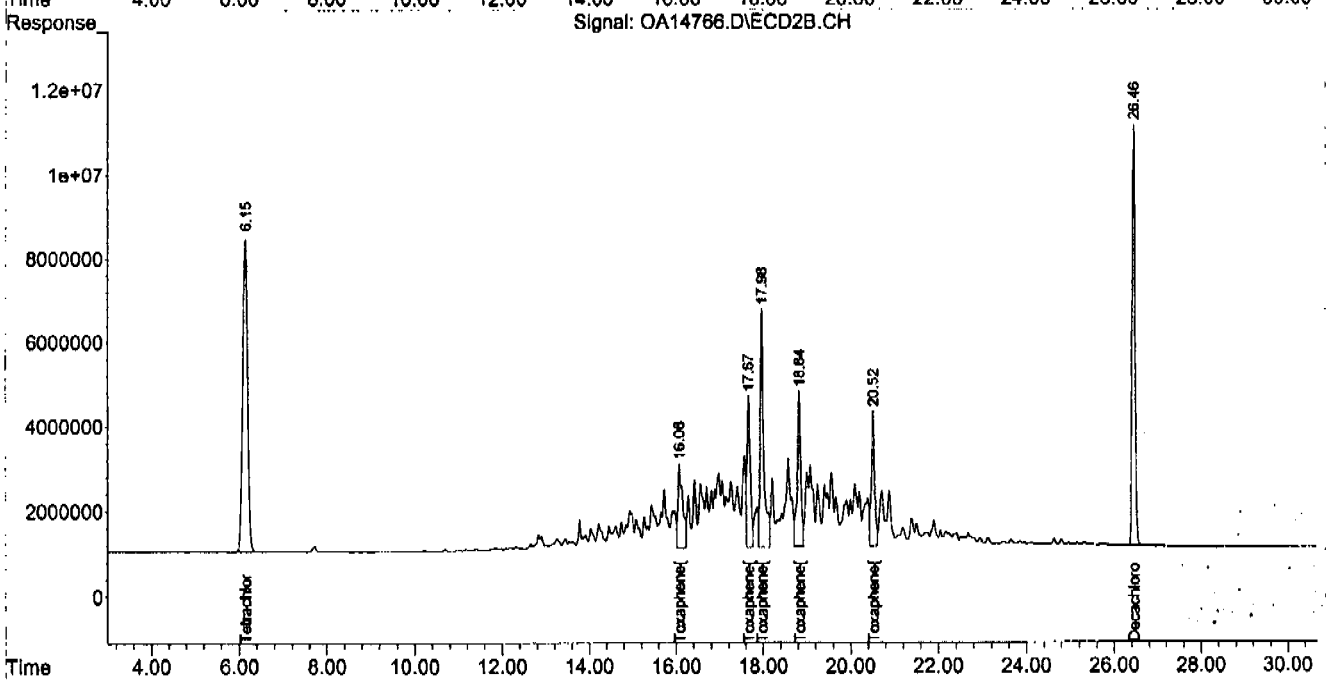
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14766.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\OA14766.D\ECD2B.CH
Acq On : 03 Aug 2004 6:40 pm Operator: owenm
Sample : ic433-500 tox Inst : GC00
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 4 8:37 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14767.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\OA14767.D\ECD2B.CH
Acq On : 03 Aug 2004 7:13 pm Operator: owenm
Sample : ic433-500 chl Inst : GC00
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 03 19:44:18 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
SAB Tetrachloro-m-xy	6.47	6.15	447.6E6	717.2E6	44.663	51.670
iked Amount 40.000 Range 30 - 150 Recovery =					111.66%	129.17%
SA Decachlorobiphen	25.31	26.46	304.5E6	470.8E6	40.823	42.059
iked Amount 40.000 Range 30 - 150 Recovery =					102.06%	105.15%
Target Compounds						
) Chlordane {A}	11.59f	11.49	319.1E6	445.9E6	488.673	483.515
) Chlordane {B}	13.02f	13.02	196.6E6	248.0E6	544.281	517.551
3) Chlordane {C}	14.79	14.77	654.0E6	972.0E6	487.687	477.761
0) Chlordane {D}	15.15	15.05	1073.0E6	1012.5E6	493.862	480.658
1) Chlordane {E}	17.48f	17.85	170.6E6	247.5E6	459.148	503.993

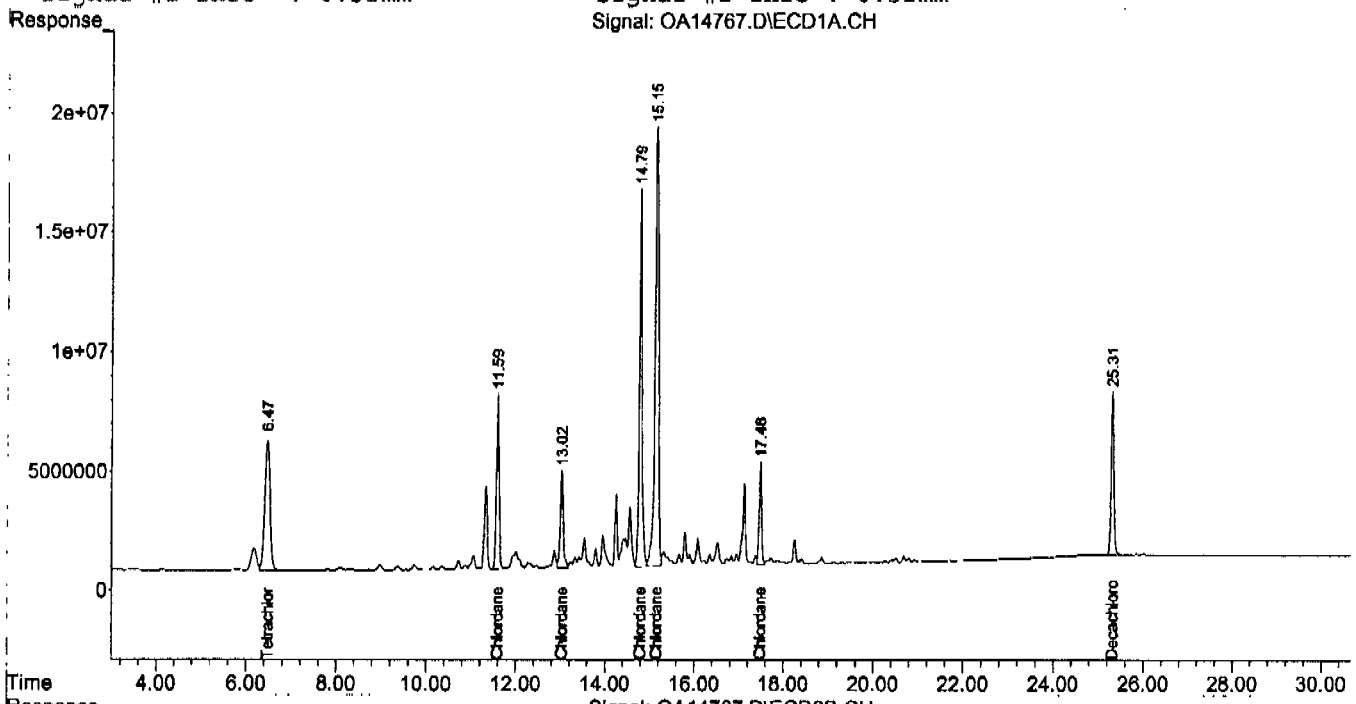
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

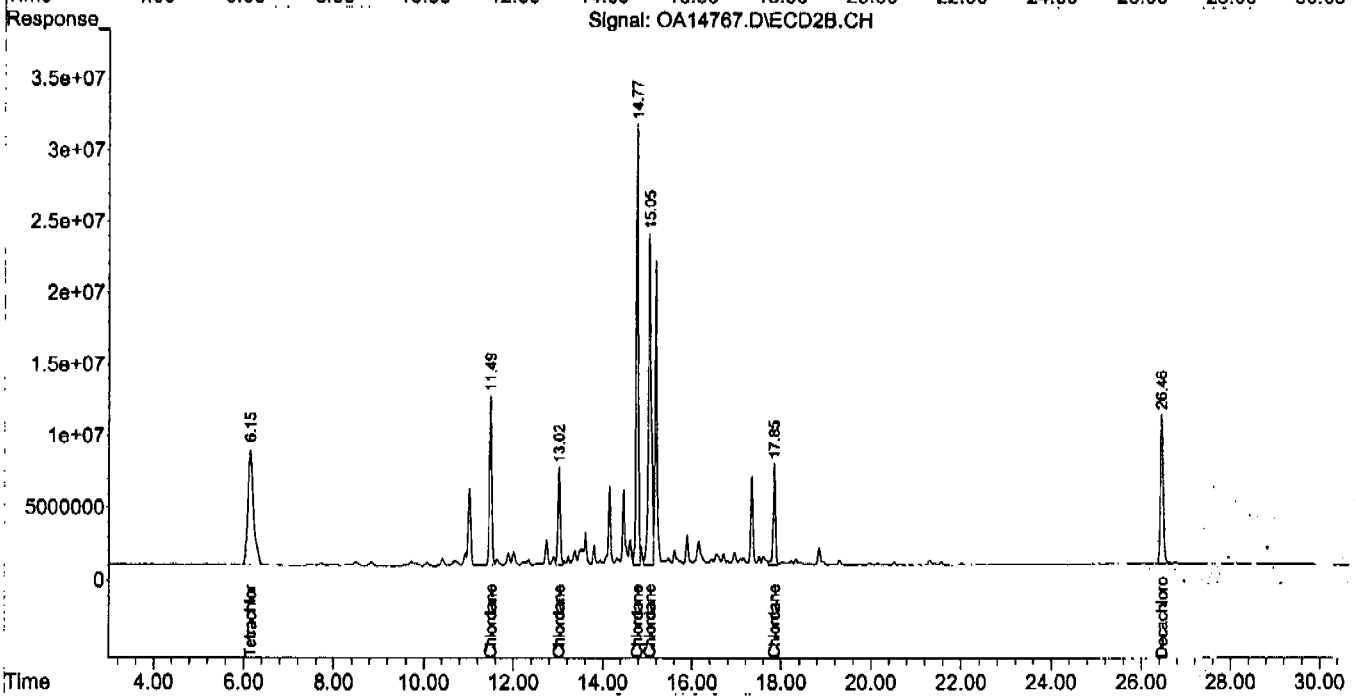
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14767.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\OA14767.D\ECD2B.CH
Acq On : 03 Aug 2004 7:13 pm Operator: owenm
Sample : ic433-500 chl Inst : GC00
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 4 8:37 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14773.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\OA14773.D\ECD2B.CH
Acq On : 03 Aug 2004 10:32 pm Operator: owenm
Sample : ic433-2 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 03 23:03:43 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.47	6.15	41723649	50540372	4.164	3.641
Spiked Amount 40.000 Range 30 - 150 Recovery =					10.41%#	9.10%#
2) SA Decachlorobiphen	25.31	26.46	30896698	44790907	4.143	4.001
Spiked Amount 40.000 Range 30 - 150 Recovery =					10.36%#	10.00%#
Target Compounds						
3) A alpha-BHC	8.78	8.71	26671636	31897498	1.803	1.564
4) MA gamma-BHC	9.97	10.03	26220602	31652989	1.879	1.641
5) MA Heptachlor	11.59	11.49	27625008	32411223	2.042	1.710
6) B beta-BHC	10.32	10.38	14717211	17801609	2.204	1.949
7) B delta-BHC	10.92	11.35	21856904	26629729	1.905	1.658
8) MB Aldrin	12.55	12.49	24557819	30776552	1.933	1.702
9) B Heptachlor Epoxi	14.43	14.23	23875238	30561022	2.008	1.807
10) B gamma-Chlordane	14.79	14.78	22872944	30043921	1.986	1.755
11) B alpha-Chlordane	15.18	15.20	23130268	30209364	2.020	1.790
12) A Endosulfan I	15.57	15.33	22233833	28290439	2.007	1.791
13) B 4,4'-DDE	15.45	15.76	19695698	26722752	1.804	1.648
14) MA Dieldrin	16.30	16.14	22006152	30068075	1.897	1.778
15) MA Endrin	17.00	17.04	19320631	25553595	1.867	1.720
16) A 4,4'-DDD	17.26	17.49	15944824	22371849	1.839	1.725
17) B Endosulfan II	17.71	17.71	19837215	26572123	1.983	1.805
18) MA 4,4'-DDT	18.13	18.47	16629332	23303520	1.807	1.714
19) B Endrin Aldehyde	19.08	18.80	14718428	22053039	1.904	1.924
20) B Endosulfan Sulfa	20.55	19.71	16006541	22560776	2.161	2.033
21) A Methoxychlor	19.74	20.83	10453211	14502964	2.031	1.889
22) B Endrin Ketone	21.52	21.53	19829325	26842484	2.063	1.888

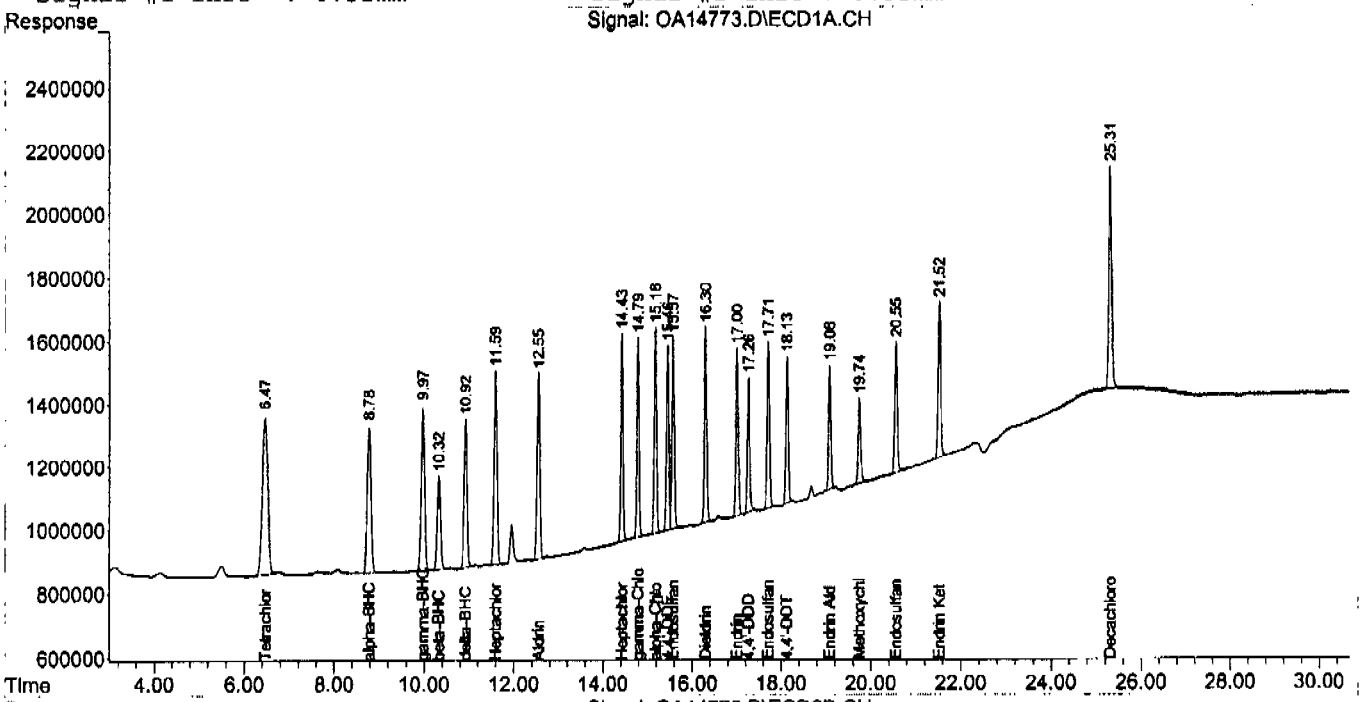
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

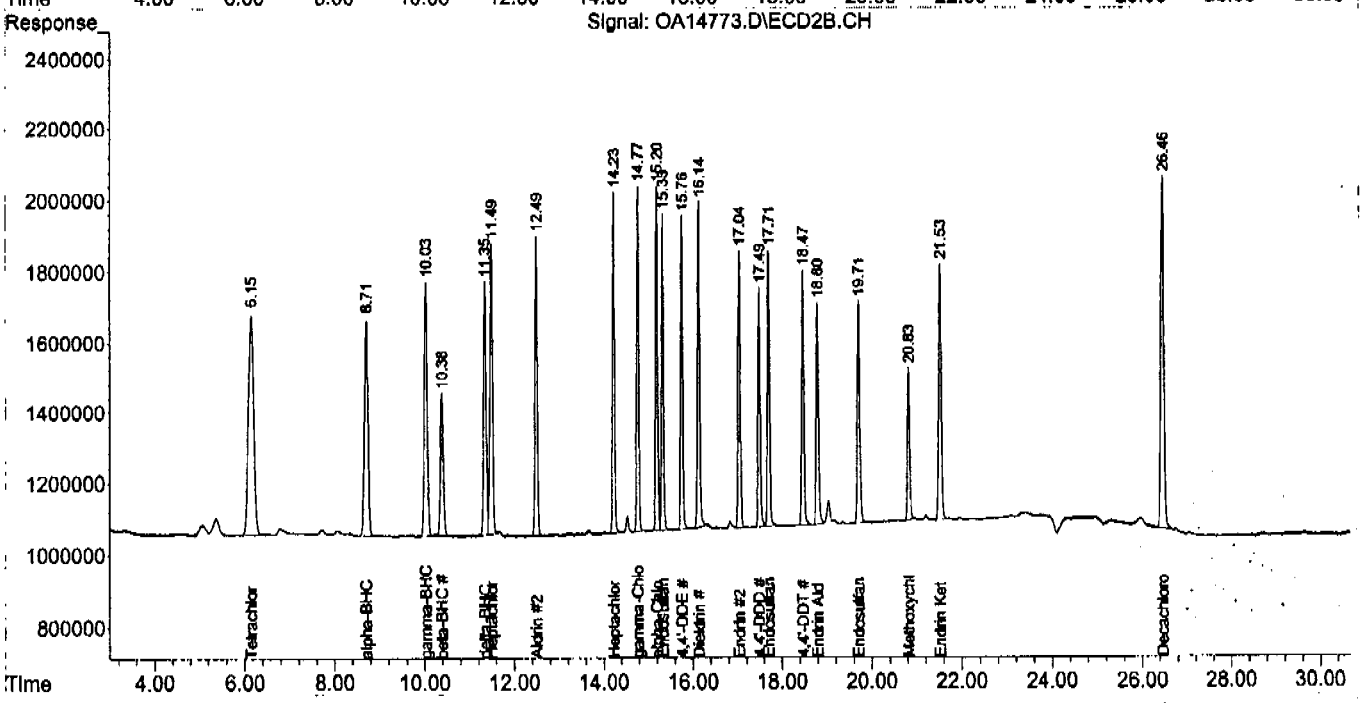
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14773.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\OA14773.D\ECD2B.CH
Acq On : 03 Aug 2004 10:32 pm Operator: owenm
Sample : ic433-2 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 4 8:40 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14772.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\OA14772.D\ECD2B.CH
Acq On : 03 Aug 2004 9:59 pm Operator: owenm
Sample : ic433-5 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 03 22:30:31 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.47	6.15	98196243	124.3E6	9.799	8.955
Spiked Amount 40.000 Range 30 - 150 Recovery =					24.50%#	22.39%#
2) SA Decachlorobiphen	25.31	26.46	71087450	105.5E6	9.531	9.424
Spiked Amount 40.000 Range 30 - 150 Recovery =					23.83%#	23.56%#
Target Compounds						
3) A alpha-BHC	8.78	8.71	66788894	83198796	4.515	4.080
4) MA gamma-BHC	9.97	10.03	64831392	81567703	4.647	4.228
5) MA Heptachlor	11.59	11.49	66161272	80935395	4.891	4.270
6) B beta-BHC	10.32	10.38	33916300	45371153	5.079	4.967
B delta-BHC	10.92	11.35	56190304	70906276	4.898	4.414
MB Aldrin	12.55	12.49	60440033	77096856	4.757	4.264
B Heptachlor Epoxi	14.43	14.23	57017540	75406396	4.796	4.457
B gamma-Chlordane	14.79	14.78	54400349	72447324	4.723	4.231
B alpha-Chlordane	15.18	15.20	55256546	74089639	4.827	4.390
A Endosulfan I	15.57	15.33	53925823	69739989	4.867	4.414
B 4,4'-DDE	15.45	15.76	50029944	68054856	4.582	4.197
MA Dieldrin	16.30	16.14	54085497	72197224	4.662	4.269
MA Endrin	17.00	17.04	48971191	64801591	4.733	4.362
A 4,4'-DDD	17.26	17.49	40645992	56954819	4.689	4.391
B Endosulfan II	17.71	17.71	50767046	67382413	5.076	4.576
MA 4,4'-DDT	18.13	18.47	44051909	59704344	4.787m	4.391
B Endrin Aldehyde	19.08	18.79	39368541	54190171	5.093	4.727
B Endosulfan Sulfa	20.55	19.71	41171090	56223308	5.560	5.065
A Methoxychlor	19.74	20.83	27226349	35457737	5.289	4.618
B Endrin Ketone	21.52	21.53	49582123	68206874	5.159	4.798

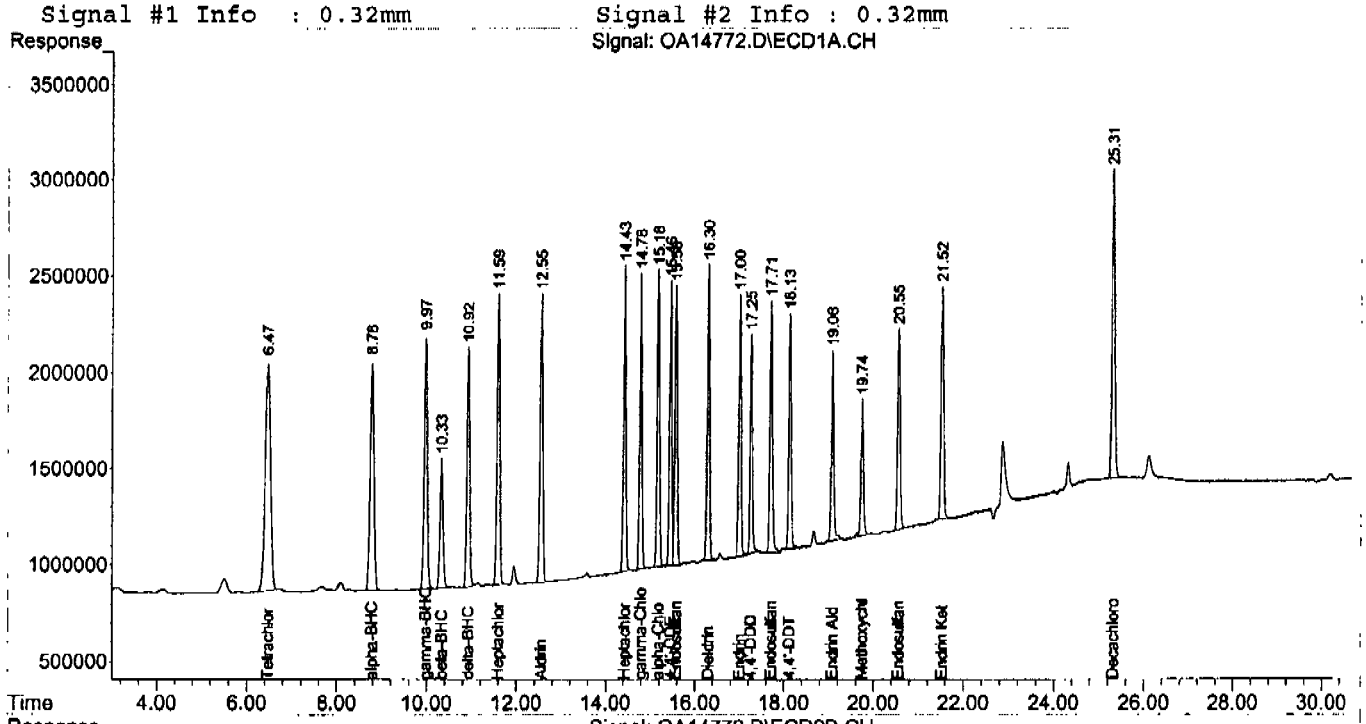
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

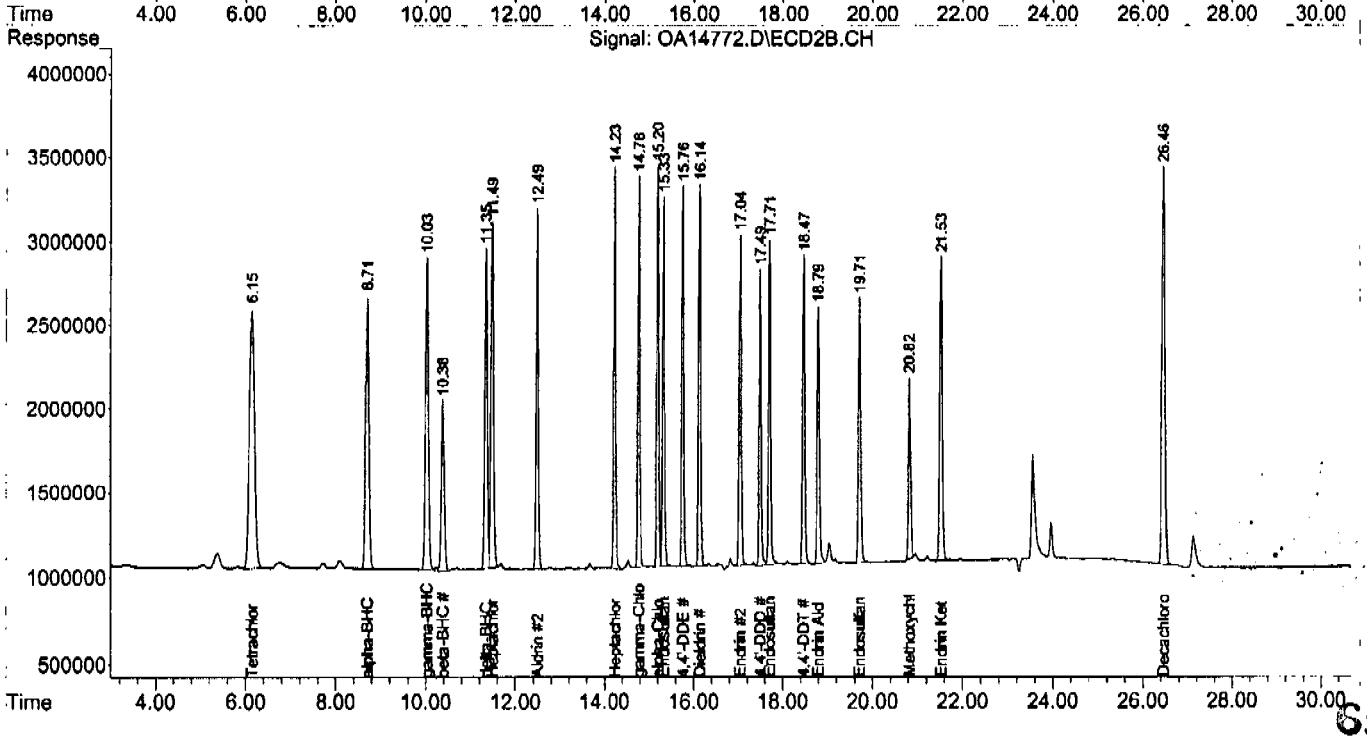
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14772.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\OA14772.D\ECD2B.CH
Acq On : 03 Aug 2004 9:59 pm Operator: owenm
Sample : ic433-5 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 4 8:39 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

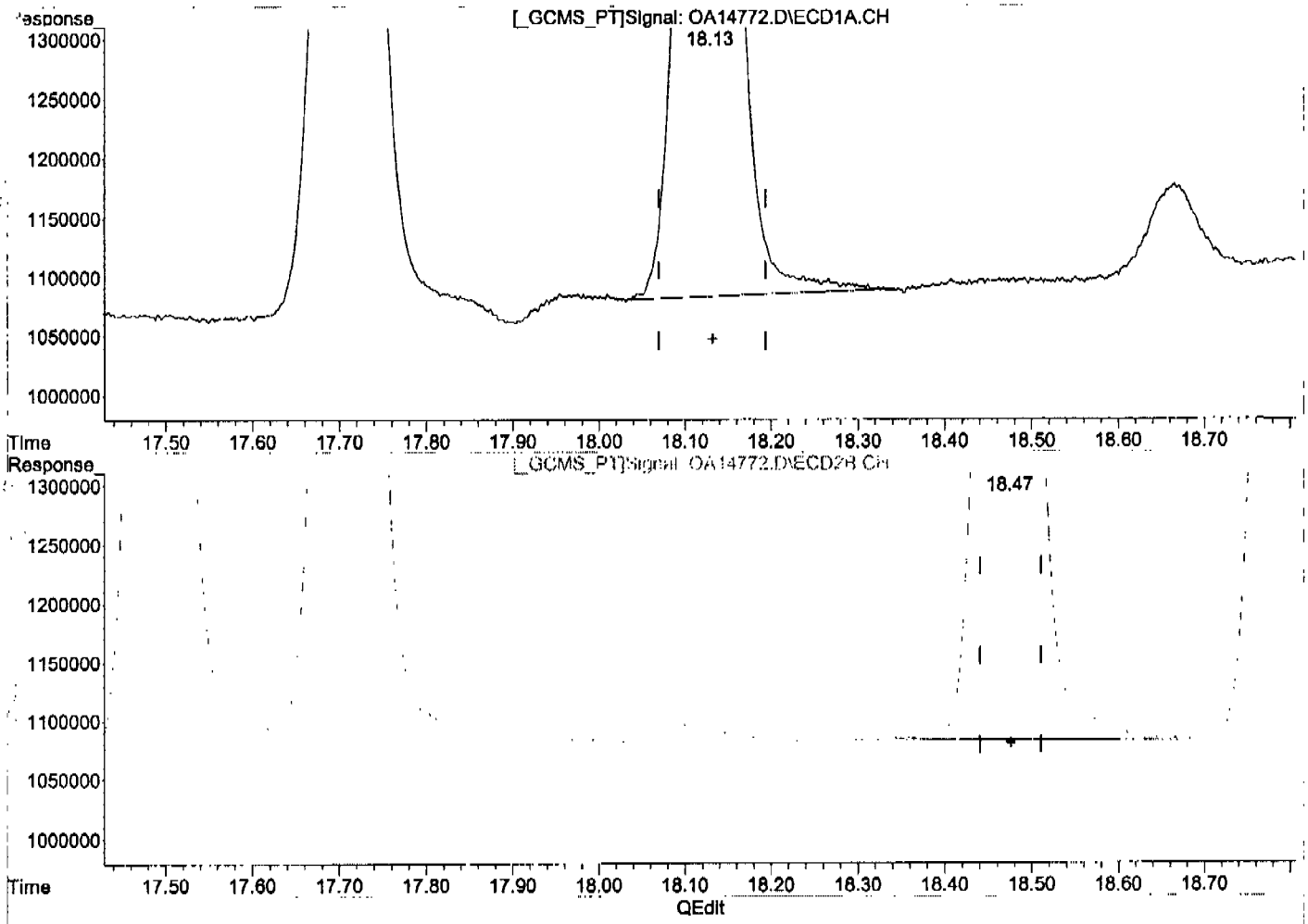




Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\OA14772.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\OA14772.D\ECD2B.CH
Acq On : 03 Aug 2004 9:59 pm Operator: owenm
Sample : ic433-5 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 3 22:30 2004 Quant Results File: PST433.RES

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Multiple Level Calibration



(17) 4,4'-DDT (MA)

18.13min 4.787PPB m

response 44051909

(17) 4,4'-DDT #2 (MA)

18.47min 4.391PPB

response 59704344

(+) = Expected Retention Time

OA14772.D PST433.M Wed Aug 04 08:39:49 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14771.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\OA14771.D\ECD2B.CH
Acq On : 03 Aug 2004 9:26 pm Operator: owenm
Sample : ic433-10 Inst : GC00
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 03 21:57:15 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	SAB Tetrachloro-m-xy	6.47	6.15	184.4E6	245.8E6	18.407	17.708
	iked Amount 40.000 Range 30 - 150 Recovery =					46.02%	44.27%
	SA Decachlorobiphen	25.31	26.46	132.4E6	197.5E6	17.752	17.644
	iked Amount 40.000 Range 30 - 150 Recovery =					44.38%	44.11%
	Target Compounds						
)	A alpha-BHC	8.78	8.71	134.0E6	173.7E6	9.057	8.517
3)	MA gamma-BHC	9.97	10.03	127.1E6	167.0E6	9.110	8.657
4)	MA Heptachlor	11.59	11.49	126.6E6	162.5E6	9.362	8.576
5)	B beta-BHC	10.32	10.38	63741855	83707725	9.545	9.163
6)	B delta-BHC	10.92	11.35	111.4E6	147.8E6	9.709	9.199
7)	MB Aldrin	12.55	12.49	116.1E6	156.2E6	9.139	8.636
8)	B Heptachlor Epoxi	14.43	14.23	108.5E6	147.8E6	9.130	8.738
)	B gamma-Chlordane	14.79	14.78	104.8E6	147.2E6	9.098	8.597
)	B alpha-Chlordane	15.18	15.20	104.7E6	146.1E6	9.143	8.658
	A Endosulfan I	15.57	15.33	101.6E6	137.8E6	9.170	8.722
	B 4,4'-DDE	15.45	15.76	97238007	138.8E6	8.905	8.558
	MA Dieldrin	16.30	16.14	105.8E6	144.9E6	9.125	8.566
	MA Endrin	17.00	17.04	93252928	126.2E6	9.012	8.494
	A 4,4'-DDD	17.26	17.49	81431536	113.6E6	9.394	8.755
	B Endosulfan II	17.71	17.71	92892612	131.2E6	9.287	8.912
	MA 4,4'-DDT	18.13	18.47	83616145	117.3E6	9.086	8.626
	B Endrin Aldehyde	19.08	18.80	74922248	104.1E6	9.692	9.078
	B Endosulfan Sulfa	20.55	19.71	76174175	106.1E6	10.286	9.562
	A Methoxychlor	19.74	20.83	49410452	69483119	9.598	9.050
	B Endrin Ketone	21.52	21.53	94077677	131.9E6	9.789	9.278

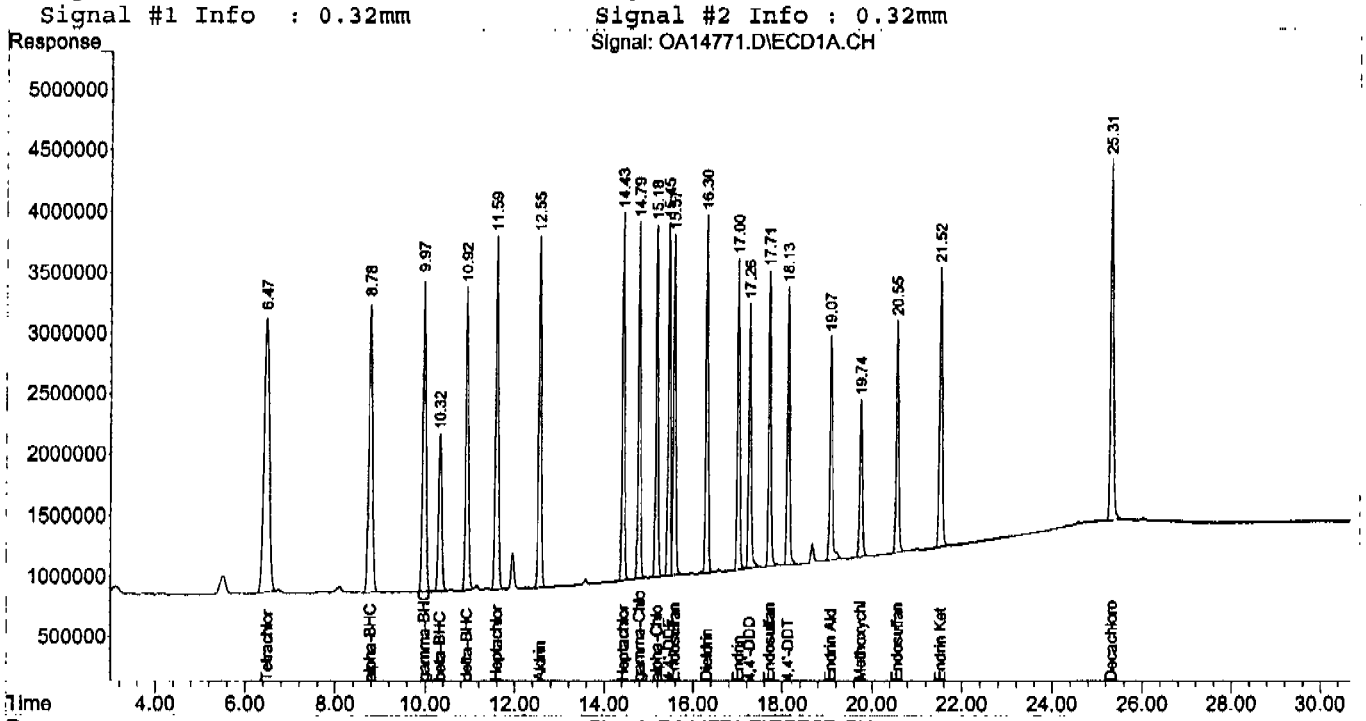
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

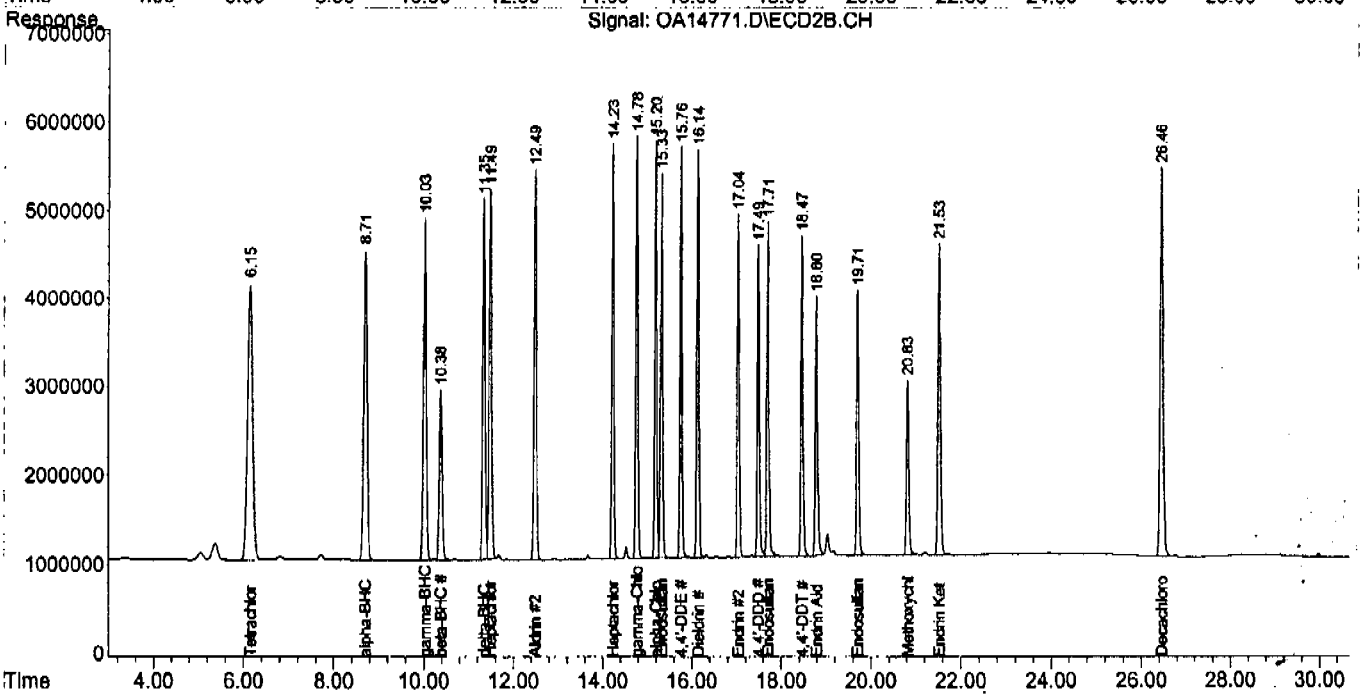
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14771.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\OA14771.D\ECD2B.CH
Acq On : 03 Aug 2004 9:26 pm Operator: owenm
Sample : ic433-10 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 4 8:39 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14770.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\OA14770.D\ECD2B.CH
Acq On : 03 Aug 2004 8:53 pm Operator: owenm
Sample : ic433-25 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 03 21:24:04 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	SAB Tetrachloro-m-xy	6.47	6.15	438.5E6	615.1E6	43.760	44.316
	iked Amount 40.000 Range 30 - 150 Recovery =					109.40%	110.79%
)	SA Decachlorobiphen	25.32	26.46	305.2E6	466.8E6	40.921	41.704
	Spiked Amount 40.000 Range 30 - 150 Recovery =					102.30%	104.26%
	Target Compounds						
2)	A alpha-BHC	8.78	8.71	340.3E6	470.4E6	23.006	23.065
3)	MA gamma-BHC	9.97	10.03	317.1E6	442.3E6	22.724	22.928
4)	MA Heptachlor	11.60	11.50	306.7E6	426.3E6	22.670	22.492
5)	B beta-BHC	10.33	10.38	145.8E6	200.7E6	21.835	21.967
6)	B delta-BHC	10.92	11.35	284.7E6	404.3E6	24.814	25.168
)	MB Aldrin	12.55	12.49	281.3E6	405.3E6	22.142	22.413
)	B Heptachlor Epoxi	14.43	14.23	258.9E6	374.4E6	21.782	22.134
)	B gamma-Chlordane	14.79	14.78	251.7E6	376.4E6	21.853	21.984
	B alpha-Chlordane	15.18	15.20	248.5E6	369.2E6	21.708	21.876
	A Endosulfan I	15.58	15.34	242.4E6	348.0E6	21.879	22.029
	B 4,4'-DDE	15.46	15.77	240.8E6	362.1E6	22.050	22.330
	MA Dieldrin	16.30	16.14	257.8E6	376.6E6	22.226	22.272
	MA Endrin	17.01	17.04	230.4E6	327.9E6	22.264	22.069
	A 4,4'-DDD	17.26	17.49	202.9E6	291.0E6	23.405	22.436
	B Endosulfan II	17.71	17.71	222.2E6	326.5E6	22.215	22.173
	MA 4,4'-DDT	18.13	18.48	206.1E6	303.3E6	22.397	22.303
	B Endrin Aldehyde	19.08	18.80	176.3E6	254.5E6	22.806	22.194
)	B Endosulfan Sulfa	20.55	19.71	181.7E6	263.9E6	24.540	23.772
)	A Methoxychlor	19.74	20.83	115.4E6	166.4E6	22.417	21.670
)	B Endrin Ketone	21.53	21.53	224.0E6	326.1E6	23.304	22.941

Approved

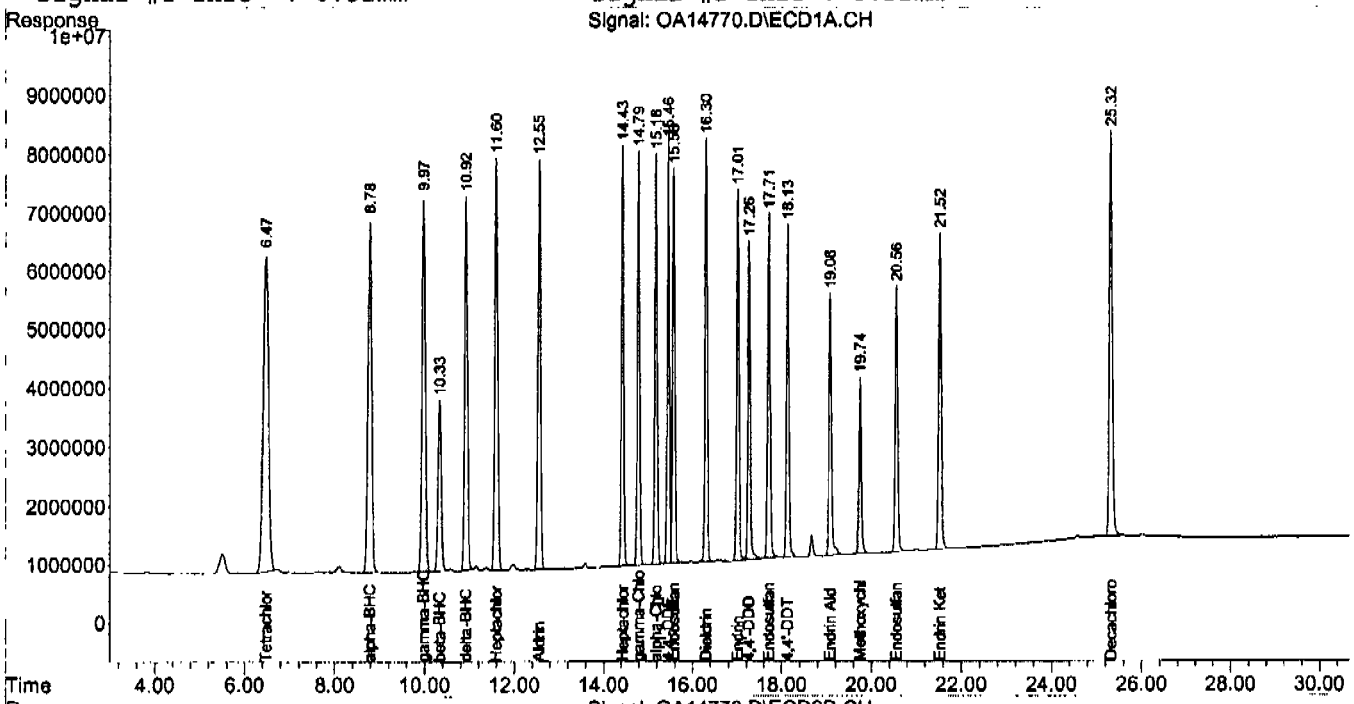
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

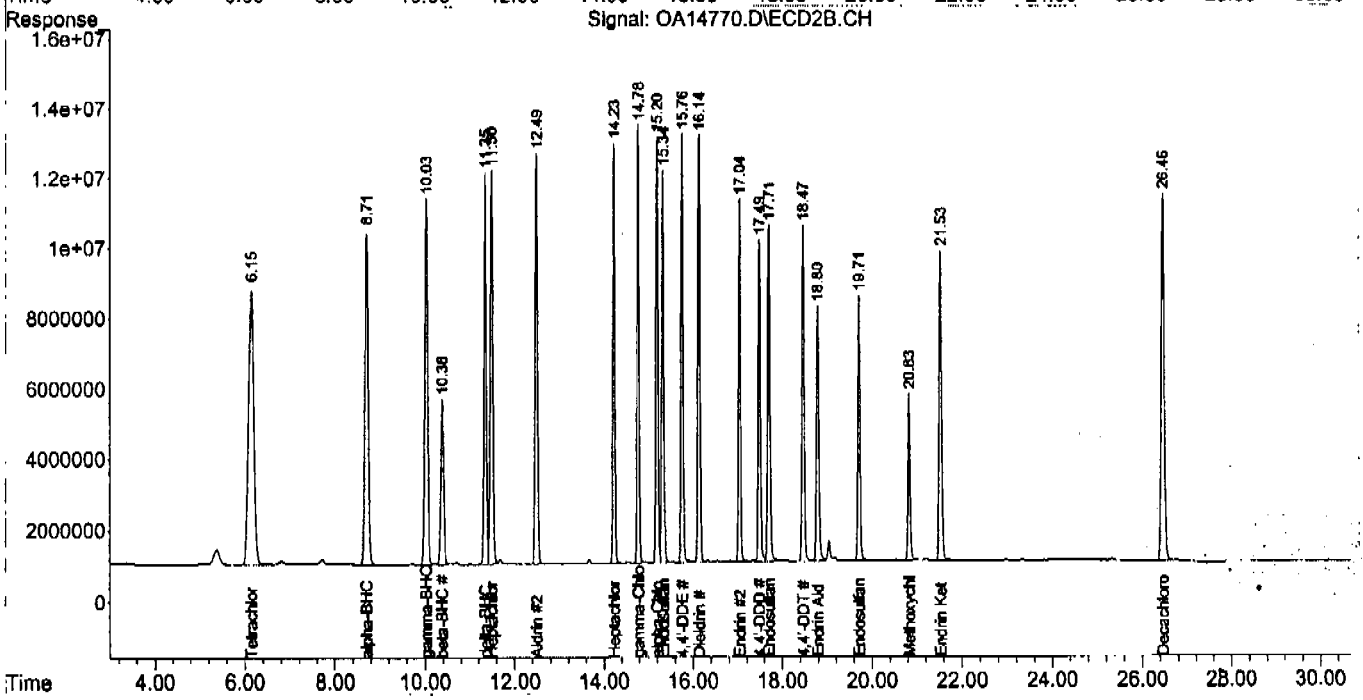
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14770.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\OA14770.D\ECD2B.CH
Acq On : 03 Aug 2004 8:53 pm Operator: owenm
Sample : ic433-25 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 4 8:38 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14769.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\OA14769.D\ECD2B.CH
Acq On : 03 Aug 2004 8:20 pm Operator: owenm
Sample : ic433-50 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 03 20:50:48 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	SAB Tetrachloro-m-xy	6.47	6.15	863.4E6	1261.3E6	86.166	90.875
	iked Amount 40.000 Range 30 - 150 Recovery = 215.41%# 227.19%#						
	SA Decachlorobiphen	25.31	26.46	582.6E6	920.6E6	78.115	82.242
	iked Amount 40.000 Range 30 - 150 Recovery = 195.29%# 205.60%#						
	Target Compounds						
A	alpha-BHC	8.78	8.71	695.8E6	1016.0E6	47.039	49.823
MA	gamma-BHC	9.97	10.03	640.0E6	939.3E6	45.870	48.691
MA	Heptachlor	11.60	11.49	607.6E6	887.6E6	44.919	46.832
B	beta-BHC	10.32	10.38	276.7E6	401.4E6	41.438	43.943
B	delta-BHC	10.92	11.35	594.5E6	877.0E6	51.818	54.601
MB	Aldrin	12.55	12.49	563.5E6	854.9E6	44.355	47.280
B	Heptachlor Epoxi	14.43	14.23	507.9E6	766.1E6	42.724	45.285
B	gamma-Chlordane	14.79	14.78	497.3E6	781.4E6	43.178	45.638
B	alpha-Chlordane	15.18	15.20	487.3E6	759.7E6	42.565	45.013
A	Endosulfan I	15.57	15.33	475.6E6	714.5E6	42.920	45.227
B	4,4'-DDE	15.45	15.76	482.0E6	762.5E6	44.141	47.024
MA	Dieldrin	16.30	16.14	512.6E6	781.7E6	44.188	46.226
MA	Endrin	17.00	17.04	460.9E6	680.6E6	44.547	45.812
A	4,4'-DDD	17.25	17.49	406.4E6	602.3E6	46.879	46.437
B	Endosulfan II	17.71	17.71	439.3E6	664.6E6	43.925	45.142
MA	4,4'-DDT	18.13	18.47	412.3E6	631.3E6	44.801	46.424
B	Endrin Aldehyde	19.07	18.80	343.2E6	507.3E6	44.400	44.244
B	Endosulfan Sulfa	20.55	19.71	358.2E6	541.1E6	48.375	48.753
A	Methoxychlor	19.74	20.83	221.6E6	326.7E6	43.052	42.554
B	Endrin Ketone	21.52	21.53	440.0E6	660.4E6	45.784	46.457

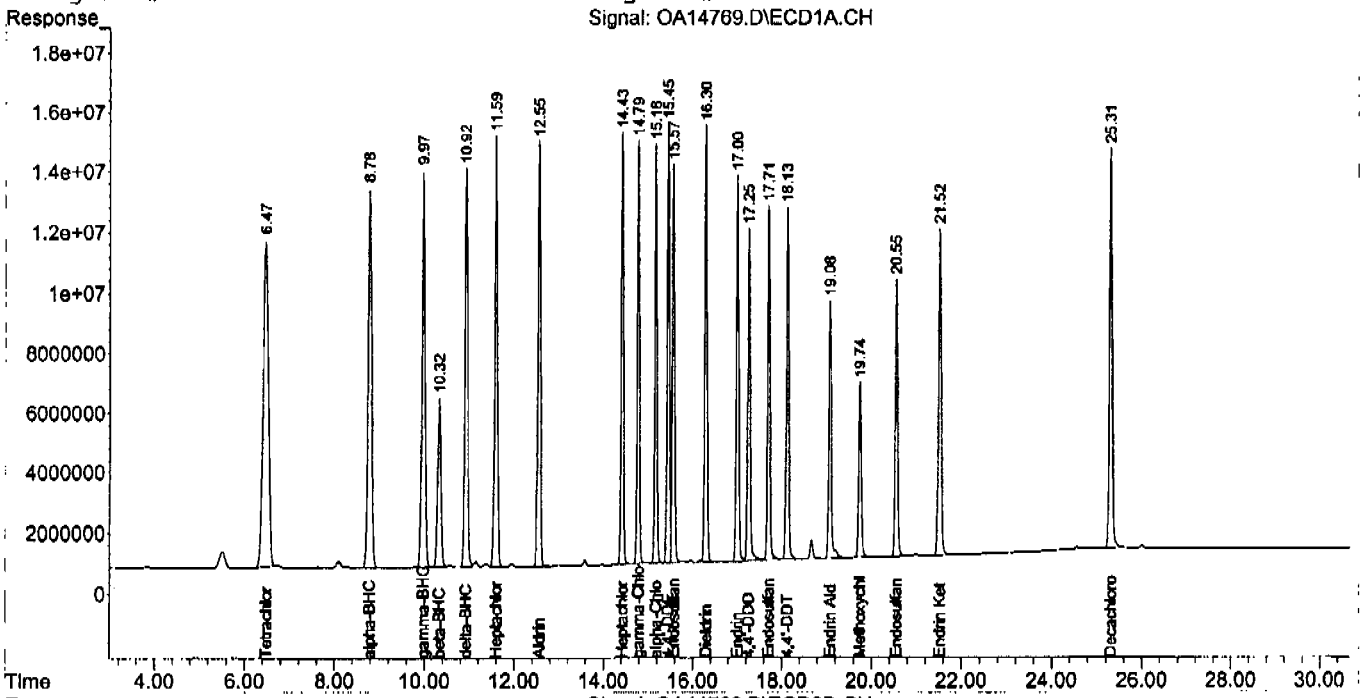
)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

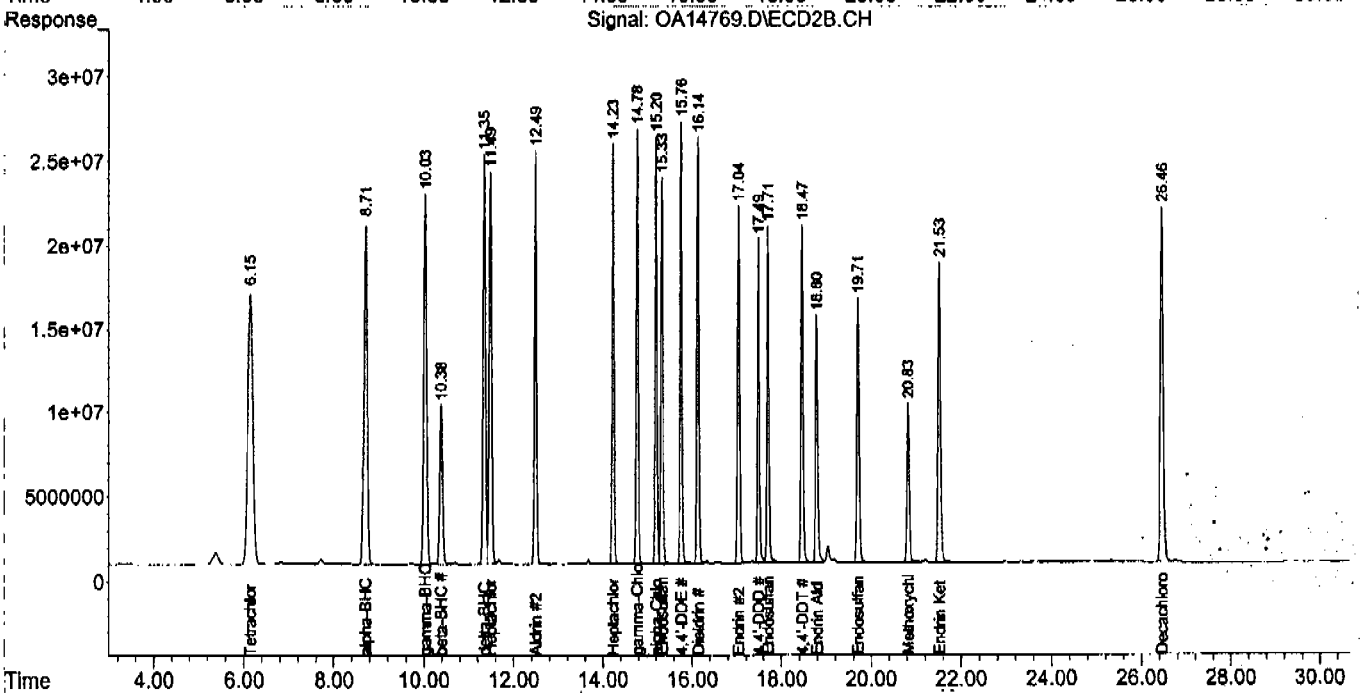
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14769.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\OA14769.D\ECD2B.CH
Acq On : 03 Aug 2004 8:20 pm Operator: owenm
Sample : ic433-50 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 4 8:38 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14768.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\OA14768.D\ECD2B.CH
Acq On : 03 Aug 2004 7:46 pm Operator: owenm
Sample : ic433-100 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 03 20:17:33 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
	SAB Tetrachloro-m-xy	6.47	6.15	1741.6E6	2617.3E6	173.800	188.570
	iked Amount 40.000 Range 30 - 150 Recovery =					434.50%#	471.42%#
	SA Decachlorobiphen	25.31	26.46	1140.6E6	1874.1E6	152.936	167.419
	piked Amount 40.000 Range 30 - 150 Recovery =					382.34%#	418.55%#
	Target Compounds						
2)	A alpha-BHC	8.78	8.71	1423.5E6	2188.5E6	96.228	107.318
3)	MA gamma-BHC	9.97	10.03	1298.2E6	1995.9E6	93.047	103.463
4)	MA Heptachlor	11.59	11.49	1210.4E6	1851.1E6	89.480	97.669
5)	B beta-BHC	10.32	10.38	550.0E6	820.5E6	82.351	89.811
6)	B delta-BHC	10.92	11.35	1229.5E6	1898.6E6	107.159	118.200
7)	MB Aldrin	12.55	12.49	1121.0E6	1781.0E6	88.238	98.498
8)	B Heptachlor Epoxi	14.43	14.23	1002.6E6	1572.7E6	84.339	92.968
9)	B gamma-Chlordane	14.79	14.78	992.0E6	1631.8E6	86.121	95.304
10)	B alpha-Chlordane	15.18	15.20	968.9E6	1579.5E6	84.633	93.587
11)	A Endosulfan I	15.57	15.33	945.5E6	1469.9E6	85.326	93.044
12)	B 4,4'-DDE	15.45	15.76	973.4E6	1581.6E6	89.148	97.533
13)	MA Dieldrin	16.30	16.14	1019.7E6	1627.4E6	87.897	96.230
14)	MA Endrin	17.00	17.04	928.0E6	1415.7E6	89.684	95.288
15)	A 4,4'-DDD	17.26	17.49	821.4E6	1256.2E6	94.760	96.846
16)	B Endosulfan II	17.71	17.71	876.8E6	1366.5E6	87.665	92.809
17)	MA 4,4'-DDT	18.13	18.47	837.0E6	1331.0E6	90.949	97.878
18)	B Endrin Aldehyde	19.08	18.79	656.2E6	1034.1E6	84.884	90.201
19)	B Endosulfan Sulfa	20.55	19.71	715.5E6	1123.8E6	96.617	101.250
20)	A Methoxychlor	19.74	20.83	440.4E6	659.9E6	85.547	85.946
21)	B Endrin Ketone	21.52	21.53	877.5E6	1353.0E6	91.308	95.175

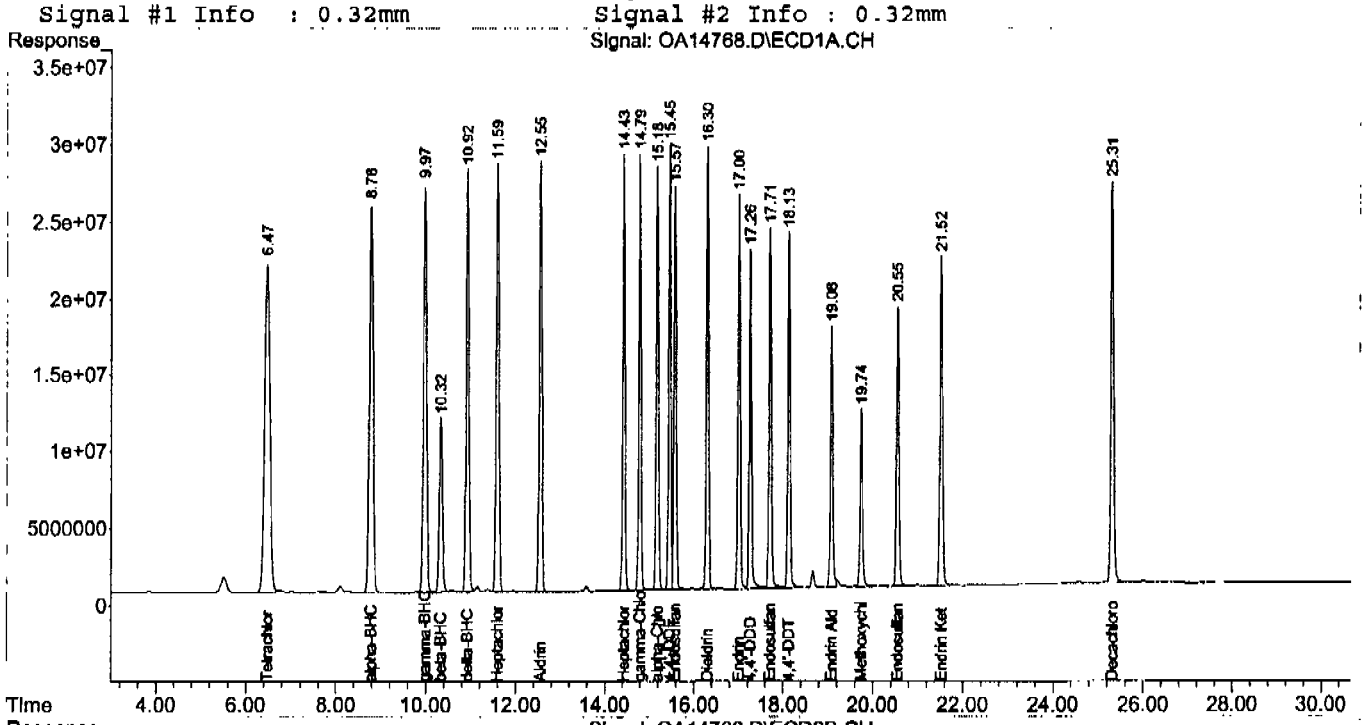
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

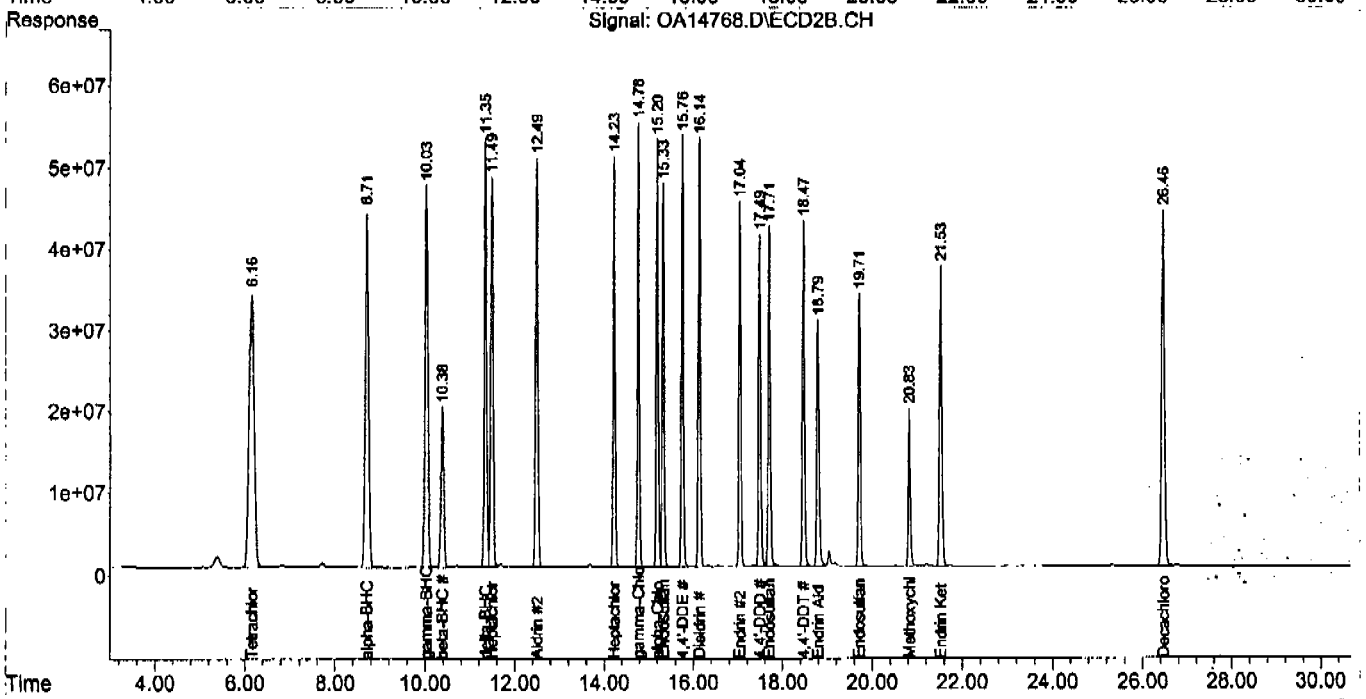
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\OA14768.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\OA14768.D\ECD2B.CH
Acq On : 03 Aug 2004 7:46 pm Operator: owenm
Sample : ic433-100 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 4 8:38 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Aug 03 15:47:33 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC
Sample: GOA439-CC433
Lab FileID: OA14973.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\oa14973.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\oa14973.D\ECD2B.CH
Acq On : 12 Aug 2004 4:36 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17667,GOA439,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	SAB	Tetrachloro-m-xylene	9.264	9.312 E6	-0.5	101	-0.06	6.32- 6.66
2	A	alpha-BHC	13.643	13.459 E6	1.3	100	-0.04	8.67- 8.94
3	MA	gamma-BHC	12.875	12.815 E6	0.5	101	-0.03	9.88-10.11
4	MA	Heptachlor	12.705	12.807 E6	-0.8	101	-0.03	11.54-11.71
5	B	beta-BHC	6.231	6.356 E6	-2.0	100	-0.03	10.26-10.45
6	B	delta-BHC	11.480	11.288 E6	1.7	101	-0.03	10.84-11.05
7	MB	Aldrin	11.618	11.753 E6	-1.2	101	-0.03	12.48-12.69
8	B	Heptachlor Epoxide	10.789	10.971 E6	-1.7	101	-0.02	14.37-14.54
9	B	gamma-Chlordane	10.455	10.636 E6	-1.7	101	-0.01	14.74-14.90
10	B	alpha-Chlordane	10.410	10.692 E6	-2.7	102	-0.02	15.12-15.30
11	A	Endosulfan I	10.121	10.435 E6	-3.1	103	-0.02	15.54-15.67
12	B	4,4'-DDE	9.764	9.794 E6	-0.3	101	-0.01	15.42-15.55
13	MA	Dieldrin	10.528	10.712 E6	-1.7	101	-0.02	16.24-16.42
14	MA	Endrin	9.416	10.055 E6	-6.8	108	-0.01	16.95-17.12
15	A	4,4'-DDD	8.117	8.485 E6	-4.5	104	-0.01	17.22-17.36
16	B	Endosulfan II	9.301	9.555 E6	-2.7	103	-0.02	17.66-17.83
17	MA	4,4'-DDT	8.391	8.732 E6	-4.1	104	-0.01	18.09-18.23
18	B	Endrin Aldehyde	7.201	7.629 E6	-5.9	102	-0.02	19.02-19.20
19	B	Endosulfan Sulfate	7.574	8.098 E6	-6.9	106	-0.03	20.49-20.68
20	A	Methoxychlor	4.844	5.225 E6	-7.9	106	-0.01	19.69-19.86
21	B	Endrin Ketone	9.295	9.683 E6	-4.2	103	-0.02	21.45-21.66
22	L8	Toxaphene{A}		----------NA----------				
23	L8	Toxaphene{B}		----------NA----------				
24	L8	Toxaphene{C}		----------NA----------				
25	L8	Toxaphene{D}		----------NA----------				
26	L8	Toxaphene{E}		----------NA----------				
27		Chlordane {A}		----------NA----------				
28		Chlordane {B}		----------NA----------				
29		Chlordane {C}		----------NA----------				
30		Chlordane {D}		----------NA----------				
31		Chlordane {E}		----------NA----------				
32	SA	Decachlorobiphenyl	6.514	6.722 E6	-3.2	102	-0.01	25.27-25.45

***** Signal #2 *****

1	SAB	Tetrachloro-m-xylene	12.559	11.901 E6	5.2	97	-0.03	6.05- 6.30
2	A	alpha-BHC	18.496	16.756 E6	9.4	96	0.00	8.66- 8.82
3	MA	gamma-BHC	17.546	16.052 E6	8.5	96	0.00	10.00-10.12
4	MA	Heptachlor	16.993	15.559 E6	8.4	96	0.00	11.48-11.58
5	B	beta-BHC	8.434	7.914 E6	6.2	95	0.00	10.35-10.46
6	B	delta-BHC	15.828	14.265 E6	9.9	97	0.00	11.32-11.45

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA439-CC433
Lab FileID: OA14973.D

7	MB	Aldrin	16.257	14.960 E6	8.0	96	0.01	12.49-12.58
8	B	Heptachlor Epoxide	15.195	14.085 E6	7.3	95	0.00	14.22-14.32
9	B	gamma-Chlordane	15.205	13.967 E6	8.1	95	0.02	14.77-14.86
10	B	alpha-Chlordane	15.049	13.895 E6	7.7	95	0.01	15.19-15.29
11	A	Endosulfan I	14.131	13.184 E6	6.7	96	0.01	15.32-15.43
12	B	4,4'-DDE	14.400	12.967 E6	10.0	93	0.02	15.75-15.86
13	MA	Dieldrin	15.156	13.823 E6	8.8	95	0.01	16.13-16.24
14	MA	Endrin	13.207	12.790 E6	3.2	101	0.02	17.04-17.14
15	A	4,4'-DDD	11.697	10.730 E6	8.3	94	0.02	17.49-17.59
16	B	Endosulfan II	13.317	12.508 E6	6.1	95	0.02	17.70-17.81
17	MA	4,4'-DDT	12.231	11.336 E6	7.3	97	0.02	18.47-18.57
18	B	Endrin Aldehyde	10.490	9.744 E6	7.1	94	0.01	18.79-18.90
19	B	Endosulfan Sulfate	10.959	10.622 E6	3.1	100	0.02	19.71-19.81
20	A	Methoxychlor	6.847	6.838 E6	0.1	98	0.02	20.83-20.93
21	B	Endrin Ketone	13.339	12.749 E6	4.4	97	0.02	21.53-21.63
22	L8	Toxaphene{A}		----------NA----------				
23	L8	Toxaphene{B}		----------NA----------				
24	L8	Toxaphene{C}		----------NA----------				
25	L8	Toxaphene{D}		----------NA----------				
26	L8	Toxaphene{E}		----------NA----------				
27		Chlordane {A}		----------NA----------				
28		Chlordane {B}		----------NA----------				
29		Chlordane {C}		----------NA----------				
30		Chlordane {D}		----------NA----------				
31		Chlordane {E}		----------NA----------				
32	SA	Decachlorobiphenyl	9.923	9.701 E6	2.2	98	0.03	26.46-26.60

Average % D = 4.8

(0.0 %) 0 of 44 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OA14771.D PST433.M Fri Aug 13 12:33:47 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14973.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\oa14973.D\ECD2B.CH
Acq On : 12 Aug 2004 4:36 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17667,GOA439,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 17:06:58 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	SAB Tetrachloro-m-xy	6.49	6.17	186.2E6	238.0E6	20.103	18.953
	Spiked Amount 40.000 Range 30 - 150 Recovery =					50.26%	47.38%
2)	SA Decachlorobiphen	25.36	26.53	134.4E6	194.0E6	20.636	19.553
	Spiked Amount 40.000 Range 30 - 150 Recovery =					51.59%	48.88%
	Target Compounds						
2)	A alpha-BHC	8.81f	8.74	134.6E6	167.6E6	9.866	9.059
3)	MA gamma-BHC	10.00f	10.06	128.2E6	160.5E6	9.953	9.149
4)	MA Heptachlor	11.62	11.53	128.1E6	155.6E6	10.080	9.156
5)	B beta-BHC	10.35	10.42	63560046	79137120	10.201	9.383
6)	B delta-BHC	10.95f	11.39	112.9E6	142.6E6	9.833	9.012
7)	MB Aldrin	12.58f	12.53	117.5E6	149.6E6	10.116	9.202
8)	B Heptachlor Epoxi	14.46	14.27	109.7E6	140.8E6	10.169	9.269
9)	B gamma-Chlordane	14.82	14.82	106.4E6	139.7E6	10.173	9.186
0)	B alpha-Chlordane	15.21	15.24	106.9E6	139.0E6	10.270	9.233
1)	A Endosulfan I	15.60	15.37	104.4E6	131.8E6	10.311	9.330
2)	B 4,4'-DDE	15.49	15.81	97943376	129.7E6	10.031	9.005
3)	MA Dieldrin	16.33	16.18	107.1E6	138.2E6	10.175	9.121
4)	MA Endrin	17.04	17.09	100.5E6	127.9E6	10.679	9.684
5)	A 4,4'-DDD	17.29	17.54	84851983	107.3E6	10.454	9.174
6)	B Endosulfan II	17.74	17.76	95553064	125.1E6	10.274	9.393
7)	MA 4,4'-DDT	18.16	18.52	87319984	113.4E6	10.406	9.268
8)	B Endrin Aldehyde	19.11	18.84	76287589	97439862	10.594	9.289
9)	B Endosulfan Sulfa	20.58	19.76	80977546	106.2E6	10.692	9.693
0)	A Methoxychlor	19.78	20.88	52247189	68381336	10.785	9.988
1)	B Endrin Ketone	21.56	21.58	96827665	127.5E6	10.417	9.558

OM
8/13/04

667

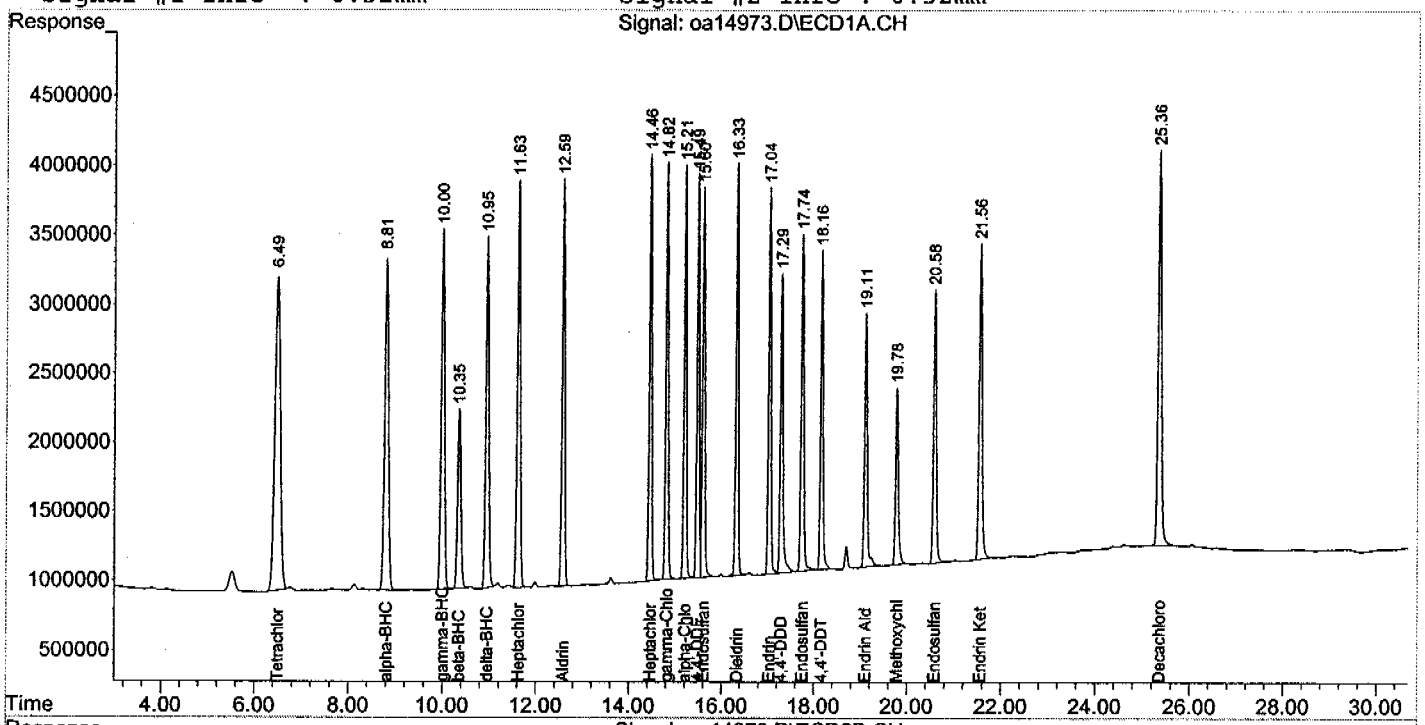
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

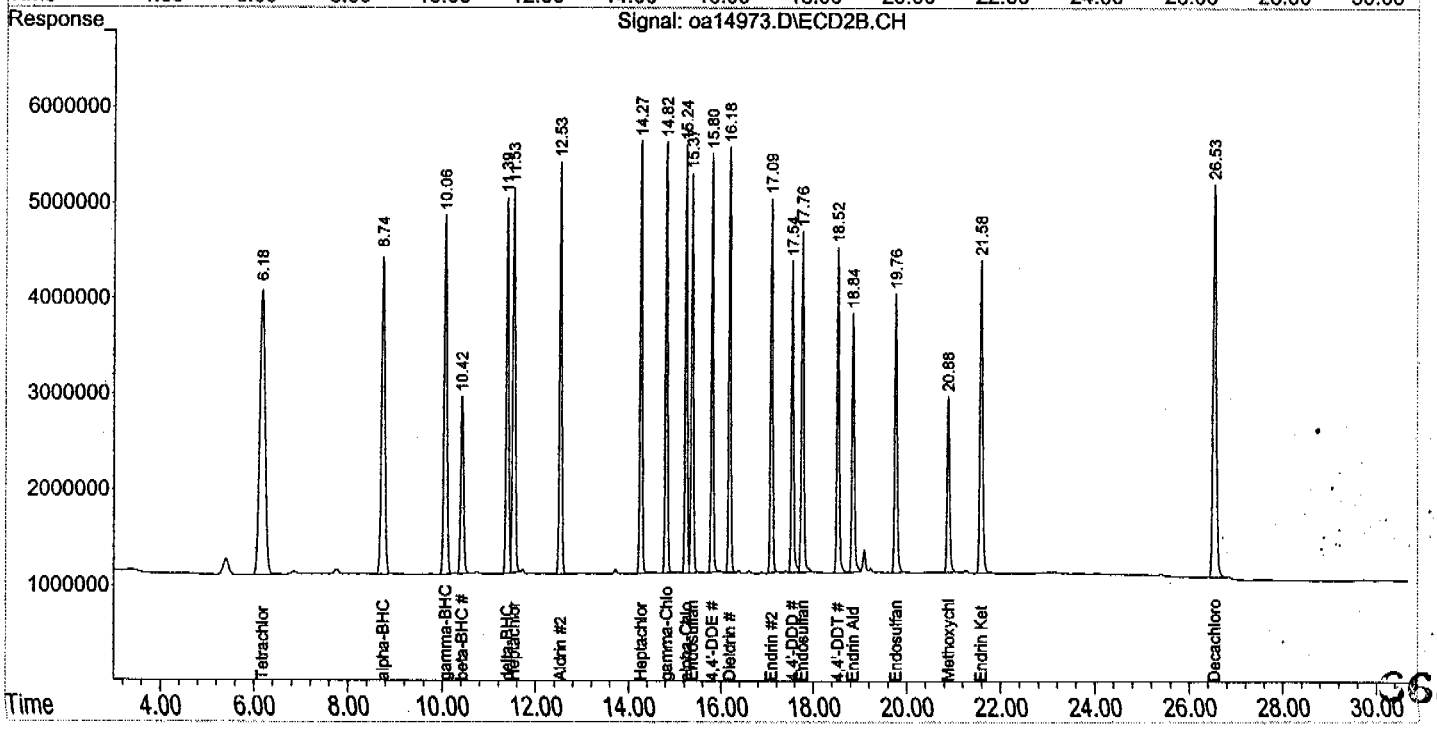
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14973.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\oa14973.D\ECD2B.CH
Acq On : 12 Aug 2004 4:36 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17667,GOA439,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 17:08 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





C68

Continuing Calibration Summary

Job Number: N74646 **Sample:** GOA439-CC433
Account: ENSRMAA ENSR Consulting & Engineering **Lab FileID:** OA14986.D
Project: Former Camp Butner, NC

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\oa14986.D\ECD1A.CH          Vial: 21
Signal #2 : C:\MSDCHEM\1\DATA\oa14986.D\ECD2B.CH
Acq On    : 13 Aug 2004  12:45 am                    Operator: owenm
Sample    : cc433-25                                 Inst    : GCOO
Misc      : OP17688,GOA439,830,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	SAB	Tetrachloro-m-xylene	9.264	9.352 E6	-0.9	107	-0.08	6.30- 6.65
2	A	alpha-BHC	13.643	14.085 E6	-3.2	103	-0.06	8.66- 8.92
3	MA	gamma-BHC	12.875	13.108 E6	-1.8	103	-0.04	9.87-10.10
4	MA	Heptachlor	12.705	12.514 E6	1.5	102	-0.04	11.53-11.70
5	B	beta-BHC	6.231	5.960 E6	4.3	102	-0.04	10.24-10.44
6	B	delta-BHC	11.480	11.815 E6	-2.9	104	-0.04	10.83-11.04
7	MB	Aldrin	11.618	11.567 E6	0.4	103	-0.04	12.47-12.68
8	B	Heptachlor Epoxide	10.789	10.880 E6	-0.8	105	-0.03	14.36-14.54
9	B	gamma-Chlordane	10.455	10.598 E6	-1.4	105	-0.02	14.73-14.89
10	B	alpha-Chlordane	10.410	10.488 E6	-0.7	106	-0.03	15.12-15.29
11	A	Endosulfan I	10.121	10.476 E6	-3.5	108	-0.02	15.53-15.67
12	B	4,4'-DDE	9.764	9.882 E6	-1.2	103	-0.02	15.41-15.55
13	MA	Dieldrin	10.528	10.898 E6	-3.5	106	-0.03	16.24-16.41
14	MA	Endrin	9.416	9.723 E6	-3.3	106	-0.02	16.94-17.12
15	A	4,4'-DDD	8.117	8.659 E6	-6.7	107	-0.01	17.22-17.35
16	B	Endosulfan II	9.301	9.670 E6	-4.0	109	-0.02	17.65-17.82
17	MA	4,4'-DDT	8.391	8.890 E6	-5.9	108	-0.01	18.09-18.23
18	B	Endrin Aldehyde	7.201	7.683 E6	-6.7	109	-0.02	19.02-19.19
19	B	Endosulfan Sulfate	7.574	7.395 E6	2.4	102	-0.03	20.49-20.68
20	A	Methoxychlor	4.844	5.077 E6	-4.8	110	-0.02	19.69-19.86
21	B	Endrin Ketone	9.295	9.538 E6	-2.6	106	-0.02	21.45-21.66
22	L8	Toxaphene{A}		----------NA----------				
23	L8	Toxaphene{B}		----------NA----------				
24	L8	Toxaphene{C}		----------NA----------				
25	L8	Toxaphene{D}		----------NA----------				
26	L8	Toxaphene{E}		----------NA----------				
27		Chlordane {A}		----------NA----------				
28		Chlordane {B}		----------NA----------				
29		Chlordane {C}		----------NA----------				
30		Chlordane {D}		----------NA----------				
31		Chlordane {E}		----------NA----------				
32	SA	Decachlorobiphenyl	6.514	6.171 E6	5.3	101	-0.01	25.27-25.45

***** Signal #2 *****

1	SAB	Tetrachloro-m-xylene	12.559	12.193 E6	2.9	99	-0.03	6.05- 6.29
2	A	alpha-BHC	18.496	18.601 E6	-0.6	99	-0.01	8.66- 8.82
3	MA	gamma-BHC	17.546	17.492 E6	0.3	99	0.00	10.00-10.12
4	MA	Heptachlor	16.993	16.397 E6	3.5	96	0.00	11.48-11.58
5	B	beta-BHC	8.434	7.876 E6	6.6	98	0.00	10.34-10.[illegible]
6	B	delta-BHC	15.828	15.660 E6	1.1	97	0.00	11.32-11.44

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA439-CC433
Lab FileID: OA14986.D

7	MB	Aldrin	16.257	15.840 E6	2.6	98	0.01	12.48-12.58
8	B	Heptachlor Epoxide	15.195	14.853 E6	2.3	99	0.00	14.22-14.32
9	B	gamma-Chlordane	15.205	14.929 E6	1.8	99	0.02	14.77-14.86
10	B	alpha-Chlordane	15.049	14.637 E6	2.7	99	0.01	15.19-15.29
11	A	Endosulfan I	14.131	13.858 E6	1.9	100	0.01	15.32-15.43
12	B	4,4'-DDE	14.400	14.313 E6	0.6	99	0.02	15.75-15.86
13	MA	Dieldrin	15.156	14.926 E6	1.5	99	0.01	16.13-16.24
14	MA	Endrin	13.207	12.965 E6	1.8	99	0.02	17.04-17.14
15	A	4,4'-DDD	11.697	11.326 E6	3.2	97	0.02	17.49-17.59
16	B	Endosulfan II	13.317	13.098 E6	1.6	100	0.02	17.70-17.81
17	MA	4,4'-DDT	12.231	11.939 E6	2.4	98	0.02	18.47-18.57
18	B	Endrin Aldehyde	10.490	10.149 E6	3.3	100	0.02	18.79-18.90
19	B	Endosulfan Sulfate	10.959	10.177 E6	7.1	96	0.02	19.71-19.82
20	A	Methoxychlor	6.847	6.585 E6	3.8	99	0.02	20.83-20.93
21	B	Endrin Ketone	13.339	13.323 E6	0.1	102	0.02	21.53-21.64
22	L8	Toxaphene{A}		----------NA----------				
23	L8	Toxaphene{B}		----------NA----------				
24	L8	Toxaphene{C}		----------NA----------				
25	L8	Toxaphene{D}		----------NA----------				
26	L8	Toxaphene{E}		----------NA----------				
27		Chlordane {A}		----------NA----------				
28		Chlordane {B}		----------NA----------				
29		Chlordane {C}		----------NA----------				
30		Chlordane {D}		----------NA----------				
31		Chlordane {E}		----------NA----------				
32	SA	Decachlorobiphenyl	9.923	9.307 E6	6.2	100	0.03	26.46-26.60

Average % D = 2.9

(0.0 %) 0 of 44 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OA14770.D PST433.M Fri Aug 13 12:36:44 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14986.D\ECD1A.CH Vial: 21
Signal #2 : C:\MSDCHEM\1\DATA\oa14986.D\ECD2B.CH
Acq On : 13 Aug 2004 12:45 am Operator: owenm
Sample : cc433-25 Inst : GCOO
Misc : OP17688,GOA439,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 01:16:31 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.47f	6.17	467.6E6	609.6E6	50.473	48.542
Spiked Amount 40.000 Range 30 - 150 Recovery =					126.18%	121.36%
2) SA Decachlorobiphen	25.36	26.53	308.5E6	465.3E6	47.363	46.897
Spiked Amount 40.000 Range 30 - 150 Recovery =					118.41%	117.24%
Target Compounds						
2) A alpha-BHC	8.79f	8.74	352.1E6	465.0E6	25.811	25.141
3) MA gamma-BHC	9.99f	10.06	327.7E6	437.3E6	25.451	24.922
4) MA Heptachlor	11.61f	11.53	312.8E6	409.9E6	24.623	24.123
5) B beta-BHC	10.34f	10.41	149.0E6	196.9E6	23.915	23.345
6) B delta-BHC	10.94f	11.38	295.4E6	391.5E6	25.730	24.734
7) MB Aldrin	12.57f	12.53	289.2E6	396.0E6	24.890	24.358
8) B Heptachlor Epoxi	14.45f	14.27	272.0E6	371.3E6	25.211	24.437
9) B gamma-Chlordane	14.81	14.82	264.9E6	373.2E6	25.340	24.545
10) B alpha-Chlordane	15.20	15.24	262.2E6	365.9E6	25.188	24.316
11) A Endosulfan I	15.60	15.37	261.9E6	346.4E6	25.876	24.517
12) B 4,4'-DDE	15.48	15.81	247.0E6	357.8E6	25.302	24.848
13) MA Dieldrin	16.32	16.18	272.5E6	373.2E6	25.880	24.622
14) MA Endrin	17.03	17.09	243.1E6	324.1E6	25.817	24.542
15) A 4,4'-DDD	17.29	17.54	216.5E6	283.1E6	26.668	24.207
16) B Endosulfan II	17.74	17.76	241.8E6	327.4E6	25.993	24.589
17) MA 4,4'-DDT	18.16	18.52	222.2E6	298.5E6	26.486	24.402
18) B Endrin Aldehyde	19.11	18.85	192.1E6	253.7E6	26.674	24.188
19) B Endosulfan Sulfa	20.58f	19.76	184.9E6	254.4E6	24.408	23.215
20) A Methoxychlor	19.77	20.88	126.9E6	164.6E6	26.204	24.046
21) B Endrin Ketone	21.56	21.58	238.4E6	333.1E6	25.652	24.969

OM 8/13/04

671

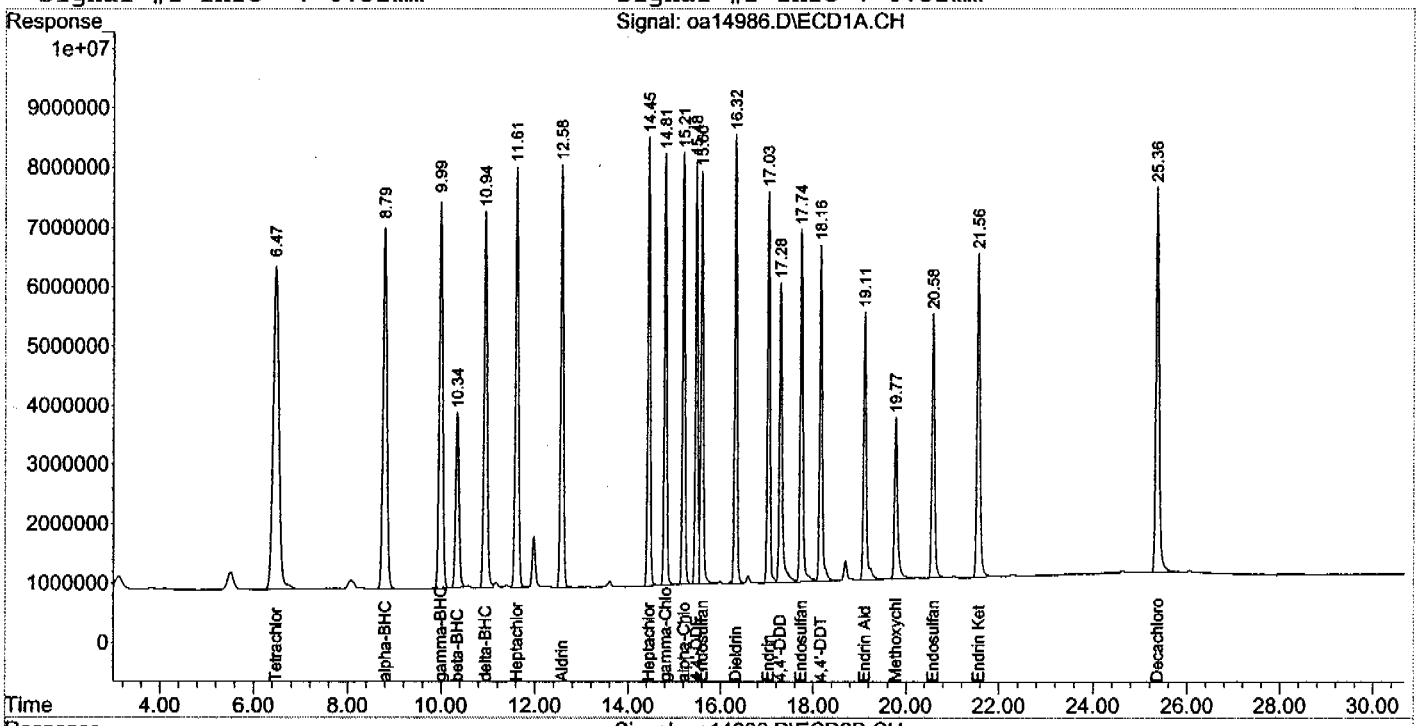
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

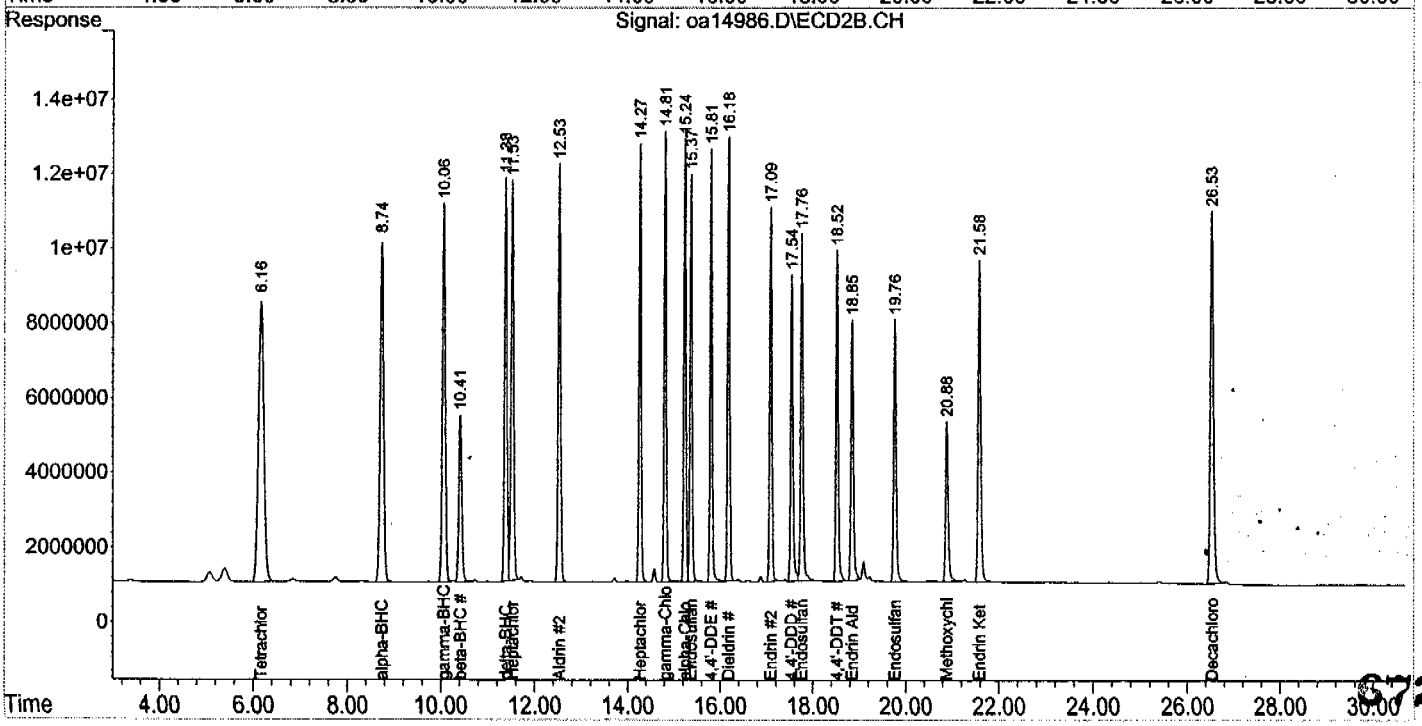
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14986.D\ECD1A.CH Vial: 21
Signal #2 : C:\MSDCHEM\1\DATA\oa14986.D\ECD2B.CH
Acq On : 13 Aug 2004 12:45 am Operator: owenm
Sample : cc433-25 Inst : GCOO
Misc : OP17688,GOA439,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 8:16 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





672

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA439-CC433
Lab FileID: OA14999.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\oa14999.D\ECD1A.CH Vial: 34
Signal #2 : C:\MSDCHEM\1\DATA\oa14999.D\ECD2B.CH
Acq On : 13 Aug 2004 9:06 am Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17672,GOA439,15.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	SAB	Tetrachloro-m-xylene	9.264	9.662 E6	-4.3	105	-0.08	6.30- 6.65
2	A	alpha-BHC	13.643	13.997 E6	-2.6	104	-0.06	8.66- 8.92
3	MA	gamma-BHC	12.875	13.252 E6	-2.9	104	-0.05	9.87-10.10
4	MA	Heptachlor	12.705	13.270 E6	-4.4	105	-0.04	11.53-11.70
5	B	beta-BHC	6.231	6.541 E6	-5.0	103	-0.04	10.24-10.44
6	B	delta-BHC	11.480	11.158 E6	2.8	100	-0.05	10.83-11.04
7	MB	Aldrin	11.618	12.123 E6	-4.3	104	-0.04	12.47-12.68
8	B	Heptachlor Epoxide	10.789	11.322 E6	-4.9	104	-0.03	14.36-14.54
9	B	gamma-Chlordane	10.455	10.936 E6	-4.6	104	-0.02	14.73-14.89
10	B	alpha-Chlordane	10.410	10.989 E6	-5.6	105	-0.03	15.12-15.29
11	A	Endosulfan I	10.121	10.885 E6	-7.5	107	-0.02	15.53-15.67
12	B	4,4'-DDE	9.764	10.175 E6	-4.2	105	-0.02	15.41-15.55
13	MA	Dieldrin	10.528	11.027 E6	-4.7	104	-0.03	16.24-16.41
14	MA	Endrin	9.416	10.568 E6	-12.2	113	-0.02	16.94-17.11
15	A	4,4'-DDD	8.117	8.814 E6	-8.6	108	-0.02	17.21-17.35
16	B	Endosulfan II	9.301	9.843 E6	-5.8	106	-0.03	17.65-17.82
17	MA	4,4'-DDT	8.391	8.917 E6	-6.3	107	-0.02	18.09-18.22
18	B	Endrin Aldehyde	7.201	7.560 E6	-5.0	101	-0.03	19.01-19.19
19	B	Endosulfan Sulfate	7.574	8.298 E6	-9.6	109	-0.03	20.48-20.67
20	A	Methoxychlor	4.844	5.144 E6	-6.2	104	-0.02	19.68-19.86
21	B	Endrin Ketone	9.295	9.652 E6	-3.8	103	-0.03	21.45-21.65
22	L8	Toxaphene{A}		----------NA----------				
23	L8	Toxaphene{B}		----------NA----------				
24	L8	Toxaphene{C}		----------NA----------				
25	L8	Toxaphene{D}		----------NA----------				
26	L8	Toxaphene{E}		----------NA----------				
27		Chlordane {A}		----------NA----------				
28		Chlordane {B}		----------NA----------				
29		Chlordane {C}		----------NA----------				
30		Chlordane {D}		----------NA----------				
31		Chlordane {E}		----------NA----------				
32	SA	Decachlorobiphenyl	6.514	6.727 E6	-3.3	102	-0.02	25.26-25.44

***** Signal #2 *****

1	SAB	Tetrachloro-m-xylene	12.559	11.978 E6	4.6	97	-0.03	6.04- 6.29
2	A	alpha-BHC	18.496	16.818 E6	9.1	97	-0.02	8.66- 8.81
3	MA	gamma-BHC	17.546	16.016 E6	8.7	96	0.00	9.99-10.12
4	MA	Heptachlor	16.993	15.742 E6	7.4	97	0.00	11.47-11.58
5	B	beta-BHC	8.434	7.909 E6	6.2	94	0.00	10.34-10.48
6	B	delta-BHC	15.828	13.571 E6	14.3	92	0.00	11.32-11.44

Continuing Calibration Summary

Job Number: N74646 **Sample:** GOA439-CC433
Account: ENSRMAA ENSR Consulting & Engineering **Lab FileID:** OA14999.D
Project: Former Camp Butner, NC

7	MB	Aldrin	16.257	14.869 E6	8.5	95	0.00	12.48-12.57
8	B	Heptachlor Epoxide	15.195	14.027 E6	7.7	95	0.00	14.21-14.32
9	B	gamma-Chlordane	15.205	13.706 E6	9.9	93	0.01	14.77-14.86
10	B	alpha-Chlordane	15.049	13.532 E6	10.1	93	0.00	15.19-15.29
11	A	Endosulfan I	14.131	12.824 E6	9.2	93	0.01	15.32-15.42
12	B	4,4'-DDE	14.400	13.005 E6	9.7	94	0.01	15.75-15.85
13	MA	Dieldrin	15.156	13.687 E6	9.7	94	0.00	16.13-16.23
14	MA	Endrin	13.207	12.644 E6	4.3	100	0.01	17.03-17.14
15	A	4,4'-DDD	11.697	10.676 E6	8.7	94	0.02	17.48-17.59
16	B	Endosulfan II	13.317	12.481 E6	6.3	95	0.01	17.70-17.81
17	MA	4,4'-DDT	12.231	11.252 E6	8.0	96	0.02	18.47-18.57
18	B	Endrin Aldehyde	10.490	9.609 E6	8.4	92	0.01	18.79-18.89
19	B	Endosulfan Sulfate	10.959	10.279 E6	6.2	97	0.02	19.71-19.81
20	A	Methoxychlor	6.847	6.769 E6	1.1	97	0.02	20.82-20.93
21	B	Endrin Ketone	13.339	11.397 E6	14.6	86	0.02	21.53-21.63
22	L8	Toxaphene{A}		----------NA----------				
23	L8	Toxaphene{B}		----------NA----------				
24	L8	Toxaphene{C}		----------NA----------				
25	L8	Toxaphene{D}		----------NA----------				
26	L8	Toxaphene{E}		----------NA----------				
27		Chlordane {A}		----------NA----------				
28		Chlordane {B}		----------NA----------				
29		Chlordane {C}		----------NA----------				
30		Chlordane {D}		----------NA----------				
31		Chlordane {E}		----------NA----------				
32	SA	Decachlorobiphenyl	9.923	8.662 E6	12.7	88	0.02	26.46-26.59

