New Jersey
ACCUTEST.
Laboratories

09/08/04

Technical Report for

ENSR Consulting & Engineering

Former Camp Butner, NC

09090-068

Accutest Job Number: N74914

Sampling Dates: 08/11/04 - 08/12/04

Report to:

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

ATTN: Debbie McGrath

Total number of pages in report: 2283

Volume: 2 of 4

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.

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA

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GC

GC
SW846 8081A
PESTICIDE

ACCUTEST

GC Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction P8081PESTICL

	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: 8/24/2004

653

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

Semivolatile Surrogate Recovery Summary

Job Number: N74914
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]
N74914-1	OA15013.D	95.0	91.0	100.0	96.0
N74914-2	OA15014.D	100.0	96.0	98.0	94.0
N74914-3	OA15015.D	96.0	92.0	75.0	72.0
N74914-4	OA15016.D	101.0	97.0	101.0	99.0
N74914-5	OA15017.D	97.0	93.0	104.0	101.0
N74914-6	OA15018.D	99.0	95.0	90.0	94.0
N74914-7	OA15019.D	98.0	94.0	99.0	100.0
N74914-9	OA15043.D	91.0	87.0	94.0	90.0
N74914-10	OA15044.D	92.0	88.0	73.0	69.0
N74914-11	OA15045.D	96.0	92.0	66.0	62.0
N74914-12	OA15046.D	98.0	94.0	83.0	79.0
N74914-13	OA15047.D	93.0	88.0	92.0	88.0
N74914-14	OA15048.D	96.0	92.0	101.0	97.0
N74914-15	OA15049.D	96.0	92.0	96.0	93.0
OP17703-BS1	OA15012.D	95.0	90.0	101.0	98.0
OP17703-MB1	OA15011.D	98.0	94.0	104.0	101.0
OP17703-MS	OA15041.D	90.0	86.0	96.0	93.0
OP17703-MSD	OA15042.D	95.0	91.0	99.0	95.0

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

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17703-MS	OA15041.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441
OP17703-MSD	OA15042.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441
N74914-9	OA15043.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441

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

N74914-1, N74914-2, N74914-3, N74914-4, N74914-5, N74914-6, N74914-7, N74914-9, N74914-10, N74914-11, N74914-12, N74914-13, N74914-14, N74914-15

CAS No.	Compound	N74914-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		0.284	0.30	106	0.31	109	3	41-145/35
319-84-6	alpha-BHC	ND		0.284	0.31	109	0.33	116	6	47-145/37
319-85-7	beta-BHC	ND		0.284	0.30	106	0.31	109	3	50-149/36
319-86-8	delta-BHC	ND		0.284	0.31	109	0.31	109	0	46-145/32
58-89-9	gamma-BHC (Lindane)	ND		0.284	0.32	113	0.33	116	3	51-145/39
5103-71-9	alpha-Chlordane	ND		0.284	0.31	109	0.32	113	3	42-156/41
5103-74-2	gamma-Chlordane	ND		0.284	0.33	116	0.34	120	3	43-152/39
60-57-1	Dieldrin	ND		0.284	0.34	120	0.35	123	3	47-153/42
72-54-8	4,4'-DDD	ND		0.284	0.35	123	0.36	127	3	57-152/39
72-55-9	4,4'-DDE	ND		0.284	0.33	116	0.34	120	3	43-156/34
50-29-3	4,4'-DDT	ND		0.284	0.35	123	0.36	127	3	54-153/37
72-20-8	Endrin	ND		0.284	0.35	123	0.36	127	3	56-151/35
1031-07-8	Endosulfan sulfate	ND		0.284	0.34	120	0.34	120	0	68-144/37
7421-93-4	Endrin aldehyde	ND		0.284	0.30	106	0.31	109	3	46-142/27
53494-70-5	Endrin ketone	ND		0.284	0.35	123	0.36	127	3	54-154/39
959-98-8	Endosulfan-I	ND		0.284	0.32	113	0.34	120	6	58-142/38
33213-65-9	Endosulfan-II	ND		0.284	0.34	120	0.35	123	3	53-150/37
76-44-8	Heptachlor	ND		0.284	0.31	109	0.33	116	6	46-149/38
1024-57-3	Heptachlor epoxide	ND		0.284	0.33	116	0.34	120	3	49-154/41
72-43-5	Methoxychlor	ND		0.284	0.34	120	0.35	123	3	44-160/38
8001-35-2	Toxaphene	ND			ND		ND		nc	50-150/20

CAS No.	Surrogate Recoveries	MS	MSD	N74914-9	Limits
877-09-8	Tetrachloro-m-xylene	90%	95%	91%	35-138%
877-09-8	Tetrachloro-m-xylene	86%	91%	87%	35-138%
2051-24-3	Decachlorobiphenyl	96%	99%	94%	19-153%
2051-24-3	Decachlorobiphenyl	93%	95%	90%	19-153%

Blank Spike Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17703-BS1	OA15012.D	1	08/13/04	OPM	08/13/04	OP17703	GOA440

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

N74914-1, N74914-2, N74914-3, N74914-4, N74914-5, N74914-6, N74914-7, N74914-9, N74914-10, N74914-11, N74914-12, N74914-13, N74914-14, N74914-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
309-00-2	Aldrin	0.25	0.28	112	72-139
319-84-6	alpha-BHC	0.25	0.30	120	82-138
319-85-7	beta-BHC	0.25	0.28	112	82-140
319-86-8	delta-BHC	0.25	0.28	112	72-141
58-89-9	gamma-BHC (Lindane)	0.25	0.30	120	84-140
5103-71-9	alpha-Chlordane	0.25	0.29	116 [a]	82-138
5103-74-2	gamma-Chlordane	0.25	0.31	124	83-139
60-57-1	Dieldrin	0.25	0.32	128	85-141
72-54-8	4,4'-DDD	0.25	0.33	132	79-153
72-55-9	4,4'-DDE	0.25	0.31	124	84-144
50-29-3	4,4'-DDT	0.25	0.33	132	75-155
72-20-8	Endrin	0.25	0.32	128	83-147
1031-07-8	Endosulfan sulfate	0.25	0.30	120	79-151
7421-93-4	Endrin aldehyde	0.25	0.29	116	78-140
53494-70-5	Endrin ketone	0.25	0.33	132	84-153
959-98-8	Endosulfan-I	0.25	0.31	124	84-141
33213-65-9	Endosulfan-II	0.25	0.32	128	86-145
76-44-8	Heptachlor	0.25	0.29	116	78-138
1024-57-3	Heptachlor epoxide	0.25	0.31	124	83-139
72-43-5	Methoxychlor	0.25	0.32	128	78-156

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	95%	35-138%
877-09-8	Tetrachloro-m-xylene	90%	35-138%
2051-24-3	Decachlorobiphenyl	101%	19-153%
2051-24-3	Decachlorobiphenyl	98%	19-153%

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

Method Blank Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17703-MB1	OA15011.D	1	08/13/04	OPM	08/13/04	OP17703	GOA440

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

N74914-1, N74914-2, N74914-3, N74914-4, N74914-5, N74914-6, N74914-7, N74914-9, N74914-10, N74914-11, N74914-12, N74914-13, N74914-14, N74914-15

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	98%	35-138%
877-09-8	Tetrachloro-m-xylene	94%	35-138%
2051-24-3	Decachlorobiphenyl	104%	19-153%
2051-24-3	Decachlorobiphenyl	101%	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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA440-CC433	**Injection Date:**	08/13/04
Lab File ID:	OA15008.D	**Injection Time:**	14:19
Instrument ID:	GCOA	**Method:**	SW846 8081A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	6.47	6.17	25.35	26.53

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP17703-MB1	OA15011.D	08/13/04	17:22	6.48	6.17	25.35	26.52
OP17703-BS1	OA15012.D	08/13/04	17:55	6.48	6.17	25.35	26.53
N74914-1	OA15013.D	08/13/04	18:28	6.48	6.17	25.35	26.53
N74914-2	OA15014.D	08/13/04	19:01	6.48	6.18	25.35	26.52
N74914-3	OA15015.D	08/13/04	19:35	6.48	6.17	25.35	26.52
N74914-4	OA15016.D	08/13/04	20:08	6.48	6.17	25.35	26.52
N74914-5	OA15017.D	08/13/04	20:41	6.48	6.17	25.34	26.52
N74914-6	OA15018.D	08/13/04	21:14	6.48	6.17	25.35	26.52
N74914-7	OA15019.D	08/13/04	21:48	6.48	6.17	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

GC Surrogate Retention Time Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA440-CC433	**Injection Date:**	08/14/04
Lab File ID:	OA15038.D	**Injection Time:**	14:46
Instrument ID:	GCOA	**Method:**	SW846 8081A

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	6.49	6.18	25.35	26.52

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP17703-MS	OA15041.D	08/14/04	17:07	6.49	6.18	25.34	26.52
OP17703-MSD	OA15042.D	08/14/04	17:40	6.48	6.18	25.34	26.52
N74914-9	OA15043.D	08/14/04	18:14	6.48	6.18	25.35	26.52
N74914-10	OA15044.D	08/14/04	18:47	6.48	6.18	25.34	26.51
N74914-11	OA15045.D	08/14/04	19:20	6.49	6.18	25.34	26.51
N74914-12	OA15046.D	08/14/04	19:53	6.48	6.17	25.34	26.51
N74914-13	OA15047.D	08/14/04	20:26	6.49	6.18	25.34	26.51
N74914-14	OA15048.D	08/14/04	21:00	6.48	6.18	25.34	26.51
N74914-15	OA15049.D	08/14/04	21:33	6.48	6.17	25.34	26.51
GOA441-ECC433	OA15050.D	08/14/04	23:03	6.48	6.18	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: N74914
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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample:	GOA440-DDT2	**Injection Date:**	08/13/04
Lab File ID:	OA15009.D	**Injection Time:**	16:15
Instrument ID:	GCOA		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	5368546	5170200
4,4'-DDE	13467461	15374284
4,4'-DDT	839137050	1213546371
DDT Breakdown [a]	2.2 %	1.7 %
Endrin aldehyde	5224695	8495905
Endrin ketone	4681234	5810797
Endrin	478846293	661374017
Endrin Breakdown [b]	2 %	2.1 %

(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
OP17703-MB1	OA15011.D	08/13/04	17:22	01:07	Method Blank
OP17703-BS1	OA15012.D	08/13/04	17:55	01:40	Blank Spike
N74914-1	OA15013.D	08/13/04	18:28	02:13	RW0804-4553-UZZLERD
N74914-2	OA15014.D	08/13/04	19:01	02:46	RW0804-HESTERFARM
N74914-3	OA15015.D	08/13/04	19:35	03:20	RW0804-4535-UZZLERD
N74914-4	OA15016.D	08/13/04	20:08	03:53	RW0804-4578-UZZLERD
N74914-5	OA15017.D	08/13/04	20:41	04:26	RW0804-627B-ENONRD
N74914-6	OA15018.D	08/13/04	21:14	04:59	RW0804-4573-UZZLERD
N74914-7	OA15019.D	08/13/04	21:48	05:33	RW0804-FIELDDUP2
GOA440-CC433	OA15020.D	08/13/04	23:18	07:03	Continuing cal 10

DDT/Endrin Breakdown Check

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample:	GOA441-DDT1	**Injection Date:**	08/14/04
Lab File ID:	OA15039.D	**Injection Time:**	16:01
Instrument ID:	GCOA		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	5229547	5711344
4,4'-DDE	13526974	16174972
4,4'-DDT	838761400	1216345837
DDT Breakdown [a]	2.2 %	1.8 %
Endrin aldehyde	0	2126789
Endrin ketone	0	0
Endrin	485286784	666300719
Endrin Breakdown [b]	0 %	0.3 %

(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
OP17703-MS	OA15041.D	08/14/04	17:07	01:06	Matrix Spike
OP17703-MSD	OA15042.D	08/14/04	17:40	01:39	Matrix Spike Duplicate
N74914-9	OA15043.D	08/14/04	18:14	02:13	RW0804-6305-ISHAMCHAMBERS
N74914-10	OA15044.D	08/14/04	18:47	02:46	RW0804-4710-MORIAHRD
N74914-11	OA15045.D	08/14/04	19:20	03:19	RW0804-4709-MORIAHRD
N74914-12	OA15046.D	08/14/04	19:53	03:52	RW0804-5057-CLAYTONRD
N74914-13	OA15047.D	08/14/04	20:26	04:25	RW0804-2202-TILLEYFARMRD
N74914-14	OA15048.D	08/14/04	21:00	04:59	RW0804-564-BETHANYCHURCH
N74914-15	OA15049.D	08/14/04	21:33	05:32	RW0804-FIELDDUP3
GOA441-ECC433	OA15050.D	08/14/04	23:03	07:02	Ending cal 25

GC Identification Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA440-CC433	**Injection Date:**	08/14/04
Lab File ID:	OA15038.D	**Injection Time:**	14:46
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	N74914-13	**Injection Date:**	08/14/04
Lab File ID:	OA15047.D	**Injection Time:**	20:26
Client ID:	RW0804-2202-TILLEYFARMRD		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-Chlordane	1	15.25	15.20	0.15		ug/l	52.1
alpha-Chlordane [a]	2 [b]	15.23	15.23	0.088		ug/l	
gamma-Chlordane	1 [b]	14.79	14.80	0.13		ug/l	8.0
gamma-Chlordane	2	14.80	14.81	0.12		ug/l	
Heptachlor epoxide	1 [b]	14.44	14.44	0.48		ug/l	6.5
Heptachlor epoxide	2	14.26	14.26	0.45		ug/l	

(a) Reported from lower concentration due to matrix interference.
(b) Final result reported from this column.

GC Identification Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA440-CC433	**Injection Date:**	08/14/04
Lab File ID:	OA15038.D	**Injection Time:**	14:46
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	N74914-15	**Injection Date:**	08/14/04
Lab File ID:	OA15049.D	**Injection Time:**	21:33
Client ID:	RW0804-FIELDDUP3		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-Chlordane	1	15.25	15.20	0.15		ug/l	52.1
alpha-Chlordane [a]	2 [b]	15.23	15.23	0.088		ug/l	
gamma-Chlordane	1 [b]	14.79	14.80	0.13		ug/l	8.0
gamma-Chlordane	2	14.80	14.81	0.12		ug/l	
Heptachlor epoxide	1 [b]	14.44	14.44	0.49		ug/l	8.5
Heptachlor epoxide	2	14.26	14.26	0.45		ug/l	

(a) Reported from lower concentration due to matrix interference.
(b) Final result reported from this column.

GC Identification Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA440-CC433	**Injection Date:**	08/14/04
Lab File ID:	OA15038.D	**Injection Time:**	14:46
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17703-MS	**Injection Date:**	08/14/04
Lab File ID:	OA15041.D	**Injection Time:**	17:07
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	12.57	12.57	0.30		ug/l	3.4
Aldrin	2	12.52	12.52	0.29		ug/l	
alpha-BHC	1 [a]	8.79	8.79	0.31		ug/l	0.0
alpha-BHC	2	8.74	8.74	0.31		ug/l	
beta-BHC	1 [a]	10.34	10.34	0.30		ug/l	0.0
beta-BHC	2	10.41	10.41	0.30		ug/l	
delta-BHC	1 [a]	10.93	10.93	0.31		ug/l	6.7
delta-BHC	2	11.38	11.38	0.29		ug/l	
gamma-BHC (Lindane)	1 [a]	9.99	9.98	0.32		ug/l	3.2
gamma-BHC (Lindane)	2	10.06	10.06	0.31		ug/l	
alpha-Chlordane	1	15.19	15.20	0.33		ug/l	6.3
alpha-Chlordane	2 [a]	15.23	15.23	0.31		ug/l	
gamma-Chlordane	1 [a]	14.80	14.80	0.33		ug/l	3.1
gamma-Chlordane	2	14.81	14.81	0.32		ug/l	
Dieldrin	1 [a]	16.32	16.32	0.34		ug/l	3.0
Dieldrin	2	16.18	16.18	0.33		ug/l	
4,4'-DDD	1 [a]	17.28	17.28	0.35		ug/l	9.0
4,4'-DDD	2	17.53	17.53	0.32		ug/l	
4,4'-DDE	1 [a]	15.47	15.47	0.33		ug/l	3.1
4,4'-DDE	2	15.80	15.80	0.32		ug/l	
4,4'-DDT	1 [a]	18.15	18.15	0.35		ug/l	5.9
4,4'-DDT	2	18.51	18.51	0.33		ug/l	
Endrin	1 [a]	17.02	17.02	0.35		ug/l	5.9
Endrin	2	17.08	17.08	0.33		ug/l	
Endosulfan sulfate	1 [a]	20.57	20.57	0.34		ug/l	6.1
Endosulfan sulfate	2	19.75	19.75	0.32		ug/l	
Endrin aldehyde	1 [a]	19.10	19.10	0.30		ug/l	6.9
Endrin aldehyde	2	18.83	18.84	0.28		ug/l	
Endrin ketone	1 [a]	21.54	21.54	0.35		ug/l	2.9
Endrin ketone	2	21.57	21.57	0.34		ug/l	
Endosulfan-I	1 [a]	15.59	15.59	0.32		ug/l	3.2
Endosulfan-I	2	15.37	15.37	0.31		ug/l	
Endosulfan-II	1 [a]	17.73	17.73	0.34		ug/l	6.1
Endosulfan-II	2	17.75	17.75	0.32		ug/l	
Heptachlor	1 [a]	11.61	11.61	0.31		ug/l	0.0
Heptachlor	2	11.52	11.52	0.31		ug/l	
Heptachlor epoxide	1 [a]	14.44	14.44	0.33		ug/l	0.0
Heptachlor epoxide	2	14.26	14.26	0.33		ug/l	
Methoxychlor	1 [a]	19.76	19.77	0.34		ug/l	0.0
Methoxychlor	2	20.87	20.87	0.34		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA440-CC433	**Injection Date:**	08/14/04
Lab File ID:	OA15038.D	**Injection Time:**	14:46
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17703-MSD	**Injection Date:**	08/14/04
Lab File ID:	OA15042.D	**Injection Time:**	17:40
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	12.57	12.57	0.31		ug/l	3.3
Aldrin	2	12.52	12.52	0.30		ug/l	
alpha-BHC	1 [a]	8.79	8.79	0.33		ug/l	3.1
alpha-BHC	2	8.74	8.74	0.32		ug/l	
beta-BHC	1 [a]	10.34	10.34	0.31		ug/l	3.3
beta-BHC	2	10.41	10.41	0.30		ug/l	
delta-BHC	1 [a]	10.93	10.93	0.31		ug/l	3.3
delta-BHC	2	11.38	11.38	0.30		ug/l	
gamma-BHC (Lindane)	1 [a]	9.98	9.98	0.33		ug/l	3.1
gamma-BHC (Lindane)	2	10.06	10.06	0.32		ug/l	
alpha-Chlordane	1	15.18	15.20	0.65		ug/l	68.0
alpha-Chlordane [b]	2 [a]	15.23	15.23	0.32		ug/l	
gamma-Chlordane	1 [a]	14.81	14.80	0.34		ug/l	3.0
gamma-Chlordane	2	14.81	14.81	0.33		ug/l	
Dieldrin	1 [a]	16.32	16.32	0.35		ug/l	2.9
Dieldrin	2	16.17	16.18	0.34		ug/l	
4,4'-DDD	1 [a]	17.28	17.28	0.36		ug/l	8.7
4,4'-DDD	2	17.53	17.53	0.33		ug/l	
4,4'-DDE	1 [a]	15.47	15.47	0.34		ug/l	3.0
4,4'-DDE	2	15.80	15.80	0.33		ug/l	
4,4'-DDT	1 [a]	18.15	18.15	0.36		ug/l	5.7
4,4'-DDT	2	18.51	18.51	0.34		ug/l	
Endrin	1 [a]	17.02	17.02	0.36		ug/l	5.7
Endrin	2	17.08	17.08	0.34		ug/l	
Endosulfan sulfate	1 [a]	20.57	20.57	0.34		ug/l	3.0
Endosulfan sulfate	2	19.75	19.75	0.33		ug/l	
Endrin aldehyde	1 [a]	19.10	19.10	0.31		ug/l	6.7
Endrin aldehyde	2	18.83	18.84	0.29		ug/l	
Endrin ketone	1 [a]	21.54	21.54	0.36		ug/l	5.7
Endrin ketone	2	21.57	21.57	0.34		ug/l	
Endosulfan-I	1 [a]	15.59	15.59	0.34		ug/l	6.1
Endosulfan-I	2	15.37	15.37	0.32		ug/l	
Endosulfan-II	1 [a]	17.73	17.73	0.35		ug/l	5.9
Endosulfan-II	2	17.75	17.75	0.33		ug/l	
Heptachlor	1 [a]	11.61	11.61	0.33		ug/l	3.1
Heptachlor	2	11.52	11.52	0.32		ug/l	
Heptachlor epoxide	1 [a]	14.44	14.44	0.34		ug/l	3.0
Heptachlor epoxide	2	14.26	14.26	0.33		ug/l	
Methoxychlor	1 [a]	19.76	19.77	0.35		ug/l	2.9
Methoxychlor	2	20.87	20.87	0.34		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA440-CC433	**Injection Date:**	08/14/04
Lab File ID:	OA15038.D	**Injection Time:**	14:46
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17703-MSD	**Injection Date:**	08/14/04
Lab File ID:	OA15042.D	**Injection Time:**	17:40
Client ID:	Matrix 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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA440-CC433	**Injection Date:**	08/13/04
Lab File ID:	OA15008.D	**Injection Time:**	14:19
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17703-BS1	**Injection Date:**	08/13/04
Lab File ID:	OA15012.D	**Injection Time:**	17:55
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	12.57	12.57	0.28		ug/l	0.0
Aldrin	2	12.53	12.53	0.28		ug/l	
alpha-BHC	1 [a]	8.79	8.79	0.30		ug/l	3.4
alpha-BHC	2	8.73	8.73	0.29		ug/l	
beta-BHC	1 [a]	10.34	10.34	0.28		ug/l	0.0
beta-BHC	2	10.41	10.41	0.28		ug/l	
delta-BHC	1 [a]	10.93	10.93	0.28		ug/l	3.6
delta-BHC	2	11.38	11.38	0.27		ug/l	
gamma-BHC (Lindane)	1 [a]	9.98	9.98	0.30		ug/l	3.4
gamma-BHC (Lindane)	2	10.06	10.06	0.29		ug/l	
alpha-Chlordane	1	15.18	15.20	0.59		ug/l	68.2
alpha-Chlordane [b]	2 [a]	15.24	15.24	0.29		ug/l	
gamma-Chlordane	1 [a]	14.81	14.81	0.31		ug/l	3.3
gamma-Chlordane	2	14.81	14.81	0.30		ug/l	
Dieldrin	1 [a]	16.32	16.32	0.32		ug/l	3.2
Dieldrin	2	16.18	16.18	0.31		ug/l	
4,4'-DDD	1 [a]	17.28	17.28	0.33		ug/l	9.5
4,4'-DDD	2	17.53	17.54	0.30		ug/l	
4,4'-DDE	1 [a]	15.48	15.48	0.31		ug/l	3.3
4,4'-DDE	2	15.80	15.80	0.30		ug/l	
4,4'-DDT	1 [a]	18.15	18.15	0.33		ug/l	6.3
4,4'-DDT	2	18.52	18.52	0.31		ug/l	
Endrin	1 [a]	17.02	17.02	0.32		ug/l	6.5
Endrin	2	17.08	17.08	0.30		ug/l	
Endosulfan sulfate	1 [a]	20.57	20.57	0.30		ug/l	3.4
Endosulfan sulfate	2	19.76	19.76	0.29		ug/l	
Endrin aldehyde	1 [a]	19.10	19.10	0.29		ug/l	7.1
Endrin aldehyde	2	18.84	18.84	0.27		ug/l	
Endrin ketone	1 [a]	21.55	21.55	0.33		ug/l	6.3
Endrin ketone	2	21.58	21.58	0.31		ug/l	
Endosulfan-I	1 [a]	15.59	15.59	0.31		ug/l	3.3
Endosulfan-I	2	15.37	15.37	0.30		ug/l	
Endosulfan-II	1 [a]	17.73	17.73	0.32		ug/l	6.5
Endosulfan-II	2	17.75	17.75	0.30		ug/l	
Heptachlor	1 [a]	11.61	11.61	0.29		ug/l	0.0
Heptachlor	2	11.53	11.53	0.29		ug/l	
Heptachlor epoxide	1 [a]	14.45	14.45	0.31		ug/l	3.3
Heptachlor epoxide	2	14.26	14.27	0.30		ug/l	
Methoxychlor	1 [a]	19.77	19.77	0.32		ug/l	3.2
Methoxychlor	2	20.88	20.88	0.31		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GOA440-CC433	**Injection Date:**	08/13/04
Lab File ID:	OA15008.D	**Injection Time:**	14:19
Instrument ID:	GCOA	**Method:**	SW846 8081A

Sample ID:	OP17703-BS1	**Injection Date:**	08/13/04
Lab File ID:	OA15012.D	**Injection Time:**	17:55
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:	RW0804-4553-UZZLERD		
Lab Sample ID:	N74914-1	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	OA15013.D	1	08/13/04	OPM	08/13/04	OP17703	GOA440
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.020	0.0081	ug/l	
319-84-6	alpha-BHC	ND	0.020	0.013	ug/l	
319-85-7	beta-BHC	ND	0.020	0.0087	ug/l	
319-86-8	delta-BHC	ND	0.020	0.0099	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.0027	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	0.0042	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.018	ug/l	
72-20-8	Endrin	ND	0.020	0.012	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	0.051	0.0054	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.0030	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0029	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0060	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.011	ug/l	
72-43-5	Methoxychlor	ND	0.051	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.26	0.25	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	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\oa15013.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\oa15013.D\ECD2B.CH
Acq On : 13 Aug 2004 6:28 pm Operator: owenm
Sample : n74914-1 Inst : GCOO
Misc : OP17703,GOA440,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 18:59:26 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	353.9E6	459.0E6	38.199	36.549
Spiked Amount	40.000	Range	30 - 150	Recovery	= 95.50%	91.37%
SA Decachlorobiphen	25.35	26.53	259.4E6	382.7E6	39.819	38.566
Spiked Amount	40.000	Range	30 - 150	Recovery	= 99.55%	96.42%

Target Compounds

OM 8/16/04

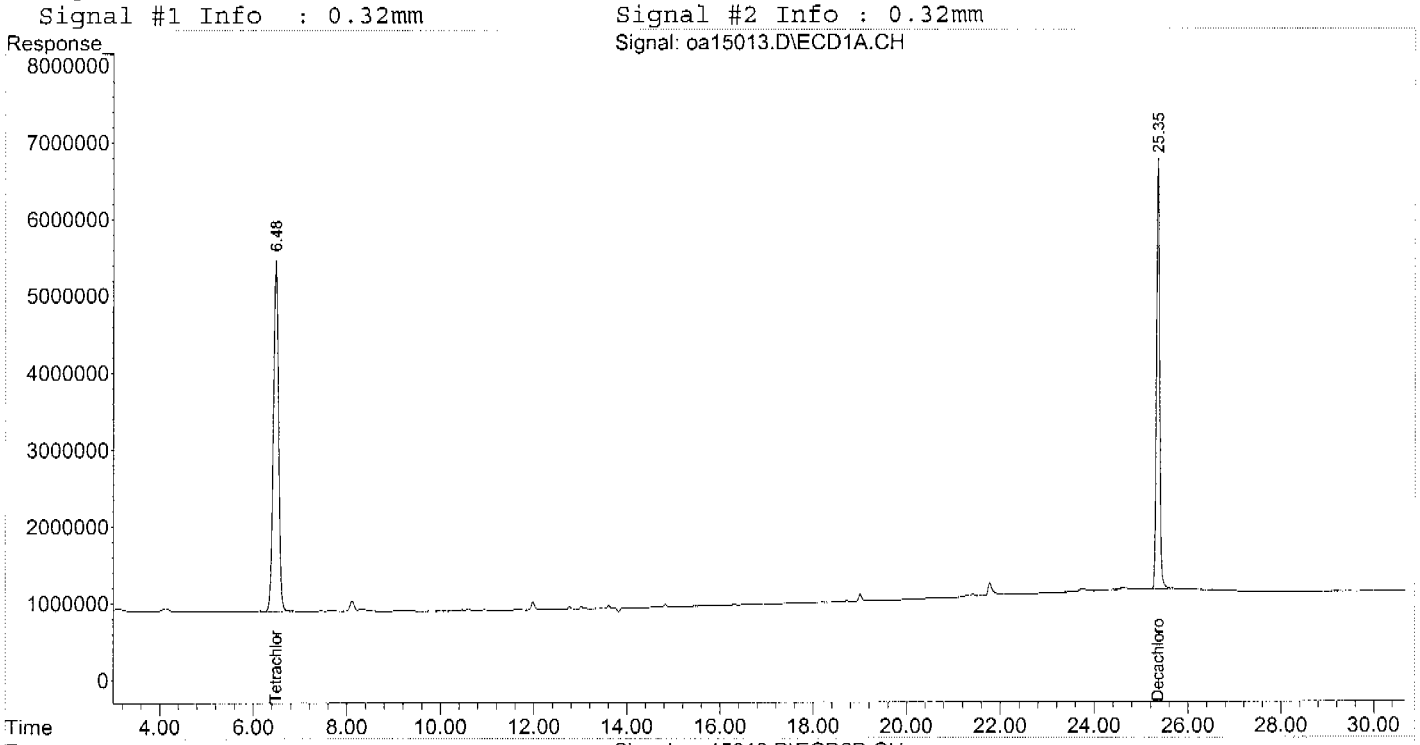
673

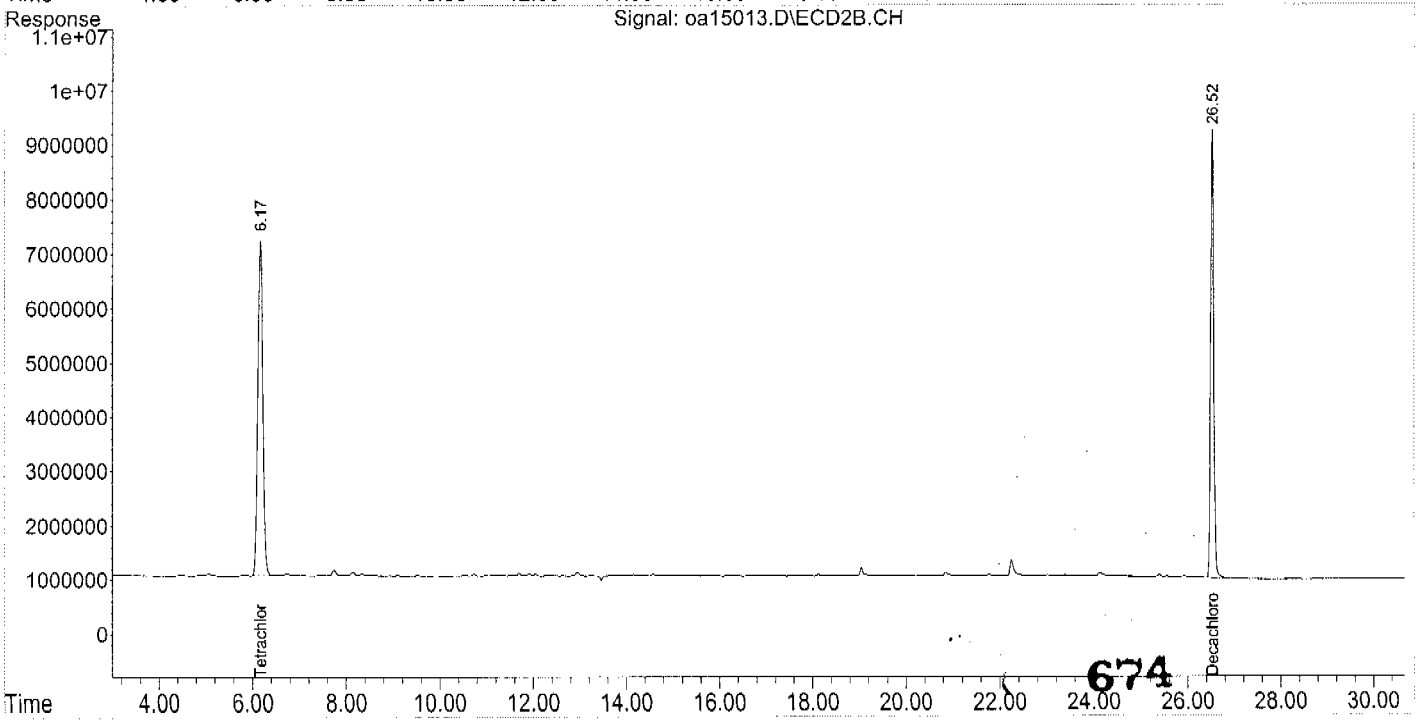
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15013.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\oa15013.D\ECD2B.CH
Acq On : 13 Aug 2004 6:28 pm Operator: owenm
Sample : n74914-1 Inst : GCOO
Misc : OP17703,GOA440,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:49 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





674

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-HESTERFARM		
Lab Sample ID:	N74914-2	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	OA15014.D	1	08/13/04	OPM	08/13/04	OP17703	GOA440
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.020	0.0081	ug/l	
319-84-6	alpha-BHC	ND	0.020	0.013	ug/l	
319-85-7	beta-BHC	ND	0.020	0.0087	ug/l	
319-86-8	delta-BHC	ND	0.020	0.0099	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.0027	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	0.0042	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.018	ug/l	
72-20-8	Endrin	ND	0.020	0.012	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	0.051	0.0054	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.0030	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0029	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0060	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.011	ug/l	
72-43-5	Methoxychlor	ND	0.051	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.26	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%		35-138%
877-09-8	Tetrachloro-m-xylene	96%		35-138%
2051-24-3	Decachlorobiphenyl	98%		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\oa15014.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\oa15014.D\ECD2B.CH
Acq On : 13 Aug 2004 7:01 pm Operator: owenm
Sample : n74914-2 Inst : GCOO
Misc : OP17703,GOA440,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 19:32:38 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 : 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	6.18	370.5E6	484.3E6	39.998	38.564
iked Amount	40.000	Range	30 - 150	Recovery	= 99.99%	96.41%
SA Decachlorobiphen	25.35	26.52	255.3E6	373.0E6	39.183	37.591
iked Amount	40.000	Range	30 - 150	Recovery	= 97.96%	93.98%

Target Compounds

OM 8/16/04

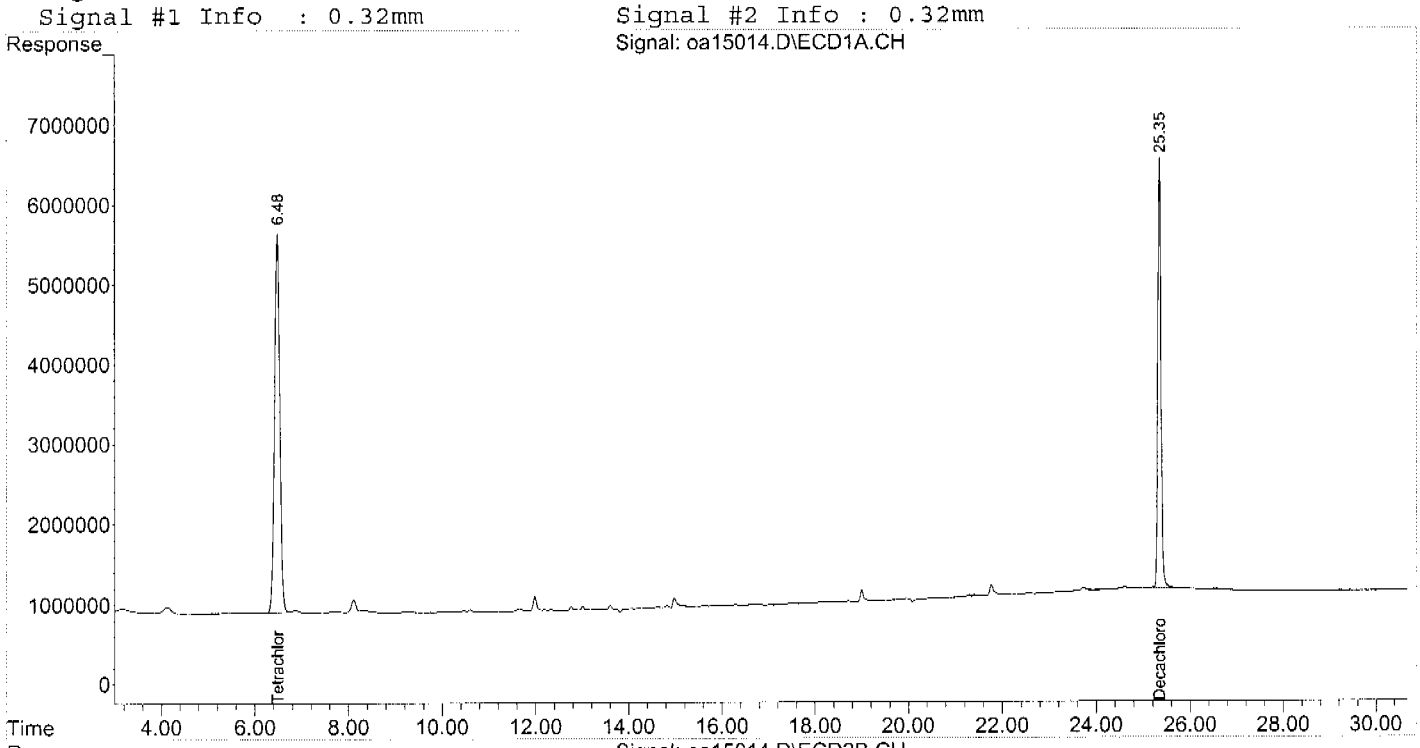
676

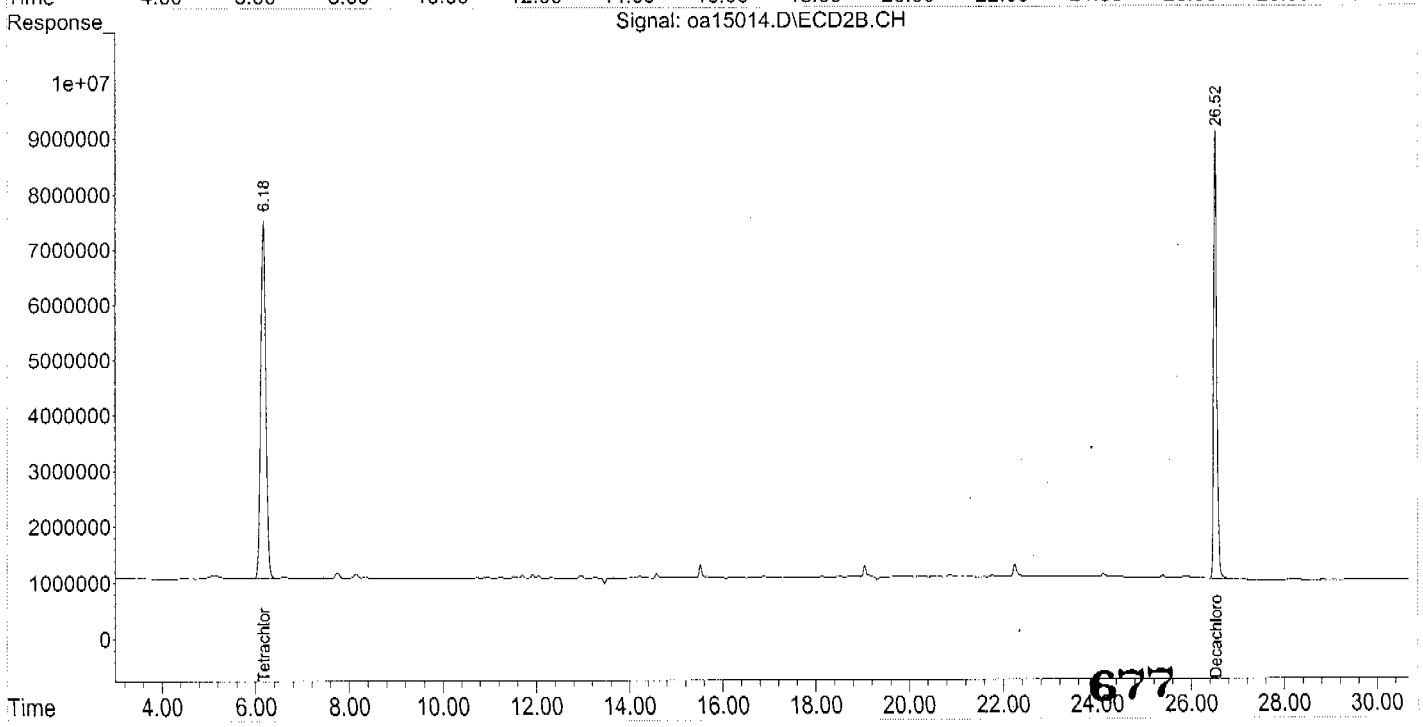
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15014.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\oa15014.D\ECD2B.CH
Acq On : 13 Aug 2004 7:01 pm Operator: owenm
Sample : n74914-2 Inst : GCOO
Misc : OP17703,GOA440,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 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





677

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4535-UZZLERD		
Lab Sample ID:	N74914-3	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	OA15015.D	1	08/13/04	OPM	08/13/04	OP17703	GOA440
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.020	0.0081	ug/l	
319-84-6	alpha-BHC	ND	0.020	0.013	ug/l	
319-85-7	beta-BHC	ND	0.020	0.0087	ug/l	
319-86-8	delta-BHC	ND	0.020	0.0099	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.020	0.0027	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	0.0042	ug/l	
50-29-3	4,4'-DDT	ND	0.020	0.018	ug/l	
72-20-8	Endrin	ND	0.020	0.012	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	0.051	0.0054	ug/l	
959-98-8	Endosulfan-I	ND	0.020	0.0030	ug/l	
33213-65-9	Endosulfan-II	ND	0.020	0.0029	ug/l	
76-44-8	Heptachlor	ND	0.020	0.0060	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.020	0.011	ug/l	
72-43-5	Methoxychlor	ND	0.051	0.012	ug/l	
8001-35-2	Toxaphene	ND	0.26	0.25	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	75%		19-153%
2051-24-3	Decachlorobiphenyl	72%		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\oa15015.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\oa15015.D\ECD2B.CH
Acq On : 13 Aug 2004 7:35 pm Operator: owenm
Sample : n74914-3 Inst : GCOO
Misc : OP17703,GOA440,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 20:05:57 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						
) SAB Tetrachloro-m-xy	6.48f	6.17	355.8E6	463.1E6	38.401	36.874
Spiked Amount	40.000	Range	30 - 150	Recovery	= 96.00%	92.19%
.) SA Decachlorobiphen	25.35	26.52	194.1E6	285.9E6	29.801	28.817
Spiked Amount	40.000	Range	30 - 150	Recovery	= 74.50%	72.04%

Target Compounds

CM
8/16/04

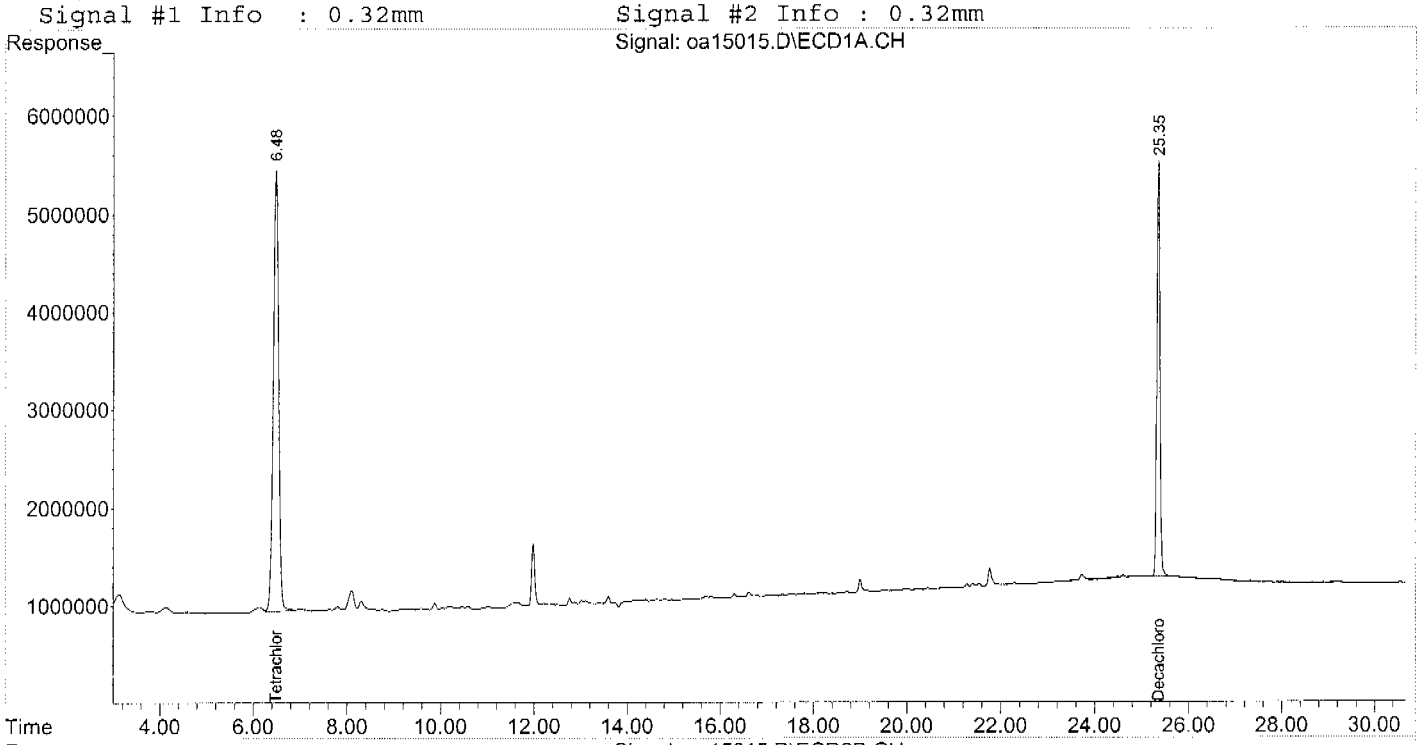
679

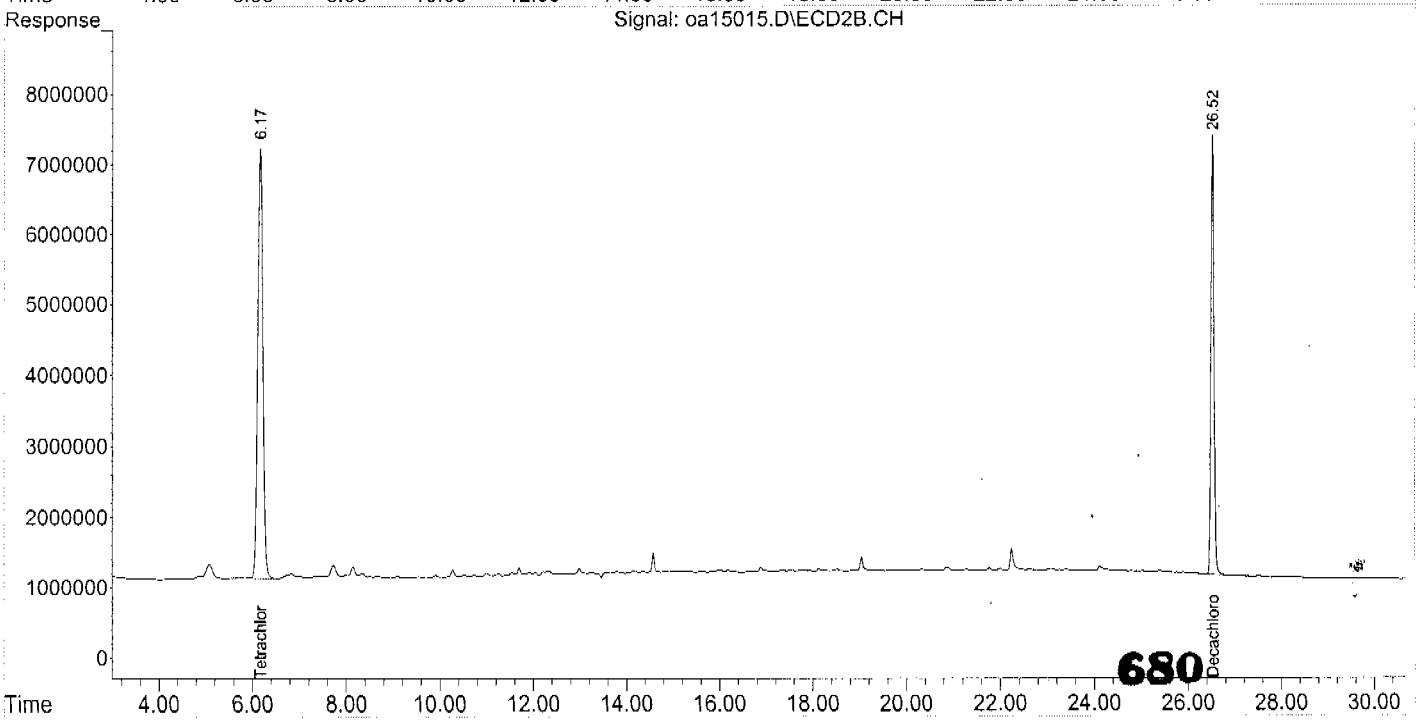
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15015.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\oa15015.D\ECD2B.CH
Acq On : 13 Aug 2004 7:35 pm Operator: owenm
Sample : n74914-3 Inst : GCOO
Misc : OP17703,GOA440,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 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





680

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4578-UZZLERD		
Lab Sample ID:	N74914-4	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	OA15016.D	1	08/13/04	OPM	08/13/04	OP17703	GOA440
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0083	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.013	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0089	ug/l	
319-86-8	delta-BHC	ND	0.021	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0027	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	0.018	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	0.020	ug/l	
53494-70-5	Endrin ketone	ND	0.052	0.0056	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0031	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0029	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0061	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.052	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	101%		35-138%
877-09-8	Tetrachloro-m-xylene	97%		35-138%
2051-24-3	Decachlorobiphenyl	101%		19-153%
2051-24-3	Decachlorobiphenyl	99%		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\oa15016.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\oa15016.D\ECD2B.CH
Acq On : 13 Aug 2004 8:08 pm Operator: owenm
Sample : n74914-4 Inst : GCOO
Misc : OP17703,GOA440,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 20:39:02 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 : 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	374.7E6	487.9E6	40.442	38.852
Spiked Amount	40.000	Range	30 - 150	Recovery	= 101.11%	97.13%
) SA Decachlorobiphen	25.35	26.52	264.3E6	391.0E6	40.570	39.404
Spiked Amount	40.000	Range	30 - 150	Recovery	= 101.43%	98.51%
Target Compounds						

OPM 8/16/04

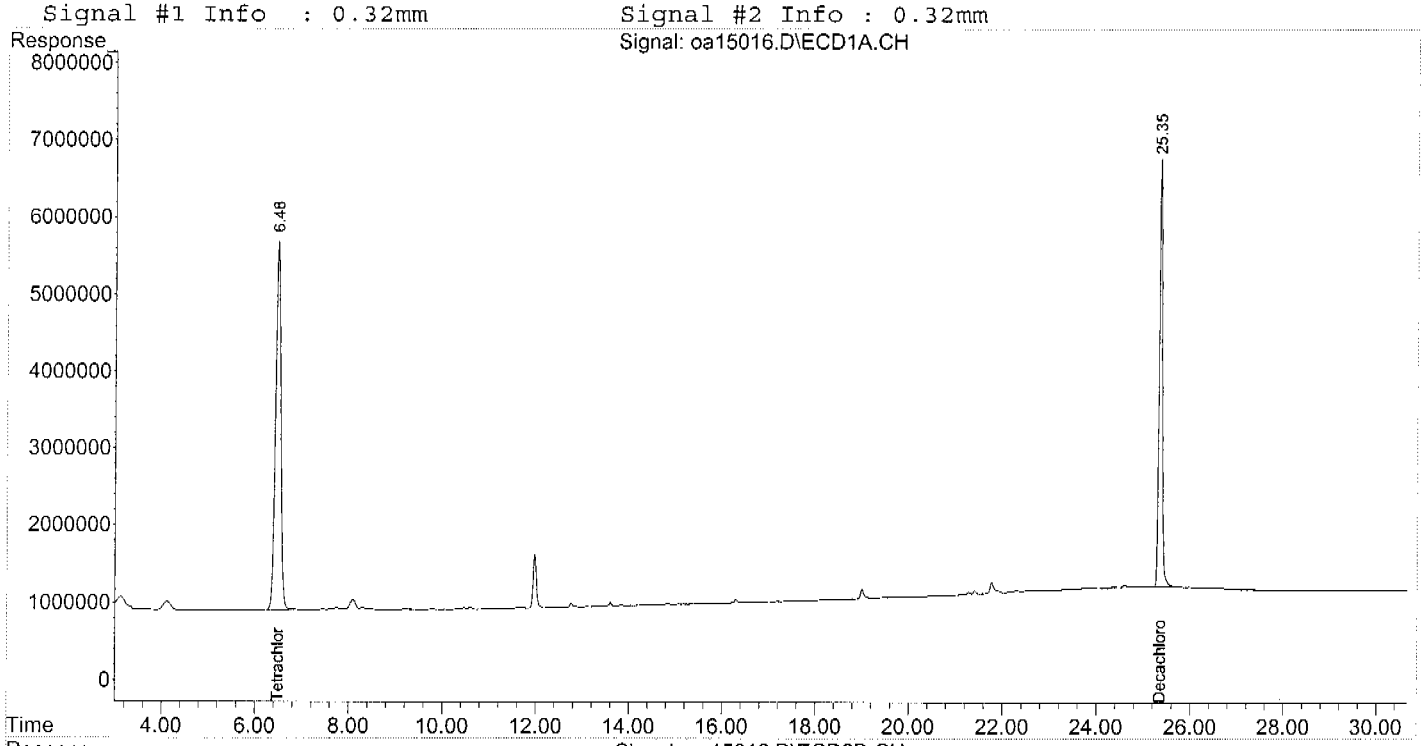
682

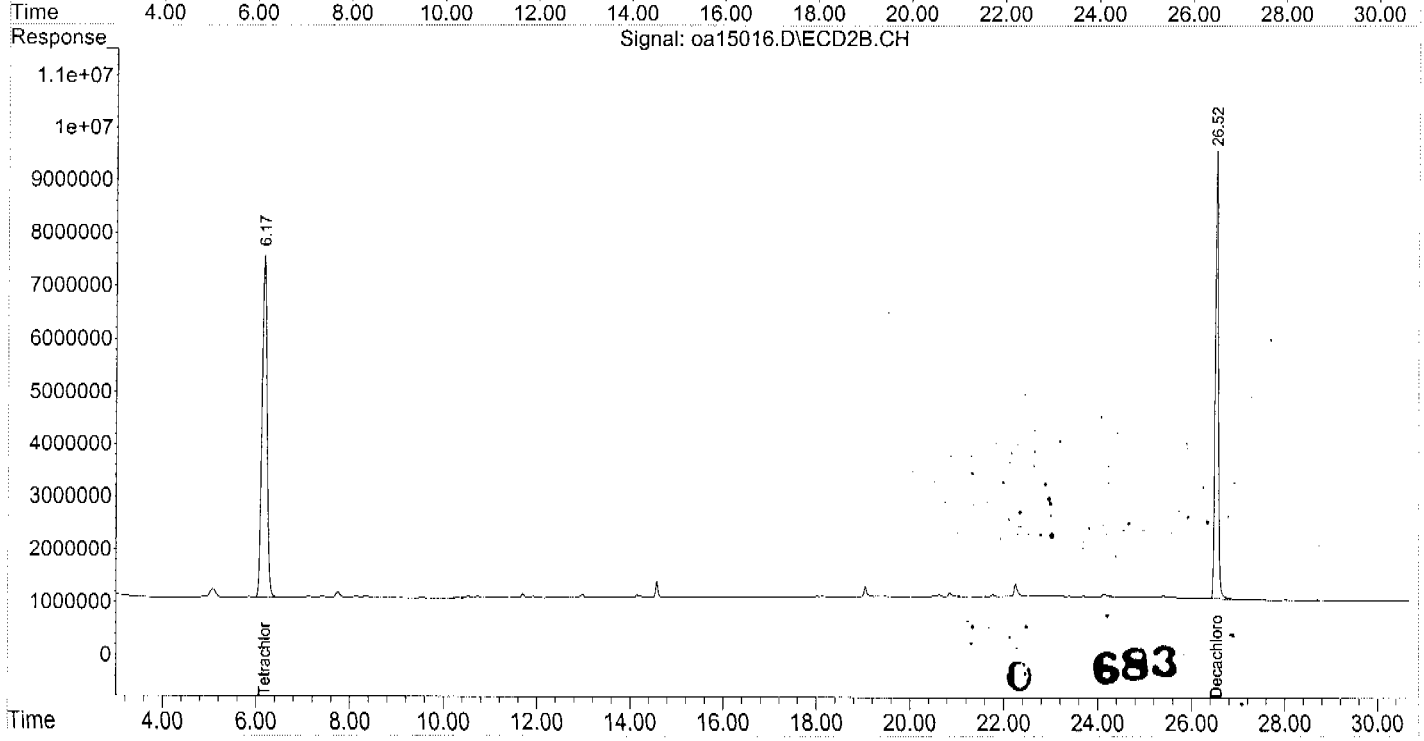
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15016.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\oa15016.D\ECD2B.CH
Acq On : 13 Aug 2004 8:08 pm Operator: owenm
Sample : n74914-4 Inst : GCOO
Misc : OP17703,GOA440,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 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





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Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-627B-ENONRD		
Lab Sample ID:	N74914-5	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	OA15017.D	1	08/13/04	OPM	08/13/04	OP17703	GOA440
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0083	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.013	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0089	ug/l	
319-86-8	delta-BHC	ND	0.021	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0027	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	0.018	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	0.020	ug/l	
53494-70-5	Endrin ketone	ND	0.052	0.0056	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0031	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0029	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0061	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.052	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	97%		35-138%
877-09-8	Tetrachloro-m-xylene	93%		35-138%
2051-24-3	Decachlorobiphenyl	104%		19-153%
2051-24-3	Decachlorobiphenyl	101%		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\oa15017.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\oa15017.D\ECD2B.CH
Acq On : 13 Aug 2004 8:41 pm Operator: owenm
Sample : n74914-5 Inst : GCOO
Misc : OP17703,GOA440,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 21:12:21 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	360.2E6	464.9E6	38.875	37.020
iked Amount 40.000 Range 30 - 150 Recovery =					97.19%	92.55%
SA Decachlorobiphen	25.34	26.52	270.1E6	401.2E6	41.460	40.434
iked Amount 40.000 Range 30 - 150 Recovery =					103.65%	101.09%

Target Compounds

OM 8/16/04

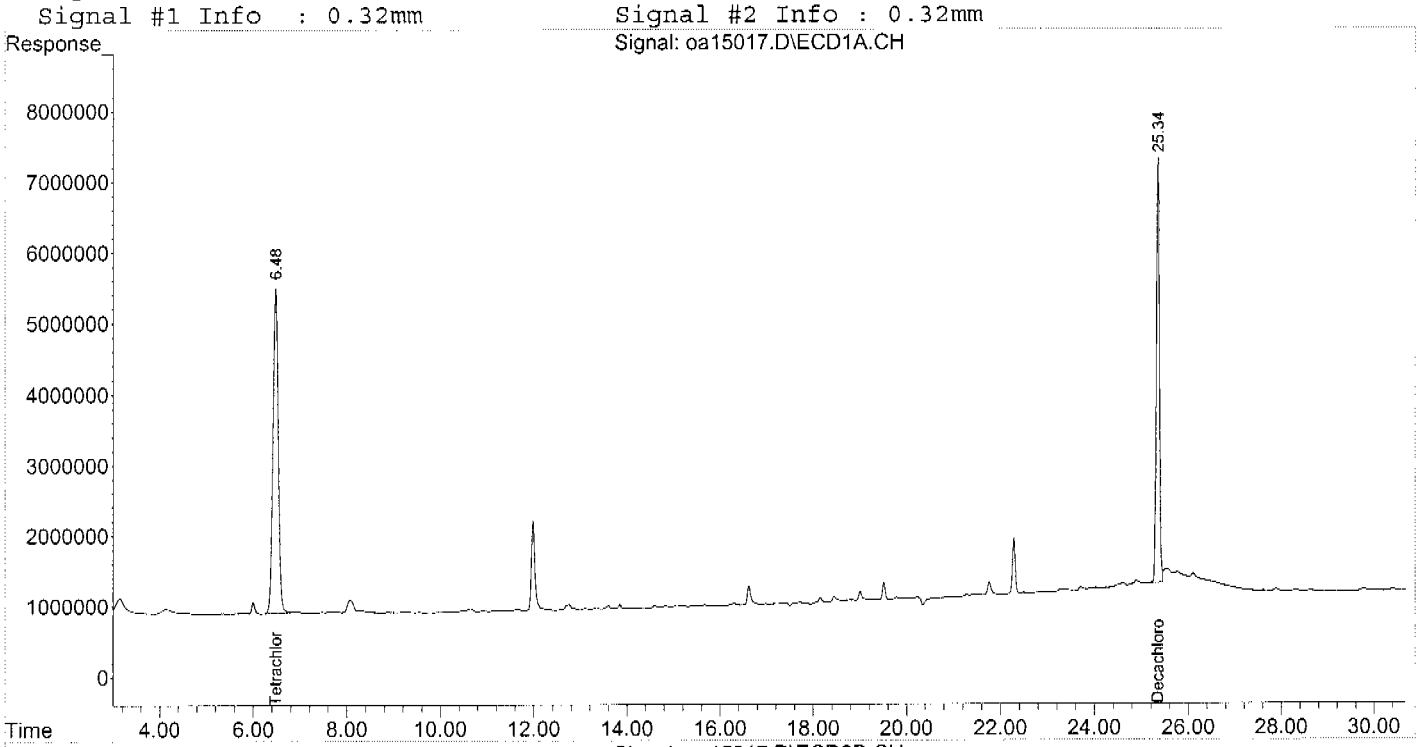
685.

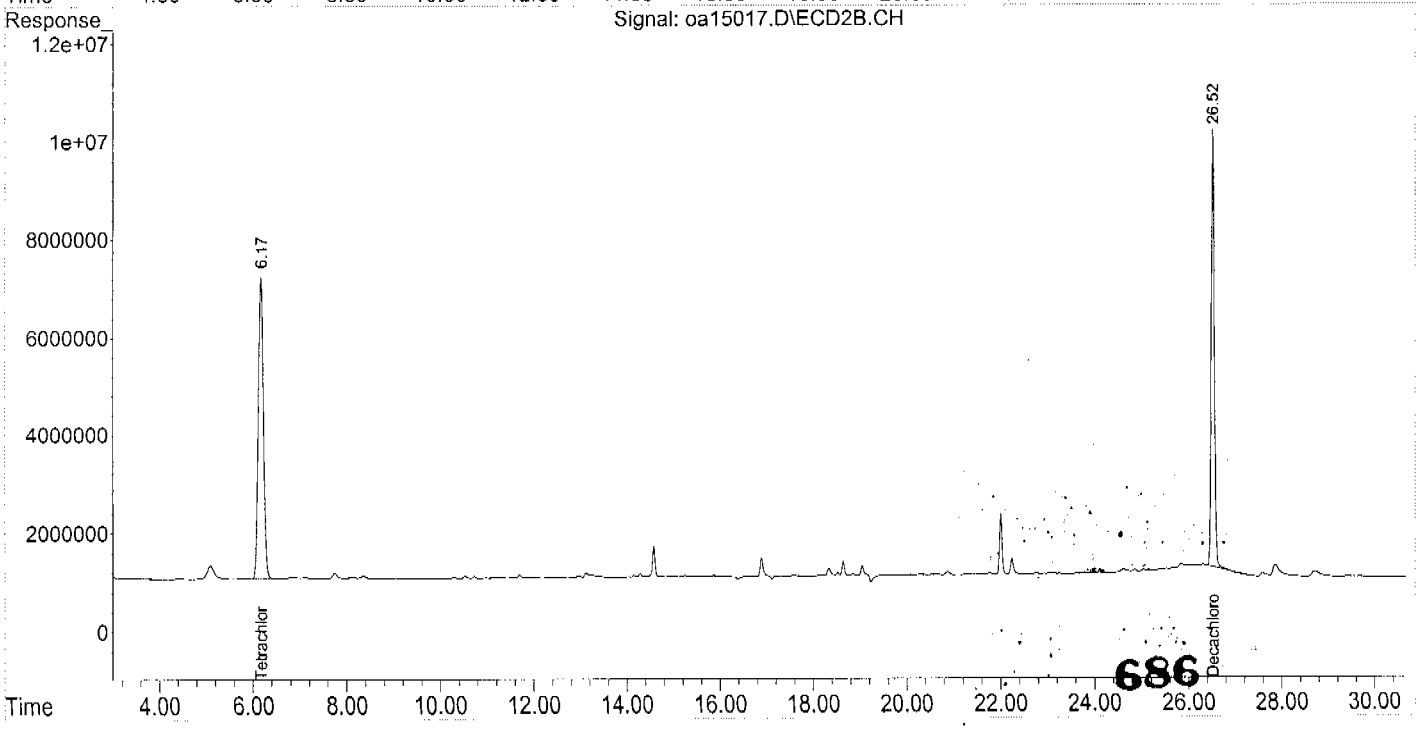
)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15017.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\oa15017.D\ECD2B.CH
Acq On : 13 Aug 2004 8:41 pm Operator: owenm
Sample : n74914-5 Inst : GCOO
Misc : OP17703,GOA440,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 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





686

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4573-UZZLERD		
Lab Sample ID:	N74914-6	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	OA15018.D	1	08/13/04	OPM	08/13/04	OP17703	GOA440
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

Pesticide TCL List

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	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		35-138%
877-09-8	Tetrachloro-m-xylene	95%		35-138%
2051-24-3	Decachlorobiphenyl	90%		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

Signal #1 : C:\MSDCHEM\1\DATA\oa15018.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\oa15018.D\ECD2B.CH
Acq On : 13 Aug 2004 9:14 pm Operator: owenm
Sample : n74914-6 Inst : GCOO
Misc : OP17703,GOA440,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 21:45:31 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						
3AB Tetrachloro-m-xy	6.48f	6.17	367.8E6	478.9E6	39.699	38.132
iked Amount 40.000 Range 30 - 150 Recovery =					99.25%	95.33%
SA Decachlorobiphen	25.35	26.52	234.9E6	374.8E6	36.063	37.771
spiked Amount 40.000 Range 30 - 150 Recovery =					90.16%	94.43%

Target Compounds

GPM
8/16/04

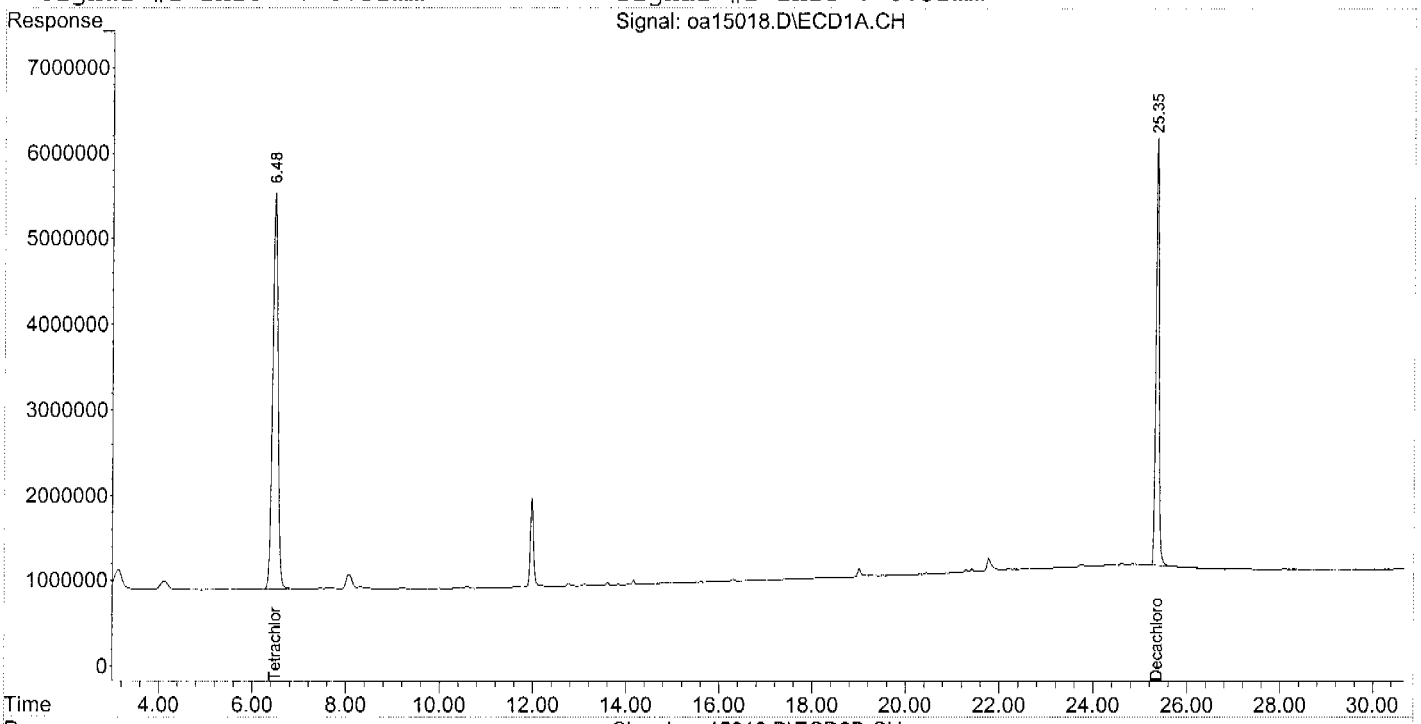
688

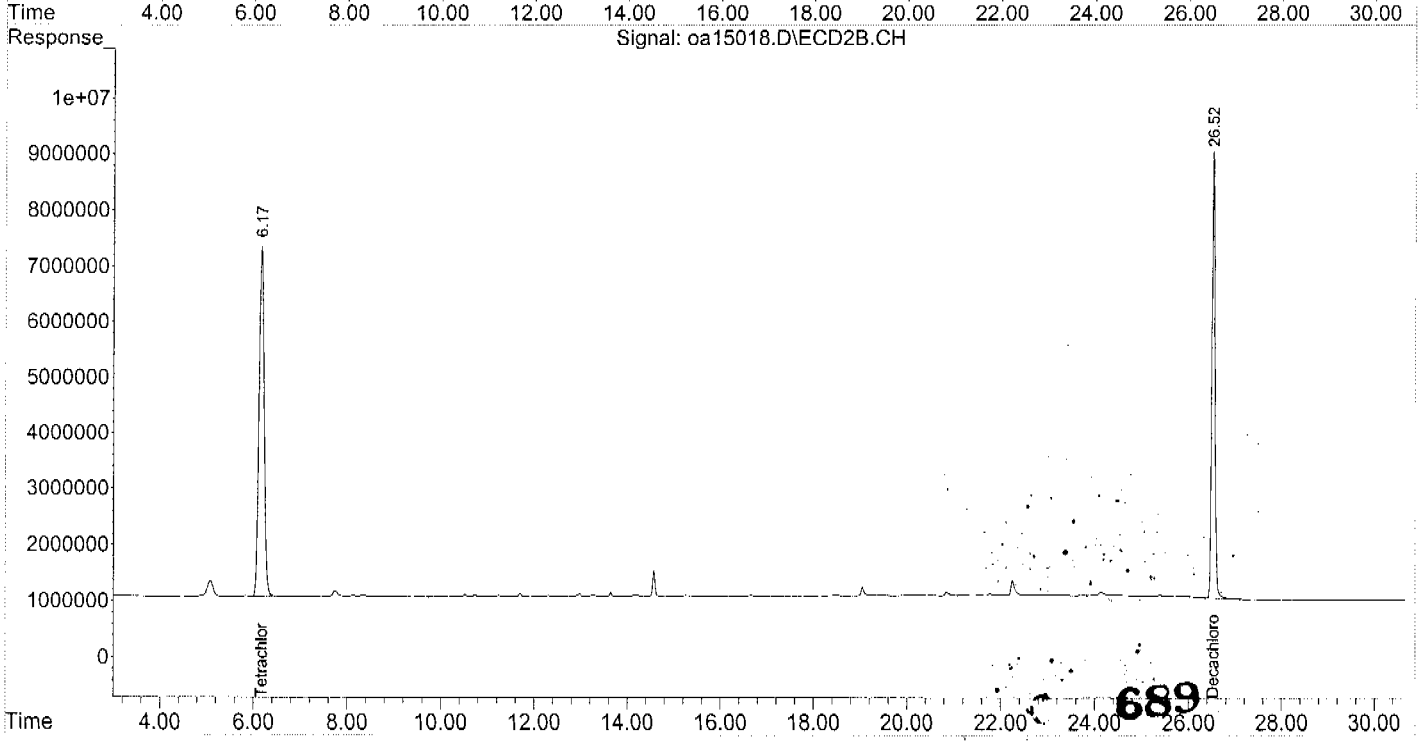
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15018.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\oa15018.D\ECD2B.CH
Acq On : 13 Aug 2004 9:14 pm Operator: owenm
Sample : n74914-6 Inst : GCOO
Misc : OP17703,GOA440,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 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





689

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-FIELDDUP2		
Lab Sample ID:	N74914-7	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	OA15019.D	1	08/13/04	OPM	08/13/04	OP17703	GOA440
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.021	0.0083	ug/l	
319-84-6	alpha-BHC	ND	0.021	0.013	ug/l	
319-85-7	beta-BHC	ND	0.021	0.0089	ug/l	
319-86-8	delta-BHC	ND	0.021	0.010	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.021	0.0027	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	0.018	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	0.020	ug/l	
53494-70-5	Endrin ketone	ND	0.052	0.0056	ug/l	
959-98-8	Endosulfan-I	ND	0.021	0.0031	ug/l	
33213-65-9	Endosulfan-II	ND	0.021	0.0029	ug/l	
76-44-8	Heptachlor	ND	0.021	0.0061	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.021	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.052	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	98%		35-138%
877-09-8	Tetrachloro-m-xylene	94%		35-138%
2051-24-3	Decachlorobiphenyl	99%		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

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15019.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\oa15019.D\ECD2B.CH
Acq On : 13 Aug 2004 9:48 pm Operator: owenm
Sample : n74914-7 Inst : GCOO
Misc : OP17703,GOA440,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 22:18:46 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 : 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	362.4E6	471.1E6	39.121	37.508
Spiked Amount 40.000 Range 30 - 150 Recovery =					97.80%	93.77%
SA Decachlorobiphen	25.35	26.52	257.7E6	395.8E6	39.562	39.889
Spiked Amount 40.000 Range 30 - 150 Recovery =					98.91%	99.72%

Target Compounds

OPM 8/16/04

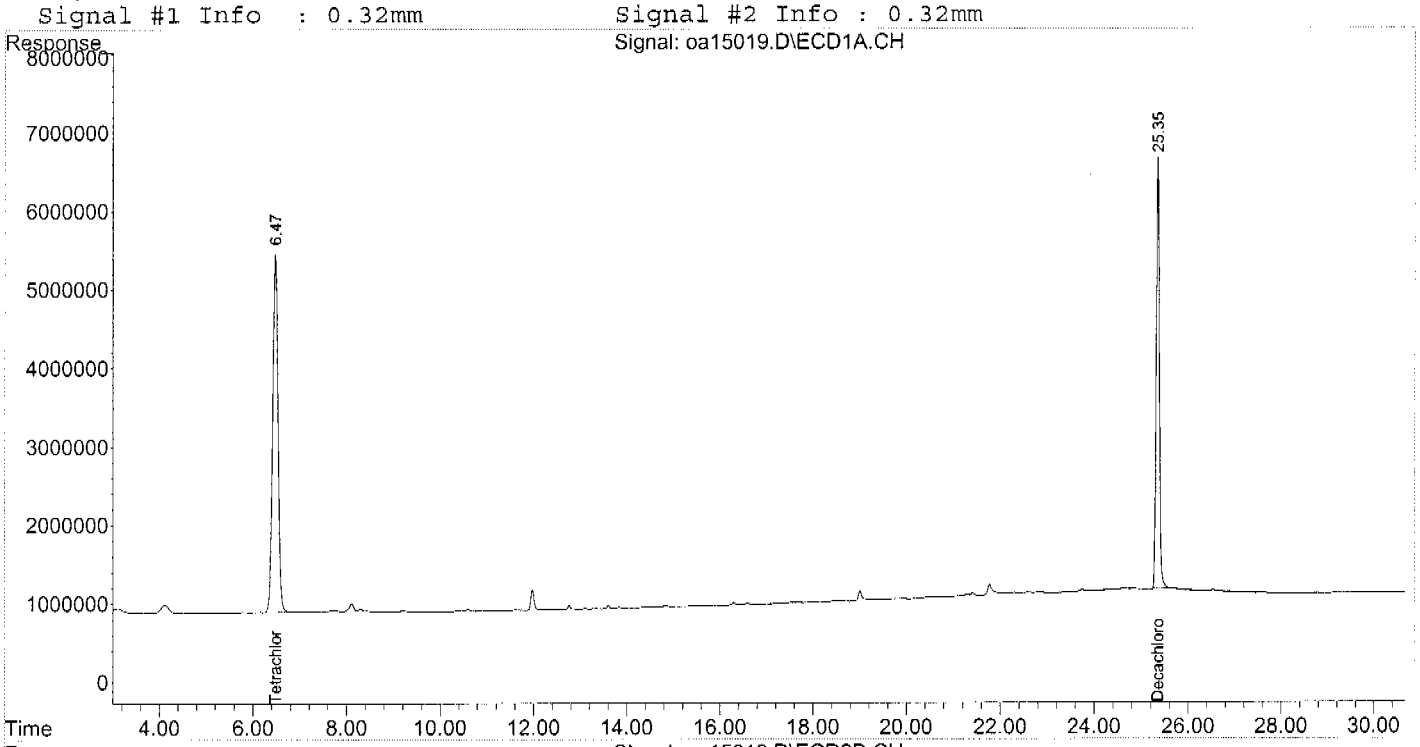
691

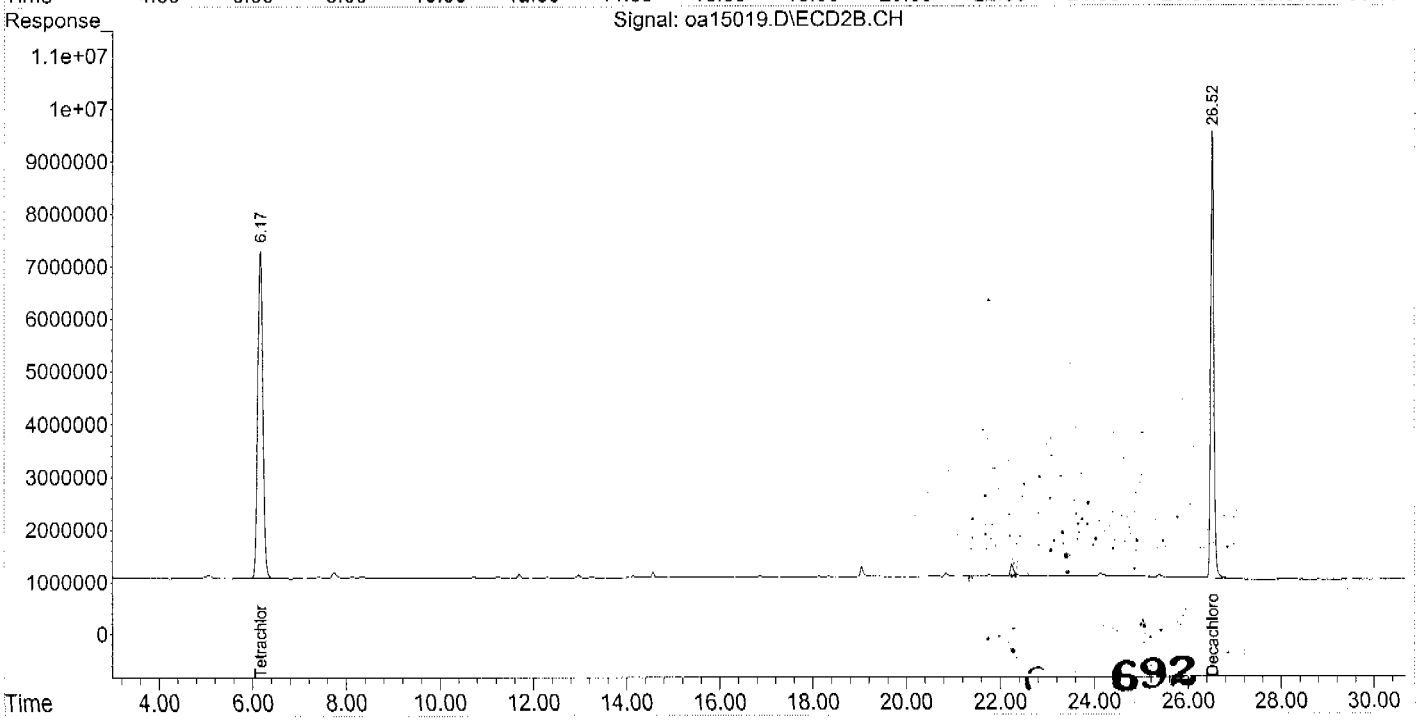
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15019.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\oa15019.D\ECD2B.CH
Acq On : 13 Aug 2004 9:48 pm Operator: owenm
Sample : n74914-7 Inst : GCOO
Misc : OP17703,GOA440,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 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





692

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-6305-ISHAMCHAMBERS		
Lab Sample ID:	N74914-9	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	OA15043.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.023	0.0090	ug/l	
319-84-6	alpha-BHC	ND	0.023	0.014	ug/l	
319-85-7	beta-BHC	ND	0.023	0.0097	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	0.020	ug/l	
5103-74-2	gamma-Chlordane	ND	0.023	0.014	ug/l	
60-57-1	Dieldrin	ND	0.023	0.014	ug/l	
72-54-8	4,4'-DDD	ND	0.023	0.019	ug/l	
72-55-9	4,4'-DDE	ND	0.023	0.0046	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	0.022	ug/l	
53494-70-5	Endrin ketone	ND	0.057	0.0061	ug/l	
959-98-8	Endosulfan-I	ND	0.023	0.0033	ug/l	
33213-65-9	Endosulfan-II	ND	0.023	0.0032	ug/l	
76-44-8	Heptachlor	ND	0.023	0.0067	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.023	0.013	ug/l	
72-43-5	Methoxychlor	ND	0.057	0.013	ug/l	
8001-35-2	Toxaphene	ND	0.28	0.28	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	94%		19-153%
2051-24-3	Decachlorobiphenyl	90%		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\oa15043.D\ECD1A.CH Vial: 35
Signal #2 : C:\MSDCHEM\1\DATA\oa15043.D\ECD2B.CH
Acq On : 14 Aug 2004 6:14 pm Operator: owenm
Sample : n74914-9 Inst : GCOO
Misc : OP17703,GOA441,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 18:44:54 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 : 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	6.18	336.5E6	435.2E6	36.326	34.656
iked Amount	40.000	Range	30 - 150	Recovery	= 90.81%	86.64%
SA Decachlorobiphen	25.35	26.52	243.8E6	356.2E6	37.430	35.895
piked Amount	40.000	Range	30 - 150	Recovery	= 93.58%	89.74%

Target Compounds

OPM 8/16/04

694

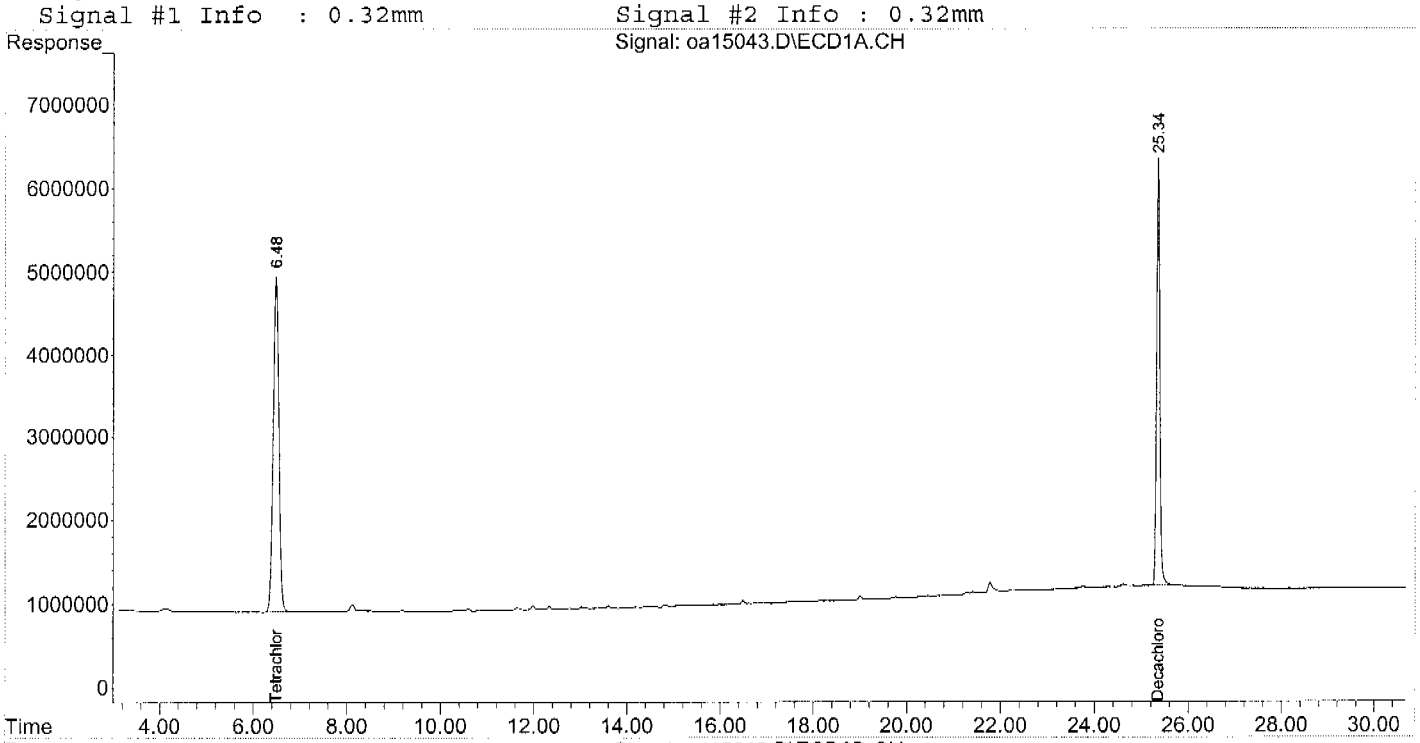
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

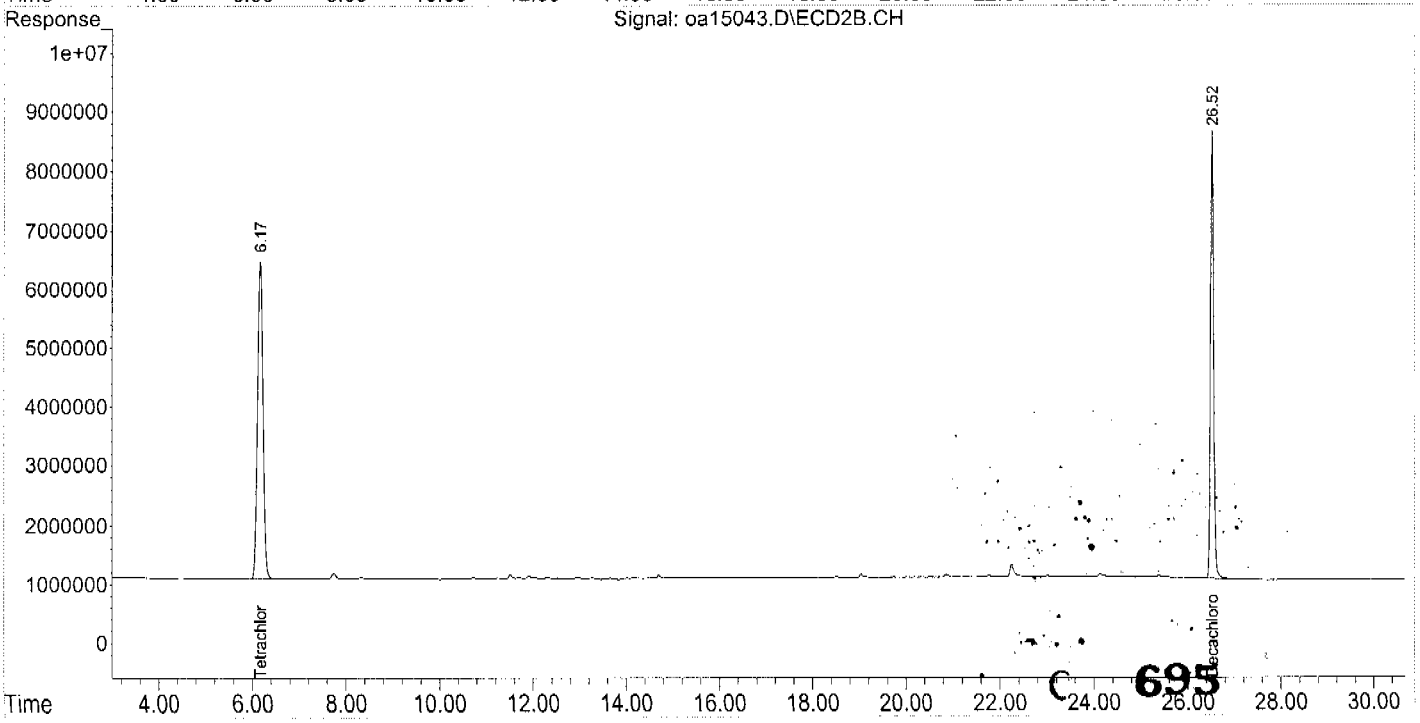
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15043.D\ECD1A.CH Vial: 35
Signal #2 : C:\MSDCHEM\1\DATA\oa15043.D\ECD2B.CH
Acq On : 14 Aug 2004 6:14 pm Operator: owenm
Sample : n74914-9 Inst : GCOO
Misc : OP17703,GOA441,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:53 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





C 695

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4710-MORIAHRD		
Lab Sample ID:	N74914-10	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	OA15044.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.022	0.0086	ug/l	
319-84-6	alpha-BHC	ND	0.022	0.014	ug/l	
319-85-7	beta-BHC	ND	0.022	0.0093	ug/l	
319-86-8	delta-BHC	ND	0.022	0.011	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	0.014	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	0.0044	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	0.0058	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	0.0064	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.022	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.054	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	92%		35-138%
877-09-8	Tetrachloro-m-xylene	88%		35-138%
2051-24-3	Decachlorobiphenyl	73%		19-153%
2051-24-3	Decachlorobiphenyl	69%		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\oa15044.D\ECD1A.CH Vial: 36
Signal #2 : C:\MSDCHEM\1\DATA\oa15044.D\ECD2B.CH
Acq On : 14 Aug 2004 6:47 pm Operator: owenm
Sample : n74914-10 Inst : GCOO
Misc : OP17703,GOA441,920,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 19:18:04 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	6.18	340.7E6	441.0E6	36.774	35.114
iked Amount	40.000	Range	30 - 150	Recovery	= 91.94%	87.78%
SA Decachlorobiphen	25.34	26.51	189.0E6	274.4E6	29.009	27.657
iked Amount	40.000	Range	30 - 150	Recovery	= 72.52%	69.14%
Target Compounds						

OM 8/16/04

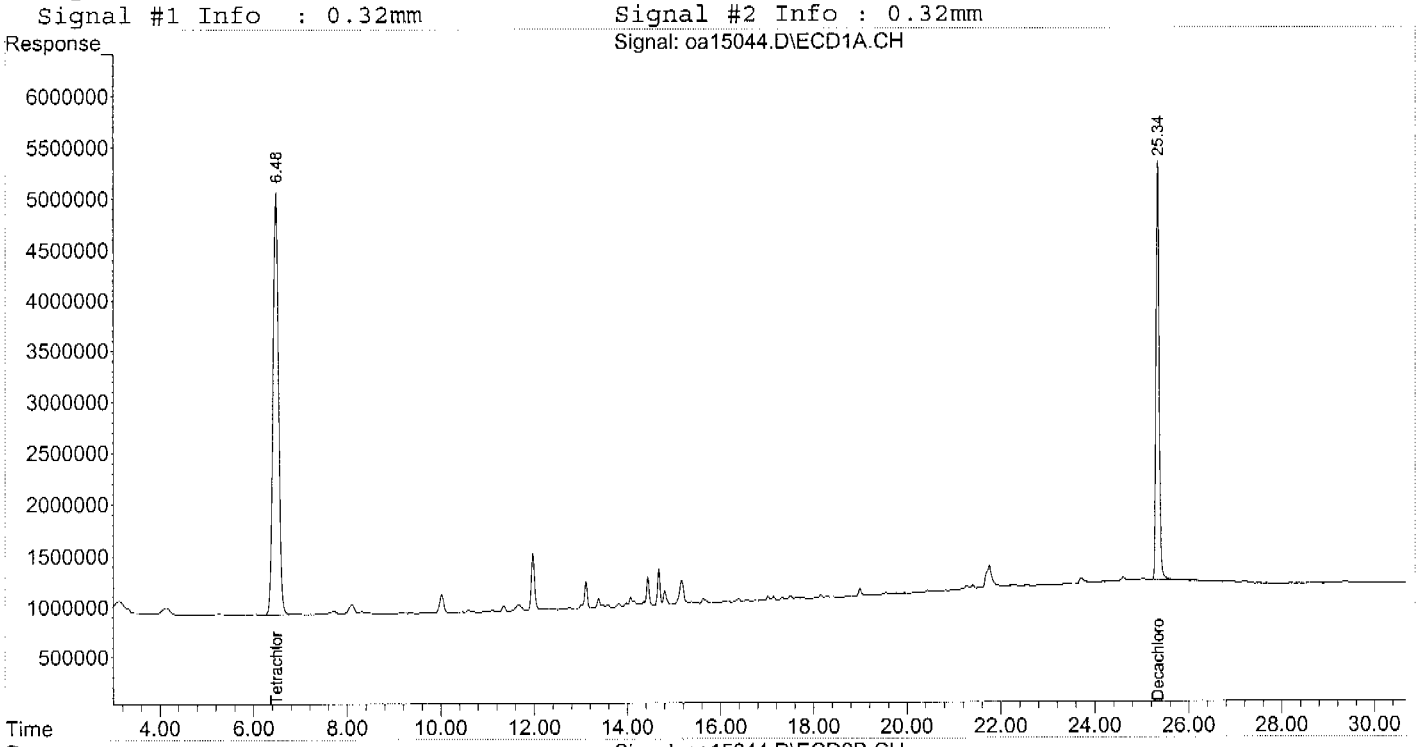
697

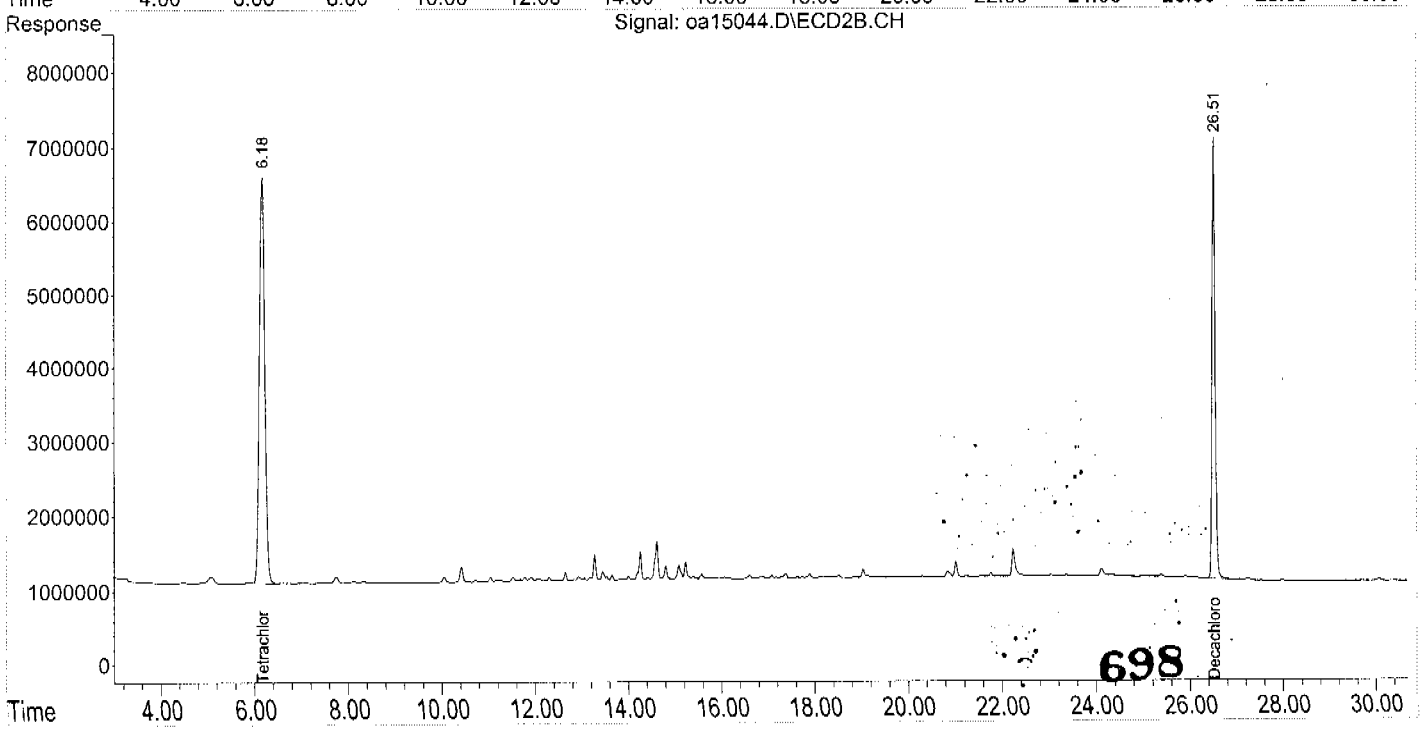
)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15044.D\ECD1A.CH Vial: 36
Signal #2 : C:\MSDCHEM\1\DATA\oa15044.D\ECD2B.CH
Acq On : 14 Aug 2004 6:47 pm Operator: owenm
Sample : n74914-10 Inst : GCOO
Misc : OP17703,GOA441,920,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:53 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





698

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4709-MORIAHRD		
Lab Sample ID:	N74914-11	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	OA15045.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441
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	66%		19-153%
2051-24-3	Decachlorobiphenyl	62%		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\oa15045.D\ECD1A.CH Vial: 37
Signal #2 : C:\MSDCHEM\1\DATA\oa15045.D\ECD2B.CH
Acq On : 14 Aug 2004 7:20 pm Operator: owenm
Sample : n74914-11 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 19:51:20 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	6.49f	6.18	355.9E6	462.9E6	38.418	36.855
Spiked Amount	40.000	Range 30 - 150		Recovery =	96.05%	92.14%
SA Decachlorobiphen	25.34	26.51	171.8E6	246.5E6	26.371	24.845
piked Amount	40.000	Range 30 - 150		Recovery =	65.93%	62.11%

Target Compounds

OM 8/16/04

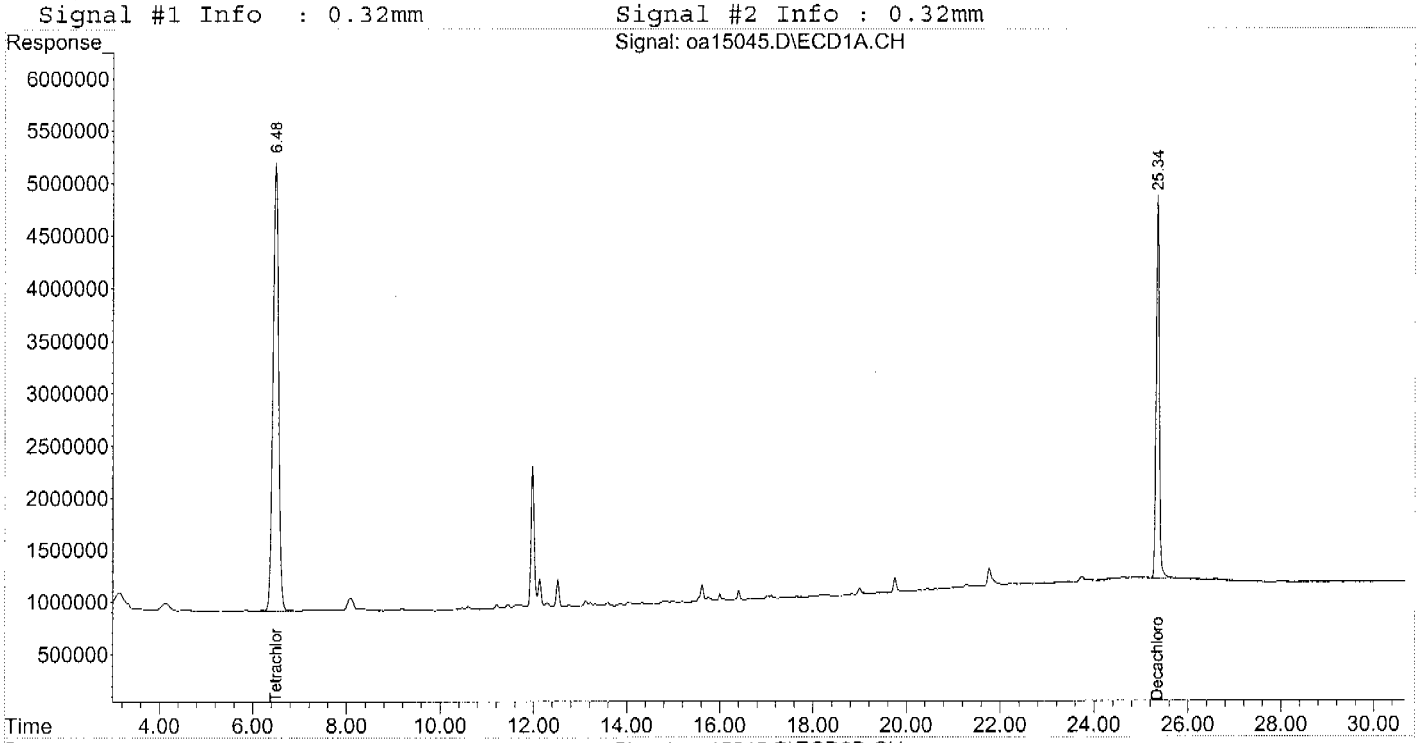
0. 700

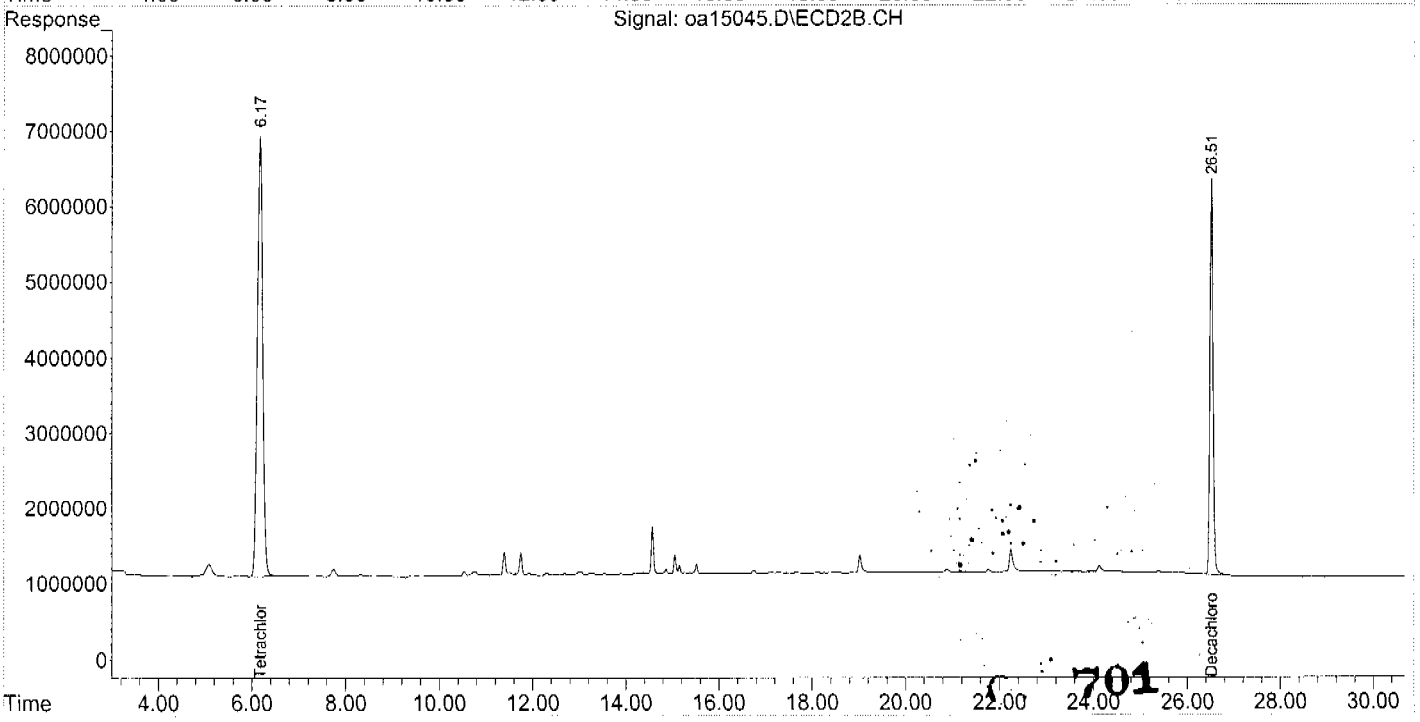
=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15045.D\ECD1A.CH Vial: 37
Signal #2 : C:\MSDCHEM\1\DATA\oa15045.D\ECD2B.CH
Acq On : 14 Aug 2004 7:20 pm Operator: owenm
Sample : n74914-11 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 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:	RW0804-5057-CLAYTONRD		
Lab Sample ID:	N74914-12	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	OA15046.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441
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	98%		35-138%
877-09-8	Tetrachloro-m-xylene	94%		35-138%
2051-24-3	Decachlorobiphenyl	83%		19-153%
2051-24-3	Decachlorobiphenyl	79%		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

Quantification Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15046.D\ECD1A.CH Vial: 38
Signal #2 : C:\MSDCHEM\1\DATA\oa15046.D\ECD2B.CH
Acq On : 14 Aug 2004 7:53 pm Operator: owenm
Sample : n74914-12 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 20:24:26 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	364.1E6	473.7E6	39.301	37.720
iked Amount 40.000 Range 30 - 150 Recovery =					98.25%	94.30%
SA Decachlorobiphen	25.34	26.51	215.1E6	311.8E6	33.013	31.419
iked Amount 40.000 Range 30 - 150 Recovery =					82.53%	78.55%

Target Compounds

OM 8/16/04

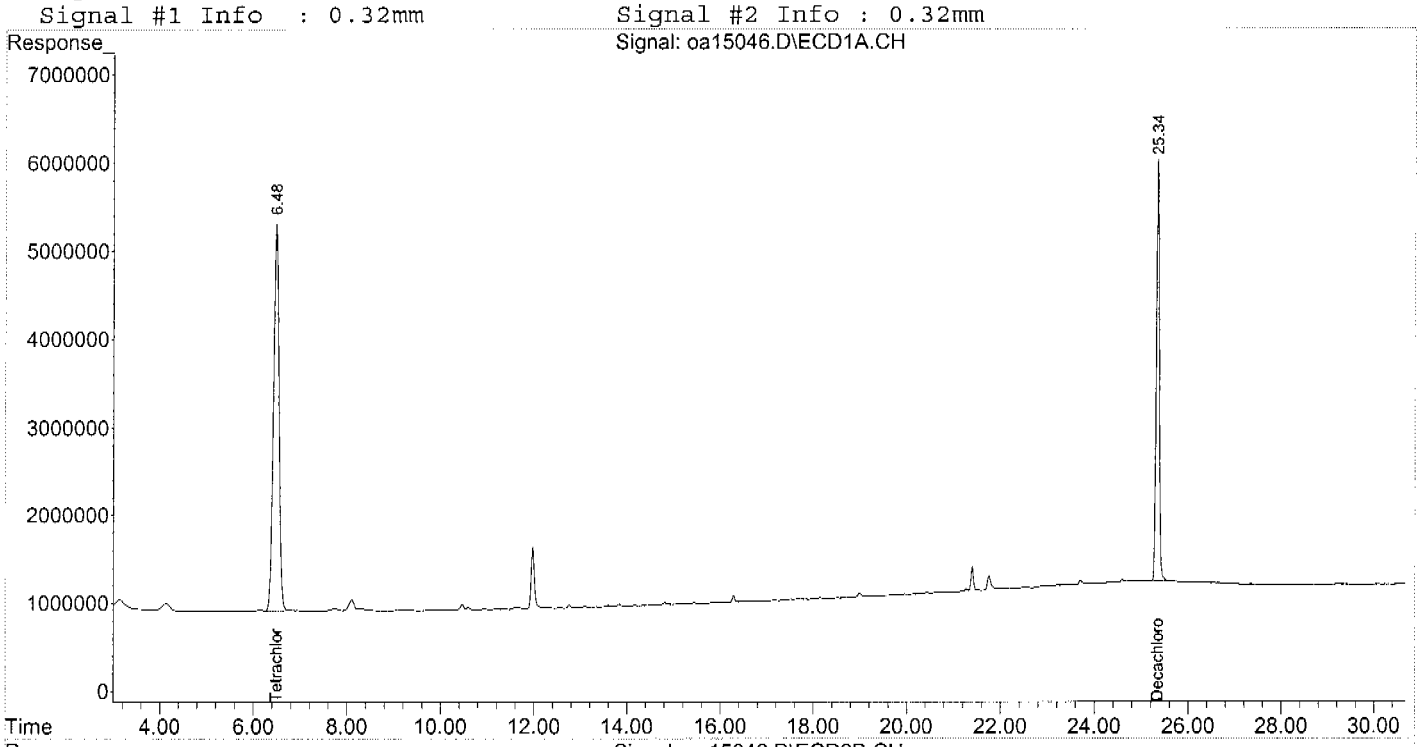
703

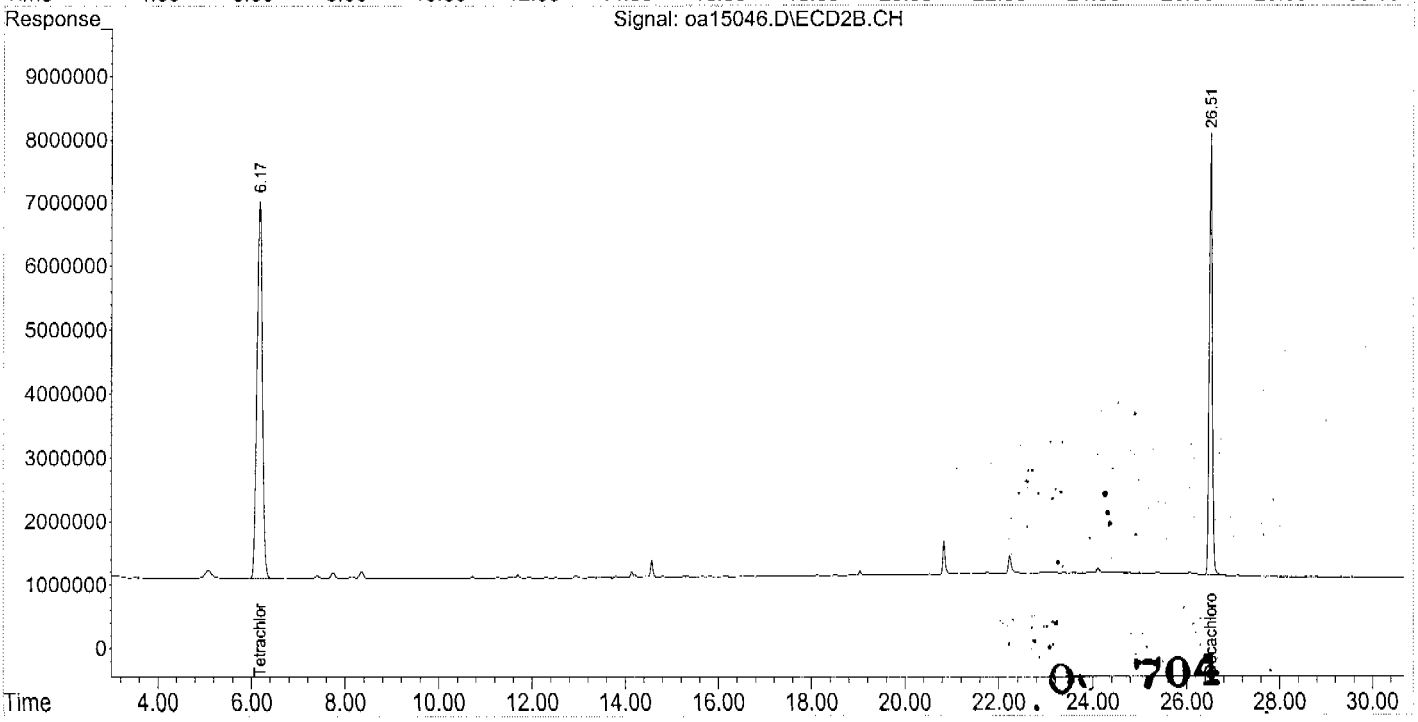
.)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15046.D\ECD1A.CH Vial: 38
Signal #2 : C:\MSDCHEM\1\DATA\oa15046.D\ECD2B.CH
Acq On : 14 Aug 2004 7:53 pm Operator: owenm
Sample : n74914-12 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 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:	RW0804-2202-TILLEYFARMRD		
Lab Sample ID:	N74914-13	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	OA15047.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.022	0.0089	ug/l	
319-84-6	alpha-BHC	ND	0.022	0.014	ug/l	
319-85-7	beta-BHC	ND	0.022	0.0096	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 [a]	0.088	0.022	0.020	ug/l	
5103-74-2	gamma-Chlordane	0.13	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	0.019	ug/l	
72-55-9	4,4'-DDE	ND	0.022	0.0046	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	0.0060	ug/l	
959-98-8	Endosulfan-I	ND	0.022	0.0033	ug/l	
33213-65-9	Endosulfan-II	ND	0.022	0.0032	ug/l	
76-44-8	Heptachlor	ND	0.022	0.0066	ug/l	
1024-57-3	Heptachlor epoxide	0.48	0.022	0.012	ug/l	
72-43-5	Methoxychlor	ND	0.056	0.013	ug/l	
8001-35-2	Toxaphene	ND	0.28	0.28	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	88%		35-138%
2051-24-3	Decachlorobiphenyl	92%		19-153%
2051-24-3	Decachlorobiphenyl	88%		19-153%

(a) Reported from lower concentration due to matrix interference.

