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ANNUAL MONITORING REPORT GROUNDWATER MONITORING AT SOLID WASTE MANAGEMENT UNIT 15 FROM 1 JANUARY 2000 THROUGH 31 MARCH 2001 NS MAYPORT FL

5/1/2001

CH2M HILL

Annual Monitoring Report

Groundwater Monitoring at
Solid Waste Management Unit 15
January 1, 2000 – March 31, 2001
Naval Station Mayport
Jacksonville, Florida

Revision No. 00

Contract No. N62467-98-D-0995
Contract Task Order No. 0007

Submitted to:

U.S. Naval Facilities
Engineering Command
Southern Division

Prepared by:

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Appendix A Groundwater Analytical Laboratory Reports (CD only)

Acronyms

BHC	benzene hexachloride
CCI	CH2M HILL Constructors, Inc.
FDEP	Florida Department of Environmental Protection
IM	Interim Measures
IMPS	Interim Measure Performance Specifications
J.A. Jones	J.A. Jones Environmental Services Company
NADS	Natural Attenuation Default Source Concentration
NAVFAC	Naval Facilities Engineering Command
NS	Naval Station
RFI	Remedial Field Investigation
SWMU	Solid Waste Management Unit
µg/L	micrograms per liter
USEPA	U.S. Environmental Protection Agency

1.0 Introduction

CH2M HILL Constructors, Inc. (CCI), with J.A. Jones Environmental Services Company (J.A. Jones), have been contracted by the Department of the Navy, Southern Division Naval Facilities Engineering Command (NAVFAC), to provide groundwater monitoring services at Solid Waste Management Unit (SWMU) 15, Naval Station (NS) Mayport, Jacksonville, Florida, under Response Action Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0007. The purpose of this Annual Monitoring Report is to provide a summary of activities performed at the site during the period of January 1, 2000, to March 31, 2001.

1.1 Objective

The objective of the groundwater monitoring program at SWMU 15 is to collect analytical data for evaluation of remedial alternatives, including natural attenuation, for the contaminated groundwater at the site.

1.2 Site Background

The Old Pesticide Handling Facility was located adjacent to Building 48A, approximately 350 feet east of the western boundary of the installation and approximately 700 feet west of Runway 23.5. During 1963 and 1964, pesticides and pesticide application equipment were stored in a shed attached to the southwest corner of Building 48A. Pesticides were mixed at the site and the application equipment may have been washed near the building. As a result, runoff from the washing and rinsing activities may have infiltrated the ground surface. In addition, small quantities of pesticides may have been disposed of near Building 48A.

Remedial Field Investigation (RFI) activities were conducted at SWMU 15 in 1993 and 1994. The RFI included sampling and analyses of surface soil, subsurface soil, and groundwater. Based on the results of the RFI, Interim Measures (IM) remediation was performed in 1997 to address contaminated soil. The IM consisted of a geotextile and limerock cover to mitigate the potential for adverse risk to human and ecological receptors. The RFI recommended additional groundwater sampling based on the presence of arsenic and alpha- and beta-benzene hexachloride (BHC) present in the groundwater during the assessment.

An Interim Measure Performance Specifications (IMPS) report was prepared by Harding Lawson Associates for the site in 1998. The IMPS identified arsenic and alpha- and beta-BHC concentrations as the groundwater contaminants that would require IM. The IMPS recommended that natural attenuation be evaluated for alpha- and beta-BHC remediation prior to evaluation of any other remedial alternatives. The IMPS recommended a compliance point groundwater monitoring program to provide sufficient data to conduct a bench-scale treatability test prior to selecting an appropriate remedial alternative for the arsenic contamination.

Based on the recommendations provided in the IMPS, quarterly sampling was conducted at the site for the last three quarters of 1998 by Bechtel Environmental, Inc. Based on review of the quarterly data by Southern Division, NAVFAC, the Florida Department of Environmental Protection (FDEP), and the U.S. Environmental Protection Agency (USEPA), it was determined the data was inconclusive, and that further groundwater sampling would be required. Quarterly groundwater monitoring was subsequently performed by CCI/ J.A. Jones during the period of January 1, 2000 through March 31, 2001.

2.0 Monitoring Results

CCI/J.A. Jones conducted quarterly groundwater monitoring activities at SWMU 15 on March 28 and 29, 2000, June 21, 2000, September 26, 2000, December 15, 2000, and March 22, 2001, in accordance with the requirements of the contract. Groundwater samples were collected from five onsite monitoring wells, identified as MPT-15-MWO-1S, MPT-15-MWO-3S, MPT-15-MWO-4S, MPT-15-MWO-5S, and MPT-15-MWO-8S, and laboratory analyzed for arsenic by USEPA SW-846 Method 7060A and organochlorine pesticides by USEPA SW-846 Method 8081A. Monitoring wells are shown on Figure 2-1 and groundwater laboratory analytical results are summarized in Table 2-1. In addition, the following field data was collected from the five onsite monitoring wells:

- Depth to water by water level indicator
- Temperature by direct read meter
- pH by direct read meter
- Turbidity by direct read meter
- Dissolved oxygen by direct read meter
- Conductivity by direct read meter

Field data are summarized in Table 2-2.

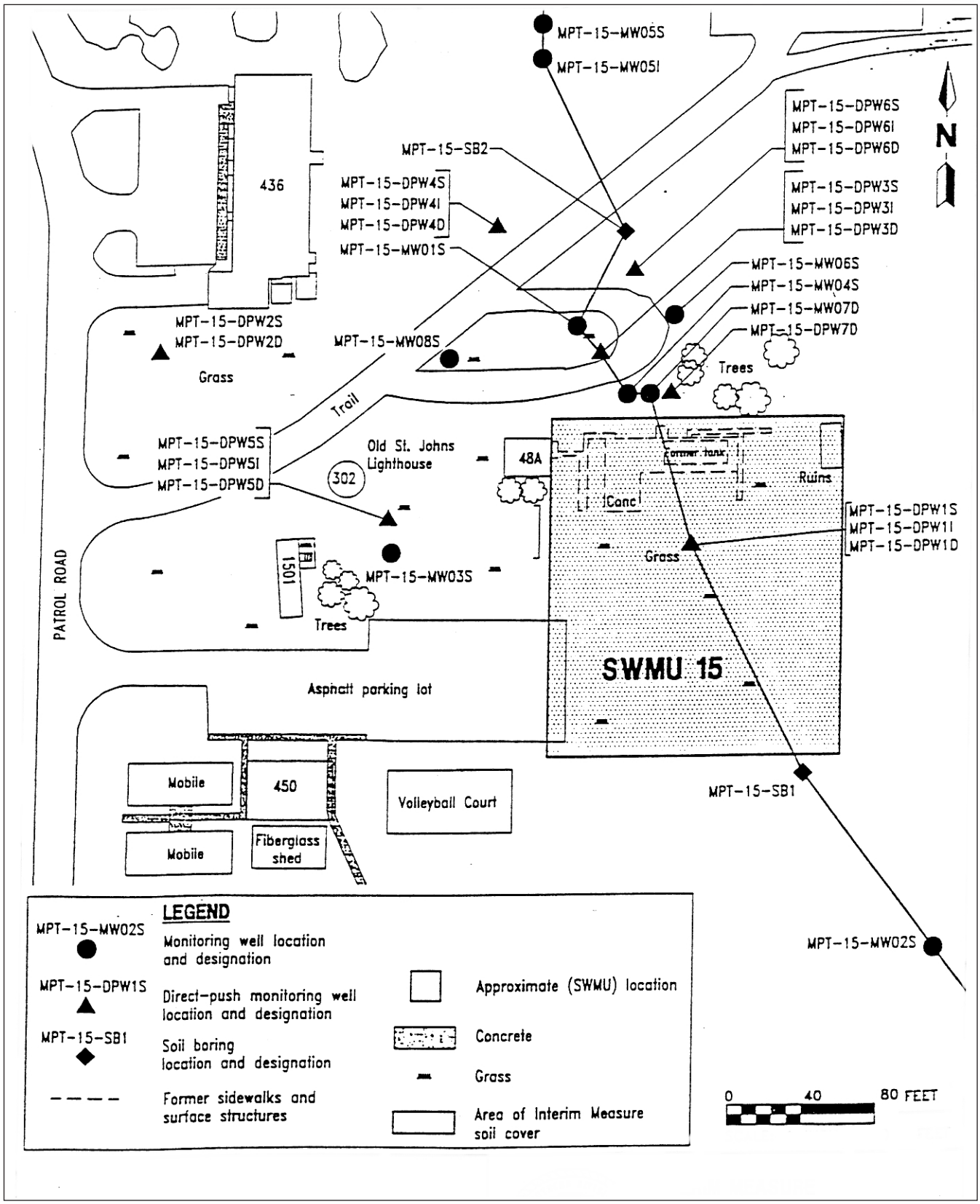

Figure 2-1
Solid Waste Management Unit (SWMU) 15
Location Map for Monitoring Wells
and Direct-Push Wells

CH2MHILL

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TABLE 2-1
Groundwater Analytical Results

Compound	GCTL	NADS	Monitoring Well ID with Sample Date																														
			MPT-15-MWO-1S					MPT-15-MWO-3S					MPT-15-MWO-4S					MPT-15-MWO-5S					MPT-15-MWO-8S					Duplicate (MPT-15-MWO-4S)				
	(µg/L)	(µg/L)	03/28/00	06/21/00	09/26/00	12/15/00	03/22/01	03/29/00	06/21/00	9/26/00	12/15/00	03/22/01	03/29/00	06/21/00	09/26/00	12/15/00	03/22/01	03/29/00	06/21/00	9/26/00	12/15/00	03/22/01	03/29/00	06/21/00	09/26/00	12/15/00	03/22/01	03/29/00	06/21/00	09/26/00	12/15/00	03/22/01
4,4'-DDD	0.1	10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	0.1	10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	0.1	10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Aldrin	0.005	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-BHC	0.006	0.6	**0.020 J**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.015 J**	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	42	420	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	0.02	2	**0.55**	**0.80**	**0.23**	**0.31**	**0.19**	<0.05	<0.05	<0.05	<0.05	<0.05	**0.30**	**0.26**	**1.30**	**0.56**	**0.085**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.36**	**0.32**	**1.30**	**0.61**	**0.08**
beta-Endosulfan	42	420	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
delta-BHC	2.1	21	**0.020 J**	**0.035 J**	<0.050	<0.05	<0.05	<0.05	<0.05	<0.050	<0.05	<0.05	**0.025 J**	**0.025 J**	<0.050	<0.05	<0.05	<0.050	<0.050	<0.050	<0.05	<0.05	<0.050	<0.050	<0.050	<0.05	<0.05	**0.020 J**	**0.030 J**	<0.05	<0.05	<0.05
Dieldrin	0.005	0.5	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Endosulfan sulfate	42	420	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Endrin	2	20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Endrin aldehyde	2	20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
gamma-BHC	0.2	20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	0.4	40	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	0.2	20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.16**	**0.035 J**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.16**	**0.04 J**	<0.05
Methoxychlor	40	400	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toxaphene	3	300	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Endrin Ketone	2	20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
alpha- Chlordane	2	200	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.075**	**0.030 J**	**0.24**	**0.15**	**0.045 J**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.090**	**0.025 J**	**0.22**	**0.11**	**0.040 J**
gamma-Chlordane	2	200	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.030 J**	<0.05	**0.13**	**0.04 J**	**0.020 J**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.030 J**	<0.05	**0.13**	**0.04 J**	**0.020 J**
Arsenic	50	500	**33**	**27 B**	**8.9**	<5	**8.7**	<10	<5	<5	<5	<5	**20**	**12 B**	**300**	**37**	**34**	<10	<5	<5	<5	<5	<10	**6.5 B**	<5	<5	<5	**11**	**8.8 B**	**300**	**28**	**62**

Notes:

1) All concentrations reported in micrograms-per-liter (µg/L).
2) The J values indicate estimated values in which the compounds are present at concentrations that are less than the quantitation limit, but above the method detection limit.
3) The B values indicate the compound was detected in the method blank at a concentration that was above the RDL, and the samples were less than five times the concentration of the method blank contamination. These results should be considered estimated.
4) GCTL = FDEP Groundwater Cleanup Target Level
5) NADS = Natural Attenuation Default Source Concentration
6) Bold indicates detected compound.
7) Shaded indicates compound detected above GCTL.

TABLE 2-2
Groundwater Field Parameters

Well Identification	Sample Date	Depth to Water[1]	Temperature (^oC)[2]	pH	Turbidity (NTU)[3]	Dissolved O_2 (mg/l)[4]	Conductivity (mS/cm)[5]
MPT-15-MWO-1S	03/28/00	7.17	20.9	6.70	84	0.45	1.940
MPT-15-MWO-3S	03/29/00	6.12	21.9	7.15	79	2.19	0.519
MPT-15-MWO-4S	03/29/00	6.83	21.1	6.70	98	0.20	10.100
MPT-15-MWO-5S	03/29/00	8.52	22.4	6.85	49	1.14	0.541
MPT-15-MWO-8S	03/29/00	6.89	20.6	7.16	63	2.96	0.665
MPT-15-MWO-1S	06/21/00	7.80	23.4	7.36	-10	0.74	1.560
MPT-15-MWO-3S	06/21/00	6.72	25.7	7.87	10	1.60	0.436
MPT-15-MWO-4S	06/21/00	7.46	21.3	8.16	0	0.51	6.490
MPT-15-MWO-5S	06/21/00	9.05	25.0	7.83	2	1.05	0.445
MPT-15-MWO-8S	06/21/00	7.60	24.1	7.78	3	5.42	0.510
MPT-15-MWO-1S	09/26/00	4.29	25.5	6.94	-10	1.84	0.787
MPT-15-MWO-3S	09/26/00	3.30	26.9	7.23	-10	3.19	0.301
MPT-15-MWO-4S	09/26/00	3.40	24.2	6.96	6	1.17	1.550
MPT-15-MWO-5S	09/26/00	6.04	27.4	6.60	-2	2.45	0.367
MPT-15-MWO-8S	09/26/00	4.01	25.8	7.22	-10	4.53	0.311
MPT-15-MWO-1S	12/15/00	6.74	21.4	6.99	2	1.00	1.620
MPT-15-MWO-3S	12/15/00	5.65	22.0	7.35	1	2.70	0.392
MPT-15-MWO-4S	12/15/00	6.30	20.4	7.00	0	0.18	4.640
MPT-15-MWO-5S	12/15/00	8.20	23.4	7.08	-2	0.80	0.315
MPT-15-MWO-8S	12/15/00	6.44	20.3	7.31	0	3.50	0.384
MPT-15-MWO-1S	03/22/01	7.11	19.0	7.10	10	2.40	1.400
MPT-15-MWO-3S	03/22/01	5.90	20.0	7.40	8	2.60	0.370
MPT-15-MWO-4S	03/22/01	6.87	18.0	7.00	NA[6]	0.80	7.800
MPT-15-MWO-5S	03/22/01	8.54	21.0	7.20	NA	1.90	0.360
MPT-15-MWO-8S	03/22/01	6.75	19.0	7.50	NA	6.10	0.330

Notes:
[1] Depth to Water is measured as feet below top of well casing.
[2] Temperature expressed in degrees Celsius (^oC).
[3] Turbidity expressed in nephelometric turbidity units (NTU).
[4] Dissolved oxygen (O_2) expressed in milligrams per liter (mg/L).
[5] Conductivity expressed in millisiemens per centimeter (mS/cm).
[6] NA denotes field parameter not analyzed.

3.0 Conclusions and Recommendations

The following two monitoring wells showed contaminant concentrations in excess of FDEP Groundwater Cleanup Target Levels, as specified in Table I of Chapter 62-777 Florida Administrative Code:

- Monitoring Well MPT-15-MWO-1S: Beta-BHC (March 28 and 29, 2000, June 21, 2000, September 26, 2000, December 15, 2000, and March 22, 2001 groundwater monitoring events) and alpha-BHC (March 28 and29, 2001 groundwater monitoring event)
- Monitoring Well MPT-15-MWO-4S: Beta-BHC (March 28 and 29, 2000, June 21, 2000, September 26, 2000, December 15, 2000, and March 22, 2001 groundwater monitoring events) and arsenic (September 26, 2001 groundwater monitoring event) (This arsenic spike is possibly due to collection of a turbid groundwater sample.)

Based on the low-level arsenic and alpha- and beta-BHC groundwater contamination, CCI/J.A. Jones recommends continued quarterly groundwater monitoring for natural attenuation at the site.

4.0 References

CH2M HILL Constructors, Inc. October 1999. Contract Task Order No. 0007, RFI Work Plan Addendum No. 02, Groundwater Monitoring at SWMU 15, Revision No. 00, Naval Station Mayport, Jacksonville, Florida.

Appendix A

Groundwater Analytical Laboratory Reports
(provided on CD only)

ACCURA ANALYTICAL LABORATORY, INC.

6017 Financial Drive, Norcross, Georgia, 30071, Phone (770) 449-8800

CASE NARRATIVE for Project Number: 27368
Client Project: N.S. Mayport SWMU 15 Quarterly GW / 149294/CTO 0007
CTO Manager: Bill Canelos

The following items were noted concerning this project:

1. The following samples were received by Accura Analytical Laboratory on 03/23/01 at 1020:

Client I.D.	Laboratory I.D.
007-MW01S-Q1-01	AC10154
007-MW03S-Q1-01	AC10155
007-MW04S-Q1-01	AC10156
007-MW05S-Q1-01	AC10157
007-MW08S-Q1-01	AC10158
007-DUP-Q1-01	AC10159
007-EQB-Q1-01	AC10160

2. The sample cooler temperature was noted to be 2^0C upon receipt.

3. The "J" values noted for the Pesticides results indicate estimated concentrations that were above the method detection limits, but below the reporting limits.

4. The following surrogate was outside the method specified limit due to matrix interference:

   Pesticides – SW-846-8081A
   Tetrachloro-m-xylene - 007-MW04S-Q1-01
   007-DUP-Q1-01

5. The laboratory control sample recovery (LCS) was outside the project specified limit for the following analytes:

   Pesticides – SW-846-8081A
   LCS - Endosulfan I Endosulfan II

   There were no hits of these analytes in the samples, and the recoveries were within historical limits established in the laboratory; therefore the data was accepted.

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6. The following spike recovery was outside the project specified limit:

   Pesticides – SW-846-8081A
   Matrix Spike - Endosulfan II

   The recovery was within historical limits established in the laboratory; therefore the data was accepted.

7. The relative percent difference between the matrix spike and matrix spike duplicate was outside the project specified limit for the following analyte:

   Pesticides – SW-846-8081A
   Alpha-Chlordane

Quality Assurance

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AAL # 27368

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

COC NUMBER: **149294-04**

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
N.S. Mayport SWMU 15	**149294**	**Bonnie Hogue Accura Analytical Laboratory**	**Jennifer Zimmerman J.A Jones Env. Services**	**6219 Authority Ave. Building 1 Jacksonville, FL 32221 Ph:(904) 7774812 Fax: (904) 7774262**
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
SWMU 15 Quarterly GW	**0007**	**1786**	**Jeff Wilmoth CH2M Hill Constuctors, Inc.**	**115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 Ph:(770)604-9182 Ext.561 Fax:604-9282**
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Bill Canelos	**Ph:(904)777-4812 Fax:(904) 777-4262**	**Ph:(770) 449-8800 Fax:(770) 449-5477**		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	TCL Pesticides by 8081A	Arsenic by 7060A								SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	**007-MW01S-Q1-01**	**MPT-15-MWO-1S**	**W**	**03/22/01**	10:15	**III/C**	**14**	**2**	**1**								**Grab**		10154
2	**007-MW03S-Q1-01**	**MPT-15-MWO-3S**	**W**	**03/22/01**	09:25	**III/C**	**14**	**2**	**1**								**Grab**		55
3	**007-MW04S-Q1-01**	**MPT-15-MWO-4S**	**W**	**03/22/01**	10:35	**III/C**	**14**	**2**	**1**								**Grab**		56
4	**007-MW05S-Q1-01**	**MPT-15-MWO-5S**	**W**	**03/22/01**	10:55	**III/C**	**14**	**2**	**1**								**Grab**		57
5	**007-MW08S-Q1-01**	**MPT-15-MWO-8S**	**W**	**03/22/01**	09:55	**III/C**	**14**	**2**	**1**								**Grab**		58
6	**007-DUP-Q1-01**	**Duplicate**	**W**		N/A	**III/C**	**14**	**2**	**1**								**Grab**		59
7	**007-EQB-Q1-01**	**Equipment Blank**	**W**	**03/22/01**	1010	**III/C**	**14**	**2**	**1**								**Grab**	**Prepared in the Field**	60
8																			
9																			
10																			

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Sott Sloan / Roger Deisler J.A. Jones Environmental Services	**Federal Express TRK#** 823904559991, 823904559980	BLB / 2°C

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
S. Sloan	**3/22/01**	**17:00**	**Federal Express**	**3/22/01**	**17:00**
Printed Name and Signature:			Printed Name and Signature:		
FEDEX	3.23.01	1020	/ BRIAN BURNS	3.23.01	1020
Printed Name and Signature:			Printed Name and Signature:		

Distribution: [ ] **Original** - Laboratory (To be returned with Analytical Report); [ ] **Copy 1** - Project File; [ ] **Copy 2** - PMO

Form CCI001, Rev 02/00

ACCURA ANALYTICAL LABORATORY, INC.

6017 Financial Drive, Norcross, Georgia 30017, Phone (770)449-8800, FAX (770)449-5477
FL Certification # E87429 NC Certification # 483 SC Certification # 98015 USACE-MRD Approved

LABORATORY REPORT

Accura Sample ID #: AC10154 **Accura Project #: 27368**

Client: CH2M HILL - CCI Date Sampled: 3/22/01

Client Contact: BILL CANELOS Date Received: 3/23/01

Client Project Number: 149294/CTO 0007 Date Reported: 4/5/01

Client Project Name: N.S. MAYPORT SWMU 15 QUARTERLY GW Sample Matrix: WATER

Client Sample ID: 007-MW01S-Q1-01

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: ug/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
4,4'-DDD	<RL		0.10
4,4'-DDE	<RL		0.10
4,4'-DDT	<RL		0.10
Aldrin	<RL		0.050
alpha- Chlordane	<RL		0.050
alpha-BHC	<RL		0.050
alpha-Endosulfan	<RL		0.050
beta-BHC	0.19		0.050
beta-Endosulfan	<RL		0.10
delta-BHC	<RL		0.050
Dieldrin	<RL		0.10
Endosulfan sulfate	<RL		0.10
Endrin	<RL		0.10
Endrin aldehyde	<RL		0.10
Endrin Ketone	<RL		0.10
gamma-BHC	<RL		0.050
gamma-Chlordane	<RL		0.050
Heptachlor	<RL		0.050
Heptachlor epoxide	<RL		0.050
Methoxychlor	<RL		0.50
Toxaphene	<RL		5.0

ANALYSIS: Single metal 6010B (water) Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 3/27/01 Date Analyzed: 3/28/01 Result Units: mg/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Arsenic	0.0087		0.0050

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: %

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Decachlorobiphenyl (Range D-163)	64		
Tetrachloro-m-xylene (Range 27-128)	56		

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LABORATORY REPORT

Accura Sample ID #: AC10155 **Accura Project #: 27368**

Client: CH2M HILL - CCI Date Sampled: 3/22/01

Client Contact: BILL CANELOS Date Received: 3/23/01

Client Project Number: 149294/CTO 0007 Date Reported: 4/5/01

Client Project Name: N.S. MAYPORT SWMU 15 QUARTERLY GW Sample Matrix: WATER

Client Sample ID: 007-MW03S-Q1-01

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/27/01 Result Units: ug/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
4,4'-DDD	<RL		0.10
4,4'-DDE	<RL		0.10
4,4'-DDT	<RL		0.10
Aldrin	<RL		0.050
alpha- Chlordane	<RL		0.050
alpha-BHC	<RL		0.050
alpha-Endosulfan	<RL		0.050
beta-BHC	<RL		0.050
beta-Endosulfan	<RL		0.10
delta-BHC	<RL		0.050
Dieldrin	<RL		0.10
Endosulfan sulfate	<RL		0.10
Endrin	<RL		0.10
Endrin aldehyde	<RL		0.10
Endrin Ketone	<RL		0.10
gamma-BHC	<RL		0.050
gamma-Chlordane	<RL		0.050
Heptachlor	<RL		0.050
Heptachlor epoxide	<RL		0.050
Methoxychlor	<RL		0.50
Toxaphene	<RL		5.0

ANALYSIS: Single metal 6010B (water) Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 3/27/01 Date Analyzed: 3/28/01 Result Units: mg/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Arsenic	<RL		0.0050

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/27/01 Result Units: %

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Decachlorobiphenyl (Range D-163)	94		
Tetrachloro-m-xylene (Range 27-128)	101		

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LABORATORY REPORT

Accura Sample ID #: AC10156 **Accura Project #: 27368**

Client: CH2M HILL - CCI Date Sampled: 3/22/01

Client Contact: BILL CANELOS Date Received: 3/23/01

Client Project Number: 149294/CTO 0007 Date Reported: 4/5/01

Client Project Name: N.S. MAYPORT SWMU 15 QUARTERLY GW Sample Matrix: WATER

Client Sample ID: 007-MW04S-Q1-01

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: ug/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
4,4'-DDD	<RL		0.10
4,4'-DDE	<RL		0.10
4,4'-DDT	<RL		0.10
Aldrin	<RL		0.050
alpha- Chlordane	0.045	J	0.050
alpha-BHC	<RL		0.050
alpha-Endosulfan	<RL		0.050
beta-BHC	0.085		0.050
beta-Endosulfan	<RL		0.10
delta-BHC	<RL		0.050
Dieldrin	<RL		0.10
Endosulfan sulfate	<RL		0.10
Endrin	<RL		0.10
Endrin aldehyde	<RL		0.10
Endrin Ketone	<RL		0.10
gamma-BHC	<RL		0.050
gamma-Chlordane	0.020	J	0.050
Heptachlor	<RL		0.050
Heptachlor epoxide	<RL		0.050
Methoxychlor	<RL		0.50
Toxaphene	<RL		5.0

ANALYSIS: Single metal 6010B (water) Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 3/27/01 Date Analyzed: 3/28/01 Result Units: mg/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Arsenic	0.034		0.0050

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: %

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Decachlorobiphenyl (Range D-163)	24		
Tetrachloro-m-xylene (Range 27-128)	527	*	

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LABORATORY REPORT

Accura Sample ID #: AC10157 **Accura Project #: 27368**

Client: CH2M HILL - CCI Date Sampled: 3/22/01

Client Contact: BILL CANELOS Date Received: 3/23/01

Client Project Number: 149294/CTO 0007 Date Reported: 4/5/01

Client Project Name: N.S. MAYPORT SWMU 15 QUARTERLY GW Sample Matrix: WATER

Client Sample ID: 007-MW05S-Q1-01

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/27/01 Result Units: ug/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
4,4'-DDD	<RL		0.10
4,4'-DDE	<RL		0.10
4,4'-DDT	<RL		0.10
Aldrin	<RL		0.050
alpha- Chlordane	<RL		0.050
alpha-BHC	<RL		0.050
alpha-Endosulfan	<RL		0.050
beta-BHC	<RL		0.050
beta-Endosulfan	<RL		0.10
delta-BHC	<RL		0.050
Dieldrin	<RL		0.10
Endosulfan sulfate	<RL		0.10
Endrin	<RL		0.10
Endrin aldehyde	<RL		0.10
Endrin Ketone	<RL		0.10
gamma-BHC	<RL		0.050
gamma-Chlordane	<RL		0.050
Heptachlor	<RL		0.050
Heptachlor epoxide	<RL		0.050
Methoxychlor	<RL		0.50
Toxaphene	<RL		5.0

ANALYSIS: Single metal 6010B (water) Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 3/27/01 Date Analyzed: 3/28/01 Result Units: mg/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Arsenic	0.0065		0.0050

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/27/01 Result Units: %

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Decachlorobiphenyl (Range D-163)	88		
Tetrachloro-m-xylene (Range 27-128)	88		

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LABORATORY REPORT

Accura Sample ID #: AC10158 **Accura Project #: 27368**

Client: CH2M HILL - CCI Date Sampled: 3/22/01

Client Contact: BILL CANELOS Date Received: 3/23/01

Client Project Number: 149294/CTO 0007 Date Reported: 4/5/01

Client Project Name: N.S. MAYPORT SWMU 15 QUARTERLY GW Sample Matrix: WATER

Client Sample ID: 007-MW08S-Q1-01

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: ug/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
4,4'-DDD	<RL		0.10
4,4'-DDE	<RL		0.10
4,4'-DDT	<RL		0.10
Aldrin	<RL		0.050
alpha- Chlordane	<RL		0.050
alpha-BHC	<RL		0.050
alpha-Endosulfan	<RL		0.050
beta-BHC	<RL		0.050
beta-Endosulfan	<RL		0.10
delta-BHC	<RL		0.050
Dieldrin	<RL		0.10
Endosulfan sulfate	<RL		0.10
Endrin	<RL		0.10
Endrin aldehyde	<RL		0.10
Endrin Ketone	<RL		0.10
gamma-BHC	<RL		0.050
gamma-Chlordane	<RL		0.050
Heptachlor	<RL		0.050
Heptachlor epoxide	<RL		0.050
Methoxychlor	<RL		0.50
Toxaphene	<RL		5.0

ANALYSIS: Single metal 6010B (water) Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 3/27/01 Date Analyzed: 3/28/01 Result Units: mg/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Arsenic	<RL		0.0050

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: %

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Decachlorobiphenyl (Range D-163)	97		
Tetrachloro-m-xylene (Range 27-128)	89		

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LABORATORY REPORT

Accura Sample ID #: AC10159 **Accura Project #: 27368**

Client: CH2M HILL - CCI Date Sampled: 3/22/01

Client Contact: BILL CANELOS Date Received: 3/23/01

Client Project Number: 149294/CTO 0007 Date Reported: 4/5/01

Client Project Name: N.S. MAYPORT SWMU 15 QUARTERLY GW Sample Matrix: WATER

Client Sample ID: 007-DUP-Q1-01

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: ug/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
4,4'-DDD	<RL		0.10
4,4'-DDE	<RL		0.10
4,4'-DDT	<RL		0.10
Aldrin	<RL		0.050
alpha- Chlordane	0.040	J	0.050
alpha-BHC	<RL		0.050
alpha-Endosulfan	<RL		0.050
beta-BHC	0.080		0.050
beta-Endosulfan	<RL		0.10
delta-BHC	<RL		0.050
Dieldrin	<RL		0.10
Endosulfan sulfate	<RL		0.10
Endrin	<RL		0.10
Endrin aldehyde	<RL		0.10
Endrin Ketone	<RL		0.10
gamma-BHC	<RL		0.050
gamma-Chlordane	0.020	J	0.050
Heptachlor	<RL		0.050
Heptachlor epoxide	<RL		0.050
Methoxychlor	<RL		0.50
Toxaphene	<RL		5.0

ANALYSIS: Single metal 6010B (water) Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 3/27/01 Date Analyzed: 3/28/01 Result Units: mg/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Arsenic	0.062		0.0050

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: %

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Decachlorobiphenyl (Range D-163)	24		
Tetrachloro-m-xylene (Range 27-128)	408	*	

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LABORATORY REPORT

Accura Sample ID #: AC10160 **Accura Project #: 27368**

Client: CH2M HILL - CCI Date Sampled: 3/22/01

Client Contact: BILL CANELOS Date Received: 3/23/01

Client Project Number: 149294/CTO 0007 Date Reported: 4/5/01

Client Project Name: N.S. MAYPORT SWMU 15 QUARTERLY GW Sample Matrix: WATER

Client Sample ID: 007-EQB-Q1-01

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: ug/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
4,4'-DDD	<RL		0.10
4,4'-DDE	<RL		0.10
4,4'-DDT	<RL		0.10
Aldrin	<RL		0.050
alpha- Chlordane	<RL		0.050
alpha-BHC	<RL		0.050
alpha-Endosulfan	<RL		0.050
beta-BHC	<RL		0.050
beta-Endosulfan	<RL		0.10
delta-BHC	<RL		0.050
Dieldrin	<RL		0.10
Endosulfan sulfate	<RL		0.10
Endrin	<RL		0.10
Endrin aldehyde	<RL		0.10
Endrin Ketone	<RL		0.10
gamma-BHC	<RL		0.050
gamma-Chlordane	<RL		0.050
Heptachlor	<RL		0.050
Heptachlor epoxide	<RL		0.050
Methoxychlor	<RL		0.50
Toxaphene	<RL		5.0

ANALYSIS: Single metal 6010B (water) Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 3/27/01 Date Analyzed: 3/28/01 Result Units: mg/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Arsenic	0.013		0.0050

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/28/01 Result Units: %

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Decachlorobiphenyl (Range D-163)	44		
Tetrachloro-m-xylene (Range 27-128)	88		

Accura Analytical Laboratory, Inc.

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LABORATORY REPORT

Accura Sample ID #: AC10161 **Accura Project #: 27368**

Client: CH2M HILL - CCI Date Sampled: 3/23/01

Client Contact: BILL CANELOS Date Received: 3/23/01

Client Project Number: 149294/CTO 0007 Date Reported: 4/5/01

Client Project Name: N.S. MAYPORT SWMU 15 QUARTERLY GW Sample Matrix: WATER

Client Sample ID: METHOD BLANK

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/27/01 Result Units: ug/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
4,4'-DDD	<RL		0.10
4,4'-DDE	<RL		0.10
4,4'-DDT	<RL		0.10
Aldrin	<RL		0.050
alpha- Chlordane	<RL		0.050
alpha-BHC	<RL		0.050
alpha-Endosulfan	<RL		0.050
beta-BHC	<RL		0.050
beta-Endosulfan	<RL		0.10
delta-BHC	<RL		0.050
Dieldrin	<RL		0.10
Endosulfan sulfate	<RL		0.10
Endrin	<RL		0.10
Endrin aldehyde	<RL		0.10
Endrin Ketone	<RL		0.10
gamma-BHC	<RL		0.050
gamma-Chlordane	<RL		0.050
Heptachlor	<RL		0.050
Heptachlor epoxide	<RL		0.050
Methoxychlor	<RL		0.50
Toxaphene	<RL		5.0

ANALYSIS: Single metal 6010B (water) Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 3/27/01 Date Analyzed: 3/28/01 Result Units: mg/L

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Arsenic	<RL		0.0050

ANALYSIS: X Pest QC Surrogates (Waters) Method Ref: 8081A

Date Ext/Dig/Prep: 3/26/01 Date Analyzed: 3/27/01 Result Units: %

Analyte Name	Analytical Results	Qualifier	Reporting Limit
Decachlorobiphenyl (Range 30-136)	70		
Tetrachloro-m-xylene (Range 38-107)	94		

Accura Analytical Laboratory, Inc.

TABLE 2-3
PROJECT QUALITY CONTROL OBJECTIVES
AAL PROJECT 27368

		Project Control Recoveries				Accuracy Limits		Project Control		Precision Limits		Project Control Recoveries		Accuracy Limits		Project Control		Precision Limits	
		MS	MSD	MS	MSD	MS/MSD Recoveries		MS/MSD % Deviation		MS/MSD Deviation		LCS	LCS	LCS Recoveries		Field Dup % Deviation		Field Dup Deviation	
Method No	Analyte / Component	Water		Soil		Water	Soil	Water	Soil	Water	Soil	Water	Soil	Water	Soil			Water	Soil
TCL PESTICIDES/AROCHLORS						%	%			%	%			%	%			%	%
8081A	alpha-BHC	80	98			60-140	20-150	20%	#VALUE!	<30	<50	90		75-125	65-135			<50	<75
8081A	beta-BHC	81	88			60-140	20-150	8%	#VALUE!	<30	<50	85		51-125	41-133			<50	<75
8081A	delta-BHC	79	101			60-140	20-150	24%	#VALUE!	<30	<50	76		75-126	65-136			<50	<75
8081A	gamma-BHC (Lindane)	78	91			60-140	20-150	15%	#VALUE!	<30	<50	83		73-125	63-130			<50	<75
8081A	Heptachlor	83	96			60-140	20-150	15%	#VALUE!	<30	<50	85		45-128	35-138			<50	<75
8081A	Aldrin	74	87			60-140	20-150	16%	#VALUE!	<30	<50	79		47-125	37-126			<50	<75
8081A	Heptachlor epoxide	84	92			60-140	20-150	9%	#VALUE!	<30	<50	90		53-134	43-144			<50	<75
8081A	Endosulfan I	61	65			60-140	20-150	6%	#VALUE!	<30	<50	47		49-143	39-153			<50	<75
8081A	Dieldrin	98	104			60-140	20-150	6%	#VALUE!	<30	<50	95		42-132	32-142			<50	<75
8081A	4,4'-DDE	118	124			60-140	20-150	5%	#VALUE!	<30	<50	92		45-139	35-149			<50	<75
8081A	Endrin	109	117			60-140	20-150	7%	#VALUE!	<30	<50	105		43-134	33-144			<50	<75
8081A	Endosulfan II	58	63			60-140	20-150	8%	#VALUE!	<30	<50	52		75-159	65-169			<50	<75
8081A	4,4'-DDD	103	105			60-140	20-150	2%	#VALUE!	<30	<50	95		48-136	38-146			<50	<75
8081A	Endosulfan sulfate	99	103			60-140	20-150	4%	#VALUE!	<30	<50	99		46-141	36-151			<50	<75
8081A	4,4'-DDT	106	107			60-140	20-150	1%	#VALUE!	<30	<50	95		34-143	25-153			<50	<75
8081A	Methoxychlor	99	103			60-140	20-150	4%	#VALUE!	<30	<50	100		73-142	63-152			<50	<75
8081A	Endrin ketone	97	93			60-140	20-150	4%	#VALUE!	<30	<50	90		43-134	33-144			<50	<75
8081A	Endrin aldehyde	90	95			60-140	20-150	5%	#VALUE!	<30	<50	91		75-150	35-160			<50	<75
8081A	alpha-Chlordane	74	104			60-140	20-150	34%	#VALUE!	<30	<50	96		41-125	31-135			<50	<75
8081A	gamma-Chlordane	90	96			60-140	20-150	6%	#VALUE!	<30	<50	89		41-125	31-133			<50	<75
8081A	Toxaphene					60-140	20-150	#DIV/0!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Decachlorobiphenyl (DCBP) (Surr)	96	89			34-133	25-143	8%	#VALUE!			69							
8081A	Tetrachloro-m-xylene (TCMX) (Surr)	64	84			45-125	35-135	27%	#VALUE!			80							
METALS BY ICP						mg/L	mg/kg			%	%			%	%			%	%
6010B	Arsenic	102	101			50-150	30-170	1%	#VALUE!	<30	<50	101		80-120	80-120			<50	<75

Notes:
1) SW-846 Methods unless otherwise noted
2) Includes sediments, waste, solids

NS Not Specified
NA Not Applicable

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Checklist

Project #: 27368 **Instrument Used: Trace ICAP/ICAP/GFAA/FIMS Hg**

Analyst Questions

1. **Is the Blank <1/2 RDL?** yes **If not, has the RDL been raised or the samples reanalyzed?** _____
2. **Are the LCS/LCSD within limits?** yes **If not, why, or are the samples being reanalyzed?** _____
3. **Duplicate AAL sample number** 10272
   Is the RPD acceptable? yes **If not, what is the reason?** _____
4. **MS/MSD AAL sample number** 10272
   Are the recoveries acceptable? yes **If not, what is the reason?** _____
5. **Sample numbers requiring dilution?** _____
   Reason for dilution. _____
6. **Are all special requirements on project sheet completed?** _____ **If unable to complete, has the project manager been notified?** _____
7. **Any additional comments.** MS/MSD, LCS % Rec. within Navy QC table.

Reviewer Questions

8. **Is the ICV within ± 10% for 6010B, or 5% for 200.7?** ✓
9. **For Hg and GFAA, is the curve acceptable, (>0.995 correlation coefficient)?** —
10. **Verified the correct date & time; sample results with sigfigs in LIMS** ✓
11. **Verified the RDL and its sigfigs according to dilution** ✓

Analyst entering results in Labworks. [signature] **Date:** 4/20/01

Peer Reviewer: _____ **Date:** 4/24/01

Peer Reviewer is responsible for reviewing all above questions.

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1-Blank	MAR2801	WATERS2	03/28/01	08:13		X	IR
2	STD8	MAR2801	WATERS2	03/28/01	08:19		X	IR
3	STD3	MAR2801	WATERS2	03/28/01	08:25		X	IR
4	STD4	MAR2801	WATERS2	03/28/01	08:29		X	IR
5	STD2	MAR2801	WATERS2	03/28/01	08:33		X	IR
6	ICV 2	MAR2801	WATERS2	03/28/01	08:37	MA	Q	CONC
7	ICV 1	MAR2801	WATERS2	03/28/01	08:46	MA	Q	CONC
8	ICB	MAR2801	WATERS2	03/28/01	08:53	MA	B	CONC
9	ICS A	MAR2801	WATERS2	03/28/01	08:58	MA	Q	CONC
10	ICS AB	MAR2801	WATERS2	03/28/01	09:05	MA	Q	CONC
11	SS I	MAR2801	WATERS2	03/28/01	09:19	MA	Q	CONC
12	SS I LOW	MAR2801	WATERS2	03/28/01	09:25	MA	Q	CONC
13	QMW0327011 0920	MAR2801	WATERS2	03/28/01	09:31	MA	S	CONC
14	QMW0327012 LCS	MAR2801	WATERS2	03/28/01	09:37	MA	S	CONC
15	QMW0327013 LCSD	MAR2801	WATERS2	03/28/01	09:42	MA	S	CONC
16	10154	MAR2801	WATERS2	03/28/01	09:48	MA	S	CONC
17	10155	MAR2801	WATERS2	03/28/01	09:54	MA	S	CONC
18	10156	MAR2801	WATERS2	03/28/01	09:59	MA	S	CONC
19	10157	MAR2801	WATERS2	03/28/01	10:05	MA	S	CONC
20	10158	MAR2801	WATERS2	03/28/01	10:11	MA	S	CONC
21	10159	MAR2801	WATERS2	03/28/01	10:16	MA	S	CONC
22	10160	MAR2801	WATERS2	03/28/01	10:22	MA	S	CONC
23	ICV 2	MAR2801	WATERS2	03/28/01	10:29	MA	Q	CONC
24	ICV 1	MAR2801	WATERS2	03/28/01	10:36	MA	Q	CONC
25	ICB	MAR2801	WATERS2	03/28/01	10:42	MA	B	CONC
26	09682	MAR2801	WATERS2	03/28/01	10:47	MA	S	CONC
27	10268	MAR2801	WATERS2	03/28/01	10:53	MA	S	CONC
28	10270	MAR2801	WATERS2	03/28/01	10:59	MA	S	CONC
29	10272	MAR2801	WATERS2	03/28/01	11:05	MA	S	CONC
30	10272 D	MAR2801	WATERS2	03/28/01	11:10	MA	S	CONC
31	10272 MS	MAR2801	WATERS2	03/28/01	11:16	MA	S	CONC
32	10272 MSD	MAR2801	WATERS2	03/28/01	11:22	MA	S	CONC
33	10154 1:4SD	MAR2801	WATERS2	03/28/01	11:27	MA	S	CONC
34	10154 1:1MSA	MAR2801	WATERS2	03/28/01	11:33	MA	S	CONC
35	ICV 2	MAR2801	WATERS2	03/28/01	11:40	MA	Q	CONC
36	ICV 1	MAR2801	WATERS2	03/28/01	11:46	MA	Q	CONC
37	ICB	MAR2801	WATERS2	03/28/01	11:52	MA	B	CONC
38	SS I	MAR2801	WATERS2	03/28/01	11:58	MA	Q	CONC
39	SS I LOW	MAR2801	WATERS2	03/28/01	12:04	MA	Q	CONC
40	ICS A	MAR2801	WATERS2	03/28/01	12:10	MA	Q	CONC
41	ICS AB	MAR2801	WATERS2	03/28/01	13:05	MA	Q	CONC
42	ICV TL,ZN	MAR2801	WATERS2	03/28/01	13:16	MA	S	CONC
43	ICB TL, ZN	MAR2801	WATERS2	03/28/01	13:20	MA	S	CONC
44	BLK TL, ZN	MAR2801	WATERS2	03/28/01	13:27	MA	S	CONC
45	09946 TL, ZN	MAR2801	WATERS2	03/28/01	13:32	MA	S	CONC
46	09963 TL, ZN	MAR2801	WATERS2	03/28/01	13:37	MA	S	CONC
47	10073 TL, ZN	MAR2801	WATERS2	03/28/01	13:44	MA	S	CONC
48	ICV TL, ZN	MAR2801	WATERS2	03/28/01	13:49	MA	S	CONC
49	ICB TL, ZN	MAR2801	WATERS2	03/28/01	14:01	MA	S	CONC
50	STD1-Blank	MAR2801	WATERS2	03/28/01	14:13		X	IR
51	STD2	MAR2801	WATERS2	03/28/01	14:16		X	IR
52	ICV ZN	MAR2801	WATERS2	03/28/01	14:19	MA	S	CONC
53	ICB ZN	MAR2801	WATERS2	03/28/01	14:28	MA	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	BLK ZN	MAR2801	WATERS2	03/28/01	14:31	MA	S	CONC
55	10073 ZN	MAR2801	WATERS2	03/28/01	14:34	MA	S	CONC
56	ICV ZN	MAR2801	WATERS2	03/28/01	14:40	MA	S	CONC
57	ICB ZN	MAR2801	WATERS2	03/28/01	14:52	MA	S	CONC

#	Element	STD'lank	STD8	STD3	STD4	STD2	ICV 2
1	Ag3280	-.00102	.56551				1.011
2	Al3082	.0176		.08424			.9721
3	As1890	-.00469			.25667		.9667
4	Ba4934	.00001				2.21485	.9715
5	Be3130	-.00316		1.02921			.9621
6	Ca3179	.00088				.03482	.9864
7	Cd2265	-.0008				.69986	.9626
8	Co2286	-.00137				.55721	.9656
9	Cr2677	.00026			.37599		.9744
10	Cu3247	.00961				.63045	.9545
11	Fe2714	.00051		.02057			Q1.069
12	K_7664	.00954				1.6801	Q9.150
13	Mg2790	-.00009				.04321	Q.9274
14	Mn2576	.00024				.47741	.9644
15	Ni2316	-.00229		.36573			.9628
16	2203/1	-.00156				1.72847	.9652
17	2203/2	.00206				1.63113	.9580
18	1960/1	-.02997			1.10516		.9768
19	1960/2	.0077			.49773		.9651
20	Sb2068	.00155		.33402			.9559
21	Sn1899	-.00045		.18865			.9615
22	Tl1908	-.00099		.10443			.9774
23	V_2924	-.00005			.00968		.9722
24	Zn2062	-.00016				.08758	.9673
25	Pb2203						.9631
26	Se1960						.9731

#	Element	ICV 1	ICB	ICS A	ICS AB	SS I	SS I LOW
1	Ag3280	.2070	.0005	.0004	.3241	Q.0014	.0003
2	Al3082	Q.2173	.0170	50.71	52.51	Q.1027	.0645
3	As1890	.2058	.0031	.0022	1.013	.0452	Q.0136
4	Ba4934	.2002	.0001	.0002	.2978	.0406	.0108
5	Be3130	.1954	.0002	.0001	.1006	.0010	.0004
6	Ca3179	.2107	-.0048	49.85	50.84	.1398	.0930
7	Cd2265	.1958	-.0005	.0060	.3011	Q.0005	.0000
8	Co2286	.1964	.0004	.0008	.3005	.0104	Q.0034
9	Cr2677	.1984	-.0003	.0001	.2988	.0042	.0009
10	Cu3247	.1927	-.0013	Q.0297	.3407	Q.0029	-.0007
11	Fe2714	Q.2305	.0015	49.76	50.73	Q.1864	.1393
12	K_7664	Q1.808	.0007	Q.2063	Q31.19	-.0056	-.0083
13	Mg2790	.1894	.0013	49.53	50.63	.0048	.0043
14	Mn2576	.1970	-.0000	.0014	.1998	.0104	.0030
15	Ni2316	.1969	.0018	.0015	.2997	.0107	.0028
16	2203/1	.1971	.0043	.0210	1.048	.0120	.0079
17	2203/2	.1943	.0013	.0012	1.032	.0073	.0023
18	1960/1	.2020	.0054	.0081	.5207	.0442	.0174
19	1960/2	.1994	.0030	.0032	.5180	.0432	.0143
20	Sb2068	.1969	.0015	.0107	1.015	Q.0124	.0048
21	Sn1899	.2006	-.0009	.0045	1.049	-.0034	-.0052
22	Tl1908	.1974	.0031	Q.0544	1.149	.0418	Q.0145
23	V_2924	.2035	.0020	.0077	.3072	.0115	Q.0096

#	Element	ICV 1	ICB	ICS A	ICS AB	SS I	SS I LOW
24	Zn2062	.1951	-.0006	.0028	.3059	.0105	.0023
25	Pb2203	.1964	.0035	.0147	1.043	.0107	Q.0063
26	Se1960	.2013	.0048	.0064	.5198	.0441	Q.0166

#	Element	QMW'0920	QMW' LCS	QMW'LCSD	10154	10155	10156
		09:31			09:48	09:54	09:59
1	Ag3280	.0004	1.049	1.018	.0007	.0005	.0003
2	Al3082	.0749	1.081	1.061	-.2693	-.1389	-.3192
3	As1890	-.0013	1.008	.9856	.0087	.0022	.0342
4	Ba4934	.0004	.9999	.9674	.0152	.0041	.0053
5	Be3130	.0002	.9695	.9372	.0006	.0001	-.0003
6	Ca3179	.0413	1.038	.9893	84.25	62.14	60.22
7	Cd2265	-.0001	.9777	.9518	-.0005	-.0009	-.0010
8	Co2286	.0009	.9920	.9680	-.0000	-.0007	.0003
9	Cr2677	.0043	1.001	.9731	.0061	.0049	.0102
10	Cu3247	-.0022	1.007	.9757	.0099	.0043	.0185
11	Fe2714	.0442	1.136	1.097	.4557	.2158	.0750
12	K_7664	.0151	9.785	9.467	13.76	1.377	115.8
13	Mg2790	.0056	.9744	.9399	16.23	2.041	100.6
14	Mn2576	.0017	.9965	.9683	.0337	.0174	.0146
15	Ni2316	.0024	.9733	.9449	.0043	.0005	.0043
16	2203/1	.0059	.9989	.9737	.0268	.0024	.0029
17	2203/2	-.0000	.9874	.9624	.0245	.0002	-.0017
18	1960/1	.0021	.9845	.9664	.0025	-.0053	.0068
19	1960/2	.0081	1.004	.9777	.0065	.0098	.0029
20	Sb2068	.0012	.9815	.9512	.0050	.0057	.0024
21	Sn1899	.0034	2.003	1.952	-.0026	-.0050	.0001
22	Tl1908	.0003	1.014	1.003	.0065	.0032	-.0002
23	V_2924	.0058	.9936	.9658	.0056	.0115	.0115
24	Zn2062	.0049	.9739	.9481	.0268	.0069	.0078
25	Pb2203	.0042	.9953	.9702	.0263	.0019	.0017
26	Se1960	.0043	.9911	.9704	.0041	-.0000	.0058

#	Element	10157	10158	10159	10160	ICV 2	ICV 1
		10:05	10:14	10:16	10:22		
1	Ag3280	.0005	.0001	.0002	.0003	Q1.089	Q.2184
2	Al3082	-.1949	-.1095	-.4015	.0977	Q1.114	Q.3064
3	As1890	.0065	.0017	.0624	.0126	1.030	Q.2114
4	Ba4934	.0072	.0030	.0056	.0003	.9918	.2009
5	Be3130	.0002	.0000	-.0000	.0004	1.054	.2102
6	Ca3179	75.77	59.67	70.95	.1248	Q1.079	Q.2154
7	Cd2265	.0003	-.0008	.0000	.0005	1.026	.2044
8	Co2286	.0021	.0001	.0024	.0025	1.038	.2081
9	Cr2677	.0001	.0055	.0055	.0004	1.054	Q.2115
10	Cu3247	.0051	.0037	.0186	-.0043	.9883	.1940
11	Fe2714	.3455	.0411	.0200	-.0177	Q1.139	Q.2433
12	K_7664	.5301	1.385	128.5	.0143	9.568	Q1.797
13	Mg2790	2.481	2.030	114.8	.0814	.9504	.1946
14	Mn2576	.0035	.0017	.0158	.0001	1.041	.2091
15	Ni2316	.0057	.0015	.0068	.0054	1.009	.2018
16	2203/1	-.0023	.0023	-.0014	.0023	1.041	.2111
17	2203/2	.0007	.0014	-.0033	-.0021	1.032	.2041

#	Element	10157	10158	10159	10160	ICV 2	ICV 1
18	1960/1	.0220	.0022	.0292	.0188	1.016	.2047
19	1960/2	-.0068	.0074	-.0095	-.0062	1.018	.2082
20	Sb2068	-.0015	.0046	-.0001	-.0010	.9921	.1986
21	Sn1899	.0030	-.0030	.0093	-.0029	1.025	.2094
22	Tl1908	.0054	.0023	.0066	.0029	1.030	.2080
23	V_2924	.0059	.0057	.0175	.0061	1.031	Q.2129
24	Zn2062	.0134	.0146	.0058	.0087	1.048	.2082
25	Pb2203	-.0011	.0022	-.0018	.0011	1.039	.2090
26	Se1960	.0126	.0042	.0165	.0107	1.017	.2061

#	Element	ICB	09682	10268	10270	10272	10272 D
1	Ag3280	.0007	.0003	.0003	.0001	.0000	.0003
2	Al3082	.0977	-.0048	.1876	.9520	.2588	.2880
3	As1890	.0047	-.0026	.0019	.0066	.0015	-.0009
4	Ba4934	.0001	.0054	.0096	.0137	.0083	.0085
5	Be3130	.0006	.0003	.0005	.0007	.0004	.0005
6	Ca3179	-.0153	38.89	1.019	1.654	.1329	.1560
7	Cd2265	.0002	-.0018	-.0011	-.0008	-.0006	.0000
8	Co2286	.0013	-.0001	.0004	.0009	.0066	.0068
9	Cr2677	-.0001	.0058	.0055	.0075	.0074	.0079
10	Cu3247	-.0059	.0005	-.0043	-.0026	-.0049	-.0045
11	Fe2714	-.0080	.1300	.1127	1.303	.3218	.3480
12	K_7664	.0058	2.860	.3664	.7268	.2241	.2143
13	Mg2790	.0049	6.195	1.171	1.735	.0826	.0916
14	Mn2576	-.0001	.0784	.0045	.0440	.0163	.0181
15	Ni2316	.0036	.0032	.0035	.0048	.0041	.0047
16	2203/1	.0026	.0054	.0039	.0025	.0063	.0058
17	2203/2	-.0001	-.0017	-.0010	-.0012	-.0016	.0009
18	1960/1	.0085	.0022	.0045	.0039	.0062	.0057
19	1960/2	.0011	.0036	.0029	.0035	.0035	.0056
20	Sb2068	.0009	.0025	.0029	.0030	.0041	.0026
21	Sn1899	.0008	.0015	.0001	-.0044	-.0030	-.0014
22	Tl1908	-.0010	.0077	.0033	.0013	.0033	.0093
23	V_2924	.0061	.0058	.0060	.0115	.0060	.0060
24	Zn2062	-.0004	.0075	.0108	.0130	.0147	.0144
25	Pb2203	.0019	.0032	.0025	.0015	.0039	.0044
26	Se1960	.0063	.0029	.0042	.0040	.0055	.0059

#	Element	10272 MS	102' MSD	101':4SD	101'1MSA	ICV 2	ICV 1
1	Ag3280	1.037	1.063	.0046	.2231	Q1.069	Q.2145
2	Al3082	1.351	1.427	.4329	.3460	Q1.115	Q.3297
3	As1890	1.023	1.005	.0560	.2193	1.019	.2027
4	Ba4934	.9392	.9731	.0165	.2125	.9722	.1963
5	Be3130	1.009	1.013	.0044	.2102	1.035	.2052
6	Ca3179	1.144	1.164	82.33	89.37	Q1.064	.2089
7	Cd2265	.9755	.9926	.0026	.2038	.9966	.1968
8	Co2286	1.005	1.027	.0134	.2122	1.021	.2032
9	Cr2677	.9979	1.031	.0060	.2133	1.029	.2054
10	Cu3247	.9476	.9954	-.0159	.2077	.9777	.1908
11	Fe2714	1.406	1.438	.3271	.6921	Q1.115	Q.2286

MS/MSD
90RPD
0.9990

#	Element	10272 MS	102' MSD	101':4SD	101'1MSA	ICV 2	ICV 1
12	K_7664	10.63	11.18	8.904	14.28	Q9.091	Q1.716
13	Mg2790	1.006	1.020	14.55	16.13	Q.9239	Q.1844
14	Mn2576	1.009	1.035	.0326	.2408	1.023	.2043
15	Ni2316	.9617	.9809	.0275	.2092	.9836	.1980
16	2203/1	1.016	1.034	.0368	.2399	1.029	.2066
17	2203/2	1.006	1.015	.0262	.2413	1.007	.1976
18	1960/1	1.040	.9717	.1008	.2225	.9982	.2048
19	1960/2	1.032	.9833	-.0093	.2055	1.003	.1979
20	Sb2068	.9545	.9575	-.0027	.2070	.9672	.1944
21	Sn1899	2.051	2.070	.0064	.2100	1.015	.2054
22	Tl1908	1.041	1.054	.0574	.2258	1.025	.1971
23	V_2924	.9758	1.005	.0300	.2149	1.008	.2072
24	Zn2062	1.024	1.019	.0293	.2232	1.017	.2006
25	Pb2203	1.013	1.028	.0345	.2409	1.022	.2038
26	Se1960	1.037	.9758	.0652	.2173	.9999	.2027

#	Element	ICB	SS I	SS I LOW	ICS A	ICS AB	ICV'L,ZN
1	Ag3280	.0006	Q.0014	.0004	.0006	.3251	
2	Al3082	.1299	Q.1836	.1556	49.91	49.88	
3	As1890	.0007	.0456	Q.0172	-.0028	1.021	
4	Ba4934	.0002	.0384	.0104	.0002	.2857	
5	Be3130	.0006	Q.0016	.0008	.0004	.1039	
6	Ca3179	-.0167	.1368	.0852	52.87	51.96	
7	Cd2265	-.0002	Q.0006	.0004	.0037	.2978	
8	Co2286	.0011	.0119	Q.0041	.0024	.3027	
9	Cr2677	.0001	.0047	Q.0013	.0007	.2988	
10	Cu3247	-.0062	Q-.0021	-.0057	Q.0255	.3312	
11	Fe2714	-.0090	Q.1734	.1317	51.83	51.30	
12	K_7664	.0021	.0021	-.0001	Q.2375	Q30.83	
13	Mg2790	.0056	.0112	.0055	48.68	47.97	
14	Mn2576	-.0000	.0105	.0030	.0014	.2023	
15	Ni2316	.0034	Q.0121	Q.0062	.0013	.2922	
16	2203/1	.0048	.0142	.0067	.0253	1.071	
17	2203/2	-.0020	.0091	.0012	-.0006	1.038	
18	1960/1	.0091	.0445	.0184	.0136	.5075	
19	1960/2	-.0002	.0399	.0137	.0011	.5059	
20	Sb2068	.0018	Q.0123	.0034	.0100	.9787	
21	Sn1899	-.0026	-.0036	.0006	-.0011	1.045	
22	Tl1908	.0027	.0413	Q.0124	Q.0509	1.130	2.073
23	V_2924	.0060	Q.0170	Q.0097	.0115	.3031	
24	Zn2062	-.0001	.0105	.0020	.0026	.3049	1.937
25	Pb2203	.0028	Q.0128	Q.0051	.0169	1.060	
26	Se1960	.0062	.0432	Q.0170	.0093	.5069	

#	Element	ICB', ZN	BLK', ZN	099', ZN	099', ZN	100', ZN	ICV', ZN
1	Ag3280						
2	Al3082						
3	As1890						
4	Ba4934						
5	Be3130						

#	Element	ICB', ZN	BLK', ZN	099', ZN	099', ZN	100', ZN	ICV', ZN
6	Ca3179						
7	Cd2265						
8	Co2286						
9	Cr2677						
10	Cu3247						
11	Fe2714						
12	K_7664						
13	Mg2790						
14	Mn2576						
15	Ni2316						
16	2203/1						
17	2203/2						
18	1960/1						
19	1960/2						
20	Sb2068						
21	Sn1899						
22	Tl1908	.0123	.0040	.0064	.0071	-.0017	1.0000
23	V_2924						
24	Zn2062	-.0017	.0108	.0158	.0377	.1295	.8883
25	Pb2203						
26	Se1960						

#	Element	ICB', ZN	STD'lank	STD2	ICV ZN	ICB ZN	BLK ZN
1	Ag3280				1.045		
2	Al3082				1.370		
3	As1890				.9599		
4	Ba4934				.8794		
5	Be3130				1.009		
6	Ca3179				.9809		
7	Cd2265				.8760		
8	Co2286				.9679		
9	Cr2677				.9250		
10	Cu3247				.9910		
11	Fe2714				1.046		
12	K_7664				13.53		
13	Mg2790				.8228		
14	Mn2576				.9805		
15	Ni2316				.8298		
16	2203/1				1.005		
17	2203/2				.9740		
18	1960/1				.9225		
19	1960/2				.9353		
20	Sb2068				.8696		
21	Sn1899				.9704		
22	Tl1908	.0025			.9828		
23	V_2924				.9304		
24	Zn2062	.0011	-.00019	.07811	.9855	.0009	.0042
25	Pb2203				.9950		
26	Se1960				.9270		

#	Element	10073 ZN	ICV ZN	ICB ZN			
1	Ag3280						
2	Al3082						
3	As1890						
4	Ba4934						
5	Be3130						
6	Ca3179						
7	Cd2265						
8	Co2286						
9	Cr2677						
10	Cu3247						
11	Fe2714						
12	K_7664						
13	Mg2790						
14	Mn2576						
15	Ni2316						
16	2203/1						
17	2203/2						
18	1960/1						
19	1960/2						
20	Sb2068						
21	Sn1899						
22	Tl1908						
23	V_2924						
24	Zn2062	.1283	.9427	.0010			
25	Pb2203						
26	Se1960						

SVO GC DATA CHECKLIST
SW-846-8081A / 8082 / 8151A

PROJECT #: 27368	METHOD: (circle applicable methods)		
MATRIX: WATER	(8081A)	8082	8151A

INITIAL ANALYST ASSESSMENT

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Are continuing calibrations compliant with method requirements?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is blank result less than 1/2 RDL for analytes of interest?	(Y)	N	NA
Are all spike recoveries acceptable for the LCS/LCSD?	(Y)	N	NA
Are all surrogate standard recoveries acceptable (blank, LCS, samples)?	Y	(N)	NA
If blank, LCS or surrogate results are unacceptable, was re-extraction performed to confirm?	Y	(N)	NA
Are all requested analytes below the upper calibration limit?	(Y)	N	NA
Were sample analyses performed within holding times?	(Y)	N	NA
Were analyses performed such that carryover was not a problem?	(Y)	N	NA
For Pesticides & Herbicides, were all hits verified with second column confirmation?	(Y)	N	NA
Are quantitations based on the latest acceptable initial calibration?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA
Are all applicable runlog and extraction sheets signed, dated, and included?	(Y)	N	NA
Are all analytes to be reported indicated as such on the raw data?	(Y)	N	NA
Was analysis completed as instructed on the Log-in Record?	(Y)	N	NA
Has all data been entered into LIMS?	(Y)	N	NA

Analyst: YGK

Date: 03/30/01 Time: 10:35

PEER REVIEW

Are continuing calibrations compliant with method requirements?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Are all blank and QC results acceptable?	(Y)	N	NA
Are all surrogate standard recoveries acceptable (blank, LCS, samples)?	(Y)	N	NA
Are all calculations correct and reported in the proper units?	(Y)	N	NA
Were sample analyses performed within holding times?	(Y)	N	NA
Are quantitations based on the latest acceptable initial calibration?	(Y)	N	NA
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Was analysis completed as instructed on the Log-in Record?	(Y)	N	NA
Have all LIMS entries been checked for accuracy?	(Y)	N	NA

Reviewer: [signature]

Date: 3/30/01 Time: 1125

ACCURA ANALYTICAL LABORATORIES

EXTRACTION LOG

ANALYSIS: (PEST / PCB) **DATE/TIME:** 3/26/01 745

MATRIX: (WATER) / TCLP **ANALYST:** KC

EXT. METHOD: 3510 / (3520) **INSTRUMENT:** GC/ECD

AAL I.D.	SAMPLE VOLUME	SURR 1.0mL	SPIKE 1.0mL	SOLVENT EXCHANGE	FINAL VOLUME	ACID CLEANED	COMMENTS
QPW032601l	1L	KC		Hexane	5.0mL	PCBx1	Split
QPW032601B	↓	↓	KC	↓	↓	↓	LCS Pest
QPW032601B	↓	↓	KC	↓	↓	↓	LCS PCB
10143	↓	↓		↓	↓	↓	split
10154	↓	↓	↓	↓	↓	nA	Pest only
10155	↓	↓	↓	↓	↓	↓	↓
10156	↓	↓	↓	↓	↓	↓	↓
10157	↓	↓	↓	↓	↓	↓	↓
10158	↓	↓	↓	↓	↓	↓	↓
10159	↓	↓	↓	↓	↓	↓	↓
10160	↓	↓		↓	↓	↓	↓

KC 3/27/01

START TIME: 1140 STOP TIME: 700 RapidVap TEMP.: 45°C

CH2CL2 I.D.: EX01185 HEXANE I.D.: EX0161

SURROGATE I.D.: P01E010 CONC.: 0.5 ppm INITIAL: KC

SPIKE I.D.: P01E019 CONC.: 0.5 ppm INITIAL: KC

SPIKE I.D.: P01E006 CONC.: 5.0 ppm INITIAL: KC

EXTRACT STORAGE: REFRIGERATOR # 5, BOX # P- 193

076

spike witness RPS

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 03/27/01
Analyst Initials: YGK
Instrument Method: 8081D2
Calibration Column: Rtx-CLP I (F)
Confirmation Column: Rtx-CLP II

DDT Breakdown % (<15%): 2.5%
Endrin Breakdown % (<15%): 13.3%

Pest Calibration Date: 01/31/01
PCB Calibration Date: —

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	50 - 150	50 - 150
Water	27 - 128	10 - 163

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	013101P	std	1X	NA	NA	
2	Hexane	"	Solv	"	"	"	
3	PEM	"	std	"	"	"	P01055
4	ccv Pest. 10ppm	"	"	"	95	90	P01045
5	ccv Chlord. 25ppm	020101CL	"	"	NA	NA	95% P01053
6	ccv TOX 2.5ppm	020101TX	"	"	"	"	105% P01048
7	Hexane	013101P	Solv	"	"	"	
8	QPW0323011	"	W	"	99	104	
9	" 1 2	"	"	"	86	90	
10	09465W	"	"	"	52	29	
11	09466W	"	"	"	82	43	
12	QPW0326011	"	"	"	94	70	
13	" 1 2	"	"	"	80	69	
14	Hexane	"	Solv	"	NA	NA	
15	ccv Pest. 10ppm	"	std	"	98	95	P01045
16	PEM	"	"	"	NA	NA	P01055
17	10143W 10X	"	W	10X	50	40	
18	10154W	"	"	1X	86	62	
19	10155W	"	"	"	101	94	
20	10156W	"	"	"	42	20	
21	10157W	"	"	"	88	88	
22	10158W	"	"	"	89	97	
23	10159W	"	"	"	52	19	

Signature/Date: [signature] 03/27/01

↓ cont

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 03/27/01 **DDT Breakdown % (<15%):** _____ **Pest Calibration Date:** _____

Analyst Initials: _____ **Endrin Breakdown % (<15%):** _____ **PCB Calibration Date:** _____

Instrument Method: _____

Calibration Column: _____

Confirmation Column: _____

Continued from p. 81

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil		
Water		

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
24	10160 w	013101P	w	1X	88	44	
25	Hexane	"	Solv	"	NA	NA	
26	ccv Pest. 10 ppm	"	std	"	99	91	P01045
27	PEM	"	"	"	NA	NA	P01055
28	QPW0326011	"	w	"	100	80	TBA clean up
29	0 1 2	"	"	"	78	74	"
30	10154 w	"	"	"	56	64	"
31	09466w 2X	"	"	2X	94	54	
32	10156 w	"	"	1X	527	24	TBA clean up
33	10159 w	"	"	"	403	24	"
34	Hexane	"	Solv	"	NA	NA	
35	ccv Pest. 10 ppm	"	std	"	94	90	P01045
36	ccv Chlord. 25 ppm	020101CL	"	"	NA	NA	101% P01053
37	PEM	013101P	"	"	"	"	P01055

YCV 03/28/01

Signature/Date: [signature] 03/28/01

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270104.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\032701\03270104.D\ECD2B.CH
Acq On : 27 Mar 2001 13:03 Operator: YGK
Sample : CCV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 9:39 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.30	5.94	14407486	12841389	0.095	0.102
		Spiked Amount 0.100			Recovery	=	95.00%	102.00%
22)	S	Decachlorobiphen	19.22	19.60	12067864	12083130	0.090	0.090
		Spiked Amount 0.100			Recovery	=	90.00%	90.00%
		Target Compounds						
2)	T	alpha-BHC	7.71	7.43	21125239	19482501	0.106	0.114
3)	T	beta-BHC	8.78	8.59	9479992	9001466	0.095	0.109
4)	T	gamma-BHC (Linda	8.53	8.35	19189901	18292405	0.097	0.108
5)	T	delta-BHC	9.24	9.33	19216802	14453537	0.099	0.107
6)	T	Heptachlor	9.74	9.43	14824569	18247499	0.097	0.110
7)	T	Aldrin	10.49	10.22	14983516	16584417	0.096	0.114
8)	T	Heptachlor epoxi	11.96	11.60	13563039	13638287	0.098	0.108
9)	T	Endosulfan I	12.88	12.51	13561615	14523193	0.106	0.109
10)	T	gamma-Chlordane	12.26	12.05	15416254	16442072	0.100	0.105
11)	T	alpha-Chlordane	12.57	12.39	13424544	15296245	0.101	0.104
12)	T	4,4'-DDE	12.77	12.82	12383429	14681443	0.102	0.107
13)	T	Dieldrin	13.44	13.14	13343855	14594871	0.103	0.108
14)	T	Endrin	13.97	13.82	9299540	9755976	0.098	0.100
15)	T	4,4'-DDD	14.14	14.13	9899624	10357644	0.100	0.103
16)	T	Endosulfan II	14.49	14.31	10353334	12838888	0.095	0.105
17)	T	Endrin aldehyde	15.42	15.06	9396899	10080257	0.101	0.106
18)	T	4,4'-DDT	14.76	14.81	10501516	11169404	0.102	0.103
19)	T	Endosulfan sulfa	16.39	15.67	10048628	10751086	0.096	0.099
20)	T	Methoxychlor	15.84	16.33	5331284	4689266	0.096	0.096
21)	T	Endrin ketone	17.02	16.84	12309702	11420803	0.097	0.096

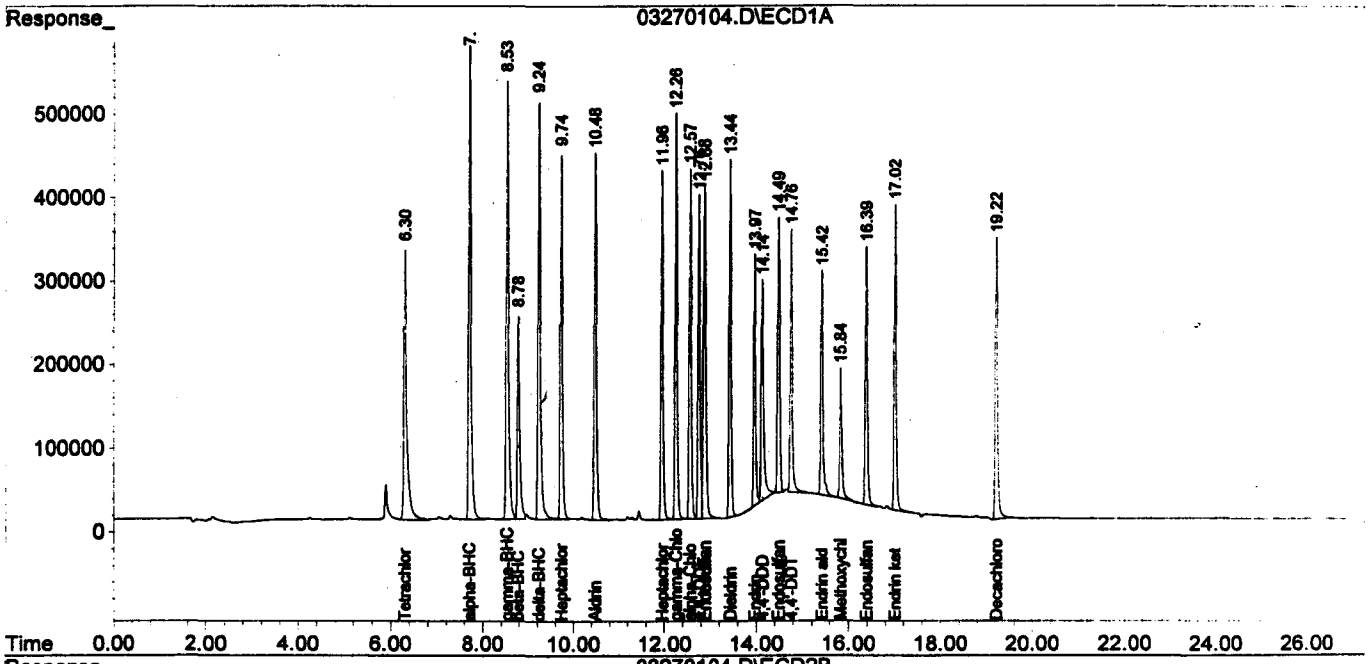
(f =RT Delta > 1/2 Window (#)=Amounts differ by > 2 m)=manual int.

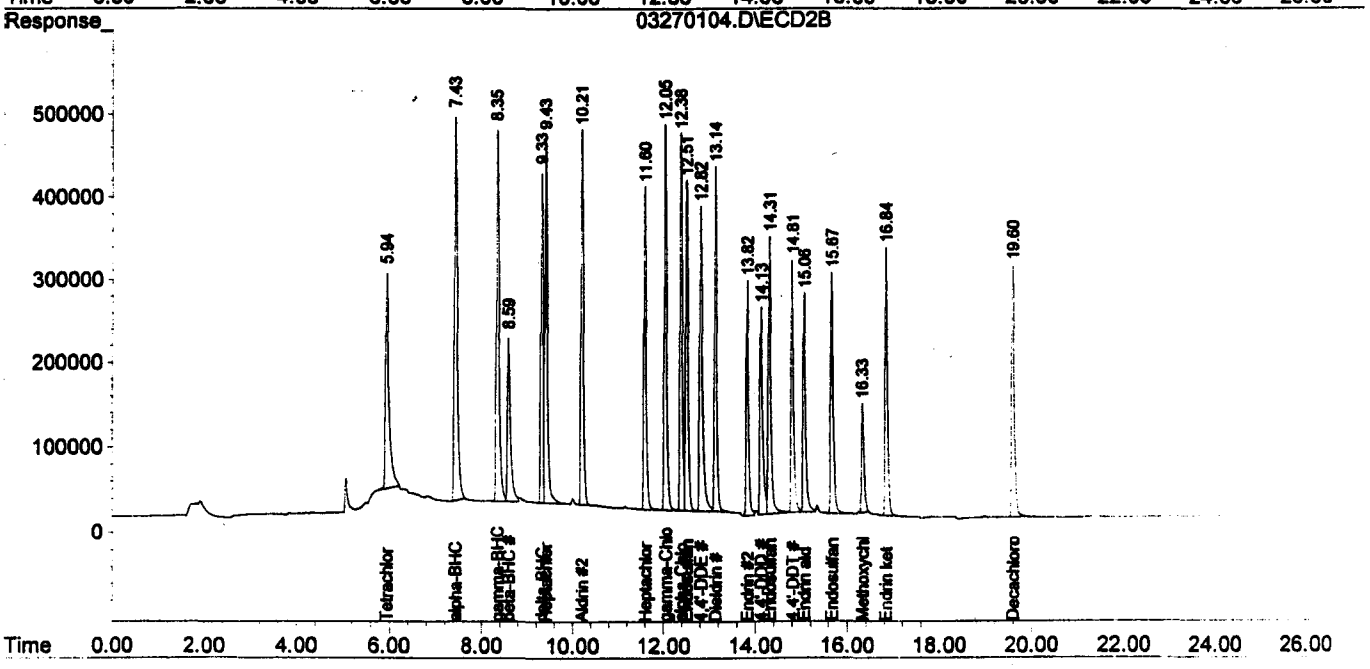
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270104.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\032701\03270104.D\ECD2B.CH
Acq On : 27 Mar 2001 13:03 Operator: YGK
Sample : CCV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 9:39 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270115.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\032701\03270115.D\ECD2B.CH
Acq On : 27 Mar 2001 20:41 Operator: YGK
Sample : CCV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 9:41 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.29	5.93	14843974	12985799	0.098	0.103
		Spiked Amount 0.100			Recovery =		98.00%	103.00%
22)	S	Decachlorobiphen	19.21	19.59	12729100	11969704	0.095	0.089
		Spiked Amount 0.100			Recovery =		95.00%	89.00%
		Target Compounds						
2)	T	alpha-BHC	7.70	7.42	21429396	19650260	0.107	0.115
3)	T	beta-BHC	8.76	8.58	9867325	9008772	0.099	0.109
4)	T	gamma-BHC (Linda	8.52	8.33	19981880	18317771	0.101	0.108
5)	T	delta-BHC	9.22	9.32	20020248	14696359	0.103	0.109
6)	T	Heptachlor	9.72	9.41	15245689	18209636	0.100	0.110
7)	T	Aldrin	10.47	10.20	15236116	16322614	0.098	0.113
8)	T	Heptachlor epoxi	11.94	11.59	13897777	13999868	0.101	0.111
9)	T	Endosulfan I	12.87	12.50	14061026	14314132	0.110	0.108
10)	T	gamma-Chlordane	12.24	12.04	15912615	16332550	0.103	0.104
11)	T	alpha-Chlordane	12.55	12.37	14599254	15118805	0.110	0.102
12)	T	4,4'-DDE	12.75	12.81	12696901	14587463	0.105	0.106
13)	T	Dieldrin	13.42	13.13	13885723	14360201	0.107	0.106
14)	T	Endrin	13.96	13.81	10182699	9655025	0.107	0.099
15)	T	4,4'-DDD	14.13	14.12	10613108	10112210	0.107	0.101
16)	T	Endosulfan II	14.47	14.30	11634463	12696194	0.107	0.103
17)	T	Endrin aldehyde	15.41	15.05	9650138	9706763	0.104	0.102
18)	T	4,4'-DDT	14.75	14.80	10607954	10811264	0.104	0.099
19)	T	Endosulfan sulfa	16.38	15.66	10584661	10617281	0.101	0.098
20)	T	Methoxychlor	15.83	16.32	5659780	4551313	0.102	0.093
21)	T	Endrin ketone	17.00	16.83	12759348	11400000	0.100	0.096

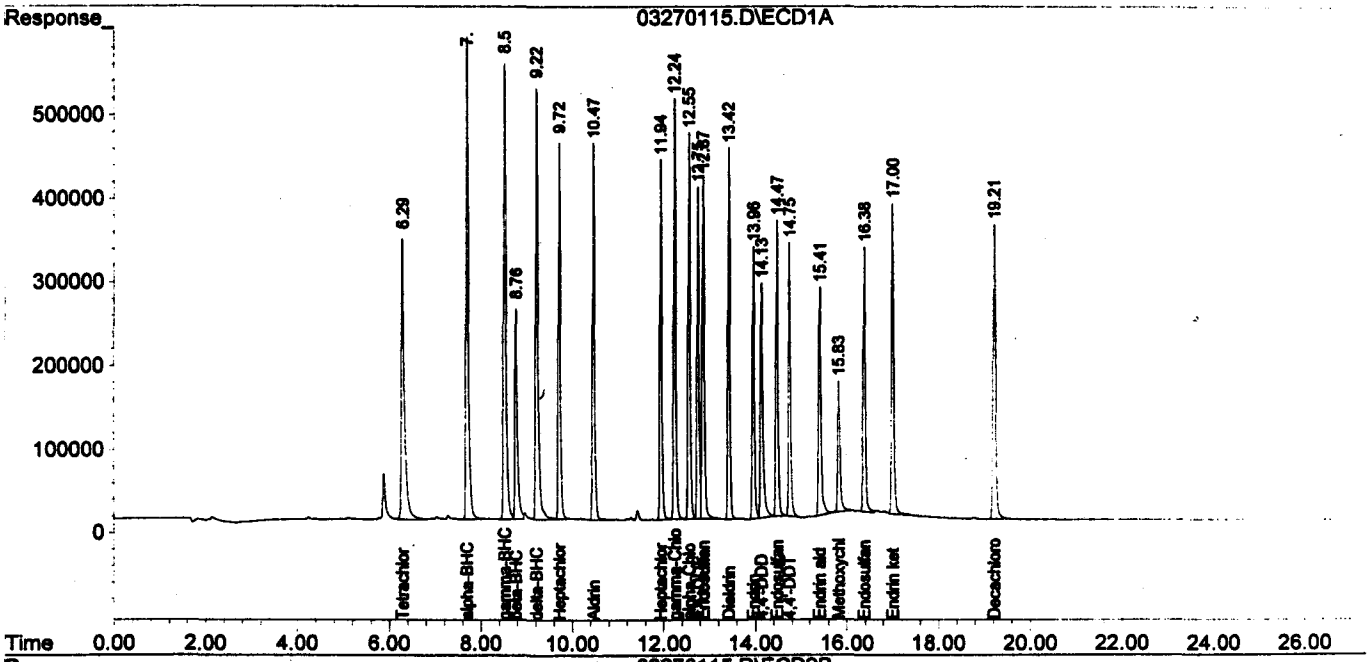
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

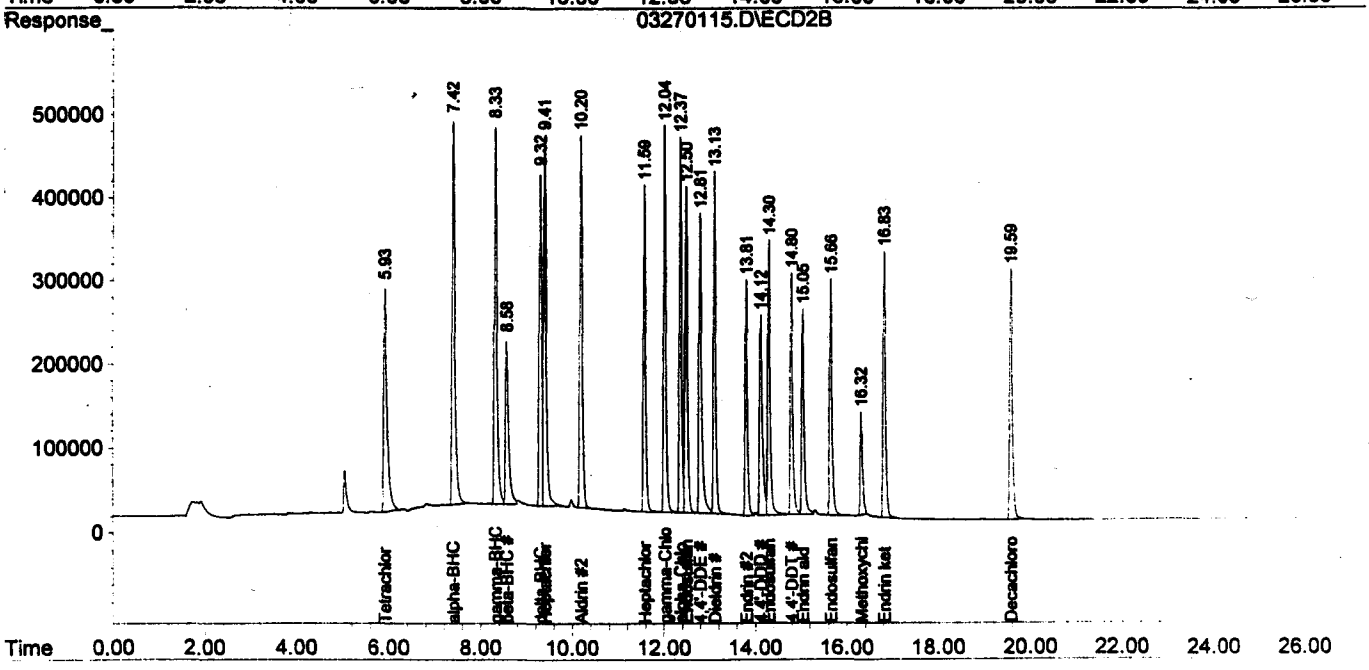
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270115.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\032701\03270115.D\ECD2B.CH
Acq On : 27 Mar 2001 20:41 Operator: YGK
Sample : CCV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 9:41 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270126.D\ECD1A.CH Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\032701\03270126.D\ECD2B.CH
Acq On : 28 Mar 2001 2:34 Operator: YGK
Sample : CCV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 9:46 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

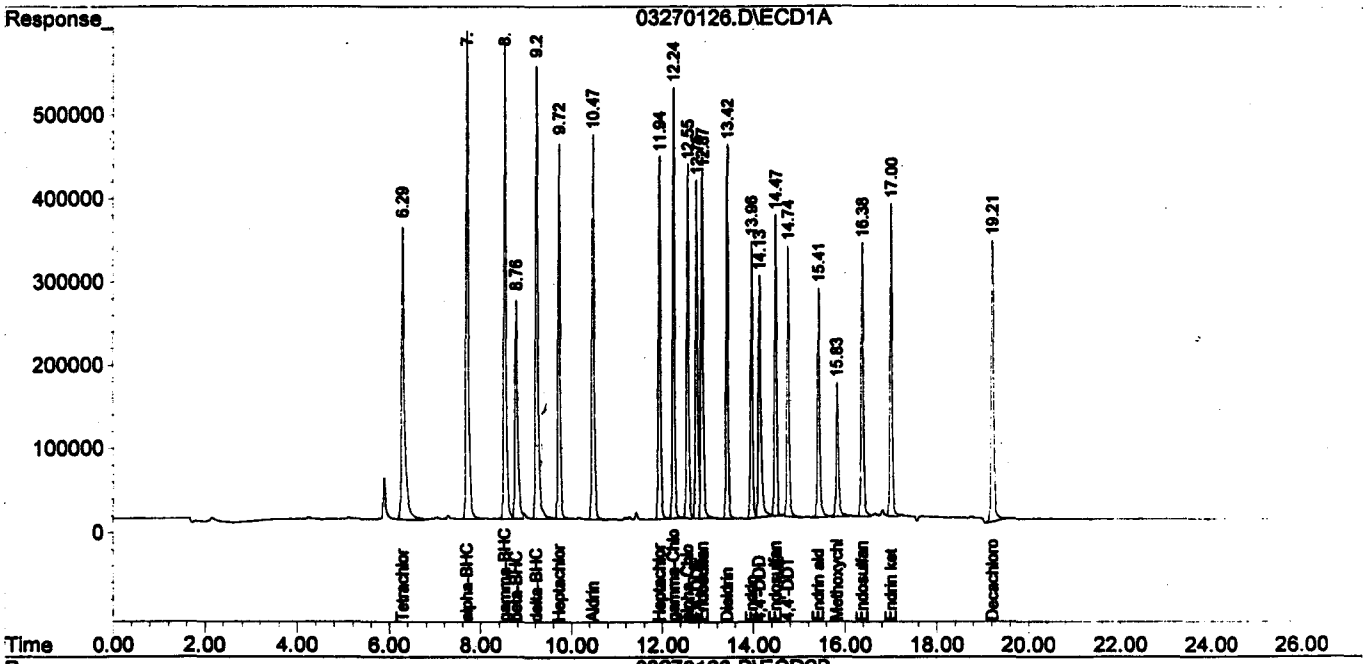
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

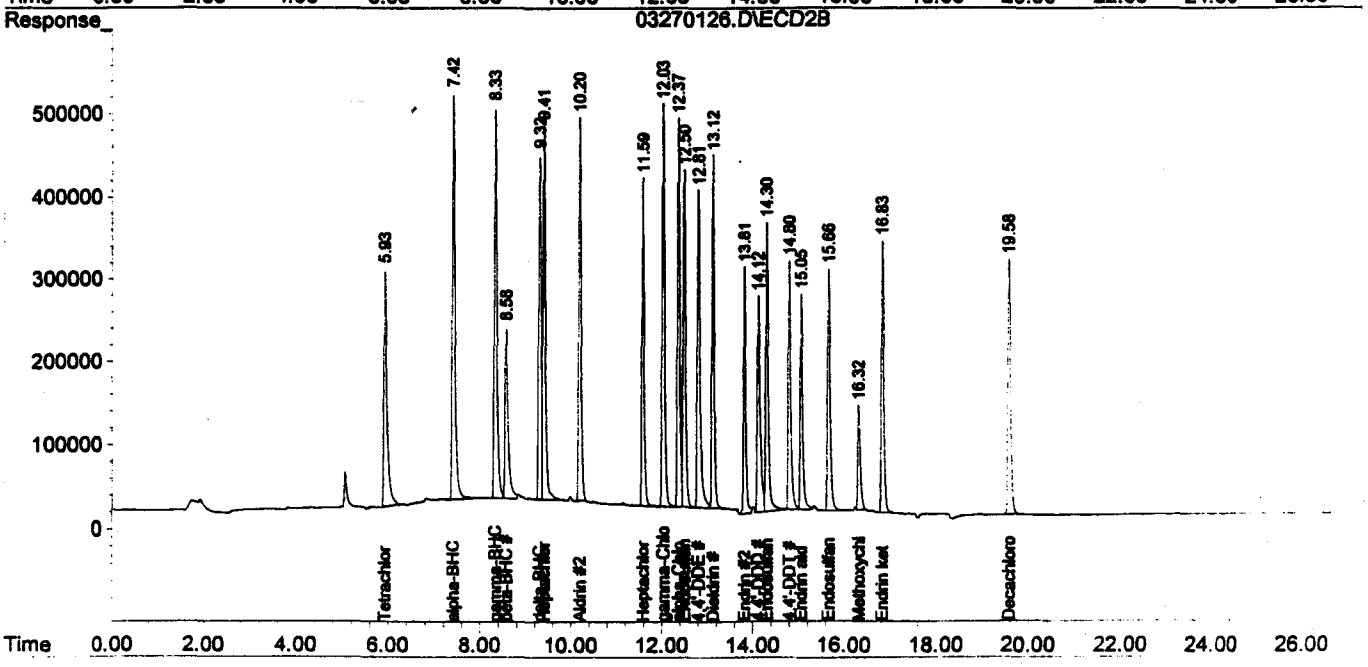
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.29	5.93	14866723	13185040	0.099	0.104
		Spiked Amount 0.100			Recovery =		99.00%	104.00%
22)	S	Decachlorobiphen	19.21	19.58	12160065	12115002	0.091	0.090
		Spiked Amount 0.100			Recovery =		91.00%	90.00%
		Target Compounds						
2)	T	alpha-BHC	7.70	7.42	22007017	19654136	0.110	0.115
3)	T	beta-BHC	8.76	8.58	9910096	9268038	0.099	0.112
4)	T	gamma-BHC (Linda	8.52	8.33	20061542	18689744	0.101	0.110
5)	T	delta-BHC	9.22	9.32	20199815	15104986	0.104	0.112
6)	T	Heptachlor	9.72	9.41	14646481	18156902	0.096	0.110
7)	T	Aldrin	10.47	10.20	15383072	16658024	0.099	0.115
8)	T	Heptachlor epoxi	11.94	11.59	13966293	13739767	0.101	0.109
9)	T	Endosulfan I	12.87	12.50	14123703	15011268	0.111	0.113
10)	T	gamma-Chlordane	12.24	12.03	16216207	17060133	0.105	0.109
11)	T	alpha-Chlordane	12.55	12.37	13619451	15874644	0.103	0.108
12)	T	4,4'-DDE	12.75	12.81	12904933	15383632	0.107	0.112
13)	T	Dieldrin	13.42	13.13	14061610	14990283	0.108	0.111
14)	T	Endrin	13.96	13.81	10354568	10564221	0.109	0.108
15)	T	4,4'-DDD	14.13	14.12	10724518	11034072	0.108	0.110
16)	T	Endosulfan II	14.47	14.30	11384745	13587943	0.105	0.111
17)	T	Endrin aldehyde	15.41	15.05	9735677	9986597	0.105	0.105
18)	T	4,4'-DDT	14.74	14.80	10570055	11087972	0.103	0.102
19)	T	Endosulfan sulfa	16.38	15.66	10832874	11048757	0.103	0.102
20)	T	Methoxychlor	15.83	16.32	5678571	4698098	0.103	0.096
21)	T	Endrin ketone	17.00	16.83	12899391	11875690	0.101	0.100

Signal #1 : C:\HPCHEM\1\DATA\032701\03270126.D\ECD1A.CH Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\032701\03270126.D\ECD2B.CH
Acq On : 28 Mar 2001 2:34 Operator: YGK
Sample : CCV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:27 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270135.D\ECD1A.CH Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\032701\03270135.D\ECD2B.CH
Acq On : 28 Mar 2001 12:24 Operator: YGK
Sample : CCV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 13:03 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.29	5.93	14251101	12300862	0.094	0.097
		Spiked Amount 0.100			Recovery =		94.00%	97.00%
22)	S	Decachlorobiphen	19.22	19.59	11980853	11476200	0.090	0.085
		Spiked Amount 0.100			Recovery =		90.00%	85.00%
		Target Compounds						
2)	T	alpha-BHC	7.70	7.42	20679552	19106566	0.103	0.112
3)	T	beta-BHC	8.77	8.58	9328140	8475175	0.093	0.102
4)	T	gamma-BHC (Linda	8.52	8.34	19033207	17323950	0.096	0.102
5)	T	delta-BHC	9.22	9.32	18874233	12636530	0.097	0.093
6)	T	Heptachlor	9.72	9.42	14415658	16406925	0.094	0.099
7)	T	Aldrin	10.47	10.20	14063156	15595505	0.090	0.108
8)	T	Heptachlor epoxi	11.95	11.59	13135511	12903430	0.095	0.102
9)	T	Endosulfan I	12.87	12.50	13189987	13853269	0.103	0.104
10)	T	gamma-Chlordane	12.24	12.04	14635968	15756166	0.095	0.101
11)	T	alpha-Chlordane	12.56	12.38	12274991	14558191	0.092	0.099
12)	T	4,4'-DDE	12.75	12.81	12048338	14237347	0.099	0.104
13)	T	Dieldrin	13.43	13.13	13241176	14024030	0.102	0.104
14)	T	Endrin	13.96	13.81	9811994	10058848	0.103	0.103
15)	T	4,4'-DDD	14.13	14.12	10089781	10506002	0.101	0.105
16)	T	Endosulfan II	14.48	14.30	10777968	12724743	0.099	0.104
17)	T	Endrin aldehyde	15.41	15.05	9190971	9280993	0.099	0.098
18)	T	4,4'-DDT	14.75	14.80	10166117	10560816	0.099	0.097
19)	T	Endosulfan sulfa	16.38	15.66	10426326	10469300	0.099	0.096
20)	T	Methoxychlor	15.83	16.32	5480862	4572467	0.099	0.093
21)	T	Endrin ketone	17.01	16.83	12610090	11337619	0.099	0.096

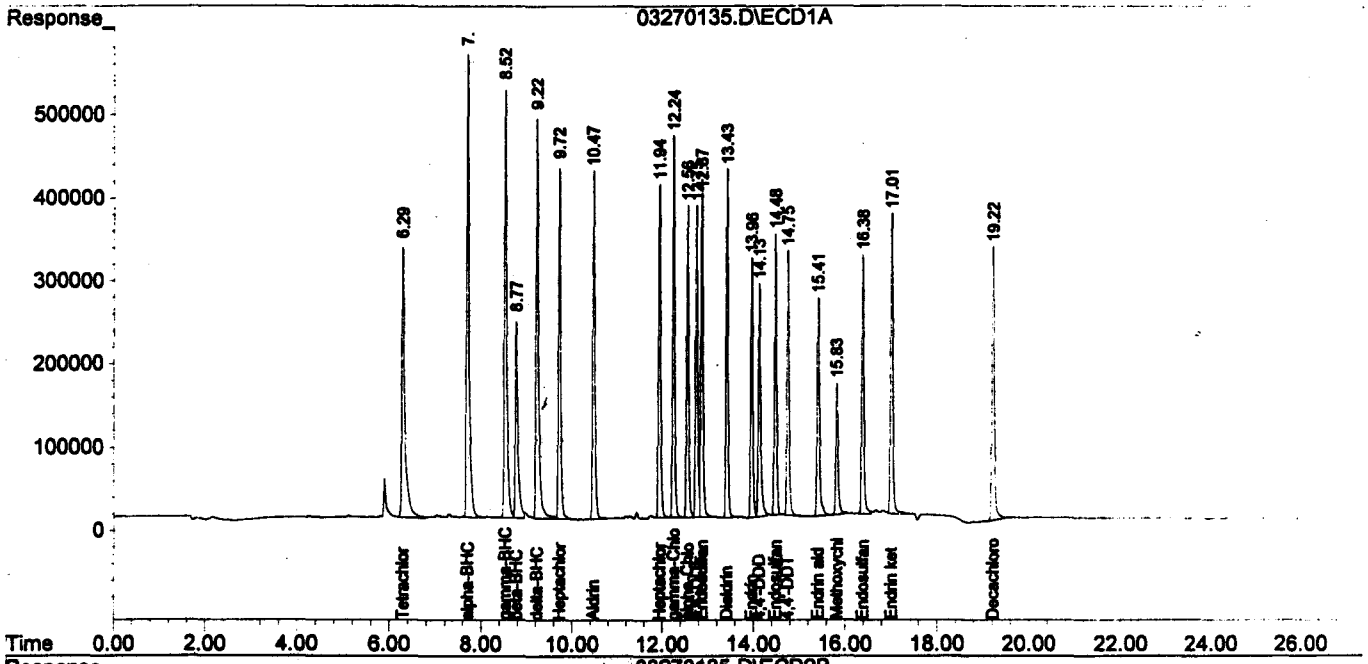
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

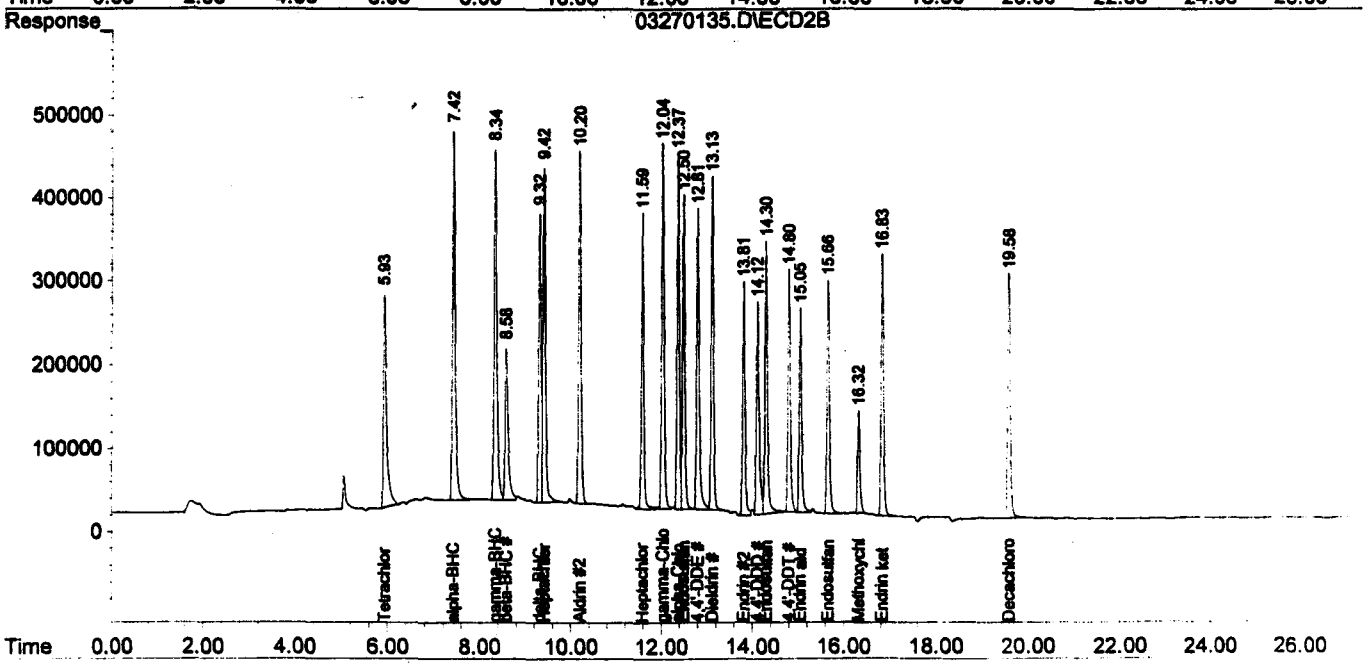
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270135.D\ECD1A.CH Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\032701\03270135.D\ECD2B.CH
Acq On : 28 Mar 2001 12:24 Operator: YGK
Sample : CCV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 13:03 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270105.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\032701\03270105.D\ECD2B.CH
Acq On : 27 Mar 2001 13:40 Operator: YGK
Sample : CCV CHLORD.25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 28 9:02 2001 Quant Results File: 020101CL.RES

Quant Method : C:\HPCHEM\1\METHODS\020101CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC: PEST A,02/01/01
Last Update : Wed Mar 28 09:01:25 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L1 CHLORDANE 1	9.53	9.07	1593238	1649192	0.232	0.271	
2)	L1 CHLORDANE 2	9.74	9.43	2616525	2777146	0.236	0.298	#
3)	L1 CHLORDANE 3	10.83	10.62	2238504	1969766	0.235	0.269	
4)	L1 CHLORDANE 4	11.81	11.54	770185	949508	0.239	0.264	
5)	L1 CHLORDANE 5	12.26	12.05	4773586	4677847	0.259	0.257	
6)	L1 CHLORDANE 6	12.54	12.26	7049915	3860104	0.270	0.253	
7)	L1 CHLORDANE 7	14.05	12.39	776419	3857352	0.189	0.256	#
	Sum CHLORDANE 1			19818372	19740915	1.661	1.867	
Average	CHLORDANE 1					0.237	0.267	

95%

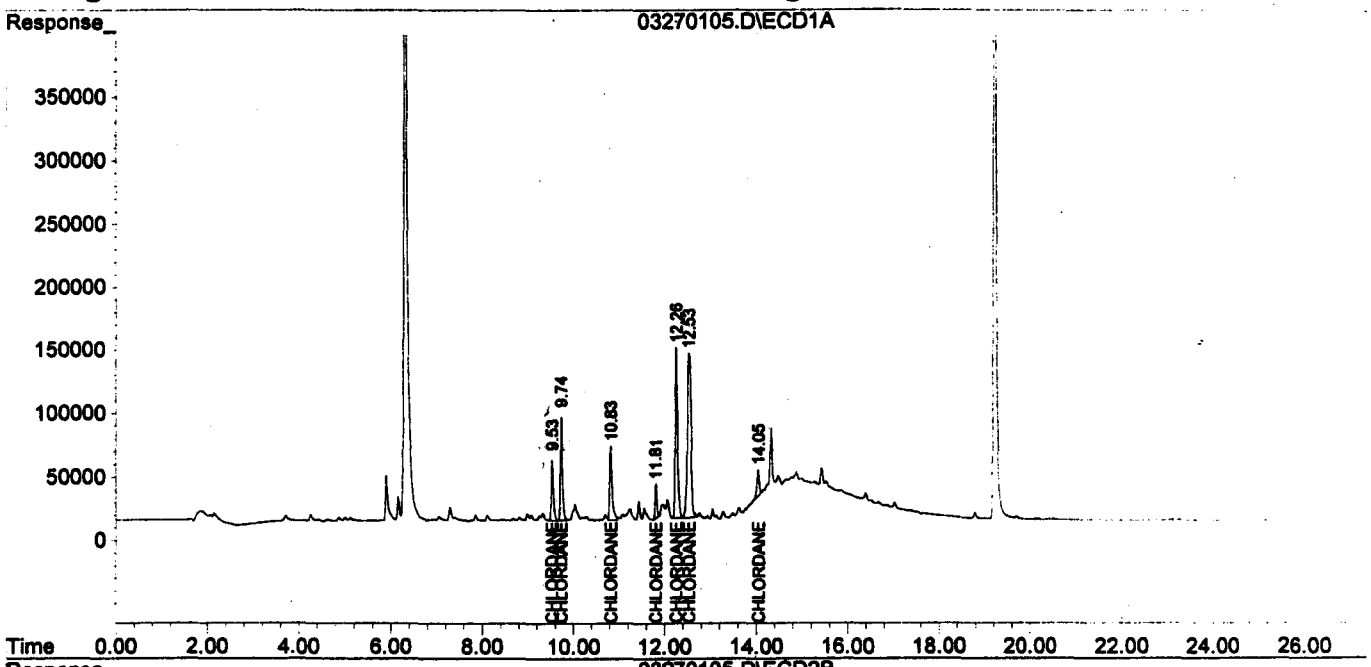
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

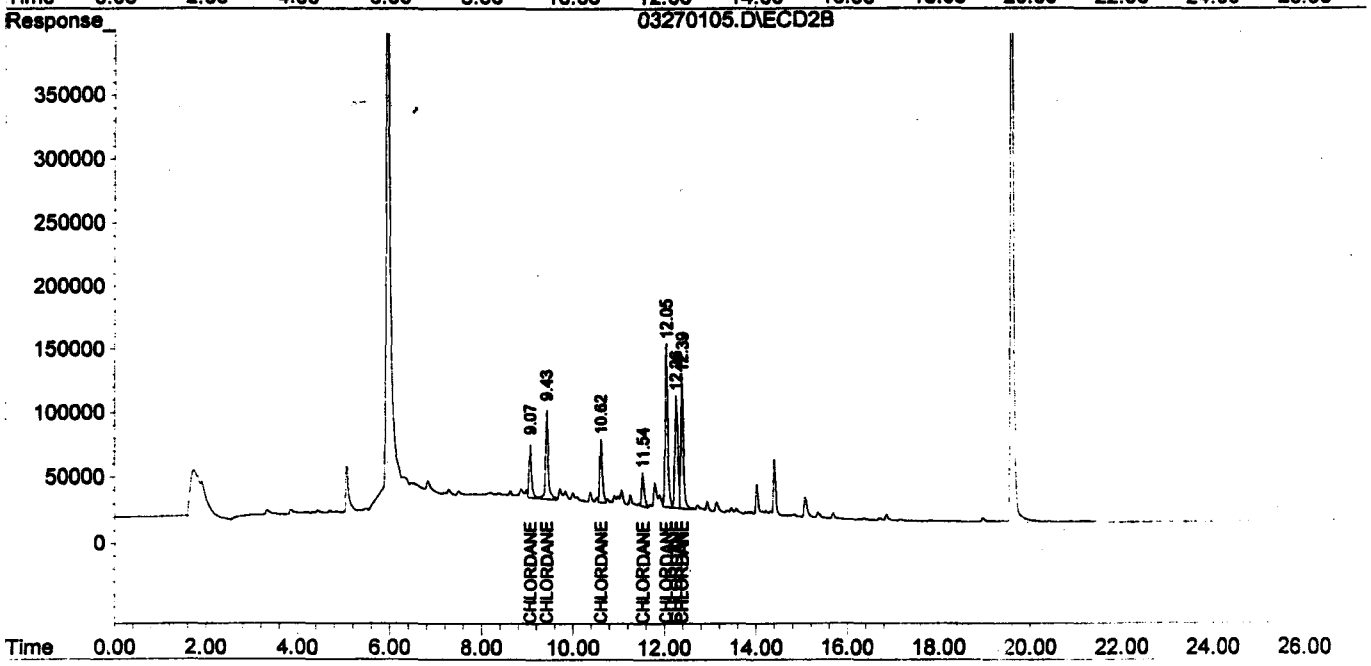
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270105.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\032701\03270105.D\ECD2B.CH
Acq On : 27 Mar 2001 13:40 Operator: YGK
Sample : CCV CHLORD.25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 28 9:02 2001 Quant Results File: 020101CL.RES

Quant Method : C:\HPCHEM\1\METHODS\020101CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC: PEST A,02/01/01
Last Update : Wed Mar 28 09:01:25 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270136.D\ECD1A.CH Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\032701\03270136.D\ECD2B.CH
Acq On : 28 Mar 2001 12:57 Operator: YGK
Sample : CCV CHLORD .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 28 13:33 2001 Quant Results File: 020101CL.RES

Quant Method : C:\HPCHEM\1\METHODS\020101CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC: PEST A,02/01/01
Last Update : Fri Feb 02 09:30:20 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L1 CHLORDANE 1	9.52	9.06	1686369	1669375	0.245	0.274
2)	L1 CHLORDANE 2	9.72	9.42	2682291	2773937	0.242	0.298
3)	L1 CHLORDANE 3	10.82	10.61	2397655	1887988	0.252	0.258
4)	L1 CHLORDANE 4	11.80	11.53	858389	1037574	0.267	0.288
5)	L1 CHLORDANE 5	12.25	12.04	4943560	4867539	0.269	0.267
6)	L1 CHLORDANE 6	12.52	12.25	7250273	4031395	0.278	0.264
7)	L1 CHLORDANE 7	14.04	12.38	900227	3964744	0.219	0.263
	Sum CHLORDANE 1			20718764	20232551	1.772	1.912
Average	CHLORDANE 1					0.253	0.273

101%

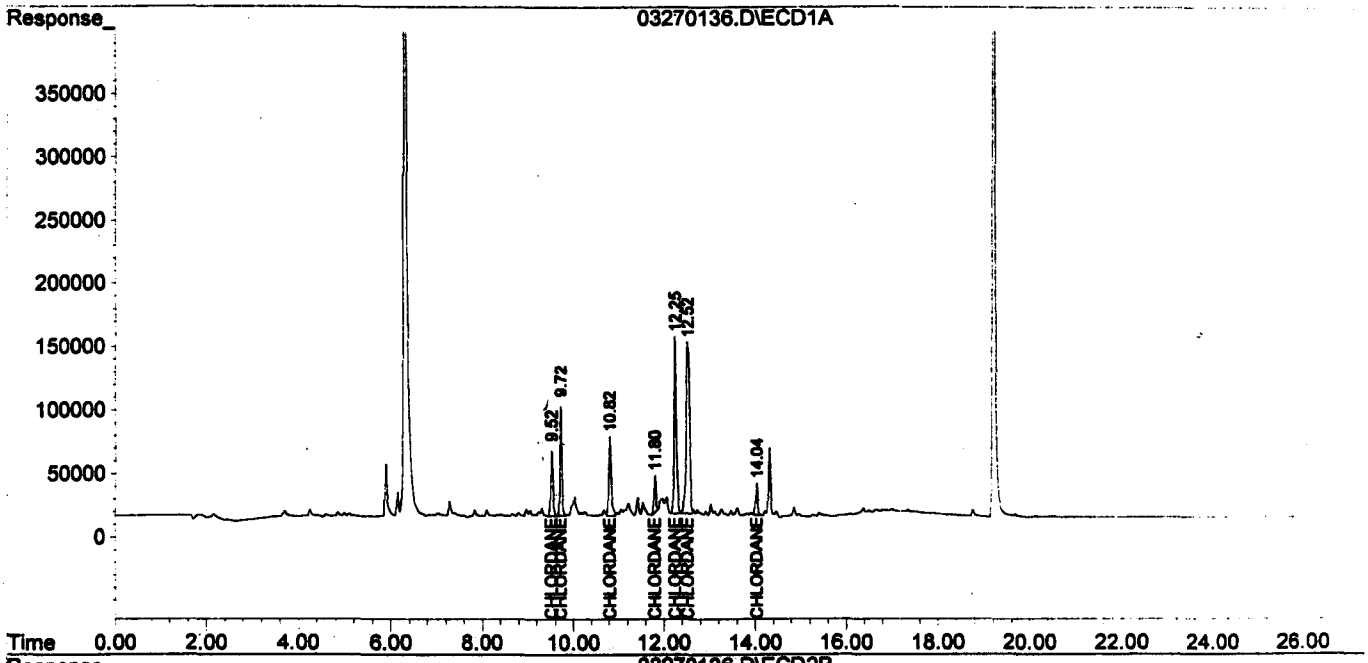
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

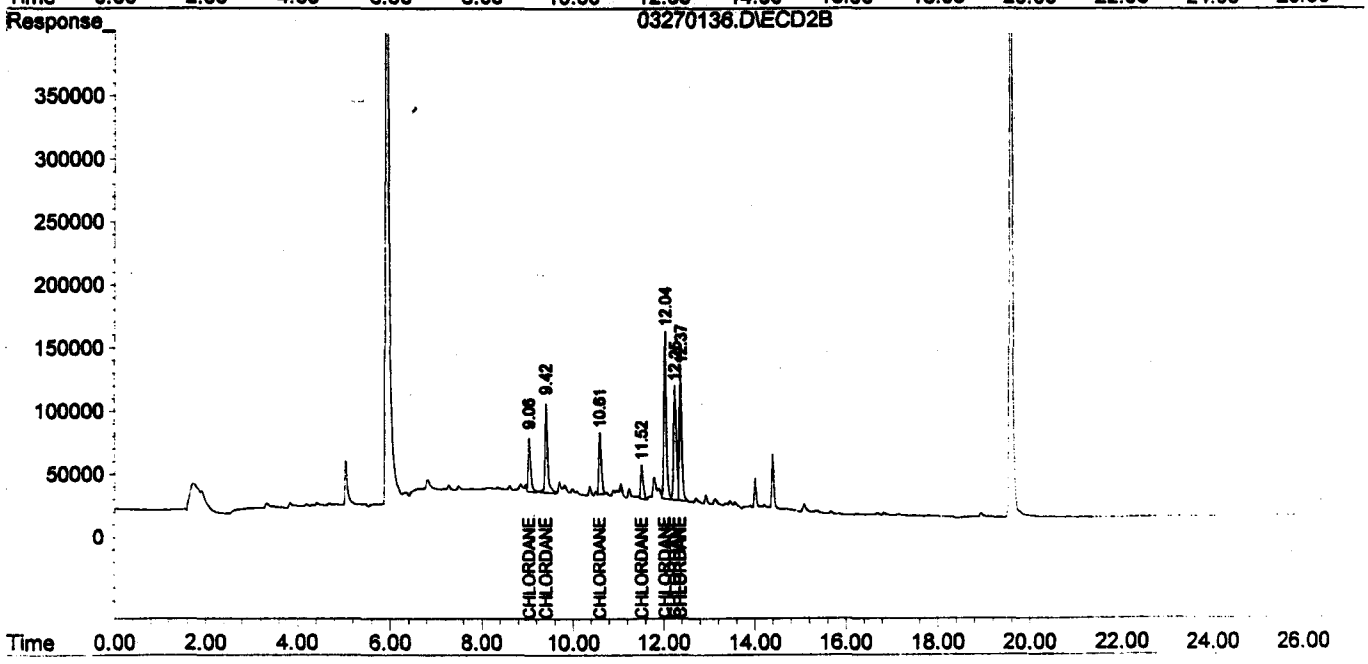
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270136.D\ECD1A.CH Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\032701\03270136.D\ECD2B.CH
Acq On : 28 Mar 2001 12:57 Operator: YGK
Sample : CCV CHLORD .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 28 13:33 2001 Quant Results File: 020101CL.RES

Quant Method : C:\HPCHEM\1\METHODS\020101CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC: PEST A,02/01/01
Last Update : Fri Feb 02 09:30:20 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270106.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\032701\03270106.D\ECD2B.CH
Acq On : 27 Mar 2001 14:16 Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:21 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Wed Mar 28 09:20:43 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1) L	TOXAPHENE	1	13.65	14.28	5762234	6731754	2.201	2.687
2) L	TOXAPHENE	2	14.73	14.49	11857212	16480606	2.834	2.637
3) L	TOXAPHENE	3	15.22	15.07	14041735	12797734	2.662	2.618
4) L	TOXAPHENE	4	15.64	15.25	8340334	14809740	2.644	2.565
5) L	TOXAPHENE	5	16.16	16.19	17032220	20925724	2.602	2.507
6) L	TOXAPHENE	6	16.96	16.32	13751926	12346470	2.679	2.518
7) L	TOXAPHENE	7	17.29	17.05	7588454	8973003	2.742	2.445
Sum	TOXAPHENE	1			78374115	93065031	18.364	17.976
Average	TOXAPHENE	1					2.623	2.568

105%

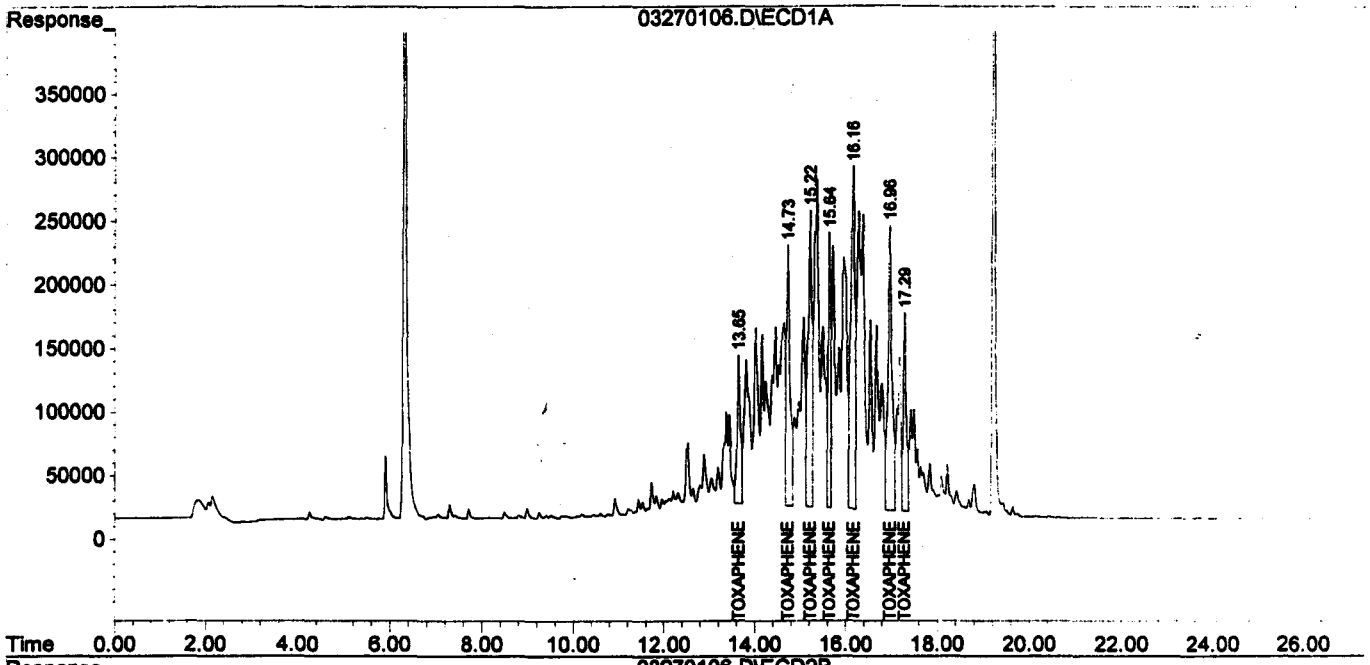
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

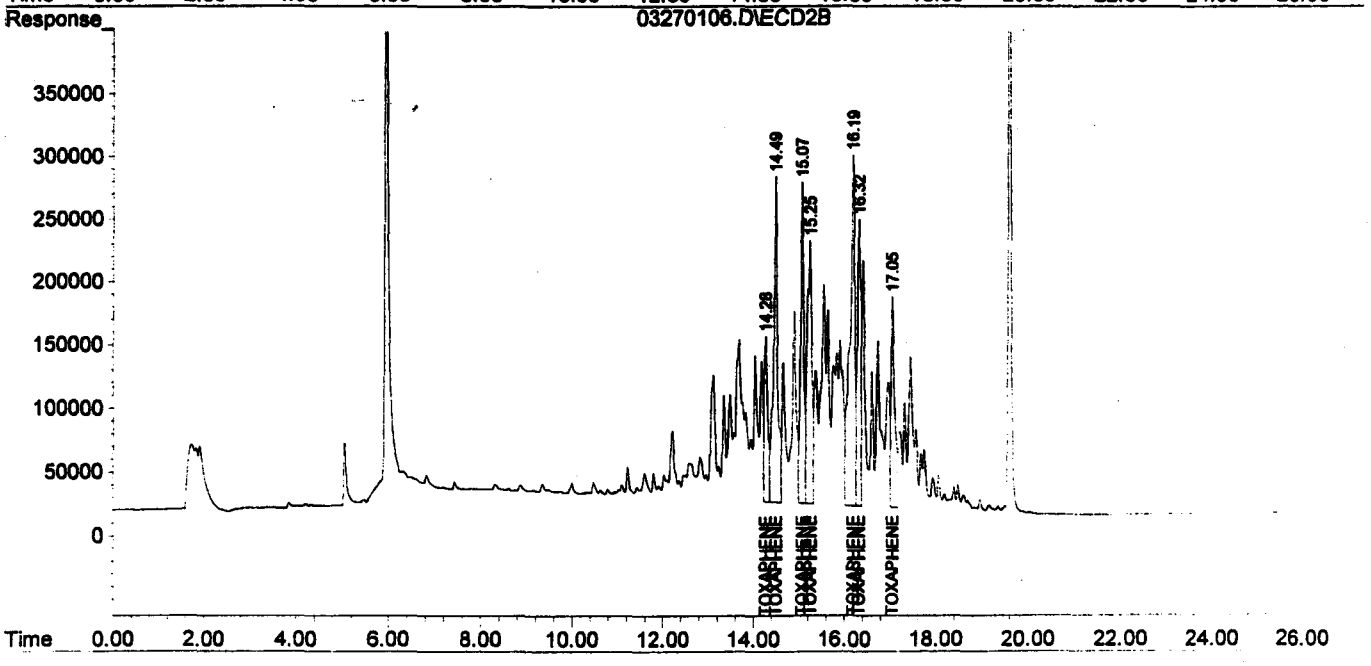
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270106.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\032701\03270106.D\ECD2B.CH
Acq On : 27 Mar 2001 14:16 Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:21 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Wed Mar 28 09:20:43 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





SVO GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

DATE / INSTRUMENT: 01/31/01, PEST-A	METHOD: (circle applicable methods)
MATRIX: —	(8081A) 8082 8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst: YCL	Reviewer:
Date: 02/01/01 Time: 11:05	Date: 2/2/01 Time: 1345

Response Factor Report PEST-A

Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001

Calibration Files
0.01 =01310105.D 0.05 =01310106.D 0.1 =01310108.D
0.25 =01310110.D 0.07 =01310107.D 0.15 =01310109.D

		Compound	0.01	0.05	0.1	0.25	0.07	0.15	Avg		%RSD
1)	S	Tetrachloro-m-xylen	1.619	1.628	1.451	1.296	1.582	1.480	1.509	E8	8.43
2)	T	alpha-BHC	1.742	2.097	1.930	1.869	2.203	2.150	1.999	E8	9.01
3)	T	beta-BHC	1.063	1.035	0.969	0.895	1.031	0.995	0.998	E8	6.04
4)	T	gamma-BHC (Lindane)	1.940	2.071	1.958	1.802	2.091	2.021	1.981	E8	5.36
5)	T	delta-BHC	1.731	2.063	1.966	1.807	2.087	2.038	1.949	E8	7.55
6)	T	Heptachlor	1.689	1.644	1.481	1.314	1.587	1.478	1.532	E8	8.93
7)	T	Aldrin	1.745	1.665	1.496	1.328	1.631	1.502	1.561	E8	9.56
8)	T	Heptachlor epoxide	1.596	1.468	1.315	1.165	1.426	1.310	1.380	E8	10.82
9)	T	Endosulfan I	1.410	1.327	1.216	1.119	1.342	1.236	1.275	E8	8.21
10)	T	gamma-Chlordane	1.641	1.607	1.499	1.382	1.615	1.535	1.546	E8	6.26
11)	T	alpha-Chlordane	1.461	1.149	1.341	1.246	1.391	1.384	1.329	E8	8.49
12)	T	4,4'-DDE	1.199	1.248	1.195	1.136	1.269	1.220	1.211	E8	3.87
13)	T	Dieldrin	1.461	1.339	1.247	1.157	1.333	1.259	1.299	E8	7.96
14)	T	Endrin	9.940	9.798	9.274	8.961	9.839	9.312	9.521	E7	4.13
15)	T	4,4'-DDD	1.020	1.004	0.972	0.939	1.035	0.997	0.995	E8	3.48
16)	T	Endosulfan II	1.178	1.113	1.054	0.982	1.109	1.069	1.084	E8	6.11
17)	T	Endrin aldehyde	1.056	0.951	0.894	0.826	0.958	0.900	0.931	E8	8.34
18)	T	4,4'-DDT	0.938	1.053	1.026	0.996	1.084	1.051	1.025	E8	5.04
19)	T	Endosulfan sulfate	1.136	1.088	1.020	0.940	1.090	1.020	1.049	E8	6.65
20)	T	Methoxychlor		5.677	5.442	5.236	5.793	5.491	5.528	E7	3.91
21)	T	Endrin ketone	1.431	1.317	1.218	1.121	1.317	1.227	1.272	E8	8.41
22)	S	Decachlorobiphenyl	1.813	1.331	1.222	1.074	1.334	1.232	1.334	E8	18.96

Signal #2 Calibration Files
0.01 =01310105.D 0.05 =01310106.D 0.1 =01310108.D
0.25 =01310110.D 0.07 =01310107.D 0.15 =01310109.D

		Compound	0.01	0.05	0.1	0.25	0.07	0.15	Avg		%RSD
1)	S	Tetrachloro-m-xylen	1.236	1.388	1.235	1.134	1.328	1.256	1.263	E8	6.90
2)	T	alpha-BHC	1.411	1.763	1.678	1.674	1.875	1.856	1.710	E8	9.89
3)	T	beta-BHC	7.511	8.697	7.927	8.038	8.900	8.687	8.293	E7	6.60
4)	T	gamma-BHC (Lindane)	1.634	1.761	1.652	1.606	1.788	1.751	1.699	E8	4.53
5)	T	delta-BHC	1.054	1.374	1.397	1.387	1.435	1.464	1.352	E8	11.08
6)	T	Heptachlor	1.843	1.763	1.592	1.418	1.716	1.595	1.654	E8	9.15
7)	T	Aldrin	1.527	1.528	1.408	1.288	1.520	1.421	1.449	E8	6.60
8)	T	Heptachlor epoxide	1.433	1.189	1.253	1.132	1.326	1.259	1.265	E8	8.35
9)	T	Endosulfan I	1.505	1.401	1.269	1.140	1.380	1.265	1.327	E8	9.67
10)	T	gamma-Chlordane	1.666	1.627	1.520	1.399	1.635	1.539	1.564	E8	6.35
11)	T	alpha-Chlordane	1.615	1.540	1.427	1.301	1.540	1.433	1.476	E8	7.57
12)	T	4,4'-DDE	1.385	1.438	1.357	1.256	1.449	1.364	1.375	E8	5.06
13)	T	Dieldrin	1.441	1.423	1.312	1.196	1.416	1.306	1.349	E8	7.05
14)	T	Endrin	1.063	1.093	0.924	0.878	1.008	0.909	0.979	E8	9.01
15)	T	4,4'-DDD	0.938	1.082	0.987	0.937	1.065	0.998	1.001	E8	6.14
16)	T	Endosulfan II	1.413	1.337	1.160	1.041	1.273	1.145	1.228	E8	11.20
17)	T	Endrin aldehyde	1.111	0.973	0.900	0.826	0.981	0.908	0.950	E8	10.23
18)	T	4,4'-DDT	1.017	1.129	1.091	1.033	1.158	1.101	1.088	E8	5.01
19)	T	Endosulfan sulfate	1.234	1.134	1.041	0.961	1.122	1.037	1.088	E8	8.77
20)	T	Methoxychlor		5.025	4.845	4.779	5.025	4.810	4.897	E7	2.43
21)	T	Endrin ketone	1.376	1.226	1.132	1.036	1.221	1.129	1.187	E8	9.79
22)	S	Decachlorobiphenyl	1.700	1.341	1.247	1.171	1.384	1.256	1.350	E8	13.86

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\013101\01310105.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\013101\01310105.D\ECD2B.CH
Acq On : 31 Jan 2001 16:19 Operator: YGK
Sample : IC PEST .010 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 8:41 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/24/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.32	5.96	1618766	1236002	0.011	0.010
		Spiked Amount 0.250			Recovery =		4.40%	4.00%
22)	S	Decachlorobiphen	19.24	19.61	1813310	1699584	0.017	0.015
		Spiked Amount 0.250			Recovery =		6.80%	6.00%
		Target Compounds						
2)	T	alpha-BHC	7.72	7.45	1741911	1411331	0.010	0.009
3)	T	beta-BHC	8.80	8.62	1063114	751127	0.012	0.009
4)	T	gamma-BHC (Linda	8.54	8.36	1940186	1633743	0.011	0.010
5)	T	delta-BHC	9.25	9.36	1730644	1053500	0.010	0.008
6)	T	Heptachlor	9.74	9.44	1689280	1843201	0.014	0.014
7)	T	Aldrin	10.49	10.23	1744692	1526879	0.012	0.010
8)	T	Heptachlor epoxi	11.96	11.61	1595766	1433033	0.012	0.011
9)	T	Endosulfan I	12.89	12.52	1410423	1505362	0.012	0.011
10)	T	gamma-Chlordane	12.26	12.06	1640960	1666064	0.012	0.011
11)	T	alpha-Chlordane	12.57	12.40	1460940	1615202	0.012	0.012
12)	T	4,4'-DDE	12.78	12.84	1198821	1384781	0.011	0.011
13)	T	Dieldrin	13.44	13.15	1460934	1441228	0.012	0.011
14)	T	Endrin	13.98	13.84	994007	1062757	0.011	0.012
15)	T	4,4'-DDD	14.16	14.16	1020451	938390	0.011	0.010
16)	T	Endosulfan II	14.50	14.33	1178396	1412956	0.012	0.012
17)	T	Endrin aldehyde	15.43	15.08	1055693	1111163	0.013	0.012
18)	T	4,4'-DDT	14.77	14.83	938139	1017307	0.011	0.011
19)	T	Endosulfan sulfa	16.40	15.69	1135645	1233788	0.012	0.012
20)	T	Methoxychlor	15.85	16.35	455611	467508	0.011	0.010
21)	T	Endrin ketone	17.03	16.86	1431165	1375701	0.013	0.012

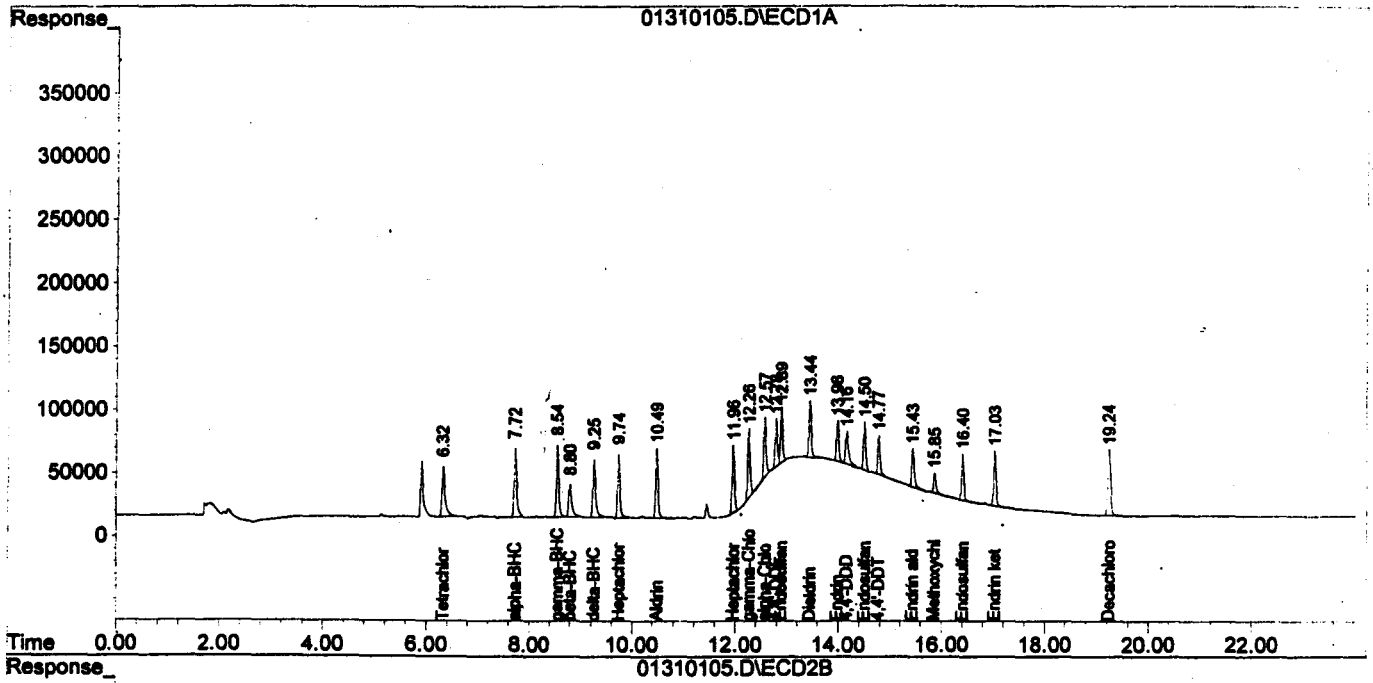
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

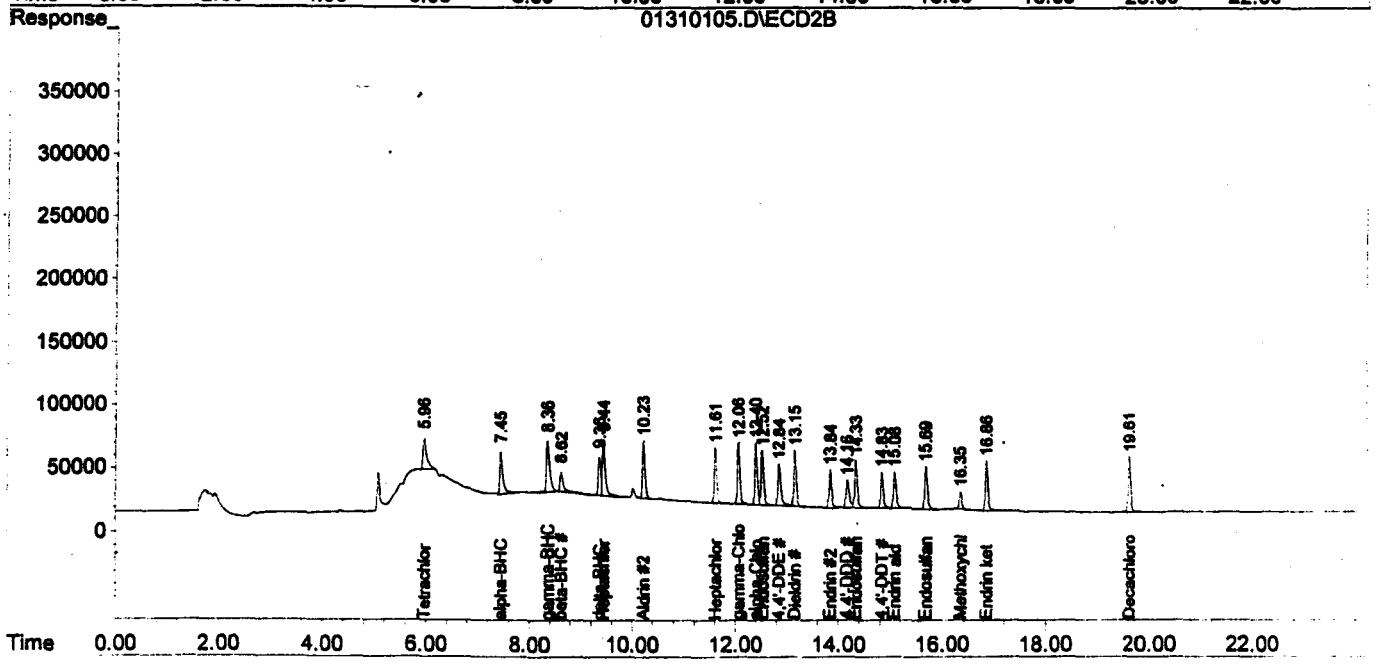
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\013101\01310105.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\013101\01310105.D\ECD2B.CH
Acq On : 31 Jan 2001 16:19 Operator: YGK
Sample : IC PEST .010 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Feb 1 8:41 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/24/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\013101\01310106.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\013101\01310106.D\ECD2B.CH
Acq On : 31 Jan 2001 16:48 Operator: YGK
Sample : IC PEST .050 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:37 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.32	5.96	8139538	6938644	0.054	0.055
		Spiked Amount 0.250			Recovery =		21.60%	22.00%
22)	S	Decachlorobiphen	19.24	19.62	6652836	6703787	0.050	0.050
		Spiked Amount 0.250			Recovery =		20.00%	20.00%
		Target Compounds						
2)	T	alpha-BHC	7.72	7.45	10486969	8813427	0.052	0.052
3)	T	beta-BHC	8.79	8.61	5175502	4348325	0.052	0.052
4)	T	gamma-BHC (Linda	8.55	8.36	10354721	8804314	0.052	0.052
5)	T	delta-BHC	9.25	9.35	10317263	6871518	0.053	0.051
6)	T	Heptachlor	9.75	9.44	8219683	8813736	0.054	0.053
7)	T	Aldrin	10.49	10.23	8324423	7641210	0.053	0.053
8)	T	Heptachlor epoxi	11.97	11.61	7338594	5943096	0.053	0.047
9)	T	Endosulfan I	12.89	12.52	6632571	7007425	0.052	0.053
10)	T	gamma-Chlordane	12.27	12.06	8036846	8133672	0.052	0.052
11)	T	alpha-Chlordane	12.58	12.40	5746248	7700886	0.043	0.052
12)	T	4,4'-DDE	12.78	12.84	6241639	7190602	0.052	0.052
13)	T	Dieldrin	13.45	13.15	6696005	7114282	0.052	0.053
14)	T	Endrin	13.98	13.84	4898967	5464035	0.051	0.056
15)	T	4,4'-DDD	14.15	14.15	5019366	5410410	0.050	0.054
16)	T	Endosulfan II	14.50	14.33	5563519	6687108	0.051	0.054
17)	T	Endrin aldehyde	15.44	15.08	4755691	4867256	0.051	0.051
18)	T	4,4'-DDT	14.77	14.83	5264962	5646921	0.051	0.052
19)	T	Endosulfan sulfa	16.40	15.69	5438207	5671332	0.052	0.052
20)	T	Methoxychlor	15.85	16.34	2838603	2512374	0.051	0.051
21)	T	Endrin ketone	17.03	16.86	6585238	6130261	0.052	0.052

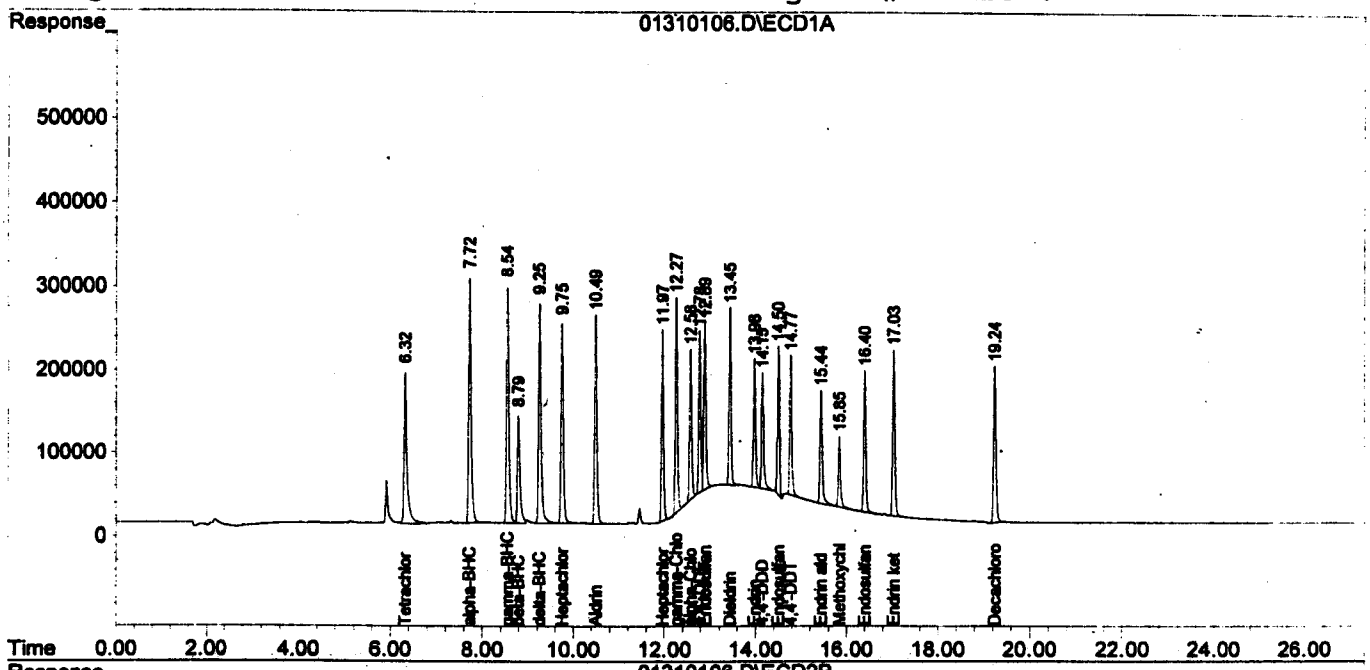
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

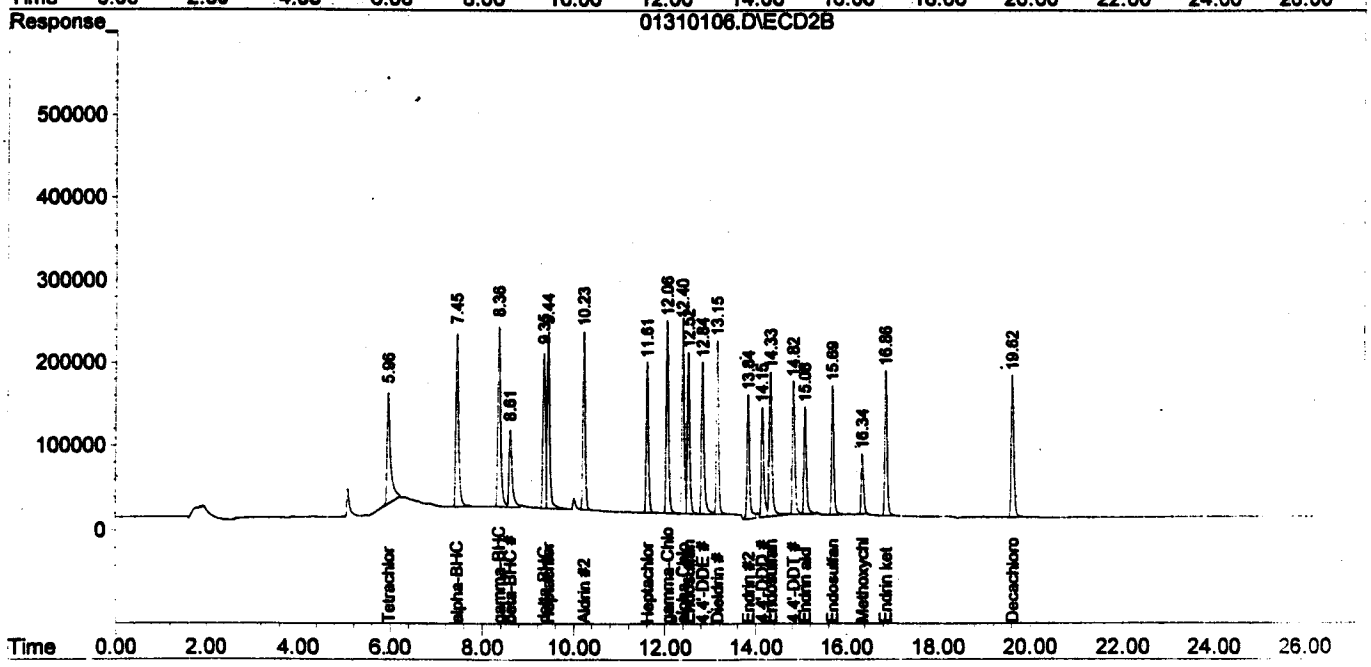
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\013101\01310106.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\013101\01310106.D\ECD2B.CH
Acq On : 31 Jan 2001 16:48 Operator: YGK
Sample : IC PEST .050 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:37 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\013101\01310107.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\013101\01310107.D\ECD2B.CH
Acq On : 31 Jan 2001 17:20 Operator: YGK
Sample : IC PEST .075 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:38 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

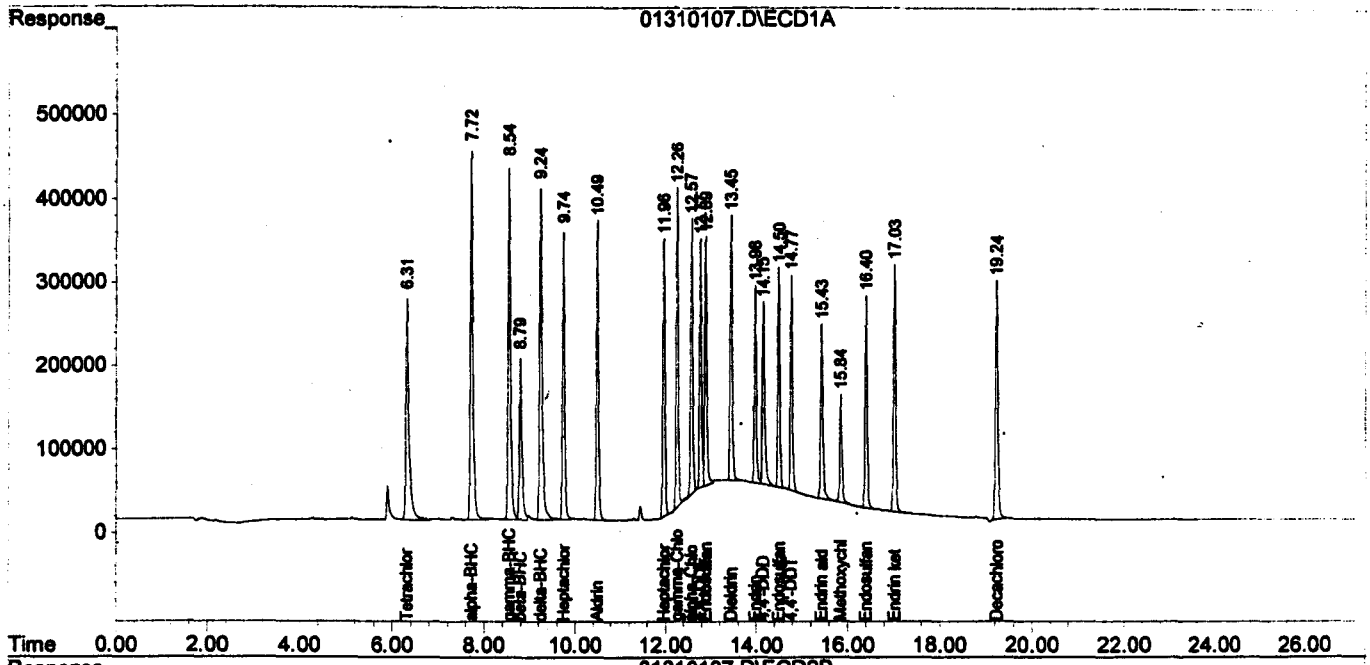
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.31	5.96	11863002	9962681	0.079	0.079
		Spiked Amount 0.250			Recovery =		31.60%	31.60%
22)	S	Decachlorobiphen	19.24	19.62	10002001	10380883	0.075	0.077
		Spiked Amount 0.250			Recovery =		30.00%	30.80%
		Target Compounds						
2)	T	alpha-BHC	7.72	7.45	16525546	14062962	0.083	0.082
3)	T	beta-BHC	8.79	8.61	7733860	6674826	0.077	0.080
4)	T	gamma-BHC (Linda	8.54	8.36	15685507	13411131	0.079	0.079
5)	T	delta-BHC	9.25	9.34	15653116	10761728	0.080	0.080
6)	T	Heptachlor	9.75	9.44	11902952	12872104	0.078	0.078
7)	T	Aldrin	10.49	10.23	12234989	11399700	0.078	0.079
8)	T	Heptachlor epoxi	11.96	11.62	10696910	9946016	0.078	0.079
9)	T	Endosulfan I	12.89	12.52	10065873	10352554	0.079	0.078
10)	T	gamma-Chlordane	12.26	12.06	12109064	12261265	0.078	0.078
11)	T	alpha-Chlordane	12.57	12.40	10432572	11550909	0.079	0.078
12)	T	4,4'-DDE	12.77	12.83	9521094	10865391	0.079	0.079
13)	T	Dieldrin	13.45	13.15	9998149	10623438	0.077	0.079
14)	T	Endrin	13.98	13.84	7379384	7561729	0.078	0.077
15)	T	4,4'-DDD	14.15	14.14	7760789	7986189	0.078	0.080
16)	T	Endosulfan II	14.50	14.33	8315880	9544058	0.077	0.078
17)	T	Endrin aldehyde	15.43	15.08	7185383	7354935	0.077	0.077
18)	T	4,4'-DDT	14.77	14.82	8128715	8688262	0.079	0.080
19)	T	Endosulfan sulfa	16.40	15.68	8177071	8413633	0.078	0.077
20)	T	Methoxychlor	15.84	16.34	4344992	3768734	0.079	0.077
21)	T	Endrin ketone	17.03	16.86	9876765	9156525	0.078	0.077

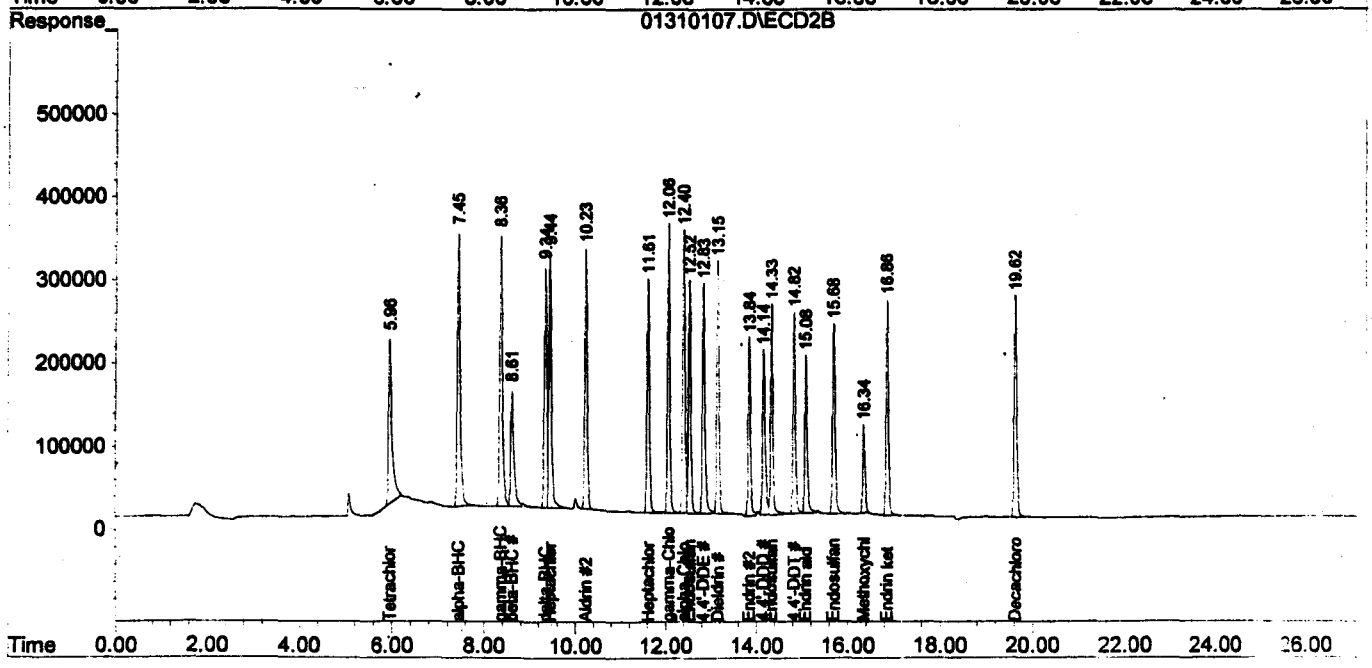
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\013101\01310107.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\013101\01310107.D\ECD2B.CH
Acq On : 31 Jan 2001 17:20 Operator: YGK
Sample : IC PEST .075 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:38 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\013101\01310108.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\013101\01310108.D\ECD2B.CH
Acq On : 31 Jan 2001 17:53 Operator: YGK
Sample : IC PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:38 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

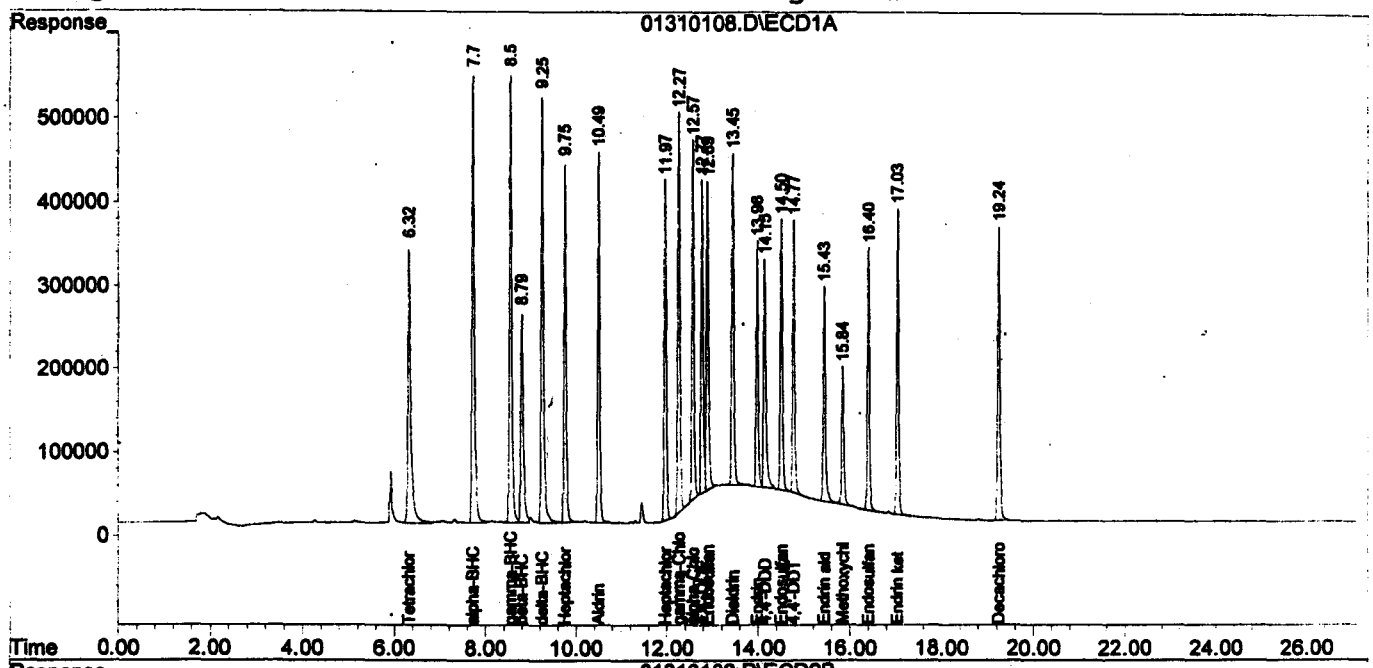
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.32	5.96	14505881	12345227	0.096	0.098
		Spiked Amount 0.250			Recovery =		38.40%	39.20%
22)	S	Decachlorobiphen	19.24	19.62	12219835	12473930	0.092	0.092
		Spiked Amount 0.250			Recovery =		36.80%	36.80%
		Target Compounds						
2)	T	alpha-BHC	7.72	7.45	19302703	16783910	0.097	0.098
3)	T	beta-BHC	8.79	8.61	9686262	7926689	0.097	0.096
4)	T	gamma-BHC (Linda	8.54	8.36	19580485	16515466	0.099	0.097
5)	T	delta-BHC	9.25	9.34	19663805	13968137	0.101	0.103
6)	T	Heptachlor	9.75	9.44	14810360	15923244	0.097	0.096
7)	T	Aldrin	10.49	10.23	14961973	14079778	0.096	0.097
8)	T	Heptachlor epoxi	11.97	11.62	13153004	12532932	0.095	0.099
9)	T	Endosulfan I	12.89	12.52	12157915	12690196	0.095	0.096
10)	T	gamma-Chlordane	12.27	12.06	14985482	15198669	0.097	0.097
11)	T	alpha-Chlordane	12.57	12.40	13405781	14266223	0.101	0.097
12)	T	4,4'-DDE	12.77	12.83	11950466	13573988	0.099	0.099
13)	T	Dieldrin	13.45	13.15	12473227	13122297	0.096	0.097
14)	T	Endrin	13.98	13.84	9273863	9239999	0.097	0.094
15)	T	4,4'-DDD	14.15	14.14	9723454	9873629	0.098	0.099
16)	T	Endosulfan II	14.50	14.33	10539373	11601160	0.097	0.094
17)	T	Endrin aldehyde	15.44	15.08	8942402	8997788	0.096	0.095
18)	T	4,4'-DDT	14.77	14.82	10260493	10914393	0.100	0.100
19)	T	Endosulfan sulfa	16.40	15.69	10199011	10408668	0.097	0.096
20)	T	Methoxychlor	15.84	16.34	5441601	4844699	0.098	0.099
21)	T	Endrin ketone	17.03	16.86	12180083	11321559	0.096	0.095

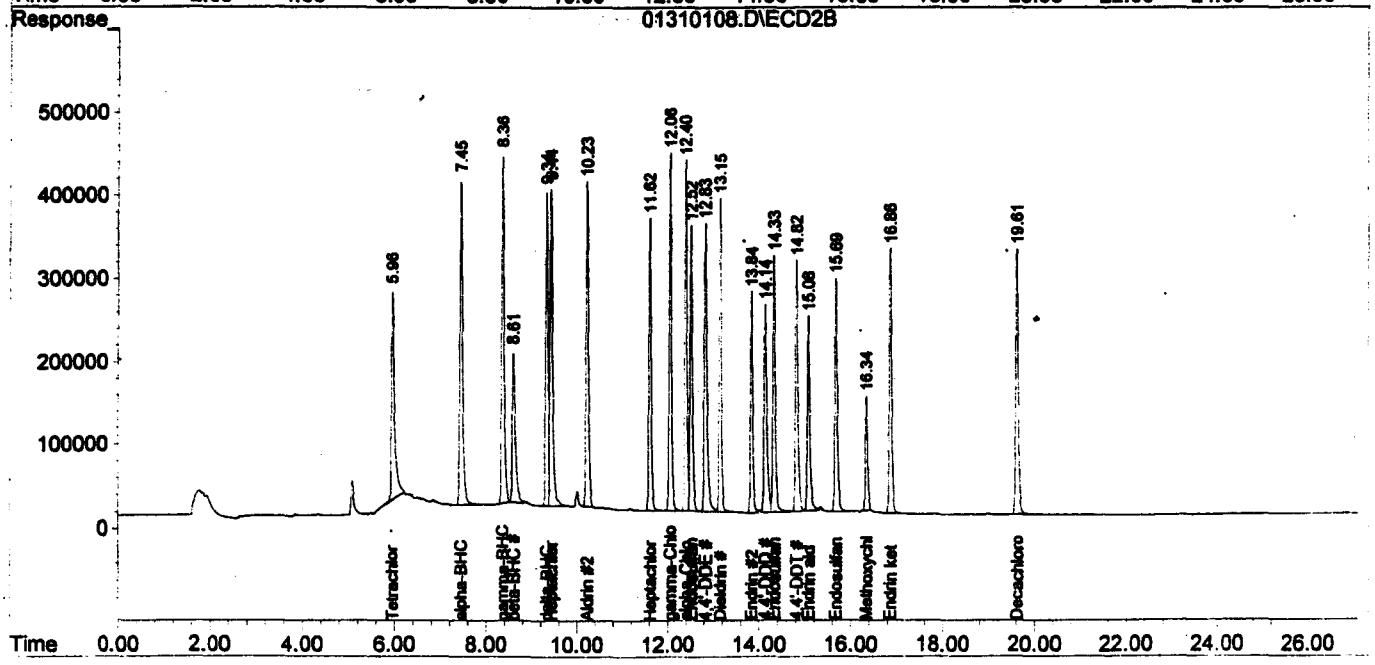
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\013101\01310108.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\013101\01310108.D\ECD2B.CH
Acq On : 31 Jan 2001 17:53 Operator: YGK
Sample : IC PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:38 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\013101\01310109.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\013101\01310109.D\ECD2B.CH
Acq On : 31 Jan 2001 18:25 Operator: YGK
Sample : IC PEST .15 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:39 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

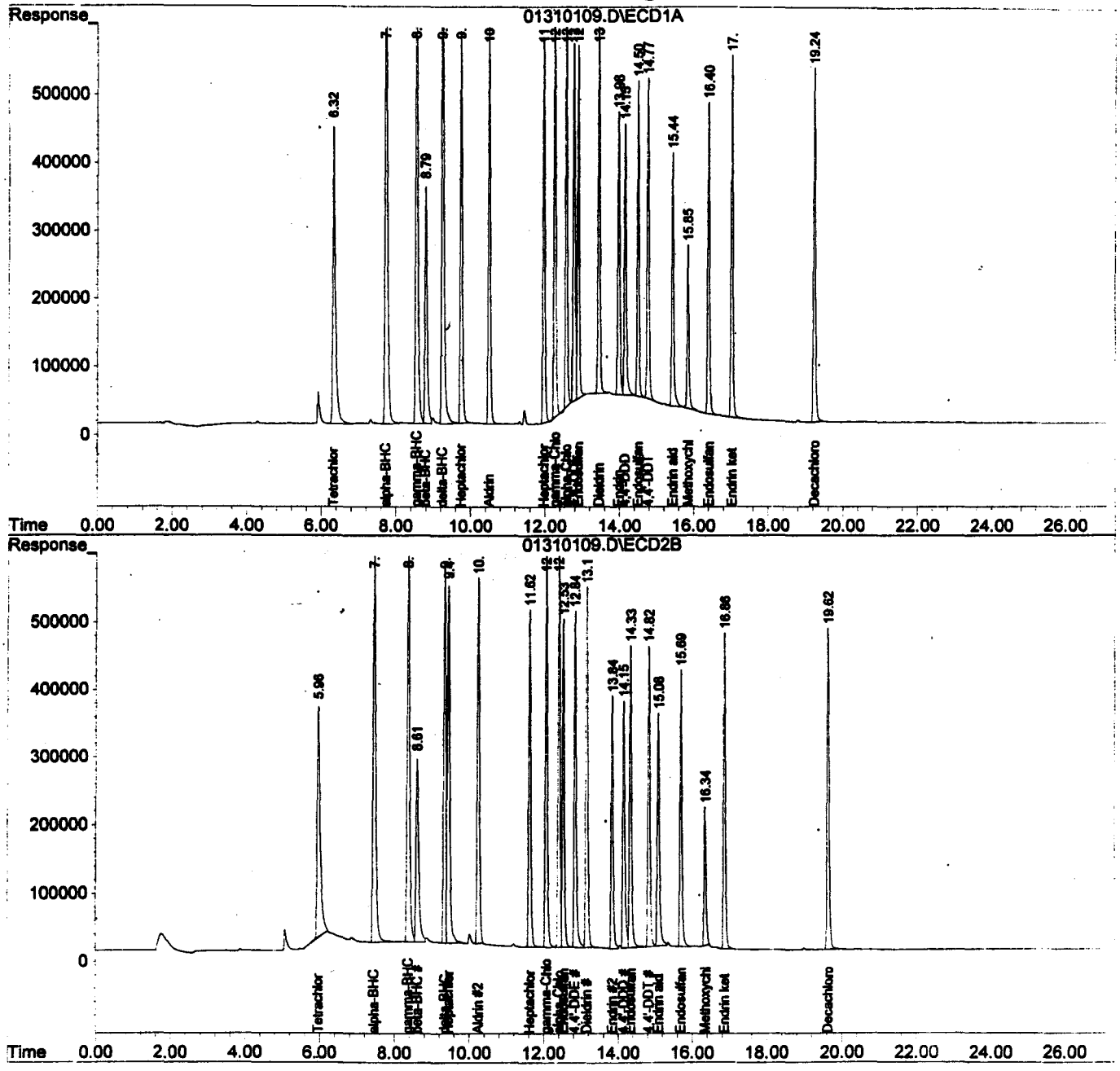
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.32	5.96	22195394	18843417	0.147	0.149
		Spiked Amount 0.250			Recovery =		58.80%	59.60%
22)	S	Decachlorobiphen	19.24	19.62	18484247	18838642	0.139	0.140
		Spiked Amount 0.250			Recovery =		55.60%	56.00%
		Target Compounds						
2)	T	alpha-BHC	7.72	7.45	32254009	27839405	0.161	0.163
3)	T	beta-BHC	8.79	8.61	14919718	13030071	0.149	0.157
4)	T	gamma-BHC (Linda	8.55	8.36	30321307	26265384	0.153	0.155
5)	T	delta-BHC	9.25	9.34	30566968	21958613	0.157	0.162
6)	T	Heptachlor	9.75	9.45	22165262	23918331	0.145	0.145
7)	T	Aldrin	10.50	10.24	22531301	21311144	0.144	0.147
8)	T	Heptachlor epoxi	11.97	11.62	19644575	18887103	0.142	0.149
9)	T	Endosulfan I	12.90	12.53	18543126	18978717	0.145	0.143
10)	T	gamma-Chlordane	12.27	12.07	23018265	23077536	0.149	0.148
11)	T	alpha-Chlordane	12.58	12.40	20761604	21498072	0.156	0.146
12)	T	4,4'-DDE	12.78	12.84	18296349	20456077	0.151	0.149
13)	T	Dieldrin	13.45	13.16	18883848	19592671	0.145	0.145
14)	T	Endrin	13.99	13.85	13968278	13633399	0.147	0.139
15)	T	4,4'-DDD	14.15	14.15	14954347	14970679	0.150	0.150
16)	T	Endosulfan II	14.50	14.33	16041004	17179284	0.148	0.140
17)	T	Endrin aldehyde	15.44	15.08	13495806	13612848	0.145	0.143
18)	T	4,4'-DDT	14.77	14.83	15772364	16515532	0.154	0.152
19)	T	Endosulfan sulfa	16.41	15.69	15303861	15557635	0.146	0.143
20)	T	Methoxychlor	15.85	16.34	8237134	7215445	0.149	0.147
21)	T	Endrin ketone	17.03	16.86	18410496	16940006	0.145	0.143

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\013101\01310109.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\013101\01310109.D\ECD2B.CH
Acq On : 31 Jan 2001 18:25 Operator: YGK
Sample : IC PEST .15 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:39 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\013101\01310110.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\013101\01310110.D\ECD2B.CH
Acq On : 31 Jan 2001 18:57 Operator: YGK
Sample : IC PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:40 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.31	5.95	32409017	28354698	0.215	0.225
		Spiked Amount 0.250			Recovery =		86.00%	90.00%
22)	S	Decachlorobiphen	19.24	19.61	26860923	29271136	0.201	0.217
		Spiked Amount 0.250			Recovery =		80.40%	86.80%
		Target Compounds						
2)	T	alpha-BHC	7.72	7.45	46731264	41843675	0.234	0.245
3)	T	beta-BHC	8.79	8.60	22381928	20095033	0.224	0.242
4)	T	gamma-BHC (Linda	8.54	8.36	45042757	40149919	0.227	0.236
5)	T	delta-BHC	9.24	9.33	45171868	34665693	0.232	0.256
6)	T	Heptachlor	9.75	9.44	32842079	35446072	0.214	0.214
7)	T	Aldrin	10.50	10.23	33198356	32209128	0.213	0.222
8)	T	Heptachlor epoxi	11.97	11.62	29135305	28289510	0.211	0.224
9)	T	Endosulfan I	12.90	12.52	27977037	28506388	0.219	0.215
10)	T	gamma-Chlordane	12.27	12.06	34538500	34964555	0.223	0.224
11)	T	alpha-Chlordane	12.58	12.40	31160295	32530821	0.235	0.220
12)	T	4,4'-DDE	12.77	12.83	28387891	31393868	0.234	0.228
13)	T	Dieldrin	13.45	13.15	28919653	29892984	0.223	0.222
14)	T	Endrin	13.98	13.84	22402347	21956413	0.235	0.224
15)	T	4,4'-DDD	14.14	14.14	23468588	23412836	0.236	0.234
16)	T	Endosulfan II	14.50	14.33	24541763	26023060	0.226	0.212
17)	T	Endrin aldehyde	15.43	15.08	20637783	20645495	0.222	0.217
18)	T	4,4'-DDT	14.77	14.82	24908142	25833255	0.243	0.237
19)	T	Endosulfan sulfa	16.40	15.68	23495994	24016512	0.224	0.221
20)	T	Methoxychlor	15.84	16.34	13088823	11948109	0.237	0.244
21)	T	Endrin ketone	17.03	16.85	28017835	25891687	0.220	0.218

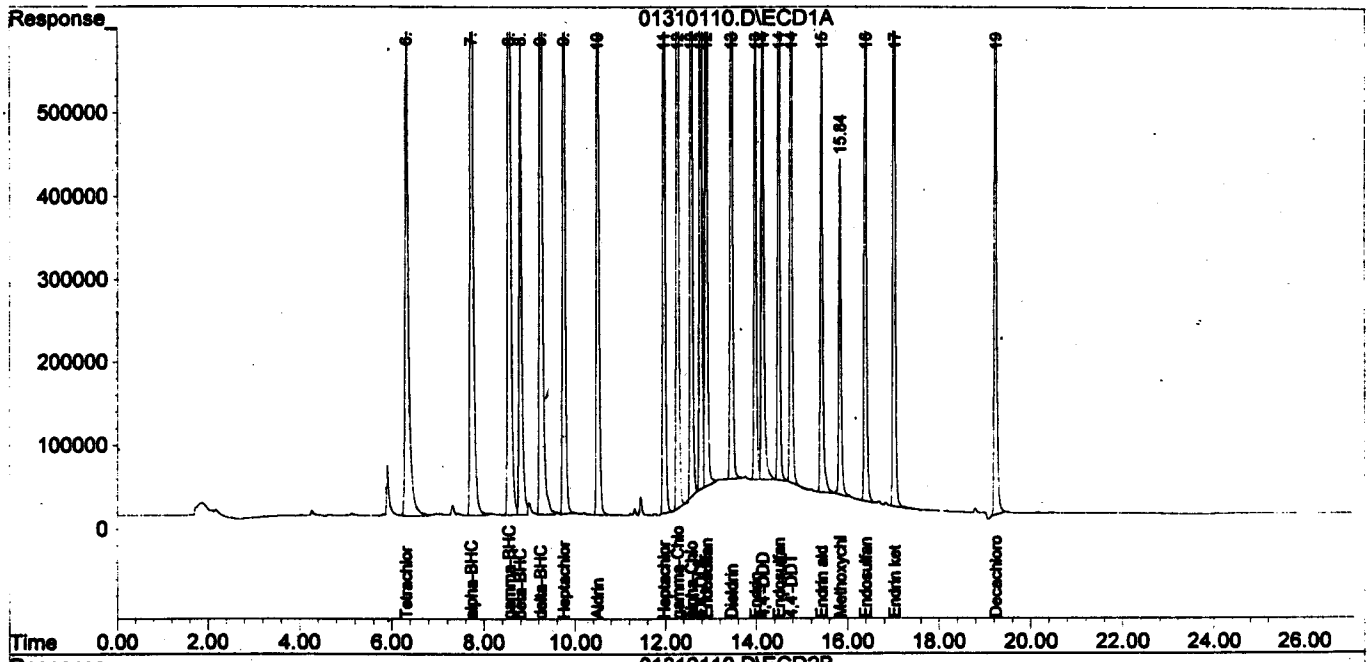
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

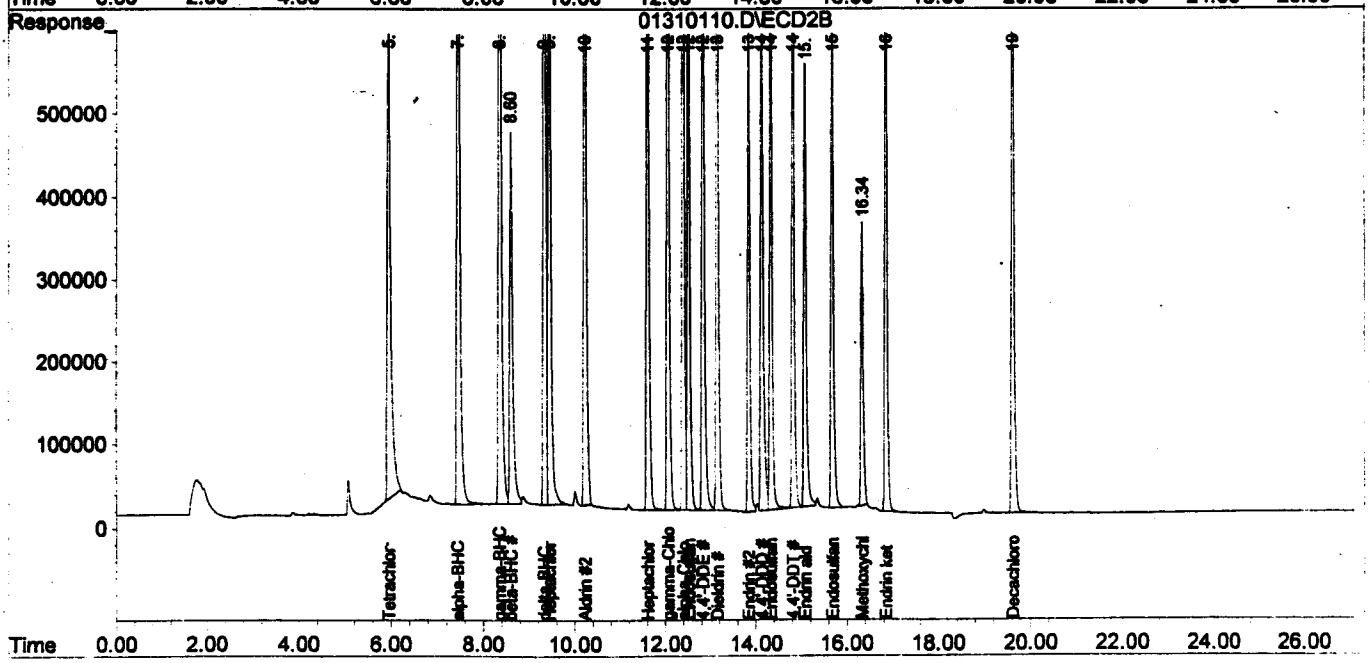
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\013101\01310110.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\013101\01310110.D\ECD2B.CH
Acq On : 31 Jan 2001 18:57 Operator: YGK
Sample : IC PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:40 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\013101\01310111.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\013101\01310111.D\ECD2B.CH
Acq On : 31 Jan 2001 19:29 Operator: YGK
Sample : ICV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:41 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

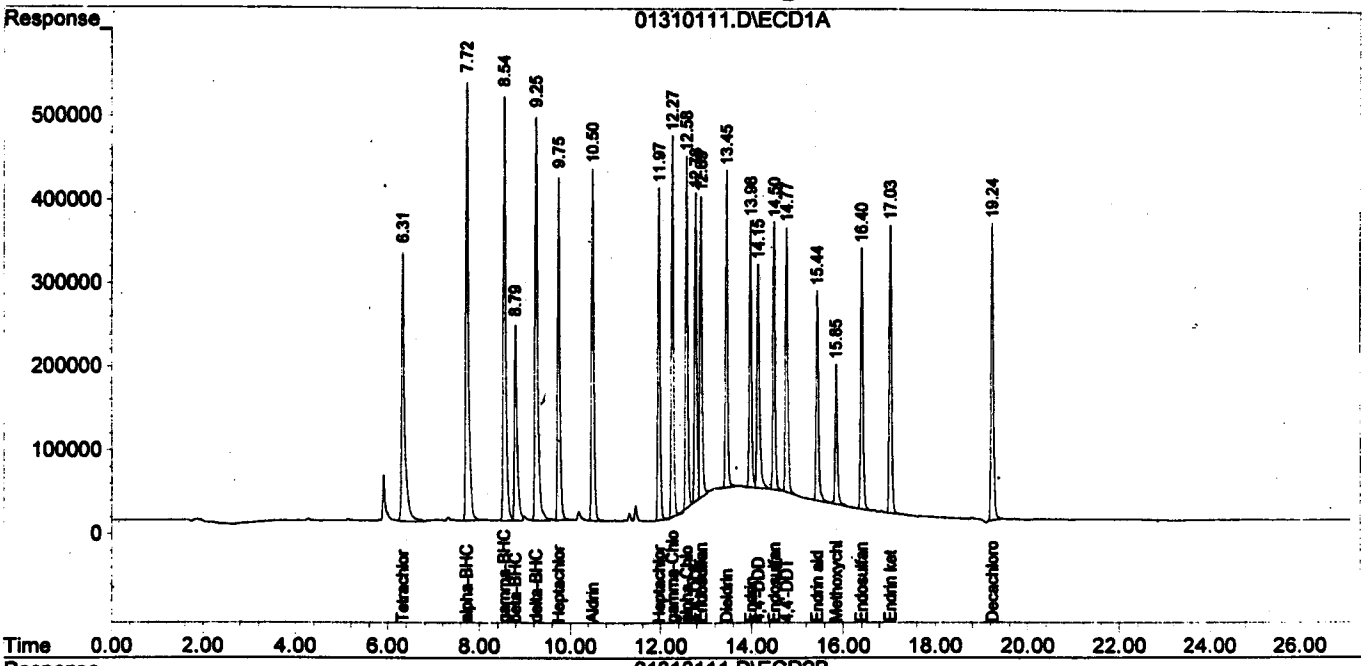
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.32	5.96	14925265	12430995	0.099	0.098
		Spiked Amount 0.250			Recovery =		39.60%	39.20%
22)	S	Decachlorobiphen	19.24	19.61	12749146	12869896	0.096	0.095
		Spiked Amount 0.250			Recovery =		38.40%	38.00%
		Target Compounds						
2)	T	alpha-BHC	7.72	7.45	20085749	17495403	0.100	0.102
3)	T	beta-BHC	8.79	8.61	9595114	8263649	0.096	0.100
4)	T	gamma-BHC (Linda	8.54	8.36	19641107	16912988	0.099	0.100
5)	T	delta-BHC	9.25	9.34	19626921	13669972	0.101	0.101
6)	T	Heptachlor	9.75	9.44	15107659	16245723	0.099	0.098
7)	T	Aldrin	10.50	10.23	15278510	14280896	0.098	0.099
8)	T	Heptachlor epoxi	11.97	11.62	13643851	12829386	0.099	0.101
9)	T	Endosulfan I	12.89	12.53	12694556	12769704	0.100	0.096
10)	T	gamma-Chlordane	12.27	12.06	15265775	15089751	0.099	0.096
11)	T	alpha-Chlordane	12.58	12.40	13846200	14234762	0.104	0.096
12)	T	4,4'-DDE	12.78	12.84	12431281	13614224	0.103	0.099
13)	T	Dieldrin	13.45	13.15	12610109	13060592	0.097	0.097
14)	T	Endrin	13.98	13.84	10619873	10427172	0.112	0.106
15)	T	4,4'-DDD	14.15	14.14	9917716	9870715	0.100	0.099
16)	T	Endosulfan II	14.50	14.33	10797203	11550627	0.100	0.094
17)	T	Endrin aldehyde	15.44	15.08	8936758	8982036	0.096	0.095
18)	T	4,4'-DDT	14.77	14.82	10416967	10885925	0.102	0.100
19)	T	Endosulfan sulfa	16.40	15.69	10332829	10494657	0.099	0.096
20)	T	Methoxychlor	15.85	16.34	5706120	5045582	0.103	0.103
21)	T	Endrin ketone	17.03	16.86	11800508	10877983	0.093	0.092

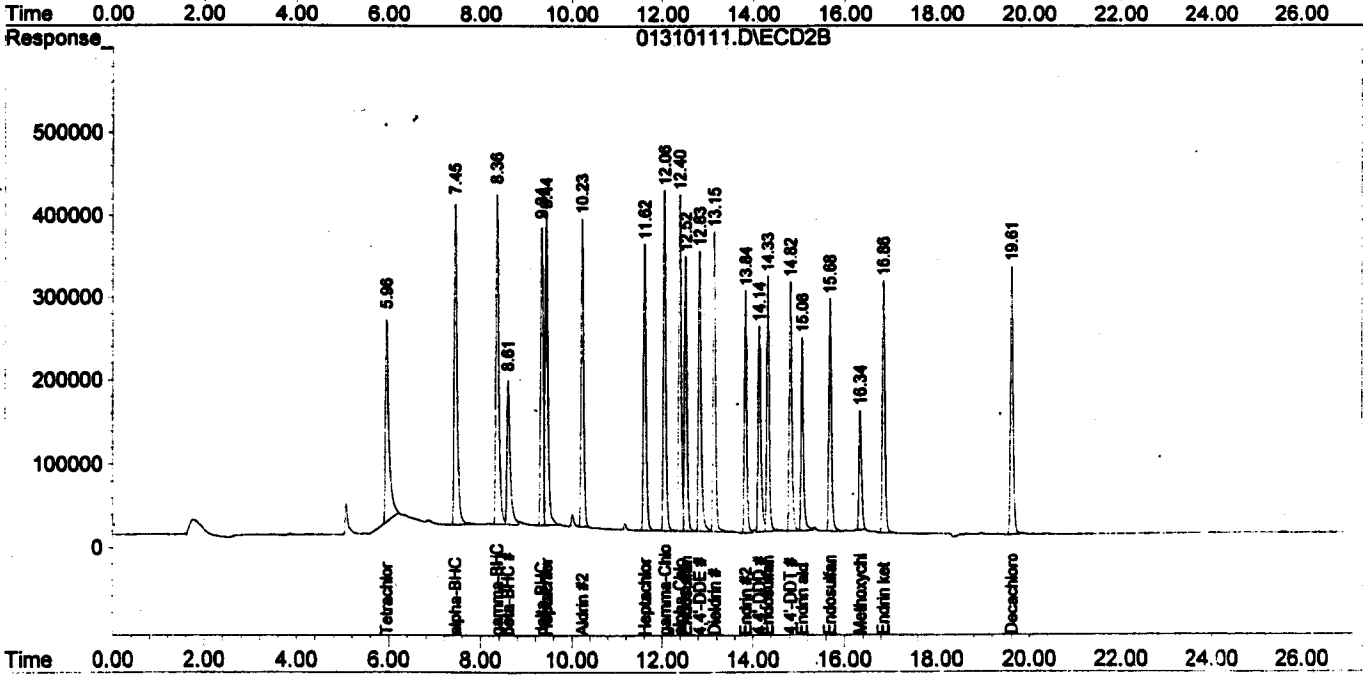
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\013101\01310111.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\013101\01310111.D\ECD2B.CH
Acq On : 31 Jan 2001 19:29 Operator: YGK
Sample : ICV PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Feb 1 10:41 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Wed Jan 31 16:02:03 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 01/31/01
Analyst Initials: YGK
Instrument Method: 8081D2
Calibration Column: Rtx-CLP1
Confirmation Column: Rtx-CLP11

DDT Breakdown % (<15%): 4.5%
Endrin Breakdown % (<15%): 5.4%

Pest Calibration Date: 01/31/01
PCB Calibration Date:

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	50-150	50-150
Water	30-150	D-150

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	013101P	std	1X	NA	NA	
2	Hexane		solv				
3	PEM		std				P00182
4	Ccv Pest.25 ppm						P00185
5	IC Pest.010 ppm						P00188
6	.050 ppm						P00187
7	.075 ppm						P01022
8	.10 ppm						P00186
9	.15 ppm						P01023
10	.25 ppm						P00185
11	Icv Pest.10 ppm				99	96	P01024

YGK 01/31/01

Signature/Date: [signature] 01/31/01

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270130.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\032701\03270130.D\ECD2B.CH
Acq On : 28 Mar 2001 9:49 Operator: YGK
Sample : 10154 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 11:59 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.29	5.93	8473513	7348744	0.056	0.058	
		Spiked Amount 0.100			Recovery	=	56.00% ✓	58.00%	
22)	S	Decachlorobiphen	19.21	19.58	8594887	7996107	0.064	0.059	
		Spiked Amount 0.100			Recovery	=	64.00% ✓	59.00%	
		Target Compounds							
2)	T	alpha-BHC	7.70	7.42	234608	219083	0.001	0.001	
3)	T	beta-BHC	8.77✓	8.58✓	3760745	3103974	0.038 ✓	0.037	
4)	T	gamma-BHC (Linda	0.00	0.00	0	0	N.D.	N.D.	
5)	T	delta-BHC	9.23	9.32	259443	319469	0.001	0.002	#
6)	T	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
7)	T	Aldrin	10.44	0.00	289441	0	0.002	N.D.	#
8)	T	Heptachlor epoxi	11.94	0.00	22524	0	0.000	N.D.	#
9)	T	Endosulfan I	12.85	12.52	157506	175869	0.001	0.001	
10)	T	gamma-Chlordane	12.18f	12.02	46533	327452	0.000	0.002	#
11)	T	alpha-Chlordane	12.60f	0.00	101313	0	0.001	N.D.	#
12)	T	4,4'-DDE	12.85f	0.00	157506	0	0.001	N.D.	#
13)	T	Dieldrin	0.00	13.06f	0	13904	N.D.	0.000	#
14)	T	Endrin	13.89f	0.00	60275	0	0.001	N.D.	#
15)	T	4,4'-DDD	14.14	14.09	60901	514827	0.001	0.005	#
16)	T	Endosulfan II	14.47	14.30	159715	354939	0.001	0.003	#
17)	T	Endrin aldehyde	15.41	15.05	406919	1056972	0.004	0.011	#
18)	T	4,4'-DDT	14.68f	14.73f	417247	24837	0.004	0.000	#
19)	T	Endosulfan sulfa	16.38	15.65	44204	27682	0.000	0.000	#
20)	T	Methoxychlor	15.80	16.22f	70468	304847	0.001	0.006	#
21)	T	Endrin ketone	17.06f	16.82	218930	51709	0.002	0.000	#

dil: 0.005 B-BHC : 0.19 ppb
rest Pest < DL

Endr. Ald. - see run #18

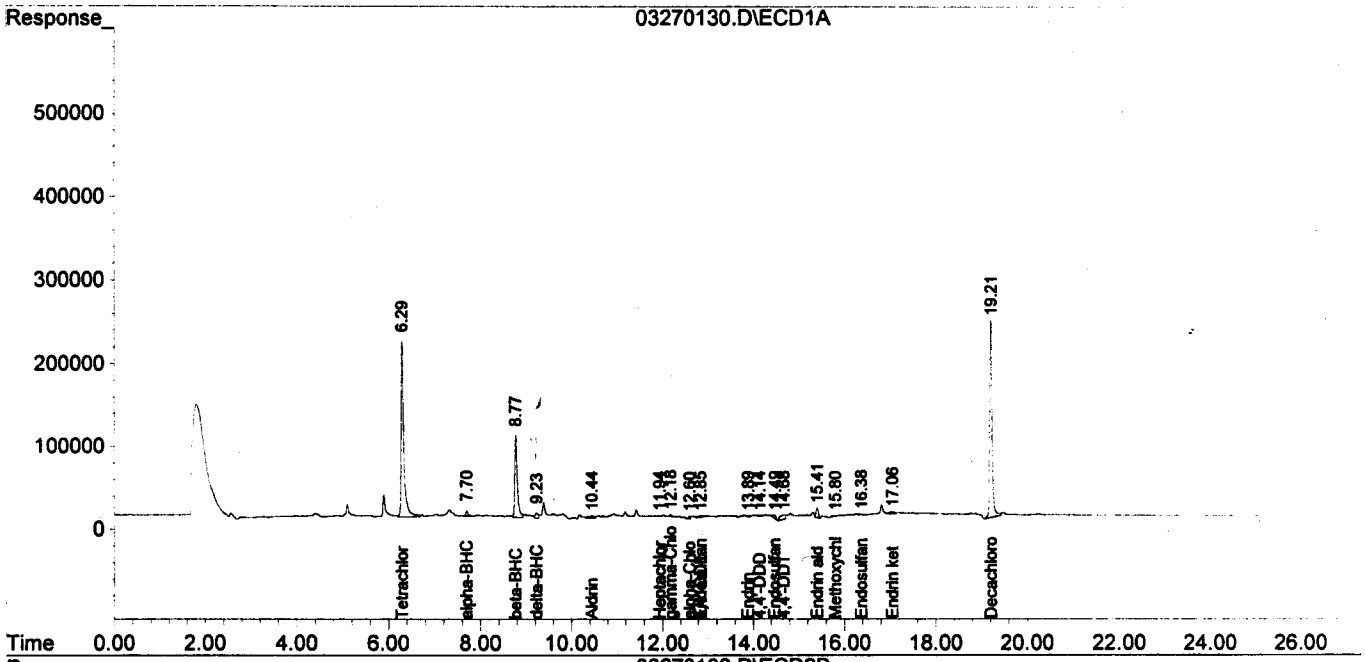
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
3270130.D 013101P.M Wed Mar 28 12:00:2[illegible] Page

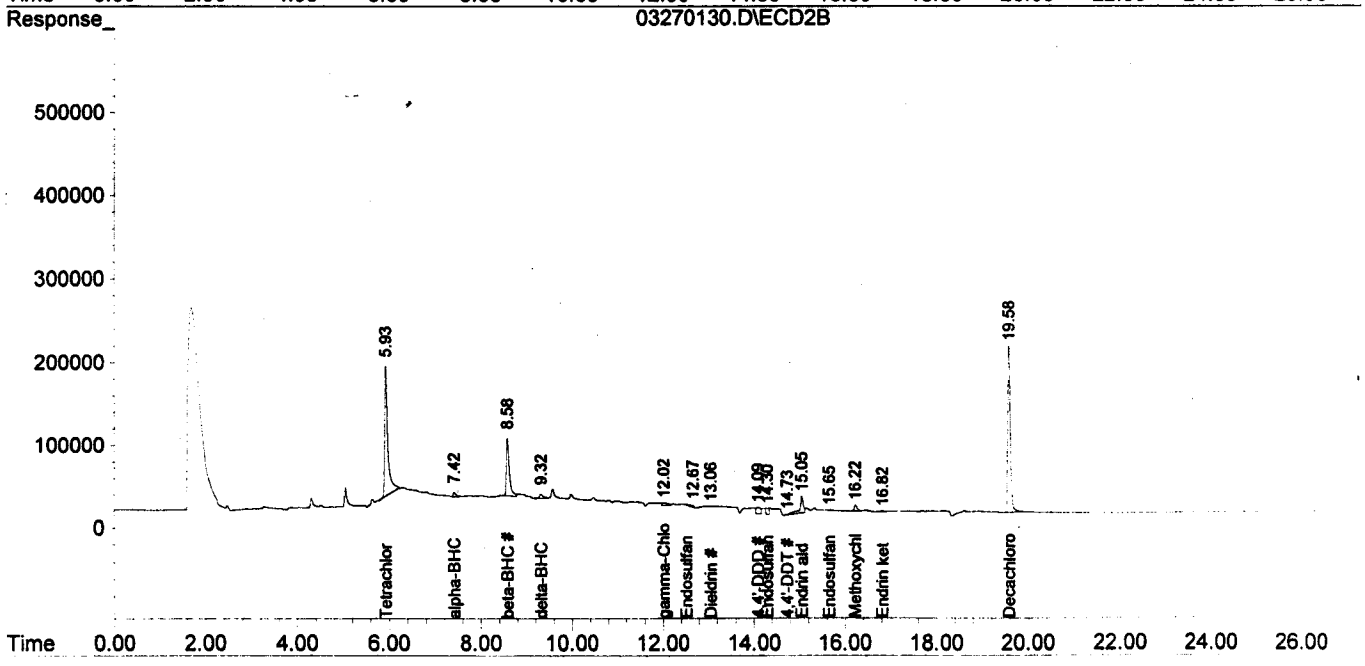
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270130.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\032701\03270130.D\ECD2B.CH
Acq On : 28 Mar 2001 9:49 Operator: YGK
Sample : 10154 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 11:59 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270130.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\032701\03270130.D\ECD2B.CH
Acq On : 28 Mar 2001 9:49 Operator: YGK
Sample : 10154 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 30 10:00 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1) L	TOXAPHENE	1	13.61f	14.29	152136	368865	0.058	0.147	#
2) L	TOXAPHENE	2	14.68f	14.50	511823	755425	0.122	0.121	
3) L	TOXAPHENE	3	15.17f	15.05	429484	1670979	0.081	0.342	#
4) L	TOXAPHENE	4	15.59	15.32f	271216	760916	0.086	0.132	#
5) L	TOXAPHENE	5	16.14	16.22	489095	1248243	0.075	0.150	#
6) L	TOXAPHENE	6	17.06f	16.22f	1493163	1248243	0.291	0.255	
7) L	TOXAPHENE	7	17.28	16.99f	526629	684970	0.190	0.187	
Sum	TOXAPHENE	1			3873545	6737642	0.904	1.332	
Average	TOXAPHENE	1					0.129	0.190	

TOX <0.2

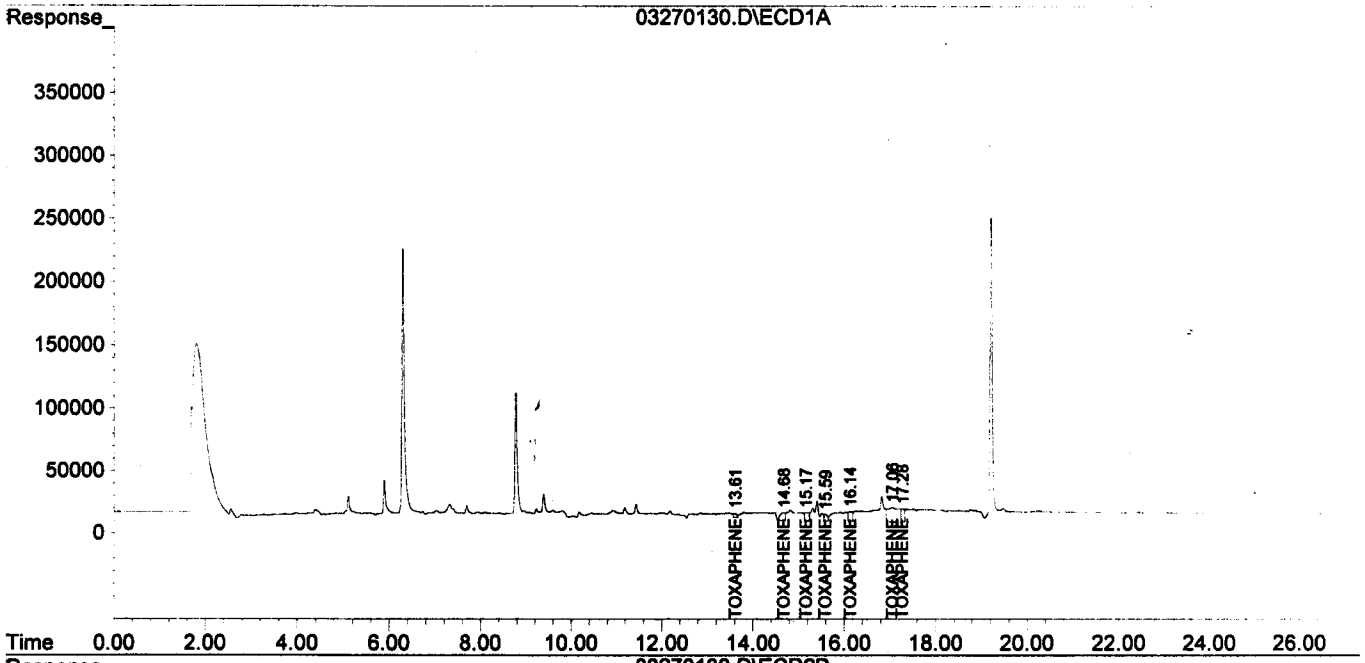
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

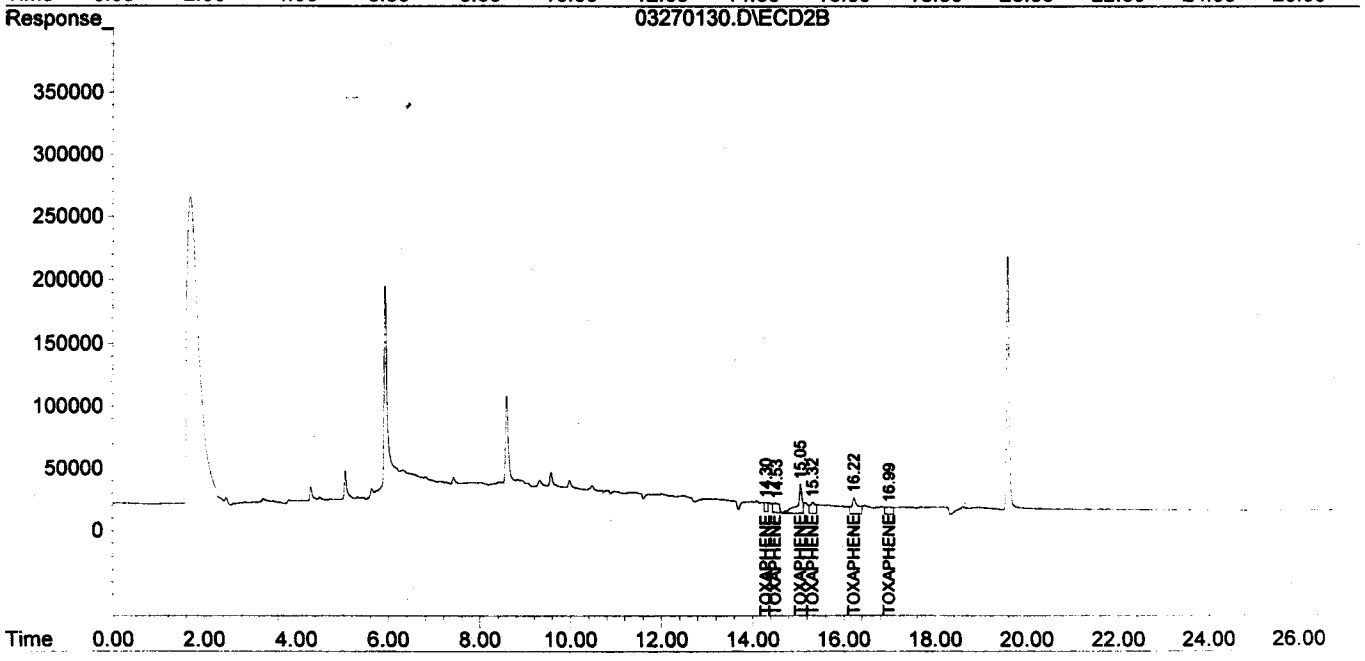
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270130.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\032701\03270130.D\ECD2B.CH
Acq On : 28 Mar 2001 9:49 Operator: YGK
Sample : 10154 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 30 10:00 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270118.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\032701\03270118.D\ECD2B.CH
Acq On : 27 Mar 2001 22:18 Operator: YGK
Sample : 10154 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:50 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.30	5.93	13011559	6254509	0.086	0.050	#
		Spiked Amount 0.100			Recovery	=	86.00% ✓	50.00%	
22)	S	Decachlorobiphen	19.21	19.58	8285903	7697863	0.062	0.057	
		Spiked Amount 0.100			Recovery	=	62.00% ✓	57.00%	
		Target Compounds							
2)	T	alpha-BHC	7.69	7.43	809200	1055914	0.004	0.006	#
3)	T	beta-BHC	8.76	8.58	6843536	785550	0.069	0.009	#
4)	T	gamma-BHC (Linda	8.56f	0.00	463372	0	0.002	N.D.	#
5)	T	delta-BHC	0.00	9.34	0	95167	N.D.	0.001	#
6)	T	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
7)	T	Aldrin	0.00	10.21	0	104676	N.D.	0.001	#
8)	T	Heptachlor epoxi	0.00	11.59	0	46832309	N.D.	0.370	#
9)	T	Endosulfan I	12.84	0.00	258941	0	0.002	N.D.	#
10)	T	gamma-Chlordane	0.00	11.99f	0	236.8E6	N.D.	1.514	#
11)	T	alpha-Chlordane	12.60f	0.00	349385	0	0.003	N.D.	#
12)	T	4,4'-DDE	12.84f	0.00	258941	0	0.002	N.D.	#
13)	T	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	T	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	T	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	T	Endrin aldehyde	15.41	0.00	67399	0	0.001	N.D.	#
18)	T	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
19)	T	Endosulfan sulfa	0.00	0.00	0	0	N.D.	N.D.	
20)	T	Methoxychlor	15.79	16.22f	39384	161308	0.001	0.003	#
21)	T	Endrin ketone	17.06f	16.82	153582	12727	0.001	0.000	#

Endrin Ald. < D.C.