Average % D = 6.9

(0.0 %) 0 of 44 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OA14771.D PST433.M Fri Aug 13 12:38:00 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14999.D\ECD1A.CH Vial: 34
Signal #2 : C:\MSDCHEM\1\DATA\oa14999.D\ECD2B.CH
Acq On : 13 Aug 2004 9:06 am Operator: owenm
Sample : cc433-10 Inst : GC00
Misc : OP17672,GOA439,15.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 09:36:46 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	SAB Tetrachloro-m-xy	6.47f	6.17	193.2E6	239.6E6	20.859	19.075
	Spiked Amount 40.000 Range 30 - 150 Recovery =					52.15%	47.69%
2)	SA Decachlorobiphen	25.35	26.52	134.5E6	173.2E6	20.654	17.458
	Spiked Amount 40.000 Range 30 - 150 Recovery =					51.63%	43.64%
	Target Compounds						
2)	A alpha-BHC	8.79f	8.73	140.0E6	168.2E6	10.260	9.093
3)	MA gamma-BHC	9.98f	10.06	132.5E6	160.2E6	10.292	9.128
4)	MA Heptachlor	11.61f	11.53	132.7E6	157.4E6	10.444	9.264
5)	B beta-BHC	10.34f	10.41	65414204	79093504	10.499	9.378
6)	B delta-BHC	10.93f	11.38	111.6E6	135.7E6	9.720	8.574
7)	MB Aldrin	12.57f	12.53	121.2E6	148.7E6	10.435	9.146
8)	B Heptachlor Epoxi	14.45f	14.26	113.2E6	140.3E6	10.494	9.231
9)	B gamma-Chlordane	14.81	14.81	109.4E6	137.1E6	10.460	9.014
0)	B alpha-Chlordane	15.20f	15.24	109.9E6	135.3E6	10.556	8.992
1)	A Endosulfan I	15.60	15.37	108.8E6	128.2E6	10.755	9.075
2)	B 4,4'-DDE	15.48	15.80	101.7E6	130.0E6	10.421	9.031
3)	MA Dieldrin	16.32f	16.18	110.3E6	136.9E6	10.474	9.031
4)	MA Endrin	17.03	17.08	105.7E6	126.4E6	11.224	9.574
5)	A 4,4'-DDD	17.28	17.54	88139231	106.8E6	10.859	9.127
6)	B Endosulfan II	17.73	17.75	98427545	124.8E6	10.583	9.372
7)	MA 4,4'-DDT	18.15	18.52	89170143	112.5E6	10.627	9.199
8)	B Endrin Aldehyde	19.10f	18.84	75602204	96093532	10.499	9.161
9)	B Endosulfan Sulfa	20.58f	19.76	82976427	102.8E6	10.956	9.379
0)	A Methoxychlor	19.77	20.88	51444434	67694940	10.620	9.887
1)	B Endrin Ketone	21.55f	21.58	96524610	114.0E6	10.384m	8.544m

OM
8/13/04

675

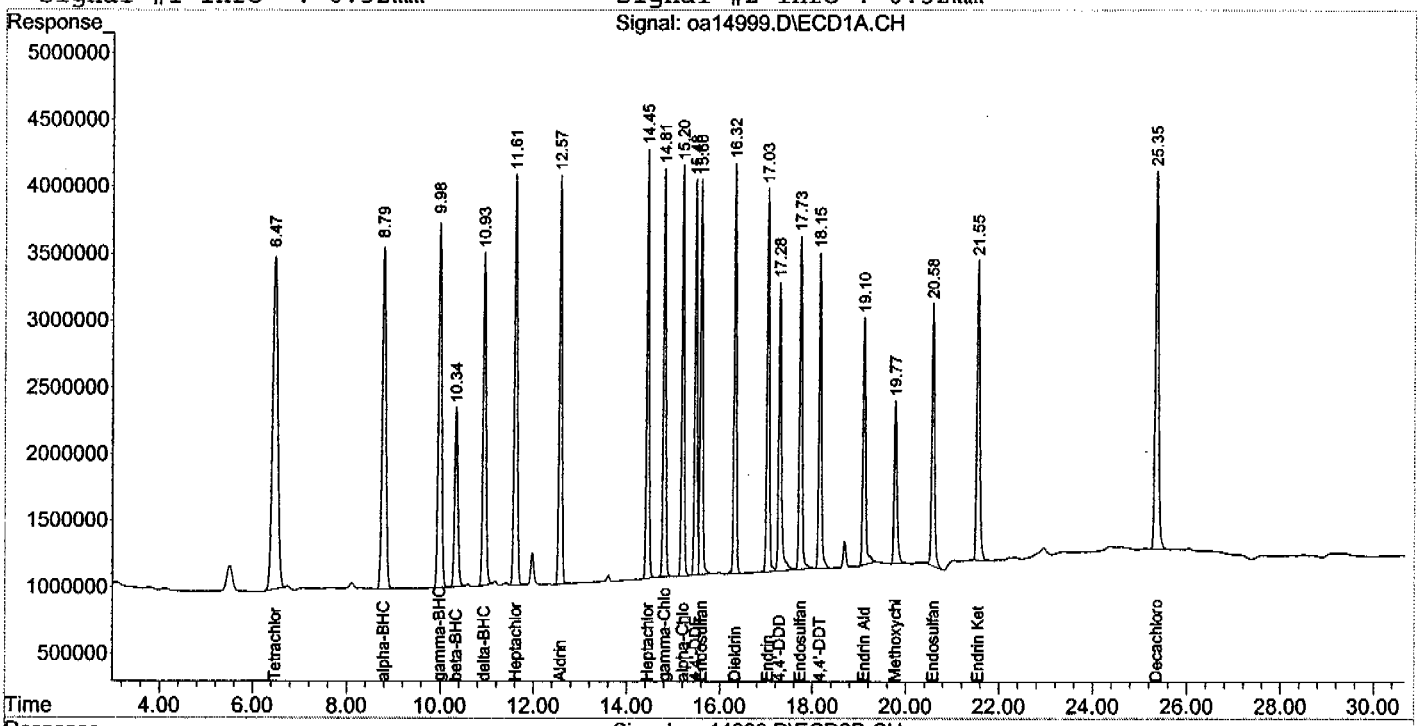
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

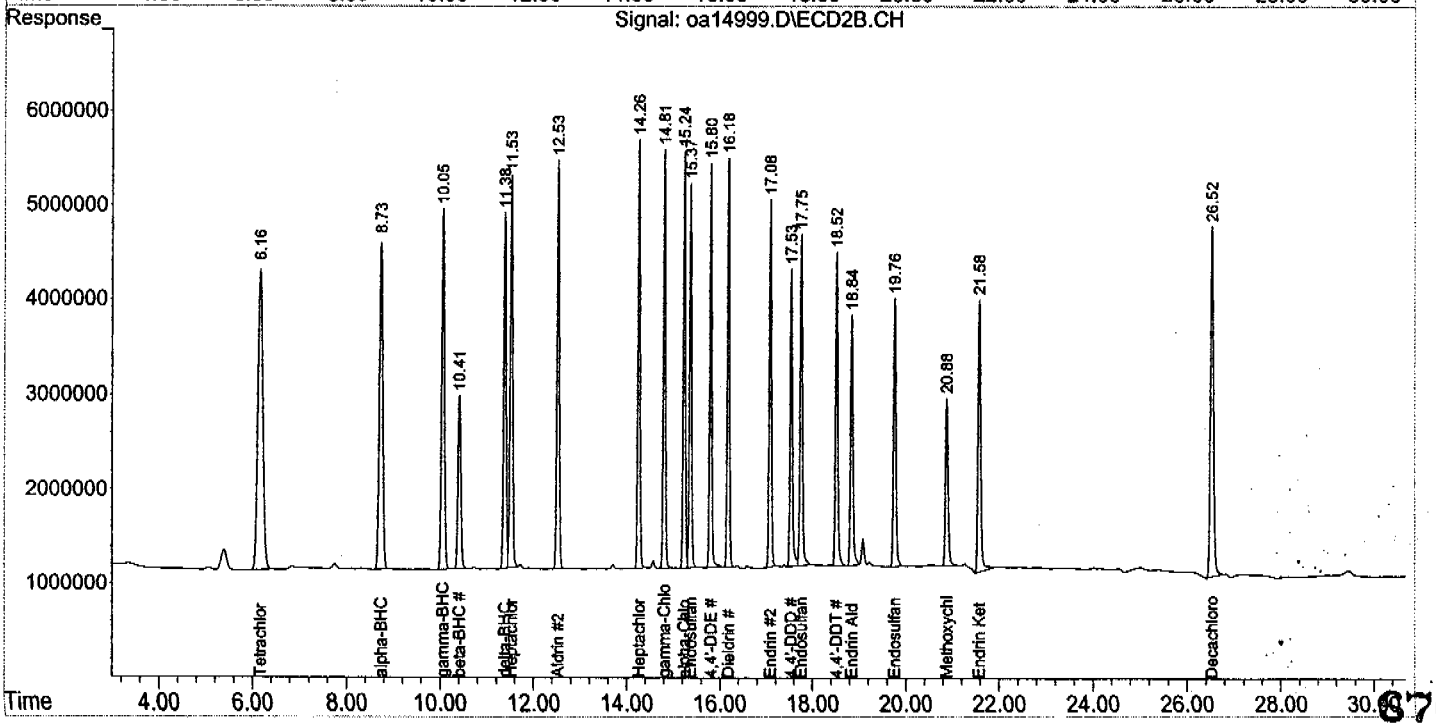
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14999.D\ECD1A.CH Vial: 34
Signal #2 : C:\MSDCHEM\1\DATA\oa14999.D\ECD2B.CH
Acq On : 13 Aug 2004 9:06 am Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17672,GOA439,15.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 9:38 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



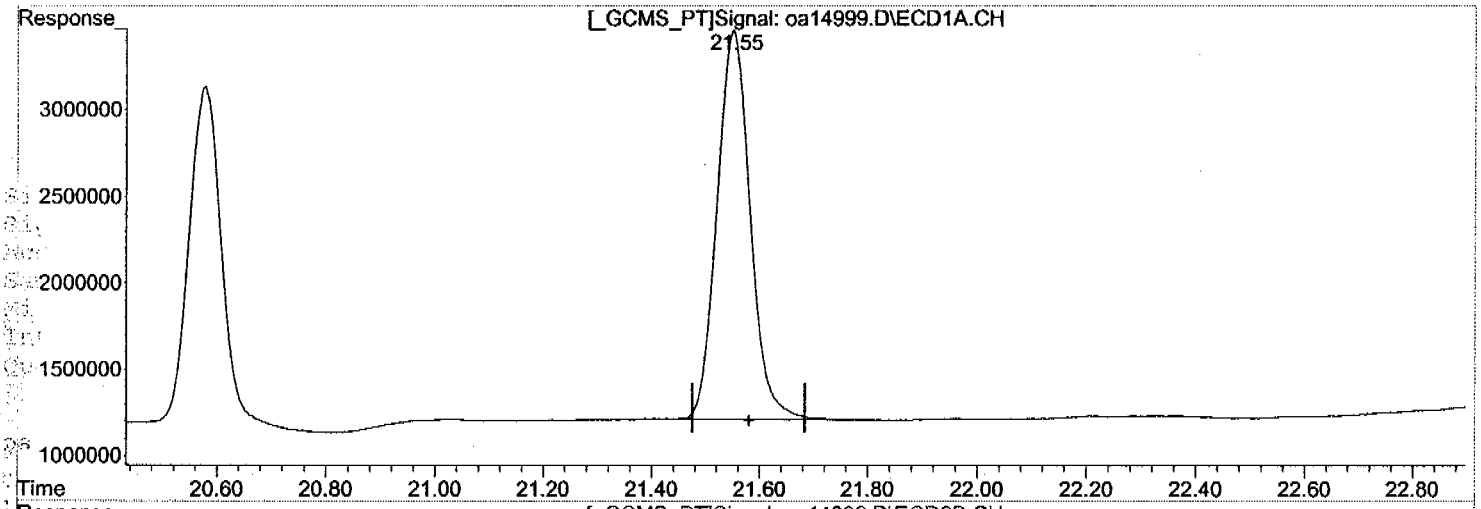


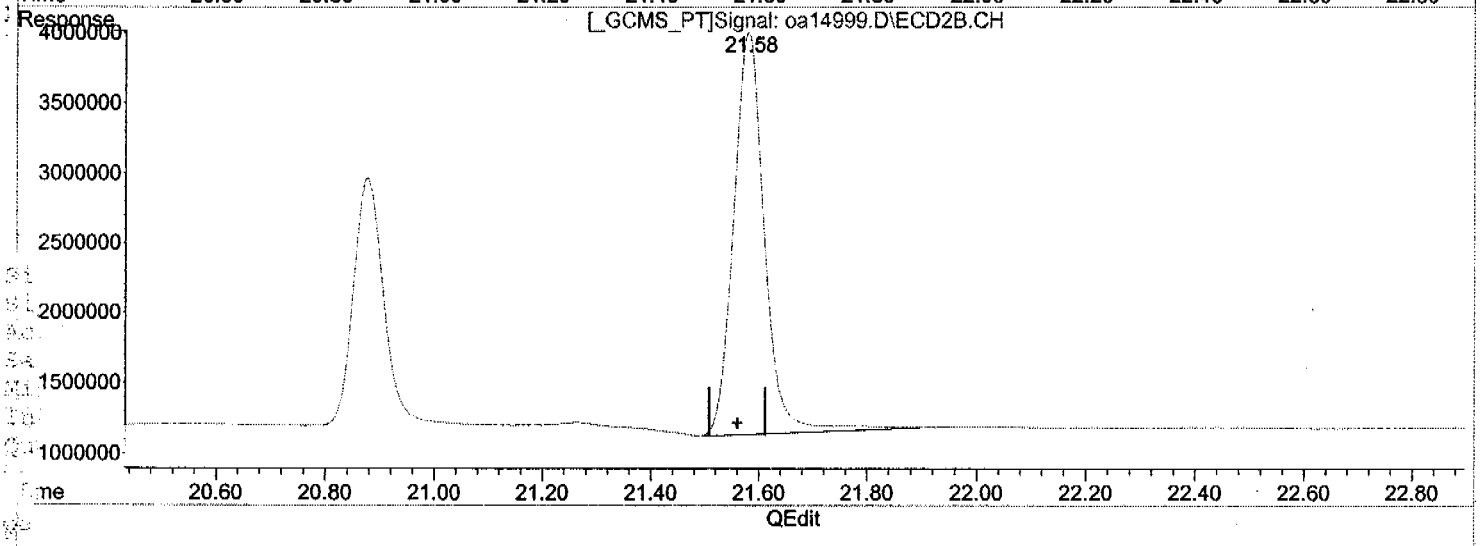
876

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa14999.D\ECD1A.CH Vial: 34
Signal #2 : C:\MSDCHEM\1\DATA\oa14999.D\ECD2B.CH
Acq On : 13 Aug 2004 9:06 am Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17672,GOA439,15.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 9:38 2004 Quant Results File: PST433.RES

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration





(21) Endrin Ketone (B)

21.55min 10.384PPB m

response 96524610

(21) Endrin Ketone #2 (B)

21.58min 8.544PPB m

response 113968685

677

(+) = Expected Retention Time

oa14999.D PST433.M Fri Aug 13 12:38:12 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14764.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\oa14764.D\ECD2B.CH
Acq On : 03 Aug 2004 5:33 pm Operator: owenm
Sample : ddt1 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 06 08:17:50 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Aug 04 08:46:11 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	SAB Tetrachloro-m-xy	6.49f	6.16	189.9E6	257.0E6	20.495	20.465
	Spiked Amount 40.000 Range 30 - 150 Recovery =					51.24%	51.16%
2)	SA Decachlorobiphen	25.32	26.46	133.3E6	203.7E6	20.469	20.529
	Spiked Amount 40.000 Range 30 - 150 Recovery =					51.17%	51.32%
	Target Compounds						
2)	A alpha-BHC	8.80f	8.71	133.2E6	175.3E6	9.763	9.476
3)	MA gamma-BHC	9.99f	10.03	122.3E6	162.5E6	9.501	9.262
5)	B beta-BHC	10.34	10.39	61643188	81255928	9.894	9.634
2)	B 4,4'-DDE	15.46	15.77	11558238	16099800	1.184	1.118
4)	MA Endrin	17.01	17.04	465.7E6	700.9E6	49.457	53.068
5)	A 4,4'-DDD	17.27	17.49	2927611	4509860	0.361m	0.386
7)	MA 4,4'-DDT	18.13	18.47	811.3E6	1296.3E6	96.688	105.984
8)	B Endrin Aldehyde	19.08	18.79	1352083	2092139	0.188m	0.199m
9)	A Methoxychlor	19.74	20.83	1038.7E6	1617.7E6	214.420	236.282
1)	B Endrin Ketone	21.52	21.52	2397885	3542854	0.258m	0.266m

OM
8/6/04

678

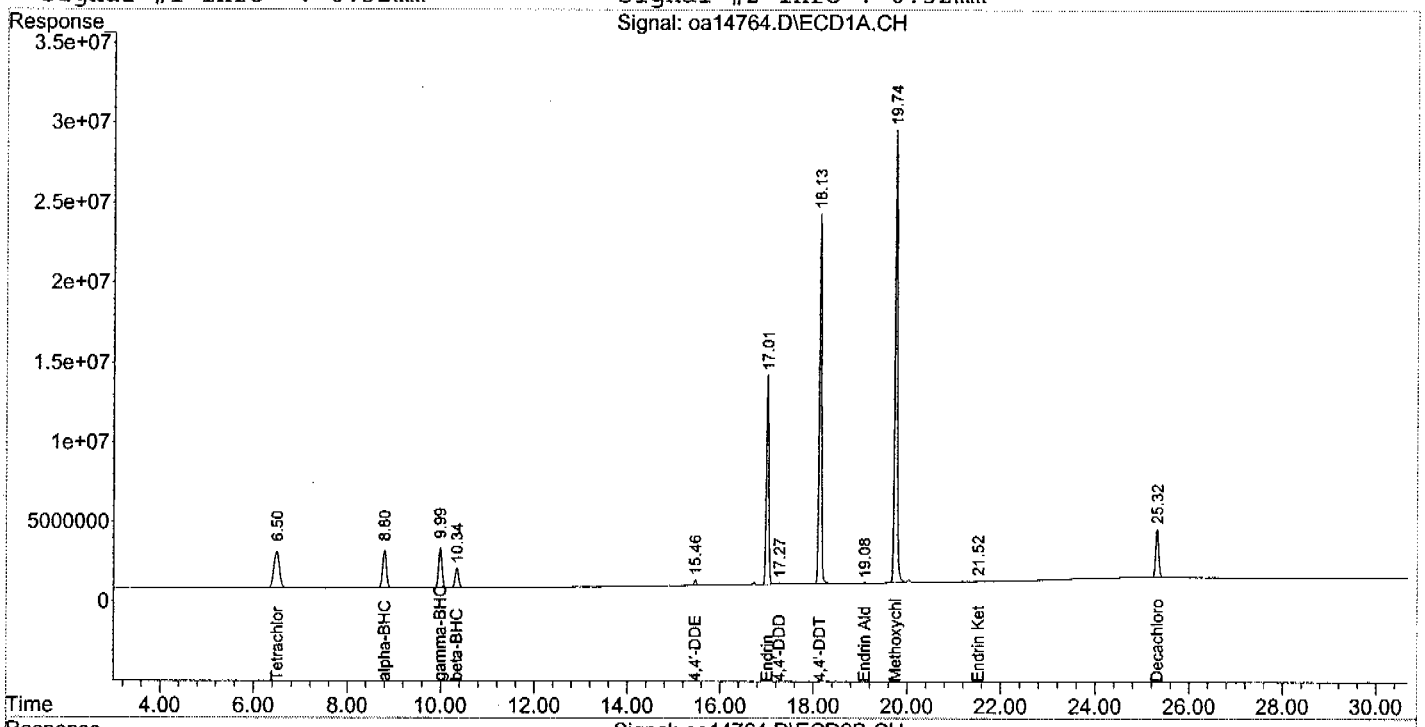
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

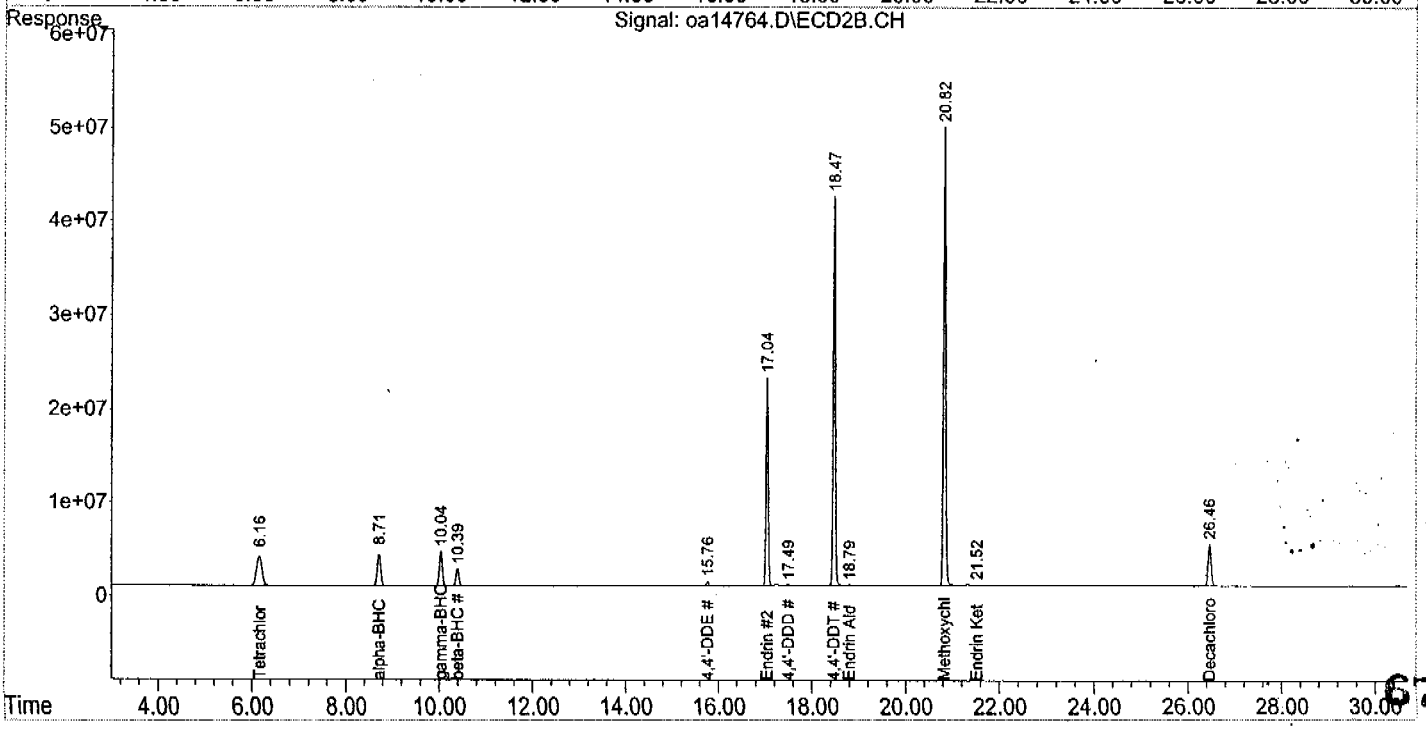
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14764.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\oa14764.D\ECD2B.CH
Acq On : 03 Aug 2004 5:33 pm Operator: owenm
Sample : ddt1 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 6 8:18 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Aug 04 08:46:11 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm



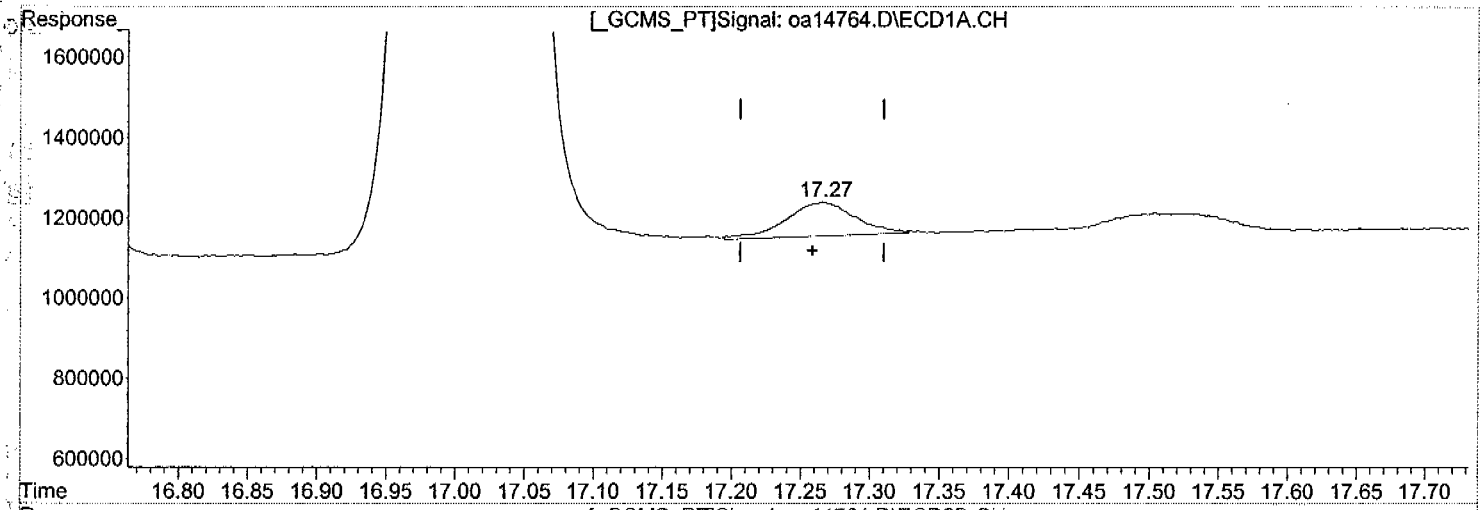


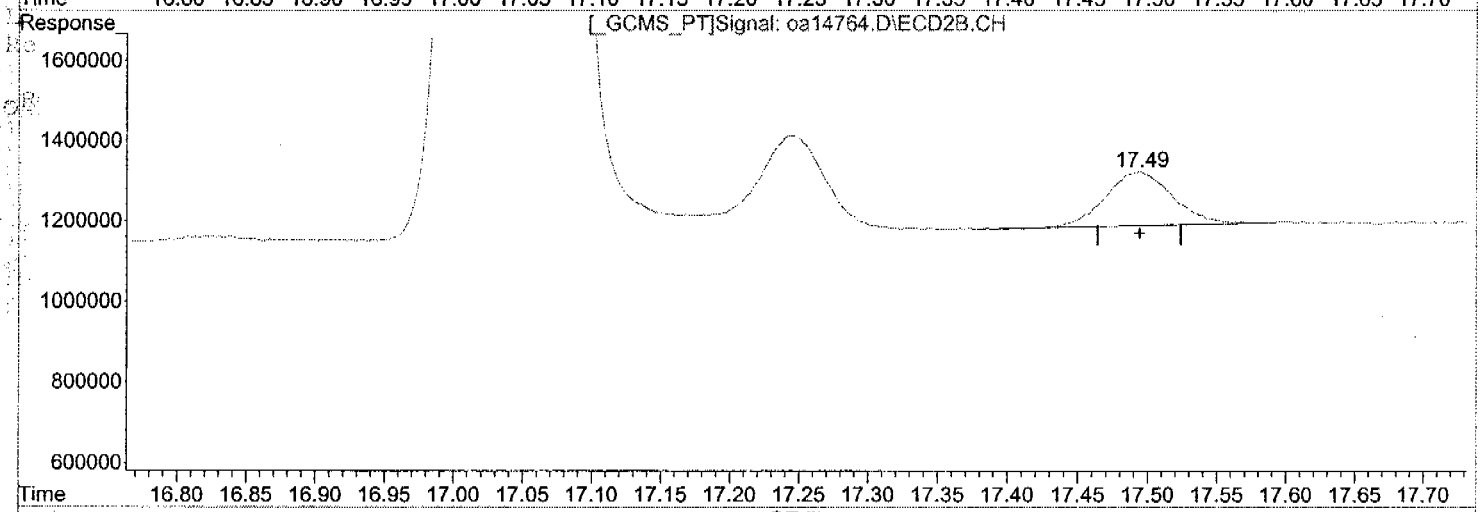
679

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa14764.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\oa14764.D\ECD2B.CH
Acq On : 03 Aug 2004 5:33 pm Operator: owenm
Sample : ddt1 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 6 8:17 2004 Quant Results File: PST433.RES

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Aug 04 08:46:11 2004
Response via : Multiple Level Calibration





(15) 4,4'-DDD (A)

17.27min 0.361PPB m

response 2927611

(15) 4,4'-DDD #2 (A)

17.49min 0.386PPB

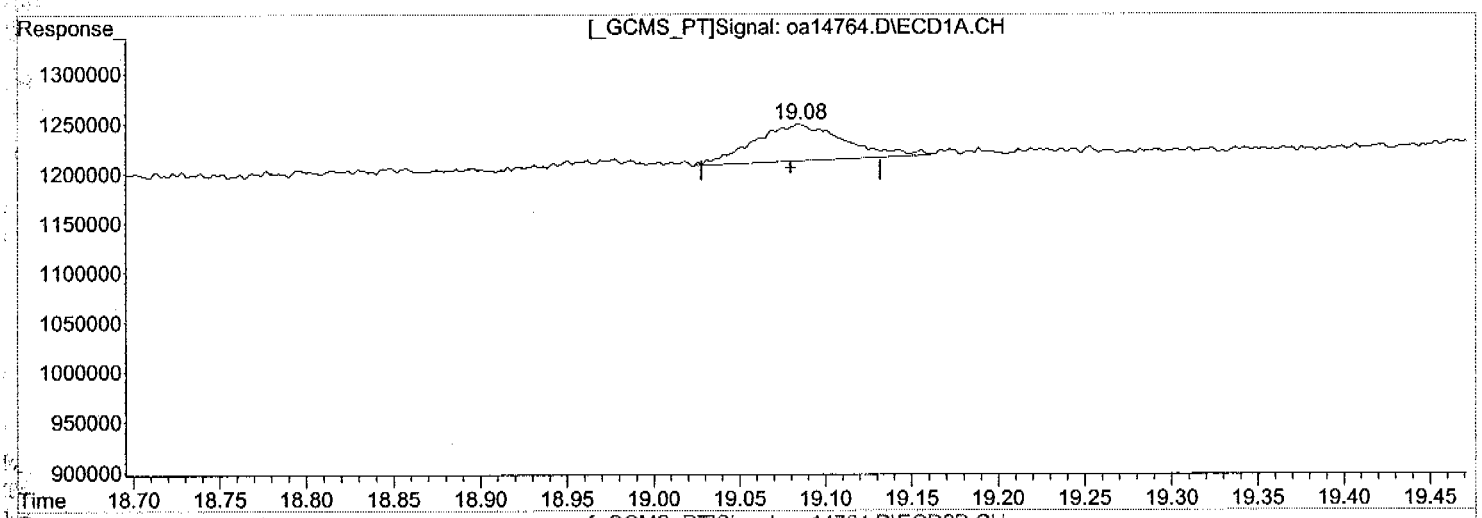
response 4509860

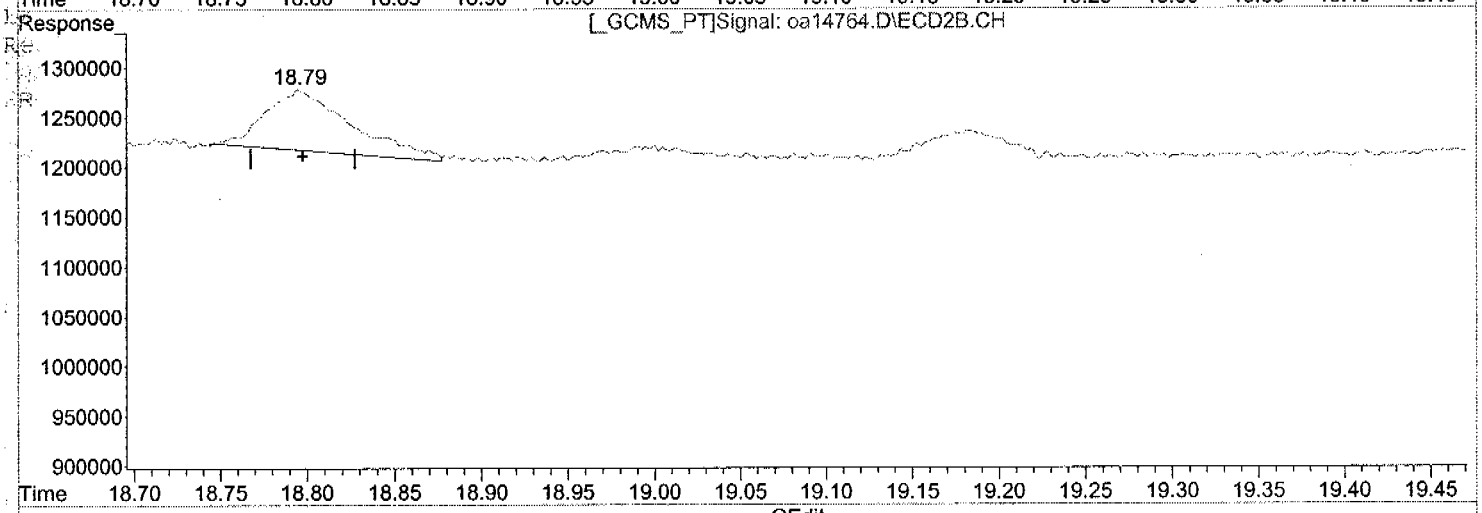
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa14764.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\oa14764.D\ECD2B.CH
Acq On : 03 Aug 2004 5:33 pm Operator: owenm
Sample : ddt1 Inst : GC00
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 6 8:17 2004 Quant Results File: PST433.RES

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Aug 04 08:46:11 2004
Response via : Multiple Level Calibration





(18) Endrin Aldehyde (B)

19.08min 0.188PPB m

response 1352083

(18) Endrin Aldehyde #2 (B)

18.79min 0.199PPB m

response 2092139

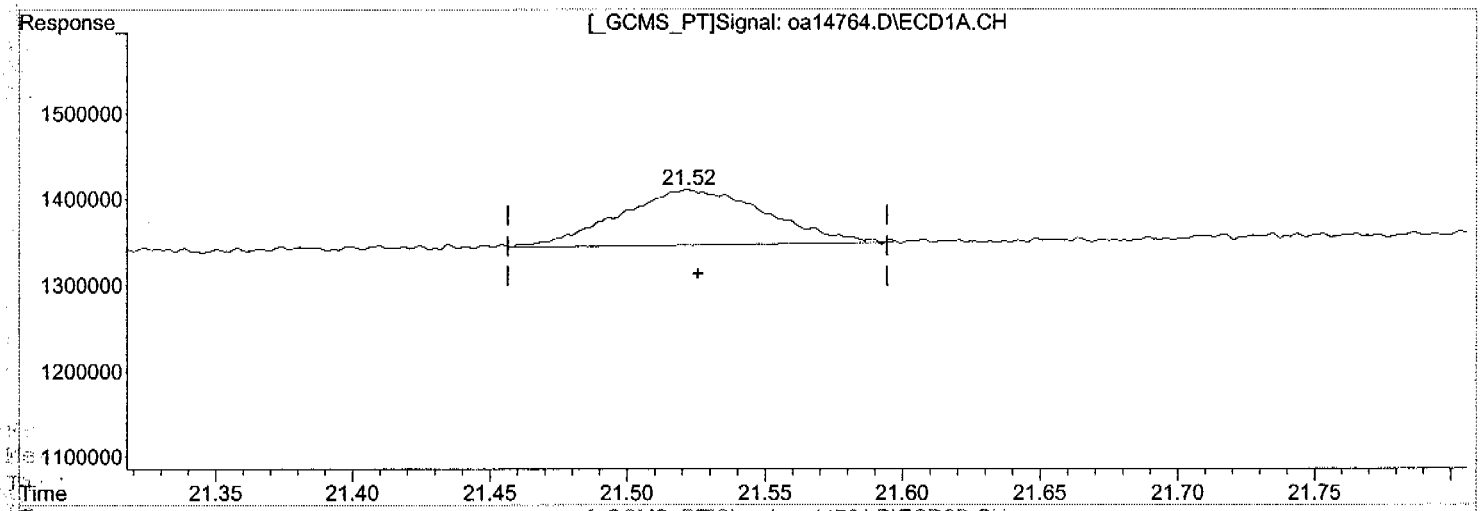
(+) = Expected Retention Time

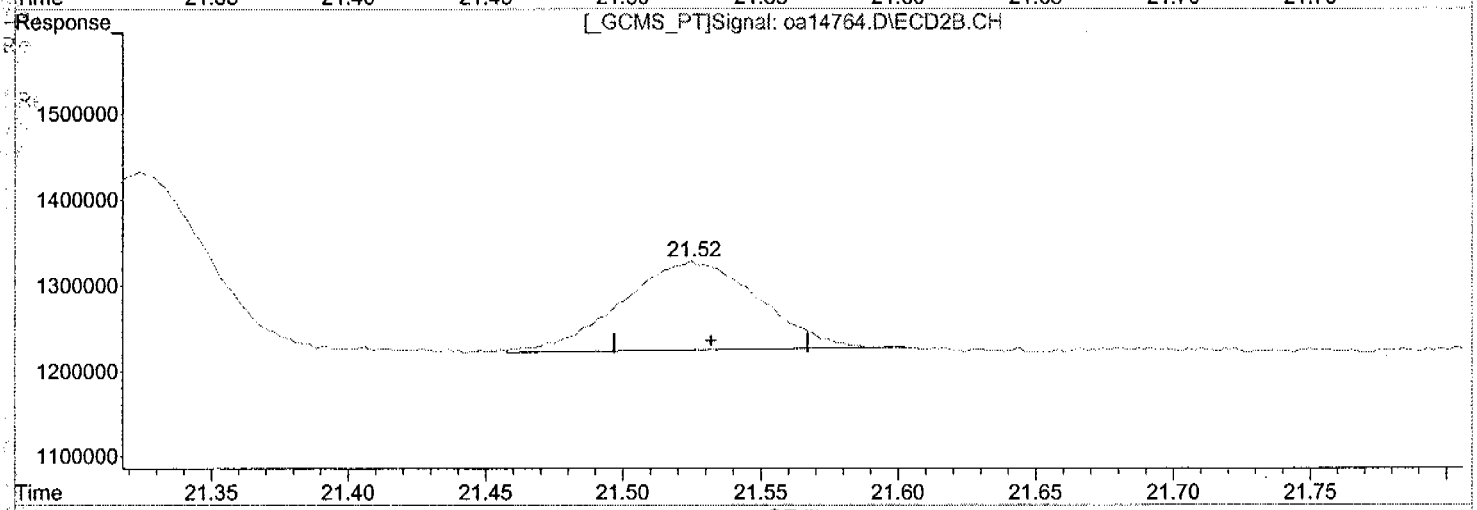
oa14764.D PST433.M Fri Aug 06 08:18:43 2004 GC

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa14764.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\oa14764.D\ECD2B.CH
Acq On : 03 Aug 2004 5:33 pm Operator: owenm
Sample : ddt1 Inst : GCOO
Misc : OP17597,GOA433,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 6 8:17 2004 Quant Results File: PST433.RES

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Aug 04 08:46:11 2004
Response via : Multiple Level Calibration





(21) Endrin Ketone (B)

21.52min 0.258PPB m

response 2397885

(21) Endrin Ketone #2 (B)

21.52min 0.266PPB m

response 3542854

S82

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14974.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\oa14974.D\ECD2B.CH
Acq On : 12 Aug 2004 5:09 pm Operator: owenm
Sample : ddt2 Inst : GCOO
Misc : OP17667,GOA439,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 17:40:19 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1)	SAB Tetrachloro-m-xy	6.48f	6.16	183.4E6	235.4E6	19.797	18.744	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					49.49%	46.86%	
2)	SA Decachlorobiphen	25.35	26.53	137.0E6	196.0E6	21.037	19.752	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					52.59%	49.38%	
	Target Compounds							
2)	A alpha-BHC	8.79f	8.73	127.9E6	158.6E6	9.373	8.577	
3)	MA gamma-BHC	9.98f	10.06	117.9E6	148.0E6	9.160	8.435	
5)	B beta-BHC	10.34f	10.41	59487312	74200632	9.548	8.797	
3)	B 4,4'-DDE	15.48	15.80	14165704	18272846	1.451	1.269	
4)	MA Endrin	17.03	17.09	463.5E6	634.3E6	49.226	48.031	
5)	A 4,4'-DDD	17.29	17.54	5627021	5849960	0.693	0.500	#
7)	MA 4,4'-DDT	18.16	18.52	799.8E6	1162.2E6	95.315	95.021	
0)	A Methoxychlor	19.77	20.88	1013.9E6	1483.0E6	209.295	216.597	
1)	B Endrin Ketone	21.56	0.00	2260344	0	0.243	N.D.	#

OM 8/13/04

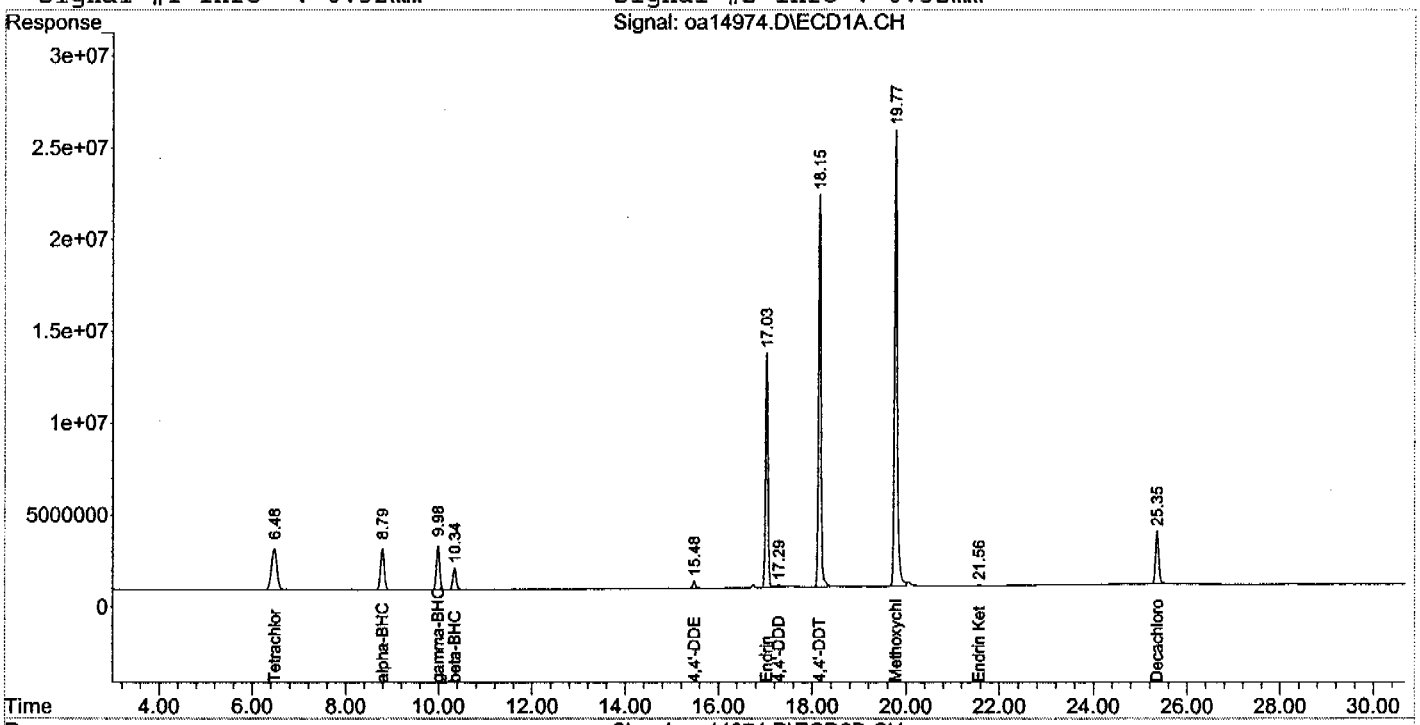
383

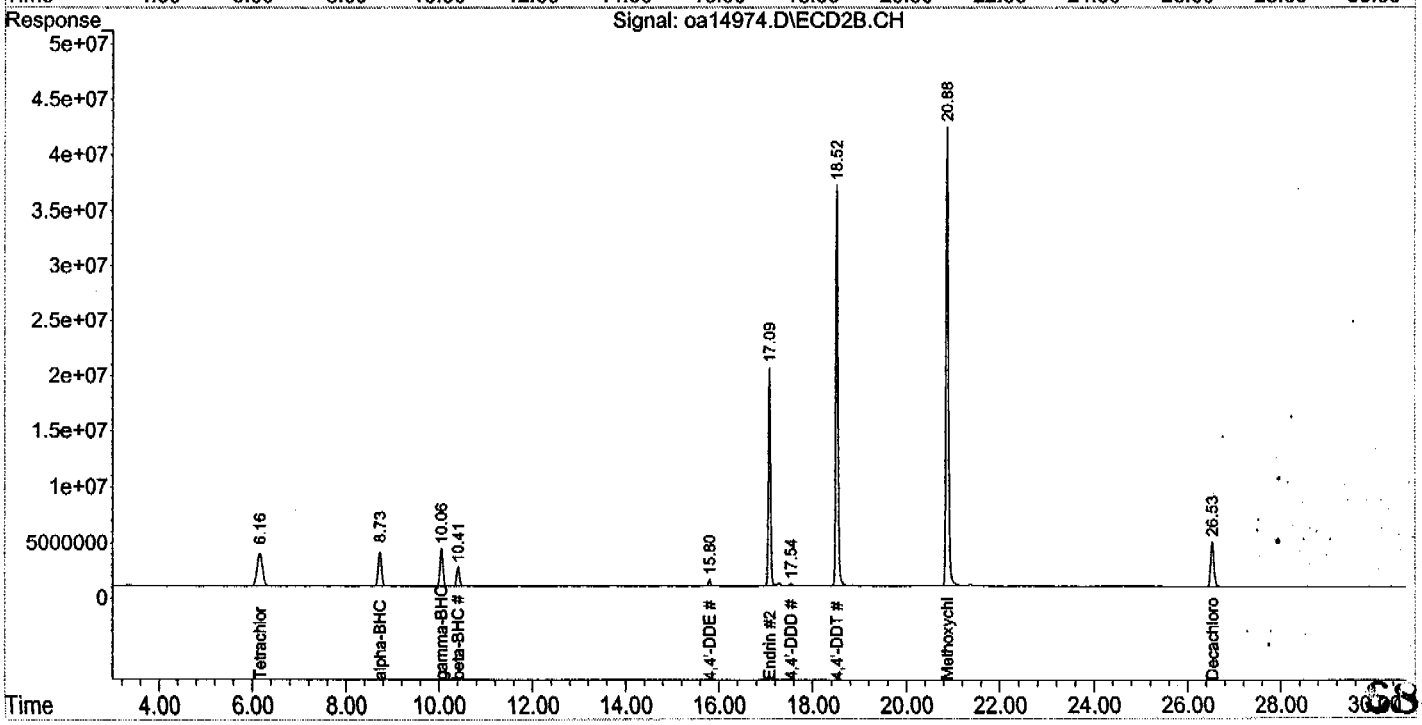
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa14974.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\oa14974.D\ECD2B.CH
Acq On : 12 Aug 2004 5:09 pm Operator: owenm
Sample : ddt2 Inst : GCOO
Misc : OP17667,GOA439,1.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 12:35 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14987.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\oa14987.D\ECD2B.CH
Acq On : 13 Aug 2004 1:52 am Operator: owenm
Sample : ddt3 Inst : GCOO
Misc : OP17688,GOA439,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 02:22:59 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	SAB Tetrachloro-m-xy	6.48f	6.17	193.3E6	237.0E6	20.870	18.870
	Spiked Amount 40.000 Range 30 - 150 Recovery =					52.18%	47.17%
2)	SA Decachlorobiphen	25.36	26.53	136.9E6	202.4E6	21.010	20.401
	Spiked Amount 40.000 Range 30 - 150 Recovery =					52.52%	51.00%
	Target Compounds						
2)	A alpha-BHC	8.79f	8.73	129.1E6	158.7E6	9.461	8.582
3)	MA gamma-BHC	9.98f	10.06	119.4E6	148.5E6	9.273	8.465
3)	B beta-BHC	10.34f	10.41	60155344	74886852	9.655	8.879
2)	B 4,4'-DDE	15.48	15.81	16267556	20540427	1.666	1.426
4)	MA Endrin	17.03	17.09	448.6E6	629.9E6	47.641	47.693
3)	A 4,4'-DDD	17.29	17.54	7069303	8648488	0.871	0.739
7)	MA 4,4'-DDT	18.16	18.52	803.9E6	1206.4E6	95.802	98.629
2)	B Endrin Aldehyde	19.11	18.85	14788183	23397959	2.054	2.231
5)	A Methoxychlor	19.77	20.88	1009.8E6	1493.2E6	208.464	218.090
1)	B Endrin Ketone	21.56	21.59	10209218	13217144	1.098	0.991

OM 8/13/04

885

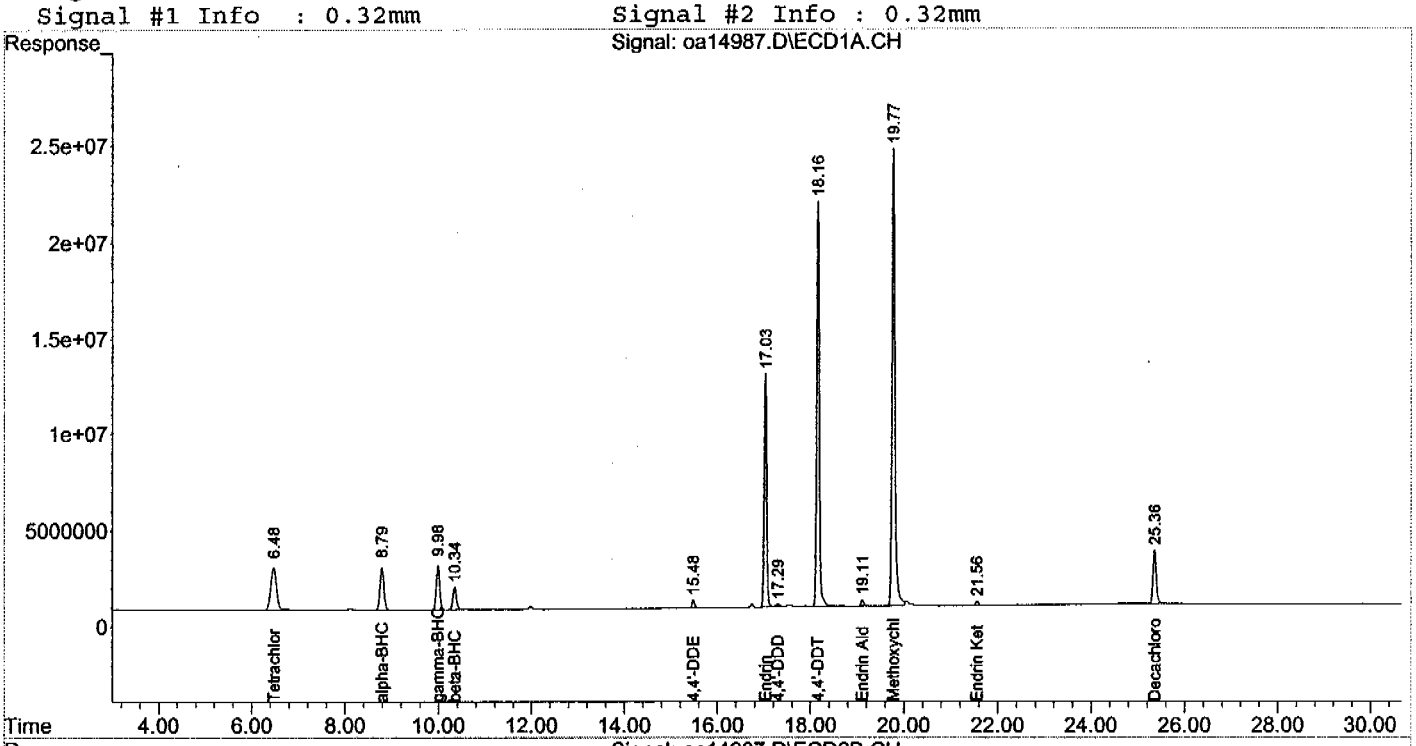
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

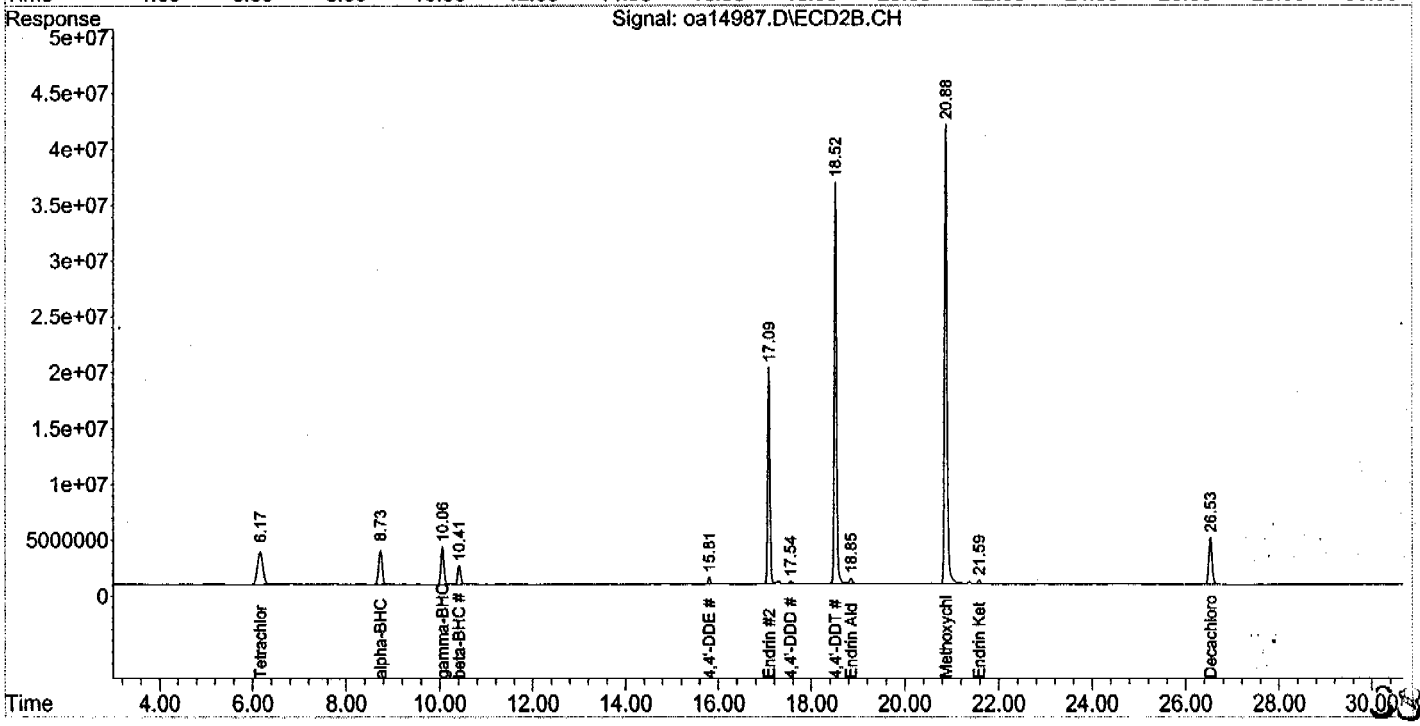
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14987.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\oa14987.D\ECD2B.CH
Acq On : 13 Aug 2004 1:52 am Operator: owenm
Sample : ddt3 Inst : GCOO
Misc : OP17688,GOA439,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 12:36 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14976.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\oa14976.D\ECD2B.CH
Acq On : 12 Aug 2004 6:16 pm Operator: owenm
Sample : op17688-mb1 Inst : GCOO
Misc : OP17688,GOA439,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 18:46:42 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) SAB Tetrachloro-m-xy	6.47f	6.17	356.7E6	464.6E6	38.500	36.991
Spiked Amount 40.000 Range 30 - 150 Recovery =					96.25%	92.48%
32) SA Decachlorobiphen	25.36	26.53	219.4E6	324.5E6	33.679	32.706
Spiked Amount 40.000 Range 30 - 150 Recovery =					84.20%	81.77%

Target Compounds

OM 8/13/04

687

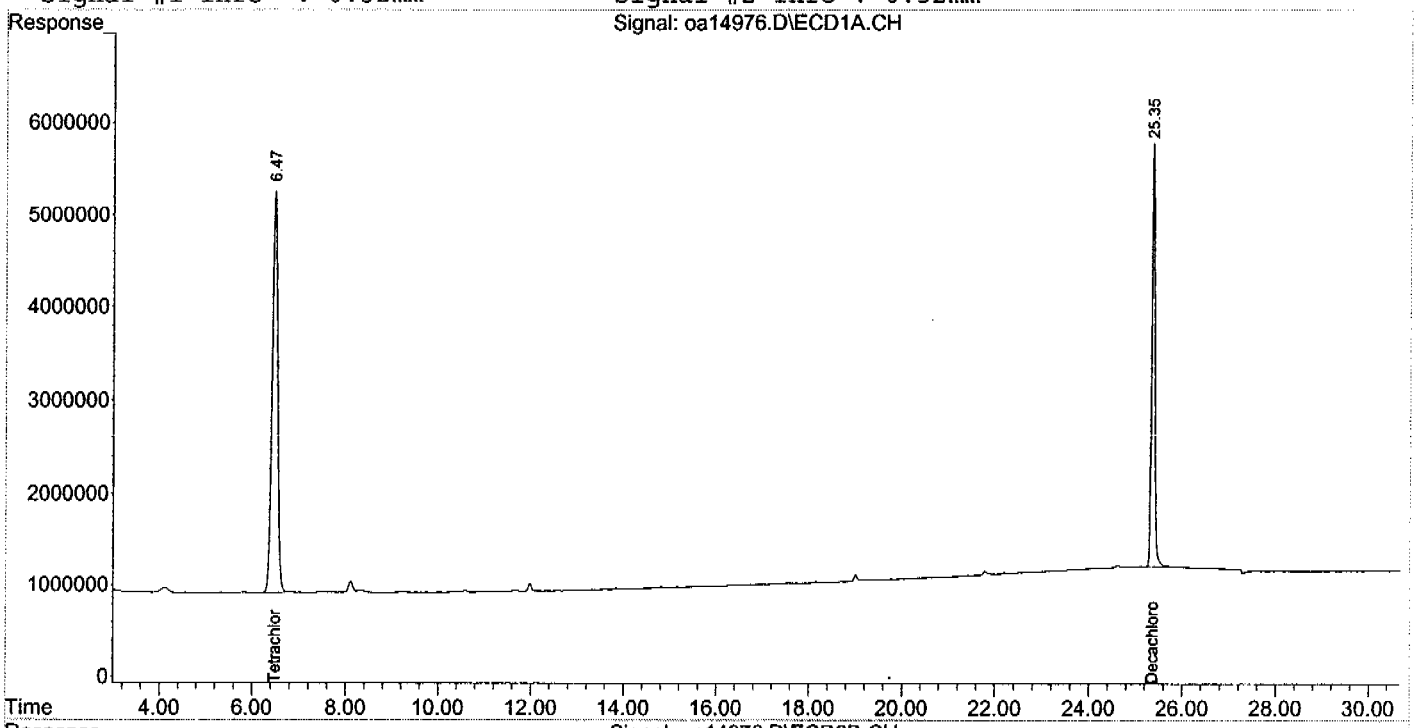
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

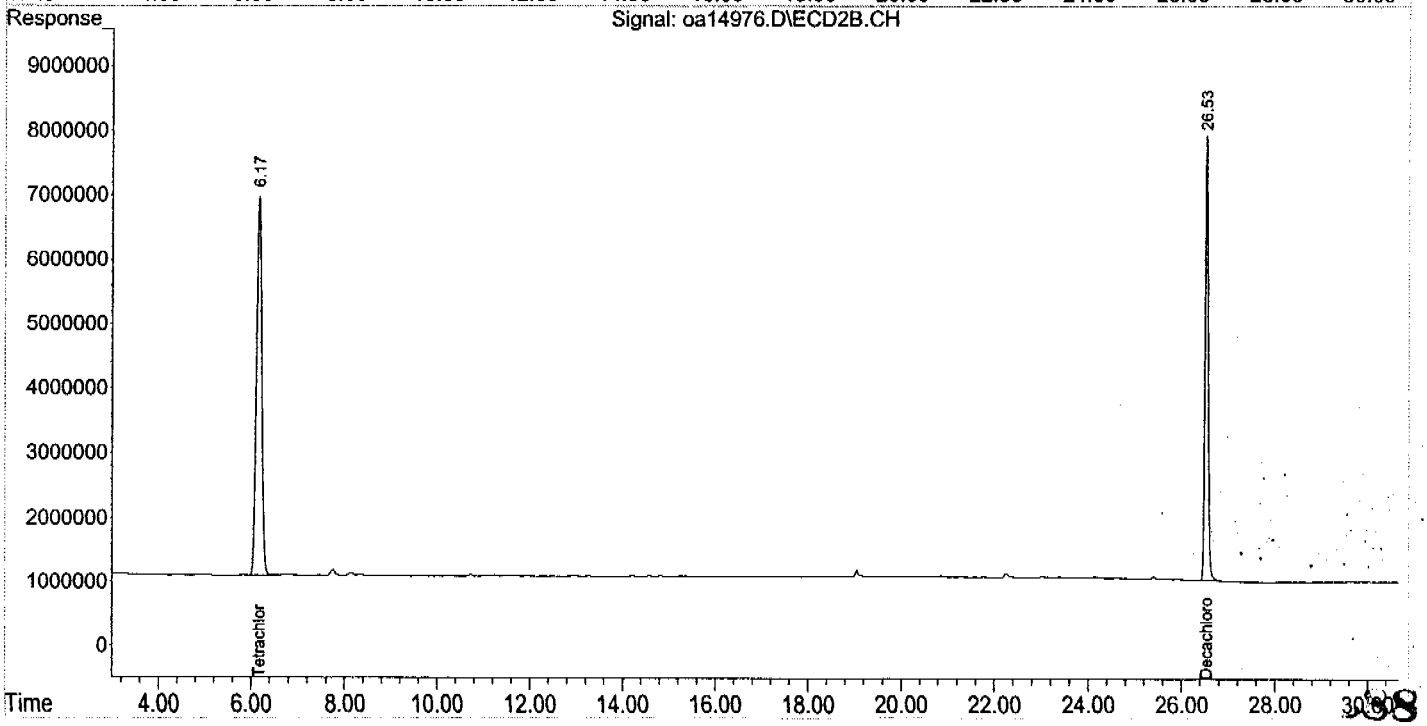
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14976.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\oa14976.D\ECD2B.CH
Acq On : 12 Aug 2004 6:16 pm Operator: owenm
Sample : op17688-mb1 Inst : GCOO
Misc : OP17688,GOA439,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 18:46 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14977.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\oa14977.D\ECD2B.CH
Acq On : 12 Aug 2004 6:49 pm Operator: owenm
Sample : op17688-bs1 Inst : GCOO
Misc : OP17688,GOA439,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 19:19:57 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1)	SAB Tetrachloro-m-xy	6.47f	6.17	349.2E6	454.0E6	37.692	36.148	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					94.23%	90.37%	
32)	SA Decachlorobiphen	25.35	26.53	241.6E6	359.4E6	37.088	36.216	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					92.72%	90.54%	
	Target Compounds							
2)	A alpha-BHC	8.79f	8.73	618.1E6	857.8E6	45.310	46.375	
3)	MA gamma-BHC	9.98f	10.06	581.8E6	811.3E6	45.189	46.240	
4)	MA Heptachlor	11.61f	11.53	553.3E6	760.3E6	43.551	44.740	
5)	B beta-BHC	10.34f	10.41	259.2E6	352.9E6	41.602	41.841	
6)	B delta-BHC	10.93f	11.38	504.6E6	695.7E6	43.954	43.953	
7)	MB Aldrin	12.57f	12.53	483.4E6	692.3E6	41.608	42.582	
8)	B Heptachlor Epoxi	14.45f	14.27	489.2E6	698.9E6	45.344	45.997	
9)	B gamma-Chlordane	14.81	14.81	479.7E6	708.9E6	45.878	46.621	
10)	B alpha-Chlordane	15.19f	15.24	899.8E6	677.7E6	86.439	45.035	#
11)	A Endosulfan I	15.60	15.37	452.9E6	638.9E6	44.749	45.214	
12)	B 4,4'-DDE	15.48	15.80	455.1E6	671.3E6	46.613	46.614	
13)	MA Dieldrin	16.32f	16.18	502.3E6	733.4E6	47.716	48.394	
14)	MA Endrin	17.03	17.09	450.5E6	623.3E6	47.842	47.197	
15)	A 4,4'-DDD	17.28	17.54	395.6E6	544.6E6	48.738	46.562	
16)	B Endosulfan II	17.74	17.76	441.0E6	629.4E6	47.412	47.265	
17)	MA 4,4'-DDT	18.16	18.52	407.7E6	572.5E6	48.592	46.804	
18)	B Endrin Aldehyde	19.10f	18.84	299.6E6	433.0E6	41.600	41.277	
19)	B Endosulfan Sulfa	20.58f	19.76	354.5E6	509.5E6	46.803	46.493	
20)	A Methoxychlor	19.77	20.88	228.1E6	320.4E6	47.080	46.804	
21)	B Endrin Ketone	21.55f	21.58	458.3E6	656.6E6	49.307	49.223	

OPM 8/13/04

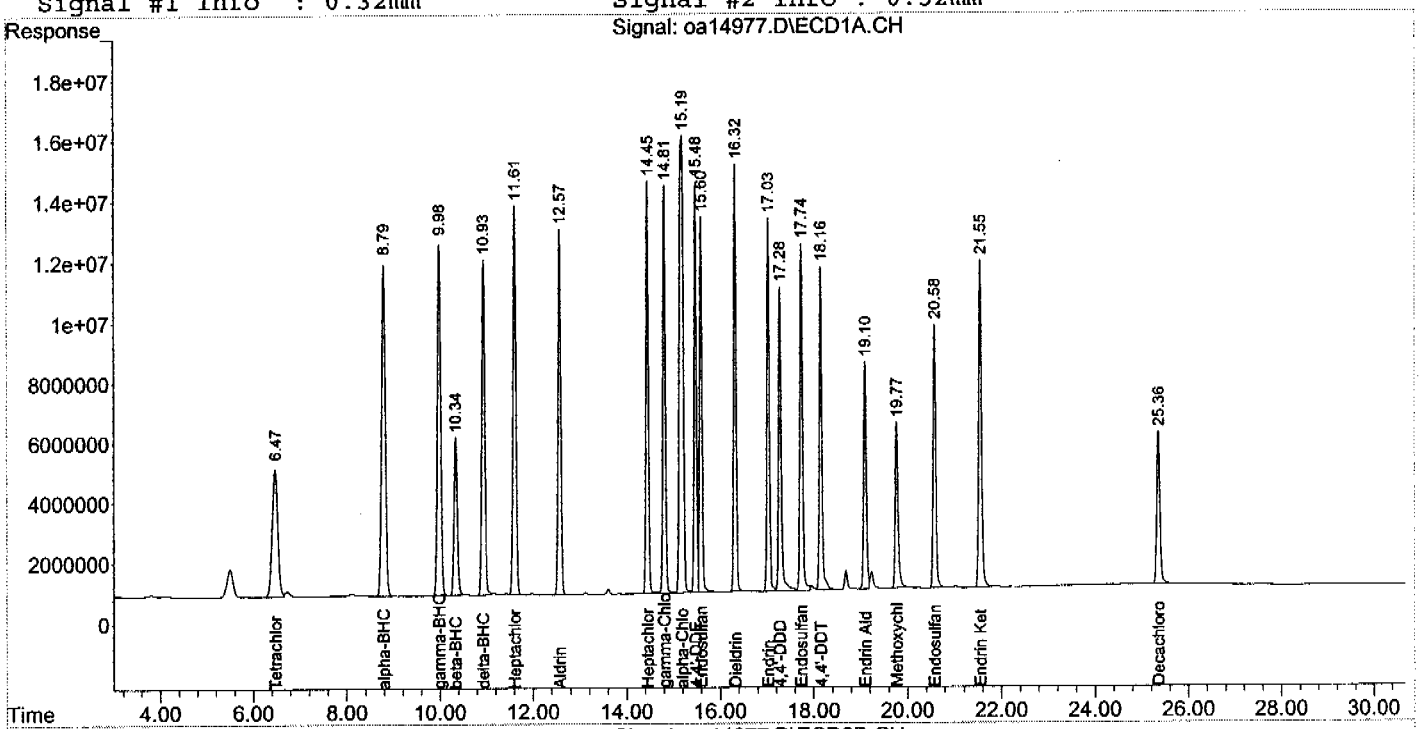
689

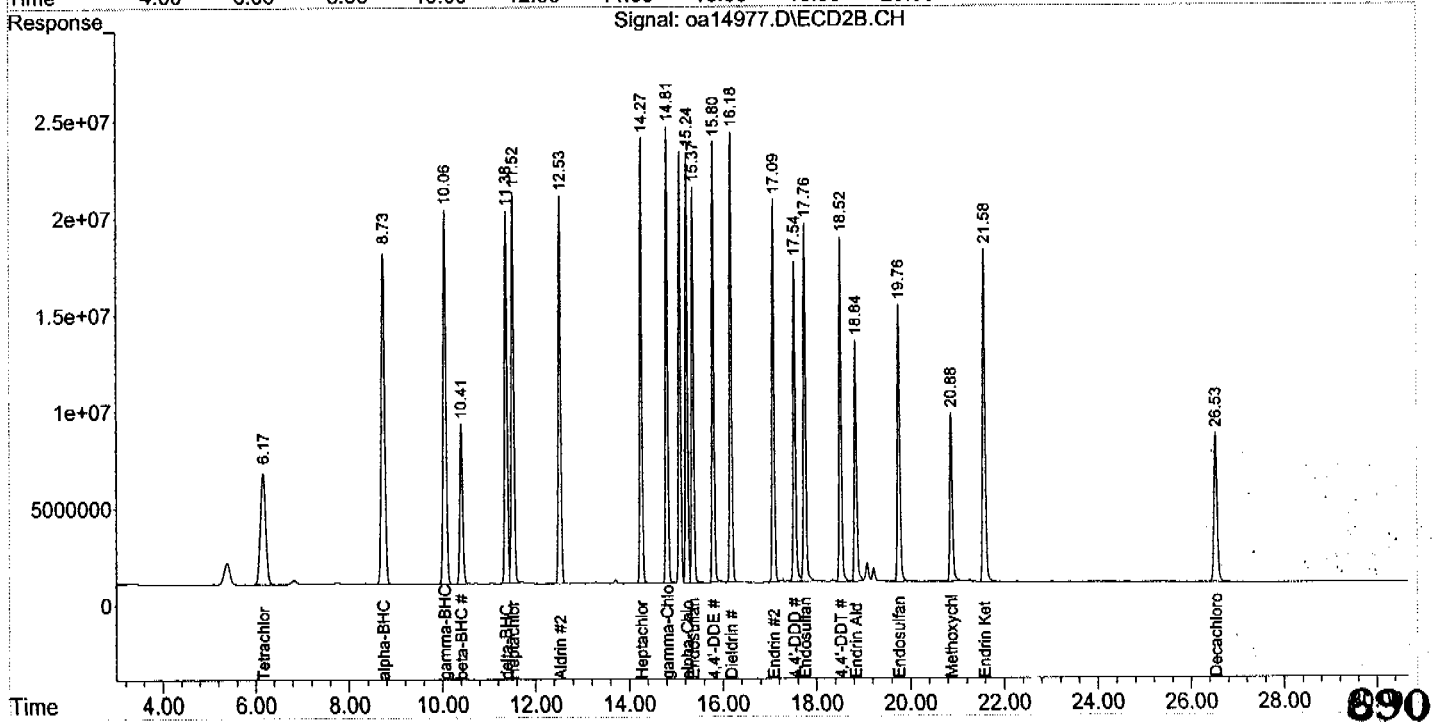
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa14977.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\oa14977.D\ECD2B.CH
Acq On : 12 Aug 2004 6:49 pm Operator: owenm
Sample : op17688-bs1 Inst : GCOO
Misc : OP17688,GOA439,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 13:08 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





890

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14978.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\oa14978.D\ECD2B.CH
Acq On : 12 Aug 2004 7:22 pm Operator: owenm
Sample : op17688-bsd Inst : GCOO
Misc : OP17688,GOA439,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 19:53:10 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1)	SAB Tetrachloro-m-xy	6.48f	6.17	369.8E6	478.4E6	39.913	38.090	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					99.78%	95.23%	
32)	SA Decachlorobiphen	25.35	26.53	248.7E6	379.0E6	38.175	38.197	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					95.44%	95.49%	
	Target Compounds							
2)	A alpha-BHC	8.79f	8.74	412.7E6	555.9E6	30.251	30.057	
3)	MA gamma-BHC	9.99f	10.06	391.0E6	524.9E6	30.367	29.916	
4)	MA Heptachlor	11.61f	11.53	385.7E6	511.7E6	30.356	30.110	
5)	B beta-BHC	10.34f	10.41	178.5E6	236.7E6	28.656	28.065	
6)	B delta-BHC	10.94f	11.38	334.7E6	445.1E6	29.159	28.119	
7)	MB Aldrin	12.57f	12.53	332.6E6	467.1E6	28.625	28.731	
8)	B Heptachlor Epoxi	14.45f	14.27	332.2E6	465.0E6	30.789	30.603	
9)	B gamma-Chlordane	14.81	14.82	336.1E6	485.6E6	32.150	31.933	
10)	B alpha-Chlordane	15.19f	15.24	618.7E6	455.4E6	59.436	30.259	#
11)	A Endosulfan I	15.60	15.37	306.5E6	421.5E6	30.288	29.832	
12)	B 4,4'-DDE	15.48	15.80	304.9E6	426.1E6	31.224	29.589	
13)	MA Dieldrin	16.32	16.18	341.5E6	482.9E6	32.438	31.864	
14)	MA Endrin	17.03	17.09	304.9E6	416.2E6	32.384	31.516	
15)	A 4,4'-DDD	17.28	17.54	263.6E6	358.3E6	32.471	30.632	
16)	B Endosulfan II	17.74	17.75	297.4E6	417.8E6	31.972	31.376	
17)	MA 4,4'-DDT	18.16	18.52	284.7E6	399.8E6	33.927m	32.683m	
18)	B Endrin Aldehyde	19.11	18.84	215.1E6	303.1E6	29.873	28.893	
19)	B Endosulfan Sulfa	20.58f	19.76	238.6E6	334.9E6	31.503	30.558	
20)	A Methoxychlor	19.77	20.88	169.8E6	235.9E6	35.058m	34.450	
21)	B Endrin Ketone	21.55f	21.58	310.3E6	444.8E6	33.377	33.346	

OPM
8/13/04

691

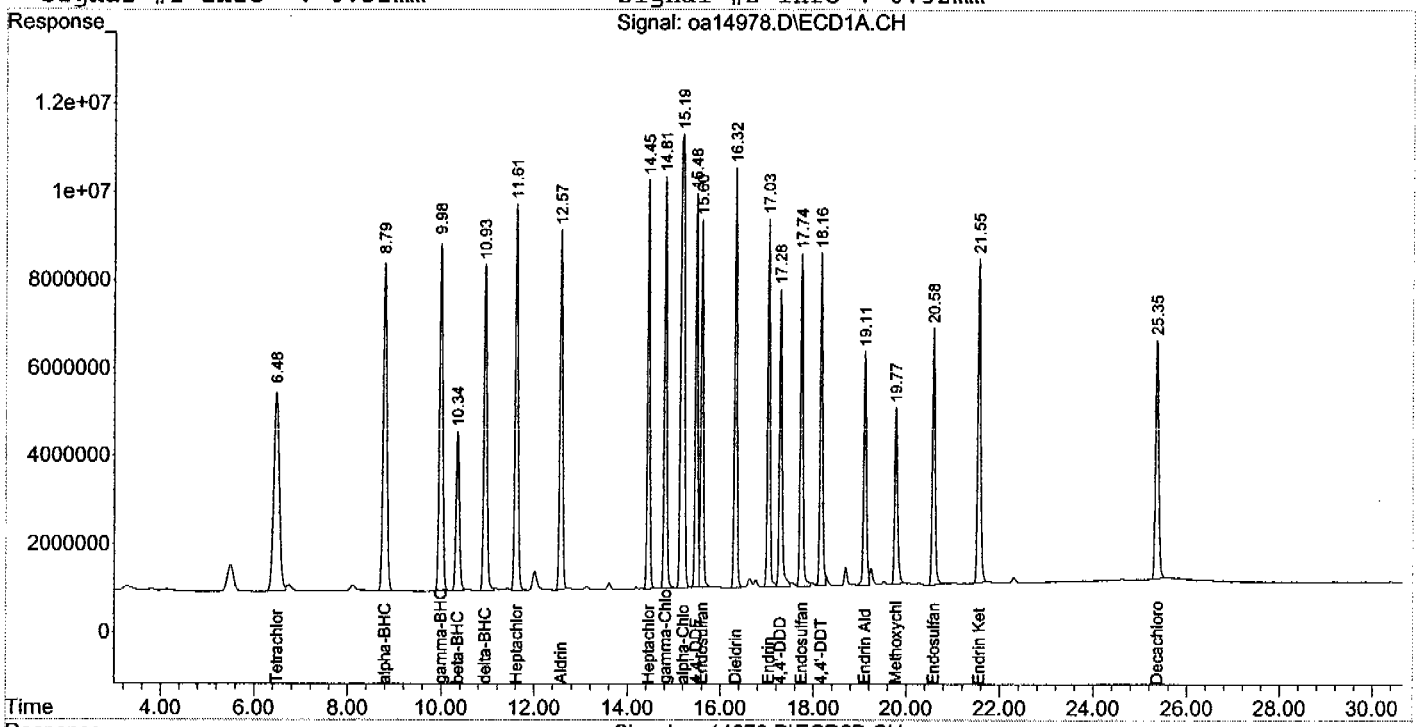
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

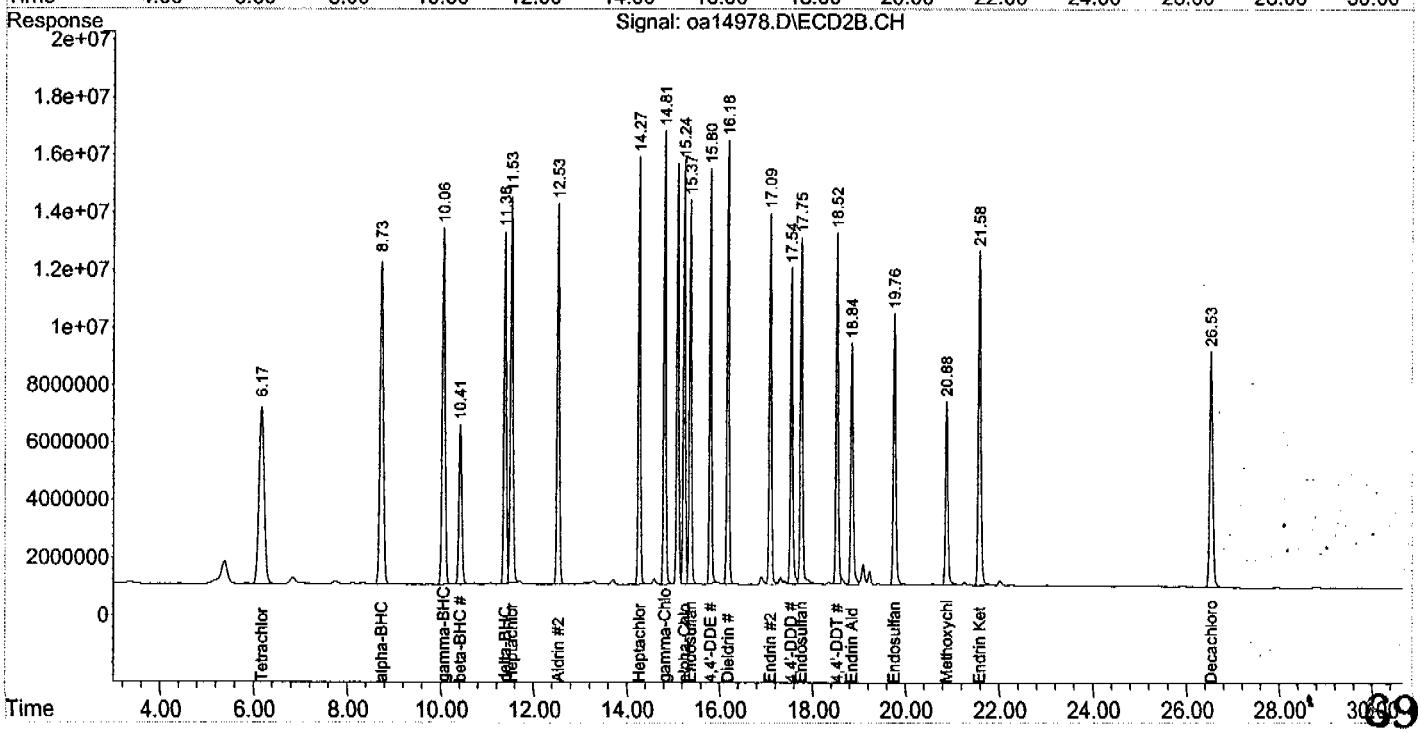
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14978.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\oa14978.D\ECD2B.CH
Acq On : 12 Aug 2004 7:22 pm Operator: owenm
Sample : op17688-bsd Inst : GCOO
Misc : OP17688,GOA439,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 13:49 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

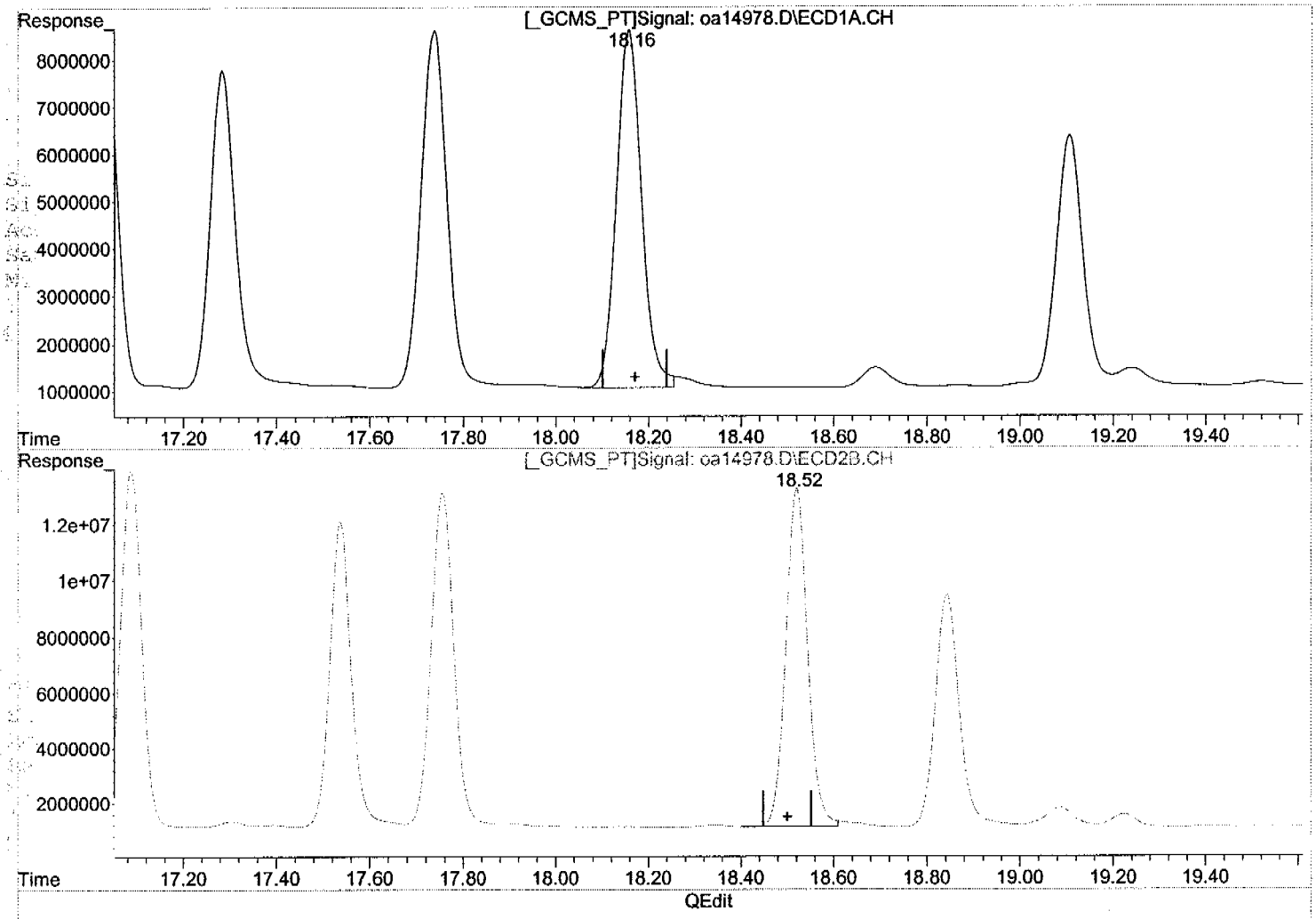




Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa14978.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\oa14978.D\ECD2B.CH
Acq On : 12 Aug 2004 7:22 pm Operator: owenm
Sample : op17688-bsd Inst : GCOO
Misc : OP17688,GOA439,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 19:53 2004 Quant Results File: PST433.RES

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration



(17) 4,4'-DDT (MA)

18.16min 33.927PPB m

response 284681266

(17) 4,4'-DDT #2 (MA)

18.52min 32.683PPB m

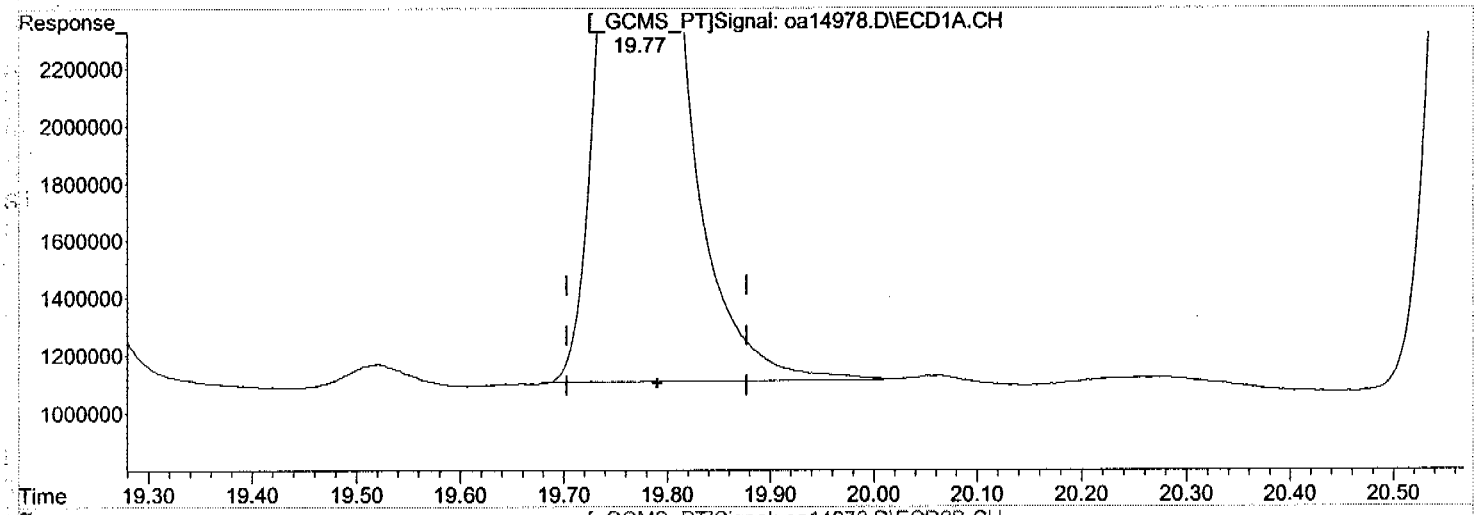
response 399753461

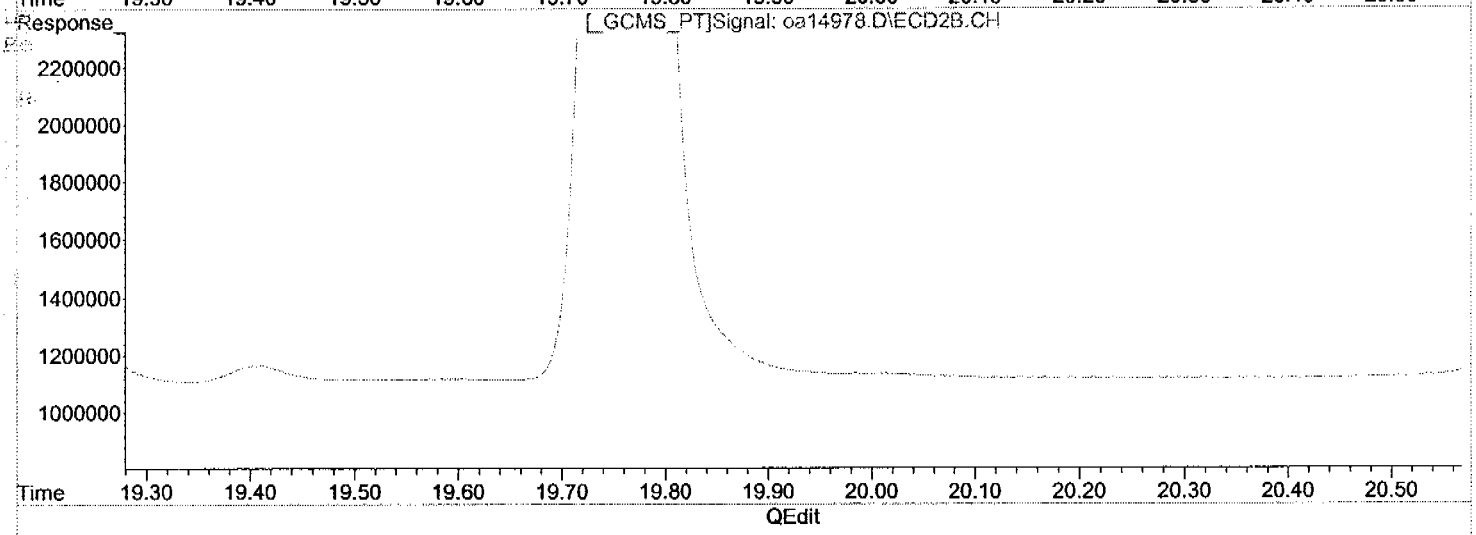
(+) = Expected Retention Time

Quantitation Report (QEdit)

Signal #1 : C:\MSDCHEM\1\DATA\oa14978.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\oa14978.D\ECD2B.CH
Acq On : 12 Aug 2004 7:22 pm Operator: owenm
Sample : op17688-bsd Inst : GCOO
Misc : OP17688,GOA439,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 19:53 2004 Quant Results File: PST433.RES

Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration





(20) Methoxychlor (A)

19.77min 35.058PPB m

response 169830073

(20) Methoxychlor #2 (A)

20.88min 34.450PPB

response 235867328

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14979.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\oa14979.D\ECD2B.CH
Acq On : 12 Aug 2004 7:55 pm Operator: owenm
Sample : op17688-ms Inst : GCOO
Misc : OP17688,GOA439,850,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 20:26:22 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Initial Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1)	SAB Tetrachloro-m-xy	6.47f	6.17	290.5E6	382.1E6	31.362	30.428	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					78.40%	76.07%	
2)	SA Decachlorobiphen	25.35	26.53	256.0E6	394.3E6	39.295	39.742	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					98.24%	99.35%	
	Target Compounds							
2)	A alpha-BHC	8.79f	8.73	353.1E6	475.2E6	25.879	25.689	
3)	MA gamma-BHC	9.98f	10.06	353.0E6	467.3E6	27.419	26.631	
4)	MA Heptachlor	11.61f	11.53	334.7E6	438.3E6	26.346	25.793	
5)	B beta-BHC	10.34f	10.41	177.5E6	232.1E6	28.485	27.522	
6)	B delta-BHC	10.93f	11.38	325.9E6	435.3E6	28.388	27.500	
7)	MB Aldrin	12.57f	12.53	291.1E6	403.2E6	25.058	24.804	
8)	B Heptachlor Epoxi	14.45f	14.27	308.0E6	435.9E6	28.548	28.687	
9)	B gamma-Chlordane	14.81	14.81	301.2E6	451.4E6	28.807	29.686	
10)	B alpha-Chlordane	15.19f	15.24	575.1E6	429.9E6	55.242	28.565	#
11)	A Endosulfan I	15.60	15.37	281.3E6	407.8E6	27.793	28.860	
12)	B 4,4'-DDE	15.48	15.80	292.2E6	439.2E6	29.931	30.500	
13)	MA Dieldrin	16.32f	16.18	311.9E6	476.0E6	29.630	31.408	
14)	MA Endrin	17.03	17.09	287.7E6	424.7E6	30.560	32.154	
15)	A 4,4'-DDD	17.28	17.54	255.2E6	384.9E6	31.445	32.903	
16)	B Endosulfan II	17.74	17.75	276.7E6	416.7E6	29.749	31.293	
17)	MA 4,4'-DDT	18.16	18.52	267.2E6	389.7E6	31.849	31.859	
18)	B Endrin Aldehyde	19.10f	18.84	199.7E6	313.4E6	27.727	29.881	
19)	B Endosulfan Sulfa	20.58f	19.76	256.1E6	348.8E6	33.814	31.827	
20)	A Methoxychlor	19.77	20.88	163.1E6	211.6E6	33.669	30.911	
21)	B Endrin Ketone	21.55f	21.58	317.3E6	436.9E6	34.130	32.754	

OPM
8/14/04

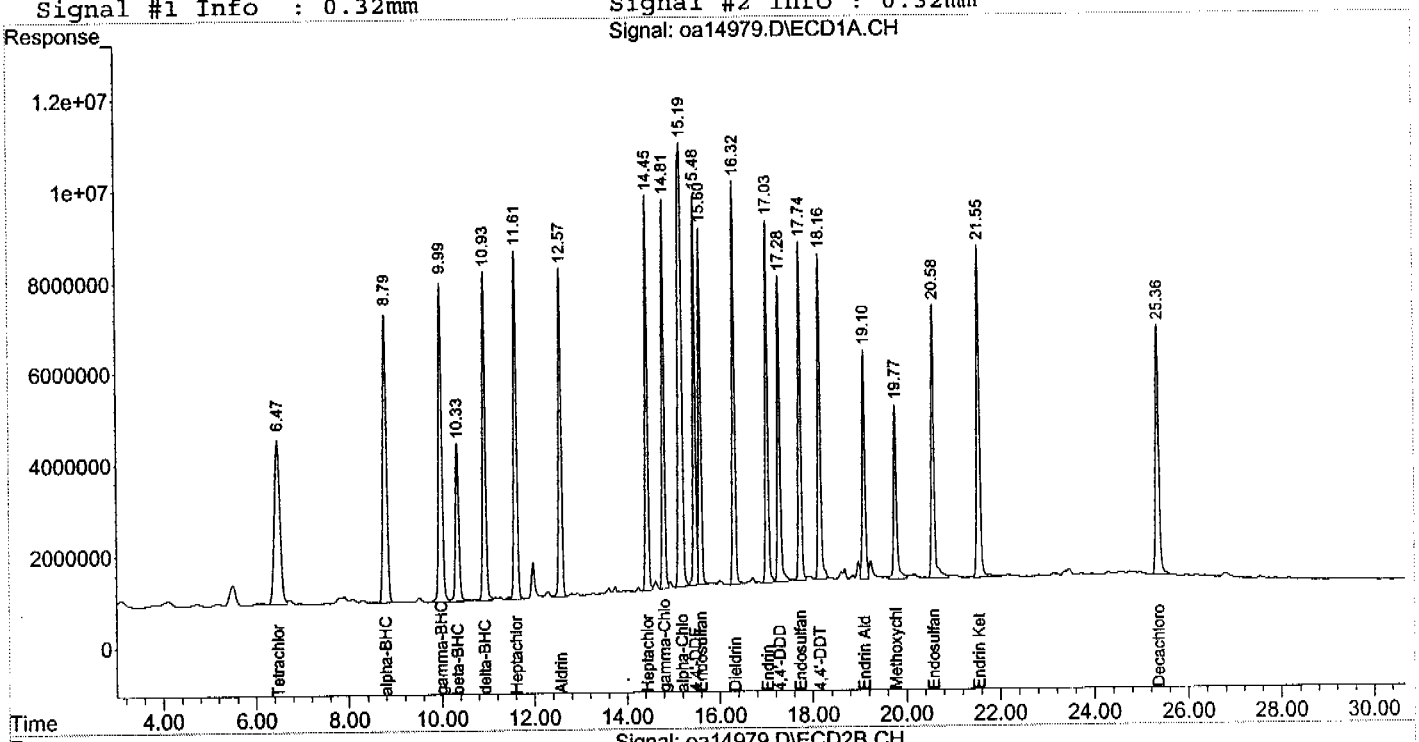
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

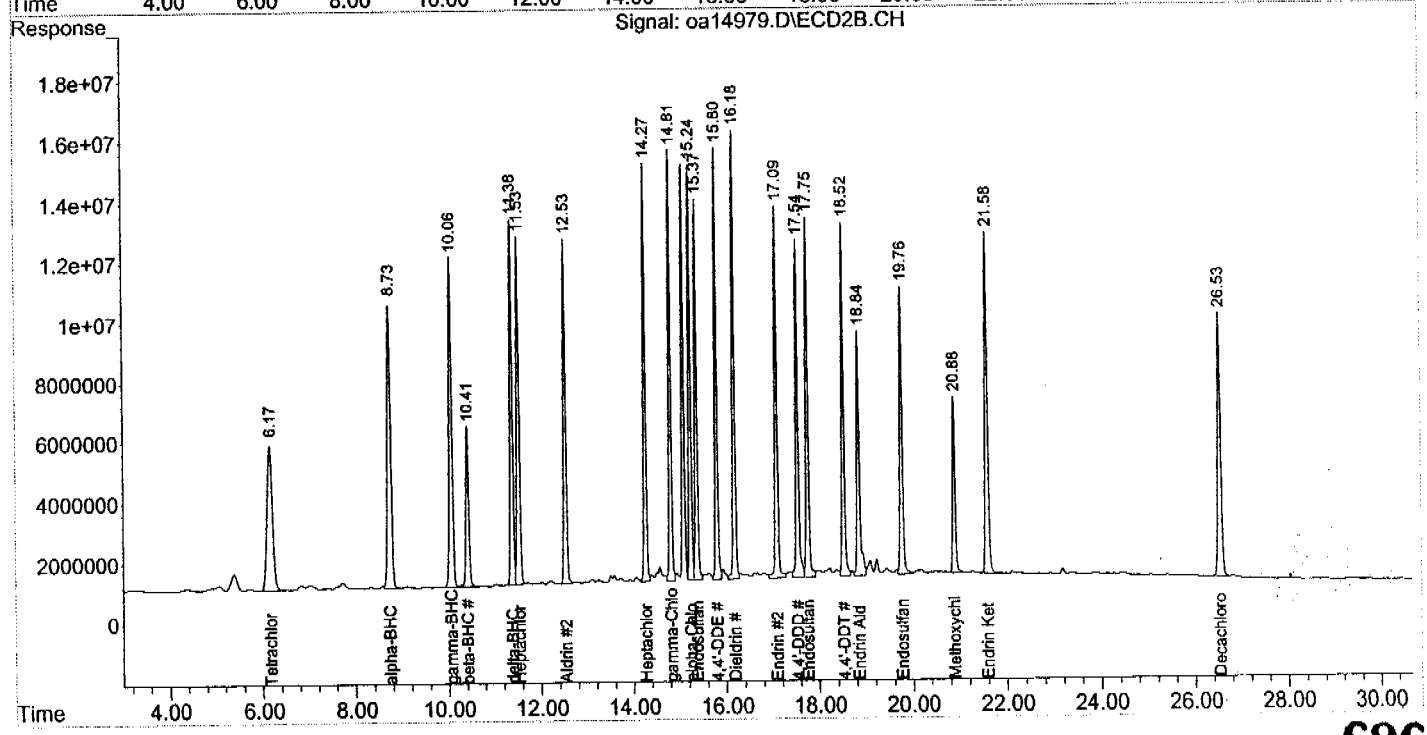
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa14979.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\oa14979.D\ECD2B.CH
Acq On : 12 Aug 2004 7:55 pm Operator: owenm
Sample : op17688-ms Inst : GCOO
Misc : OP17688,GOA439,850,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 13:55 2004 Quant Results File: PST433.RES

Quant Method : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Aug 06 08:51:27 2004
Response via : Multiple Level Calibration
DataAcq Meth : PST433.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.32mm Signal #2 Info : 0.32mm





ACCUTEST.

Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: 60A433

Date: 8/3/01

Analyst Signature: Dawn McKennan

Standard Data

Lot #	Description	Conc.
6553-38	Toxaphene	500ppb
-12	Chlordane	500 "
6551-478	ENDAM	20-200ppb
-48B	ENDBM	20-40ppb
6153-27	PCBIK	20ppb
-37	PEM	10-250ppb

Standard Data

Lot #	Description	Conc.
6553-39D	Pest mix	100 ppm
-39C		50
-41		25
-31		10
-39B		5
-39A		2

Columns: RTXCLPI / RTXCLPII

Method PST433

Initial Cal. Method PST433

Injection Volumn: 1.0uL/col

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to co[illegible] withrthe criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible] **Date:** [illegible]

R	Data File	Sample ID	Ext. Batch	Test	MTX	MALS #	Dilution	IS	SU	Status (Data)	Comments
	0A14761	DDT1			W	1	1		✓	ok	
	765	FBD1			W	2	1		✓	ok	
	766	IC433-500	Toxaphene		W	3	1		✓	ok	
	767	-500	Chlordane		W	4	1		✓	ok	
	768	IC433-100	Pest mix		W	5	1		✓	ok	
	769	-50			W	6	1		✓	ok	
	770	ICC433-25 ~~-25~~			W	7	1		✓	ok	
	771	IC433-10			W	8	1		✓	ok	
	772	-5			W	9	1		✓	ok	
	773	-2			W	10	1		✓	ok	
	774	ENDAM	2nd source		W	11	1		✓	ok	
	775	ENDBM			W	12	1		✓	ok	
	776	DDT2			W	13	1		✓	ok	
	777	FBD2			W	14	1		✓	ok	
	778	CC433-10			W	15	1		✓	ok	
	779	GP17597-MS	17597-1	8081	S	16	1		✓	OK	
	780	MSP				17	1		✓	OK	
	781	N73787 3				18	1		✓	OK	RR1.5
	782	-2				19	1		✓	OK	RR1.5
	783	-1				20	1		✓	OK	RR1.5

MTX = Matrix. Designate W for water, S for soil, O for oil. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.

ACCUTEST.

Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: 604439

Date: 8/12/04

Analyst Signature: Owen McKennan

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
6553-47	PEM	10-250ppb
6553-44	PIBIK	20ppb
6553-31	Pest mix	10ppb
6553-41	Pest mix	25ppb
A16E37	Hexane (Baker)	

Columns: RTXCLPI / RTXCLPII

Method PST433

Initial Cal. Method PST433

Injection Volumn: 1.0mL (co)

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to co with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 08/13/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	0A14966	DDT1				1	1		✓	OK	
	967	IB01				2	1		✓	OK	
	968	N74603-8	17667-1	8081	S	3	10		✓	OK	
	969	-9				4	10			NOT USING	~~0~~ OVERWROTE FILE
	970	-10				5	10		✗	OK	~~FF~~ OM
	971	-9				6	10 ~~50~~		High ✗	NOT USING ~~OK~~ OM	reextract sample
	972	-9				7	50			NOT USING	↓
	973	CC437-10				8	1		✓	OK	
	974	DDT2				9	1		✓	OK	
	975	IB02				10	1		✓	OK	
	976	OP17688-MB1	17688-1	8081	✓	11	1		✓	OK	
	977	-BS1				12	1		✓	OK	Double spiked
	978	-BSD				13	1		✓	OK	
	979	-MS				14	1		✓	OK	
	980	N74646-1				15	1		✓	OK	
	981	-2				16	1		✓	OK	
	982	-3				17	1		✓	OK	
	983	-4				18	1		✓	OK	
	984	-5				19	1		✓	OK	
	985	-6				20	1		✓	OK	

698

MTX = Matrix. Designate W for water, S for soil, O for oil. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.

Form: OP016-04

ACCUTEST

Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: 60A439

Date: 8/12/04

Analyst Signature: Owen McKenna

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
6553-71	Pest mix	10 ppb
6553-41	Pest mix	25 ppb
6553-44	PIBK	20 ppb
6553-47	PEM	10-250 ppb
A16E37	Hexane (Baker)	

Columns: RTXCLPI / RTXCLPII

Method PST433

Initial Cal. Method PST433

Injection Volumn: 1.0mL/col

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to cor with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 08/13/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	0A14986	~~CC433~~ CC433-25				21	1		/	OK	
	987	DQ13				22	1		/	OK	
	988	IB03				23	1		/	OK	
	989	0017667-mB1 ~~N74646-7~~	17667-1 ~~17688-1~~	8081 ~~8081~~	S ~~W~~	24	1				
	990	N74646 -8	17688-1	8081	W	25	1		/	OK	
	991	-9				26	1		/	OK	
	992	-10				27	1		/	OK	
	993	-11				28	1		/	OK	
	994	-12				29	1		/	OK	
	995	-13				30	1		/	OK	
	996	N73749 -11	17609-1	8081	S	31	2		/	OK	
	997	N74648-5 ~~CC433-10~~	17672-1	8081	S	32	1		/	OK	
	998	-6				33	1		/	OK	
	999	CC433-10				34	1		/	OK	

8/13/04

MTX = Matrix . Designate W for water, S for soil, O for oil. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.

ACCUTEST

LIQUID/LIQUID EXTRACTION

BATCH # Ge 17644-1 | RACK# A-1

Separatory Funnel | Continuous Liquid Liquid

EXTRACT METHOD (circle one) SW846 3510C / EPA 600 series / EPA 500 series / CLP / other _____ SW846 3520C / CLP / other _____

EXTRACTION DATE: 8/11/04 ANALYST: CLKR METHOD: [illegible] Water Bath Temp(C) 40°/60° Nitrogen Evap Temp(C) _____

Supervisor Review: Signature [illegible] Date 8/11/04

	Sample #	Sample Bottle #	Analysis Type	Sample Description	Sample Vol (ml) Oil Wt. (g)	pH Adjust (ml) >11 NaOH	pH Adjust (ml) <2 H2SO4	Final Extract Vol(ml)	Final Extract Color	Extract Cleanup GPC	Extract Cleanup H2SO4	Extract Cleanup Cu	Extract Cleanup Florisil		Comments
	MB		Pest	Dilution	1000			10	Clear			✓			
	BS *		↓	↓	1000			↓	↓			✓			
	BSD MS	2			1000							✓			
	N74646-2 MS/MSD	4			990							✓			
	~~BS~~														
	~~MS~~														
	~~MSD~~														
1	N74646-1	4	Pest	Clear	900			10	Clear			✓			
2	-2	3			860							✓			
3	-3	3			940							✓			
4	-4	4			930							✓			
5	-5	3			940							✓			
6	-6	3			930							✓			
7	-7	4			940							✓			
8	-8	3			940							✓			
9	-10	2			940							✓			
10	-11	1			940							✓			
11	-12	3			900							✓			
12	-13	4			940							✓			
13															
14															
15															
16															
17															
18															
19															
20															

COMMENTS: * BS and Spike twice

SURROGATE SPIKE DATA

	LOT #	CONC. (PPM)	AMT ADDED (ML)
BASE			
ACID			
PPCB	0711009	400 ppm	1
HERB			

WITNESS SIGN: [illegible]

MATRIX SPIKE DATA

	LOT #	CONC.	AMT ADDED (ML)
BASE			
ACID			
PEST	0710091	250 ppm	1
PCB			
HERB			

WITNESS SIGN: [illegible]

SOLVENT DATA

	LOT #	BRAND	AMT X/ML
METH CHLOR	A21E70	Baker	3X60
HEXANE	A16E37	Baker	50
ACETONE			
ETH ETHER			

REAGENT/FILTER MEDIA

	LOT #	BRAND
SODIUM SULF	SS2450	EMD
FILTER PAPER	21589112	Fisher
1:1 H2SO4	-	
10N NAOH		
COPPER	0711-015	Aldrich
FLORISIL		

GC
SW846 8082
PCB

ACCUTEST

GC Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction D8082PCBAO

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
3. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
4. Surrogate Recoveries Meet Criteria (if applicable)		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
5. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
6. Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Retention Time Summary for comment.		
7. Extraction Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
8. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
9. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*		

Additional Comments:

QC Review Signature: Benedetta M. Popow Date: 8/18/2004

Form: RG05
Rev. Date: 2/15/00

Semivolatile Surrogate Recovery Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Method: SW846 8082 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
N74646-1	EF53442.D	89.0	95.0	111.0	115.0
N74646-2	EF53443.D	62.0	67.0	109.0	112.0
N74646-3	EF53444.D	84.0	90.0	105.0	108.0
N74646-4	EF53445.D	87.0	94.0	107.0	110.0
N74646-5	EF53446.D	85.0	90.0	100.0	103.0
N74646-6	EF53447.D	63.0	68.0	110.0	115.0
N74646-8	EF53448.D	86.0	92.0	107.0	109.0
N74646-9	EF53449.D	88.0	94.0	107.0	109.0
N74646-10	EF53450.D	75.0	81.0	82.0	84.0
N74646-11	EF53453.D	85.0	91.0	99.0	101.0
N74646-12	EF53454.D	83.0	89.0	77.0	78.0
N74646-13	EF53455.D	81.0	87.0	105.0	106.0
OP17689-BS1	EF53437.D	83.0	94.0	97.0	99.0
OP17689-BSD	EF53441.D	82.0	87.0	93.0	96.0
OP17689-MB1	EF53436.D	90.0	104.0	82.0	85.0
OP17689-MS	EF53438.D	83.0	96.0	91.0	95.0

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	27-140%
S2 = Decachlorobiphenyl	19-151%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Blank Spike/Blank Spike Duplicate Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17689-BS1	EF53437.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
OP17689-BSD	EF53441.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576

The QC reported here applies to the following samples: **Method:** SW846 8082

N74646-1, N74646-2, N74646-3, N74646-4, N74646-5, N74646-6, N74646-8, N74646-9, N74646-10, N74646-11, N74646-12, N74646-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	2	2.1	105	2.2	110	5	78-134/30
11104-28-2	Aroclor 1221		ND		ND		nc	70-130/30
11141-16-5	Aroclor 1232		ND		ND		nc	70-130/30
53469-21-9	Aroclor 1242		ND		ND		nc	70-130/30
12672-29-6	Aroclor 1248		ND		ND		nc	70-130/30
11097-69-1	Aroclor 1254		ND		ND		nc	70-130/30
11096-82-5	Aroclor 1260	2	2.2	110	2.3	115	4	77-133/30
11100-14-4	Aroclor 1268		ND		ND		nc	50-150/30 [a]
37324-23-5	Aroclor 1262		ND		ND		nc	50-150/30 [a]

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	83%	82%	27-140%
877-09-8	Tetrachloro-m-xylene	94%	87%	27-140%
2051-24-3	Decachlorobiphenyl	97%	93%	19-151%
2051-24-3	Decachlorobiphenyl	99%	96%	19-151%

(a) Advisory control limits.

Matrix Spike Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17689-MS	EF53438.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
N74646-3	EF53444.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576

The QC reported here applies to the following samples: **Method:** SW846 8082

N74646-1, N74646-2, N74646-3, N74646-4, N74646-5, N74646-6, N74646-8, N74646-9, N74646-10, N74646-11, N74646-12, N74646-13

CAS No.	Compound	N74646-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
12674-11-2	Aroclor 1016	ND		2.3	2.3	100	53-146
11104-28-2	Aroclor 1221	ND			ND		70-130
11141-16-5	Aroclor 1232	ND			ND		70-130
53469-21-9	Aroclor 1242	ND			ND		70-130
12672-29-6	Aroclor 1248	ND			ND		70-130
11097-69-1	Aroclor 1254	ND			ND		70-130
11096-82-5	Aroclor 1260	ND		2.3	2.5	109	48-147
11100-14-4	Aroclor 1268	ND			ND		50-150 [a]
37324-23-5	Aroclor 1262	ND			ND		50-150 [a]

CAS No.	Surrogate Recoveries	MS	N74646-3	Limits
877-09-8	Tetrachloro-m-xylene	83%	84%	27-140%
877-09-8	Tetrachloro-m-xylene	96%	90%	27-140%
2051-24-3	Decachlorobiphenyl	91%	105%	19-151%
2051-24-3	Decachlorobiphenyl	95%	108%	19-151%

(a) Advisory control limits.

Method Blank Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17689-MB1	EF53436.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576

The QC reported here applies to the following samples: **Method:** SW846 8082

N74646-1, N74646-2, N74646-3, N74646-4, N74646-5, N74646-6, N74646-8, N74646-9, N74646-10, N74646-11, N74646-12, N74646-13

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.075	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.085	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.12	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.13	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.072	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.072	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.10	ug/l	
11100-14-4	Aroclor 1268	ND	0.50		ug/l	
37324-23-5	Aroclor 1262	ND	0.50		ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	90%	27-140%
877-09-8	Tetrachloro-m-xylene	104%	27-140%
2051-24-3	Decachlorobiphenyl	82%	19-151%
2051-24-3	Decachlorobiphenyl	85%	19-151%

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GCEF
Method: SW846 8082

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	EF52980.D	07/26/04 22:08	GEF2562-ICC2562	OLGAA
Std#2	EF52996.D	07/27/04 08:34	GEF2562-CC2562	OLGAA
Std#3	EF53066.D	07/29/04 13:13	GEF2565-CC2562	OLGAA

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+/- 3*StdDev)
Tetrachloro-m-xylene	1	SURR	5.93	5.93	5.98	5.95	0.029	+/- 0.087
Decachlorobiphenyl	1	SURR	28.58	28.59	28.61	28.59	0.015	+/- 0.046
Tetrachloro-m-xylene	2	SURR	6.09	6.09	6.13	6.10	0.023	+/- 0.069
Decachlorobiphenyl	2	SURR	30.71	30.71	30.73	30.72	0.012	+/- 0.035
AR1016-A	1	REG	8.31	8.31	8.37	8.33	0.035	+/- 0.104
AR1016-B	1	REG	9.07	9.07	9.12	9.09	0.029	+/- 0.087
AR1016-C	1	REG	10.12	10.11	10.18	10.14	0.038	+/- 0.114
AR1016-D	1	REG	10.68	10.65	10.74	10.69	0.046	+/- 0.137
AR1016-E	1	REG	12.34	12.33	12.39	12.35	0.032	+/- 0.096
AR1260-A	1	REG	20.59	20.59	20.64	20.61	0.029	+/- 0.087
AR1260-B	1	REG	21.15	21.15	21.20	21.17	0.029	+/- 0.087
AR1260-C	1	REG	22.34	22.35	22.39	22.36	0.026	+/- 0.079
AR1260-D	1	REG	23.70	23.71	23.74	23.72	0.021	+/- 0.062
AR1260-E	1	REG	24.77	24.77	24.81	24.78	0.023	+/- 0.069
AR1016-A	2	REG	7.75	7.75	7.80	7.77	0.029	+/- 0.087
AR1016-B	2	REG	11.11	11.11	11.16	11.13	0.029	+/- 0.087
AR1016-C	2	REG	11.68	11.67	11.73	11.69	0.032	+/- 0.096
AR1016-D	2	REG	13.72	13.72	13.76	13.73	0.023	+/- 0.069
AR1016-E	2	REG	14.27	14.27	14.32	14.29	0.029	+/- 0.087
AR1260-A	2	REG	22.48	22.49	22.53	22.50	0.026	+/- 0.079
AR1260-B	2	REG	22.88	22.89	22.92	22.90	0.021	+/- 0.062
AR1260-C	2	REG	24.09	24.10	24.12	24.10	0.015	+/- 0.046
AR1260-D	2	REG	25.03	25.03	25.06	25.04	0.017	+/- 0.052
AR1260-E	2	REG	26.24	26.24	26.27	26.25	0.017	+/- 0.052

GC Surrogate Retention Time Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2576-CC2562	**Injection Date:**	08/14/04
Lab File ID:	EF53427.D	**Injection Time:**	02:49
Instrument ID:	GCEF	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.94	6.09	28.60	30.70

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP17668-MB2	EF53434.D	08/14/04	08:21	5.92	6.08	28.61	30.71
OP17668-BS2	EF53435.D	08/14/04	08:58	5.92	6.08	28.60	30.71
OP17689-MB1	EF53436.D	08/14/04	09:35	5.93	6.09	28.62	30.73
OP17689-BS1	EF53437.D	08/14/04	10:12	5.92	6.08	28.60	30.71
OP17689-MS	EF53438.D	08/14/04	10:48	5.93	6.09	28.60	30.71

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2576-CC2562	**Injection Date:**	08/14/04
Lab File ID:	EF53439.D	**Injection Time:**	12:03
Instrument ID:	GCEF	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.93	6.09	28.62	30.74

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP17689-BSD	EF53441.D	08/14/04	14:30	5.92	6.08	28.61	30.72
N74646-1	EF53442.D	08/14/04	15:07	5.92	6.07	28.59	30.70
N74646-2	EF53443.D	08/14/04	15:44	5.93	6.09	28.61	30.72
N74646-3	EF53444.D	08/14/04	16:21	5.92	6.08	28.59	30.70
N74646-4	EF53445.D	08/14/04	16:58	5.93	6.09	28.61	30.72
N74646-5	EF53446.D	08/14/04	17:35	5.92	6.08	28.59	30.70
N74646-6	EF53447.D	08/14/04	18:12	5.93	6.08	28.61	30.72
N74646-8	EF53448.D	08/14/04	18:49	5.92	6.08	28.60	30.71
N74646-9	EF53449.D	08/14/04	19:25	5.93	6.09	28.62	30.73
N74646-10	EF53450.D	08/14/04	20:02	5.92	6.08	28.60	30.71

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2576-CC2562	**Injection Date:**	08/14/04
Lab File ID:	EF53451.D	**Injection Time:**	22:30
Instrument ID:	GCEF	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.92	6.08	28.61	30.72

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
N74646-11	EF53453.D	08/14/04	23:44	5.92	6.08	28.61	30.72
N74646-12	EF53454.D	08/15/04	00:21	5.92	6.08	28.61	30.72
N74646-13	EF53455.D	08/15/04	00:58	5.93	6.09	28.62	30.72
ZZZZZZ	EF53456.D	08/15/04	01:35	5.94	6.09	28.62	30.73
ZZZZZZ	EF53457.D	08/15/04	02:12	5.92	6.08	28.60	30.71
ZZZZZZ	EF53458.D	08/15/04	02:48	5.92	6.08	28.60	30.72
ZZZZZZ	EF53459.D	08/15/04	03:25	5.92	6.08	28.61	30.72
GEF2576-ECC256	EF53460.D	08/15/04	04:40	5.91	6.07	28.60	30.71

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Identification Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2576-CC2562	**Injection Date:**	08/14/04
Lab File ID:	EF53427.D	**Injection Time:**	02:49
Instrument ID:	GCEF	**Method:**	SW846 8082

Sample ID:	OP17689-MS	**Injection Date:**	08/14/04
Lab File ID:	EF53438.D	**Injection Time:**	10:48
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1 [a]			2.3		ug/l	8.3
Aroclor 1016	2			2.5		ug/l	
AR1016-A	1	8.33	8.33	2.5		ug/l	
AR1016-A	2	7.77	7.77	2.4		ug/l	
AR1016-B	1	9.08	9.08	2.1		ug/l	
AR1016-B	2	11.14	11.13	2.5		ug/l	
AR1016-C	1	10.15	10.15	2.2		ug/l	
AR1016-C	2	11.71	11.70	2.4		ug/l	
AR1016-D	1	10.71	10.71	2.3		ug/l	
AR1016-D	2	13.74	13.74	2.9		ug/l	
AR1016-E	1	12.36	12.36	2.3		ug/l	
AR1016-E	2	14.29	14.30	2.5		ug/l	
Aroclor 1260	1 [a]			2.5		ug/l	4.1
Aroclor 1260	2			2.4		ug/l	
AR1260-A	1	20.63	20.63	2.5		ug/l	
AR1260-A	2	22.52	22.52	2.5		ug/l	
AR1260-B	1	21.19	21.18	2.4		ug/l	
AR1260-B	2	22.91	22.91	2.4		ug/l	
AR1260-C	1	22.38	22.38	2.5		ug/l	
AR1260-C	2	24.12	24.12	2.4		ug/l	
AR1260-D	1	23.74	23.74	2.6		ug/l	
AR1260-D	2	25.06	25.05	2.4		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2576-CC2562	**Injection Date:**	08/14/04
Lab File ID:	EF53439.D	**Injection Time:**	12:03
Instrument ID:	GCEF	**Method:**	SW846 8082

Sample ID:	OP17689-BSD	**Injection Date:**	08/14/04
Lab File ID:	EF53441.D	**Injection Time:**	14:30
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1			1.9		ug/l	14.6
Aroclor 1016	2 [a]			2.2		ug/l	
AR1016-A	1	8.33	8.33	2.0		ug/l	
AR1016-A	2	7.77	7.77	2.1		ug/l	
AR1016-B	1	9.08	9.09	1.7		ug/l	
AR1016-B	2	11.15	11.14	2.1		ug/l	
AR1016-C	1	10.16	10.15	1.9		ug/l	
AR1016-C	2	11.72	11.71	2.3		ug/l	
AR1016-D	1	10.71	10.71	1.9		ug/l	
AR1016-D	2	13.75	13.76	2.2		ug/l	
AR1016-E	1	12.37	12.37	1.9		ug/l	
AR1016-E	2	14.31	14.32	2.1		ug/l	
Aroclor 1260	1			2.1		ug/l	9.1
Aroclor 1260	2 [a]			2.3		ug/l	
AR1260-A	1	20.64	20.65	2.1		ug/l	
AR1260-A	2	22.54	22.55	2.4		ug/l	
AR1260-B	1	21.20	21.21	2.2		ug/l	
AR1260-B	2	22.92	22.94	2.2		ug/l	
AR1260-C	1	22.39	22.41	2.2		ug/l	
AR1260-C	2	24.13	24.14	2.4		ug/l	
AR1260-D	1	23.75	23.76	2.2		ug/l	
AR1260-D	2	25.07	25.07	2.1		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2576-CC2562	**Injection Date:**	08/14/04
Lab File ID:	EF53427.D	**Injection Time:**	02:49
Instrument ID:	GCEF	**Method:**	SW846 8082

Sample ID:	OP17689-BS1	**Injection Date:**	08/14/04
Lab File ID:	EF53437.D	**Injection Time:**	10:12
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1			2.0		ug/l	4.9
Aroclor 1016	2 [a]			2.1		ug/l	
AR1016-A	1	8.32	8.33	2.1		ug/l	
AR1016-A	2	7.76	7.77	2.1		ug/l	
AR1016-B	1	9.07	9.08	1.7		ug/l	
AR1016-B	2	11.14	11.13	2.1		ug/l	
AR1016-C	1	10.15	10.15	1.9		ug/l	
AR1016-C	2	11.70	11.70	2.1		ug/l	
AR1016-D	1	10.70	10.71	2.0		ug/l	
AR1016-D	2	13.74	13.74	2.1		ug/l	
AR1016-E	1	12.35	12.36	2.1		ug/l	
AR1016-E	2	14.29	14.30	2.1		ug/l	
Aroclor 1260	1			2.2		ug/l	0.0
Aroclor 1260	2 [a]			2.2		ug/l	
AR1260-A	1	20.62	20.63	2.2		ug/l	
AR1260-A	2	22.52	22.52	2.4		ug/l	
AR1260-B	1	21.18	21.18	2.3		ug/l	
AR1260-B	2	22.91	22.91	2.2		ug/l	
AR1260-C	1	22.38	22.38	2.2		ug/l	
AR1260-C	2	24.12	24.12	2.1		ug/l	
AR1260-D	1	23.74	23.74	2.1		ug/l	
AR1260-D	2	25.05	25.05	2.1		ug/l	

(a) QC results reported from this column.

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-658-LAKEVIEWDR		
Lab Sample ID:	N74646-1	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53442.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.56	0.084	ug/l	
11104-28-2	Aroclor 1221	ND	0.56	0.094	ug/l	
11141-16-5	Aroclor 1232	ND	0.56	0.14	ug/l	
53469-21-9	Aroclor 1242	ND	0.56	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.56	0.080	ug/l	
11097-69-1	Aroclor 1254	ND	0.56	0.080	ug/l	
11096-82-5	Aroclor 1260	ND	0.56	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.56		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.56		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		27-140%
877-09-8	Tetrachloro-m-xylene	95%		27-140%
2051-24-3	Decachlorobiphenyl	111%		19-151%
2051-24-3	Decachlorobiphenyl	115%		19-151%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53442.D\ECD1A.CH Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\ef53442.D\ECD2B.CH
Acq On : 14 Aug 2004 3:07 pm Operator: olgaa
Sample : N74646-1 Inst : GCEF
Misc : OP17689,GEF2576,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:32 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.92	6.07	1246977	1398022	35.474	37.966
Spiked Amount 40.000			Recovery	=	88.68%	94.92%
50) S Decachlorobiphen	28.59	30.70	1358474	1640317	44.530	46.043
Spiked Amount 40.000			Recovery	=	111.33%	115.11%

Target Compounds

OA
81607

715

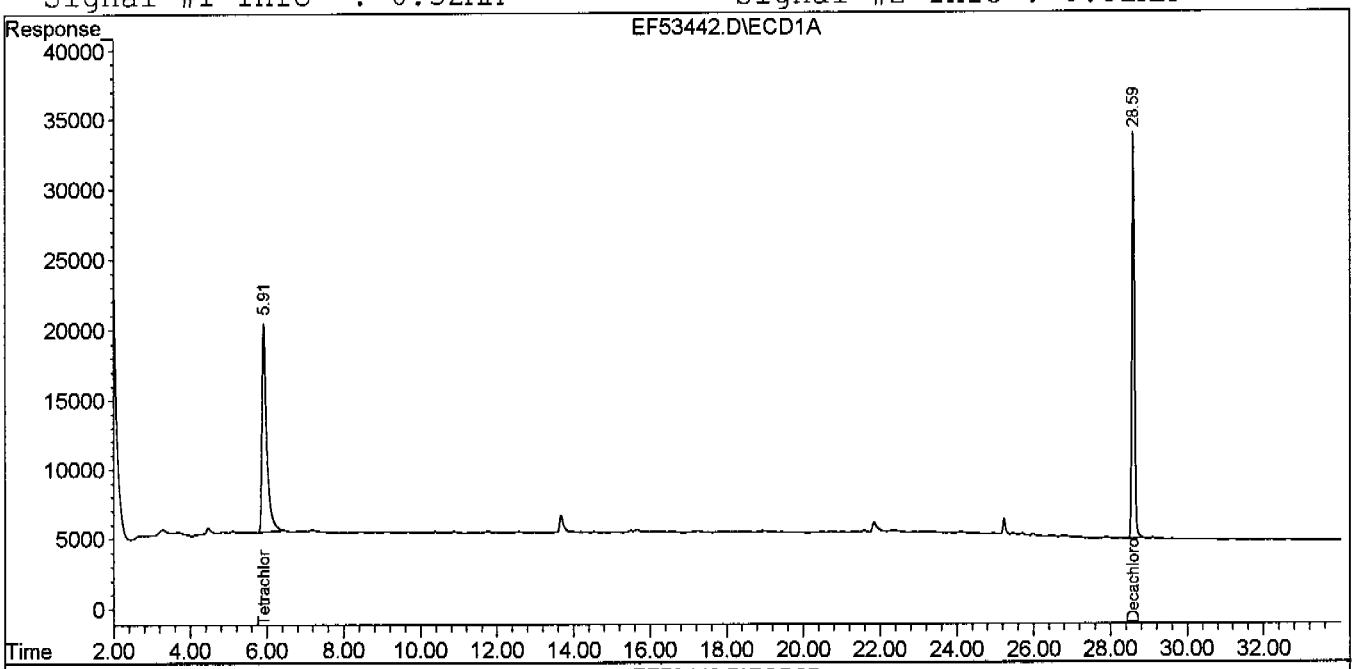
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

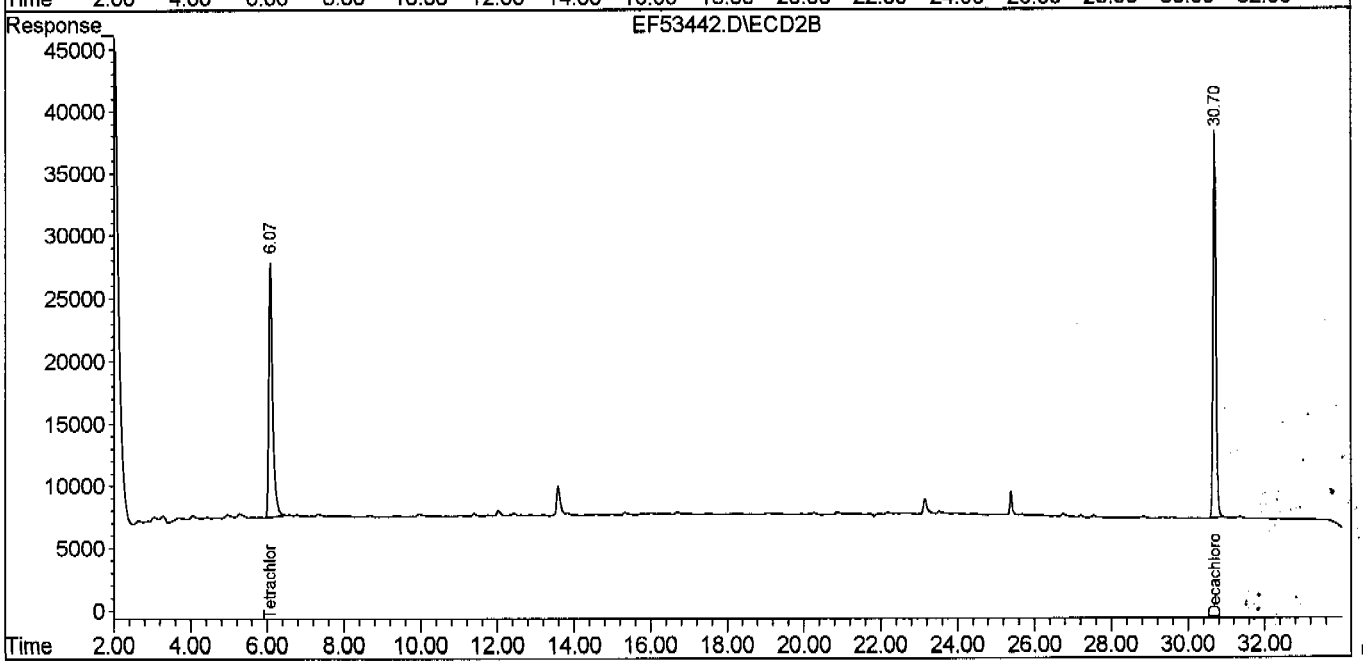
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53442.D\ECD1A.CH Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\ef53442.D\ECD2B.CH
Acq On : 14 Aug 2004 3:07 pm Operator: olgaa
Sample : N74646-1 Inst : GCEF
Misc : OP17689,GEF2576,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:32 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





716

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-653-LAKEVIEWDR		
Lab Sample ID:	N74646-2	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53443.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	860 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.58	0.088	ug/l	
11104-28-2	Aroclor 1221	ND	0.58	0.099	ug/l	
11141-16-5	Aroclor 1232	ND	0.58	0.14	ug/l	
53469-21-9	Aroclor 1242	ND	0.58	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.58	0.084	ug/l	
11097-69-1	Aroclor 1254	ND	0.58	0.083	ug/l	
11096-82-5	Aroclor 1260	ND	0.58	0.12	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.58		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.58		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	62%		27-140%
877-09-8	Tetrachloro-m-xylene	67%		27-140%
2051-24-3	Decachlorobiphenyl	109%		19-151%
2051-24-3	Decachlorobiphenyl	112%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53443.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\ef53443.D\ECD2B.CH
Acq On : 14 Aug 2004 3:44 pm Operator: olgaa
Sample : N74646-2 Inst : GCEF
Misc : OP17689,GEF2576,860,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:33 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	874961	990495	24.891	26.899
Spiked Amount 40.000			Recovery	=	62.23%	67.25%
50) S Decachlorobiphen	28.61	30.72	1325756	1603104	43.458	44.999
Spiked Amount 40.000			Recovery	=	108.65%	112.50%

Target Compounds

OA
81684

718

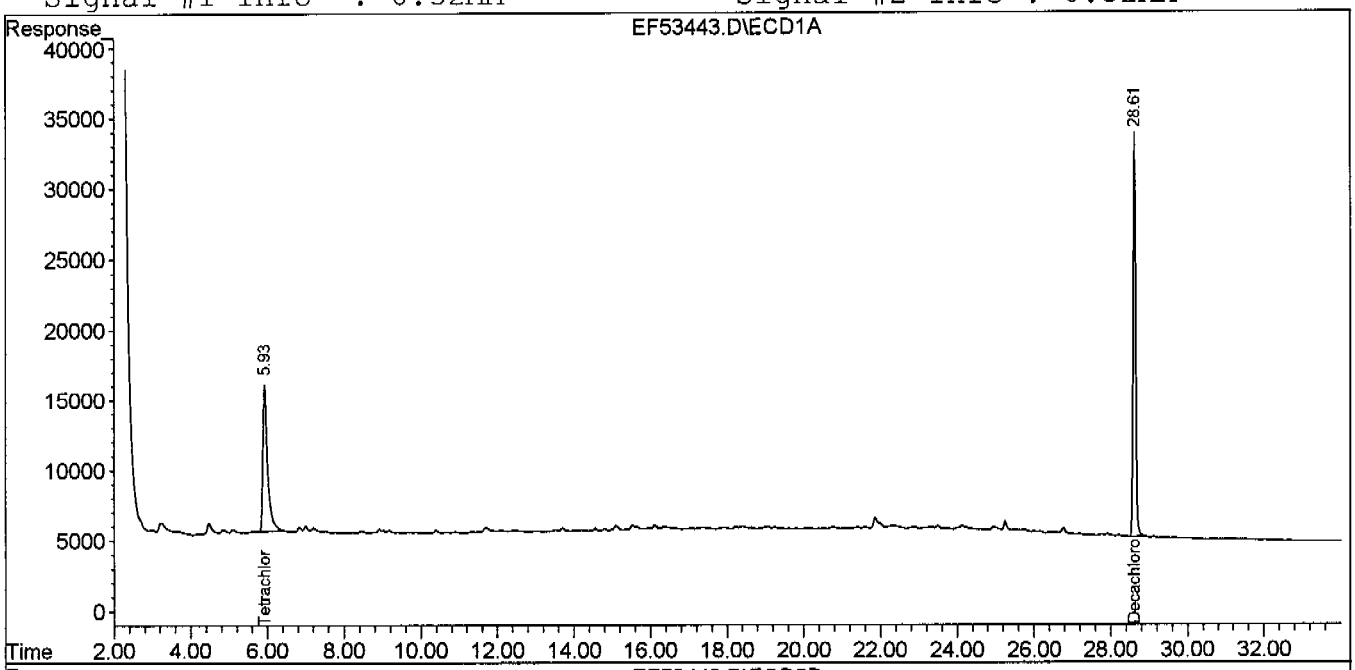
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef53443.D GEF2562.M Mon Aug 16 12:34:14 2004 RPT1 Page 1

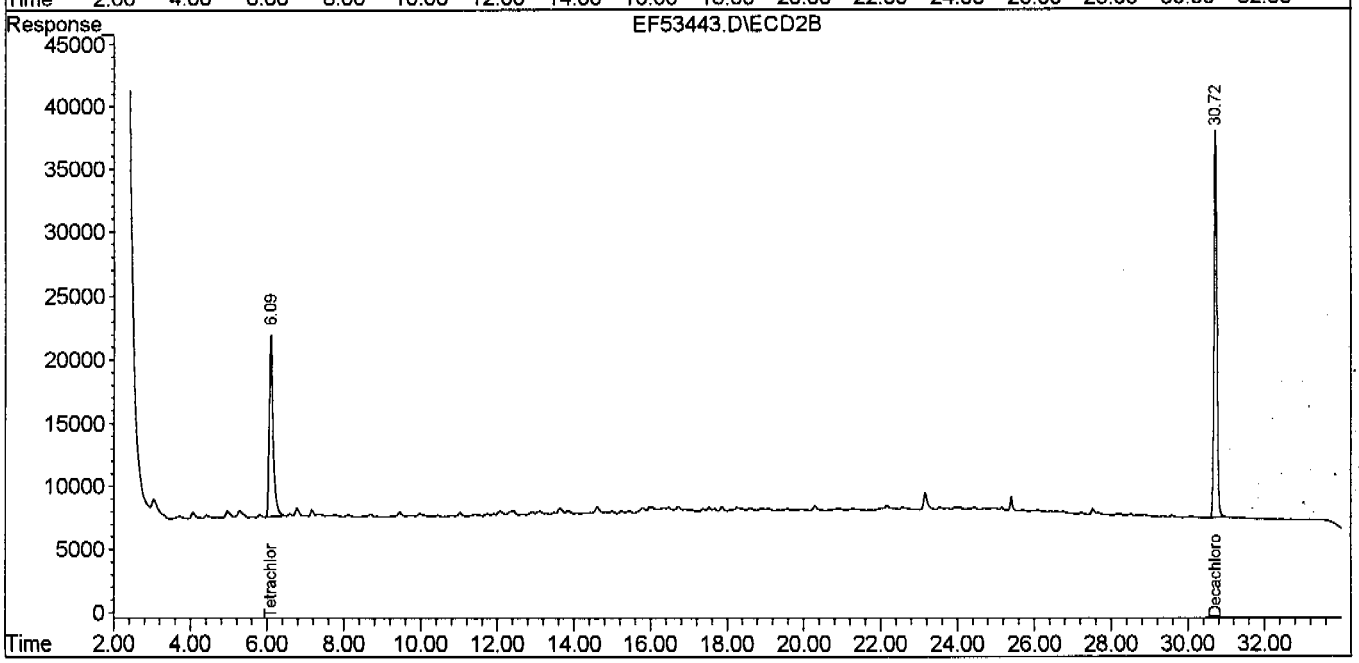
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53443.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\ef53443.D\ECD2B.CH
Acq On : 14 Aug 2004 3:44 pm Operator: olgaa
Sample : N74646-2 Inst : GCEF
Misc : OP17689,GEF2576,860,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:33 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





719

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-652-LAKEVIEWDR		
Lab Sample ID:	N74646-3	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53444.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.080	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.090	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.076	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.076	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.53		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.53		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		27-140%
877-09-8	Tetrachloro-m-xylene	90%		27-140%
2051-24-3	Decachlorobiphenyl	105%		19-151%
2051-24-3	Decachlorobiphenyl	108%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53444.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\ef53444.D\ECD2B.CH
Acq On : 14 Aug 2004 4:21 pm Operator: olgaa
Sample : N74646-3 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:34 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.92	6.08	1186391	1323202	33.750	35.934
Spiked Amount 40.000			Recovery	=	84.38%	89.83%
50) S Decachlorobiphen	28.59	30.70	1277379	1533412	41.872	43.042
Spiked Amount 40.000			Recovery	=	104.68%	107.61%

Target Compounds

QA
81607

721

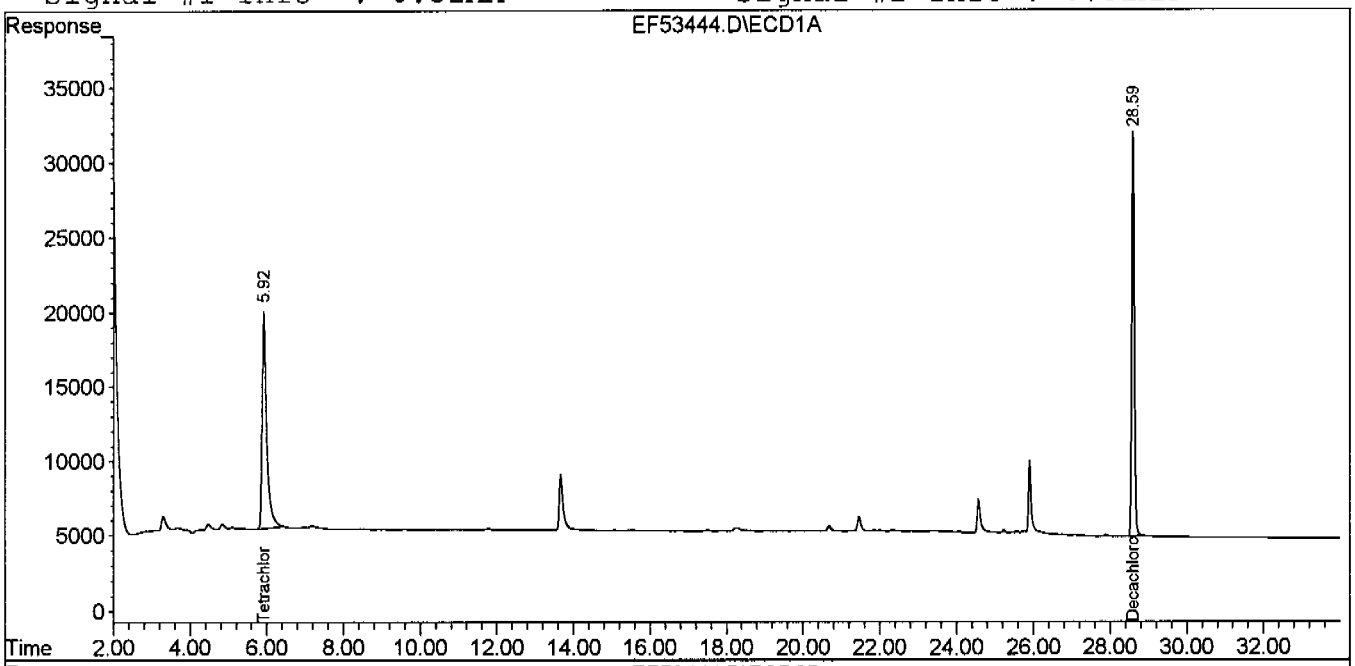
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef53444.D GEF2562.M Mon Aug 16 12:35:13 2004 RPT1 Page 1

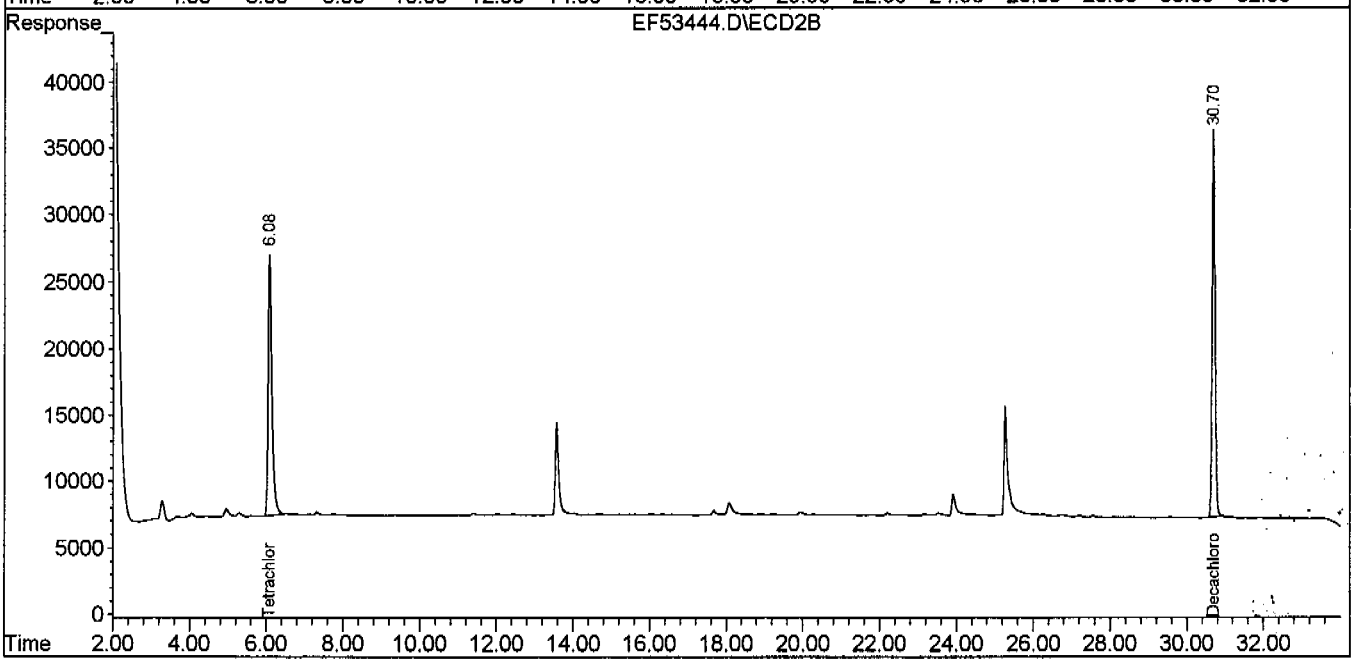
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53444.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\ef53444.D\ECD2B.CH
Acq On : 14 Aug 2004 4:21 pm Operator: olgaa
Sample : N74646-3 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:34 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





722

Accutest Laboratories

Report of Analysis

Client Sample ID:	RWB0804-3536-FLETCHERSWAY		
Lab Sample ID:	N74646-4	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53445.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.54	0.081	ug/l	
11104-28-2	Aroclor 1221	ND	0.54	0.091	ug/l	
11141-16-5	Aroclor 1232	ND	0.54	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.54	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.54	0.077	ug/l	
11097-69-1	Aroclor 1254	ND	0.54	0.077	ug/l	
11096-82-5	Aroclor 1260	ND	0.54	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.54		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.54		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		27-140%
877-09-8	Tetrachloro-m-xylene	94%		27-140%
2051-24-3	Decachlorobiphenyl	107%		19-151%
2051-24-3	Decachlorobiphenyl	110%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (Q1 Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53445.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\ef53445.D\ECD2B.CH
Acq On : 14 Aug 2004 4:58 pm Operator: olgaa
Sample : N74646-4 Inst : GCEF
Misc : OP17689,GEF2576,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:35 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	1216788	1379563	34.615	37.465
Spiked Amount 40.000			Recovery	=	86.54%	93.66%
50) S Decachlorobiphen	28.61	30.72	1304378	1560770	42.757	43.810
Spiked Amount 40.000			Recovery	=	106.89%	109.53%

Target Compounds

QA
8/6/04

724

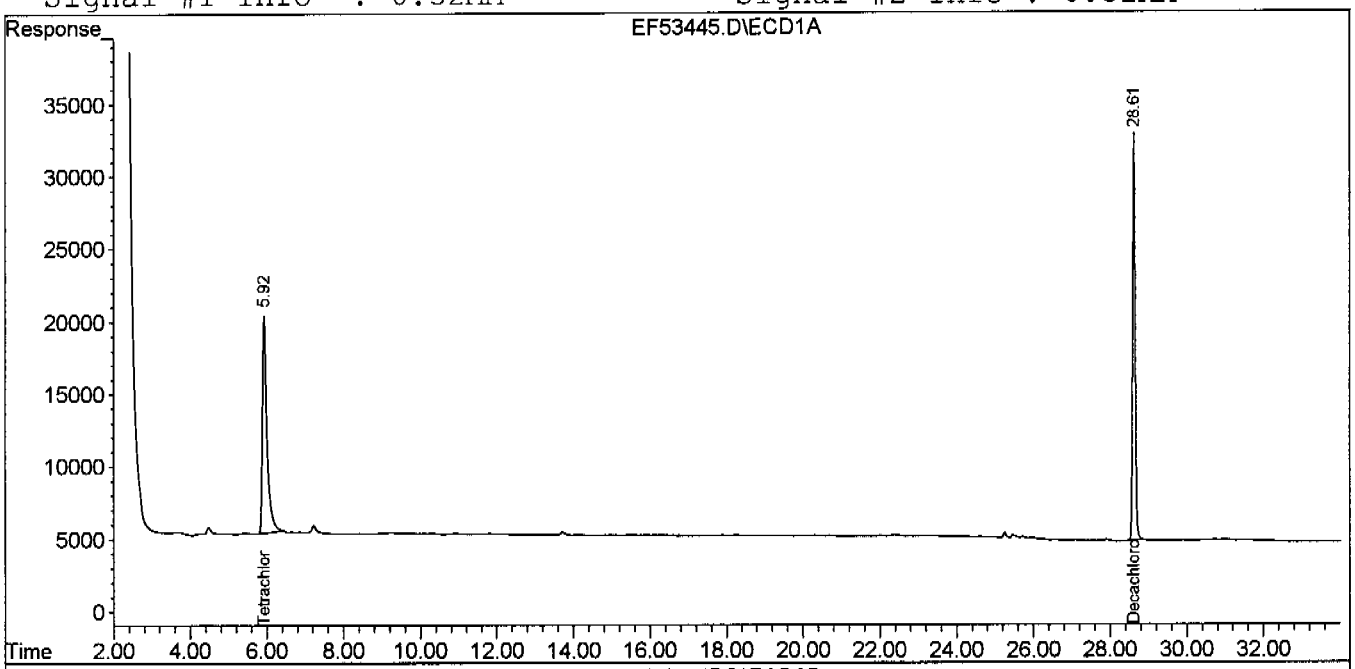
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

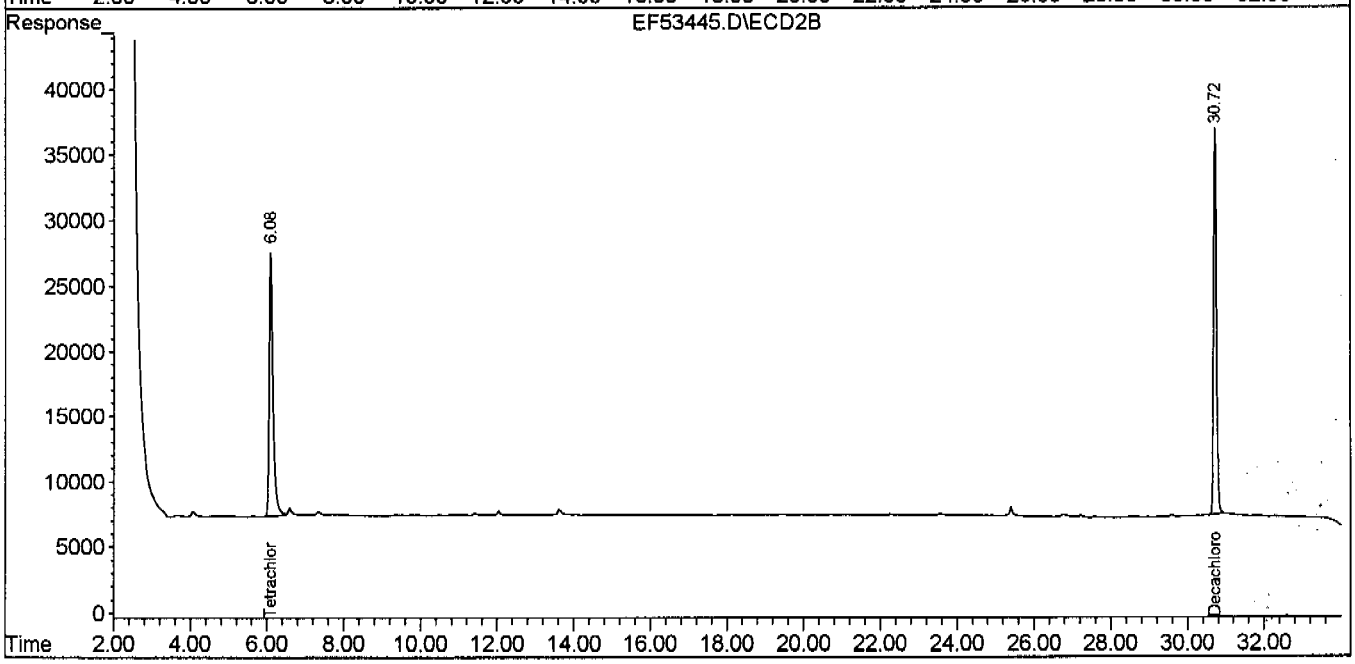
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53445.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\ef53445.D\ECD2B.CH
Acq On : 14 Aug 2004 4:58 pm Operator: olgaa
Sample : N74646-4 Inst : GCEF
Misc : OP17689,GEF2576,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:35 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-NCNG		
Lab Sample ID:	N74646-5	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53446.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.079	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.089	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.076	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.076	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.53		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.53		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		27-140%
877-09-8	Tetrachloro-m-xylene	90%		27-140%
2051-24-3	Decachlorobiphenyl	100%		19-151%
2051-24-3	Decachlorobiphenyl	103%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53446.D\ECD1A.CH Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\ef53446.D\ECD2B.CH
Acq On : 14 Aug 2004 5:35 pm Operator: olgaa
Sample : N74646-5 Inst : GCEF
Misc : OP17689,GEF2576,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:36 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.92	6.08	1190996	1332743	33.881	36.193
Spiked Amount 40.000			Recovery	=	84.70%	90.48%
50) S Decachlorobiphen	28.59	30.70	1221159	1461270	40.029	41.017
Spiked Amount 40.000			Recovery	=	100.07%	102.54%

Target Compounds

QA
8/6/04

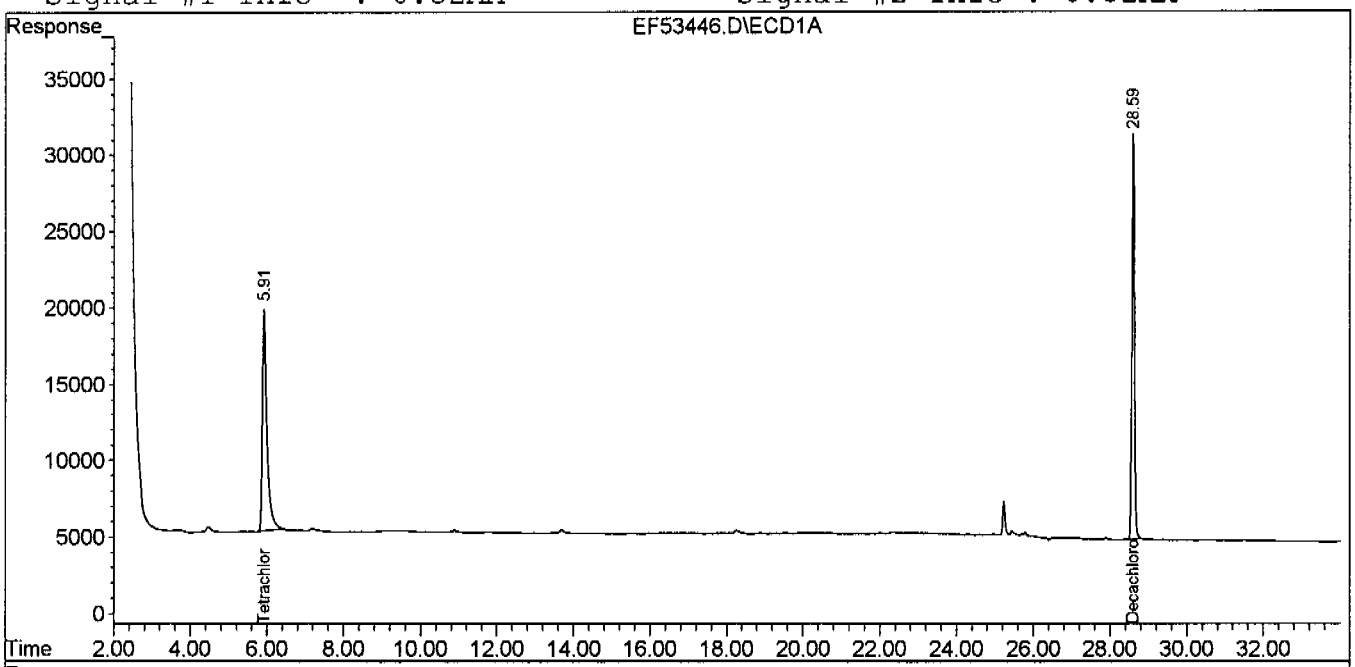
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef53446 D GEF2562 M Mon Aug 16 12:37:03 2004 RPT1 Page 1

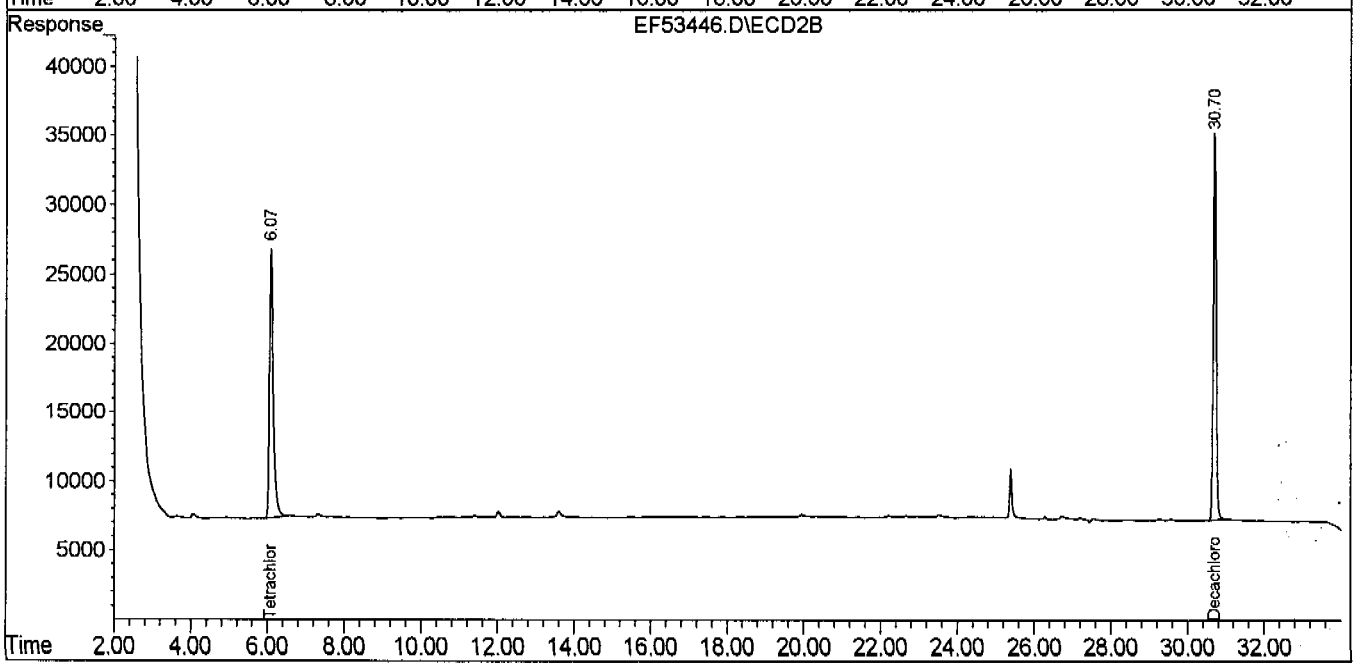
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53446.D\ECD1A.CH Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\ef53446.D\ECD2B.CH
Acq On : 14 Aug 2004 5:35 pm Operator: olgaa
Sample : N74646-5 Inst : GCEF
Misc : OP17689,GEF2576,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:36 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-FIELDDUP1		
Lab Sample ID:	N74646-6	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53447.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	830 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.60	0.091	ug/l	
11104-28-2	Aroclor 1221	ND	0.60	0.10	ug/l	
11141-16-5	Aroclor 1232	ND	0.60	0.15	ug/l	
53469-21-9	Aroclor 1242	ND	0.60	0.16	ug/l	
12672-29-6	Aroclor 1248	ND	0.60	0.087	ug/l	
11097-69-1	Aroclor 1254	ND	0.60	0.087	ug/l	
11096-82-5	Aroclor 1260	ND	0.60	0.12	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.60		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.60		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	63%		27-140%
877-09-8	Tetrachloro-m-xylene	68%		27-140%
2051-24-3	Decachlorobiphenyl	110%		19-151%
2051-24-3	Decachlorobiphenyl	115%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53447.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\ef53447.D\ECD2B.CH
Acq On : 14 Aug 2004 6:12 pm Operator: olgaa
Sample : N74646-6 Inst : GCEF
Misc : OP17689,GEF2576,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:38 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.08	883467	1001028	25.133	27.185
Spiked Amount 40.000			Recovery	=	62.83%	67.96%
50) S Decachlorobiphen	28.61	30.72	1339571	1633093	43.910	45.840
Spiked Amount 40.000			Recovery	=	109.78%	114.60%

Target Compounds

OA
81697

730

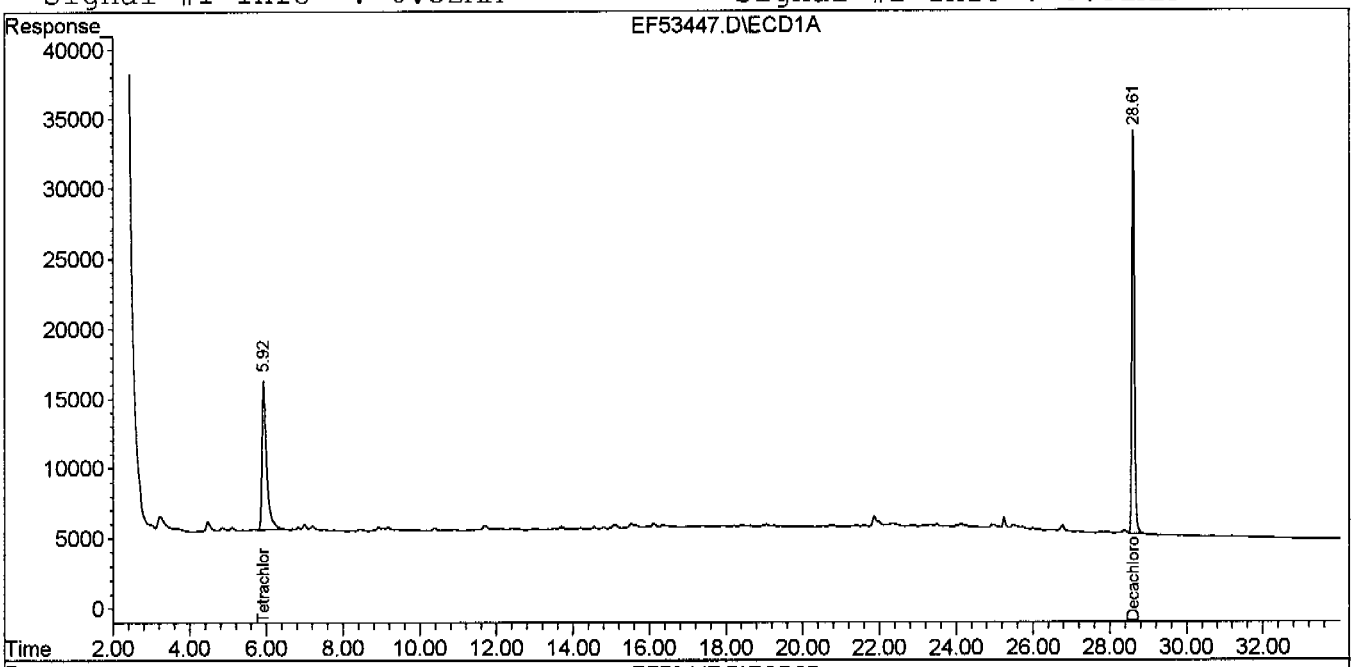
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

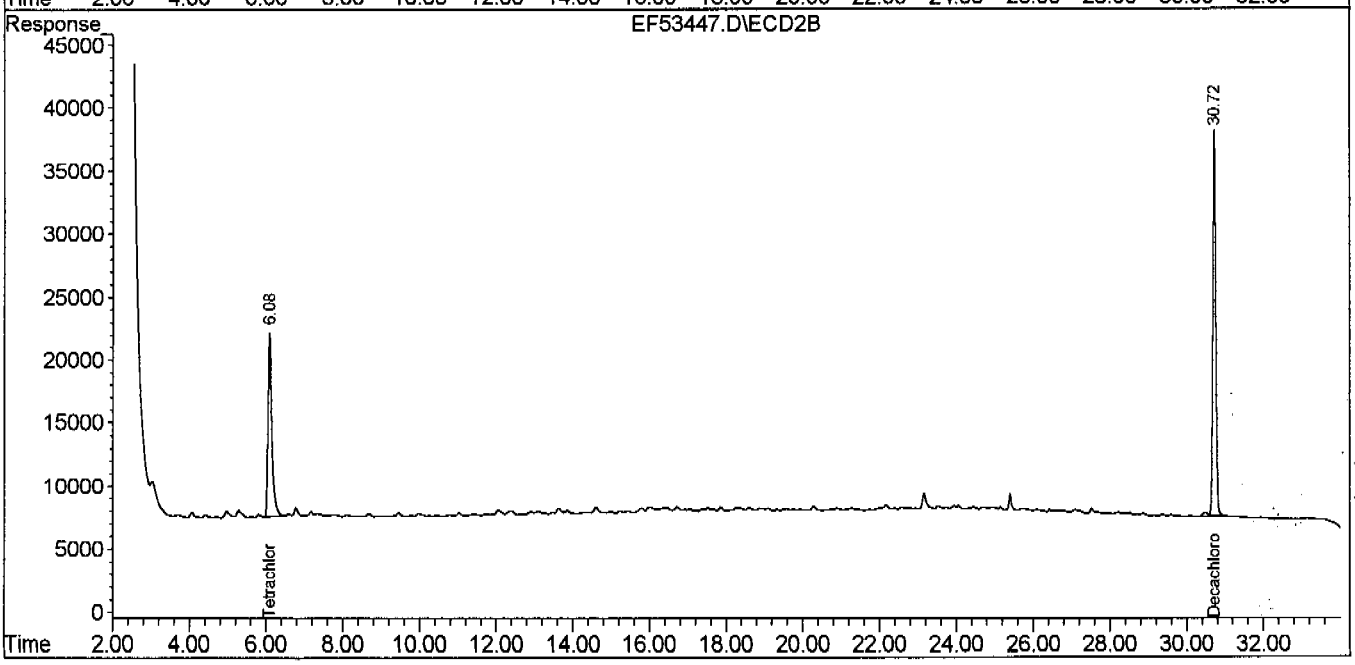
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53447.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\ef53447.D\ECD2B.CH
Acq On : 14 Aug 2004 6:12 pm Operator: olgaa
Sample : N74646-6 Inst : GCEF
Misc : OP17689,GEF2576,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:38 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-CAMPBARHAM		
Lab Sample ID:	N74646-8	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53448.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.55	0.083	ug/l	
11104-28-2	Aroclor 1221	ND	0.55	0.093	ug/l	
11141-16-5	Aroclor 1232	ND	0.55	0.14	ug/l	
53469-21-9	Aroclor 1242	ND	0.55	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.55	0.079	ug/l	
11097-69-1	Aroclor 1254	ND	0.55	0.079	ug/l	
11096-82-5	Aroclor 1260	ND	0.55	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.55		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.55		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		27-140%
877-09-8	Tetrachloro-m-xylene	92%		27-140%
2051-24-3	Decachlorobiphenyl	107%		19-151%
2051-24-3	Decachlorobiphenyl	109%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53448.D\ECD1A.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\ef53448.D\ECD2B.CH
Acq On : 14 Aug 2004 6:49 pm Operator: olgaa
Sample : N74646-8 Inst : GCEF
Misc : OP17689,GEF2576,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:39 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.92	6.08	1213892	1360013	34.532	36.934
Spiked Amount 40.000			Recovery	=	86.33%	92.33%
50) S Decachlorobiphen	28.60	30.71	1301684	1554231	42.669	43.627
Spiked Amount 40.000			Recovery	=	106.67%	109.07%

Target Compounds

QA
8/16/04

733

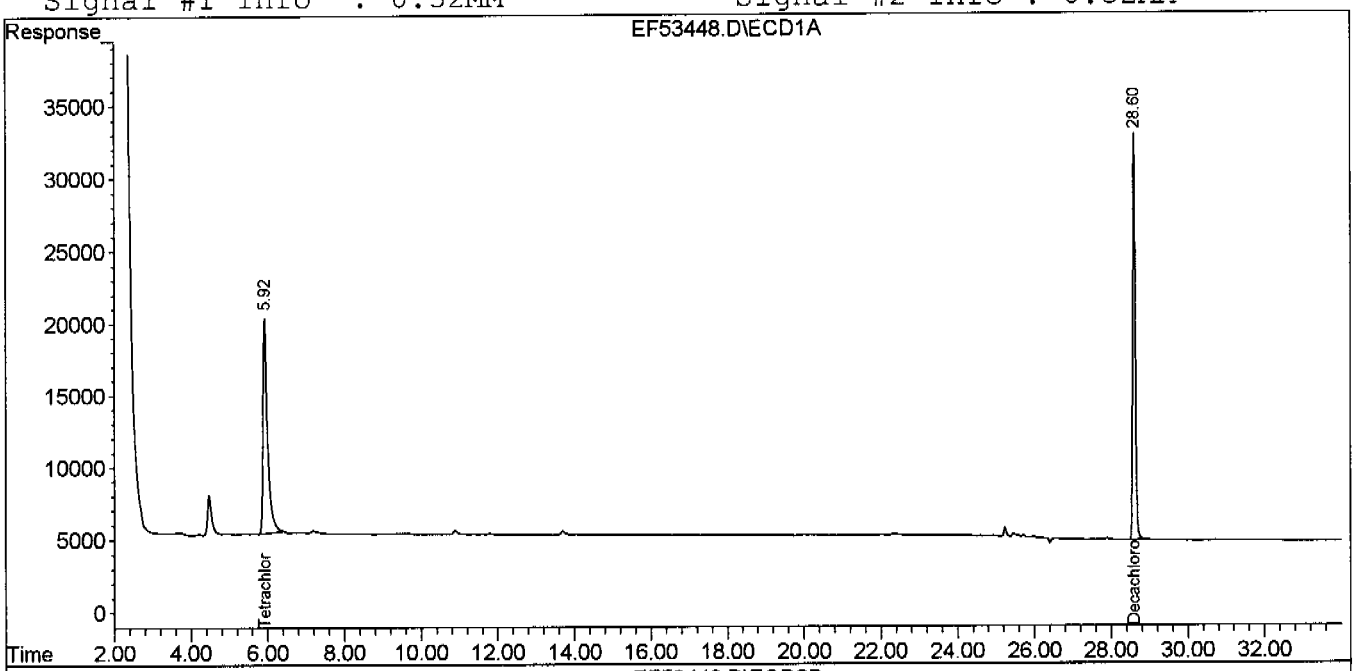
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

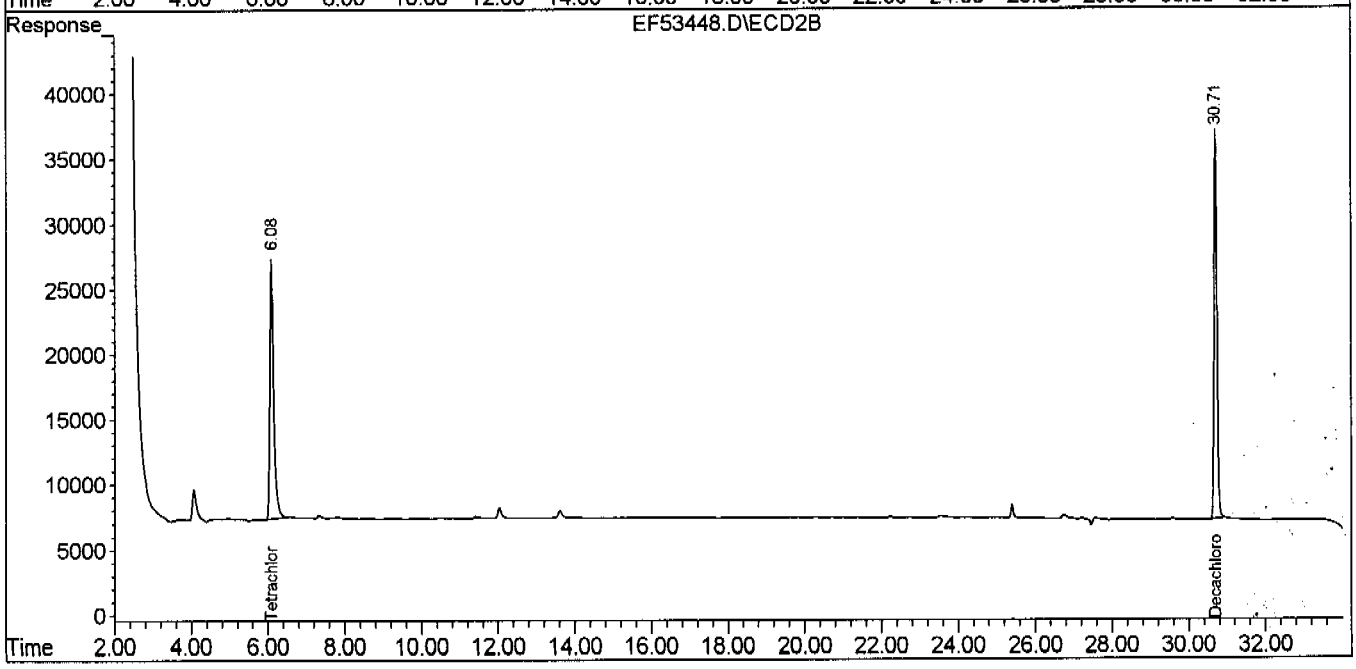
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53448.D\ECD1A.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\ef53448.D\ECD2B.CH
Acq On : 14 Aug 2004 6:49 pm Operator: olgaa
Sample : N74646-8 Inst : GCEF
Misc : OP17689,GEF2576,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:39 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4051-RANGERD		
Lab Sample ID:	N74646-9	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53449.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.080	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.090	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.076	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.076	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.53		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.53		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		27-140%
877-09-8	Tetrachloro-m-xylene	94%		27-140%
2051-24-3	Decachlorobiphenyl	107%		19-151%
2051-24-3	Decachlorobiphenyl	109%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (Qt Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53449.D\ECD1A.CH Vial: 34
Signal #2 : C:\HPCHEM\1\DATA\ef53449.D\ECD2B.CH
Acq On : 14 Aug 2004 7:25 pm Operator: olgaa
Sample : N74646-9 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:40 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	1239102	1385266	35.249	37.620
Spiked Amount 40.000			Recovery	=	88.12%	94.05%
50) S Decachlorobiphen	28.62	30.73	1300782	1548475	42.639	43.465
Spiked Amount 40.000			Recovery	=	106.60%	108.66%

Target Compounds

QA
8/18/04

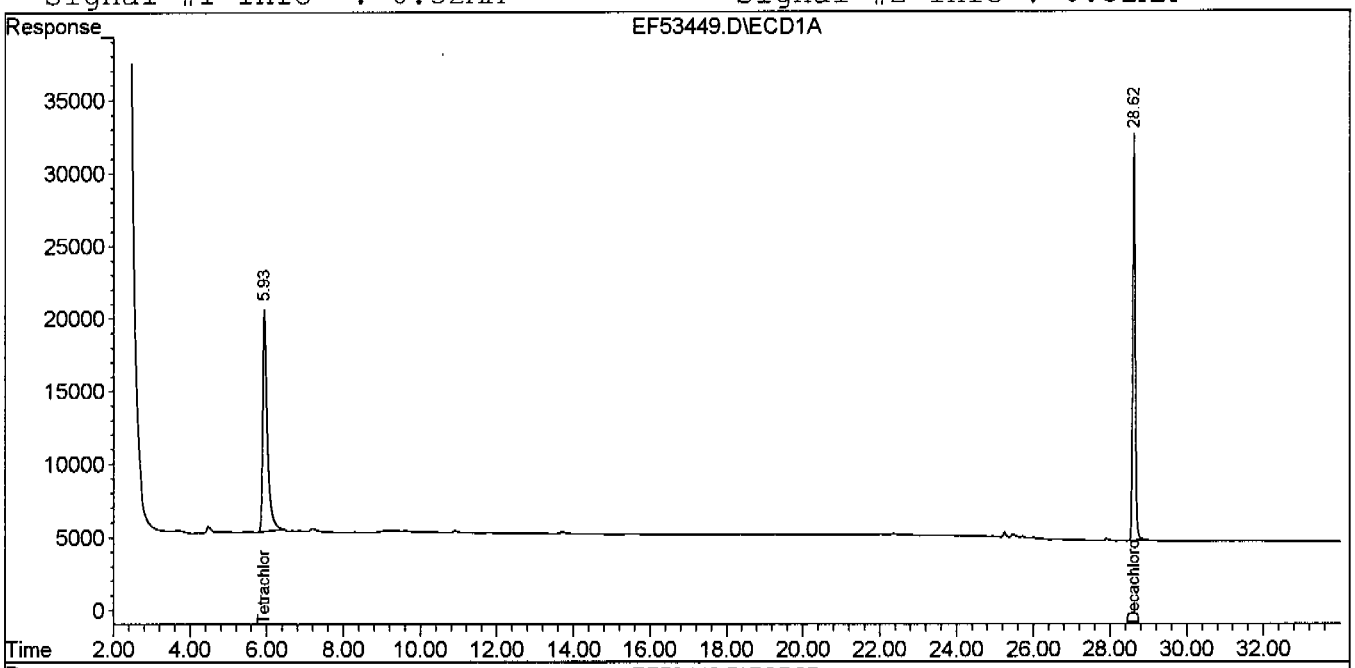
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef53449 D GEF2562 M Mon Aug 16 12:40:47 2004 RPT1 Page 1

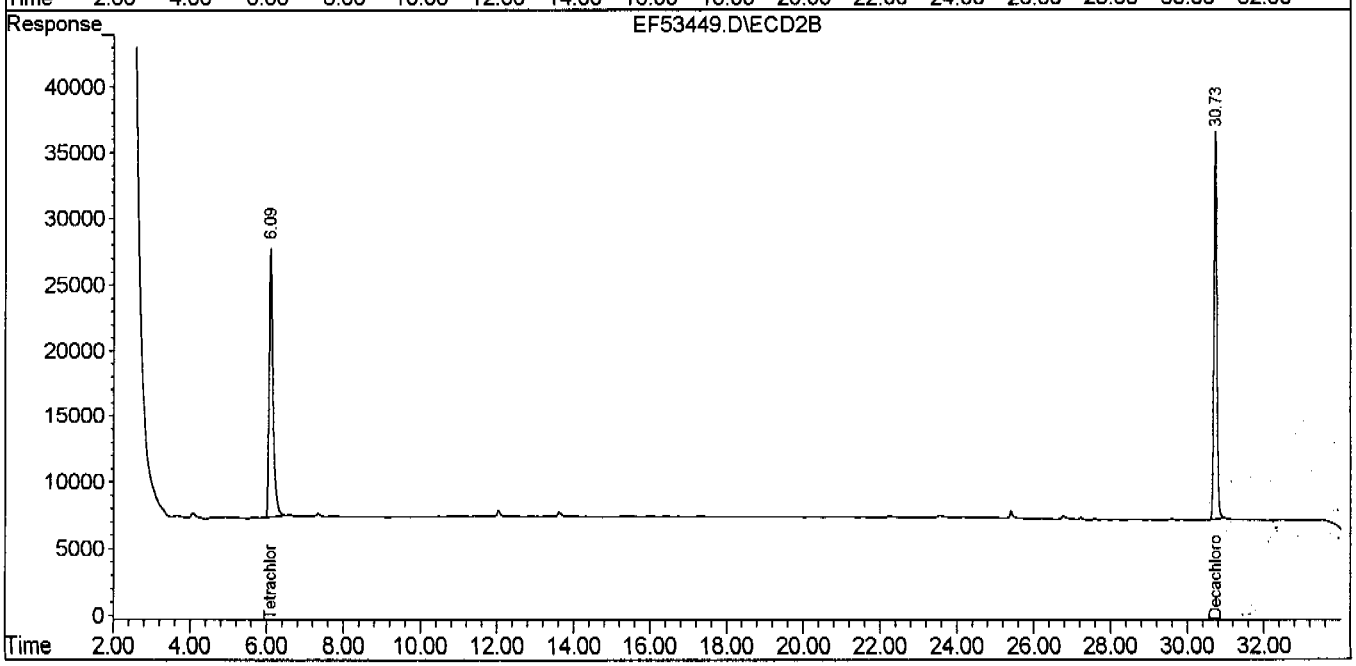
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53449.D\ECD1A.CH Vial: 34
Signal #2 : C:\HPCHEM\1\DATA\ef53449.D\ECD2B.CH
Acq On : 14 Aug 2004 7:25 pm Operator: olgaa
Sample : N74646-9 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:40 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-CAMPEASON		
Lab Sample ID:	N74646-10	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53450.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.080	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.090	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.076	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.076	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.53		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.53		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		27-140%
877-09-8	Tetrachloro-m-xylene	81%		27-140%
2051-24-3	Decachlorobiphenyl	82%		19-151%
2051-24-3	Decachlorobiphenyl	84%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53450.D\ECD1A.CH Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\ef53450.D\ECD2B.CH
Acq On : 14 Aug 2004 8:02 pm Operator: olgaa
Sample : N74646-10 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:41 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.92	6.08	1058647	1198670	30.116	32.552
Spiked Amount 40.000			Recovery	=	75.29%	81.38%
50) S Decachlorobiphen	28.60	30.71	1004716	1198139	32.934	33.631
Spiked Amount 40.000			Recovery	=	82.33%	84.08%

Target Compounds

OA
8/6/04

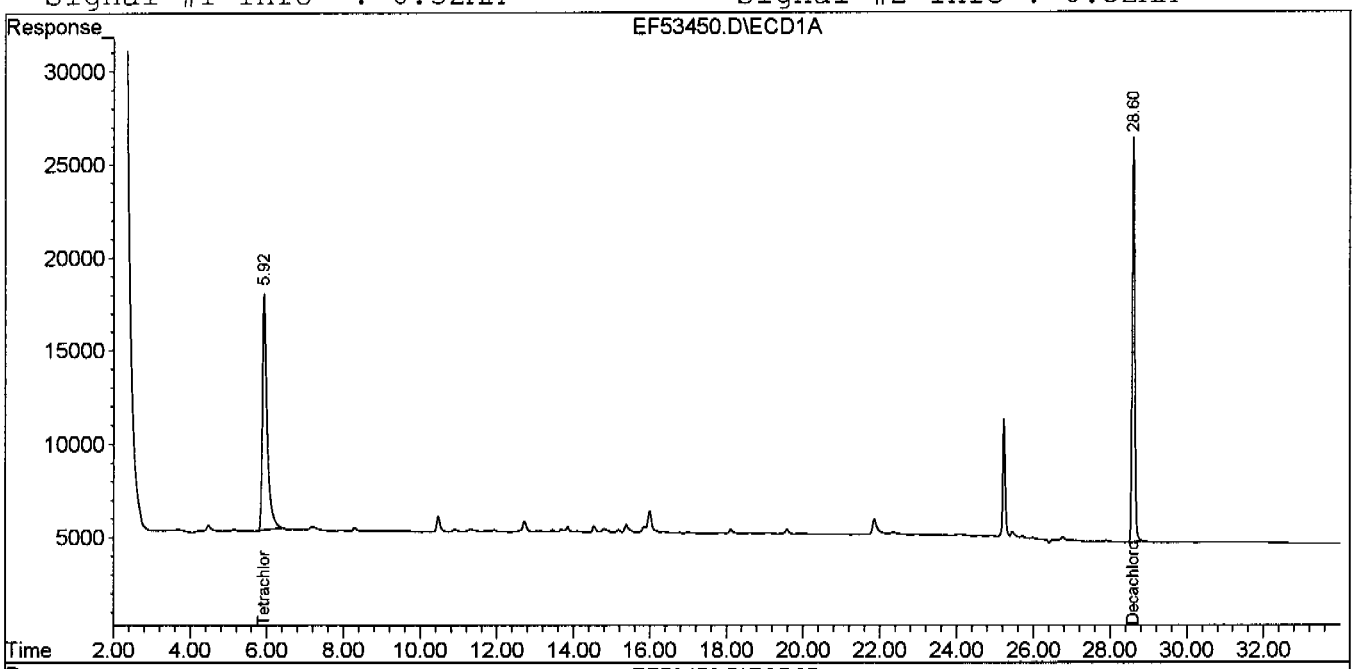
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef53450.D GEF2562.M Mon Aug 16 12:41:54 2004 RPT1 Page 1

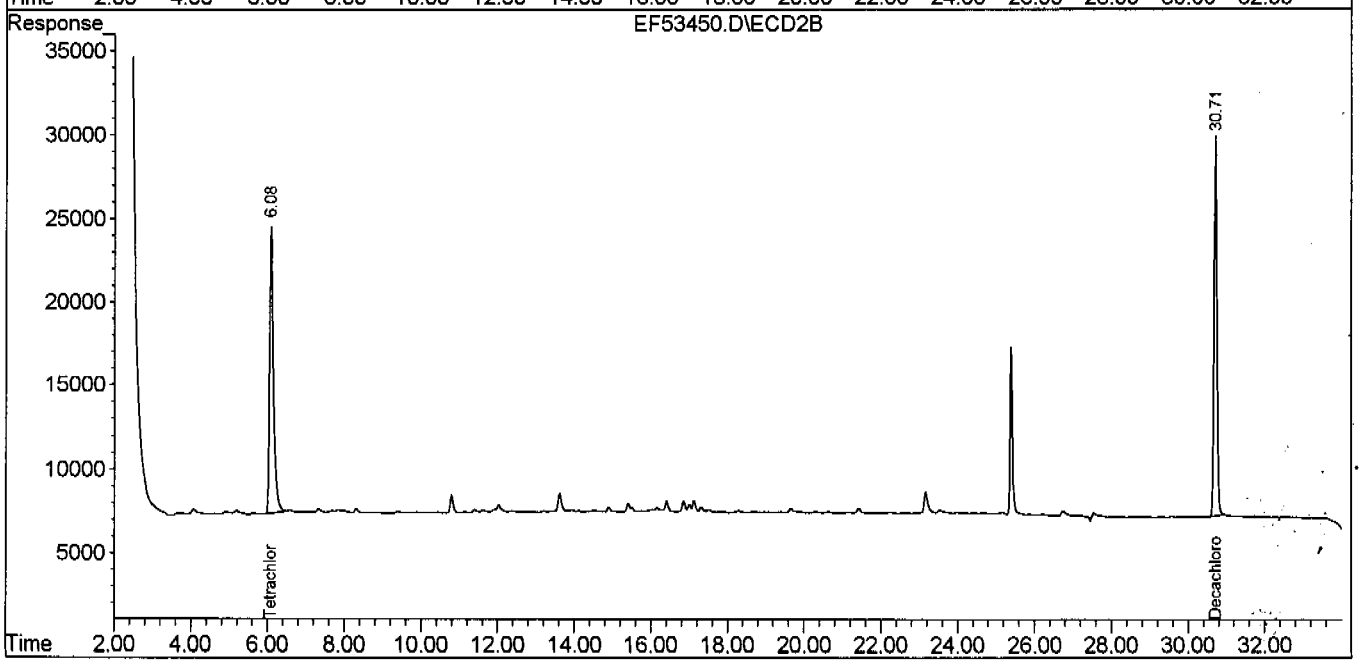
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53450.D\ECD1A.CH Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\ef53450.D\ECD2B.CH
Acq On : 14 Aug 2004 8:02 pm Operator: olgaa
Sample : N74646-10 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:41 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-750-LITTLEMOUNTAIN		
Lab Sample ID:	N74646-11	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53453.D	1	08/14/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.079	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.089	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.076	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.076	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.53		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.53		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		27-140%
877-09-8	Tetrachloro-m-xylene	91%		27-140%
2051-24-3	Decachlorobiphenyl	99%		19-151%
2051-24-3	Decachlorobiphenyl	101%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53453.D\ECD1A.CH Vial: 38
Signal #2 : C:\HPCHEM\1\DATA\ef53453.D\ECD2B.CH
Acq On : 14 Aug 2004 11:44 pm Operator: olgaa
Sample : N74646-11 Inst : GCEF
Misc : OP17689,GEF2576,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:42 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.92	6.08	1191658	1338469	33.900	36.349
Spiked Amount 40.000			Recovery	=	84.75%	90.87%
50) S Decachlorobiphen	28.61	30.72	1204289	1433381	39.476	40.235
Spiked Amount 40.000			Recovery	=	98.69%	100.59%

Target Compounds

QA
81689

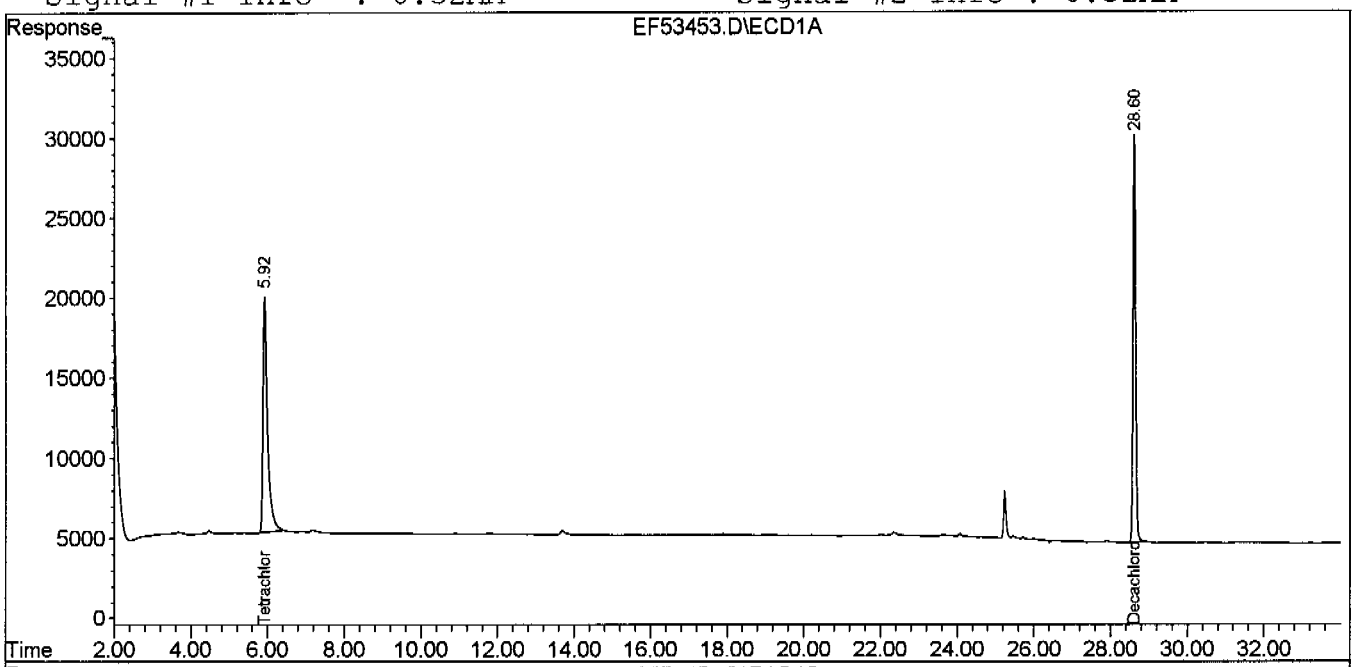
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef53453.D GEF2562.M Mon Aug 16 12:42:55 2004 RPT1 Page 1

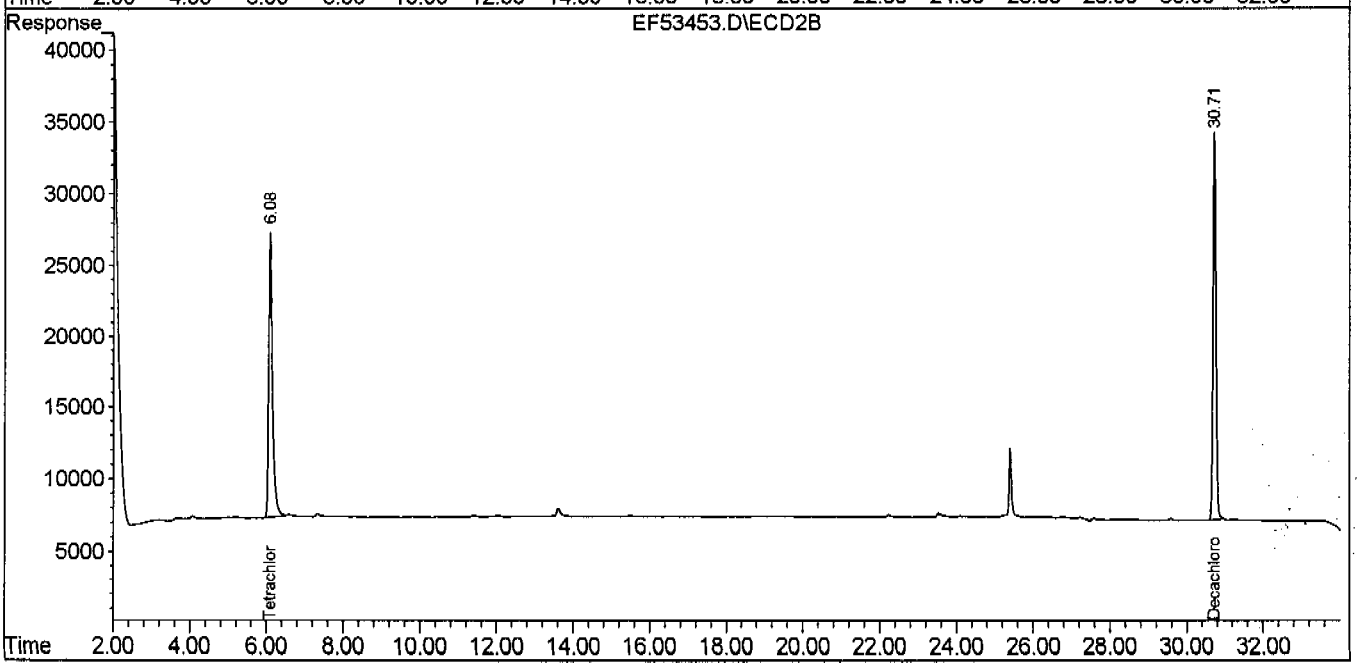
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53453.D\ECD1A.CH Vial: 38
Signal #2 : C:\HPCHEM\1\DATA\ef53453.D\ECD2B.CH
Acq On : 14 Aug 2004 11:44 pm Operator: olgaa
Sample : N74646-11 Inst : GCEF
Misc : OP17689,GEF2576,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:42 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-191-FALCONLANE		
Lab Sample ID:	N74646-12	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53454.D	1	08/15/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.56	0.084	ug/l	
11104-28-2	Aroclor 1221	ND	0.56	0.094	ug/l	
11141-16-5	Aroclor 1232	ND	0.56	0.14	ug/l	
53469-21-9	Aroclor 1242	ND	0.56	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.56	0.080	ug/l	
11097-69-1	Aroclor 1254	ND	0.56	0.080	ug/l	
11096-82-5	Aroclor 1260	ND	0.56	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.56		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.56		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	83%		27-140%
877-09-8	Tetrachloro-m-xylene	89%		27-140%
2051-24-3	Decachlorobiphenyl	77%		19-151%
2051-24-3	Decachlorobiphenyl	78%		19-151%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53454.D\ECD1A.CH Vial: 39
Signal #2 : C:\HPCHEM\1\DATA\ef53454.D\ECD2B.CH
Acq On : 15 Aug 2004 12:21 am Operator: olgaa
Sample : N74646-12 Inst : GCEF
Misc : OP17689,GEF2576,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:43 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.92	6.08	1164603	1312086	33.130	35.632
Spiked Amount 40.000			Recovery	=	82.83%	89.08%
50) S Decachlorobiphen	28.61	30.72	937065	1106971	30.717	31.072
Spiked Amount 40.000			Recovery	=	76.79%	77.68%
Target Compounds						

QA
8/6/04

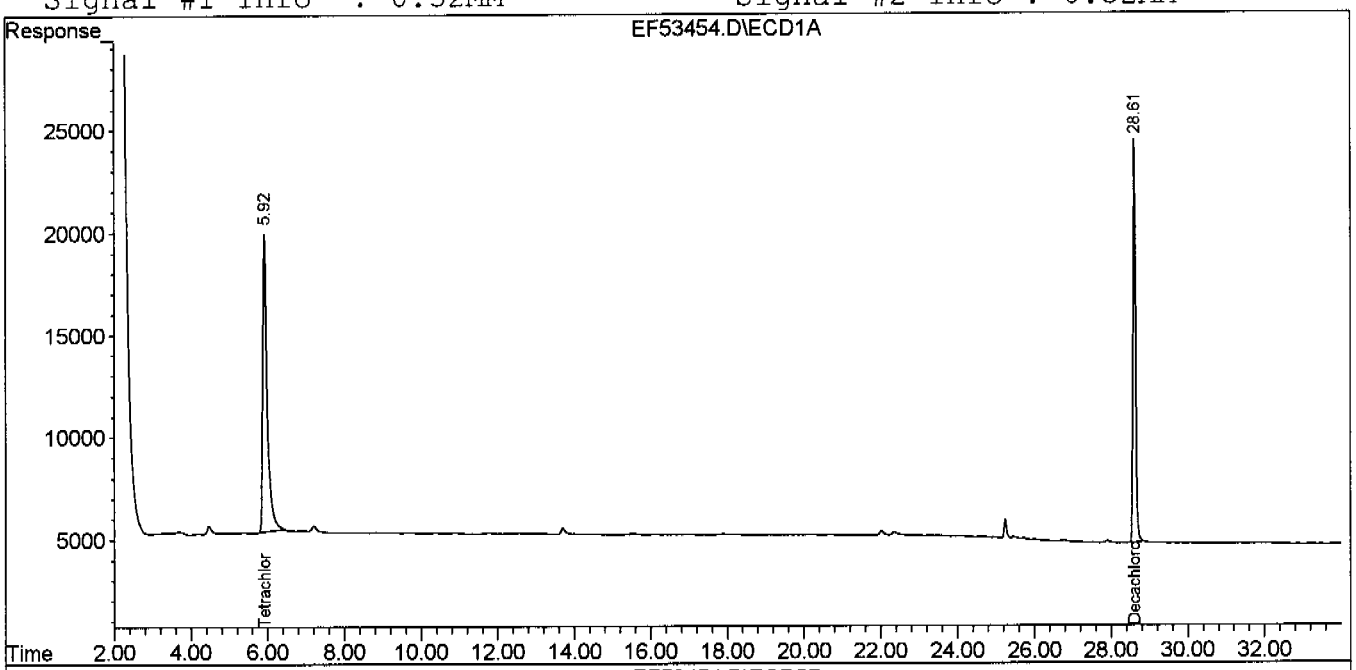
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

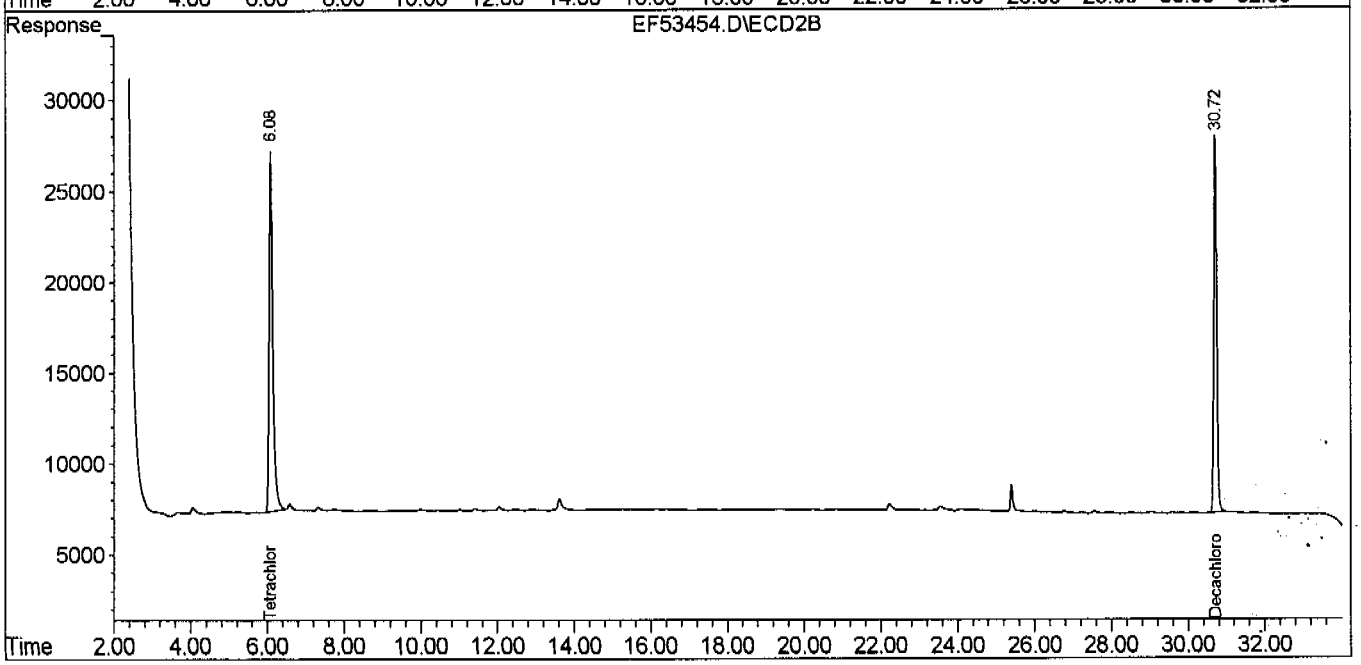
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53454.D\ECD1A.CH Vial: 39
Signal #2 : C:\HPCHEM\1\DATA\ef53454.D\ECD2B.CH
Acq On : 15 Aug 2004 12:21 am Operator: olgaa
Sample : N74646-12 Inst : GCEF
Misc : OP17689,GEF2576,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:43 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4149-RANGERD		
Lab Sample ID:	N74646-13	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8082 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF53455.D	1	08/15/04	OYA	08/11/04	OP17689	GEF2576
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.080	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.090	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.53	0.076	ug/l	
11097-69-1	Aroclor 1254	ND	0.53	0.076	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.53		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.53		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		27-140%
877-09-8	Tetrachloro-m-xylene	87%		27-140%
2051-24-3	Decachlorobiphenyl	105%		19-151%
2051-24-3	Decachlorobiphenyl	106%		19-151%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53455.D\ECD1A.CH Vial: 40
Signal #2 : C:\HPCHEM\1\DATA\ef53455.D\ECD2B.CH
Acq On : 15 Aug 2004 12:58 am Operator: olgaa
Sample : N74646-13 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:45 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	1133385	1275834	32.242	34.648
Spiked Amount 40.000			Recovery	=	80.60%	86.62%
50) S Decachlorobiphen	28.62	30.72	1277204	1512759	41.866	42.463
Spiked Amount 40.000			Recovery	=	104.67%	106.16%

Target Compounds

OA
81684

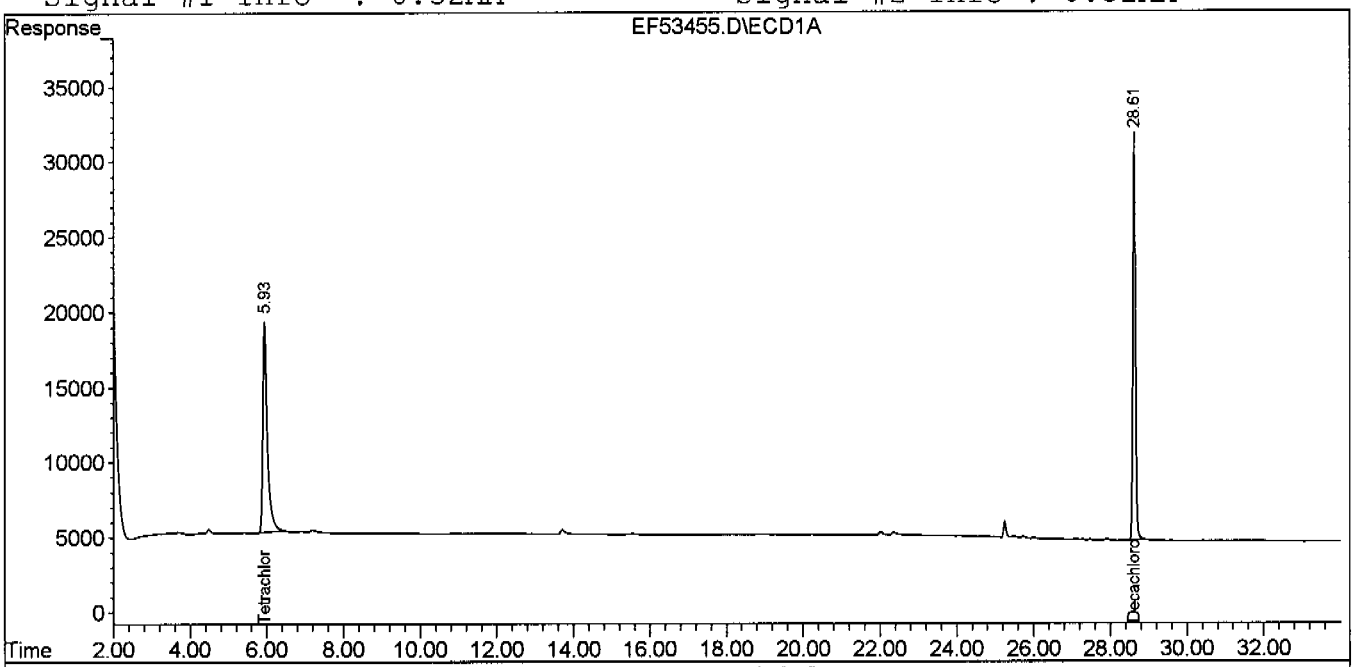
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