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\oa15047.D\ECD1A.CH Vial: 39
Signal #2 : C:\MSDCHEM\1\DATA\oa15047.D\ECD2B.CH
Acq On : 14 Aug 2004 8:26 pm Operator: owenm
Sample : n74914-13 Inst : GCOO
Misc : OP17703,GOA441,890,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 20:57:41 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						
1) SAB Tetrachloro-m-xy	6.49f	6.18	343.1E6	444.6E6	37.032	35.399
Spiked Amount 40.000 Range 30 - 150 Recovery =					92.58%	88.50%
2) SA Decachlorobiphen	25.34	26.51	240.9E6	351.0E6	36.985	35.373
Spiked Amount 40.000 Range 30 - 150 Recovery =					92.46%	88.43%
Target Compounds						
8) B Heptachlor Epoxi	14.44f	14.26	465.2E6	605.5E6	43.122	39.847
9) B gamma-Chlordane	14.79f	14.80	117.9E6	163.6E6	11.273	10.758
10) B alpha-Chlordane	15.25	15.23	143.5E6	118.5E6	13.788	7.872 #

OPM
8/16/04

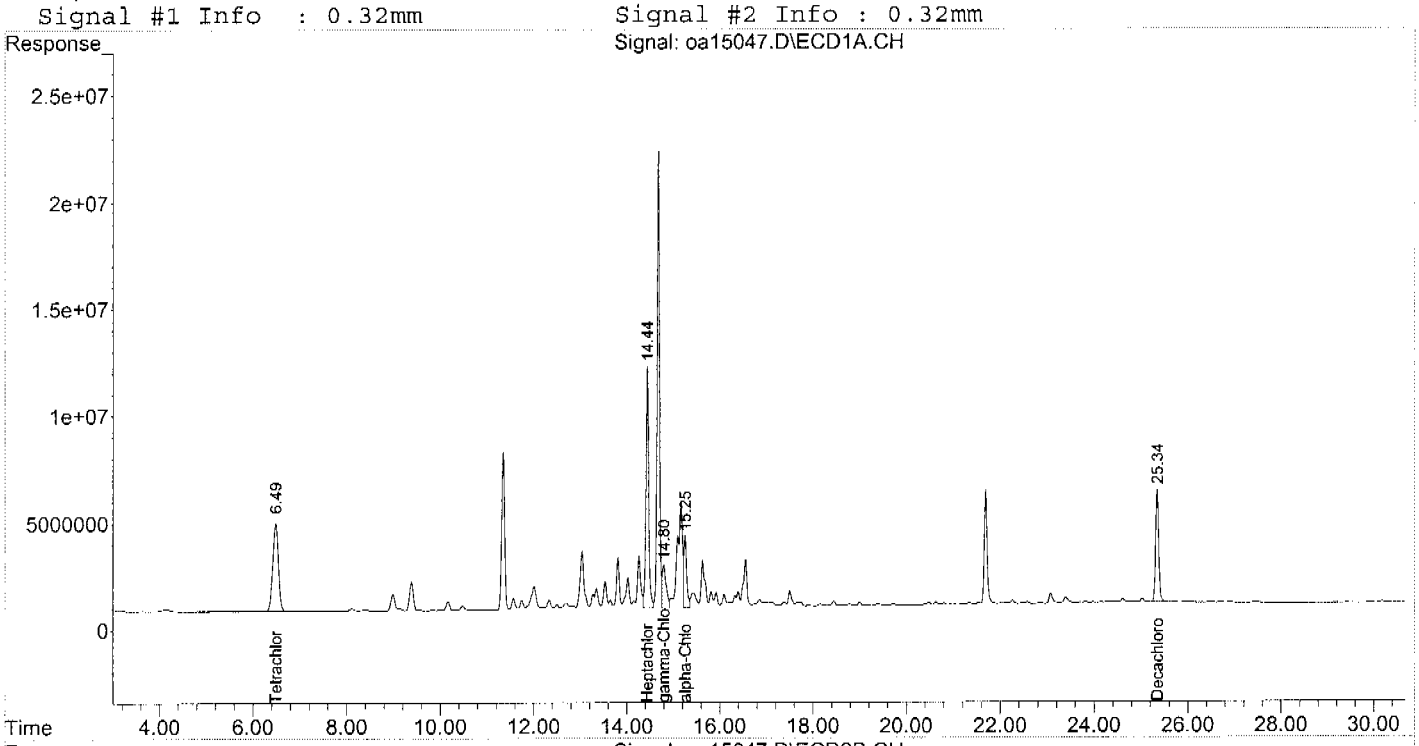
706

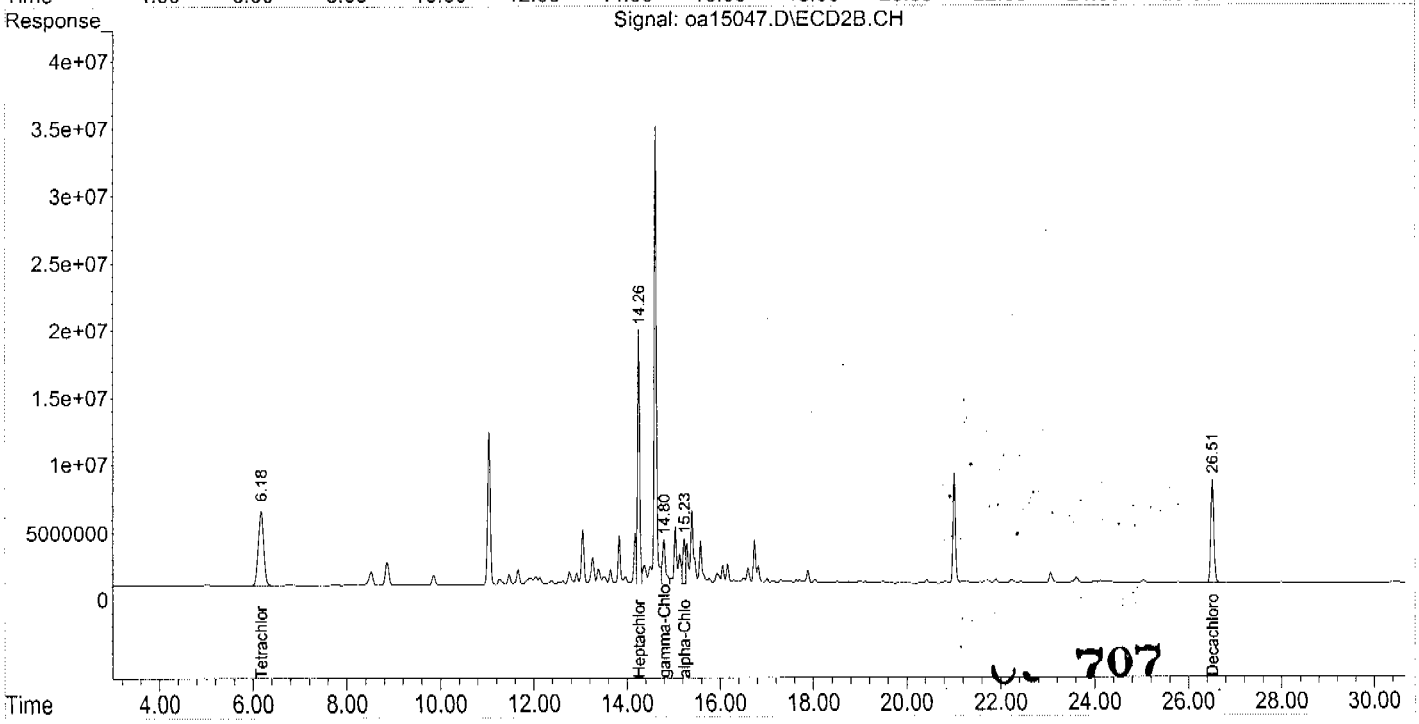
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15047.D\ECD1A.CH Vial: 39
Signal #2 : C:\MSDCHEM\1\DATA\oa15047.D\ECD2B.CH
Acq On : 14 Aug 2004 8:26 pm Operator: owenm
Sample : n74914-13 Inst : GCOO
Misc : OP17703,GOA441,890,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:56 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





707

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-564-BETHANYCHURCH		
Lab Sample ID:	N74914-14	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	OA15048.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441
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	101%		19-153%
2051-24-3	Decachlorobiphenyl	97%		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\oa15048.D\ECD1A.CH Vial: 40
Signal #2 : C:\MSDCHEM\1\DATA\oa15048.D\ECD2B.CH
Acq On : 14 Aug 2004 9:00 pm Operator: owenm
Sample : n74914-14 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 21:30:49 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	6.18	355.0E6	460.7E6	38.318	36.682
Spiked Amount 40.000 Range 30 - 150 Recovery =					95.80%	91.70%
32) SA Decachlorobiphen	25.34	26.51	262.0E6	385.2E6	40.225	38.818
Spiked Amount 40.000 Range 30 - 150 Recovery =					100.56%	97.04%

Target Compounds

OPM 8/16/04

709

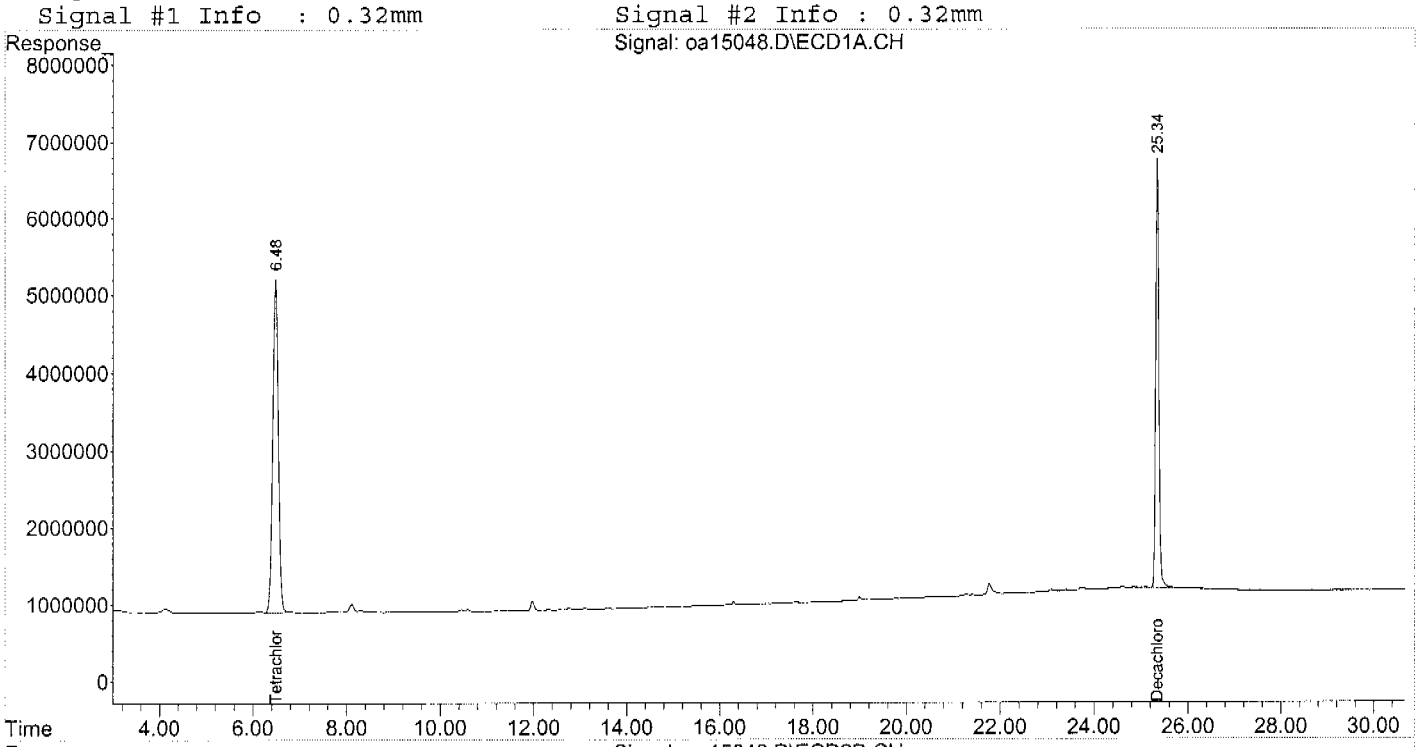
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

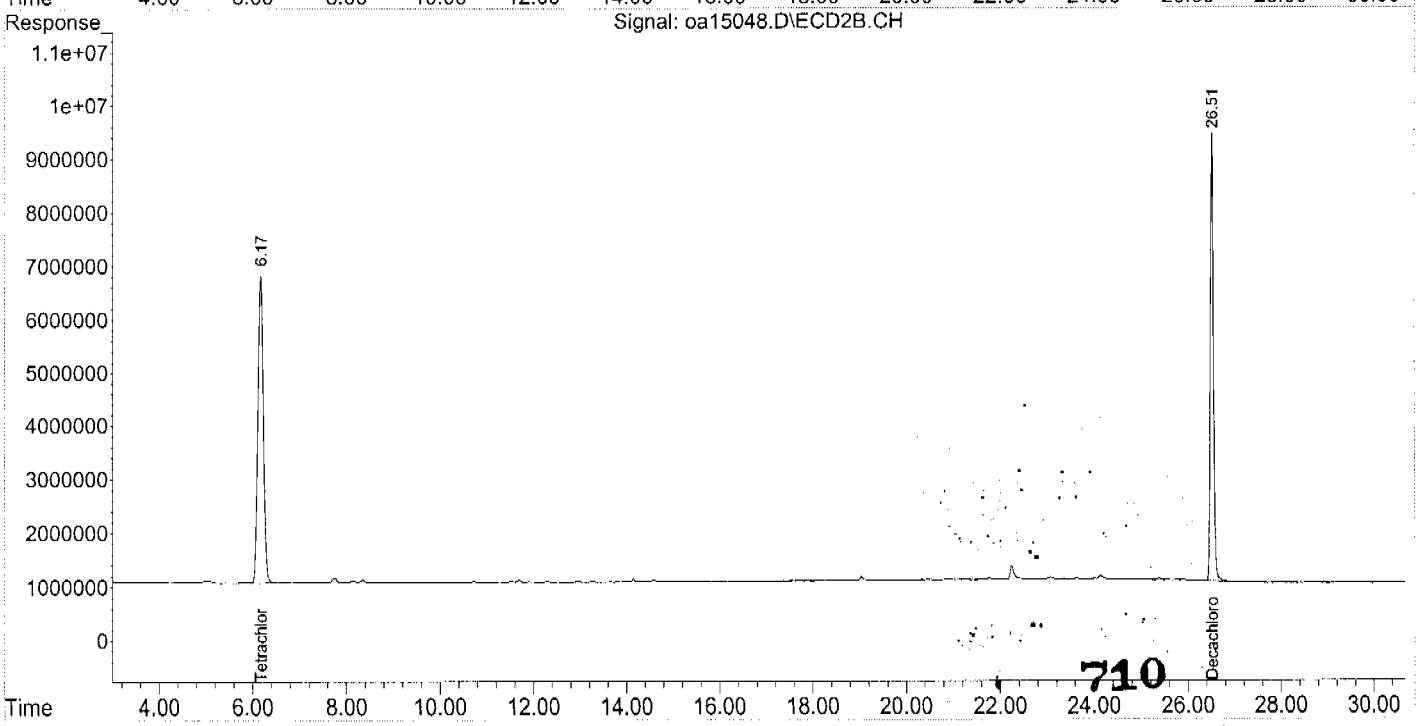
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15048.D\ECD1A.CH Vial: 40
Signal #2 : C:\MSDCHEM\1\DATA\oa15048.D\ECD2B.CH
Acq On : 14 Aug 2004 9:00 pm Operator: owenm
Sample : n74914-14 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 21:30 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





710

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-FIELDDUP3		
Lab Sample ID:	N74914-15	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	OA15049.D	1	08/14/04	OPM	08/13/04	OP17703	GOA441
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 [a]	0.088	0.022	0.020	ug/l	
5103-74-2	gamma-Chlordane	0.13	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	0.49	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	96%		19-153%
2051-24-3	Decachlorobiphenyl	93%		19-153%

(a) Reported from lower concentration due to matrix interference.

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\oa15049.D\ECD1A.CH Vial: 41
Signal #2 : C:\MSDCHEM\1\DATA\oa15049.D\ECD2B.CH
Acq On : 14 Aug 2004 9:33 pm Operator: owenm
Sample : n74914-15 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 22:04:08 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 : 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	356.2E6	461.8E6	38.445	36.767
Spiked Amount 40.000 Range 30 - 150 Recovery =					96.11%	91.92%
SA Decachlorobiphen	25.34	26.51	251.3E6	368.0E6	38.580	37.084
Spiked Amount 40.000 Range 30 - 150 Recovery =					96.45%	92.71%
Target Compounds						
B Heptachlor Epoxi	14.44f	14.26	473.6E6	614.8E6	43.898	40.462
B gamma-Chlordane	14.79f	14.80	120.6E6	165.9E6	11.532	10.912
B alpha-Chlordane	15.25	15.23	143.8E6	118.8E6	13.815	7.893 #

OM 8/16/04

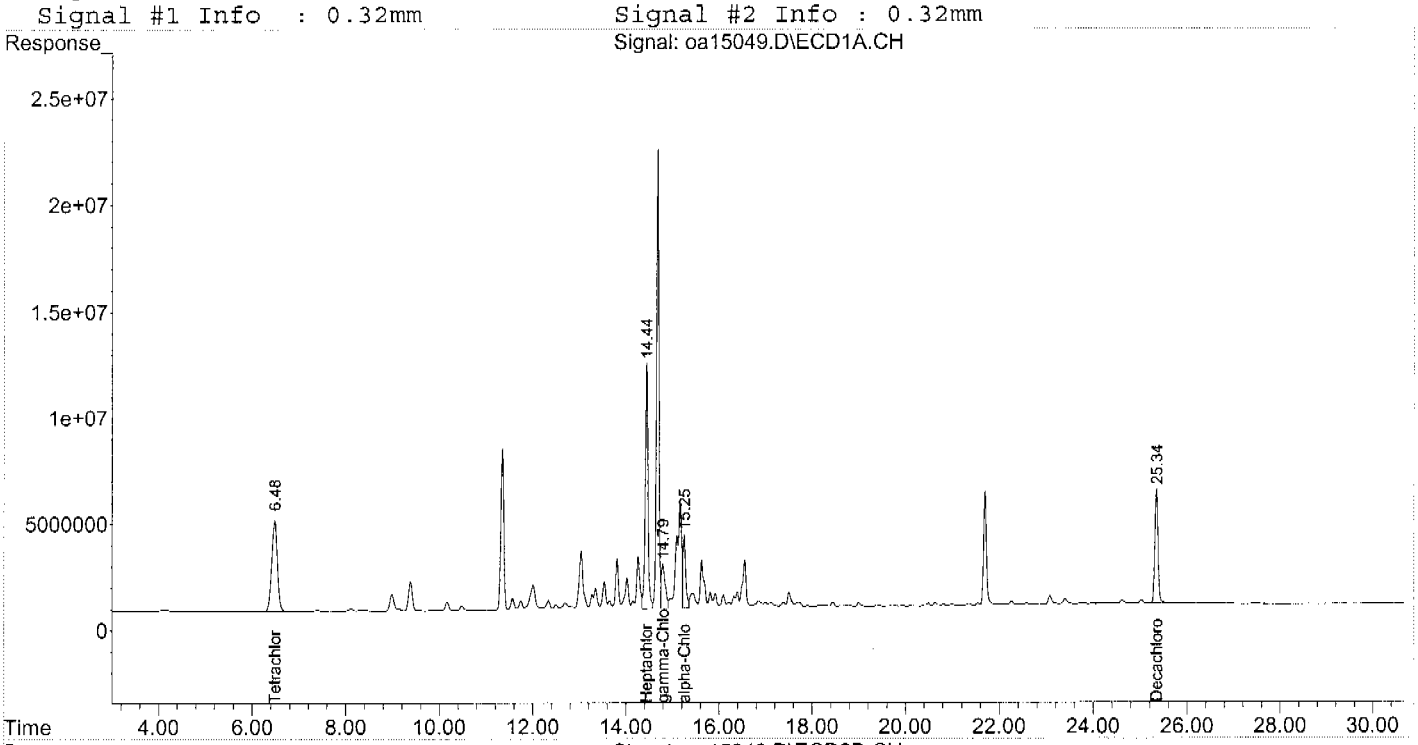
712

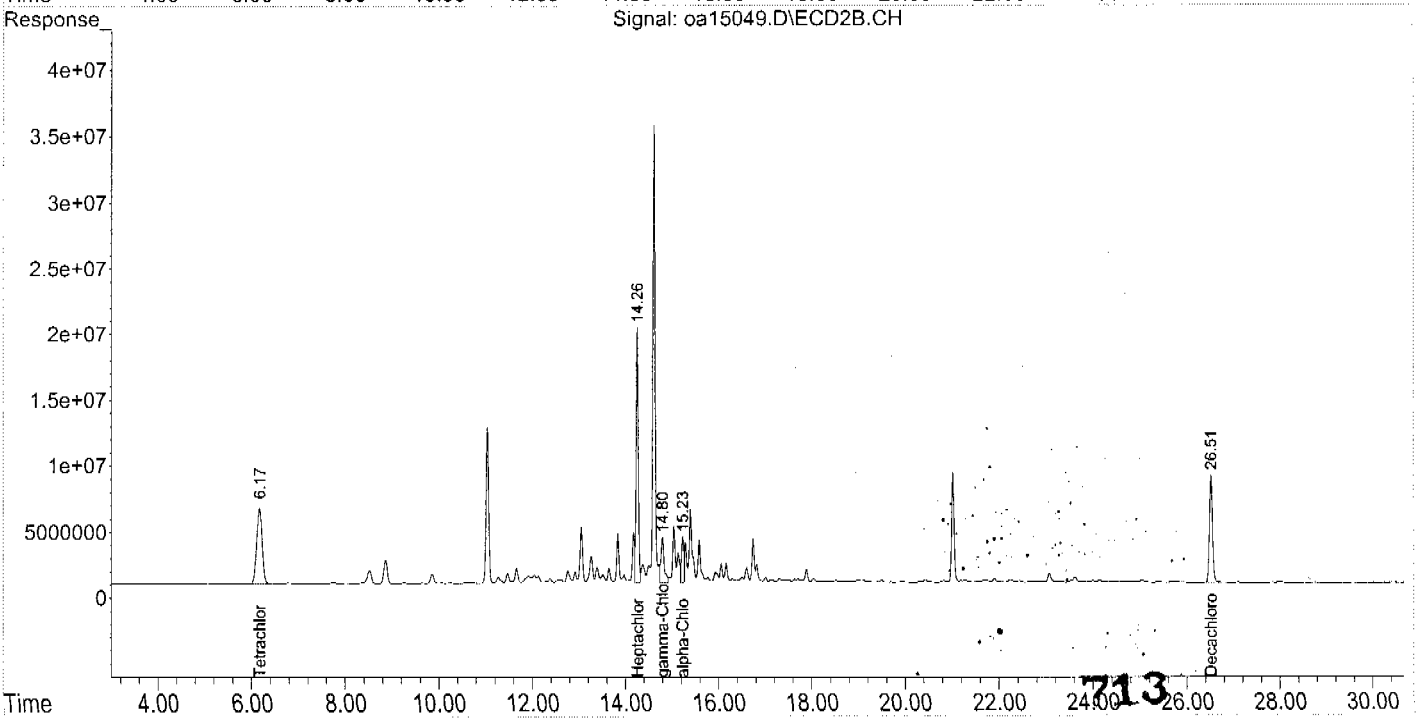
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\MSDCHEM\1\DATA\oa15049.D\ECD1A.CH Vial: 41
Signal #2 : C:\MSDCHEM\1\DATA\oa15049.D\ECD2B.CH
Acq On : 14 Aug 2004 9:33 pm Operator: owenm
Sample : n74914-15 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:57 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 : 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





713

Initial Calibration Summary

Job Number: N74914
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	6.74

Initial Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA433-ICC433
Lab FileID: OA14770.D

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 : 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 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

716

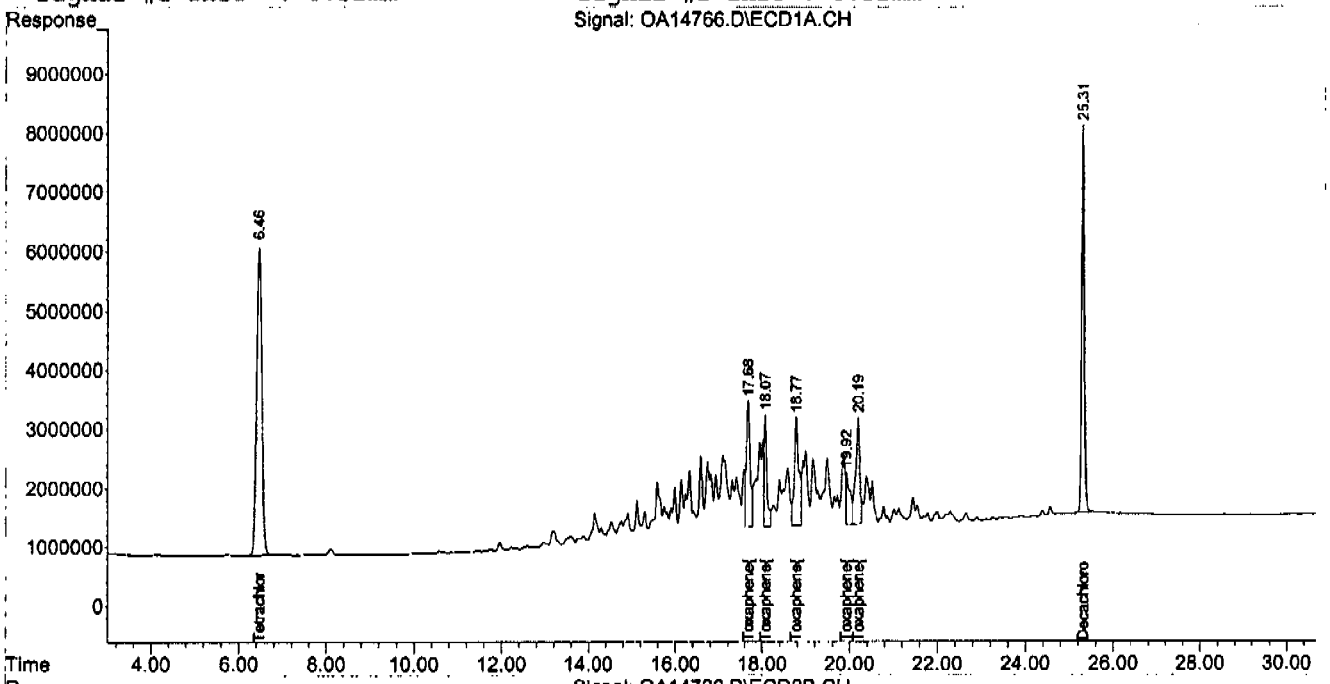
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

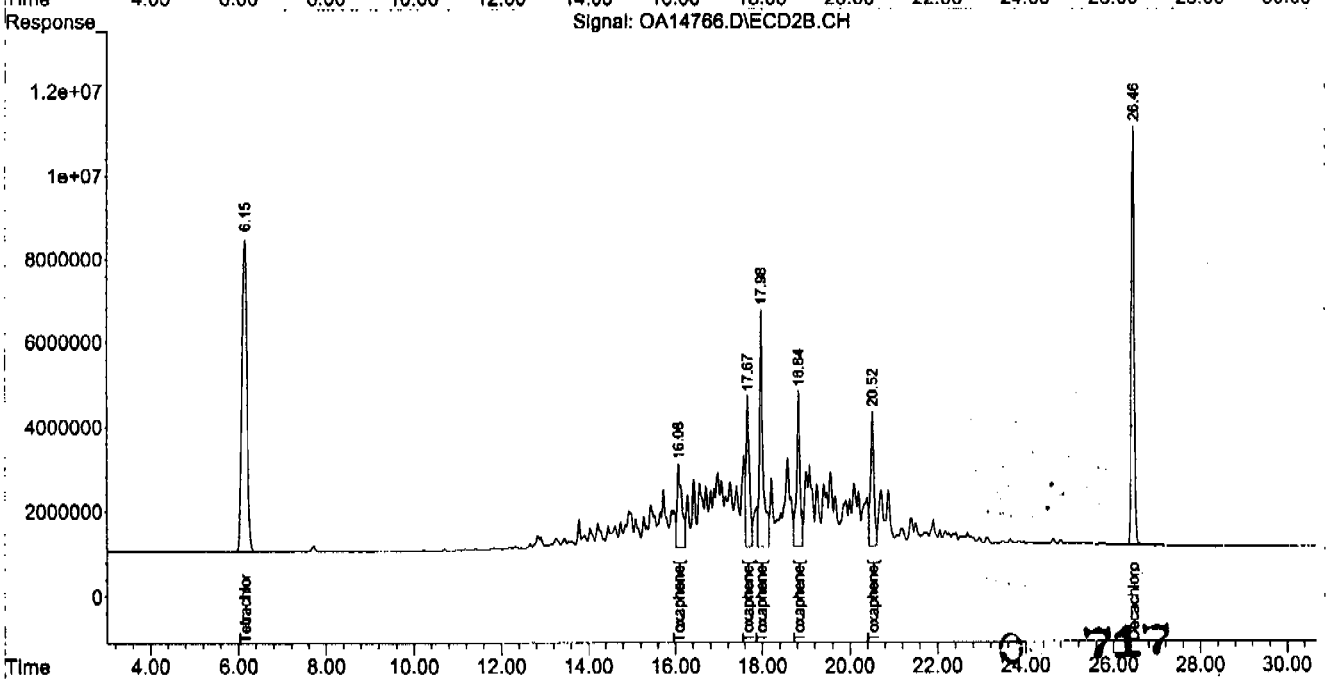
Quantitation Report (QT Reviewed)

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 : 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 8:37 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 : 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 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
Spiked 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
Spiked Amount 40.000 Range 30 - 150 Recovery =					102.06%	105.15%
Target Compounds						
(7) Chlordane {A}	11.59f	11.49	319.1E6	445.9E6	488.673	483.515
(8) Chlordane {B}	13.02f	13.02	196.6E6	248.0E6	544.281	517.551
(9) Chlordane {C}	14.79	14.77	654.0E6	972.0E6	487.687	477.761
(10) Chlordane {D}	15.15	15.05	1073.0E6	1012.5E6	493.862	480.658
(11) Chlordane {E}	17.48f	17.85	170.6E6	247.5E6	459.148	503.993

QC 718

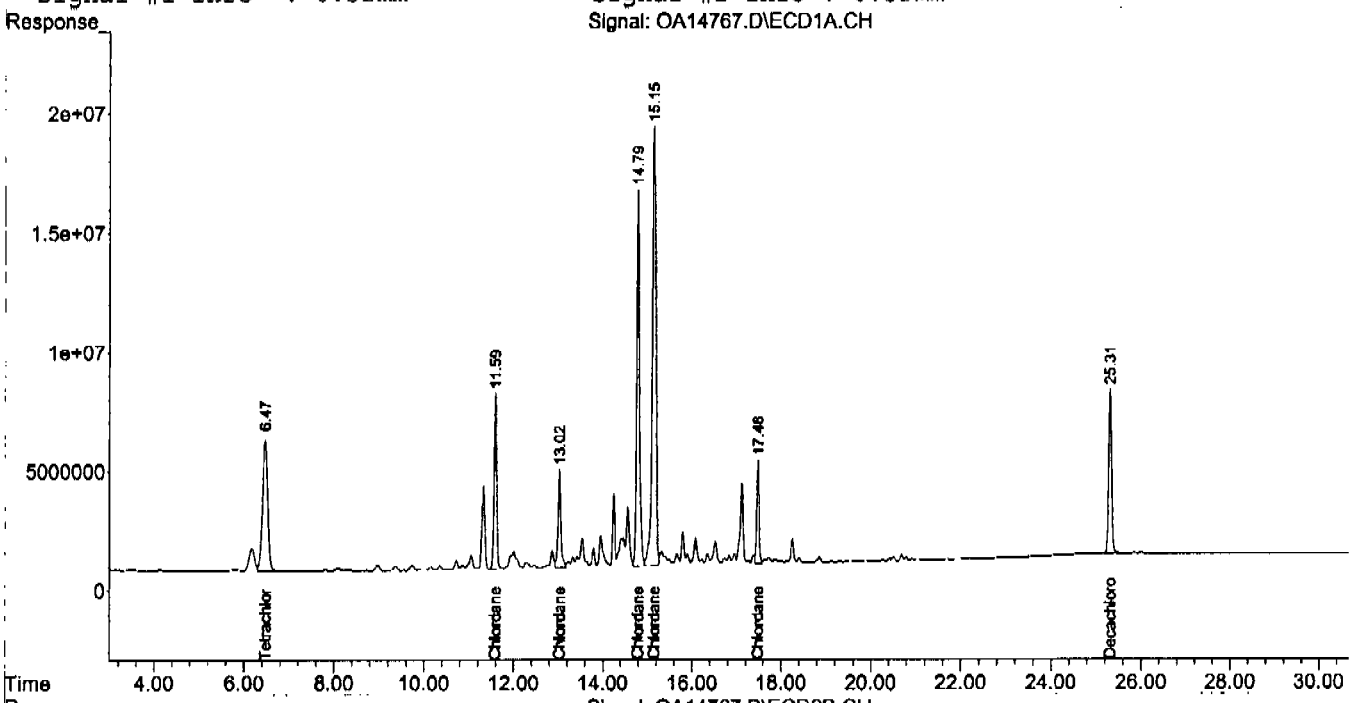
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

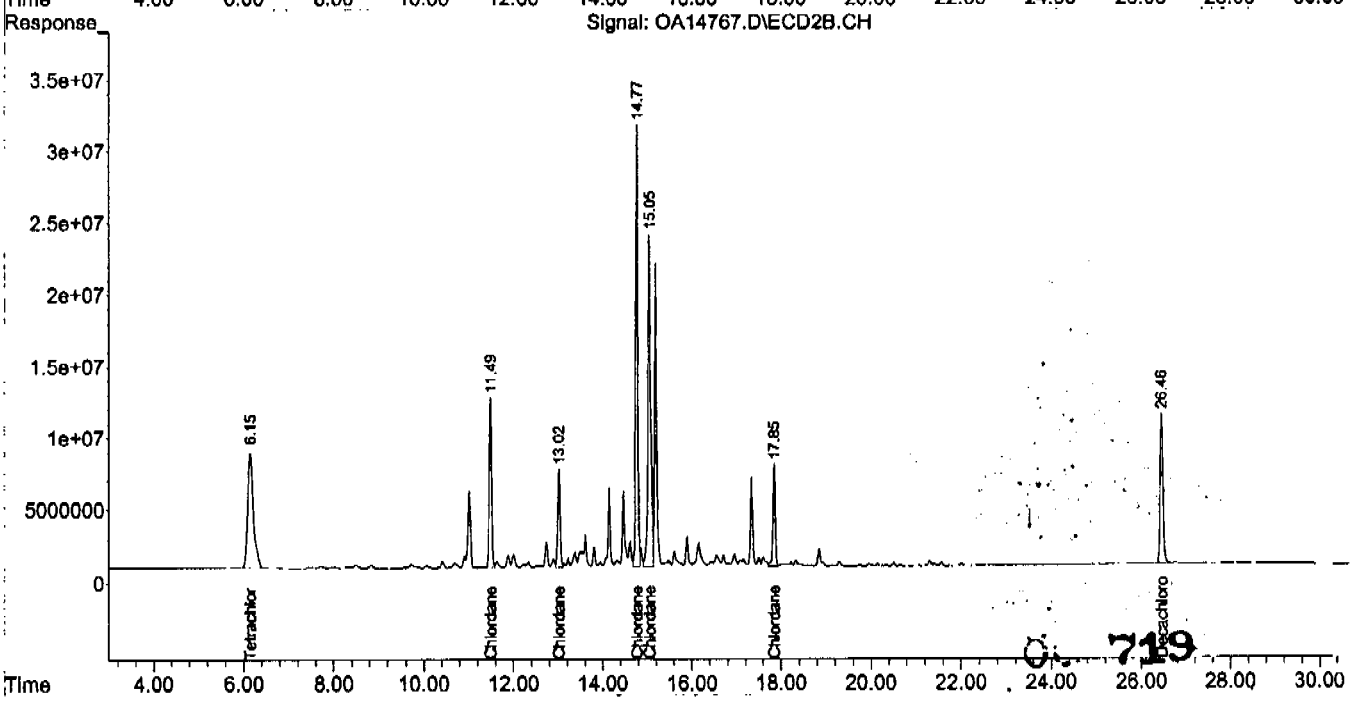
Quantitation Report (QT Reviewed)

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 : 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 8:37 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
	B delta-BHC	10.92	11.35	21856904	26629729	1.905	1.658
	MB Aldrin	12.55	12.49	24557819	30776552	1.933	1.702
	B Heptachlor Epoxi	14.43	14.23	23875238	30561022	2.008	1.807
	B gamma-Chlordane	14.79	14.78	22872944	30043921	1.986	1.755
	B alpha-Chlordane	15.18	15.20	23130268	30209364	2.020	1.790
	A Endosulfan I	15.57	15.33	22233833	28290439	2.007	1.791
	B 4,4'-DDE	15.45	15.76	19695698	26722752	1.804	1.648
	MA Dieldrin	16.30	16.14	22006152	30068075	1.897	1.778
	MA Endrin	17.00	17.04	19320631	25553595	1.867	1.720
	A 4,4'-DDD	17.26	17.49	15944824	22371849	1.839	1.725
	B Endosulfan II	17.71	17.71	19837215	26572123	1.983	1.805
7)	MA 4,4'-DDT	18.13	18.47	16629332	23303520	1.807	1.714
8)	B Endrin Aldehyde	19.08	18.80	14718428	22053039	1.904	1.924
9)	B Endosulfan Sulfa	20.55	19.71	16006541	22560776	2.161	2.033
10)	A Methoxychlor	19.74	20.83	10453211	14502964	2.031	1.889
11)	B Endrin Ketone	21.52	21.53	19829325	26842484	2.063	1.888

720

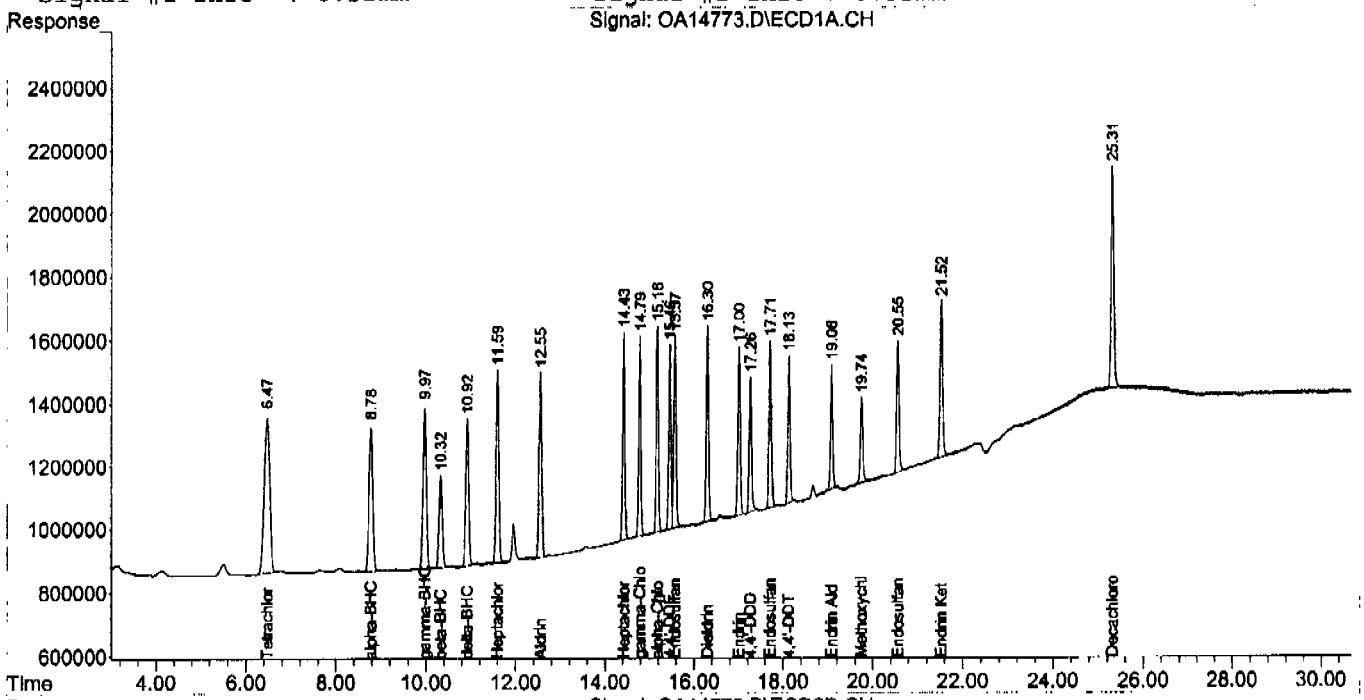
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

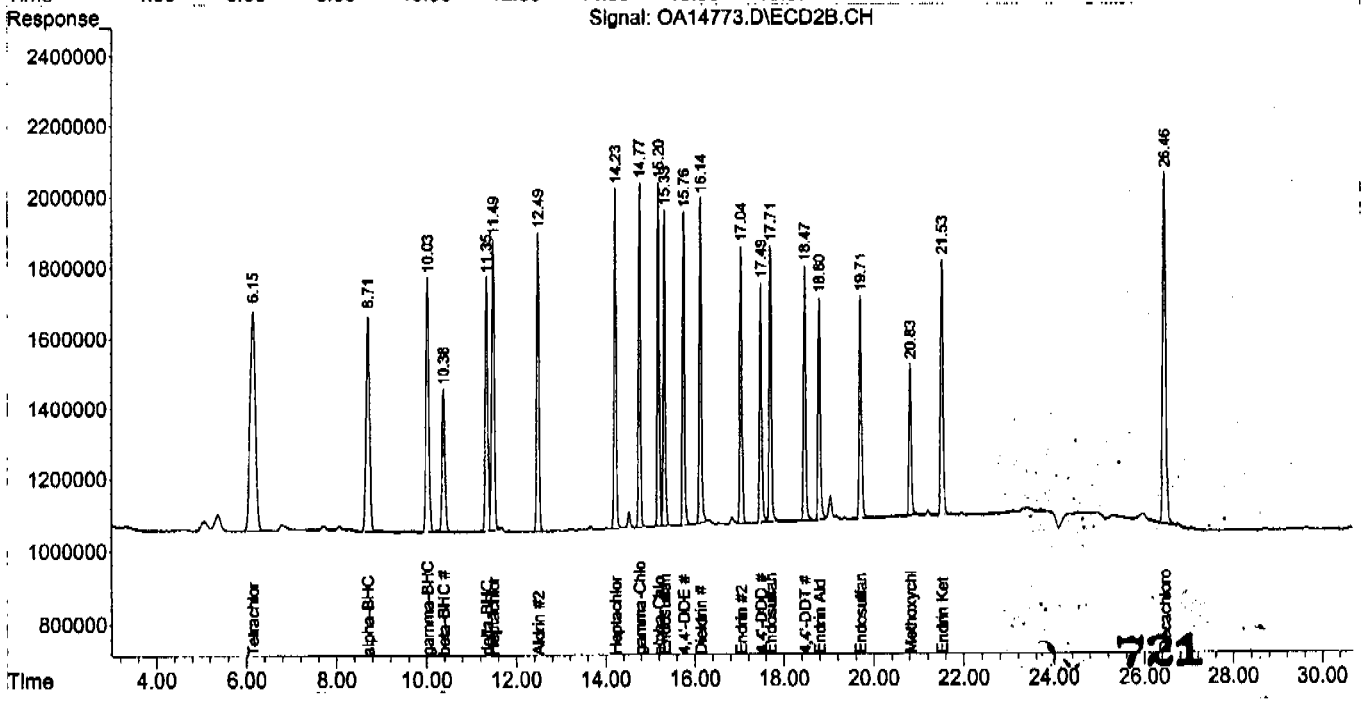
Quantitation Report (QT Reviewed)

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

722

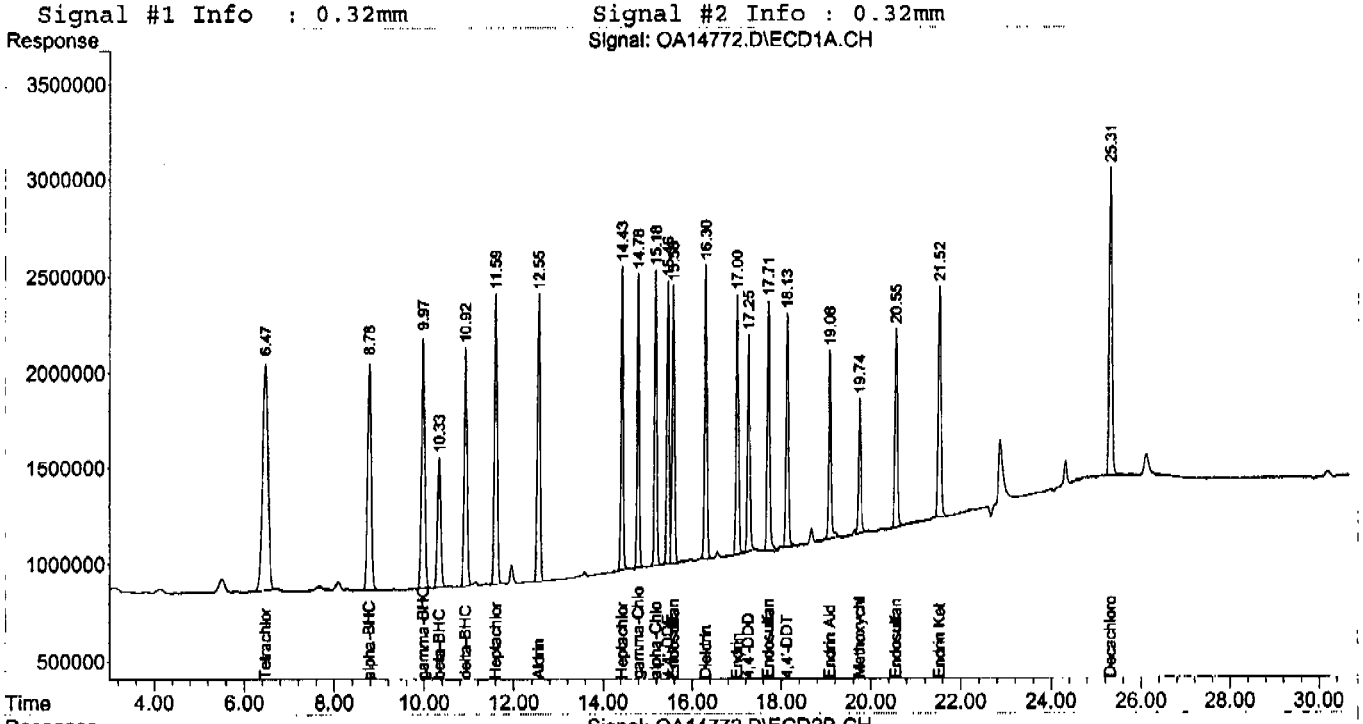
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

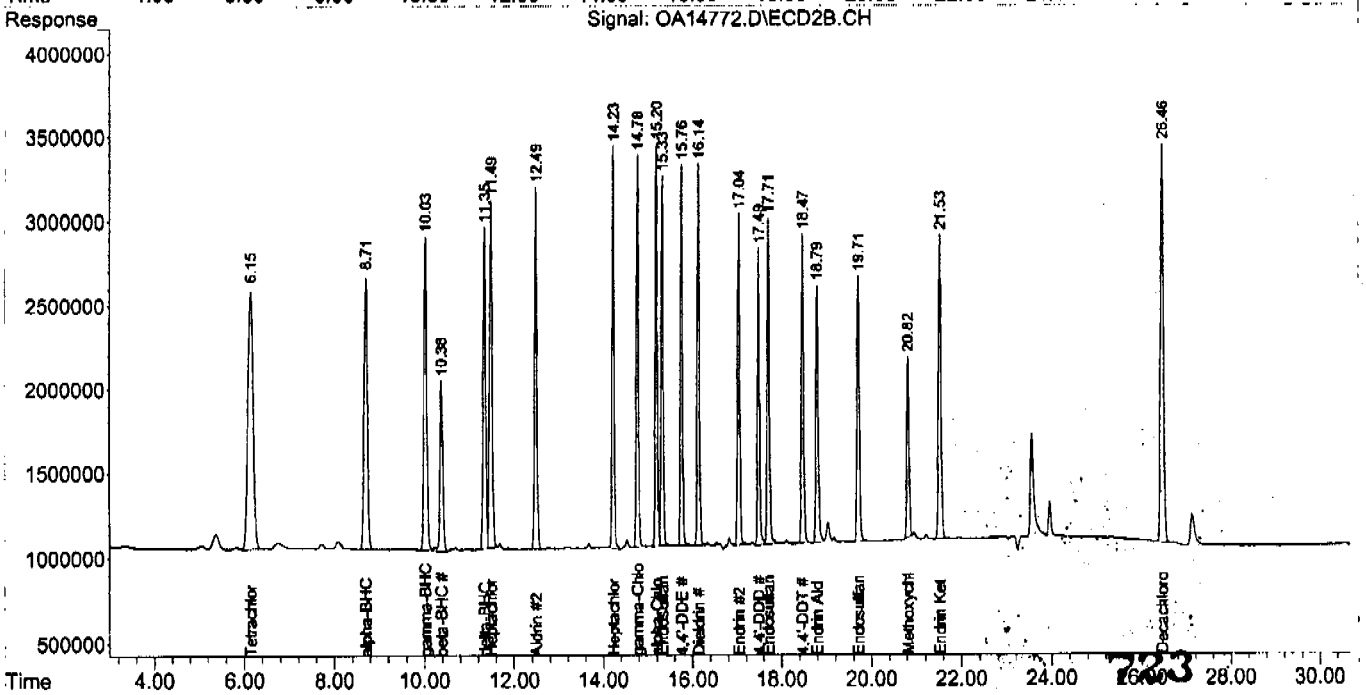
Quantitation Report (QT Reviewed)

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

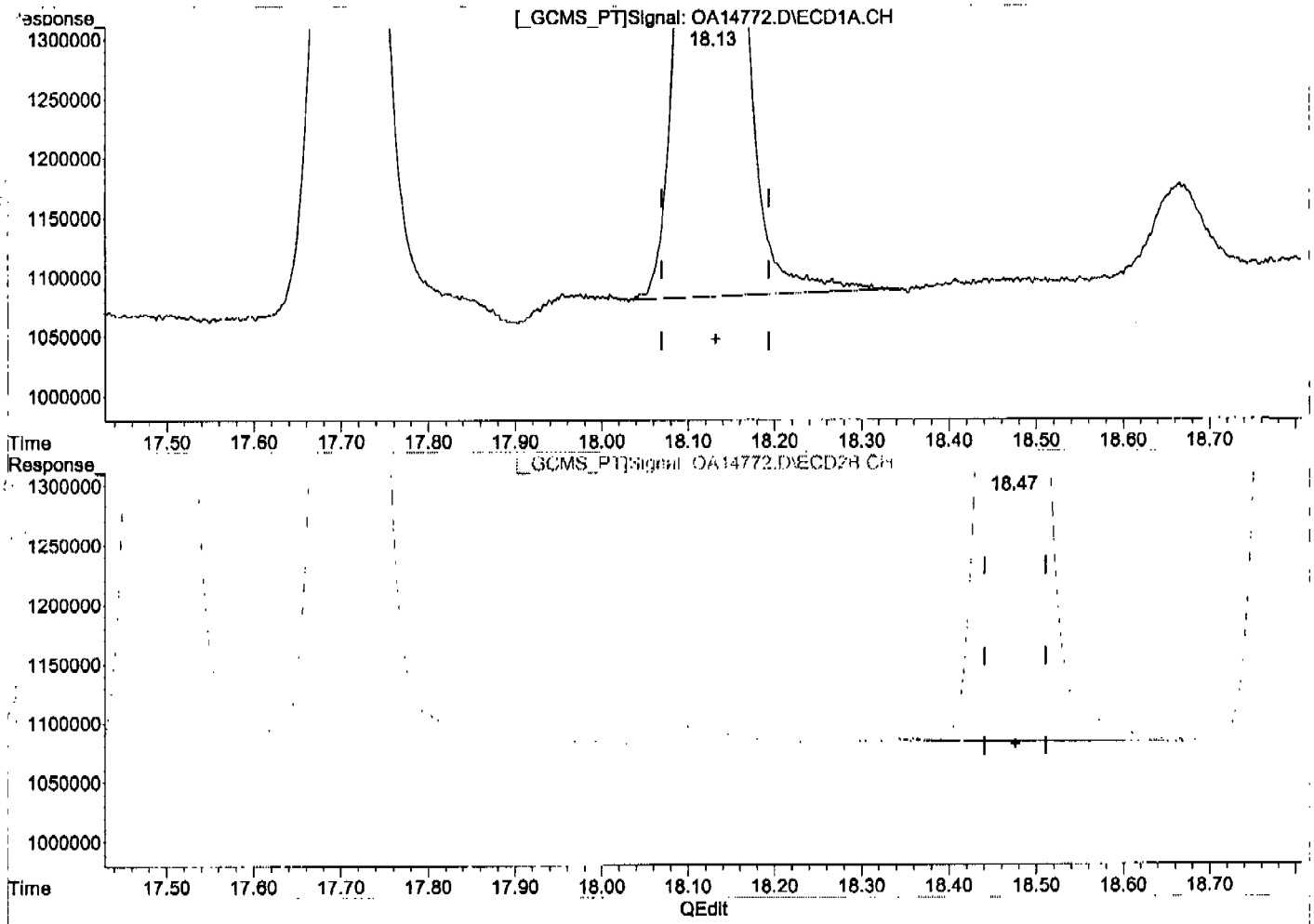




Quantitation Report (Qedit)

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 : 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 21:57:15 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

Above

0. 725

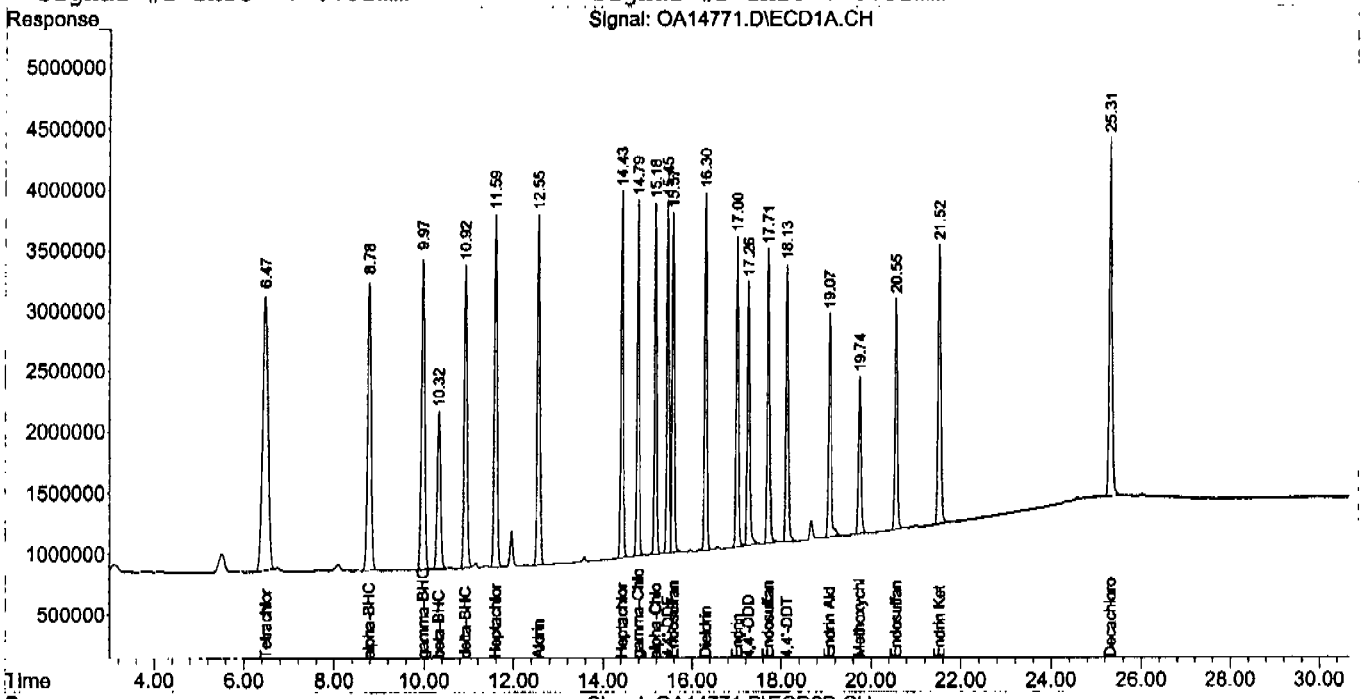
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

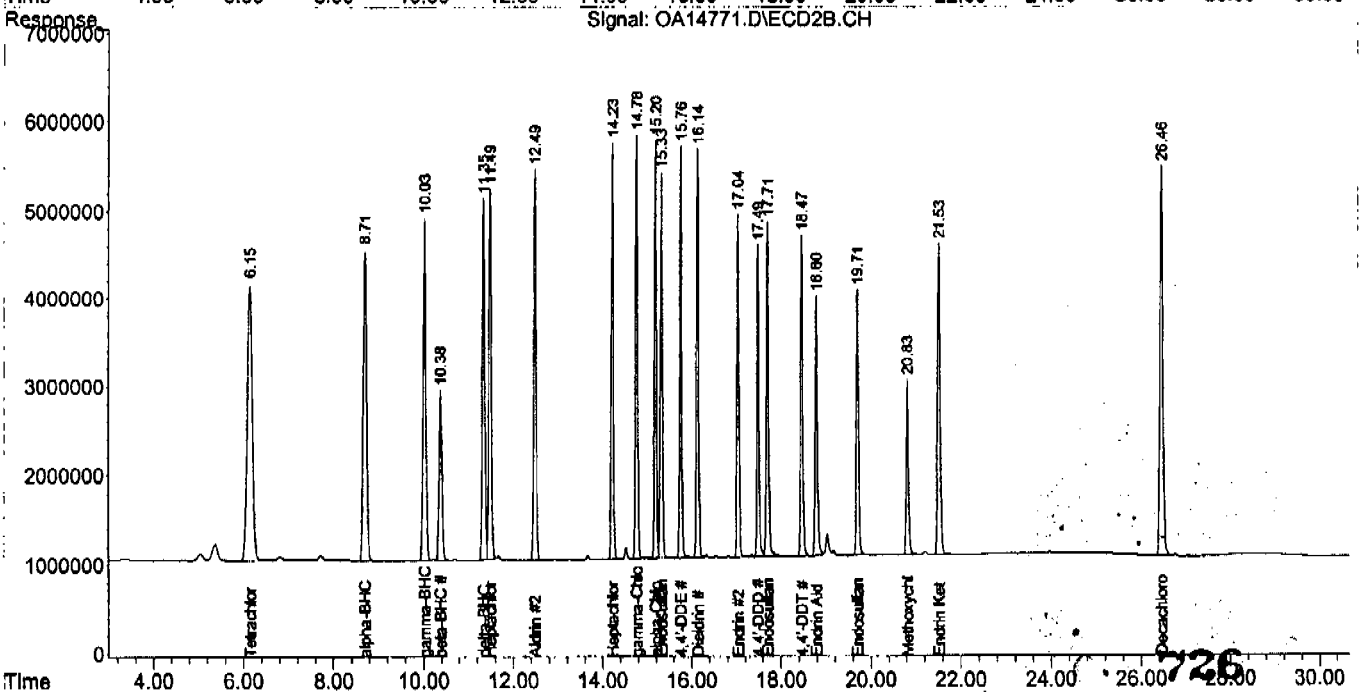
Quantitation Report (QT Reviewed)

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
	Spiked 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

OC 727

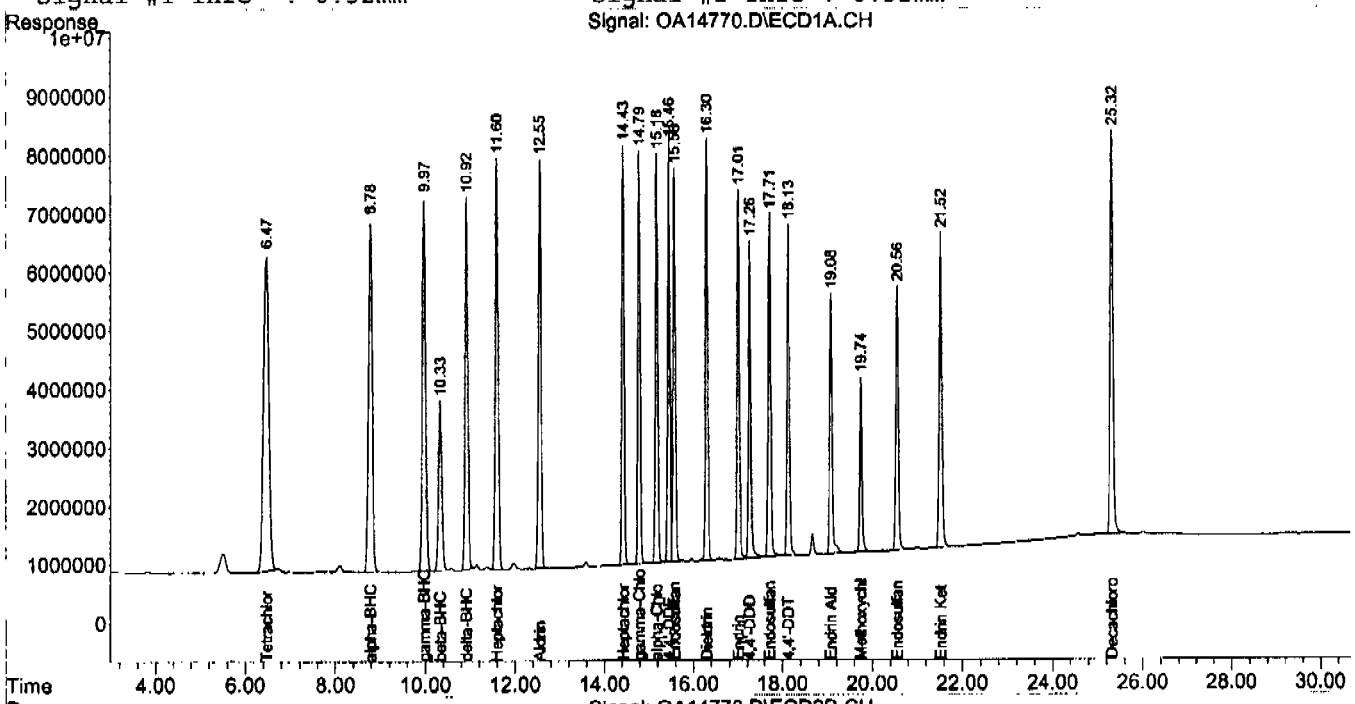
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

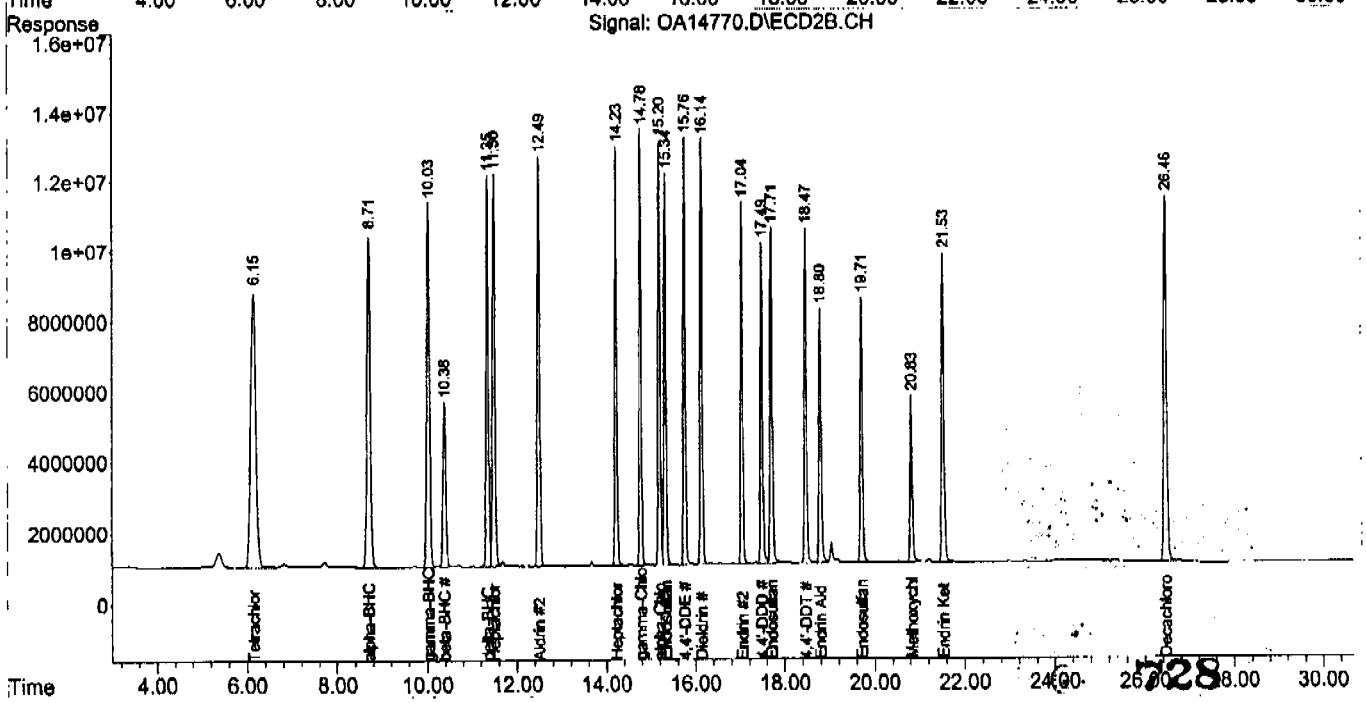
Quantitation Report (QT Reviewed)

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 : 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 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
3)	B beta-BHC	10.32	10.38	276.7E6	401.4E6	41.438	43.943
5)	B delta-BHC	10.92	11.35	594.5E6	877.0E6	51.818	54.601
7)	MB Aldrin	12.55	12.49	563.5E6	854.9E6	44.355	47.280
8)	B Heptachlor Epoxi	14.43	14.23	507.9E6	766.1E6	42.724	45.285
9)	B gamma-Chlordane	14.79	14.78	497.3E6	781.4E6	43.178	45.638
0)	B alpha-Chlordane	15.18	15.20	487.3E6	759.7E6	42.565	45.013
1)	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

Reviewed

OC 729

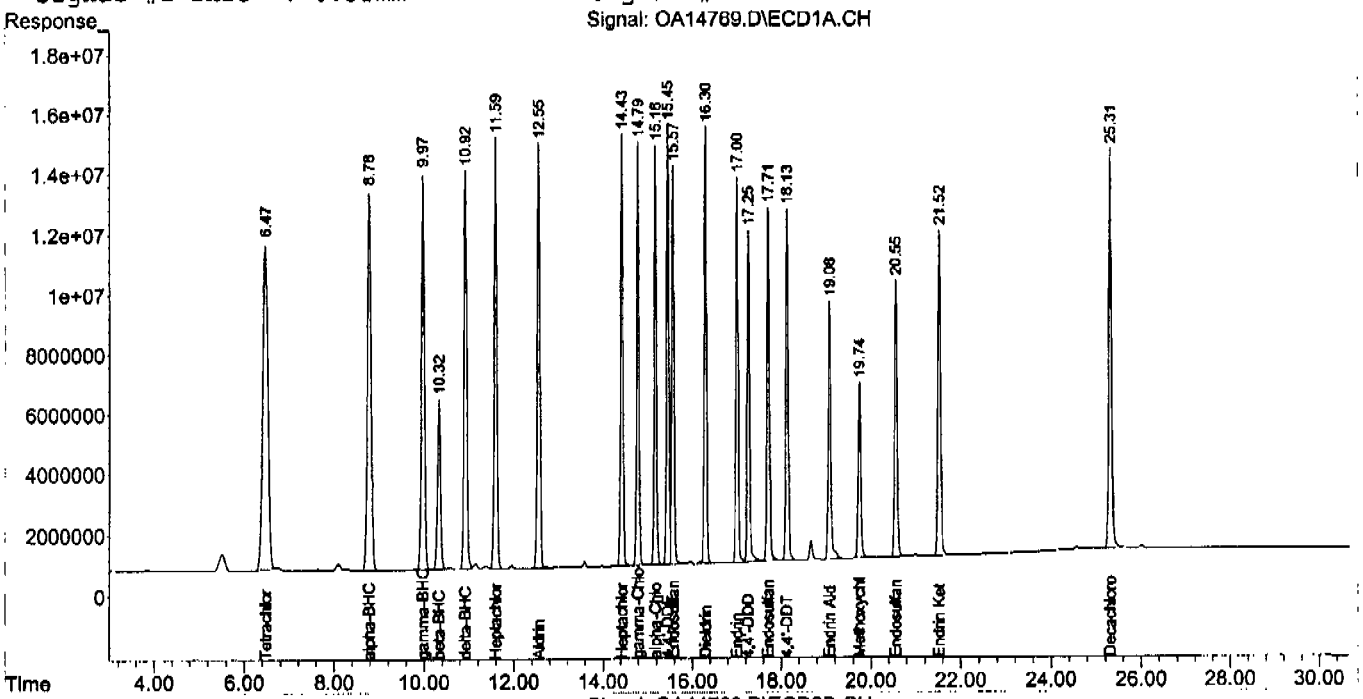
)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

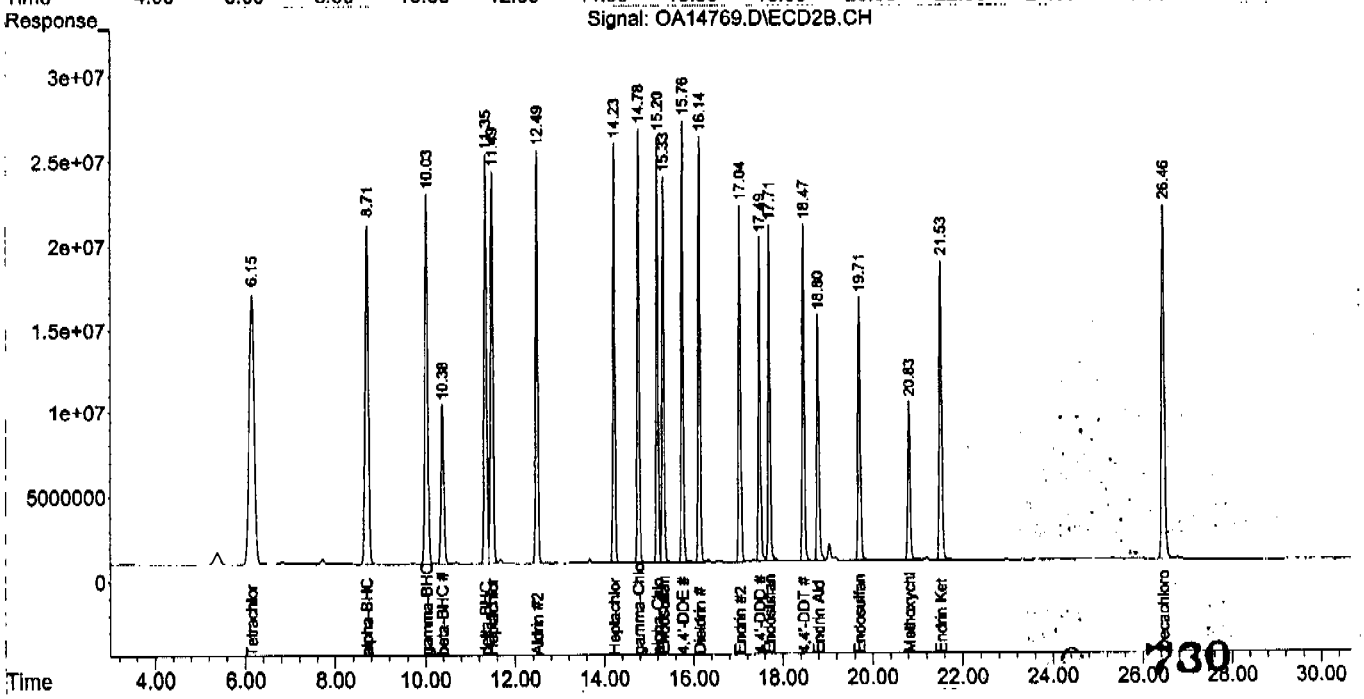
Quantitation Report (QT Reviewed)

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

Sport

731

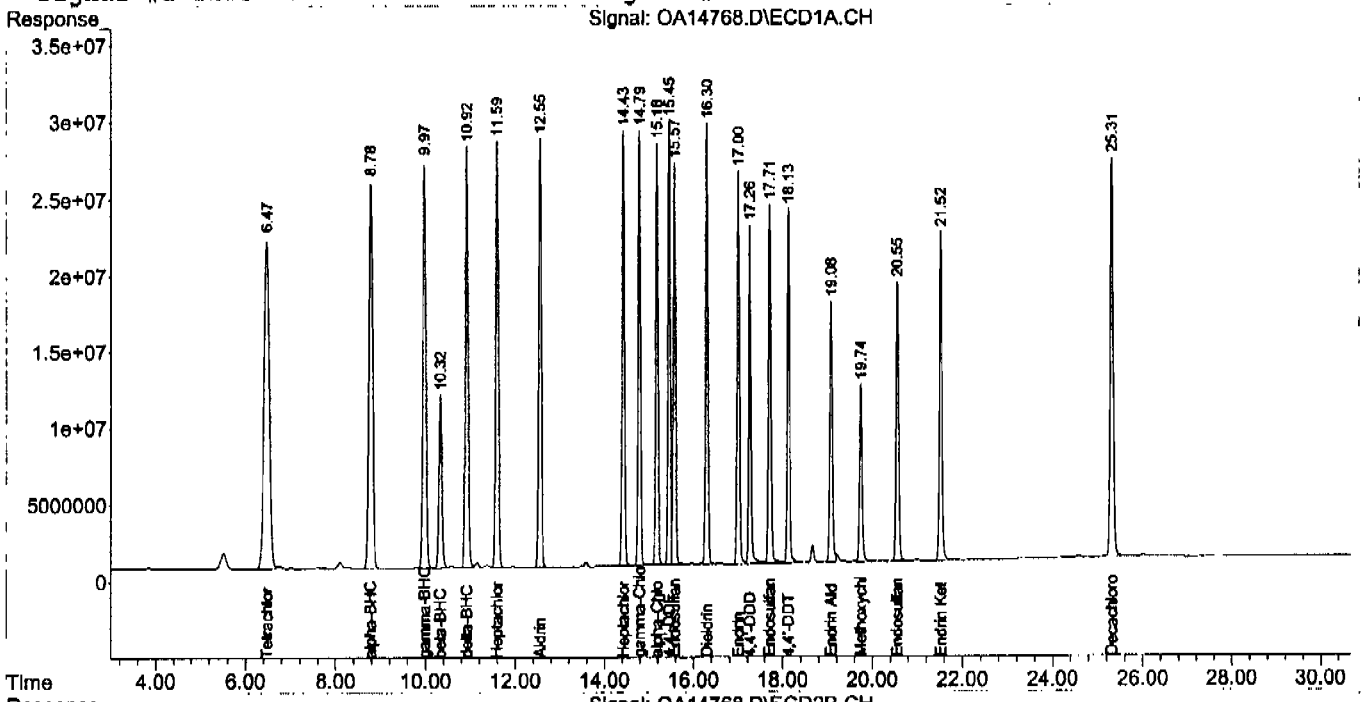
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

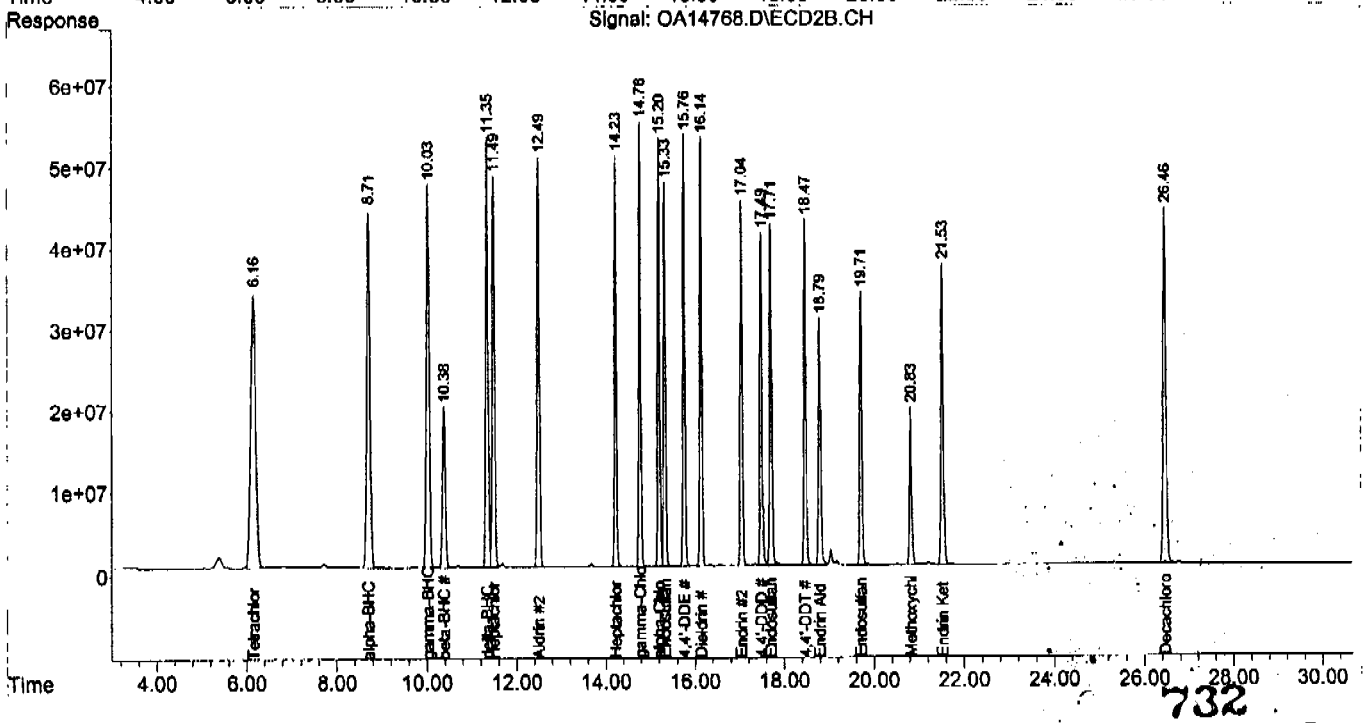
Quantitation Report (QT Reviewed)

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





732

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA440-CC433
Lab FileID: OA15008.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\oa15008.D\ECD1A.CH Vial: 43
Signal #2 : C:\MSDCHEM\1\DATA\oa15008.D\ECD2B.CH
Acq On : 13 Aug 2004 2:19 pm Operator: owenm
Sample : cc433-25 Inst : GCOO
Misc : OP17544,GOA440,15.1,,,10,2 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	9.450 E6	-2.0	108	-0.08	6.30- 6.64
2	A	alpha-BHC	13.643	14.467 E6	-6.0	106	-0.06	8.66- 8.92
3	MA	gamma-BHC	12.875	13.462 E6	-4.6	106	-0.05	9.87-10.10
4	MA	Heptachlor	12.705	12.913 E6	-1.6	105	-0.04	11.52-11.70
5	B	beta-BHC	6.231	6.086 E6	2.3	104	-0.04	10.24-10.43
6	B	delta-BHC	11.480	11.923 E6	-3.9	105	-0.05	10.83-11.04
7	MB	Aldrin	11.618	11.829 E6	-1.8	105	-0.04	12.47-12.67
8	B	Heptachlor Epoxide	10.789	11.061 E6	-2.5	107	-0.03	14.36-14.53
9	B	gamma-Chlordane	10.455	10.788 E6	-3.2	107	-0.02	14.73-14.89
10	B	alpha-Chlordane	10.410	10.687 E6	-2.7	108	-0.03	15.11-15.29
11	A	Endosulfan I	10.121	10.704 E6	-5.8	110	-0.03	15.53-15.66
12	B	4,4'-DDE	9.764	10.128 E6	-3.7	105	-0.02	15.41-15.54
13	MA	Dieldrin	10.528	11.062 E6	-5.1	107	-0.03	16.23-16.41
14	MA	Endrin	9.416	10.171 E6	-8.0	110	-0.03	16.94-17.11
15	A	4,4'-DDD	8.117	8.754 E6	-7.8	108	-0.02	17.21-17.35
16	B	Endosulfan II	9.301	9.814 E6	-5.5	110	-0.03	17.65-17.82
17	MA	4,4'-DDT	8.391	8.902 E6	-6.1	108	-0.02	18.08-18.22
18	B	Endrin Aldehyde	7.201	7.640 E6	-6.1	108	-0.03	19.01-19.19
19	B	Endosulfan Sulfate	7.574	7.600 E6	-0.3	105	-0.04	20.48-20.67
20	A	Methoxychlor	4.844	5.019 E6	-3.6	109	-0.02	19.68-19.86
21	B	Endrin Ketone	9.295	9.498 E6	-2.2	106	-0.03	21.44-21.65
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	6.450 E6	1.0	106	-0.02	25.26-25.44

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

1	SAB	Tetrachloro-m-xylene	12.559	12.434 E6	1.0	101	-0.03	6.05- 6.29
2	A	alpha-BHC	18.496	18.993 E6	-2.7	101	-0.02	8.66- 8.81
3	MA	gamma-BHC	17.546	17.730 E6	-1.0	100	0.00	10.00-10.12
4	MA	Heptachlor	16.993	16.808 E6	1.1	99	0.00	11.47-11.58
5	B	beta-BHC	8.434	7.950 E6	5.7	99	0.00	10.34-10.48
6	B	delta-BHC	15.828	15.502 E6	2.1	96	0.00	11.32-11.44

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA440-CC433
Lab FileID: OA15008.D

7	MB	Aldrin	16.257	15.827 E6	2.6	98	0.00	12.48-12.57
8	B	Heptachlor Epoxide	15.195	14.777 E6	2.8	99	0.00	14.21-14.32
9	B	gamma-Chlordane	15.205	14.458 E6	4.9	96	0.01	14.77-14.86
10	B	alpha-Chlordane	15.049	14.225 E6	5.5	96	0.00	15.19-15.29
11	A	Endosulfan I	14.131	13.497 E6	4.5	97	0.01	15.32-15.42
12	B	4,4'-DDE	14.400	13.968 E6	3.0	96	0.01	15.75-15.85
13	MA	Dieldrin	15.156	14.704 E6	3.0	98	0.01	16.13-16.23
14	MA	Endrin	13.207	13.343 E6	-1.0	102	0.01	17.03-17.14
15	A	4,4'-DDD	11.697	11.264 E6	3.7	97	0.02	17.48-17.59
16	B	Endosulfan II	13.317	13.022 E6	2.2	100	0.01	17.70-17.81
17	MA	4,4'-DDT	12.231	11.750 E6	3.9	97	0.02	18.47-18.57
18	B	Endrin Aldehyde	10.490	9.861 E6	6.0	97	0.01	18.79-18.89
19	B	Endosulfan Sulfate	10.959	9.691 E6	11.6	92	0.02	19.71-19.81
20	A	Methoxychlor	6.847	6.345 E6	7.3	95	0.02	20.83-20.93
21	B	Endrin Ketone	13.339	12.629 E6	5.3	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	9.453 E6	4.7	101	0.03	26.46-26.60

Average % D = 3.9

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

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OA14770.D PST433.M Mon Aug 16 11:53:51 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15008.D\ECD1A.CH Vial: 43
Signal #2 : C:\MSDCHEM\1\DATA\oa15008.D\ECD2B.CH
Acq On : 13 Aug 2004 2:19 pm Operator: owenm
Sample : cc433-25 Inst : GCOO
Misc : OP17544,GOA440,15.1,,,10,2 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 14:50:27 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	472.5E6	621.7E6	51.000	49.503
	Spiked Amount 40.000 Range 30 - 150 Recovery =					127.50%	123.76%
2)	SA Decachlorobiphen	25.35	26.53	322.5E6	472.6E6	49.507	47.632
	Spiked Amount 40.000 Range 30 - 150 Recovery =					123.77%	119.08%
	Target Compounds						
4)	A alpha-BHC	8.79f	8.73	361.7E6	474.8E6	26.511	25.671
6)	MA gamma-BHC	9.98f	10.06	336.5E6	443.2E6	26.139	25.262
1)	MA Heptachlor	11.61f	11.53	322.8E6	420.2E6	25.409	24.727
3)	B beta-BHC	10.34f	10.41	152.2E6	198.8E6	24.421	23.564
5)	B delta-BHC	10.93f	11.38	298.1E6	387.5E6	25.966	24.484
7)	MB Aldrin	12.57f	12.53	295.7E6	395.7E6	25.452	24.339
8)	B Heptachlor Epoxi	14.45f	14.27	276.5E6	369.4E6	25.630	24.312
9)	B gamma-Chlordane	14.81f	14.81	269.7E6	361.4E6	25.795	23.771
0)	B alpha-Chlordane	15.20f	15.24	267.2E6	355.6E6	25.664	23.632
1)	A Endosulfan I	15.59	15.37	267.6E6	337.4E6	26.441	23.879
2)	B 4,4'-DDE	15.48	15.80	253.2E6	349.2E6	25.932	24.250
3)	MA Dieldrin	16.32f	16.18	276.6E6	367.6E6	26.269	24.254
4)	MA Endrin	17.02	17.08	254.3E6	333.6E6	27.006	25.257
5)	A 4,4'-DDD	17.28	17.54	218.9E6	281.6E6	26.963	24.075
6)	B Endosulfan II	17.73f	17.75	245.3E6	325.5E6	26.379	24.446
7)	MA 4,4'-DDT	18.15	18.52	222.6E6	293.8E6	26.523	24.017
8)	B Endrin Aldehyde	19.10f	18.84	191.0E6	246.5E6	26.524	23.503
9)	B Endosulfan Sulfa	20.57f	19.76	190.0E6	242.3E6	25.087	22.107
0)	A Methoxychlor	19.77	20.88	125.5E6	158.6E6	25.902	23.170
1)	B Endrin Ketone	21.55f	21.58	237.4E6	315.7E6	25.544	23.669

OPM 8/16/04

735

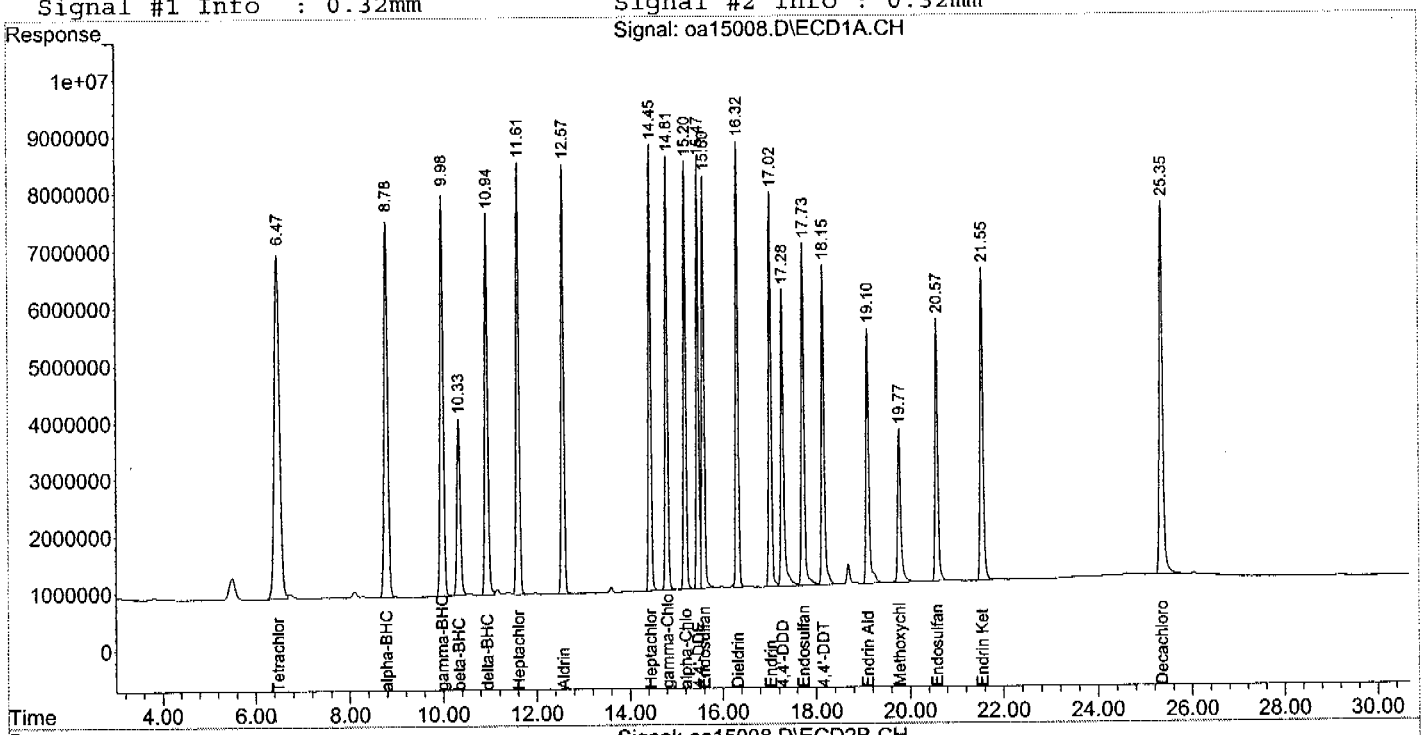
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

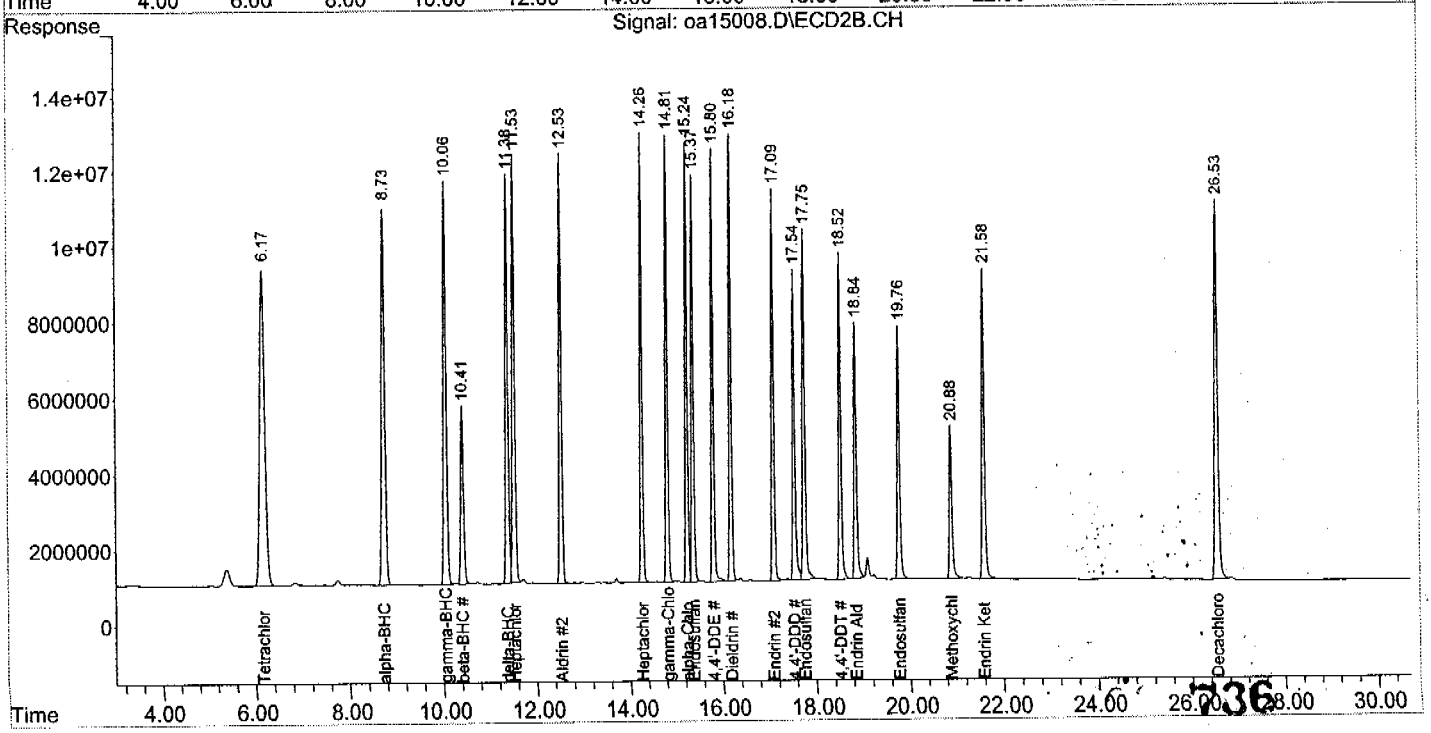
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15008.D\ECD1A.CH Vial: 43
Signal #2 : C:\MSDCHEM\1\DATA\oa15008.D\ECD2B.CH
Acq On : 13 Aug 2004 2:19 pm Operator: owenm
Sample : cc433-25 Inst : GCOO
Misc : OP17544,GOA440,15.1,,,10,2 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 14:58 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 : 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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA440-CC433
Lab FileID: OA15020.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\oa15020.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\oa15020.D\ECD2B.CH
Acq On : 13 Aug 2004 11:18 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17703,GOA440,960,,,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	10.141 E6	-9.5	110	-0.07	6.31- 6.65
2	A	alpha-BHC	13.643	14.306 E6	-4.9	107	-0.06	8.66- 8.92
3	MA	gamma-BHC	12.875	13.552 E6	-5.3	107	-0.05	9.87-10.10
4	MA	Heptachlor	12.705	13.298 E6	-4.7	105	-0.04	11.52-11.70
5	B	beta-BHC	6.231	6.664 E6	-6.9	105	-0.04	10.24-10.43
6	B	delta-BHC	11.480	11.647 E6	-1.5	105	-0.05	10.83-11.04
7	MB	Aldrin	11.618	12.486 E6	-7.5	108	-0.04	12.47-12.67
8	B	Heptachlor Epoxide	10.789	11.748 E6	-8.9	108	-0.03	14.36-14.53
9	B	gamma-Chlordane	10.455	11.316 E6	-8.2	108	-0.02	14.73-14.89
10	B	alpha-Chlordane	10.410	10.951 E6	-5.2	105	-0.03	15.11-15.29
11	A	Endosulfan I	10.121	11.250 E6	-11.2	111	-0.02	15.53-15.67
12	B	4,4'-DDE	9.764	9.910 E6	-1.5	102	-0.02	15.41-15.55
13	MA	Dieldrin	10.528	11.472 E6	-9.0	108	-0.03	16.23-16.41
14	MA	Endrin	9.416	10.432 E6	-10.8	112	-0.02	16.94-17.11
15	A	4,4'-DDD	8.117	8.900 E6	-9.6	109	-0.01	17.22-17.35
16	B	Endosulfan II	9.301	9.996 E6	-7.5	108	-0.03	17.65-17.82
17	MA	4,4'-DDT	8.391	8.959 E6	-6.8	107	-0.01	18.09-18.22
18	B	Endrin Aldehyde	7.201	8.209 E6	-14.0	110	-0.03	19.01-19.19
19	B	Endosulfan Sulfate	7.574	7.576 E6	-0.0	99	-0.03	20.48-20.67
20	A	Methoxychlor	4.844	5.184 E6	-7.0	105	-0.02	19.69-19.86
21	B	Endrin Ketone	9.295	10.342 E6	-11.3	110	-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	6.671 E6	-2.4	101	-0.01	25.27-25.44

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

1	SAB	Tetrachloro-m-xylene	12.559	12.388 E6	1.4	101	-0.03	6.05- 6.29
2	A	alpha-BHC	18.496	17.396 E6	5.9	100	-0.01	8.66- 8.82
3	MA	gamma-BHC	17.546	16.691 E6	4.9	100	0.00	10.00-10.12
4	MA	Heptachlor	16.993	16.035 E6	5.6	99	0.00	11.48-11.58
5	B	beta-BHC	8.434	8.313 E6	1.4	99	0.00	10.34-10.48
6	B	delta-BHC	15.828	14.392 E6	9.1	97	0.00	11.32-11.44

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA440-CC433
Lab FileID: OA15020.D

7	MB	Aldrin	16.257	15.609 E6	4.0	100	0.00	12.48-12.58
8	B	Heptachlor Epoxide	15.195	14.695 E6	3.3	99	0.00	14.21-14.32
9	B	gamma-Chlordane	15.205	14.614 E6	3.9	99	0.01	14.77-14.86
10	B	alpha-Chlordane	15.049	14.447 E6	4.0	99	0.00	15.19-15.29
11	A	Endosulfan I	14.131	13.690 E6	3.1	99	0.01	15.32-15.43
12	B	4,4'-DDE	14.400	13.686 E6	5.0	99	0.01	15.75-15.86
13	MA	Dieldrin	15.156	14.333 E6	5.4	99	0.01	16.13-16.23
14	MA	Endrin	13.207	13.142 E6	0.5	104	0.02	17.03-17.14
15	A	4,4'-DDD	11.697	10.947 E6	6.4	96	0.02	17.49-17.59
16	B	Endosulfan II	13.317	13.345 E6	-0.2	102	0.01	17.70-17.81
17	MA	4,4'-DDT	12.231	11.501 E6	6.0	98	0.02	18.47-18.57
18	B	Endrin Aldehyde	10.490	10.159 E6	3.2	98	0.01	18.79-18.89
19	B	Endosulfan Sulfate	10.959	9.863 E6	10.0	93	0.02	19.71-19.81
20	A	Methoxychlor	6.847	6.818 E6	0.4	98	0.02	20.83-20.93
21	B	Endrin Ketone	13.339	13.498 E6	-1.2	102	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	9.968 E6	-0.5	101	0.03	26.46-26.60

Average % D = 5.4

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

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OA14771.D PST433.M Mon Aug 16 11:56:01 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15020.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\oa15020.D\ECD2B.CH
Acq On : 13 Aug 2004 11:18 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17703,GOA440,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 23:48:59 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	202.8E6	247.8E6	21.893	19.728
Spiked Amount 40.000 Range 30 - 150 Recovery =					54.73%	49.32%
2) SA Decachlorobiphen	25.36	26.53	133.4E6	199.4E6	20.481	20.091
Spiked Amount 40.000 Range 30 - 150 Recovery =					51.20%	50.23%
Target Compounds						
2) A alpha-BHC	8.79f	8.74	143.1E6	174.0E6	10.486	9.405
3) MA gamma-BHC	9.98f	10.06	135.5E6	166.9E6	10.525	9.512
4) MA Heptachlor	11.61f	11.53	133.0E6	160.4E6	10.466	9.436
5) B beta-BHC	10.34f	10.41	66638624	83132223	10.695	9.856
6) B delta-BHC	10.93f	11.38	116.5E6	143.9E6	10.146	9.093
7) MB Aldrin	12.57f	12.53	124.9E6	156.1E6	10.747	9.601
8) B Heptachlor Epoxi	14.45f	14.27	117.5E6	147.0E6	10.889	9.671
9) B gamma-Chlordane	14.81	14.81	113.2E6	146.1E6	10.824	9.611
10) B alpha-Chlordane	15.20f	15.24	109.5E6	144.5E6	10.519	9.600
11) A Endosulfan I	15.60	15.37	112.5E6	136.9E6	11.116	9.688
12) B 4,4'-DDE	15.48	15.80	99102510	136.9E6	10.150	9.504
13) MA Dieldrin	16.32f	16.18	114.7E6	143.3E6	10.897	9.457
14) MA Endrin	17.03	17.09	104.3E6	131.4E6	11.079	9.951
15) A 4,4'-DDD	17.29	17.54	89000642	109.5E6	10.965	9.359
16) B Endosulfan II	17.73	17.75	99955968	133.5E6	10.747	10.021
17) MA 4,4'-DDT	18.16	18.52	89592140	115.0E6	10.677	9.403
18) B Endrin Aldehyde	19.10f	18.84	82093037	101.6E6	11.401	9.685
19) B Endosulfan Sulfa	20.58f	19.76	75755790	98629099	10.002	9.000
20) A Methoxychlor	19.77	20.88	51844746	68176912	10.702	9.958
21) B Endrin Ketone	21.55f	21.58	103.4E6	135.0E6	11.126m	10.119

OPM 8/16/04

739

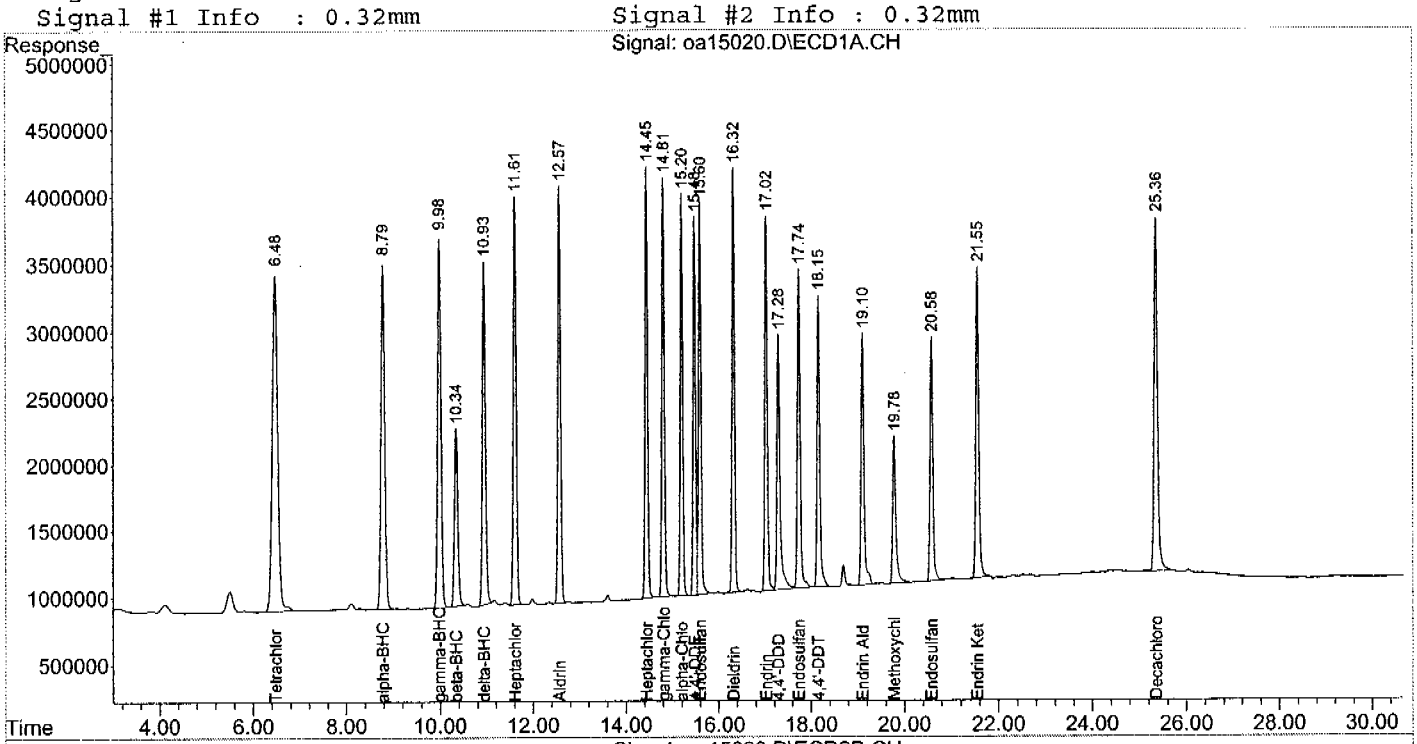
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

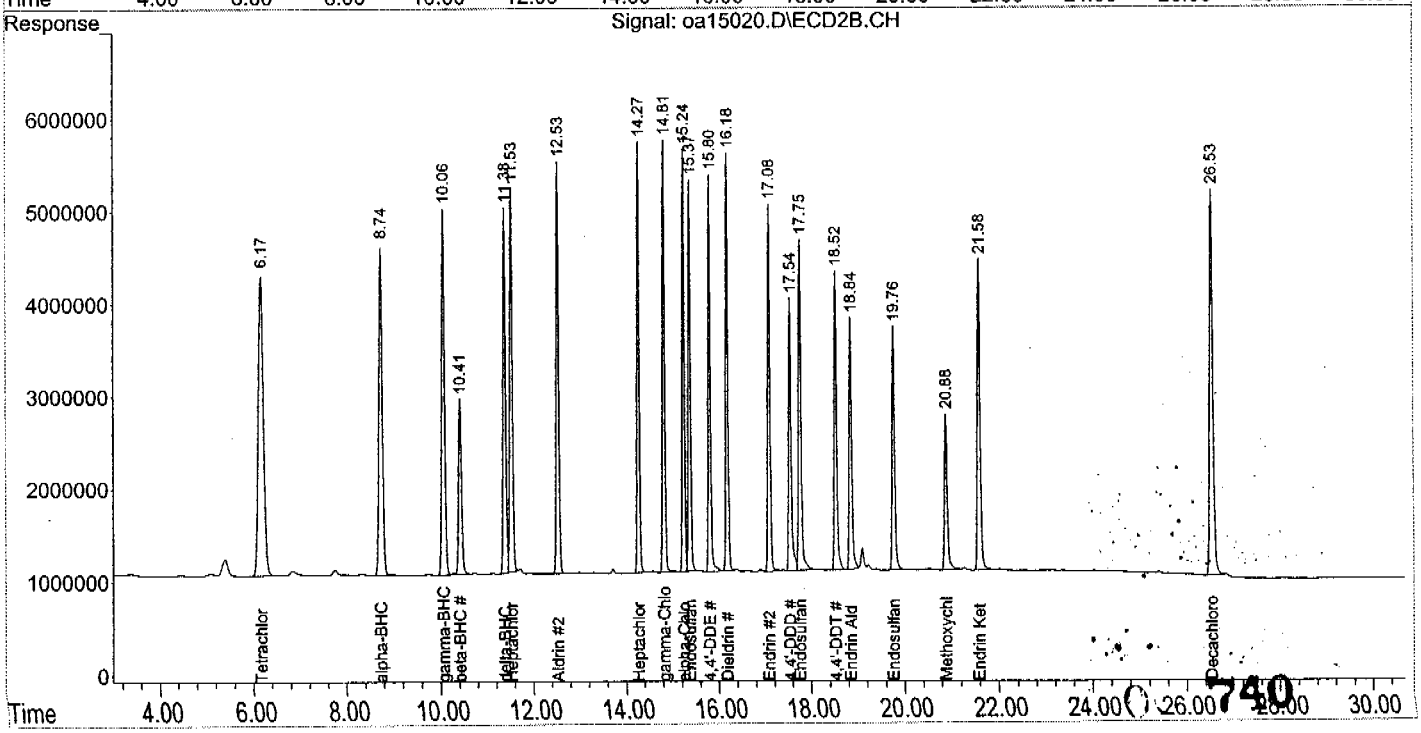
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15020.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\oa15020.D\ECD2B.CH
Acq On : 13 Aug 2004 11:18 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17703,GOA440,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 8:08 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



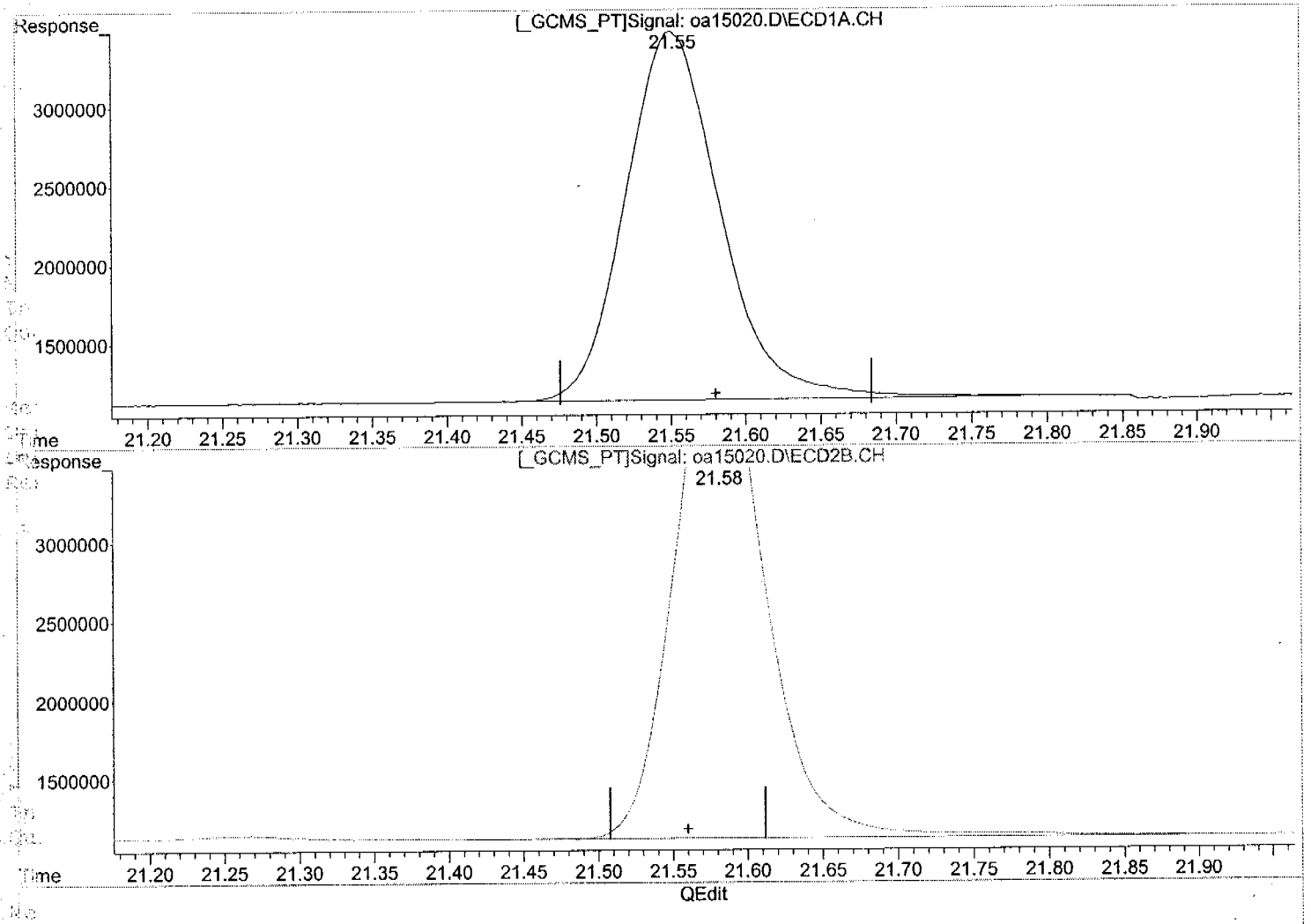


740

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa15020.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\oa15020.D\ECD2B.CH
Acq On : 13 Aug 2004 11:18 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17703,GOA440,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 8:08 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 11.126PPB m

response 103424825

(21) Endrin Ketone #2 (B)

21.58min 10.119PPB

response 134980776

741

(+) = Expected Retention Time

oa15020.D PST433.M Mon Aug 16 11:56:38 2004 GC

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA440-CC433
Lab FileID: OA15038.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\oa15038.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\oa15038.D\ECD2B.CH
Acq On : 14 Aug 2004 2:46 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17672,GOA440,15.1,,,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	9.678 E6	-4.5	105	-0.06	6.31- 6.66
2	A	alpha-BHC	13.643	14.005 E6	-2.7	105	-0.06	8.66- 8.92
3	MA	gamma-BHC	12.875	13.160 E6	-2.2	104	-0.05	9.87-10.10
4	MA	Heptachlor	12.705	13.315 E6	-4.8	105	-0.04	11.52-11.70
5	B	beta-BHC	6.231	6.439 E6	-3.3	101	-0.04	10.24-10.43
6	B	delta-BHC	11.480	11.555 E6	-0.7	104	-0.05	10.83-11.04
7	MB	Aldrin	11.618	12.085 E6	-4.0	104	-0.04	12.47-12.67
8	B	Heptachlor Epoxide	10.789	11.372 E6	-5.4	105	-0.04	14.36-14.53
9	B	gamma-Chlordane	10.455	10.836 E6	-3.6	103	-0.03	14.73-14.88
10	B	alpha-Chlordane	10.410	11.282 E6	-8.4	108	-0.03	15.11-15.29
11	A	Endosulfan I	10.121	10.572 E6	-4.5	104	-0.03	15.52-15.66
12	B	4,4'-DDE	9.764	10.131 E6	-3.8	104	-0.03	15.40-15.54
13	MA	Dieldrin	10.528	11.132 E6	-5.7	105	-0.03	16.23-16.40
14	MA	Endrin	9.416	10.393 E6	-10.4	111	-0.03	16.94-17.11
15	A	4,4'-DDD	8.117	8.689 E6	-7.0	107	-0.02	17.21-17.35
16	B	Endosulfan II	9.301	9.714 E6	-4.4	105	-0.03	17.64-17.82
17	MA	4,4'-DDT	8.391	9.111 E6	-8.6	109	-0.02	18.08-18.22
18	B	Endrin Aldehyde	7.201	7.589 E6	-5.4	101	-0.03	19.01-19.18
19	B	Endosulfan Sulfate	7.574	8.210 E6	-8.4	108	-0.04	20.48-20.67
20	A	Methoxychlor	4.844	5.397 E6	-11.4	109	-0.02	19.68-19.85
21	B	Endrin Ketone	9.295	10.147 E6	-9.2	108	-0.04	21.44-21.65
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	6.734 E6	-3.4	102	-0.02	25.26-25.43

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

1	SAB	Tetrachloro-m-xylene	12.559	11.908 E6	5.2	97	-0.02	6.06- 6.30
2	A	alpha-BHC	18.496	16.763 E6	9.4	97	-0.01	8.66- 8.82
3	MA	gamma-BHC	17.546	16.016 E6	8.7	96	0.00	9.99-10.12
4	MA	Heptachlor	16.993	15.762 E6	7.2	97	0.00	11.47-11.58
5	B	beta-BHC	8.434	7.903 E6	6.3	94	0.00	10.34-10.48
6	B	delta-BHC	15.828	14.043 E6	11.3	95	0.00	11.32-11.44

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC
Sample: GOA440-CC433
Lab FileID: OA15038.D

7	MB	Aldrin	16.257	14.755 E6	9.2	94	0.00	12.48-12.57
8	B	Heptachlor Epoxide	15.195	13.821 E6	9.0	93	0.00	14.21-14.31
9	B	gamma-Chlordane	15.205	13.752 E6	9.6	93	0.00	14.76-14.86
10	B	alpha-Chlordane	15.049	14.145 E6	6.0	97	0.00	15.18-15.29
11	A	Endosulfan I	14.131	13.132 E6	7.1	95	0.00	15.32-15.42
12	B	4,4'-DDE	14.400	12.724 E6	11.6	92	0.00	15.75-15.85
13	MA	Dieldrin	15.156	13.085 E6	13.7	90	0.00	16.12-16.23
14	MA	Endrin	13.207	12.619 E6	4.5	100	0.00	17.03-17.13
15	A	4,4'-DDD	11.697	10.565 E6	9.7	93	0.01	17.48-17.58
16	B	Endosulfan II	13.317	12.323 E6	7.5	94	0.00	17.70-17.80
17	MA	4,4'-DDT	12.231	11.583 E6	5.3	99	0.01	18.46-18.56
18	B	Endrin Aldehyde	10.490	9.646 E6	8.0	93	0.00	18.78-18.89
19	B	Endosulfan Sulfate	10.959	10.610 E6	3.2	100	0.01	19.70-19.81
20	A	Methoxychlor	6.847	6.639 E6	3.0	96	0.01	20.82-20.92
21	B	Endrin Ketone	13.339	12.346 E6	7.4	94	0.01	21.52-21.63
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	9.415 E6	5.1	95	0.02	26.45-26.59

Average % D = 6.6

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

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OA14771.D PST433.M Mon Aug 16 12:04:56 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15038.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\oa15038.D\ECD2B.CH
Acq On : 14 Aug 2004 2:46 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17672,GOA440,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 15:17:24 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	6.49f	6.18	193.6E6	238.2E6	20.893	18.963
	Spiked Amount 40.000 Range 30 - 150 Recovery =					52.23%	47.41%
	SA Decachlorobiphen	25.35	26.52	134.7E6	188.3E6	20.673	18.978
	Spiked Amount 40.000 Range 30 - 150 Recovery =					51.68%	47.45%
	Target Compounds						
2)	A alpha-BHC	8.79f	8.74	140.0E6	167.6E6	10.265	9.063
3)	MA gamma-BHC	9.98f	10.06	131.6E6	160.2E6	10.221	9.128
4)	MA Heptachlor	11.61f	11.52	133.1E6	157.6E6	10.480	9.276
5)	B beta-BHC	10.34f	10.41	64385092	79031068	10.334	9.370
6)	B delta-BHC	10.93f	11.38	115.5E6	140.4E6	10.065	8.872
7)	MB Aldrin	12.57f	12.52	120.9E6	147.5E6	10.402	9.076
8)	B Heptachlor Epoxi	14.44f	14.26	113.7E6	138.2E6	10.541	9.096
9)	B gamma-Chlordane	14.80f	14.81	108.4E6	137.5E6	10.364	9.044
10)	B alpha-Chlordane	15.20f	15.23	112.8E6	141.5E6	10.837	9.400
11)	A Endosulfan I	15.59f	15.37	105.7E6	131.3E6	10.445	9.293
12)	B 4,4'-DDE	15.47f	15.80	101.3E6	127.2E6	10.376	8.836
13)	MA Dieldrin	16.32f	16.18	111.3E6	130.8E6	10.574	8.634
14)	MA Endrin	17.02f	17.08	103.9E6	126.2E6	11.038	9.554
15)	A 4,4'-DDD	17.28	17.53	86888210	105.6E6	10.705	9.032
16)	B Endosulfan II	17.73f	17.75	97139112	123.2E6	10.444	9.254
17)	MA 4,4'-DDT	18.15	18.51	91106190	115.8E6	10.858	9.470
18)	B Endrin Aldehyde	19.10f	18.84	75893605	96460400	10.540	9.196
19)	B Endosulfan Sulfa	20.57f	19.75	82097187	106.1E6	10.839m	9.682
20)	A Methoxychlor	19.77	20.87	53970571	66393658	11.141	9.697m
21)	B Endrin Ketone	21.54f	21.57	101.5E6	123.5E6	10.917	9.255m

OM 8/16/04

744

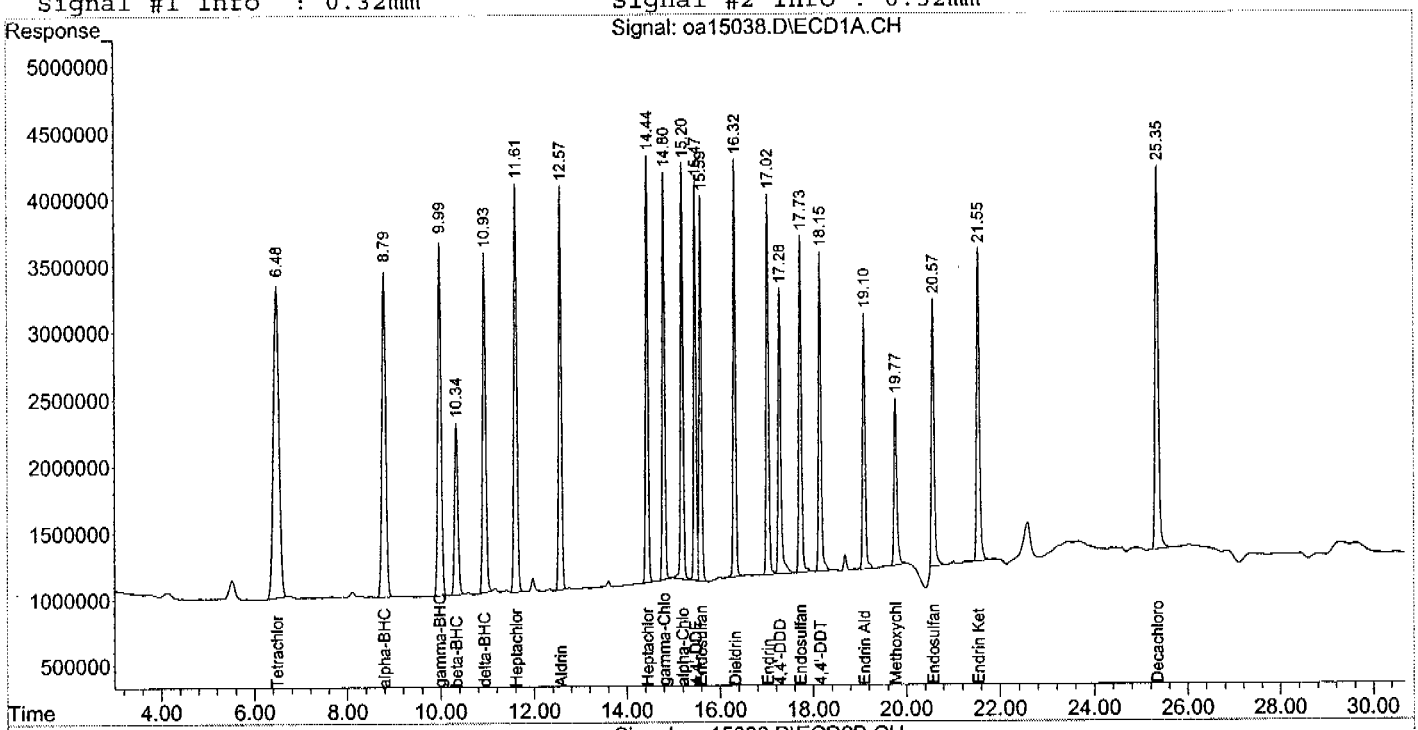
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