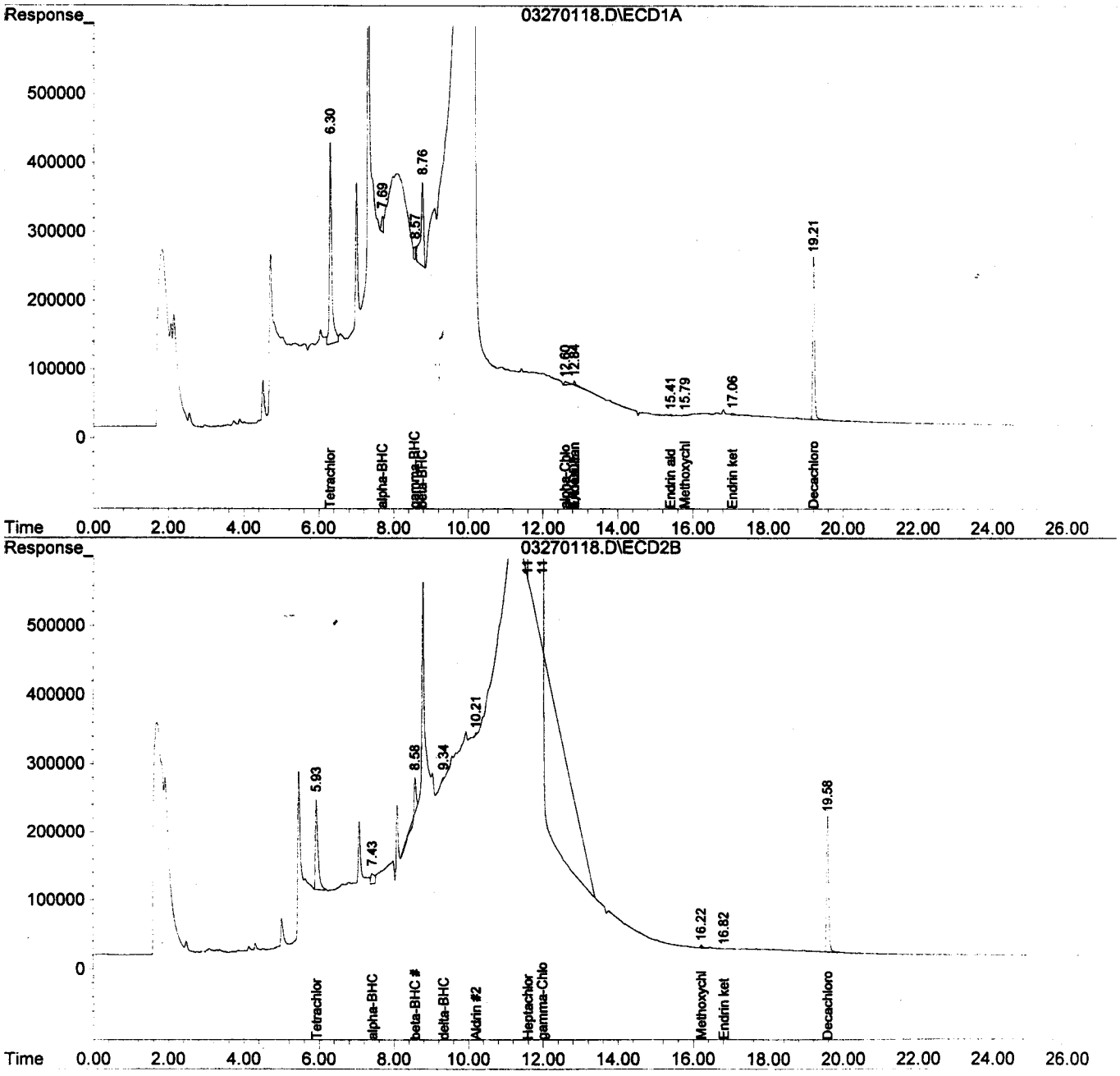
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270118.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\032701\03270118.D\ECD2B.CH
Acq On : 27 Mar 2001 22:18 Operator: YGK
Sample : 10154 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:50 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270119.D\ECD1A.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\032701\03270119.D\ECD2B.CH
Acq On : 27 Mar 2001 22:50 Operator: YGK
Sample : 10155 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:51 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.29	5.93	15204411	10621317	0.101	0.084	
		Spiked Amount 0.100				Recovery =	101.00% ✓	84.00%	
22)	S	Decachlorobiphen	19.21	19.58	12554524	12041790	0.094	0.089	
		Spiked Amount 0.100				Recovery =	94.00% ✓	89.00%	
		Target Compounds							
2)	T	alpha-BHC	0.00	7.48f	0	72597	N.D.	0.000	#
3)	T	beta-BHC	8.80	8.60	26379	204951	0.000	0.002	#
4)	T	gamma-BHC (Linda	0.00	0.00	0	0	N.D.	N.D.	
5)	T	delta-BHC	0.00	9.31	0	65317	N.D.	0.000	#
6)	T	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
7)	T	Aldrin	10.48	0.00	40137	0	0.000	N.D.	#
8)	T	Heptachlor epoxi	0.00	11.57	0	171080	N.D.	0.001	#
9)	T	Endosulfan I	12.86	0.00	215527	0	0.002	N.D.	#
10)	T	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	T	alpha-Chlordane	12.59	0.00	61106	0	0.000	N.D.	#
12)	T	4,4'-DDE	12.69f	12.78	254392	26118	0.002	0.000	#
13)	T	Dieldrin	0.00	13.17	0	22770	N.D.	0.000	#
14)	T	Endrin	14.01f	13.89f	113712	531748	0.001	0.005	#
15)	T	4,4'-DDD	0.00	14.09	0	167406	N.D.	0.002	#
16)	T	Endosulfan II	14.47	14.31	101635	131851	0.001	0.001	
17)	T	Endrin aldehyde	15.41	15.06	55346	48065	0.001	0.001	
18)	T	4,4'-DDT	14.69f	14.75f	291365	43263	0.003	0.000	#
19)	T	Endosulfan sulfa	16.45f	15.65	107165	15686	0.001	0.000	#
20)	T	Methoxychlor	0.00	16.22f	0	1399395	N.D.	0.029	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Pest CDC

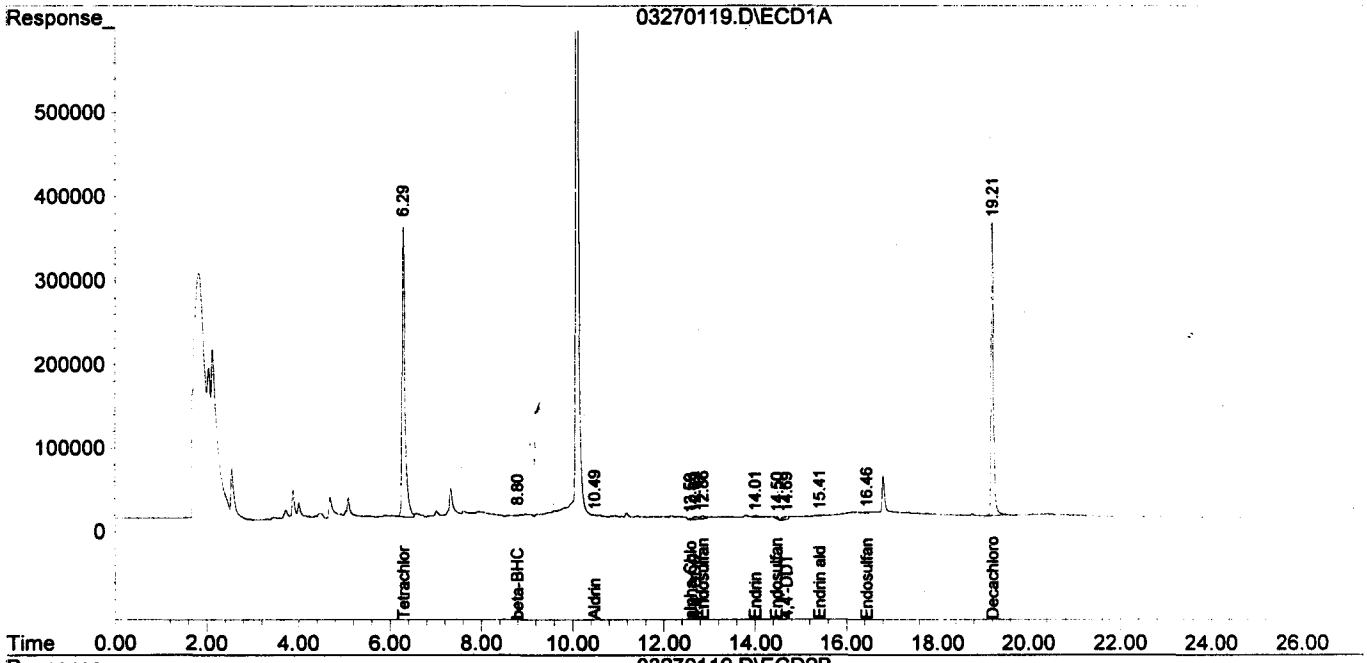
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

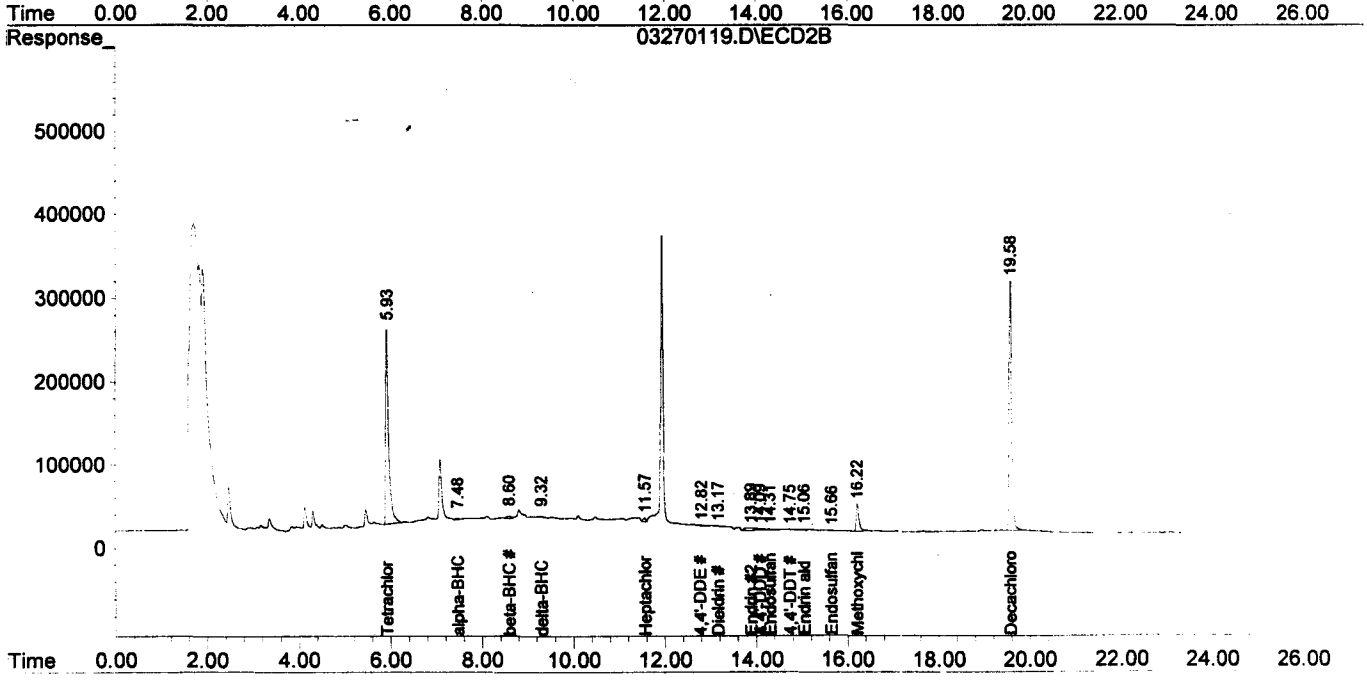
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270119.D\ECD1A.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\032701\03270119.D\ECD2B.CH
Acq On : 27 Mar 2001 22:50 Operator: YGK
Sample : 10155 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:51 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270119.D\ECD1A.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\032701\03270119.D\ECD2B.CH
Acq On : 27 Mar 2001 22:50 Operator: YGK
Sample : 10155 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:25 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds										
1)	L	TOXAPHENE	1	13.64	14.30	175773	334176	0.067	0.133	#
2)	L	TOXAPHENE	2	14.69f	0.00	382080	0	0.091	N.D.	#
3)	L	TOXAPHENE	3	15.13f	15.06	358974	134904	0.068	0.028	#
4)	L	TOXAPHENE	4	15.68	15.17f	341113	199808	0.108	0.035	#
5)	L	TOXAPHENE	5	16.14	16.22	531597	1504037	0.081	0.180	#
6)	L	TOXAPHENE	6	0.00	16.22f	0	1504037	N.D.	0.307	#
7)	L	TOXAPHENE	7	17.28	17.02	413353	5240	0.149	0.001	#
Sum		TOXAPHENE	1			2202891	3682202	0.565	0.684	
Average		TOXAPHENE	1					0.094	0.114	

TOX 402

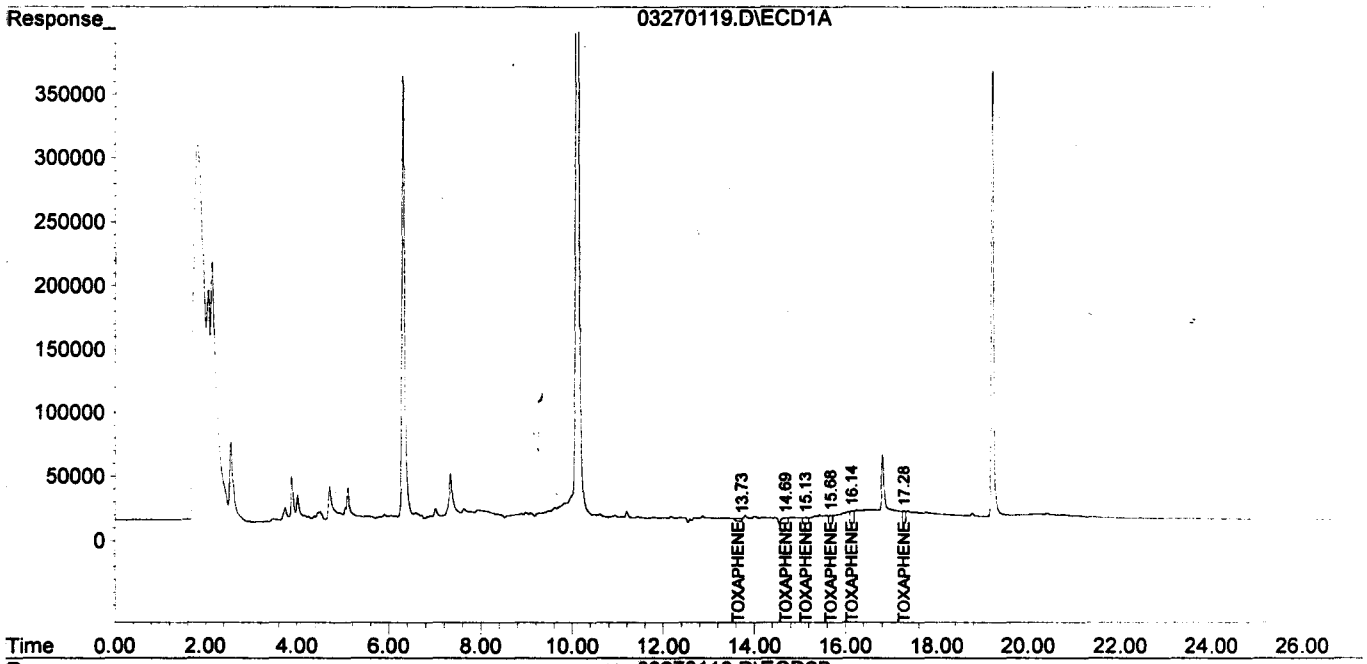
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

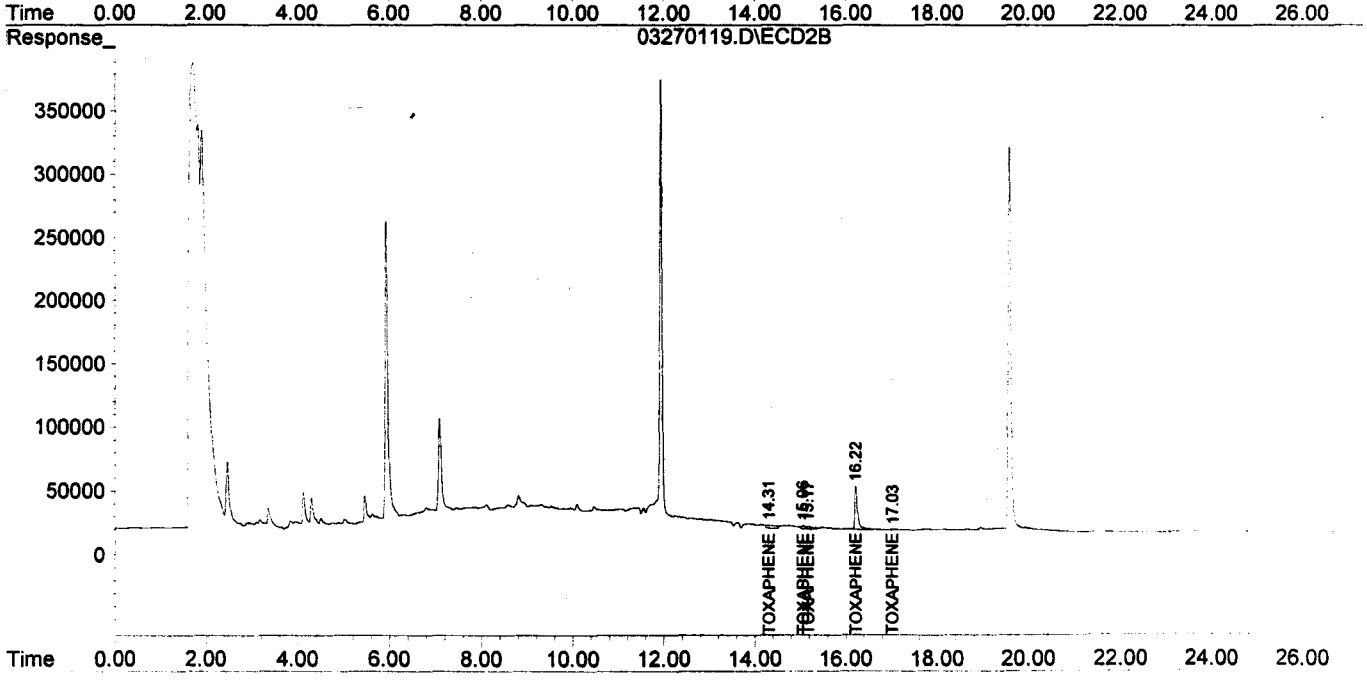
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270119.D\ECD1A.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\032701\03270119.D\ECD2B.CH
Acq On : 27 Mar 2001 22:50 Operator: YGK
Sample : 10155 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:25 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270132.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\032701\03270132.D\ECD2B.CH
Acq On : 28 Mar 2001 10:53 Operator: YGK
Sample : 10156 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 29 15:03 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	6.30	5.92	79487899	14787925	0.527	0.117	#
	Spiked Amount 0.100			Recovery	=	527.00%	117.00%	
22)	S Decachlorobiphen	19.22	19.59	3209693	2715250	0.024	0.020	
	Spiked Amount 0.100			Recovery	=	24.00%	20.00%	
	Target Compounds							
2)	T alpha-BHC	7.70	7.42	152706	313935	0.001	0.002	#
3)	T beta-BHC	8.77	8.59	1686716	1427846	0.017	0.017	
4)	T gamma-BHC (Linda	8.56f	8.33	16638	48162	0.000	0.000	#
5)	T delta-BHC	9.23	0.00	179012	0	0.001	N.D.	#
6)	T Heptachlor	0.00	9.41	0	28923	N.D.	0.000	#
7)	T Aldrin	10.41f	0.00	54805441	0	0.351	N.D.	#
8)	T Heptachlor epoxi	11.94	11.66f	165836	286431	0.001	0.002	#
9)	T Endosulfan I	12.92f	0.00	1869979	0	0.015	N.D.	#
10)	T gamma-Chlordane	12.25	12.04	443754	674424	0.003	0.004	#
11)	T alpha-Chlordane	12.56	12.38	845006	1272499	0.006	0.009	#
12)	T 4,4'-DDE	12.75	0.00	12764	0	0.000	N.D.	#
13)	T Dieldrin	13.43	13.12	69303	176435	0.001	0.001	#
14)	T Endrin	13.88f	13.78	64467	414177	0.001	0.004	#
15)	T 4,4'-DDD	14.05f	14.13	66837	2277105	0.001	0.023	#
16)	T Endosulfan II	14.47	14.35	204420	1184978	0.002	0.010	#
17)	T Endrin aldehyde	15.36f	15.05	20191138	567797	0.217	0.006	#
18)	T 4,4'-DDT	14.75	14.75	185959	30938	0.002	0.000	#
19)	T Endosulfan sulfa	16.38	15.66	66038	28051	0.001	0.000	#
20)	T Methoxychlor	15.73f	16.22f	172036	350915	0.003	0.007	#
21)	T Endrin ketone	0.00	16.82	0	70038	N.D.	0.001	#

dil. 0.005

B-BHC : 0.085 ppb

G-Chlordane : 0.0020 ppb J

A-Chlordane : 0.0045 ppb J

rest Pest < QL

Endrin Ald. - see run #20

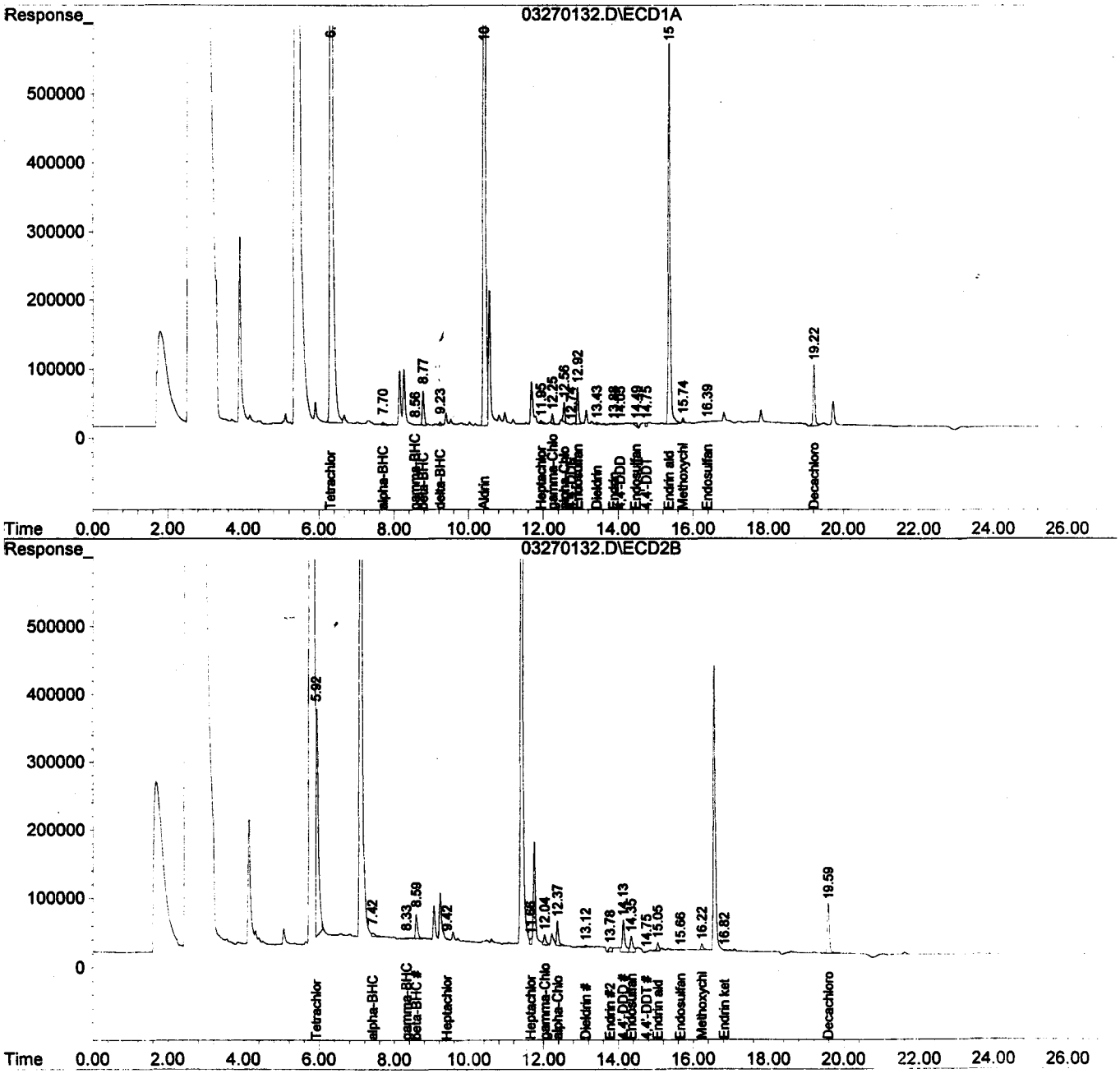
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270132.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\032701\03270132.D\ECD2B.CH
Acq On : 28 Mar 2001 10:53 Operator: YGK
Sample : 10156 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 29 15:03 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270132.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\032701\03270132.D\ECD2B.CH
Acq On : 28 Mar 2001 10:53 Operator: YGK
Sample : 10156 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 30 10:01 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1) L	TOXAPHENE	1	13.62	14.35f	180739	1218952	0.069	0.486	#
2) L	TOXAPHENE	2	14.75	14.51	265879	677662	0.064	0.108	#
3) L	TOXAPHENE	3	15.16f	15.05	679783	897327	0.129	0.184	#
4) L	TOXAPHENE	4	15.73f	15.32f	1061982	569795	0.337	0.099	#
5) L	TOXAPHENE	5	16.18	16.22	925965	1110067	0.141	0.133	
6) L	TOXAPHENE	6	0.00	16.22f	0	1110067	N.D.	0.226	#
7) L	TOXAPHENE	7	17.22f	17.10	1068973	511970	0.386	0.140	#
Sum	TOXAPHENE	1			4183321	6095841	1.126	1.376	
Average	TOXAPHENE	1					0.188	0.197	

TOX<02

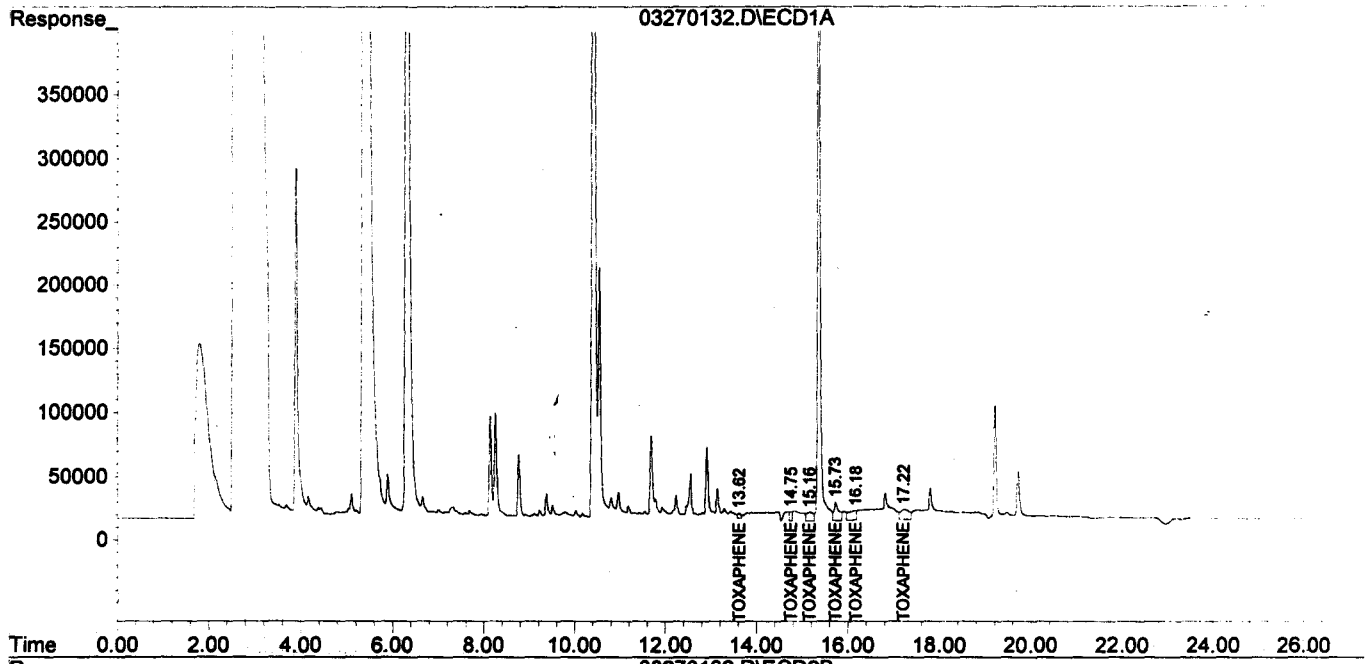
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

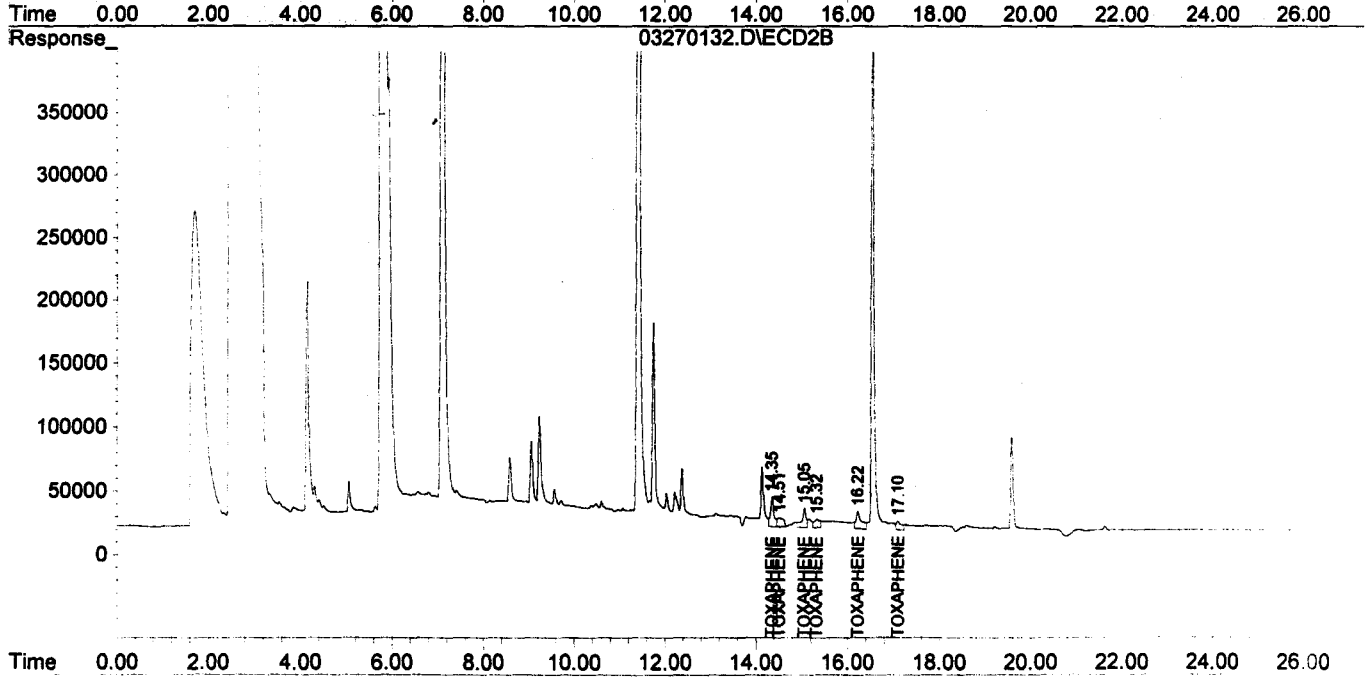
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270132.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\032701\03270132.D\ECD2B.CH
Acq On : 28 Mar 2001 10:53 Operator: YGK
Sample : 10156 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 30 10:01 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270120.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\032701\03270120.D\ECD2B.CH
Acq On : 27 Mar 2001 23:22 Operator: YGK
Sample : 10156 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:52 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	0.00	5.93	0	5335970	N.D.	0.042	#
		Spiked Amount 0.100			Recovery =		0.00%	42.00%	✓
22)	S	Decachlorobiphen	19.21	19.58	2628205	2344315	0.020	0.017	
		Spiked Amount 0.100			Recovery =		20.00% ✓	17.00%	
		Target Compounds							
2)	T	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	T	beta-BHC	8.76	0.00	4255849	0	0.043	N.D.	#
4)	T	gamma-BHC (Linda	8.53	0.00	160718	0	0.001	N.D.	#
5)	T	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
6)	T	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
7)	T	Aldrin	0.00	10.21	0	39772	N.D.	0.000	#
8)	T	Heptachlor epoxi	11.93	0.00	87420	0	0.001	N.D.	#
9)	T	Endosulfan I	12.83	0.00	222050	0	0.002	N.D.	#
10)	T	gamma-Chlordane	12.24	0.00	415393	0	0.003	N.D.	#
11)	T	alpha-Chlordane	12.55	12.37	912455	431057	0.007	0.003	#
12)	T	4,4'-DDE	12.73	0.00	107823	0	0.001	N.D.	#
13)	T	Dieldrin	13.42	13.12	80237	144721	0.001	0.001	#
14)	T	Endrin	13.97	13.76f	319510	145934	0.003	0.001	#
15)	T	4,4'-DDD	14.22f	0.00	24613	0	0.000	N.D.	#
16)	T	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	T	Endrin aldehyde	15.41	15.05	164845	52709	0.002	0.001	#
18)	T	4,4'-DDT	14.75	14.82	127459	64886	0.001	0.001	#
19)	T	Endosulfan sulfa	16.36	15.67	46590	35586	0.000	0.000	#
20)	T	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.	
21)	T	Endrin ketone	17.06f	0.00	37433	0	0.000	N.D.	#

used Rtx-5 col (for SS1)

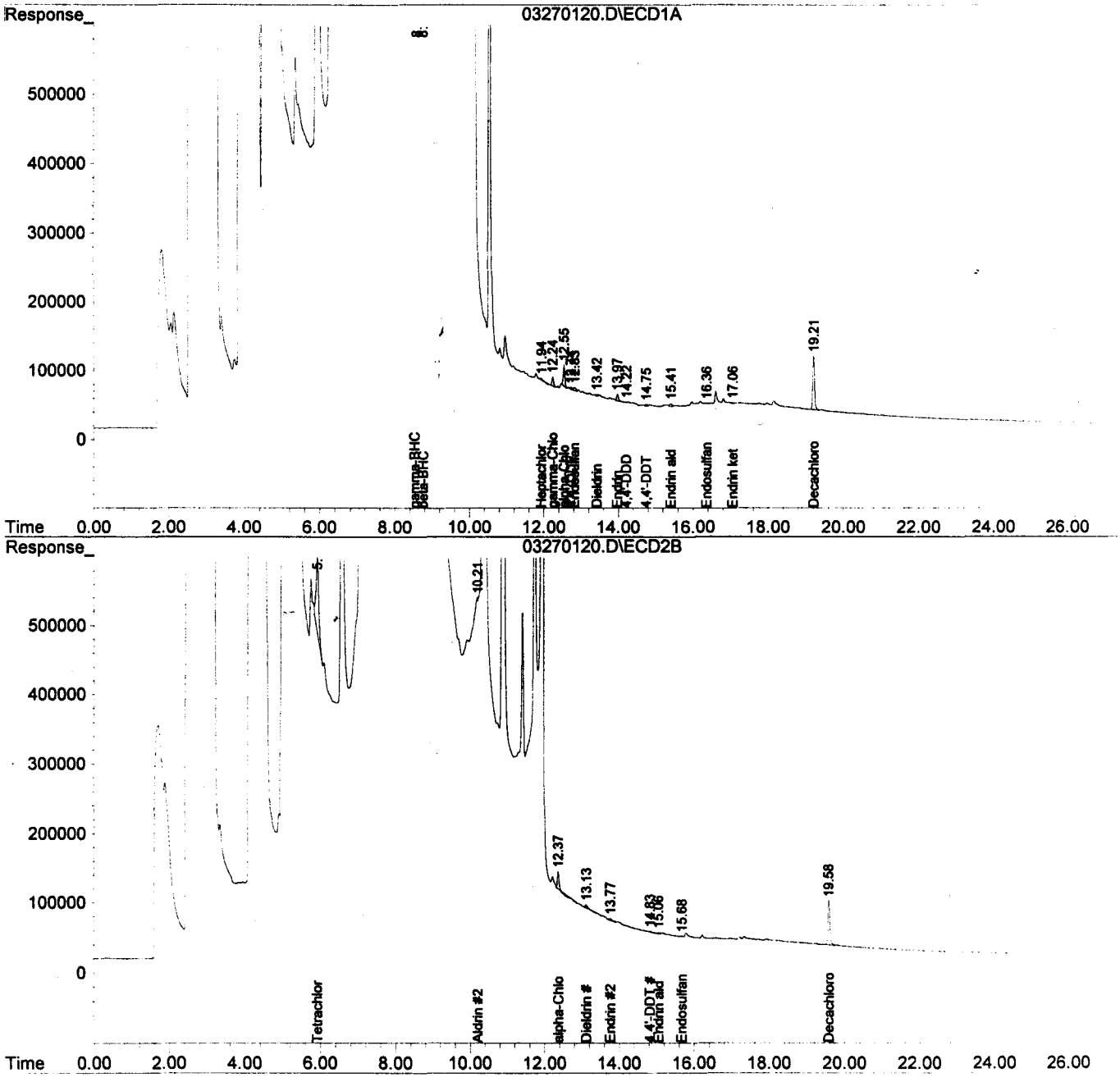
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270120.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\032701\03270120.D\ECD2B.CH
Acq On : 27 Mar 2001 23:22 Operator: YGK
Sample : 10156 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:52 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270121.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\032701\03270121.D\ECD2B.CH
Acq On : 27 Mar 2001 23:54 Operator: YGK
Sample : 10157 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:52 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.29	5.93	13331831	11111747	0.088	0.088	
		Spiked Amount 0.100			Recovery	=	88.00% ✓	88.00%	
22)	S	Decachlorobiphen	19.21	19.58	11751812	11352428	0.088	0.084	
		Spiked Amount 0.100			Recovery	=	88.00% ✓	84.00%	
		Target Compounds							
2)	T	alpha-BHC	7.64f	7.47f	238819	56199	0.001	0.000	#
3)	T	beta-BHC	8.75	8.56	135052	733804	0.001	0.009	#
4)	T	gamma-BHC (Linda	0.00	0.00	0	0	N.D.	N.D.	
5)	T	delta-BHC	9.24	9.32	70523	30504	0.000	0.000	#
6)	T	Heptachlor	0.00	9.44	0	13943	N.D.	0.000	#
7)	T	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	T	Heptachlor epoxi	0.00	11.57	0	98317	N.D.	0.001	#
9)	T	Endosulfan I	12.85	12.54	650005	55226	0.005	0.000	#
10)	T	gamma-Chlordane	12.18f	11.97f	21630	1280409	0.000	0.008	#
11)	T	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
12)	T	4,4'-DDE	12.68f	12.82	229470	19743	0.002	0.000	#
13)	T	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	T	Endrin	0.00	13.89f	0	175292	N.D.	0.002	#
15)	T	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	T	Endrin aldehyde	15.41	15.05	34199	38788	0.000	0.000	
18)	T	4,4'-DDT	14.82f	14.73f	305511	28093	0.003	0.000	#
19)	T	Endosulfan sulfa	0.00	15.65	0	20176	N.D.	0.000	#
20)	T	Methoxychlor	15.81	16.23f	19799	311847	0.000	0.006	#
21)	T	Endrin ketone	16.96	0.00	63268	0	0.000	N.D.	#

Pest<02

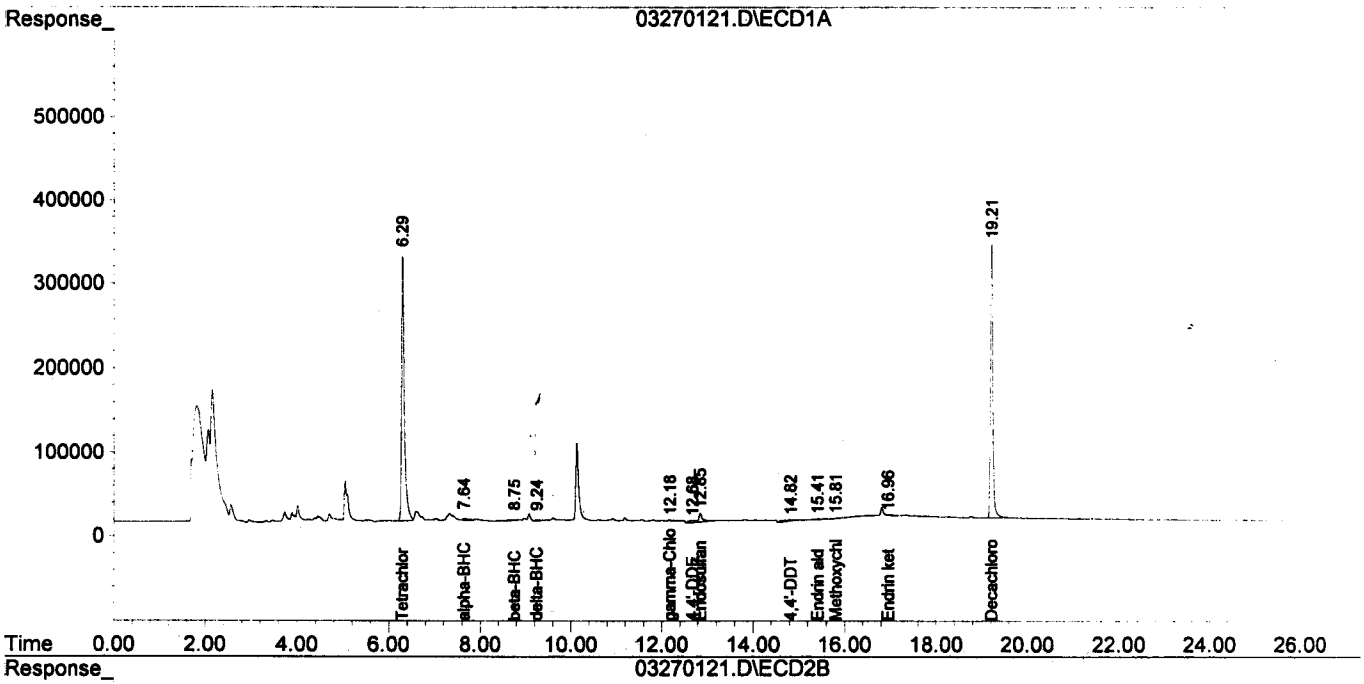
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

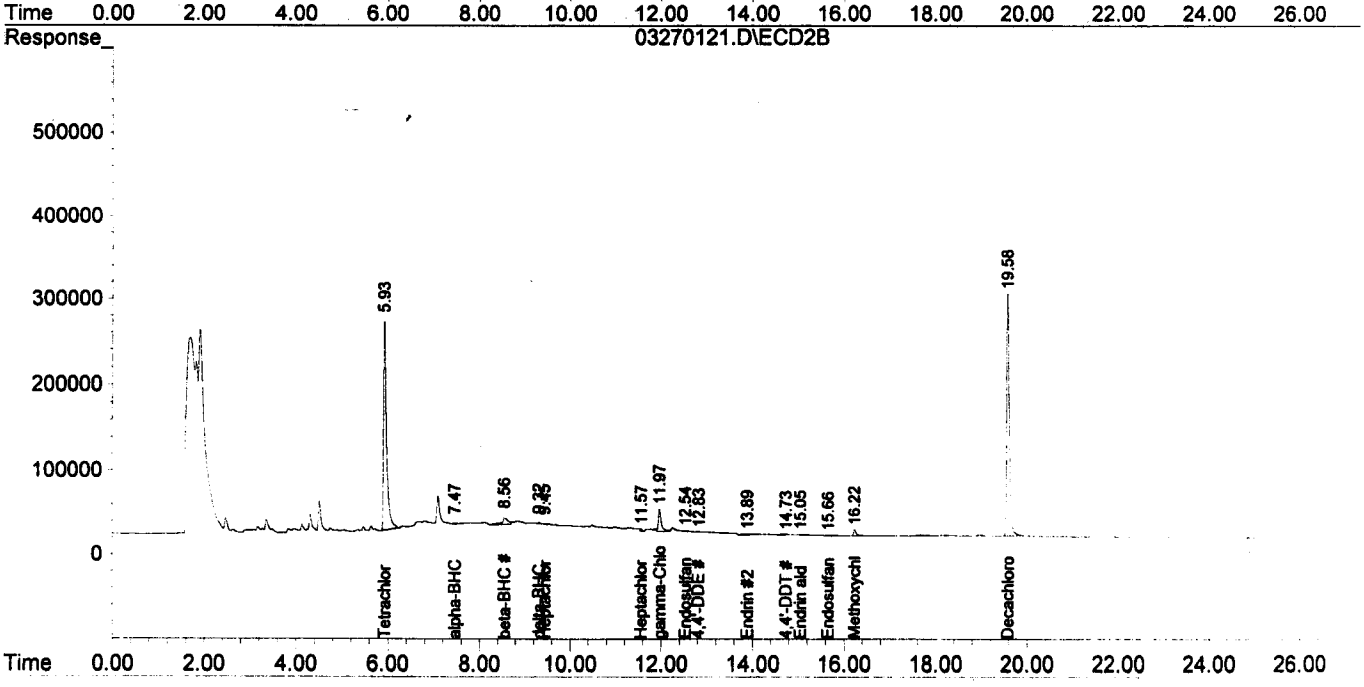
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270121.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\032701\03270121.D\ECD2B.CH
Acq On : 27 Mar 2001 23:54 Operator: YGK
Sample : 10157 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:52 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270121.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\032701\03270121.D\ECD2B.CH
Acq On : 27 Mar 2001 23:54 Operator: YGK
Sample : 10157 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:25 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1) L	TOXAPHENE	1	13.64	0.00	65094	0	0.025	N.D.	#
2) L	TOXAPHENE	2	0.00	14.48	0	83511	N.D.	0.013	#
3) L	TOXAPHENE	3	15.20	15.05	117312	100775	0.022	0.021	
4) L	TOXAPHENE	4	15.58f	15.32f	174023	46666	0.055	0.008	#
5) L	TOXAPHENE	5	16.16	16.23	954871	352521	0.146	0.042	#
6) L	TOXAPHENE	6	16.95	16.23f	1357287	352521	0.264	0.072	#
7) L	TOXAPHENE	7	17.28	17.07	383029	11091	0.138	0.003	#
Sum	TOXAPHENE	1			3051617	947085	0.651	0.159	
Average	TOXAPHENE	1					0.108	0.027	

TOXSOIL

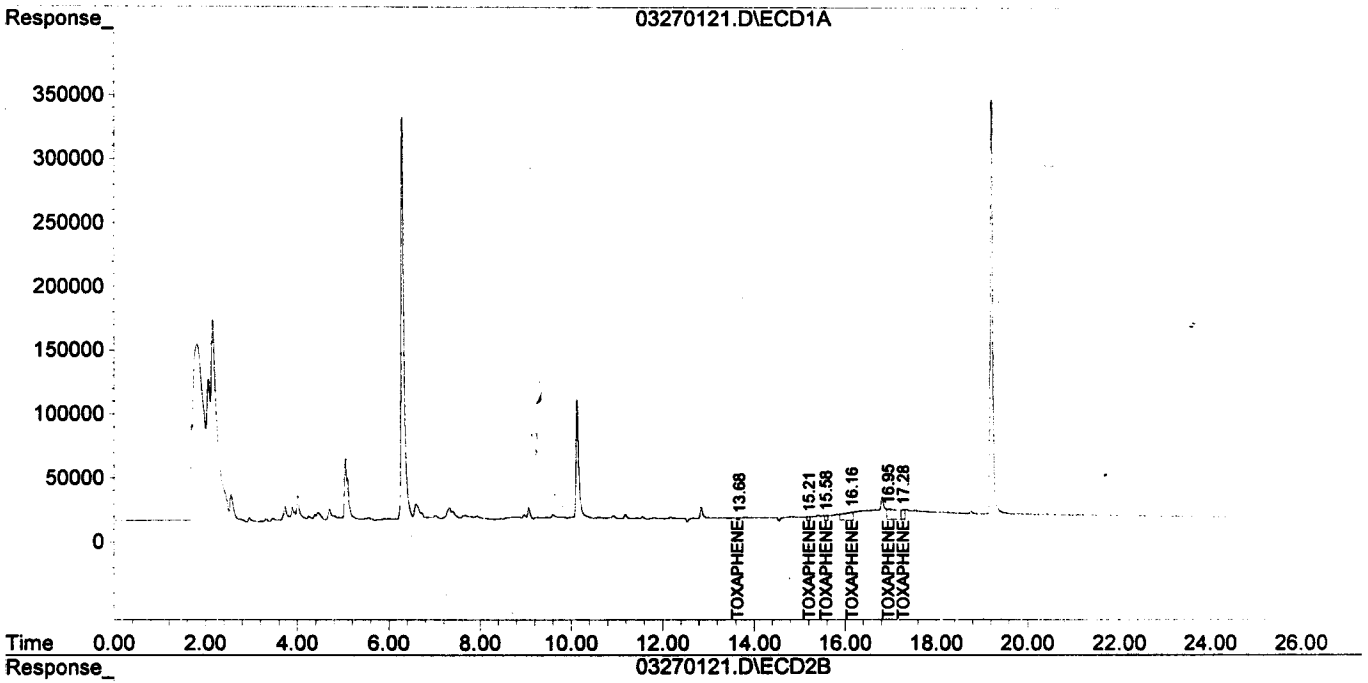
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

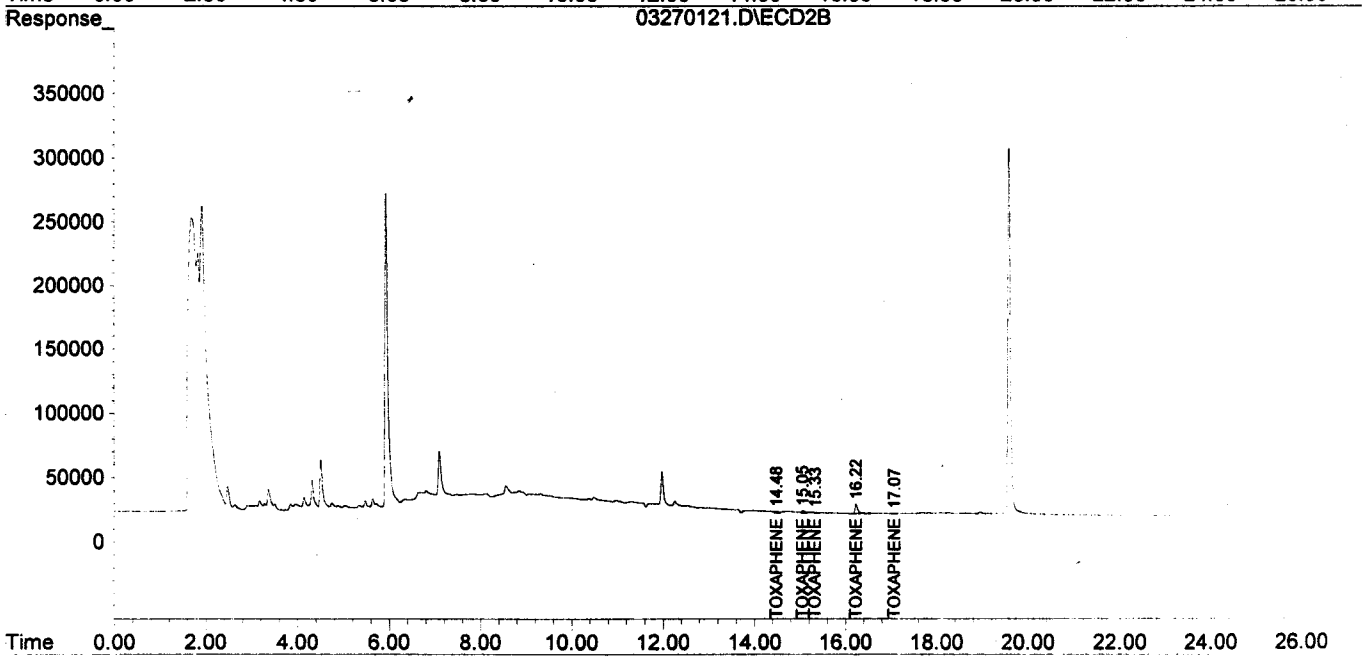
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270121.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\032701\03270121.D\ECD2B.CH
Acq On : 27 Mar 2001 23:54 Operator: YGK
Sample : 10157 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:25 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270122.D\ECD1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\032701\03270122.D\ECD2B.CH
Acq On : 28 Mar 2001 00:26 Operator: YGK
Sample : 10158 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:53 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.29	5.93	13470928	11294024	0.089	0.089	
		Spiked Amount 0.100			Recovery	=	89.00% ✓	89.00%	
22)	S	Decachlorobiphen	19.21	19.58	12993471	12531161	0.097	0.093	
		Spiked Amount 0.100			Recovery	=	97.00% ✓	93.00%	
		Target Compounds							
2)	T	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	T	beta-BHC	8.76	8.56	111908	488741	0.001	0.006	#
4)	T	gamma-BHC (Linda	8.47f	8.36	79997	27897	0.000	0.000	#
5)	T	delta-BHC	9.21	9.32	101705	30901	0.001	0.000	#
6)	T	Heptachlor	0.00	9.45	0	11802	N.D.	0.000	#
7)	T	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	T	Heptachlor epoxi	0.00	11.57	0	93505	N.D.	0.001	#
9)	T	Endosulfan I	12.85	12.54	665418	159379	0.005	0.001	#
10)	T	gamma-Chlordane	12.26	11.98f	13766	956051	0.000	0.006	#
11)	T	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
12)	T	4,4'-DDE	12.69f	0.00	294904	0	0.002	N.D.	#
13)	T	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	T	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	T	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	T	Endrin aldehyde	15.41	15.06	44018	41086	0.000	0.000	
18)	T	4,4'-DDT	14.83f	14.76	282165	24012	0.003	0.000	#
19)	T	Endosulfan sulfa	16.46f	0.00	89899	0	0.001	N.D.	#
20)	T	Methoxychlor	15.81	16.23f	15179	743978	0.000	0.015	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Pest <DL

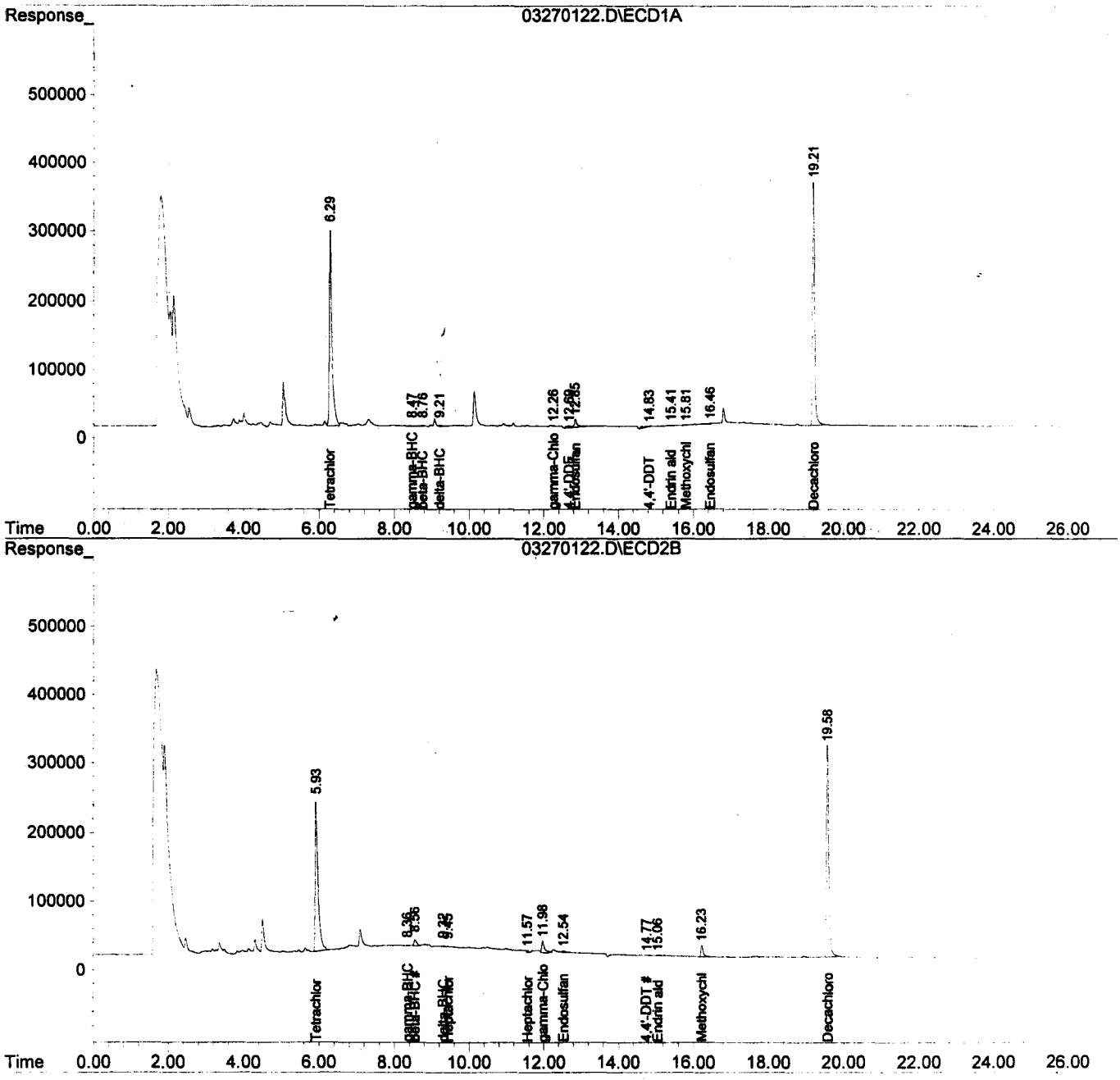
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270122.D\ECD1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\032701\03270122.D\ECD2B.CH
Acq On : 28 Mar 2001 00:26 Operator: YGK
Sample : 10158 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:53 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270122.D\ECD1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\032701\03270122.D\ECD2B.CH
Acq On : 28 Mar 2001 00:26 Operator: YGK
Sample : 10158 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:26 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds										
1)	L	TOXAPHENE	1	13.63	14.30	68993	188615	0.026	0.075	#
2)	L	TOXAPHENE	2	0.00	14.49	0	132310	N.D.	0.021	#
3)	L	TOXAPHENE	3	15.17f	15.06	405624	163984	0.077	0.034	#
4)	L	TOXAPHENE	4	15.58f	15.19f	191389	149863	0.061	0.026	#
5)	L	TOXAPHENE	5	16.15	16.23	676078	874768	0.103	0.105	
6)	L	TOXAPHENE	6	0.00	16.23f	0	874768	N.D.	0.178	#
7)	L	TOXAPHENE	7	17.28	0.00	329703	0	0.119	N.D.	#
Sum		TOXAPHENE	1			1671788	2384308	0.386	0.439	
Average		TOXAPHENE	1					0.077	0.073	

TOX <02

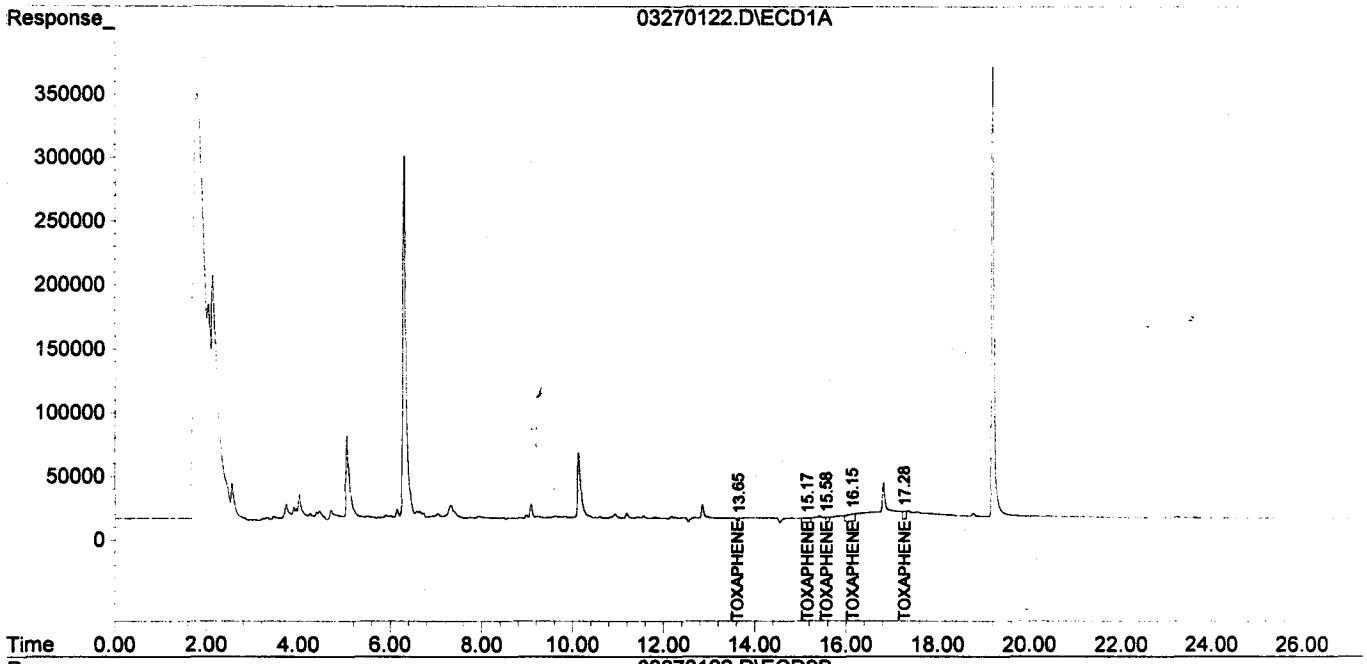
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

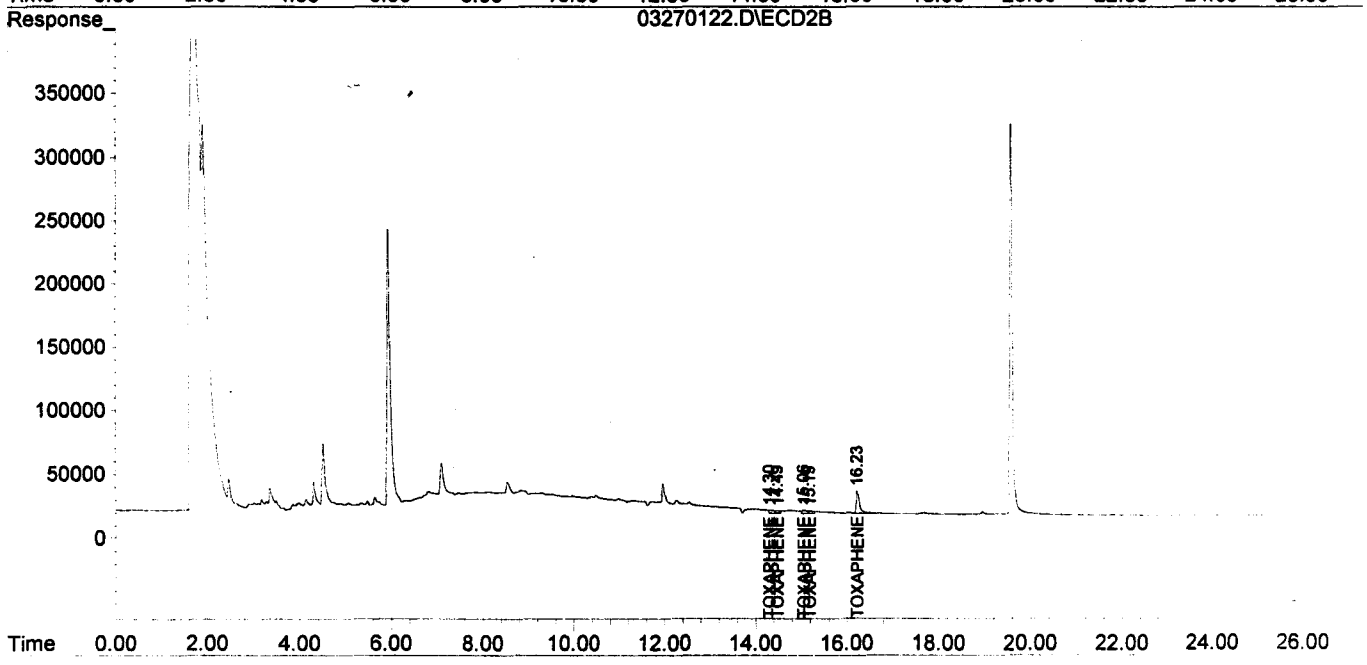
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270122.D\ECD1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\032701\03270122.D\ECD2B.CH
Acq On : 28 Mar 2001 00:26 Operator: YGK
Sample : 10158 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:26 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270133.D\ECD1A.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\032701\03270133.D\ECD2B.CH
Acq On : 28 Mar 2001 11:25 Operator: YGK
Sample : 10159 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 29 15:05 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	6.31	5.93	61521070	12954562	0.408	0.103 #
	Spiked Amount 0.100			Recovery	=	408.00% ✓	103.00%
22) S	Decachlorobiphen	19.22	19.59	3245495	2831431	0.024	0.021
	Spiked Amount 0.100			Recovery	=	24.00% ✓	21.00%
	Target Compounds						
2) T	alpha-BHC	7.70	7.42	139720	267637	0.001	0.002 #
3) T	beta-BHC	8.78 ✓	8.59 ✓	1400991	1332891	0.014	0.016 ✓
4) T	gamma-BHC (Linda	8.56f	8.33	15833	73170	0.000	0.000 #
5) T	delta-BHC	9.23	0.00	163609	0	0.001	N.D. #
6) T	Heptachlor	0.00	9.41	0	25168	N.D.	0.000 #
7) T	Aldrin	10.41f	0.00	37565638	0	0.241 —	N.D. #
8) T	Heptachlor epoxi	11.95	11.67f	167594	150101	0.001	0.001
9) T	Endosulfan I	12.92f	0.00	1988653	0	0.016 —	N.D. #
10) T	gamma-Chlordane	12.25 ✓	12.04 ✓	417757	568458	0.003	0.004 ✓ #
11) T	alpha-Chlordane	12.56 ✓	12.38 ✓	671852	1195033	0.005	0.008 ✓ #
12) T	4,4'-DDE	12.75	12.71f	10953	58265	0.000	0.000 #
13) T	Dieldrin	13.43	13.12	61826	91857	0.000	0.001 #
14) T	Endrin	13.88f	13.78	59708	427760	0.001	0.004 #
15) T	4,4'-DDD	14.05f	14.13	57051	2225997	0.001	0.022 #
16) T	Endosulfan II	14.47	14.35 —	206921	742015	0.002	0.006 # —
17) T	Endrin aldehyde	15.36 —	15.06	12163281	294729	0.131 —	0.003 #
18) T	4,4'-DDT	14.75	14.84	165651	29054	0.002	0.000 #
19) T	Endosulfan sulfa	0.00	15.67	0	52632	N.D.	0.000 #
20) T	Methoxychlor	15.74f	16.22f	122336	346265	0.002	0.007 #
21) T	Endrin ketone	17.00	16.83	173809	90461	0.001	0.001 #

dil : 0.005

B-BHC : 0.080 ppb

G-Chlord. : 0.020 ppb J

A-Chlord. : 0.040 ppb J , rest Pest < D

Endo Ald. see run # 23

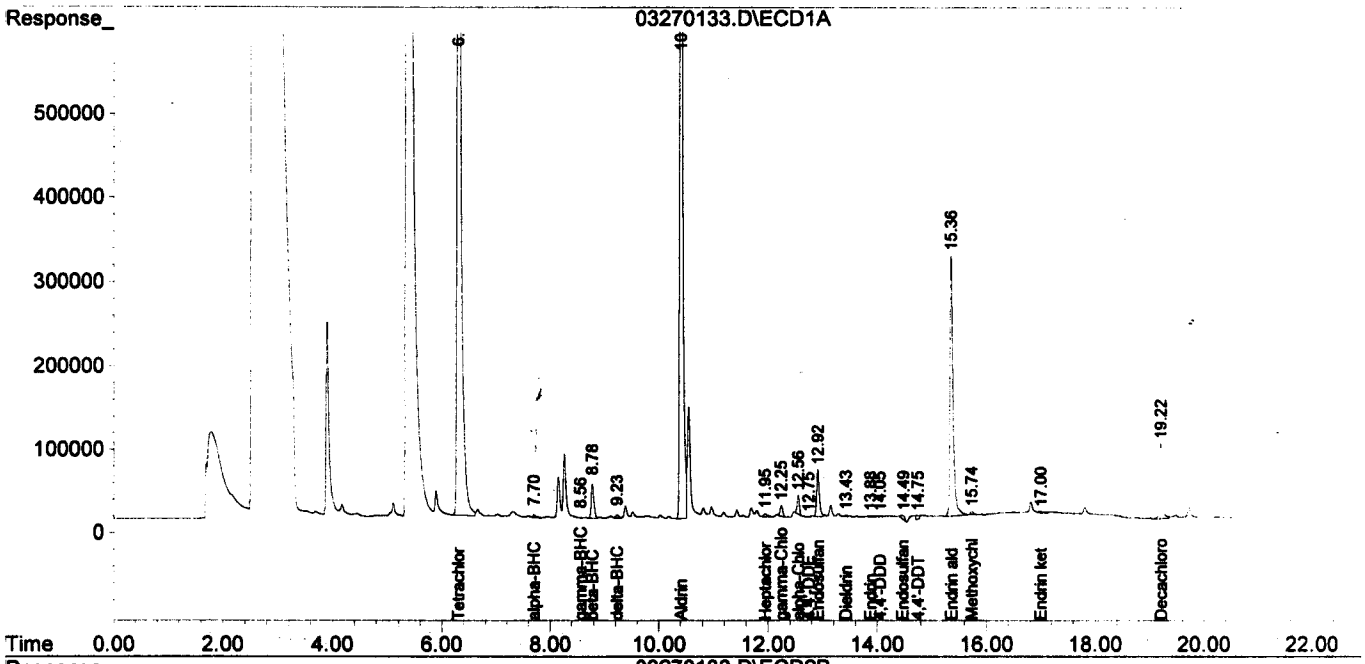
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

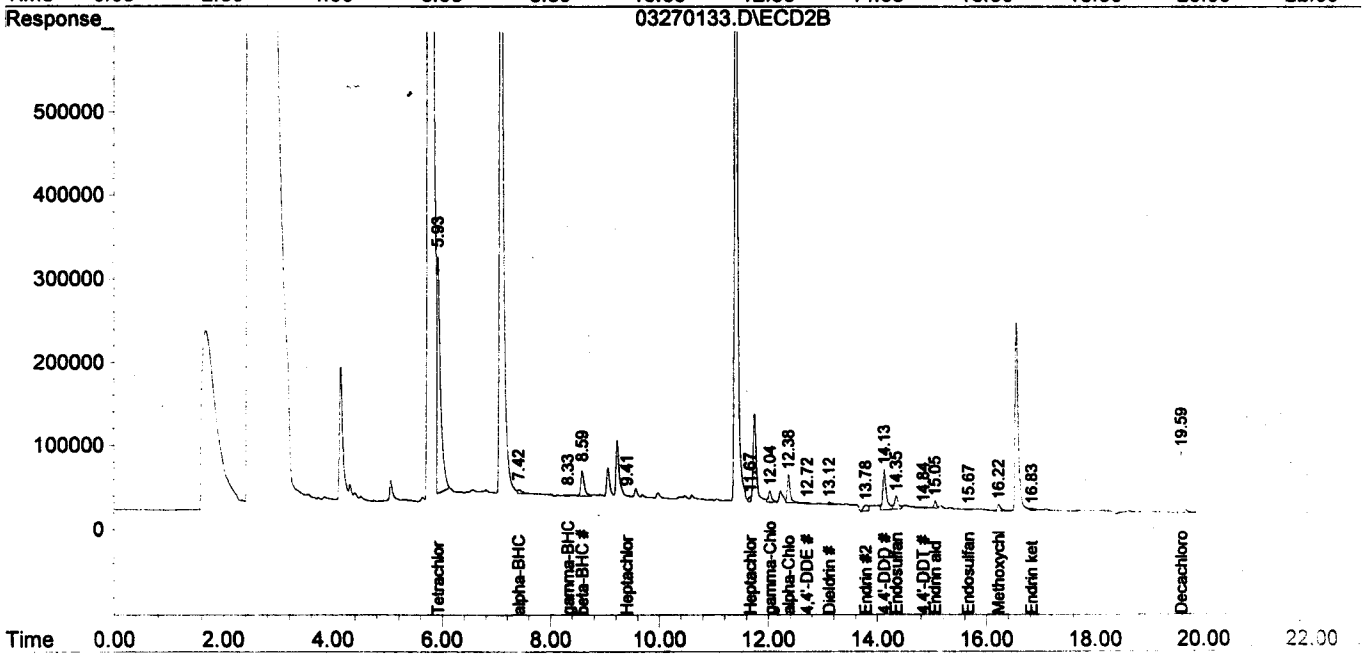
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270133.D\ECD1A.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\032701\03270133.D\ECD2B.CH
Acq On : 28 Mar 2001 11:25 Operator: YGK
Sample : 10159 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 29 15:05 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Feb 01 10:53:51 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270133.D\ECD1A.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\032701\03270133.D\ECD2B.CH
Acq On : 28 Mar 2001 11:25 Operator: YGK
Sample : 10159 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 30 10:01 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds								
1) L	TOXAPHENE	1	13.62	0.00	280090	0	0.107	N.D.	#
2) L	TOXAPHENE	2	14.75	14.51	313466	1115154	0.075	0.178	#
3) L	TOXAPHENE	3	15.15f	15.06	782594	622873	0.148	0.127	
4) L	TOXAPHENE	4	15.74f	15.33f	1189907	478649	0.377	0.083	#
5) L	TOXAPHENE	5	16.18	16.22	1387211	736834	0.212	0.088	#
6) L	TOXAPHENE	6	17.00	16.22f	1674689	736834	0.326	0.150	#
7) L	TOXAPHENE	7	17.29	17.10	1054906	391103	0.381	0.107	#
Sum	TOXAPHENE	1			6682862	4081447	1.627	0.734	
Average	TOXAPHENE	1					0.232	0.122	

TOX CBZ

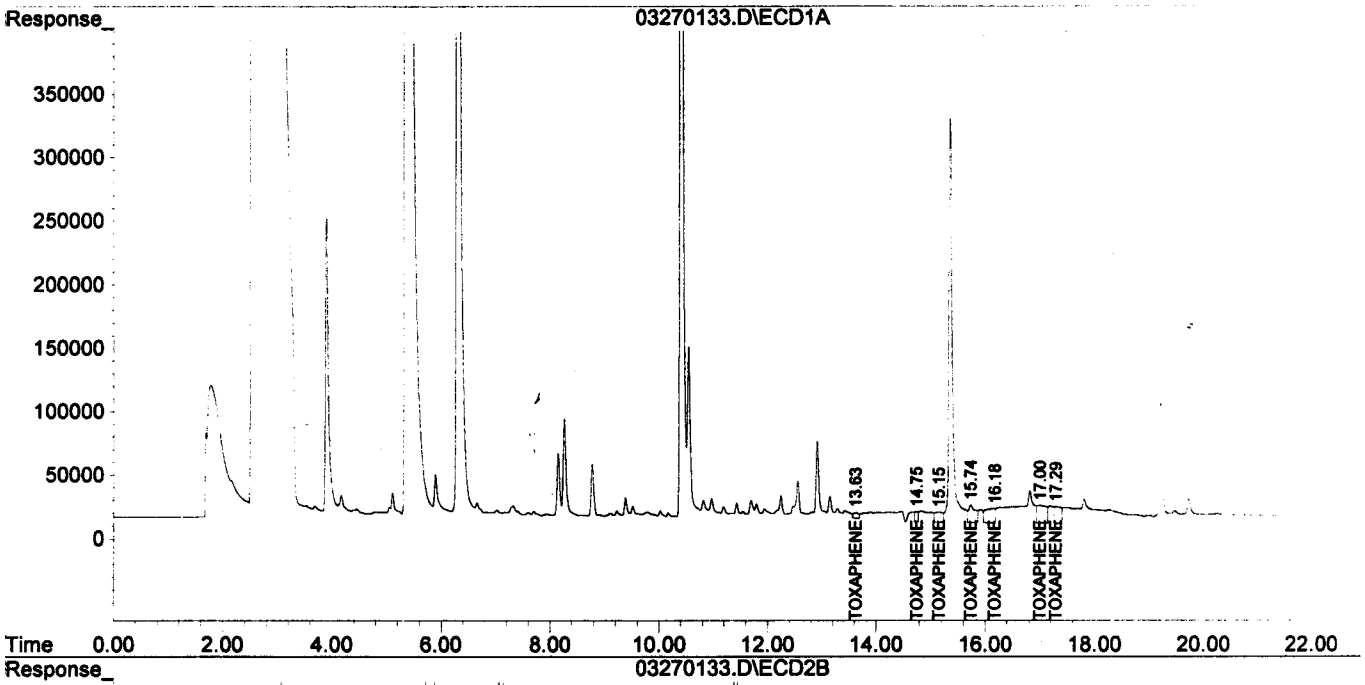
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

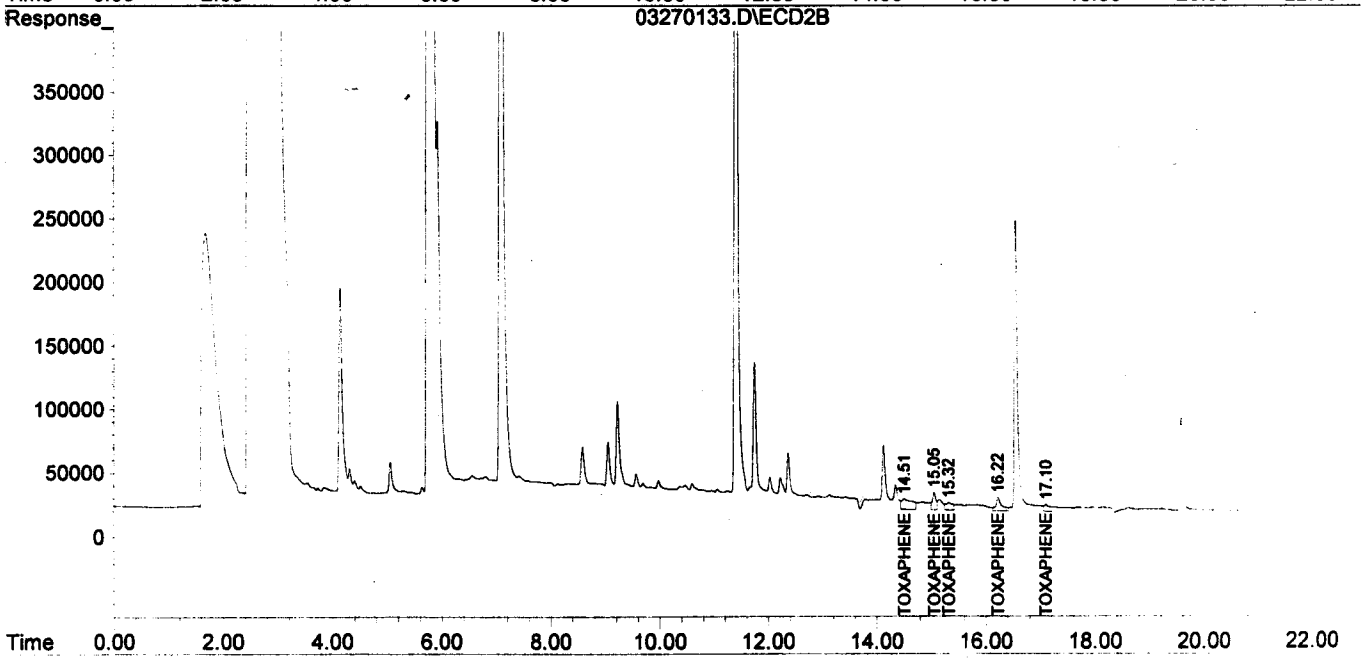
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270133.D\ECD1A.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\032701\03270133.D\ECD2B.CH
Acq On : 28 Mar 2001 11:25 Operator: YGK
Sample : 10159 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 30 10:01 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270123.D\ECD1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\032701\03270123.D\ECD2B.CH
Acq On : 28 Mar 2001 00:58 Operator: YGK
Sample : 10159 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:54 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.29	5.93	52952265	6527285	0.351	0.052	#
		Spiked Amount 0.100			Recovery	=	351.00% *	52.00% ✓	
22)	S	Decachlorobiphen	19.21	19.58	2566654	2287513	0.019	0.017	
		Spiked Amount 0.100			Recovery	=	19.00% ✓	17.00%	
		Target Compounds							
2)	T	alpha-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	T	beta-BHC	8.76	0.00	4293114	0	0.043	N.D.	#
4)	T	gamma-BHC (Linda	8.54	0.00	80333	0	0.000	N.D.	#
5)	T	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
6)	T	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
7)	T	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	T	Heptachlor epoxi	11.93	0.00	38928	0	0.000	N.D.	#
9)	T	Endosulfan I	12.83	0.00	251582	0	0.002	N.D.	#
10)	T	gamma-Chlordane	12.24	0.00	359135	0	0.002	N.D.	#
11)	T	alpha-Chlordane	12.55	0.00	698994	0	0.005	N.D.	#
12)	T	4,4'-DDE	12.73	0.00	111751	0	0.001	N.D.	#
13)	T	Dieldrin	13.42	13.12	59552	61386	0.000	0.000	
14)	T	Endrin	13.97	13.76f	702753	294766	0.007	0.003	#
15)	T	4,4'-DDD	14.21f	0.00	16672	0	0.000	N.D.	#
16)	T	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	T	Endrin aldehyde	15.40	15.05	158700	47056	0.002	0.000	#
18)	T	4,4'-DDT	14.75	14.82	34798	26637	0.000	0.000	#
19)	T	Endosulfan sulfa	16.36	15.65	23844	14149	0.000	0.000	#
20)	T	Methoxychlor	0.00	0.00	0	0	N.D.	N.D.	
21)	T	Endrin ketone	17.07f	0.00	28477	0	0.000	N.D.	#

* used rear col. for SS1

Endr. Ald < 4D2

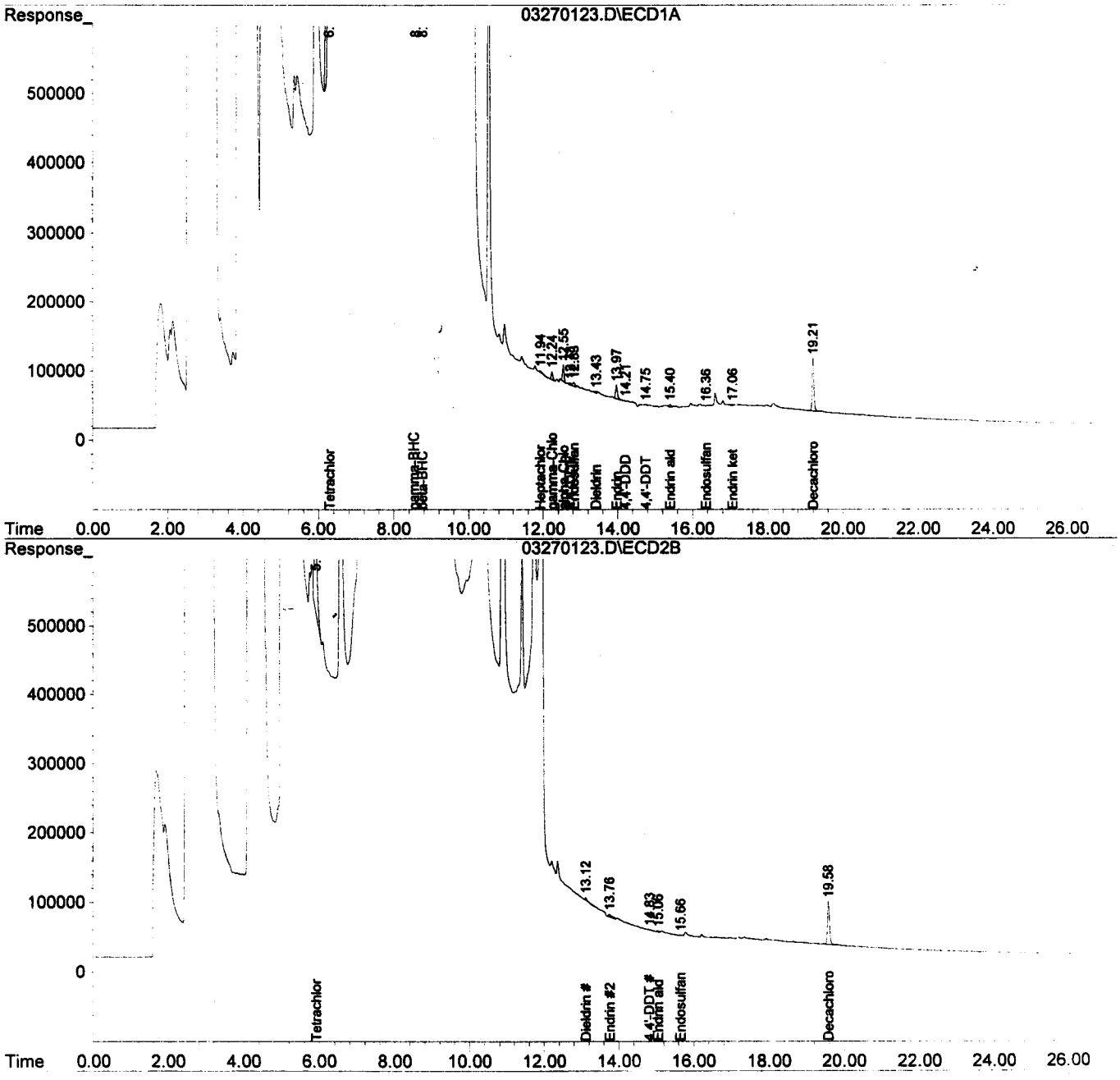
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270123.D\ECD1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\032701\03270123.D\ECD2B.CH
Acq On : 28 Mar 2001 00:58 Operator: YGK
Sample : 10159 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:54 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270124.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\032701\03270124.D\ECD2B.CH
Acq On : 28 Mar 2001 1:30 Operator: YGK
Sample : 10160 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:55 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.29	5.93	13338209	8896600	0.088	0.070	
		Spiked Amount 0.100			Recovery	=	88.00%	70.00%	
22)	S	Decachlorobiphen	19.21	19.59	5908650	5571253	0.044	0.041	
		Spiked Amount 0.100			Recovery	=	44.00%	41.00%	
		Target Compounds							
2)	T	alpha-BHC	0.00	7.47f	0	161665	N.D.	0.001	#
3)	T	beta-BHC	8.80f	8.55	250403	652334	0.003	0.008	#
4)	T	gamma-BHC (Linda	0.00	0.00	0	0	N.D.	N.D.	
5)	T	delta-BHC	0.00	9.32	0	85561	N.D.	0.001	#
6)	T	Heptachlor	0.00	9.45f	0	66034	N.D.	0.000	#
7)	T	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	T	Heptachlor epoxi	0.00	11.57	0	102942	N.D.	0.001	#
9)	T	Endosulfan I	12.85	12.52	1053204	240872	0.008	0.002	#
10)	T	gamma-Chlordane	12.23	0.00	664331	0	0.004	N.D.	#
11)	T	alpha-Chlordane	12.49f	0.00	44201	0	0.000	N.D.	#
12)	T	4,4'-DDE	12.69f	12.77	284318	111485	0.002	0.001	#
13)	T	Dieldrin	13.47	0.00	13887	0	0.000	N.D.	#
14)	T	Endrin	13.93	13.90f	46584	530626	0.000	0.005	#
15)	T	4,4'-DDD	0.00	14.10	0	305361	N.D.	0.003	#
16)	T	Endosulfan II	14.44	0.00	124645	0	0.001	N.D.	#
17)	T	Endrin aldehyde	15.41	15.06	42150	32112	0.000	0.000	#
18)	T	4,4'-DDT	14.83f	0.00	490484	0	0.005	N.D.	#
19)	T	Endosulfan sulfa	16.36	15.66	17450	11849	0.000	0.000	#
20)	T	Methoxychlor	15.80	16.22f	50789	1107723	0.001	0.023	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Pest < Dr

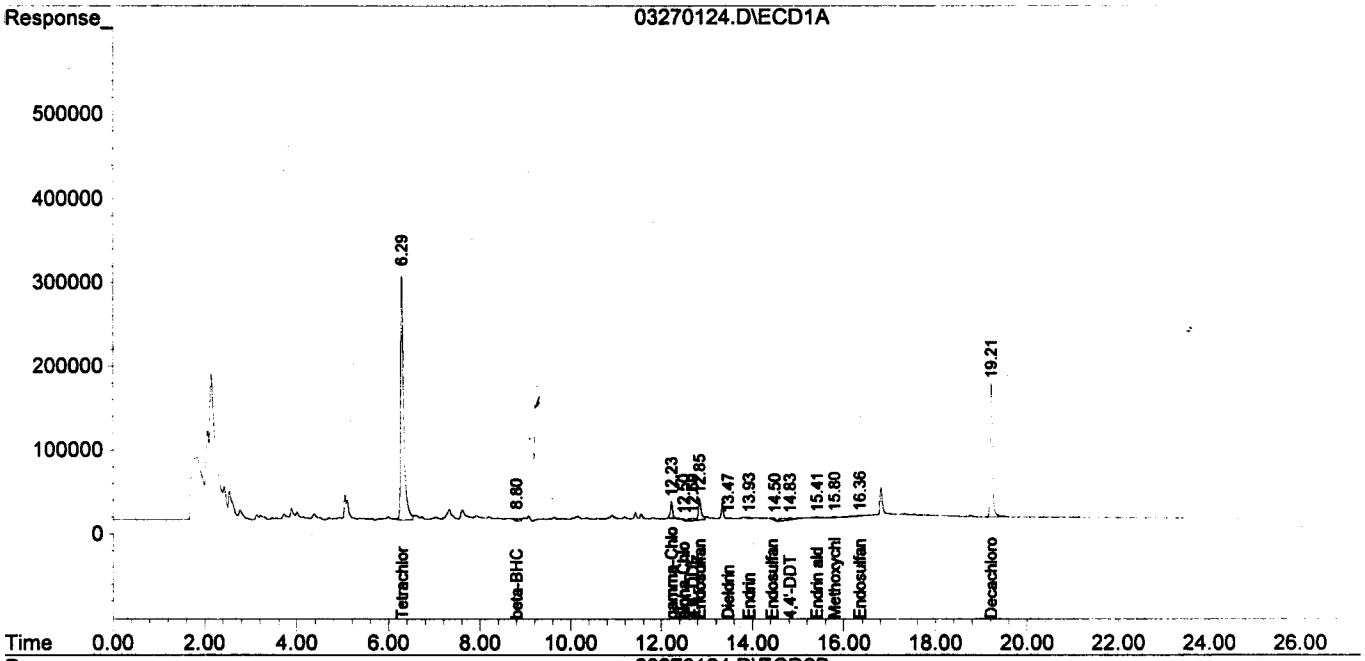
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

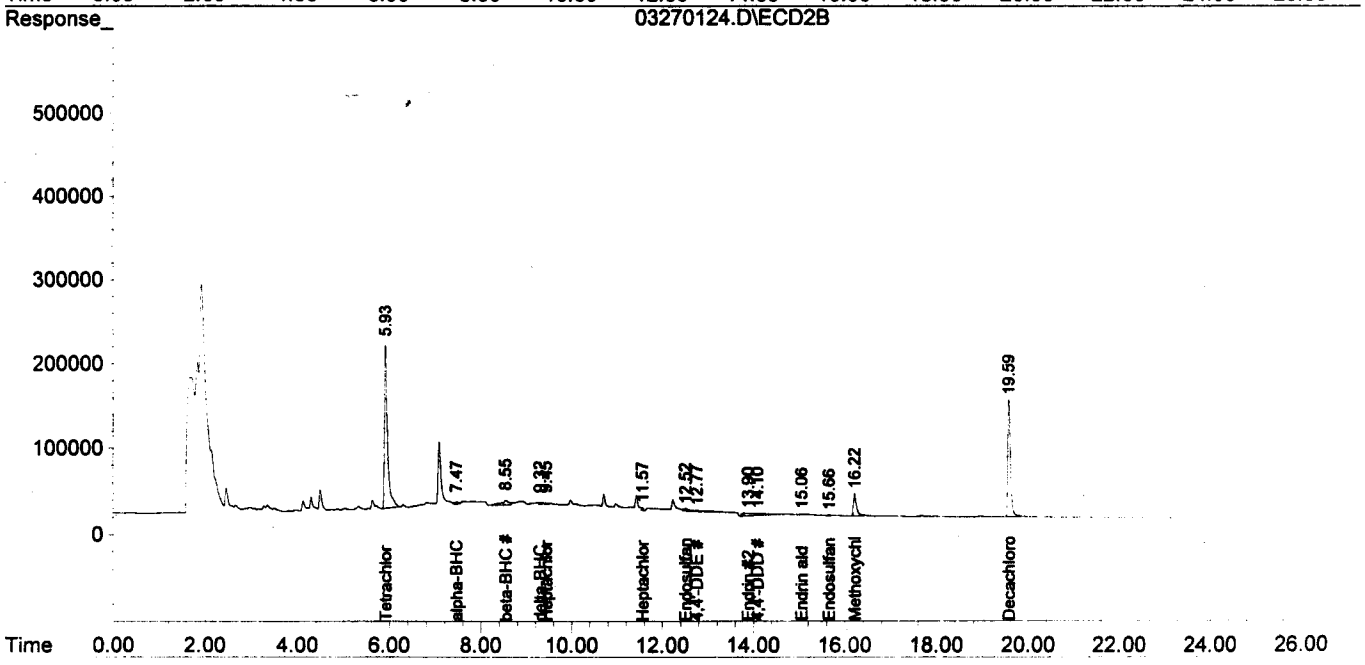
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270124.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\032701\03270124.D\ECD2B.CH
Acq On : 28 Mar 2001 1:30 Operator: YGK
Sample : 10160 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:55 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270124.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\032701\03270124.D\ECD2B.CH
Acq On : 28 Mar 2001 1:30 Operator: YGK
Sample : 10160 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:26 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds								
1) L	TOXAPHENE	1	13.69f	0.00	143314	0	0.055	N.D.	#
2) L	TOXAPHENE	2	14.74	14.49	444425	10457	0.106	0.002	#
3) L	TOXAPHENE	3	15.18	15.06	404848	38260	0.077	0.008	#
4) L	TOXAPHENE	4	15.67	15.33f	154505	20410	0.049	0.004	#
5) L	TOXAPHENE	5	16.16	16.22	721197	1204519	0.110	0.144	#
6) L	TOXAPHENE	6	0.00	16.22f	0	1204519	N.D.	0.246	#
7) L	TOXAPHENE	7	17.28	17.09	436840	7039	0.158	0.002	#
Sum	TOXAPHENE	1			2305128	2485204	0.555	0.405	
Average	TOXAPHENE	1					0.092	0.067	

TOX<02

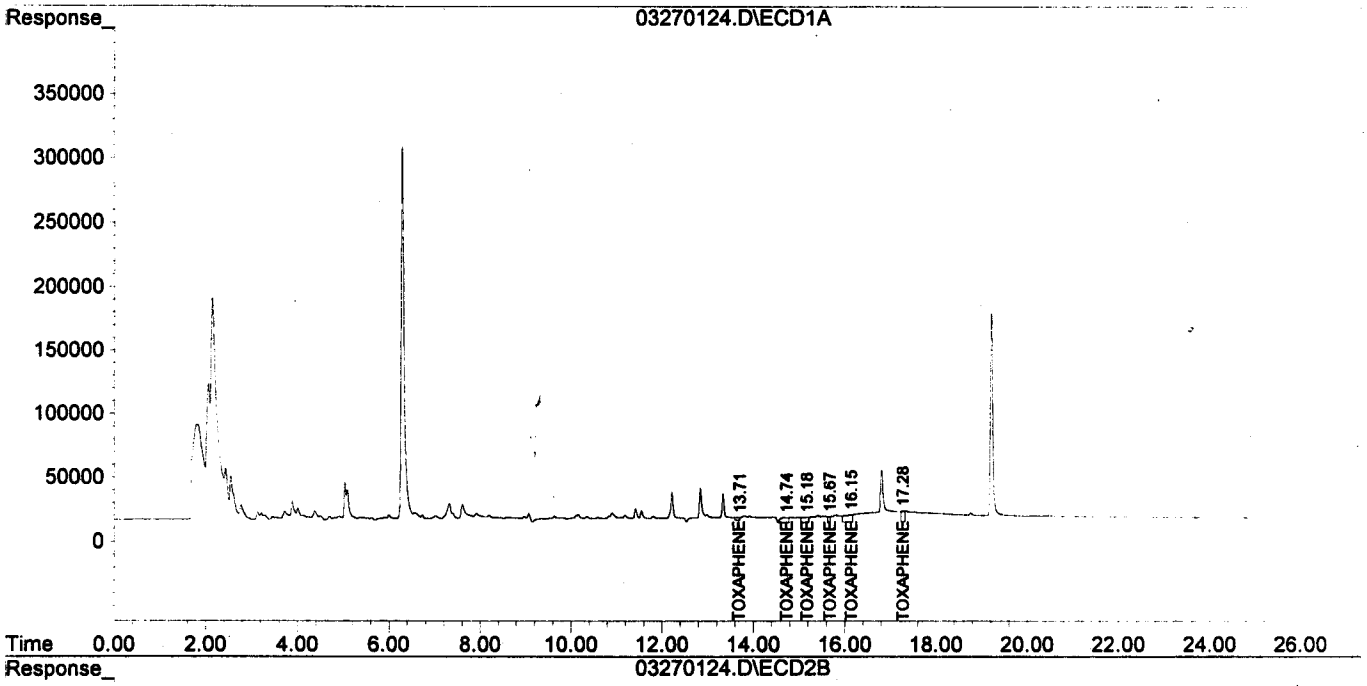
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

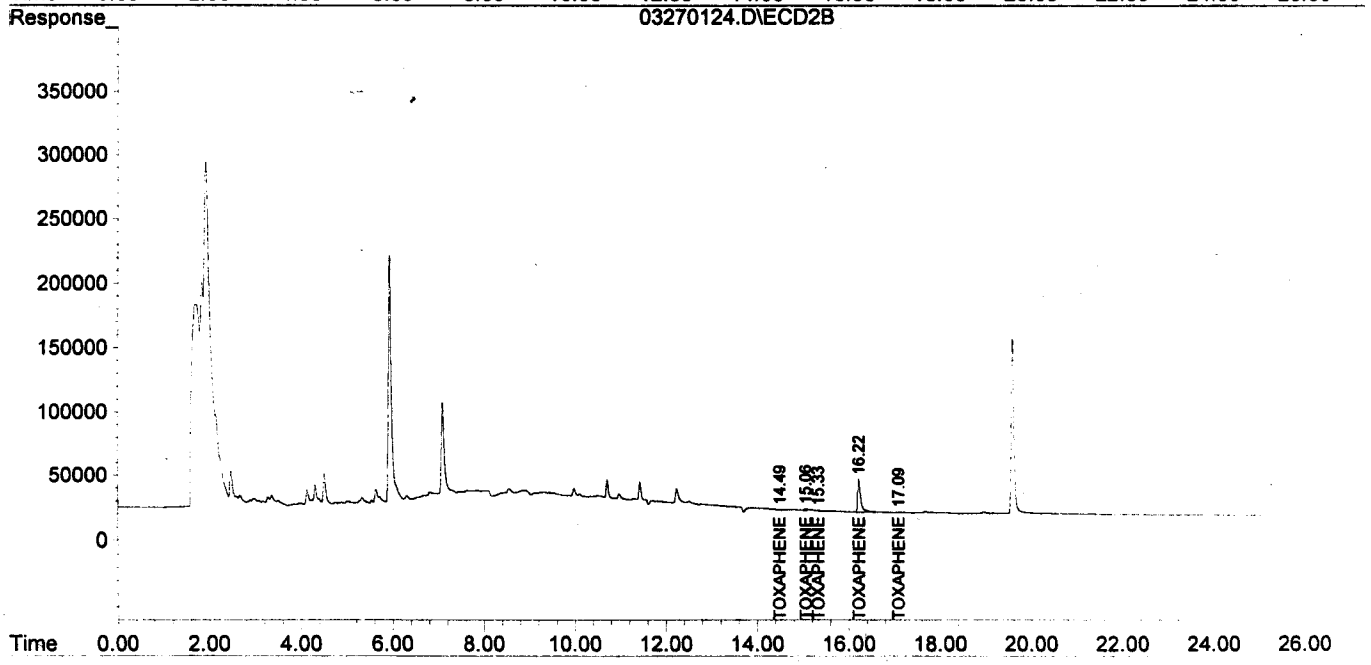
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270124.D\ECD1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\032701\03270124.D\ECD2B.CH
Acq On : 28 Mar 2001 1:30 Operator: YGK
Sample : 10160 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:26 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270112.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\032701\03270112.D\ECD2B.CH
Acq On : 27 Mar 2001 17:29 Operator: YGK
Sample : QPW0326011 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:46 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
	System Monitoring Compounds							
1)	S Tetrachloro-m-xy	6.30	5.94	14153582	11480008	0.094	0.091	
	Spiked Amount 0.100			Recovery	=	94.00%	91.00%	
22)	S Decachlorobiphen	19.22	19.59	9404852	8758500	0.070	0.065	
	Spiked Amount 0.100			Recovery	=	70.00%	65.00%	
	Target Compounds							
2)	T alpha-BHC	7.69	7.48f	23654	50333	0.000	0.000	#
3)	T beta-BHC	8.81f	8.56	90200	1055399	0.001	0.013	#
4)	T gamma-BHC (Linda	8.48f	8.36	32742	169434	0.000	0.001	#
5)	T delta-BHC	9.22	9.32	146553	106505	0.001	0.001	
6)	T Heptachlor	9.71	9.44	90327	44856	0.001	0.000	#
7)	T Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	T Heptachlor epoxi	0.00	11.57	0	98560	N.D.	0.001	#
9)	T Endosulfan I	12.85	12.54	561589	198971	0.004	0.001	#
10)	T gamma-Chlordane	12.18f	12.00	18547	327134	0.000	0.002	#
11)	T alpha-Chlordane	12.60f	0.00	38543	0	0.000	N.D.	#
12)	T 4,4'-DDE	12.69f	0.00	118779	0	0.001	N.D.	#
13)	T Dieldrin	0.00	13.03f	0	176659	N.D.	0.001	#
14)	T Endrin	14.01f	13.78	14596	43002	0.000	0.000	#
15)	T 4,4'-DDD	0.00	14.10	0	21649	N.D.	0.000	#
16)	T Endosulfan II	14.50	14.31	65046	18702	0.001	0.000	#
17)	T Endrin aldehyde	15.42	15.06	216332	118229	0.002	0.001	#
18)	T 4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
19)	T Endosulfan sulfa	16.45f	15.67	359228	28011	0.003	0.000	#
20)	T Methoxychlor	15.80	16.22f	15717	1888053	0.000	0.039	#
21)	T Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Pest < $\frac{1}{2}$ PQL

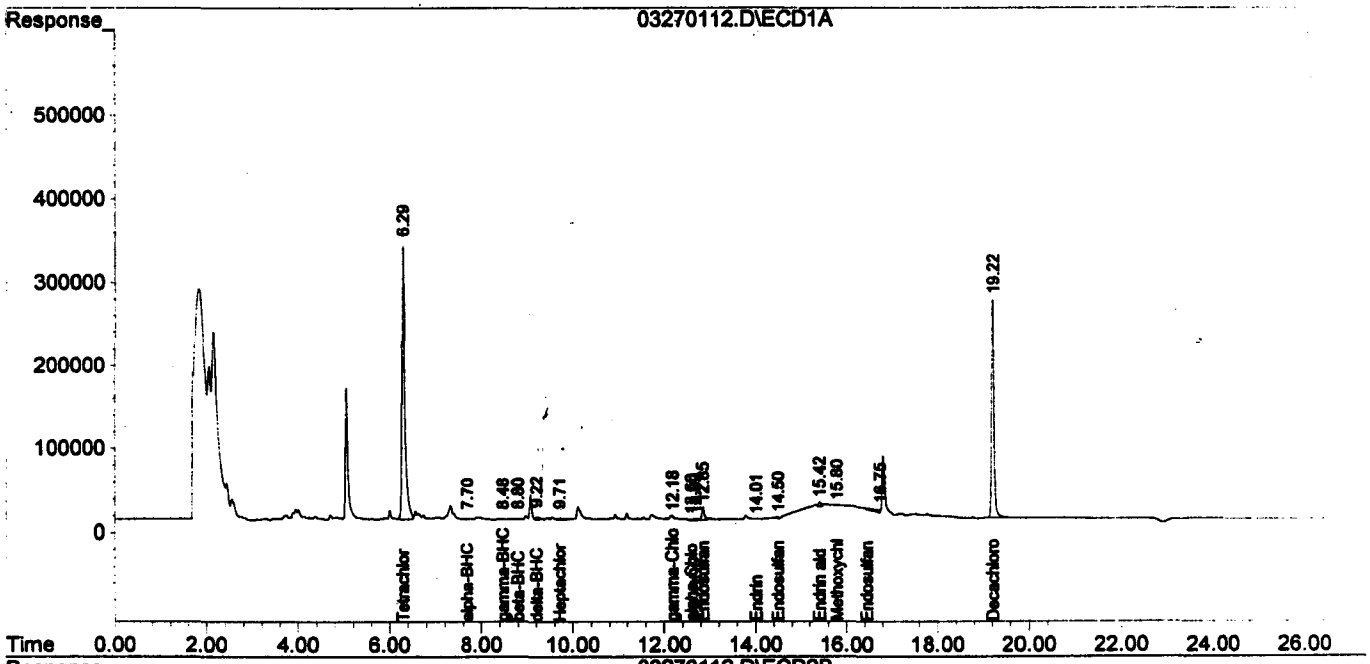
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

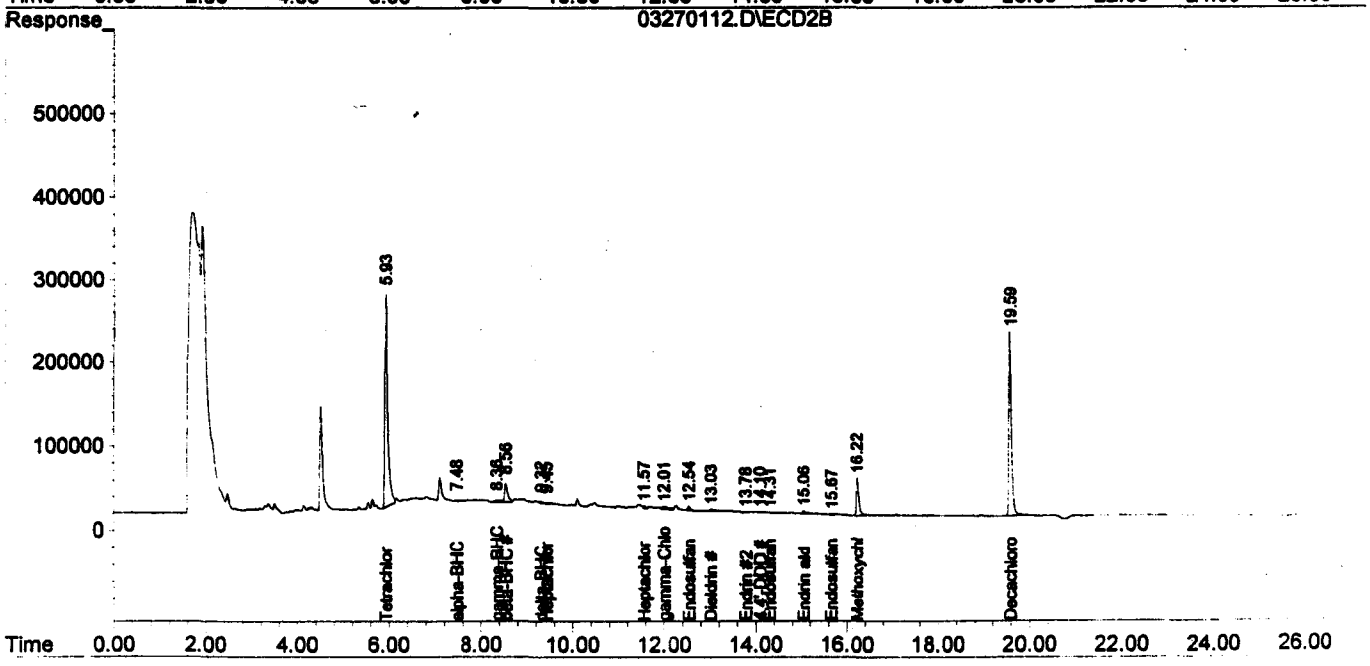
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270112.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\032701\03270112.D\ECD2B.CH
Acq On : 27 Mar 2001 17:29 Operator: YGK
Sample : QPW0326011 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:46 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270112.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\032701\03270112.D\ECD2B.CH
Acq On : 27 Mar 2001 17:29 Operator: YGK
Sample : QPW0326011 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:24 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1) L	TOXAPHENE	1	13.64	14.31	2097	165191	0.001	0.066	#
2) L	TOXAPHENE	2	0.00	0.00	0	0	N.D.	N.D.	
3) L	TOXAPHENE	3	0.00	15.06	0	200194	N.D.	0.041	#
4) L	TOXAPHENE	4	15.67	15.17f	1177710	106301	0.373	0.018	#
5) L	TOXAPHENE	5	16.14	16.22	935255	2069712	0.143	0.248	#
6) L	TOXAPHENE	6	0.00	16.22f	0	2069712	N.D.	0.422	#
7) L	TOXAPHENE	7	17.38f	17.01	197576	73717	0.071	0.020	#
Sum	TOXAPHENE	1			2312638	4684828	0.588	0.815	
Average	TOXAPHENE	1					0.147	0.136	

Tox < ½ DL

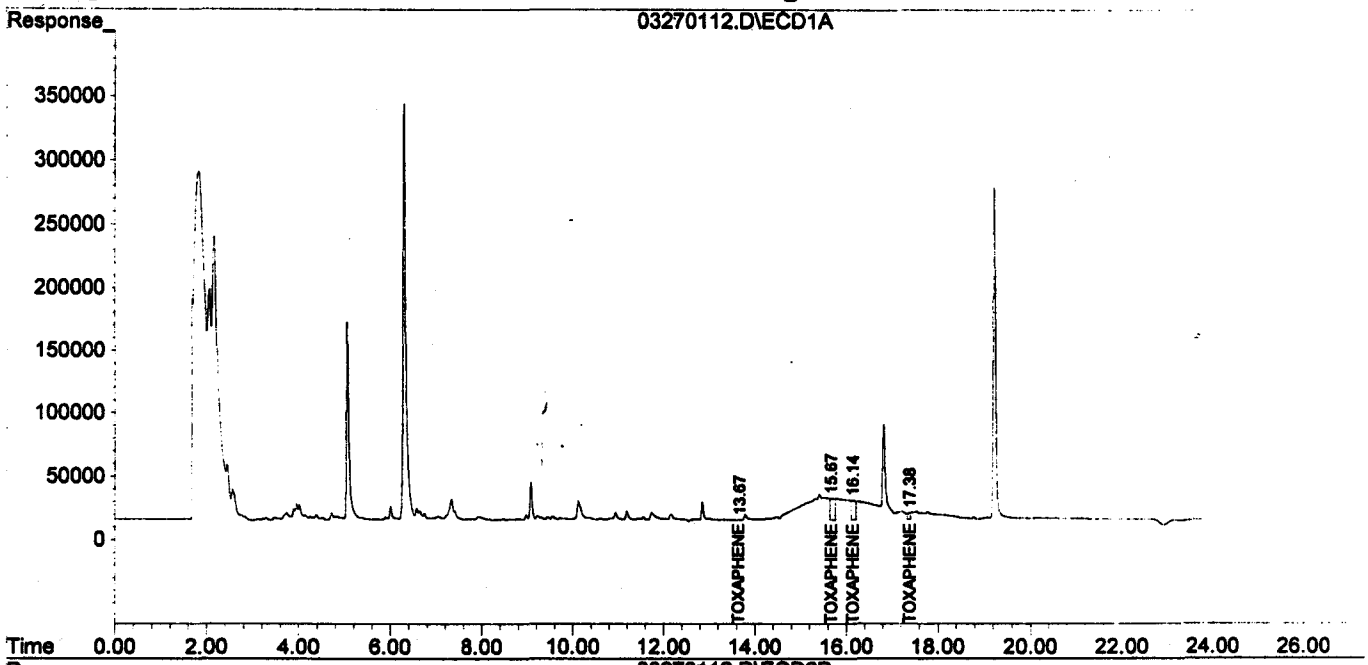
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

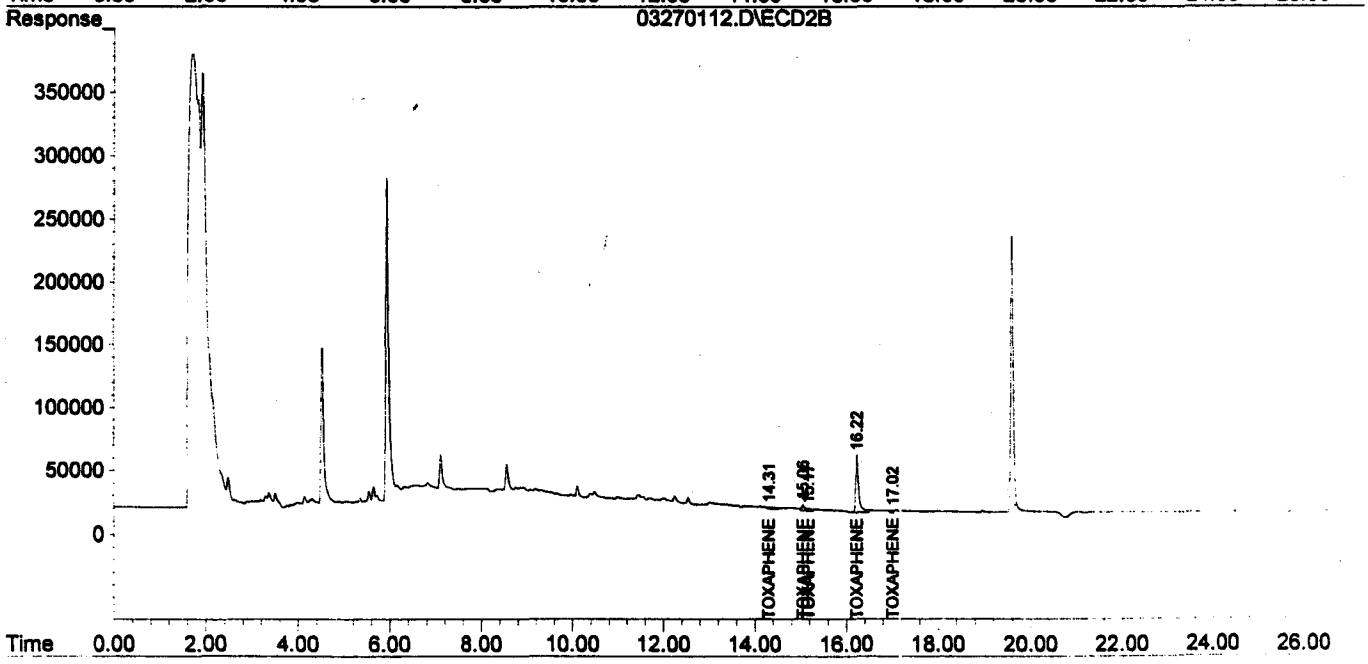
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270112.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\032701\03270112.D\ECD2B.CH
Acq On : 27 Mar 2001 17:29 Operator: YGK
Sample : QPW0326011 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 28 9:24 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270128.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\032701\03270128.D\ECD2B.CH
Acq On : 28 Mar 2001 8:44 Operator: YGK
Sample : QPW0326011 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 11:57 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.28	5.92	15096154	11897576	0.100	0.094	
		Spiked Amount 0.100			Recovery	=	100.00%	94.00%	
22)	S	Decachlorobiphen	19.20	19.57	10638656	9924930	0.080	0.074	
		Spiked Amount 0.100			Recovery	=	80.00%	74.00%	
		Target Compounds							
2)	T	alpha-BHC	0.00	7.46f	0	35041	N.D.	0.000	#
3)	T	beta-BHC	8.80	8.54f	15409	1077304	0.000	0.013	#
4)	T	gamma-BHC (Linda	8.47f	8.34	31308	103536	0.000	0.001	#
5)	T	delta-BHC	9.20	9.31	110072	93890	0.001	0.001	
6)	T	Heptachlor	9.70	9.44	42551	55493	0.000	0.000	
7)	T	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	T	Heptachlor epoxi	0.00	11.56	0	148226	N.D.	0.001	#
9)	T	Endosulfan I	12.84	12.53	656081	248006	0.005	0.002	#
10)	T	gamma-Chlordane	0.00	11.99f	0	448158	N.D.	0.003	#
11)	T	alpha-Chlordane	12.60f	0.00	86565	0	0.001	N.D.	#
12)	T	4,4'-DDE	12.68f	12.74f	291469	20860	0.002	0.000	#
13)	T	Dieldrin	0.00	0.00	0	0	N.D.	N.D.	
14)	T	Endrin	0.00	13.89f	0	426452	N.D.	0.004	#
15)	T	4,4'-DDD	0.00	14.08	0	191760	N.D.	0.002	#
16)	T	Endosulfan II	14.46	14.29	88724	80769	0.001	0.001	
17)	T	Endrin aldehyde	15.40	15.04	112692	98423	0.001	0.001	
18)	T	4,4'-DDT	14.73	14.80	314874	22681	0.003	0.000	#
19)	T	Endosulfan sulfa	16.36	15.65	13099	12918	0.000	0.000	
20)	T	Methoxychlor	15.79	0.00	19743	0	0.000	N.D.	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

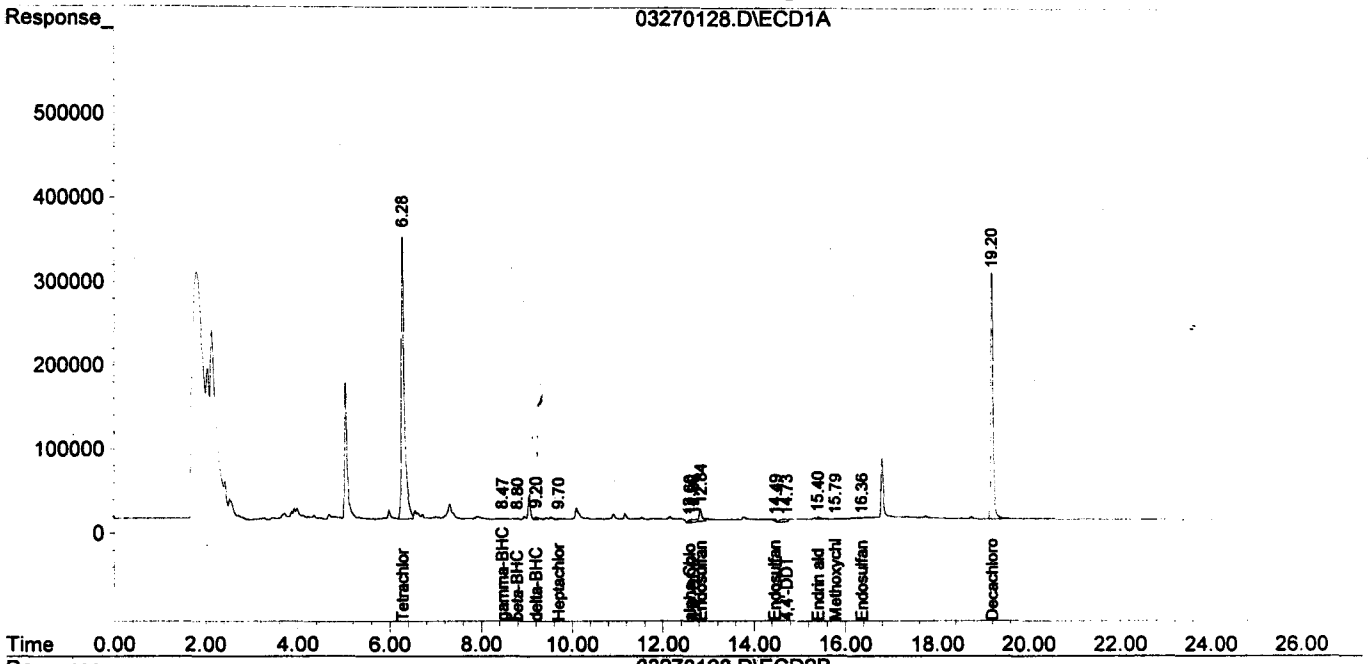
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

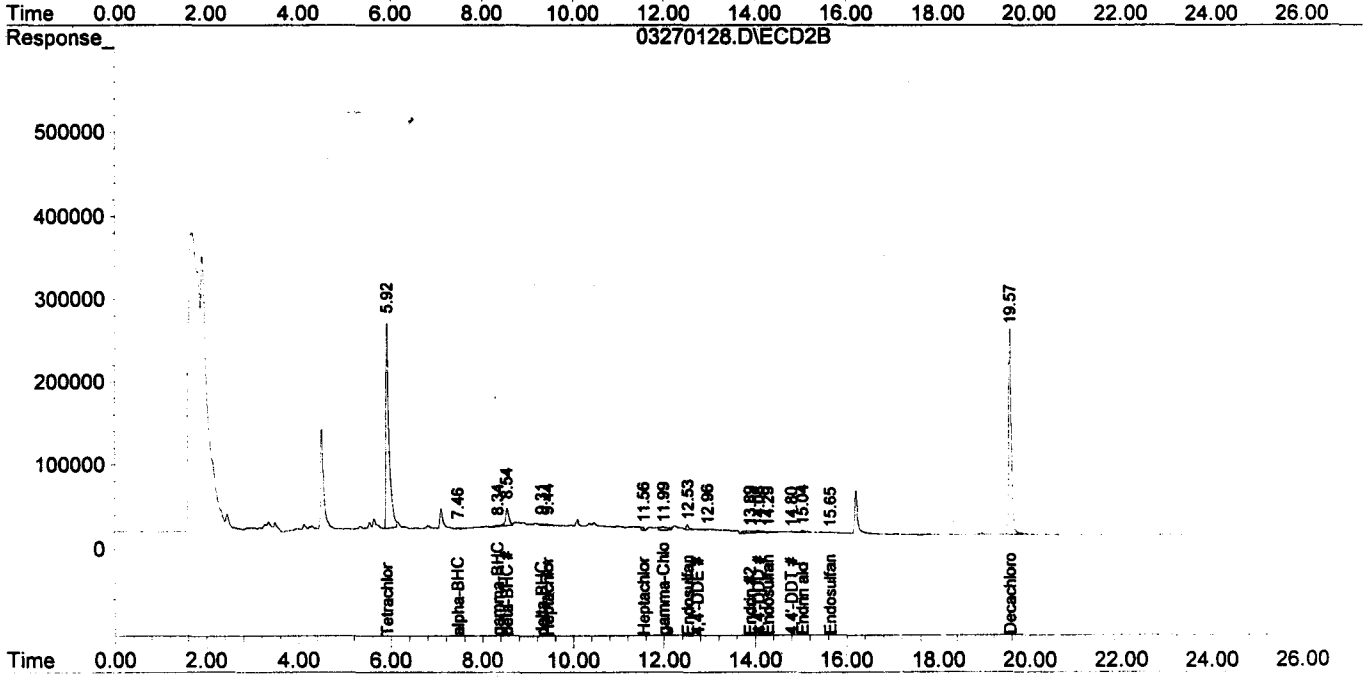
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270128.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\032701\03270128.D\ECD2B.CH
Acq On : 28 Mar 2001 8:44 Operator: YGK
Sample : QPW0326011 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 11:57 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270128.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\032701\03270128.D\ECD2B.CH
Acq On : 28 Mar 2001 8:44 Operator: YGK
Sample : QPW0326011 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 30 9:59 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1) L	TOXAPHENE	1	13.63	14.29	76369	242114	0.029	0.097	#
2) L	TOXAPHENE	2	14.73	14.45f	413574	100786	0.099	0.016	#
3) L	TOXAPHENE	3	15.31f	15.04	302725	246908	0.057	0.051	
4) L	TOXAPHENE	4	15.66	15.31f	180244	133517	0.057	0.023	#
5) L	TOXAPHENE	5	16.13	16.21	192341	2803739	0.029	0.336	#
6) L	TOXAPHENE	6	0.00	0.00	0	0	N.D.	N.D.	
7) L	TOXAPHENE	7	17.35f	17.07	323552	133414	0.117	0.036	#
Sum	TOXAPHENE	1			1488804	3660479	0.389	0.559	
Average	TOXAPHENE	1					0.065	0.093	

TOX 5 2

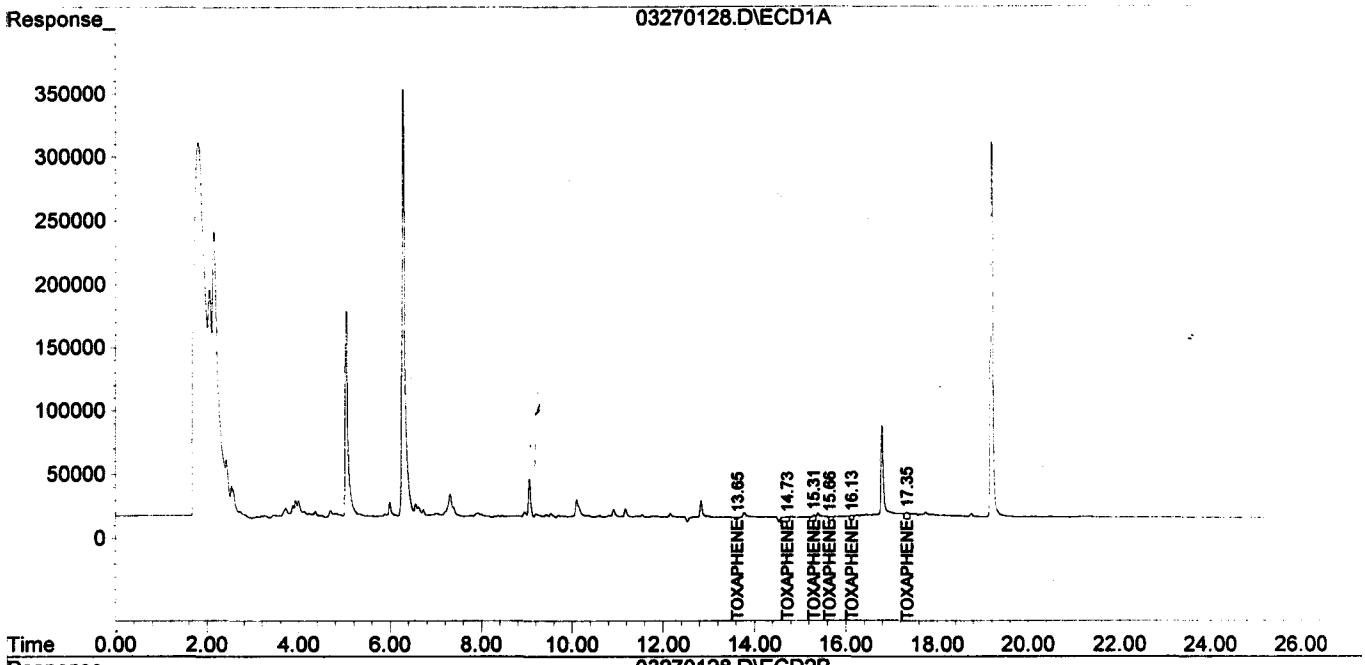
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

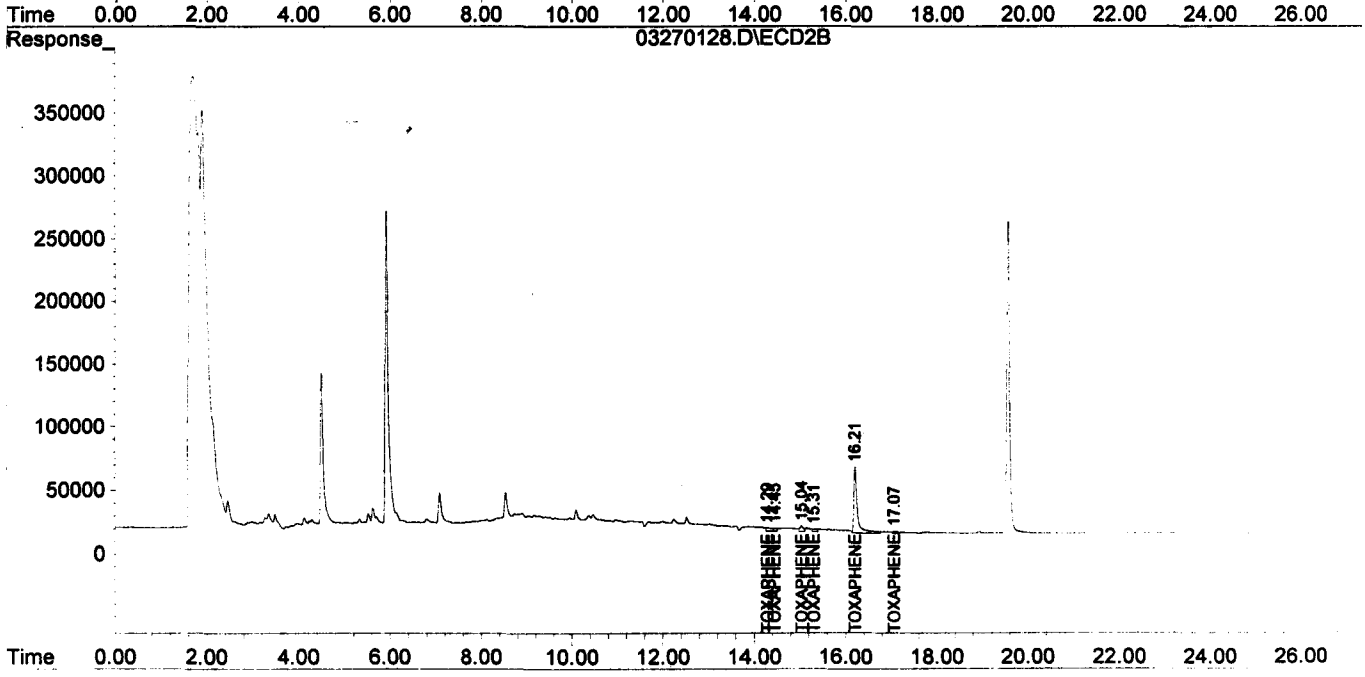
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270128.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\032701\03270128.D\ECD2B.CH
Acq On : 28 Mar 2001 8:44 Operator: YGK
Sample : QPW0326011 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Mar 30 9:59 2001 Quant Results File: 020101TX.RES

Quant Method : C:\HPCHEM\1\METHODS\020101TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,02/01/01
Last Update : Tue Mar 06 09:49:37 2001
Response via : Single Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Accura Analytical Laboratory, Inc.

Pesticides LCS Report

Sample ID:	QPW0326012	**Date Acquired:**	3/27/01
Operator:	YGK	**Instrument ID:**	PESST-A
Data File:	03270113	**Bottle #:**	13
Method:	8081A	**Matrix:**	Water

Compounds	Expected Conc. (ppm)	Actual Conc. (ppm)	Percent Recovery	Recovery Limits (%)	Pass/ Fail
Aldrin	0.10	0.079	79%	61 - 108	Pass
alpha-BHC	0.10	0.09	90%	67 - 124	Pass
alpha-Chlordane	0.10	0.096	96%	50 - 150	Pass
beta-BHC	0.10	0.085	85%	67 - 110	Pass
gamma-BHC	0.10	0.083	83%	65 - 112	Pass
gamma-Chlordane	0.10	0.089	89%	50 - 150	Pass
delta-BHC	0.10	0.076	76%	66 - 108	Pass
4,4'-DDD	0.10	0.095	95%	79 - 136	Pass
4,4'-DDE	0.10	0.092	92%	78 - 130	Pass
4,4'-DDT	0.10	0.095	95%	78 - 134	Pass
Dieldrin	0.10	0.095	95%	79 - 127	Pass
Endosulfan I	0.10	0.047	47%	39 - 115	Pass
Endosulfan II	0.10	0.052	52%	50 - 109	Pass
Endosulfan Sulfate	0.10	0.099	99%	79 - 137	Pass
Endrin	0.10	0.105	105%	83 - 148	Pass
Endrin Aldehyde	0.10	0.091	91%	78 - 118	Pass
Endrin Ketone	0.10	0.09	90%	74 - 121	Pass
Heptachlor epoxide	0.10	0.09	90%	76 - 117	Pass
Heptachlor	0.10	0.085	85%	62 - 118	Pass
Methoxychlor	0.10	0.1	100%	79 - 133	Pass

Surrogates	Expected Rec. (ppm)	Actual Rec. (ppm)	Percent Recovery	Recovery Limits (%)	Pass/ Fail
Tetrachloro-m-xylene	0.10	0.08	80%	38 - 107	Pass
Decachlorobiphenyl	0.10	0.069	69%	30 - 136	Pass

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270113.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\032701\03270113.D\ECD2B.CH
Acq On : 27 Mar 2001 18:01 Operator: YGK
Sample : QPW0326012 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:47 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.29	5.93	12024544	10295934	0.080	0.082	
		Spiked Amount 0.100			Recovery	=	80.00%	82.00%	
22)	S	Decachlorobiphen	19.22	19.59	9255967	8575899	0.069	0.064	
		Spiked Amount 0.100			Recovery	=	69.00%	64.00%	
		Target Compounds							
2)	T	alpha-BHC	7.70	7.42	18088478	16072000	0.090	0.094	
3)	T	beta-BHC	8.77	8.58	8519669	8040824	0.085	0.097	
4)	T	gamma-BHC (Linda	8.52	8.34	16435424	14510312	0.083	0.085	
5)	T	delta-BHC	9.22	9.32	14757615	13069532	0.076	0.097	#
6)	T	Heptachlor	9.72	9.42	13061385	15351027	0.085	0.093	
7)	T	Aldrin	10.47	10.21	12311272	13159818	0.079	0.091	
8)	T	Heptachlor epoxi	11.94	11.59	12422782	12572507	0.090	0.099	
9)	T	Endosulfan I	12.87	12.50	6025732	5692164	0.047	0.043	
10)	T	gamma-Chlordane	12.24	12.04	13696896	14148470	0.089	0.090	
11)	T	alpha-Chlordane	12.55	12.38	12794483	13191973	0.096	0.089	
12)	T	4,4'-DDE	12.75	12.81	11201041	12509819	0.092	0.091	
13)	T	Dieldrin	13.43	13.13	12380455	12715578	0.095	0.094	
14)	T	Endrin	13.96	13.82	10025764	9707838	0.105	0.099	
15)	T	4,4'-DDD	14.13	14.12	9489710	9227546	0.095	0.092	
16)	T	Endosulfan II	14.48	14.30	5648221	6537693	0.052	0.053	
17)	T	Endrin aldehyde	15.41	15.05	8513479	7918691	0.091	0.083	
18)	T	4,4'-DDT	14.75	14.80	9767174	10046529	0.095	0.092	
19)	T	Endosulfan sulfa	16.38	15.66	10377132	9685456	0.099	0.089	
20)	T	Methoxychlor	15.83	16.32	5531814	4626477	0.100	0.094	
21)	T	Endrin ketone	17.01	16.83	11432294	10328999	0.090	0.087	

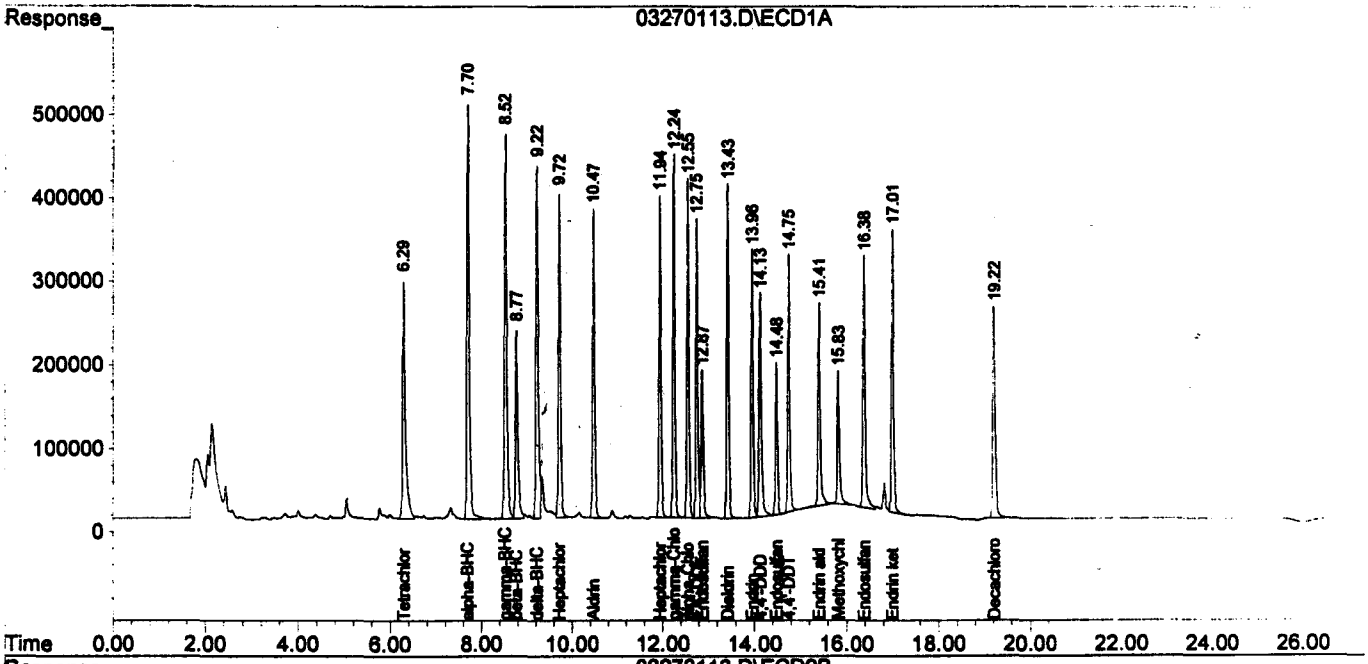
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

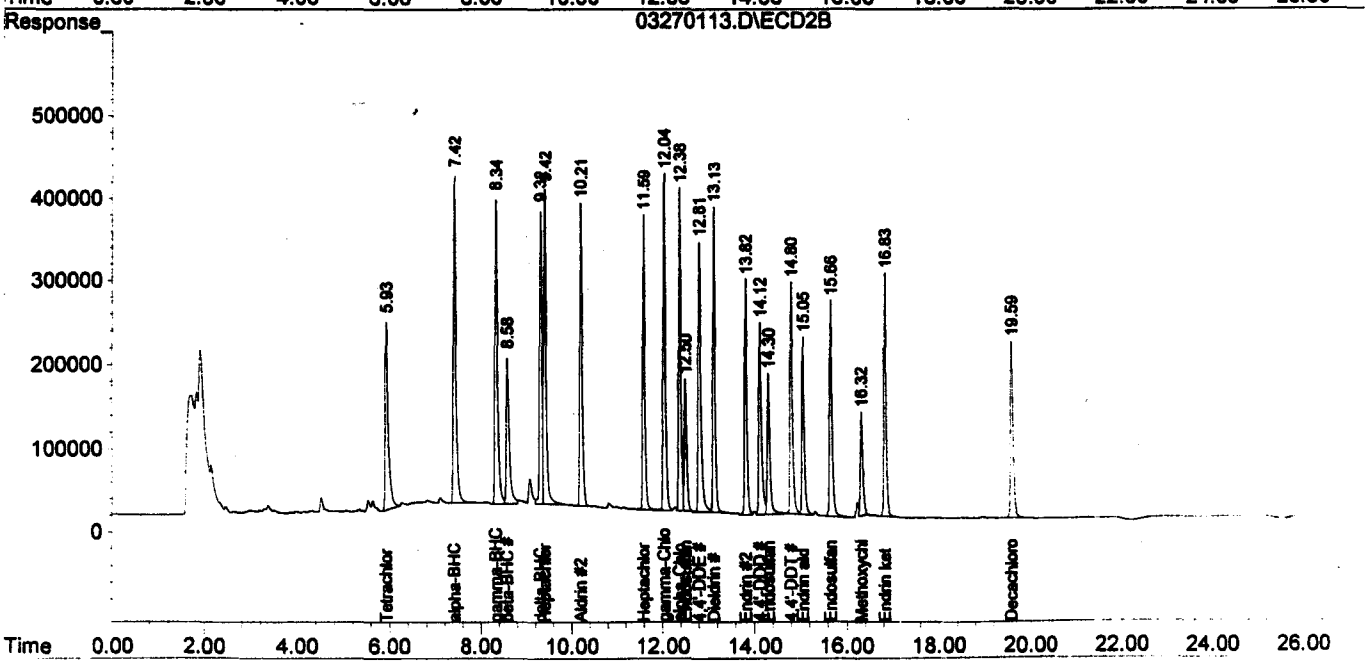
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270113.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\032701\03270113.D\ECD2B.CH
Acq On : 27 Mar 2001 18:01 Operator: YGK
Sample : QPW0326012 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 8:47 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ACCURA ANALYTICAL LABORATORY, INC.
Environmental Analytical Services

SAMPLE EXTRACTION BATCHBOOK

Beginning Date: 3/15/01 **Batch ID:** PestW-081 **Matrix:** water

Ext. Method: 3520 **MS ID:** 09765 **MSD ID:** 09765

	Lab. Proj. #	LIMS ID #	Ext. Date	Comment
1	27289	09764	3/15/01	
2	↓	09765	↓	
3		09766		
4		09767		
5	↓	09768	↓	
6	27336	10025	3/22/01	
7	27335	10029	↓	
8	27364	10143	3/26/01	
9	27368	10154	↓	
10	↓	10156		
11		10155		
12		10157		
13		10158		
14		10159		
15	↓	10160	↓	
16	27386	10303	3/28/01	
17	27398	10398	↓	
18				
19				
20				

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\031601\03160112.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\031601\03160112.D\ECD2B.CH
Acq On : 16 Mar 2001 15:10 Operator: YGK
Sample : 09765 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 19 9:21 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Mon Mar 19 09:14:42 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.30	5.94	10941715	10599408	0.073	0.084	
		Spiked Amount 0.100			Recovery	=	73.00% ✓	84.00%	
22)	S	Decachlorobiphen	19.21	19.58	13359539	12643491	0.100	0.094	
		Spiked Amount 0.100			Recovery	=	100.00% ✓	94.00%	
		Target Compounds							
2)	T	alpha-BHC	7.70	7.49f	10571	80486	0.000	0.000	#
3)	T	beta-BHC	8.78	8.56	152401	121827	0.002	0.001	
4)	T	gamma-BHC (Linda	8.57f	8.35	150945	81787	0.001	0.000	#
5)	T	delta-BHC	9.20	9.32	151676	97404	0.001	0.001	
6)	T	Heptachlor	9.78f	0.00	84463	0	0.001	N.D.	#
7)	T	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	T	Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	T	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
10)	T	gamma-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
11)	T	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
12)	T	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	T	Dieldrin	13.43	13.13	147525	530042	0.001	0.004	#
14)	T	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	T	4,4'-DDD	14.19f	14.16	45207	41687	0.000	0.000	
16)	T	Endosulfan II	14.48	0.00	23136	0	0.000	N.D.	#
17)	T	Endrin aldehyde	15.43	15.06	55881	40372	0.001	0.000	#
18)	T	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
19)	T	Endosulfan sulfa	16.45f	0.00	85657	0	0.001	N.D.	#
20)	T	Methoxychlor	15.84	16.22f	33465	1190169	0.001	0.024	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Pest<Dr

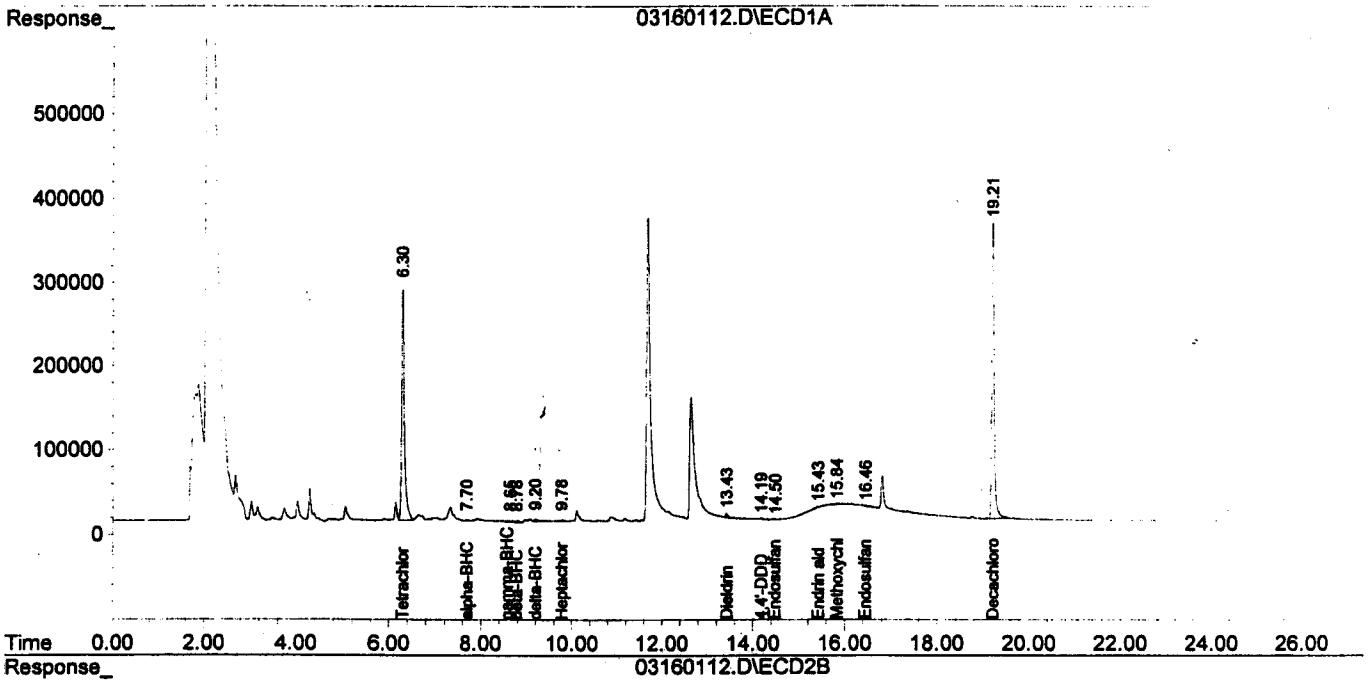
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual i[illegible]

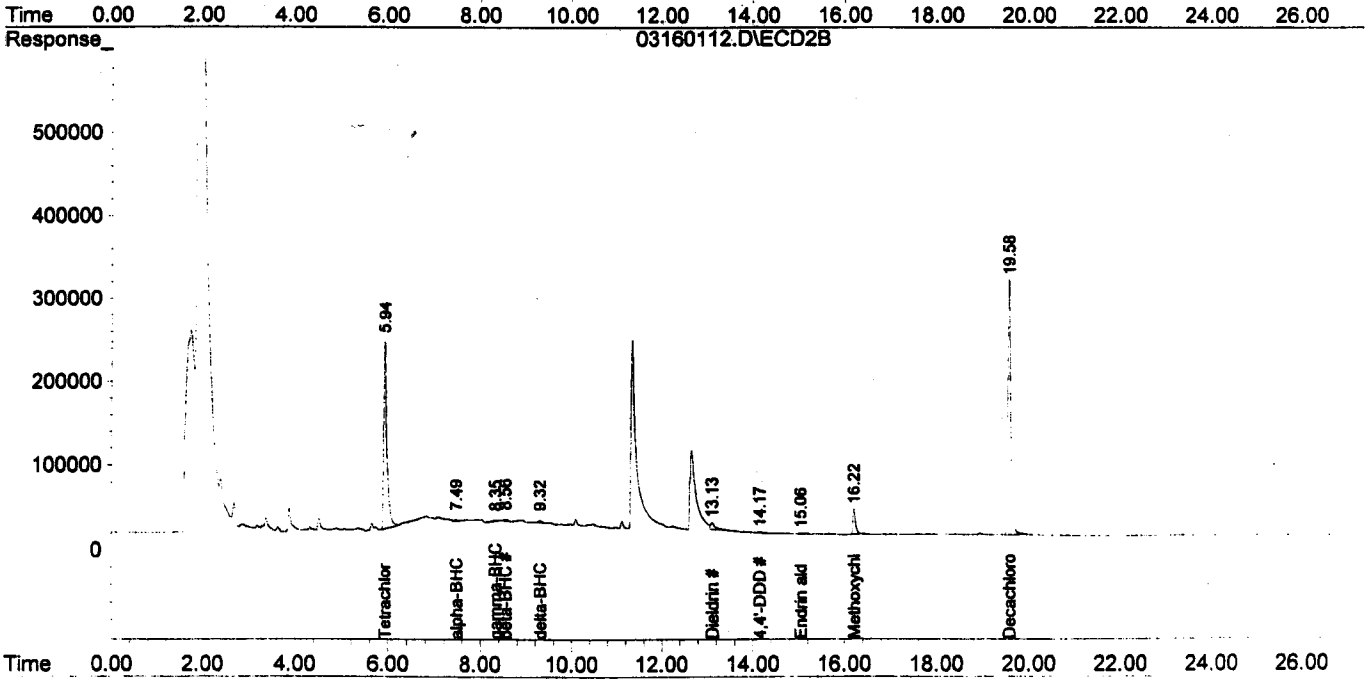
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\031601\03160112.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\031601\03160112.D\ECD2B.CH
Acq On : 16 Mar 2001 15:10 Operator: YGK
Sample : 09765 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 19 9:21 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Mon Mar 19 09:14:42 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\031601\03160113.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\031601\03160113.D\ECD2B.CH
Acq On : 16 Mar 2001 15:42 Operator: YGK
Sample : 09765 W MS Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 19 9:24 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Mon Mar 19 09:14:42 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.30	5.94	9680430	8852781	0.064	0.070	
		Spiked Amount 0.100			Recovery	=	64.00%	70.00%	
22)	S	Decachlorobiphen	19.21	19.58	12791354	12095127	0.096	0.090	
		Spiked Amount 0.100			Recovery	=	96.00%	90.00%	
		Target Compounds							
2)	T	alpha-BHC	7.70	7.42	16038664	15293340	0.080	0.089	
3)	T	beta-BHC	8.77	8.58	8114238	7384826	0.081	0.089	
4)	T	gamma-BHC (Linda	8.52	8.34	15492800	13750698	0.078	0.081	
5)	T	delta-BHC	9.23	9.32	15476424	12771372	0.079	0.094	
6)	T	Heptachlor	9.73	9.42	12693141	15026315	0.083	0.091	
7)	T	Aldrin	10.47	10.21	11544760	12513758	0.074	0.086	
8)	T	Heptachlor epoxi	11.95	11.59	11641510	13809905	0.084	0.109	#
9)	T	Endosulfan I	12.87	12.50	7827972	6161097	0.061	0.046	
10)	T	gamma-Chlordane	12.25	12.04	13932553	14198674	0.090	0.091	
11)	T	alpha-Chlordane	12.56	12.38	9861152	13139376	0.074	0.089	
12)	T	4,4'-DDE	12.75	12.81	14245352	15365464	0.118	0.112	
13)	T	Dieldrin	13.43	13.13	12753799	13284574	0.098	0.098	
14)	T	Endrin	13.96	13.81	10419187	10490894	0.109	0.107	
15)	T	4,4'-DDD	14.13	14.12	10198162	10209746	0.103	0.102	
16)	T	Endosulfan II	14.48	14.30	6281429	7062054	0.058	0.057	
17)	T	Endrin aldehyde	15.41	15.05	8343083	8997441	0.090	0.095	
18)	T	4,4'-DDT	14.75	14.80	10828578	10932812	0.106	0.100	
19)	T	Endosulfan sulfa	16.38	15.66	10387250	10501393	0.099	0.097	
20)	T	Methoxychlor	15.82	16.31	5482451	6411042	0.099	0.131	#
21)	T	Endrin ketone	17.00	16.83	12368523	10395189	0.097	0.088	

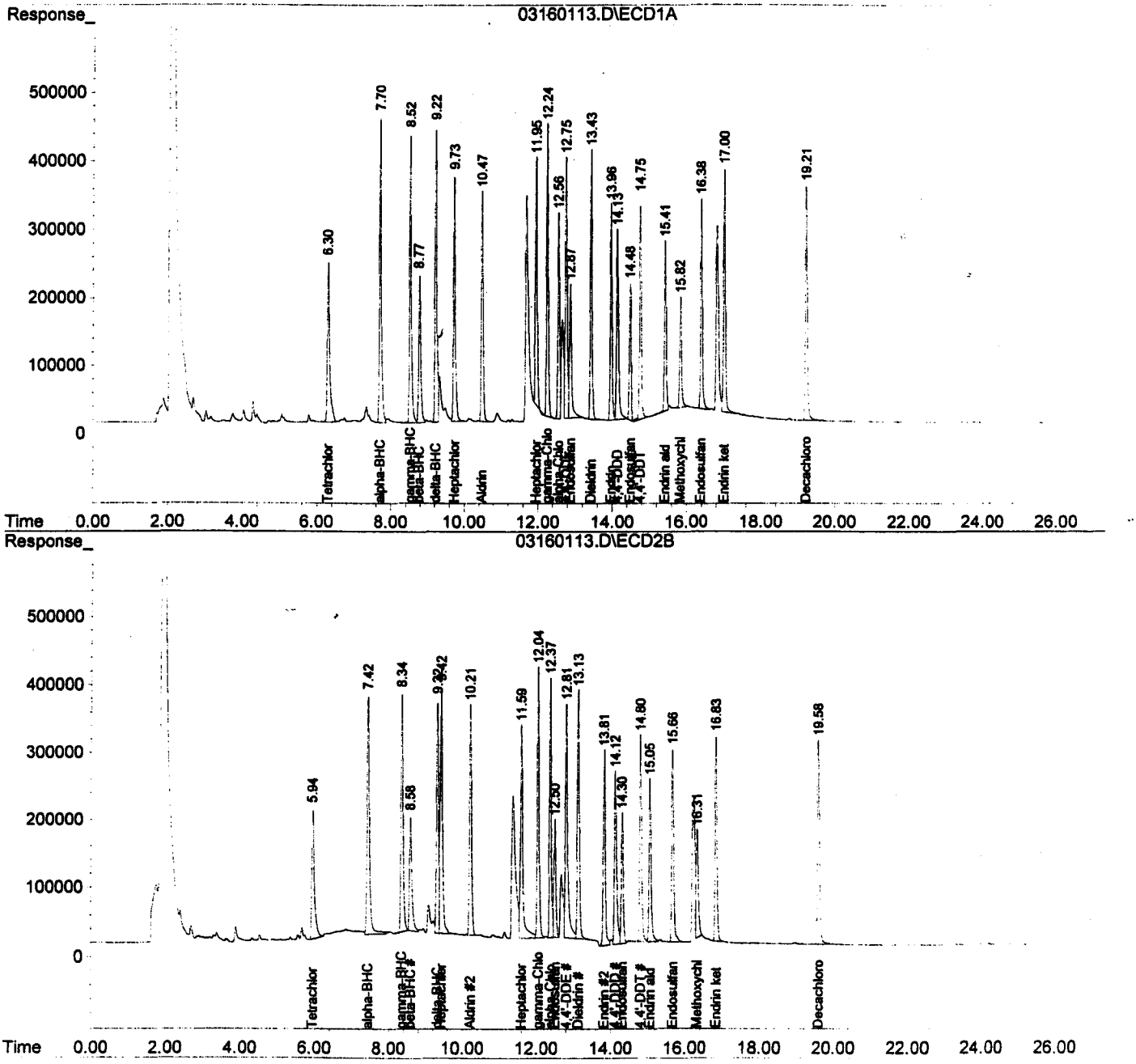
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
03160113.D 013101P.M Mon Mar 19 09:24:23 2001

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\031601\03160113.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\031601\03160113.D\ECD2B.CH
Acq On : 16 Mar 2001 15:42 Operator: YGK
Sample : 09765 W MS Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 19 9:24 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Mon Mar 19 09:14:42 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\031601\03160114.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\031601\03160114.D\ECD2B.CH
Acq On : 16 Mar 2001 16:14 Operator: YGK
Sample : 09765 W MSD Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 19 9:25 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Mon Mar 19 09:14:42 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

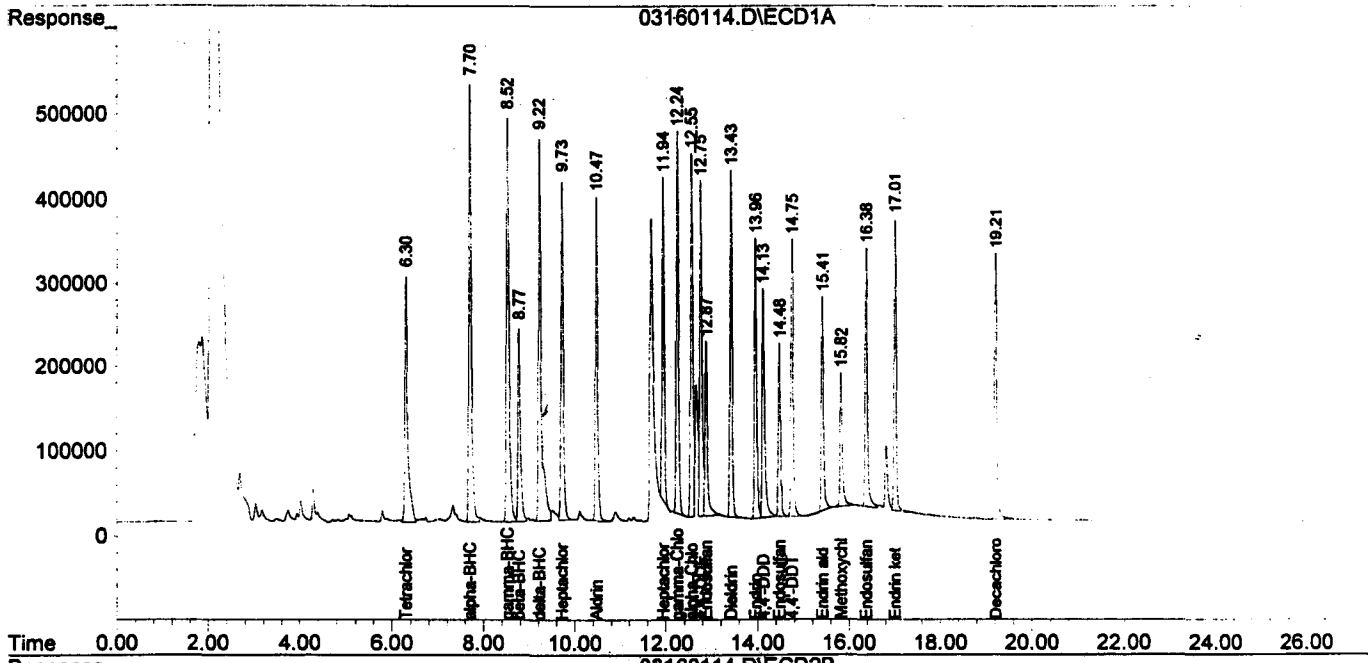
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	6.30	5.94	12604724	11265953	0.084	0.089	
		Spiked Amount 0.100			Recovery	=	84.00% ✓	89.00%	
22)	S	Decachlorobiphen	19.21	19.58	11883543	11204332	0.089	0.083	
		Spiked Amount 0.100			Recovery	=	89.00% ✓	83.00%	
		Target Compounds							
2)	T	alpha-BHC	7.70	7.42	19499487	18548495	0.098	0.109	
3)	T	beta-BHC	8.77	8.58	8828713	7930374	0.088	0.096	
4)	T	gamma-BHC (Linda	8.52	8.34	18007203	15675363	0.091	0.092	
5)	T	delta-BHC	9.22	9.32	19775025	14043432	0.101	0.104	
6)	T	Heptachlor	9.73	9.42	14660362	17544455	0.096	0.106	
7)	T	Aldrin	10.47	10.21	13599647	14557129	0.087	0.100	
8)	T	Heptachlor epoxi	11.94	11.59	12655019	16724863	0.092	0.132	#
9)	T	Endosulfan I	12.87	12.50	8307012	6629705	0.065	0.050	
10)	T	gamma-Chlordane	12.25	12.04	14828361	15294464	0.096	0.098	
11)	T	alpha-Chlordane	12.55	12.38	13870306	14160332	0.104	0.096	
12)	T	4,4'-DDE	12.75	12.81	15077370	16079264	0.124	0.117	
13)	T	Dieldrin	13.43	13.13	13502401	14167267	0.104	0.105	
14)	T	Endrin	13.96	13.81	11148652	10620780	0.117	0.108	
15)	T	4,4'-DDD	14.13	14.12	10486510	10012896	0.105	0.100	
16)	T	Endosulfan II	14.48	14.30	6848060	7514620	0.063	0.061	
17)	T	Endrin aldehyde	15.41	15.05	8809017	9246658	0.095	0.097	
18)	T	4,4'-DDT	14.75	14.80	10961477	11276906	0.107	0.104	
19)	T	Endosulfan sulfa	16.38	15.66	10786840	10601049	0.103	0.097	
20)	T	Methoxychlor	15.83	16.31	5686156	5241337	0.103	0.107	
21)	T	Endrin ketone	17.01	16.83	11859300	10596687	0.093	0.089	

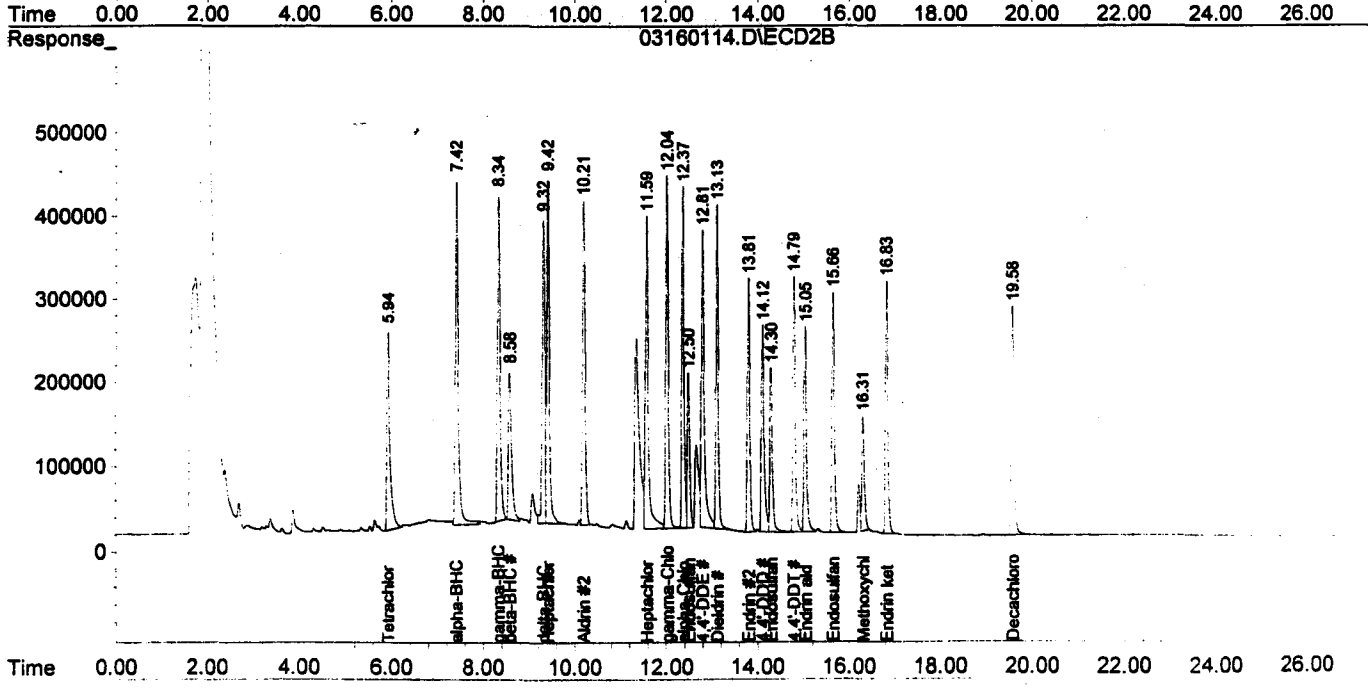
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
03160114.D 013101P.M [illegible] Mar 19 0[illegible]:14 2001 P[illegible]

Signal #1 : C:\HPCHEM\1\DATA\031601\03160114.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\031601\03160114.D\ECD2B.CH
Acq On : 16 Mar 2001 16:14 Operator: YGK
Sample : 09765 W MSD Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 19 9:25 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Mon Mar 19 09:14:42 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ACCURA ANALYTICAL LABORATORIES

EXTRACTION LOG

ANALYSIS: (PEST) / PCB

DATE/TIME: 3/15/01 1430

MATRIX: (WATER) / TCLP

ANALYST: KC

EXT. METHOD: 3510 / (3520)

INSTRUMENT: GC/ECD

AAL I.D.	SAMPLE VOLUME	SURR 1.0mL	SPIKE 1.0mL	SOLVENT EXCHANGE	FINAL VOLUME	ACID CLEANED	COMMENTS
QPW0315011	1L	KC		Hexane	5.0mL	DEB KC	
QPW0315012	↓	↓	KC	↓	↓	↓	
MS 09765	↓	↓	↓	↓	↓	↓	
MSD 09765	↓	↓	↓	↓	↓	↓	
09764	↓	↓		↓	↓	↓	
09765	↓	↓		↓	↓	↓	
09766	↓	↓		↓	↓	↓	
09767	↓	↓		↓	↓	↓	
09768	↓	↓		↓	↓	↓	

KC 3/16/01

START TIME: 1515 STOP TIME: 930 RapidVap TEMP.: 45°C

CH2CL2 I.D.: EX01185 HEXANE I.D.: EX01161

SURROGATE I.D. : PO1ED40 CONC. : 0.5 INITIAL : KC

SPIKE I.D. : PO1ED19 CONC. : 0.5 INITIAL : KC

SPIKE I.D. : — CONC. : — INITIAL : —

EXTRACT STORAGE: REFRIGERATOR # 5, BOX # P- 191, 192

072

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\032701\03270129.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\032701\03270129.D\ECD2B.CH
Acq On : 28 Mar 2001 9:16 Operator: YGK
Sample : QPW0326012 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 11:58 2001 Quant Results File: 013101P.RES

Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Initial Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.28	5.92	11748557	9794304	0.078	0.078
		Spiked Amount 0.100			Recovery =		78.00%	78.00%
22)	S	Decachlorobiphen	19.21	19.57	9821564	9163511	0.074	0.068
		Spiked Amount 0.100			Recovery =		74.00%	68.00%
		Target Compounds						
2)	T	alpha-BHC	7.69	7.41	16936843	14702985	0.085	0.086
3)	T	beta-BHC	8.76	8.57	8055101	7438689	0.081	0.090
4)	T	gamma-BHC (Linda	8.51	8.32	15581019	13768550	0.079	0.081
5)	T	delta-BHC	9.22	9.31	9674390	6245950	0.050	0.046
6)	T	Heptachlor	9.71	9.41	12711739	13149700	0.083	0.079
7)	T	Aldrin	10.46	10.19	12537693	12806966	0.080	0.088
8)	T	Heptachlor epoxi	11.94	11.58	12692292	10965277	0.092	0.087
9)	T	Endosulfan I	12.86	12.49	6705720	6562884	0.053	0.049
10)	T	gamma-Chlordane	12.24	12.03	13132572	13863544	0.085	0.089
11)	T	alpha-Chlordane	12.55	12.37	11080109	13083739	0.083	0.089
12)	T	4,4'-DDE	12.74	12.80	11394098	12252908	0.094	0.089
13)	T	Dieldrin	13.42	13.12	12691070	12896428	0.098	0.096
14)	T	Endrin	13.95	13.80	10523686	10621232	0.111	0.108
15)	T	4,4'-DDD	14.12	14.11	10259954	10644776	0.103	0.106
16)	T	Endosulfan II	14.47	14.29	6309199	7582929	0.058	0.062
17)	T	Endrin aldehyde	15.40	15.05	2651356	2804883	0.028	0.030
18)	T	4,4'-DDT	14.74	14.79	11121762	9608065	0.109	0.088
19)	T	Endosulfan sulfa	16.37	15.65	9915208	9904665	0.095	0.091
20)	T	Methoxychlor	15.82	16.31	5782080	5115801	0.105	0.104
21)	T	Endrin ketone	17.00	16.82	11697133	10484189	0.092	0.088

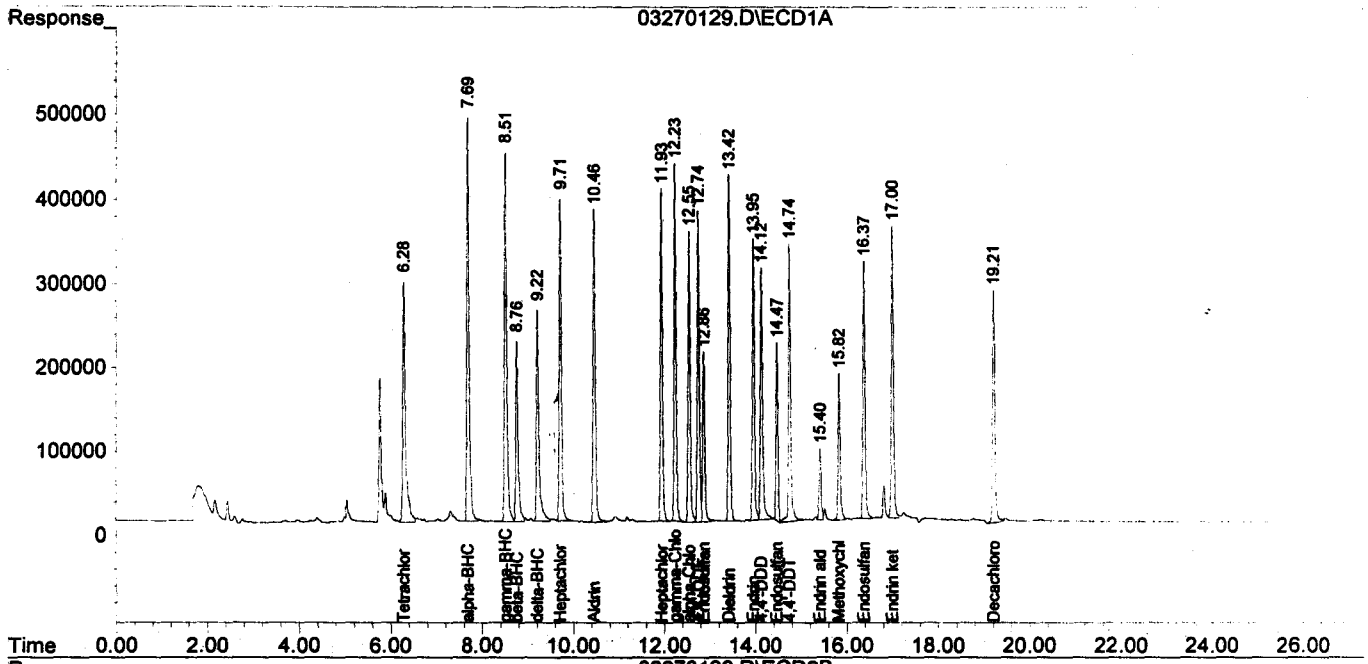
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

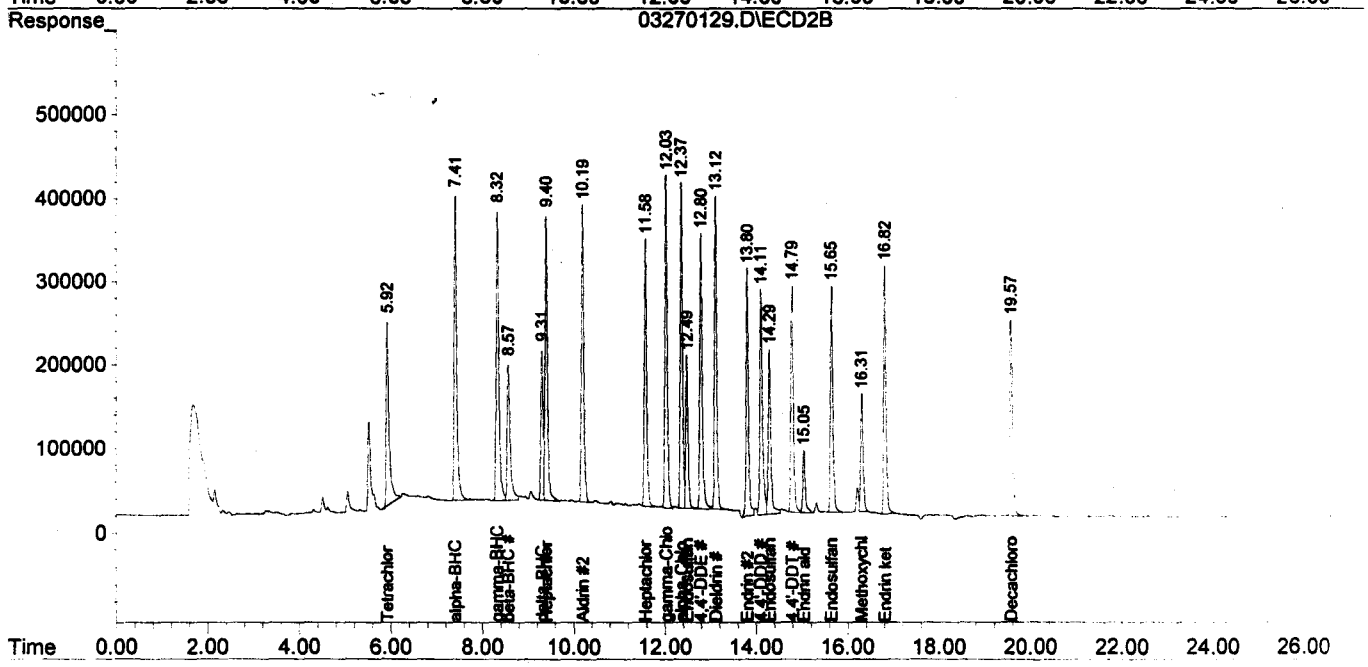
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\032701\03270129.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\032701\03270129.D\ECD2B.CH
Acq On : 28 Mar 2001 9:16 Operator: YGK
Sample : QPW0326012 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Mar 28 11:58 2001 Quant Results File: 013101P.RES

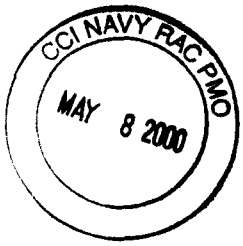
Quant Method : C:\HPCHEM\1\METHODS\013101P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (01/31/01)
Last Update : Thu Mar 22 09:36:05 2001
Response via : Multiple Level Calibration
DataAcq Meth : 8081D2.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ACCURA ANALYTICAL LABORATORY, INC.
6017 Financial Drive, Norcross, Georgia, 30071, Phone (770) 449-8800



CASE NARRATIVE for Project Number: 24074
Client Project: SWMU 15 Quarterly G.W. Sampling / 083-CTO 007 SWMU15

The following items were noted concerning this project:

1. The samples were received at 4^0C.

2. The following samples required dilution due to the nature of the matrix, resulting in elevated detection limits:
   Pesticides SW-846-8081A
   007-MW015-Q1-003
   007-MW045-Q1-00
   007-DUP01-Q1-00

3. The J values noted for the Pesticides and Metals analyses indicate estimated values in which the compounds are present at concentrations that are less than the quantitation limit, but above the method detection limit.

4. The LCS/LCSD recoveries were outside the project specific limits for delta-BHC, but were within the established in-house limits; therefore the sample results were not effected.

5. The samples submitted for Pesticides required an additional clean-up step prior to sample analysis due to high levels of sulfer. Consequently, this procedure also removed Endrin Aldehyde. Therefore, the results for Endrin Aldehyde were reported from the sample extract analyzed prior to the clean-up step.

Quality Assurance

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TABLE 2-3
PROJECT QUALITY CONTROL RESULTS
Project 24074

		Project Control Recoveries				Accuracy Limits		Project Control		Precision Limits		Project Control Recoveries		Accuracy Limits		Project Control	
		MS	MSD	MS	MSD	MS/MSD Recoveries		MS/MSD % Deviation		MS/MSD Deviation		LSC	LCS	LCS Recoveries		Field Dup % Deviation	
Method No	Analyte / Component	Water		Soil		Water	Soil	Water	Soil	Water	Soil	Water	Soil	Water	Soil		
TCL PESTICIDES/AROCHLORS						%	%			%	%			%	%		
8081A	alpha-BHC	94	94			60-140	20-150	0%	#VALUE!	<30	<50	94		75-125	65-135		
8081A	beta-BHC	92	91			60-140	20-150	1%	#VALUE!	<30	<50	92		51-125	41-133		
8081A	delta-BHC	53	52			60-140	20-150	2%	#VALUE!	<30	<50	53		75-126	65-136		
8081A	gamma-BHC (Lindane)	94	94			60-140	20-150	0%	#VALUE!	<30	<50	94		73-125	63-130		
8081A	Heptachlor	94	93			60-140	20-150	1%	#VALUE!	<30	<50	94		45-128	35-138		
8081A	Aldrin	98	97			60-140	20-150	1%	#VALUE!	<30	<50	98		47-125	37-126		
8081A	Heptachlor epoxide	105	104			60-140	20-150	1%	#VALUE!	<30	<50	105		53-134	43-144		
8081A	Endosulfan I	95	95			60-140	20-150	0%	#VALUE!	<30	<50	95		49-143	39-153		
8081A	Dieldrin	104	104			60-140	20-150	0%	#VALUE!	<30	<50	104		42-132	32-142		
8081A	4,4'-DDE	106	106			60-140	20-150	0%	#VALUE!	<30	<50	106		45-139	35-149		
8081A	Endrin	109	109			60-140	20-150	0%	#VALUE!	<30	<50	109		43-134	33-144		
8081A	Endosulfan II	96	95			60-140	20-150	1%	#VALUE!	<30	<50	96		75-159	65-169		
8081A	4,4'-DDD	107	106			60-140	20-150	1%	#VALUE!	<30	<50	107		48-136	38-146		
8081A	Endosulfan sulfate	100	100			60-140	20-150	0%	#VALUE!	<30	<50	100		46-141	36-151		
8081A	4,4'-DDT	102	102			60-140	20-150	0%	#VALUE!	<30	<50	102		34-143	25-153		
8081A	Methoxychlor	104	104			60-140	20-150	0%	#VALUE!	<30	<50	104		73-142	63-152		
8081A	Endrin ketone	100	100			60-140	20-150	0%	#VALUE!	<30	<50	100		43-134	33-144		
8081A	Endrin aldehyde	106	108			60-140	20-150	2%	#VALUE!	<30	<50	106		75-150	35-160		
8081A	alpha-Chlordane	101	100			60-140	20-150	1%	#VALUE!	<30	<50	101		41-125	31-135		
8081A	gamma-Chlordane	101	101			60-140	20-150	0%	#VALUE!	<30	<50	101		41-125	31-133		
8081A	Decachlorobiphenyl (DCBP) (Surr)	95	95			34-133	25-143	0%	#VALUE!			95					
8081A	Tetrachloro-m-xylene (TCMX) (Surr)	101	101			45-125	35-135	0%	#VALUE!			101					
TAL METALS BY ICP						mg/L	mg/kg			%	%			%	%		
6010B	Arsenic	105	105			50-150	30-170	0%	#VALUE!	<30	<50	105		80-120	80-120		

Notes:
1) SW-846 Methods unless otherwise noted
2) Includes sediments, waste, solids

NS = Not Specified
NA = Not Applicable

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LABORATORY REPORT

Accura Sample ID #: AB90038 **Accura Project #: 24074**

Client: CH2M HILL - CCI Date Sampled: 3/29/00

Client Contact: SAM ROSS Date Received: 3/31/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 4/20/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW015-Q1-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 4/5/00 Date Analyzed: 4/7/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.033	0.010

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/6/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	0.020 J	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.55	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	0.020 J	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.50
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/6/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	37	
Tetrachloro-m-xylene (Range 5-156)	86	

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LABORATORY REPORT

Accura Sample ID #: AB90039 **Accura Project #: 24074**

Client: CH2M HILL - CCI Date Sampled: 3/29/00

Client Contact: SAM ROSS Date Received: 3/31/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 4/20/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW035-Q1-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 4/5/00 Date Analyzed: 4/7/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.010

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	116	
Tetrachloro-m-xylene (Range 5-156)	101	

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LABORATORY REPORT

Accura Sample ID #: AB90040 **Accura Project #: 24074**

Client: CH2M HILL - CCI Date Sampled: 3/29/00

Client Contact: SAM ROSS Date Received: 3/31/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 4/20/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW045-Q1-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 4/5/00 Date Analyzed: 4/7/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.020	0.010

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/6/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	0.075	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.30	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	0.025 J	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	1.0
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	0.030 J	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/6/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	32	
Tetrachloro-m-xylene (Range 5-156)	95	

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LABORATORY REPORT

Accura Sample ID #: AB90041 **Accura Project #: 24074**

Client: CH2M HILL - CCI Date Sampled: 3/29/00

Client Contact: SAM ROSS Date Received: 3/31/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 4/20/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW055-Q1-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 4/5/00 Date Analyzed: 4/7/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.010

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	100	
Tetrachloro-m-xylene (Range 5-156)	100	

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LABORATORY REPORT

Accura Sample ID #: AB90042 **Accura Project #: 24074**

Client: CH2M HILL - CCI Date Sampled: 3/29/00

Client Contact: SAM ROSS Date Received: 3/31/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 4/20/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW085-Q1-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 4/5/00 Date Analyzed: 4/7/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.010

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	105	
Tetrachloro-m-xylene (Range 5-156)	98	

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LABORATORY REPORT

Accura Sample ID #: AB90043 **Accura Project #: 24074**

Client: CH2M HILL - CCI Date Sampled: 3/29/00

Client Contact: SAM ROSS Date Received: 3/31/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 4/20/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-DUP01-Q1-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 4/5/00 Date Analyzed: 4/7/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.011	0.010

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/6/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	0.090	0.050
alpha-BHC	0.015 J	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.36	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	0.020 J	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	1.0
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	0.030 J	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/6/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	28	
Tetrachloro-m-xylene (Range 5-156)	117	

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LABORATORY REPORT

Accura Sample ID #: AB90044 **Accura Project #: 24074**

Client: CH2M HILL - CCI Date Sampled: 3/29/00

Client Contact: SAM ROSS Date Received: 3/31/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 4/20/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-EQ01-Q1-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 4/5/00 Date Analyzed: 4/7/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.010

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	51	
Tetrachloro-m-xylene (Range 5-156)	94	

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LABORATORY REPORT

Accura Sample ID #: AB90045 **Accura Project #: 24074**

Client: CH2M HILL - CCI Date Sampled: 3/31/00

Client Contact: SAM ROSS Date Received: 3/31/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 4/20/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: METHOD BLANK

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 4/5/00 Date Analyzed: 4/7/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.010

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest QC Surrogates (Waters) Method Ref: 8081A

Date Ext/Dig/Prep: 4/4/00 Date Analyzed: 4/5/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range 35-133)	88	
Tetrachloro-m-xylene (Range 49-146)	97	

Accura Analytical Laboratory, Inc.