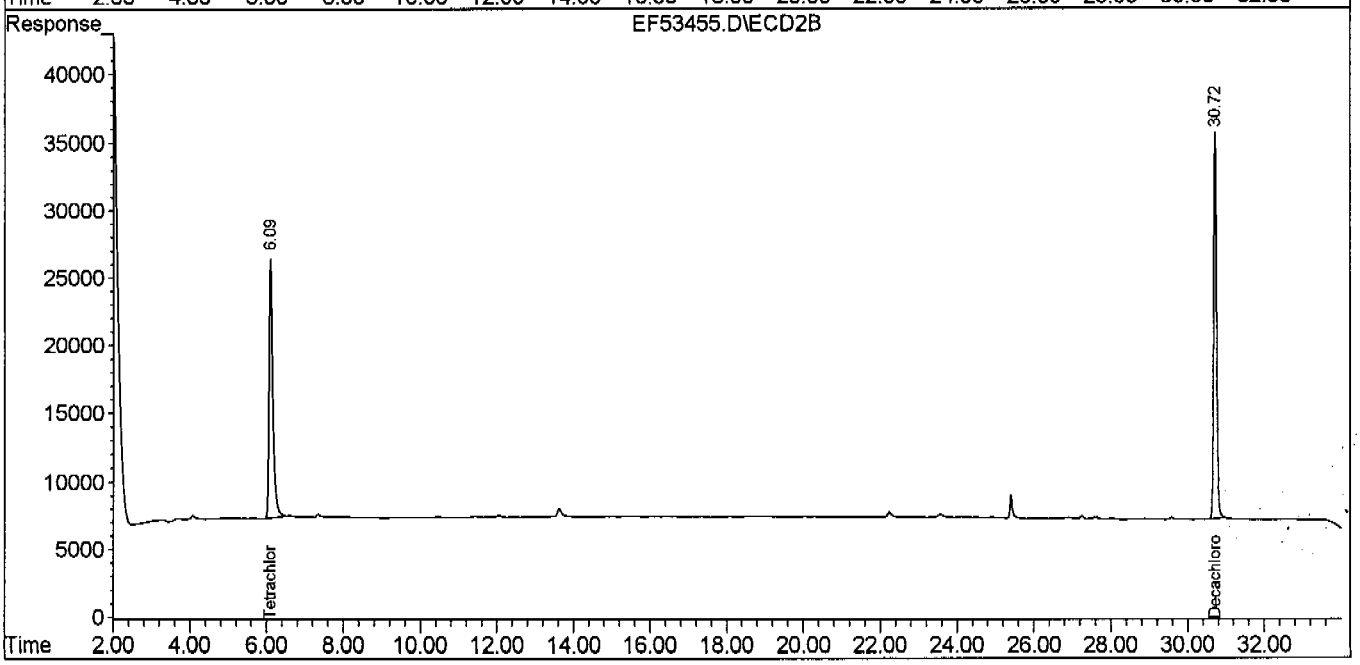
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53455.D\ECD1A.CH Vial: 40
Signal #2 : C:\HPCHEM\1\DATA\ef53455.D\ECD2B.CH
Acq On : 15 Aug 2004 12:58 am Operator: olgaa
Sample : N74646-13 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:45 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Initial Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2562-ICC2562
Lab FileID: EF52980.D

Response Factor Report GCEF

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:31:31 2004

Calibration Files
3000 =ef52982.D 2000 =ef52981.D 1000 =ef52980.D
500 =ef52979.D 250 =ef52978.D 50 =ef52977.D

		Compound	3000	2000	1000	500	250	50	Avg	%RSD
1)	S	Tetrachloro-m-xylen	3.487	3.555	3.686	3.528	3.320		3.515 E4	3.76
2)		AR1221-A			3.376				3.376 E2	0.00
3)		AR1221-B			4.576				4.576 E2	0.00
4)		AR1221-C			1.575				1.575 E3	0.00
5)		AR1221-D			1.547				1.547 E2	0.00
6)		AR1221-E			2.181				2.181 E2	0.00
7)		AR1232-A			1.088				1.088 E3	0.00
8)		AR1232-B			8.069				8.069 E2	0.00
9)		AR1232-C			1.333				1.333 E3	0.00
10)		AR1232-D			5.725				5.725 E2	0.00
11)		AR1232-E			5.653				5.653 E2	0.00
12)		AR1242-A			1.382				1.382 E3	0.00
13)		AR1242-B			2.383				2.383 E3	0.00
14)		AR1242-C			9.978				9.978 E2	0.00
15)		AR1242-D			1.079				1.079 E3	0.00
16)		AR1242-E			4.875				4.875 E2	0.00
17)		AR1248-A			9.089				9.089 E2	0.00
18)		AR1248-B			8.520				8.520 E2	0.00
19)		AR1248-C			1.751				1.751 E3	0.00
20)		AR1248-D			1.009				1.009 E3	0.00
21)		AR1248-E			1.129				1.129 E3	0.00
22)		AR1254-A			1.491				1.491 E3	0.00
23)		AR1254-B			1.746				1.746 E3	0.00
24)		AR1254-C			2.262				2.262 E3	0.00
25)		AR1254-D			2.001				2.001 E3	0.00
26)		AR1254-E			1.943				1.943 E3	0.00
27)		AR1254-F			1.217				1.217 E3	0.00
28)		AR1254-G			1.148				1.148 E3	0.00
29)		AR1254-H			1.032				1.032 E3	0.00
30)		AR1016-A	1.472	1.575	1.797	1.913	1.873	2.029	1.777 E3	11.96
31)		AR1016-B	1.113	1.171	1.289	1.221	1.015	1.031	1.140 E3	9.45
32)		AR1016-C	3.148	3.194	3.330	3.123	3.074	2.927	3.133 E3	4.25
33)		AR1016-D	1.231	1.271	1.385	1.357	1.394	1.365	1.334 E3	5.00
34)		AR1016-E	1.319	1.364	1.481	1.393	1.431	1.145	1.355 E3	8.64
35)		AR1260-A	3.193	3.287	3.554	3.552	3.572	3.583	3.457 E3	4.94
36)		AR1260-B	1.424	1.486	1.653	1.707	1.786	1.854	1.651 E3	10.19
37)		AR1260-C	1.556	1.606	1.748	1.744	1.788	1.687	1.688 E3	5.35
38)		AR1260-D	2.997	3.083	3.348	3.242	3.257	3.421	3.225 E3	4.94
39)		AR1260-E	1.585	1.607	1.698	1.661	1.624	1.571	1.624 E3	2.94
40)		AR1262-A			2.542				2.542 E3	0.00
41)		AR1262-B			2.270				2.270 E3	0.00
42)		AR1262-C			4.130				4.130 E3	0.00
43)		AR1262-D			1.768				1.768 E3	0.00
44)		AR1262-E			1.232				1.232 E3	0.00
45)		AR1268-A			4.821				4.821 E3	0.00
46)		AR1268-B			4.759				4.759 E3	0.00
47)		AR1268-C			3.375				3.375 E3	0.00
48)		AR1268-D			1.484				1.484 E3	0.00

Initial Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC
Sample: GEF2562-ICC2562
Lab FileID: EF52980.D

49)		AR1268-E			8.879				8.879	E3	0.00
50)	S	Decachlorobiphenyl	2.532	2.583	2.982	3.179	3.377	3.651	3.051	E4	14.47

Signal #2 Calibration Files

3000	=ef52982.D	2000	=ef52981.D	1000	=ef52980.D
500	=ef52979.D	250	=ef52978.D	50	=ef52977.D

		Compound	3000	2000	1000	500	250	50	Avg		%RSD
1)	S	Tetrachloro-m-xylen	3.686	3.752	3.914	3.687	3.579	3.475	3.682	E4	4.07
2)		AR1221-A			3.078				3.078	E2	0.00
3)		AR1221-B			4.591				4.591	E2	0.00
4)		AR1221-C			3.005				3.005	E2	0.00
5)		AR1221-D			1.230				1.230	E3	0.00
6)		AR1221-E			2.321				2.321	E2	0.00
7)		AR1232-A			9.881				9.881	E2	0.00
8)		AR1232-B			8.671				8.671	E2	0.00
9)		AR1232-C			1.407				1.407	E3	0.00
10)		AR1232-D			6.968				6.968	E2	0.00
11)		AR1232-E			4.334				4.334	E2	0.00
12)		AR1242-A			1.437				1.437	E3	0.00
13)		AR1242-B			2.538				2.538	E3	0.00
14)		AR1242-C			1.245				1.245	E3	0.00
15)		AR1242-D			8.631				8.631	E2	0.00
16)		AR1242-E			1.229				1.229	E3	0.00
17)		AR1248-A			1.550				1.550	E3	0.00
18)		AR1248-B			1.145				1.145	E3	0.00
19)		AR1248-C			1.373				1.373	E3	0.00
20)		AR1248-D			1.578				1.578	E3	0.00
21)		AR1248-E			1.364				1.364	E3	0.00
22)		AR1254-A			1.885				1.885	E3	0.00
23)		AR1254-B			1.860				1.860	E3	0.00
24)		AR1254-C			1.360				1.360	E3	0.00
25)		AR1254-D			2.537				2.537	E3	0.00
26)		AR1254-E			1.967				1.967	E3	0.00
27)		AR1254-F			8.788				8.788	E2	0.00
28)		AR1254-G			8.370				8.370	E2	0.00
29)		AR1254-H			8.680				8.680	E2	0.00
30)		AR1016-A	7.238	7.573	8.221	8.394	8.162	7.606	7.866	E2	5.80
31)		AR1016-B	3.039	3.150	3.407	3.428	3.241	3.219	3.247	E3	4.60
32)		AR1016-C	1.438	1.510	1.676	1.728	1.538	1.607	1.583	E3	6.85
33)		AR1016-D	0.963	1.001	1.104	1.141	1.159	1.190	1.093	E3	8.32
34)		AR1016-E	1.200	1.217	1.290	1.284	1.234	1.131	1.226	E3	4.82
35)		AR1260-A	2.322	2.400	2.620	2.646	2.692	2.762	2.574	E3	6.74
36)		AR1260-B	1.485	1.558	1.745	1.827	1.942	2.176	1.789	E3	14.20
37)		AR1260-C	1.559	1.625	1.803	1.891	1.938	2.150	1.828	E3	11.84
38)		AR1260-D	3.165	3.269	3.569	3.671	3.538	3.868	3.513	E3	7.37
39)		AR1260-E	2.285	2.334	2.503	2.506	2.480	2.482	2.432	E3	3.97
40)		AR1262-A			2.680				2.680	E3	0.00
41)		AR1262-B			2.389				2.389	E3	0.00
42)		AR1262-C			4.342				4.342	E3	0.00
43)		AR1262-D			3.050				3.050	E3	0.00
44)		AR1262-E			1.630				1.630	E3	0.00
45)		AR1268-A			5.041				5.041	E3	0.00
46)		AR1268-B			4.982				4.982	E3	0.00
47)		AR1268-C			3.685				3.685	E3	0.00
48)		AR1268-D			1.712				1.712	E3	0.00
49)		AR1268-E			1.047				1.047	E4	0.00
50)	S	Decachlorobiphenyl	2.992	3.061	3.526	3.669	3.940	4.188	3.563	E4	13.31

Initial Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2562-ICC2562
Lab FileID: EF52980.D

(#) = Out of Range

GEF2562.M Mon Aug 16 11:33:20 2004 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52972.D\ECD1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\ef52972.D\ECD2B.CH
Acq On : 26 Jul 2004 5:13 pm Operator: olgaa
Sample : IC2562-1000,1221 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:14 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.94	6.10	3722240	3778062	116.176	113.807
Spiked Amount 40.000			Recovery	=	290.44%	284.52%
37) S Decachlorobiphen	28.59	30.71	2853851	3385369	101.379	105.707
Spiked Amount 40.000			Recovery	=	253.45%	264.27%
Target Compounds						
2) AR1221-A	4.52	4.85	337639	307843	1000.000	1000.000
3) AR1221-B	6.49	7.06	457638	459085	1000.000	1000.000
4) AR1221-C	7.10	7.54	1575071	300454	1000.000	1000.000
5) AR1221-D	8.33	7.76	154692	1229927	1000.000	1000.000
6) AR1221-E	9.07	9.27	218062	232133	1000.000	1000.000

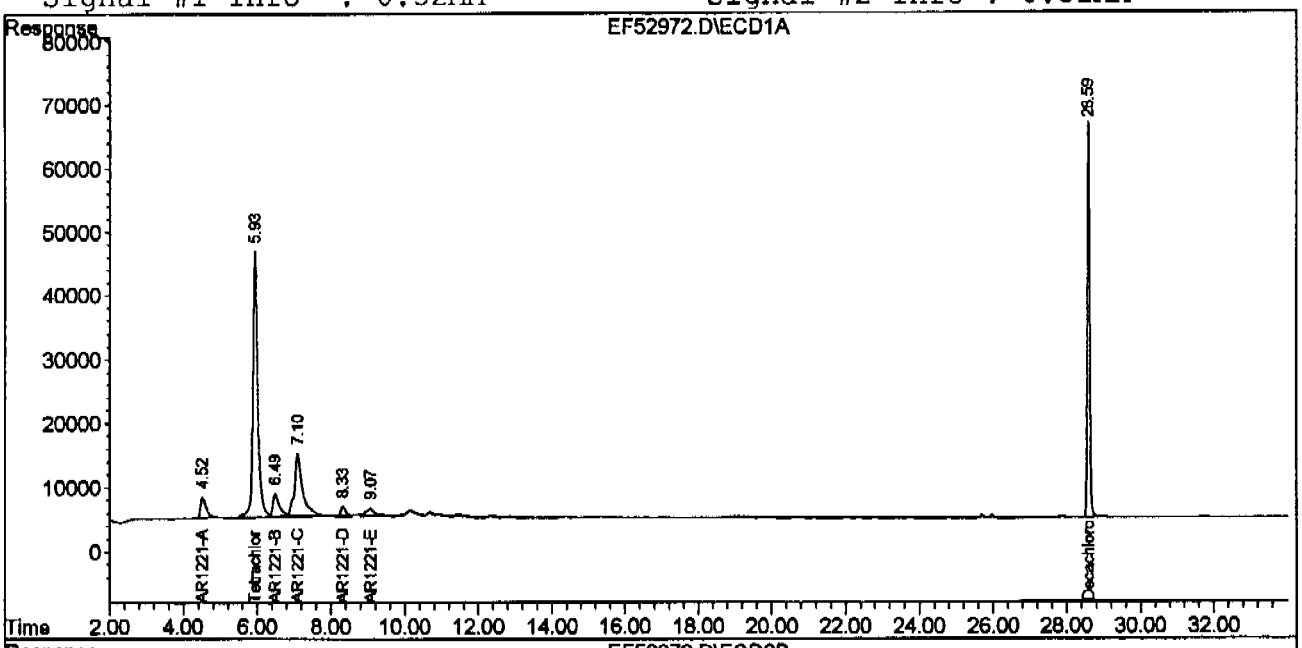
OA
72704

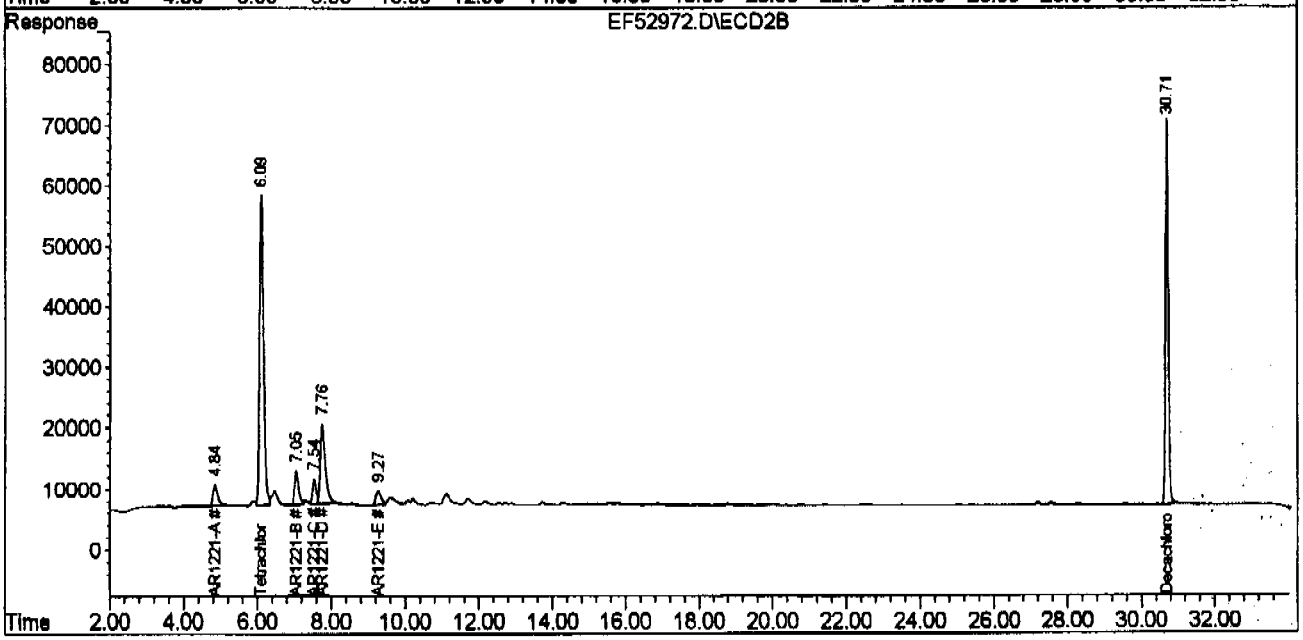
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52972.D\ECD1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\ef52972.D\ECD2B.CH
Acq On : 26 Jul 2004 5:13 pm Operator: olgaa
Sample : IC2562-1000,1221 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:14 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52973.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\ef52973.D\ECD2B.CH
Acq On : 26 Jul 2004 5:50 pm Operator: olgaa
Sample : IC2562-1000,1232 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:21 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	3702515	3854161	115.560	116.099
Spiked Amount 40.000			Recovery	=	288.90%	290.25%
37) S Decachlorobiphen	28.59	30.71	2894962	3440687	102.839	107.434
Spiked Amount 40.000			Recovery	=	257.10%	268.59%
Target Compounds						
7) AR1232-A	7.10	7.75	1088358	988090	1639.486	1224.320
8) AR1232-B	8.32	9.24	806870	867119	1249.943	1217.791
9) AR1232-C	10.13	11.12	1332815	1407198	1227.163	1196.704
10) AR1232-D	10.68	11.69	572539	696818	1240.232	1258.557
11) AR1232-E	12.34	13.72	565337	433380	1253.423	1199.540

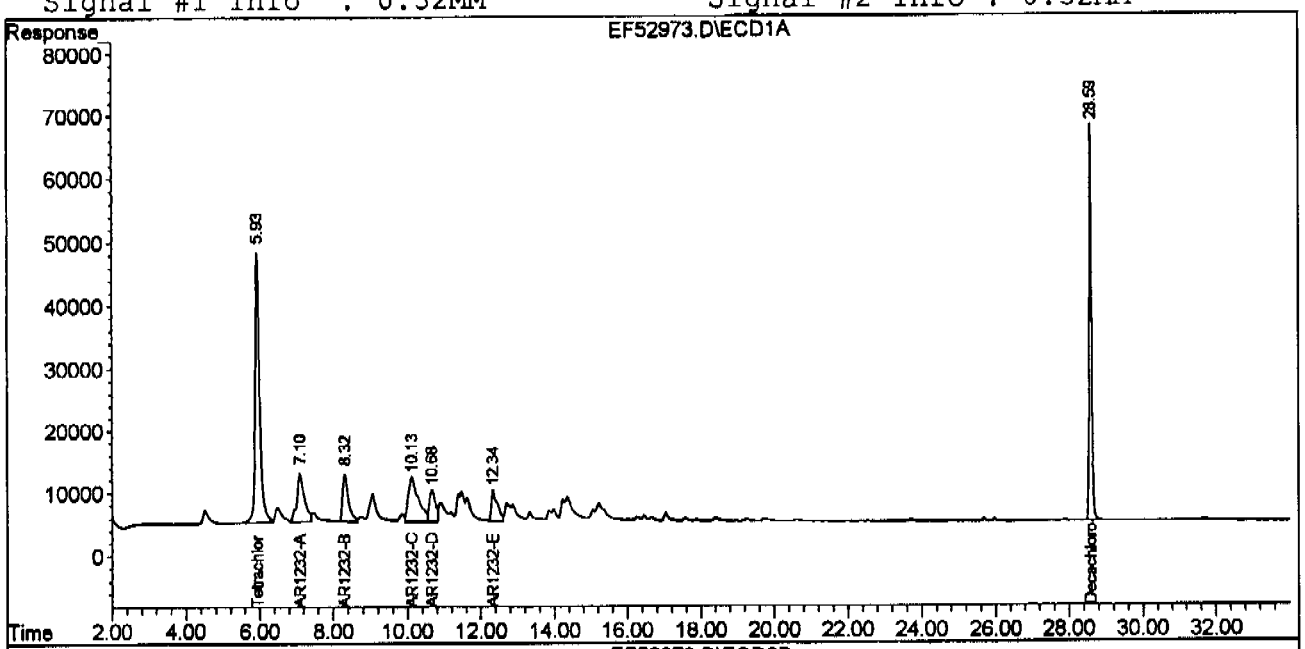
QA
72784

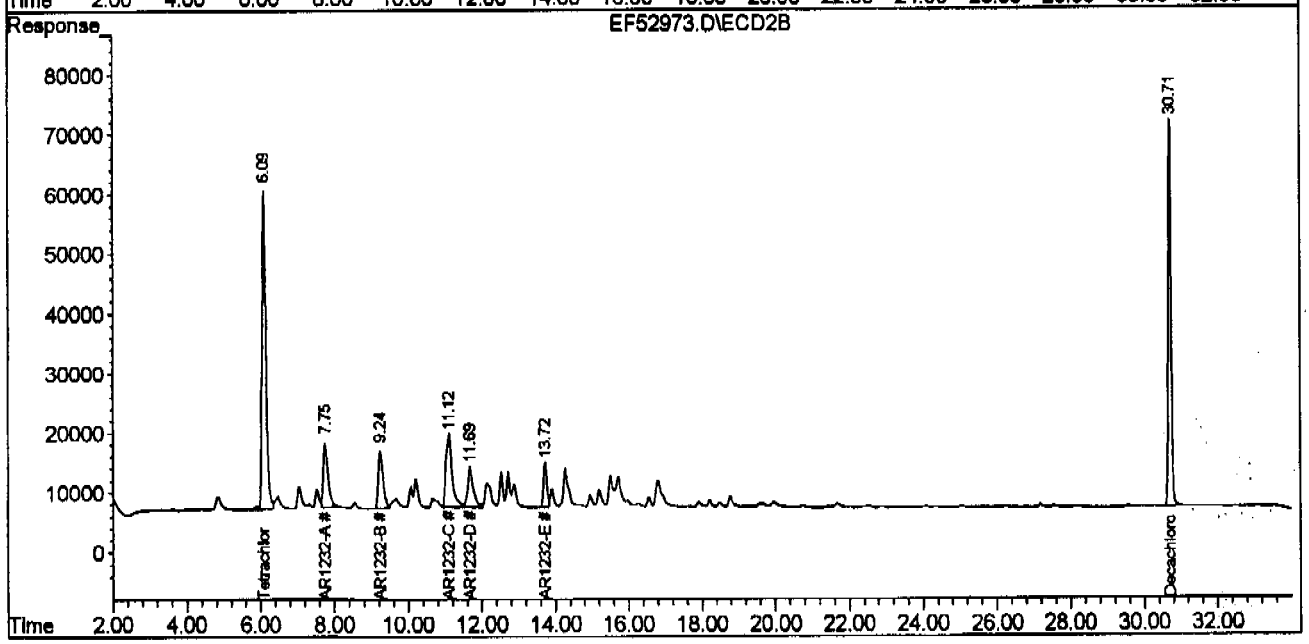
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52973.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\ef52973.D\ECD2B.CH
Acq On : 26 Jul 2004 5:50 pm Operator: olgaa
Sample : IC2562-1000,1232 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:21 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52974.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\ef52974.D\ECD2B.CH
Acq On : 26 Jul 2004 6:27 pm Operator: olgaa
Sample : IC2562-1000,1242 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:40 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	3513260	3754474	111.103	113.257
Spiked Amount 40.000			Recovery	=	277.76%	283.14%
37) S Decachlorobiphen	28.58	30.71	2842442	3368872	101.042	105.300
Spiked Amount 40.000			Recovery	=	252.61%	263.25%
Target Compounds						
12) AR1242-A	8.32	9.24	1381855	1436588	1000.000	1000.000
13) AR1242-B	10.12	11.11	2383387	2537938	1000.000	1000.000
14) AR1242-C	10.68	11.68	997821	1244649	1000.000	1000.000
15) AR1242-D	12.34	13.72	1078799	863100	1000.000	1000.000
16) AR1242-E	14.23	14.27	487505	1229433	1000.000	1000.000

OA
72704

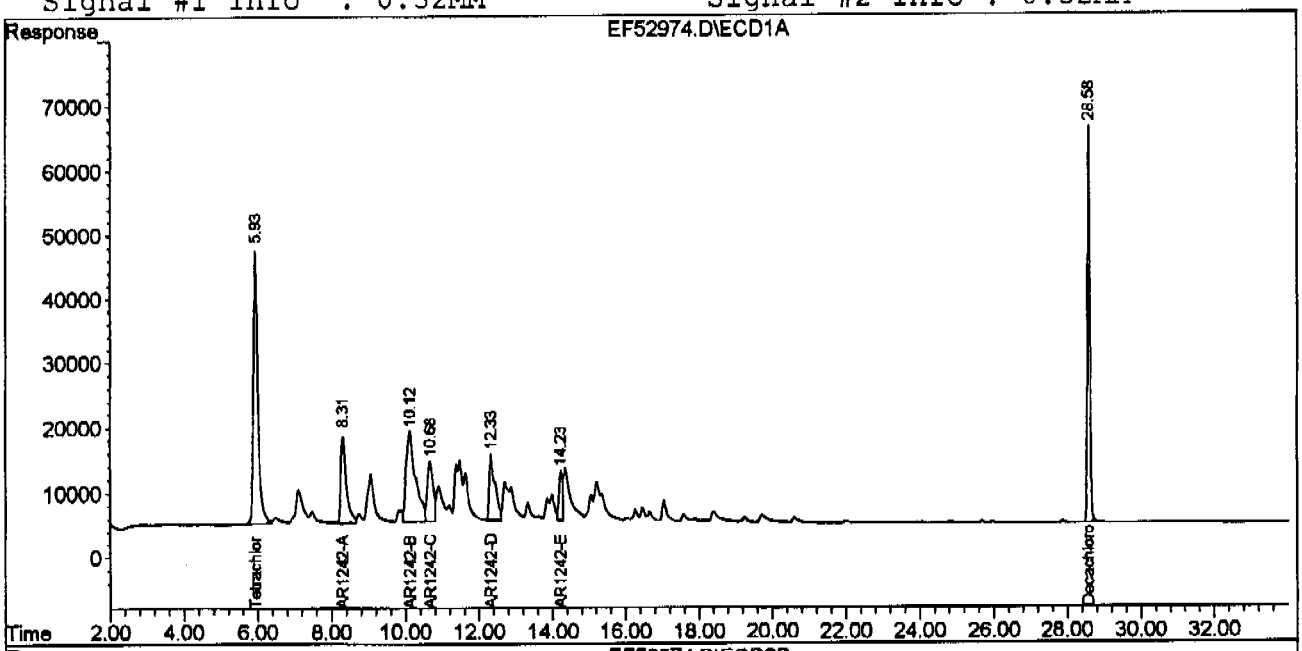
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

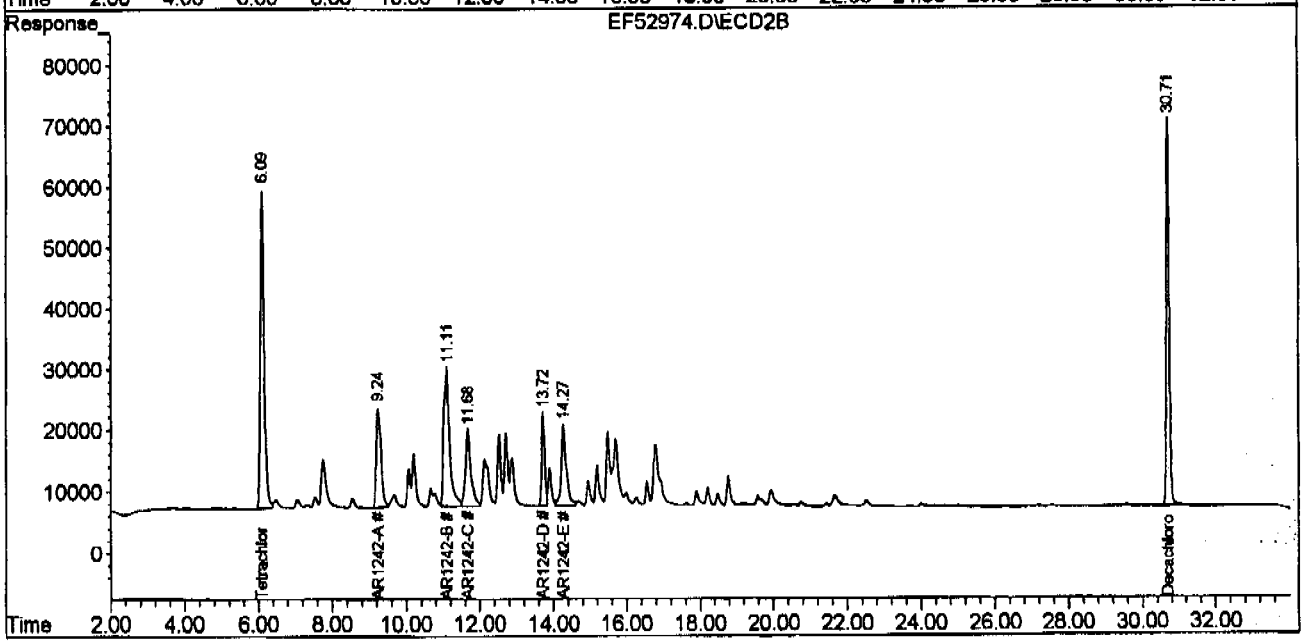
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52974.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\ef52974.D\ECD2B.CH
Acq On : 26 Jul 2004 6:27 pm Operator: olgaa
Sample : IC2562-1000,1242 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:40 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52975.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\ef52975.D\ECD2B.CH
Acq On : 26 Jul 2004 7:03 pm Operator: olgaa
Sample : IC2562-1000,1248 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:42 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	3464105	3721392	109.548	112.259
Spiked Amount 40.000			Recovery	=	273.87%	280.65%
37) S Decachlorobiphen	28.58	30.71	2835387	3358477	100.791	104.975
Spiked Amount 40.000			Recovery	=	251.98%	262.44%
Target Compounds						
17) AR1248-A	10.13	11.12	908926	1550284	866.935	942.663
18) AR1248-B	11.39	12.52	852002	1145233	956.572	992.804
19) AR1248-C	12.33	13.72	1750978	1373015	982.301	982.643
20) AR1248-D	14.23	14.27	1009272	1578429	981.057	1007.491
21) AR1248-E	15.21	15.49	1128886	1364079	1035.755	970.690

OA
7/27/04

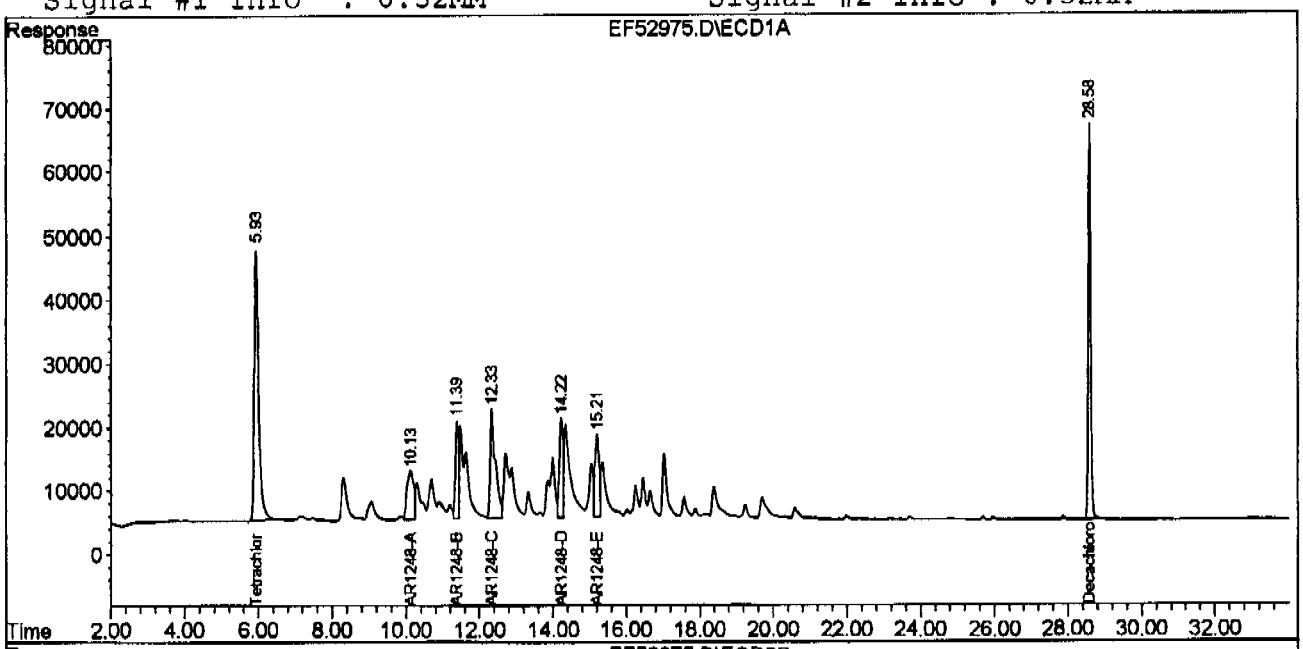
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

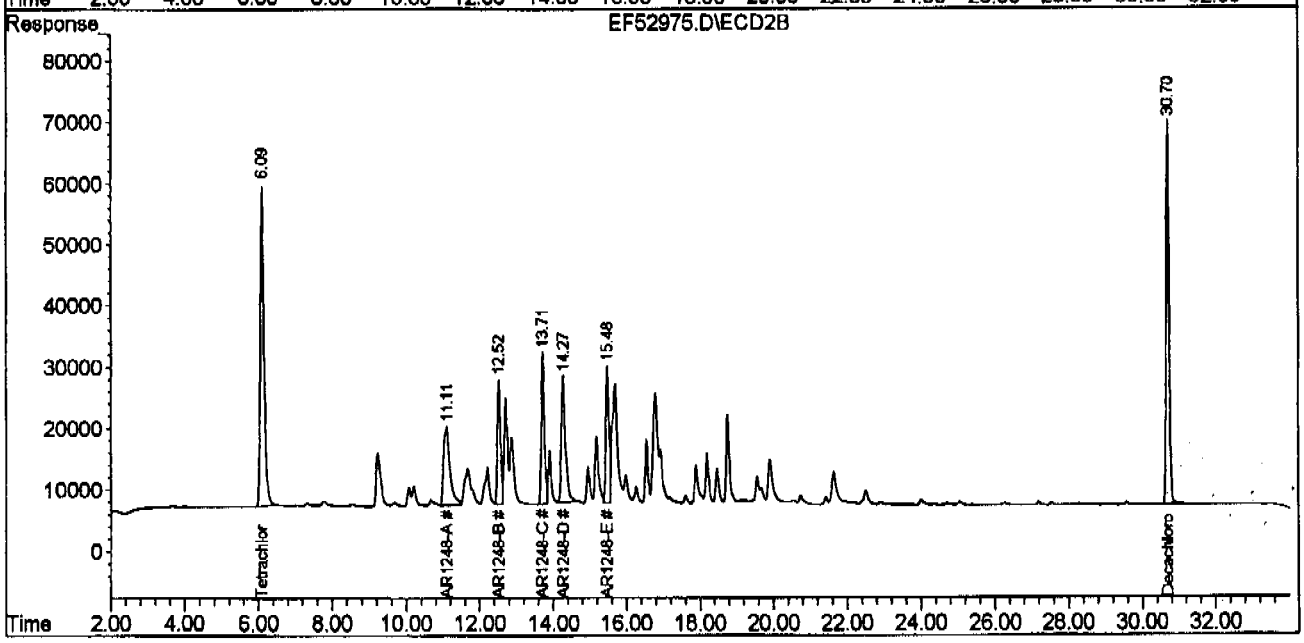
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52975.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\ef52975.D\ECD2B.CH
Acq On : 26 Jul 2004 7:03 pm Operator: olgaa
Sample : IC2562-1000,1248 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:42 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52976.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\ef52976.D\ECD2B.CH
Acq On : 26 Jul 2004 7:40 pm Operator: olgaa
Sample : IC2562-1000,1254 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:46 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	3467144	3724369	109.644	112.349
Spiked Amount 40.000			Recovery	=	274.11%	280.87%
37) S Decachlorobiphen	28.58	30.70	2840911	3363067	100.988	105.119
Spiked Amount 40.000			Recovery	=	252.47%	262.80%
Target Compounds						
22) AR1254-A	13.99	15.62	1478304	1885412	1134.464	1248.335
23) AR1254-B	15.19	16.54	1746561	1859598	1165.985	1184.138
24) AR1254-C	17.03	18.19	2261933	1359861	1168.135	1280.467
25) AR1254-D	18.37	18.75	2001266	2537169	1186.521	1222.063
26) AR1254-E	19.24	19.89	1942972	1966683	1127.057	1181.987

QA
72701

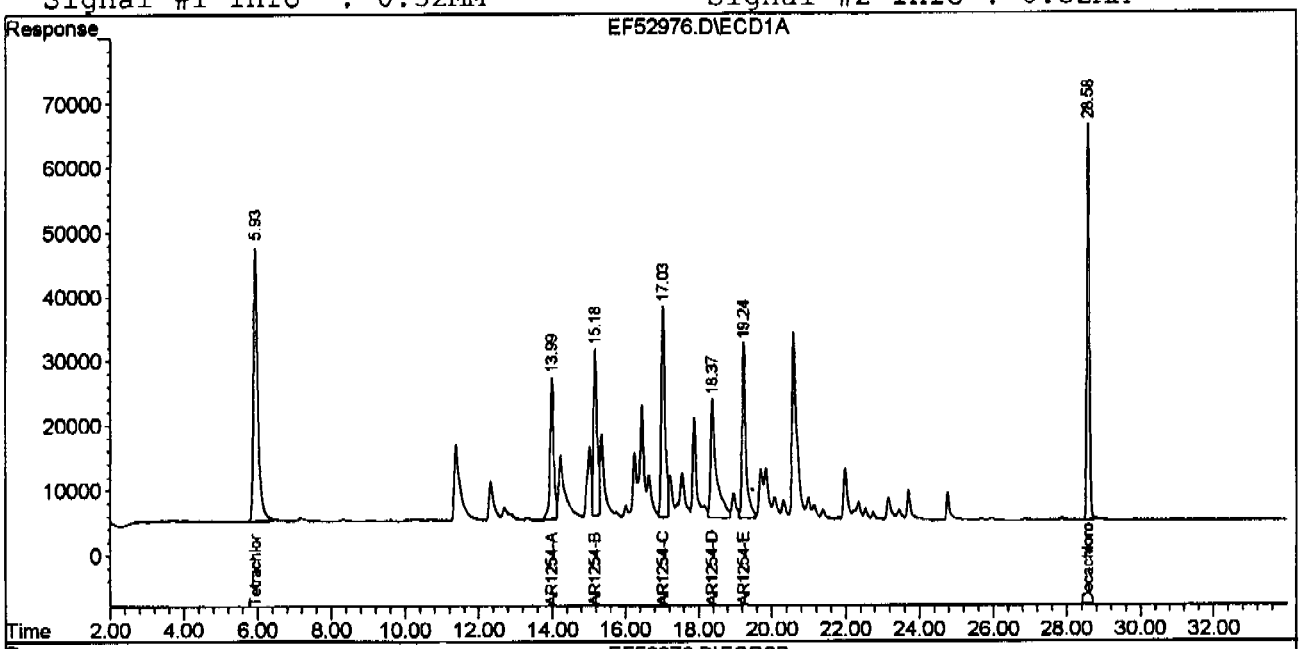
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef52976 D GEF2562 M Tue Jul 27 08:47:34 2004 RPT1 Page 1

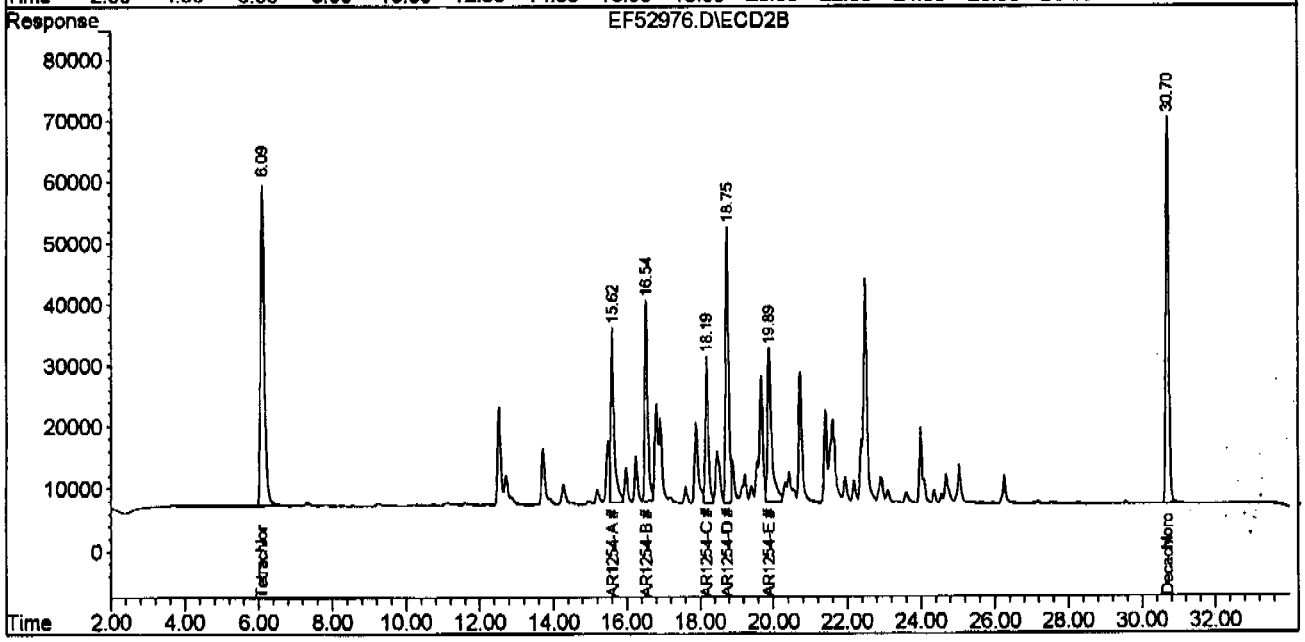
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52976.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\ef52976.D\ECD2B.CH
Acq On : 26 Jul 2004 7:40 pm Operator: olgaa
Sample : IC2562-1000,1254 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:46 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52977.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef52977.D\ECD2B.CH
Acq On : 26 Jul 2004 8:17 pm Operator: olgaa
Sample : IC2562-50,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:11 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.94	6.09	161413	173757	5.049	5.192
Spiked Amount 40.000			Recovery	=	12.62%	12.98%
37) S Decachlorobiphen	28.59	30.71	182539	209393	6.436	6.481
Spiked Amount 40.000			Recovery	=	16.09%	16.20%
Target Compounds						
27) AR1016-A	8.32	7.77	101469	38028	63.069	53.642
28) AR1016-B	9.07	11.15	51532	160940	49.802	55.407
29) AR1016-C	10.15	11.71	146351	80374	52.823m	58.477
30) AR1016-D	10.70	13.73	68228	59516	57.562	61.570
31) AR1016-E	12.34	14.29	57236	56527	46.038	52.142
32) AR1260-A	20.60	22.51	179128	138118	58.541	61.554m
33) AR1260-B	21.15	22.89	92689	108824	62.662	71.570
34) AR1260-C	22.35	24.10	84372	107507	57.507	69.374m
35) AR1260-D	23.71	25.04	171030	193403	60.919m	63.349
36) AR1260-E	24.77	26.25	78564	124121	55.872	57.758m

QA
7/27/04

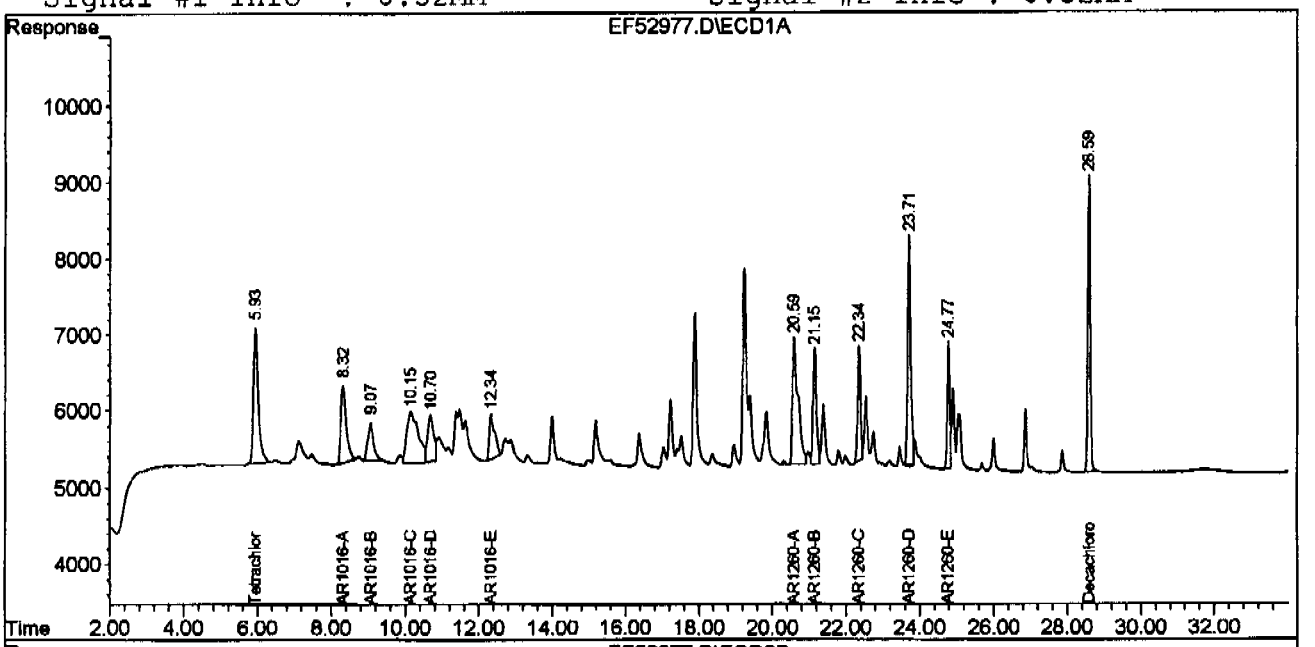
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

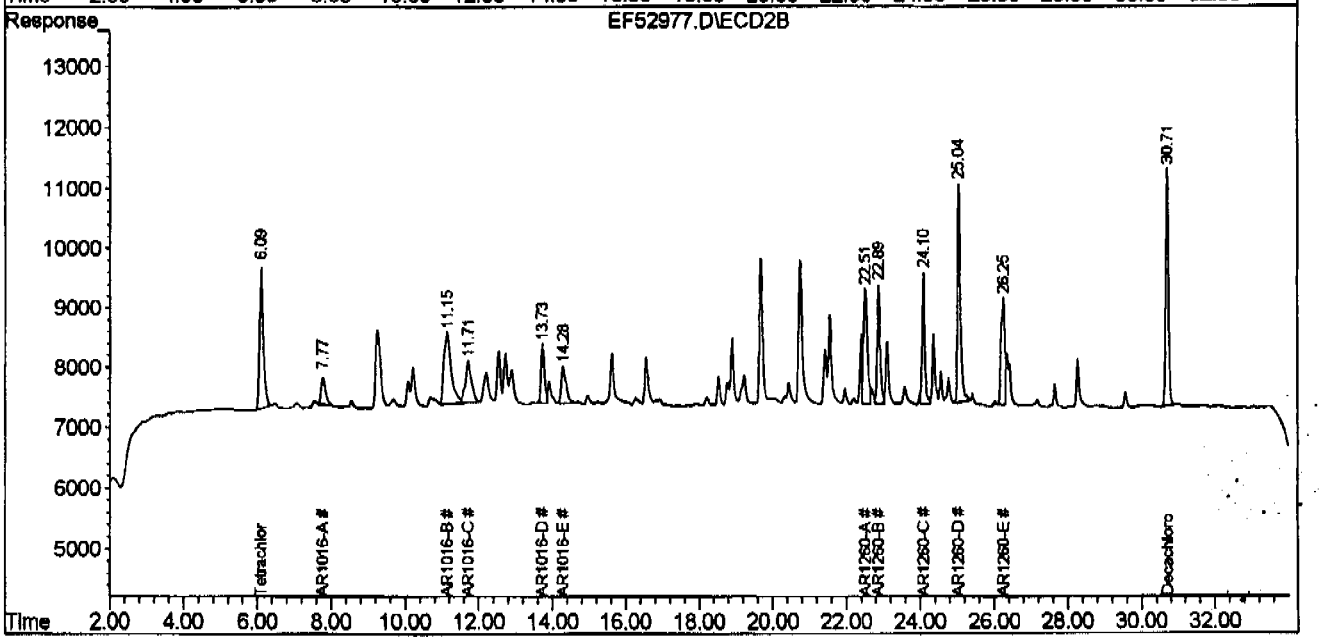
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52977.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef52977.D\ECD2B.CH
Acq On : 26 Jul 2004 8:17 pm Operator: olgaa
Sample : IC2562-50,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:11 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

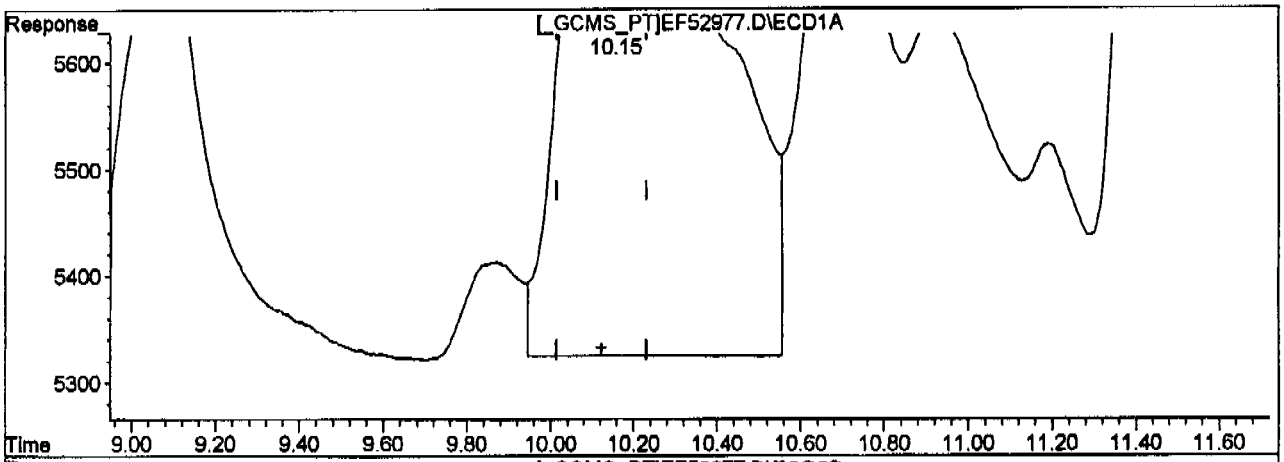


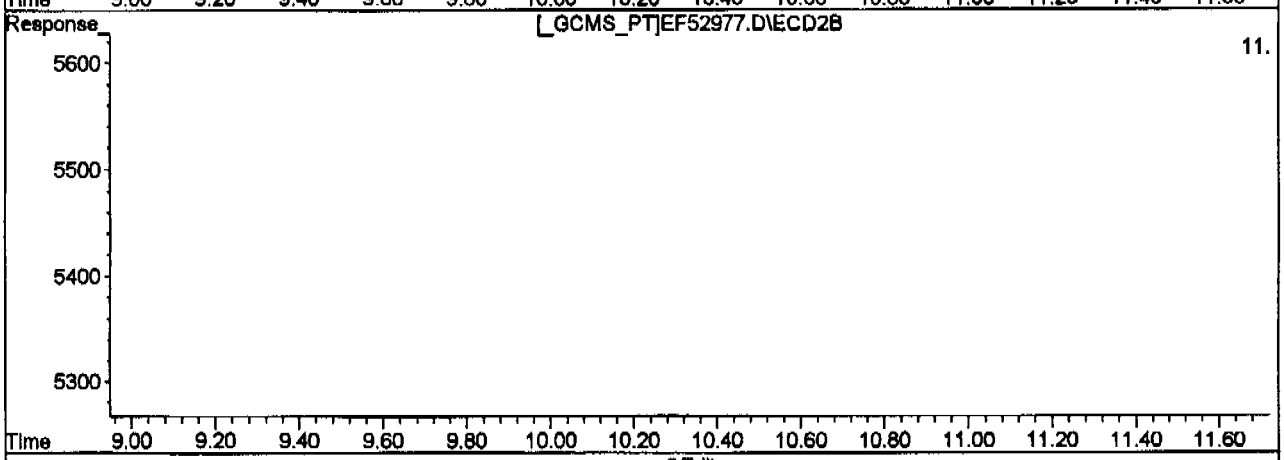


Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52977.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef52977.D\ECD2B.CH
Acq On : 26 Jul 2004 8:17 pm Operator: olgaa
Sample : IC2562-50,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:08 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration





QEdit

(29) AR1016-C

10.15min 52.823PPB m

response 146351

(29) AR1016-C #2

11.71min 58.477PPB

response 80374

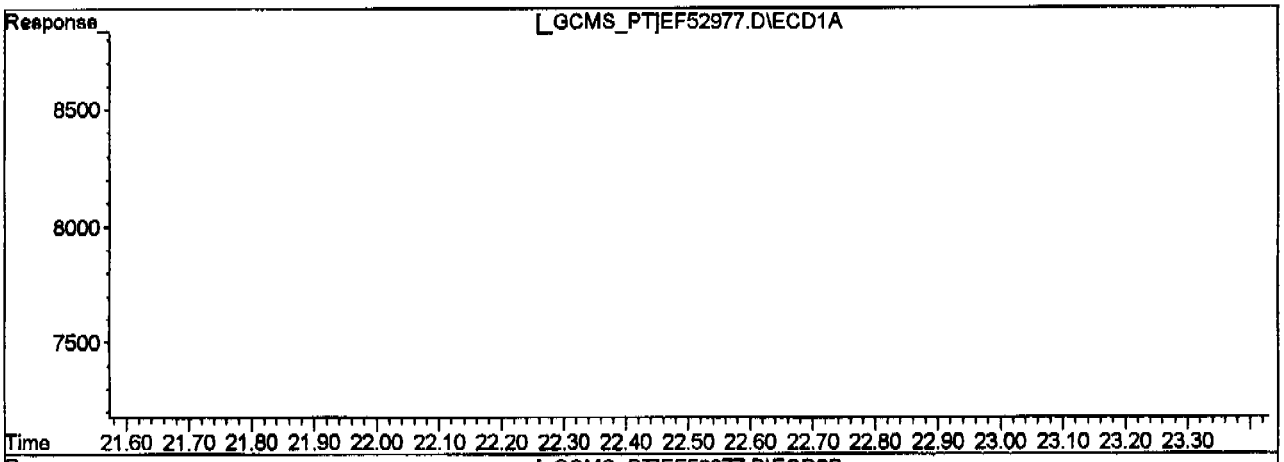
(+) = Expected Retention Time

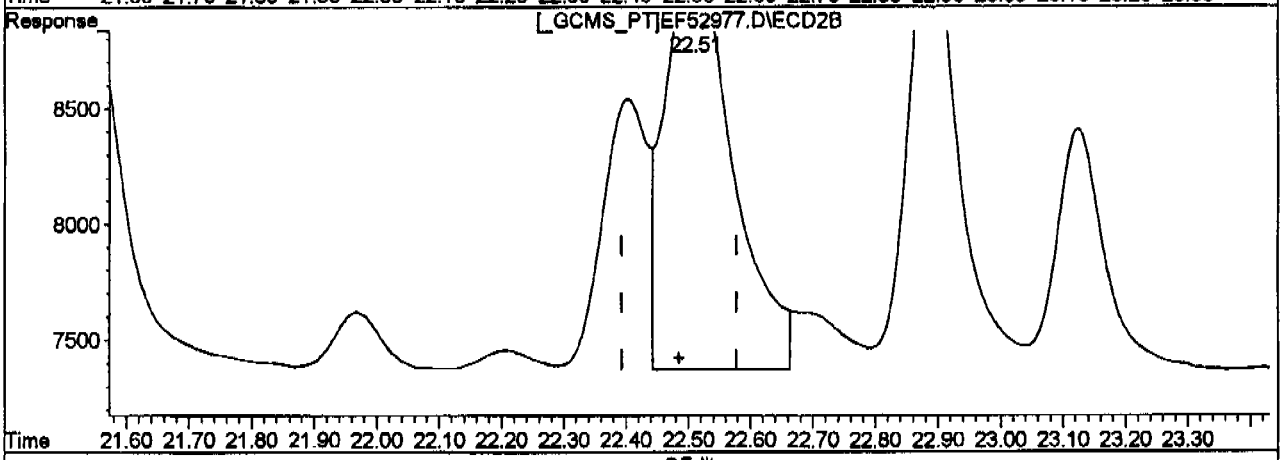
ef52977.D GEF2562.M Tue Jul 27 09:11:09 2004 RPT1

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52977.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef52977.D\ECD2B.CH
Acq On : 26 Jul 2004 8:17 pm Operator: olgaa
Sample : IC2562-50,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:05 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration





QEdit

(32) AR1260-A

20.60min 58.541PPB

response 179128

(32) AR1260-A #2

22.51min 61.554PPB m

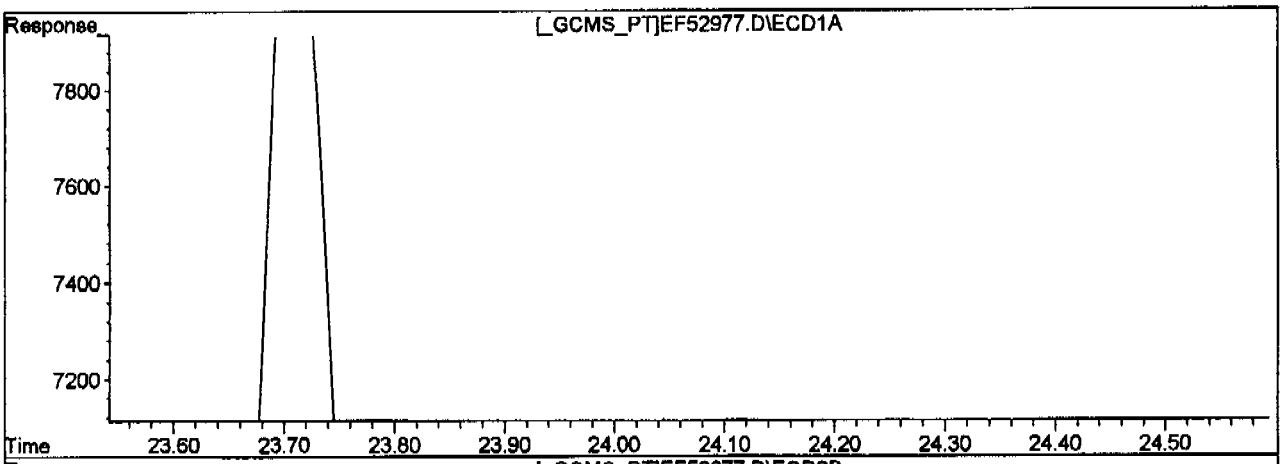
response 138118

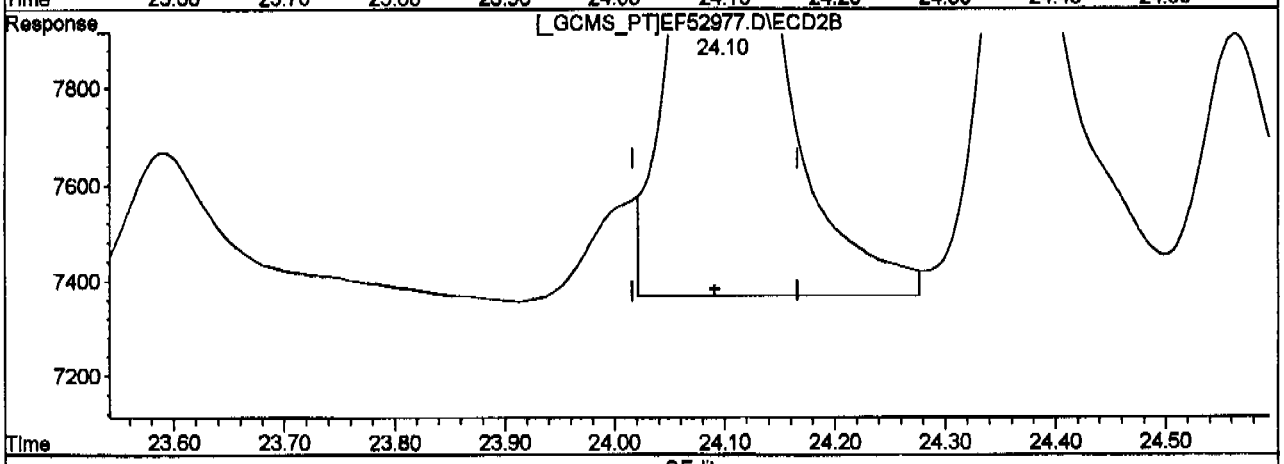
(+) = Expected Retention Time

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52977.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef52977.D\ECD2B.CH
Acq On : 26 Jul 2004 8:17 pm Operator: olgaa
Sample : IC2562-50,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:05 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration





QEdit

(34) AR1260-C

22.35min 57.507PPB

response 84372

(34) AR1260-C #2

24.10min 69.374PPB m

response 107507

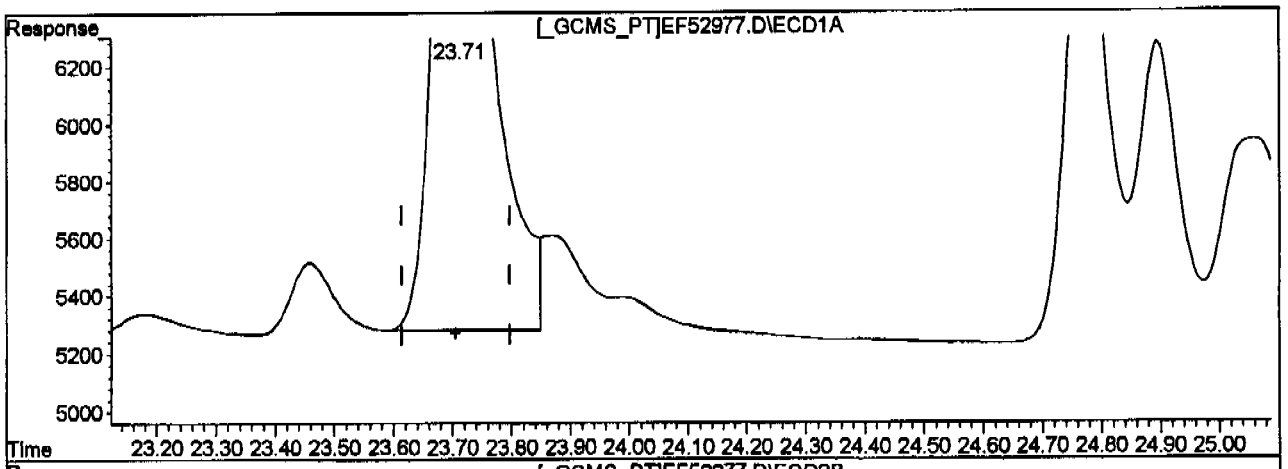
(+) = Expected Retention Time

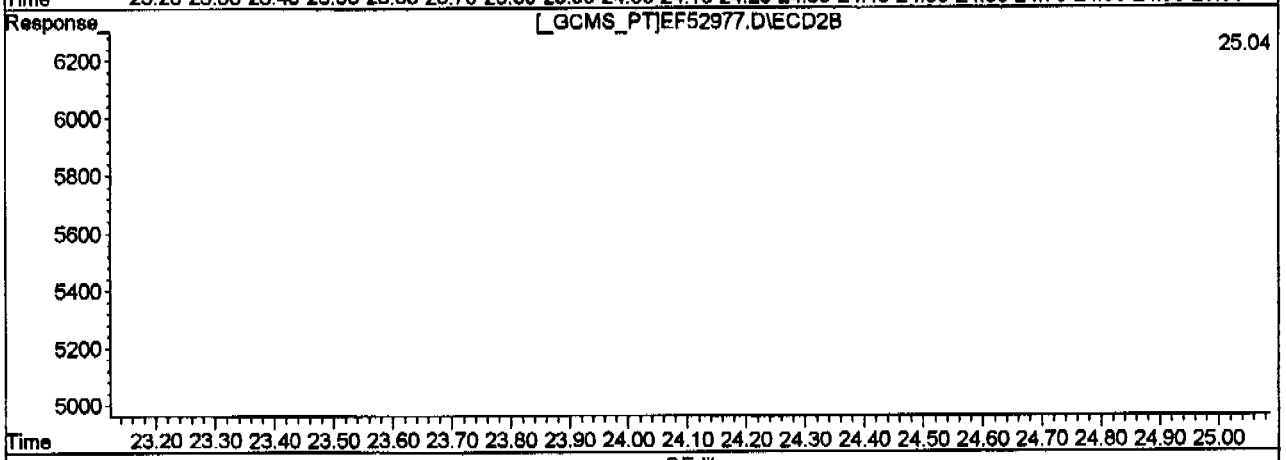
ef52977.D GEF2562.M Tue Jul 27 09:07:24 2004 RPT1

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52977.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef52977.D\ECD2B.CH
Acq On : 26 Jul 2004 8:17 pm Operator: olgaa
Sample : IC2562-50,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:05 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration





QEdit

(35) AR1260-D

23.71min 60.919PPB m

response 171030

(35) AR1260-D #2

25.04min 63.349PPB

response 193403

(+) = Expected Retention Time

ef52977.D GEF2562.M Tue Jul 27 09:08:21 2004 RPT1

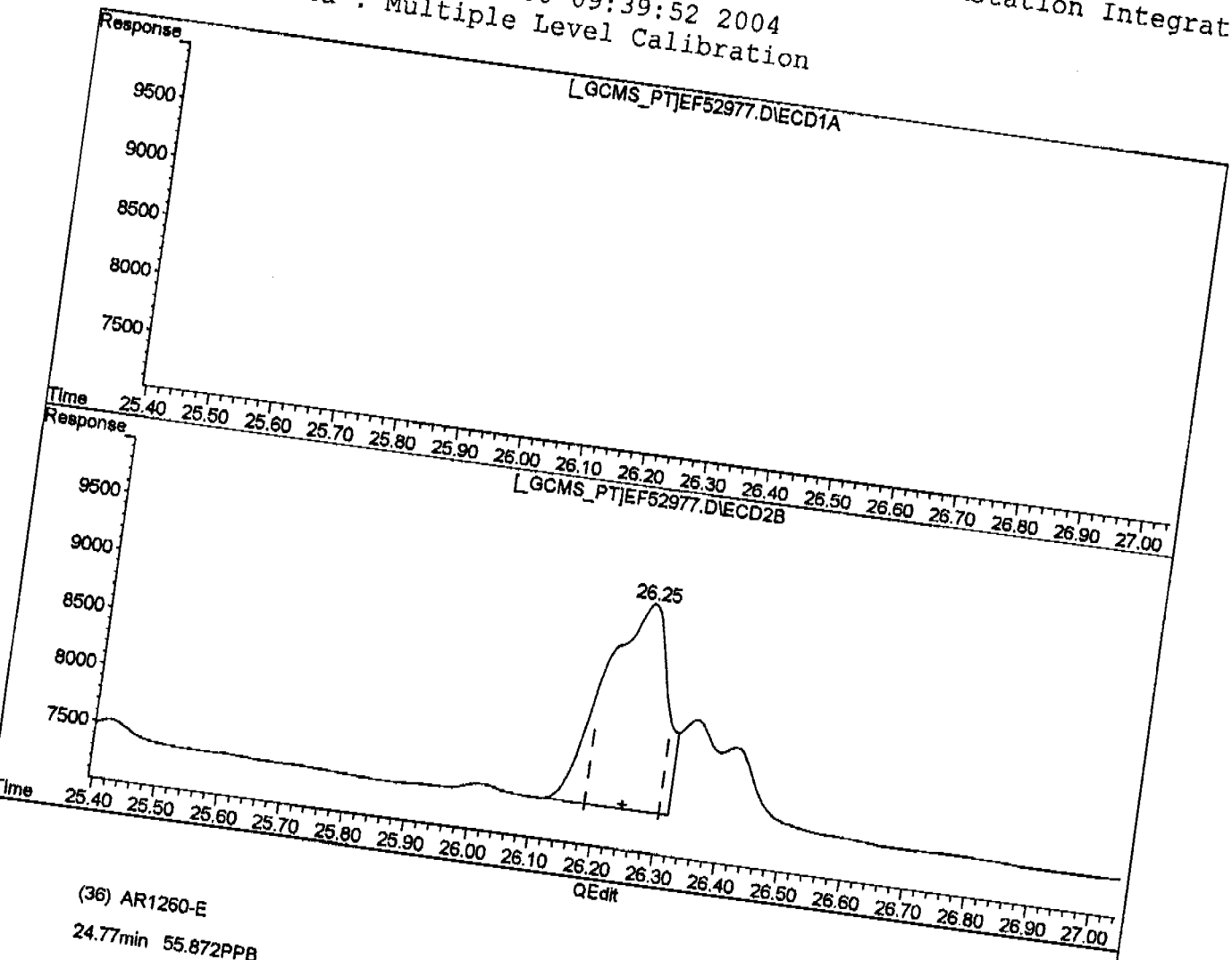
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52977.D\ECD1A.CH
Signal #2 : C:\HPCHEM\1\DATA\ef52977.D\ECD2B.CH
Acq On : 26 Jul 2004 8:17 pm
Sample : IC2562-50,1016/1260
Misc : OP17527,GEF2562,15.1,,,10,1
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:05 2004 Quant Results File: GEF2562.RES

Vial: 7

Operator: olgaa
Inst : GCEF
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration



(36) AR1260-E
24.77min 55.872PPB
response 78564

(36) AR1260-E #2
26.25min 57.758PPB m
response 124121

= Expected Retention Time

977.D GEF2562.M Tue Jul 27 09:08:45 2004 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52978.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\ef52978.D\ECD2B.CH
Acq On : 26 Jul 2004 8:54 pm Operator: olgaa
Sample : IC2562-250,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:03 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.94	6.10	829999	894646	25.964	26.730
Spiked Amount 40.000			Recovery	=	64.91%	66.83%
37) S Decachlorobiphen	28.58	30.71	844175	984902	29.762	30.485
Spiked Amount 40.000			Recovery	=	74.41%	76.21%
Target Compounds						
27) AR1016-A	8.32	7.77	468231	204051	291.031	287.830
28) AR1016-B	9.07	11.13	253796	810229	245.277	278.937
29) AR1016-C	10.14	11.70	768560	384473	277.396	279.727
30) AR1016-D	10.69	13.72	348440	289683	293.966	299.683
31) AR1016-E	12.34	14.28	357821	308537	287.811	284.603
32) AR1260-A	20.59	22.50	893079	672976	291.866	299.922
33) AR1260-B	21.15	22.88	446512	485509	301.861	319.304
34) AR1260-C	22.35	24.09	447071	484565	304.719	312.690m
35) AR1260-D	23.71	25.03	814138	884569	289.989	289.739
36) AR1260-E	24.77	26.25	405907	620009	288.665	288.513

OA
72784

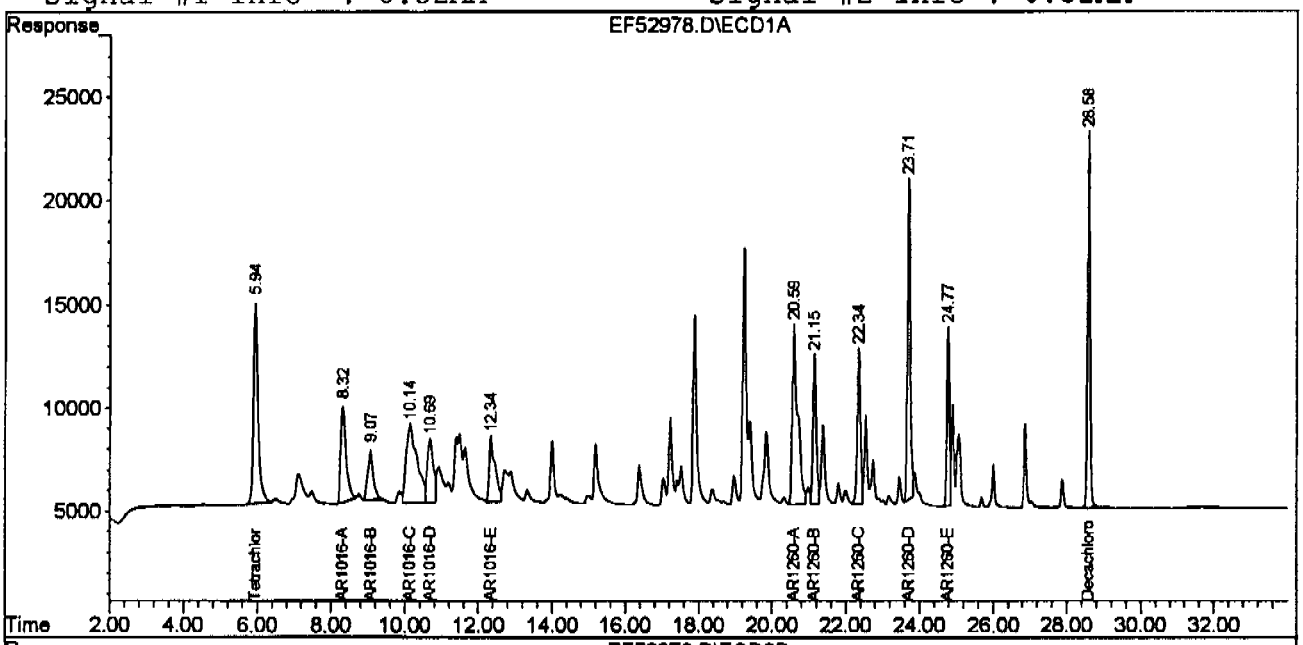
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

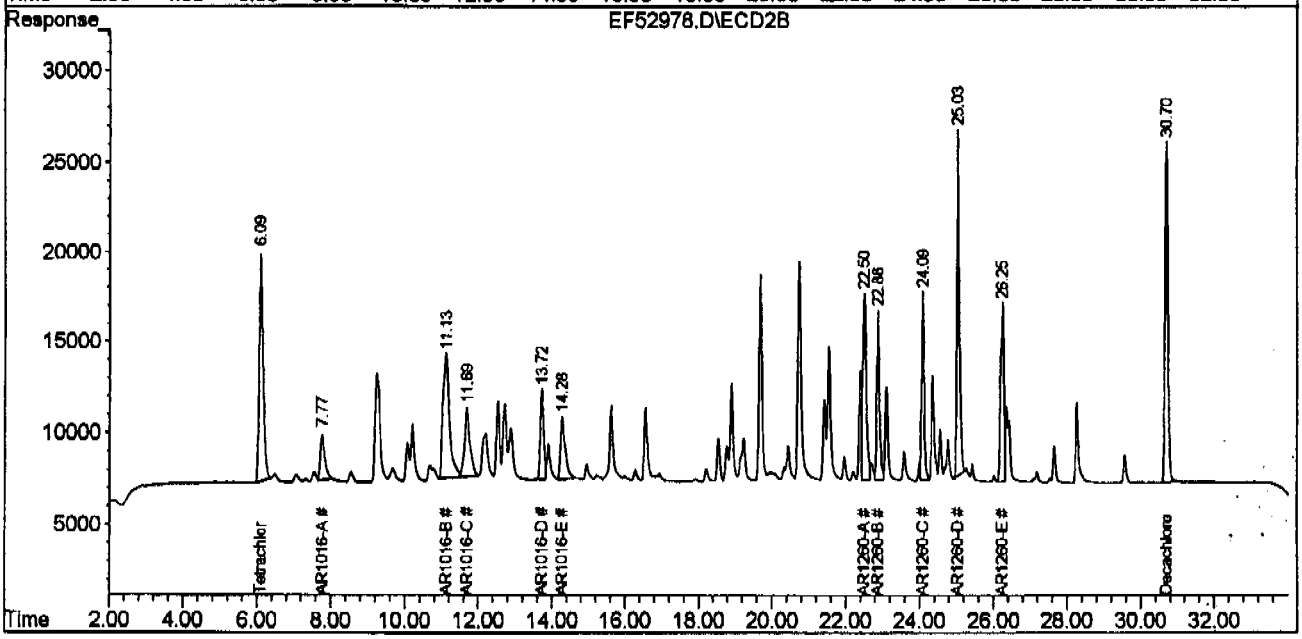
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52978.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\ef52978.D\ECD2B.CH
Acq On : 26 Jul 2004 8:54 pm Operator: olgaa
Sample : IC2562-250,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:03 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

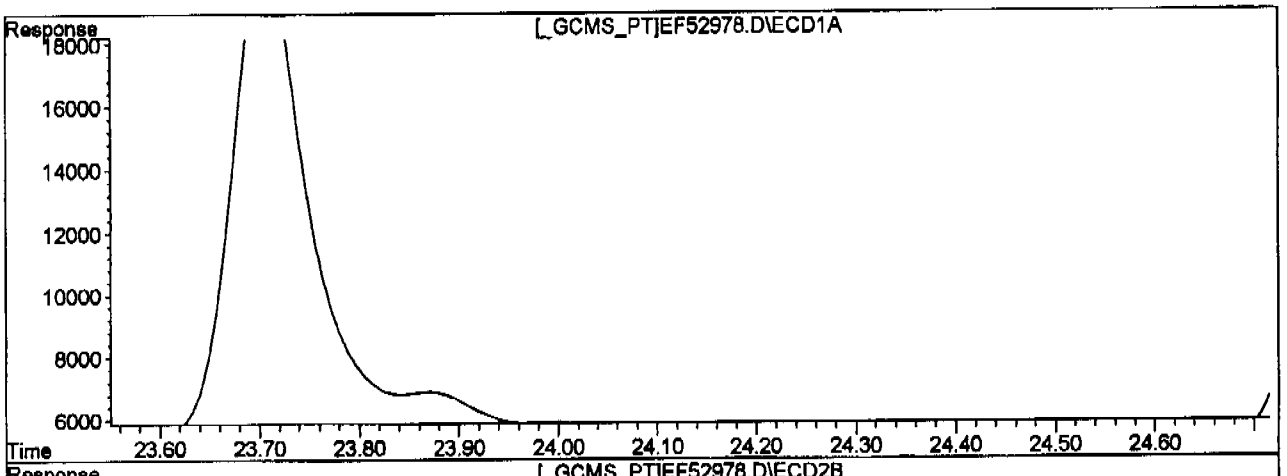


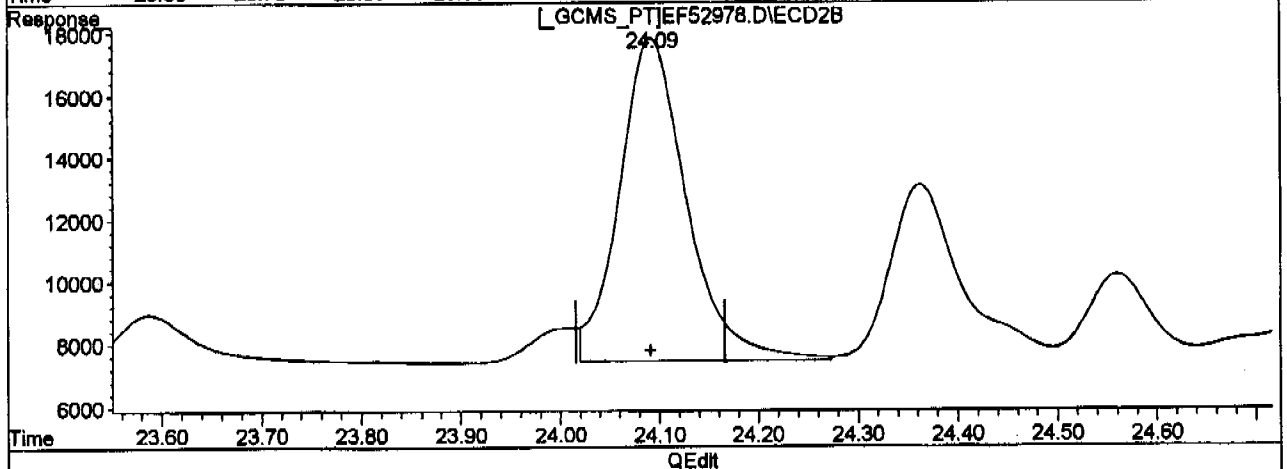


Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52978.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\ef52978.D\ECD2B.CH
Acq On : 26 Jul 2004 8:54 pm Operator: olgaa
Sample : IC2562-250,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:02 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration





QEdit

(34) AR1260-C

22.35min 304.719PPB

response 447071

(34) AR1260-C #2

24.09min 312.690PPB m

response 484565

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52979.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\ef52979.D\ECD2B.CH
Acq On : 26 Jul 2004 9:31 pm Operator: olgaa
Sample : IC2562-500,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:00 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.94	6.09	1764017	1843566	55.181	55.082
Spiked Amount 40.000			Recovery	=	137.95%	137.71%
37) S Decachlorobiphen	28.58	30.70	1589460	1834612	56.038	56.785
Spiked Amount 40.000			Recovery	=	140.10%	141.96%
Target Compounds						
27) AR1016-A	8.32	7.76	956548	419725	594.548	592.053
28) AR1016-B	9.07	11.12	610661	1714087	590.165	590.107
29) AR1016-C	10.13	11.69	1561494	864209	563.590	628.762
30) AR1016-D	10.69	13.72	678310	570368	572.266	590.056
31) AR1016-E	12.34	14.28	696295	642183	560.060	592.366
32) AR1260-A	20.59	22.49	1775792	1322993	580.345	589.611
33) AR1260-B	21.15	22.88	853480	913365	576.989	600.691
34) AR1260-C	22.35	24.09	872049	945273	594.380	609.984m
35) AR1260-D	23.71	25.03	1621170	1835385	577.446	601.177
36) AR1260-E	24.77	26.24	830643	1252832	590.720	582.989

DA
72707

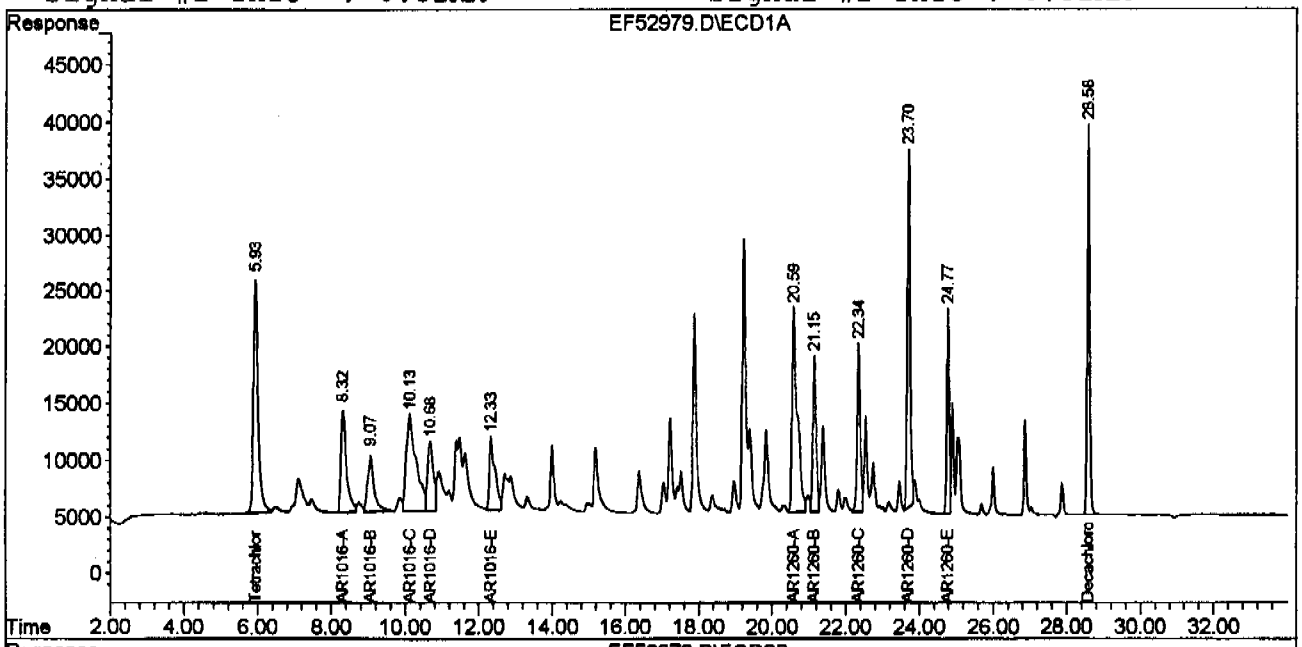
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

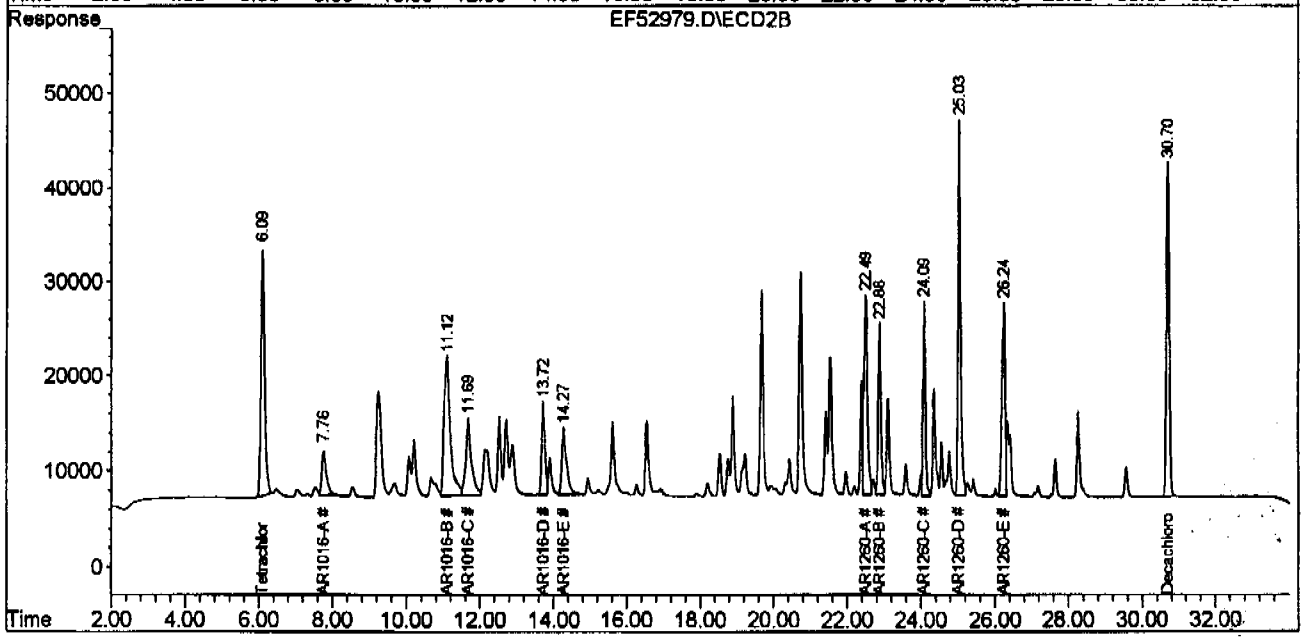
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52979.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\ef52979.D\ECD2B.CH
Acq On : 26 Jul 2004 9:31 pm Operator: olgaa
Sample : IC2562-500,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 9:00 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

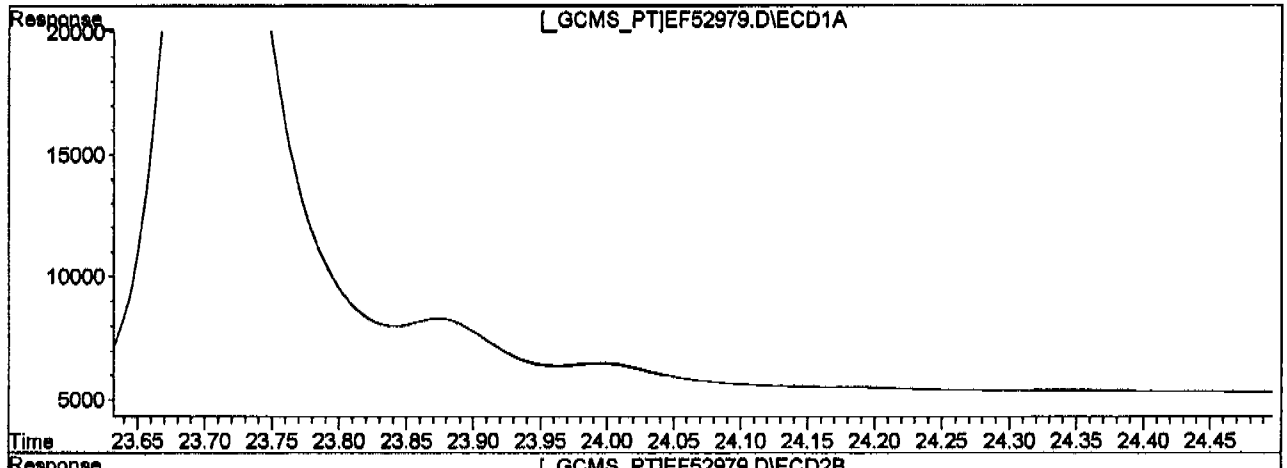


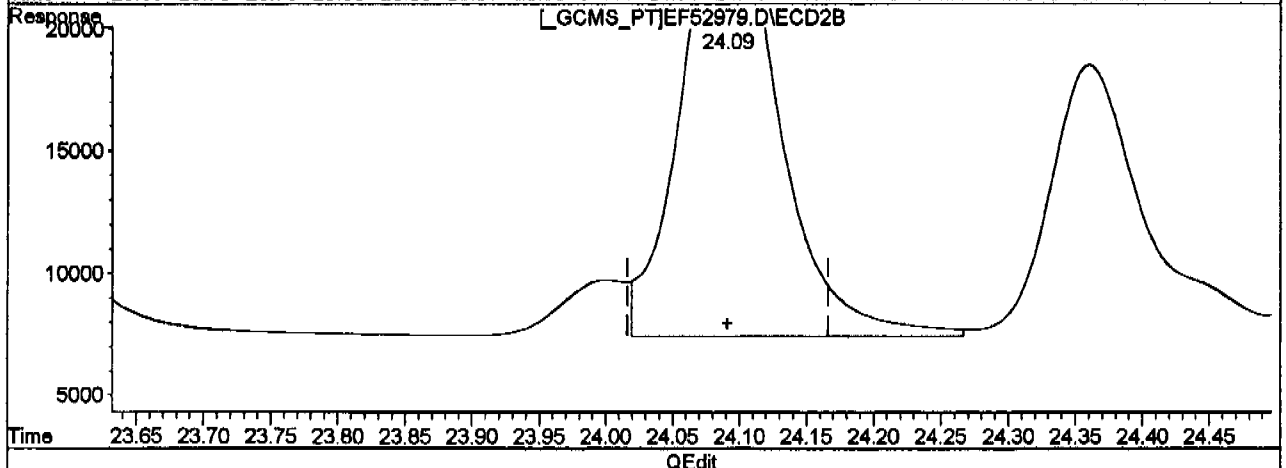


Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52979.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\ef52979.D\ECD2B.CH
Acq On : 26 Jul 2004 9:31 pm Operator: olgaa
Sample : IC2562-500,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:58 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration





QEdit

(34) AR1260-C

22.35min 594.380PPB

response 872049

(34) AR1260-C #2

24.09min 609.984PPB m

response 945273

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52980.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\ef52980.D\ECD2B.CH
Acq On : 26 Jul 2004 10:08 pm Operator: olgaa
Sample : ICC2562-1000,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:51 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	3686346	3914170	115.314	116.948
Spiked Amount 40.000			Recovery	=	288.29%	292.37%
37) S Decachlorobiphen	28.58	30.71	2982027	3526303	105.134	109.147
Spiked Amount 40.000			Recovery	=	262.84%	272.87%
Target Compounds						
27) AR1016-A	8.31	7.75	1796804	822143	1116.813	1159.695
28) AR1016-B	9.07	11.11	1289077	3406700	1245.811	1172.822
29) AR1016-C	10.12	11.68	3329932	1675780	1201.873	1219.227
30) AR1016-D	10.68	13.72	1384778	1104289	1168.287	1142.407
31) AR1016-E	12.34	14.27	1480552	1290237	1190.871	1190.148
32) AR1260-A	20.59	22.48	3553958	2619922	1161.466	1167.607
33) AR1260-B	21.15	22.88	1652662	1744737	1117.269	1147.458
34) AR1260-C	22.34	24.09	1748134	1802940	1191.511	1163.437
35) AR1260-D	23.70	25.03	3347962	3568893	1192.514	1168.984
36) AR1260-E	24.77	26.24	1697658	2502823	1207.307	1164.657

OA
72704

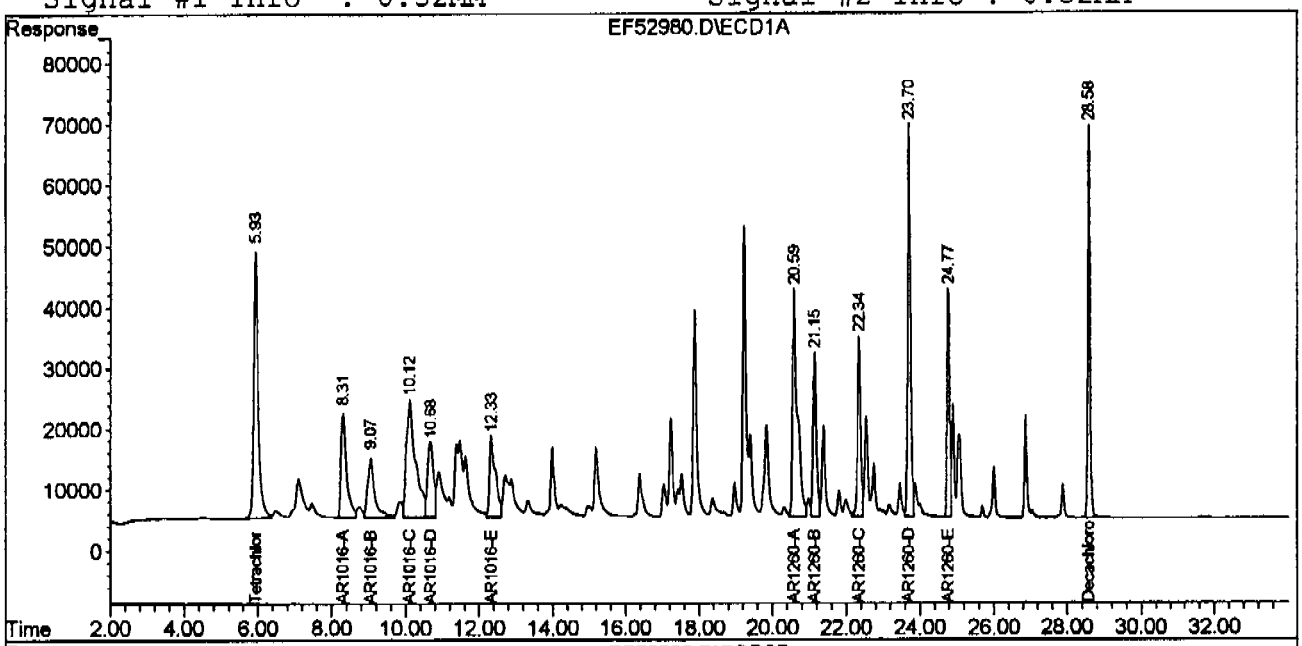
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

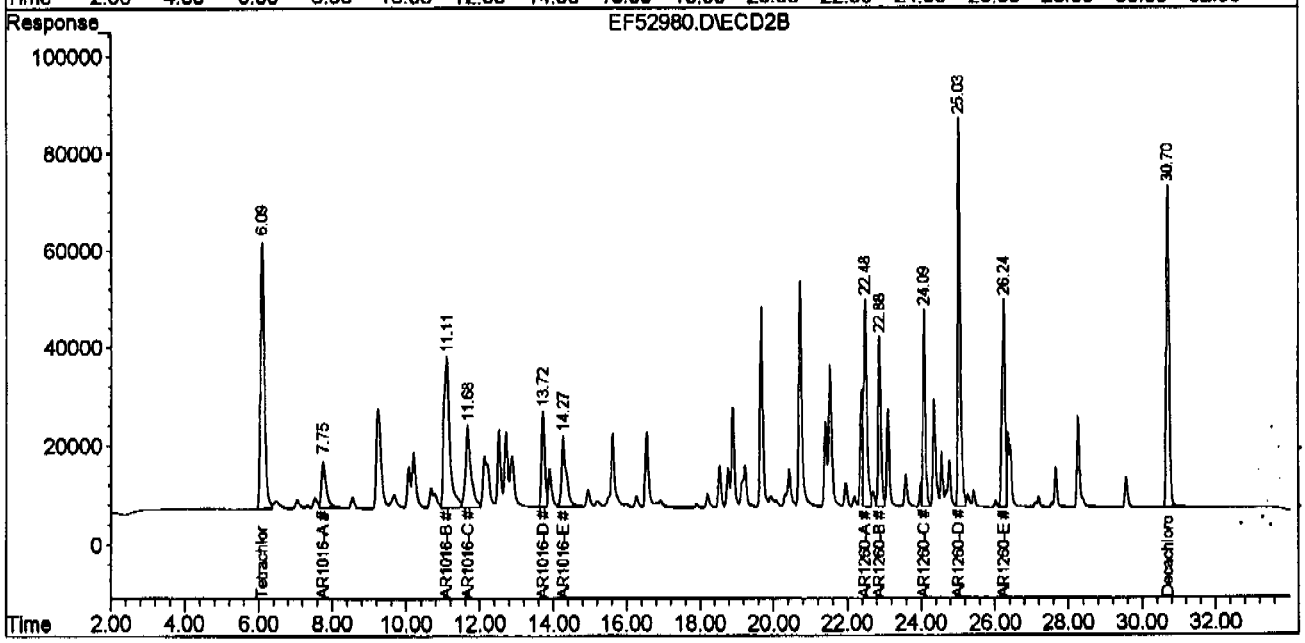
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52980.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\ef52980.D\ECD2B.CH
Acq On : 26 Jul 2004 10:08 pm Operator: olgaa
Sample : ICC2562-1000,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:51 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52981.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\ef52981.D\ECD2B.CH
Acq On : 26 Jul 2004 10:45 pm Operator: olgaa
Sample : IC2562-2000,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:52 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	5.93	6.09	7109287	7504770	222.388	224.228
	Spiked Amount 40.000			Recovery	=	555.97%	560.57%
37)	S Decachlorobiphen	28.58	30.70	5166866	6121288	182.163	189.467
	Spiked Amount 40.000			Recovery	=	455.41%	473.67%
	Target Compounds						
27)	AR1016-A	8.31	7.75	3149560	1514578	1957.625	2136.427
28)	AR1016-B	9.07	11.10	2341219	6299295	2262.639	2168.653
29)	AR1016-C	10.11	11.67	6388787	3019552	2305.906	2196.900
30)	AR1016-D	10.66	13.72	2542351	2002704	2144.889	2071.832
31)	AR1016-E	12.33	14.27	2728542	2433656	2194.684	2244.867
32)	AR1260-A	20.58	22.48	6574414	4800130	2148.578	2139.249
33)	AR1260-B	21.15	22.88	2971028	3116237	2008.540	2049.450
34)	AR1260-C	22.34	24.09	3212135	3250647	2189.359	2097.642
35)	AR1260-D	23.70	25.02	6165819	6537906	2196.209	2141.479
36)	AR1260-E	24.77	26.24	3214084	4668493	2285.729	2172.423

QA
72704

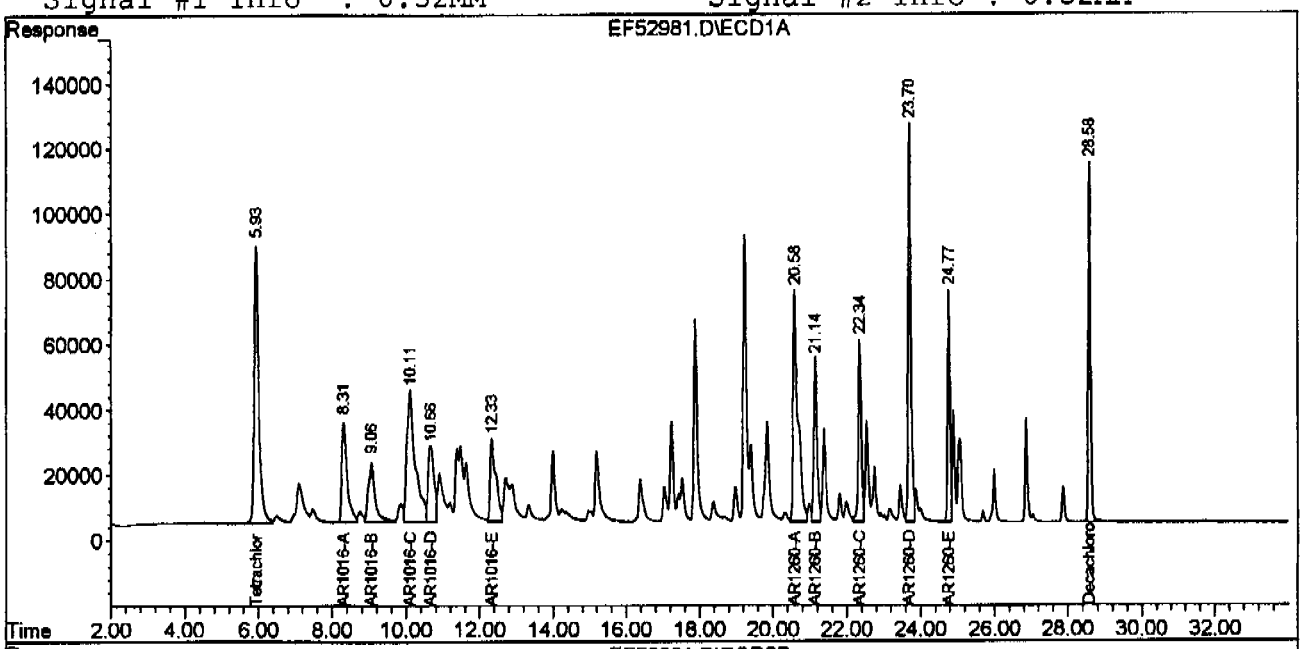
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