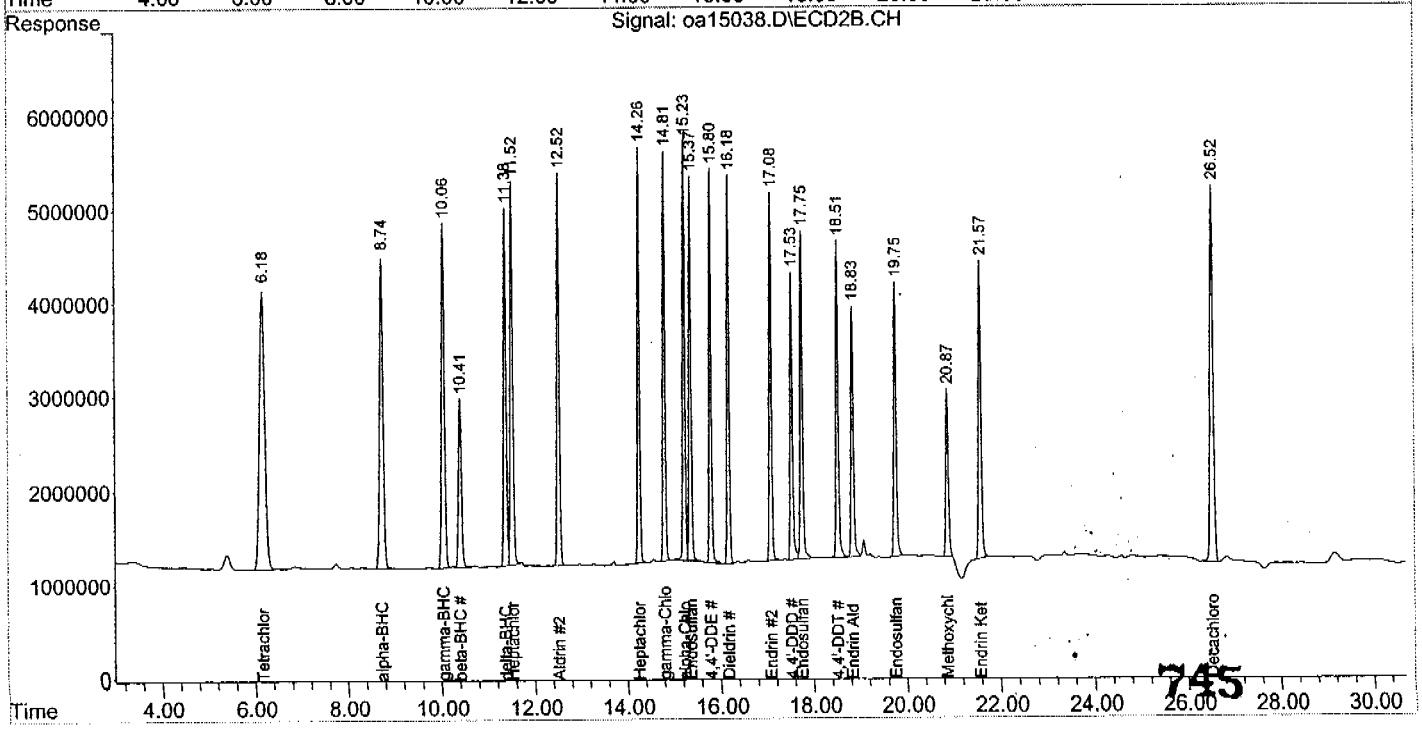
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15038.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\oa15038.D\ECD2B.CH
Acq On : 14 Aug 2004 2:46 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17672,GOA440,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 15:20 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



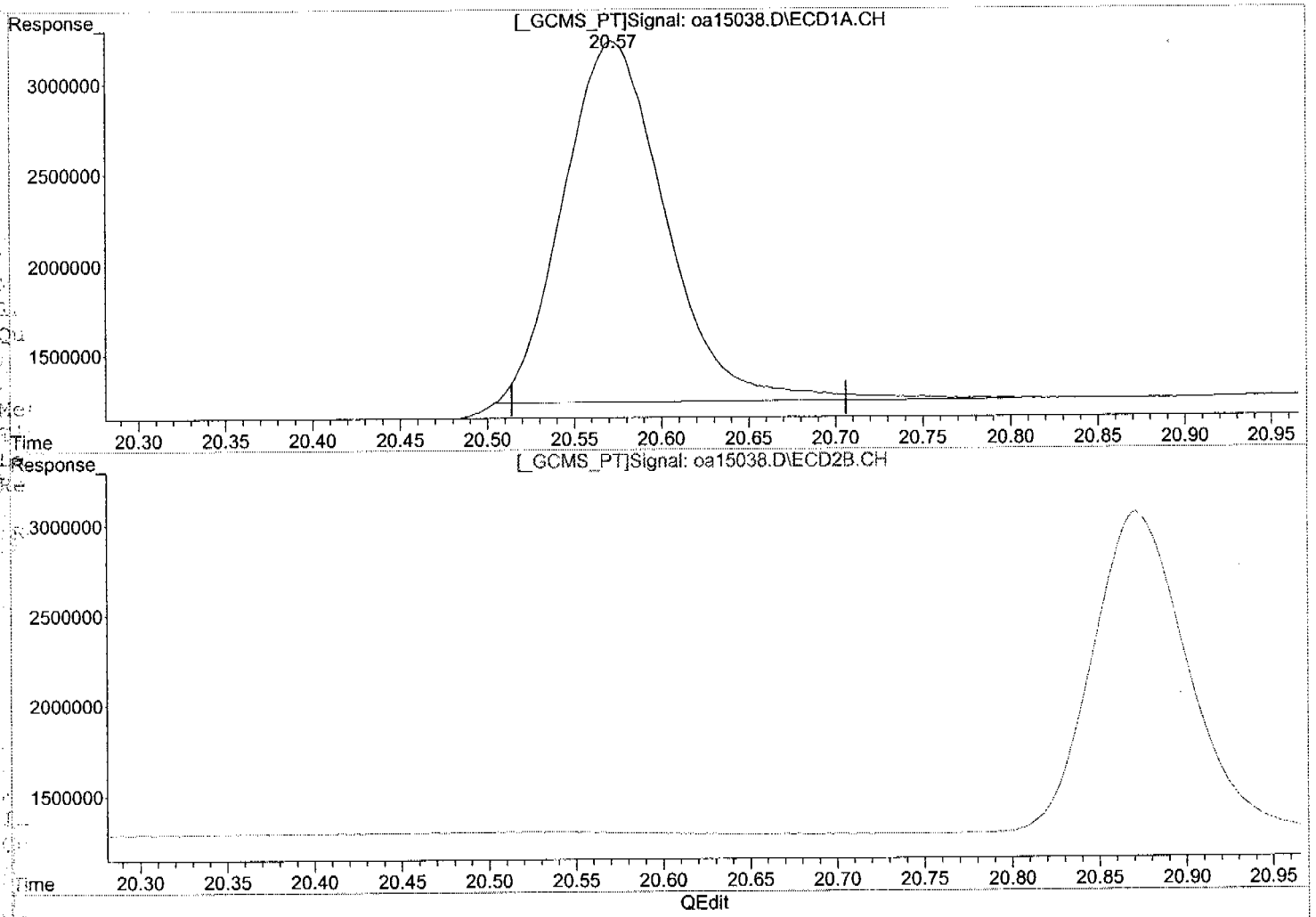


745

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa15038.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\oa15038.D\ECD2B.CH
Acq On : 14 Aug 2004 2:46 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17672,GOA440,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 15:20 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



(19) Endosulfan Sulfate (B)

20.57min 10.839PPB m

response 82097187

(19) Endosulfan Sulfate #2 (B)

19.75min 9.682PPB

response 106102741

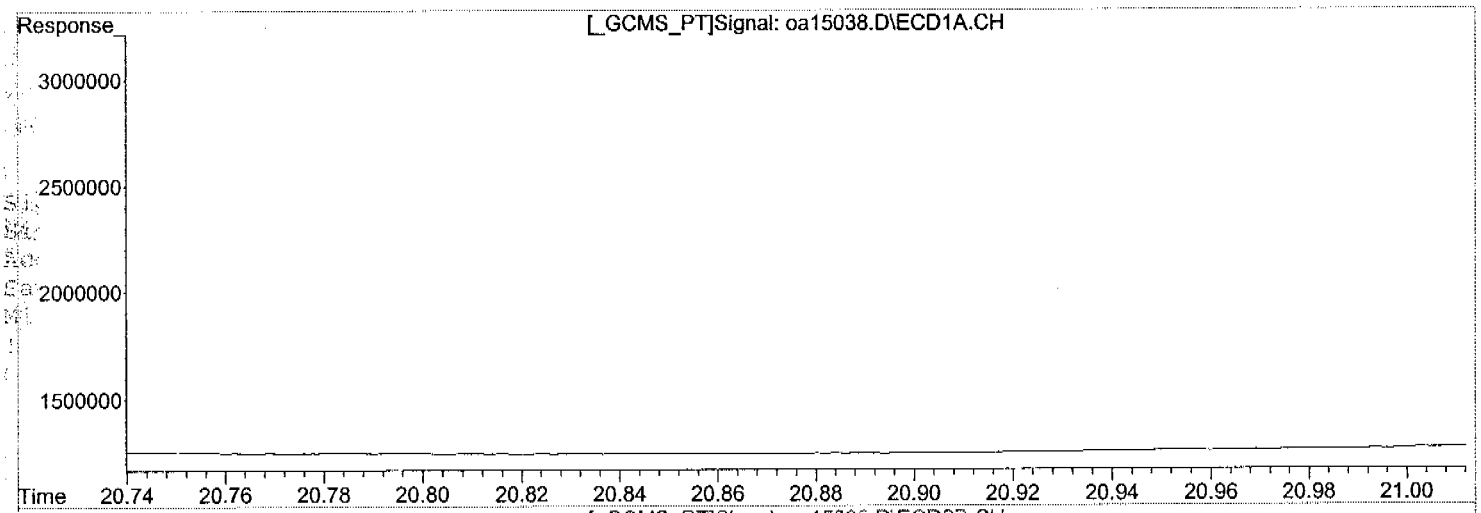
746

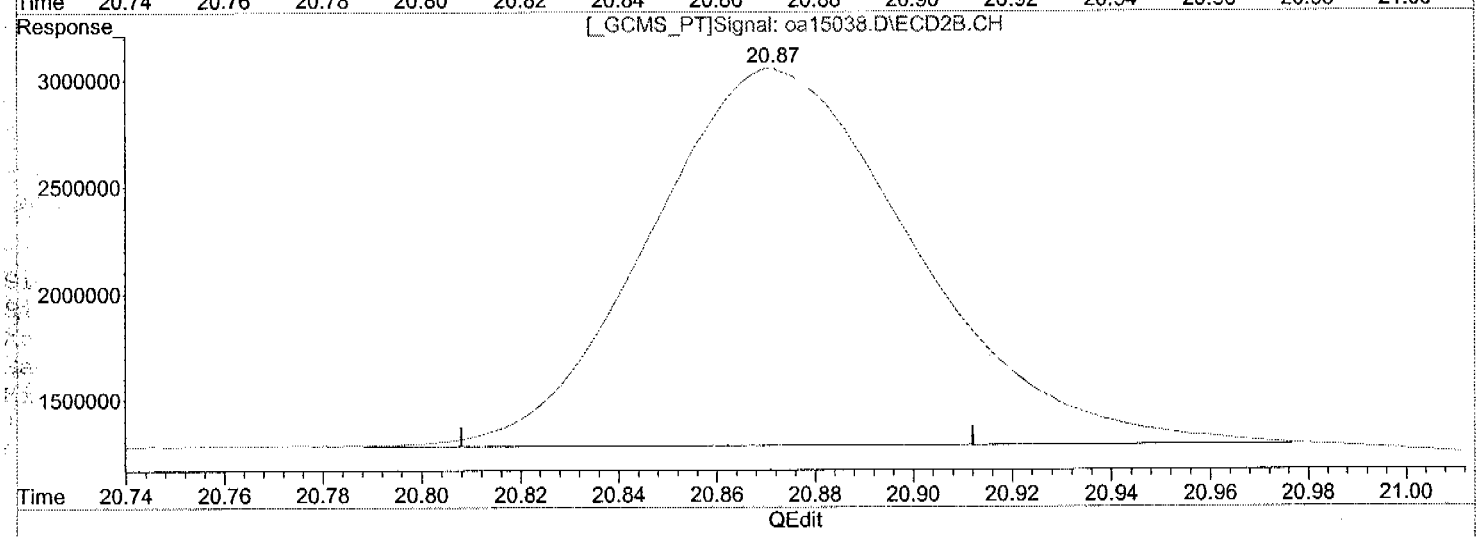
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa15038.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\oa15038.D\ECD2B.CH
Acq On : 14 Aug 2004 2:46 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17672,GOA440,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 15:20 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 11.141PPB

response 53970571

(20) Methoxychlor #2 (A)

20.87min 9.697PPB m

response 66393658

OC 747

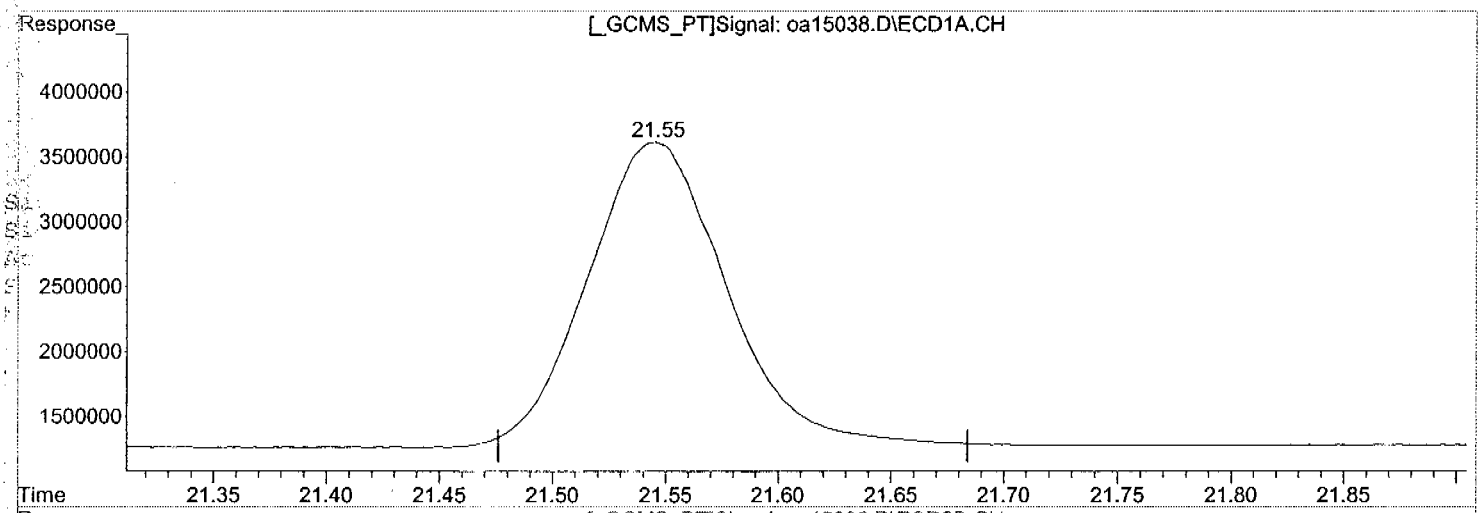
(+) = Expected Retention Time

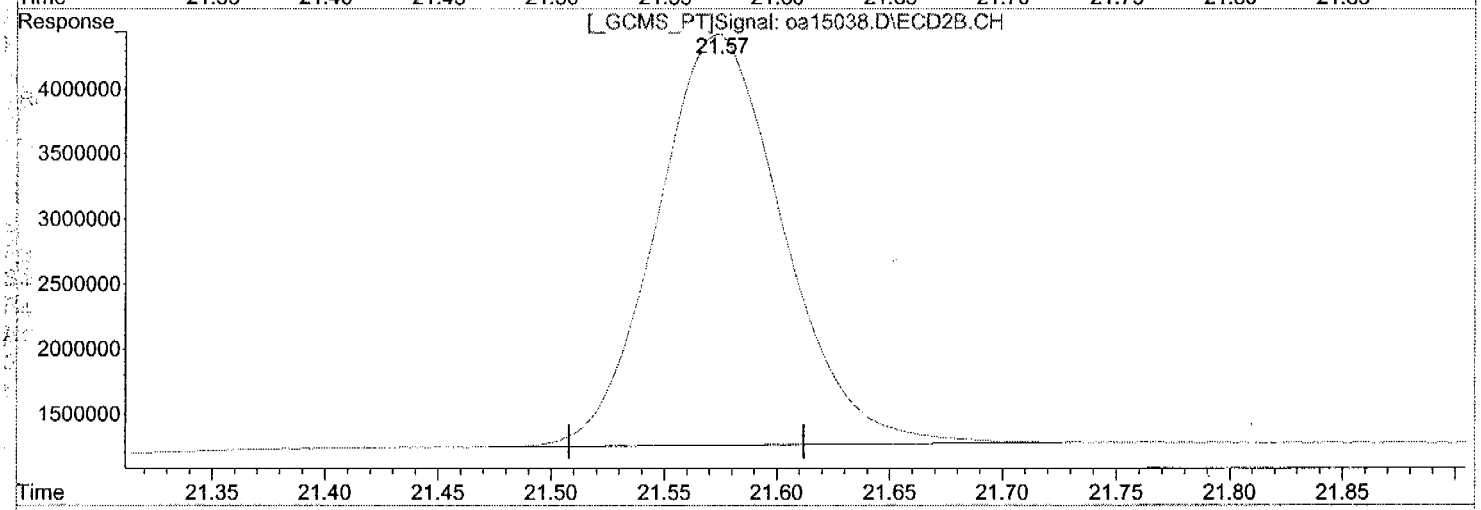
oa15038.D PST433.M Mon Aug 16 12:05:05 2004 GC

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa15038.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\oa15038.D\ECD2B.CH
Acq On : 14 Aug 2004 2:46 pm Operator: owenm
Sample : cc433-10 Inst : GCOO
Misc : OP17672,GOA440,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 15:20 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)

21.54min 10.917PPB

response 101474921

(21) Endrin Ketone #2 (B)

21.57min 9.255PPB m

response 123458935

748

(+) = Expected Retention Time

oa15038.D PST433.M Mon Aug 16 12:05:11 2004 GC

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA441-ECC433
Lab FileID: OA15050.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\oa15050.D\ECD1A.CH Vial: 42
Signal #2 : C:\MSDCHEM\1\DATA\oa15050.D\ECD2B.CH
Acq On : 14 Aug 2004 11:03 pm Operator: owenm
Sample : ecc433-25 Inst : GCOO
Misc : OP17703,GOA441,900,,,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	9.326 E6	-0.7	106	-0.07	6.31- 6.65
2	A	alpha-BHC	13.643	14.016 E6	-2.7	103	-0.06	8.66- 8.92
3	MA	gamma-BHC	12.875	12.958 E6	-0.6	102	-0.04	9.87-10.10
4	MA	Heptachlor	12.705	12.012 E6	5.5	98	-0.04	11.53-11.70
5	B	beta-BHC	6.231	5.888 E6	5.5	101	-0.04	10.24-10.43
6	B	delta-BHC	11.480	11.294 E6	1.6	99	-0.04	10.83-11.04
7	MB	Aldrin	11.618	11.115 E6	4.3	99	-0.04	12.47-12.68
8	B	Heptachlor Epoxide	10.789	10.104 E6	6.3	98	-0.03	14.36-14.53
9	B	gamma-Chlordane	10.455	9.759 E6	6.7	97	-0.02	14.73-14.89
10	B	alpha-Chlordane	10.410	9.643 E6	7.4	97	-0.03	15.11-15.29
11	A	Endosulfan I	10.121	9.658 E6	4.6	100	-0.02	15.53-15.66
12	B	4,4'-DDE	9.764	9.045 E6	7.4	94	-0.02	15.41-15.55
13	MA	Dieldrin	10.528	9.941 E6	5.6	96	-0.03	16.23-16.41
14	MA	Endrin	9.416	9.221 E6	2.1	100	-0.02	16.94-17.11
15	A	4,4'-DDD	8.117	7.842 E6	3.4	97	-0.02	17.21-17.35
16	B	Endosulfan II	9.301	8.836 E6	5.0	99	-0.03	17.65-17.82
17	MA	4,4'-DDT	8.391	8.071 E6	3.8	98	-0.02	18.08-18.22
18	B	Endrin Aldehyde	7.201	6.696 E6	7.0	95	-0.03	19.01-19.19
19	B	Endosulfan Sulfate	7.574	6.703 E6	11.5	92	-0.03	20.48-20.67
20	A	Methoxychlor	4.844	4.523 E6	6.6	98	-0.02	19.68-19.86
21	B	Endrin Ketone	9.295	8.444 E6	9.2	94	-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	5.234 E6	19.6#	86	-0.02	25.26-25.44

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

1	SAB	Tetrachloro-m-xylene	12.559	12.342 E6	1.7	100	-0.02	6.06- 6.30
2	A	alpha-BHC	18.496	18.833 E6	-1.8	100	-0.01	8.66- 8.82
3	MA	gamma-BHC	17.546	17.725 E6	-1.0	100	0.00	9.99-10.12
4	MA	Heptachlor	16.993	16.674 E6	1.9	98	0.00	11.47-11.58
5	B	beta-BHC	8.434	7.949 E6	5.8	99	0.00	10.34-10.48
6	B	delta-BHC	15.828	15.644 E6	1.2	97	0.00	11.32-11.44

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GOA441-ECC433
Lab FileID: OA15050.D

7	MB	Aldrin	16.257	16.419 E6	-1.0	101	0.00	12.48-12.57
8	B	Heptachlor Epoxide	15.195	15.096 E6	0.7	101	0.00	14.21-14.31
9	B	gamma-Chlordane	15.205	15.139 E6	0.4	101	0.00	14.76-14.85
10	B	alpha-Chlordane	15.049	14.854 E6	1.3	101	0.00	15.18-15.29
11	A	Endosulfan I	14.131	14.124 E6	0.0	101	0.00	15.31-15.42
12	B	4,4'-DDE	14.400	14.585 E6	-1.3	101	0.00	15.75-15.85
13	MA	Dieldrin	15.156	15.204 E6	-0.3	101	0.00	16.12-16.23
14	MA	Endrin	13.207	13.826 E6	-4.7	105	0.00	17.03-17.13
15	A	4,4'-DDD	11.697	11.322 E6	3.2	97	0.01	17.48-17.58
16	B	Endosulfan II	13.317	13.482 E6	-1.2	103	0.00	17.69-17.80
17	MA	4,4'-DDT	12.231	12.196 E6	0.3	101	0.00	18.46-18.56
18	B	Endrin Aldehyde	10.490	10.065 E6	4.1	99	0.00	18.78-18.88
19	B	Endosulfan Sulfate	10.959	10.466 E6	4.5	99	0.01	19.70-19.80
20	A	Methoxychlor	6.847	6.714 E6	1.9	101	0.00	20.82-20.92
21	B	Endrin Ketone	13.339	13.244 E6	0.7	102	0.01	21.52-21.62
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	9.429 E6	5.0	101	0.02	26.45-26.58

Average % D = 3.9

(2.3 %) 1 of 44 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
OA14770.D PST433.M Tue Aug 17 12:25:03 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15050.D\ECD1A.CH Vial: 42
Signal #2 : C:\MSDCHEM\1\DATA\oa15050.D\ECD2B.CH
Acq On : 14 Aug 2004 11:03 pm Operator: owenm
Sample : ecc433-25 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 23:34:31 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	6.48f	6.18	466.3E6	617.1E6	50.334	49.137
Spiked Amount 40.000 Range 30 - 150 Recovery =					125.84%	122.84%
2) SA Decachlorobiphen	25.35	26.52	261.7E6	471.4E6	40.170	47.510
Spiked Amount 40.000 Range 30 - 150 Recovery =					100.43%	118.77%
Target Compounds						
2) A alpha-BHC	8.79f	8.74	350.4E6	470.8E6	25.685	25.455
3) MA gamma-BHC	9.99f	10.06	324.0E6	443.1E6	25.161	25.255
4) MA Heptachlor	11.61f	11.52	300.3E6	416.9E6	23.635	24.530
5) B beta-BHC	10.34f	10.41	147.2E6	198.7E6	23.624	23.561
6) B delta-BHC	10.94f	11.38	282.4E6	391.1E6	24.596	24.708
7) MB Aldrin	12.57f	12.52	277.9E6	410.5E6	23.918	25.249
8) B Heptachlor Epoxi	14.45f	14.26	252.6E6	377.4E6	23.412	24.837
9) B gamma-Chlordane	14.81	14.81	244.0E6	378.5E6	23.336	24.891
10) B alpha-Chlordane	15.20f	15.23	241.1E6	371.3E6	23.158	24.676
11) A Endosulfan I	15.60	15.37	241.5E6	353.1E6	23.858	24.989
12) B 4,4'-DDE	15.48	15.80	226.1E6	364.6E6	23.161	25.322
13) MA Dieldrin	16.32f	16.17	248.5E6	380.1E6	23.607	25.080
14) MA Endrin	17.03	17.08	230.5E6	345.7E6	24.483	26.172
15) A 4,4'-DDD	17.28	17.53	196.0E6	283.0E6	24.153	24.199
16) B Endosulfan II	17.73f	17.75	220.9E6	337.1E6	23.750	25.311
17) MA 4,4'-DDT	18.15	18.51	201.8E6	304.9E6	24.046	24.927
18) B Endrin Aldehyde	19.10f	18.83	167.4E6	251.6E6	23.247	23.988
19) B Endosulfan Sulfa	20.58f	19.75	167.6E6	261.7E6	22.124	23.876
20) A Methoxychlor	19.77	20.87	113.1E6	167.8E6	23.342	24.514
21) B Endrin Ketone	21.55f	21.57	211.1E6	331.1E6	22.709	24.822

OPM 8/17/04

751

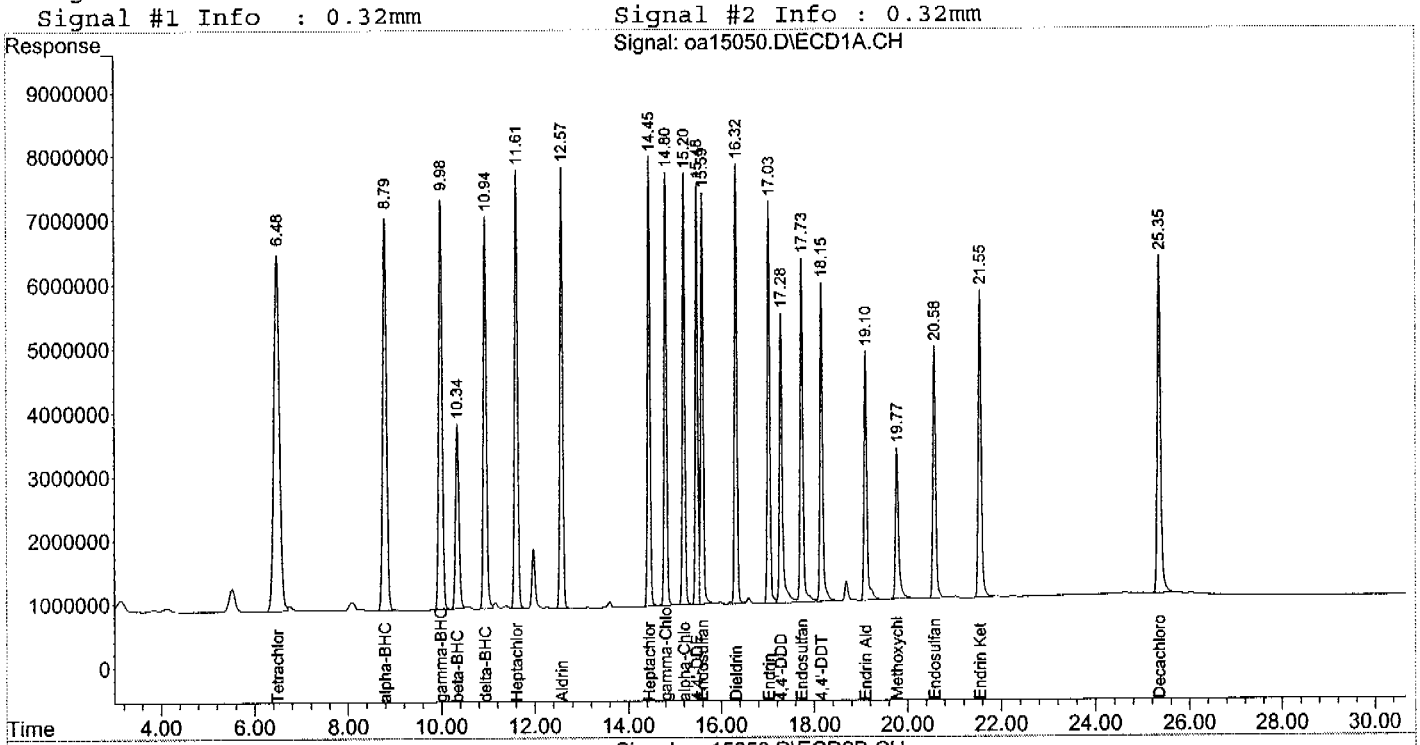
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

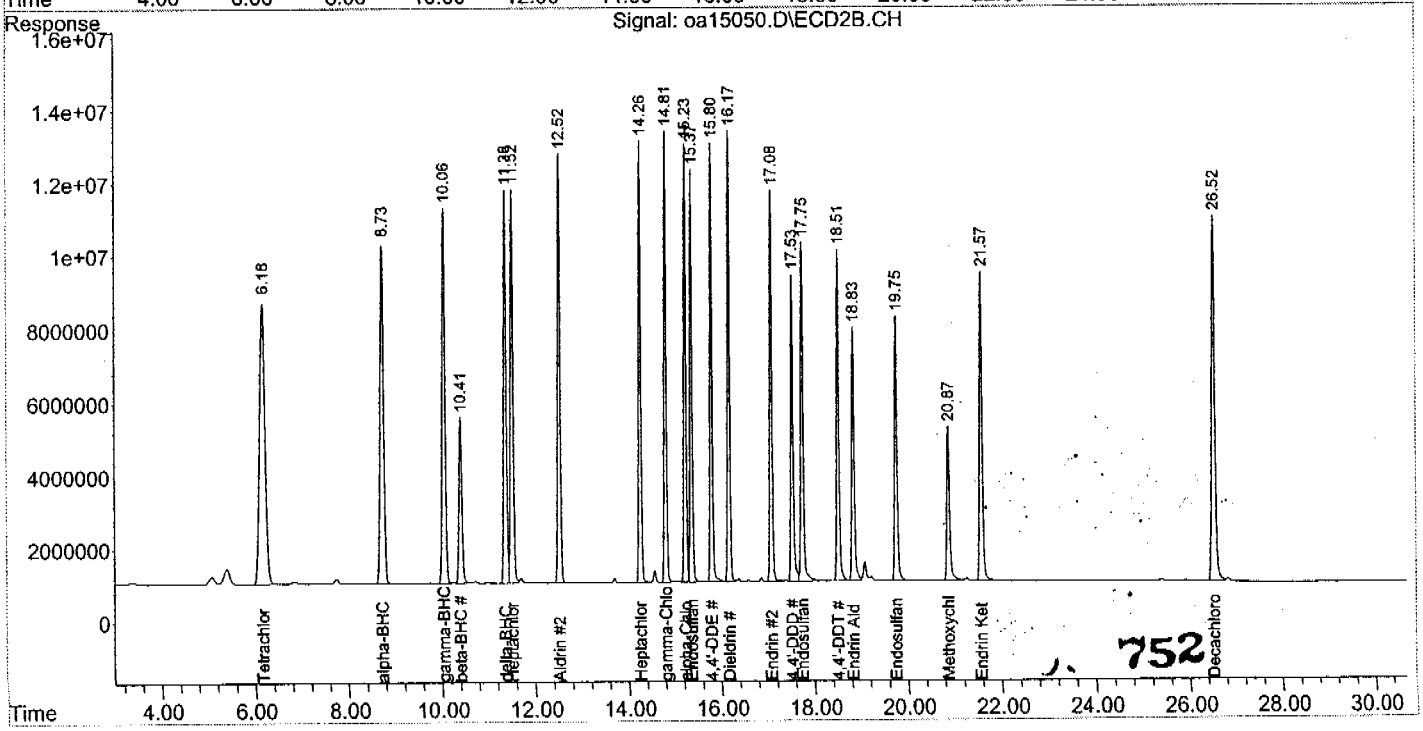
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15050.D\ECD1A.CH Vial: 42
Signal #2 : C:\MSDCHEM\1\DATA\oa15050.D\ECD2B.CH
Acq On : 14 Aug 2004 11:03 pm Operator: owenm
Sample : ecc433-25 Inst : GCOO
Misc : OP17703,GOA441,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 8:14 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\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
1)	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
3)	B Endrin Aldehyde	19.08	18.79	1352083	2092139	0.188m	0.199m
0)	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

753

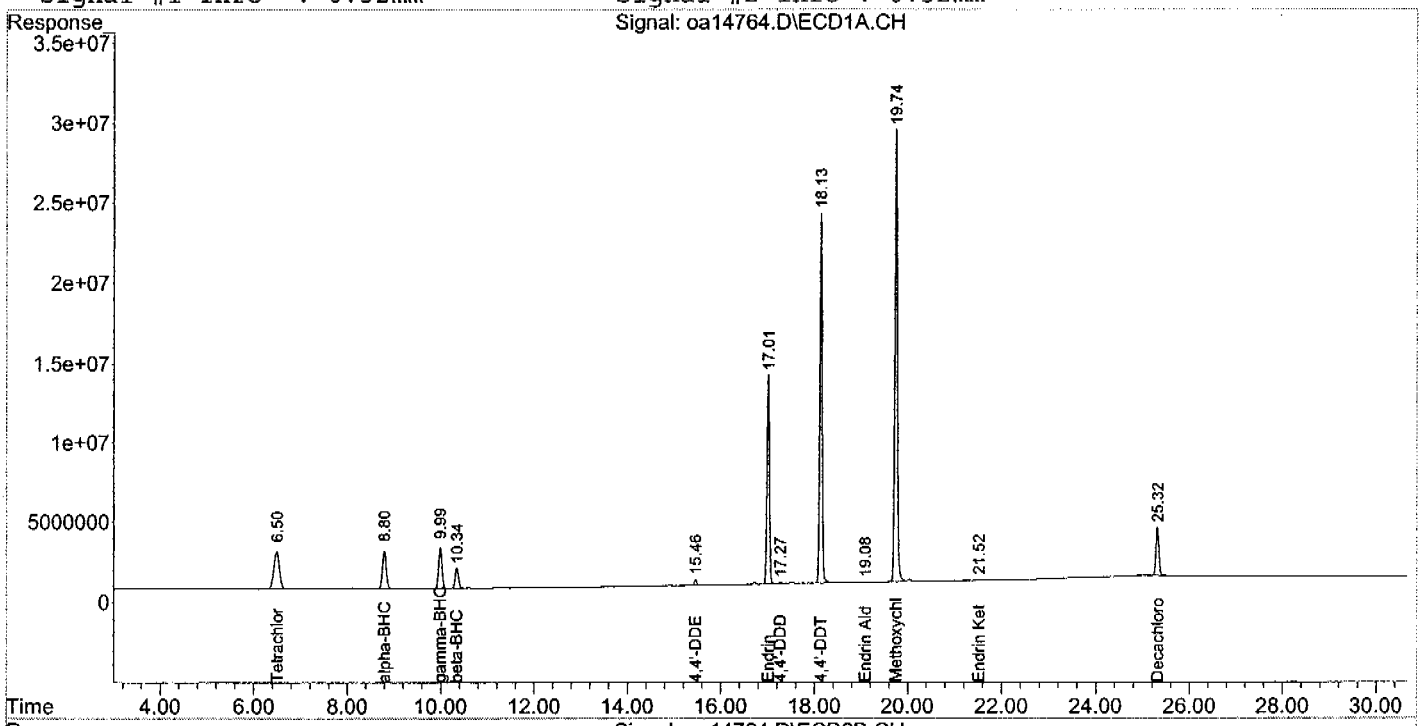
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

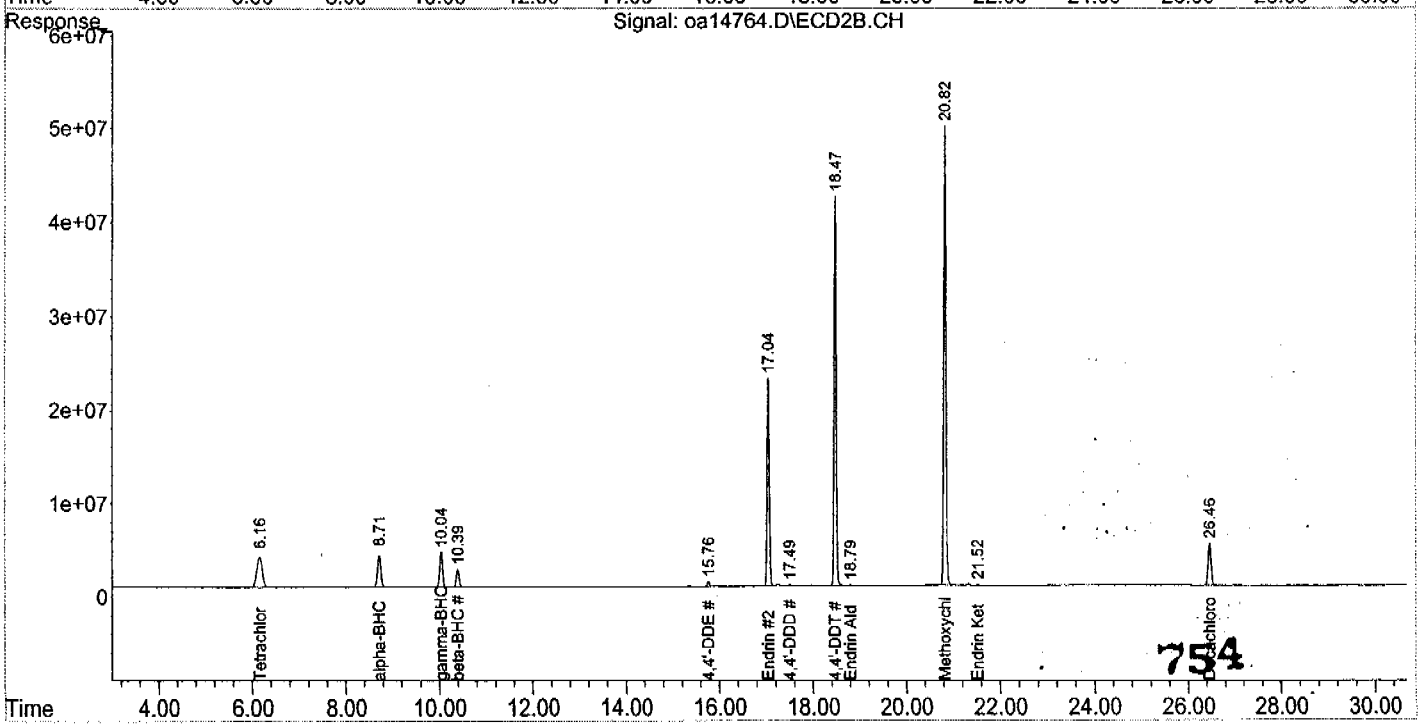
Quantitation Report (QT Reviewed)

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



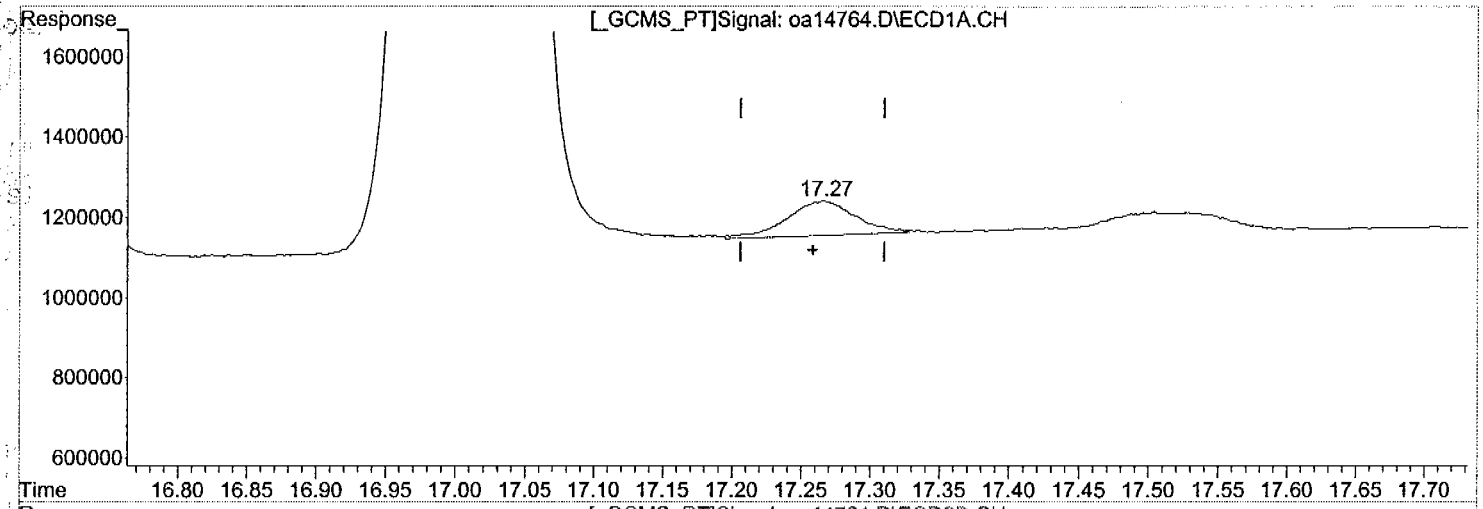


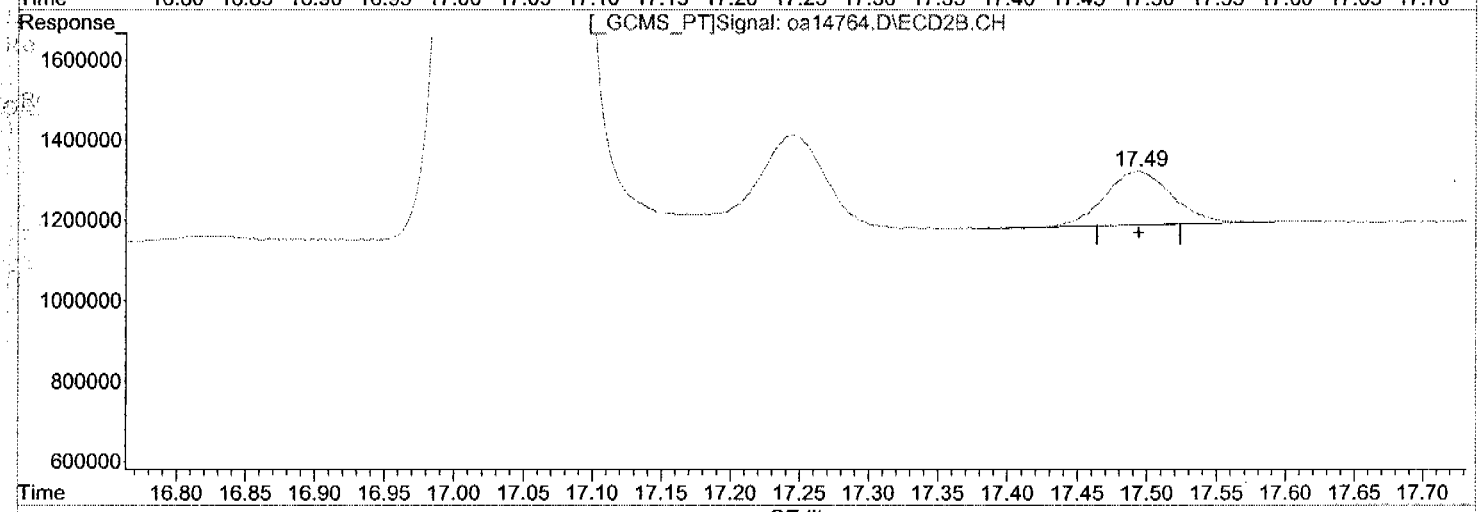
754

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

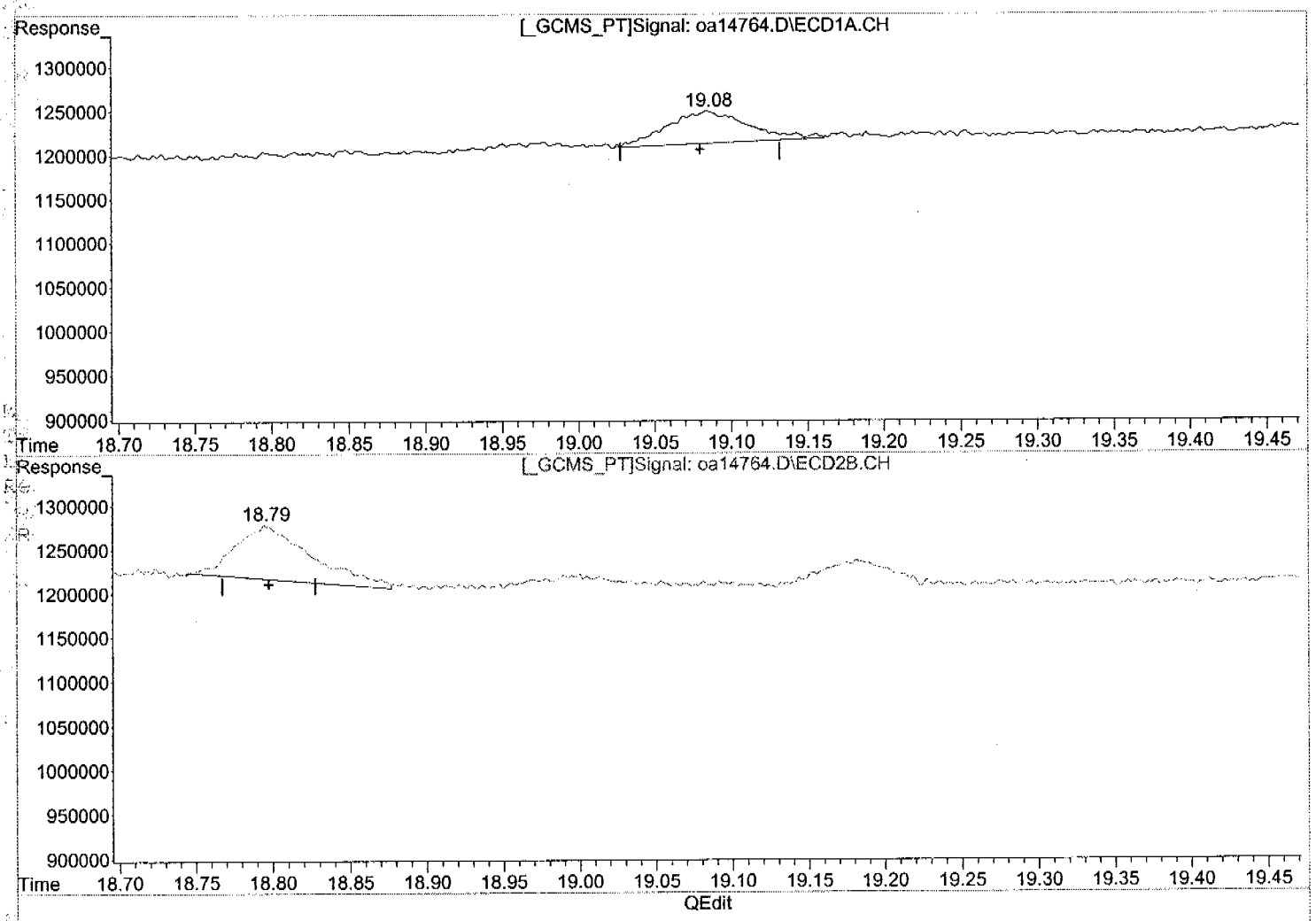
755

(+) = 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 : 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



(18) Endrin Aldehyde (B)

19.08min 0.188PPB m

response 1352083

(18) Endrin Aldehyde #2 (B)

18.79min 0.199PPB m

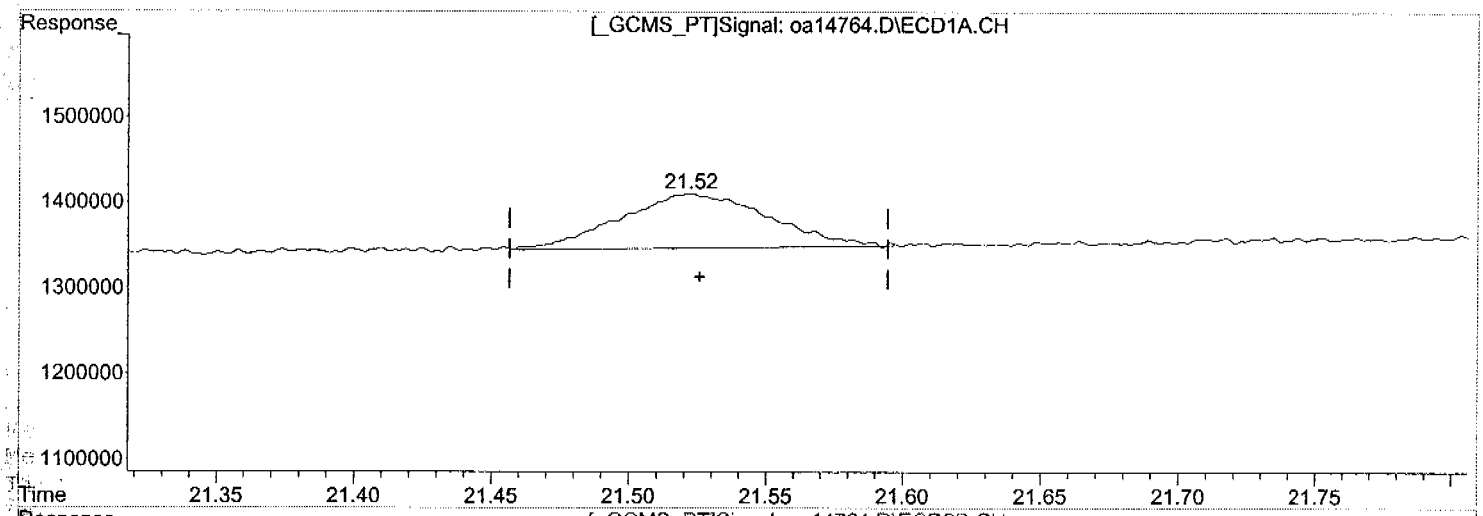
response 2092139

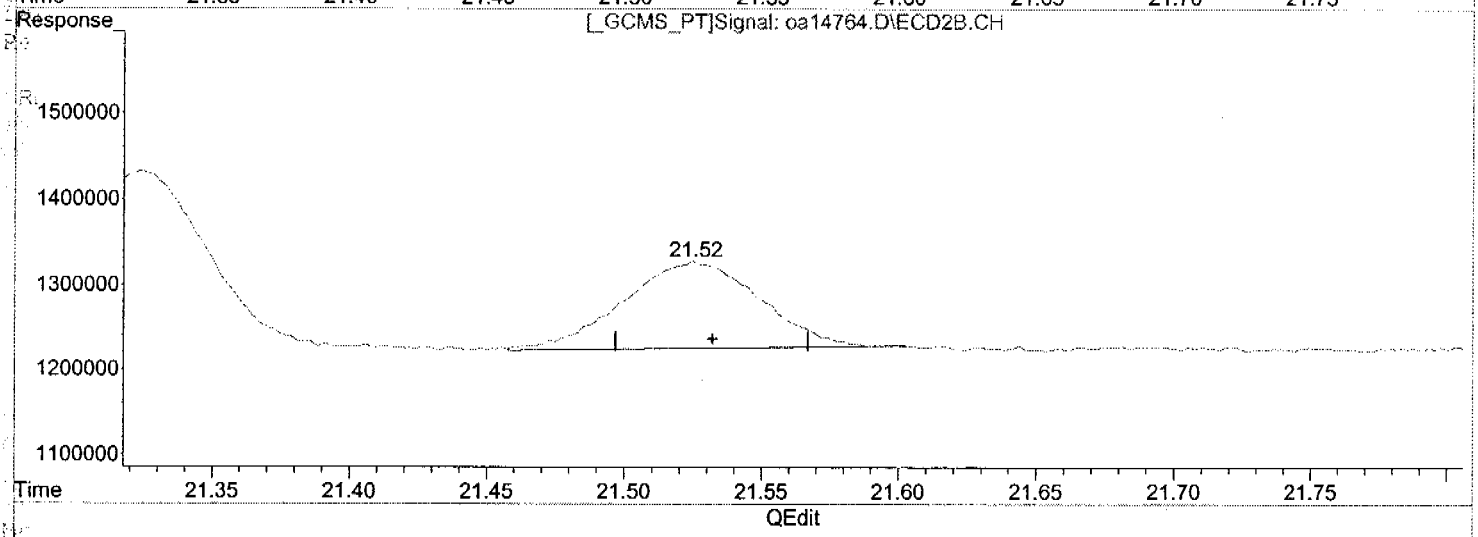
(+) = Expected Retention Time

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

757

(+) = Expected Retention Time

oa14764.D PST433.M Fri Aug 06 08:18:31 2004 GC

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15009.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\oa15009.D\ECD2B.CH
Acq On : 13 Aug 2004 4:15 pm Operator: owenm
Sample : ddt2 Inst : GCOO
Misc : OP17544,GOA440,15.1,,,10,2 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 16:46:35 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 : 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	6.50	6.17	190.4E6	245.1E6	20.556	19.514
Spiked Amount 40.000 Range 30 - 150 Recovery =					51.39%	48.79%
2) SA Decachlorobiphen	25.35	26.52	140.7E6	204.2E6	21.604	20.575
Spiked Amount 40.000 Range 30 - 150 Recovery =					54.01%	51.44%
Target Compounds						
2) A alpha-BHC	8.81f	8.74	133.4E6	165.8E6	9.781	8.965
3) MA gamma-BHC	10.00	10.06	123.3E6	154.8E6	9.574	8.820
4) B beta-BHC	10.35	10.41	62176216	77839144	9.979	9.229
5) B 4,4'-DDE	15.49	15.80	13467461	15374284	1.379	1.068
6) MA Endrin	17.03	17.08	478.8E6	661.4E6	50.857	50.078
6) A 4,4'-DDD	17.29	17.53	5368546	5170200	0.661	0.442 #
7) MA 4,4'-DDT	18.16	18.51	839.1E6	1213.5E6	100.004	99.216
8) B Endrin Aldehyde	19.11	18.84	5224695	8495905	0.726	0.810
9) A Methoxychlor	19.77	20.87	1051.4E6	1567.7E6	217.047	228.979
10) B Endrin Ketone	21.55	21.58	4681234	5810797	0.504	0.436

OYM 8/16/04

758

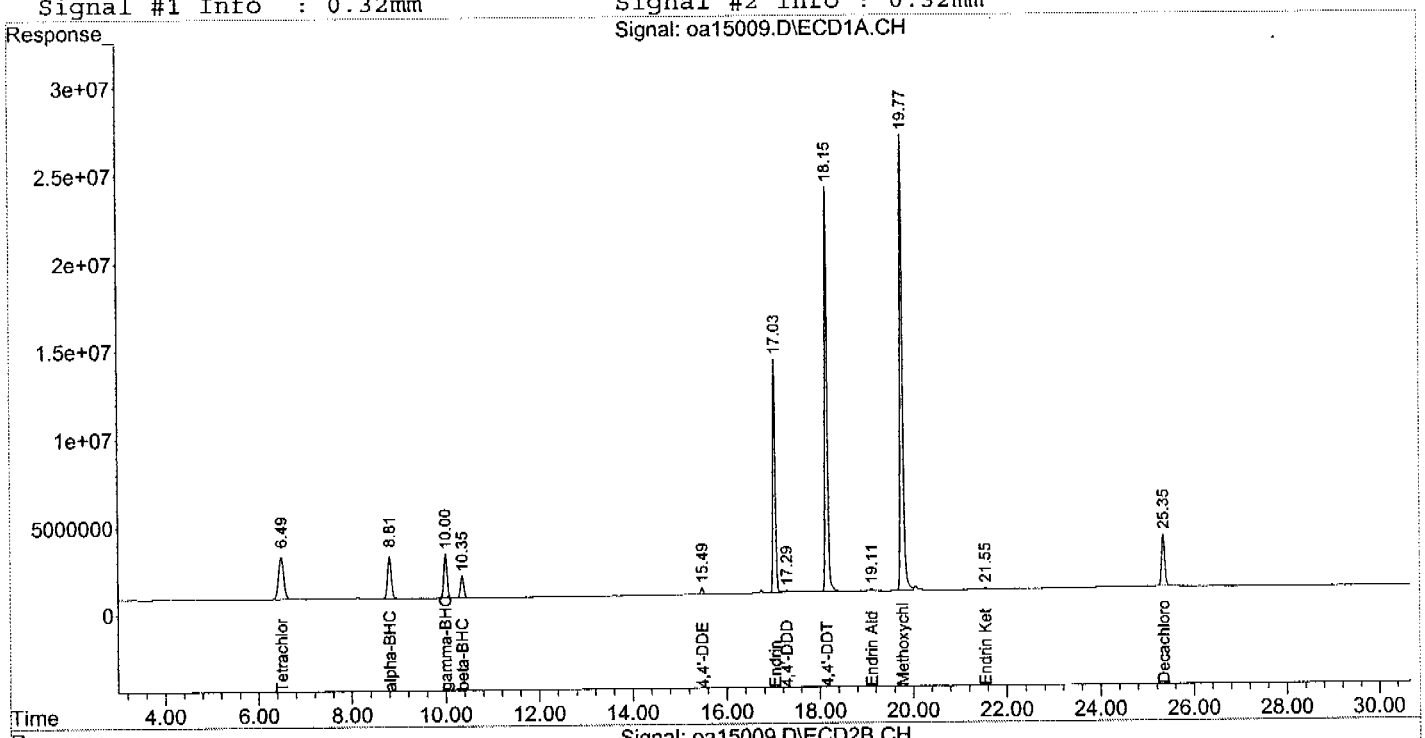
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

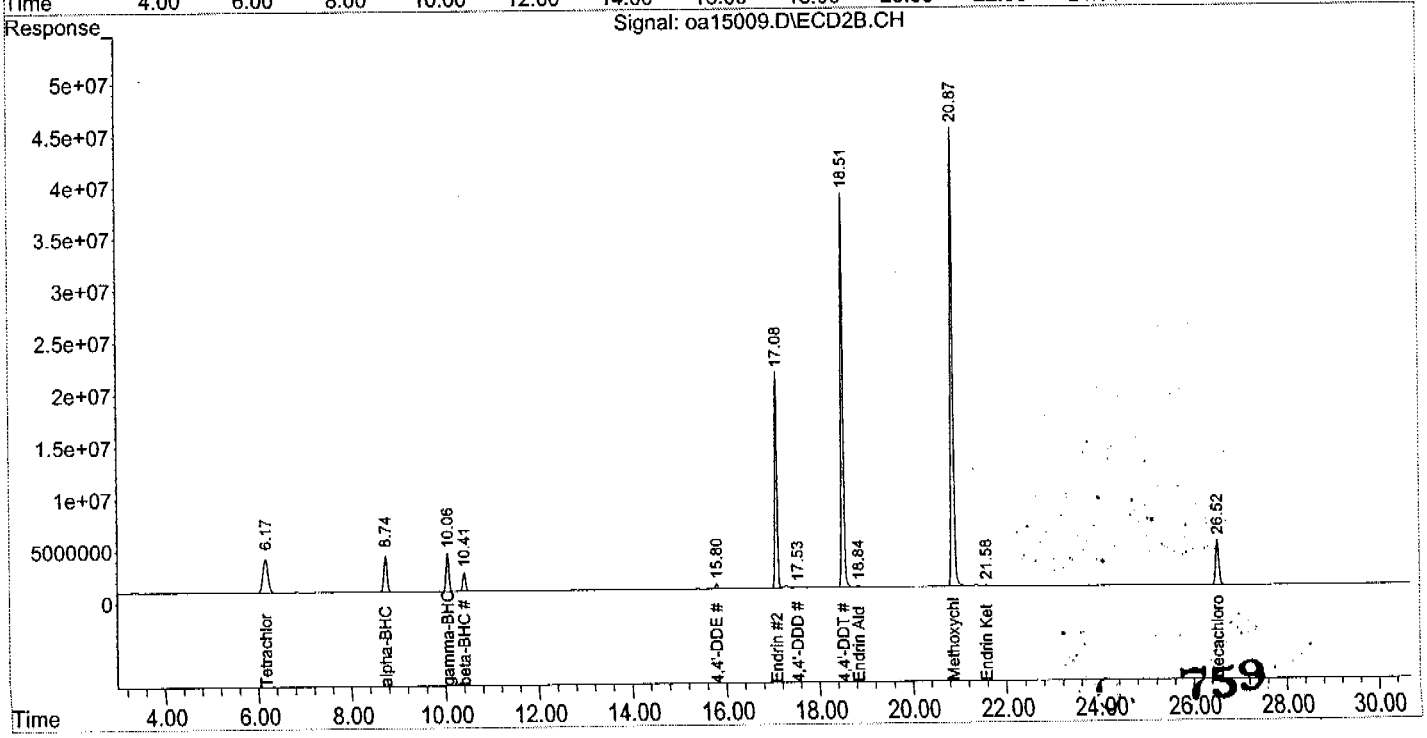
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15009.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\oa15009.D\ECD2B.CH
Acq On : 13 Aug 2004 4:15 pm Operator: owenm
Sample : ddt2 Inst : GCOO
Misc : OP17544,GOA440,15.1,,,10,2 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 11:55 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





759

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15039.D\ECD1A.CH Vial: 31
Signal #2 : C:\MSDCHEM\1\DATA\oa15039.D\ECD2B.CH
Acq On : 14 Aug 2004 4:01 pm Operator: owenm
Sample : ddt1 Inst : GCOO
Misc : OP17672,GOA441,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 16:32:06 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						
) SAB Tetrachloro-m-xy	6.48f	6.18	186.7E6	238.5E6	20.152	18.994
Spiked Amount 40.000 Range 30 - 150 Recovery =					50.38%	47.48%
) SA Decachlorobiphen	25.34	26.52	141.6E6	200.5E6	21.744	20.203
Spiked Amount 40.000 Range 30 - 150 Recovery =					54.36%	50.51%
Target Compounds						
) A alpha-BHC	8.79f	8.73	130.6E6	160.7E6	9.570	8.687
) MA gamma-BHC	9.98f	10.06	120.8E6	150.3E6	9.380	8.566
) B beta-BHC	10.34f	10.41	60181912	74989426	9.659	8.891
) B 4,4'-DDE	15.48	15.80	13526974	16174972	1.385	1.123
) MA Endrin	17.02f	17.08	485.3E6	666.3E6	51.541	50.451
) A 4,4'-DDD	17.28	17.53	5229547	5711344	0.644	0.488
) MA 4,4'-DDT	18.15	18.51	838.8E6	1216.3E6	99.960	99.445
) B Endrin Aldehyde	0.00	18.83	0	2126789	N.D.	0.203 #
) A Methoxychlor	19.76f	20.87	1061.6E6	1549.8E6	219.143	226.359

OM 8/17/04

760

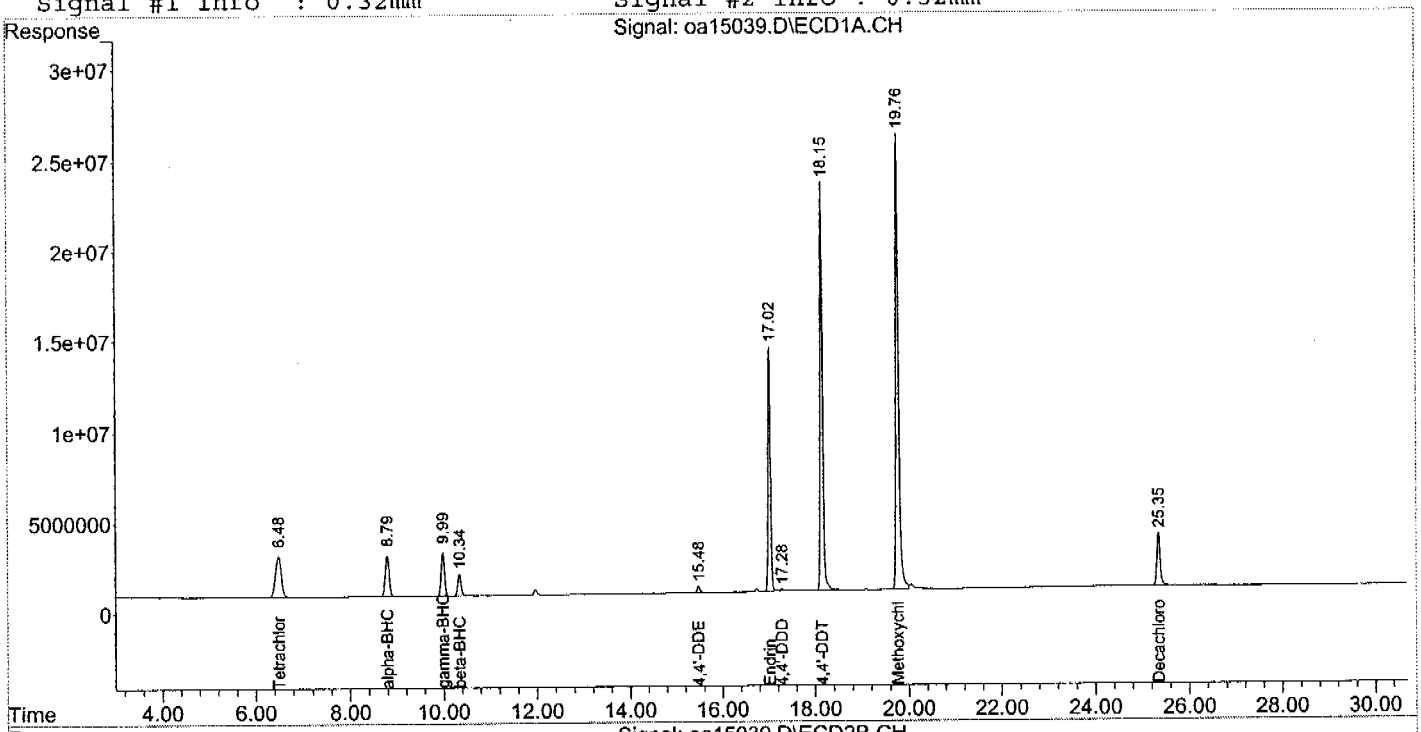
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

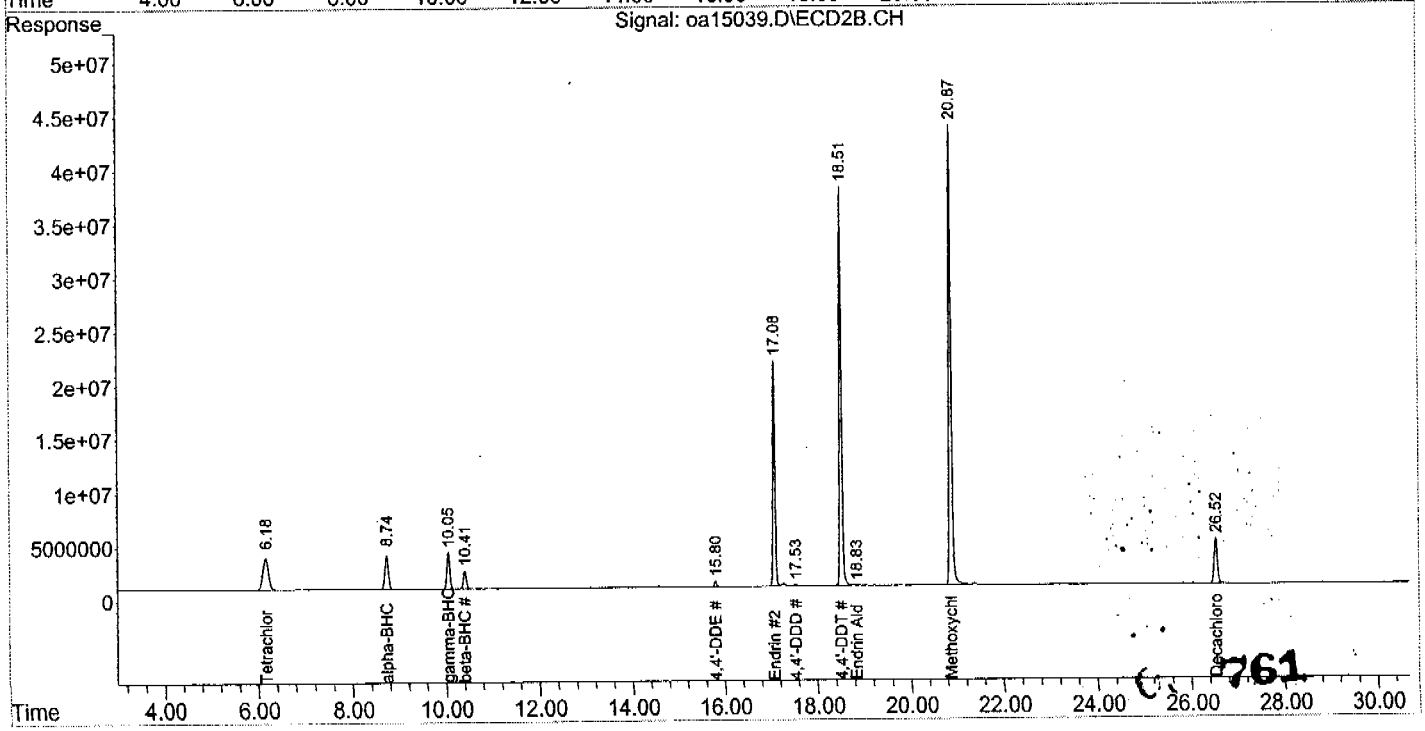
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15039.D\ECD1A.CH Vial: 31
Signal #2 : C:\MSDCHEM\1\DATA\oa15039.D\ECD2B.CH
Acq On : 14 Aug 2004 4:01 pm Operator: owenm
Sample : ddt1 Inst : GCOO
Misc : OP17672,GOA441,15.1,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 17 12:22 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 : 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





761

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15011.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\oa15011.D\ECD2B.CH
Acq On : 13 Aug 2004 5:22 pm Operator: owenm
Sample : op17703-mb1 Inst : GCOO
Misc : OP17703,GOA440,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 17:52:59 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	361.9E6	469.9E6	39.066	37.414
Spiked Amount	40.000	Range	30 - 150	Recovery	= 97.67%	93.53%
2) SA Decachlorobiphen	25.35	26.52	272.1E6	401.2E6	41.774	40.433
Spiked Amount	40.000	Range	30 - 150	Recovery	= 104.44%	101.08%

Target Compounds

OM 8/16/04

762

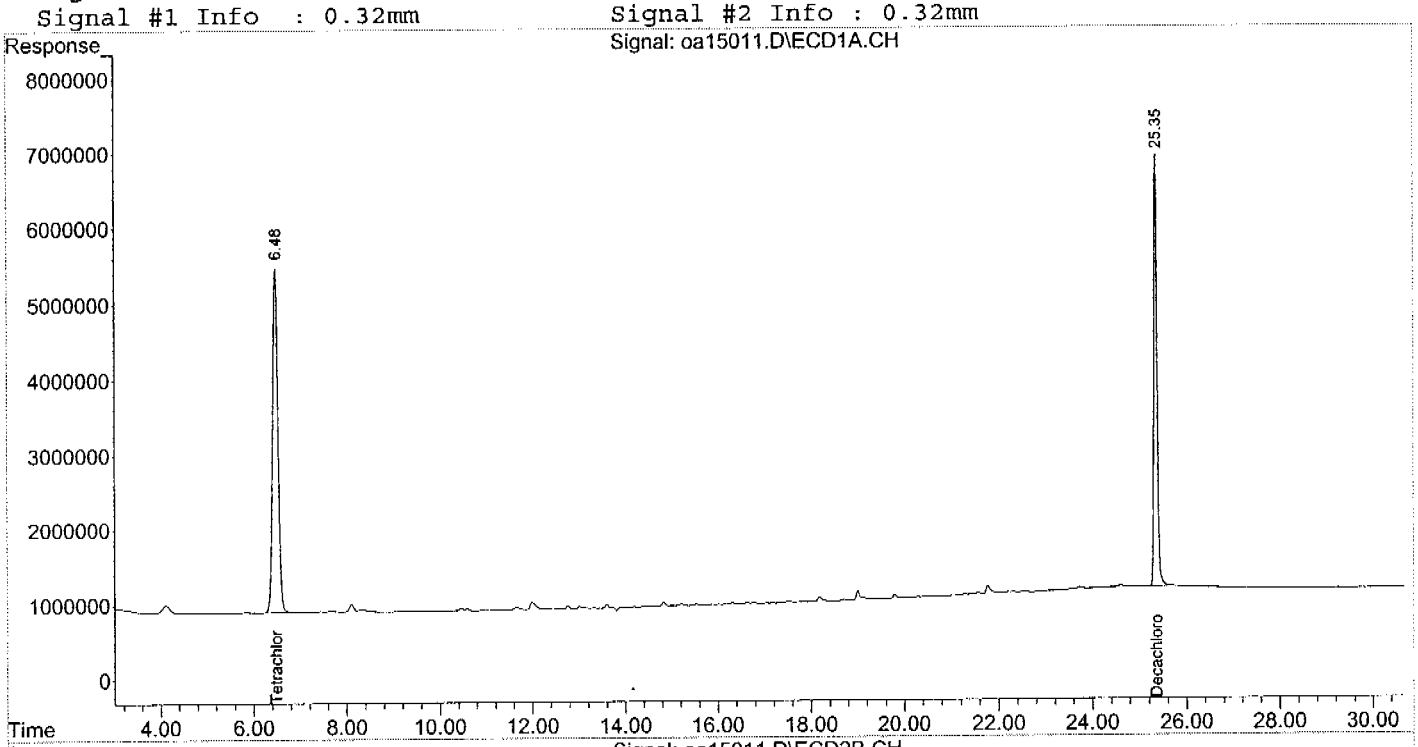
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

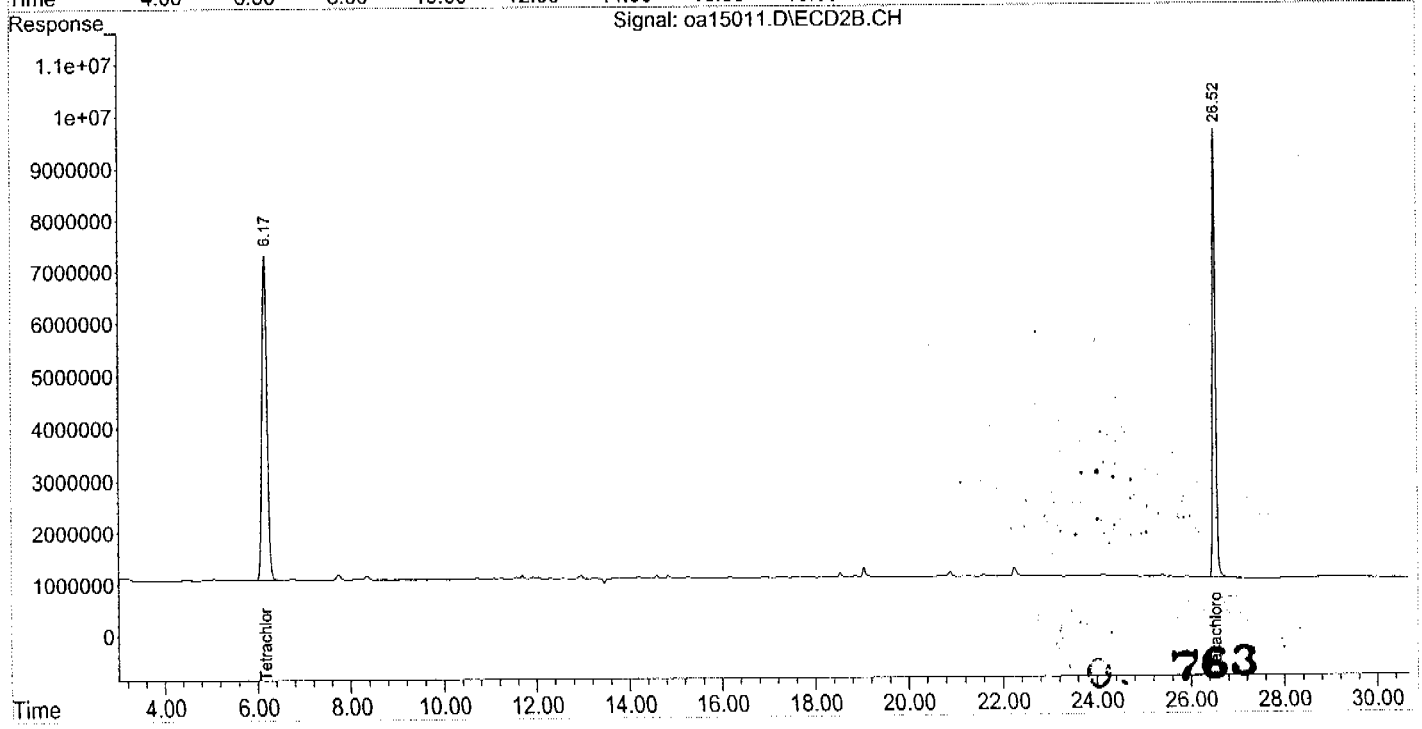
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15011.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\oa15011.D\ECD2B.CH
Acq On : 13 Aug 2004 5:22 pm Operator: owenm
Sample : op17703-mb1 Inst : GCOO
Misc : OP17703,GOA440,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:22 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 : 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





763

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15041.D\ECD1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\oa15041.D\ECD2B.CH
Acq On : 14 Aug 2004 5:07 pm Operator: owenm
Sample : op17703-ms Inst : GCOO
Misc : OP17703,GOA441,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 17:38:27 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	6.49f	6.18	334.0E6	433.0E6	36.049	34.474
	iked Amount 40.000 Range 30 - 150 Recovery =					90.12%	86.18%
	SA Decachlorobiphen	25.34	26.52	249.6E6	367.4E6	38.313	37.027
	piked Amount 40.000 Range 30 - 150 Recovery =					95.78%	92.57%
	Target Compounds						
)	A alpha-BHC	8.79f	8.74	377.3E6	502.5E6	27.653	27.166
)	MA gamma-BHC	9.99f	10.06	358.4E6	474.0E6	27.836	27.016
)	MA Heptachlor	11.61f	11.52	349.8E6	458.7E6	27.528	26.994
)	B beta-BHC	10.34f	10.41	166.2E6	219.5E6	26.680	26.023
)	B delta-BHC	10.93f	11.38	310.5E6	409.4E6	27.044	25.867
	MB Aldrin	12.57f	12.52	303.2E6	416.6E6	26.100	25.629
	B Heptachlor Epoxi	14.44f	14.26	313.6E6	436.9E6	29.071	28.753
	B gamma-Chlordane	14.80f	14.81	305.4E6	431.2E6	29.210	28.361
	B alpha-Chlordane	15.19f	15.23	302.1E6	413.5E6	29.017m	27.478
	A Endosulfan I	15.59f	15.37	289.0E6	389.3E6	28.554	27.553
	B 4,4'-DDE	15.47f	15.80	285.9E6	407.2E6	29.278	28.279
	MA Dieldrin	16.32f	16.18	317.0E6	437.9E6	30.106	28.895
	MA Endrin	17.02f	17.08	286.3E6	383.3E6	30.408	29.024
	A 4,4'-DDD	17.28	17.53	249.4E6	330.4E6	30.728	28.249
	B Endosulfan II	17.73f	17.75	278.3E6	374.8E6	29.923	28.142
	MA 4,4'-DDT	18.15	18.51	260.4E6	350.9E6	31.031	28.687
	B Endrin Aldehyde	19.10f	18.83	191.7E6	261.7E6	26.628	24.951
	B Endosulfan Sulfa	20.57f	19.75	225.5E6	310.8E6	29.775	28.361
	A Methoxychlor	19.76f	20.87	147.0E6	204.8E6	30.348	29.908
	B Endrin Ketone	21.54f	21.57	288.6E6	393.3E6	31.052	29.488

OM 8/16/04

764

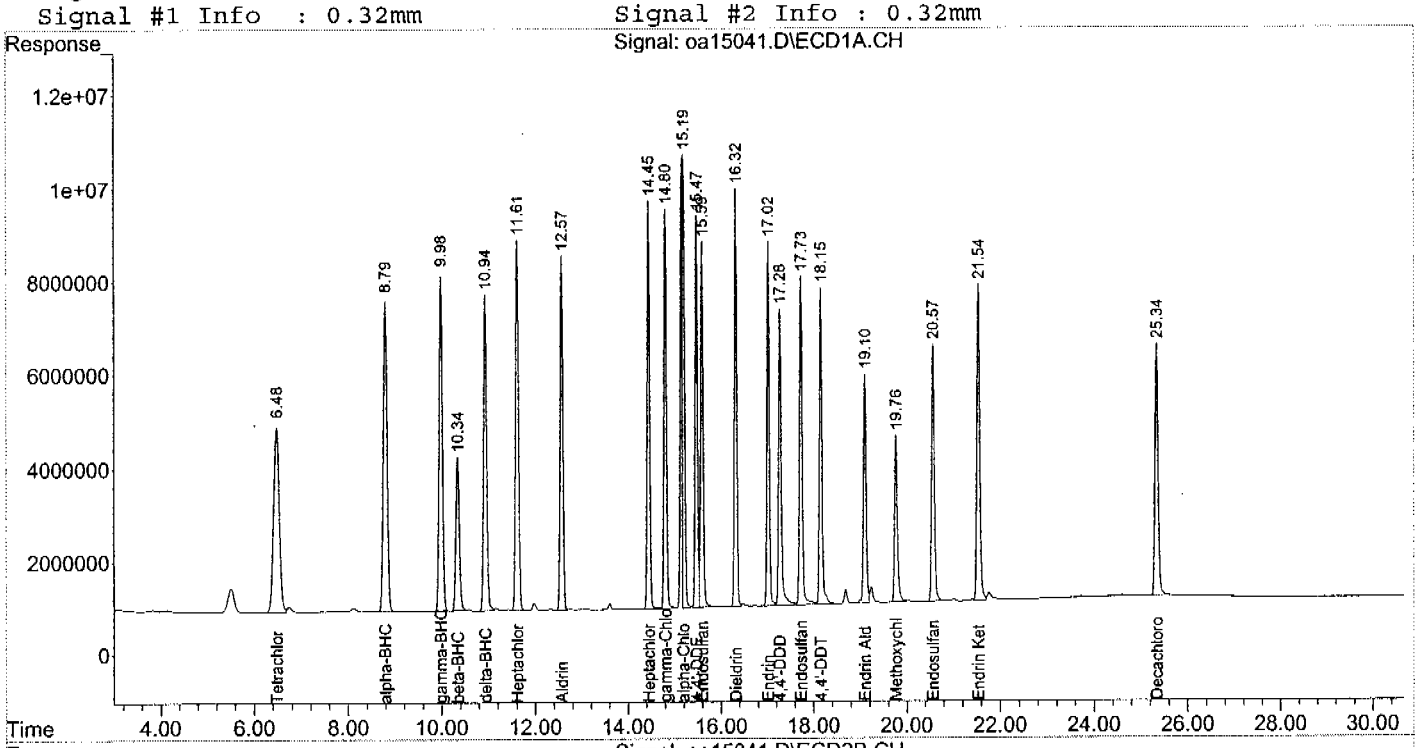
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

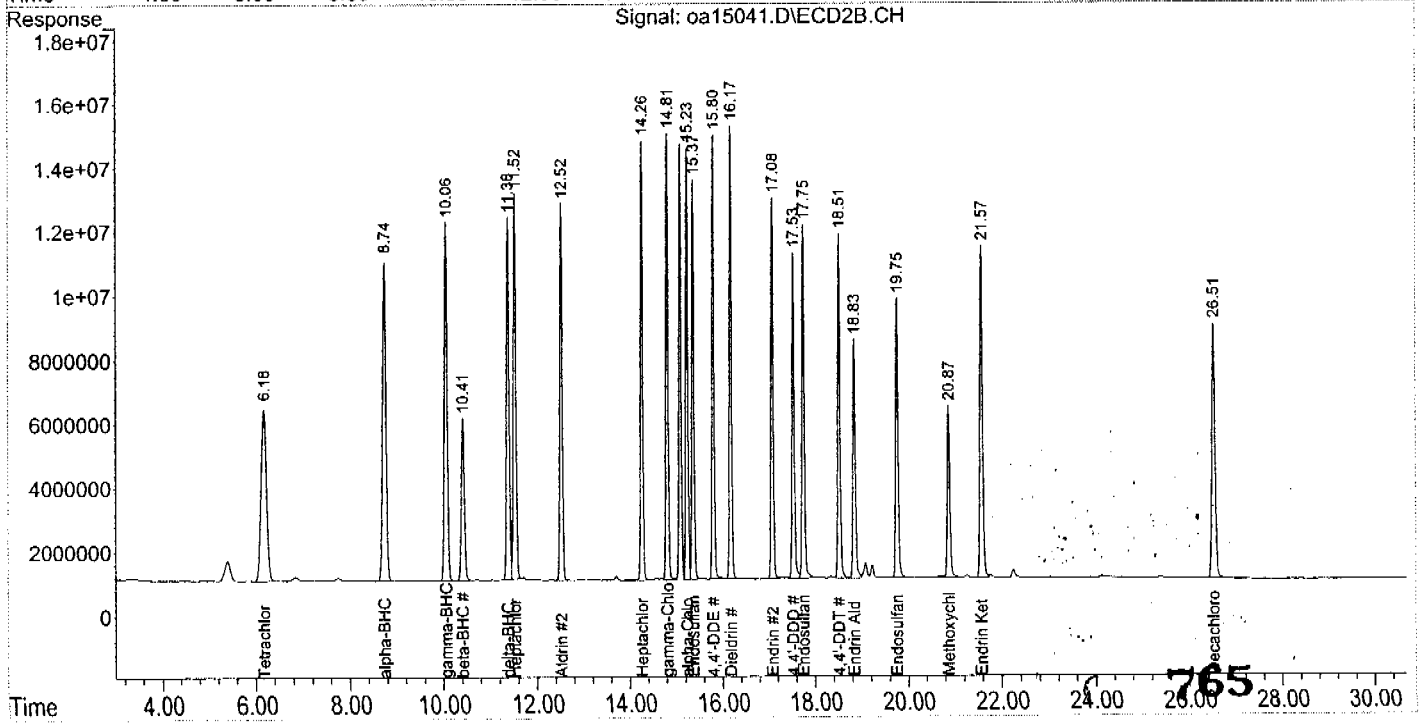
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15041.D\ECD1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\oa15041.D\ECD2B.CH
Acq On : 14 Aug 2004 5:07 pm Operator: owenm
Sample : op17703-ms Inst : GCOO
Misc : OP17703,GOA441,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:46 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



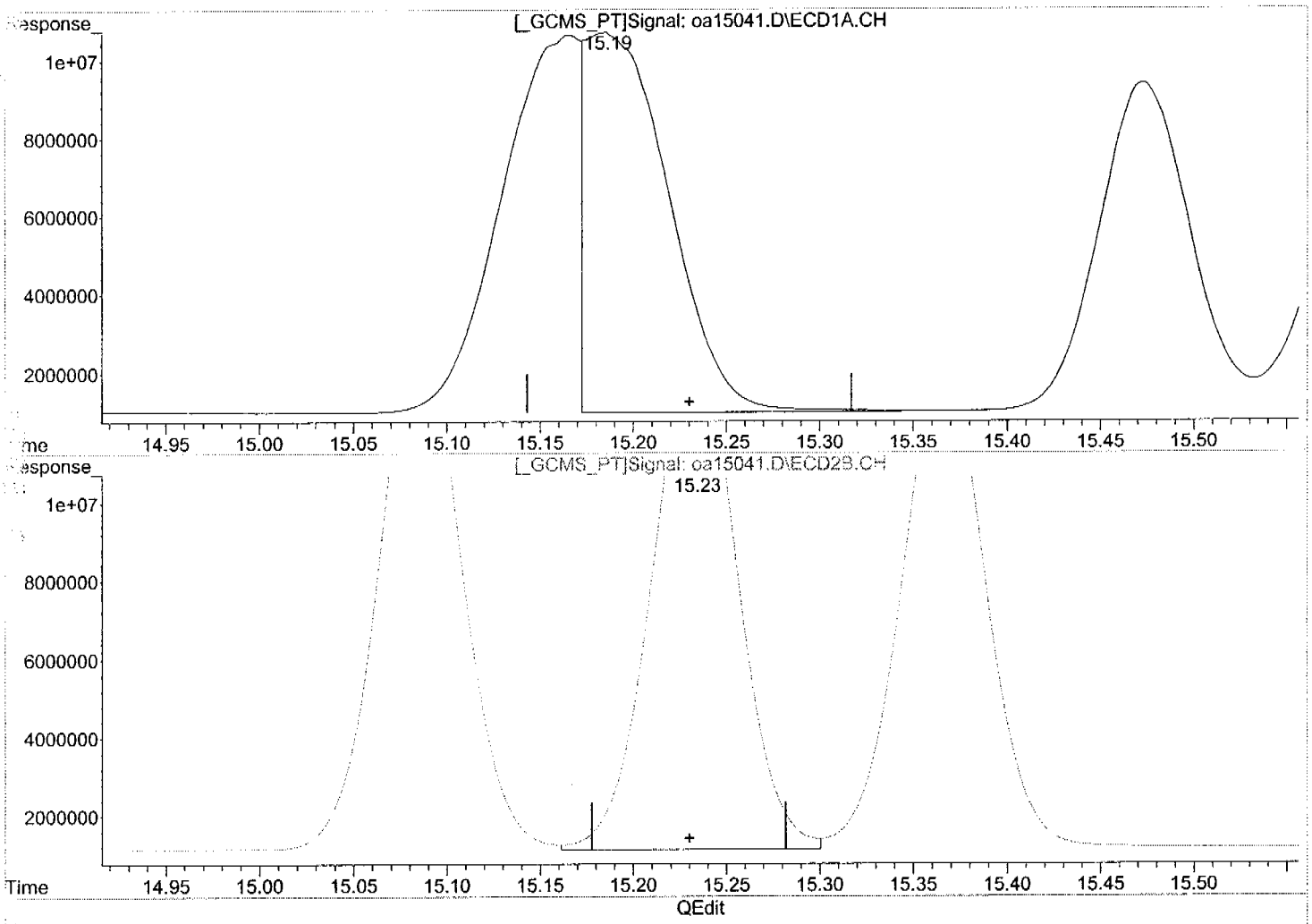


765

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\oa15041.D\ECD1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\oa15041.D\ECD2B.CH
Acq On : 14 Aug 2004 5:07 pm Operator: owenm
Sample : op17703-ms Inst : GCOO
Misc : OP17703,GOA441,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:46 2004 Quant Results File: PST433.RES

thod : C:\MSDCHEM\1\METHODS\PST433.M (Chemstation Integrator)
tle : PEST/PCB
st Update : Fri Aug 06 08:51:27 2004
sponse via : Multiple Level Calibration



(10) alpha-Chlordane (B)

15.19min 29.017PPB m

response 302065899

(10) alpha-Chlordane #2 (B)

15.23min 27.478PPB

response 413517874

766

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15042.D\ECD1A.CH Vial: 34
Signal #2 : C:\MSDCHEM\1\DATA\oa15042.D\ECD2B.CH
Acq On : 14 Aug 2004 5:40 pm Operator: owenm
Sample : op17703-msd Inst : GCOO
Misc : OP17703,GOA441,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 14 18:11:40 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	6.18	352.0E6	457.0E6	37.991	36.388	
Spiked Amount		40.000 Range	30 - 150	Recovery	=	94.98%	90.97%	
) SA Decachlorobiphen		25.34	26.52	257.4E6	376.9E6	39.509	37.983	
Spiked Amount		40.000 Range	30 - 150	Recovery	=	98.77%	94.96%	
Target Compounds								
) A	alpha-BHC	8.79f	8.74	391.6E6	523.2E6	28.701	28.285	
) MA	gamma-BHC	9.98f	10.06	371.2E6	492.1E6	28.833	28.047	
) MA	Heptachlor	11.61f	11.52	363.8E6	478.6E6	28.636	28.165	
) B	beta-BHC	10.34f	10.41	170.9E6	225.5E6	27.433	26.737	
) B	delta-BHC	10.93f	11.38	317.5E6	418.5E6	27.658	26.442	
MB	Aldrin	12.57f	12.52	314.1E6	432.5E6	27.036	26.601	
B	Heptachlor Epoxi	14.44f	14.26	323.4E6	446.3E6	29.971	29.368	
B	gamma-Chlordane	14.81f	14.81	314.8E6	443.4E6	30.109	29.162	
B	alpha-Chlordane	15.18f	15.23	594.6E6	426.4E6	57.123	28.338	#
A	Endosulfan I	15.59f	15.37	298.5E6	401.5E6	29.493	28.412	
B	4,4'-DDE	15.47	15.80	294.1E6	415.1E6	30.126	28.828	
MA	Dieldrin	16.32f	16.17	325.9E6	452.5E6	30.956	29.856	
MA	Endrin	17.02f	17.08	294.5E6	396.7E6	31.281	30.039	
A	4,4'-DDD	17.28	17.53	255.8E6	341.3E6	31.520	29.182	
B	Endosulfan II	17.73f	17.75	285.2E6	389.5E6	30.660	29.248	
MA	4,4'-DDT	18.15	18.51	268.4E6	361.4E6	31.981	29.546	
B	Endrin Aldehyde	19.10f	18.83	194.0E6	267.1E6	26.946	25.465	
B	Endosulfan Sulfa	20.57f	19.75	229.2E6	315.8E6	30.257	28.818	
A	Methoxychlor	19.76f	20.87	149.7E6	204.1E6	30.893	29.813	
B	Endrin Ketone	21.54f	21.57	291.9E6	401.1E6	31.398	30.071	

OM 8/16/04

767

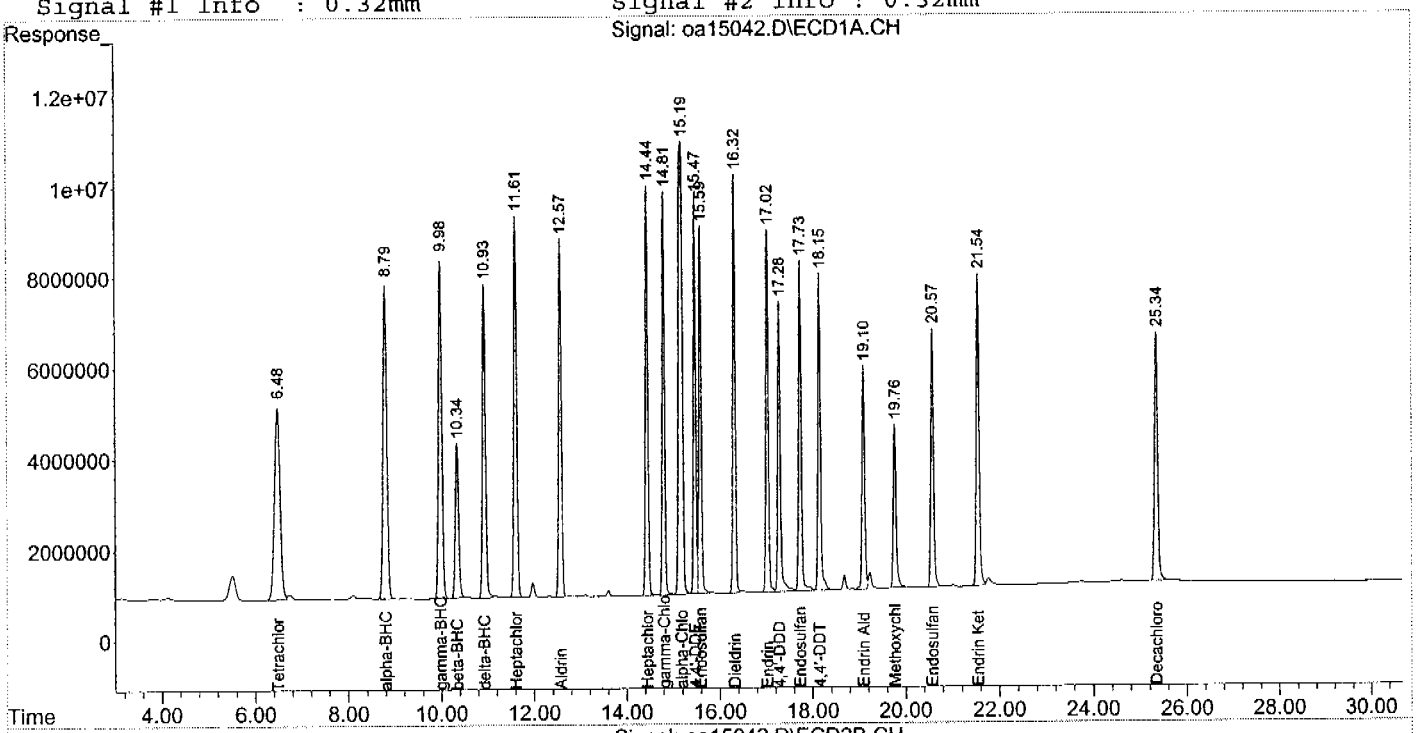
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

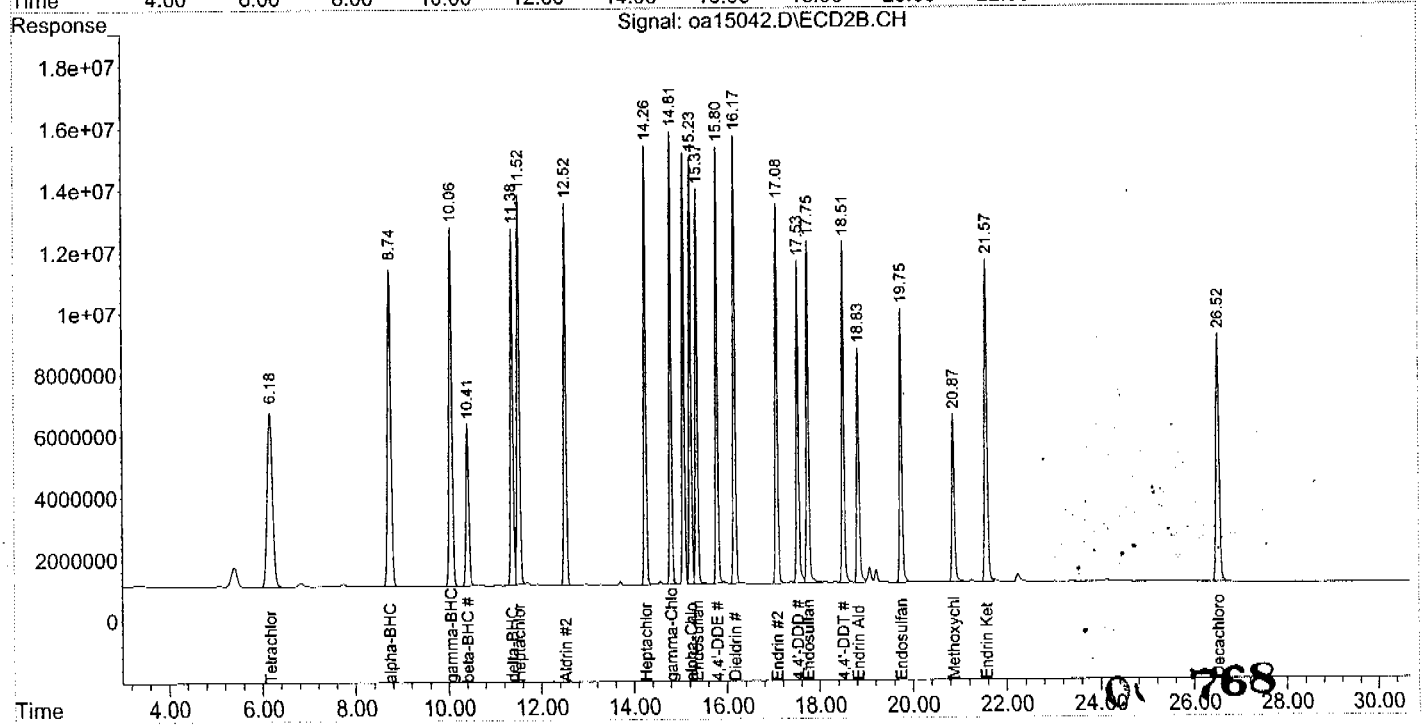
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15042.D\ECD1A.CH Vial: 34
Signal #2 : C:\MSDCHEM\1\DATA\oa15042.D\ECD2B.CH
Acq On : 14 Aug 2004 5:40 pm Operator: owenm
Sample : op17703-msd Inst : GCOO
Misc : OP17703,GOA441,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:49 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 (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15012.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\oa15012.D\ECD2B.CH
Acq On : 13 Aug 2004 5:55 pm Operator: owenm
Sample : op17703-bs1 Inst : GCOO
Misc : OP17703,GOA440,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 13 18:26:12 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 : 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	351.3E6	454.1E6	37.924	36.156	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					94.81%	90.39%	
12)	SA Decachlorobiphen	25.35	26.53	264.0E6	388.4E6	40.519	39.138	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					101.30%	97.84%	
	Target Compounds							
2)	A alpha-BHC	8.79f	8.73	405.8E6	544.7E6	29.742	29.447	
3)	MA gamma-BHC	9.98f	10.06	384.4E6	514.4E6	29.857	29.317	
4)	MA Heptachlor	11.61f	11.53	369.6E6	491.2E6	29.091	28.905	
5)	B beta-BHC	10.34f	10.41	176.3E6	232.5E6	28.289	27.563	
6)	B delta-BHC	10.93f	11.38	319.5E6	423.6E6	27.835	26.761	
7)	MB Aldrin	12.57f	12.53	324.0E6	449.3E6	27.888	27.635	
8)	B Heptachlor Epoxi	14.45f	14.26	329.7E6	459.9E6	30.558	30.269	
9)	B gamma-Chlordane	14.81f	14.81	321.3E6	461.8E6	30.735	30.372	
10)	B alpha-Chlordane	15.18f	15.24	609.5E6	443.1E6	58.554	29.444	#
11)	A Endosulfan I	15.59	15.37	309.4E6	418.8E6	30.575	29.640	
12)	B 4,4'-DDE	15.48	15.80	303.0E6	437.4E6	31.031	30.376	
13)	MA Dieldrin	16.32f	16.18	336.7E6	473.3E6	31.984	31.232	
14)	MA Endrin	17.02	17.08	297.0E6	402.0E6	31.541	30.439	
15)	A 4,4'-DDD	17.28	17.53	264.0E6	350.3E6	32.528	29.950	
16)	B Endosulfan II	17.73f	17.75	297.6E6	404.8E6	31.997	30.397	
17)	MA 4,4'-DDT	18.15	18.52	273.5E6	373.5E6	32.593	30.534	
18)	B Endrin Aldehyde	19.10f	18.84	206.9E6	285.8E6	28.731	27.246	
19)	B Endosulfan Sulfa	20.57f	19.76	230.5E6	322.5E6	30.437	29.424	
20)	A Methoxychlor	19.77	20.88	154.3E6	212.7E6	31.858	31.061	
21)	B Endrin Ketone	21.55f	21.58	303.6E6	419.4E6	32.664	31.439	

OM 8/16/04

769

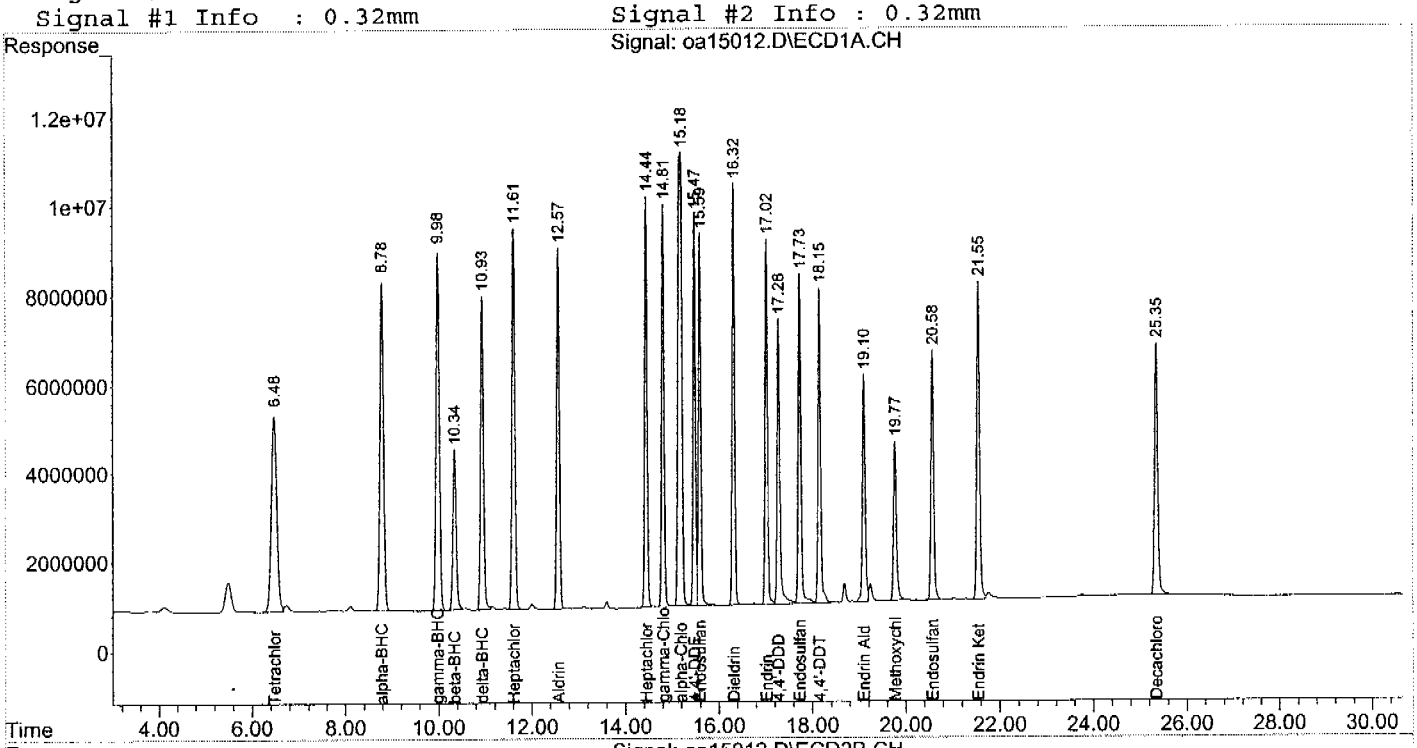
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

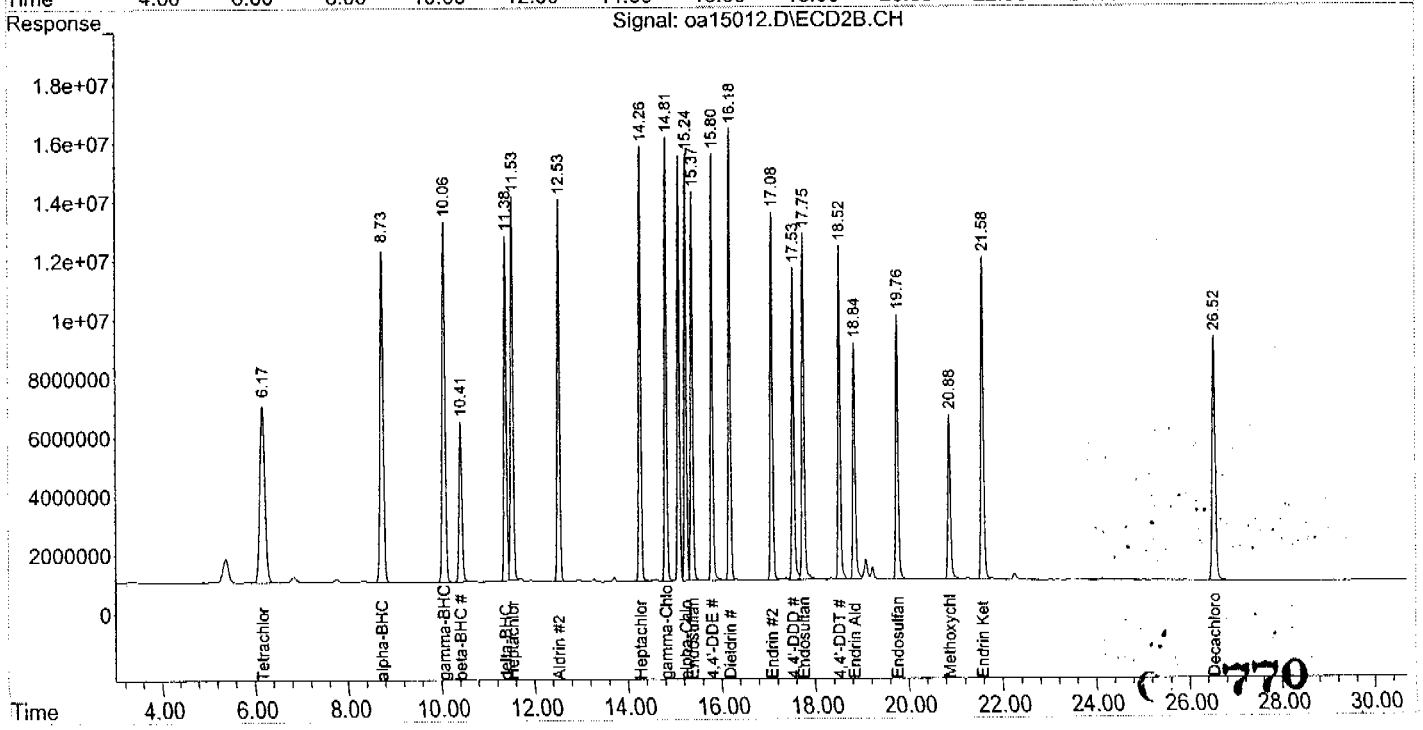
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\oa15012.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\oa15012.D\ECD2B.CH
Acq On : 13 Aug 2004 5:55 pm Operator: owenm
Sample : op17703-bs1 Inst : GCOO
Misc : OP17703,GOA440,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 16 10:23 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





770

ACCUTEST.

Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: 6UA433

Date: 8/3/01

Analyst Signature: Owen McKennan

Standard Data

Lot #	Description	Conc.
6553-28	Toxaphene	500 ppb
-12	Chlordane	500 ↓
6551-478	Endrin	40-200 ppb
-48B	Endrin	20-40 ppb
6153-27	PCBK	20 ppb
-37	PEM	10-250 ppb

Standard Data

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

Columns: RTX CLP I / RTX CLP II

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 cor with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 08/04/01

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	0A14764	DDT 1			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	N737823				18	1		/	OK	RR1.5
	782	-2				19	1		/	OK	RR1.5
	783	-1				20	1		/	OK	RR1.5

771

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: 60A440

Date: 8/13/04

Analyst Signature: Owen McKenna

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
6553-31	Pest mix	100ppb
-41	Pest mix	25ppb
-44	PIQIK	20ppb
-47	PEM	10-150ppb
A16E37	Hexane (Baker)	

Columns: RTXCLP2/RTXCLP II

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 co with the criteria of Accutest SOP EQA044.

Supervisor Signature: **Date:** 08/16/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	OA15000	DDT1				35	1		/	OK	
	1	IB01				36	1		/	OK	
	2	N74648-1	17672-1	8081SL	S	37	2		/	OK	
	3	-2				38	2		/	OK	
	4	-3				39	2		/	OK	
	5	N73181-6	17544-1	8081	S	40	4		/	OK	
	6	-8				41	5		/	OK	
	7	-9				42	2		/	OK	
	8	CC433-25			W	43	1		/	OK	
	9	DDT2			W	1	1		/	OK	
	10	IB02			W	2	1		/	OK	
	11	OP17703-MB1	17703-1	8081	W	3	1		/	OK	
	12	-BS1				4	1		/	OK	
	13	N74914-1				5	1		/	OK	
	14	-2				6	1		/	OK	
	15	-3				7	1		/	OK	
	16	-4				8	1		/	OK	
	17	-5				9	1		/	OK	
	18	-6				10	1		/	OK	
	19	-7				11	1		/	OK	

772

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: 60A440

Date: 8/13/04

Analyst Signature: Owen McKennaB

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
6553-31	Pest Mix	10ppb
-41	↓	25ppb
-44	PEB1K	20ppb
-47	PEm	10-250ppb
A1GE37	Hexane (Baker)	

Columns: RTX CLP I / RTX CLP II

Method PST433

Initial Cal. Method PST433

Injection Volumn: 1.0mL/60l

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:** 08/16/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	0A150 20	CC433-10			W	12	1		✓	OK	
	21	DDT3			W	13	1		✓	OK	
	22	IB03			W	14	1		✓	OK	
	23	OP17676-MB3	17676-3	8081	S	15	1				
	24	-BS3				16	1				
	25	N75035-1				17	1				
	26	N74649-1	17672-1	8081	S	18	1				
	27	-2				19	1				
	28	-4				20	1				
	29	-5				21	1				
	30	-6				22	1				
	31	-7				23	1				
	32	CC433-25			W	24	1		✓	OK	
	33	DDT4				25	1		✓	OK	
	34	IB04				26	1		✓	OK	
	35	OP17672-MS	17672-1	8081	S	27	10				
	36	-MSD				28	10				
	37	N74149-3				29	10				RR 1:500 dilution
	38	CC433-10				30	1		✓	OK	
	0A150 39	DDT5				31	1				

773

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: 60A41

Date: 8/14/04

Analyst Signature: Owen McKennett

Standard Data

Lot #	Description	Conc.

Standard Data

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

Columns: RTXCLP7 / 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 co with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 08/16/04

R	Data File		Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	OA15059 ~~OA15059~~		DDT1			W	31	1		✓	OK	
	OA15060	~~540~~	IB01			✓	32	1		✓	OK	
	41	~~541~~	OP17703-MS	17703-1	8081	W	33	1		✓	OK	
	42	~~542~~	-MSD				34	1		✓	OK	
	43	~~543~~	N74914-9				35	1		✓	OK	
	44	~~544~~	-10				36	1		✓	OK	
	45	~~545~~	-11				37	1		✓	OK	
	46	~~546~~	-12				38	1		✓	OK	
	47	~~547~~	-13				39	1		✓	OK	
	48	~~548~~	-14				40	1		✓	OK	
	49 OA 8/14	~~549~~	-15				41	1		✓	OK	
	50	~~550~~	ECC433-25			W	42	1		SU low ✓	OK	
	51	~~551~~	DDT2			W	43	1			NOT USING	NO Beginning check
	52	~~552~~	IB02			✓	44	1				
	53	~~553~~	OP17695-MS1	17695-1	8081	W	45	1				
	54	~~554~~	~~-MSD~~ B01 OA 8/14				46	1				
	55	~~555~~	-MS				47	1				
	56	~~556~~	-MSD				48	1				
	57	~~557~~	N74891-1				49	1				
	58	~~558~~	N74879-1				50	1				

774

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 #	RACK#
Gc-17703-1	G100

Supervisor Review
Signature
Date 8/13/04

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: 8/13/04 ANALYST: ATH/BH/LA METHOD: Ref 1 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	H2SO4	Cu	Florisil		Comments
	MB 1		Pest	DI H2O	1000			10	clear						
	BS 1		↓	↓	1000			10	↓						
	N74914-7 MS ~~MS~~	17	Pest	lt. Yellow	880			↓	↓						
	↳ MSD ~~MSD~~	17	↓	↓	880			↓	↓						
	~~BS~~														
	~~MS~~														
	~~MSD~~														
1	N74914-1	1	Pest	clear	980			10	↑						
2	-2	2	↓	↓	980			10	↑						
3	-3	3	↓	lt yellow	980			10	↑						
4	-4	1	↓	cloudy	960			10	clear						
5	-5	1	↓	clear	960			10	↓						
6	-6	1	↓	↓	1000			10	↓						
7	-7	2	↓	↓	960			10	↓						
8	-8	78	Pest	lt. Yellow	880			↑	↑						
9	-10	4	↓	↓	920			↑	↑						
10	-11	4	↓	clear	900			↑	↑						
11	-12	3	↓	lt. Yellow	900			↑	↑						
12	-13	3	↓	clear	890			↑	↑						
13	-14	3	↓	↓	900			↑	↑						
14	-15	4	↓	↓	900			↓	↓						
15															
16															
17															
18															
19															
20															

SURROGATE SPIKE DATA

	LOT #	CONC. (PPM)	AMT ADDED (ML)
BASE			
ACID			
PPCB	0P11-009	400ppb	1
HERB			

WITNESS SIGN: ATH

MATRIX SPIKE DATA

	LOT #	CONC.	AMT ADDED (ML)
BASE			
ACID			
PEST	0P10-091	250ppb	1
PCB			
HERB			

WITNESS SIGN: ATH

SOLVENT DATA

	LOT #	BRAND	AMT X/ML
METH CHLOR	A21E70	J.T. Baker	3/60
HEXANE	A16E57	↓	50
ACETONE			
ETH ETHER			

REAGENT/FILTER MEDIA

	LOT #	BRAND
SODIUM SULF	552424	J.T. Baker
FILTER PAPER	E1558911L	Fisher
1:1 H2SO4		
10N NAOH		
COPPER	0P11-018	Aldrich
FLORISIL		

COMMENTS:

GC
SW846 8082
PCB

ACCUTEST

GC Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction P8082PCBAO

	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: 8/24/2004

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

Semivolatile Surrogate Recovery Summary

Job Number: N74914
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]
N74914-1	EF53499.D	86.0	93.0	107.0	110.0
N74914-2	EF53500.D	90.0	97.0	104.0	107.0
N74914-3	EF53501.D	87.0	93.0	81.0	84.0
N74914-4	EF53502.D	90.0	100.0	108.0	110.0
N74914-5	EF53518.D	78.0	87.0	104.0	108.0
N74914-6	EF53506.D	89.0	96.0	104.0	107.0
N74914-7	EF53519.D	88.0	103.0	110.0	115.0
N74914-9	EF53498.D	82.0	90.0	100.0	103.0
N74914-10	EF53508.D	82.0	88.0	78.0	80.0
N74914-11	EF53509.D	86.0	92.0	70.0	71.0
N74914-12	EF53510.D	88.0	94.0	86.0	88.0
N74914-13	EF53511.D	83.0	89.0	99.0	101.0
N74914-14	EF53512.D	85.0	93.0	105.0	108.0
N74914-15	EF53513.D	86.0	93.0	102.0	105.0
OP17704-BS1	EF53495.D	88.0	94.0	109.0	114.0
OP17704-MB1	EF53494.D	87.0	96.0	110.0	116.0
OP17704-MS	EF53496.D	89.0	95.0	107.0	112.0
OP17704-MSD	EF53497.D	79.0	85.0	104.0	105.0

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

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17704-MS	EF53496.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578
OP17704-MSD	EF53497.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578
N74914-9	EF53498.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578

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

N74914-1, N74914-2, N74914-3, N74914-4, N74914-5, N74914-6, N74914-7, N74914-9, N74914-10, N74914-11, N74914-12, N74914-13, N74914-14, N74914-15

CAS No.	Compound	N74914-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		2.82	2.9	103	2.6	95	11	53-146/20
11104-28-2	Aroclor 1221	ND			ND		ND		nc	70-130/10
11141-16-5	Aroclor 1232	ND			ND		ND		nc	70-130/10
53469-21-9	Aroclor 1242	ND			ND		ND		nc	70-130/10
12672-29-6	Aroclor 1248	ND			ND		ND		nc	70-130/10
11097-69-1	Aroclor 1254	ND			ND		ND		nc	70-130/10
11096-82-5	Aroclor 1260	ND		2.82	3.1	110	2.9	106	7	48-147/24
11100-14-4	Aroclor 1268	ND			ND		ND		nc	-/10
37324-23-5	Aroclor 1262	ND			ND		ND		nc	-/10

CAS No.	Surrogate Recoveries	MS	MSD	N74914-9	Limits
877-09-8	Tetrachloro-m-xylene	89%	79%	82%	27-140%
877-09-8	Tetrachloro-m-xylene	95%	85%	90%	27-140%
2051-24-3	Decachlorobiphenyl	107%	104%	100%	19-151%
2051-24-3	Decachlorobiphenyl	112%	105%	103%	19-151%

Blank Spike Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17704-BS1	EF53495.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578

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

N74914-1, N74914-2, N74914-3, N74914-4, N74914-5, N74914-6, N74914-7, N74914-9, N74914-10, N74914-11, N74914-12, N74914-13, N74914-14, N74914-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	2	2.4	120	78-134
11104-28-2	Aroclor 1221		ND		70-130
11141-16-5	Aroclor 1232		ND		70-130
53469-21-9	Aroclor 1242		ND		70-130
12672-29-6	Aroclor 1248		ND		70-130
11097-69-1	Aroclor 1254		ND		70-130
11096-82-5	Aroclor 1260	2	2.4	120	77-133
11100-14-4	Aroclor 1268		ND		50-150 [a]
37324-23-5	Aroclor 1262		ND		50-150 [a]

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	88%	27-140%
877-09-8	Tetrachloro-m-xylene	94%	27-140%
2051-24-3	Decachlorobiphenyl	109%	19-151%
2051-24-3	Decachlorobiphenyl	114%	19-151%

(a) Advisory control limits.