25612

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

6017 Financial Drive, Norcross, GA 30071
Phone # (770) 449-8800 Fax # (770) 449-5477

CHAIN OF CUSTODY

Company Name: CCI / ~~J.A. Jones Env~~
Address: 6219 Authority Ave Jax, FL 32215
Report Sent to: (Client Contact): Sam Ross
Contact Phone # (904) 777 4812 Fax # (904) 777-4262
Project Name: SWMU 15 Quarterly G.W. Sampling
Project Number: 083 - CTO 007 SWMU 15

Billing address: CH2M HILL 115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346
Client P.O. #

For Laboratory Use Only

Custody Seal: Y N Page 1 OF 1
QC Level: N 1 2 3 4 Init/Temp: 4°C
Sample Condition: AAL Lab Project # 24074

Samplers: (signature) [signature]
Samplers: (printed) R. Dumaop

Sample ID #	Sample Date / Time	Comp	Grab	Matrix	Preserved	Sample Location:	No. of Containers	ANALYSIS: TCL Pesticides 8081A	ANALYSIS: Arsenic 6010B								Remarks	Accura Sample ID No. AB
007-MW01S-Q1-00	3/29/00 15:30		X	W	X	MPT-15-MW0-1S	~~2~~ 3	X	X									90038
007-MW03S-Q1-00	11:20		X	W	X	MPT-15 MW0-3S	~~2~~ 3	X	X									90039
007-MW04S-Q1-00	13:30		X	W	X	MPT-15-MW0-4S	~~2~~ 3	X	X								3/31/00	90040
007-MW05S-Q1-00	12:00		X	W	X	MPT-15-MW0-5S	~~2~~ 3	X	X									90041
007-MW08S-Q1-00	14:00		X	W	X	MPT-15-MW0-8S	~~2~~ 3	X	X									90042
007-DUP01-Q1-00	14:00		X	W	X		~~2~~ 3	X	X									90043
007-EQ01-Q1-00	11:00		X	W	X		~~2~~ 3	X	X									90044

Relinquished By:	Date / Time	Received By:	Date / Time	Special Requirements Or Remarks:
[signature] 3 coolers	3/30/00	Fedex		
Relinquished By:	**Date / Time**	**Received By:**	**Date / Time**	**Turnaround Time Requested:**
Fedex		[signature]	3/31/00 09:30	7 day

Matrix Guide: (S = Soil) (W = Water) (L = Liquid) (C = Cartridge) (SL = Sludge) (A = Air Sample) (F = Foods) (M = Miscellaneous)

COC97-2.XLS

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: PCB Spike Std
Lab Standard ID# P99E146
Prepared By: CZ

Date Made: 12/7/1999
Expire Date: 6/7/2000
Matrix: MeOH

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Aroclor 1016/1260 Mix	EX-99027	1000 ppm	500 ul	5.0 ppm
MeOH	EX-99133	ppb	To 100 ml	—
				CZ 12/7/99

Standard Name: O. Pest Surrogate
Lab Standard ID# P99E147
Prepared By: CZ

Date Made: 12/7/1999
Expire Date: 2/7/2000
Matrix: Acetone

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
4-Chloro-3-Nitrobenzotrifluoride	EX-99090	1000 ppm	250 ul	10 ppm
Acetone	EX-99059	100%	To 25 ml	—
				CZ 12/7/99

Siprlgfi

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: HERB SURROGATE STD
Lab Standard ID# H00E026
Prepared By: RJ

Date Made: 3/20/00
Expire Date: 9/20/00
Matrix: MeOH

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
2,4 DCAA	EX99077	200ppm	1250 µL	2.5ppm
MeOH	EX00007	100%	TO 100 ml	—

3/20/00 RJ

Standard Name: PEST SURROGATE STD
Lab Standard ID# P00E027
Prepared By: RJ

Date Made: 3/24/00
Expire Date: 9/24/00
Matrix: MeOH

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Pest Surr mix	EX00019-1,2	200 ppm	1250 µL	1.25 ppm
MeOH	EX00007	100%	TO 200ml	—

3/24/00 RJ

Spelgit

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Pest. spike std (for NAVY projects)
Lab Standard ID# P00E032
Prepared By: YGK

Date Made: 04/03/00
Expire Date: 10/03/00
Matrix: MeOH

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Pest mix AB#1	S00A041	200 ppm	250 µL	1.25 ppm each
MeOH	Ex-00007	100%	to 40.0 mL	
YCL	04/03/00			

Standard Name: FL-PRO TRPH Spike Std
Lab Standard ID# FL-00-E033
Prepared By: CL

Date Made: 4/4/2000
Expire Date: 10/4/2000
Matrix: Acetone/Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
FL TRPH STD Mix	EX00013/EX99111	500 ug/ml	2000 ul	250 ug/ml
Acetone	~~EX-9908~~ EX-99068 4/4/00	100%	2000 ul	—
				CL 4/4/00

Stprlgfr

TABLE 2-3
PROJECT QUALITY CONTROL RESULTS
Project 24074

		Project Control Recoveries				Accuracy Limits		Project Control		Precision Limits		Project Control Recoveries		Accuracy Limits		Project Control	
		MS	MSD	MS	MSD	MS/MSD Recoveries		MS/MSD % Deviation		MS/MSD Deviation		LSC	LCS	LCS Recoveries		Field Dup % Deviation	
Method No	Analyte / Component	Water		Soil		Water	Soil	Water	Soil	Water	Soil	Water	Soil	Water	Soil		
TCL PESTICIDES/AROCHLORS						%	%			%	%			%	%		
8081A	alpha-BHC	94	94			60-140	20-150	0%	#VALUE!	<30	<50	94		75-125	65-135		
8081A	beta-BHC	92	91			60-140	20-150	1%	#VALUE!	<30	<50	92		51-125	41-133		
8081A	delta-BHC	53	52			60-140	20-150	2%	#VALUE!	<30	<50	53		75-126	65-136		
8081A	gamma-BHC (Lindane)	94	94			60-140	20-150	0%	#VALUE!	<30	<50	94		73-125	63-130		
8081A	Heptachlor	94	93			60-140	20-150	1%	#VALUE!	<30	<50	94		45-128	35-138		
8081A	Aldrin	98	97			60-140	20-150	1%	#VALUE!	<30	<50	98		47-125	37-126		
8081A	Heptachlor epoxide	105	104			60-140	20-150	1%	#VALUE!	<30	<50	105		53-134	43-144		
8081A	Endosulfan I	95	95			60-140	20-150	0%	#VALUE!	<30	<50	95		49-143	39-153		
8081A	Dieldrin	104	104			60-140	20-150	0%	#VALUE!	<30	<50	104		42-132	32-142		
8081A	4,4'-DDE	106	106			60-140	20-150	0%	#VALUE!	<30	<50	106		45-139	35-149		
8081A	Endrin	109	109			60-140	20-150	0%	#VALUE!	<30	<50	109		43-134	33-144		
8081A	Endosulfan II	96	95			60-140	20-150	1%	#VALUE!	<30	<50	96		75-159	65-169		
8081A	4,4'-DDD	107	106			60-140	20-150	1%	#VALUE!	<30	<50	107		48-136	38-146		
8081A	Endosulfan sulfate	100	100			60-140	20-150	0%	#VALUE!	<30	<50	100		46-141	36-151		
8081A	4,4'-DDT	102	102			60-140	20-150	0%	#VALUE!	<30	<50	102		34-143	25-153		
8081A	Methoxychlor	104	104			60-140	20-150	0%	#VALUE!	<30	<50	104		73-142	63-152		
8081A	Endrin ketone	100	100			60-140	20-150	0%	#VALUE!	<30	<50	100		43-134	33-144		
8081A	Endrin aldehyde	106	108			60-140	20-150	2%	#VALUE!	<30	<50	106		75-150	35-160		
8081A	alpha-Chlordane	101	100			60-140	20-150	1%	#VALUE!	<30	<50	101		41-125	31-135		
8081A	gamma-Chlordane	101	101			60-140	20-150	0%	#VALUE!	<30	<50	101		41-125	31-133		
8081A	Decachlorobiphenyl (DCBP) (Surr)	95	95			34-133	25-143	0%	#VALUE!			95					
8081A	Tetrachloro-m-xylene (TCMX) (Surr)	101	101			45-125	35-135	0%	#VALUE!			101					
TAL METALS BY ICP						mg/L	mg/kg			%	%			%	%		
6010B	Arsenic	105	105			50-150	30-170	0%	#VALUE!	<30	<50	105		80-120	80-120		

Notes:
1) SW-846 Methods unless otherwise noted
2) Includes sediments, waste, solids

NS = Not Specified
NA = Not Applicable

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA

Std #8	Lot #
Ag	M99020

Std #3	Lot #
Al	M99023
Be	M99013
Fe	M99076
Ni	M99019
Sb	M99090
Sn	M99087
Tl	M99088

Std #2	Lot #
Ba	M99096
Ca	M99014
Cd	M99075
Co	M99016
Cu	M99017
K	98A393
Mg	M99018
Mn	M99077
Pb	M99089
Zn	M99083

Std #4	Lot #
As	M99074
Cr	M99015
Se	M99086
V	M99222

ICV #1& 2	Lot #
QCS 19	M99129
QCS 7	M99111
ICV Sn	98A390

SS I	Lot #
SS I	M99085

ICS A	Lot #
INFCS IV	M99084

ICS AB	Lot #
INFCS I	M99095
INFCS IV	M99084
INFCS Ag	M99094

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
02/3/00	29 A	1 (Blank)	6010B/200.7	03/3/00	M.Q	500mL	
	B	2	6010B/200.7				
	C	3	6010B/200.7				
	D	4	6010B/200.7				
	E	8	6010B/200.7			500, 100mL	
	F	ICV 1	6010B/200.7				
	G	ICV 2	6010B/200.7			500, 100mL	
	H	ICS A	6010B/200.7				
	~~I~~	ICS AB	6010B/200.7				
	I	SS I	6010B/200.7				
	K	SS I Low	6010B/200.7				

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

L SSAg

Reviewed By: JS 2/19/00

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA

Std #8	Lot #
Ag	Sep 30

Std #3	Lot #
Al	
Be	Sep 30
Fe	
Ni	
Sb	
Sn	
Tl	

Std #2	Lot #
Ba	Sep 30
Ca	
Cd	
Co	
Cu	
K	M99152
Mg	
Mn	Sep 30
Pb	
Zn	

Std #4	Lot #
As	Sep 30
Cr	
Se	
V	

ICV #1& 2	Lot #
QCS 19	
QCS 7	
ICV Sn	M99153

SS I	Lot #
SS I	Sep 30

ICS A	Lot #
INFCS IV	

ICS AB	Lot #
INFCS I	
INFCS IV	
INFCS Ag	

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
03/7/00	33A	1 (Blank)	6010B/200.7	04/7/00	MG	500 mL	
	B	2	6010B/200.7				
	C	3	6010B/200.7				
	D	4	6010B/200.7				
	E	8	6010B/200.7			500, 100mL	
	F	ICV 1	6010B/200.7				
	G	ICV 2	6010B/200.7			500, 100mL	
	H	ICS A	6010B/200.7				
	I	ICS AB	6010B/200.7				
	J	SS I	6010B/200.7				
	K	SS I Low	6010B/200.7				

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

L 55Ag 04/7/00 MG 100mL

Reviewed By: _____

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA

Std #8	Lot #
Ag	

Std #3	Lot #
Al	
Be	
Fe	
Ni	
Sb	
Sn	
Tl	

Std #2	Lot #
Ba	
Ca	
Cd	
Co	
Cu	
K	
Mg	
Mn	
Pb	
Zn	

See pg 34

Std #4	Lot #
As	
Cr	
Se	
V	

ICV #1& 2	Lot #
QCS 19	
QCS 7	
ICV Sn	

SS I	Lot #
SS I	

ICS A	Lot #
INFCS IV	

ICS AB	Lot #
INFCS I	
INFCS IV	
INFCS Ag	

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
03/8/00	T34A	1 (Blank)	6010B/200.7	04/8/00	MA	500mL	
	B	2	6010B/200.7				
	C	3	6010B/200.7				
	D	4	6010B/200.7				
	E	8	6010B/200.7				
	F	ICV 1	6010B/200.7				
	G	ICV 2	6010B/200.7				
	H	ICS A	6010B/200.7				
	I	ICS AB	6010B/200.7				
	J	SS I	6010B/200.7				
	K	SS I Low	6010B/200.7				

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

Reviewed By:_____

ACCURA ANALYTICAL LABORATORIES

EXTRACTION LOG

ANALYSIS: (PEST) / (PCB)

DATE/TIME: 4/4/00 / 7:30 a.m.

MATRIX: WATER

ANALYST: QL

EXT. METHOD: 3510 / (3520)

INSTRUMENT: GC/ECD

AAL I.D.	SAMPLE VOLUME	pH	SURR 1.0mL	SPIKE 1.0mL	SOLVENT EXCHANGE	FINAL VOLUME	ACID CLEANED	COMMENTS
Blank	1L		DK		Hexane	5.0mL	PCB's x1	Split
LCS	↓		↓	DK	↓	↓		Pest
LCS Dup	↓		↓	↓	↓	↓		↓
LCS	↓		↓	↓	↓	↓	✓	PCB
LCS Dup	↓		↓	↓	↓	↓	✓	↓
90038	↓		↓	↓	↓	↓	↓	Pest
90039	↓		↓	↓	↓	↓	↓	↓
90040	↓		↓	↓	↓	↓	↓	↓
90041	↓		↓	↓	↓	↓	↓	↓
90042	↓		↓	↓	↓	↓	↓	↓
* 90043	↓		↓	↓	↓	↓	↓	* Sample has strong odor
90044	↓		↓	↓	↓	↓	↓	↓
90074	↓		↓	↓	↓	↓	✓	PCB
90075	↓		↓	↓	↓	↓	✓	↓
90076	↓		↓	↓	↓	↓	✓	↓
90077	↓		↓	↓	↓	↓	✓	↓
90078	↓		↓	↓	↓	↓	✓	↓
90079	↓		↓	↓	↓	↓	✓	↓
								4/5/00 QL
								9:45 a.m.

START TIME: 11:30 a.m. STOP TIME: 6:a.m. RapidVap TEMP.: 45°C

CH2CL2 I.D.: EX00022 HEXANE I.D.: EX00027

SURROGATE I.D.: P00E027 CONC.: 1.25 ppm INITIAL: QL

SPIKE I.D.: P00E032 CONC.: 1.25 ppm INITIAL: QL

SPIKE I.D.: P99E146 CONC.: 5.0 ppm INITIAL: QL

EXTRACT STORAGE: REFRIGERATOR # 5, BOX # P- 150

GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 04/06/00
Analyst Initials: YGK
Instrument Method: 8081D1
Calibration Column: Rtx-CLP1
Confirmation Column: Rtx-CLP2

DDT Breakdown % (<15%): 4.6%
Endrin Breakdown % (<15%): 5.7%

Pest Calibration Date: 02/21/00
PCB Calibration Date: —

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	35-110	18-135
Water	13-119	D-127

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	022100P	std	1X	NA	NA	
2	Hexane		solv				
3	PEM		std				P00088
4	ccv Pest. 25ppm				109	112	P00021 ~~P00088~~ YGK 04/06
5	ccv Chlord. 25ppm	032200CL			NA	NA	104% P00071
6	ccv TOX 2.5ppm	032300TX					99% P00067
7	Hexane	022100P	solv				
8	BLNK W 04/05		W		101	80	
9	LCS W 04/05				105	88	
10	90030W 1:100			100X	B2	B2	
11	90030W 1:10			10X	YGK 04/01 ~~240~~ 84	52	
12	90032W 1:10				116	24	
13	BLNK W 04/04			1X	102	87	
14	LCS W 04/04				101	95	
15	LCS W DUP 04/04				101	95	
16	90038 W				86	37	Clean up with TBA
17	90040 W				95	32	
18	90043 W				117	28	
19	Hexane		solv		NA	NA	
20	PEM		std				P00088
21	ccv Pest. 25ppm				110	108	P00021
22	YGK	04/06					

Signature/Date: [signature] 04/06/00

001

Pestrun.xls Page #

GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 04/05/00
Analyst Initials: YGK
Instrument Method: 8081D1
Data Checked By: -
Calibration Column: Rtx-CLP 1
Confirmation Column: Rtx-CLP 2

DDT Breakdown % (<15%): 11.8%
Endrin Breakdown % (<15%): 7.6%

Pest Calibration Date: 02/21/00
PCB Calibration Date: -

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	35 - 110	18 - 135
Water	13 - 119	D - 127

Sequence Directory:

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	022100 P	std	1X	NA	NA	
2	Hexane		solv				
3	PEM		std				P00088
4	ccv Pest .25 ppm				111	114	P00021
5	ccv Chlord .25 ppm	032200 CL			NA	NA	P00071
6	ccv TOX 2.5 ppm	032300 TX					P00067
7	Hexane	022100 P	solv				
8	BLNK W 04/04		W		97	88	
9	LCS W 04/04				98	94	
10	LCS W DUP 04/04				96	91	
11	90038 W				80	29	
12	90039 W				101	116	
13	90041 W				100	100	
14	90042 W				98	105	
15	90038 W 1:10			10X	96	40	
16	90040 W 1:20			20X	B2	B2	
17	90043 W 1:20				B2	B2	
18	90044 W			1X	94	51	
19	Hexane		solv		NA	NA	
20	PEM		std				P00088
21	ccv Pest .25 ppm				114	115	Calibration - Rear col. (Rtx-CLP 2) P00021
22	BLNK W 04/04		W		99	85	
23	LCS W 04/04				98	89	Clean up with TBA

Signature/Date: [signature] 04/05/00

Approved By / Date:

↓ cont

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\040600\04060016.D\ECD2B.CH
Acq On : 6 Apr 2000 9:13 pm Operator: YGK
Sample : 90038 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:50 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
	System Monitoring Compounds						
1) S	TCMX (SURR)	8.21	7.92	14659173	14987729	0.215	0.208
	Spiked Amount 0.250			Recovery	=	86.00% ✓	83.20%
22) S	DCB (SURR)	21.01	21.46	5226334	4920129	0.092	0.077
	Spiked Amount 0.250			Recovery	=	36.80% ✓	30.80%
	Target Compounds						
2) T	A-BHC	9.76	9.61	403830	460183	0.004 ✓ J	0.004
3) T	B-BHC	10.85 ✓	10.77 ✓	5248434	5570651	0.109 ✓	0.108
4) T	LINDANE	10.60	10.53	65630	133783	0.001	0.001 #
5) T	D-BHC	11.29 ✓	11.50 ✓	320135	385310	~~0.003~~	~~0.004 ✓ J~~ Report @ 4/13/00
6) T	HEPTACHLOR	11.81	11.61	148628	72101	0.002	0.001 #
7) T	ALDRIN	12.46f	12.35	16021	88900	0.000	0.001 #
8) T	HEPT.EPOXIDE	13.96	13.63f	43736	336190	0.001	0.004 #
9) T	ENDOSULFAN 1	14.82	14.57	176781	170580	0.003	0.002
10) T	GAMMA-CHLORDANE	14.20	0.00	161559	0	0.002	N.D. #
11) T	ALFA-CHLORDANE	14.59f	14.44	107368	55691	0.002	0.001 #
12) T	DDE	14.72	14.88	20991	15671	0.000	0.000 #
13) T	DIELDRIN	15.39	15.15	43797	22760	0.001	0.000 #
14) T	ENDRIN	15.89	15.82	33757	113875	0.001	0.002 #
15) T	DDD	16.05	16.10	35527	19195	0.001	0.000 #
16) T	ENDOSULFAN 2	16.39	16.30	140219	29639	0.002	0.000 #
17) T	ENDRIN ALDEHYDE	17.31	17.02	321094	333958	0.007	0.006
18) T	DDT	16.61	16.76	320944	12021	0.005 -	0.000 #
19) T	ENDOS.SULFATE	18.25	17.60	63006	53882	0.001	0.001 #
20) T	METHOXYCHLOR	17.69	18.13f	18716	339357	0.001	0.010 #
21) T	ENDRIN KETONE	18.86	18.75	31777	64298	0.000	0.001 #

dil: $\frac{5}{1000} = 0.005$

α BHC: 0.020 ppb J

B BHC: 0.55 ppb

rest Pest < DC

Endr. Ald. - see dil 1:10

YGK 04/07 ~~D BHC : 0.020 ppb J see BLNK~~

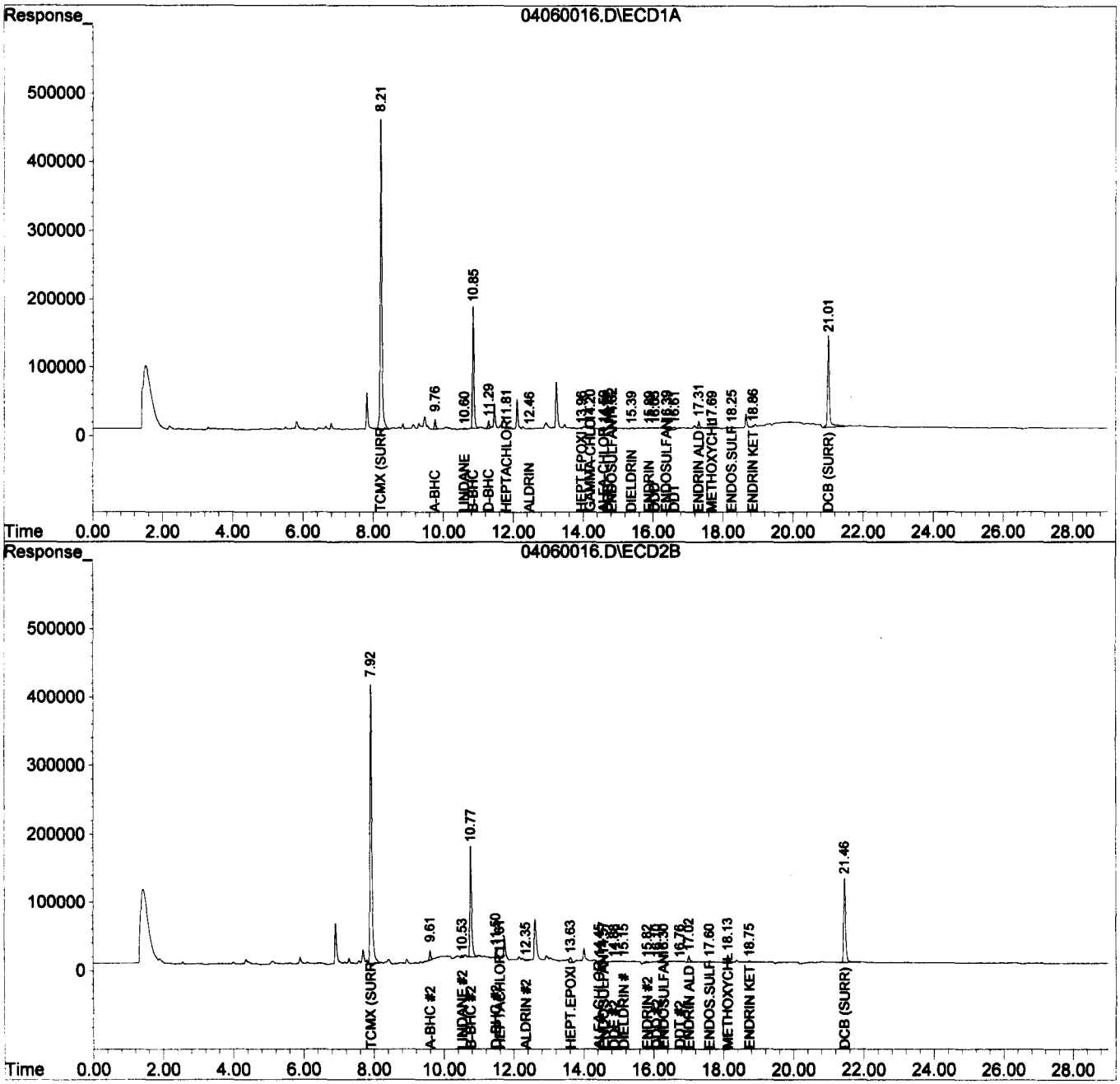
D-BHC : 0.020 ppb J @ 4/13/00

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

Signal #1 : C:\HPCHEM\1\DATA\040600\04060016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\040600\04060016.D\ECD2B.CH
Acq On : 6 Apr 2000 9:13 pm Operator: YGK
Sample : 90038 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:50 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\040600\04060016.D\ECD2B.CH
Acq On : 6 Apr 2000 9:13 pm Operator: YGK
Sample : 90038 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 10:00 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.38	16.44	260947	54127	0.317	0.012	#
2)	L TOX 2	16.61	0.00	399005	0	0.282	N.D.	#
3)	L TOX 3	17.18f	17.02	370305	344266	0.166	0.102	#
4)	L TOX 4	17.85	18.13	249359	342085	0.096	0.084	
5)	L TOX 5	18.10f	0.00	307242	0	0.088	N.D.	#
6)	L TOX 6	0.00	18.90f	0	86311	N.D.	0.037	#
7)	L TOX 7	19.11	0.00	654777	0	0.447	N.D.	#
	Sum TOX 1			2241635	826789	1.397	0.236	
Average	TOX 1					0.233	0.059	

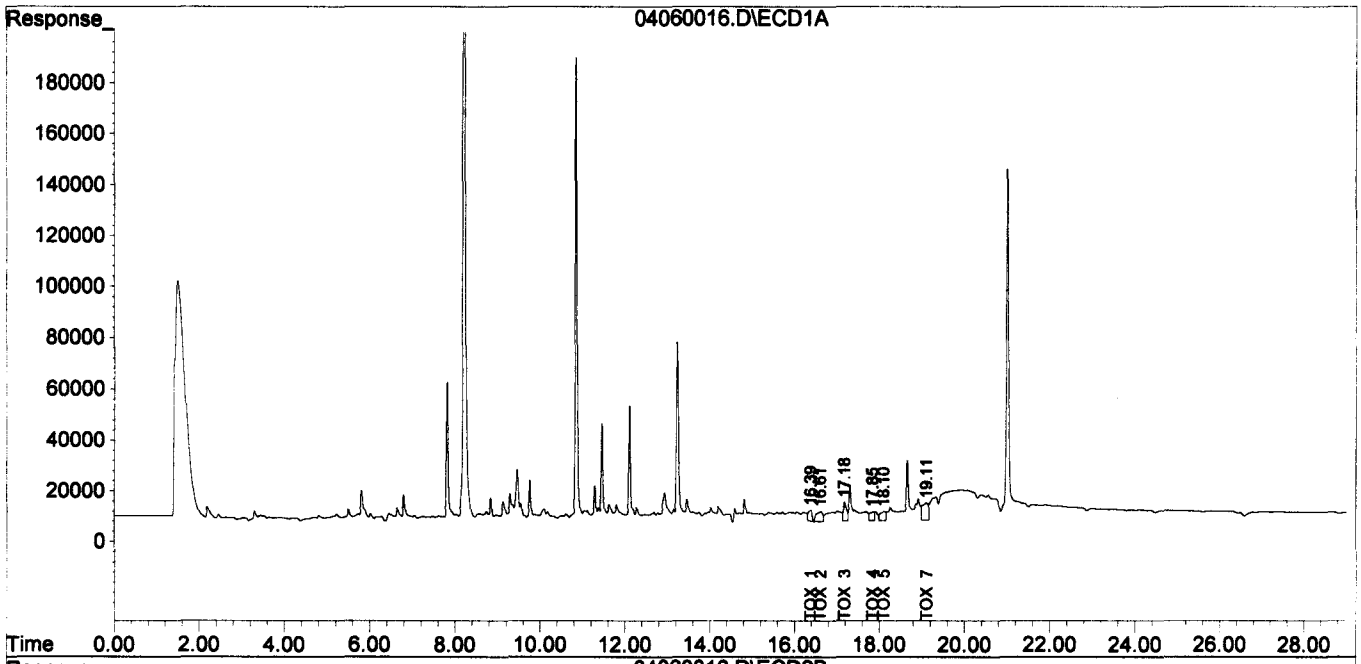
TOX<DZ

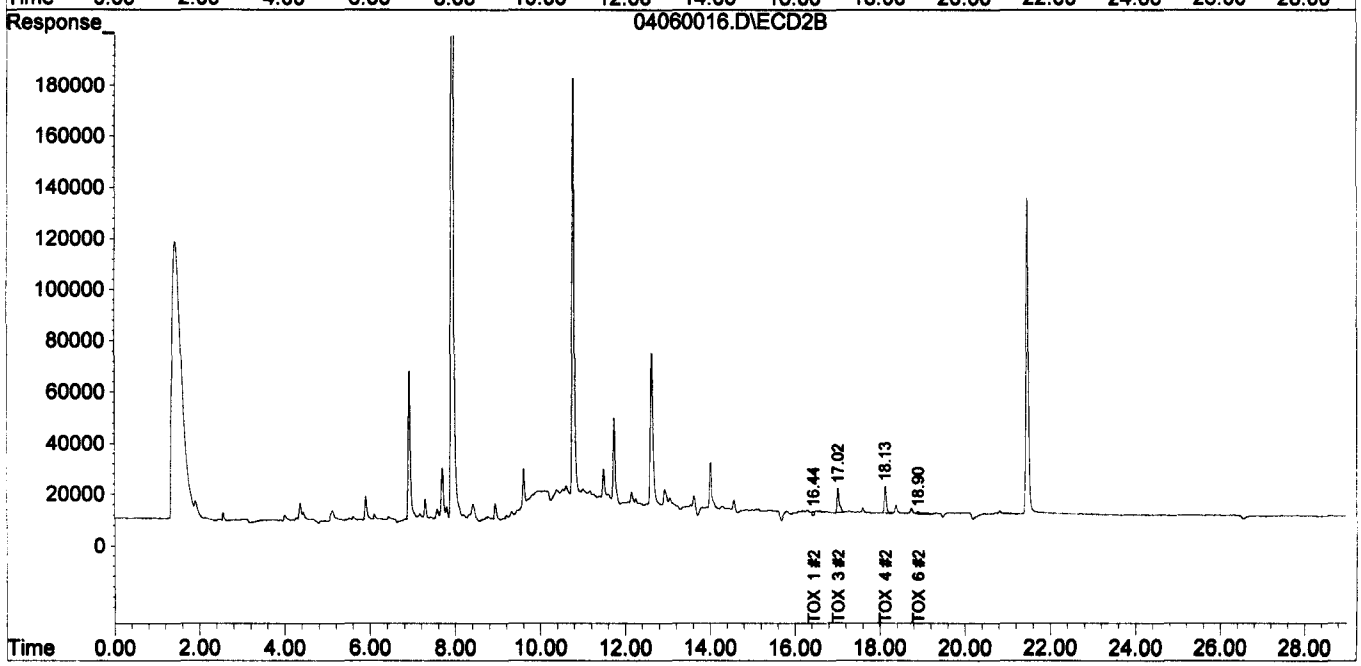
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\040600\04060016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\040600\04060016.D\ECD2B.CH
Acq On : 6 Apr 2000 9:13 pm Operator: YGK
Sample : 90038 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 10:00 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050015.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\040500\04050015.D\ECD2B.CH
Acq On : 5 Apr 2000 4:59 pm Operator: YGK
Sample : 90038 W 1:10 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:39 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
	System Monitoring Compounds							
1)	S TCMX (SURR)	8.21	7.92	1656117	2525636	0.024	0.035	#
	Spiked Amount 0.250			Recovery	=	9.60%	14.00%	
22)	S DCB (SURR)	21.02	21.45	541181	510478	0.010	0.008	
	Spiked Amount 0.250			Recovery	=	4.00%	3.20%	
	Target Compounds							
2)	T A-BHC	9.75	9.61	64835	58018	0.001	0.000	
3)	T B-BHC	10.85	10.77	911447	1181641	0.019	0.023	
4)	T LINDANE	10.61	0.00	16878	0	0.000	N.D.	#
5)	T D-BHC	0.00	11.49	0	90635	N.D.	0.001	#
6)	T HEPTACHLOR	0.00	0.00	0	0	N.D.	N.D.	
7)	T ALDRIN	0.00	0.00	0	0	N.D.	N.D.	
8)	T HEPT.EPOXIDE	14.02f	13.66	6689	21332642	0.000	0.267	#
9)	T ENDOSULFAN 1	14.83	14.56	14339	27074	0.000	0.000	#
10)	T GAMMA-CHLORDANE	14.20f	0.00	568769	0	0.007	N.D.	#
11)	T ALFA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T DDE	14.83f	14.78f	14339	4117	0.000	0.000	#
13)	T DIELDRIN	0.00	0.00	0	0	N.D.	N.D.	
14)	T ENDRIN	0.00	15.77f	0	555479	N.D.	0.009	#
15)	T DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T ENDOSULFAN 2	0.00	0.00	0	0	N.D.	N.D.	
17)	T ENDRIN ALDEHYDE	17.31	17.00	16521	-509963	0.000	N.D.	#
18)	T DDT	16.60f	0.00	655410	0	0.011	N.D.	#
19)	T ENDOS.SULFATE	18.25	0.00	-1113	0	N.D.	N.D.	
20)	T METHOXYCHLOR	0.00	0.00	0	0	N.D.	N.D.	
21)	T ENDRIN KETONE	18.92f	0.00	6285	0	0.000	N.D.	#

End Ald <DL (x10)

rest Post - see Clean up TBA

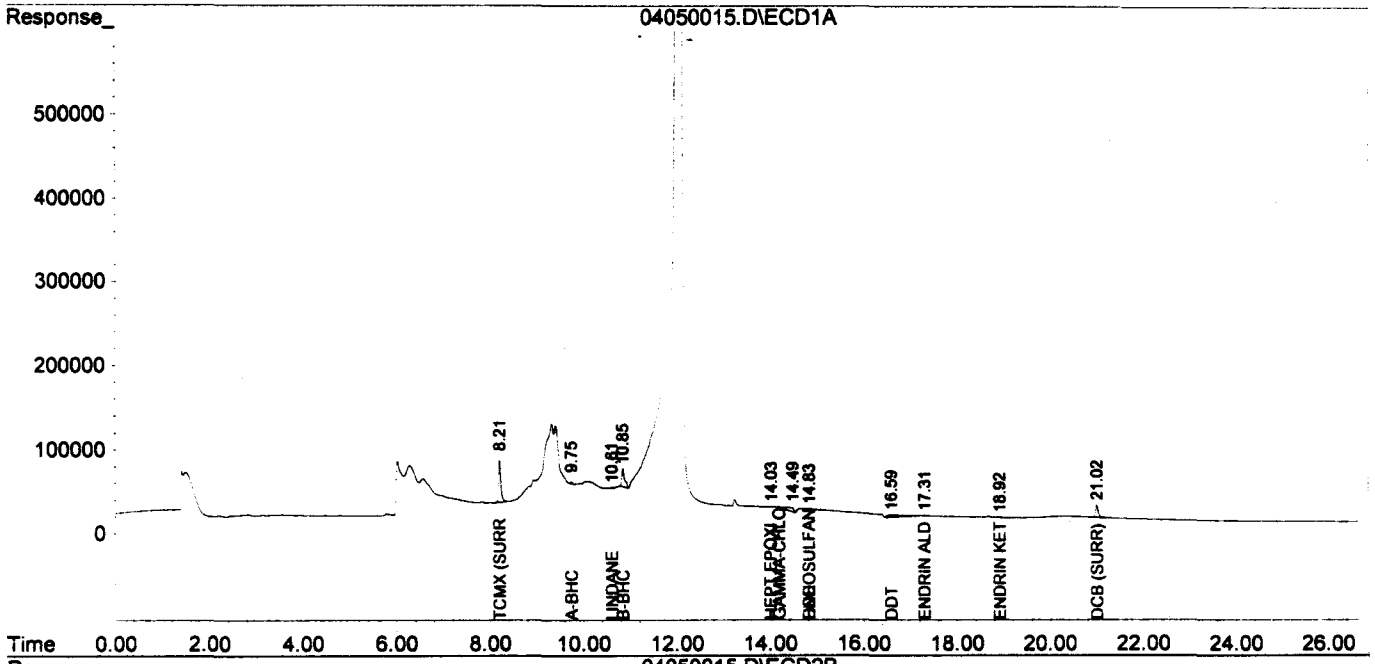
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

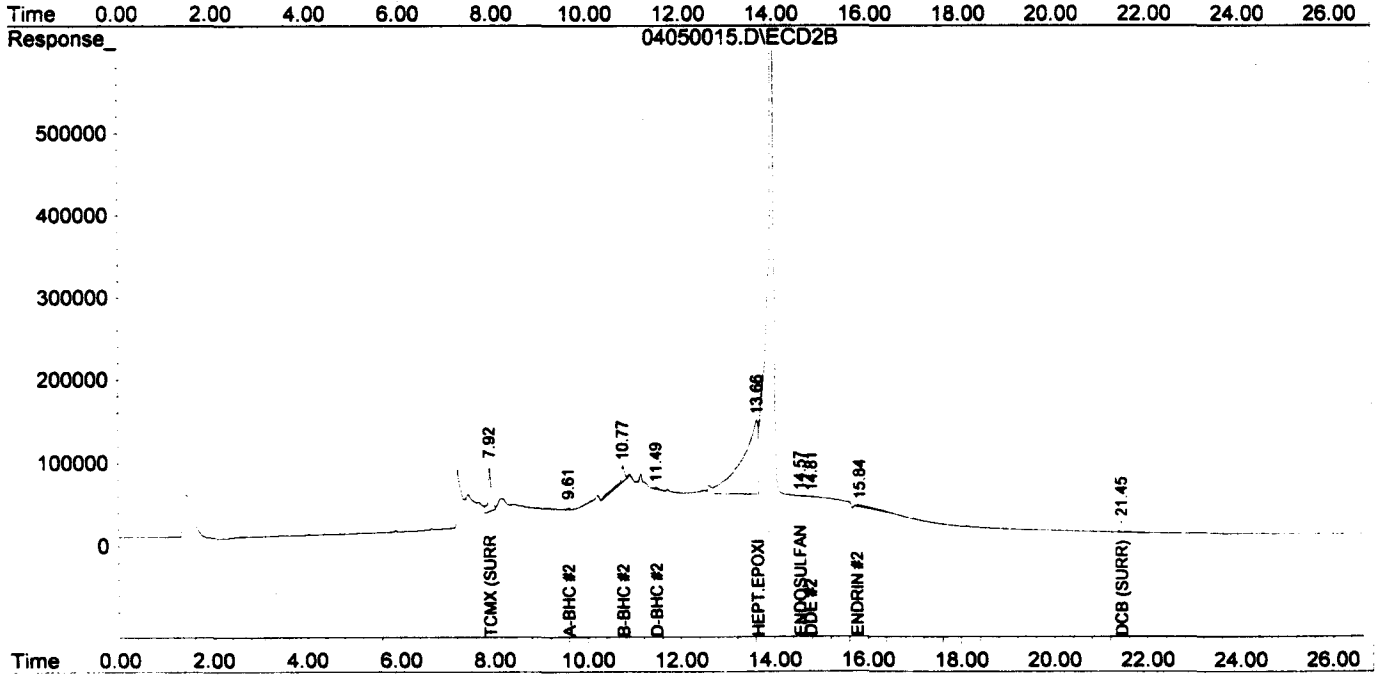
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050015.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\040500\04050015.D\ECD2B.CH
Acq On : 5 Apr 2000 4:59 pm Operator: YGK
Sample : 90038 W 1:10 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:39 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050012.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\040500\04050012.D\ECD2B.CH
Acq On : 5 Apr 2000 3:18 pm Operator: YGK
Sample : 90039 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:00 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.20	7.91	17124320	18802035	0.252	0.260	
		Spiked Amount 0.250			Recovery	=	100.80%	104.00%	
22)	S	DCB (SURR)	21.01	21.45	16407267	17609259	0.289	0.276	
		Spiked Amount 0.250			Recovery	=	115.60%	110.40%	
		Target Compounds							
2)	T	A-BHC	9.74	9.65	34297	36788	0.000	0.000	
3)	T	B-BHC	10.81f	10.75	2359	718982	0.000	0.014	#
4)	T	LINDANE	10.58	10.53	295439	141966	0.003	0.001	#
5)	T	D-BHC	11.30	11.51	61870	112828	0.001	0.001	#
6)	T	HEPTACHLOR	11.81	11.63	147294	159618	0.002	0.002	
7)	T	ALDRIN	0.00	12.36	0	51066	N.D.	0.001	#
8)	T	HEPT.EPOXIDE	14.02f	13.65	66951	518094	0.001	0.006	#
9)	T	ENDOSULFAN 1	14.82	14.58	790495	141184	0.011	0.002	#
10)	T	GAMMA-CHLORDANE	14.20f	0.00	136796	0	0.002	N.D.	#
11)	T	ALFA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.71	14.82	8041	29269	0.000	0.000	#
13)	T	DIELDRIN	15.32f	0.00	162	0	0.000	N.D.	#
14)	T	ENDRIN	15.91	15.79	10958	9722	0.000	0.000	
15)	T	DDD	16.06	0.00	11295	0	0.000	N.D.	#
16)	T	ENDOSULFAN 2	16.35f	16.29	69717	8614	0.001	0.000	#
17)	T	ENDRIN ALDEHYDE	17.31	17.03	23940	84137	0.001	0.002	#
18)	T	DDT	16.62	16.75	164057	10952	0.003	0.000	#
19)	T	ENDOS.SULFATE	18.24	17.59	1199	36839	0.000	0.001	#
20)	T	METHOXYCHLOR	17.67	0.00	34874	0	0.001	N.D.	#
21)	T	ENDRIN KETONE	18.86	18.74	10876	6430	0.000	0.000	#

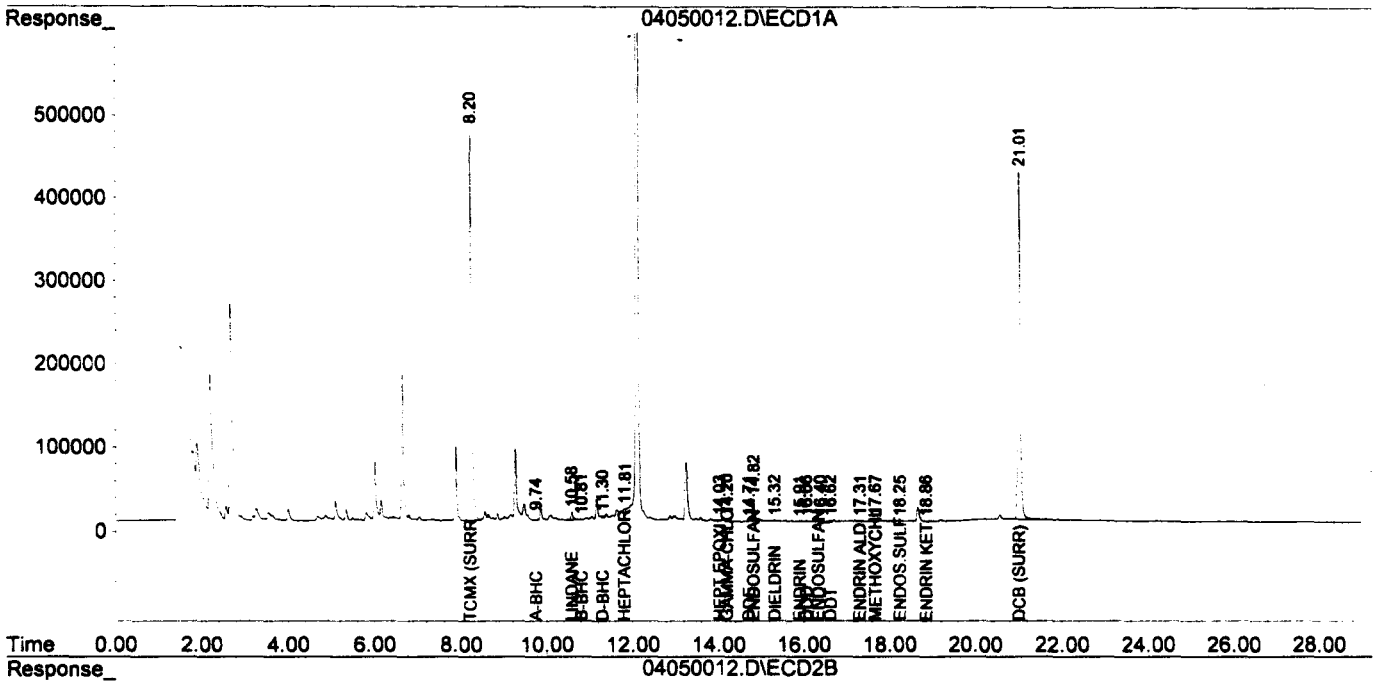
Post ECD

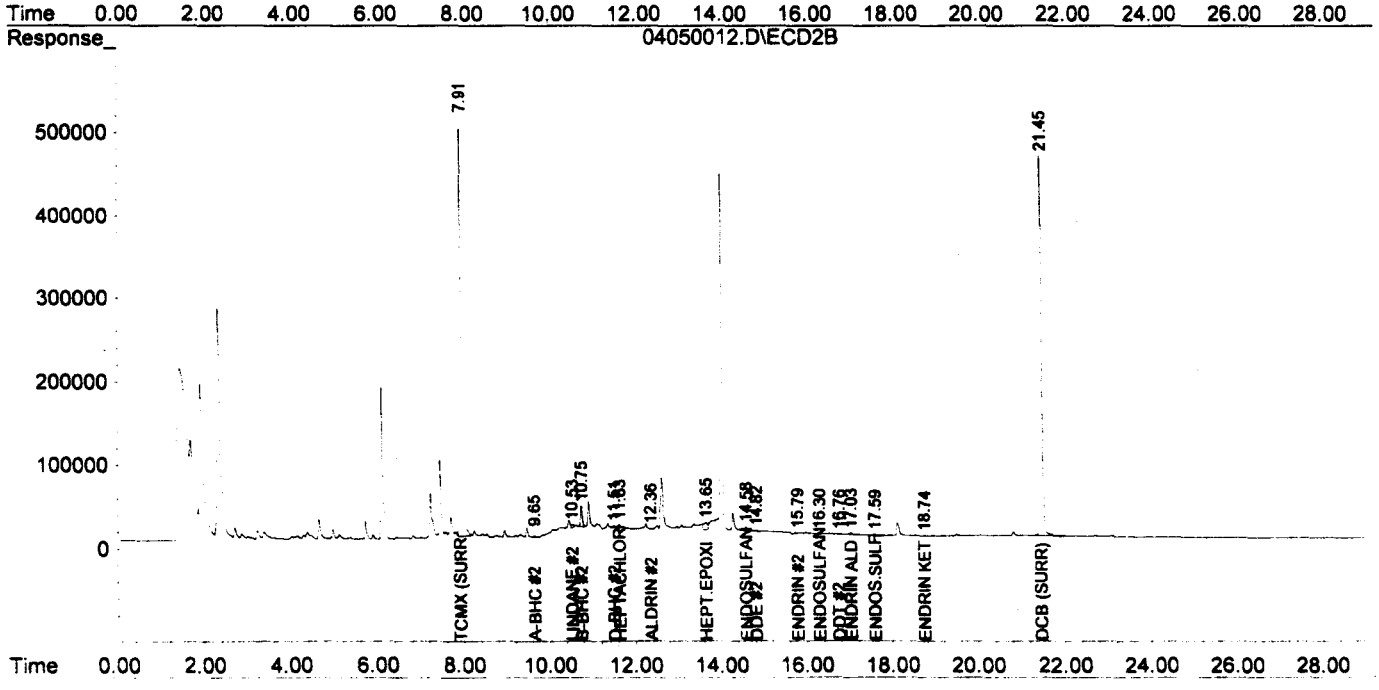
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\040500\04050012.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\040500\04050012.D\ECD2B.CH
Acq On : 5 Apr 2000 3:18 pm Operator: YGK
Sample : 90039 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:00 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050012.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\040500\04050012.D\ECD2B.CH
Acq On : 5 Apr 2000 3:18 pm Operator: YGK
Sample : 90039 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:37 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds								
1)	L	TOX 1	16.35	16.43	135798	2378	0.165	0.001	#
2)	L	TOX 2	16.62	16.94f	202004	1677	0.143	0.001	#
3)	L	TOX 3	17.07	17.03	123490	85672	0.055	0.025	#
4)	L	TOX 4	17.84	18.12	71996	650633	0.028	0.161	#
5)	L	TOX 5	18.00	0.00	96851	0	0.028	N.D.	#
6)	L	TOX 6	18.86	18.97	150895	2428	0.057	0.001	#
7)	L	TOX 7	19.19f	0.00	350142	0	0.239	N.D.	#
	Sum	TOX 1			1131176	742787	0.715	0.188	
Average		TOX 1					0.102	0.038	

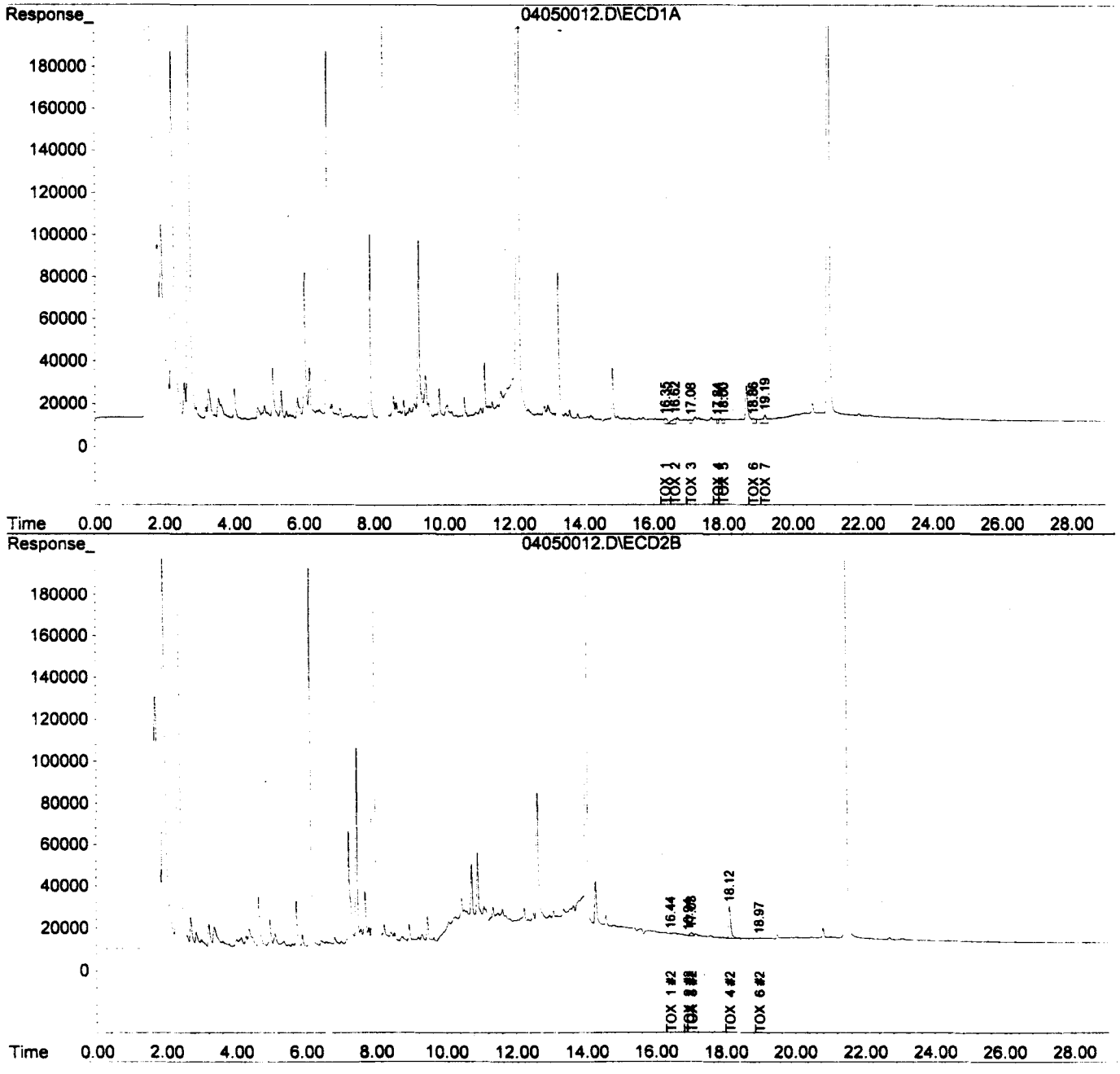
TOX <D2

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

Signal #1 : C:\HPCHEM\1\DATA\040500\04050012.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\040500\04050012.D\ECD2B.CH
Acq On : 5 Apr 2000 3:18 pm Operator: YGK
Sample : 90039 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:37 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060017.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\040600\04060017.D\ECD2B.CH
Acq On : 6 Apr 2000 9:47 pm Operator: YGK
Sample : 90040 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:50 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.20	7.92	16196190	13581506	0.238	0.188	
		Spiked Amount 0.250			Recovery	=	95.20%	75.20%	
22)	S	DCB (SURR)	21.01	21.46	4475348	4137222	0.079	0.065	
		Spiked Amount 0.250			Recovery	=	31.60%	26.00%	
		Target Compounds							
2)	T	A-BHC	9.76	9.61	262522	223278	0.002	0.002	
3)	T	B-BHC	10.85	10.78	2756132	3048447	0.057	0.059	
4)	T	LINDANE	10.60	10.53	58031	53763	0.001	0.001	YGK 04/11
5)	T	D-BHC	11.29	11.49	250108	465508	~~0.003~~	~~0.005~~ #	~~VJ~~
6)	T	HEPTACHLOR	11.80	0.00	114096	0	0.001	N.D. #	Report
7)	T	ALDRIN	12.57f	12.41f	1110254	19117	0.015	0.000 #	4/13/00
8)	T	HEPT.EPOXIDE	13.96	13.61f	101162	415752	0.001	0.005 #	
9)	T	ENDOSULFAN 1	14.87	14.57	1076700	49464	0.015	0.001 #	
10)	T	GAMMA-CHLORDANE	14.24	14.11	483661	292138	0.006 J	0.003 #	
11)	T	ALFA-CHLORDANE	14.54	14.44	1023117	1108544	0.015	0.013	
12)	T	DDE	14.72	14.89	21930	6307	0.000	0.000 #	
13)	T	DIELDRIN	15.38	15.16	73246	78701	0.001	0.001	
14)	T	ENDRIN	15.97f	15.78	4899	59808	0.000	0.001 #	
15)	T	DDD	16.05	16.12	5884	579348	0.000	0.010 #	
16)	T	ENDOSULFAN 2	16.39	16.32	94789	65563	0.002	0.001 #	
17)	T	ENDRIN ALDEHYDE	17.25f	17.02	-718027	320275	N.D.	0.006	
18)	T	DDT	16.69	16.79	356749	28185	0.006	0.000 #	
19)	T	ENDOS.SULFATE	18.25	17.60	10711	116655	0.000	0.002 #	
20)	T	METHOXYCHLOR	17.78f	18.13f	15940	366176	0.001	0.011 #	
21)	T	ENDRIN KETONE	18.86	18.75	29863	34655	0.000	0.000	

D-BHC: 0.025 ppb J w 4/13/00

dil: 0.005

B BHC: 0.30 ppb

rest Pest < DC

α-Chlord.: 0.075 ppb

Endr. Ald. see dil 1:20

YGK 04/07 ~~D BHC: 0.025 ppb J~~ ~~see BLNK~~ YGK 04/13

γ Chlord: 0.030 ppb J

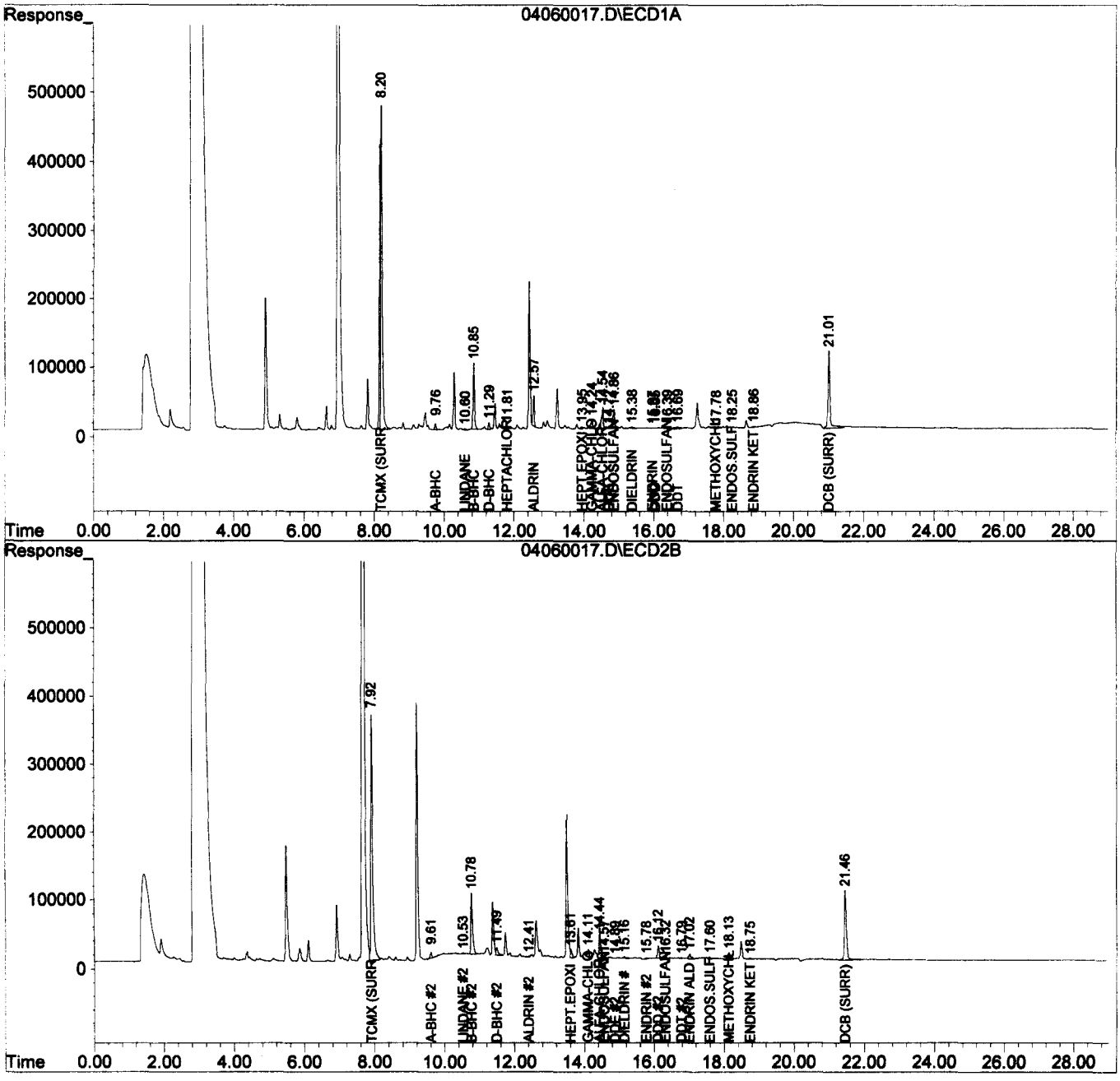
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040600\04060017.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\040600\04060017.D\ECD2B.CH
Acq On : 6 Apr 2000 9:47 pm Operator: YGK
Sample : 90040 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:50 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060017.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\040600\04060017.D\ECD2B.CH
Acq On : 6 Apr 2000 9:47 pm Operator: YGK
Sample : 90040 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 10:00 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.39	16.50	168632	141328	0.205	0.032	#
2)	L TOX 2	16.61	16.89	176992	60790	0.125	0.024	#
3)	L TOX 3	0.00	17.02	0	475619	N.D.	0.141	#
4)	L TOX 4	17.78f	18.13	110001	474090	0.042	0.117	#
5)	L TOX 5	18.00	0.00	210259	0	0.060	N.D.	#
6)	L TOX 6	18.86f	19.01f	260927	11665	0.098	0.005	#
7)	L TOX 7	19.04f	0.00	231342	0	0.158	N.D.	#
	Sum TOX 1			1158153	1163492	0.689	0.319	
	Average TOX 1					0.115	0.064	

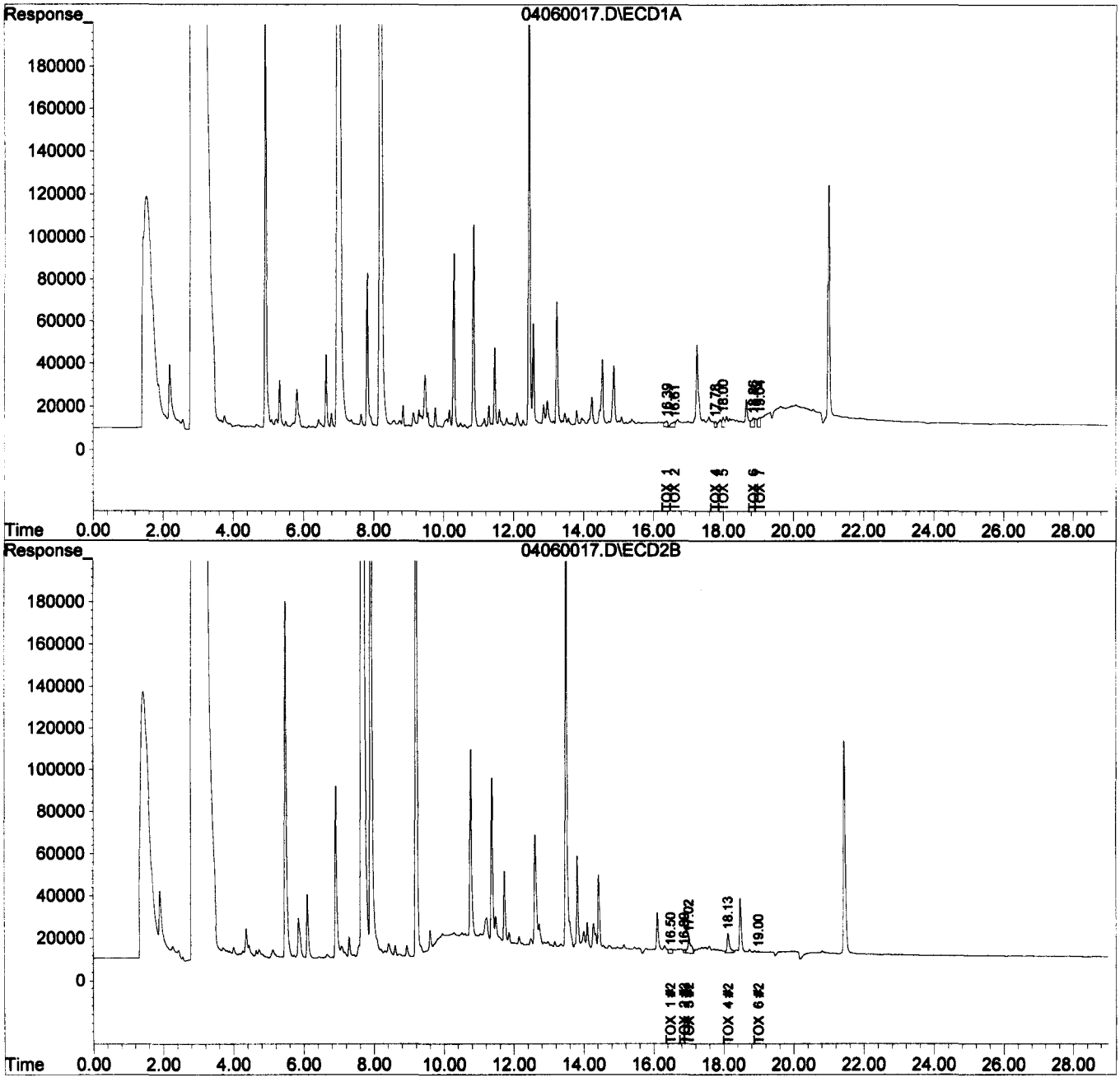
toxcor

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

Signal #1 : C:\HPCHEM\1\DATA\040600\04060017.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\040600\04060017.D\ECD2B.CH
Acq On : 6 Apr 2000 9:47 pm Operator: YGK
Sample : 90040 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 10:00 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\040500\04050016.D\ECD2B.CH
Acq On : 5 Apr 2000 5:31 pm Operator: YGK
Sample : 90040 W 1:20 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:03 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.22	7.92	391.4E6	1638170	5.752	0.023	#
		Spiked Amount 0.250			Recovery	= 2300.80%	B2	9.20%	
22)	S	DCB (SURR)	21.01	21.45	218709	237604	0.004	0.004	
		Spiked Amount 0.250			Recovery	= 1.60%	B2	1.60%	
		Target Compounds							
2)	T	A-BHC	0.00	0.00	0	0	N.D.	N.D.	
3)	T	B-BHC	10.85	0.00	234241	0	0.005	N.D.	#
4)	T	LINDANE	10.55f	10.48f	12997	22541926	0.000	0.214	#
5)	T	D-BHC	0.00	0.00	0	0	N.D.	N.D.	
6)	T	HEPTACHLOR	11.85f	0.00	5617279	0	0.072	N.D.	#
7)	T	ALDRIN	12.56f	12.35	668284	2369015	0.009	0.027	#
8)	T	HEPT.EPOXIDE	13.94	13.67	2635	2450109	0.000	0.031	#
9)	T	ENDOSULFAN 1	14.83	0.00	-6820	0	N.D.	N.D.	
10)	T	GAMMA-CHLORDANE	14.20f	0.00	98404	0	0.001	N.D.	#
11)	T	ALFA-CHLORDANE	14.50f	14.43	38652	47312	0.001	0.001	
12)	T	DDE	14.64f	0.00	10344	0	0.000	N.D.	#
13)	T	DIELDRIN	0.00	15.14	0	-2968	N.D.	N.D.	
14)	T	ENDRIN	0.00	15.78f	0	290843	N.D.	0.005	#
15)	T	DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	ENDOSULFAN 2	0.00	0.00	0	0	N.D.	N.D.	
17)	T	ENDRIN ALDEHYDE	17.31	17.00	17101	-143328	0.000	N.D.	#
18)	T	DDT	0.00	0.00	0	0	N.D.	N.D.	
19)	T	ENDOS.SULFATE	18.25	0.00	2481	0	0.000	N.D.	#
20)	T	METHOXYCHLOR	0.00	0.00	0	0	N.D.	N.D.	
21)	T	ENDRIN KETONE	18.86	18.74	4969	3110	0.000	0.000	#

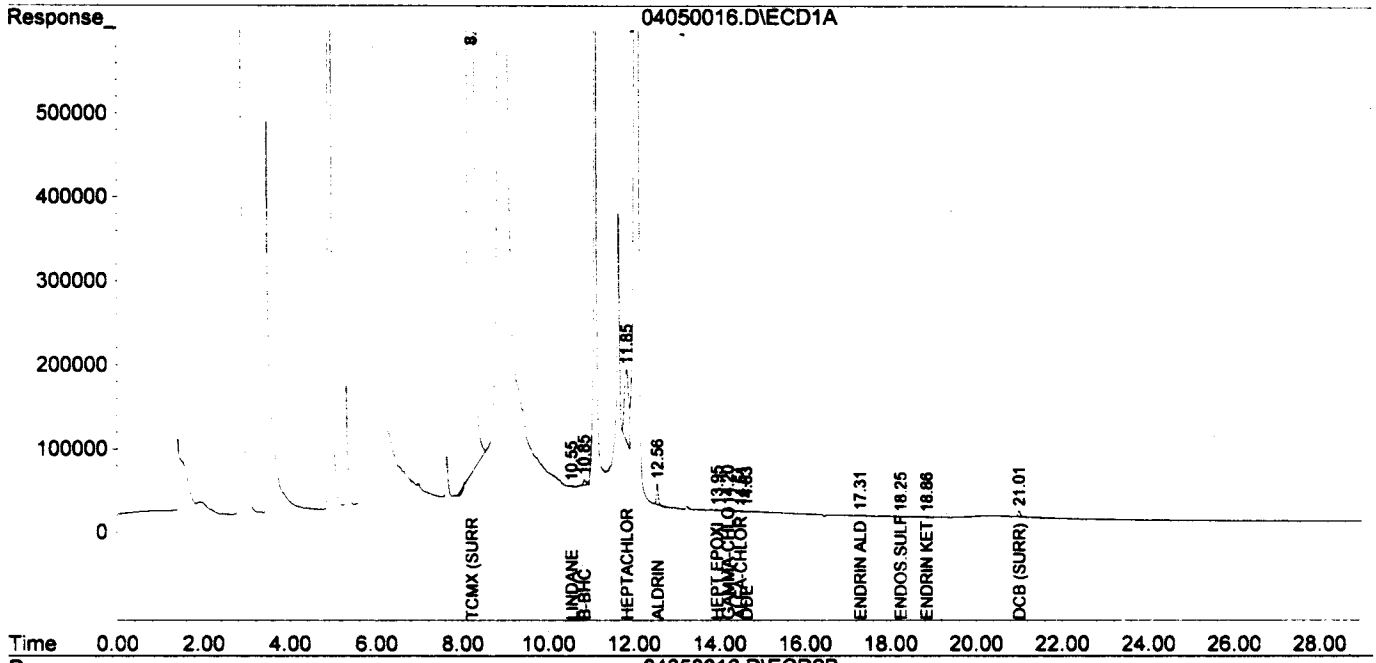
Endr. Ald. < DC (x20)
rest Pest - see clean up TBA

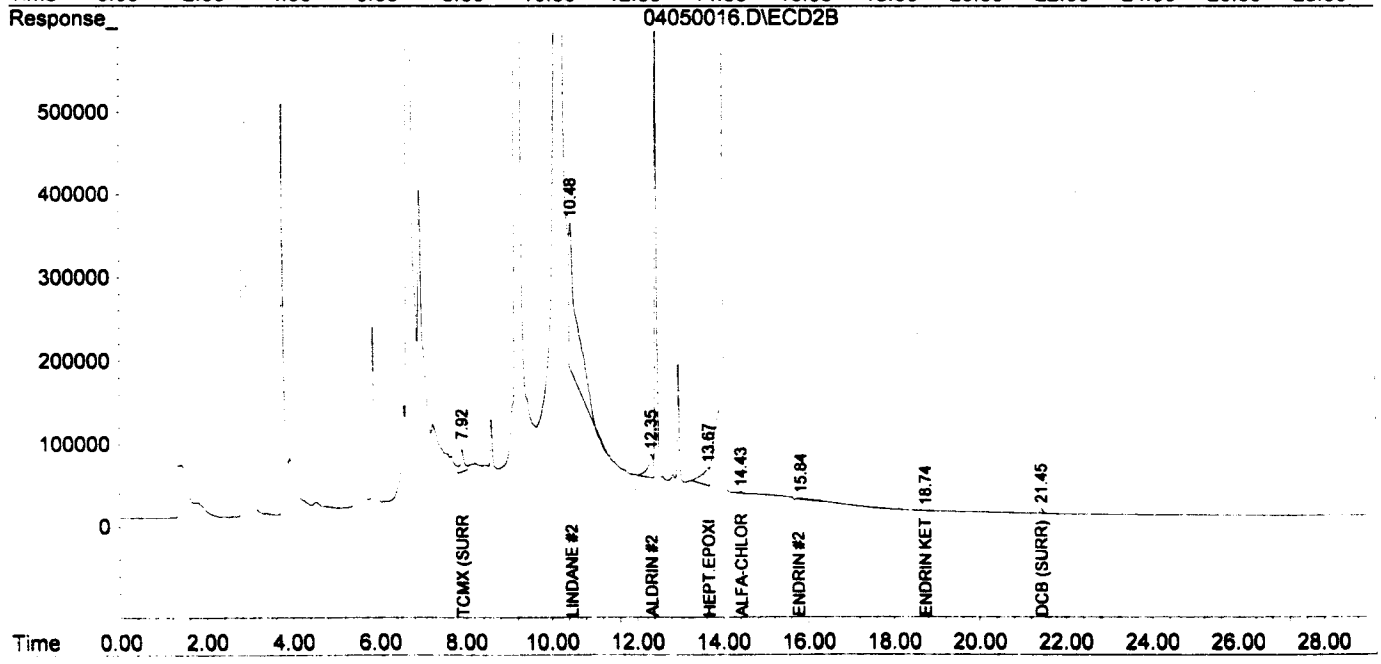
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\040500\04050016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\040500\04050016.D\ECD2B.CH
Acq On : 5 Apr 2000 5:31 pm Operator: YGK
Sample : 90040 W 1:20 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:03 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\040500\04050013.D\ECD2B.CH
Acq On : 5 Apr 2000 3:52 pm Operator: YGK
Sample : 90041 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:01 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.21	7.91	17106365	19359895	0.251	0.268	
		Spiked Amount 0.250			Recovery	=	100.40%	107.20%	
22)	S	DCB (SURR)	21.01	21.45	14206272	15395964	0.250	0.241	
		Spiked Amount 0.250			Recovery	=	100.00%	96.40%	
		Target Compounds							
2)	T	A-BHC	9.80	9.66f	58384	81762	0.001	0.001	#
3)	T	B-BHC	10.84	10.75	51141	4723966	0.001	0.092	#
4)	T	LINDANE	10.58	10.56	128761	270783	0.001	0.003	#
5)	T	D-BHC	11.30	11.48	514224	160839	0.005	0.002	#
6)	T	HEPTACHLOR	11.80	11.62	24624	13011	0.000	0.000	#
7)	T	ALDRIN	12.47f	12.40f	42048	81653	0.001	0.001	#
8)	T	HEPT.EPOXIDE	13.98	13.65	135282	145533	0.002	0.002	
9)	T	ENDOSULFAN 1	14.82	14.58	2525040	2705048	0.036	0.034	
10)	T	GAMMA-CHLORDANE	14.20f	0.00	444106	0	0.006	N.D.	#
11)	T	ALFA-CHLORDANE	14.48f	0.00	132259	0	0.002	N.D.	#
12)	T	DDE	14.72	14.78f	5042	2664	0.000	0.000	#
13)	T	DIELDRIN	15.35	15.19	-1750	36306	N.D.	0.000	
14)	T	ENDRIN	15.95	15.79	67958	11701	0.001	0.000	#
15)	T	DDD	16.06	16.06	10442	11977	0.000	0.000	
16)	T	ENDOSULFAN 2	16.39	16.26	49907	27904	0.001	0.000	#
17)	T	ENDRIN ALDEHYDE	17.29	16.99	20759	999401	0.000	0.018	#
18)	T	DDT	16.63	16.75	123886	14067	0.002	0.000	#
19)	T	ENDOS.SULFATE	18.24	17.58	2894	40472	0.000	0.001	#
20)	T	METHOXYCHLOR	0.00	0.00	0	0	N.D.	N.D.	
21)	T	ENDRIN KETONE	0.00	18.71	0	33850	N.D.	0.000	#

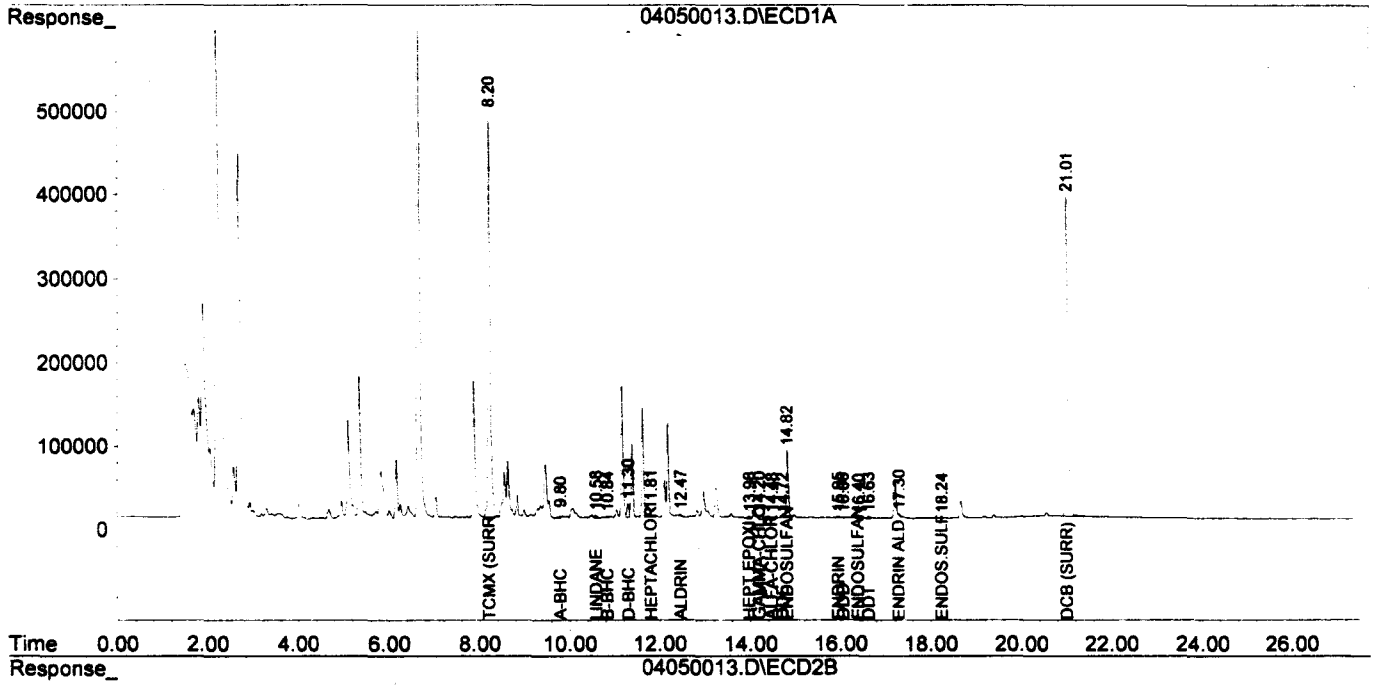
Pest <02

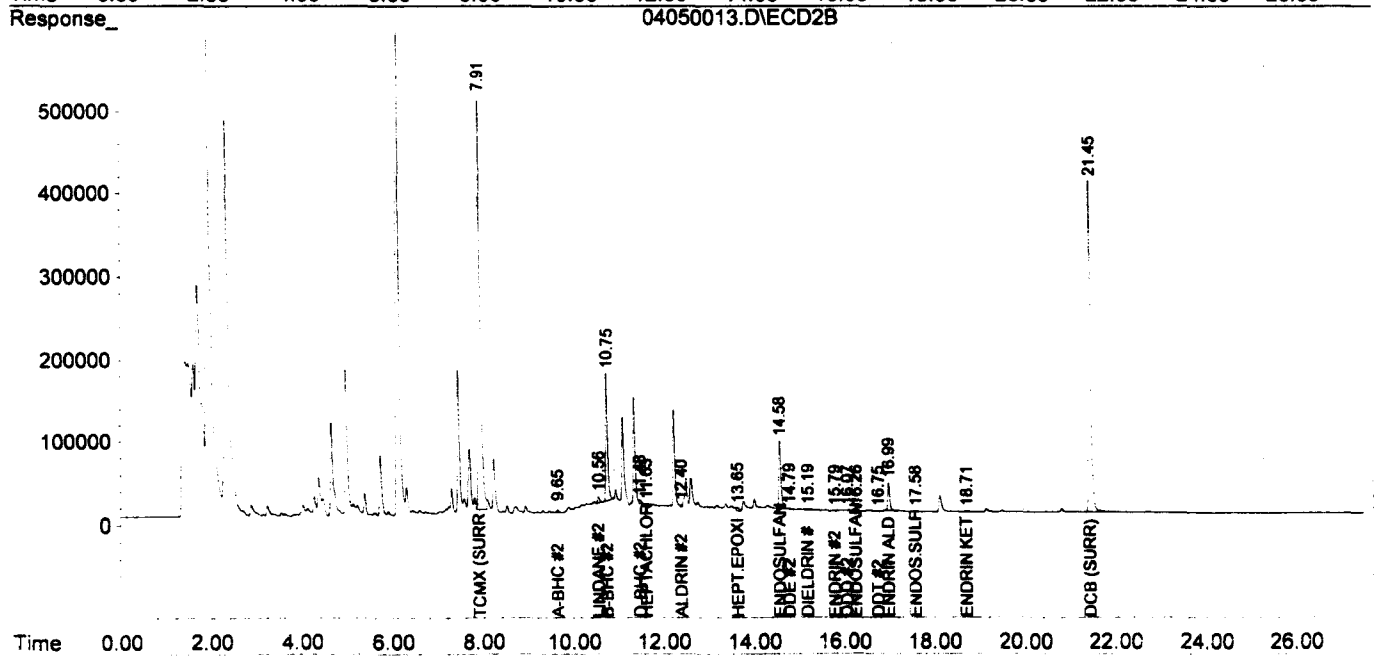
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\040500\04050013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\040500\04050013.D\ECD2B.CH
Acq On : 5 Apr 2000 3:52 pm Operator: YGK
Sample : 90041 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:01 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\040500\04050013.D\ECD2B.CH
Acq On : 5 Apr 2000 3:52 pm Operator: YGK
Sample : 90041 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:37 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.39	16.53f	108472	149074	0.132	0.034	#
2)	L TOX 2	16.63	16.91	174504	68401	0.124	0.027	#
3)	L TOX 3	17.05f	16.99	126262	1149495	0.057	0.340	#
4)	L TOX 4	17.83	18.12	60049	804401	0.023	0.199	#
5)	L TOX 5	18.00	0.00	118212	0	0.034	N.D.	#
6)	L TOX 6	18.85	18.92	101447	16721	0.038	0.007	#
7)	L TOX 7	19.19f	19.37	307472	6584	0.210	0.003	#
	Sum TOX 1			996418	2194675	0.617	0.610	
Average	TOX 1					0.088	0.102	

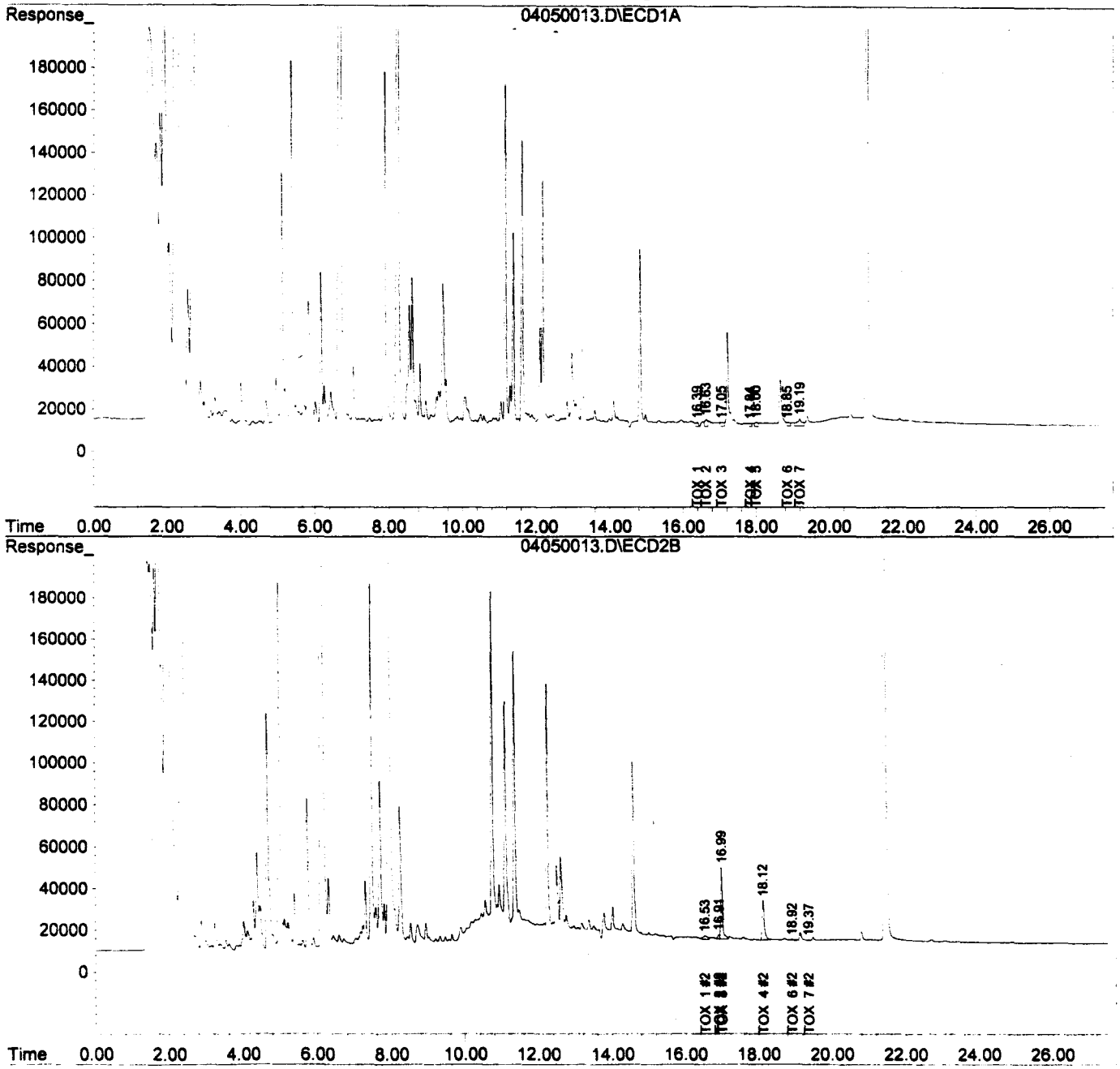
TOX <DL

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

Signal #1 : C:\HPCHEM\1\DATA\040500\04050013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\040500\04050013.D\ECD2B.CH
Acq On : 5 Apr 2000 3:52 pm Operator: YGK
Sample : 90041 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:37 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\040500\04050014.D\ECD2B.CH
Acq On : 5 Apr 2000 4:25 pm Operator: YGK
Sample : 90042 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:01 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.21	7.92	16762966	18859431	0.246	0.261	
		Spiked Amount 0.250			Recovery	=	98.40%	104.40%	
22)	S	DCB (SURR)	21.01	21.45	14953940	15450401	0.263	0.242	
		Spiked Amount 0.250			Recovery	=	105.20%	96.80%	
		Target Compounds							
2)	T	A-BHC	9.78	9.65	41710	38406	0.000	0.000	
3)	T	B-BHC	10.92f	10.75	69078	2002458	0.001	0.039	#
4)	T	LINDANE	10.59	10.56	680487	213831	0.007	0.002	#
5)	T	D-BHC	11.30	11.50	245408	96866	0.003	0.001	#
6)	T	HEPTACHLOR	11.81	11.63	53902	62602	0.001	0.001	
7)	T	ALDRIN	12.47f	12.36	-15586	182324	N.D.	0.002	
8)	T	HEPT.EPOXIDE	13.98	13.64f	177790	555207	0.002	0.007	#
9)	T	ENDOSULFAN 1	14.82	14.58	1057259	858068	0.015	0.011	#
10)	T	GAMMA-CHLORDANE	14.21	0.00	860861	0	0.011	N.D.	#
11)	T	ALFA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.72	14.79f	8732	83250	0.000	0.001	#
13)	T	DIELDRIN	0.00	15.15	0	10218	N.D.	0.000	#
14)	T	ENDRIN	15.90	15.87	4393	182046	0.000	0.003	#
15)	T	DDD	16.06	16.08	16470	7640	0.000	0.000	#
16)	T	ENDOSULFAN 2	16.36	0.00	154241	0	0.003	N.D.	#
17)	T	ENDRIN ALDEHYDE	17.31	16.99	19905	254411	0.000	0.005	#
18)	T	DDT	16.62	16.75	4564	15079	0.000	0.000	#
19)	T	ENDOS.SULFATE	18.31	17.58	137635	39117	0.002	0.001	#
20)	T	METHOXYCHLOR	17.67	0.00	26984	0	0.001	N.D.	#
21)	T	ENDRIN KETONE	0.00	18.73	0	30702	N.D.	0.000	#

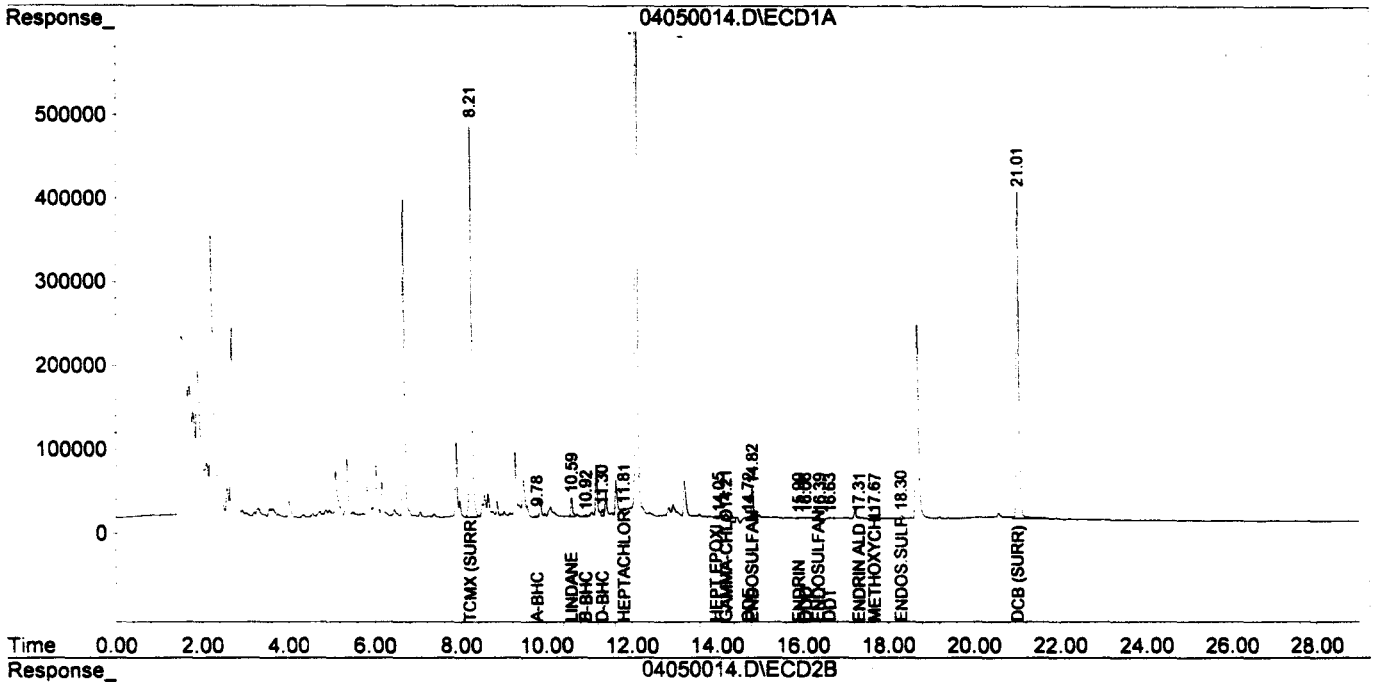
Pest < DC

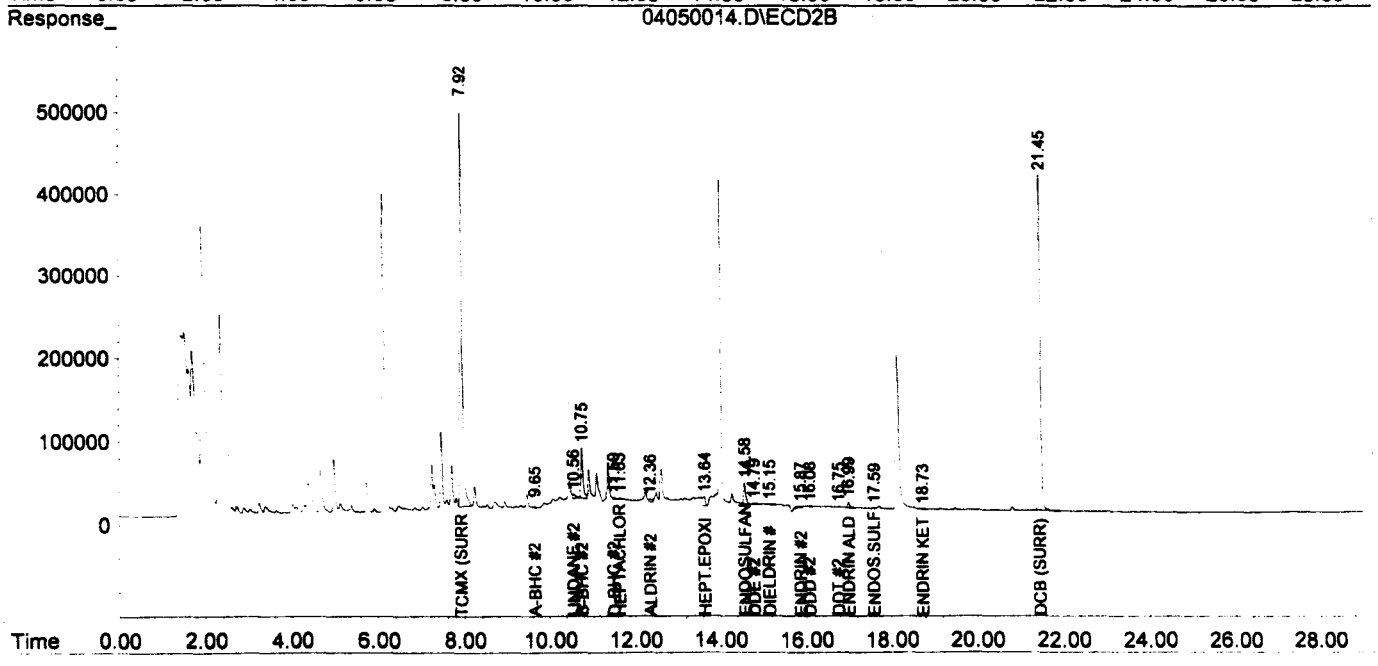
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\040500\04050014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\040500\04050014.D\ECD2B.CH
Acq On : 5 Apr 2000 4:25 pm Operator: YGK
Sample : 90042 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:01 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\040500\04050014.D\ECD2B.CH
Acq On : 5 Apr 2000 4:25 pm Operator: YGK
Sample : 90042 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:38 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.36	16.52f	371765	12866	0.452	0.003	#
2)	L TOX 2	16.62	16.86	652209	10937	0.462	0.004	#
3)	L TOX 3	17.07	16.99	346943	255538	0.156	0.076	#
4)	L TOX 4	17.84	18.13	200252	10716155	0.077	2.645	#
5)	L TOX 5	18.01	0.00	270672	0	0.077	N.D.	#
6)	L TOX 6	0.00	0.00	0	0	N.D.	N.D.	
7)	L TOX 7	19.19f	0.00	789534	0	0.540	N.D.	#
	Sum TOX 1			2631373	10995496	1.764	2.728	
Average	TOX 1					0.294	0.682	

TOXECD.C.

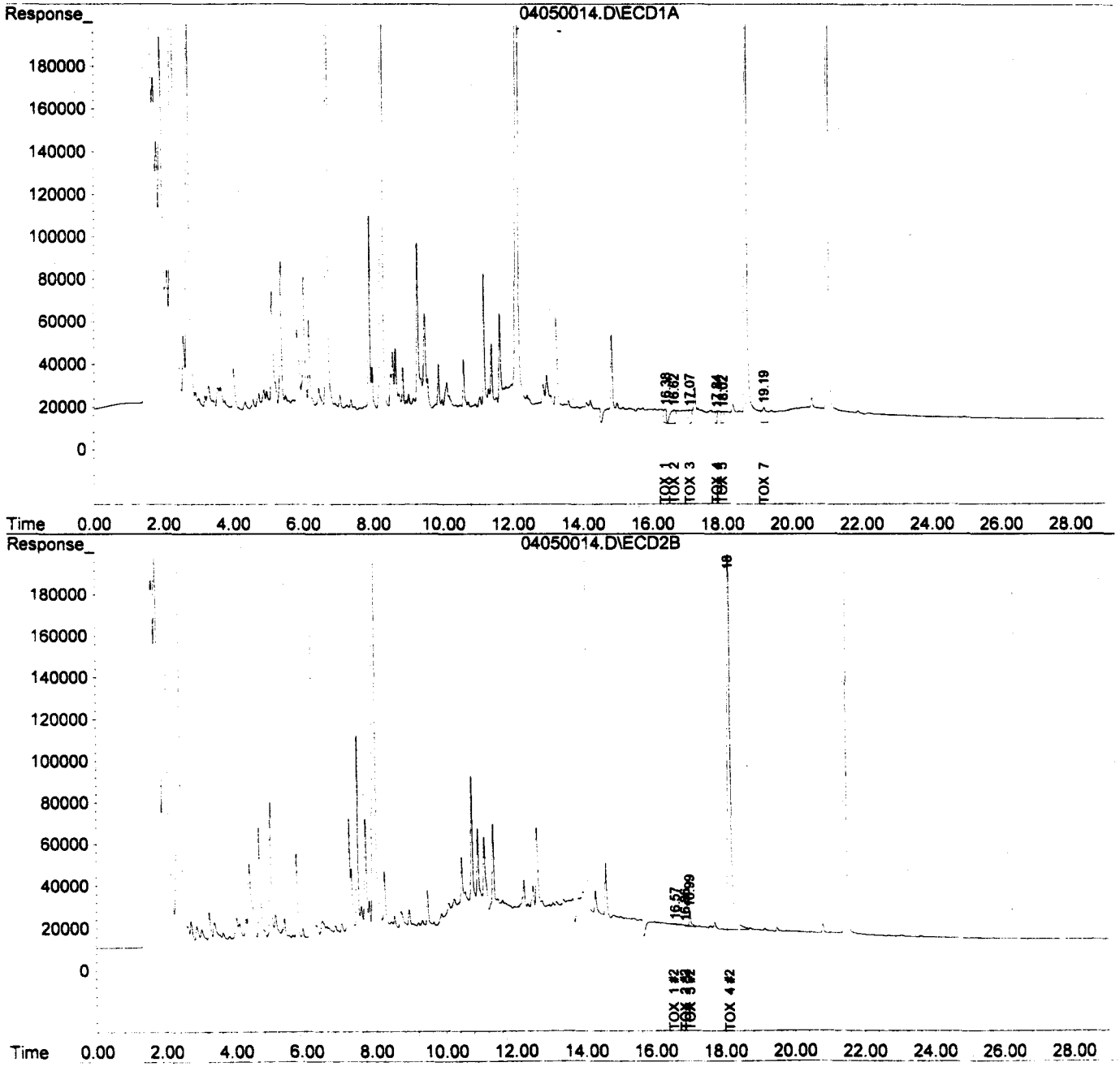
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\040500\04050014.D\ECD2B.CH
Acq On : 5 Apr 2000 4:25 pm Operator: YGK
Sample : 90042 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:38 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060018.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\040600\04060018.D\ECD2B.CH
Acq On : 6 Apr 2000 10:21 pm Operator: YGK
Sample : 90043 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:51 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.20	7.92	19946509	15353728	0.293	0.213	#
		Spiked Amount 0.250			Recovery	=	117.20%	85.20%	
22)	S	DCB (SURR)	21.01	21.46	3987206	3721977	0.070	0.058	
		Spiked Amount 0.250			Recovery	=	28.00%	23.20%	
		Target Compounds							
2)	T	A-BHC	9.76	9.61	301166	297874	0.003 J	0.003	
3)	T	B-BHC	10.85	10.77	3137267	3643624	0.065	0.071	
4)	T	LINDANE	10.60	10.53	66330	61807	0.001	0.001	
5)	T	D-BHC	11.29	11.49	279064	438365	~~0.003~~	~~0.004~~ #	Report 4/13/00
6)	T	HEPTACHLOR	11.80	11.61	206604	86342	0.003	0.001	#
7)	T	ALDRIN	12.57f	12.41f	317702	22759	0.004	0.000	#
8)	T	HEPT.EPOXIDE	13.95	13.76f	187834	23778	0.003	0.000	#
9)	T	ENDOSULFAN 1	14.86	14.58	489569	112252	0.007	0.001	#
10)	T	GAMMA-CHLORDANE	14.24	14.11	476986	368162	0.006	0.004	#
11)	T	ALFA-CHLORDANE	14.54	14.44	1221013	1271601	0.018	0.015	
12)	T	DDE	14.72	14.88	24950	4903	0.000	0.000	#
13)	T	DIELDRIN	15.38	15.15	75869	79736	0.001	0.001	
14)	T	ENDRIN	15.97f	15.78	9344	42632	0.000	0.001	#
15)	T	DDD	16.05	16.12	4303	176410	0.000	0.003	#
16)	T	ENDOSULFAN 2	16.39	16.32	77290	55359	0.001	0.001	#
17)	T	ENDRIN ALDEHYDE	17.25f	17.02	-909177	80167	N.D.	0.001	
18)	T	DDT	16.61	16.79	106801	17343	0.002	0.000	#
19)	T	ENDOS.SULFATE	18.25	17.60	28914	31590	0.001	0.000	
20)	T	METHOXYCHLOR	17.59f	18.13f	7385	283150	0.000	0.008	#
21)	T	ENDRIN KETONE	18.86	18.75	22647	25834	0.000	0.000	

α BHC : 0.015 ppb J

dil: 0.005

β BHC : 0.36 ppb

α-Chlord. : 0.090 ppb

γ-Chlord : 0.030 ppb J

YGK 04/07 ~~α BHC~~ YGK 04/07 ~~D BHC : 0.020 J~~ ~~see BLNK~~

res Pest < DL

End. Ald. see dil. 1:20

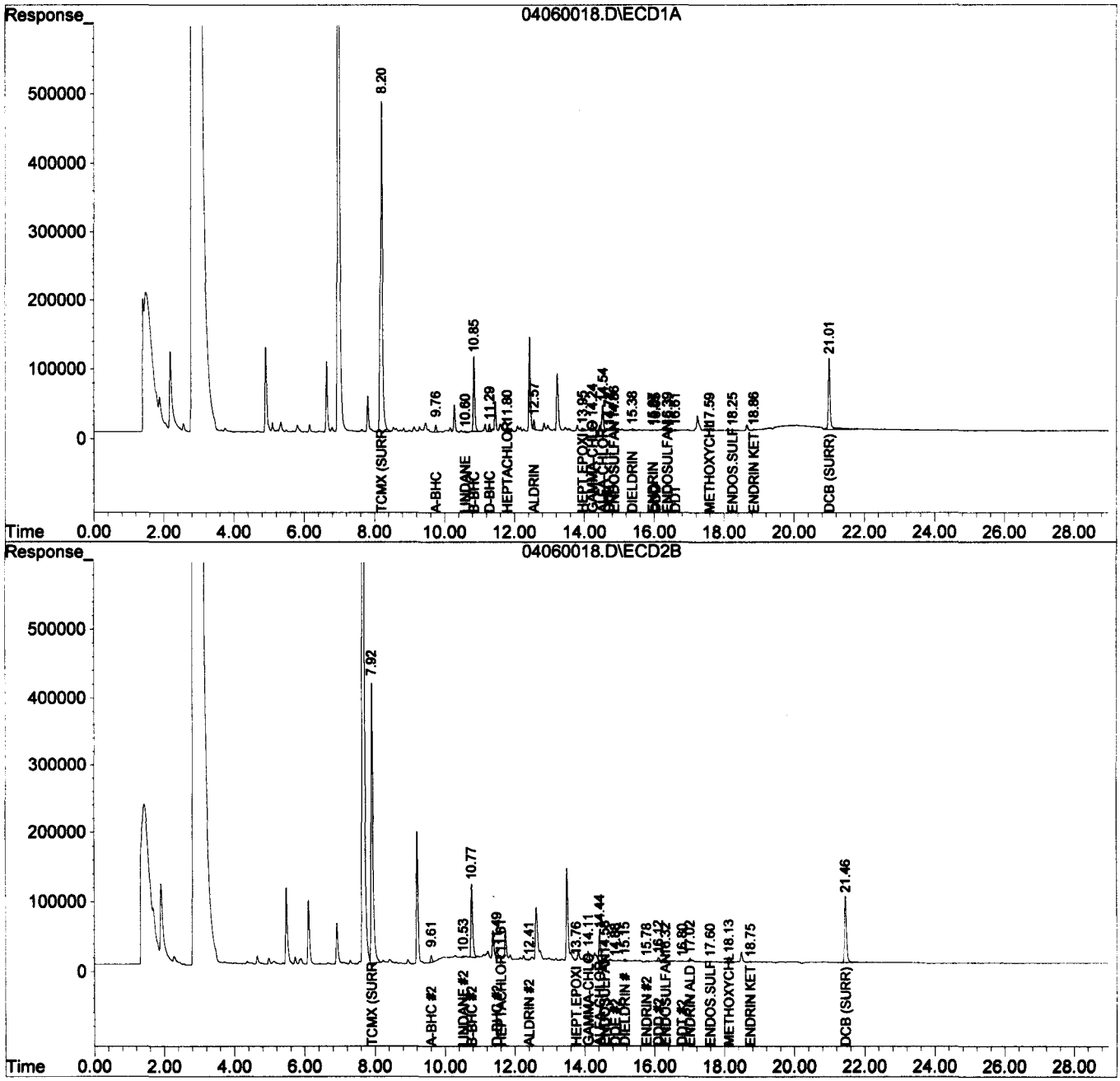
D-BHC - 0.020 J 4/13/00

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

Signal #1 : C:\HPCHEM\1\DATA\040600\04060018.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\040600\04060018.D\ECD2B.CH
Acq On : 6 Apr 2000 10:21 pm Operator: YGK
Sample : 90043 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:51 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060018.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\040600\04060018.D\ECD2B.CH
Acq On : 6 Apr 2000 10:21 pm Operator: YGK
Sample : 90043 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 10:01 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
Target Compounds						
1) L TOX 1	16.39	16.45	131319	64476	0.160	0.015 #
2) L TOX 2	16.61	16.79f	118184	24000	0.084	0.009 #
3) L TOX 3	0.00	17.02	0	163028	N.D.	0.048 #
4) L TOX 4	17.85	18.13	49490	284322	0.019	0.070 #
5) L TOX 5	18.00	0.00	103068	0	0.029	N.D. #
6) L TOX 6	18.86	18.89f	164188	25353	0.062	0.011 #
7) L TOX 7	19.20f	0.00	308053	0	0.211	N.D. #
Sum TOX 1			874302	561178	0.564	0.153
Average TOX 1					0.094	0.031

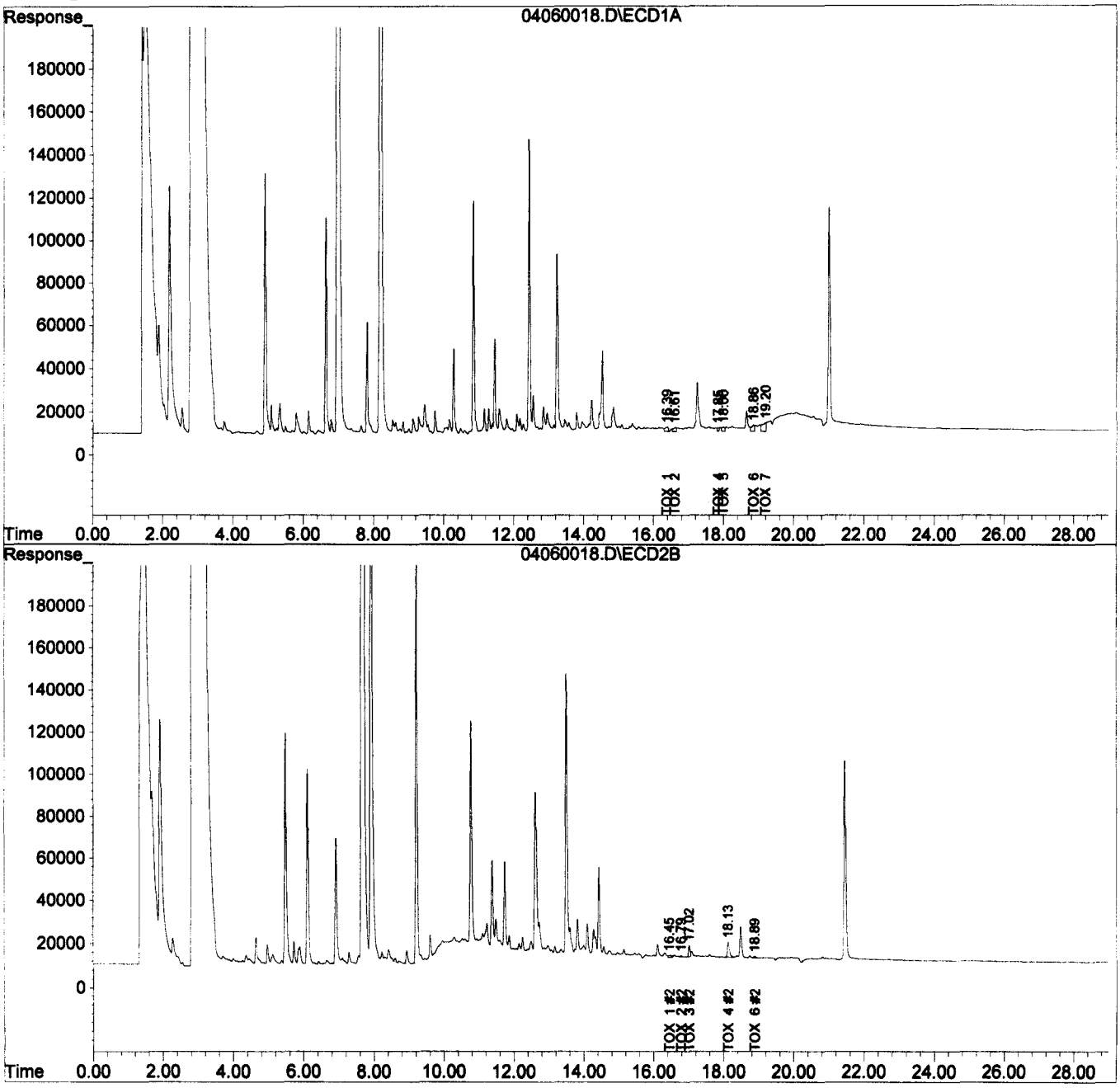
TOX <02

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

Signal #1 : C:\HPCHEM\1\DATA\040600\04060018.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\040600\04060018.D\ECD2B.CH
Acq On : 6 Apr 2000 10:21 pm Operator: YGK
Sample : 90043 W CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 10:01 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050017.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\040500\04050017.D\ECD2B.CH
Acq On : 5 Apr 2000 6:06 pm Operator: YGK
Sample : 90043 W 1:20 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:04 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
	System Monitoring Compounds							
1)	S TCMX (SURR)	8.21	7.92	201.4E6	1579455	2.960	0.022	#
	Spiked Amount 0.250			Recovery	= 1184.00%		8.80%	
22)	S DCB (SURR)	21.01	21.45	636639	223970	0.011	0.004	#
	Spiked Amount 0.250			Recovery	= 4.40%		1.60%	
	Target Compounds							
2)	T A-BHC	9.73f	0.00	-23123	0	N.D.	N.D.	
3)	T B-BHC	10.85	10.76	239276	-242647	0.005	N.D.	#
4)	T LINDANE	10.56f	10.47f	19667	5279805	0.000	0.050	#
5)	T D-BHC	0.00	11.48	0	-23851	N.D.	N.D.	
6)	T HEPTACHLOR	11.84f	0.00	2579107	0	0.033	N.D.	#
7)	T ALDRIN	12.56f	12.36	304890	1613225	0.004	0.018	#
8)	T HEPT.EPOXIDE	13.95	13.67	33377	739571	0.000	0.009	#
9)	T ENDOSULFAN 1	14.83	0.00	13223	0	0.000	N.D.	#
10)	T GAMMA-CHLORDANE	14.23	0.00	93643	0	0.001	N.D.	#
11)	T ALFA-CHLORDANE	14.52	14.42	44461	42299	0.001	0.001	
12)	T DDE	14.83f	0.00	13223	0	0.000	N.D.	#
13)	T DIELDRIN	0.00	15.14	0	1352	N.D.	0.000	#
14)	T ENDRIN	0.00	15.78f	0	50829	N.D.	0.001	#
15)	T DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T ENDOSULFAN 2	0.00	0.00	0	0	N.D.	N.D.	
17)	T ENDRIN ALDEHYDE	17.31	17.01	16969	15700	0.000	0.000	
18)	T DDT	0.00	0.00	0	0	N.D.	N.D.	
19)	T ENDOS.SULFATE	18.25	0.00	2207	0	0.000	N.D.	#
20)	T METHOXYCHLOR	0.00	0.00	0	0	N.D.	N.D.	
21)	T ENDRIN KETONE	18.85	18.74	5748	4507	0.000	0.000	#

Endr. Ald. < DL (x20)
Test Pest - see Clean up TBA

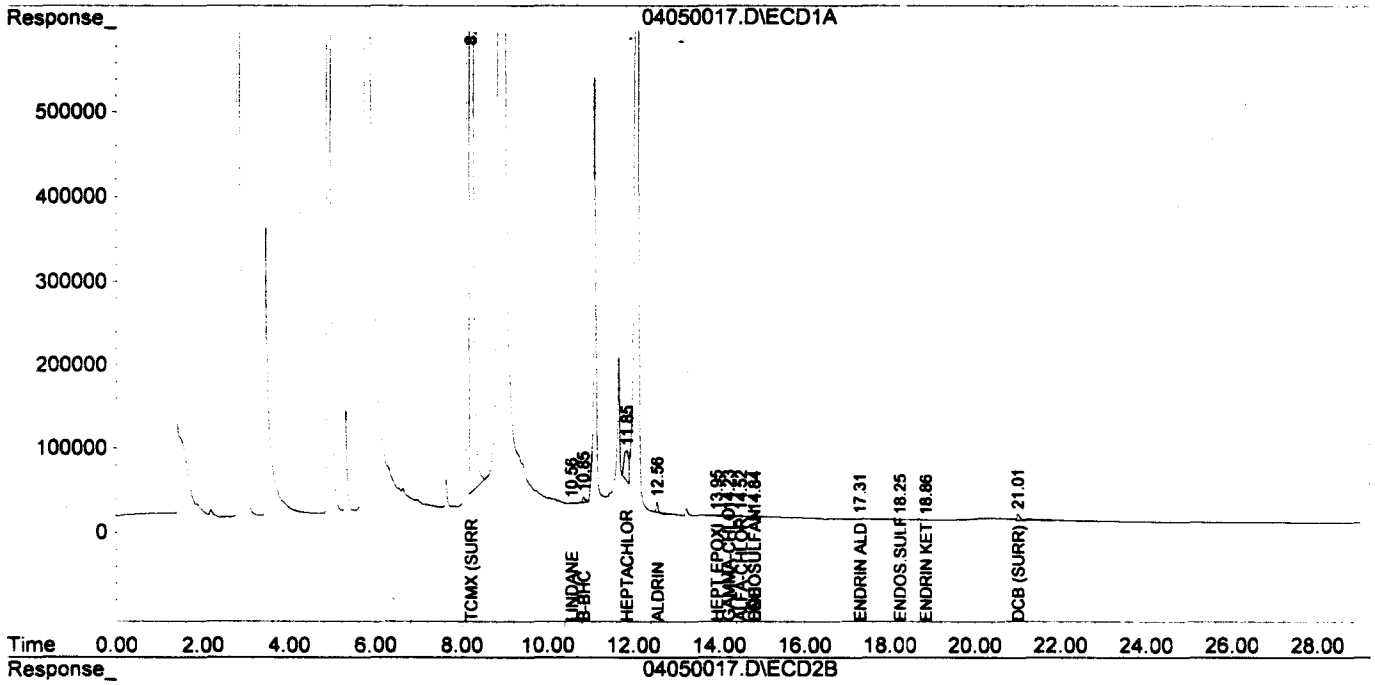
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

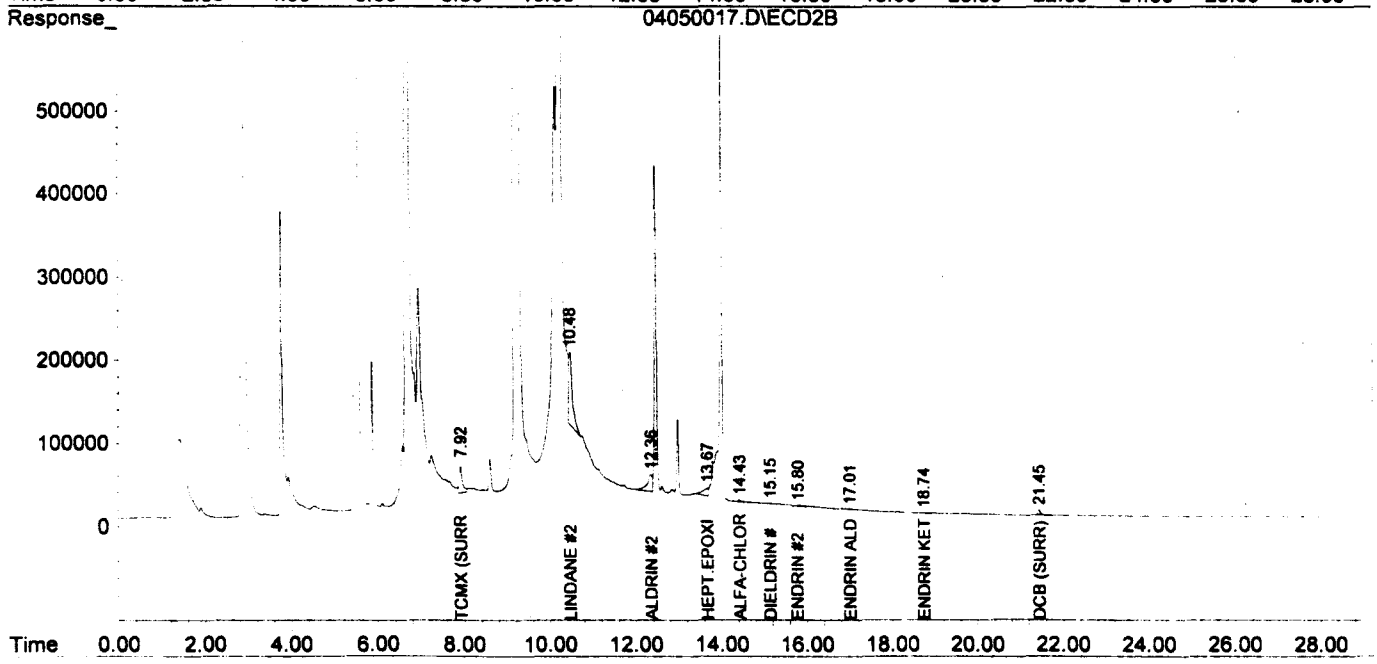
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050017.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\040500\04050017.D\ECD2B.CH
Acq On : 5 Apr 2000 6:06 pm Operator: YGK
Sample : 90043 W 1:20 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:04 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050018.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\040500\04050018.D\ECD2B.CH
Acq On : 5 Apr 2000 6:40 pm Operator: YGK
Sample : 90044 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:53 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
	System Monitoring Compounds							
1)	S TCMX (SURR)	8.20	7.91	15944709	17105995	0.234	0.237	
	Spiked Amount 0.250			Recovery	=	93.60% 94	94.80%	
22)	S DCB (SURR)	21.01	21.45	7192927	7311950	0.127	0.114	
	Spiked Amount 0.250			Recovery	=	50.80% 51	45.60%	
	Target Compounds							
2)	T A-BHC	9.76	9.60	54511	39385	0.000	0.000	#
3)	T B-BHC	10.85	10.75	132586	1287799	0.003	0.025	#
4)	T LINDANE	10.58	10.55	475062	96484	0.005	0.001	#
5)	T D-BHC	11.30	11.50	97457	74404	0.001	0.001	#
6)	T HEPTACHLOR	11.80	11.63	61736	80474	0.001	0.001	
7)	T ALDRIN	0.00	12.36	0	54953	N.D.	0.001	#
8)	T HEPT.EPOXIDE	13.98	13.64f	109233	161216	0.002	0.002	#
9)	T ENDOSULFAN 1	14.82	14.58	910823	578957	0.013	0.007	#
10)	T GAMMA-CHLORDANE	14.25	0.00	1068697	0	0.013	N.D.	#
11)	T ALFA-CHLORDANE	0.00	14.42	0	54339	N.D.	0.001	#
12)	T DDE	14.72	14.78f	5901	42230	0.000	0.001	#
13)	T DIELDRIN	15.32f	0.00	-327443	0	N.D.	N.D.	
14)	T ENDRIN	15.84f	15.87	6336	20027	0.000	0.000	#
15)	T DDD	16.06	16.07	5843	7212	0.000	0.000	
16)	T ENDOSULFAN 2	16.39	16.29	72608	6813	0.001	0.000	#
17)	T ENDRIN ALDEHYDE	17.31	16.99	16188	129607	0.000	0.002	#
18)	T DDT	16.62	16.75	196939	8748	0.003	0.000	#
19)	T ENDOS.SULFATE	18.23	17.58	2629	17420	0.000	0.000	#
20)	T METHOXYCHLOR	17.67	0.00	23330	0	0.001	N.D.	#
21)	T ENDRIN KETONE	0.00	18.74	0	7963	N.D.	0.000	#

Pest < DC

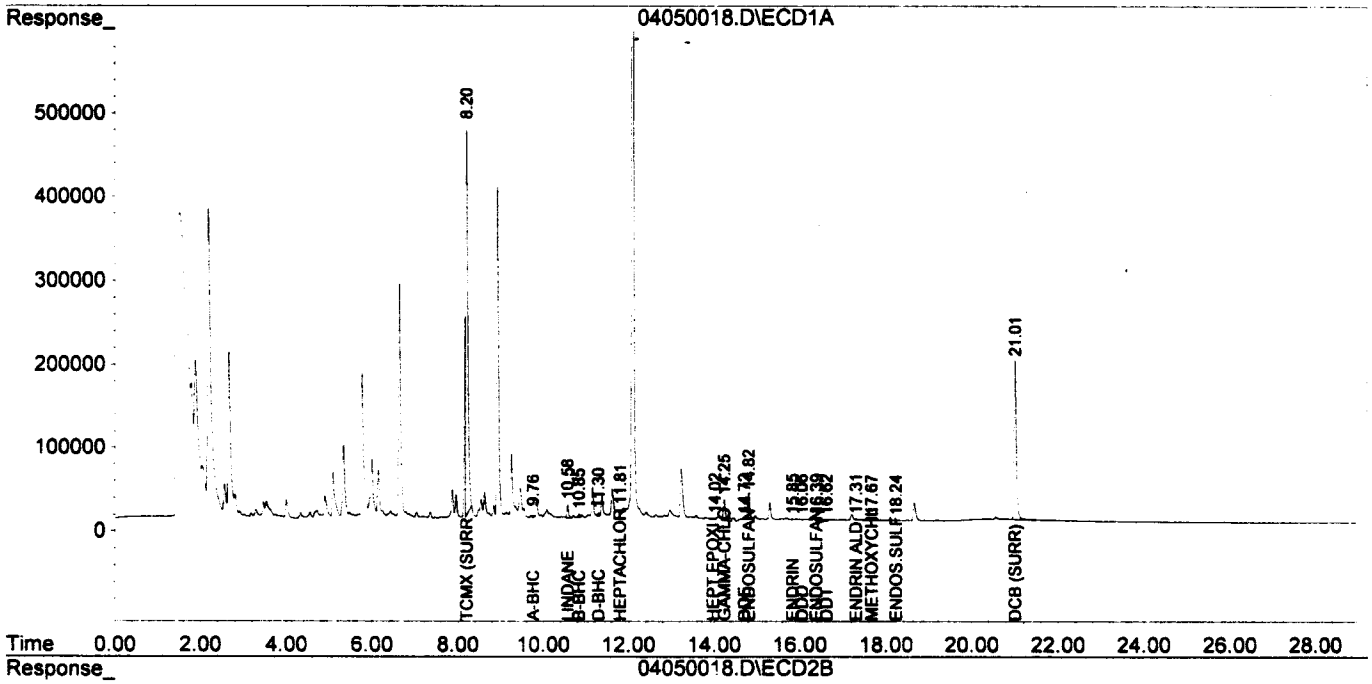
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

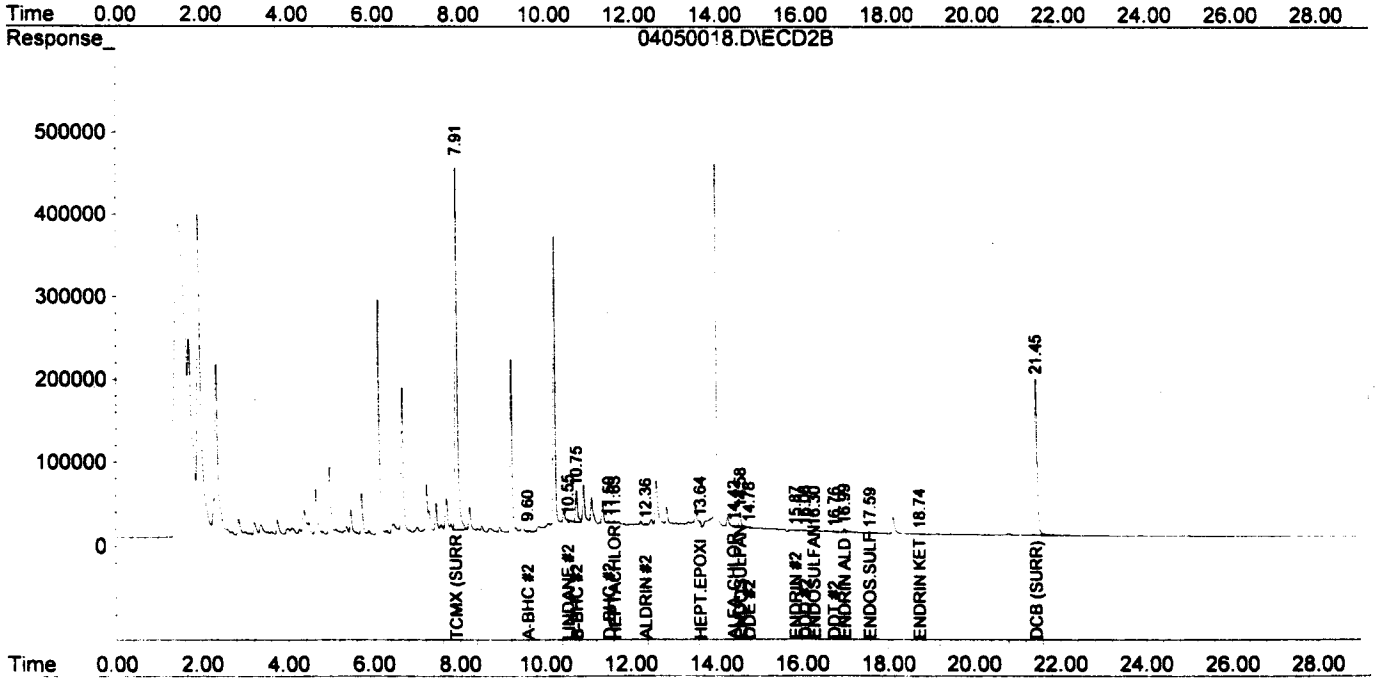
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050018.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\040500\04050018.D\ECD2B.CH
Acq On : 5 Apr 2000 6:40 pm Operator: YGK
Sample : 90044 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 11:53 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050018.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\040500\04050018.D\ECD2B.CH
Acq On : 5 Apr 2000 6:40 pm Operator: YGK
Sample : 90044 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:39 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1)	L TOX	1	16.38	16.53f	211208	5976	0.257	0.001	#
2)	L TOX	2	16.62	0.00	284409	0	0.201	N.D.	#
3)	L TOX	3	17.21f	16.99	403384	130836	0.181	0.039	#
4)	L TOX	4	17.84	18.12	56258	889547	0.022	0.220	#
5)	L TOX	5	18.00	0.00	72594	0	0.021	N.D.	#
6)	L TOX	6	18.85	0.00	51380	0	0.019	N.D.	#
7)	L TOX	7	19.19f	0.00	45154	0	0.031	N.D.	#
	Sum TOX	1			1124388	1026359	0.732	0.260	
Average	TOX	1					0.105	0.087	

TOX<CD c.

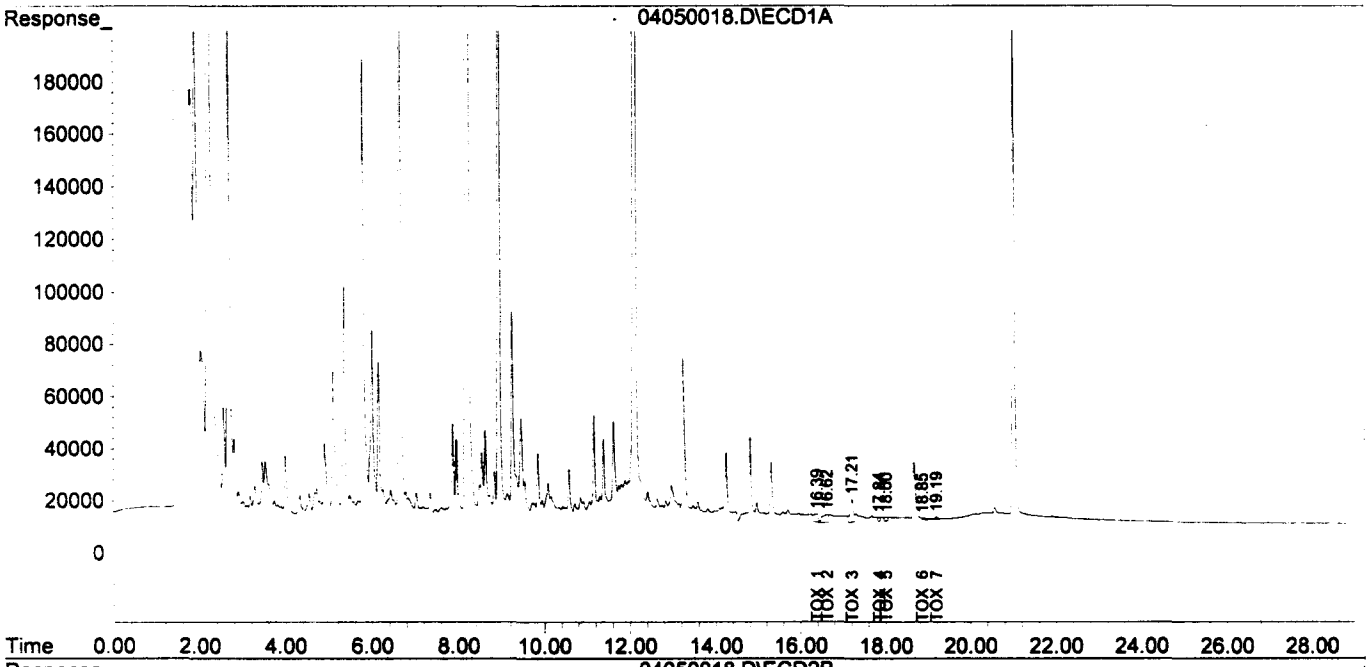
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

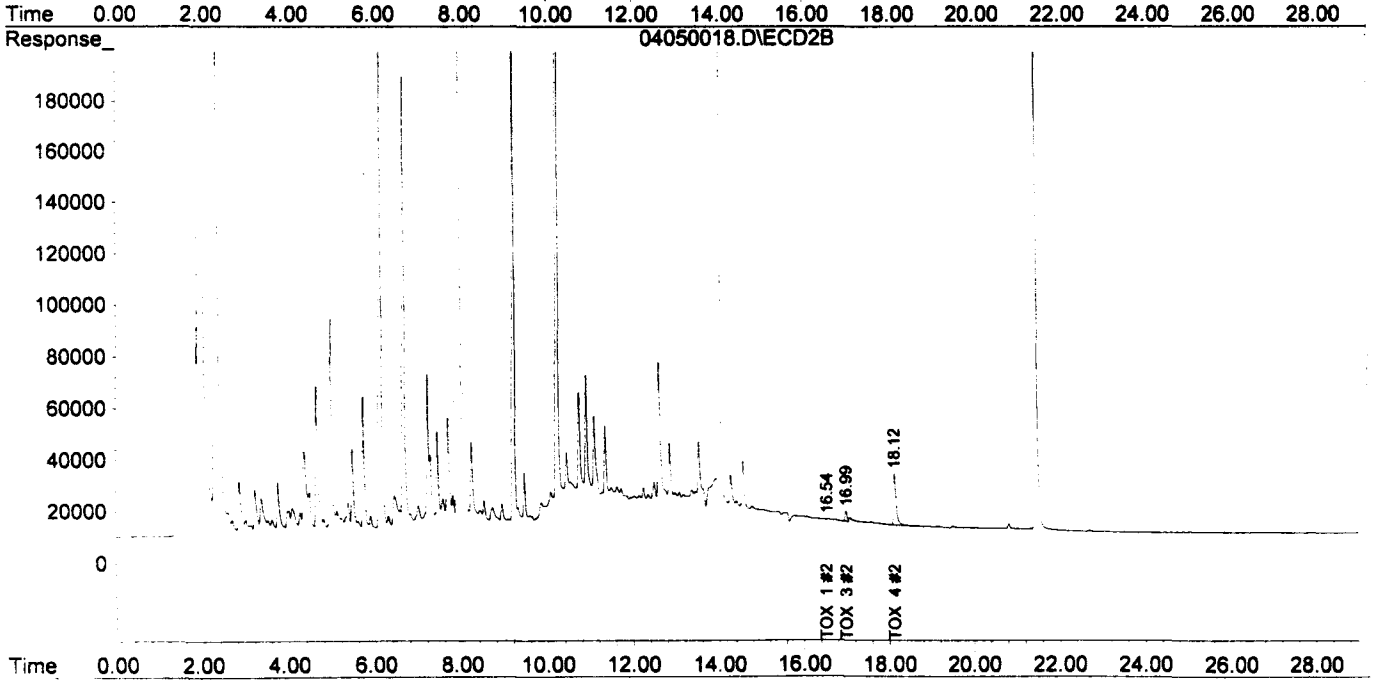
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050018.D\ECD1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\040500\04050018.D\ECD2B.CH
Acq On : 5 Apr 2000 6:40 pm Operator: YGK
Sample : 90044 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:39 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\040500\04050008.D\ECD1A.CH Vial: 8
Acq On : 5 Apr 2000 1:01 pm Operator: YGK
Sample : BLNK W 04/04 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\DATA\040500\04050008.D\ECD2B.CH Vial: 8
Acq On : 5 Apr 2000 1:01 pm Operator: YGK
Sample : BLNK S 03/31 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 6 11:24 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
	System Monitoring Compounds							
1)	S TCMX (SURR)	8.21	7.92	16564590	17648333	0.243	0.245	
	Spiked Amount 0.250			Recovery	=	97.20%	98.00%	
22)	S DCB (SURR)	21.01	21.45	12551531	13193668	0.221	0.206	
	Spiked Amount 0.250			Recovery	=	88.40%	82.40%	
	Target Compounds							
2)	T A-BHC	9.73f	9.64	14708	44079	0.000	0.000	#
3)	T B-BHC	10.92f	10.75	68769	121170	0.001	0.002	#
4)	T LINDANE	10.60	10.53	55359	45426	0.001	0.000	
5)	T D-BHC	11.27	11.51	362992	103421	0.004	0.001	#
6)	T HEPTACHLOR	11.80	11.58	165680	15463	0.002	0.000	#
7)	T ALDRIN	12.47f	0.00	49361	0	0.001	N.D.	#
8)	T HEPT.EPOXIDE	0.00	13.65	0	105308	N.D.	0.001	#
9)	T ENDOSULFAN 1	14.82	14.58	1049953	47587	0.015	0.001	#
10)	T GAMMA-CHLORDANE	0.00	14.10	0	5061	N.D.	0.000	#
11)	T ALFA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T DDE	14.71	0.00	4632	0	0.000	N.D.	#
13)	T DIELDRIN	0.00	0.00	0	0	N.D.	N.D.	
14)	T ENDRIN	15.97f	15.87	15653	9782	0.000	0.000	#
15)	T DDD	15.97f	16.00f	15653	13080	0.000	0.000	
16)	T ENDOSULFAN 2	16.35	16.30	50381	11026	0.001	0.000	#
17)	T ENDRIN ALDEHYDE	17.31	17.04	40127	133768	0.001	0.002	#
18)	T DDT	16.70	16.69f	148007	2771	0.002	0.000	#
19)	T ENDOS.SULFATE	18.25	17.59	3328	17403	0.000	0.000	#
20)	T METHOXYCHLOR	17.67	0.00	32396	0	0.001	N.D.	#
21)	T ENDRIN KETONE	0.00	18.74	0	5359	N.D.	0.000	#

Pest < ½ DL

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

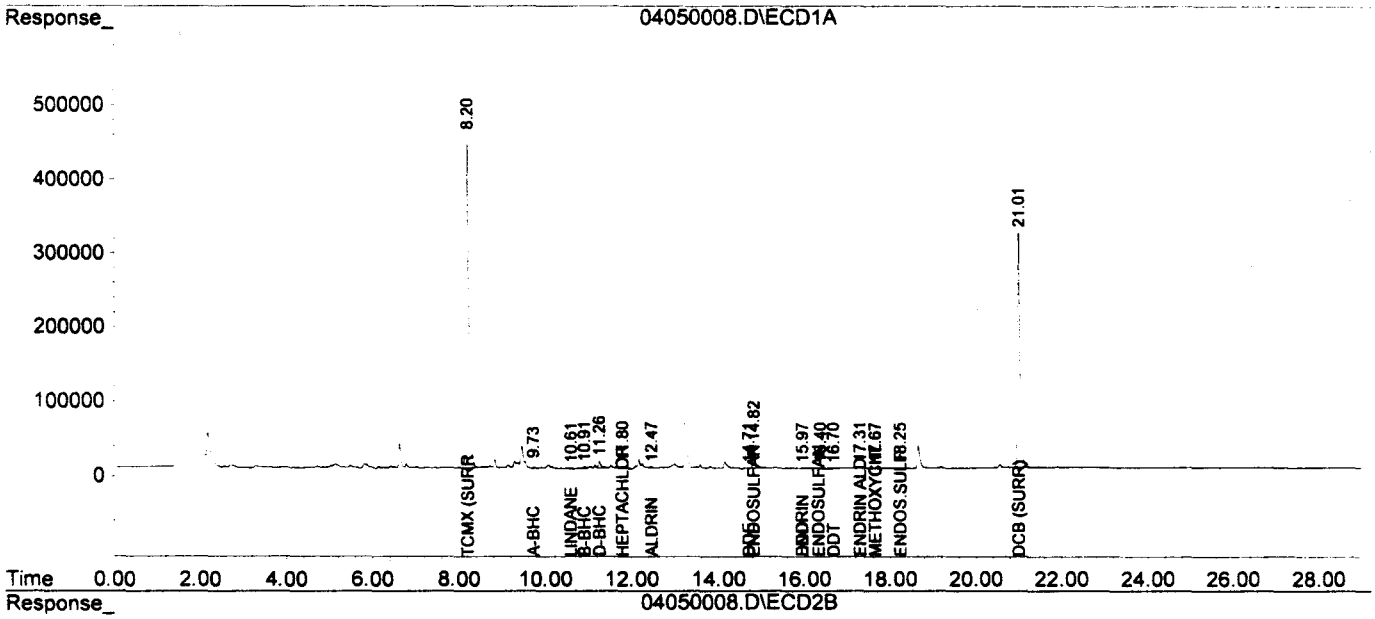
Quantitation Report

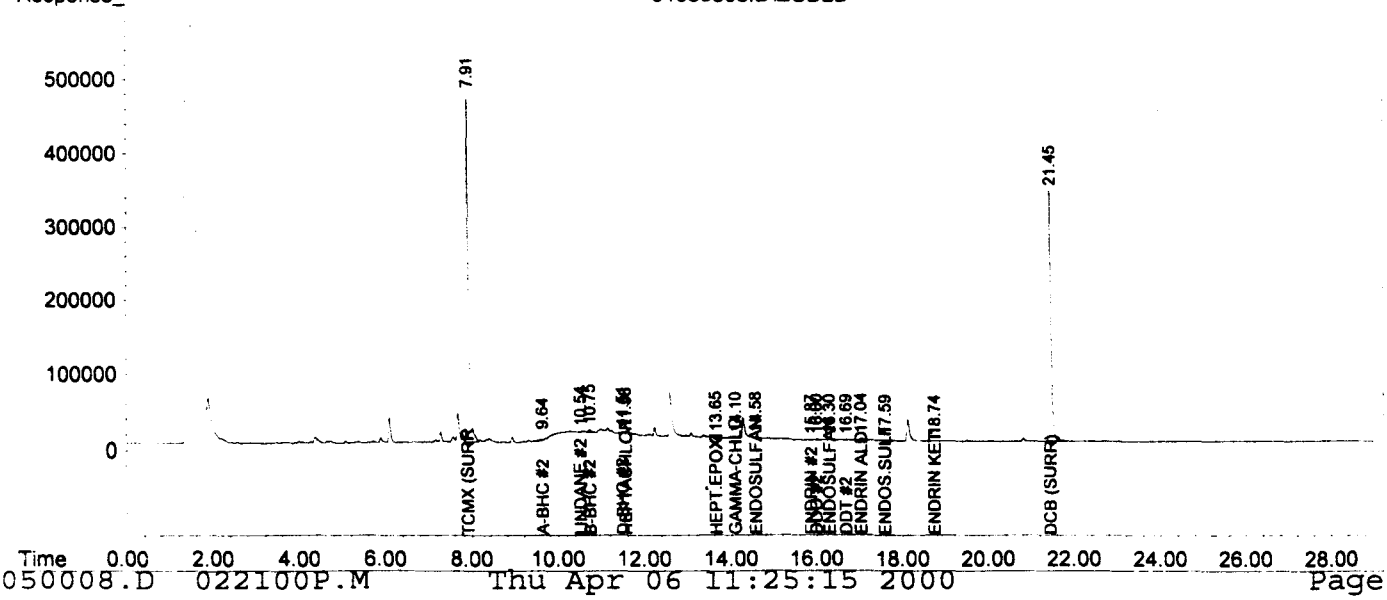
Data File : C:\HPCHEM\1\DATA\040500\04050008.D\ECD1A.CH Vial: 8
Acq On : 5 Apr 2000 1:01 pm Operator: YGK
Sample : BLNK W 04/04 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : EVENTS.E

Data File : C:\HPCHEM\1\DATA\040500\04050008.D\ECD2B.CH Vial: 8
Acq On : 5 Apr 2000 1:01 pm Operator: YGK
Sample : BLNK S 03/31 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : events2.e
Quant Time: Apr 6 11:24 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\040500\04050008.D\ECD1A.CH Vial: 8
Acq On : 5 Apr 2000 1:01 pm Operator: YGK
Sample : BLNK W 04/04 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\040500\04050008.D\ECD2B.CH Vial: 8
Acq On : 5 Apr 2000 1:01 pm Operator: YGK
Sample : BLNK S 03/31 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 6 13:36 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds							
1) L TOX 1	16.35	0.00	94540	0	0.115	N.D.	#
2) L TOX 2	16.61	0.00	109274	0	0.077	N.D.	#
3) L TOX 3	17.09	17.04	35806	134111	0.016	0.040	#
4) L TOX 4	17.83	18.12	65382	1242987	0.025	0.307	#
5) L TOX 5	18.01	0.00	55885	0	0.016	N.D.	#
6) L TOX 6	18.85	0.00	105791	0	0.040	N.D.	#
7) L TOX 7	19.12	0.00	30450	0	0.021	N.D.	#
Sum TOX 1			497128	1377098	0.310	0.346	
Average TOX 1					0.044	0.173	

TOX < 1/2 DL

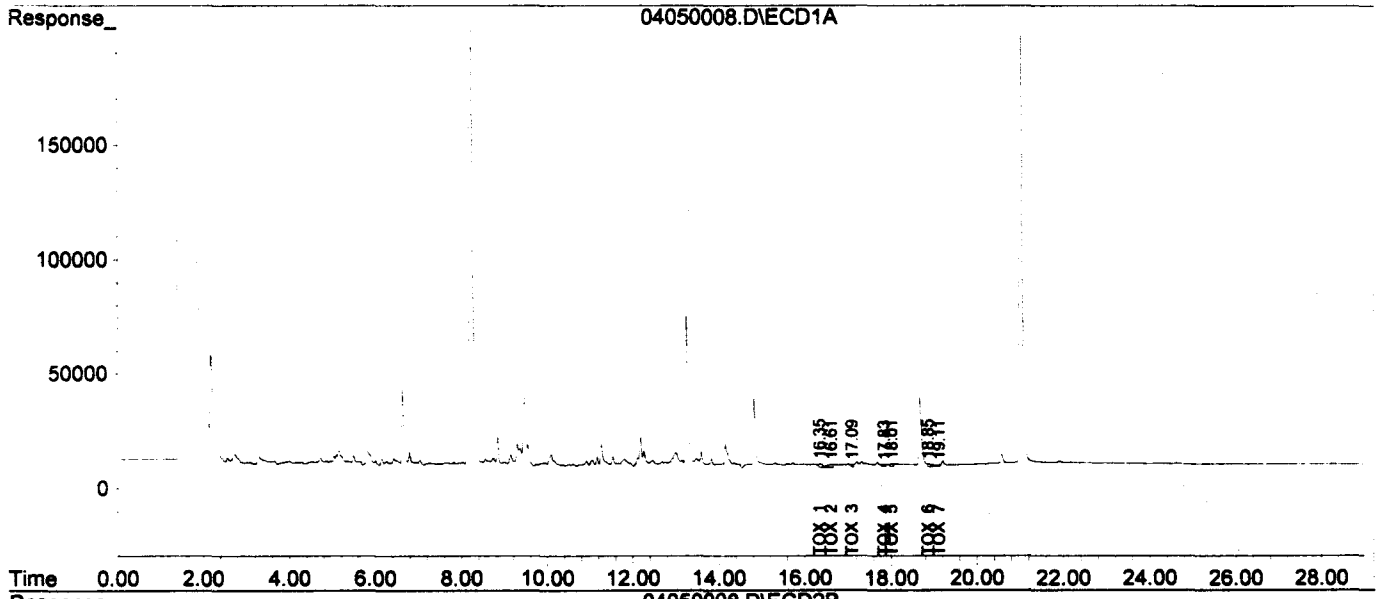
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

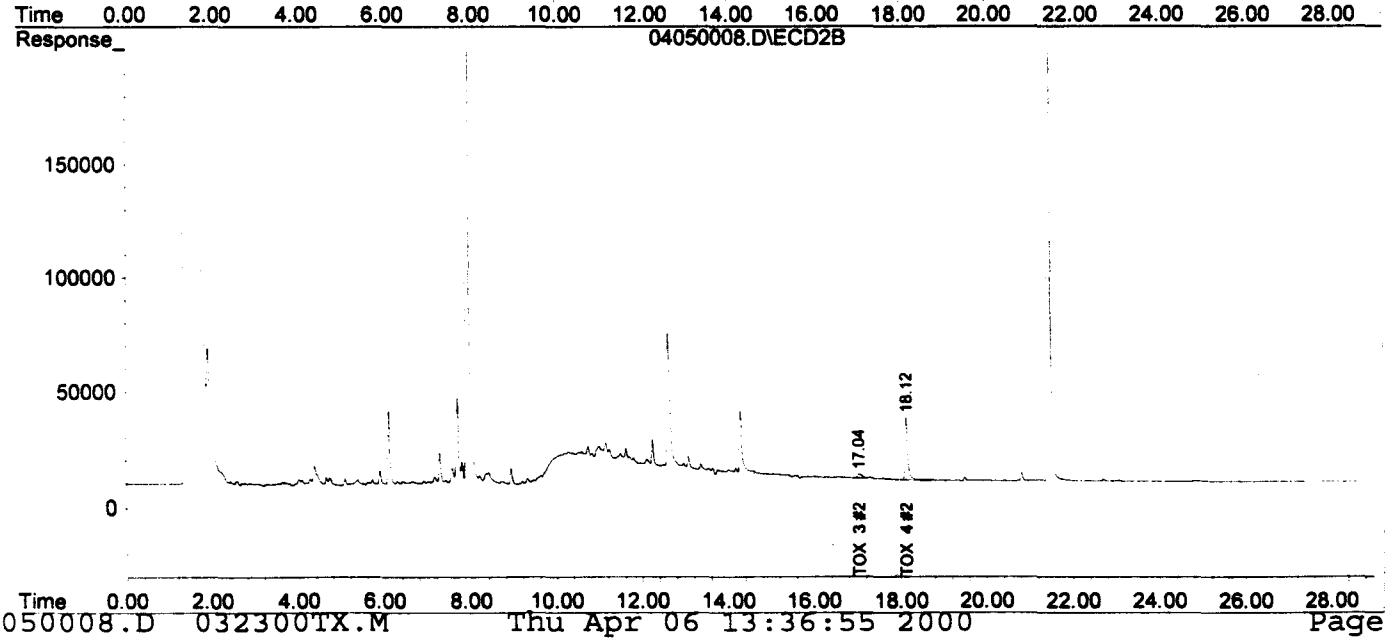
Data File : C:\HPCHEM\1\DATA\040500\04050008.D\ECD1A.CH Vial: 8
Acq On : 5 Apr 2000 1:01 pm Operator: YGK
Sample : BLNK W 04/04 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\040500\04050008.D\ECD2B.CH Vial: 8
Acq On : 5 Apr 2000 1:01 pm Operator: YGK
Sample : BLNK S 03/31 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 6 13:36 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Accura Analytical Laboratory, Inc.
Persticides LCS/LCS DUP Report

Sample ID:	LCS/LCS DUP PEST 04/04 CL TBA	**Date Acquired:**	4/6/00
Operator:	YGK	**Instrument ID:**	#1
Data File:	04060014&15	**Bottle #:**	14&15
Method:	8081	**Matrix:**	WATER

Compounds	Expected Conc.(ppm)	LCS Act. Conc.(ppm)	LCS % Recovery	LCSD Act. Conc.(ppm)	LCSD % Recovery	Recovery Limits (%)*	LCS Pass/ Fail	LCSD Pass/ Fail	%RPD	%RPD Limit	%RPD Pass/ Fail
Aldrin	0.25	0.245	98%	0.243	97%	30 - 150	Pass	Pass	1%	< 20	Pass
alpha-BHC	0.25	0.236	94%	0.235	94%	30 - 150	Pass	Pass	0%	< 20	Pass
beta-BHC	0.25	0.229	92%	0.228	91%	30 - 150	Pass	Pass	0%	< 20	Pass
gamma-BHC	0.25	0.235	94%	0.235	94%	30 - 150	Pass	Pass	0%	< 20	Pass
delta-BHC	0.25	0.133	53%	0.131	52%	30 - 150	Pass	Pass	2%	< 20	Pass
alpha-Chlordane	0.25	0.253	101%	0.249	100%	30 - 150	Pass	Pass	2%	< 20	Pass
gamma-Chlordane	0.25	0.253	101%	0.253	101%	30 - 150	Pass	Pass	0%	< 20	Pass
4,4'-DDD	0.25	0.267	107%	0.266	106%	30 - 150	Pass	Pass	0%	< 20	Pass
4,4'-DDE	0.25	0.266	106%	0.265	106%	30 - 150	Pass	Pass	0%	< 20	Pass
4,4'-DDT	0.25	0.254	102%	0.254	102%	30 - 150	Pass	Pass	0%	< 20	Pass
Dieldrin	0.25	0.261	104%	0.259	104%	30 - 150	Pass	Pass	1%	< 20	Pass
Endosulfan I	0.25	0.238	95%	0.238	95%	30 - 150	Pass	Pass	0%	< 20	Pass
Endosulfan II	0.25	0.239	96%	0.238	95%	30 - 150	Pass	Pass	0%	< 20	Pass
Endosulfan Sulfate	0.25	0.25	100%	0.249	100%	30 - 150	Pass	Pass	0%	< 20	Pass
Endrin	0.25	0.273	109%	0.272	109%	30 - 150	Pass	Pass	0%	< 20	Pass
Endrin Aldehyde	0.25	0.024	10%	0.017	7%	30 - 150	Fail	Fail	34%	< 20	Fail
Endrin Ketone	0.25	0.251	100%	0.251	100%	30 - 150	Pass	Pass	0%	< 20	Pass
Heptachlor epoxide	0.25	0.262	105%	0.261	104%	30 - 150	Pass	Pass	0%	< 20	Pass
Heptachlor	0.25	0.234	94%	0.232	93%	30 - 150	Pass	Pass	1%	< 20	Pass
Methoxychlor	0.25	0.26	104%	0.259	104%	30 - 150	Pass	Pass	0%	< 20	Pass

Surrogates	Expected Conc.(ppm)	LCS Act. Conc.(ppm)	LCS % Recovery	LCSD Act. Conc.(ppm)	LCSD % Recovery	Recovery Limits (%)*	LCS Pass/ Fail	LCSD Pass/ Fail
Tetrachloro-m-xylene	0.25	0.253	101%	0.253	101%	30 - 150	Pass	Pass
Decachlorobiphenyl	0.25	0.237	95%	0.237	95%	30 - 150	Pass	Pass

*-Inhouse limits to be developed

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\040600\04060014.D\ECD2B.CH
Acq On : 6 Apr 2000 8:04 pm Operator: YGK
Sample : LCS W 04/04 CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:48 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.21	7.92	17229287	18436219	0.253	0.255
		Spiked Amount 0.250			Recovery =		101.20%	102.00%
22)	S	DCB (SURR)	21.01	21.46	13478424	14160756	0.237	0.222
		Spiked Amount 0.250			Recovery =		94.80%	88.80%
		Target Compounds						
2)	T	A-BHC	9.76	9.61	25949933	28505443	0.236	0.241
3)	T	B-BHC	10.85	10.77	11037413	12453883	0.229	0.242
4)	T	LINDANE	10.60	10.53	23067404	25181123	0.235	0.239
5)	T	D-BHC	11.29	11.49	12655293	13084623	0.133	0.132
6)	T	HEPTACHLOR	11.79	11.59	18300447	20470481	0.234	0.231
7)	T	ALDRIN	12.52	12.35	18371096	21066606	0.245	0.241
8)	T	HEPT.EPOXIDE	13.95	13.69	18915671	20754864	0.262	0.260
9)	T	ENDOSULFAN 1	14.85	14.56	16721106	18731534	0.238	0.235
10)	T	GAMMA-CHLORDANE	14.24	14.11	20339089	23146248	0.253	0.252
11)	T	ALFA-CHLORDANE	14.54	14.44	17575112	21266797	0.253	0.255
12)	T	DDE	14.73	14.84	17677470	21171760	0.266	0.255
13)	T	DIELDRIN	15.38	15.16	18723053	21807560	0.261	0.261
14)	T	ENDRIN	15.90	15.82	15819943	17730118	0.273	0.278
15)	T	DDD	16.05	16.10	14660304	15740727	0.267	0.263
16)	T	ENDOSULFAN 2	16.40	16.29	14701408	16635973	0.239	0.238
17)	T	ENDRIN ALDEHYDE	17.31	17.02	1154247	1276456	0.024	0.023
18)	T	DDT	16.65	16.76	15155367	16570589	0.254	0.249
19)	T	ENDOS.SULFATE	18.25	17.61	14201902	16033062	0.250	0.242
20)	T	METHOXYCHLOR	17.69	18.23	8126566	9099981	0.260	0.261
21)	T	ENDRIN KETONE	18.86	18.75	16628692	18717879	0.251	0.251

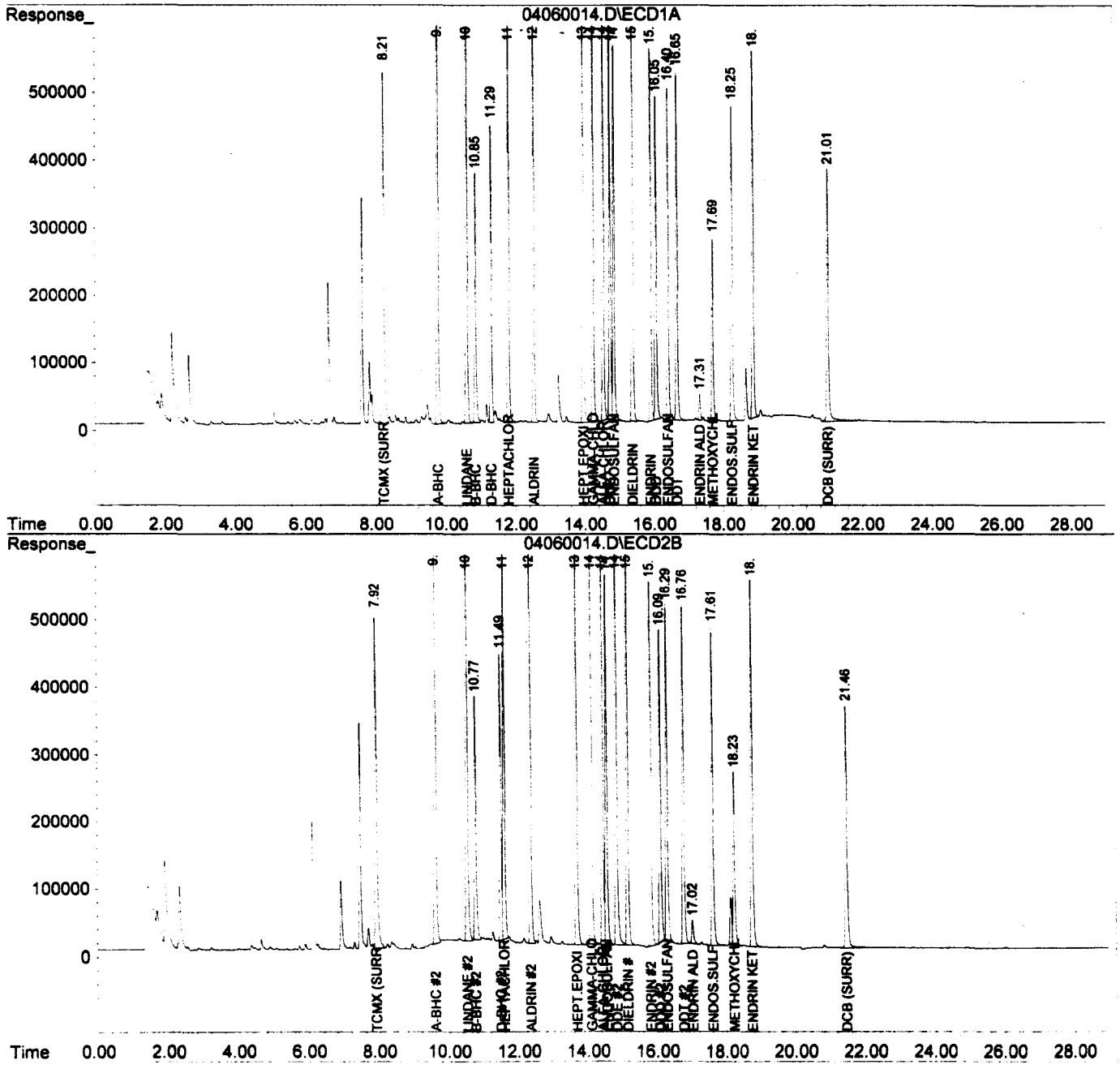
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040600\04060014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\040600\04060014.D\ECD2B.CH
Acq On : 6 Apr 2000 8:04 pm Operator: YGK
Sample : LCS W 04/04 CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:48 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060015.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\040600\04060015.D\ECD2B.CH
Acq On : 6 Apr 2000 8:39 pm Operator: YGK
Sample : LCS W DUP 04/04 CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:49 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

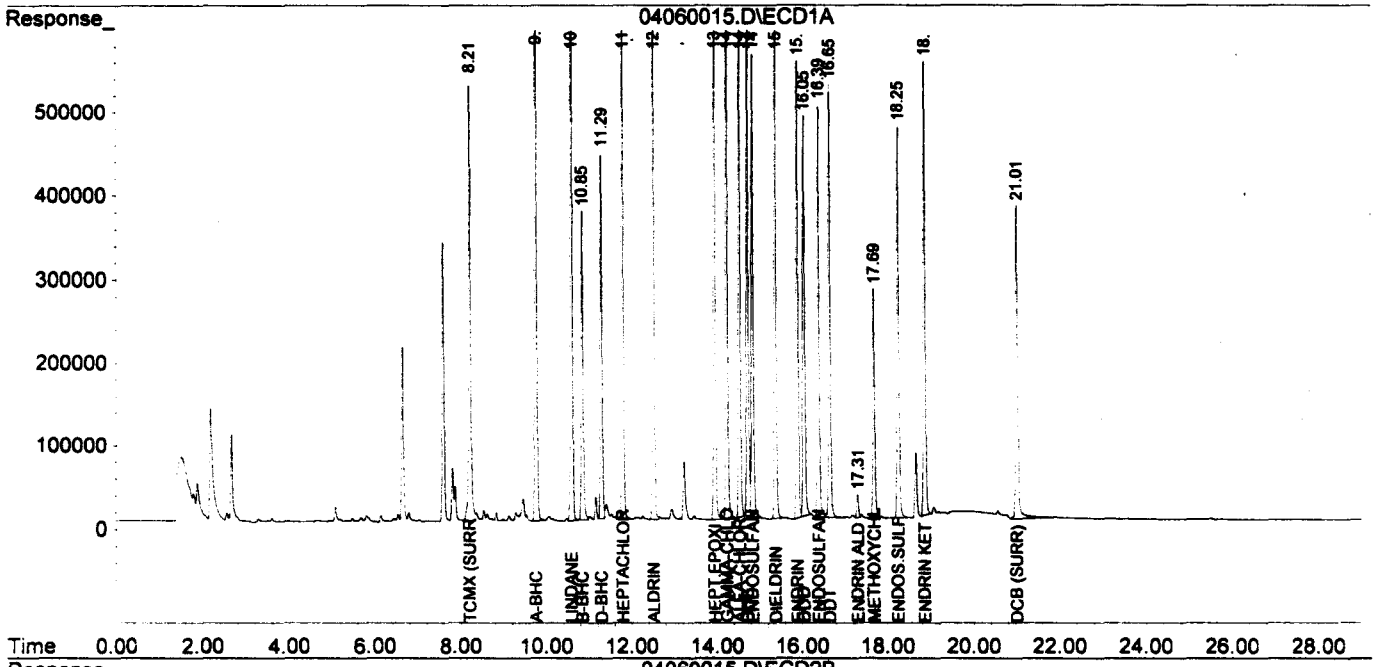
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.21	7.92	17186757	18385096	0.253	0.255
		Spiked Amount 0.250			Recovery =		101.20%	102.00%
22)	S	DCB (SURR)	21.01	21.46	13450398	14116507	0.237	0.221
		Spiked Amount 0.250			Recovery =		94.80%	88.40%
		Target Compounds						
2)	T	A-BHC	9.76	9.61	25843782	28209969	0.235	0.239
3)	T	B-BHC	10.85	10.77	11032448	12372389	0.228	0.241
4)	T	LINDANE	10.60	10.53	23020830	24765504	0.235	0.236
5)	T	D-BHC	11.29	11.49	12526915	12890041	0.131	0.130
6)	T	HEPTACHLOR	11.79	11.59	18143159	20178708	0.232	0.228
7)	T	ALDRIN	12.52	12.35	18264754	20847218	0.243	0.238
8)	T	HEPT.EPOXIDE	13.95	13.69	18831253	20407775	0.261	0.256
9)	T	ENDOSULFAN 1	14.85	14.55	16698862	18596445	0.238	0.233
10)	T	GAMMA-CHLORDANE	14.24	14.11	20371878	23027348	0.253	0.250
11)	T	ALFA-CHLORDANE	14.54	14.44	17310470	21105049	0.249	0.253
12)	T	DDE	14.73	14.84	17639162	21020226	0.265	0.253
13)	T	DIELDRIN	15.38	15.16	18635603	21672965	0.259	0.259
14)	T	ENDRIN	15.90	15.82	15762489	17525549	0.272	0.275
15)	T	DDD	16.05	16.09	14631208	15592924	0.266	0.261
16)	T	ENDOSULFAN 2	16.40	16.29	14644469	16528979	0.238	0.237
17)	T	ENDRIN ALDEHYDE	17.31	17.02	817295	904968	0.017	0.017
18)	T	DDT	16.65	16.76	15171305	16417719	0.254	0.246
19)	T	ENDOS.SULFATE	18.25	17.61	14158814	15876092	0.249	0.240
20)	T	METHOXYCHLOR	17.69	18.23	8095863	9028835	0.259	0.259
21)	T	ENDRIN KETONE	18.86	18.75	16633863	18562524	0.251	0.249

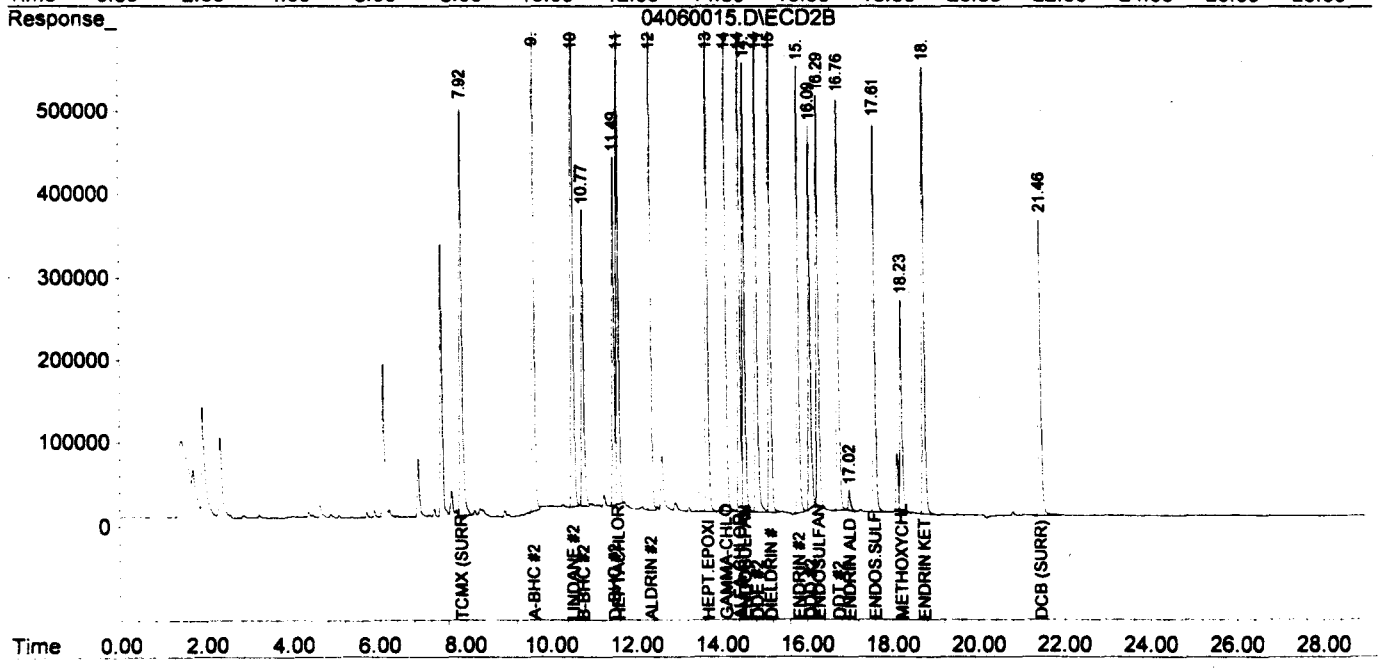
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\040600\04060015.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\040600\04060015.D\ECD2B.CH
Acq On : 6 Apr 2000 8:39 pm Operator: YGK
Sample : LCS W DUP 04/04 CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:49 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Accura Analytical Laboratory, Inc.
Persticides LCS/LCS DUP Report

Sample ID:	LCS/LCS DUP PEST 04/04	**Date Acquired:**	4/5/00
Operator:	YGK	**Instrument ID:**	#1
Data File:	04050009&10	**Bottle #:**	9&10
Method:	8081	**Matrix:**	WATER

Compounds	Expected Conc.(ppm)	LCS Act. Conc.(ppm)	LCS % Recovery	LCSD Act. Conc.(ppm)	LCSD % Recovery	Recovery Limits (%)	LCS Pass/ Fail	LCSD Pass/ Fail	%RPD	%RPD Limit	%RPD Pass/ Fail
Aldrin	0.25	0.237	95%	0.246	98%	73 - 113	Pass	Pass	4%	< 20	Pass
alpha-BHC	0.25	0.232	93%	0.236	94%	64 - 108	Pass	Pass	2%	< 20	Pass
beta-BHC	0.25	0.237	95%	0.241	96%	81 - 118	Pass	Pass	2%	< 20	Pass
gamma-BHC	0.25	0.236	94%	0.241	96%	66 - 110	Pass	Pass	2%	< 20	Pass
delta-BHC	0.25	0.23	92%	0.227	91%	68 - 113	Pass	Pass	1%	< 20	Pass
alpha-Chlordane	0.25	0.273	109%	0.27	108%	30 - 150	Pass	Pass	1%	< 20	Pass
gamma-Chlordane	0.25	0.261	104%	0.265	106%	30 - 150	Pass	Pass	2%	< 20	Pass
4,4'-DDD	0.25	0.268	107%	0.276	110%	75 - 124	Pass	Pass	3%	< 20	Pass
4,4'-DDE	0.25	0.261	104%	0.266	106%	74 - 120	Pass	Pass	2%	< 20	Pass
4,4'-DDT	0.25	0.242	97%	0.243	97%	71 - 123	Pass	Pass	0%	< 20	Pass
Dieldrin	0.25	0.262	105%	0.268	107%	80 - 126	Pass	Pass	2%	< 20	Pass
Endosulfan I	0.25	0.276	110%	0.279	112%	60 - 130	Pass	Pass	1%	< 20	Pass
Endosulfan II	0.25	0.263	105%	0.271	108%	30 - 150	Pass	Pass	3%	< 20	Pass
Endosulfan Sulfate	0.25	0.256	102%	0.259	104%	79 - 135	Pass	Pass	1%	< 20	Pass
Endrin	0.25	0.267	107%	0.272	109%	97 - 129	Pass	Pass	2%	< 20	Pass
Endrin Aldehyde	0.25	0.264	106%	0.27	108%	68 - 135	Pass	Pass	2%	< 20	Pass
Endrin Ketone	0.25	0.268	107%	0.274	110%	30 - 150	Pass	Pass	2%	< 20	Pass
Heptachlor epoxide	0.25	0.263	105%	0.268	107%	78 - 123	Pass	Pass	2%	< 20	Pass
Heptachlor	0.25	0.233	93%	0.238	95%	73 - 117	Pass	Pass	2%	< 20	Pass
Methoxychlor	0.25	0.253	101%	0.256	102%	73 - 127	Pass	Pass	1%	< 20	Pass

Surrogates	Expected Conc.(ppm)	LCS Act. Conc.(ppm)	LCS % Recovery	LCSD Act. Conc.(ppm)	LCSD % Recovery	Recovery Limits (%)	LCS Pass/ Fail	LCSD Pass/ Fail
Tetrachloro-m-xylene	0.25	0.245	98%	0.241	96%	73 - 112	Pass	Pass
Decachlorobiphenyl	0.25	0.235	94%	0.227	91%	29 - 135	Pass	Pass

*-Inhouse limits to be developed

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\040500\04050009.D\ECD2B.CH
Acq On : 5 Apr 2000 1:35 pm Operator: YGK
Sample : LCS W 04/04 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:57 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.21	7.92	16652934	17877053	0.245	0.248
		Spiked Amount 0.250			Recovery	=	98.00%	99.20%
22)	S	DCB (SURR)	21.01	21.45	13346927	14104548	0.235	0.221
		Spiked Amount 0.250			Recovery	=	94.00%	88.40%
		Target Compounds						
2)	T	A-BHC	9.76	9.61	25507353	27113680	0.232	0.229
3)	T	B-BHC	10.85	10.77	11422809	12160579	0.237	0.237
4)	T	LINDANE	10.60	10.53	23189637	24228415	0.236	0.230
5)	T	D-BHC	11.29	11.48	21967733	21153445	0.230	0.214
6)	T	HEPTACHLOR	11.79	11.58	18193588	20876576	0.233	0.235
7)	T	ALDRIN	12.52	12.34	17820415	20244586	0.237	0.231
8)	T	HEPT.EPOXIDE	13.95	13.68	19022143	20830258	0.263	0.261
9)	T	ENDOSULFAN 1	14.84	14.55	19371374	20610437	0.276	0.258
10)	T	GAMMA-CHLORDANE	14.24	14.10	21006056	23197991	0.261	0.252
11)	T	ALFA-CHLORDANE	14.54	14.43	18961819	21479705	0.273	0.257
12)	T	DDE	14.73	14.83	17403199	21201772	0.261	0.255
13)	T	DIELDRIN	15.38	15.15	18833553	21873105	0.262	0.262
14)	T	ENDRIN	15.89	15.81	15499740	17139149	0.267	0.269
15)	T	DDD	16.05	16.09	14737157	15874532	0.268	0.265
16)	T	ENDOSULFAN 2	16.39	16.28	16216114	18252554	0.263	0.261
17)	T	ENDRIN ALDEHYDE	17.31	17.01	12594178	13831296	0.264	0.254
18)	T	DDT	16.65	16.75	14401378	15356414	0.242	0.230
19)	T	ENDOS.SULFATE	18.25	17.60	14543274	16444109	0.256	0.249
20)	T	METHOXYCHLOR	17.69	18.22	7907513	8738371	0.253	0.251
21)	T	ENDRIN KETONE	18.86	18.74	17777688	19223423	0.268	0.258

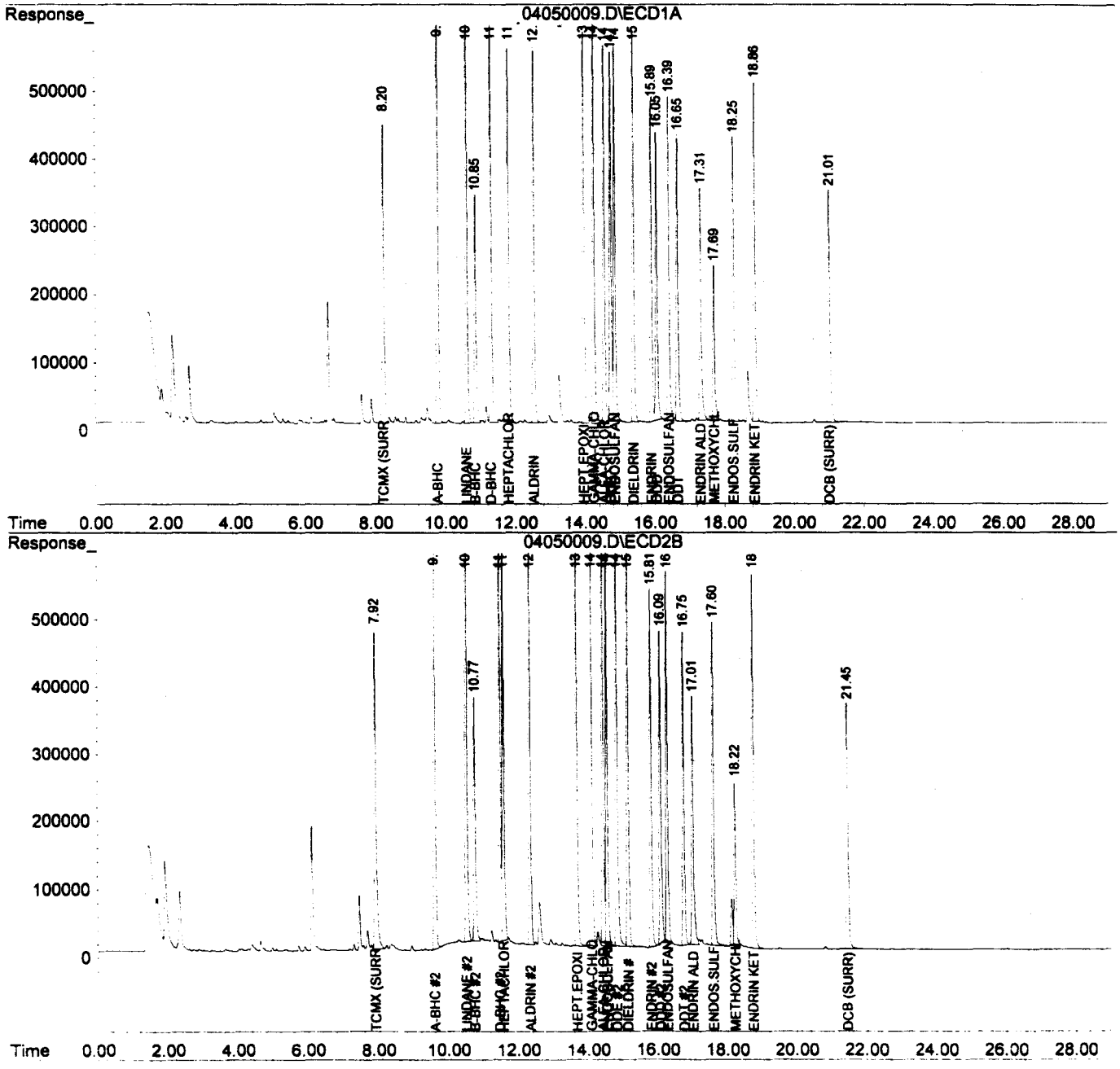
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\040500\04050009.D\ECD2B.CH
Acq On : 5 Apr 2000 1:35 pm Operator: YGK
Sample : LCS W 04/04 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:57 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\040500\04050010.D\ECD2B.CH
Acq On : 5 Apr 2000 2:09 pm Operator: YGK
Sample : LCS W DUP 04/04 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:58 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.21	7.92	16391619	17922292	0.241	0.248
		Spiked Amount 0.250			Recovery	=	96.40%	99.20%
22)	S	DCB (SURR)	21.01	21.45	12910121	13659638	0.227	0.214
		Spiked Amount 0.250			Recovery	=	90.80%	85.60%
		Target Compounds						
2)	T	A-BHC	9.76	9.61	25990316	27541128	0.236	0.233
3)	T	B-BHC	10.85	10.77	11620667	12365863	0.241	0.241
4)	T	LINDANE	10.60	10.53	23625501	24662135	0.241	0.235
5)	T	D-BHC	11.29	11.48	21654382	20986459	0.227	0.212
6)	T	HEPTACHLOR	11.79	11.58	18593052	21231696	0.238	0.239
7)	T	ALDRIN	12.52	12.34	18444367	20888690	0.246	0.239
8)	T	HEPT.EPOXIDE	13.95	13.68	19374520	20920182	0.268	0.262
9)	T	ENDOSULFAN 1	14.84	14.55	19598552	21019126	0.279	0.263
10)	T	GAMMA-CHLORDANE	14.24	14.10	21324027	23619311	0.265	0.257
11)	T	ALFA-CHLORDANE	14.54	14.43	18785419	21804913	0.270	0.261
12)	T	DDE	14.73	14.83	17734835	21618333	0.266	0.260
13)	T	DIELDRIN	15.38	15.15	19270288	22360260	0.268	0.268
14)	T	ENDRIN	15.90	15.81	15790155	17452257	0.272	0.274
15)	T	DDD	16.05	16.09	15148717	16212671	0.276	0.271
16)	T	ENDOSULFAN 2	16.39	16.28	16707019	18732748	0.271	0.268
17)	T	ENDRIN ALDEHYDE	17.31	17.01	12838485	14050671	0.270	0.258
18)	T	DDT	16.65	16.75	14488738	15417582	0.243	0.231
19)	T	ENDOS.SULFATE	18.25	17.60	14760878	16469575	0.259	0.249
20)	T	METHOXYCHLOR	17.69	18.22	8002758	8402811	0.256	0.241
21)	T	ENDRIN KETONE	18.86	18.74	18183147	19689646	0.274	0.264

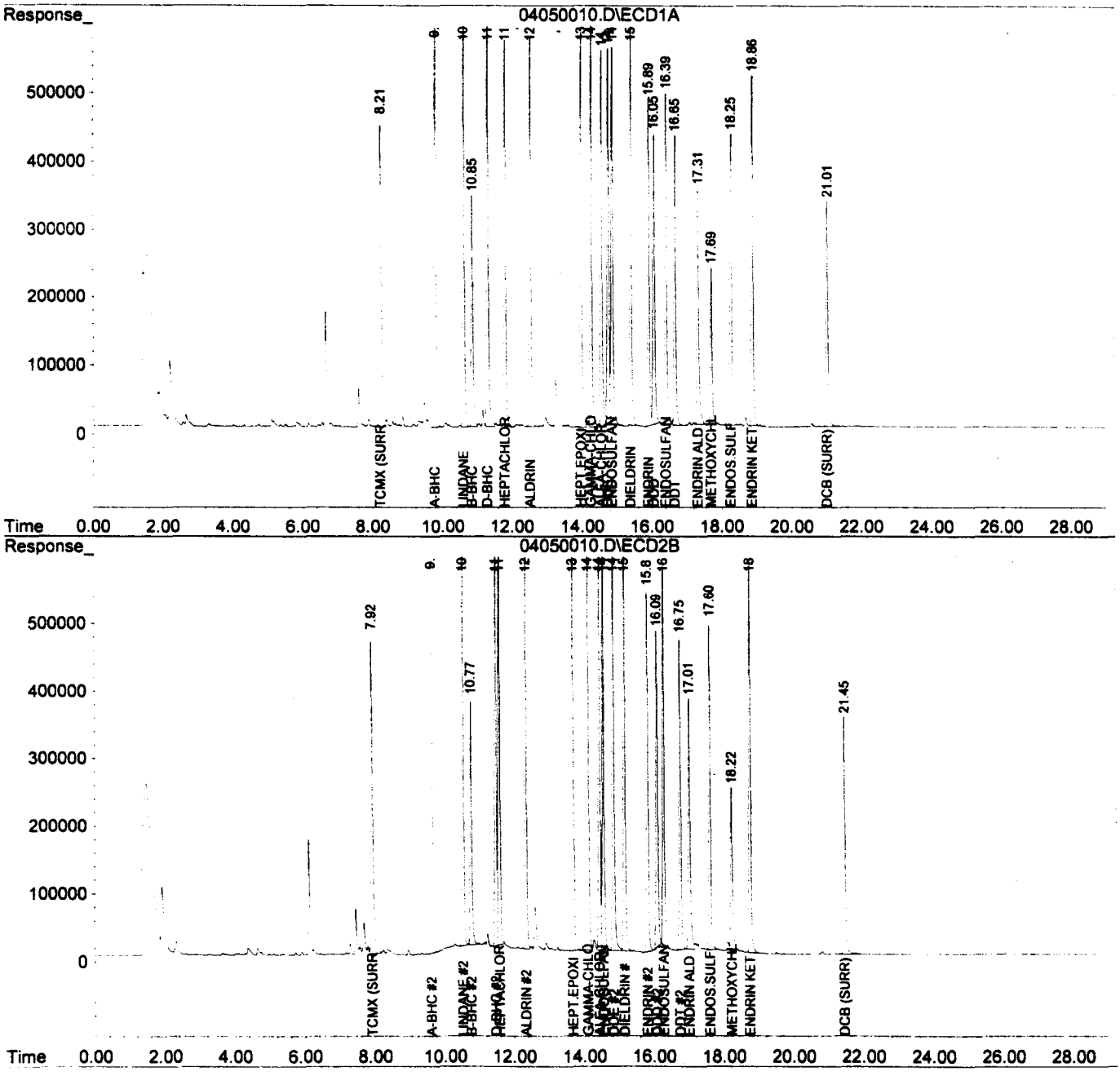
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\040500\04050010.D\ECD2B.CH
Acq On : 5 Apr 2000 2:09 pm Operator: YGK
Sample : LCS W DUP 04/04 Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:58 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\040600\04060013.D\ECD2B.CH
Acq On : 6 Apr 2000 7:30 pm Operator: YGK
Sample : BLNK W 04/04 CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:47 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.21	7.92	17333332	18684308	0.255	0.259	
		Spiked Amount 0.250			Recovery	=	102.00%	103.60%	
22)	S	DCB (SURR)	21.01	21.46	12326783	13595798	0.217	0.213	
		Spiked Amount 0.250			Recovery	=	86.80%	85.20%	
		Target Compounds							
2)	T	A-BHC	9.73	9.64	18484	279279	0.000	0.002	#
3)	T	B-BHC	0.00	10.76	0	149849	N.D.	0.003	#
4)	T	LINDANE	10.59	10.54	94844	44211	0.001	0.000	#
5)	T	D-BHC	11.27	11.52	357473	94211	0.004	0.001	#
6)	T	HEPTACHLOR	11.81	11.59	221661	18635	0.003	0.000	#
7)	T	ALDRIN	12.47f	0.00	56285	0	0.001	N.D.	#
8)	T	HEPT.EPOXIDE	13.97	13.66	7689	185854	0.000	0.002	#
9)	T	ENDOSULFAN 1	14.83	14.59	502833	44434	0.007	0.001	#
10)	T	GAMMA-CHLORDANE	14.20	0.00	144733	0	0.002	N.D.	#
11)	T	ALFA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.72	14.89	3206	3859	0.000	0.000	
13)	T	DIELDRIN	15.38	0.00	857	0	0.000	N.D.	#
14)	T	ENDRIN	15.96f	15.81	34759	54569	0.001	0.001	#
15)	T	DDD	15.96f	16.01f	34759	30465	0.001	0.001	
16)	T	ENDOSULFAN 2	16.35	16.31	95756	12299	0.002	0.000	#
17)	T	ENDRIN ALDEHYDE	17.31	17.10f	19993	103297	0.000	0.002	#
18)	T	DDT	16.70	16.77	4181	10143	0.000	0.000	#
19)	T	ENDOS.SULFATE	18.31f	17.60	8256	20775	0.000	0.000	#
20)	T	METHOXYCHLOR	17.67	18.13f	23723	1157355	0.001	0.033	#
21)	T	ENDRIN KETONE	0.00	18.76	0	5504	N.D.	0.000	#

Pest < ½ DL

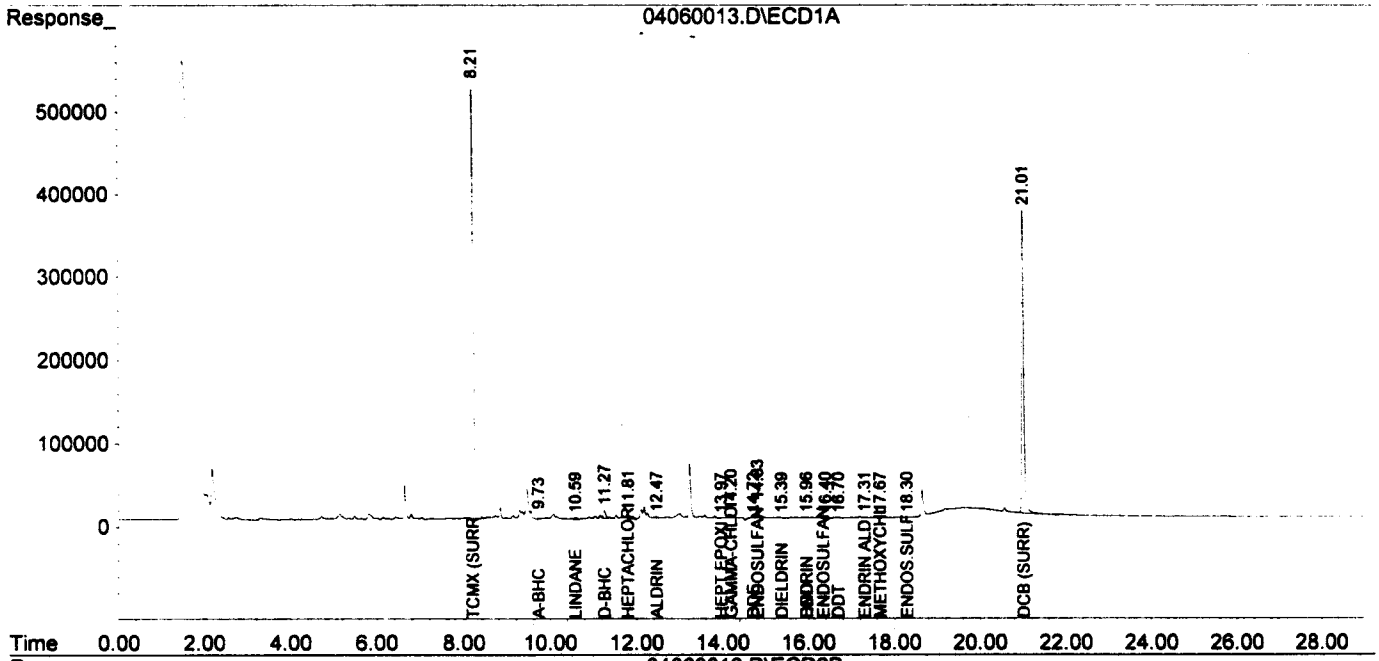
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

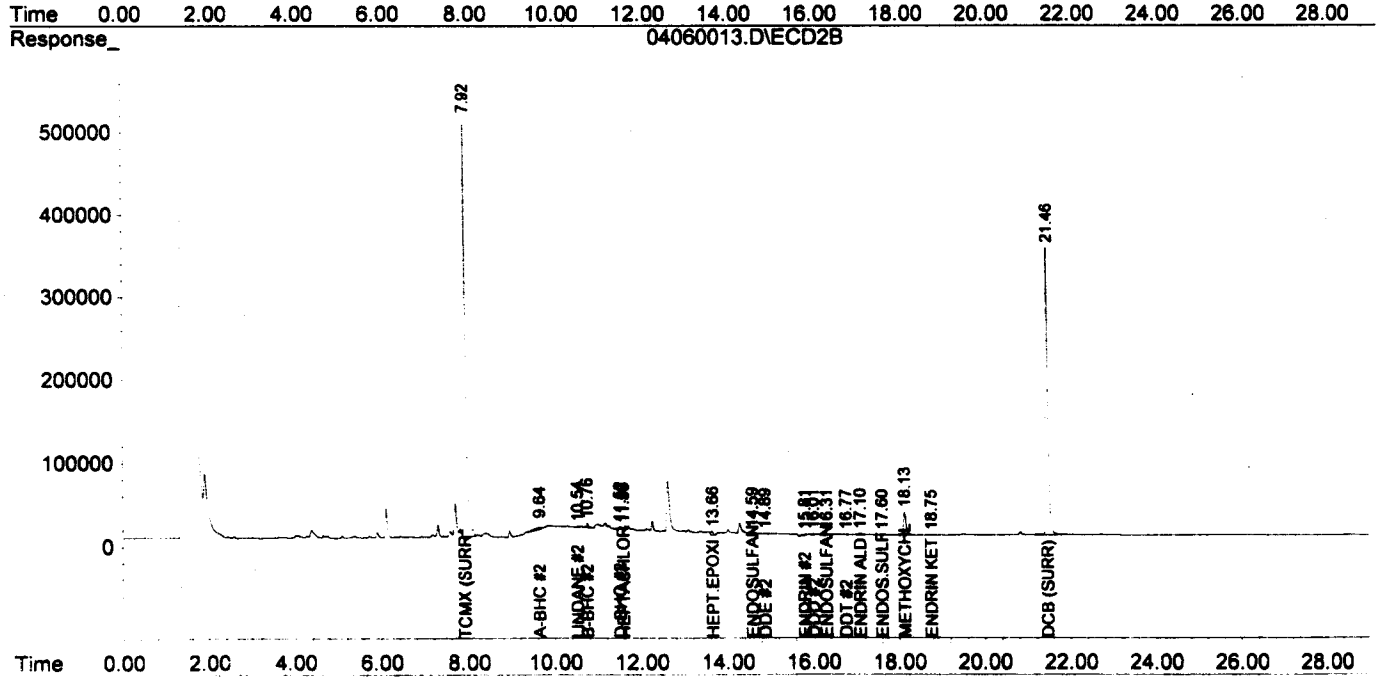
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040600\04060013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\040600\04060013.D\ECD2B.CH
Acq On : 6 Apr 2000 7:30 pm Operator: YGK
Sample : BLNK W 04/04 CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:47 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\040600\04060013.D\ECD2B.CH
Acq On : 6 Apr 2000 7:30 pm Operator: YGK
Sample : BLNK W 04/04 CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 9:59 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds								
1)	L TOX	1	16.35	0.00	184345	0	0.224	N.D.	#
2)	L TOX	2	16.61	16.77f	256403	15532	0.181	0.006	#
3)	L TOX	3	17.19f	17.10f	279890	109650	0.126	0.032	#
4)	L TOX	4	17.84	18.13	171624	1158017	0.066	0.286	#
5)	L TOX	5	18.00	0.00	137432	0	0.039	N.D.	#
6)	L TOX	6	0.00	0.00	0	0	N.D.	N.D.	
7)	L TOX	7	19.20f-	0.00	2497328	0	1.707 -	N.D.	#
	Sum TOX	1			3527022	1283199	2.343	0.324	
Average	TOX	1					0.391	0.108	