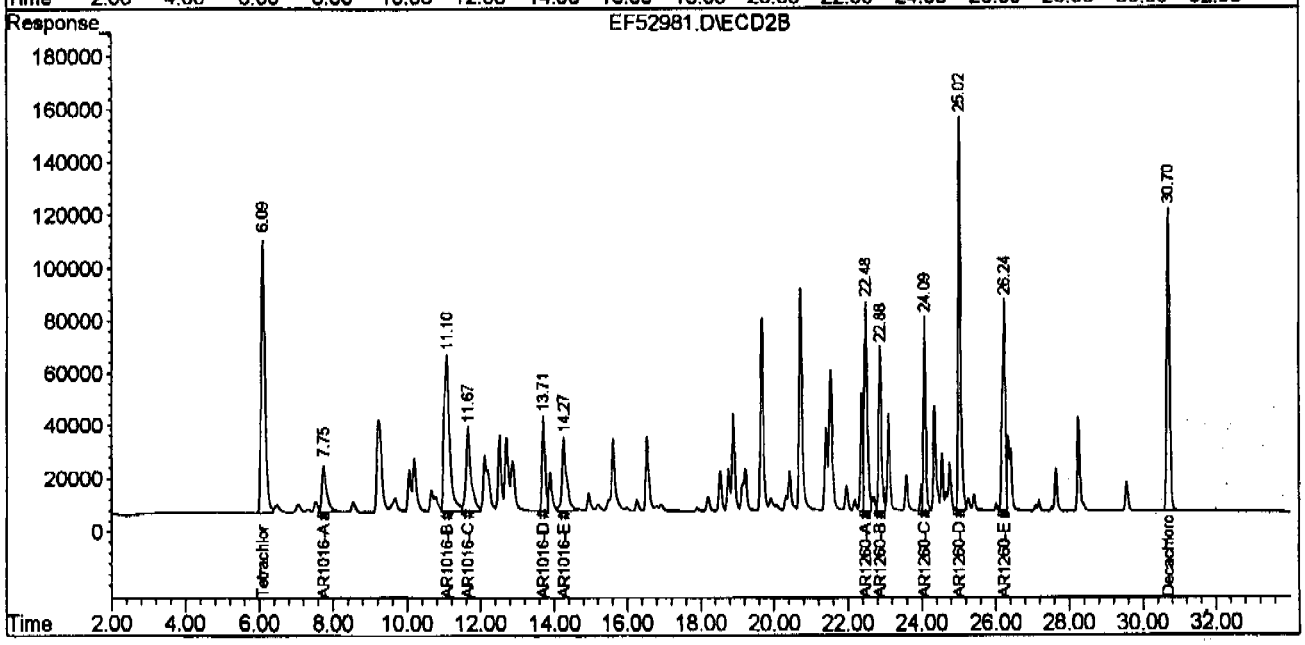
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52981.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\ef52981.D\ECD2B.CH
Acq On : 26 Jul 2004 10:45 pm Operator: olgaa
Sample : IC2562-2000,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:52 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef52982.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef52982.D\ECD2B.CH
Acq On : 26 Jul 2004 11:22 pm Operator: olgaa
Sample : IC2562-3000,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:55 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	10461450	11058846	327.249	330.417
Spiked Amount 40.000			Recovery	=	818.12%	826.04%
37) S Decachlorobiphen	28.58	30.70	7596818	8975262	267.834	277.804
Spiked Amount 40.000			Recovery	=	669.59%	694.51%
Target Compounds						
27) AR1016-A	8.31	7.75	4416826	2171437	2745.301	3062.976
28) AR1016-B	9.06	11.09	3338855	9117728	3226.791	3138.952
29) AR1016-C	10.11	11.66	9445006	4313465	3408.988	3138.297
30) AR1016-D	10.65	13.71	3691984	2890379	3114.793	2990.148
31) AR1016-E	12.33	14.26	3955709	3600131	3181.747m	3320.854
32) AR1260-A	20.59	22.48	9580189	6965011	3130.892	3104.060
33) AR1260-B	21.15	22.88	4270817	4455817	2887.252	2930.449
34) AR1260-C	22.35	24.09	4668974	4675781	3182.326	3017.280
35) AR1260-D	23.70	25.02	8991871	9495007	3202.824	3110.071
36) AR1260-E	24.77	26.24	4755981	6854449	3382.264	3189.630

OA
72707

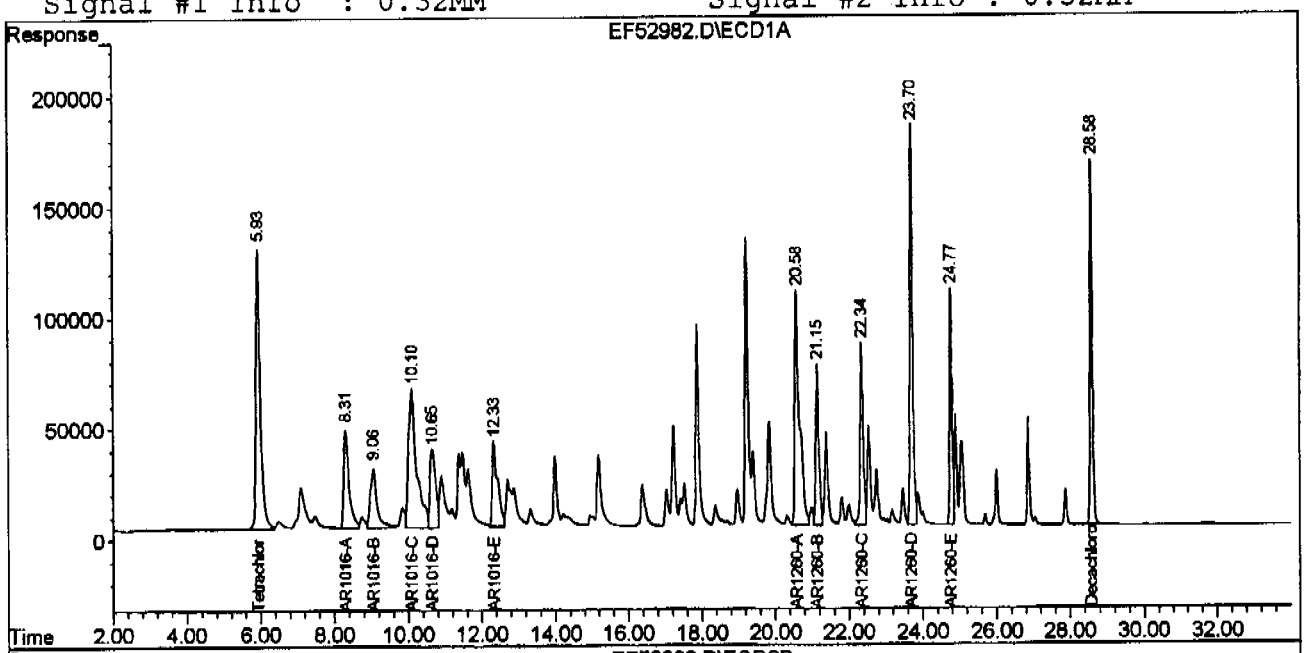
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

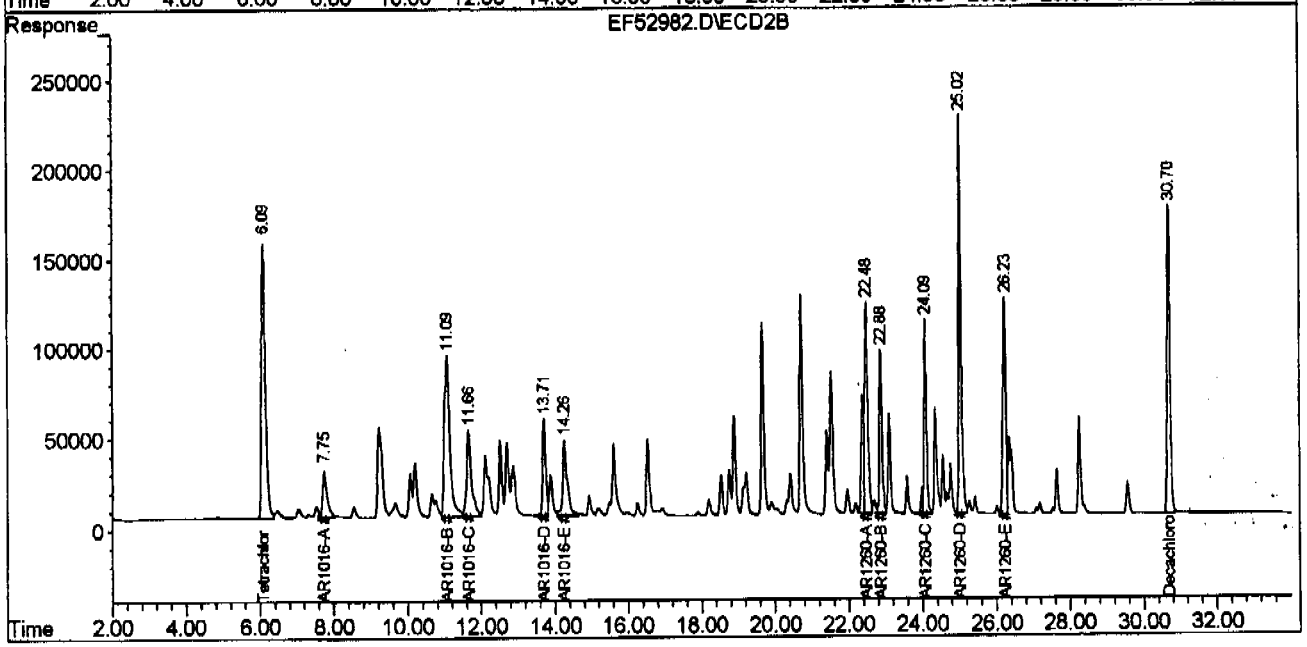
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52982.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef52982.D\ECD2B.CH
Acq On : 26 Jul 2004 11:22 pm Operator: olgaa
Sample : IC2562-3000,1016/1260 Inst : GCEF
Misc : OP17527,GEF2562,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:55 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM



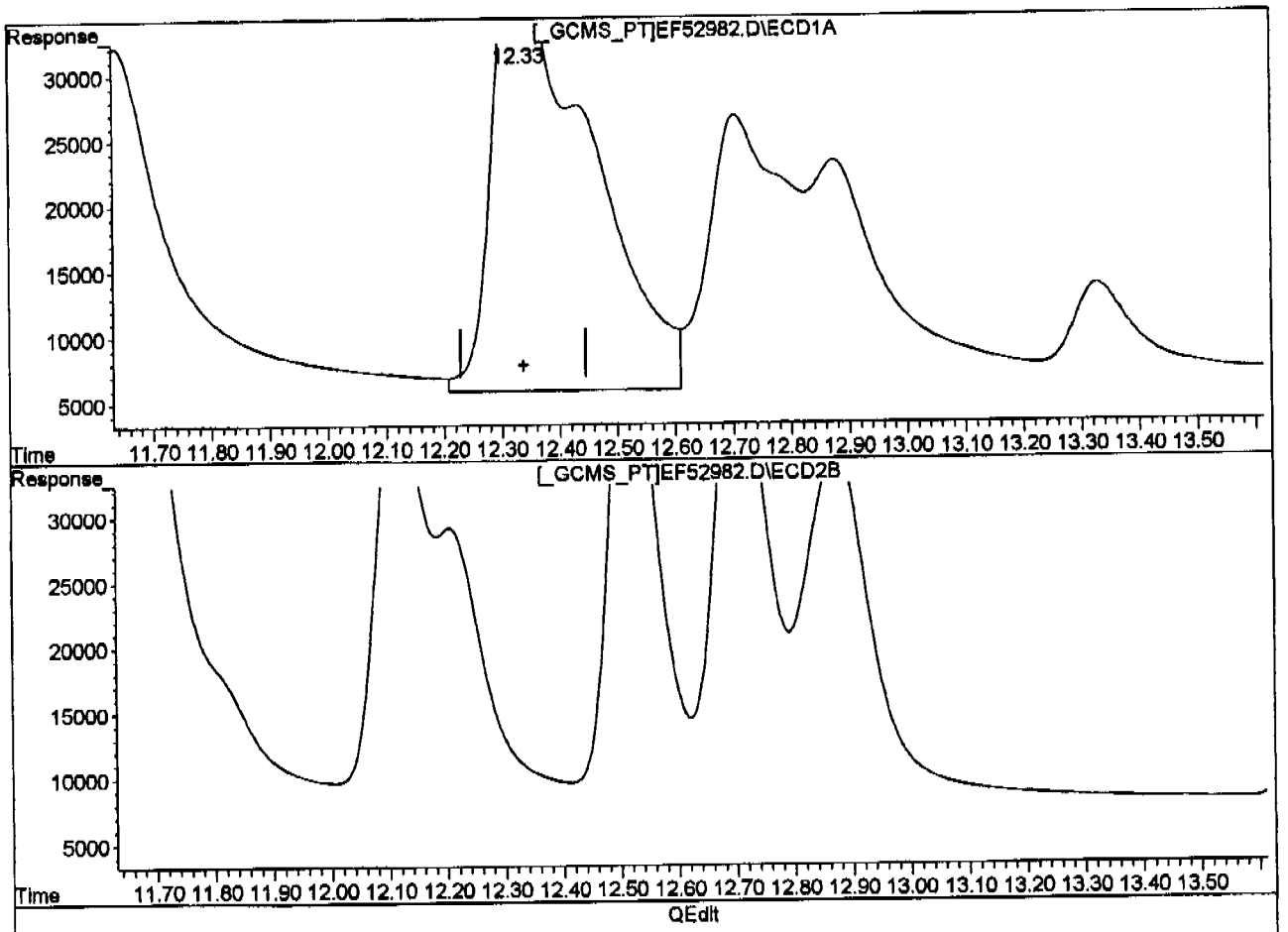


Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52982.D\ECD1A.CH
Signal #2 : C:\HPCHEM\1\DATA\ef52982.D\ECD2B.CH
Acq On : 26 Jul 2004 11:22 pm
Sample : IC2562-3000,1016/1260
Misc : OP17527,GEF2562,15.1,,,10,1
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jul 27 8:54 2004 Quant Results File: GEF2562.RES

Vial: 12
Operator: olgaa
Inst : GCEF
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 08 09:39:52 2004
Response via : Multiple Level Calibration



(31) AR1016-E

12.33min 3181.747PPB m

response 3955709

(31) AR1016-E #2

14.26min 3320.854PPB

response 3600131

(+) = Expected Retention Time

ef52982.D GEF2562.M Tue Jul 27 08:55:08 2004 RPT1

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2576-CC2562
Lab FileID: EF53427.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef53427.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef53427.D\ECD2B.CH
Acq On : 14 Aug 2004 2:49 am Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17677,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 29 17:33:23 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	35.152	32.175 E3	8.5	91	0.00	5.85- 6.02
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1254-F		----------NA----------				
28		AR1254-G		----------NA----------				
29		AR1254-H		----------NA----------				
30		AR1016-A	1.777	1.776 E3	0.1	93	0.02	8.23- 8.43
31		AR1016-B	1.140	1.111 E3	2.5	91	0.01	8.99- 9.17
32		AR1016-C	3.133	2.934 E3	6.4	94	0.02	10.03-10.26
33		AR1016-D	1.334	1.267 E3	5.0	93	0.03	10.57-10.84
34		AR1016-E	1.355	1.277 E3	5.8	92	0.02	12.26-12.45
35		AR1260-A	3.457	3.386 E3	2.1	95	0.04	20.54-20.71
36		AR1260-B	1.651	1.639 E3	0.7	96	0.04	21.10-21.27
37		AR1260-C	1.688	1.684 E3	0.2	97	0.04	22.30-22.46
38		AR1260-D	3.225	3.291 E3	-2.0	101	0.03	23.67-23.80
39		AR1260-E	1.624	1.636 E3	-0.7	98	0.03	24.73-24.87
40	S	Decachlorobiphenyl	30.507	32.453 E3	-6.4	102	0.01	28.55-28.64

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2576-CC2562
Lab FileID: EF53427.D

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	36.823	33.336 E3	9.5	90	0.00	6.02- 6.16
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1254-F		----------NA----------				
28		AR1254-G		----------NA----------				
29		AR1254-H		----------NA----------				
30		AR1016-A	786.578	760.233	3.3	91	0.02	7.68- 7.86
31		AR1016-B	3.247	3.015 E3	7.1	88	0.03	11.05-11.22
32		AR1016-C	1.583	1.466 E3	7.4	85	0.03	11.61-11.80
33		AR1016-D	1093.148	1059.440	3.1	93	0.02	13.67-13.81
34		AR1016-E	1.226	1.136 E3	7.3	88	0.02	14.21-14.38
35		AR1260-A	2.574	2.542 E3	1.2	96	0.04	22.44-22.60
36		AR1260-B	1.789	1.746 E3	2.4	96	0.03	22.85-22.97
37		AR1260-C	1.828	1.794 E3	1.9	95	0.03	24.07-24.16
38		AR1260-D	3.513	3.555 E3	-1.2	97	0.02	25.00-25.10
39		AR1260-E	2.432	2.462 E3	-1.2	98	0.02	26.21-26.31
40	S	Decachlorobiphenyl	35.626	38.306 E3	-7.5	104	0.00	30.67-30.74

Average % D = 3.9

(0.0 %) 0 of 24 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ef52979.D GEF2562.M Mon Aug 16 08:46:56 2004 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53427.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef53427.D\ECD2B.CH
Acq On : 14 Aug 2004 2:49 am Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17677,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 8:45 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.94	6.09	1608753	1666794	45.765	45.265
	Spiked Amount 40.000			Recovery	=	114.41%	113.16%
40) S	Decachlorobiphen	28.60	30.70	1622648	1915322	53.190	53.762
	Spiked Amount 40.000			Recovery	=	132.98%	134.41%
	Target Compounds						
30)	AR1016-A	8.33	7.77	887942	380117	499.814	483.254
31)	AR1016-B	9.08	11.13	555504	1507424	487.300	464.216
32)	AR1016-C	10.15	11.70	1467086	732985	468.296	463.076
33)	AR1016-D	10.71	13.74	633598	529720	475.105	484.582
34)	AR1016-E	12.36	14.30	638362	568195	471.000	463.444
35)	AR1260-A	20.63	22.52	1693022	1270918	489.760	493.819
36)	AR1260-B	21.18	22.91	819307	872897	496.120	487.953
37)	AR1260-C	22.38	24.12	842047	897223	498.727	490.920m
38)	AR1260-D	23.74	25.05	1645487	1777740	510.290	505.999
39)	AR1260-E	24.80	26.26	818043	1230861	503.606	506.180

QA

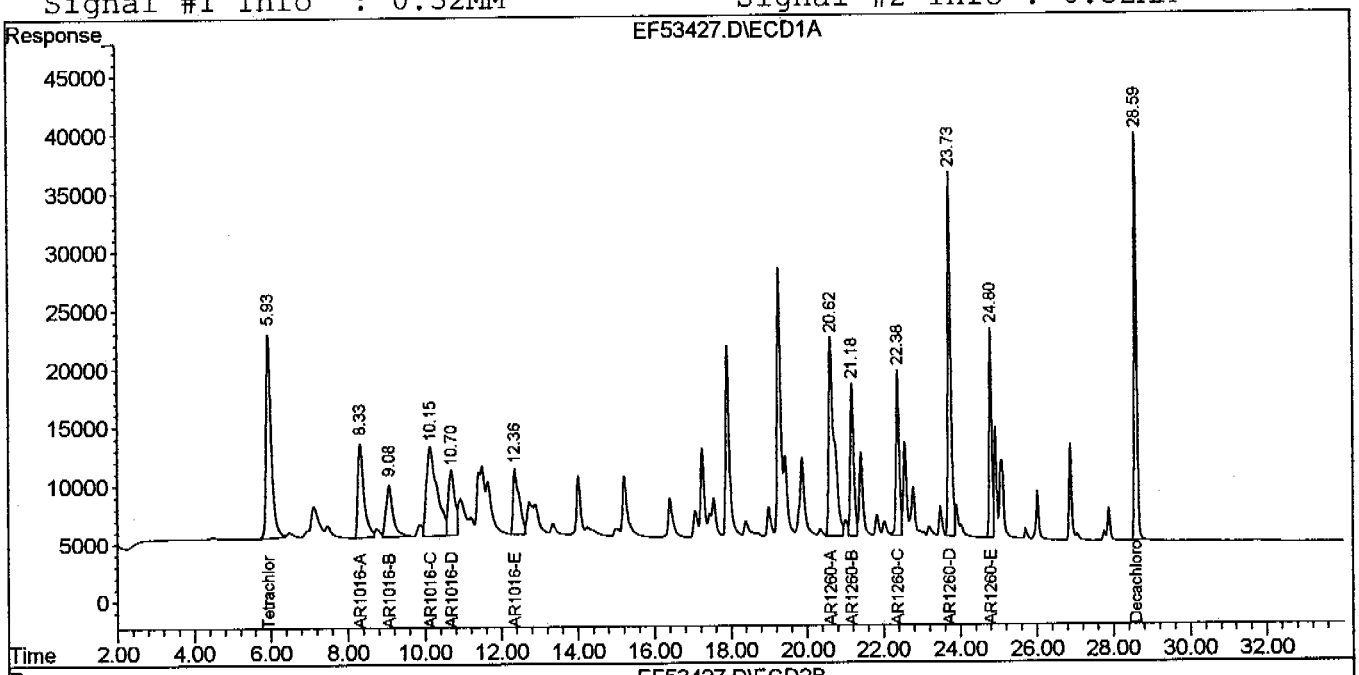
81684

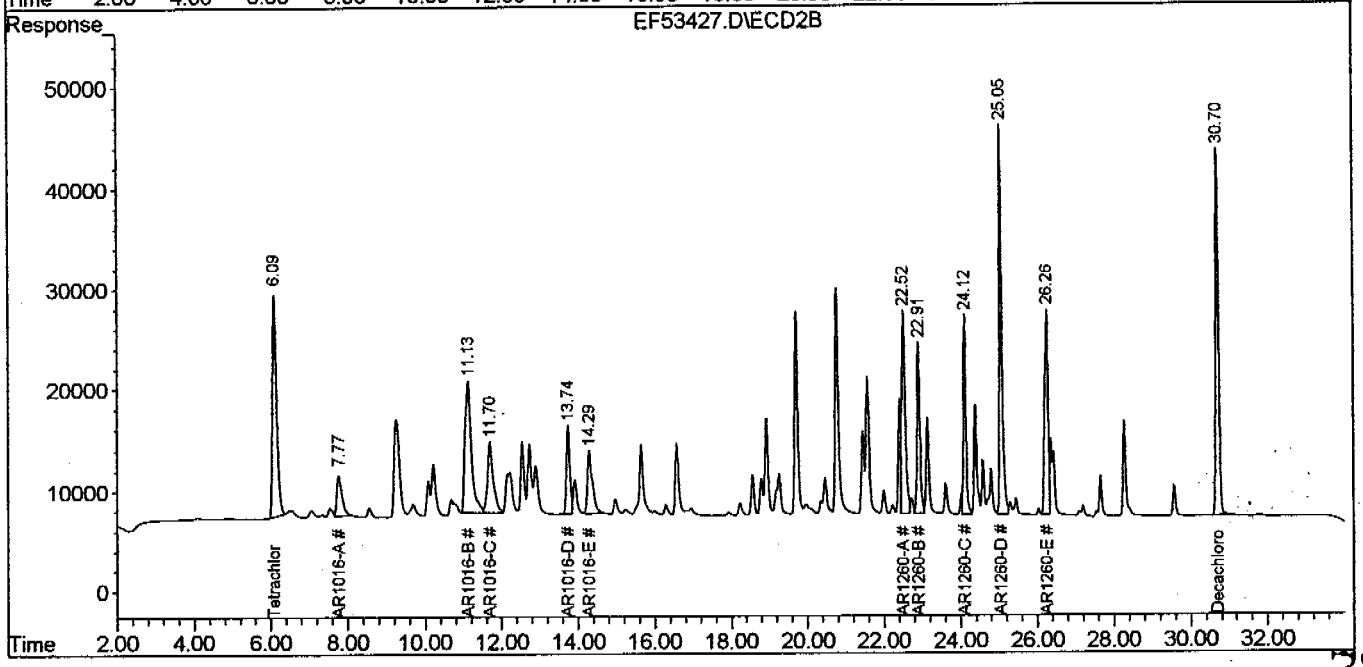
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef53427 D GEF2562 M Mon Aug 16 08:46:34 2004 RPT1 Page 1

Signal #1 : C:\HPCHEM\1\DATA\ef53427.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef53427.D\ECD2B.CH
Acq On : 14 Aug 2004 2:49 am Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17677,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 8:45 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

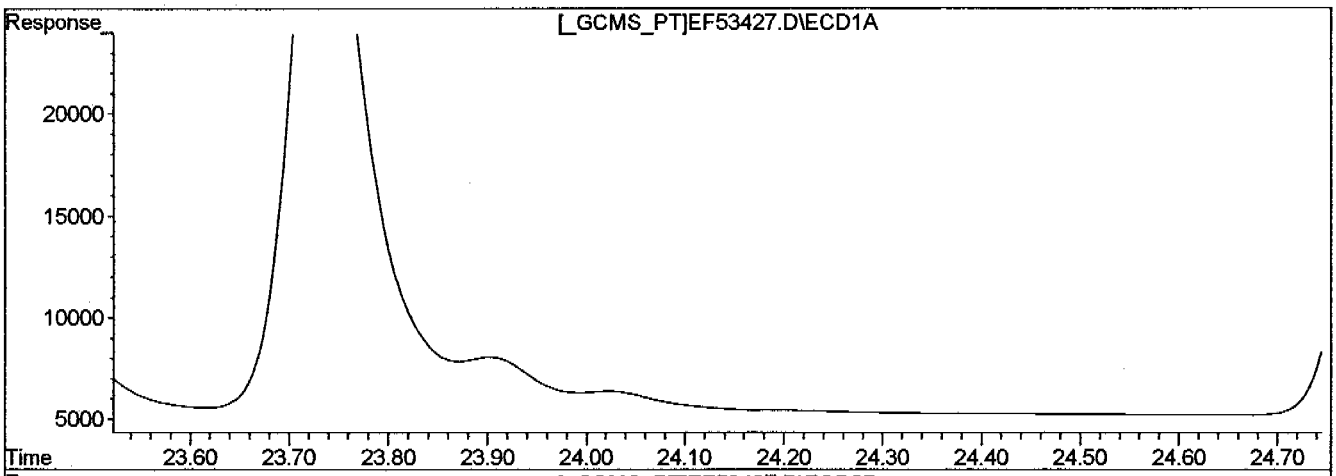


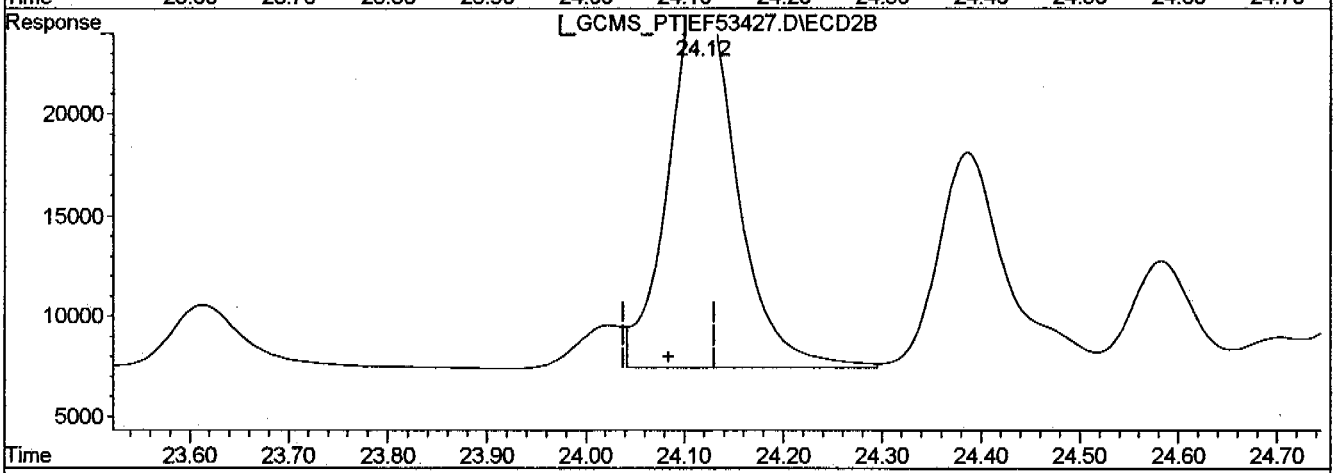


Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53427.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef53427.D\ECD2B.CH
Acq On : 14 Aug 2004 2:49 am Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17677,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 8:45 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Multiple Level Calibration





QEdit

(37) AR1260-C

22.38min 498.727PPB

response 842047

(37) AR1260-C #2

24.12min 490.920PPB m

response 897223

787

(+) = Expected Retention Time

ef53427.D GEF2562.M Mon Aug 16 08:47:29 2004 RPT1

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2576-CC2562
Lab FileID: EF53439.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef53439.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\ef53439.D\ECD2B.CH
Acq On : 14 Aug 2004 12:03 pm Operator: olgaa
Sample : CC2562-1000 Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 29 17:33:23 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	35.152	40.197 E3	-14.4	109	0.00	5.85- 6.02
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1254-F		----------NA----------				
28		AR1254-G		----------NA----------				
29		AR1254-H		----------NA----------				
30		AR1016-A	1.777	1.933 E3	-8.8	108	0.02	8.23- 8.44
31		AR1016-B	1.140	1.266 E3	-11.1	98	0.02	9.00- 9.18
32		AR1016-C	3.133	3.549 E3	-13.3	107	0.03	10.04-10.26
33		AR1016-D	1.334	1.441 E3	-8.0	104	0.04	10.58-10.85
34		AR1016-E	1.355	1.473 E3	-8.7	99	0.04	12.28-12.47
35		AR1260-A	3.457	3.859 E3	-11.6	109	0.07	20.57-20.74
36		AR1260-B	1.651	1.785 E3	-8.1	108	0.07	21.13-21.30
37		AR1260-C	1.688	1.874 E3	-11.0	107	0.06	22.33-22.49
38		AR1260-D	3.225	3.686 E3	-14.3	110	0.06	23.70-23.82
39		AR1260-E	1.624	1.910 E3	-17.6#	112	0.05	24.75-24.89
40	S	Decachlorobiphenyl	30.507	32.941 E3	-8.0	110	0.04	28.58-28.67

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2576-CC2562
Lab FileID: EF53439.D

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	36.823	41.755	E3	-13.4	107	0.00	6.02- 6.16
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1254-A		----------NA----------					
23		AR1254-B		----------NA----------					
24		AR1254-C		----------NA----------					
25		AR1254-D		----------NA----------					
26		AR1254-E		----------NA----------					
27		AR1254-F		----------NA----------					
28		AR1254-G		----------NA----------					
29		AR1254-H		----------NA----------					
30		AR1016-A	786.578	861.355		-9.5	105	0.01	7.68- 7.86
31		AR1016-B	3.247	3.574	E3	-10.1	105	0.03	11.05-11.23
32		AR1016-C	1.583	1.620	E3	-2.3	97	0.03	11.62-11.81
33		AR1016-D	1093.148	1177.646		-7.7	107	0.04	13.69-13.83
34		AR1016-E	1.226	1.282	E3	-4.6	99	0.04	14.23-14.40
35		AR1260-A	2.574	2.950	E3	-14.6	113	0.06	22.47-22.63
36		AR1260-B	1.789	1.904	E3	-6.4	109	0.06	22.87-23.00
37		AR1260-C	1.828	1.981	E3	-8.4	110	0.05	24.09-24.18
38		AR1260-D	3.513	3.876	E3	-10.3	109	0.05	25.02-25.13
39		AR1260-E	2.432	2.846	E3	-17.0#	114	0.04	26.23-26.33
40	S	Decachlorobiphenyl	35.626	39.622	E3	-11.2	112	0.03	30.70-30.77

Average % D = 10.4

(8.3 %) 2 of 24 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF52980.D GEF2562.M Mon Aug 16 08:58:16 2004 RPT1

Signal #1 : C:\HPCHEM\1\DATA\ef53439.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\ef53439.D\ECD2B.CH
Acq On : 14 Aug 2004 12:03 pm Operator: olgaa
Sample : CC2562-1000 Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 8:55 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	5.93	6.09	4019658	4175455	114.350	113.393
Spiked Amount	40.000			Recovery	=	285.87%	283.48%
40) S	Decachlorobiphen	28.62	30.74	3294141	3962230	107.980	111.218
Spiked Amount	40.000			Recovery	=	269.95%	278.05%
	Target Compounds						
30)	AR1016-A	8.33	7.77	1933026	861355	1088.082	1095.067
31)	AR1016-B	9.09	11.14	1266193	3574408	1110.731	1100.751
32)	AR1016-C	10.15	11.71	3549417	1619970	1132.979	1023.444
33)	AR1016-D	10.71	13.76	1441402	1177646	1080.840	1077.298
34)	AR1016-E	12.37	14.32	1473012	1282184	1086.827	1045.804
35)	AR1260-A	20.65	22.55	3858800	2949584	1116.281	1146.070
36)	AR1260-B	21.21	22.94	1785183	1903896	1080.993	1064.286
37)	AR1260-C	22.41	24.14	1873911	1980581	1109.880	1083.685m
38)	AR1260-D	23.76	25.07	3686450	3876154	1143.224	1103.272
39)	AR1260-E	24.82	26.28	1909628	2845592	1175.610	1170.223

OA
81604

(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

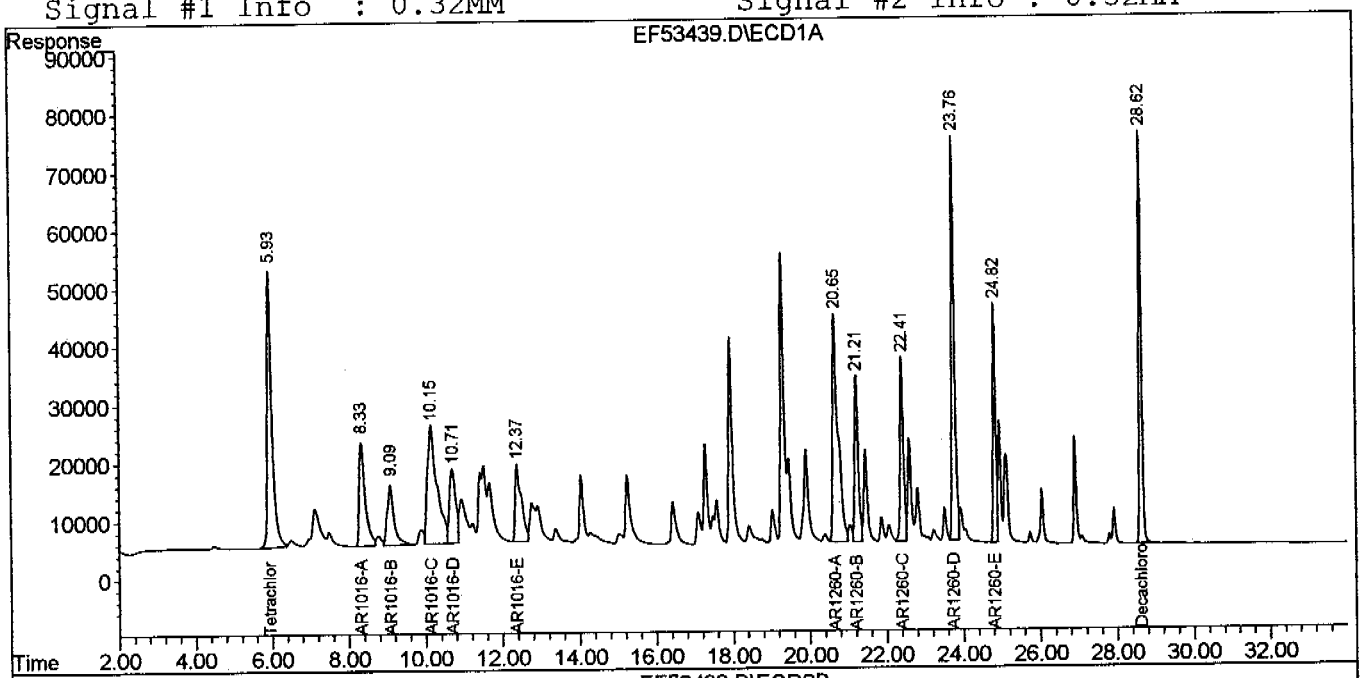
Quantitation Report

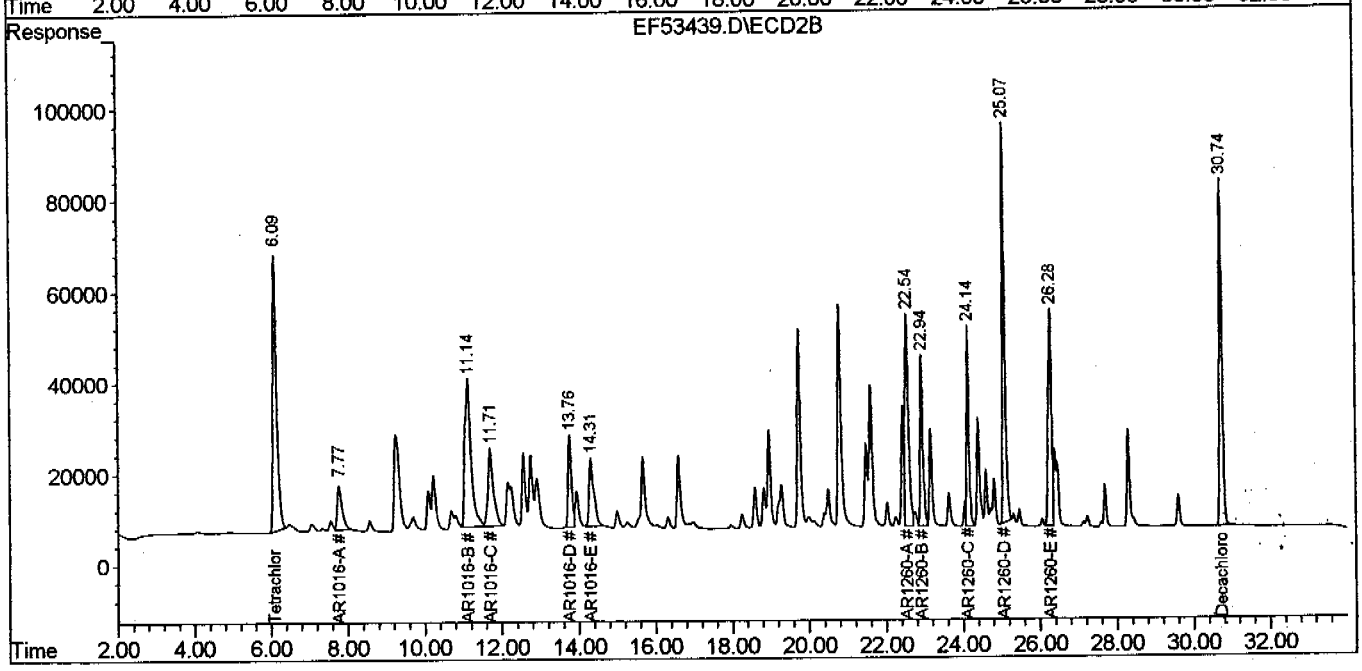
Signal #1 : C:\HPCHEM\1\DATA\ef53439.D\ECD1A.CH
Signal #2 : C:\HPCHEM\1\DATA\ef53439.D\ECD2B.CH
Acq On : 14 Aug 2004 12:03 pm
Sample : CC2562-1000
Misc : OP17689,GEF2576,1000,,,10,1
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 8:55 2004 Quant Results File: GEF2562.RES

Vial: 24
Operator: olgaa
Inst : GCEF
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1
Signal #1 Info : 0.32MM
Signal #2 Phase: RTX-CLP2
Signal #2 Info : 0.32MM

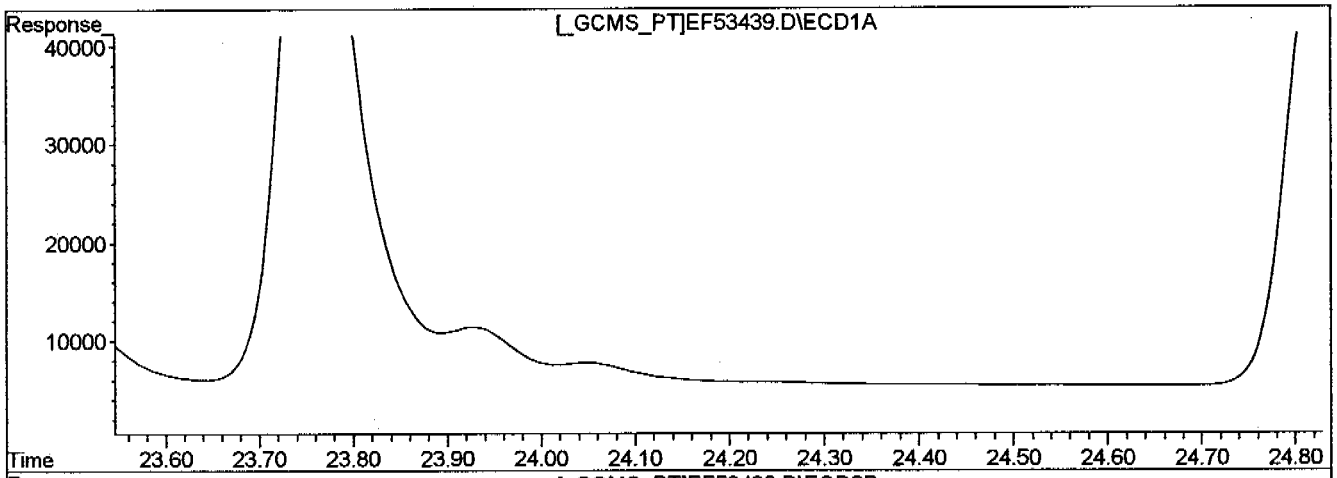


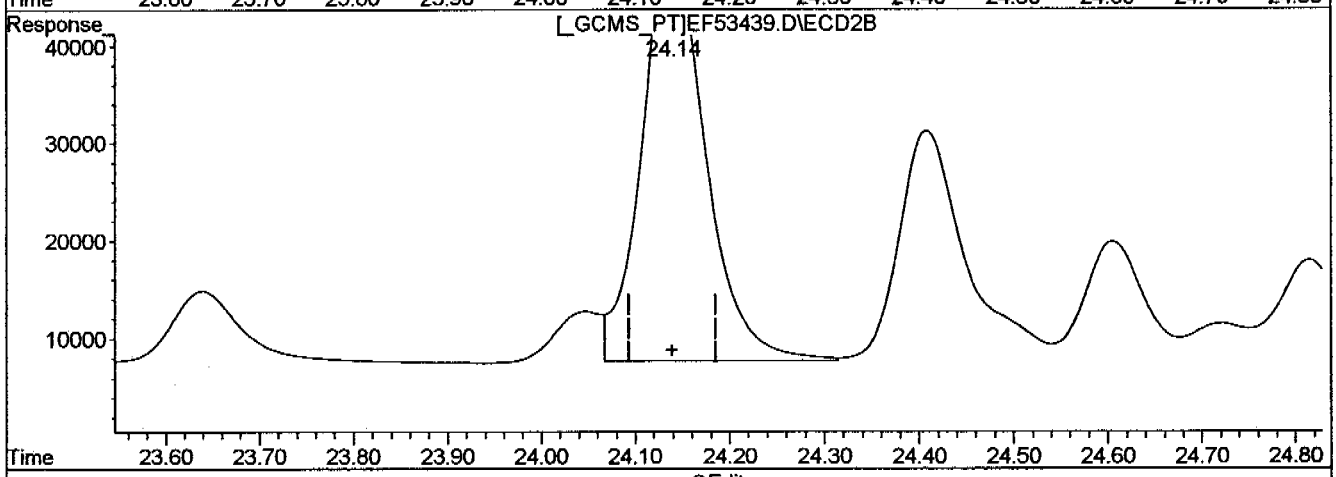


Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53439.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\ef53439.D\ECD2B.CH
Acq On : 14 Aug 2004 12:03 pm Operator: olgaa
Sample : CC2562-1000 Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 8:55 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Multiple Level Calibration





QEdit

(37) AR1260-C

22.41min 1109.880PPB

response 1873911

(37) AR1260-C #2

24.14min 1083.685PPB m

response 1980581

(+) = Expected Retention Time

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2576-CC2562
Lab FileID: EF53451.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef53451.D\ECD1A.CH Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\ef53451.D\ECD2B.CH
Acq On : 14 Aug 2004 10:30 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 29 17:33:23 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	35.152	35.048 E3	0.3	99	0.00	5.83- 6.01
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1254-F		----------NA----------				
28		AR1254-G		----------NA----------				
29		AR1254-H		----------NA----------				
30		AR1016-A	1.777	1.898 E3	-6.8	99	0.00	8.22- 8.42
31		AR1016-B	1.140	1.041 E3	8.7	85	0.00	8.99- 9.16
32		AR1016-C	3.133	3.192 E3	-1.9	102	0.03	10.03-10.26
33		AR1016-D	1.334	1.397 E3	-4.7	103	0.03	10.57-10.84
34		AR1016-E	1.355	1.429 E3	-5.5	103	0.02	12.26-12.45
35		AR1260-A	3.457	3.693 E3	-6.8	104	0.05	20.55-20.72
36		AR1260-B	1.651	1.794 E3	-8.7	105	0.05	21.11-21.28
37		AR1260-C	1.688	1.825 E3	-8.1	105	0.05	22.31-22.47
38		AR1260-D	3.225	3.553 E3	-10.2	110	0.04	23.68-23.81
39		AR1260-E	1.624	1.745 E3	-7.5	105	0.04	24.74-24.88
40	S	Decachlorobiphenyl	30.507	32.645 E3	-7.0	103	0.02	28.56-28.65

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2576-CC2562
Lab FileID: EF53451.D

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	36.823	38.626 E3	-4.9	105	0.00	6.01- 6.15
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1254-F		----------NA----------				
28		AR1254-G		----------NA----------				
29		AR1254-H		----------NA----------				
30		AR1016-A	786.578	859.703	-9.3	102	0.00	7.68- 7.85
31		AR1016-B	3.247	3.528 E3	-8.7	103	0.03	11.05-11.23
32		AR1016-C	1.583	1.795 E3	-13.4	104	0.03	11.61-11.80
33		AR1016-D	1093.148	1176.389	-7.6	103	0.03	13.68-13.82
34		AR1016-E	1.226	1.343 E3	-9.5	105	0.03	14.22-14.39
35		AR1260-A	2.574	2.845 E3	-10.5	108	0.05	22.46-22.62
36		AR1260-B	1.789	1.941 E3	-8.5	106	0.04	22.86-22.98
37		AR1260-C	1.828	2.020 E3	-10.5	107	0.03	24.08-24.17
38		AR1260-D	3.513	3.934 E3	-12.0	107	0.04	25.01-25.12
39		AR1260-E	2.432	2.679 E3	-10.2	107	0.03	26.22-26.32
40	S	Decachlorobiphenyl	35.626	38.844 E3	-9.0	106	0.01	30.68-30.75

Average % D = 7.9

(0.0 %) 0 of 24 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ef52979.D GEF2562.M Mon Aug 16 09:08:05 2004 RPT1

Signal #1 : C:\HPCHEM\1\DATA\ef53451.D\ECD1A.CH Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\ef53451.D\ECD2B.CH
Acq On : 14 Aug 2004 10:30 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 9:06 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	5.92	6.08	1752420	1931289	49.852	52.448
	Spiked Amount 40.000			Recovery	=	124.63%	131.12%
40)	S Decachlorobiphen	28.61	30.72	1632238	1942215	53.504	54.517
	Spiked Amount 40.000			Recovery	=	133.76%	136.29%
	Target Compounds						
30)	AR1016-A	8.32	7.76	949144	429852	534.264	546.483
31)	AR1016-B	9.08	11.14	520350	1763973	456.462	543.221
32)	AR1016-C	10.15	11.71	1596075	897576	509.469	567.059
33)	AR1016-D	10.70	13.75	698540	588194	523.803	538.074
34)	AR1016-E	12.36	14.30	714610	671509	527.258	547.712
35)	AR1260-A	20.64	22.54	1846578	1422256	534.181	552.622
36)	AR1260-B	21.20	22.92	896871	970643	543.088	542.594
37)	AR1260-C	22.39	24.12	912356	1010025	540.370	552.640m
38)	AR1260-D	23.75	25.06	1776636	1967134	550.962	559.907
39)	AR1260-E	24.81	26.27	872486	1339443	537.122	550.833

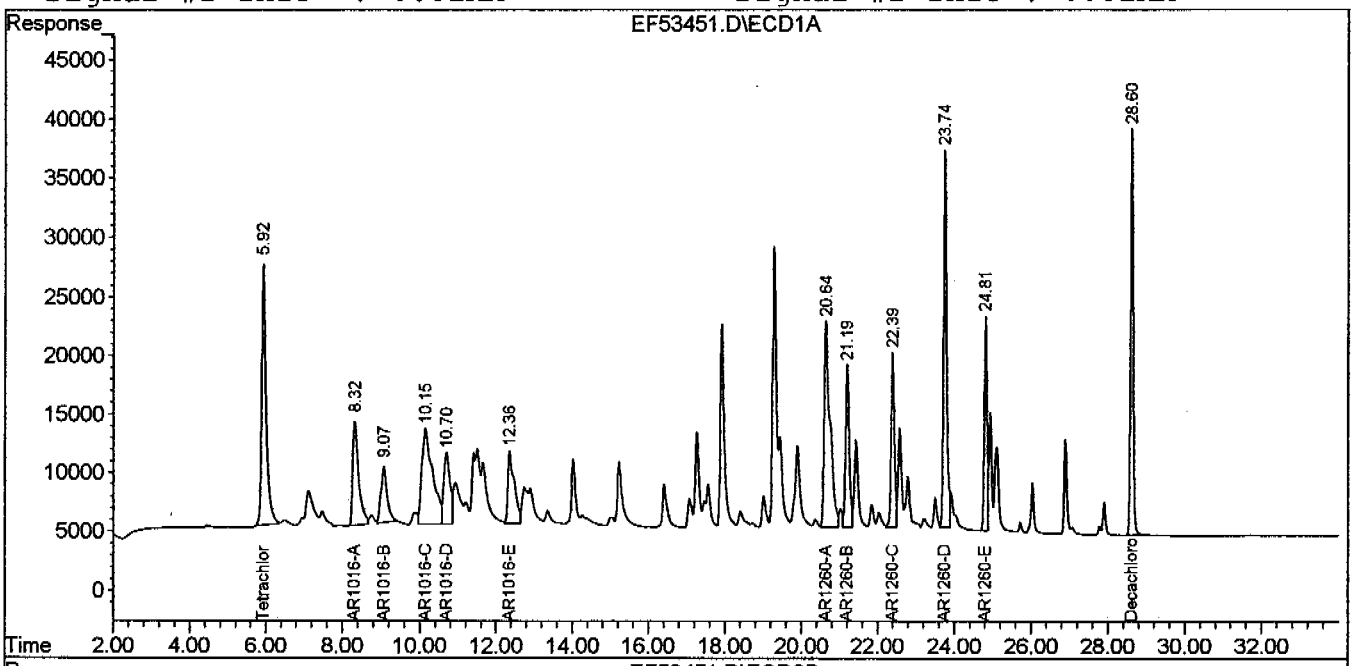
OA
81687

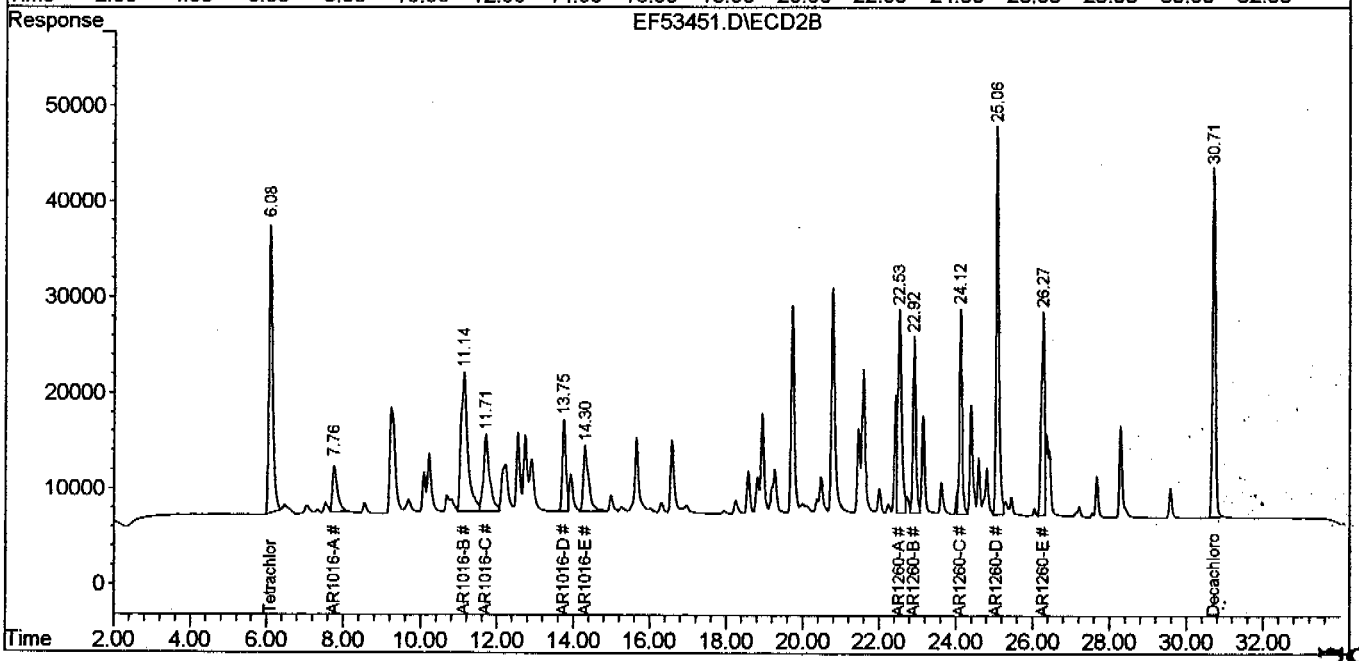
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\ef53451.D\ECD1A.CH Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\ef53451.D\ECD2B.CH
Acq On : 14 Aug 2004 10:30 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 9:06 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

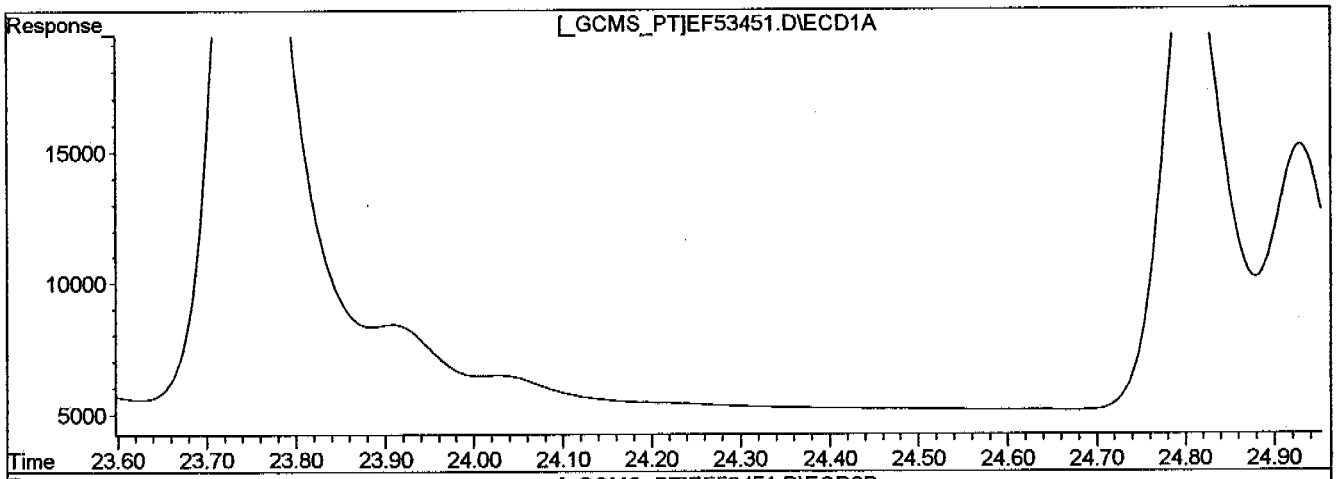


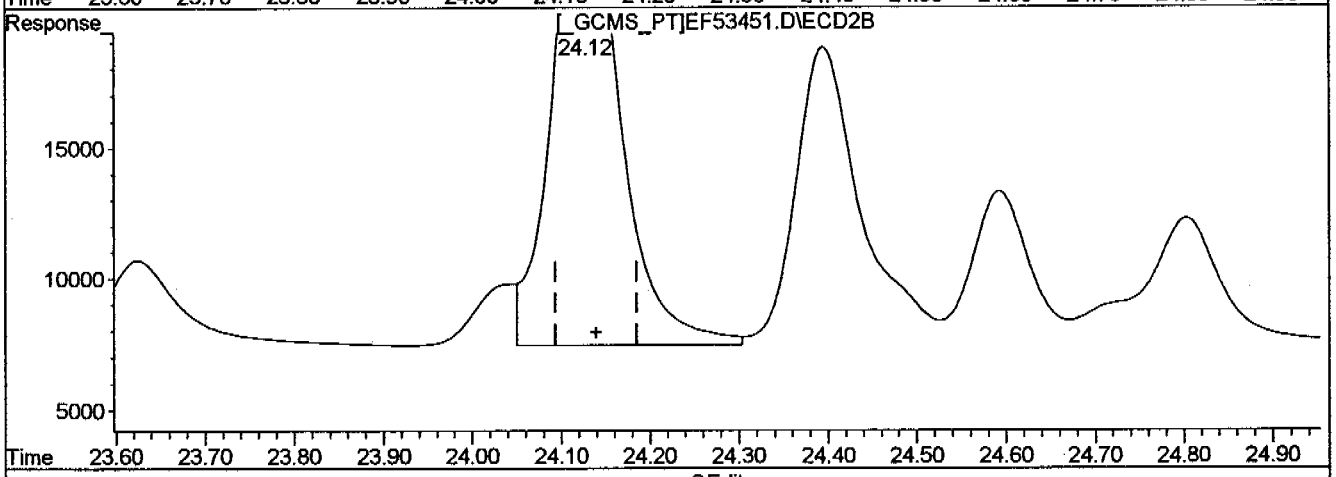


Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53451.D\ECD1A.CH Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\ef53451.D\ECD2B.CH
Acq On : 14 Aug 2004 10:30 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17689,GEF2576,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 9:04 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Thu Jul 29 17:33:23 2004
Response via : Multiple Level Calibration





QEdit

(37) AR1260-C

22.39min 540.370PPB

response 912356

(37) AR1260-C #2

24.12min 552.640PPB m

response 1010025

(+) = Expected Retention Time

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2576-ECC2562
Lab FileID: EF53460.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\ef53460.D\ECD1A.CH          Vial: 45
Signal #2 : C:\HPCHEM\1\DATA\ef53460.D\ECD2B.CH
Acq On    : 15 Aug 2004   4:40 am                   Operator: olgaa
Sample    : ECC2562-1000                            Inst    : GCEF
Misc      : OP17692,GEF2576,15.0,,,10,1             Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title        : GC/ECD- PCB
Last Update  : Thu Jul 29 17:33:23 2004
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	35.152	40.315 E3	-14.7	109	-0.02	5.83- 6.00
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1254-A		----------NA----------				
23		AR1254-B		----------NA----------				
24		AR1254-C		----------NA----------				
25		AR1254-D		----------NA----------				
26		AR1254-E		----------NA----------				
27		AR1254-F		----------NA----------				
28		AR1254-G		----------NA----------				
29		AR1254-H		----------NA----------				
30		AR1016-A	1.777	1.925 E3	-8.3	107	0.00	8.20- 8.41
31		AR1016-B	1.140	1.263 E3	-10.8	98	0.00	8.98- 9.15
32		AR1016-C	3.133	3.531 E3	-12.7	106	0.00	10.02-10.24
33		AR1016-D	1.334	1.451 E3	-8.8	105	0.01	10.55-10.83
34		AR1016-E	1.355	1.494 E3	-10.3	101	0.01	12.25-12.45
35		AR1260-A	3.457	3.872 E3	-12.0	109	0.05	20.55-20.72
36		AR1260-B	1.651	1.809 E3	-9.6	109	0.04	21.10-21.28
37		AR1260-C	1.688	1.887 E3	-11.8	108	0.04	22.31-22.47
38		AR1260-D	3.225	3.655 E3	-13.3	109	0.04	23.68-23.80
39		AR1260-E	1.624	1.859 E3	-14.5	110	0.04	24.74-24.87
40	S	Decachlorobiphenyl	30.507	31.211 E3	-2.3	105	0.02	28.56-28.65

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2576-ECC2562
Lab FileID: EF53460.D

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	36.823	42.582	E3	-15.6#	109	-0.02	6.01- 6.14
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1254-A		----------NA----------					
23		AR1254-B		----------NA----------					
24		AR1254-C		----------NA----------					
25		AR1254-D		----------NA----------					
26		AR1254-E		----------NA----------					
27		AR1254-F		----------NA----------					
28		AR1254-G		----------NA----------					
29		AR1254-H		----------NA----------					
30		AR1016-A	786.578	845.882		-7.5	103	0.00	7.66- 7.84
31		AR1016-B	3.247	3.696	E3	-13.8	108	0.01	11.04-11.21
32		AR1016-C	1.583	1.785	E3	-12.8	106	0.02	11.60-11.79
33		AR1016-D	1093.148	1194.299		-9.3	108	0.02	13.67-13.81
34		AR1016-E	1.226	1.384	E3	-12.9	107	0.02	14.21-14.38
35		AR1260-A	2.574	2.917	E3	-13.3	111	0.04	22.45-22.61
36		AR1260-B	1.789	1.902	E3	-6.3	109	0.04	22.86-22.98
37		AR1260-C	1.828	2.007	E3	-9.8	111	0.03	24.08-24.17
38		AR1260-D	3.513	3.944	E3	-12.3	110	0.03	25.01-25.11
39		AR1260-E	2.432	2.770	E3	-13.9	111	0.03	26.22-26.32
40	S	Decachlorobiphenyl	35.626	37.059	E3	-4.0	105	0.00	30.68-30.75

Average % D = 10.9

(4.2 %) 1 of 24 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF52980.D GEF2562.M Mon Aug 16 09:12:59 2004 RPT1

Signal #1 : C:\HPCHEM\1\DATA\ef53460.D\ECD1A.CH Vial: 45
Signal #2 : C:\HPCHEM\1\DATA\ef53460.D\ECD2B.CH
Acq On : 15 Aug 2004 4:40 am Operator: olgaa
Sample : ECC2562-1000 Inst : GCEF
Misc : OP17692,GEF2576,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 9:11 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	5.91	6.07	4031466	4258165	114.686	115.639
	Spiked Amount 40.000			Recovery	=	286.72%	289.10%
40)	S Decachlorobiphen	28.60	30.71	3121119	3705923	102.309	104.024
	Spiked Amount 40.000			Recovery	=	255.77%	260.06%
	Target Compounds						
30)	AR1016-A	8.31	7.75	1924609	845882	1083.344	1075.395
31)	AR1016-B	9.07	11.12	1262735	3695601	1107.697	1138.073
32)	AR1016-C	10.13	11.69	3531339	1784680	1127.208	1127.502
33)	AR1016-D	10.69	13.74	1450626	1194299	1087.757	1092.531
34)	AR1016-E	12.35	14.30	1494483	1383626	1102.669	1128.544
35)	AR1260-A	20.63	22.53	3871982	2916585	1120.094	1133.249
36)	AR1260-B	21.19	22.92	1808999	1902202	1095.415	1063.340
37)	AR1260-C	22.39	24.12	1887035	2006593	1117.653	1097.918m
38)	AR1260-D	23.74	25.06	3655200	3943502	1133.533m	1122.441
39)	AR1260-E	24.81	26.27	1859146	2770293	1144.532	1139.257

OA
8/16/04

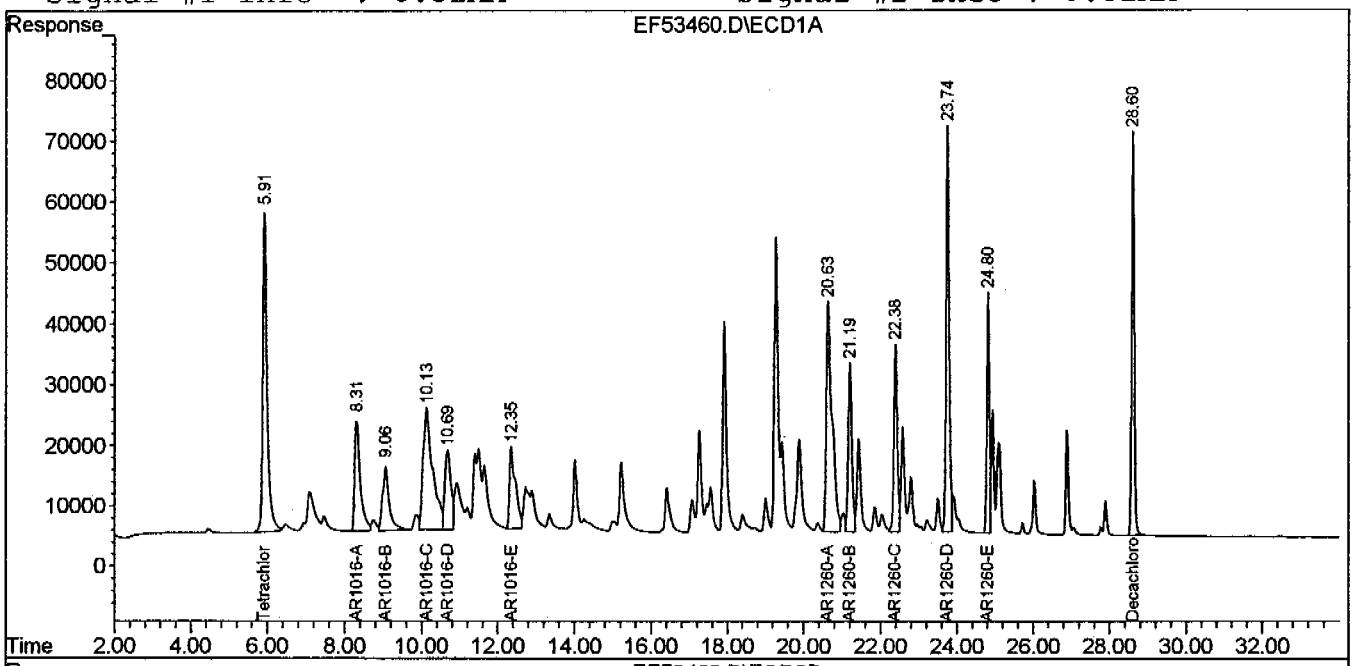
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

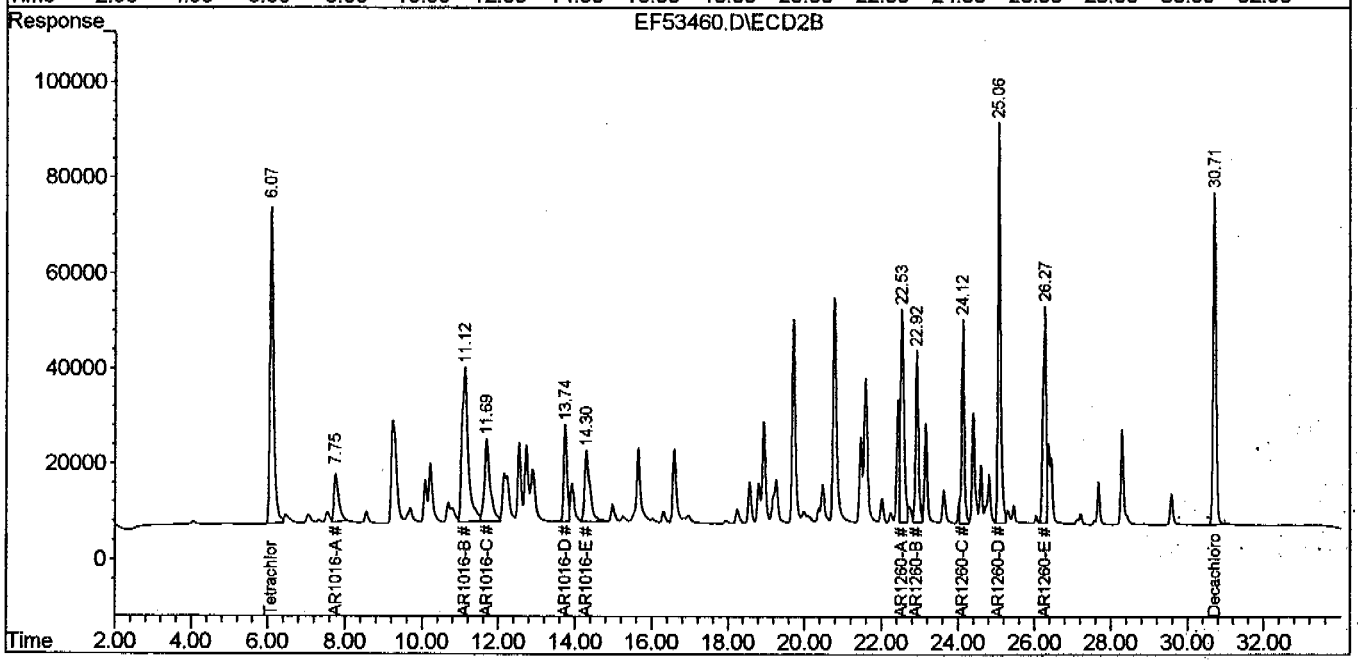
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53460.D\ECD1A.CH Vial: 45
Signal #2 : C:\HPCHEM\1\DATA\ef53460.D\ECD2B.CH
Acq On : 15 Aug 2004 4:40 am Operator: olgaa
Sample : ECC2562-1000 Inst : GCEF
Misc : OP17692,GEF2576,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 9:11 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

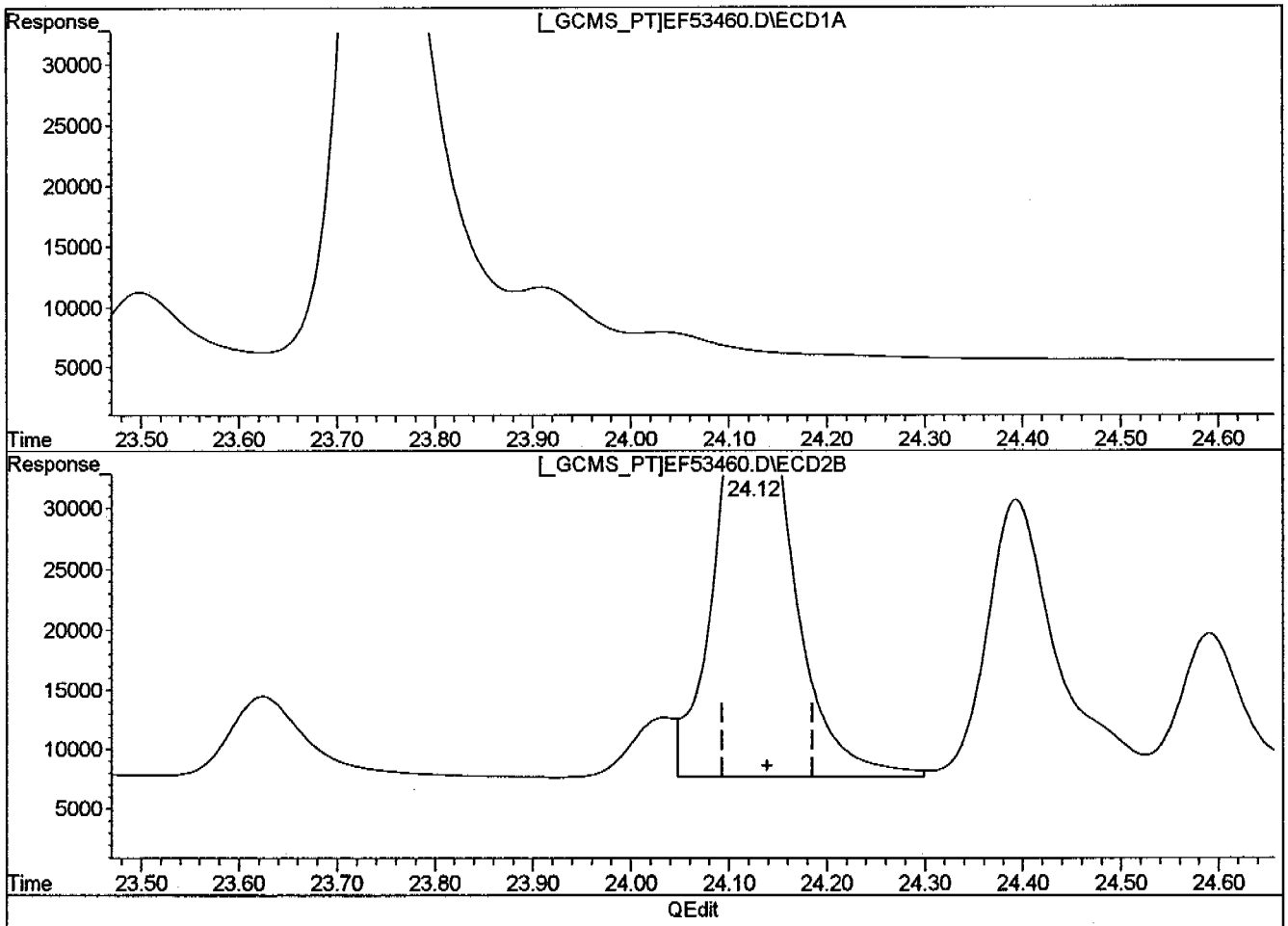




Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53460.D\ECD1A.CH Vial: 45
Signal #2 : C:\HPCHEM\1\DATA\ef53460.D\ECD2B.CH
Acq On : 15 Aug 2004 4:40 am Operator: olgaa
Sample : ECC2562-1000 Inst : GCEF
Misc : OP17692,GEF2576,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 9:11 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Multiple Level Calibration



(37) AR1260-C

22.39min 1117.653PPB

response 1887035

(37) AR1260-C #2

24.12min 1097.918PPB m

response 2006593

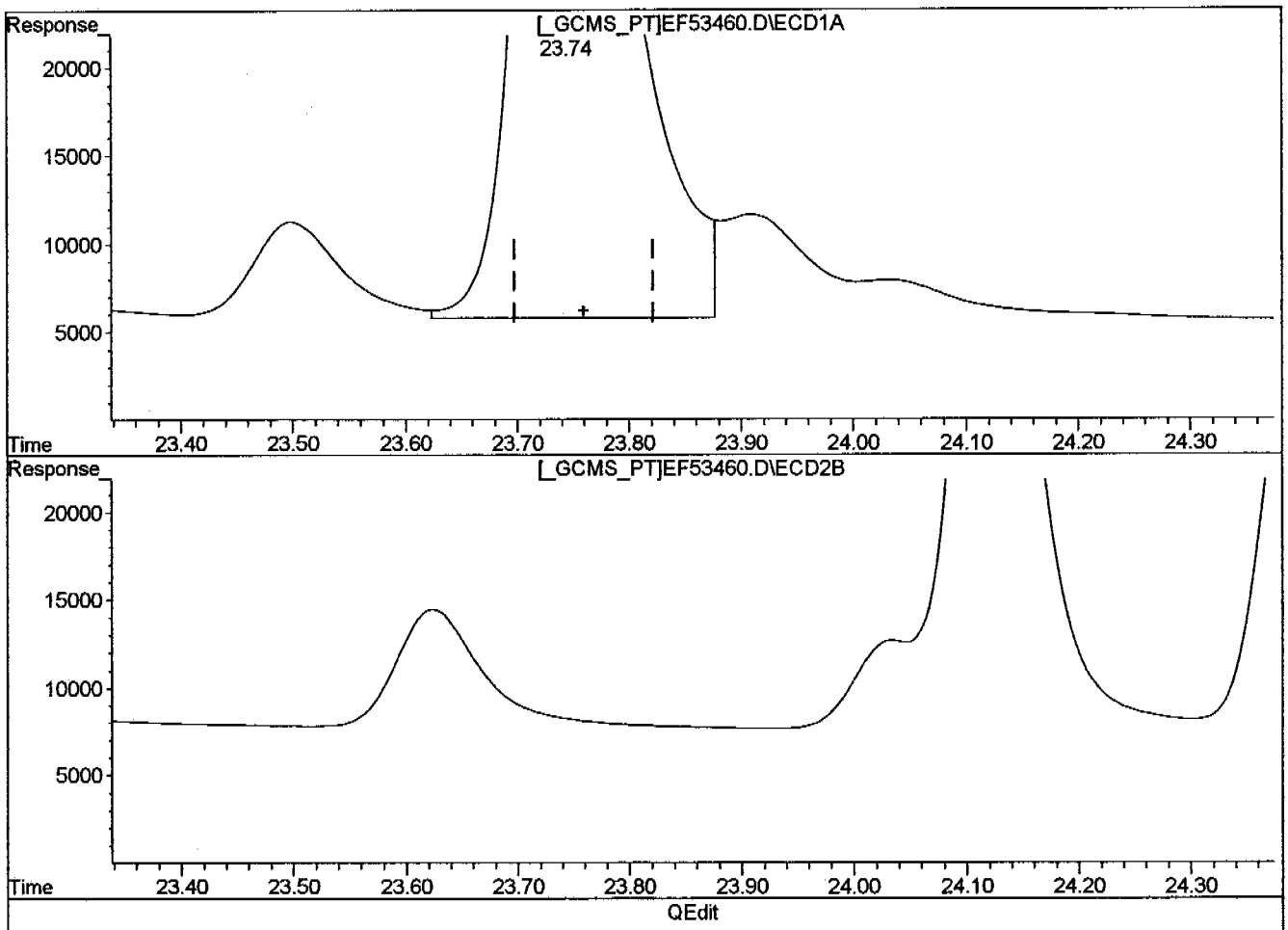
(+) = Expected Retention Time

ef53460.D GEF2562.M Mon Aug 16 09:14:33 2004 RPT1

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53460.D\ECD1A.CH Vial: 45
Signal #2 : C:\HPCHEM\1\DATA\ef53460.D\ECD2B.CH
Acq On : 15 Aug 2004 4:40 am Operator: olgaa
Sample : ECC2562-1000 Inst : GCEF
Misc : OP17692,GEF2576,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 9:11 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Fri Jul 30 11:21:26 2004
Response via : Multiple Level Calibration



QEdit

(38) AR1260-D

23.74min 1133.533PPB m

response 3655200

(38) AR1260-D #2

25.06min 1122.441PPB

response 3943502

(+) = Expected Retention Time

ef53460.D GEF2562.M Mon Aug 16 09:14:43 2004 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53436.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\ef53436.D\ECD2B.CH
Acq On : 14 Aug 2004 9:35 am Operator: olgaa
Sample : OP17689-MB1 Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:19 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	1264546	1529040	35.973	41.524
Spiked Amount 40.000			Recovery	=	89.93%	103.81%
50) S Decachlorobiphen	28.62	30.73	996534	1214353	32.666	34.086
Spiked Amount 40.000			Recovery	=	81.66%	85.22%

Target Compounds

DA
8/60/

804

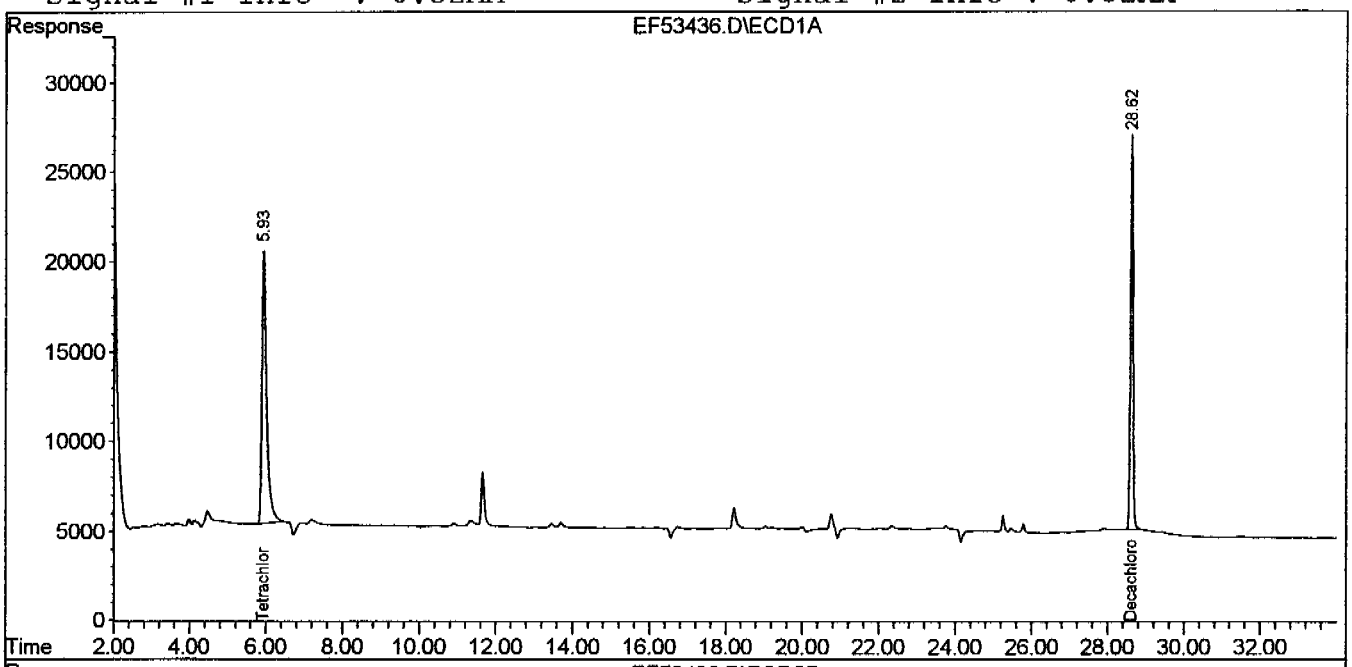
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

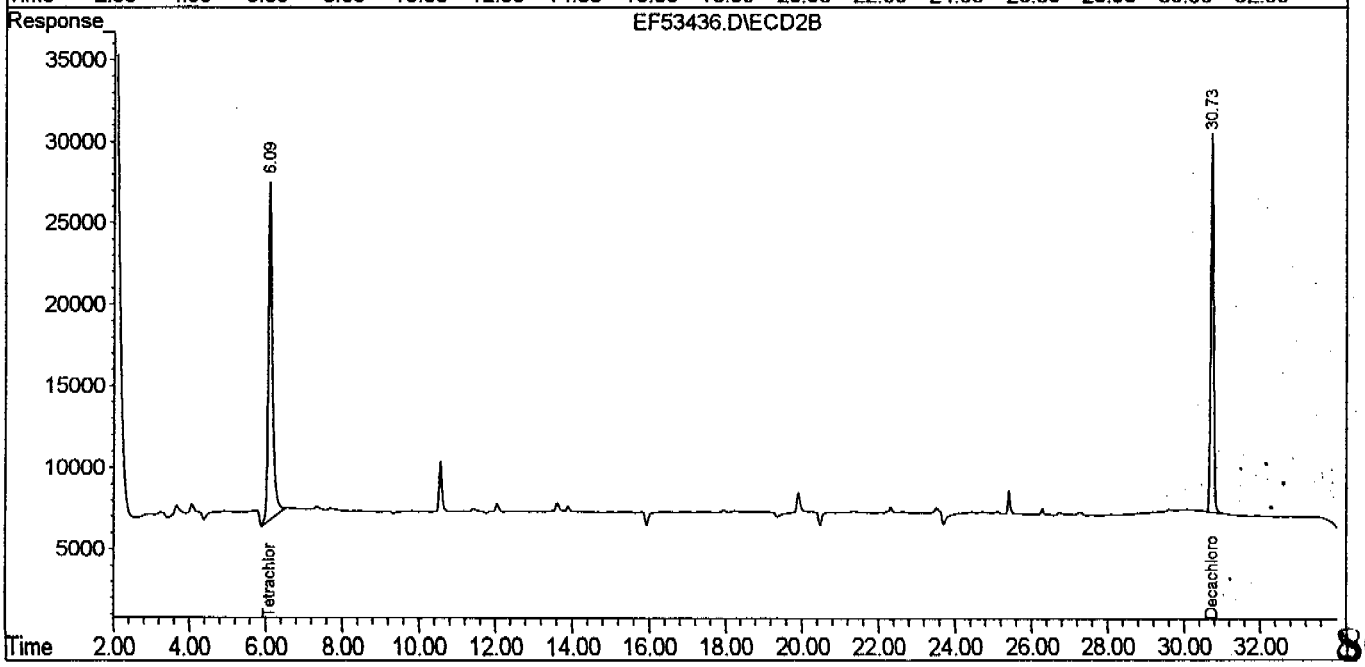
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53436.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\ef53436.D\ECD2B.CH
Acq On : 14 Aug 2004 9:35 am Operator: olgaa
Sample : OP17689-MB1 Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:19 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





805

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53437.D\ECD1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\ef53437.D\ECD2B.CH
Acq On : 14 Aug 2004 10:12 am Operator: olgaa
Sample : OP17689-BS1 Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:26 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.92	6.08	1170034	1384369	33.285	37.595
Spiked Amount 40.000			Recovery	=	83.21%	93.99%
50) S Decachlorobiphen	28.60	30.71	1178175	1416916	38.620	39.772
Spiked Amount 40.000			Recovery	=	96.55%	99.43%
Target Compounds						
30) AR1016-A	8.32	7.76	367013	163383	206.588	207.714
31) AR1016-B	9.07	11.14	195506	670268	171.501	206.411
32) AR1016-C	10.15	11.70	610075	328762	194.737	207.701
33) AR1016-D	10.70	13.74	269097	230773	201.783	211.109
34) AR1016-E	12.35	14.29	284616	257251	209.997	209.825
35) AR1260-A	20.62	22.52	770172	626746	222.797	243.524
36) AR1260-B	21.18	22.91	385278	391194	233.300	218.679
37) AR1260-C	22.38	24.12	363492	378818	215.289	207.272m
38) AR1260-D	23.74	25.05	678553	751611	210.429	213.931

QA
81604

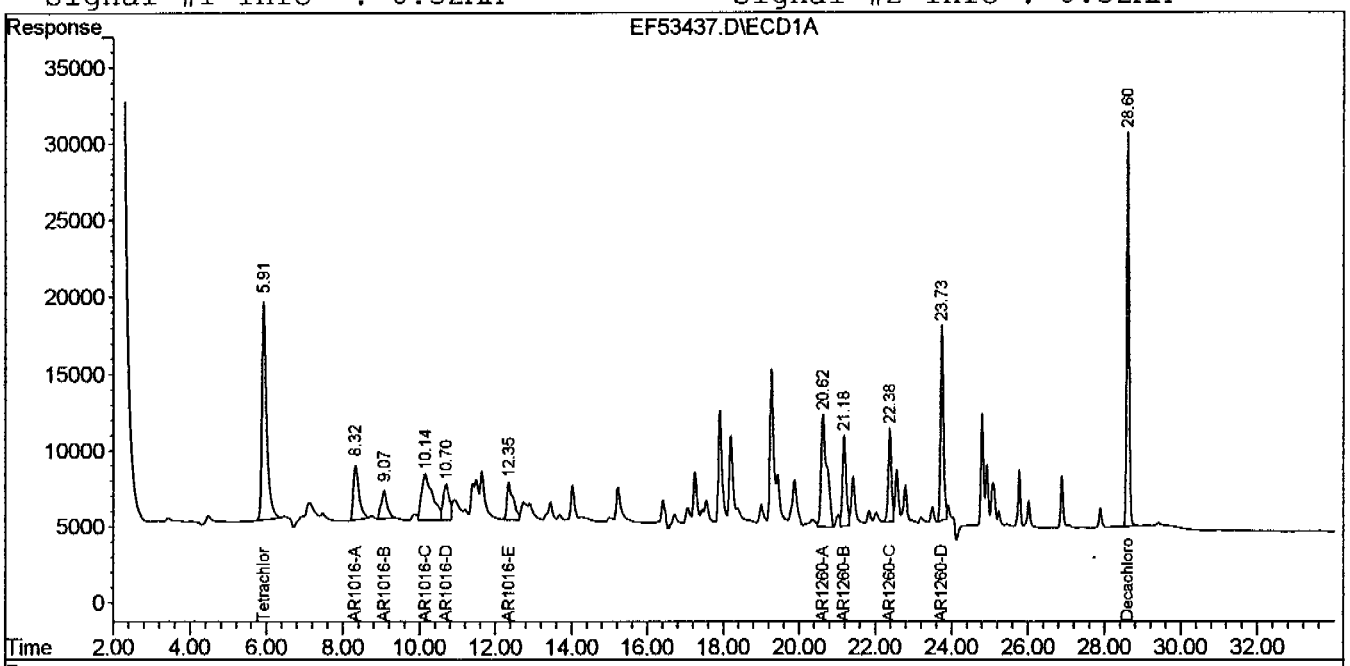
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

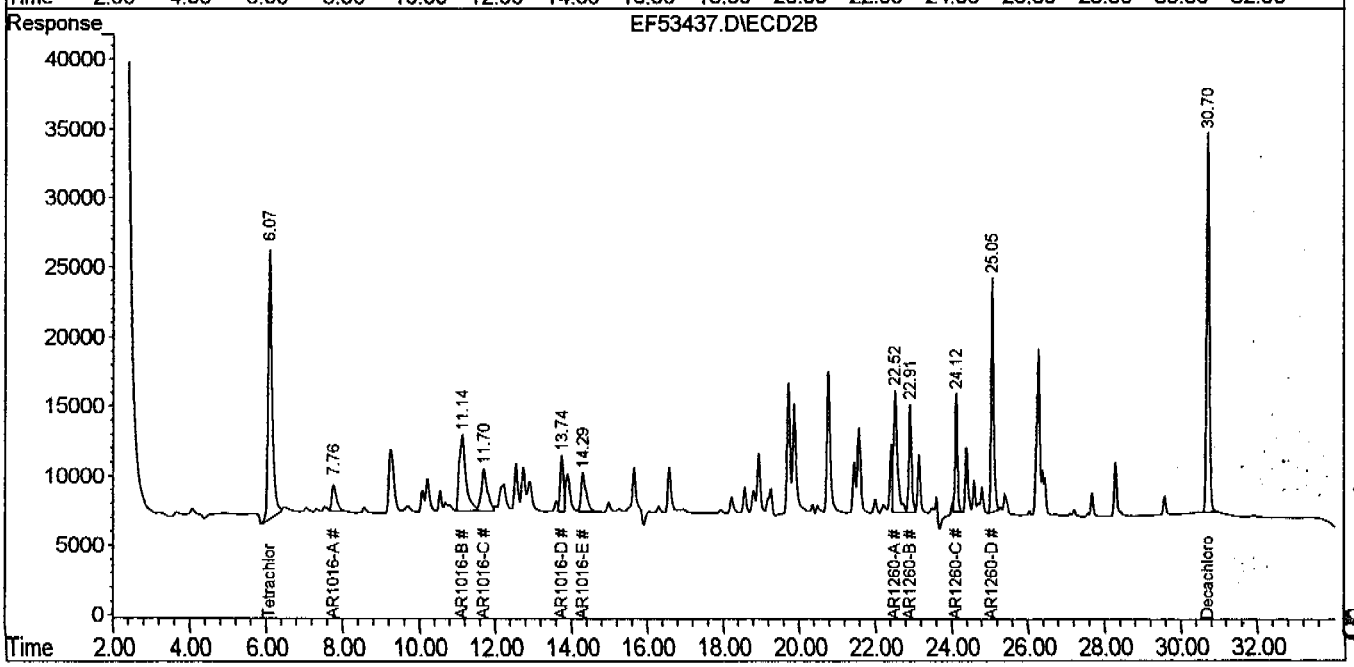
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53437.D\ECD1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\ef53437.D\ECD2B.CH
Acq On : 14 Aug 2004 10:12 am Operator: olgaa
Sample : OP17689-BS1 Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:26 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM



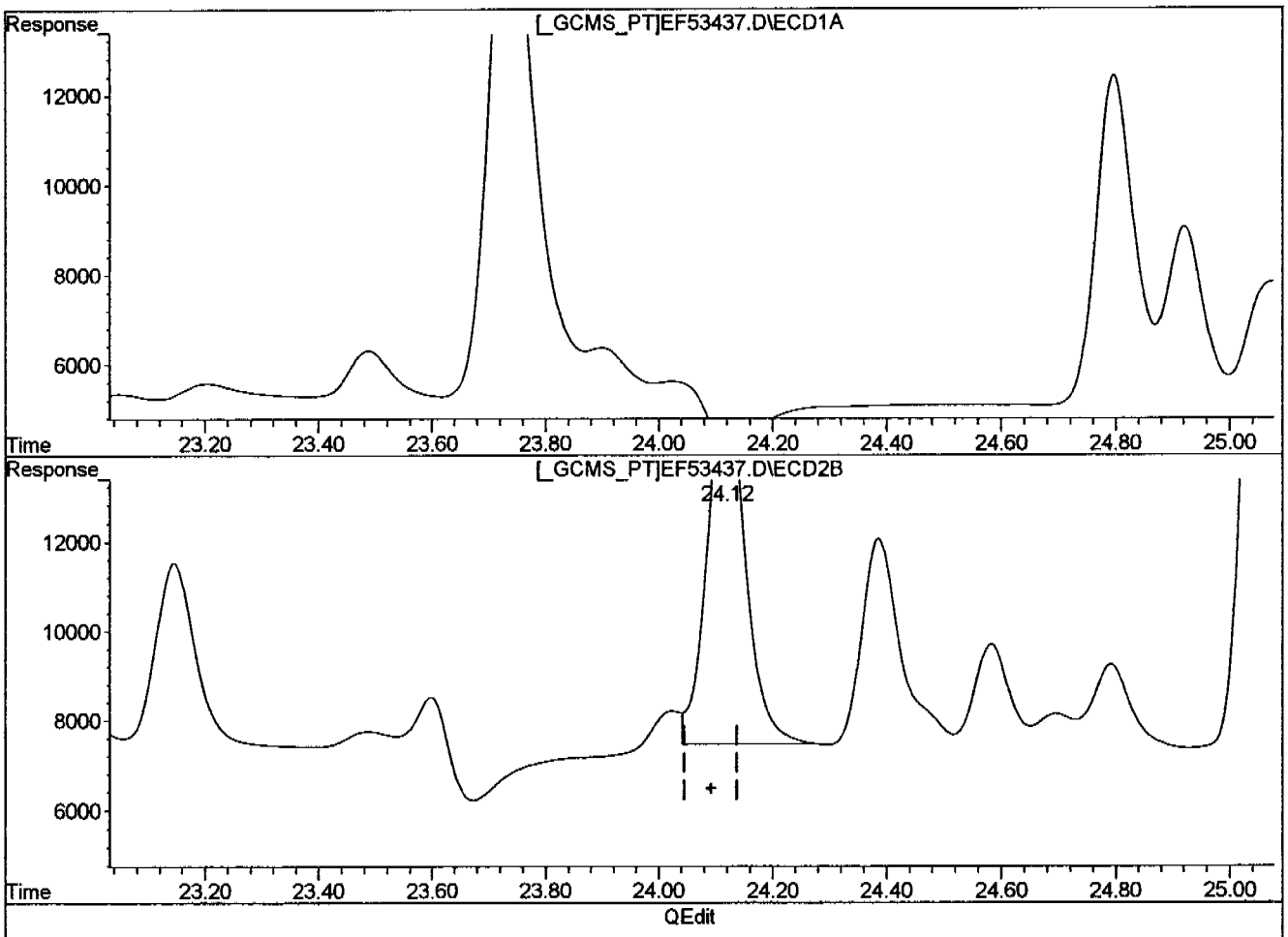


807

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53437.D\ECD1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\ef53437.D\ECD2B.CH
Acq On : 14 Aug 2004 10:12 am Operator: olgaa
Sample : OP17689-BS1 Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:21 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:31:31 2004
Response via : Multiple Level Calibration



(37) AR1260-C

22.38min 215.289PPB

response 363492

(37) AR1260-C #2

24.12min 207.272PPB m

response 378818

(+) = Expected Retention Time

ef53437.D GEF2562.M Mon Aug 16 12:22:26 2004 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53441.D\ECD1A.CH Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\ef53441.D\ECD2B.CH
Acq On : 14 Aug 2004 2:30 pm Operator: olgaa
Sample : OP17689-BSD Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:29 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.92	6.08	1148755	1281854	32.679	34.811
Spiked Amount 40.000			Recovery	=	81.70%	87.03%
50) S Decachlorobiphen	28.61	30.72	1130288	1373834	37.050	38.563
Spiked Amount 40.000			Recovery	=	92.62%	96.41%
Target Compounds						
30) AR1016-A	8.33	7.77	359471	166355	202.343	211.492
31) AR1016-B	9.08	11.15	190982	692946	167.533	213.395
32) AR1016-C	10.16	11.72	604108	367912	192.832	232.435
33) AR1016-D	10.71	13.75	256572	243756	192.392	222.985
34) AR1016-E	12.37	14.31	262703	258343	193.829	210.715
35) AR1260-A	20.64	22.54	713140	604927	206.299	235.046
36) AR1260-B	21.20	22.92	358688	400714	217.199	224.001
37) AR1260-C	22.39	24.13	364332	440139	215.786	240.824
38) AR1260-D	23.75	25.07	697380	742780	216.268	211.418

QA
81607

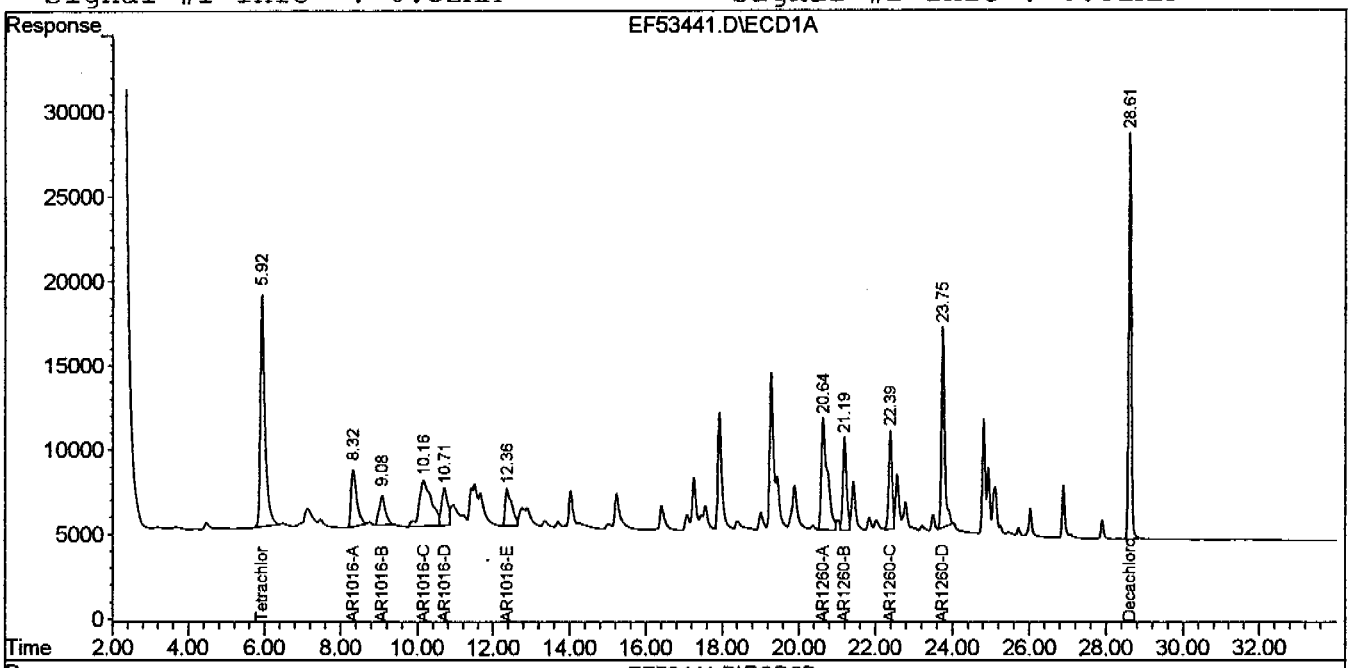
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

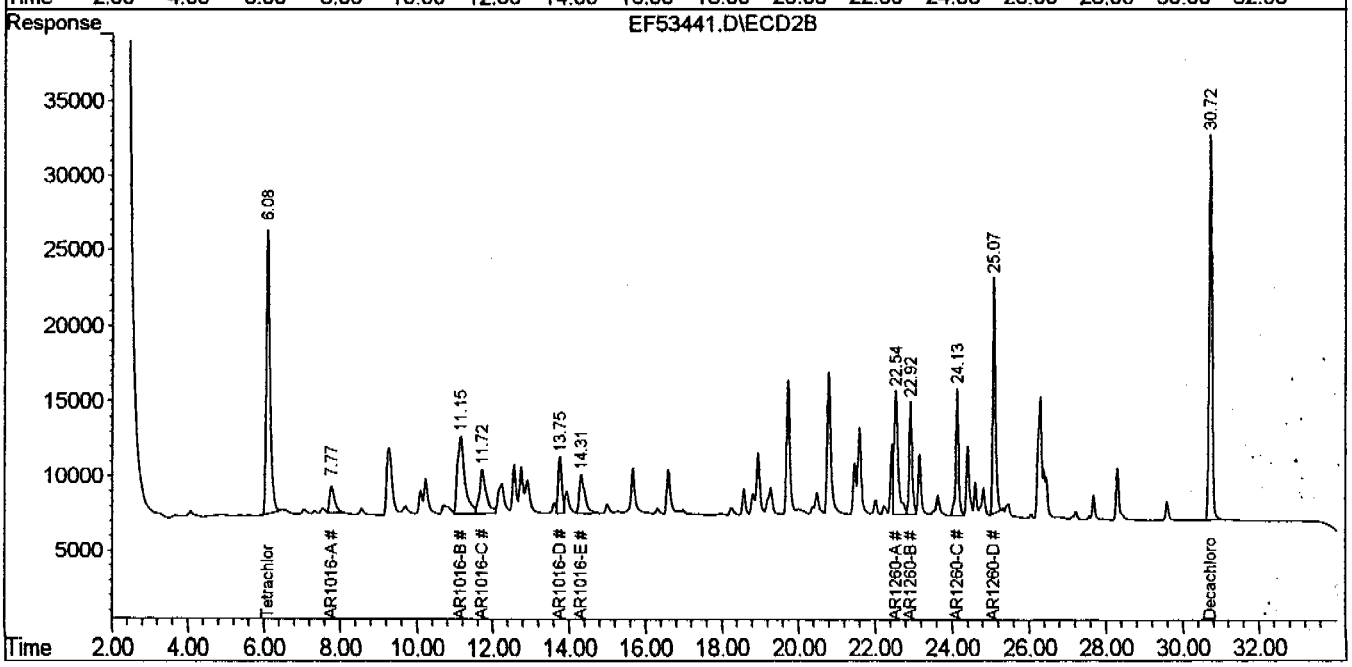
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53441.D\ECD1A.CH Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\ef53441.D\ECD2B.CH
Acq On : 14 Aug 2004 2:30 pm Operator: olgaa
Sample : OP17689-BSD Inst : GCEF
Misc : OP17689,GEF2576,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:29 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM





810

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53438.D\ECD1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\ef53438.D\ECD2B.CH
Acq On : 14 Aug 2004 10:48 am Operator: olgaa
Sample : OP17689-MS Inst : GCEF
Misc : OP17689,GEF2576,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:25 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Initial Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	5.93	6.09	1170533	1416121	33.299	38.458
Spiked Amount 40.000			Recovery	=	83.25%	96.15%
50) S Decachlorobiphen	28.60	30.71	1116433	1348528	36.596	37.853
Spiked Amount 40.000			Recovery	=	91.49%	94.63%
Target Compounds						
30) AR1016-A	8.33	7.77	386711	162520	217.676	206.617
31) AR1016-B	9.08	11.14	206214	692555	180.895	213.275
32) AR1016-C	10.15	11.71	602041	333192	192.172	210.500
33) AR1016-D	10.71	13.74	262689	271309	196.978	248.190
34) AR1016-E	12.36	14.29	273933	269610	202.115	219.905
35) AR1260-A	20.63	22.52	764235	549243	221.079	213.410
36) AR1260-B	21.19	22.91	349142	379962	211.418	212.400
37) AR1260-C	22.38	24.12	360137	379288	213.302	207.529m
38) AR1260-D	23.74	25.06	733749	741316	227.547	211.001

OA

81607

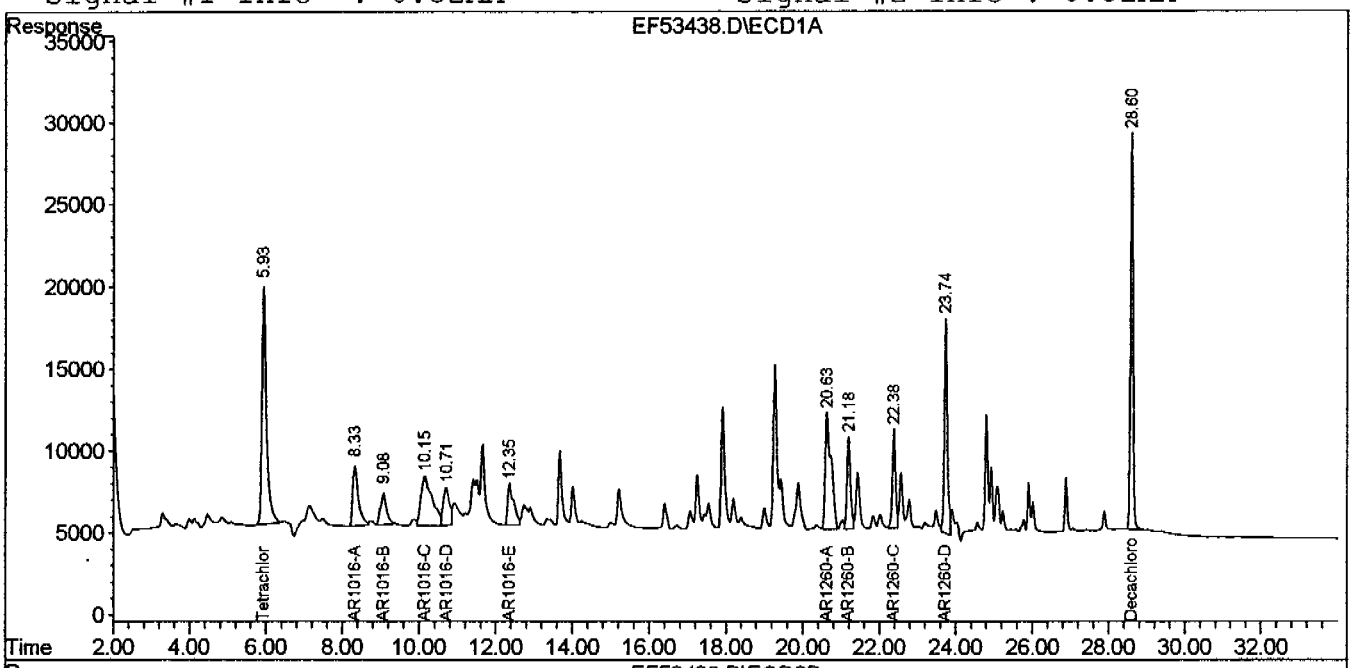
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

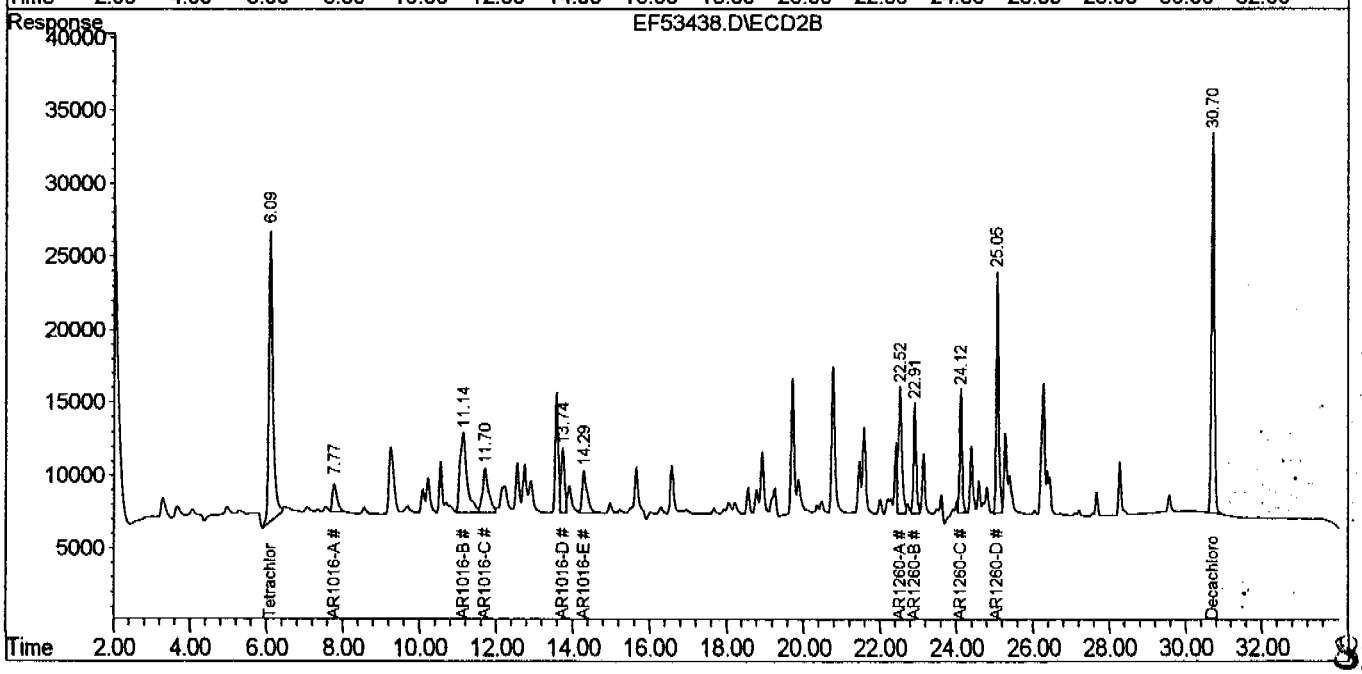
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53438.D\ECD1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\ef53438.D\ECD2B.CH
Acq On : 14 Aug 2004 10:48 am Operator: olgaa
Sample : OP17689-MS Inst : GCEF
Misc : OP17689,GEF2576,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:25 2004 Quant Results File: GEF2562.RES

Quant Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:23:34 2004
Response via : Multiple Level Calibration
DataAcq Meth : GEF2562.M

Volume Inj. : 1UL/COLUMN
Signal #1 Phase : RTX-CLP1 Signal #2 Phase: RTX-CLP2
Signal #1 Info : 0.32MM Signal #2 Info : 0.32MM



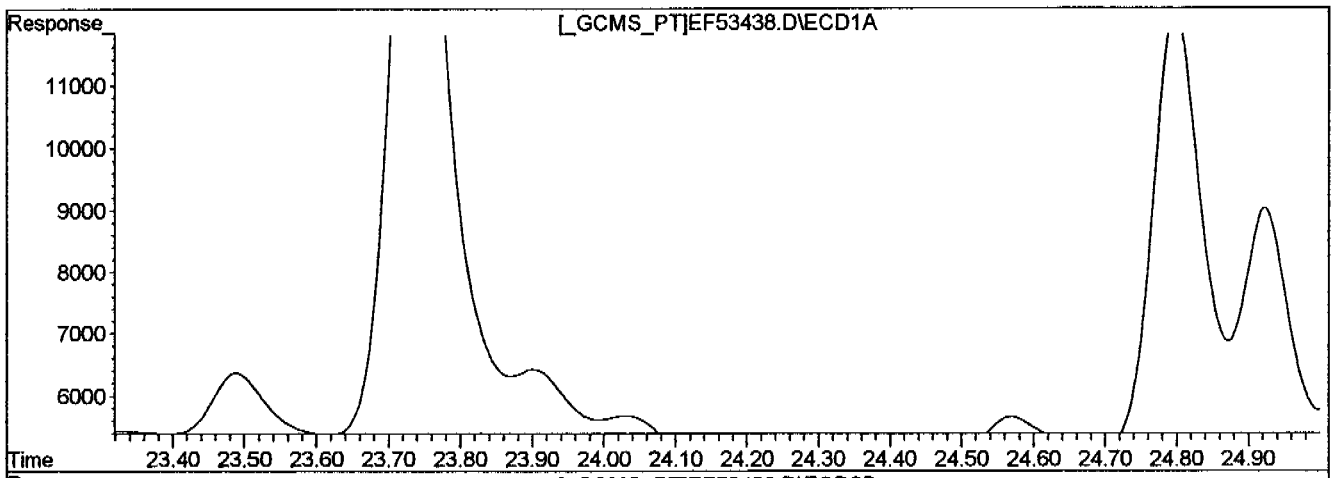


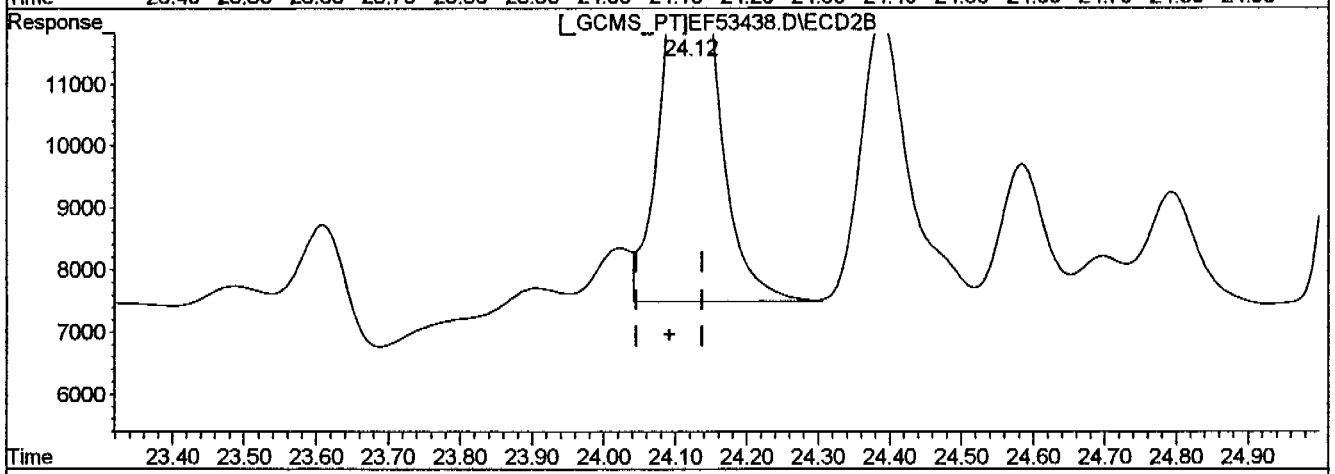
312

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53438.D\ECD1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\ef53438.D\ECD2B.CH
Acq On : 14 Aug 2004 10:48 am Operator: olgaa
Sample : OP17689-MS Inst : GCEF
Misc : OP17689,GEF2576,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 16 12:23 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Mon Aug 16 11:31:31 2004
Response via : Multiple Level Calibration





QEdit

(37) AR1260-C

22.38min 213.302PPB

response 360137

(37) AR1260-C #2

24.12min 207.529PPB m

response 379288

(+) = Expected Retention Time

ef53438.D GEF2562.M Mon Aug 16 12:24:57 2004 RPT1

ACCUTEST.

Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: GEF 2562

Date: 7-26-04

Analyst Signature: Olga Gapiau

Columns: RTX CLP1 / RTX CLP2

Method GEF2562

Initial Cal. Method GEF2562

Injection Volumn: 1 µl

Date Archived:

Standard Data

Lot #	Description	Conc.
635329B	1016/1260	1000µg/L
635329A	↓	500µg/L
635323	PIBCH	200µg/L
635184	AT 1221	1000µg/L
635210	AT 1232	↓
635136	AT 1242	↓
635284	AT 1248	↓

Standard Data

Lot #	Description	Conc.
635324A	1016/1260	50µg/L
635324B	↓	250µg/L
635324C	↓	2000µg/L
635324D	↓	3000µg/L
635270	1016/1260 2nd Source	1000µg/L
635160	AT 1254	↓

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to cor with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 7/27/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	EF52970	CC2561-100			W	1	1			not ring	RT shifted
	971	IB01			W	1	1		✓	OK	
	972	IC 2562-1000	1221	8082	↓	2	1		✓	OK	
	973	IC 2562-1000	1232	↓	↓	3	1		✓	OK	
	974	IC2562-1000	1242	↓	↓	4	1		✓	OK	
	975	IC2562-1000	1248	↓	↓	5	1		✓	OK	
	976	IC2562-1000	1254	↓	↓	6	1		✓	OK	
	977	IC2562-50	1016/1260	↓	↓	7	1		✓	OK	
	978	-250	↓	↓	↓	8	1		✓	OK	
	979	-500	↓	↓	↓	9	1		✓	OK	
	980	ICC2562-1000	↓	↓	↓	10	1		✓	OK	
	981	IC 2562-2000	↓	↓	↓	11	1		✓	OK	
	982	-3000	↓	↓	↓	12	1		✓	OK	
	983	CC2562-1000	1016/1260 2nd Source	↓	↓	13	1		✓	OK	
	984	CC2562-500	↓	↓	W	14	1		✓	OK	
	985	IB02	↓	↓	W	15	1		✓	OK	
R	986	OP17493-MB4	17493-4	8082	W	16	1				
↓	987	-BS4	↓	↓	↓	17	1				
↓	988	N73118-1	↓	↓	↓	18	1				
↓	989	OP17516-MB1	17516-1	↓	S	19	1				

MTX = Matrix. Designate W for water, S for soil, O for oil. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.

Form: OR016-04
Rev. Date: 10/4/02

ACCUTEST

Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: GEF2570

Date: 8-13-04

Analyst Signature: Olga Ganiou

Standard Data

Lot #	Description	Conc.
635342	P1/3CL	200ng/ml
635329A	1016/1260	500ng/ml
635281b	↓	1000ng/ml

Standard Data

Lot #	Description	Conc.

Columns: RTX CLP1/RTX CLP11

Method GEF2562

Initial Cal. Method GEF2562

Injection Volumn: 1 µl

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to co with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date 08/6/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	EFS3426	OP17674-BS12	17674-1	8082/MRL	W	11	1				report 1st Chem. AT 1268 due to CB check
	27	CC2562-500				12	1		✓	OK	
	28	IB03				13	1			bad injection	
	289	OP17674-BS13	17674-1	8082/MRL	W	14	1				AT 1268
	30	-BS14				15	1				
	31	-BS15				16	1				
	32	-BS16				17	1				
	33	-BS17				18	1				
	34	OP17668-MB2	17668-2	8082	S	19	1		✓	OK	do not report 1260-E due to CB check
	35	-BS2				20	1		✓	OK	
R	36	OP17689-MB1	17689-1		W	21	1		✓	OK	
R	37	-BS1				22	1		✓	OK	
R	38	-MS				23	1		✓	OK	
	39	CC2562-1000			W	24	1		✓	OK	1260-E↑
	40	IB04			W	25	1		✓	OK	
	41	OP17689-BSD	17689-1	8082	W	26	1		✓	OK	do not report 1260-E due to CB check
	42	N74646-1				27	1		✓	OK	
	43	-2				28	1		✓	OK	
	44	-3				29	1		✓	OK	
	45	-4				30	1		✓	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.

Form: OR016-04
Rev. Date: 10/4/02

ACCUTEST. Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: GEF2576

Analyst Signature: Olga Ganian

e: 8-13-04

Columns: RTX CLP1/RTX CLP2

Method GEF2562

Initial Cal. Method GEF2562

Injection Volumn: 1 µl

Date Archived:

Standard Data

ot #	Description	Conc.
342	PCBW	200ug/L
329A	1016/1260	500ug/L
281L	↓	1000ug/L

Standard Data

Lot #	Description	Conc.

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to co with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 8/16/04

Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
EF5344	N74646-5	17687-1	8082	W	31	1		✓	OK	
477	-6	↓	↓	↓	32	1		✓	OK	
478	-8				33	1		✓	OK	
489	-9				34	1		✓	OK	
490	-10				35	1		✓	OK	
501	CC2562-500				36	1		✓	OK	
502	IB05				37	1		✓	OK	
523	N74646-11	17687-1	8082		38	1		✓	OK	
524	-12	↓	↓		39	1		✓	OK	
545	-13			↓	40	1		✓	OK	
556	N74927-1	17692-1		S	41	1		✓	OK	
567	-2	↓	↓	↓	42	1		✓	OK	
578	-3				43	1		✓	OK	
589	-4				44	1		✓	OK	
590	ECC2562-1000			W	45	1		Tcus 7 2nd	OK	
6										

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.

Form: OR016-04
Rev. Date: 10/4/02

ACCUTEST.

LIQUID/LIQUID EXTRACTION

BATCH # GC 176 8/-1 | RACK# 7-1

Supervisor Review: Signature [illegible] Date 8/11/04

Separatory Funnel — Continuous Liquid Liquid

EXTRACT METHOD (circle one) SW846 3510C / EPA 600 series / EPA 500 series / CLP / other _____ SW846 3520C / CLP / other _____

EXTRACTION DATE: 8/11/04 ANALYST: LL/KR METHOD: 8/9 Water Bath Temp(C) 42°/60° Nitrogen Evap Temp(C) _____

	Sample #	Sample Bottle #	Analysis Type	Sample Description	Sample Vol (ml) Oil Wt. (g)	pH Adjust (ml) >11 NaOH	pH Adjust (ml) <2 H2SO4	Final Extract Vol(ml)	Final Extract Color	Extract Cleanup GPC	Extract Cleanup H2SO4	Extract Cleanup Cu	Extract Cleanup Florisil	Comments
	MB 1		PCB	Dilution	1000			10	Clear			✓		
	BS 1		↓	↓	1000			↓	↓			✓		
	BSD ~~MS~~				1000							✓		
	N74646 MS ~~MSD~~	4			870							✓		
	~~BS~~													
	~~MS~~													
	~~MSD~~													
1	N74646-1	4	PCB	Clear	900			10	Clear			✓		
2	-2	3	↓	↓	860			↓	↓			✓		
3	-3	3			940							✓		
4	-4	4			930							✓		
5	-5	3			950							✓		
6	-6	3			830							✓		
7	-7	4			910							✓		
8	-8	3			940							✓		
9	-10	4			940							✓		
10	-11	5			950							✓		
11	-12	3			900							✓		
12	-13	4	↓	↓	940			↓	↓			✓		
13														
14														
15														
16														
17														
18														
19														
20														

COMMENTS:

SURROGATE SPIKE DATA

	LOT #	CONC. (PPM)	AD (ml)
BASE			
ACID			
PPCB	8/11 009	400 ppb	
HERB			

WITNESS SIGN: [illegible]

MATRIX SPIKE DATA

	LOT #	CONC.	AD (ml)
BASE			
ACID			
PEST			
PCB	8/11 075	2 ppm	
HERB			

WITNESS SIGN: [illegible]

SOLVENT DATA

	LOT #	BRAND
METH CHLOR	A21E70	Baker
HEXANE	A16E37	"
ACETONE		
ETH ETHER		

REAGENT/FILTER MEDIA

	LOT #	BRAND
SODIUM SULF	552450	EMD
FILTER PAPER	815 89112	Fisher
1:1 H2SO4		
10N NAOH		
COPPER	OP11-015	Aldrich
FLORISIL		

T1 8-16

817

GC
SW846 8151
Herbicide

ACCUTEST.

GC Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction H8151 STD

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
3. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
4. Surrogate Recoveries Meet Criteria (if applicable)		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
5. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
6. Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Retention Time Summary for comment.		
7. Extraction Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
8. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		

9. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*

Additional Comments:

QC Review Signature: Benedetta M. Popow Date: 8/18/2004

Form: RG05
Rev. Date: 2/15/00

Semivolatile Surrogate Recovery Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Method: SW846 8151 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
N74646-1	1G11099.D	103.0	96.0
N74646-2	1G11100.D	98.0	94.0
N74646-3	1G11101.D	101.0	95.0
N74646-4	1G11094.D	103.0	95.0
N74646-5	1G11102.D	99.0	93.0
N74646-6	1G11103.D	103.0	95.0
N74646-8	1G11104.D	101.0	93.0
N74646-9	1G11105.D	100.0	92.0
N74646-10	1G11106.D	99.0	91.0
N74646-11	1G11107.D	100.0	92.0
N74646-12	1G11108.D	102.0	94.0
N74646-13	1G11111.D	100.0	92.0
OP17690-BS1	1G11091.D	92.0	86.0
OP17690-BSD	1G11092.D	92.0	87.0
OP17690-MB1	1G11090.D	89.0	83.0
OP17690-MS	1G11093.D	105.0	99.0

Surrogate Compounds	Recovery Limits
S1 = 2,4-DCAA	54-141%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Blank Spike/Blank Spike Duplicate Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17690-BS1	1G11091.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
OP17690-BSD	1G11092.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277

The QC reported here applies to the following samples: **Method:** SW846 8151

N74646-1, N74646-2, N74646-3, N74646-4, N74646-5, N74646-6, N74646-8, N74646-9, N74646-10, N74646-11, N74646-12, N74646-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	5	4.6	92	4.7	94	2	41-135/30
93-72-1	2,4,5-TP (Silvex)	5	5.3	106	5.3	106	0	41-137/30
93-76-5	2,4,5-T	5	5.5	110	5.5	110	0	42-131/30
87-86-5	Pentachlorophenol	5	5.3	106	5.3	106	0	19-138/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
19719-28-9	2,4-DCAA	92%	92%	54-141%
19719-28-9	2,4-DCAA	86%	87%	54-141%

Matrix Spike Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17690-MS	1G11093.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
N74646-4	1G11094.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277

The QC reported here applies to the following samples: **Method:** SW846 8151

N74646-1, N74646-2, N74646-3, N74646-4, N74646-5, N74646-6, N74646-8, N74646-9, N74646-10, N74646-11, N74646-12, N74646-13

CAS No.	Compound	N74646-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
94-75-7	2,4-D	ND		5.62	6.0	107	37-146
93-72-1	2,4,5-TP (Silvex)	ND		5.62	6.8	121	21-144
93-76-5	2,4,5-T	ND		5.62	7.0	125	24-133
87-86-5	Pentachlorophenol	ND		5.62	6.8	121	13-134

CAS No.	Surrogate Recoveries	MS	N74646-4	Limits
19719-28-9	2,4-DCAA	105%	103%	54-141%
19719-28-9	2,4-DCAA	99%	95%	54-141%

Method Blank Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17690-MB1	1G11090.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277

The QC reported here applies to the following samples: **Method:** SW846 8151

N74646-1, N74646-2, N74646-3, N74646-4, N74646-5, N74646-6, N74646-8, N74646-9, N74646-10, N74646-11, N74646-12, N74646-13

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.50	0.28	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.15	0.13	ug/l	
93-76-5	2,4,5-T	ND	0.20	0.20	ug/l	
87-86-5	Pentachlorophenol	ND	0.15	0.12	ug/l	

CAS No.	Surrogate Recoveries		Limits
19719-28-9	2,4-DCAA	89%	54-141%
19719-28-9	2,4-DCAA	83%	54-141%

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC1G
Method: SW846 8151

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	1G10680.D	07/14/04 19:52	G1G260-ICC260	OWENM
Std#2	1G10701.D	07/15/04 12:49	G1G261-ECC260	OWENM
Std#3	1G10720.D	07/16/04 15:42	G1G262-CC260	OWENM

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+/- 3*StdDev)
2,4-DCAA	1	SURR	16.45	16.46	16.47	16.46	0.010	+/- 0.030
2,4-DCAA	2	SURR	15.48	15.49	15.49	15.49	0.006	+/- 0.030 [a]
Dalapon	1	REG	3.73	3.74	3.74	3.74	0.006	+/- 0.030 [a]
Dicamba	1	REG	17.03	17.04	17.05	17.04	0.010	+/- 0.030
MCPP	1	REG	17.72	17.73	17.73	17.73	0.006	+/- 0.030 [a]
MCPA	1	REG	18.20	18.21	18.21	18.21	0.006	+/- 0.030 [a]
Dichloroprop	1	REG	19.34	19.35	19.35	19.35	0.006	+/- 0.030 [a]
2,4-D	1	REG	20.04	20.04	20.04	20.04	0.000	+/- 0.030 [a]
Pentachlorophenol	1	REG	20.64	20.64	20.65	20.64	0.006	+/- 0.030 [a]
2,4,5-TP (Silvex)	1	REG	22.46	22.47	22.47	22.47	0.006	+/- 0.030 [a]
2,4,5-T	1	REG	23.24	23.28	23.25	23.26	0.021	+/- 0.062
2,4-DB	1	REG	24.72	24.77	24.73	24.74	0.026	+/- 0.079
Picloram	1	REG	27.20	27.26	27.21	27.22	0.032	+/- 0.096
Dinoseb	1	REG	27.68	27.68	27.68	27.68	0.000	+/- 0.030 [a]
Dalapon	2	REG	3.14	3.17	3.16	3.16	0.015	+/- 0.046
Dicamba	2	REG	16.00	16.01	16.01	16.01	0.006	+/- 0.030 [a]
MCPP	2	REG	16.46	16.47	16.47	16.47	0.006	+/- 0.030 [a]
MCPA	2	REG	17.19	17.19	17.19	17.19	0.000	+/- 0.030 [a]
Dichloroprop	2	REG	18.18	18.18	18.18	18.18	0.000	+/- 0.030 [a]
2,4-D	2	REG	19.10	19.10	19.10	19.10	0.000	+/- 0.030 [a]
Pentachlorophenol	2	REG	20.07	20.07	20.07	20.07	0.000	+/- 0.030 [a]
2,4,5-TP (Silvex)	2	REG	21.35	21.35	21.35	21.35	0.000	+/- 0.030 [a]
2,4,5-T	2	REG	22.40	22.43	22.40	22.41	0.017	+/- 0.052
2,4-DB	2	REG	23.74	23.79	23.75	23.76	0.026	+/- 0.079
Dinoseb	2	REG	24.51	24.52	24.51	24.51	0.006	+/- 0.030 [a]
Picloram	2	REG	27.01	27.06	27.02	27.03	0.026	+/- 0.079

(a) Default minimum StdDev of .01 minutes employed.

GC Surrogate Retention Time Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	G1G277-CC276	**Injection Date:**	08/12/04
Lab File ID:	1G11087.D	**Injection Time:**	08:58
Instrument ID:	GC1G	**Method:**	SW846 8151

	S1 [a] RT	S1 [b] RT
Check Std	16.47	15.51

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP17690-MB1	1G11090.D	08/12/04	11:34	16.48	15.51
OP17690-BS1	1G11091.D	08/12/04	12:07	16.47	15.51
OP17690-BSD	1G11092.D	08/12/04	12:41	16.47	15.51
OP17690-MS	1G11093.D	08/12/04	13:15	16.47	15.51
N74646-4	1G11094.D	08/12/04	13:49	16.47	15.51
F25751-1	1G11095.D	08/12/04	14:22	16.47	15.51
ZZZZZZ	1G11096.D	08/12/04	14:56	16.47	15.51

Surrogate Compounds

S1 = 2,4-DCAA

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	G1G277-CC276	**Injection Date:**	08/12/04
Lab File ID:	1G11097.D	**Injection Time:**	15:30
Instrument ID:	GC1G	**Method:**	SW846 8151

	S1 [a] RT	S1 [b] RT
Check Std	16.47	15.51

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
N74646-1	1G11099.D	08/12/04	18:22	16.47	15.51
N74646-2	1G11100.D	08/12/04	18:56	16.47	15.51
N74646-3	1G11101.D	08/12/04	19:30	16.47	15.51
N74646-5	1G11102.D	08/12/04	20:04	16.47	15.51
N74646-6	1G11103.D	08/12/04	20:37	16.47	15.51
N74646-8	1G11104.D	08/12/04	21:11	16.47	15.51
N74646-9	1G11105.D	08/12/04	21:45	16.47	15.51
N74646-10	1G11106.D	08/12/04	22:19	16.47	15.51
N74646-11	1G11107.D	08/12/04	22:52	16.47	15.51
N74646-12	1G11108.D	08/12/04	23:26	16.47	15.51

Surrogate Compounds

S1 = 2,4-DCAA

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	G1G277-CC276	**Injection Date:**	08/13/04
Lab File ID:	1G11109.D	**Injection Time:**	01:07
Instrument ID:	GC1G	**Method:**	SW846 8151

	S1 [a] RT	S1 [b] RT
Check Std	16.47	15.51

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
N74646-13	1G11111.D	08/13/04	02:15	16.47	15.51
G1G277-ECC276	1G11112.D	08/13/04	02:49	16.47	15.51

Surrogate Compounds

S1 = 2,4-DCAA

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-658-LAKEVIEWDR		
Lab Sample ID:	N74646-1	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11099.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.57	0.32	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.17	0.14	ug/l	
93-76-5	2,4,5-T	ND	0.23	0.22	ug/l	
87-86-5	Pentachlorophenol	ND	0.17	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	103%		54-141%
19719-28-9	2,4-DCAA	96%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11099.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G11099.D\ECD2B.CH
Acq On : 8-12-04 06:22:46 PM Operator: kristis
Sample : N74646-1 Inst : GC1G
Misc : OP17600,G1G277,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 18:53:53 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1663.5E6	1234.4E6	1032.092	962.080
Spiked Amount 1000.000			Recovery	=	103.21%	96.21%

Target Compounds

829

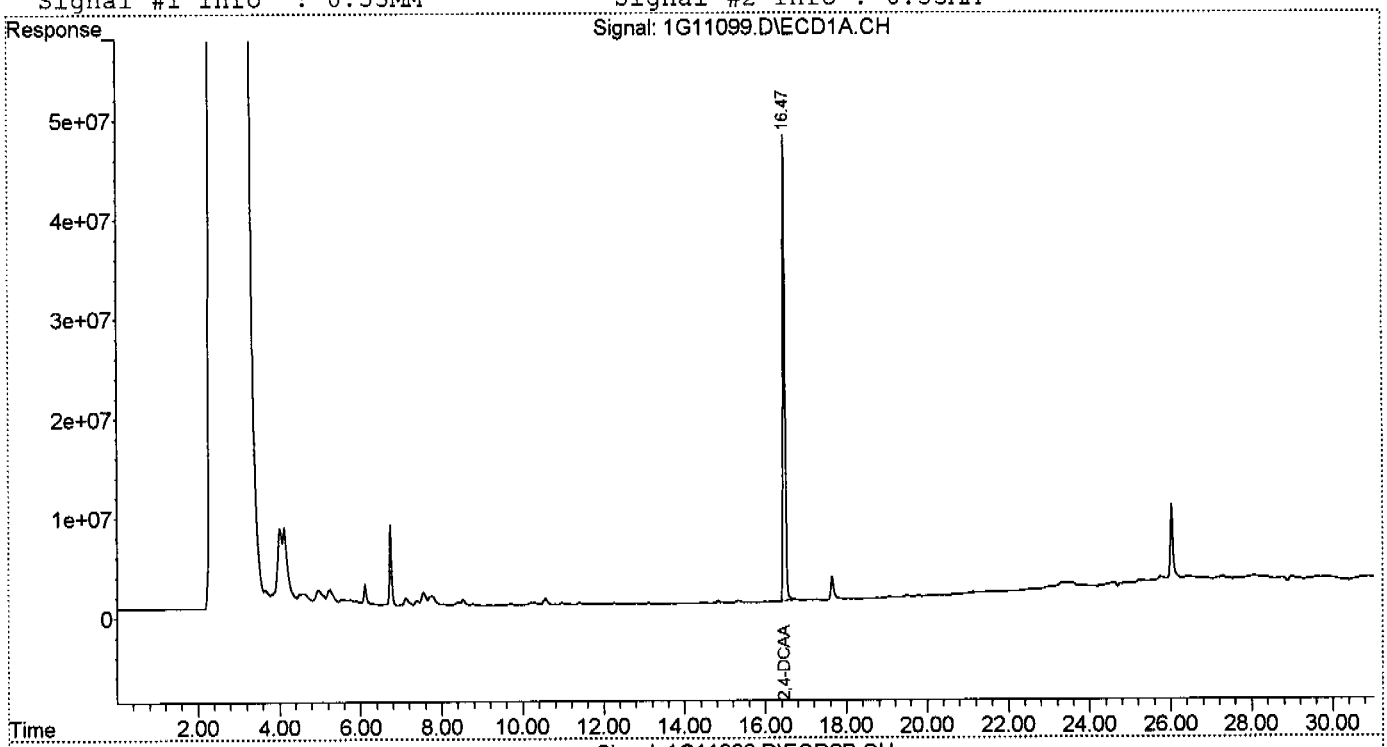
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

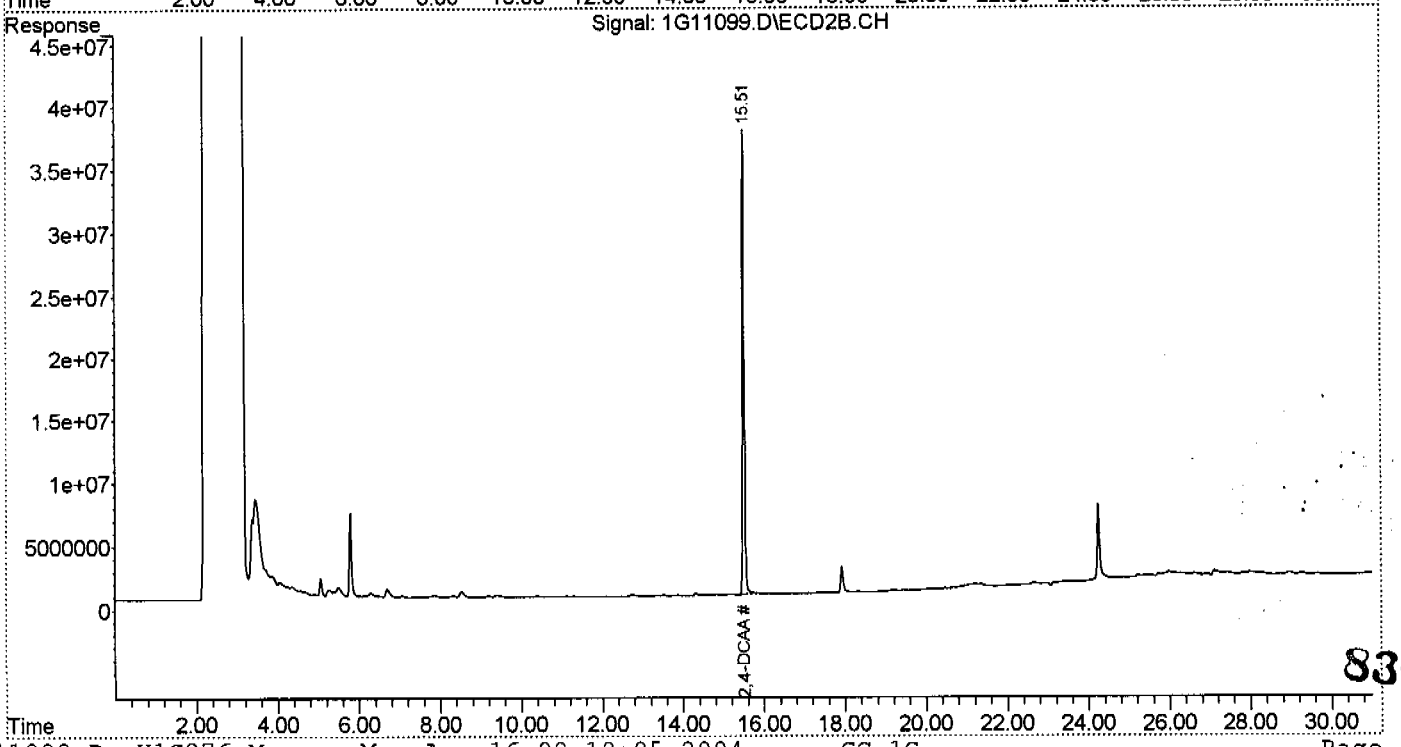
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11099.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G11099.D\ECD2B.CH
Acq On : 8-12-04 06:22:46 PM Operator: kristis
Sample : N74646-1 Inst : GC1G
Misc : OP17600,G1G277,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 9:09 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





830

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-653-LAKEVIEWDR		
Lab Sample ID:	N74646-2	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11100.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.56	0.31	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.17	0.14	ug/l	
93-76-5	2,4,5-T	ND	0.22	0.22	ug/l	
87-86-5	Pentachlorophenol	ND	0.17	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	98%		54-141%
19719-28-9	2,4-DCAA	94%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11100.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G11100.D\ECD2B.CH
Acq On : 8-12-04 06:56:36 PM Operator: kristis
Sample : N74646-2 Inst : GC1G
Misc : OP17600,G1G277,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 19:27:41 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1584.0E6	1207.1E6	982.742	940.763
Spiked Amount 1000.000			Recovery	=	98.27%	94.08%
Target Compounds						

KBW67

832

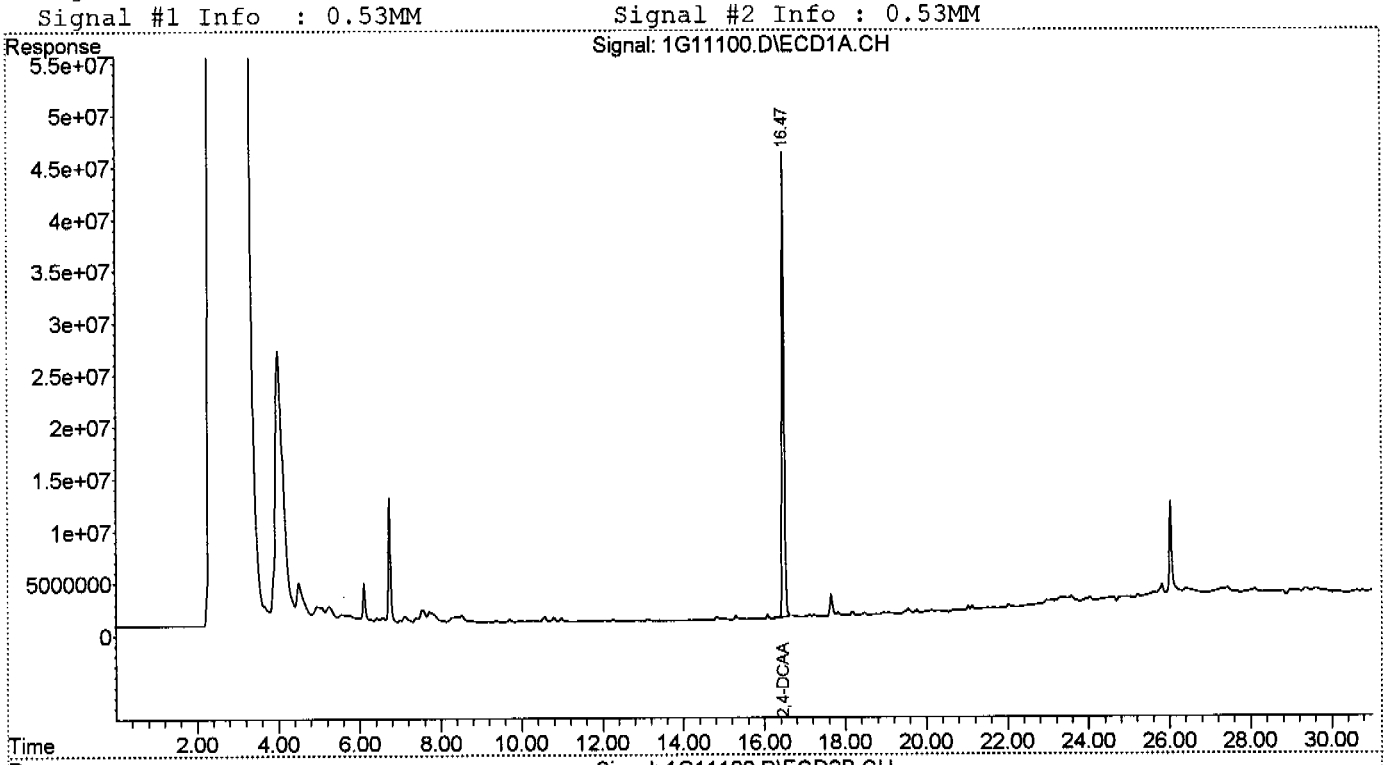
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

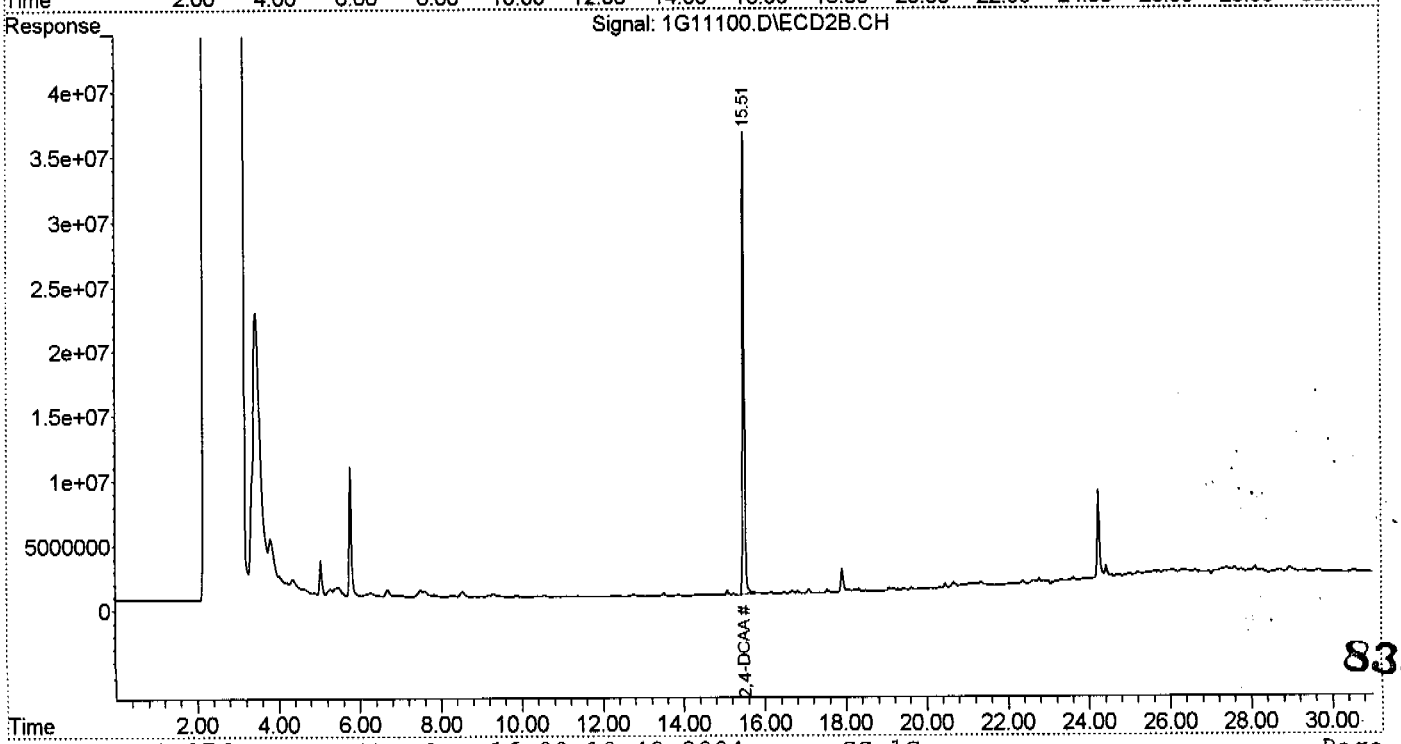
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11100.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G11100.D\ECD2B.CH
Acq On : 8-12-04 06:56:36 PM Operator: kristis
Sample : N74646-2 Inst : GC1G
Misc : OP17600,G1G277,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 9:10 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





833

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-652-LAKEVIEWDR		
Lab Sample ID:	N74646-3	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11101.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.54	0.30	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.16	0.14	ug/l	
93-76-5	2,4,5-T	ND	0.22	0.22	ug/l	
87-86-5	Pentachlorophenol	ND	0.16	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	101%		54-141%
19719-28-9	2,4-DCAA	95%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11101.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G11101.D\ECD2B.CH
Acq On : 8-12-04 07:30:19 PM Operator: kristis
Sample : N74646-3 Inst : GC1G
Misc : OP17600,G1G277,920,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 20:01:26 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1629.6E6	1218.3E6	1011.063	949.559
Spiked Amount 1000.000			Recovery	=	101.11%	94.96%
Target Compounds						

835

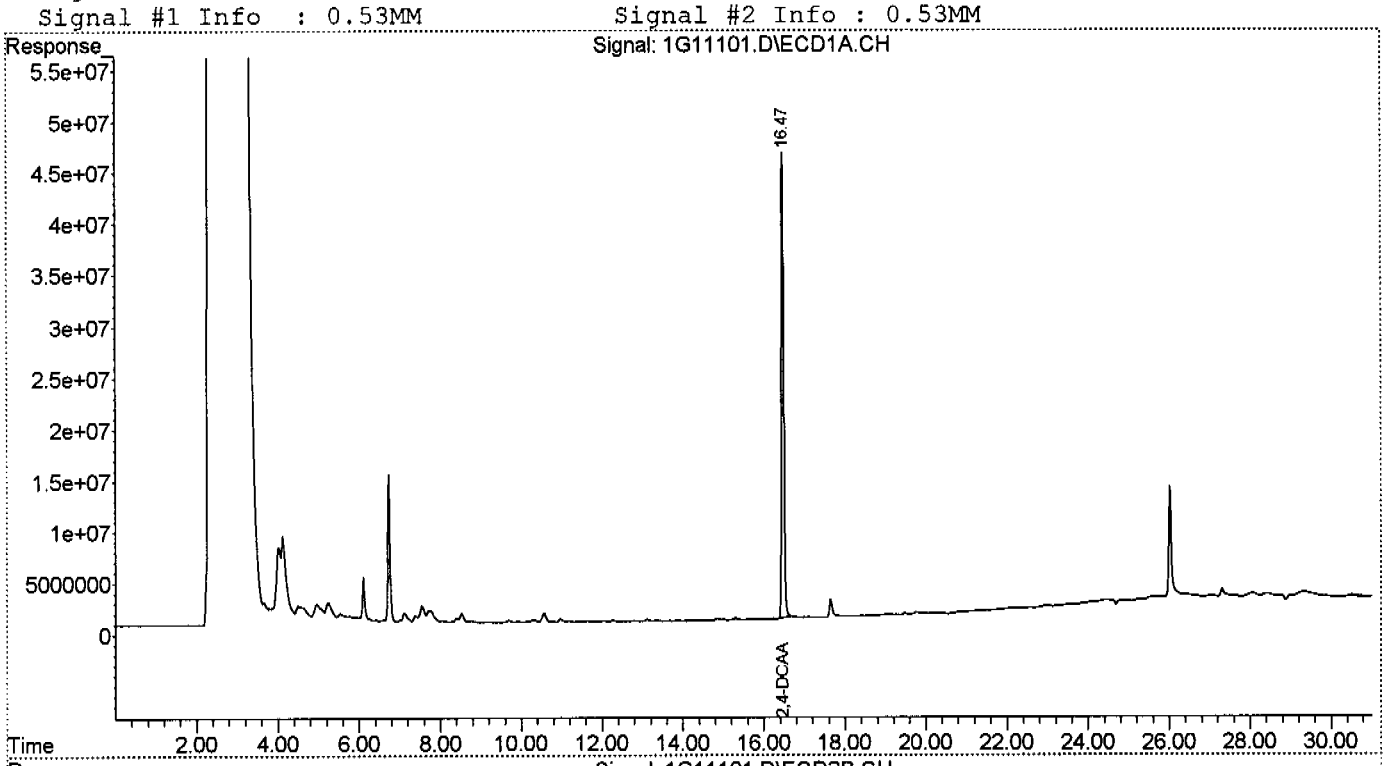
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

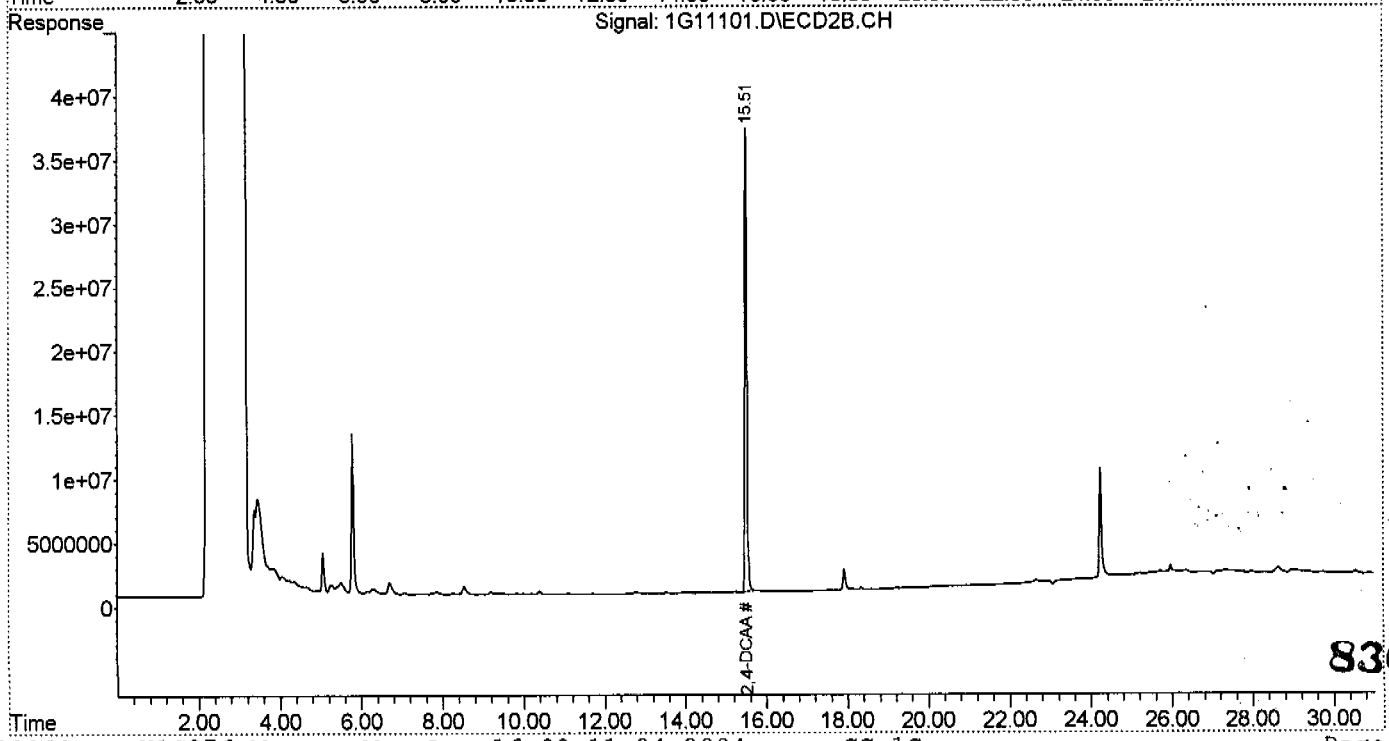
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11101.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G11101.D\ECD2B.CH
Acq On : 8-12-04 07:30:19 PM Operator: kristis
Sample : N74646-3 Inst : GC1G
Misc : OP17600,G1G277,920,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 20:01 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





836

Accutest Laboratories

Report of Analysis

Client Sample ID:	RWB0804-3536-FLETCHERSWAY		
Lab Sample ID:	N74646-4	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11094.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.57	0.32	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.17	0.14	ug/l	
93-76-5	2,4,5-T	ND	0.23	0.22	ug/l	
87-86-5	Pentachlorophenol	ND	0.17	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	103%		54-141%
19719-28-9	2,4-DCAA	95%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11094.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11094.D\ECD2B.CH
Acq On : 8-12-04 01:49:06 PM Operator: kristis
Sample : N74646-4 Inst : GC1G
Misc : OP17690,G1G277,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 14:20:12 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1661.1E6	1213.3E6	1030.590	945.655
Spiked Amount 1000.000			Recovery	=	103.06%	94.57%
Target Compounds						

838

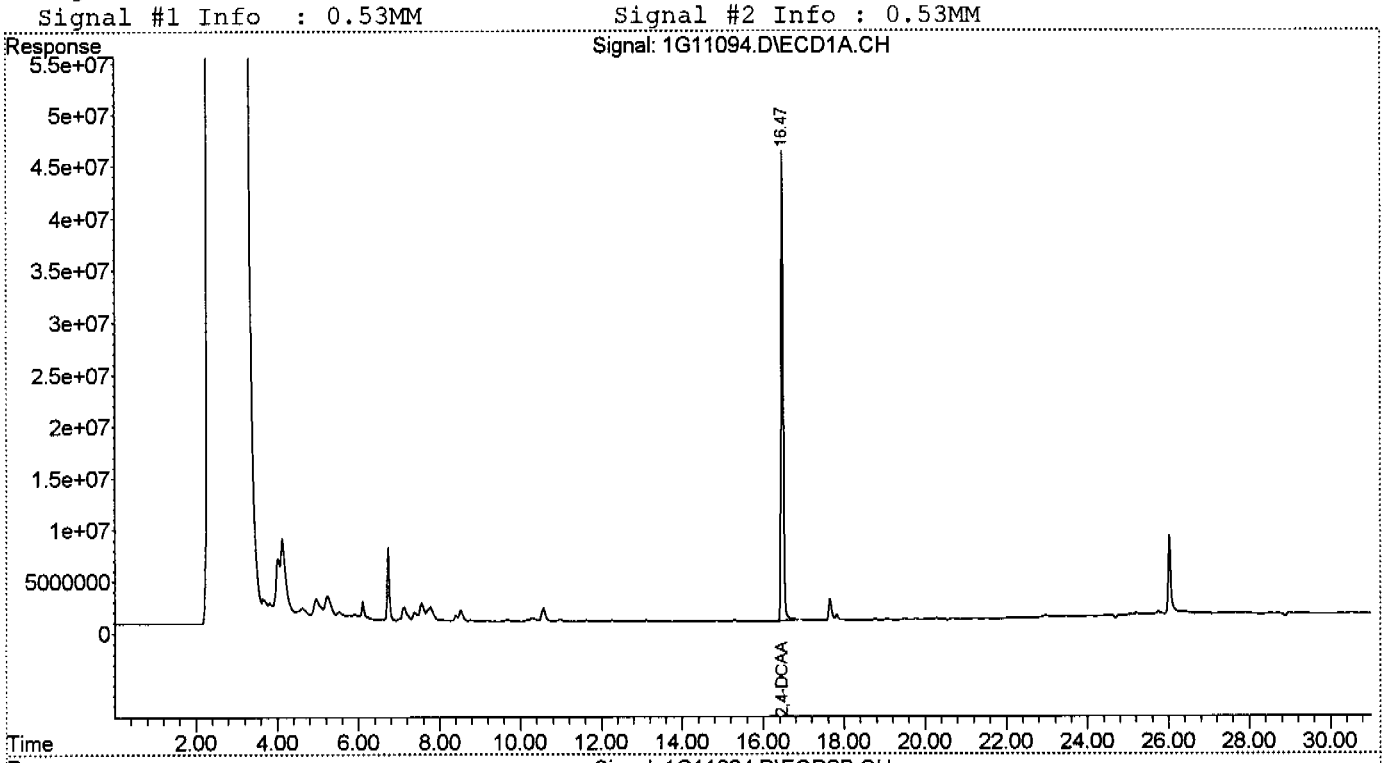
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

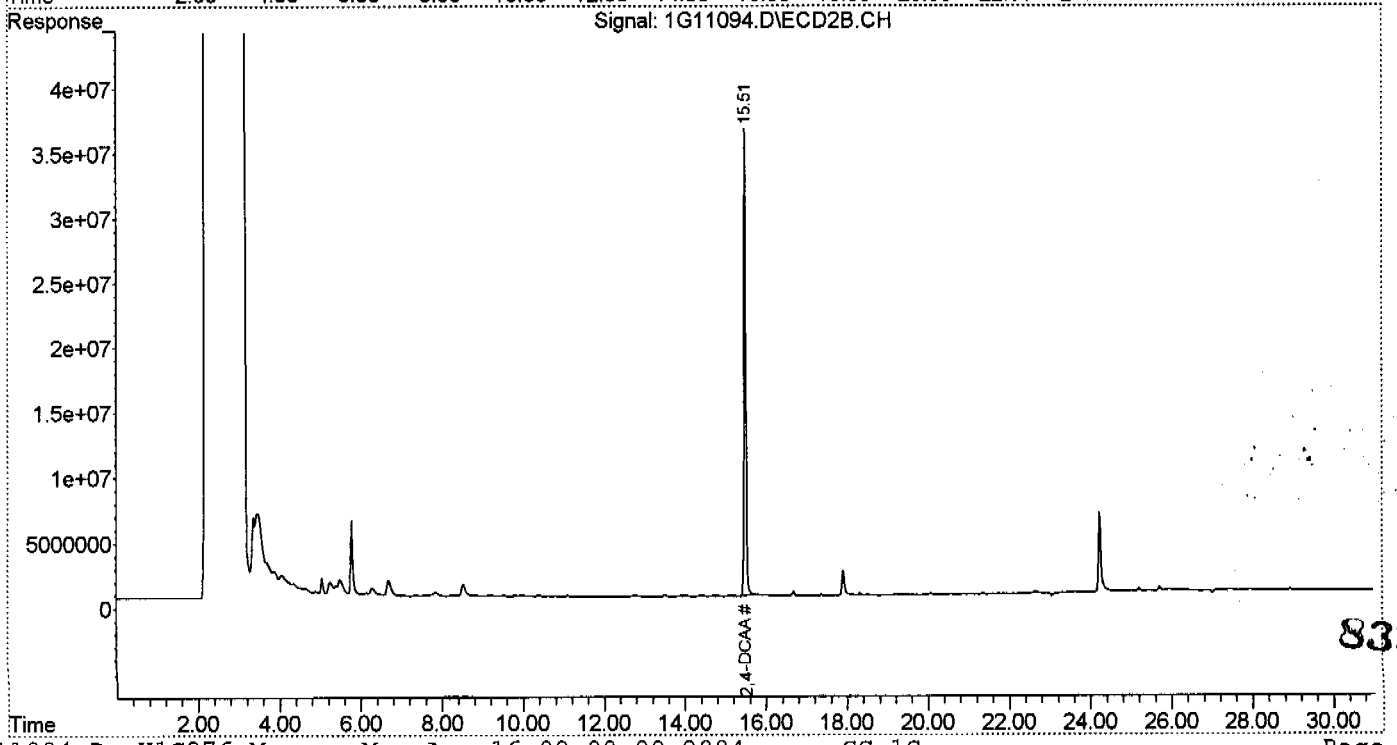
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11094.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11094.D\ECD2B.CH
Acq On : 8-12-04 01:49:06 PM Operator: kristis
Sample : N74646-4 Inst : GC1G
Misc : OP17690,G1G277,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 9:07 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





839

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-NCNG		
Lab Sample ID:	N74646-5	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11102.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	870 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.57	0.32	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.17	0.14	ug/l	
93-76-5	2,4,5-T	ND	0.23	0.23	ug/l	
87-86-5	Pentachlorophenol	ND	0.17	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	99%		54-141%
19719-28-9	2,4-DCAA	93%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11102.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G11102.D\ECD2B.CH
Acq On : 8-12-04 08:04:09 PM Operator: kristis
Sample : N74646-5 Inst : GC1G
Misc : OP17600,G1G277,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 20:35:18 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1599.2E6	1191.0E6	992.181	928.221
Spiked Amount 1000.000			Recovery	=	99.22%	92.82%
Target Compounds						

841

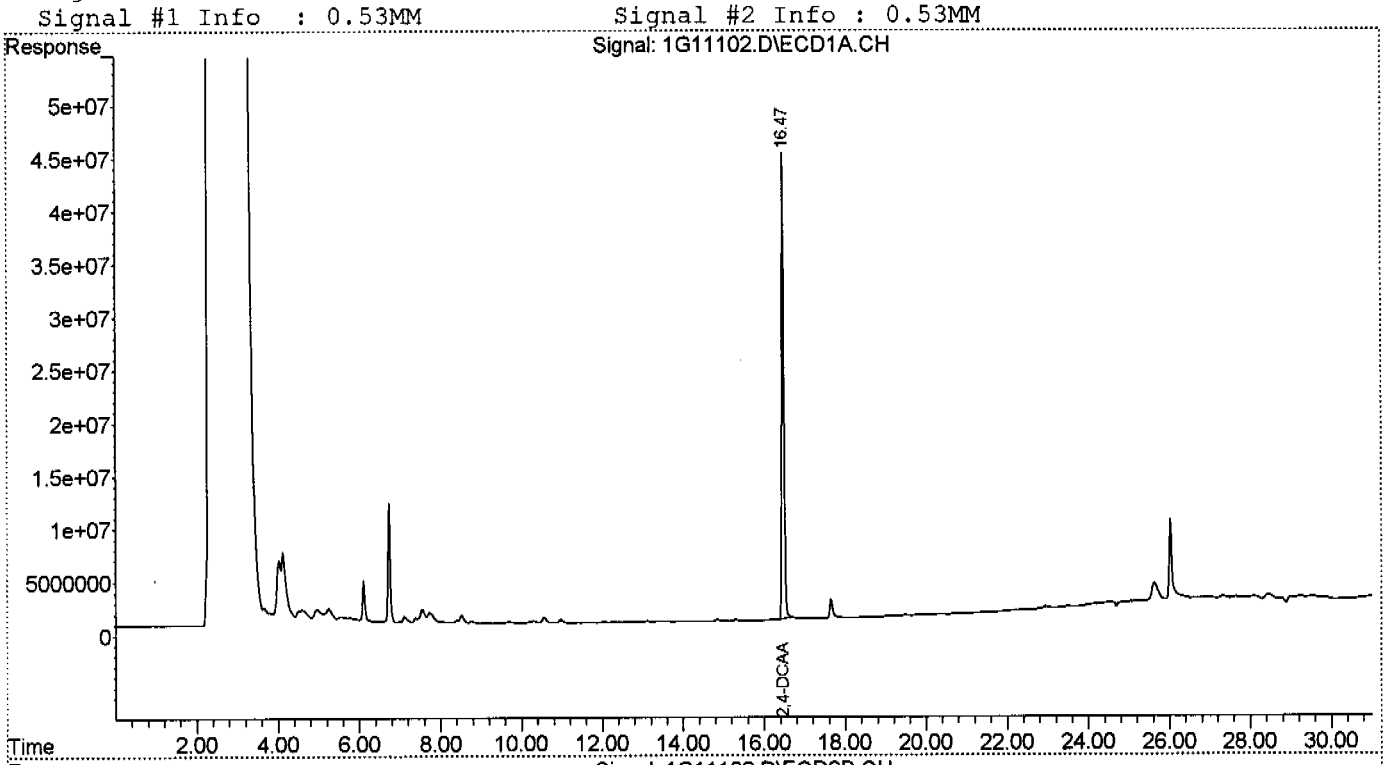
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

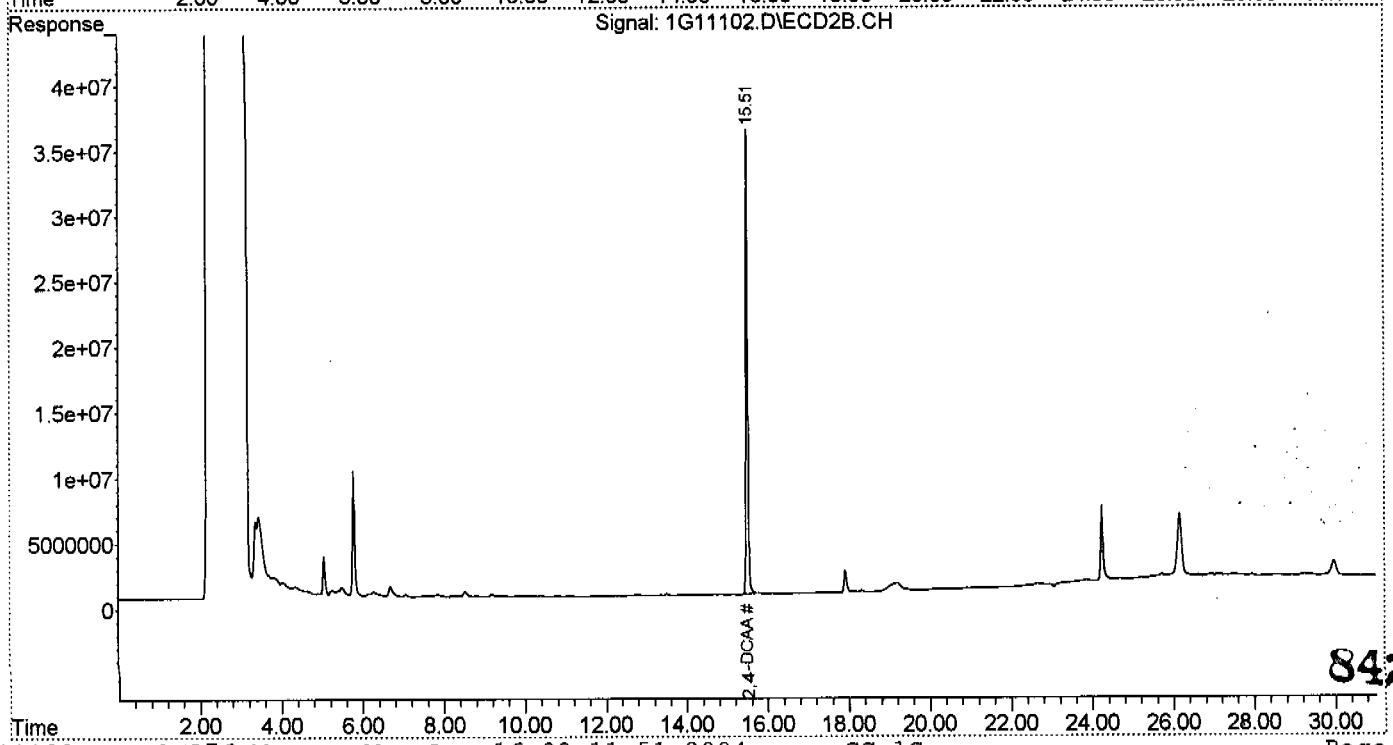
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11102.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G11102.D\ECD2B.CH
Acq On : 8-12-04 08:04:09 PM Operator: kristis
Sample : N74646-5 Inst : GC1G
Misc : OP17600,G1G277,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 20:35 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





842

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-FIELDDUP1		
Lab Sample ID:	N74646-6	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11103.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	870 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.57	0.32	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.17	0.14	ug/l	
93-76-5	2,4,5-T	ND	0.23	0.23	ug/l	
87-86-5	Pentachlorophenol	ND	0.17	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	103%		54-141%
19719-28-9	2,4-DCAA	95%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11103.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G11103.D\ECD2B.CH
Acq On : 8-12-04 08:37:49 PM Operator: kristis
Sample : N74646-6 Inst : GC1G
Misc : OP17600,G1G277,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 21:08:58 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1653.8E6	1212.7E6	1026.059	945.130
Spiked Amount 1000.000			Recovery	=	102.61%	94.51%
Target Compounds						

844

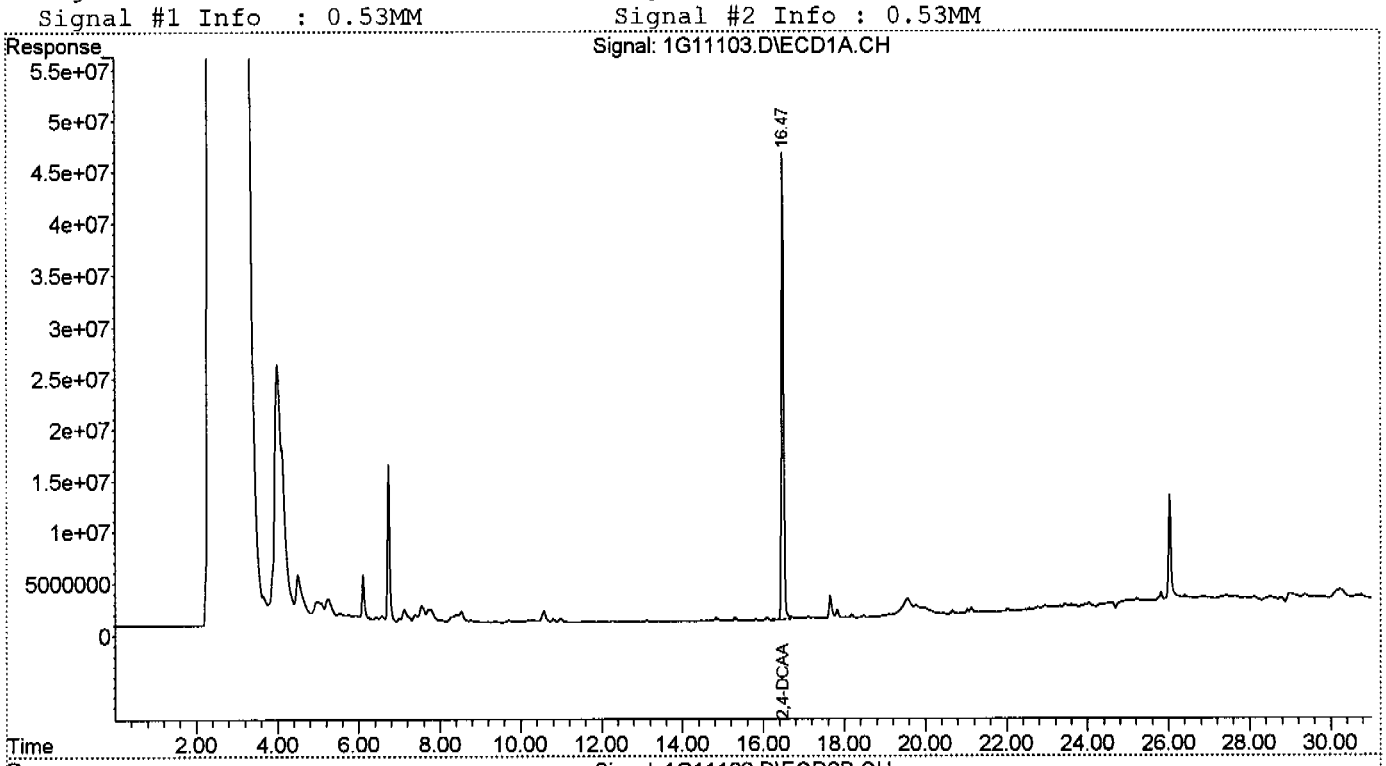
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

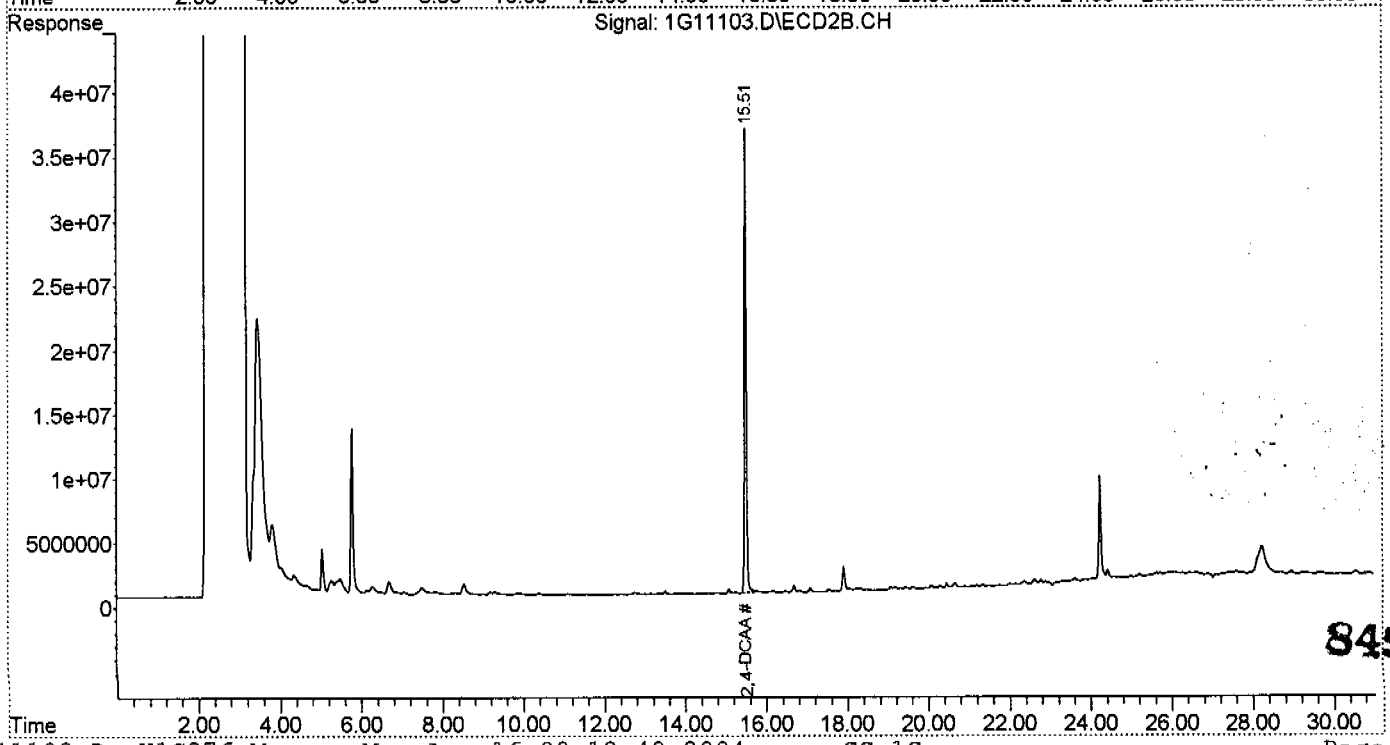
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11103.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G11103.D\ECD2B.CH
Acq On : 8-12-04 08:37:49 PM Operator: kristis
Sample : N74646-6 Inst : GC1G
Misc : OP17600,G1G277,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 9:12 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





845

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-CAMPBARHAM		
Lab Sample ID:	N74646-8	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11104.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	870 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.57	0.32	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.17	0.14	ug/l	
93-76-5	2,4,5-T	ND	0.23	0.23	ug/l	
87-86-5	Pentachlorophenol	ND	0.17	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	101%		54-141%
19719-28-9	2,4-DCAA	93%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

846

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11104.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11104.D\ECD2B.CH
Acq On : 8-12-04 09:11:37 PM Operator: kristis
Sample : N74646-8 Inst : GC1G
Misc : OP17600,G1G277,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 21:42:47 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1622.6E6	1189.9E6	1006.692	927.361
Spiked Amount 1000.000			Recovery	=	100.67%	92.74%
Target Compounds						

Kaxbl

847

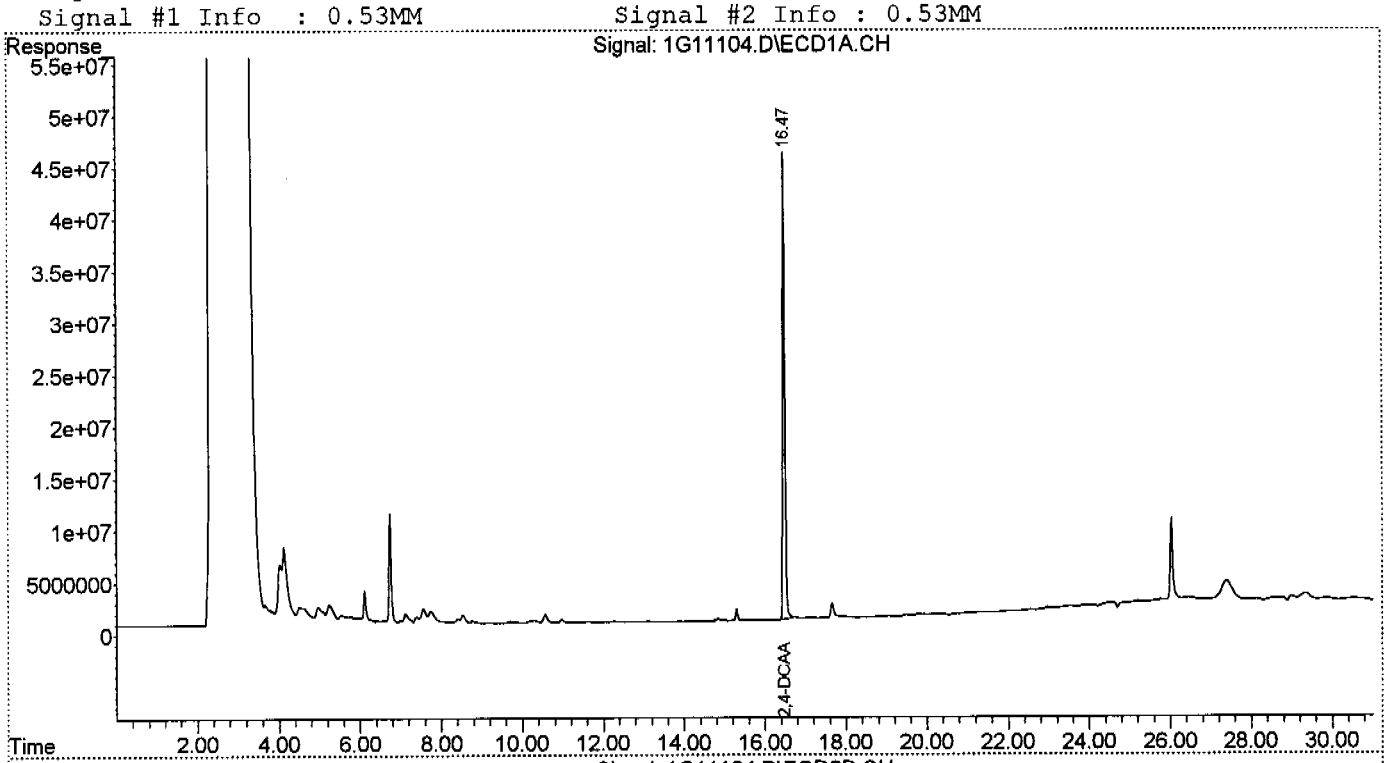
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

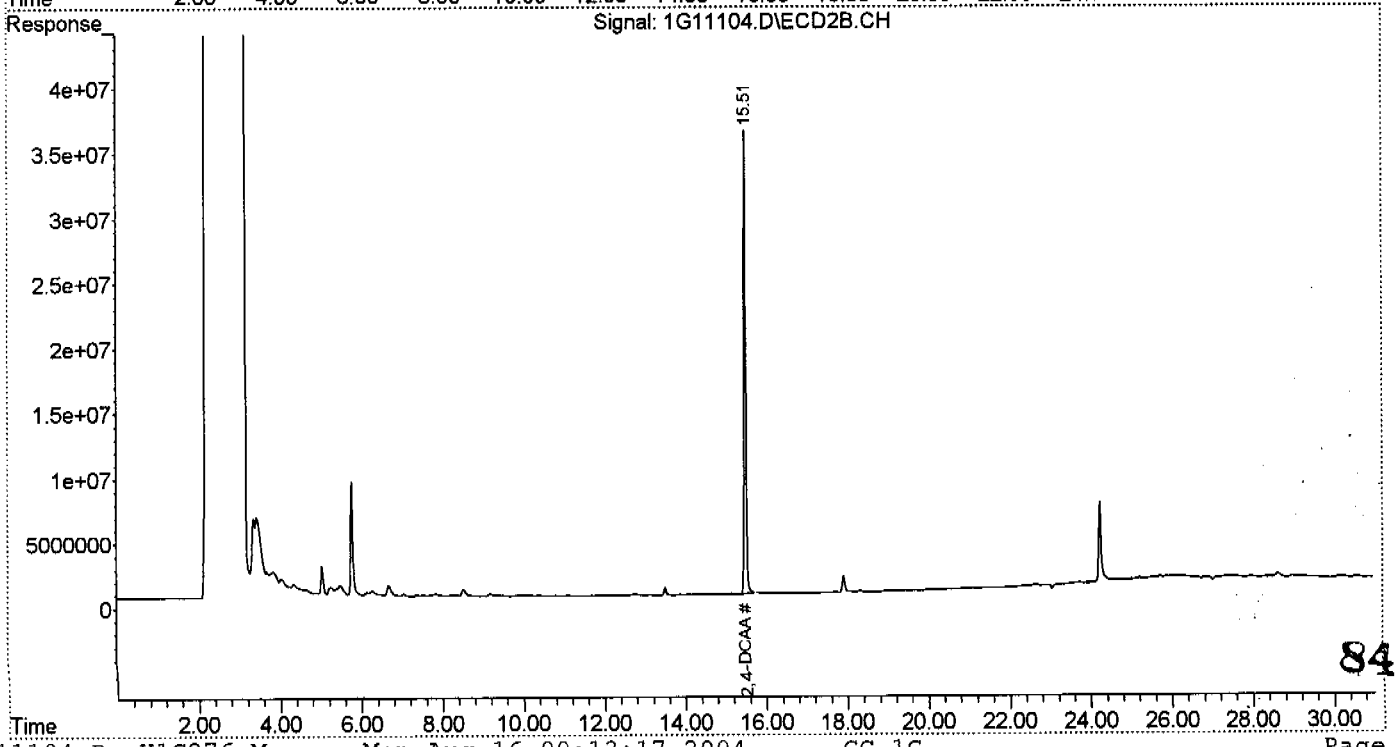
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11104.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11104.D\ECD2B.CH
Acq On : 8-12-04 09:11:37 PM Operator: kristis
Sample : N74646-8 Inst : GC1G
Misc : OP17600,G1G277,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 21:42 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





848

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4051-RANGERD		
Lab Sample ID:	N74646-9	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11105.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.53	0.30	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.16	0.13	ug/l	
93-76-5	2,4,5-T	ND	0.21	0.21	ug/l	
87-86-5	Pentachlorophenol	ND	0.16	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	100%		54-141%
19719-28-9	2,4-DCAA	92%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11105.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G11105.D\ECD2B.CH
Acq On : 8-12-04 09:45:18 PM Operator: kristis
Sample : N74646-9 Inst : GC1G
Misc : OP17600,G1G277,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 22:16:23 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1609.2E6	1177.0E6	998.401	917.327
Spiked Amount 1000.000			Recovery	=	99.84%	91.73%

Target Compounds

850

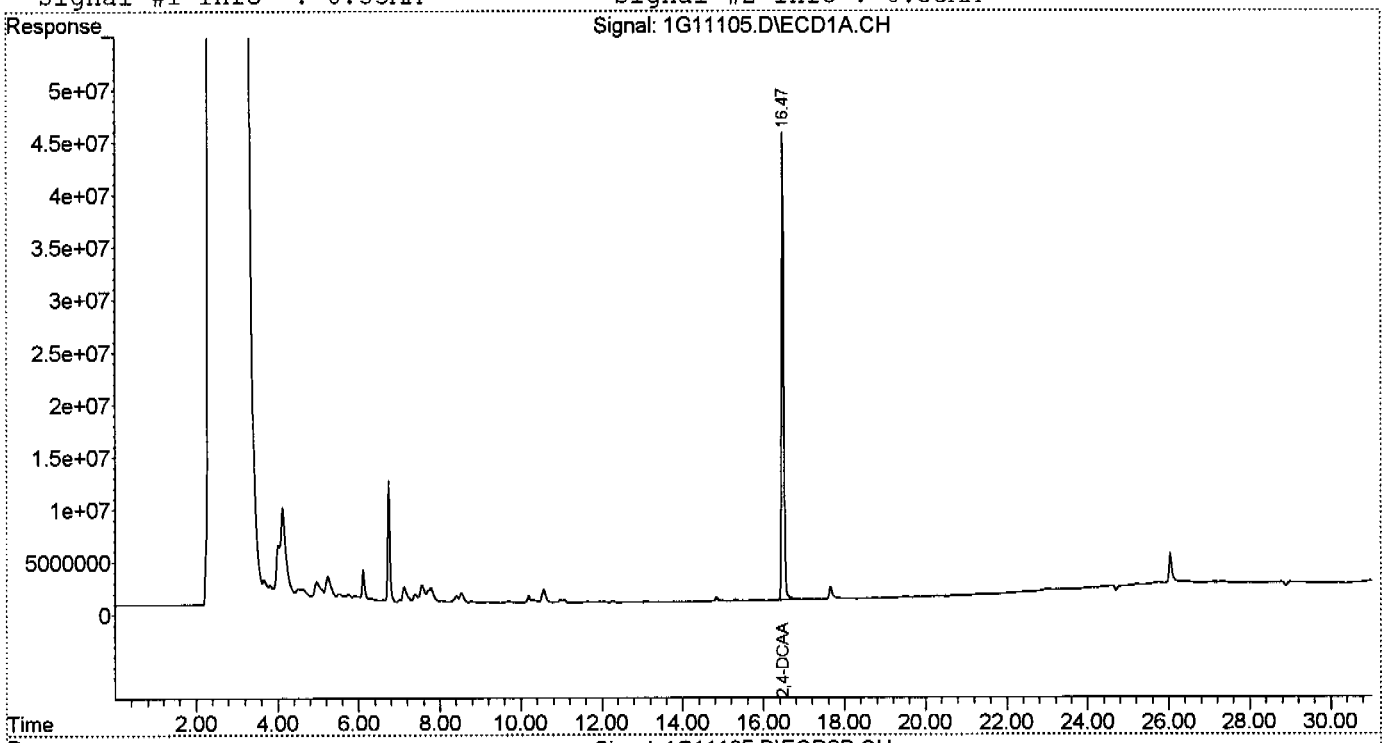
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

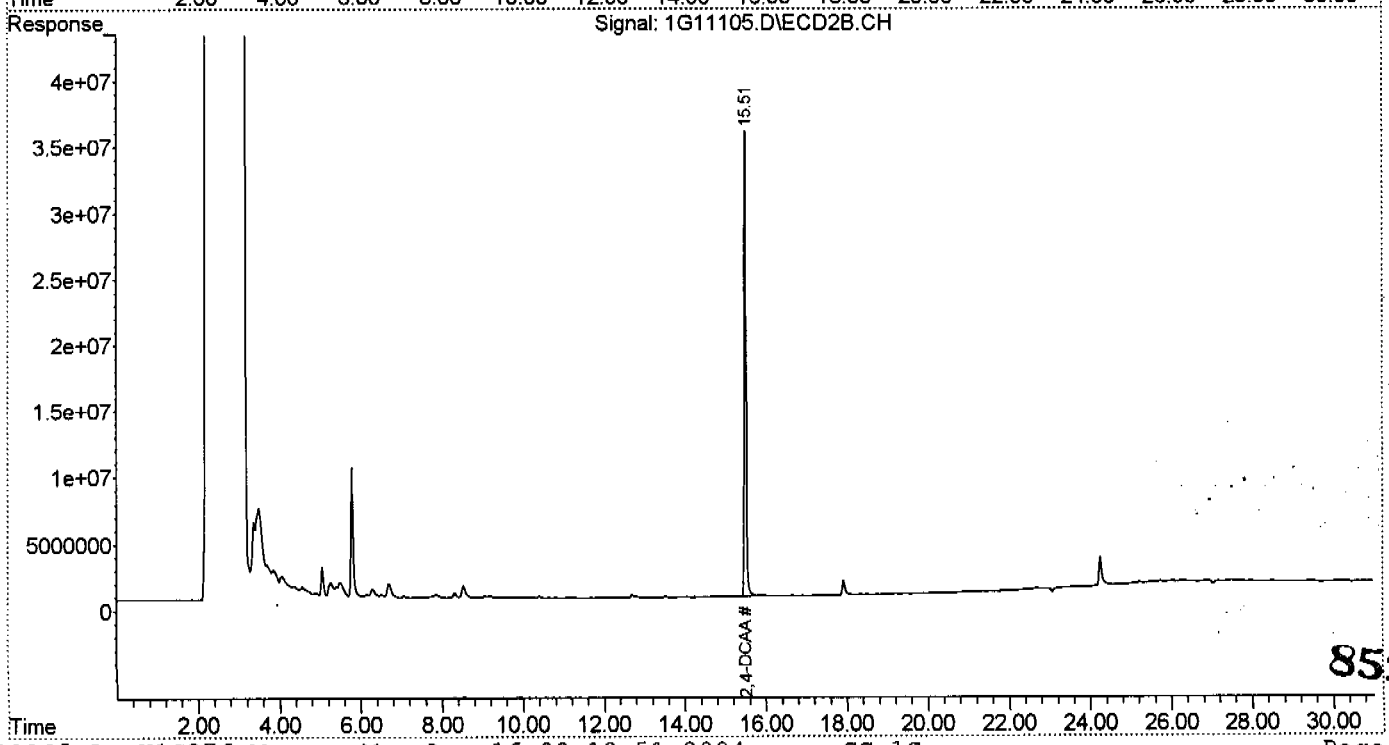
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11105.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G11105.D\ECD2B.CH
Acq On : 8-12-04 09:45:18 PM Operator: kristis
Sample : N74646-9 Inst : GC1G
Misc : OP17600,G1G277,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 9:13 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





851

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-CAMPEASON		
Lab Sample ID:	N74646-10	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11106.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	870 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.57	0.32	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.17	0.14	ug/l	
93-76-5	2,4,5-T	ND	0.23	0.23	ug/l	
87-86-5	Pentachlorophenol	ND	0.17	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	99%		54-141%
19719-28-9	2,4-DCAA	91%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11106.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G11106.D\ECD2B.CH
Acq On : 12 Aug 2004 10:19 pm Operator: kristis
Sample : N74646-10 Inst : GC1G
Misc : OP17600,G1G277,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 22:50:10 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1596.5E6	1170.4E6	990.476	912.175
Spiked Amount 1000.000			Recovery	=	99.05%	91.22%
Target Compounds						

853

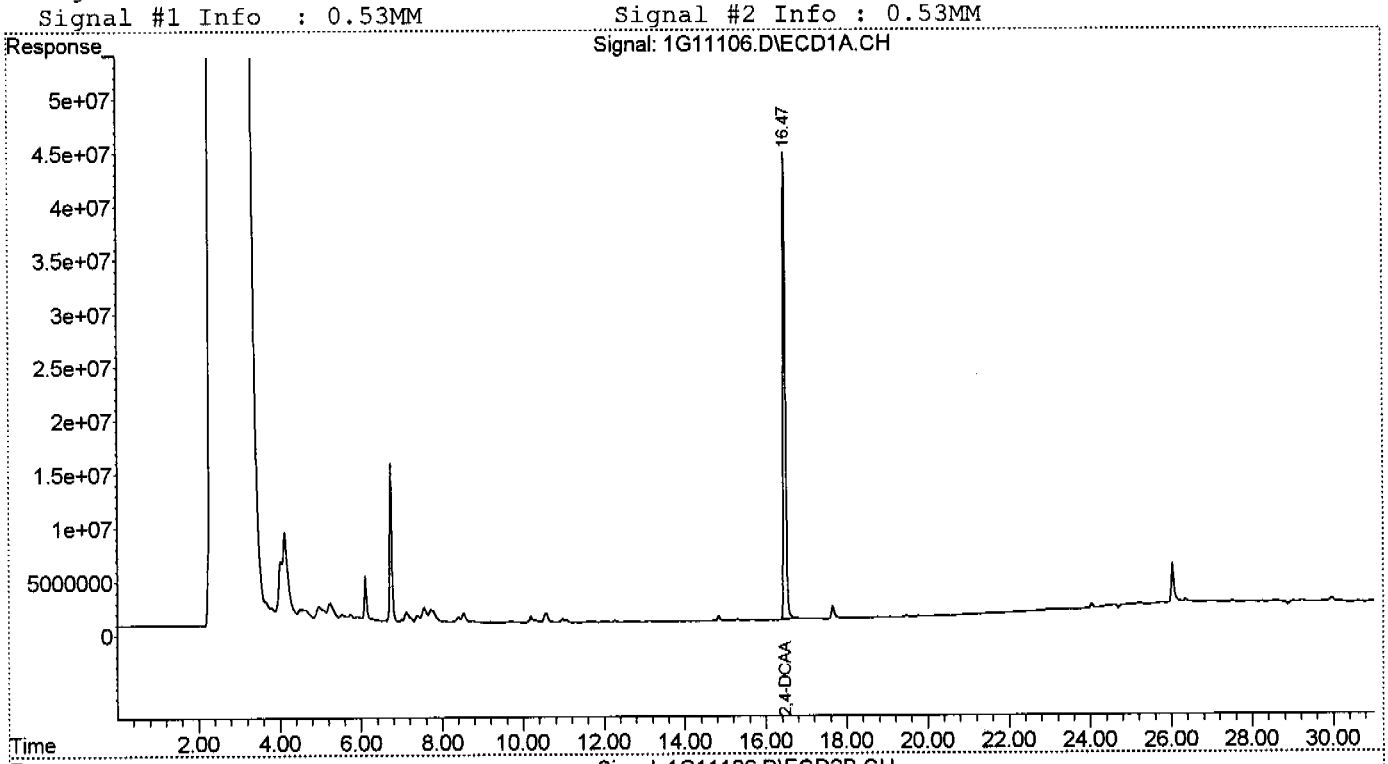
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

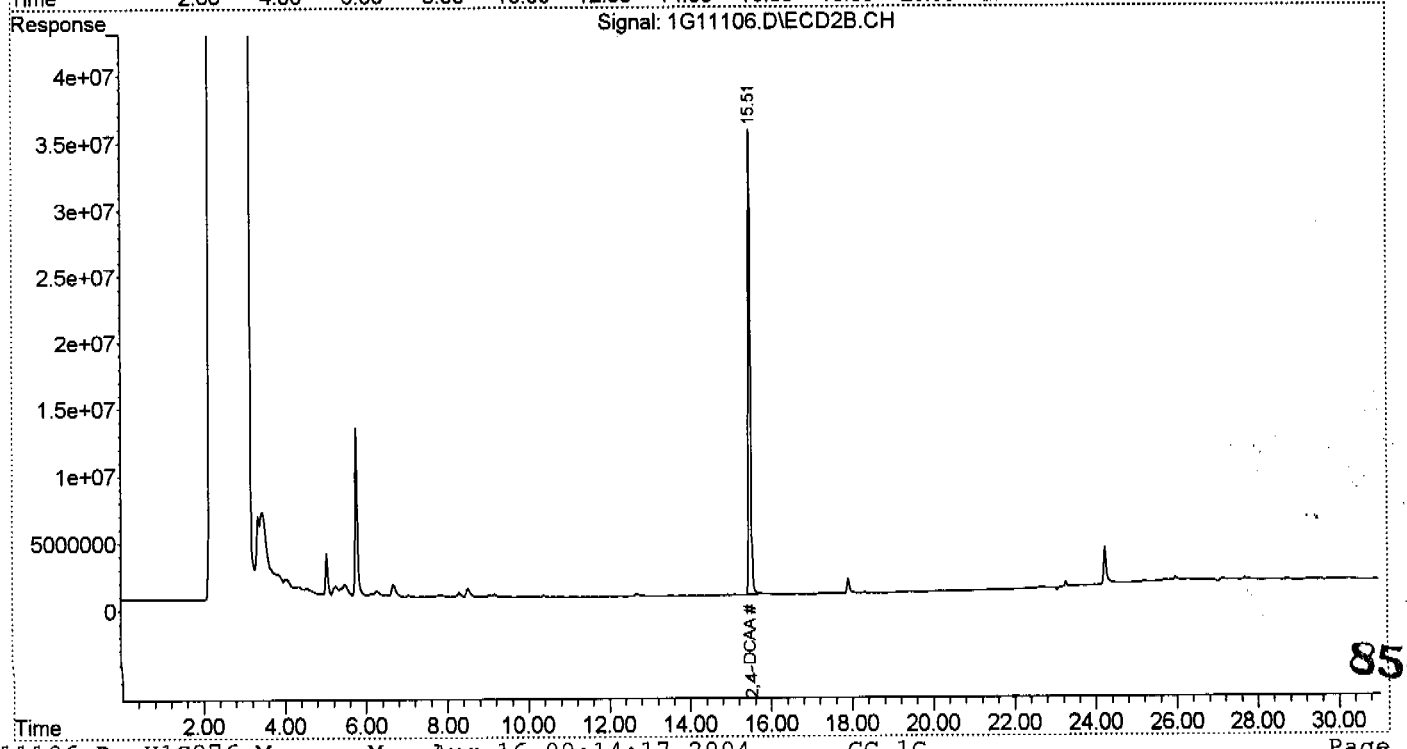
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11106.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G11106.D\ECD2B.CH
Acq On : 12 Aug 2004 10:19 pm Operator: kristis
Sample : N74646-10 Inst : GC1G
Misc : OP17600,G1G277,870,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 22:50 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





854

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-750-LITTLEMOUNTAIN		
Lab Sample ID:	N74646-11	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11107.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.63	0.35	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.19	0.16	ug/l	
93-76-5	2,4,5-T	ND	0.25	0.25	ug/l	
87-86-5	Pentachlorophenol	ND	0.19	0.15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	100%		54-141%
19719-28-9	2,4-DCAA	92%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11107.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11107.D\ECD2B.CH
Acq On : 12 Aug 2004 10:52 pm Operator: kristis
Sample : N74646-11 Inst : GC1G
Misc : OP17600,G1G277,800,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 23:23:51 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1616.6E6	1183.9E6	1002.986	922.748
Spiked Amount 1000.000			Recovery	=	100.30%	92.27%
Target Compounds						

856

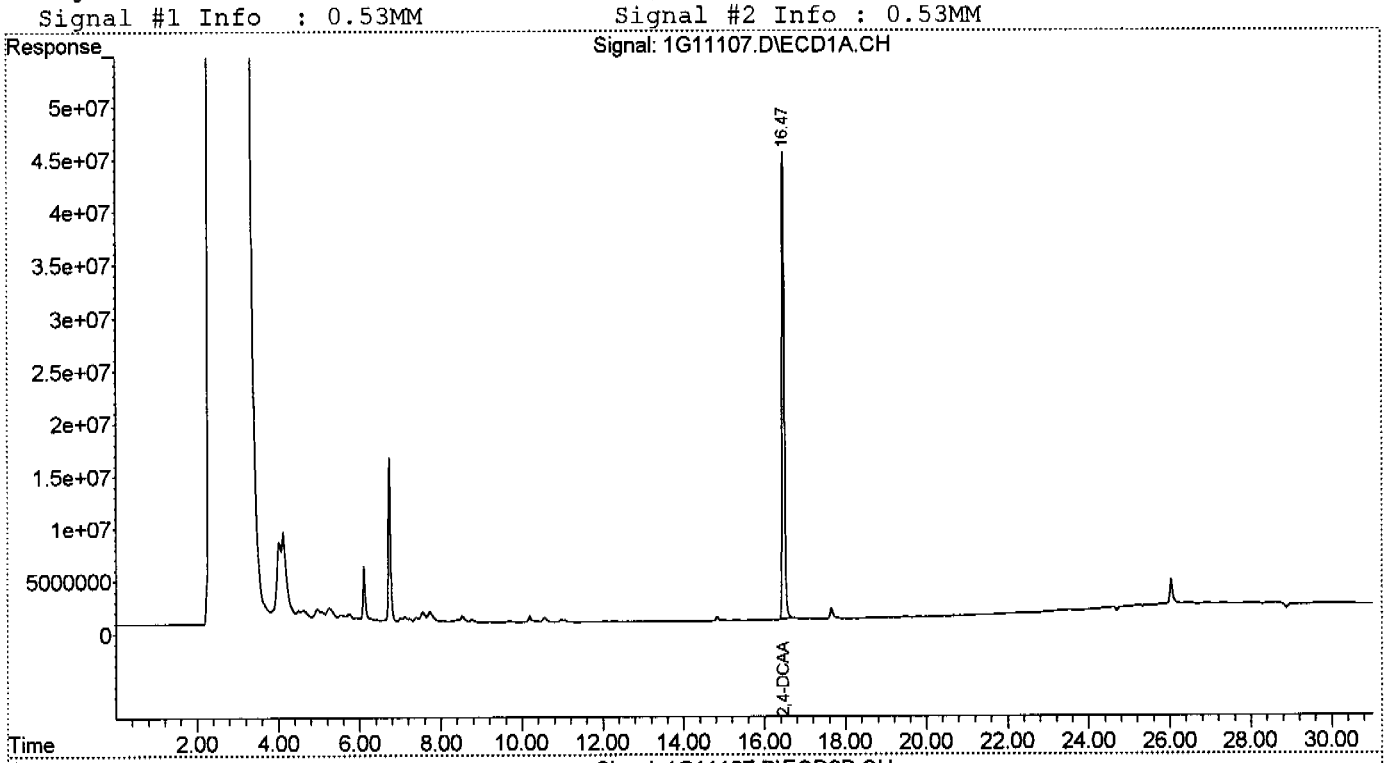
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

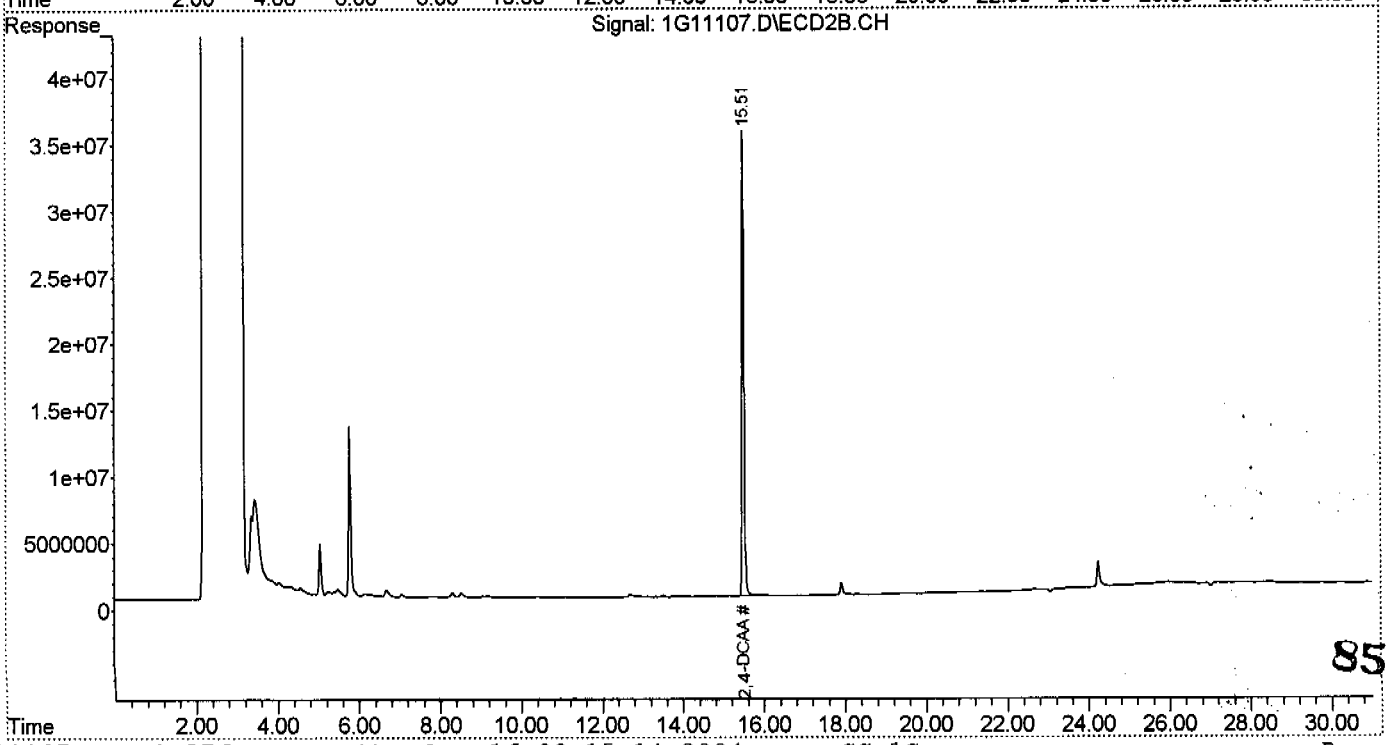
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11107.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11107.D\ECD2B.CH
Acq On : 12 Aug 2004 10:52 pm Operator: kristis
Sample : N74646-11 Inst : GC1G
Misc : OP17600,G1G277,800,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 23:23 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