Method Blank Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17704-MB1	EF53494.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578

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

N74914-1, N74914-2, N74914-3, N74914-4, N74914-5, N74914-6, N74914-7, N74914-9, N74914-10, N74914-11, N74914-12, N74914-13, N74914-14, N74914-15

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	87%	27-140%
877-09-8	Tetrachloro-m-xylene	96%	27-140%
2051-24-3	Decachlorobiphenyl	110%	19-151%
2051-24-3	Decachlorobiphenyl	116%	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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2578-CC2562	**Injection Date:**	08/17/04
Lab File ID:	EF53492.D	**Injection Time:**	14:19
Instrument ID:	GCEF	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.91	6.07	28.60	30.72

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP17704-MB1	EF53494.D	08/17/04	16:21	5.90	6.06	28.60	30.73
OP17704-BS1	EF53495.D	08/17/04	16:58	5.89	6.05	28.59	30.71
OP17704-MS	EF53496.D	08/17/04	17:34	5.90	6.06	28.60	30.72
OP17704-MSD	EF53497.D	08/17/04	18:11	5.88	6.04	28.57	30.68
N74914-9	EF53498.D	08/17/04	18:48	5.90	6.06	28.59	30.71
N74914-1	EF53499.D	08/17/04	19:25	5.90	6.06	28.59	30.71
N74914-2	EF53500.D	08/17/04	20:02	5.90	6.06	28.59	30.71
N74914-3	EF53501.D	08/17/04	20:39	5.89	6.05	28.59	30.71
N74914-4	EF53502.D	08/17/04	21:16	5.90	6.05	28.59	30.71
ZZZZZZ	EF53503.D	08/17/04	21:53	5.90	6.06	28.59	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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2578-CC2562	**Injection Date:**	08/17/04
Lab File ID:	EF53504.D	**Injection Time:**	23:07
Instrument ID:	GCEF	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.89	6.05	28.59	30.71

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
N74914-6	EF53506.D	08/18/04	01:35	5.89	6.05	28.59	30.71
N74914-10	EF53508.D	08/18/04	02:49	5.89	6.05	28.58	30.70
N74914-11	EF53509.D	08/18/04	03:25	5.90	6.06	28.58	30.70
N74914-12	EF53510.D	08/18/04	04:02	5.90	6.06	28.59	30.71
N74914-13	EF53511.D	08/18/04	04:39	5.90	6.06	28.59	30.71
N74914-14	EF53512.D	08/18/04	05:16	5.89	6.05	28.59	30.70
N74914-15	EF53513.D	08/18/04	05:53	5.91	6.07	28.60	30.72
ZZZZZZ	EF53515.D	08/18/04	07:07	5.90	6.06	28.58	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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2578-CC2562	**Injection Date:**	08/18/04
Lab File ID:	EF53516.D	**Injection Time:**	08:34
Instrument ID:	GCEF	**Method:**	SW846 8082

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.92	6.08	28.59	30.71

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
N74914-5	EF53518.D	08/18/04	09:58	5.90	6.06	28.60	30.72
N74914-7	EF53519.D	08/18/04	10:46	5.93	6.09	28.62	30.74
ZZZZZZ	EF53520.D	08/18/04	11:23	5.90	6.06	28.58	30.70
ZZZZZZ	EF53521.D	08/18/04	12:00	5.91	6.07	28.61	30.73

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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2578-CC2562	**Injection Date:**	08/17/04
Lab File ID:	EF53492.D	**Injection Time:**	14:19
Instrument ID:	GCEF	**Method:**	SW846 8082

Sample ID:	OP17704-MS	**Injection Date:**	08/17/04
Lab File ID:	EF53496.D	**Injection Time:**	17:34
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1 [a]			2.9		ug/l	3.4
Aroclor 1016	2			3.0		ug/l	
AR1016-A	1	8.28	8.30	3.0		ug/l	
AR1016-A	2	7.73	7.73	2.9		ug/l	
AR1016-B	1	9.04	9.05	2.5		ug/l	
AR1016-B	2	11.09	11.09	2.8		ug/l	
AR1016-C	1	10.10	10.10	2.9		ug/l	
AR1016-C	2	11.66	11.65	3.2		ug/l	
AR1016-D	1	10.66	10.66	3.0		ug/l	
AR1016-D	2	13.69	13.70	3.2		ug/l	
AR1016-E	1	12.30	12.32	2.9		ug/l	
AR1016-E	2	14.24	14.25	2.9		ug/l	
Aroclor 1260	1 [a]			3.1		ug/l	6.2
Aroclor 1260	2			3.3		ug/l	
AR1260-A	1	20.57	20.58	3.0		ug/l	
AR1260-A	2	22.48	22.48	3.2		ug/l	
AR1260-B	1	21.13	21.15	3.1		ug/l	
AR1260-B	2	22.87	22.88	3.3		ug/l	
AR1260-C	1	22.33	22.34	3.1		ug/l	
AR1260-C	2	24.09	24.09	3.5		ug/l	
AR1260-D	1	23.70	23.71	3.5		ug/l	
AR1260-D	2	25.03	25.03	3.2		ug/l	
AR1260-E	1	24.77	24.78	2.9		ug/l	
AR1260-E	2	26.25	26.25	3.1		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2578-CC2562	**Injection Date:**	08/17/04
Lab File ID:	EF53492.D	**Injection Time:**	14:19
Instrument ID:	GCEF	**Method:**	SW846 8082

Sample ID:	OP17704-MSD	**Injection Date:**	08/17/04
Lab File ID:	EF53497.D	**Injection Time:**	18:11
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1 [a]			2.6		ug/l	3.8
Aroclor 1016	2			2.7		ug/l	
AR1016-A	1	8.27	8.30	2.7		ug/l	
AR1016-A	2	7.71	7.73	2.5		ug/l	
AR1016-B	1	9.02	9.05	2.2		ug/l	
AR1016-B	2	11.08	11.09	2.5		ug/l	
AR1016-C	1	10.09	10.10	2.7		ug/l	
AR1016-C	2	11.64	11.65	2.8		ug/l	
AR1016-D	1	10.64	10.66	2.5		ug/l	
AR1016-D	2	13.67	13.70	3.1		ug/l	
AR1016-E	1	12.29	12.32	2.6		ug/l	
AR1016-E	2	14.22	14.25	2.6		ug/l	
Aroclor 1260	1 [a]			2.9		ug/l	3.4
Aroclor 1260	2			3.0		ug/l	
AR1260-A	1	20.55	20.58	2.8		ug/l	
AR1260-A	2	22.46	22.48	3.0		ug/l	
AR1260-B	1	21.11	21.15	2.9		ug/l	
AR1260-B	2	22.85	22.88	3.1		ug/l	
AR1260-C	1	22.31	22.34	2.8		ug/l	
AR1260-C	2	24.06	24.09	3.2		ug/l	
AR1260-D	1	23.68	23.71	3.2		ug/l	
AR1260-D	2	25.01	25.03	3.0		ug/l	
AR1260-E	1	24.75	24.78	2.7		ug/l	
AR1260-E	2	26.23	26.25	2.9		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	GEF2578-CC2562	**Injection Date:**	08/17/04
Lab File ID:	EF53492.D	**Injection Time:**	14:19
Instrument ID:	GCEF	**Method:**	SW846 8082

Sample ID:	OP17704-BS1	**Injection Date:**	08/17/04
Lab File ID:	EF53495.D	**Injection Time:**	16:58
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1			2.0		ug/l	18.2
Aroclor 1016	2 [a]			2.4		ug/l	
AR1016-A	1	8.27	8.30	2.1		ug/l	
AR1016-A	2	7.72	7.73	2.3		ug/l	
AR1016-B	1	9.03	9.05	1.8		ug/l	
AR1016-B	2	11.08	11.09	2.3		ug/l	
AR1016-C	1	10.10	10.10	2.0		ug/l	
AR1016-C	2	11.65	11.65	2.3		ug/l	
AR1016-D	1	10.65	10.66	2.1		ug/l	
AR1016-D	2	13.68	13.70	2.6		ug/l	
AR1016-E	1	12.30	12.32	2.1		ug/l	
AR1016-E	2	14.24	14.25	2.6		ug/l	
Aroclor 1260	1			2.3		ug/l	4.3
Aroclor 1260	2 [a]			2.4		ug/l	
AR1260-A	1	20.56	20.58	2.2		ug/l	
AR1260-A	2	22.47	22.48	2.3		ug/l	
AR1260-B	1	21.12	21.15	2.3		ug/l	
AR1260-B	2	22.86	22.88	2.4		ug/l	
AR1260-C	1	22.32	22.34	2.3		ug/l	
AR1260-C	2	24.08	24.09	2.7		ug/l	
AR1260-D	1	23.70	23.71	2.5		ug/l	
AR1260-D	2	25.02	25.03	2.4		ug/l	
AR1260-E	1	24.76	24.78	2.2		ug/l	
AR1260-E	2	26.24	26.25	2.4		ug/l	

(a) QC results reported from this column.

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4553-UZZLERD		
Lab Sample ID:	N74914-1	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	EF53499.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.51	0.077	ug/l	
11104-28-2	Aroclor 1221	ND	0.51	0.087	ug/l	
11141-16-5	Aroclor 1232	ND	0.51	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.51	0.13	ug/l	
12672-29-6	Aroclor 1248	ND	0.51	0.073	ug/l	
11097-69-1	Aroclor 1254	ND	0.51	0.073	ug/l	
11096-82-5	Aroclor 1260	ND	0.51	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.51		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.51		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	93%		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 (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53499.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef53499.D\ECD2B.CH
Acq On : 17 Aug 2004 7:25 pm Operator: olgaa
Sample : N74914-1 Inst : GCEF
Misc : OP17704,GEF2578,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:07 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	5.90	6.06	1202414	1376946	34.206	37.394
Spiked Amount 40.000			Recovery	=	85.52%	93.49%
50) S Decachlorobiphen	28.59	30.71	1307690	1563085	42.865	43.875
Spiked Amount 40.000			Recovery	=	107.16%	109.69%

Target Compounds

OA
81887

790

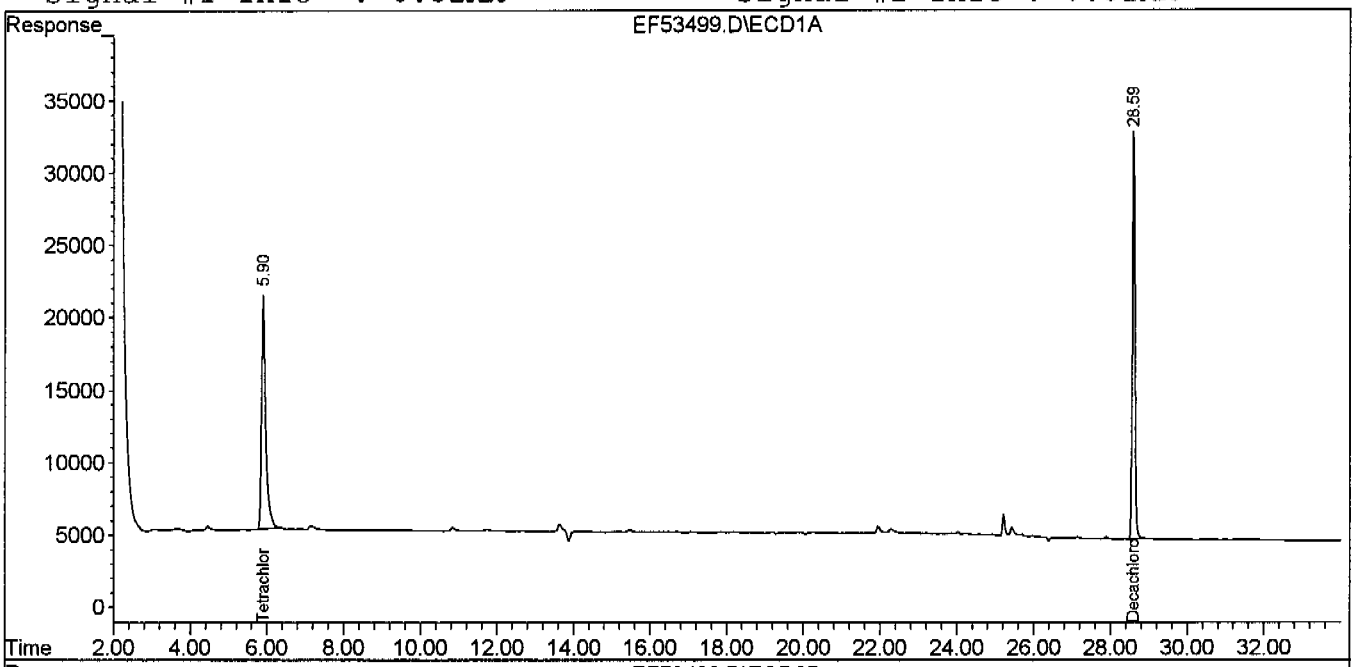
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

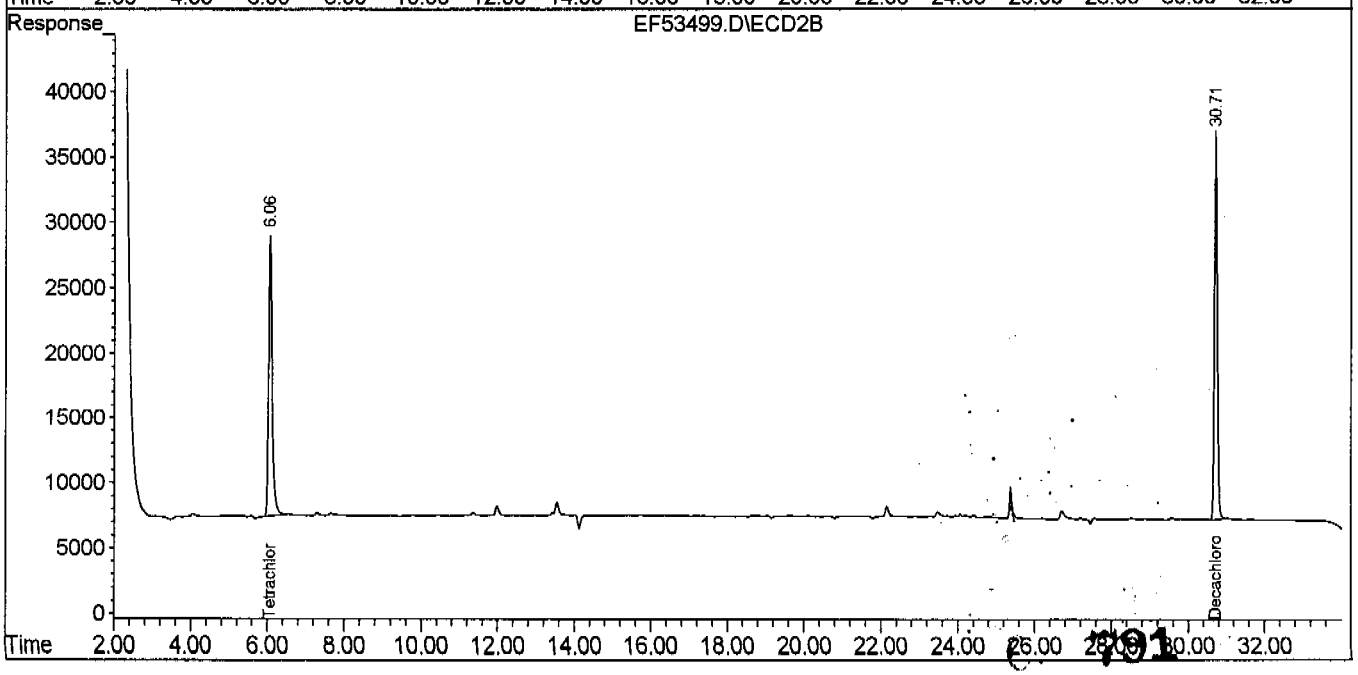
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53499.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef53499.D\ECD2B.CH
Acq On : 17 Aug 2004 7:25 pm Operator: olgaa
Sample : N74914-1 Inst : GCEF
Misc : OP17704,GEF2578,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:07 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-HESTERFARM		
Lab Sample ID:	N74914-2	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	EF53500.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.51	0.077	ug/l	
11104-28-2	Aroclor 1221	ND	0.51	0.087	ug/l	
11141-16-5	Aroclor 1232	ND	0.51	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.51	0.13	ug/l	
12672-29-6	Aroclor 1248	ND	0.51	0.073	ug/l	
11097-69-1	Aroclor 1254	ND	0.51	0.073	ug/l	
11096-82-5	Aroclor 1260	ND	0.51	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.51		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.51		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		27-140%
877-09-8	Tetrachloro-m-xylene	97%		27-140%
2051-24-3	Decachlorobiphenyl	104%		19-151%
2051-24-3	Decachlorobiphenyl	107%		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\ef53500.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\ef53500.D\ECD2B.CH
Acq On : 17 Aug 2004 8:02 pm Operator: olgaa
Sample : N74914-2 Inst : GCEF
Misc : OP17704,GEF2578,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:10 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	5.90	6.06	1265317	1425842	35.995	38.722
Spiked Amount 40.000			Recovery	=	89.99%	96.81%
50) S Decachlorobiphen	28.59	30.71	1270066	1523333	41.632	42.759
Spiked Amount 40.000			Recovery	=	104.08%	106.90%

Target Compounds

OA
81804

793

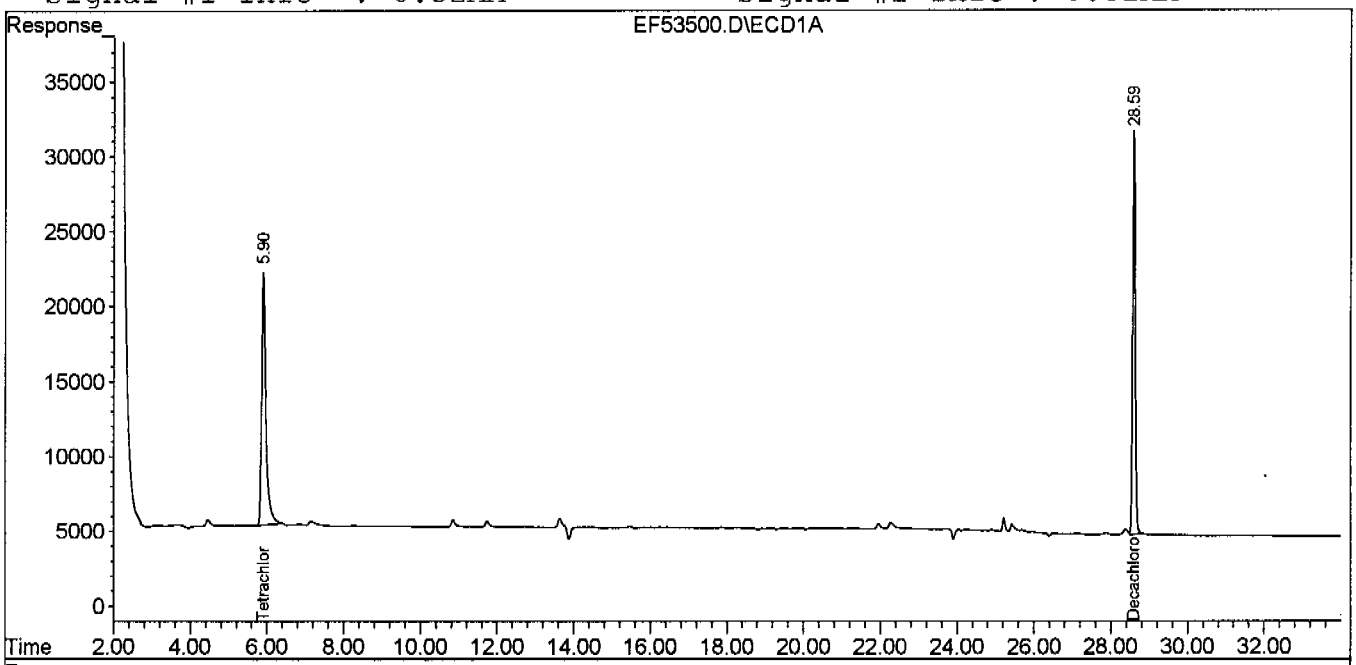
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

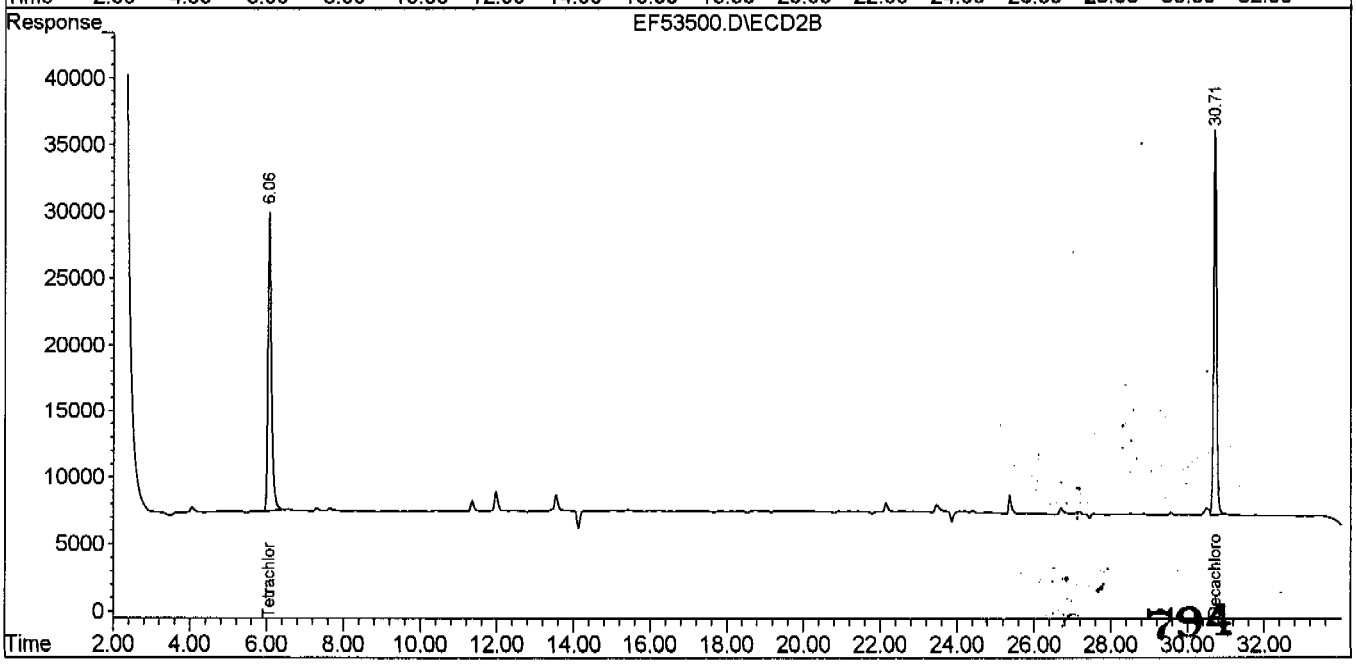
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53500.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\ef53500.D\ECD2B.CH
Acq On : 17 Aug 2004 8:02 pm Operator: olgaa
Sample : N74914-2 Inst : GCEF
Misc : OP17704,GEF2578,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:10 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:	RW0804-4535-UZZLERD		
Lab Sample ID:	N74914-3	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	EF53501.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.51	0.077	ug/l	
11104-28-2	Aroclor 1221	ND	0.51	0.087	ug/l	
11141-16-5	Aroclor 1232	ND	0.51	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.51	0.13	ug/l	
12672-29-6	Aroclor 1248	ND	0.51	0.073	ug/l	
11097-69-1	Aroclor 1254	ND	0.51	0.073	ug/l	
11096-82-5	Aroclor 1260	ND	0.51	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.51		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.51		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	93%		27-140%
2051-24-3	Decachlorobiphenyl	81%		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\ef53501.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\ef53501.D\ECD2B.CH
Acq On : 17 Aug 2004 8:39 pm Operator: olgaa
Sample : N74914-3 Inst : GCEF
Misc : OP17704,GEF2578,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:11 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	5.89	6.05	1219155	1369185	34.682	37.183
Spiked Amount 40.000			Recovery	=	86.71%	92.96%
50) S Decachlorobiphen	28.59	30.71	987408	1194363	32.367	33.525
Spiked Amount 40.000			Recovery	=	80.92%	83.81%

Target Compounds

OA
81807

796

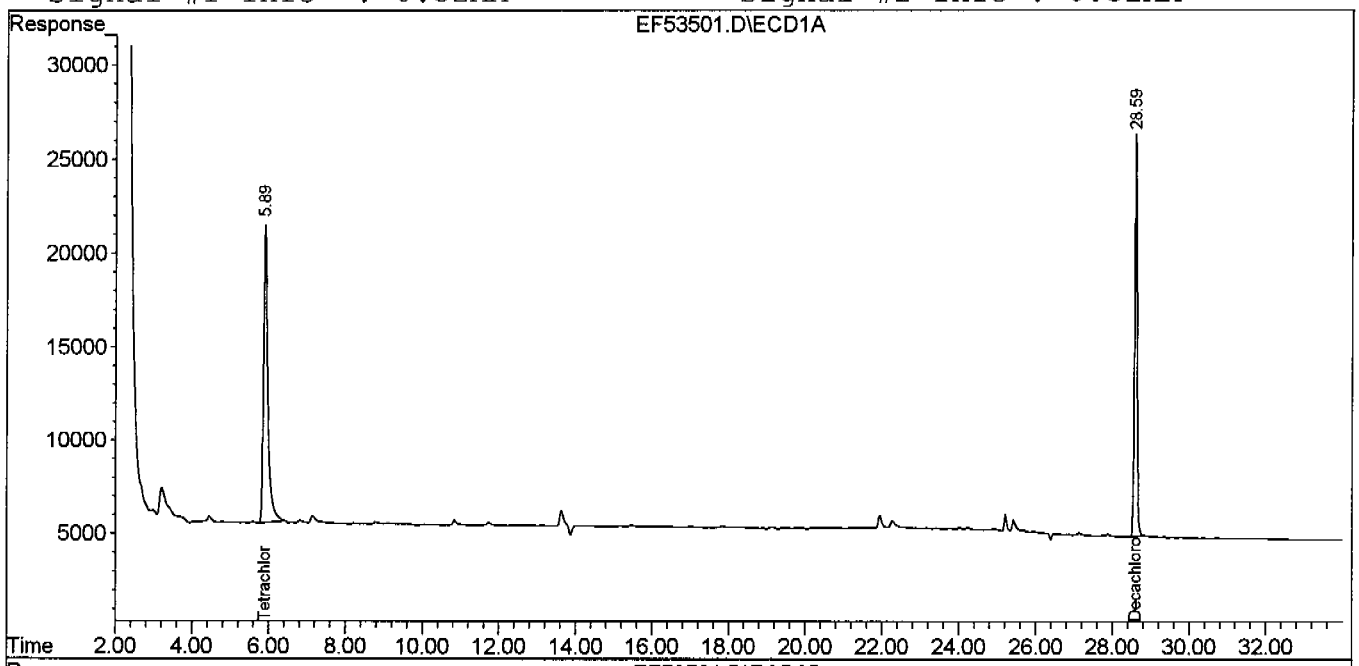
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

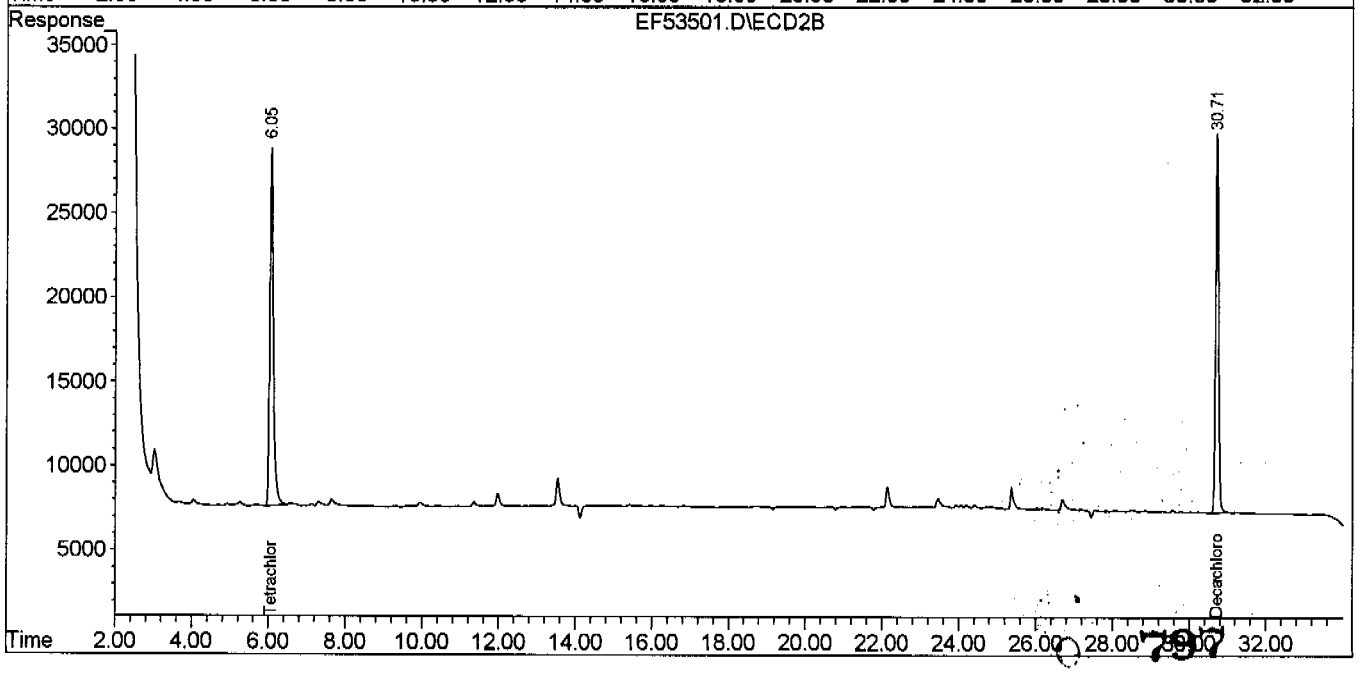
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53501.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\ef53501.D\ECD2B.CH
Acq On : 17 Aug 2004 8:39 pm Operator: olgaa
Sample : N74914-3 Inst : GCEF
Misc : OP17704,GEF2578,980,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:11 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:	RW0804-4578-UZZLERD		
Lab Sample ID:	N74914-4	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	EF53502.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.52	0.079	ug/l	
11104-28-2	Aroclor 1221	ND	0.52	0.088	ug/l	
11141-16-5	Aroclor 1232	ND	0.52	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.52	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.52	0.075	ug/l	
11097-69-1	Aroclor 1254	ND	0.52	0.075	ug/l	
11096-82-5	Aroclor 1260	ND	0.52	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.52		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.52		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		27-140%
877-09-8	Tetrachloro-m-xylene	100%		27-140%
2051-24-3	Decachlorobiphenyl	108%		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 (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53502.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\ef53502.D\ECD2B.CH
Acq On : 17 Aug 2004 9:16 pm Operator: olgaa
Sample : N74914-4 Inst : GCEF
Misc : OP17704,GEF2578,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:12 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	5.90	6.05	1271965	1465975	36.184	39.812
Spiked Amount 40.000			Recovery	=	90.46%	99.53%
50) S Decachlorobiphen	28.59	30.71	1319135	1572906	43.241	44.151
Spiked Amount 40.000			Recovery	=	108.10%	110.38%

Target Compounds

OA
21807

799

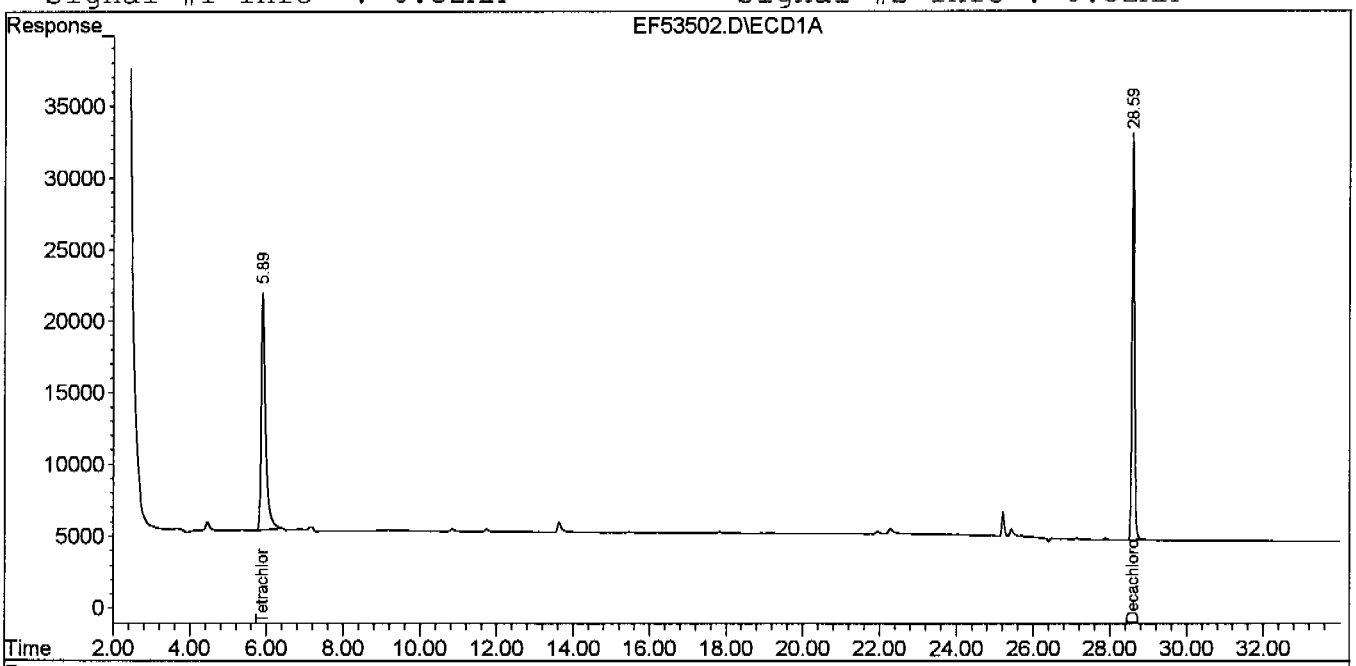
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

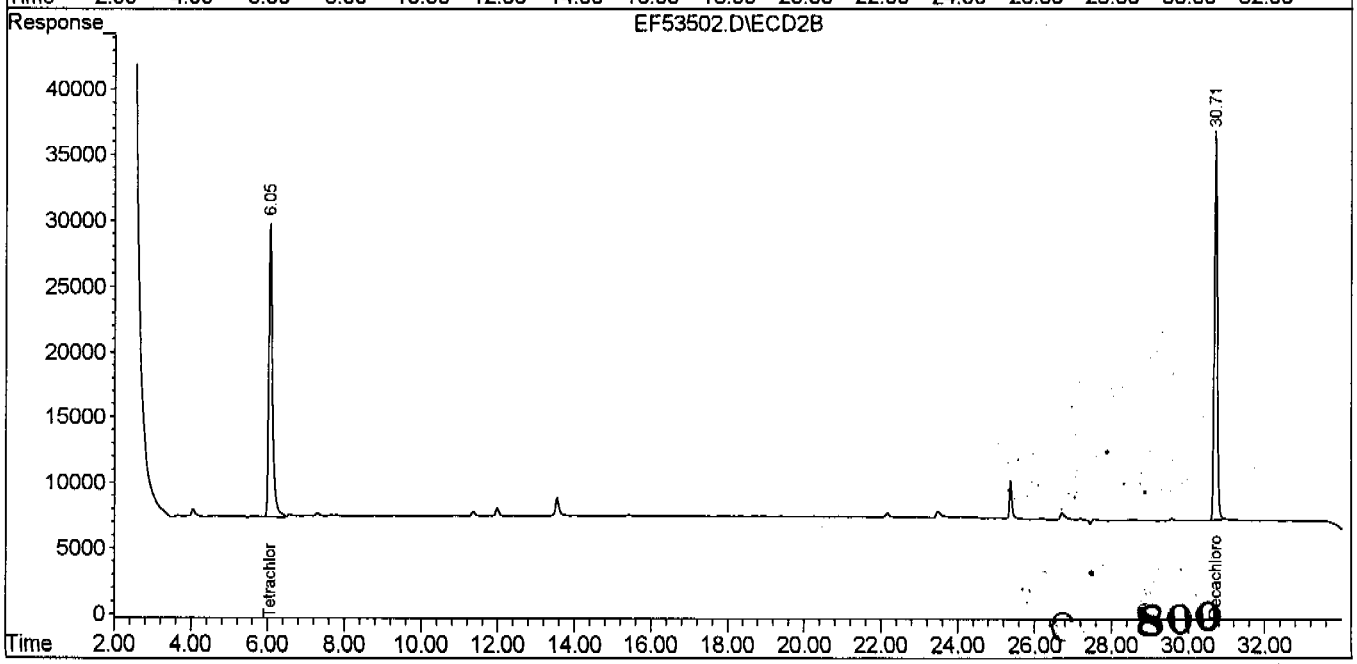
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53502.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\ef53502.D\ECD2B.CH
Acq On : 17 Aug 2004 9:16 pm Operator: olgaa
Sample : N74914-4 Inst : GCEF
Misc : OP17704,GEF2578,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:12 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:	RW0804-627B-ENONRD		
Lab Sample ID:	N74914-5	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	EF53518.D	1	08/18/04	OYA	08/13/04	OP17704	GEF2579
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.52	0.079	ug/l	
11104-28-2	Aroclor 1221	ND	0.52	0.088	ug/l	
11141-16-5	Aroclor 1232	ND	0.52	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.52	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.52	0.075	ug/l	
11097-69-1	Aroclor 1254	ND	0.52	0.075	ug/l	
11096-82-5	Aroclor 1260	ND	0.52	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.52		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.52		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		27-140%
877-09-8	Tetrachloro-m-xylene	87%		27-140%
2051-24-3	Decachlorobiphenyl	104%		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\ef53518.D\ECD1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\ef53518.D\ECD2B.CH
Acq On : 18 Aug 2004 9:58 am Operator: olgaa
Sample : N74914-5 Inst : GCEF
Misc : OP17704,GEF2579,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 10:34 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	5.90	6.06	1101001	1282507	31.321	34.829
Spiked Amount 40.000			Recovery	=	78.30%	87.07%
50) S Decachlorobiphen	28.60	30.72	1264920	1546040	41.463	43.397
Spiked Amount 40.000			Recovery	=	103.66%	108.49%

Target Compounds

QA
81807

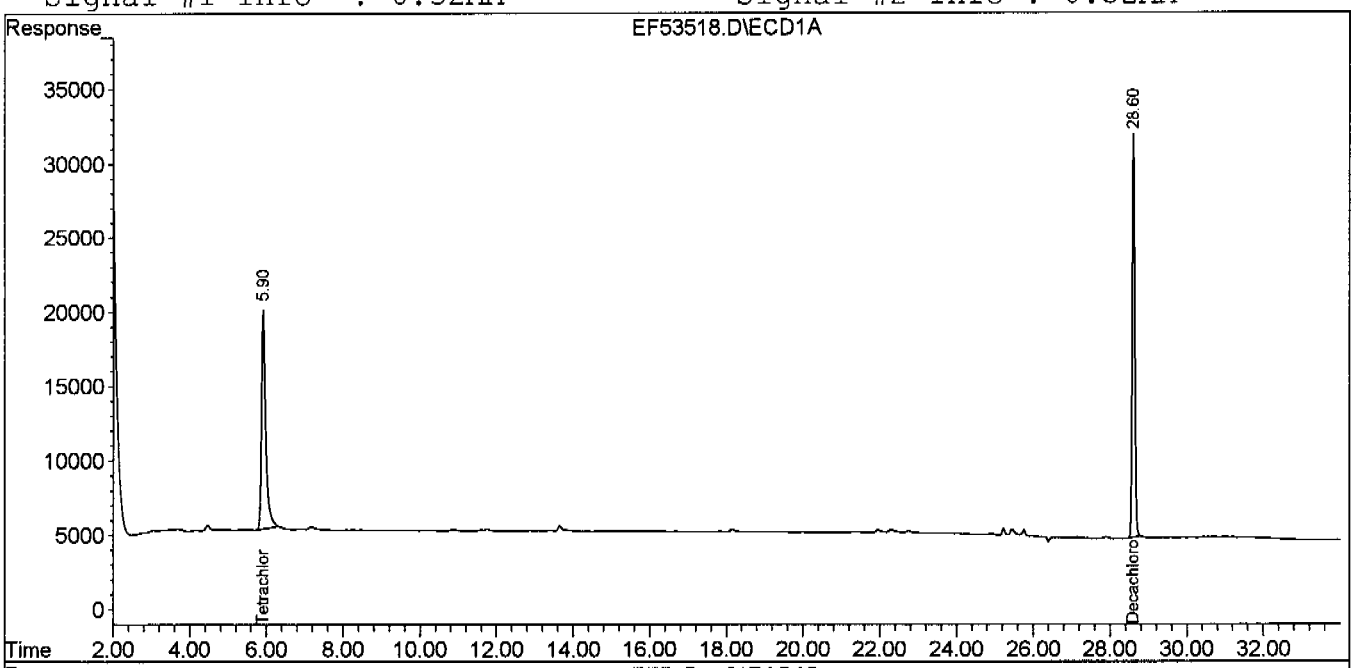
802

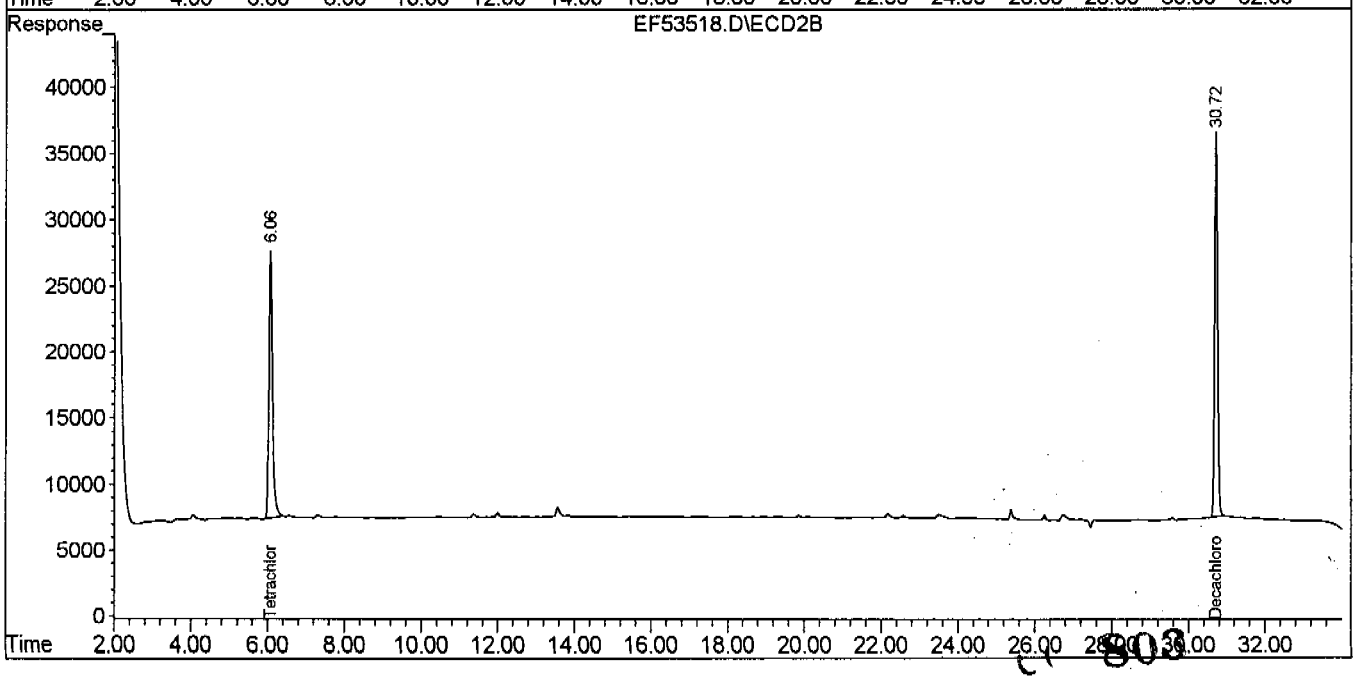
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53518.D\ECD1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\ef53518.D\ECD2B.CH
Acq On : 18 Aug 2004 9:58 am Operator: olgaa
Sample : N74914-5 Inst : GCEF
Misc : OP17704,GEF2579,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 10:34 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





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4573-UZZLERD		
Lab Sample ID:	N74914-6	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	EF53506.D	1	08/18/04	OYA	08/13/04	OP17704	GEF2578
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

PCB List

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	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		27-140%
877-09-8	Tetrachloro-m-xylene	96%		27-140%
2051-24-3	Decachlorobiphenyl	104%		19-151%
2051-24-3	Decachlorobiphenyl	107%		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\ef53506.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\ef53506.D\ECD2B.CH
Acq On : 18 Aug 2004 1:35 am Operator: olgaa
Sample : N74914-6 Inst : GCEF
Misc : OP17704,GEF2578,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:13 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	5.89	6.05	1253286	1412417	35.653	38.357
Spiked Amount 40.000			Recovery	=	89.13%	95.89%
50) S Decachlorobiphen	28.59	30.71	1268523	1523778	41.582	42.772
Spiked Amount 40.000			Recovery	=	103.96%	106.93%

Target Compounds

QA
81809

805

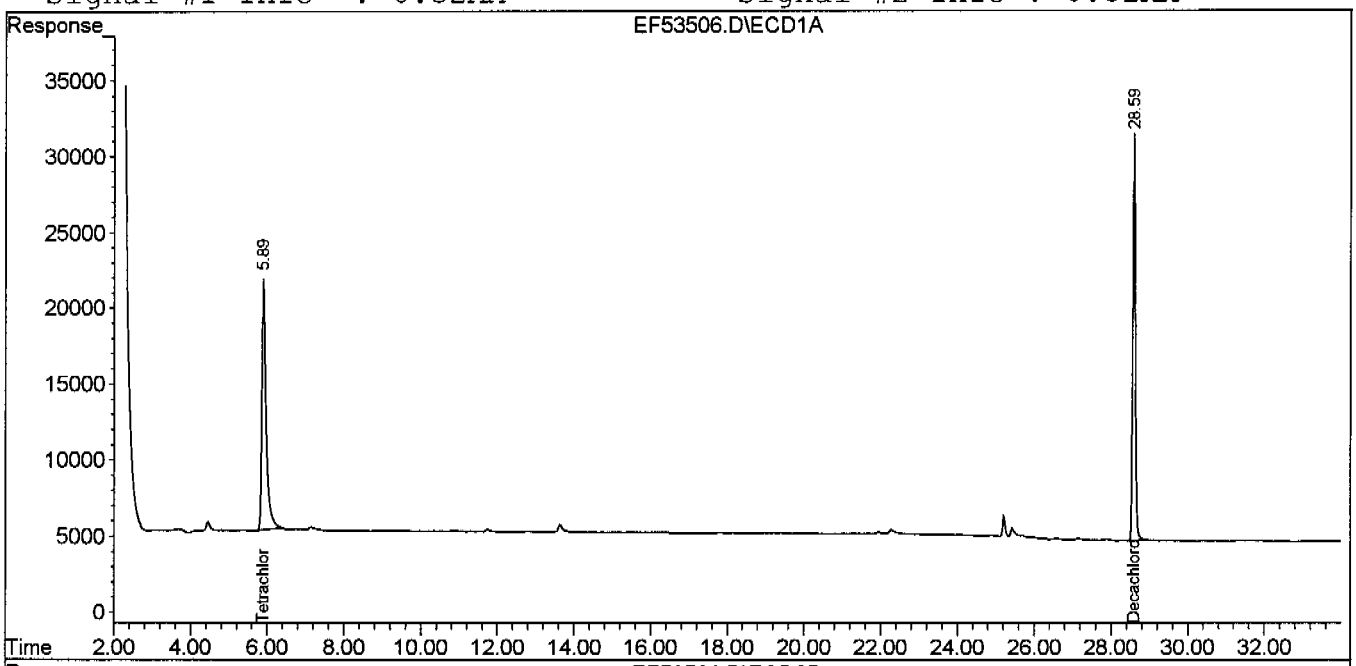
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

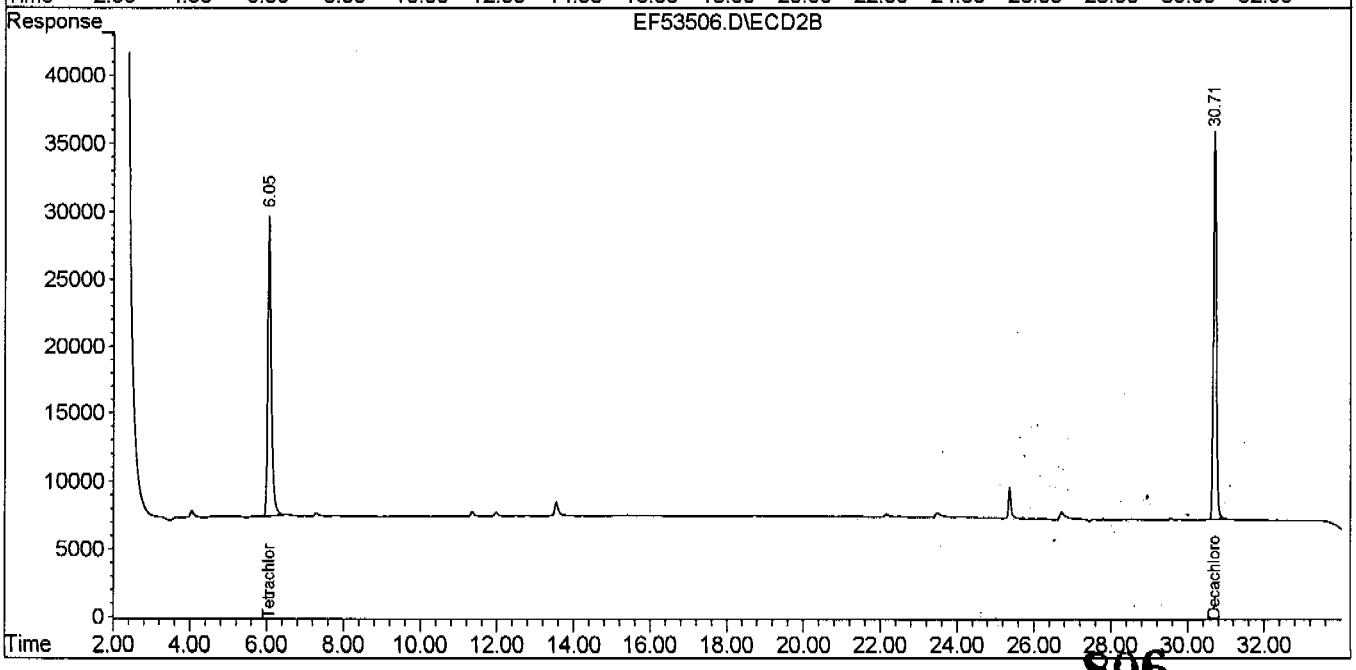
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53506.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\ef53506.D\ECD2B.CH
Acq On : 18 Aug 2004 1:35 am Operator: olgaa
Sample : N74914-6 Inst : GCEF
Misc : OP17704,GEF2578,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:13 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-FIELDDUP2		
Lab Sample ID:	N74914-7	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	EF53519.D	1	08/18/04	OYA	08/13/04	OP17704	GEF2579
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.52	0.079	ug/l	
11104-28-2	Aroclor 1221	ND	0.52	0.088	ug/l	
11141-16-5	Aroclor 1232	ND	0.52	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.52	0.14	ug/l	
12672-29-6	Aroclor 1248	ND	0.52	0.075	ug/l	
11097-69-1	Aroclor 1254	ND	0.52	0.075	ug/l	
11096-82-5	Aroclor 1260	ND	0.52	0.11	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.52		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.52		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	103%		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

807

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53519.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\ef53519.D\ECD2B.CH
Acq On : 18 Aug 2004 10:46 am Operator: olgaa
Sample : N74914-7 Inst : GCEF
Misc : OP17704,GEF2579,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:42 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	5.93	6.09	1243941	1515304	35.387	41.151
Spiked Amount 40.000			Recovery	=	88.47%	102.88%
50) S Decachlorobiphen	28.62	30.74	1340858	1637639	43.953	45.968
Spiked Amount 40.000			Recovery	=	109.88%	114.92%

Target Compounds

OA
81884

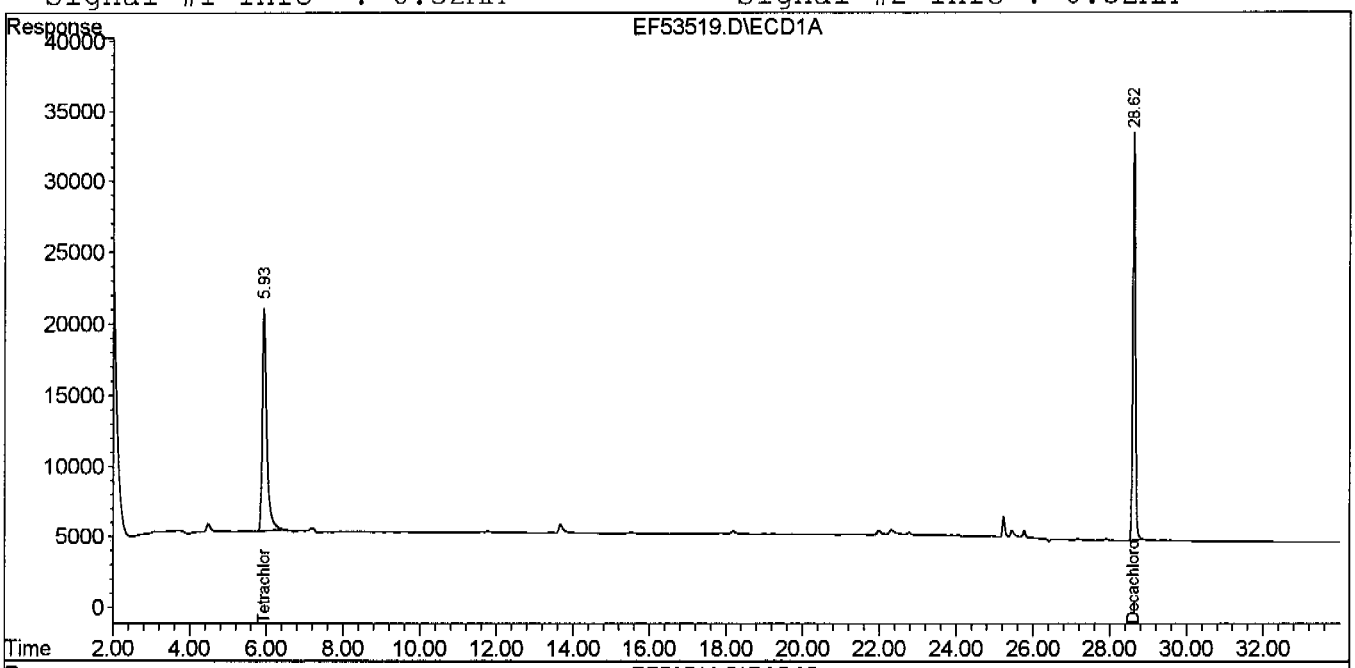
808

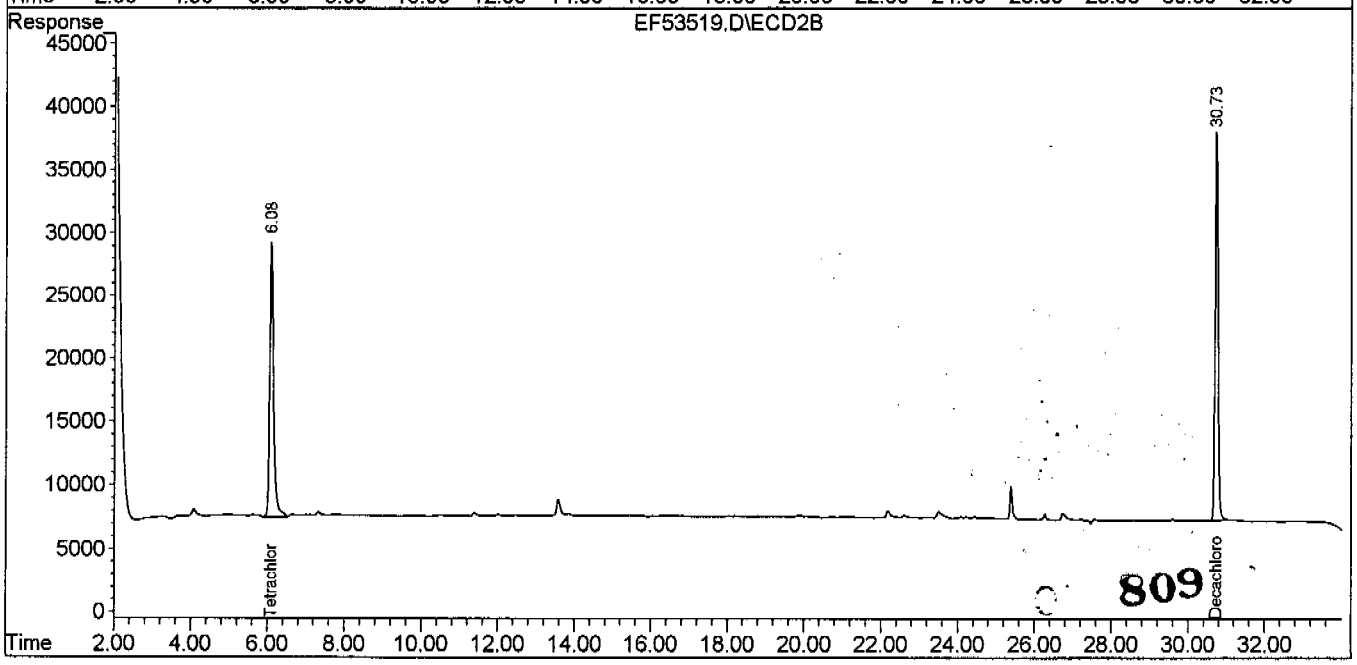
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53519.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\ef53519.D\ECD2B.CH
Acq On : 18 Aug 2004 10:46 am Operator: olgaa
Sample : N74914-7 Inst : GCEF
Misc : OP17704,GEF2579,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:42 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





809

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-6305-ISHAMCHAMBERS		
Lab Sample ID:	N74914-9	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	EF53498.D	1	08/17/04	OYA	08/13/04	OP17704	GEF2578
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.57	0.086	ug/l	
11104-28-2	Aroclor 1221	ND	0.57	0.096	ug/l	
11141-16-5	Aroclor 1232	ND	0.57	0.14	ug/l	
53469-21-9	Aroclor 1242	ND	0.57	0.15	ug/l	
12672-29-6	Aroclor 1248	ND	0.57	0.082	ug/l	
11097-69-1	Aroclor 1254	ND	0.57	0.082	ug/l	
11096-82-5	Aroclor 1260	ND	0.57	0.12	ug/l	
11100-14-4	**Aroclor 1268**	ND	0.57		ug/l	
37324-23-5	**Aroclor 1262**	ND	0.57		ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		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\ef53498.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\ef53498.D\ECD2B.CH
Acq On : 17 Aug 2004 6:48 pm Operator: olgaa
Sample : N74914-9 Inst : GCEF
Misc : OP17704,GEF2578,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:06 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	5.90	6.06	1156738	1324448	32.906	35.968
Spiked Amount 40.000			Recovery	=	82.27%	89.92%
50) S Decachlorobiphen	28.59	30.71	1222606	1471010	40.076	41.291
Spiked Amount 40.000			Recovery	=	100.19%	103.23%

Target Compounds

OA
81807

0. 811

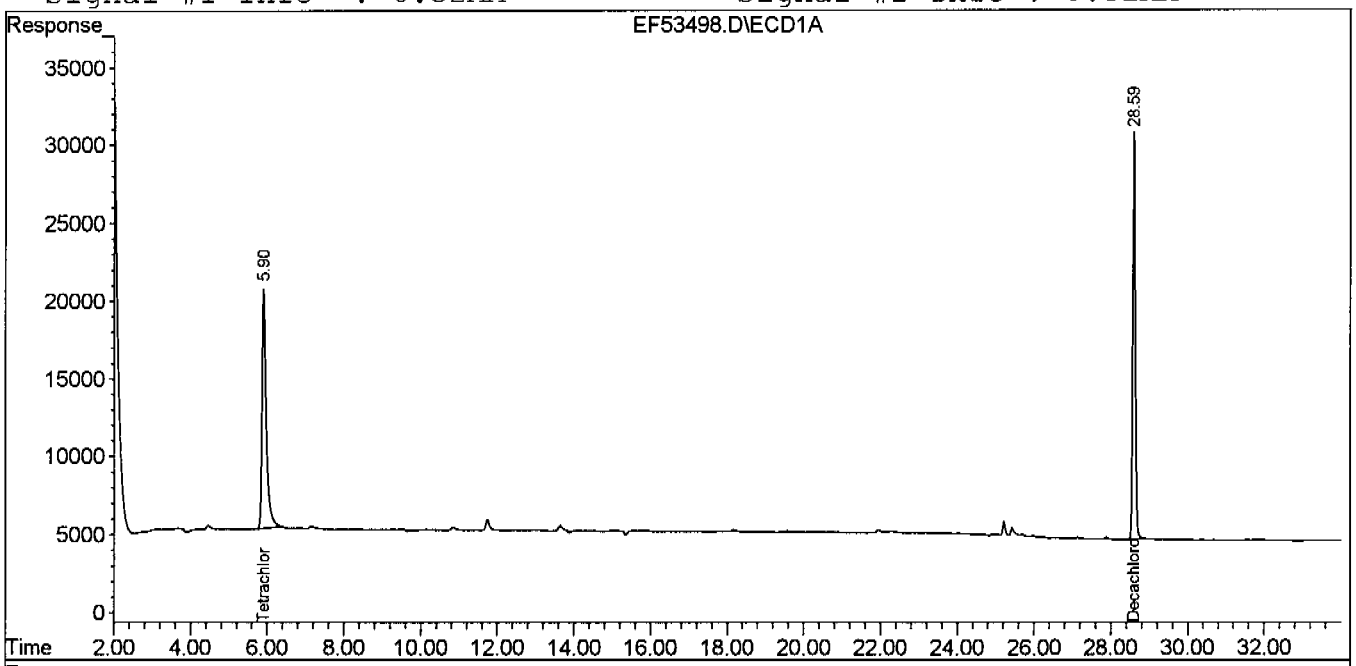
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

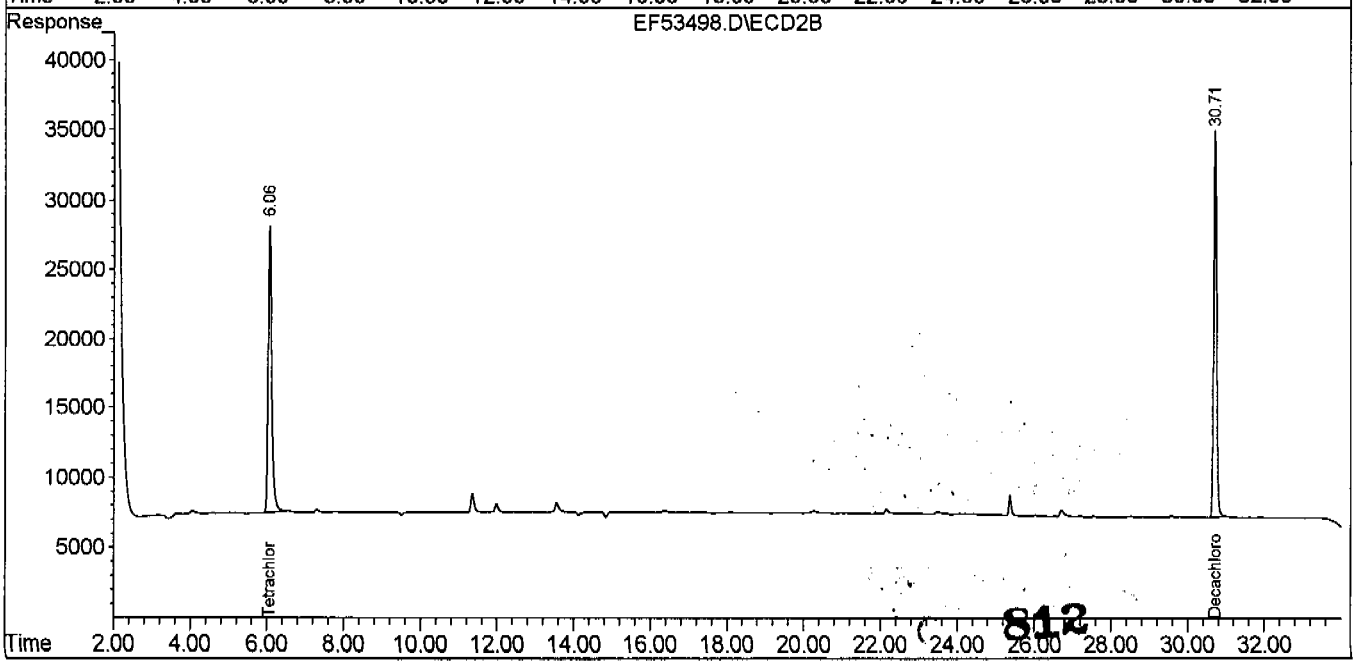
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53498.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\ef53498.D\ECD2B.CH
Acq On : 17 Aug 2004 6:48 pm Operator: olgaa
Sample : N74914-9 Inst : GCEF
Misc : OP17704,GEF2578,880,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:06 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





812

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4710-MORIAHRD		
Lab Sample ID:	N74914-10	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	EF53508.D	1	08/18/04	OYA	08/13/04	OP17704	GEF2578
Run #2							

	Initial Volume	Final Volume
Run #1	920 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.54	0.082	ug/l	
11104-28-2	Aroclor 1221	ND	0.54	0.092	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	0.078	ug/l	
11097-69-1	Aroclor 1254	ND	0.54	0.078	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	82%		27-140%
877-09-8	Tetrachloro-m-xylene	88%		27-140%
2051-24-3	Decachlorobiphenyl	78%		19-151%
2051-24-3	Decachlorobiphenyl	80%		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\ef53508.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\ef53508.D\ECD2B.CH
Acq On : 18 Aug 2004 2:49 am Operator: olgaa
Sample : N74914-10 Inst : GCEF
Misc : OP17704,GEF2578,920,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:15 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	5.89	6.05	1155161	1302279	32.862	35.366
Spiked Amount 40.000			Recovery	=	82.16%	88.41%
50) S Decachlorobiphen	28.58	30.70	952148	1136422	31.211	31.899
Spiked Amount 40.000			Recovery	=	78.03%	79.75%

Target Compounds

QA
8/18/04

814

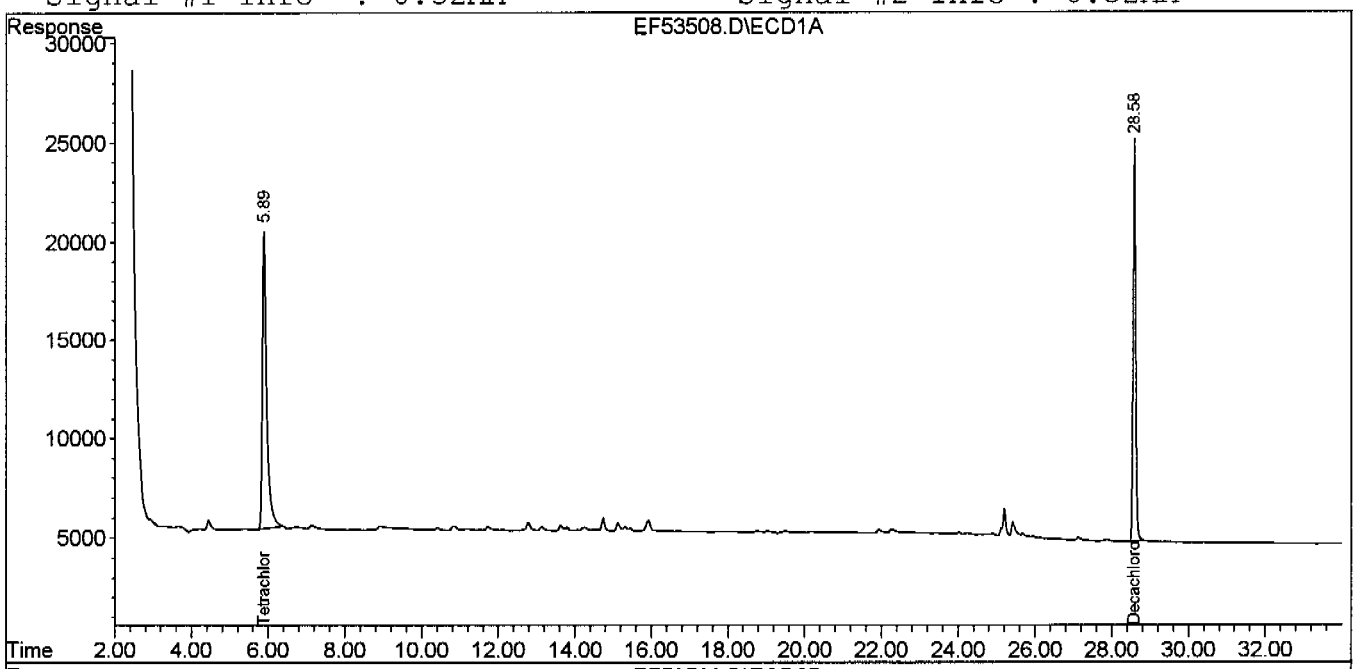
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

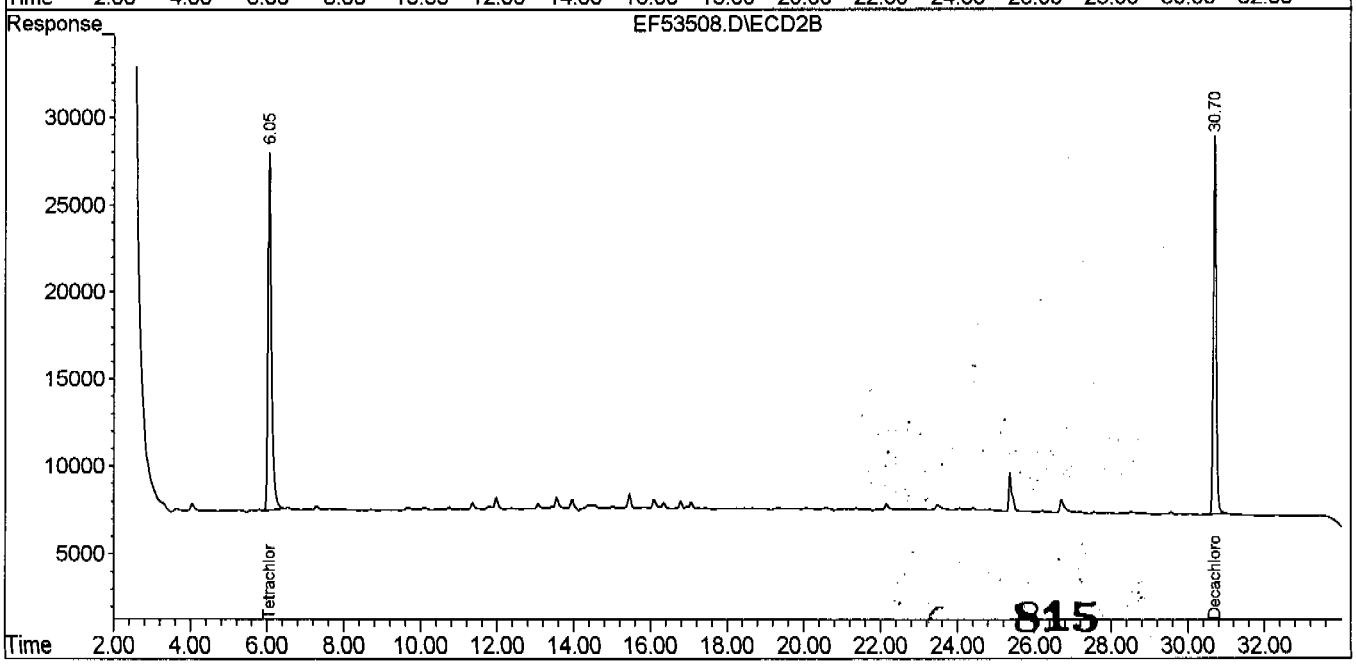
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53508.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\ef53508.D\ECD2B.CH
Acq On : 18 Aug 2004 2:49 am Operator: olgaa
Sample : N74914-10 Inst : GCEF
Misc : OP17704,GEF2578,920,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:15 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





815

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4709-MORIAHRD		
Lab Sample ID:	N74914-11	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	EF53509.D	1	08/18/04	OYA	08/13/04	OP17704	GEF2578
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	86%		27-140%
877-09-8	Tetrachloro-m-xylene	92%		27-140%
2051-24-3	Decachlorobiphenyl	70%		19-151%
2051-24-3	Decachlorobiphenyl	71%		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\ef53509.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\ef53509.D\ECD2B.CH
Acq On : 18 Aug 2004 3:25 am Operator: olgaa
Sample : N74914-11 Inst : GCEF
Misc : OP17704,GEF2578,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:16 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	5.90	6.06	1207691	1348060	34.356	36.609
Spiked Amount 40.000			Recovery	=	85.89%	91.52%
50) S Decachlorobiphen	28.58	30.70	848464	1011050	27.812	28.380
Spiked Amount 40.000			Recovery	=	69.53%	70.95%
Target Compounds						

OA
8/18/04

0 817

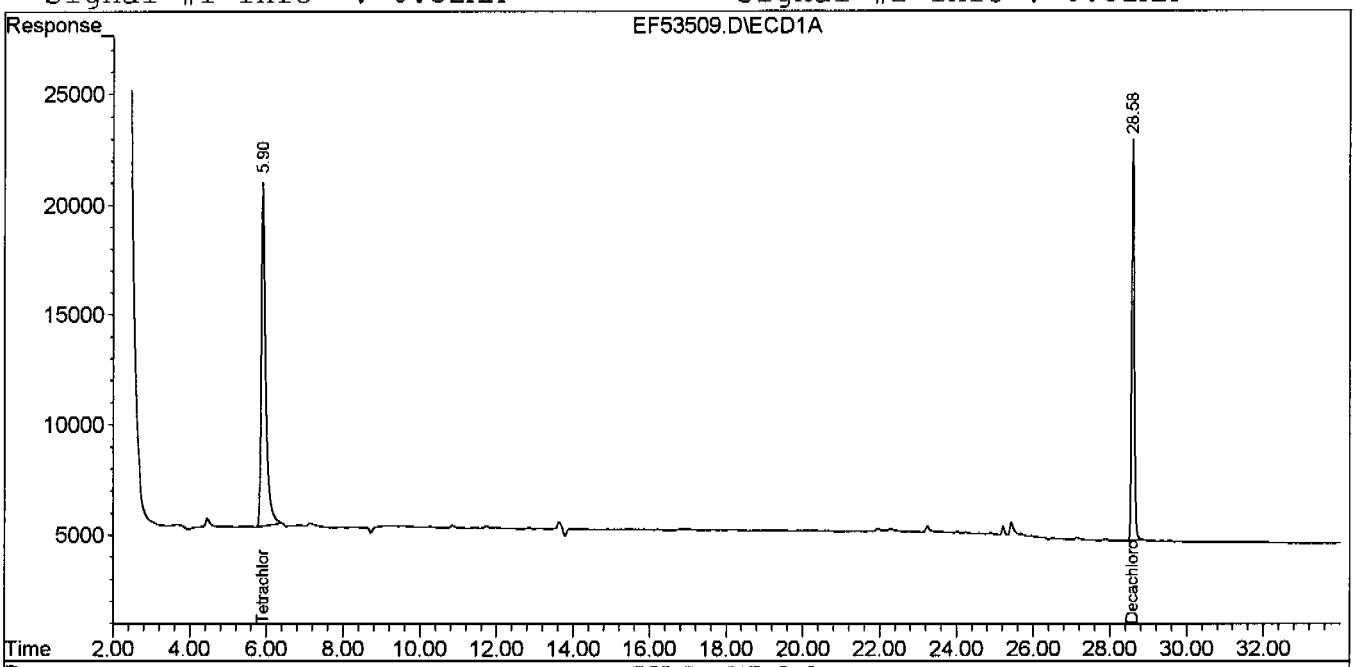
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

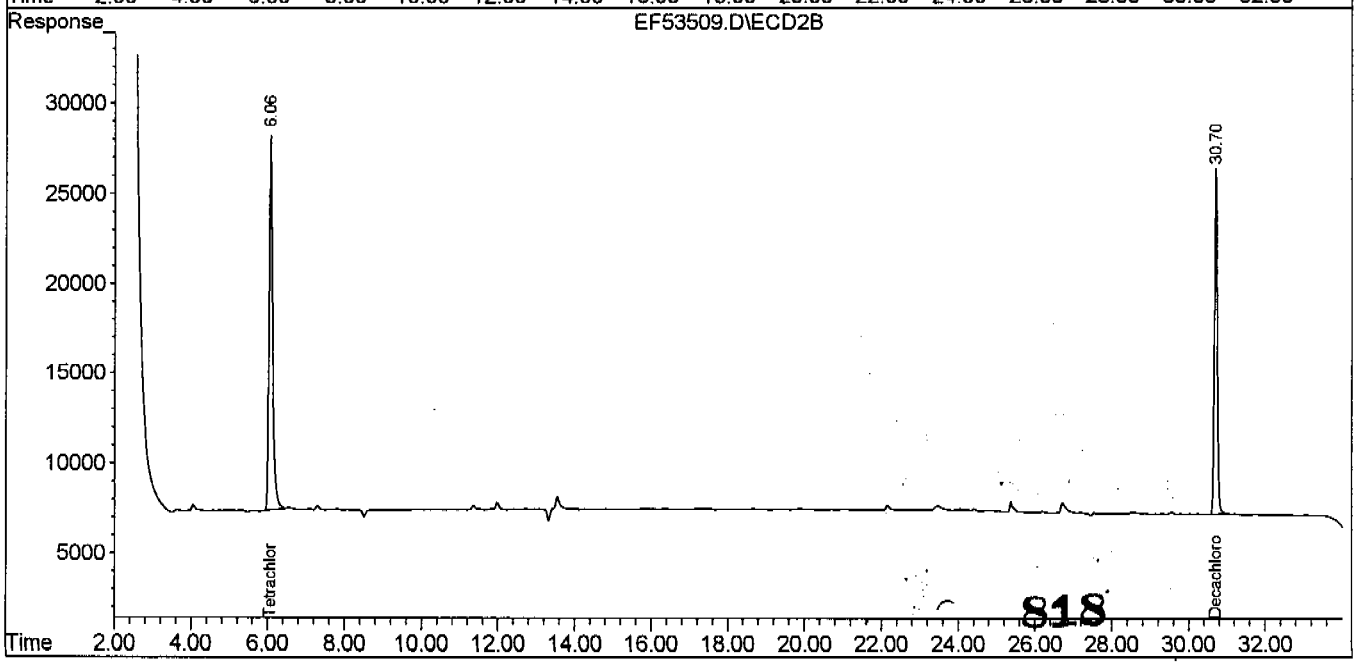
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53509.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\ef53509.D\ECD2B.CH
Acq On : 18 Aug 2004 3:25 am Operator: olgaa
Sample : N74914-11 Inst : GCEF
Misc : OP17704,GEF2578,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:16 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





818

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-5057-CLAYTONRD		
Lab Sample ID:	N74914-12	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	EF53510.D	1	08/18/04	OYA	08/13/04	OP17704	GEF2578
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	88%		27-140%
877-09-8	Tetrachloro-m-xylene	94%		27-140%
2051-24-3	Decachlorobiphenyl	86%		19-151%
2051-24-3	Decachlorobiphenyl	88%		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\ef53510.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\ef53510.D\ECD2B.CH
Acq On : 18 Aug 2004 4:02 am Operator: olgaa
Sample : N74914-12 Inst : GCEF
Misc : OP17704,GEF2578,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:17 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	5.90	6.06	1236984	1388180	35.189	37.699
Spiked Amount 40.000			Recovery	=	87.97%	94.25%
50) S Decachlorobiphen	28.59	30.71	1054250	1261089	34.558	35.398
Spiked Amount 40.000			Recovery	=	86.40%	88.50%
Target Compounds						

QA
81807

820

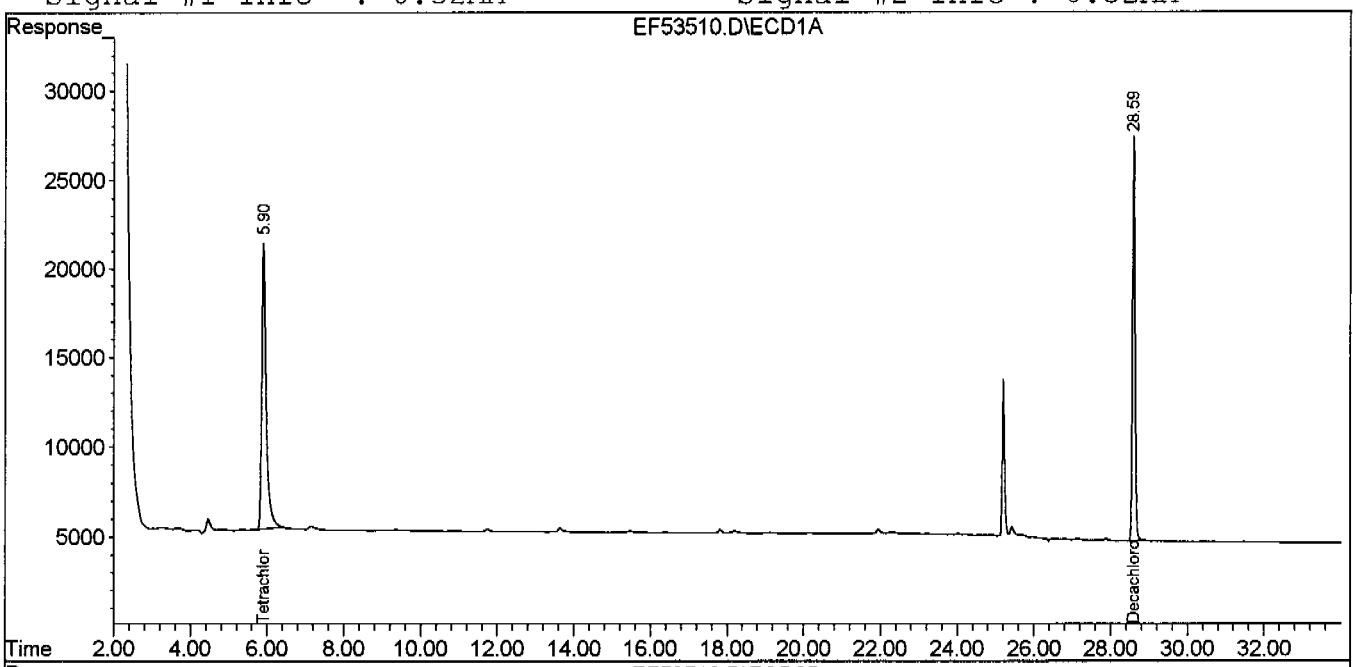
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

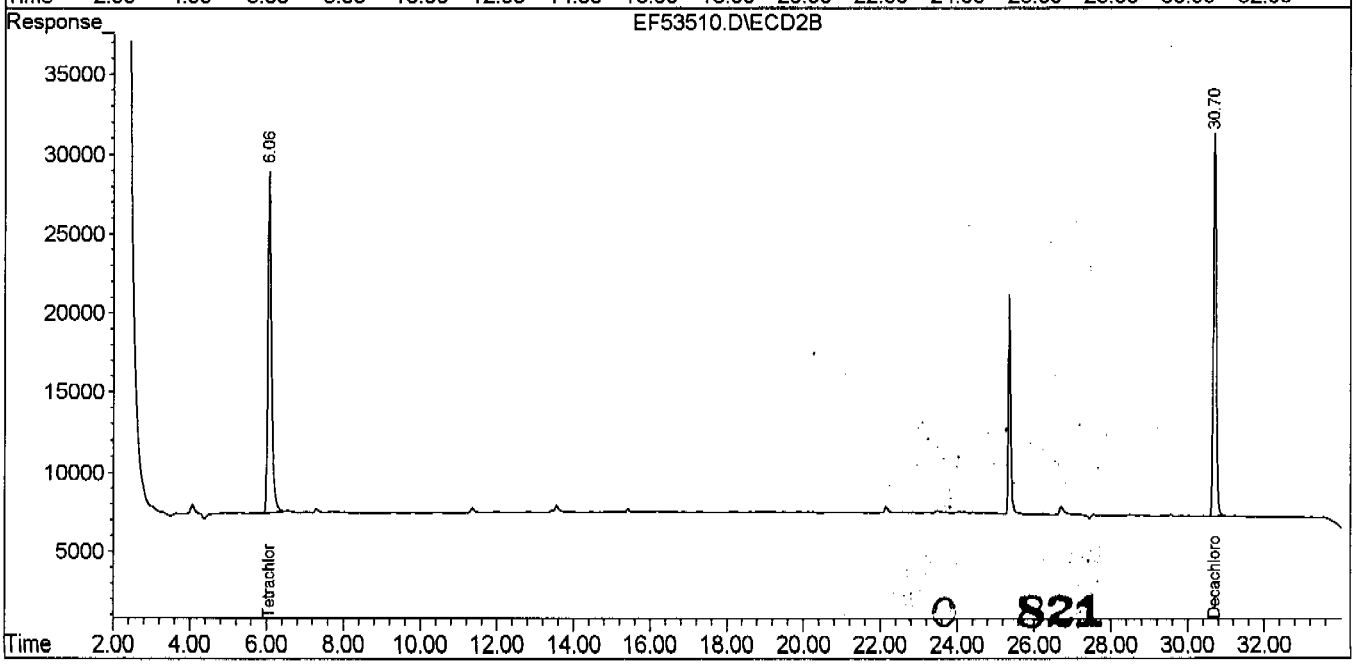
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53510.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\ef53510.D\ECD2B.CH
Acq On : 18 Aug 2004 4:02 am Operator: olgaa
Sample : N74914-12 Inst : GCEF
Misc : OP17704,GEF2578,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:17 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:	RW0804-2202-TILLEYFARMRD		
Lab Sample ID:	N74914-13	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	EF53511.D	1	08/18/04	OYA	08/13/04	OP17704	GEF2578
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.56	0.085	ug/l	
11104-28-2	Aroclor 1221	ND	0.56	0.095	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	0.081	ug/l	
11097-69-1	Aroclor 1254	ND	0.56	0.081	ug/l	
11096-82-5	Aroclor 1260	ND	0.56	0.12	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	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\ef53511.D\ECD1A.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\ef53511.D\ECD2B.CH
Acq On : 18 Aug 2004 4:39 am Operator: olgaa
Sample : N74914-13 Inst : GCEF
Misc : OP17704,GEF2578,890,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:19 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	5.90	6.06	1164615	1314893	33.131	35.709
Spiked Amount 40.000			Recovery	=	82.83%	89.27%
50) S Decachlorobiphen	28.59	30.71	1207906	1439835	39.595	40.416
Spiked Amount 40.000			Recovery	=	98.99%	101.04%

Target Compounds

QA
81884

823

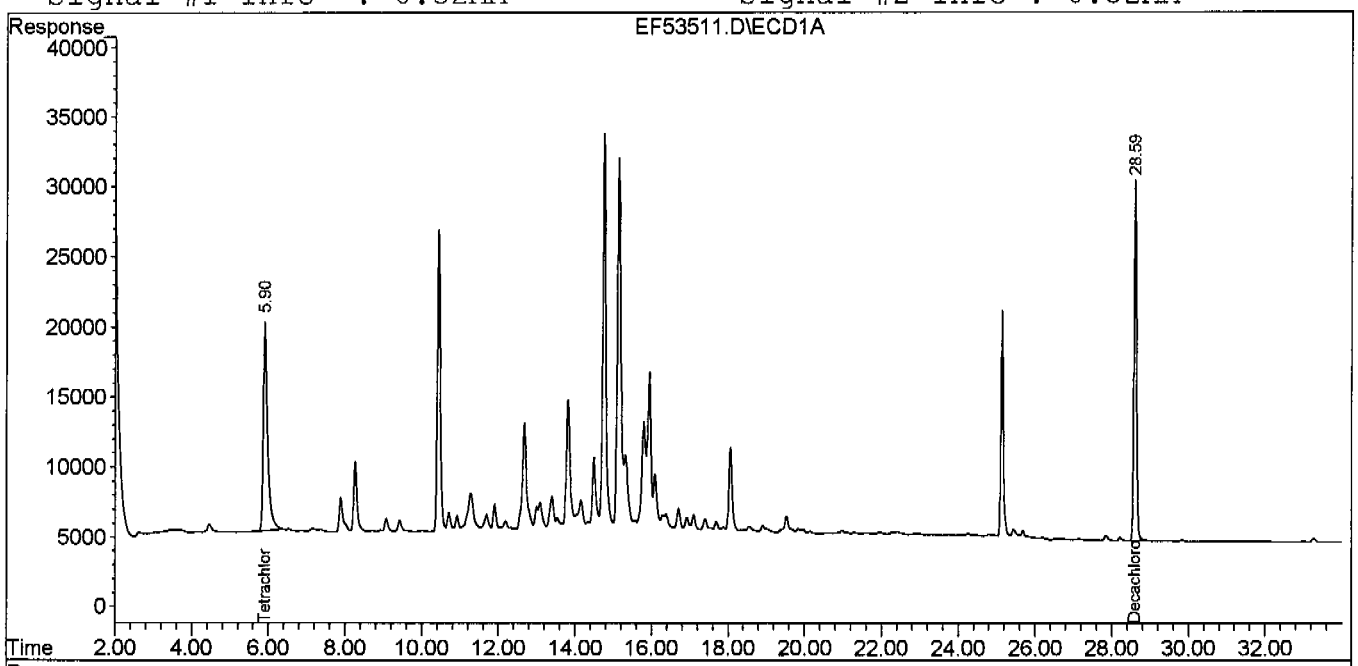
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef53511 D GEF2562 M Wed Aug 18 11:19:31 2004 RPT1 Page 1

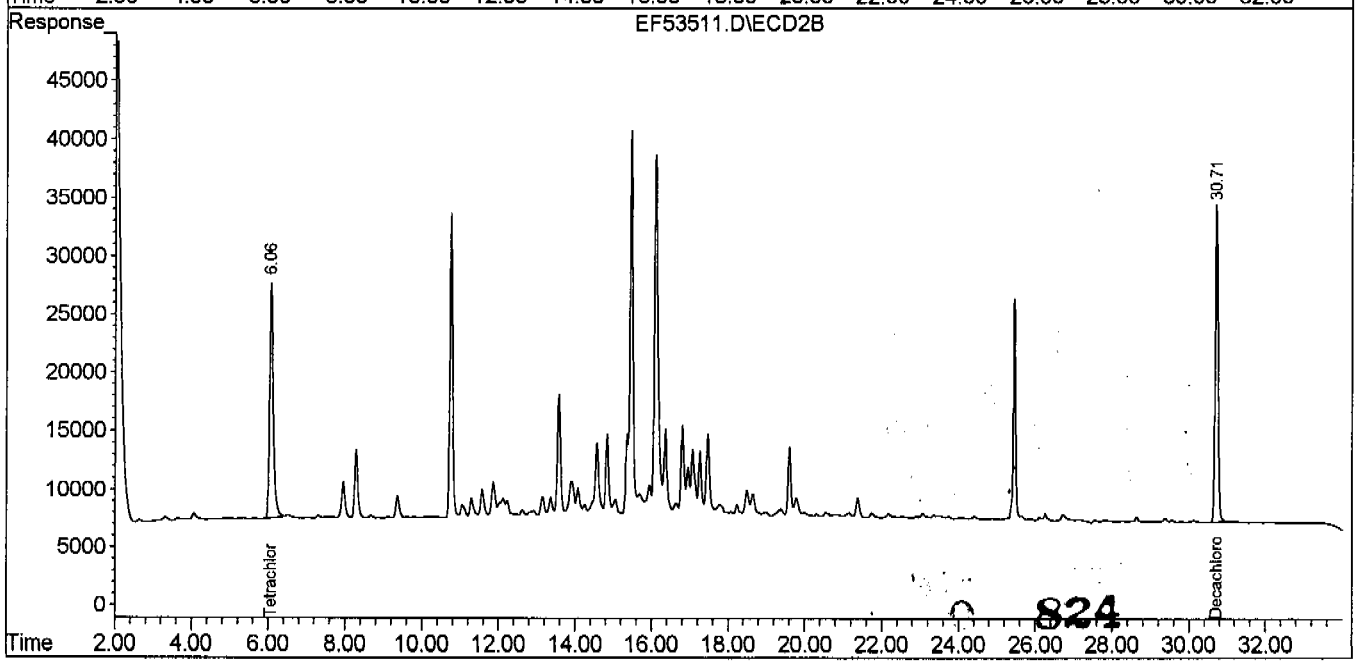
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53511.D\ECD1A.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\ef53511.D\ECD2B.CH
Acq On : 18 Aug 2004 4:39 am Operator: olgaa
Sample : N74914-13 Inst : GCEF
Misc : OP17704,GEF2578,890,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:19 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





824

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-564-BETHANYCHURCH		
Lab Sample ID:	N74914-14	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	EF53512.D	1	08/18/04	OYA	08/13/04	OP17704	GEF2578
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	85%		27-140%
877-09-8	Tetrachloro-m-xylene	93%		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\ef53512.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\ef53512.D\ECD2B.CH
Acq On : 18 Aug 2004 5:16 am Operator: olgaa
Sample : N74914-14 Inst : GCEF
Misc : OP17704,GEF2578,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:20 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	5.89	6.05	1190175	1363712	33.858	37.034
Spiked Amount 40.000			Recovery	=	84.65%	92.58%
50) S Decachlorobiphen	28.59	30.70	1286535	1537424	42.172	43.155
Spiked Amount 40.000			Recovery	=	105.43%	107.89%

Target Compounds

OA
81809

826

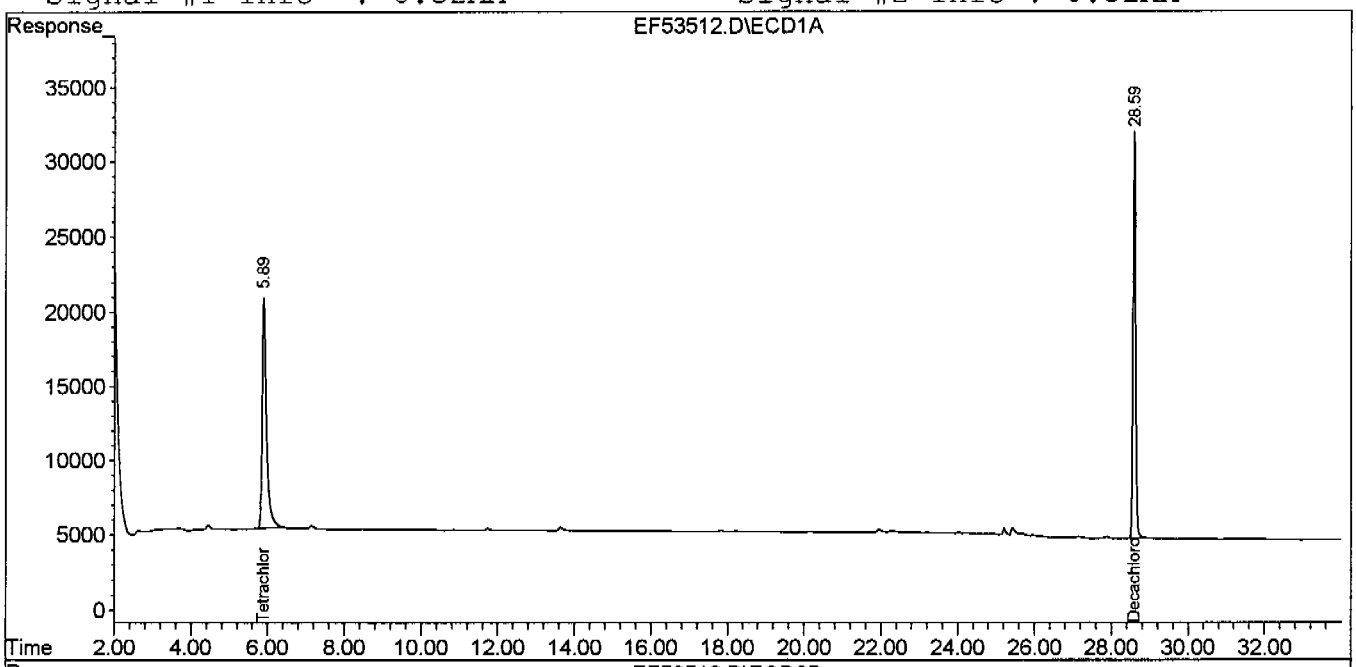
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

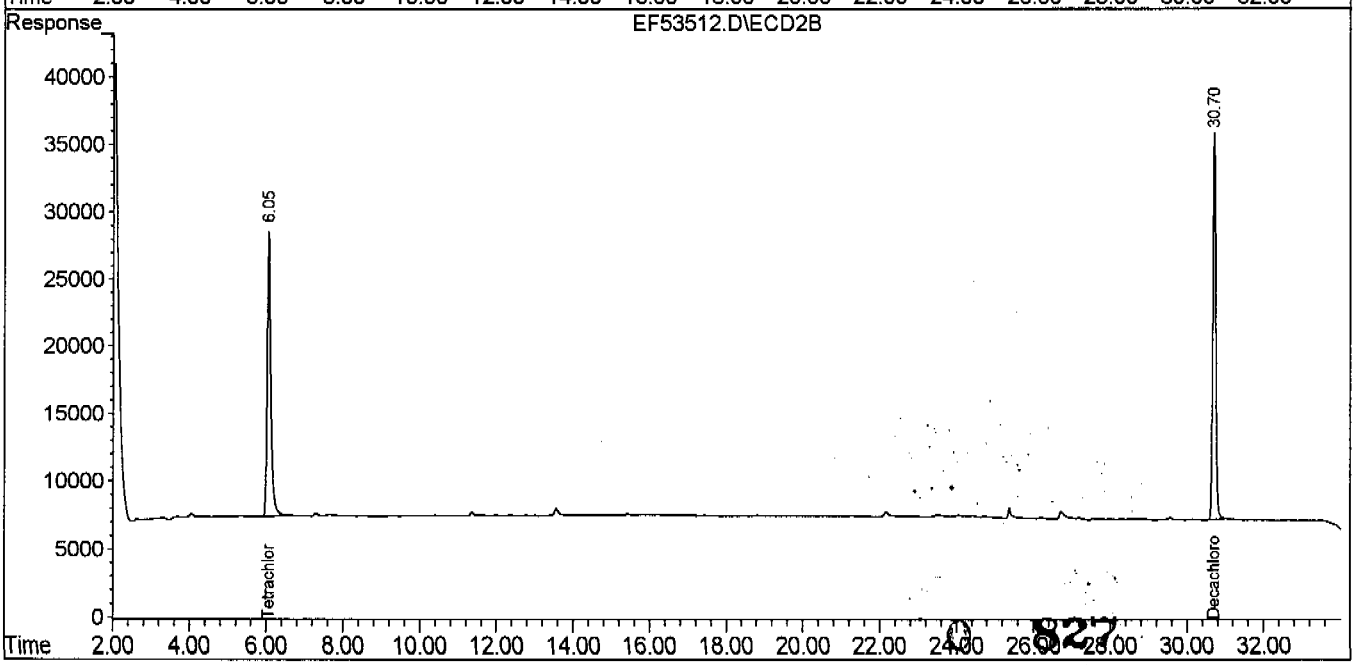
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53512.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\ef53512.D\ECD2B.CH
Acq On : 18 Aug 2004 5:16 am Operator: olgaa
Sample : N74914-14 Inst : GCEF
Misc : OP17704,GEF2578,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:20 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-FIELDDUP3		
Lab Sample ID:	N74914-15	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	EF53513.D	1	08/18/04	OYA	08/13/04	OP17704	GEF2578
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	86%		27-140%
877-09-8	Tetrachloro-m-xylene	93%		27-140%
2051-24-3	Decachlorobiphenyl	102%		19-151%
2051-24-3	Decachlorobiphenyl	105%		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\ef53513.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\ef53513.D\ECD2B.CH
Acq On : 18 Aug 2004 5:53 am Operator: olgaa
Sample : N74914-15 Inst : GCEF
Misc : OP17704,GEF2578,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:21 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	5.91	6.07	1208003	1368521	34.365	37.165
Spiked Amount 40.000			Recovery	=	85.91%	92.91%
50) S Decachlorobiphen	28.60	30.72	1243032	1494643	40.746	41.954
Spiked Amount 40.000			Recovery	=	101.87%	104.89%

Target Compounds

OA
81887

829

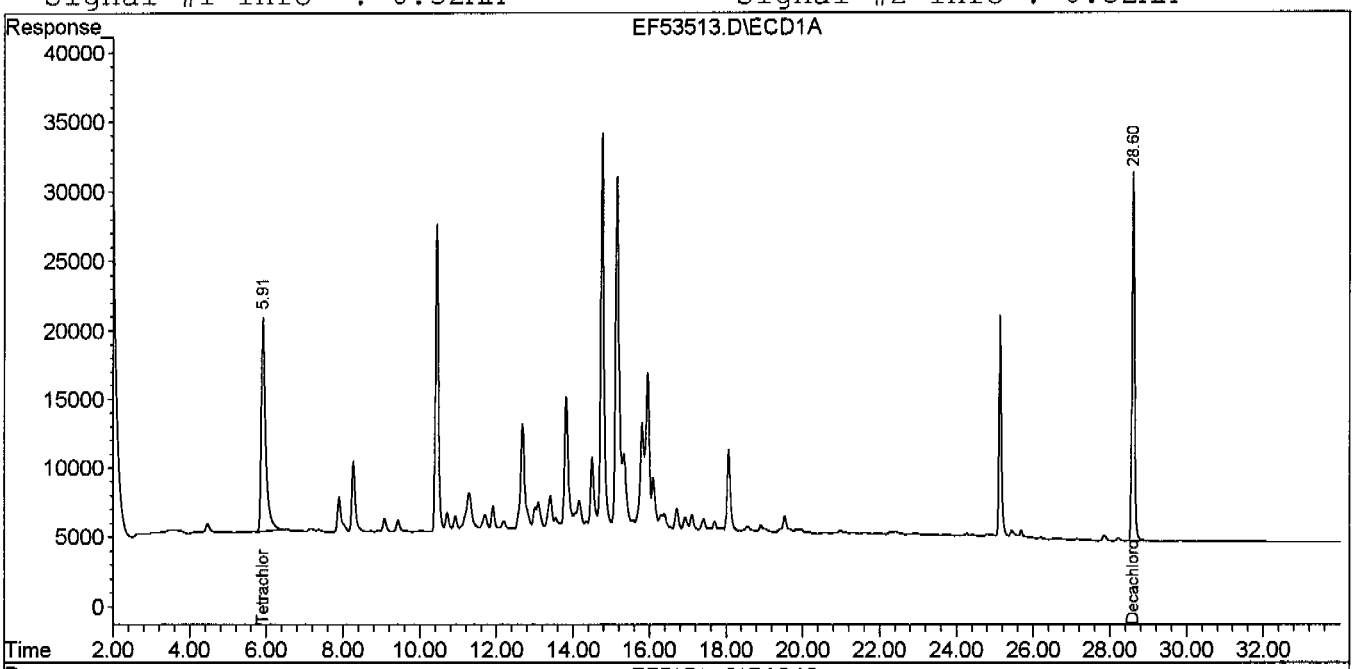
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

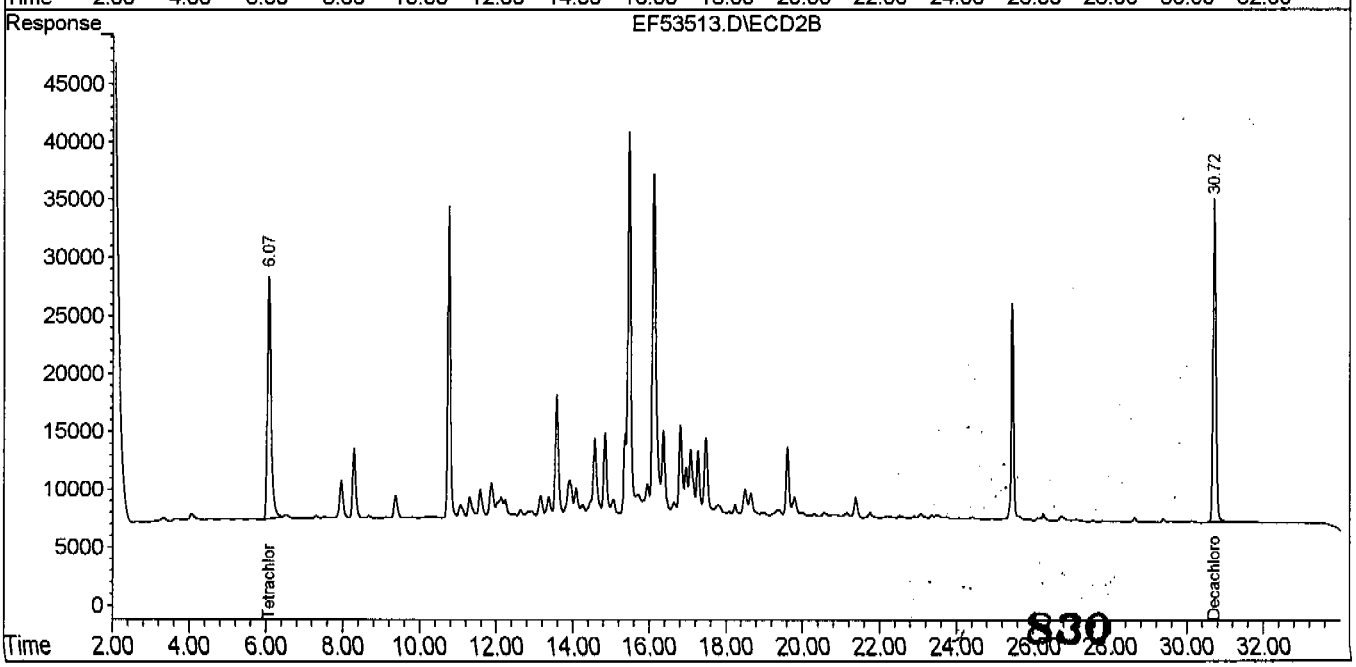
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53513.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\ef53513.D\ECD2B.CH
Acq On : 18 Aug 2004 5:53 am Operator: olgaa
Sample : N74914-15 Inst : GCEF
Misc : OP17704,GEF2578,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:21 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





830

Initial Calibration Summary

Job Number: N74914
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: N74914
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	[illegible]	3.563 E4	13.31

Initial Calibration Summary

Job Number: N74914
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

QA
72704

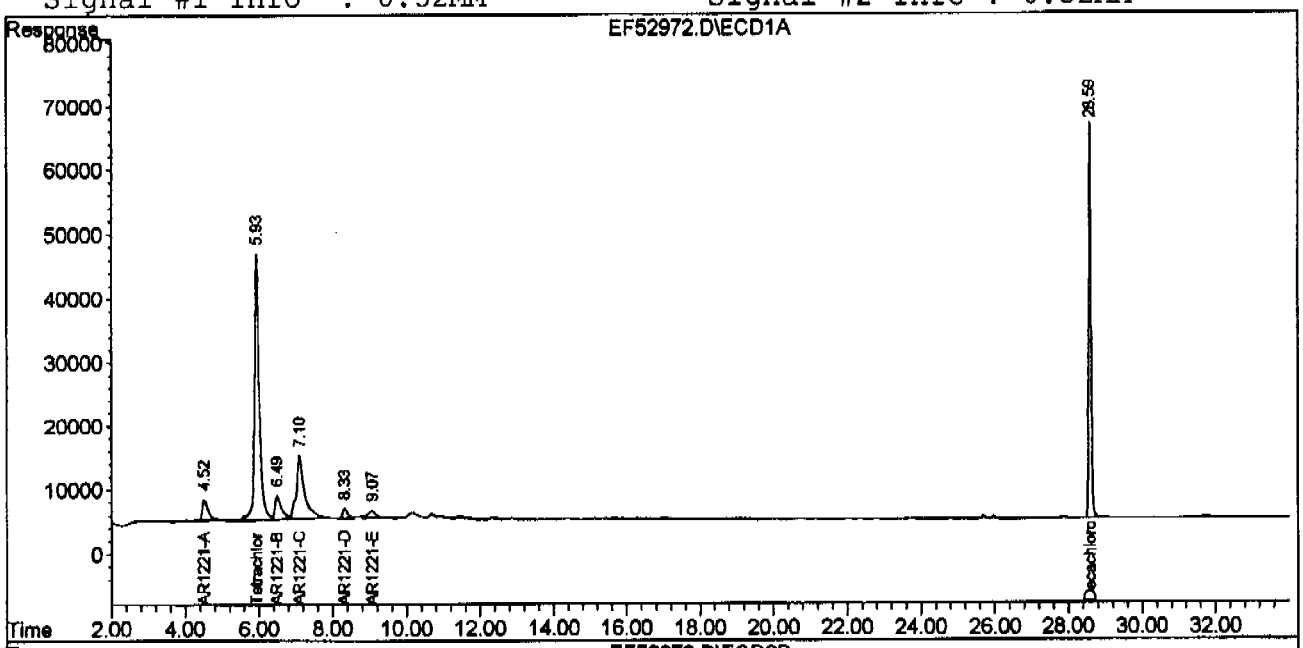
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef52972 D GEF2562 M Tue Jul 27 08:14:50 2004 RPT1 Page 1

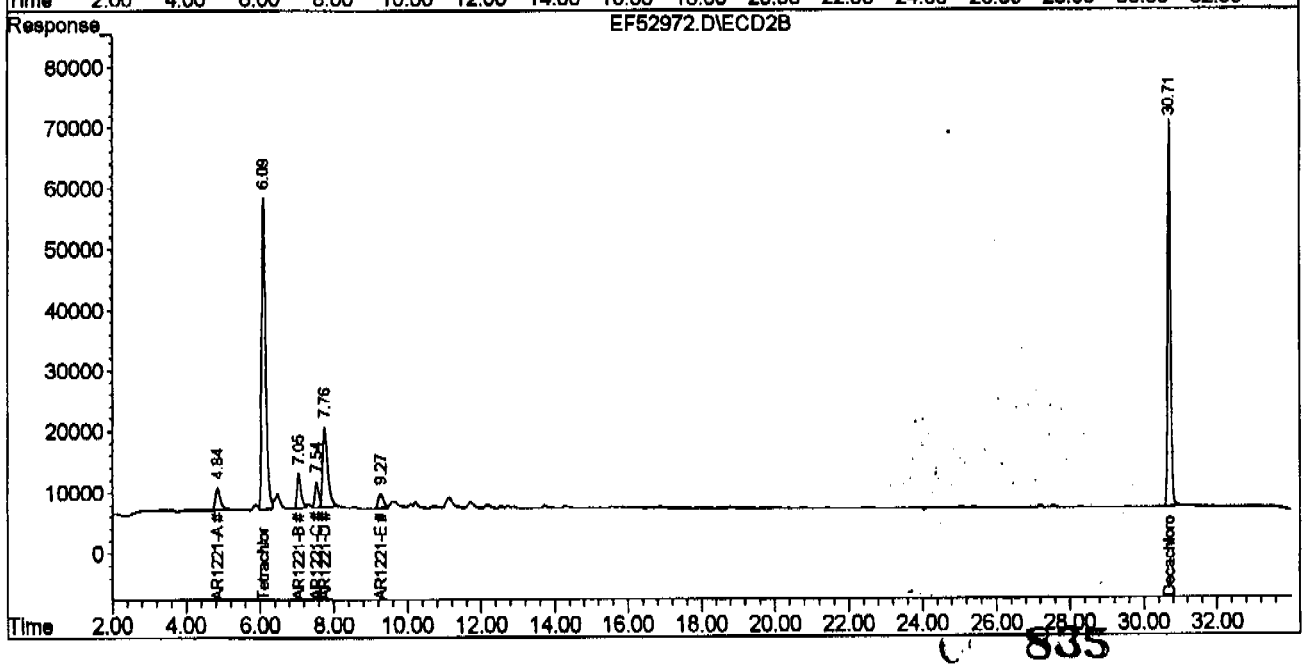
Quantitation Report

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





835

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

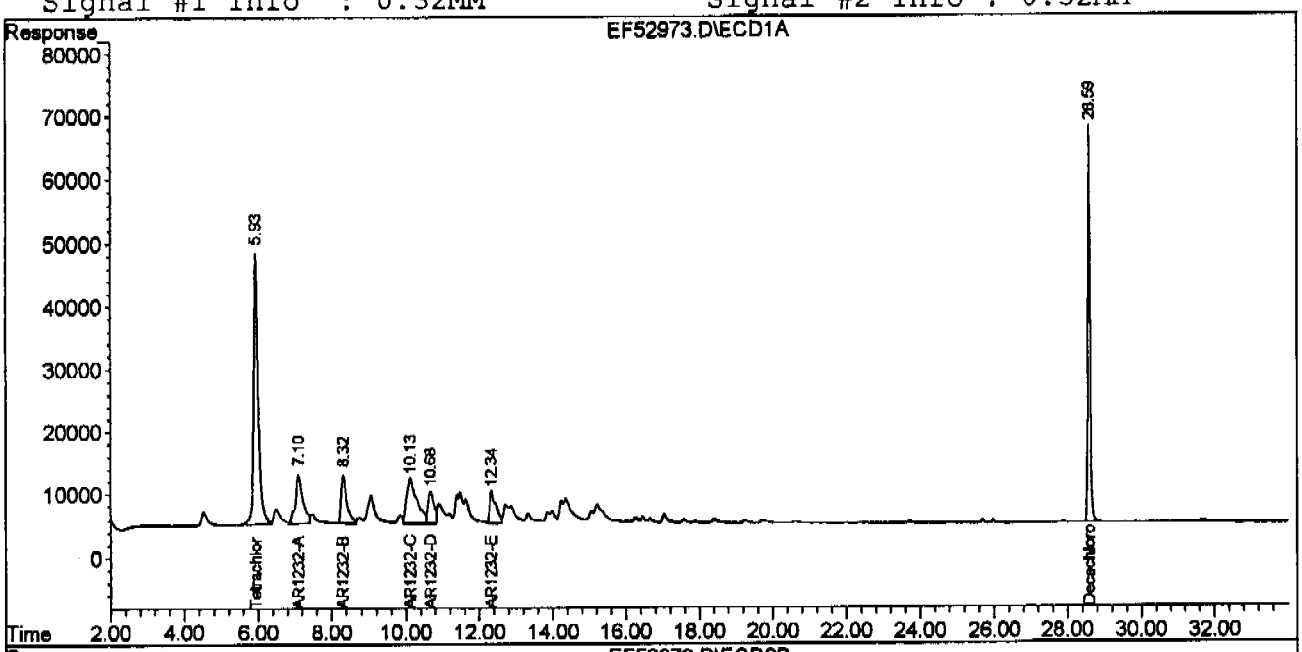
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef52973 D GEF2562 M Tue Jul 27 08:24:12 2004 RPT1 Page 1