TOX < $\frac{1}{2}$ QL

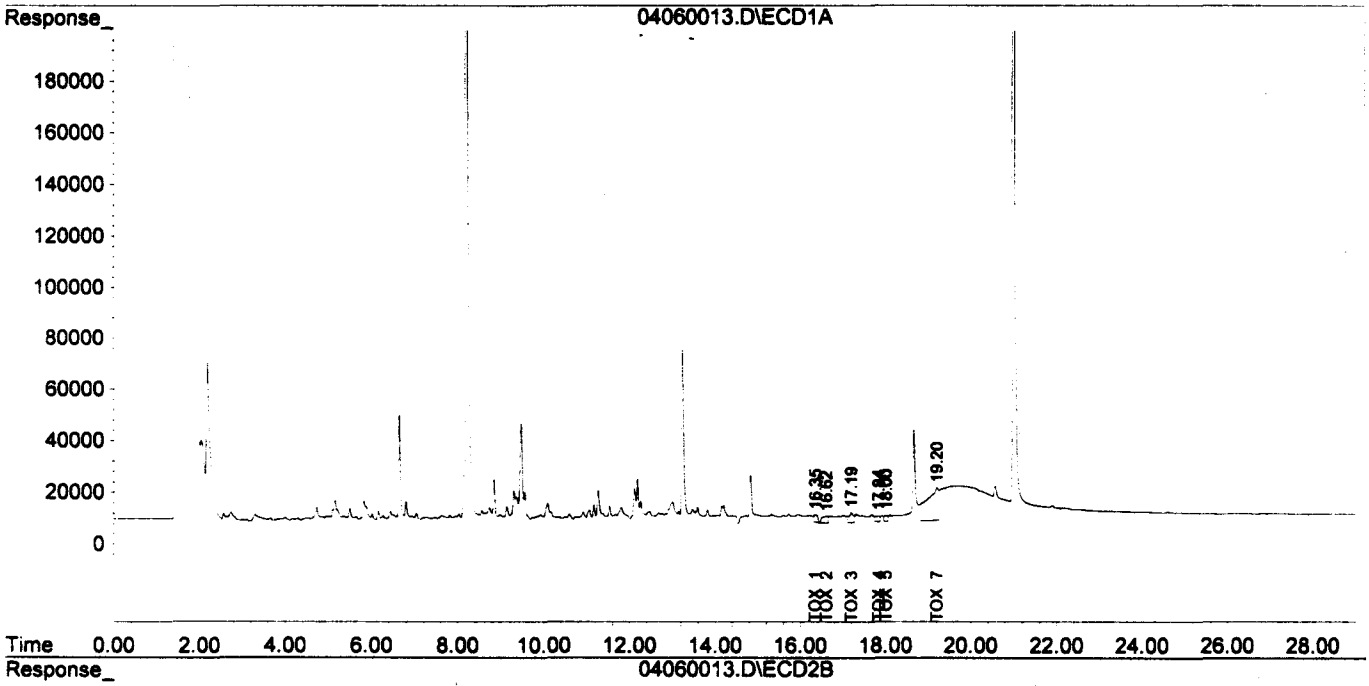
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

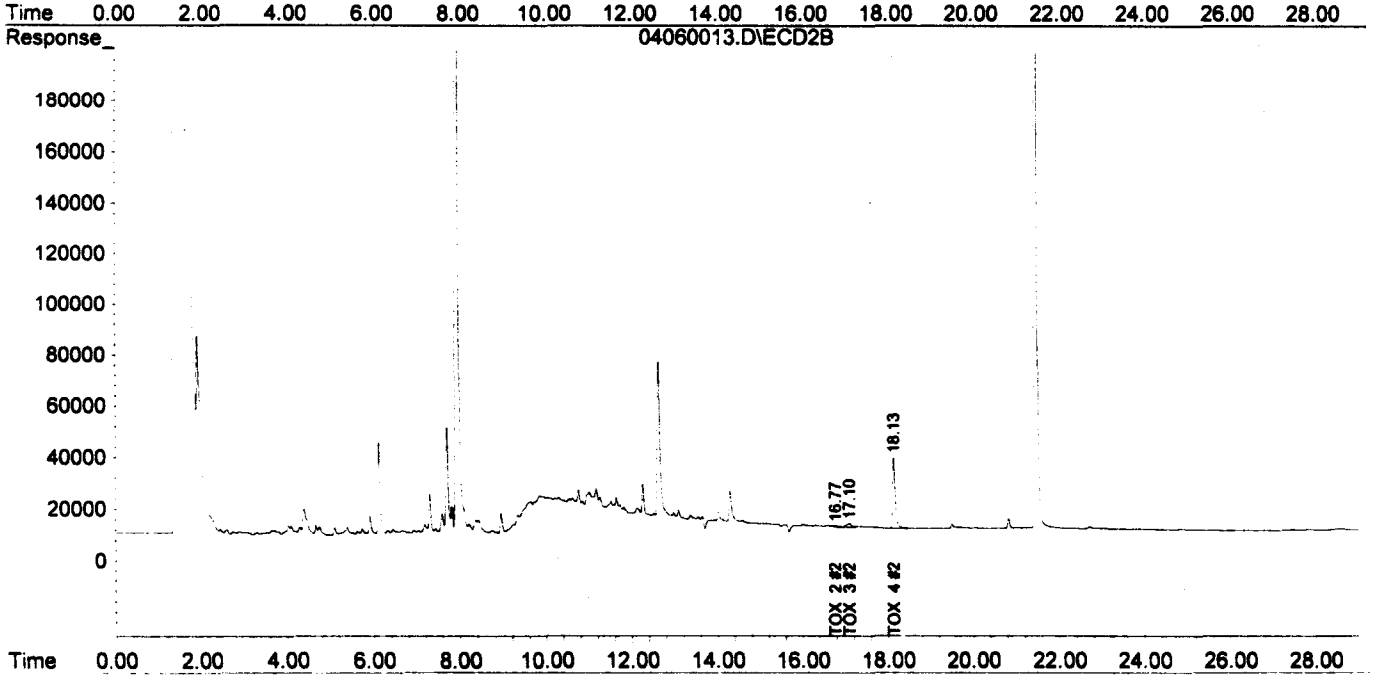
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040600\04060013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\040600\04060013.D\ECD2B.CH
Acq On : 6 Apr 2000 7:30 pm Operator: YGK
Sample : BLNK W 04/04 CL Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 9:59 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\040500\04050004.D\ECD2B.CH
Acq On : 5 Apr 2000 10:34 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:54 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.20	7.91	18847032	20471803	0.277	0.284
		Spiked Amount 0.250			Recovery	=	110.80%	113.60%
22)	S	DCB (SURR)	21.01	21.45	16141618	18080653	0.284	0.283
		Spiked Amount 0.250			Recovery	=	113.60%	113.20%
		Target Compounds						
2)	T	A-BHC	9.75	9.60	29384522	30911499	0.267	0.262
3)	T	B-BHC	10.84	10.76	12963464	13449514	0.268	0.262
4)	T	LINDANE	10.59	10.52	26238338	27045198	0.267	0.257
5)	T	D-BHC	11.29	11.48	23370334	22229832	0.245	0.225
6)	T	HEPTACHLOR	11.79	11.58	20636466	24013216	0.264	0.271
7)	T	ALDRIN	12.51	12.34	20951815	23742674	0.279	0.271
8)	T	HEPT.EPOXIDE	13.95	13.67	19775447	22102209	0.274	0.277
9)	T	ENDOSULFAN 1	14.84	14.54	19460242	21893590	0.277	0.274
10)	T	GAMMA-CHLORDANE	14.23	14.10	22009911	25052759	0.274	0.273
11)	T	ALFA-CHLORDANE	14.54	14.43	19908284	22769837	0.286	0.273
12)	T	DDE	14.73	14.83	18102727	22477817	0.272	0.270
13)	T	DIELDRIN	15.38	15.15	19451088	22831545	0.271	0.273
14)	T	ENDRIN	15.89	15.81	15827106	16839182	0.273	0.264
15)	T	DDD	16.05	16.08	15345340	16464101	0.279	0.275
16)	T	ENDOSULFAN 2	16.39	16.27	16915060	18906382	0.275	0.271
17)	T	ENDRIN ALDEHYDE	17.30	17.00	12152856	13796019	0.255	0.253
18)	T	DDT	16.65	16.75	14113945	14976285	0.237	0.225
19)	T	ENDOS.SULFATE	18.25	17.59	14664841	16745424	0.258	0.253
20)	T	METHOXYCHLOR	17.69	18.22	7770001	8358915	0.248	0.240
21)	T	ENDRIN KETONE	18.86	18.74	18132124	19459078	0.274	0.261

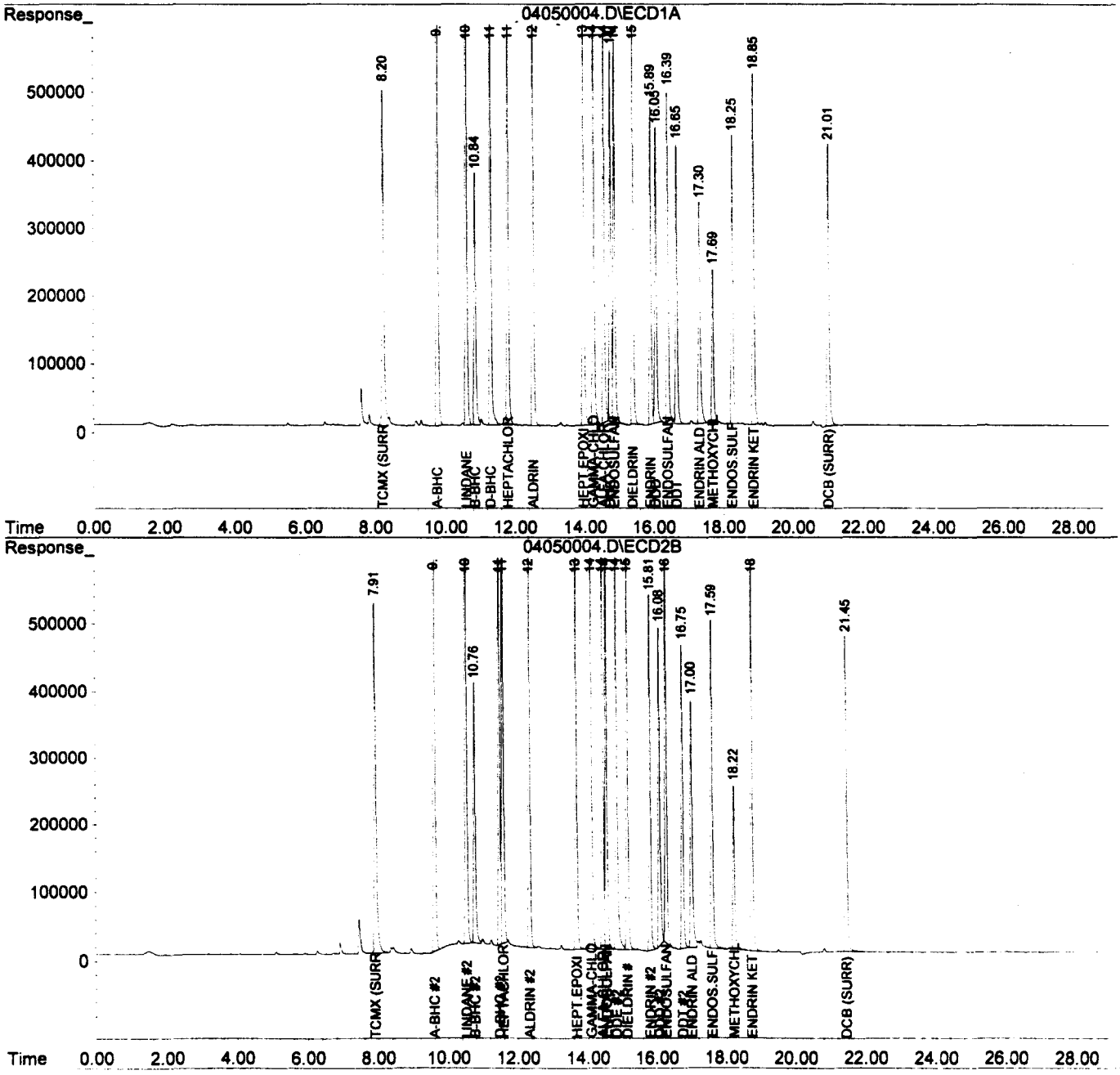
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\040500\04050004.D\ECD2B.CH
Acq On : 5 Apr 2000 10:34 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:54 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050021.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\040500\04050021.D\ECD2B.CH
Acq On : 5 Apr 2000 8:23 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 8:52 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

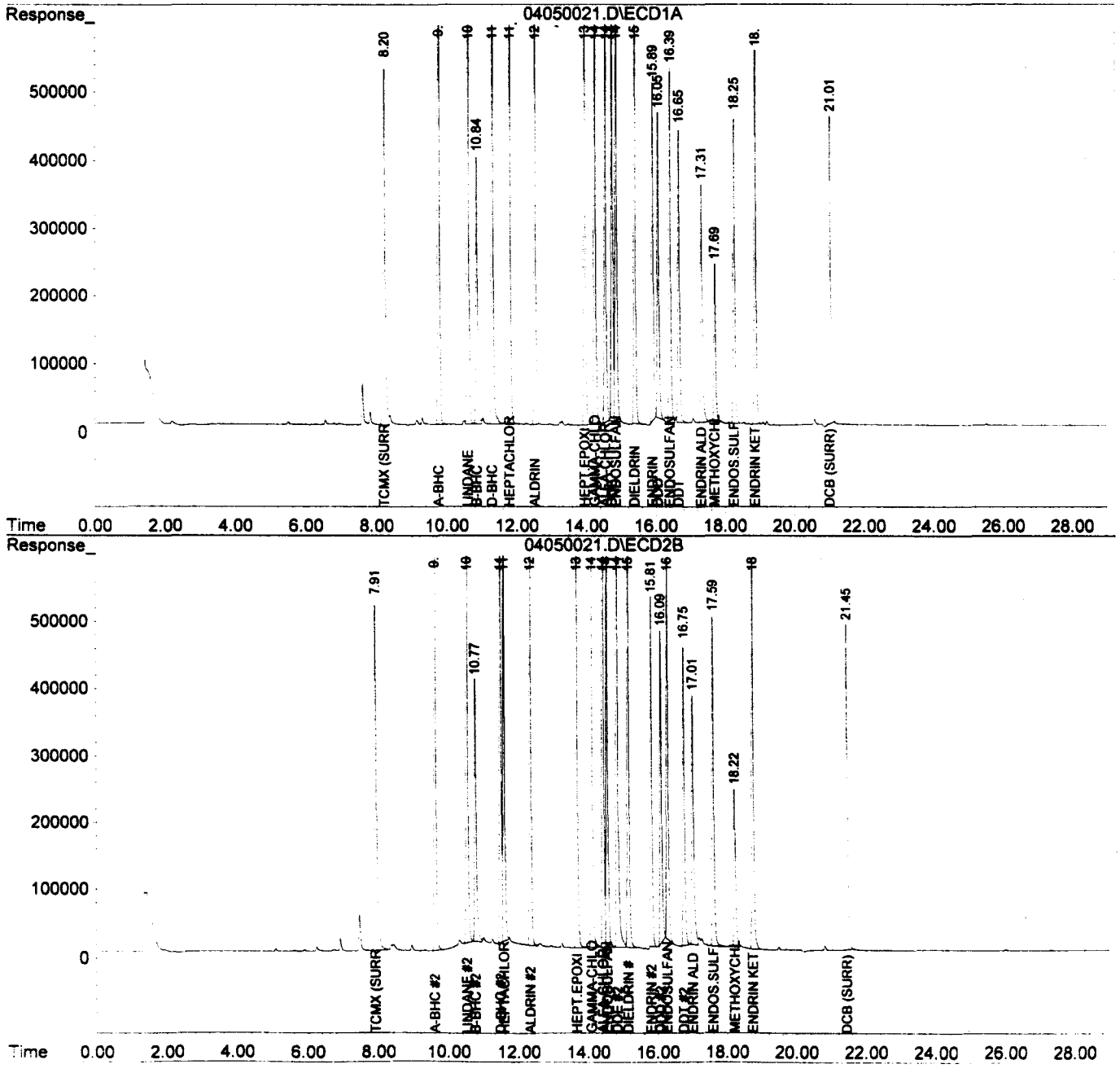
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.20	7.91	19456692	20450938	0.286	0.283
		Spiked Amount 0.250			Recovery	=	114.40%	113.20%
22)	S	DCB (SURR)	21.01	21.45	16304243	18339493	0.287	0.287
		Spiked Amount 0.250			Recovery	=	114.80%	114.80%
		Target Compounds						
2)	T	A-BHC	9.76	9.60	30372002	32200916	0.276	0.272
3)	T	B-BHC	10.84	10.77	13273766	13768789	0.275	0.268
4)	T	LINDANE	10.59	10.52	26865057	27761432	0.274	0.264
5)	T	D-BHC	11.29	11.48	24319705	23041156	0.255	0.233
6)	T	HEPTACHLOR	11.79	11.58	19821718	21609406	0.254	0.244
7)	T	ALDRIN	12.52	12.34	21349487	24042414	0.284	0.275
8)	T	HEPT.EPOXIDE	13.95	13.68	20106154	22159525	0.278	0.278
9)	T	ENDOSULFAN 1	14.84	14.54	20017812	22180692	0.285	0.278
10)	T	GAMMA-CHLORDANE	14.24	14.10	22667111	25488643	0.282	0.277
11)	T	ALFA-CHLORDANE	14.54	14.43	19922694	23149478	0.286	0.277
12)	T	DDE	14.73	14.83	18868758	22876774	0.283	0.275
13)	T	DIELDRIN	15.38	15.15	20123461	23189646	0.280	0.277
14)	T	ENDRIN	15.89	15.81	15819914	16442083	0.273	0.258
15)	T	DDD	16.05	16.09	15289754	16432471	0.278	0.275
16)	T	ENDOSULFAN 2	16.39	16.28	17481710	19260961	0.284	0.276
17)	T	ENDRIN ALDEHYDE	17.31	17.01	12567504	14101394	0.264	0.259
18)	T	DDT	16.65	16.75	14521475	15069930	0.244	0.226
19)	T	ENDOS.SULFATE	18.25	17.59	15114159	16902940	0.266	0.256
20)	T	METHOXYCHLOR	17.69	18.22	7867504	8036449	0.251	0.231
21)	T	ENDRIN KETONE	18.86	18.74	18658297	20167424	0.282	0.271

Signal #1 : C:\HPCHEM\1\DATA\040500\04050021.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\040500\04050021.D\ECD2B.CH
Acq On : 5 Apr 2000 8:23 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 8:52 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\040500\04050006.D\ECD2B.CH
Acq On : 5 Apr 2000 11:52 am Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:34 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds							
1) L TOX 1	16.37	16.46	2902001	9585466	3.528	2.156	#
2) L TOX 2	16.63	16.86	4662401	6105967	3.300	2.402	#
3) L TOX 3	17.11	17.02	6462921	9071541	2.904	2.686	
4) L TOX 4	17.83	18.11	6472493	8437743	2.492	2.082	
5) L TOX 5	18.03	18.23	8740151	6315193	2.500	1.873	#
6) L TOX 6	18.80	18.95	5869892	5104202	2.212	2.199	
7) L TOX 7	19.13	19.34	2001154	1128425	1.368	0.597	#
Sum TOX 1			37111012	45748538	18.304	13.996	
Average TOX 1					2.615	~~1.999~~ 2.233	

105%

89%

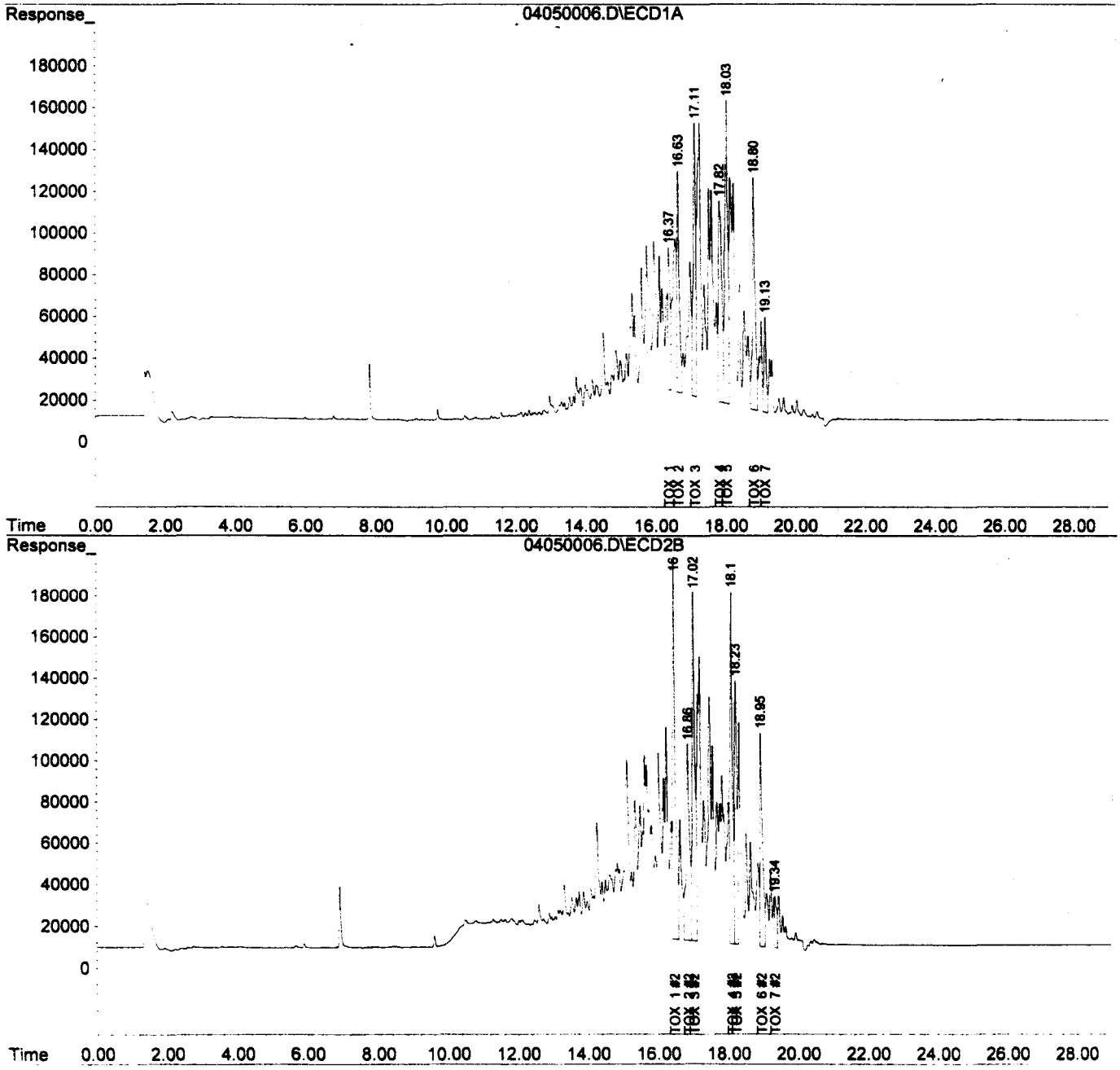
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\040500\04050006.D\ECD2B.CH
Acq On : 5 Apr 2000 11:52 am Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 6 13:34 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050003.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\040500\04050003.D\ECD2B.CH
Acq On : 5 Apr 2000 10:00 am Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:55 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	0.00	0.00	0	0	N.D.	N.D.	
		Spiked Amount 0.250			Recovery	=	0.00%	0.00%	
22)	S	DCB (SURR)	21.01	21.45	58728	37714	0.001	0.001	#
		Spiked Amount 0.250			Recovery	=	0.40%	0.40%	
		Target Compounds							
2)	T	A-BHC	9.75	0.00	8013	0	0.000	N.D.	#
3)	T	B-BHC	10.84	10.78	59591	59332	0.001	0.001	
4)	T	LINDANE	10.59	10.52	13611	13597	0.000	0.000	
5)	T	D-BHC	11.29	11.49	166410	154655	0.002	0.002	
6)	T	HEPTACHLOR	11.79	11.64f	8035	47301	0.000	0.001	#
7)	T	ALDRIN	12.51	12.34	36101696	40871533	0.481	0.467	
8)	T	HEPT.EPOXIDE	13.98	13.66	112414	50693	0.002	0.001	#
9)	T	ENDOSULFAN 1	0.00	14.54	0	46712	N.D.	0.001	#
10)	T	GAMMA-CHLORDANE	14.20f	14.11	76453	38815	0.001	0.000	#
11)	T	ALFA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.73	14.84	651733	609702	0.010	0.007	#
13)	T	DIELDRIN	15.37	15.14	22701	79449	0.000	0.001	#
14)	T	ENDRIN	15.89	15.81	27743361	31212412	0.479	0.489	
15)	T	DDD	16.05	16.09	2762012	2851339	0.050	0.048	
16)	T	ENDOSULFAN 2	16.39	16.28	56175	60838	0.001	0.001	
17)	T	ENDRIN ALDEHYDE	17.30	17.01	426121	334444	0.009	0.006	#
18)	T	DDT	16.65	16.74	25461579	27602464	0.427	0.414	
19)	T	ENDOS.SULFATE	18.25	17.59	149645	94164	0.003	0.001	#
20)	T	METHOXYCHLOR	17.69	0.00	8918	0	0.000	N.D.	#
21)	T	ENDRIN KETONE	18.86	18.74	1855801	2126314	0.028	0.029	

DDT: $\frac{3,413,700 \times 100\%}{28,875,300} = 11.8\%$

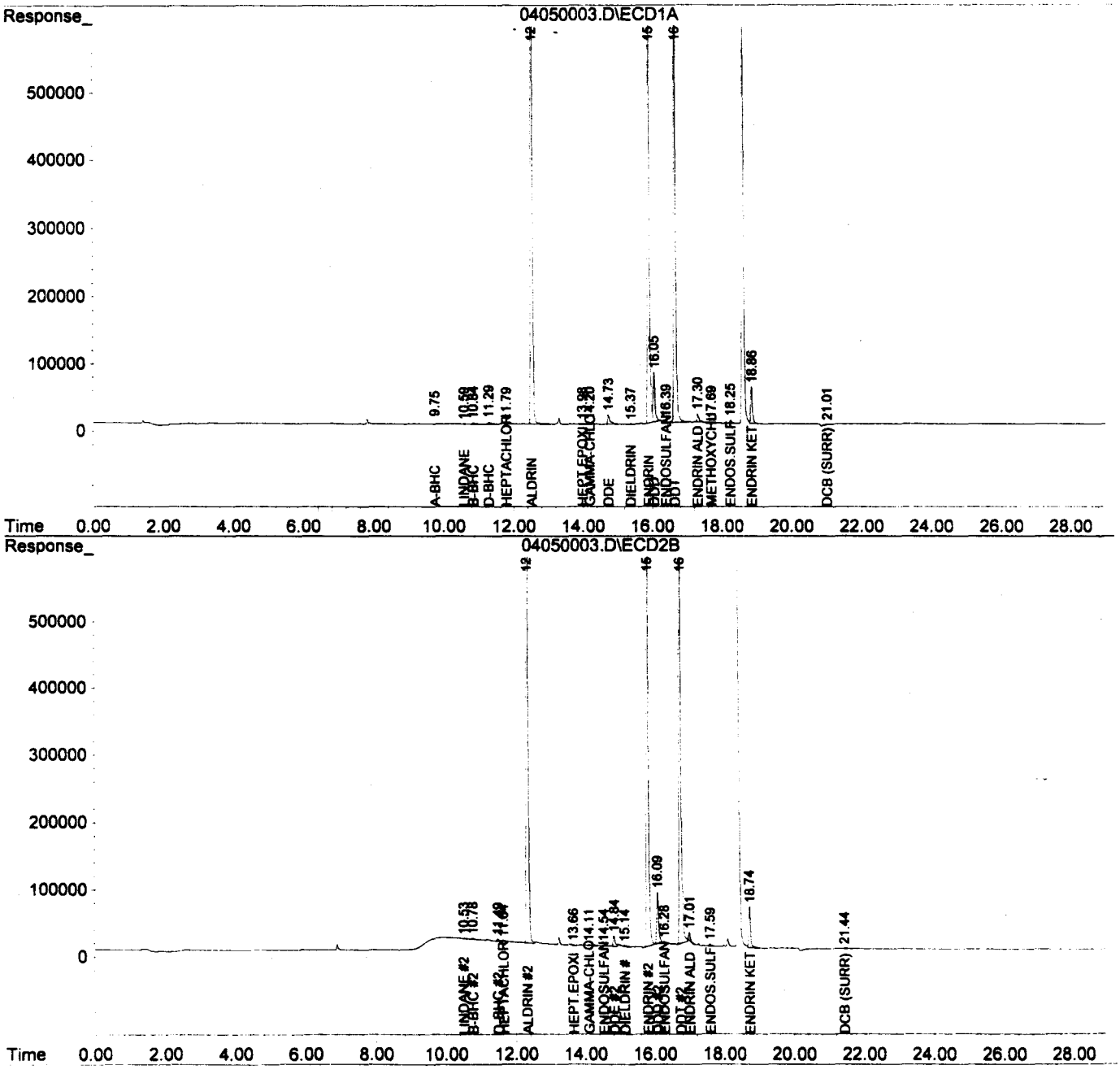
Endrin: $\frac{2,281,900 \times 100\%}{30,025,300} = 7.6\%$

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

Signal #1 : C:\HPCHEM\1\DATA\040500\04050003.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\040500\04050003.D\ECD2B.CH
Acq On : 5 Apr 2000 10:00 am Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:55 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050020.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\040500\04050020.D\ECD2B.CH
Acq On : 5 Apr 2000 7:48 pm Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 8:46 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.16f	0.00	285656	0	0.004	N.D.	#
		Spiked Amount 0.250			Recovery	=	1.60%	0.00%	
22)	S	DCB (SURR)	21.02	21.45	71882	26976	0.001	0.000	#
		Spiked Amount 0.250			Recovery	=	0.40%	0.00%	
		Target Compounds							
2)	T	A-BHC	9.75	9.61	3507	9931	0.000	0.000	#
3)	T	B-BHC	10.85	10.79	31191	34469	0.001	0.001	
4)	T	LINDANE	10.59	10.53	12265	381674	0.000	0.004	#
5)	T	D-BHC	11.29	11.51	53509	85377	0.001	0.001	#
6)	T	HEPTACHLOR	0.00	0.00	0	0	N.D.	N.D.	
7)	T	ALDRIN	12.52	12.34	39544023	44784359	0.526	0.512	
8)	T	HEPT.EPOXIDE	13.98	13.65	140885	95728	0.002	0.001	#
9)	T	ENDOSULFAN 1	14.83	14.54	-90389	43074	N.D.	0.001	
10)	T	GAMMA-CHLORDANE	14.20f	14.11	132101	46771	0.002	0.001	#
11)	T	ALFA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.73	14.84	595953	737380	0.009	0.009	
13)	T	DIELDRIN	15.38	15.15	31968	75197	0.000	0.001	#
14)	T	ENDRIN	15.89	15.81	29795383	32120351	0.514	0.504	
15)	T	DDD	16.06	16.09	3088146	2928764	0.056	0.049	
16)	T	ENDOSULFAN 2	16.39	16.28	127505	113947	0.002	0.002	
17)	T	ENDRIN ALDEHYDE	17.31	17.01	385915	256039	0.008	0.005	#
18)	T	DDT	16.65	16.75	27655559	28736714	0.464	0.431	
19)	T	ENDOS.SULFATE	18.25	17.60	147610	169967	0.003	0.003	
20)	T	METHOXYCHLOR	17.69	0.00	14416	0	0.000	N.D.	#
21)	T	ENDRIN KETONE	18.86	18.74	2672874	2891354	0.040	0.039	

$\Phi DT < 15\%$

$Endrin < 15\%$

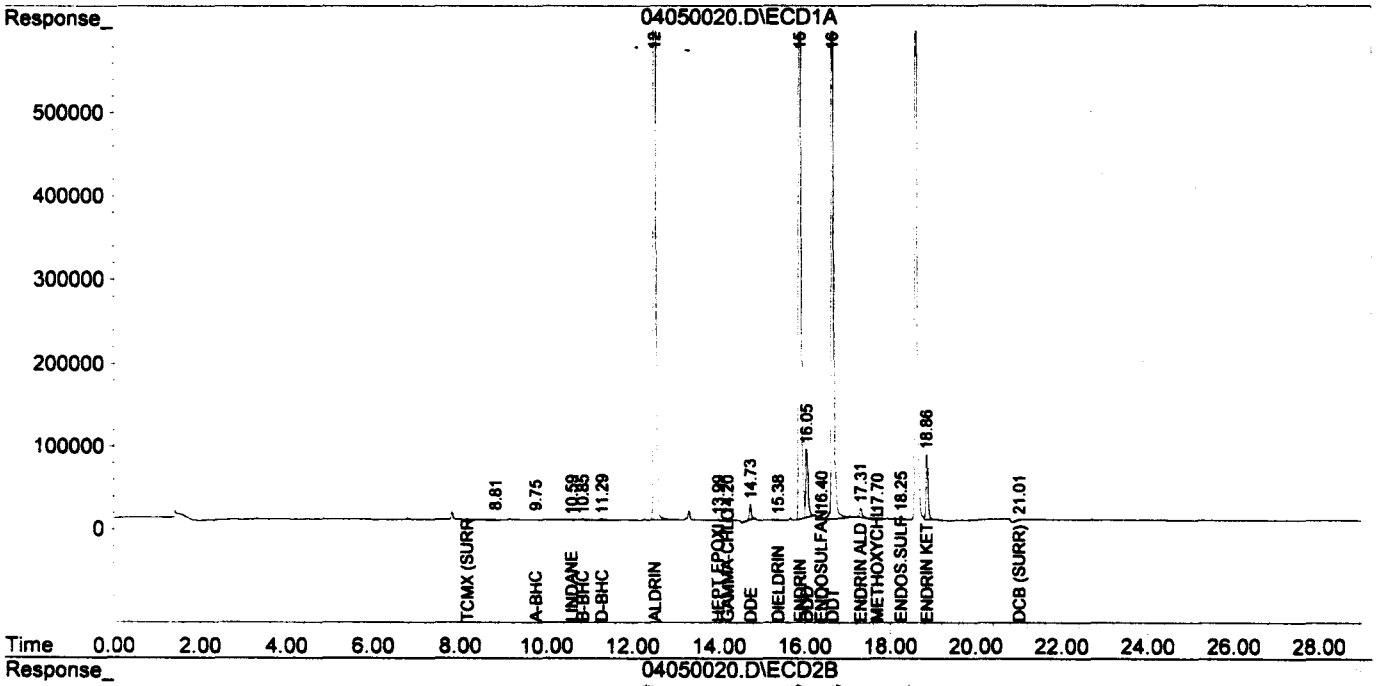
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

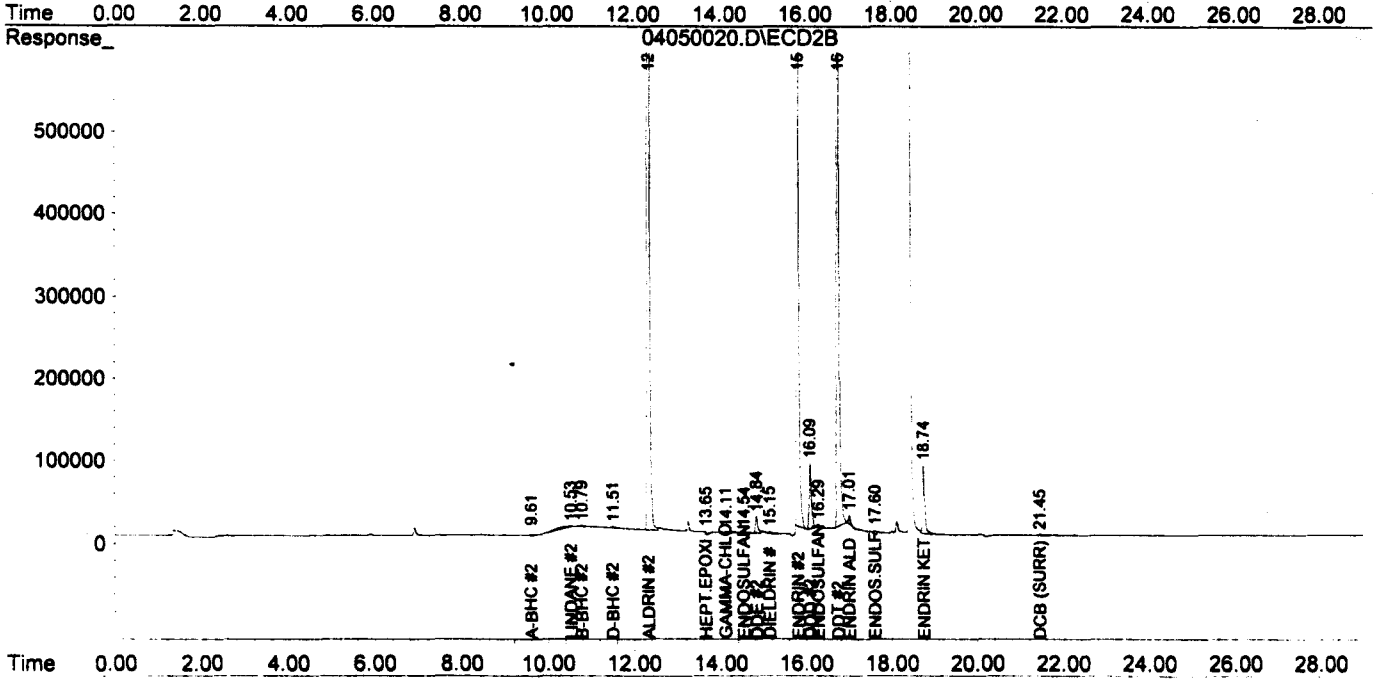
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050020.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\040500\04050020.D\ECD2B.CH
Acq On : 5 Apr 2000 7:48 pm Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 8:46 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\040600\04060004.D\ECD2B.CH
Acq On : 6 Apr 2000 2:11 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:43 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.21	7.92	18490162	20348920	0.272	0.282
		Spiked Amount 0.250			Recovery	=	108.80% v	112.80%
22)	S	DCB (SURR)	21.01	21.46	15847856	17711262	0.279	0.277
		Spiked Amount 0.250			Recovery	=	111.60% v	110.80%
		Target Compounds						
2)	T	A-BHC	9.76	9.61	28153193	31520803	0.256	0.267
3)	T	B-BHC	10.85	10.77	12110089	13346948	0.251	0.260
4)	T	LINDANE	10.60	10.53	24967987	27668029	0.254	0.263
5)	T	D-BHC	11.29	11.49	23667539	24591794	0.248	0.248
6)	T	HEPTACHLOR	11.79	11.59	19424751	23151198	0.249	0.261
7)	T	ALDRIN	12.52	12.35	20309462	24241899	0.270	0.277
8)	T	HEPT.EPOXIDE	13.95	13.69	18563653	21803648	0.257	0.273
9)	T	ENDOSULFAN 1	14.85	14.55	18434366	21693087	0.263	0.272
10)	T	GAMMA-CHLORDANE	14.24	14.11	20751978	24601489	0.258	0.268
11)	T	ALFA-CHLORDANE	14.54	14.44	18489628	22334713	0.266	0.267
12)	T	DDE	14.73	14.84	17636807	22088029	0.265	0.266
13)	T	DIELDRIN	15.38	15.16	18521755	22456332	0.258	0.269
14)	T	ENDRIN	15.90	15.82	15150476	16760141	0.261	0.263
15)	T	DDD	16.05	16.10	14421954	15747251	0.262	0.263
16)	T	ENDOSULFAN 2	16.40	16.29	16036738	18496895	0.260	0.265
17)	T	ENDRIN ALDEHYDE	17.31	17.02	11890150	14336811	0.250	0.263
18)	T	DDT	16.65	16.76	14797884	16151231	0.248	0.242
19)	T	ENDOS.SULFATE	18.25	17.61	14625824	17141320	0.257	0.259
20)	T	METHOXYCHLOR	17.69	18.23	7659991	8438315	0.245	0.242
21)	T	ENDRIN KETONE	18.86	18.75	17003555	19272208	0.257	0.259

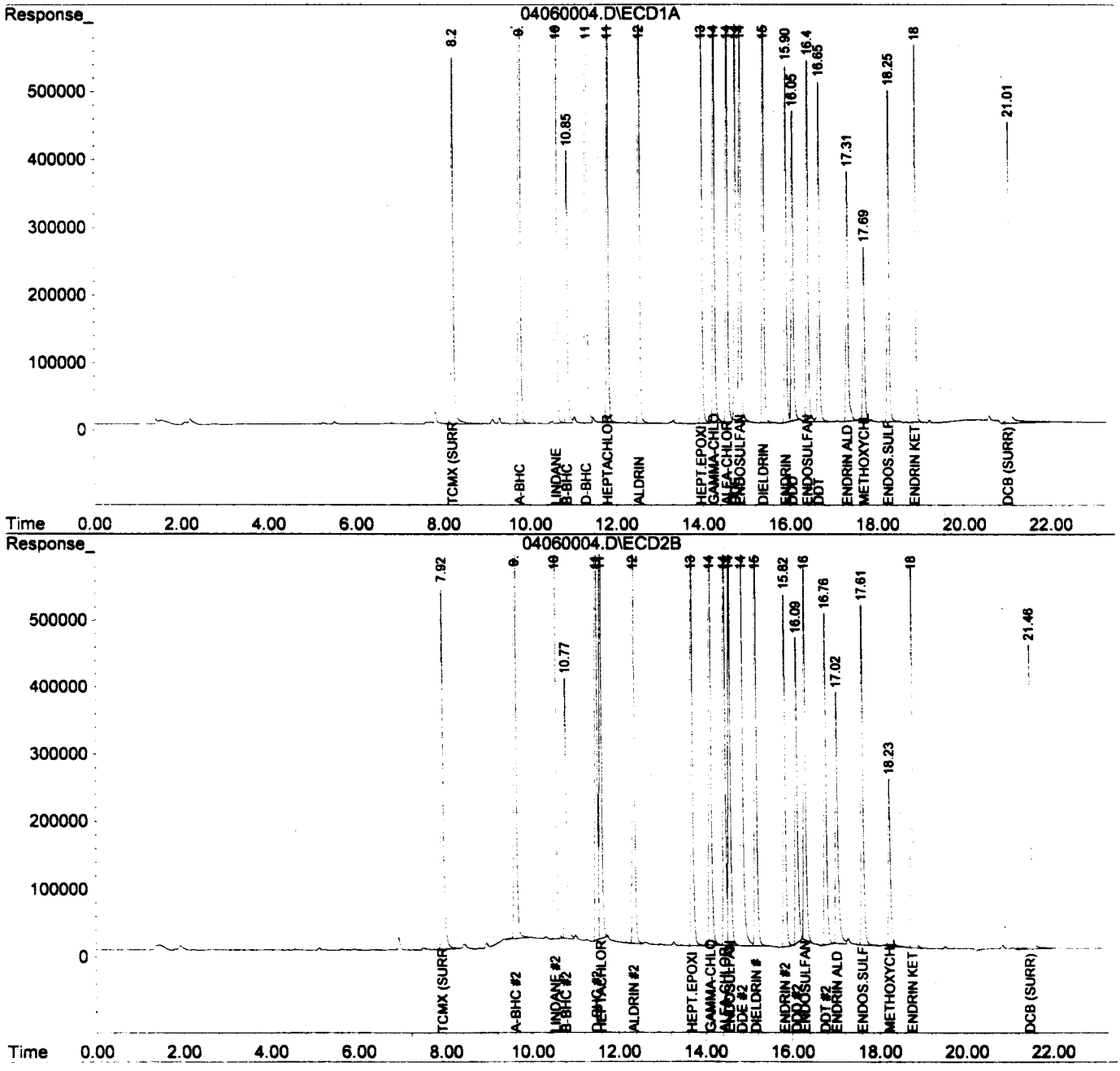
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040600\04060004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\040600\04060004.D\ECD2B.CH
Acq On : 6 Apr 2000 2:11 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:43 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060021.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\040600\04060021.D\ECD2B.CH
Acq On : 7 Apr 2000 12:04 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:38 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

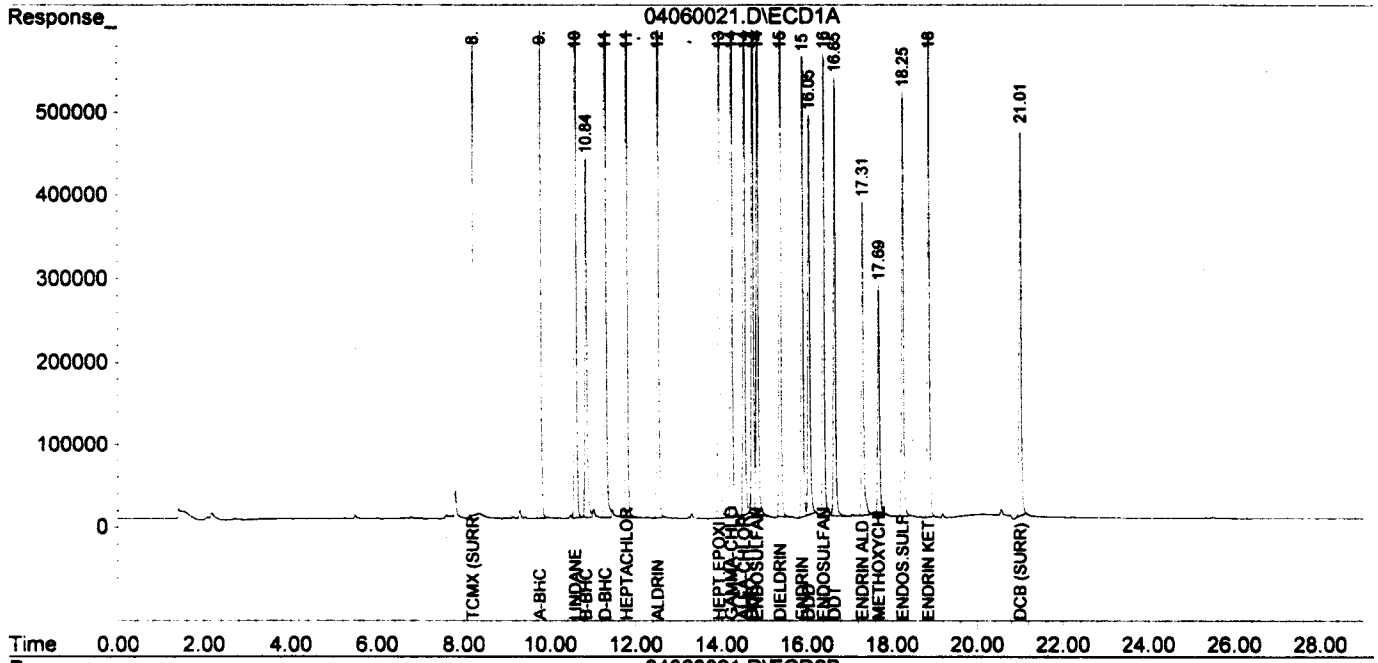
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.21	7.92	18671508	20397712	0.274	0.283
		Spiked Amount 0.250			Recovery	=	109.60%	113.20%
22)	S	DCB (SURR)	21.01	21.46	15300650	18170109	0.269	0.284
		Spiked Amount 0.250			Recovery	=	107.60%	113.60%
		Target Compounds						
2)	T	A-BHC	9.76	9.61	30514646	32800813	0.277	0.278
3)	T	B-BHC	10.84	10.77	13097685	13735374	0.271	0.267
4)	T	LINDANE	10.60	10.53	27017479	28654725	0.275	0.273
5)	T	D-BHC	11.29	11.49	25085322	24820380	0.263	0.251
6)	T	HEPTACHLOR	11.79	11.59	20699961	23614550	0.265	0.266
7)	T	ALDRIN	12.52	12.35	21379862	24328638	0.285	0.278
8)	T	HEPT.EPOXIDE	13.95	13.68	19744049	21413389	0.273	0.268
9)	T	ENDOSULFAN 1	14.84	14.55	19720264	21866090	0.281	0.274
10)	T	GAMMA-CHLORDANE	14.24	14.11	22184887	24930196	0.276	0.271
11)	T	ALFA-CHLORDANE	14.54	14.44	18248050	22619619	0.262	0.271
12)	T	DDE	14.73	14.84	18842335	22193634	0.283	0.267
13)	T	DIELDRIN	15.38	15.16	19461964	22627472	0.271	0.271
14)	T	ENDRIN	15.89	15.82	16142471	16783649	0.279	0.263
15)	T	DDD	16.05	16.09	15345575	15981072	0.279	0.267
16)	T	ENDOSULFAN 2	16.39	16.28	16463984	18658990	0.267	0.267
17)	T	ENDRIN ALDEHYDE	17.31	17.02	12280007	14173746	0.258	0.260
18)	T	DDT	16.65	16.76	15748118	16269538	0.264	0.244
19)	T	ENDOS.SULFATE	18.25	17.60	15410590	17129221	0.271	0.259
20)	T	METHOXYCHLOR	17.69	18.23	8236395	8708949	0.263	0.250
21)	T	ENDRIN KETONE	18.86	18.75	18048441	19734738	0.272	0.265

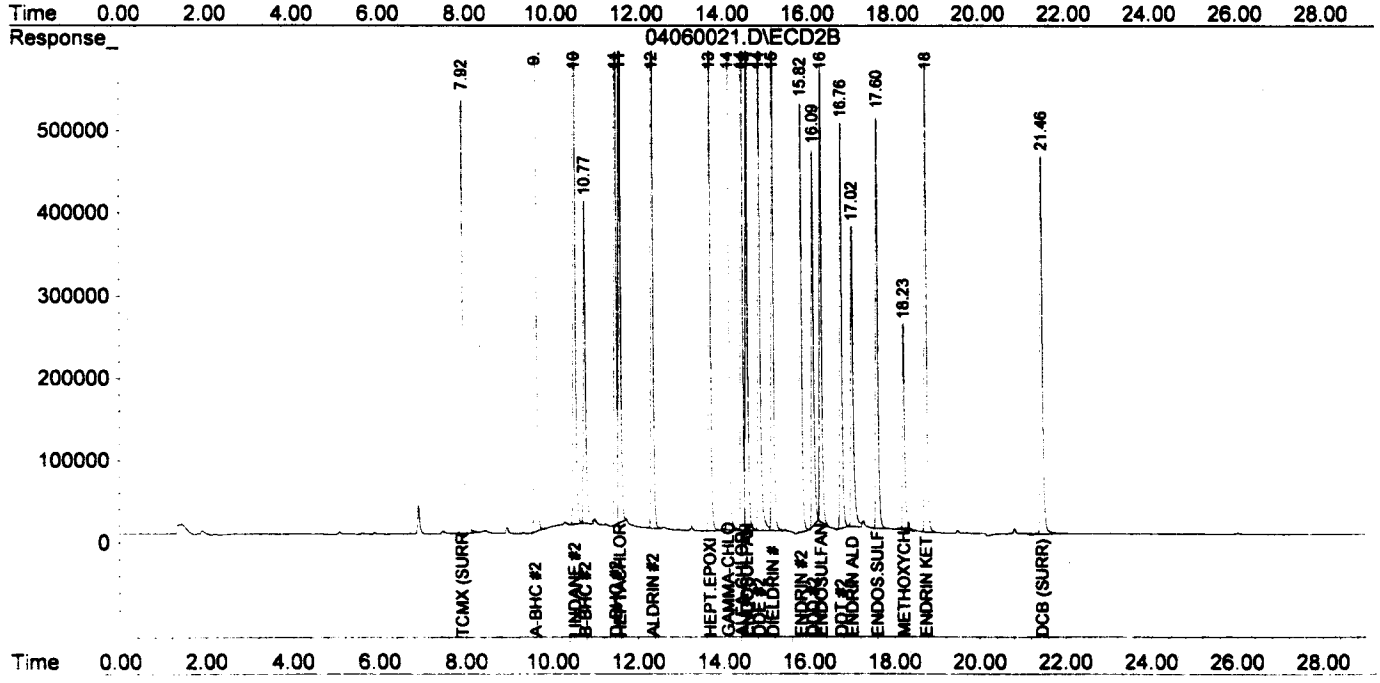
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\040600\04060021.D\ECD1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\040600\04060021.D\ECD2B.CH
Acq On : 7 Apr 2000 12:04 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:38 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\040600\04060006.D\ECD2B.CH
Acq On : 6 Apr 2000 3:29 pm Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 9:57 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
Target Compounds						
1) L TOX 1	16.37	16.47	2420419	11445750	2.943	2.575
2) L TOX 2	16.64	16.87	3809452	6346865	2.697	2.496
3) L TOX 3	17.11	17.03	5946340	8616236	2.672	2.552
4) L TOX 4	17.83	18.12	6239627	9653231	2.403	2.382
5) L TOX 5	18.03	18.24	8413656	7604503	2.406	2.255
6) L TOX 6	18.81	18.96	5859399	5367614	2.208	2.312
7) L TOX 7	19.13	19.35	2854620	2894390	1.951	1.532
Sum TOX 1			35543514	51928590	17.278	16.105
Average TOX 1					2.468	2.301

99%

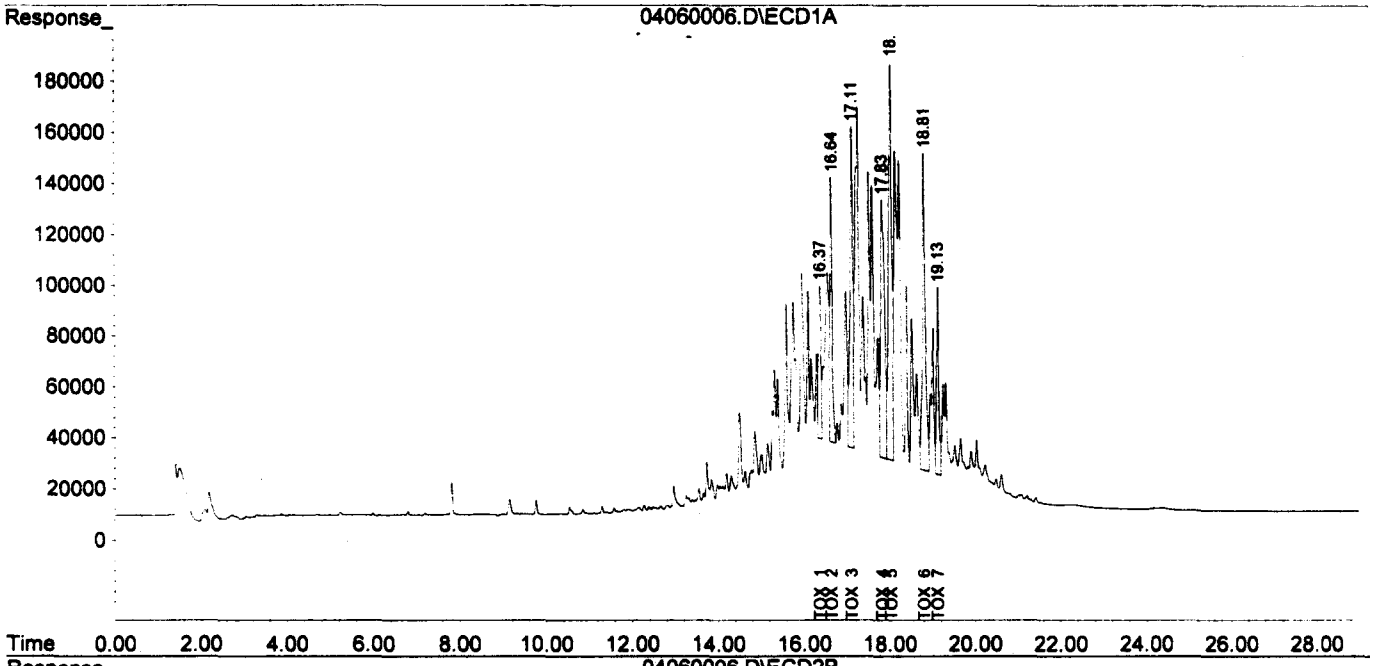
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

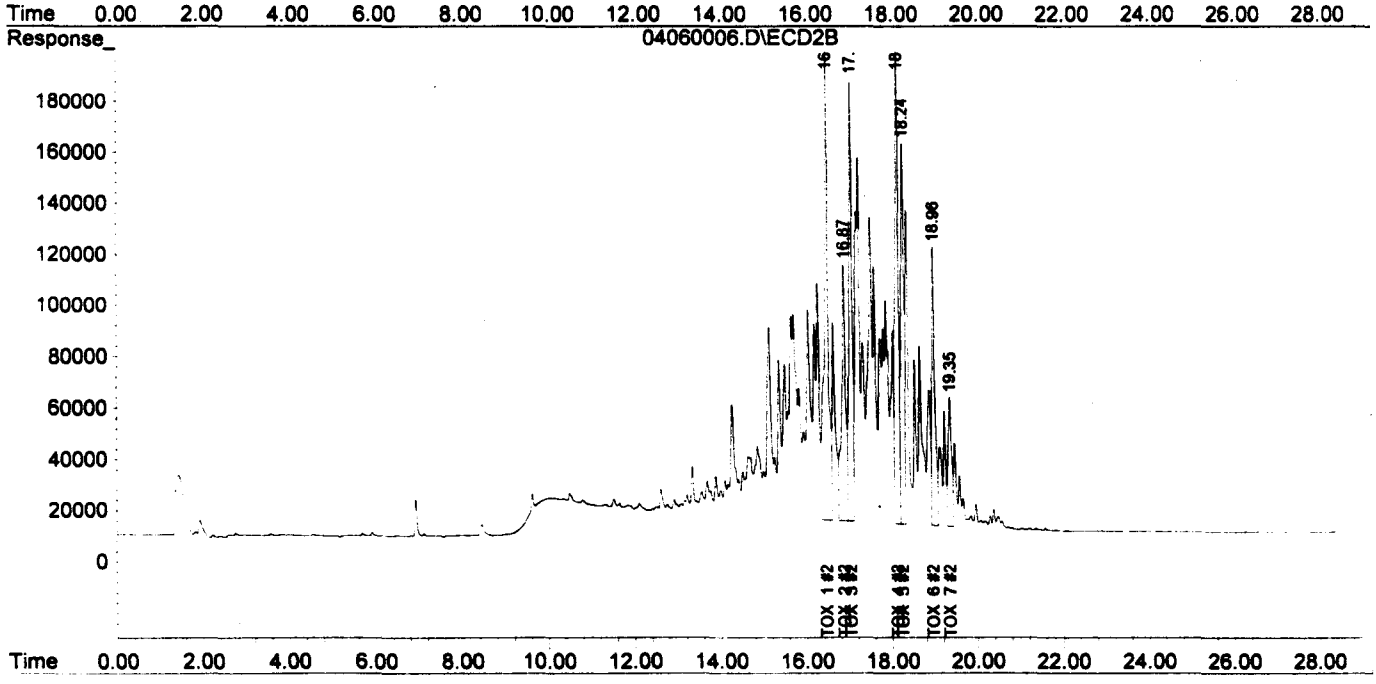
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040600\04060006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\040600\04060006.D\ECD2B.CH
Acq On : 6 Apr 2000 3:29 pm Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 7 9:57 2000 Quant Results File: 032300TX.RES

Quant Method : C:\HPCHEM\1\METHODS\032300TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC # 1,03/23/00
Last Update : Fri Mar 24 16:52:29 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060003.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\040600\04060003.D\ECD2B.CH
Acq On : 6 Apr 2000 1:37 pm Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:42 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2		Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds								
1)	S	TCMX (SURR)	0.00	0.00		0	0	N.D.	N.D.	
		Spiked Amount 0.250				Recovery	=	0.00%	0.00%	
22)	S	DCB (SURR)	21.02	21.46		48465	21355	0.001	0.000	#
		Spiked Amount 0.250				Recovery	=	0.40%	0.00%	
		Target Compounds								
2)	T	A-BHC	9.76	9.61		2631	84583	0.000	0.001	#
3)	T	B-BHC	10.85	10.79		80890	66026	0.002	0.001	
4)	T	LINDANE	10.60	10.53		22626	13735	0.000	0.000	#
5)	T	D-BHC	11.29	11.50		150616	190091	0.002	0.002	
6)	T	HEPTACHLOR	11.84f	0.00		4722	0	0.000	N.D.	#
7)	T	ALDRIN	12.52	12.35		34657145	42428904	0.461	0.485	
8)	T	HEPT.EPOXIDE	13.96	13.66		139901	59497	0.002	0.001	#
9)	T	ENDOSULFAN 1	14.83	14.55		89919	38187	0.001	0.000	#
10)	T	GAMMA-CHLORDANE	14.20	0.00		122304	0	0.002	N.D.	#
11)	T	ALFA-CHLORDANE	0.00	0.00		0	0	N.D.	N.D.	
12)	T	DDE	14.74	14.85	v	157522	213290	0.002	0.003	
13)	T	DIELDRIN	15.38	15.15		20221	53067	0.000	0.001	#
14)	T	ENDRIN	15.90	15.82	+	26437191	31631633	0.456	0.496	
15)	T	DDD	16.06	16.11	v	1111815	1009061	0.020	0.017	
16)	T	ENDOSULFAN 2	16.39	16.29		88094	34950	0.001	0.001	#
17)	T	ENDRIN ALDEHYDE	17.31	17.02	+	644842	441129	0.014	0.008	#
18)	T	DDT	16.65	16.76	v	26433931	30169745	0.443	0.453	
19)	T	ENDOS.SULFATE	18.25	17.61		146641	19642	0.003	0.000	#
20)	T	METHOXYCHLOR	17.69	18.23		36502	9838	0.001	0.000	#
21)	T	ENDRIN KETONE	18.86	18.75	+	962843	1110245	0.015	0.015	

DDT: $\frac{1,269,300 \times 100\%}{27,703,200} = 4.6\%$

Endrin: $\frac{1,607,700 \times 100\%}{28,044,900} = 5.7\%$

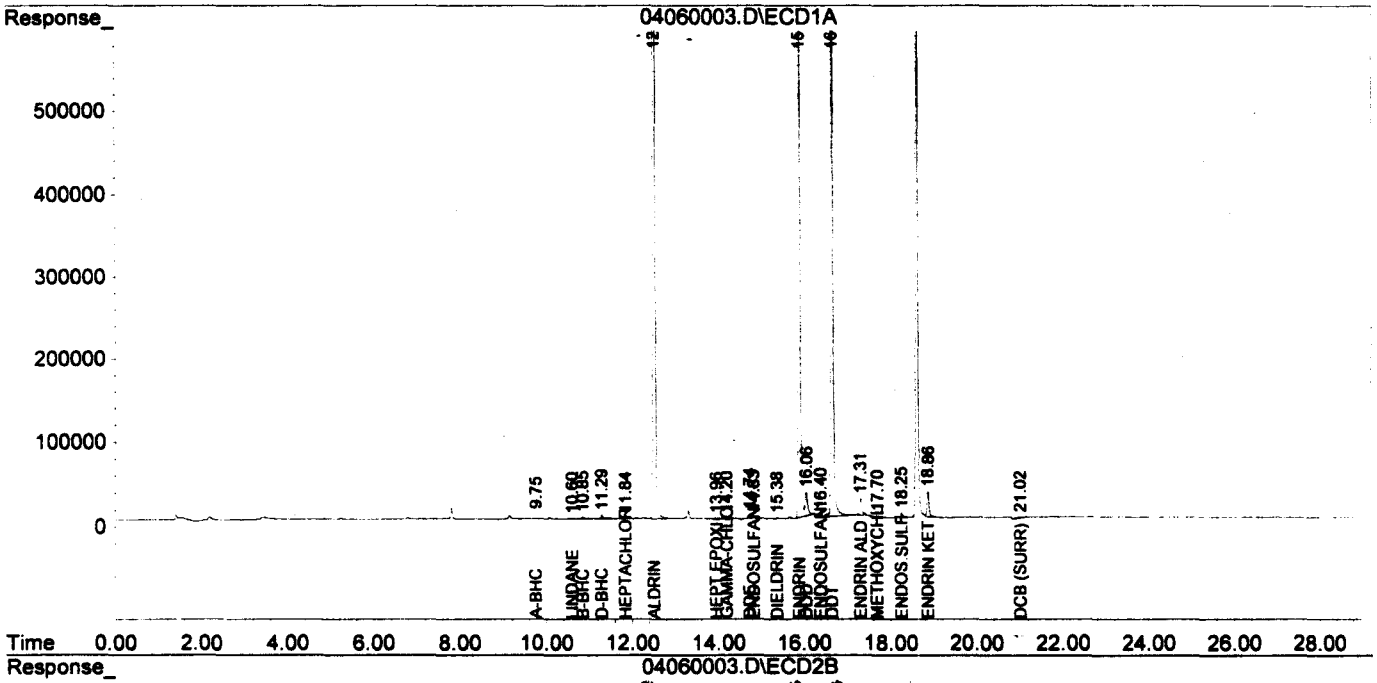
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

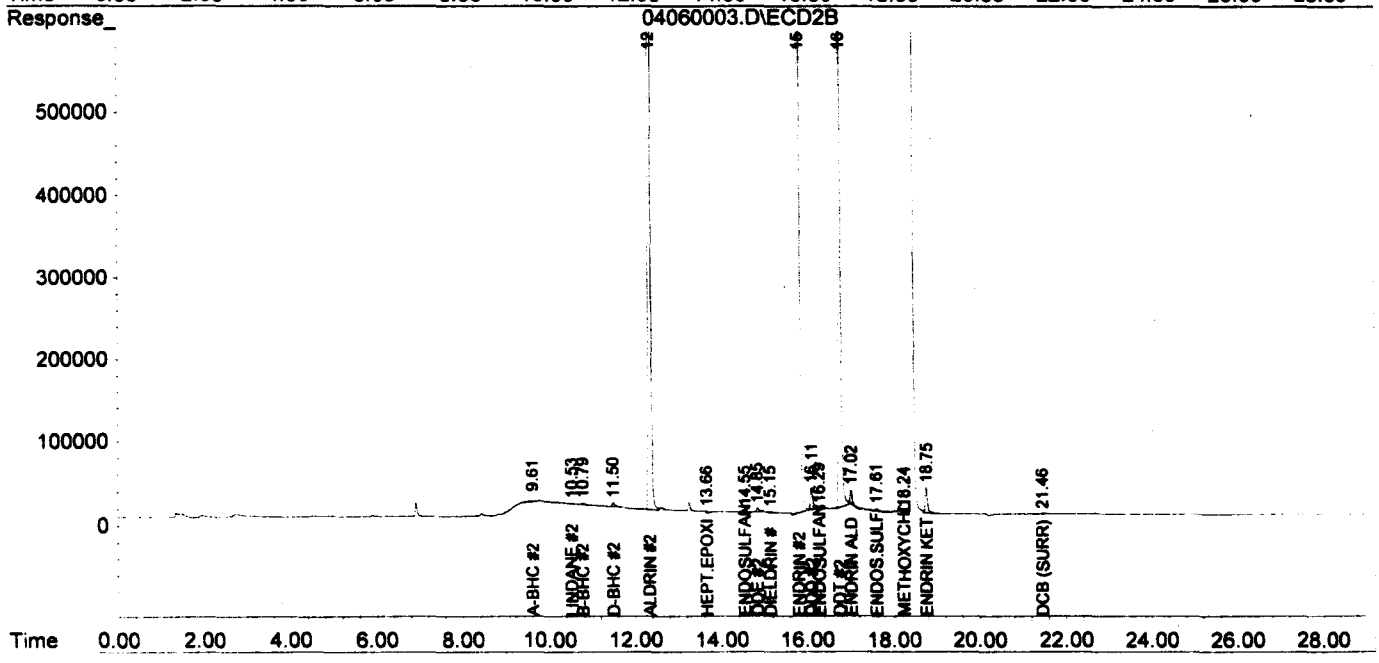
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040600\04060003.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\040600\04060003.D\ECD2B.CH
Acq On : 6 Apr 2000 1:37 pm Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:42 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040600\04060020.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\040600\04060020.D\ECD2B.CH
Acq On : 6 Apr 2000 11:30 pm Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:52 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.15f	7.89	22538	5856	0.000	0.000	#
		Spiked Amount 0.250			Recovery =		0.00%	0.00%	
22)	S	DCB (SURR)	21.01	21.46	825661	13320	0.015	0.000	#
		Spiked Amount 0.250			Recovery =		6.00%	0.00%	
		Target Compounds							
2)	T	A-BHC	9.75	0.00	2010	0	0.000	N.D.	#
3)	T	B-BHC	10.85	10.79	32055	40677	0.001	0.001	
4)	T	LINDANE	10.59	10.54	20920	50929	0.000	0.000	#
5)	T	D-BHC	11.29	11.51	71612	81698	0.001	0.001	
6)	T	HEPTACHLOR	11.85f	0.00	34649	0	0.000	N.D.	#
7)	T	ALDRIN	12.52	12.35	39901351	46169653	0.531	0.527	
8)	T	HEPT.EPOXIDE	13.96	13.65	78220	184949	0.001	0.002	#
9)	T	ENDOSULFAN 1	14.83	14.55	-172150	46470	N.D.	0.001	
10)	T	GAMMA-CHLORDANE	14.20	14.03f	55417	66338	0.001	0.001	
11)	T	ALFA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.73	14.85	280089	180258	0.004	0.002	#
13)	T	DIELDRIN	15.38	15.16	38847	30760	0.001	0.000	#
14)	T	ENDRIN	15.89	15.82	30210530	33920823	0.521	0.532	
15)	T	DDD	16.06	16.11	1555953	1385335	0.028	0.023	
16)	T	ENDOSULFAN 2	16.39	16.29	200731	59124	0.003	0.001	#
17)	T	ENDRIN ALDEHYDE	17.31	17.02	485198	270063	0.010	0.005	#
18)	T	DDT	16.65	16.76	31525583	32936758	0.529	0.494	
19)	T	ENDOS.SULFATE	18.25	17.61	129885	54854	0.002	0.001	#
20)	T	METHOXYCHLOR	17.69	18.23	14991	27419	0.000	0.001	#
21)	T	ENDRIN KETONE	18.86	18.75	1670610	1737709	0.025	0.023	

DDT < 15%

Endrin < 15%

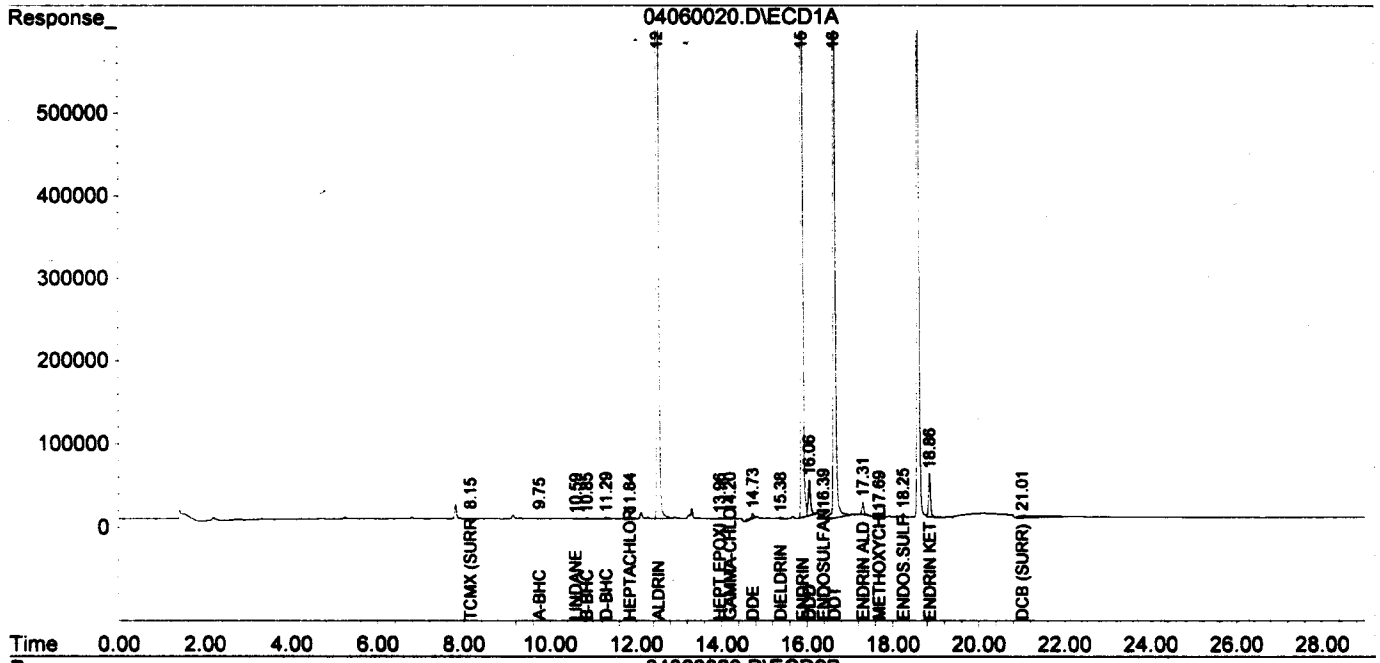
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

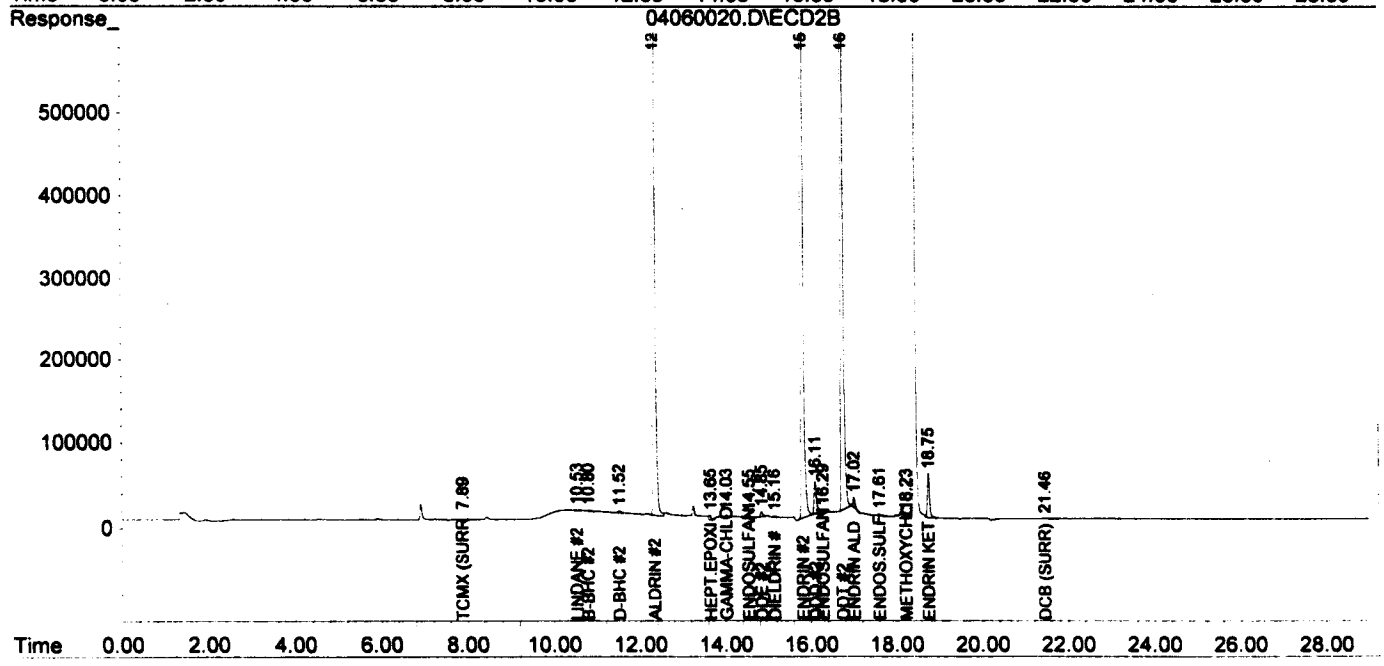
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040600\04060020.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\040600\04060020.D\ECD2B.CH
Acq On : 6 Apr 2000 11:30 pm Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 7 7:52 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Fri Apr 07 07:42:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Pest. mix. interm.
Lab Standard ID# P00018
Prepared By: YGK

Date Made: 02/21/00
Expire Date: 08/21/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Pest. mix AB#1	S00A041	200 ppm	200 µL	10.0 ppm
SS stock	S99A155	200 ppm	200 µL	10.0 ppm
Hexane	Ex 99135	100%	to 4 mL	
YGK 02/21/00				

Standard Name: Pest. mix. std
Lab Standard ID# P00019 - P00024
Prepared By: YGK

Date Made: 02/21/00
Expire Date: 08/21/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.	
Pest. mix. Interm	P00018	10 ppm	200 µL	0.5 ppm	P00019
			140 µL	0.35 ppm	P00020
			100 µL	0.25 ppm	P00021
			40 µL	0.10 ppm	P00022
	YK 02/21		20 µL	0.050 ppm	P00023
Pest. std	P00019	0.50 ppm	80 µL	0.010 ppm	P00024
Hexane	Ex 99135	100%	to 4 mL each		
YGK	02/21/00				

STPRLGFR.XLS

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Pest. mix ICV
Lab Standard ID#: P00025
Prepared By: YGK

Date Made: 02/21/00
Expire Date: 08/21/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Pest. mix. Interm (ICV)	P00017	10 ppm	100 µL	0.25 ppm
Hexane	Ex 99135	100%	to 4 mL	
	02/21/00			
YGK				

Standard Name: Ar1016+1260, SS std
Lab Standard ID#: P00026 - P00030
Prepared By: YGK

Date Made: 02/25/00
Expire Date: 08/25/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.	
Ar1016+1260, SS interm	P99141	25/5.0 ppm	400 µL	2.5/0.5 ppm	P00026
			240 µL	1.5/0.30 ppm	P00027
			160 µL	1.0/0.20 ppm	P00028
			80 µL	050/0.10 ppm	P00029
			16 µL	0.10/0.020 ppm	P00030
Hexane	Ex 99135	100%	to 4 mL each		
YGK 02/25/00					

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Chlordane (Tech), ICV
Lab Standard ID# P00087
Prepared By: YGK

Date Made: 03/22/00
Expire Date: 09/22/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Chlordane, work	P00086	10 ppm	100 µL	0.25 ppm
Hexane	Ex 99135	100%	to 4.0 mL	

YGK 03/22/00

Standard Name: PEM
Lab Standard ID# P00088
Prepared By: YGK

Date Made: 03/28/00
Expire Date: 09/28/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
PEM	S99A158	100 ppm	20 µL	0.5 ppm
Hexane	Ex 99135	100%	to 4.0 mL	

YGK 03/28/00

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Chlordane tech. std
Lab Standard ID#: P00073 – P00077
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.	
Chlordane, interm	P00072	10 ppm	300 µL	0.75 ppm	P00073
			200 µL	0.50 ppm	P00074
			100 µL	0.25 ppm	P00075
			40 µL	0.10 ppm	P00076
			20 µL	0.050 ppm	P00077
Hexane	Ex 99135	100%	to 4.0 mL each		

YGK 03/06/00

Standard Name: Herb. mix (deriv), work
Lab Standard ID#: H00078
Prepared By: YGK

Date Made: 03/16/00
Expire Date: 09/16/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Herb. mix. stock *	S99A096	200-2,000 ppm	80 µL	4 - 40 ppm
DCAA stock	S00A050	100 ppm	320 µL	8.0 ppm
MCPP, MCPA stock	S00A049	2,000	720 µL	360 ppm
Hexane	Ex 99135	100%	to 4.0 mL	
MCPP, MCPA - 2,000 ppm, rest - 200 ppm				

YGK 03/16/00

SVO GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

DATE / INSTRUMENT: 02/21/00 #1	METHOD: (circle applicable methods)
MATRIX:	(8081A) 8082 8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst: [signature]	Reviewer: [signature]
Date: 02/23/00 Time: 11:00 AM	Date: 3/2/00 Time: 12:53

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 02/21/00
Analyst Initials: YGK
Instrument Method: 8081D1
Data Checked By: –
Calibration Column: Rtx-CLP1
Confirmation Column: Rtx-CLP2

DDT Breakdown % (<15%): 5.5%
Endrin Breakdown % (<15%): 10.2%

Pest Calibration Date: 02/21/00
PCB Calibration Date: –

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	30-116	22-132
Water	13-119	D-127

Sequence Directory:

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	022100P	std	1X	NA	NA	
2	Hexane		solv				
3	PEM		std				P99241
4	IC Pest. 0.010 ppm						P00024
5	IC Pest. 0.050 ppm						P00023
6	IC Pest .10 ppm						P00022
7	IC Pest .25 ppm						P00021
8	IC Pest .35 ppm						P00020
9	IC Pest .50 ppm						P00019
10	ICV Pest .25 ppm				112	111	P00025
11	Hexane		solv		NA	NA	
12	PEM		std				P99241

YGK 02/21/00

Signature/Date: [signature] 02/21/00

Approved By / Date:

Response Factor Report GC/ECD IN

Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Wed Feb 23 10:43:49 2000

Calibration Files
0.01 =02210004.D 0.05 =02210005.D 0.1 =02210006.D
0.25 =02210007.D 0.35 =02210008.D 0.50 =02210009.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	TCMX (SURR)	1.025	0.939	0.812	0.746	0.711	0.641	0.813	E8	17.86
2)	T	A-BHC	1.111	1.368	1.251	1.196	1.161	1.038	1.188	E8	9.64
3)	T	B-BHC	6.300	6.049	5.439	5.206	5.083	4.574	5.442	E7	11.75
4)	T	LINDANE	1.064	1.234	1.123	1.069	1.034	0.925	1.075	E8	9.48
5)	T	D-BHC	1.031	1.149	1.058	1.032	1.010	0.899	1.030	E8	7.82
6)	T	HEPTACHLOR	1.085	1.067	0.940	0.857	0.817	0.734	0.917	E8	15.29
7)	T	ALDRIN	8.889	9.787	8.807	8.229	7.854	7.090	8.443	E7	11.06
8)	T	HEPT.EPOXIDE	1.018	0.967	0.856	0.792	0.755	0.681	0.845	E8	15.21
9)	T	ENDOSULFAN 1	1.075	0.949	0.839	0.773	0.731	0.661	0.838	E8	18.13
10)	T	GAMMA-CHLORDANE	1.067	1.032	0.929	0.880	0.842	0.760	0.918	E8	12.69
11)	T	ALFA-CHLORDANE	6.970	8.811	7.833	7.807	7.033	6.650	7.518	E7	10.55
12)	T	DDE	6.793	8.016	7.497	7.277	6.988	6.295	7.144	E7	8.33
13)	T	DIELDRIN	8.312	9.050	8.277	7.891	7.419	6.832	7.963	E7	9.70
14)	T	ENDRIN	6.486	7.058	6.489	6.229	6.107	5.493	6.310	E7	8.20
15)	T	DDD	6.268	6.439	6.094	5.963	5.733	5.232	5.955	E7	7.22
16)	T	ENDOSULFAN 2	7.604	7.778	7.081	6.805	6.294	5.879	6.907	E7	10.67
17)	T	ENDRIN ALDEHYDE	6.246	5.983	5.473	5.326	4.674	4.625	5.388	E7	12.29
18)	T	DDT	5.998	6.652	6.390	6.411	6.244	5.690	6.231	E7	5.48
19)	T	ENDOS.SULFATE	7.375	7.066	6.383	6.156	5.926	5.417	6.387	E7	11.39
20)	T	METHOXYCHLOR		3.655	3.370	3.308	3.285	2.996	3.323	E7	7.08
21)	T	ENDRIN KETONE	8.964	8.415	7.575	7.225	6.911	6.279	7.561	E7	13.06
22)	S	DCB (SURR)	8.773	7.625	7.087	6.278	5.956	5.320	6.840	E7	18.28

Signal #2 Calibration Files
0.01 =02210004.D 0.05 =02210005.D 0.1 =02210006.D
0.25 =02210007.D 0.35 =02210008.D 0.50 =02210009.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	TCMX (SURR)	1.042	0.997	0.866	0.795	0.759	0.677	0.856	E8	16.50
2)	T	A-BHC	1.253	1.588	1.340	1.282	1.245	1.116	1.304	E8	12.08
3)	T	B-BHC	7.126	6.478	5.746	5.527	5.424	4.865	5.861	E7	13.84
4)	T	LINDANE	1.361	1.348	1.210	1.147	1.108	0.990	1.194	E8	12.02
5)	T	D-BHC	1.186	1.212	1.101	1.068	1.049	0.935	1.092	E8	9.20
6)	T	HEPTACHLOR	1.244	1.202	1.057	0.974	0.929	0.834	1.040	E8	15.33
7)	T	ALDRIN	1.114	1.166	1.038	0.960	0.918	0.823	1.003	E8	12.71
8)	T	HEPT.EPOXIDE	0.876	1.045	0.921	0.883	0.818	0.760	0.884	E8	10.99
9)	T	ENDOSULFAN 1	1.066	1.067	0.943	0.877	0.834	0.752	0.923	E8	13.75
10)	T	GAMMA-CHLORDANE	1.116	1.187	1.053	1.006	0.965	0.867	1.032	E8	10.95
11)	T	ALFA-CHLORDANE	1.106	1.101	0.975	0.916	0.878	0.786	0.961	E8	13.22
12)	T	DDE	0.887	1.009	0.936	0.910	0.867	0.788	0.900	E8	8.16
13)	T	DIELDRIN	0.984	1.063	0.965	0.916	0.870	0.792	0.932	E8	10.16
14)	T	ENDRIN	7.278	7.682	7.000	6.808	6.743	6.052	6.927	E7	7.94
15)	T	DDD	6.151	6.898	6.516	6.478	6.288	5.675	6.334	E7	6.48
16)	T	ENDOSULFAN 2	9.374	8.961	8.041	7.615	7.318	6.606	7.986	E7	12.97
17)	T	ENDRIN ALDEHYDE	8.064	7.090	6.301	5.970	5.694	5.151	6.378	E7	16.43
18)	T	DDT	6.245	7.387	7.057	7.181	6.938	6.383	6.865	E7	6.61
19)	T	ENDOS.SULFATE	8.938	8.270	7.446	7.188	6.892	6.280	7.502	E7	12.81
20)	T	METHOXYCHLOR		4.038	3.687	3.700	3.641	3.335	3.680	E7	6.78
21)	T	ENDRIN KETONE	9.951	9.457	8.512	8.121	7.753	7.062	8.476	E7	12.69
22)	S	DCB (SURR)	8.484	9.231	7.357	6.915	6.570	6.102	7.443	E7	16.04

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\022100\02210004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\022100\02210004.D\ECD2B.CH
Acq On : 21 Feb 2000 11:55 am Operator: YGK
Sample : IC PEST .010 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 21 17:22 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:49:26 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.22	7.94	1025206	1041501	0.015	0.014	
		Spiked Amount 0.250	Range 66 - 152			Recovery =	6.00%#	5.60%#	
12)	S	DCB (SURR)	21.02	21.48	891334	941519	0.016	0.015	
		Spiked Amount 0.250	Range 1 - 169			Recovery =	6.40%	6.00%	
		Target Compounds							
2)	T	A-BHC	9.77	9.63	1111383	1253334	0.010	0.011	
	T	B-BHC	10.86	10.79	629967	712647	0.013	0.014	
4)	T	LINDANE	10.61	10.55	1063589	1360755	0.011	0.013	
5)	T	D-BHC	11.30	11.51	1031144	1186132	0.011	0.012	
6)	T	HEPTACHLOR	11.80	11.61	1084657	1243984	0.014	0.014	
7)	T	ALDRIN	12.53	12.37	888920	1113757	0.012	0.013	
8)	T	HEPT.EPOXIDE	13.96	13.70	1017632	875995	0.014	0.011	
9)	T	ENDOSULFAN 1	14.86	14.57	1074748	1066043	0.015	0.013	
10)	T	GAMMA-CHLORDANE	14.25	14.13	1066974	1115566	0.013	0.012	
11)	T	ALFA-CHLORDANE	14.55	14.46	697047	1106324	0.010	0.013	#
12)	T	DDE	14.74	14.86	679261	887330	0.010	0.011	
13)	T	DIELDRIN	15.39	15.18	831189	984275	0.012	0.012	
14)	T	ENDRIN	15.91	15.84	648593	727839	0.011	0.011	
15)	T	DDD	16.07	16.12	626820	615054	0.011	0.010	
16)	T	ENDOSULFAN 2	16.41	16.31	760362	937386	0.012	0.013	
17)	T	ENDRIN ALDEHYDE	17.32	17.04	624613	828798	0.013	0.015	
18)	T	DDT	16.66	16.78	599778	624525	0.010	0.009	
19)	T	ENDOS.SULFATE	18.26	17.62	737533	893800	0.013	0.014	
20)	T	METHOXYCHLOR	17.70	18.25	415466	342581	0.014	0.010	#
21)	T	ENDRIN KETONE	18.87	18.77	896403	995083	0.014	0.013	

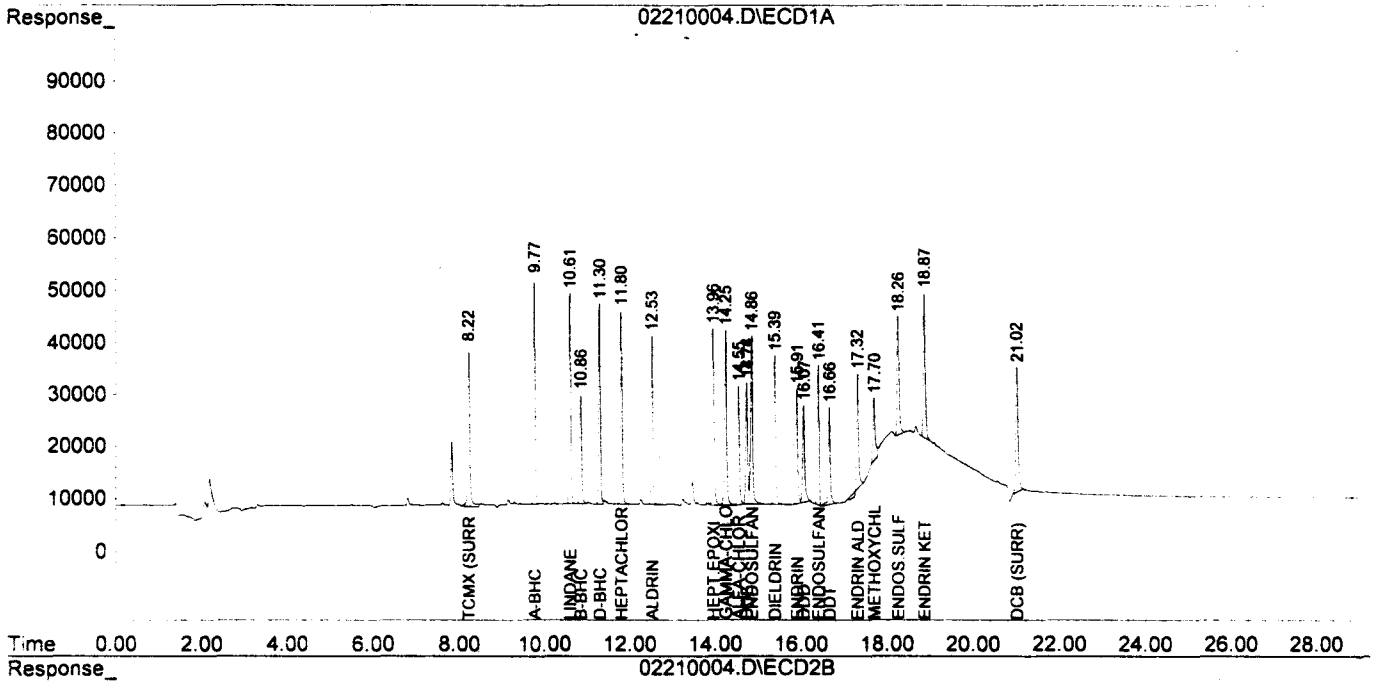
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

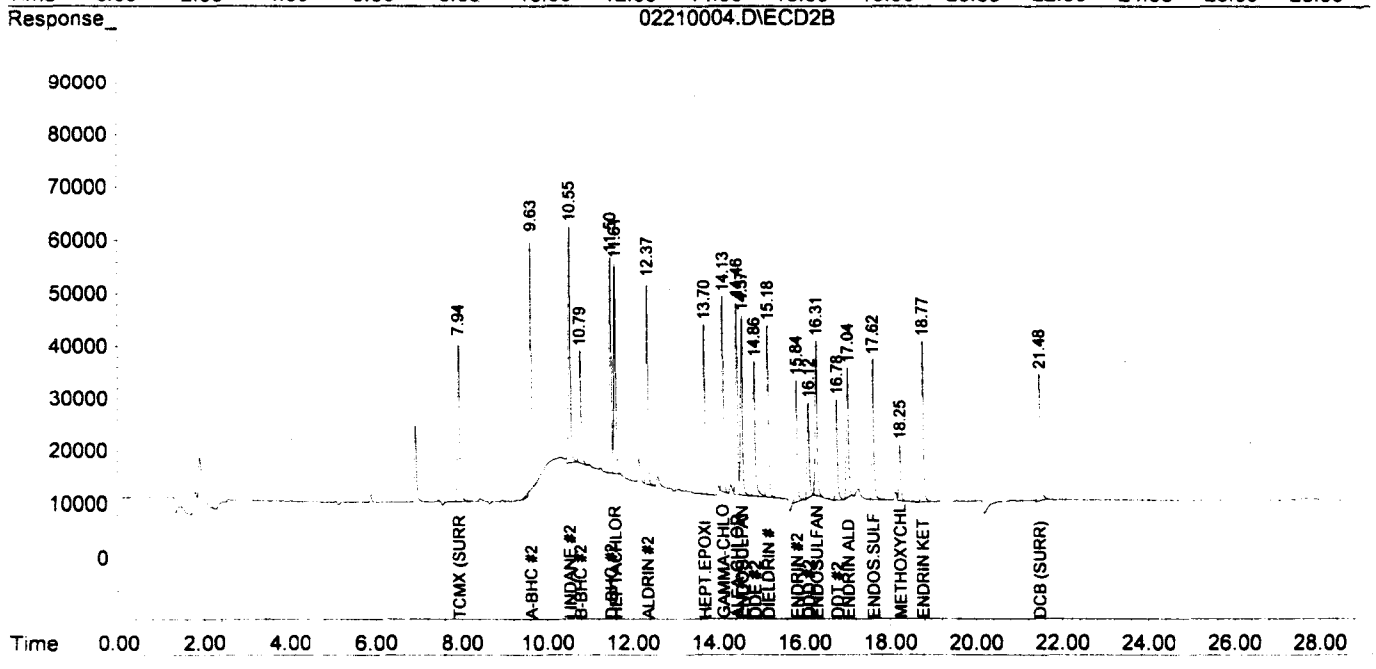
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\022100\02210004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\022100\02210004.D\ECD2B.CH
Acq On : 21 Feb 2000 11:55 am Operator: YGK
Sample : IC PEST .010 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 21 17:22 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:49:26 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\022100\02210005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\022100\02210005.D\ECD2B.CH
Acq On : 21 Feb 2000 12:29 pm Operator: YGK
Sample : IC PEST .050 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 21 17:25 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 17:24:52 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

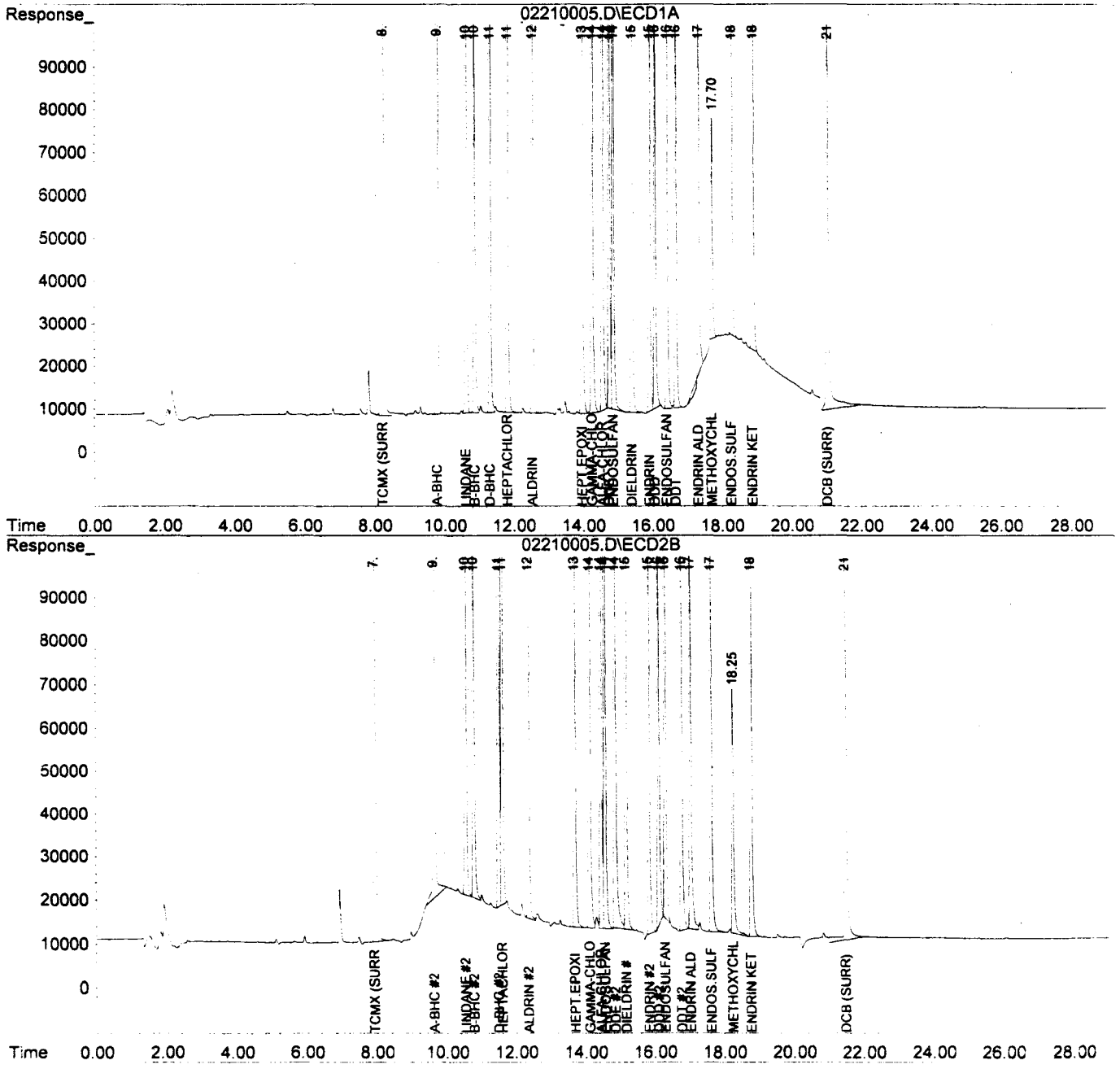
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.22	7.93	4695930	4985338	0.069	0.069
		Spiked Amount 0.250			Recovery =		27.60%	27.60%
22)	S	DCB (SURR)	21.02	21.48	4531187	4615407	0.080	0.072
		Spiked Amount 0.250			Recovery =		32.00%	28.80%
		Target Compounds						
2)	T	A-BHC	9.77	9.63	6841015	7942383	0.062	0.067
	T	B-BHC	10.85	10.79	3024521	3238970	0.063	0.063
4)	T	LINDANE	10.60	10.55	6171656	6741969	0.063	0.064
5)	T	D-BHC	11.30	11.50	5744858	6059006	0.060	0.061
6)	T	HEPTACHLOR	11.80	11.61	5335027	6010945	0.068	0.068
7)	T	ALDRIN	12.53	12.36	4893505	5829350	0.065	0.067
8)	T	HEPT.EPOXIDE	13.96	13.70	4833170	5223584	0.067	0.065
9)	T	ENDOSULFAN 1	14.85	14.57	4745042	5334017	0.068	0.067
10)	T	GAMMA-CHLORDANE	14.25	14.12	5162342	5936907	0.064	0.065
11)	T	ALFA-CHLORDANE	14.55	14.45	4405623	5506840	0.063	0.066
12)	T	DDE	14.74	14.86	4008159	5007434	0.060	0.061
13)	T	DIELDRIN	15.39	15.18	4525027	5304010	0.063	0.064
14)	T	ENDRIN	15.90	15.84	3529202	3840785	0.061	0.060
15)	T	DDD	16.06	16.11	3219566	3449179	0.059	0.058
16)	T	ENDOSULFAN 2	16.40	16.30	3888780	4480508	0.063	0.064
17)	T	ENDRIN ALDEHYDE	17.32	17.03	2707457	3544823	0.057	0.065
18)	T	DDT	16.66	16.78	3325960	3693513	0.056	0.055
19)	T	ENDOS.SULFATE	18.26	17.62	3482060	4134951	0.062	0.063
20)	T	METHOXYCHLOR	17.70	18.25	1705718	2019038	0.059	0.058
21)	T	ENDRIN KETONE	18.87	18.77	4207340	4728287	0.064	0.064

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\022100\02210005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\022100\02210005.D\ECD2B.CH
Acq On : 21 Feb 2000 12:29 pm Operator: YGK
Sample : IC PEST .050 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 21 17:25 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 17:24:52 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\022100\02210006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\022100\02210006.D\ECD2B.CH
Acq On : 21 Feb 2000 1:03 pm Operator: YGK
Sample : IC PEST .10 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:46 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Wed Feb 23 10:43:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.22	7.93	8122197	8660946	0.119	0.120
		Spiked Amount 0.250			Recovery =		47.60%	48.00%
22)	S	DCB (SURR)	21.02	21.49	7086844	7356712	0.125	0.115
		Spiked Amount 0.250			Recovery =		50.00%	46.00%
		Target Compounds						
2)	T	A-BHC	9.77	9.63	12514802	13395899	0.114	0.113
	T	B-BHC	10.86	10.79	5439116	5746284	0.113	0.112
4)	T	LINDANE	10.61	10.55	11228748	12098904	0.114	0.115
5)	T	D-BHC	11.30	11.50	10576195	11011920	0.111	0.111
6)	T	HEPTACHLOR	11.80	11.61	9397513	10569831	0.120	0.119
7)	T	ALDRIN	12.53	12.37	8807450	10384250	0.117	0.119
8)	T	HEPT.EPOXIDE	13.96	13.70	8560508	9211263	0.119	0.115
9)	T	ENDOSULFAN 1	14.86	14.57	8389482	9426049	0.120	0.118
10)	T	GAMMA-CHLORDANE	14.25	14.13	9285815	10529224	0.115	0.115
11)	T	ALFA-CHLORDANE	14.55	14.46	7833239	9751633	0.113	0.117
12)	T	DDE	14.74	14.86	7496911	9360371	0.113	0.113
13)	T	DIELDRIN	15.39	15.18	8276817	9651182	0.115	0.115
14)	T	ENDRIN	15.91	15.84	6489178	6999806	0.112	0.110
15)	T	DDD	16.06	16.11	6094139	6516055	0.111	0.109
16)	T	ENDOSULFAN 2	16.40	16.30	7081395	8040949	0.115	0.115
17)	T	ENDRIN ALDEHYDE	17.32	17.04	5472874	6301279	0.115	0.116
18)	T	DDT	16.66	16.78	6390041	7056843	0.107	0.106
19)	T	ENDOS.SULFATE	18.26	17.62	6382548	7446378	0.112	0.113
20)	T	METHOXYCHLOR	17.70	18.25	3370213	3687310	0.108	0.106
21)	T	ENDRIN KETONE	18.87	18.77	7574981	8512049	0.114	0.114

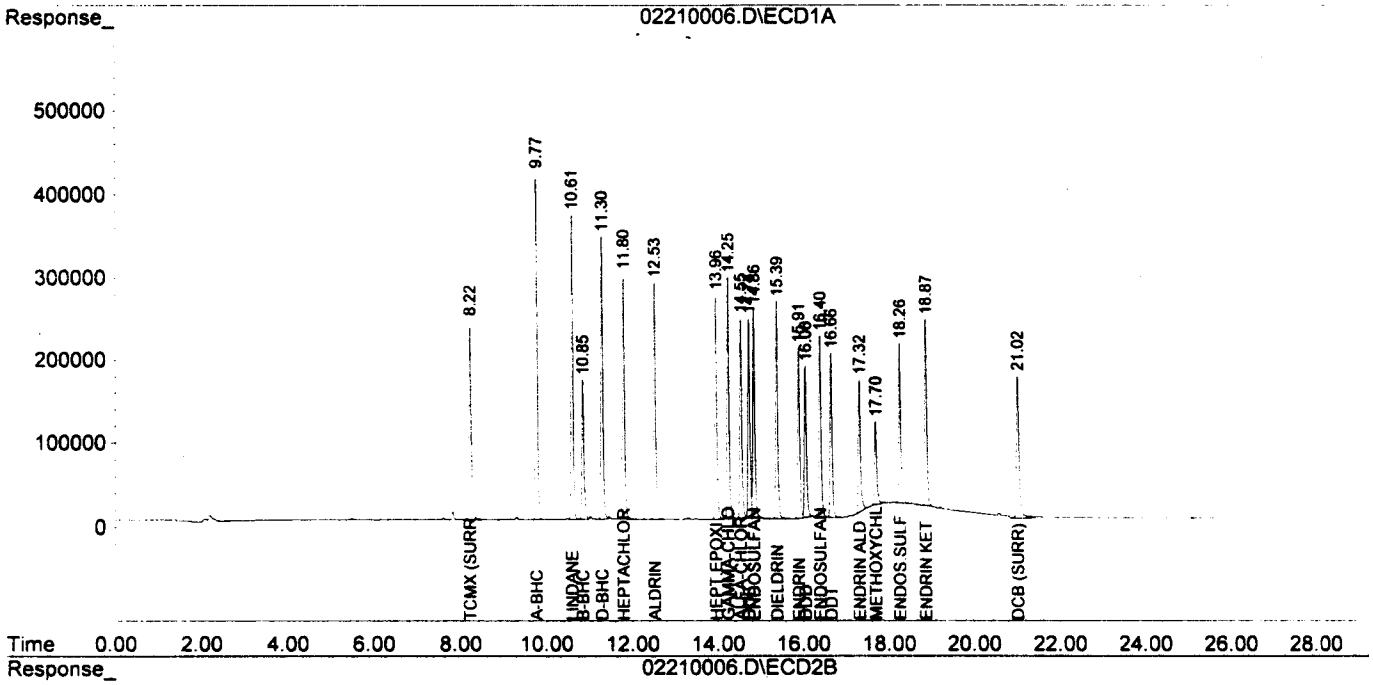
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

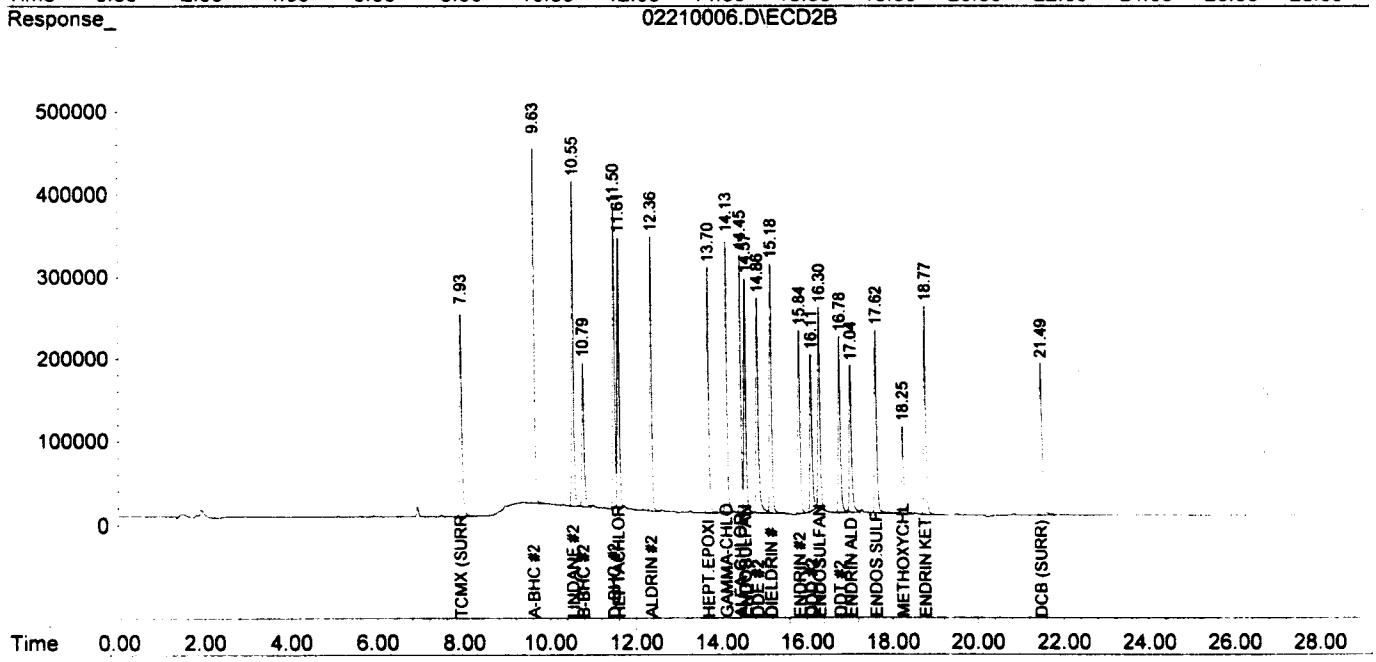
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\022100\02210006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\022100\02210006.D\ECD2B.CH
Acq On : 21 Feb 2000 1:03 pm Operator: YGK
Sample : IC PEST .10 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:46 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Wed Feb 23 10:43:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\022100\02210007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\022100\02210007.D\ECD2B.CH
Acq On : 21 Feb 2000 1:37 pm Operator: YGK
Sample : IC PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:47 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:36:52 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.22	7.93	18660861	19864993	0.274	0.275
		Spiked Amount 0.250			Recovery	=	109.60%	110.00%
12)	S	DCB (SURR)	21.02	21.49	15694166	17288523	0.276	0.271
		Spiked Amount 0.250			Recovery	=	110.40%	108.40%
		Target Compounds						
2)	T	A-BHC	9.77	9.63	29908683	32046001	0.272	0.271
	T	B-BHC	10.86	10.79	13014850	13817987	0.270	0.269
4)	T	LINDANE	10.61	10.55	26727413	28667109	0.272	0.273
5)	T	D-BHC	11.30	11.50	25807547	26707736	0.271	0.270
6)	T	HEPTACHLOR	11.80	11.61	21421285	24348725	0.274	0.275
7)	T	ALDRIN	12.53	12.37	20572683	24007691	0.274	0.274
8)	T	HEPT.EPOXIDE	13.96	13.70	19794820	22079720	0.274	0.277
9)	T	ENDOSULFAN 1	14.86	14.57	19323241	21929023	0.276	0.275
10)	T	GAMMA-CHLORDANE	14.25	14.13	21988942	25145148	0.273	0.274
11)	T	ALFA-CHLORDANE	14.55	14.46	19518268	22911192	0.281	0.274
12)	T	DDE	14.74	14.86	18191369	22749661	0.273	0.274
13)	T	DIELDRIN	15.39	15.18	19726877	22905990	0.275	0.274
14)	T	ENDRIN	15.91	15.84	15573347	17019120	0.269	0.267
15)	T	DDD	16.06	16.11	14906763	16195717	0.271	0.271
16)	T	ENDOSULFAN 2	16.41	16.30	17012677	19037531	0.276	0.272
17)	T	ENDRIN ALDEHYDE	17.32	17.04	13313782	14924131	0.280	0.274
18)	T	DDT	16.66	16.78	16028591	17952439	0.269	0.269
19)	T	ENDOS.SULFATE	18.26	17.62	15390667	17970251	0.270	0.272
20)	T	METHOXYCHLOR	17.70	18.25	8270215	9250992	0.264	0.266
21)	T	ENDRIN KETONE	18.87	18.77	18061853	20301339	0.273	0.273

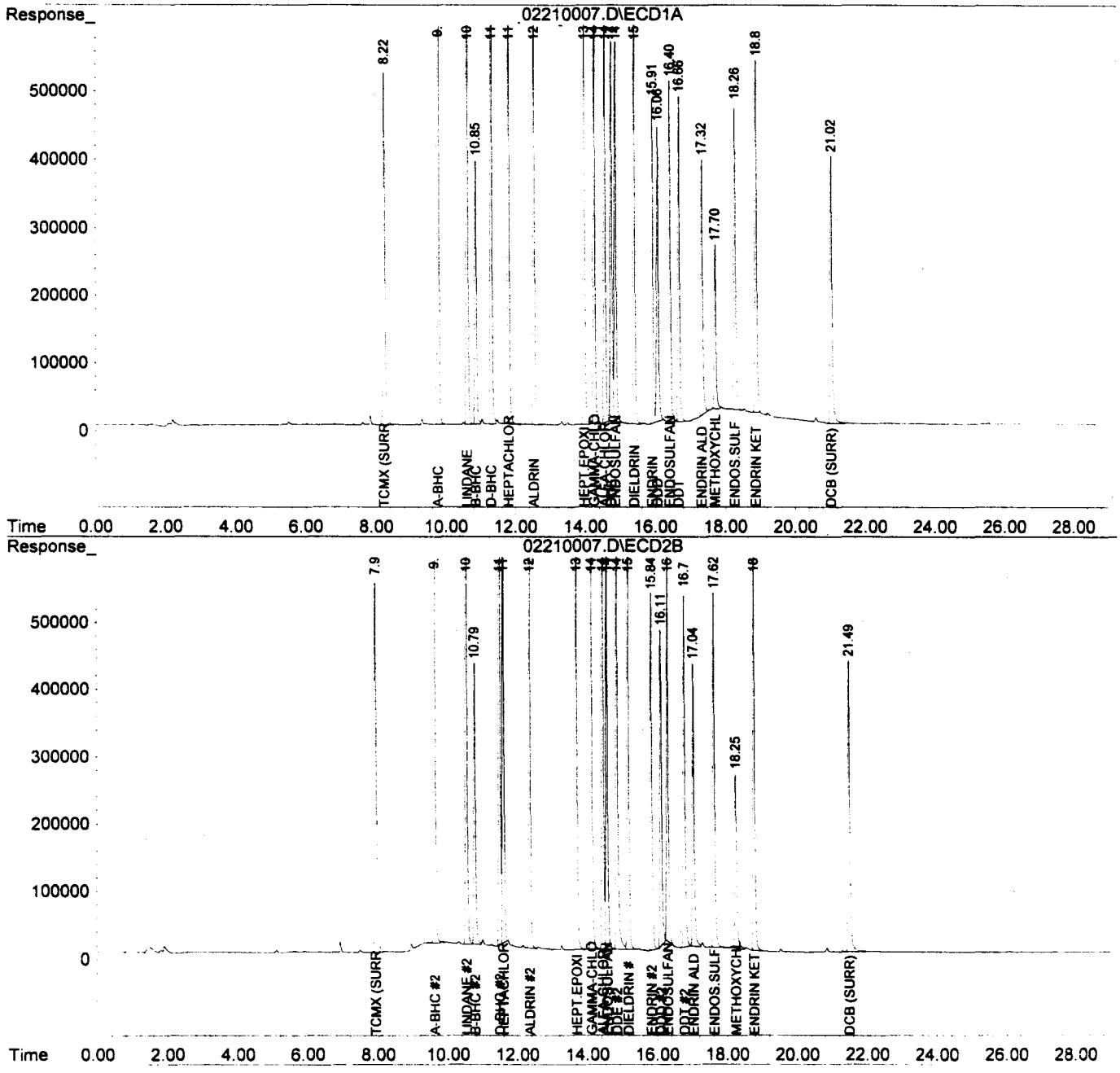
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\022100\02210007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\022100\02210007.D\ECD2B.CH
Acq On : 21 Feb 2000 1:37 pm Operator: YGK
Sample : IC PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:47 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:36:52 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\022100\02210008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\022100\02210008.D\ECD2B.CH
Acq On : 21 Feb 2000 2:11 pm Operator: YGK
Sample : IC PEST .35 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:48 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:36:52 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.22	7.94	24896474	26575720	0.366	0.368
		Spiked Amount 0.250			Recovery	=	146.40%	147.20%
22)	S	DCB (SURR)	21.02	21.49	20846167	22995096	0.367	0.360
		Spiked Amount 0.250			Recovery	=	146.80%	144.00%
		Target Compounds						
2)	T	A-BHC	9.77	9.63	40630380	43572827	0.369	0.369
	T	B-BHC	10.86	10.79	17790098	18984800	0.368	0.369
4)	T	LINDANE	10.61	10.55	36203319	38787241	0.369	0.369
5)	T	D-BHC	11.30	11.50	35359754	36705770	0.371	0.371
6)	T	HEPTACHLOR	11.80	11.61	28604092	32527353	0.366	0.367
7)	T	ALDRIN	12.53	12.37	27488874	32146958	0.366	0.367
8)	T	HEPT.EPOXIDE	13.97	13.70	26427377	28620524	0.366	0.359
9)	T	ENDOSULFAN 1	14.86	14.57	25584078	29195484	0.365	0.366
10)	T	GAMMA-CHLORDANE	14.25	14.13	29459296	33781717	0.366	0.367
11)	T	ALFA-CHLORDANE	14.55	14.46	24616878	30730919	0.354	0.368
12)	T	DDE	14.74	14.86	24456942	30342013	0.367	0.365
13)	T	DIELDRIN	15.39	15.18	25965596	30442249	0.361	0.364
14)	T	ENDRIN	15.91	15.84	21374883	23598840	0.369	0.370
15)	T	DDD	16.06	16.11	20064468	22008066	0.365	0.368
16)	T	ENDOSULFAN 2	16.41	16.31	22030214	25613677	0.358	0.367
17)	T	ENDRIN ALDEHYDE	17.32	17.04	16359679	19930454	0.343	0.366
18)	T	DDT	16.66	16.78	21854292	24283610	0.366	0.364
19)	T	ENDOS.SULFATE	18.26	17.62	20740299	24121861	0.364	0.365
20)	T	METHOXYCHLOR	17.70	18.25	11498564	12743855	0.367	0.366
21)	T	ENDRIN KETONE	18.87	18.77	24188131	27136947	0.365	0.364

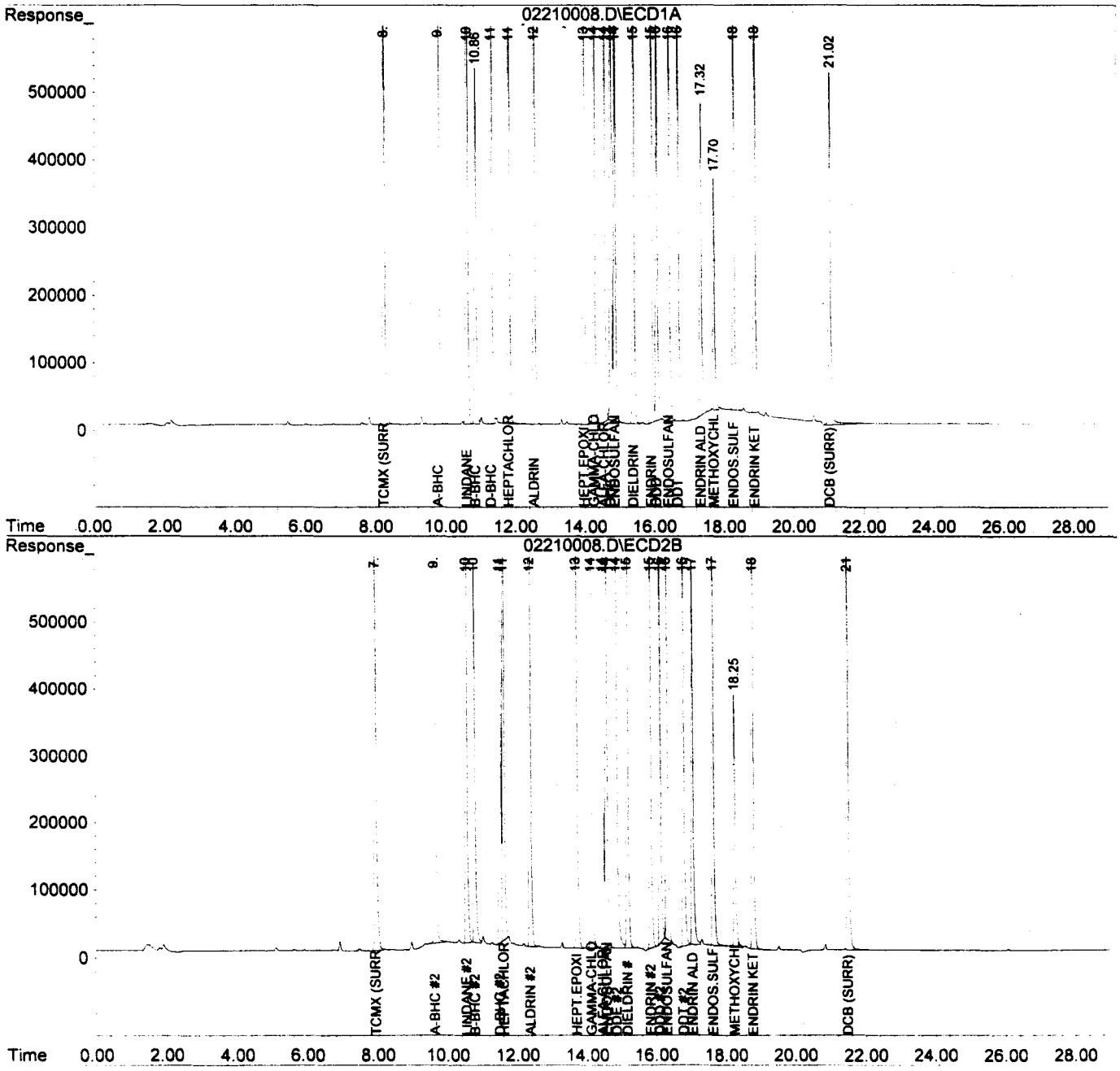
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\022100\02210008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\022100\02210008.D\ECD2B.CH
Acq On : 21 Feb 2000 2:11 pm Operator: YGK
Sample : IC PEST .35 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:48 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:36:52 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\022100\02210009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\022100\02210009.D\ECD2B.CH
Acq On : 21 Feb 2000 2:45 pm Operator: YGK
Sample : IC PEST .50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:49 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:36:52 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.22	7.93	32042636	33825734	0.471	0.469
		Spiked Amount 0.250			Recovery	=	188.40%	187.60%
22)	S	DCB (SURR)	21.02	21.49	26601608	30509763	0.468	0.477
		Spiked Amount 0.250			Recovery	=	187.20%	190.80%
		Target Compounds						
2)	T	A-BHC	9.77	9.63	51922316	55791143	0.472	0.472
	T	B-BHC	10.86	10.79	22867949	24323762	0.474	0.473
4)	T	LINDANE	10.61	10.55	46260967	49519771	0.471	0.471
5)	T	D-BHC	11.30	11.50	44952333	46737078	0.472	0.472
6)	T	HEPTACHLOR	11.80	11.61	36704655	41716680	0.470	0.470
7)	T	ALDRIN	12.53	12.37	35451688	41169806	0.472	0.470
8)	T	HEPT.EPOXIDE	13.96	13.70	34052175	37980186	0.471	0.476
9)	T	ENDOSULFAN 1	14.86	14.57	33042102	37624683	0.471	0.471
10)	T	GAMMA-CHLORDANE	14.25	14.13	37976030	43359438	0.472	0.472
11)	T	ALFA-CHLORDANE	14.55	14.46	33248680	39291527	0.478	0.470
12)	T	DDE	14.74	14.86	31473133	39423144	0.473	0.474
13)	T	DIELDRIN	15.39	15.18	34160872	39579935	0.475	0.474
14)	T	ENDRIN	15.91	15.84	27464576	30261558	0.474	0.475
15)	T	DDD	16.06	16.11	26162351	28372850	0.476	0.474
16)	T	ENDOSULFAN 2	16.41	16.31	29395266	33030207	0.477	0.473
17)	T	ENDRIN ALDEHYDE	17.32	17.04	23126743	25755853	0.486	0.472
18)	T	DDT	16.66	16.78	28447537	31914443	0.477	0.479
19)	T	ENDOS.SULFATE	18.26	17.62	27084810	31400087	0.476	0.475
20)	T	METHOXYCHLOR	17.70	18.25	14977775	16675875	0.478	0.479
21)	T	ENDRIN KETONE	18.87	18.77	31396603	35311358	0.474	0.474

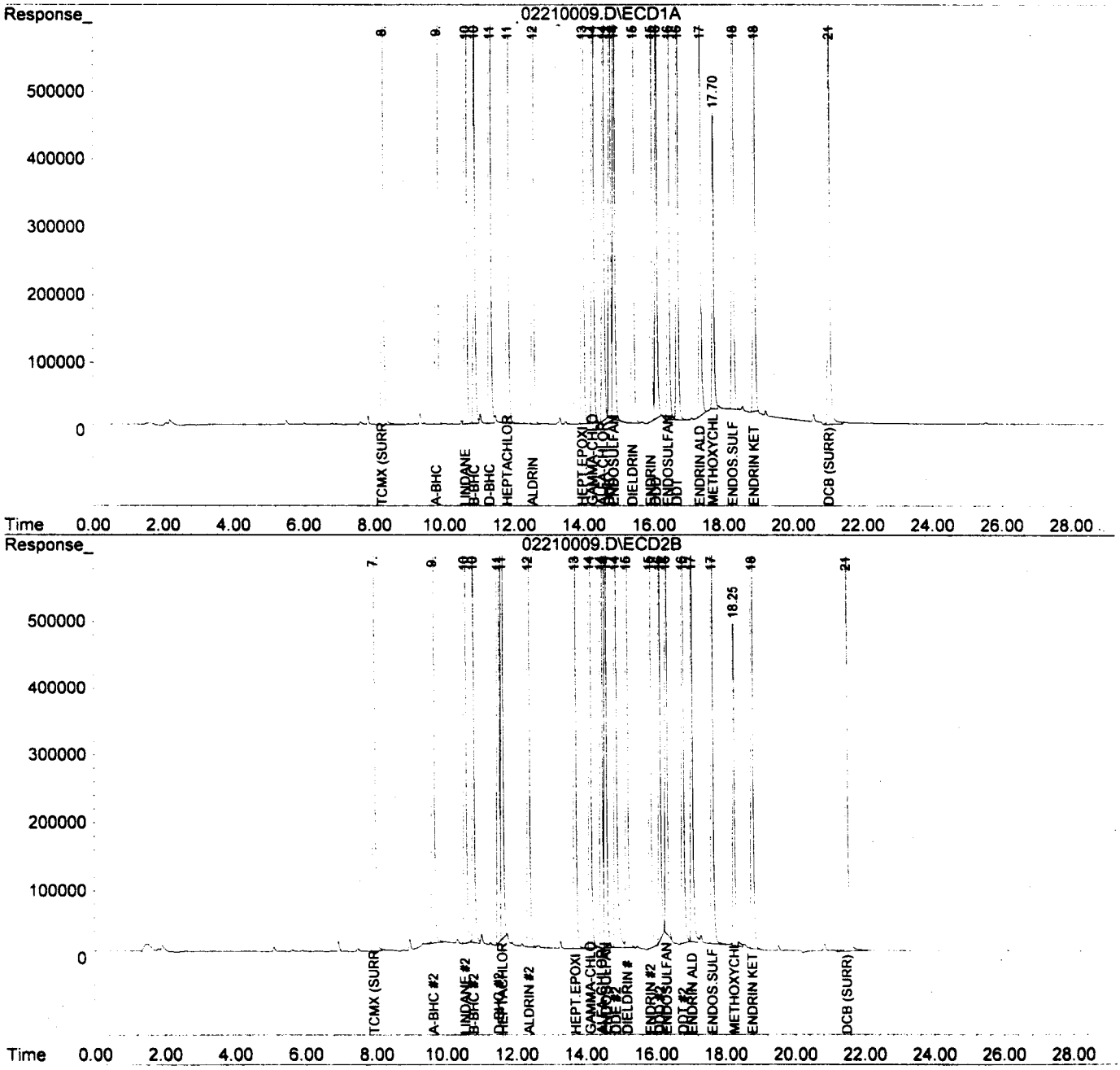
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\022100\02210009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\022100\02210009.D\ECD2B.CH
Acq On : 21 Feb 2000 2:45 pm Operator: YGK
Sample : IC PEST .50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:49 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:36:52 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\022100\02210010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\022100\02210010.D\ECD2B.CH
Acq On : 21 Feb 2000 3:20 pm Operator: YGK
Sample : ICV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:50 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:36:52 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

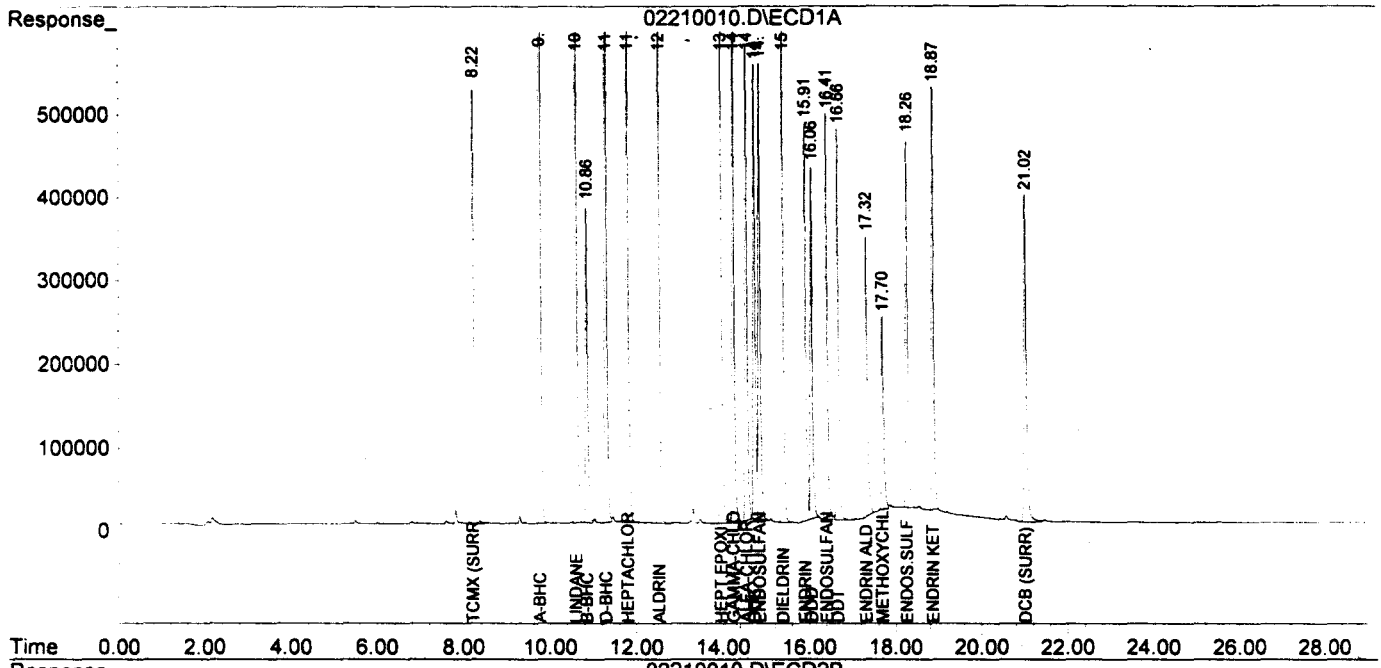
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.22	7.94	18979684	20043958	0.279	0.278
		Spiked Amount 0.250			Recovery	=	111.60% #2	111.20%
22)	S	DCB (SURR)	21.02	21.49	15762377	17359882	0.277	0.272
		Spiked Amount 0.250			Recovery	=	110.80% #2	108.80%
		Target Compounds						
2)	T	A-BHC	9.77	9.63	29031777	31244741	0.264	0.264
	T	B-BHC	10.86	10.79	12748978	13506167	0.264	0.263
4)	T	LINDANE	10.61	10.55	26218047	28075510	0.267	0.267
5)	T	D-BHC	11.30	11.50	25297492	26102047	0.265	0.264
6)	T	HEPTACHLOR	11.80	11.61	21388855	24037208	0.274	0.271
7)	T	ALDRIN	12.53	12.37	20031031	23214162	0.267	0.265
8)	T	HEPT.EPOXIDE	13.96	13.70	19427683	21441419	0.269	0.269
9)	T	ENDOSULFAN 1	14.86	14.57	18925538	21330567	0.270	0.267
10)	T	GAMMA-CHLORDANE	14.25	14.13	21117361	23956403	0.263	0.261
11)	T	ALFA-CHLORDANE	14.55	14.46	18931625	22374254	0.272	0.268
12)	T	DDE	14.74	14.86	17624414	21883765	0.265	0.263
13)	T	DIELDRIN	15.39	15.18	19411878	22572172	0.270	0.270
14)	T	ENDRIN	15.91	15.84	15797430	17021890	0.273	0.267
15)	T	DDD	16.06	16.11	14583786	15444558	0.265	0.258
16)	T	ENDOSULFAN 2	16.41	16.31	16665784	18552575	0.271	0.266
17)	T	ENDRIN ALDEHYDE	17.32	17.04	12061888	13104707	0.253	0.240
18)	T	DDT	16.66	16.78	15887055	17543109	0.266	0.263
19)	T	ENDOS.SULFATE	18.26	17.62	15330942	17734320	0.269	0.268
20)	T	METHOXYCHLOR	17.70	18.25	8020647	8773491	0.256	0.252
21)	T	ENDRIN KETONE	18.87	18.77	17530175	19672505	0.265	0.264

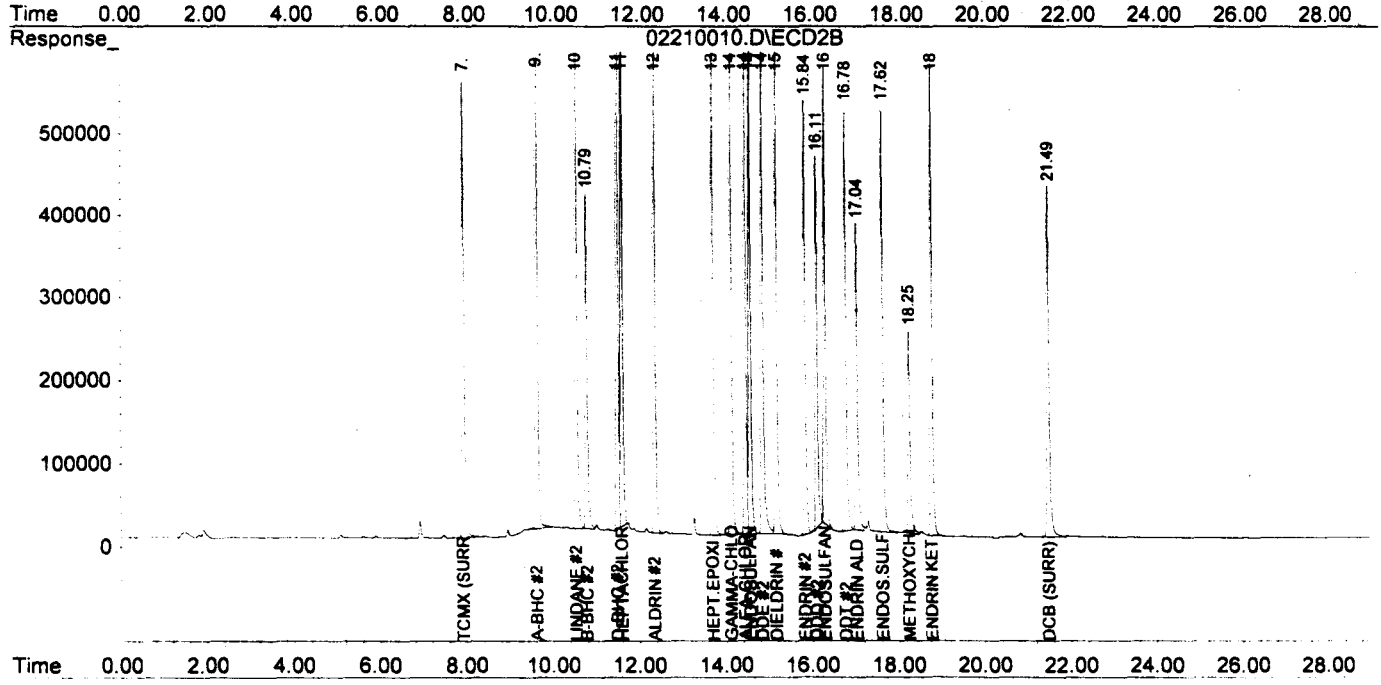
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\022100\02210010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\022100\02210010.D\ECD2B.CH
Acq On : 21 Feb 2000 3:20 pm Operator: YGK
Sample : ICV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 23 10:50 2000 Quant Results File: 022100P.RES

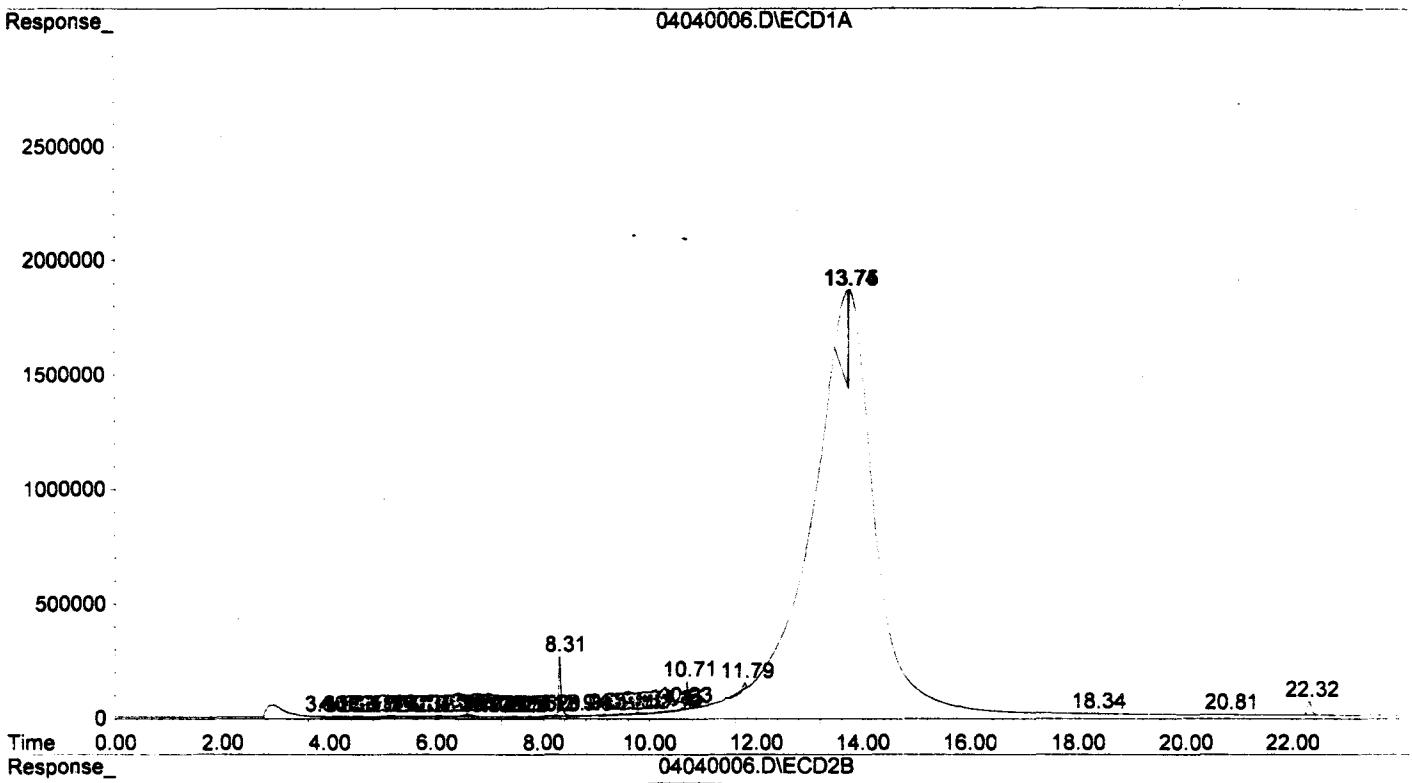
Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Mon Feb 21 16:36:52 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

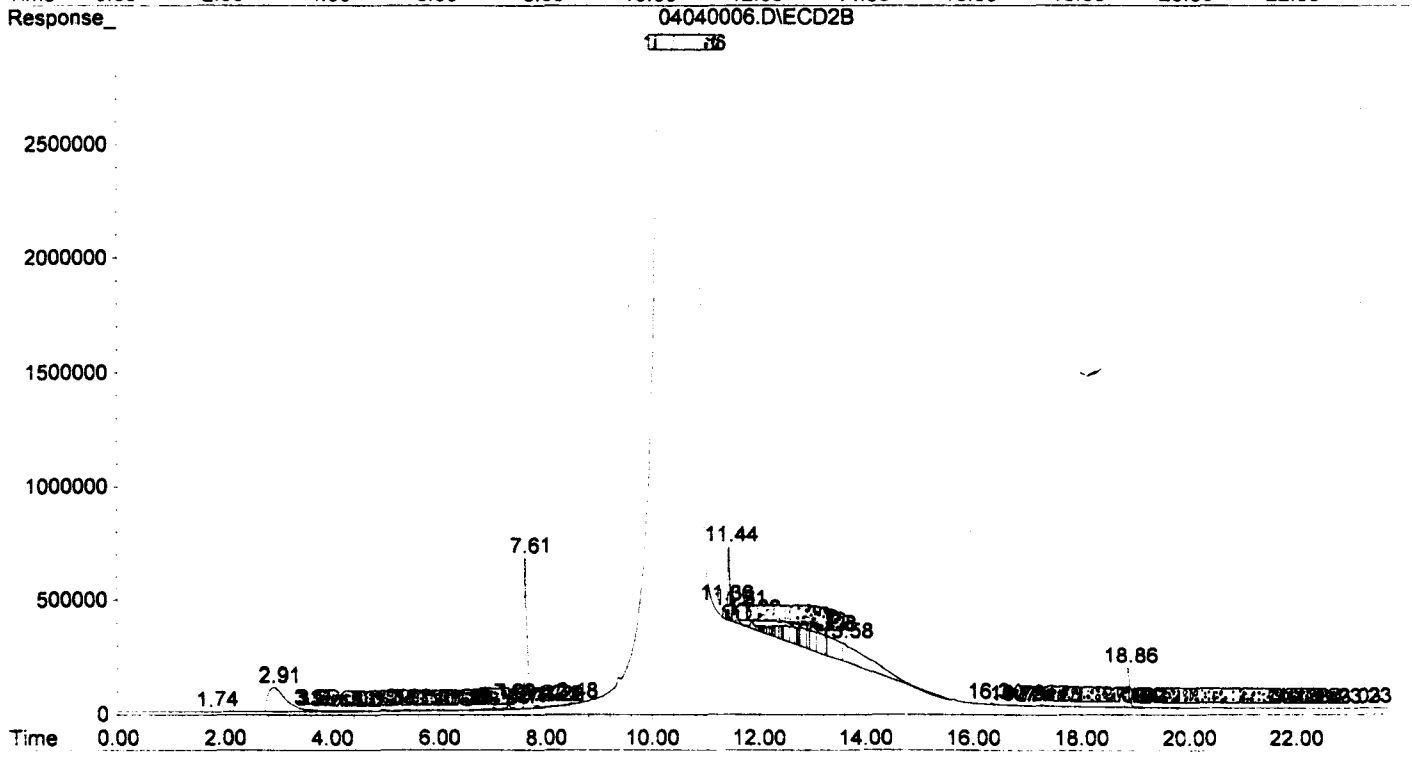
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



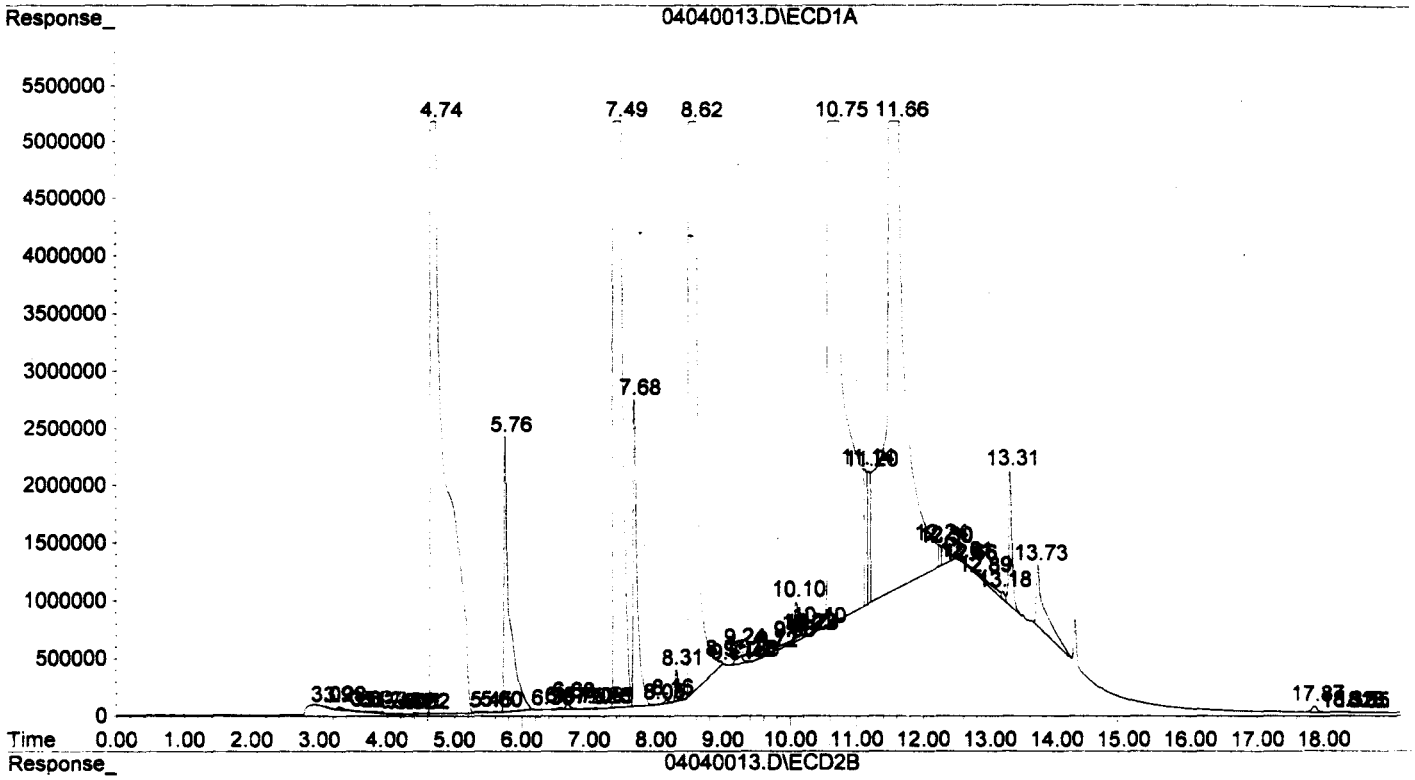


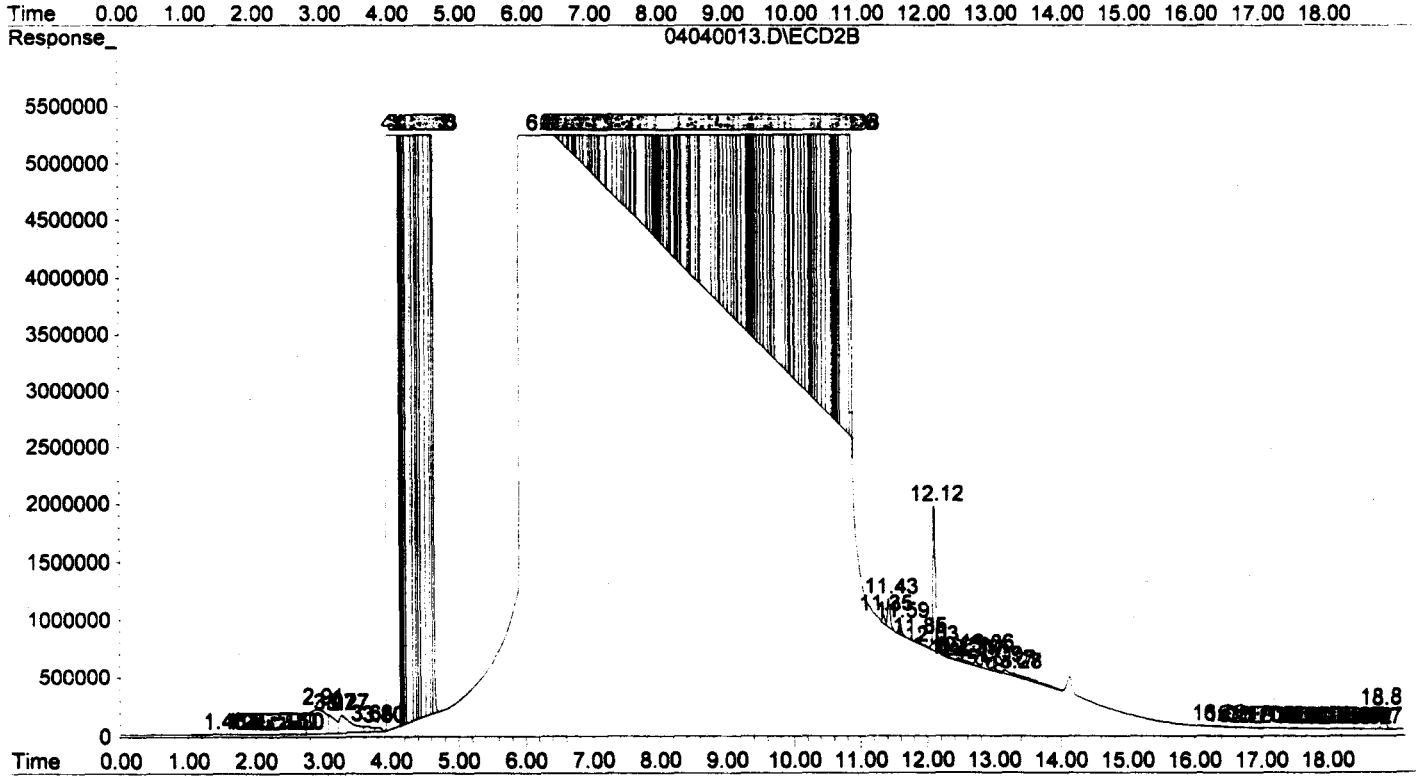
File : C:\HPCHEM\2\DATA\040400\04040006.D
Operator : YGK
Acquired : 5 Apr 2000 1:12 pm using AcqMethod 8151D7.M
Instrument : GC/ECD In
Sample Name: 90038 W Scan
Misc Info :
Vial Number: 6



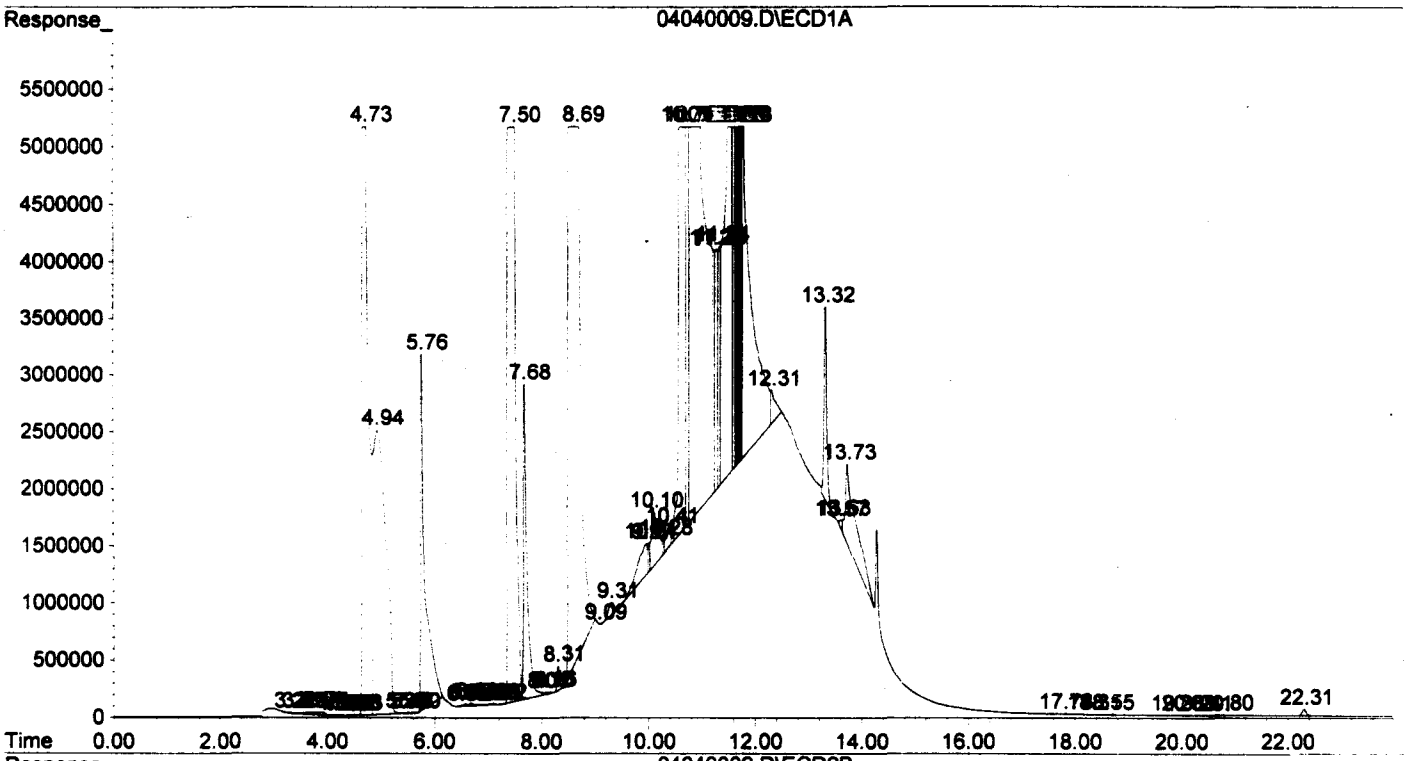


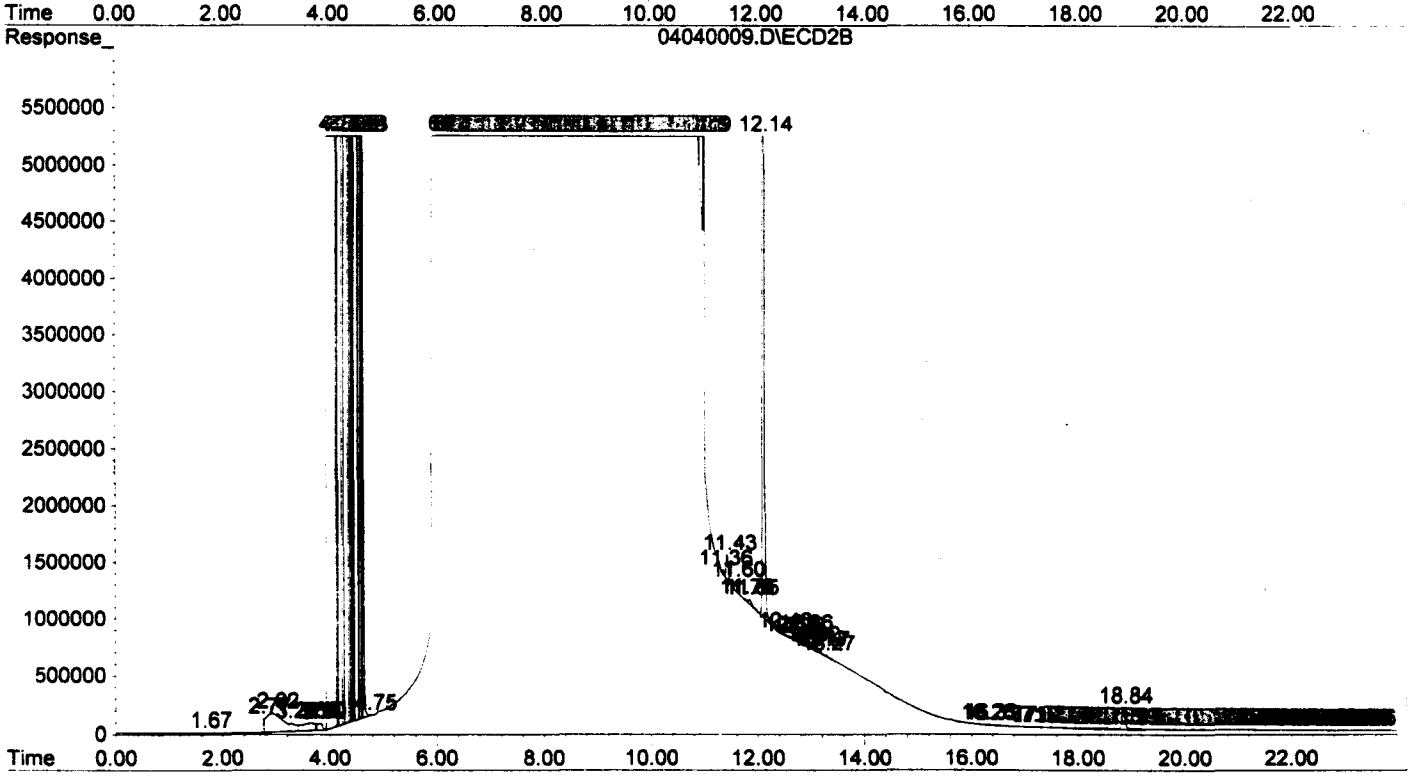
File : C:\HPCHEM\2\DATA\040400\04040013.D
Operator : YGK
Acquired : 5 Apr 2000 4:19 pm using AcqMethod 8151D7.M
Instrument : GC/ECD In
Sample Name: 90043 W Scan
Misc Info :
Vial Number: 13





File : C:\HPCHEM\2\DATA\040400\04040009.D
Operator : YGK
Acquired : 5 Apr 2000 2:37 pm using AcqMethod 8151D7.M
Instrument : GC/ECD In
Sample Name: 90040 W Scan
Misc Info :
Vial Number: 9





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\040500\04050011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\040500\04050011.D\ECD2B.CH
Acq On : 5 Apr 2000 2:44 pm Operator: YGK
Sample : 90038 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:59 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.21	7.92	13526720	16781737	0.199	0.233	
		Spiked Amount 0.250			Recovery	=	79.60% ✓	93.20%	
22)	S	DCB (SURR)	21.01	21.45	4131178	4179996	0.073	0.065	
		Spiked Amount 0.250			Recovery	=	29.20% ✓	26.00%	
		Target Compounds							
2)	T	A-BHC	9.75	9.61	530099	915328	0.005	0.008	#
3)	T	B-BHC	10.85	10.77	6501156	4312026	0.135	0.084	#
4)	T	LINDANE	10.65f	0.00	603775	0	0.006	N.D.	#
5)	T	D-BHC	0.00	11.49	0	165423	N.D.	0.002	#
6)	T	HEPTACHLOR	0.00	11.62	0	35839	N.D.	0.000	#
7)	T	ALDRIN	0.00	12.34	0	9631878	N.D.	0.110	#
8)	T	HEPT.EPOXIDE	14.02f	13.65	4683817	398.9E6	0.065	4.999	#
9)	T	ENDOSULFAN 1	14.82	14.55	549516	559570	0.008	0.007	
10)	T	GAMMA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
11)	T	ALFA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.82f	0.00	549516	0	0.008	N.D.	#
13)	T	DIELDRIN	0.00	0.00	0	0	N.D.	N.D.	
14)	T	ENDRIN	0.00	15.75f	0	2000164	N.D.	0.031	#
15)	T	DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	ENDOSULFAN 2	0.00	0.00	0	0	N.D.	N.D.	
17)	T	ENDRIN ALDEHYDE	17.30	0.00	39334	0	0.001	N.D.	#
18)	T	DDT	16.58f	0.00	1401255	0	0.023	N.D.	#
19)	T	ENDOS.SULFATE	18.24	0.00	6383	0	0.000	N.D.	#
20)	T	METHOXYCHLOR	17.66	0.00	10628	0	0.000	N.D.	#
21)	T	ENDRIN KETONE	18.91f	18.72	109557	78580	0.002	0.001	#

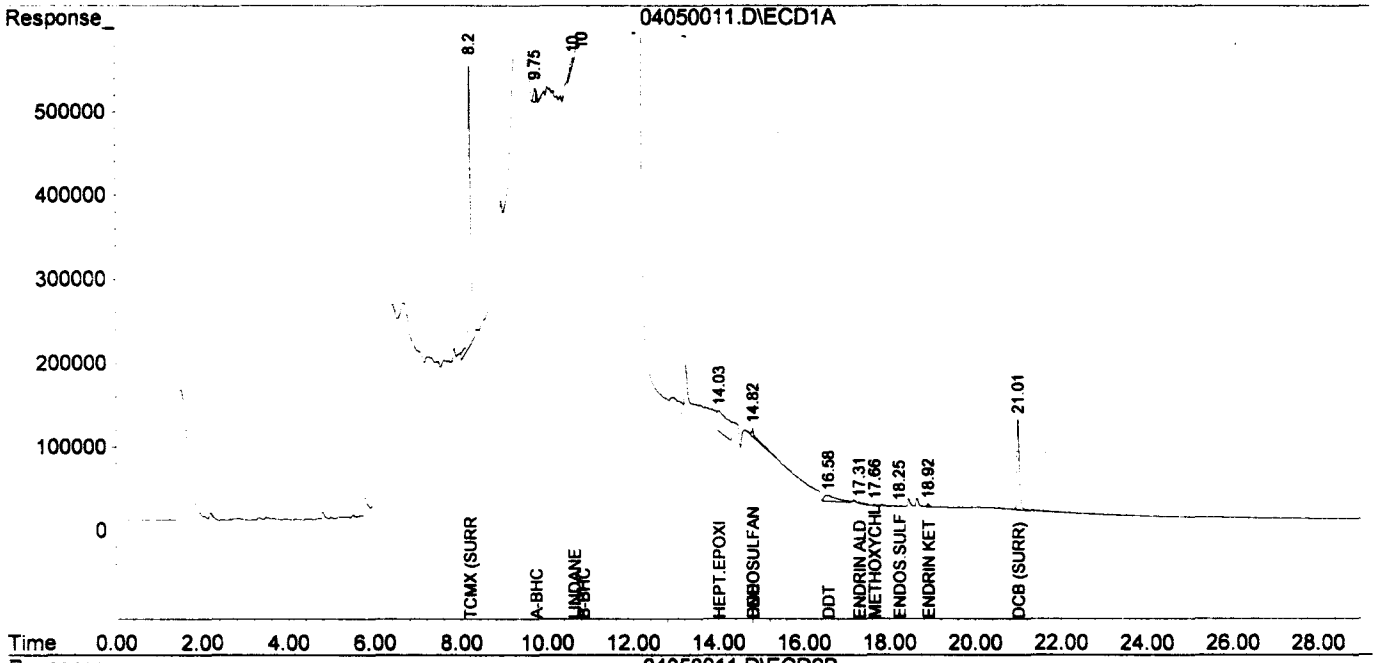
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

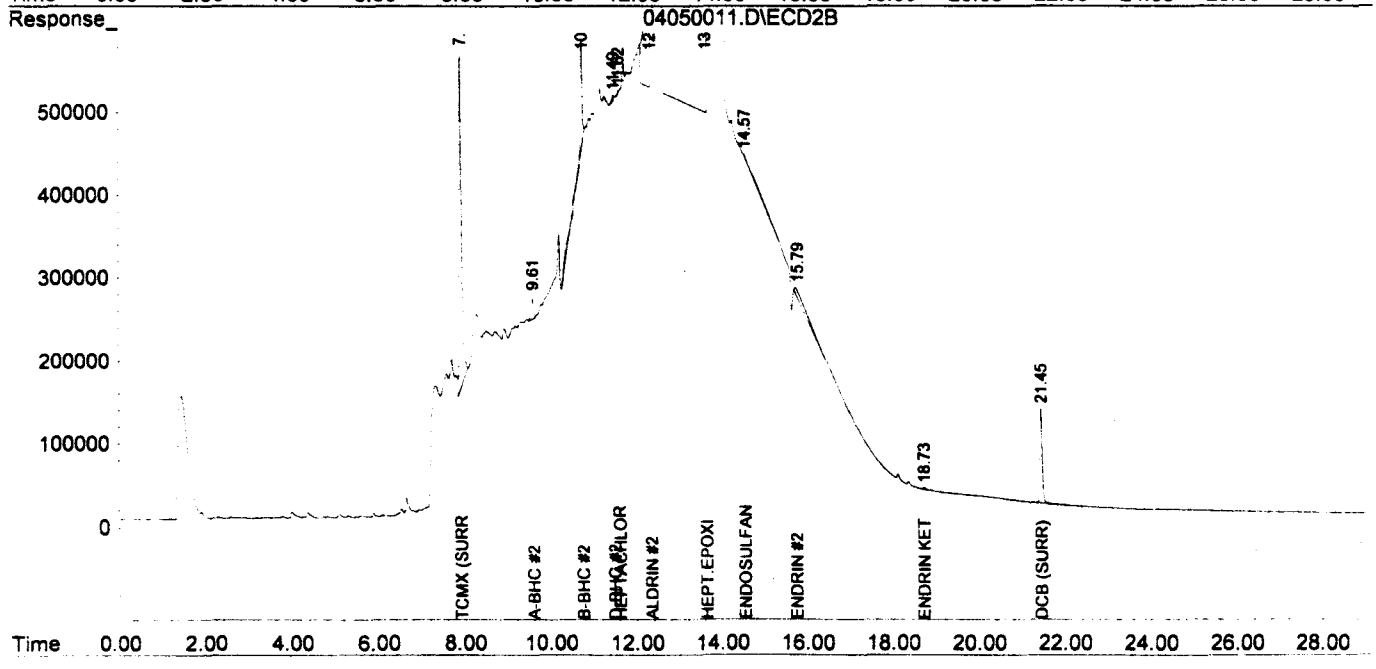
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\040500\04050011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\040500\04050011.D\ECD2B.CH
Acq On : 5 Apr 2000 2:44 pm Operator: YGK
Sample : 90038 W Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 6 10:59 2000 Quant Results File: 022100P.RES

Quant Method : C:\HPCHEM\1\METHODS\022100P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (02/21/00)
Last Update : Tue Feb 22 16:44:36 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Checklist

Project #: 24074 **Instrument Used:** Trace ICAP/ICAP/GFAA/FIMS Hg

Reviewer Questions

1. Is the ICV within ± 10% for 6010B, or 5% for 200.7? _____
2. For Hg and GFAA, is the curve acceptable, (>0.995 correlation coefficient)? _____
3. Verified the correct dates and times are entered. _____
4. Verified the sample results reported with the proper significant figures in the logbook and in the LIMS. _____
5. Verified all dilution factors are taken into account for the calculation. _____
6. Verified the RDL is correct according to dilutions and reported with the correct significant figures. _____

Analyst Questions

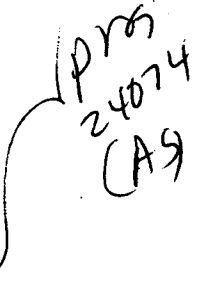
7. Is the Blank <1/2 RDL? yes If not, has the RDL been raised or the samples reanalyzed? _____
8. Are the LCS/LCSD within limits? yes If not, why, or are the samples being reanalyzed? _____
9. Duplicate AAI. sample number 90044
   Is the RPD acceptable? yes If not, what is the reason? _____
10. MS/MSD AAI. sample number 90044
    Are the recoveries acceptable? yes If not, what is the reason? _____
11. Sample numbers requiring dilution? _____
    Reason for dilution. _____
12. Are all special requirements on project sheet completed? _____ If unable to complete, has the project manager been notified? _____
13. Any additional comments. _____

Analyst entering results in Labworks. bro Date: 4/10/00

Peer Reviewer: _____ Date: _____

Peer reviewer is responsible for reviewing all above questions

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1-Blank	APR0700	WATERS	04/07/00	11:46		X	IR
2	STD8	APR0700	WATERS	04/07/00	11:55		X	IR
3	STD3	APR0700	WATERS	04/07/00	11:59		X	IR
4	STD4	APR0700	WATERS	04/07/00	12:04		X	IR
5	STD2	APR0700	WATERS	04/07/00	12:10		X	IR
6	icv 1	APR0700	WATERS	04/07/00	12:31	sch	Q	CONC
7	icv 2	APR0700	WATERS	04/07/00	12:39	sch	Q	CONC
8	icb	APR0700	WATERS	04/07/00	12:47	sch	B	CONC
9	ss i	APR0700	WATERS	04/07/00	12:54	sch	Q	CONC
10	ss i low	APR0700	WATERS	04/07/00	13:01	sch	Q	CONC
11	ics a	APR0700	WATERS	04/07/00	13:08	sch	Q	CONC
12	ics ab	APR0700	WATERS	04/07/00	13:16	sch	Q	CONC
13	89866 rtl	APR0700	WATERS	04/07/00	13:23	sch	S	CONC
14	prepblk 1000	APR0700	WATERS	04/07/00	13:30	sch	S	CONC
15	lcs 040500a	APR0700	WATERS	04/07/00	13:37	sch	S	CONC
16	lcsd 040500a	APR0700	WATERS	04/07/00	13:44	sch	S	CONC
17	90157	APR0700	WATERS	04/07/00	13:51	sch	S	CONC
18	90161	APR0700	WATERS	04/07/00	13:58	sch	S	CONC
19	90032	APR0700	WATERS	04/07/00	14:04	sch	S	CONC
20	90038	APR0700	WATERS	04/07/00	14:11	sch	S	CONC
21	90039	APR0700	WATERS	04/07/00	14:18	sch	S	CONC
22	90040	APR0700	WATERS	04/07/00	14:25	sch	S	CONC
23	icv 1	APR0700	WATERS	04/07/00	14:32	sch	Q	CONC
24	icv 2	APR0700	WATERS	04/07/00	14:39	sch	Q	CONC
25	icb	APR0700	WATERS	04/07/00	14:47	sch	B	CONC
26	90041	APR0700	WATERS	04/07/00	14:54	sch	S	CONC
27	90042	APR0700	WATERS	04/07/00	15:00	sch	S	CONC
28	90043	APR0700	WATERS	04/07/00	15:07	sch	S	CONC
29	90044	APR0700	WATERS	04/07/00	15:14	sch	S	CONC
30	90044 d	APR0700	WATERS	04/07/00	15:21	sch	S	CONC
31	90044 ms	APR0700	WATERS	04/07/00	15:28	sch	S	CONC
32	90044 msd	APR0700	WATERS	04/07/00	15:35	sch	S	CONC
33	90157 1:4sd	APR0700	WATERS	04/07/00	15:42	sch	S	CONC
34	90157 1:1msa	APR0700	WATERS	04/07/00	15:48	sch	S	CONC
35	icv 1	APR0700	WATERS	04/07/00	15:55	sch	Q	CONC
36	icv 2	APR0700	WATERS	04/07/00	16:03	sch	Q	CONC
37	icb	APR0700	WATERS	04/07/00	16:10	sch	B	CONC
38	ss i	APR0700	WATERS	04/07/00	16:17	sch	Q	CONC
39	ss i low	APR0700	WATERS	04/07/00	16:24	sch	Q	CONC
40	ics a	APR0700	WATERS	04/07/00	16:31	sch	Q	CONC
41	ics ab	APR0700	WATERS	04/07/00	16:40	sch	Q	CONC



#	Element	STD'lank	STD8	STD3	STD4	STD2	icv 1
1	Ag3280	-.00056	.99545				Q.2111
2	Al3082	.03399		.08987			Q.0566
3	As1890	.00032			.67048		.2018
4	Ba4934	.00005				1.85456	.2062
5	Be3130	-.00319		3.3783			.1978
6	Ca3179	.00259				.08823	Q.1838
7	Cd2265	-.00033				2.18635	.2020
8	Co2286	-.00026				1.25086	.2013
9	Cr2677	.00034			.83243		.1989
10	Cu3247	.00992				.62812	.1993
11	Fe2714	.00031		.04215			Q.2276
12	K_7664	.04652				.15224	2.015
13	Mg2790	.00002				.0635	.1916
14	Mn2576	.00064				.97213	.2010
15	Ni2316	-.0007		.88581			.1986
16	2203/1	.00259				3.33849	.2002
17	2203/2	-.00176				3.41751	.2043
18	1960/1	-.00242			2.25667		.2001
19	1960/2	.00071			1.14313		.2025
20	Sb2068	.00095		.54251			Q.1856
21	Sn1899	.00037		.37556			.1966
22	Tl1908	-.00109		.15898			.2032
23	V_2924	-.00044			.33162		.1956
24	Zn2062	.00029				.42393	.1999
25	Pb2203						.2018
26	Se1960						.2011

#	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
1	Ag3280	Q1.068	.0007	Q.0020	.0014	-.0006	.3212
2	Al3082	Q.8651	L-.2694	Q-.2531	-.2820	59.98	Q60.82
3	As1890	.9747	.0027	.0450	.0118	-.0029	1.002
4	Ba4934	.9882	.0003	.0408	.0114	.0011	.3106
5	Be3130	.9701	.0003	.0012	.0004	.0001	.1012
6	Ca3179	Q1.105	-.0141	.0421	.0107	50.24	50.54
7	Cd2265	.9959	.0008	Q.0018	.0004	-.0027	.3034
8	Co2286	.9862	.0008	.0111	Q.0032	.0005	.3055
9	Cr2677	.9761	-.0006	.0038	Q.0014	-.0004	.3005
10	Cu3247	1.021	-.0018	Q.0028	-.0010	.0001	.3248
11	Fe2714	Q1.070	-.0009	Q.0398	.0197	50.04	50.52
12	K_7664	10.45	.0415	.1015	.0788	.0108	Q26.61
13	Mg2790	.9544	.0010	.0005	.0000	52.24	52.60
14	Mn2576	.9847	-.0001	.0096	.0023	.0033	.2087
15	Ni2316	.9709	-.0006	.0093	.0026	-.0002	.2993
16	2203/1	.9939	.0012	.0093	.0014	.0035	1.053
17	2203/2	.9841	.0017	.0115	.0058	.0000	1.041
18	1960/1	.9340	.0005	.0407	.0103	-.0087	.4953
19	1960/2	.9554	-.0018	.0356	.0074	.0055	.5079
20	Sb2068	Q.9385	-.0006	Q.0067	.0008	-.0030	Q.1024
21	Sn1899	.9505	-.0029	-.0013	.0020	.0014	Q.0989
22	Tl1908	.9923	H.0010	.0413	.0086	.0053	1.027
23	V_2924	.9564	.0005	.0101	.0027	.0014	.2992

#	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
24	Zn2062	.9995	-.0005	.0112	.0023	.0022	.3054
25	Pb2203	.9909	.0016	.0103	Q.0031	.0026	1.050
26	Se1960	Q.9413	-.0001	.0392	.0096	-.0038	.4997

#	Element	898' rtl	pre'1000 13:30	lcs'500a	lcs'500a	90157	90161
1	Ag3280	-.0017	.0007	1.077	1.102	.0009	.0003
2	Al3082	69.95	-.2016	.9803	1.015	5.069	1.645
3	As1890	.0027	.0021	1.053	1.070	.0067	.0013
4	Ba4934	.5700	.0003	1.044	1.066	.0437	.0286
5	Be3130	.0017	.0001	1.042	1.063	.0004	.0003
6	Ca3179	79.09	.0403	1.089	1.118	15.29	13.33
7	Cd2265	-.0045	.0004	1.053	1.074	.0003	-.0003
8	Co2286	.0385	-.0004	1.060	1.083	.0017	.0013
9	Cr2677	.0601	.0002	1.031	1.051	.0069	.0033
10	Cu3247	.0594	-.0030	1.095	1.119	.0330	.0104
11	Fe2714	76.15	.0265	1.224	1.165	4.222	4.646
12	K_7664	48.61	.1597	10.77	11.11	6.096	4.165
13	Mg2790	30.45	.0100	1.001	1.022	2.707	1.806
14	Mn2576	1.766	.0015	1.052	1.074	.0904	.1914
15	Ni2316	.0180	-.0012	1.007	1.025	.0020	.0021
16	2203/1	.0126	.0038	1.064	1.097	.0168	.0095
17	2203/2	.0073	.0006	1.054	1.080	.0173	.0095
18	1960/1	-.0149	-.0079	.9833	1.000	-.0056	-.0065
19	1960/2	.0088	.0004	1.004	1.019	.0007	.0050
20	Sb2068	-.0024	.0019	.9885	1.006	.0022	-.0002
21	Sn1899	-.0005	-.0024	2.052	2.102	.0012	.0025
22	Tl1908	.0052	-.0036	1.041	1.072	.0035	-.0047
23	V_2924	.1973	.0008	1.007	1.023	.0112	.0055
24	Zn2062	.1664	.0043	1.068	1.086	.0997	.0846
25	Pb2203	.0111	.0030	1.061	1.092	.0172	.0097
26	Se1960	-.0068	-.0049	.9905	1.007	-.0033	-.0025

#	Element	90032	90038 14:11	90039 14:18	90040 14:25	icv 1	icv 2
1	Ag3280	.0018	.0008	.0011	.0011	.2105	1.041
2	Al3082	9.135	-.1913	-.0473	-.0732	Q.0683	Q1.091
3	As1890	.0062	.0332	.0030	.0204	.2030	.9695
4	Ba4934	.1041	.0179	.0065	.0049	.2015	.9478
5	Be3130	.0062	.0002	.0001	.0004	.2020	.9670
6	Ca3179	57.41	111.3	73.43	73.92	.2053	Q1.090
7	Cd2265	.0005	-.0001	-.0002	-.0001	.2020	.9711
8	Co2286	.0386	-.0002	.0001	.0007	.2048	.9781
9	Cr2677	.0007	.0007	.0010	.0051	.1995	.9603
10	Cu3247	-.0107	-.0055	-.0041	-.0055	.1978	1.019
11	Fe2714	6.129	.3434	1.159	.2777	Q.2351	Q1.063
12	K_7664	6.717	35.09	1.817	132.0	1.991	9.958
13	Mg2790	16.24	34.35	2.178	104.3	.2060	Q.9231
14	Mn2576	30.71	.0937	.1335	.0126	.2044	.9757
15	Ni2316	.0135	-.0008	-.0008	-.0001	.1952	Q.9379
16	2203/1	.0020	.0023	-.0034	.0008	.2049	1.006
17	2203/2	.0043	.0073	.0029	.0010	.2102	.9879

#	Element	90032	90038	90039	90040	icv 1	icv 2
18	1960/1	.0071	-.0097	-.0059	-.0037	.2065	.9383
19	1960/2	-.0003	-.0010	.0015	.0006	.2011	.9515
20	Sb2068	-.0026	-.0007	.0006	-.0023	Q.1827	Q.9051
21	Sn1899	-.0033	.0030	-.0003	-.0010	.2074	.9618
22	Tl1908	.0462	.0059	-.0038	-.0016	.2098	.9844
23	V_2924	.0017	.0019	.0018	.0068	.1969	Q.9340
24	Zn2062	.2368	.0143	.0230	.0060	.2015	.9804
25	Pb2203	.0029	.0043	-.0011	.0011	.2069	1.000
26	Se1960	.0047	-.0066	-.0032	-.0021	.2049	Q.9429

#	Element	icb	90041	90042	90043	90044	90044 d
			14:54	15:00	15:07	15:14	
1	Ag3280	.0005	.0006	.0008	.0003	.0001	.0002
2	Al3082	L-.1531	-.1252	-.0945	-.0898	-.1006	-.1111
3	As1890	.0018	.0023	-.0002	.0110	.0004	-.0010
4	Ba4934	.0002	.0090	.0049	.0047	.0003	.0002
5	Be3130	.0004	.0002	.0002	.0004	.0001	.0002
6	Ca3179	-.0157	75.91	92.20	70.48	.0860	.0826
7	Cd2265	.0005	-.0001	-.0001	-.0003	-.0004	-.0000
8	Co2286	.0003	.0003	-.0008	.0005	-.0006	.0000
9	Cr2677	.0001	.0000	.0005	.0048	-.0005	-.0000
10	Cu3247	L-.0060	-.0055	-.0059	-.0075	-.0070	-.0066
11	Fe2714	-.0092	.8330	.1022	.1349	.0381	.0158
12	K_7664	.0380	.5262	2.372	135.4	.0816	.0526
13	Mg2790	.0002	2.400	4.152	104.4	.0127	.0071
14	Mn2576	-.0001	.0089	.0260	.0114	.0001	-.0002
15	Ni2316	-.0003	-.0010	-.0022	.0007	-.0027	-.0012
16	2203/1	-.0025	-.0008	-.0007	-.0034	-.0019	-.0033
17	2203/2	.0005	-.0000	.0019	.0024	.0041	.0036
18	1960/1	.0018	-.0007	-.0002	-.0041	-.0098	-.0073
19	1960/2	-.0023	.0005	-.0027	.0004	.0023	.0024
20	Sb2068	-.0017	.0054	.0026	-.0051	-.0032	-.0011
21	Sn1899	-.0004	-.0047	.0025	.0005	.0005	-.0006
22	Tl1908	H.0018	-.0001	-.0053	.0019	-.0024	-.0014
23	V_2924	.0011	.0022	.0021	.0060	.0008	.0006
24	Zn2062	-.0008	.0371	.0287	.0482	.0052	.0151
25	Pb2203	-.0013	-.0003	.0004	-.0012	.0004	-.0008
26	Se1960	.0006	-.0001	-.0008	-.0024	-.0056	-.0039

#	Element	90044 ms	900' msd	901':4sd	901'1msa	icv 1	icv 2
1	Ag3280	1.421	1.060	.0045	.2096	.2070	1.041
2	Al3082	1.462	1.079	3.942	5.233	Q.1257	Q1.097
3	As1890	1.047	1.052	-.0165	.1963	.2036	.9770
4	Ba4934	1.364	1.016	.0408	.2430	.1988	Q.9436
5	Be3130	1.048	1.045	.0030	.2022	.2017	.9803
6	Ca3179	1.119	1.098	13.99	15.29	Q.1790	Q1.088
7	Cd2265	1.042	1.034	.0025	.1992	.1992	.9721
8	Co2286	1.063	1.060	.0064	.2063	.2035	.9911
9	Cr2677	1.025	1.020	.0048	.2039	.1978	.9650
10	Cu3247	1.108	1.105	-.0058	.2368	.1971	1.038
11	Fe2714	1.143	1.138	3.895	4.410	Q.2281	Q1.061

#	Element	90044 ms	900' msd	901':4sd	901'1msa	icv 1	icv 2
12	K_7664	14.29	10.59	4.567	7.745	1.891	10.05
13	Mg2790	.9773	.9680	2.414	2.818	.1916	Q.9189
14	Mn2576	1.052	1.049	.0821	.2928	.2027	.9873
15	Ni2316	.9820	.9761	-.0013	.1926	.1922	Q.9293
16	2203/1	1.083	1.079	.0002	.2205	.2078	1.026
17	2203/2	1.062	1.054	.0227	.2164	.2032	.9959
18	1960/1	.9866	.9855	.0185	.1997	.2058	.9604
19	1960/2	1.006	1.005	-.0038	.1936	.2022	.9634
20	Sb2068	.9677	.9615	.0000	.1827	Q.1801	Q.9084
21	Sn1899	2.072	2.073	.0013	.2017	.2027	.9803
22	Tl1908	1.035	1.042	.0154	.2106	.2000	.9844
23	V_2924	.9956	.9901	.0161	.2049	.1941	Q.9362
24	Zn2062	1.062	1.060	.0825	.2891	.1994	.9847
25	Pb2203	1.076	1.071	.0089	.2196	.2065	1.016
26	Se1960	.9932	.9924	.0120	.1981	.2048	.9616

#	Element	icb	ss i	ss i low	ics a	ics ab	
1	Ag3280	.0009	Q.0016	.0012	-.0006	.3154	
2	Al3082	L-.1023	Q-.0051	-.0657	57.71	59.17	
3	As1890	.0010	.0408	.0087	-.0015	1.018	
4	Ba4934	.0003	.0394	.0110	.0012	.3021	
5	Be3130	.0005	Q.0015	.0006	.0003	.1033	
6	Ca3179	-.0206	.0367	.0040	49.89	50.51	
7	Cd2265	.0003	Q.0015	.0006	-.0034	.2989	
8	Co2286	.0009	.0108	Q.0036	.0007	.3107	
9	Cr2677	-.0002	.0041	.0010	.0004	.3004	
10	Cu3247	L-.0082	Q-.0034	-.0073	-.0058	.3297	
11	Fe2714	-.0045	Q.0276	.0046	50.32	51.01	
12	K_7664	.0223	.0970	.0032	.0617	Q26.15	
13	Mg2790	-.0018	-.0005	.0000	50.74	51.56	
14	Mn2576	-.0001	.0098	.0022	.0035	.2112	
15	Ni2316	-.0001	.0103	.0022	-.0008	.2900	
16	2203/1	-.0000	.0138	.0010	.0016	1.084	
17	2203/2	.0021	.0076	.0029	-.0009	1.053	
18	1960/1	-.0010	.0391	.0137	-.0082	.5105	
19	1960/2	-.0024	.0391	.0100	-.0003	.5123	
20	Sb2068	-.0011	Q.0079	.0025	-.0025	Q.0994	
21	Sn1899	.0024	.0004	.0012	-.0007	Q.1094	
22	Tl1908	H.0052	.0402	Q.0185	.0028	1.032	
23	V_2924	.0010	.0108	Q.0041	.0023	.2971	
24	Zn2062	-.0011	.0119	.0025	.0022	.3044	
25	Pb2203	.0009	Q.0120	Q.0019	.0010	1.074	
26	Se1960	-.0013	.0393	Q.0126	-.0054	.5113	

TRACE

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Digestion Log for Waters

Date: 04.05.00
Analyst: RL/LS
Time Started: 10:00
Time Ended: _____
Matrix: Water

BATCH #: 040500A
HNO_3 Acid Lot # _____
1:1 HCL Acid Lot # _____
Digestion Method: 3010A
Hot Plate Temp: _____

QCS 19 Lot #: M99164 Amount: _____
QCS 7 Lot #: M99165 Amount: _____
ICV Sn Lot #: M99128 Amount: _____
Sample Vials Lot #: _____

AAL #	Sample Volume (mL)	Conc. HNO_3	1:1 HCL	Final Volume	Dilution	Spikes Added QCS 19	QCS 7	ICV Sn	Comments
Blank									
LCS									
LCSD									
90157									24090-A Pb, Zn, Ni, Cu, Cd
90161									24091-B Pb, Zn, Ni, Cu, Cd
90032									24071 — Zn
90038									24094 — As
90039									
90040									
90041									
90042									
90043									
90044									
90044D									
90044MS									
90044MSD									

9500

Reviewed By: _____

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1-Blank	APR0700	WATERS	04/07/00	11:46		X	IR
2	STD8	APR0700	WATERS	04/07/00	11:55		X	IR
3	STD3	APR0700	WATERS	04/07/00	11:59		X	IR
4	STD4	APR0700	WATERS	04/07/00	12:04		X	IR
5	STD2	APR0700	WATERS	04/07/00	12:10		X	IR
6	icv 1	APR0700	WATERS	04/07/00	12:31	sch	Q	CONC
7	icv 2	APR0700	WATERS	04/07/00	12:39	sch	Q	CONC
8	icb	APR0700	WATERS	04/07/00	12:47	sch	B	CONC
9	ss i	APR0700	WATERS	04/07/00	12:54	sch	Q	CONC
10	ss i low	APR0700	WATERS	04/07/00	13:01	sch	Q	CONC
11	ics a	APR0700	WATERS	04/07/00	13:08	sch	Q	CONC
12	ics ab	APR0700	WATERS	04/07/00	13:16	sch	Q	CONC
13	89866 rtl	APR0700	WATERS	04/07/00	13:23	sch	S	CONC
14	prepblk 1000	APR0700	WATERS	04/07/00	13:30	sch	S	CONC
15	lcs 040500a	APR0700	WATERS	04/07/00	13:37	sch	S	CONC
16	lcsd 040500a	APR0700	WATERS	04/07/00	13:44	sch	S	CONC
17	90157	APR0700	WATERS	04/07/00	13:51	sch	S	CONC
18	90161	APR0700	WATERS	04/07/00	13:58	sch	S	CONC
19	90032	APR0700	WATERS	04/07/00	14:04	sch	S	CONC
20	90038	APR0700	WATERS	04/07/00	14:11	sch	S	CONC
21	90039	APR0700	WATERS	04/07/00	14:18	sch	S	CONC
22	90040	APR0700	WATERS	04/07/00	14:25	sch	S	CONC
23	icv 1	APR0700	WATERS	04/07/00	14:32	sch	Q	CONC
24	icv 2	APR0700	WATERS	04/07/00	14:39	sch	Q	CONC
25	icb	APR0700	WATERS	04/07/00	14:47	sch	B	CONC
26	90041	APR0700	WATERS	04/07/00	14:54	sch	S	CONC
27	90042	APR0700	WATERS	04/07/00	15:00	sch	S	CONC
28	90043	APR0700	WATERS	04/07/00	15:07	sch	S	CONC
29	90044	APR0700	WATERS	04/07/00	15:14	sch	S	CONC
30	90044 d	APR0700	WATERS	04/07/00	15:21	sch	S	CONC
31	90044 ms	APR0700	WATERS	04/07/00	15:28	sch	S	CONC
32	90044 msd	APR0700	WATERS	04/07/00	15:35	sch	S	CONC
33	90157 1:4sd	APR0700	WATERS	04/07/00	15:42	sch	S	CONC
34	90157 1:1msa	APR0700	WATERS	04/07/00	15:48	sch	S	CONC
35	icv 1	APR0700	WATERS	04/07/00	15:55	sch	Q	CONC
36	icv 2	APR0700	WATERS	04/07/00	16:03	sch	Q	CONC
37	icb	APR0700	WATERS	04/07/00	16:10	sch	B	CONC
38	ss i	APR0700	WATERS	04/07/00	16:17	sch	Q	CONC
39	ss i low	APR0700	WATERS	04/07/00	16:24	sch	Q	CONC
40	ics a	APR0700	WATERS	04/07/00	16:31	sch	Q	CONC
41	ics ab	APR0700	WATERS	04/07/00	16:40	sch	Q	CONC

#	Element	STD'lank	STD8	STD3	STD4	STD2	icv 1
1	Ag3280	-.00056	.99545				Q.2111
2	Al3082	.03399		.08987			Q.0566
3	As1890	.00032			.67048		.2018
4	Ba4934	.00005				1.85456	.2062
5	Be3130	-.00319		3.3783			.1978
6	Ca3179	.00259				.08823	Q.1838
7	Cd2265	-.00033				2.18635	.2020
8	Co2286	-.00026				1.25086	.2013
9	Cr2677	.00034			.83243		.1989
10	Cu3247	.00992				.62812	.1993
11	Fe2714	.00031		.04215			Q.2276
12	K_7664	.04652				.15224	2.015
13	Mg2790	.00002				.0635	.1916
14	Mn2576	.00064				.97213	.2010
15	Ni2316	-.0007		.88581			.1986
16	2203/1	.00259				3.33849	.2002
17	2203/2	-.00176				3.41751	.2043
18	1960/1	-.00242			2.25667		.2001
19	1960/2	.00071			1.14313		.2025
20	Sb2068	.00095		.54251			Q.1856
21	Sn1899	.00037		.37556			.1966
22	Tl1908	-.00109		.15898			.2032
23	V_2924	-.00044			.33162		.1956
24	Zn2062	.00029				.42393	.1999
25	Pb2203						.2018
26	Se1960						.2011

#	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
1	Ag3280	Q1.068	.0007	Q.0020	.0014	-.0006	.3212
2	Al3082	Q.8651	L-.2694	Q-.2531	-.2820	59.98	Q60.82
3	As1890	.9747	.0027	.0450	.0118	-.0029	1.002
4	Ba4934	.9882	.0003	.0408	.0114	.0011	.3106
5	Be3130	.9701	.0003	.0012	.0004	.0001	.1012
6	Ca3179	Q1.105	-.0141	.0421	.0107	50.24	50.54
7	Cd2265	.9959	.0008	Q.0018	.0004	-.0027	.3034
8	Co2286	.9862	.0008	.0111	Q.0032	.0005	.3055
9	Cr2677	.9761	-.0006	.0038	Q.0014	-.0004	.3005
10	Cu3247	1.021	-.0018	Q.0028	-.0010	.0001	.3248
11	Fe2714	Q1.070	-.0009	Q.0398	.0197	50.04	50.52
12	K_7664	10.45	.0415	.1015	.0788	.0108	Q26.61
13	Mg2790	.9544	.0010	.0005	.0000	52.24	52.60
14	Mn2576	.9847	-.0001	.0096	.0023	.0033	.2087
15	Ni2316	.9709	-.0006	.0093	.0026	-.0002	.2993
16	2203/1	.9939	.0012	.0093	.0014	.0035	1.053
17	2203/2	.9841	.0017	.0115	.0058	.0000	1.041
18	1960/1	.9340	.0005	.0407	.0103	-.0087	.4953
19	1960/2	.9554	-.0018	.0356	.0074	.0055	.5079
20	Sb2068	Q.9385	-.0006	Q.0067	.0008	-.0030	Q.1024
21	Sn1899	.9505	-.0029	-.0013	.0020	.0014	Q.0989
22	Tl1908	.9923	H.0010	.0413	.0086	.0053	1.027
23	V_2924	.9564	.0005	.0101	.0027	.0014	.2992

#	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
24	Zn2062	.9995	-.0005	.0112	.0023	.0022	.3054
25	Pb2203	.9909	.0016	.0103	Q.0031	.0026	1.050
26	Se1960	Q.9413	-.0001	.0392	.0096	-.0038	.4997

#	Element	898' rtl	pre'1000	lcs'500a	lcs'500a	90157	90161
1	Ag3280	-.0017	.0007	1.077	1.102	.0009	.0003
2	Al3082	69.95	-.2016	.9803	1.015	5.069	1.645
3	As1890	.0027	.0021	1.053	1.070	.0067	.0013
4	Ba4934	.5700	.0003	1.044	1.066	.0437	.0286
5	Be3130	.0017	.0001	1.042	1.063	.0004	.0003
6	Ca3179	79.09	.0403	1.089	1.118	15.29	13.33
7	Cd2265	-.0045	.0004	1.053	1.074	.0003	-.0003
8	Co2286	.0385	-.0004	1.060	1.083	.0017	.0013
9	Cr2677	.0601	.0002	1.031	1.051	.0069	.0033
10	Cu3247	.0594	-.0030	1.095	1.119	.0330	.0104
11	Fe2714	76.15	.0265	1.224	1.165	4.222	4.646
12	K_7664	48.61	.1597	10.77	11.11	6.096	4.165
13	Mg2790	30.45	.0100	1.001	1.022	2.707	1.806
14	Mn2576	1.766	.0015	1.052	1.074	.0904	.1914
15	Ni2316	.0180	-.0012	1.007	1.025	.0020	.0021
16	2203/1	.0126	.0038	1.064	1.097	.0168	.0095
17	2203/2	.0073	.0006	1.054	1.080	.0173	.0095
18	1960/1	-.0149	-.0079	.9833	1.000	-.0056	-.0065
19	1960/2	.0088	.0004	1.004	1.019	.0007	.0050
20	Sb2068	-.0024	.0019	.9885	1.006	.0022	-.0002
21	Sn1899	-.0005	-.0024	2.052	2.102	.0012	.0025
22	Tl1908	.0052	-.0036	1.041	1.072	.0035	-.0047
23	V_2924	.1973	.0008	1.007	1.023	.0112	.0055
24	Zn2062	.1664	.0043	1.068	1.086	.0997	.0846
25	Pb2203	.0111	.0030	1.061	1.092	.0172	.0097
26	Se1960	-.0068	-.0049	.9905	1.007	-.0033	-.0025

#	Element	90032	90038	90039	90040	icv 1	icv 2
1	Ag3280	.0018	.0008	.0011	.0011	.2105	1.041
2	Al3082	9.135	-.1913	-.0473	-.0732	Q.0683	Q1.091
3	As1890	.0062	.0332	.0030	.0204	.2030	.9695
4	Ba4934	.1041	.0179	.0065	.0049	.2015	.9478
5	Be3130	.0062	.0002	.0001	.0004	.2020	.9670
6	Ca3179	57.41	111.3	73.43	73.92	.2053	Q1.090
7	Cd2265	.0005	-.0001	-.0002	-.0001	.2020	.9711
8	Co2286	.0386	-.0002	.0001	.0007	.2048	.9781
9	Cr2677	.0007	.0007	.0010	.0051	.1995	.9603
10	Cu3247	-.0107	-.0055	-.0041	-.0055	.1978	1.019
11	Fe2714	6.129	.3434	1.159	.2777	Q.2351	Q1.063
12	K_7664	6.717	35.09	1.817	132.0	1.991	9.958
13	Mg2790	16.24	34.35	2.178	104.3	.2060	Q.9231
14	Mn2576	30.71	.0937	.1335	.0126	.2044	.9757
15	Ni2316	.0135	-.0008	-.0008	-.0001	.1952	Q.9379
16	2203/1	.0020	.0023	-.0034	.0008	.2049	1.006
17	2203/2	.0043	.0073	.0029	.0010	.2102	.9879

#	Element	90032	90038	90039	90040	icv 1	icv 2
18	1960/1	.0071	-.0097	-.0059	-.0037	.2065	.9383
19	1960/2	-.0003	-.0010	.0015	.0006	.2011	.9515
20	Sb2068	-.0026	-.0007	.0006	-.0023	Q.1827	Q.9051
21	Sn1899	-.0033	.0030	-.0003	-.0010	.2074	.9618
22	Tl1908	.0462	.0059	-.0038	-.0016	.2098	.9844
23	V_2924	.0017	.0019	.0018	.0068	.1969	Q.9340
24	Zn2062	.2368	.0143	.0230	.0060	.2015	.9804
25	Pb2203	.0029	.0043	-.0011	.0011	.2069	1.000
26	Se1960	.0047	-.0066	-.0032	-.0021	.2049	Q.9429

#	Element	icb	90041	90042	90043	90044	90044 d
1	Ag3280	.0005	.0006	.0008	.0003	.0001	.0002
2	Al3082	L-.1531	-.1252	-.0945	-.0898	-.1006	-.1111
3	As1890	.0018	.0023	-.0002	.0110	.0004	-.0010
4	Ba4934	.0002	.0090	.0049	.0047	.0003	.0002
5	Be3130	.0004	.0002	.0002	.0004	.0001	.0002
6	Ca3179	-.0157	75.91	92.20	70.48	.0860	.0826
7	Cd2265	.0005	-.0001	-.0001	-.0003	-.0004	-.0000
8	Co2286	.0003	.0003	-.0008	.0005	-.0006	.0000
9	Cr2677	.0001	.0000	.0005	.0048	-.0005	-.0000
10	Cu3247	L-.0060	-.0055	-.0059	-.0075	-.0070	-.0066
11	Fe2714	-.0092	.8330	.1022	.1349	.0381	.0158
12	K_7664	.0380	.5262	2.372	135.4	.0816	.0526
13	Mg2790	.0002	2.400	4.152	104.4	.0127	.0071
14	Mn2576	-.0001	.0089	.0260	.0114	.0001	-.0002
15	Ni2316	-.0003	-.0010	-.0022	.0007	-.0027	-.0012
16	2203/1	-.0025	-.0008	-.0007	-.0034	-.0019	-.0033
17	2203/2	.0005	-.0000	.0019	.0024	.0041	.0036
18	1960/1	.0018	-.0007	-.0002	-.0041	-.0098	-.0073
19	1960/2	-.0023	.0005	-.0027	.0004	.0023	.0024
20	Sb2068	-.0017	.0054	.0026	-.0051	-.0032	-.0011
21	Sn1899	-.0004	-.0047	.0025	.0005	.0005	-.0006
22	Tl1908	H.0018	-.0001	-.0053	.0019	-.0024	-.0014
23	V_2924	.0011	.0022	.0021	.0060	.0008	.0006
24	Zn2062	-.0008	.0371	.0287	.0482	.0052	.0151
25	Pb2203	-.0013	-.0003	.0004	-.0012	.0004	-.0008
26	Se1960	.0006	-.0001	-.0008	-.0024	-.0056	-.0039

#	Element	90044 ms	900' msd	901':4sd	901'1msa	icv 1	icv 2
1	Ag3280	1.421	1.060	.0045	.2096	.2070	1.041
2	Al3082	1.462	1.079	3.942	5.233	Q.1257	Q1.097
3	As1890	1.047	1.052	-.0165	.1963	.2036	.9770
4	Ba4934	1.364	1.016	.0408	.2430	.1988	Q.9436
5	Be3130	1.048	1.045	.0030	.2022	.2017	.9803
6	Ca3179	1.119	1.098	13.99	15.29	Q.1790	Q1.088
7	Cd2265	1.042	1.034	.0025	.1992	.1992	.9721
8	Co2286	1.063	1.060	.0064	.2063	.2035	.9911
9	Cr2677	1.025	1.020	.0048	.2039	.1978	.9650
10	Cu3247	1.108	1.105	-.0058	.2368	.1971	1.038
11	Fe2714	1.143	1.138	3.895	4.410	Q.2281	Q1.061

#	Element	90044 ms	900' msd	901':4sd	901'1msa	icv 1	icv 2
12	K_7664	14.29	10.59	4.567	7.745	1.891	10.05
13	Mg2790	.9773	.9680	2.414	2.818	.1916	Q.9189
14	Mn2576	1.052	1.049	.0821	.2928	.2027	.9873
15	Ni2316	.9820	.9761	-.0013	.1926	.1922	Q.9293
16	2203/1	1.083	1.079	.0002	.2205	.2078	1.026
17	2203/2	1.062	1.054	.0227	.2164	.2032	.9959
18	1960/1	.9866	.9855	.0185	.1997	.2058	.9604
19	1960/2	1.006	1.005	-.0038	.1936	.2022	.9634
20	Sb2068	.9677	.9615	.0000	.1827	Q.1801	Q.9084
21	Sn1899	2.072	2.073	.0013	.2017	.2027	.9803
22	Tl1908	1.035	1.042	.0154	.2106	.2000	.9844
23	V_2924	.9956	.9901	.0161	.2049	.1941	Q.9362
24	Zn2062	1.062	1.060	.0825	.2891	.1994	.9847
25	Pb2203	1.076	1.071	.0089	.2196	.2065	1.016
26	Se1960	.9932	.9924	.0120	.1981	.2048	.9616

#	Element	icb	ss i	ss i low	ics a	ics ab	
1	Ag3280	.0009	Q.0016	.0012	-.0006	.3154	
2	Al3082	L-.1023	Q-.0051	-.0657	57.71	59.17	
3	As1890	.0010	.0408	.0087	-.0015	1.018	
4	Ba4934	.0003	.0394	.0110	.0012	.3021	
5	Be3130	.0005	Q.0015	.0006	.0003	.1033	
6	Ca3179	-.0206	.0367	.0040	49.89	50.51	
7	Cd2265	.0003	Q.0015	.0006	-.0034	.2989	
8	Co2286	.0009	.0108	Q.0036	.0007	.3107	
9	Cr2677	-.0002	.0041	.0010	.0004	.3004	
10	Cu3247	L-.0082	Q-.0034	-.0073	-.0058	.3297	
11	Fe2714	-.0045	Q.0276	.0046	50.32	51.01	
12	K_7664	.0223	.0970	.0032	.0617	Q26.15	
13	Mg2790	-.0018	-.0005	.0000	50.74	51.56	
14	Mn2576	-.0001	.0098	.0022	.0035	.2112	
15	Ni2316	-.0001	.0103	.0022	-.0008	.2900	
16	2203/1	-.0000	.0138	.0010	.0016	1.084	
17	2203/2	.0021	.0076	.0029	-.0009	1.053	
18	1960/1	-.0010	.0391	.0137	-.0082	.5105	
19	1960/2	-.0024	.0391	.0100	-.0003	.5123	
20	Sb2068	-.0011	Q.0079	.0025	-.0025	Q.0994	
21	Sn1899	.0024	.0004	.0012	-.0007	Q.1094	
22	Tl1908	H.0052	.0402	Q.0185	.0028	1.032	
23	V_2924	.0010	.0108	Q.0041	.0023	.2971	
24	Zn2062	-.0011	.0119	.0025	.0022	.3044	
25	Pb2203	.0009	Q.0120	Q.0019	.0010	1.074	
26	Se1960	-.0013	.0393	Q.0126	-.0054	.5113	

Table Name: T040700A Autosampler Type: TYPE TJA
Sample Positions: 167/192 QC Positions: 7/19 # Sets: 1
Rinse Station location is rack -1, pos. -1.