857

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-191-FALCONLANE		
Lab Sample ID:	N74646-12	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11108.D	1	08/12/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	820 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.61	0.34	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.18	0.15	ug/l	
93-76-5	2,4,5-T	ND	0.24	0.24	ug/l	
87-86-5	Pentachlorophenol	ND	0.18	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	102%		54-141%
19719-28-9	2,4-DCAA	94%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11108.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G11108.D\ECD2B.CH
Acq On : 12 Aug 2004 11:26 pm Operator: kristis
Sample : N74646-12 Inst : GC1G
Misc : OP17600,G1G277,820,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 23:57:39 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1638.7E6	1206.3E6	1016.679	940.165
Spiked Amount 1000.000			Recovery	=	101.67%	94.02%
Target Compounds						

859

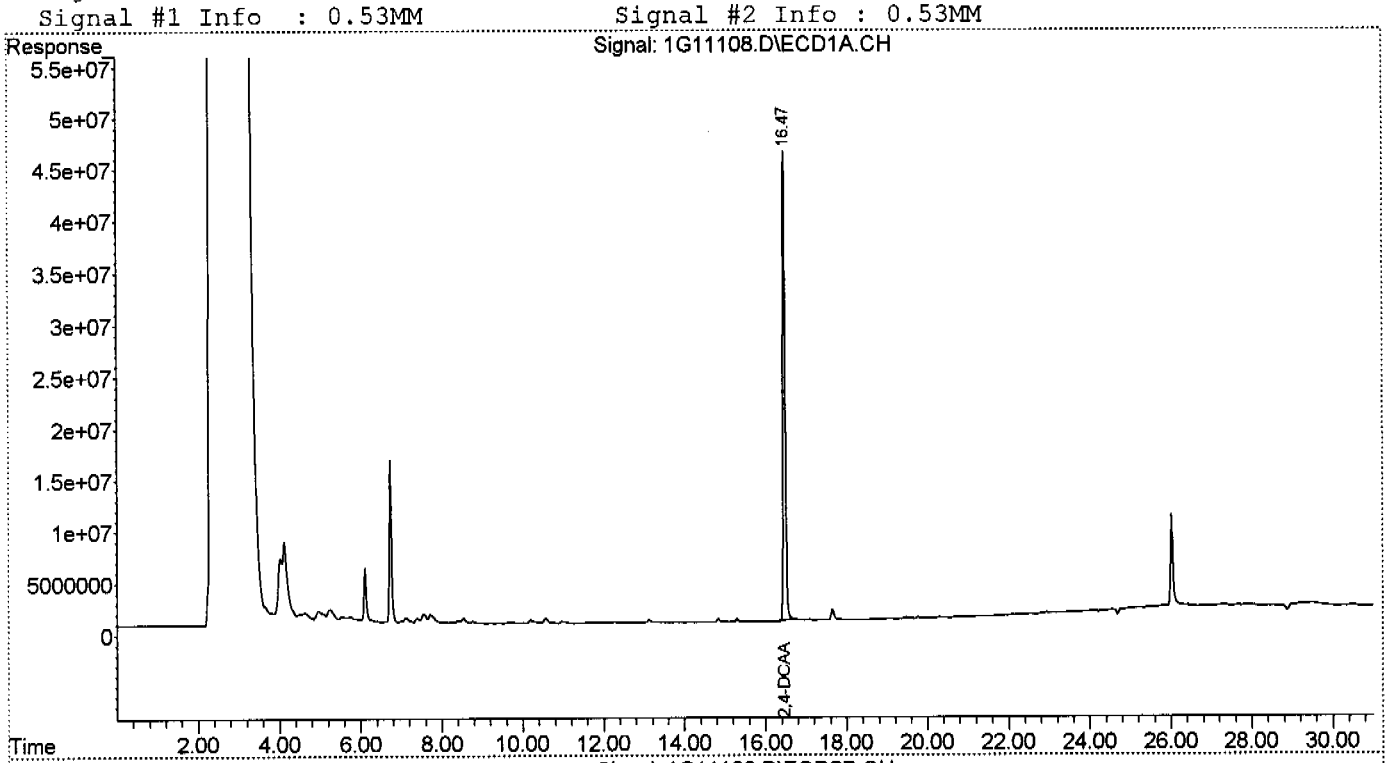
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

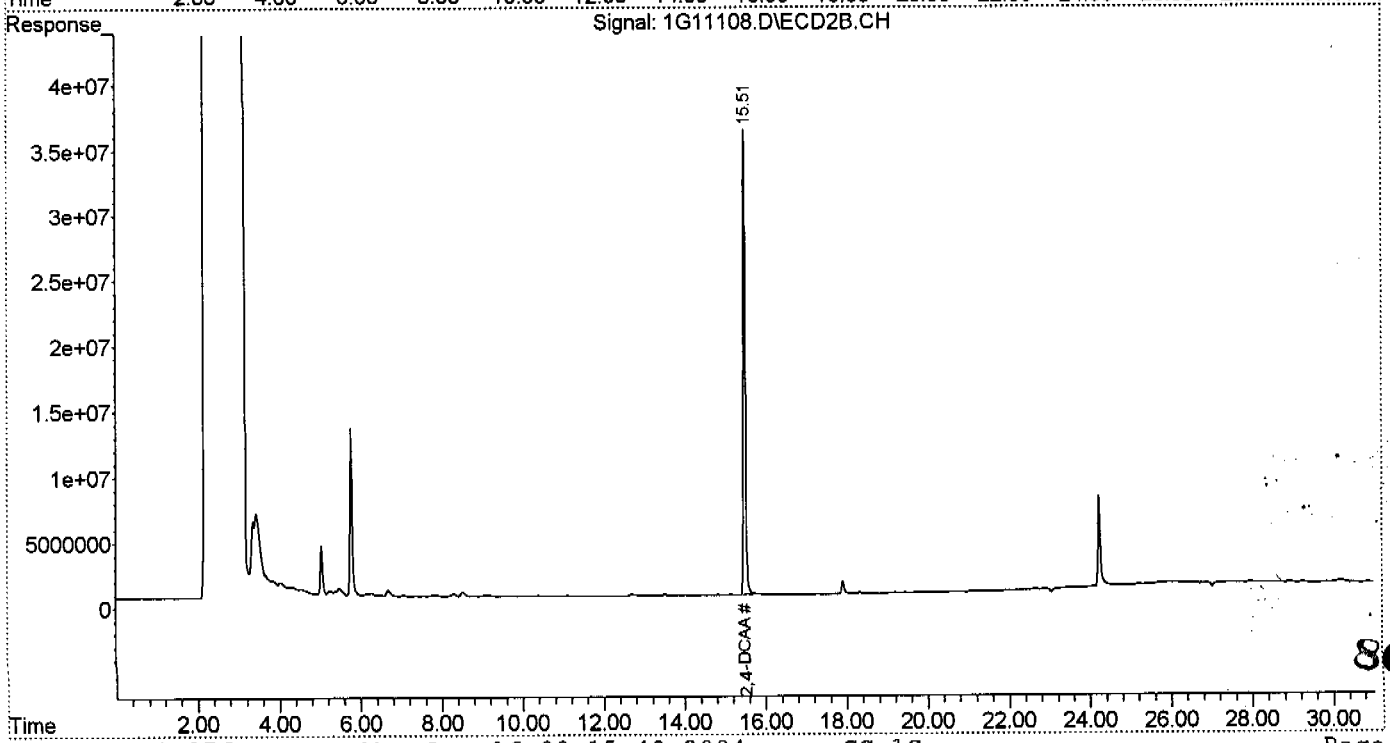
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11108.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G11108.D\ECD2B.CH
Acq On : 12 Aug 2004 11:26 pm Operator: kristis
Sample : N74646-12 Inst : GC1G
Misc : OP17600,G1G277,820,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 23:57 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





860

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4149-RANGERD		
Lab Sample ID:	N74646-13	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
Method:	SW846 8151 SW846 3510C	**Percent Solids:**	n/a
Project:	Former Camp Butner, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G11111.D	1	08/13/04	KLS	08/11/04	OP17690	G1G277
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.55	0.31	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.16	0.14	ug/l	
93-76-5	2,4,5-T	ND	0.22	0.22	ug/l	
87-86-5	Pentachlorophenol	ND	0.16	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	100%		54-141%
19719-28-9	2,4-DCAA	92%		54-141%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11111.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G11111.D\ECD2B.CH
Acq On : 8-13-04 02:15:15 AM Operator: kristis
Sample : N74646-13 Inst : GC1G
Misc : OP17600,G1G277,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 02:46:20 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
2) S 2,4-DCAA	16.47	15.51	1608.1E6	1180.4E6	997.708	920.021
Spiked Amount 1000.000			Recovery	=	99.77%	92.00%
Target Compounds						

862

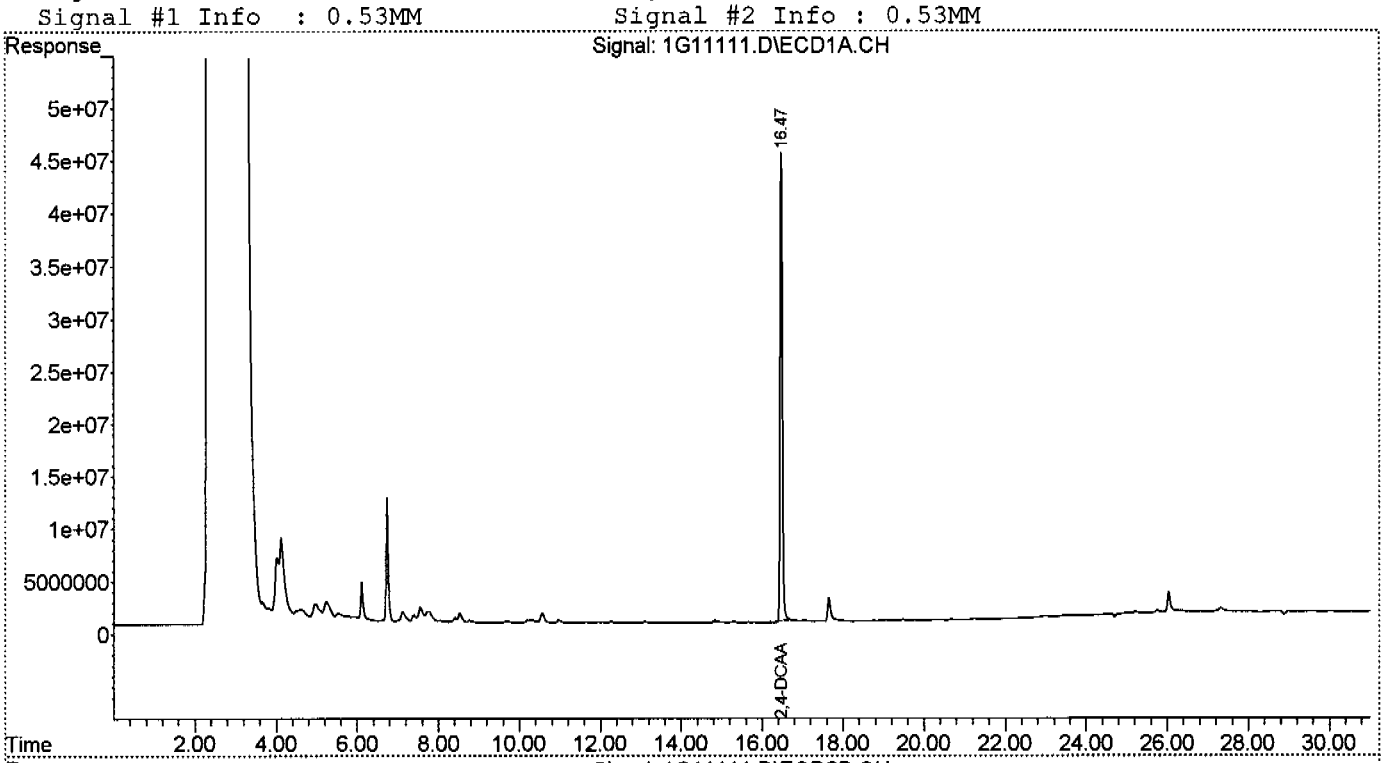
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

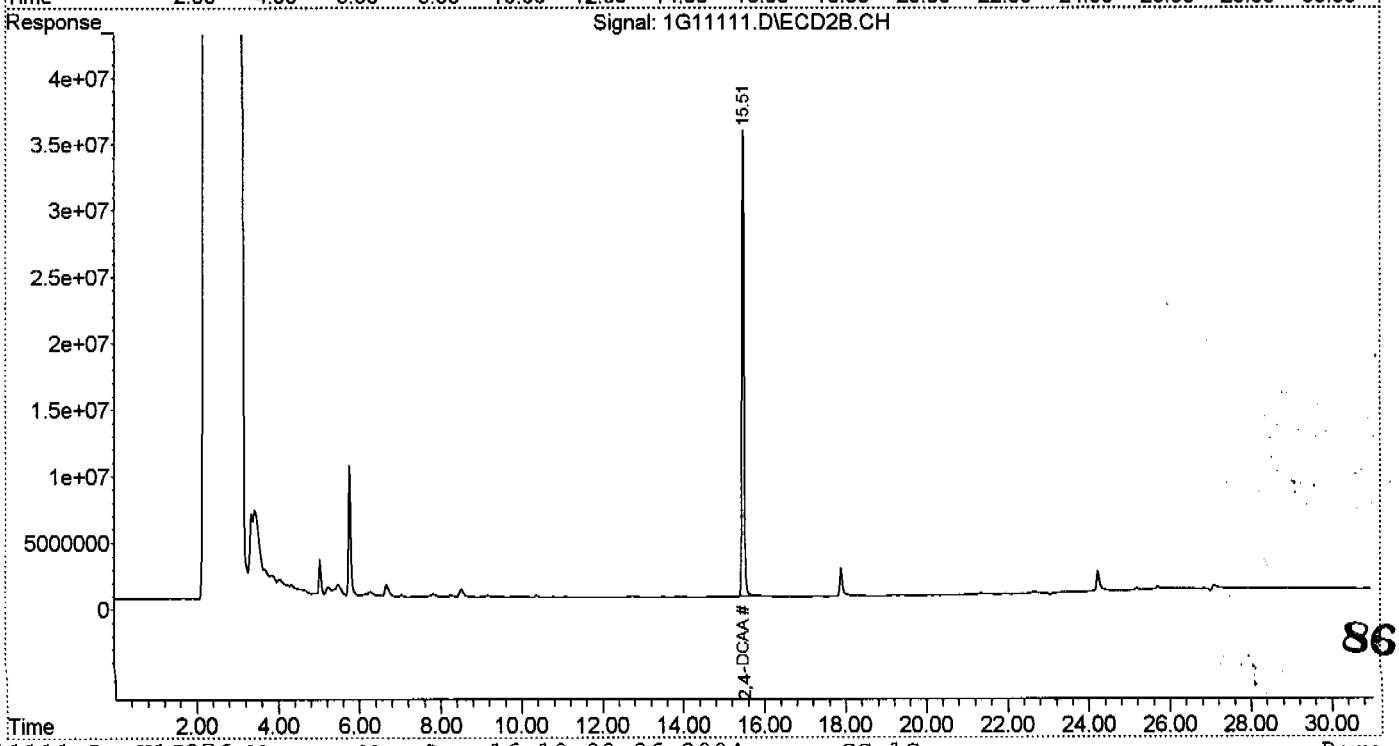
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11111.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G11111.D\ECD2B.CH
Acq On : 8-13-04 02:15:15 AM Operator: kristis
Sample : N74646-13 Inst : GC1G
Misc : OP17600,G1G277,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 9:18 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





863

Initial Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: G1G276-ICC276
Lab FileID: 1G11059.D

Response Factor Report GC1G

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration

Calibration Files
500 =1G11056.D 400 =1G11057.D 300 =1G11058.D 200 =1G11059.D
100 =1G11060.D 50 =1G11061.D

		Compound	500	400	300	200	100	50	Avg		%RSD
1)		Dalapon	2.062	1.950	1.899	2.098	1.516	1.344	1.812	E6	17.06
2)	S	2,4-DCAA	1.518	1.578	1.594	1.556	1.675	1.751	1.612	E6	5.34
3)		Dicamba	6.172	6.355	6.420	5.835	6.444	6.522	6.291	E6	4.02
4)		MCPP	4.741	5.030	4.860	4.136	5.166	4.402	4.722	E3	8.24
5)		MCPA	7.462	7.821	7.936	7.344	8.488	8.653	7.951	E3	6.67
6)		Dichloroprop	1.604	1.648	1.723	1.511	1.772	1.807	1.678	E6	6.62
7)		2,4-D	2.017	2.091	2.107	1.805	2.097	2.066	2.030	E6	5.67
8)		Pentachlorophenol	2.302	2.409	2.382	2.175	2.176	2.080	2.254	E7	5.80
9)		2,4,5-TP	8.606	9.033	8.973	8.438	8.210	7.336	8.433	E6	7.38
10)		2,4,5-T	7.724	8.862	8.063	7.308	8.053	6.265	7.713	E6	11.33
11)		2,4-DB	1.394	3.756	1.757	0.922	1.294	1.404	1.755	E6	57.91
12)		Dinoseb	5.726	6.508	6.503	5.950	5.065	5.714	5.911	E6	9.26
13)		Picloram	0.994	1.032	1.037	0.998	0.887	0.767	0.952	E7	11.10

Signal #2

1)		Dalapon	1.610	1.630	1.726	1.273	2.121	1.395	1.626	E6	18.11
2)	S	2,4-DCAA	1.179	1.241	1.271	1.247	1.329	1.431	1.283	E6	6.79
3)		Dicamba	4.846	5.167	5.120	4.703	5.221	5.285	5.057	E6	4.55
4)		MCPP	3.707	3.789	3.929	3.350	3.668	3.335	3.629	E3	6.61
5)		MCPA	5.965	6.497	6.624	6.021	7.281	7.250	6.606	E3	8.65
6)		Dichloroprop	1.168	1.266	1.278	1.130	1.349	1.436	1.271	E6	8.89
7)		2,4-D	1.661	1.766	1.725	1.398	1.753	1.756	1.676	E6	8.45
8)		Pentachlorophenol	1.828	1.918	2.242	1.735	1.628	1.656	1.834	E7	12.38
9)		2,4,5-TP	6.188	7.144	6.923	6.408	5.965	6.000	6.438	E6	7.65
10)		2,4,5-T	6.146	7.813	6.366	5.948	5.473	5.118	6.144	E6	15.23
11)		2,4-DB	8.903	9.217	9.197	7.445	7.962	6.565	8.215	E5	13.14
12)		Dinoseb	3.665	4.425	4.137	3.944	3.204	3.638	3.836	E6	11.17
13)		Picloram	8.623	8.390	8.829	9.149	7.651	7.456	8.350	E6	8.00

(#) = Out of Range

H1G276.M Wed Aug 11 09:08:30 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11061.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11061.D\ECD2B.CH
Acq On : 8-10-04 09:07:25 PM Operator: kristis
Sample : IC276-50 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 21:38:32 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
2) S	2,4-DCAA	16.47	15.51	175.1E6	143.1E6	110.425	87.494
Spiked Amount	1000.000			Recovery	=	11.04%	8.75%
	Target Compounds						
1)	Dalapon	3.71	3.17f	13441359	13945691	7.951m	9.000m
3)	Dicamba	17.05	16.03	65222503	52847624	10.240	7.783
4)	MCPP	17.73	16.49	11004677	8337665	2305.525	1818.706m
5)	MCPA	18.21	17.21	21632316	18124016	2642.961	2176.568
6)	Dichloroprop	19.36	18.21	90332302	71779307	52.540	41.817m
7)	2,4-D	20.05	19.13f	103.3E6	87778144	48.874	38.035
8)	Pentachloropheno	20.65	20.10f	104.0E6	82776725	4.508	3.343 #
9)	2,4,5-TP	22.48	21.38f	73363236	60003308	8.258	6.684
10)	2,4,5-T	23.29	22.46	62649888	51176233	7.885	5.980
11)	2,4-DB	24.78	23.82	70206299	32823442	45.229	26.814 #
12)	Dinoseb	27.70f	24.55f	285.7E6	181.9E6	45.298	30.894 #
13)	Picloram	27.29	27.11	383.6E6	372.8E6	34.601	30.061

865

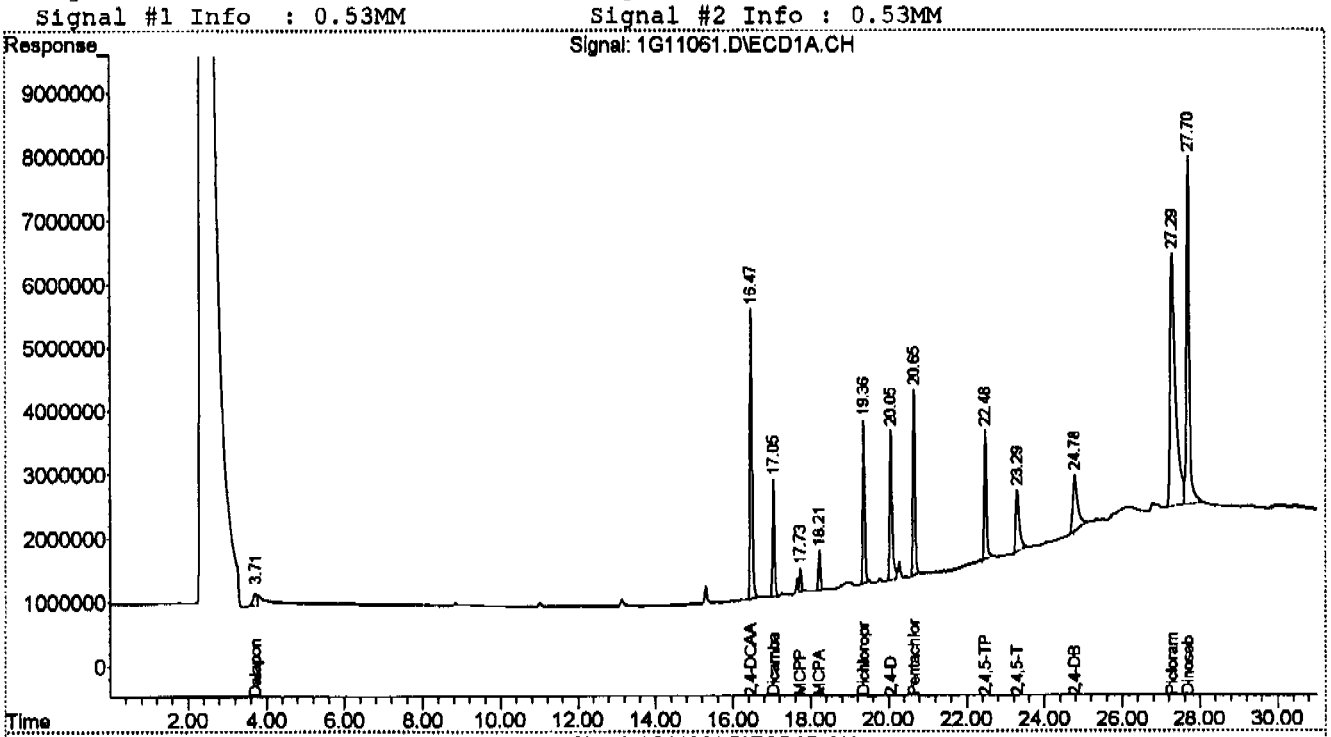
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

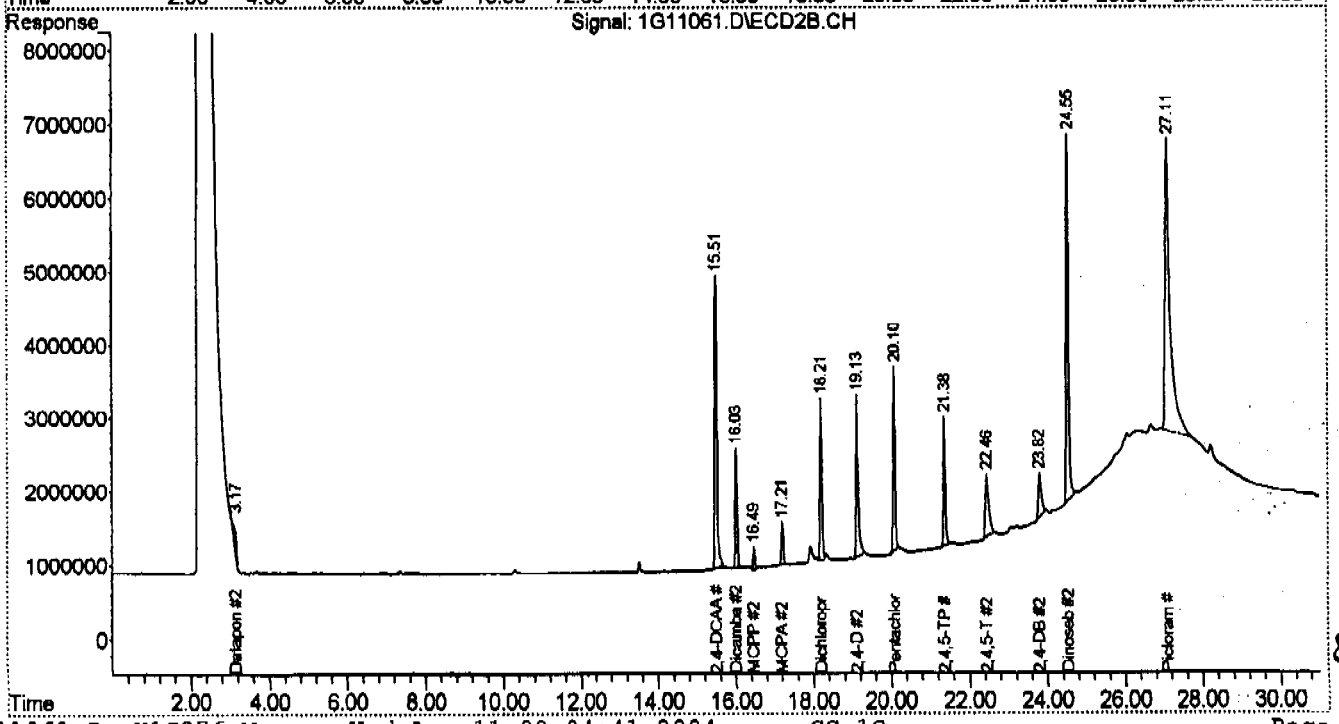
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11061.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11061.D\ECD2B.CH
Acq On : 8-10-04 09:07:25 PM Operator: kristis
Sample : IC276-50 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 11 9:04 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM



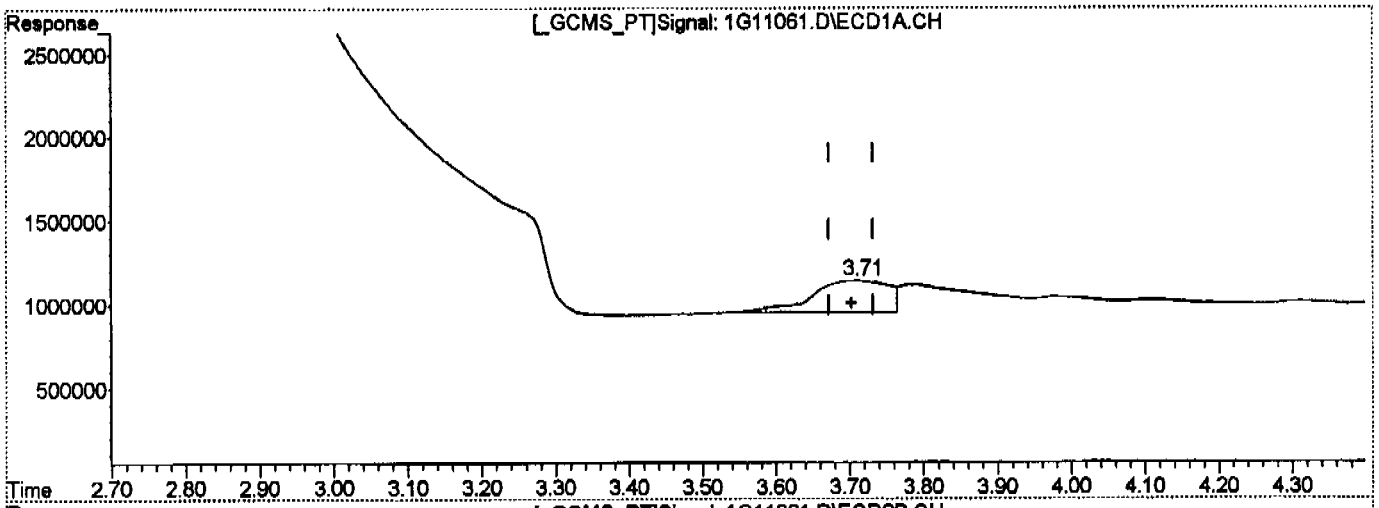


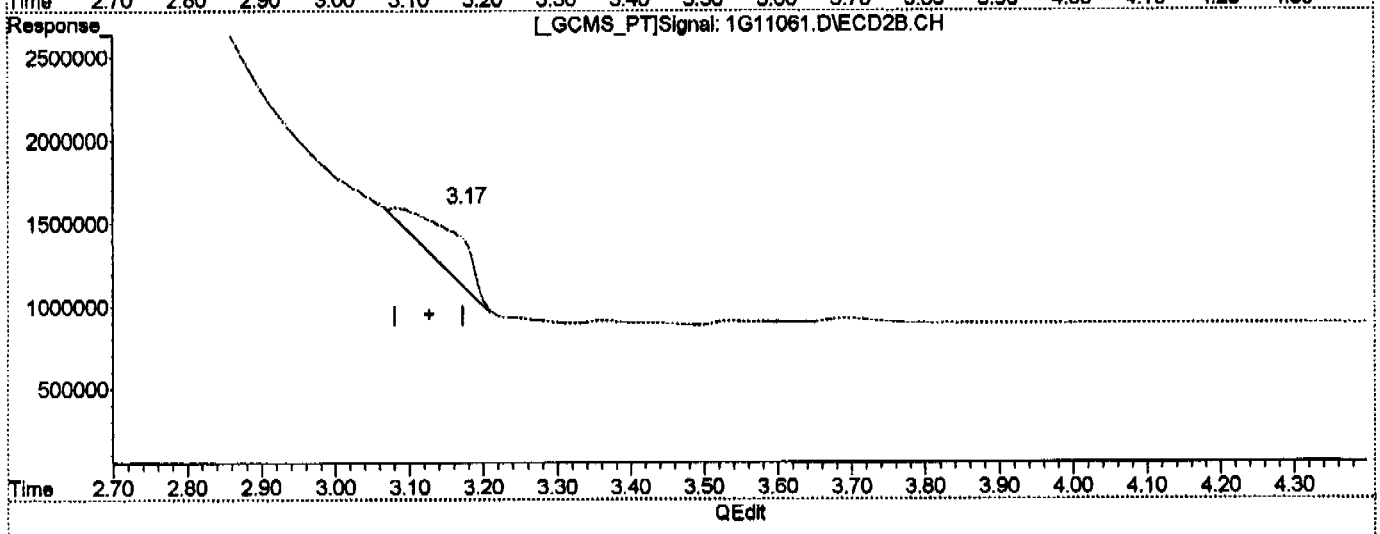
866

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11061.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11061.D\ECD2B.CH
Acq On : 8-10-04 09:07:25 PM Operator: kristis
Sample : IC276-50 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 11 9:04 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:04:34 2004
Response via : Multiple Level Calibration





(1) Dalapon

3.71min 7.951 m

response 13441359

(1) Dalapon #2

3.17min 9.000 m

response 13945691

867

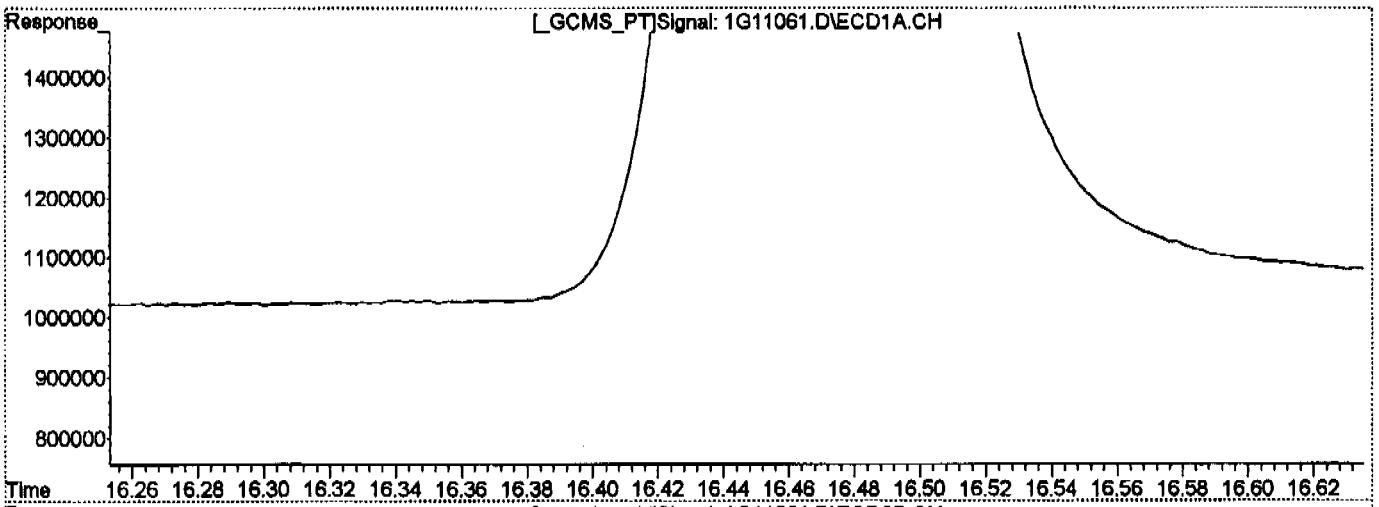
(+) = Expected Retention Time

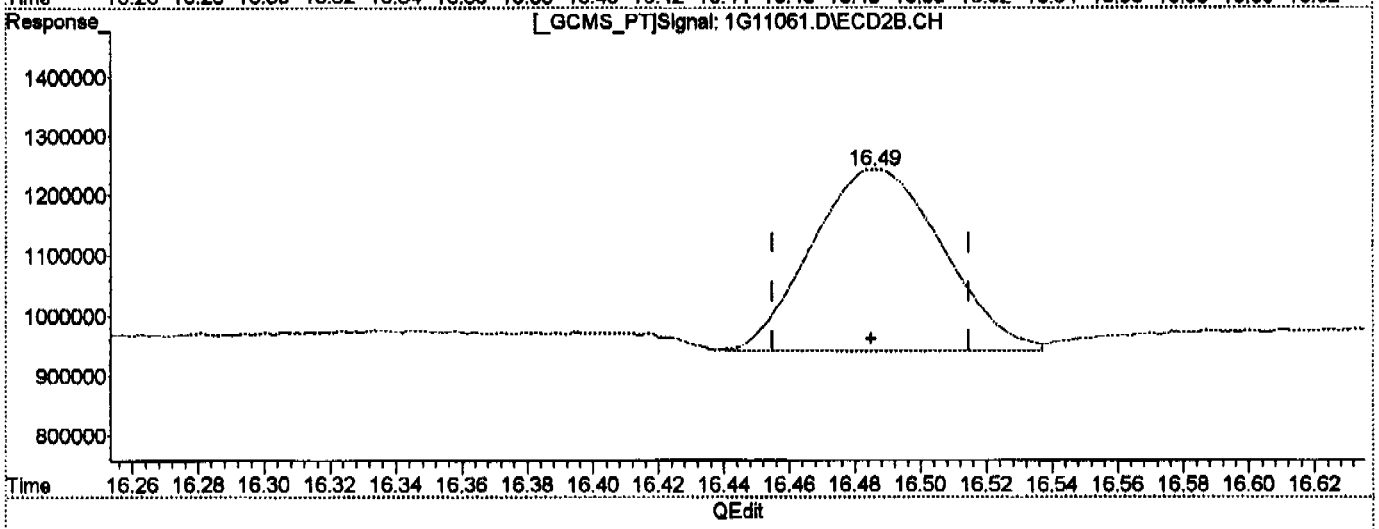
1G11061.D H1G276.M Wed Aug 11 09:04:58 2004 GC_1G

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11061.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11061.D\ECD2B.CH
Acq On : 8-10-04 09:07:25 PM Operator: kristis
Sample : IC276-50 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 21:38 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration





(4) MCPP

17.73min 2305.525

response 11004677

(4) MCPP #2

16.49min 1818.706 m

response 8337665

868

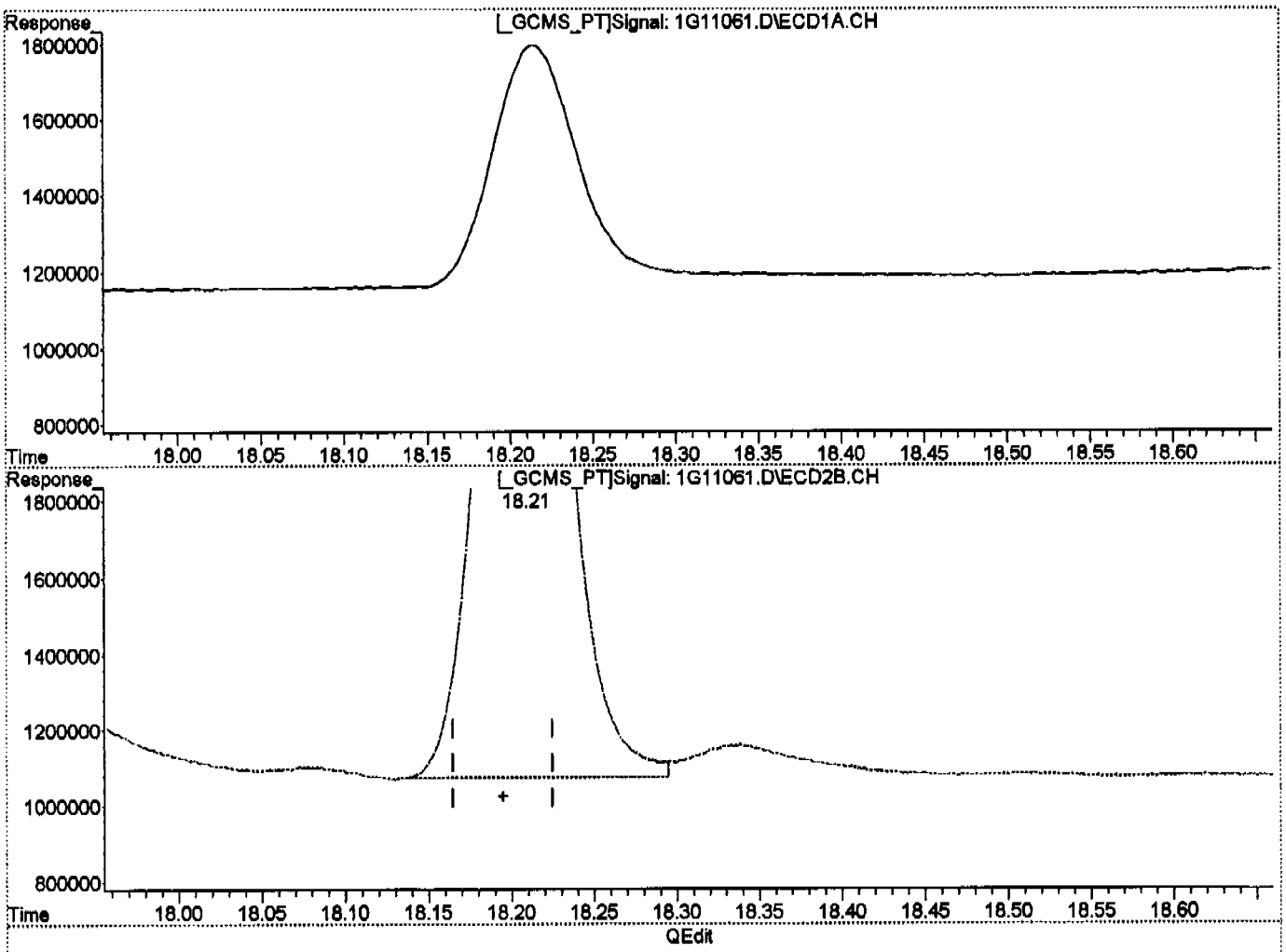
(+) = Expected Retention Time

1G11061.D H1G276.M Wed Aug 11 08:57:45 2004 GC_1G

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11061.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11061.D\ECD2B.CH
Acq On : 8-10-04 09:07:25 PM Operator: kristis
Sample : IC276-50 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 21:38 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration



(6) Dichloroprop

19.36min 52.540PPB

response 90332302

(6) Dichloroprop #2

18.21min 41.817PPB m

response 71779307

869

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11060.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G11060.D\ECD2B.CH
Acq On : 8-10-04 08:33:39 PM Operator: kristis
Sample : IC276-100 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 21:04:45 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	
	System Monitoring Compounds							
2) S	2,4-DCAA	16.47	15.51	335.0E6	265.9E6	211.198	162.614	
Spiked Amount	1000.000			Recovery	=	21.12%	16.26%	
	Target Compounds							
1)	Dalapon	3.71	3.10f	30320236	42412851	17.935	27.371m	#
3)	Dicamba	17.05	16.03	128.9E6	104.4E6	20.235	15.377	
4)	MCPP	17.73	16.49	25831682	18337864	5411.843	4000.063	#
5)	MCPA	18.21	17.21	42440002	36404832	5185.172	4371.967	
6)	Dichloroprop	19.36	18.21	177.2E6	134.9E6	103.053	78.570	
7)	2,4-D	20.05	19.13	209.7E6	175.3E6	99.225	75.940	
8)	Pentachloropheno	20.65	20.10f	217.6E6	162.8E6	9.436	6.574	#
9)	2,4,5-TP	22.48	21.38f	164.2E6	119.3E6	18.482	13.289	#
10)	2,4,5-T	23.27	22.45	161.1E6	109.5E6	20.271	12.789	#
11)	2,4-DB	24.76	23.80	129.4E6	79621416	83.350	65.043	
12)	Dinoseb	27.70	24.55f	506.5E6	320.4E6	80.295m	54.418	#
13)	Picloram	27.26	27.09	886.7E6	765.1E6	79.981m	61.698	

870

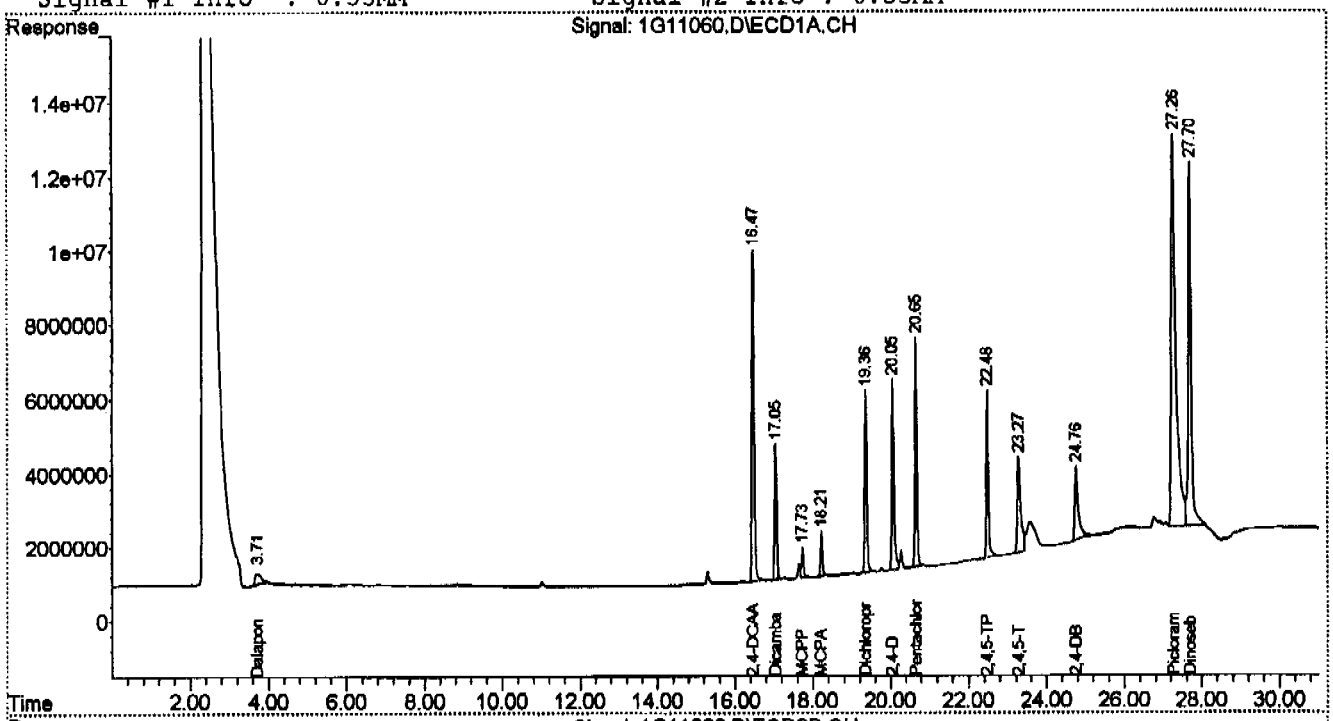
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

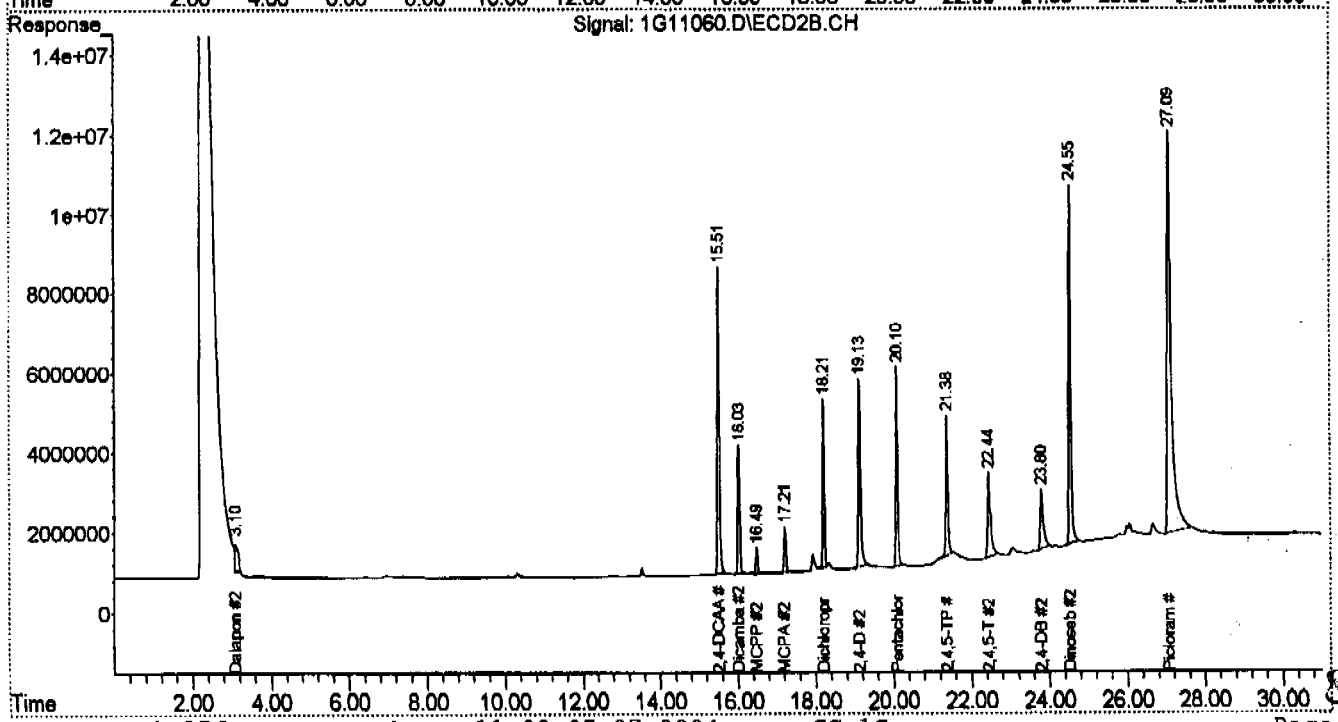
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11060.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G11060.D\ECD2B.CH
Acq On : 8-10-04 08:33:39 PM Operator: kristis
Sample : IC276-100 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 11 9:07 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

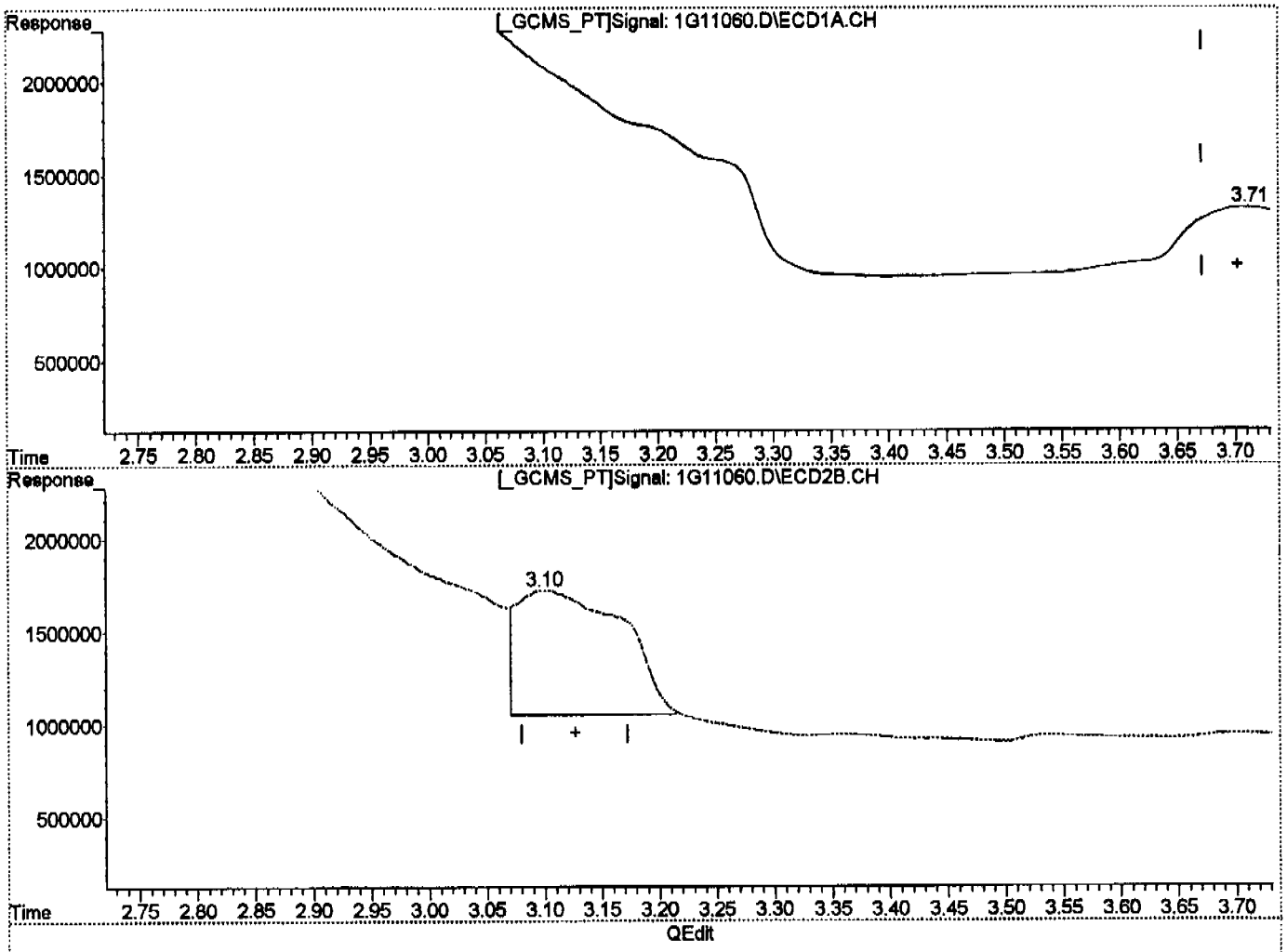




Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11060.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G11060.D\ECD2B.CH
Acq On : 8-10-04 08:33:39 PM Operator: kristis
Sample : IC276-100 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 11 9:02 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:04:34 2004
Response via : Multiple Level Calibration



(1) Dalapon

3.71min 17.935

response 30320236

(1) Dalapon #2

3.10min 27.371 m

response 42412851

872

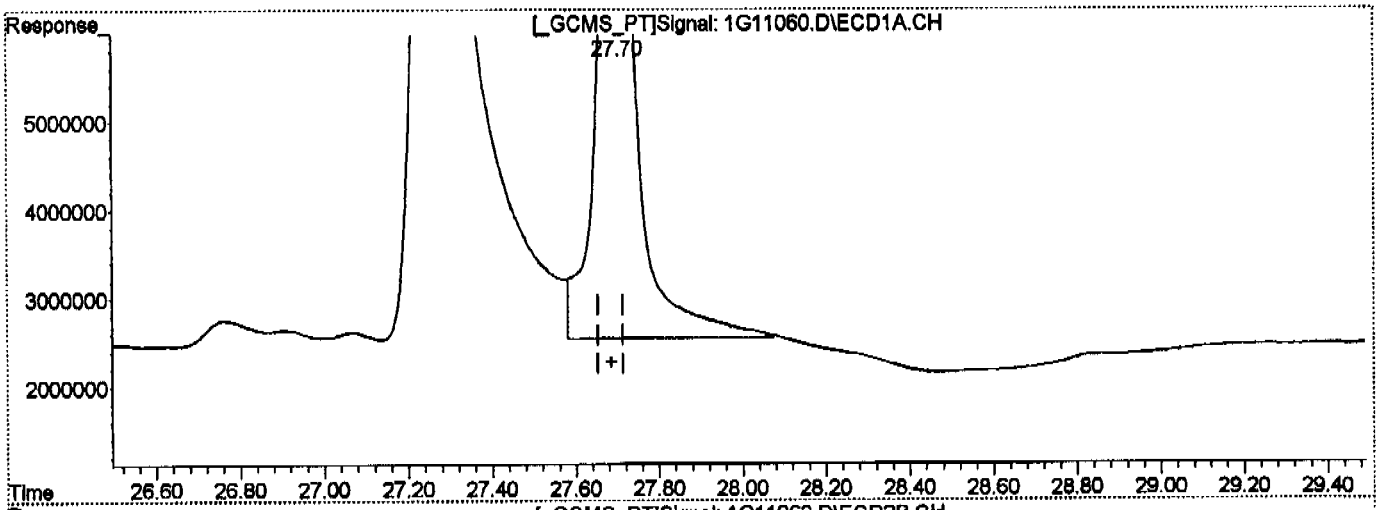
(+) = Expected Retention Time

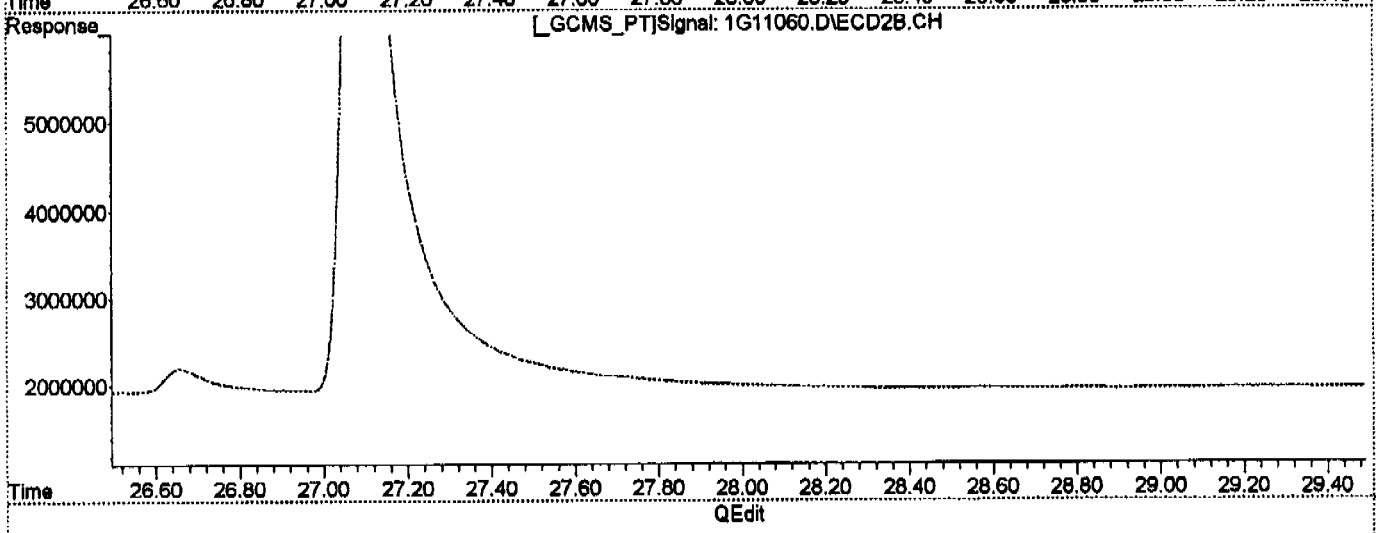
1G11060.D H1G276.M Wed Aug 11 09:07:06 2004 GC_1G

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11060.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G11060.D\ECD2B.CH
Acq On : 8-10-04 08:33:39 PM Operator: kristis
Sample : IC276-100 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 21:04 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration





(12) Dinoseb

27.70min 80.295PPB m

response 506453717

(12) Dinoseb #2

24.55min 54.418PPB

response 320379405

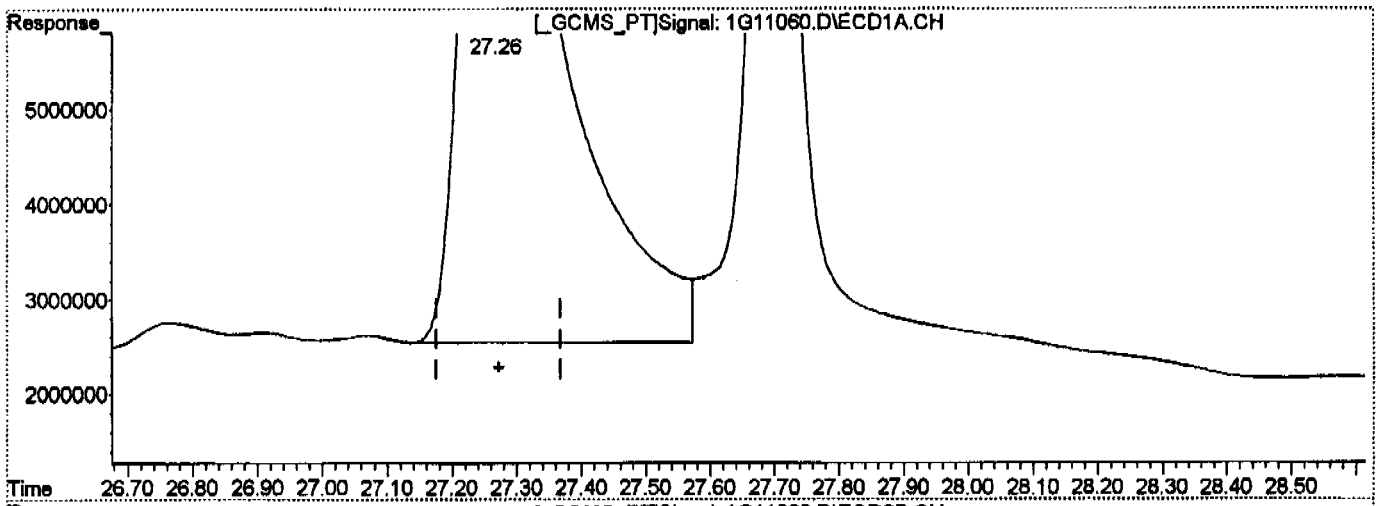
(+) = Expected Retention Time

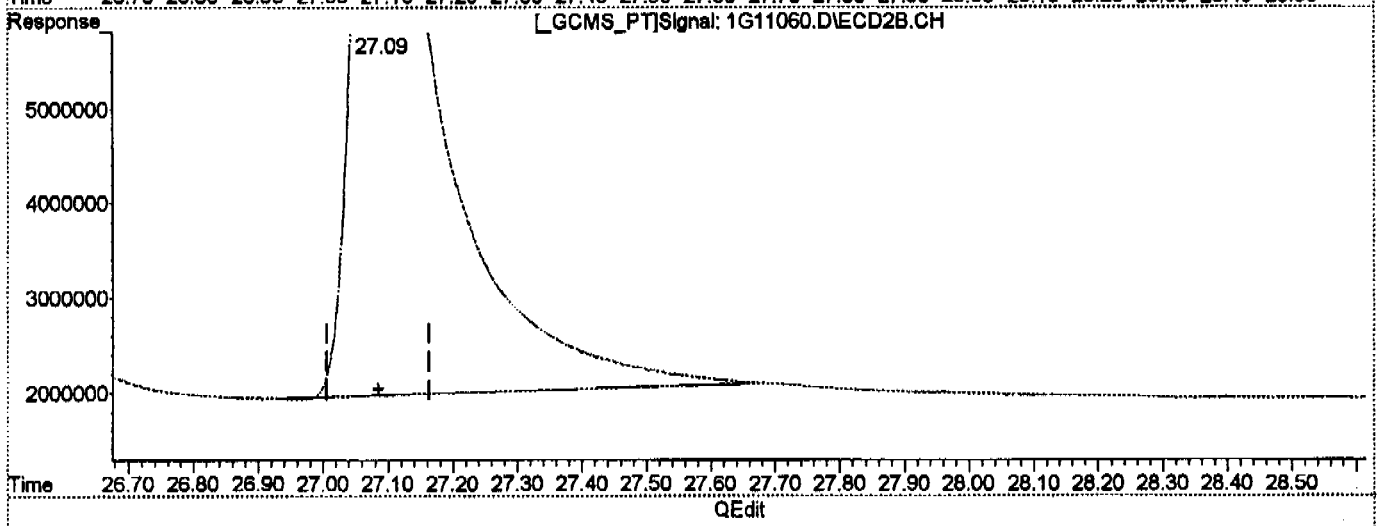
1G11060.D H1G276.M Wed Aug 11 08:56:36 2004 GC_1G

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11060.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G11060.D\ECD2B.CH
Acq On : 8-10-04 08:33:39 PM Operator: kristis
Sample : IC276-100 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 21:04 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration





(13) Picloram

27.26min 79.981PPB m

response 886706044

(13) Picloram #2

27.09min 61.698PPB

response 765136064

(+) = Expected Retention Time
1G11060.D H1G276.M Wed Aug 11 08:56:45 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11059.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G11059.D\ECD2B.CH
Acq On : 8-10-04 07:59:59 PM Operator: kristis
Sample : ICC276-200 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 20:31:08 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	
	System Monitoring Compounds							
2) S	2,4-DCAA	16.47	15.51	622.2E6	498.8E6	392.299	305.072	
Spiked Amount	1000.000			Recovery	=	39.23%	30.51%	
	Target Compounds							
1)	Dalapon	3.70	3.13	83910276	50919256	49.634	32.860	#
3)	Dicamba	17.05	16.03	233.4E6	188.1E6	36.642	27.706	
4)	MCPP	17.74	16.49	41356996	33496520	8664.460	7306.642	
5)	MCPA	18.22	17.22	73442149	60213572	8972.907	7231.231	
6)	Dichloroprop	19.36	18.21	302.2E6	225.9E6	175.772	131.624	#
7)	2,4-D	20.05	19.13	361.0E6	279.6E6	170.766	121.135	#
8)	Pentachlorophenol	20.65	20.10f	434.9E6	347.1E6	18.857	14.018	#
9)	2,4,5-TP	22.48	21.38f	337.5E6	256.3E6	37.993	28.553	
10)	2,4,5-T	23.27	22.44	292.3E6	237.9E6	36.790	27.800	
11)	2,4-DB	24.75	23.79	184.5E6	148.9E6	118.857	121.639	
12)	Dinoseb	27.70	24.55f	1190.0E6	788.9E6	188.667	133.996	#
13)	Picloram	27.24	27.07	1996.2E6	1829.7E6	180.054	147.545	

875

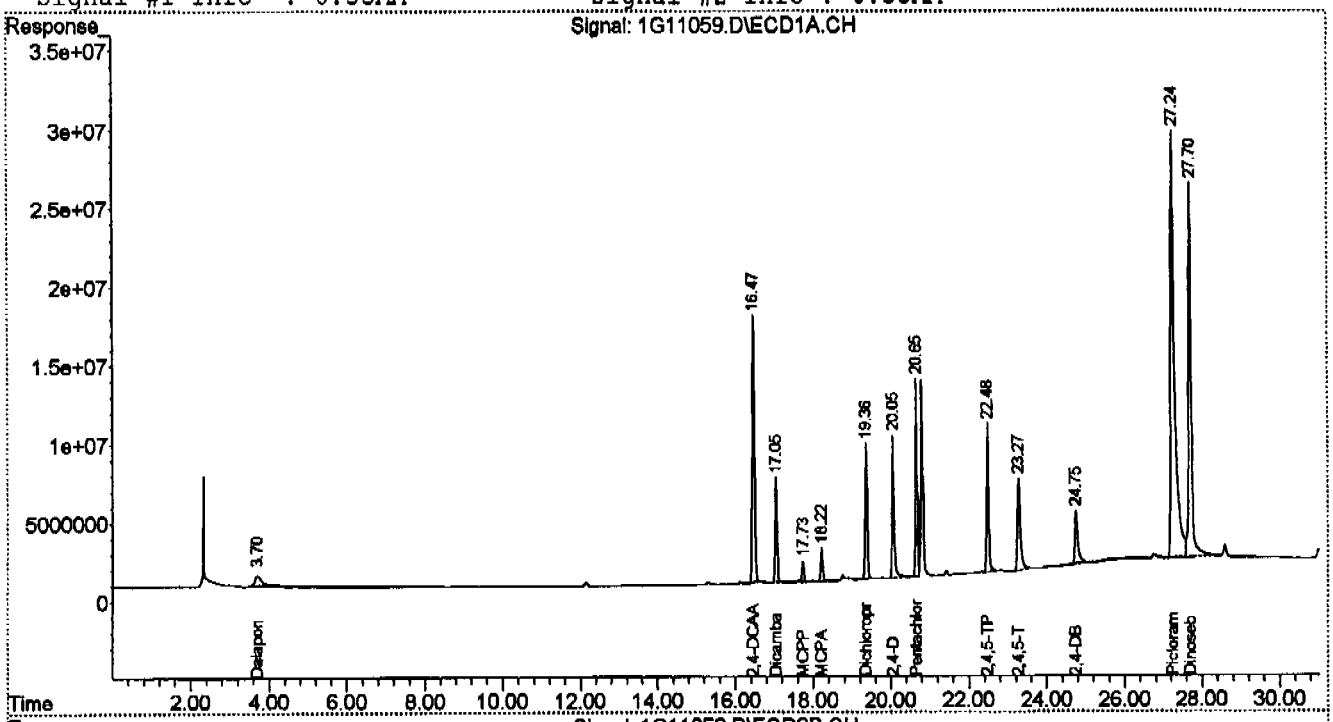
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

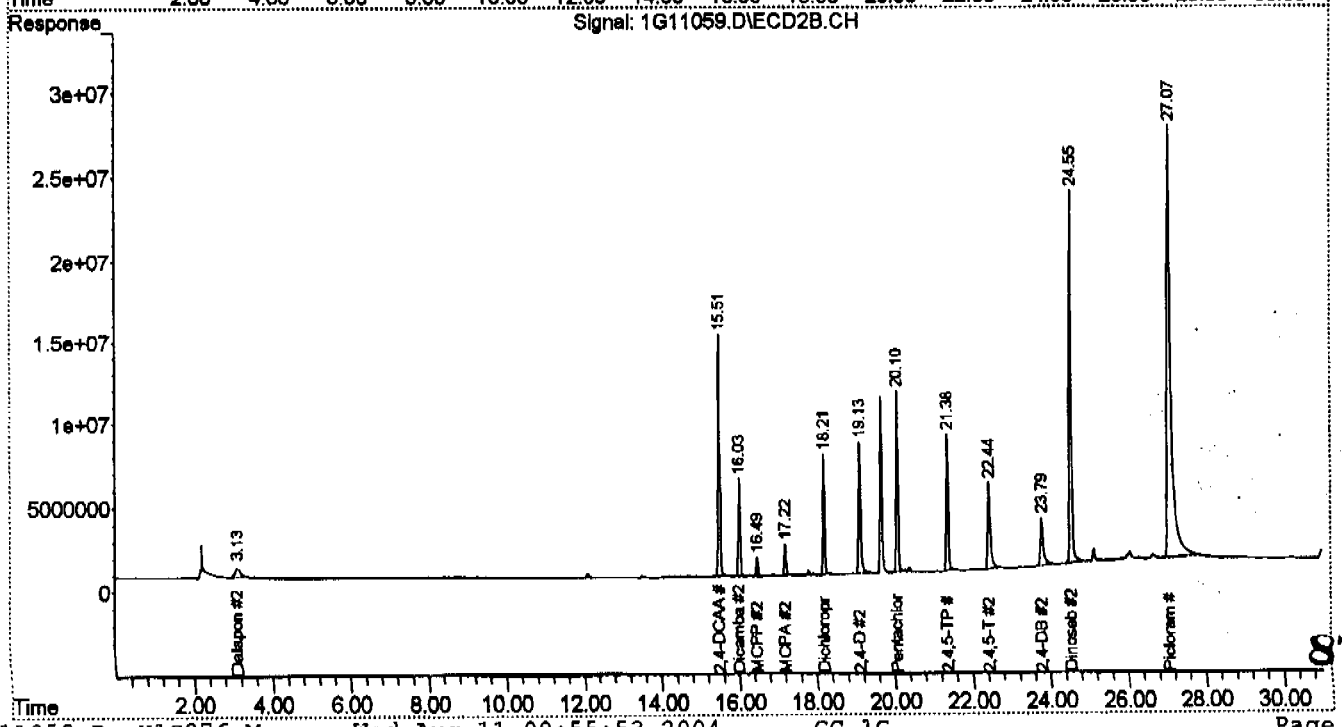
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11059.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G11059.D\ECD2B.CH
Acq On : 8-10-04 07:59:59 PM Operator: kristis
Sample : ICC276-200 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 20:31 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





876

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11058.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G11058.D\ECD2B.CH
Acq On : 8-10-04 07:26:10 PM Operator: kristis
Sample : IC276-300 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 19:57:15 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
2) S	2,4-DCAA	16.47	15.51	956.3E6	762.8E6	602.958	466.486
Spiked Amount	1000.000			Recovery	=	60.30%	46.65%
	Target Compounds						
1)	Dalapon	3.70	3.11	113.9E6	103.6E6	67.386	66.847
3)	Dicamba	17.05	16.03	385.2E6	307.2E6	60.480	45.239 #
4)	MCPP	17.74	16.49	72895736	58928120	15271.954	12854.072
5)	MCPA	18.22	17.22	119.0E6	99357804	14544.730	11932.181
6)	Dichloroprop	19.36	18.21	517.0E6	383.3E6	300.684	223.330 #
7)	2,4-D	20.05	19.13	632.1E6	517.5E6	299.041	224.223 #
8)	Pentachloropheno	20.65	20.10f	714.6E6	672.7E6	30.984	27.168m
9)	2,4,5-TP	22.48	21.38f	538.4E6	415.4E6	60.603	46.272
10)	2,4,5-T	23.26	22.43	483.8E6	381.9E6	60.886	44.627 #
11)	2,4-DB	24.74	23.78	527.2E6	275.9E6	339.656	225.391 #
12)	Dinoseb	27.70	24.55f	1951.0E6	1241.2E6	309.311	210.826 #
13)	Picloram	27.23f	27.06	3110.3E6	2648.7E6	280.550	213.585

877

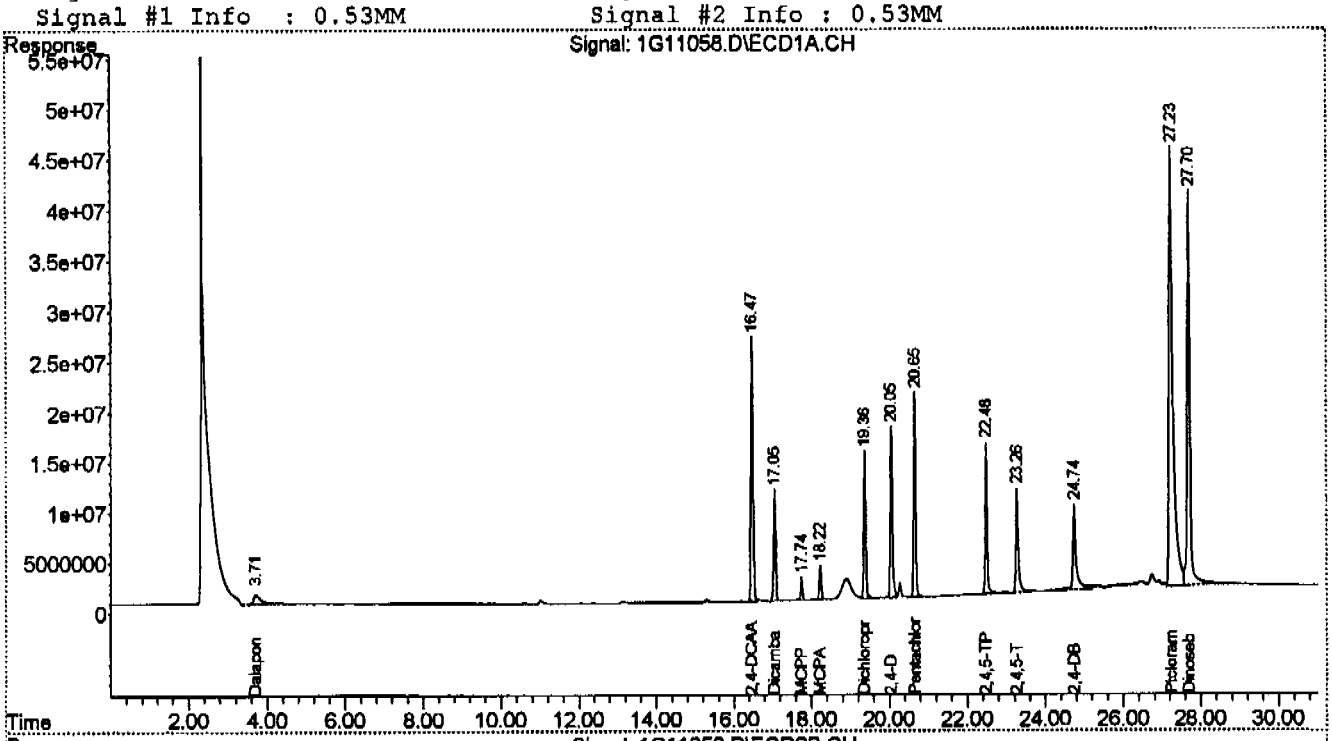
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

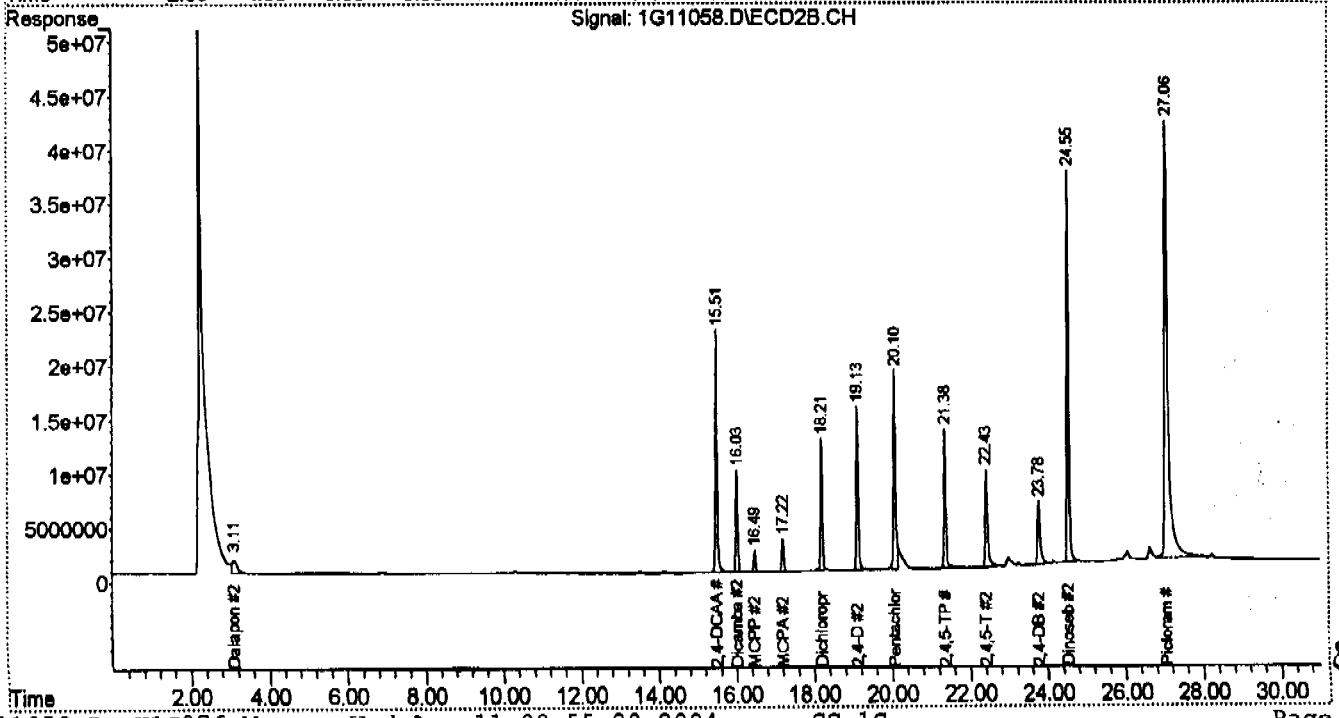
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11058.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G11058.D\ECD2B.CH
Acq On : 8-10-04 07:26:10 PM Operator: kristis
Sample : IC276-300 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 11 8:54 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM



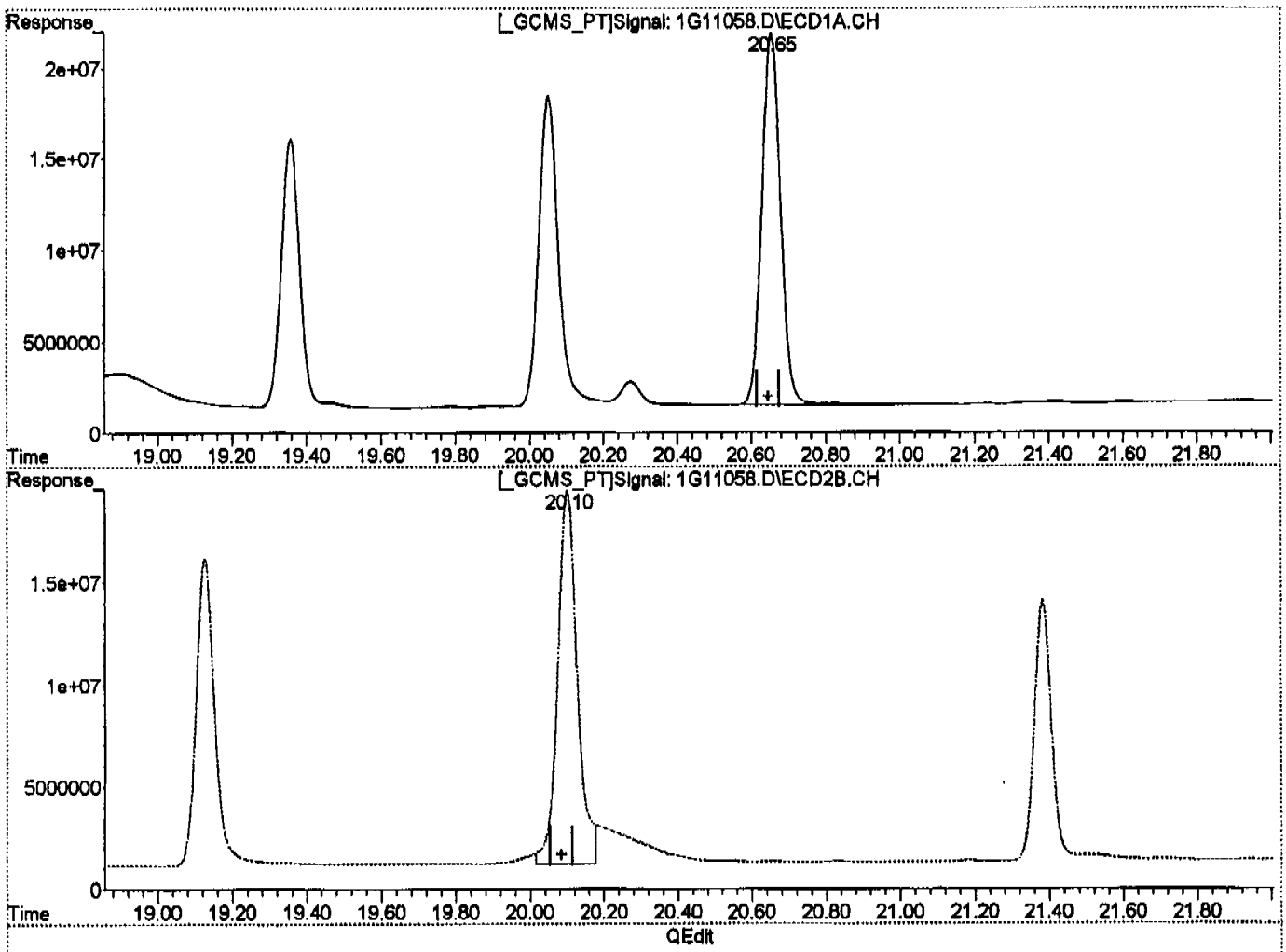


878

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11058.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G11058.D\ECD2B.CH
Acq On : 8-10-04 07:26:10 PM Operator: kristis
Sample : IC276-300 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 19:57 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration



(8) Pentachlorophenol

20.65min 30.984PPB

response 714595384

(8) Pentachlorophenol #2

20.10min 27.168PPB m

response 672660961

(+) = Expected Retention Time

1G11058.D H1G276.M Wed Aug 11 08:55:02 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11057.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G11057.D\ECD2B.CH
Acq On : 8-10-04 06:52:28 PM Operator: kristis
Sample : IC276-400 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 19:23:33 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	
	System Monitoring Compounds							
2) S	2,4-DCAA	16.47	15.51	1262.0E6	992.8E6	795.689	607.136	
Spiked Amount	1000.000			Recovery	=	79.57%	60.71%	
	Target Compounds							
1)	Dalapon	3.71	3.12	156.0E6	130.4E6	92.293	84.146	
3)	Dicamba	17.05	16.03	508.4E6	413.3E6	79.820	60.872	
4)	MCPP	17.74	16.50	100.6E6	75781459	21076.419	16530.313	
5)	MCPA	18.22	17.22	156.4E6	129.9E6	19110.830	15605.595	
6)	Dichloroprop	19.36	18.21	659.4E6	506.4E6	383.524	295.012	
7)	2,4-D	20.05	19.13	836.2E6	706.6E6	395.601	306.155	
8)	Pentachloropheno	20.65	20.10	963.5E6	767.1E6	41.775	30.981	#
9)	2,4,5-TP	22.48	21.38f	722.7E6	571.5E6	81.349	63.665	
10)	2,4,5-T	23.26	22.43	709.0E6	625.0E6	89.225	73.030	
11)	2,4-DB	24.72	23.78	1502.4E6	368.7E6	967.867	301.184	#
12)	Dinoseb	27.70	24.55f	2603.1E6	1769.8E6	412.702	300.607	#
13)	Picloram	27.21f	27.05	4129.0E6	3356.1E6	372.433	270.622	#

880

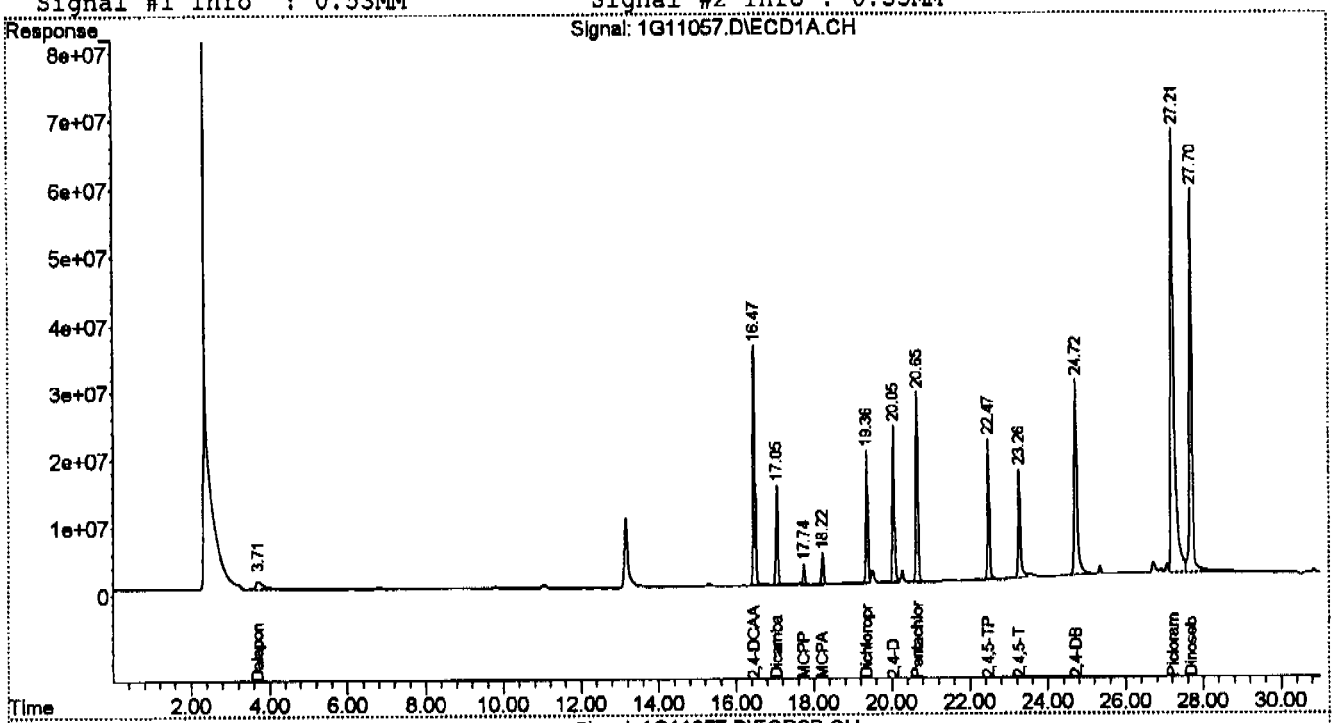
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

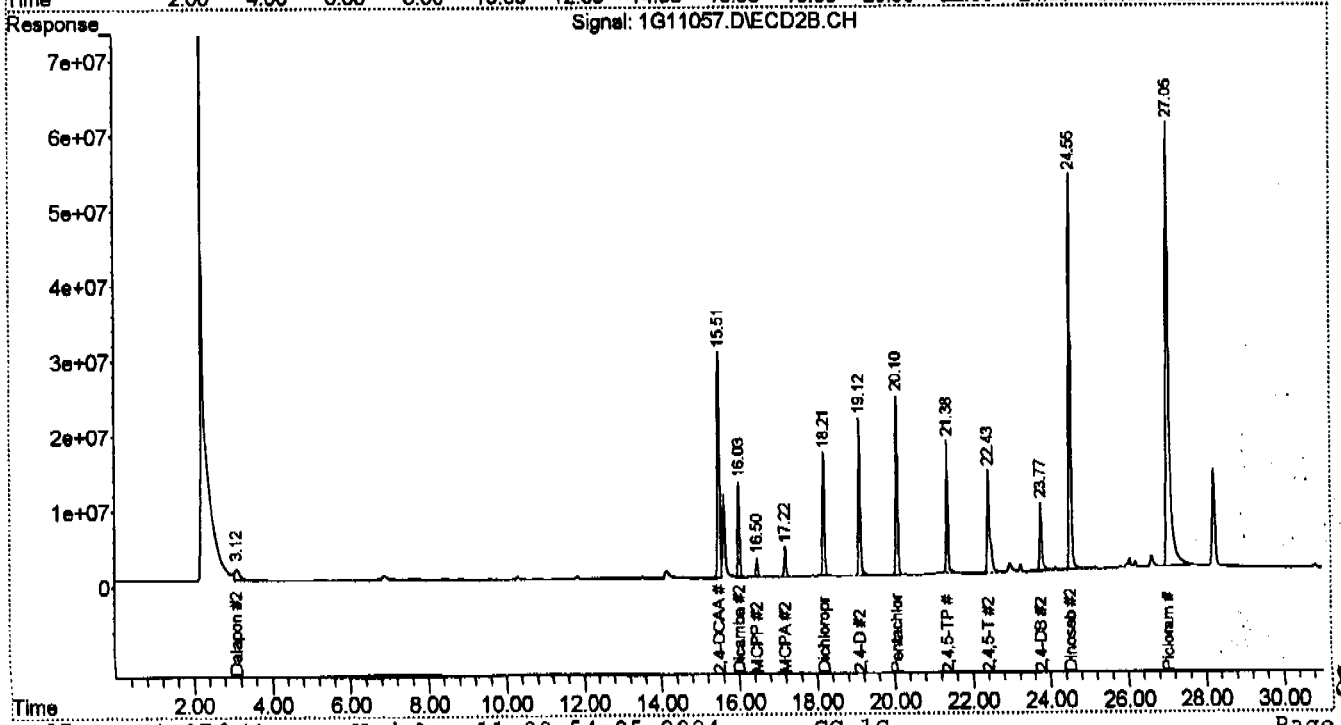
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11057.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G11057.D\ECD2B.CH
Acq On : 8-10-04 06:52:28 PM Operator: kristis
Sample : IC276-400 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 19:23 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11056.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G11056.D\ECD2B.CH
Acq On : 8-10-04 06:18:38 PM Operator: kristis
Sample : IC276-500 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 18:49:47 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	
	System Monitoring Compounds							
2) S	2,4-DCAA	16.47	15.51	1517.5E6	1178.9E6	956.764	720.972	
Spiked Amount	1000.000			Recovery	=	95.68%	72.10%	
	Target Compounds							
1)	Dalapon	3.70	3.12	206.2E6	161.0E6	121.977	103.884	
3)	Dicamba	17.05	16.03	617.2E6	484.6E6	96.910	71.366	#
4)	MCPP	17.74	16.50	118.5E6	92674780	24832.596	20215.277	
5)	MCPA	18.22	17.22	186.5E6	149.1E6	22790.676	17909.615	
6)	Dichloroprop	19.36	18.21	802.0E6	583.9E6	466.469	340.172	#
7)	2,4-D	20.05	19.12	1008.4E6	830.3E6	477.071	359.757	
8)	Pentachloropheno	20.65	20.10	1150.8E6	914.1E6	49.896	36.918	#
9)	2,4,5-TP	22.48	21.38f	860.6E6	618.8E6	96.874	68.929	#
10)	2,4,5-T	23.26	22.43	772.4E6	614.6E6	97.209	71.807	#
11)	2,4-DB	24.74	23.78	697.2E6	445.1E6	449.141	363.627	
12)	Dinoseb	27.70	24.55f	2863.0E6	1832.7E6	453.908	311.297	#
13)	Picloram	27.22f	27.05	4969.2E6	4311.5E6	448.220	347.668	

882

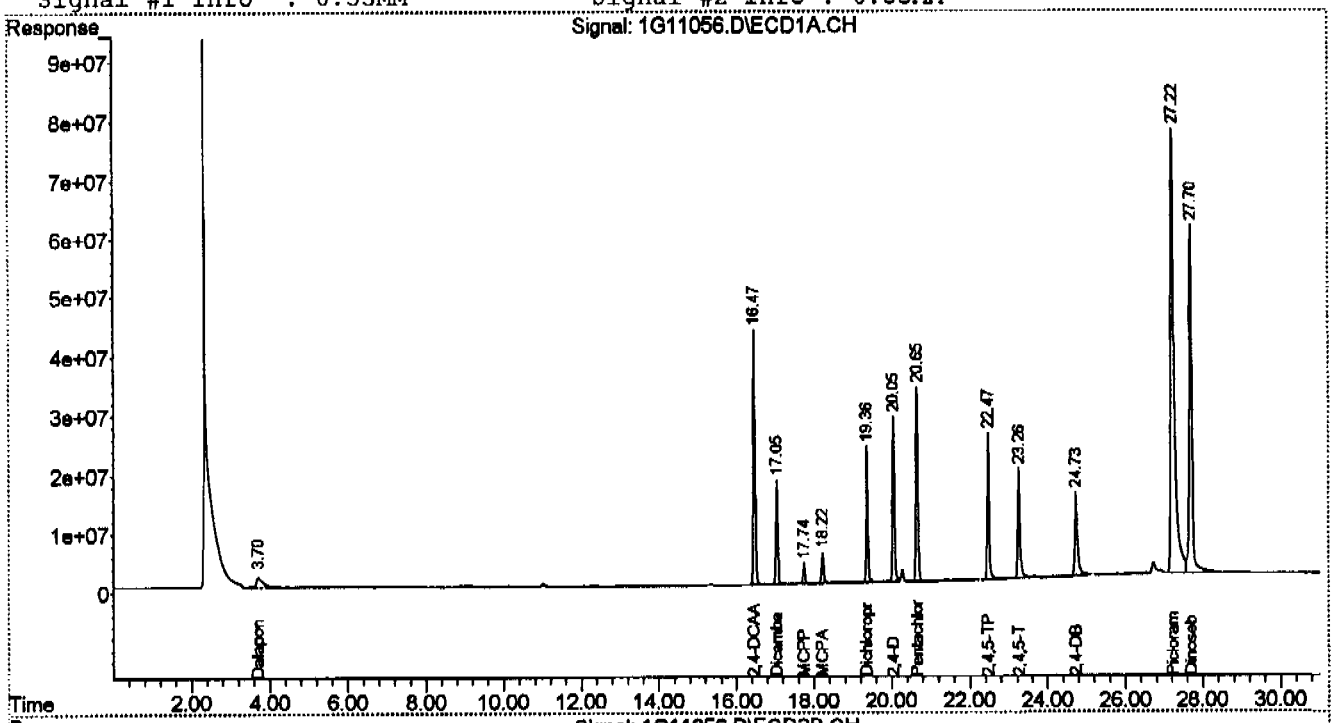
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

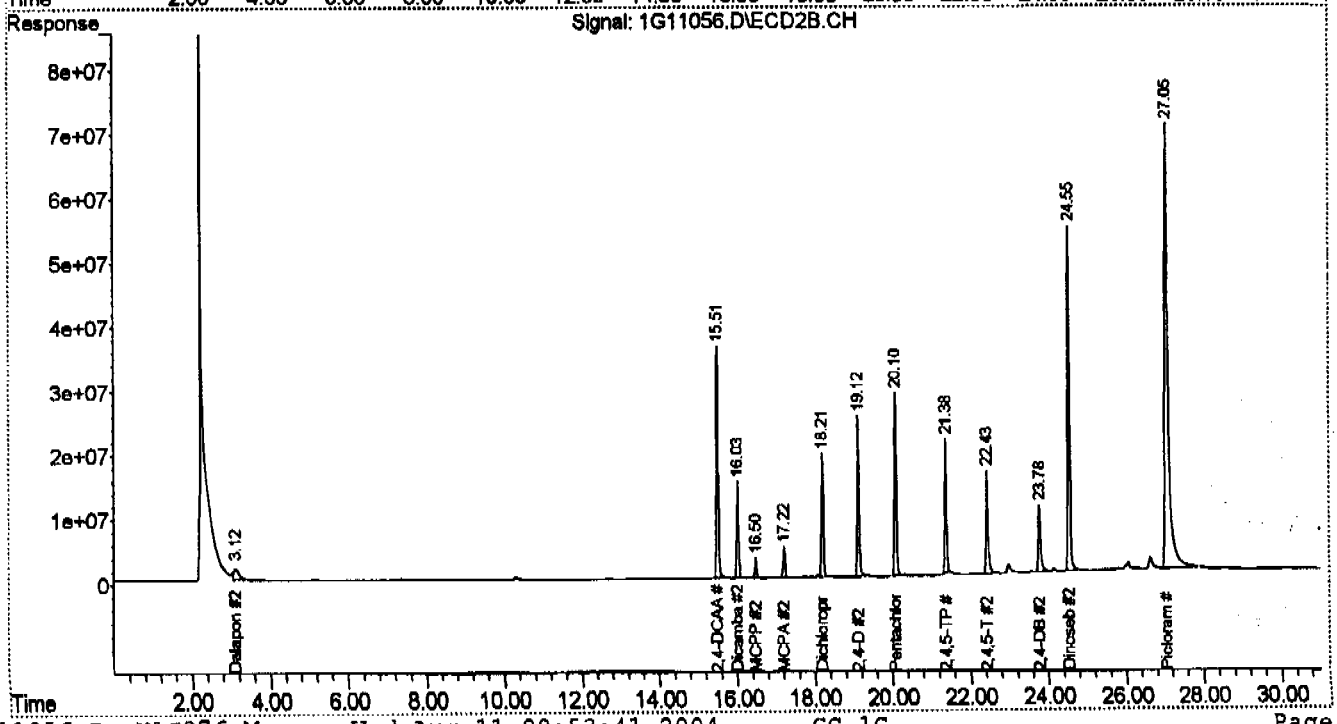
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11056.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G11056.D\ECD2B.CH
Acq On : 8-10-04 06:18:38 PM Operator: kristis
Sample : IC276-500 Inst : GC1G
Misc : OP17637,G1G276,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 10 18:49 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 04 11:28:58 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM





883

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: G1G277-CC276
Lab FileID: 1G11087.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1G11087.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1G11087.D\ECD2B.CH
Acq On : 8-12-04 08:58:59 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17644,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Dalapon	1.812	1.819 E6	-0.4	87	0.00	3.67- 3.73
2 S	2,4-DCAA	1.612	1.640 E6	-1.7	105	0.00	16.44-16.50
3	Dicamba	6.291	6.590 E6	-4.8	113	0.00	17.02-17.08
4	MCPP	4.722	5.636 E3	-19.4#	136	0.00	17.71-17.77
5	MCPA	7.951	9.779 E3	-23.0#	133	0.00	18.19-18.25
6	Dichloroprop	1.678	1.737 E6	-3.5	115	0.00	19.33-19.39
7	2,4-D	2.030	2.070 E6	-2.0	115	0.00	20.02-20.08
8	Pentachlorophenol	22.538	23.155 E6	-2.7	106	0.00	20.63-20.69
9	2,4,5-TP	8.433	9.210 E6	-9.2	109	0.00	22.45-22.51
10	2,4,5-T	7.713	7.816 E6	-1.3	107	0.00	23.21-23.34
11	2,4-DB	1.755	1.517 E6	13.6	164#	0.01	24.69-24.84
12	Dinoseb	5.911	6.978 E6	-18.1#	117	0.00	27.67-27.73
13	Picloram	9.525	9.320 E6	2.2	93	0.02	27.17-27.36

***** Signal #2 *****

1	Dalapon	1.626	1.359 E6	16.4#	107	-0.02	3.06- 3.16
2 S	2,4-DCAA	1.283	1.218 E6	5.1	98	0.00	15.48-15.54
3	Dicamba	5.057	4.922 E6	2.7	105	0.00	16.00-16.06
4	MCPP	3.629	3.852 E3	-6.1	115	0.00	16.46-16.52
5	MCPA	6.606	6.755 E3	-2.3	112	0.00	17.18-17.24
6	Dichloroprop	1.271	1.272 E6	-0.1	113	0.00	18.18-18.24
7	2,4-D	1.676	1.722 E6	-2.7	123	0.00	19.10-19.16
8	Pentachlorophenol	18.344	17.765 E6	3.2	102	0.00	20.07-20.13
9	2,4,5-TP	6.438	6.277 E6	2.5	98	0.00	21.35-21.41
10	2,4,5-T	6.144	5.834 E6	5.0	98	0.00	22.39-22.49
11	2,4-DB	821.481	868.159 E3	-5.7	117	0.00	23.72-23.88
12	Dinoseb	3.836	4.275 E6	-11.4	108	0.00	24.52-24.58
13	Picloram	8.350	8.276 E6	0.9	90	0.01	27.01-27.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G11059.D H1G276.M Thu Aug 12 16:53:24 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11087.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1G11087.D\ECD2B.CH
Acq On : 8-12-04 08:58:59 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17644,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 09:30:13 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
2) S	2,4-DCAA	16.47	15.51	656.1E6	487.3E6	407.047	379.808
	Spiked Amount 1000.000			Recovery	=	40.70%	37.98%
	Target Compounds						
1)	Dalapon	3.70	3.11	72764685	54369197	40.168	33.443m
3)	Dicamba	17.05	16.03	263.6E6	196.9E6	41.900	38.936
4)	MCPP	17.74	16.49	56358425	38523504	11934.061	10614.048
5)	MCPA	18.22	17.21	97787047	67546880	12299.189	10224.481
6)	Dichloroprop	19.36	18.21	347.5E6	254.4E6	207.120	200.132
7)	2,4-D	20.05	19.13	413.9E6	344.4E6	203.870	205.449
8)	Pentachlorophenol	20.66	20.10	463.1E6	355.3E6	20.548	19.368
9)	2,4,5-TP	22.48	21.38	368.4E6	251.1E6	43.688	39.001
10)	2,4,5-T	23.28	22.44	312.7E6	233.3E6	40.538	37.980
11)	2,4-DB	24.77	23.80	303.4E6	173.6E6	172.885	211.364
12)	Dinoseb	27.70	24.55	1395.5E6	855.1E6	236.096	222.929
13)	Picloram	27.26	27.09	1864.0E6	1655.2E6	195.700	198.233