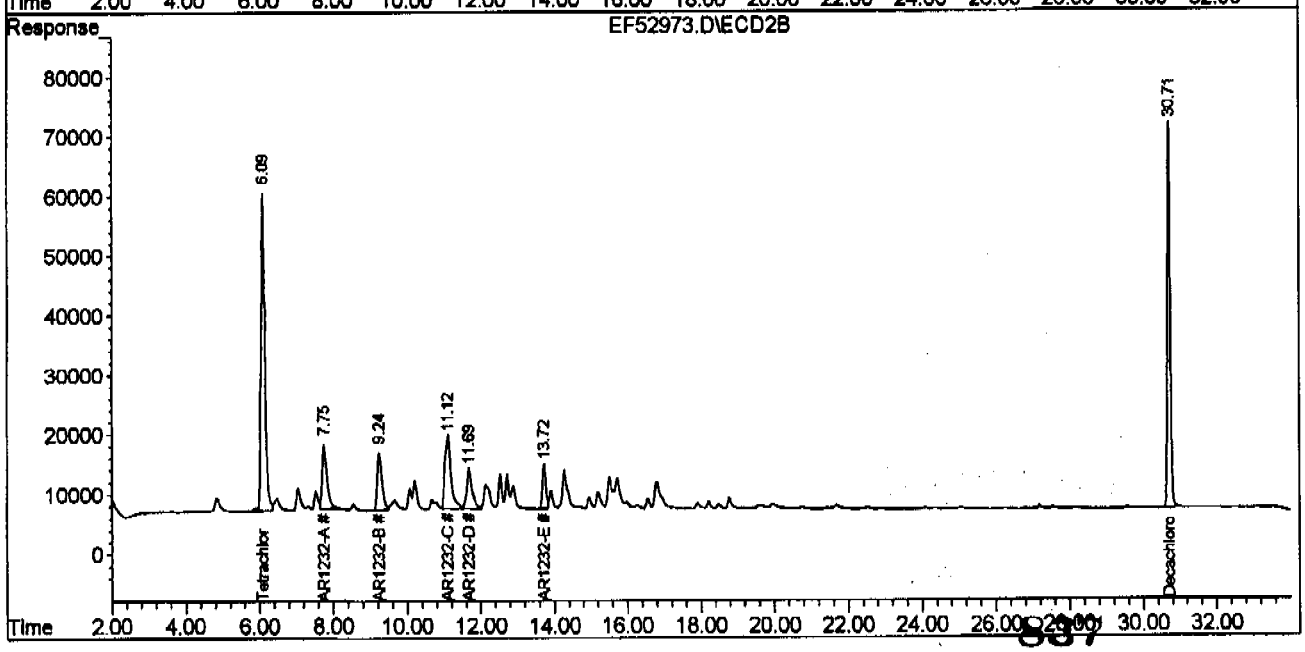
Quantitation Report

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
72784

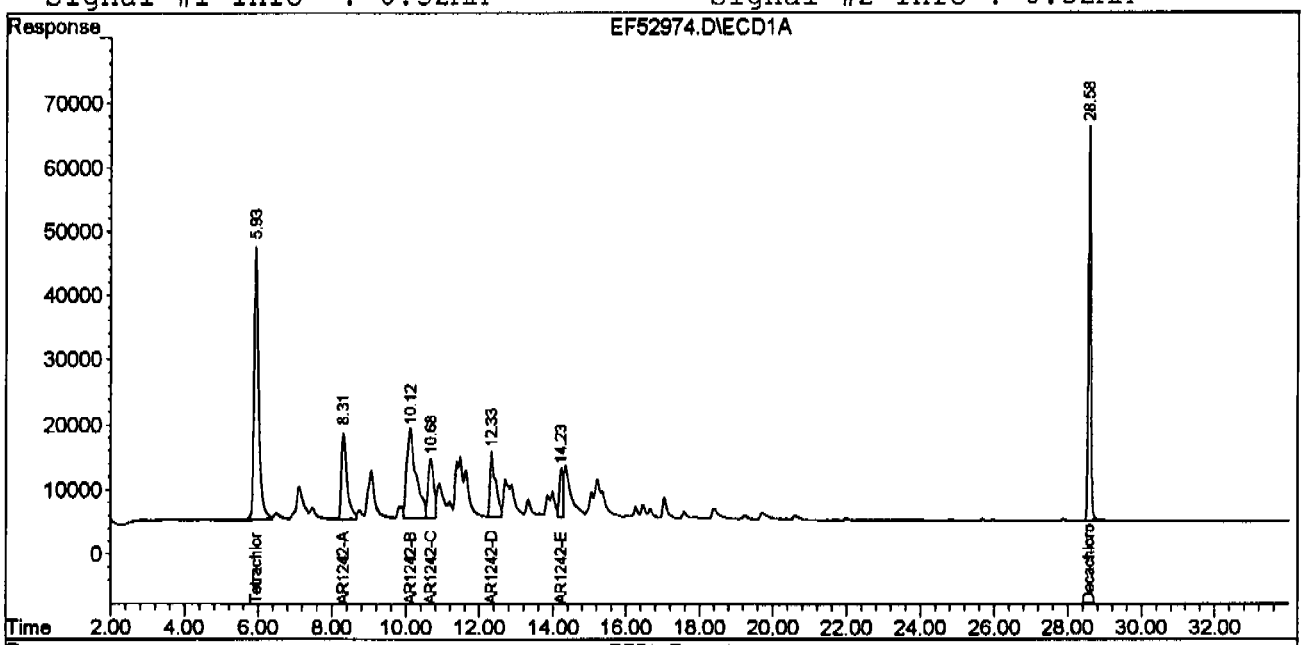
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef52974 D GEF2562 M Tue Jul 27 08:41:31 2004 RPT1 Page 1

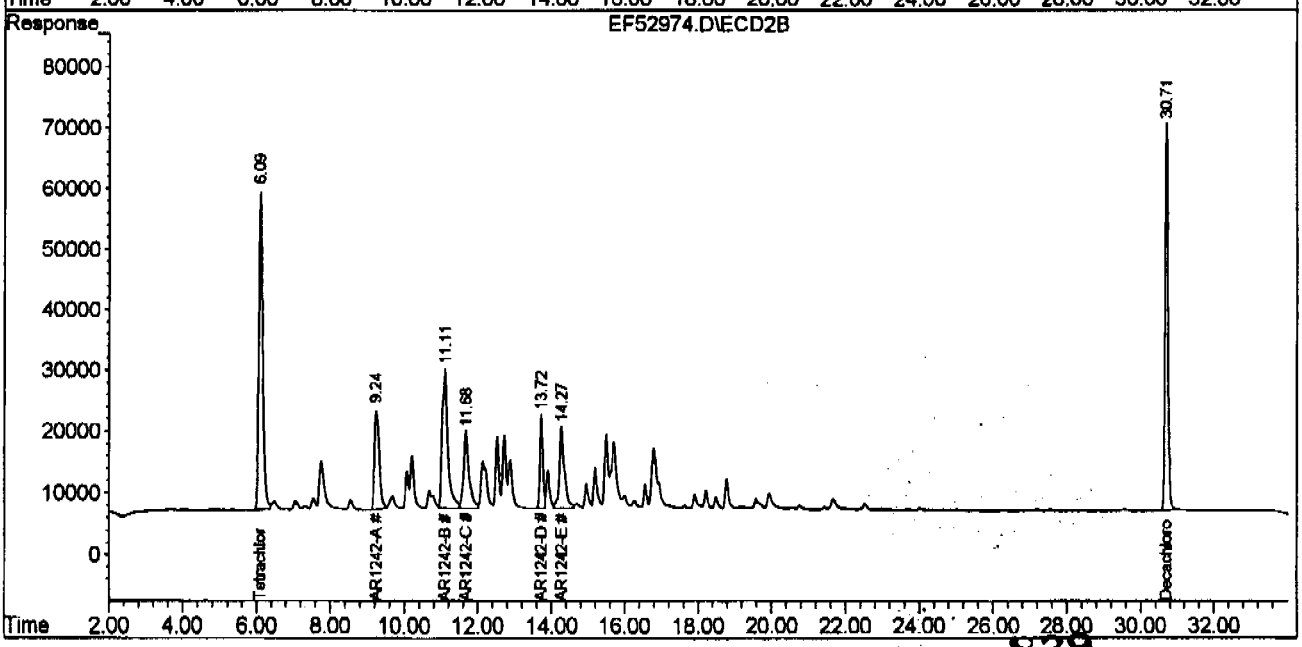
Quantitation Report

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





839

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

QA
7/27/04

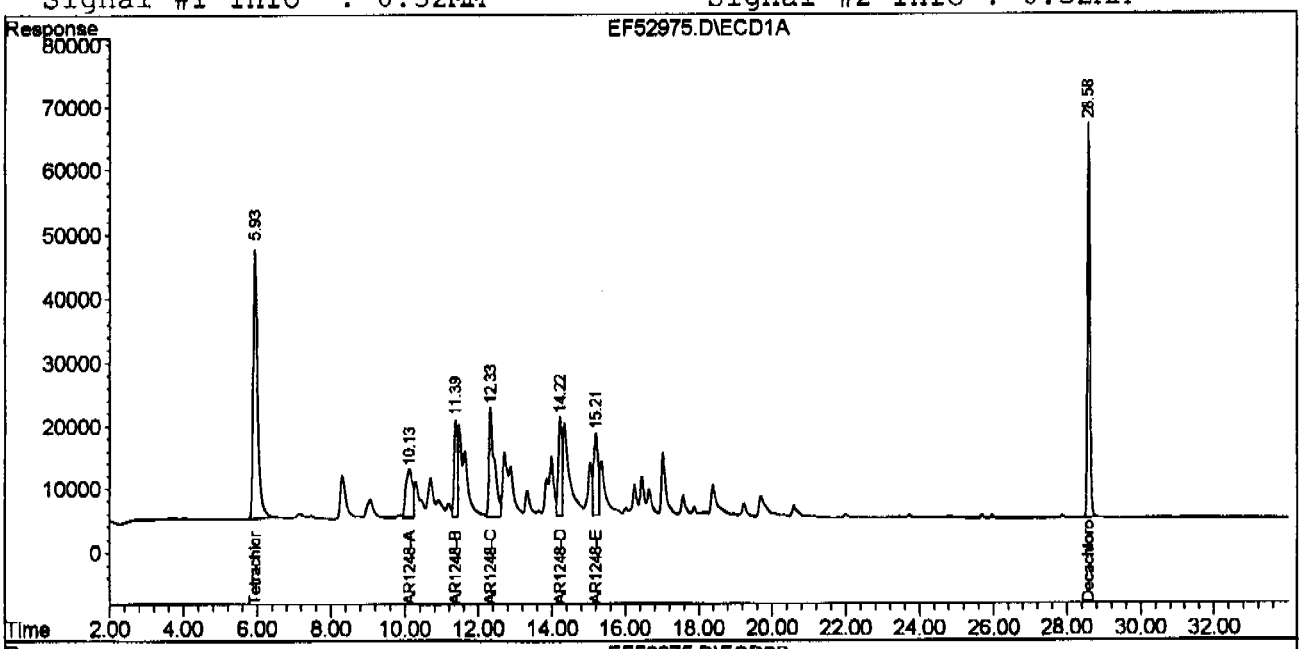
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.
ef52975 D GEF2562 M Tue Jul 27 08:43:25 2004 RPT1 Page 1

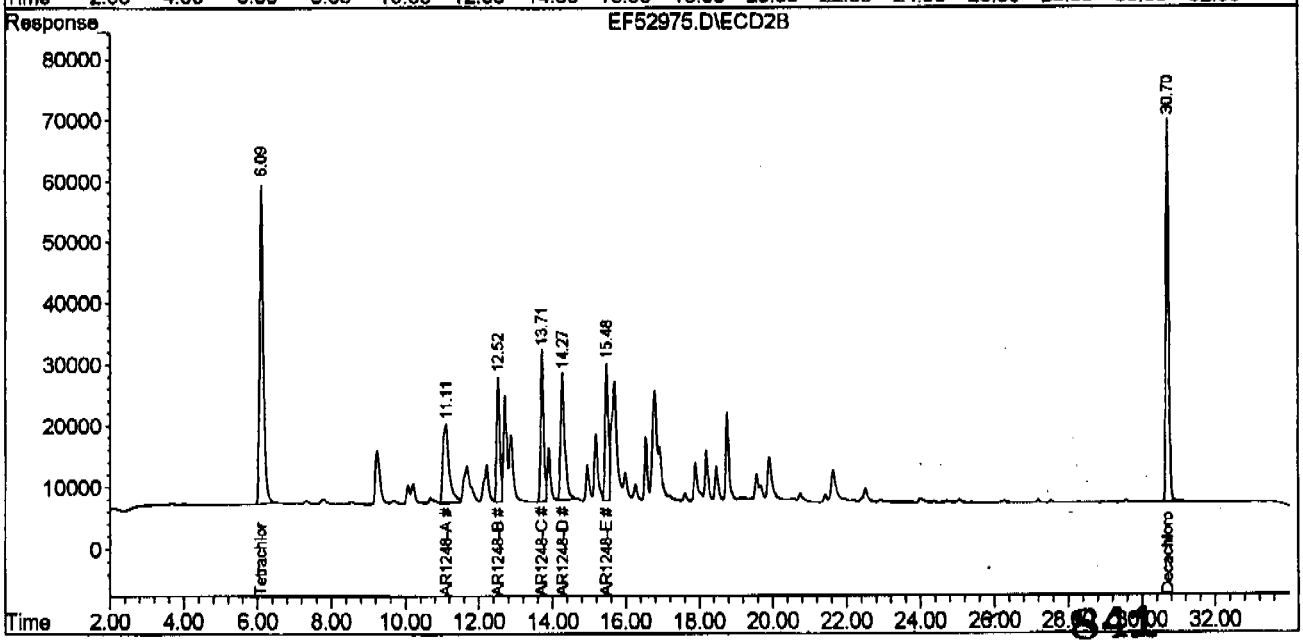
Quantitation Report

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

842

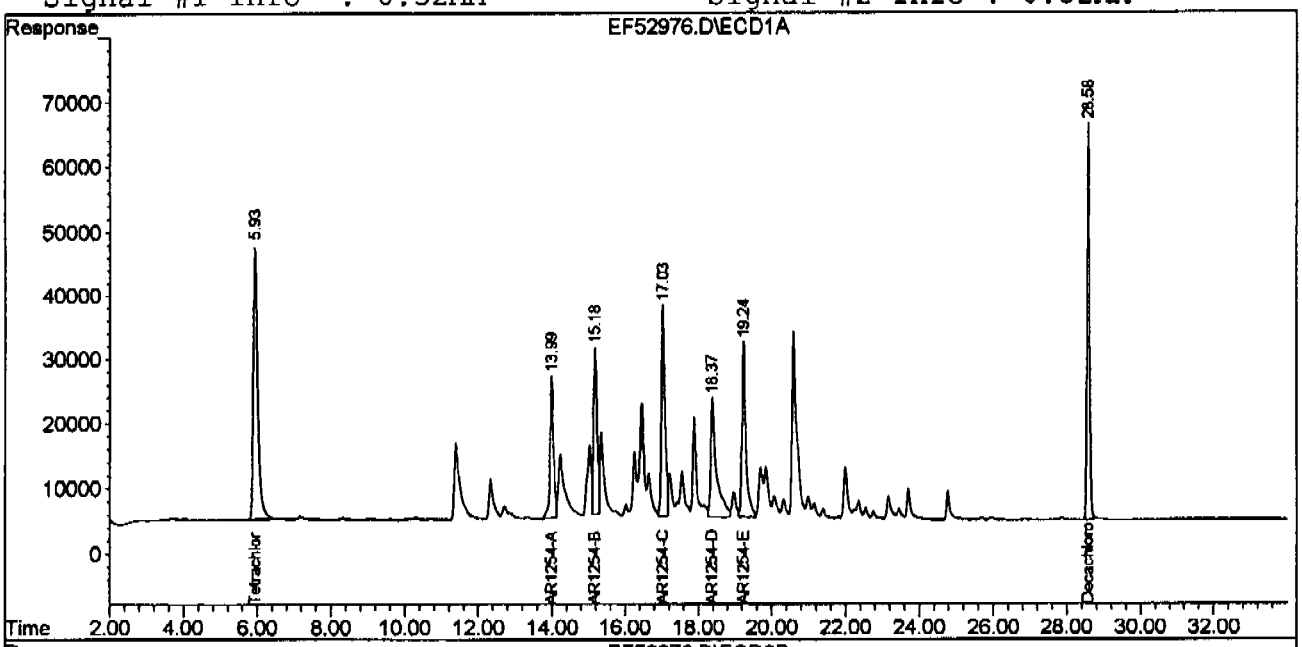
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

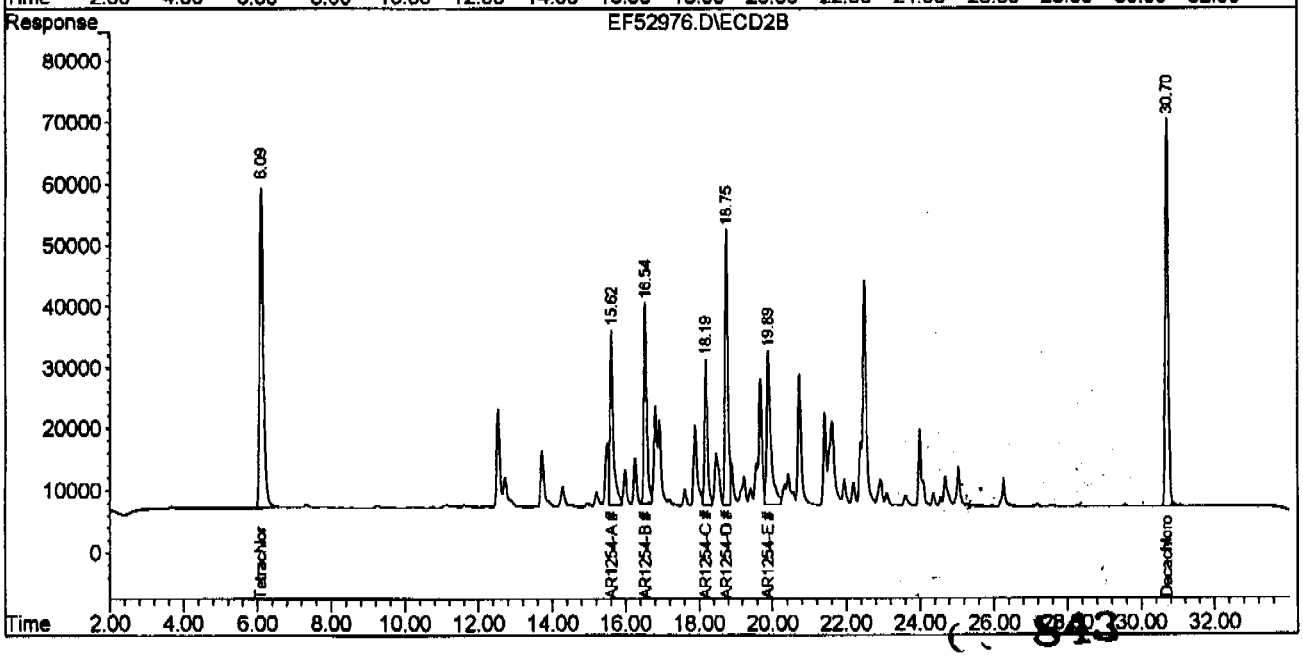
Quantitation Report

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

844

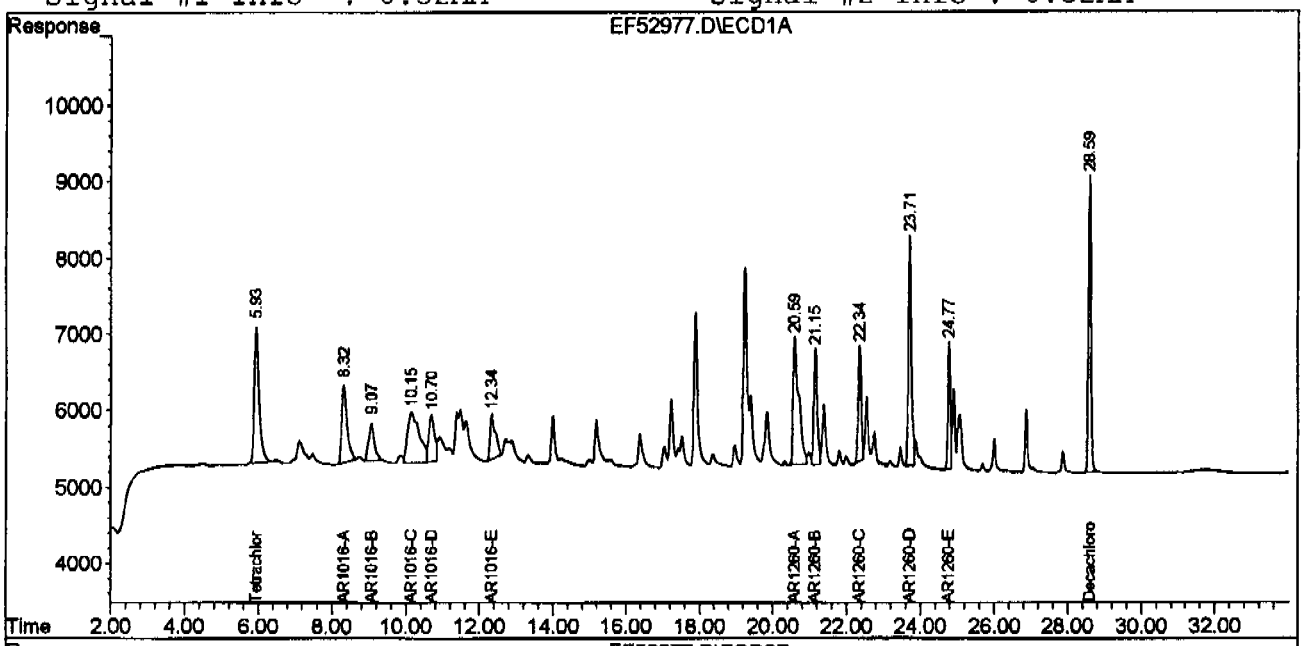
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

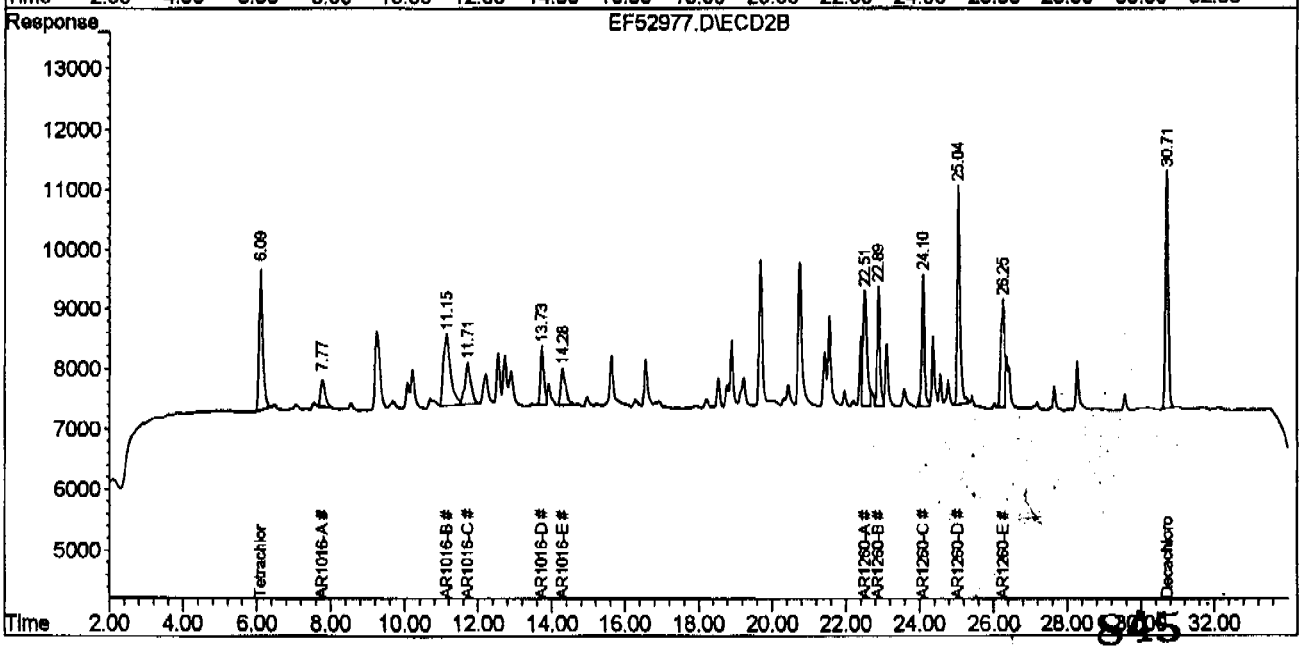
Quantitation Report

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

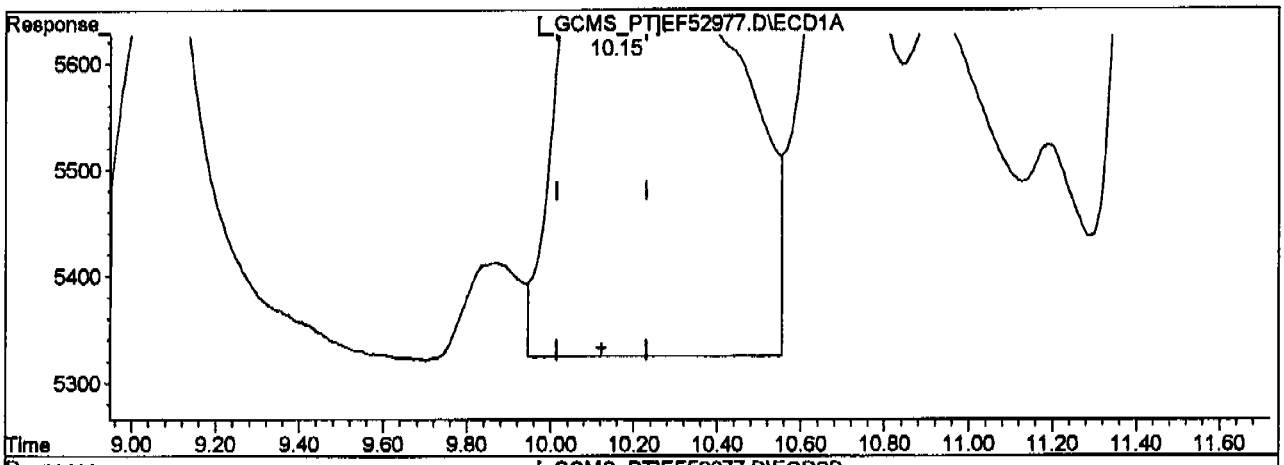


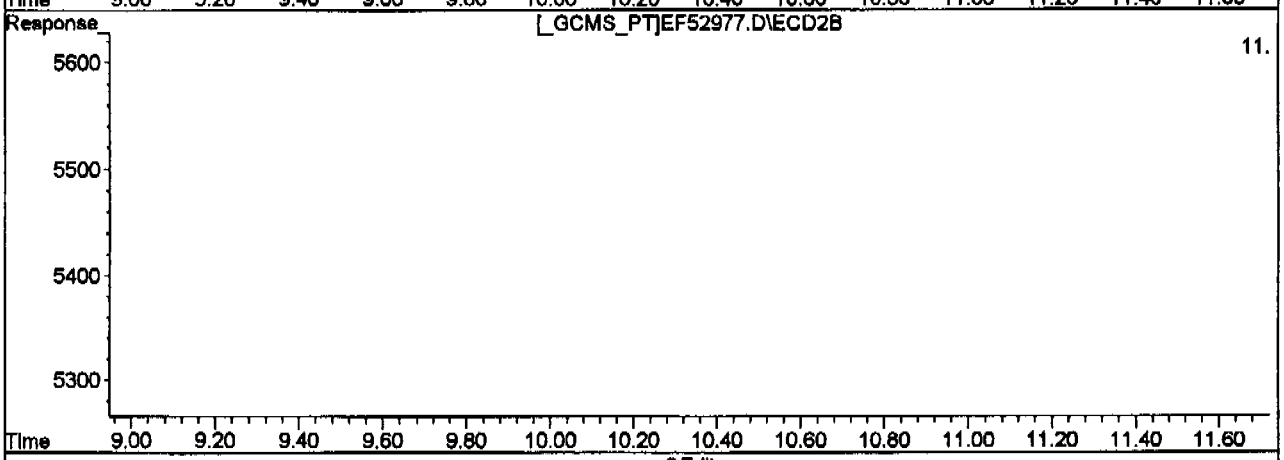


Quantitation Report

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

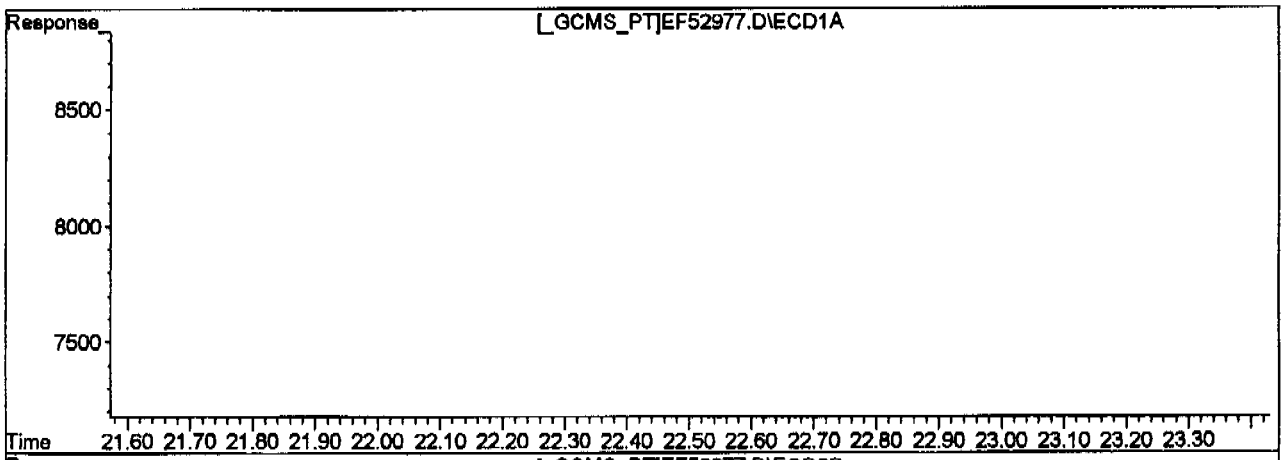
(+) = Expected Retention Time

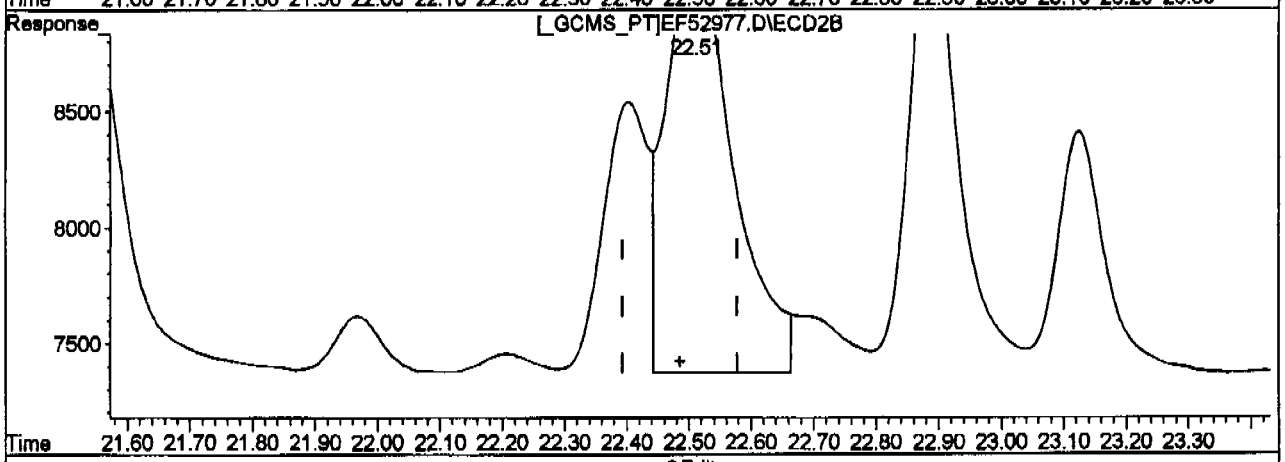
ef52977.D GEF2562.M Tue Jul 27 09:11:09 2004 RPT1

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

847

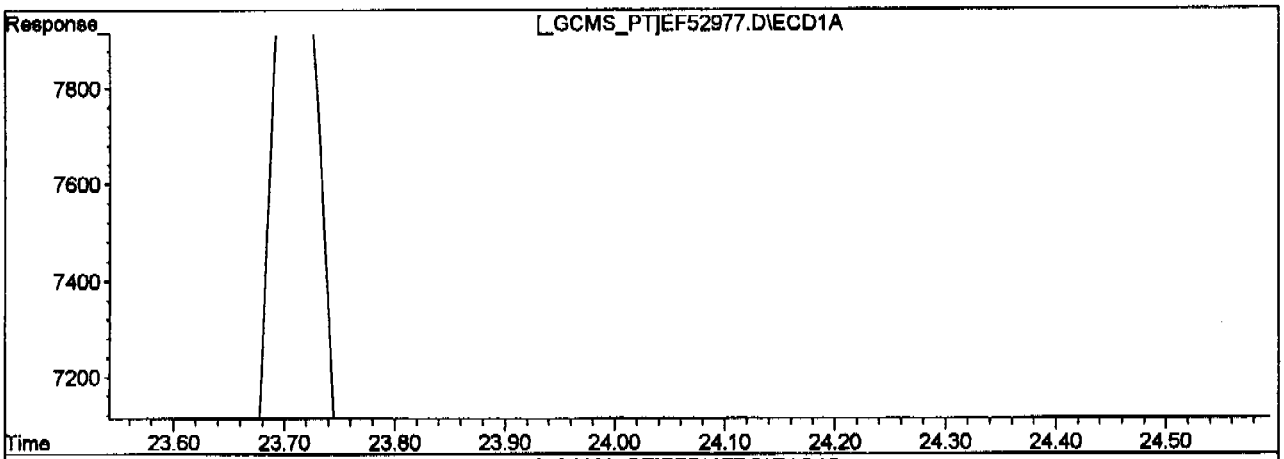
(+) = Expected Retention Time

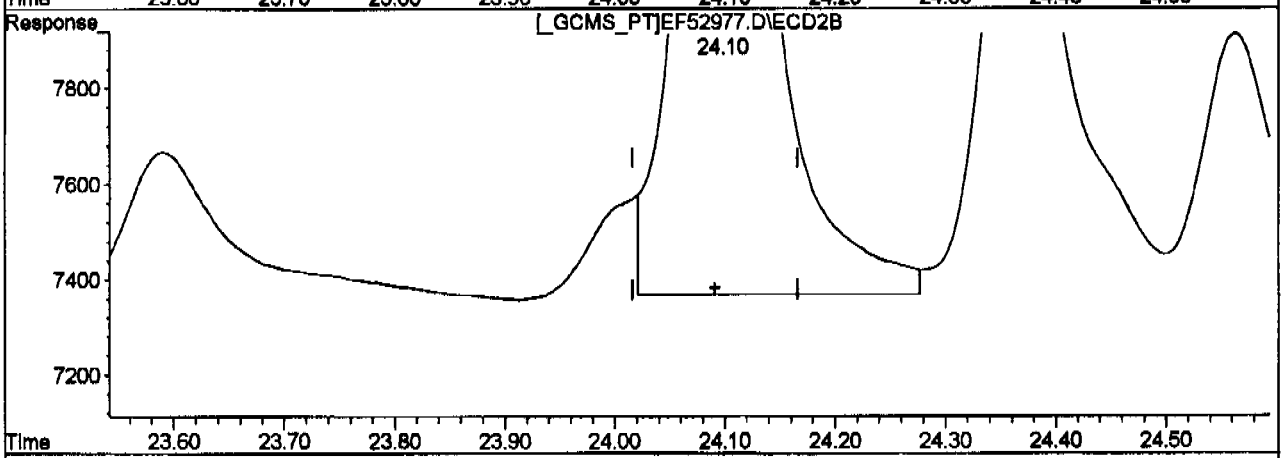
ef52977.D GEF2562.M Tue Jul 27 09:08:04 2004 RPT1

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

(34) AR1260-C

22.35min 57.507PPB

response 84372

(34) AR1260-C #2

24.10min 69.374PPB m

response 107507

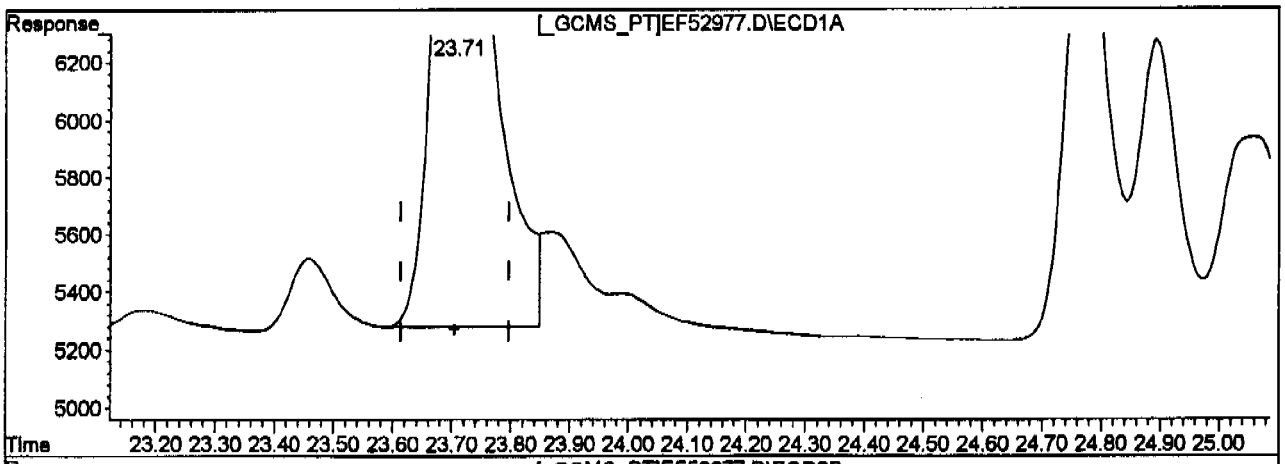
(+) = Expected Retention Time

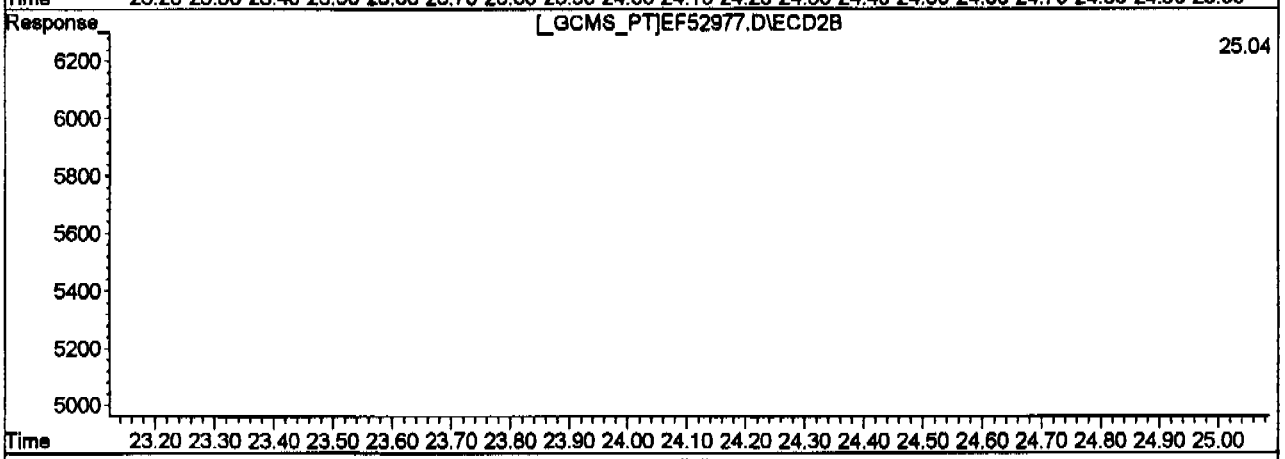
ef52977.D GEF2562.M Tue Jul 27 09:07:24 2004 RPT1

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

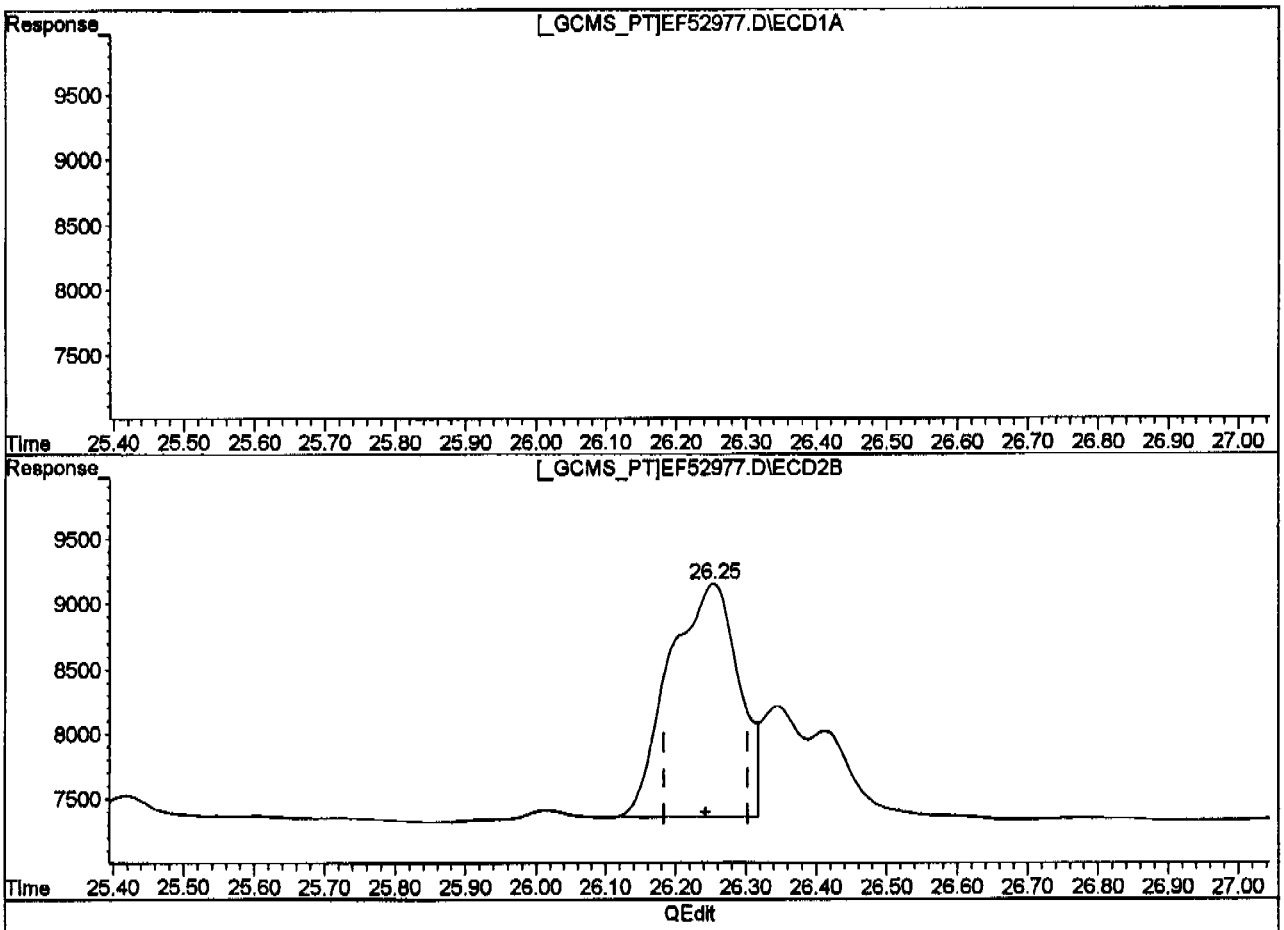
(+) = Expected Retention Time

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

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52977.D\ECD1A.CH 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



(36) AR1260-E

24.77min 55.872PPB

response 78564

(36) AR1260-E #2

26.25min 57.758PPB m

response 124121

850

(+) = Expected Retention Time

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

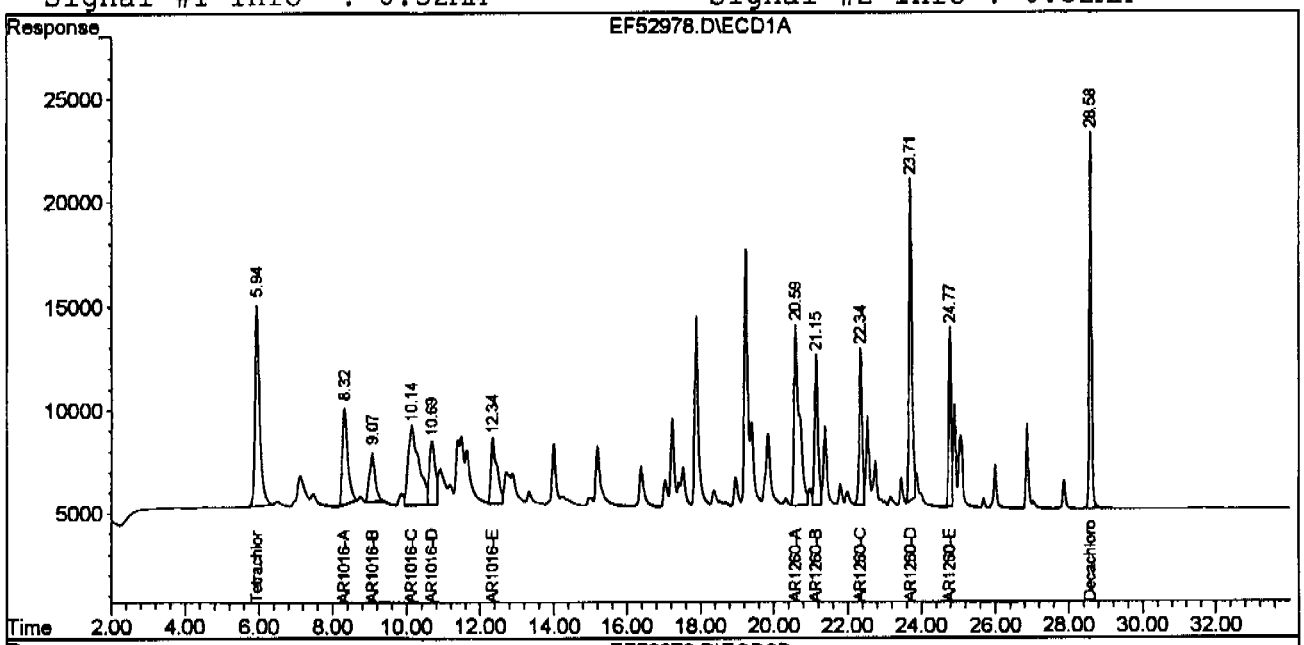
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

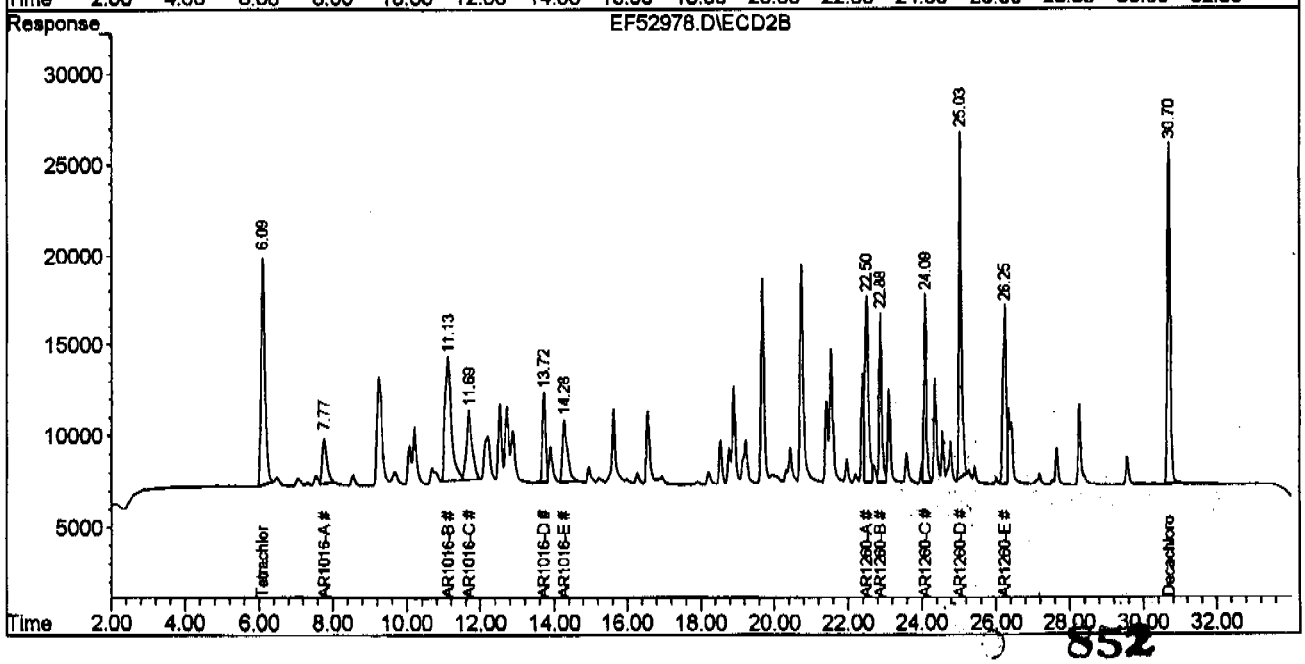
Quantitation Report

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



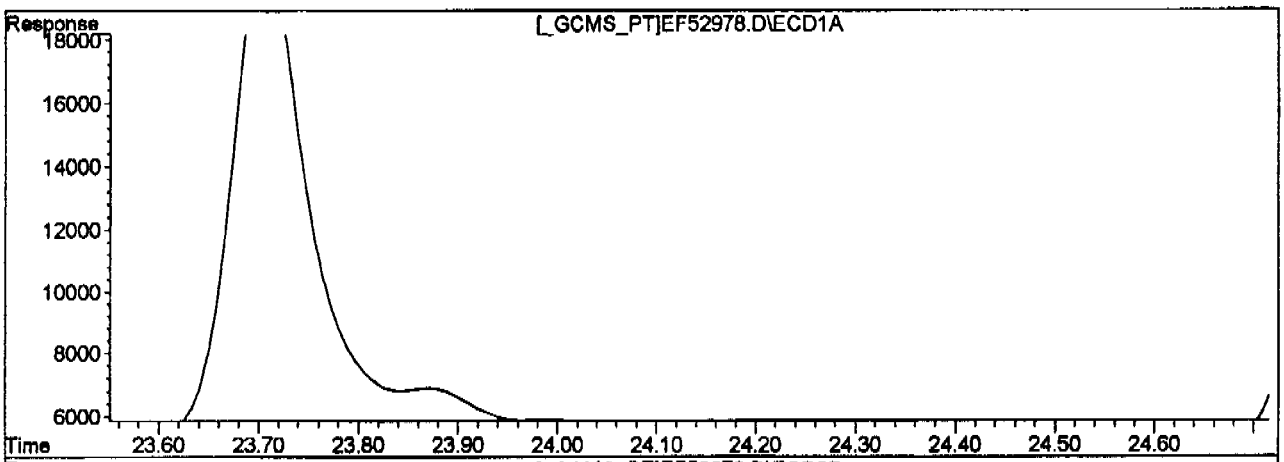


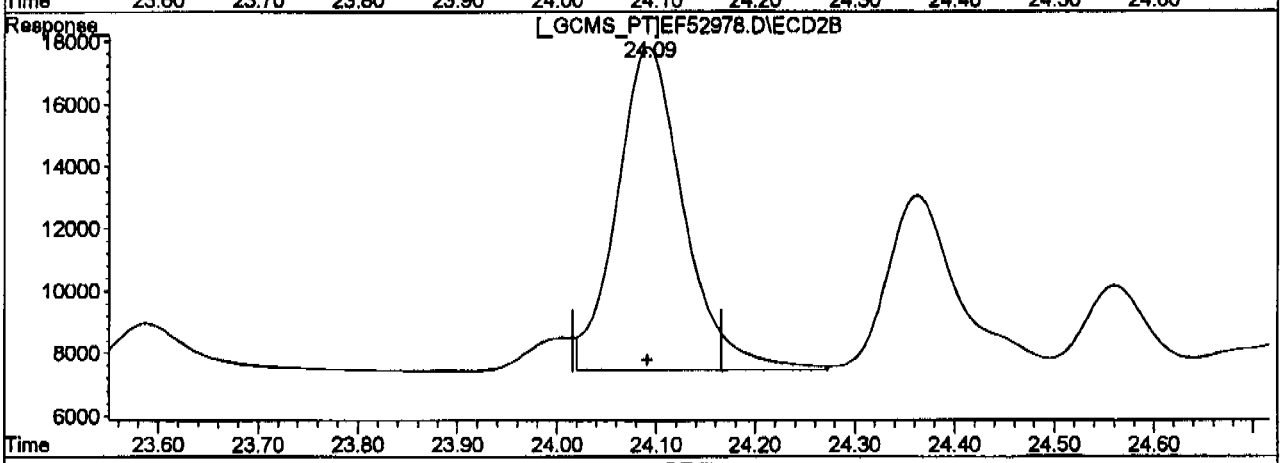
852

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

ef52978.D GEF2562.M Tue Jul 27 09:03:12 2004 RPT1

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

OA
72707

854

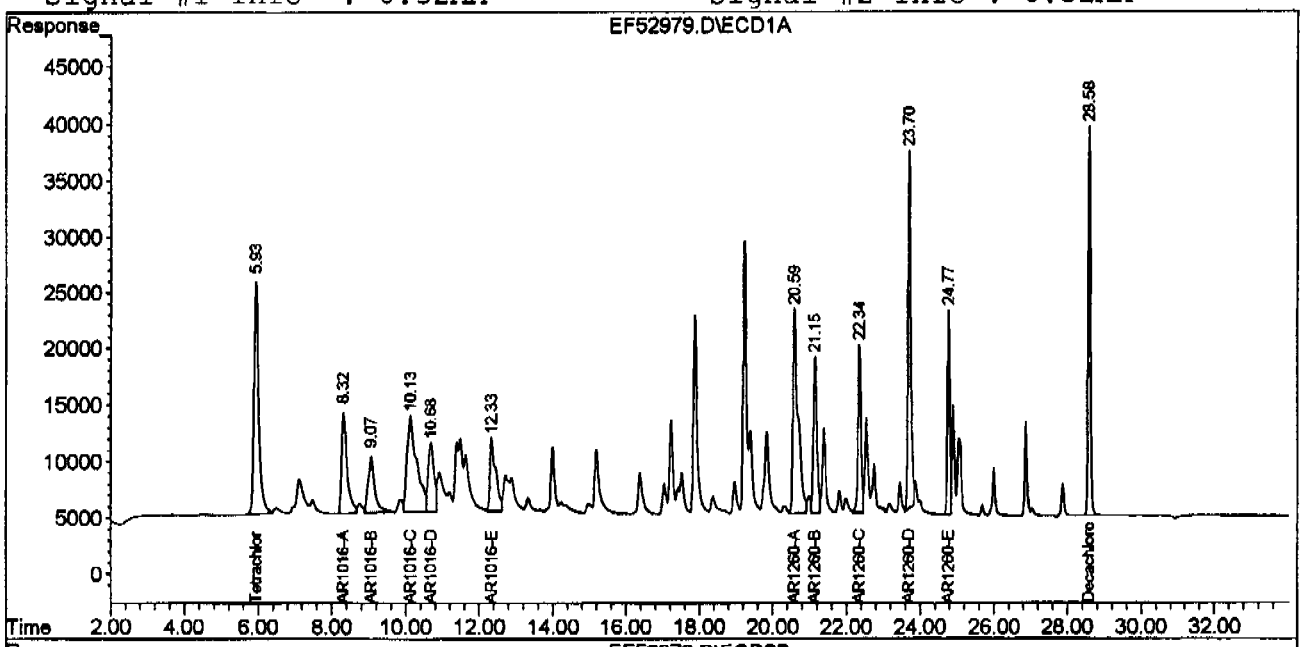
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

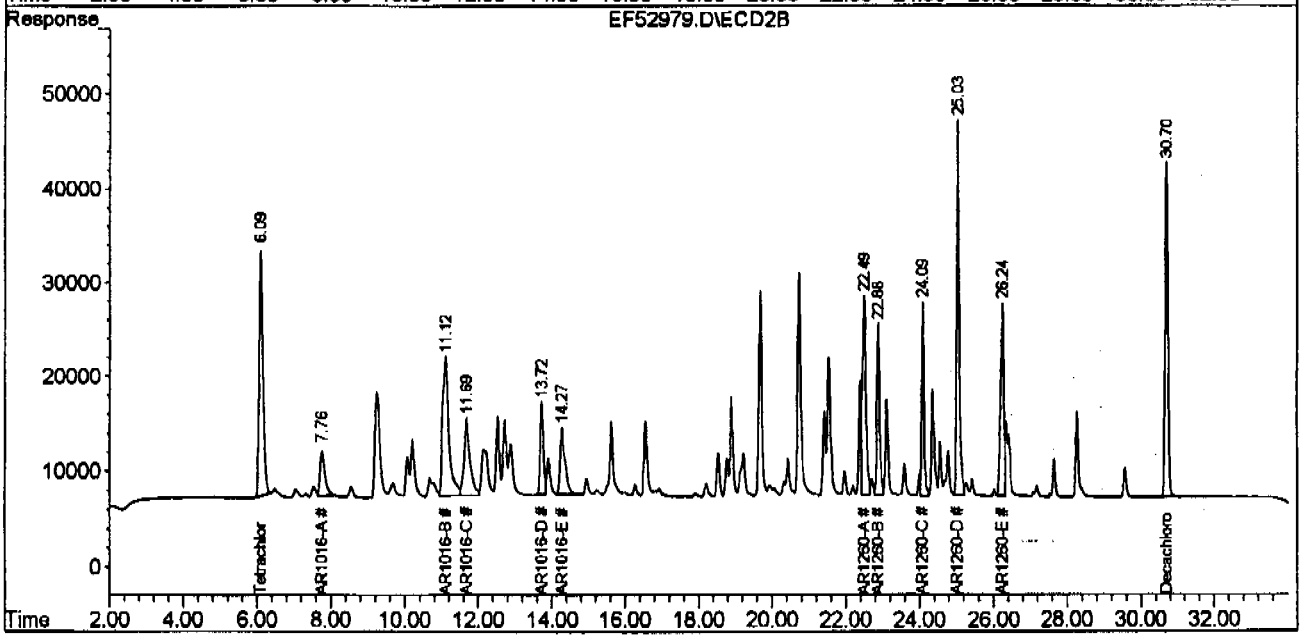
Quantitation Report

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

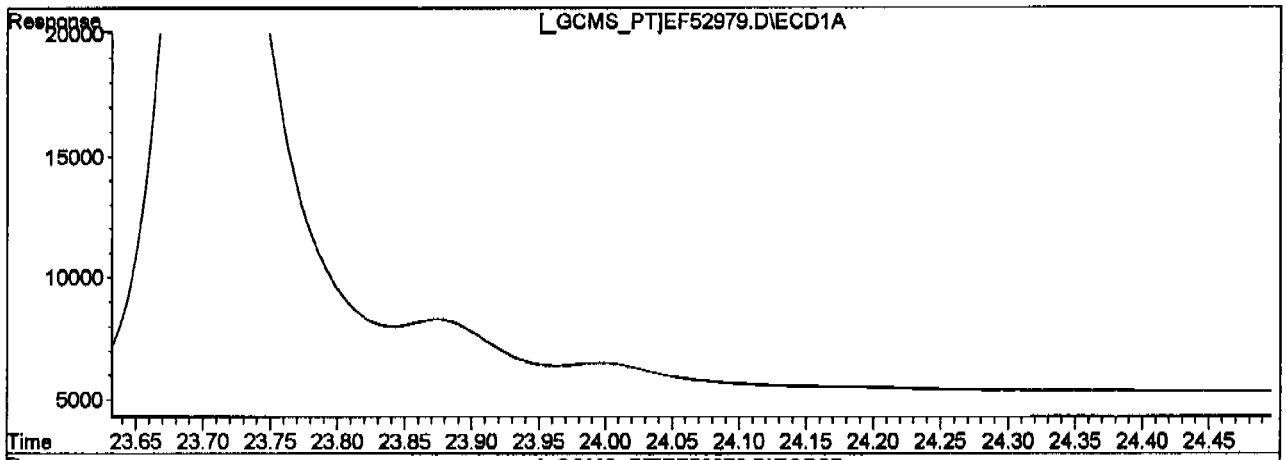


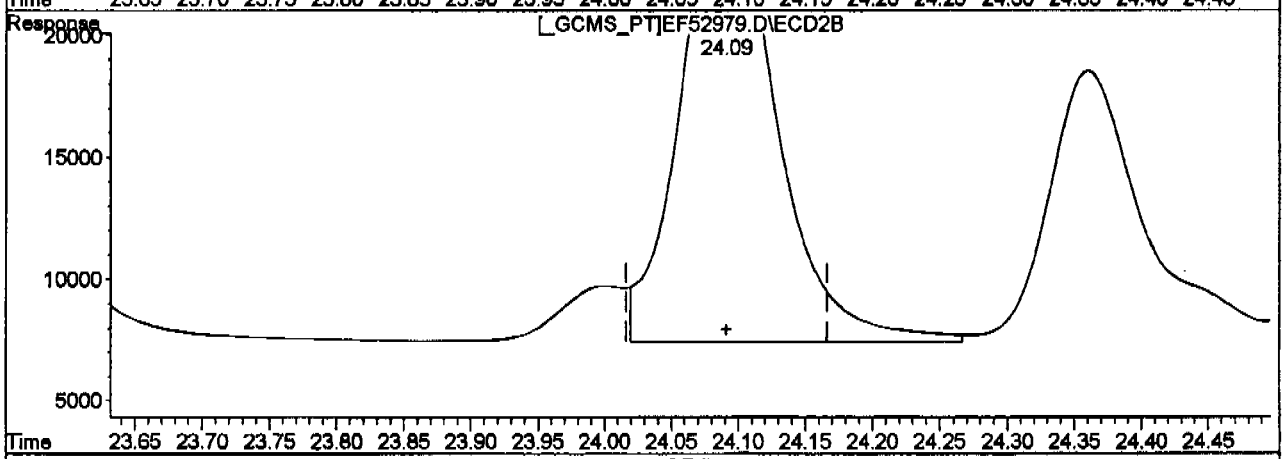


Quantitation Report

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

856

(+) = 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

QA
72704

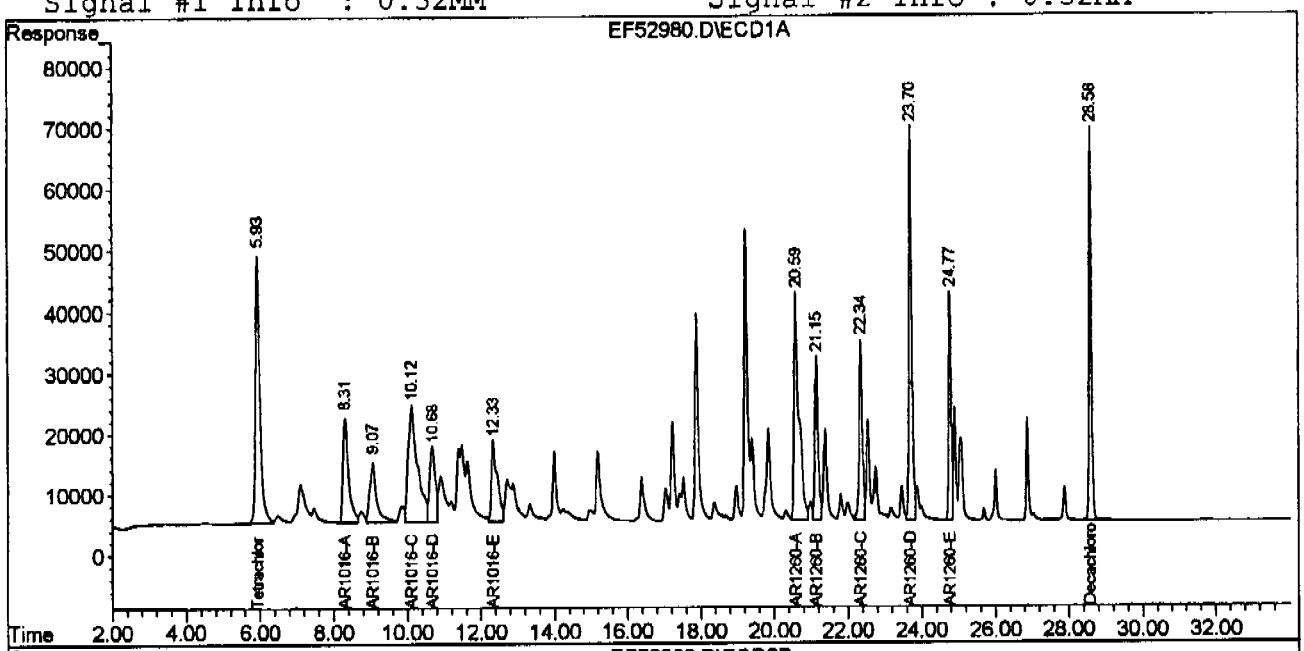
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

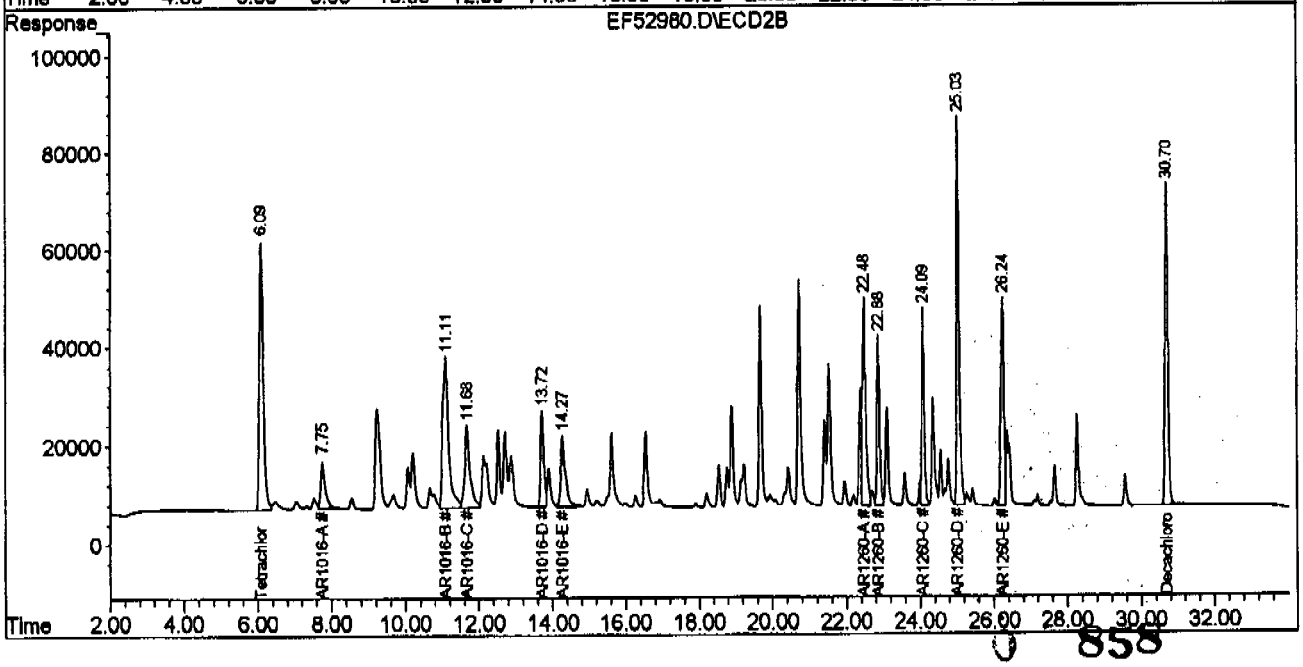
Quantitation Report

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

859

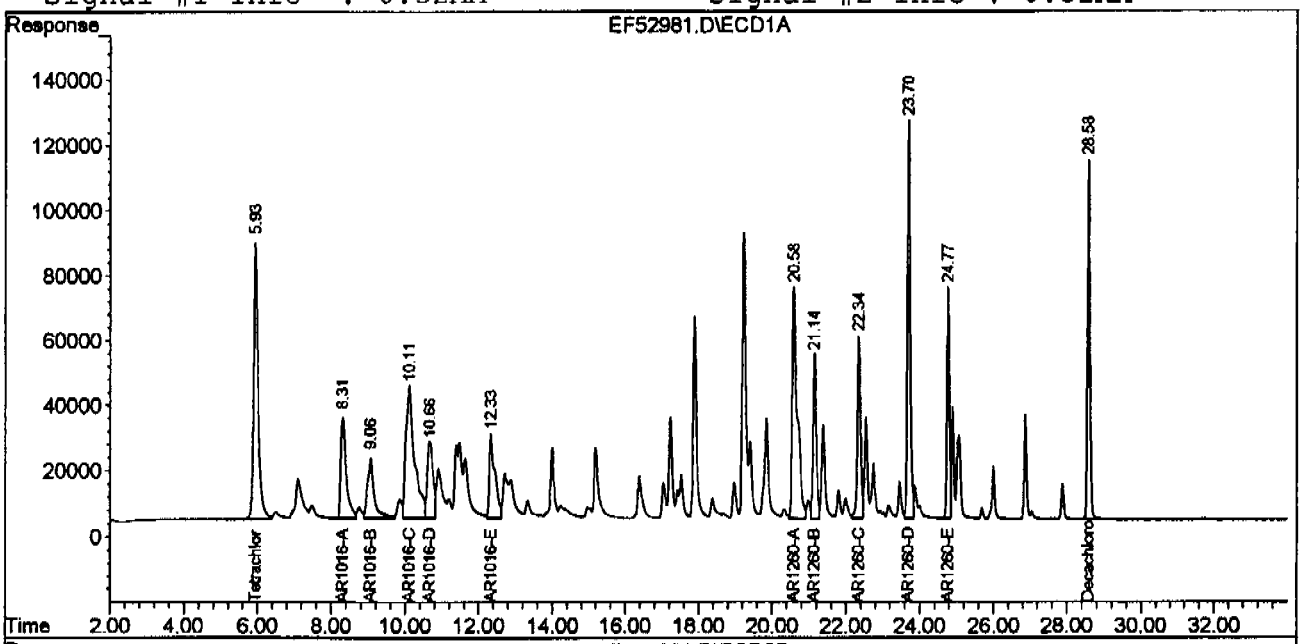
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

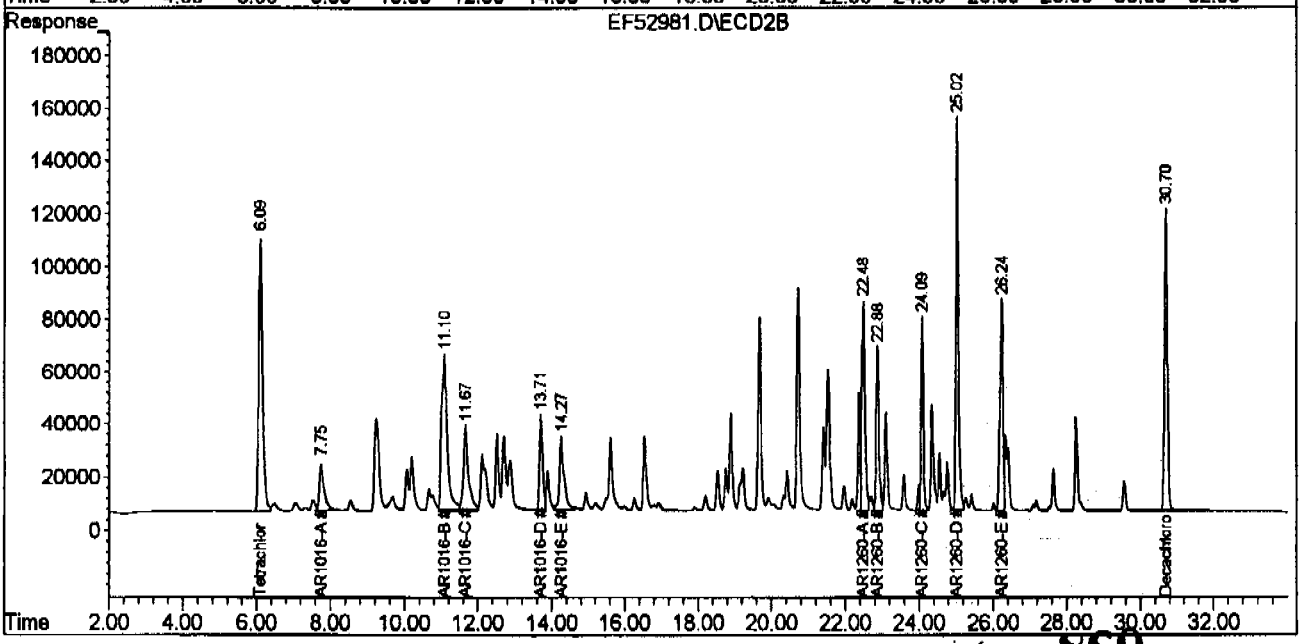
Quantitation Report

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





860

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

861

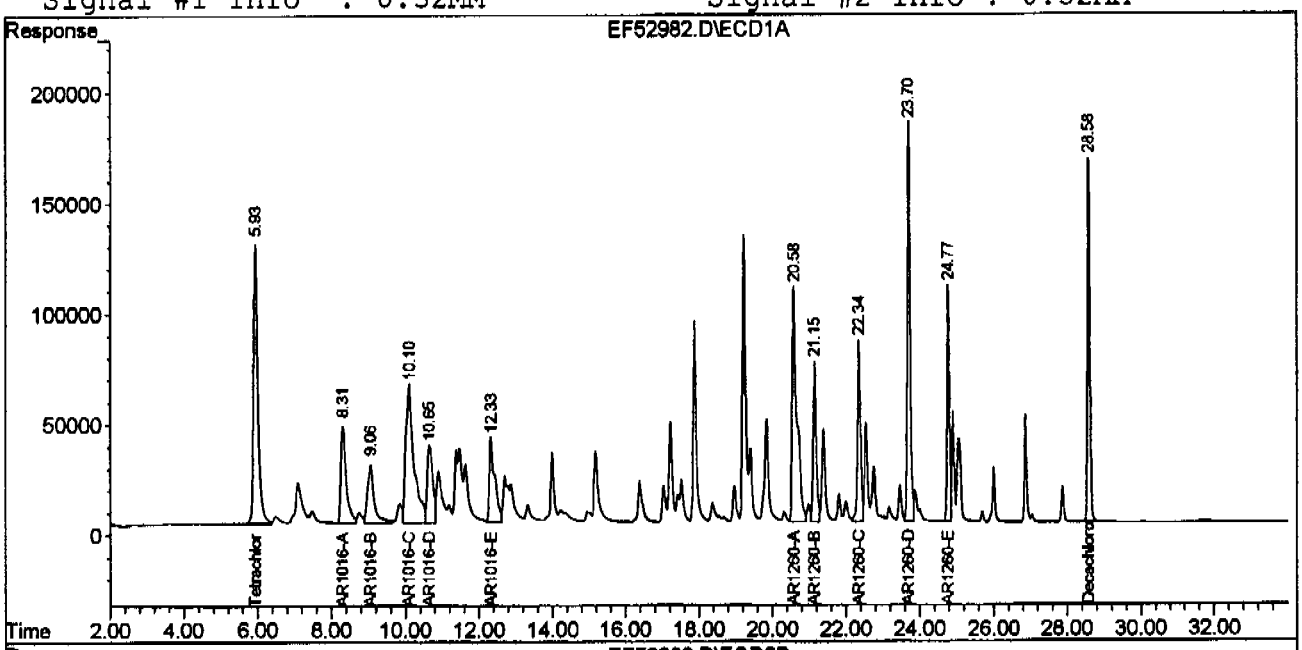
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

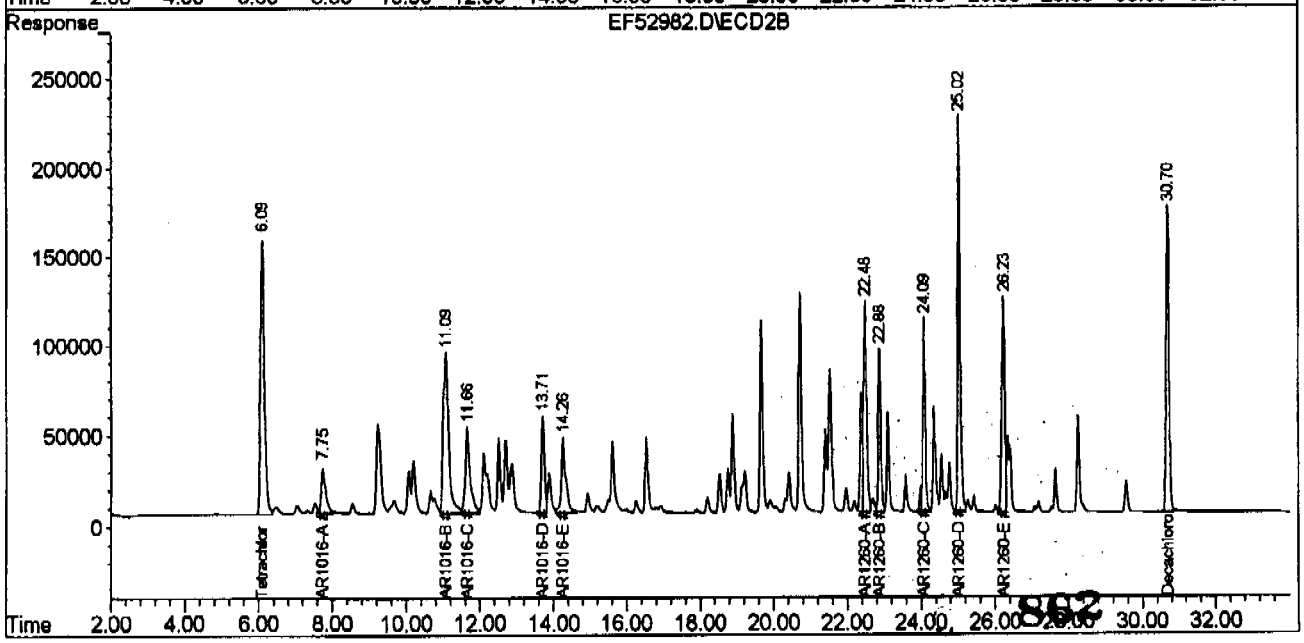
Quantitation Report

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

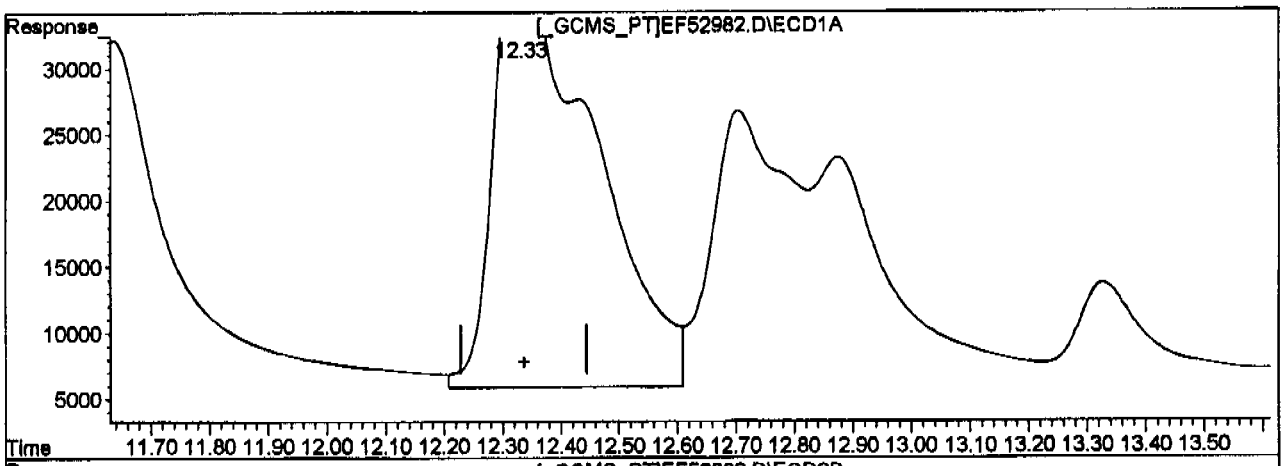


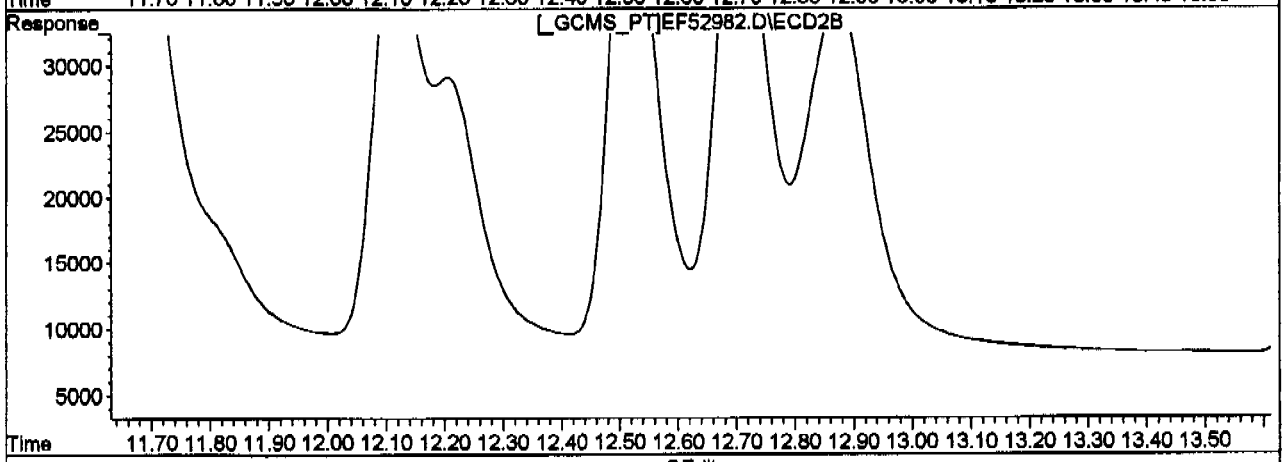


Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef52982.D\ECD1A.CH 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 8:54 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

(31) AR1016-E

12.33min 3181.747PPB m

response 3955709

(31) AR1016-E #2

14.26min 3320.854PPB

response 3600131

863

(+) = Expected Retention Time

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2578-CC2562
Lab FileID: EF53492.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef53492.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef53492.D\ECD2B.CH
Acq On : 17 Aug 2004 2:19 pm Operator: olgaa
Sample : CC2562-1000 Inst : GCEF
Misc : OP17610,GEF2578,5.5,,,5,1 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 : Mon Aug 16 11:31:31 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	37.406 E3	-6.4	101	-0.02	5.82- 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	1.804 E3	-1.5	100	-0.02	8.19- 8.40
31		AR1016-B	1.140	1.179 E3	-3.4	91	-0.02	8.96- 9.14
32		AR1016-C	3.133	3.404 E3	-8.6	102	-0.02	9.99-10.22
33		AR1016-D	1.334	1.372 E3	-2.8	99	-0.02	10.52-10.80
34		AR1016-E	1.355	1.419 E3	-4.7	96	-0.02	12.22-12.42
35		AR1260-A	3.457	3.663 E3	-6.0	103	0.00	20.50-20.67
36		AR1260-B	1.651	1.689 E3	-2.3	102	0.00	21.06-21.23
37		AR1260-C	1.688	1.783 E3	-5.6	102	0.00	22.27-22.42
38		AR1260-D	3.225	3.393 E3	-5.2	101	0.00	23.65-23.77
39		AR1260-E	1.624	1.810 E3	-11.5	107	0.00	24.71-24.85
40		AR1262-A		----------NA----------				
41		AR1262-B		----------NA----------				

Continuing Calibration Summary

Job Number: N74914 **Sample:** GEF2578-CC2562
Account: ENSRMAA ENSR Consulting & Engineering **Lab FileID:** EF53492.D
Project: Former Camp Butner, NC

42		AR1262-C			----------NA----------				
43		AR1262-D			----------NA----------				
44		AR1262-E			----------NA----------				
45		AR1268-A			----------NA----------				
46		AR1268-B			----------NA----------				
47		AR1268-C			----------NA----------				
48		AR1268-D			----------NA----------				
49		AR1268-E			----------NA----------				
50	S	Decachlorobiphenyl	30.507	31.679	E3	-3.8	106	0.02	28.56-28.65

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

1	S	Tetrachloro-m-xylene	36.823	41.417	E3	-12.5	106	-0.02	6.00- 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	865.340		-10.0	105	-0.03	7.64- 7.82
31		AR1016-B	3.247	3.624	E3	-11.6	106	-0.02	11.00-11.17
32		AR1016-C	1.583	1.728	E3	-9.2	103	-0.02	11.56-11.75
33		AR1016-D	1093.148	1161.457		-6.2	105	-0.02	13.63-13.77
34		AR1016-E	1.226	1.294	E3	-5.5	100	-0.02	14.16-14.34
35		AR1260-A	2.574	2.802	E3	-8.9	107	0.00	22.40-22.56
36		AR1260-B	1.789	1.861	E3	-4.0	107	0.00	22.81-22.94
37		AR1260-C	1.828	1.922	E3	-5.1	107	0.00	24.04-24.14
38		AR1260-D	3.513	3.840	E3	-9.3	108	0.00	24.98-25.08
39		AR1260-E	2.432	2.714	E3	-11.6	108	0.00	26.20-26.30
40		AR1262-A			----------NA----------				
41		AR1262-B			----------NA----------				
42		AR1262-C			----------NA----------				
43		AR1262-D			----------NA----------				
44		AR1262-E			----------NA----------				
45		AR1268-A			----------NA----------				
46		AR1268-B			----------NA----------				
47		AR1268-C			----------NA----------				
48		AR1268-D			----------NA----------				

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2578-CC2562
Lab FileID: EF53492.D

```
49      AR1268-E                              ----------NA----------
50 S    Decachlorobiphenyl       35.626  38.148 E3  -7.1  108   0.01   30.69-30.76
-----------------------------------------------------------------------------------

                                                  Average % D =   6.8

 (  0.0 %)  0 of  24 compounds'%D > 15
-----------------------------------------------------------------------------------

   (#) = Out of Range                 SPCC's out = 0  CCC's out = 0
    ef52980.D  GEF2562.M          Tue Aug 17 15:00:37 2004   RPT1
```

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53492.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef53492.D\ECD2B.CH
Acq On : 17 Aug 2004 2:19 pm Operator: olgaa
Sample : CC2562-1000 Inst : GCEF
Misc : OP17610,GEF2578,5.5,,,5,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 17 14:59 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	5.91	6.07	3740557	4141682	106.410	112.476
Spiked Amount 40.000			Recovery	=	266.03%	281.19%
50) S Decachlorobiphen	28.60	30.72	3167898	3814844	103.842	107.081
Spiked Amount 40.000			Recovery	=	259.61%	267.70%
Target Compounds						
30) AR1016-A	8.30	7.73	1803849	865340	1015.370	1100.132
31) AR1016-B	9.05	11.09	1179210	3623698	1034.428	1115.930
32) AR1016-C	10.10	11.65	3403726	1727900	1086.474	1091.630
33) AR1016-D	10.66	13.70	1371975	1161457	1028.780	1062.489
34) AR1016-E	12.32	14.25	1418713	1293878	1046.764	1055.342
35) AR1260-A	20.58	22.48	3662786	2802342	1059.577	1088.859
36) AR1260-B	21.15	22.88	1688770	1861364	1022.612	1040.511
37) AR1260-C	22.34	24.09	1783493	1922297	1056.327	1051.795
38) AR1260-D	23.71	25.03	3392918	3840047	1052.195	1092.995
39) AR1260-E	24.78	26.25	1809528	2713573	1113.986	1115.931

OA
8/18/04

867

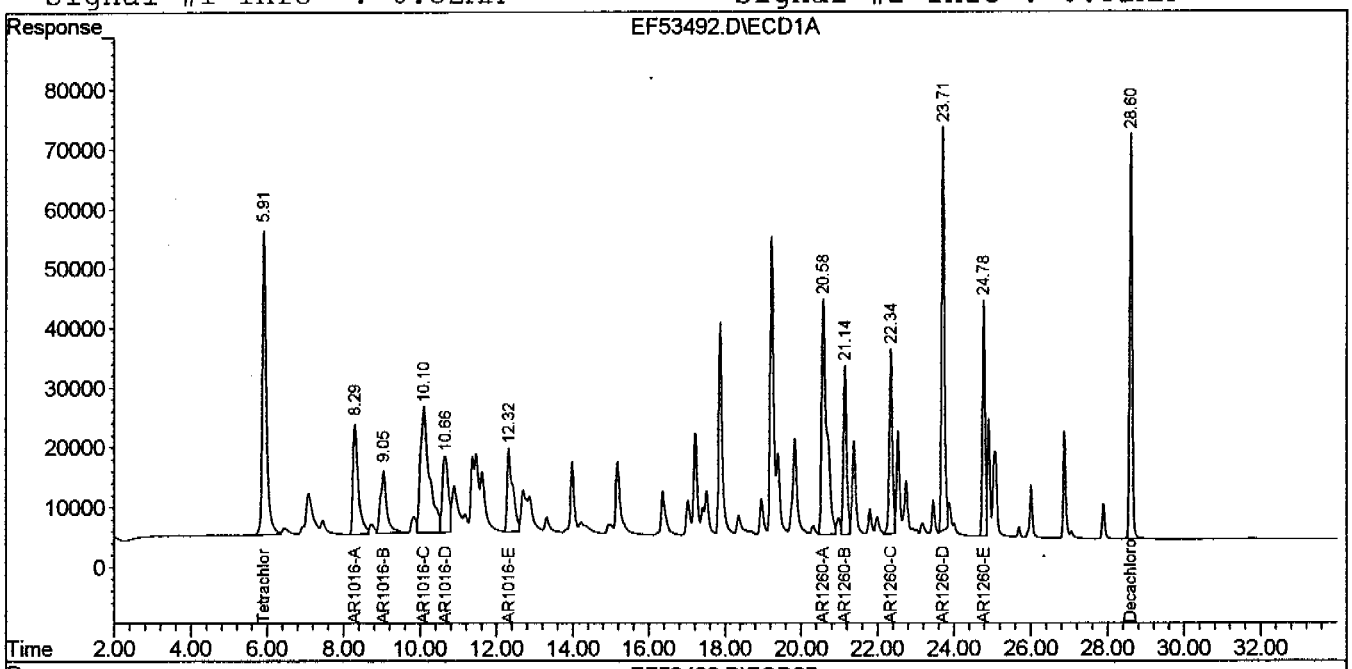
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

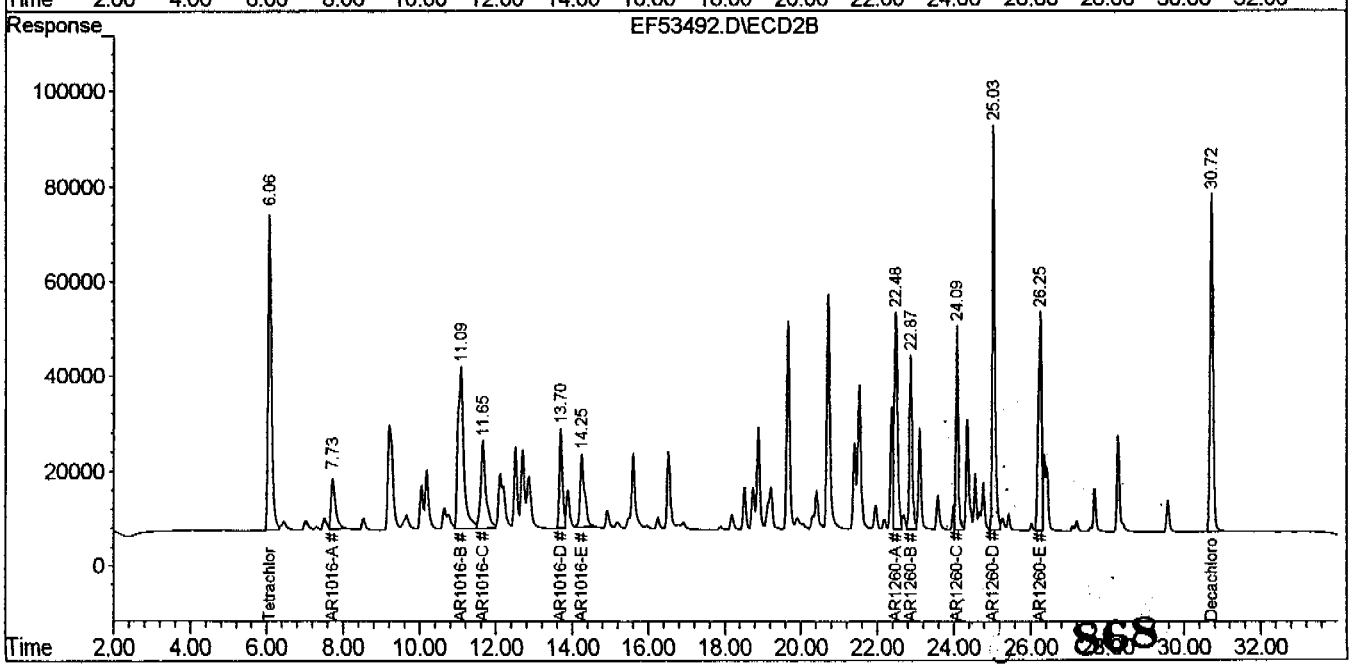
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53492.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\ef53492.D\ECD2B.CH
Acq On : 17 Aug 2004 2:19 pm Operator: olgaa
Sample : CC2562-1000 Inst : GCEF
Misc : OP17610,GEF2578,5.5,,,5,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 17 14:59 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





868

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2578-CC2562
Lab FileID: EF53504.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef53504.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef53504.D\ECD2B.CH
Acq On : 17 Aug 2004 11:07 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17704,GEF2578,960,,,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 : Wed Aug 18 09:08:06 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	37.116 E3	-5.6	105	0.00	5.81- 5.98
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	1.987 E3	-11.8	104	0.00	8.17- 8.38
31		AR1016-B	1.140	1.102 E3	3.3	90	0.00	8.94- 9.12
32		AR1016-C	3.133	3.456 E3	-10.3	111	0.00	9.98-10.20
33		AR1016-D	1.334	1.475 E3	-10.6	109	0.00	10.51-10.78
34		AR1016-E	1.355	1.518 E3	-12.0	109	0.00	12.20-12.39
35		AR1260-A	3.457	3.823 E3	-10.6	108	0.00	20.48-20.65
36		AR1260-B	1.651	1.837 E3	-11.3	108	0.00	21.04-21.21
37		AR1260-C	1.688	1.829 E3	-8.4	105	0.00	22.25-22.40
38		AR1260-D	3.225	3.564 E3	-10.5	110	0.00	23.63-23.76
39		AR1260-E	1.624	1.815 E3	-11.8	109	0.00	24.70-24.83
40		AR1262-A		----------NA----------				
41		AR1262-B		----------NA----------				

869

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC
Sample: GEF2578-CC2562
Lab FileID: EF53504.D

42		AR1262-C		----------NA----------				
43		AR1262-D		----------NA----------				
44		AR1262-E		----------NA----------				
45		AR1268-A		----------NA----------				
46		AR1268-B		----------NA----------				
47		AR1268-C		----------NA----------				
48		AR1268-D		----------NA----------				
49		AR1268-E		----------NA----------				
50	S	Decachlorobiphenyl	30.507	33.416 E3	-9.5	105	0.00	28.54-28.63

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

1	S	Tetrachloro-m-xylene	36.823	40.182 E3	-9.1	109	0.00	5.99- 6.12
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	872.442	-10.9	104	0.00	7.64- 7.81
31		AR1016-B	3.247	3.548 E3	-9.3	104	0.00	11.00-11.17
32		AR1016-C	1.583	1.736 E3	-9.7	100	0.00	11.55-11.75
33		AR1016-D	1093.148	1217.982	-11.4	107	0.00	13.61-13.75
34		AR1016-E	1.226	1.274 E3	-3.9	99	0.00	14.15-14.32
35		AR1260-A	2.574	2.896 E3	-12.5	109	0.00	22.39-22.55
36		AR1260-B	1.789	1.982 E3	-10.8	108	0.00	22.80-22.92
37		AR1260-C	1.828	1.992 E3	-9.0	105	0.00	24.03-24.12
38		AR1260-D	3.513	3.850 E3	-9.6	105	0.00	24.97-25.08
39		AR1260-E	2.432	2.766 E3	-13.7	110	0.00	26.19-26.29
40		AR1262-A		----------NA----------				
41		AR1262-B		----------NA----------				
42		AR1262-C		----------NA----------				
43		AR1262-D		----------NA----------				
44		AR1262-E		----------NA----------				
45		AR1268-A		----------NA----------				
46		AR1268-B		----------NA----------				
47		AR1268-C		----------NA----------				
48		AR1268-D		----------NA----------				

870

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2578-CC2562
Lab FileID: EF53504.D

```
49      AR1268-E                                  ----------NA----------
50 S    Decachlorobiphenyl        35.626  39.931 E3 -12.1  109    0.00    30.67-30.74
-----------------------------------------------------------------------------------

                                                   Average % D =    9.9

 (  0.0 %)  0 of  24 compounds'%D > 15
-----------------------------------------------------------------------------------

   (#) = Out of Range                 SPCC's out = 0  CCC's out = 0
    ef52979.D  GEF2562.M          Wed Aug 18 09:10:28 2004   RPT1
```

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53504.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef53504.D\ECD2B.CH
Acq On : 17 Aug 2004 11:07 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17704,GEF2578,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 9:09 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	5.89	6.05	1855776	2009121	52.792	54.562
Spiked Amount 40.000			Recovery	=	131.98%	136.41%
50) S Decachlorobiphen	28.59	30.71	1670825	1996525	54.769	56.042
Spiked Amount 40.000			Recovery	=	136.92%	140.11%
Target Compounds						
30) AR1016-A	8.28	7.72	993723	436221	559.358	554.581
31) AR1016-B	9.03	11.08	550850	1774081	483.217	546.334
32) AR1016-C	10.09	11.65	1728119	868236	551.618	548.523
33) AR1016-D	10.65	13.68	737406	608991	552.947	557.098
34) AR1016-E	12.30	14.24	758785	636896	559.852	519.480
35) AR1260-A	20.56	22.47	1911563	1448093	552.980	562.661
36) AR1260-B	21.12	22.86	918685	990931	556.298	553.935
37) AR1260-C	22.33	24.08	914287	995929	541.514	544.928m
38) AR1260-D	23.69	25.02	1781832	1924944	552.573	547.898
39) AR1260-E	24.76	26.24	907548	1382904	558.707	568.707

OA
81804

872

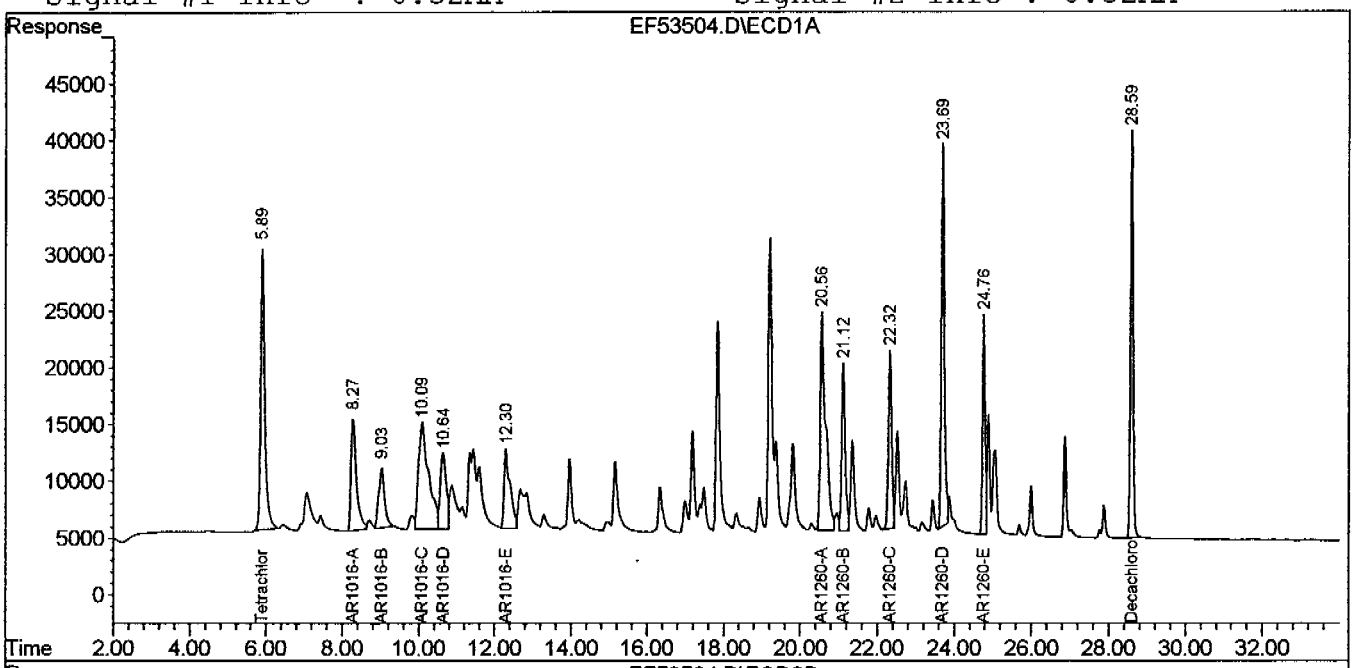
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

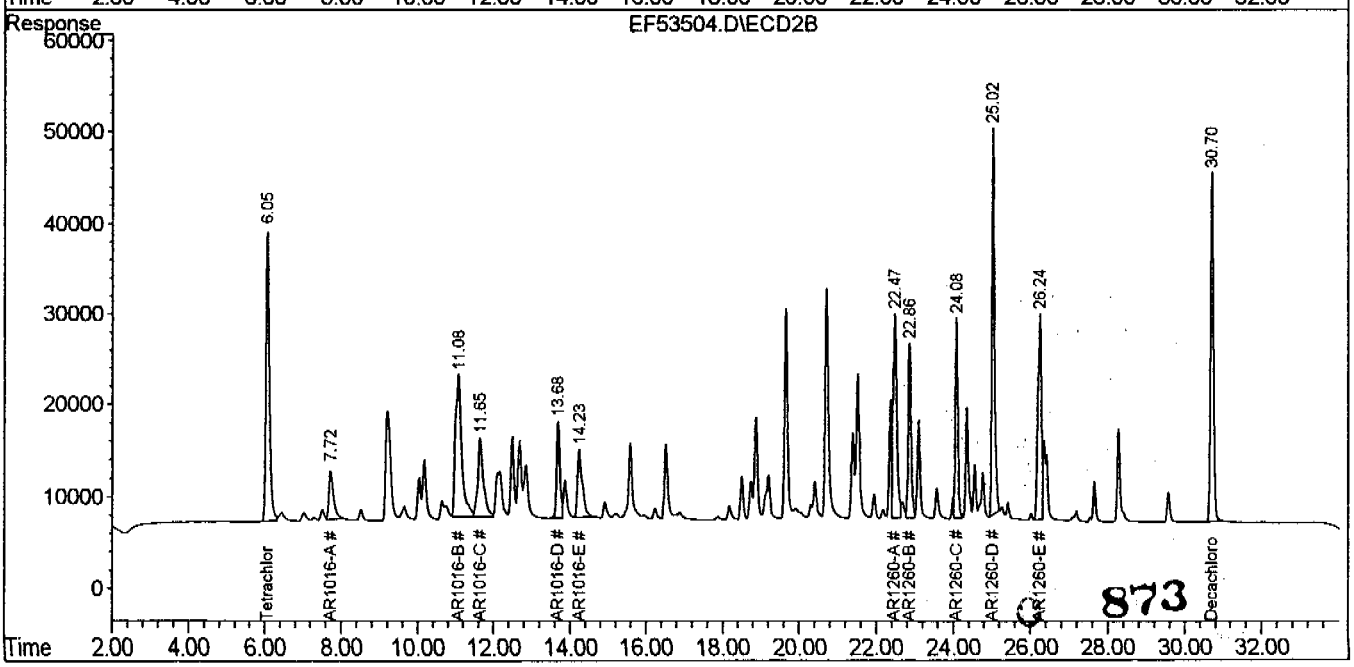
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53504.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef53504.D\ECD2B.CH
Acq On : 17 Aug 2004 11:07 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17704,GEF2578,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 9:09 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



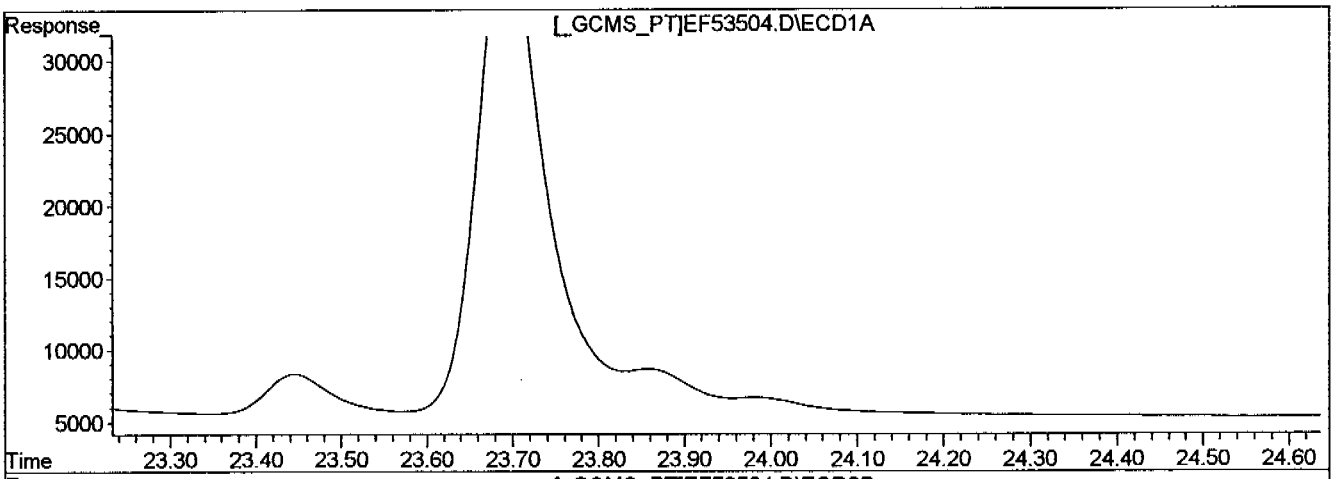


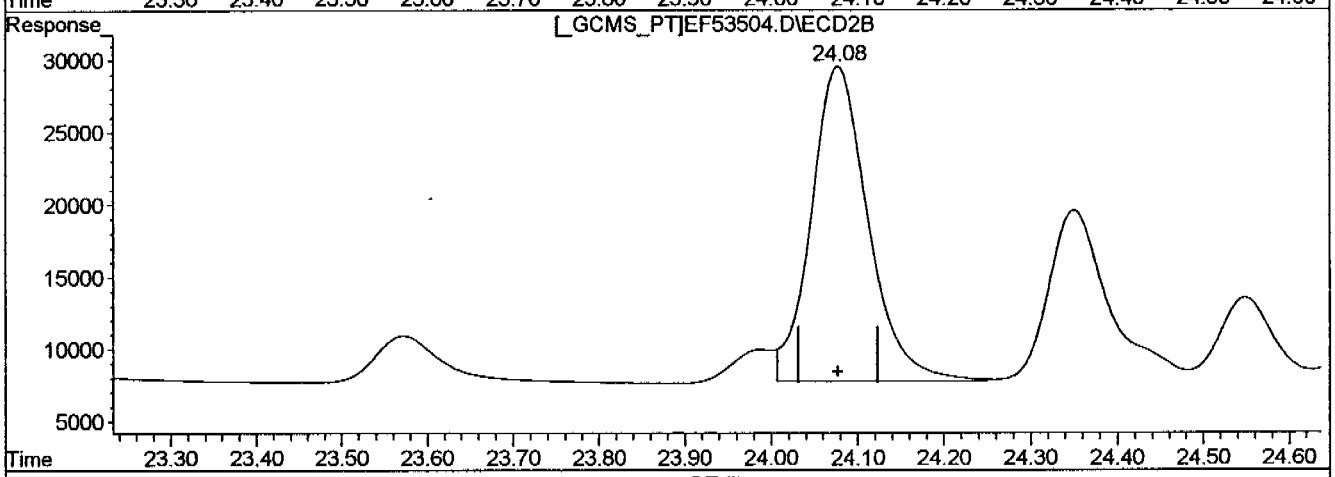
873

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53504.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\ef53504.D\ECD2B.CH
Acq On : 17 Aug 2004 11:07 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17704,GEF2578,960,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 9:08 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Wed Aug 18 09:08:06 2004
Response via : Multiple Level Calibration





QEdit

(37) AR1260-C

22.33min 541.514PPB

response 914287

(37) AR1260-C #2

24.08min 544.928PPB m

response 995929

874

(+) = Expected Retention Time

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2578-CC2562
Lab FileID: EF53516.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef53516.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\ef53516.D\ECD2B.CH
Acq On : 18 Aug 2004 8:34 am Operator: olgaa
Sample : CC2562-1000 Inst : GCEF
Misc : OP17610,GEF2578,5.2,,,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 : Wed Aug 18 09:08:06 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	37.447 E3	-6.5	102	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	1.795 E3	-1.0	100	0.02	8.19- 8.40
31		AR1016-B	1.140	1.174 E3	-3.0	91	0.02	8.97- 9.14
32		AR1016-C	3.133	3.301 E3	-5.4	99	0.02	9.99-10.22
33		AR1016-D	1.334	1.362 E3	-2.1	98	0.02	10.53-10.80
34		AR1016-E	1.355	1.406 E3	-3.8	95	0.02	12.22-12.41
35		AR1260-A	3.457	3.643 E3	-5.4	102	0.00	20.48-20.66
36		AR1260-B	1.651	1.696 E3	-2.7	103	0.00	21.04-21.22
37		AR1260-C	1.688	1.776 E3	-5.2	102	0.00	22.25-22.41
38		AR1260-D	3.225	3.383 E3	-4.9	101	0.00	23.63-23.76
39		AR1260-E	1.624	1.789 E3	-10.2	105	0.00	24.70-24.84
40		AR1262-A		----------NA----------				
41		AR1262-B		----------NA----------				

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2578-CC2562
Lab FileID: EF53516.D

42		AR1262-C			----------NA----------			
43		AR1262-D			----------NA----------			
44		AR1262-E			----------NA----------			
45		AR1268-A			----------NA----------			
46		AR1268-B			----------NA----------			
47		AR1268-C			----------NA----------			
48		AR1268-D			----------NA----------			
49		AR1268-E			----------NA----------			
50	S	Decachlorobiphenyl	30.507	31.433 E3	-3.0	105	0.00	28.55-28.64

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

1	S	Tetrachloro-m-xylene	36.823	40.823 E3	-10.9	104	0.02	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	843.442	-7.2	103	0.02	7.66- 7.83
31		AR1016-B	3.247	3.524 E3	-8.5	103	0.01	11.01-11.18
32		AR1016-C	1.583	1.702 E3	-7.5	102	0.01	11.57-11.76
33		AR1016-D	1093.148	1149.492	-5.2	104	0.02	13.63-13.77
34		AR1016-E	1.226	1.329 E3	-8.4	103	0.02	14.16-14.34
35		AR1260-A	2.574	2.794 E3	-8.5	107	0.00	22.39-22.55
36		AR1260-B	1.789	1.859 E3	-3.9	107	0.00	22.80-22.93
37		AR1260-C	1.828	1.948 E3	-6.6	108	0.00	24.03-24.13
38		AR1260-D	3.513	3.886 E3	-10.6	109	0.00	24.97-25.08
39		AR1260-E	2.432	2.715 E3	-11.6	108	0.00	26.19-26.30
40		AR1262-A			----------NA----------			
41		AR1262-B			----------NA----------			
42		AR1262-C			----------NA----------			
43		AR1262-D			----------NA----------			
44		AR1262-E			----------NA----------			
45		AR1268-A			----------NA----------			
46		AR1268-B			----------NA----------			
47		AR1268-C			----------NA----------			
48		AR1268-D			----------NA----------			

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2578-CC2562
Lab FileID: EF53516.D

```
49      AR1268-E                                  ----------NA----------
50 S    Decachlorobiphenyl        35.626  38.177 E3  -7.2  108   0.00   30.68-30.75
-----------------------------------------------------------------------------------

                                                   Average % D =   6.2

 (  0.0 %)  0 of  24 compounds'%D > 15
-----------------------------------------------------------------------------------

   (#) = Out of Range                 SPCC's out = 0  CCC's out = 0
    ef53504.D  GEF2562.M          Wed Aug 18 09:15:11 2004   RPT1
```

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53516.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\ef53516.D\ECD2B.CH
Acq On : 18 Aug 2004 8:34 am Operator: olgaa
Sample : CC2562-1000 Inst : GCEF
Misc : OP17610,GEF2578,5.2,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 9:14 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	3744742	4082282	106.529	110.863
Spiked Amount 40.000			Recovery	=	266.32%	277.16%
50) S Decachlorobiphen	28.59	30.71	3143305	3817695	103.036	107.161
Spiked Amount 40.000			Recovery	=	257.59%	267.90%
Target Compounds						
30) AR1016-A	8.30	7.74	1795239	843442	1010.523	1072.293
31) AR1016-B	9.05	11.09	1174200	3523842	1030.032	1085.179
32) AR1016-C	10.11	11.66	3300880	1702257	1053.646	1075.430
33) AR1016-D	10.66	13.70	1361503	1149492	1020.928	1051.542
34) AR1016-E	12.32	14.25	1405877	1328520	1037.293	1083.597
35) AR1260-A	20.57	22.47	3642571	2793674	1053.729	1085.491
36) AR1260-B	21.13	22.87	1695520	1859393	1026.699	1039.409
37) AR1260-C	22.33	24.08	1775742	1947857	1051.737	1065.780
38) AR1260-D	23.70	25.02	3383155	3885841	1049.167	1106.029
39) AR1260-E	24.77	26.24	1789207	2714656	1101.477	1116.377

QA

81804

878

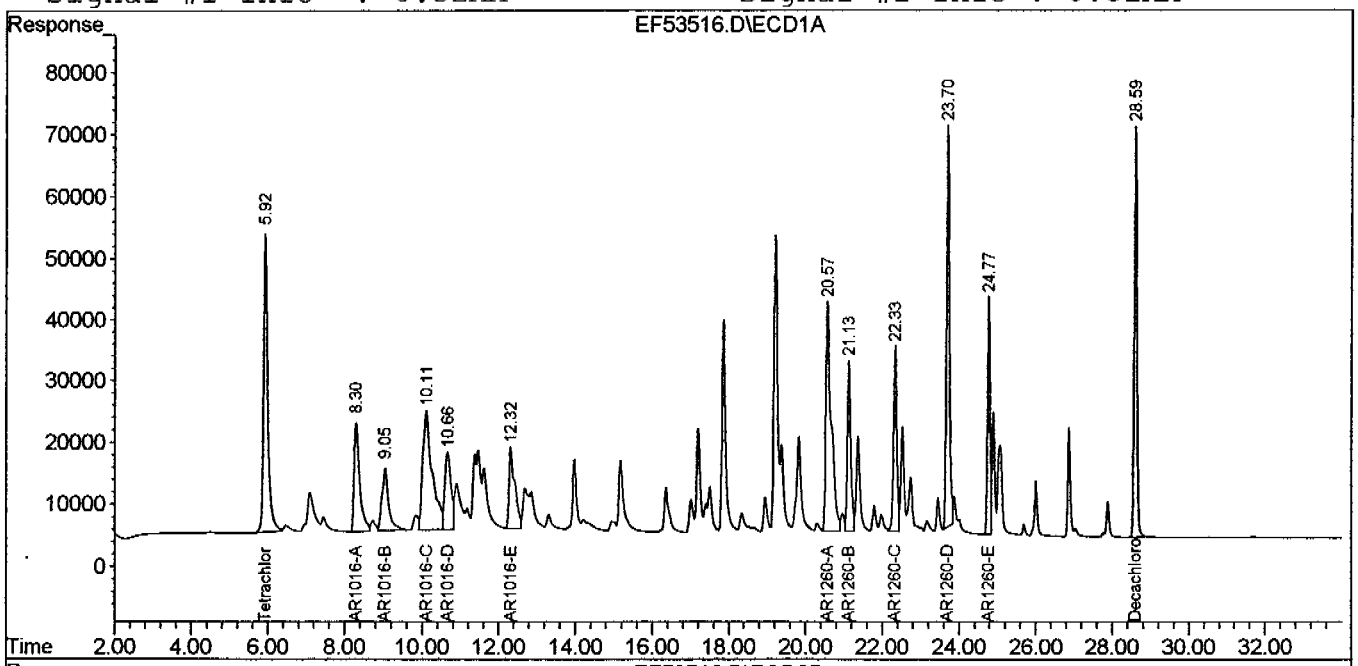
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

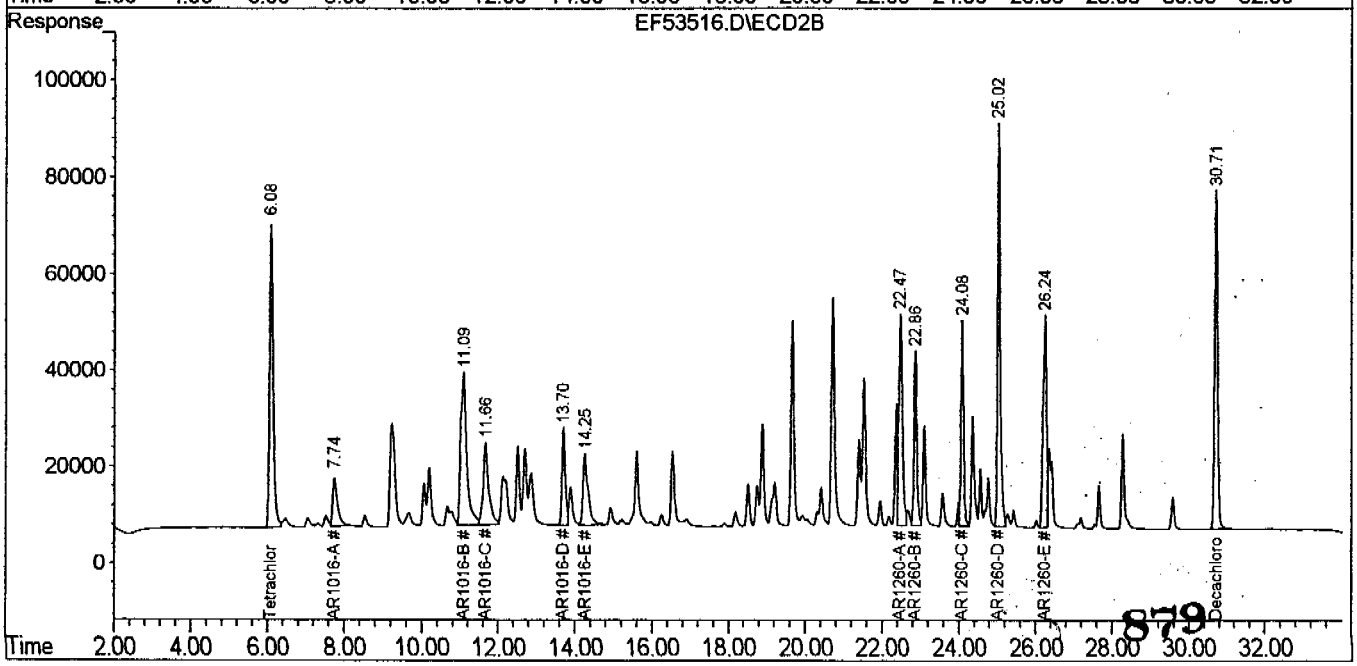
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53516.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\ef53516.D\ECD2B.CH
Acq On : 18 Aug 2004 8:34 am Operator: olgaa
Sample : CC2562-1000 Inst : GCEF
Misc : OP17610,GEF2578,5.2,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 9:14 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





879

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2579-CC2562
Lab FileID: EF53522.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\ef53522.D\ECD1A.CH Vial: 99
Signal #2 : C:\HPCHEM\1\DATA\ef53522.D\ECD2B.CH
Acq On : 18 Aug 2004 4:19 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17610,GEF2579,5.0,,,5,1 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 : Mon Aug 16 11:23:34 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	34.844 E3	0.9	99	0.04	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	1.900 E3	-6.9	99	0.06	8.23- 8.44
31		AR1016-B	1.140	1.208 E3	-6.0	99	0.05	9.00- 9.17
32		AR1016-C	3.133	3.463 E3	-10.5	111	0.05	10.03-10.26
33		AR1016-D	1.334	1.399 E3	-4.9	103	0.05	10.56-10.83
34		AR1016-E	1.355	1.465 E3	-8.1	105	0.07	12.27-12.46
35		AR1260-A	3.457	3.531 E3	-2.1	99	0.06	20.54-20.72
36		AR1260-B	1.651	1.654 E3	-0.2	97	0.07	21.10-21.28
37		AR1260-C	1.688	1.690 E3	-0.1	97	0.06	22.31-22.46
38		AR1260-D	3.225	3.276 E3	-1.6	101	0.04	23.68-23.80
39		AR1260-E	1.624	1.717 E3	-5.7	103	0.04	24.73-24.87
40		AR1262-A		----------NA----------				
41		AR1262-B		----------NA----------				