--- Racks ---

Rack #	Type	Usage	#Pos Left	Analyses/Pos
1	Aux. (L) Rack	STD/QC/BLANK	7	10
2	Sample (16mm)	Samples	23	1
3	Sample (16mm)	Samples	48	1
4	Sample (16mm)	Samples	48	1
5	Sample (16mm)	Samples	48	1

--- Sample Sets ---

Set#	Type	Prepare?	Description	Method	#Pos	Rack#	StartPos
1	Normal	No	misc waters	WATERS	25	2	1

--- Preparation Info ---

Set#	Uptake	Uptake#2	Final	Dil.Factor

No Samples Prepared.

Rack #1

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	STD2	-NA-	1	Standard
2	1	2	STD4	-NA-	1	Standard
3	1	3	STD3	-NA-	1	Standard
4	1	4	STD8	-NA-	1	Standard
5	1	5	STD1-Blank	-NA-	1	Standard
6	1	6	ics ab	-NA-	2	QC Standard
7	1	7	icb	-NA-	3	Blank
8	1	8	icv 1	-NA-	3	QC Standard
9	1	9	icv 2	-NA-	3	QC Standard
10	1	10	ss i	-NA-	2	QC Standard
11	1	11	ss i low	-NA-	2	QC Standard
12	1	12	ics a	-NA-	2	QC Standard
(13...19	Not Used)					

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
1	1	1	89866 rtl	1	-NA-	Sample
2	1	2	prepblk 1000	1	-NA-	Sample
3	1	3	lcs 040500a	1	-NA-	Sample
4	1	4	lcsd 040500a	1	-NA-	Sample
5	1	5	90157	1	-NA-	Sample
6	1	6	90161	1	-NA-	Sample
7	1	7	90032	1	-NA-	Sample
8	1	8	90038	1	-NA-	Sample
9	1	9	90039	1	-NA-	Sample

Rack #2

Pos	Row	Col	Sample Name	Set #	#Used	Type
10	1	10	90040	1	-NA-	Sample
11	1	11	90041	1	-NA-	Sample
12	1	12	90042	1	-NA-	Sample
13	2	1	90043	1	-NA-	Sample
14	2	2	90044	1	-NA-	Sample
15	2	3	90044 d	1	-NA-	Sample
16	2	4	90044 ms	1	-NA-	Sample
17	2	5	90044 msd	1	-NA-	Sample
18	2	6	90157 1:4sd	1	-NA-	Sample
19	2	7	90157 1:1msa	1	-NA-	Sample
20	2	8	(empty)	1	-NA-	-NA-
21	2	9	(empty)	1	-NA-	-NA-
22	2	10	(empty)	1	-NA-	-NA-
23	2	11	(empty)	1	-NA-	-NA-
24	2	12	(empty)	1	-NA-	-NA-
25	3	1	(empty)	1	-NA-	-NA-
(26...48	Not Used)					

Rack #3

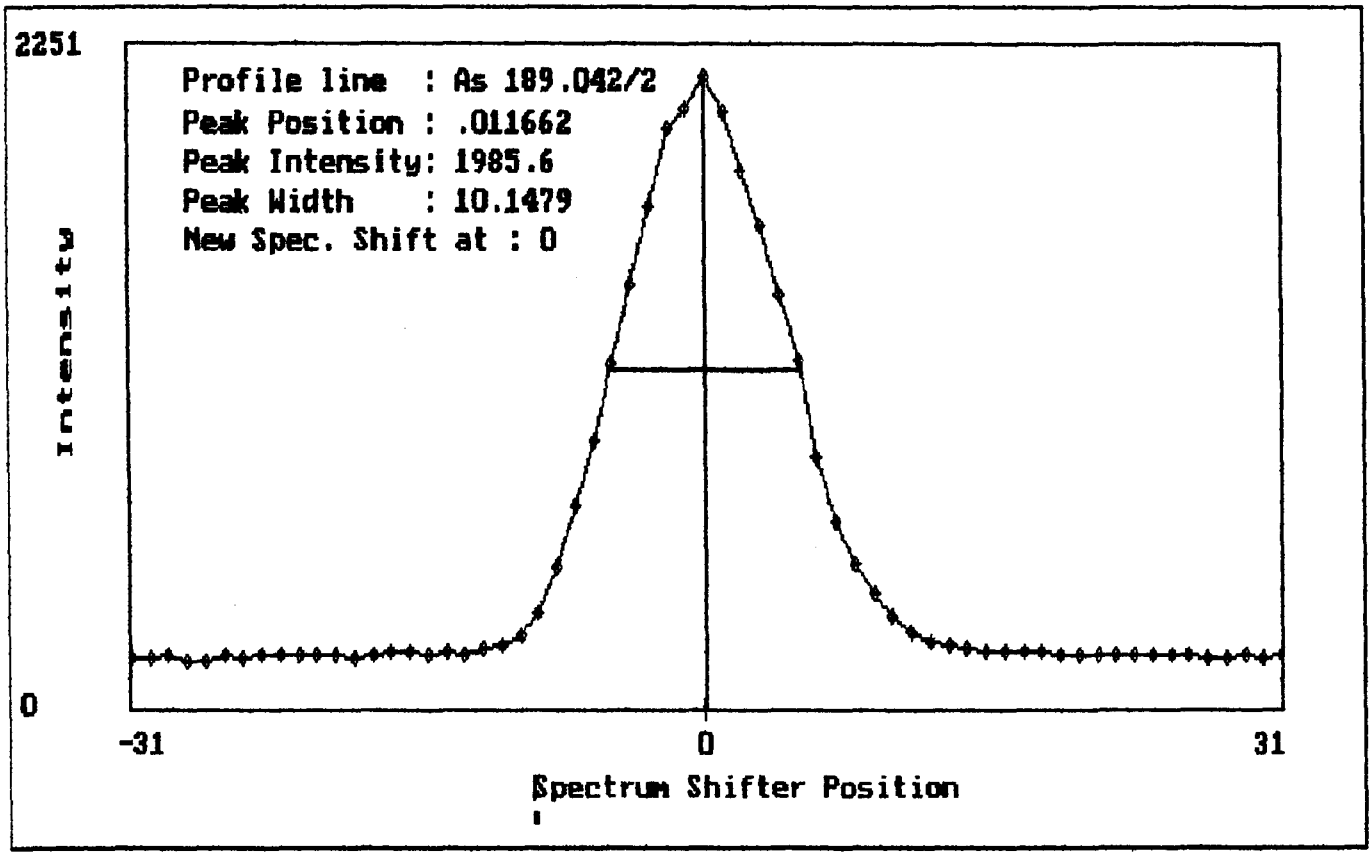
Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...48	Not Used)					

Rack #4

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...48	Not Used)					

Rack #5

Pos	Row	Col	Sample Name	Set #	#Used	Type
(1...48	Not Used)					


2251
Profile line : As 189.042/2
Peak Position : .011662
Peak Intensity: 1985.6
Peak Width : 10.1479
New Spec. Shift at : 0
Intensity
0
-31
0
31
Spectrum Shifter Position

Method: WATERS Standard: STD1-Blank
Run Time: 04/07/00 11:46:51

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Avge	-.0006	.0340	.0003	.0001	-.0032	.0026	-.0003
SDev	.0003	.0085	.0006	.0000	.0000	.0001	.0001
%RSD	44.36	25.10	190.1	66.82	.8004	3.208	35.79
#1	-.0008	.0267	.0009	.0000	-.0032	.0025	-.0003
#2	-.0006	.0434	.0004	.0001	-.0032	.0027	-.0005
#3	-.0003	.0319	-.0003	.0001	-.0032	.0026	-.0003

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Avge	-.0003	.0003	.0099	.0003	.0465	.0000	.0006
SDev	.0005	.0003	.0000	.0002	.0021	.0001	.0001
%RSD	184.9	75.35	.0909	52.47	4.591	264.3	19.36
#1	-.0007	.0001	.0099	.0005	.0442	-.0000	.0005
#2	.0003	.0006	.0099	.0003	.0471	.0001	.0008
#3	-.0004	.0003	.0099	.0002	.0483	.0000	.0006

Elem	Ni2316	2203/1	2203/2	1960/1	1960/2	Sb2068	Sn1899
Avge	-.0007	.0026	-.0018	-.0024	.0007	.0010	.0004
SDev	.0001	.0044	.0034	.0062	.0025	.0006	.0007
%RSD	14.14	167.9	191.6	256.0	349.9	65.73	186.1
#1	-.0008	.0055	-.0057	-.0086	.0013	.0007	.0008
#2	-.0006	-.0024	.0003	-.0025	.0029	.0017	-.0004
#3	-.0007	.0047	.0001	.0038	-.0020	.0005	.0007

Elem	Tl1908	V_2924	Zn2062
Avge	-.0011	-.0004	.0003
SDev	.0008	.0000	.0002
%RSD	76.90	11.04	54.74
#1	-.0006	-.0004	.0001
#2	-.0021	-.0004	.0004
#3	-.0006	-.0005	.0003

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40231	--	--	--	--	--	--
SDev	51.54933	--	--	--	--	--	--
%RSD	.1281323	--	--	--	--	--	--
#1	40278	--	--	--	--	--	--
#2	40176	--	--	--	--	--	--
#3	40240	--	--	--	--	--	--

Method: WATERS Standard: STD8
Run Time: 04/07/00 11:55:29

Elem	Ag3280
Avge	.9955
SDev	.0001

%RSD	.0138						
#1	.9955						
#2	.9953						
#3	.9956						
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39418	--	--	--	--	--	--
SDev	137.3511	--	--	--	--	--	--
%RSD	.3484507	--	--	--	--	--	--
#1	39275	--	--	--	--	--	--
#2	39549	--	--	--	--	--	--
#3	39429	--	--	--	--	--	--

Method: WATERS Standard: STD3
Run Time: 04/07/00 11:59:05

Elem	Al3082	Be3130	Fe2714	Ni2316	Sb2068	Sn1899	Tl1908
Avge	.0899	3.378	.0422	.8858	.5425	.3756	.1590
SDev	.0010	.047	.0006	.0133	.0068	.0043	.0024
%RSD	1.168	1.387	1.454	1.506	1.248	1.137	1.529
#1	.0893	3.354	.0419	.8779	.5380	.3742	.1574
#2	.0892	3.349	.0417	.8783	.5393	.3721	.1577
#3	.0911	3.432	.0429	.9012	.5503	.3803	.1618

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40080	--	--	--	--	--	--
SDev	538.0914	--	--	--	--	--	--
%RSD	1.342532	--	--	--	--	--	--
#1	40390	--	--	--	--	--	--
#2	40392	--	--	--	--	--	--
#3	39459	--	--	--	--	--	--

Method: WATERS Standard: STD4
Run Time: 04/07/00 12:04:22

Elem	As1890	Cr2677	1960/1	1960/2	V_2924
Avge	.6705	.8324	2.257	1.143	.3316
SDev	.0035	.0053	.025	.011	.0023
%RSD	.5239	.6399	1.102	.9209	.6820
#1	.6692	.8307	2.241	1.145	.3310
#2	.6745	.8384	2.285	1.153	.3341
#3	.6678	.8282	2.244	1.132	.3298

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED

Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40085	--	--	--	--	--	--
SDev	198.1010	--	--	--	--	--	--
%RSD	.4942023	--	--	--	--	--	--
#1	40215	--	--	--	--	--	--
#2	39857	--	--	--	--	--	--
#3	40183	--	--	--	--	--	--

Method: WATERS Standard: STD2
Run Time: 04/07/00 12:10:16

Elem	Ba4934	Ca3179	Cd2265	Co2286	Cu3247	K_7664	Mg2790
Avge	1.855	.0882	2.186	1.251	.6281	.1522	.0635
SDev	.017	.0007	.018	.010	.0048	.0010	.0006
%RSD	.8923	.8392	.8317	.8308	.7594	.6476	.9369
#1	1.854	.0883	2.186	1.248	.6261	.1534	.0632
#2	1.839	.0875	2.169	1.242	.6247	.1516	.0631
#3	1.872	.0890	2.205	1.262	.6336	.1518	.0642

Elem	Mn2576	2203/1	2203/2	Zn2062
Avge	.9721	3.338	3.418	.4239
SDev	.0086	.039	.040	.0036
%RSD	.8809	1.181	1.162	.8371
#1	.9701	3.339	3.407	.4233
#2	.9647	3.299	3.384	.4207
#3	.9815	3.378	3.461	.4277

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40341	--	--	--	--	--	--
SDev	304.5111	--	--	--	--	--	--
%RSD	.7548427	--	--	--	--	--	--
#1	40338	--	--	--	--	--	--
#2	40647	--	--	--	--	--	--
#3	40038	--	--	--	--	--	--

Method: WATERS Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	STD8	STD1-Blank	2.00800	.001131	04/07/00 12:10:16
Al3082	308.215	STD3	STD1-Blank	35.8235	-1.21779	04/07/00 12:10:16
As1890	189.042	STD4	STD1-Blank	2.96880	-.000959	04/07/00 12:10:16
Ba4934	493.409	STD2	STD1-Blank	1.07845	-.000063	04/07/00 12:10:16
Be3130	313.042	STD3	STD1-Blank	.591454	.001892	04/07/00 12:10:16
Ca3179	317.933	STD2	STD1-Blank	23.3532	-.060564	04/07/00 12:10:16
Cd2265	226.502	STD2	STD1-Blank	.914624	.000310	04/07/00 12:10:16
Co2286	228.616	STD2	STD1-Blank	1.59856	.000419	04/07/00 12:10:16
Cr2677	267.716	STD4	STD1-Blank	2.40358	-.000837	04/07/00 12:10:16
Cu3247	324.753	STD2	STD1-Blank	3.23520	-.032112	04/07/00 12:10:16

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Fe2714	271.441	STD3	STD1-Blank	47.8019	-.015046	04/07/00 12:10:16
K_7664	766.491	STD2	STD1-Blank	18.9178	-.880125	04/07/00 12:10:16
Mg2790	279.078	STD2	STD1-Blank	31.5069	-.000785	04/07/00 12:10:16
Mn2576	257.610	STD2	STD1-Blank	2.05871	-.001331	04/07/00 12:10:16
Ni2316	231.604	STD3	STD1-Blank	2.25601	.001589	04/07/00 12:10:16
Pb2203	220.353	NONE	NONE	1.00000	.000000	*04/07/00 12:10:16
Se1960	196.026	NONE	NONE	1.00000	.000000	*04/07/00 12:10:16
2203/1	220.351	STD2	STD1-Blank	.599613	-.001558	04/07/00 12:10:16
2203/2	220.352	STD2	STD1-Blank	.584976	.001031	04/07/00 12:10:16
1960/1	196.021	STD4	STD1-Blank	.885482	.002148	04/07/00 12:10:16
1960/2	196.022	STD4	STD1-Blank	1.75067	-.001249	04/07/00 12:10:16
Sb2068	206.838	STD3	STD1-Blank	3.69319	-.003521	04/07/00 12:10:16
Sn1899	189.989	STD3	STD1-Blank	5.33058	-.001984	04/07/00 12:10:16
Tl1908	190.864	STD3	STD1-Blank	12.5022	.013682	04/07/00 12:10:16
V_2924	292.402	STD4	STD1-Blank	6.02433	.002695	04/07/00 12:10:16
Zn2062	206.200	STD2	STD1-Blank	4.72100	-.001409	04/07/00 12:10:16

Method: WATERS Sample Name: icv 1 Operator: sch
Run Time: 04/07/00 12:31:56
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.2111	Q.0566	.2018	.2062	.1978	Q.1838	.2020
SDev	.0004	.1028	.0034	.0004	.0004	.0013	.0008
%RSD	.2148	181.5	1.673	.1744	.1822	.6820	.4199
#1	.2106	Q-.0297	.2056	.2065	.1975	Q.1824	.2011
#2	.2110	Q.1703	.2003	.2058	.1978	Q.1849	.2024
#3	Q.2115	Q.0292	.1993	.2064	.1982	Q.1839	.2027
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.2000	.2000	.2000	.2000	.2000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2013	.1989	.1993	Q.2276	2.015	.1916	.2010
SDev	.0006	.0005	.0002	.0137	.069	.0071	.0003
%RSD	.2984	.2500	.0910	6.009	3.446	3.693	.1450
#1	.2013	.1985	.1992	Q.2126	2.013	.1966	.2007
#2	.2007	.1994	.1995	Q.2394	2.086	.1948	.2013
#3	.2019	.1986	.1992	Q.2307	1.947	Q.1835	.2010
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	.2000	.2000	.2000	.2000	2.000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.1986	.2018	.2011	.2002	.2043	.2001	.2025
SDev	.0014	.0020	.0024	.0036	.0030	.0037	.0029
%RSD	.6864	.9983	1.203	1.776	1.487	1.869	1.406
#1	.1978	.1998	.2038	.1978	.2029	.2035	.2038
#2	.1978	.2019	.2004	.1986	.2078	.2007	.1993
#3	.2002	.2038	.1991	.2043	.2022	.1961	.2045
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.2000	.2000	.2000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	Q.1856	.1966	.2032	.1956	.1999
SDev	.0039	.0034	.0081	.0002	.0012
%RSD	2.118	1.713	3.994	.0797	.6154
#1	Q.1810	.1997	.1987	.1956	.1985
#2	Q.1876	.1930	.1984	.1957	.2006
#3	Q.1881	.1972	Q.2126	.1954	.2006
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass

Value	.2000	.2000	.2000	.2000	.2000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40435	--	--	--	--	--	--
SDev	66.50564	--	--	--	--	--	--
%RSD	.1644754	--	--	--	--	--	--
#1	40368	--	--	--	--	--	--
#2	40436	--	--	--	--	--	--
#3	40501	--	--	--	--	--	--

Method: WATERS Sample Name: icv 2 Operator: sch
Run Time: 04/07/00 12:39:42
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q1.068	Q.8651	.9747	.9882	.9701	Q1.105	.9959
SDev	.008	.0114	.0121	.0059	.0075	.009	.0067
%RSD	.7660	1.317	1.237	.5925	.7708	.8009	.6741
#1	Q1.072	Q.8766	.9749	.9924	.9725	Q1.107	.9965
#2	Q1.058	Q.8538	.9626	.9815	.9618	Q1.095	.9888
#3	Q1.073	Q.8650	.9867	.9907	.9762	Q1.112	1.002
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9862	.9761	1.021	Q1.070	10.45	.9544	.9847
SDev	.0077	.0080	.008	.009	.18	.0118	.0070
%RSD	.7831	.8170	.7577	.8740	1.723	1.240	.7132
#1	.9892	.9789	1.026	Q1.080	Q10.63	.9564	.9869
#2	.9774	.9671	1.012	Q1.065	10.27	Q.9417	.9768
#3	.9920	.9823	1.024	Q1.063	10.46	.9651	.9903
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.9709	.9909	Q.9413	.9939	.9841	.9340	.9554
SDev	.0052	.0060	.0059	.0063	.0055	.0035	.0115
%RSD	.5392	.6053	.6263	.6356	.5544	.3730	1.202
#1	.9698	.9935	Q.9443	.9972	.9854	.9370	.9585
#2	.9663	.9840	Q.9345	.9867	.9781	.9302	.9427
#3	.9766	.9951	.9451	.9979	.9888	.9349	.9650
Errors	QC Pass	QC Pass	QC Fail	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	1.000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	Q.9385	.9505	.9923	.9564	.9995
SDev	.0054	.0165	.0085	.0073	.0062
%RSD	.5751	1.731	.8588	.7636	.6193
#1	Q.9415	.9511	.9825	.9596	1.001
#2	Q.9323	Q.9338	.9977	.9480	.9928
#3	Q.9417	.9667	.9968	.9614	1.005
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass

Value	1.000	1.000	1.000	1.000	1.000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40752	--	--	--	--	--	--
SDev	269.6893	--	--	--	--	--	--
%RSD	.6617764	--	--	--	--	--	--
#1	40512	--	--	--	--	--	--
#2	41044	--	--	--	--	--	--
#3	40701	--	--	--	--	--	--

Method: WATERS Sample Name: icb Operator: sch
Run Time: 04/07/00 12:47:18
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	L-.2694	.0027	.0003	.0003	-.0141	.0008
SDev	.0005	.0250	.0029	.0001	.0001	.0009	.0001
%RSD	81.18	9.267	107.4	38.40	23.22	6.332	7.421
#1	.0000	L-.2912	-.0006	.0002	.0002	-.0151	.0008
#2	.0010	L-.2748	.0050	.0004	.0004	-.0133	.0007
#3	.0010	L-.2421	.0037	.0004	.0004	-.0139	.0008
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0050	.0015	.0500	.0015
Low	-.0050	-.0500	-.0050	-.0050	-.0015	-.0500	-.0015

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	-.0006	-.0018	-.0009	.0415	.0010	-.0001
SDev	.0007	.0001	.0010	.0066	.0258	.0029	.0001
%RSD	84.85	22.01	52.84	730.2	62.15	286.1	99.49
#1	.0010	-.0006	L-.0026	-.0021	.0234	.0031	-.0003
#2	.0000	-.0004	-.0007	-.0068	.0300	.0023	-.0001
#3	.0014	-.0007	-.0021	.0062	.0710	-.0023	-.0000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0025	.0500	.1000	.0500	.0050
Low	-.0050	-.0050	-.0025	-.0500	-.1000	-.0500	-.0050

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0006	.0016	-.0001	.0012	.0017	.0005	-.0018
SDev	.0007	.0009	.0055	.0023	.0026	.0053	.0061
%RSD	106.3	57.84	7356.	199.0	147.6	1076.	337.7
#1	.0001	H.0027	-.0011	.0034	.0004	-.0011	-.0018
#2	-.0011	.0011	H.0059	.0012	.0001	.0064	.0043
#3	-.0010	.0010	-.0050	-.0012	.0047	-.0038	-.0079
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.0050	.0025	.0050				
Low	-.0050	-.0025	-.0050				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0029	H.0010	.0005	-.0005
SDev	.0027	.0028	.0069	.0002	.0004
%RSD	444.4	95.67	658.2	33.30	85.31
#1	.0020	-.0011	H.0023	.0006	-.0007
#2	L-.0033	-.0016	H.0072	.0006	-.0000
#3	-.0005	-.0062	L-.0064	.0003	-.0008
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass

High	.0025	.0500	.0010	.0050	.0100
Low	-.0025	-.0500	-.0020	-.0050	-.0100

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40541	--	--	--	--	--	--
SDev	11.93035	--	--	--	--	--	--
%RSD	.0294276	--	--	--	--	--	--
#1	40555	--	--	--	--	--	--
#2	40533	--	--	--	--	--	--
#3	40536	--	--	--	--	--	--

Method: WATERS Sample Name: ss i Operator: sch
Run Time: 04/07/00 12:54:10
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0020	Q-.2531	.0450	.0408	.0012	.0421	Q.0018
SDev	.0001	.0134	.0022	.0004	.0000	.0007	.0005
%RSD	3.508	5.294	4.916	.9083	1.030	1.762	26.43
#1	Q.0020	Q-.2604	.0467	.0408	.0012	.0419	Q.0013
#2	Q.0021	Q-.2612	.0458	.0404	.0012	.0415	Q.0019
#3	Q.0019	Q-.2376	.0425	.0411	.0012	.0429	Q.0022

Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass	NOCHECK	QC Fail
Value	.0010	.0400	.0400	.0400	.0010		.0010
Range	20.00	20.00	20.00	20.00	20.00		20.00

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0111	.0038	Q.0028	Q.0398	.1015	.0005	.0096
SDev	.0007	.0006	.0009	.0100	.0706	.0040	.0001
%RSD	6.265	16.90	32.53	25.15	69.56	741.0	1.219
#1	.0107	.0041	Q.0020	Q.0328	.1189	.0040	.0096
#2	.0119	Q.0030	Q.0026	Q.0513	.1619	-.0039	.0096
#3	.0108	.0042	Q.0037	Q.0354	.0239	.0016	.0098

Errors	QC Pass	QC Pass	QC Fail	QC Fail	NOCHECK	NOCHECK	QC Pass
Value	.0100	.0040	.0050	.0200			.0100
Range	20.00	20.00	20.00	20.00			20.00

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0093	.0103	.0392	.0093	.0115	.0407	.0356
SDev	.0012	.0019	.0022	.0015	.0027	.0030	.0028
%RSD	12.51	18.56	5.535	16.28	23.82	7.375	7.875
#1	.0096	.0116	.0417	.0101	.0137	.0438	.0368
#2	.0081	.0112	.0379	.0102	.0123	.0403	.0324
#3	.0104	.0081	.0380	.0076	.0084	.0379	.0377

Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0100	.0100	.0400				
Range	20.00	20.00	20.00				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	Q.0067	-.0013	.0413	.0101	.0112
SDev	.0045	.0023	.0059	.0004	.0003
%RSD	67.70	174.5	14.18	3.621	2.972
#1	.0089	-.0020	.0379	.0102	.0108
#2	.0098	-.0032	.0380	.0097	.0113
#3	Q.0015	.0012	Q.0481	.0104	.0114

Errors	QC Fail	NOCHECK	QC Pass	QC Pass	QC Pass
Value	.0100		.0400	.0100	.0100
Range	20.00		20.00	20.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39963	--	--	--	--	--	--
SDev	292.1889	--	--	--	--	--	--
%RSD	.7311546	--	--	--	--	--	--
#1	39881	--	--	--	--	--	--
#2	40287	--	--	--	--	--	--
#3	39720	--	--	--	--	--	--

Method: WATERS Sample Name: ss i low Operator: sch
Run Time: 04/07/00 13:01:08
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0014	-.2820	.0118	.0114	.0004	.0107	.0004
SDev	.0004	.0074	.0006	.0001	.0000	.0021	.0001
%RSD	26.92	2.621	4.839	.5917	7.568	19.69	36.11
#1	.0013	-.2905	Q.0123	.0113	.0004	.0089	.0004
#2	.0018	-.2774	.0120	.0115	.0004	.0130	.0005
#3	.0011	-.2780	.0112	.0114	.0004	.0102	.0003

Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value			.0100	.0100			
Range			20.00	20.00			

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0032	Q.0014	-.0010	.0197	.0788	-.0000	.0023
SDev	.0013	.0002	.0005	.0097	.0549	.0023	.0001
%RSD	40.41	12.61	47.50	49.03	69.71	62230.	4.788
#1	.0025	Q.0012	-.0015	.0086	.0205	-.0000	.0021

#2	Q.0047	Q.0014	-.0006	.0264	.1296	.0023	.0023
#3	.0025	Q.0016	-.0009	.0241	.0863	-.0023	.0023
Errors	QC Fail	QC Fail	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value	.0025	.0010					.0025
Range	20.00	20.00					20.00
Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0026	Q.0031	.0096	.0014	.0058	.0103	.0074
SDev	.0008	.0013	.0011	.0009	.0022	.0027	.0025
%RSD	31.35	42.30	11.63	65.54	38.53	25.88	33.74
#1	Q.0016	Q.0046	.0092	.0023	.0083	.0085	.0100
#2	Q.0030	Q.0020	.0087	.0005	.0043	.0091	.0072
#3	Q.0030	.0028	.0108	.0014	.0047	.0134	.0050

Errors	QC Pass	QC Fail	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0025	.0025	.0100				
Range	20.00	20.00	20.00				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0008	.0020	.0086	.0027	.0023
SDev	.0015	.0023	.0028	.0009	.0006
%RSD	197.5	117.2	32.10	31.44	24.52
#1	-.0010	.0003	Q.0069	.0022	.0016
#2	.0017	.0046	Q.0072	Q.0037	.0027
#3	.0015	.0011	.0118	.0022	.0025

Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK
Value			.0100	.0025	
Range			20.00	20.00	

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40306	--	--	--	--	--	--
SDev	21.82506	--	--	--	--	--	--
%RSD	.0541480	--	--	--	--	--	--
#1	40330	--	--	--	--	--	--
#2	40302	--	--	--	--	--	--
#3	40287	--	--	--	--	--	--

Method: WATERS Sample Name: ics a Operator: sch
Run Time: 04/07/00 13:08:05
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	59.98	-.0029	.0011	.0001	50.25	-.0027
SDev	.0005	.08	.0032	.0001	.0000	.01	.0003
%RSD	90.33	.1375	109.8	5.648	30.14	.0220	10.41

#1	-.0005	Q60.07	-.0063	.0010	.0001	50.23	-.0029
#2	-.0001	59.94	.0001	.0011	.0001	50.26	-.0024
#3	-.0011	59.92	-.0025	.0011	.0001	50.25	-.0027
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0050	50.00	.0050	.0050	.0015	50.00	.0025
Range	300.0	20.00	300.0	300.0	300.0	20.00	300.0
Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	-.0004	.0001	50.04	.0108	52.24	.0033
SDev	.0005	.0004	.0003	.03	.0336	.04	.0001
%RSD	116.9	98.68	409.9	.0671	310.2	.0806	1.804
#1	.0009	-.0007	.0002	50.00	.0421	52.28	.0033
#2	.0007	-.0007	-.0002	50.06	.0151	52.20	.0033
#3	-.0001	.0001	.0003	50.06	-.0247	52.23	.0032
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0050	.0050	.0050	50.00	.0500	50.00	.0050
Range	300.0	300.0	300.0	20.00	300.0	20.00	300.0
Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0002	.0026	-.0038	.0035	.0000	-.0087	.0055
SDev	.0007	.0024	.0031	.0031	.0013	.0037	.0018
%RSD	371.4	94.16	81.12	87.34	8600.	42.77	33.25
#1	.0001	.0040	-.0011	.0051	.0012	-.0057	.0075
#2	-.0010	.0039	-.0072	.0054	.0002	-.0129	.0038
#3	.0003	-.0002	-.0031	-.0000	-.0014	-.0076	.0053
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0050	.0050	.0050				
Range	300.0	300.0	300.0				
Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062		
Units	ppm	ppm	ppm	ppm	ppm		
Avge	-.0030	.0014	.0053	.0014	.0022		
SDev	.0020	.0005	.0080	.0005	.0004		
%RSD	67.57	33.02	151.4	38.03	19.09		
#1	-.0027	.0020	.0094	.0017	.0026		
#2	-.0052	.0013	-.0040	.0017	.0023		
#3	-.0011	.0010	.0105	.0008	.0017		
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass		
Value	.0050	.0050	.0050	.0050	.0050		
Range	300.0	300.0	300.0	300.0	300.0		

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40443	--	--	--	--	--	--

SDev	22.71563	--	--	--	--	--	--
%RSD	.0561670	--	--	--	--	--	--
#1	40433	--	--	--	--	--	--
#2	40427	--	--	--	--	--	--
#3	40469	--	--	--	--	--	--

Method: WATERS Sample Name: ics ab Operator: sch
Run Time: 04/07/00 13:16:10
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3212	Q60.82	1.002	.3106	.1012	50.54	.3034
SDev	.0012	.04	.003	.0007	.0001	.04	.0004
%RSD	.3865	.0713	.3027	.2347	.0470	.0702	.1467
#1	.3226	Q60.82	.9992	.3098	.1012	50.53	.3035
#2	.3203	Q60.87	1.001	.3113	.1011	50.51	.3029
#3	.3208	Q60.78	1.005	.3106	.1012	50.58	.3038
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.3000	50.00	1.000	.3000	.1000	50.00	.3000
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3055	.3005	.3248	50.52	Q26.61	52.60	.2087
SDev	.0001	.0004	.0005	.02	.27	.06	.0002
%RSD	.0419	.1447	.1521	.0300	1.027	.1064	.0814
#1	.3056	.3006	.3251	50.54	Q26.65	52.56	.2087
#2	.3054	.3000	.3252	50.51	Q26.86	52.58	.2089
#3	.3056	.3008	.3243	50.52	Q26.32	52.67	.2086
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.3000	.3000	.3000	50.00	20.00	50.00	.2000
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.2993	1.050	.4997	1.053	1.041	.4953	.5079
SDev	.0015	.004	.0058	.005	.001	.0076	.0068
%RSD	.4875	.3344	1.167	.4628	.0811	1.543	1.346
#1	.2977	1.054	.5053	1.059	1.042	.5040	.5073
#2	.2997	1.048	.5003	1.051	1.040	.4926	.5151
#3	.3005	1.047	.4936	1.050	1.041	.4894	.5014
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.3000	1.000	.5000				
Range	20.00	20.00	20.00				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	Q.1024	Q.0989	1.027	.2992	.3054
SDev	.0043	.0035	.008	.0004	.0018
%RSD	4.172	3.558	.7546	.1334	.6001
#1	Q.0990	Q.0948	1.034	.2987	.3034
#2	Q.1010	Q.1007	1.028	.2994	.3060
#3	Q.1072	Q.1011	1.019	.2994	.3069
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass

Value	1.000	1.000	1.000	.3000	.3000		
Range	20.00	20.00	20.00	20.00	20.00		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40546	--	--	--	--	--	--
SDev	83.81130	--	--	--	--	--	--
%RSD	.2067050	--	--	--	--	--	--
#1	40467	--	--	--	--	--	--
#2	40634	--	--	--	--	--	--
#3	40538	--	--	--	--	--	--

Method: WATERS Sample Name: 89866 rtl Operator: sch
Run Time: 04/07/00 13:23:42
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0017	69.95	.0027	.5701	.0017	79.09	-.0045
SDev	.0008	.14	.0030	.0016	.0001	.20	.0002
%RSD	48.77	.1989	109.2	.2799	3.132	.2507	4.444
#1	-.0008	69.94	.0030	.5712	.0016	78.87	-.0044
#2	-.0023	70.09	.0056	.5708	.0017	79.14	-.0047
#3	-.0022	69.82	-.0004	.5682	.0017	79.26	-.0044

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0385	.0601	.0594	76.15	48.61	30.45	1.766
SDev	.0005	.0006	.0012	.11	.61	.03	.003
%RSD	1.223	.9088	1.961	.1474	1.260	.0962	.1573
#1	.0388	.0607	.0605	76.03	48.33	30.42	1.763
#2	.0388	.0600	.0596	76.18	49.31	30.47	1.766
#3	.0379	.0596	.0582	76.24	48.18	30.46	1.769

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0180	.0111	-.0068	.0126	.0073	-.0149	.0088
SDev	.0004	.0011	.0021	.0008	.0033	.0020	.0035
%RSD	2.336	9.847	31.25	6.448	44.90	13.59	40.33
#1	.0185	.0105	-.0045	.0117	.0073	-.0133	.0127
#2	.0177	.0123	-.0086	.0129	.0105	-.0171	.0079
#3	.0178	.0104	-.0073	.0133	.0040	-.0141	.0058

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0024	-.0005	.0052	.1973	.1665
SDev	.0024	.0024	.0017	.0006	.0007
%RSD	102.6	527.1	32.12	.2814	.4071
#1	.0003	-.0019	.0048	.1972	.1657
#2	-.0028	.0023	.0071	.1968	.1669
#3	-.0045	-.0019	.0039	.1979	.1668

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	41764	--	--	--	--	--	--
SDev	287.7864	--	--	--	--	--	--
%RSD	.6890776	--	--	--	--	--	--
#1	41433	--	--	--	--	--	--
#2	41955	--	--	--	--	--	--
#3	41904	--	--	--	--	--	--

Method: WATERS Sample Name: prepblk 1000 Operator: sch
Run Time: 04/07/00 13:30:35
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	-.2016	.0021	.0003	.0001	.0403	.0004
SDev	.0002	.0217	.0013	.0001	.0000	.0018	.0003
%RSD	21.82	10.77	63.57	14.93	6.493	4.477	76.00
#1	.0007	-.1765	.0032	.0003	.0001	.0399	.0005
#2	.0006	-.2133	.0023	.0004	.0001	.0422	.0000
#3	.0009	-.2149	.0006	.0003	.0001	.0387	.0005

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0004	.0002	-.0030	.0265	.1597	.0100	.0015
SDev	.0002	.0005	.0001	.0059	.0138	.0024	.0001
%RSD	51.75	283.4	4.469	22.11	8.609	23.73	3.604
#1	-.0002	-.0004	-.0031	.0306	.1731	.0095	.0014
#2	-.0003	.0004	-.0031	.0198	.1604	.0079	.0015
#3	-.0006	.0006	-.0028	.0292	.1456	.0126	.0014

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0012	.0030	-.0049	.0038	.0006	-.0079	.0004
SDev	.0016	.0015	.0043	.0030	.0026	.0060	.0011
%RSD	134.9	50.13	86.88	80.04	411.1	76.19	317.3
#1	-.0022	.0014	-.0026	.0014	.0007	-.0050	.0016
#2	.0007	.0032	-.0023	.0028	.0032	-.0039	.0002
#3	-.0021	.0044	-.0099	.0072	-.0020	-.0147	-.0007

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0019	-.0024	-.0036	.0008	.0043
SDev	.0020	.0023	.0081	.0009	.0004
%RSD	108.5	93.03	226.7	110.5	9.796
#1	-.0005	-.0049	.0045	-.0000	.0048
#2	.0028	-.0019	-.0036	.0007	.0041
#3	.0033	-.0005	-.0116	.0018	.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39845	--	--	--	--	--	--
SDev	137.7425	--	--	--	--	--	--
%RSD	.3456959	--	--	--	--	--	--
#1	39769	--	--	--	--	--	--
#2	39762	--	--	--	--	--	--
#3	40004	--	--	--	--	--	--

Method: WATERS Sample Name: lcs 040500a Operator: sch
Run Time: 04/07/00 13:37:27
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.077	.9803	1.053	1.044	1.042	1.089	1.053
SDev	.008	.0149	.009	.009	.008	.010	.007
%RSD	.7364	1.517	.8223	.8301	.8117	.8749	.6664
#1	1.070	.9728	1.043	1.037	1.033	1.079	1.045
#2	1.085	.9975	1.060	1.053	1.050	1.098	1.059
#3	1.076	.9707	1.055	1.040	1.043	1.090	1.053

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.060	1.031	1.095	1.224	10.77	1.001	1.052
SDev	.006	.009	.008	.027	.12	.007	.009
%RSD	.5968	.9032	.7687	2.174	1.097	.7408	.8857
#1	1.053	1.021	1.087	1.193	10.77	.9942	1.043
#2	1.066	1.040	1.103	1.240	10.89	1.009	1.061
#3	1.062	1.032	1.094	1.239	10.66	1.000	1.053

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	1.007	1.061	.9905	1.064	1.054	.9833	1.004
SDev	.011	.008	.0053	.007	.011	.0087	.007
%RSD	1.056	.7646	.5304	.6159	1.081	.8861	.7353
#1	.9979	1.052	.9859	1.056	1.042	.9791	.9989
#2	1.019	1.068	.9963	1.069	1.065	.9933	1.002
#3	1.005	1.062	.9894	1.065	1.055	.9775	1.013

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.9885	2.052	1.041	1.007	1.068
SDev	.0100	.025	.013	.009	.008
%RSD	1.012	1.217	1.277	.9098	.7614
#1	.9799	2.024	1.026	.9979	1.059
#2	.9995	2.071	1.047	1.016	1.075
#3	.9863	2.060	1.050	1.007	1.068

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39973	--	--	--	--	--	--
SDev	145.7498	--	--	--	--	--	--
%RSD	.3646206	--	--	--	--	--	--
#1	40080	--	--	--	--	--	--
#2	39807	--	--	--	--	--	--
#3	40032	--	--	--	--	--	--

Method: WATERS Sample Name: lcsd 040500a Operator: sch
Run Time: 04/07/00 13:44:20
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.102	1.015	1.070	1.066	1.063	1.118	1.074
SDev	.003	.019	.005	.007	.002	.001	.004
%RSD	.2506	1.866	.4312	.6612	.1768	.0604	.3966
#1	1.105	1.035	1.074	1.073	1.065	1.118	1.076
#2	1.101	1.013	1.065	1.067	1.064	1.118	1.078
#3	1.100	.9974	1.072	1.059	1.061	1.117	1.070

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.083	1.051	1.119	1.165	11.11	1.022	1.074
SDev	.002	.004	.006	.010	.28	.007	.003
%RSD	.2164	.3350	.5714	.8604	2.480	.6962	.2624
#1	1.085	1.055	1.125	1.158	11.38	1.028	1.076
#2	1.083	1.051	1.119	1.160	11.10	1.022	1.075
#3	1.081	1.048	1.112	1.176	10.83	1.014	1.071

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	1.025	1.092	1.007	1.097	1.080	1.000	1.019
SDev	.002	.003	.003	.002	.007	.005	.005
%RSD	.1983	.3051	.3172	.1832	.6349	.4635	.5153
#1	1.025	1.095	1.008	1.100	1.084	1.004	1.014
#2	1.026	1.092	1.009	1.096	1.083	1.001	1.025
#3	1.022	1.088	1.003	1.096	1.072	.9952	1.019

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	1.006	2.102	1.072	1.023	1.086
SDev	.002	.012	.007	.004	.002
%RSD	.2008	.5572	.6750	.3572	.1537
#1	1.007	2.115	1.077	1.027	1.085
#2	1.008	2.098	1.074	1.023	1.086
#3	1.004	2.093	1.063	1.020	1.088

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39972	--	--	--	--	--	--
SDev	201.0182	--	--	--	--	--	--
%RSD	.5029018	--	--	--	--	--	--
#1	39760	--	--	--	--	--	--
#2	39995	--	--	--	--	--	--
#3	40160	--	--	--	--	--	--

Method: WATERS Sample Name: 90157 Operator: sch
Run Time: 04/07/00 13:51:12
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0009	5.069	.0067	.0437	.0004	15.29	.0003
SDev	.0003	.044	.0039	.0002	.0000	.02	.0004
%RSD	38.07	.8778	57.51	.4364	4.338	.1567	131.2
#1	.0006	5.109	.0112	.0440	.0004	15.30	.0007
#2	.0008	5.021	.0045	.0437	.0005	15.31	-.0001
#3	.0013	5.076	.0045	.0436	.0005	15.27	.0003

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0017	.0069	.0330	4.222	6.096	2.707	.0904
SDev	.0002	.0005	.0006	.013	.100	.008	.0002
%RSD	13.28	7.598	1.889	.3090	1.632	.3088	.2267
#1	.0015	.0070	.0337	4.235	6.188	2.714	.0906
#2	.0019	.0063	.0326	4.209	5.991	2.710	.0903
#3	.0019	.0074	.0327	4.223	6.109	2.698	.0902

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0020	.0172	-.0033	.0168	.0173	-.0056	.0007
SDev	.0013	.0052	.0019	.0079	.0014	.0020	.0018
%RSD	65.33	30.04	58.45	47.11	8.291	36.26	264.7
#1	.0033	.0229	-.0050	.0252	.0176	-.0074	-.0007
#2	.0007	.0160	-.0038	.0157	.0158	-.0061	.0000
#3	.0020	.0128	-.0012	.0095	.0186	-.0034	.0027

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0022	.0012	.0035	.0112	.0997
SDev	.0013	.0021	.0022	.0003	.0004
%RSD	57.51	176.9	63.13	2.702	.4188
#1	.0011	.0012	.0019	.0111	.1002
#2	.0019	-.0009	.0026	.0116	.0996
#3	.0036	.0032	.0060	.0110	.0994

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40047	--	--	--	--	--	--
SDev	72.80339	--	--	--	--	--	--
%RSD	.1817933	--	--	--	--	--	--
#1	39971	--	--	--	--	--	--
#2	40116	--	--	--	--	--	--
#3	40055	--	--	--	--	--	--

Method: WATERS Sample Name: 90161 Operator: sch
Run Time: 04/07/00 13:58:04
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	1.645	.0013	.0286	.0003	13.33	-.0003
SDev	.0003	.015	.0006	.0001	.0000	.01	.0003
%RSD	107.4	.9262	43.00	.3392	6.294	.0942	104.0
#1	.0005	1.639	.0007	.0286	.0003	13.32	-.0006
#2	.0005	1.634	.0018	.0284	.0003	13.33	-.0003
#3	-.0001	1.662	.0013	.0286	.0003	13.34	.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0013	.0033	.0104	4.646	4.165	1.806	.1914
SDev	.0006	.0003	.0006	.007	.023	.010	.0003
%RSD	45.14	10.15	5.795	.1535	.5429	.5562	.1695
#1	.0006	.0035	.0110	4.643	4.181	1.816	.1913
#2	.0018	.0034	.0098	4.642	4.139	1.804	.1912
#3	.0014	.0029	.0104	4.655	4.175	1.796	.1918

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0021	.0097	-.0025	.0095	.0095	-.0065	.0050
SDev	.0012	.0027	.0014	.0027	.0028	.0024	.0037
%RSD	58.25	27.54	54.65	29.07	29.41	37.33	75.04
#1	.0027	.0126	-.0032	.0125	.0118	-.0055	.0008
#2	.0029	.0072	-.0009	.0073	.0064	-.0048	.0062
#3	.0007	.0094	-.0034	.0086	.0102	-.0093	.0079

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0025	-.0047	.0055	.0846
SDev	.0010	.0053	.0050	.0002	.0002
%RSD	418.4	206.7	106.9	4.137	.2672
#1	-.0013	.0078	-.0007	.0053	.0844
#2	.0006	.0027	-.0031	.0057	.0848
#3	-.0000	-.0028	-.0103	.0056	.0845

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39990	--	--	--	--	--	--
SDev	34.23935	--	--	--	--	--	--
%RSD	.0856191	--	--	--	--	--	--
#1	39954	--	--	--	--	--	--
#2	40022	--	--	--	--	--	--
#3	39995	--	--	--	--	--	--

Method: WATERS Sample Name: 90032 Operator: sch
Run Time: 04/07/00 14:04:56
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0018	9.135	.0062	.1041	.0062	57.41	.0005
SDev	.0004	.084	.0016	.0007	.0001	.39	.0001
%RSD	21.66	.9189	26.30	.6733	.7419	.6769	10.12
#1	.0022	9.170	.0054	.1048	.0062	57.51	.0006
#2	.0016	9.195	.0080	.1042	.0062	57.74	.0005
#3	.0014	9.039	.0051	.1034	.0061	56.98	.0006

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0386	.0007	-.0107	6.129	6.717	16.24	30.71
SDev	.0003	.0000	.0002	.043	.119	.13	.19
%RSD	.7584	5.732	1.429	.6989	1.777	.7816	.6310
#1	.0385	.0007	-.0108	6.137	6.804	16.28	30.76
#2	.0389	.0007	-.0107	6.166	6.765	16.34	30.87
#3	.0383	.0006	-.0105	6.082	6.581	16.10	30.50

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0135	.0029	.0047	.0020	.0043	.0071	-.0003
SDev	.0005	.0002	.0006	.0003	.0010	.0016	.0022
%RSD	3.980	5.547	12.27	13.90	22.54	23.35	777.0
#1	.0141	.0028	.0042	.0020	.0039	.0052	.0019
#2	.0133	.0031	.0053	.0017	.0054	.0080	-.0004
#3	.0131	.0028	.0046	.0023	.0035	.0080	-.0024

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0026	-.0033	.0462	.0017	.2368
SDev	.0026	.0030	.0026	.0004	.0021
%RSD	100.2	91.82	5.534	22.25	.8801
#1	-.0051	-.0041	.0456	.0014	.2371
#2	-.0027	-.0058	.0440	.0016	.2388
#3	.0000	.0001	.0490	.0021	.2346

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	82839	--	--	--	--	--	--
SDev	488.7426	--	--	--	--	--	--
%RSD	.5899933	--	--	--	--	--	--
#1	82452	--	--	--	--	--	--
#2	82676	--	--	--	--	--	--
#3	83388	--	--	--	--	--	--

Method: WATERS Sample Name: 90038 Operator: sch
Run Time: 04/07/00 14:11:48
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	-.1913	.0332	.0179	.0002	111.3	-.0001
SDev	.0006	.0054	.0017	.0001	.0000	.4	.0002
%RSD	78.99	2.825	5.262	.6372	7.588	.3443	209.5
#1	.0014	-.1854	.0329	.0178	.0002	111.0	.0001
#2	.0001	-.1926	.0316	.0181	.0002	111.7	-.0002
#3	.0009	-.1959	.0350	.0179	.0002	111.3	-.0002

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0007	-.0055	.3434	35.09	34.35	.0937
SDev	.0001	.0012	.0003	.0080	.44	.11	.0010
%RSD	76.92	167.9	5.435	2.319	1.253	.3186	1.098
#1	-.0002	.0017	-.0051	.3444	35.46	34.30	.0926
#2	-.0003	-.0006	-.0057	.3350	35.21	34.47	.0946
#3	-.0000	.0010	-.0056	.3508	34.60	34.27	.0941

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0008	.0043	-.0066	.0023	.0073	-.0097	-.0010
SDev	.0022	.0008	.0010	.0012	.0032	.0007	.0029
%RSD	286.3	18.58	15.58	49.66	43.85	7.246	301.2
#1	-.0011	.0049	-.0068	.0033	.0075	-.0105	.0001
#2	-.0027	.0034	-.0075	.0027	.0040	-.0095	-.0042
#3	.0016	.0044	-.0055	.0010	.0105	-.0092	.0013

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	.0030	.0059	.0019	.0143
SDev	.0019	.0043	.0050	.0003	.0002
%RSD	282.9	144.0	84.99	16.49	1.090
#1	.0007	-.0020	.0116	.0020	.0143
#2	.0002	.0056	.0036	.0021	.0144
#3	-.0029	.0053	.0024	.0015	.0141

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40628	--	--	--	--	--	--
SDev	118.9384	--	--	--	--	--	--
%RSD	.2927521	--	--	--	--	--	--
#1	40558	--	--	--	--	--	--
#2	40560	--	--	--	--	--	--
#3	40765	--	--	--	--	--	--

Method: WATERS Sample Name: 90039 Operator: sch
Run Time: 04/07/00 14:18:44
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0011	-.0473	.0030	.0065	.0002	73.43	-.0002
SDev	.0003	.0054	.0027	.0001	.0000	.14	.0002
%RSD	32.32	11.39	90.81	1.310	11.57	.1905	77.75
#1	.0015	-.0431	.0061	.0065	.0001	73.27	-.0002
#2	.0009	-.0453	.0008	.0065	.0002	73.53	-.0001
#3	.0009	-.0534	.0022	.0064	.0002	73.48	-.0005

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0010	-.0041	1.159	1.817	2.178	.1335
SDev	.0005	.0009	.0006	.006	.053	.001	.0004
%RSD	436.2	88.41	14.30	.5390	2.913	.0620	.3404
#1	-.0004	.0005	-.0041	1.164	1.856	2.179	.1339
#2	.0006	.0020	-.0036	1.160	1.838	2.176	.1337
#3	.0001	.0005	-.0047	1.152	1.756	2.179	.1330

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0008	-.0011	-.0032	-.0034	.0029	-.0059	.0015
SDev	.0012	.0016	.0037	.0030	.0019	.0067	.0030
%RSD	150.8	148.6	116.9	87.84	66.38	114.9	201.7
#1	.0005	.0007	-.0074	.0000	.0012	-.0136	.0045
#2	-.0009	-.0025	-.0022	-.0054	.0025	-.0027	-.0016
#3	-.0019	-.0014	-.0001	-.0050	.0049	-.0012	.0016

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0006	-.0003	-.0038	.0018	.0230
SDev	.0040	.0056	.0051	.0004	.0001
%RSD	672.0	2016.	135.0	20.53	.6042
#1	-.0030	.0050	.0019	.0022	.0230
#2	.0048	-.0061	-.0080	.0015	.0232
#3	-.0001	.0003	-.0052	.0018	.0229

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39870	--	--	--	--	--	--
SDev	203.7163	--	--	--	--	--	--
%RSD	.5109556	--	--	--	--	--	--
#1	39637	--	--	--	--	--	--
#2	39956	--	--	--	--	--	--
#3	40016	--	--	--	--	--	--

Method: WATERS Sample Name: 90040 Operator: sch
Run Time: 04/07/00 14:25:36
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0011	-.0732	.0204	.0049	.0004	73.92	-.0001
SDev	.0010	.0062	.0011	.0000	.0000	.52	.0002
%RSD	96.16	8.445	5.482	.8307	8.946	.7050	173.1
#1	.0008	-.0717	.0200	.0049	.0004	73.48	-.0003
#2	.0022	-.0679	.0195	.0049	.0004	73.79	-.0002
#3	.0002	-.0799	.0217	.0048	.0004	74.50	.0001

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0051	-.0055	.2777	132.0	104.3	.0126
SDev	.0011	.0002	.0009	.0056	1.5	.8	.0003
%RSD	159.9	4.432	15.59	2.034	1.163	.7349	2.263
#1	.0017	.0053	-.0046	.2809	130.4	103.9	.0128
#2	.0008	.0053	-.0063	.2810	132.2	103.8	.0126
#3	-.0005	.0049	-.0055	.2711	133.5	105.2	.0123

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0001	.0011	-.0021	.0008	.0010	-.0037	.0006
SDev	.0008	.0028	.0042	.0038	.0012	.0053	.0020
%RSD	564.4	247.0	202.4	461.8	118.9	143.0	341.3
#1	-.0007	.0024	-.0068	.0021	.0023	-.0096	-.0017
#2	.0008	-.0021	.0013	-.0034	-.0001	.0006	.0019
#3	-.0005	.0030	-.0007	.0038	.0008	-.0021	.0015

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0023	-.0010	-.0016	.0068	.0060
SDev	.0019	.0029	.0055	.0006	.0004
%RSD	85.84	287.2	351.4	8.610	7.445
#1	-.0019	-.0006	.0048	.0062	.0065
#2	-.0005	.0016	-.0046	.0074	.0060
#3	-.0043	-.0041	-.0049	.0068	.0056

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	41307	--	--	--	--	--	--
SDev	52.30679	--	--	--	--	--	--
%RSD	.1266294	--	--	--	--	--	--
#1	41343	--	--	--	--	--	--
#2	41331	--	--	--	--	--	--
#3	41247	--	--	--	--	--	--

Method: WATERS Sample Name: icv 1 Operator: sch
Run Time: 04/07/00 14:32:28
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2105	Q.0683	.2030	.2015	.2020	.2053	.2020
SDev	.0016	.0242	.0049	.0006	.0012	.0051	.0013
%RSD	.7696	35.49	2.397	.3057	.5870	2.479	.6504
#1	Q.2121	Q.0476	.2038	.2022	.2034	.2009	.2035
#2	.2089	Q.0950	.1978	.2012	.2012	.2109	.2012
#3	.2105	Q.0623	.2074	.2010	.2014	.2042	.2012
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.2000	.2000	.2000	.2000	.2000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2048	.1995	.1978	Q.2351	1.991	.2060	.2044
SDev	.0014	.0013	.0007	.0132	.137	.0032	.0009
%RSD	.7004	.6517	.3613	5.590	6.873	1.538	.4648
#1	.2064	.2010	.1984	Q.2358	2.060	.2030	.2054
#2	.2039	.1988	.1970	Q.2217	Q1.833	.2057	.2042
#3	.2039	.1988	.1980	Q.2479	2.079	.2093	.2036
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	.2000	.2000	.2000	.2000	2.000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.1952	.2069	.2049	.2049	.2102	.2065	.2011
SDev	.0013	.0023	.0053	.0032	.0039	.0078	.0019
%RSD	.6600	1.093	2.611	1.552	1.843	3.758	.9184
#1	.1964	.2092	.2028	.2085	.2098	.2025	.2027
#2	.1938	.2068	.2110	.2027	.2143	.2154	.2015
#3	.1955	.2047	.2009	.2034	.2066	.2016	.1991
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.2000	.2000	.2000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	Q.1827	.2074	.2098	.1969	.2015
SDev	.0031	.0014	.0080	.0013	.0025
%RSD	1.718	.6993	3.820	.6545	1.222
#1	Q.1837	.2078	Q.2178	.1984	.2043
#2	Q.1792	.2059	.2018	.1960	.2000
#3	Q.1852	.2087	.2099	.1963	.2001
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass

Value	.2000	.2000	.2000	.2000	.2000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40928	--	--	--	--	--	--
SDev	110.6993	--	--	--	--	--	--
%RSD	.2704710	--	--	--	--	--	--
#1	40814	--	--	--	--	--	--
#2	41035	--	--	--	--	--	--
#3	40936	--	--	--	--	--	--

Method: WATERS Sample Name: icv 2 Operator: sch
Run Time: 04/07/00 14:39:56
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.041	Q1.091	.9695	.9478	.9670	Q1.090	.9711
SDev	.014	.045	.0125	.0164	.0123	.013	.0120
%RSD	1.326	4.089	1.288	1.733	1.278	1.232	1.240
#1	Q1.056	Q1.138	.9814	.9658	.9800	Q1.105	.9842
#2	1.040	Q1.086	.9704	Q.9438	.9656	Q1.085	.9687
#3	1.028	1.049	.9565	Q.9337	.9555	Q1.080	.9605
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9781	.9603	1.019	Q1.063	9.958	Q.9231	.9757
SDev	.0123	.0118	.018	.011	.259	.0133	.0134
%RSD	1.253	1.225	1.790	1.068	2.599	1.437	1.375
#1	.9907	.9725	1.038	Q1.070	10.24	Q.9364	.9900
#2	.9776	.9594	1.017	Q1.070	9.912	Q.9230	.9736
#3	.9662	.9490	1.001	1.050	9.725	Q.9099	.9635
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	Q.9379	1.000	Q.9429	1.006	.9879	.9383	.9515
SDev	.0098	.008	.0158	.010	.0056	.0175	.0127
%RSD	1.041	.8387	1.681	.9722	.5708	1.862	1.330
#1	.9471	1.008	.9585	1.015	.9935	.9552	.9646
#2	Q.9388	1.002	Q.9434	1.008	.9881	.9396	.9506
#3	Q.9276	.9912	Q.9268	.9953	.9822	.9203	.9393
Errors	QC Fail	QC Pass	QC Fail	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	1.000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	Q.9051	.9618	.9844	Q.9340	.9804
SDev	.0125	.0075	.0190	.0127	.0089
%RSD	1.384	.7842	1.932	1.361	.9116
#1	Q.9156	.9705	.9993	.9476	.9886
#2	Q.9083	.9578	.9909	Q.9320	.9816
#3	Q.8912	.9570	.9630	Q.9224	.9709
Errors	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass

Value	1.000	1.000	1.000	1.000	1.000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	41602	--	--	--	--	--	--
SDev	674.6068	--	--	--	--	--	--
%RSD	1.621586	--	--	--	--	--	--
#1	40870	--	--	--	--	--	--
#2	41736	--	--	--	--	--	--
#3	42199	--	--	--	--	--	--

Method: WATERS Sample Name: icb Operator: sch
Run Time: 04/07/00 14:47:08
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	L-.1531	.0018	.0002	.0004	-.0157	.0005
SDev	.0001	.0039	.0017	.0000	.0000	.0010	.0001
%RSD	21.68	2.538	94.70	19.05	4.994	6.159	24.58
#1	.0004	L-.1496	.0032	.0002	.0004	-.0149	.0004
#2	.0004	L-.1523	.0023	.0001	.0004	-.0154	.0006
#3	.0006	L-.1573	-.0001	.0001	.0004	-.0168	.0004
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0050	.0015	.0500	.0015
Low	-.0050	-.0500	-.0050	-.0050	-.0015	-.0500	-.0015

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0001	L-.0060	-.0092	.0380	.0002	-.0001
SDev	.0005	.0004	.0009	.0061	.0352	.0042	.0001
%RSD	162.7	567.2	15.03	65.97	92.72	1797.	42.44
#1	.0001	-.0000	L-.0054	-.0127	.0778	-.0039	-.0001
#2	.0009	.0005	L-.0055	-.0022	.0106	-.0000	-.0001
#3	-.0001	-.0003	L-.0070	-.0127	.0256	.0046	-.0002
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0025	.0500	.1000	.0500	.0050
Low	-.0050	-.0050	-.0025	-.0500	-.1000	-.0500	-.0050

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0003	-.0013	.0006	-.0025	.0005	.0018	-.0023
SDev	.0015	.0019	.0022	.0019	.0019	.0034	.0018
%RSD	540.9	147.1	351.0	75.66	366.3	190.7	80.02
#1	.0008	-.0008	.0026	-.0018	.0005	.0042	-.0010
#2	.0004	.0003	-.0017	-.0011	.0024	-.0021	-.0014
#3	-.0020	L-.0033	.0009	-.0047	-.0013	.0032	-.0044
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.0050	.0025	.0050				
Low	-.0050	-.0025	-.0050				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0017	-.0004	H.0018	.0011	-.0008
SDev	.0013	.0008	.0016	.0002	.0001
%RSD	77.68	193.8	88.20	19.73	13.81
#1	-.0002	.0005	H.0036	.0014	-.0007
#2	-.0024	-.0007	.0009	.0011	-.0009
#3	L-.0025	-.0011	.0009	.0009	-.0008
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass

High	.0025	.0500	.0010	.0050	.0100
Low	-.0025	-.0500	-.0020	-.0050	-.0100

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40936	--	--	--	--	--	--
SDev	92.08872	--	--	--	--	--	--
%RSD	.2249596	--	--	--	--	--	--
#1	40882	--	--	--	--	--	--
#2	40883	--	--	--	--	--	--
#3	41042	--	--	--	--	--	--

Method: WATERS Sample Name: 90041 Operator: sch
Run Time: 04/07/00 14:54:01
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	-.1252	.0023	.0090	.0002	75.91	-.0002
SDev	.0008	.0180	.0014	.0001	.0000	.10	.0002
%RSD	128.6	14.35	61.73	1.693	7.452	.1358	138.8
#1	.0015	-.1080	.0035	.0091	.0002	75.93	.0001
#2	.0004	-.1439	.0007	.0089	.0003	75.79	-.0003
#3	-.0001	-.1236	.0026	.0088	.0003	75.99	-.0002

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0000	-.0055	.8330	.5262	2.400	.0089
SDev	.0010	.0006	.0004	.0076	.1877	.021	.0000
%RSD	324.4	1341.	6.887	.9112	35.67	.8592	.4464
#1	.0005	.0003	-.0059	.8293	.7137	2.415	.0088
#2	.0012	.0004	-.0052	.8280	.5268	2.408	.0088
#3	-.0008	-.0006	-.0054	.8417	.3382	2.377	.0089

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0010	-.0003	-.0001	-.0008	-.0000	-.0007	.0005
SDev	.0016	.0027	.0011	.0033	.0016	.0019	.0015
%RSD	169.8	839.2	818.6	391.5	6731.	262.8	312.2
#1	-.0008	-.0026	-.0013	-.0034	-.0018	-.0023	.0001
#2	.0006	.0026	.0000	.0029	.0014	-.0014	.0021
#3	-.0027	-.0010	.0009	-.0020	.0003	.0014	-.0008

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0054	-.0047	-.0001	.0022	.0371
SDev	.0010	.0043	.0115	.0005	.0004
%RSD	18.90	92.07	11780.	24.26	1.221
#1	.0057	.0003	-.0117	.0018	.0366

#2	.0042	-.0070	.0001	.0021	.0373
#3	.0062	-.0073	.0113	.0028	.0374

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40075	--	--	--	--	--	--
SDev	243.9815	--	--	--	--	--	--
%RSD	.6088124	--	--	--	--	--	--
#1	39798	--	--	--	--	--	--
#2	40258	--	--	--	--	--	--
#3	40169	--	--	--	--	--	--

Method: WATERS Sample Name: 90042 Operator: sch
Run Time: 04/07/00 15:00:53
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	-.0945	-.0002	.0049	.0002	92.20	-.0001
SDev	.0010	.0140	.0013	.0001	.0000	.06	.0001
%RSD	122.4	14.82	568.0	1.863	7.183	.0649	90.93
#1	.0001	-.0784	.0012	.0048	.0002	92.27	-.0000
#2	.0020	-.1023	-.0007	.0050	.0002	92.15	-.0001
#3	.0004	-.1030	-.0012	.0049	.0002	92.18	-.0002

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	.0005	-.0059	.1022	2.372	4.152	.0260
SDev	.0005	.0005	.0007	.0122	.122	.009	.0000
%RSD	62.58	94.72	12.48	11.96	5.151	.2211	.1496
#1	-.0003	.0001	-.0067	.0893	2.231	4.148	.0259
#2	-.0009	.0011	-.0056	.1136	2.450	4.145	.0260
#3	-.0013	.0004	-.0053	.1038	2.434	4.162	.0260

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0022	.0004	-.0008	-.0007	.0019	-.0002	-.0027
SDev	.0006	.0024	.0006	.0050	.0027	.0021	.0027
%RSD	27.72	549.6	68.25	766.5	142.1	1066.	101.0
#1	-.0023	-.0007	-.0011	-.0030	.0033	-.0017	-.0004
#2	-.0015	-.0013	-.0012	-.0041	.0036	-.0011	-.0020
#3	-.0027	.0033	-.0002	.0051	-.0012	.0022	-.0056

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0026	.0025	-.0053	.0021	.0287
SDev	.0005	.0018	.0017	.0004	.0003
%RSD	20.60	70.61	31.45	17.59	1.179
#1	.0020	.0006	-.0045	.0021	.0284

#2	.0031	.0040	-.0041	.0025	.0291
#3	.0026	.0029	-.0072	.0018	.0285

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40068	--	--	--	--	--	--
SDev	189.9921	--	--	--	--	--	--
%RSD	.4741742	--	--	--	--	--	--
#1	39855	--	--	--	--	--	--
#2	40129	--	--	--	--	--	--
#3	40220	--	--	--	--	--	--

Method: WATERS Sample Name: 90043 Operator: sch
Run Time: 04/07/00 15:07:46
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	-.0898	.0110	.0047	.0004	70.48	-.0003
SDev	.0008	.0068	.0014	.0001	.0000	.57	.0003
%RSD	290.0	7.625	12.82	1.961	4.622	.8032	85.63
#1	.0009	-.0892	.0126	.0048	.0004	69.91	-.0001
#2	-.0006	-.0969	.0099	.0046	.0004	70.50	-.0006
#3	.0004	-.0832	.0104	.0047	.0004	71.04	-.0003

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	.0048	-.0075	.1349	135.4	104.4	.0114
SDev	.0006	.0010	.0002	.0111	3.1	.9	.0001
%RSD	125.7	21.46	3.011	8.205	2.292	.8888	.8310
#1	.0008	.0050	-.0076	.1286	131.8	103.5	.0114
#2	-.0002	.0037	-.0072	.1285	137.0	104.4	.0115
#3	.0008	.0058	-.0076	.1477	137.3	105.3	.0114

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0007	-.0012	-.0024	-.0034	.0024	-.0041	.0004
SDev	.0015	.0024	.0058	.0041	.0014	.0070	.0033
%RSD	214.3	203.6	242.0	122.6	58.38	173.0	807.3
#1	.0007	.0008	-.0044	-.0004	.0026	-.0065	-.0008
#2	-.0008	-.0039	-.0069	-.0081	.0038	-.0096	-.0021
#3	.0023	-.0005	.0041	-.0017	.0010	.0039	.0041

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0051	.0005	.0019	.0060	.0482
SDev	.0049	.0019	.0042	.0002	.0002
%RSD	96.42	358.0	220.4	2.703	.4130
#1	-.0051	.0025	-.0014	.0059	.0482

#2	-.0099	.0004	.0004	.0062	.0479
#3	-.0001	-.0013	.0067	.0059	.0483

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	41528	--	--	--	--	--	--
SDev	118.6971	--	--	--	--	--	--
%RSD	.2858242	--	--	--	--	--	--
#1	41575	--	--	--	--	--	--
#2	41616	--	--	--	--	--	--
#3	41393	--	--	--	--	--	--

Method: WATERS Sample Name: 90044 Operator: sch
Run Time: 04/07/00 15:14:38
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	-.1006	.0004	.0003	.0002	.0860	-.0004
SDev	.0008	.0168	.0034	.0001	.0000	.0014	.0004
%RSD	658.3	16.72	790.2	19.74	20.59	1.656	90.55
#1	.0003	-.0812	.0012	.0003	.0001	.0868	-.0005
#2	.0008	-.1095	-.0033	.0003	.0002	.0868	-.0000
#3	-.0008	-.1111	.0034	.0002	.0002	.0843	-.0007

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0005	-.0070	.0381	.0816	.0127	.0001
SDev	.0008	.0005	.0005	.0037	.1564	.0076	.0001
%RSD	140.8	104.4	7.676	9.715	191.7	59.76	55.64
#1	-.0001	-.0001	-.0064	.0366	.2195	.0206	.0001
#2	-.0001	-.0004	-.0075	.0354	.1136	.0119	.0001
#3	-.0015	-.0010	-.0070	.0423	-.0884	.0055	.0002

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0027	.0004	-.0056	-.0019	.0041	-.0098	.0023
SDev	.0015	.0008	.0011	.0023	.0054	.0018	.0007
%RSD	56.24	204.8	19.40	121.5	130.7	18.65	30.67
#1	-.0044	.0013	-.0048	-.0025	.0080	-.0083	.0015
#2	-.0014	-.0000	-.0051	.0006	-.0020	-.0093	.0028
#3	-.0024	-.0001	-.0068	-.0038	.0065	-.0118	.0027

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0032	.0005	-.0024	.0008	.0052
SDev	.0025	.0027	.0040	.0002	.0002
%RSD	78.21	512.5	163.8	21.64	4.530
#1	-.0030	.0000	-.0039	.0007	.0050

#2	-.0008	.0034	-.0055	.0007	.0055
#3	-.0058	-.0019	.0021	.0010	.0052

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39845	--	--	--	--	--	--
SDev	112.4826	--	--	--	--	--	--
%RSD	.2822980	--	--	--	--	--	--
#1	39774	--	--	--	--	--	--
#2	39787	--	--	--	--	--	--
#3	39975	--	--	--	--	--	--

Method: WATERS Sample Name: 90044 d Operator: sch
Run Time: 04/07/00 15:21:30
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	-.1111	-.0010	.0002	.0002	.0826	-.0000
SDev	.0001	.0115	.0015	.0001	.0000	.0009	.0003
%RSD	30.68	10.31	160.4	25.09	10.84	1.151	1706.
#1	.0001	-.0980	.0006	.0002	.0001	.0837	-.0002
#2	.0002	-.1191	-.0010	.0003	.0002	.0822	.0004
#3	.0002	-.1163	-.0025	.0002	.0002	.0819	-.0003

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	-.0000	-.0066	.0158	.0526	.0071	-.0002
SDev	.0002	.0004	.0009	.0085	.0495	.0016	.0001
%RSD	1351.	4447.	13.33	53.77	94.15	22.05	36.20
#1	-.0002	-.0002	-.0076	.0175	.0780	.0072	-.0003
#2	.0001	.0005	-.0066	.0066	.0842	.0056	-.0002
#3	.0001	-.0004	-.0058	.0234	-.0045	.0087	-.0002

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0012	-.0008	-.0039	-.0033	.0036	-.0073	.0024
SDev	.0011	.0013	.0022	.0014	.0021	.0032	.0003
%RSD	95.30	164.8	55.90	42.59	59.73	43.68	14.05
#1	-.0012	-.0009	-.0034	-.0043	.0052	-.0068	.0028
#2	-.0023	-.0020	-.0020	-.0040	.0011	-.0044	.0023
#3	-.0001	.0006	-.0062	-.0017	.0044	-.0107	.0022

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0011	-.0006	-.0014	.0006	.0151
SDev	.0012	.0017	.0031	.0004	.0002
%RSD	104.7	282.7	218.1	78.40	1.488
#1	-.0022	-.0016	-.0024	.0010	.0149

#2	-.0012	-.0016	.0020	.0006	.0153
#3	.0001	.0014	-.0039	.0001	.0151

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39751	--	--	--	--	--	--
SDev	85.09602	--	--	--	--	--	--
%RSD	.2140745	--	--	--	--	--	--
#1	39668	--	--	--	--	--	--
#2	39746	--	--	--	--	--	--
#3	39838	--	--	--	--	--	--

Method: WATERS Sample Name: 90044 ms Operator: sch
Run Time: 04/07/00 15:28:23
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.421	1.462	1.047	1.364	1.048	1.119	1.042
SDev	.025	.074	.019	.028	.020	.022	.021
%RSD	1.758	5.058	1.851	2.058	1.897	1.968	2.030
#1	1.431	1.504	1.054	1.378	1.056	1.128	1.051
#2	1.438	1.505	1.063	1.382	1.062	1.136	1.057
#3	1.392	1.377	1.026	1.331	1.025	1.094	1.018

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.063	1.025	1.108	1.143	14.29	.9773	1.052
SDev	.022	.020	.023	.026	.41	.0152	.021
%RSD	2.043	1.948	2.087	2.278	2.903	1.555	1.962
#1	1.072	1.033	1.120	1.153	14.60	.9803	1.060
#2	1.080	1.039	1.123	1.163	14.45	.9907	1.067
#3	1.039	1.002	1.082	1.114	13.82	.9608	1.028

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.9820	1.076	.9932	1.083	1.062	.9866	1.006
SDev	.0191	.018	.0144	.017	.020	.0155	.014
%RSD	1.943	1.695	1.446	1.611	1.899	1.573	1.417
#1	.9901	1.079	.9946	1.084	1.068	.9844	1.015
#2	.9957	1.093	1.007	1.101	1.078	1.003	1.014
#3	.9602	1.057	.9782	1.066	1.039	.9722	.9894

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.9677	2.072	1.035	.9956	1.062
SDev	.0190	.040	.017	.0183	.022
%RSD	1.960	1.929	1.660	1.836	2.106
#1	.9753	2.079	1.035	1.003	1.074

#2	.9817	2.109	1.053	1.009	1.076
#3	.9461	2.030	1.019	.9748	1.036

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40310	--	--	--	--	--	--
SDev	785.4470	--	--	--	--	--	--
%RSD	1.948516	--	--	--	--	--	--
#1	39941	--	--	--	--	--	--
#2	39777	--	--	--	--	--	--
#3	41212	--	--	--	--	--	--

Method: WATERS Sample Name: 90044 msd Operator: sch
Run Time: 04/07/00 15:35:15
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.060	1.079	1.052	1.016	1.045	1.098	1.034
SDev	.002	.013	.003	.006	.001	.003	.002
%RSD	.1576	1.200	.2541	.5889	.1137	.2438	.1974
#1	1.059	1.093	1.052	1.022	1.044	1.097	1.032
#2	1.061	1.067	1.055	1.016	1.046	1.101	1.036
#3	1.058	1.079	1.049	1.010	1.044	1.096	1.034

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.060	1.020	1.105	1.138	10.59	.9680	1.049
SDev	.000	.002	.001	.015	.07	.0103	.001
%RSD	.0358	.2106	.0992	1.302	.6757	1.061	.1117
#1	1.060	1.021	1.106	1.124	10.66	.9715	1.049
#2	1.061	1.022	1.104	1.153	10.52	.9761	1.050
#3	1.060	1.018	1.106	1.137	10.58	.9565	1.048

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.9761	1.071	.9924	1.079	1.054	.9855	1.005
SDev	.0028	.001	.0015	.004	.004	.0038	.009
%RSD	.2902	.1263	.1489	.3760	.3857	.3854	.8573
#1	.9771	1.071	.9909	1.081	1.053	.9877	.9967
#2	.9784	1.069	.9923	1.074	1.059	.9812	1.014
#3	.9729	1.072	.9939	1.082	1.051	.9878	1.005

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.9615	2.073	1.042	.9901	1.060
SDev	.0049	.008	.006	.0022	.001
%RSD	.5072	.3898	.5570	.2248	.1326
#1	.9631	2.066	1.037	.9914	1.060

#2	.9655	2.070	1.040	.9912	1.061
#3	.9561	2.082	1.048	.9875	1.059

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39950	--	--	--	--	--	--
SDev	88.46091	--	--	--	--	--	--
%RSD	.2214309	--	--	--	--	--	--
#1	39849	--	--	--	--	--	--
#2	39985	--	--	--	--	--	--
#3	40015	--	--	--	--	--	--

Method: WATERS Sample Name: 90157 1:4sd Operator: sch
Run Time: 04/07/00 15:42:07
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 5

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0045	3.942	-.0165	.0408	.0030	13.99	.0025
SDev	.0042	.341	.0041	.0017	.0011	.44	.0009
%RSD	92.63	8.655	25.11	4.267	36.58	3.129	36.47
#1	.0000	4.219	-.0123	.0414	.0019	14.43	.0022
#2	.0083	4.047	-.0166	.0423	.0041	13.99	.0035
#3	.0052	3.561	-.0206	.0389	.0029	13.56	.0018

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0064	.0048	-.0058	3.895	4.567	2.414	.0821
SDev	.0025	.0029	.0023	.183	.169	.104	.0021
%RSD	39.66	59.35	39.90	4.700	3.691	4.324	2.540
#1	.0064	.0032	-.0059	4.072	4.595	2.519	.0838
#2	.0038	.0082	-.0034	3.908	4.720	2.411	.0827
#3	.0089	.0031	-.0081	3.707	4.386	2.310	.0798

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0013	.0089	.0120	.0002	.0227	.0185	-.0038
SDev	.0017	.0124	.0114	.0170	.0094	.0209	.0092
%RSD	123.2	138.9	94.96	8049.	41.49	112.8	243.5
#1	-.0025	.0037	.0166	-.0021	.0119	.0235	-.0002
#2	.0006	.0230	.0205	.0183	.0289	.0363	-.0142
#3	-.0021	-.0000	-.0010	-.0155	.0273	-.0044	.0031

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0013	.0154	.0161	.0825
SDev	.0120	.0155	.0328	.0011	.0024
%RSD	238000.	1194.	212.7	6.885	2.936
#1	.0109	.0004	.0127	.0149	.0848

#2	.0019	.0172	-.0159	.0171	.0829
#3	-.0129	-.0138	.0495	.0164	.0799

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	41298	--	--	--	--	--	--
SDev	197.5053	--	--	--	--	--	--
%RSD	.4782480	--	--	--	--	--	--
#1	41146	--	--	--	--	--	--
#2	41226	--	--	--	--	--	--
#3	41521	--	--	--	--	--	--

Method: WATERS Sample Name: 90157 1:1msa Operator: sch
Run Time: 04/07/00 15:48:59
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 2

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2096	5.233	.1963	.2430	.2022	15.29	.1992
SDev	.0006	.054	.0012	.0008	.0009	.06	.0009
%RSD	.3082	1.026	.6105	.3466	.4404	.3758	.4638
#1	.2096	5.275	.1949	.2438	.2025	15.31	.2003
#2	.2089	5.172	.1967	.2421	.2012	15.22	.1987
#3	.2102	5.250	.1972	.2430	.2029	15.33	.1987

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2063	.2039	.2368	4.410	7.745	2.818	.2928
SDev	.0014	.0013	.0021	.058	.218	.024	.0017
%RSD	.6965	.6274	.8667	1.324	2.815	.8556	.5750
#1	.2063	.2050	.2389	4.437	7.788	2.838	.2936
#2	.2048	.2025	.2348	4.344	7.509	2.791	.2909
#3	.2077	.2042	.2368	4.451	7.939	2.825	.2939

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.1926	.2196	.1981	.2205	.2164	.1997	.1936
SDev	.0021	.0021	.0036	.0030	.0074	.0058	.0052
%RSD	1.062	.9671	1.820	1.343	3.418	2.891	2.685
#1	.1905	.2212	.1982	.2236	.2148	.1970	.1996
#2	.1925	.2172	.2016	.2201	.2099	.2064	.1908
#3	.1946	.2205	.1944	.2177	.2244	.1959	.1903

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.1827	.2017	.2106	.2049	.2891
SDev	.0013	.0025	.0032	.0023	.0032
%RSD	.7338	1.255	1.533	1.142	1.095
#1	.1843	.2036	.2144	.2058	.2895

#2	.1821	.1988	.2088	.2022	.2858
#3	.1818	.2027	.2088	.2066	.2921

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40400	--	--	--	--	--	--
SDev	215.9961	--	--	--	--	--	--
%RSD	.5346395	--	--	--	--	--	--
#1	40216	--	--	--	--	--	--
#2	40638	--	--	--	--	--	--
#3	40347	--	--	--	--	--	--

Method: WATERS Sample Name: icv 1 Operator: sch
Run Time: 04/07/00 15:55:51
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2070	Q.1257	.2036	.1988	.2017	Q.1790	.1992
SDev	.0007	.0008	.0024	.0008	.0004	.0011	.0005
%RSD	.3524	.6551	1.187	.3886	.2181	.6283	.2682
#1	.2073	Q.1267	.2026	.1987	.2014	Q.1781	.1992
#2	.2075	Q.1255	.2064	.1996	.2022	Q.1803	.1998
#3	.2062	Q.1251	.2019	.1980	.2014	Q.1786	.1987
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.2000	.2000	.2000	.2000	.2000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2035	.1978	.1971	Q.2281	1.891	.1916	.2027
SDev	.0021	.0014	.0006	.0130	.045	.0056	.0003
%RSD	1.047	.6835	.2953	5.711	2.356	2.900	.1651
#1	.2026	.1972	.1967	Q.2400	Q1.878	.1964	.2024
#2	.2060	.1993	.1978	Q.2299	1.940	.1929	.2030
#3	.2020	.1968	.1969	Q.2142	Q1.854	Q.1855	.2026
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	.2000	.2000	.2000	.2000	2.000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.1922	.2065	.2048	.2078	.2032	.2058	.2022
SDev	.0017	.0018	.0033	.0028	.0002	.0050	.0001
%RSD	.8969	.8774	1.597	1.361	.0979	2.403	.0564
#1	.1903	.2078	.2064	.2099	.2031	.2082	.2021
#2	.1929	.2044	.2011	.2046	.2035	.2002	.2023
#3	.1935	.2073	.2071	.2090	.2032	.2092	.2023

Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.2000	.2000	.2000				
Range	5.500	5.500	5.500				
Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062		
Units	ppm	ppm	ppm	ppm	ppm		
Avge	Q.1801	.2027	.2000	.1941	.1994		
SDev	.0043	.0062	.0033	.0011	.0010		
%RSD	2.366	3.041	1.650	.5449	.5081		
#1	Q.1815	.2079	.1963	.1930	.1992		
#2	Q.1835	.2045	.2024	.1951	.2006		
#3	Q.1753	.1959	.2014	.1942	.1986		
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass		
Value	.2000	.2000	.2000	.2000	.2000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40879	--	--	--	--	--	--
SDev	49.16639	--	--	--	--	--	--
%RSD	.1202720	--	--	--	--	--	--
#1	40896	--	--	--	--	--	--
#2	40824	--	--	--	--	--	--
#3	40918	--	--	--	--	--	--

Method: WATERS Sample Name: icv 2 Operator: sch
Run Time: 04/07/00 16:03:12
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.041	Q1.097	.9770	Q.9436	.9803	Q1.088	.9721
SDev	.014	.052	.0147	.0170	.0134	.015	.0137
%RSD	1.385	4.731	1.505	1.805	1.371	1.391	1.408
#1	1.049	Q1.144	.9856	.9535	.9868	Q1.093	.9741
#2	1.050	Q1.107	.9854	.9534	.9893	Q1.100	.9846
#3	1.024	1.042	.9601	Q.9239	.9649	Q1.071	.9575
Errors	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9911	.9650	1.038	Q1.061	10.05	Q.9189	.9873
SDev	.0129	.0141	.018	.009	.18	.0187	.0145
%RSD	1.307	1.458	1.750	.8804	1.837	2.039	1.465
#1	.9970	.9708	1.051	Q1.055	10.23	Q.9262	.9945
#2	1.0000	.9753	1.045	Q1.071	10.06	Q.9328	.9968
#3	.9762	.9490	1.017	Q1.055	9.865	Q.8976	.9707
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	Q.9293	1.016	.9616	1.026	.9959	.9604	.9634
SDev	.0125	.009	.0143	.009	.0098	.0147	.0143
%RSD	1.342	.8977	1.484	.8544	.9871	1.535	1.485
#1	Q.9331	1.018	.9729	1.028	.9979	.9701	.9778
#2	Q.9394	1.025	.9663	1.034	1.005	.9676	.9630
#3	Q.9154	1.007	.9455	1.017	.9852	.9434	.9492
Errors	QC Fail	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	1.000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	Q.9084	.9803	.9844	Q.9362	.9847
SDev	.0128	.0175	.0107	.0132	.0124
%RSD	1.405	1.787	1.091	1.406	1.263
#1	Q.9104	.9861	.9792	Q.9418	.9899
#2	Q.9200	.9942	.9967	.9456	.9937
#3	Q.8947	.9606	.9772	Q.9211	.9705
Errors	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass

Value	1.000	1.000	1.000	1.000	1.000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	41008	--	--	--	--	--	--
SDev	632.2043	--	--	--	--	--	--
%RSD	1.541648	--	--	--	--	--	--
#1	40538	--	--	--	--	--	--
#2	40760	--	--	--	--	--	--
#3	41727	--	--	--	--	--	--

Method: WATERS Sample Name: icb Operator: sch
Run Time: 04/07/00 16:10:41
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0009	L-.1023	.0010	.0003	.0005	-.0206	.0003
SDev	.0008	.0149	.0019	.0001	.0002	.0011	.0003
%RSD	89.64	14.52	194.6	49.34	30.05	5.254	110.4
#1	.0001	L-.1015	.0025	.0002	.0004	-.0212	.0001
#2	.0010	L-.1176	.0015	.0002	.0005	-.0213	.0002
#3	.0017	L-.0879	-.0011	.0005	.0007	-.0194	.0007
Errors	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0050	.0015	.0500	.0015
Low	-.0050	-.0500	-.0050	-.0050	-.0015	-.0500	-.0015

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0009	-.0002	L-.0082	-.0045	.0223	-.0018	-.0001
SDev	.0004	.0002	.0007	.0020	.0411	.0019	.0002
%RSD	42.97	94.69	8.254	44.42	184.1	107.0	197.9
#1	.0006	-.0003	L-.0089	-.0069	.0688	-.0016	-.0003
#2	.0007	-.0005	L-.0075	-.0034	-.0093	-.0039	-.0002
#3	.0013	-.0000	L-.0083	-.0033	.0075	-.0000	.0001
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0025	.0500	.1000	.0500	.0050
Low	-.0050	-.0050	-.0025	-.0500	-.1000	-.0500	-.0050

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0002	.0009	-.0013	-.0000	.0021	-.0010	-.0024
SDev	.0002	.0015	.0057	.0031	.0015	.0080	.0017
%RSD	144.6	161.1	438.6	28660.	72.32	765.7	71.78
#1	-.0002	-.0007	H.0053	-.0032	.0038	.0081	-.0008
#2	-.0003	.0011	L-.0050	.0004	.0019	-.0067	-.0022
#3	.0001	.0024	-.0042	.0029	.0007	-.0045	-.0043
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.0050	.0025	.0050				
Low	-.0050	-.0025	-.0050				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0011	.0024	H.0052	.0010	-.0011
SDev	.0027	.0025	.0034	.0004	.0005
%RSD	257.7	104.9	64.62	46.04	43.49
#1	-.0015	.0032	H.0021	.0005	-.0016
#2	.0019	-.0004	H.0088	.0014	-.0007
#3	L-.0035	.0044	H.0048	.0011	-.0009
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass

High	.0025	.0500	.0010	.0050	.0100		
Low	-.0025	-.0500	-.0020	-.0050	-.0100		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40947	--	--	--	--	--	--
SDev	111.0015	--	--	--	--	--	--
%RSD	.2710836	--	--	--	--	--	--
#1	40948	--	--	--	--	--	--
#2	41058	--	--	--	--	--	--
#3	40836	--	--	--	--	--	--

Method: WATERS Sample Name: ss i Operator: sch
Run Time: 04/07/00 16:17:33
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0016	Q-.0051	.0408	.0394	Q.0015	.0367	Q.0015
SDev	.0007	.0068	.0022	.0001	.0000	.0015	.0001
%RSD	44.35	133.8	5.302	.3755	1.071	3.986	5.941
#1	Q.0024	Q-.0127	.0423	.0394	Q.0015	.0384	Q.0016
#2	Q.0016	Q-.0030	.0418	.0395	Q.0015	.0359	Q.0015
#3	.0009	Q.0004	.0383	.0392	Q.0015	.0359	Q.0014
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Fail	NOCHECK	QC Fail
Value	.0010	.0400	.0400	.0400	.0010		.0010
Range	20.00	20.00	20.00	20.00	20.00		20.00

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0108	.0041	Q-.0034	Q.0276	.0970	-.0005	.0098
SDev	.0007	.0006	.0005	.0192	.1286	.0005	.0001
%RSD	6.161	14.07	14.91	69.71	132.6	86.35	.6546
#1	.0106	.0047	Q-.0035	.0216	.2141	-.0008	.0099
#2	.0115	.0036	Q-.0028	Q.0491	.1174	-.0000	.0098
#3	.0102	.0039	Q-.0038	Q.0121	-.0407	-.0008	.0098
Errors	QC Pass	QC Pass	QC Fail	QC Fail	NOCHECK	NOCHECK	QC Pass
Value	.0100	.0040	.0050	.0200			.0100
Range	20.00	20.00	20.00	20.00			20.00

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0103	Q.0120	.0393	.0138	.0076	.0391	.0391
SDev	.0024	.0036	.0013	.0079	.0049	.0028	.0033
%RSD	23.08	30.22	3.362	57.01	64.99	7.266	8.541
#1	.0116	.0093	.0389	.0084	.0102	.0403	.0356
#2	.0118	.0106	.0408	.0102	.0106	.0411	.0394
#3	Q.0076	Q.0161	.0382	.0228	.0019	.0358	.0423

Errors	QC Pass	QC Fail	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0100	.0100	.0400				
Range	20.00	20.00	20.00				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	Q.0079	.0004	.0402	.0108	.0119
SDev	.0054	.0037	.0028	.0006	.0009
%RSD	68.25	931.6	7.052	5.238	7.680
#1	Q.0133	.0046	.0417	.0106	Q.0125
#2	Q.0080	-.0013	.0421	.0114	Q.0123
#3	Q.0025	-.0021	.0370	.0103	.0109

Errors	QC Fail	NOCHECK	QC Pass	QC Pass	QC Pass
Value	.0100		.0400	.0100	.0100
Range	20.00		20.00	20.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40316	--	--	--	--	--	--
SDev	122.9919	--	--	--	--	--	--
%RSD	.3050696	--	--	--	--	--	--
#1	40334	--	--	--	--	--	--
#2	40185	--	--	--	--	--	--
#3	40429	--	--	--	--	--	--

Method: WATERS Sample Name: ss i low Operator: sch
Run Time: 04/07/00 16:24:31
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	-.0657	.0087	.0110	.0006	.0040	.0006
SDev	.0009	.0080	.0023	.0001	.0000	.0020	.0002
%RSD	76.92	12.18	25.83	.7928	1.542	51.11	33.01
#1	.0016	-.0746	.0099	.0111	.0006	.0019	.0004
#2	.0018	-.0634	.0101	.0110	.0006	.0041	.0006
#3	.0001	-.0591	Q.0061	.0111	.0006	.0059	.0008

Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value			.0100	.0100			
Range			20.00	20.00			

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0036	.0010	-.0073	.0046	.0032	-.0000	.0022
SDev	.0009	.0005	.0003	.0131	.1050	.0008	.0001
%RSD	24.52	49.77	4.182	282.3	3326.	14760.	2.783
#1	.0026	Q.0015	-.0070	.0169	.0782	.0008	.0022

#2	Q.0041	Q.0005	-.0076	.0062	.0481	-.0000	.0021
#3	Q.0041	.0009	-.0072	-.0092	-.1169	-.0008	.0022

Errors	QC Fail	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value	.0025	.0010					.0025
Range	20.00	20.00					20.00

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0022	Q.0019	Q.0126	.0010	.0029	.0137	.0100
SDev	.0008	.0026	.0020	.0046	.0025	.0032	.0065
%RSD	37.93	139.2	15.54	467.6	85.12	23.52	65.56
#1	Q.0020	Q.0032	Q.0124	.0022	.0046	.0168	.0029
#2	Q.0031	Q.0035	Q.0147	.0049	.0001	.0139	.0158
#3	Q.0015	Q-.0011	.0108	-.0041	.0041	.0104	.0111

Errors	QC Pass	QC Fail	QC Fail	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0025	.0025	.0100				
Range	20.00	20.00	20.00				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0025	.0012	Q.0185	Q.0041	.0025
SDev	.0042	.0039	.0011	.0008	.0002
%RSD	170.6	328.9	5.826	18.38	7.201
#1	-.0008	.0037	Q.0183	Q.0033	.0027
#2	.0073	-.0033	Q.0196	Q.0042	.0023
#3	.0010	.0032	Q.0175	Q.0048	.0026

Errors	NOCHECK	NOCHECK	QC Fail	QC Fail	NOCHECK
Value			.0100	.0025	
Range			20.00	20.00	

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40399	--	--	--	--	--	--
SDev	30.10537	--	--	--	--	--	--
%RSD	.0745195	--	--	--	--	--	--
#1	40390	--	--	--	--	--	--
#2	40433	--	--	--	--	--	--
#3	40375	--	--	--	--	--	--

Method: WATERS Sample Name: ics a Operator: sch
Run Time: 04/07/00 16:31:28
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	57.71	-.0015	.0012	.0003	49.89	-.0034
SDev	.0005	.11	.0029	.0000	.0000	.16	.0006
%RSD	80.83	.1946	189.6	2.160	1.474	.3112	16.33

#1	-.0006	57.66	-.0020	.0012	.0003	49.76	-.0038
#2	-.0001	57.64	-.0042	.0012	.0003	49.85	-.0028
#3	-.0011	57.84	.0016	.0011	.0003	50.07	-.0037
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0050	50.00	.0050	.0050	.0015	50.00	.0025
Range	300.0	20.00	300.0	300.0	300.0	20.00	300.0
Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0004	-.0058	50.32	.0617	50.74	.0035
SDev	.0007	.0006	.0003	.17	.0771	.12	.0001
%RSD	97.93	155.4	4.711	.3337	124.9	.2456	2.694
#1	.0004	.0009	-.0062	50.17	.1208	50.63	.0035
#2	.0016	.0003	-.0056	50.31	.0898	50.71	.0036
#3	.0002	-.0002	-.0058	50.50	-.0255	50.88	.0034
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0050	.0050	.0050	50.00	.0500	50.00	.0050
Range	300.0	300.0	300.0	20.00	300.0	20.00	300.0
Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0008	.0010	-.0054	.0016	-.0009	-.0082	-.0003
SDev	.0005	.0012	.0007	.0020	.0016	.0013	.0034
%RSD	63.68	118.3	13.42	126.5	168.0	15.25	1315.
#1	-.0012	.0019	-.0049	.0037	-.0024	-.0070	-.0014
#2	-.0009	.0013	-.0062	.0012	.0008	-.0081	-.0029
#3	-.0003	-.0003	-.0050	-.0002	-.0012	-.0095	.0036
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0050	.0050	.0050				
Range	300.0	300.0	300.0				
Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062		
Units	ppm	ppm	ppm	ppm	ppm		
Avge	-.0025	-.0007	.0028	.0023	.0022		
SDev	.0036	.0014	.0059	.0007	.0002		
%RSD	144.1	199.6	212.7	30.42	9.560		
#1	-.0008	-.0017	.0082	.0015	.0021		
#2	-.0067	-.0013	-.0036	.0028	.0021		
#3	-.0001	.0009	.0038	.0025	.0024		
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass		
Value	.0050	.0050	.0050	.0050	.0050		
Range	300.0	300.0	300.0	300.0	300.0		

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40588	--	--	--	--	--	--

SDev	114.8579	--	--	--	--	--	--
%RSD	.2829872	--	--	--	--	--	--
#1	40691	--	--	--	--	--	--
#2	40608	--	--	--	--	--	--
#3	40464	--	--	--	--	--	--

Method: WATERS Sample Name: ics ab Operator: sch
Run Time: 04/07/00 16:40:02
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3154	59.17	1.018	.3021	.1033	50.51	.2989
SDev	.0009	.11	.003	.0018	.0002	.09	.0015
%RSD	.2912	.1800	.2603	.5968	.1631	.1779	.5077
#1	.3164	59.24	1.015	.3030	.1032	50.42	.2985
#2	.3150	59.22	1.020	.3001	.1032	50.51	.2976
#3	.3147	59.05	1.019	.3034	.1035	50.60	.3006
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.3000	50.00	1.000	.3000	.1000	50.00	.3000
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3107	.3004	.3297	51.01	Q26.15	51.56	.2112
SDev	.0007	.0001	.0014	.11	.32	.05	.0005
%RSD	.2112	.0482	.4215	.2195	1.238	.0972	.2440
#1	.3104	.3003	.3290	50.88	Q25.88	51.55	.2107
#2	.3102	.3005	.3289	51.08	Q26.51	51.62	.2113
#3	.3114	.3005	.3313	51.08	Q26.05	51.52	.2117
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.3000	.3000	.3000	50.00	20.00	50.00	.2000
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.2900	1.074	.5113	1.084	1.053	.5105	.5123
SDev	.0024	.003	.0041	.005	.006	.0074	.0057
%RSD	.8359	.2599	.8075	.4635	.5260	1.442	1.117
#1	.2910	1.072	.5071	1.083	1.048	.5051	.5105
#2	.2873	1.077	.5114	1.090	1.050	.5074	.5187
#3	.2918	1.073	.5153	1.080	1.059	.5188	.5077
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.3000	1.000	.5000				
Range	20.00	20.00	20.00				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	Q.0994	Q.1094	1.032	.2971	.3044
SDev	.0027	.0021	.007	.0005	.0013
%RSD	2.692	1.930	.6607	.1824	.4369
#1	Q.1018	Q.1107	1.029	.2973	.3047
#2	Q.0965	Q.1106	1.040	.2974	.3055
#3	Q.1000	Q.1070	1.027	.2964	.3029
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass

Value	1.000	1.000	1.000	.3000	.3000		
Range	20.00	20.00	20.00	20.00	20.00		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40430	--	--	--	--	--	--
SDev	66.34003	--	--	--	--	--	--
%RSD	.1640862	--	--	--	--	--	--
#1	40355	--	--	--	--	--	--
#2	40481	--	--	--	--	--	--
#3	40454	--	--	--	--	--	--

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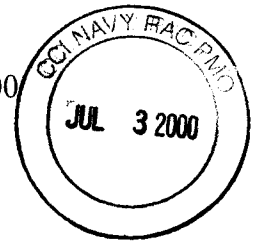

CASE NARRATIVE for Project Number: 24747
Client Project: SWMU 15 Quarterly G.W. Sampling / 083[redacted]SWMU15

The following items were noted concerning this project:

1. The following samples were received by Accura Analytical Laboratory on 6/22/00 at 1000:

Client I.D.	Laboratory I.D.
007-MW01S-Q2-00	AB94248
007-MW03S-Q2-00	AB94249
007-MW04S-Q2-00	AB94250
007-MW05S-Q2-00	AB94251
007-MW08S-Q2-00	AB94252
007-DUP-Q2-00	AB94253
007-EQB-Q2-00	AB94254

2. The cooler temperature was 2^0C upon receipt.

3. The "J" flags applied to the Pesticide results indicate estimated values in which the compounds are present at concentrations that are less than the quantitation limit, but above the method detection limit.

4. The "B" flags applied to the Arsenic results indicates that the analyte was detected in the method blank at a concentration that was above the RDL, and the samples were less than five times the concentration of the method blank contamination. These results should be considered estimated.

5. The following samples required dilution due to the nature of the matrix, resulting in elevated detection limits:
   Pesticides SW-846-8081A
   007-MW04S-Q2-00
   007-DUP-Q2-00

6. Due to high sulfer concentration in the samples submitted for Pesticide analyses, a TBA cleanup was performed by Method SW-846-3660B. Following the cleanup procedure Endrin Aldehyde was not within the method acceptance limits for the Laboratory Control Sample; therefore all results for Endrin Aldehyde were obtained from the sample extract prior to cleanup.

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7. The calculated reporting limit for Endrin Aldehyde was based on the low standard concentration on the current calibration curve for samples 007-MW04S-Q2-00 and 007-DUP-Q2-00 at a 10 times dilution factor.

8. The following surrogate was outside the method specified limits due to matrix interference:
   Pesticides SW-846-8081A
   Tetrachloro-m-xylene (007-DUP-Q2-00)

Quality Assurance

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TABLE 2-3
PROJECT QUALITY CONTROL OBJECTIVES

		Project Control Recoveries				Accuracy Limits		Project Control		Precision Limits		Project Control Recoveries		Accuracy Limits		Project Control		Precision Limits	
		LCS	LCSD	MS	MSD	MS/MSD Recoveries		MS/MSD % Deviation		MS/MSD Deviation		LSC	LCS	LCS Recoveries		Field Dup % Deviation		Field Dup Deviation	
Method No	Analyte / Component	Water		Soil		Water	Soil	Water	Soil	Water	Soil	Water	Soil	Water	Soil			Water	Soil
TCL PESTICIDES/AROCHLORS						%	%			%	%			%	%			%	%
8081A	alpha-BHC	92	92			60-140	20-150	0%	#VALUE!	<30	<50	89		75-125	65-135			<50	<75
8081A	beta-BHC	94	93			60-140	20-150	1%	#VALUE!	<30	<50	93		51-125	41-133			<50	<75
8081A	delta-BHC	96	96			60-140	20-150	0%	#VALUE!	<30	<50	87		75-126	65-136			<50	<75
8081A	gamma-BHC (Lindane)	95	96			60-140	20-150	1%	#VALUE!	<30	<50	92		73-125	63-130			<50	<75
8081A	Heptachlor	100	98			60-140	20-150	2%	#VALUE!	<30	<50	94		45-128	35-138			<50	<75
8081A	Aldrin	94	93			60-140	20-150	1%	#VALUE!	<30	<50	92		47-125	37-126			<50	<75
8081A	Heptachlor epoxide	105	105			60-140	20-150	0%	#VALUE!	<30	<50	104		53-134	43-144			<50	<75
8081A	Endosulfan I	108	106			60-140	20-150	2%	#VALUE!	<30	<50	104		49-143	39-153			<50	<75
8081A	Dieldrin	107	107			60-140	20-150	0%	#VALUE!	<30	<50	106		42-132	32-142			<50	<75
8081A	4,4'-DDE	106	104			60-140	20-150	2%	#VALUE!	<30	<50	106		45-139	35-149			<50	<75
8081A	Endrin	108	106			60-140	20-150	2%	#VALUE!	<30	<50	110		43-134	33-144			<50	<75
8081A	Endosulfan II	108	106			60-140	20-150	2%	#VALUE!	<30	<50	98		75-159	65-169			<50	<75
8081A	4,4'-DDD	99	97			60-140	20-150	2%	#VALUE!	<30	<50	101		48-136	38-146			<50	<75
8081A	Endosulfan sulfate	106	101			60-140	20-150	5%	#VALUE!	<30	<50	104		46-141	36-151			<50	<75
8081A	4,4'-DDT	110	106			60-140	20-150	4%	#VALUE!	<30	<50	106		34-143	25-153			<50	<75
8081A	Methoxychlor	107	104			60-140	20-150	3%	#VALUE!	<30	<50	104		73-142	63-152			<50	<75
8081A	Endrin ketone	109	106			60-140	20-150	3%	#VALUE!	<30	<50	104		43-134	33-144			<50	<75
8081A	Endrin aldehyde	105	101			60-140	20-150	4%	#VALUE!	<30	<50	105*		75-150	35-160			<50	<75
8081A	alpha-Chlordane	103	103			60-140	20-150	0%	#VALUE!	<30	<50	77		41-125	31-135			<50	<75
8081A	gamma-Chlordane	103	102			60-140	20-150	1%	#VALUE!	<30	<50	100		41-125	31-133			<50	<75
8081A	Toxaphene					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Arochlor-1016					60-140	20-150	#VALUE!	#VALUE!	<30	<50			54-125	44-127			<50	<75
8081A	Arochlor-1221					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Arochlor-1232					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Arochlor-1242					60-140	20-150	#VALUE!	#VALUE!	<30	<50			39-150	29-160			<50	<75
8081A	Arochlor-1248					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Arochlor-1254					60-140	20-150	#VALUE!	#VALUE!	<30	<50			29-131	25-141			<50	<75
8081A	Arochlor-1260					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Decachlorobiphenyl (DCBP) (Surr)	82	79			34-133	25-143	4%	#VALUE!			83							
8081A	Tetrachloro-m-xylene (TCMX) (Surr)	107	91			45-125	35-135	16%	#VALUE!			107							
TAL METALS BY GFAA						%	%			%	%			%	%			%	%
7060A	Arsenic					50-150	30-170	#VALUE!	#VALUE!	<30	<50			74-120	74-1120			<50	<75

* Value from non-cleaned fraction. Analyte reported from non-cleaned fraction in sample.

Notes:
1) SW-846 Methods unless otherwise noted
2) Includes sediments, waste, solids

NS = Not Specified
NA = Not Applicable

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FL Certification # E87429 NC Certification # 483 SC Certification # 98015 USACE-MRD Approved

LABORATORY REPORT

Accura Sample ID #: AB94248 **Accura Project #: 24747**

Client: CH2M HILL - CCI Date Sampled: 6/21/00

Client Contact: KEITH CONN Date Received: 6/22/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 7/7/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW01S-Q2-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/29/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.027B	0.0050
Overwrite metal name here	<RDL	1

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/28/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.80	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	0.035 J	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/28/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	40	
Tetrachloro-m-xylene (Range 5-156)	76	

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LABORATORY REPORT

Accura Sample ID #: AB94249 **Accura Project #: 24747**

Client: CH2M HILL - CCI Date Sampled: 6/21/00

Client Contact: KEITH CONN Date Received: 6/22/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 7/6/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW03S-Q2-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/29/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	103	
Tetrachloro-m-xylene (Range 5-156)	86	

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FL Certification # E87429 NC Certification # 483 SC Certification # 98015 USACE-MRD Approved

LABORATORY REPORT

Accura Sample ID #: AB94250 **Accura Project #: 24747**

Client: CH2M HILL - CCI Date Sampled: 6/21/00

Client Contact: KEITH CONN Date Received: 6/22/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 7/7/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW04S-Q2-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/29/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.012B	0.0050
Overwrite metal name here	<RDL	1

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/28/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	0.030 J	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.26	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	0.025 J	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.50
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/28/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	35	
Tetrachloro-m-xylene (Range 5-156)	132	

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LABORATORY REPORT

Accura Sample ID #: AB94251 **Accura Project #: 24747**

Client: CH2M HILL - CCI Date Sampled: 6/21/00

Client Contact: KEITH CONN Date Received: 6/22/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 7/6/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW05S-Q2-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/29/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	86	
Tetrachloro-m-xylene (Range 5-156)	81	

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LABORATORY REPORT

Accura Sample ID #: AB94252 **Accura Project #: 24747**

Client: CH2M HILL - CCI Date Sampled: 6/21/00

Client Contact: KEITH CONN Date Received: 6/22/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 7/7/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-MW08S-Q2-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/29/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.0065B	0.0050
Overwrite metal name here	<RDL	1

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	102	
Tetrachloro-m-xylene (Range 5-156)	80	

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LABORATORY REPORT

Accura Sample ID #: AB94253 **Accura Project #: 24747**

Client: CH2M HILL - CCI Date Sampled: 6/21/00

Client Contact: KEITH CONN Date Received: 6/22/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 7/7/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-DUP-Q2-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/29/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.0088B	0.0050
Overwrite metal name here	<RDL	1

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/28/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	0.025 J	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.32	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	0.030 J	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.50
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/28/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	28	
Tetrachloro-m-xylene (Range 5-156)	225	

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LABORATORY REPORT

Accura Sample ID #: AB94254 **Accura Project #: 24747**

Client: CH2M HILL - CCI Date Sampled: 6/21/00

Client Contact: KEITH CONN Date Received: 6/22/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 7/6/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: 007-EQB-Q2-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/29/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-169)	83	
Tetrachloro-m-xylene (Range 5-156)	115	

Accura Analytical Laboratory, Inc.

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FL Certification # E87429 NC Certification # 483 SC Certification # 98015 USACE-MRD Approved

LABORATORY REPORT

Accura Sample ID #: AB94255 **Accura Project #: 24747**

Client: CH2M HILL - CCI Date Sampled: 6/22/00

Client Contact: KEITH CONN Date Received: 6/22/00

Client Project Number: 083-CTO 007 SWMU15 Date Reported: 7/6/00

Client Project Name: SWMU 15 QUARTERLY G.W. SAMPLING Sample Matrix: WATER

Client Sample ID: METHOD BLANK

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/29/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.0059	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest QC Surrogates (Waters) Method Ref: 8081A

Date Ext/Dig/Prep: 6/26/00 Date Analyzed: 6/27/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range 35-133)	102	
Tetrachloro-m-xylene (Range 49-146)	78	

Accura Analytical Laboratory, Inc.

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

AAL# 24747

COC NUMBER: **149294-01**

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
N.S. Mayport SWMU 15	**149294**	**Accura Analytical Laboratory Jeff Wilmoth**	**Keith Conn J.A Jones Env. Services**	**6219 Authority Ave. Building 1 Jacksonville, FL 32221 Ph:(904) 7774812 Fax: (904) 7774262**
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
SWMU 15 Quarterly GW	**0007**	**1786**	**Lisa Schwan CH2M Hill Constuctors, Inc.**	**115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 Ph:(770)604-9182 Ext.561 Fax:604-9282**
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Keith Conn	**Ph:(904)777-4812 Fax:(904) 777-4262**	**Ph:(770) 449-8800 Fax:(770) 449-5477**		

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	ANALYSES REQUIRED (Include Method Numbers): TCL Pesticides by 8081A	Arsenic by 7060A									SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	**007-MW01S-Q2-00**	**MPT-15-MWO-1S**	**W**	**06/21/00**	**10:40**	**III/C**	**14**	**2**	**1**									**Grab**		94248
2	**007-MW03S-Q2-00**	**MPT-15-MWO-3S**	**W**	**06/21/00**	**11:55**	**III/C**	**14**	**3**	**1**									**Grab**	**MS/MSD**	94249
3	**007-MW04S-Q2-00**	**MPT-15-MWO-4S**	**W**	**06/21/00**	**14:10**	**III/C**	**14**	**2**	**1**									**Grab**		94250
4	**007-MW05S-Q2-00**	**MPT-15-MWO-5S**	**W**	**06/21/00**	**13:35**	**III/C**	**14**	**2**	**1**									**Grab**		94251
5	**007-MW08S-Q2-00**	**MPT-15-MWO-8S**	**W**	**06/21/00**	**11:20**	**III/C**	**14**	**2**	**1**									**Grab**		94252
6	**007-DUP-Q2-00**	**Duplicate**	**W**			**III/C**	**14**	**2**	**1**									**Grab**		94253
7	**007-EQB-Q2-00**	**Equipment Blank**	**W**	**06/21/00**	**11:00**	**III/C**	**14**	**2**	**1**									**Grab**	**Prepared in the Field**	94254
8																				
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Randy Dumaop / Brian Crawford J.A. Jones Environmental Services	**Federal Express TRK# 791102232960, 790854427084**	2°C

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R.Dumaop	6/21/00	17:30	Federal Express TRK# 791102232960, 790854427084	6/21/00	17:30
Printed Name and Signature:			Printed Name and Signature:		
Fedex			Lively	6/22/00	10:00
Printed Name and Signature:			Printed Name and Signature:		

SVO GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

DATE / INSTRUMENT: 06/22/00 GC-PEST-A	METHOD: (circle applicable methods)
MATRIX:	(8081A) 8082 8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst: YCK	Reviewer:
Date: 06/26/00 Time: 11:30	Date: 06.28.2000 Time: 1206

Response Factor Report GC/ECD IN

Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000

Calibration Files
0.01 =06220005.D 0.05 =06220006.D 0.1 =06220007.D
0.25 =06220008.D 0.35 =06220009.D 0.50 =06220010.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	TCMX (SURR)	0.980	1.070	1.037	0.885	0.817	0.763	0.925	E8	13.36
2)	T	A-BHC	1.413	1.574	1.507	1.343	1.270	1.193	1.383	E8	10.38
3)	T	B-BHC	6.631	6.592	6.251	5.683	5.358	5.094	5.935	E7	10.97
4)	T	LINDANE	1.275	1.391	1.328	1.187	1.114	1.057	1.225	E8	10.48
5)	T	D-BHC	1.126	1.323	1.264	1.161	1.088	1.035	1.166	E8	9.33
6)	T	HEPTACHLOR	1.153	1.190	1.097	0.937	0.873	0.816	1.011	E8	15.47
7)	T	ALDRIN	1.127	1.167	1.095	0.955	0.893	0.835	1.012	E8	13.47
8)	T	HEPT.EPOXIDE	1.120	1.062	0.985	0.865	0.808	0.765	0.934	E8	15.36
9)	T	ENDOSULFAN 1	1.108	1.097	1.014	0.865	0.816	0.760	0.943	E8	15.83
10)	T	GAMMA-CHLORDANE	1.154	1.109	1.054	0.957	0.891	0.852	1.003	E8	12.11
11)	T	ALPHA-CHLORDANE	1.027	1.019	0.958	0.803	0.813	0.768	0.898	E8	12.97
12)	T	DDE	7.273	8.685	8.644	8.143	7.628	7.265	7.940	E7	8.14
13)	T	DIELDRIN	0.934	1.000	0.956	0.862	0.814	0.769	0.889	E8	10.03
14)	T	ENDRIN	7.214	7.888	7.618	7.143	6.667	6.469	7.167	E7	7.55
15)	T	DDD	5.893	7.283	7.376	7.050	6.807	6.524	6.822	E7	8.09
16)	T	ENDOSULFAN 2	8.114	8.485	8.191	7.261	7.045	6.739	7.639	E7	9.35
17)	T	ENDRIN ALDEHYDE	6.639	6.446	6.372	5.763	5.567	5.337	6.021	E7	8.87
18)	T	DDT	6.025	7.464	7.577	7.262	7.013	6.750	7.015	E7	8.13
19)	T	ENDOS.SULFATE	8.473	7.787	7.462	6.749	6.471	6.193	7.189	E7	12.09
20)	T	METHOXYCHLOR		3.895	3.804	3.722	3.640	3.578	3.728	E7	3.39
21)	T	ENDRIN KETONE	8.800	8.993	8.522	7.800	7.493	7.120	8.121	E7	9.35
22)	S	DCB (SURR)	1.041	0.924	0.833	0.707	0.674	0.639	0.803	E8	19.71

Signal #2 Calibration Files
0.01 =06220005.D 0.05 =06220006.D 0.1 =06220007.D
0.25 =06220008.D 0.35 =06220009.D 0.50 =06220010.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	TCMX (SURR)	9.938	9.636	9.097	8.041	7.741	7.242	8.616	E7	12.72
2)	T	A-BHC	1.264	1.497	1.461	1.323	1.272	1.196	1.336	E8	8.88
3)	T	B-BHC	5.348	5.647	5.800	5.488	5.191	5.007	5.414	E7	5.41
4)	T	LINDANE	1.329	1.271	1.235	1.149	1.092	1.040	1.186	E8	9.37
5)	T	D-BHC	0.810	1.003	1.005	0.977	0.927	0.904	0.938	E8	7.98
6)	T	HEPTACHLOR	1.299	1.266	1.183	1.054	0.990	0.924	1.120	E8	13.67
7)	T	ALDRIN	1.052	1.108	1.060	0.963	0.909	0.862	0.992	E8	9.70
8)	T	HEPT.EPOXIDE	1.005	1.026	0.965	0.853	0.826	0.791	0.911	E8	10.98
9)	T	ENDOSULFAN 1	9.769	9.912	9.361	8.510	8.043	7.682	8.879	E7	10.81
10)	T	GAMMA-CHLORDANE	0.976	1.075	1.042	0.959	0.906	0.866	0.971	E8	8.15
11)	T	ALPHA-CHLORDANE	9.855	9.823	9.435	8.614	8.169	7.797	8.949	E7	9.83
12)	T	DDE	8.267	9.272	9.208	8.760	8.341	8.037	8.648	E7	5.96
13)	T	DIELDRIN	9.029	9.920	9.579	8.845	8.414	8.061	8.975	E7	7.76
14)	T	ENDRIN	7.325	6.855	7.066	6.795	6.394	6.384	6.803	E7	5.45
15)	T	DDD	5.827	6.452	6.570	6.542	6.241	6.081	6.285	E7	4.66

= = Out of Range

Response Factor Report GC/ECD IN

Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000

Calibration Files
0.01 =06220005.D 0.05 =06220006.D 0.1 =06220007.D
0.25 =06220008.D 0.35 =06220009.D 0.50 =06220010.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
16)	T	ENDOSULFAN 2	9.429	9.090	8.661	7.856	7.522	7.169	8.288	E7	10.94
17)	T	ENDRIN ALDEHYDE	6.796	6.407	6.247	5.844	5.570	5.385	6.041	E7	8.87
18)	T	DDT	5.758	6.956	7.095	7.007	6.730	6.598	6.690	E7	7.37
19)	T	ENDOS.SULFATE	7.950	7.780	7.470	6.959	6.660	6.419	7.206	E7	8.62
20)	T	METHOXYCHLOR		3.236	3.358	3.364	3.253	3.293	3.301	E7	1.78
21)	T	ENDRIN KETONE	8.952	9.110	8.710	8.023	7.685	7.358	8.307	E7	8.67
22)	S	DCB (SURR)	9.664	9.161	8.244	7.154	6.848	6.488	7.926	E7	16.42

=) = Out of Range

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062200\06220005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\062200\06220005.D\ECD2B.CH
Acq On : 22 Jun 2000 3:10 pm Operator: YGK
Sample : IC PEST .010 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 22 20:39 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Fri May 05 09:39:32 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
	System Monitoring Compounds							
) S	TCMX (SURR)	8.20	7.90	979507	993845	0.012	0.013	
Spiked Amount	0.250			Recovery	=	4.80%	5.20%	
) S	DCB (SURR)	20.98	21.40	1041305	966381	0.016	0.014	
Spiked Amount	0.250			Recovery	=	6.40%	5.60%	
	Target Compounds							
) T	A-BHC	9.74	9.58	1413320	1264270	0.011	0.010	
) T	B-BHC	10.83	10.75	663099	534781	0.013	0.010	
) T	LINDANE	10.58	10.50	1274602	1329116	0.012	0.012	
) T	D-BHC	11.28	11.46	1125788	810070	0.010	0.009	
) T	HEPTACHLOR	11.77	11.54	1153226	1299215	0.013	0.013	
) T	ALDRIN	12.50	12.30	1127419	1051892	0.013	0.012	
) T	HEPT.EPOXIDE	13.93	13.64	1120324	1004873	0.014	0.012	
) T	ENDOSULFAN 1	14.82	14.51	1107914	976873	0.014	0.012	
) T	GAMMA-CHLORDANE	14.21	14.06	1153664	976451	0.013	0.011	
) T	ALPHA-CHLORDANE	14.51	14.39	1026748	985519	0.013	0.012	
) T	DDE	14.72	14.81	727317	826676	0.010	0.010	
) T	DIELDRIN	15.35	15.11	934368	902858	0.012	0.011	
) T	ENDRIN	15.87	15.77	721397	732510	0.011	0.011	
) T	DDD	16.04	16.07	589338	582657	0.009	0.009	
) T	ENDOSULFAN 2	16.37	16.24	811357	942884	0.012	0.013	
) T	ENDRIN ALDEHYDE	17.28	16.97	663850	679596	0.012	0.012	
) T	DDT	16.63	16.72	602541	575759	0.009	0.009	
) T	ENDOS.SULFATE	18.22	17.56	847265	795017	0.013	0.012	
) T	METHOXYCHLOR	17.67	18.19	526832	264521	0.015	0.008	#
) T	ENDRIN KETONE	18.83	18.70	880048	895243	0.012	0.012	

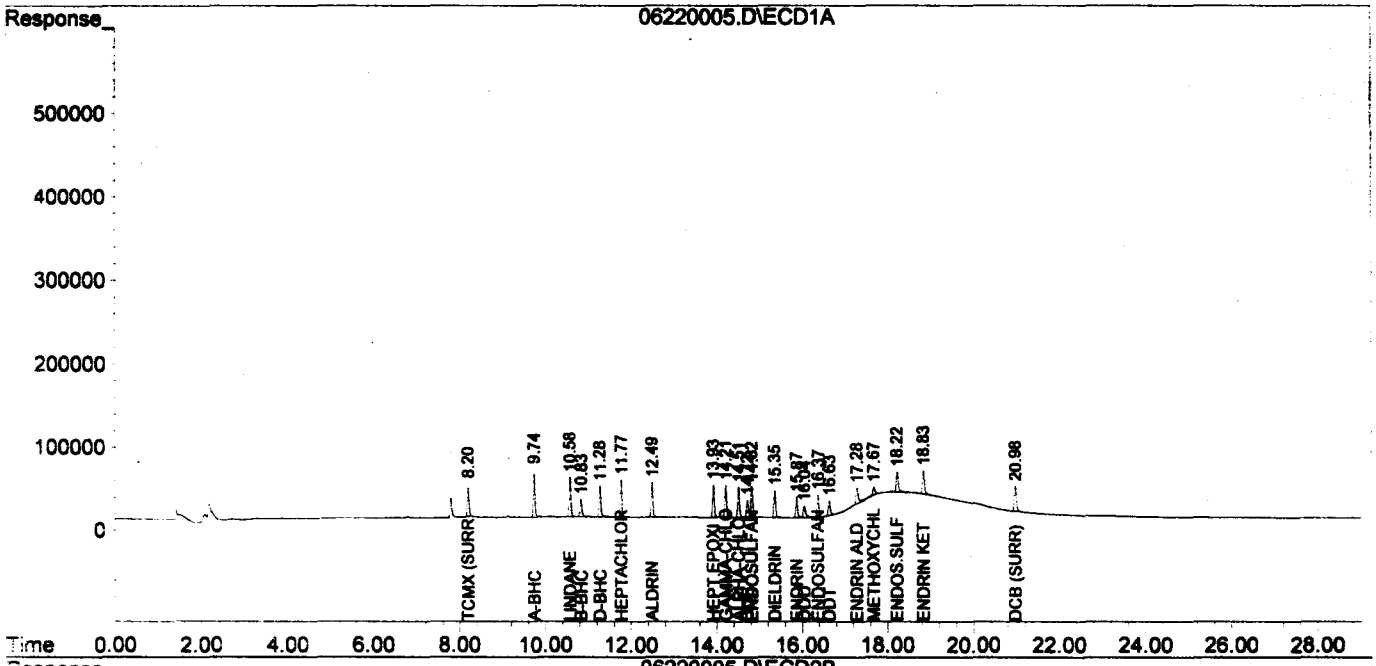
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

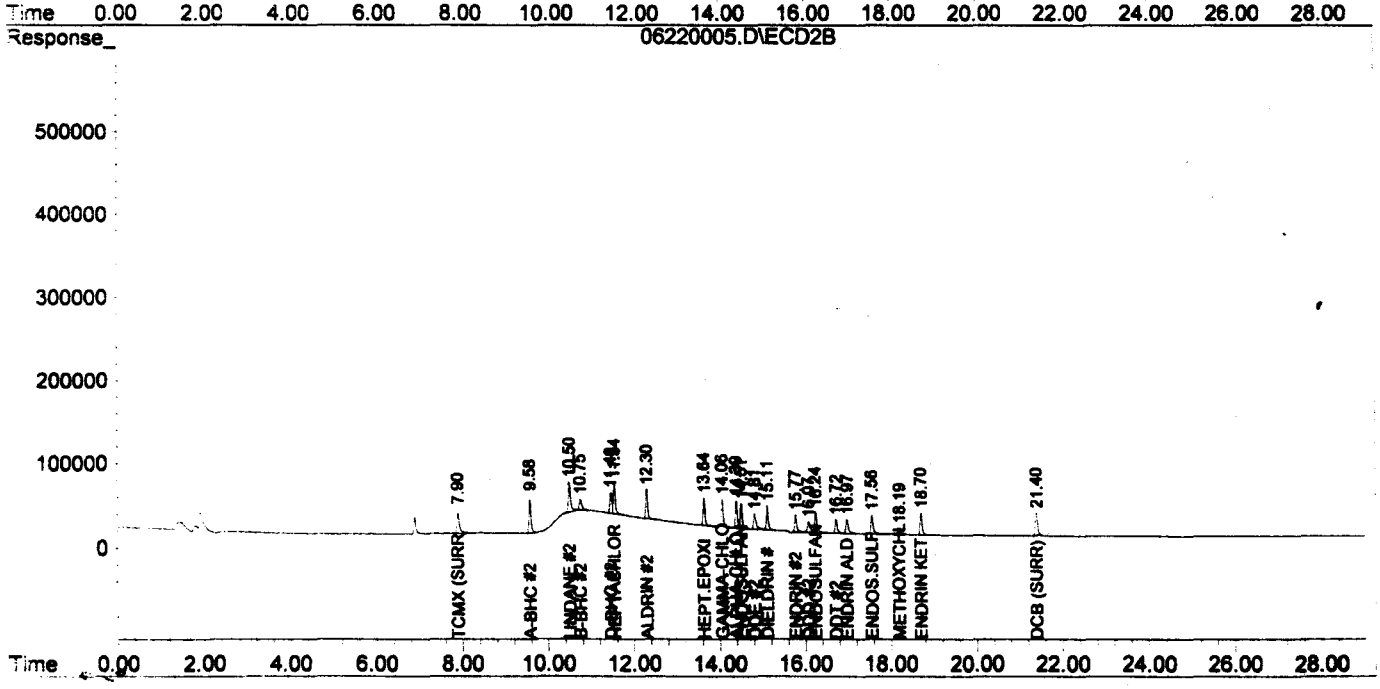
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062200\06220005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\062200\06220005.D\ECD2B.CH
Acq On : 22 Jun 2000 3:10 pm Operator: YGK
Sample : IC PEST .010 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 22 20:39 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Fri May 05 09:39:32 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062200\06220006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\062200\06220006.D\ECD2B.CH
Acq On : 22 Jun 2000 3:44 pm Operator: YGK
Sample : IC PEST .050 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:15 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.18	7.88	5350617	4818233	0.067	0.064
		Spiked Amount 0.250			Recovery =		26.80%	25.60%
2)	S	DCB (SURR)	20.97	21.39	4620909	4580468	0.070	0.068
		Spiked Amount 0.250			Recovery =		28.00%	27.20%
		Target Compounds						
2)	T	A-BHC	9.73	9.57	7869560	7490490	0.063	0.060
3)	T	B-BHC	10.82	10.73	3295922	2877451	0.062	0.056
4)	T	LINDANE	10.57	10.49	6953518	6287914	0.063	0.058
5)	T	D-BHC	11.26	11.45	6615719	5016962	0.062	0.054
6)	T	HEPTACHLOR	11.76	11.54	5950707	6332048	0.069	0.065
7)	T	ALDRIN	12.48	12.29	5835008	5540003	0.067	0.062
8)	T	HEPT.EPOXIDE	13.92	13.63	5312114	5128167	0.067	0.063
9)	T	ENDOSULFAN 1	14.81	14.50	5482785	4955874	0.069	0.062
10)	T	GAMMA-CHLORDANE	14.20	14.05	5542678	5376273	0.063	0.060
11)	T	ALPHA-CHLORDANE	14.50	14.38	5094052	4911475	0.064	0.061
12)	T	DDE	14.70	14.80	4342561	4636168	0.058	0.056
13)	T	DIELDRIN	15.34	15.10	5000258	4960051	0.063	0.060
14)	T	ENDRIN	15.86	15.77	3943956	3427254	0.059	0.053
15)	T	DDD	16.03	16.06	3641569	3225995	0.054	0.052
16)	T	ENDOSULFAN 2	16.36	16.23	4242522	4545233	0.061	0.061
17)	T	ENDRIN ALDEHYDE	17.27	16.96	3222920	3203466	0.059	0.058
18)	T	DDT	16.62	16.71	3732199	3477998	0.054	0.052
19)	T	ENDOS.SULFATE	18.21	17.55	3893365	3890033	0.061	0.059
20)	T	METHOXYCHLOR	17.66	18.18	1947395	1618016	0.054	0.049
21)	T	ENDRIN KETONE	18.82	18.69	4496504	4555047	0.061	0.060

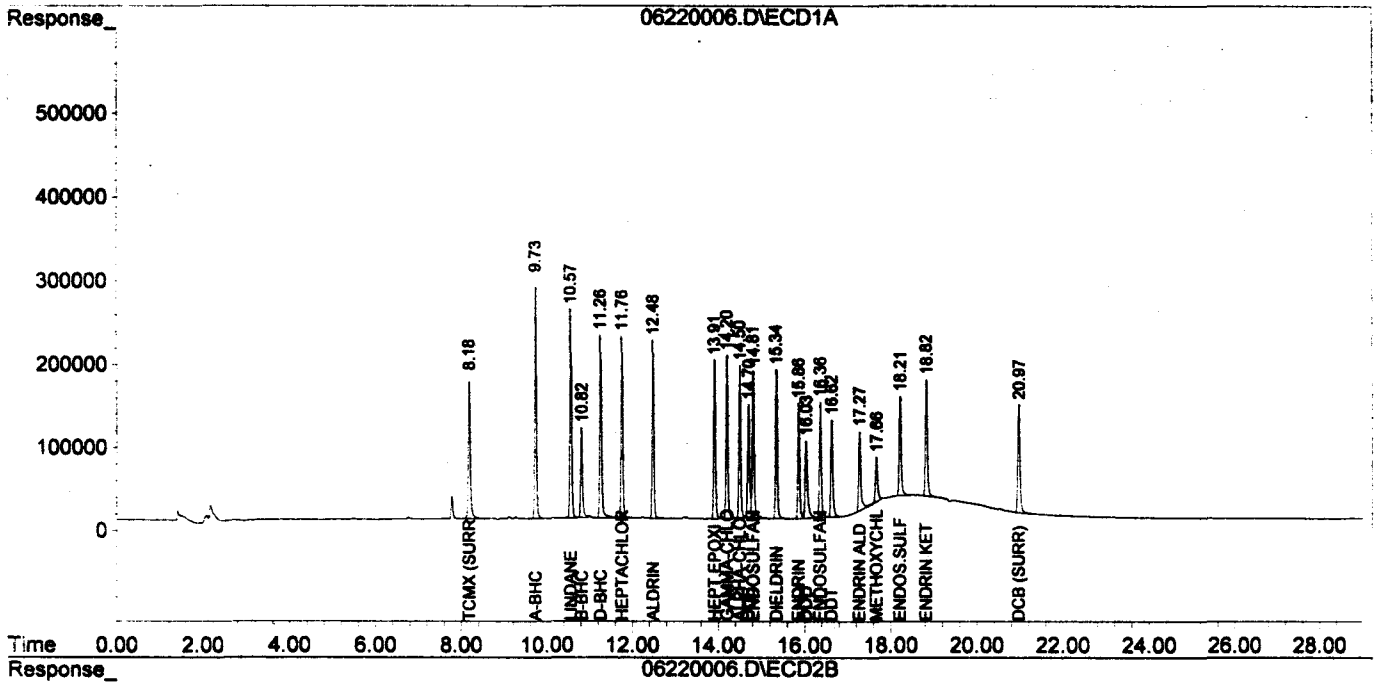
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

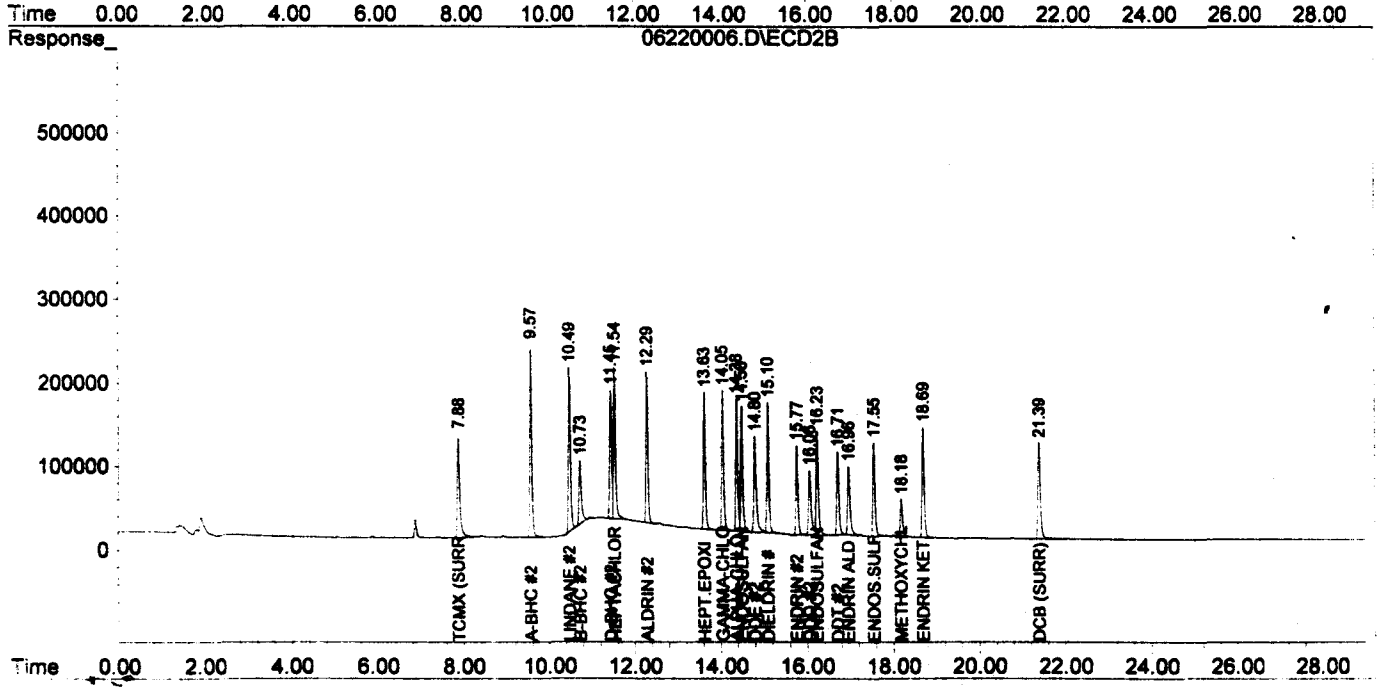
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062200\06220006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\062200\06220006.D\ECD2B.CH
Acq On : 22 Jun 2000 3:44 pm Operator: YQK
Sample : IC PEST .050 PPM Inst : GC/E
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:15 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062200\06220007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\062200\06220007.D\ECD2B.CH
Acq On : 22 Jun 2000 4:18 pm Operator: YGK
Sample : IC PEST .10 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:16 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.18	7.88	10372622	9097420	0.129	0.121
		Spiked Amount 0.250			Recovery	=	51.60%	48.40%
2)	S	DCB (SURR)	20.97	21.39	8331761	8243835	0.126	0.122
		Spiked Amount 0.250			Recovery	=	50.40%	48.80%
		Target Compounds						
2)	T	A-BHC	9.73	9.57	15068325	14609818	0.121	0.118
3)	T	B-BHC	10.82	10.73	6250681	5800471	0.118	0.113
4)	T	LINDANE	10.57	10.49	13279620	12347481	0.121	0.115
5)	T	D-BHC	11.26	11.44	12643691	10054866	0.118	0.109
6)	T	HEPTACHLOR	11.76	11.54	10966760	11834775	0.128	0.122
7)	T	ALDRIN	12.48	12.30	10951192	10599352	0.125	0.118
8)	T	HEPT.EPOXIDE	13.92	13.63	9848550	9649858	0.123	0.119
9)	T	ENDOSULFAN 1	14.81	14.50	10141958	9360660	0.127	0.118
10)	T	GAMMA-CHLORDANE	14.20	14.05	10535392	10419934	0.119	0.116
11)	T	ALPHA-CHLORDANE	14.50	14.38	9577422	9434551	0.121	0.117
12)	T	DDE	14.70	14.80	8644356	9208079	0.115	0.112
13)	T	DIELDRIN	15.34	15.10	9555703	9579282	0.120	0.115
14)	T	ENDRIN	15.86	15.77	7617827	7066178	0.115	0.109
15)	T	DDD	16.02	16.05	7375813	6569976	0.110	0.106
16)	T	ENDOSULFAN 2	16.36	16.23	8191263	8661289	0.118	0.117
17)	T	ENDRIN ALDEHYDE	17.27	16.96	6371880	6246605	0.116	0.113
18)	T	DDT	16.62	16.71	7577056	7094766	0.110	0.106
19)	T	ENDOS.SULFATE	18.21	17.55	7462029	7469624	0.117	0.113
20)	T	METHOXYCHLOR	17.66	18.18	3804361	3357605	0.105	0.102
21)	T	ENDRIN KETONE	18.82	18.69	8522033	8710440	0.116	0.115

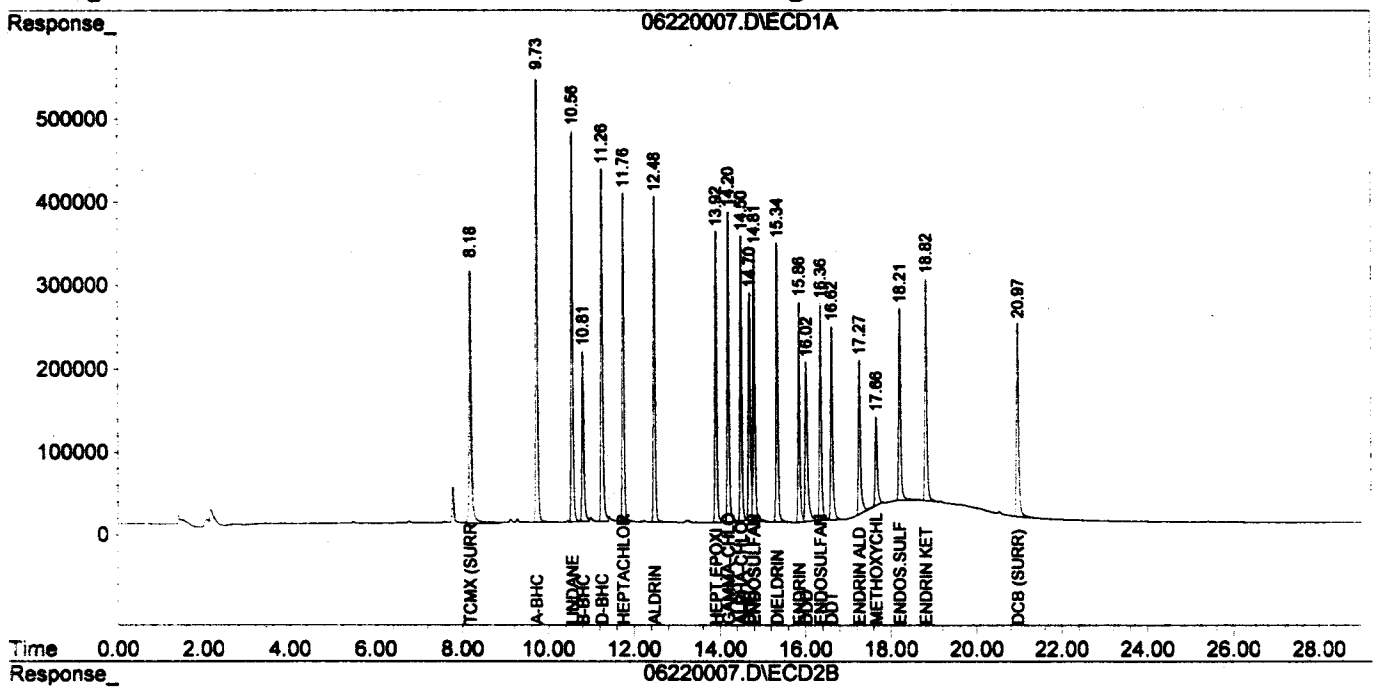
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

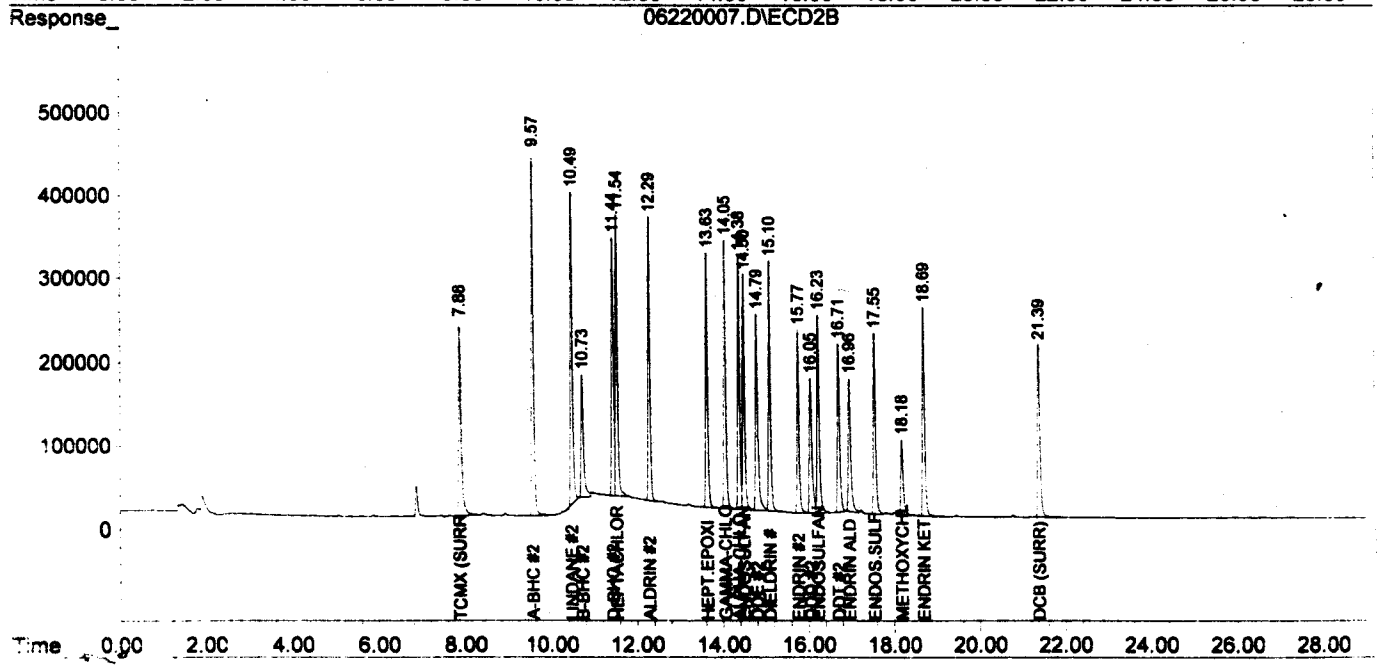
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062200\06220007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\062200\06220007.D\ECD2B.CH
Acq On : 22 Jun 2000 4:18 pm Operator: YGK
Sample : IC PEST .10 PPM Inst : GC/ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:16 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062200\06220008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\062200\06220008.D\ECD2B.CH
Acq On : 22 Jun 2000 4:53 pm Operator: YGK
Sample : IC PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:17 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.18	7.88	22132747	20103265	0.276	0.266
		Spiked Amount 0.250			Recovery	=	110.40%	106.40%
2)	S	DCB (SURR)	20.96	21.39	17677444	17884435	0.266	0.266
		Spiked Amount 0.250			Recovery	=	106.40%	106.40%
		Target Compounds						
2)	T	A-BHC	9.73	9.56	33573662	33078437	0.270	0.266
3)	T	B-BHC	10.81	10.73	14208417	13720062	0.269	0.267
4)	T	LINDANE	10.56	10.48	29669644	28718282	0.270	0.267
5)	T	D-BHC	11.26	11.44	29036286	24435040	0.270	0.265
6)	T	HEPTACHLOR	11.76	11.54	23415290	26354627	0.273	0.272
7)	T	ALDRIN	12.48	12.29	23887281	24068511	0.273	0.269
8)	T	HEPT.EPOXIDE	13.91	13.63	21633663	21317954	0.271	0.262
9)	T	ENDOSULFAN 1	14.81	14.50	21616301	21274082	0.271	0.268
10)	T	GAMMA-CHLORDANE	14.20	14.05	23932250	23963601	0.271	0.268
11)	T	ALPHA-CHLORDANE	14.50	14.38	20076183	21534470	0.254	0.267
12)	T	DDE	14.69	14.79	20358005	21899997	0.271	0.265
13)	T	DIELDRIN	15.34	15.10	21544992	22113444	0.269	0.266
14)	T	ENDRIN	15.86	15.76	17856597	16986314	0.268	0.263
15)	T	DDD	16.01	16.04	17623755	16355926	0.263	0.264
16)	T	ENDOSULFAN 2	16.35	16.23	18152653	19639235	0.262	0.265
17)	T	ENDRIN ALDEHYDE	17.27	16.96	14408623	14610832	0.263	0.264
18)	T	DDT	16.61	16.70	18156120	17516874	0.263	0.261
19)	T	ENDOS.SULFATE	18.21	17.55	16872390	17396961	0.264	0.264
20)	T	METHOXYCHLOR	17.65	18.18	9305031	8410004	0.257	0.255
21)	T	ENDRIN KETONE	18.82	18.69	19500064	20058308	0.265	0.265

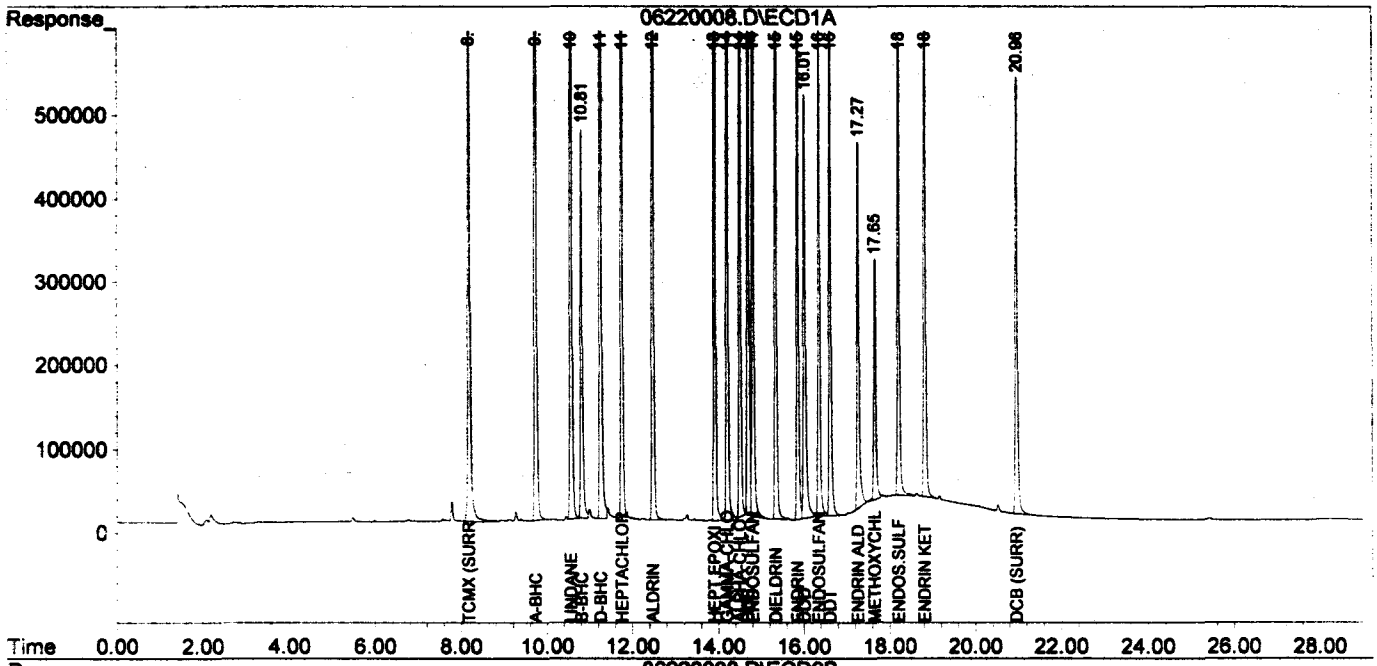
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

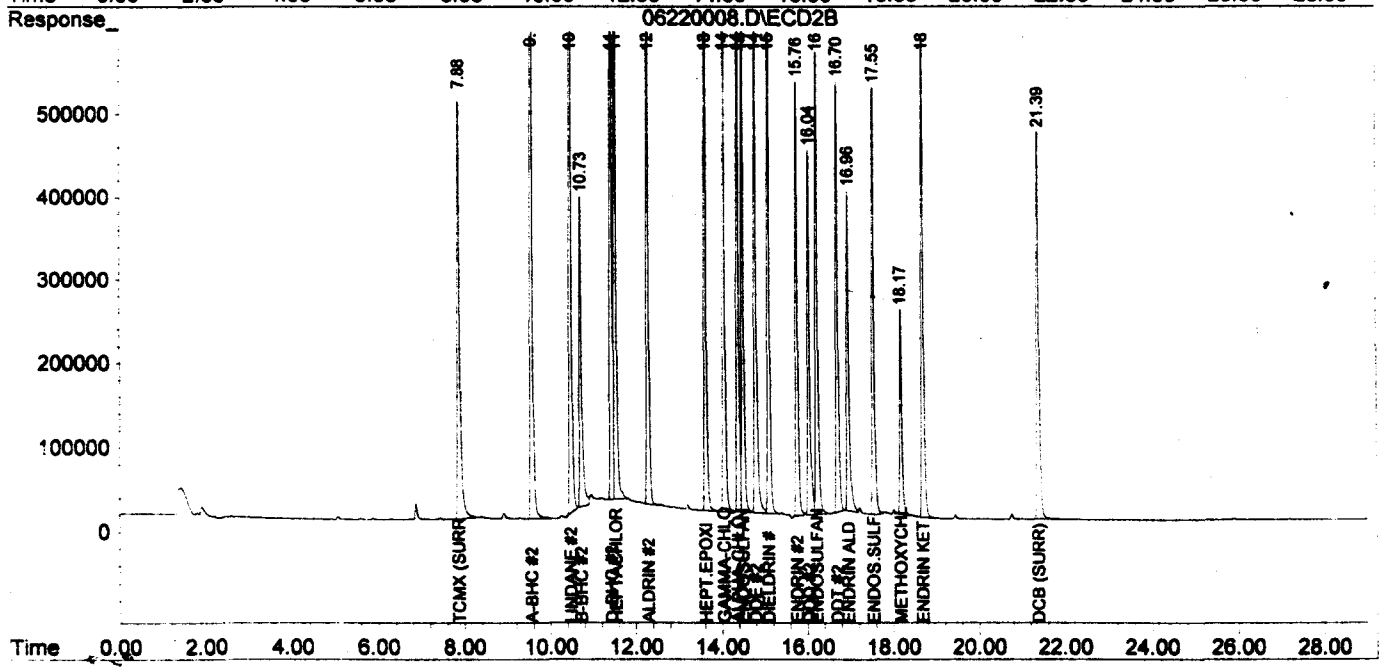
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062200\06220008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\062200\06220008.D\ECD2B.CH
Acq On : 22 Jun 2000 4:53 pm Operator: YGK
Sample : IC PEST .25 PPM Inst : GC/ECD 1N
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:17 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062200\06220009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\062200\06220009.D\ECD2B.CH
Acq On : 22 Jun 2000 5:27 pm Operator: YGK
Sample : IC PEST .35 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:17 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.18	7.88	28583093	27094475	0.356	0.359
		Spiked Amount 0.250			Recovery	=	142.40%	143.60%
12)	S	DCB (SURR)	20.96	21.39	23589712	23968444	0.355	0.356
		Spiked Amount 0.250			Recovery	=	142.00%	142.40%
		Target Compounds						
2)	T	A-BHC	9.73	9.56	44433544	44534808	0.357	0.358
3)	T	B-BHC	10.81	10.72	18751871	18168366	0.355	0.353
4)	T	LINDANE	10.56	10.48	38990640	38213545	0.355	0.356
5)	T	D-BHC	11.26	11.44	38079219	32446627	0.355	0.351
6)	T	HEPTACHLOR	11.76	11.54	30552340	34652493	0.357	0.358
7)	T	ALDRIN	12.48	12.29	31266058	31828617	0.357	0.356
8)	T	HEPT.EPOXIDE	13.91	13.63	28262533	28900022	0.354	0.355
9)	T	ENDOSULFAN 1	14.81	14.50	28556164	28151341	0.358	0.354
10)	T	GAMMA-CHLORDANE	14.20	14.05	31200699	31723962	0.353	0.354
11)	T	ALPHA-CHLORDANE	14.50	14.38	28465253	28590242	0.360	0.355
12)	T	DDE	14.69	14.79	26699491	29194167	0.355	0.354
13)	T	DIELDRIN	15.34	15.10	28478452	29449582	0.356	0.354
14)	T	ENDRIN	15.86	15.76	23335917	22377905	0.351	0.346
15)	T	DDD	16.01	16.04	23823776	21844634	0.356	0.352
16)	T	ENDOSULFAN 2	16.35	16.23	24658837	26328072	0.355	0.355
17)	T	ENDRIN ALDEHYDE	17.27	16.96	19483205	19493808	0.355	0.353
18)	T	DDT	16.61	16.70	24546052	23553594	0.355	0.351
19)	T	ENDOS.SULFATE	18.21	17.55	22649457	23310105	0.355	0.354
20)	T	METHOXYCHLOR	17.65	18.18	12738333	11385082	0.352	0.346
21)	T	ENDRIN KETONE	18.82	18.69	26224386	26898151	0.356	0.355

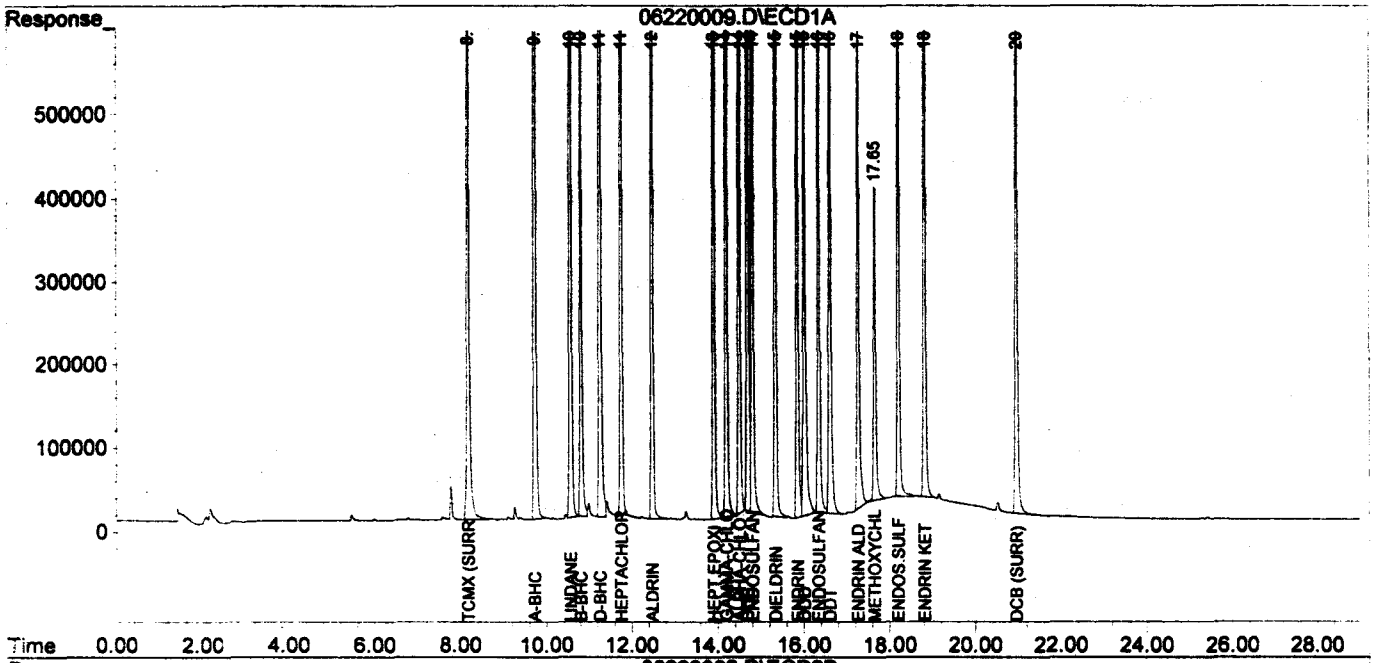
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

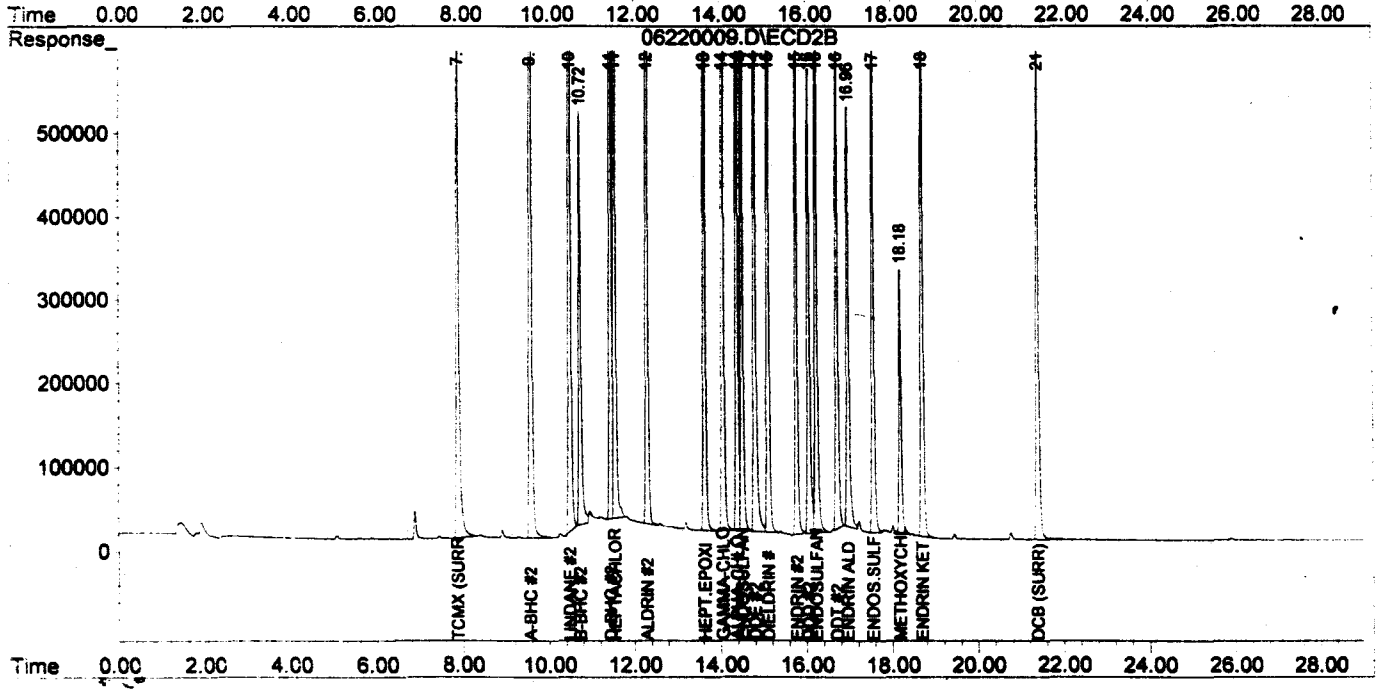
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062200\06220009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\062200\06220009.D\ECD2B.CH
Acq On : 22 Jun 2000 5:27 pm Operator: YGK
Sample : IC PEST .35 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:17 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062200\06220010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\062200\06220010.D\ECD2B.CH
Acq On : 22 Jun 2000 6:02 pm Operator: YGK
Sample : IC PEST .50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:18 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

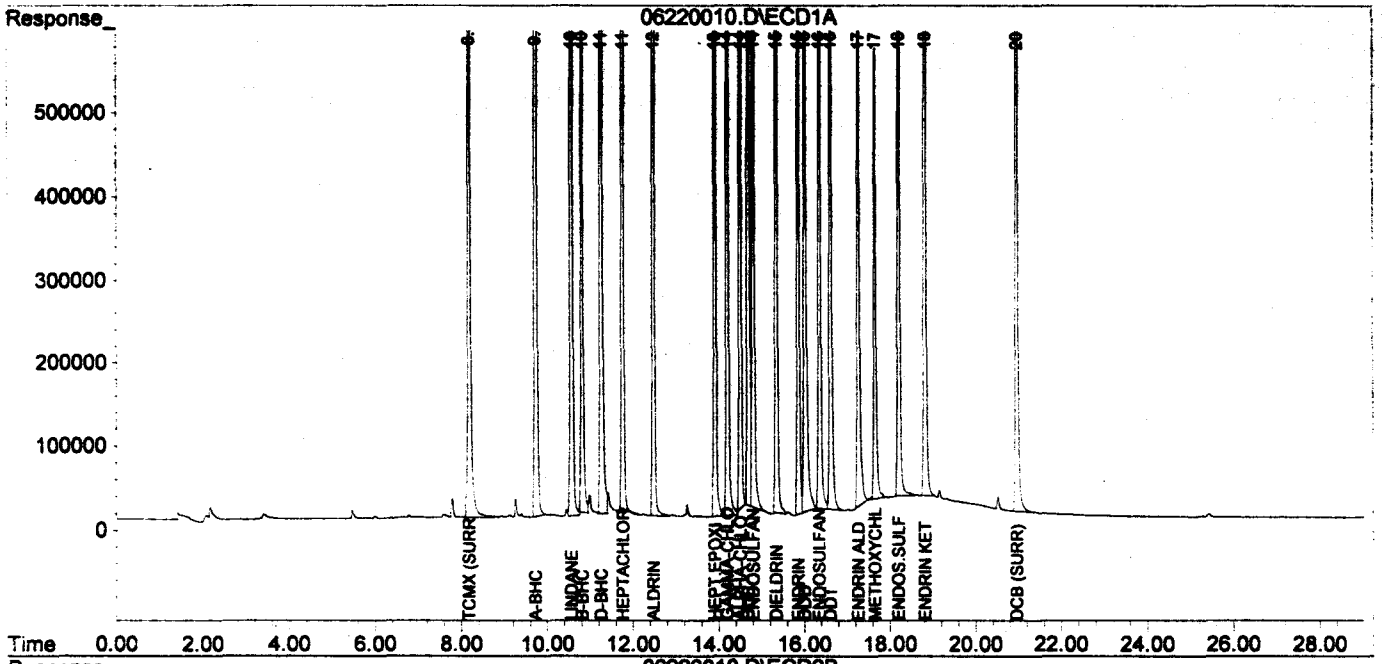
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.18	7.88	38125748	36209330	0.475	0.480
		Spiked Amount 0.250			Recovery =		190.00%	192.00%
2)	S	DCB (SURR)	20.96	21.38	31928751	32437858	0.481	0.482
		Spiked Amount 0.250			Recovery =		192.40%	192.80%
		Target Compounds						
2)	T	A-BHC	9.72	9.56	59667456	59806848	0.480	0.481
3)	T	B-BHC	10.81	10.72	25468613	25035383	0.482	0.487
4)	T	LINDANE	10.56	10.48	52852299	51983317	0.481	0.484
5)	T	D-BHC	11.25	11.44	51764688	45193146	0.482	0.489
6)	T	HEPTACHLOR	11.76	11.54	40807732	46218501	0.476	0.477
7)	T	ALDRIN	12.48	12.29	41742423	43084716	0.477	0.482
8)	T	HEPT.EPOXIDE	13.91	13.63	38267242	39529001	0.480	0.486
9)	T	ENDOSULFAN 1	14.81	14.49	38019910	38410703	0.477	0.483
10)	T	GAMMA-CHLORDANE	14.20	14.05	42594771	43295059	0.482	0.484
11)	T	ALPHA-CHLORDANE	14.50	14.38	38401060	38983052	0.485	0.484
12)	T	DDE	14.69	14.79	36324692	40186332	0.483	0.487
13)	T	DIELDRIN	15.34	15.10	38433004	40304399	0.481	0.485
14)	T	ENDRIN	15.85	15.76	32346629	31921063	0.486	0.494
15)	T	DDD	16.01	16.04	32622326	30403599	0.487	0.490
16)	T	ENDOSULFAN 2	16.35	16.23	33696623	35847358	0.486	0.484
17)	T	ENDRIN ALDEHYDE	17.27	16.96	26684615	26926493	0.486	0.487
18)	T	DDT	16.61	16.70	33751007	32988077	0.488	0.492
19)	T	ENDOS.SULFATE	18.21	17.54	30965964	32094879	0.485	0.487
20)	T	METHOXYCHLOR	17.65	18.17	17891386	16465158	0.494	0.500
21)	T	ENDRIN KETONE	18.82	18.69	35601765	36790592	0.484	0.485

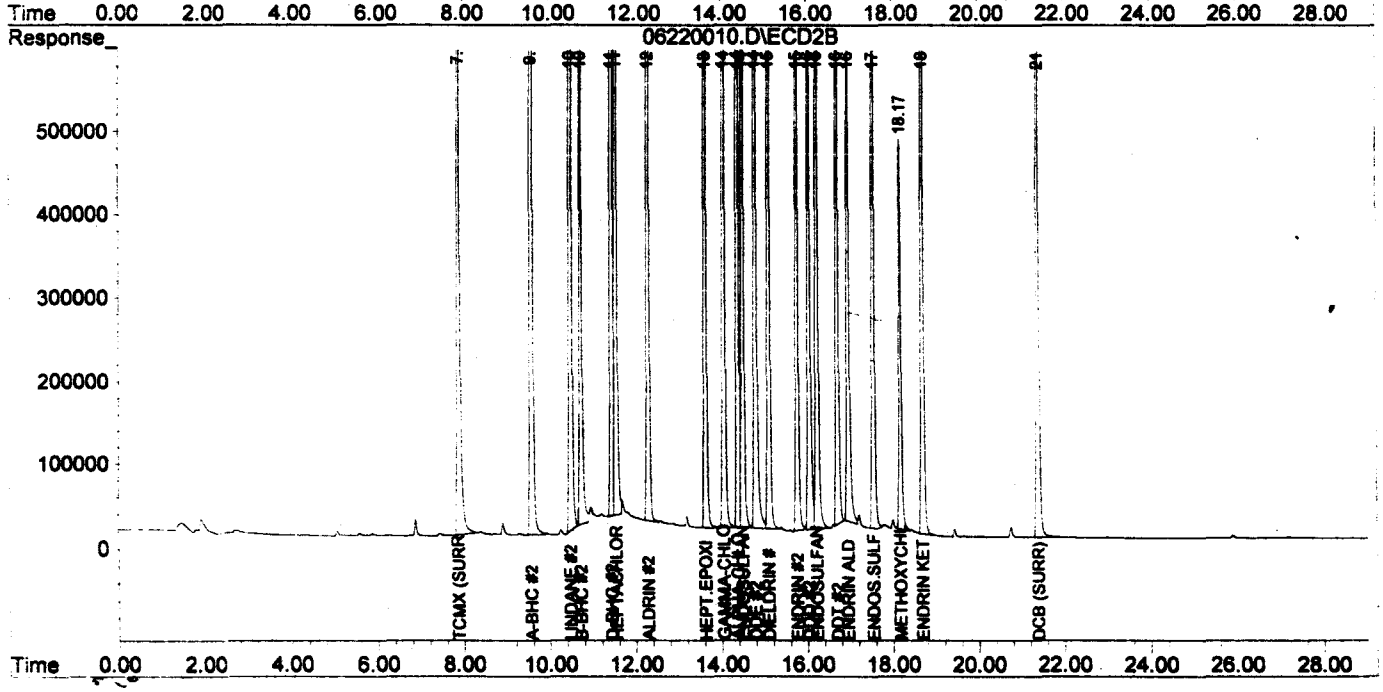
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\1\DATA\062200\06220010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\062200\06220010.D\ECD2B.CH
Acq On : 22 Jun 2000 6:02 pm Operator:
Sample : IC PEST .50 PPM Inst :
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:18 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062200\06220011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\062200\06220011.D\ECD2B.CH
Acq On : 22 Jun 2000 6:36 pm Operator: YGK
Sample : ICV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:19 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.18	7.88	22614028	20749515	0.282	0.275
		Spiked Amount 0.250			Recovery	=	112.80%	110.00%
2)	S	DCB (SURR)	20.96	21.39	18224007	18529255	0.275	0.275
		Spiked Amount 0.250			Recovery	=	110.00%	110.00%
		Target Compounds						
2)	T	A-BHC	9.72	9.56	33166027	32766606	0.267	0.264
3)	T	B-BHC	10.81	10.73	14111680	13582246	0.267	0.264
4)	T	LINDANE	10.56	10.48	29661367	28672022	0.270	0.267
5)	T	D-BHC	11.26	11.44	28838387	24080919	0.268	0.261
6)	T	HEPTACHLOR	11.76	11.54	23906915	26266256	0.279	0.271
7)	T	ALDRIN	12.48	12.29	23538224	23607173	0.269	0.264
8)	T	HEPT.EPOXIDE	13.91	13.63	21586135	21747176	0.271	0.267
9)	T	ENDOSULFAN 1	14.81	14.50	21792253	21176446	0.273	0.266
0)	T	GAMMA-CHLORDANE	14.20	14.05	23223944	23321319	0.263	0.261
1)	T	ALPHA-CHLORDANE	14.50	14.38	21609373	21554963	0.273	0.267
2)	T	DDE	14.69	14.79	19981534	21666444	0.266	0.262
3)	T	DIELDRIN	15.34	15.10	21621074	22404703	0.270	0.270
4)	T	ENDRIN	15.86	15.76	18492224	17293052	0.278	0.268
5)	T	DDD	16.02	16.05	17812915	16092505	0.266	0.259
6)	T	ENDOSULFAN 2	16.35	16.23	18454316	19775603	0.266	0.267
7)	T	ENDRIN ALDEHYDE	17.27	16.96	13340045	12844794	0.243	0.232
8)	T	DDT	16.61	16.70	18577001	17597450	0.269	0.263
9)	T	ENDOS.SULFATE	18.21	17.55	17341649	17598441	0.272	0.267
0)	T	METHOXYCHLOR	17.65	18.18	9214739	7996405	0.254	0.243
1)	T	ENDRIN KETONE	18.82	18.69	19476774	19724088	0.265	0.260

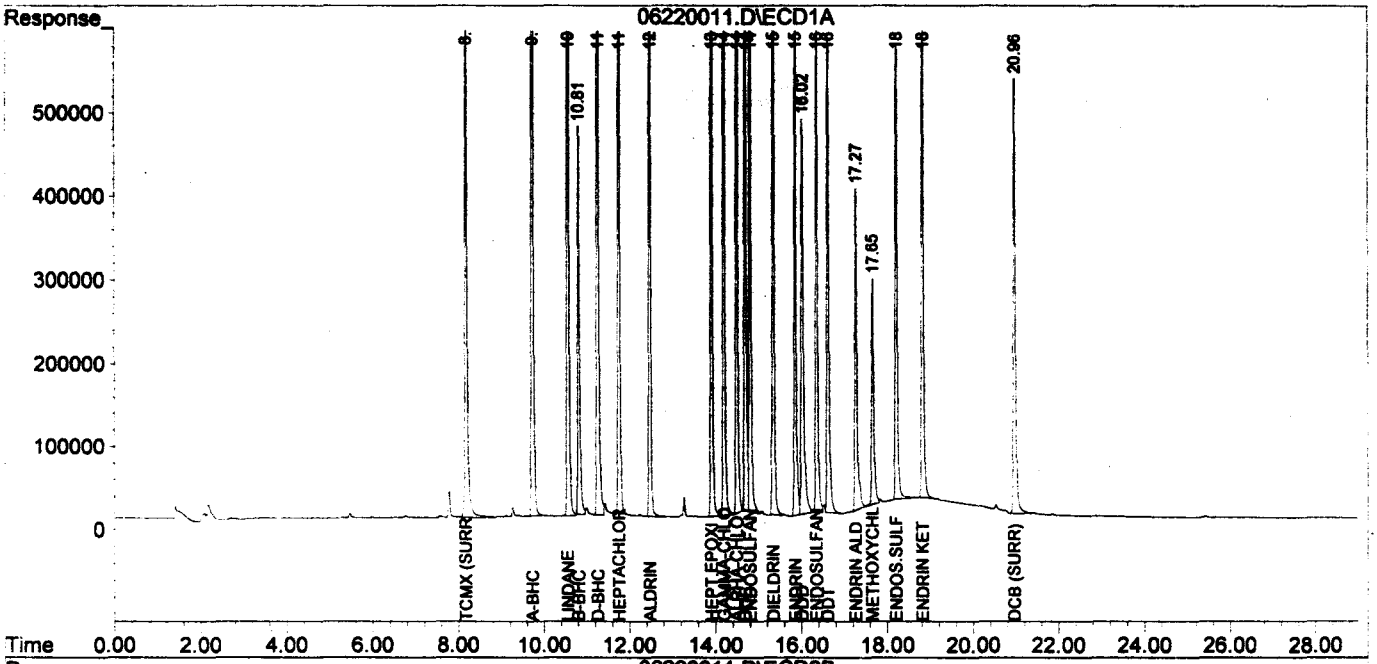
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

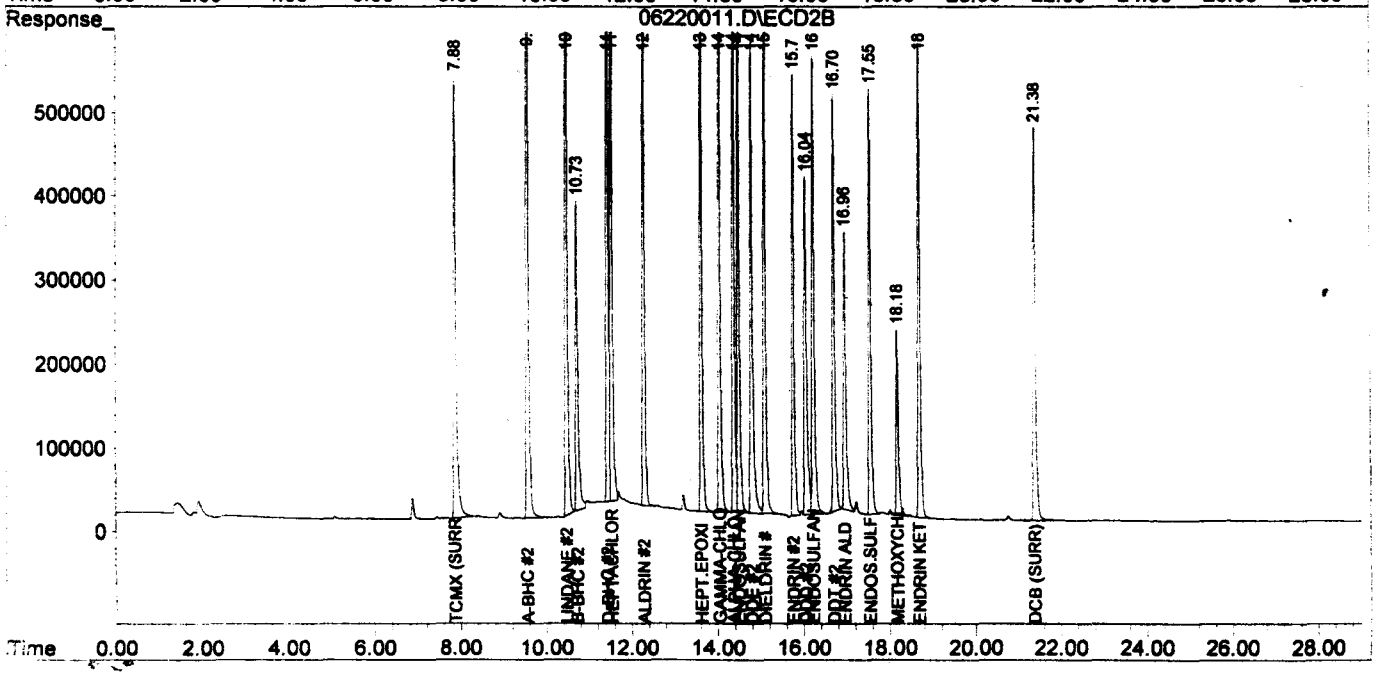
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062200\06220011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\062200\06220011.D\ECD2B.CH
Acq On : 22 Jun 2000 6:36 pm Operator: YGK
Sample : ICV PEST .25 PPM Inst : GC/ECD_IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 26 10:19 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Thu Jun 22 20:39:25 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 06/22/00
Analyst Initials: YGK
Instrument Method: 8081
Calibration Column: Rtx - CLP1 (F)
Confirmation Column: Rtx - CLP2

DDT Breakdown % (<15%): 2.6%
Endrin Breakdown % (<15%): 3.8%

Pest Calibration Date: 06/22/00
PCB Calibration Date:

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	35 - 110	18 - 135
Water	5 - 156	D-163

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations	
1	PRIMER	062200P	std	1X	NA	NA		
2	Hexane	"	soln	"	"	"		
3	PEM	"	std	"	"	"		P00112
4	ccv Pest. 25 ppm	"	"	"	"	"		P00114
5	IC Pest. 010 ppm	"	"	"	"	"		P00024
6	IC Pest. 050 ppm	"	"	"	"	"		P00023
7	.10 ppm	"	"	"	"	"		P00022
8	.25 ppm	"	"	"	"	"		P00114
9	.35 ppm	"	"	"	"	"		P00020
10	.50 ppm	"	"	"	"	"		P00019
11	ICV Pest. 25 ppm	"	"	"	113	110		P00025
12	ccv Chlord. 25 ppm	050900CL	"	"	NA	NA	104%	P00111
13	ccv Tox 2.5 ppm	050800TX	"	"	"	"	106%	P00113
14	Hexane	062200P	soln	"	"	"		
15	BLNK W 06/20	"	w	"	89	76		
16	LCS W 06/20	"	"	"	101	68		
17	93916 W	"	"	"	108	46		
18	93936 W	"	"	"	30	9.6		
19	93819 S 1:10	"	S	10X	116	144		
20	93916 W 1:10	"	w	10X	136	56		
21	Hexane	"	soln	1X	NA	NA		
22	ccv Pest. 25 ppm	"	std	"	101	98		P00118
23	ccv Chlord. 25 ppm	050900CL	"	"	NA	NA	98%	P00111