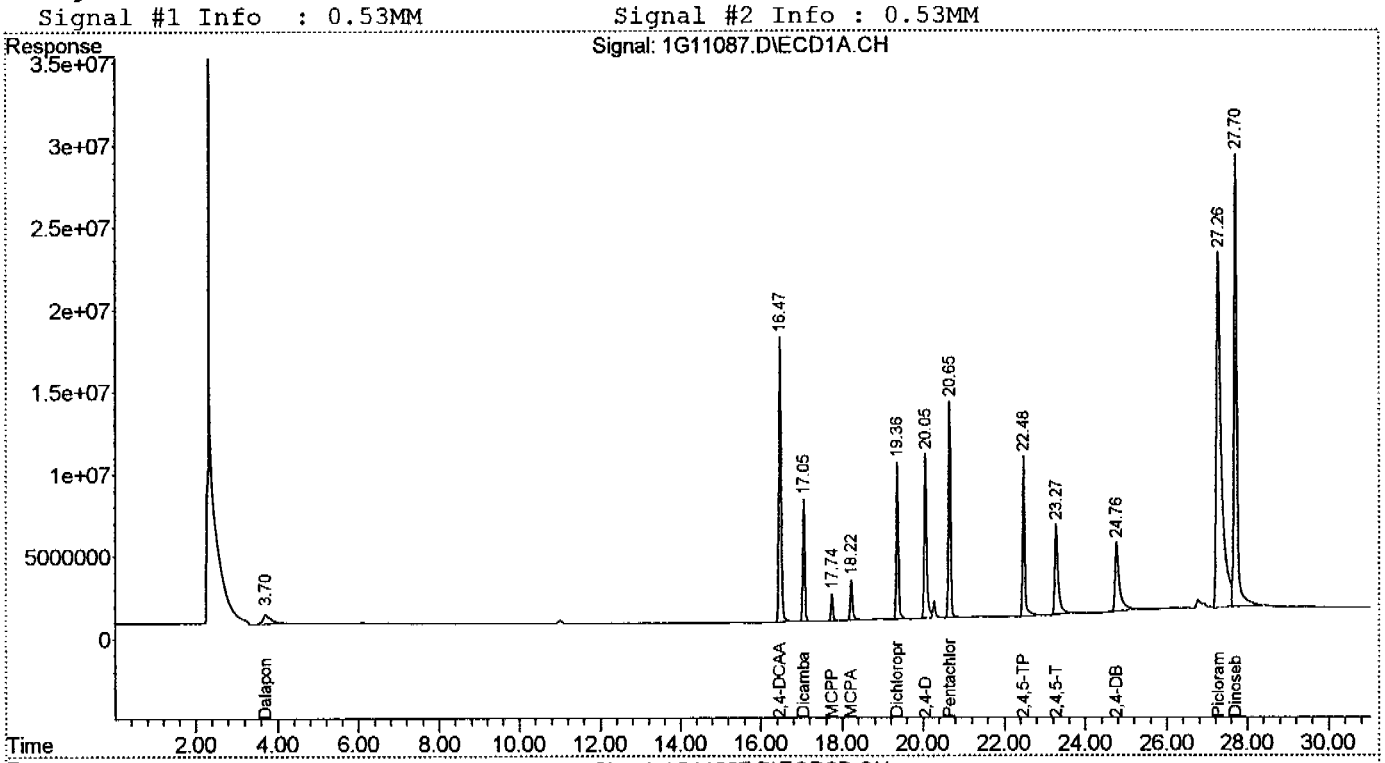
885

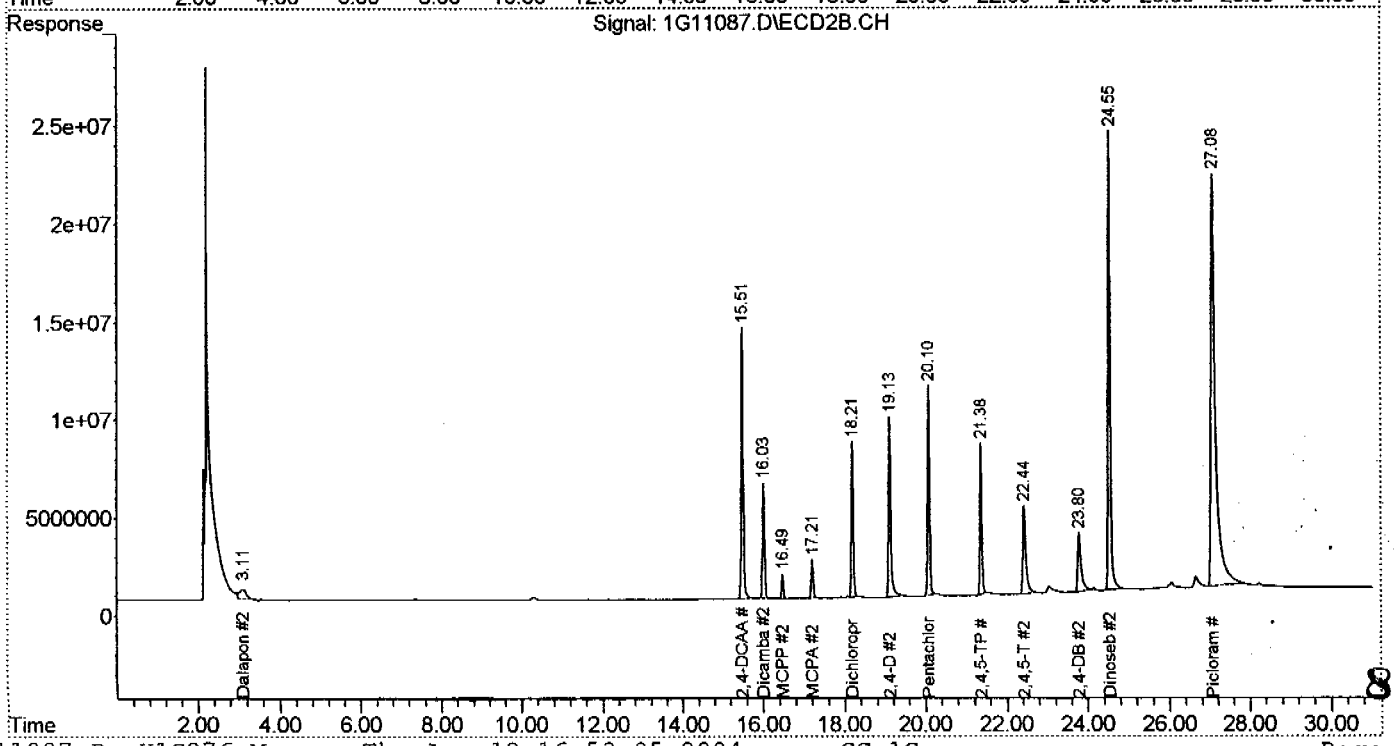
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\1G11087.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1G11087.D\ECD2B.CH
Acq On : 8-12-04 08:58:59 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17644,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 16:52 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM



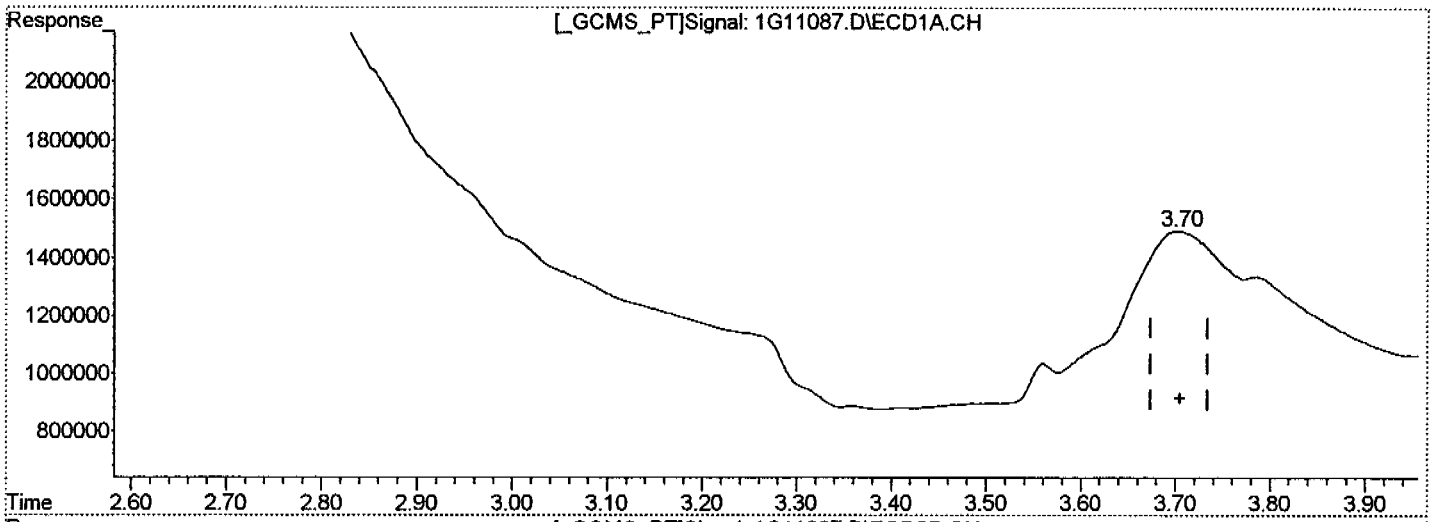


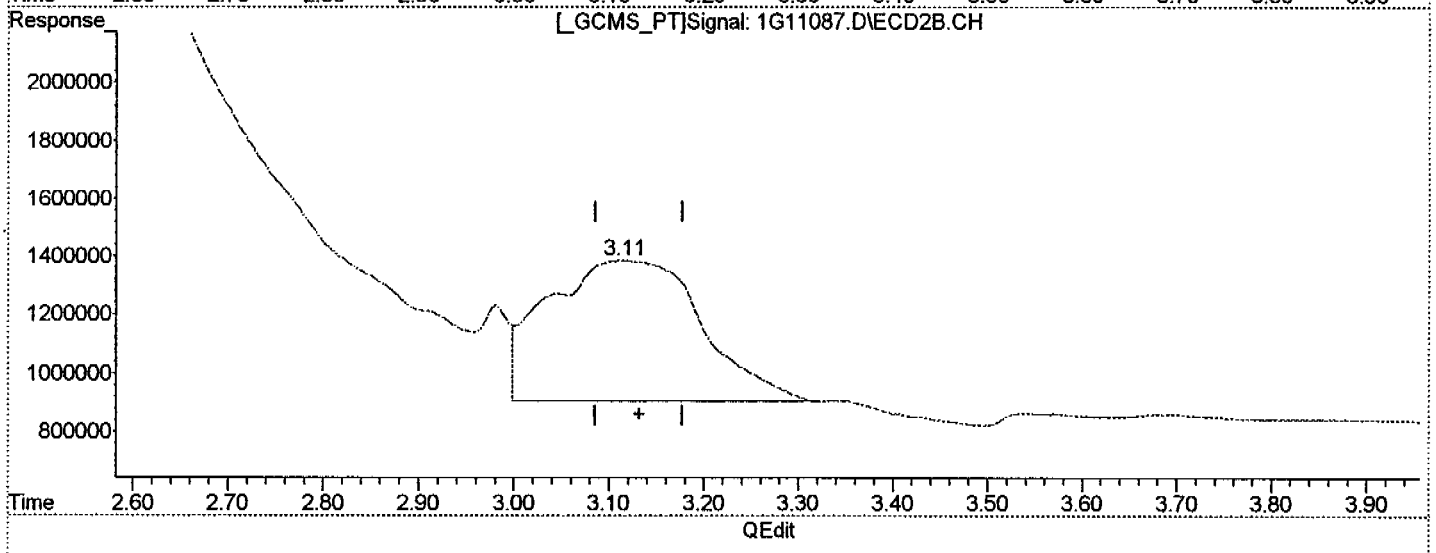
886

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11087.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1G11087.D\ECD2B.CH
Acq On : 8-12-04 08:58:59 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17644,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 16:52 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration





(1) Dalapon

3.70min 40.168

response 72764685

(1) Dalapon #2

3.11min 33.443 m

response 54369197

887

(+) = Expected Retention Time

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: G1G277-CC276
Lab FileID: 1G11097.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1G11097.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11097.D\ECD2B.CH
Acq On : 8-12-04 03:30:25 PM Operator: kristis
Sample : CC276-400 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Dalapon	1.812	1.804 E6	0.4	93	0.00	3.67- 3.73
2 S	2,4-DCAA	1.612	1.561 E6	3.2	99	0.00	16.44-16.50
3	Dicamba	6.291	5.862 E6	6.8	92	0.00	17.02-17.08
4	MCPP	4.722	3.841 E3	18.7#	76	0.00	17.71-17.77
5	MCPA	7.951	6.986 E3	12.1	89	0.00	18.19-18.25
6	Dichloroprop	1.678	1.627 E6	3.0	99	0.00	19.33-19.39
7	2,4-D	2.030	1.987 E6	2.1	95	0.00	20.02-20.08
8	Pentachlorophenol	22.538	21.265 E6	5.6	88	0.00	20.63-20.69
9	2,4,5-TP	8.433	9.214 E6	-9.3	102	0.00	22.45-22.51
10	2,4,5-T	7.713	6.882 E6	10.8	78	0.00	23.20-23.32
11	2,4-DB	1.755	14.519 E6	-727.3#	387#	-0.04	24.64-24.80
12	Dinoseb	5.911	7.106 E6	-20.2#	109	0.00	27.67-27.73
13	Picloram	9.525	8.737 E6	8.3	85	-0.02	27.12-27.32

***** Signal #2 *****

1	Dalapon	1.626	1.847 E6	-13.6	113	-0.02	3.07- 3.16
2 S	2,4-DCAA	1.283	1.156 E6	9.9	93	0.00	15.48-15.54
3	Dicamba	5.057	4.785 E6	5.4	93	0.00	16.00-16.06
4	MCPP	3.629	3.346 E3	7.8	88	0.00	16.47-16.53
5	MCPA	6.606	7.319 E3	-10.8	113	0.00	17.19-17.25
6	Dichloroprop	1.271	1.113 E6	12.4	88	0.00	18.18-18.24
7	2,4-D	1.676	1.436 E6	14.3	81	0.00	19.10-19.16
8	Pentachlorophenol	18.344	16.549 E6	9.8	86	0.00	20.07-20.13
9	2,4,5-TP	6.438	5.807 E6	9.8	81	0.00	21.35-21.41
10	2,4,5-T	6.144	5.573 E6	9.3	71	0.00	22.38-22.49
11	2,4-DB	821.481	836.765 E3	-1.9	91	-0.01	23.70-23.86
12	Dinoseb	3.836	4.504 E6	-17.4#	102	0.00	24.52-24.58
13	Picloram	8.350	7.477 E6	10.5	89	-0.02	26.98-27.14

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G11057.D H1G276.M Thu Aug 12 17:02:59 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11097.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11097.D\ECD2B.CH
Acq On : 8-12-04 03:30:25 PM Operator: kristis
Sample : CC276-400 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 17:00:21 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	
	System Monitoring Compounds							
2) S	2,4-DCAA	16.47	15.51	1249.0E6	924.7E6	774.891	720.674	
Spiked Amount	1000.000			Recovery	=	77.49%	72.07%	
	Target Compounds							
1)	Dalapon	3.70	3.11	144.4E6	147.8E6	79.686m	90.885	
3)	Dicamba	17.05	16.03	468.9E6	382.8E6	74.534	75.702	
4)	MCPP	17.74	16.50	76821195	66916713	16267.112	18436.984	
5)	MCPA	18.22	17.22	139.7E6	146.4E6	17572.820	22156.029	#
6)	Dichloroprop	19.36	18.21	650.8E6	445.2E6	387.924	350.326	
7)	2,4-D	20.05	19.13	794.8E6	574.6E6	391.434	342.762m	
8)	Pentachlorophenol	20.66	20.10	850.6E6	662.0E6	37.741	36.085	
9)	2,4,5-TP	22.48	21.38	737.1E6	464.5E6	87.413	72.152	
10)	2,4,5-T	23.26	22.44	550.6E6	445.8E6	71.386	72.569	
11)	2,4-DB	24.72	23.78	5807.6E6	334.7E6	3309.792m	407.442	#
12)	Dinoseb	27.70	24.55	2842.3E6	1801.5E6	480.856	469.679	
13)	Picloram	27.22	27.06	3494.8E6	2991.0E6	366.921	358.216	

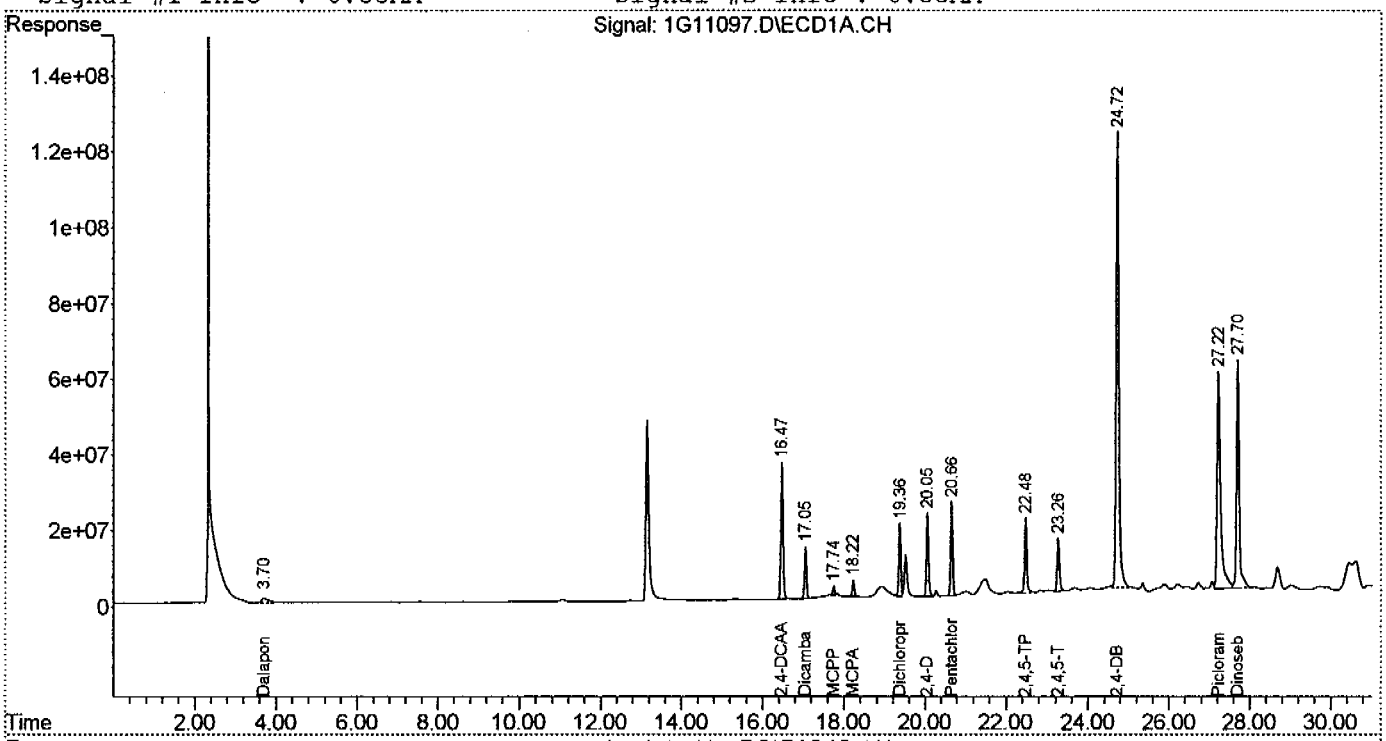
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

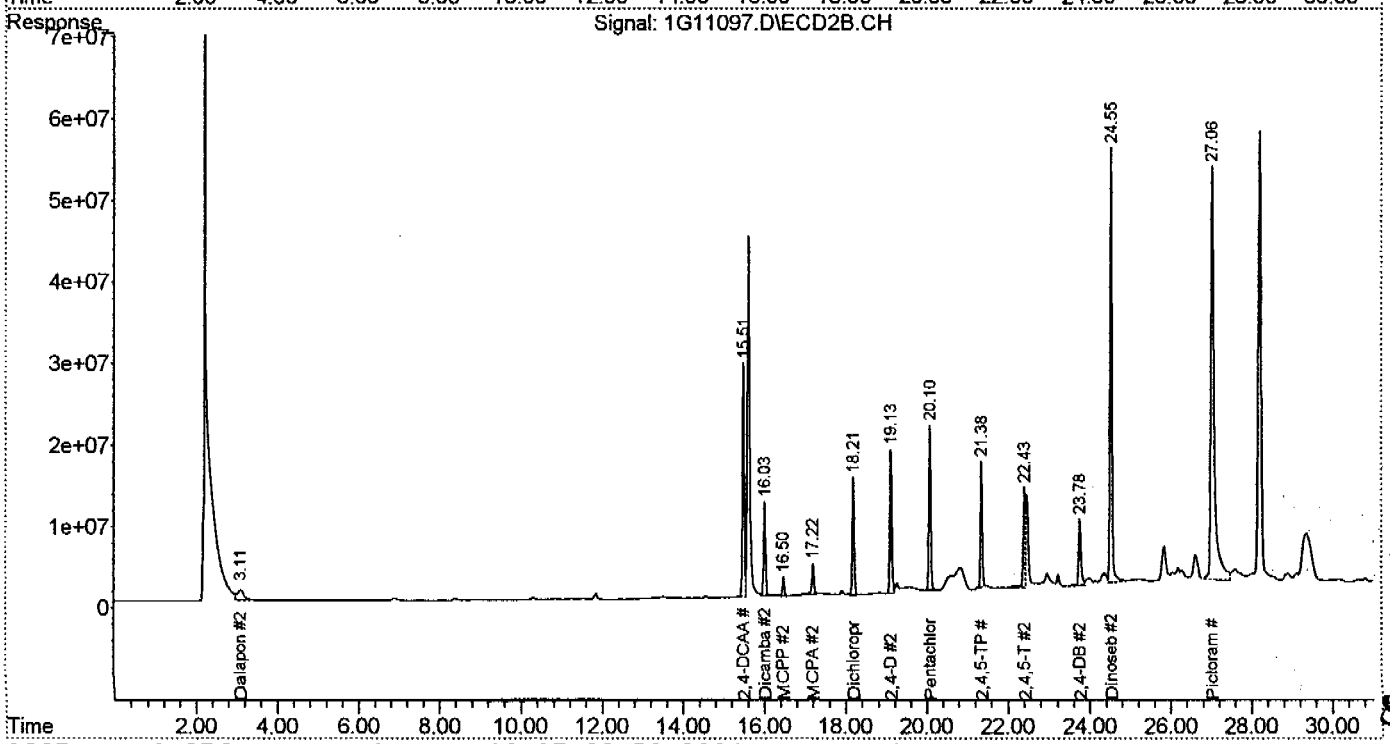
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11097.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11097.D\ECD2B.CH
Acq On : 8-12-04 03:30:25 PM Operator: kristis
Sample : CC276-400 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 17:02 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM



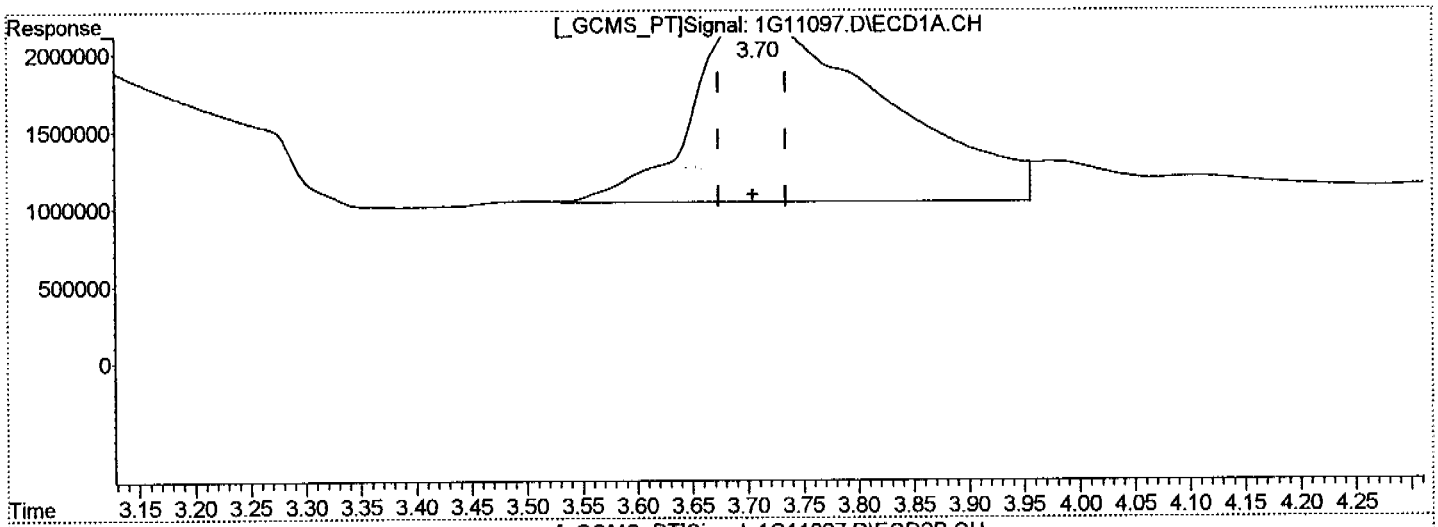


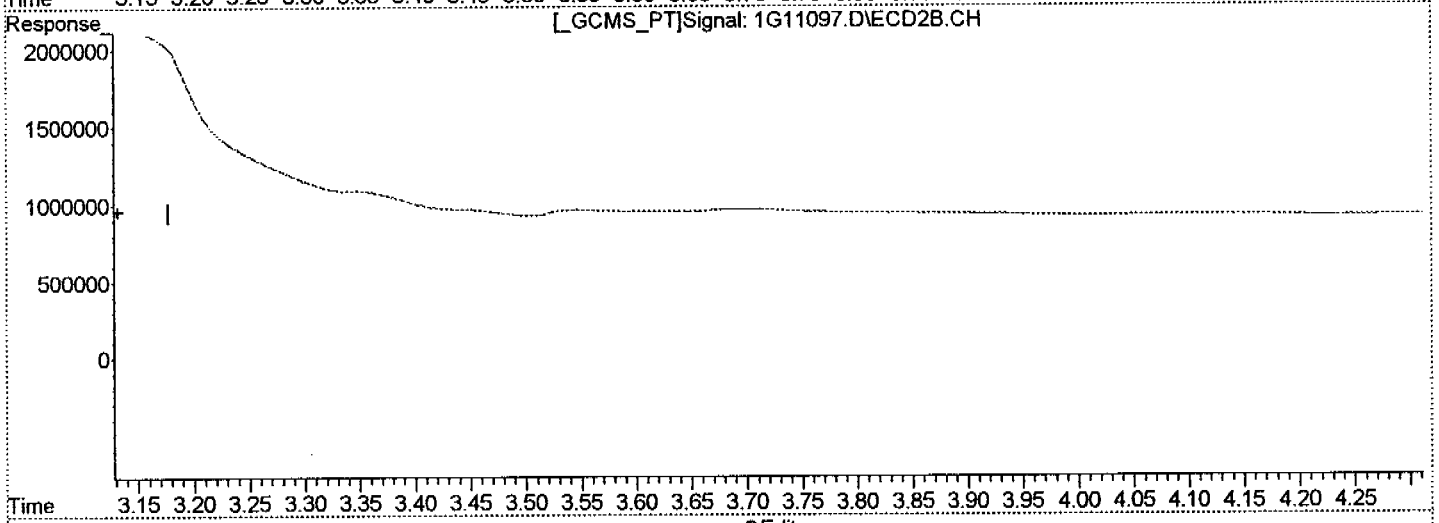
890

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11097.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11097.D\ECD2B.CH
Acq On : 8-12-04 03:30:25 PM Operator: kristis
Sample : CC276-400 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 17:00 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration





(1) Dalapon

3.70min 79.686 m

response 144351836

(1) Dalapon #2

3.11min 90.885

response 147752971

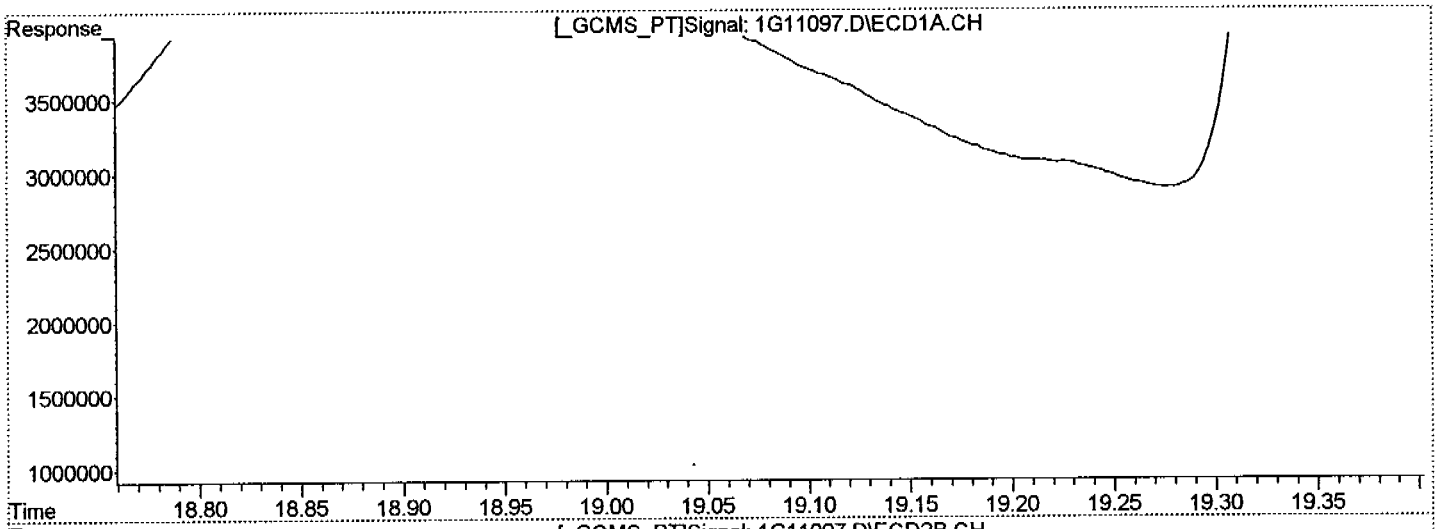
(+) = Expected Retention Time

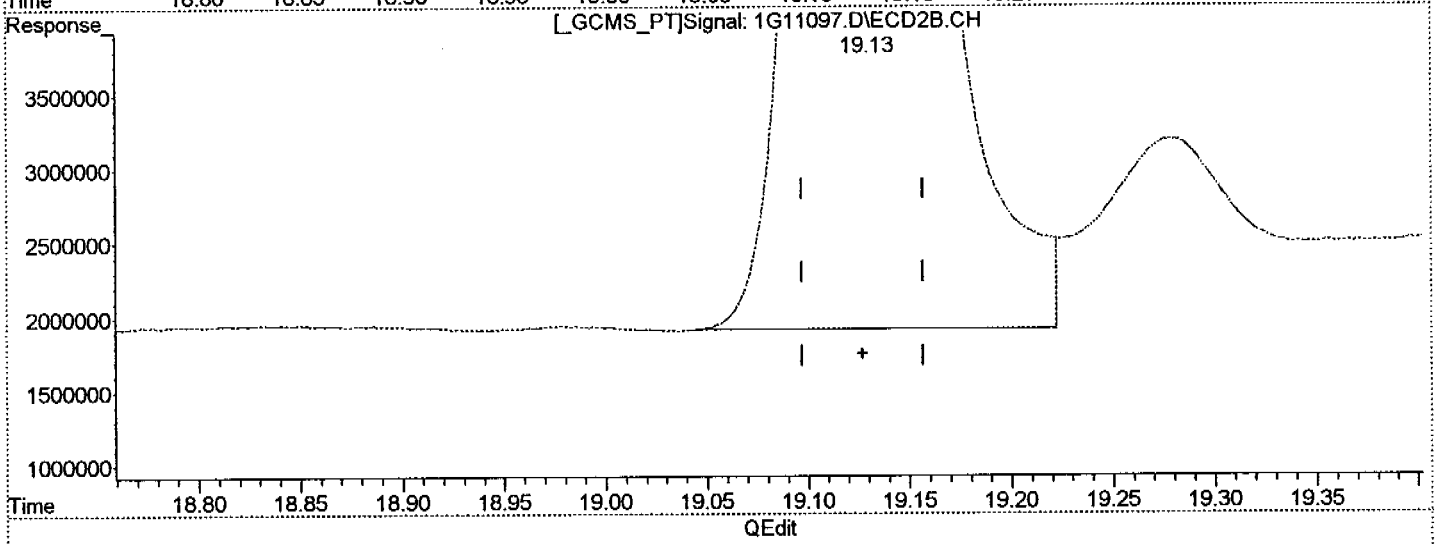
1G11097.D H1G276.M Thu Aug 12 17:00:42 2004 GC_1G

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11097.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11097.D\ECD2B.CH
Acq On : 8-12-04 03:30:25 PM Operator: kristis
Sample : CC276-400 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 17:00 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration





QEdit

(7) 2,4-D

20.05min 391.434PPB

response 794782502

(7) 2,4-D #2

19.13min 342.762PPB m

response 574572830

892

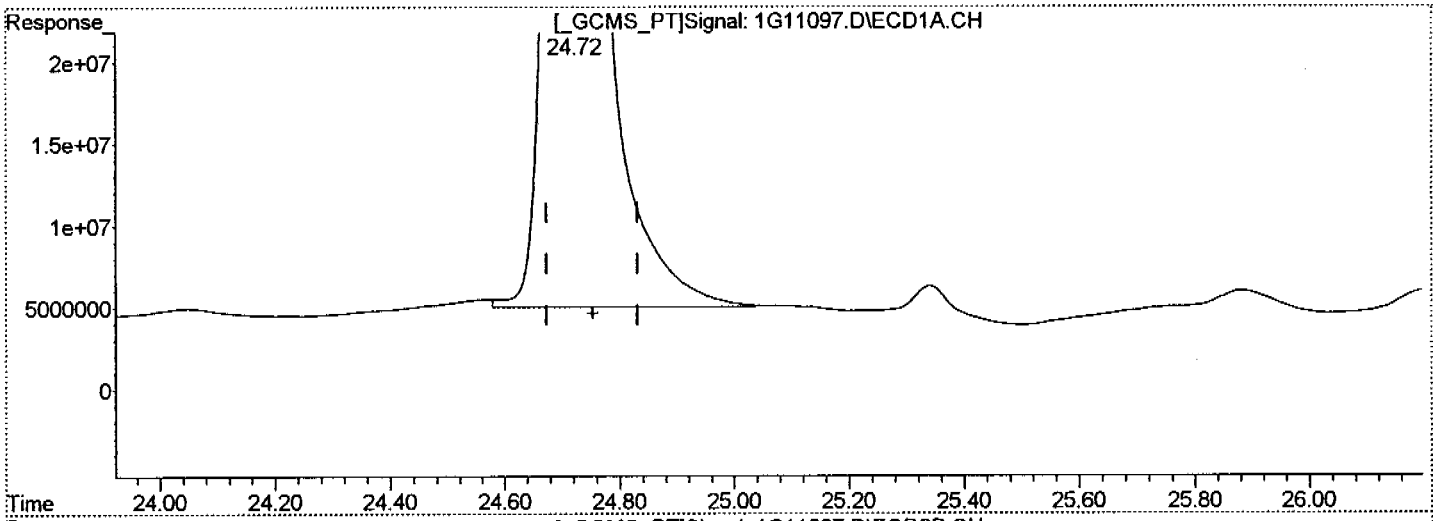
(+) = Expected Retention Time

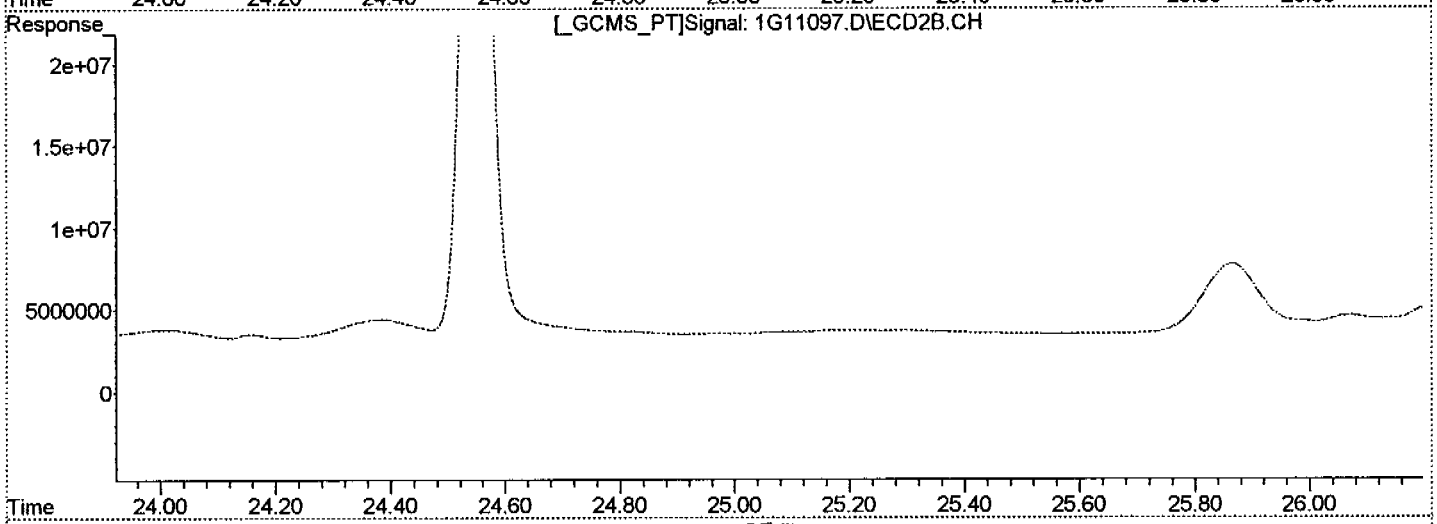
1G11097.D H1G276.M Thu Aug 12 17:02:24 2004 GC_1G

Quantification Report (QedIt)

Signal #1 : C:\MSDCHEM\1\DATA\1G11097.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11097.D\ECD2B.CH
Acq On : 8-12-04 03:30:25 PM Operator: kristis
Sample : CC276-400 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 12 17:00 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration





QEdit

(11) 2,4-DB

24.72min 3309.792PPB m

response 5807584389

(11) 2,4-DB #2

23.78min 407.442PPB

response 334706093

893

(+) = Expected Retention Time

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: G1G277-CC276
Lab FileID: 1G11109.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1G11109.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G11109.D\ECD2B.CH
Acq On : 8-13-04 01:07:46 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1		Dalapon	1.812	1.283 E6	29.2#	61	0.00	3.68- 3.74
2	S	2,4-DCAA	1.612	1.712 E6	-6.2	110	0.00	16.44-16.50
3		Dicamba	6.291	6.919 E6	-10.0	119	0.00	17.02-17.08
4		MCPP	4.722	5.186 E3	-9.8	125	0.00	17.71-17.77
5		MCPA	7.951	8.698 E3	-9.4	118	0.00	18.19-18.25
6		Dichloroprop	1.678	1.839 E6	-9.6	122	0.00	19.33-19.39
7		2,4-D	2.030	2.249 E6	-10.8	125	0.00	20.02-20.08
8		Pentachlorophenol	22.538	25.528 E6	-13.3	117	0.00	20.63-20.69
9		2,4,5-TP	8.433	9.319 E6	-10.5	110	0.00	22.45-22.51
10		2,4,5-T	7.713	8.295 E6	-7.5	113	0.00	23.21-23.34
11		2,4-DB	1.755	1.576 E6	10.2	171#	0.01	24.68-24.84
12		Dinoseb	5.911	7.068 E6	-19.6#	119	0.00	27.67-27.73
13		Picloram	9.525	8.482 E6	11.0	85	0.03	27.17-27.37

***** Signal #2 *****

1		Dalapon	1.626	1.149 E6	29.3#	90	-0.02	3.06- 3.16
2	S	2,4-DCAA	1.283	1.293 E6	-0.8	104	0.00	15.48-15.54
3		Dicamba	5.057	5.140 E6	-1.6	109	0.00	16.00-16.06
4		MCPP	3.629	4.036 E3	-11.2	120	0.00	16.46-16.52
5		MCPA	6.606	7.072 E3	-7.1	117	0.00	17.19-17.25
6		Dichloroprop	1.271	1.336 E6	-5.1	118	0.00	18.18-18.24
7		2,4-D	1.676	1.823 E6	-8.8	130	0.00	19.10-19.16
8		Pentachlorophenol	18.344	19.689 E6	-7.3	113	0.00	20.07-20.13
9		2,4,5-TP	6.438	6.578 E6	-2.2	103	0.00	21.35-21.41
10		2,4,5-T	6.144	6.236 E6	-1.5	105	0.00	22.40-22.50
11		2,4-DB	821.481	899.449 E3	-9.5	121	0.00	23.72-23.88
12		Dinoseb	3.836	4.588 E6	-19.6#	116	0.00	24.52-24.58
13		Picloram	8.350	7.064 E6	15.4#	77	0.02	27.01-27.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G11059.D H1G276.M Mon Aug 16 09:18:00 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11109.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G11109.D\ECD2B.CH
Acq On : 8-13-04 01:07:46 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 01:38:52 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Initial Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
2) S	2,4-DCAA	16.47	15.51	684.8E6	517.2E6	424.869	403.095
	Spiked Amount 1000.000				Recovery =	42.49%	40.31%
	Target Compounds						
1)	Dalapon	3.71	3.11	51311081	45952322	28.325m	28.266m
3)	Dicamba	17.05	16.03	276.7E6	205.6E6	43.987	40.655
4)	MCPP	17.74	16.49	51858223	40355320	10981.130	11118.752
5)	MCPA	18.22	17.22	86978425	70722689	10939.732	10705.199
6)	Dichloroprop	19.36	18.21	367.7E6	267.2E6	219.195	210.271
7)	2,4-D	20.05	19.13	449.9E6	364.6E6	221.558	217.474
8)	Pentachloropheno	20.66	20.10	510.6E6	393.8E6	22.653	21.466
9)	2,4,5-TP	22.48	21.38	372.8E6	263.1E6	44.206	40.871
10)	2,4,5-T	23.28	22.45	331.8E6	249.4E6	43.018	40.602
11)	2,4-DB	24.76	23.80	315.1E6	179.9E6	179.604	218.982
12)	Dinoseb	27.70	24.55	1413.6E6	917.6E6	239.148	239.229
13)	Picloram	27.27	27.09	1696.4E6	1412.9E6	178.100	169.211

895

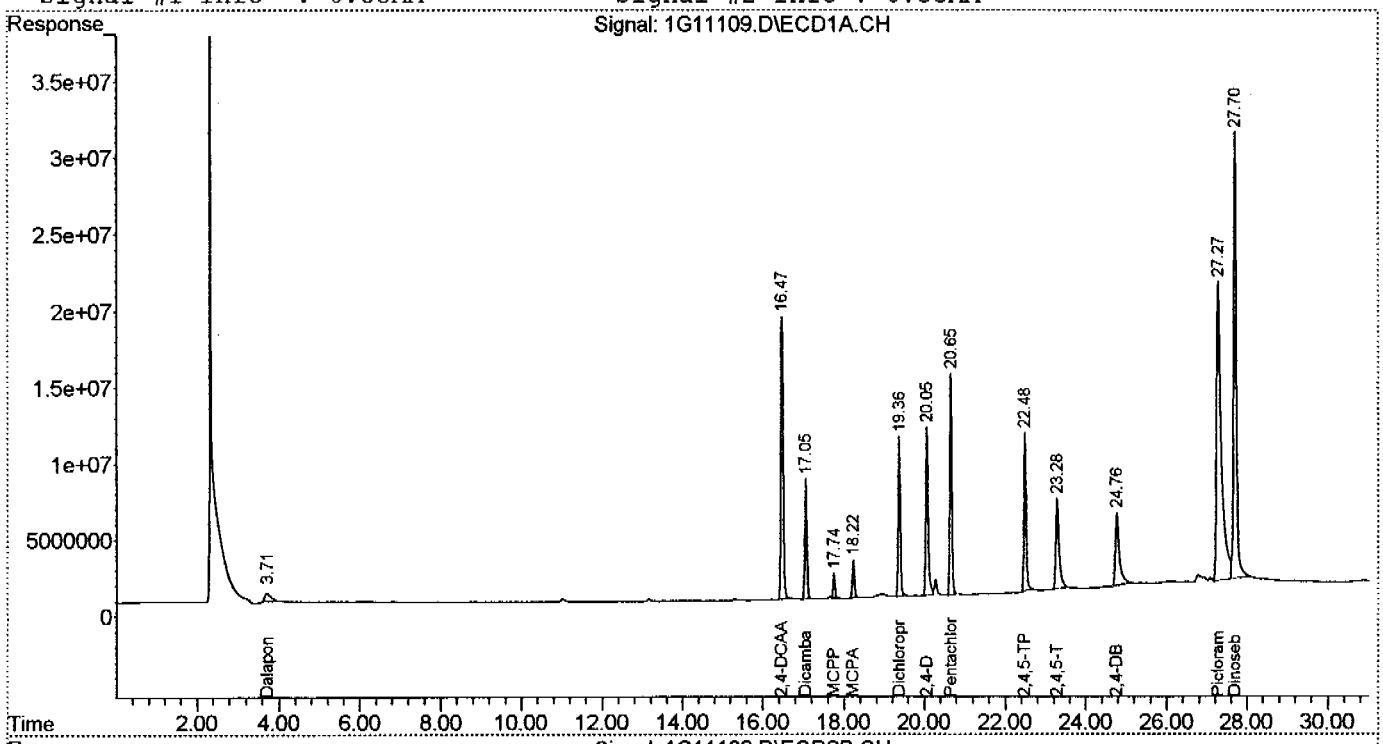
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

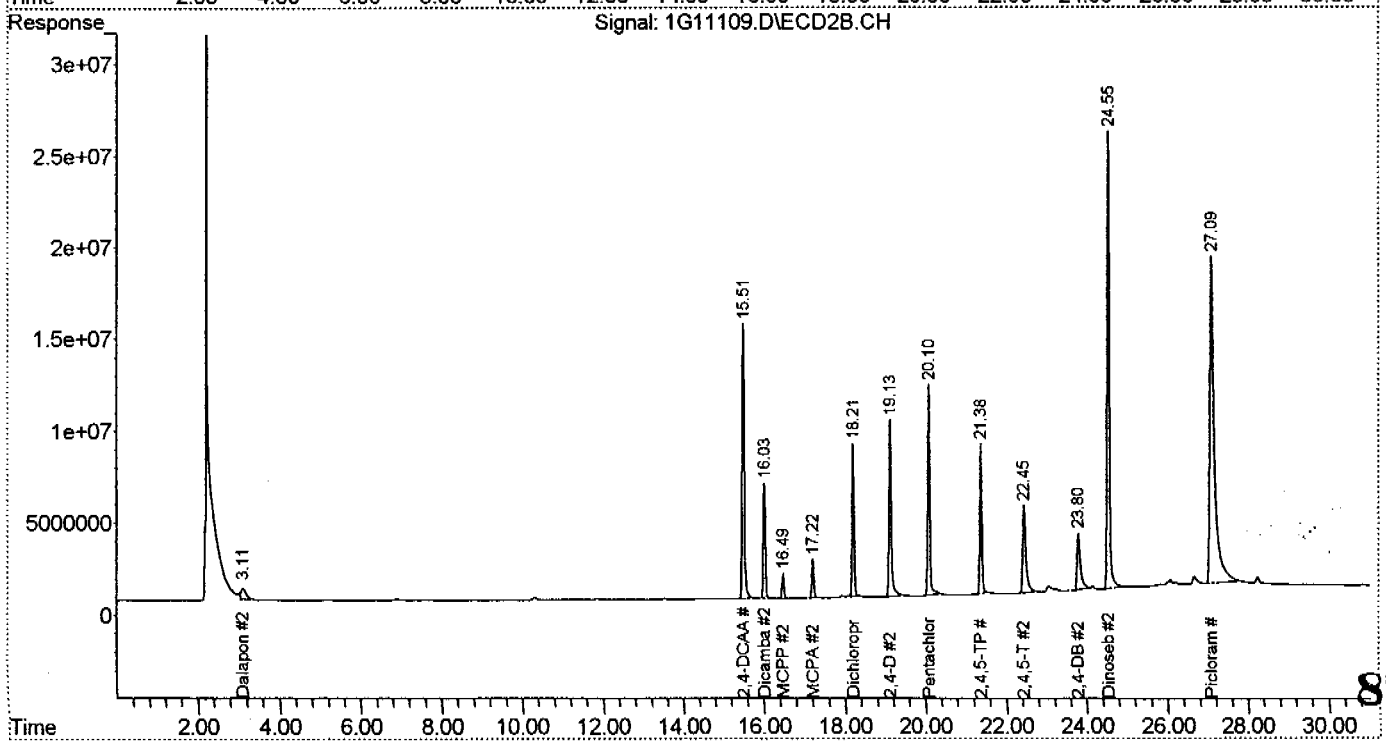
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11109.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G11109.D\ECD2B.CH
Acq On : 8-13-04 01:07:46 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 9:16 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration
DataAcq Meth : H1G276.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTX-CLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 0.53MM Signal #2 Info : 0.53MM



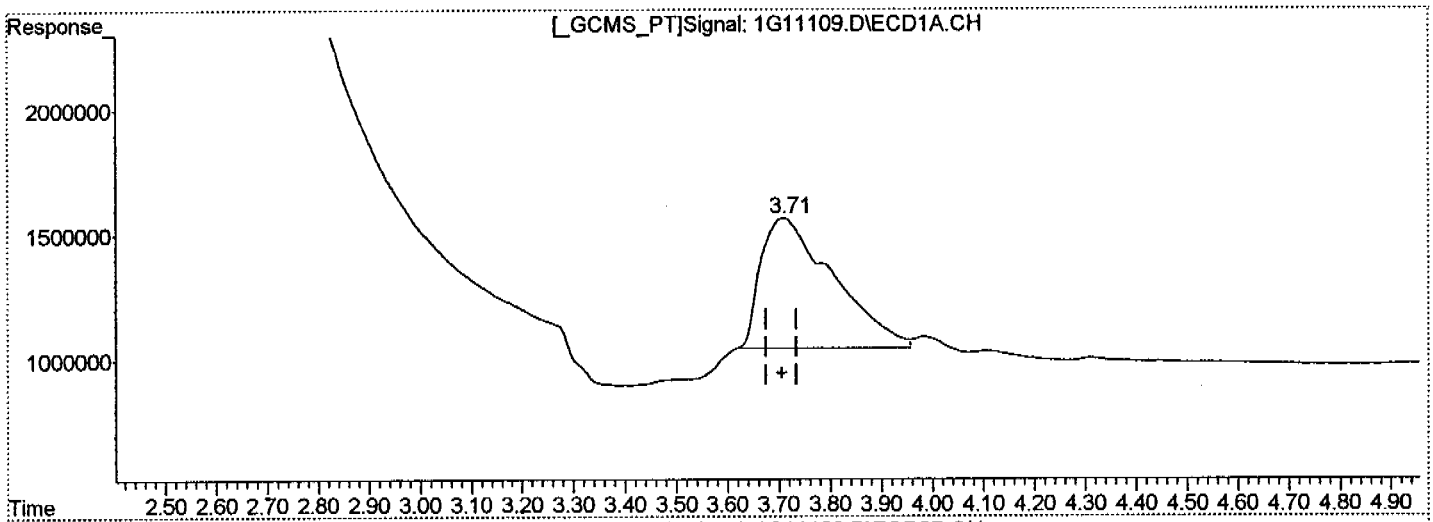


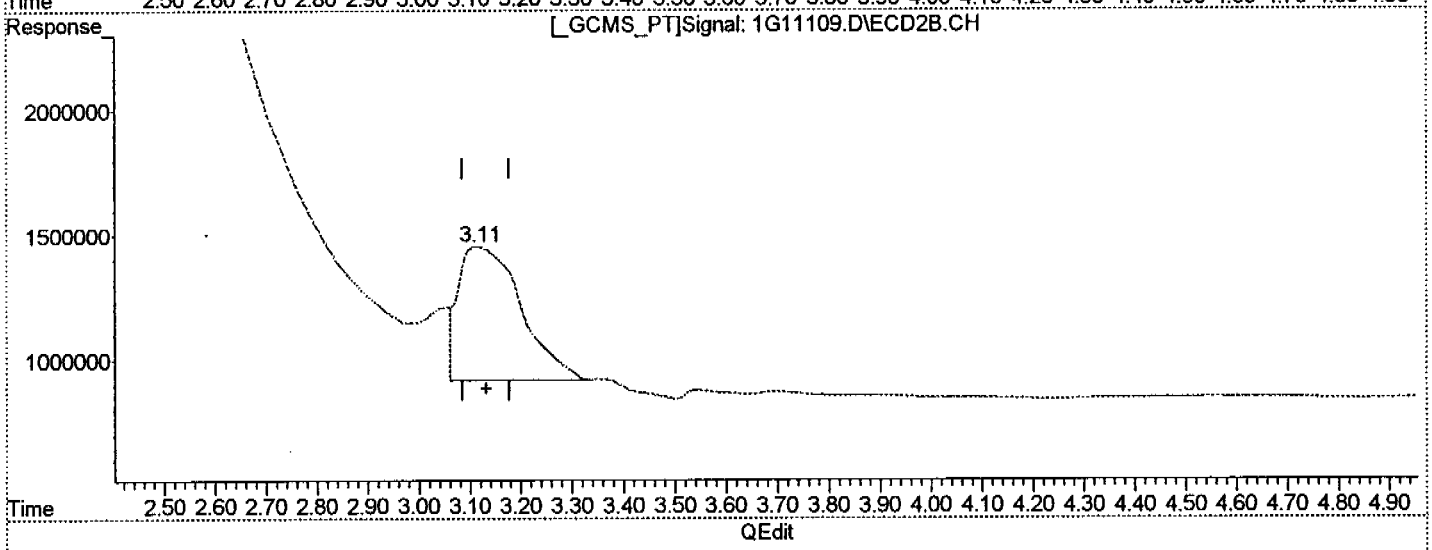
896

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11109.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G11109.D\ECD2B.CH
Acq On : 8-13-04 01:07:46 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 9:16 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration





(1) Dalapon

3.71min 28.325 m

response 51311081

(1) Dalapon #2

3.11min 28.266 m

response 45952322

(+) = Expected Retention Time

1G11109.D H1G276.M Wed Aug 18 10:53:11 2004 GC 1G

Continuing Calibration Summary

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: G1G277-ECC276
Lab FileID: 1G11112.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1G11112.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G11112.D\ECD2B.CH
Acq On : 8-13-04 02:49:04 AM Operator: kristis
Sample : ECC276-400 Inst : GC1G
Misc : OP17600,G1G277,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Wed Aug 11 09:07:15 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1		Dalapon	1.812	1.468 E6	19.0#	75	0.00	3.67- 3.73
2	S	2,4-DCAA	1.612	1.686 E6	-4.6	107	0.00	16.44-16.50
3		Dicamba	6.291	6.942 E6	-10.3	109	0.00	17.02-17.08
4		MCPP	4.722	4.344 E3	8.0	86	0.00	17.71-17.77
5		MCPA	7.951	8.149 E3	-2.5	104	0.00	18.19-18.25
6		Dichloroprop	1.678	1.800 E6	-7.3	109	0.00	19.33-19.39
7		2,4-D	2.030	2.236 E6	-10.1	107	0.00	20.02-20.08
8		Pentachlorophenol	22.538	27.214 E6	-20.7#	113	0.00	20.63-20.69
9		2,4,5-TP	8.433	10.182 E6	-20.7#	113	0.00	22.45-22.51
10		2,4,5-T	7.713	8.937 E6	-15.9#	101	0.00	23.20-23.32
11		2,4-DB	1.755	18.490 E6	-953.6#	492#	-0.04	24.64-24.79
12		Dinoseb	5.911	7.431 E6	-25.7#	114	0.00	27.67-27.73
13		Picloram	9.525	9.786 E6	-2.7	95	-0.02	27.13-27.32

***** Signal #2 *****

1		Dalapon	1.626	1.822 E6	-12.1	112	-0.02	3.07- 3.16
2	S	2,4-DCAA	1.283	1.232 E6	4.0	99	0.00	15.48-15.54
3		Dicamba	5.057	5.347 E6	-5.7	103	0.00	16.00-16.06
4		MCPP	3.629	3.783 E3	-4.2	100	0.00	16.47-16.53
5		MCPA	6.606	6.561 E3	0.7	101	0.00	17.19-17.25
6		Dichloroprop	1.271	1.293 E6	-1.7	102	0.00	18.18-18.24
7		2,4-D	1.676	1.736 E6	-3.6	98	0.00	19.10-19.16
8		Pentachlorophenol	18.344	19.857 E6	-8.2	104	0.00	20.07-20.13
9		2,4,5-TP	6.438	7.289 E6	-13.2	102	0.00	21.35-21.41
10		2,4,5-T	6.144	6.183 E6	-0.6	79	0.00	22.38-22.49
11		2,4-DB	821.481	950.091 E3	-15.7#	103	-0.01	23.70-23.86
12		Dinoseb	3.836	4.850 E6	-26.4#	110	0.00	24.52-24.58
13		Picloram	8.350	7.567 E6	9.4	90	-0.02	26.98-27.14

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G11057.D H1G276.M Mon Aug 16 10:17:46 2004 GC_1G

SERIAL DILUTION RESULTS SUMMARY

Login Number: N74646
Account: ENSRMAA - ENSR Consulting & Engineering
Project: Former Camp Butner, NC

QC Batch ID: MP26857
Matrix Type: AQUEOUS

Methods: SW846 6020
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Instrument Detection Limits

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Instrument ID: ICPMS1 **Effective Date:** 07/01/04

Analyte	IDL ug/l
Aluminum	2.86
Antimony	.103
Arsenic	.565
Barium	.051
Beryllium	.035
Boron	.696
Cadmium	.088
Calcium	25.1
Chromium	.115
Cobalt	.029
Copper	1.18
Iron	2.81
Lead	.081
Magnesium	3.78
Manganese	.202
Molybdenum	.146
Nickel	.264
Potassium	22.2
Selenium	.939
Silver	.177
Sodium	28.35
Strontium	.11
Thallium	.0535
Tin	.0346
Titanium	.129
Vanadium	1.08
Zinc	3.79

The above applies to the following instrument runs:
MA14277,MA14290

Instrument Detection Limits

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Instrument ID: LEEMANHG1 **Effective Date:** 06/17/04

Analyte	IDL ug/l
Mercury	.0454

The above applies to the following instrument runs:
MA14274,MA14280

Instrument Detection Limits

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Instrument ID: TJATRACE1 **Effective Date:** 05/21/04

Analyte	IDL ug/l
Aluminum	45.5
Antimony	3.9
Arsenic	4.5
Barium	1.4
Beryllium	.2
Cadmium	.4
Calcium	34.2
Chromium	.9
Cobalt	.8
Copper	1
Iron	29.1
Lead	2
Magnesium	29.1
Manganese	.3
Nickel	2.3
Potassium	23.8
Selenium	4.5
Silver	.6
Sodium	271.5
Thallium	5.1
Vanadium	1.4
Zinc	3.1

The above applies to the following instrument runs:
MA14303

Instrument Detection Limits

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Instrument ID: TJATRACE3 **Effective Date:** 06/11/04

Analyte	IDL ug/l
Aluminum	9.9
Antimony	3.2
Arsenic	2.6
Barium	.4
Beryllium	.1
Cadmium	.3
Calcium	9.1
Chromium	.8
Cobalt	.9
Copper	.9
Iron	18.4
Lead	1.4
Magnesium	8.7
Manganese	.2
Nickel	1.1
Palladium	2.7
Potassium	11.6
Selenium	1.8
Silicon	7.7
Silver	.7
Sodium	169.8
Thallium	4.5
Tin	2.3
Vanadium	1
Zinc	.9

The above applies to the following instrument runs:
MA14278,MA14293

Instrument Linear Ranges

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Instrument ID: ICPMS1 **Effective Date:** 07/21/04

Analyte	Linear Range ug/l
Aluminum	100000
Antimony	500
Arsenic	500
Barium	500
Beryllium	500
Boron	500
Cadmium	500
Calcium	100000
Chromium	500
Cobalt	500
Copper	500
Iron	100000
Lead	500
Magnesium	100000
Manganese	500
Molybdenum	500
Nickel	500
Potassium	100000
Selenium	500
Silver	500
Sodium	100000
Strontium	500
Thallium	500
Tin	500
Titanium	500
Vanadium	500
Zinc	500

The above applies to the following instrument runs:
MA14277,MA14290

Instrument Linear Ranges

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Instrument ID: TJATRACE1 **Effective Date:** 05/21/04

Analyte	Linear Range ug/l
Aluminum	1000000
Antimony	50000
Arsenic	50000
Barium	25000
Beryllium	10000
Cadmium	25000
Calcium	1000000
Chromium	50000
Cobalt	50000
Copper	50000
Iron	1000000
Lead	50000
Magnesium	1000000
Manganese	50000
Nickel	50000
Potassium	500000
Selenium	50000
Silver	1000
Sodium	400000
Thallium	50000
Vanadium	50000
Zinc	10000

The above applies to the following instrument runs:
MA14303

Instrument Linear Ranges

Job Number: N74646
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Instrument ID: TJATRACE3 **Effective Date:** 06/11/04

Analyte	Linear Range ug/l
Aluminum	1000000
Antimony	50000
Arsenic	25000
Barium	25000
Beryllium	25000
Cadmium	25000
Calcium	1000000
Chromium	50000
Cobalt	50000
Copper	50000
Iron	1000000
Lead	50000
Magnesium	1000000
Manganese	25000
Nickel	50000
Palladium	50000
Potassium	500000
Selenium	50000
Silicon	50000
Silver	1000
Sodium	750000
Thallium	50000
Tin	50000
Vanadium	50000
Zinc	50000

The above applies to the following instrument runs:
MA14278,MA14293

ICP-MS Correction Factors

for run MA14277, MA14290

ACCUTEST

	Mass and Element	Correction Equation	Additional masses to monitor	Correction Equation	Additional masses to monitor	Correction Equation	Run ID	Date	Analyst
							14215	7/29/04	MD
ANALYTICAL MASSES	7Li								
	9Be								
	11B		10B						
	23Na								
	25Mg		26Mg						
	27Al								
	39K								
	43Ca		44Ca						
	47Ti								
	51V	-3.0002 x 53ClO							
	52Cr	-0.0010 x 13C	53Cr	-1.0000 x 53ClO					
	55Mn	-0.001 x 57Fe							
	56Fe	-0.013 x 43Ca	57Fe						
	59Co	-0.004 x 43Ca							
	60Ni	-0.002 x 43Ca	62Ni						
	65Cu	-0.003 x 47Ti	63Cu						
	66Zn	-0.006 x 47Ti	67Zn		68Zn				
	75As	-3.0 x ArCl							
	82Se	-1.001 x 83Kr	77Se		78Se				
	88Sr								
	95Mo		97Mo		98Mo				
	105Pd								
	107Ag		109Ag						
	111Cd	-0.982 x 108MoO	106Cd		108Cd				
					114Cd	-0.027 x 118Sn - (-.15) MoO			
	118Sn								
	121Sb		123Sb						
	137Ba								
	202Hg								
	205Tl		203Tl						
	208Pb	206 +207+208							
	238U								
POLY-ATOMICS	51ClO	-0.114 x 52Cr							
	77ArCl	-0.84 x 78Se							
	108MoO	-0.712 x 106Cd							
INTERNAL STDS	6Li	-0.081 x 7Li							
	45Sc								
	83Kr								
	89Y								
	103Rh								
	115In	-0.014 x 118Sn							
	159Tb								
	165Ho								
	209Bi								

Reviewed by:_____ Date:_____

FN: AA049
Rev. Date: 3/17/03

1025

TRACE 3 7/14/04 (RP)
Ca+Fe

ement:	Ba	Be	Cd	Co	Cr
velength:	493.409	313.042	226.502/2	228.616	267.716
IECs:	YES	YES	YES	YES	YES
mber of IECs:	0	2	3	2	2
fecting Element:	--n/a--	V 2924	Fe2714	Mo2020	Al3082
factor:	--n/a--	.000323	.000098	-.00083	.000006
factor:	--n/a--	0	0	0	0
e?:	--n/a--	YES	YES	YES	YES
fecting Element:	--n/a--	Mo2020	Al3082	Fe2714	V 2924
factor:	--n/a--	-.00044	.000021	-.00002	-.00038
factor:	--n/a--	0	0	0	0
e?:	--n/a--	YES	YES	YES	YES
fecting Element:	--n/a--	--n/a--	Ni2316	--n/a--	--n/a--
factor:	--n/a--	--n/a--	0	--n/a--	--n/a--
factor:	--n/a--	--n/a--	0	--n/a--	--n/a--
e?:	--n/a--	--n/a--	YES	--n/a--	--n/a--

ement:	Cu	Mn	Ni	Ag	V
velength:	324.753	257.610	231.604/2	328.068	292.402
IECs:	YES	YES	YES	YES	YES
ber of IECs:	2	0	1	2	3
fecting Element:	Fe2714	--n/a--	V 2924	Mo2020	Fe2714
factor:	.000006	--n/a--	-.00066	-.00013	-.00041
factor:	0	--n/a--	0	0	0
e?:	YES	--n/a--	YES	YES	YES
fecting Element:	Mo2020	--n/a--	--n/a--	V 2924	Mo2020
factor:	.000318	--n/a--	--n/a--	-.00052	.000266
factor:	0	--n/a--	--n/a--	0	0
e?:	YES	--n/a--	--n/a--	YES	YES
fecting Element:	--n/a--	--n/a--	--n/a--	--n/a--	Cr2677
factor:	--n/a--	--n/a--	--n/a--	--n/a--	-.0014
factor:	--n/a--	--n/a--	--n/a--	--n/a--	0
e?:	--n/a--	--n/a--	--n/a--	--n/a--	YES

IEC for run MA14278, MA14293

ement:	Zn	As	Tl	Sm	Sm
velength:	206.200	189.042/2	190.864/2	220.353	196.026
IECs:	YES	YES	YES	YES	YES
mber of IECs:	5	7	6	2	2
fecting Element:	Fe2714	Pd3404	Fe2714	2203/1	1960/1
factor:	.000021	.022	.001337	-.33333	-.33333
factor:	0	0	0	0	0
e?:	YES	YES	YES	YES	YES
fecting Element:	Ca3179	Mo2020	Mg2790	2203/2	1960/2
factor:	.000002	-.00007	.000006	-.66667	-.66667
factor:	0	0	0	0	0
e?:	YES	YES	YES	YES	YES
fecting Element:	Al3082	V 2924	V 2924	--n/a--	--n/a--
factor:	-------	.000011	-.00102	--n/a--	--n/a--
factor:	0	0	0	--n/a--	--n/a--
e?:	YES	YES	YES	--n/a--	--n/a--
fecting Element:	Mo2020	Fe2714	Al3082	--n/a--	--n/a--
factor:	.000305	-------	-.00001	--n/a--	--n/a--
factor:	0	0	0	--n/a--	--n/a--
e?:	YES	YES	YES	--n/a--	--n/a--
fecting Element:	V 2924	Cr2677	Ca3179	--n/a--	--n/a--
factor:	-.0009	-.00377	.000009	--n/a--	--n/a--
factor:	0	0	0	--n/a--	--n/a--
e?:	YES	YES	YES	--n/a--	--n/a--
fecting Element:	--n/a--	Se1960	Mn2576	--n/a--	--n/a--
factor:	--n/a--	0	-.0006	--n/a--	--n/a--
factor:	--n/a--	0	0	--n/a--	--n/a--
e?:	--n/a--	YES	YES	--n/a--	--n/a--
fecting Element:	--n/a--	Al3082	--n/a--	--n/a--	--n/a--
factor:	--n/a--	.000001	--n/a--	--n/a--	--n/a--
factor:	--n/a--	0	--n/a--	--n/a--	--n/a--
e?:	--n/a--	YES	--n/a--	--n/a--	--n/a--

lement:	Sb	Al	Ca	Fe	Mg
avelength:	206.838/2	308.215	317.933	271.441	279.078
IECs:	YES	NO	YES	YES	YES
mber of IECs:	6	3	0	2	0
fecting Element:	Fe2714	Mo2020	--n/a--	Mo2020	--n/a--
factor:	.000043	.010689	--n/a--	.000685	--n/a--
factor:	0	0	--n/a--	0	--n/a--
se?:	YES	YES	--n/a--	YES	--n/a--
fecting Element:	V 2924	V 2924	--n/a--	V 2924	--n/a--
factor:	-.00196	-.02184	--n/a--	.101477	--n/a--
factor:	0	0	--n/a--	0	--n/a--
se?:	YES	YES	--n/a--	YES	--n/a--
fecting Element:	Cr2677	Mg2790	--n/a--	--n/a--	--n/a--
factor:	.00255	-.00023	--n/a--	--n/a--	--n/a--
factor:	0	0	--n/a--	--n/a--	--n/a--
se?:	YES	YES	--n/a--	--n/a--	--n/a--
fecting Element:	Al3082	--n/a--	--n/a--	--n/a--	--n/a--
factor:	-.00002	--n/a--	--n/a--	--n/a--	--n/a--
factor:	0	--n/a--	--n/a--	--n/a--	--n/a--
se?:	YES	--n/a--	--n/a--	--n/a--	--n/a--
fecting Element:	Ca3179	--n/a--	--n/a--	--n/a--	--n/a--
factor:	.000005	--n/a--	--n/a--	--n/a--	--n/a--
factor:	0	--n/a--	--n/a--	--n/a--	--n/a--
se?:	YES	--n/a--	--n/a--	--n/a--	--n/a--
fecting Element:	Mg2790	--n/a--	--n/a--	--n/a--	--n/a--
factor:	.000002	--n/a--	--n/a--	--n/a--	--n/a--
factor:	0	--n/a--	--n/a--	--n/a--	--n/a--
se?:	YES	--n/a--	--n/a--	--n/a--	--n/a--

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ement:	K	Na	Mo	Pd	Si
avelength:	766.491	330.232	202.030	340.458	288.158
e IECs:	YES	YES	YES	YES	YES
mber of IECs:	1	7	2	0	2
fecting Element:	Al3082	Ca3179	V 2924	--n/a--	V 2924
factor:	-.00023	-.00076	-.00055	--n/a--	-.008
factor:	0	0	0	--n/a--	0
se?:	YES	YES	YES	--n/a--	YES

ffecting Element:	--n/a--	Fe2714	Fe2714	--n/a--	Mo2020
1 factor:	--n/a--	-.00276	-.00001	--n/a--	.008
2 factor:	--n/a--	0	0	--n/a--	0
se?:	--n/a--	YES	YES	--n/a--	YES
ffecting Element:	--n/a--	V 2924	--n/a--	--n/a--	--n/a--
1 factor:	--n/a--	-.01376	--n/a--	--n/a--	--n/a--
2 factor:	--n/a--	0	--n/a--	--n/a--	--n/a--
se?:	--n/a--	YES	--n/a--	--n/a--	--n/a--
ffecting Element:	--n/a--	Mo2020	--n/a--	--n/a--	--n/a--
1 factor:	--n/a--	-.028	--n/a--	--n/a--	--n/a--
2 factor:	--n/a--	0	--n/a--	--n/a--	--n/a--
se?:	--n/a--	YES	--n/a--	--n/a--	--n/a--
Effecting Element:	--n/a--	Mg2790	--n/a--	--n/a--	--n/a--
1 factor:	--n/a--	.000698	--n/a--	--n/a--	--n/a--
2 factor:	--n/a--	0	--n/a--	--n/a--	--n/a--
se?:	--n/a--	YES	--n/a--	--n/a--	--n/a--
ffecting Element:	--n/a--	Zn2062	--n/a--	--n/a--	--n/a--
1 factor:	--n/a--	-.0928	--n/a--	--n/a--	--n/a--
2 factor:	--n/a--	0	--n/a--	--n/a--	--n/a--
se?:	--n/a--	YES	--n/a--	--n/a--	--n/a--
ffecting Element:	--n/a--	Al3082	--n/a--	--n/a--	--n/a--
1 factor:	--n/a--	-.0003	--n/a--	--n/a--	--n/a--
2 factor:	--n/a--	0	--n/a--	--n/a--	--n/a--
se?:	--n/a--	YES	--n/a--	--n/a--	--n/a--

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lement:	Sn	Pb	Pb	Se	Se
avelength:	189.989	220.351	220.352/2	196.021	196.022/2
se IECs:	YES	YES	YES	YES	YES
umber of IECs:	2	8	8	6	6
ffecting Element:	Cr2677	Fe2714	Fe2714	Mn2576	Fe2714
1 factor:	-.00012	.000072	.00006	.000291	-.00037
2 factor:	0	0	0	0	0
se?:	YES	YES	YES	YES	YES
ffecting Element:	Mo2020	Al3082	Al3082	Pd3404	Mn2576
1 factor:	.0012	.000367	-.00018	.000839	.0005
2 factor:	0	0	0	0	0
se?:	YES	YES	YES	YES	YES

ffecting Element:	--n/a--	Mn2576	Mn2576	V 2924	Pd3404
1 factor:	--n/a--	.000018	.000146	.000535	-.00053
2 factor:	--n/a--	0	0	0	0
e?:	--n/a--	YES	YES	YES	YES

ffecting Element:	--n/a--	Pd3404	Pd3404	Mo2020	V 2924
1 factor:	--n/a--	.000874	.00053	.000164	-.00026
2 factor:	--n/a--	0	0	0	0
se?:	--n/a--	YES	YES	YES	YES

ffecting Element:	--n/a--	V 2924	V 2924	Fe2714	Al3082
1 factor:	--n/a--	.000233	-.00009	-.00002	.000004
2 factor:	--n/a--	0	0	0	0
se?:	--n/a--	YES	YES	YES	YES

ffecting Element:	--n/a--	Mo2020	Mo2020	Al3082	Mg2790
1 factor:	--n/a--	-.00039	-.00104	.00001	-------
2 factor:	--n/a--	0	0	0	0
se?:	--n/a--	YES	YES	YES	YES

ffecting Element:	--n/a--	Ca3179	Ca3179	--n/a--	--n/a--
1 factor:	--n/a--	.000004	-------	--n/a--	--n/a--
2 factor:	--n/a--	0	0	--n/a--	--n/a--
se?:	--n/a--	YES	YES	--n/a--	--n/a--

ffecting Element:	--n/a--	Mg2790	Mg2790	--n/a--	--n/a--
1 factor:	--n/a--	.000002	-------	--n/a--	--n/a--
2 factor:	--n/a--	0	0	--n/a--	--n/a--
se?:	--n/a--	YES	YES	--n/a--	--n/a--

Element:	Ba	Be	Cd	Co	Cr
Wavelength:	493.409	313.042	226.502	228.616	267.716
Use IECs:	YES	YES	YES	YES	YES
Number of IECs:	0	4	3	3	4
Affecting Element:	--n/a--	Cu3247	Al3082	Ni2316	Fe2714
k1 factor:	--n/a--	-.00002	.000015	.000218	-.00002
k2 factor:	--n/a--	0	0	0	0
use?:	--n/a--	YES	YES	YES	YES
Affecting Element:	--n/a--	Cr2677	Fe2714	Cr2677	V_2924
k1 factor:	--n/a--	-.00001	.000134	-.00001	.000111
k2 factor:	--n/a--	0	0	0	0
use?:	--n/a--	YES	YES	YES	NO
Affecting Element:	--n/a--	Mn2576	Co2286	Ba4934	Mn2576
k1 factor:	--n/a--	.000093	-.0001	.000032	.000124
k2 factor:	--n/a--	0	0	0	0
use?:	--n/a--	YES	YES	YES	YES
Affecting Element:	--n/a--	V 2924	--n/a--	--n/a--	Ba4934
k1 factor:	--n/a--	-.00005	--n/a--	--n/a--	.00006
k2 factor:	--n/a--	0	--n/a--	--n/a--	0
use?:	--n/a--	YES	--n/a--	--n/a--	YES

Element:	Cu	Mn	Ni	Ag	V
Wavelength:	324.753	257.610	231.604/2	328.068	292.402
Use IECs:	YES	YES	YES	YES	YES
Number of IECs:	8	6	5	5	4
Affecting Element:	Fe2714	Co2286	V_2924	Cu3247	Fe2714
k1 factor:	.000007	.000039	-.00001	-.00003	.000028
k2 factor:	0	0	0	0	0
use?:	YES	YES	NO	YES	YES
Affecting Element:	Cr2677	Al3082	Co2286	Mn2576	Mn2576
k1 factor:	-.00007	.000006	-.00036	.000096	-.0001
k2 factor:	0	0	0	0	0
use?:	YES	YES	YES	YES	YES
Affecting Element:	Al3082	Cr2677	Fe2714	Fe2714	Zn2138
k1 factor:	.000007	.000016	.000001	-.00001	.0007
k2 factor:	0	0	0	0	0
use?:	YES	YES	YES	YES	YES

IEC for run MA 14303

Affecting Element:	Ca3179	V 2924	Al3082	V 2924	Mg2790
k1 factor:	-------	.000036	-------	.000051	-------
k2 factor:	0	0	0	0	0
use?:	YES	YES	NO	YES	YES
Affecting Element:	Ni2316	Fe2714	Ba4934	Ba4934	--n/a--
k1 factor:	.000055	-.00005	.00044	-.00004	--n/a--
k2 factor:	0	0	0	0	--n/a--
use?:	YES	YES	YES	YES	--n/a--
Affecting Element:	Mn2576	Ni2316	--n/a--	--n/a--	--n/a--
k1 factor:	-.00002	.00016	--n/a--	--n/a--	--n/a--
k2 factor:	0	0	--n/a--	--n/a--	--n/a--
use?:	YES	YES	--n/a--	--n/a--	--n/a--
Affecting Element:	V 2924	--n/a--	--n/a--	--n/a--	--n/a--
k1 factor:	-.00001	--n/a--	--n/a--	--n/a--	--n/a--
k2 factor:	0	--n/a--	--n/a--	--n/a--	--n/a--
use?:	YES	--n/a--	--n/a--	--n/a--	--n/a--
Affecting Element:	Mg2790	--n/a--	--n/a--	--n/a--	--n/a--
k1 factor:	.000001	--n/a--	--n/a--	--n/a--	--n/a--
k2 factor:	0	--n/a--	--n/a--	--n/a--	--n/a--
use?:	YES	--n/a--	--n/a--	--n/a--	--n/a--

Element:	Zn	As	Tl	S	S
Wavelength:	213.856/2	189.042/2	190.861	220.353	196.026
Use IECs:	YES	YES	YES	YES	YES
Number of IECs:	5	7	8	2	2
Affecting Element:	Fe2714	Al3082	Fe2714	2203/1	1960/1
k1 factor:	.000109	.001438	-.00005	-.333	-.333
k2 factor:	0	0	0	0	0
use?:	YES	NO	YES	YES	YES
Affecting Element:	Co2286	Cr2677	Al3082	2203/2	1960/2
k1 factor:	-.00008	-.0063	-.00002	-.667	-.667
k2 factor:	0	0	0	0	0
use?:	YES	YES	YES	YES	YES
Affecting Element:	Al3082	Ba4934	V 2924	--n/a--	--n/a--
k1 factor:	.000008	.0002	.001823	--n/a--	--n/a--
k2 factor:	0	0	0	--n/a--	--n/a--
use?:	YES	YES	YES	--n/a--	--n/a--

Affecting Element:	Ni2316	Mn2576	Mn2576	--n/a--	--n/a--
k1 factor:	.00515	.000071	.000199	--n/a--	--n/a--
k2 factor:	0	0	0	--n/a--	--n/a--
use?:	YES	YES	YES	--n/a--	--n/a--
Affecting Element:	V 2924	Ca3179	Ca3179	--n/a--	--n/a--
k1 factor:	.000001	.000004	-.00001	--n/a--	--n/a--
k2 factor:	0	0	0	--n/a--	--n/a--
use?:	YES	YES	YES	--n/a--	--n/a--
Affecting Element:	--n/a--	Fe2714	Mg2790	--n/a--	--n/a--
k1 factor:	--n/a--	.000003	.000002	--n/a--	--n/a--
k2 factor:	--n/a--	0	0	--n/a--	--n/a--
use?:	--n/a--	YES	YES	--n/a--	--n/a--
Affecting Element:	--n/a--	V 2924	Cr2677	--n/a--	--n/a--
k1 factor:	--n/a--	-.00001	.00025	--n/a--	--n/a--
k2 factor:	--n/a--	0	0	--n/a--	--n/a--
use?:	--n/a--	YES	YES	--n/a--	--n/a--
Affecting Element:	--n/a--	--n/a--	Co2286	--n/a--	--n/a--
k1 factor:	--n/a--	--n/a--	.002866	--n/a--	--n/a--
k2 factor:	--n/a--	--n/a--	0	--n/a--	--n/a--
use?:	--n/a--	--n/a--	YES	--n/a--	--n/a--

Element:	S	Al	Ca	Fe	Mg
Wavelength:	206.838	308.215	317.933	271.441	279.078
Use IECs:	YES	YES	YES	YES	YES
Number of IECs:	2	9	3	7	1
Affecting Element:	2068/1	Fe2714	Fe2714	Al3082	Fe2714
k1 factor:	-.333	-------	.000028	.000287	-.00013
k2 factor:	0	0	0	0	0
use?:	YES	YES	YES	YES	YES
Affecting Element:	2068/2	Mg2790	Mg2790	Mn2576	--n/a--
k1 factor:	-.667	.000036	.000452	.000114	--n/a--
k2 factor:	0	0	0	0	--n/a--
use?:	YES	YES	YES	YES	--n/a--
Affecting Element:	--n/a--	Ca3179	Al3082	Cr2677	--n/a--
k1 factor:	--n/a--	-.00008	.000073	.00063	--n/a--
k2 factor:	--n/a--	0	0	0	--n/a--
use?:	--n/a--	YES	YES	YES	--n/a--

Affecting Element:	--n/a--	Cu3247	--n/a--	Co2286	--n/a--
k1 factor:	--n/a--	.010612	--n/a--	.095	--n/a--
k2 factor:	--n/a--	0	--n/a--	0	--n/a--
use?:	--n/a--	NO	--n/a--	YES	--n/a--
Affecting Element:	--n/a--	Cr2677	--n/a--	Ca3179	--n/a--
k1 factor:	--n/a--	.012067	--n/a--	.000074	--n/a--
k2 factor:	--n/a--	0	--n/a--	0	--n/a--
use?:	--n/a--	NO	--n/a--	YES	--n/a--
Affecting Element:	--n/a--	Mn2576	--n/a--	Mg2790	--n/a--
k1 factor:	--n/a--	.443	--n/a--	-.00061	--n/a--
k2 factor:	--n/a--	0	--n/a--	0	--n/a--
use?:	--n/a--	NO	--n/a--	YES	--n/a--
Affecting Element:	--n/a--	V 2924	--n/a--	V 2924	--n/a--
k1 factor:	--n/a--	.028139	--n/a--	.007518	--n/a--
k2 factor:	--n/a--	0	--n/a--	0	--n/a--
use?:	--n/a--	YES	--n/a--	YES	--n/a--
Affecting Element:	--n/a--	Co2286	--n/a--	--n/a--	--n/a--
k1 factor:	--n/a--	.005	--n/a--	--n/a--	--n/a--
k2 factor:	--n/a--	0	--n/a--	--n/a--	--n/a--
use?:	--n/a--	NO	--n/a--	--n/a--	--n/a--
Affecting Element:	--n/a--	Be3130	--n/a--	--n/a--	--n/a--
k1 factor:	--n/a--	.0324	--n/a--	--n/a--	--n/a--
k2 factor:	--n/a--	0	--n/a--	--n/a--	--n/a--
use?:	--n/a--	YES	--n/a--	--n/a--	--n/a--

Element:	K	Na	Pb	Pb	Se
Wavelength:	766.491	330.232	220.351	220.352/2	196.021
Use IECs:	YES	YES	YES	YES	YES
Number of IECs:	0	3	11	11	9
Affecting Element:	--n/a--	Zn2138	Al3082	Al3082	Co2286
k1 factor:	--n/a--	-.15	.0004	-.00017	-.0007
k2 factor:	--n/a--	0	0	0	0
use?:	--n/a--	YES	YES	YES	NO
Affecting Element:	--n/a--	Fe2714	V 2924	Ni2316	Fe2714
k1 factor:	--n/a--	-.00408	-.0001	.000176	-------
k2 factor:	--n/a--	0	0	0	0
use?:	--n/a--	YES	YES	YES	YES

Affecting Element:	--n/a--	Ca3179	Fe2714	Fe2714	Cr2677
k1 factor:	--n/a--	-.00067	.000052	.000042	.000272
k2 factor:	--n/a--	0	0	0	0
use?:	--n/a--	YES	YES	YES	NO

Affecting Element:	--n/a--	--n/a--	Ni2316	Mn2576	Mn2576
k1 factor:	--n/a--	--n/a--	.000297	.00011	.000024
k2 factor:	--n/a--	--n/a--	0	0	0
use?:	--n/a--	--n/a--	YES	YES	YES

Affecting Element:	--n/a--	--n/a--	Mn2576	V 2924	V 2924
k1 factor:	--n/a--	--n/a--	.000033	-.0006	.000428
k2 factor:	--n/a--	--n/a--	0	0	0
use?:	--n/a--	--n/a--	YES	YES	YES

Affecting Element:	--n/a--	--n/a--	Cu3247	Cu3247	Al3082
k1 factor:	--n/a--	--n/a--	.0008	-.0002	.000004
k2 factor:	--n/a--	--n/a--	0	0	0
use?:	--n/a--	--n/a--	YES	YES	YES

Affecting Element:	--n/a--	--n/a--	Cr2677	Cr2677	Ni2316
k1 factor:	--n/a--	--n/a--	-.00003	.000011	.00034
k2 factor:	--n/a--	--n/a--	0	0	0
use?:	--n/a--	--n/a--	YES	YES	NO

Affecting Element:	--n/a--	--n/a--	Ca3179	Ca3179	Mg2790
k1 factor:	--n/a--	--n/a--	-------	-.00001	.000006
k2 factor:	--n/a--	--n/a--	0	0	0
use?:	--n/a--	--n/a--	YES	YES	YES

Affecting Element:	--n/a--	--n/a--	Mg2790	Mg2790	Ca3179
k1 factor:	--n/a--	--n/a--	.000003	-------	-.00001
k2 factor:	--n/a--	--n/a--	0	0	0
use?:	--n/a--	--n/a--	YES	YES	YES

Affecting Element:	--n/a--	--n/a--	Ba4934	Ba4934	--n/a--
k1 factor:	--n/a--	--n/a--	-.00032	.00028	--n/a--
k2 factor:	--n/a--	--n/a--	0	0	--n/a--
use?:	--n/a--	--n/a--	YES	YES	--n/a--

Affecting Element:	--n/a--	--n/a--	Co2286	Co2286	--n/a--
k1 factor:	--n/a--	--n/a--	.00012	.00002	--n/a--
k2 factor:	--n/a--	--n/a--	0	0	--n/a--
use?:	--n/a--	--n/a--	YES	YES	--n/a--

Element:	Se	Sb	Sb
Wavelength:	196.022/2	206.831	206.832/2
Use IECs:	YES	YES	YES
Number of IECs:	9	8	8
Affecting Element:	Fe2714	Fe2714	Fe2714
k1 factor:	-.00033	.000041	.000037
k2 factor:	0	0	0
use?:	YES	YES	YES
Affecting Element:	V 2924	Cr2677	Cr2677
k1 factor:	-.00014	.01304	.00822
k2 factor:	0	0	0
use?:	YES	YES	YES
Affecting Element:	Mn2576	Ni2316	V 2924
k1 factor:	.000281	-.00162	.00011
k2 factor:	0	0	0
use?:	YES	YES	YES
Affecting Element:	Al3082	V 2924	Mn2576
k1 factor:	-------	-.00314	.000034
k2 factor:	0	0	0
use?:	YES	YES	YES
Affecting Element:	Co2286	Mn2576	Mg2790
k1 factor:	-.00062	.000087	-------
k2 factor:	0	0	0
use?:	YES	YES	YES
Affecting Element:	Cr2677	Mg2790	Al3082
k1 factor:	-.00051	.000003	-------
k2 factor:	0	0	0
use?:	NO	YES	YES
Affecting Element:	Ni2316	Al3082	Ca3179
k1 factor:	-.00027	.000016	-------
k2 factor:	0	0	0
use?:	NO	YES	YES
Affecting Element:	Ca3179	Ca3179	Ni2316
k1 factor:	-------	.000014	.00004
k2 factor:	0	0	0
use?:	YES	YES	YES

Affecting Element:	Mg2790	--n/a--	--n/a--
k1 factor:	-------	--n/a--	--n/a--
factor:	0	--n/a--	--n/a--
use?:	YES	--n/a--	--n/a--

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-658-LAKEVIEWDR		
Lab Sample ID:	N74646-1	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Calcium	35000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Iron	179	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Lead	<3.0	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Magnesium	5600	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Manganese	19.0	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Mercury	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [4]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Sodium	9880	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Zinc	<20	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Prep QC Batch: MP26763
(5) Prep QC Batch: MP26767

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-658-LAKEVIEWDR		
Lab Sample ID:	N74646-1F	**Date Sampled:**	08/09/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Calcium [a]	35500	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Magnesium [a]	5710	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Manganese [a]	18.5	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Mercury [a]	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [4]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Sodium [a]	9940	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Zinc [a]	<20	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Prep QC Batch: MP26763
(5) Prep QC Batch: MP26767

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-653-LAKEVIEWDR		
Lab Sample ID:	N74646-2	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/16/04	ND	SW846 6010B [4]	SW846 3010A [6]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [6]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Calcium	11800	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Iron	<100	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Lead	8.2	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Magnesium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Manganese	<15	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Mercury	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [5]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Sodium	11000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [6]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Zinc	<20	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Instrument QC Batch: MA14293
(5) Prep QC Batch: MP26763
(6) Prep QC Batch: MP26767

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-653-LAKEVIEWDR		
Lab Sample ID:	N74646-2F	**Date Sampled:**	08/09/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Calcium [a]	11100	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Magnesium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Manganese [a]	<15	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Mercury [a]	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [4]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Sodium [a]	10600	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Zinc [a]	<20	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Prep QC Batch: MP26763
(5) Prep QC Batch: MP26767

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-652-LAKEVIEWDR		
Lab Sample ID:	N74646-3	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Calcium	6430	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Iron	844	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Lead	<3.0	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Magnesium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Manganese	533	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Mercury	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [4]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Sodium	7560	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Zinc	958	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Prep QC Batch: MP26763
(5) Prep QC Batch: MP26767

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-652-LAKEVIEWDR		
Lab Sample ID:	N74646-3F	**Date Sampled:**	08/09/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Calcium [a]	6340	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Magnesium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Manganese [a]	516	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Mercury [a]	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [4]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Sodium [a]	7510	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Zinc [a]	925	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Prep QC Batch: MP26763
(5) Prep QC Batch: MP26767

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RWB0804-3536-FLETCHERSWAY		
Lab Sample ID:	N74646-4	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Calcium	5780	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Iron	385	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Lead	<3.0	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Magnesium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Manganese	93.4	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Mercury	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [4]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Sodium	8240	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Zinc	<20	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Prep QC Batch: MP26763
(5) Prep QC Batch: MP26767

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RWB0804-3536-FLETCHERSWAY		
Lab Sample ID:	N74646-4F	**Date Sampled:**	08/09/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/17/04	ND	SW846 6010B [4]	SW846 3010A [6]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [6]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Calcium [a]	5970	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Magnesium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Manganese [a]	96.4	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Mercury [a]	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [5]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Sodium [a]	8380	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [6]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]
Zinc [a]	<20	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [6]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Instrument QC Batch: MA14293
(5) Prep QC Batch: MP26763
(6) Prep QC Batch: MP26767

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-NCNG		
Lab Sample ID:	N74646-5	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Calcium	34500	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Copper	131	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Iron	<100	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Lead	14.8	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Magnesium	9100	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Manganese	<15	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Mercury	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [4]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Sodium	10900	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]
Zinc	364	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Prep QC Batch: MP26763
(5) Prep QC Batch: MP26767

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-NCNG		
Lab Sample ID:	N74646-5F	**Date Sampled:**	08/09/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Calcium [a]	34600	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Magnesium [a]	9220	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Manganese [a]	<15	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Mercury [a]	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [4]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Sodium [a]	11200	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Zinc [a]	275	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Prep QC Batch: MP26763
(5) Prep QC Batch: MP26767

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-FIELDDUP1		
Lab Sample ID:	N74646-6	**Date Sampled:**	08/09/04
Matrix:	AQ - Ground Water	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/16/04	ND	SW846 6010B [4]	SW846 3010A [6]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [6]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Calcium	11700	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Iron	<100	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Lead	7.1	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Magnesium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Manganese	<15	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Mercury	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [5]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Sodium	11200	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [6]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]
Zinc	<20	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [3]	SW846 3010A [6]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Instrument QC Batch: MA14293
(5) Prep QC Batch: MP26763
(6) Prep QC Batch: MP26767

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-FIELDDUP1		
Lab Sample ID:	N74646-6F	**Date Sampled:**	08/09/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/10/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Calcium [a]	11400	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Magnesium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Manganese [a]	<15	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Mercury [a]	<0.20	0.20	ug/l	1	08/11/04	08/12/04	WG	SW846 7470A [1]	SW846 7470A [4]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Sodium [a]	10900	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [2]	SW846 3010A [5]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]
Zinc [a]	<20	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [3]	SW846 3010A [5]

(1) Instrument QC Batch: MA14274
(2) Instrument QC Batch: MA14277
(3) Instrument QC Batch: MA14278
(4) Prep QC Batch: MP26763
(5) Prep QC Batch: MP26767

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-CAMPBARHAM		
Lab Sample ID:	N74646-8	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Calcium	23500	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Iron	<100	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Lead	8.2	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Magnesium	5310	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Manganese	<15	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Mercury	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [3]	SW846 7470A [5]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Sodium	10300	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Zinc	57.0	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA14277
(2) Instrument QC Batch: MA14278
(3) Instrument QC Batch: MA14280
(4) Prep QC Batch: MP26767
(5) Prep QC Batch: MP26774

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW0804-CAMPBARHAM		
Lab Sample ID:	N74646-8F	**Date Sampled:**	08/10/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Calcium [a]	22900	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Lead [a]	35.7	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Magnesium [a]	5260	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Manganese [a]	<15	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Mercury [a]	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [3]	SW846 7470A [5]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Sodium [a]	10300	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Zinc [a]	69.9	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA14277
(2) Instrument QC Batch: MA14278
(3) Instrument QC Batch: MA14280
(4) Prep QC Batch: MP26767
(5) Prep QC Batch: MP26774

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4051-RANGERD		
Lab Sample ID:	N74646-9	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/17/04	ND	SW846 6010B [4]	SW846 3010A [5]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [5]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Calcium	25000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Iron	619	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Lead	<3.0	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Magnesium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Manganese	366	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Mercury	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [3]	SW846 7470A [6]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Sodium	12200	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [5]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Zinc	270	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA14277
(2) Instrument QC Batch: MA14278
(3) Instrument QC Batch: MA14280
(4) Instrument QC Batch: MA14293
(5) Prep QC Batch: MP26767
(6) Prep QC Batch: MP26774

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4051-RANGERD		
Lab Sample ID:	N74646-9F	**Date Sampled:**	08/10/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Calcium [a]	23900	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Magnesium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Manganese [a]	346	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Mercury [a]	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [3]	SW846 7470A [5]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Sodium [a]	11700	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Zinc [a]	226	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA14277
(2) Instrument QC Batch: MA14278
(3) Instrument QC Batch: MA14280
(4) Prep QC Batch: MP26767
(5) Prep QC Batch: MP26774

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-CAMPEASON		
Lab Sample ID:	N74646-10	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Calcium	10200	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Copper	25.0	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Iron	<100	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Lead	12.1	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Magnesium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Manganese	<15	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Mercury	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [3]	SW846 7470A [5]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Sodium	10400	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]
Zinc	26.9	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA14277
(2) Instrument QC Batch: MA14278
(3) Instrument QC Batch: MA14280
(4) Prep QC Batch: MP26767
(5) Prep QC Batch: MP26774

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-CAMPEASON		
Lab Sample ID:	N74646-10F	**Date Sampled:**	08/10/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Arsenic [a]	5.2	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Calcium [a]	10400	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Magnesium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Manganese [a]	<15	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Mercury [a]	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [3]	SW846 7470A [5]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Sodium [a]	10200	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [4]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]
Zinc [a]	22.2	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA14277
(2) Instrument QC Batch: MA14278
(3) Instrument QC Batch: MA14280
(4) Prep QC Batch: MP26767
(5) Prep QC Batch: MP26774

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-750-LITTLEMOUNTAIN		
Lab Sample ID:	N74646-11	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/17/04	ND	SW846 6010B [4]	SW846 3010A [5]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [5]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Calcium	72200	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Iron	<100	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Lead	<3.0	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Magnesium	8000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Manganese	177	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Mercury	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [3]	SW846 7470A [6]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Sodium	15000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [5]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]
Zinc	<20	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA14277
(2) Instrument QC Batch: MA14278
(3) Instrument QC Batch: MA14280
(4) Instrument QC Batch: MA14293
(5) Prep QC Batch: MP26767
(6) Prep QC Batch: MP26774

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-750-LITTLEMOUNTAIN		
Lab Sample ID:	N74646-11F	**Date Sampled:**	08/10/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/17/04	ND	SW846 6010B [4]	SW846 3010A [5]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Barium [a]	<200	200	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [5]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Calcium [a]	71500	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Copper [a]	<25	25	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Iron [a]	<100	100	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Magnesium [a]	7980	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Manganese [a]	176	15	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Mercury [a]	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [3]	SW846 7470A [6]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Silver [a]	<10	10	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Sodium [a]	14900	5000	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/12/04	ND	SW846 6020 [1]	SW846 3010A [5]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]
Zinc [a]	22.3	20	ug/l	1	08/12/04	08/13/04	ND	SW846 6010B [2]	SW846 3010A [5]

(1) Instrument QC Batch: MA14277
(2) Instrument QC Batch: MA14278
(3) Instrument QC Batch: MA14280
(4) Instrument QC Batch: MA14293
(5) Prep QC Batch: MP26767
(6) Prep QC Batch: MP26774

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-191-FALCONLANE		
Lab Sample ID:	N74646-12	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/17/04	JDM	SW846 6010B [4]	SW846 3010A [5]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/16/04	ND	SW846 6020 [3]	SW846 3010A [7]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Calcium	69900	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Iron	141	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Lead	<3.0	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Magnesium	6680	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Manganese	289	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Mercury	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [2]	SW846 7470A [6]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Sodium	11700	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Thallium	<1.0	1.0	ug/l	2	08/12/04	08/16/04	ND	SW846 6020 [3]	SW846 3010A [7]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Zinc	26.3	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]

(1) Instrument QC Batch: MA14278
(2) Instrument QC Batch: MA14280
(3) Instrument QC Batch: MA14290
(4) Instrument QC Batch: MA14303
(5) Prep QC Batch: MP26768
(6) Prep QC Batch: MP26774
(7) Prep QC Batch: MP26857

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-191-FALCONLANE		
Lab Sample ID:	N74646-12F	**Date Sampled:**	08/10/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/17/04	JDM	SW846 6010B [4]	SW846 3010A [5]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Barium [a]	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/16/04	ND	SW846 6020 [3]	SW846 3010A [7]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Calcium [a]	72000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Copper [a]	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Iron [a]	<100	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Magnesium [a]	6840	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Manganese [a]	291	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Mercury [a]	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [2]	SW846 7470A [6]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Silver [a]	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Sodium [a]	11700	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/16/04	ND	SW846 6020 [3]	SW846 3010A [7]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Zinc [a]	<20	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]

(1) Instrument QC Batch: MA14278
(2) Instrument QC Batch: MA14280
(3) Instrument QC Batch: MA14290
(4) Instrument QC Batch: MA14303
(5) Prep QC Batch: MP26768
(6) Prep QC Batch: MP26774
(7) Prep QC Batch: MP26857

(a) Reported results are dissolved metals.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4149-RANGERD		
Lab Sample ID:	N74646-13	**Date Sampled:**	08/10/04
Matrix:	AQ - Ground Water	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	<200	200	ug/l	1	08/12/04	08/17/04	JDM	SW846 6010B [4]	SW846 3010A [5]
Antimony	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Arsenic	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Barium	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Beryllium	<2.0	2.0	ug/l	2	08/12/04	08/16/04	ND	SW846 6020 [3]	SW846 3010A [7]
Cadmium	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Calcium	36600	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Chromium	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Cobalt	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Copper	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Iron	<100	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Lead	<3.0	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Magnesium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Manganese	372	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Mercury	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [2]	SW846 7470A [6]
Nickel	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Potassium	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Selenium	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Silver	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Sodium	10500	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Thallium	1.1	1.0	ug/l	2	08/12/04	08/16/04	ND	SW846 6020 [3]	SW846 3010A [7]
Vanadium	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Zinc	1010	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]

(1) Instrument QC Batch: MA14278
(2) Instrument QC Batch: MA14280
(3) Instrument QC Batch: MA14290
(4) Instrument QC Batch: MA14303
(5) Prep QC Batch: MP26768
(6) Prep QC Batch: MP26774
(7) Prep QC Batch: MP26857

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4149-RANGERD		
Lab Sample ID:	N74646-13F	**Date Sampled:**	08/10/04
Matrix:	AQ - Groundwater Filtered	**Date Received:**	08/11/04
		Percent Solids:	n/a
Project:	Former Camp Butner, NC		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum [a]	<200	200	ug/l	1	08/12/04	08/17/04	JDM	SW846 6010B [4]	SW846 3010A [5]
Antimony [a]	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Arsenic [a]	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Barium [a]	<200	200	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Beryllium [a]	<2.0	2.0	ug/l	2	08/12/04	08/16/04	ND	SW846 6020 [3]	SW846 3010A [7]
Cadmium [a]	<4.0	4.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Calcium [a]	38100	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Chromium [a]	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Cobalt [a]	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Copper [a]	<25	25	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Iron [a]	<100	100	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Lead [a]	<3.0	3.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Magnesium [a]	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Manganese [a]	386	15	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Mercury [a]	<0.20	0.20	ug/l	1	08/12/04	08/13/04	WG	SW846 7470A [2]	SW846 7470A [6]
Nickel [a]	<40	40	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Potassium [a]	<5000	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Selenium [a]	<5.0	5.0	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Silver [a]	<10	10	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Sodium [a]	10900	5000	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Thallium [a]	<1.0	1.0	ug/l	2	08/12/04	08/16/04	ND	SW846 6020 [3]	SW846 3010A [7]
Vanadium [a]	<50	50	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]
Zinc [a]	1040	20	ug/l	1	08/12/04	08/12/04	ND	SW846 6010B [1]	SW846 3010A [5]

(1) Instrument QC Batch: MA14278
(2) Instrument QC Batch: MA14280
(3) Instrument QC Batch: MA14290
(4) Instrument QC Batch: MA14303
(5) Prep QC Batch: MP26768
(6) Prep QC Batch: MP26774
(7) Prep QC Batch: MP26857

(a) Reported results are dissolved metals.

RL = Reporting Limit