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2579-CC2562
Lab FileID: EF53522.D

42		AR1262-C			----------NA----------			
43		AR1262-D			----------NA----------			
44		AR1262-E			----------NA----------			
45		AR1268-A			----------NA----------			
46		AR1268-B			----------NA----------			
47		AR1268-C			----------NA----------			
48		AR1268-D			----------NA----------			
49		AR1268-E			----------NA----------			
50	S	Decachlorobiphenyl	30.507	27.844 E3	8.7	88	0.01	28.55-28.64
*****		Signal #2 *****						
1	S	Tetrachloro-m-xylene	36.823	35.103 E3	4.7	95	0.04	6.03- 6.17
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	817.592	-3.9	97	0.04	7.68- 7.85
31		AR1016-B	3.247	3.442 E3	-6.0	100	0.05	11.04-11.22
32		AR1016-C	1.583	1.610 E3	-1.7	93	0.05	11.61-11.80
33		AR1016-D	1093.148	1110.672	-1.6	97	0.07	13.68-13.82
34		AR1016-E	1.226	1.185 E3	3.3	92	0.06	14.21-14.39
35		AR1260-A	2.574	2.572 E3	0.1	97	0.05	22.44-22.60
36		AR1260-B	1.789	1.661 E3	7.2	91	0.05	22.85-22.98
37		AR1260-C	1.828	1.756 E3	3.9	93	0.04	24.07-24.16
38		AR1260-D	3.513	3.391 E3	3.5	92	0.03	25.00-25.10
39		AR1260-E	2.432	2.444 E3	-0.5	98	0.02	26.21-26.31
40		AR1262-A			----------NA----------			
41		AR1262-B			----------NA----------			
42		AR1262-C			----------NA----------			
43		AR1262-D			----------NA----------			
44		AR1262-E			----------NA----------			
45		AR1268-A			----------NA----------			
46		AR1268-B			----------NA----------			
47		AR1268-C			----------NA----------			
48		AR1268-D			----------NA----------			

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: GEF2579-CC2562
Lab FileID: EF53522.D

49		AR1268-E			----------NA----------				
50	S	Decachlorobiphenyl	35.626	32.186	E3	9.7	88	0.00	30.66-30.73

Average % D = 4.2

(0.0 %) 0 of 24 compounds'%D > 15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
ef52979.D GEF2562.M Wed Aug 18 16:57:16 2004 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53522.D\ECD1A.CH Vial: 99
Signal #2 : C:\HPCHEM\1\DATA\ef53522.D\ECD2B.CH
Acq On : 18 Aug 2004 4:19 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17610,GEF2579,5.0,,,5,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 16:54 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	5.94	6.10	1742217	1755173	49.562	47.665
Spiked Amount 40.000			Recovery	=	123.91%	119.16%
50) S Decachlorobiphen	28.60	30.70	1392199	1609280	45.636	45.172
Spiked Amount 40.000			Recovery	=	114.09%	112.93%
Target Compounds						
30) AR1016-A	8.33	7.76	949976	408796	534.733	519.715
31) AR1016-B	9.08	11.13	604211	1721024	530.026	529.995
32) AR1016-C	10.14	11.70	1731654	804916	552.746	508.520
33) AR1016-D	10.70	13.75	699695	555336	524.669	508.015
34) AR1016-E	12.36	14.30	732516	592731	540.469	483.457
35) AR1260-A	20.63	22.52	1765614	1286153	510.760	499.739
36) AR1260-B	21.19f	22.91	826792	830570	500.653	464.292
37) AR1260-C	22.38f	24.12	845234	877907	500.615	480.352
38) AR1260-D	23.74	25.05	1637816	1695721	507.911	482.654
39) AR1260-E	24.80	26.26	858292	1221871	528.384	502.483

OA
81884

883

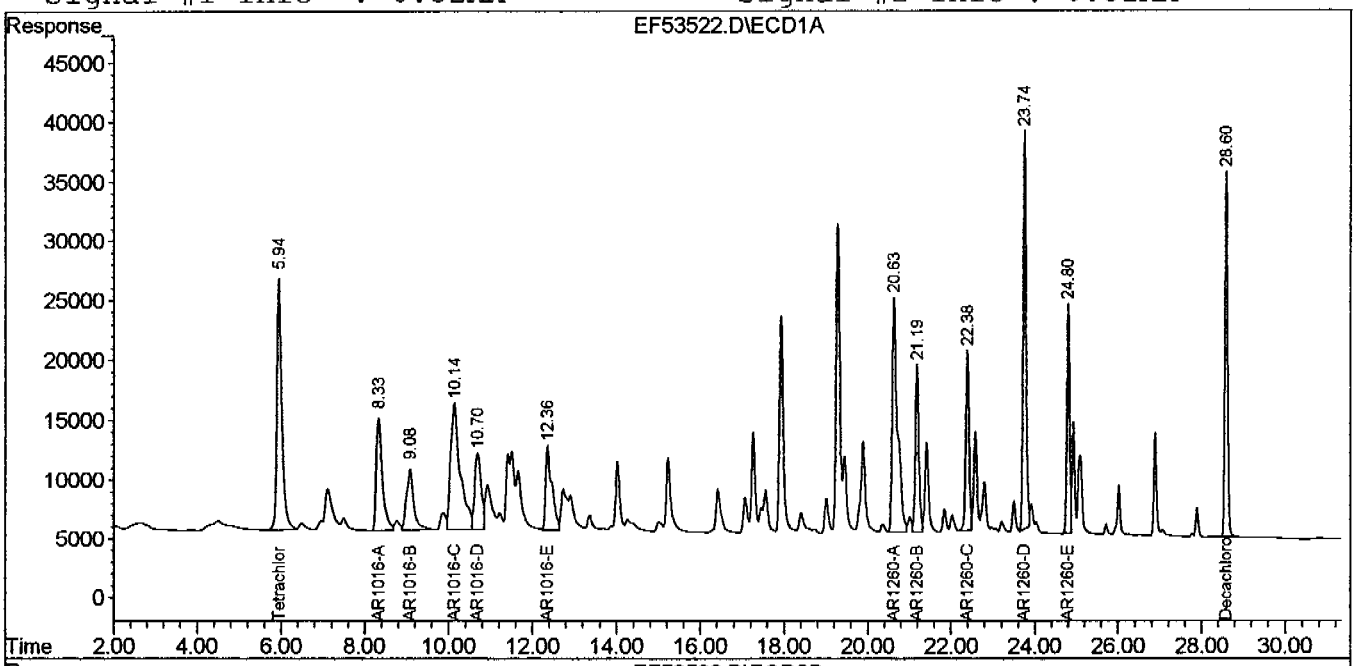
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

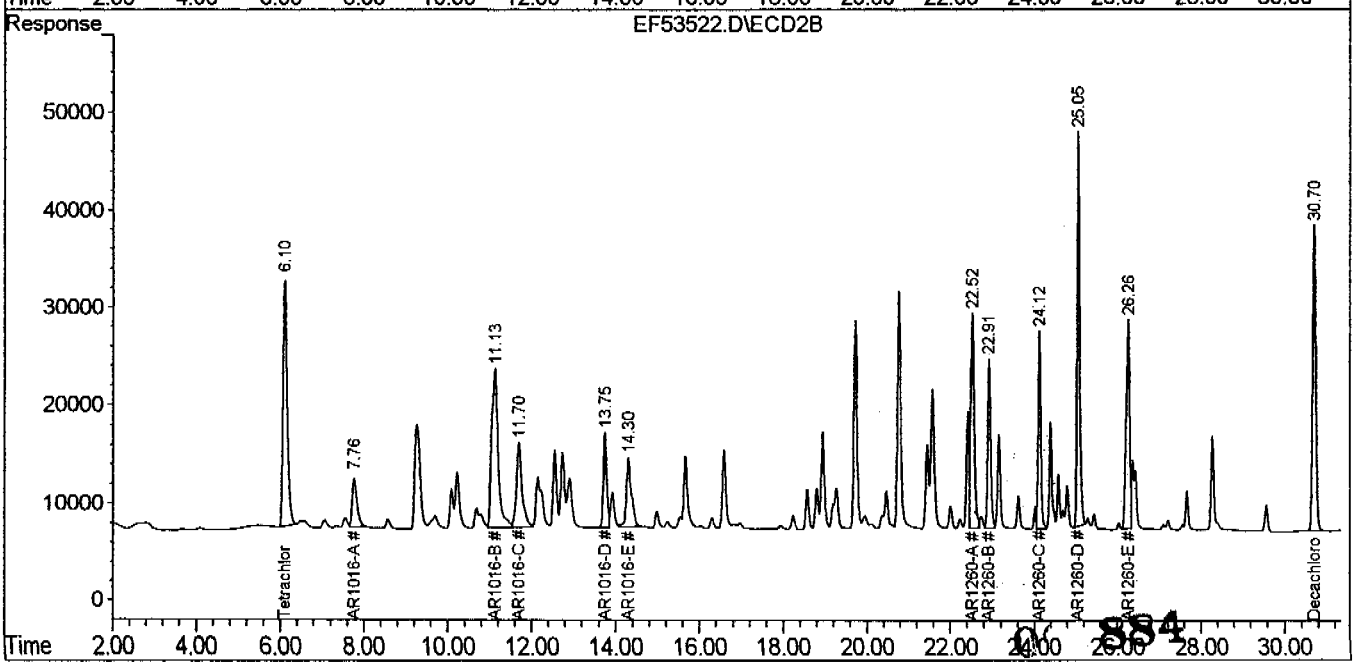
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53522.D\ECD1A.CH Vial: 99
Signal #2 : C:\HPCHEM\1\DATA\ef53522.D\ECD2B.CH
Acq On : 18 Aug 2004 4:19 pm Operator: olgaa
Sample : CC2562-500 Inst : GCEF
Misc : OP17610,GEF2579,5.0,,,5,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 16:54 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





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53494.D\ECD1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\ef53494.D\ECD2B.CH
Acq On : 17 Aug 2004 4:21 pm Operator: olgaa
Sample : OP17704-MB1 Inst : GCEF
Misc : OP17704,GEF2578,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 10:53 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	5.90	6.06	1228562	1417539	34.950	38.496
Spiked Amount 40.000			Recovery	=	87.38%	96.24%
50) S Decachlorobiphen	28.60	30.73	1342689	1653735	44.013	46.420
Spiked Amount 40.000			Recovery	=	110.03%	116.05%

Target Compounds

QA
81804

885

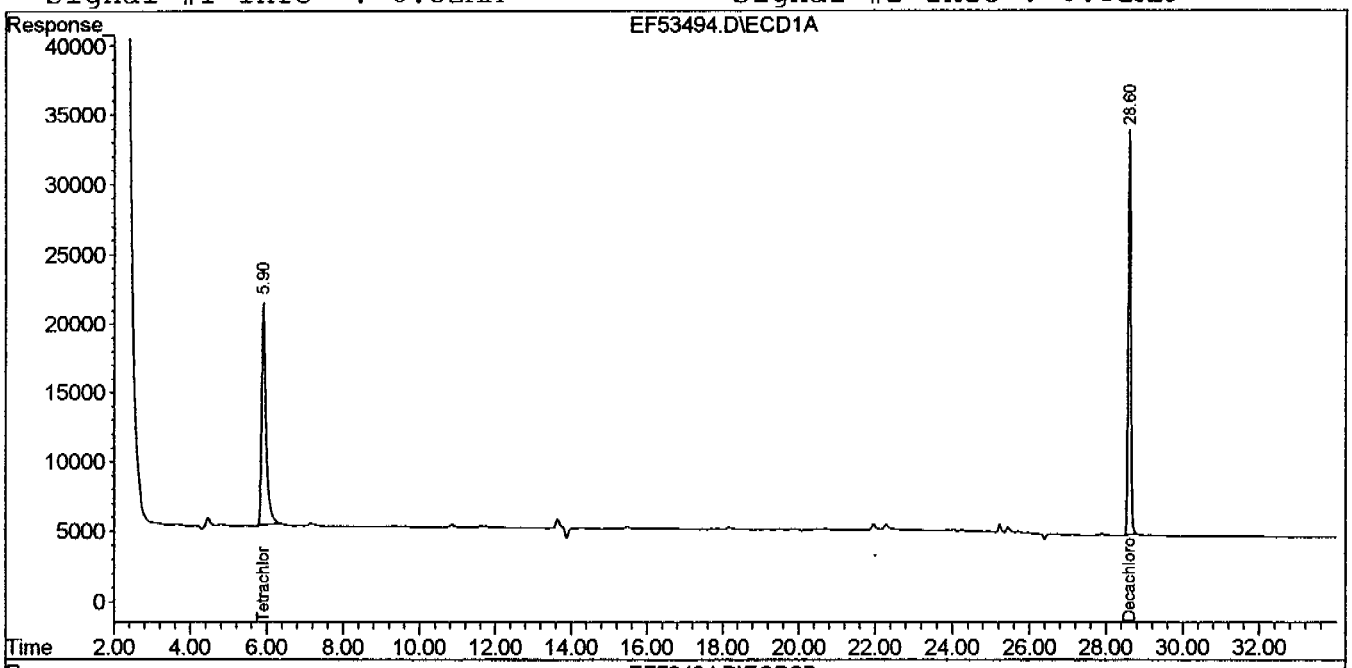
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

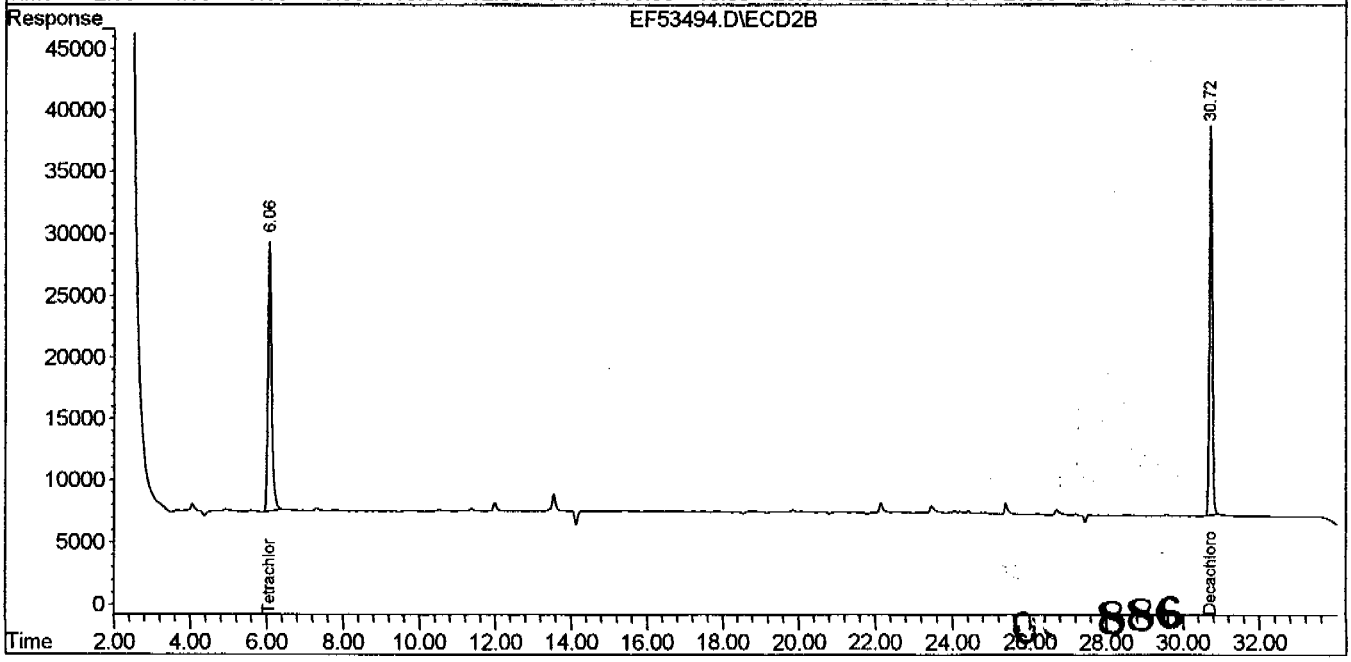
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53494.D\ECD1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\ef53494.D\ECD2B.CH
Acq On : 17 Aug 2004 4:21 pm Operator: olgaa
Sample : OP17704-MB1 Inst : GCEF
Misc : OP17704,GEF2578,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 10:53 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





886

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53496.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\ef53496.D\ECD2B.CH
Acq On : 17 Aug 2004 5:34 pm Operator: olgaa
Sample : OP17704-MS Inst : GCEF
Misc : OP17704,GEF2578,710,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:02 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	5.90	6.06	1246025	1404880	35.446	38.152
	Spiked Amount 40.000			Recovery	=	88.61%	95.38%
50) S	Decachlorobiphen	28.60	30.72	1307924	1592599	42.873	44.704
	Spiked Amount 40.000			Recovery	=	107.18%	111.76%
	Target Compounds						
30)	AR1016-A	8.28	7.73	376742	164136	212.065	208.671
31)	AR1016-B	9.04	11.09	202627	656633	177.749	202.212
32)	AR1016-C	10.10	11.66	649751	359429	207.401	227.075
33)	AR1016-D	10.66	13.69	283433	251804	212.533	230.348
34)	AR1016-E	12.30	14.24	279222	256373	206.017	209.109
35)	AR1260-A	20.57	22.48	739084	580272	213.803	225.467
36)	AR1260-B	21.13	22.87	367506	417235	222.538	233.236
37)	AR1260-C	22.33	24.09	376049	453116	222.727	247.925
38)	AR1260-D	23.70	25.03	790257	798631	245.071	227.315
39)	AR1260-E	24.77	26.25	335792	538131	206.721	221.301

OA
8/18/04

0 887

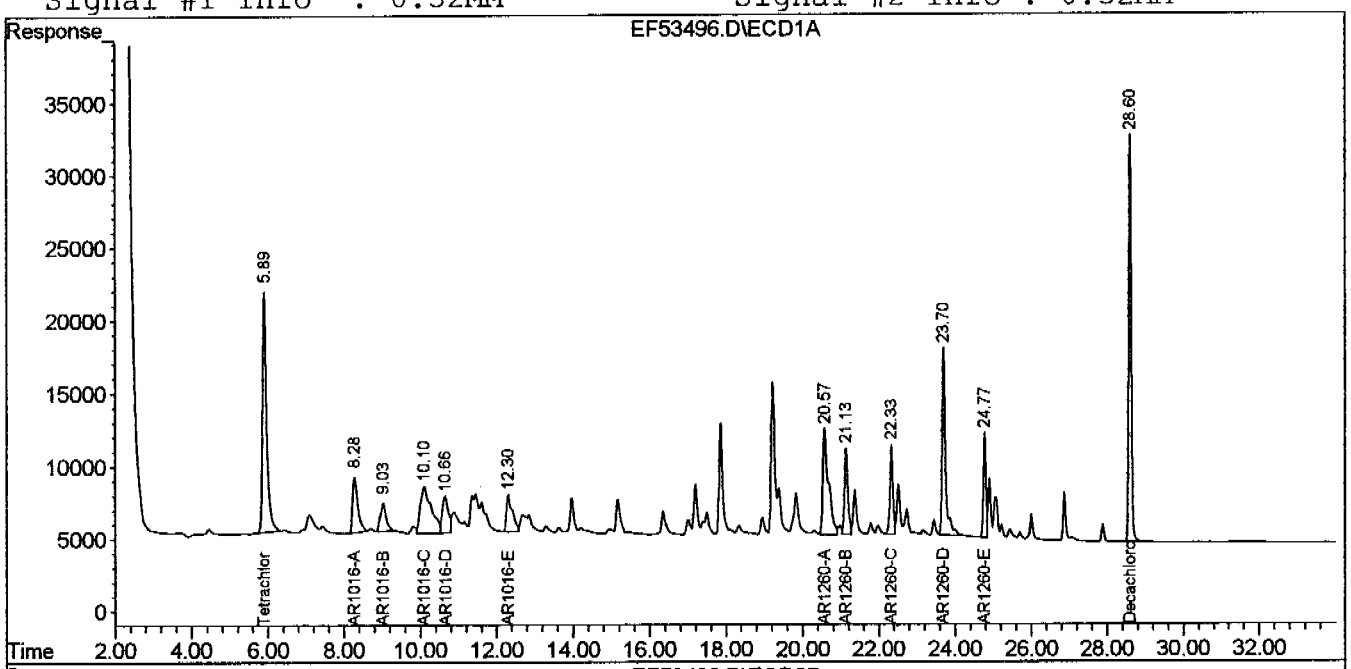
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

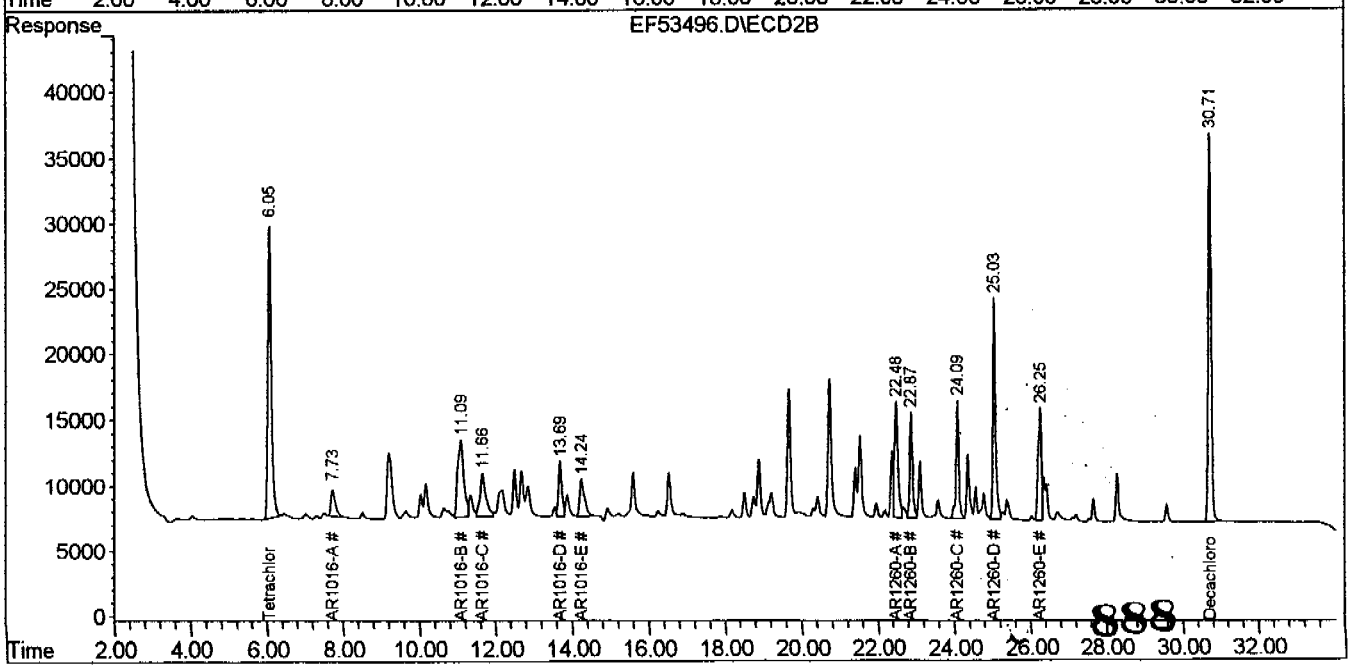
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53496.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\ef53496.D\ECD2B.CH
Acq On : 17 Aug 2004 5:34 pm Operator: olgaa
Sample : OP17704-MS Inst : GCEF
Misc : OP17704,GEF2578,710,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:02 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





888

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53497.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\ef53497.D\ECD2B.CH
Acq On : 17 Aug 2004 6:11 pm Operator: olgaa
Sample : OP17704-MSD Inst : GCEF
Misc : OP17704,GEF2578,730,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:04 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	5.88	6.04	1109981	1252589	31.576	34.017
	Spiked Amount 40.000			Recovery	=	78.94%	85.04%
50) S	Decachlorobiphen	28.57	30.68	1264411	1496463	41.447	42.005
	Spiked Amount 40.000			Recovery	=	103.62%	105.01%
	Target Compounds						
30)	AR1016-A	8.27	7.71	349199	145166	196.561	184.553
31)	AR1016-B	9.02	11.08	183590	584909	161.049	180.125
32)	AR1016-C	10.09	11.64	624656	320492	199.391	202.477
33)	AR1016-D	10.64	13.67	247056	249728	185.256	228.448
34)	AR1016-E	12.29	14.22	258823	234375	190.966	191.167m
35)	AR1260-A	20.55	22.46	698514	556221	202.067	216.121
36)	AR1260-B	21.11	22.85	348666	398445	211.130	222.733
37)	AR1260-C	22.31	24.06	350830	432488	207.790	236.638
38)	AR1260-D	23.68	25.01	754308	765097	233.922	217.770
39)	AR1260-E	24.75	26.23	318517	520345	196.086	213.987

QA

81887

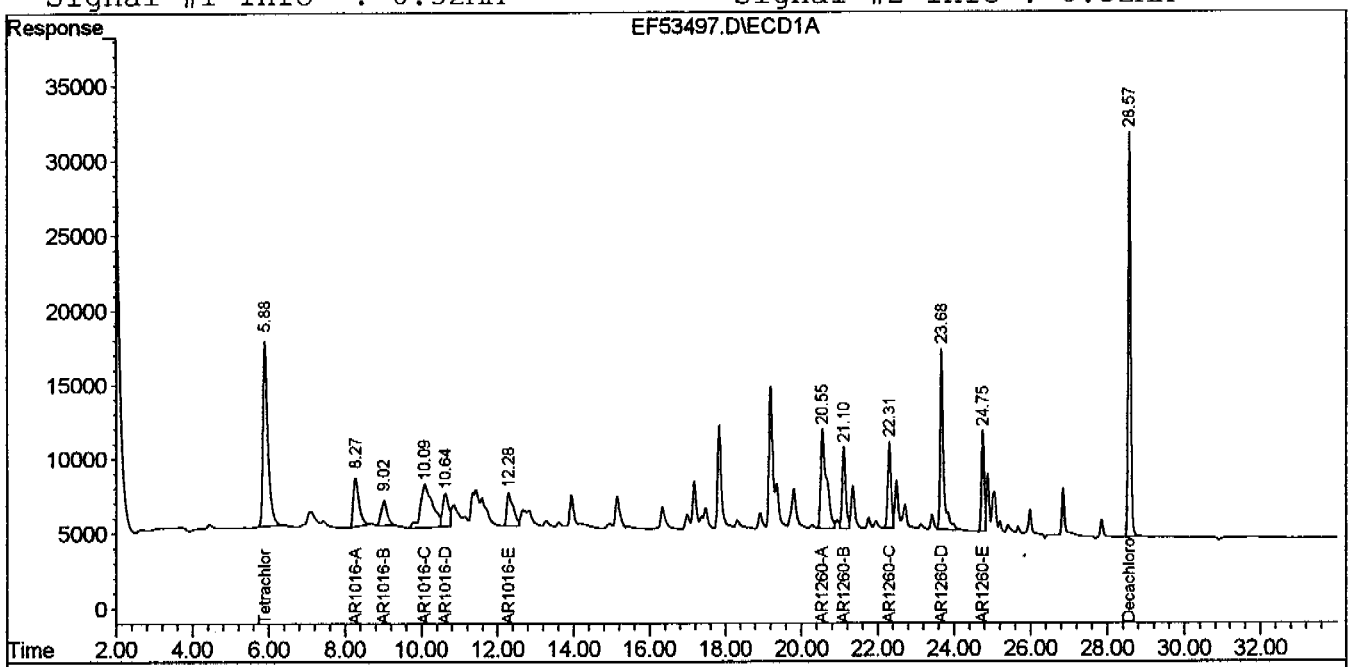
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

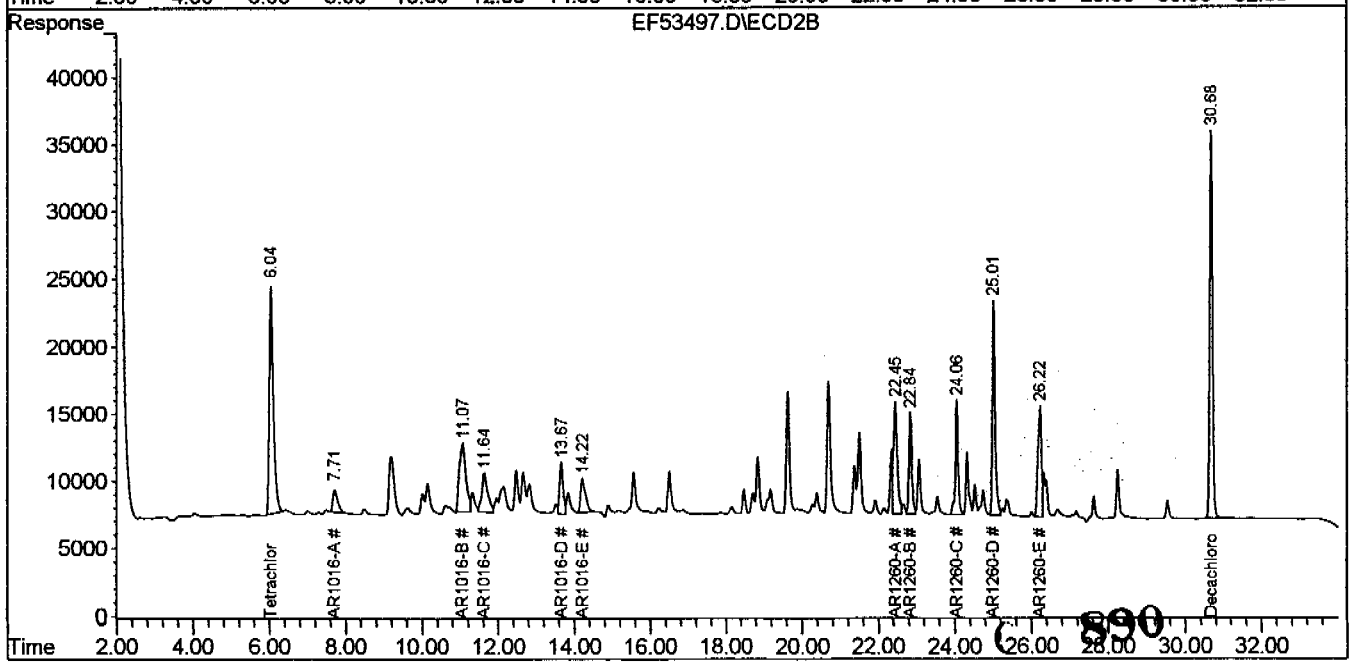
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53497.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\ef53497.D\ECD2B.CH
Acq On : 17 Aug 2004 6:11 pm Operator: olgaa
Sample : OP17704-MSD Inst : GCEF
Misc : OP17704,GEF2578,730,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:04 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



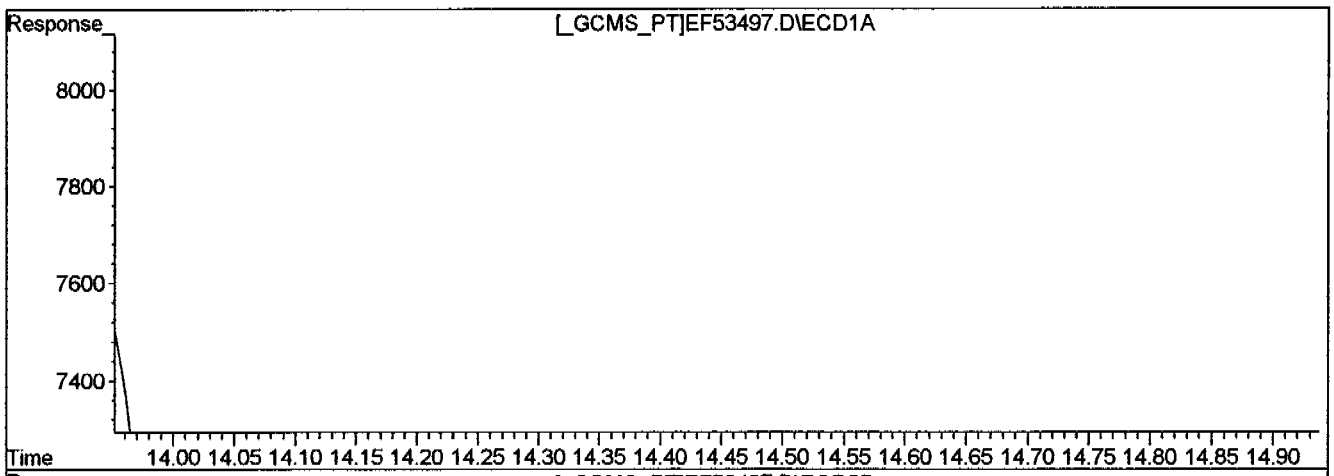


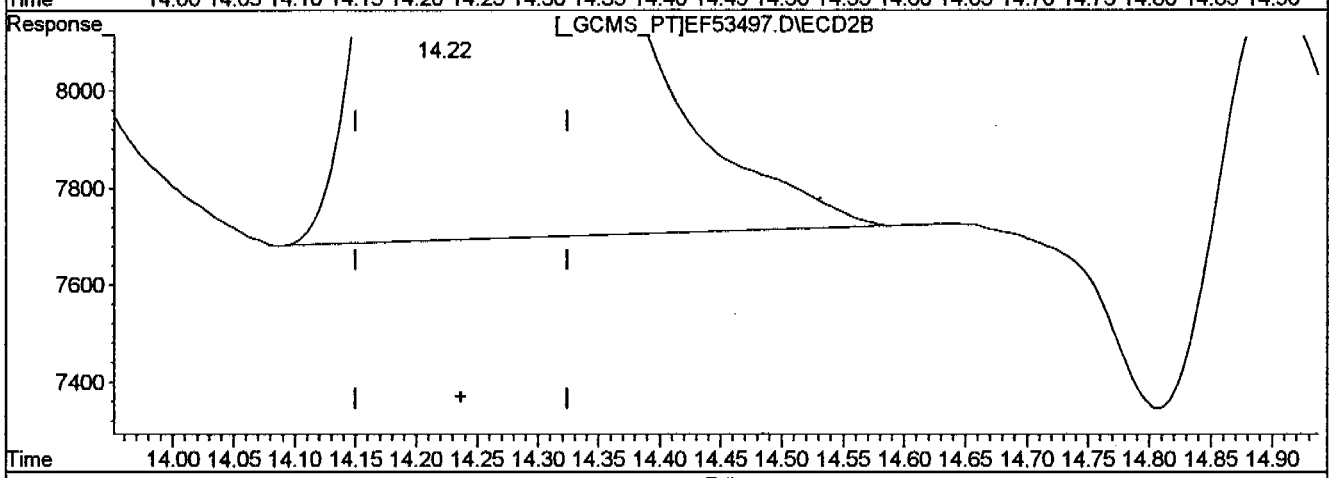
890

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53497.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\ef53497.D\ECD2B.CH
Acq On : 17 Aug 2004 6:11 pm Operator: olgaa
Sample : OP17704-MSD Inst : GCEF
Misc : OP17704,GEF2578,730,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 11:03 2004 Quant Results File: GEF2562.RES

Method : C:\HPCHEM\1\METHODS\GEF2562.M (Chemstation Integrator)
Title : GC/ECD- PCB
Last Update : Wed Aug 18 09:08:06 2004
Response via : Multiple Level Calibration





QEdit

(34) AR1016-E

12.29min 190.966PPB

response 258823

(34) AR1016-E #2

14.22min 191.167PPB m

response 234375

(+) = Expected Retention Time

ef53497.D GEF2562.M Wed Aug 18 11:04:30 2004 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\ef53495.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\ef53495.D\ECD2B.CH
Acq On : 17 Aug 2004 4:58 pm Operator: olgaa
Sample : OP17704-BS1 Inst : GCEF
Misc : OP17704,GEF2578,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 10:57 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	5.89	6.05	1233111	1387629	35.079	37.684
	Spiked Amount 40.000			Recovery	=	87.70%	94.21%
50) S	Decachlorobiphen	28.59	30.71	1330575	1619760	43.616	45.466
	Spiked Amount 40.000			Recovery	=	109.04%	113.67%
	Target Compounds						
30)	AR1016-A	8.27	7.72	380461	182802	214.158	232.401
31)	AR1016-B	9.03	11.08	201466	733842	176.730	225.989
32)	AR1016-C	10.10	11.65	638416	362669	203.783	229.123
33)	AR1016-D	10.65	13.68	273488	279691	205.076	255.859
34)	AR1016-E	12.30	14.24	290102	320558	214.045	261.461
35)	AR1260-A	20.56	22.47	754527	602759	218.271	234.204
36)	AR1260-B	21.12	22.86	375844	436751	227.587	244.146
37)	AR1260-C	22.32	24.08	388522	495387	230.114	271.053
38)	AR1260-D	23.70	25.02	800910	841278	248.374	239.453
39)	AR1260-E	24.76	26.24	360024	571453	221.639	235.005

OA
81807

892

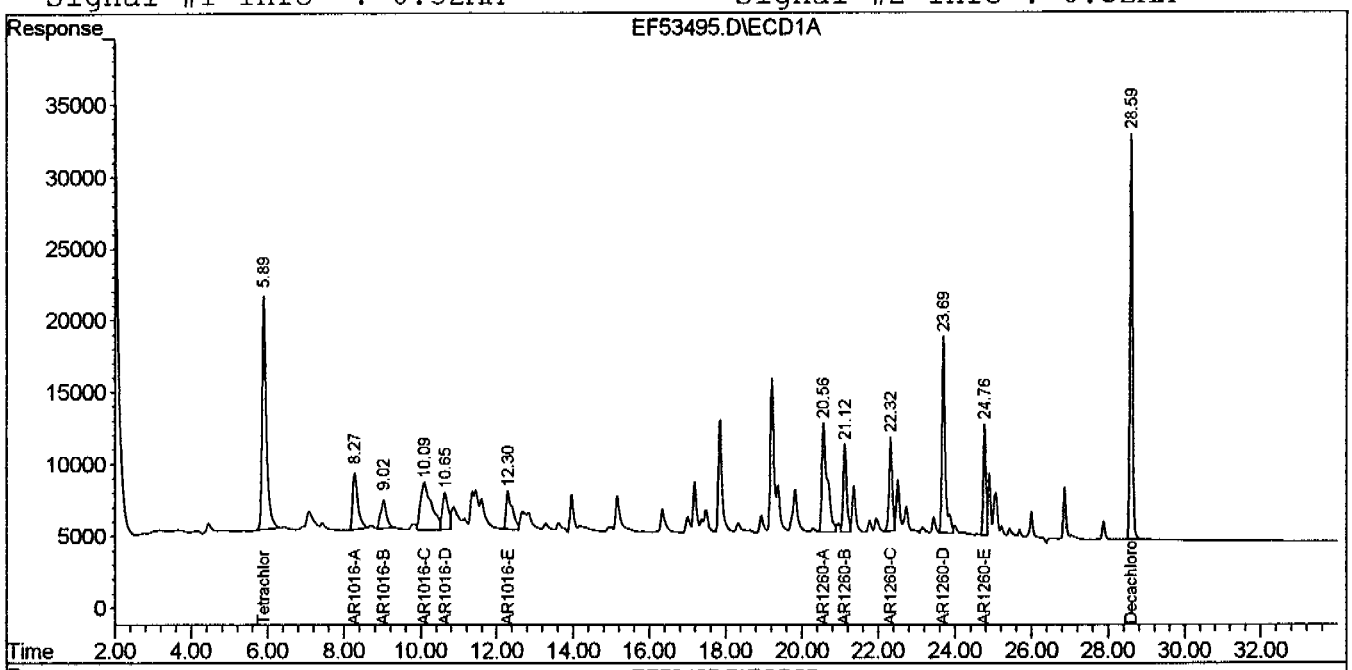
(f)=RT Delta > Window (P)=Amounts differ by> 40% RPD (m)=manual int.

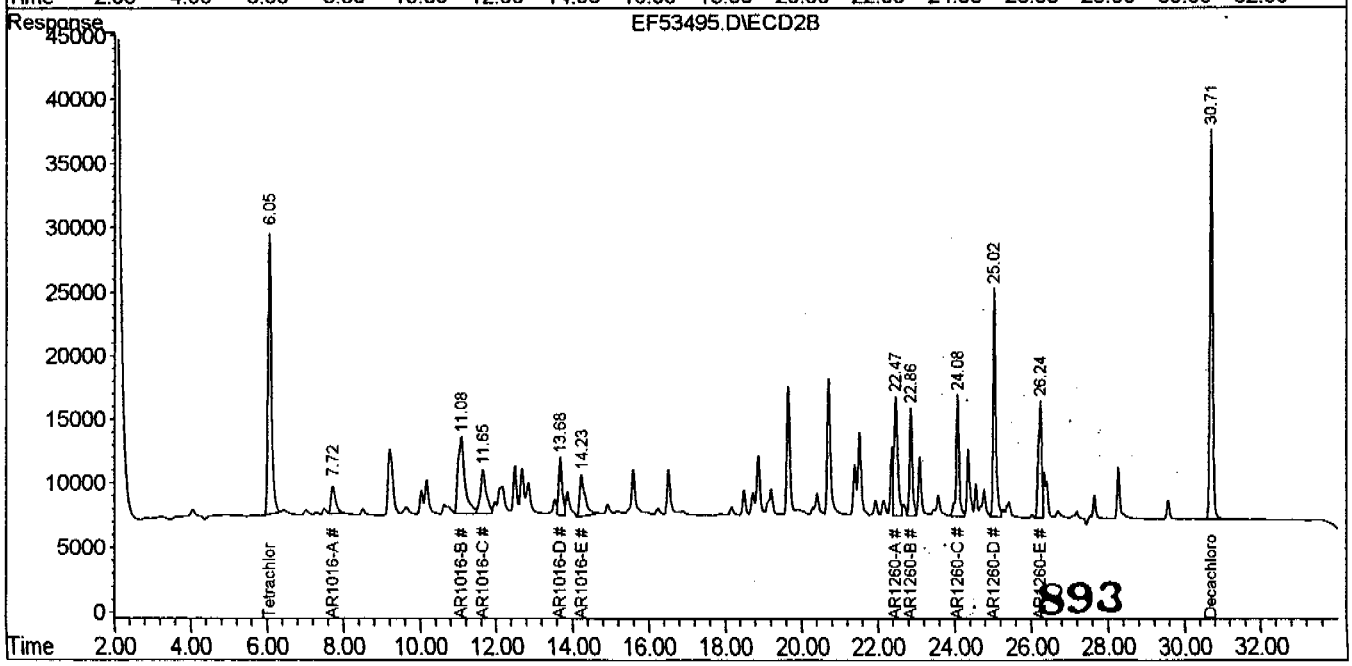
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\ef53495.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\ef53495.D\ECD2B.CH
Acq On : 17 Aug 2004 4:58 pm Operator: olgaa
Sample : OP17704-BS1 Inst : GCEF
Misc : OP17704,GEF2578,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Aug 18 10:57 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.

Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: GEF 2562

Date: 7-26-04

Analyst Signature: Olga Gapiou

Columns: RTX-CLP1 / RTX-CLP2

Method GEF2562

Initial Cal. Method GEF2562

Injection Volumn: 1 µl

Date Archived:

Standard Data

Lot #	Description	Conc.
G35329B	1016/1260	1000µg/L
G35329A	↓	500µg/L
G35323	PIBCH	200µg/L
G35189	AT 1221	1000µg/L
G35210	AT 1232	↓
G35136	AT 1242	
G35284	AT 1248	

Standard Data

Lot #	Description	Conc.
G35324A	1016/1260	50µg/L
G35324B	↓	250µg/L
G35324C		2000µg/L
G35324D		3000µg/L
G35270	1016/1260 2nd Source	1000µg/L
G35160	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: 07/27/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	EF52970	CC2561-100			W	1	1			not using	RT shifted
	971	IB01			W	1	1		✓	OK	
	972	IC2562-1000	1221	8082	↓	2	1		✓	OK	
	973	IC2562-1000	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	IC2562-2000	↓	↓	↓	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: GEF2577

Analyst Signature: Olga Ganiou

Date: 8-16-04

Columns: RTX CLP1/RTX-CLP2

Method GEF2562

Initial Cal. Method GEF2562

Injection Volumn: 1 µl

Date Archived:

Standard Data

Lot #	Description	Conc.
635328A	1016/1260	500ng/µl
635369	↓	1000ng/µl

Standard Data

Lot #	Description	Conc.
635342	PIBulk	200ng/µl

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: Date:

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	EF53481	OP17610-MS N73749-13	OA 81604 17610-1	8082	W	20	1		✓	OK	
	82	~~14~~ MSD	OA 81604			21	1		✓	OK	
	83	~~15~~ 8	OA 81604			22	1		✓	OK	
	84	~~16~~ 1	OA 81604			23	1		✓	OK	
	85	CC2562-500			W	24	1		✓	OK	
	86	IBD1			W	1	1		✓	OK	GEF2578
	87	N73749-2	17610-1	8082	W	2	1		✓	OK	
	88	-3				3	1		SCKS ↑	OK	
	89	-4				4	1		✓	OK	
	90	-5				5	1		✓	OK	
	91	-6				6	1		SCKS ↑	OK	
	92	CC2562-1000			W	7	1		✓	OK	
	93	IBD2			W	1	1		✓	OK	
	94	OP17704-MB1	17704-1	8082	W	2	1		✓	OK	
	95	-BS1				3	1		✓	OK	
	96	-MS				4	1		✓	OK	
	97	-MSD				5	1		✓	OK	
	98	N74914-9				6	1		✓	OK	
	99	-1				7	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.

895 . 169

Form: OR016-04
Rev. Date: 10/4/02

ACCUTEST.

Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: GEF2578

Analyst Signature: Olga Ganian

Date: 8-17-04

Columns: RTX-CLP I / RTX-CLP II

Method GEF2562

Initial Cal. Method GEF2562

Injection Volumn: 1 µl

Date Archived:

Standard Data

Lot #	Description	Conc.
685342	PIBLK	20ppb
685358A	1016/1260	500ppb
685369	↓	1000ppb

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: 08/18/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	EF53500	N74914-2	17704-1	8082	W	8	1		✓	OK	
	01	-3	↓	↓	↓	9	1		✓	OK	
	02	-4	↓	↓	↓	10	1		✓	OK	
	03	N74942-1R 5 OA 8/17/04	17719-1	↓	S	11	1		✓	OK	11:07
	04	CC2562-500			W	12	1		✓	OK	
	05	IB03				13	1		✓	OK	
	06	N74914-6	17704-1	8082		14	1			bad inject.	RR
	07	-7	↓	↓		15	1		✓	OK	
	08	-10				16	1		✓	OK	
	09	-11				17	1		✓	OK	
	10	-12				18	1		✓	OK	
	11	-13				19	1		✓	OK	
	12	-14				20	1		✓	OK	
	13	-15	↓			21	1		✓	OK	
	14	OA 8/17/04 -5 ~~N73749-7~~	17610-1		b	22			↓	bad inject.	RR for conf.
	15	-9	176/10-1 ↓	↓	b	23	1		✓	OK	
	16	CC2562-1000			W	24	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

Batch ID: GEF 2517

Analyst Signature: Olga Ganiam

Date: 8-18-04

Columns: RTX-CLP I / RTX CLP II

Method GEF 2562

Initial Cal. Method GEF 2562

Injection Volumn: 1 µl.

Date Archived:

Standard Data

Lot #	Description	Conc.
635342	PIBEC	200µg/L
635329A	1016/1200	500µg/L
685369	↓	1000µg/L

Standard Data

Lot #	Description	Conc.

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: [illegible] Date: [illegible]

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	EF53517	IB01			W	1	1		✓	OK	
R	18	N74914-5	17704-1	8082	W	2	1		✓	OK	
R	19	-7	↓	↓	W	3	1		✓	OK	
	20	N73749-7	17610-1	↓	S	4	1		✓	OK	
	21	-10	↓	↓	S	5	1		✓	OK	
	22	CC 2562-500			W	6	1		✓	OK	
	23	IB02			W	1	1		✓	OK	
	24	N75132-2	17719-1	8082	S	2	1				
	25	N75133-2	↓	↓	S	3	1				
	26	N74875-10	17692-1	↓	S	4	1				
	27	N73749-11	17610-1	↓	S	5	1				
	28	-12	↓	↓	↓	6	1				
	29	-13	↓	↓	↓	7	1				
	30	-14	↓	↓	↓	8	1				
	31	-15	↓	↓	↓	9	1				
	32	-16	↓	↓	↓	10	1				
	33	-17	↓	↓	↓	11	1				
	34	CC 2562-1000			W	12	1		✓	OK	
	35	IB03			W	13	1		✓	OK	
	36	N7349-18	17610-1	8082	S	14	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

LIQUID/LIQUID EXTRACTION

BATCH #	RACK#
R17704-1	G-100

Supervisor Review
Signature
Date 8/13/04

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: 8/13/04 ANALYST: ATH/BL/GA METHOD: Ref Water Bath Temp(C) 60-70 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			10	↓						
N74914-9 MS ~~MS~~	2	PCB	H. Yellow	710			↑	↑						
↓ MD ~~MSD~~	3	↓	↓	730			↓	↓						
~~BS~~														
~~MS~~														
~~MSD~~														
N74914-1	1	PCB	Clear	980			10	↑						
-2	2	↓	↓	980			10	↑						
-3	3	↓	H. yellow	980			10	↑						
-4	1	↓	Milky	960			10	clear						
-5	1	↓	Clear	960			10	↓						
-6	1	↓	↓	1000			10	↓						
-7	2	↓	↓	960			10	↓						
-8	28	PCB	H. Yellow	880			↑	↓						
-10	4	↓	↓	920			↑	↓						
-11	4	↓	Clear	900			↑	↓						
-12	3	↓	H. Yellow	900			↑	↓						
-13	3	↓	Clear	890			↑	↓						
-14	3	↓	↓	900			↑	↓						
-15	4	↓	↓	900			↓	↓						

SURROGATE SPIKE DATA

	LOT #	CONC. (PPM)	AMT ADDED (ML)
BASE			
ACID			
PPCB	0P11-009	400ppb	1
HERB			

WITNESS SIGN: NTY

MATRIX SPIKE DATA (BL)

	LOT #	CONC.	AMT ADDED (ML)
BASE			
ACID			
PEST			
PCB	0P10-075	2ppm	1
HERB			

WITNESS SIGN: NTY

SOLVENT DATA (BL)

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

REAGENT/FILTER MEDIA

	LOT #	BRAND
SODIUM SULF	552464	Baker
FILTER PAPER	E1589112	Fisher
1:1 H2SO4		
10N NAOH		
COPPER	0P11-08	Aldrich
FLORISIL		

COMMENTS:

868

4

GC
SW846 8151
Herbicide

ACCUTEST

GC Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction H8151STD) HCLPCP

	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. Rogan Date: 8/24/2004

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

Semivolatile Surrogate Recovery Summary

Job Number: N74914
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]
N74914-1	1G11278.D	93.0	90.0
N74914-2	1G11279.D	95.0	91.0
N74914-3	1G11280.D	101.0	95.0
N74914-4	1G11281.D	94.0	90.0
N74914-5	1G11284.D	97.0	94.0
N74914-6	1G11285.D	94.0	92.0
N74914-7	1G11286.D	97.0	94.0
N74914-9	1G11287.D	96.0	93.0
N74914-10	1G11288.D	99.0	95.0
N74914-11	1G11289.D	93.0	88.0
N74914-12	1G11290.D	101.0	95.0
N74914-13	1G11291.D	97.0	93.0
N74914-14	1G11292.D	97.0	93.0
N74914-15	1G11293.D	96.0	92.0
OP17705-BS1	1G11277.D	84.0	82.0
OP17705-MB1	1G11276.D	84.0	80.0
OP17705-MS	1G11296.D	97.0	93.0
OP17705-MSD	1G11297.D	101.0	97.0

Surrogate Compounds	Recovery Limits
S1 = 2,4-DCAA	54-141%

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

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17705-MS	1G11296.D	1	08/19/04	KLS	08/13/04	OP17705	G1G283
OP17705-MSD	1G11297.D	1	08/19/04	KLS	08/13/04	OP17705	G1G283
N74914-9	1G11287.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283

The QC reported here applies to the following samples: **Method:** SW846 8151

N74914-1, N74914-2, N74914-3, N74914-4, N74914-5, N74914-6, N74914-7, N74914-9, N74914-10, N74914-11, N74914-12, N74914-13, N74914-14, N74914-15

CAS No.	Compound	N74914-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND		5.88	5.6	95	6.0	102	7	37-146/40
93-72-1	2,4,5-TP (Silvex)	ND		5.88	6.6	112	6.8	116	3	21-144/39
93-76-5	2,4,5-T	ND		5.88	7.2	122	7.2	122	0	24-133/42
87-86-5	Pentachlorophenol	ND		5.88	6.5	111	6.7	114	3	13-134/43

CAS No.	Surrogate Recoveries	MS	MSD	N74914-9	Limits
19719-28-9	2,4-DCAA	97%	101%	96%	54-141%
19719-28-9	2,4-DCAA	93%	97%	93%	54-141%

Blank Spike Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17705-BS1	1G11277.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283

The QC reported here applies to the following samples: **Method:** SW846 8151

N74914-1, N74914-2, N74914-3, N74914-4, N74914-5, N74914-6, N74914-7, N74914-9, N74914-10, N74914-11, N74914-12, N74914-13, N74914-14, N74914-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	5	4.1	82	41-135
93-72-1	2,4,5-TP (Silvex)	5	5.1	102	41-137
93-76-5	2,4,5-T	5	5.0	100	42-131
87-86-5	Pentachlorophenol	5	4.8	96	19-138

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	84%	54-141%
19719-28-9	2,4-DCAA	82%	54-141%

Method Blank Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17705-MB1	1G11276.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283

The QC reported here applies to the following samples: **Method:** SW846 8151

N74914-1, N74914-2, N74914-3, N74914-4, N74914-5, N74914-6, N74914-7, N74914-9, N74914-10, N74914-11, N74914-12, N74914-13, N74914-14, N74914-15

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	84%	54-141%
19719-28-9	2,4-DCAA	80%	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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	G1G283-CC276	**Injection Date:**	08/18/04
Lab File ID:	1G11274.D	**Injection Time:**	08:40
Instrument ID:	GC1G	**Method:**	SW846 8151

	S1 [a] RT	S1 [b] RT
Check Std	16.44	15.47

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP17705-MB1	1G11276.D	08/18/04	11:26	16.44	15.48
OP17705-BS1	1G11277.D	08/18/04	11:59	16.44	15.48
N74914-1	1G11278.D	08/18/04	12:33	16.44	15.48
N74914-2	1G11279.D	08/18/04	13:07	16.44	15.48
N74914-3	1G11280.D	08/18/04	13:40	16.44	15.48
N74914-4	1G11281.D	08/18/04	14:14	16.45	15.49

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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	G1G283-CC276	**Injection Date:**	08/18/04
Lab File ID:	1G11282.D	**Injection Time:**	16:30
Instrument ID:	GC1G	**Method:**	SW846 8151

	S1 [a] RT	S1 [b] RT
Check Std	16.45	15.49

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
N74914-5	1G11284.D	08/18/04	18:38	16.44	15.49
N74914-6	1G11285.D	08/18/04	19:12	16.44	15.49
N74914-7	1G11286.D	08/18/04	19:45	16.44	15.49
N74914-9	1G11287.D	08/18/04	20:19	16.44	15.48
N74914-10	1G11288.D	08/18/04	20:53	16.44	15.48
N74914-11	1G11289.D	08/18/04	21:27	16.44	15.48
N74914-12	1G11290.D	08/18/04	22:00	16.44	15.48
N74914-13	1G11291.D	08/18/04	22:34	16.44	15.48
N74914-14	1G11292.D	08/18/04	23:08	16.44	15.48
N74914-15	1G11293.D	08/18/04	23:42	16.44	15.48

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: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Check Std:	G1G283-CC276	**Injection Date:**	08/19/04
Lab File ID:	1G11294.D	**Injection Time:**	01:23
Instrument ID:	GC1G	**Method:**	SW846 8151

	S1 [a] RT	S1 [b] RT
Check Std	16.44	15.48

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP17705-MS	1G11296.D	08/19/04	02:30	16.45	15.49
OP17705-MSD	1G11297.D	08/19/04	03:04	16.44	15.48
OP17725-LS2	1G11298.D	08/19/04	03:38	16.44	15.48
ZZZZZZ	1G11299.D	08/19/04	04:11	16.44	15.48
ZZZZZZ	1G11300.D	08/19/04	04:45	16.44	15.48
ZZZZZZ	1G11301.D	08/19/04	05:19	16.44	15.48
ZZZZZZ	1G11302.D	08/19/04	05:53	16.44	15.48
ZZZZZZ	1G11303.D	08/19/04	06:26	16.44	15.48
G1G283-ECC276	1G11304.D	08/19/04	07:00	16.44	15.48

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:	RW0804-4553-UZZLERD		
Lab Sample ID:	N74914-1	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	1G11278.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.59	0.33	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	0.23	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	93%		54-141%
19719-28-9	2,4-DCAA	90%		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\1G11278.D\ECD1A.CH Vial: 29
Signal #2 : C:\MSDCHEM\1\DATA\1G11278.D\ECD2B.CH
Acq On : 18 Aug 2004 12:33 pm Operator: kristis
Sample : N74914-1 Inst : GC1G
Misc : OP17705,G1G283,850,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:52:12 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1507.0E6	1148.5E6	934.998	895.148
Spiked Amount 1000.000			Recovery	=	93.50%	89.51%
Target Compounds						

Kfay

910

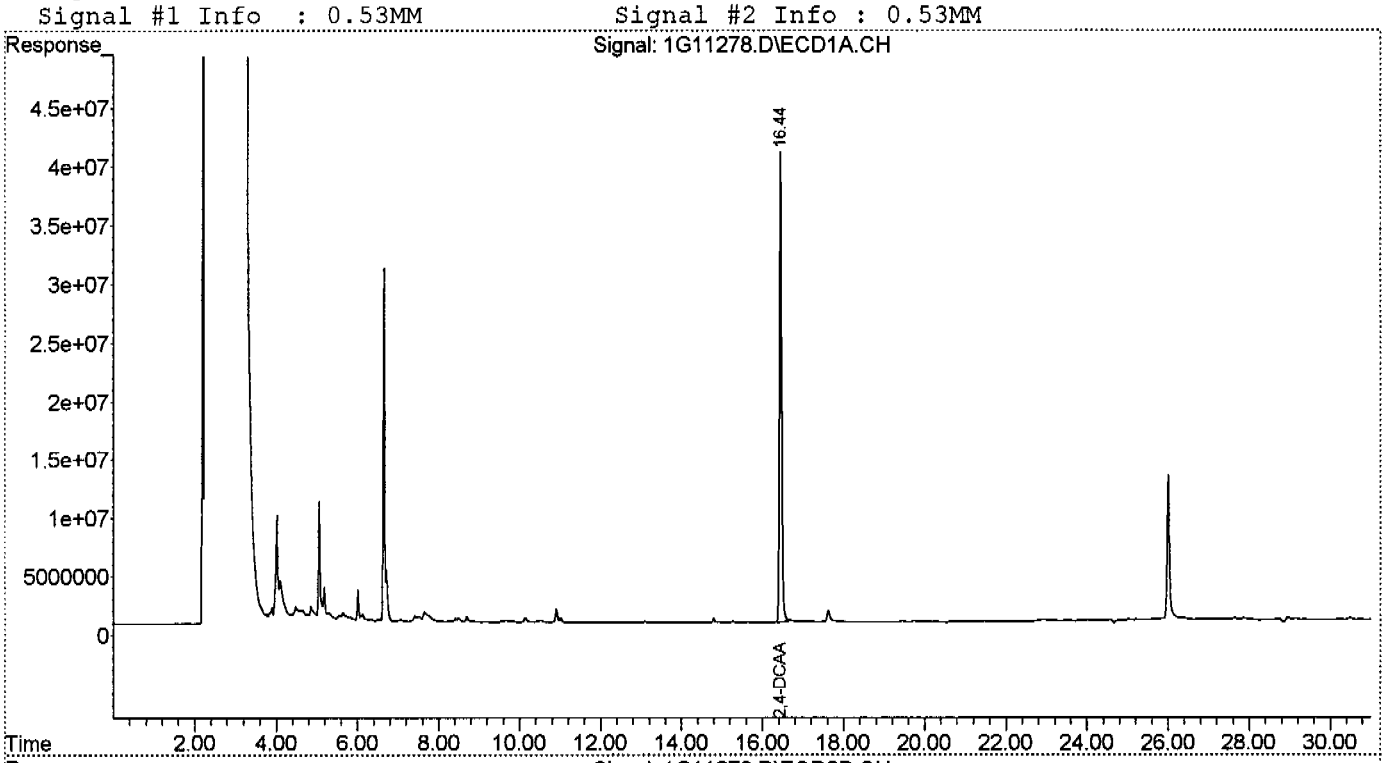
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

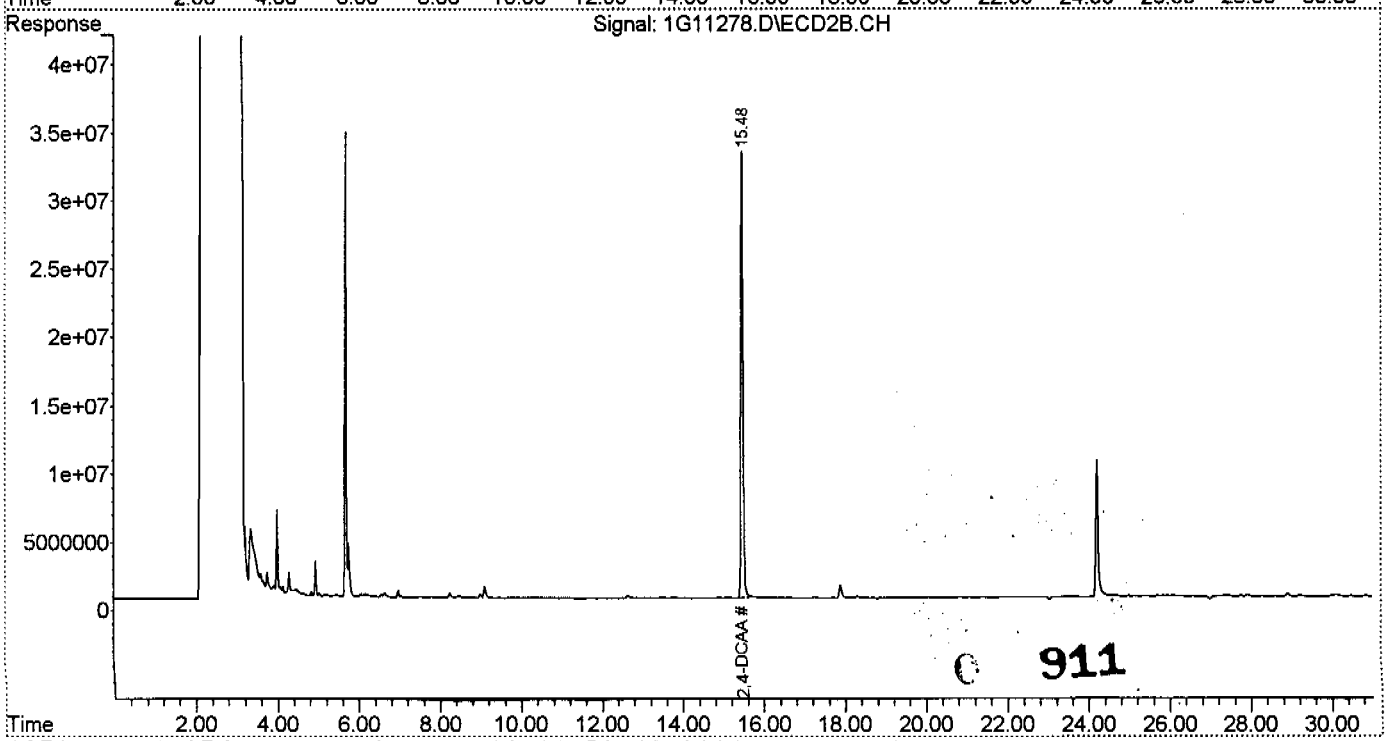
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11278.D\ECD1A.CH Vial: 29
Signal #2 : C:\MSDCHEM\1\DATA\1G11278.D\ECD2B.CH
Acq On : 18 Aug 2004 12:33 pm Operator: kristis
Sample : N74914-1 Inst : GC1G
Misc : OP17705,G1G283,850,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:52 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





911

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-HESTERFARM		
Lab Sample ID:	N74914-2	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	1G11279.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
Run #2							

	Initial Volume	Final Volume
Run #1	840 ml	10.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.60	0.33	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	95%		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\1G11279.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1G11279.D\ECD2B.CH
Acq On : 8-18-04 01:07:14 PM Operator: kristis
Sample : N74914-2 Inst : GC1G
Misc : OP17705,G1G283,840,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:52:51 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1529.1E6	1162.7E6	948.681	906.190
Spiked Amount 1000.000			Recovery	=	94.87%	90.62%
Target Compounds						

KGG4

913

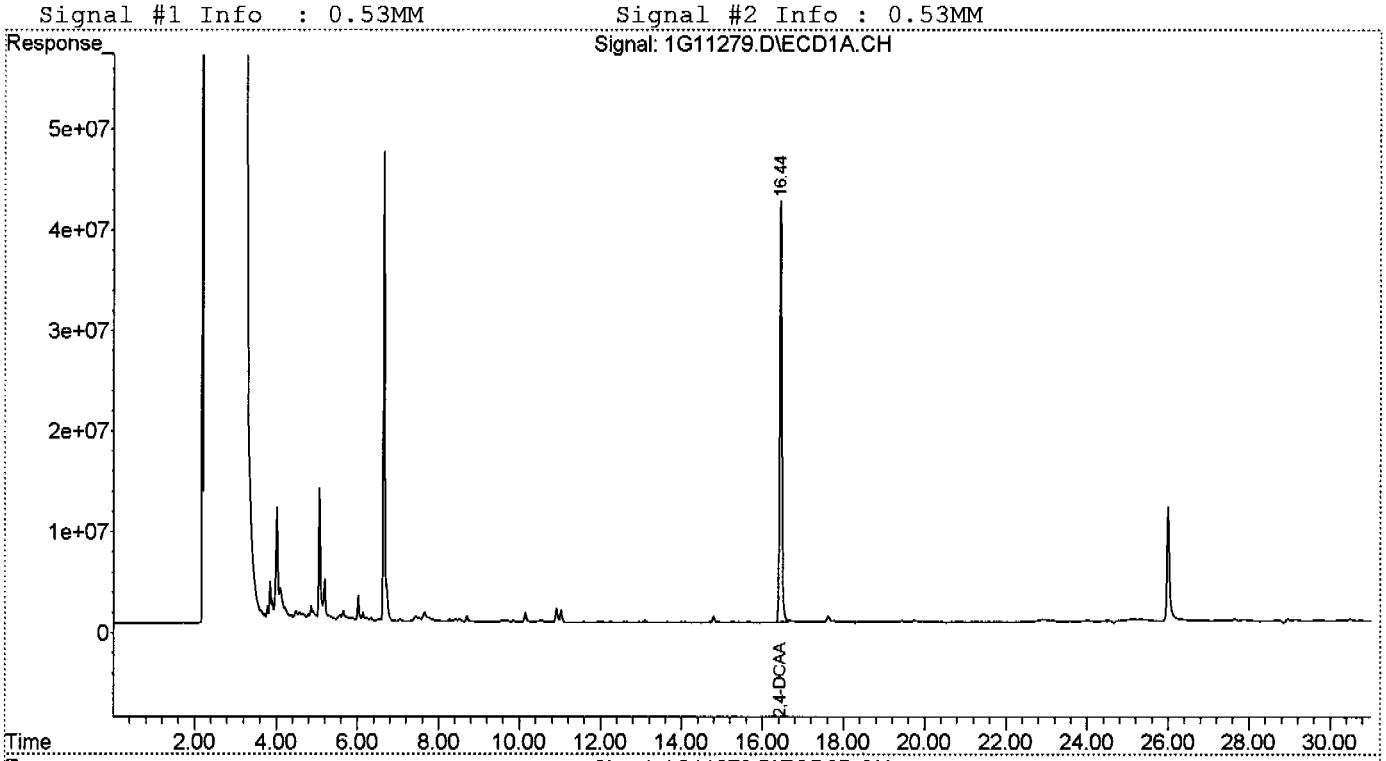
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

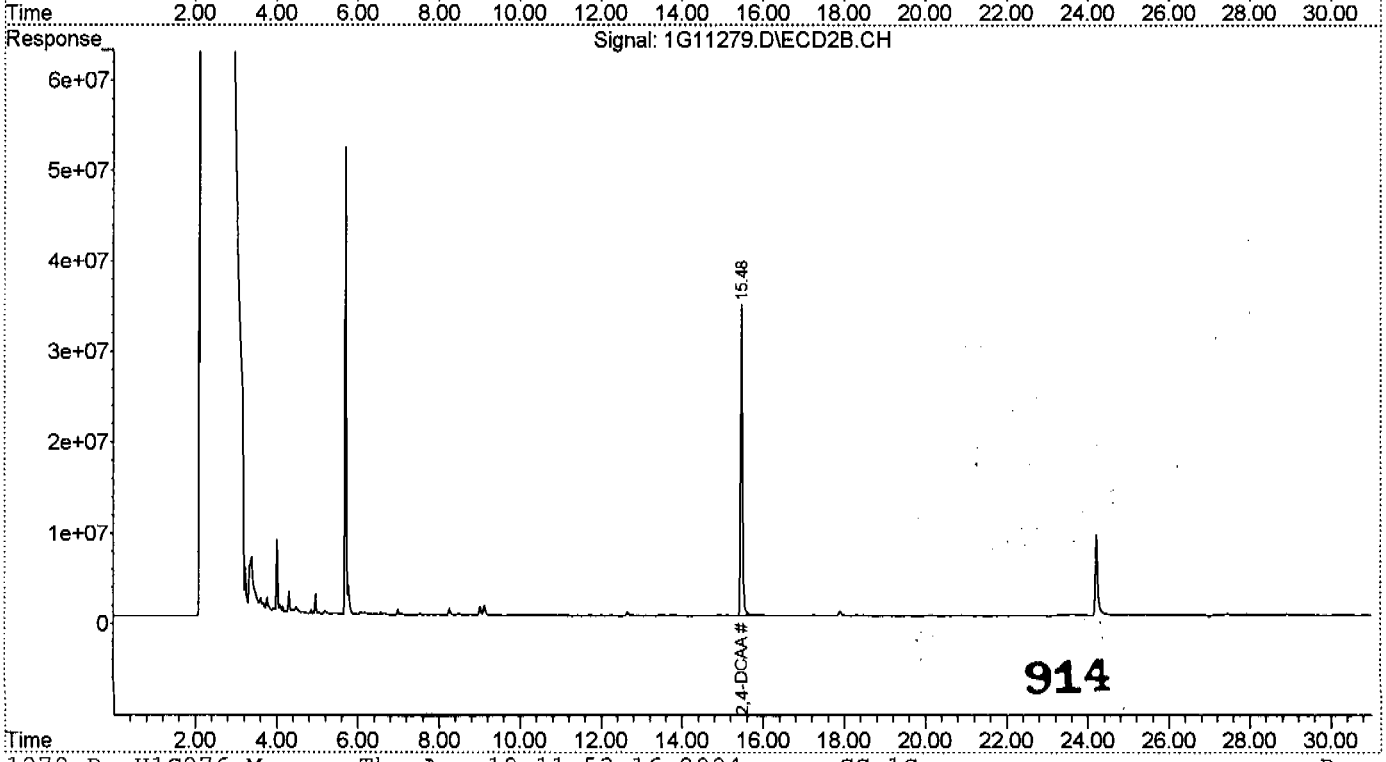
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11279.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1G11279.D\ECD2B.CH
Acq On : 8-18-04 01:07:14 PM Operator: kristis
Sample : N74914-2 Inst : GC1G
Misc : OP17705,G1G283,840,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:53 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4535-UZZLERD		
Lab Sample ID:	N74914-3	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	1G11280.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
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\1G11280.D\ECD1A.CH Vial: 31
Signal #2 : C:\MSDCHEM\1\DATA\1G11280.D\ECD2B.CH
Acq On : 8-18-04 01:40:56 PM Operator: kristis
Sample : N74914-3 Inst : GC1G
Misc : OP17705,G1G283,920,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:53:25 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1620.4E6	1221.7E6	1005.310	952.152
Spiked Amount 1000.000			Recovery	=	100.53%	95.22%
Target Compounds						

916

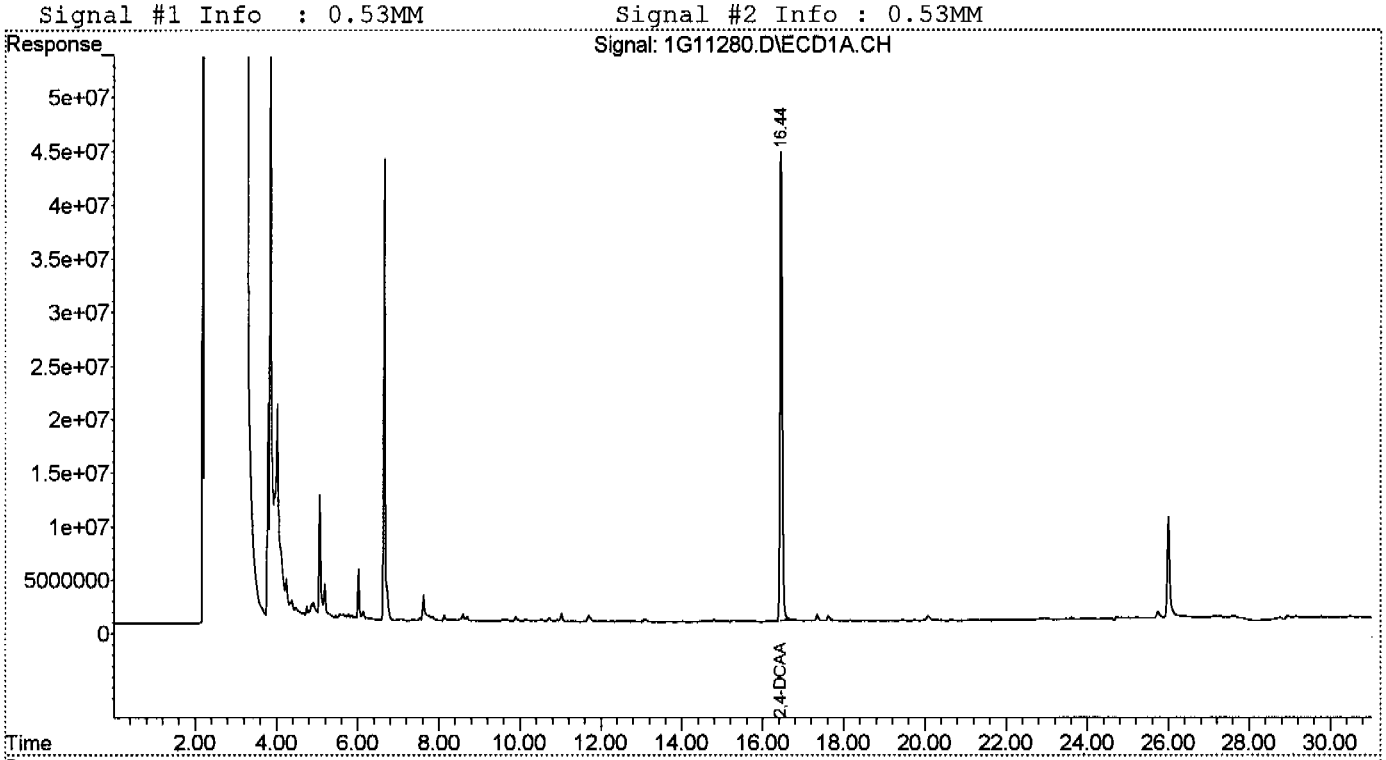
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

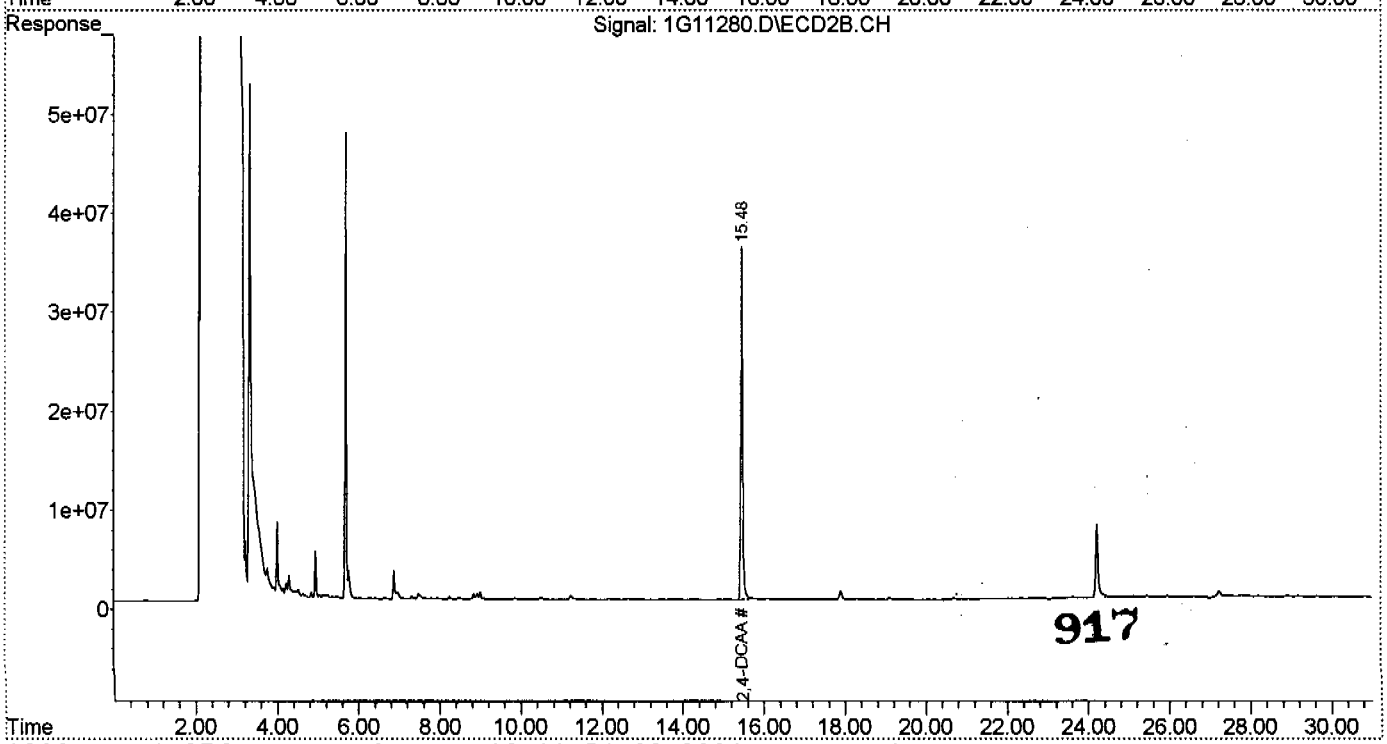
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11280.D\ECD1A.CH Vial: 31
Signal #2 : C:\MSDCHEM\1\DATA\1G11280.D\ECD2B.CH
Acq On : 8-18-04 01:40:56 PM Operator: kristis
Sample : N74914-3 Inst : GC1G
Misc : OP17705,G1G283,920,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:53 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





917

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4578-UZZLERD		
Lab Sample ID:	N74914-4	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	1G11281.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
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	94%		54-141%
19719-28-9	2,4-DCAA	90%		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\1G11281.D\ECD1A.CH Vial: 32
Signal #2 : C:\MSDCHEM\1\DATA\1G11281.D\ECD2B.CH
Acq On : 8-18-04 02:14:44 PM Operator: kristis
Sample : N74914-4 Inst : GC1G
Misc : OP17705,G1G283,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:54:10 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.45	15.49f	1514.9E6	1152.3E6	939.885	898.115
Spiked Amount 1000.000				Recovery =	93.99%	89.81%

Target Compounds

919

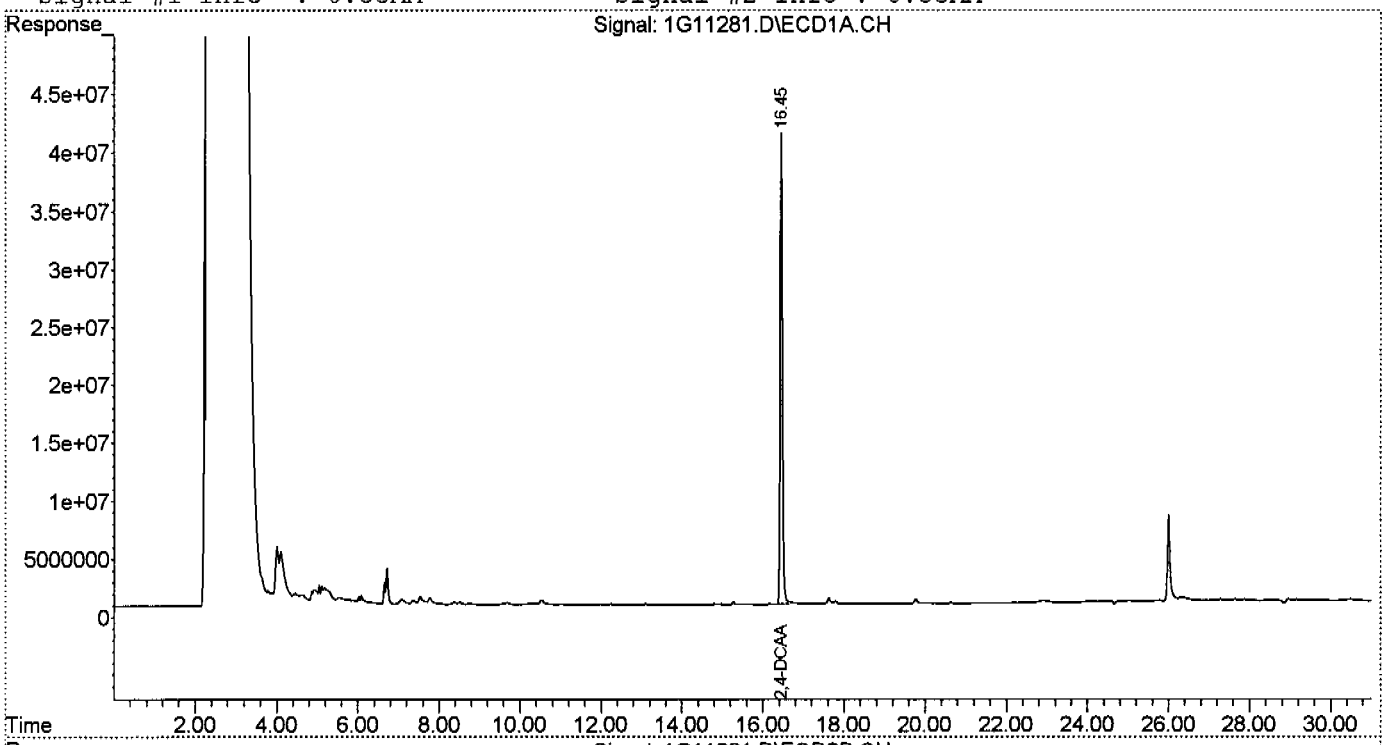
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

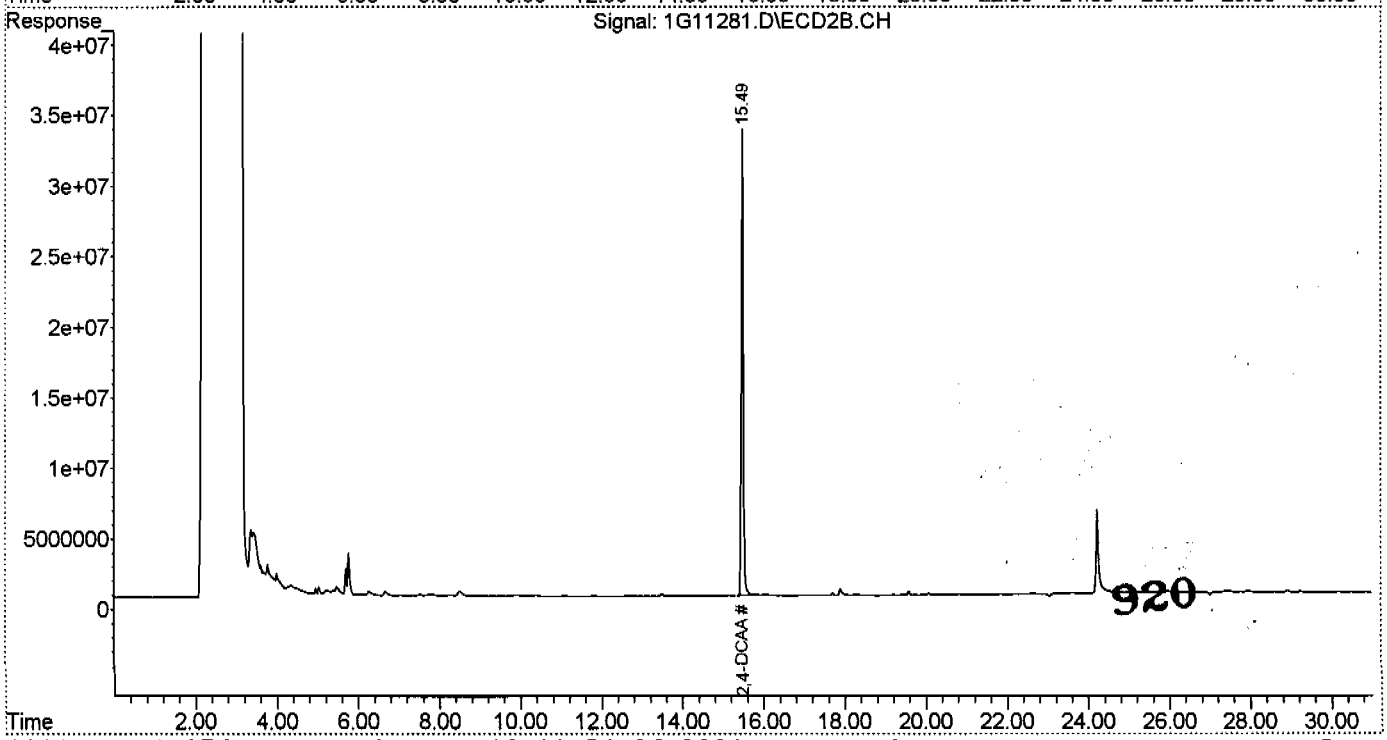
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11281.D\ECD1A.CH Vial: 32
Signal #2 : C:\MSDCHEM\1\DATA\1G11281.D\ECD2B.CH
Acq On : 8-18-04 02:14:44 PM Operator: kristis
Sample : N74914-4 Inst : GC1G
Misc : OP17705,G1G283,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:54 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-627B-ENONRD		
Lab Sample ID:	N74914-5	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	1G11284.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
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	97%		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\1G11284.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G11284.D\ECD2B.CH
Acq On : 8-18-04 06:38:27 PM Operator: kristis
Sample : N74914-5 Inst : GC1G
Misc : OP17705,G1G283,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 18 19:09:32 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	16.44f	15.49f	1570.9E6	1205.0E6	974.595	939.190
Spiked Amount 1000.000			Recovery	=	97.46%	93.92%

Target Compounds

922

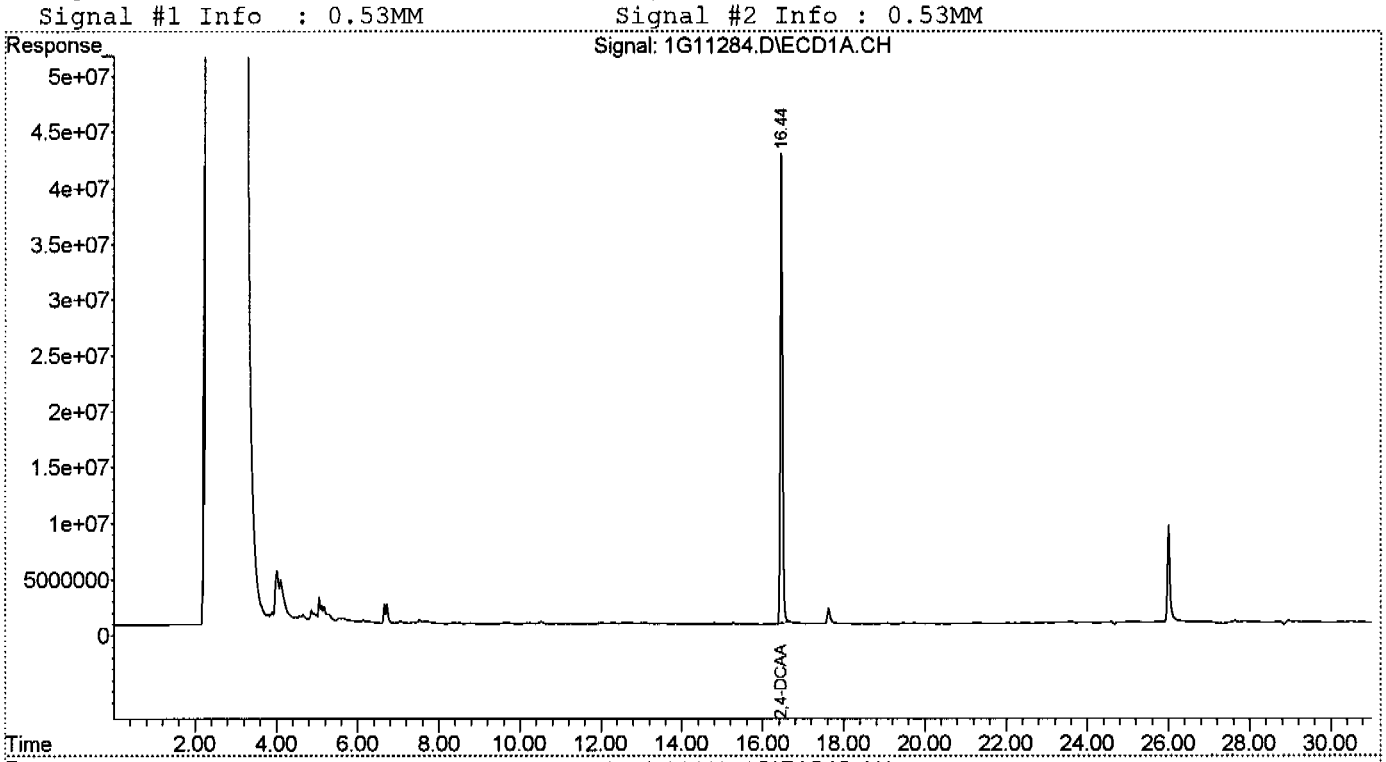
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

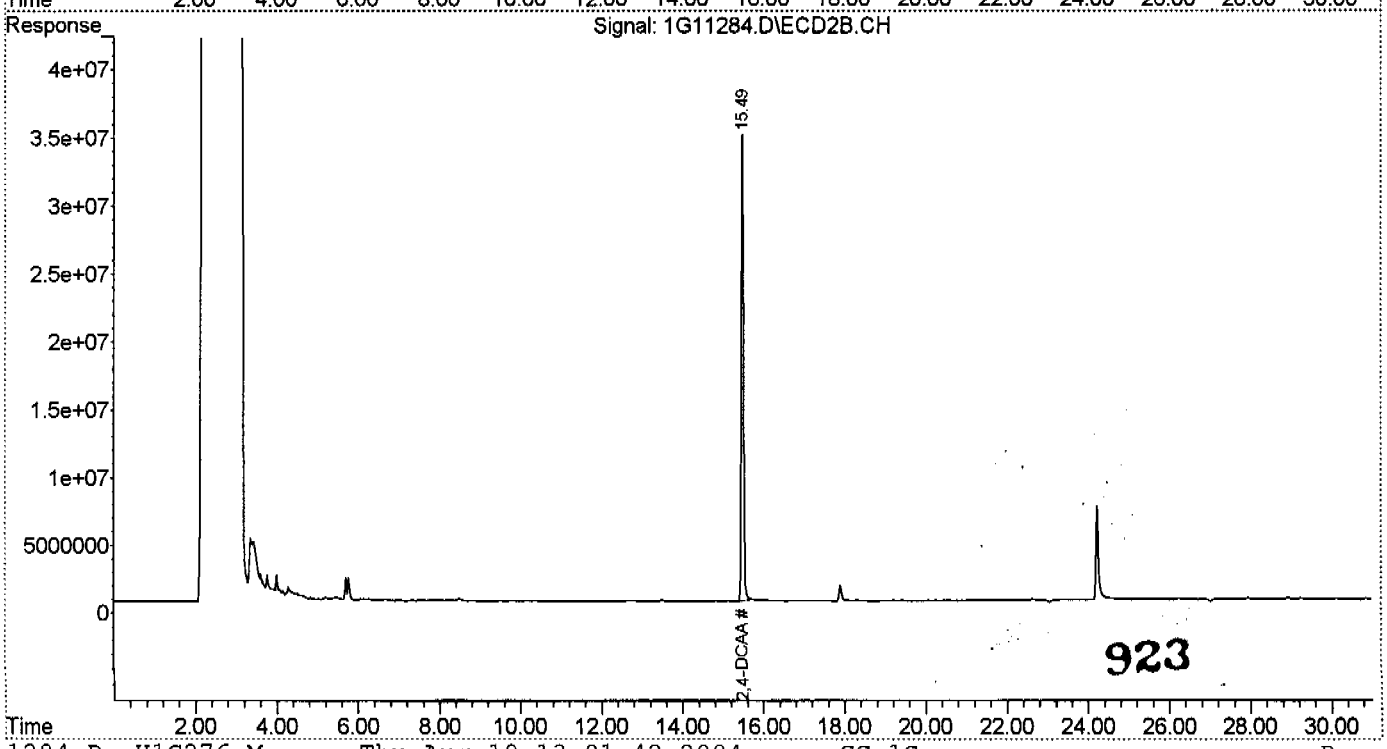
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11284.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G11284.D\ECD2B.CH
Acq On : 8-18-04 06:38:27 PM Operator: kristis
Sample : N74914-5 Inst : GC1G
Misc : OP17705,G1G283,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:01 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





923

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4573-UZZLERD		
Lab Sample ID:	N74914-6	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	1G11285.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
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	94%		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\1G11285.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G11285.D\ECD2B.CH
Acq On : 8-18-04 07:12:16 PM Operator: kristis
Sample : N74914-6 Inst : GC1G
Misc : OP17705,G1G283,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 18 19:43:22 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	16.44f	15.49f	1522.7E6	1180.3E6	944.702	919.889
Spiked Amount 1000.000			Recovery	=	94.47%	91.99%
Target Compounds						

925

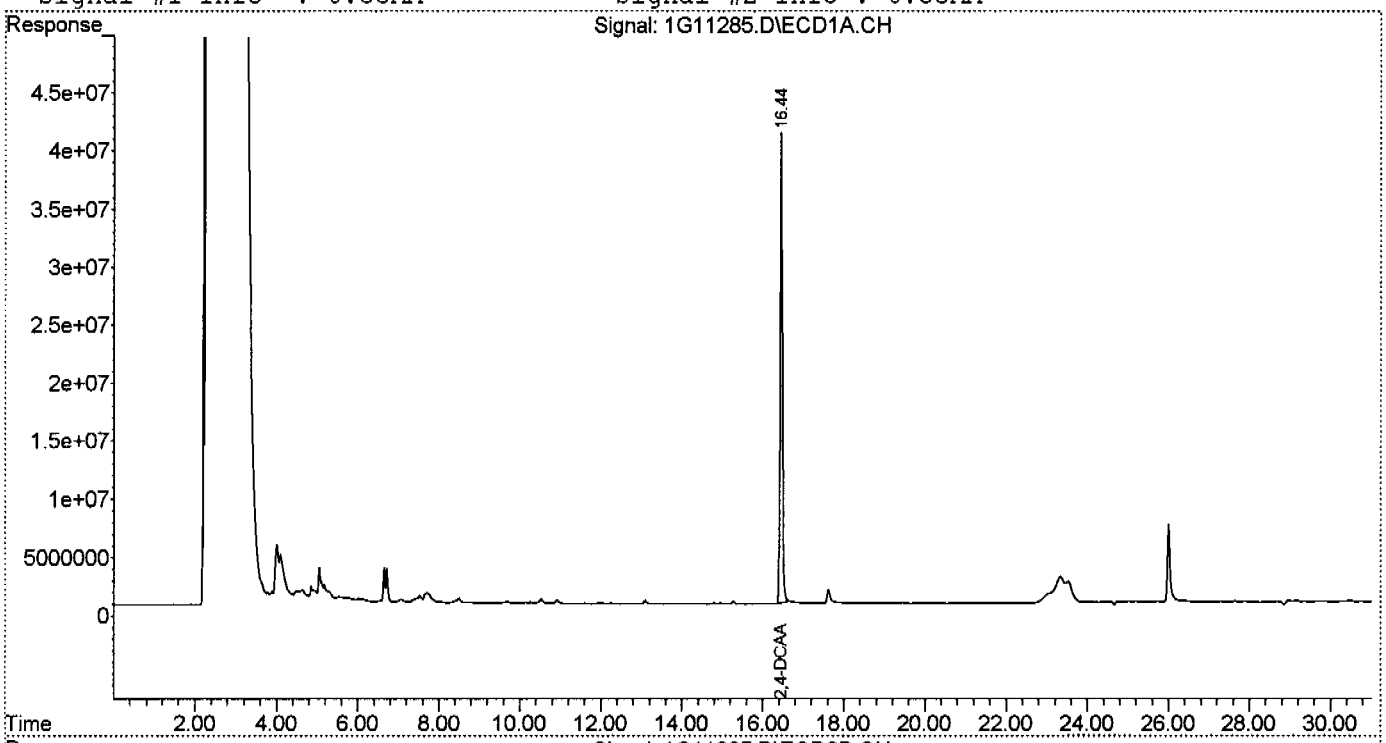
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

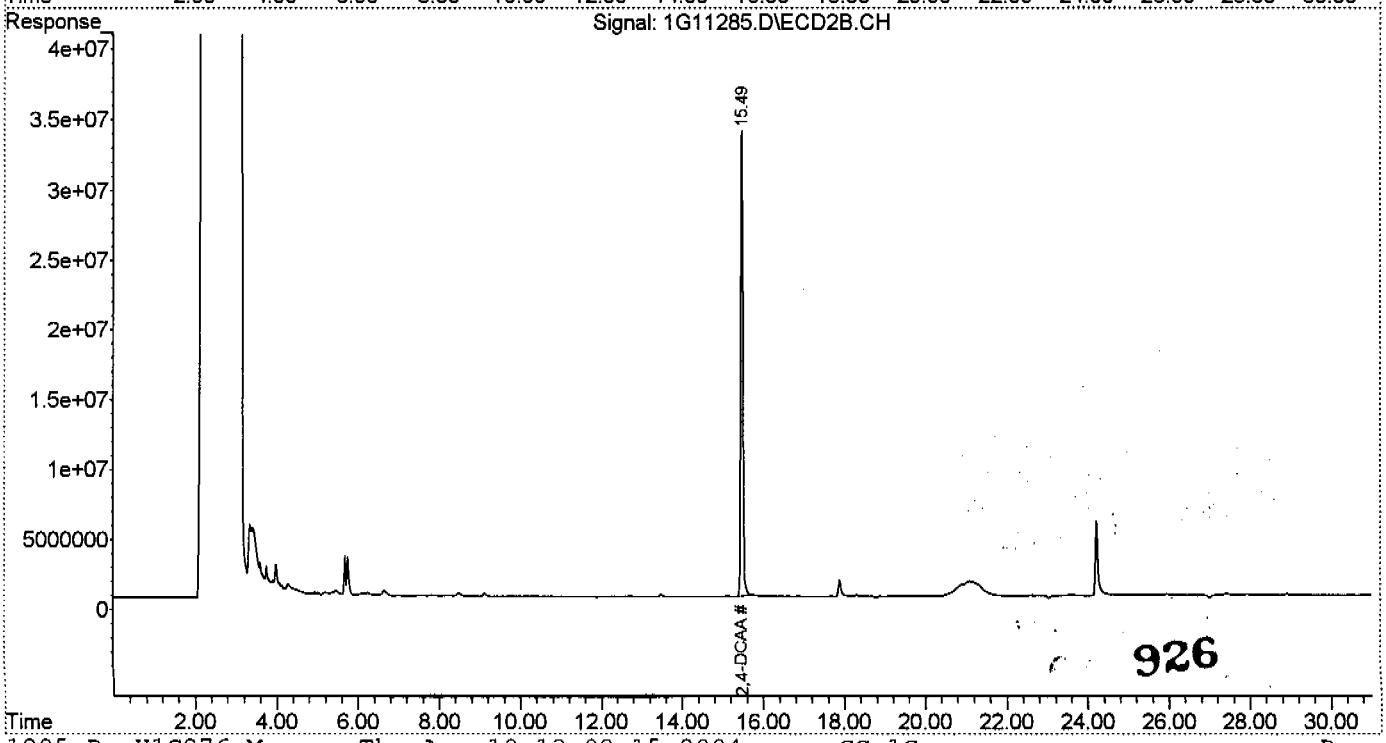
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11285.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G11285.D\ECD2B.CH
Acq On : 8-18-04 07:12:16 PM Operator: kristis
Sample : N74914-6 Inst : GC1G
Misc : OP17705,G1G283,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 18 19:43 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





926

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-FIELDDUP2		
Lab Sample ID:	N74914-7	**Date Sampled:**	08/11/04
Matrix:	AQ - Ground Water	**Date Received:**	08/12/04
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	1G11286.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
Run #2							

	Initial Volume	Final Volume
Run #1	930 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	0.13	ug/l	
93-76-5	2,4,5-T	ND	0.22	0.21	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	97%		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\1G11286.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G11286.D\ECD2B.CH
Acq On : 8-18-04 07:45:59 PM Operator: kristis
Sample : N74914-7 Inst : GC1G
Misc : OP17705,G1G283,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 18 20:17:08 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	16.44f	15.49f	1565.7E6	1201.8E6	971.397	936.637
Spiked Amount 1000.000			Recovery	=	97.14%	93.66%
Target Compounds						

928

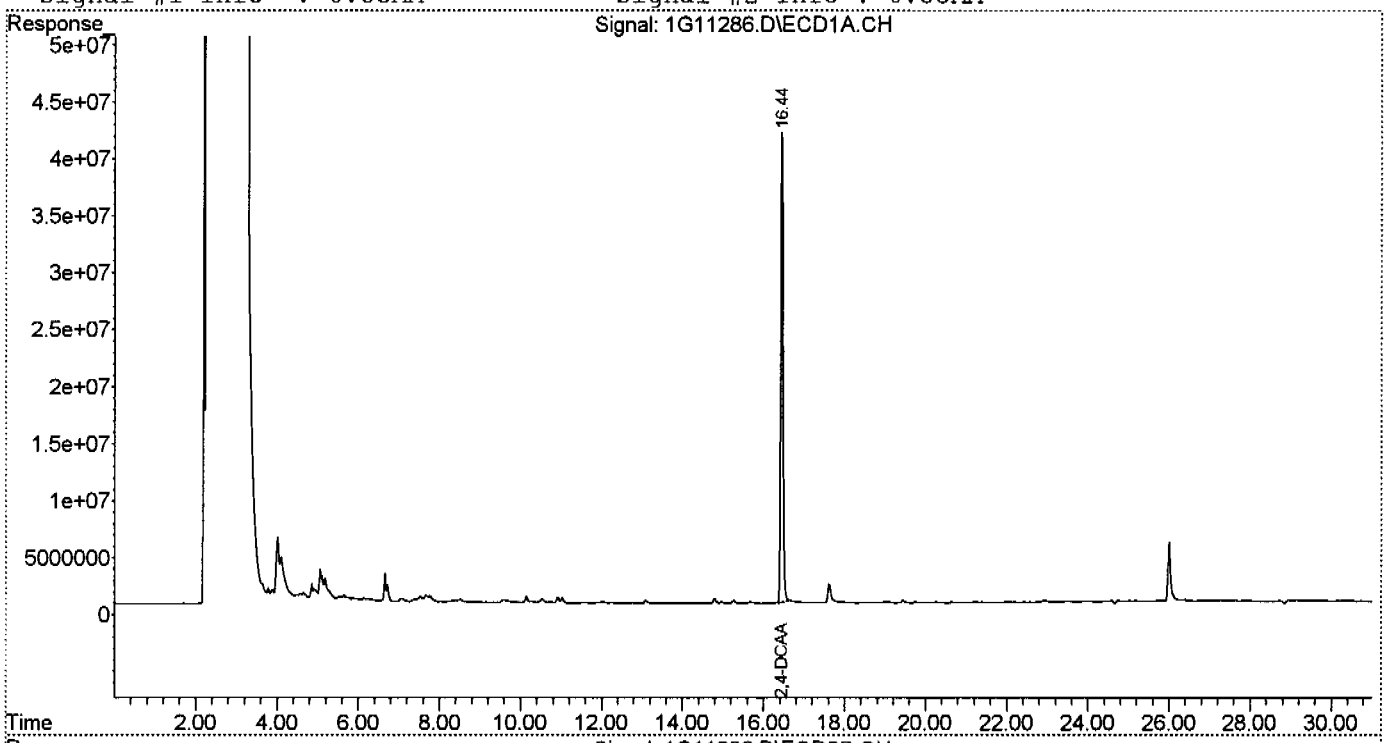
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

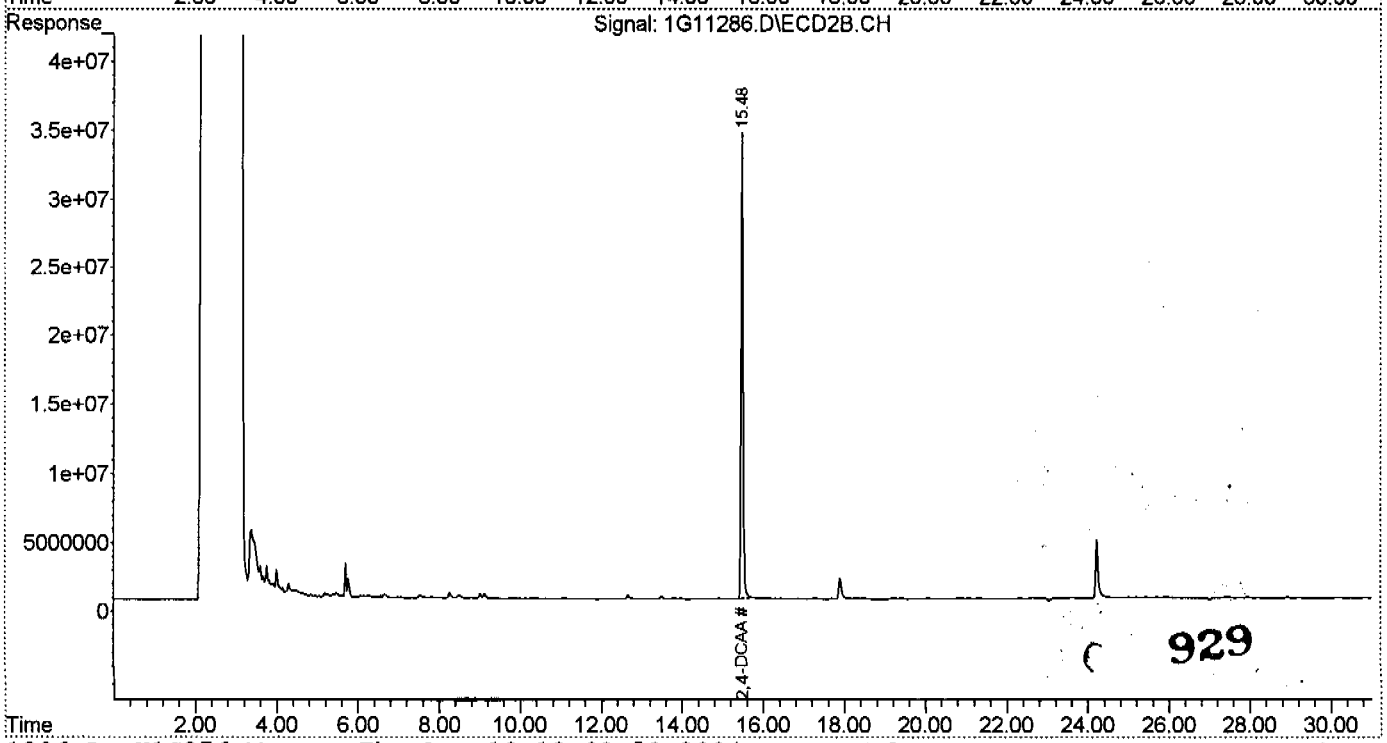
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11286.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G11286.D\ECD2B.CH
Acq On : 8-18-04 07:45:59 PM Operator: kristis
Sample : N74914-7 Inst : GC1G
Misc : OP17705,G1G283,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:02 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





929

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-6305-ISHAMCHAMBERS		
Lab Sample ID:	N74914-9	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	1G11287.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
Run #2							

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

Herbicide List

CAS No.	Compound	Result	RL	MDL	Units	Q
94-75-7	2,4-D	ND	0.60	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	96%		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\1G11287.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G11287.D\ECD2B.CH
Acq On : 8-18-04 08:19:48 PM Operator: kristis
Sample : N74914-9 Inst : GC1G
Misc : OP17705,G1G283,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 18 20:50:57 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 : 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	16.44f	15.48f	1539.7E6	1188.4E6	955.264	926.248
Spiked Amount 1000.000			Recovery	=	95.53%	92.62%
Target Compounds						

931

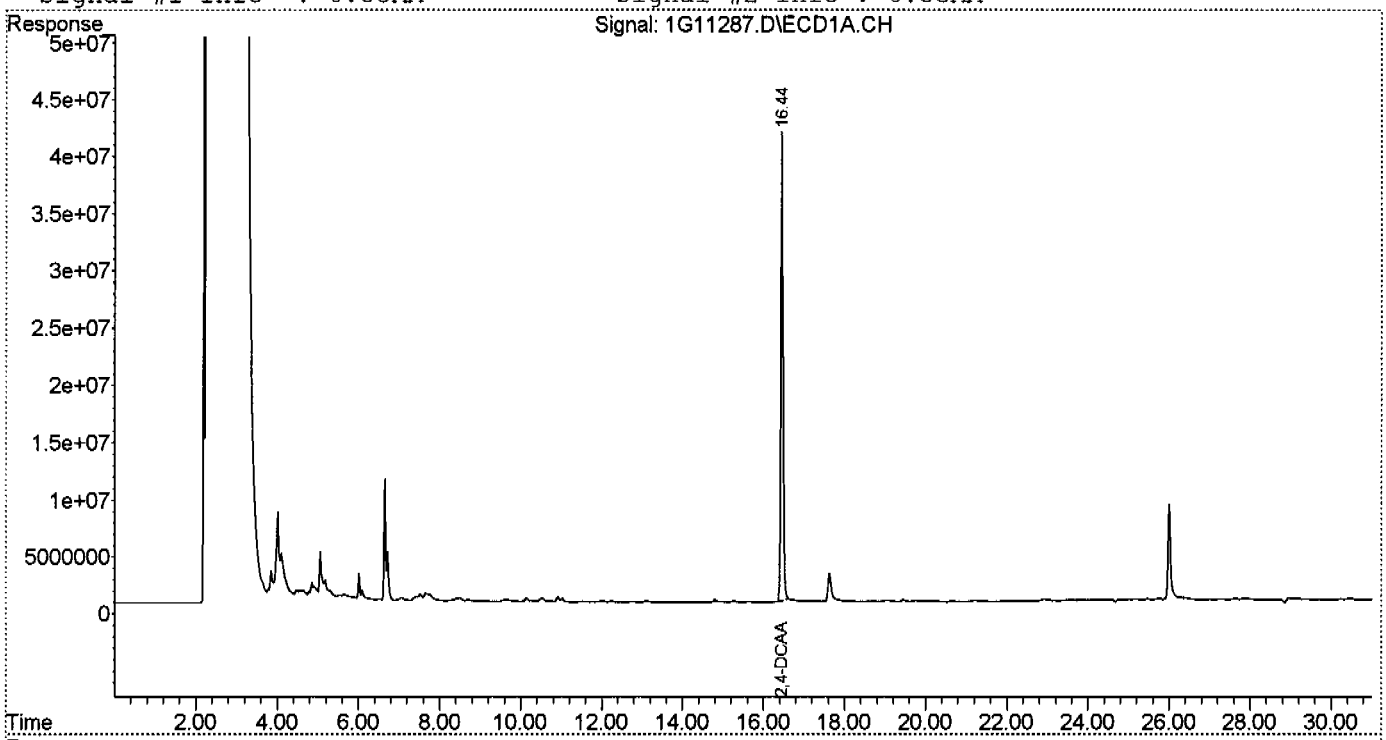
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

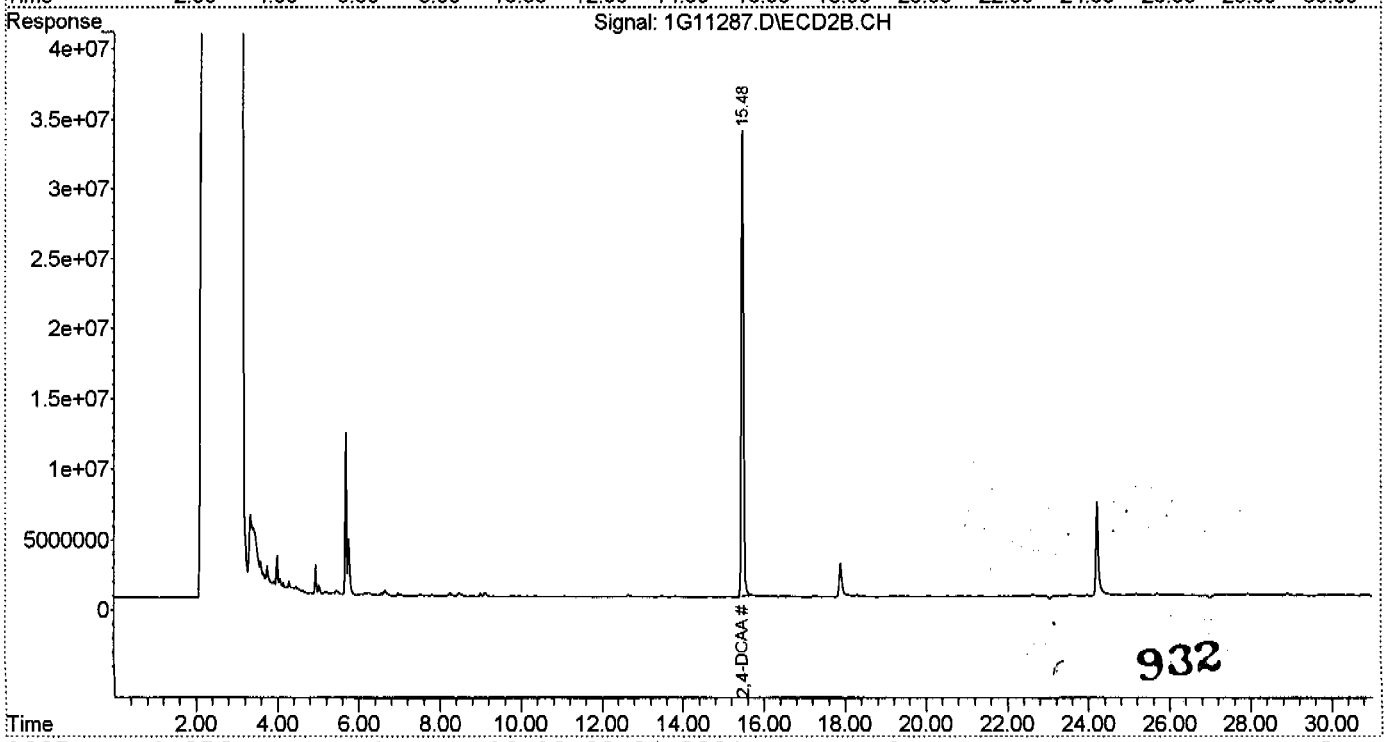
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11287.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G11287.D\ECD2B.CH
Acq On : 8-18-04 08:19:48 PM Operator: kristis
Sample : N74914-9 Inst : GC1G
Misc : OP17705,G1G283,830,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:03 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





932

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4710-MORIAHRD		
Lab Sample ID:	N74914-10	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	1G11288.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
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	99%		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\1G11288.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G11288.D\ECD2B.CH
Acq On : 8-18-04 08:53:29 PM Operator: kristis
Sample : N74914-10 Inst : GC1G
Misc : OP17705,G1G283,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:03:33 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1588.0E6	1224.0E6	985.236	953.973
Spiked Amount 1000.000			Recovery	=	98.52%	95.40%

Target Compounds

934

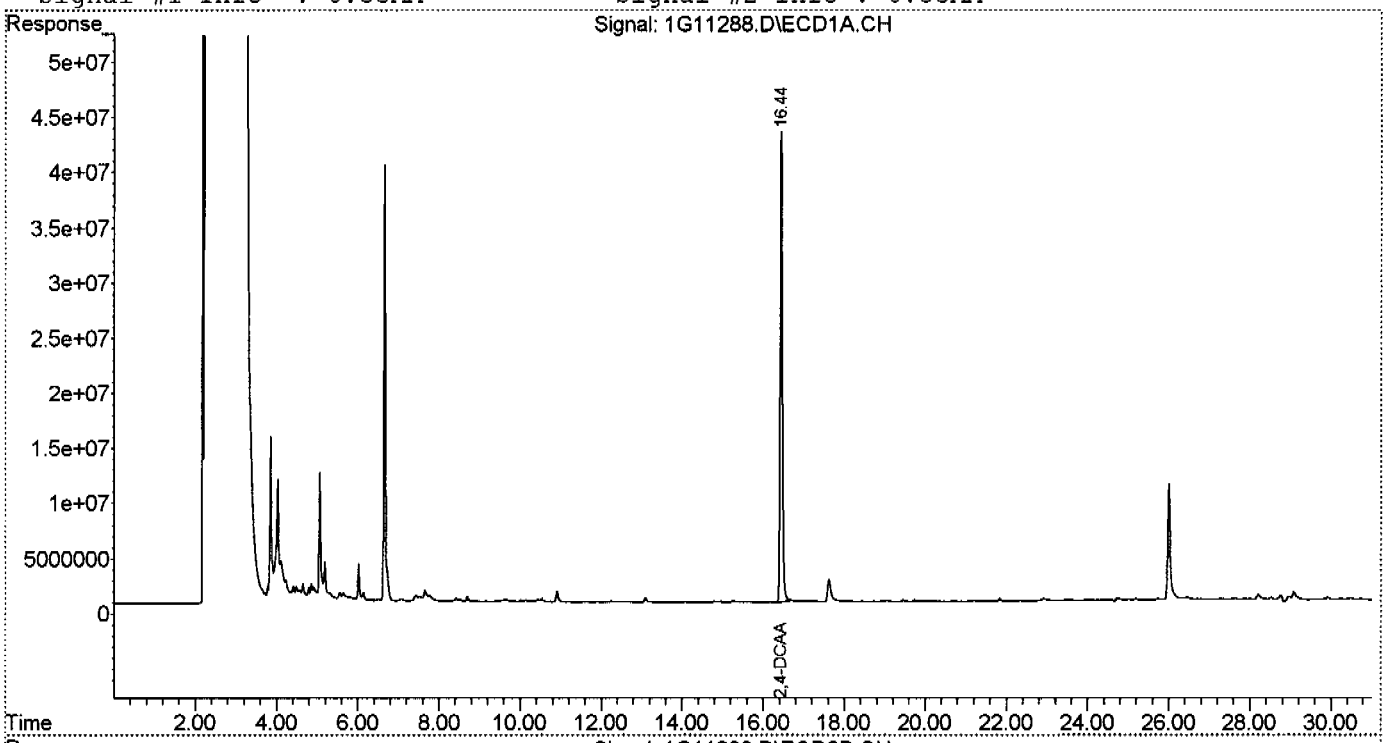
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