Signature/Date: Yefim Zeyfman 06/22/00

↓ Cont

SVO GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

DATE / INSTRUMENT: 05/09/00 , GC A	METHOD: (circle applicable methods)
MATRIX:	(8081A) 8082 8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is the runlog completely filled out (~~including review signature/date~~)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst:		Reviewer:	
Date: 05/10/00	Time: 11:15	Date: 05.10.2000	Time: 1640

Response Factor Report GC/ECD IN

Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Tue May 09 14:05:09 2000

Calibration Files
0.05 =05090006.D 0.1 =05090007.D 0.25 =05090005.D
0.5 =05090008.D 0.75 =05090009.D

	Compound	0.05	0.1	0.25	0.5	0.75	Avg		%RSD
1) L1	CHLORD 1	4.312	4.296	4.427	4.225	4.225	4.297	E6	1.93
2) L1	CHLORD 2	7.254	7.176	7.690	7.025	6.946	7.218	E6	4.02
3) L1	CHLORD 3	6.569	6.318	6.538	5.444	5.204	6.015	E6	10.70
4) L1	CHLORD 4	2.270	2.237	2.454	2.309	2.355	2.325	E6	3.64
5) L1	CHLORD 5	1.356	1.336	1.356	1.300	1.287	1.327	E7	2.40
6) L1	CHLORD 6	2.030	2.090	2.014	2.031	1.997	2.032	E7	1.72
7) L1	CHLORD 7	2.201	2.107	2.340	2.214	2.259	2.224	E6	3.83

gnal #2 Calibration Files
0.05 =05090006.D 0.1 =05090007.D 0.25 =05090005.D
0.5 =05090008.D 0.75 =05090009.D

	Compound	0.05	0.1	0.25	0.5	0.75	Avg		%RSD
1) L1	CHLORD 1	3.855	3.812	4.203	4.005	4.050	3.985	E6	3.95
2) L1	CHLORD 2	6.604	6.196	7.291	6.112	6.243	6.489	E6	7.49
3) L1	CHLORD 3	5.950	5.618	5.670	5.027	4.875	5.428	E6	8.42
4) L1	CHLORD 4	2.354	2.437	2.647	2.314	2.392	2.429	E6	5.36
5) L1	CHLORD 5	1.228	1.183	1.236	1.181	1.170	1.200	E7	2.53
6) L1	CHLORD 6	0.962	0.977	1.074	0.990	0.989	0.998	E7	4.38
7) L1	CHLORD 7	0.978	0.969	1.044	0.955	0.953	0.980	E7	3.80

#) = Out of Range

050900CL.M Tue May 09 14:05:24 2000

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\050900\05090006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\050900\05090006.D\ECD2B.CH
Acq On : 9 May 2000 12:05 pm Operator: YGK
Sample : IC CHLORD .050 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:06 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Wed Mar 15 14:12:02 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
)	L1 CHLORD 1	11.59	11.23	215589	192749	0.051	0.048
)	L1 CHLORD 2	11.79	11.58	362703	330222	0.052	0.053
)	L1 CHLORD 3	12.86	12.73	328462	297517	0.061	0.060
)	L1 CHLORD 4	13.81	13.61	113508	117718	0.048	0.049
)	L1 CHLORD 5	14.24	14.10	677767	614037	0.052	0.052
)	L1 CHLORD 6	14.53	14.31	1014764	481052	0.051	0.048
)	L1 CHLORD 7	15.97	14.43	110053	489102	0.049	0.051
	Sum CHLORD 1			2822846	2522396	0.364	0.361
	erage CHLORD 1					0.052	0.052

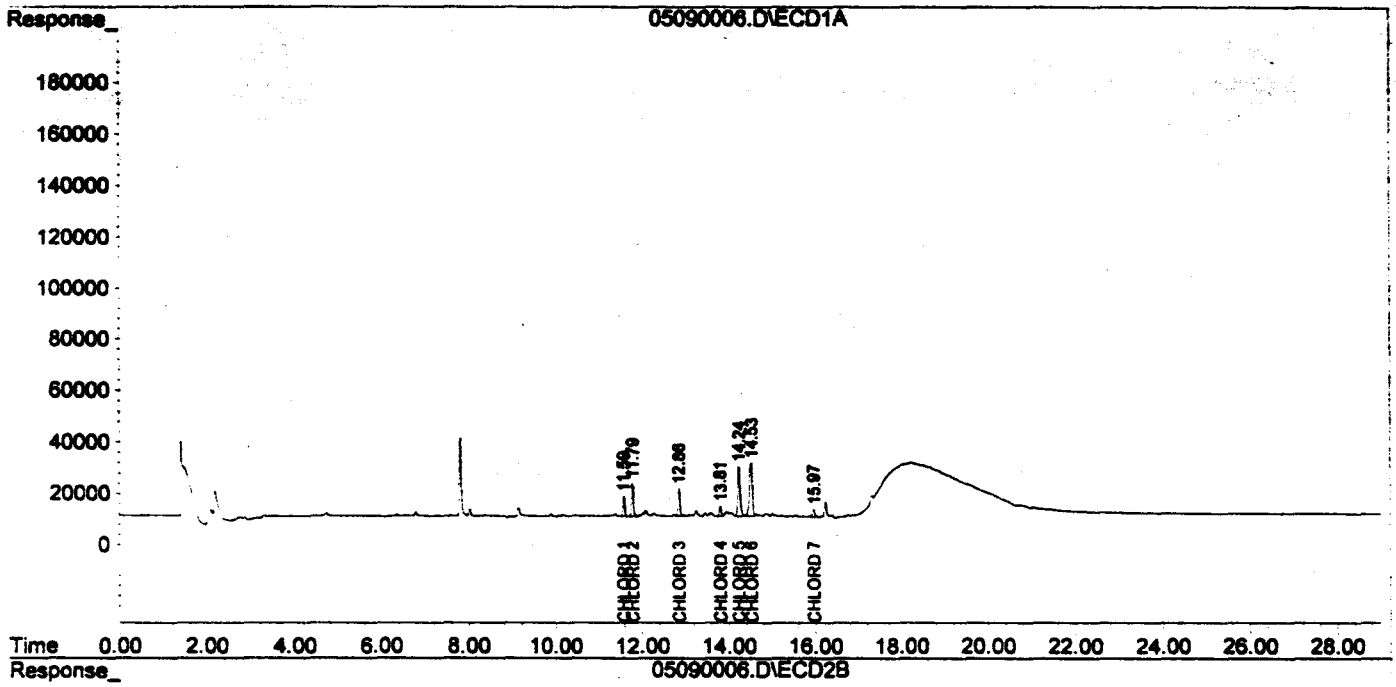
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

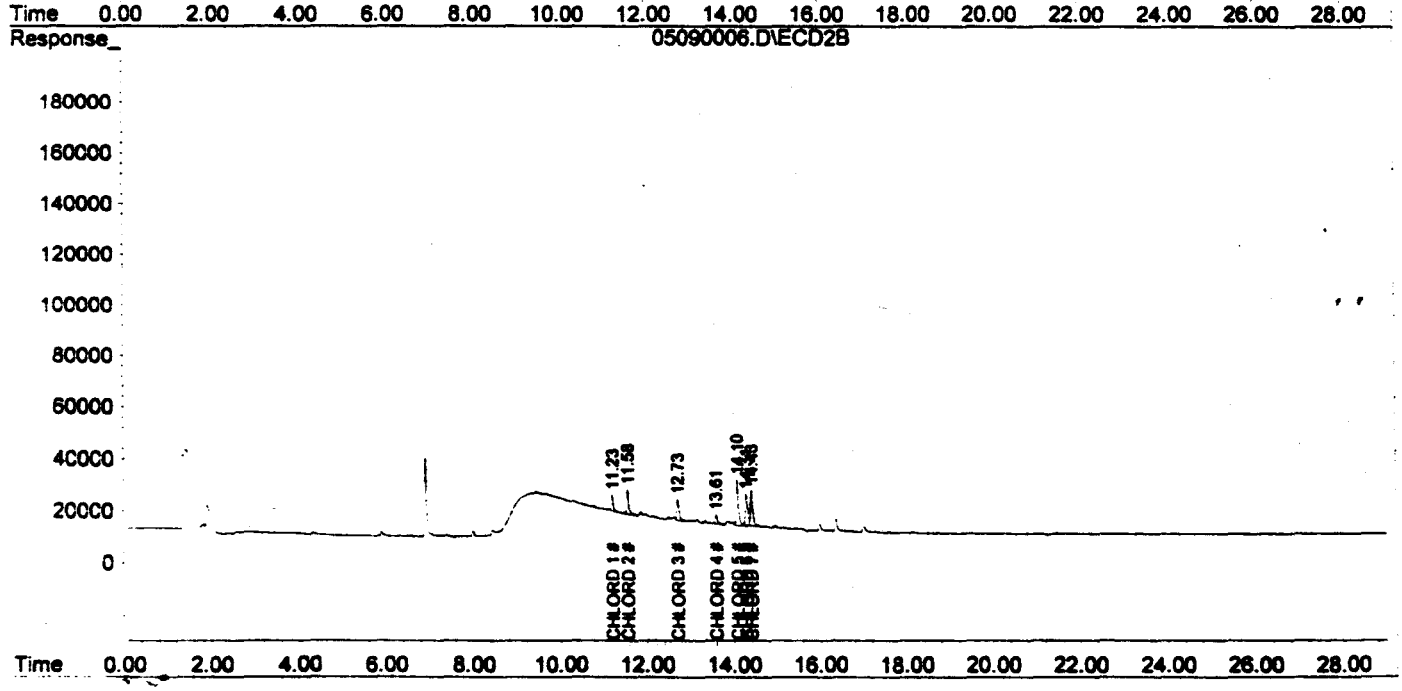
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050900\05090006.D\ECD1A.CH
Signal #2 : C:\HPCHEM\1\DATA\050900\05090006.D\ECD2B.CH
Acq On : 9 May 2000 12:05 pm Operator :
Sample : IC CHLORD .050 PPM Inst : GC/ECD 11
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:06 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Wed Mar 15 14:12:02 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\050900\05090007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\050900\05090007.D\ECD2B.CH
Acq On : 9 May 2000 12:40 pm Operator: YGK
Sample : IC CHLORD .10 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:07 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Wed Mar 15 14:12:02 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1)	L1	CHLORD 1	11.59	11.23	429582	381213	0.101	0.094
2)	L1	CHLORD 2	11.79	11.58	717583	619615	0.102	0.099
3)	L1	CHLORD 3	12.86	12.73	631759	561824	0.117	0.113
4)	L1	CHLORD 4	13.81	13.61	223719	243735	0.095	0.102
5)	L1	CHLORD 5	14.24	14.10	1335688	1182748	0.103	0.100
6)	L1	CHLORD 6	14.53	14.31	2089865	976975	0.104	0.098
7)	L1	CHLORD 7	15.97	14.43	210651	968526	0.094	0.101
	Sum	CHLORD 1			5638848	4934635	0.717	0.707
	Average	CHLORD 1					0.102	0.101

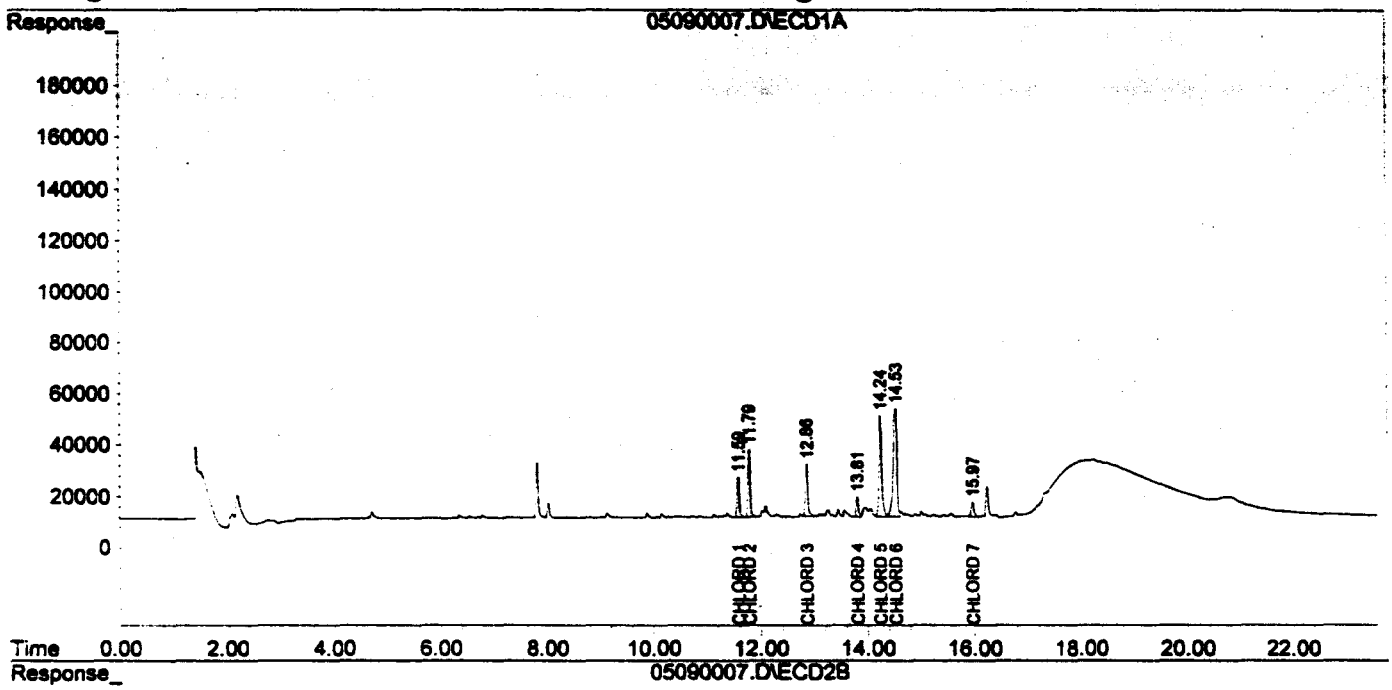
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

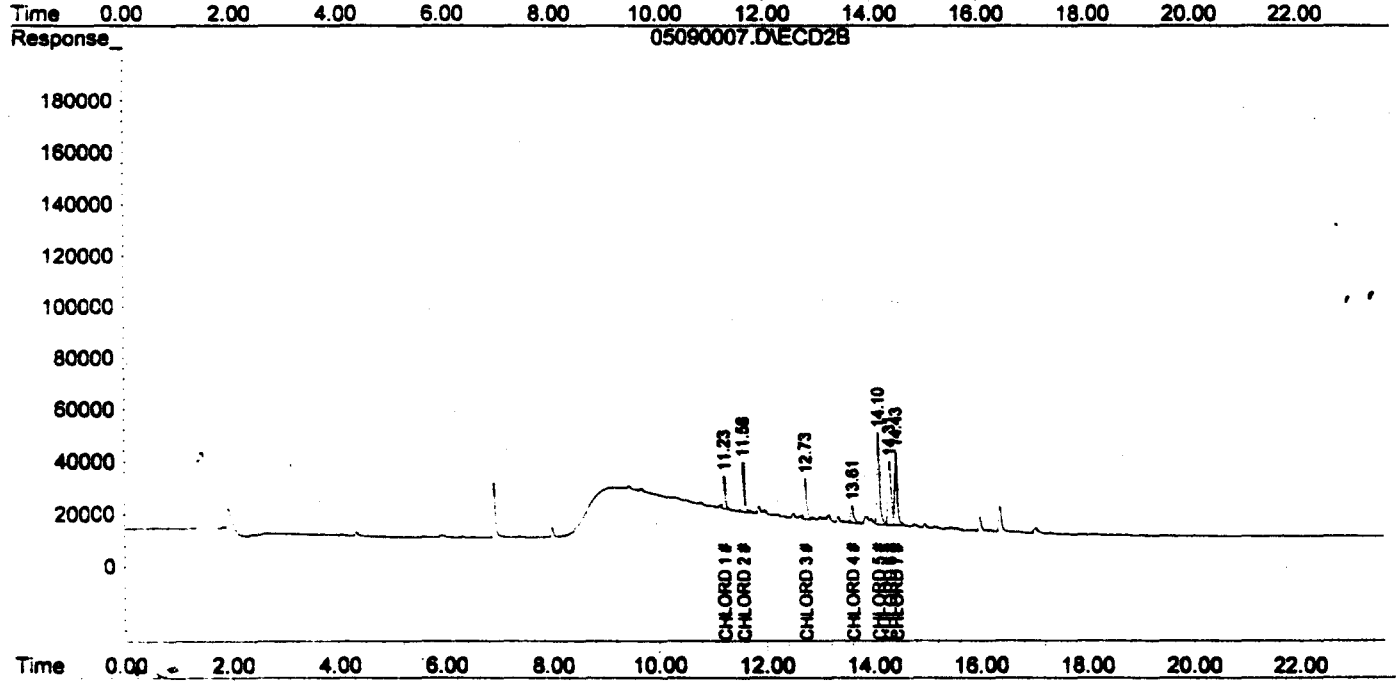
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050900\05090007.D\ECD1A.CH
Signal #2 : C:\HPCHEM\1\DATA\050900\05090007.D\ECD2B.CH
Acq On : 9 May 2000 12:40 pm Operator: YEL
Sample : IC CHLORD .10 PPM Inst : GC/ECD 1N
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:07 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Wed Mar 15 14:12:02 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Revie[illegible]

Signal #1 : C:\HPCHEM\1\DATA\050900\05090005.D\ECD1A.CH [illegible]
Signal #2 : C:\HPCHEM\1\DATA\050900\05090005.D\ECD2B.CH [illegible]
Acq On : 9 May 2000 11:31 am Operator: YGK [illegible]
Sample : IC CHLORD .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:06 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Tue May 09 14:05:09 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
) L1	CHLORD 1	11.60	11.24	1106831	1050714	0.261	0.260
) L1	CHLORD 2	11.80	11.59	1922595	1822783	0.274	0.290
) L1	CHLORD 3	12.87	12.74	1634564	1417392	0.304	0.284
) L1	CHLORD 4	13.82	13.61	613576	661838	0.261	0.277
) L1	CHLORD 5	14.25	14.11	3390950	3091121	0.262	0.262
) L1	CHLORD 6	14.52	14.31	5035776	2684660	0.251	0.270
) L1	CHLORD 7	15.98	14.43	584933	2609706	0.260	0.272
Sum	CHLORD 1			14289226	13338214	1.872	1.915
erage	CHLORD 1					0.267	0.274

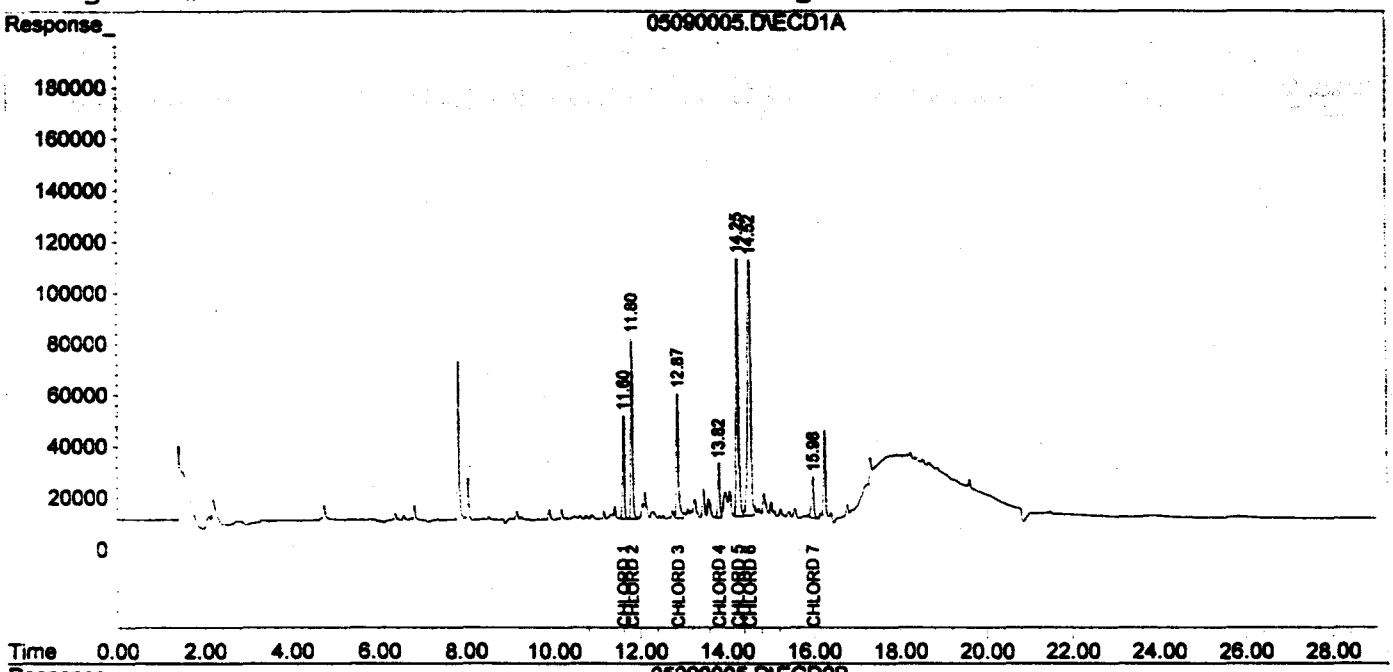
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
05090005.D 050900CL.M Tue May 09 14:06:25 2000 Page 1

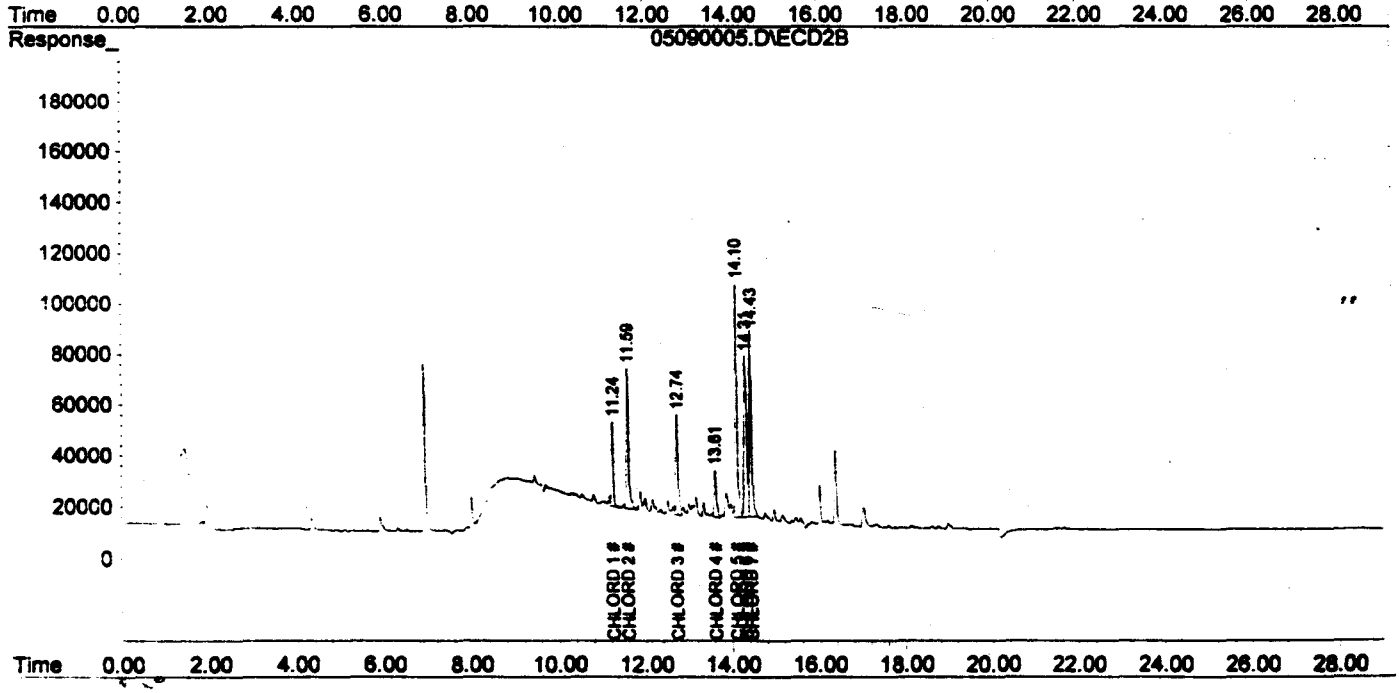
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050900\05090005.D\ECD1A.CH Vial:
Signal #2 : C:\HPCHEM\1\DATA\050900\05090005.D\ECD2B.CH
Acq On : 9 May 2000 11:31 am Operator:
Sample : IC CHLORD .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:06 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Tue May 09 14:05:09 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\050900\05090008.D\ECD1A.CH Vial:
Signal #2 : C:\HPCHEM\1\DATA\050900\05090008.D\ECD2B.CH
Acq On : 9 May 2000 1:09 pm Operator:
Sample : IC CHLORD .50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:09 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Wed Mar 15 14:12:02 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
)	L1 CHLORD 1	11.59	11.23	2112657	2002467	0.498	0.495
)	L1 CHLORD 2	11.79	11.58	3512550	3055767	0.500	0.487
)	L1 CHLORD 3	12.86	12.73	2722230	2513396	0.506	0.504
)	L1 CHLORD 4	13.81	13.61	1154512	1157167	0.492	0.484
)	L1 CHLORD 5	14.24	14.10	6498888	5904961	0.501	0.501
)	L1 CHLORD 6	14.53	14.31	10157173	4950120	0.506	0.498
)	L1 CHLORD 7	15.97	14.43	1107134	4775559	0.492	0.497
	Sum CHLORD 1			27265144	24359437	3.495	3.466
	erage CHLORD 1					0.499	0.495

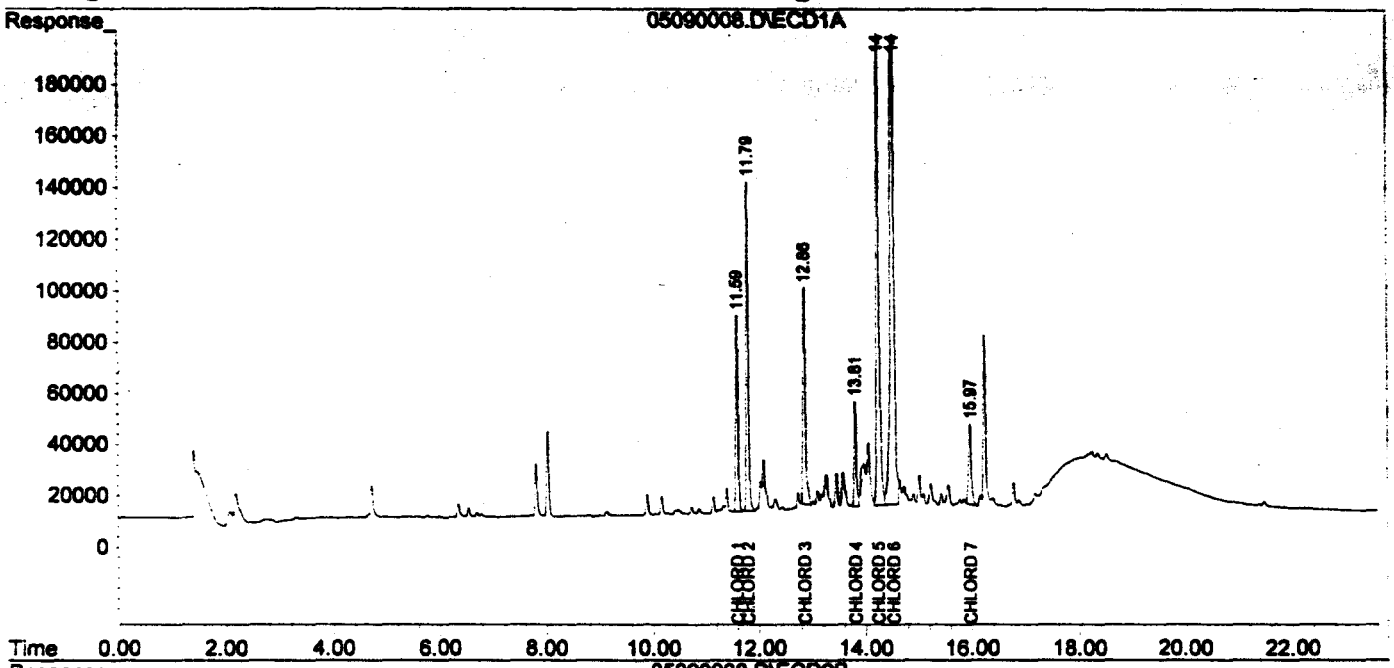
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

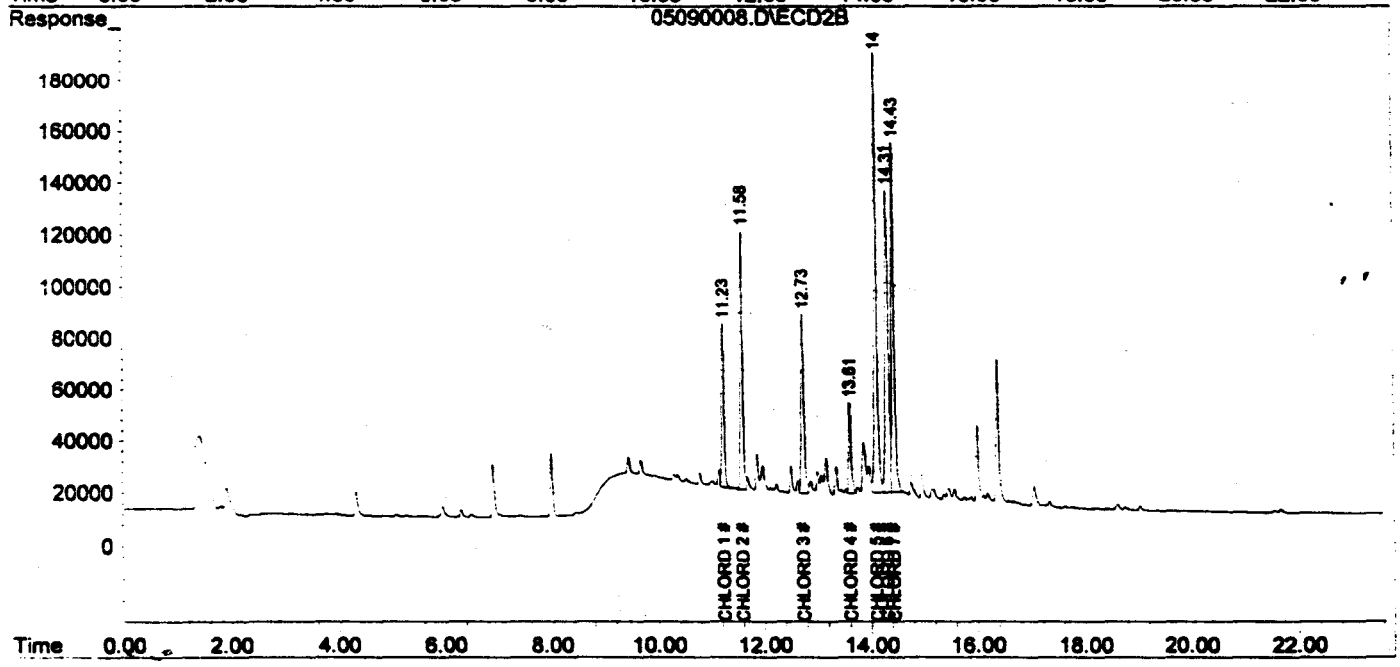
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050900\05[illegible]0008.D\ECD1A.CH
Signal #2 : C:\HPCHEM\1\DATA\050900\05[illegible]0008.D\ECD2B.CH
Acq On : 9 May 2000 1:09 pm Operator:
Sample : IC CHLORD .50 PPM Inst : GC/
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:09 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Wed Mar 15 14:12:02 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Revie

Signal #1 : C:\HPCHEM\1\DATA\050900\05090009.D\ECD1A.CH Val: 9
Signal #2 : C:\HPCHEM\1\DATA\050900\05090009.D\ECD2B.CH
Acq On : 9 May 2000 1:37 pm Operator: YGK
Sample : IC CHLORD .75 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:10 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Wed Mar 15 14:12:02 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
Target Compounds						
) L1 CHLORD 1	11.59	11.23	3168976	3037551	0.747	0.751
) L1 CHLORD 2	11.79	11.58	5209482	4682540	0.742	0.746
) L1 CHLORD 3	12.86	12.73	3902947	3655951	0.725	0.733
) L1 CHLORD 4	13.81	13.61	1766442	1794157	0.752	0.751
) L1 CHLORD 5	14.24	14.10	9656245	8774941	0.745	0.745
) L1 CHLORD 6	14.53	14.31	14979317	7416323	0.746	0.745
) L1 CHLORD 7	15.97	14.43	1694277	7149025	0.753	0.744
Sum CHLORD 1			40377685	36510486	5.210	5.216
erage CHLORD 1					0.744	0.745

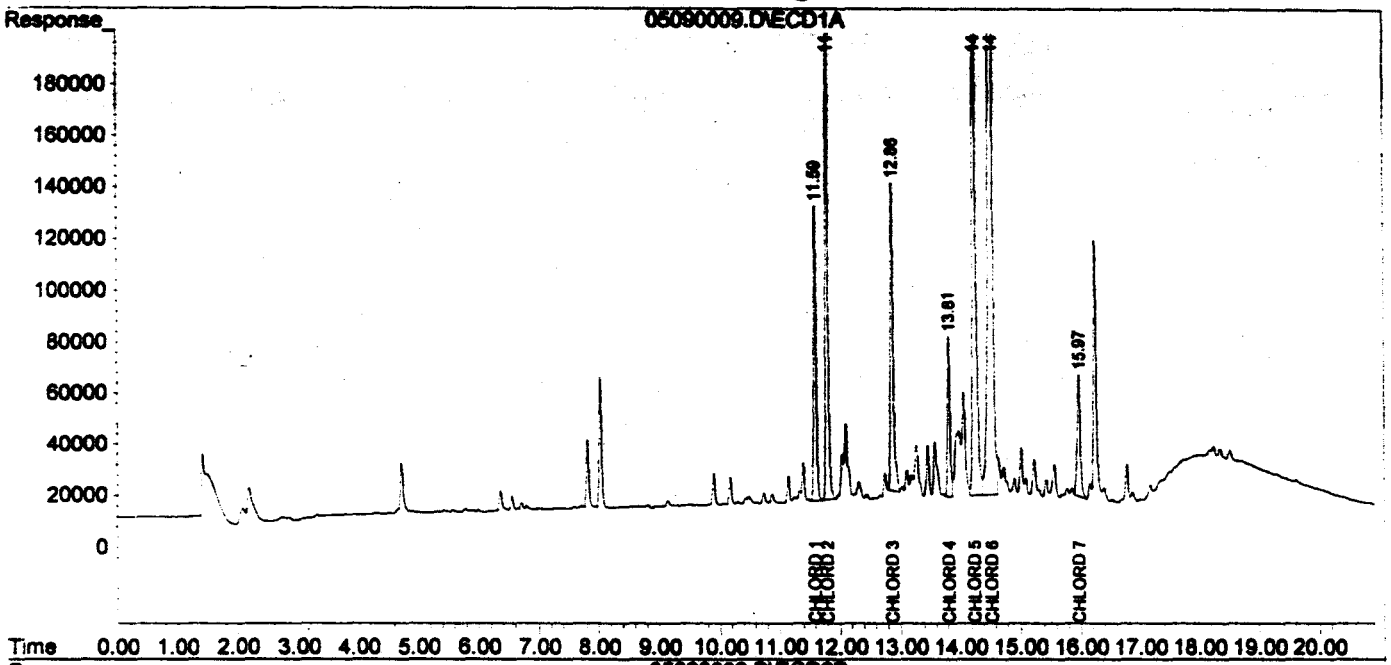
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

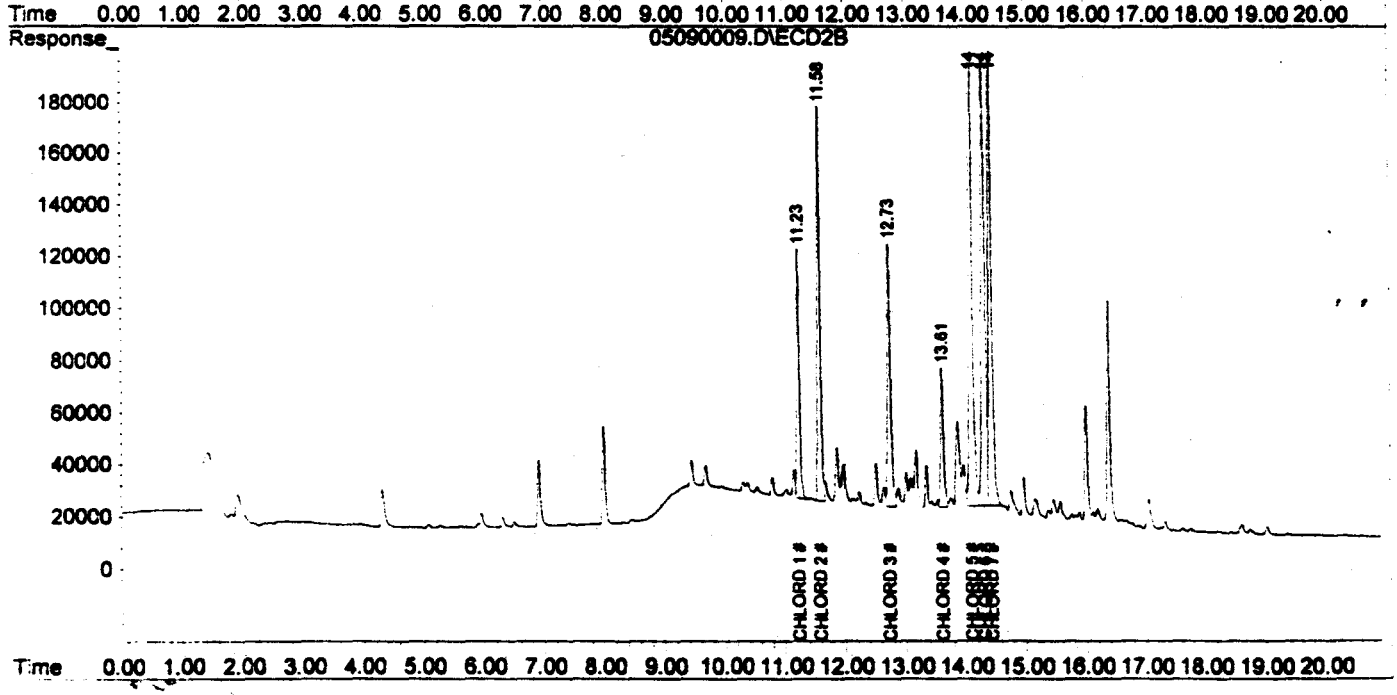
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050900\05090009.D\ECD1A.CH (V1
Signal #2 : C:\HPCHEM\1\DATA\050900\05090009.D\ECD2B.CH
Acq On : 9 May 2000 1:37 pm Operator: YGK
Sample : IC CHLORD .75 PPM Inst : GC/ECD 1
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:10 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Wed Mar 15 14:12:02 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not

Signal #1 : C:\HPCHEM\1\DATA\050900\05090010.D\ECD1A.CH Vial:
Signal #2 : C:\HPCHEM\1\DATA\050900\05090010.D\ECD2B.CH
Acq On : 9 May 2000 2:04 pm Operator:
Sample : ICV CHLORD .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:37 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Mon Nov 08 17:46:02 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds								
L1	CHLORD 1	11.59	11.23	1193076	1108783	0.281	0.274	
L1	CHLORD 2	11.79	11.58	1794416	1488441	0.255	0.237	
L1	CHLORD 3	12.86	12.73	1388428	1249004	0.258	0.251	
L1	CHLORD 4	13.81	13.61	662655	621840	0.282	0.260	
L1	CHLORD 5	14.24	14.10	3700305	3314797	0.285	0.281	
L1	CHLORD 6	14.53	14.31	5483056	2159797	0.273	0.217	
L1	CHLORD 7	15.97	14.43	461229	2878323	0.205	0.300	#
Sum	CHLORD 1			14683165	12820985	1.840	1.820	
erage	CHLORD 1					0.263	0.260	

105%

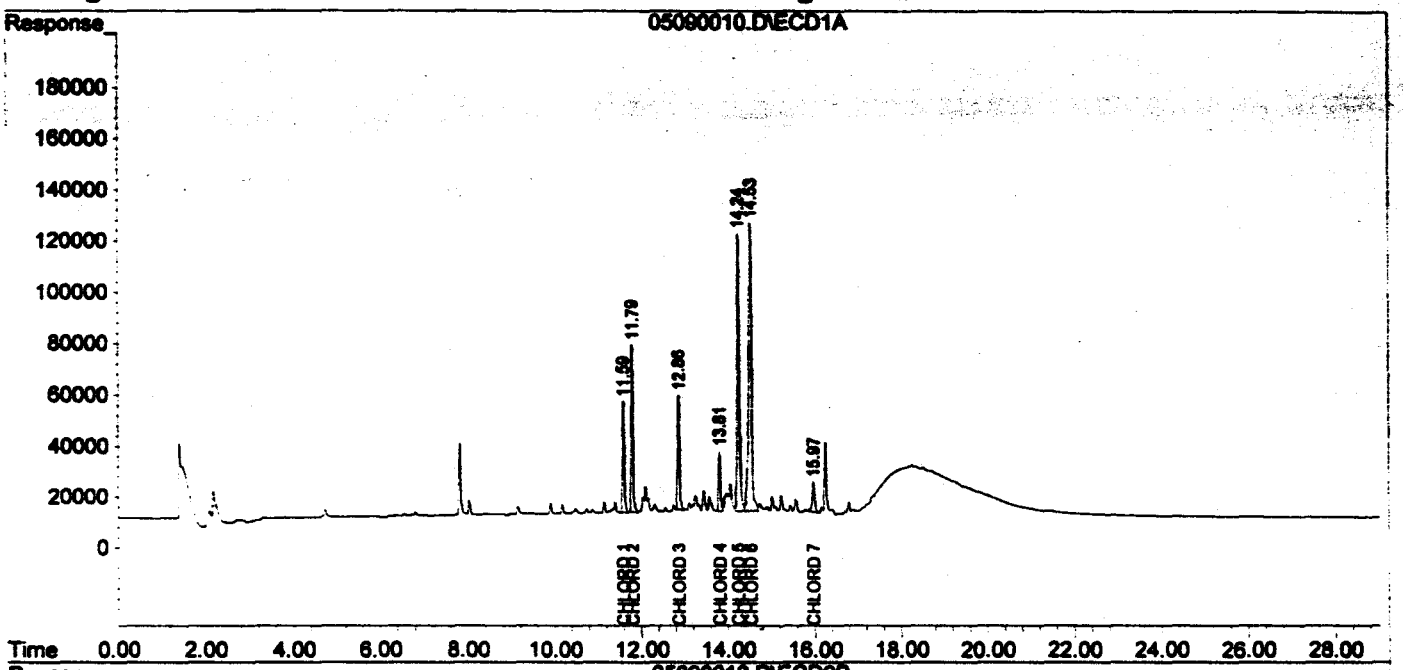
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

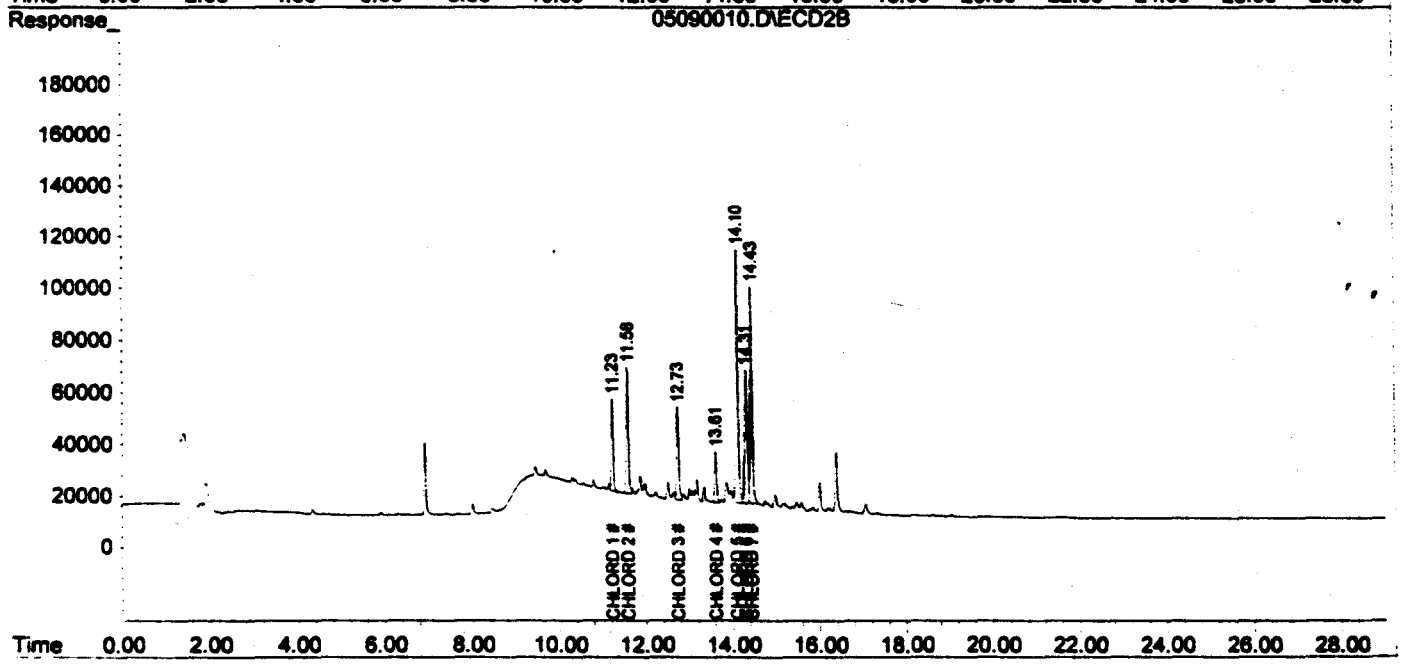
Quantita[illegible]

Signal #1 : C:\HPCHEM\1\DATA\050900[illegible]
Signal #2 : C:\HPCHEM\1\DATA\050900[illegible]
Acq On : 9 May 2000 2:04 pm
Sample : ICV CHLORD .25 PPM
Misc :
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: May 9 14:37 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Mon Nov 08 17:46:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 05/09/00
Analyst Initials: YGK
Instrument Method: 8081D1
Calibration Column: Rtx-CLP1
Confirmation Column: Rtx-CLP2

DDT Breakdown % (<15%): 6.0%
Endrin Breakdown % (<15%): 9.1%

Pest Calibration Date: 05/07/00
PCB Calibration Date: —

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	35-110	18-135
Water	5-156	D-163

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	050700P	soil	1X	NA	NA	
2	Hexane		soil				
3	PEM		std				P00088
4	ccv Pest .25 ppm				108	109	P00103
5	ic Chlord .25 ppm	050900CL			NA	NA	P00015
6	IC 0.05 ppm						P00077
7	IC 0.10 ppm						P00076
8	IC 0.50 ppm						P00074
9	IC 0.75 ppm						P00073
10	ccv Chlor. .25 ppm						105% P00087
11	ccv TOX 2.5 ppm	050800TX			NA	NA	110% P00067
12	Hexane	050700P	soil				
13	BLNK T 05/08		W		97	113	
14	LCS T 05/08				98	81	
15	91377 T				95	108	
16	91379 T				85	109	
17	91381 T				92	110	
18	91383 T				94	112	
19	91385 T				98	115	
20	91387 T				92	106	
21	91389 T				101	114	
22	91391 T				98	118	
23	Hexane		soil		NA	NA	

Signature/Date: [signature] 05/09/00

↓ cont.

SVO GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

DATE / INSTRUMENT: 05/08/00 GC A	METHOD: (circle applicable methods)
MATRIX:	(8081A) 8082 8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is the runlog completely filled out (~~including review signature/date~~)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst: [signature]	Reviewer: [signature]
Date: 05/09/00 Time: 12:00	Date: 05.18.2000 Time: 1645

Response Factor Report GC/ECD IN

Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue May 09 11:56:31 2000

Calibration Files
5 =05080008.D 3.5 =05080007.D 2.5 =05080006.D
1.5 =05080005.D 0.5 =05080004.D

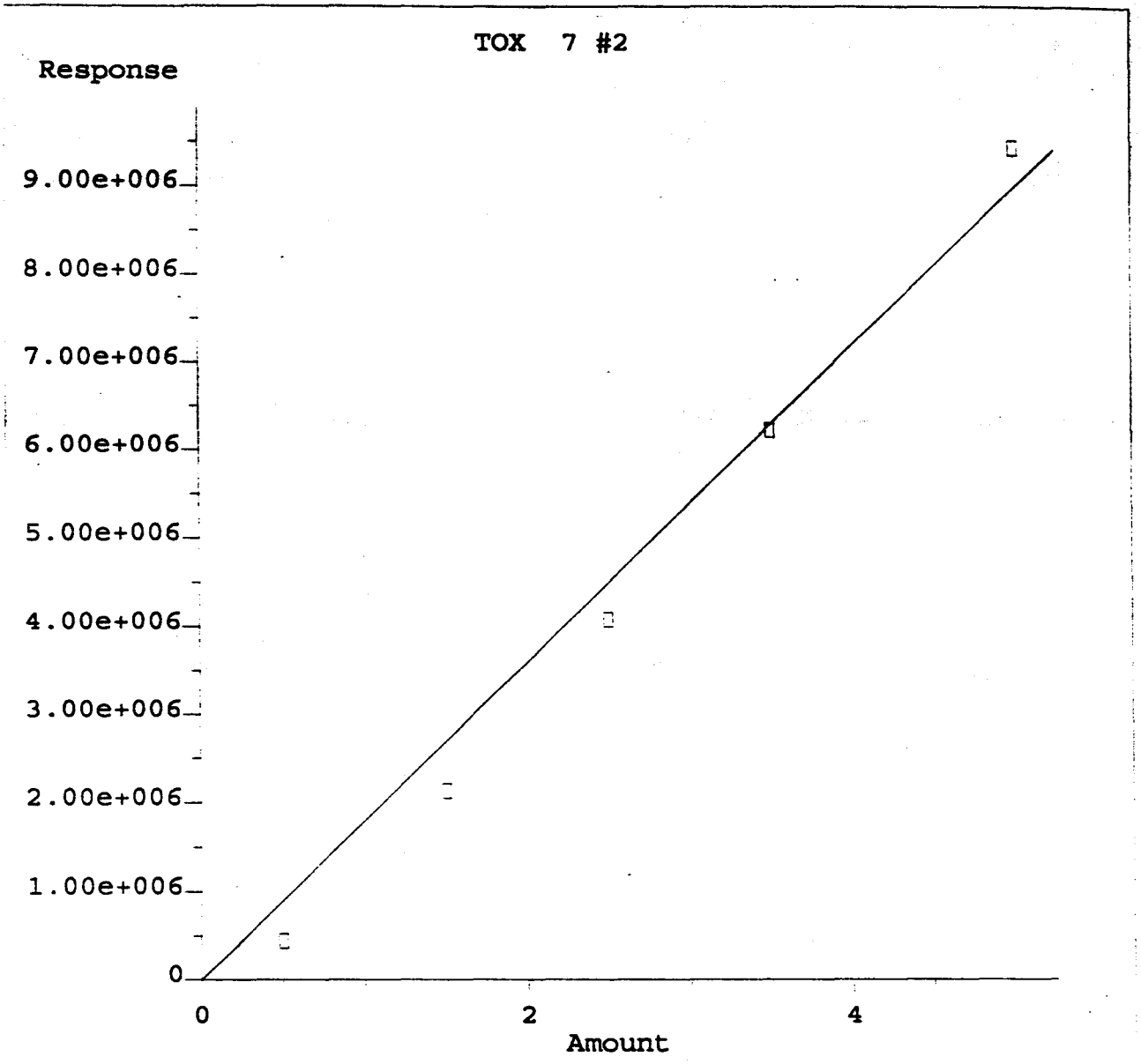
	Compound	5	3.5	2.5	1.5	0.5	Avg		%RSD
1) L	TOX 1	1.260	1.314	1.350	1.337	1.012	1.255	E6	11.16
2) L	TOX 2	2.096	2.155	2.132	2.215	1.681	2.056	E6	10.41
3) L	TOX 3	3.031	3.070	3.101	2.991	2.492	2.937	E6	8.58
4) L	TOX 4	3.415	3.588	3.624	3.406	2.498	3.306	E6	13.99
5) L	TOX 5	4.245	4.437	4.545	4.587	4.097	4.382	E6	4.72
6) L	TOX 6	3.265	3.399	3.511	3.659	4.209	3.609	E6	10.14
7) L	TOX 7	1.806	1.813	1.799	1.818	1.965	1.840	E6	3.80

Signal #2 Calibration Files
5 =05080008.D 3.5 =05080007.D 2.5 =05080006.D
1.5 =05080005.D 0.5 =05080004.D

	Compound	5	3.5	2.5	1.5	0.5	Avg		%RSD
1) L	TOX 1	4.523	4.622	4.526	4.467	3.380	4.304	E6	12.07
2) L	TOX 2	2.619	2.631	2.483	2.436	1.983	2.430	E6	10.87
3) L	TOX 3	3.404	3.465	3.380	3.348	2.944	3.308	E6	6.29
4) L	TOX 4	4.168	4.241	4.197	4.140	3.711	4.092	E6	5.28
5) L	TOX 5	3.416	3.403	3.298	3.150	2.514	3.156	E6	11.86
6) L	TOX 6	2.407	2.374	2.303	2.202	1.807	2.218	E6	10.96
7) L	TOX 7	1.888	1.777	1.630	1.419	0.880	1.519	E6	26.18

see PLOT

#) = Out of Range



Response = 1.79e+006 * Amt
Coef of Det (r^2) = 0.998 Curve Fit: Linear/(0,0)

Method Name: C:\HPCHEM\1\METHODS\050800TX.M
Calibration Table Last Updated: Tue Nov 09 10:01:01 1999

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\050800\05080004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\050800\05080004.D\ECD2B.CH
Acq On : 8 May 2000 10:19 am Operator: YGK
Sample : IC TOX 0.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:06 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds								
1)	L	TOX 1	16.36	16.45	593764	1689819	0.461	0.372	
2)	L	TOX 2	16.63	16.85	897532	991317	0.423	0.383	
3)	L	TOX 3	17.10	17.02	1267615	1471814	0.416	0.431	
4)	L	TOX 4	17.82	18.11	1266109	1855671	0.363	0.443	
5)	L	TOX 5	18.02	18.23	2064896	1257062	0.474	0.372	
6)	L	TOX 6	18.80	18.94	2116036	903539	0.630	0.381	#
7)	L	TOX 7	19.12	19.33	987674	440219	0.546	0.245	#
	Sum	TOX 1			9193625	8609440	3.314	2.628	
Average		TOX 1					0.473	0.375	

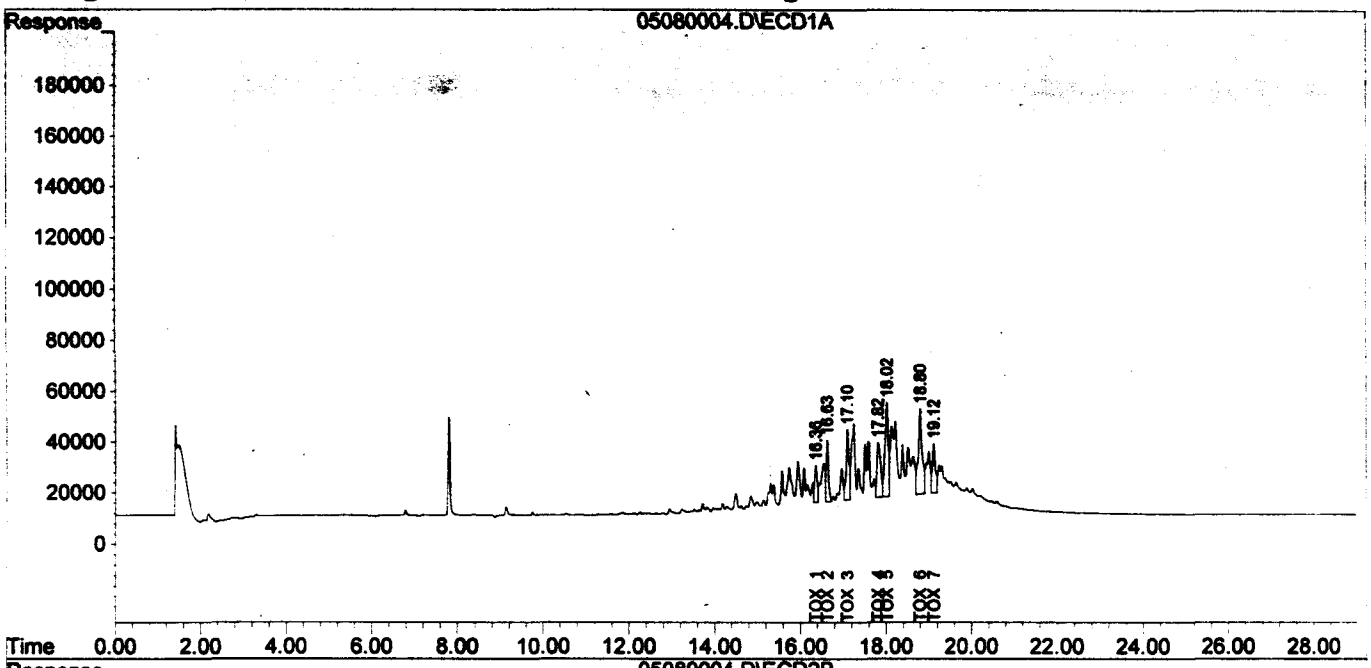
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

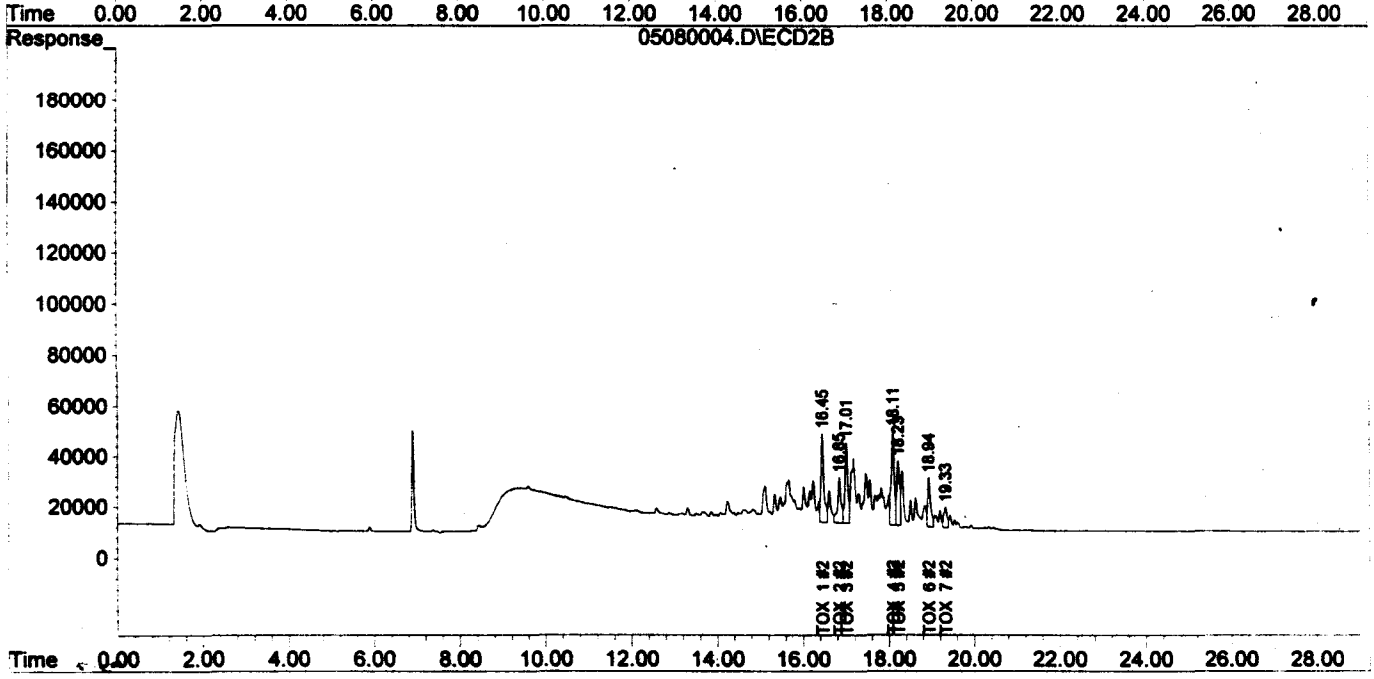
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050800\05080004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\050800\05080004.D\ECD2B.CH
Acq On : 8 May 2000 10:19 am Operator: YGK
Sample : IC TOX 0.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:06 2000 Quant Results File: 050800TX.RBS

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\050800\05080005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\050800\05080005.D\ECD2B.CH
Acq On : 8 May 2000 10:53 am Operator: YGK
Sample : IC TOX 1.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:07 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L TOX 1	16.36	16.45	2006204	6701061	1.557	1.476
2)	L TOX 2	16.63	16.85	3322031	3653904	1.567	1.410
3)	L TOX 3	17.10	17.02	4486239	5022157	1.473	1.472
4)	L TOX 4	17.82	18.11	5109090	6210648	1.466	1.483
5)	L TOX 5	18.02	18.23	6880465	4725555	1.581	1.399
6)	L TOX 6	18.80	18.94	5488775	3302286	1.634	1.393
7)	L TOX 7	19.12	19.34	2727720	2129106	1.508	1.186
	Sum TOX 1			30020525	31744717	10.786	9.819
Average	TOX 1					1.541	1.403

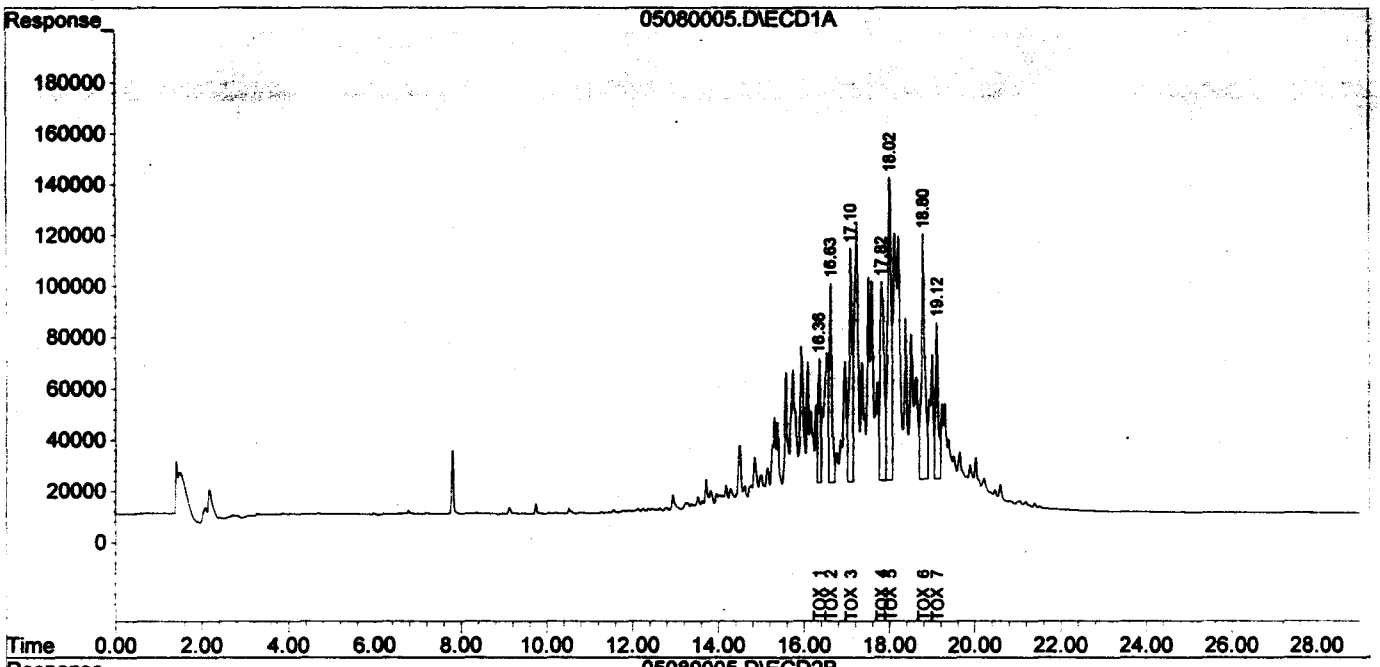
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

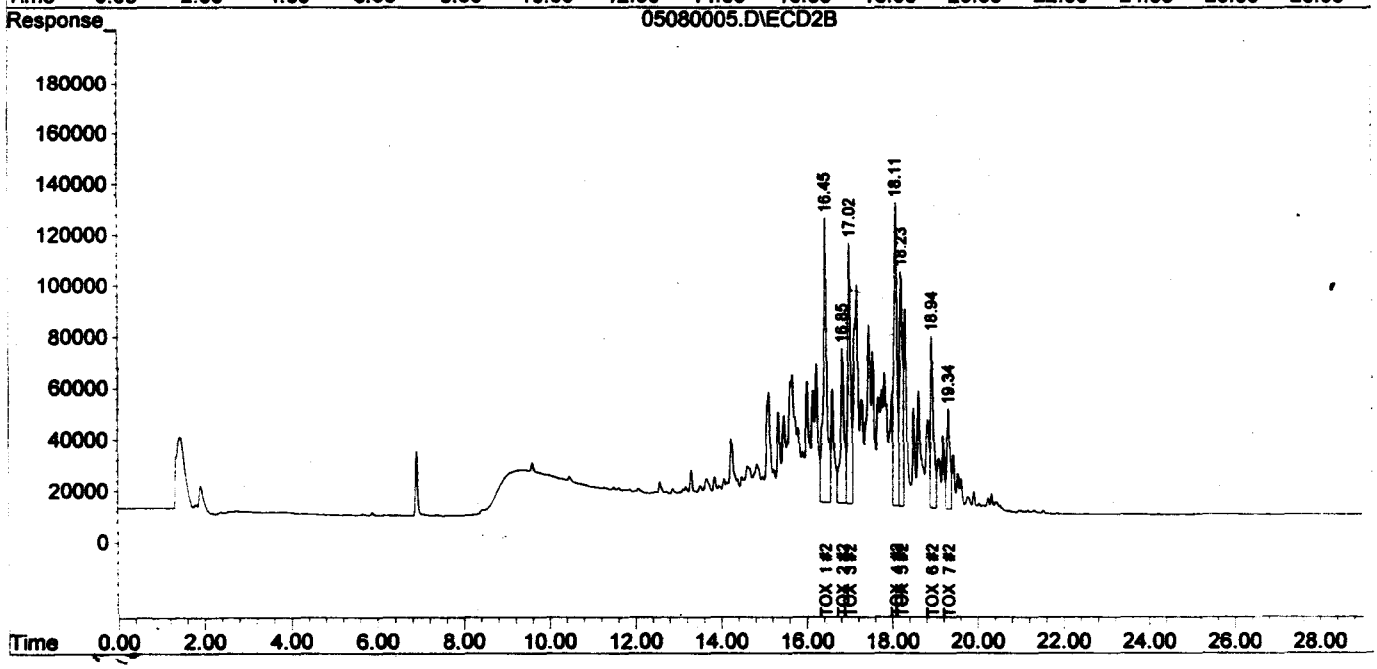
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050800\05080005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\050800\05080005.D\ECD2B.CH
Acq On : 8 May 2000 10:53 am Operator: YG
Sample : IC TOX 1.50 PPM Inst : GC/ECD-1N
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:07 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\050800\05080006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\050800\05080006.D\ECD2B.CH
Acq On : 8 May 2000 11:27 am Operator: YGK
Sample : IC TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:07 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

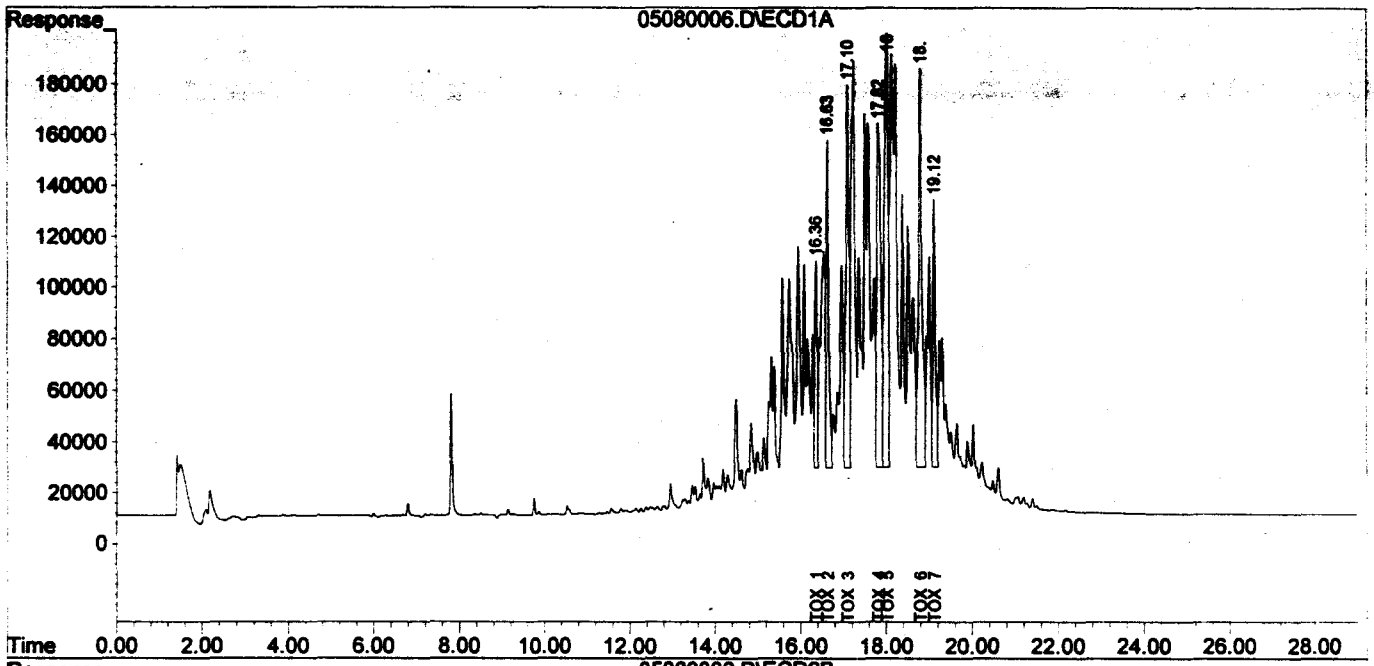
	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1)	L TOX	1	16.37	16.45	3375819	11315937	2.620	2.492
2)	L TOX	2	16.63	16.86	5329143	6206327	2.514	2.395
3)	L TOX	3	17.10	17.02	7751642	8450445	2.545	2.477
4)	L TOX	4	17.82	18.11	9060132	10493232	2.600	2.506
5)	L TOX	5	18.02	18.23	11361550	8245611	2.610	2.441
6)	L TOX	6	18.80	18.95	8776827	5756464	2.614	2.428
7)	L TOX	7	19.12	19.34	4496686	4074764	2.486	2.270
	Sum TOX	1			50151798	54542779	17.989	17.009
	Average TOX	1					2.570	2.430

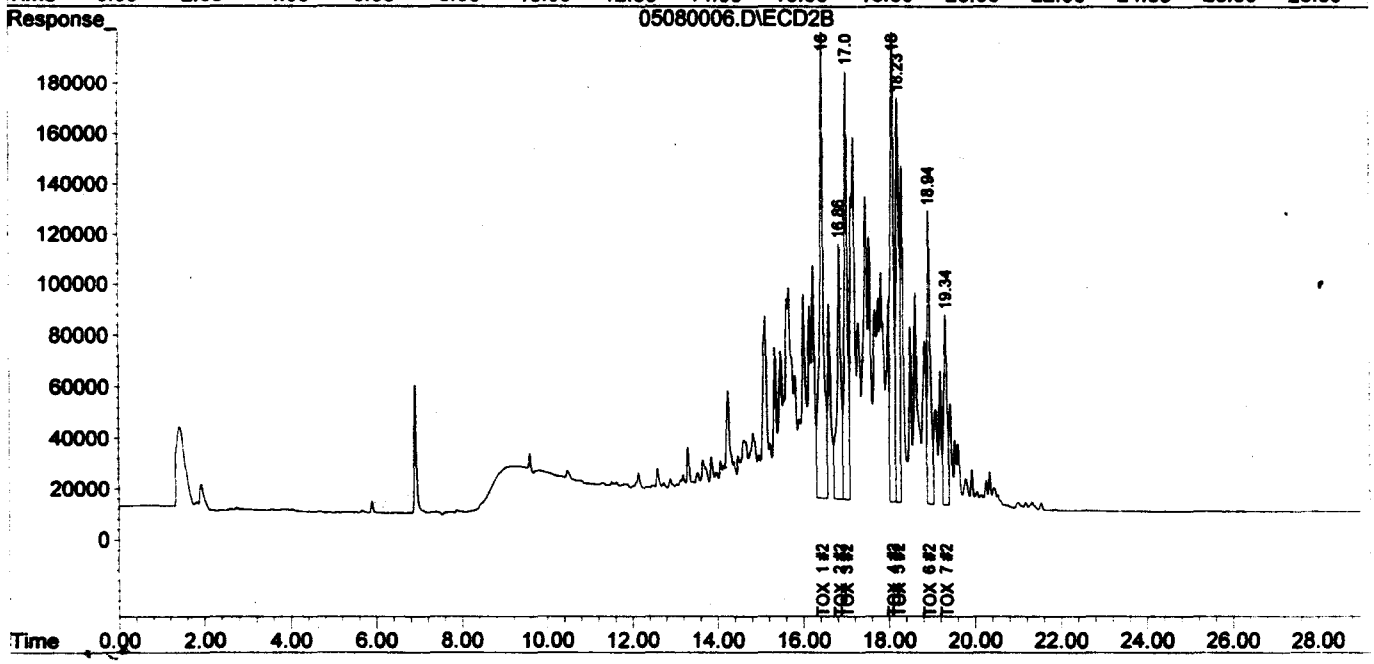
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050800\05080006.D\ECD1A.CH Yr: 6
Signal #2 : C:\HPCHEM\1\DATA\050800\05080006.D\ECD2B.CH
Acq On : 8 May 2000 11:27 am Operator: YGK
Sample : IC TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:07 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\050800\05080007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\050800\05080007.D\ECD2B.CH
Acq On : 8 May 2000 12:02 pm Operator: YGK
Sample : IC TOX 3.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:08 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1)	L TOX	1	16.37	16.46	4597321	16175334	3.567	3.562
2)	L TOX	2	16.63	16.86	7542251	9207503	3.557	3.553
3)	L TOX	3	17.11	17.02	10743496	12126509	3.527	3.554
4)	L TOX	4	17.83	18.11	12557488	14844595	3.604	3.545
5)	L TOX	5	18.02	18.23	15530197	11911836	3.568	3.526
6)	L TOX	6	18.80	18.95	11895664	8308468	3.542	3.505
7)	L TOX	7	19.13	19.34	6346950	6219646	3.509	3.466
	Sum TOX	1			69213366	78793892	24.876	24.711
Average	TOX	1					3.554	3.530

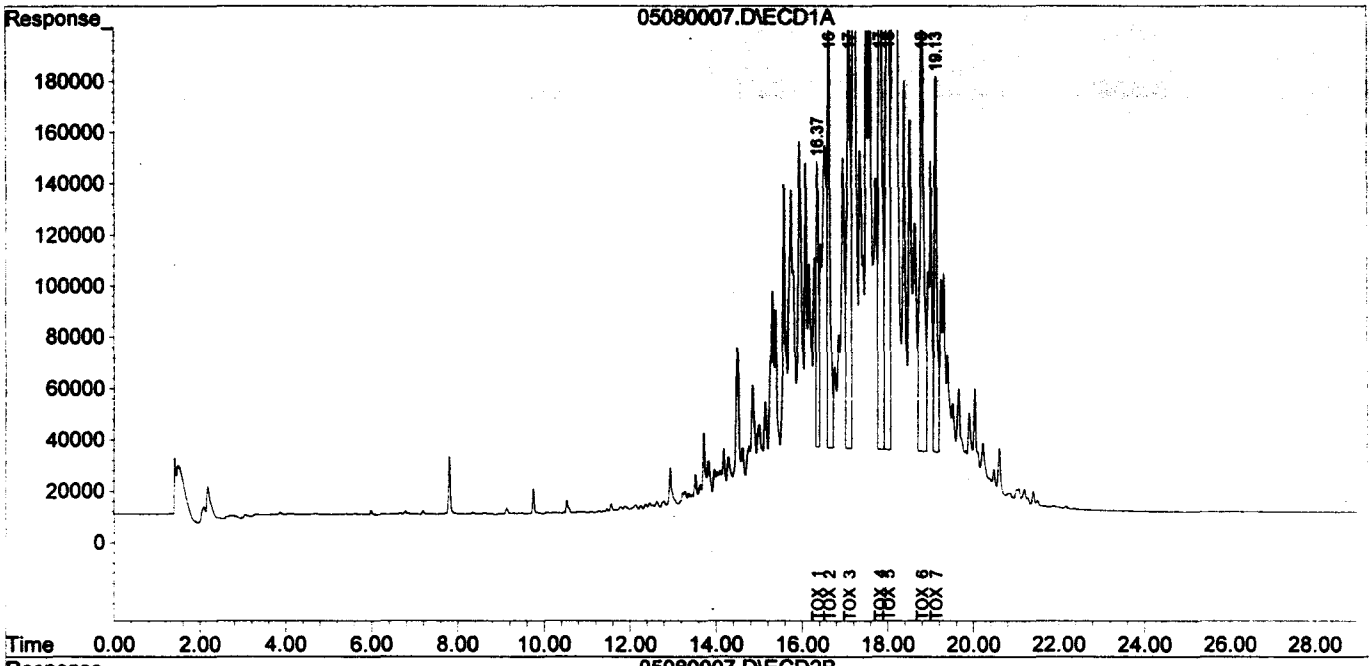
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

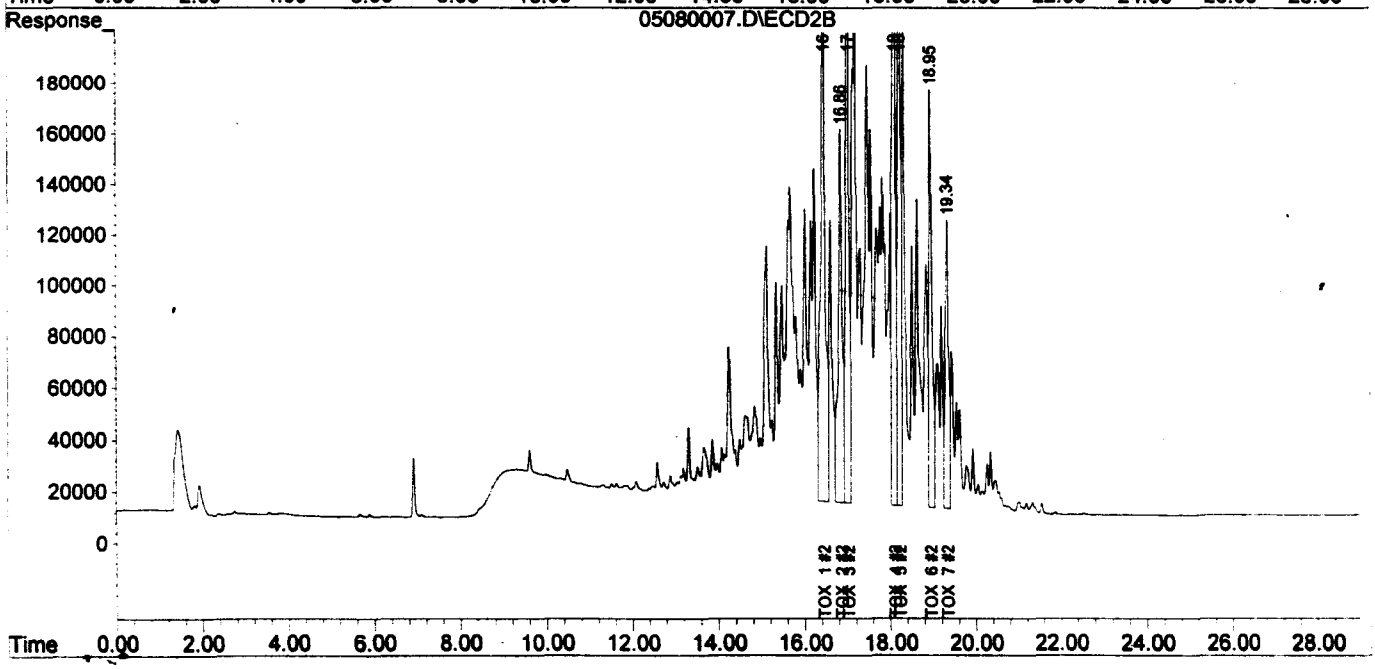
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050800\05080007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\050800\05080007.D\ECD2B.CH
Acq On : 8 May 2000 12:02 pm Operator: YGK
Sample : IC TOX 3.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:08 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\050800\05080008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\050800\05080008.D\ECD2B.CH
Acq On : 8 May 2000 12:36 pm Operator: YGK
Sample : IC TOX 5.0 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:09 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1)	L TOX	1	16.37	16.46	6297727	22614167	4.887	4.980
2)	L TOX	2	16.64	16.86	10480526	13094749	4.943	5.054
3)	L TOX	3	17.11	17.02	15153375	17021373	4.975	4.989
4)	L TOX	4	17.83	18.11	17074936	20841851	4.901	4.977
5)	L TOX	5	18.03	18.23	21226269	17079148	4.876	5.055
6)	L TOX	6	18.80	18.95	16323171	12034966	4.861	5.077
7)	L TOX	7	19.13	19.34	9031664	9437551	4.994	5.259
	Sum TOX	1			95587669	112.1E6	34.437	35.390
Average	TOX	1					4.920	5.056

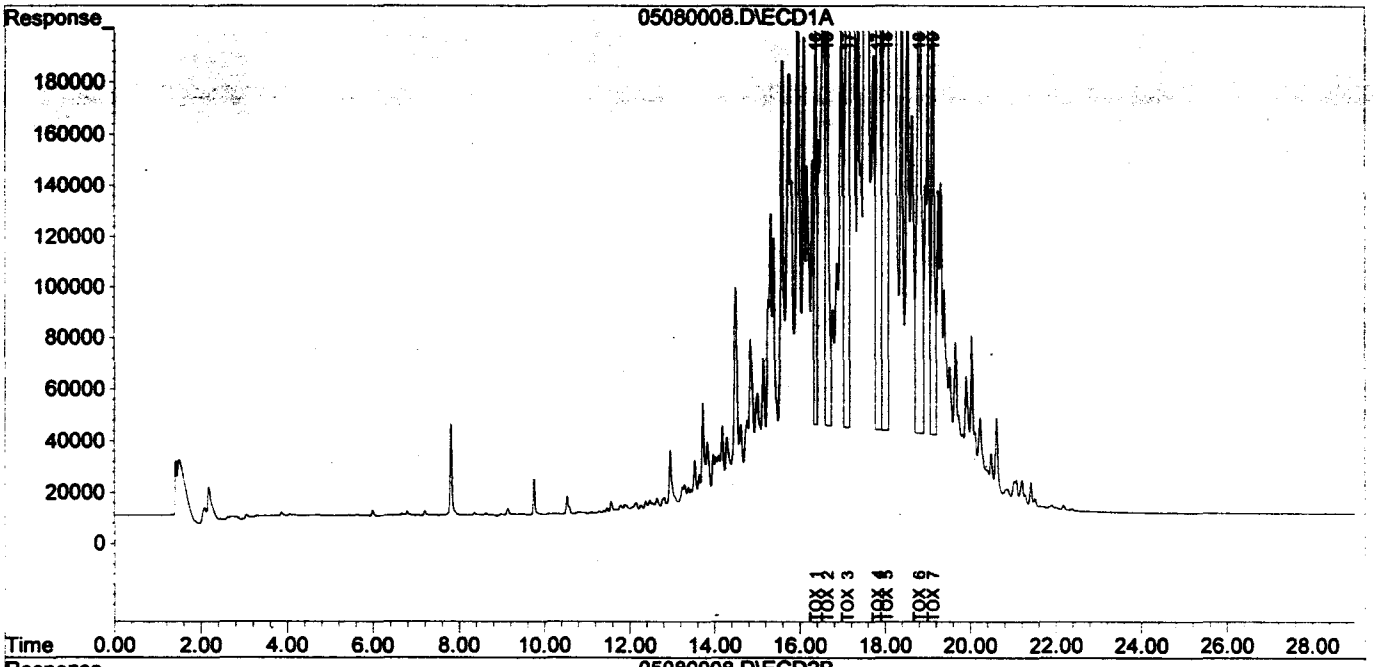
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

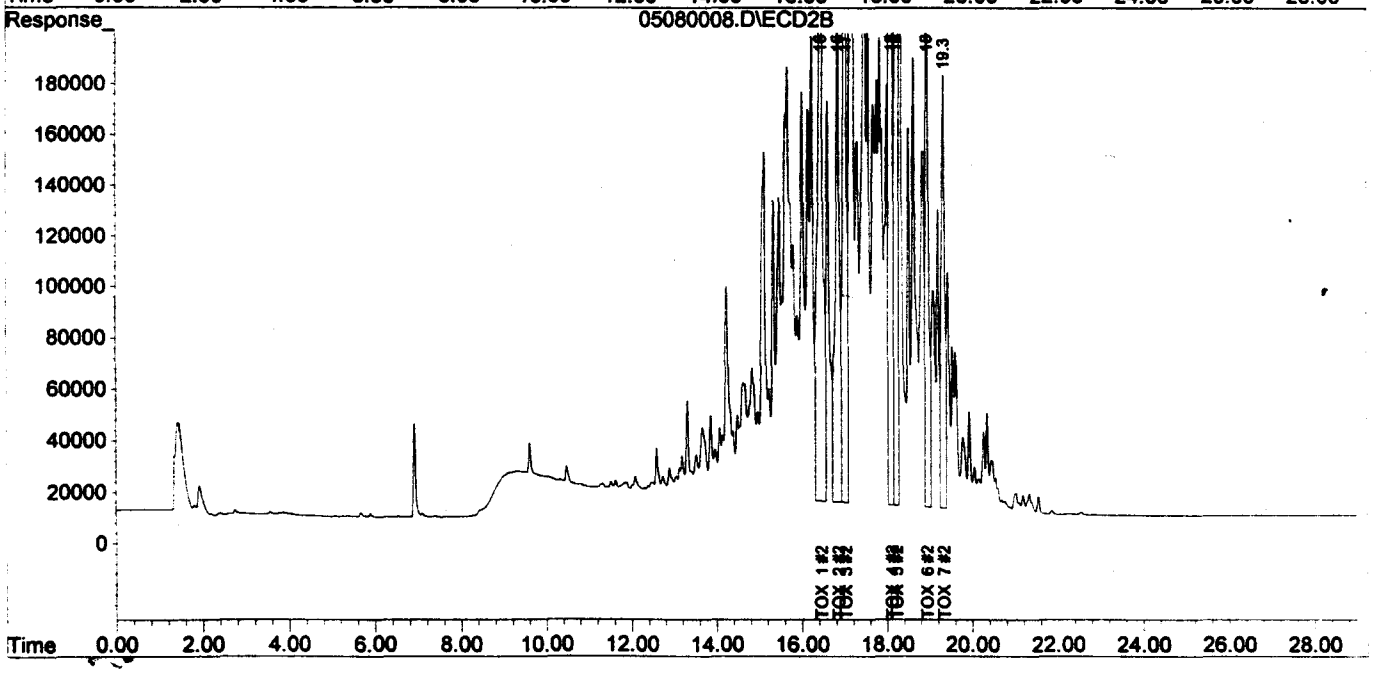
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050800\05080008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\050800\05080008.D\ECD2B.CH
Acq On : 8 May 2000 12:36 pm Operator: YGK
Sample : IC TOX 5.0 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:09 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\050800\05080009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\050800\05080009.D\ECD2B.CH
Acq On : 8 May 2000 1:10 pm Operator: GK
Sample : ICV TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:03 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1)	L	TOX 1	16.38	16.46	1434357	8408983	1.113	1.852	#
2)	L	TOX 2	16.64	16.86	4394679	5202438	2.073	2.008	
3)	L	TOX 3	17.11	17.02	8281315	8624667	2.719	2.528	
4)	L	TOX 4	17.83	18.11	7891101	13127130	2.265	3.135	#
5)	L	TOX 5	18.02	18.27	12657278	11243987	2.908	3.328	
6)	L	TOX 6	18.80	18.95	11087384	8667892	3.302	3.656	
7)	L	TOX 7	19.13	19.34	6669180	6410220	3.687	3.572	
Sum		TOX 1			52415293	61685317	18.067	20.078	
Average		TOX 1					2.581	2.868	

103%

115%

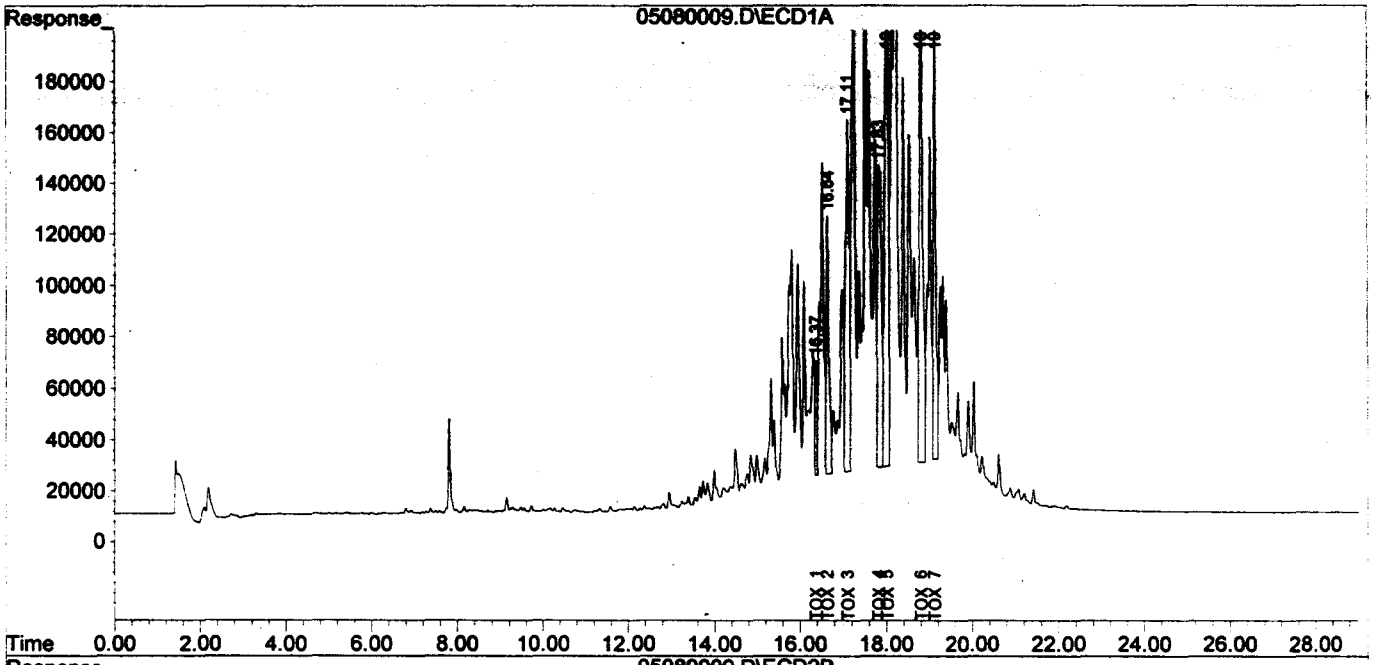
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

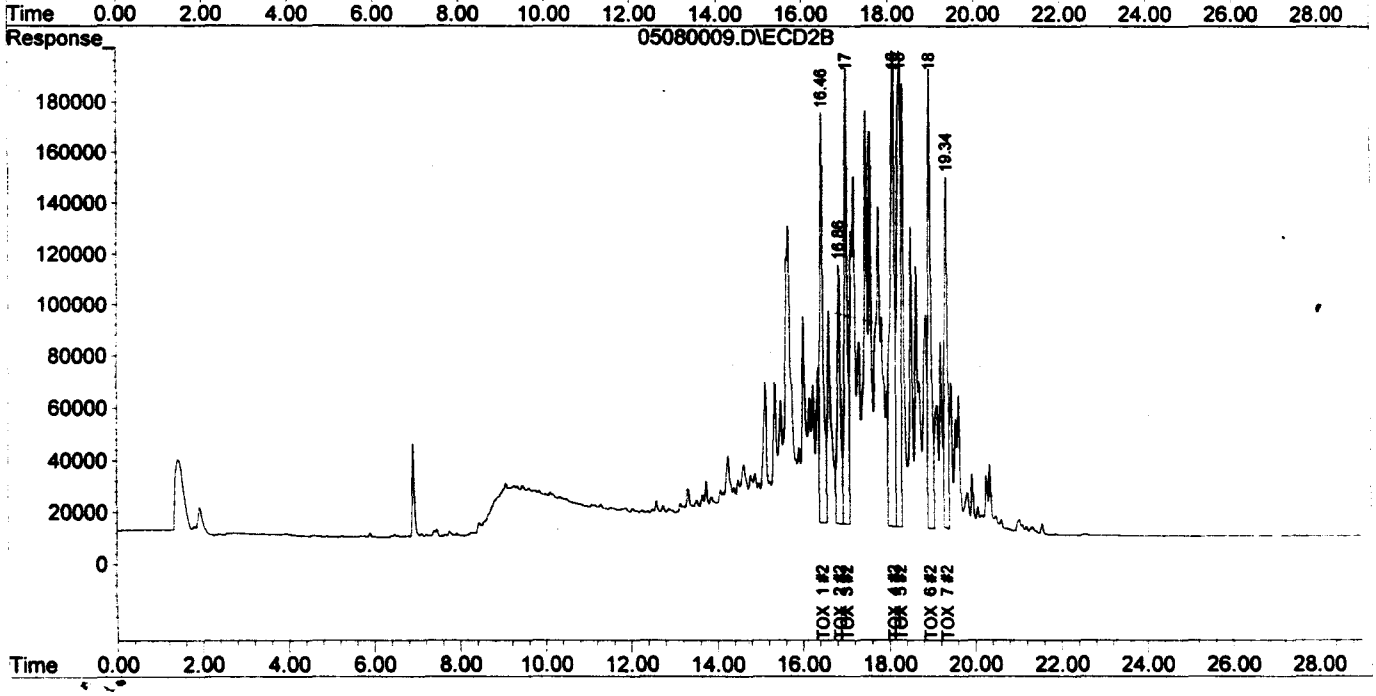
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\050800\05080009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\050800\05080009.D\ECD2B.CH
Acq On : 8 May 2000 1:10 pm Operator: YGK
Sample : ICV TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 12:03 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 05/08/00
Analyst Initials: YGK
Instrument Method: 8081D1
Calibration Column: Rtx-CLP1 (F)
Confirmation Column: Rtx-CLP2

DDT Breakdown % (<15%): 4.2%
Endrin Breakdown % (<15%): 4.8%

Pest Calibration Date: 05/07/00
PCB Calibration Date: —

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	35-110	18-135
Water	5-156	D-163

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	27 Hexane	050700P	solv	1X	NA	NA	vial # 27 seq. 05/07/00
2	28 PEM	"	std	"	"	"	vial # 28 seq. 05/07/00 P00088
3	29 ccv Pest. 25 ppm	"	"	"	106	103	vial # 29 seq. 05/07/00 continued from seq. 05/07 P00103
4	IC TOX 0.50 ppm				NA	NA	P00069
5	IC TOX 1.50 ppm						P00068
6	IC TOX 2.50 ppm						P00067
7	IC TOX 3.5 ppm						P00066
8	IC TOX 5.0 ppm						P00065
9	ICV TOX 2.5 ppm						103% P00071
10	BLNK W 05/04	050700P	W		98	99	
11	LCS W 05/04	"	"	"	104	99	
12	91280 W 1:10	"	"	10X	156	36	
13	Hexane	"	solv	1X	NA	NA	
14	PEM	"	std	"	"	"	P00088
15	ccv Pest. 25 ppm	"	"	"	107	109	P00103
16	ccv Chlord. 25 ppm	032200CL	"	"	NA	NA	P00075
17	BLNK T 05/04	"	W	"	"	"	for Chlordane only
18	91361 T	"	"	"	"	"	
19	91363 T	"	"	"	"	"	
20	91365 T	"	"	"	"	"	
21	91367 T	"	"	"	"	"	
22	91369 T	"	"	"	"	"	
23	91371 T	"	"	"	"	"	

Signature/Date: [signature] 05/08/00

↓ cont.

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Pest. mix, interm.
Lab Standard ID# P00018
Prepared By: YGK

Date Made: 02/21/00
Expire Date: 08/21/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
Pest. mix AB#1	S00A041	200 ppm	200 µL	10.0 ppm
SS stock	S99A155	200 ppm	200 µL	10.0 ppm
Hexane	Ex 99135	100%	to 4 mL	

YGK 02/21/00

Standard Name: Pest. mix. std
Lab Standard ID# P00019 - P00024
Prepared By: YGK

Date Made: 02/21/00
Expire Date: 08/21/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.	
Pest. mix. Interm	P00018	10 ppm	200 µL	0.5 ppm	P00C
			140 µL	0.35 ppm	P00C
			100 µL	0.25 ppm	P00C
			40 µL	0.10 ppm	P00C
	YK 02/21		20 µL	0.050 ppm	P00C
Pest. std	P00019	0.50 ppm	80 µL	0.010 ppm	P00C
Hexane	Ex 99135	100%	to 4 mL each		

YGK 02/21/00

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Pest. mix ICV
Lab Standard ID# P00025
Prepared By: YGK

Date Made: 02/21/00
Expire Date: 08/21/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
Pest. mix. Interm (ICV)	P00017	10 ppm	100 µL	0.25 ppm
in Hexane	Ex 99135	100%	to 4 mL	
	02/21/00			
YGK				

Standard Name: Ar1016+1260, SS std
Lab Standard ID# P00026 -- P00030
Prepared By: YGK

Date Made: 02/25/00
Expire Date: 08/25/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.	
Ar1016+1260, SS interm	P99141	25/5.0 ppm	400 µL	2.5/0.5 ppm	P00C
			240 µL	1.5/0.30 ppm	P00C
			160 µL	1.0/0.20 ppm	P00C
			80 µL	050/0.10 ppm	P00C
			16 µL	0.10/0.020 ppm	P00C
Hexane	Ex 99135	100%	to 4 mL each		
YGK 02/25/00					

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Ar 1221 ICV
Lab Standard ID#: P00063
Prepared By: YGK

Date Made: 03/01/00
Expire Date: 09/01/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Ar 1221 stock	S99A201	1000 ppm	8.0 µL	2.0 ppm
Hexane	Ex 99135	100%	to 4.0 mL	

YGK 03/01/00

Standard Name: Toxaphene std (interm)
Lab Standard ID#: P00064
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Toxaphene stock	S99A169	1000 ppm	400 µL	100 ppm
Hexane	Ex 99135	100%	to 4.0 mL	

YGK 03/06/00

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Toxaphene, std
Lab Standard ID#: P00065 - P00069
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.	
Toxaphene, interm.	P00064	100 ppm	200 µL	5.0 ppm	P00065
			140 µL	3.5 ppm	P00066
			100 µL	2.5 ppm	P00067
			60 µL	1.5 ppm	P00068
			20 µL	0.50 ppm	P00069
Hexane	Ex 99135	100%	to 4.0 mL each		
YGK	03/06/00				

Standard Name: Toxaphene, std interm (ICV)
Lab Standard ID#: P00070
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Toxaphene, stock	S99A198	1000 ppm	200 µL	50 ppm
Hexane	Ex 99135	100%	to 4.0 mL	
	03/06/00			
YGK				

STPRLGFR.XLS

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Toxaphene std (ICV)
Lab Standard ID# P00071
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Toxaphene interm	P00070	50 ppm	200 µL	2.5 ppm
Hexane	Ex 99135	100%	to 4.0 mL	
YGK 03/06/00				

Standard Name: Chlordane std interm
Lab Standard ID# P00072
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Chlordane (tech) stock	S99A167	1000 ppm	40 µL	10 ppm
Hexane	Ex 99135	100%	to 4.0 mL	
YGK 03/06/00				

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Chlordane tech. std
Lab Standard ID#: P00073 - P00077
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.	
Chlordane, interm	P00072	10 ppm	300 µL	0.75 ppm	P00073
			200 µL	0.50 ppm	P00074
			100 µL	0.25 ppm	P00075
			40 µL	0.10 ppm	P00076
			20 µL	0.050 ppm	P00077
Hexane	Ex 99135	100%	to 4.0 mL each		

YGK 03/06/00

Standard Name: Herb. mix (deriv), work
Lab Standard ID#: H00078
Prepared By: YGK

Date Made: 03/16/00
Expire Date: 09/16/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Herb. mix. stock *	S99A096	200-2,000 ppm	80 µL	4 - 40 ppm
DCAA stock	S00A050	100 ppm	320 µL	8.0 ppm
MCPP, MCPA stock	S00A049	2,000	720 µL	360 ppm
Hexane	Ex 99135	100%	to 4.0 mL	
MCPP, MCPA - 2,000 ppm, rest - 200 ppm				

YGK 03/16/00

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: std Herb. mix
Lab Standard ID#: H00085
Prepared By: YGK

Date Made: 03/22/00
Expire Date: 09/22/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
std Herb. mix /SS	H00079	2.0-200/4.0ppm	750 µL	0.75-75/1.5 ppm
Hexane	Ex 99135	100%	to 2.0 mL	
YGK 03/22/00				

Standard Name: Chlordane (work) ICV interm
Lab Standard ID#: P00086
Prepared By: YGK

Date Made: 03/22/00
Expire Date: 09/22/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Chlordane stock	S00A052	1000 ppm	40 µL	10 ppm
Hexane	Ex 99135	100%	to 4.0 mL	
YGK 03/22/00				

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Chlordane (Tech), ICV
Lab Standard ID#: P00087
Prepared By: YGK

Date Made: 03/22/00
Expire Date: 09/22/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Chlordane (work) interm.	P00086	10 ppm	100 µL	0.25 ppm
Hexane	Ex 99135	100%	to 4.0 mL	

YGK 03/22/00

Standard Name: PEM
Lab Standard ID#: P00088
Prepared By: YGK

Date Made: 03/28/00
Expire Date: 09/28/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
PEM	S99A158	100 ppm	20 µL	0.5 ppm
Hexane	Ex 99135	100%	to 4.0 mL	

YGK 03/28/00

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Chlordane, Tech, std
Lab Standard ID#: P00111
Prepared By: YGK

Date Made: 06/05/00
Expire Date: 12/05/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
Chlordane Tech, extern.	P00072	10 ppm	100 µL	0.25 ppm
Hexane	Ex00025	100%	to 4.0 mL	

YGK 06/05/00

Standard Name: PEM
Lab Standard ID#: P00112
Prepared By: YGK

Date Made: 06/09/00
Expire Date: 12/09/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
Toxaphene	S99A158	100 ppm	20 µL	0.5 ppm
Hexane	Ex00025	100%	to 4.0 mL	

YGK 06/05/00

STPRLGFR.XLS

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Toxaphene, std (ccv)
Lab Standard ID#: P00113
Prepared By: YGK

Date Made: 06/12/00
Expire Date: 12/12/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
Toxaphene, interm.	P00064	100 ppm	100 µL	2.5 ppm
Hexane	Ex 00025	100%	to 4.0 mL	
YGK 06/12/00				

Standard Name: Pest. mix. std (0.25 ppm)
Lab Standard ID#: P00114
Prepared By: YGK

Date Made: 06/14/00
Expire Date: 12/14/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
Pest std interm.	P00018	10 ppm	100 µL	0.25 ppm
Hexane	Ex 00025	100%	to 4.0 mL	
YGK 06/14/00				

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062700\06270004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\062700\06270004.D\ECD2B.CH
Acq On : 27 Jun 2000 1:24 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 8:29 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.17	7.87	21689198	19415613	0.270	0.257
		Spiked Amount 0.250			Recovery	=	108.00%	102.80%
22)	S	DCB (SURR)	20.96	21.37	17083379	17407581	0.257	0.258
		Spiked Amount 0.250			Recovery	=	102.80%	103.20%
		Target Compounds						
2)	T	A-BHC	9.72	9.55	31988497	31350496	0.257	0.252
3)	T	B-BHC	10.81	10.72	13200589	12329356	0.250	0.240
4)	T	LINDANE	10.56	10.47	27947097	26874715	0.254	0.250
5)	T	D-BHC	11.25	11.43	27307711	21579893	0.254	0.234
6)	T	HEPTACHLOR	11.75	11.52	22590096	26790246	0.264	0.277
7)	T	ALDRIN	12.47	12.28	22873949	23307110	0.261	0.261
8)	T	HEPT.EPOXIDE	13.91	13.62	20701086	20710423	0.260	0.254
9)	T	ENDOSULFAN 1	14.80	14.48	20984492	20461419	0.263	0.257
10)	T	GAMMA-CHLORDANE	14.19	14.04	22369191	23300131	0.253	0.260
11)	T	ALPHA-CHLORDANE	14.49	14.37	19607293	20578637	0.248	0.255
12)	T	DDE	14.69	14.78	18962815	21060502	0.252	0.255
13)	T	DIELDRIN	15.33	15.09	20375473	21172699	0.255	0.255
14)	T	ENDRIN	15.85	15.75	15967976	15359971	0.240	0.238
15)	T	DDD	16.01	16.03	16215634	15288017	0.242	0.246
16)	T	ENDOSULFAN 2	16.35	16.22	17281761	18874244	0.249	0.255
17)	T	ENDRIN ALDEHYDE	17.26	16.95	13308033	13979395	0.242	0.253
18)	T	DDT	16.61	16.69	17064551	16475824	0.247	0.246
19)	T	ENDOS.SULFATE	18.20	17.53	15558314	16299562	0.244	0.247
20)	T	METHOXYCHLOR	17.65	18.16	8516136	7928340	0.235	0.241
21)	T	ENDRIN KETONE	18.81	18.67	18804072	18948694	0.256	0.250

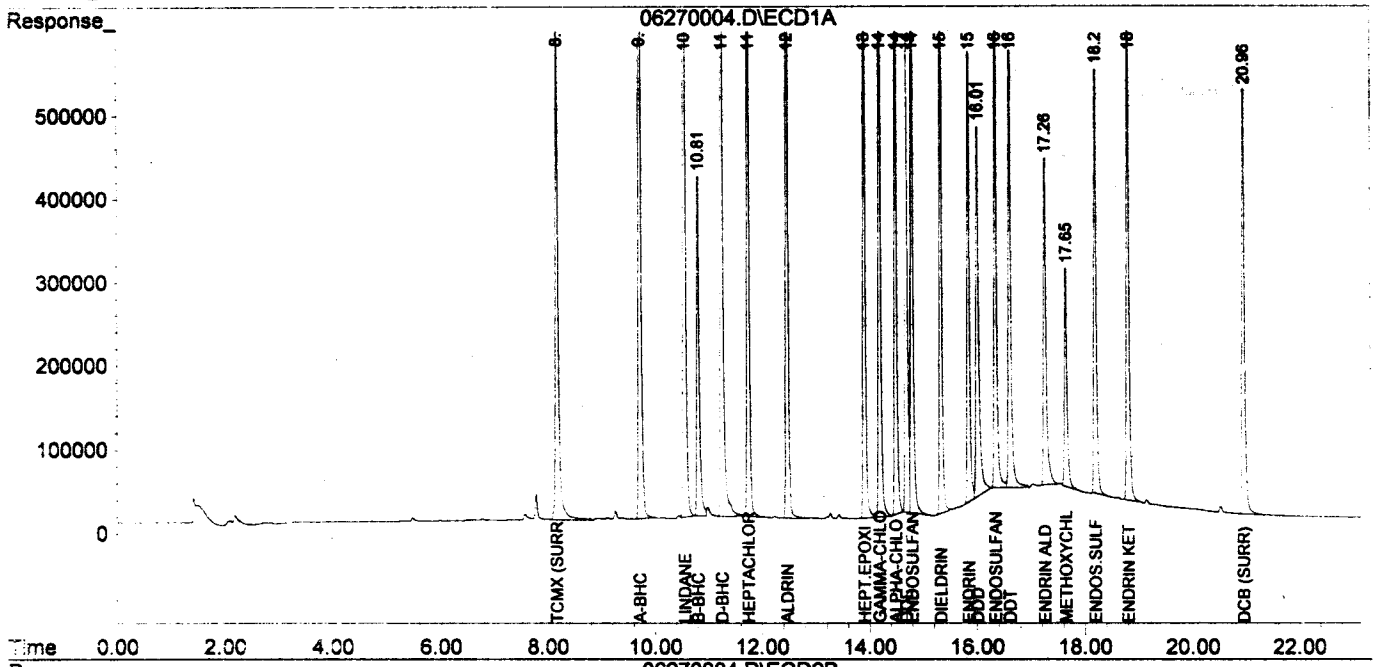
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

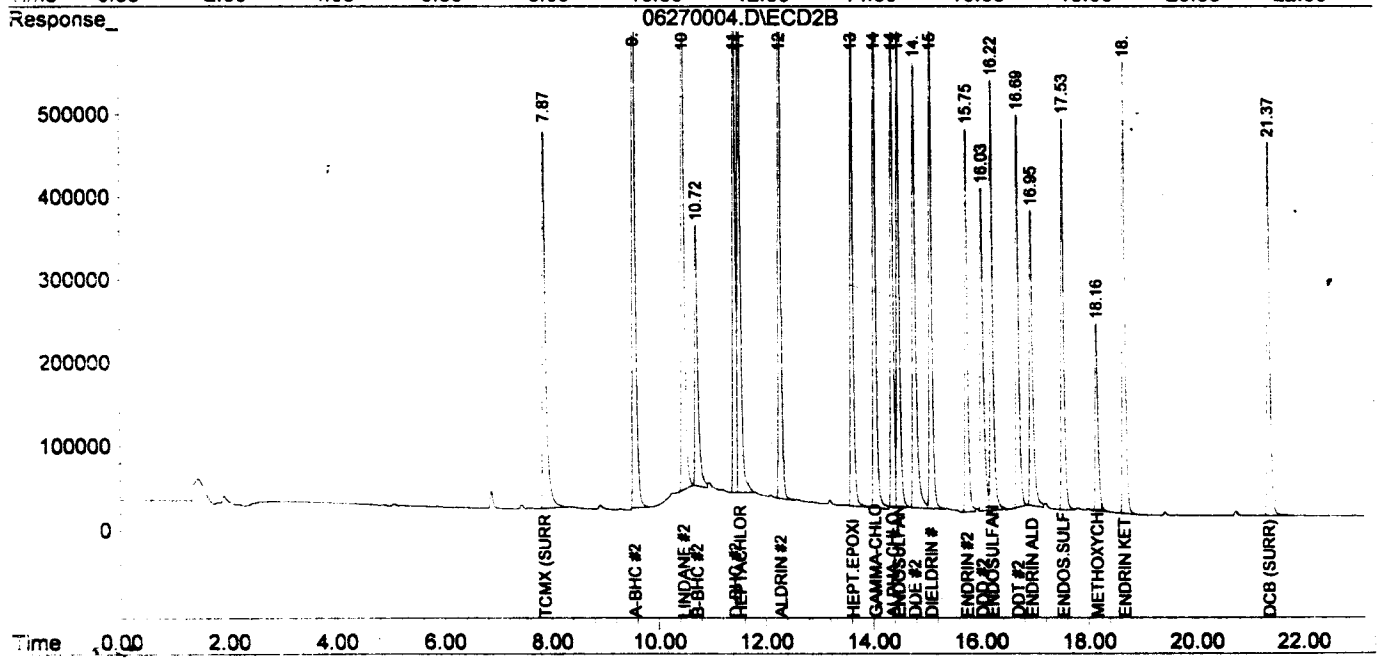
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062700\06270004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\062700\06270004.D\ECD2B.CH
Acq On : 27 Jun 2000 1:24 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 8:29 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062700\06270019.D\ECD1A.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\062700\06270019.D\ECD2B.CH
Acq On : 28 Jun 2000 12:12 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 11:18 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Fri May 05 09:39:32 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.16	7.86	20357877	18224017	0.254	0.242
		Spiked Amount 0.250			Recovery	=	101.60% ✓	96.80%
2)	S	DCB (SURR)	20.94	21.35	16959719	16209862	0.255	0.241
		Spiked Amount 0.250			Recovery	=	102.00% ✓	96.40%
		Target Compounds						
2)	T	A-BHC	9.71	9.55	31380302	29690409	0.252	0.239
3)	T	B-BHC	10.80	10.71	13070303	12091810	0.247	0.235
4)	T	LINDANE	10.55	10.46	27674476	25797209	0.252	0.240
5)	T	D-BHC	11.24	11.42	27189123	20763434	0.253	0.225
6)	T	HEPTACHLOR	11.74	11.51	20753182	23107884	0.242	0.239
7)	T	ALDRIN	12.46	12.27	21886426	21660340	0.250	0.242
8)	T	HEPT.EPOXIDE	13.90	13.61	20165593	19577590	0.253	0.240
9)	T	ENDOSULFAN 1	14.79	14.47	20891809	19349112	0.262	0.243
10)	T	GAMMA-CHLORDANE	14.18	14.03	22165495	21527482	0.251	0.241
11)	T	ALPHA-CHLORDANE	14.48	14.36	19760813	19398994	0.250	0.241
12)	T	DDE	14.68	14.77	18509523	19851738	0.246	0.240
13)	T	DIELDRIN	15.32	15.08	20295656	20059701	0.254	0.241
14)	T	ENDRIN	15.84	15.74	16529537	14785838	0.249	0.229
15)	T	DDD	16.00	16.03	16449604	14379330	0.246	0.232
16)	T	ENDOSULFAN 2	16.34	16.20	17703879	17880685	0.255	0.241
17)	T	ENDRIN ALDEHYDE	17.25	16.94	13382037	12894098	0.244	0.233
18)	T	DDT	16.60	16.68	16697775	15293817	0.241	0.228
19)	T	ENDOS.SULFATE	18.19	17.52	15880841	15519361	0.249	0.235
20)	T	METHOXYCHLOR	17.64	18.15	8644448	7195549	0.239	0.219
21)	T	ENDRIN KETONE	18.80	18.66	18603614	17856881	0.253	0.236

✓

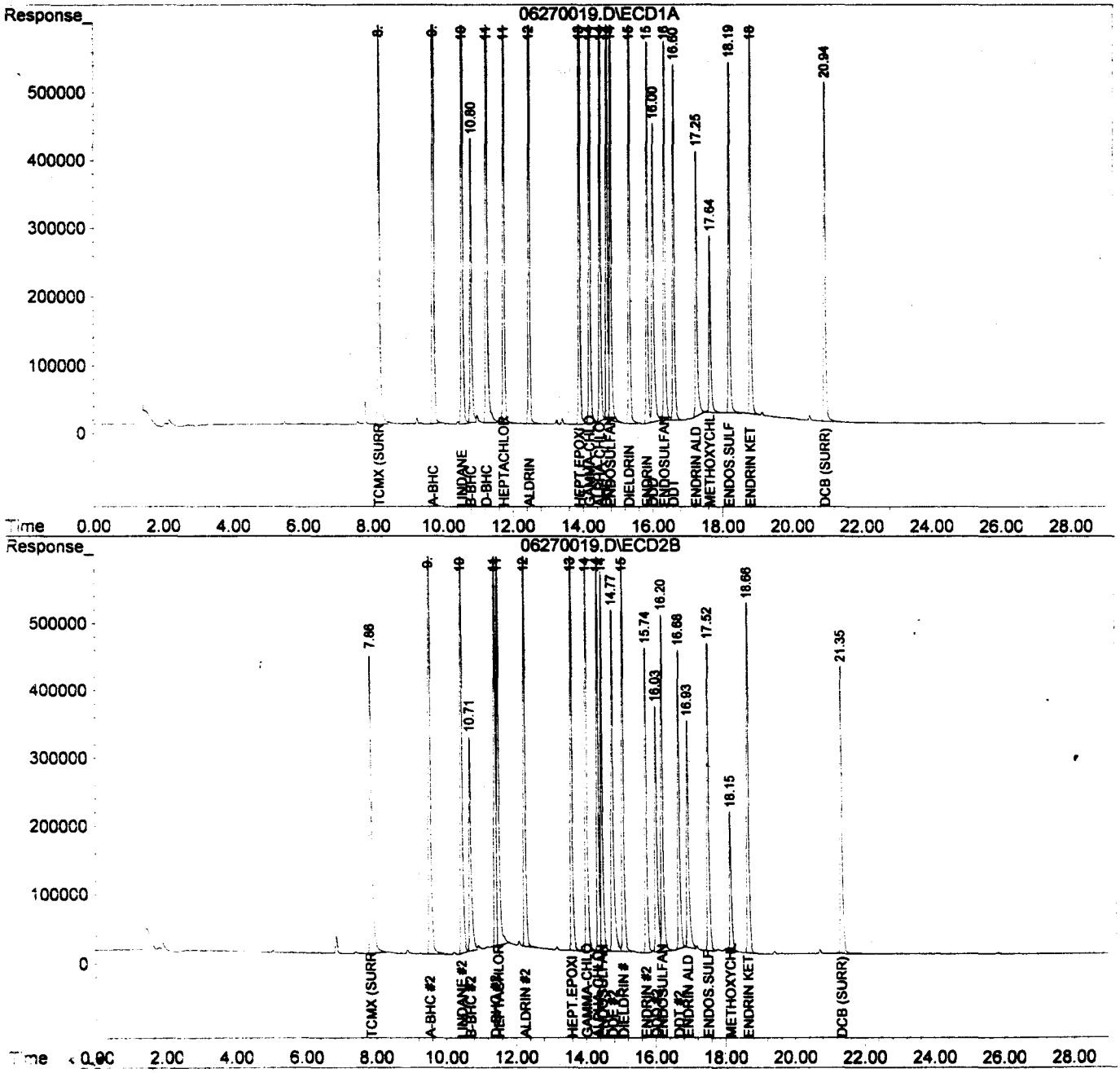
(*)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062700\06270019.D\ECD1A.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\062700\06270019.D\ECD2B.CH
Acq On : 28 Jun 2000 12:12 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 11:18 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Fri May 05 09:39:32 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062700\06270028.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\062700\06270028.D\ECD2B.CH
Acq On : 28 Jun 2000 7:36 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 11:15 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Fri May 05 09:39:32 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.16	7.87	21467784	19005653	0.268	0.252
		Spiked Amount 0.250			Recovery	=	107.20% ✓	100.80%
2)	S	DCB (SURR)	20.94	21.35	17676853	17162838	0.266	0.255
		Spiked Amount 0.250			Recovery	=	106.40% ✓	102.00%
		Target Compounds						
2)	T	A-BHC	9.71	9.55	32465400	30881433	0.261	0.249
3)	T	B-BHC	10.80	10.71	13573171	12484048	0.257	0.243
4)	T	LINDANE	10.55	10.47	28593596	26732359	0.260	0.249
5)	T	D-BHC	11.24	11.42	27598069	20656599	0.257	0.224
6)	T	HEPTACHLOR	11.74	11.52	22125878	24213685	0.258	0.250
7)	T	ALDRIN	12.46	12.27	22968042	22423552	0.262	0.251
8)	T	HEPT.EPOXIDE	13.90	13.61	21052054	20242405	0.264	0.249
9)	T	ENDOSULFAN 1	14.79	14.47	22080069	19971570	0.277	0.251
10)	T	GAMMA-CHLORDANE	14.18	14.03	23059770	22272043	0.261	0.249
11)	T	ALPHA-CHLORDANE	14.48	14.36	20670579	20059525	0.261	0.249
12)	T	DDE	14.68	14.77	19143200	20569878	0.254	0.249
13)	T	DIELDRIN	15.32	15.08	21177582	20707176	0.265	0.249
14)	T	ENDRIN	15.84	15.74	17340204	15449658	0.261	0.239
15)	T	DDD	16.00	16.03	17316644	14800193	0.259	0.239
16)	T	ENDOSULFAN 2	16.34	16.21	18361661	18609425	0.265	0.251
17)	T	ENDRIN ALDEHYDE	17.25	16.94	13791962	12971828	0.251	0.235
18)	T	DDT	16.60	16.68	17012919	15260598	0.246	0.228
19)	T	ENDOS.SULFATE	18.19	17.52	16338568	15842251	0.256	0.240
20)	T	METHOXYCHLOR	17.64	18.16	9047880	7449018	0.250	0.226
21)	T	ENDRIN KETONE	18.80	18.66	19282821	18375596	0.262	0.242

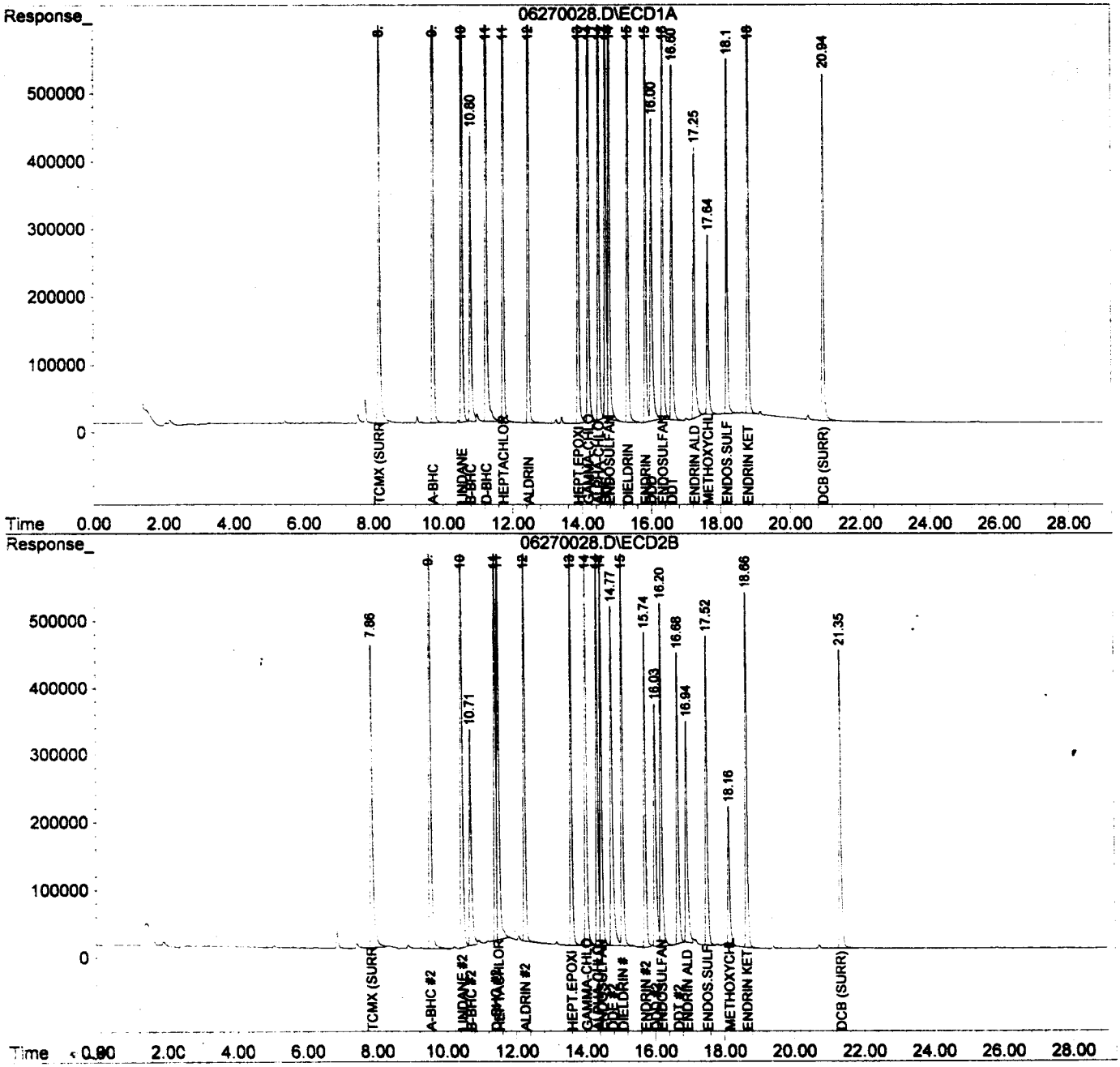
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062700\06270028.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\062700\06270028.D\ECD2B.CH
Acq On : 28 Jun 2000 7:36 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 11:15 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Fri May 05 09:39:32 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062700\06270038.D\ECD1A.CH Vial: 38
Signal #2 : C:\HPCHEM\1\DATA\062700\06270038.D\ECD2B.CH
Acq On : 28 Jun 2000 2:43 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 29 8:59 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.17	7.86	21521150	19227695	0.268	0.255
		Spiked Amount 0.250			Recovery	=	107.20%	102.00%
12)	S	DCB (SURR)	20.94	21.35	17398578	16720751	0.262	0.248
		Spiked Amount 0.250			Recovery	=	104.80%	99.20%
		Target Compounds						
2)	T	A-BHC	9.72	9.55	33202019	30958239	0.267	0.249
3)	T	B-BHC	10.81	10.71	14117928	12880794	0.267	0.250
4)	T	LINDANE	10.56	10.46	29376343	27112161	0.267	0.252
5)	T	D-BHC	11.25	11.42	28859760	21926800	0.269	0.237
6)	T	HEPTACHLOR	11.75	11.51	22805016	24809198	0.266	0.256
7)	T	ALDRIN	12.47	12.27	23444669	22744533	0.268	0.254
8)	T	HEPT.EPOXIDE	13.90	13.60	21369895	20278207	0.268	0.249
9)	T	ENDOSULFAN 1	14.79	14.47	21671095	20051069	0.272	0.252
10)	T	GAMMA-CHLORDANE	14.19	14.03	23766994	22249702	0.269	0.249
11)	T	ALPHA-CHLORDANE	14.49	14.35	20764180	20181206	0.263	0.250
12)	T	DDE	14.68	14.77	20156058	20790894	0.268	0.252
13)	T	DIELDRIN	15.33	15.07	21506376	20648546	0.269	0.248
14)	T	ENDRIN	15.84	15.74	18124917	16197848	0.273	0.251
15)	T	DDD	16.00	16.02	17605015	15464275	0.263	0.249
16)	T	ENDOSULFAN 2	16.34	16.20	18302718	18375253	0.264	0.248
17)	T	ENDRIN ALDEHYDE	17.25	16.93	13775533	13214912	0.251	0.239
18)	T	DDT	16.60	16.68	17456456	15895097	0.252	0.237
19)	T	ENDOS.SULFATE	18.19	17.52	16571517	15969184	0.260	0.242
20)	T	METHOXYCHLOR	17.64	18.15	9229184	7666153	0.255	0.233
21)	T	ENDRIN KETONE	18.80	18.66	19396782	18433085	0.264	0.243

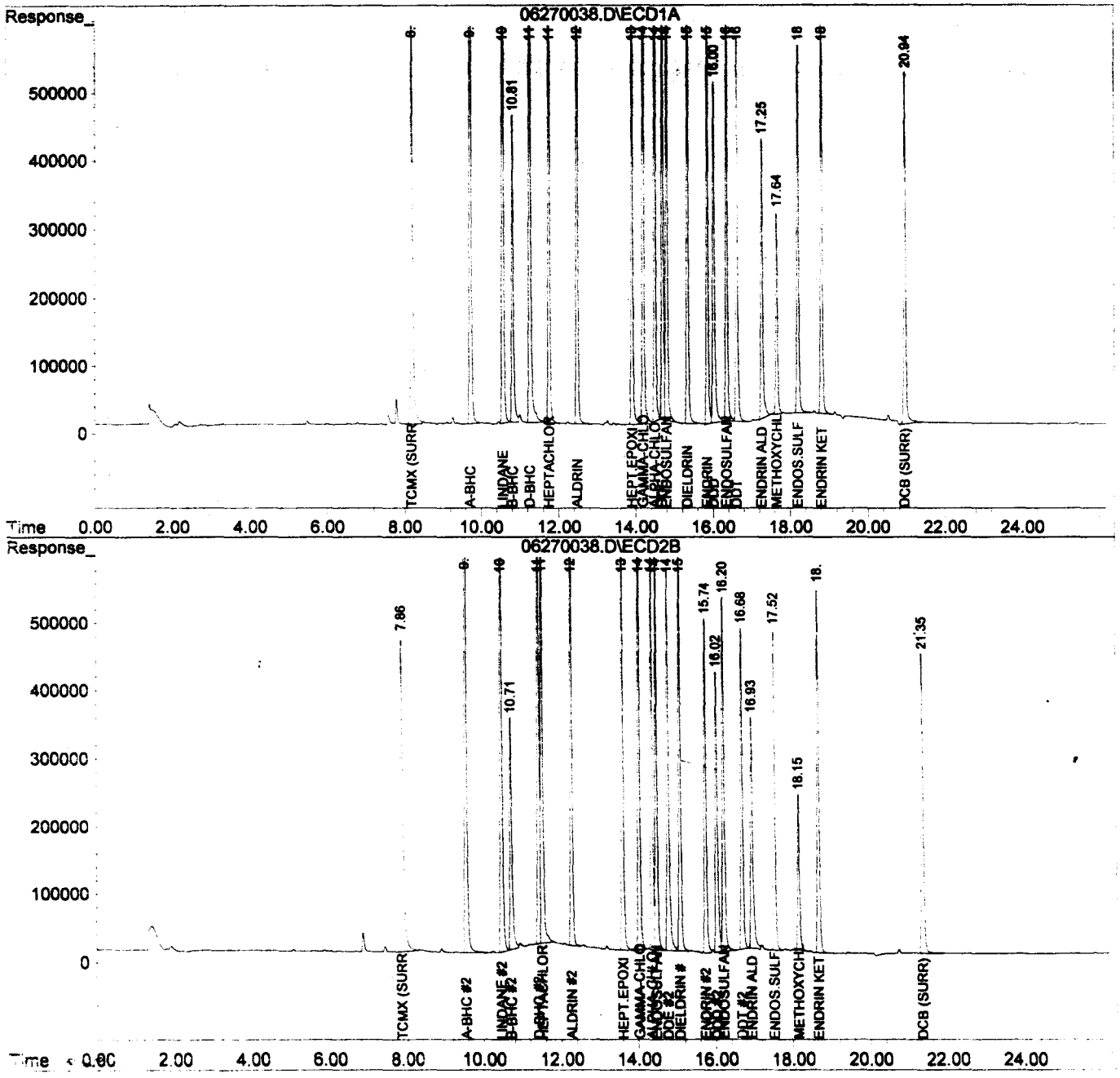
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062700\06270038.D\ECD1A.CH Vial: 38
Signal #2 : C:\HPCHEM\1\DATA\062700\06270038.D\ECD2B.CH
Acq On : 28 Jun 2000 2:43 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 29 8:59 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062700\06270052.D\ECD1A.CH Vial:
Signal #2 : C:\HPCHEM\1\DATA\062700\06270052.D\ECD2B.CH
Acq On : 29 Jun 2000 1:27 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 29 9:10 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.16	7.86	21629684	19002664	0.270	0.252
		Spiked Amount 0.250			Recovery	=	108.00% ✓	100.80%
2)	S	DCB (SURR)	20.94	21.35	17392407	16796518	0.262	0.249
		Spiked Amount 0.250			Recovery	=	104.80% ✓	99.60%
		Target Compounds						
2)	T	A-BHC	9.71	9.55	32574016	30691522	0.262	0.247
3)	T	B-BHC	10.80	10.71	13640003	12410589	0.258	0.241
4)	T	LINDANE	10.55	10.46	28615073	26461034	0.260	0.246
5)	T	D-BHC	11.24	11.42	27953270	20507625	0.260	0.222
6)	T	HEPTACHLOR	11.74	11.51	22147339	24350754	0.258	0.251
7)	T	ALDRIN	12.46	12.27	23016908	22388546	0.263	0.250
8)	T	HEPT.EPOXIDE	13.90	13.61	20875941	19783322	0.262	0.243
9)	T	ENDOSULFAN 1	14.79	14.47	21757779	19739146	0.273	0.248
0)	T	GAMMA-CHLORDANE	14.18	14.03	23059962	21932177	0.261	0.245
1)	T	ALPHA-CHLORDANE	14.48	14.36	19940831	19856649	0.252	0.246
2)	T	DDE	14.68	14.77	19364149	20302037	0.257	0.246
3)	T	DIELDRIN	15.32	15.08	21088432	20402634	0.264	0.245
4)	T	ENDRIN	15.84	15.74	17479805	15512445	0.263	0.240
5)	T	DDD	16.00	16.02	17449940	15039337	0.261	0.242
6)	T	ENDOSULFAN 2	16.34	16.20	17844058	18376069	0.257	0.248
7)	T	ENDRIN ALDEHYDE	17.25	16.93	13734895	12978323	0.250	0.235
8)	T	DDT	16.60	16.68	16901787	15072305	0.244	0.225
9)	T	ENDOS.SULFATE	18.19	17.52	16396597	15733303	0.257	0.239
0)	T	METHOXYCHLOR	17.64	18.15	8947657	7226263	0.247	0.219
1)	T	ENDRIN KETONE	18.80	18.66	19253780	18232324	0.262	0.241

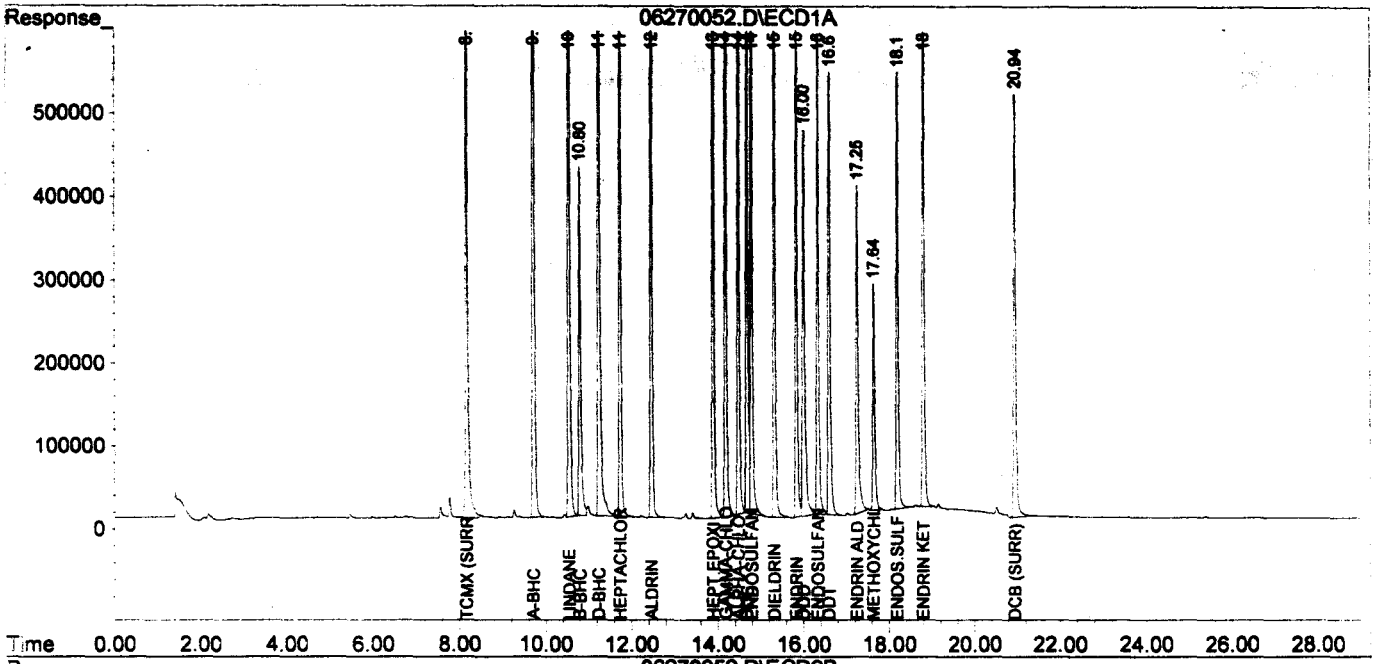
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

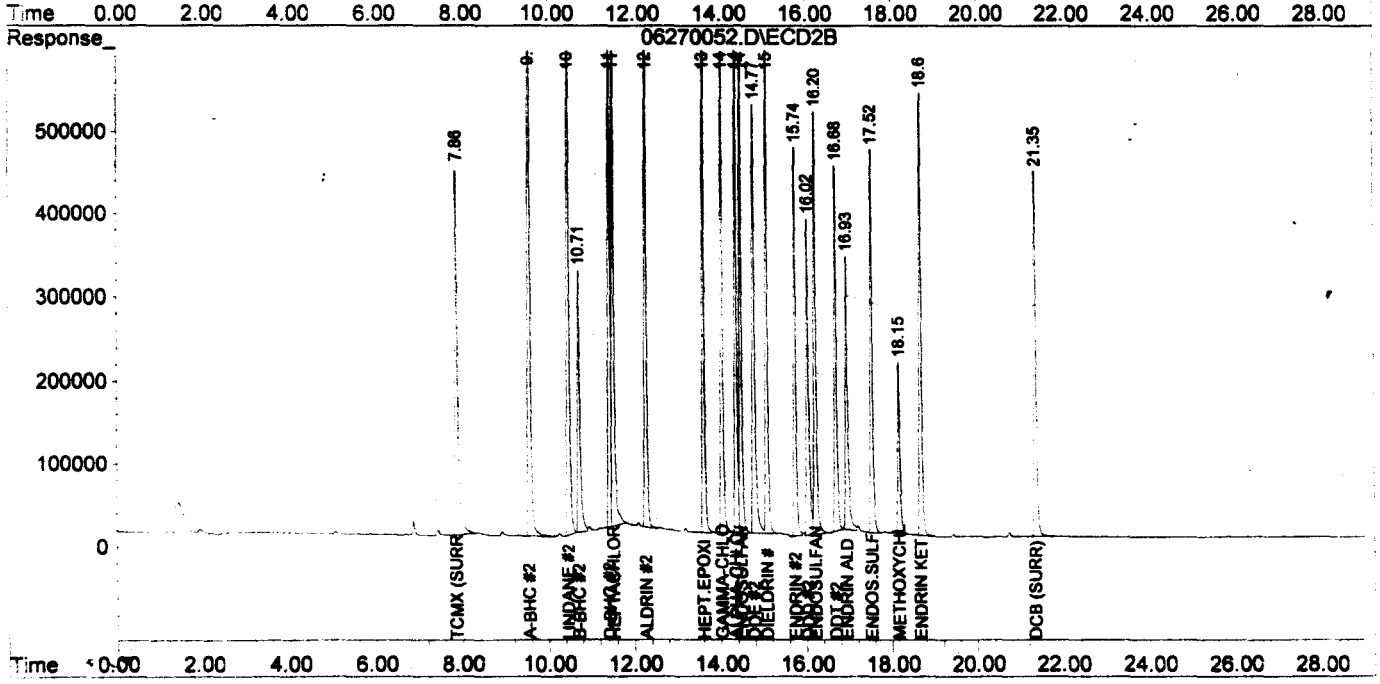
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062700\06270052.D\ECD1A.CH Vial: 52
Signal #2 : C:\HPCHEM\1\DATA\062700\06270052.D\ECD2B.CH
Acq On : 29 Jun 2000 1:27 am Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 29 9:10 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062700\06270068.D\ECD1A.CH Vial: 68
Signal #2 : C:\HPCHEM\1\DATA\062700\06270068.D\ECD2B.CH
Acq On : 29 Jun 2000 12:37 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 29 13:06 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Fri May 05 09:39:32 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.17	7.86	21616276	18514800	0.269	0.245
		Spiked Amount 0.250			Recovery =		107.60%	98.00%
22)	S	DCB (SURR)	20.95	21.35	15374462	16853111	0.232	0.250
		Spiked Amount 0.250			Recovery =		92.80%	100.00%
		Target Compounds						
2)	T	A-BHC	9.71	9.55	32752931	30389521	0.263	0.245
3)	T	B-BHC	10.80	10.71	13857935	12422811	0.262	0.241
4)	T	LINDANE	10.55	10.46	28753183	26582316	0.262	0.247
5)	T	D-BHC	11.25	11.42	28073841	22488138	0.261	0.244
6)	T	HEPTACHLOR	11.74	11.51	22735269	24186664	0.265	0.250
7)	T	ALDRIN	12.47	12.27	22625179	22443414	0.258	0.251
8)	T	HEPT.EPOXIDE	13.90	13.60	20789976	17966976	0.261	0.221
9)	T	ENDOSULFAN 1	14.79	14.47	22889172	19690582	0.287	0.248
10)	T	GAMMA-CHLORDANE	14.19	14.03	22646874	21812481	0.256	0.244
11)	T	ALPHA-CHLORDANE	14.49	14.36	16929939	20221089	0.214	0.251
12)	T	DDE	14.68	14.76	19718363	20330928	0.262	0.246
13)	T	DIELDRIN	15.33	15.08	20807885	20331385	0.260	0.245
14)	T	ENDRIN	15.84	15.74	17812681	16596860	0.268	0.257
15)	T	DDD	16.00	16.02	16957311	15737472	0.253	0.254
16)	T	ENDOSULFAN 2	16.34	16.20	16911024	17978351	0.244	0.243
17)	T	ENDRIN ALDEHYDE	17.25	16.93	12652982	12786658	0.231	0.231
18)	T	DDT	16.60	16.68	15688576	14584021	0.227	0.218
19)	T	ENDOS.SULFATE	18.19	17.52	15785166	15772649	0.247	0.239
20)	T	METHOXYCHLOR	17.64	18.15	8356797	7351686	0.231	0.223
21)	T	ENDRIN KETONE	18.80	18.66	18270573	18274433	0.248	0.241

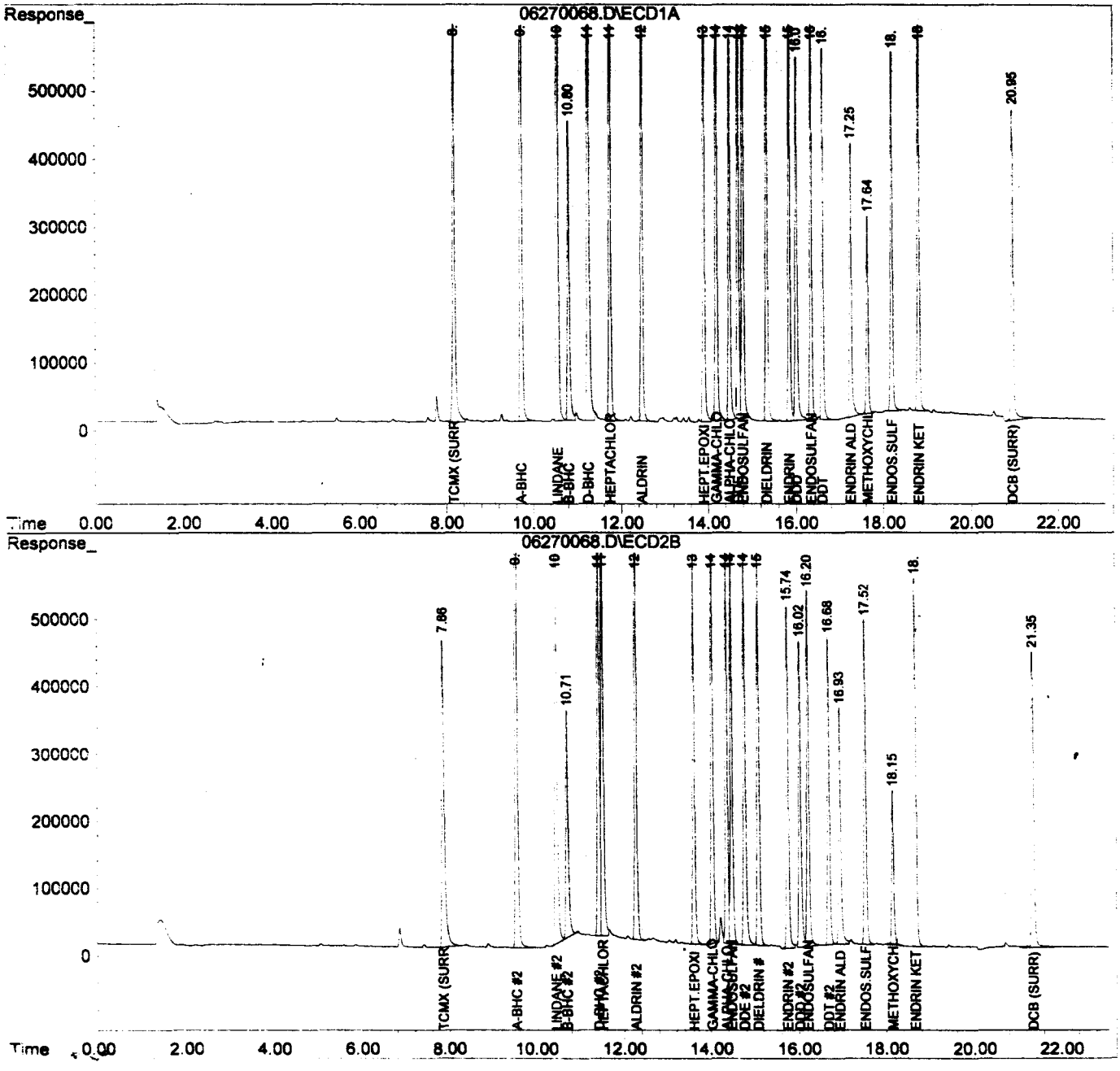
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062700\06270068.D\ECD1A.CH Vial: 68
Signal #2 : C:\HPCHEM\1\DATA\062700\06270068.D\ECD2B.CH
Acq On : 29 Jun 2000 12:37 pm Operator: YGK
Sample : CCV PEST .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 29 13:06 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Fri May 05 09:39:32 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\062700\06270006.D\ECD1A.CH Vial: 6
Acq On : 27 Jun 2000 2:27 pm Operator: YGK
Sample : CCV CHLORD .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\062700\06270006.D\ECD2B.CH Vial: 6
Acq On : 27 Jun 2000 2:27 pm Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : events2.e
Quant Time: Jun 28 10:50 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Mon Nov 08 17:46:02 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L1 CHLORD 1	11.55	11.18	1015347	976586	0.239	0.241
2)	L1 CHLORD 2	11.75	11.53	1753077	1645070	0.250	0.262
3)	L1 CHLORD 3	12.82	12.68	1407620	1233068	0.262	0.247
4)	L1 CHLORD 4	13.77	13.55	535179	508774	0.228	0.213
5)	L1 CHLORD 5	14.20	14.04	3094419	2669178	0.239	0.227
6)	L1 CHLORD 6	14.48	14.25	4932506	2200727	0.245	0.221
7)	L1 CHLORD 7	15.93	14.37	431691	2252929	0.192	0.235
	Sum CHLORD 1			13169839	11486333	1.655	1.646
	Average CHLORD 1					0.236	0.235

94%

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

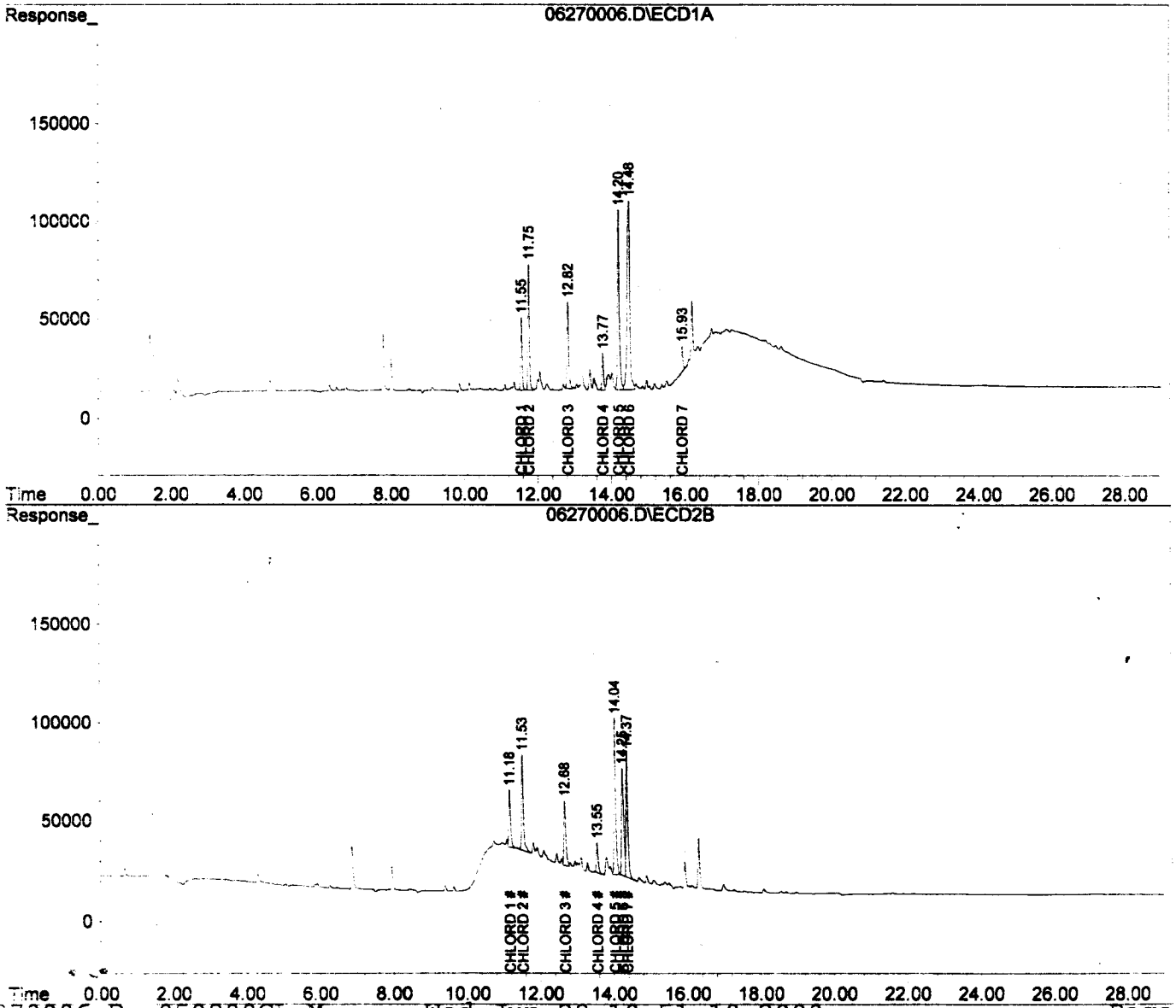
Quantitation Report

Data File : C:\HPCHEM\1\DATA\062700\06270006.D\ECD1A.CH Vial: 6
Acq On : 27 Jun 2000 2:27 pm Operator: YGK
Sample : CCV CHLORD .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\062700\06270006.D\ECD2B.CH Vial: 6
Acq On : 27 Jun 2000 2:27 pm Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : events2.e
Quant Time: Jun 28 10:50 2000 Quant Results File: 050900CL.RES

Quant Method : C:\HPCHEM\1\METHODS\050900CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,05/09/00
Last Update : Mon Nov 08 17:46:02 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\062700\06270005.D\ECD1A.CH Vial: 5
Acq On : 27 Jun 2000 1:53 pm Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\062700\06270005.D\ECD2B.CH Vial: 5
Acq On : 27 Jun 2000 1:53 pm Operator: YGK
Sample : CCV CHLORD .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Jun 28 11:05 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds								
1)	L	TOX 1	16.33	16.40	3256725	10263957	2.527	2.260	
2)	L	TOX 2	16.59	16.80	6050638	5519464	2.854	2.130	#
3)	L	TOX 3	17.06	16.96	8345564	7760703	2.740	2.275	
4)	L	TOX 4	17.78	18.05	8562715	13199706	2.458	3.152	#
5)	L	TOX 5	17.98	18.17	10560667	7797002	2.426	2.308	
6)	L	TOX 6	18.76	18.88	7956355	5396926	2.369	2.277	
7)	L	TOX 7	19.08	19.28	4080996	3922404	2.256	2.186	
	Sum	TOX 1			48813659	53860162	17.631	16.587	
Average		TOX 1					2.519	2.370	

101%

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

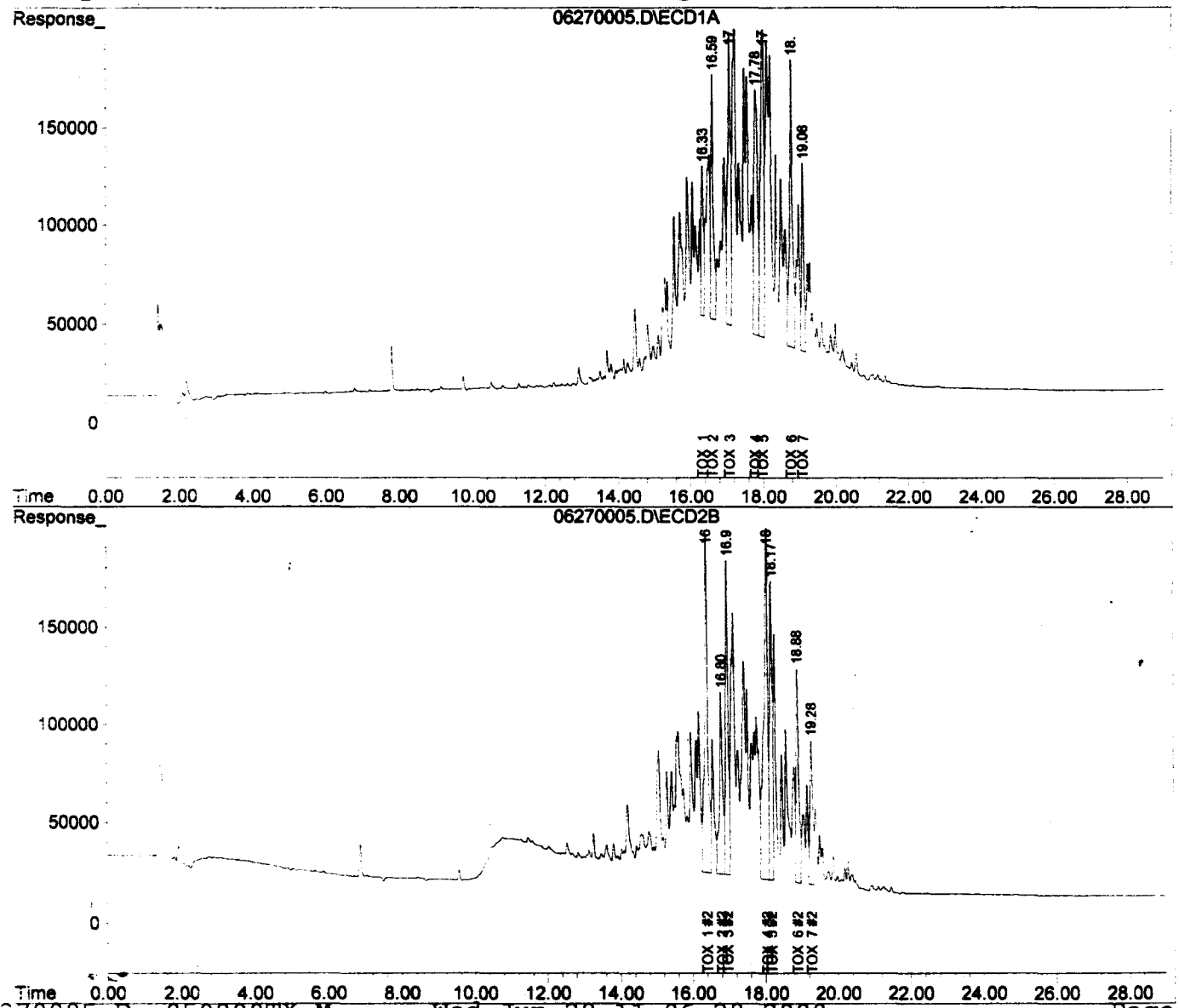
Quantitation Report

Data File : C:\HPCHEM\1\DATA\062700\06270005.D\ECD1A.CH Vial: 5
Acq On : 27 Jun 2000 1:53 pm Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\HPCHEM\1\DATA\062700\06270005.D\ECD2B.CH Vial: 5
Acq On : 27 Jun 2000 1:53 pm Operator: YGK
Sample : CCV CHLORD .25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Jun 28 11:05 2000 Quant Results File: 050800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\050800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,05/08/00
Last Update : Tue Nov 09 10:01:01 1999
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062700\06270003.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\062700\06270003.D\ECD2B.CH
Acq On : 27 Jun 2000 12:50 pm Operator: YGK
Sample : PEM Inst : GC/ECD 1
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 8:28 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
	System Monitoring Compounds							
1) S	TCMX (SURR)	0.00	0.00	0	0	N.D.	N.D.	
	Spiked Amount 0.250			Recovery	=	0.00%	0.00%	
2) S	DCB (SURR)	20.96	0.00	844663	0	0.013	N.D.	#
	Spiked Amount 0.250			Recovery	=	5.20%	0.00%	
	Target Compounds							
2) T	A-BHC	9.72	9.56	2703	9293	0.000	0.000	#
3) T	B-BHC	10.82	10.76f	44155	1346694	0.001	0.026	#
4) T	LINDANE	10.56	0.00	15537	0	0.000	N.D.	#
5) T	D-BHC	11.26	11.47f	90562	136715	0.001	0.001	#
6) T	HEPTACHLOR	11.75	11.47f	8563	136715	0.000	0.001	#
7) T	ALDRIN	12.47	12.28	41656473	43822729	0.476	0.490	
8) T	HEPT.EPOXIDE	13.91	13.61	30175	43942	0.000	0.001	#
9) T	ENDOSULFAN 1	14.80	14.49	-23391	45349	N.D.	0.001	
10) T	GAMMA-CHLORDANE	14.16	14.08f	19573	15783	0.000	0.000	
11) T	ALPHA-CHLORDANE	14.47	14.31f	17232	42224	0.000	0.001	#
12) T	DDE	14.70	14.80 v	122412	521539	0.002	0.006	#
13) T	DIELDRIN	15.34	15.09	36475	92757	0.000	0.001	#
14) T	ENDRIN	15.85	15.75 v	31690880	32458515	0.476	0.502	
15) T	DDD	16.02	16.05 v	662905	764061	0.010	0.012	
16) T	ENDOSULFAN 2	16.35	16.23	270637	180459	0.004	0.002	#
17) T	ENDRIN ALDEHYDE	17.27	16.95 v	263092	55785	0.005	0.001	#
18) T	DDT	16.61	16.69 v	33684671	33242867	0.487	0.496	
19) T	ENDOS.SULFATE	18.20	17.54	62580	80678	0.001	0.001	
20) T	METHOXYCHLOR	0.00	18.05f	0	-323889	N.D.	N.D.	
21) T	ENDRIN KETONE	18.81	18.68 v	600819	795173	0.008	0.010	#

DDT: $\frac{785,300 \times 100\%}{34,470,000} = \frac{\text{2.8\%}}{\text{YGK 06/28}}$ 2.3%

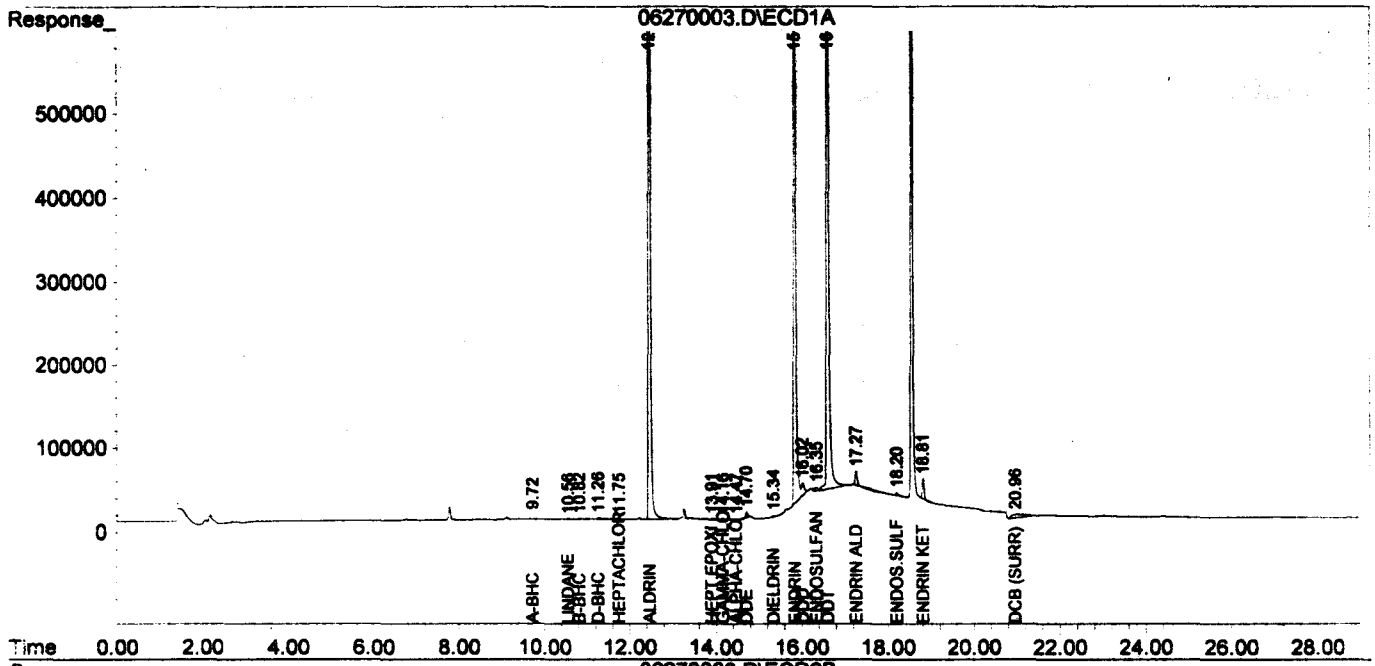
Endrin: $\frac{863,400 \times 100\%}{32,554,800} = 2.7\%$

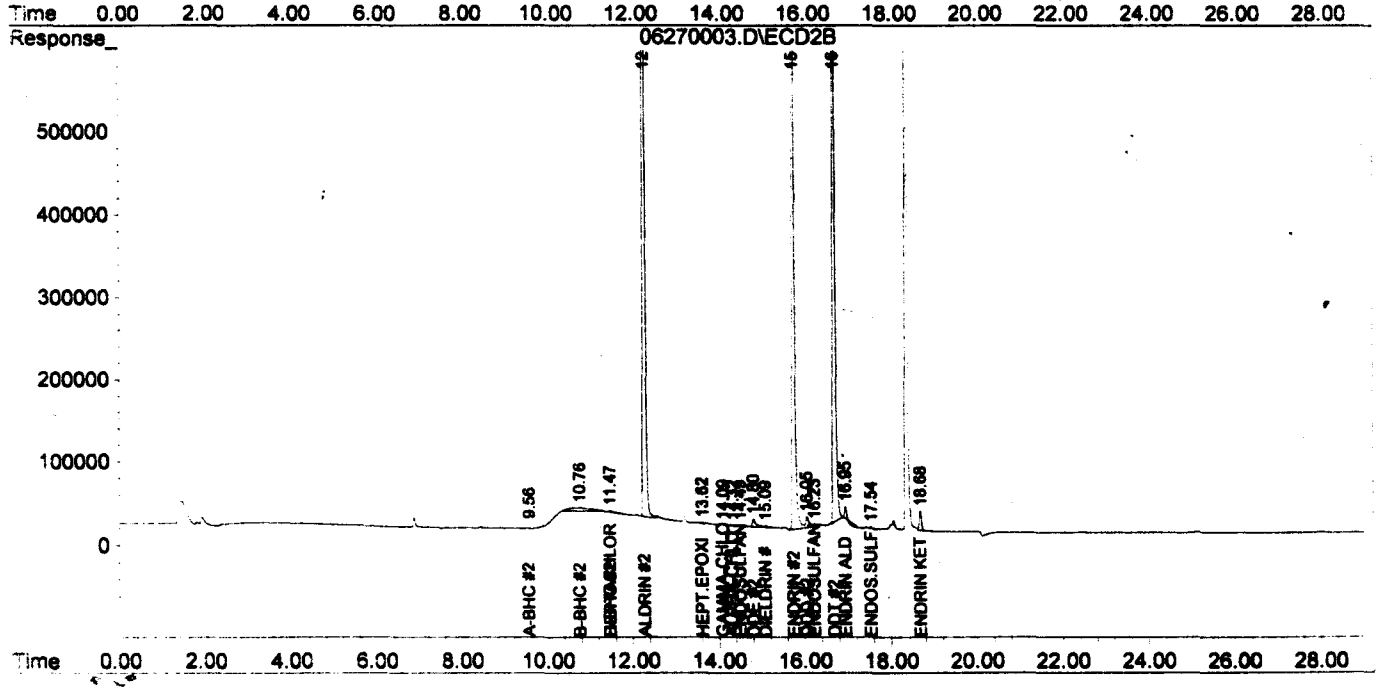
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
06270003.D 062200P.M Wed Jun 28 08:29:01 2000 Page 1

Signal #1 : C:\HPCHEM\1\DATA\062700\06270003.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\062700\06270003.D\ECD2B.CH
Acq On : 27 Jun 2000 12:50 pm Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 8:28 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062700\06270020.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\062700\06270020.D\ECD2B.CH
Acq On : 28 Jun 2000 12:46 am Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 8:38 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	0.00	7.84	0	27460	N.D.	0.000	#
		Spiked Amount 0.250			Recovery	=	0.00%	0.00%	
2)	S	DCB (SURR)	20.95	21.36	780	9502	0.000	0.000	#
		Spiked Amount 0.250			Recovery	=	0.00%	0.00%	
		Target Compounds							
2)	T	A-BHC	9.71	9.55	4032	-13167	0.000	N.D.	#
3)	T	B-BHC	10.81	0.00	43196	0	0.001	N.D.	#
4)	T	LINDANE	10.55	10.48	18972	6168	0.000	0.000	#
5)	T	D-BHC	11.25	11.47f	72777	226297	0.001	0.002	#
6)	T	HEPTACHLOR	11.74	11.47f	15958	226297	0.000	0.002	#
7)	T	ALDRIN	12.46	12.27	43490793	44055574	0.497	0.492	
8)	T	HEPT.EPOXIDE	13.90	13.60	34416	83895	0.000	0.001	#
9)	T	ENDOSULFAN 1	14.79	14.48	30347	61671	0.000	0.001	#
10)	T	GAMMA-CHLORDANE	14.15	14.08f	32538	16017	0.000	0.000	#
11)	T	ALPHA-CHLORDANE	14.45	14.29f	27032	145259	0.000	0.002	#
12)	T	DDE	14.69	14.79	334389	345472	0.004	0.004	
13)	T	DIELDRIN	15.33	15.08	63220	78076	0.001	0.001	
14)	T	ENDRIN	15.84	15.74	34706397	33513279	0.522	0.519	
15)	T	DDD	16.01	16.04	793753	807047	0.012	0.013	
16)	T	ENDOSULFAN 2	16.34	16.22	241374	130468	0.003	0.002	#
17)	T	ENDRIN ALDEHYDE	17.26	16.94	429431	-432435	0.008	N.D.	#
18)	T	DDT	16.60	16.68	35493234	32987215	0.513	0.492	
19)	T	ENDOS.SULFATE	18.19	17.53	113202	47393	0.002	0.001	#
20)	T	METHOXYCHLOR	0.00	0.00	0	0	N.D.	N.D.	
21)	T	ENDRIN KETONE	18.80	18.67	614526	770750	0.008	0.010	

DDT < 15%

Endrin < 15%

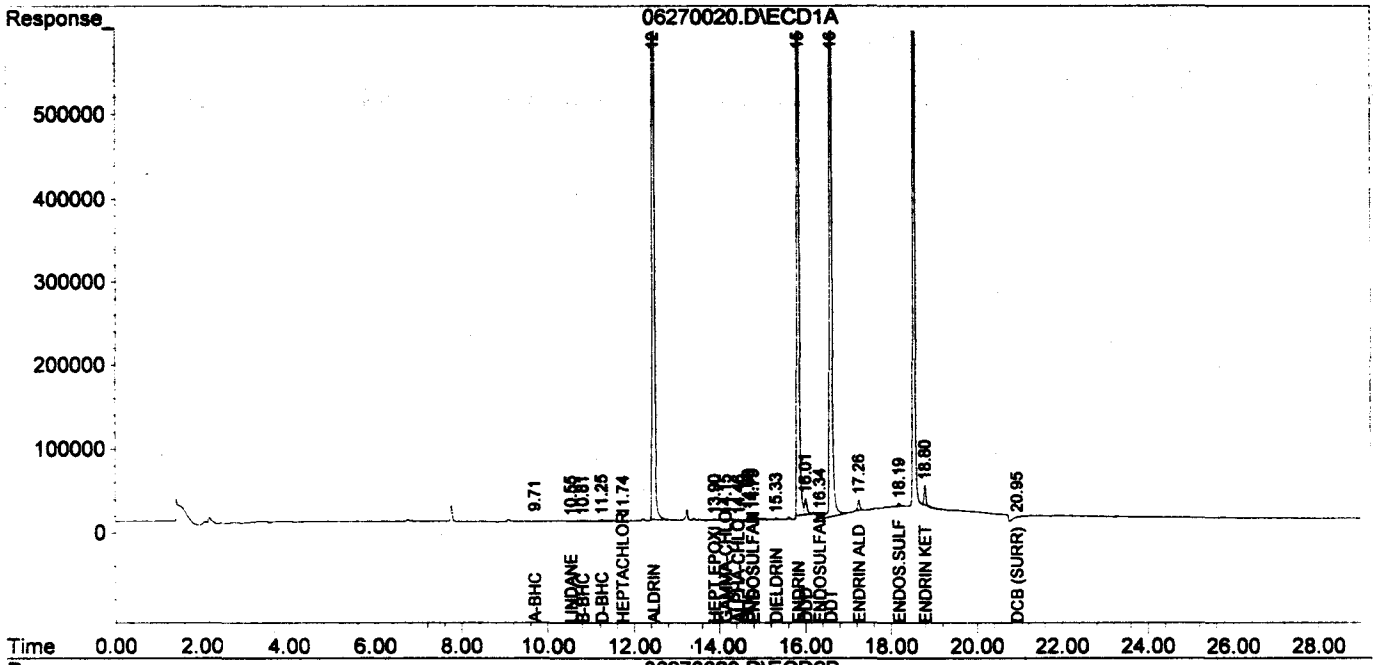
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

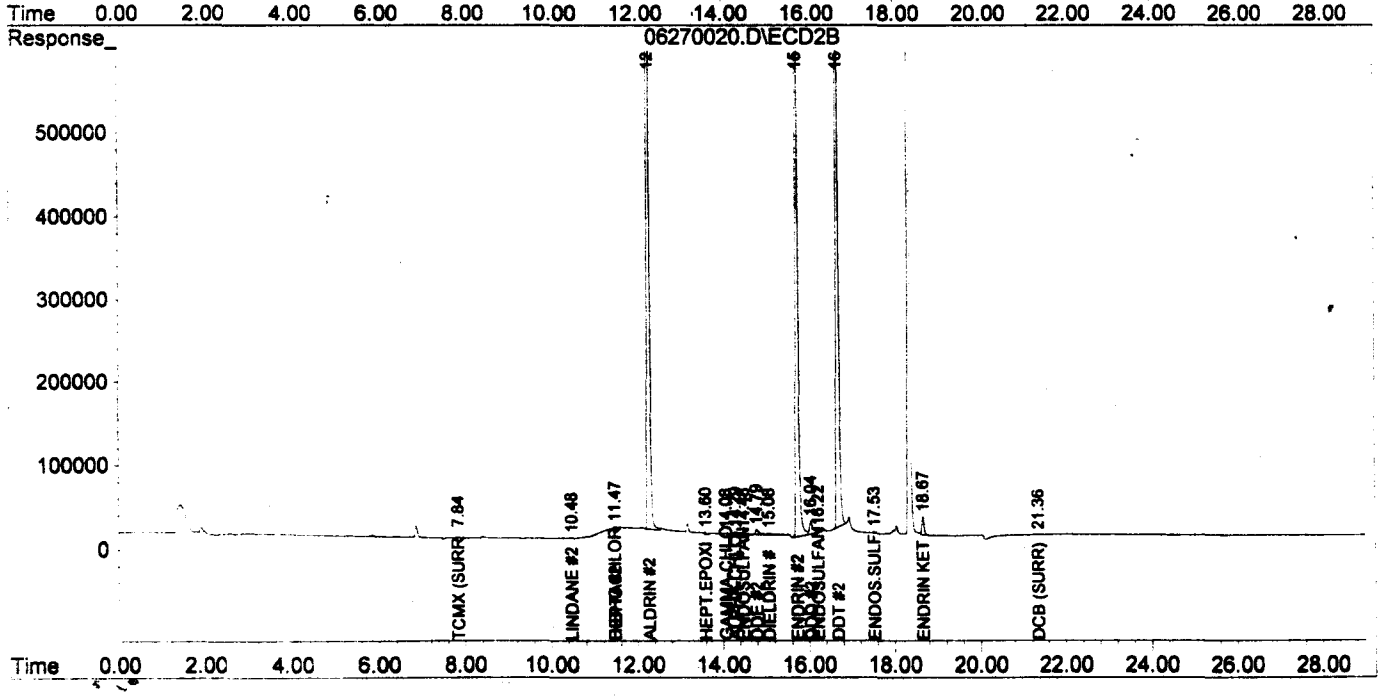
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062700\06270020.D\ECD1A.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\062700\06270020.D\ECD2B.CH
Acq On : 28 Jun 2000 12:46 am Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 8:38 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\062700\06270029.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\062700\06270029.D\ECD2B.CH
Acq On : 28 Jun 2000 8:10 am Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 11:36 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	0.00	7.84	0	36285	N.D.	0.000	#
		Spiked Amount 0.250			Recovery	=	0.00%	0.00%	
12)	S	DCB (SURR)	0.00	21.36	0	7305	N.D.	0.000	#
		Spiked Amount 0.250			Recovery	=	0.00%	0.00%	
		Target Compounds							
2)	T	A-BHC	0.00	9.55	0	4983	N.D.	0.000	#
3)	T	B-BHC	10.82	0.00	9748	0	0.000	N.D.	#
4)	T	LINDANE	0.00	0.00	0	0	N.D.	N.D.	
5)	T	D-BHC	11.26	11.48f	8683	321480	0.000	0.003	#
6)	T	HEPTACHLOR	0.00	11.48f	0	321480	N.D.	0.003	#
7)	T	ALDRIN	12.47	12.27	44036060	44220526	0.503	0.494	
8)	T	HEPT.EPOXIDE	13.90	0.00	1946	0	0.000	N.D.	#
9)	T	ENDOSULFAN 1	0.00	14.49	0	22435	N.D.	0.000	#
10)	T	GAMMA-CHLORDANE	14.15	13.97f	21080	6603	0.000	0.000	#
11)	T	ALPHA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.70	14.81	923970	763527	0.012	0.009	
13)	T	DIELDRIN	15.33	15.08	19313	111356	0.000	0.001	#
14)	T	ENDRIN	15.84	15.74	34113950	32064030	0.513	0.496	
15)	T	DDD	16.02	16.06	1350234	1114856	0.020	0.018	
16)	T	ENDOSULFAN 2	16.34	16.22	19834	166492	0.000	0.002	#
17)	T	ENDRIN ALDEHYDE	17.26	16.94	899449	-701967	0.016	N.D.	#
18)	T	DDT	16.60	16.68	35137739	31888939	0.508	0.476	
19)	T	ENDOS.SULFATE	18.20	17.53	72642	15995	0.001	0.000	#
20)	T	METHOXYCHLOR	0.00	0.00	0	0	N.D.	N.D.	
21)	T	ENDRIN KETONE	18.80	18.67	1365241	1479428	0.019	0.020	

RCA 06/28
DDT < ~~DDE~~ 15%

Endrin < 15%

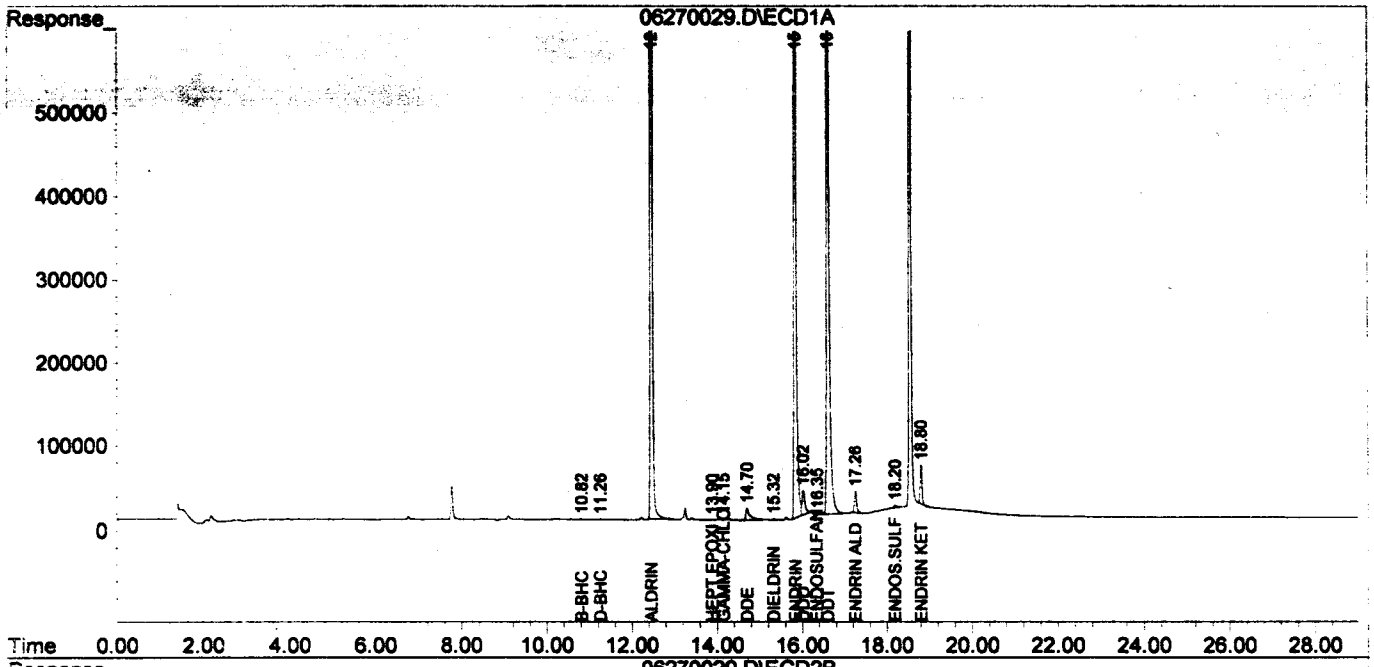
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

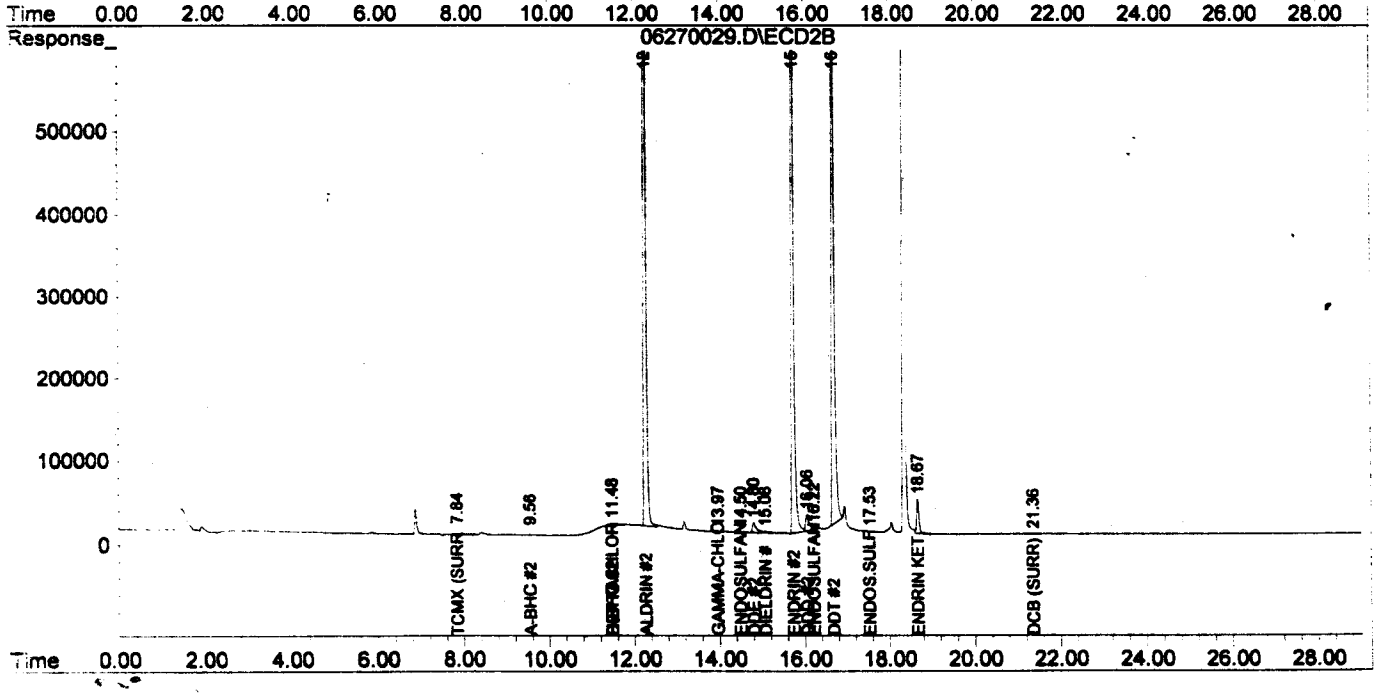
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\062700\06270029.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\062700\06270029.D\ECD2B.CH
Acq On : 28 Jun 2000 8:10 am Operator:
Sample : PEM Inst : GC/ECD 1
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 28 11:36 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1: C:\HPCHEM\1\DATA\062700\06270039.D\ECD1A.CH Vial: 39
Signal #2: C:\HPCHEM\1\DATA\062700\06270039.D\ECD2B.CH
Acq On : 28 Jun 2000 3:42 pm Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 29 8:59 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
	System Monitoring Compounds							
1) S	TCMX (SURR)	0.00	7.84	0	24246	N.D.	0.000	#
Spiked Amount	0.250			Recovery	=	0.00%	0.00%	
2) S	DCB (SURR)	0.00	0.00	0	0	N.D.	N.D.	
Spiked Amount	0.250			Recovery	=	0.00%	0.00%	
	Target Compounds							
2) T	A-BHC	0.00	0.00	0	0	N.D.	N.D.	
3) T	B-BHC	0.00	0.00	0	0	N.D.	N.D.	
4) T	LINDANE	0.00	0.00	0	0	N.D.	N.D.	
5) T	D-BHC	0.00	11.47f	0	126921	N.D.	0.001	#
6) T	HEPTACHLOR	0.00	11.47f	0	126921	N.D.	0.001	#
7) T	ALDRIN	12.47	12.27	40996127	40766073	0.468	0.456	
8) T	HEPT.EPOXIDE	0.00	0.00	0	0	N.D.	N.D.	
9) T	ENDOSULFAN 1	14.80	14.49	-123529	65492	N.D.	0.001	
10) T	GAMMA-CHLORDANE	14.15	13.96f	28172	18407	0.000	0.000	#
11) T	ALPHA-CHLORDANE	14.44	14.31f	24309	128473	0.000	0.002	#
12) T	DDE	14.70	14.79	152842	526702	0.002	0.006	#
13) T	DIELDRIN	15.33	15.08	17483	63300	0.000	0.001	#
14) T	ENDRIN	15.84	15.74	32302762	30292022	0.486	0.469	
15) T	DDD	16.02	16.05	1144728	1009642	0.017	0.016	
16) T	ENDOSULFAN 2	16.33	16.22	62354	122831	0.001	0.002	#
17) T	ENDRIN ALDEHYDE	17.26	16.94	363987	-617548	0.007	N.D.	#
18) T	DDT	16.60	16.68	32433254	29616663	0.469	0.442	
19) T	ENDOS.SULFATE	18.20	17.53	75846	294363	0.001	0.004	#
20) T	METHOXYCHLOR	0.00	0.00	0	0	N.D.	N.D.	
21) T	ENDRIN KETONE	18.81	18.67	724127	839205	0.010	0.011	

DDT < 15%

Endrin < 15%

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

Quantitation Report (Not Rev...)