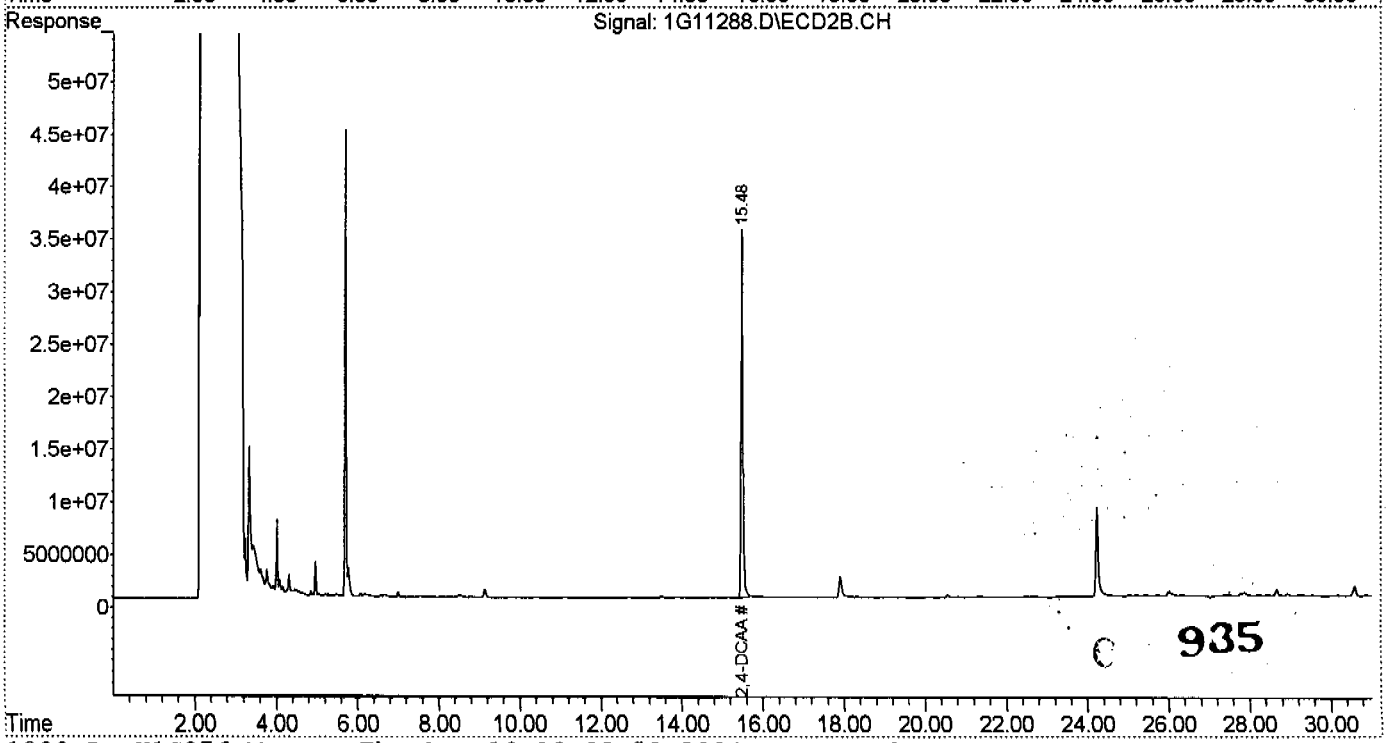
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11288.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G11288.D\ECD2B.CH
Acq On : 8-18-04 08:53:29 PM Operator: kristis
Sample : N74914-10 Inst : GC1G
Misc : OP17705,G1G283,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:03 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





935

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-4709-MORIAHRD		
Lab Sample ID:	N74914-11	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	1G11289.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
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	93%		54-141%
19719-28-9	2,4-DCAA	88%		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\1G11289.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11289.D\ECD2B.CH
Acq On : 8-18-04 09:27:18 PM Operator: kristis
Sample : N74914-11 Inst : GC1G
Misc : OP17705,G1G283,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:04:08 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1493.5E6	1134.6E6	926.625	884.287
Spiked Amount 1000.000			Recovery	=	92.66%	88.43%
Target Compounds						

KF 8/5/04

937

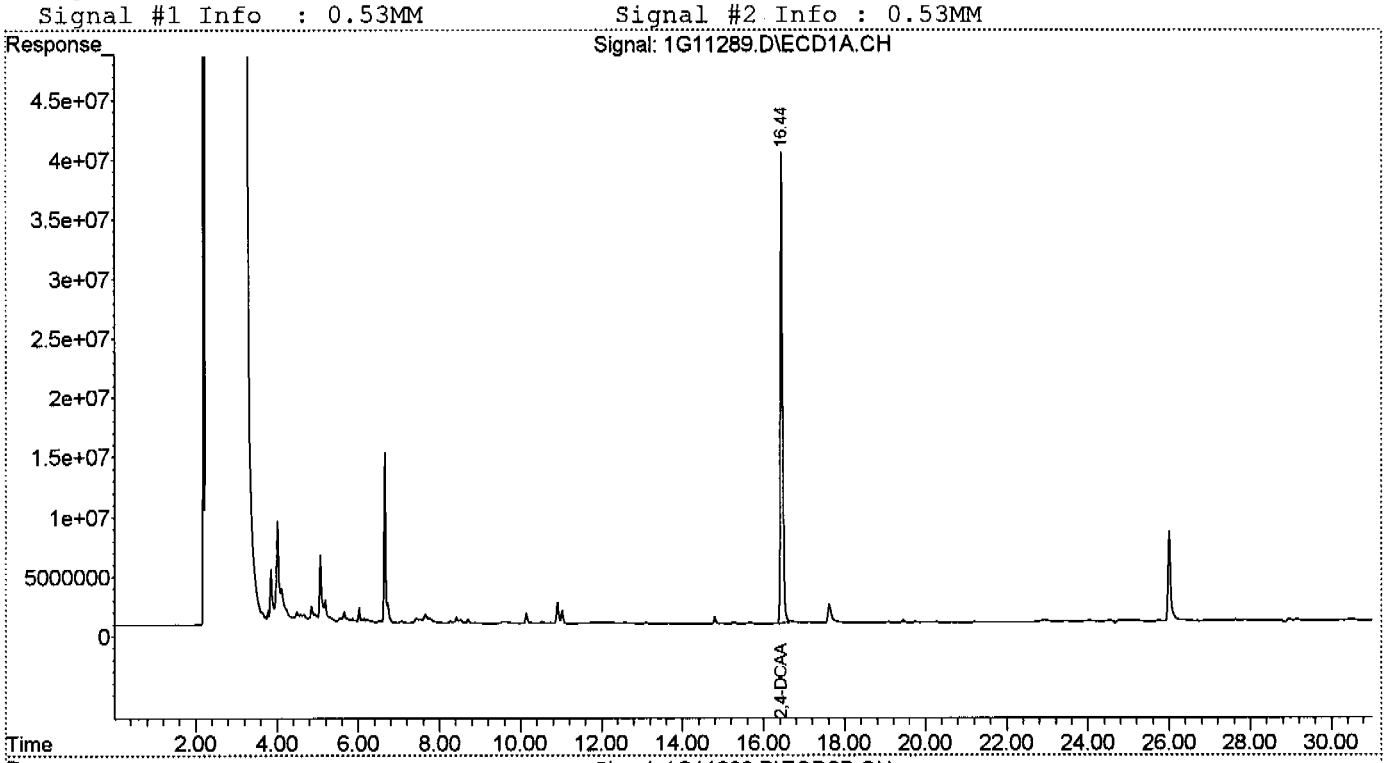
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

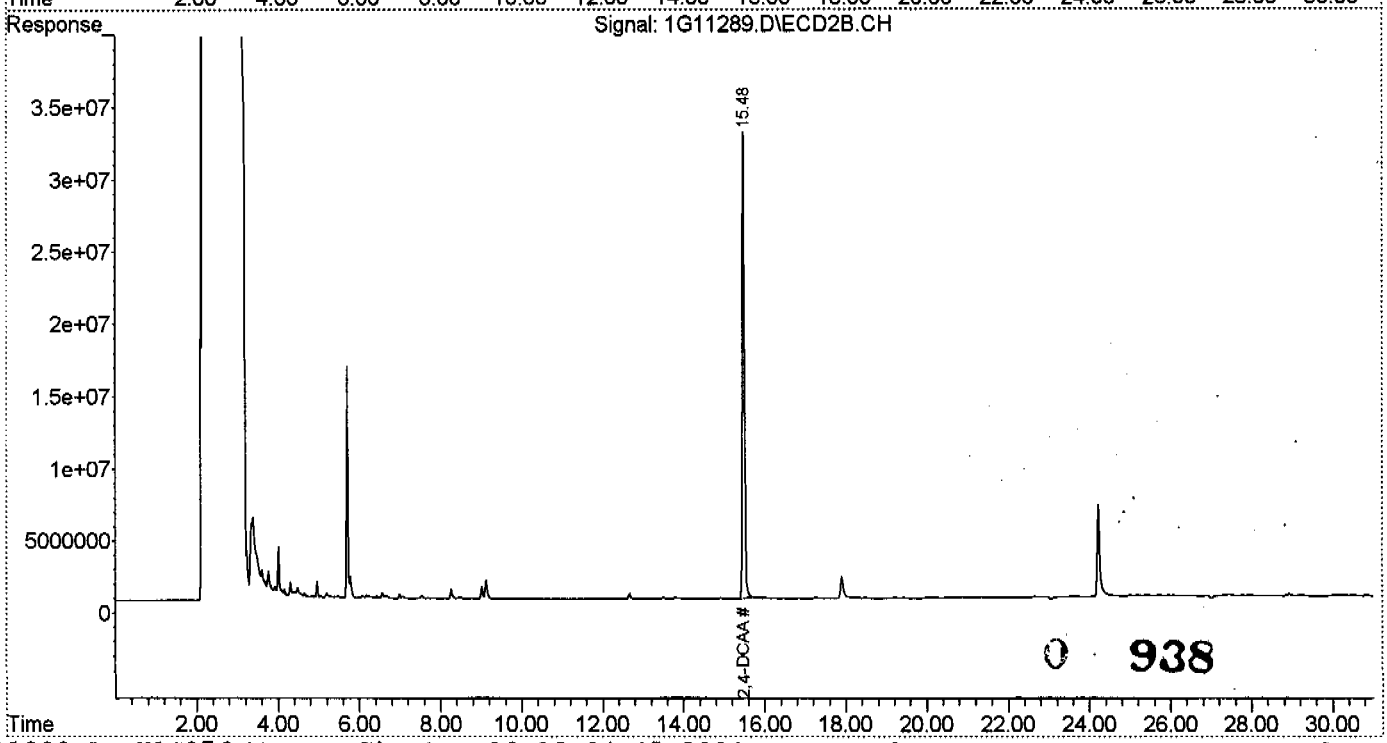
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11289.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G11289.D\ECD2B.CH
Acq On : 8-18-04 09:27:18 PM Operator: kristis
Sample : N74914-11 Inst : GC1G
Misc : OP17705,G1G283,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:04 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





0 938

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-5057-CLAYTONRD		
Lab Sample ID:	N74914-12	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	1G11290.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
Run #2							

	Initial Volume	Final Volume
Run #1	890 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	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\1G11290.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G11290.D\ECD2B.CH
Acq On : 18 Aug 2004 10:00 pm Operator: kristis
Sample : N74914-12 Inst : GC1G
Misc : OP17705,G1G283,890,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:04:57 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1620.4E6	1222.6E6	1005.309	952.859
Spiked Amount 1000.000			Recovery	=	100.53%	95.29%
Target Compounds						

940

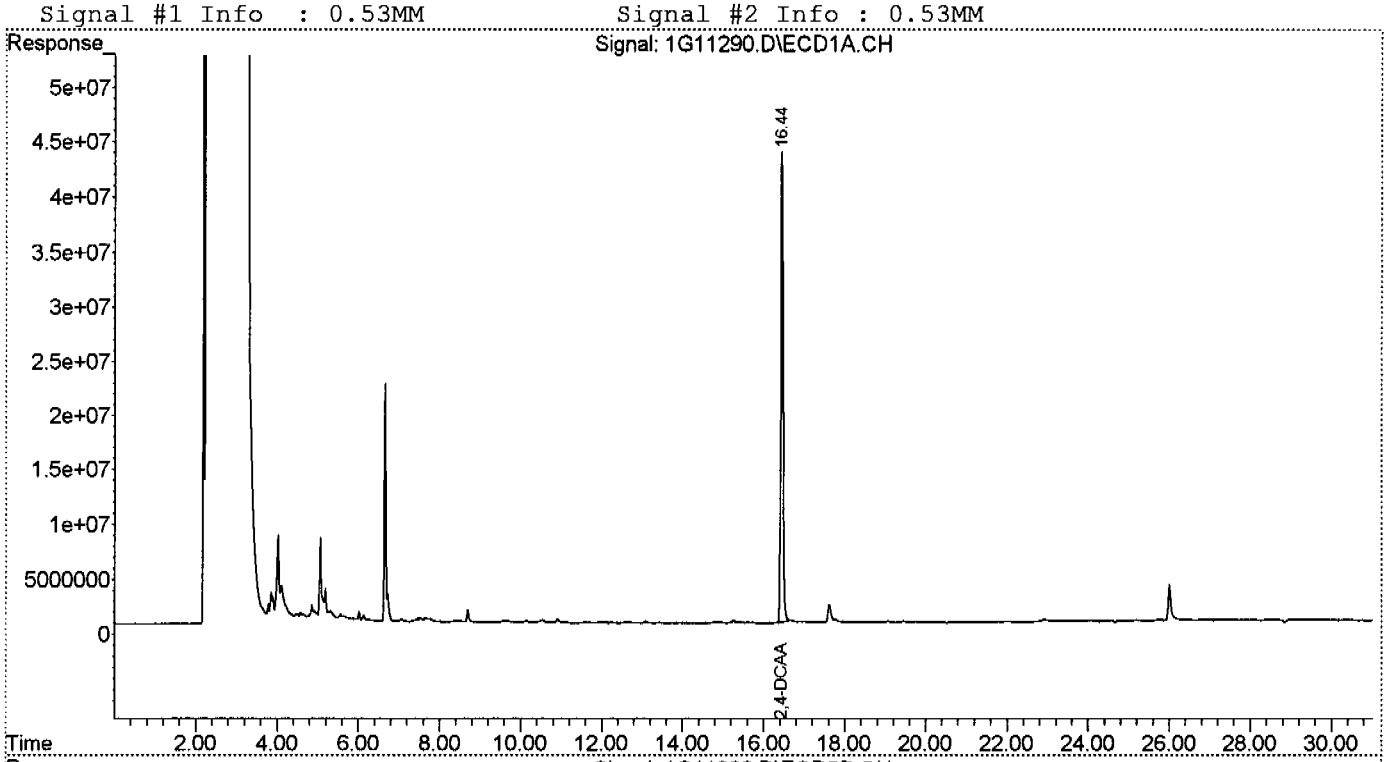
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

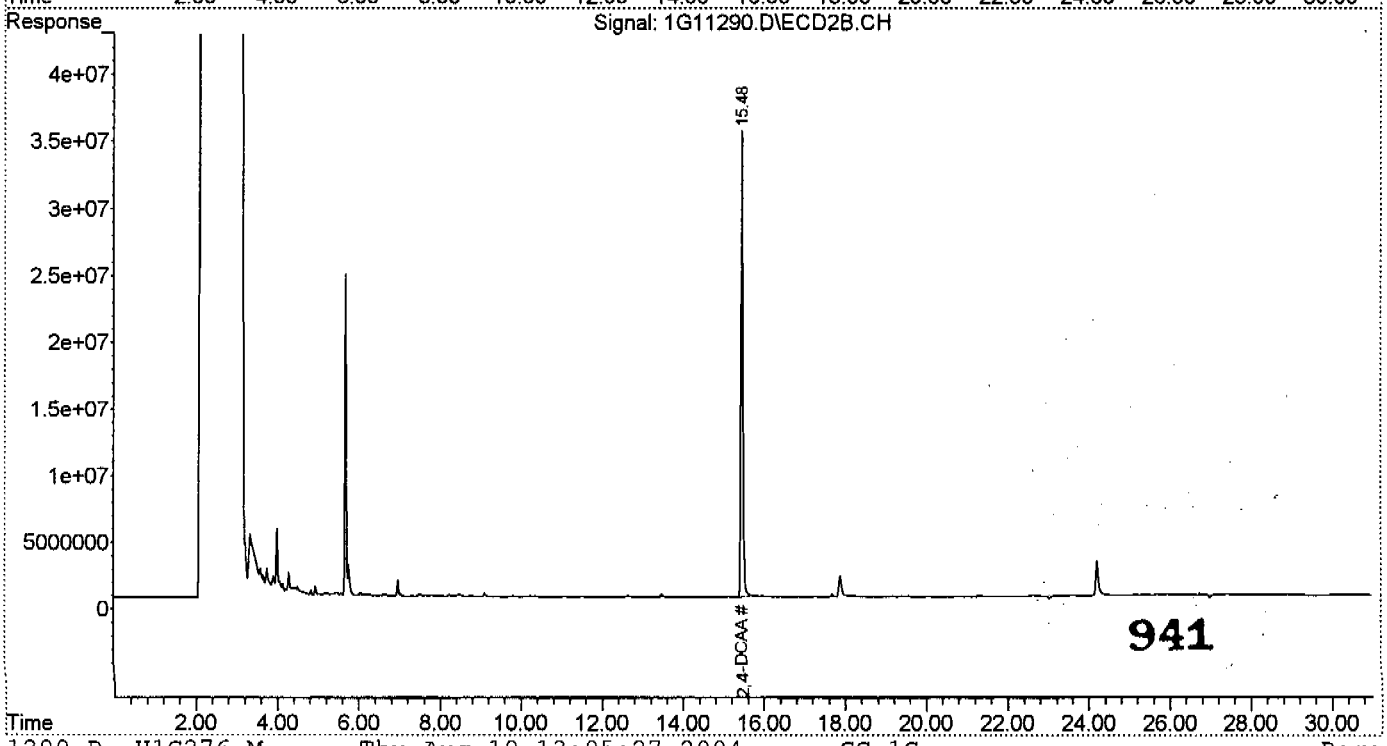
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11290.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G11290.D\ECD2B.CH
Acq On : 18 Aug 2004 10:00 pm Operator: kristis
Sample : N74914-12 Inst : GC1G
Misc : OP17705,G1G283,890,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:05 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





941

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-2202-TILLEYFARMRD		
Lab Sample ID:	N74914-13	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	1G11291.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
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	97%		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\1G11291.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G11291.D\ECD2B.CH
Acq On : 18 Aug 2004 10:34 pm Operator: kristis
Sample : N74914-13 Inst : GC1G
Misc : OP17705,G1G283,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:05:36 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1566.2E6	1192.7E6	971.709	929.561
Spiked Amount 1000.000			Recovery	=	97.17%	92.96%
Target Compounds						

943

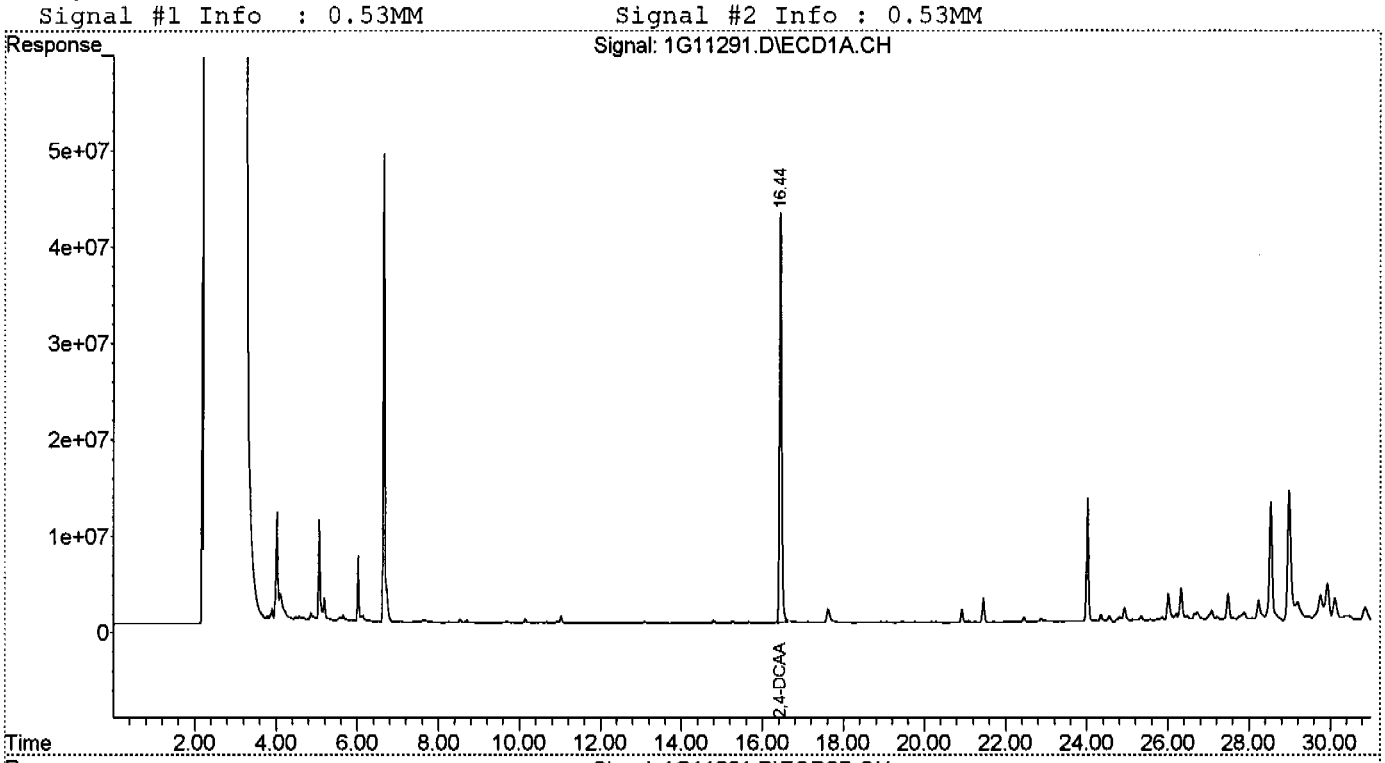
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

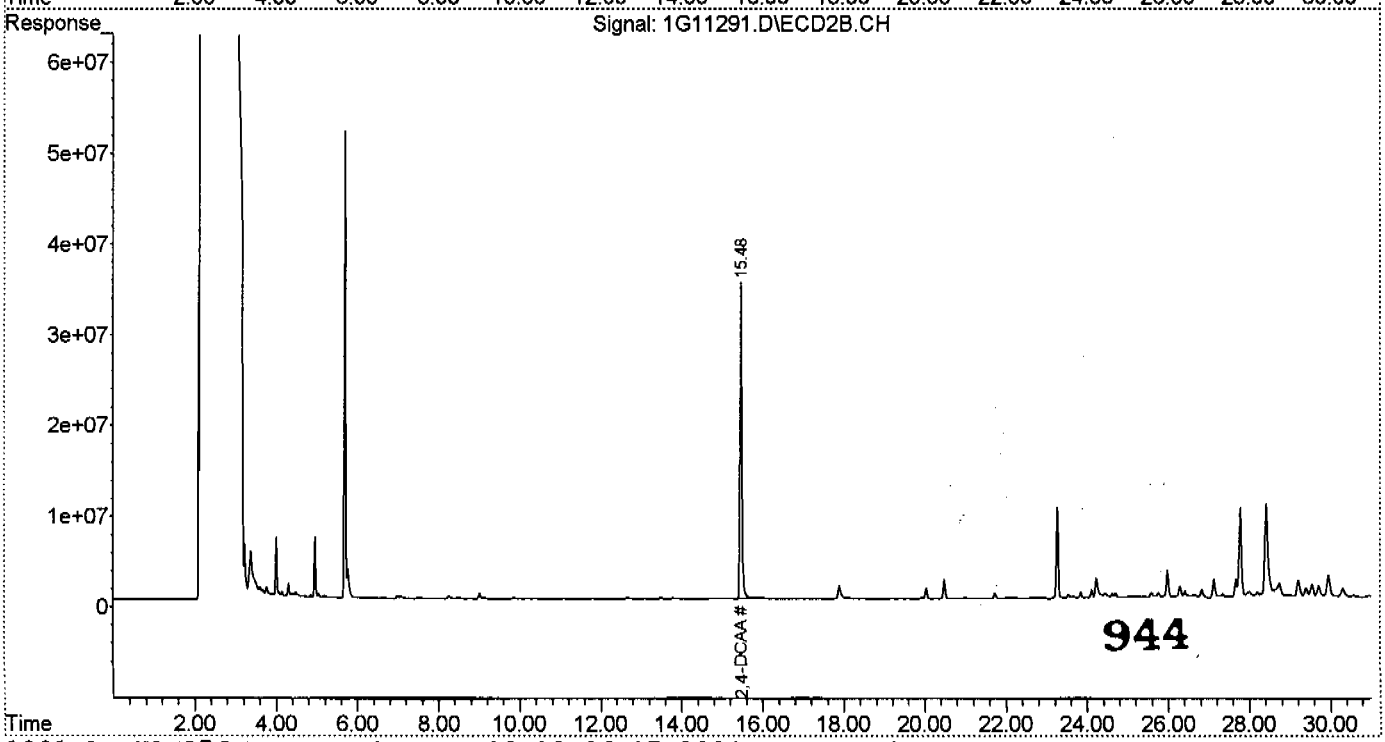
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11291.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G11291.D\ECD2B.CH
Acq On : 18 Aug 2004 10:34 pm Operator: kristis
Sample : N74914-13 Inst : GC1G
Misc : OP17705,G1G283,900,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:05 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-564-BETHANYCHURCH		
Lab Sample ID:	N74914-14	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	1G11292.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
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	97%		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\1G11292.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11292.D\ECD2B.CH
Acq On : 18 Aug 2004 11:08 pm Operator: kristis
Sample : N74914-14 Inst : GC1G
Misc : OP17705,G1G283,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:06:26 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1569.1E6	1190.2E6	973.505	927.647
Spiked Amount 1000.000			Recovery	=	97.35%	92.76%
Target Compounds						

946

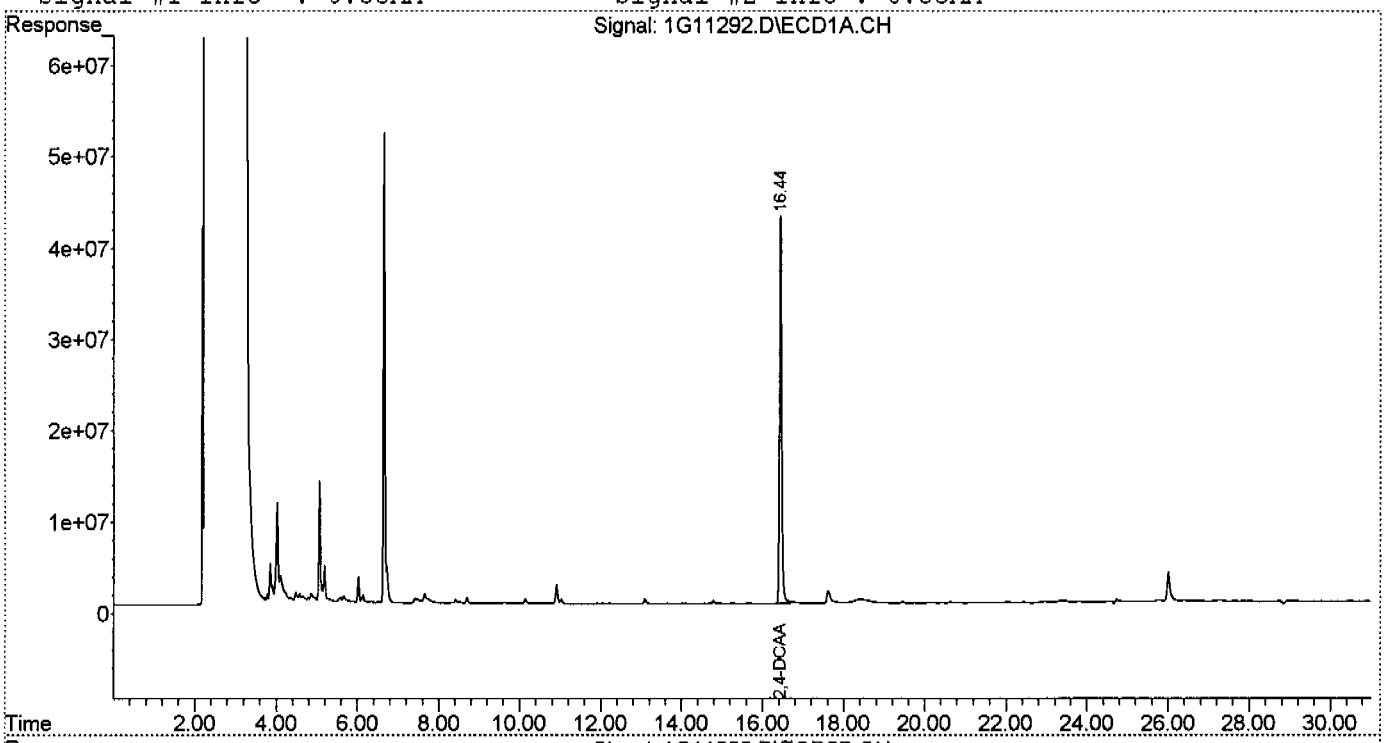
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

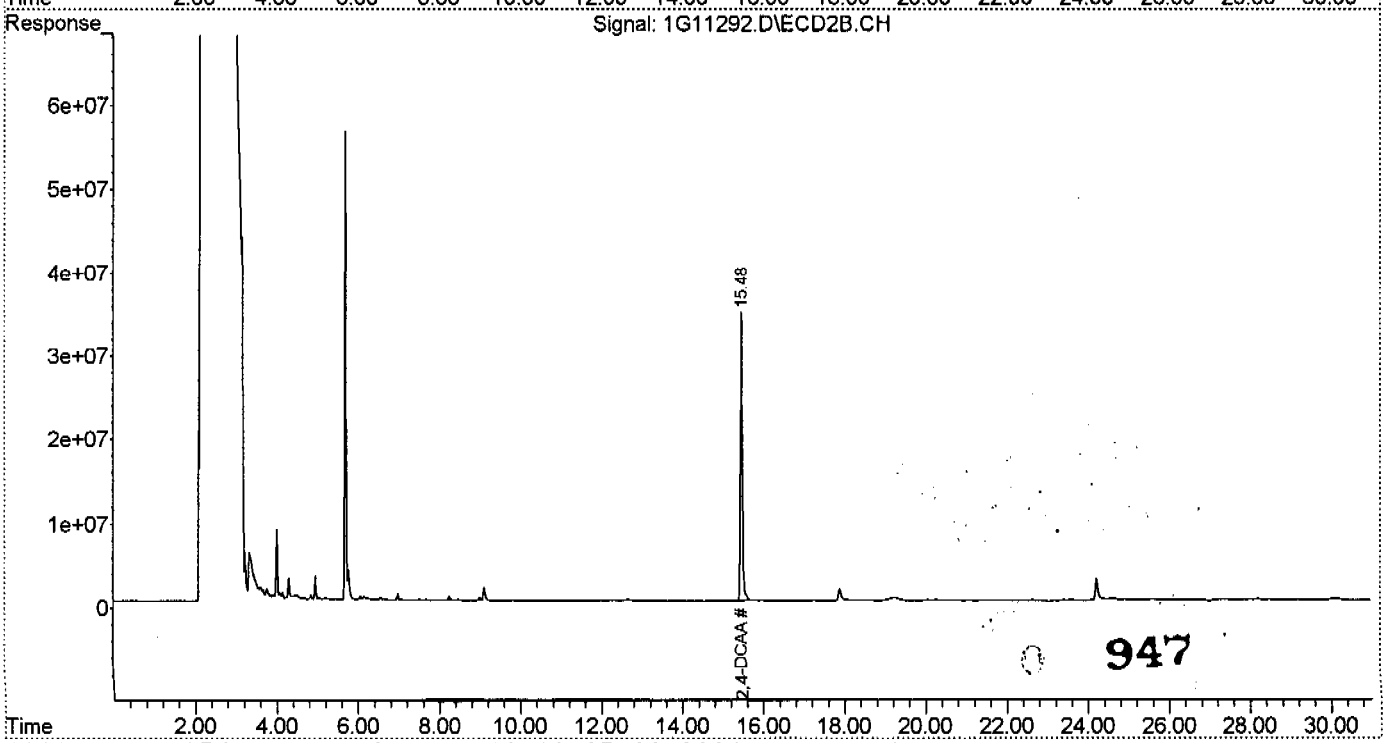
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11292.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G11292.D\ECD2B.CH
Acq On : 18 Aug 2004 11:08 pm Operator: kristis
Sample : N74914-14 Inst : GC1G
Misc : OP17705,G1G283,940,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:06 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





947

Accutest Laboratories

Report of Analysis

Client Sample ID:	RW0804-FIELDDUP3		
Lab Sample ID:	N74914-15	**Date Sampled:**	08/12/04
Matrix:	AQ - Ground Water	**Date Received:**	08/13/04
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	1G11293.D	1	08/18/04	KLS	08/13/04	OP17705	G1G283
Run #2							

	Initial Volume	Final Volume
Run #1	950 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	0.29	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	96%		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\1G11293.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G11293.D\ECD2B.CH
Acq On : 18 Aug 2004 11:42 pm Operator: kristis
Sample : N74914-15 Inst : GC1G
Misc : OP17705,G1G283,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:07:08 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1553.7E6	1175.4E6	963.965	916.069
Spiked Amount 1000.000			Recovery	=	96.40%	91.61%
Target Compounds						

RJS/50

949

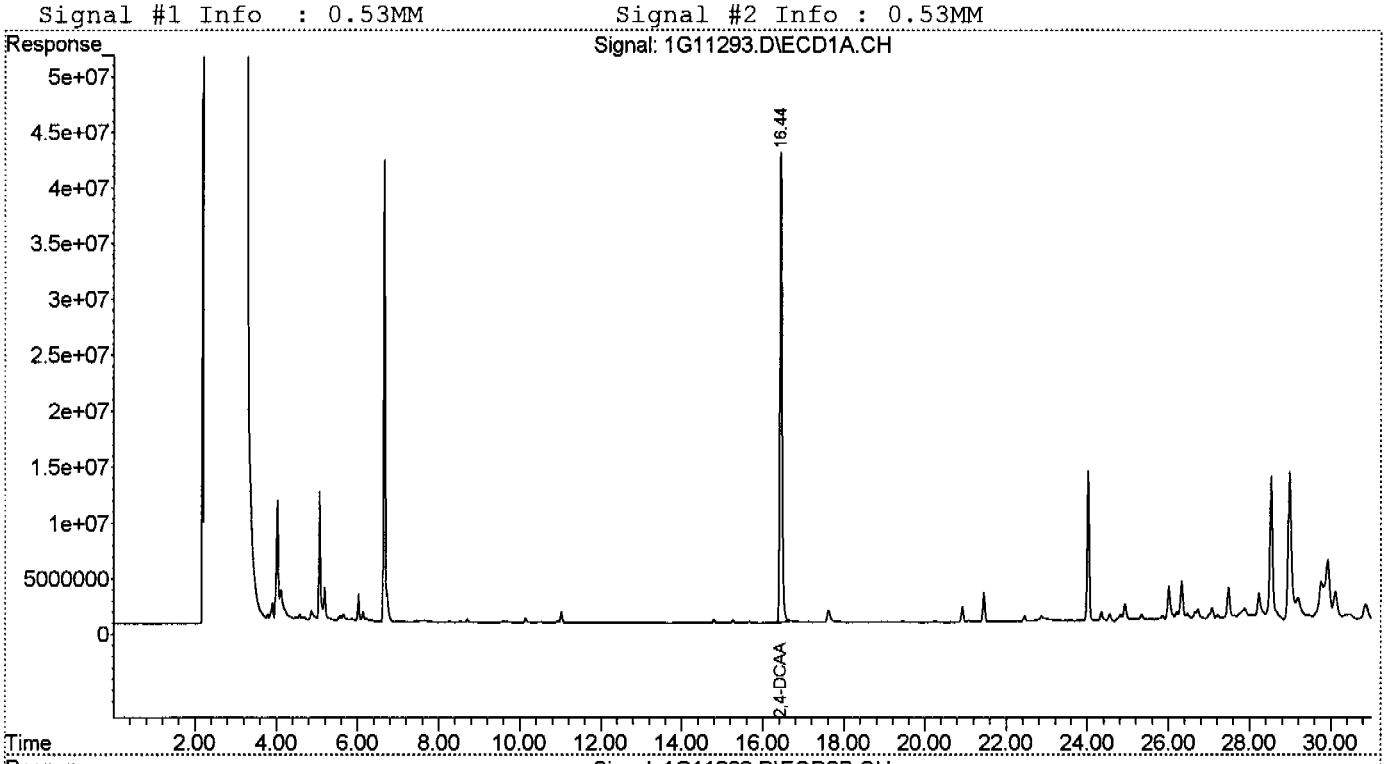
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

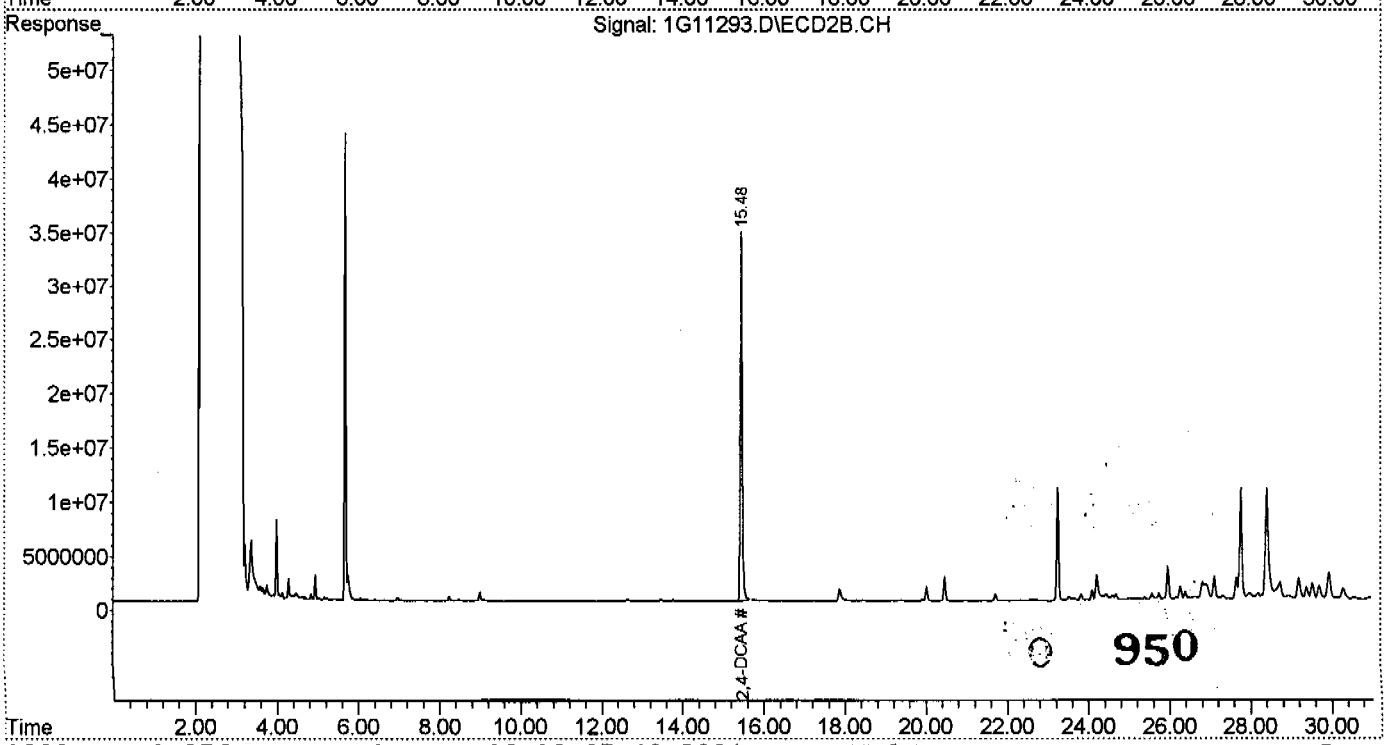
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11293.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G11293.D\ECD2B.CH
Acq On : 18 Aug 2004 11:42 pm Operator: kristis
Sample : N74914-15 Inst : GC1G
Misc : OP17705,G1G283,950,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:07 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





Initial Calibration Summary

Job Number: N74914
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

952

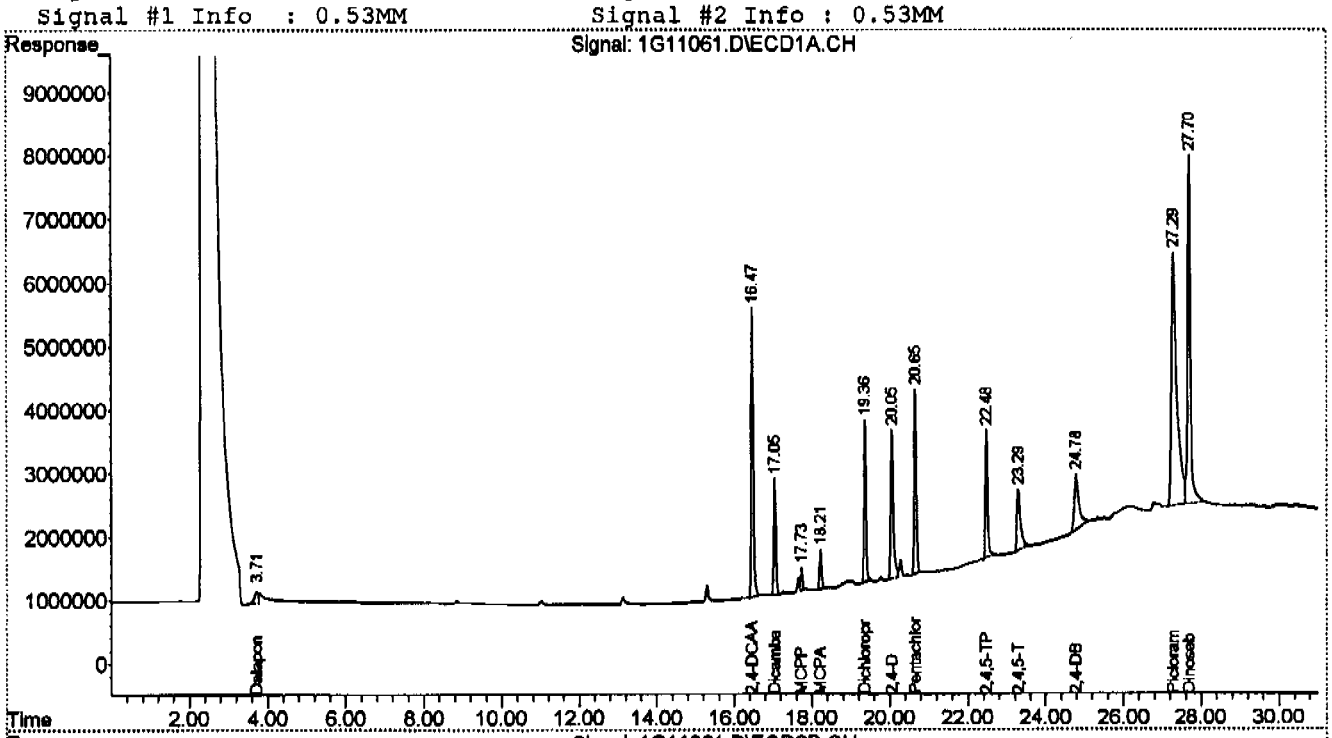
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

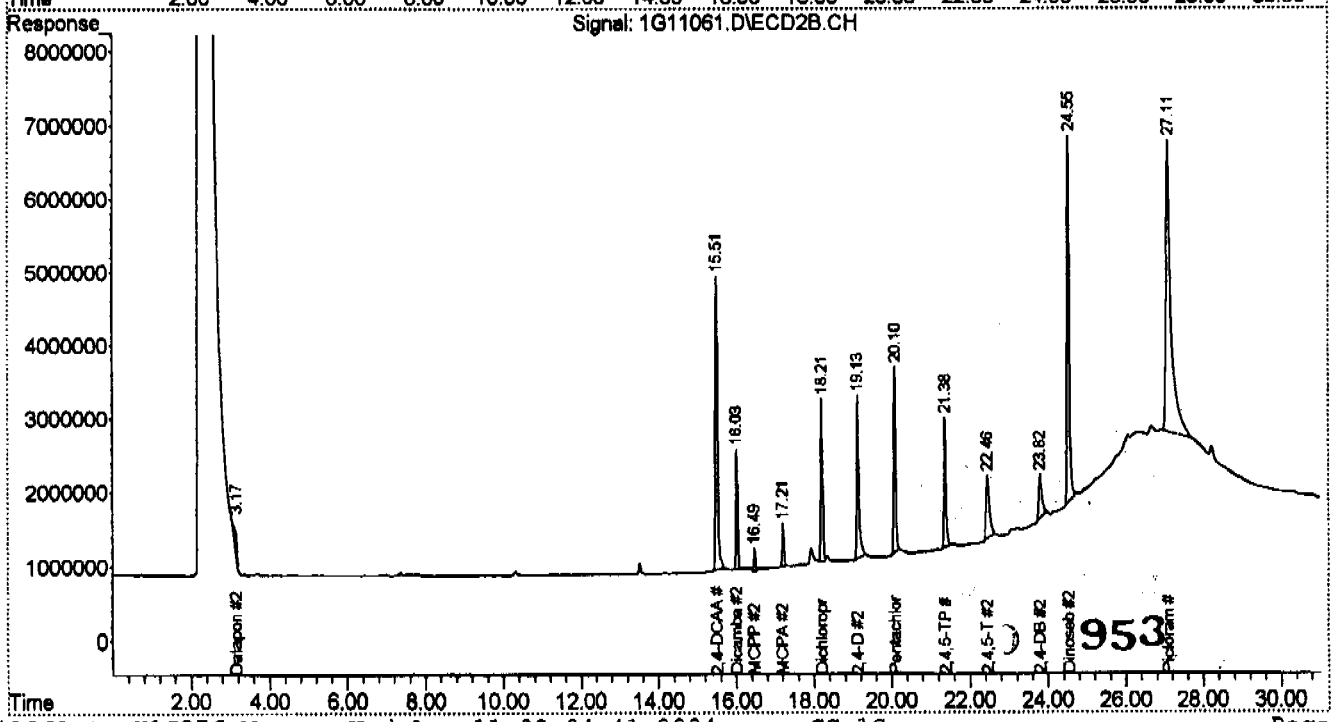
Quantitation Report (QT Reviewed)

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



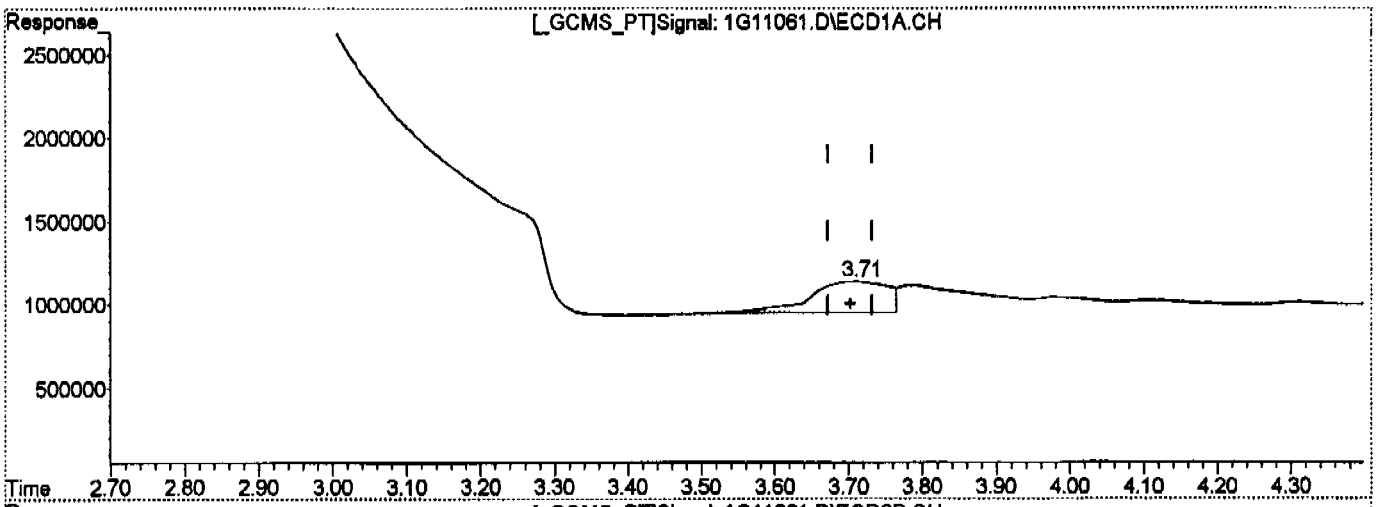


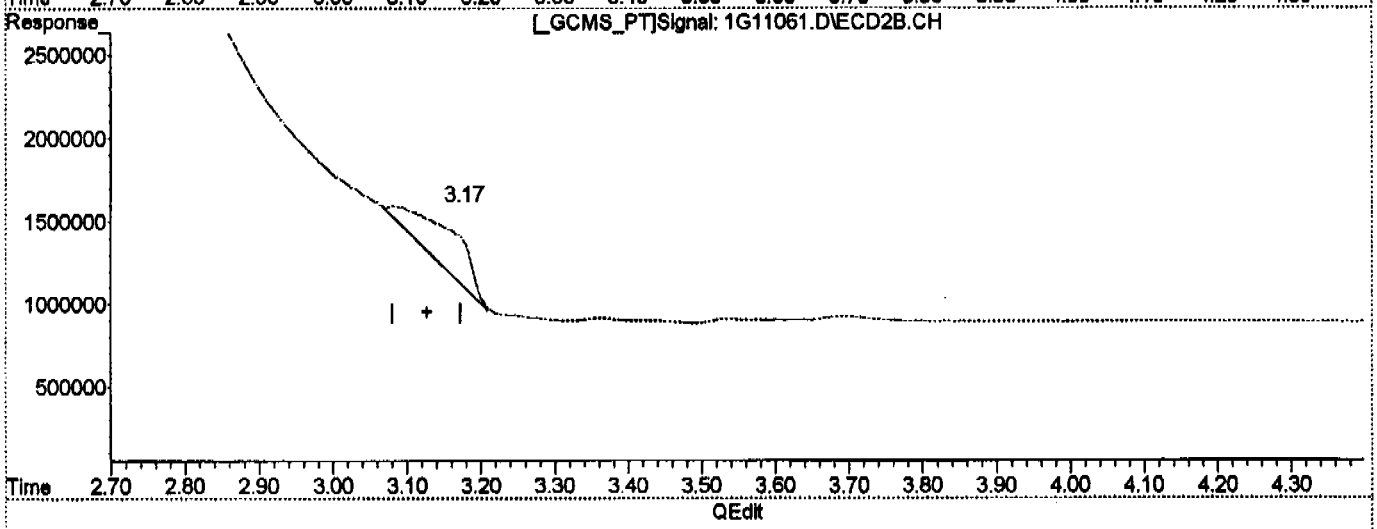
953

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

954

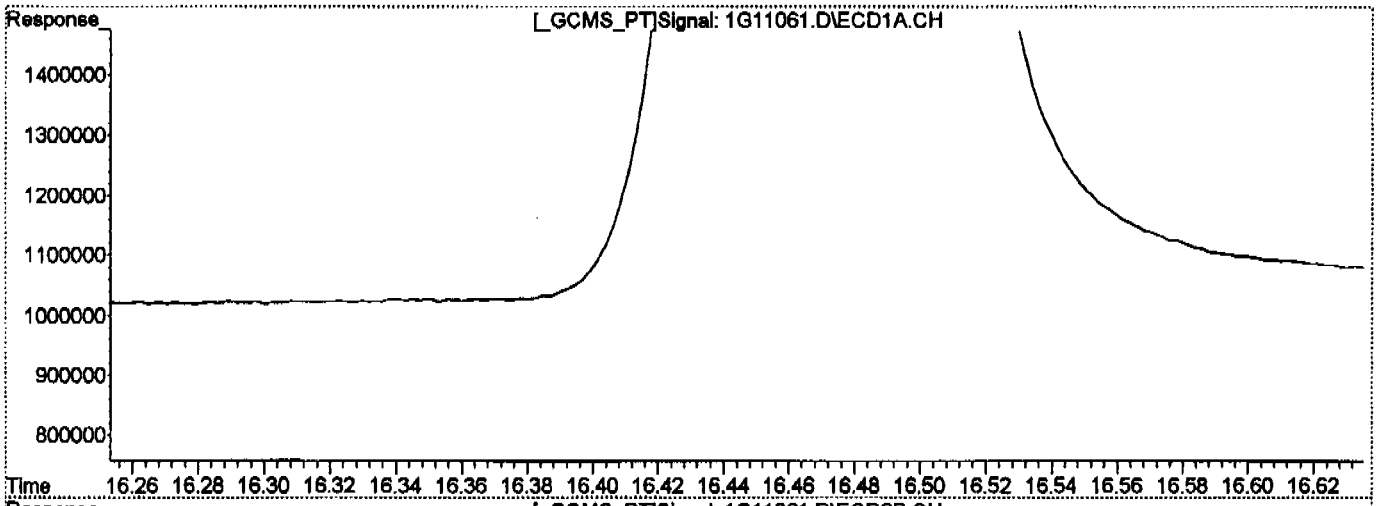
(+) = Expected Retention Time

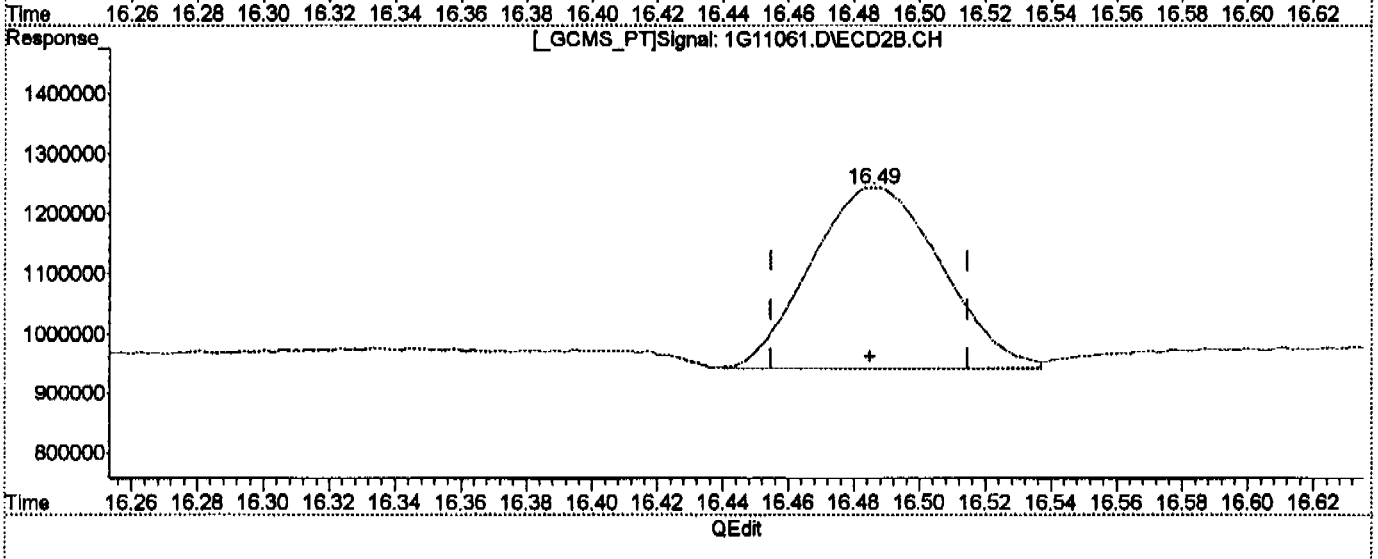
1G11061.D H1G276.M Wed Aug 11 09:04:58 2004 GC_1G

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

955

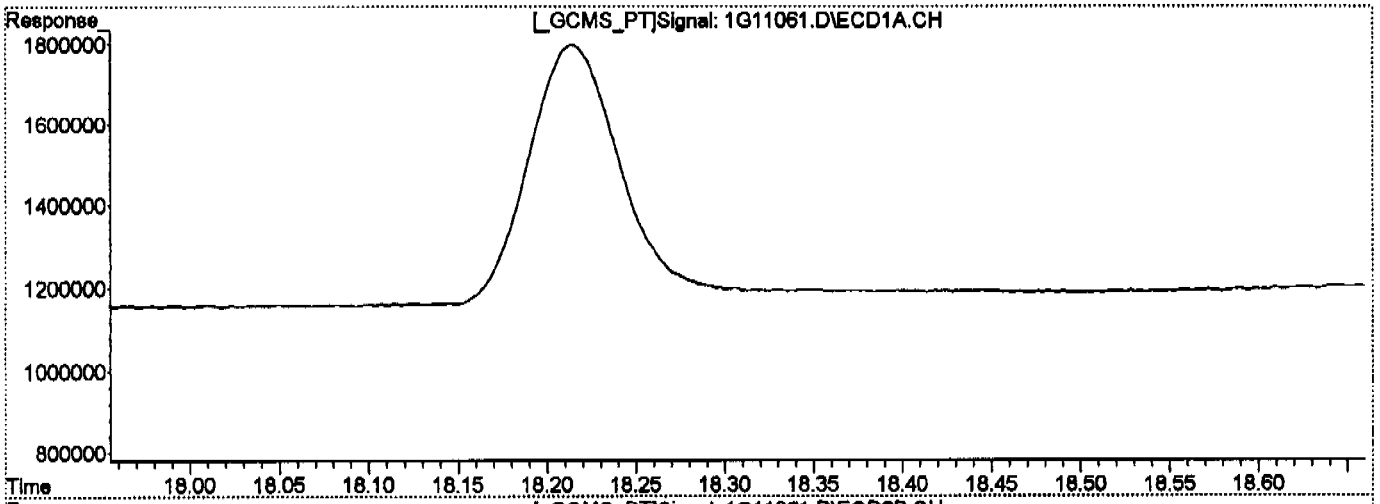
(+) = Expected Retention Time

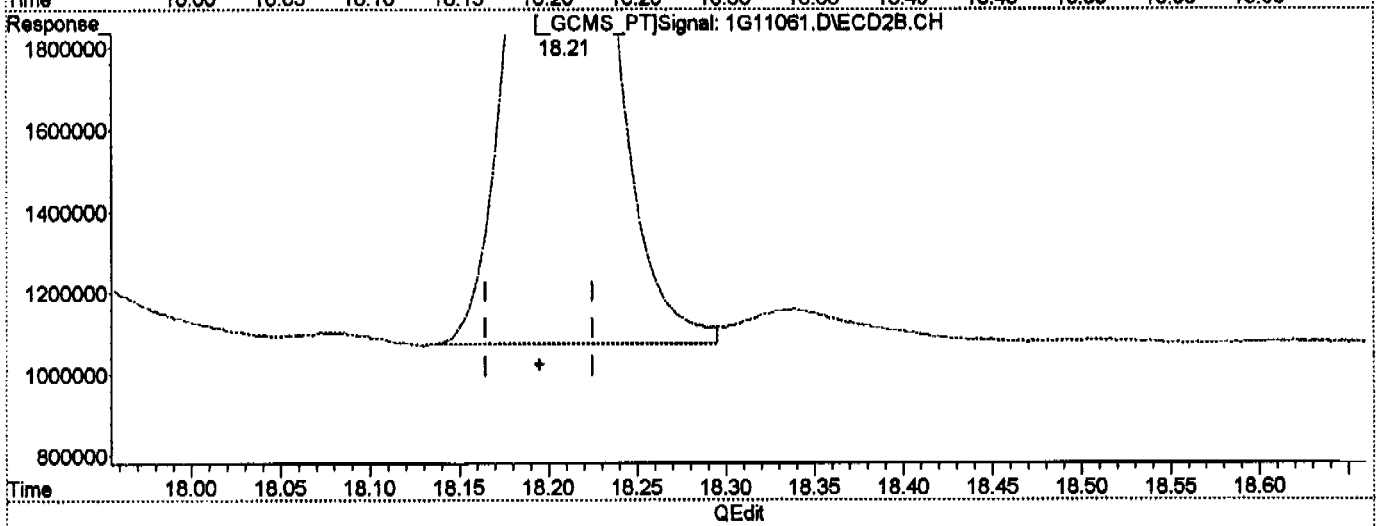
1G11061.D H1G276.M Wed Aug 11 08:57:45 2004 GC_1G

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

0. 956

(+) = Expected Retention Time

1G11061.D H1G276.M Wed Aug 11 08:57:56 2004 GC_1G

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	

957

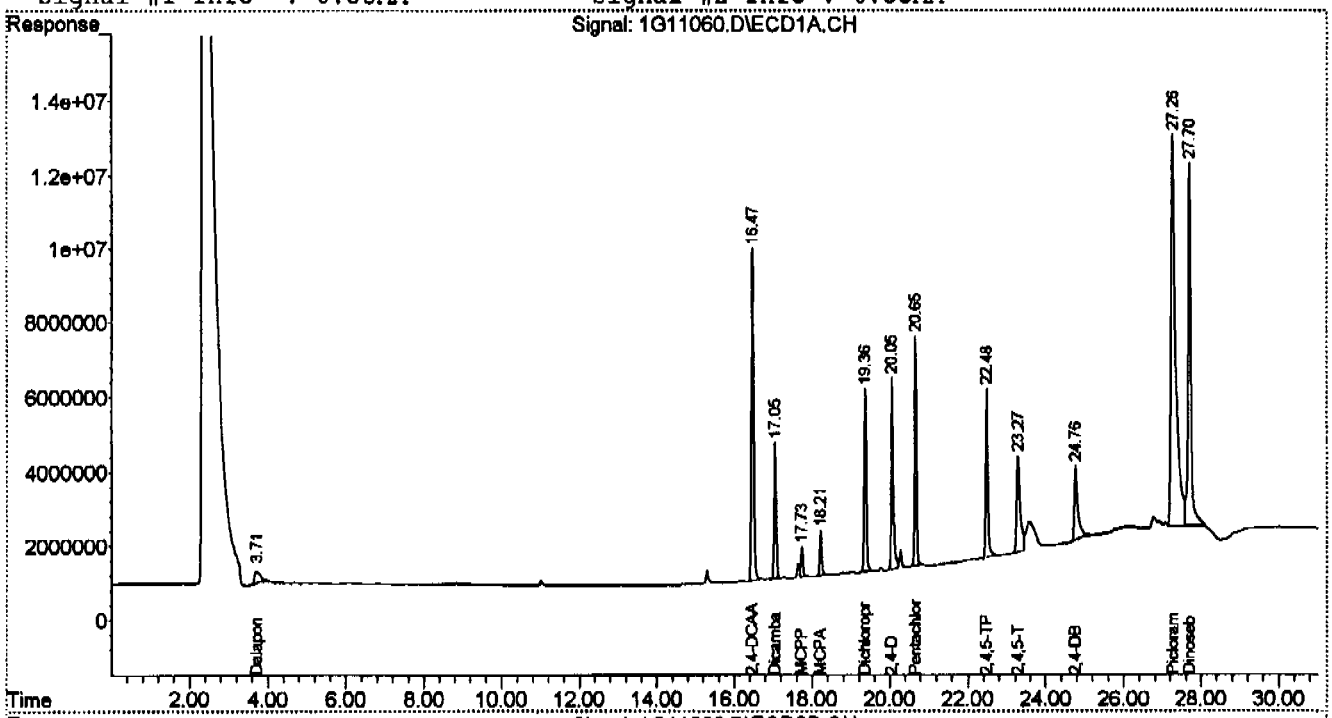
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

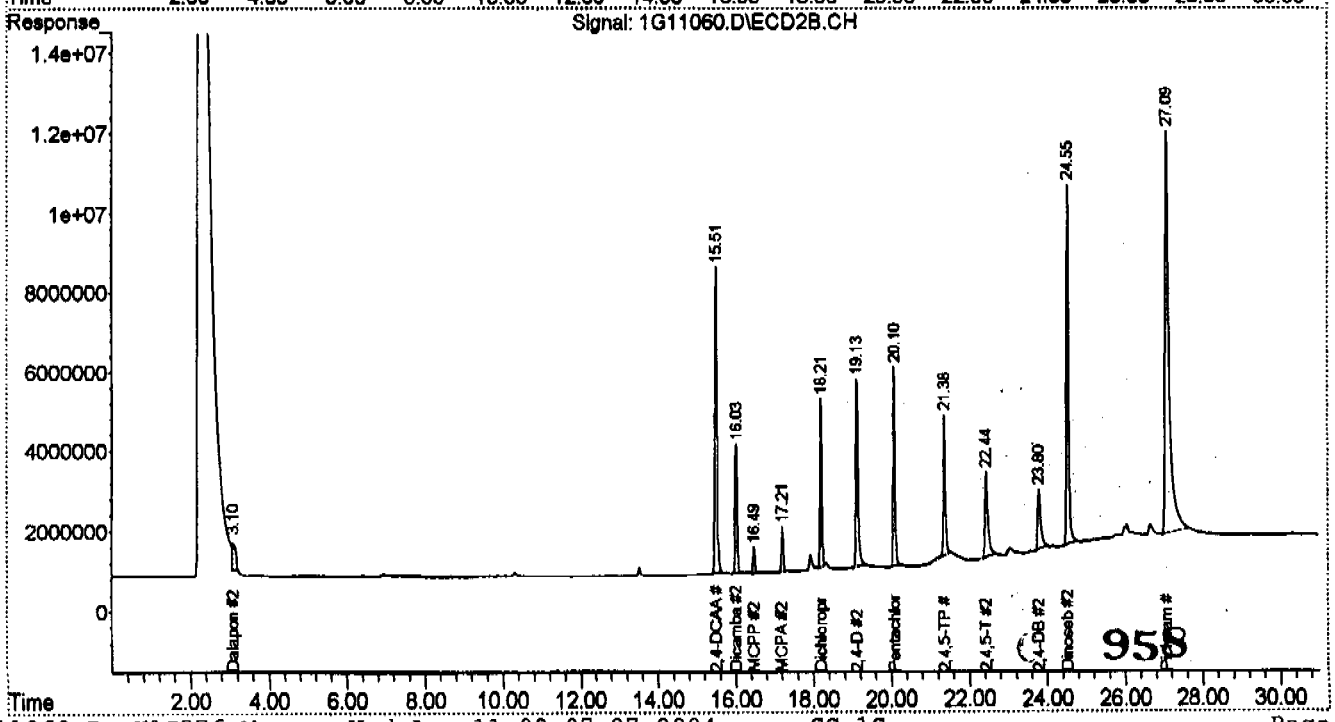
Quantitation Report (QT Reviewed)

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



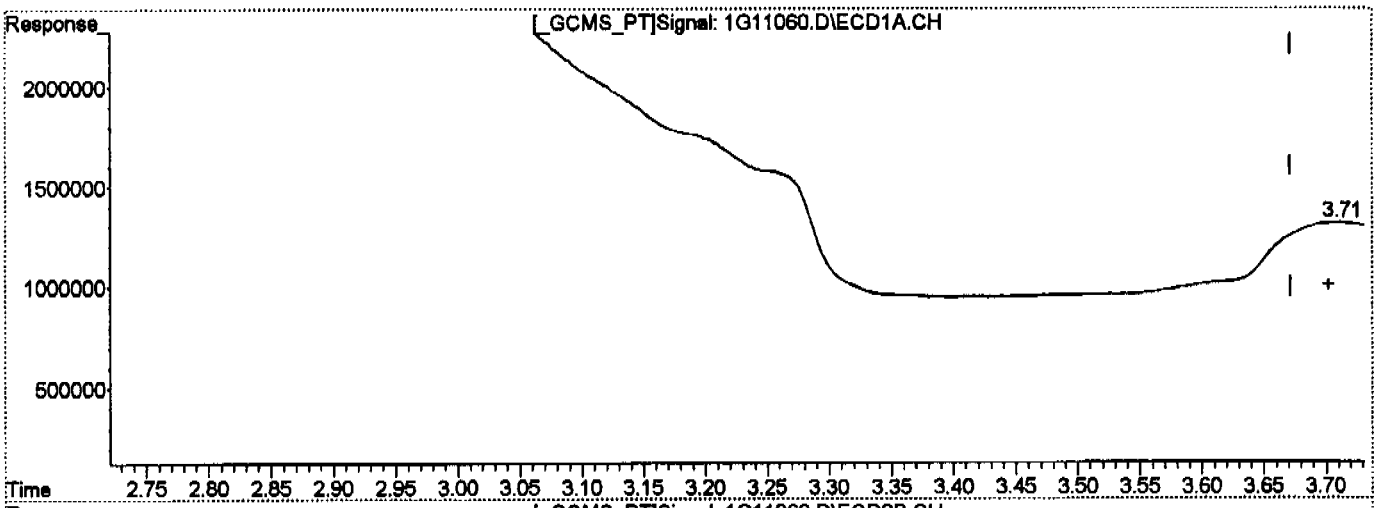


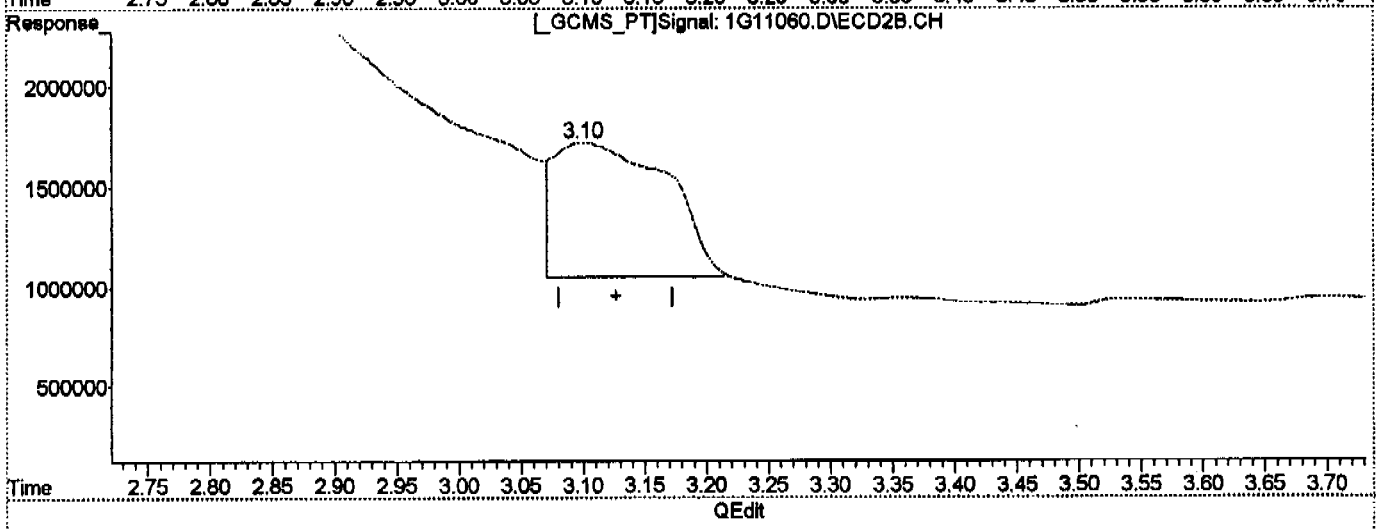
958

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

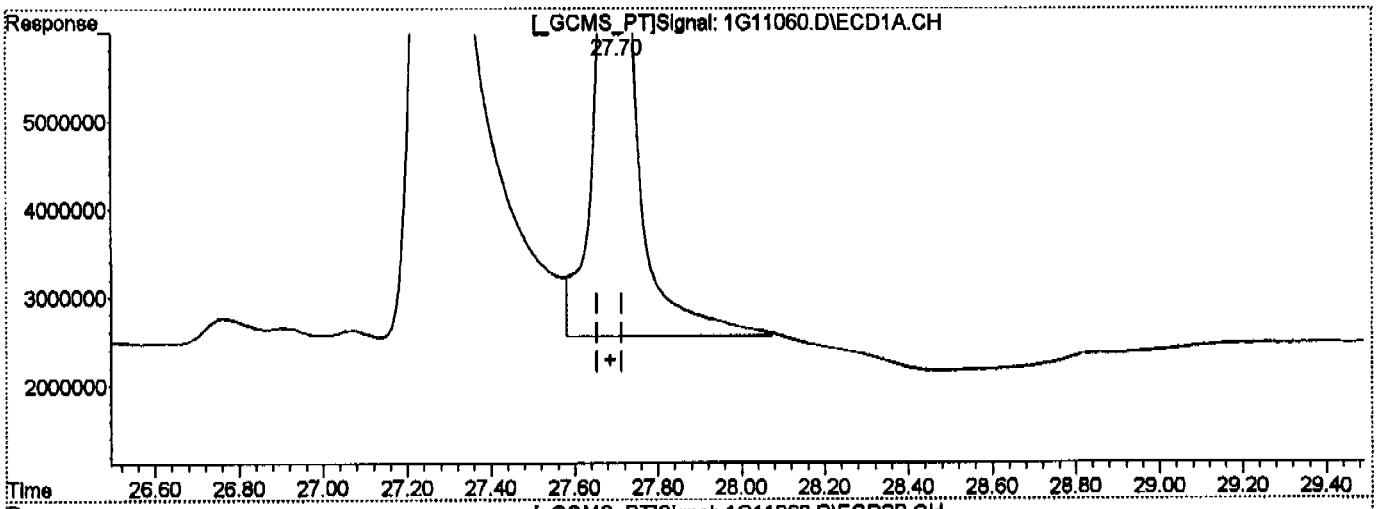
959

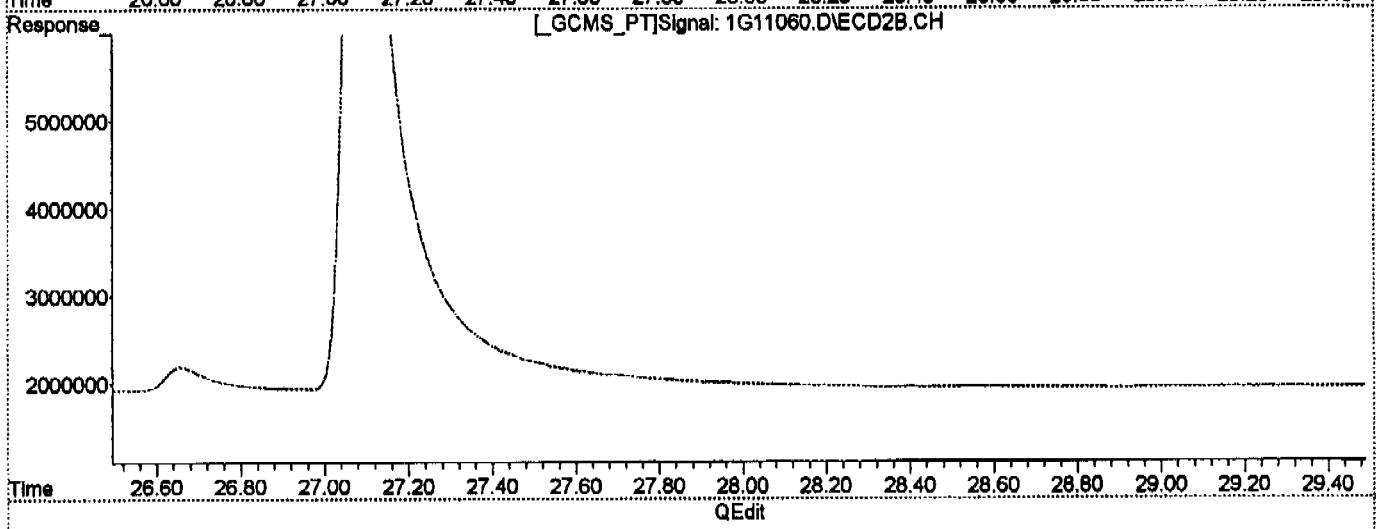
(+) = Expected Retention Time

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

960

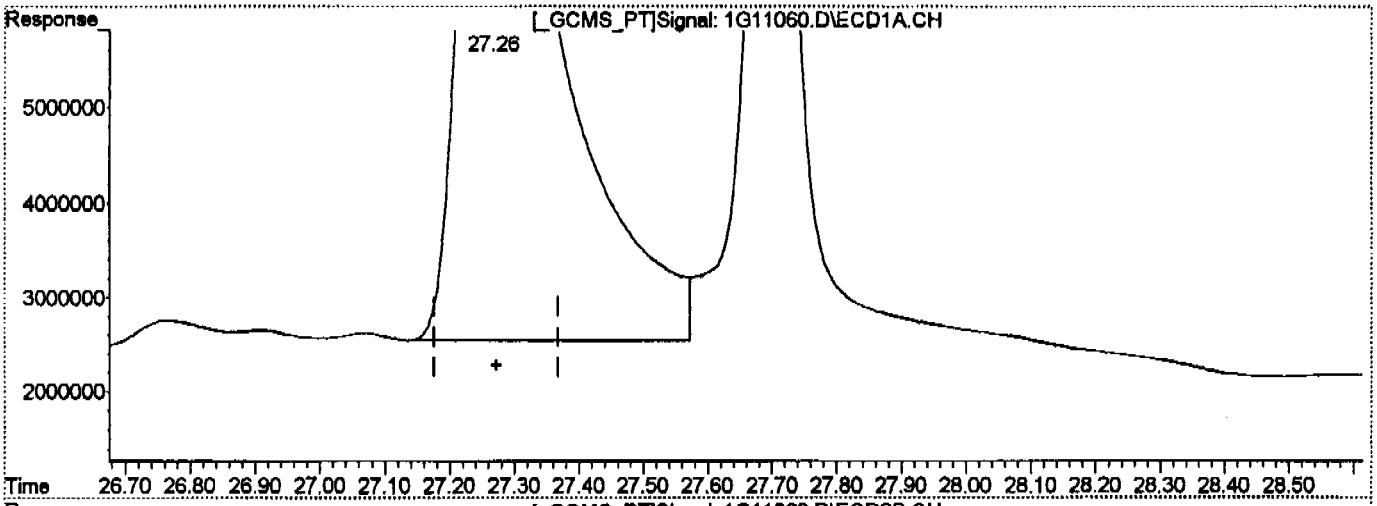
(+) = Expected Retention Time

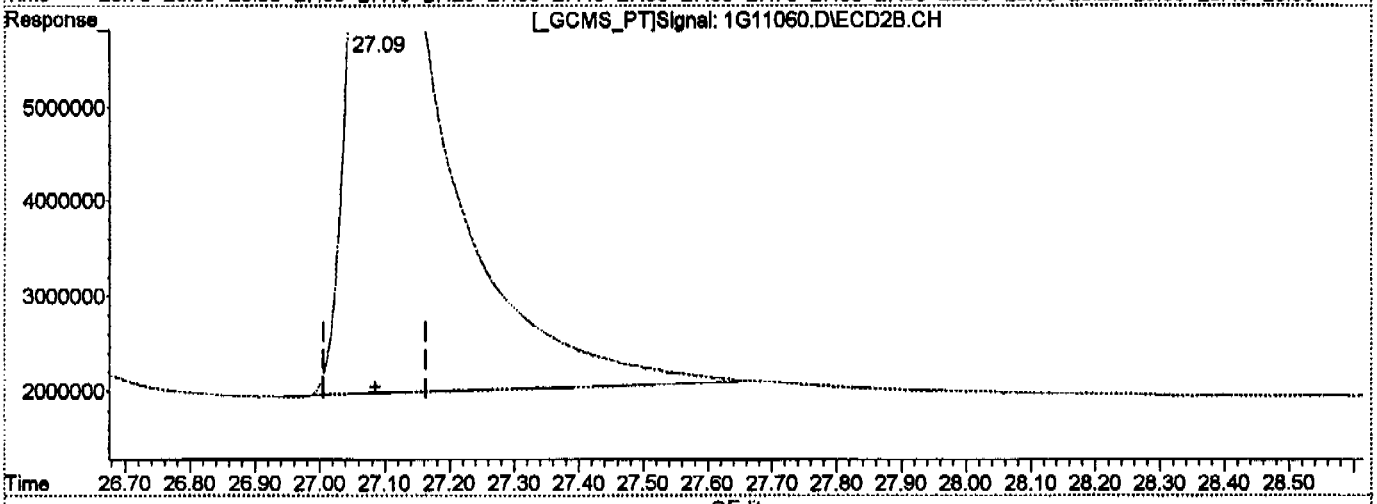
1G11060.D H1G276.M Wed Aug 11 08:56:36 2004 GC_1G

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





QEdit

(13) Picloram

27.26min 79.981PPB m

response 886706044

(13) Picloram #2

27.09min 61.698PPB

response 765136064

961

(+) = Expected Retention Time

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	

962

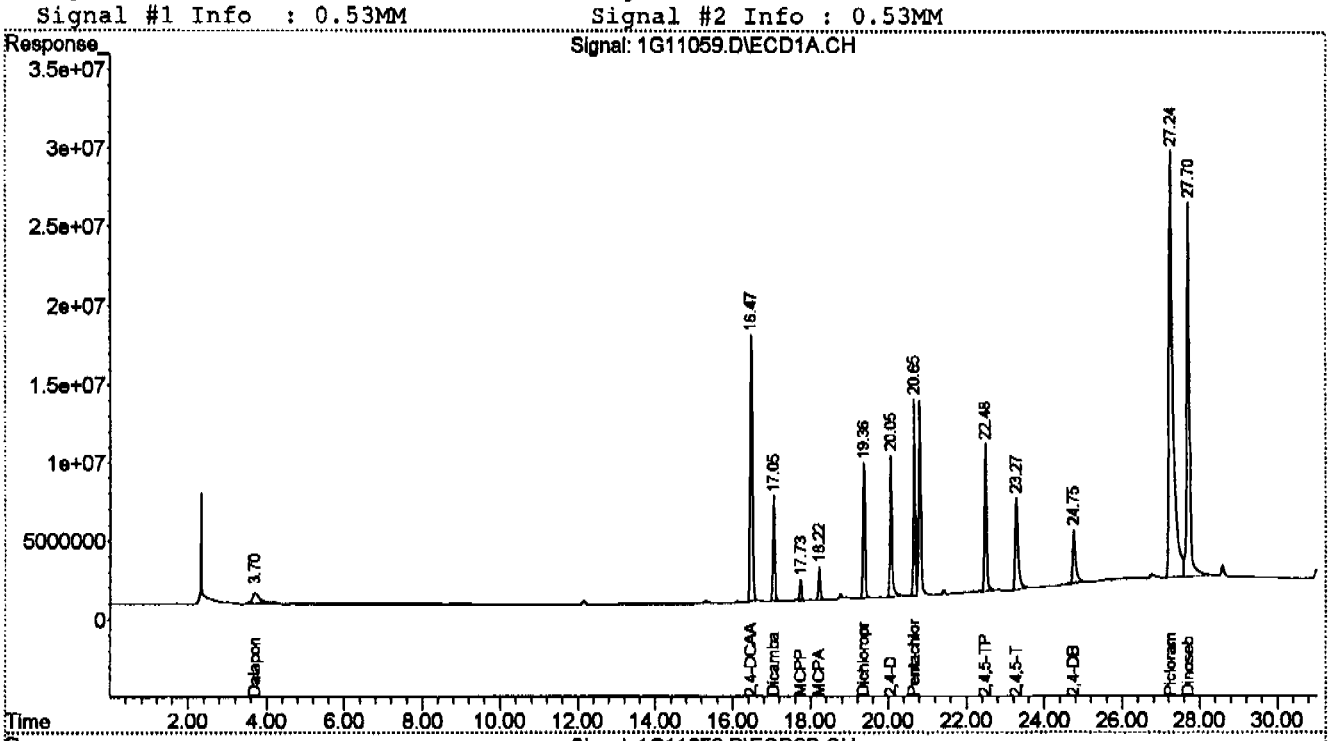
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

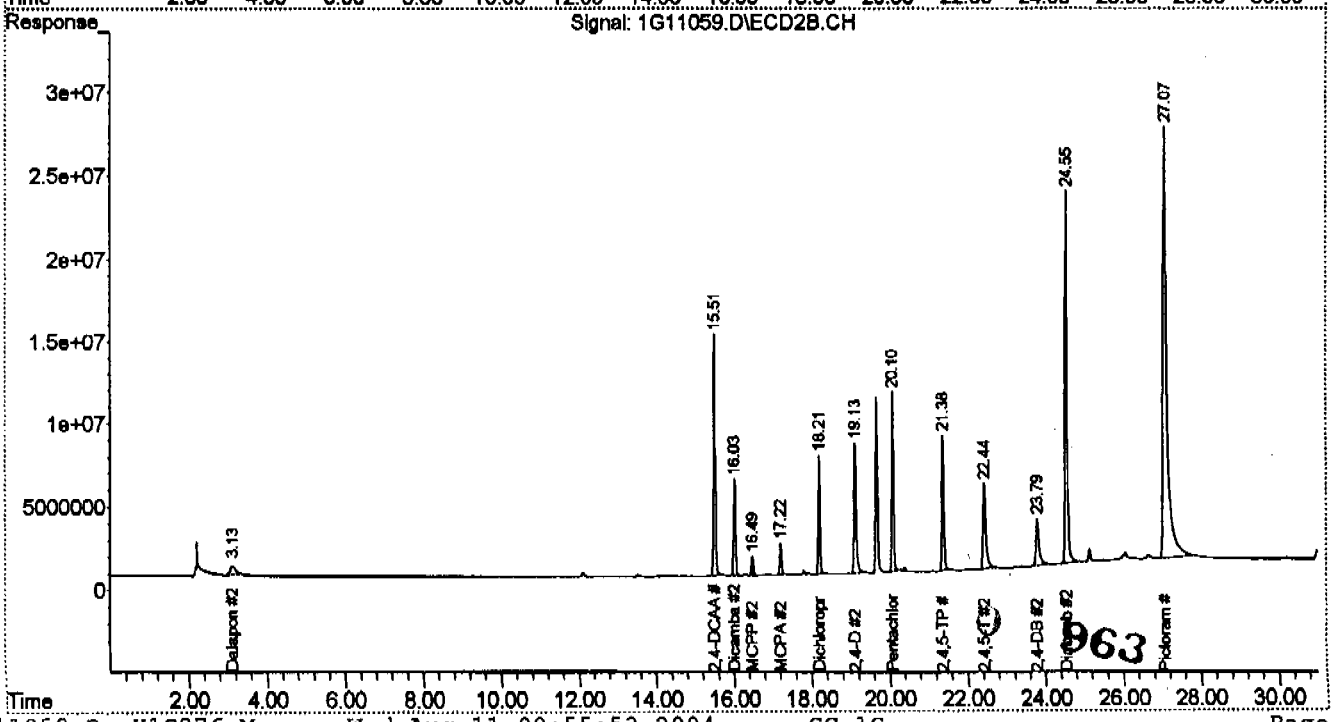
Quantitation Report (QT Reviewed)

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





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	

964

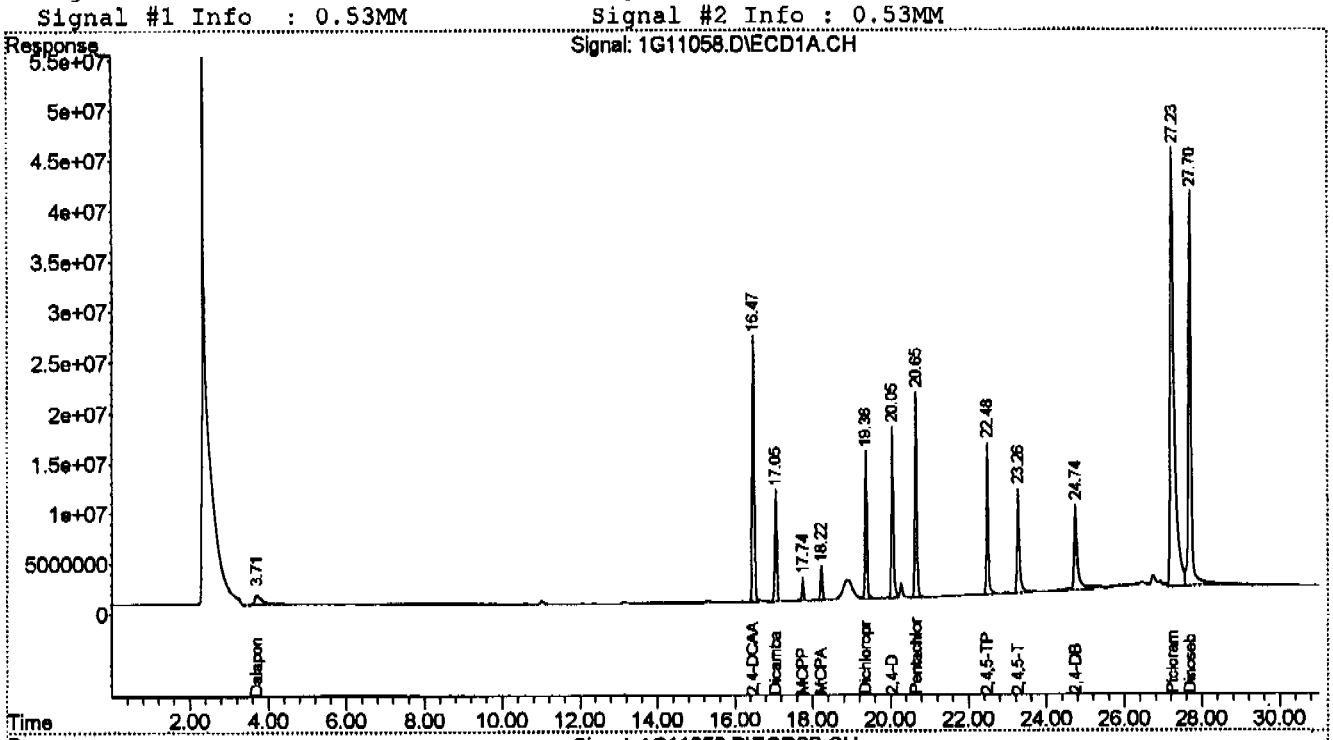
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

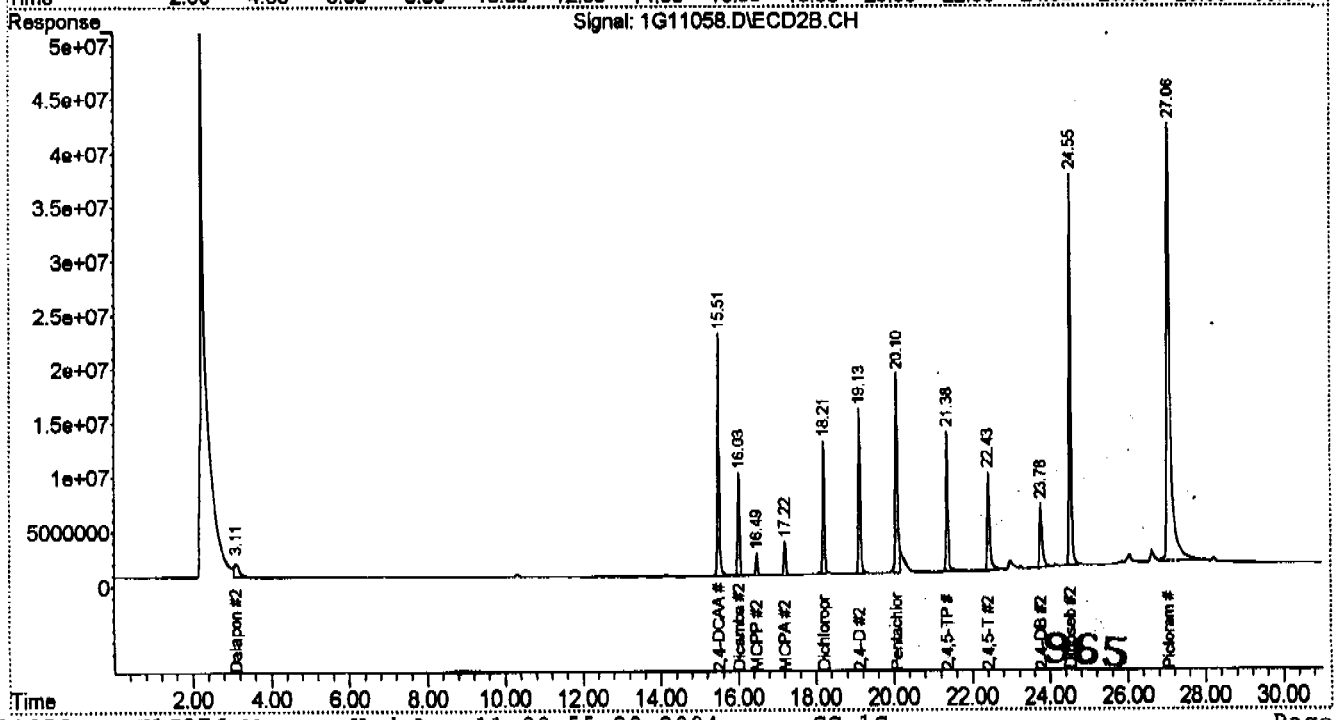
Quantitation Report (QT Reviewed)

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

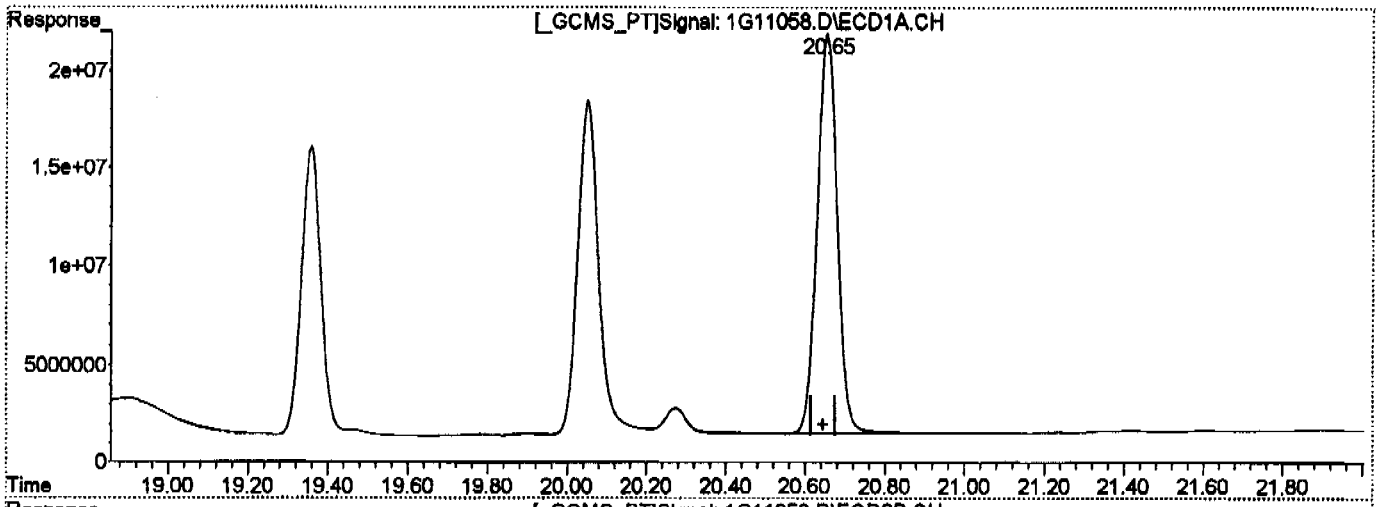


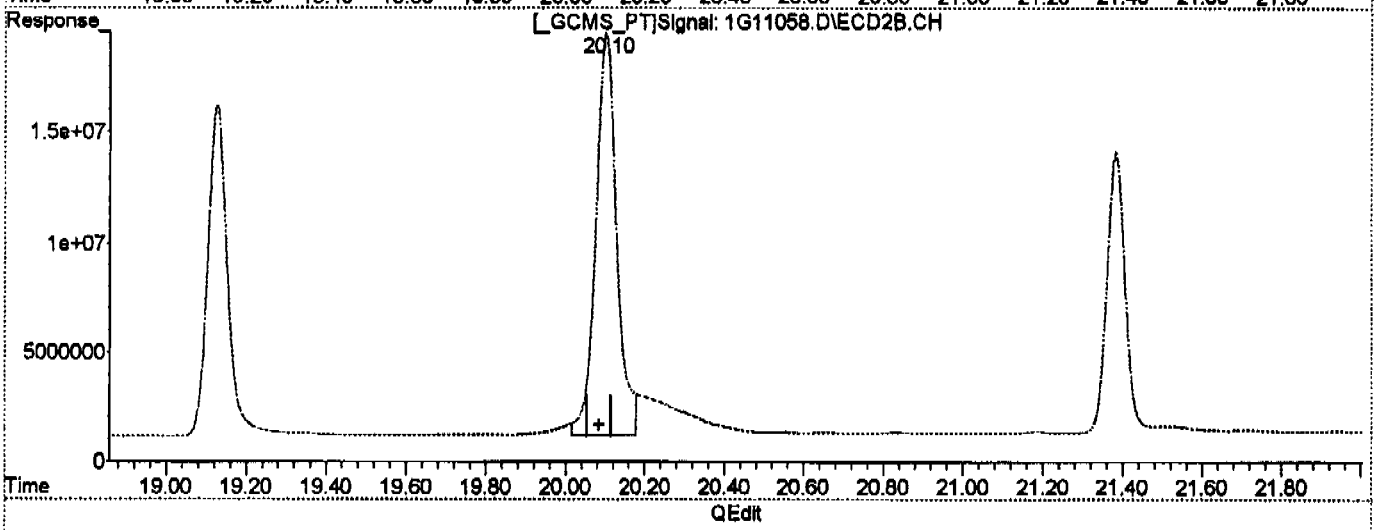


Quantitation Report (Qedit)

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

966

(+) = 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	#

967

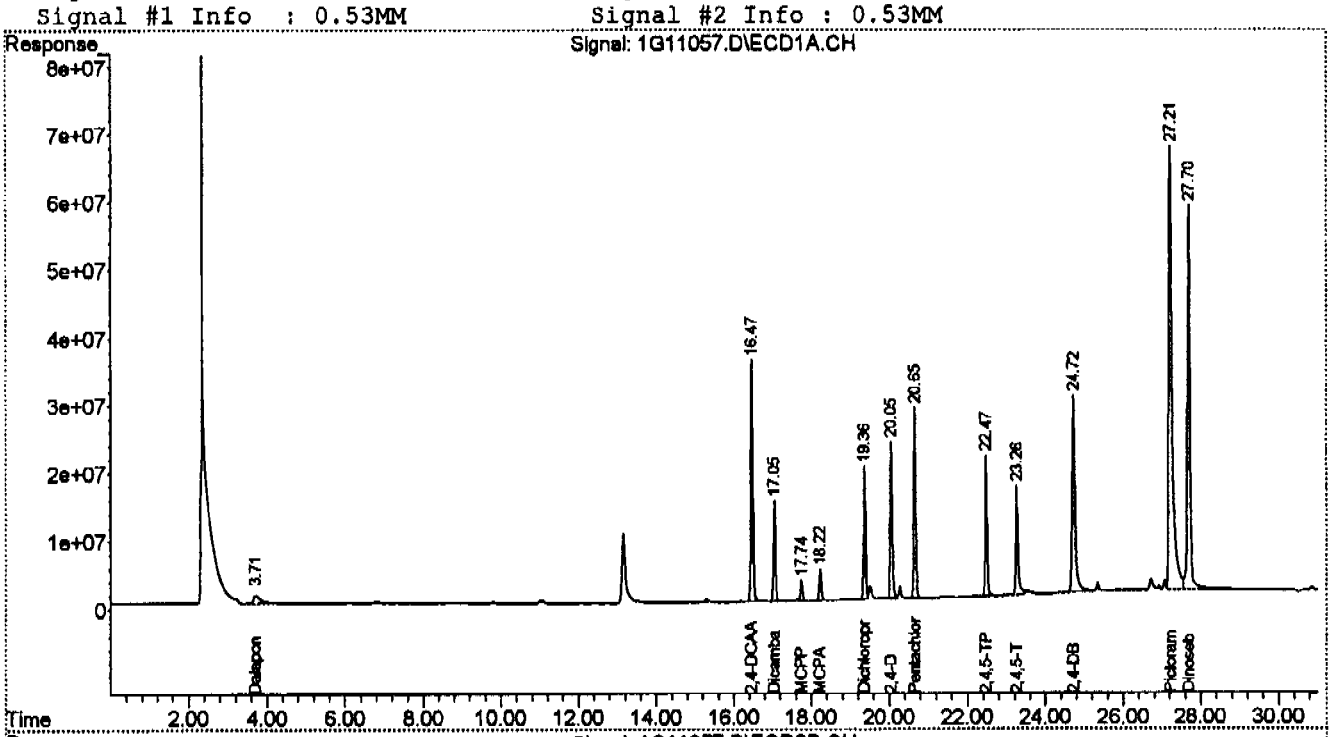
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

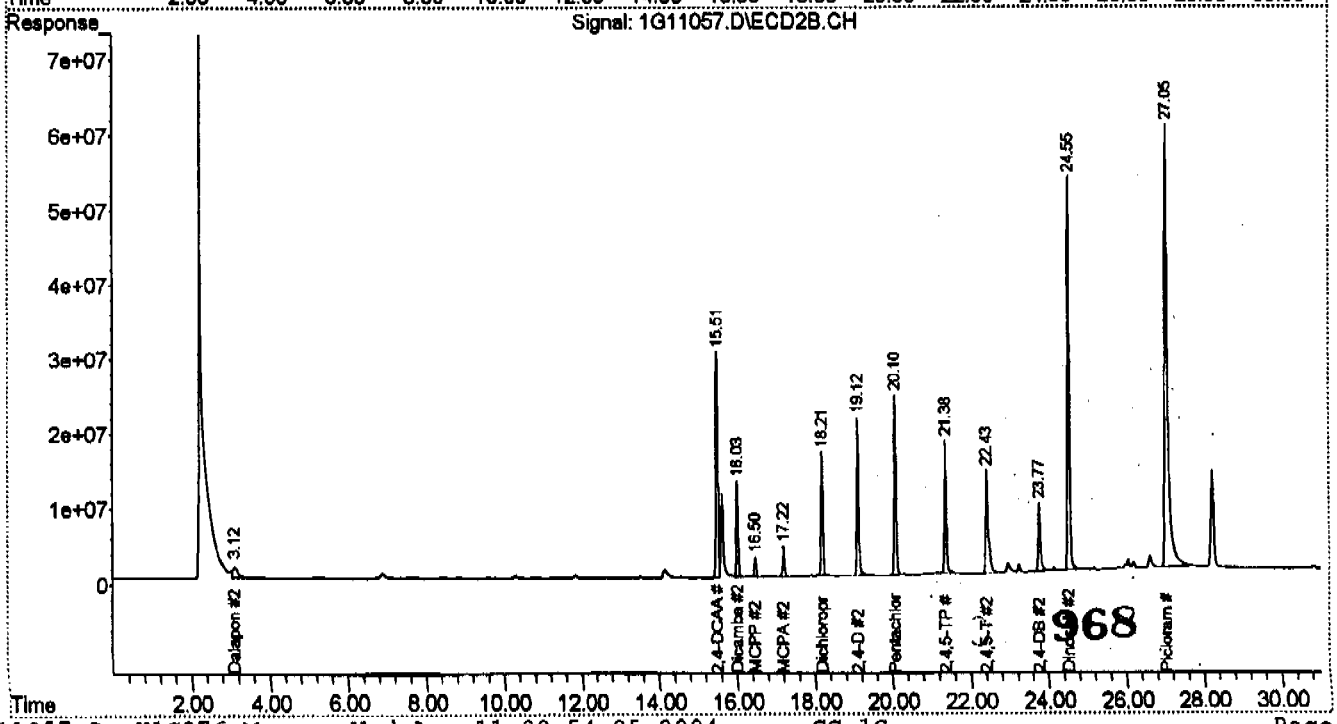
Quantitation Report (QT Reviewed)

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	

969

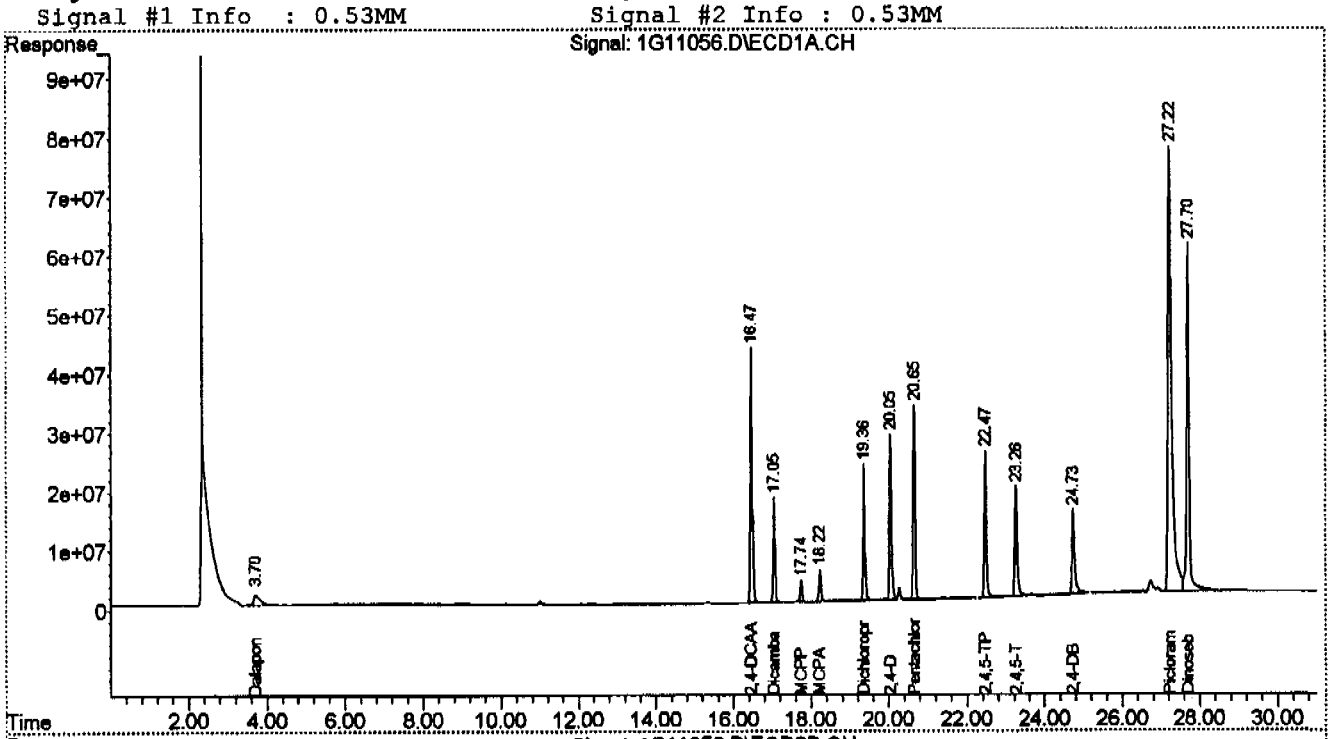
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

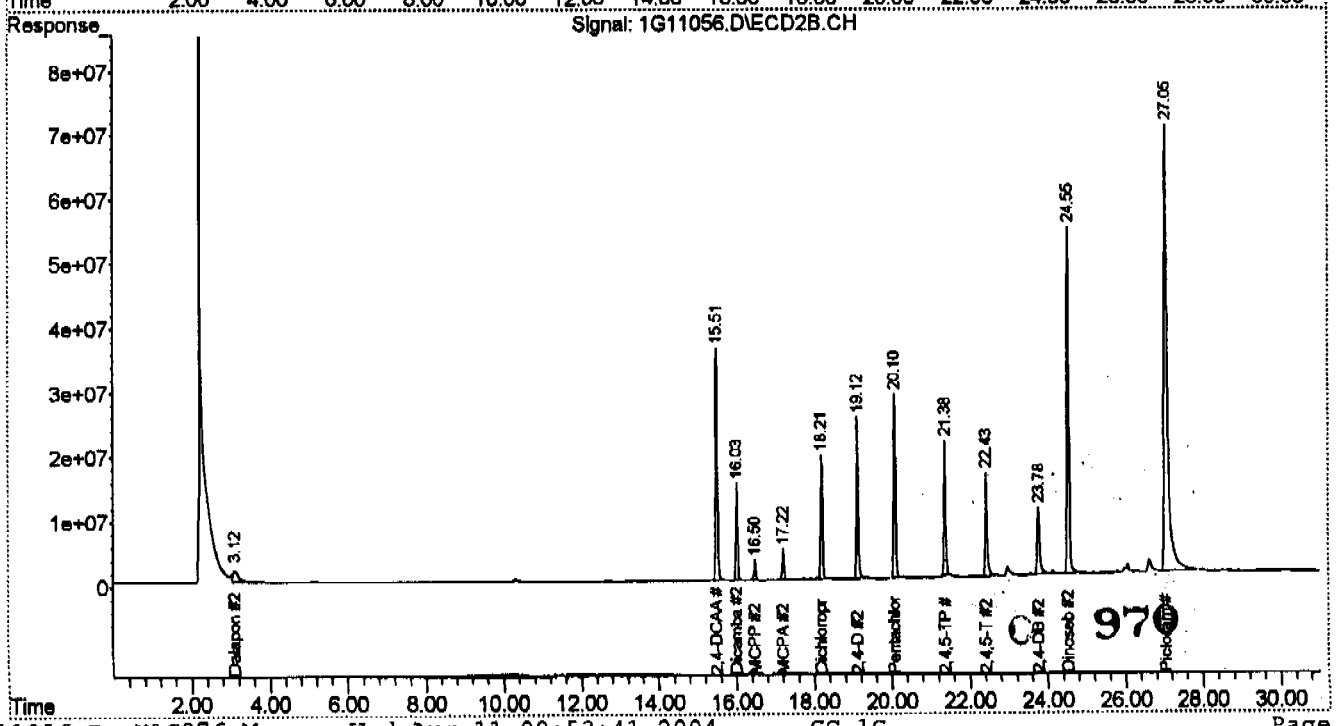
Quantitation Report (QT Reviewed)

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





970

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: G1G283-CC276
Lab FileID: 1G11274.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1G11274.D\ECD1A.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\1G11274.D\ECD2B.CH
Acq On : 8-18-04 08:40:35 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,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 : Thu Aug 19 11:48:59 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	1.358 E6	25.1#	65	0.00	3.57- 3.63
2 S	2,4-DCAA	1.612	1.668 E6	-3.5	107	0.00	16.41-16.47
3	Dicamba	6.291	6.517 E6	-3.6	112	0.00	16.99-17.05
4	MCPP	4.722	5.061 E3	-7.2	122	0.00	17.68-17.74
5	MCPA	7.951	8.551 E3	-7.5	116	0.00	18.16-18.22
6	Dichloroprop	1.678	1.711 E6	-2.0	113	0.00	19.30-19.36
7	2,4-D	2.030	2.130 E6	-4.9	118	0.00	20.00-20.06
8	Pentachlorophenol	22.538	23.610 E6	-4.8	109	0.00	20.60-20.66
9	2,4,5-TP	8.433	9.096 E6	-7.9	108	0.00	22.42-22.48
10	2,4,5-T	7.713	7.934 E6	-2.9	109	0.00	23.17-23.30
11	2,4-DB	1.755	2.517 E6	-43.4#	273#	0.00	24.62-24.78
12	Dinoseb	5.911	6.925 E6	-17.2#	116	0.00	27.64-27.70
13	Picloram	9.525	11.086 E6	-16.4#	111	0.00	27.08-27.27

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

1	Dalapon	1.626	1.574 E6	3.2	124	0.00	2.97- 3.06
2 S	2,4-DCAA	1.283	1.179 E6	8.1	95	0.00	15.44-15.50
3	Dicamba	5.057	4.951 E6	2.1	105	0.00	15.96-16.02
4	MCPP	3.629	3.714 E3	-2.3	111	0.00	16.43-16.49
5	MCPA	6.606	7.356 E3	-11.4	122	0.00	17.15-17.21
6	Dichloroprop	1.271	1.304 E6	-2.6	115	0.00	18.15-18.21
7	2,4-D	1.676	1.662 E6	0.8	119	0.00	19.07-19.13
8	Pentachlorophenol	18.344	17.452 E6	4.9	101	0.00	20.04-20.10
9	2,4,5-TP	6.438	6.590 E6	-2.4	103	0.00	21.32-21.38
10	2,4,5-T	6.144	6.071 E6	1.2	102	0.00	22.35-22.45
11	2,4-DB	821.481	918.527 E3	-11.8	123	0.00	23.67-23.82
12	Dinoseb	3.836	4.936 E6	-28.7#	125	0.00	24.49-24.55
13	Picloram	8.350	8.972 E6	-7.4	98	0.00	26.93-27.09

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G11274.D H1G276.M Thu Aug 19 11:50:25 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11274.D\ECD1A.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\1G11274.D\ECD2B.CH
Acq On : 8-18-04 08:40:35 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:49:06 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.47	667.1E6	471.5E6	413.868	367.459	
Spiked Amount	1000.000			Recovery	=	41.39%	36.75%	
	Target Compounds							
1)	Dalapon	3.60	3.01	54308687	62961360	29.980m	38.729	#
3)	Dicamba	17.02	15.99	260.7E6	198.1E6	41.436	39.167	
4)	MCPP	17.71	16.46	50613731	37137036	10717.605m	10232.047	
5)	MCPA	18.19	17.18	85508119	73561926	10754.804m	11134.970	
6)	Dichloroprop	19.33	18.18	342.2E6	260.9E6	203.976	205.257	
7)	2,4-D	20.03	19.10	426.1E6	332.4E6	209.851	198.296	
8)	Pentachloropheno	20.63	20.07	472.2E6	349.0E6	20.952	19.027	
9)	2,4,5-TP	22.45	21.35	363.8E6	263.6E6	43.144	40.943	
10)	2,4,5-T	23.23	22.40	317.4E6	242.8E6	41.148	39.527	
11)	2,4-DB	24.70	23.74	503.3E6	183.7E6	286.855	223.627	
12)	Dinoseb	27.67	24.52	1385.0E6	987.2E6	234.306	257.380	
13)	Picloram	27.17	27.01	2217.2E6	1794.3E6	232.784	214.895	

KBG 9/1

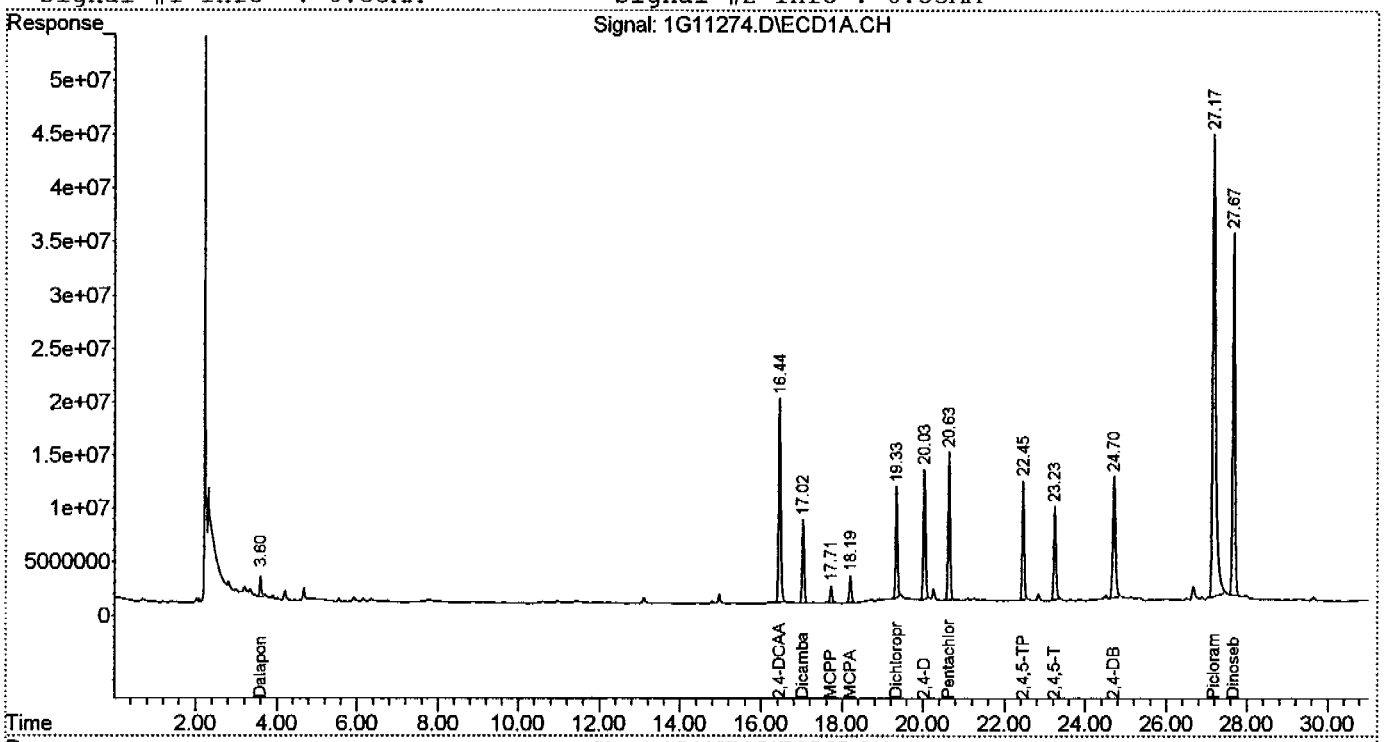
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