Signal #1 : C:\HPCHEM\1\DATA\062200\06270053.D\ECD1A.CH Vial: 53
Signal #2 : C:\HPCHEM\1\DATA\062200\06270053.D\ECD2B.CH
Acq On : 29 Jun 2000 12:02 am Operator: YGK
Sample : PEM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jun 29 9:11 2000 Quant Results File: 062200P.RES

Quant Method : C:\HPCHEM\1\METHODS\062200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (06/22/00)
Last Update : Wed Jun 28 08:18:57 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	0.00	7.84	0	56620	N.D.	0.001	#
		Spiked Amount 0.250			Recovery =		0.00%	0.40%	
22)	S	DCB (SURR)	0.00	21.41	0	10707	N.D.	0.000	#
		Spiked Amount 0.250			Recovery =		0.00%	0.00%	
		Target Compounds							
2)	T	A-BHC	0.00	9.55	0	7402	N.D.	0.000	#
3)	T	B-BHC	10.81	0.00	1820	0	0.000	N.D.	#
4)	T	LINDANE	0.00	0.00	0	0	N.D.	N.D.	
5)	T	D-BHC	11.26	11.47f	60359	191330	0.001	0.002	#
6)	T	HEPTACHLOR	0.00	11.47f	0	191330	N.D.	0.002	#
7)	T	ALDRIN	12.46	12.27	45047655	45408395	0.515	0.508	
8)	T	HEPT.EPOXIDE	13.95f	0.00	416336	0	0.005	N.D.	#
9)	T	ENDOSULFAN 1	14.78	14.48	280169	181093	0.004	0.002	#
10)	T	GAMMA-CHLORDANE	14.15	13.95f	326063	88600	0.004	0.001	#
11)	T	ALPHA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.69	14.78	315689	430714	0.004	0.005	
13)	T	DIELDRIN	15.32	15.08	31786	48442	0.000	0.001	#
14)	T	ENDRIN	15.84	15.74	36391682	34911745	0.547	0.540	
15)	T	DDD	16.01	16.03	1375029	1391176	0.021	0.022	
16)	T	ENDOSULFAN 2	16.33	16.21	272444	187458	0.004	0.003	#
17)	T	ENDRIN ALDEHYDE	17.25	16.93	230055	46504	0.004	0.001	#
18)	T	DDT	16.60	16.68	37145553	33379534	0.537	0.498	
19)	T	ENDOS.SULFATE	18.19	17.52	79828	15264	0.001	0.000	#
20)	T	METHOXYCHLOR	17.62	0.00	14002	0	0.000	N.D.	#
21)	T	ENDRIN KETONE	18.80	18.67	876614	883172	0.012	0.012	

DDT < 15%

Endrin < 15%

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

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Digestion Log for Waters

RL 6.26.00

Date: 06.26.00
Analyst: RL
Time Started: 1300
Time Ended: 08.00 06.27.00
Matrix: Water

BATCH #: 062600BC
HNO_3 Acid Lot # M.99204
1:1 HCL Acid Lot # M.99170
Digestion Method: 3010A
Hot Plate Temp: 95.8°C

QCS 19 Lot #: M.99[illegible] Amount [illegible]
QCS 7 Lot #: M.99[illegible] Amount [illegible]
ICV Sn Lot #: M.99[illegible] Amount [illegible]
Sample Vials Lot #: [illegible]

AAL #	Sample Volume (mL)	Conc. HNO_3	1:1 HCL	Final Volume	Dilution	Spikes Added QCS 19	QCS 7	ICV Sn	Comments
Blank	50	1.5+1.5	5.0	50	1:1				
LCS						✓	✓	✓	
LCSD						✓	✓	✓	
94070					Due 6/30/00	24713 (App I)			
94071									
94072									
94078						24714 (App I)			
94079									
94080									
94081									
94082									
94188		Due 6/30/00	to Reserve ± CAP		(Fe)	24738 (Check DF Tape			
94189									
94189D									
94189MS						✓	✓	✓	
94189MSD						✓	✓	✓	
94083						24714 (App I)			
94089									
94234		6/28/00		(200.7)		24727-A (Pb, Zn, Cu, Cd, Ni)			
94248				(6/29/00)		24747 (As) (Level 4QC)			
94249	RL 6.26.00								
94250									
94251									
94252									
94253									
94254	25								
94254D	25	25							
94254MS	50	MS				✓	✓	✓	
94254MSD		MSD				✓	✓	✓	

RL 6.27.00

1.76

Reviewed By: _____ 3010wdig Page # _____

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA

Std #8	Lot #
Ag	

Std #3	Lot #
Al	
Be	
Fe	
Ni	
Sb	
Sn	
Tl	

Std #2	Lot #
Ba	
Ca	
Cd	
Co	
Cu	
K	
Mg	
Mn	
Pb	
Zn	

Set IP844

Std #4	Lot #
As	
Cr	
Se	
V	

ICV #1& 2	Lot #
QCS 19	
QCS 7	
ICV Sn	

SS I	Lot #
SS I	

ICS A	Lot #
INFCS IV	

ICS AB	Lot #
INFCS I	
INFCS IV	
INFCS Ag	

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
6/11/00	T44A	1 (Blank)	6010B/200.7	to 7/11/00	Qm.9	500mL	
	B	2	6010B/200.7				
	C	3	6010B/200.7				
	D	4	6010B/200.7				
	E	8	6010B/200.7			100mL	
	F	ICV 1	6010B/200.7			500mL	
	G	ICV 2	6010B/200.7				
	H	ICS A	6010B/200.7				
	I	ICS AB	6010B/200.7				
	J	SS I	6010B/200.7				
	K	SS I Low	6010B/200.7				

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

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ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA
	See pg 4

Std #8	Lot #
Ag	

Std #3	Lot #
Al	
Be	
Fe	See pg 4
Ni	
Sb	
Sn	
Tl	

Std #2	Lot #
Ba	M99091
Ca	M99143
Cd	
Co	
Cu	See pg 4
K	
Mg	
Mn	
Pb	
Zn	

Std #4	Lot #
As	
Cr	
Se	See pg 4
V	

ICV #1& 2	Lot #
QCS 19	
QCS 7	
ICV Sn	

SS I	Lot #
SS I	

ICS A	Lot #
INFCS IV	See pg 4

ICS AB	Lot #
INFCS I	
INFCS IV	M99186
INFCS Ag	See pg 4

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
06/11/00	43A	1 (Blank)	6010B/200.7	07/11/00	thg.	500mL	
	43B	2	6010B/200.7				
	C	3	6010B/200.7				
	D	4	6010B/200.7				
	E	8	6010B/200.7			100mL	
	F	ICV 1	6010B/200.7			500mL	
	G	ICV 2	6010B/200.7		10	100mL	
	H	ICS A	6010B/200.7			500mL	
	I	ICS AB	6010B/200.7				
	J	SS I	6010B/200.7				
	K	SS I Low	6010B/200.7				

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ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA

Std #8	Lot #
Ag	M99150

Std #3	Lot #
Al	M99073
Be	M99146
Fe	M99076
Ni	M99151
Sb	M99090
Sn	M99087
Tl	M99088

Std #2	Lot #
Ba	M99096
Ca	M99014
Cd	M99075
Co	M99144
Cu	M99148
K	M99152
Mg	M99018
Mn	M99077
Pb	M99089
Zn	M99083

Std #4	Lot #
As	M99074
Cr	M99149
Se	M99086
V	M99145

ICV #1& 2	Lot #
QCS 19	M99129
QCS 7	M99111
ICV Sn	M99153

SS I	Lot #
SS I	M99085

ICS A	Lot #
INFCS IV	M99084

ICS AB	Lot #
INFCS I	M99095
INFCS IV	M99084
INFCS Ag	M99094

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
	hma 5/8/00	1 (Blank)	6010B/200.7				
		2	6010B/200.7				
		3	6010B/200.7		hma 5/8/00		
		4	6010B/200.7				
		8	6010B/200.7				
05/8/00	T40F	ICV 1	6010B/200.7	06/8/00	RL	500mL	
05/8/00	T40G	ICV 2	6010B/200.7	06/8/00	RL	500mL	
	hma 5/8/00	ICS A	6010B/200.7				
		ICS AB	6010B/200.7		hma 5/8/00		
		SS I	6010B/200.7				
		SS I Low	6010B/200.7				

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

Reviewed By:

Raw Data CCV Data

Method: WATERS Sample Name: icv 1 Operator: sch
Run Time: 06/29/00 12:12:44
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1995	Q.1239	.2027	.1989	.1997	.2007	.1992
SDev	.0107	.0643	.0098	.0107	.0104	.0129	.0104
%RSD	5.367	51.91	4.842	5.379	5.198	6.411	5.201
#1	.2043	Q.1595	.2093	.2057	.2050	.2082	.2050
#2	.2069	Q.1626	.2072	.2045	.2063	.2079	.2055
#3	Q.1872	Q.0497	.1914	Q.1866	Q.1877	Q.1858	Q.1873
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.2000	.2000	.2000	.2000	.2000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1996	.1969	.1921	.1926	Q.1810	Q.1724	.1976
SDev	.0100	.0115	.0131	.0242	.0365	.0160	.0105
%RSD	5.011	5.824	6.836	12.54	20.15	9.274	5.316
#1	.2061	.2032	.1997	.2028	Q.2179	Q.1871	.2031
#2	.2045	.2038	.1997	.2101	Q.1801	Q.1745	.2043
#3	Q.1881	Q.1836	Q.1770	Q.1651	Q.1450	Q.1554	Q.1855
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	.2000	.2000	.2000	.2000	2.000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.1968	.2023	.1974	.2057	.1944	.2006	.1903
SDev	.0116	.0083	.0084	.0083	.0089	.0070	.0120
%RSD	5.906	4.103	4.281	4.012	4.600	3.473	6.322
#1	.2049	.2078	.2004	.2123	.1975	.2014	.1977
#2	.2021	.2064	.2040	.2084	.2014	.2071	.1967
#3	Q.1835	.1928	Q.1879	.1964	.1843	.1932	.1764
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.2000	.2000	.2000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.1970	.1892	.2016	.1918	.1988
SDev	.0152	.0112	.0128	.0106	.0115
%RSD	7.710	5.938	6.341	5.501	5.773
#1	.2085	.1953	.2081	.1967	.2052
#2	.2028	.1961	.2098	.1990	.2058
#3	Q.1798	Q.1762	Q.1868	Q.1797	Q.1856
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

Value	.2000	.2000	.2000	.2000	.2000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27371	--	--	--	--	--	--
SDev	1374.797	--	--	--	--	--	--
%RSD	5.022884	--	--	--	--	--	--
#1	26665	--	--	--	--	--	--
#2	26492	--	--	--	--	--	--
#3	28955	--	--	--	--	--	--

Method: WATERS Sample Name: icv 2 Operator: sch
Run Time: 06/29/00 12:21:01
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.006	1.015	.9939	1.014	1.002	1.006	1.004
SDev	.007	.019	.0090	.003	.007	.008	.007
%RSD	.7452	1.830	.9081	.2958	.6816	.7946	.6764
#1	.9974	1.025	.9852	1.017	.9941	.9976	.9982
#2	1.009	1.026	.9933	1.012	1.006	1.008	1.003
#3	1.011	.9932	1.003	1.012	1.006	1.013	1.012
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.007	.9953	1.003	Q1.071	Q.9383	.9610	1.002
SDev	.009	.0045	.001	.018	.0772	.0079	.005
%RSD	.9244	.4565	.0983	1.670	8.225	.8238	.4967
#1	.9964	.9905	1.002	1.050	Q1.026	.9522	.9960
#2	1.012	.9960	1.003	Q1.083	Q.9075	.9633	1.003
#3	1.013	.9995	1.004	Q1.078	Q.8814	.9675	1.006
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.9965	1.016	.9988	1.025	.9967	1.003	.9893
SDev	.0038	.013	.0087	.011	.0179	.005	.0166
%RSD	.3827	1.280	.8751	1.092	1.791	.4877	1.681
#1	.9980	1.006	.9890	1.019	.9795	.9979	.9703
#2	.9922	1.011	1.002	1.018	.9955	1.004	.9965
#3	.9993	1.031	1.006	1.038	1.015	1.008	1.001
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	1.000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.9766	1.005	1.042	.9766	.9942
SDev	.0026	.012	.009	.0032	.0124
%RSD	.2623	1.187	.8321	.3256	1.243
#1	.9753	.9956	1.039	.9731	.9822
#2	.9749	1.000	1.036	.9773	.9937
#3	.9795	1.018	1.052	.9793	1.007
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

Value	1.000	1.000	1.000	1.000	1.000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26758	--	--	--	--	--	--
SDev	73.79250	--	--	--	--	--	--
%RSD	.2757739	--	--	--	--	--	--
#1	26777	--	--	--	--	--	--
#2	26821	--	--	--	--	--	--
#3	26677	--	--	--	--	--	--

Method: WATERS Sample Name: icb Operator: sch
Run Time: 06/29/00 12:27:38
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	L-.0506	H.0076	.0003	.0002	-.0154	-.0003
SDev	.0003	.0128	.0025	.0001	.0001	.0012	.0007
%RSD	223.8	25.29	32.67	26.90	47.28	7.845	231.5
#1	-.0000	-.0373	H.0103	.0003	.0001	-.0146	-.0010
#2	.0004	L-.0629	H.0056	.0003	.0002	-.0147	.0002
#3	-.0001	L-.0515	H.0067	.0002	.0002	-.0168	-.0001
Errors	LC Pass	LC Low	LC High	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0050	.0015	.0500	.0015
Low	-.0050	-.0500	-.0050	-.0050	-.0015	-.0500	-.0015

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	.0008	.0000	-.0374	.0105	-.0210	.0001
SDev	.0009	.0015	.0010	.0140	.0112	.0117	.0001
%RSD	114.0	198.5	2544.	37.35	106.6	55.84	100.0
#1	.0002	.0023	-.0005	-.0473	.0208	-.0075	.0003
#2	.0019	-.0007	.0012	-.0436	.0120	-.0267	.0001
#3	.0003	.0007	-.0006	-.0214	-.0014	-.0288	.0001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0025	.0500	.1000	.0500	.0050
Low	-.0050	-.0050	-.0025	-.0500	-.1000	-.0500	-.0050

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0018	.0022	-.0023	.0050	-.0045	.0005	-.0089
SDev	.0015	.0039	.0009	.0056	.0022	.0034	.0043
%RSD	86.20	178.4	39.13	112.6	48.23	624.2	48.38
#1	.0009	H.0066	-.0022	.0111	-.0034	-.0002	-.0071
#2	.0009	.0006	-.0032	.0038	-.0069	-.0024	-.0058
#3	.0036	-.0006	-.0015	.0001	-.0031	.0043	-.0138
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.0050	.0025	.0050				
Low	-.0050	-.0025	-.0050				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0031	H.0042	.0001	.0008
SDev	.0026	.0042	.0031	.0003	.0006
%RSD	984.9	138.6	75.21	171.0	71.72
#1	H.0026	.0066	H.0073	-.0000	.0006
#2	.0007	-.0016	H.0041	.0004	.0014
#3	L-.0026	.0042	H.0010	.0000	.0003
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass

High	.0025	.0500	.0010	.0050	.0100		
Low	-.0025	-.0500	-.0020	-.0050	-.0100		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26676	--	--	--	--	--	--
SDev	71.58212	--	--	--	--	--	--
%RSD	.2683390	--	--	--	--	--	--
#1	26596	--	--	--	--	--	--
#2	26698	--	--	--	--	--	--
#3	26734	--	--	--	--	--	--

Method: WATERS Sample Name: 94082 Operator: sch
Run Time: 06/29/00 12:33:43
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	1.335	.0024	.0826	.0006	4.182	-.0009
SDev	.0006	.018	.0011	.0009	.0001	.004	.0004
%RSD	76.94	1.313	45.52	1.075	23.21	.0979	41.42
#1	-.0007	1.355	.0035	.0836	.0004	4.186	-.0012
#2	-.0014	1.324	.0014	.0824	.0007	4.178	-.0011
#3	-.0002	1.325	.0022	.0818	.0006	4.182	-.0005

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0045	.0023	.0010	.9661	.1422	1.745	.0283
SDev	.0002	.0009	.0020	.0102	.0291	.015	.0002
%RSD	3.739	37.47	191.7	1.054	20.47	.8761	.7935
#1	.0046	.0032	.0032	.9778	.1752	1.762	.0285
#2	.0046	.0015	.0002	.9592	.1200	1.737	.0281
#3	.0043	.0023	-.0004	.9613	.1314	1.735	.0284

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0044	.0062	-.0011	.0096	-.0015	-.0014	-.0014
SDev	.0011	.0014	.0027	.0011	.0058	.0044	.0030
%RSD	24.93	22.52	253.3	11.96	375.7	315.9	216.8
#1	.0051	.0078	-.0025	.0088	.0048	-.0051	.0017
#2	.0031	.0054	-.0028	.0090	-.0028	-.0025	-.0043
#3	.0049	.0054	.0021	.0109	-.0066	.0034	-.0015

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0026	.0030	-.0057	.0020	.1996
SDev	.0014	.0029	.0041	.0006	.0006
%RSD	53.68	97.55	72.76	30.38	.3079
#1	.0040	.0031	-.0026	.0024	.1990

#2	.0024	-.0000	-.0040	.0024	.1996
#3	.0013	.0058	-.0104	.0013	.2003

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26641	--	--	--	--	--	--
SDev	263.5040	--	--	--	--	--	--
%RSD	.9891042	--	--	--	--	--	--
#1	26338	--	--	--	--	--	--
#2	26819	--	--	--	--	--	--
#3	26765	--	--	--	--	--	--

Method: WATERS Sample Name: 94083 Operator: sch
Run Time: 06/29/00 12:39:49
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0529	.0021	.0005	-.0001	.0668	.0000
SDev	.0006	.0073	.0035	.0001	.0001	.0022	.0001
%RSD	816.7	13.76	165.9	20.33	128.9	3.329	345.9
#1	-.0004	.0589	-.0019	.0004	-.0002	.0649	-.0000
#2	.0008	.0550	.0034	.0006	-.0001	.0693	.0002
#3	-.0001	.0448	.0048	.0004	.0000	.0663	-.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0013	.0010	.0011	-.0221	.0146	-.0142	.0004
SDev	.0015	.0009	.0011	.0211	.0100	.0012	.0001
%RSD	111.4	88.22	102.7	95.47	68.61	8.756	32.81
#1	.0005	.0020	.0012	-.0302	.0189	-.0128	.0002
#2	.0030	.0008	.0022	.0018	.0217	-.0150	.0004
#3	.0005	.0002	-.0001	-.0380	.0031	-.0150	.0005

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0002	.0012	-.0010	.0039	-.0054	.0003	-.0047
SDev	.0033	.0022	.0004	.0028	.0061	.0019	.0026
%RSD	1722.	192.4	41.89	72.48	113.1	615.8	56.67
#1	-.0022	.0037	-.0005	.0059	-.0018	.0025	-.0075
#2	.0039	-.0004	-.0013	.0051	-.0124	-.0012	-.0023
#3	-.0011	.0001	-.0013	.0007	-.0020	-.0004	-.0041

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0021	.0030	-.0086	-.0000	.0051
SDev	.0010	.0078	.0009	.0012	.0002
%RSD	47.16	257.8	10.81	3162.	3.840
#1	.0017	-.0058	-.0075	-.0012	.0051

#2	.0033	.0090	-.0092	.0013	.0053
#3	.0014	.0058	-.0089	-.0002	.0049

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26418	--	--	--	--	--	--
SDev	229.8956	--	--	--	--	--	--
%RSD	.8702235	--	--	--	--	--	--
#1	26324	--	--	--	--	--	--
#2	26250	--	--	--	--	--	--
#3	26680	--	--	--	--	--	--

Method: WATERS Sample Name: 94089 Operator: sch
Run Time: 06/29/00 12:45:54
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0010	16.28	.0095	1.477	.0036	53.73	-.0040
SDev	.0005	.27	.0016	.022	.0001	.66	.0008
%RSD	54.50	1.685	16.82	1.484	2.379	1.235	20.78
#1	-.0005	16.59	.0112	1.503	.0035	54.42	-.0033
#2	-.0015	16.06	.0081	1.464	.0036	53.10	-.0037
#3	-.0009	16.19	.0091	1.465	.0036	53.67	-.0049

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0240	.0486	.0630	55.92	1.536	28.05	.3084
SDev	.0005	.0020	.0026	.72	.148	.39	.0039
%RSD	2.006	4.091	4.174	1.290	9.666	1.378	1.269
#1	.0245	.0504	.0661	56.69	1.707	28.49	.3125
#2	.0241	.0465	.0612	55.26	1.451	27.76	.3047
#3	.0235	.0491	.0619	55.81	1.448	27.90	.3081

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0473	.0457	-.0035	.0480	.0400	-.0068	.0024
SDev	.0006	.0016	.0010	.0024	.0008	.0036	.0043
%RSD	1.367	3.540	29.57	5.111	2.121	52.68	175.9
#1	.0474	.0466	-.0023	.0488	.0409	-.0029	-.0019
#2	.0479	.0467	-.0039	.0500	.0392	-.0075	.0024
#3	.0466	.0438	-.0042	.0453	.0400	-.0100	.0067

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0035	.0130	-.0017	.0288	.1663
SDev	.0026	.0028	.0075	.0006	.0015
%RSD	74.90	21.83	444.7	2.011	.9249
#1	.0063	.0143	-.0103	.0292	.1677

#2	.0027	.0150	.0036	.0281	.1647	
#3	.0013	.0098	.0016	.0290	.1664	

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	28386	--	--	--	--	--	--
SDev	453.8910	--	--	--	--	--	--
%RSD	1.598996	--	--	--	--	--	--
#1	27863	--	--	--	--	--	--
#2	28677	--	--	--	--	--	--
#3	28618	--	--	--	--	--	--

Method: WATERS Sample Name: 94234 Operator: sch
Run Time: 06/29/00 12:51:59
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0004	.2847	.0044	.0277	.0001	16.57	-.0004
SDev	.0004	.0197	.0021	.0004	.0001	.21	.0005
%RSD	93.54	6.928	49.21	1.359	140.5	1.263	109.7
#1	-.0006	.3074	.0052	.0280	-.0000	16.63	-.0009
#2	-.0006	.2713	.0019	.0273	.0002	16.34	-.0004
#3	.0000	.2755	.0059	.0278	.0001	16.75	.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0021	.0033	.0110	4.278	.4452	1.777	.1917
SDev	.0004	.0006	.0014	.051	.0418	.028	.0026
%RSD	17.51	17.42	12.52	1.194	9.378	1.584	1.351
#1	.0017	.0039	.0119	4.293	.4928	1.791	.1928
#2	.0023	.0032	.0095	4.221	.4146	1.744	.1888
#3	.0023	.0028	.0118	4.320	.4283	1.795	.1936

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0054	.0112	-.0008	.0161	.0003	.0017	-.0067
SDev	.0007	.0008	.0017	.0022	.0067	.0021	.0021
%RSD	13.06	7.058	212.9	13.56	1989.	125.2	31.67
#1	.0046	.0104	-.0005	.0182	-.0063	.0029	-.0083
#2	.0059	.0112	-.0027	.0163	.0002	-.0007	-.0075
#3	.0056	.0120	.0008	.0139	.0071	.0028	-.0043

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0015	.0026	-.0048	.0034	.0685
SDev	.0028	.0046	.0036	.0005	.0014
%RSD	187.9	177.0	74.40	13.35	2.055
#1	.0042	-.0027	-.0022	.0030	.0689

#2	.0017	.0056	-.0034	.0039	.0669
#3	-.0014	.0048	-.0089	.0033	.0696

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27194	--	--	--	--	--	--
SDev	385.9098	--	--	--	--	--	--
%RSD	1.419116	--	--	--	--	--	--
#1	26884	--	--	--	--	--	--
#2	27626	--	--	--	--	--	--
#3	27071	--	--	--	--	--	--

Method: WATERS Sample Name: 94248 Operator: sch
Run Time: 06/29/00 12:58:04
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	-.0144	.0268	.0215	.0001	108.2	-.0004
SDev	.0012	.0386	.0039	.0006	.0002	2.1	.0003
%RSD	6290.	268.0	14.37	2.873	159.1	1.904	76.50
#1	.0014	.0297	.0303	.0222	-.0001	110.5	-.0008
#2	-.0005	-.0309	.0274	.0212	.0002	107.5	-.0002
#3	-.0009	-.0421	.0227	.0211	.0003	106.5	-.0003

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0011	.0029	-.0033	.6311	3.267	35.93	.0871
SDev	.0008	.0022	.0020	.0206	.253	.77	.0016
%RSD	78.84	73.82	60.83	3.268	7.737	2.129	1.817
#1	.0018	.0054	-.0010	.6523	3.559	36.79	.0888
#2	.0002	.0018	-.0042	.6111	3.120	35.69	.0866
#3	.0012	.0016	-.0047	.6300	3.122	35.32	.0858

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	-.0002	.0169	-.0028	.0193	.0110	-.0011	-.0073
SDev	.0022	.0015	.0013	.0026	.0006	.0023	.0015
%RSD	1409.	9.094	46.79	13.29	5.246	216.2	20.12
#1	.0019	.0184	-.0039	.0220	.0104	-.0023	-.0082
#2	-.0024	.0169	-.0014	.0191	.0112	.0016	-.0081
#3	.0001	.0154	-.0032	.0168	.0115	-.0025	-.0056

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0024	.0060	-.0007	.0019	.0136
SDev	.0040	.0027	.0048	.0004	.0006
%RSD	164.3	43.93	664.0	21.87	4.199
#1	.0056	.0070	-.0062	.0019	.0141

#2	-.0021	.0030	.0030	.0022	.0130
#3	.0038	.0081	.0010	.0014	.0137

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27189	--	--	--	--	--	--
SDev	843.0126	--	--	--	--	--	--
%RSD	3.100603	--	--	--	--	--	--
#1	26226	--	--	--	--	--	--
#2	27545	--	--	--	--	--	--
#3	27795	--	--	--	--	--	--

Method: WATERS Sample Name: 94249 Operator: sch
Run Time: 06/29/00 13:04:13
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	.0698	.0042	.0054	-.0000	74.58	-.0002
SDev	.0005	.0049	.0025	.0001	.0001	.44	.0004
%RSD	62.79	7.026	59.12	1.162	340.2	.5861	186.1
#1	-.0003	.0651	.0070	.0055	-.0001	74.13	-.0000
#2	-.0013	.0694	.0032	.0054	.0000	74.61	.0001
#3	-.0009	.0748	.0024	.0054	.0000	75.00	-.0007

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0009	-.0017	.2324	.1918	2.292	.0290
SDev	.0006	.0004	.0010	.0172	.0176	.002	.0001
%RSD	214.6	51.70	60.00	7.406	9.188	.0938	.3948
#1	.0005	.0014	-.0009	.2126	.2119	2.289	.0290
#2	-.0004	.0005	-.0013	.2438	.1789	2.292	.0289
#3	.0007	.0007	-.0028	.2408	.1846	2.293	.0291

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0009	-.0006	.0011	-.0001	-.0027	.0031	-.0036
SDev	.0011	.0013	.0016	.0036	.0035	.0011	.0030
%RSD	122.1	199.7	140.2	4667.	125.9	37.16	83.37
#1	.0016	-.0013	.0029	-.0013	-.0022	.0040	-.0001
#2	-.0004	-.0014	-.0002	-.0029	.0004	.0018	-.0051
#3	.0014	.0008	.0007	.0039	-.0064	.0034	-.0056

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0019	.0010	-.0019	.0007	.0046
SDev	.0017	.0004	.0041	.0004	.0009
%RSD	88.56	43.94	220.6	64.17	19.67
#1	.0017	.0015	.0006	.0002	.0056

#2	.0003	.0008	-.0066	.0011	.0038
#3	.0036	.0007	.0005	.0007	.0046

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26806	--	--	--	--	--	--
SDev	30.80584	--	--	--	--	--	--
%RSD	.1149214	--	--	--	--	--	--
#1	26818	--	--	--	--	--	--
#2	26829	--	--	--	--	--	--
#3	26771	--	--	--	--	--	--

Method: WATERS Sample Name: 94250 Operator: sch
Run Time: 06/29/00 13:10:19
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	-.0421	.0119	.0058	.0005	74.02	-.0005
SDev	.0001	.0332	.0033	.0002	.0002	.50	.0005
%RSD	19.25	78.77	27.89	2.792	34.93	.6799	98.05
#1	-.0006	-.0062	.0119	.0060	.0003	74.60	-.0006
#2	-.0007	-.0717	.0151	.0058	.0005	73.80	.0000
#3	-.0009	-.0484	.0085	.0057	.0006	73.67	-.0009

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0012	.0079	-.0049	.0690	14.36	135.2	.0089
SDev	.0008	.0019	.0020	.0083	1.47	1.4	.0000
%RSD	68.96	24.18	40.54	12.03	10.25	1.073	.4438
#1	.0016	.0101	-.0032	.0649	16.06	136.8	.0088
#2	.0016	.0070	-.0045	.0635	13.53	134.7	.0089
#3	.0002	.0067	-.0071	.0785	13.49	134.0	.0089

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0030	.0007	.0037	.0040	-.0068	.0084	-.0067
SDev	.0008	.0012	.0035	.0021	.0057	.0046	.0014
%RSD	26.92	155.3	94.73	51.37	84.98	54.42	20.92
#1	.0036	.0011	.0070	.0062	-.0100	.0126	-.0051
#2	.0021	.0017	.0039	.0021	-.0001	.0091	-.0074
#3	.0032	-.0006	.0001	.0038	-.0102	.0035	-.0077

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0051	.0001	.0070	.0121
SDev	.0034	.0025	.0050	.0008	.0004
%RSD	1184.	48.83	6565.	10.89	3.234
#1	.0042	.0031	.0031	.0067	.0118

#2	-.0017	.0079	.0028	.0064	.0121
#3	-.0016	.0044	-.0057	.0078	.0126

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27785	--	--	--	--	--	--
SDev	474.5345	--	--	--	--	--	--
%RSD	1.707880	--	--	--	--	--	--
#1	27247	--	--	--	--	--	--
#2	27964	--	--	--	--	--	--
#3	28144	--	--	--	--	--	--

Method: WATERS Sample Name: 94251 Operator: sch
Run Time: 06/29/00 13:16:24
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0126	.0022	.0086	-.0001	84.41	-.0002
SDev	.0014	.0508	.0013	.0002	.0001	2.59	.0001
%RSD	785.3	401.4	60.51	2.813	130.5	3.064	57.76
#1	.0017	-.0094	.0007	.0087	-.0002	82.65	-.0002
#2	-.0011	.0707	.0028	.0089	-.0002	87.38	-.0001
#3	-.0001	-.0234	.0031	.0084	.0001	83.20	-.0004

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0015	.0010	-.0008	.5170	.0961	2.637	.0054
SDev	.0010	.0004	.0012	.0189	.0406	.075	.0002
%RSD	66.80	42.97	144.7	3.654	42.25	2.857	4.127
#1	.0014	.0010	.0002	.5355	.1420	2.610	.0053
#2	.0006	.0013	-.0006	.5178	.0818	2.722	.0056
#3	.0026	.0005	-.0022	.4977	.0647	2.578	.0052

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0027	.0027	-.0056	.0076	-.0081	-.0061	-.0054
SDev	.0013	.0023	.0041	.0022	.0030	.0035	.0056
%RSD	46.00	83.20	74.44	28.55	37.45	56.69	103.0
#1	.0022	.0049	-.0038	.0091	-.0046	-.0043	-.0036
#2	.0042	.0004	-.0103	.0051	-.0101	-.0101	-.0117
#3	.0018	.0029	-.0026	.0085	-.0095	-.0039	-.0010

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0034	.0009	-.0003	.0012	.0139
SDev	.0031	.0027	.0028	.0008	.0007
%RSD	90.44	311.9	1007.	67.60	5.061
#1	.0052	-.0017	.0017	.0021	.0139

#2	.0050	.0006	.0009	.0005	.0147	
#3	-.0001	.0036	-.0034	.0011	.0132	

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26043	--	--	--	--	--	--
SDev	597.4382	--	--	--	--	--	--
%RSD	2.294016	--	--	--	--	--	--
#1	25975	--	--	--	--	--	--
#2	25483	--	--	--	--	--	--
#3	26672	--	--	--	--	--	--

Method: WATERS Sample Name: 94252 Operator: sch
Run Time: 06/29/00 13:22:29
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	-.0056	.0065	.0060	-.0000	95.64	-.0003
SDev	.0004	.0145	.0027	.0001	.0001	.69	.0003
%RSD	66.65	257.9	40.90	1.579	11210.	.7264	130.2
#1	-.0005	-.0139	.0075	.0061	-.0001	96.44	.0001
#2	-.0002	-.0141	.0086	.0060	.0001	95.22	-.0002
#3	-.0010	.0111	.0035	.0060	.0000	95.26	-.0006

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	.0009	-.0014	.0077	.2402	3.762	.0050
SDev	.0012	.0008	.0015	.0047	.0337	.034	.0001
%RSD	195.5	87.35	110.0	61.12	14.02	.8972	2.022
#1	.0019	.0018	-.0001	.0066	.2784	3.801	.0051
#2	-.0002	.0005	-.0010	.0129	.2274	3.743	.0051
#3	.0000	.0004	-.0030	.0037	.2148	3.742	.0049

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0031	.0029	-.0029	.0050	-.0024	-.0014	-.0068
SDev	.0010	.0024	.0016	.0030	.0014	.0042	.0040
%RSD	31.83	84.10	54.02	59.74	59.77	298.1	59.47
#1	.0038	.0051	-.0021	.0080	-.0016	-.0004	-.0064
#2	.0036	.0003	-.0019	.0020	-.0041	.0022	-.0110
#3	.0020	.0031	-.0047	.0049	-.0015	-.0060	-.0029

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0030	-.0004	-.0034	.0014	.0127
SDev	.0034	.0014	.0073	.0003	.0008
%RSD	111.8	315.8	217.7	21.32	6.030
#1	.0041	.0007	-.0073	.0017	.0131

#2	-.0008	.0000	-.0079	.0013	.0132
#3	.0057	-.0020	.0051	.0011	.0118

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26902	--	--	--	--	--	--
SDev	261.8225	--	--	--	--	--	--
%RSD	.9732453	--	--	--	--	--	--
#1	26601	--	--	--	--	--	--
#2	27028	--	--	--	--	--	--
#3	27077	--	--	--	--	--	--

Method: WATERS Sample Name: 94253 Operator: sch
Run Time: 06/29/00 13:28:34
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	-.0056	.0088	.0056	.0005	72.58	-.0007
SDev	.0006	.0382	.0032	.0001	.0001	.56	.0004
%RSD	79.30	686.6	36.53	.9741	21.35	.7772	56.35
#1	-.0012	.0343	.0079	.0056	.0004	72.09	-.0010
#2	-.0001	-.0419	.0124	.0055	.0006	72.44	-.0009
#3	-.0008	-.0092	.0062	.0056	.0005	73.20	-.0003

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0023	.0073	-.0043	.0824	13.96	133.0	.0089
SDev	.0011	.0011	.0004	.0190	1.32	.4	.0001
%RSD	47.86	15.81	9.597	23.11	9.458	.3101	1.364
#1	.0036	.0083	-.0039	.0668	15.48	133.3	.0090
#2	.0021	.0076	-.0044	.0767	13.07	132.5	.0088
#3	.0014	.0060	-.0047	.1036	13.34	133.1	.0090

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0027	.0013	.0017	.0039	-.0049	.0060	-.0078
SDev	.0008	.0066	.0012	.0101	.0006	.0018	.0027
%RSD	27.83	514.4	68.00	260.3	12.01	29.65	34.98
#1	.0028	-.0023	.0025	-.0018	-.0044	.0058	-.0048
#2	.0019	.0089	.0022	.0156	-.0056	.0079	-.0101
#3	.0034	-.0027	.0004	-.0021	-.0048	.0044	-.0085

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0036	-.0027	.0069	.0051
SDev	.0011	.0002	.0009	.0011	.0003
%RSD	364.1	6.381	32.30	16.09	6.200
#1	.0014	.0038	-.0034	.0056	.0053

#2	.0003	.0034	-.0030	.0077	.0053
#3	-.0008	.0034	-.0017	.0073	.0048

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27624	--	--	--	--	--	--
SDev	175.1152	--	--	--	--	--	--
%RSD	.6339165	--	--	--	--	--	--
#1	27617	--	--	--	--	--	--
#2	27803	--	--	--	--	--	--
#3	27453	--	--	--	--	--	--

Method: WATERS Sample Name: icv 1 Operator: sch
Run Time: 06/29/00 13:34:39
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2084	.1954	Q.2119	.2061	Q.2113	Q.2389	.2084
SDev	.0016	.0149	.0062	.0016	.0018	.0067	.0014
%RSD	.7664	7.617	2.917	.7666	.8547	2.800	.6780
#1	.2070	Q.1785	Q.2117	.2051	.2095	Q.2424	.2077
#2	.2102	.2067	Q.2182	.2080	Q.2131	Q.2432	.2100
#3	.2082	.2010	.2059	.2053	Q.2112	Q.2312	.2075
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Fail	QC Pass
Value	.2000	.2000	.2000	.2000	.2000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.2113	.2070	.2011	.1944	Q.1873	Q.2130	.2080
SDev	.0027	.0012	.0012	.0194	.0205	.0065	.0017
%RSD	1.290	.5782	.5882	9.980	10.96	3.051	.8287
#1	.2089	.2066	.2009	Q.1754	Q.2110	Q.2195	.2063
#2	Q.2143	.2084	.2024	Q.2142	Q.1747	Q.2128	.2098
#3	.2107	.2061	.2001	.1937	Q.1762	.2065	.2080
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	.2000	.2000	.2000	.2000	2.000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.2053	Q.2135	.2041	.2156	.2079	.2040	.2035
SDev	.0039	.0016	.0037	.0007	.0058	.0027	.0075
%RSD	1.875	.7331	1.791	.3195	2.804	1.340	3.676
#1	.2008	Q.2117	.2033	.2164	.2013	.2054	.1982
#2	.2072	Q.2148	.2081	.2155	.2122	.2057	.2121
#3	.2077	Q.2138	.2010	.2150	.2103	.2008	.2003

Errors	QC Pass	QC Fail	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.2000	.2000	.2000				
Range	5.500	5.500	5.500				
Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062		
Units	ppm	ppm	ppm	ppm	ppm		
Avge	.2036	.2003	Q.2121	.2005	Q.2114		
SDev	.0006	.0017	.0071	.0023	.0024		
%RSD	.3001	.8646	3.329	1.127	1.136		
#1	.2032	.2007	.2051	.1988	.2092		
#2	.2032	.1984	Q.2192	.2031	Q.2140		
#3	.2043	.2017	Q.2120	.1997	.2109		

Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail
Value	.2000	.2000	.2000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26509	--	--	--	--	--	--
SDev	204.7340	--	--	--	--	--	--
%RSD	.7723187	--	--	--	--	--	--
#1	26615	--	--	--	--	--	--
#2	26273	--	--	--	--	--	--
#3	26639	--	--	--	--	--	--

Method: WATERS Sample Name: icv 2 Operator: sch
Run Time: 06/29/00 13:41:03
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.019	1.028	1.012	1.007	1.024	1.043	1.020
SDev	.006	.024	.006	.009	.002	.002	.001
%RSD	.5498	2.318	.6429	.8593	.2397	.1527	.1034
#1	1.025	1.054	1.015	1.016	1.027	1.045	1.019
#2	1.017	1.024	1.016	1.000	1.023	1.043	1.021
#3	1.014	1.007	1.004	1.003	1.022	1.042	1.019
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.025	1.012	1.002	Q1.088	Q.9198	.9743	1.016
SDev	.001	.004	.009	.011	.0911	.0047	.004
%RSD	.1412	.3491	.8503	1.018	9.905	.4846	.3511
#1	1.027	1.016	1.011	Q1.078	Q1.025	.9797	1.020
#2	1.024	1.010	.9989	Q1.086	Q.8661	.9708	1.013
#3	1.024	1.009	.9948	Q1.100	Q.8682	.9724	1.016
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	1.005	1.031	1.011	1.038	1.016	1.014	1.003
SDev	.001	.004	.002	.007	.007	.002	.010
%RSD	.1459	.3630	.1818	.6844	.7001	.2246	.9995
#1	1.006	1.033	1.009	1.045	1.008	1.016	.9951
#2	1.005	1.027	1.013	1.031	1.019	1.012	1.014
#3	1.003	1.034	1.010	1.040	1.021	1.016	.9987
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	1.000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.9815	1.028	Q1.071	.9855	1.025
SDev	.0094	.004	.015	.0030	.007
%RSD	.9550	.4375	1.394	.3061	.7098
#1	.9922	1.033	Q1.088	.9889	1.019
#2	.9778	1.024	Q1.065	.9836	1.023
#3	.9745	1.027	Q1.060	.9838	1.033
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass

Value	1.000	1.000	1.000	1.000	1.000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26724	--	--	--	--	--	--
SDev	157.7878	--	--	--	--	--	--
%RSD	.5904349	--	--	--	--	--	--
#1	26551	--	--	--	--	--	--
#2	26761	--	--	--	--	--	--
#3	26860	--	--	--	--	--	--

Method: WATERS Sample Name: icb Operator: sch
Run Time: 06/29/00 13:47:33
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	-.0099	.0049	.0003	.0005	-.0143	.0004
SDev	.0006	.0250	.0015	.0001	.0000	.0035	.0001
%RSD	350.4	251.8	30.28	31.51	6.679	24.34	24.50
#1	.0005	-.0241	.0033	.0004	.0005	-.0103	.0003
#2	-.0005	.0189	H.0051	.0003	.0004	-.0165	.0004
#3	-.0005	-.0246	H.0063	.0002	.0004	-.0161	.0005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0050	.0015	.0500	.0015
Low	-.0050	-.0500	-.0050	-.0050	-.0015	-.0500	-.0015

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	.0005	L-.0030	-.0388	-.0022	-.0164	.0002
SDev	.0008	.0008	.0007	.0075	.0038	.0030	.0002
%RSD	76.04	166.2	22.80	19.36	171.1	18.57	74.09
#1	.0007	.0013	-.0025	-.0328	.0021	-.0129	.0005
#2	.0019	.0005	L-.0028	-.0472	-.0040	-.0182	.0001
#3	.0004	-.0003	L-.0038	-.0364	-.0049	-.0181	.0001
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0025	.0500	.1000	.0500	.0050
Low	-.0050	-.0050	-.0025	-.0500	-.1000	-.0500	-.0050

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0004	H.0047	-.0037	.0082	-.0033	-.0043	-.0036
SDev	.0004	.0004	.0023	.0022	.0033	.0029	.0031
%RSD	98.33	8.504	62.02	26.09	100.6	68.62	87.81
#1	.0006	H.0044	-.0017	.0058	.0005	-.0030	-.0001
#2	.0007	H.0052	L-.0063	.0097	-.0049	-.0077	-.0044
#3	-.0001	H.0047	-.0033	.0093	-.0055	-.0022	-.0062
Errors	LC Pass	LC High	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.0050	.0025	.0050				
Low	-.0050	-.0025	-.0050				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	H.0036	.0041	L-.0037	.0004	.0004
SDev	.0026	.0039	.0079	.0013	.0003
%RSD	71.54	94.34	211.1	296.6	89.44
#1	H.0027	.0009	.0004	.0018	.0006
#2	H.0064	.0084	H.0012	-.0009	.0005
#3	.0016	.0029	L-.0129	.0005	-.0000
Errors	LC High	LC Pass	LC Low	LC Pass	LC Pass

High	.0025	.0500	.0010	.0050	.0100		
Low	-.0025	-.0500	-.0020	-.0050	-.0100		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26809	--	--	--	--	--	--
SDev	271.1205	--	--	--	--	--	--
%RSD	1.011292	--	--	--	--	--	--
#1	26984	--	--	--	--	--	--
#2	26497	--	--	--	--	--	--
#3	26947	--	--	--	--	--	--

ICAL

Standardization Rpt. 06/29/00 09:23:17 AM page 1

Method: WATERS Standard: STD1-Blank
Run Time: 06/29/00 09:18:01

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Avge	-.0019	.0355	.0030	.0000	-.0078	.0014	-.0008
SDev	.0001	.0011	.0044	.0000	.0001	.0000	.0003
%RSD	3.324	3.066	149.9	86.73	1.393	1.644	33.22
#1	-.0018	.0367	.0081	.0000	-.0079	.0014	-.0009
#2	-.0019	.0346	.0010	.0000	-.0077	.0014	-.0005
#3	-.0018	.0352	-.0002	.0000	-.0078	.0013	-.0010

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Avge	-.0014	.0002	.0247	.0007	.0435	-.0001	.0002
SDev	.0002	.0005	.0003	.0004	.0080	.0001	.0000
%RSD	17.86	327.0	1.001	55.75	18.52	150.7	8.630
#1	-.0015	.0007	.0246	.0011	.0525	.0000	.0003
#2	-.0011	.0001	.0250	.0004	.0410	-.0002	.0003
#3	-.0016	-.0003	.0245	.0005	.0370	-.0001	.0002

Elem	Ni2316	2203/1	2203/2	1960/1	1960/2	Sb2068	Sn1899
Avge	-.0022	.0019	-.0051	-.0205	.0052	.0023	-.0001
SDev	.0009	.0015	.0058	.0063	.0010	.0010	.0003
%RSD	42.24	77.66	113.8	30.82	18.78	43.50	369.1
#1	-.0031	.0032	-.0086	-.0132	.0046	.0022	-.0004
#2	-.0020	.0022	-.0083	-.0242	.0047	.0013	-.0001
#3	-.0013	.0003	.0016	-.0240	.0063	.0033	.0003

Elem	Tl1908	V_2924	Zn2062
Avge	-.0008	-.0010	-.0000
SDev	.0004	.0002	.0000
%RSD	46.05	17.56	346.9
#1	-.0013	-.0009	-.0000
#2	-.0008	-.0012	-.0000
#3	-.0005	-.0010	.0000

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26782	--	--	--	--	--	--
SDev	168.7760	--	--	--	--	--	--
%RSD	.6301922	--	--	--	--	--	--
#1	26623	--	--	--	--	--	--
#2	26959	--	--	--	--	--	--
#3	26763	--	--	--	--	--	--

Method: WATERS Standard: STD8
Run Time: 06/29/00 09:24:34

Elem	Ag3280
Avge	1.118
	.007

%RSD	.6332
#1	1.126
#2	1.112
#3	1.117

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26695	--	--	--	--	--	--
SDev	270.1487	--	--	--	--	--	--
%RSD	1.011995	--	--	--	--	--	--
#1	26390	--	--	--	--	--	--
#2	26789	--	--	--	--	--	--
#3	26905	--	--	--	--	--	--

Method: WATERS Standard: STD3
Run Time: 06/29/00 09:29:03

Elem	Al3082	Be3130	Fe2714	Ni2316	Sb2068	Sn1899	Tl1908
Avge	.1173	3.222	.0416	.8123	.7740	.5545	.2183
SDev	.0002	.009	.0003	.0029	.0015	.0028	.0017
%RSD	.1330	.2749	.7934	.3635	.1919	.4994	.7749
#1	.1174	3.212	.0414	.8110	.7742	.5514	.2163
#2	.1174	3.229	.0414	.8103	.7724	.5556	.2192
#3	.1171	3.224	.0420	.8157	.7753	.5566	.2193

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26782	--	--	--	--	--	--
SDev	87.68884	--	--	--	--	--	--
%RSD	.3274130	--	--	--	--	--	--
#1	26683	--	--	--	--	--	--
#2	26815	--	--	--	--	--	--
#3	26849	--	--	--	--	--	--

Method: WATERS Standard: STD4
Run Time: 06/29/00 09:33:15

Elem	As1890	Cr2677	1960/1	1960/2	V_2924
Avge	.8697	.7926	3.509	1.398	.3455
SDev	.0074	.0055	.036	.015	.0024
%RSD	.8553	.6989	1.032	1.066	.6961
#1	.8776	.7989	3.550	1.416	.3482
#2	.8685	.7905	3.484	1.390	.3442
#3	.8629	.7885	3.492	1.390	.3440

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED

Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26612	--	--	--	--	--	--
SDev	303.9907	--	--	--	--	--	--
%RSD	1.142292	--	--	--	--	--	--
#1	26266	--	--	--	--	--	--
#2	26736	--	--	--	--	--	--
#3	26835	--	--	--	--	--	--

Method: WATERS Standard: STD2
Run Time: 06/29/00 09:39:08

Elem	Ba4934	Ca3179	Cd2265	Co2286	Cu3247	K_7664	Mg2790
Avge	2.255	.0778	1.799	1.152	.7658	1.310	.0711
SDev	.071	.0029	.069	.042	.0239	.016	.0024
%RSD	3.130	3.722	3.824	3.681	3.123	1.187	3.305
#1	2.175	.0745	1.720	1.103	.7388	1.324	.0684
#2	2.308	.0799	1.847	1.183	.7844	1.313	.0730
#3	2.282	.0791	1.830	1.168	.7743	1.293	.0718

Elem	Mn2576	2203/1	2203/2	Zn2062
Avge	.9114	3.419	3.232	.4925
SDev	.0328	.113	.133	.0206
%RSD	3.598	3.309	4.101	4.187
#1	.8739	3.292	3.081	.4688
#2	.9351	3.511	3.328	.5066
#3	.9251	3.452	3.286	.5021

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27172	--	--	--	--	--	--
SDev	749.5828	--	--	--	--	--	--
%RSD	2.758625	--	--	--	--	--	--
#1	27995	--	--	--	--	--	--
#2	26528	--	--	--	--	--	--
#3	26994	--	--	--	--	--	--

Method: WATERS Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	STD8	STD1-Blank	1.78593	.003308	06/29/00 09:39:08
Al3082	308.215	STD3	STD1-Blank	24.4698	-.869010	06/29/00 09:39:08
As1890	189.042	STD4	STD1-Blank	2.29560	-.006817	06/29/00 09:39:08
Ba4934	493.409	STD2	STD1-Blank	.886983	-.000023	06/29/00 09:39:08
Be3130	313.042	STD3	STD1-Blank	.619305	.004833	06/29/00 09:39:08
Ca3179	317.933	STD2	STD1-Blank	26.1580	-.035814	06/29/00 09:39:08
Cd2265	226.502	STD2	STD1-Blank	1.11111	.000883	06/29/00 09:39:08
Co2286	228.616	STD2	STD1-Blank	1.73458	.002396	06/29/00 09:39:08
Cr2677	267.716	STD4	STD1-Blank	2.52368	-.000380	06/29/00 09:39:08
Cu3247	324.753	STD2	STD1-Blank	2.69844	-.066598	06/29/00 09:39:08

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Fe2714	271.441	STD3	STD1-Blank	48.8453	-.033503	06/29/00 09:39:08
K_7664	766.491	STD2	STD1-Blank	1.57912	-.068647	06/29/00 09:39:08
Mg2790	279.078	STD2	STD1-Blank	28.1114	.002434	06/29/00 09:39:08
Mn2576	257.610	STD2	STD1-Blank	2.19512	-.000546	06/29/00 09:39:08
Ni2316	231.604	STD3	STD1-Blank	2.45556	.005292	06/29/00 09:39:08
Pb2203	220.353	NONE	NONE	1.00000	.000000	*06/29/00 09:39:08
Be1960	196.026	NONE	NONE	1.00000	.000000	*06/29/00 09:39:08
2203/1	220.351	STD2	STD1-Blank	.585438	-.001123	06/29/00 09:39:08
2203/2	220.352	STD2	STD1-Blank	.617946	.003160	06/29/00 09:39:08
1960/1	196.021	STD4	STD1-Blank	.566819	.011600	06/29/00 09:39:08
1960/2	196.022	STD4	STD1-Blank	1.43547	-.007451	06/29/00 09:39:08
Sb2068	206.838	STD3	STD1-Blank	2.59187	-.005941	06/29/00 09:39:08
Sn1899	189.989	STD3	STD1-Blank	3.60619	.000315	06/29/00 09:39:08
Tl1908	190.864	STD3	STD1-Blank	9.13303	.007700	06/29/00 09:39:08
V_2924	292.402	STD4	STD1-Blank	5.77346	.005960	06/29/00 09:39:08
Zn2062	206.200	STD2	STD1-Blank	4.06080	.000050	06/29/00 09:39:08

lethod: WATERS Sample Name: icv 1 Operator: sch
Run Time: 06/29/00 09:44:41
Comment: sample id's begin with "AB"
lode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2033	Q.2233	Q.1857	.2059	.2028	Q.2137	.2050
SDev	.0016	.0252	.0034	.0019	.0015	.0007	.0021
%RSD	.7904	11.30	1.855	.9315	.7447	.3369	1.018
#1	.2047	Q.2417	Q.1817	.2079	.2039	Q.2133	.2044
#2	.2037	Q.2337	Q.1879	.2057	.2035	Q.2145	.2073
#3	.2015	.1945	Q.1875	.2041	.2011	Q.2133	.2033
Errors	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass
Value	.2000	.2000	.2000	.2000	.2000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2045	.2023	.1998	Q.2161	Q.1781	.1922	.2030
SDev	.0009	.0019	.0031	.0158	.0136	.0009	.0014
%RSD	.4190	.9284	1.548	7.326	7.636	.4575	.6955
#1	.2036	.2027	.2029	.1984	Q.1899	.1912	.2038
#2	.2053	.2039	.1997	Q.2290	Q.1811	.1927	.2038
#3	.2047	.2003	.1967	Q.2210	Q.1632	.1927	.2013
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass
Value	.2000	.2000	.2000	.2000	2.000	.2000	.2000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.2028	.2043	.2010	.2030	.2058	.1980	.2061
SDev	.0013	.0025	.0025	.0037	.0019	.0034	.0023
%RSD	.6508	1.203	1.234	1.842	.9446	1.712	1.119
#1	.2035	.2043	.2025	.2040	.2035	.2010	.2048
#2	.2037	.2019	.2023	.1989	.2068	.1986	.2087
#3	.2013	.2068	.1981	.2062	.2070	.1943	.2047
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.2000	.2000	.2000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.1986	.1937	.2063	.1980	.2054
SDev	.0012	.0021	.0027	.0018	.0017
%RSD	.6256	1.074	1.295	.8968	.8301
#1	.1988	.1956	.2068	.1991	.2045
#2	.1973	.1942	.2086	.1990	.2074
#3	.1998	.1915	.2034	.1960	.2044
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

Value	.2000	.2000	.2000	.2000	.2000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26705	--	--	--	--	--	--
SDev	285.7155	--	--	--	--	--	--
%RSD	1.069882	--	--	--	--	--	--
#1	26502	--	--	--	--	--	--
#2	26582	--	--	--	--	--	--
#3	27032	--	--	--	--	--	--

Method: WATERS Sample Name: icv 2 Operator: sch
Run Time: 06/29/00 09:51:19
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9897	.9781	.9625	.9976	.9808	1.000	.9963
SDev	.0394	.0615	.0377	.0323	.0374	.040	.0364
%RSD	3.985	6.290	3.918	3.235	3.810	3.970	3.658
#1	Q.9443	Q.9071	Q.9196	.9606	Q.9378	.9547	.9544
#2	1.009	1.013	.9775	1.013	.9992	1.020	1.014
#3	1.015	1.014	.9904	1.020	1.005	1.026	1.021
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9923	.9824	.9813	Q1.064	Q.9558	.9642	.9875
SDev	.0344	.0353	.0377	.054	.0413	.0220	.0370
%RSD	3.468	3.598	3.839	5.061	4.317	2.277	3.745
#1	.9526	Q.9416	Q.9379	1.005	Q1.003	Q.9391	Q.9449
#2	1.010	1.001	1.001	Q1.078	Q.9304	.9742	1.007
#3	1.014	1.005	1.005	Q1.110	Q.9335	.9794	1.011
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	1.000	1.000
Range	5.500	5.500	5.500	5.500	5.500	5.500	5.500

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.9842	.9926	.9811	.9933	.9902	.9799	.9828
SDev	.0327	.0332	.0215	.0298	.0412	.0202	.0253
%RSD	3.325	3.347	2.191	2.999	4.163	2.059	2.574
#1	.9467	.9550	.9564	.9607	.9426	.9572	.9540
#2	.9987	1.005	.9918	1.000	1.014	.9865	1.001
#3	1.007	1.018	.9953	1.019	1.014	.9959	.9932
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	1.000				
Range	5.500	5.500	5.500				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.9692	.9791	1.019	.9628	.9931
SDev	.0327	.0358	.035	.0356	.0387
%RSD	3.371	3.656	3.470	3.695	3.895
#1	Q.9320	Q.9379	.9778	Q.9219	.9487
#2	.9826	.9973	1.037	.9799	1.011
#3	.9930	1.002	1.040	.9866	1.020
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

Value	1.000	1.000	1.000	1.000	1.000		
Range	5.500	5.500	5.500	5.500	5.500		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27158	--	--	--	--	--	--
SDev	727.5200	--	--	--	--	--	--
%RSD	2.678809	--	--	--	--	--	--
#1	27997	--	--	--	--	--	--
#2	26781	--	--	--	--	--	--
#3	26697	--	--	--	--	--	--

Method: WATERS Sample Name: icb Operator: sch
Run Time: 06/29/00 09:58:02
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0223	L-.0136	.0003	.0004	.0008	.0003
SDev	.0002	.0229	.0001	.0001	.0000	.0021	.0004
%RSD	91.24	102.5	.4097	29.52	6.928	269.8	123.7
#1	.0005	.0450	L-.0136	.0004	.0003	.0024	-.0001
#2	.0000	.0226	L-.0136	.0003	.0004	.0014	.0003
#3	.0002	-.0007	L-.0135	.0002	.0004	-.0015	.0006
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0500	.0050	.0050	.0015	.0500	.0015
Low	-.0050	-.0500	-.0050	-.0050	-.0015	-.0500	-.0015

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	.0009	-.0024	-.0030	-.0034	-.0006	.0004
SDev	.0005	.0014	.0019	.0022	.0118	.0089	.0001
%RSD	132.7	149.1	77.40	75.16	345.2	1448.	14.30
#1	-.0002	.0025	-.0003	-.0006	.0099	.0045	.0004
#2	.0007	.0001	L-.0032	-.0050	-.0075	.0045	.0004
#3	.0006	.0002	L-.0037	-.0033	-.0126	-.0109	.0003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0050	.0050	.0025	.0500	.1000	.0500	.0050
Low	-.0050	-.0050	-.0025	-.0500	-.1000	-.0500	-.0050

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0020	.0017	.0004	.0002	.0036	.0015	-.0025
SDev	.0021	.0004	.0012	.0028	.0064	.0032	.0039
%RSD	104.5	25.09	284.6	1192.	176.4	218.4	151.4
#1	.0012	.0021	-.0009	.0003	.0046	-.0008	-.0020
#2	.0043	.0012	.0007	.0030	-.0032	.0001	.0010
#3	.0004	.0018	.0015	-.0026	.0095	.0052	-.0067
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.0050	.0025	.0050				
Low	-.0050	-.0025	-.0050				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.0015	H.0021	.0015	.0003
SDev	.0014	.0023	.0038	.0007	.0005
%RSD	810.4	149.3	183.7	46.03	208.0
#1	-.0018	-.0010	H.0065	.0018	.0008
#2	.0009	.0033	-.0006	.0020	-.0002
#3	.0004	.0023	.0004	.0007	.0002
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass

High	.0025	.0500	.0010	.0050	.0100		
Low	-.0025	-.0500	-.0020	-.0050	-.0100		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27185	--	--	--	--	--	--
SDev	430.4118	--	--	--	--	--	--
%RSD	1.583250	--	--	--	--	--	--
#1	26691	--	--	--	--	--	--
#2	27388	--	--	--	--	--	--
#3	27477	--	--	--	--	--	--

Method: WATERS Sample Name: ss i Operator: sch
Run Time: 06/29/00 10:04:07
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	Q.0784	Q.0255	.0412	.0011	.0657	Q.0019
SDev	.0000	.0265	.0010	.0007	.0001	.0010	.0001
%RSD	3.198	33.77	4.104	1.685	6.989	1.460	3.218
#1	.0010	Q.0975	Q.0266	.0420	.0010	.0667	Q.0019
#2	.0009	Q.0896	Q.0245	.0409	.0012	.0648	Q.0020
#3	.0010	Q.0482	Q.0256	.0407	.0011	.0656	Q.0018
Errors	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	NOCHECK	QC Fail
Value	.0010	.0400	.0400	.0400	.0010		.0010
Range	20.00	20.00	20.00	20.00	20.00		20.00

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0116	.0041	Q.0034	Q.0862	.0082	.0007	.0105
SDev	.0009	.0010	.0015	.0072	.0158	.0040	.0002
%RSD	7.435	23.27	44.59	8.339	193.2	572.5	2.306
#1	Q.0125	Q.0052	.0051	Q.0854	.0263	.0035	.0107
#2	.0109	.0040	Q.0023	Q.0795	.0014	.0024	.0104
#3	.0113	.0033	Q.0028	Q.0938	-.0031	-.0039	.0103
Errors	QC Pass	QC Pass	QC Fail	QC Fail	NOCHECK	NOCHECK	QC Pass
Value	.0100	.0040	.0050	.0200			.0100
Range	20.00	20.00	20.00	20.00			20.00

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0102	.0110	.0382	.0107	.0107	.0360	.0417
SDev	.0003	.0034	.0022	.0057	.0014	.0027	.0024
%RSD	2.442	30.59	5.698	53.43	13.30	7.370	5.718
#1	.0104	Q.0128	.0357	.0140	.0094	.0330	.0401
#2	.0103	Q.0072	.0393	.0041	.0123	.0381	.0406
#3	.0100	Q.0132	.0396	.0140	.0106	.0367	.0445

Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0100	.0100	.0400				
Range	20.00	20.00	20.00				
Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062		
Units	ppm	ppm	ppm	ppm	ppm		
Avge	.0116	.0001	.0395	.0112	.0115		
SDev	.0037	.0035	.0056	.0005	.0006		
%RSD	31.56	2630.	14.07	4.637	5.161		
#1	Q.0133	-.0008	.0458	.0106	.0110		
#2	Q.0074	.0040	.0370	.0114	.0113		
#3	Q.0141	-.0028	.0355	.0116	Q.0122		

Errors	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value	.0100		.0400	.0100	.0100
Range	20.00		20.00	20.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26625	--	--	--	--	--	--
SDev	306.0757	--	--	--	--	--	--
%RSD	1.149594	--	--	--	--	--	--
#1	26273	--	--	--	--	--	--
#2	26770	--	--	--	--	--	--
#3	26831	--	--	--	--	--	--

Method: WATERS Sample Name: ss i low Operator: sch
Run Time: 06/29/00 10:10:17
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0372	Q-.0056	.0106	.0003	.0481	.0009
SDev	.0006	.0144	.0024	.0001	.0001	.0022	.0008
%RSD	80.49	38.83	42.39	.6192	24.47	4.501	91.25
#1	.0001	.0535	Q-.0083	.0107	.0002	.0457	.0019
#2	.0011	.0260	Q-.0041	.0106	.0004	.0488	.0002
#3	.0009	.0320	Q-.0043	.0106	.0004	.0499	.0008

Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value			.0100	.0100			
Range			20.00	20.00			
Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0043	Q.0013	-.0012	.0540	.0001	-.0003	.0028
SDev	.0006	.0007	.0010	.0083	.0107	.0080	.0001
%RSD	14.37	55.49	79.87	15.42	8430.	2355.	3.869
#1	Q.0044	Q.0015	-.0001	.0527	.0116	.0067	.0028

#2	Q.0036	Q.0005	-.0020	.0464	-.0096	-.0091	.0026
#3	Q.0048	Q.0018	-.0016	.0629	-.0016	.0014	.0028
Errors	QC Fail	QC Fail	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value	.0025	.0010					.0025
Range	20.00	20.00					20.00
Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	Q.0049	Q.0040	Q.0078	.0022	.0066	.0079	.0067
SDev	.0007	.0014	.0024	.0016	.0013	.0036	.0014
%RSD	13.50	36.31	31.01	75.41	20.23	45.52	20.40
#1	Q.0042	Q.0045	.0097	.0031	.0062	.0100	.0080
#2	Q.0055	.0024	.0087	.0003	.0055	.0100	.0053
#3	Q.0051	Q.0051	Q.0051	.0031	.0081	.0038	.0068
Errors	QC Fail	QC Fail	QC Fail	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0025	.0025	.0100				
Range	20.00	20.00	20.00				
Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062		
Units	ppm	ppm	ppm	ppm	ppm		
Avge	.0017	.0008	.0120	Q.0039	.0035		
SDev	.0010	.0040	.0036	.0003	.0003		
%RSD	56.47	498.7	30.21	8.218	9.569		
#1	.0020	-.0036	Q.0146	Q.0040	.0039		
#2	.0024	.0041	Q.0134	Q.0036	.0034		
#3	.0006	.0019	Q.0079	Q.0042	.0032		
Errors	NOCHECK	NOCHECK	QC Pass	QC Fail	NOCHECK		
Value			.0100	.0025			
Range			20.00	20.00			
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	26795	--	--	--	--	--	--
SDev	145.0736	--	--	--	--	--	--
%RSD	.5414270	--	--	--	--	--	--
#1	26629	--	--	--	--	--	--
#2	26899	--	--	--	--	--	--
#3	26856	--	--	--	--	--	--

Method: WATERS Sample Name: ics a Operator: sch
Run Time: 06/29/00 10:16:27
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	50.89	Q-.0179	.0003	.0001	50.60	-.0022
SDev	.0003	.30	.0033	.0000	.0001	.27	.0004
%RSD	226.6	.5952	18.17	7.451	51.06	.5273	16.71

#1	.0001	51.16	Q-.0166	.0003	.0001	50.62	-.0025
#2	-.0001	50.56	Q-.0216	.0003	.0001	50.32	-.0018
#3	-.0005	50.94	Q-.0155	.0003	.0002	50.85	-.0023
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0050	50.00	.0050	.0050	.0015	50.00	.0025
Range	300.0	20.00	300.0	300.0	300.0	20.00	300.0
Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0022	.0002	-.0003	50.64	-.0035	52.42	.0036
SDev	.0008	.0014	.0016	.26	.0187	.31	.0001
%RSD	36.69	584.9	513.1	.5066	539.4	.5915	1.883
#1	.0025	.0017	-.0004	50.66	.0181	52.62	.0036
#2	.0028	-.0000	-.0018	50.38	-.0148	52.06	.0035
#3	.0013	-.0010	.0013	50.89	-.0138	52.58	.0036
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0050	.0050	.0050	50.00	.0500	50.00	.0050
Range	300.0	300.0	300.0	20.00	300.0	20.00	300.0
Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.0016	.0028	-.0051	.0050	-.0027	-.0094	.0027
SDev	.0012	.0028	.0016	.0038	.0030	.0026	.0016
%RSD	77.20	100.5	30.70	75.57	110.8	27.87	60.13
#1	.0029	.0036	-.0034	.0045	.0007	-.0064	.0018
#2	.0014	-.0003	-.0064	.0015	-.0050	-.0109	.0017
#3	.0005	.0051	-.0055	.0090	-.0039	-.0109	.0045
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.0050	.0050	.0050				
Range	300.0	300.0	300.0				
Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062		
Units	ppm	ppm	ppm	ppm	ppm		
Avge	.0013	.0021	-.0004	.0015	.0028		
SDev	.0024	.0025	.0046	.0010	.0007		
%RSD	181.1	120.7	1242.	68.24	26.41		
#1	.0021	.0039	-.0056	.0004	.0025		
#2	.0032	.0030	.0014	.0017	.0023		
#3	-.0013	-.0008	.0031	.0023	.0037		
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass		
Value	.0050	.0050	.0050	.0050	.0050		
Range	300.0	300.0	300.0	300.0	300.0		

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27001	--	--	--	--	--	--

SDev	166.7723	--	--	--	--	--	--
%RSD	.6176523	--	--	--	--	--	--
#1	26840	--	--	--	--	--	--
#2	27173	--	--	--	--	--	--
#3	26990	--	--	--	--	--	--

Method: WATERS Sample Name: ics ab Operator: sch
Run Time: 06/29/00 10:22:51
Comment: sample id's begin with "AB"
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	Ba4934	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3089	51.34	.9710	.3070	.0989	50.59	.3026
SDev	.0058	1.06	.0218	.0069	.0017	1.00	.0064
%RSD	1.882	2.071	2.246	2.235	1.720	1.974	2.108
#1	.3115	51.89	.9719	.3111	.0994	50.90	.3047
#2	.3129	52.02	.9924	.3109	.1004	51.40	.3076
#3	.3022	50.12	.9488	.2991	.0971	49.47	.2954
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.3000	50.00	1.000	.3000	.1000	50.00	.3000
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.3057	.2997	.3158	50.73	Q3.049	52.61	.2069
SDev	.0046	.0060	.0079	1.05	.113	1.12	.0041
%RSD	1.519	2.020	2.498	2.060	3.720	2.131	1.985
#1	.3075	.3016	.3202	51.08	Q3.156	53.12	.2083
#2	.3091	.3045	.3206	51.55	Q3.061	53.39	.2101
#3	.3004	.2929	.3067	49.55	Q2.930	51.33	.2023
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.3000	.3000	.3000	50.00	20.00	50.00	.2000
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	Ni2316	Pb2203	Se1960	2203/1	2203/2	1960/1	1960/2
Units	ppm						
Avge	.3025	1.033	.4855	1.038	1.023	.4781	.4995
SDev	.0091	.020	.0110	.020	.022	.0111	.0112
%RSD	3.001	1.956	2.258	1.887	2.108	2.318	2.241
#1	.3056	1.037	.4871	1.042	1.024	.4812	.4980
#2	.3096	1.051	.4956	1.055	1.043	.4873	.5114
#3	.2922	1.011	.4739	1.016	1.000	.4658	.4892
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	.3000	1.000	.5000				
Range	20.00	20.00	20.00				

Elem	Sb2068	Sn1899	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avge	.9868	.9930	1.037	.2962	.3029
SDev	.0184	.0275	.014	.0059	.0072
%RSD	1.867	2.772	1.385	1.998	2.375
#1	.9992	1.007	1.040	.2976	.3039
#2	.9955	1.011	1.050	.3012	.3096
#3	.9656	.9613	1.022	.2897	.2953
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass

Value	1.000	1.000	1.000	.3000	.3000		
Range	20.00	20.00	20.00	20.00	20.00		
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	27328	--	--	--	--	--	--
SDev	616.8163	--	--	--	--	--	--
%RSD	2.257058	--	--	--	--	--	--
#1	27052	--	--	--	--	--	--
#2	26898	--	--	--	--	--	--
#3	28035	--	--	--	--	--	--

ACCURA ANALYTICAL LABORATORY, INC.

6017 Financial Drive, Norcross, Georgia, 30071, Phone (770) 449-8800

CASE NARRATIVE for Project Number: 25673
Client Project: N.S. Mayport SWMU 15 / 149294-CTO 0007
Task Order Manager: Keith Conn

The following items were noted concerning this project:

1. The following samples were received by Accura Analytical Laboratory on 9/27/00 at 0940:

Client I.D.	Laboratory I.D.
007-MW01S-Q3-00	AC00094
007-MW03S-Q3-00	AC00095
007-MW04S-Q3-00	AC00096
007-MW05S-Q3-00	AC00097
007-MW08S-Q3-00	AC00098
007-DUP-Q3-00	AC00099
007-EQB-Q3-00	AC00100

2. The cooler temperature was 2^0C upon receipt.

Accura Analytical Laboratory

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FL Certification # E87429 NC Certification # 483 SC Certification # 98015 USACE-MRD Approved

LABORATORY REPORT

Accura Sample ID #: AC00094 **Accura Project #: 25673**

Client: CH2M HILL - CCI Date Sampled: 09/26/2000

Client Contact: KEITH CONN Date Received: 09/27/2000

Client Project Number: 149294 - CTO 0007 Date Reported: 10/11/2000

Client Project Name: N. S. MAYPORT SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW01S-Q3-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 10/02/2000 Date Analyzed: 10/03/2000 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.0089	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.23	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-139)	66	
Tetrachloro-m-xylene (Range 16-159)	71	

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LABORATORY REPORT

Accura Sample ID #: AC00095 **Accura Project #: 25673**

Client: CH2M HILL - CCI Date Sampled: 09/26/2000

Client Contact: KEITH CONN Date Received: 09/27/2000

Client Project Number: 149294 - CTO 0007 Date Reported: 10/11/2000

Client Project Name: N. S. MAYPORT SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW03S-Q3-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 10/02/2000 Date Analyzed: 10/03/2000 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-139)	78	
Tetrachloro-m-xylene (Range 16-159)	61	

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LABORATORY REPORT

Accura Sample ID #: AC00096 **Accura Project #: 25673**

Client: CH2M HILL - CCI Date Sampled: 09/26/2000

Client Contact: KEITH CONN Date Received: 09/27/2000

Client Project Number: 149294 - CTO 0007 Date Reported: 10/19/2000

Client Project Name: N. S. MAYPORT SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW04S-Q3-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 10/02/2000 Date Analyzed: 10/03/2000 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.30	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	0.24	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	1.3	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	0.13	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	0.16	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-139)	24	
Tetrachloro-m-xylene (Range 16-159)	69	

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LABORATORY REPORT

Accura Sample ID #: AC00097 **Accura Project #: 25673**

Client: CH2M HILL - CCI Date Sampled: 09/26/2000

Client Contact: KEITH CONN Date Received: 09/27/2000

Client Project Number: 149294 - CTO 0007 Date Reported: 10/11/2000

Client Project Name: N. S. MAYPORT SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW05S-Q3-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 10/02/2000 Date Analyzed: 10/03/2000 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-139)	80	
Tetrachloro-m-xylene (Range 16-159)	71	

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LABORATORY REPORT

Accura Sample ID #: AC00098 **Accura Project #: 25673**

Client: CH2M HILL - CCI Date Sampled: 09/26/2000

Client Contact: KEITH CONN Date Received: 09/27/2000

Client Project Number: 149294 - CTO 0007 Date Reported: 10/11/2000

Client Project Name: N. S. MAYPORT SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW08S-Q3-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 10/02/2000 Date Analyzed: 10/03/2000 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-139)	90	
Tetrachloro-m-xylene (Range 16-159)	80	

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FL Certification # E87429 NC Certification # 483 SC Certification # 98015 USACE-MRD Approved

LABORATORY REPORT

Accura Sample ID #: AC00099 **Accura Project #: 25673**

Client: CH2M HILL - CCI Date Sampled: 09/26/2000

Client Contact: KEITH CONN Date Received: 09/27/2000

Client Project Number: 149294 - CTO 0007 Date Reported: 10/11/2000

Client Project Name: N. S. MAYPORT SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-DUP-Q3-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 10/02/2000 Date Analyzed: 10/03/2000 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.30	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	0.22	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	1.3	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	0.13	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	0.16	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-139)	28	
Tetrachloro-m-xylene (Range 16-159)	62	

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FL Certification # E87429 NC Certification # 483 SC Certification # 98015 USACE-MRD Approved

LABORATORY REPORT

Accura Sample ID #: AC00100 **Accura Project #: 25673**

Client: CH2M HILL - CCI Date Sampled: 09/26/2000

Client Contact: KEITH CONN Date Received: 09/27/2000

Client Project Number: 149294 - CTO 0007 Date Reported: 10/11/2000

Client Project Name: N. S. MAYPORT SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-EQB-Q3-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 10/02/2000 Date Analyzed: 10/03/2000 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/02/2000 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-139)	49	
Tetrachloro-m-xylene (Range 16-159)	73	

Accura Analytical Laboratory, Inc.

ACCURA ANALYTICAL LABORATORY, INC.

6017 Financial Drive, Norcross, Georgia 30017, Phone (770)449-8800, FAX (770)449-5477

FL Certification # E87429 NC Certification # 483 SC Certification # 98015 USACE-MRD Approved

LABORATORY REPORT

Accura Sample ID #: AC00101 **Accura Project #: 25673**

Client: CH2M HILL - CCI Date Sampled: 09/27/2000

Client Contact: KEITH CONN Date Received: 09/27/2000

Client Project Number: 149294 - CTO 0007 Date Reported: 10/11/2000

Client Project Name: N. S. MAYPORT SWMU 15 Sample Matrix: WATER

Client Sample ID: METHOD BLANK

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 10/02/2000 Date Analyzed: 10/03/2000 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/01/2000 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest QC Surrogates (Waters) Method Ref: 8081A

Date Ext/Dig/Prep: 09/29/2000 Date Analyzed: 10/01/2000 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range 50-124)	48	
Tetrachloro-m-xylene (Range 54-130)	66	

Accura Analytical Laboratory, Inc.

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

AML Project # 25673

COC NUMBER: **149294-02**

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
N.S. Mayport SWMU 15	**149294**	**Accura Analytical Laboratory**	**Keith Conn J.A Jones Env. Services**	**6219 Authority Ave. Building 1 Jacksonville, FL 32221 Ph:(904) 7774812 Fax: (904) 7774262**
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
SWMU 15 Quarterly GW	**0007**	**1786**	**Jeff Wilmoth CH2M Hill Constuctors, Inc.**	**115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 Ph:(770)604-9182 Ext.561 Fax:604-9282**
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
Keith Conn	**Ph:(904)777-4812 Fax:(904) 777-4262**	**Ph:(770) 449-8800 Fax:(770) 449-5477**		

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	ANALYSES REQUIRED (Include Method Numbers): TCL Pesticides by 8081A	Arsenic by 7060A									SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID AC:
1	**007-MW01S-Q3-00**	**MPT-15-MWO-1S**	**W**	**09/26/00**	**10:50**	**III/C**	**14**	**2**	**1**									**Grab**		00094
2	**007-MW03S-Q3-00**	**MPT-15-MWO-3S**	**W**	**09/26/00**	**12:05**	**III/C**	**14**	**3**	**2**									**Grab**	**MS/MSD**	00095
3	**007-MW04S-Q3-00**	**MPT-15-MWO-4S**	**W**	**09/26/00**	**12:50**	**III/C**	**14**	**2**	**1**									**Grab**		00096
4	**007-MW05S-Q3-00**	**MPT-15-MWO-5S**	**W**	**09/26/00**	**13:50**	**III/C**	**14**	**2**	**1**									**Grab**		00097
5	**007-MW08S-Q3-00**	**MPT-15-MWO-8S**	**W**	**09/26/00**	**11:35**	**III/C**	**14**	**2**	**1**									**Grab**		00098
6	**007-DUP-Q3-00**	**Duplicate**	**W**	9/26/00		**III/C**	**14**	**2**	**1**									**Grab**		00099
7	**007-EQB-Q3-00**	**Equipment Blank**	**W**	**09/26/00**	**11:00**	**III/C**	**14**	**2**	**1**									**Grab**	**Prepared in the Field**	00100
8																				
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Randy Dumaop / Keith Conn J.A. Jones Environmental Services	**Federal Express TRK# 790366278046, 790366278252.**	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R.Dumaop	**9/26/00**	**18:00**	**Federal Express**	**9/26/00**	**18:00**
Printed Name and Signature:			Printed Name and Signature:		
FedEx	9/27/00	09:40	DAVID C. FULLER	9/27/00	09:40
Printed Name and Signature:			Printed Name and Signature:		

TABLE 2-3
PROJECT QUALITY CONTROL OBJECTIVES
AAL PROJECT #25673

		Project Control Recoveries				Accuracy Limits		Project Control		Precision Limits		Project Control Recoveries		Accuracy Limits		Project Control		Precision Limits	
		MS	MSD	MS	MSD	MS/MSD Recoveries		MS/MSD % Deviation		MS/MSD Deviation		LSC	LCS	LCS Recoveries		Field Dup % Deviation		Field Dup Deviation	
Method No	Analyte / Component	Water		Soil		Water	Soil	Water	Soil	Water	Soil	Water	Soil	Water	Soil			Water	Soil
TCL PESTICIDES/AROCHLORS						%	%			%	%			%	%			%	%
8081A	alpha-BHC	80	80			60-140	20-150	0%	#VALUE!	<30	<50	84		75-125	65-135			<50	<75
8081A	beta-BHC	82	82			60-140	20-150	0%	#VALUE!	<30	<50	85		51-125	41-133			<50	<75
8081A	delta-BHC	86	85			60-140	20-150	1%	#VALUE!	<30	<50	93		75-126	65-136			<50	<75
8081A	gamma-BHC (Lindane)	82	84			60-140	20-150	2%	#VALUE!	<30	<50	94		73-125	63-130			<50	<75
8081A	Heptachlor	89	87			60-140	20-150	2%	#VALUE!	<30	<50	91		45-128	35-138			<50	<75
8081A	Aldrin	86	82			60-140	20-150	5%	#VALUE!	<30	<50	86		47-125	37-126			<50	<75
8081A	Heptachlor epoxide	94	94			60-140	20-150	0%	#VALUE!	<30	<50	96		53-134	43-144			<50	<75
8081A	Endosulfan I	83	82			60-140	20-150	1%	#VALUE!	<30	<50	85		49-143	39-153			<50	<75
8081A	Dieldrin	95	94			60-140	20-150	1%	#VALUE!	<30	<50	99		42-132	32-142			<50	<75
8081A	4,4'-DDE	94	92			60-140	20-150	2%	#VALUE!	<30	<50	98		45-139	35-149			<50	<75
8081A	Endrin	100	99			60-140	20-150	1%	#VALUE!	<30	<50	101		43-134	33-144			<50	<75
8081A	Endosulfan II	87	86			60-140	20-150	1%	#VALUE!	<30	<50	91		75-159	65-169			<50	<75
8081A	4,4'-DDD	98	97			60-140	20-150	1%	#VALUE!	<30	<50	100		48-136	38-146			<50	<75
8081A	Endosulfan sulfate	104	104			60-140	20-150	0%	#VALUE!	<30	<50	104		46-141	36-151			<50	<75
8081A	4,4'-DDT	98	101			60-140	20-150	3%	#VALUE!	<30	<50	101		34-143	25-153			<50	<75
8081A	Methoxychlor	100	103			60-140	20-150	3%	#VALUE!	<30	<50	102		73-142	63-152			<50	<75
8081A	Endrin ketone	97	98			60-140	20-150	1%	#VALUE!	<30	<50	97		43-134	33-144			<50	<75
8081A	Endrin aldehyde	98	98			60-140	20-150	0%	#VALUE!	<30	<50	99		75-150	35-160			<50	<75
8081A	alpha-Chlordane	95	95			60-140	20-150	0%	#VALUE!	<30	<50	99		41-125	31-135			<50	<75
8081A	gamma-Chlordane	91	90			60-140	20-150	1%	#VALUE!	<30	<50	94		41-125	31-133			<50	<75
8081A	Toxaphene	NA	NA			60-140	20-150	#VALUE!	#VALUE!	<30	<50	NA		41-126	31-136			<50	<75
8081A	Decachlorobiphenyl (DCBP) (Surr)	82	79			34-133	25-143	4%	#VALUE!			53							
8081A	Tetrachloro-m-xylene (TCMX) (Surr)	70	65			45-125	35-135	7%	#VALUE!			71							
METALS BY TRACE ICP						mg/L	mg/kg			%	%			%	%			%	%
6010B	Arsenic	106	105			50-150	30-170	1%	#VALUE!	<30	<50	96		80-120	80-120			<50	<75

Notes:
1) SW-846 Methods unless otherwise noted
2) Includes sediments, waste, solids

NS = Not Specified
NA = Not Applicable

PR[illegible]			
ML[illegible]			
Are all standards within expiration dates for both stock and serial standards?	[illegible]	[illegible]	[illegible]
Are continuing calibrations compliant with method requirements?	[illegible]	[illegible]	[illegible]
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	Y	N	[illegible]
Is blank result less than 1/2 RDL for analytes of interest?	Y	N	NA
Are all spike recoveries acceptable for the LCS/LCSD?	Y	N	NA
Are all surrogate standard recoveries acceptable (blank, LCS, samples)?	Y	N	NA
If blank, LCS or surrogate results are unacceptable, was re-extraction performed to confirm?	Y	N	NA
Are all requested analytes below the upper calibration limit?	Y	N	NA
Were sample analyses performed within holding times?	Y	N	NA
Were analyses performed such that carryover was not a problem?	Y	N	NA
For Pesticides & Herbicides, were all hits verified with second column confirmation?	Y	N	NA
Are quantitations based on the latest acceptable initial calibration?	Y	N	NA
Are all mistakes single lined, initialled, and dated?	Y	N	NA
Are all applicable runlog and extraction sheets signed, dated, and included?	Y	N	NA
Are all analytes to be reported indicated as such on the raw data?	Y	N	NA
Was analysis completed as instructed on the Log-in Record?	Y	N	NA
Has all data been entered into LIMS?	Y	N	NA

Analyst: [signature]	
Date: 10/6/00	Time: 1300

PEER REVIEW			
Are continuing calibrations compliant with method requirements?	Y	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	Y	N	NA
Are all blank and QC results acceptable?	Y	N	NA
Are all surrogate standard recoveries acceptable (blank, LCS, samples)?	Y	N	NA
Are all calculations correct and reported in the proper units?	Y	N	NA
Were sample analyses performed within holding times?	Y	N	NA
Are quantitations based on the latest acceptable initial calibration?	Y	N	NA
Is the runlog completely filled out (including review signature/date)?	Y	N	NA
Was analysis completed as instructed on the Log-in Record?	Y	N	NA
Have all LIMS entries been checked for accuracy?	Y	N	NA

Reviewer:	
Date:	Time:

ACCURA ANALYTICAL LABORATORIES

EXTRACTION LOG

ANALYSIS: (PEST) / PCB

DATE/TIME: 9/29/00 1:00pm

MATRIX: WATER

ANALYST: RJ

EXT. METHOD: 3510 / (3520)

INSTRUMENT: GC/ECD

AAL I.D.	SAMPLE VOLUME	pH	SURR 1.0ml	SPIKE 1.0ml	SOLVENT EXCHANGE	FINAL VOLUME	ACID CLEANED	COMMENTS
[redacted]	1L		RJ		HEXANE	5.0ml	N/A	
				RJ				
[redacted]								
00409								CCVRB-01
00410								CCVPB-01

9/30/00 RJ 3:10p.m.

START TIME: 2:30p.m. STOP TIME: 10:30AM RapidVap TEMP.: 45°C

CH2CL2 I.D.: EX00072 HEXANE I.D.: EX00071

SURROGATE I.D.: [redacted] CONC: [redacted] INITIAL: RJ

SPIKE I.D.: [redacted] CONC: 1.25ppm INITIAL: RJ

SPIKE I.D.: [redacted] CONC: [redacted] INITIAL: [redacted]

[redacted] OPERATOR'S INITIALS: RJ

PCB Instrument Run Log

BORATORY, INC.

Analytical Services

10/01/00

08101

Btx-CLP1 (F)

Btx-CLP2

Down % (<15%): 6.3%

Down % (<15%): 8.3%

Pest Calibration Date: 09/28/00

PCB Calibration Date: –

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil		
Water	21-131	D-160

Method Filename	Matrix	[illegible]	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
[illegible]	std		NA	NA	
	Solv		↓	↓	
	std		↓	↓	P00119
	↓		102	91	P00123
00300CL	↓		NA	NA	P00118
0100TX	↓		↓	↓	~~97%~~ Yes 10/01 97% P00131
2800P	Solv		↓	↓	
			[illegible]	[illegible]	
			71	53	
			71	66	
			61	78	
			70	82	
			65	79	
			64	23	
			71	80	
			80	90	
			56	26	
			[illegible]	49	
			76	33	
			72	39	
	Solv		NA	NA	
	std		↓	↓	P00119
	↓		97	94	P00123

[signature] 10/01/00

GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 10/02/00 **Analyst Initials:** YCK **Instrument Method:** 8081 **Calibration Column:** DEx **Confirmation Column:**

DDT Breakdown % (<15%): 10.3% **Endrin Breakdown % (<15%):** 14.9%

Pest Calibration Date: _____ **PCB Calibration Date:** _____

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil		
Water		

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER						
2	[redacted]						
3							
4	[redacted]				102	98	
5							97
6							105%
7	Hexane						
8	BLNK 10/02						
9	LCS T 10/02						
10	[redacted]						
11	[redacted]						
12	[redacted]				72	56	TBA clean up
13					67	56	
14					69	24	
15					62	28	
16	[redacted]						
17	[redacted]						
18	[redacted]				100	96	
	YCK	10/02/00					

Signature/Date: [signature] 10/02/00

[illegible]

Sample : 00094 W Inst [illegible]
Misc : Multiplier [illegible]
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Oct 2 15:40 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. . :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.23	7.91	18023385	19399418	0.178	0.179	
		Spiked Amount 0.250			Recovery	=	71.20%	71.60%	
2)	S	DCB (SURR)	20.98	21.38	13379813	14070908	0.165	0.161	
		Spiked Amount 0.250			Recovery	=	66.00%	64.40%	
		Target Compounds							
2)	T	A-BHC	9.75	9.57	391596	375448	0.003	0.002	
3)	T	B-BHC	10.84	10.73	3049961	2642587	0.046	0.035	
4)	T	LINDANE	0.00	0.00	0	0	N.D.	N.D.	
5)	T	D-BHC	11.28	11.46	290232	130545	0.002	0.001	#
6)	T	HEPTACHLOR	11.80	11.59f	298885	73446	0.003	0.001	#
7)	T	ALDRIN	0.00	12.30	0	32339	N.D.	0.000	#
8)	T	HEPT.EPOXIDE	0.00	13.62	0	142279	N.D.	0.001	#
9)	T	ENDOSULFAN 1	14.79	14.51	525362	71223	0.005	0.001	#
10)	T	GAMMA-CHLORDANE	14.22	0.00	39136	0	0.000	N.D.	#
11)	T	ALPHA-CHLORDANE	14.56f	0.00	59674	0	0.001	N.D.	#
12)	T	DDE	14.69	14.82	73803	40255	0.001	0.000	#
13)	T	DIELDRIN	15.35	15.08	25348	338241	0.000	0.003	#
14)	T	ENDRIN	15.94f	15.81f	51454	144178	0.001	0.002	#
15)	T	DDD	15.94f	0.00	51454	0	0.001	N.D.	#
16)	T	ENDOSULFAN 2	16.34	16.25	170033	31428	0.002	0.000	#
17)	T	ENDRIN ALDEHYDE	17.26	16.95	7065	15657	0.000	0.000	#
18)	T	DDT	16.59	16.71	523241	25471	0.007	0.000	#
19)	T	ENDOS.SULFATE	18.16f	17.51	5845	17484	0.000	0.000	#
20)	T	METHOXYCHLOR	17.63	18.08f	32346	704207	0.001	0.017	#
21)	T	ENDRIN KETONE	18.88f	0.00	17236	0	0.000	N.D.	#

dil: $\frac{5}{1000} = 0.005$

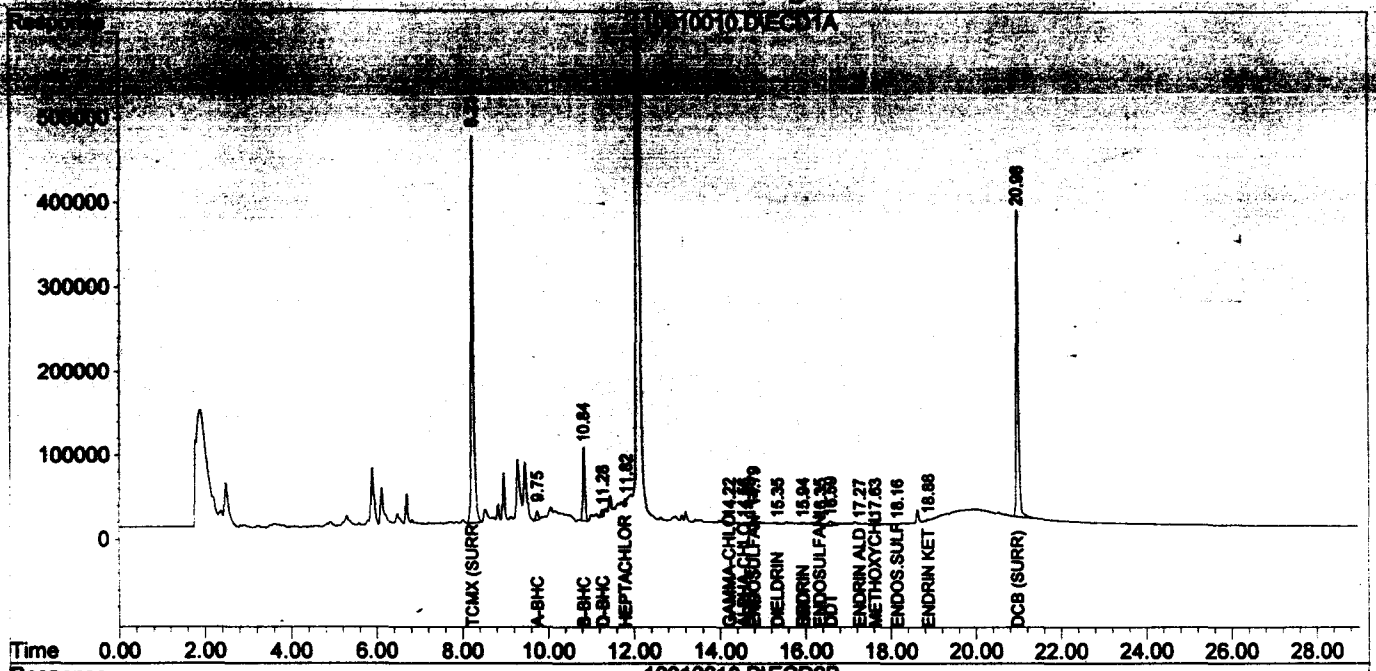
B-BHC : 0.23 ppb

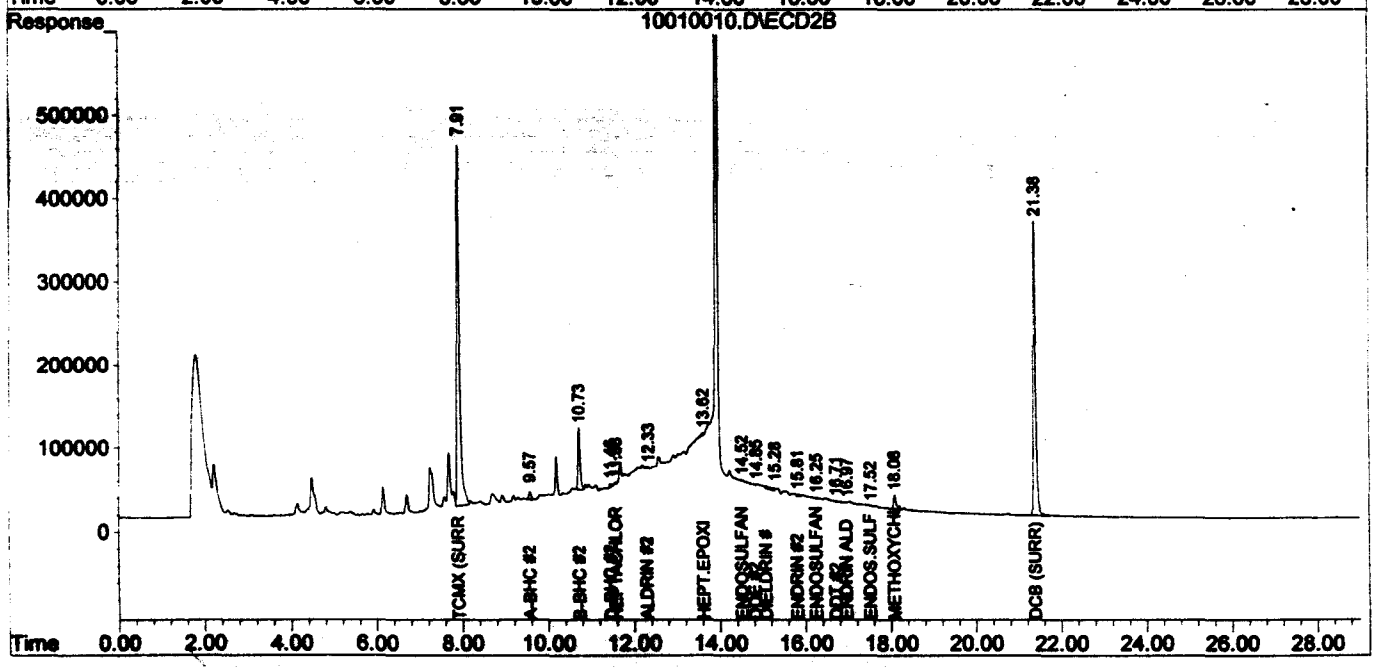
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1: Signal #2:
Oct 2 15:40 2000 Results File:

Quant Method : C:\HPCHEM\1\ 092800P.M (Chemstation Integrator)
Title : Calibration Report By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





[illegible]
[illegible]
[illegible]
[illegible] autointi.e IntFile [illegible]
Quant [illegible] Oct 2 16:03 2000 Quant Result File: 08[illegible]

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Mon Sep 25 09:25:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1) L	TOX 1	16.34	16.46f	215122	145578	0.139	0.033 #
2) L	TOX 2	16.59	16.71f	601568	22976	0.247	0.008 #
3) L	TOX 3	17.16f	16.95	216605	15657	0.064	0.004 #
4) L	TOX 4	17.78	18.08	37490	706647	0.011	0.158 #
5) L	TOX 5	17.98	18.08f	31493	706647	0.007	0.190 #
6) L	TOX 6	0.00	18.83f	0	19227	N.D.	0.008 #
7) L	TOX 7	0.00	0.00	0	0	N.D.	N.D.
Sum	TOX 1			1102277	1616732	0.467	0.401
Average	TOX 1					0.093	0.067

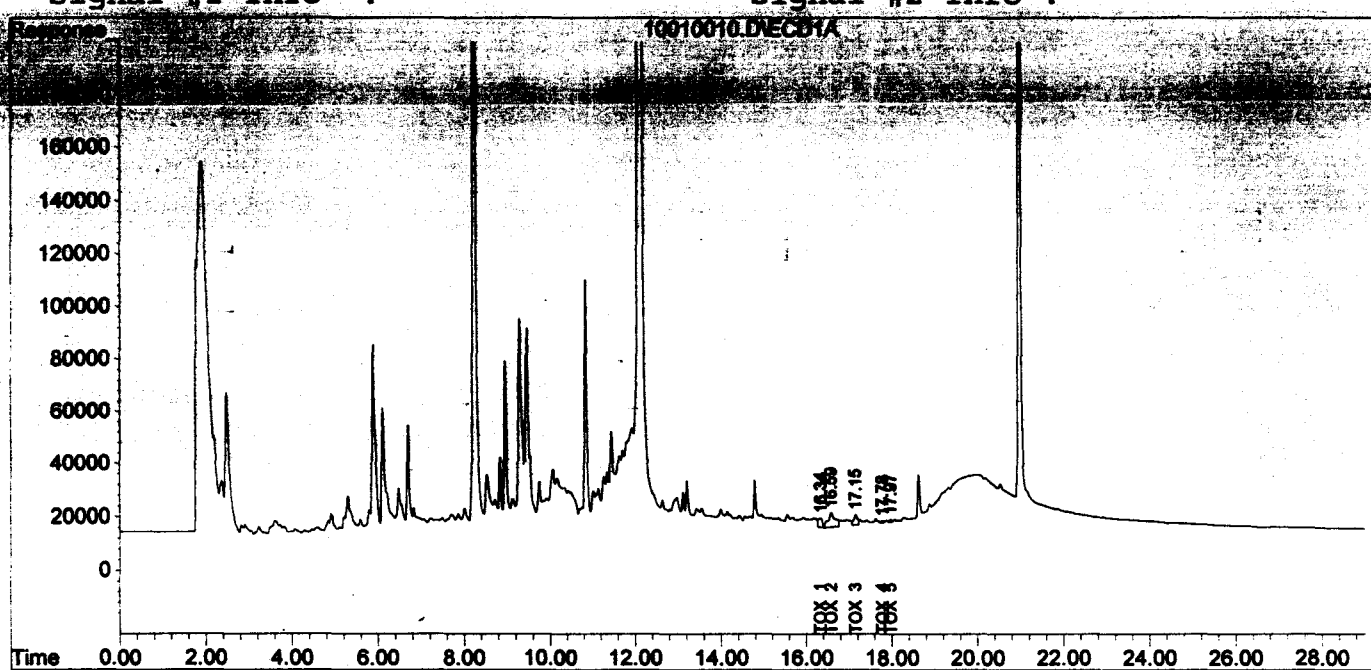
TOX [illegible]

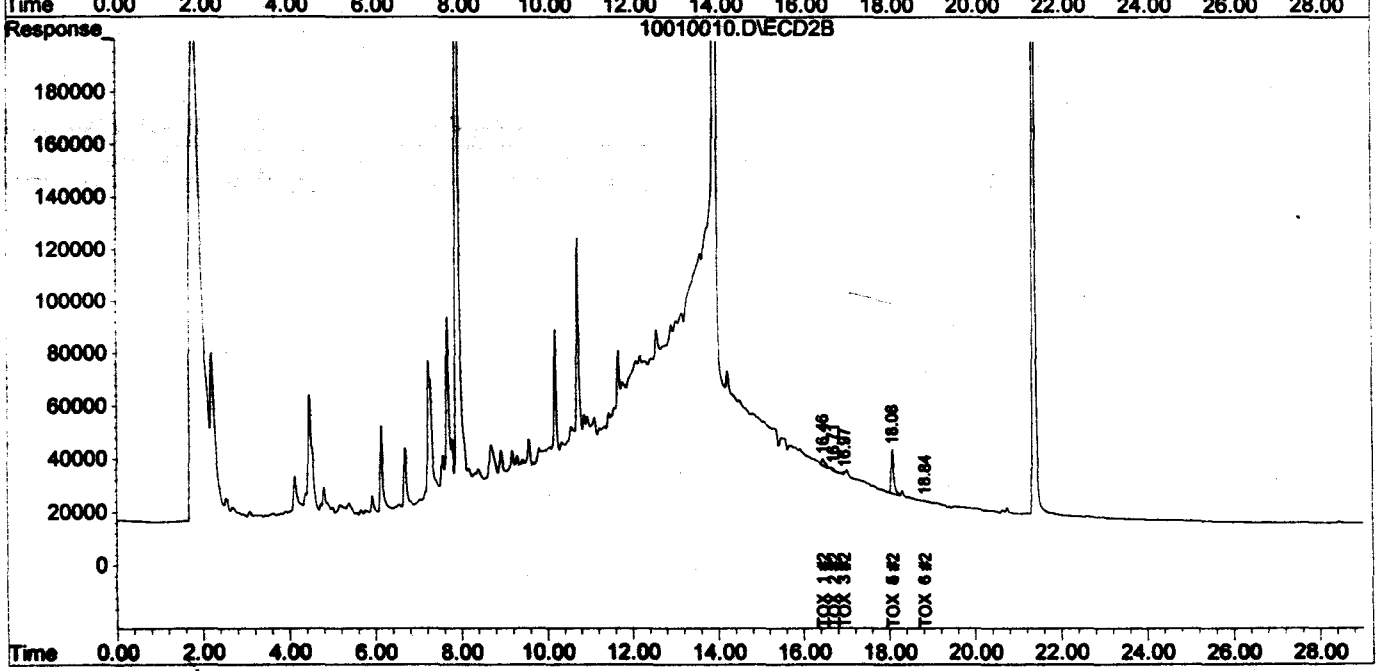
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

[illegible] Signal #1: [illegible] Signal #2: [illegible]
Quant Time: Oct 2 16:03 2000 Quant Results File: [illegible]

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation [illegible]
Title : [illegible] ANALYSIS BY ECD; GC A,08/01/00
Last Update : Mon Sep 25 09:25:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





[illegible]

Response Via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

[illegible]		[illegible]	RT#2	Res#1	Res#2	mg/L	mg/L	
[illegible]								
[illegible] Compounds								
) S	[illegible]	[illegible]23	7.91	15330227	16820679	0.152	0.155	
Spiked Amount	0.250			Recovery	=	60.80%	62.00%	
) S	DCB (SURR)	20.98	21.39	15887866	17033115	0.195	0.194	
Spiked Amount	0.250			Recovery	=	78.00%	77.60%	
Target Compounds								
) T	A-BHC	9.73	9.51f	77199	100967	0.000	0.001	
) T	B-BHC	10.89f	10.71	71646	507750	0.001	0.007	#
) T	LINDANE	10.62	10.50	41167	102887	0.000	0.001	#
) T	D-BHC	11.29	11.47	201105	46420	0.001	0.000	#
) T	HEPTACHLOR	11.81	11.59f	207207	10057	0.002	0.000	#
) T	ALDRIN	12.44f	12.32	21211	31106	0.000	0.000	
) T	HEPT.EPOXIDE	0.00	13.60	0	53917	N.D.	0.000	#
) T	ENDOSULFAN 1	14.79	14.52	598628	329635	0.006	0.003	#
) T	GAMMA-CHLORDANE	14.21	14.05	45658	136357	0.000	0.001	#
) T	ALPHA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
) T	DDE	14.69	14.82	58139	114819	0.001	0.001	#
) T	DIELDRIN	15.35	15.08	21860	260678	0.000	0.002	#
) T	ENDRIN	15.95f	15.73	41000	128535	0.001	0.001	#
) T	DDD	15.95f	16.13f	41000	64705	0.001	0.001	#
) T	ENDOSULFAN 2	16.33	16.26	153274	36225	0.002	0.000	#
) T	ENDRIN ALDEHYDE	17.27	16.95	7786	21304	0.000	0.000	#
) T	DDT	16.60	16.71	585954	25286	0.008	0.000	#
) T	ENDOS.SULFATE	18.28f	0.00	7256	0	0.000	N.D.	#
) T	METHOXYCHLOR	17.63	18.08f	29052	477894	0.001	0.012	#
) T	ENDRIN KETONE	0.00	0.00	0	0	N.D.	N.D.	

Pest cdc

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

DataAcq Meth : 8081D1.M

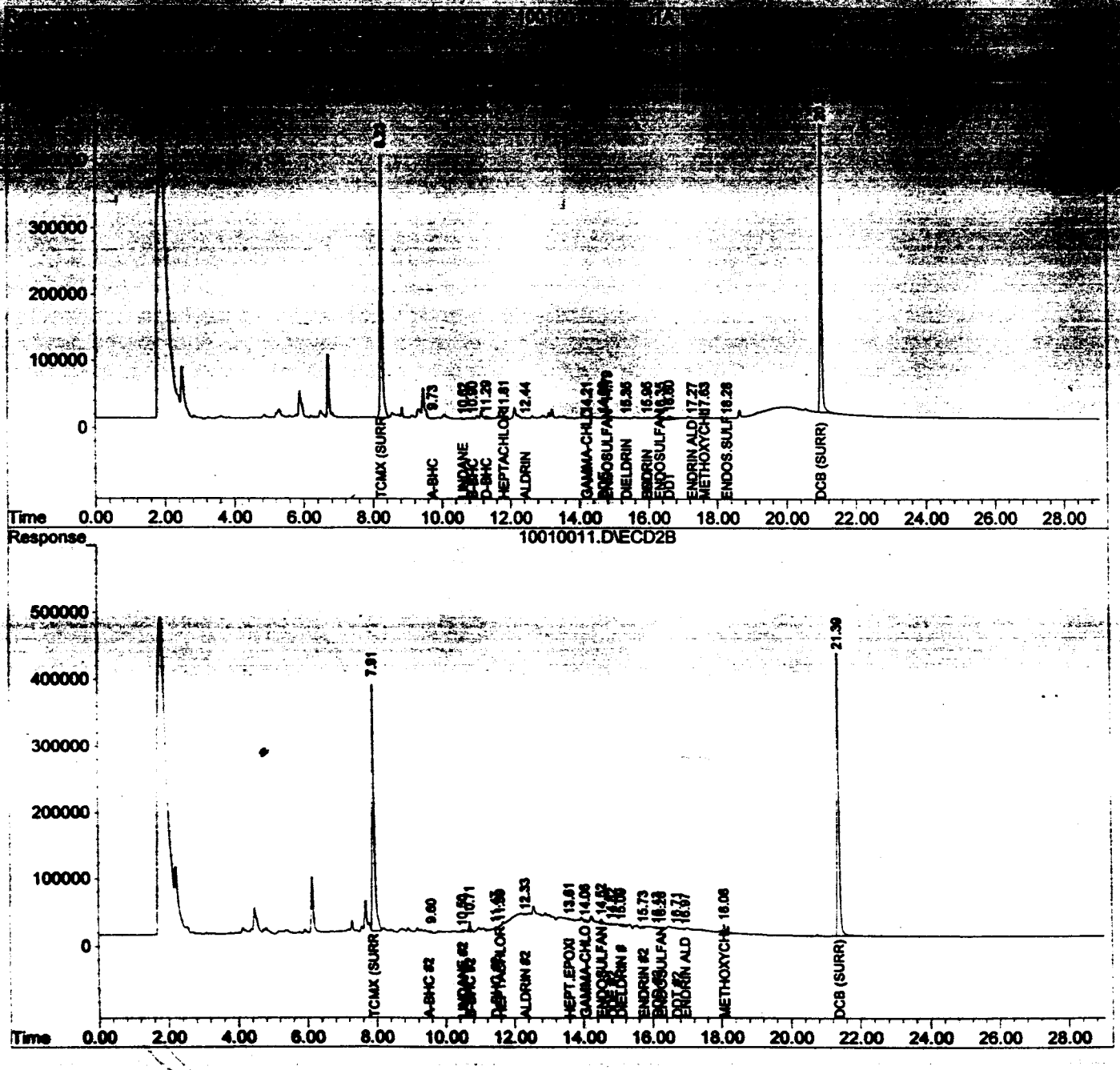
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



[illegible] 2000

[illegible] Calibration

Data [illegible] 8081D1 [illegible]

Volume Inj [illegible] :

Signal #1 Phase : Signal #2 Phase:

Signal #1 Info : Signal #2 Info :

			RT#2	Resp#1	Resp#2	[illegible]	[illegible]
) [illegible]		16.[illegible]	16.47f	[illegible]93613	363725	[illegible]	[illegible]
) [illegible]		16.[illegible]	16.82	667400	[illegible]42374	[illegible]	[illegible]
) L	TOX 3	17.16f	16.95	235385	70258	0.069	[illegible]019 #
) L	TOX 4	17.77	18.08	46380	477894	0.014	[illegible]107 #
) L	TOX 5	17.97	18.08f	39278	477894	0.009	[illegible]29 #
) L	TOX 6	0.00	0.00	0	0	N.D.	N.D.
) L	TOX 7	19.18f	0.00	814073	0	0.557	N.D. #
Sum	TOX 1			1996128	1432146	1.047	0.352
erage	TOX 1					0.175	0.070

TOX [illegible]

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

[redacted]

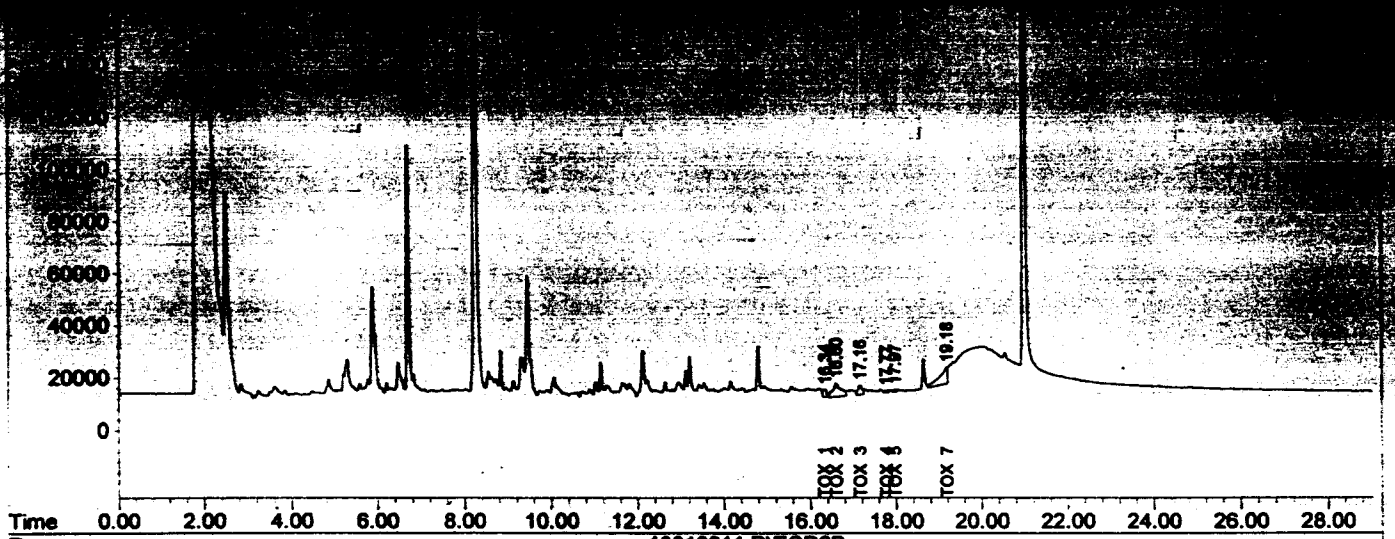
Volume [ml] :

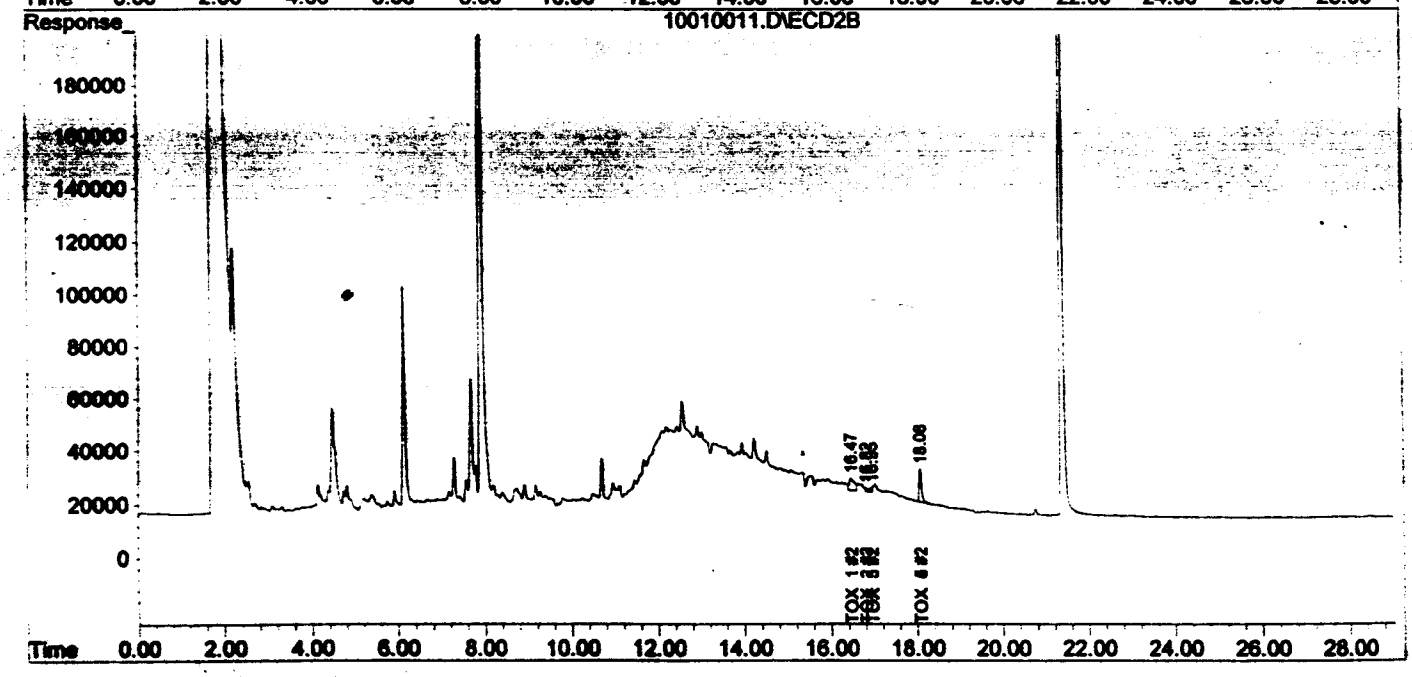
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :





[redacted]

Quant Time: Oct 5 8:58 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest by Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
	System Monitoring Compounds						
1)	S TCMX (SURR)	8.22	7.89	17338912	18522000	0.172	0.171
	Spiked Amount 0.250			Recovery	=	68.80%	68.40%
22)	S DCB (SURR)	20.95	21.36	4850586	5170836	0.060	0.059
	Spiked Amount 0.250			Recovery	=	24.00%	23.60%
	Target Compounds						
2)	T A-BHC	9.74	9.55	202674	241411	0.001	0.001
3)	T B-BHC	10.82	10.71	17517654	18588056	0.266	0.248
4)	T LINDANE	10.57	10.47	116683	66115	0.001	0.000 #
5)	T D-BHC	11.27	11.45	240094	251954	0.002	0.002
6)	T HEPTACHLOR	0.00	0.00	0	0	N.D.	N.D.
7)	T ALDRIN	12.55f	12.28	214395	116300	0.002	0.001 #
8)	T HEPT.EPOXIDE	13.90	13.60	3030023	2011302	0.032	0.018 #
9)	T ENDOSULFAN 1	14.82	14.49	1578941	1752620	0.016 NC	0.015
10)	T GAMMA-CHLORDANE	14.19	14.02	2847158	2394968	0.026	0.018 #
11)	T ALPHA-CHLORDANE	14.48	14.35	4532855	6850523	0.047	0.056
12)	T DDE	14.67	14.88f	136318	264042	0.002	0.002 #
13)	T DIELDRIN	15.33	15.07	388182	693413	0.004	0.006 #
14)	T ENDRIN	15.91	15.79	41462	94441	0.001	0.001 #
15)	T DDD	16.10f	16.12f	133248	240223	0.002	0.003 #
16)	T ENDOSULFAN 2	16.32f	16.29f	266910	798454	0.003	0.008 #
17)	T ENDRIN ALDEHYDE	17.25	16.93	44646	39315	0.001	0.001 #
18)	T DDT	16.62	16.69	279659	58672	0.004	0.001 #
19)	T ENDOS.SULFATE	18.15f	17.64f	11111	17655	0.000	0.000 #
20)	T METHOXYCHLOR	17.63	0.00	7349	0	0.000	N.D. #
21)	T ENDRIN KETONE	18.86	18.71	311361	45733	0.004	0.000 #

B-BHC = 1.3 ppb

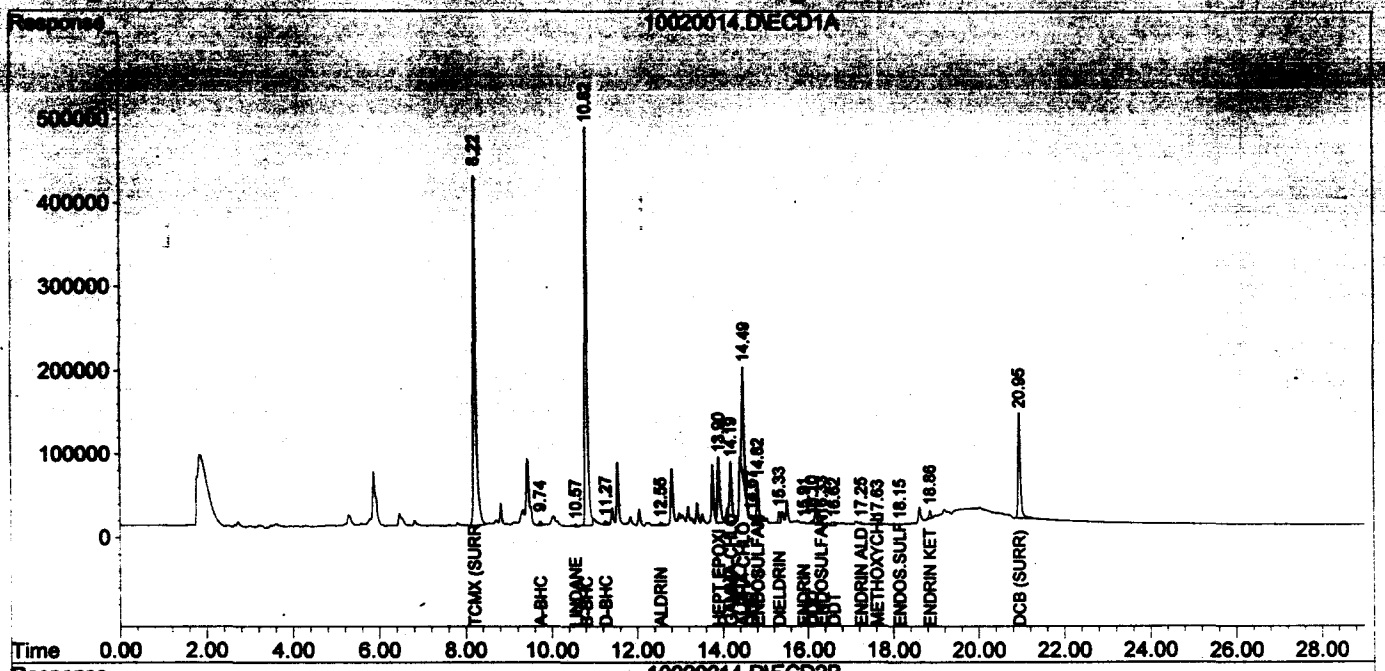
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

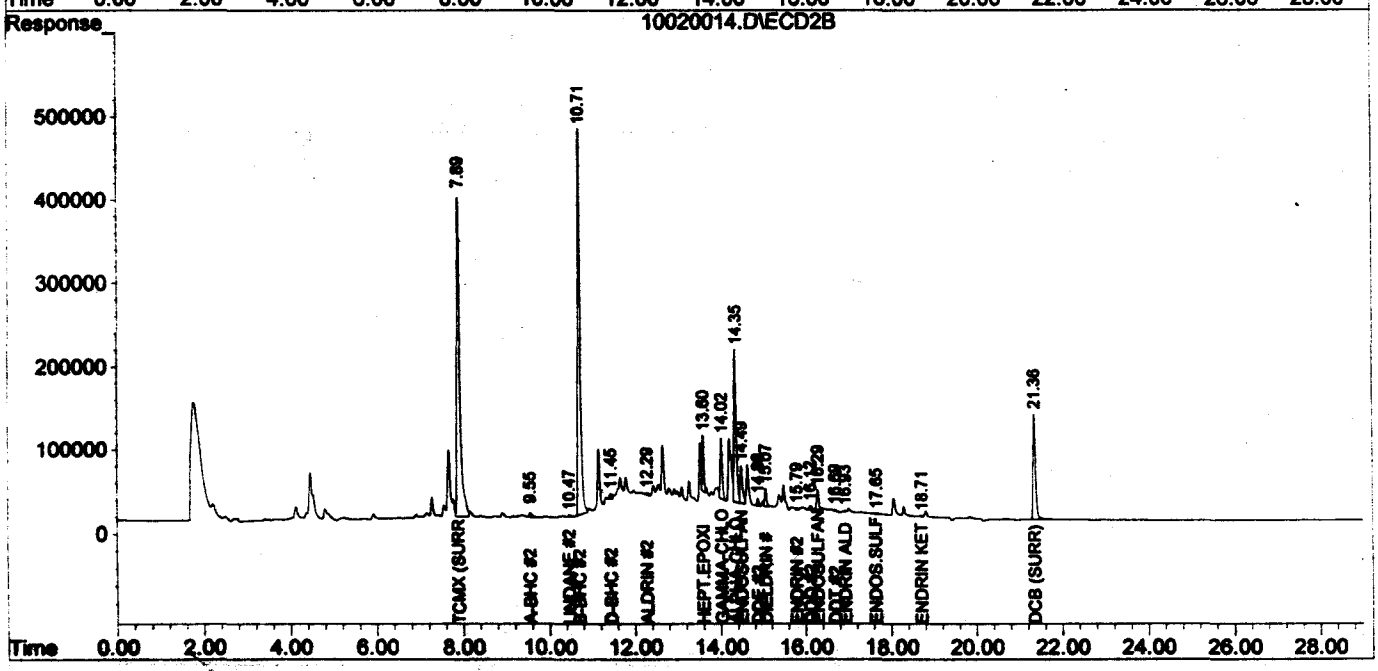
[illegible]

[illegible] #1: [illegible] IntFile Signal #2: [illegible]
Quant Time: Oct 5 [illegible] 2000 Quant Results File: [illegible]

[illegible] C:\[illegible]\1\METHODS\092800P.M (Chemstation [illegible])
Title : Calibration for Pest By Method 8081 (09/28/[illegible])
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

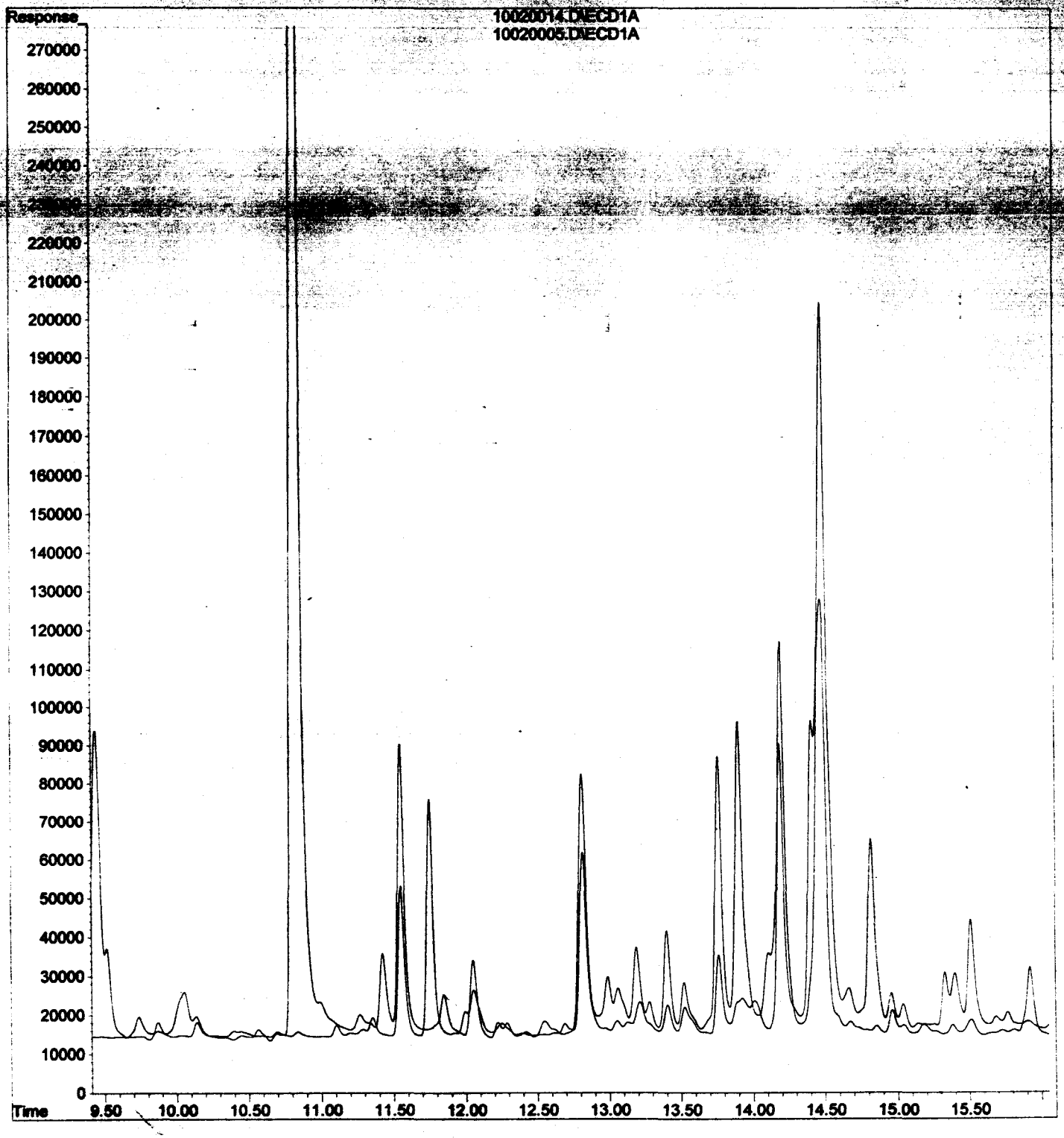




Method 8081D1.M

Misc Info :

Vial Number: 14



[illegible]

Sample : [illegible]
Misc : [illegible]
IntFile Signal #1: EVENTS.E IntFile Signal #2: [illegible]
Quant Time: Oct 2 15:44 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.23	7.91	16097925	18986050	0.159	0.175	
		Spiked Amount 0.250			Recovery	=	63.60%	70.00%	
22)	S	DCB (SURR)	20.98	21.38	4685986	4666960	0.058	0.053	
		Spiked Amount 0.250			Recovery	=	23.20%	21.20%	
		Target Compounds							
2)	T	A-BHC	9.79f	9.60	292811	531814	0.002	0.003	#
3)	T	B-BHC	10.84	10.72	18023830	11779297	0.273	0.157	#
4)	T	LINDANE	0.00	0.00	0	0	N.D.	N.D.	
5)	T	D-BHC	0.00	0.00	0	0	N.D.	N.D.	
6)	T	HEPTACHLOR	0.00	0.00	0	0	N.D.	N.D.	
7)	T	ALDRIN	12.51	0.00	-308313	0	N.D.	N.D.	
8)	T	HEPT.EPOXIDE	13.92	13.63	3039192	4959635	0.032	0.045	#
9)	T	ENDOSULFAN 1	14.83	14.50	2251537	687209	0.023 NC	0.006	#
10)	T	GAMMA-CHLORDANE	14.21	14.02	2342781	213.3E6	0.021	1.593	#
11)	T	ALPHA-CHLORDANE	14.50	14.37	4466396	4091971	0.046	0.034	#
12)	T	DDE	14.68	0.00	173030	0	0.002	N.D.	#
13)	T	DIELDRIN	15.34	15.08	408993	21484	0.004	0.000	#
14)	T	ENDRIN	15.91	15.67f	31636	373838	0.000	0.004	#
15)	T	DDD	16.11f	16.12f	67249	40824	0.001	0.000	#
16)	T	ENDOSULFAN 2	16.29f	16.31f	4246	684435	0.000	0.007	#
17)	T	ENDRIN ALDEHYDE	17.26	17.02f	-1315	-1667975	N.D.	N.D.	
18)	T	DDT	16.58	0.00	248366	0	0.003	N.D.	#
19)	T	ENDOS.SULFATE	18.18	0.00	32401	0	0.000	N.D.	#
20)	T	METHOXYCHLOR	17.62	18.08f	16653	474185	0.000	0.012	#
21)	T	ENDRIN KETONE	18.88	18.73	442401	100093	0.005	0.001	#

~~File Copy~~ Dec 10/6

Report: d-BHC
Endrin Aldehyde < RDL

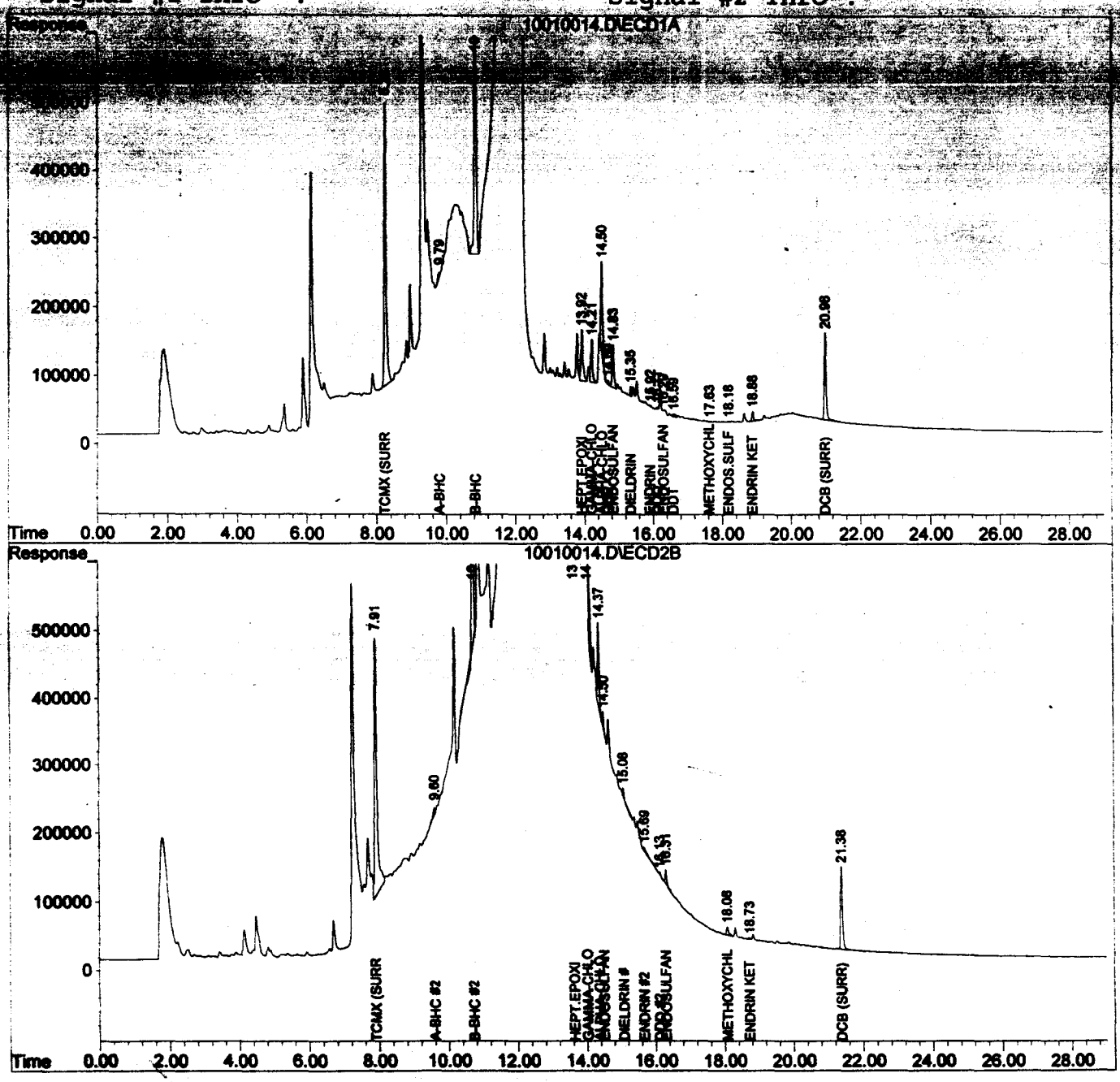
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

[redacted]

Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :



[illegible]
[illegible] 5 9:11 2000 Quant Results File: 080100[illegible]

Quant Method : C:\HPCHEM\1\METHODS\080100[illegible]M (Chemstation [illegible]
Title : TOXAPHENE ANALYSIS BY ECD [illegible] A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

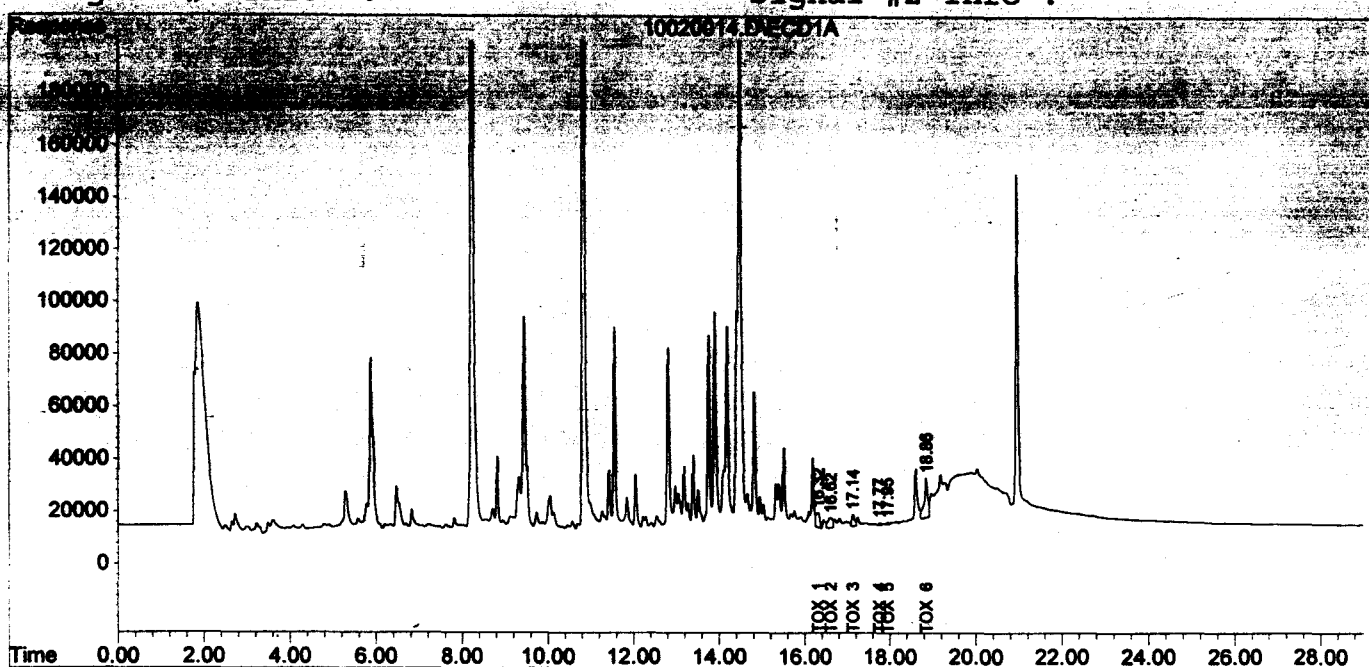
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1) L	TOX 1	16.32	16.38	350734	133157	0.226	0.030	#
2) L	TOX 2	16.62	0.00	312087	0	0.128	N.D.	#
3) L	TOX 3	17.14f	16.93	208923	90531	0.061	0.025	#
4) L	TOX 4	17.77	18.06	31107	888212	0.009	0.198	#
5) L	TOX 5	17.96	0.00	21486	0	0.005	N.D.	#
6) L	TOX 6	18.86f	18.81f	862725	252656	0.305	0.101	#
7) L	TOX 7	0.00	19.28	0	18461	N.D.	0.009	#
Sum	TOX 1			1787062	1383017	0.734	0.363	
Average	TOX 1					0.122	0.073	

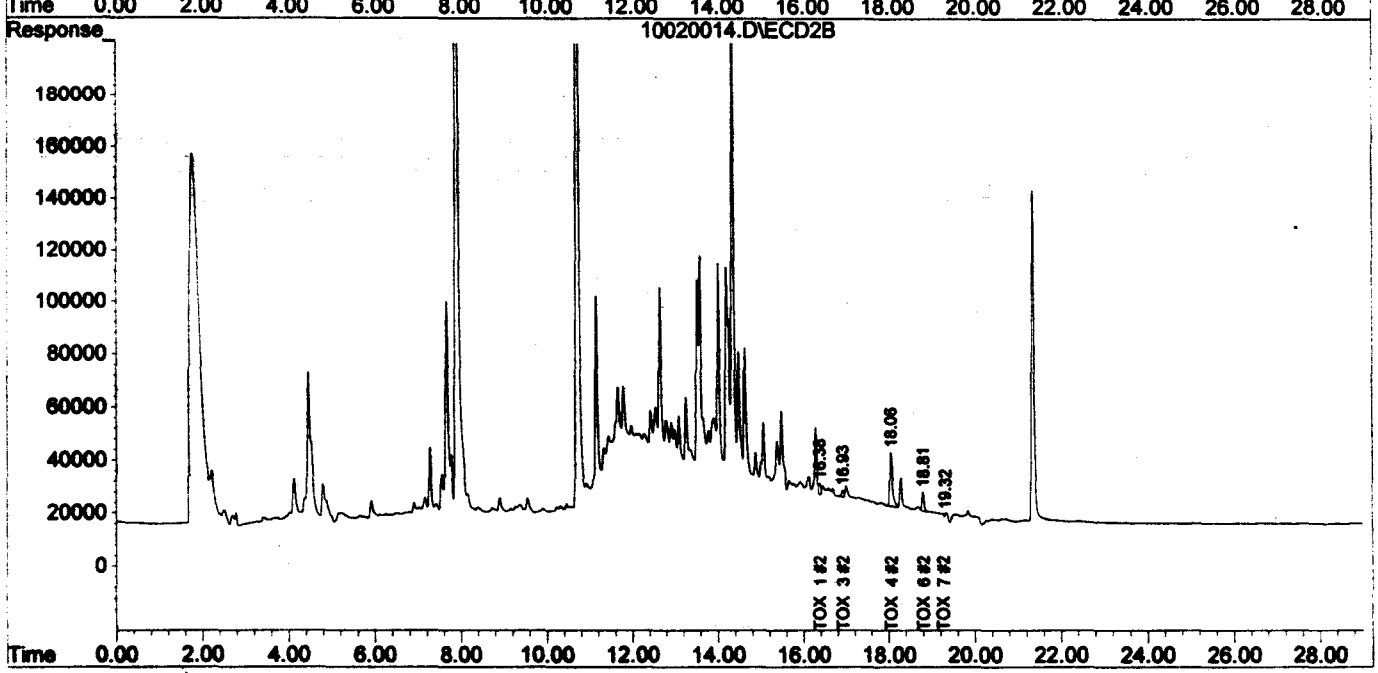
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

[illegible] Signal #2 [illegible]
Quant [illegible] Oct 5 9:11 2000 Quant Results File: 080[illegible]

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation [illegible]
Title : [illegible]PHENE ANALYSIS BY ECD; GC-A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Sample [illegible]0097 W
Misc [illegible]
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2
Quant Time: Oct 2 15:46 2000 Quant Results File: 092800P

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.23	7.91	18017092	19789896	0.178	0.183	
		Spiked Amount 0.250			Recovery	=	71.20% ✓	73.20%	
2)	S	DCB (SURR)	20.98	21.38	16298563	16930444	0.201	0.193	
		Spiked Amount 0.250			Recovery	=	80.40% ✓	77.20%	
		Target Compounds							
2)	T	A-BHC	9.73	9.52f	69743	95626	0.000	0.001	
3)	T	B-BHC	10.89f	10.71	59296	440669	0.001	0.006	#
4)	T	LINDANE	10.62	10.51	89346	66899	0.001	0.000	#
5)	T	D-BHC	11.29	11.47	94981	46440	0.001	0.000	#
6)	T	HEPTACHLOR	11.81f	11.59f	180219	60627	0.002	0.000	#
7)	T	ALDRIN	12.44f	12.33f	19880	25850	0.000	0.000	
8)	T	HEPT.EPOXIDE	0.00	13.60	0	59848	N.D.	0.001	#
9)	T	ENDOSULFAN 1	14.79	14.52	1089042	242727	0.011 -	0.002	#
10)	T	GAMMA-CHLORDANE	14.22	14.04	53007	56163	0.000	0.000	
11)	T	ALPHA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.69	14.82	88402	18971	0.001	0.000	#
13)	T	DIELDRIN	15.35	15.09	10847	155481	0.000	0.001	#
14)	T	ENDRIN	15.95f	15.73	21071	224416	0.000	0.003	#
15)	T	DDD	15.95f	16.09f	21071	129913	0.000	0.001	#
16)	T	ENDOSULFAN 2	16.33	16.26	196633	54522	0.002	0.001	#
17)	T	ENDRIN ALDEHYDE	17.27	17.03f	7994	140323	0.000	0.002	#
18)	T	DDT	16.60	16.71	602050	33022	0.008 -	0.000	#
19)	T	ENDOS.SULFATE	18.28f	0.00	6401	0	0.000	N.D.	#
20)	T	METHOXYCHLOR	17.63	18.08f	45795	480486	0.001	0.012	#
21)	T	ENDRIN KETONE	0.00	0.00	0	0	N.D.	N.D.	

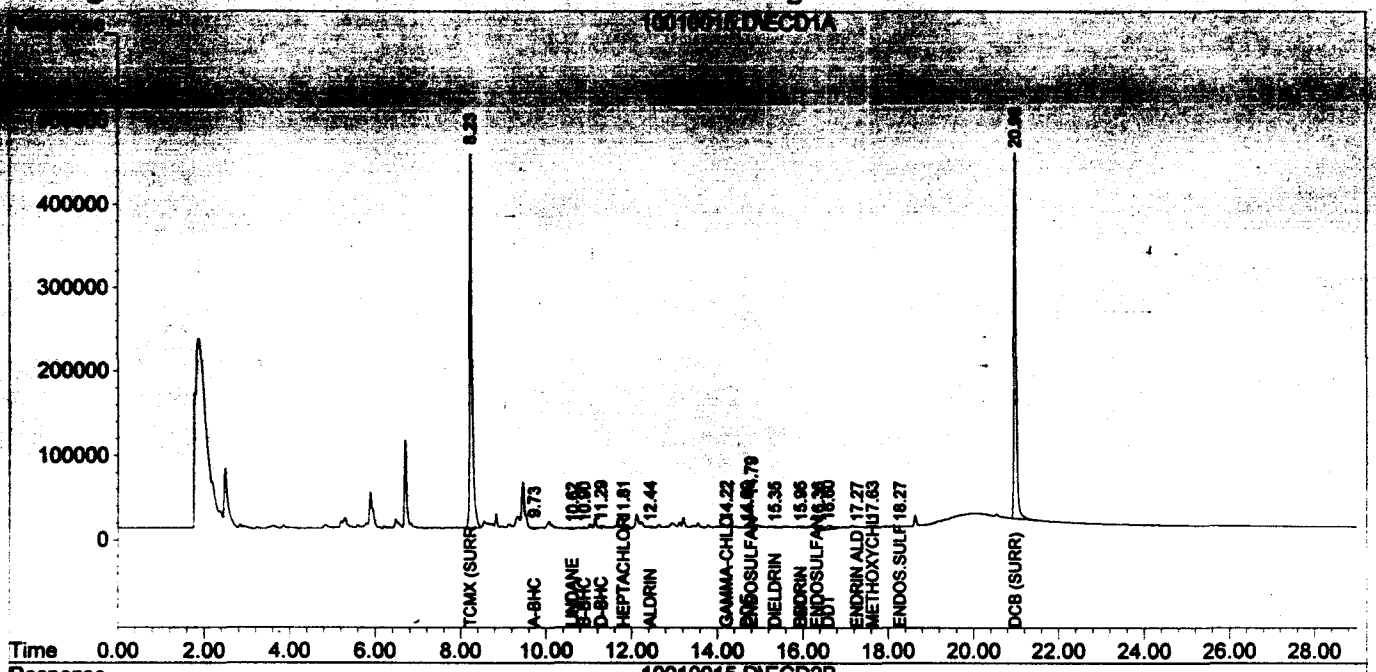
Pest CDZ.

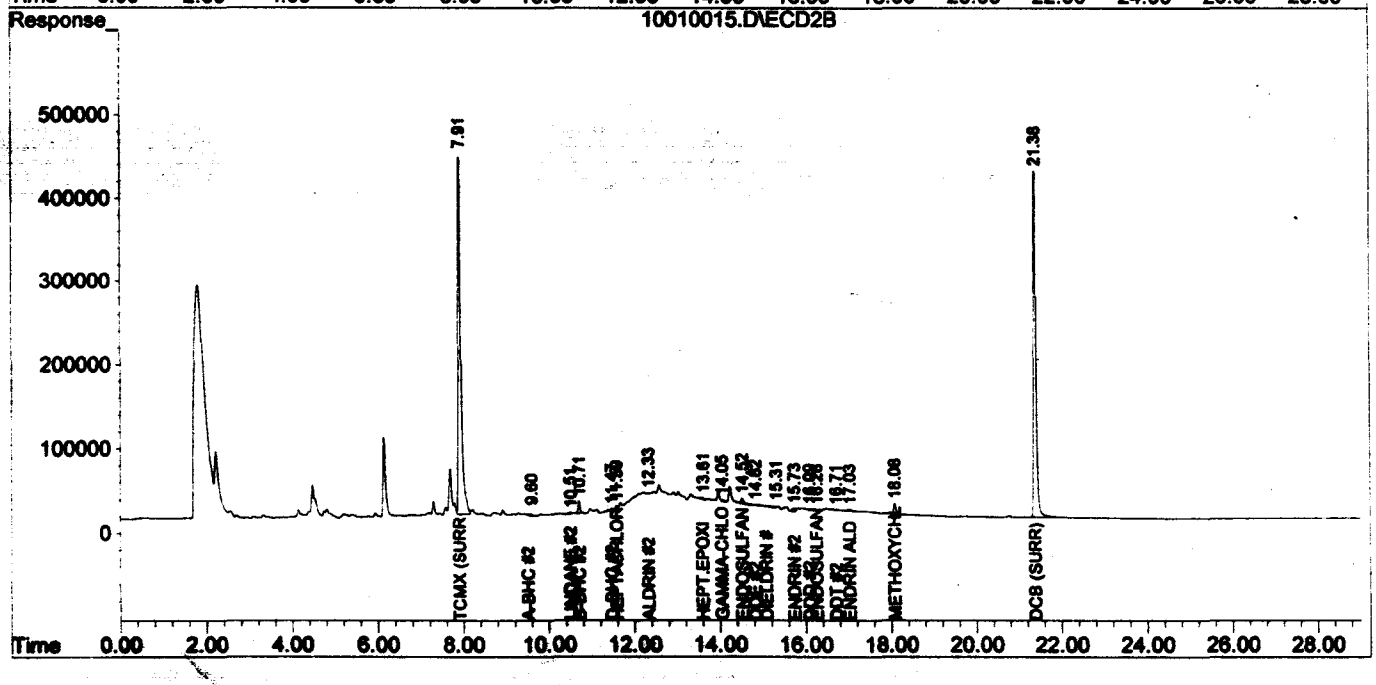
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

[illegible]
Int[illegible] Signal #2
Quan[illegible] Oct 2 15:46 2000 [illegible] Results File: [illegible]

Quant Method : C:\HPCHEM\1\METH[illegible]092800P.M (Chemstation Integrator)
Title : Calibration [illegible] By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:[illegible] 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





[illegible] #1 [illegible]int1.e IntFile Signal [illegible]
[illegible] 2 [illegible]05 2000 Quant Results File [illegible]

[illegible] : C:\[illegible]\1\METHODS\080100TX.M (Che[illegible]ation [illegible]
[illegible] : TOXA[illegible]NE ANALYSIS BY ECD; GC A/[illegible]/00
Last Update : Mon Sep 25 09:25:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds								
1) L	TOX	1	16.33	16.33f	249000	115603	0.160	0.026	#
2) L	TOX	2	16.60	16.71f	772856	98149	0.317	0.036	#
3) L	TOX	3	17.16f	0.00	314815	0	0.092	N.D.	#
4) L	TOX	4	17.78	18.08	84307	480486	0.025	0.107	#
5) L	TOX	5	17.97	18.08f	55849	480486	0.013	0.129	#
6) L	TOX	6	0.00	18.92	0	122951	N.D.	0.049	#
7) L	TOX	7	19.18f	0.00	-81882	0	N.D.	N.D.	
Sum	TOX	1			1476827	1297675	0.551	0.348	
Average	TOX	1					0.110	0.070	

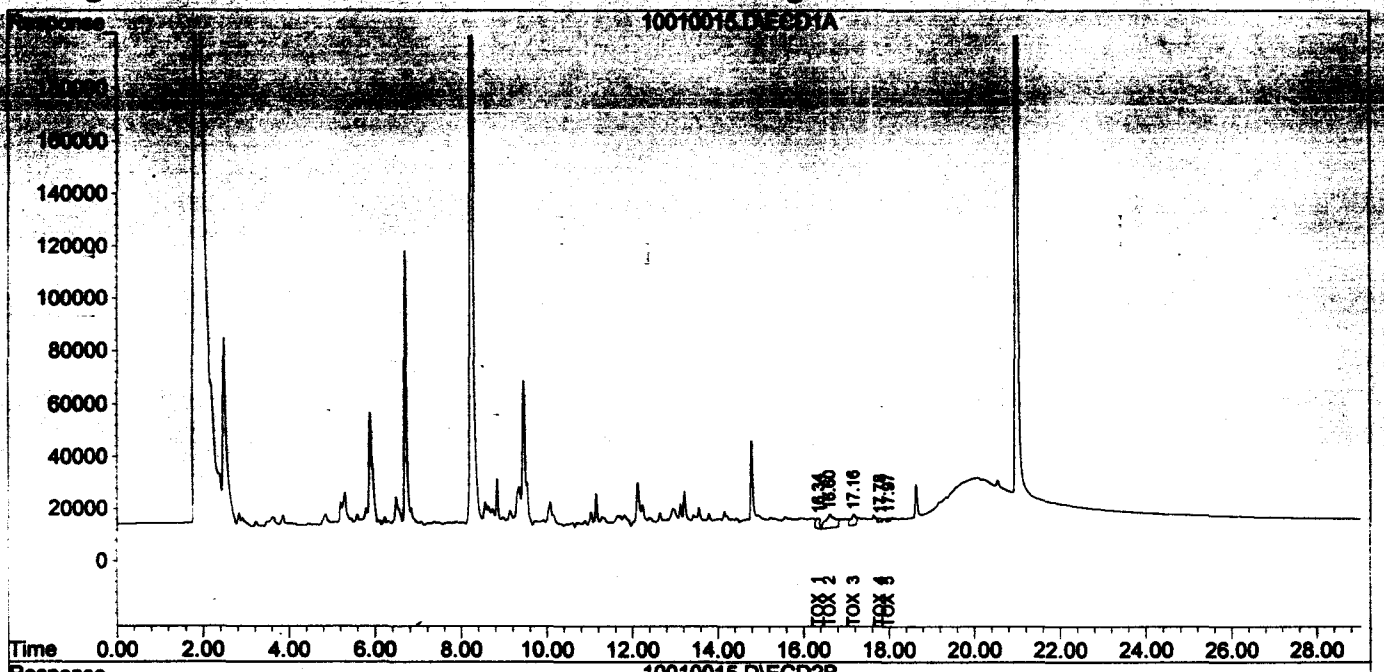
TOX <DL

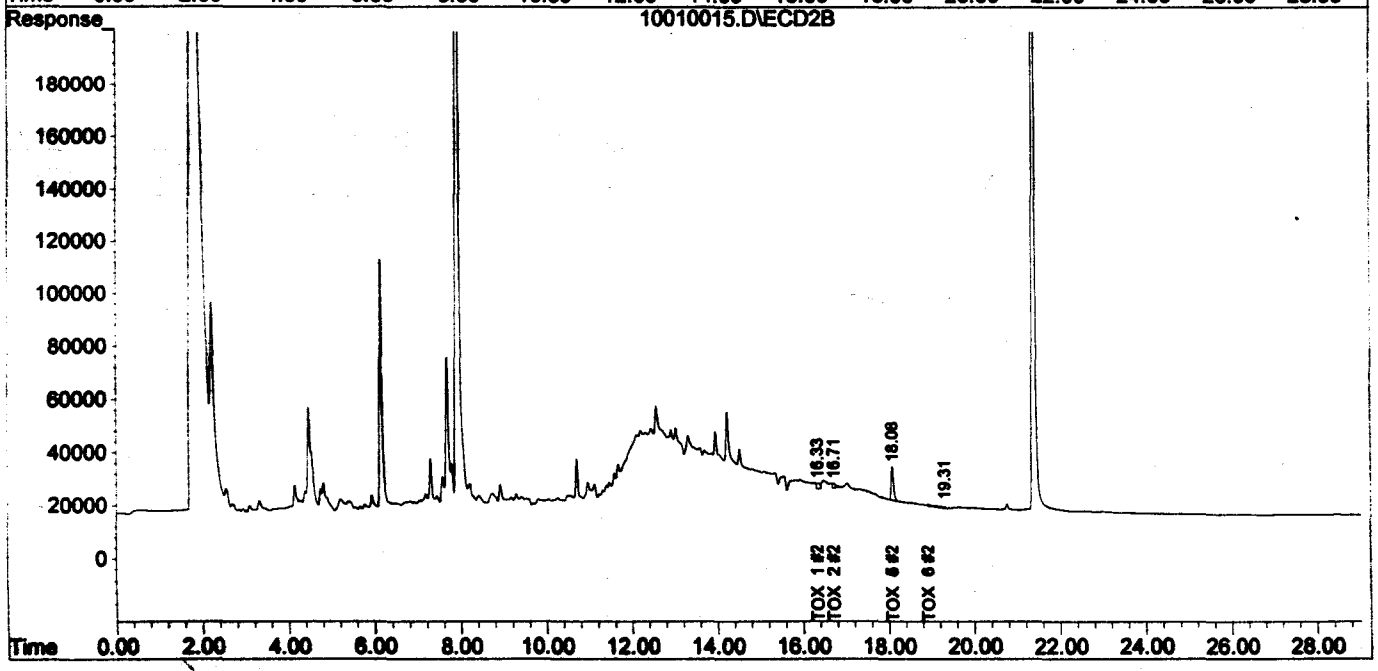
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

[illegible]
[illegible] autointl [illegible] Signal #2 [illegible]
Quant [illegible] Oct 2 16:05 2000 Quant Results File: 080[illegible]

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integ[illegible]
Title : [illegible] ANALYSIS BY ECD, GC A,08/01/00
Last Update : Mon Sep 25 09:25:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Misc : [illegible]
Int[illegible] Signal #1 EVENTS [illegible] IntFile Signal #2 [illegible]
Quant Time: Oct 2 15:47 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.23	7.91	20074814	22391019	0.199	0.207	
		Spiked Amount 0.250			Recovery	=	79.60% ✓	82.80%	
22)	S	DCB (SURR)	20.98	21.38	18203941	18998120	0.224	0.217	
		Spiked Amount 0.250			Recovery	=	89.60% ✓	86.80%	
		Target Compounds							
2)	T	A-BHC	9.78	9.51f	25466	115466	0.000	0.001	#
3)	T	B-BHC	10.90f	10.71	74399	471445	0.001	0.006	#
4)	T	LINDANE	10.62	10.50	102270	76356	0.001	0.000	#
5)	T	D-BHC	11.29	11.47	210364	86067	0.002	0.001	#
6)	T	HEPTACHLOR	11.81	11.58f	228981	121832	0.002	0.001	#
7)	T	ALDRIN	12.44f	12.33f	72845	28593	0.001	0.000	#
8)	T	HEPT.EPOXIDE	0.00	13.60	0	138003	N.D.	0.001	#
9)	T	ENDOSULFAN 1	14.79	14.52	1408324	275439	0.014	0.002	#
10)	T	GAMMA-CHLORDANE	14.22	0.00	71836	0	0.001	N.D.	#
11)	T	ALPHA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.69	14.82	286921	87861	0.003	0.001	#
13)	T	DIELDRIN	15.35	15.08	22810	243509	0.000	0.002	#
14)	T	ENDRIN	15.95f	15.73	46307	136640	0.001	0.002	#
15)	T	DDD	15.95f	16.09f	46307	70393	0.001	0.001	#
16)	T	ENDOSULFAN 2	16.33	16.26	176312	40219	0.002	0.000	#
17)	T	ENDRIN ALDEHYDE	17.27	17.02f	5850	192947	0.000	0.003	#
18)	T	DDT	16.60	16.71	479958	36176	0.006	0.000	#
19)	T	ENDOS.SULFATE	18.27f	17.51	10949	25512	0.000	0.000	#
20)	T	METHOXYCHLOR	17.63	18.08f	68255	589439	0.002	0.015	#
21)	T	ENDRIN KETONE	0.00	0.00	0	0	N.D.	N.D.	

Pest Cal

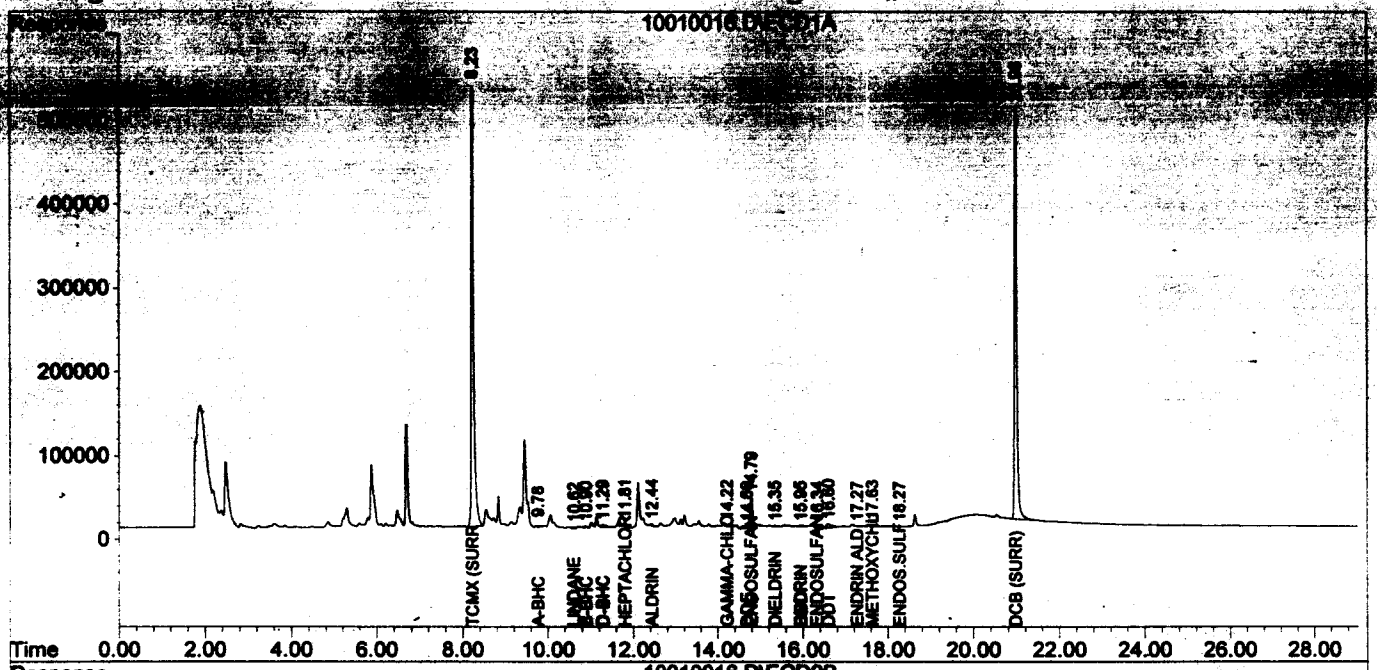
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

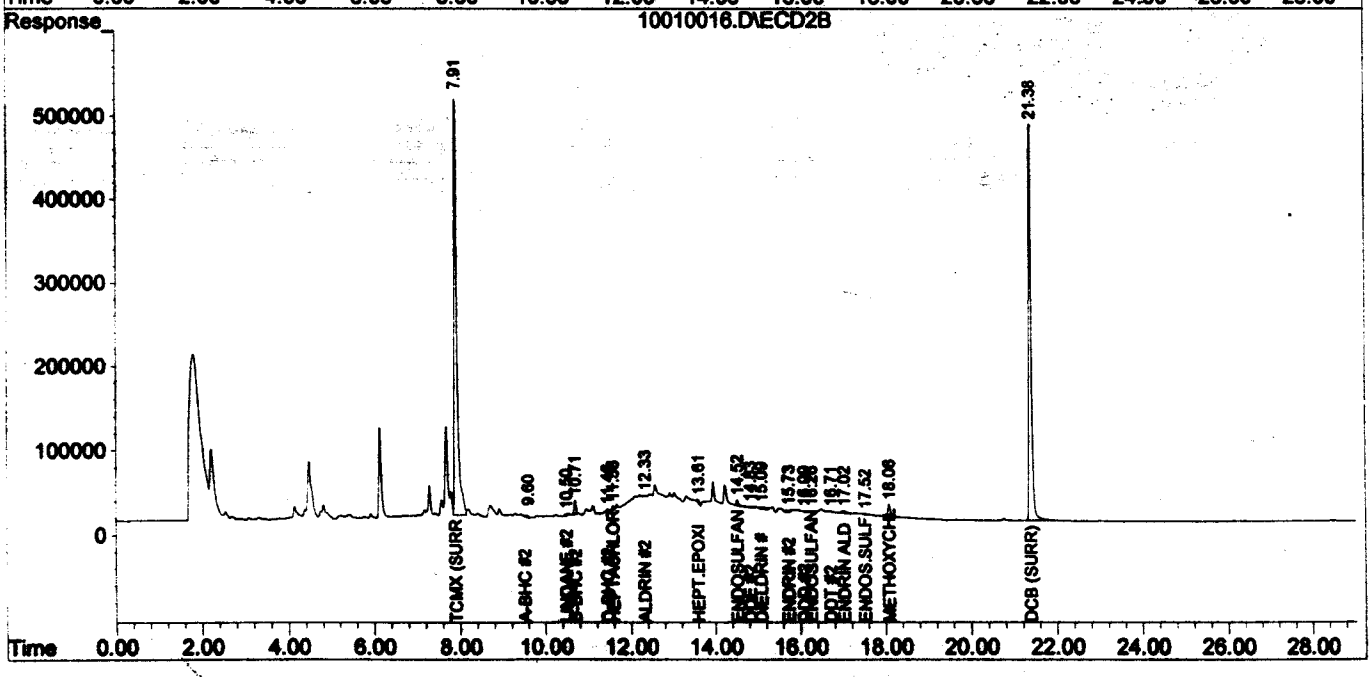
[illegible]

[illegible] Oct [illegible] 15:47 2000 Quan[illegible]

[illegible] : C:\HPCHEM\1\METHODS\[illegible]00P.M [illegible]
[illegible] : Calibration for Pest by Method [illegible]
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





[illegible]
[illegible] File Signal#2 [illegible]
Quant [illegible] Oct [illegible] Results File: 080[illegible]

Quant Method : [illegible]080100TX.M (Chemstat[illegible]
Title : [illegible] ECD; GC A[illegible]/01/0[illegible]
Last Update : Mon Sep 25 [illegible]:25:04 [illegible]000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1) L	TOX 1	16.33	16.33f	223033	73849	0.144	0.017 #
2) L	TOX 2	16.60	16.71f	754130	63020	0.309	0.023 #
3) L	TOX 3	17.16f	17.02f	290855	193231	0.085	0.053 #
4) L	TOX 4	17.78	18.08	71111	589439	0.021	0.131 #
5) L	TOX 5	17.97	18.08f	56092	589439	0.013	0.159 #
6) L	TOX 6	0.00	18.92	0	178102	N.D.	0.071 #
7) L	TOX 7	19.18f	0.00	-89173	0	N.D.	N.D.
Sum	TOX 1			1395222	1687079	0.511	0.454
Average	TOX 1					0.102	0.076

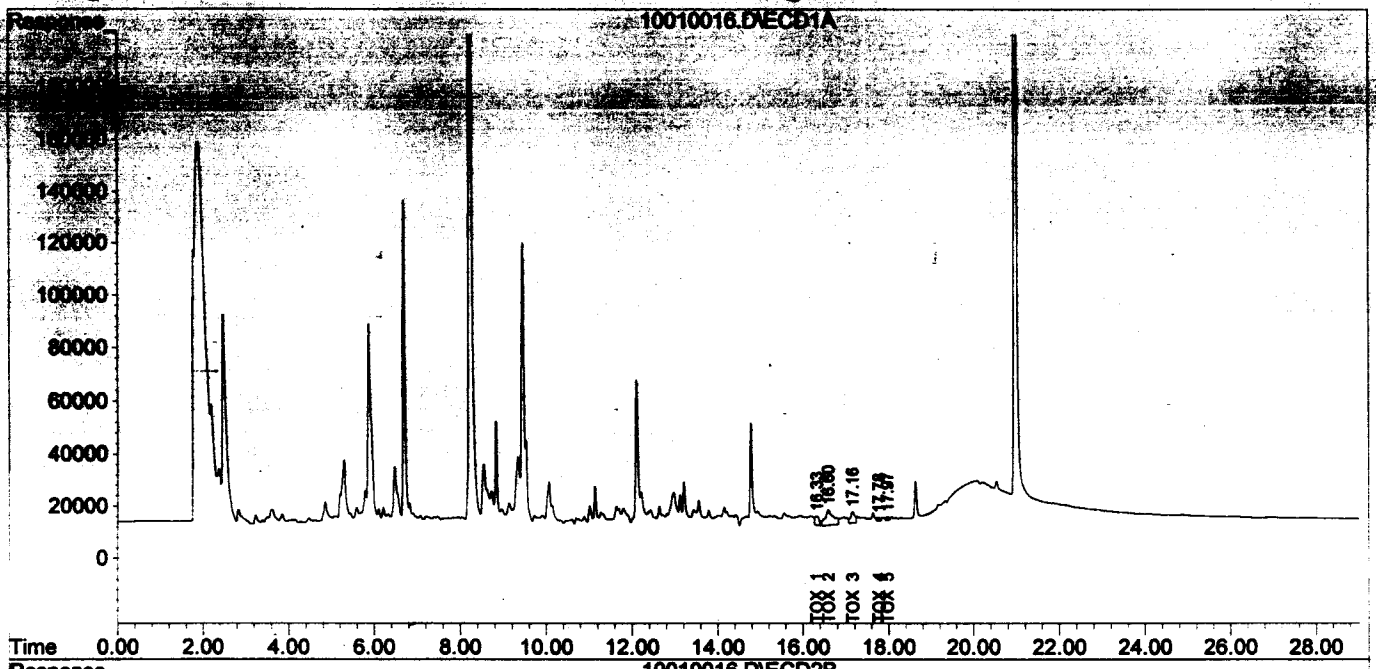
TOX<QL.

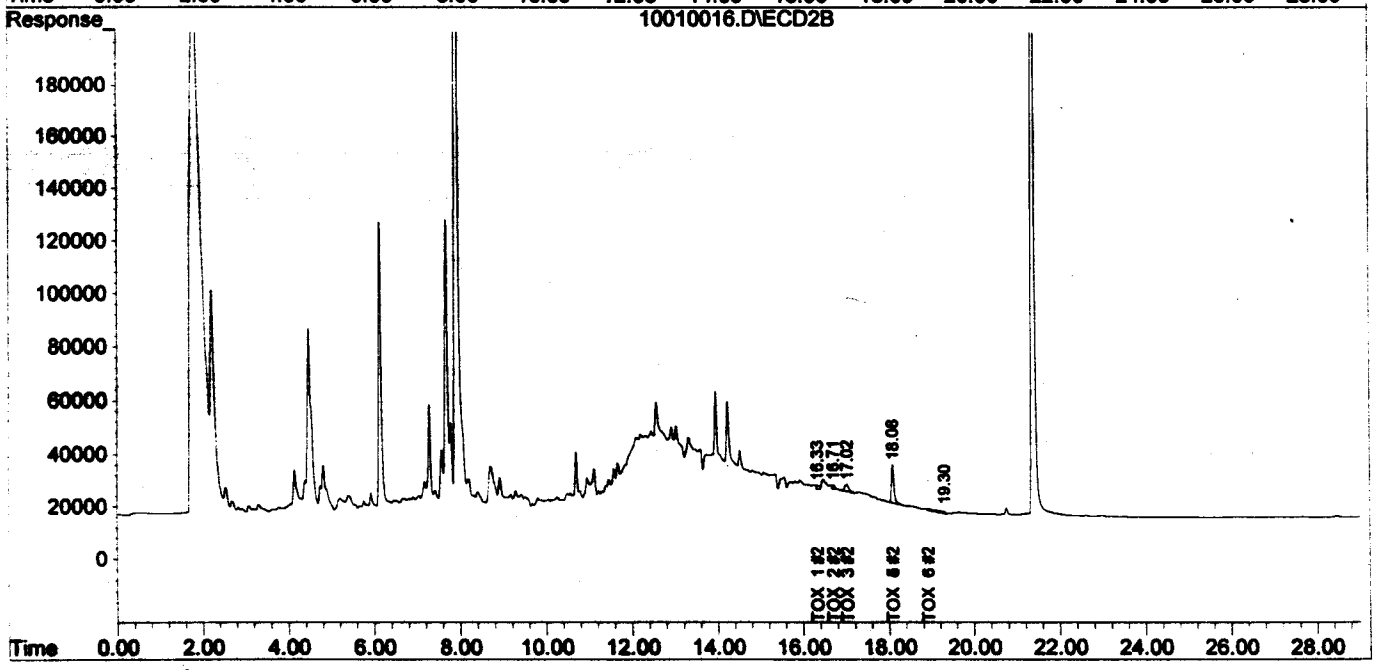
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

[illegible] #1 [illegible] Signal #2 [illegible]
[illegible] Oct 2 [illegible]:05 200[illegible] Quant Results File: [illegible]

[illegible] : C:\[illegible]\1\[illegible]\080100TX.M (Chemstation Integrator)
[illegible] : TOXA[illegible]NE A[illegible]SIS BY [illegible] GC A,08/01/00
Last Update : Mon [illegible] 25 0[illegible]:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





[illegible]
Sample : 00099.W [illegible]
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: [illegible]
Quant Time: Oct 5 8:59 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.21	7.89	15535654	16943048	0.154	0.157	
		Spiked Amount 0.250			Recovery	=	61.60%	62.80%	
22)	S	DCB (SURR)	20.95	21.36	5699447	6023700	0.070	0.069	
		Spiked Amount 0.250			Recovery	=	28.00%	27.60%	
		Target Compounds							
2)	T	A-BHC	9.73	9.55	209015	238882	0.001	0.001	
3)	T	B-BHC	10.82	10.71	17549420	18516370	0.266	0.247	
4)	T	LINDANE	10.57	10.47	116035	68137	0.001	0.000	#
5)	T	D-BHC	11.27	11.45	266077	274523	0.002	0.002	
6)	T	HEPTACHLOR	0.00	0.00	0	0	N.D.	N.D.	
7)	T	ALDRIN	12.55f	12.28	157734	120129	0.001	0.001	#
8)	T	HEPT.EPOXIDE	13.90	13.59	2980196	1879163	0.032	0.017	#
9)	T	ENDOSULFAN 1	14.82X	14.49X	1559906	1740521	0.016 NC/RT	0.015	
10)	T	GAMMA-CHLORDANE	14.19	14.02	2823803	2371420	0.026	0.018	#
11)	T	ALPHA-CHLORDANE	14.48	14.35	4247055	6797739	0.044	0.056	#
12)	T	DDE	14.67	14.88f	139846	261646	0.002	0.002	#
13)	T	DIELDRIN	15.33	15.07	387342	688385	0.004	0.006	#
14)	T	ENDRIN	15.91	15.79	40824	134151	0.001	0.002	#
15)	T	DDD	16.10f	16.11f	50628	274353	0.001	0.003	#
16)	T	ENDOSULFAN 2	16.32f	16.29f	208690	803758	0.003	0.008	#
17)	T	ENDRIN ALDEHYDE	17.25	16.93	30563	28333	0.000	0.000	
18)	T	DDT	16.61	16.69	325341	50170	0.004	0.001	#
19)	T	ENDOS.SULFATE	18.15f	17.52	11683	16281	0.000	0.000	
20)	T	METHOXYCHLOR	17.63	0.00	11846	0	0.000	N.D.	#
21)	T	ENDRIN KETONE	18.86	18.71	301617	49846	0.004	0.001	#

β-BHC = 1.3ppb
Hept. Epox = 0.16ppb
g-Chlor. = 0.13ppb
α-Chlor. = 0.22ppb

[signature] 10/6

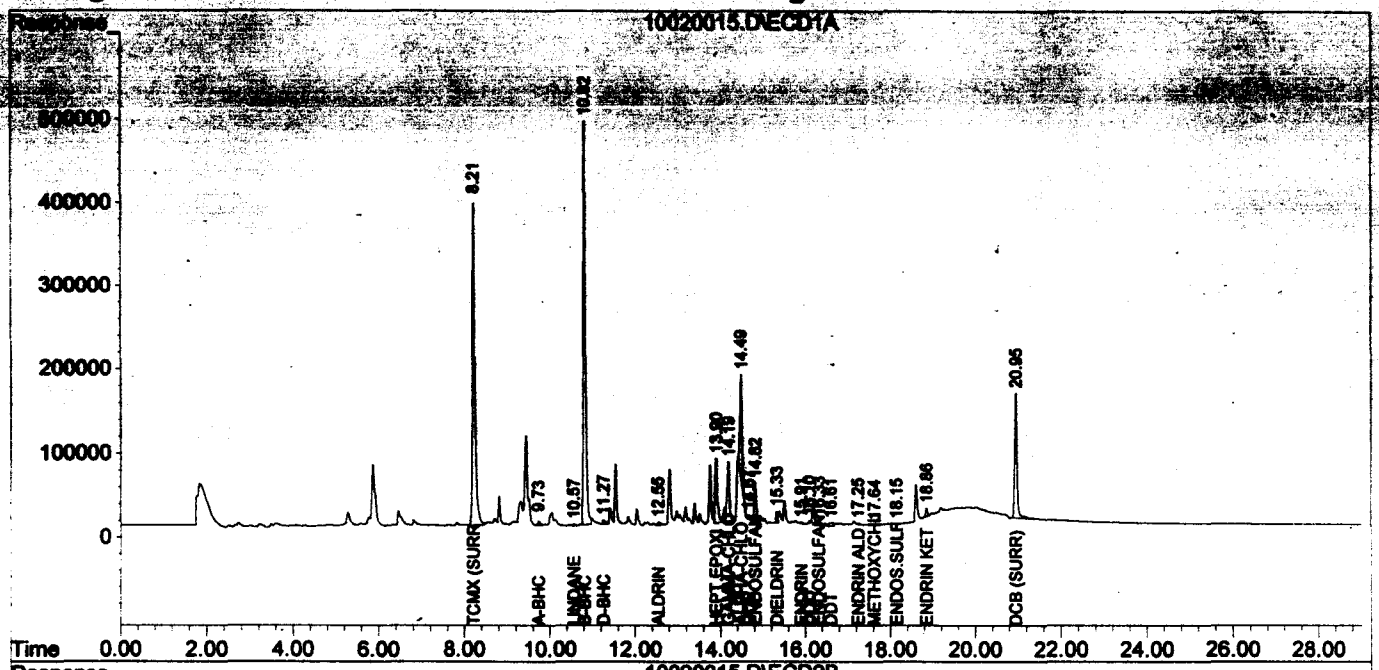
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

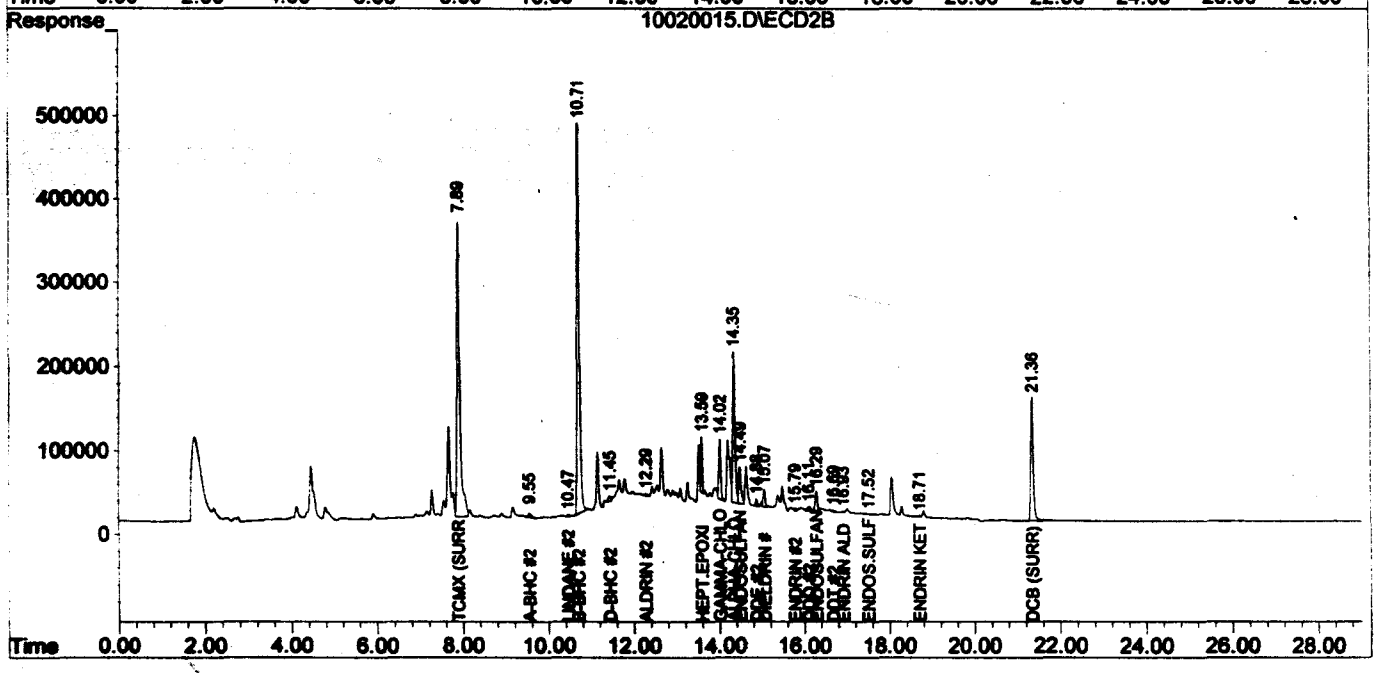
Quant Time: Oct 5 9:59 2000 Quant Results File: 092800

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

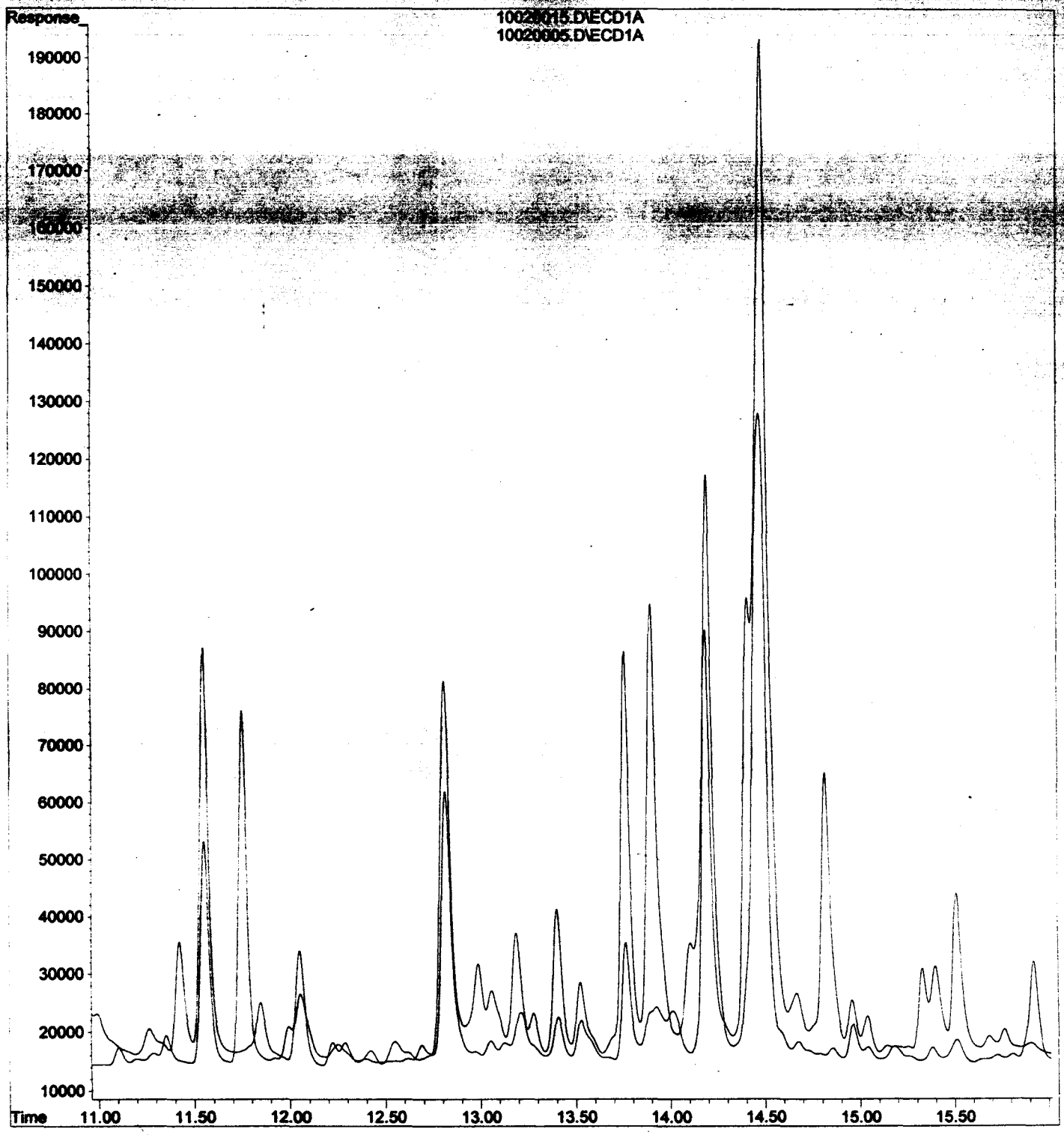
Volume Inj. :
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :





[illegible]
Acquired : 2 Oct 2000 [illegible]0 pm using AcqMethod 8081D1.M
Instrument : GC/ECD IN
Sample Name: 00099 W TBA
Misc Info :
Vial Number: 15



[illegible]
[illegible] : 00099 [illegible]
Misc : [illegible]
IntFile Signal #1: EVENTS.E IntFile Signal #2: [illegible]
Quant Time: Oct 2 15:47 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.23	7.91	14022571	16280977	0.139	0.150	
		Spiked Amount 0.250			Recovery	=	55.60% ✓	60.00%	
22)	S	DCB (SURR)	20.98	21.38	5253549	5301625	0.065	0.061	
		Spiked Amount 0.250			Recovery	=	26.00% ✓	24.40%	
		Target Compounds							
2)	T	A-BHC	9.80f	9.60	153697	422850	0.001	0.002	#
3)	T	B-BHC	10.84	10.72	18957094	10973247	0.287	0.146	#
4)	T	LINDANE	10.59	0.00	514133	0	0.004	N.D.	#
5)	T	D-BHC	0.00	0.00	0	0	N.D.	N.D.	
6)	T	HEPTACHLOR	0.00	0.00	0	0	N.D.	N.D.	
7)	T	ALDRIN	12.51	0.00	-577633	0	N.D.	N.D.	
8)	T	HEPT.EPOXIDE	13.92	13.63	2924704	6538526	0.031	0.060	#
9)	T	ENDOSULFAN 1	14.83	14.50	2315807	613592	0.024	0.005	#
10)	T	GAMMA-CHLORDANE	14.21	14.03	2192344	171.8E6	0.020	1.283	#
11)	T	ALPHA-CHLORDANE	14.50	14.37	8101812	3813781	0.084	0.031	#
12)	T	DDE	14.68	0.00	439642	0	0.005	N.D.	#
13)	T	DIELDRIN	15.35	15.08	397942	-82292	0.004	N.D.	#
14)	T	ENDRIN	15.78f	15.67f	88191	510742	0.001	0.006	#
15)	T	DDD	16.11f	16.12f	65317	42476	0.001	0.000	#
16)	T	ENDOSULFAN 2	16.29f	16.31f	302884	612150	0.004	0.006	#
17)	T	ENDRIN ALDEHYDE	17.25	17.02f	-5570	-1930431	N.D.	N.D.	
18)	T	DDT	16.58	0.00	278472	0	0.004	N.D.	#
19)	T	ENDOS.SULFATE	18.18	0.00	34524	0	0.000	N.D.	#
20)	T	METHOXYCHLOR	17.63	18.08f	14053	1307256	0.000	0.032	#
21)	T	ENDRIN KETONE	18.88	18.68	427838	19134	0.005	0.000	#

~~File Copy~~ DA 10/6

Report: d-BHC & Endrin Ald. <RDL

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

[illegible] 000[illegible]

[illegible]gnal #1 [illegible] IntFile Signal #2: [illegible]

Quant [illegible]: Oct [illegible] 15:47 2000 Quant Results File: 092[illegible]

Quant Method : C[illegible]CHEM\1\METHODS\092800P.M (Chemstat[illegible])

Title : C[illegible]ation for Pest [illegible] Method 8081 (09/[illegible])

Last Update : Mon Oct 02 15:31:54 2000

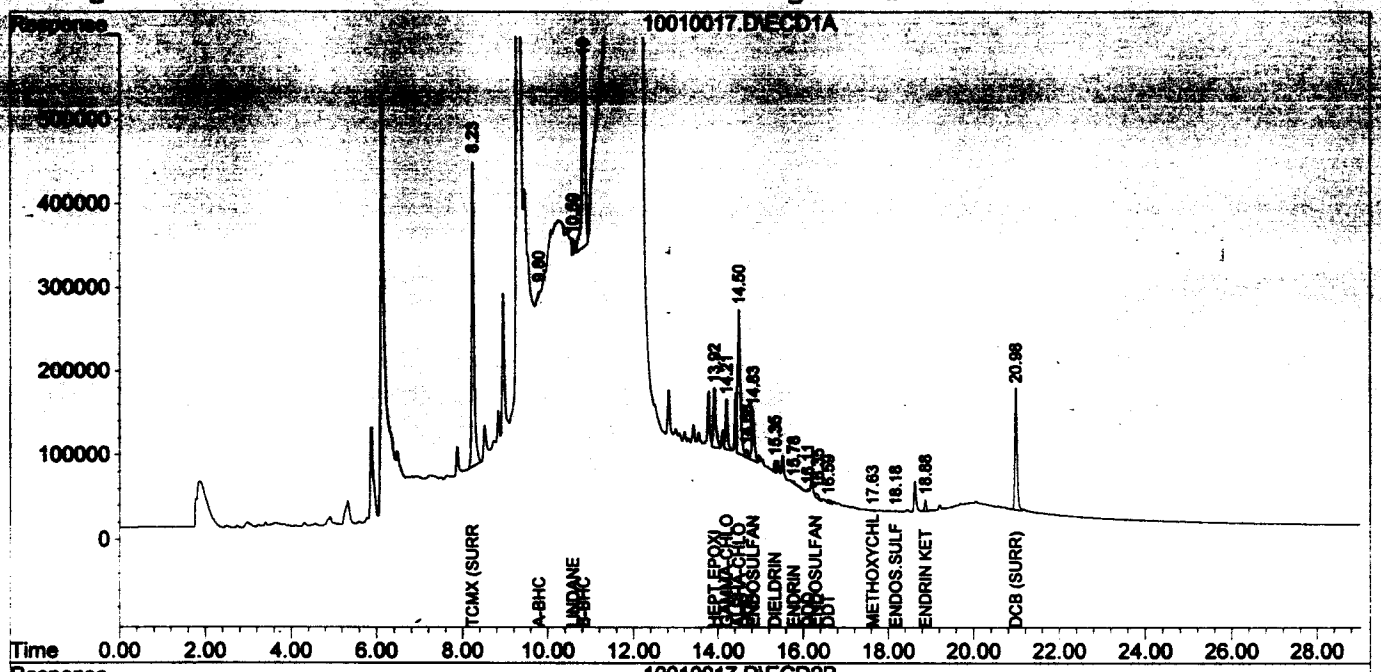
Response via : Multiple Level Calibration

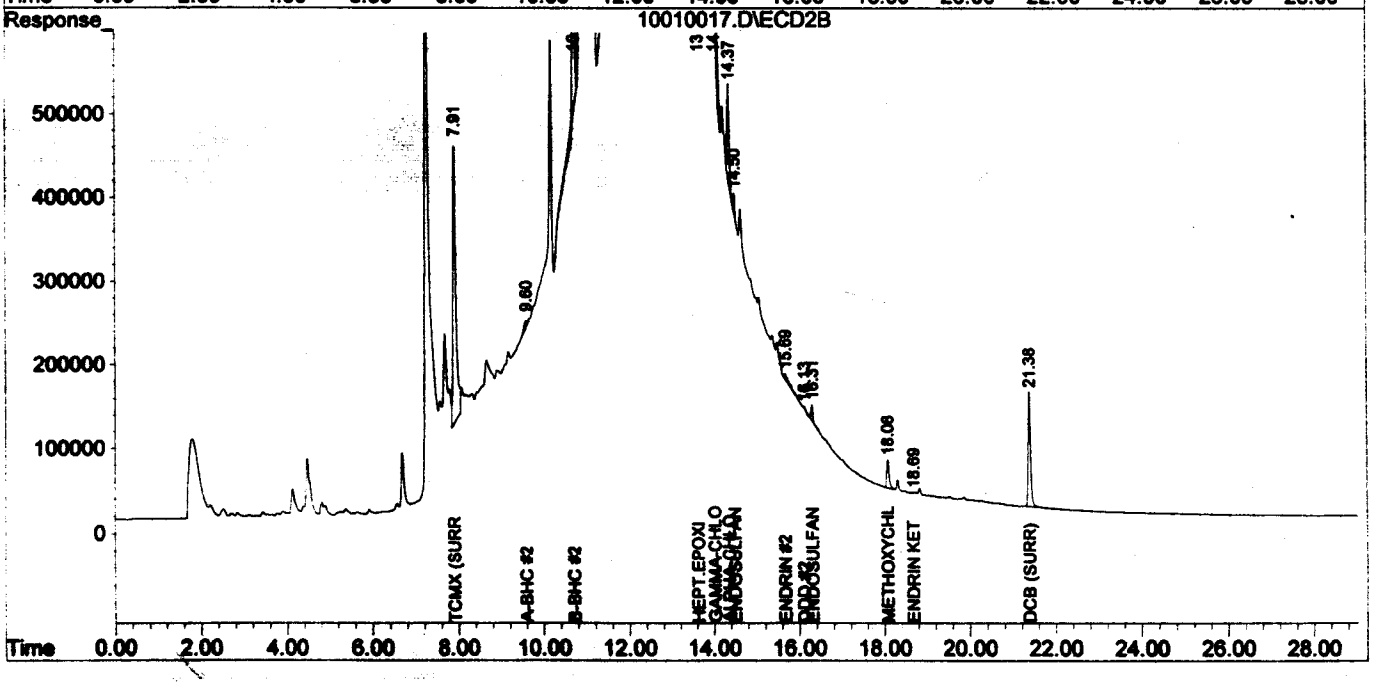
DataAcq Meth : 8081D1.M

Volume Inj. :

Signal #1 Phase : Signal #2 Phase:

Signal #1 Info : Signal #2 Info :





Data Path : [redacted]

Data File : [redacted] Acq On : [redacted]

Signal #1: autoint1.e Signal #2: [redacted]

Quant Time: Oct 5 9:12 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1)	L	TOX 1	16.32	16.38	387723	142094	0.250	0.032	#
2)	L	TOX 2	16.61	0.00	365776	0	0.150	N.D.	#
3)	L	TOX 3	17.14f	16.93	256894	70878	0.075	0.020	#
4)	L	TOX 4	17.77	18.06	31990	2006133	0.009	0.447	#
5)	L	TOX 5	17.96	0.00	14084	0	0.003	N.D.	#
6)	L	TOX 6	18.86f	18.81f	476406	260661	0.168	0.104	#
7)	L	TOX 7	0.00	19.35f	0	22228	N.D.	0.011	#
	Sum	TOX 1			1532872	2501995	0.656	0.613	
Average		TOX 1					0.109	0.123	

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

[illegible]

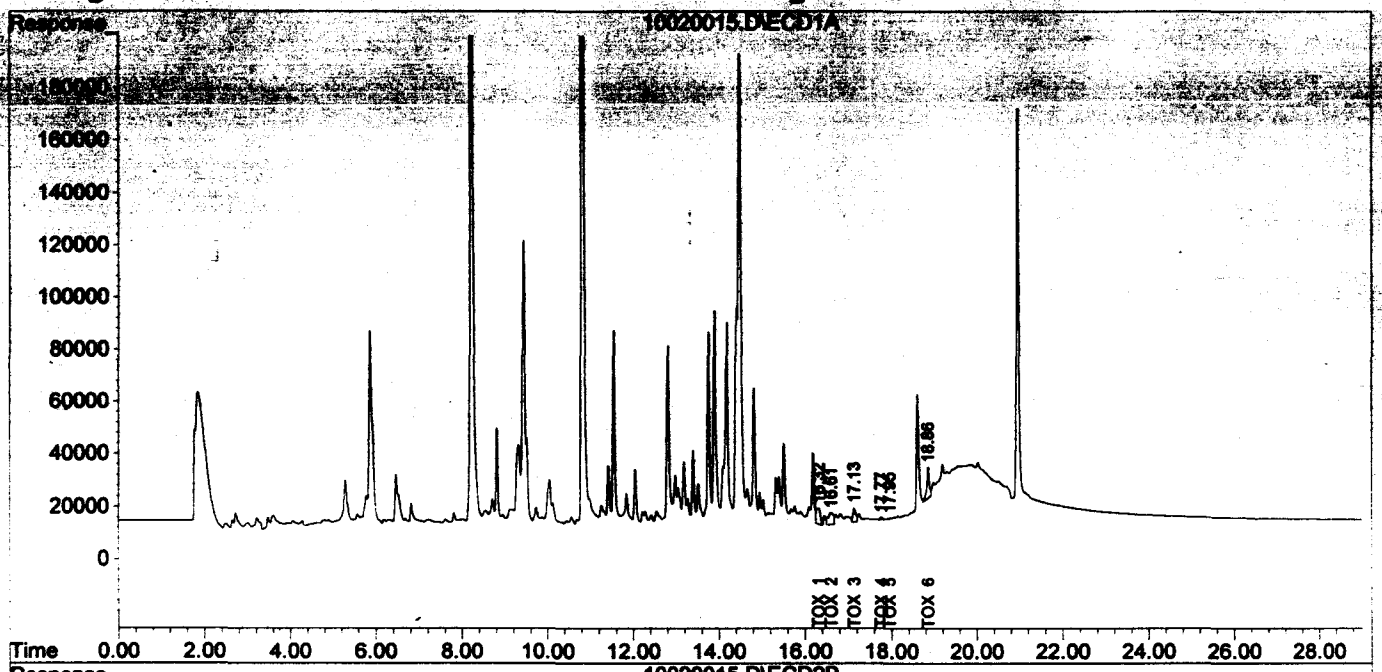
[illegible]

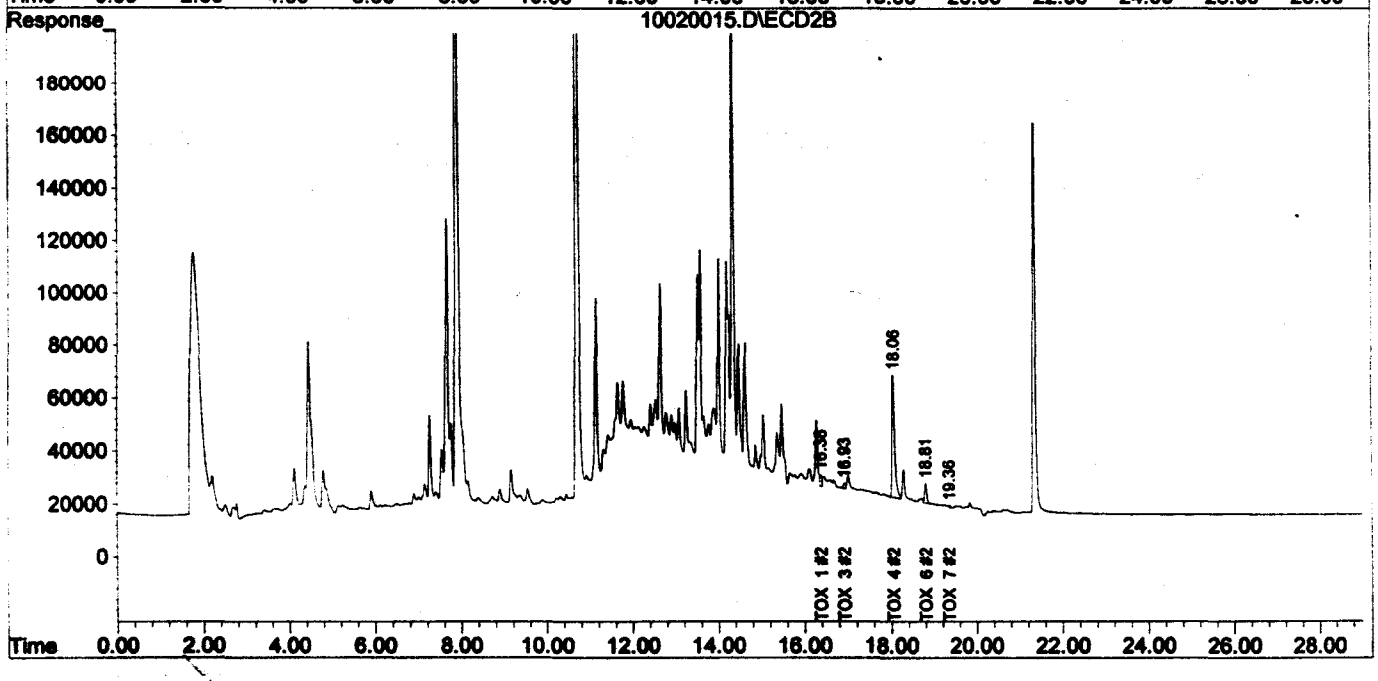
[illegible]gnal #1: autoint1.e IntFile-Signal #2 [illegible]

Quant Time: Oct 5 9:12 2000 Quant Results File: 080100[illegible]

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD, GC A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





[illegible]
[illegible]
[illegible]
[illegible] : 00100 W
[illegible] :
IntFile Signal #1: EVENTS.E IntFile Signal #2: [illegible]
Quant Time: Oct 2 15:48 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.23	7.91	18367052	19672686	0.182	0.182	
		Spiked Amount 0.250			Recovery	=	72.80%	72.80%	
22)	S	DCB (SURR)	20.98	21.39	10032900	10755958	0.123	0.123	
		Spiked Amount 0.250			Recovery	=	49.20%	49.20%	
		Target Compounds							
2)	T	A-BHC	9.70f	9.51f	874801	97204	0.006	0.001	#
3)	T	B-BHC	10.90f	10.71	76420	183474	0.001	0.002	#
4)	T	LINDANE	10.62	10.50	39018	61239	0.000	0.000	#
5)	T	D-BHC	11.34f	11.47	101275	54605	0.001	0.000	#
6)	T	HEPTACHLOR	11.81f	11.47f	182422	54605	0.002	0.000	#
7)	T	ALDRIN	12.54f	12.33f	2479	30058	0.000	0.000	#
8)	T	HEPT.EPOXIDE	0.00	13.60	0	36499	N.D.	0.000	#
9)	T	ENDOSULFAN 1	14.79	14.52	1258466	150022	0.013	0.001	#
10)	T	GAMMA-CHLORDANE	14.21	14.05	1127142	41211	0.010	0.000	#
11)	T	ALPHA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.69	14.82	112004	58955	0.001	0.000	#
13)	T	DIELDRIN	15.39	15.09	2527	180092	0.000	0.002	#
14)	T	ENDRIN	15.84	15.73	48534	148318	0.001	0.002	#
15)	T	DDD	15.94f	16.01	42994	71614	0.001	0.001	#
16)	T	ENDOSULFAN 2	16.33	16.27	176333	36933	0.002	0.000	#
17)	T	ENDRIN ALDEHYDE	17.27	17.03f	7244	142653	0.000	0.002	#
18)	T	DDT	16.59	16.71	249255	40002	0.003	0.000	#
19)	T	ENDOS.SULFATE	18.17	0.00	14543	0	0.000	N.D.	#
20)	T	METHOXYCHLOR	17.63	18.08f	57689	921234	0.001	0.023	#
21)	T	ENDRIN KETONE	0.00	0.00	0	0	N.D.	N.D.	