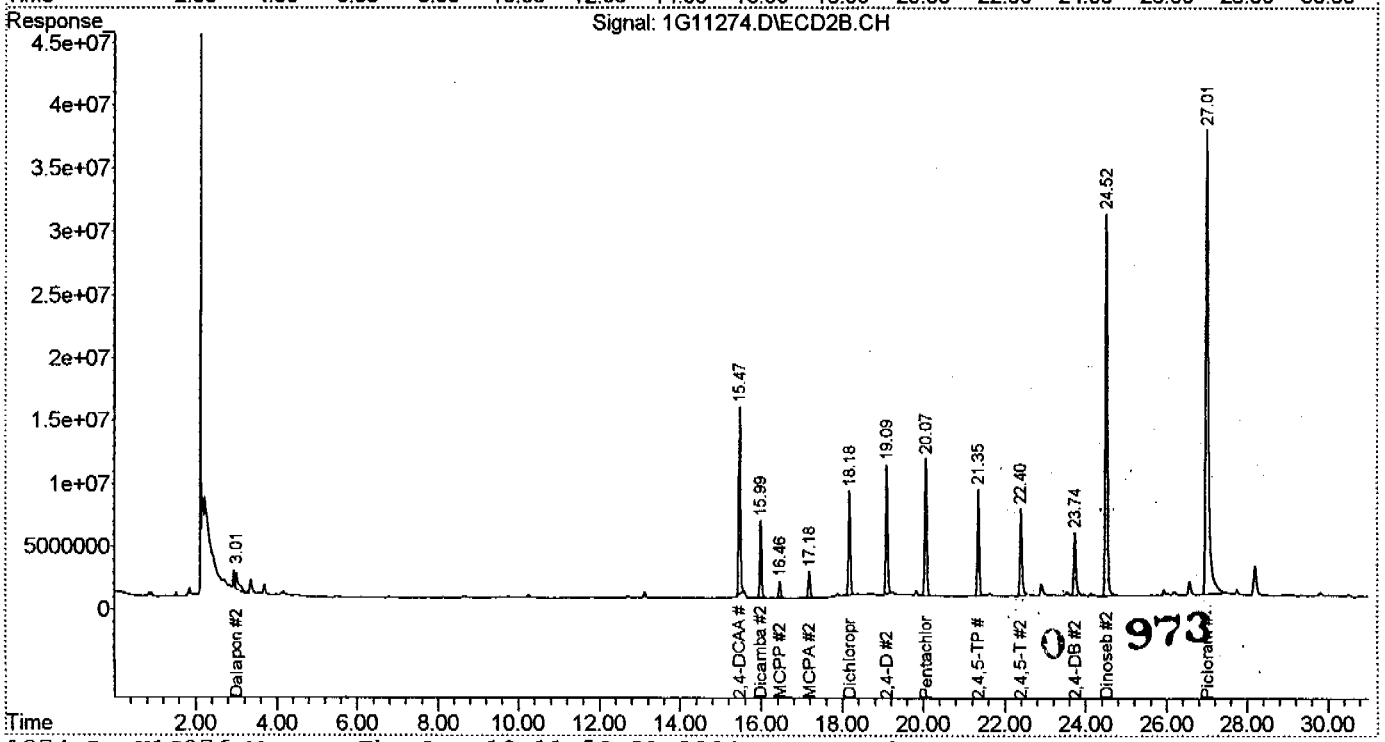
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11274.D\ECD1A.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\1G11274.D\ECD2B.CH
Acq On : 8-18-04 08:40:35 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:49 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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



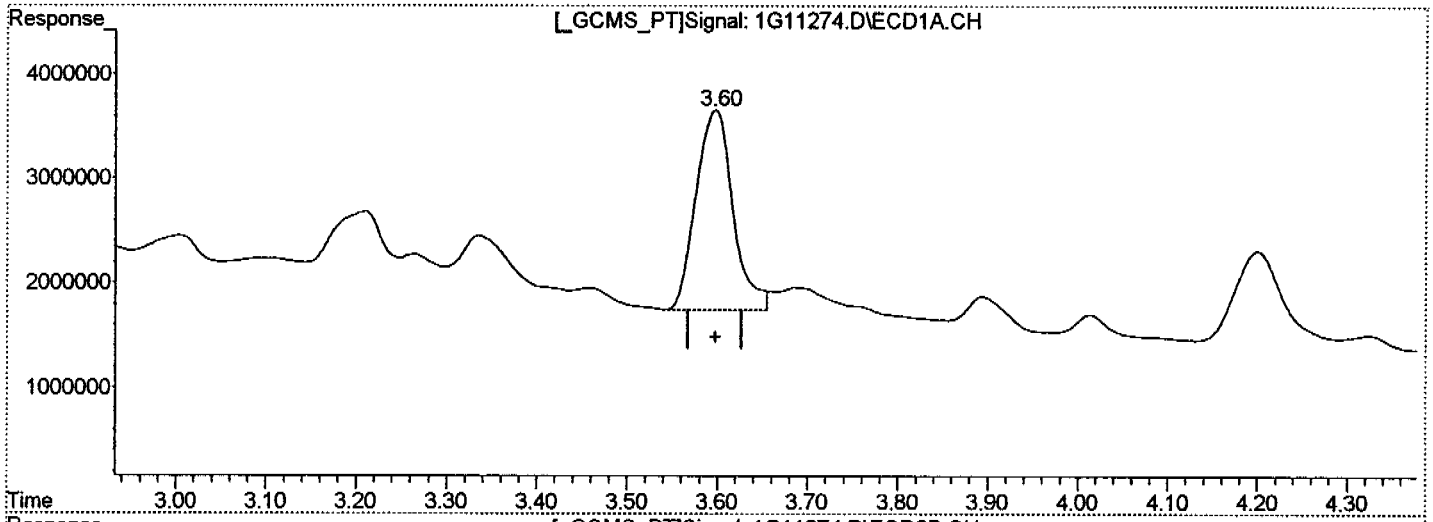


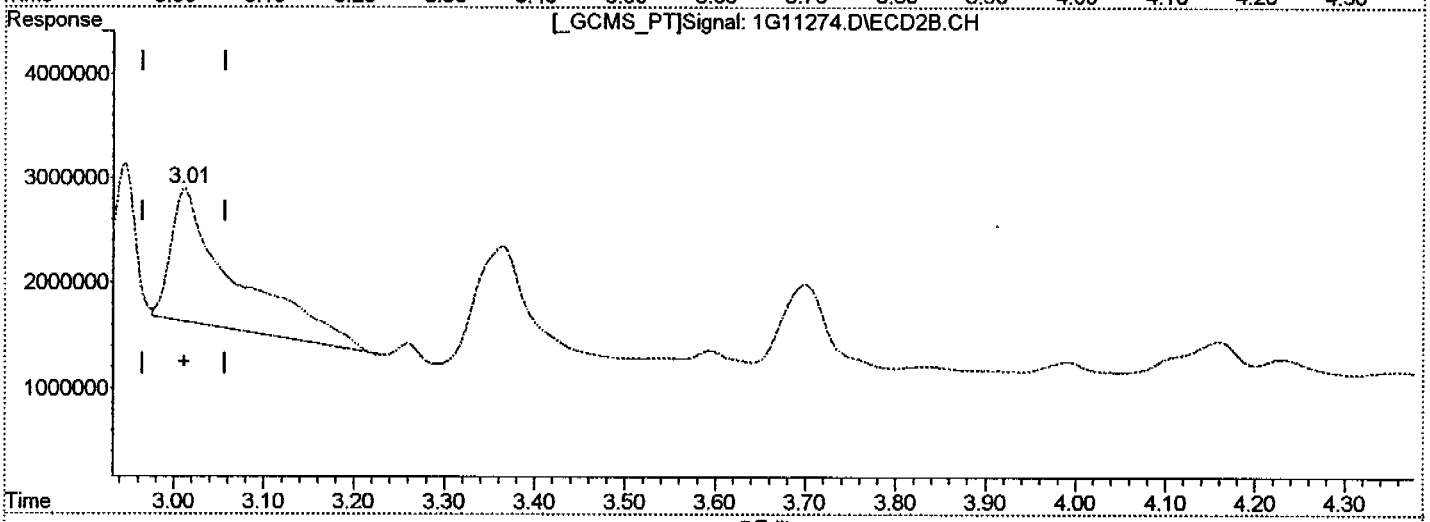
0973

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11274.D\ECD1A.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\1G11274.D\ECD2B.CH
Acq On : 8-18-04 08:40:35 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:49 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 2004
Response via : Multiple Level Calibration





(1) Dalapon

3.60min 29.980 m

response 54308687

(1) Dalapon #2

3.01min 38.729

response 62961360

0 974

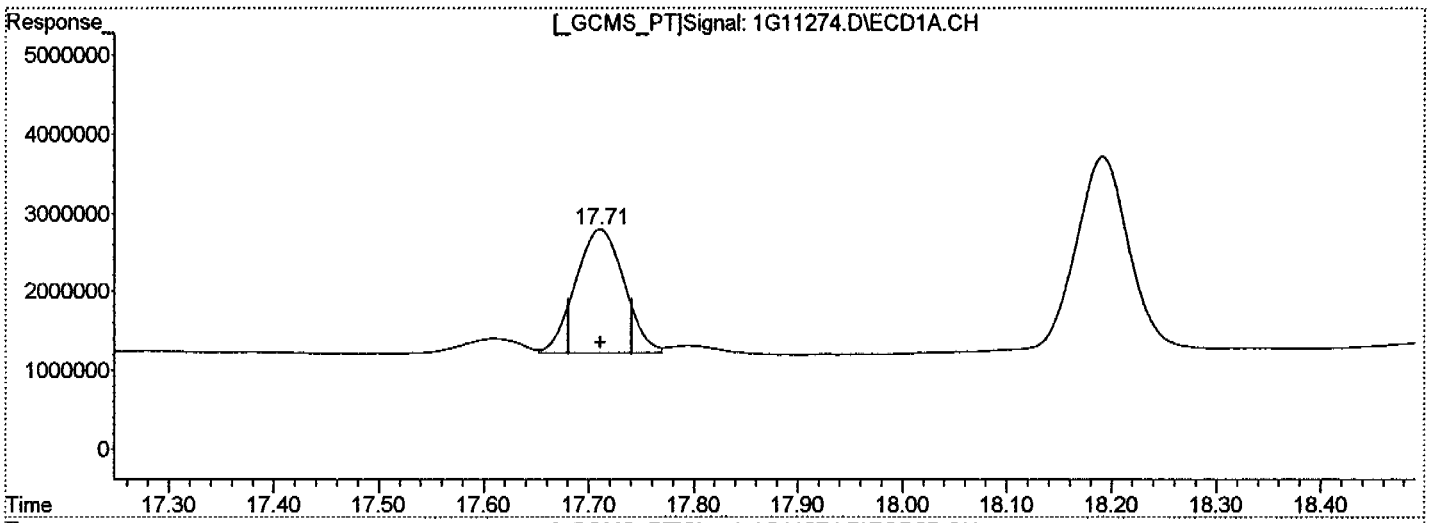
(+) = Expected Retention Time

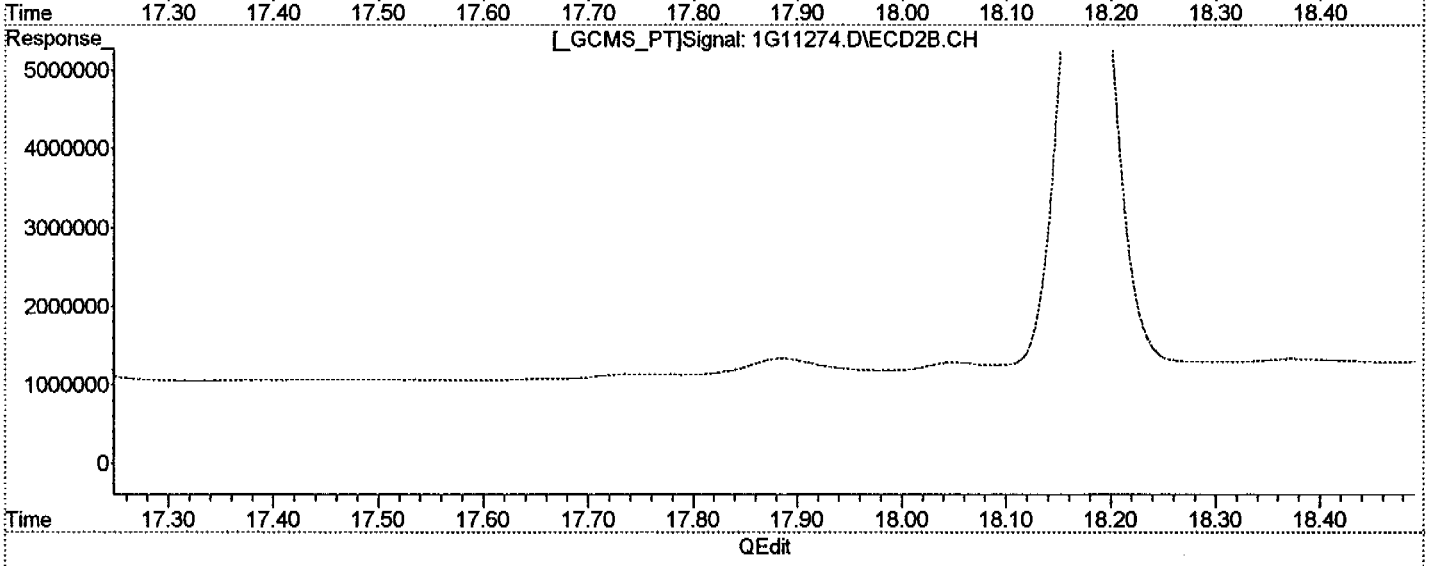
1G11274.D H1G276.M Thu Aug 19 11:49:20 2004 GC_1G

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11274.D\ECD1A.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\1G11274.D\ECD2B.CH
Acq On : 8-18-04 08:40:35 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:49 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 2004
Response via : Multiple Level Calibration





(4) MCPP

17.71min 10717.605 m

response 50613731

(4) MCPP #2

16.46min 10232.047

response 37137036

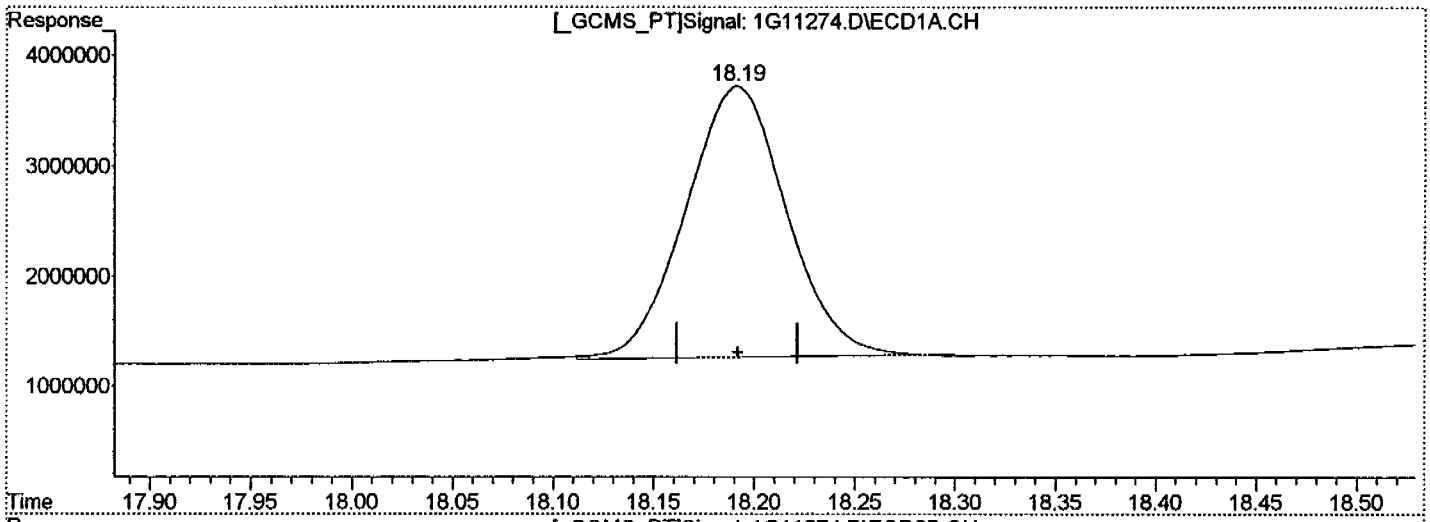
C 975

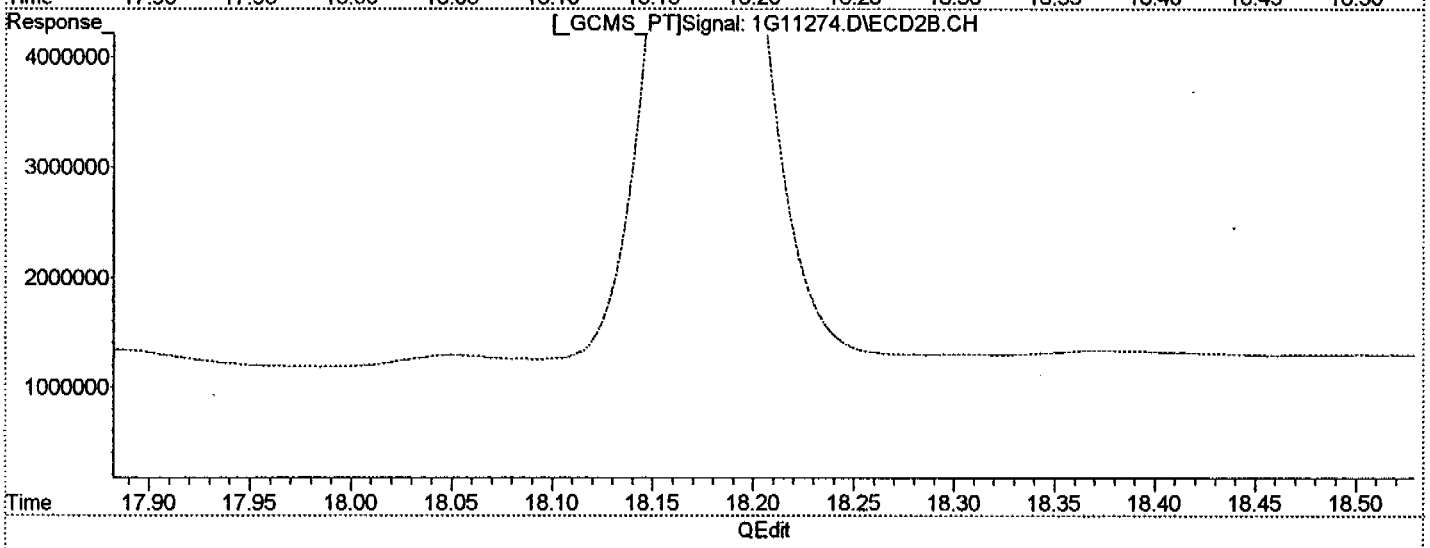
(+) = Expected Retention Time

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11274.D\ECD1A.CH Vial: 25
Signal #2 : C:\MSDCHEM\1\DATA\1G11274.D\ECD2B.CH
Acq On : 8-18-04 08:40:35 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:49 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 2004
Response via : Multiple Level Calibration





(5) MCPA

18.19min 10754.804PPB m

response 85508119

(5) MCPA #2

17.18min 11134.970PPB

response 73561926

C 976

(+) = Expected Retention Time

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: G1G283-CC276
Lab FileID: 1G11282.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1G11282.D\ECD1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\1G11282.D\ECD2B.CH
Acq On : 8-18-04 04:30:07 PM Operator: kristis
Sample : CC276-300 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,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 : Thu Aug 19 11:48:59 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	1.081 E6	40.3#	57	0.09	3.65- 3.71
2	S	2,4-DCAA	1.612	1.665 E6	-3.3	104	0.00	16.42-16.48
3		Dicamba	6.291	6.468 E6	-2.8	101	0.00	17.00-17.06
4		MCPP	4.722	4.457 E3	5.6	92	0.00	17.69-17.75
5		MCPA	7.951	7.928 E3	0.3	100	0.00	18.17-18.23
6		Dichloroprop	1.678	1.590 E6	5.2	92	0.00	19.31-19.37
7		2,4-D	2.030	1.850 E6	8.9	88	0.00	20.00-20.06
8		Pentachlorophenol	22.538	25.618 E6	-13.7	108	0.00	20.60-20.66
9		2,4,5-TP	8.433	9.697 E6	-15.0	108	0.00	22.43-22.49
10		2,4,5-T	7.713	8.398 E6	-8.9	104	0.01	23.18-23.31
11		2,4-DB	1.755	1.703 E6	3.0	97	0.02	24.65-24.80
12		Dinoseb	5.911	6.452 E6	-9.2	99	0.00	27.64-27.70
13		Picloram	9.525	10.949 E6	-15.0	106	0.05	27.12-27.32

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

1		Dalapon	1.626	0.788 E6	51.5#	46#	0.11#	3.07- 3.16
2	S	2,4-DCAA	1.283	1.285 E6	-0.2	101	0.02	15.46-15.52
3		Dicamba	5.057	5.011 E6	0.9	98	0.02	15.98-16.04
4		MCPP	3.629	3.695 E3	-1.8	94	0.02	16.44-16.50
5		MCPA	6.606	6.146 E3	7.0	93	0.02	17.17-17.23
6		Dichloroprop	1.271	1.237 E6	2.7	97	0.01	18.16-18.22
7		2,4-D	1.676	1.491 E6	11.0	86	0.01	19.08-19.14
8		Pentachlorophenol	18.344	19.394 E6	-5.7	86	0.01	20.05-20.11
9		2,4,5-TP	6.438	7.220 E6	-12.1	104	0.01	21.33-21.39
10		2,4,5-T	6.144	6.766 E6	-10.1	106	0.02	22.37-22.47
11		2,4-DB	821.481	802.850 E3	2.3	87	0.03	23.70-23.86
12		Dinoseb	3.836	4.263 E6	-11.1	103	0.01	24.50-24.56
13		Picloram	8.350	9.435 E6	-13.0	107	0.05	26.98-27.14

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G11058.D H1G276.M Thu Aug 19 11:57:46 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11282.D\ECD1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\1G11282.D\ECD2B.CH
Acq On : 8-18-04 04:30:07 PM Operator: kristis
Sample : CC276-300 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 18 17:45:01 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 : 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	16.45f	15.49f	999.2E6	770.9E6	619.920	600.844
	Spiked Amount 1000.000				Recovery =	61.99%	60.08%
	Target Compounds						
1)	Dalapon	3.68	3.12	64877295	47254823	35.814m	29.067
3)	Dicamba	17.03f	16.01f	388.1E6	300.6E6	61.679	59.452
4)	MCPP	17.72f	16.47f	66848848	55426848	14155.439	15271.280
5)	MCPA	18.20f	17.20f	118.9E6	92195832	14957.745	13955.560
6)	Dichloroprop	19.34f	18.19f	476.9E6	371.0E6	284.267	291.954
7)	2,4-D	20.03f	19.11f	555.0E6	447.4E6	273.338	266.889
8)	Pentachloropheno	20.63f	20.08f	768.5E6	581.8E6	34.100	31.716
9)	2,4,5-TP	22.46f	21.36f	581.8E6	433.2E6	68.995	67.287
10)	2,4,5-T	23.25	22.42	503.9E6	406.0E6	65.332	66.080
11)	2,4-DB	24.73	23.78	510.8E6	240.9E6	291.136	293.196
12)	Dinoseb	27.67f	24.53f	1935.7E6	1279.0E6	327.472	333.471
13)	Picloram	27.22	27.06	3284.7E6	2830.4E6	344.861	338.985

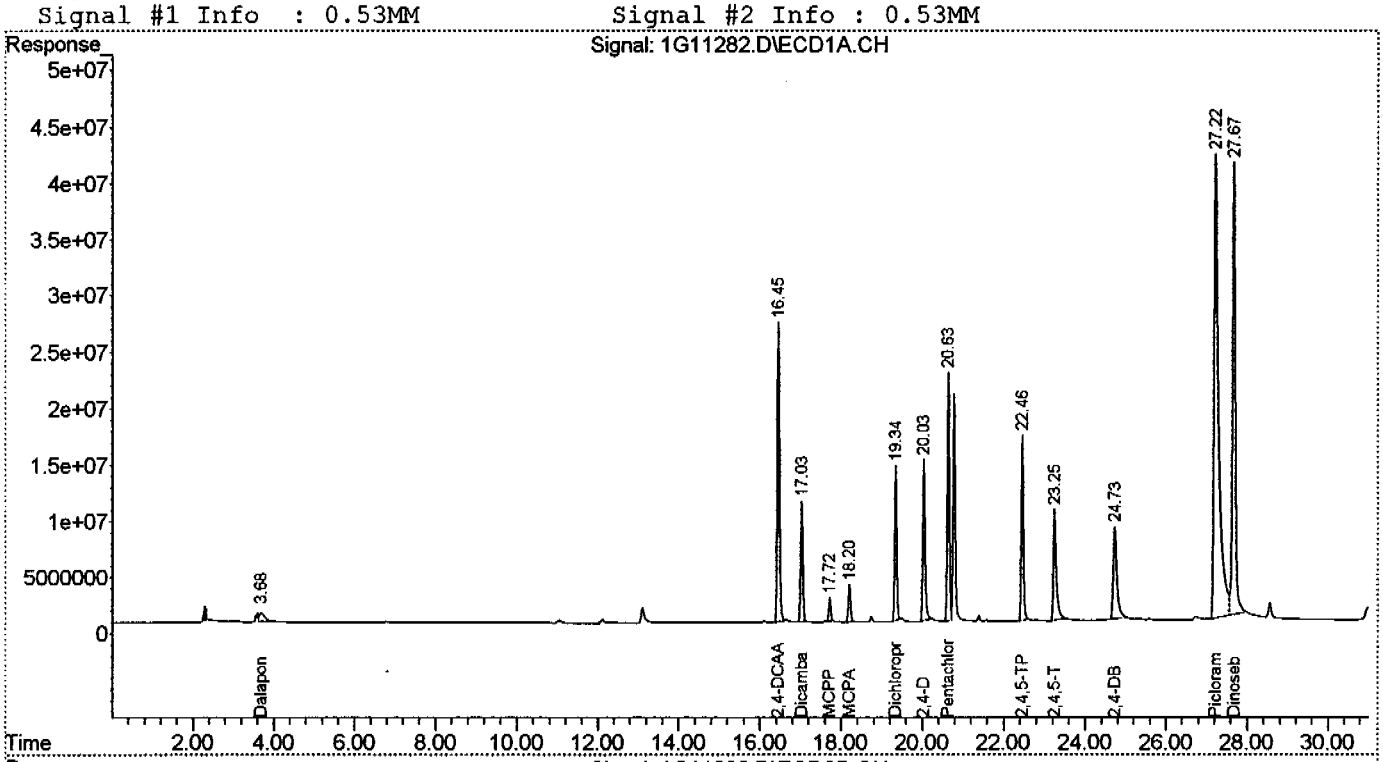
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

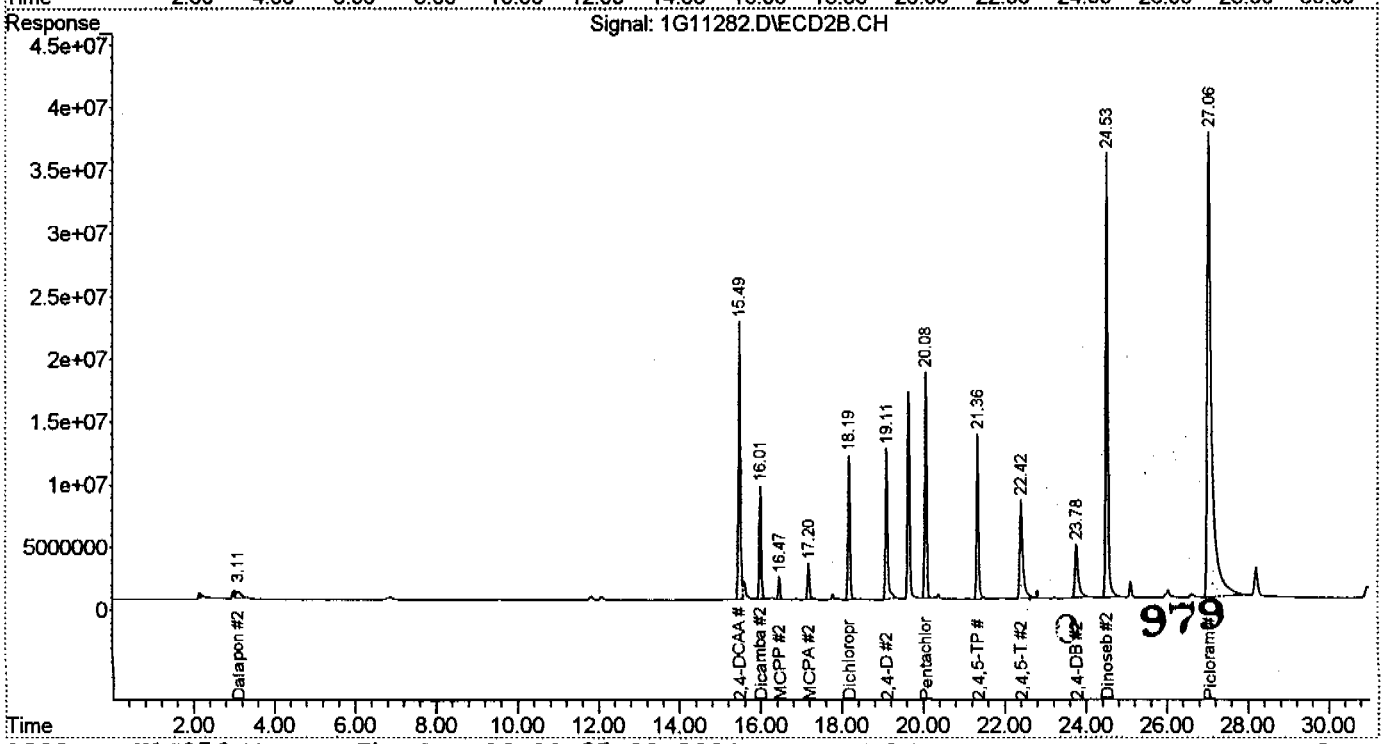
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11282.D\ECD1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\1G11282.D\ECD2B.CH
Acq On : 8-18-04 04:30:07 PM Operator: kristis
Sample : CC276-300 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:56 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



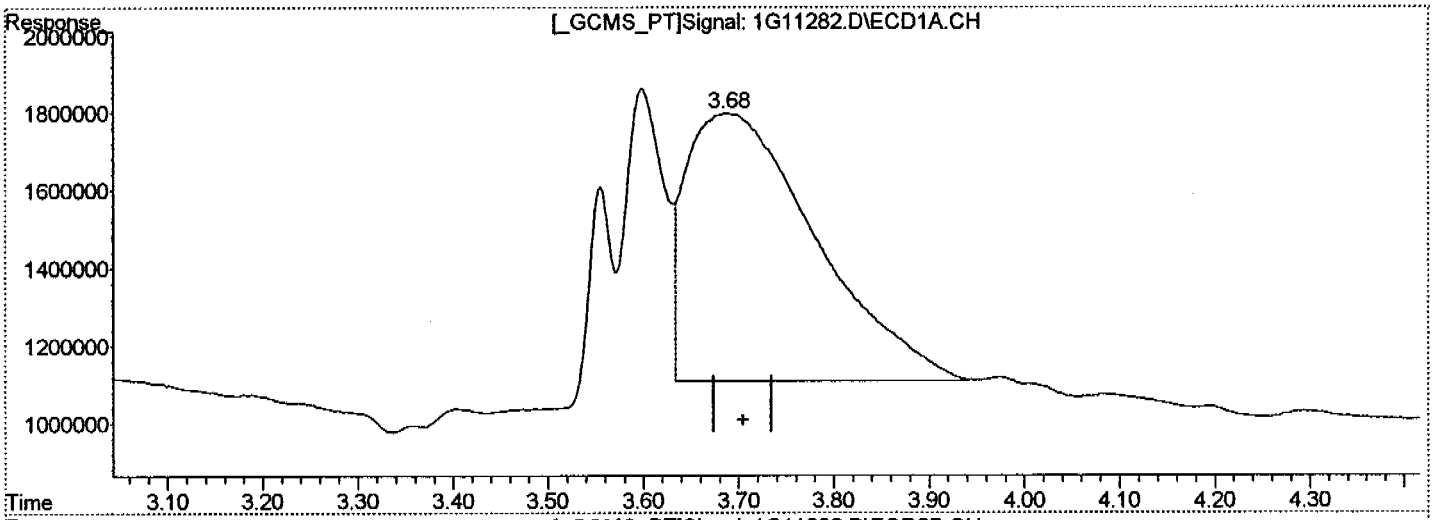


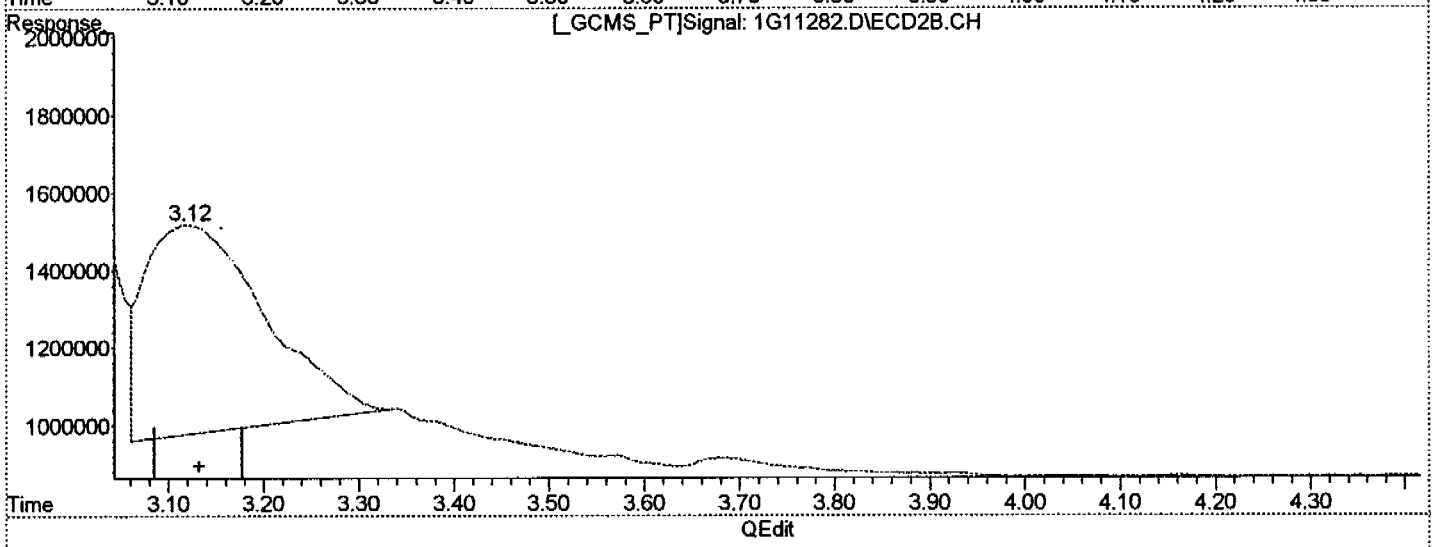
979

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11282.D\ECD1A.CH Vial: 33
Signal #2 : C:\MSDCHEM\1\DATA\1G11282.D\ECD2B.CH
Acq On : 8-18-04 04:30:07 PM Operator: kristis
Sample : CC276-300 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 18 17:45 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 2004
Response via : Multiple Level Calibration





(1) Dalapon

3.68min 35.814 m

response 64877295

(1) Dalapon #2

3.12min 29.067

response 47254823

980

(+) = Expected Retention Time

1G11282.D H1G276.M Thu Aug 19 11:56:46 2004 GC 1G

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC
Sample: G1G283-CC276
Lab FileID: 1G11294.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1G11294.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G11294.D\ECD2B.CH
Acq On : 8-19-04 01:23:18 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,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 : Thu Aug 19 13:16:09 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	0.465 E6	74.3#	22#	0.00	3.66- 3.72
2 S	2,4-DCAA	1.612	1.646 E6	-2.1	106	0.00	16.41-16.47
3	Dicamba	6.291	6.598 E6	-4.9	113	0.00	16.99-17.05
4	MCPP	4.722	4.957 E3	-5.0	120	0.00	17.68-17.74
5	MCPA	7.951	8.997 E3	-13.2	123	0.00	18.16-18.22
6	Dichloroprop	1.678	1.749 E6	-4.2	116	0.00	19.30-19.36
7	2,4-D	2.030	2.129 E6	-4.9	118	0.00	20.00-20.06
8	Pentachlorophenol	22.538	24.259 E6	-7.6	112	0.00	20.60-20.66
9	2,4,5-TP	8.433	9.491 E6	-12.5	112	0.00	22.42-22.48
10	2,4,5-T	7.713	7.974 E6	-3.4	109	0.00	23.19-23.31
11	2,4-DB	1.755	2.146 E6	-22.3#	233#	0.00	24.66-24.82
12	Dinoseb	5.911	7.789 E6	-31.8#	131	0.00	27.64-27.70
13	Picloram	9.525	10.379 E6	-9.0	104	0.00	27.14-27.33

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

1	Dalapon	1.626	0.607 E6	62.7#	48#	0.00	3.02- 3.11
2 S	2,4-DCAA	1.283	1.231 E6	4.1	99	0.00	15.45-15.51
3	Dicamba	5.057	5.077 E6	-0.4	108	0.00	15.97-16.03
4	MCPP	3.629	3.948 E3	-8.8	118	0.00	16.44-16.50
5	MCPA	6.606	6.947 E3	-5.2	115	0.00	17.16-17.22
6	Dichloroprop	1.271	1.310 E6	-3.1	116	0.00	18.15-18.21
7	2,4-D	1.676	1.779 E6	-6.1	127	0.00	19.07-19.13
8	Pentachlorophenol	18.344	19.444 E6	-6.0	112	0.00	20.05-20.11
9	2,4,5-TP	6.438	6.525 E6	-1.4	102	0.00	21.33-21.39
10	2,4,5-T	6.144	6.202 E6	-0.9	104	0.00	22.37-22.48
11	2,4-DB	821.481	862.042 E3	-4.9	116	0.00	23.71-23.86
12	Dinoseb	3.836	4.298 E6	-12.0	109	0.00	24.50-24.56
13	Picloram	8.350	8.775 E6	-5.1	96	0.00	26.99-27.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G11294.D H1G276.M Thu Aug 19 13:16:36 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11294.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G11294.D\ECD2B.CH
Acq On : 8-19-04 01:23:18 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:15:20 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:15:14 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	16.44	15.48	658.3E6	492.3E6	408.446	383.728
Spiked Amount	1000.000			Recovery	=	40.84%	38.37%
	Target Compounds						
1)	Dalapon	3.69	3.07	18606320	24293624	10.271	14.943m#
3)	Dicamba	17.02	16.00	263.9E6	203.1E6	41.951	40.164
4)	MCPP	17.71	16.47	49569918	39481740	10496.575	10878.063
5)	MCPA	18.19	17.19	89972747	69472508	11316.344	10515.961
6)	Dichloroprop	19.33	18.18	349.8E6	262.0E6	208.546	206.177
7)	2,4-D	20.03	19.10	425.7E6	355.7E6	209.673	212.221
8)	Pentachlorophenol	20.63	20.08	485.2E6	388.9E6	21.528	21.199
9)	2,4,5-TP	22.45	21.36	379.6E6	261.0E6	45.021	40.539
10)	2,4,5-T	23.25	22.42	318.9E6	248.1E6	41.354	40.379
11)	2,4-DB	24.74	23.79f	429.2E6	172.4E6	244.607	209.875
12)	Dinoseb	27.67	24.53	1557.8E6	859.6E6	263.540	224.125
13)	Picloram	27.24f	27.07f	2075.8E6	1754.9E6	217.941	210.180

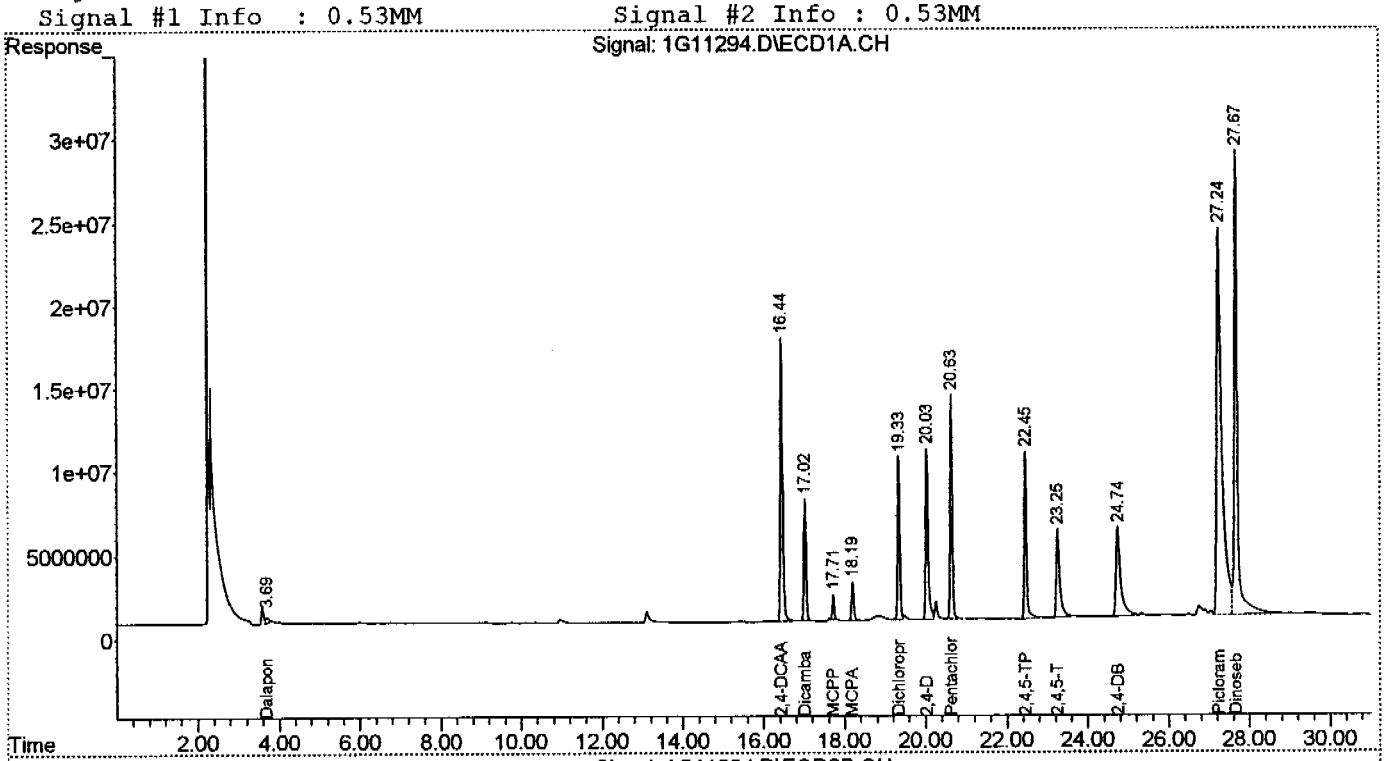
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

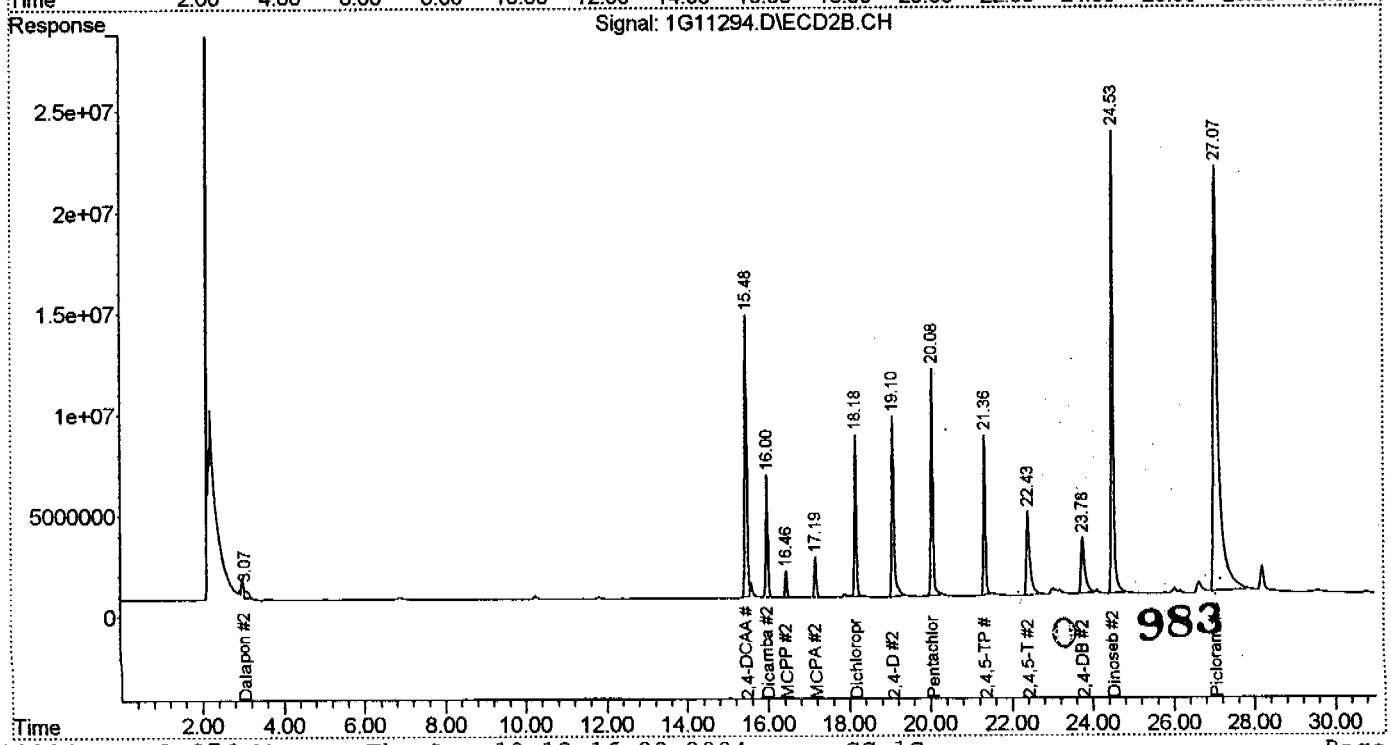
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11294.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G11294.D\ECD2B.CH
Acq On : 8-19-04 01:23:18 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:15 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:15:14 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



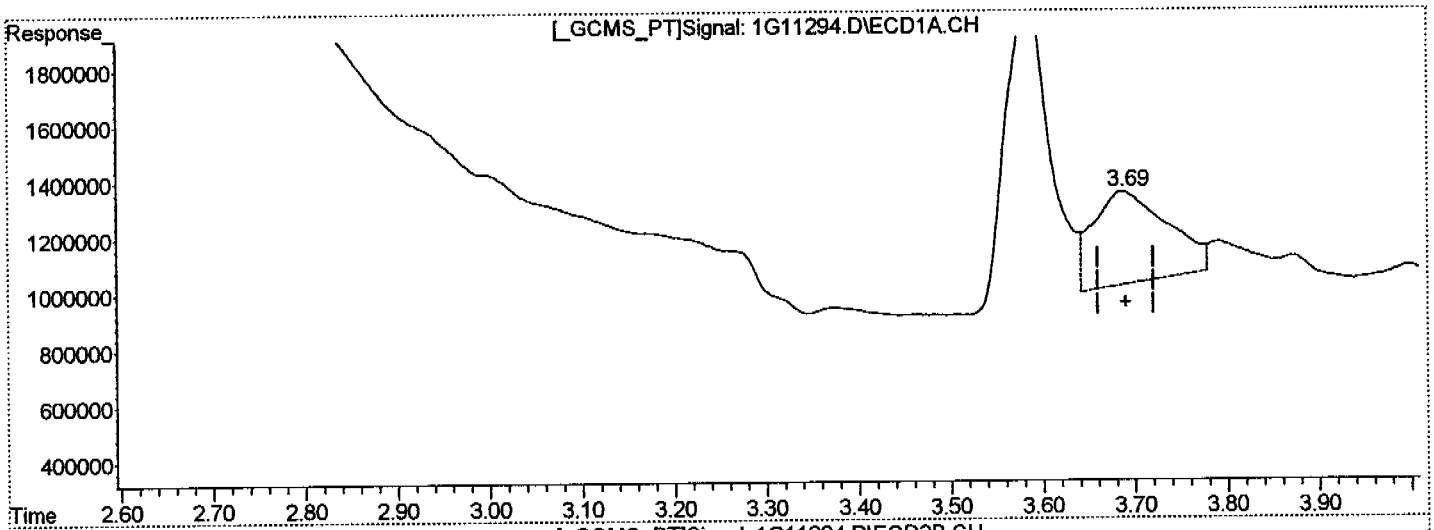


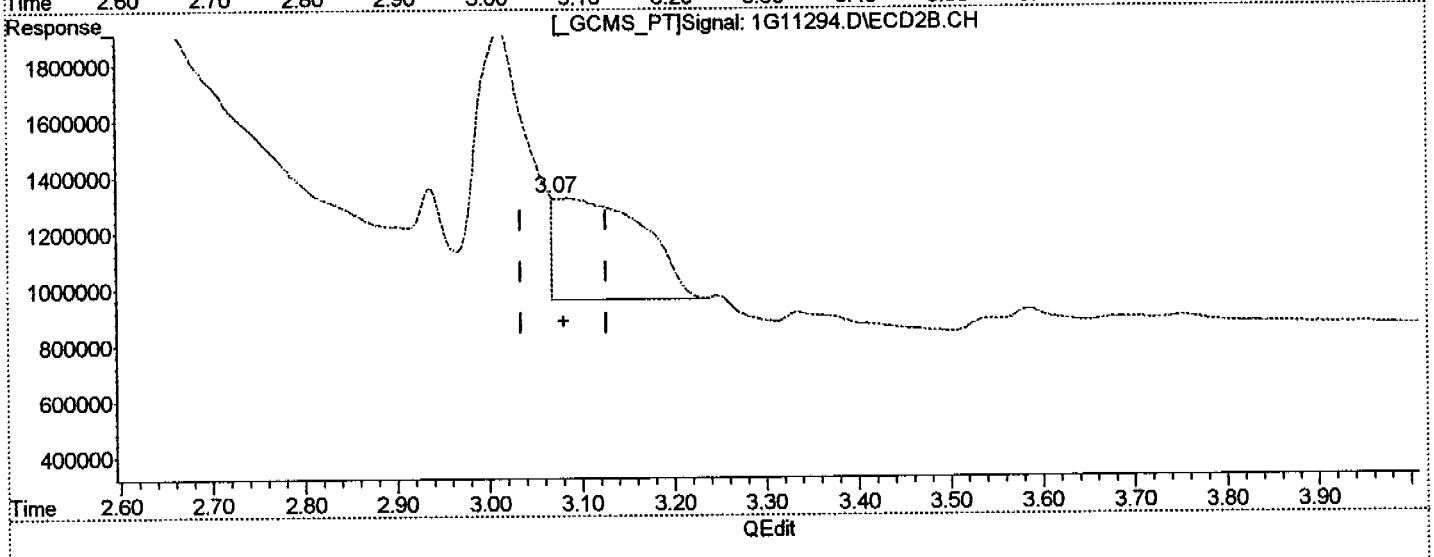
983

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11294.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G11294.D\ECD2B.CH
Acq On : 8-19-04 01:23:18 AM Operator: kristis
Sample : CC276-200 Inst : GC1G
Misc : OP17705,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:15 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:15:14 2004
Response via : Multiple Level Calibration





(1) Dalapon

3.69min 10.271

response 18606320

(1) Dalapon #2

3.07min 14.943 m

response 24293624

984

(+) = Expected Retention Time

Continuing Calibration Summary

Job Number: N74914
Account: ENSRMAA ENSR Consulting & Engineering
Project: Former Camp Butner, NC

Sample: G1G283-ECC276
Lab FileID: 1G11304.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1G11304.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G11304.D\ECD2B.CH
Acq On : 8-19-04 07:00:25 AM Operator: kristis
Sample : ECC276-300 Inst : GC1G
Misc : OP17725,G1G283,1.00,,,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 : Thu Aug 19 13:16:09 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	0.613 E6	66.2#	32#	0.00	3.66- 3.72
2	S	2,4-DCAA	1.612	1.705 E6	-5.8	107	0.00	16.41-16.47
3		Dicamba	6.291	6.995 E6	-11.2	109	0.00	16.99-17.05
4		MCPP	4.722	5.712 E3	-21.0#	118	0.00	17.68-17.74
5		MCPA	7.951	8.468 E3	-6.5	107	0.00	18.16-18.22
6		Dichloroprop	1.678	1.723 E6	-2.7	100	0.00	19.30-19.36
7		2,4-D	2.030	2.163 E6	-6.6	103	0.00	20.00-20.06
8		Pentachlorophenol	22.538	25.940 E6	-15.1#	109	0.00	20.60-20.66
9		2,4,5-TP	8.433	9.812 E6	-16.4#	109	0.00	22.42-22.48
10		2,4,5-T	7.713	8.133 E6	-5.4	101	-0.01	23.18-23.30
11		2,4-DB	1.755	14.282 E6	-713.8#	813#	-0.04	24.61-24.77
12		Dinoseb	5.911	6.675 E6	-12.9	103	0.00	27.64-27.70
13		Picloram	9.525	10.781 E6	-13.2	104	-0.04	27.10-27.29

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

1		Dalapon	1.626	0.540 E6	66.8#	31#	0.03	3.05- 3.14
2	S	2,4-DCAA	1.283	1.272 E6	0.9	100	0.00	15.45-15.51
3		Dicamba	5.057	5.389 E6	-6.6	105	0.00	15.97-16.03
4		MCPP	3.629	4.063 E3	-12.0	103	0.00	16.44-16.50
5		MCPA	6.606	6.997 E3	-5.9	106	0.00	17.16-17.22
6		Dichloroprop	1.271	1.315 E6	-3.5	103	0.00	18.15-18.21
7		2,4-D	1.676	1.715 E6	-2.3	99	0.00	19.07-19.13
8		Pentachlorophenol	18.344	19.435 E6	-5.9	87	0.00	20.05-20.11
9		2,4,5-TP	6.438	7.182 E6	-11.6	104	0.00	21.33-21.39
10		2,4,5-T	6.144	8.948 E6	-45.6#	141	0.00	22.36-22.47
11		2,4-DB	821.481	903.136 E3	-9.9	98	-0.02	23.68-23.84
12		Dinoseb	3.836	4.748 E6	-23.8#	115	0.00	24.50-24.56
13		Picloram	8.350	9.273 E6	-11.1	105	-0.03	26.96-27.11

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G11058.D H1G276.M Thu Aug 19 13:46:13 2004 GC_1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11304.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G11304.D\ECD2B.CH
Acq On : 8-19-04 07:00:25 AM Operator: kristis
Sample : ECC276-300 Inst : GC1G
Misc : OP17725,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:44:40 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:16:09 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	16.44	15.48	1023.0E6	763.4E6	634.682	594.987	
	Spiked Amount 1000.000				Recovery =	63.47%	59.50%	
	Target Compounds							
1)	Dalapon	3.69	3.10f	36784033	32420917	20.306m	19.943m	
3)	Dicamba	17.02	16.00	419.7E6	323.3E6	66.713	63.941	
4)	MCPP	17.71	16.47	85673414	60942424	18141.595m	16790.939	
5)	MCPA	18.19	17.19	127.0E6	105.0E6	15976.092	15887.369	
6)	Dichloroprop	19.33	18.18	517.0E6	394.4E6	308.190	310.308	
7)	2,4-D	20.03	19.10	648.9E6	514.5E6	319.607	306.906	
8)	Pentachlorophenol	20.63	20.08	778.2E6	583.1E6	34.529	31.784	
9)	2,4,5-TP	22.45	21.36	588.7E6	430.9E6	69.813	66.929	
10)	2,4,5-T	23.24	22.42	488.0E6	536.9E6	63.272	87.388	#
11)	2,4-DB	24.69f	23.76	4284.5E6	270.9E6	2441.790	329.820	#
12)	Dinoseb	27.67	24.53	2002.5E6	1424.3E6	338.785	371.339	
13)	Picloram	27.19f	27.04	3234.3E6	2781.8E6	339.570	333.160	

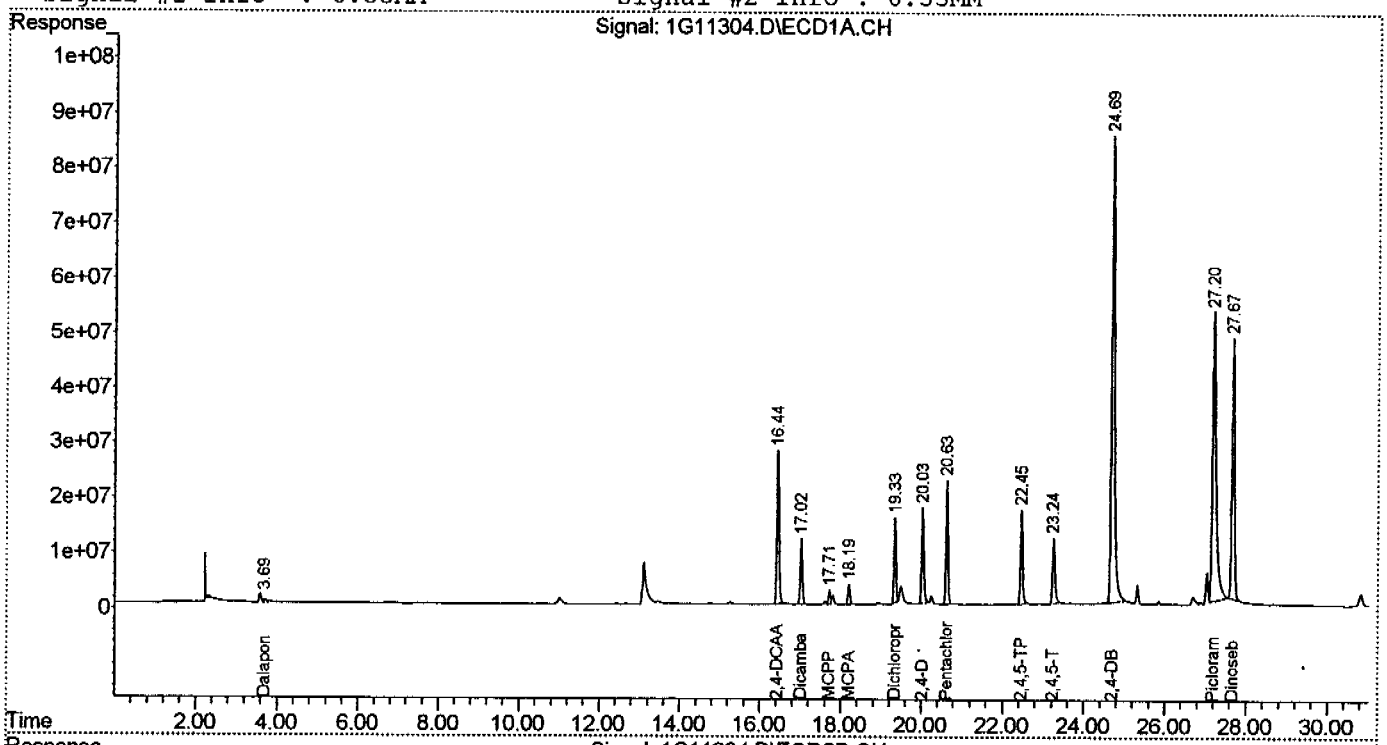
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

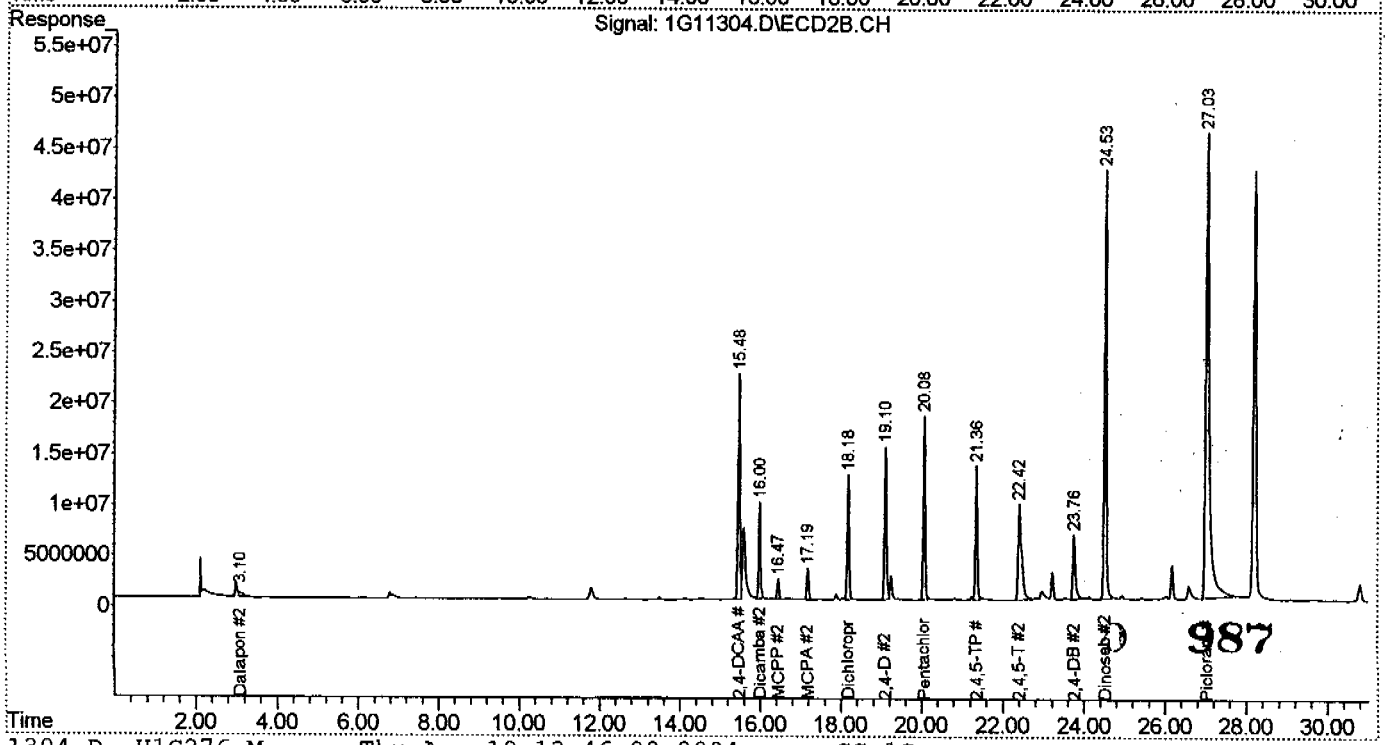
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11304.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G11304.D\ECD2B.CH
Acq On : 8-19-04 07:00:25 AM Operator: kristis
Sample : ECC276-300 Inst : GC1G
Misc : OP17725,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:45 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:16:09 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



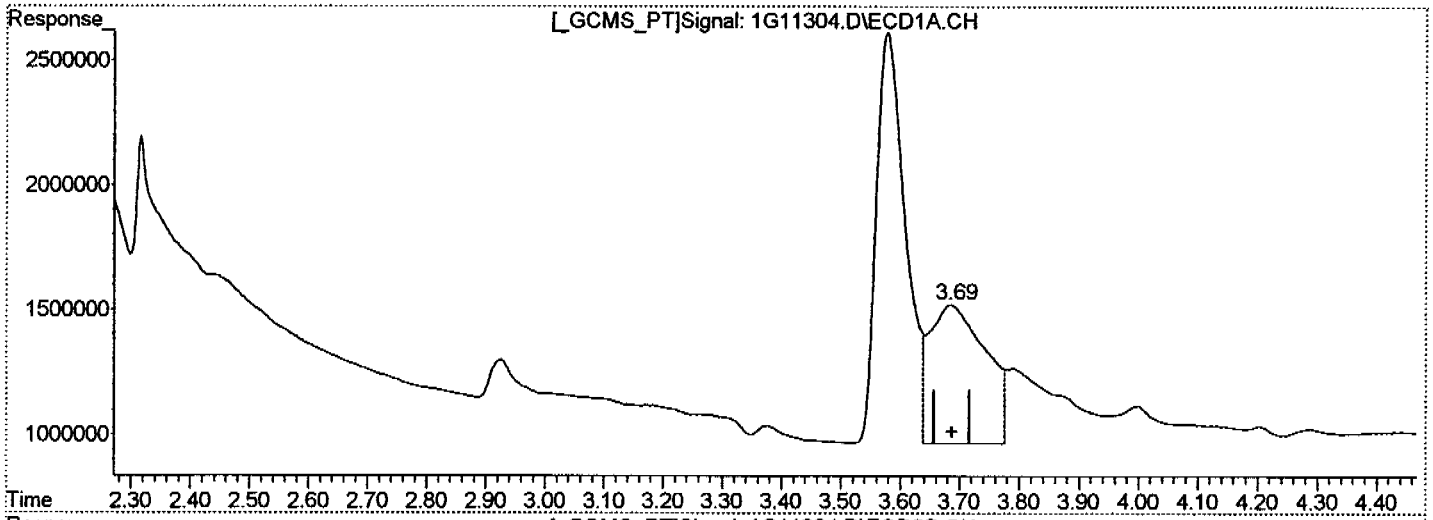


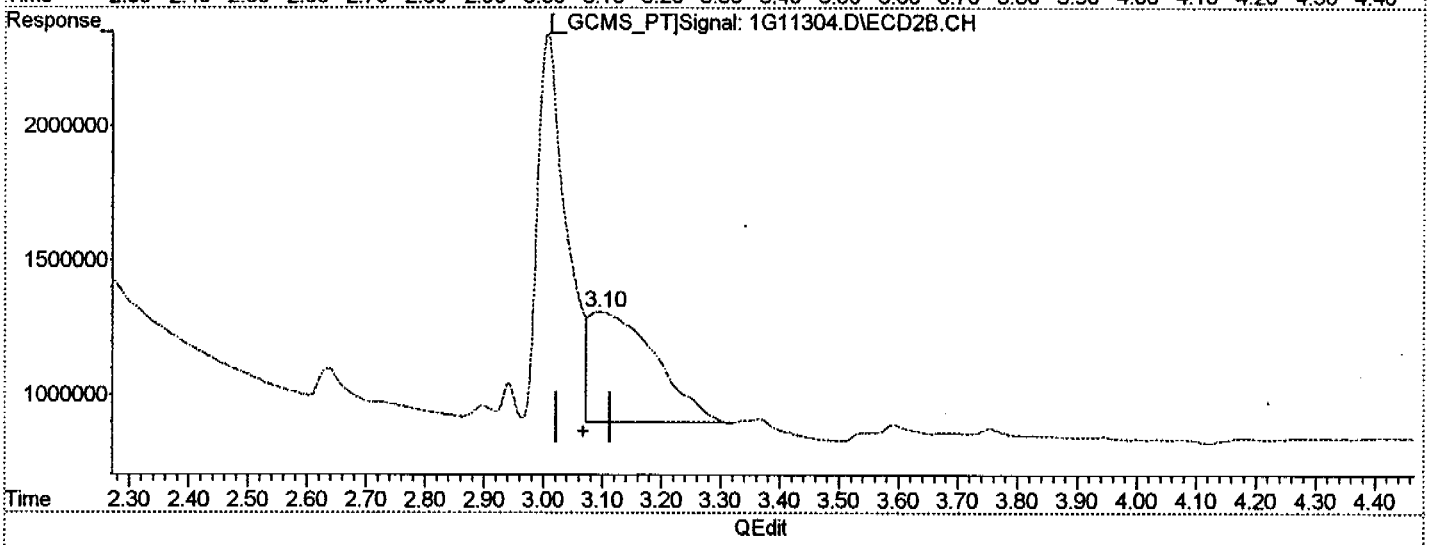
987

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11304.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G11304.D\ECD2B.CH
Acq On : 8-19-04 07:00:25 AM Operator: kristis
Sample : ECC276-300 Inst : GC1G
Misc : OP17725,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:44 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:16:09 2004
Response via : Multiple Level Calibration





(1) Dalapon

3.69min 20.306 m

response 36784033

(1) Dalapon #2

3.10min 19.943 m

response 32420917

988

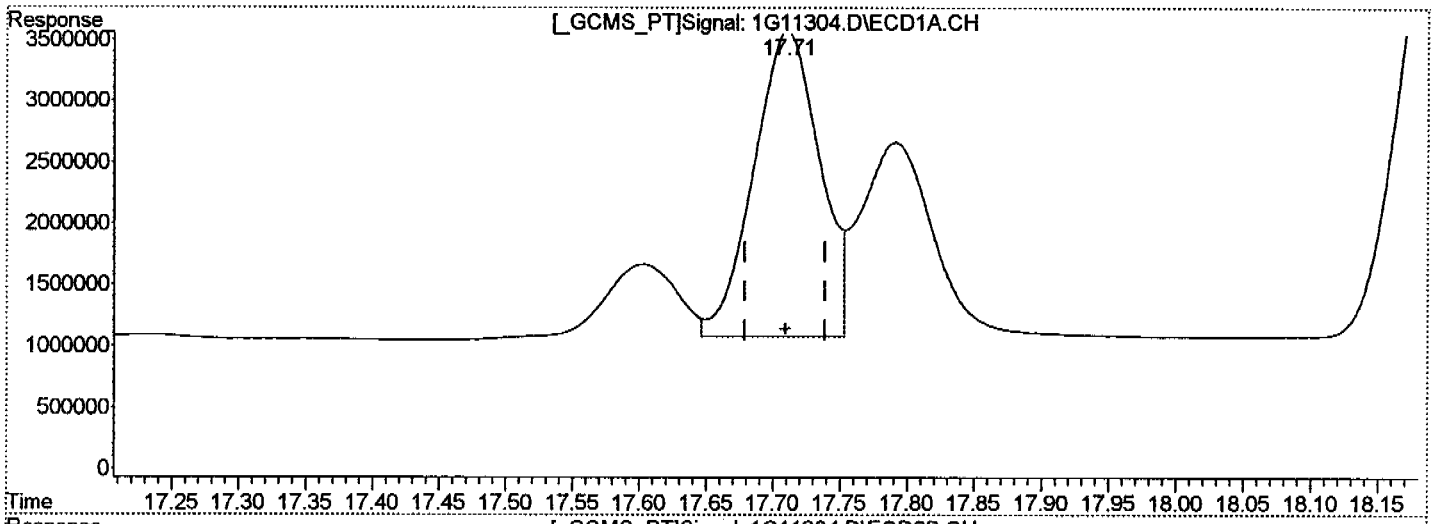
(+) = Expected Retention Time

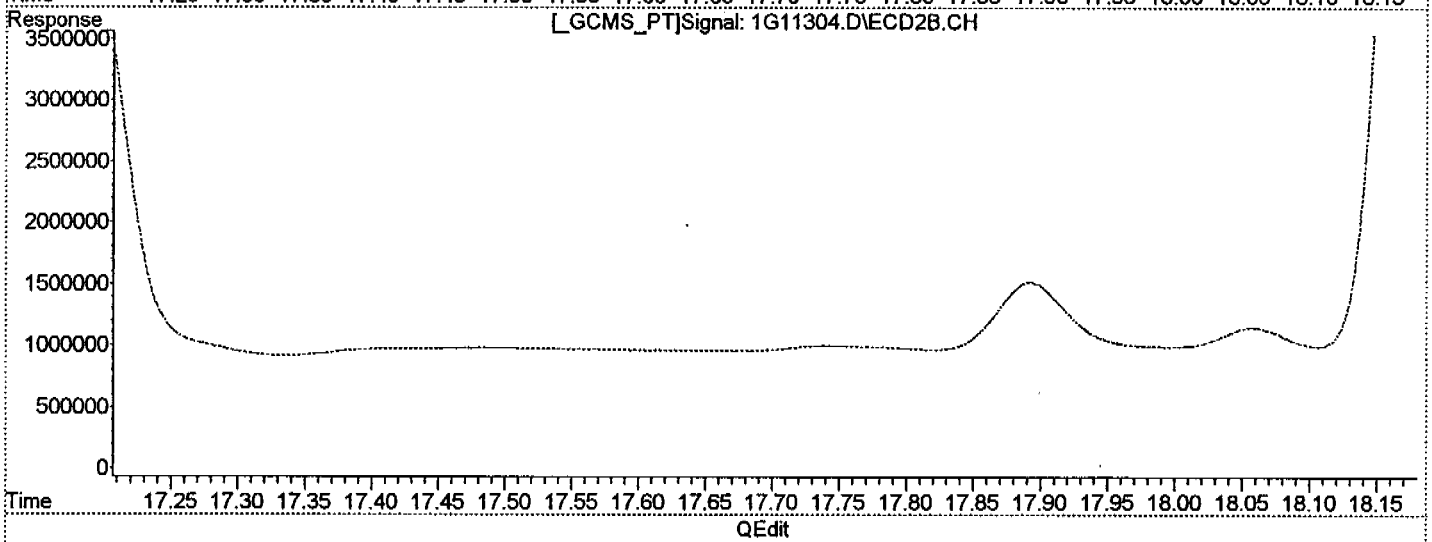
1G11304.D H1G276.M Thu Aug 19 13:45:09 2004 GC 1G

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11304.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G11304.D\ECD2B.CH
Acq On : 8-19-04 07:00:25 AM Operator: kristis
Sample : ECC276-300 Inst : GC1G
Misc : OP17725,G1G283,1.00,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:44 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:16:09 2004
Response via : Multiple Level Calibration





(4) MCPP

17.71min 18141.595 m

response 85673414

(4) MCPP #2

16.47min 16790.939

response 60942424

989

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11276.D\ECD1A.CH Vial: 27
Signal #2 : C:\MSDCHEM\1\DATA\1G11276.D\ECD2B.CH
Acq On : 18 Aug 2004 11:26 am Operator: kristis
Sample : OP17705-MB1 Inst : GC1G
Misc : OP17705,G1G283,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:51:04 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1353.5E6	1031.4E6	839.743	803.851
Spiked Amount 1000.000			Recovery	=	83.97%	80.39%
Target Compounds						

990

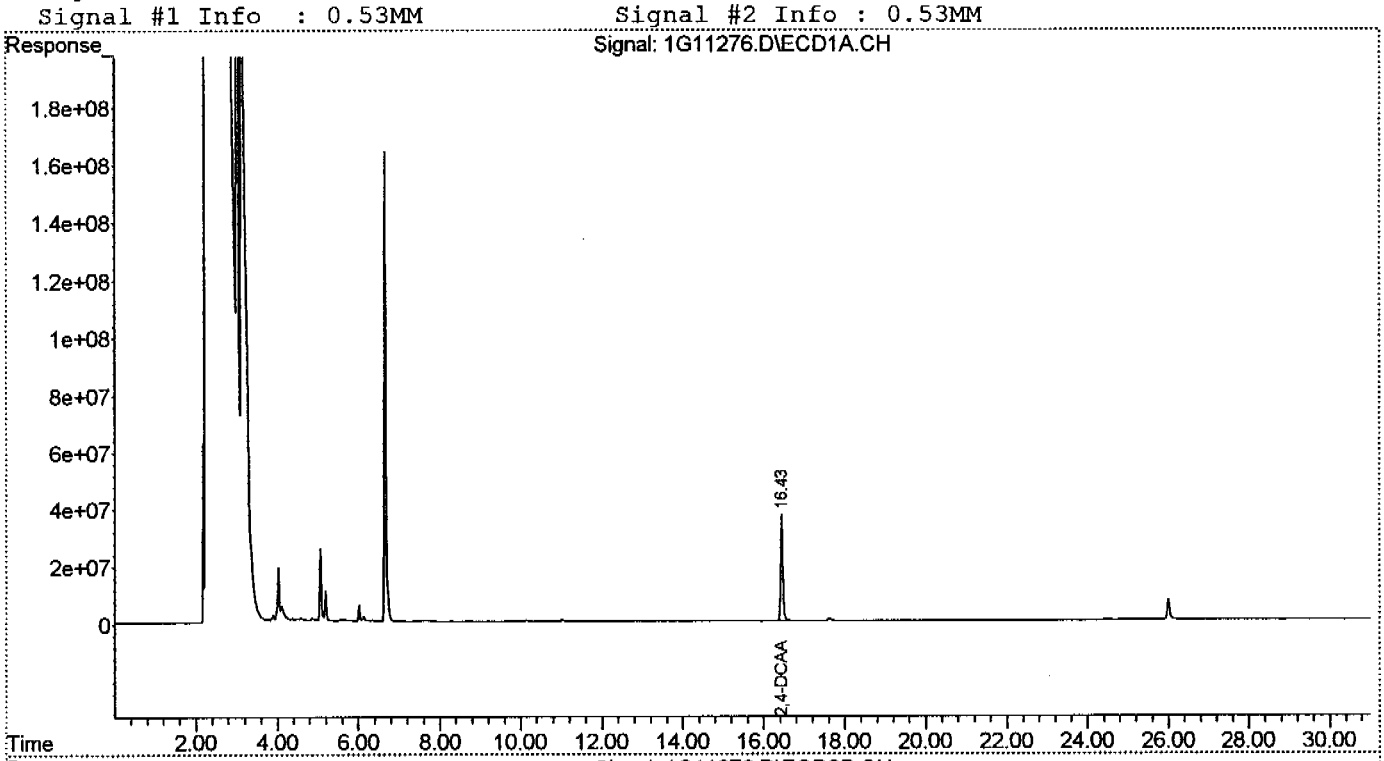
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

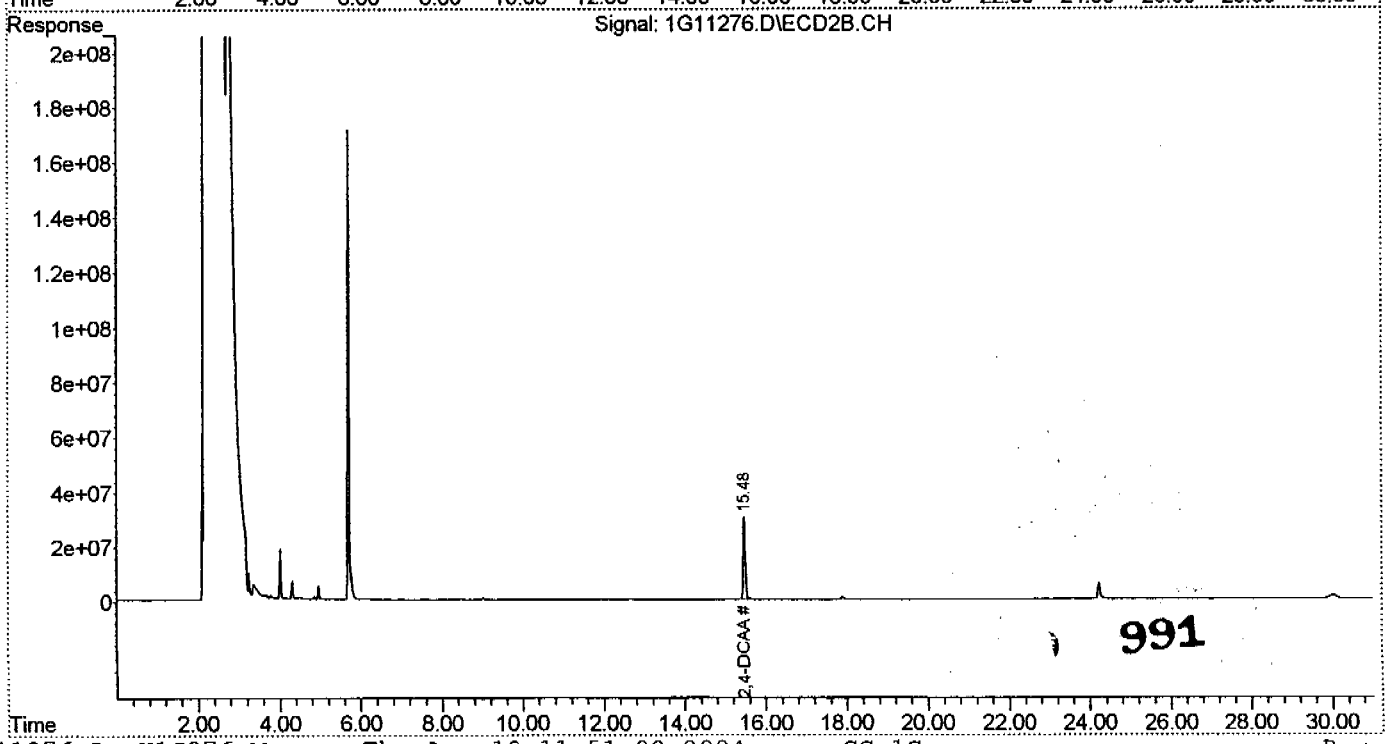
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11276.D\ECD1A.CH Vial: 27
Signal #2 : C:\MSDCHEM\1\DATA\1G11276.D\ECD2B.CH
Acq On : 18 Aug 2004 11:26 am Operator: kristis
Sample : OP17705-MB1 Inst : GC1G
Misc : OP17705,G1G283,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:51 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





991

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11296.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G11296.D\ECD2B.CH
Acq On : 8-19-04 02:30:44 AM Operator: kristis
Sample : OP17705-MS Inst : GC1G
Misc : OP17705,G1G283,850,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:23:02 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:16:09 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	16.45	15.49	1556.4E6	1193.7E6	965.608	930.373	
Spiked Amount	1000.000			Recovery	=	96.56%	93.04%	
	Target Compounds							
1)	Dalapon	3.70	0.00	536.1E6	0	295.948	N.D.	#
3)	Dicamba	17.02	16.01	3094.9E6	2344.9E6	491.928	463.708	
4)	MCPP	17.70	16.47	35126047	16632368	7438.043m	4582.573	#
5)	MCPA	18.19	17.19	45994868	36453592	5785.015	5517.931	
6)	Dichloroprop	19.34	18.19	812.3E6	596.1E6	484.237	469.011	
7)	2,4-D	20.03	19.11	973.6E6	731.2E6	479.518	436.226	
8)	Pentachloropheno	20.63	20.08	12373.4E6	9156.0E6	549.013	499.117	
9)	2,4,5-TP	22.46	21.36	4749.3E6	3426.6E6	563.202	532.240	
10)	2,4,5-T	23.24	22.41	4690.4E6	3427.4E6	608.143	557.872	
11)	2,4-DB	24.71	23.76	562.6E6	405.5E6	320.631	493.617	#
12)	Dinoseb	27.67	24.53	2281.0E6	1407.3E6	385.886	366.896	
13)	Picloram	27.20	27.04	3570.1E6	2657.4E6	374.820	318.261	

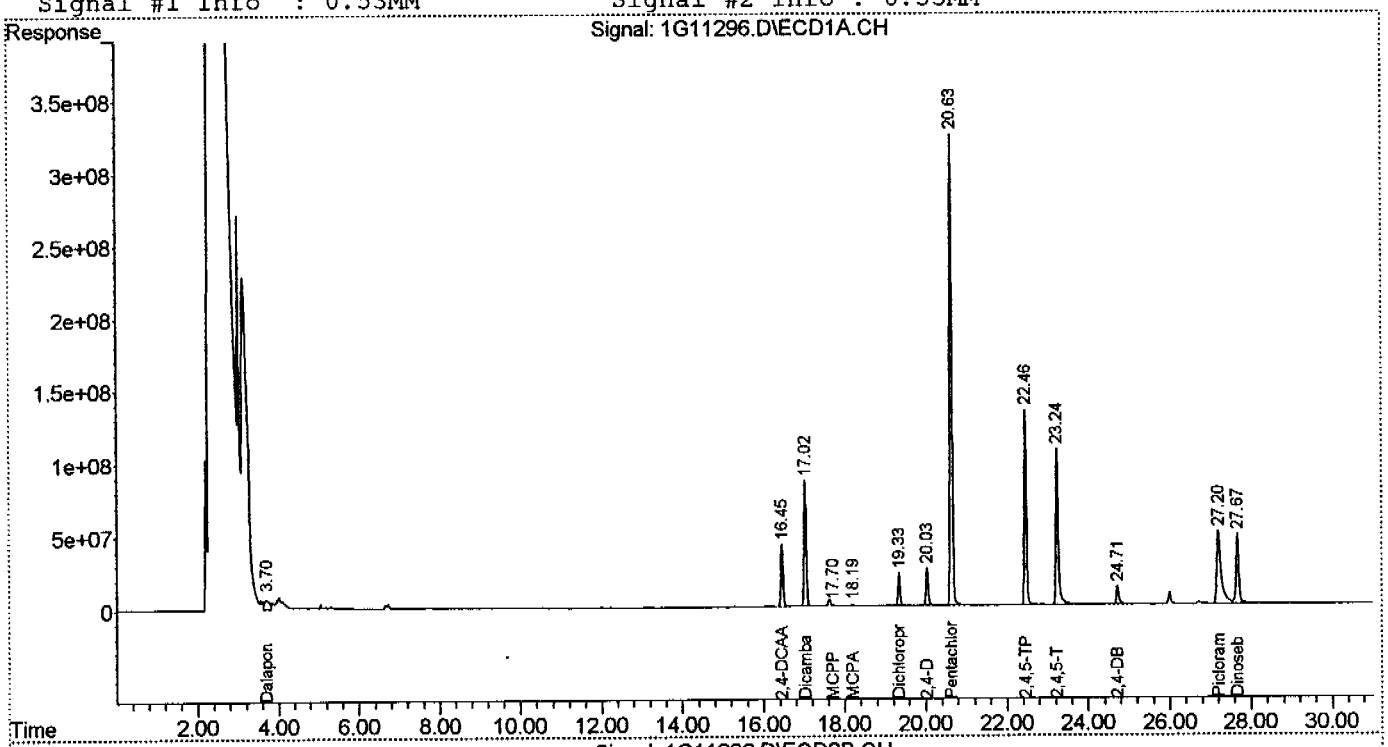
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

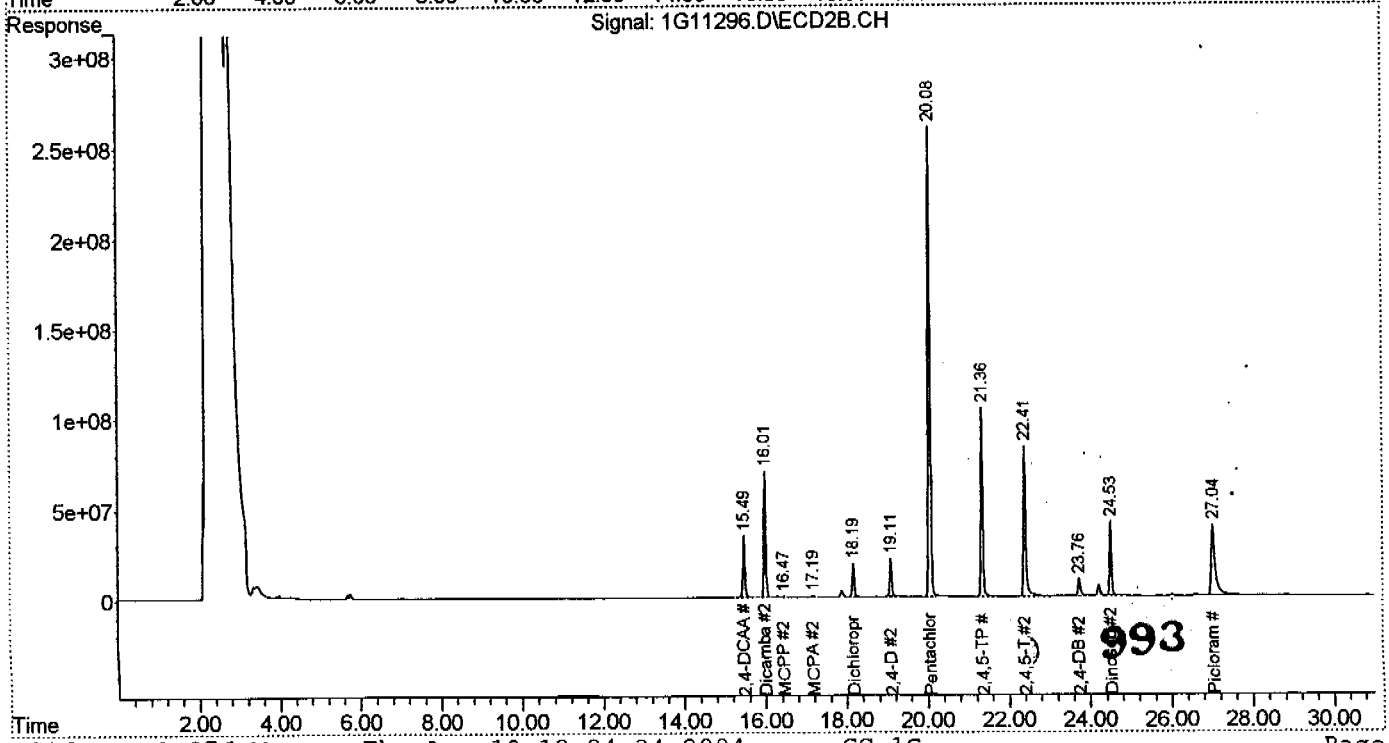
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11296.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G11296.D\ECD2B.CH
Acq On : 8-19-04 02:30:44 AM Operator: kristis
Sample : OP17705-MS Inst : GC1G
Misc : OP17705,G1G283,850,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:23 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:16:09 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



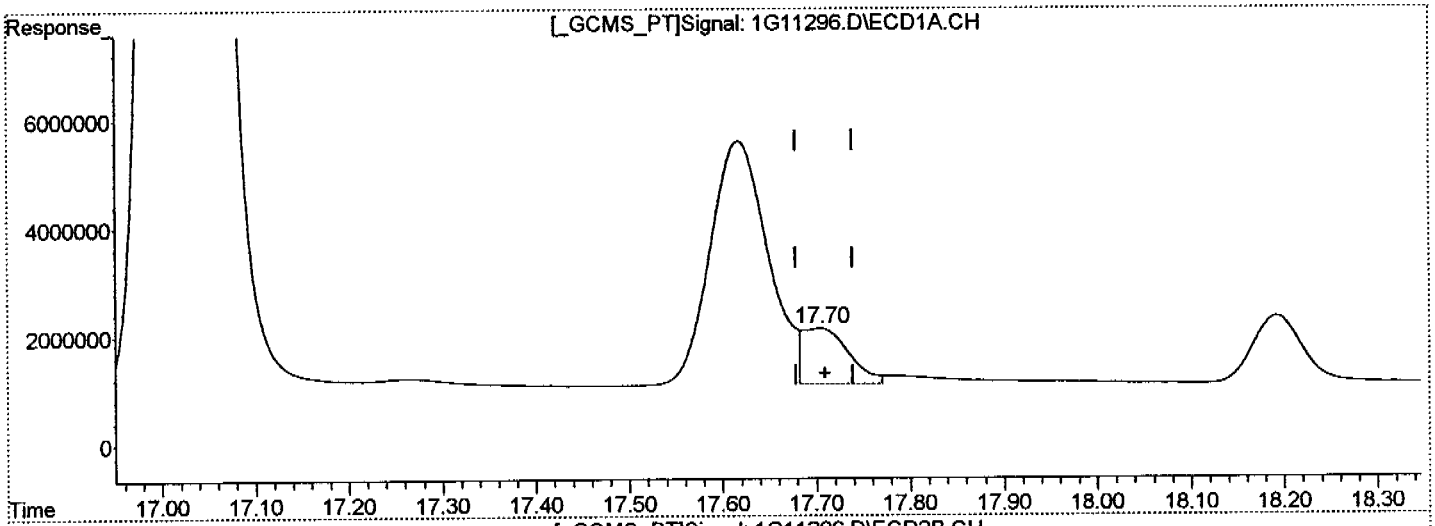


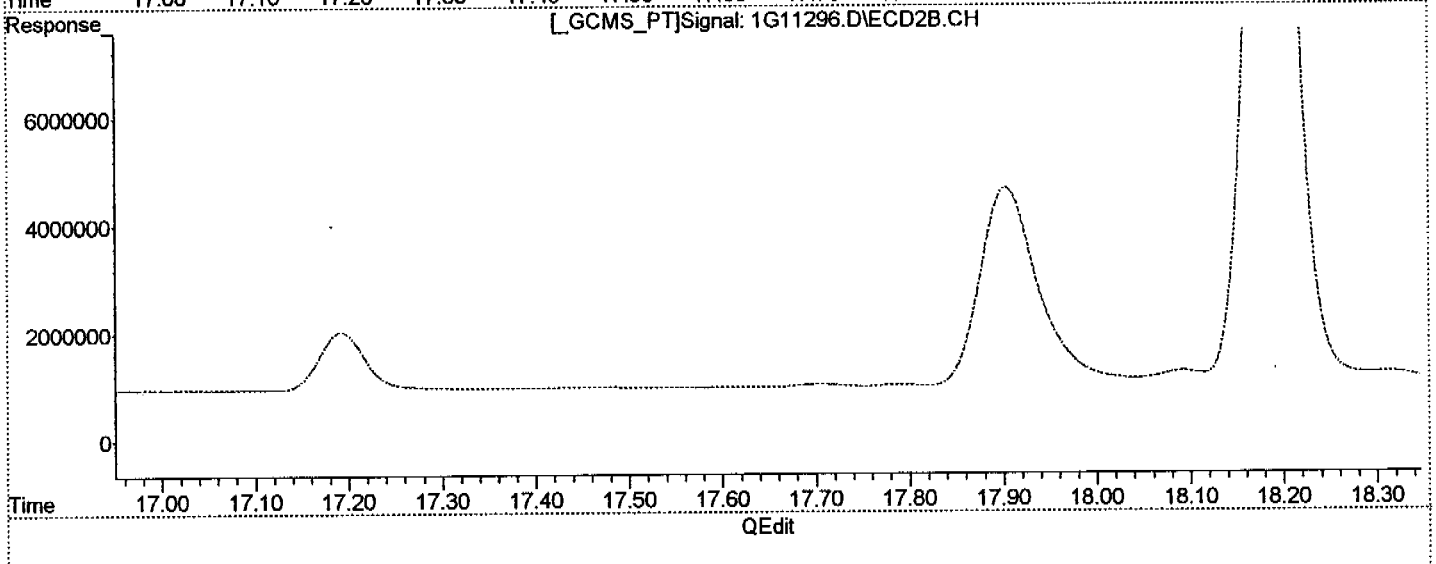
993

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G11296.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G11296.D\ECD2B.CH
Acq On : 8-19-04 02:30:44 AM Operator: kristis
Sample : OP17705-MS Inst : GC1G
Misc : OP17705,G1G283,850,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:23 2004 Quant Results File: H1G276.RES

Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:16:09 2004
Response via : Multiple Level Calibration





(4) MCPP

17.70min 7438.043 m

response 35126047

(4) MCPP #2

16.47min 4582.573

response 16632368

994

(+) = Expected Retention Time

1G11296.D H1G276.M Thu Aug 19 13:24:02 2004 GC 1G

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11297.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G11297.D\ECD2B.CH
Acq On : 8-19-04 03:04:29 AM Operator: kristis
Sample : OP17705-MSD Inst : GC1G
Misc : OP17705,G1G283,850,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:29:35 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:16:09 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	16.44	15.48	1628.0E6	1239.3E6	1010.070	965.904	
Spiked Amount	1000.000			Recovery	=	101.01%	96.59%	
	Target Compounds							
1)	Dalapon	3.68	0.00	295.5E6	0	163.120	N.D.	#
3)	Dicamba	17.02	16.00	3216.0E6	2411.5E6	511.167	476.895	
4)	MCPP	17.70	16.47	36454422	17037632	7719.330	4694.231	#
5)	MCPA	18.19	17.19	46759369	36847752	5881.171	5577.595	
6)	Dichloroprop	19.33	18.19	838.3E6	592.3E6	499.747	466.031	
7)	2,4-D	20.03	19.11	1034.0E6	745.6E6	509.231	444.776	
8)	Pentachlorophenol	20.63	20.08	12763.2E6	9393.4E6	566.308	512.060	
9)	2,4,5-TP	22.45	21.36	4845.6E6	3487.1E6	574.629	541.630	
10)	2,4,5-T	23.23	22.41	4735.5E6	3432.4E6	613.990	558.687	
11)	2,4-DB	24.71	23.76	561.2E6	396.5E6	319.829	482.677	#
12)	Dinoseb	27.67	24.53	2564.4E6	1616.9E6	433.832	421.553	
13)	Picloram	27.21	27.05	3282.2E6	2490.5E6	344.598	298.269	

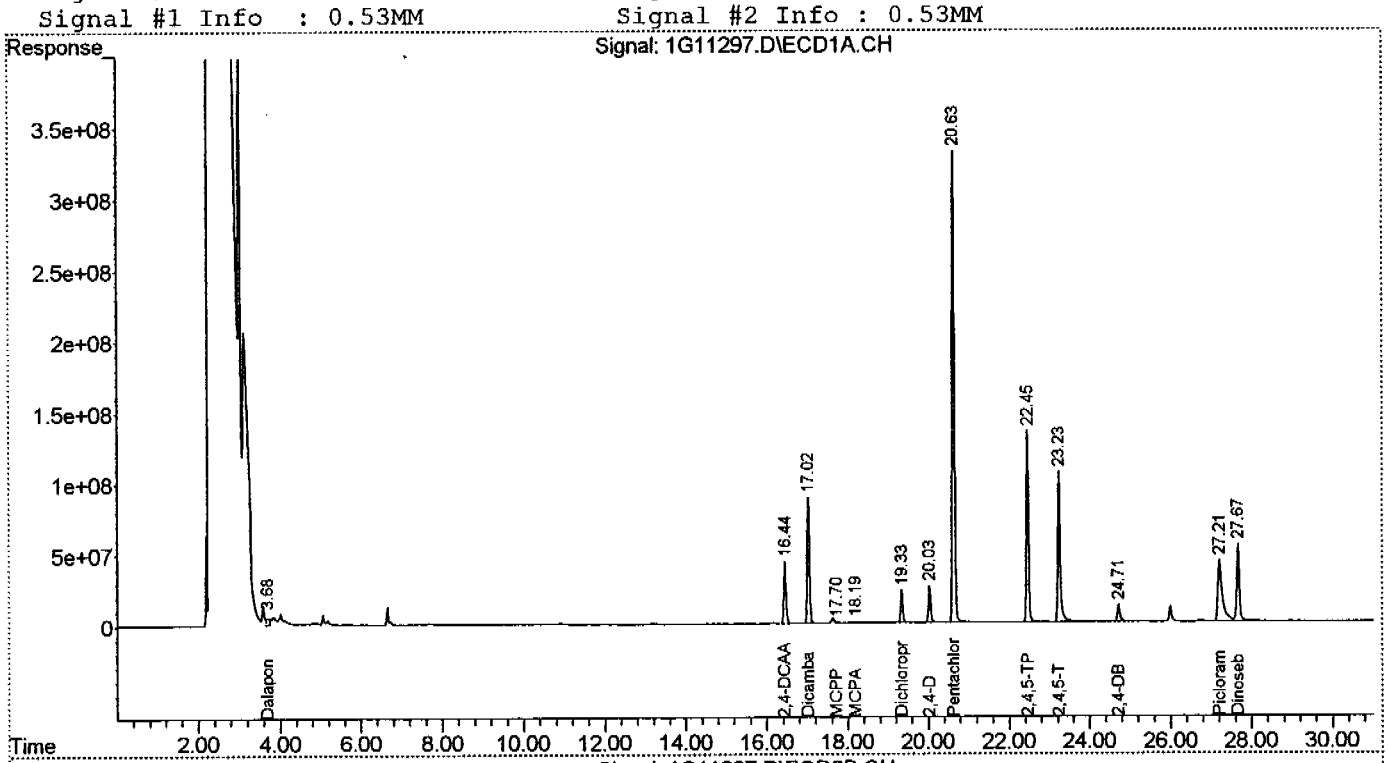
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

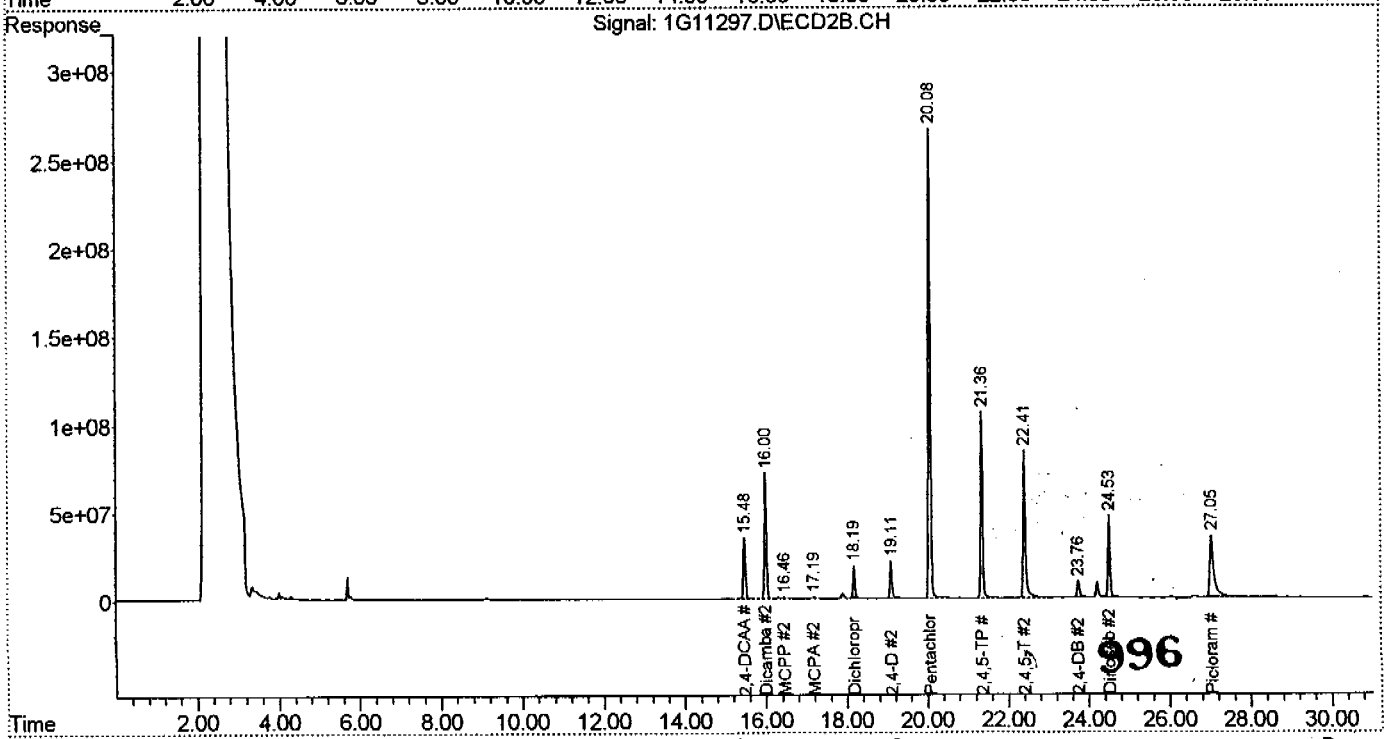
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11297.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G11297.D\ECD2B.CH
Acq On : 8-19-04 03:04:29 AM Operator: kristis
Sample : OP17705-MSD Inst : GC1G
Misc : OP17705,G1G283,850,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 13:29 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 13:16:09 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\1G11277.D\ECD1A.CH Vial: 28
Signal #2 : C:\MSDCHEM\1\DATA\1G11277.D\ECD2B.CH
Acq On : 18 Aug 2004 11:59 am Operator: kristis
Sample : OP17705-BS1 Inst : GC1G
Misc : OP17705,G1G283,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:51:30 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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	16.44	15.48	1358.4E6	1053.9E6	842.791	821.427	
Spiked Amount	1000.000			Recovery	=	84.28%	82.14%	
	Target Compounds							
1)	Dalapon	3.58	0.00	568.3E6	0	313.736	N.D.	#
3)	Dicamba	17.02	16.00	2679.3E6	2036.0E6	425.863	402.635	
4)	MCPP	17.71	16.46	20011316	14145256	4237.454	3897.320	
5)	MCPA	18.19	17.19	41143096	32110520	5174.783	4860.526	
6)	Dichloroprop	19.33	18.18	690.8E6	514.7E6	411.799	404.954	
7)	2,4-D	20.03	19.10	839.9E6	636.9E6	413.630	379.932	
8)	Pentachloropheno	20.63	20.08	10757.4E6	8014.0E6	477.312	436.866	
9)	2,4,5-TP	22.45	21.36	4269.4E6	2958.0E6	506.293	459.457	
10)	2,4,5-T	23.23	22.41	3881.1E6	2840.8E6	503.212	462.388	
11)	2,4-DB	24.71	23.76	448.3E6	336.0E6	255.505	409.076	#
12)	Dinoseb	27.67	24.53	2153.9E6	1407.2E6	364.396	366.894	
13)	Picloram	27.20	27.04	3840.0E6	2974.6E6	403.163	356.258	

KBG9

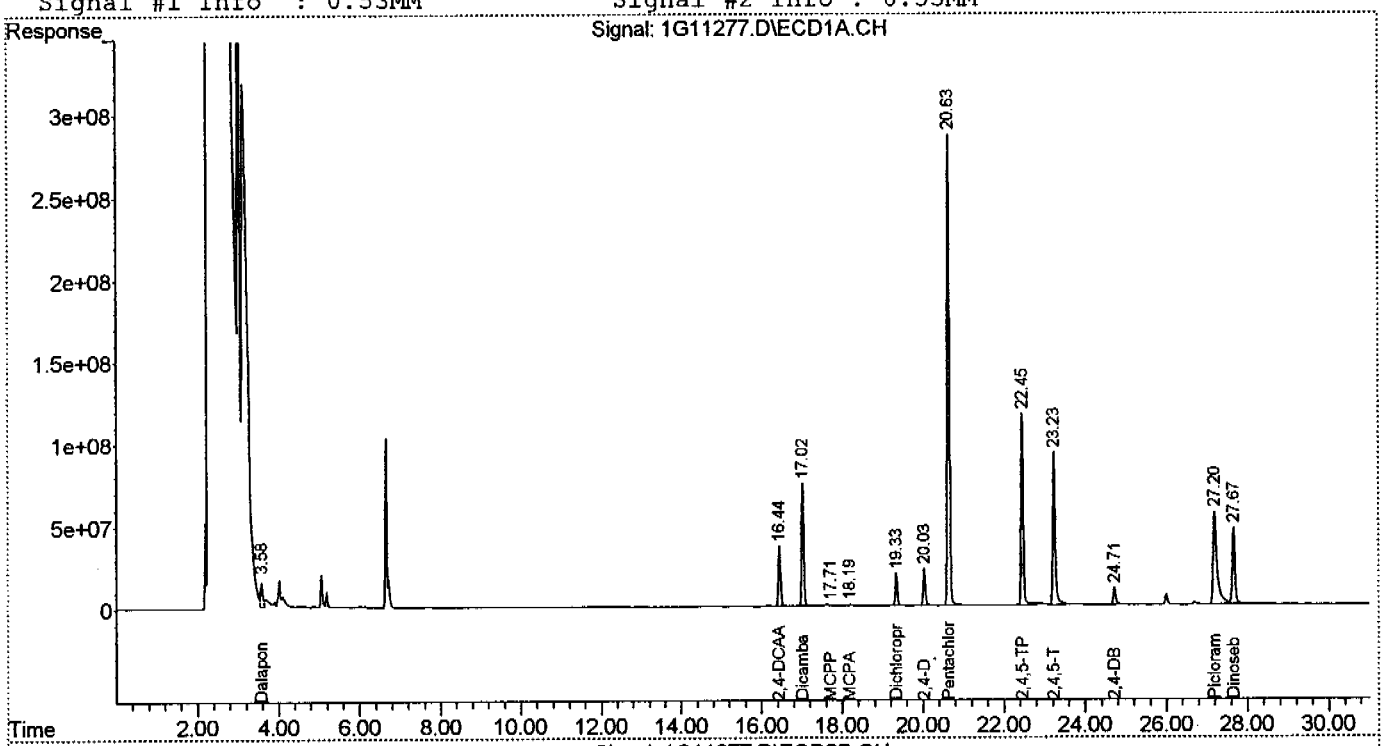
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

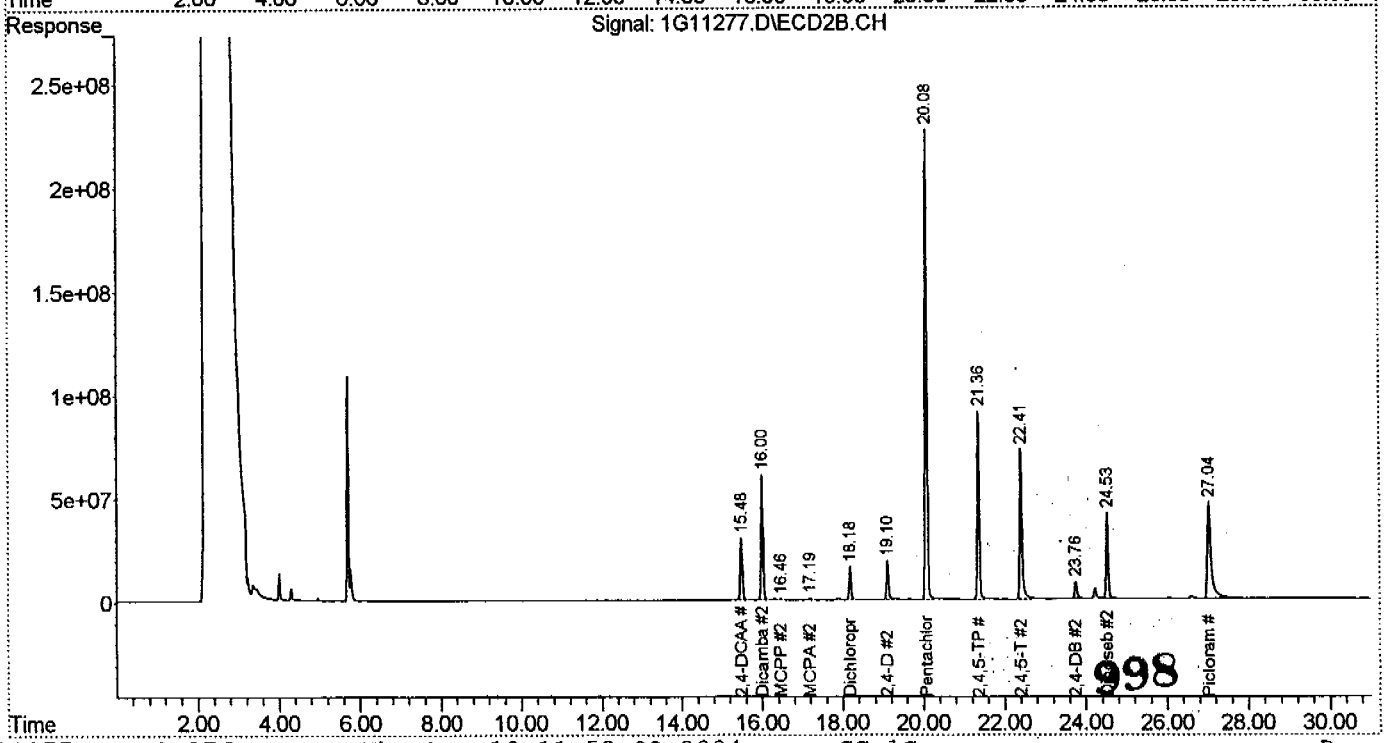
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G11277.D\ECD1A.CH Vial: 28
Signal #2 : C:\MSDCHEM\1\DATA\1G11277.D\ECD2B.CH
Acq On : 18 Aug 2004 11:59 am Operator: kristis
Sample : OP17705-BS1 Inst : GC1G
Misc : OP17705,G1G283,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 19 11:51 2004 Quant Results File: H1G276.RES

Quant Method : C:\MSDCHEM\1\METHODS\H1G276.M (Chemstation Integrator)
Title : HERB
Last Update : Thu Aug 19 11:48:59 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





ACCUTEST.

Pesticides/PCBs/Herbicides by GC ANALYSIS LOG

Batch ID: 116276

Date: 05/10/04

Analyst Signature: [signature]

Columns: RTX-CLP1/RTX-CLP2

Method: 116276

Initial Cal. Method: 116276

Injection Volumn: 1.0 l per column

Date Archived:

Standard Data

Lot #	Description	Conc.
653-87	Pibc	400 ppb
MeOH	Hexane/MeOH	—

Standard Data

Lot #	Description	Conc.
653-84	Mod. Std	500 ppb
653-88		400 ppb
653-86		300 ppb
653-80		200 ppb
653-85		100 ppb
653-81		50 ppb
653286	Mod 2nd source	300 ppb

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

Supervisor Signature: [signature] Date: 8/17/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments 2,4-DB 2nd dental only!
	1611055	IB01			W	1	1		/	ok	
	056	K276-500			W	2	1		/	ok	
	057	K276-400			W	3	1		/	ok	
	058	K276-300			W	4	1		/	ok	
	059	K276-200			W	5	1		/	ok	
	060	K276-100			W	6	1		/	ok	
	061	K276-50			W	7	1		/	ok	
	062	CC276-300	2nd source		W	8	1		-	not using	Rerun to confirm!
	063	IB02			W	9	1		/	ok	
	064	CC276-400			W	10	1		/	ok	
R	065	F25751-1	176001	8151 SUL	W	11	5		/	ok	
R	066	-5				12	5		/	ok	
R	067	073750-1		8151		13	1		/	ok	
R	068	074215-1	176371	8151	S	14	1		/	ok	
	069	CC276-200			W	15	1		/	ok	
	070	CC276-200			W	15	1		/	ok	
	071	IB03			W	16	1		/	ok	
	072	OP17644-MB2	17644-2	TCLP	W	17	1		/	ok	
	073	OP17644-BS2				18	1		/	ok	
	074	OP17644-LBS				19	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

Analyst Signature: [signature]

Date: 081704

Columns: RTX-CLP1/RTX-CLP2

Method: 1116276

Initial Cal. Method: 1116276

Injection Volumn: 1.0 l per column

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
655350	Mob Stc	200ppb
655287	PIBUK	400ppb
655356	Mob Stc	300ppb

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: 8/18/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	MALS #	Dilution	IS	SU	Status (Data)	Comments
	1611270	OP1705-MB1	17257	8151 STD + PCP	W	21	1			not run	
	271	OP1705-BS1				22	1			↓	
	272	U74914-1				23	1			↓	
	273	-2				24	1			ok	
	274	CC276-200			W	25	1			ok	
	275	1803			W	26	1			ok	
	276	OP1705-MB1	17257	8151 STD + PCP	W	27	1			ok	
	277	OP1705-BS1				28	1			ok	
	278	U74914-1				29	1			ok	
	279	-2				30	1			ok	
	280	-3				31	1			ok	
	281	-4				32	1			ok	
	282	CC276-300			W	33	1			ok	
	283	1804			W	1	1			ok	
	284	U74914-5	17257	8151 STD + PCP	W	2	1			ok	
	285	-6				3	1			ok	
	286	-7				4	1			ok	
	287	-8				5	1			ok	
	288	-10				6	1			ok	
	289	-11				7	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

Batch ID: 016225

Analyst Signature: [illegible]

Date: 06-18-04

Columns: RTX-CLP1/RTX-CLP2

Method: 4116276

Initial Cal. Method: 4116276

Injection Volumn: 1.0 Recalculating

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
055380	Herb Std	200 ppb
055287	PIRLK	400 ppb
055380	Herb Std	300 ppb

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: [illegible] Date: 8/19/04

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	1611250	D74514-12	17705-1	Ext Std PCP	W	8	1			ok	
	251	-13				9	1			ok	
	252	-14				10	1			ok	
	253	-15				11	1			ok	
	254	CC216-200			W	12	1			ok	
	255	1805			W	13	1			ok	
	256	OP17725-MS	17725-1	Ext Std PCP	W	14	1			ok	
	257	OP17725-MSD				15	1			ok	
R	258	OP17725-B2	17725-2	PCP Herb	W	16	1			ok	
R	259	D75102-1				17	1			ok	
	300 ~~252~~	D75132-2				18	1			ok	
R	301 ~~253~~	D75110-1				19	1		BM		Re-extract to confirm
R	302 ~~254~~	-2				20	1		BM		Re-extract to confirm
	303 ~~255~~	D75132-2				21	1			ok	2,4-5 TP + PCP Bias High not confirmed
	304 ~~256~~	CC216-300			W	22	1			ok	2,4-5 T Bias High not confirmed

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.

181

Form: OR016-04
Rev. Date: 10/4/02

1001

LIQUID/LIQUID EXTRACTION

ACCUTEST

BATCH # Gc 17705-1 | RACK# G-3

Supervisor Review
Signature
Date 4/13/04

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: 4/13/04 ANALYST: G MATHIARAKIS METHOD: Aun Water Bath Temp(C) 64° Nitrogen Evap Temp(C) 34°

Sample #	Sample Bottle #	Analysis Type	Sample Description	Sample Vol (ml) Oil Wt. (g)	pH Adjust (ml) 6N >11 NaOH	pH Adjust (ml) 1:3 <2 H2SO4	Final Extract Vol(ml)	Final Extract Color	Extract Cleanup GPC	Extract Cleanup H2SO4	Extract Cleanup Cu	Extract Cleanup Florisil		Comments
MB		Aun	DI Aw	1000	1	4	10	clear						
BS		↓	↓	1000	1	4	10	clear						
BSD	2	↓	cloudy	850	1	4	10	clear						
MS	5	↓	cloudy	850	1	4	10	clear						
MSD														
BK														
BS														
MSD														
[illegible] -1	3	Aun	cloudy	850	1	4	10	clear						
-2	4	↓	yellow	840	1	4	10	↓						
-3	3	↓	↓	920	1	4	10	↓						
-4	3	↓	clear	900	1	4	10	↓						
-5	4	↓	yellow	940	1	4	10	↓						
-6	4	↓	↓	940	1	4	10	↓						
-7	4	↓	↓	930	1	4	10	↓						
-9	14	↓	cloudy	830	1	4	10	clear						
-10	5	↓	yellow	900	1	4	10	clear						
-11	6	↓	↓	900	1	4	10	clear						
-12	5	↓	↓	890	1	4	10	clear						
-13	5	↓	clear	900	1	4	10	↓						
-14	5	↓	↓	940	1	4	10	↓						
-15	6	↓	↓	950	1	4	10	↓						

COMMENTS:

SURROGATE SPIKE DATA

	LOT #	CONC. (PPM)	AMT ADDED (ML)
BASE			
ACID			
PPCB			
HERB	0410-018	10ppm	1

WITNESS SIGN: GP

MATRIX SPIKE DATA

	LOT #	CONC.	AMT ADDED (ML)
BASE			
ACID			
PEST			
PCB			
HERB	0410-068	5/50ppm	1

WITNESS SIGN: GP

SOLVENT DATA

	LOT #	BRAND	AMT X/ML
METH CHLOR	A21E76	Baker	
HEXANE	A16E37	Baker	50
ACETONE			
ETH ETHER	CL025	B&J	

REAGENT/FILTER MEDIA

	LOT #	BRAND
Acidified SODIUM SULF	0410-088	Baker
FILTER PAPER		
1:3 H2SO4	0410-052	EMD
6N NAOH	3245	VWR
COPPER		
FLORISIL		