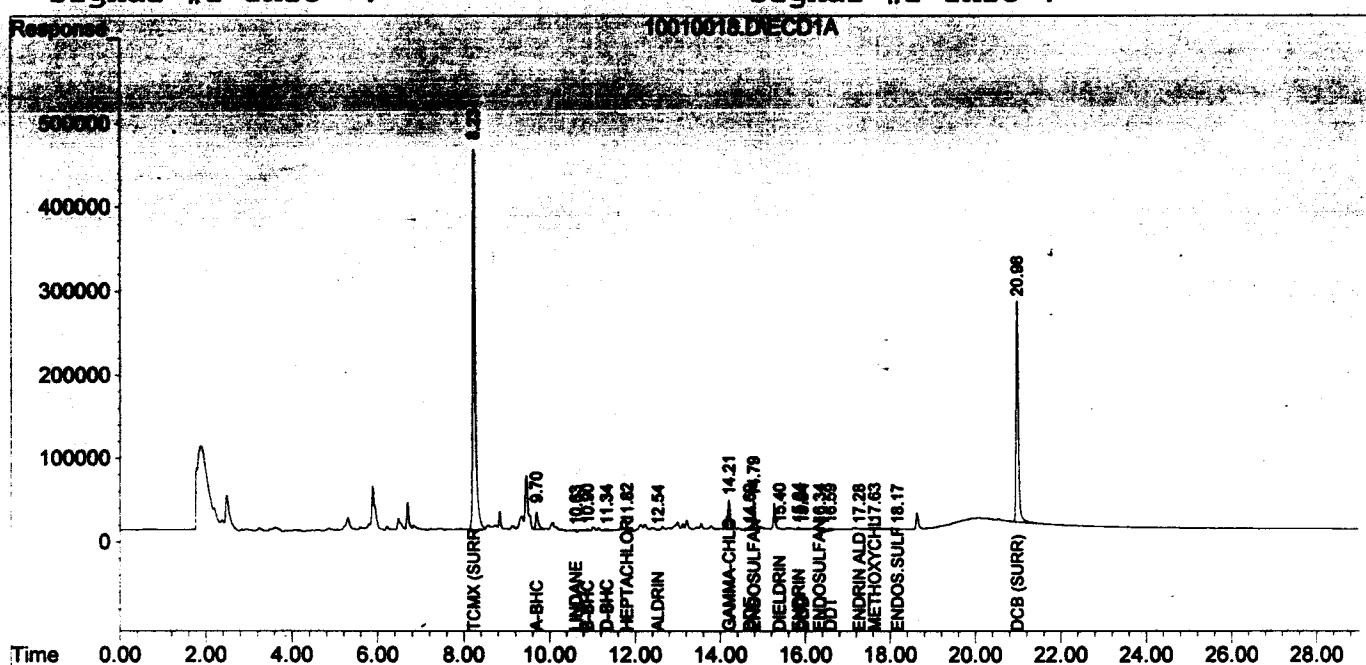
Pest<DC.

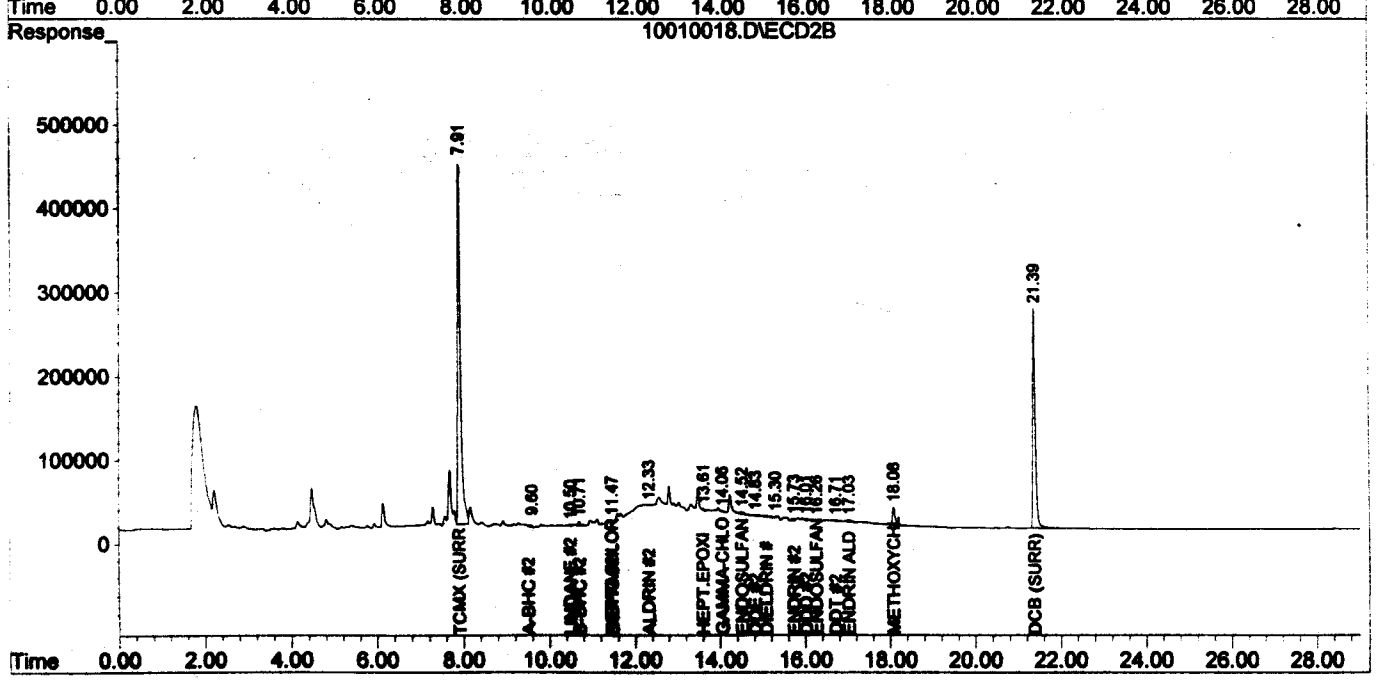
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Sample : [illegible]
Misc : [illegible]
IntFile Signal #1: [illegible] IntFile Signal #2: [illegible]
Quant Time: Oct 2 15:48 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





[illegible]

[illegible]

Int File Signal #1: [illegible] Int File Signal #2: [illegible]

Quant Time: Oct 2 16:06 2000 Quant Results File: 080[illegible]

Quant Method : C:\[illegible]\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Mon Sep 25 09:25:04 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound			RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds									
1)	L	TOX	1	16.33	16.34f	217370	80045	0.140	0.018	#
2)	L	TOX	2	16.59	16.83	335212	11021	0.137	0.004	#
3)	L	TOX	3	17.16f	17.03f	266646	142653	0.078	0.039	#
4)	L	TOX	4	17.78	18.08	79649	925123	0.023	0.206	#
5)	L	TOX	5	17.97	18.08f	58278	925123	0.013	0.249	#
6)	L	TOX	6	0.00	18.92	0	110208	N.D.	0.044	#
7)	L	TOX	7	19.18f	19.27	-84564	59106	N.D.	0.030	#
	Sum	TOX	1			957156	2253278	0.334	0.590	
Average		TOX	1					0.067	0.084	

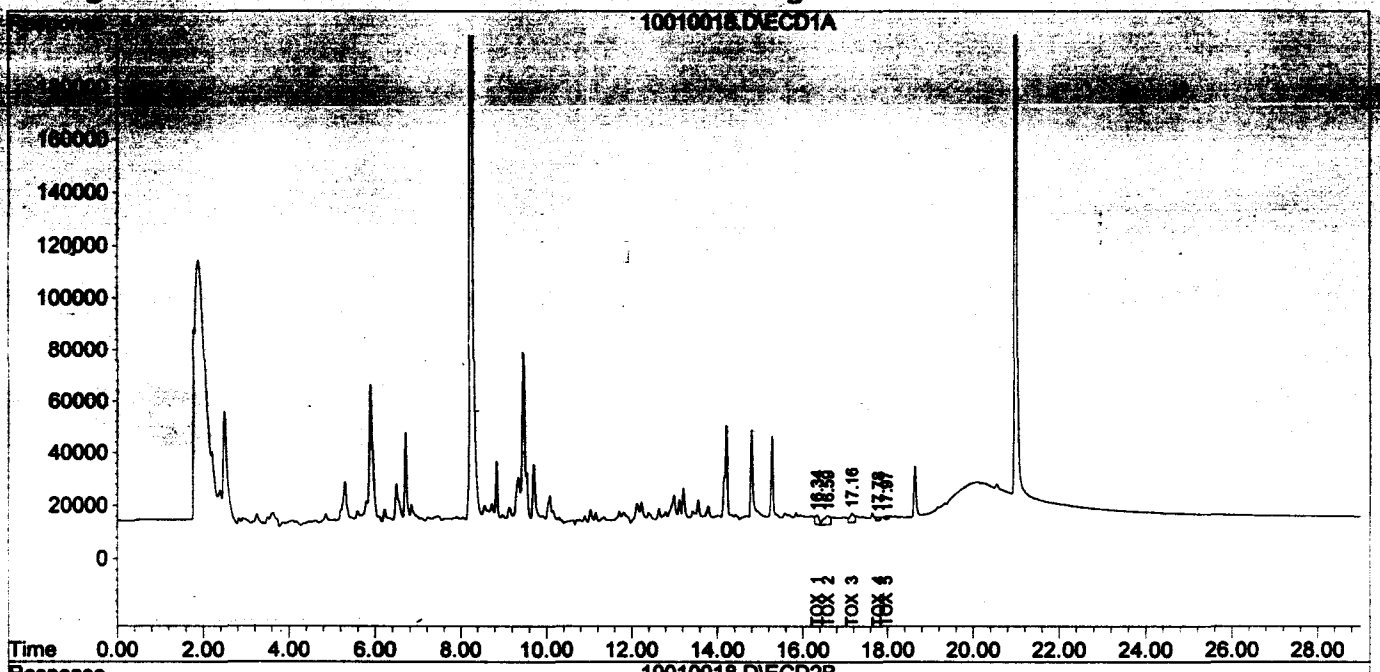
TOX<QC.

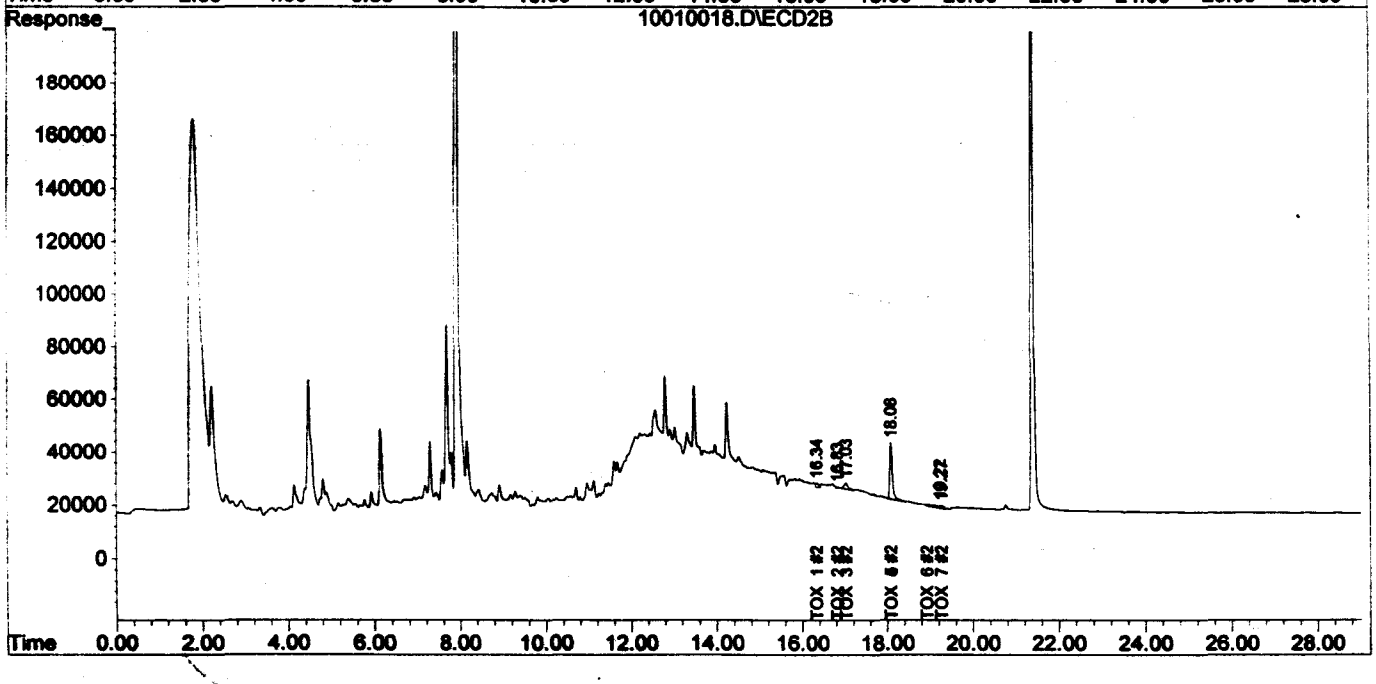
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

[illegible] Signal #1: autoint1.e [illegible] File Signal #2
Quant Time: Oct 2 16:06 2000 Quant Results File: 08[illegible]

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : [illegible]APHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Mon Sep 25 09:25:04 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





[redacted]

Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

[redacted]

S		20.98	21.39	9641195	10887057	0.119	0.124	
Spiked Amount 0.250				Recovery	=	47.60%	49.60%	
Target Compounds								
T	A-BHC	9.74	9.56	117654	92033	0.001	0.001	#
T	B-BHC	10.89f	10.71	90933	554088	0.001	0.007	#
T	LINDANE	10.59	10.49	161462	145892	0.001	0.001	
T	D-BHC	11.29	11.47	178494	24743	0.001	0.000	#
T	HEPTACHLOR	11.80	11.47f	344242	24743	0.003	0.000	#
T	ALDRIN	12.44f	12.29	62571	40178	0.001	0.000	#
T	HEPT.EPOXIDE	13.93	13.61	26195	72641	0.000	0.001	#
T	ENDOSULFAN 1	14.80	14.52	666275	411305	0.007	0.003	#
T	GAMMA-CHLORDANE	14.21	14.05	87701	186386	0.001	0.001	#
T	ALPHA-CHLORDANE	0.00	14.37	0	122428	N.D.	0.001	#
T	DDE	14.69	14.82	35618	45730	0.000	0.000	
T	DIELDRIN	15.35	15.09	39944	62636	0.000	0.001	#
T	ENDRIN	15.84	15.73	13102	138725	0.000	0.002	#
T	[redacted]	15.95f	16.13f	40782	79823	0.001	0.001	#
T	ENDOSULFAN 2	16.33	16.26	152849	41959	0.002	0.000	#
T	ENDRIN ALDEHYDE	17.27	16.95	21952	7732	0.000	0.000	#
T	DDT	16.57f	16.71	399905	50352	0.005	0.001	#
T	ENDOS.SULFATE	18.16f	17.52	4291	-30912	0.000	N.D.	#
T	METHOXYCHLOR	17.63	18.08f	31894	565711	0.001	0.014	#
T	ENDRIN KETONE	0.00	18.68	0	7107	N.D.	0.000	#

Post < ½ DL

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

[redacted]

Multiple Level Calibration

Data Acq Meth : 8081D1.M

Volume Inj. : [redacted]

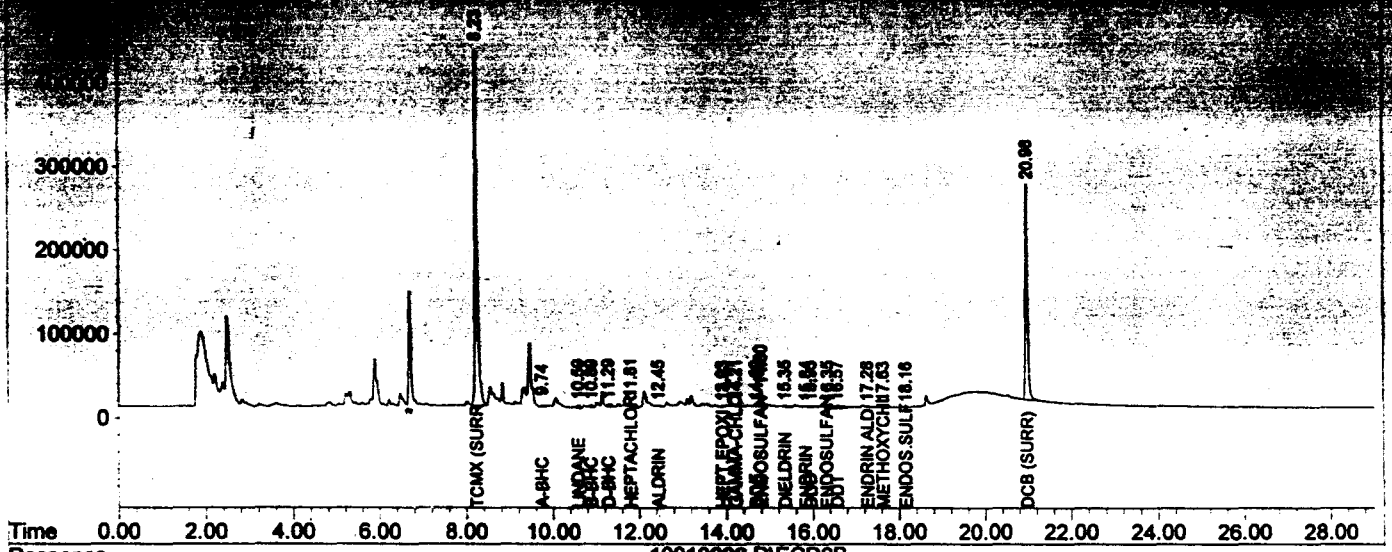
Signal #1 Phase :

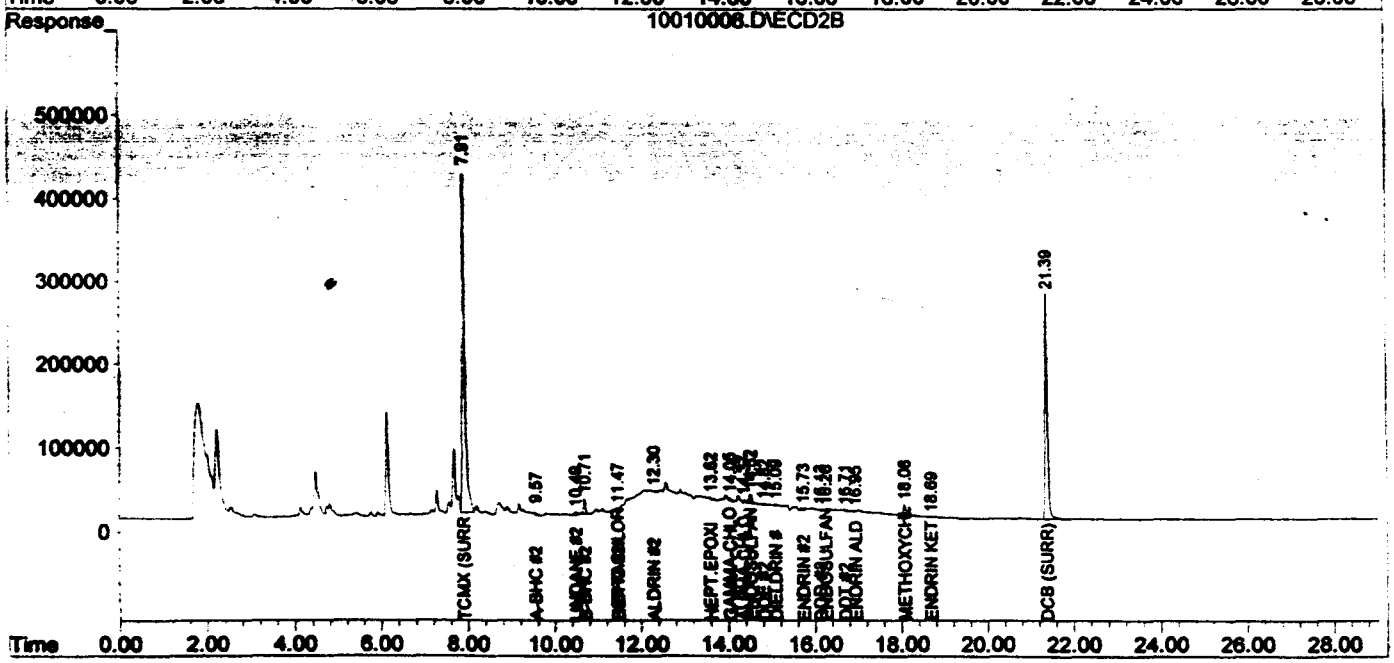
Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :

[redacted]





[illegible]

[illegible] : Initial Calibration
DataAcq Meth : 8081[illegible]M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

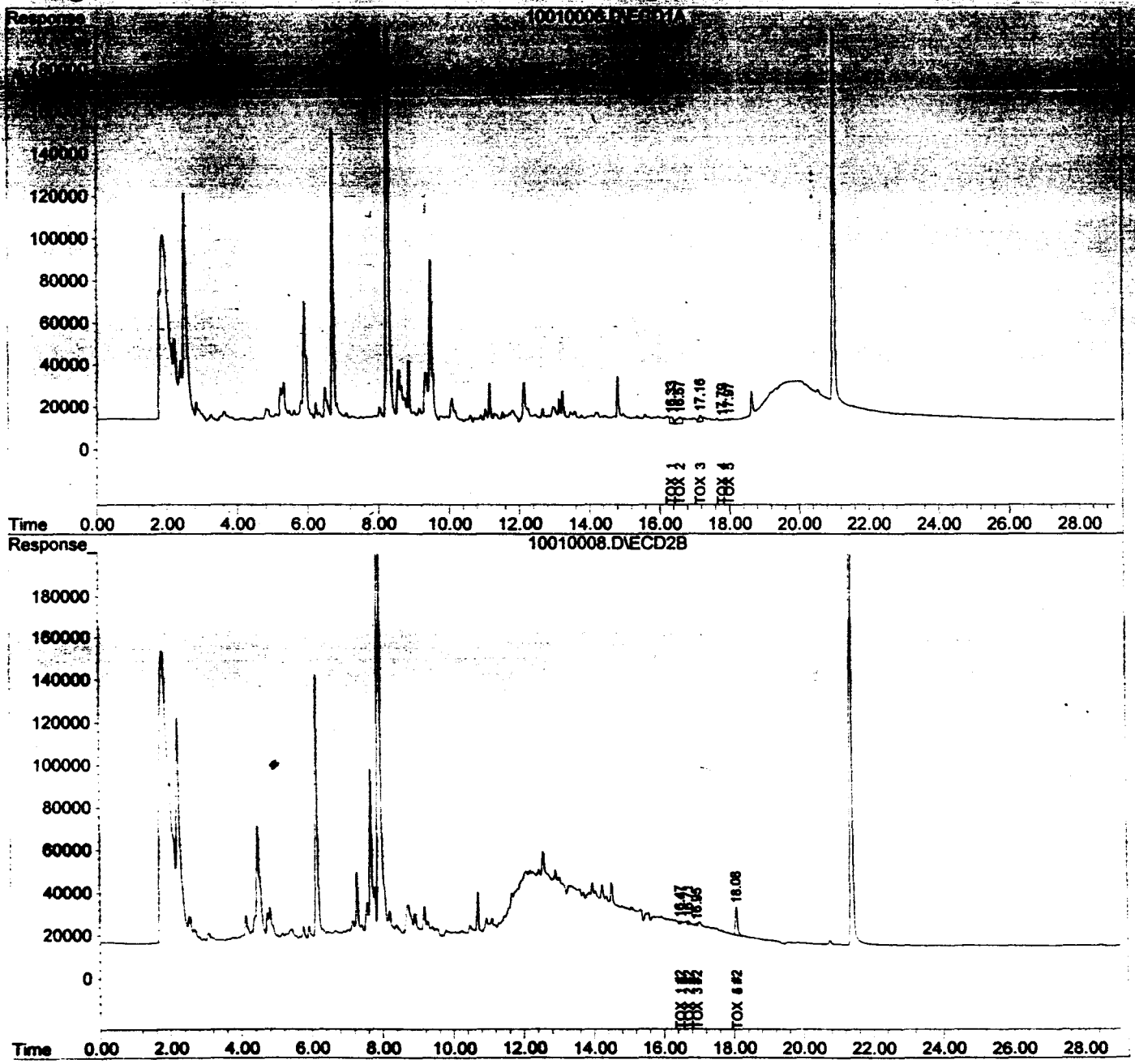
) L	TOX	1	16.33	16.47f	187922	49726	0.121	[illegible]
) L	TOX	2	16.57	16.71f	285685	66064	0.117	[illegible]
) L	TOX	3	17.16f	16.95	196839	32665	0.058	0.009 #
) L	TOX	4	17.78	18.08	17016	571695	0.005	0.127 #
) L	TOX	5	17.98	18.08f	21512	571695	0.005	0.154 #
) L	TOX	6	0.00	0.00	0	0	N.D.	N.D.
) L	TOX	7	0.00	0.00	0	0	N.D.	N.D.
Sum	TOX	1			708975	1291845	0.306	0.326
erage	TOX	1					0.061	0.065

TOX < $\frac{1}{2}$ DC

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

Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



Sample : BLNK W 09/[illegible]
Misc : Multipl[illegible]
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Oct 5 8:57 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

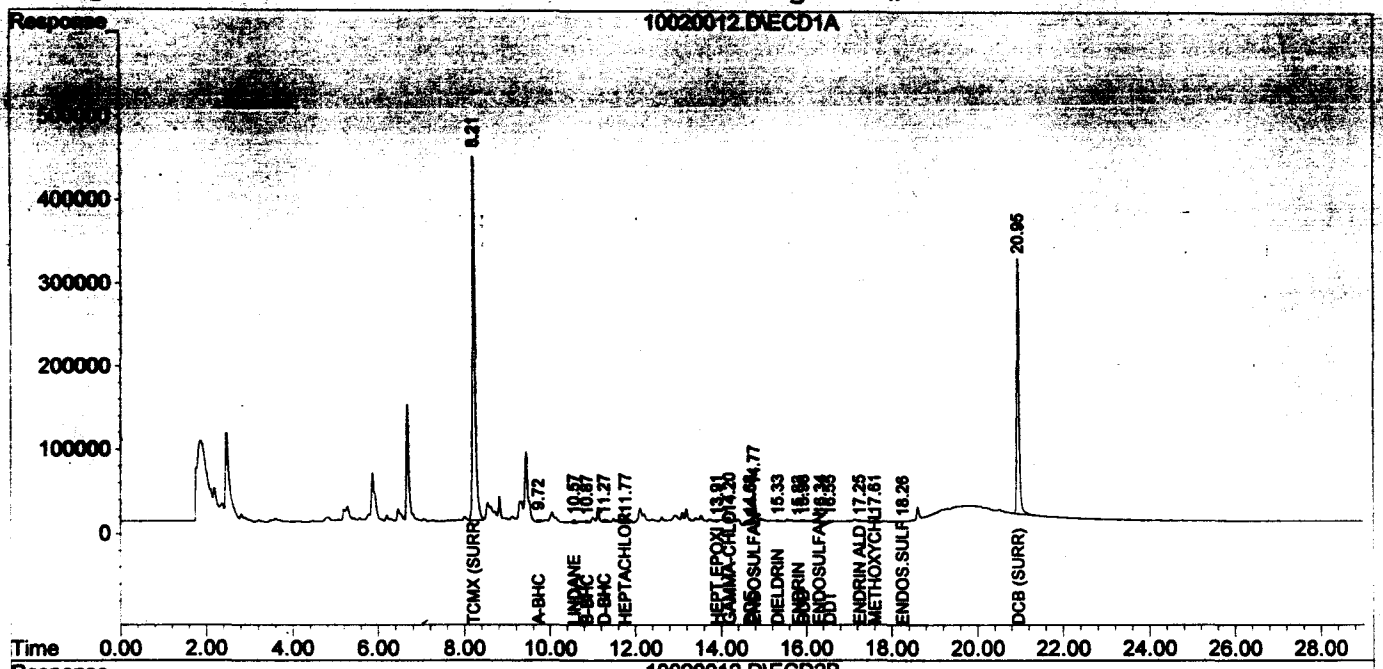
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.22	7.89	18316358	19875935	0.181	0.184	
		Spiked Amount 0.250			Recovery	=	72.40%	73.60%	
22)	S	DCB (SURR)	20.96	21.36	11354728	12429239	0.140	0.142	
		Spiked Amount 0.250			Recovery	=	56.00%	56.80%	
		Target Compounds							
2)	T	A-BHC	9.72	9.54	119163	90119	0.001	0.001	#
3)	T	B-BHC	10.87	10.69f	92919	554733	0.001	0.007	#
4)	T	LINDANE	10.57	10.48	190800	141492	0.001	0.001	#
5)	T	D-BHC	11.27	11.46	189016	101127	0.001	0.001	#
6)	T	HEPTACHLOR	11.76	11.57f	88827	419102	0.001	0.003	#
7)	T	ALDRIN	0.00	12.27	0	33747	N.D.	0.000	#
8)	T	HEPT.EPOXIDE	13.91	13.58	41079	227179	0.000	0.002	#
9)	T	ENDOSULFAN 1	14.78	14.51	1563847	804702	0.016	NC→0.007	#
10)	T	GAMMA-CHLORDANE	14.20	14.03	137312	268970	0.001	0.002	#
11)	T	ALPHA-CHLORDANE	0.00	14.35	0	249573	N.D.	0.002	#
12)	T	DDE	14.68	14.80	411458	274757	0.005	0.002	#
13)	T	DIELDRIN	15.33	15.07	44606	367158	0.000	0.003	#
14)	T	ENDRIN	15.82	15.72	32421	395438	0.000	0.004	#
15)	T	DDD	15.93f	16.12f	83106	330163	0.001	0.004	#
16)	T	ENDOSULFAN 2	16.31f	16.24	165937	138408	0.002	0.001	#
17)	T	ENDRIN ALDEHYDE	17.25	16.92	19411	22779	0.000	0.000	
18)	T	DDT	16.55f	16.69	240647	59734	0.003	0.001	#
19)	T	ENDOS.SULFATE	18.26	17.50	10932	64687	0.000	0.001	#
20)	T	METHOXYCHLOR	17.61f	0.00	80214	0	0.002	N.D.	#
21)	T	ENDRIN KETONE	0.00	18.66	0	12761	N.D.	0.000	#

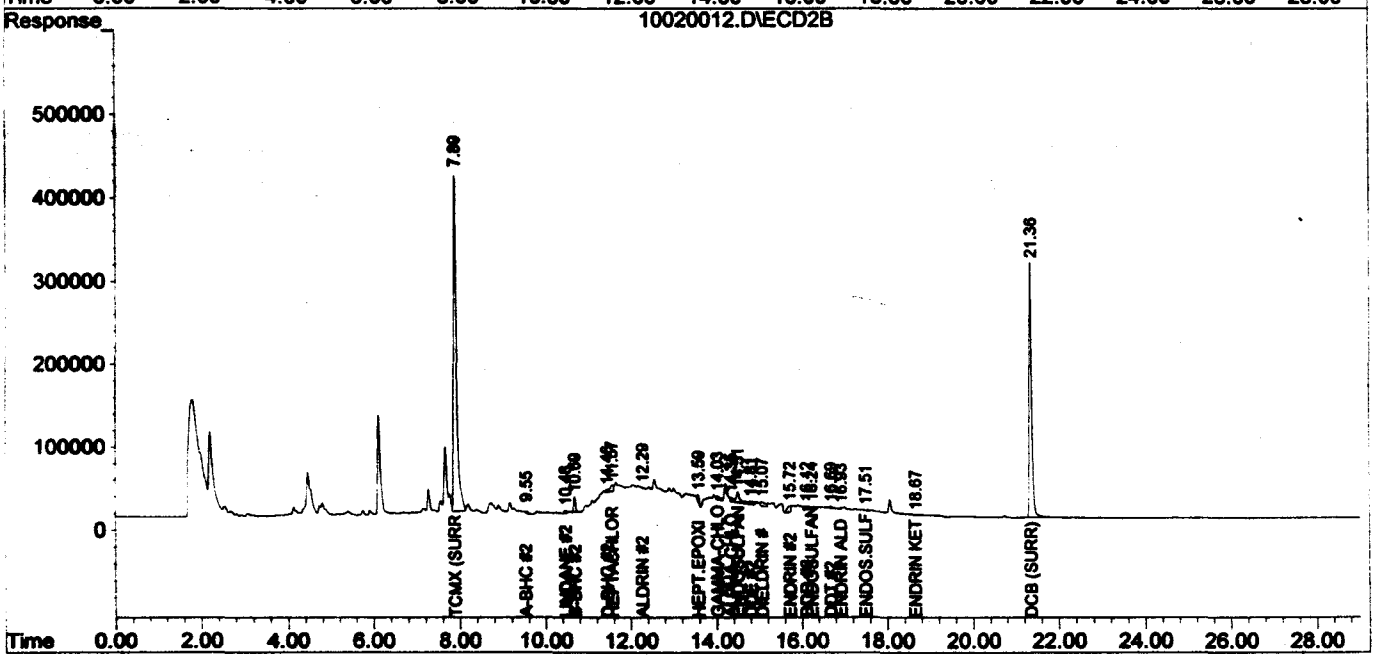
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data File : 10020012.D
InFile Signal #1: EVENTS.Z InFile Signal #2: EV
Quant Time: Oct 5 8:57 2000 Quant Results File: 09

Quant Method : C:\EPCHEM\1\METHODS\092800P.M (Chemstation Int
Title : Calibration for Pest By Method 8081 (0
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





[illegible]

IntFile Signal #1: autoint1.[illegible] IntFile Signal #2: [illegible]
Quant Time: Oct 5 9:10 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

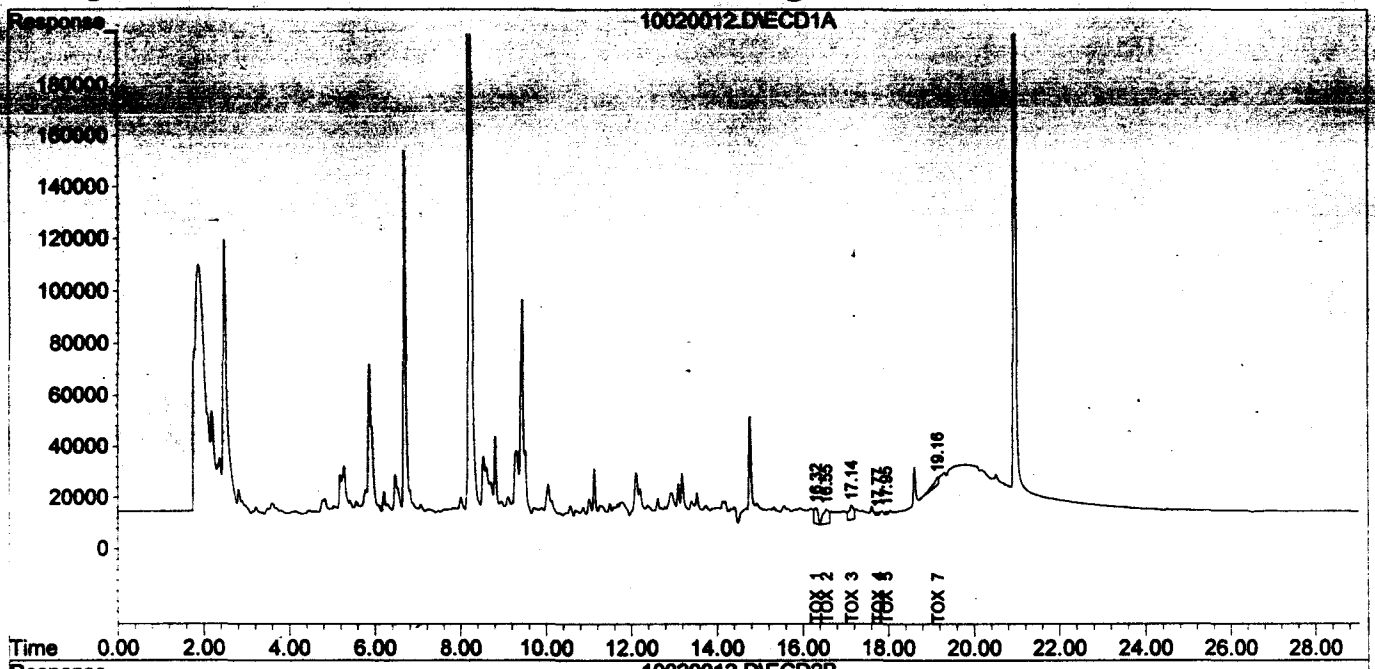
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

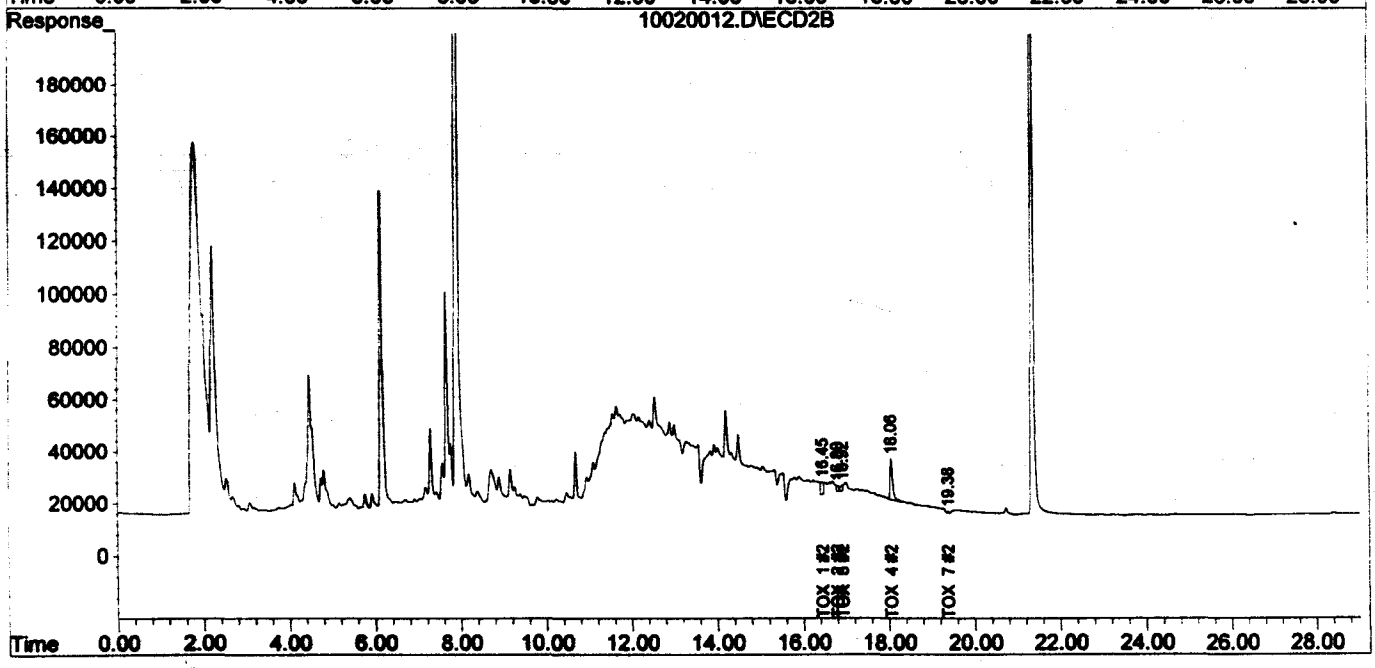
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1) L	TOX 1	16.31	16.46f	382938	225688	0.247	0.050	#
2) L	TOX 2	16.55	16.81	553398	82152	0.227	0.030	#
3) L	TOX 3	17.14f	16.92	430990	89277	0.126	0.025	#
4) L	TOX 4	17.77	18.06	57660	687529	0.017	0.153	#
5) L	TOX 5	17.95	0.00	41762	0	0.010	N.D.	#
6) L	TOX 6	0.00	0.00	0	0	N.D.	N.D.	
7) L	TOX 7	19.16f	19.38f	277632	13124	0.190	0.007	#
Sum	TOX 1			1744381	1097769	0.817	0.265	
Average	TOX 1					0.136	0.053	

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

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Last Update : Wed Aug 02 08:57:05 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





Data File: 10010009 Batch #: 9

Method: 8081A Matrix: Water

[illegible]												
[illegible]												
[illegible]												
[illegible]												
[illegible]	0.25		0.215		86%		68	-	121		Pass
[illegible]	0.25		0.236		[illegible]%		30	-	150		Pass
[illegible]	0.25		0.232		93%		72	-	115		Pass
4,4'-DDD	0.25		0.251		100%		80	-	127		Pass
4,4'-DDE	0.25		0.244		98%		77	-	129		Pass
4,4'-DDT	0.25		0.253		101%		80	-	130		Pass
Dieldrin	0.25		0.248		99%		84	-	128		Pass
Endosulfan I	0.25		0.213		85%		51	-	142		Pass
Endosulfan II	0.25		0.227		91%		54	-	125		Pass
Endosulfan Sulfate	0.25		0.261		104%		87	-	140		Pass
Endrin	0.25		0.253		101%		83	-	131		Pass
Endrin Aldehyde	0.25		0.247		99%		84	-	121		Pass
Endrin Ketone	0.25		0.243		97%		30	-	150		Pass
Heptachlor epoxide	0.25		0.241		96%		81	-	128		Pass
Heptachlor	0.25		0.227		91%		70	-	125		Pass
Methoxychlor	0.25		0.254		102%		85	-	122		Pass

Surrogates	Expected Rec. (ppm)		Actual Rec. (ppm)		Percent Recovery		Recovery Limits (%)				Pass/ Fail
Tetrachloro-m-xylene	0.25		0.177		71%		51	-	123		Pass
Decachlorobiphenyl	0.25		0.132		53%		42	-	153		Pass

[redacted]

DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :

[redacted]

)	S	[redacted]	8.23	7.91	17[redacted]	38 19[redacted]	83	0.[redacted]
Sp[redacted]					[redacted]covery		70.80% V	[redacted]
)	S	DCB (60m,R)	20.98	21.39	10730182	11685772	0.132	0.133
Spiked Amount		0.250			Recovery	=	52.80% V	53.20%

Target Compounds

)	T	A-BHC	9.75	9.57	32356993	35320621	0.209	0.204
)	T	B-BHC	10.84	10.73	13994043	15126625	0.212	0.202
)	T	LINDANE	10.59	10.48	29886156	32128625	0.215	0.207
)	T	D-BHC	11.28	11.44	32129269	27305289	0.232	0.211
)	T	HEPTACHLOR	11.77	11.53	22536784	28200999	0.227	0.205
)	T	ALDRIN	12.49	12.28	22982564	28103579	0.214	0.212
)	T	HEPT.EPOXIDE	13.92	13.62	22737733	26845876	0.241	0.246
)	T	ENDOSULFAN 1	14.81	14.49	20984143	25019206	0.213	0.210
)	T	GAMMA-CHLORDANE	14.21	14.04	25820571	30536142	0.236	0.228
)	T	ALPHA-CHLORDANE	14.51	14.37	23848212	28770104	0.247	0.237
)	T	DDE	14.70	14.78	22036424	29833030	0.244	0.243
)	T	DIELDRIN	15.35	15.09	23287264	29555892	0.248	0.257
)	T	ENDRIN	15.86	15.75	19258282	22779781	0.253	0.255
)	T	DDD	16.02	16.03	19671007	23189944	0.251	0.257
)	T	ENDOSULFAN 2	16.36	16.22	18055611	23796698	0.227	0.230
)	T	ENDRIN ALDEHYDE	17.27	16.95	15904807	19837932	0.247	0.260
)	T	DDT	16.62	16.69	19402315	22561448	0.253	0.250
)	T	ENDOS.SULFATE	18.21	17.54	19445764	22019166	0.261	0.261
)	T	METHOXYCHLOR	17.66	18.17	9836517	11657958	0.254	0.289
)	T	ENDRIN KETONE	18.83	18.68	20682750	23450837	0.243	0.250

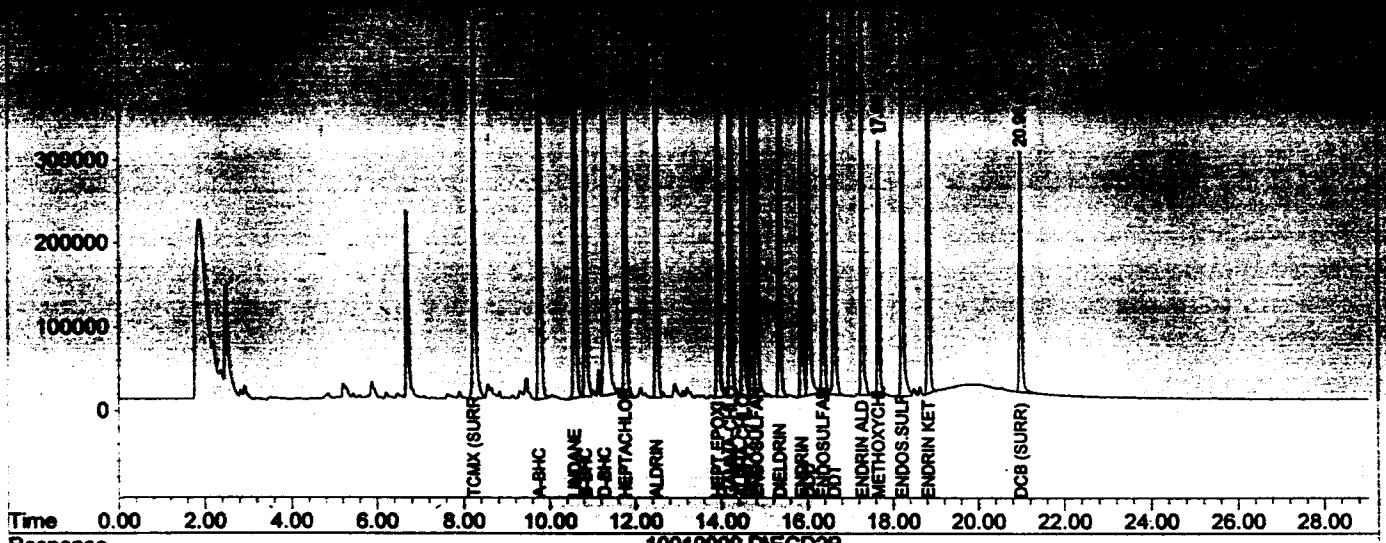
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

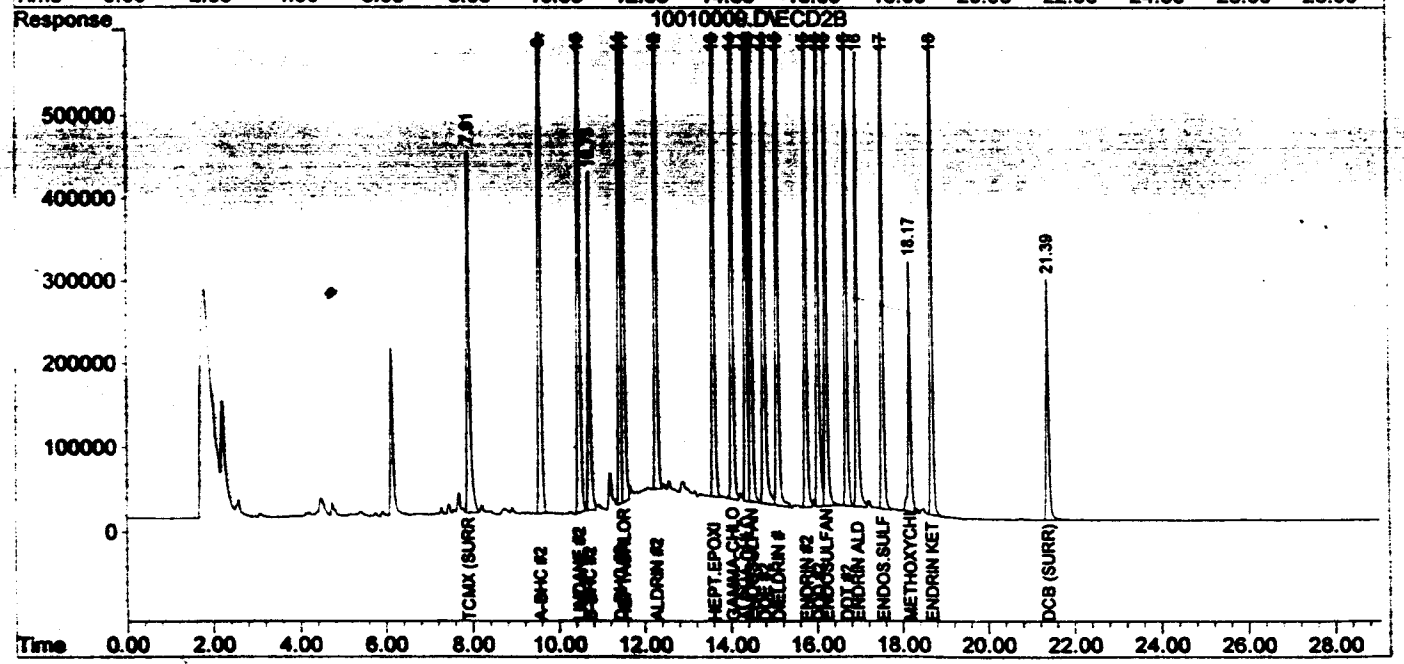
[redacted]

808ID1.M

Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :





[redacted]

Pesticides LCS Report

Sample ID:	LCS PEST W TB 09/29	**Date Acquired:**	10/2/00
Operator:	YGK	**Instrument ID:**	PEST-A
Data File:	10020013	**Bottle #:**	13
Method:	8081A	**Matrix:**	Water

Compounds	Expected Conc. (ppm)	Actual Conc. (ppm)	Percent Recovery	Recovery Limits (%)	Pass/ Fail
[redacted]	0.25	0.204	82%	67 - [redacted]	Pass
[redacted]HC	0.25	0.19	76%	65 - 117	Pass
[redacted]	0.25	0.189	76%	67 - 120	Pass
[redacted]HC	0.25	0.187	75%	68 - 121	Pass
delta-BHC	0.25	0.093	37%	72 - 115	Fail
4,4'-DDD	0.25	0.249	100%	80 - 127	Pass
4,4'-DDE	0.25	0.237	95%	77 - 129	Pass
4,4'-DDT	0.25	0.206	82%	80 - 130	Pass
Dieldrin	0.25	0.239	96%	84 - 128	Pass
Endosulfan I	0.25	0.207	83%	51 - 142	Pass
Endosulfan II	0.25	0.217	87%	54 - 125	Pass
Endosulfan Sulfate	0.25	0.144	58%	87 - 140	Fail
Endrin	0.25	0.242	97%	83 - 131	Pass
Endrin Aldehyde	0.25	0.015	6%	84 - 121	Fail
Heptachlor epoxide	0.25	0.234	94%	81 - 128	Pass
Heptachlor	0.25	0.212	85%	70 - 125	Pass
Methoxychlor	0.25	0.222	89%	85 - 122	Pass

Surrogates	Expected Rec. (ppm)	Actual Rec. (ppm)	Percent Recovery	Recovery Limits (%)	Pass/ Fail
Tetrachloro-m-xylene	0.25	0.167	67%	51 - 123	Pass
Decachlorobiphenyl	0.25	0.141	56%	42 - 153	Pass

Sample : LCS W 09/29 TEA
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Oct 5 8:58 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

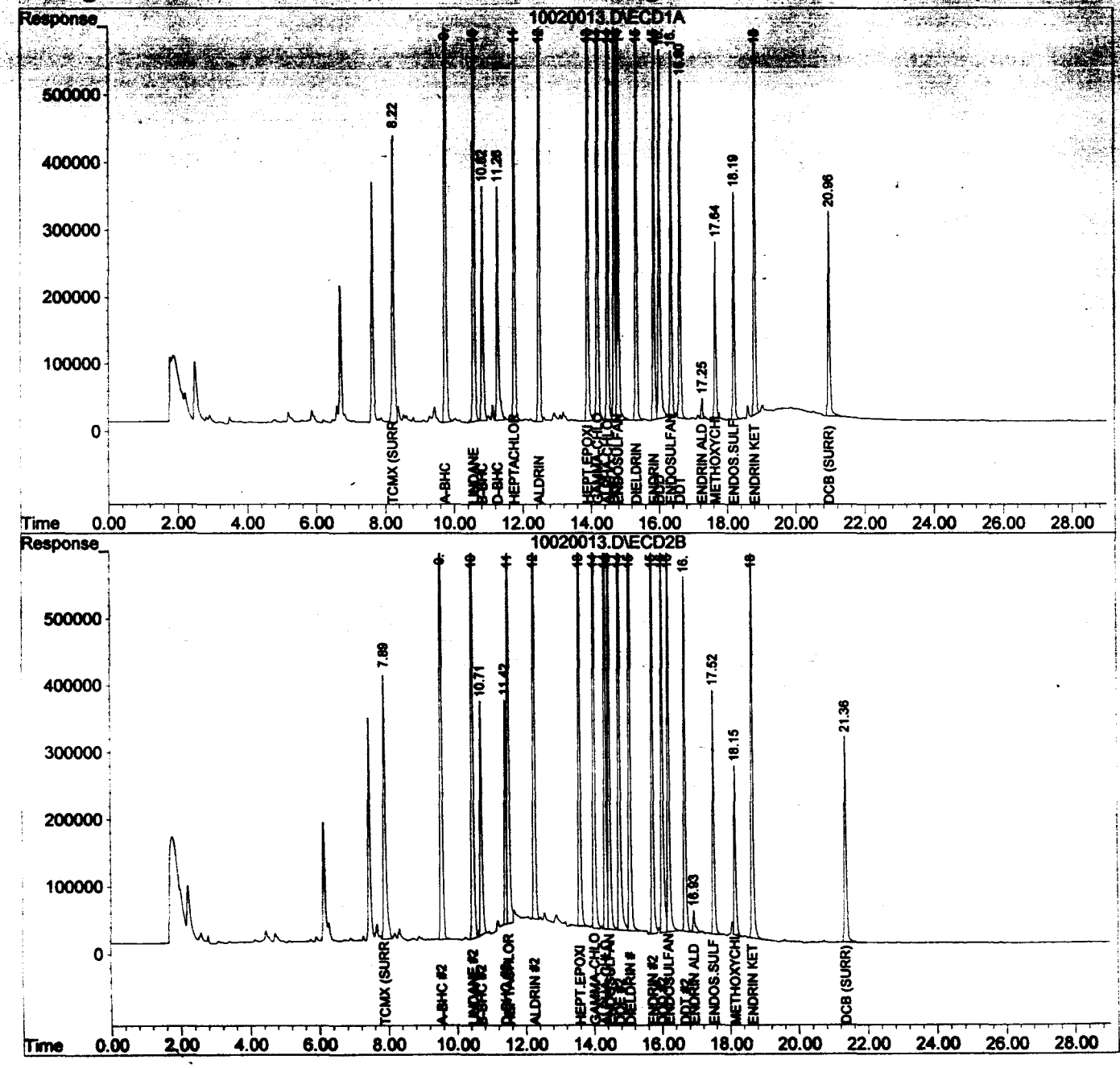
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.22	7.89	16861968	18122351	0.167	0.167	
		Spiked Amount 0.250			Recovery =		66.80%	66.80%	
22)	S	DCB (SURR)	20.96	21.36	11439537	12479591	0.141	0.142	
		Spiked Amount 0.250			Recovery =		56.40%	56.80%	
		Target Compounds							
2)	T	A-BHC	9.74	9.55	29311284	31395027	0.190	0.182	
3)	T	B-BHC	10.82	10.71	12500245	13796892	0.189	0.184	
4)	T	LINDANE	10.57	10.46	26048456	27675055	0.187	0.178	
5)	T	D-BHC	11.26	11.42	12845459	10859833	0.093	0.084	
6)	T	HEPTACHLOR	11.75	11.51	20972340	25180870	0.212	0.183	
7)	T	ALDRIN	12.47	12.27	21926168	26041909	0.204	0.197	
8)	T	HEPT.EPOXIDE	13.90	13.60	22027408	24855263	0.234	0.228	
9)	T	ENDOSULFAN 1	14.79	14.47	20350048	23485279	0.207	0.198	
10)	T	GAMMA-CHLORDANE	14.19	14.02	24303525	28606667	0.222	0.214	
11)	T	ALPHA-CHLORDANE	14.49	14.35	21962433	26452792	0.228	0.218	
12)	T	DDE	14.68	14.76	21417136	28282263	0.237	0.230	
13)	T	DIELDRIN	15.33	15.07	22399079	27428519	0.239	0.238	
14)	T	ENDRIN	15.84	15.73	18404991	21579926	0.242	0.242	
15)	T	DDD	16.00	16.01	19565701	22533578	0.249	0.250	
16)	T	ENDOSULFAN 2	16.34	16.20	17237449	22549141	0.217	0.218	
17)	T	ENDRIN ALDEHYDE	17.25	16.93	950001	1428095	0.015	0.019	#
18)	T	DDT	16.60	16.67	15801083	18122971	0.206	0.201	
19)	T	ENDOS.SULFATE	18.19	17.52	10729776	12645048	0.144	0.150	
20)	T	METHOXYCHLOR	17.64	18.15	8603206	9038731	0.222	0.224	
21)	T	ENDRIN KETONE	18.80	18.66	19068931	22016268	0.224	0.235	

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

Sample : LCS
Misc : Multiplier:
IntFile Signal #1: EVENTS.E IntFile Signal #2: event.e
Quant Time: Oct 5 8:58 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Accura Analytical Laboratory, Inc.

Pesticides MS/MSD Report

Sample ID:	00095	[illegible]	10/2/00
Operator:	YGK	Instrument ID:	PEST-A
Data File:	10010012&13	[illegible]	12&13
Method:	8081	[illegible]	Water

Compounds	Expected Conc. (ppm)	MS Act. Conc. (ppm)	MS % Recovery	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lindane	0.25	0.206	82%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Heptachlor	0.25	0.223	89%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Aldrin	0.25	0.214	86%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Dieldrin	0.25	0.238	95%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Endrin	0.25	0.249	100%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DDT	0.25	0.245	98%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Endosulfan 1	0.25	0.208	83%	0.206	82%	[illegible]	Pass	[illegible]
Methoxychlor	0.25	0.251	100%	0.258	103%	[illegible]	Pass	[illegible]

Surrogates	Expected Conc. (ppm)	MS Act. Conc. (ppm)	MS % Recovery	MSD Act. Conc. (ppm)	MSD [illegible]	[illegible]	MS Pass [illegible]	[illegible]
Tetrachloro-m-xylene	0.25	0.174	70%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Decachlorobiphenyl	0.25	0.206	82%	0.197	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

Response Via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

[illegible]

[illegible] Compounds

S	[illegible]	[illegible]	[illegible]	[illegible]	9200928	0.174	[illegible]
Spiked Amount	[illegible]250			Recovery	=	69.60%	70.80%
S	DCB (SURR)	20.98	21.38	16754104	18521678	0.206	0.211
Spiked Amount	0.250			Recovery	=	82.40%	84.40%

Target Compounds

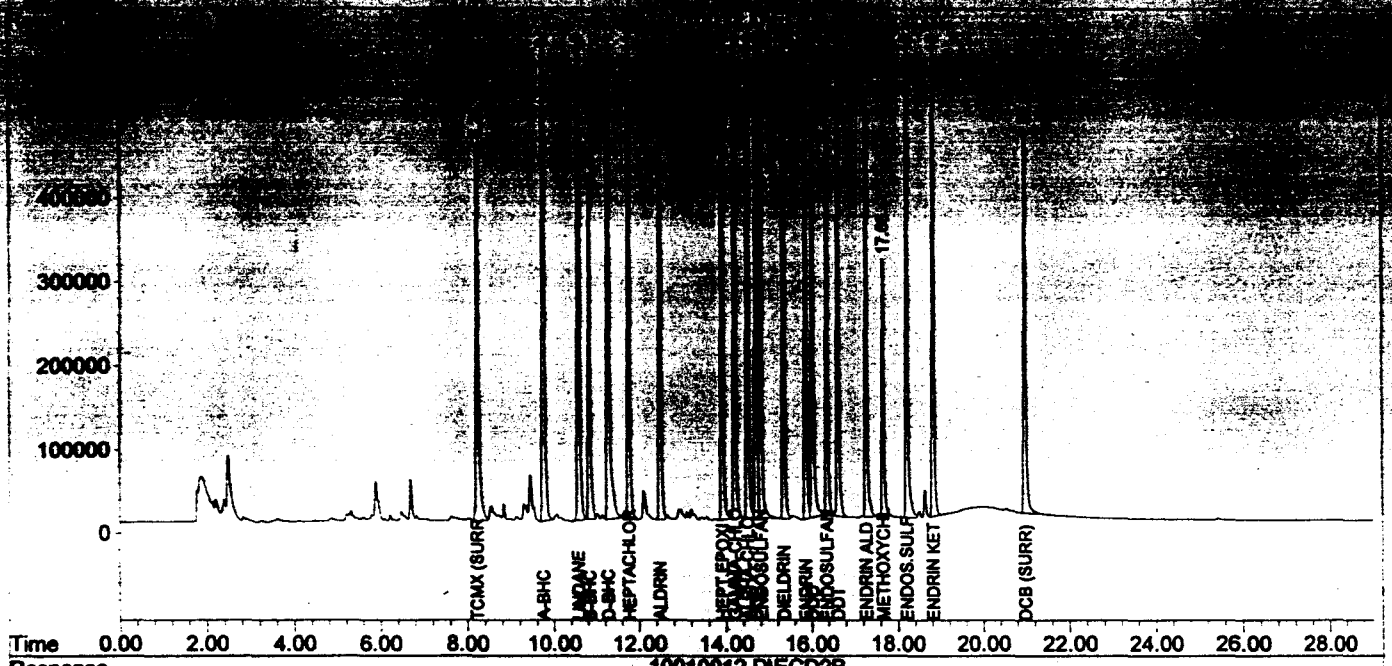
T	A-BHC	9.76	9.57	31011664	33510290	0.201	0.194
T	B-BHC	10.84	10.73	13544211	13738701	0.205	0.183
T	LINDANE	10.59	10.48	28701680	30527540	0.206	0.196
T	D-BHC	11.28	11.44	29901748	26141616	0.216	0.202
T	HEPTACHLOR	11.77	11.53	22128005	27984830	0.223	0.204
T	ALDRIN	12.49	12.28	22980662	27449254	0.214	0.207
T	HEPT.EPOXIDE	13.92	13.62	22183701	25747793	0.235	0.236
T	ENDOSULFAN 1	14.81	14.49	20478924	24006917	0.208	0.202
T	GAMMA-CHLORDANE	14.21	14.04	24843290	28974364	0.227	0.216
T	ALPHA-CHLORDANE	14.51	14.37	22825252	27486781	0.237	0.226
T	DDE	14.70	14.78	21126720	27939177	0.234	0.227
T	DIELDRIN	15.35	15.09	22331383	28146285	0.238	0.245
T	ENDRIN	15.86	15.75	18947358	22238404	0.249	0.249
T	DDD	16.02	16.03	19208615	22296401	0.245	0.247
T	ENDOSULFAN 2	16.36	16.22	17251490	22478043	0.217	0.217
T	ENDRIN ALDEHYDE	17.27	16.95	15756835	19563558	0.244	0.256
T	DDT	16.62	16.69	18821748	21372142	0.245	0.237
T	ENDOS.SULFATE	18.21	17.54	19335741	21797948	0.260	0.258
T	METHOXYCHLOR	17.66	18.17	9744090	11230733	0.251	0.278
T	ENDRIN KETONE	18.83	18.68	20637253	23092058	0.243	0.246

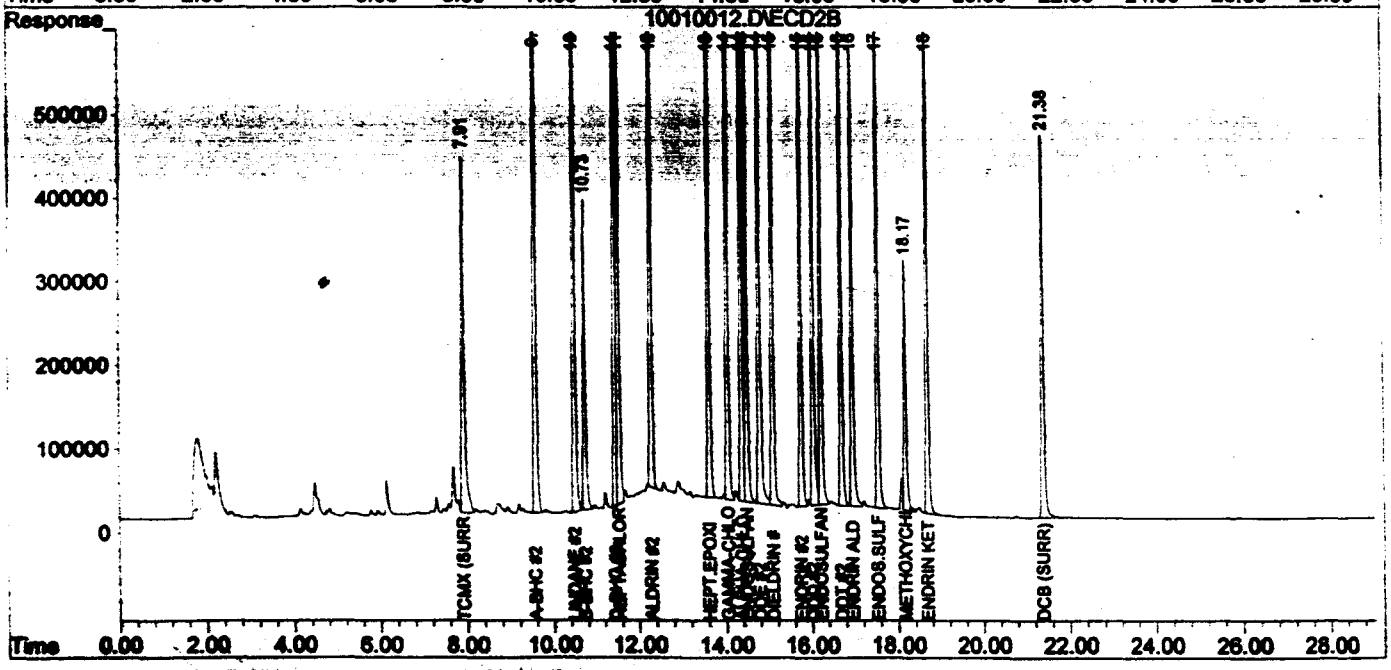
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Response Via : Multiple Level Calibration
DataAcq Meth : 8081DI.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :





[illegible]

Response [illegible] Initial Calibration
DataAcq [illegible] 8081DI.M

Volume Inj [illegible] :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

[illegible] Resp 2 mg/l [illegible]

Sy[illegible] Compounds)

) S	[illegible]	8.23	7.9[illegible]	[illegible]54	17987678	0.163	0[illegible]
Spiked [illegible]	[illegible]250			Recovery	=	65.20% ✓	66.[illegible]
) S	DCB (SURR)	20.98	21.38	16004413	17761055	0.197	0.20[illegible]
Spiked Amount	0.250			Recovery	=	78.80% ✓	81.20[illegible]

Target Compounds

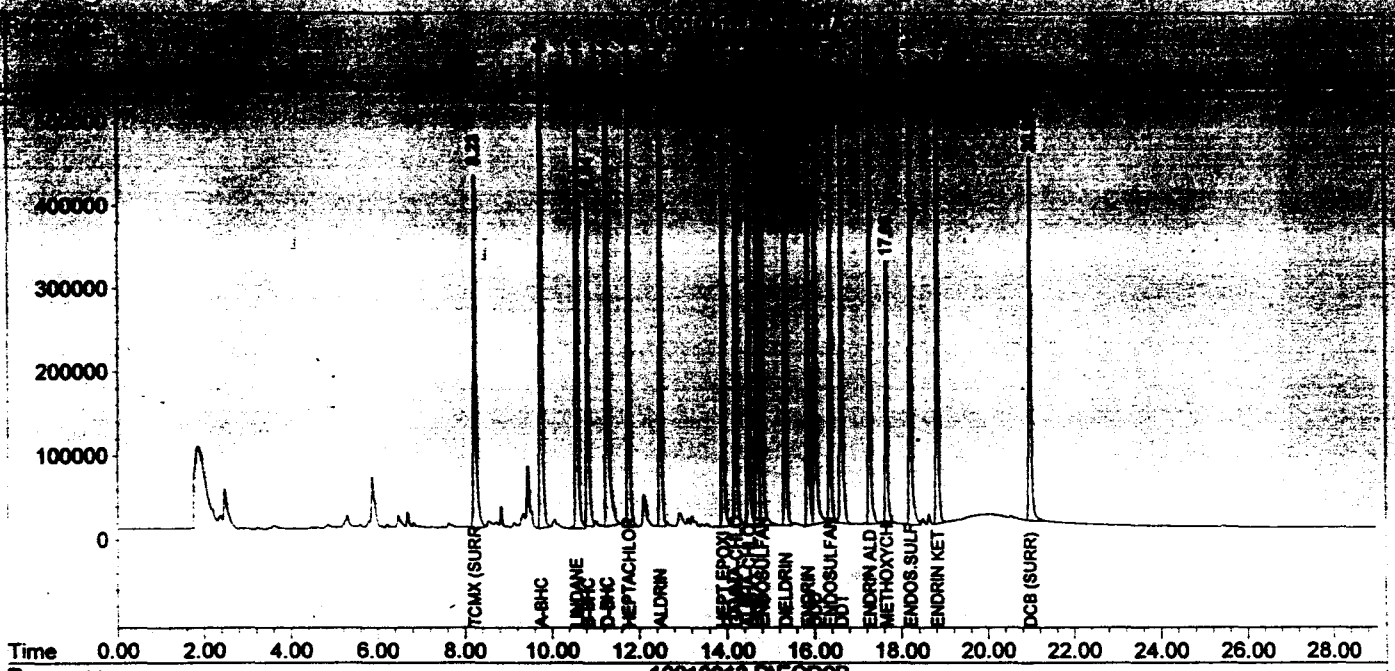
) T	A-BHC	9.75	9.57	30904802	33310188	0.200	0.193
) T	B-BHC	10.84	10.73	13475987	13630180	0.204	0.182
) T	LINDANE	10.58	10.48	29078756	30612903	0.209	0.197
) T	D-BHC	11.28	11.44	29419646	25954565	0.212	0.201
) T	HEPTACHLOR	11.77	11.53	21643807	27276688	0.218	0.199
) T	ALDRIN	12.49	12.28	22031571	25950808	0.205	0.196
) T	HEPT.EPOXIDE	13.92	13.62	22050712	25706473	0.234	0.236
) T	ENDOSULFAN 1	14.81	14.49	20302693	23835855	0.206	0.201
) T	GAMMA-CHLORDANE	14.21	14.04	24510929	28757483	0.224	0.215
) T	ALPHA-CHLORDANE	14.51	14.37	22822538	27348425	0.237	0.225
) T	DDE	14.70	14.78	20856974	27218922	0.231	0.222
) T	DIELDRIN	15.35	15.09	21981874	28068275	0.234	0.244
) T	ENDRIN	15.86	15.75	18767390	22003998	0.247	0.246
) T	DDD	16.02	16.03	19076274	22541174	0.243	0.250
) T	ENDOSULFAN 2	16.36	16.22	17048830	22184690	0.215	0.214
) T	ENDRIN ALDEHYDE	17.27	16.95	15737364	19583060	0.244	0.256
) T	DDT	16.62	16.69	19351026	21093122	0.252	0.234
) T	ENDOS.SULFATE	18.21	17.54	19449192	21951930	0.261	0.260
) T	METHOXYCHLOR	17.66	18.17	9996718	11305569	0.258	0.280
) T	ENDRIN KETONE	18.83	18.68	20891798	23550106	0.246	0.251

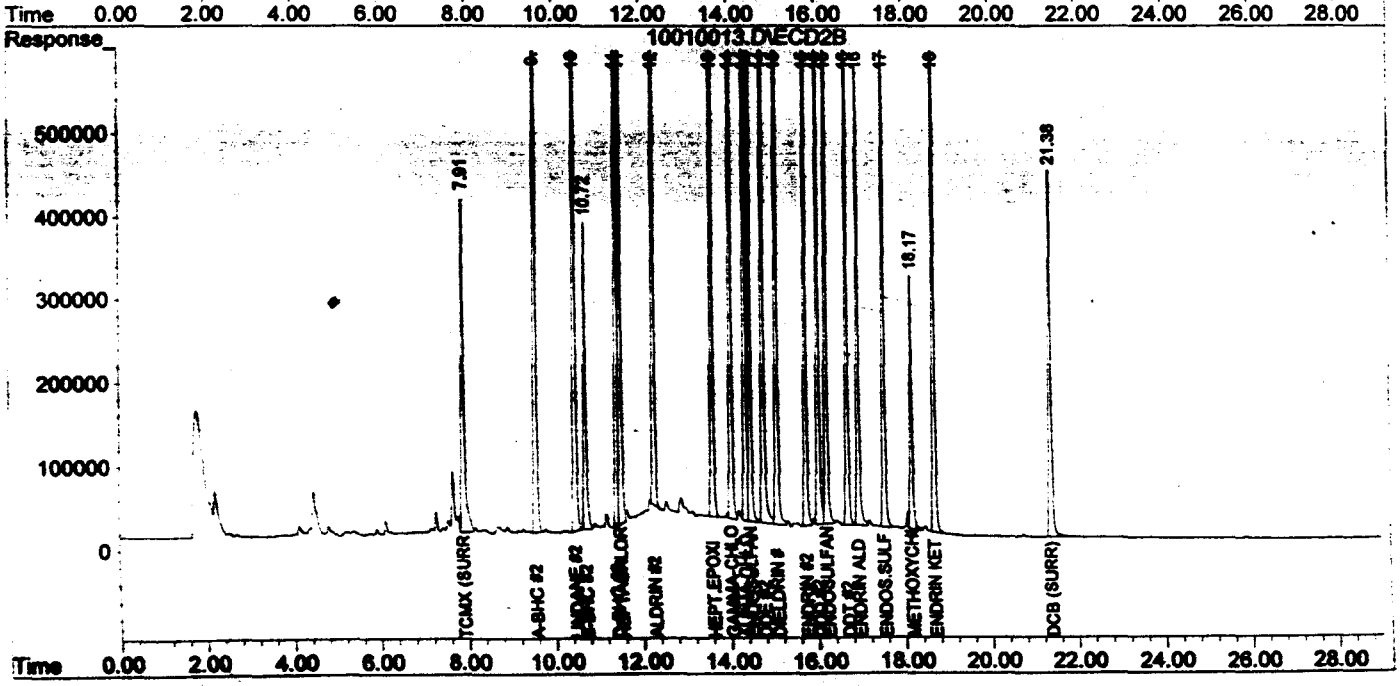
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :





[illegible] 2000
[illegible] : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

[illegible]

[illegible]

) [illegible]		[illegible]	[illegible]	[illegible]	27520243	[illegible]	[illegible]
Sp[illegible]	[illegible]				Recovery =	[illegible]	[illegible]
) S	DCB (SURR)	20.99	21.39	18492765	21210277	0.228	0.242
Spiked Amount	0.250			Recovery	=	91.20% V	96.80%

Target Compounds

) T	A-BHC	9.76	9.57	38574054	43505760	0.249	0.252
) T	B-BHC	10.84	10.73	16394105	18886211	0.248	0.252
) T	LINDANE	10.59	10.48	34980744	39458328	0.252	0.254
) T	D-BHC	11.28	11.44	34477570	32777637	0.249	0.253
) T	HEPTACHLOR	11.77	11.53	25096143	35929085	0.253	0.261
) T	ALDRIN	12.50	12.29	27216534	34366708	0.254	0.260
) T	HEPT.EPOXIDE	13.93	13.62	23780852	28862030	0.252	0.265
) T	ENDOSULFAN 1	14.82	14.49	24879680	30927904	0.253	0.260
) T	GAMMA-CHLORDANE	14.22	14.05	27973401	34227553	0.256	0.256
) T	ALPHA-CHLORDANE	14.51	14.37	25317265	31200791	0.262	0.257
) T	DDE	14.71	14.78	22869899	31706555	0.253	0.258
) T	DIELDRIN	15.35	15.09	23685963	30131548	0.253	0.262
) T	ENDRIN	15.87	15.76	18919862	23181147	0.249	0.259
) T	DDD	16.03	16.04	19732396	23667783	0.251	0.262
) T	ENDOSULFAN 2	16.37	16.23	19924640	26646044	0.251	0.257
) T	ENDRIN ALDEHYDE	17.28	16.95	14966737	18770195	0.232	0.246
) T	DDT	16.63	16.70	18458637	21815280	0.240	0.242
) T	ENDOS.SULFATE	18.22	17.54	17417747	21592696	0.234	0.255
) T	METHOXYCHLOR	17.67	18.17	9280662	9810356	0.240	0.243
) T	ENDRIN KETONE	18.83	18.69	19886814	23291208	0.234	0.248

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
10010004.D 092800P.M Mon Oct 02 15:38:34 2000 Page 1

[redacted]

DataAcq Meth : 8081Dr.M

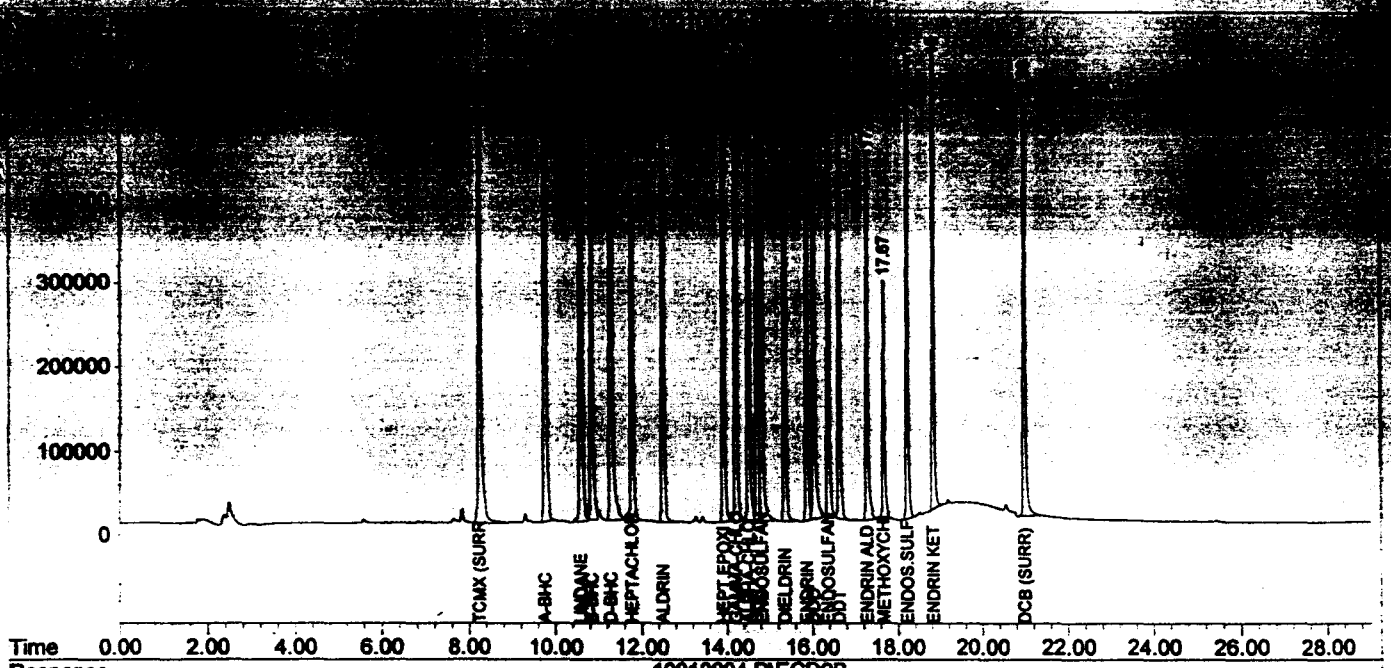
Volume Inj. :

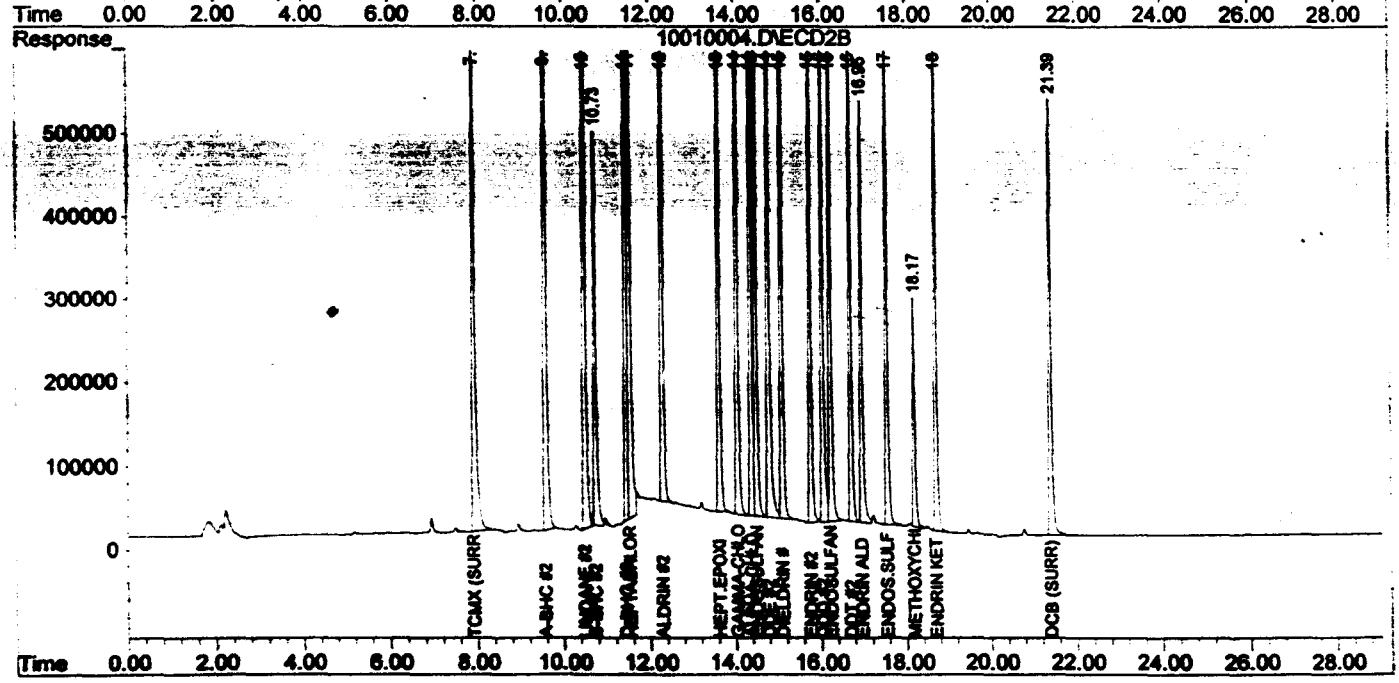
Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :





[illegible]

[illegible] : Wed [illegible]

Response via : Initial Calibration

DataAcq Meth : 8081D1.M

Volume Inj. :

Signal #1 Phase : Signal #2 Phase:

Signal #1 Info : Signal #2 Info :

[illegible]								
[illegible]	L	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	L	TOX	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	L	TOX	3	17.08	16.96	8479162	9834458	2.486	2.709
[illegible]	L	TOX	4	17.80	18.06	7969765	12258910	2.322	2.733
[illegible]	L	TOX	5	18.00	18.18	10416096	9735440	2.393	2.623
[illegible]	L	TOX	6	18.78	18.89	6922300	6428504	2.447	2.560
[illegible]	L	TOX	7	19.10	19.29	3470976	4164058	2.377	2.087
	Sum	TOX	1			47229021	61635900	16.983	18.001
[illegible]erage		TOX	1					2.426	2.572

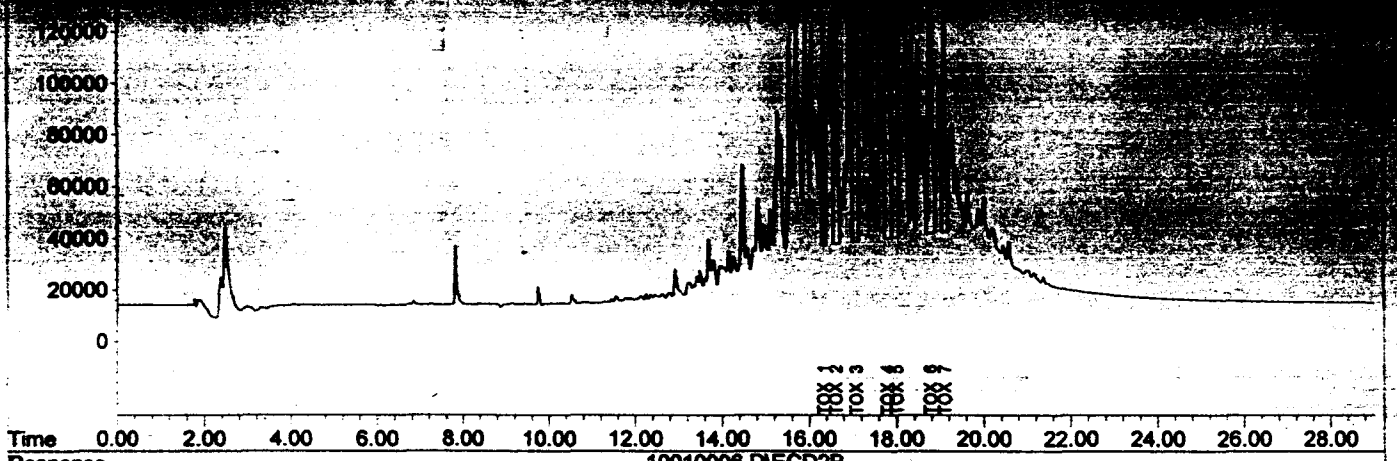
97%

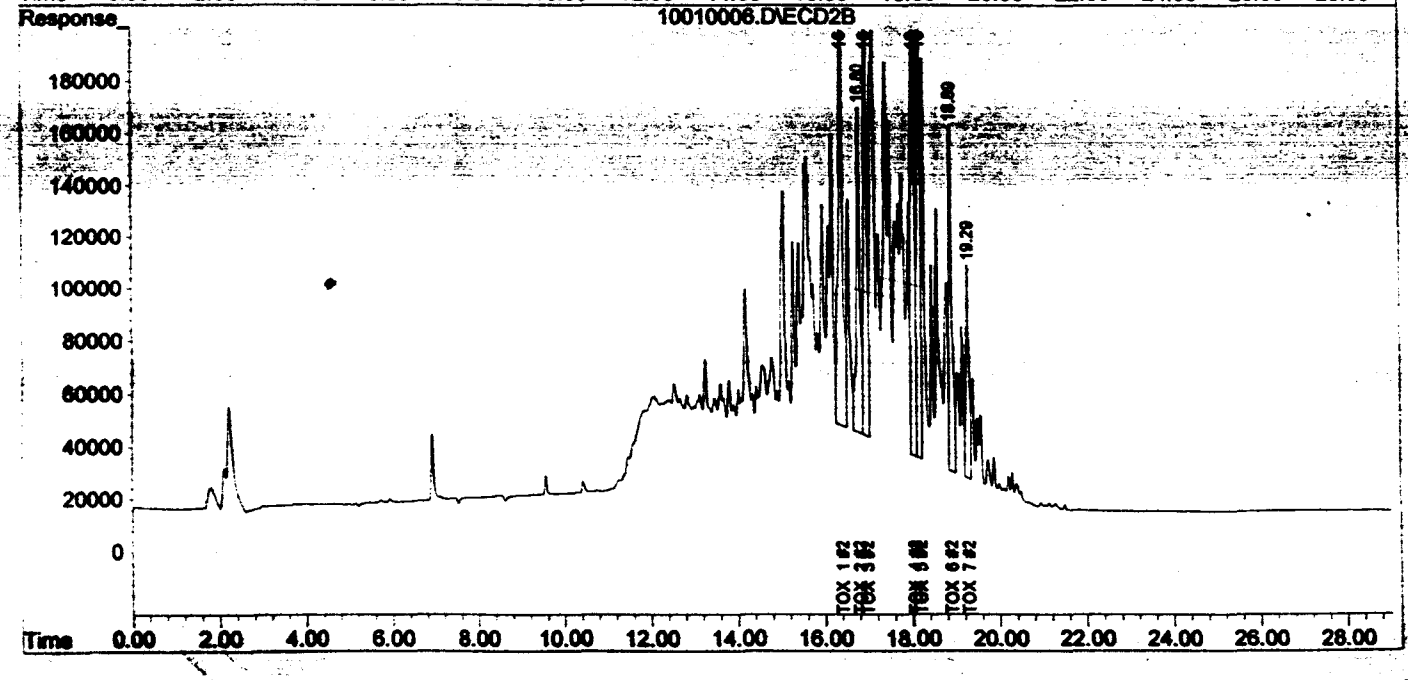
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :





[illegible]

Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

			RT#1	RT#2	Resp#1	Resp#2	[illegible]	[illegible]
	Sy[illegible]							
)	S	[illegible]	8.23	7.91	24449919	25375757	0.242	[illegible]
Spiked		[illegible]			Recovery	=	96.80%	[illegible]
)	S	DCB (SURR)	20.98	21.39	19034685	20849089	0.234	0.238
Spiked Amount		0.250			Recovery	=	93.60%	95.20%
	Target Compounds							
)	T	A-BHC	9.75	9.57	36751881	41072396	0.238	0.238
)	T	B-BHC	10.84	10.73	15280992	17447474	0.232	0.233
)	T	LINDANE	10.59	10.48	32875666	36523359	0.237	0.235
)	T	D-BHC	11.28	11.44	32123897	29868387	0.232	0.231
)	T	HEPTACHLOR	11.77	11.53	22823935	33653902	0.230	0.245
)	T	ALDRIN	12.49	12.28	25721781	32213178	0.240	0.243
)	T	HEPT.EPOXIDE	13.92	13.62	22372655	27414305	0.237	0.251
)	T	ENDOSULFAN 1	14.81	14.49	23825027	29066450	0.242	0.245
)	T	GAMMA-CHLORDANE	14.21	14.04	26172960	31989254	0.239	0.239
)	T	ALPHA-CHLORDANE	14.51	14.37	24045230	29040806	0.249	0.239
)	T	DDE	14.71	14.78	20993429	29565486	0.232	0.241
)	T	DIELDRIN	15.35	15.09	22225363	28361387	0.237	0.246
)	T	ENDRIN	15.86	15.75	17509295	21278779	0.230	0.238
)	T	DDD	16.02	16.04	18498723	22211037	0.236	0.246
)	T	ENDOSULFAN 2	16.37	16.22	18982657	25579581	0.239	0.247
)	T	ENDRIN ALDEHYDE	17.27	16.95	14081667	17561170	0.218	0.230
)	T	DDT	16.62	16.70	16722421	20439609	0.218	0.226
)	T	ENDOS.SULFATE	18.21	17.54	17246090	20800751	0.232	0.246
)	T	METHOXYCHLOR	17.67	18.17	8550064	9072615	0.221	0.225
)	T	ENDRIN KETONE	18.83	18.68	20018520	22787065	0.236	0.243

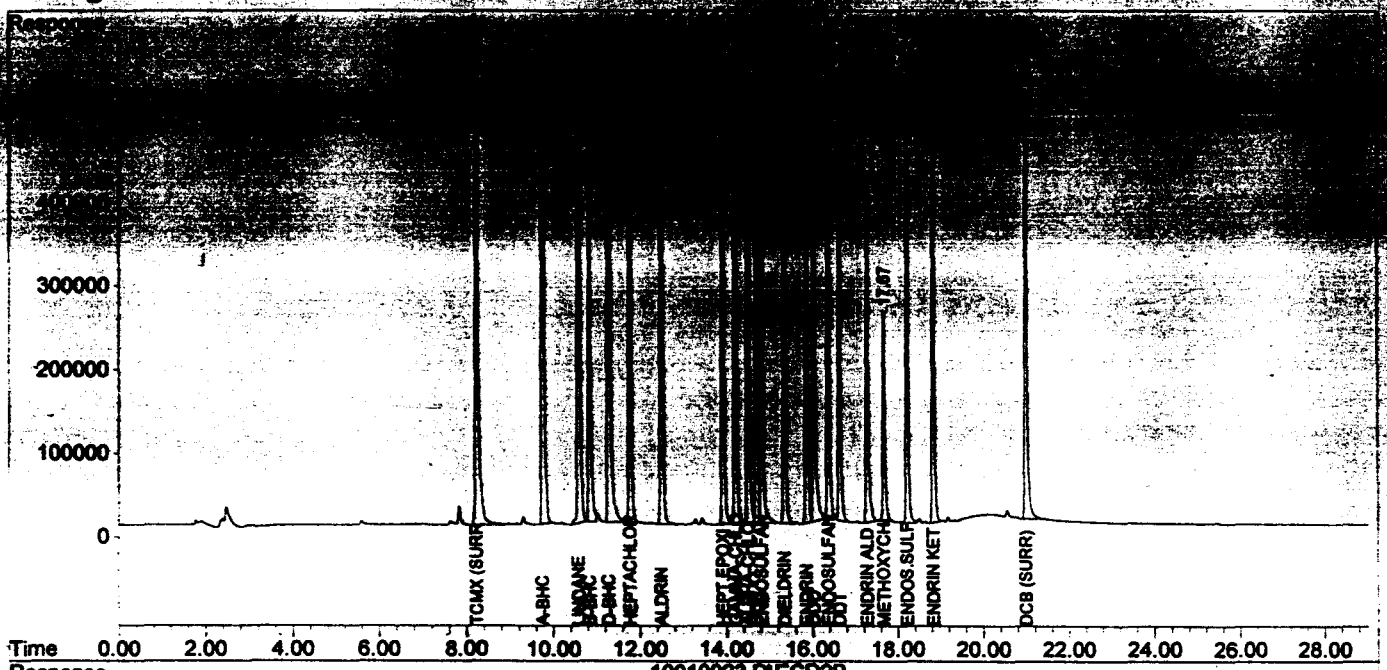
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

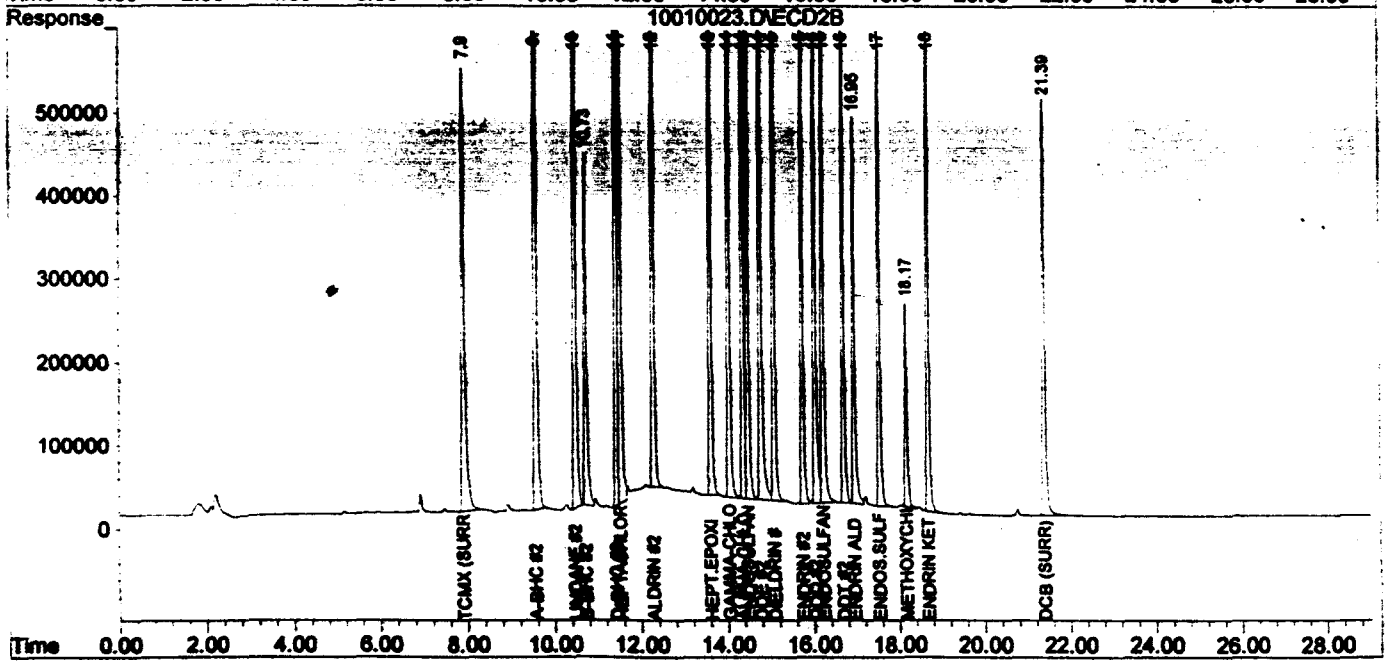
[redacted]

Response via : Multiple Level Calibration
DataAcq Meth : 8081DF.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :





Sample : PEM
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Oct 5 9:04 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

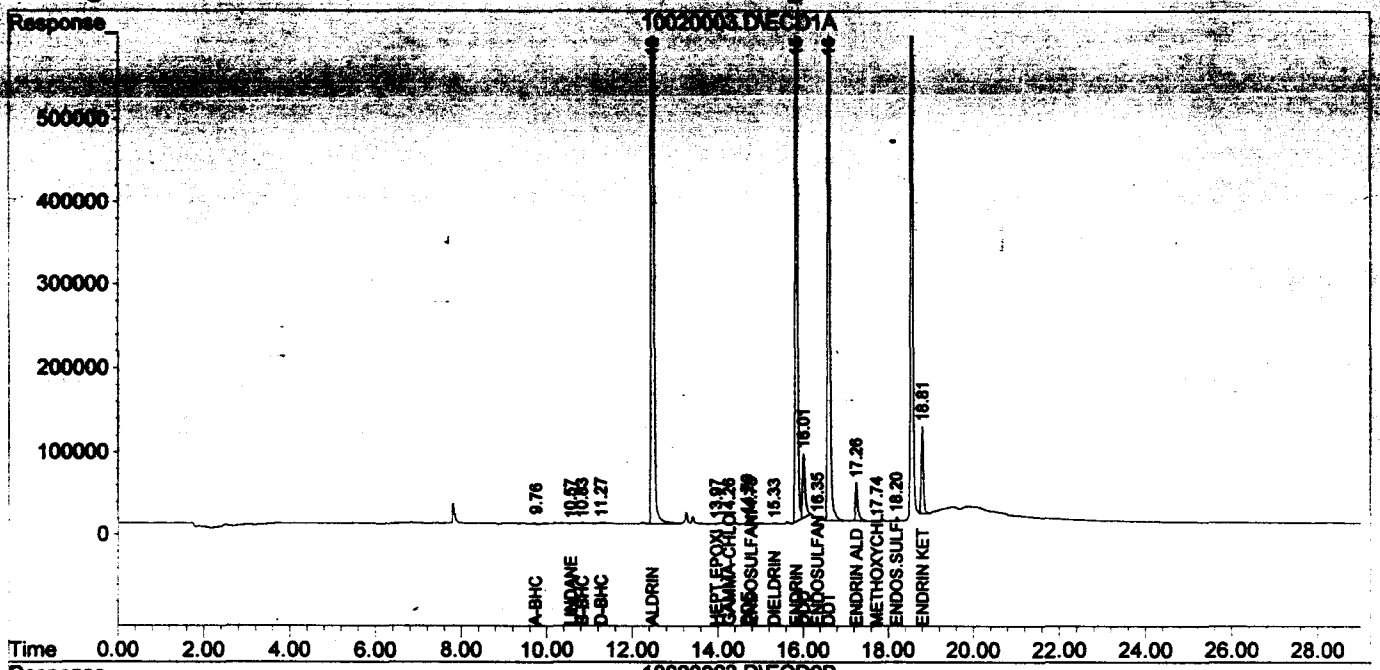
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	0.00	0.00	0	0	N.D.	N.D.	
		Spiked Amount 0.250			Recovery	=	0.00%	0.00%	
22)	S	DCB (SURR)	0.00	0.00	0	0	N.D.	N.D.	
		Spiked Amount 0.250			Recovery	=	0.00%	0.00%	
		Target Compounds							
2)	T	A-BHC	9.74	9.55	46657	8774	0.000	0.000	#
3)	T	B-BHC	10.83	10.76	41252	-22725	0.001	N.D.	#
4)	T	LINDANE	10.57	10.48	11569	6357	0.000	0.000	#
5)	T	D-BHC	11.27	11.47	74876	408793	0.001	0.003	#
6)	T	HEPTACHLOR	0.00	11.47f	0	408793	N.D.	0.003	#
7)	T	ALDRIN	12.47	12.26	47627569	58244917	0.444	0.440	
8)	T	HEPT.EPOXIDE	13.97	0.00	36478	0	0.000	N.D.	#
9)	T	ENDOSULFAN 1	14.78	14.47	226350	69077	0.002	0.001	#
10)	T	GAMMA-CHLORDANE	14.26f	14.06	28068	68675	0.000	0.001	#
11)	T	ALPHA-CHLORDANE	0.00	0.00	0	0	N.D.	N.D.	
12)	T	DDE	14.70	14.78	279355	400973	0.003	0.003	
13)	T	DIELDRIN	15.33	15.07	23975	48587	0.000	0.000	#
14)	T	ENDRIN	15.84	15.73	31631992	38404986	0.416	0.430	
15)	T	DDD	16.01	16.03	3329193	5040213	0.042	0.056	#
16)	T	ENDOSULFAN 2	16.34	16.20	60757	675205	0.001	0.007	#
17)	T	ENDRIN ALDEHYDE	17.26	16.94	1855527	2000668	0.029	0.026	
18)	T	DDT	16.60	16.67	31333278	36036577	0.408	0.399	
19)	T	ENDOS.SULFATE	18.20	17.52	148506	110843	0.002	0.001	#
20)	T	METHOXYCHLOR	17.73f	0.00	10140	0	0.000	N.D.	#
21)	T	ENDRIN KETONE	18.81	18.66	3683113	5128629	0.043	0.055	#

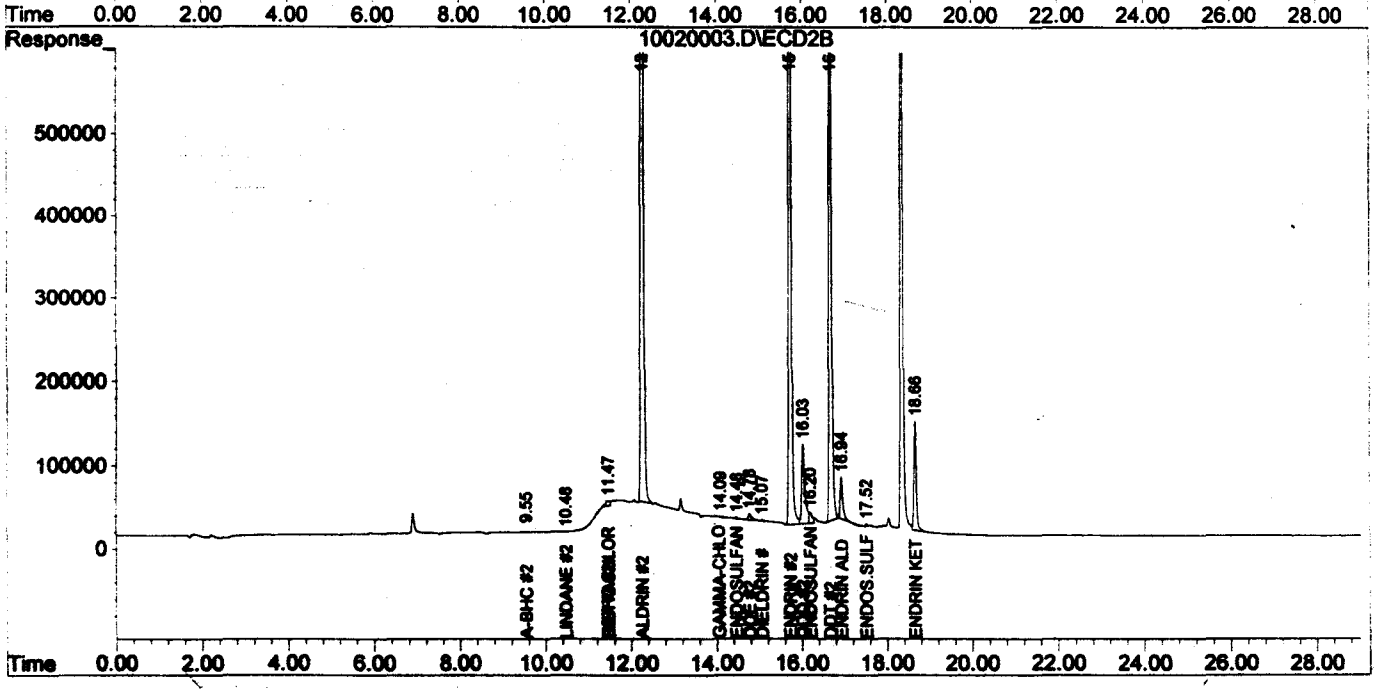
Quant Time: Oct 5 9:04 2000 Quant Results File: 092800P

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation
Title : Calibration for Pest By Method 8081 (09/28/
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :





Misc : Multiplier: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Oct 5 9:05 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

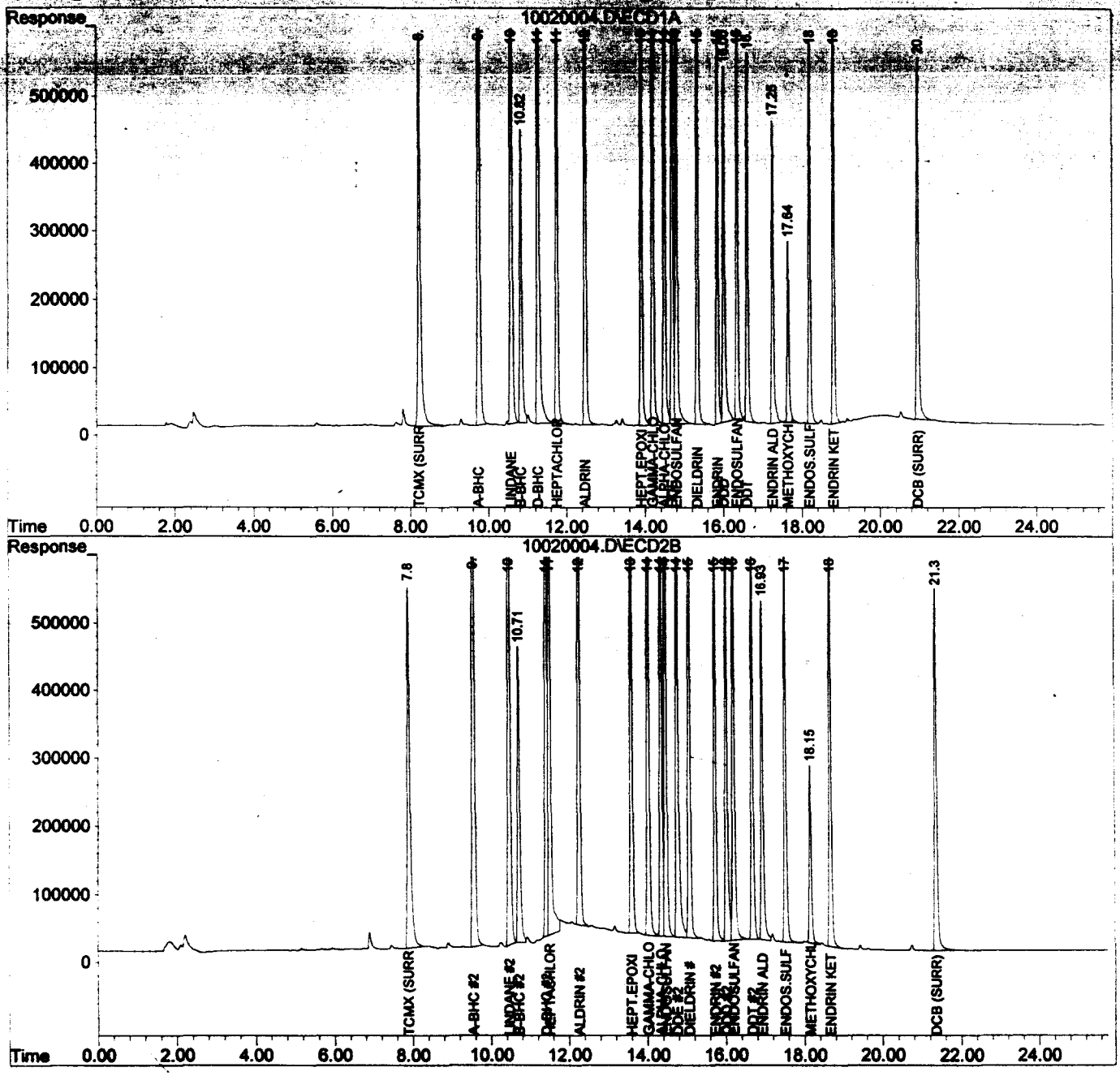
	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
	System Monitoring Compounds						
1)	S TCMX (SURR)	8.21	7.89	25858233	26751756	0.256	0.247
	Spiked Amount 0.250			Recovery	=	102.40%	98.80%
22)	S DCB (SURR)	20.95	21.36	19998565	22000238	0.246	0.251
	Spiked Amount 0.250			Recovery	=	98.40%	100.40%
	Target Compounds						
2)	T A-BHC	9.74	9.55	38929299	43109245	0.252	0.249
3)	T B-BHC	10.82	10.71	16297628	18426943	0.247	0.246
4)	T LINDANE	10.57	10.46	34780950	38612818	0.250	0.248
5)	T D-BHC	11.26	11.42	34375667	30975788	0.248	0.239
6)	T HEPTACHLOR	11.75	11.51	24629264	37776402	0.248	0.275
7)	T ALDRIN	12.47	12.26	27394147	34212956	0.255	0.258
8)	T HEPT.EPOXIDE	13.90	13.60	23800058	29608376	0.252	0.271
9)	T ENDOSULFAN 1	14.79	14.47	25402339	31483336	0.258	0.265
10)	T GAMMA-CHLORDANE	14.19	14.02	28328343	34535762	0.259	0.258
11)	T ALPHA-CHLORDANE	14.49	14.35	26218363	31293588	0.272	0.257
12)	T DDE	14.68	14.76	22495427	32157627	0.249	0.262
13)	T DIELDRIN	15.33	15.07	23653852	30695364	0.252	0.267
14)	T ENDRIN	15.84	15.73	18211196	22579833	0.239	0.253
15)	T DDD	16.00	16.01	20103382	22739808	0.256	0.252
16)	T ENDOSULFAN 2	16.34	16.20	20191296	27794828	0.254	0.268
17)	T ENDRIN ALDEHYDE	17.25	16.93	15525574	18895804	0.241	0.247
18)	T DDT	16.60	16.67	17964549	22064041	0.234	0.244
19)	T ENDOS.SULFATE	18.19	17.52	18140332	22327260	0.244	0.264
20)	T METHOXYCHLOR	17.64	18.15	9194637	9693632	0.237	0.240
21)	T ENDRIN KETONE	18.80	18.66	21322902	24976099	0.251	0.266

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

Acq. [illegible] 2 Oct 2000 [illegible] 03 pm
Sample : CCV PEST .25 PPM
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Oct 5 9:05 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



[illegible]

Sample : CCV PEST .25 PPM
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: eventsfile
Quant Time: Oct 5 9:07 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

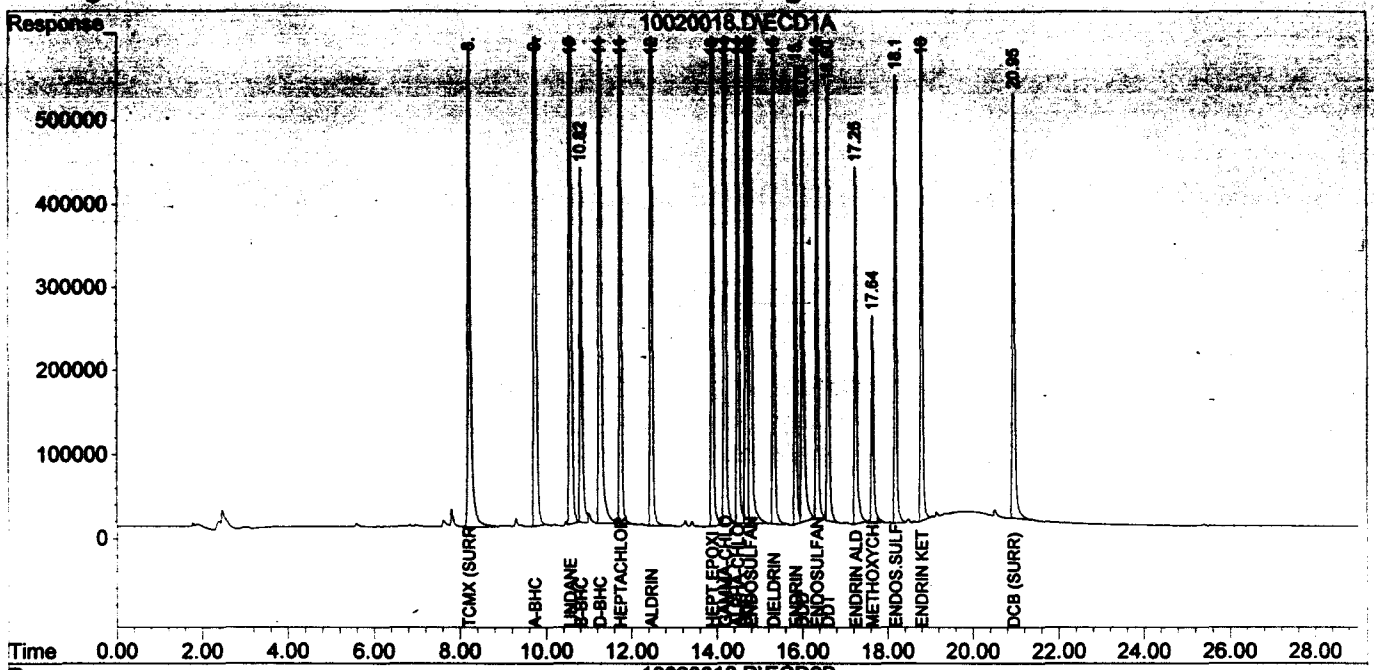
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.21	7.89	25218551	26218549	0.250	0.242
		Spiked Amount 0.250			Recovery	=	100.00%	96.80%
22)	S	DCB (SURR)	20.95	21.35	19445215	21257666	0.239	0.243
		Spiked Amount 0.250			Recovery	=	95.60%	97.20%
		Target Compounds						
2)	T	A-BHC	9.73	9.55	37936529	42069589	0.245	0.243
3)	T	B-BHC	10.82	10.71	15855222	17967027	0.240	0.240
4)	T	LINDANE	10.56	10.46	33906556	37819910	0.244	0.243
5)	T	D-BHC	11.26	11.42	33275348	29747111	0.240	0.230
6)	T	HEPTACHLOR	11.75	11.51	24021040	35615988	0.242	0.259
7)	T	ALDRIN	12.47	12.26	26710575	33300588	0.249	0.252
8)	T	HEPT.EPOXIDE	13.90	13.60	23124403	28923010	0.245	0.265
9)	T	ENDOSULFAN 1	14.79	14.46	25113273	30660577	0.255	0.258
10)	T	GAMMA-CHLORDANE	14.19	14.02	27295134	33586167	0.250	0.251
11)	T	ALPHA-CHLORDANE	14.49	14.35	25470533	30454293	0.264	0.250
12)	T	DDE	14.68	14.76	21545287	31135699	0.238	0.253
13)	T	DIELDRIN	15.32	15.07	23061101	30065831	0.246	0.261
14)	T	ENDRIN	15.84	15.73	17382749	21376124	0.228	0.239
15)	T	DDD	16.00	16.02	19448472	21903159	0.248	0.243
16)	T	ENDOSULFAN 2	16.34	16.20	19743360	27344060	0.249	0.264
17)	T	ENDRIN ALDEHYDE	17.25	16.93	15358954	18683777	0.238	0.245
18)	T	DDT	16.60	16.67	17368293	21165253	0.226	0.234
19)	T	ENDOS.SULFATE	18.19	17.51	17642859	21724557	0.237	0.257
20)	T	METHOXYCHLOR	17.64	18.15	8888416	9155575	0.229	0.227
21)	T	ENDRIN KETONE	18.80	18.66	20868039	24530811	0.246	0.261

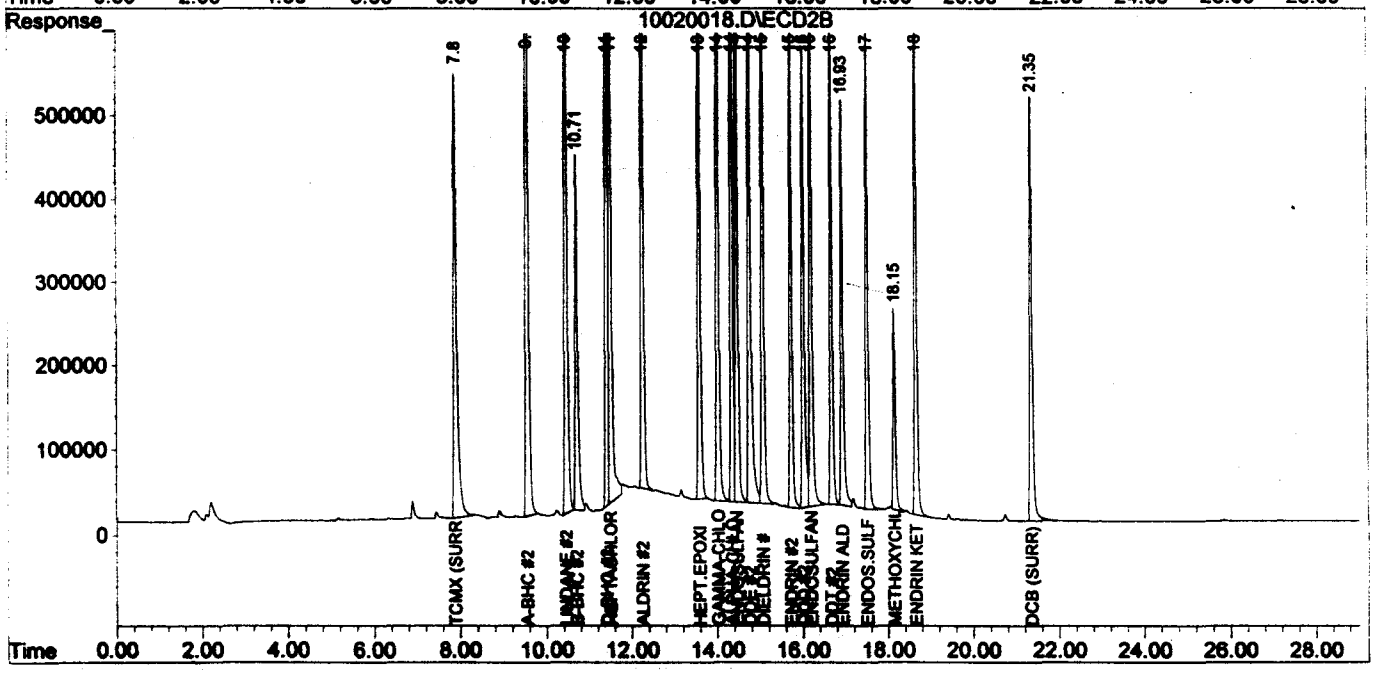
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Sample : CCV PEST .25 PPM Inst
Misc : Multi
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2
Quant Time: Oct 5 9:07 2000 Quant Results File: 092800P

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Mon Oct 02 15:31:54 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





[illegible]

[illegible]

Quant Time: Oct 5 [illegible] 2000 Quant [illegible] File: 08010[illegible]

Quant Method : C:\[illegible]\1\METH[illegible]M (Chemstat[illegible]

[illegible] : TOXAPHENE ANALYSIS BY [illegible] GC [illegible] 08/01/00[illegible]

Last Update : Wed Aug 02 08:57:05 2000

Response via : Initial Calibration

DataAcq Meth : 8081D1.M

Volume Inj. :

Signal #1 Phase : Signal #2 Phase:

Signal #1 Info : Signal #2 Info :

	Compound			RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds								
1)	L	TOX	1	16.33	16.38	3965082	13590314	2.555	3.041
2)	L	TOX	2	16.59	16.78	7001760	7514015	2.871	2.775
3)	L	TOX	3	17.06	16.94	9121957	10797000	2.674	2.975
4)	L	TOX	4	17.79	18.03	8666471	13858204	2.525	3.089
5)	L	TOX	5	17.98	18.15	11202434	10817520	2.573	2.915
6)	L	TOX	6	18.76	18.87	7567985	7333198	2.676	2.921
7)	L	TOX	7	19.08	19.26	3765000	4806586	2.578	2.409
	Sum	TOX	1			51290689	68716838	18.453	20.124
	verage	TOX	1					2.636	2.875

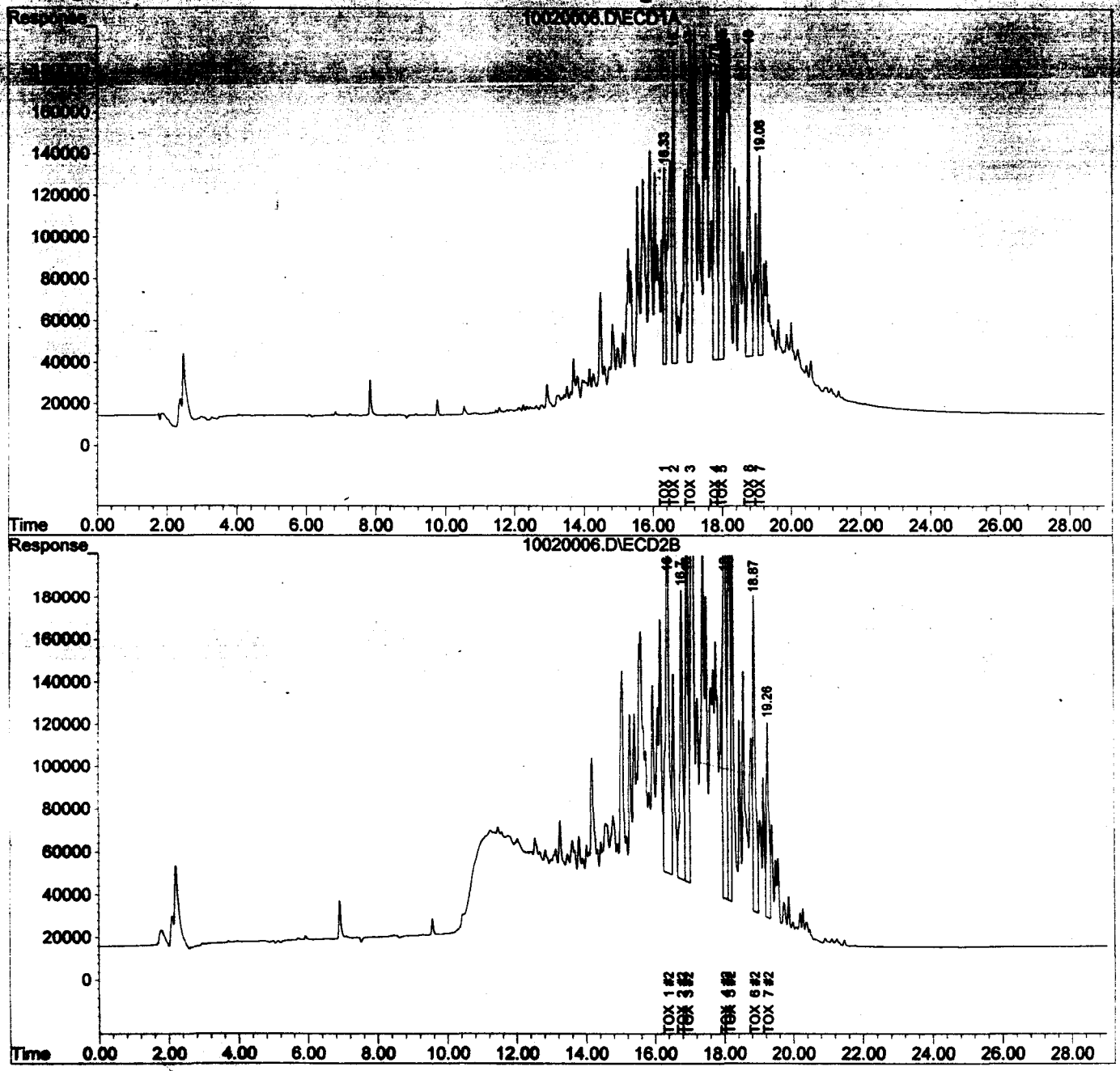
105%

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

Quant Time: Oct 5 9:[illegible] 2000 Quant Results File: 080100TX.[illegible]

Quant Method : C:\HP[illegible]\1\METHODS\080100TX.M (Chemstation [illegible]
[illegible] : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #2 Phase:
Signal #1 Info :
Signal #2 Info :



ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Toxaphene, std
Lab Standard ID# P00065 - P00069
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.	
Toxaphene, interm.	P00064	100 ppm	200 µL	5.0 ppm	P00065
			140 µL	3.5 ppm	P00066
			100 µL	2.5 ppm	P00067
			60 µL	1.5 ppm	P00068
			20 µL	0.50 ppm	P00069
Hexane	Ex 99135	100%	to 4.0 mL each		
YGK	03/06/00				

Standard Name: Toxaphene, std interm (ICV)
Lab Standard ID# P00070
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Toxaphene, stock	S99A198	1000 ppm	200 µL	50 ppm
Hexane	Ex 99135	100%	to 4.0 mL	
YGK	03/06/00			

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Pest. mix std
Lab Standard ID# P00121 - P00124
Prepared By: YGK

Date Made: 08/18/00
Expire Date: 02/18/01
Matrix:

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.	
Pest mix interm. std	P00018	10 ppm	100 µL	0.25 ppm	00121
Hexane	Ex 00035	100%	to 4.0 mL		
Pest. mix interm	P00018	10 ppm	100 µL	0.25 ppm	00122
Pest mix interm	"	"	"	"	00123
Pest mix interm	"	"	"	"	00124
Hexane	Ex 00035	100%	to 4.0 mL each		
YGK 08/18/00					

Standard Name: Pest. mix. std
Lab Standard ID# P00125 - P00129
Prepared By: YGK

Date Made: 08/18/00
Expire Date: 02/18/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.	
interm. std	P00018	10 ppm	200 µL	0.50 ppm	00125
"	"	"	140 µL	0.35 ppm	00126
"	"	"	40 µL	0.10 ppm	00127
"	"	"	20 µL	0.050 ppm	00128
mix. std	P00125	0.50 ppm	80 µL	0.010 ppm	00129
ane	Ex 00035	100%	to 4.0 mL each		
YGK 08/18/00					

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Toxaphene, std 2.5 ppm
Lab Standard ID# P00130
Prepared By: YGK

Date Made: 09/05/00
Expire Date: 03/05/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Toxaphene, interm	P00064	100 ppm	100 µL	2.5 ppm
Hexane	Ex00035	100%	to 4.0 mL	
YGK 09/05/00				

Standard Name: Toxaphene, std 2.5 ppm
Lab Standard ID# P00131
Prepared By: YGK

Date Made: 09/05/00
Expire Date: 03/05/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used.	Final Conc.
Toxaphene, interm.	P00064	100 ppm	100 µL	2.5 ppm
Hexane	Ex 00035	100%	to 4.0 mL	
YGK 09/05/00				

[illegible]

SW-846 [illegible]

DATE / INSTRUMENT: 09/28/00 PEST-A	[illegible] (circle applic[illegible])
MATRIX:	[illegible]A 8082 [illegible]A

Are all standards within expiration dates for both stock and serial standards?	Y	N	NA
Is the Initial Calibration compliant with the method specifications?	Y	N	NA
Were daily retention time windows updated?	Y	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	Y	N	NA
Is the runlog completely filled out (including review signature/date)?	Y	N	NA
Are all mistakes single lined, initialled, and dated?	Y	N	NA

Analyst: YGK		Reviewer:	
Date: 09/29/00	Time: 10:00	Date: 10.03.2000	Time: 1430

Method : C:\HPCHEM\1\METHODS\092800[illegible]
Title : Calibration for Test By [illegible] 8081 [illegible]
Last Update : Fri Sep 29 09:18:41 2000

Calibration Files
0.01 =09280005.D 0.05 =09280006.D 0.1 =09280007.D
0.25 =09280008.D 0.35 =09280009.D 0.50 =09280010.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	TCMX (SURR)	1.295	1.428	1.250	1.103	1.025	0.966	1.178	E8	14.95
2)	T	A-BHC	1.702	1.921	1.799	1.647	1.551	1.505	1.688	E8	9.19
3)	T	B-BHC	8.161	8.124	7.390	6.872	6.561	6.499	7.268	E7	10.28
4)	T	LINDANE	1.600	1.738	1.619	1.477	1.396	1.352	1.531	E8	9.63
5)	T	D-BHC	1.378	1.646	1.538	1.450	1.383	1.364	1.460	E8	7.68
6)	T	HEPTACHLOR	1.369	1.362	1.191	1.053	0.997	0.961	1.155	E8	15.62
7)	T	ALDRIN	1.423	1.477	1.349	1.174	1.090	1.024	1.256	E8	14.83
8)	T	HEPT.EPOXIDE	1.302	1.335	1.170	1.017	0.955	0.905	1.114	E8	16.35
9)	T	ENDOSULFAN 1	1.335	1.408	1.237	1.071	0.995	0.944	1.165	E8	16.30
10)	T	GAMMA-CHLORDANE	1.461	1.449	1.312	1.171	1.104	1.057	1.259	E8	13.87
11)	T	ALPHA-CHLORDANE	1.277	1.321	1.161	1.077	1.025	0.895	1.126	E8	14.21
12)	T	DDE	1.029	1.140	1.037	0.959	0.897	0.885	0.991	E8	9.77
13)	T	DIELDRIN	1.203	1.258	1.126	1.006	0.940	0.908	1.074	E8	13.40
14)	T	ENDRIN	9.201	9.759	8.631	7.915	7.513	7.515	8.422	E7	11.07
15)	T	DDD	7.504	9.429	8.731	8.207	7.766	7.752	8.232	E7	8.86
16)	T	ENDOSULFAN 2	1.067	1.083	0.942	0.846	0.794	0.772	0.917	E8	14.76
17)	T	ENDRIN ALDEHYDE	8.646	8.431	7.357	6.665	6.291	6.411	7.300	E7	14.11
18)	T	DDT	6.663	8.399	7.579	7.612	7.335	7.857	7.574	E7	7.58
19)	T	ENDOS.SULFATE	1.009	0.955	0.843	0.762	0.734	0.739	0.840	E8	14.02
20)	T	METHOXYCHLOR		4.449	3.837	3.737	3.590	4.044	3.931	E7	8.47
21)	T	ENDRIN KETONE	1.091	1.106	0.971	0.878	0.826	0.847	0.953	E8	12.92
22)	S	DCB (SURR)	1.168	1.117	0.930	0.803	0.779	0.824	0.937	E8	17.95

Signal #2 Calibration Files
0.01 =09280005.D 0.05 =09280006.D 0.1 =09280007.D
0.25 =09280008.D 0.35 =09280009.D 0.50 =09280010.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	TCMX (SURR)	1.227	1.404	1.281	1.151	1.087	1.052	1.200	E8	10.95
2)	T	A-BHC	1.938	2.152	2.040	1.836	1.747	1.676	1.898	E8	9.50
3)	T	B-BHC	9.074	9.338	8.431	7.862	7.490	7.351	8.258	E7	10.03
4)	T	LINDANE	1.897	1.994	1.813	1.656	1.566	1.508	1.739	E8	11.08
5)	T	D-BHC	1.293	1.518	1.408	1.345	1.292	1.275	1.355	E8	6.90
6)	T	HEPTACHLOR	1.890	2.055	1.701	1.501	1.411	1.304	1.644	E8	17.69
7)	T	ALDRIN	1.820	1.839	1.655	1.460	1.360	1.253	1.565	E8	15.63
8)	T	HEPT.EPOXIDE	1.572	1.602	1.376	1.223	1.136	1.019	1.321	E8	17.91
9)	T	ENDOSULFAN 1	1.725	1.654	1.460	1.296	1.191	1.145	1.412	E8	17.13
10)	T	GAMMA-CHLORDANE	1.814	1.766	1.580	1.442	1.340	1.299	1.540	E8	14.10
11)	T	ALPHA-CHLORDANE	1.676	1.621	1.442	1.308	1.213	1.182	1.407	E8	14.84
12)	T	DDE	1.589	1.620	1.431	1.315	1.230	1.195	1.396	E8	12.94
13)	T	DIELDRIN	1.576	1.615	1.425	1.257	1.156	1.106	1.356	E8	15.91
14)	T	ENDRIN	1.080	1.208	1.058	0.946	0.879	0.877	1.008	E8	12.94
15)	T	DDD	1.155	1.131	1.048	0.911	0.897	0.896	1.006	E8	11.97
16)	T	ENDOSULFAN 2	1.414	1.419	1.261	1.113	1.029	1.008	1.207	E8	15.32
17)	T	ENDRIN ALDEHYDE	0.962	1.002	0.890	0.781	0.745	0.761	0.857	E8	12.87
18)	T	DDT	0.848	1.010	0.905	0.899	0.862	0.922	0.908	E8	6.32
19)	T	ENDOS.SULFATE	1.190	1.139	0.994	0.886	0.829	0.834	0.979	E8	16.00
20)	T	METHOXYCHLOR		4.996	4.187	3.943	3.787	4.169	4.216	E7	11.06
21)	T	ENDRIN KETONE	1.304	1.272	1.101	0.985	0.920	0.926	1.085	E8	15.71
22)	S	DCB (SURR)	1.133	1.157	0.980	0.875	0.834	0.890	0.978	E8	14.10

Acq On : 28 Sep 2000 1:46 pm Operator: [illegible]
Sample : IC PEST 0.010 PPM Inst : GC/ECD 1N
Misc : Mult. Fir: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:11 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

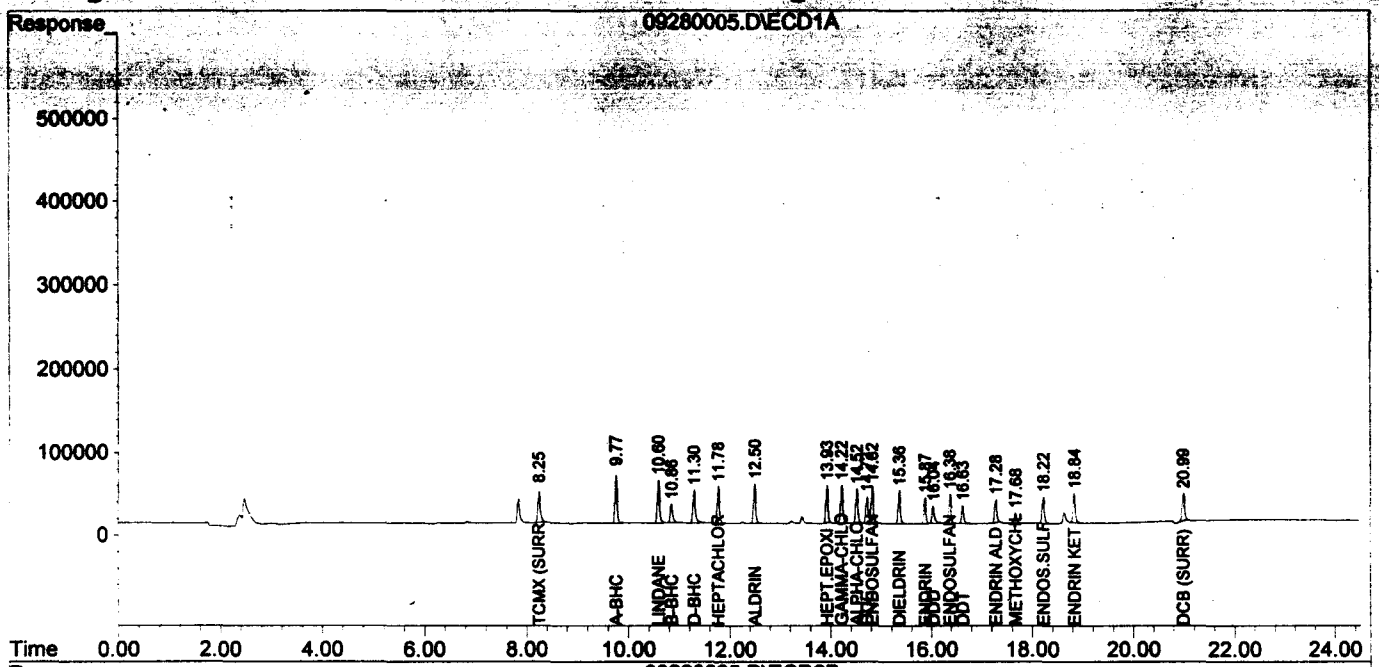
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.25	7.93	1294742	1226996	0.013	0.011	
		Spiked Amount 0.250			Recovery =		5.20%	4.40%	
22)	S	DCB (SURR)	20.99	21.40	1167736	1133409	0.014	0.013	
		Spiked Amount 0.250			Recovery =		5.60%	5.20%	
		Target Compounds							
2)	T	A-BHC	9.77	9.58	1701576	1937575	0.011	0.011	
3)	T	B-BHC	10.86	10.76	816055	907390	0.012	0.012	
4)	T	LINDANE	10.60	10.50	1599951	1896543	0.012	0.012	
5)	T	D-BHC	11.30	11.47	1378004	1293486	0.010	0.010	
6)	T	HEPTACHLOR	11.78	11.54	1369271	1889935	0.014	0.014	
7)	T	ALDRIN	12.50	12.29	1423118	1820440	0.013	0.014	
8)	T	HEPT.EPOXIDE	13.93	13.63	1302446	1571695	0.014	0.014	
9)	T	ENDOSULFAN 1	14.82	14.50	1335418	1724635	0.014	0.015	
10)	T	GAMMA-CHLORDANE	14.22	14.05	1461040	1814260	0.013	0.014	
11)	T	ALPHA-CHLORDANE	14.52	14.38	1277252	1675783	0.013	0.014	
12)	T	DDE	14.72	14.80	1028935	1588575	0.011	0.013	
13)	T	DIELDRIN	15.36	15.10	1203275	1576142	0.013	0.014	
14)	T	ENDRIN	15.87	15.76	920075	1080071	0.012	0.012	
15)	T	DDD	16.04	16.06	750411	1155028	0.010	0.013	#
16)	T	ENDOSULFAN 2	16.38	16.24	1066669	1414160	0.013	0.014	
17)	T	ENDRIN ALDEHYDE	17.28	16.96	864615	961723	0.013	0.013	
18)	T	DDT	16.63	16.71	666255	847563	0.009	0.009	
19)	T	ENDOS.SULFATE	18.22	17.55	1009411	1190066	0.014	0.014	
20)	T	METHOXYCHLOR	17.68	18.18	420442	604714	0.011	0.015	#
21)	T	ENDRIN KETONE	18.84	18.70	1090724	1303791	0.013	0.014	

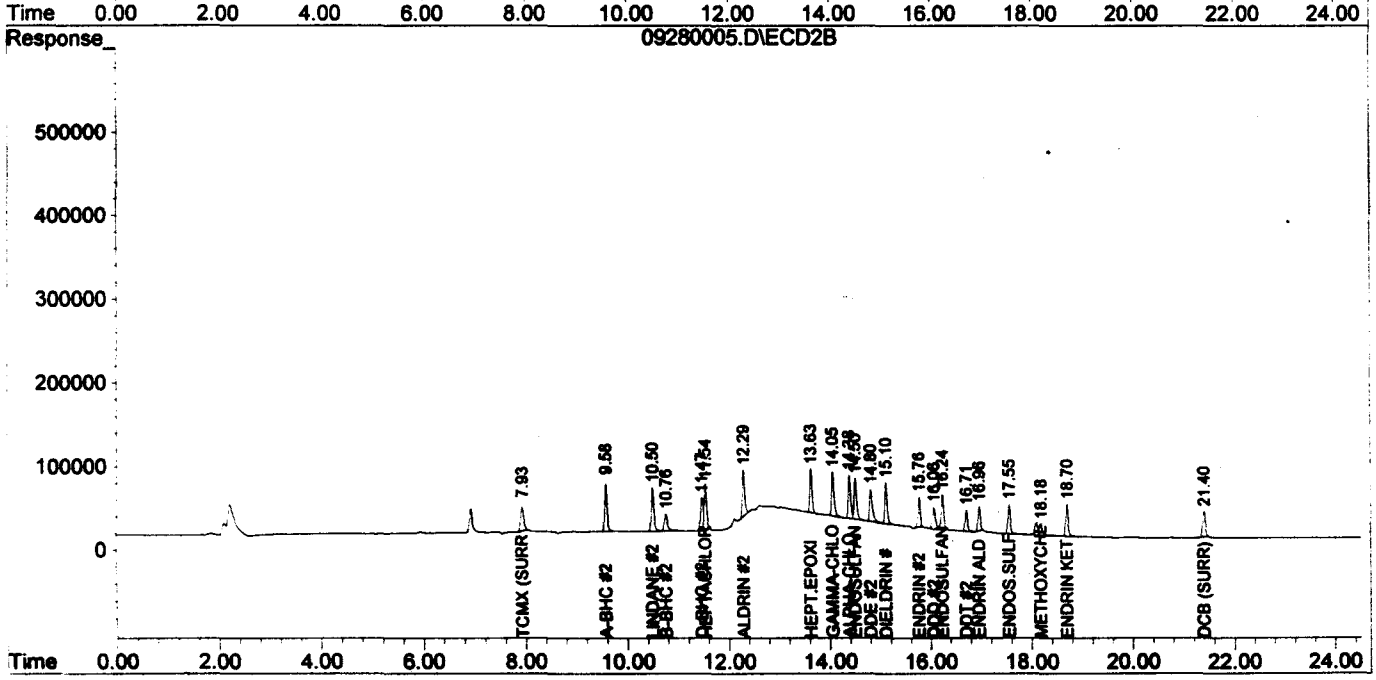
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\H[illegible]
Signal #2 : D:\H[illegible]
Acq On : 28 Sep 2000 1:46 pm Operator: YGK
Sample : IC PEST 0.010 PPM Inst : GC/ECD_1N
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:11 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Signal #1 : C:\HPCHEM\1\DATA\092800\09280006.D\FID1A.CH
Signal #2 : C:\HPCHEM\1\DATA\092800\09280006.D\FID2A.CH
Acq On : 28 Sep 2000 2:15 pm Operator:
Sample : IC PEST 0.050 PPM Inst :
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:36 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

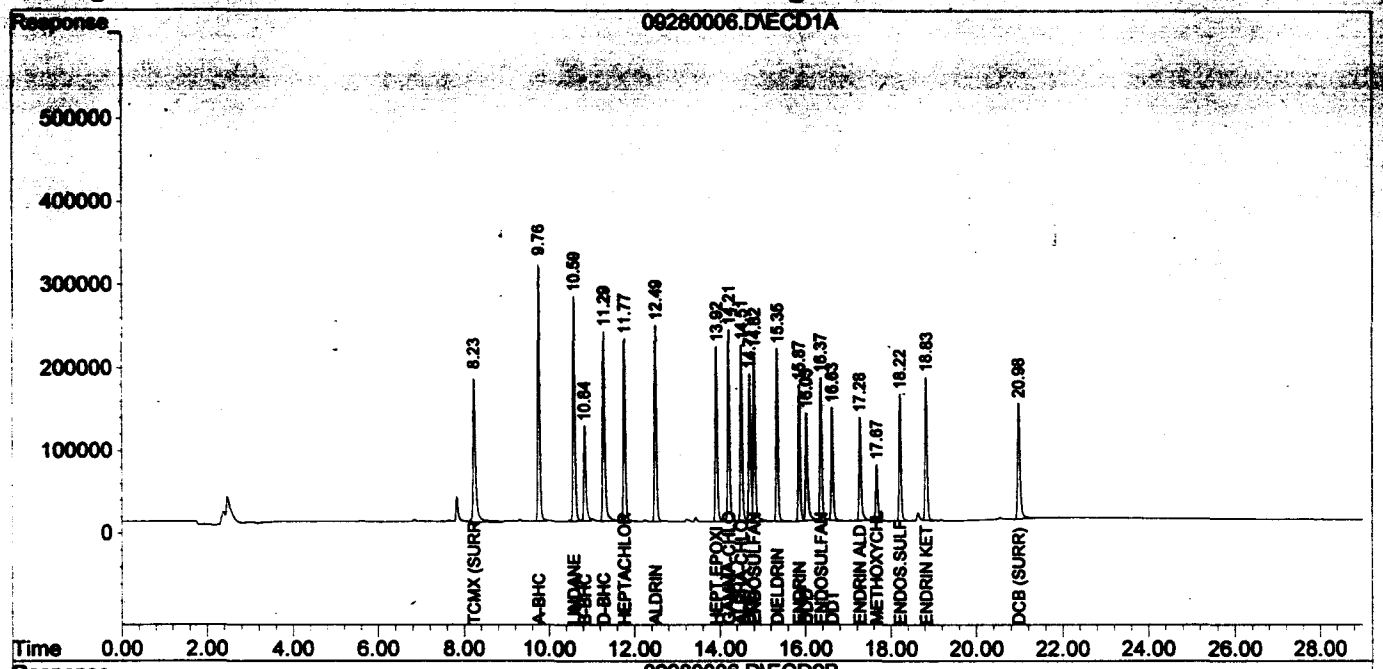
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

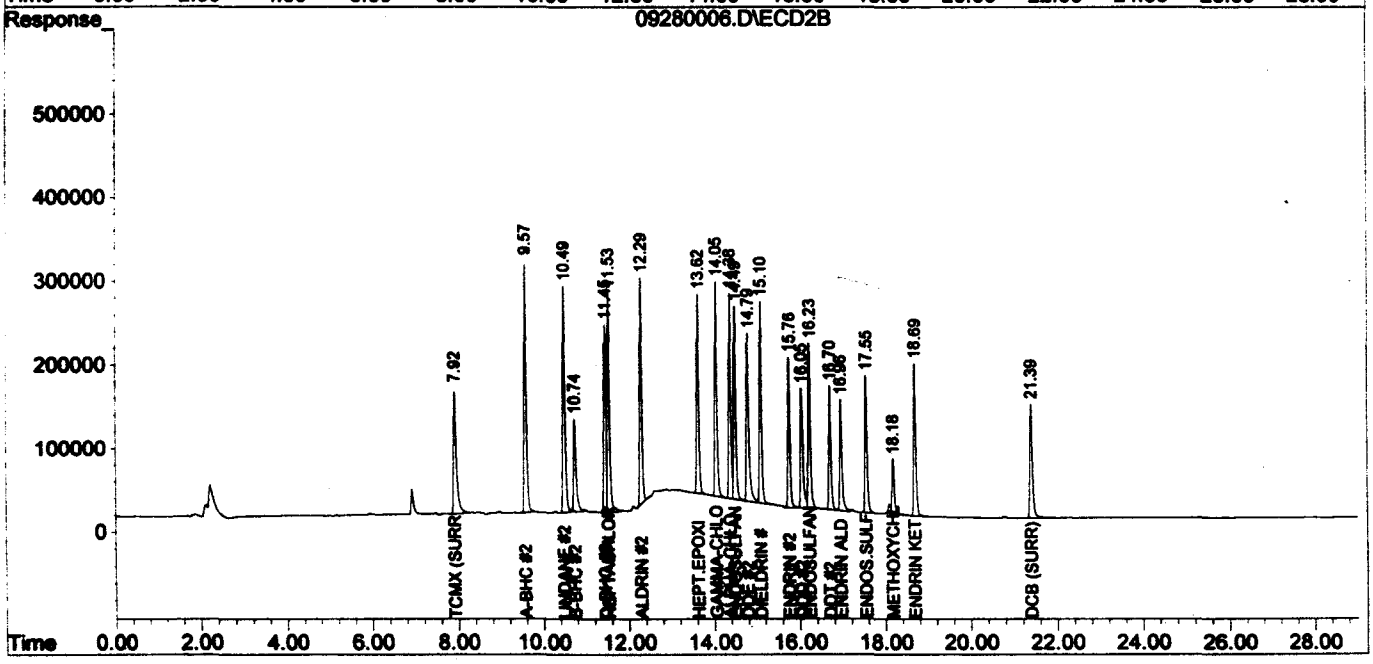
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.23	7.92	7139223	7022358	0.071	0.065
		Spiked Amount 0.250			Recovery =		28.40%	26.00%
22)	S	DCB (SURR)	20.99	21.39	5582922	5784055	0.069	0.066
		Spiked Amount 0.250			Recovery =		27.60%	26.40%
		Target Compounds						
2)	T	A-BHC	9.76	9.58	9603898	10760652	0.062	0.062
3)	T	B-BHC	10.84	10.74	4061847	4669207	0.062	0.062
4)	T	LINDANE	10.59	10.49	8692427	9971961	0.063	0.064
5)	T	D-BHC	11.29	11.45	8232118	7590595	0.059	0.059
6)	T	HEPTACHLOR	11.77	11.53	6808690	10274366	0.069	0.075
7)	T	ALDRIN	12.49	12.29	7384552	9197253	0.069	0.069
8)	T	HEPT.EPOXIDE	13.92	13.62	6674401	8008891	0.071	0.073
9)	T	ENDOSULFAN 1	14.82	14.49	7041684	8271867	0.072	0.070
10)	T	GAMMA-CHLORDANE	14.21	14.05	7246624	8831420	0.066	0.066
11)	T	ALPHA-CHLORDANE	14.51	14.38	6606767	8106729	0.068	0.067
12)	T	DDE	14.71	14.79	5702053	8098570	0.063	0.066
13)	T	DIELDRIN	15.35	15.10	6291626	8075915	0.067	0.070
14)	T	ENDRIN	15.87	15.76	4879647	6040061	0.064	0.068
15)	T	DDD	16.03	16.05	4714677	5653891	0.060	0.063
16)	T	ENDOSULFAN 2	16.37	16.23	5412524	7096816	0.068	0.068
17)	T	ENDRIN ALDEHYDE	17.28	16.96	4227264	5009779	0.066	0.066
18)	T	DDT	16.63	16.70	4199594	5050400	0.055	0.056
19)	T	ENDOS.SULFATE	18.22	17.55	4774433	5693678	0.064	0.067
20)	T	METHOXYCHLOR	17.67	18.18	2224337	2498027	0.057	0.062
21)	T	ENDRIN KETONE	18.83	18.69	5530127	6357753	0.065	0.068

[illegible]
[illegible]
[illegible] On : 28 Sep 2000 2:[illegible] pm Op[illegible]
Sample : IC PEST 0.050 PPM Inst[illegible]
Misc : Mult[illegible]
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2[illegible]
Quant Time: Sep 29 9:36 2000 Quant Results File: 092800P[illegible]

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrat[illegible]
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Signal #1 : [illegible]\092[illegible]D\ECD1[illegible]
Signal #2 : [illegible]\092[illegible]09280007.D\ECD2[illegible]
Acq On : 28 Sep 2000 2:50 pm Operator [illegible]
Sample : IC PEST 0.10 PPM Inst : GC/ECD [illegible]
Misc : Multiplr : 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:37 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

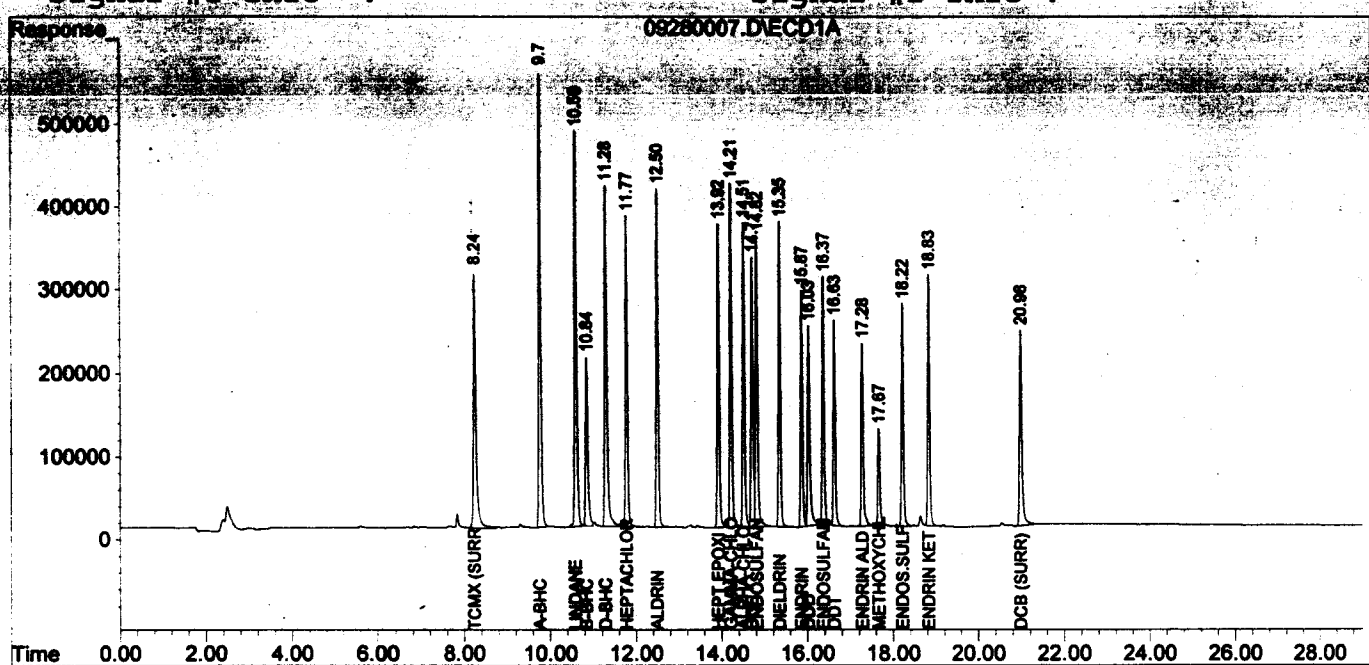
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.24	7.92	12503979	12811759	0.124	0.118
		Spiked Amount 0.250			Recovery	=	49.60%	47.20%
22)	S	DCB (SURR)	20.99	21.39	9298023	9796880	0.114	0.112
		Spiked Amount 0.250			Recovery	=	45.60%	44.80%
		Target Compounds						
2)	T	A-BHC	9.76	9.58	17989073	20398766	0.116	0.118
3)	T	B-BHC	10.84	10.74	7389515	8431393	0.112	0.112
4)	T	LINDANE	10.59	10.49	16188999	18133823	0.116	0.117
5)	T	D-BHC	11.29	11.45	15382224	14078665	0.111	0.109
6)	T	HEPTACHLOR	11.77	11.53	11910120	17006641	0.120	0.124
7)	T	ALDRIN	12.50	12.29	13490874	16546683	0.126	0.125
8)	T	HEPT.EPOXIDE	13.92	13.62	11700547	13759844	0.124	0.126
9)	T	ENDOSULFAN 1	14.82	14.49	12373627	14603142	0.126	0.123
10)	T	GAMMA-CHLORDANE	14.21	14.05	13124474	15801990	0.120	0.118
11)	T	ALPHA-CHLORDANE	14.51	14.38	11605624	14421742	0.120	0.119
12)	T	DDE	14.71	14.79	10373949	14312232	0.115	0.116
13)	T	DIELDRIN	15.35	15.10	11260540	14249305	0.120	0.124
14)	T	ENDRIN	15.87	15.76	8630687	10579001	0.113	0.118
15)	T	DDD	16.03	16.05	8730523	10476418	0.111	0.116
16)	T	ENDOSULFAN 2	16.37	16.23	9421834	12609366	0.119	0.122
17)	T	ENDRIN ALDEHYDE	17.28	16.96	7373708	8895316	0.114	0.116
18)	T	DDT	16.63	16.70	7578946	9050492	0.099	0.100
19)	T	ENDOS.SULFATE	18.22	17.55	8428359	9943639	0.113	0.118
20)	T	METHOXYCHLOR	17.67	18.18	3917579	4187208	0.101	0.104
21)	T	ENDRIN KETONE	18.83	18.69	9707810	11005205	0.114	0.117

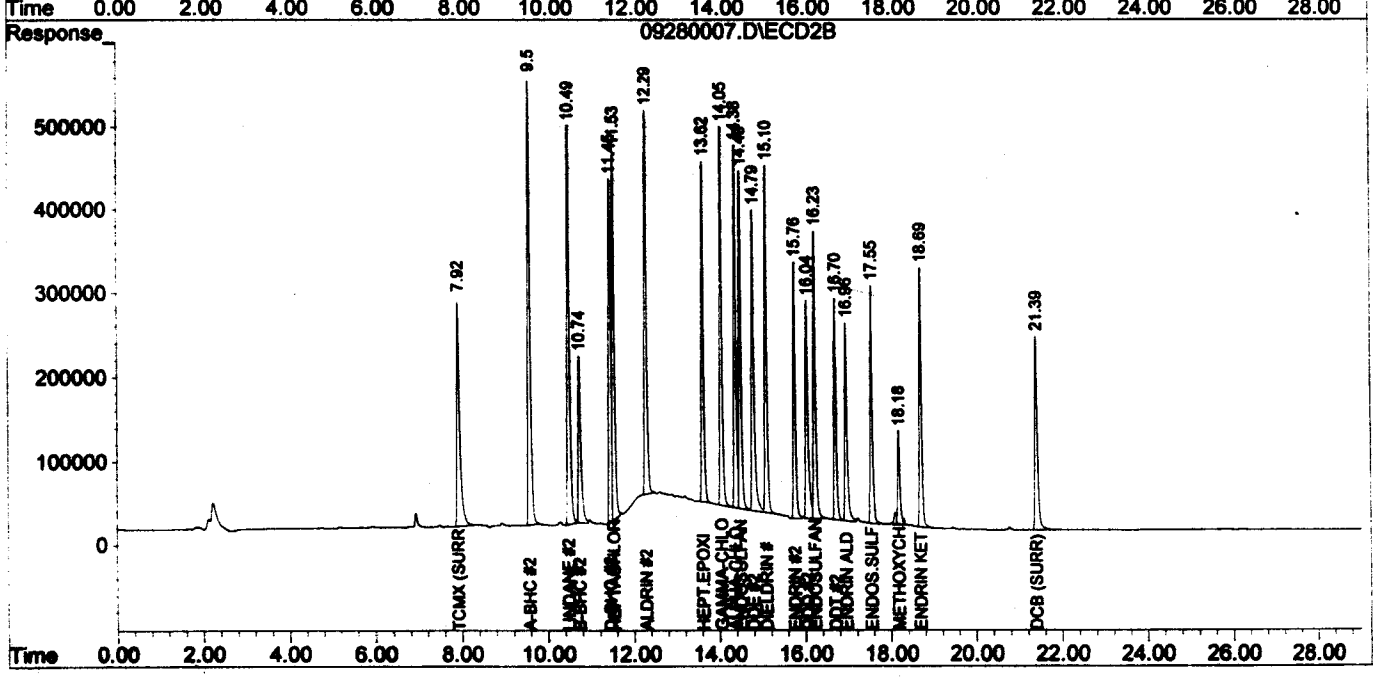
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Acq On : 28 Sep 2000 2:50 pm Opc
Sample : IC PEST 0.10 PPM Inst
Misc : Mult
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2
Quant Time: Sep 29 9:37 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Signal #1 : [illegible]
Signal #2 : [illegible]
Acq On : 28 Sep 2000 3:24 pm [illegible]ator: YOK
Sample : IC PEST 0.25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:38 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

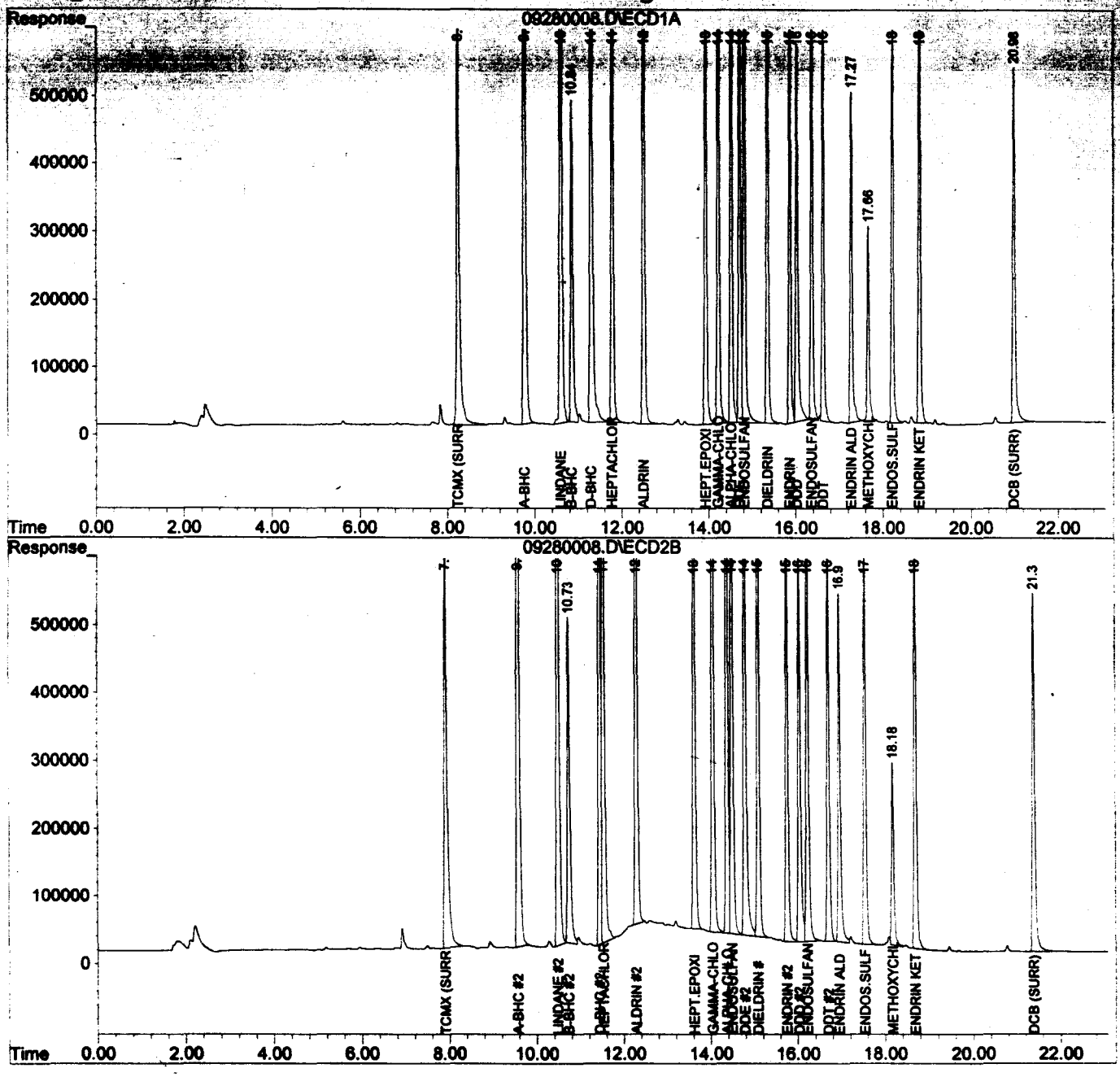
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.23	7.91	27581460	28772616	0.273	0.266
		Spiked Amount 0.250			Recovery	=	109.20%	106.40%
22)	S	DCB (SURR)	20.98	21.39	20070623	21875693	0.247	0.250
		Spiked Amount 0.250			Recovery	=	98.80%	100.00%
		Target Compounds						
2)	T	A-BHC	9.76	9.57	41185766	45889026	0.266	0.266
3)	T	B-BHC	10.84	10.73	17178931	19655544	0.260	0.262
4)	T	LINDANE	10.59	10.49	36935452	41404378	0.266	0.266
5)	T	D-BHC	11.28	11.44	36243707	33618811	0.261	0.260
6)	T	HEPTACHLOR	11.77	11.53	26322890	37531373	0.266	0.273
7)	T	ALDRIN	12.49	12.29	29345046	36487613	0.274	0.276
8)	T	HEPT.EPOXIDE	13.92	13.62	25413977	30562750	0.270	0.280
9)	T	ENDOSULFAN 1	14.81	14.49	26769330	32400799	0.272	0.273
10)	T	GAMMA-CHLORDANE	14.21	14.05	29269936	36046963	0.268	0.269
11)	T	ALPHA-CHLORDANE	14.51	14.37	26913978	32689939	0.279	0.269
12)	T	DDE	14.70	14.78	23964880	32867050	0.265	0.267
13)	T	DIELDRIN	15.35	15.10	25153382	31421258	0.268	0.273
14)	T	ENDRIN	15.86	15.76	19786655	23651940	0.260	0.265
15)	T	DDD	16.02	16.04	20517220	22775941	0.261	0.252
16)	T	ENDOSULFAN 2	16.37	16.23	21140662	27834998	0.266	0.269
17)	T	ENDRIN ALDEHYDE	17.27	16.95	16716281	19514808	0.259	0.256
18)	T	DDT	16.62	16.70	19029285	22483194	0.248	0.249
19)	T	ENDOS.SULFATE	18.21	17.54	19057457	22152416	0.256	0.262
20)	T	METHOXYCHLOR	17.66	18.18	9552684	9858514	0.247	0.244
21)	T	ENDRIN KETONE	18.83	18.69	21959585	24629347	0.258	0.262

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

Sample : IC PEST 0.25 PPM
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:38 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



Signal #1 : C:\HPCHEM\1\[illegible]
Signal #2 : C:\HPCHEM\1\[illegible]
Acq On : 28 Sep 2000 4:22 pm Operator: YGK
Sample : IC PEST 0.35 PPM Inst : GC/ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:39 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

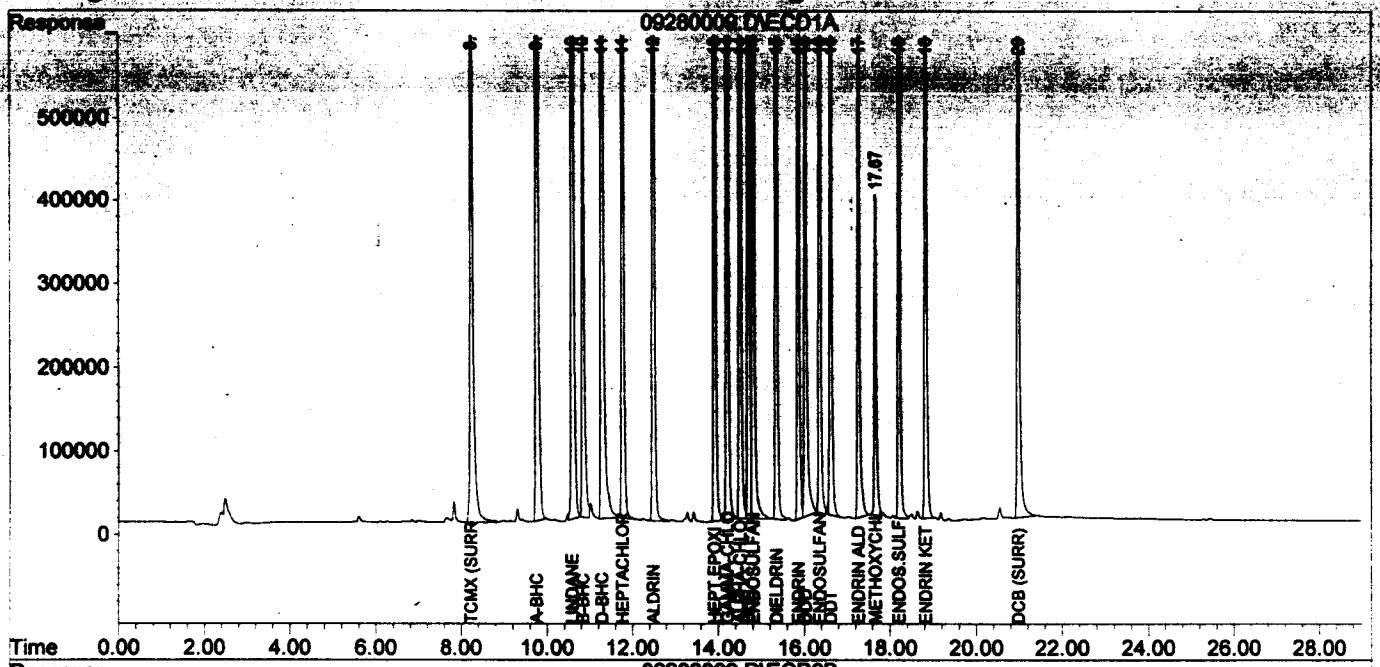
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.23	7.91	35890876	38037374	0.355	0.351
		Spiked Amount 0.250			Recovery	=	142.00%	140.40%
22)	S	DCB (SURR)	20.98	21.39	27263621	29196185	0.335	0.333
		Spiked Amount 0.250			Recovery	=	134.00%	133.20%
		Target Compounds						
2)	T	A-BHC	9.76	9.57	54291853	61132138	0.351	0.354
3)	T	B-BHC	10.84	10.73	22962724	26213609	0.348	0.350
4)	T	LINDANE	10.59	10.49	48859029	54804442	0.352	0.353
5)	T	D-BHC	11.28	11.44	48405536	45207004	0.349	0.349
6)	T	HEPTACHLOR	11.77	11.53	34880957	49378139	0.352	0.359
7)	T	ALDRIN	12.50	12.29	38164110	47607383	0.356	0.360
8)	T	HEPT.EPOXIDE	13.92	13.62	33437559	39767514	0.355	0.365
9)	T	ENDOSULFAN 1	14.82	14.49	34821601	41689499	0.354	0.351
10)	T	GAMMA-CHLORDANE	14.21	14.05	38645460	46903748	0.353	0.350
11)	T	ALPHA-CHLORDANE	14.51	14.37	35882146	42441956	0.372	0.349
12)	T	DDE	14.71	14.78	31403906	43044707	0.348	0.350
13)	T	DIELDRIN	15.35	15.10	32884840	40446893	0.351	0.351
14)	T	ENDRIN	15.87	15.76	26295476	30781716	0.346	0.344
15)	T	DDD	16.02	16.04	27181573	31399037	0.346	0.348
16)	T	ENDOSULFAN 2	16.37	16.23	27801388	36012253	0.350	0.348
17)	T	ENDRIN ALDEHYDE	17.27	16.95	22009637	26057690	0.341	0.341
18)	T	DDT	16.62	16.70	25673550	30168769	0.334	0.334
19)	T	ENDOS.SULFATE	18.22	17.54	25689598	29012552	0.345	0.343
20)	T	METHOXYCHLOR	17.67	18.18	12883807	13253336	0.333	0.328
21)	T	ENDRIN KETONE	18.83	18.69	28899192	32211201	0.340	0.343

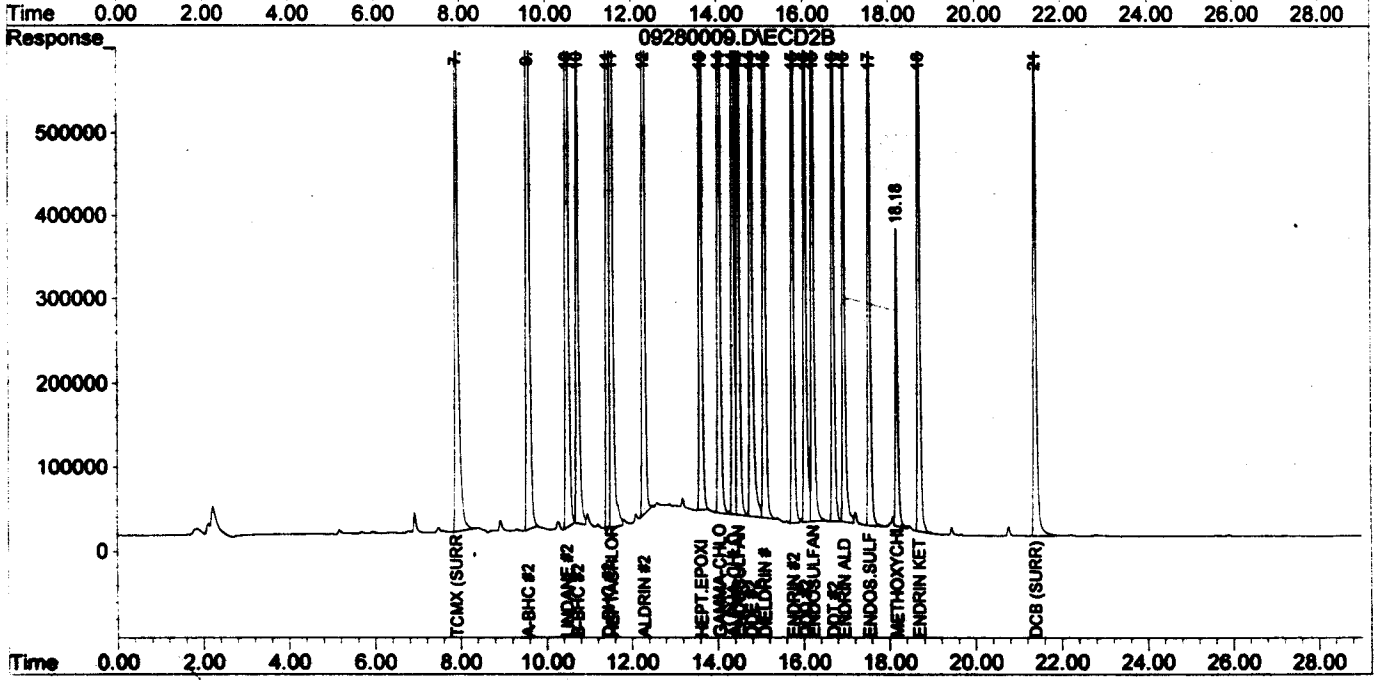
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Sample : IC PEST 0.35 PPM
Misc :
IncFile Signal #1: EVENTS.E IncFile Signal #2: EVENTS2.E
Quant Time: Sep 29 9:39 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





Data File : 09280010.D
Acq On : 9/28/00 10:09 PM
Sample : IC PEST @ 50 PPM
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:18 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

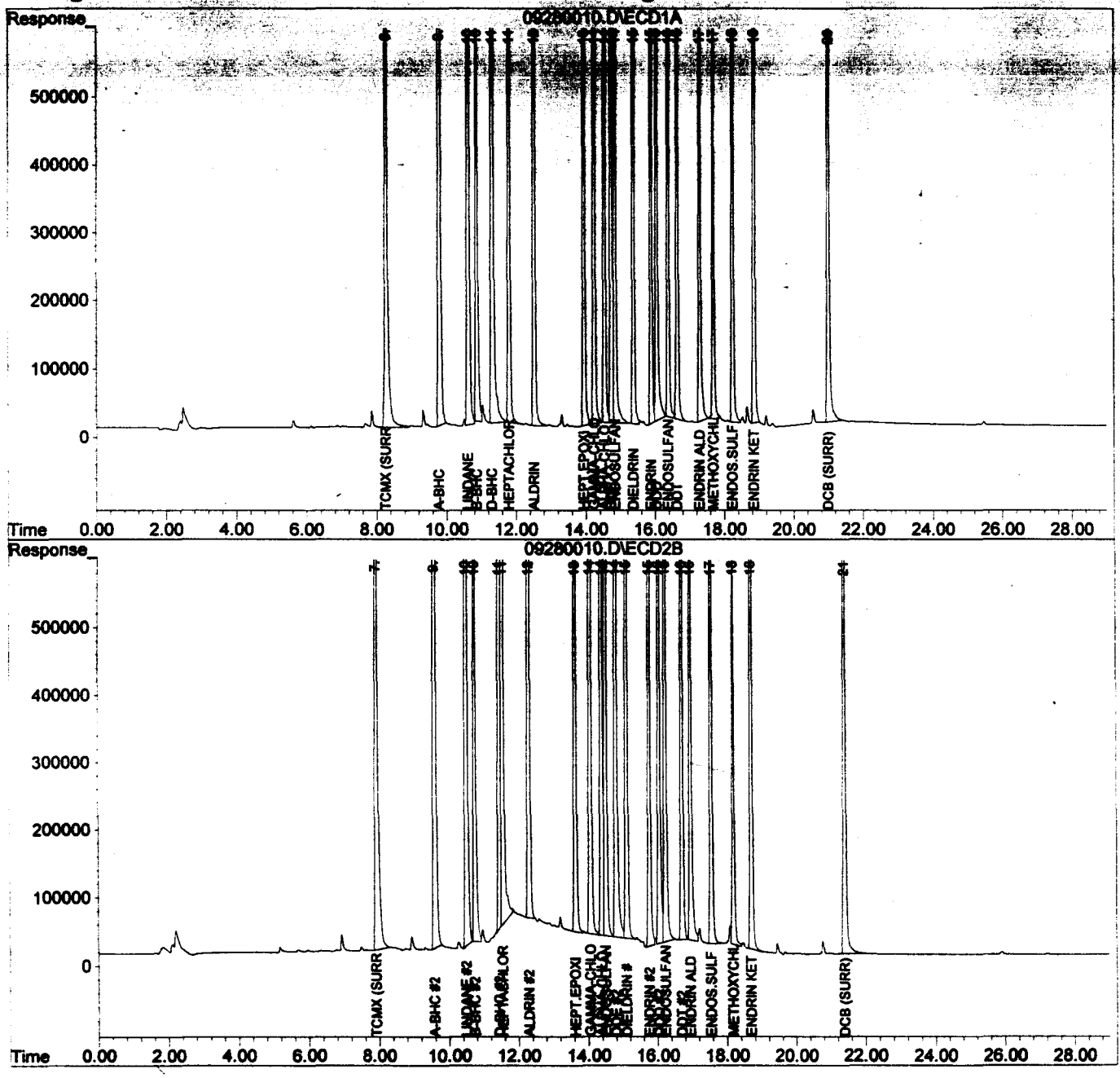
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.25	7.92	48297526	52588795	0.478	0.486
		Spiked Amount 0.250			Recovery	=	191.20%	194.40%
22)	S	DCB (SURR)	20.99	21.40	41205235	44496308	0.507	0.508
		Spiked Amount 0.250			Recovery	=	202.80%	203.20%
		Target Compounds						
2)	T	A-BHC	9.77	9.58	75269677	83788930	0.487	0.485
3)	T	B-BHC	10.85	10.74	32497129	36753337	0.493	0.490
4)	T	LINDANE	10.60	10.49	67617407	75423251	0.486	0.485
5)	T	D-BHC	11.29	11.45	68212374	63764660	0.492	0.493
6)	T	HEPTACHLOR	11.79	11.54	48066239	65211323	0.485	0.475
7)	T	ALDRIN	12.51	12.30	51179712	62664443	0.477	0.473
8)	T	HEPT.EPOXIDE	13.93	13.63	45242244	50929367	0.480	0.469
9)	T	ENDOSULFAN 1	14.83	14.50	47184352	57236418	0.479	0.482
10)	T	GAMMA-CHLORDANE	14.22	14.05	52833863	64938527	0.483	0.485
11)	T	ALPHA-CHLORDANE	14.52	14.38	44766645	59084927	0.464	0.486
12)	T	DDE	14.71	14.79	44261890	59731182	0.490	0.486
13)	T	DIELDRIN	15.36	15.10	45416071	55319820	0.484	0.481
14)	T	ENDRIN	15.87	15.76	37573688	43873979	0.494	0.491
15)	T	DDD	16.03	16.04	38761026	44778606	0.494	0.496
16)	T	ENDOSULFAN 2	16.37	16.23	38591256	50376912	0.486	0.486
17)	T	ENDRIN ALDEHYDE	17.28	16.96	32055167	38056661	0.497	0.498
18)	T	DDT	16.63	16.70	39282972	46106463	0.512	0.511
19)	T	ENDOS.SULFATE	18.22	17.55	36946254	41690209	0.496	0.493
20)	T	METHOXYCHLOR	17.67	18.18	20221780	20845011	0.522	0.516
21)	T	ENDRIN KETONE	18.84	18.69	42337512	46321075	0.498	0.493

Sample : IC PEST 0.50 PPM
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:18 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Sample : ICV PEST 0.25 PPM
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:39 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #2 Phase:
Signal #1 Info :
Signal #2 Info :

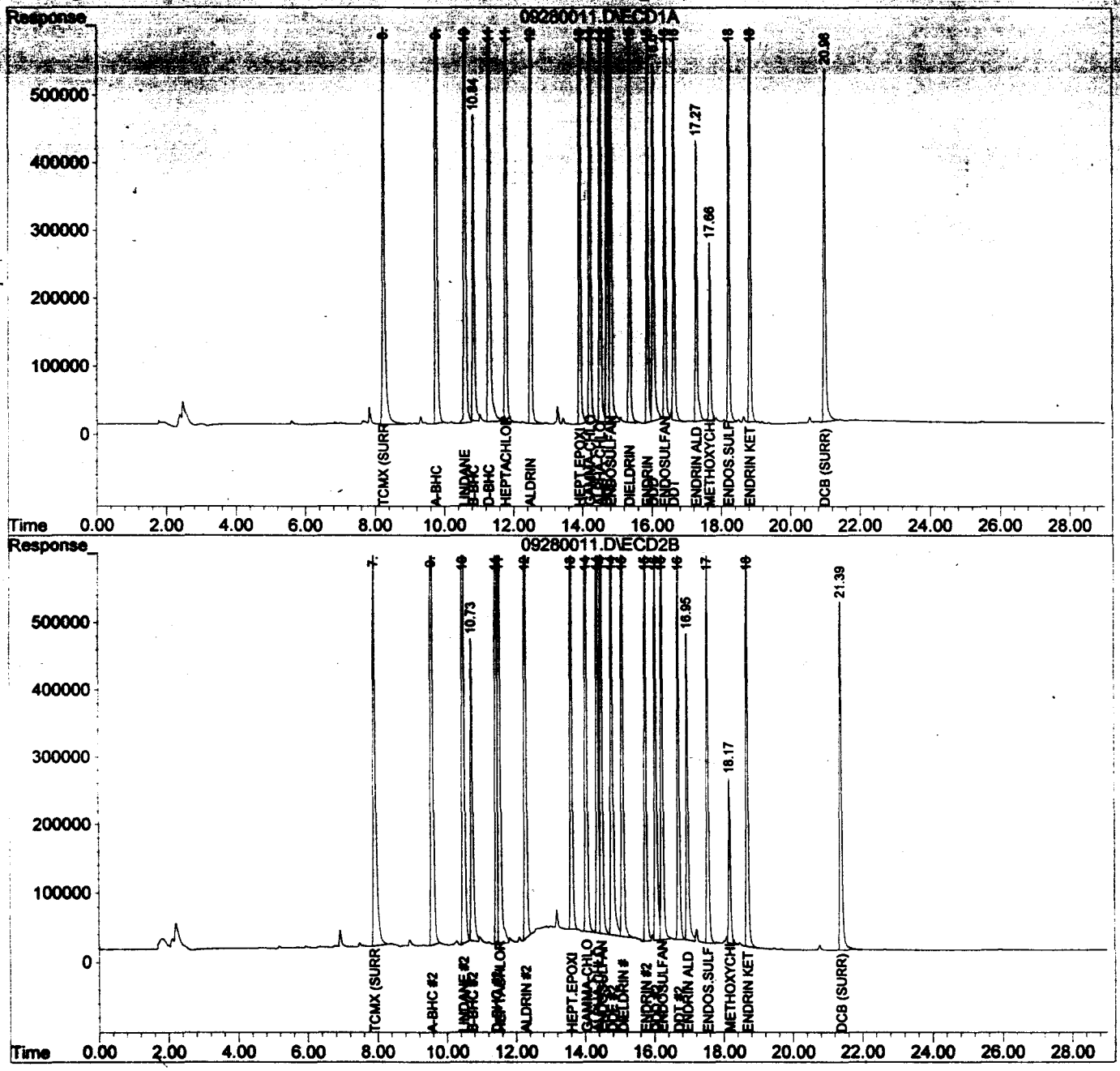
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.23	7.91	27445237	28412302	0.272	0.263
		Spiked Amount 0.250			Recovery	=	108.80%	105.20%
22)	S	DCB (SURR)	20.98	21.39	20219107	21554629	0.249	0.246
		Spiked Amount 0.250			Recovery	=	99.60%	98.40%
		Target Compounds						
2)	T	A-BHC	9.75	9.57	39477226	43586157	0.255	0.252
3)	T	B-BHC	10.84	10.73	16527466	18714358	0.251	0.250
4)	T	LINDANE	10.59	10.48	36061700	39569336	0.259	0.255
5)	T	D-BHC	11.28	11.44	34944853	31756463	0.252	0.245
6)	T	HEPTACHLOR	11.77	11.53	25865671	37395604	0.261	0.272
7)	T	ALDRIN	12.49	12.29	27923388	34950159	0.260	0.264
8)	T	HEPT.EPOXIDE	13.92	13.62	24345353	28679287	0.258	0.263
9)	T	ENDOSULFAN 1	14.81	14.49	25604996	30896583	0.260	0.260
10)	T	GAMMA-CHLORDANE	14.21	14.05	27920242	33722664	0.255	0.252
11)	T	ALPHA-CHLORDANE	14.51	14.37	25439674	31227124	0.264	0.257
12)	T	DDE	14.70	14.78	22696911	31494975	0.251	0.256
13)	T	DIELDRIN	15.35	15.09	24110036	30446277	0.257	0.265
14)	T	ENDRIN	15.86	15.76	19319117	22853604	0.254	0.256
15)	T	DDD	16.02	16.04	19675407	23109029	0.251	0.256
16)	T	ENDOSULFAN 2	16.37	16.23	19979468	26496102	0.252	0.256
17)	T	ENDRIN ALDEHYDE	17.27	16.95	14587587	17281245	0.226	0.226
18)	T	DDT	16.62	16.70	18283400	21692040	0.238	0.240
19)	T	ENDOS.SULFATE	18.21	17.54	18382359	21304720	0.247	0.252
20)	T	METHOXYCHLOR	17.66	18.18	8849625	9069594	0.228	0.225
21)	T	ENDRIN KETONE	18.83	18.69	20832599	23389017	0.245	0.249

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

Sample : ICV Pest 0.25 PPM
Misc :
IntFile Signal #1: EVENTS.E IntFile Signal #2: event2.e
Quant Time: Sep 29 9:39 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 09/28/00
Analyst Initials: YGK
Instrument Method: 8081D1
Calibration Column: Rtx-CLP1 (F)
Confirmation Column: Rtx-CLP 2

DDT Breakdown % (<15%): 5.6%
Endrin Breakdown % (<15%): 8.1%

Pest Calibration Date: 09/28/00
PCB Calibration Date: —

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	50-116	43-152
Water	21-131	D-160

Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations	
1	PRIMER	092800P	std	1X	NA	NA		
2	Hexane		solv					
3	PEM		std					P00119
4	ccv Pest .25 ppm							P00123
5	IC Pest .010 ppm							P00129
6	" .050 ppm							P00128
7	" .10 ppm							P00127
8	" .25 ppm							P00123
9	" .35 ppm							P00126
10	" .50 ppm							P00125
11	ICV .25 ppm				109	100		P00120
12	CCV PCB .25 ppm	080300CL			NA	NA	102%	P00118
13	CCV TCX .25 ppm	080100TX					92%	P00131
14	Hexane	092800P	solv					
15	BLANK W 09/25		W		76	72		
16	LCS W 09/26				80	72		
17	99299 W 1:5			5X	90	86		
18	99299 W 1:3			3X	88	79		
09/28 17	99299 W			1X	75	69		
	[illegible] W 09/27				77	73		
	[illegible] W 09/27				77	68		
	[illegible] W 09/27				76	68		
	99297 W				68	42		

Signature/Date: [signature] 09/28/00

SVOC GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

TOX

DATE / INSTRUMENT: 08/01/00, PEST-A	METHOD: (circle applicable methods)
MATRIX:	(8081A) 8082 8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst: YGK	Reviewer:
Date: 08/04/00 Time: 14:50	Date: 08.07.2000 Time: 08:30

Aug 02 09:45:41 2000

Calibration Files
5 =08010016.D 3.5 =08010015.D 2.5 =08010014.D
1.5 =08010013.D 0.5 =08010012.D

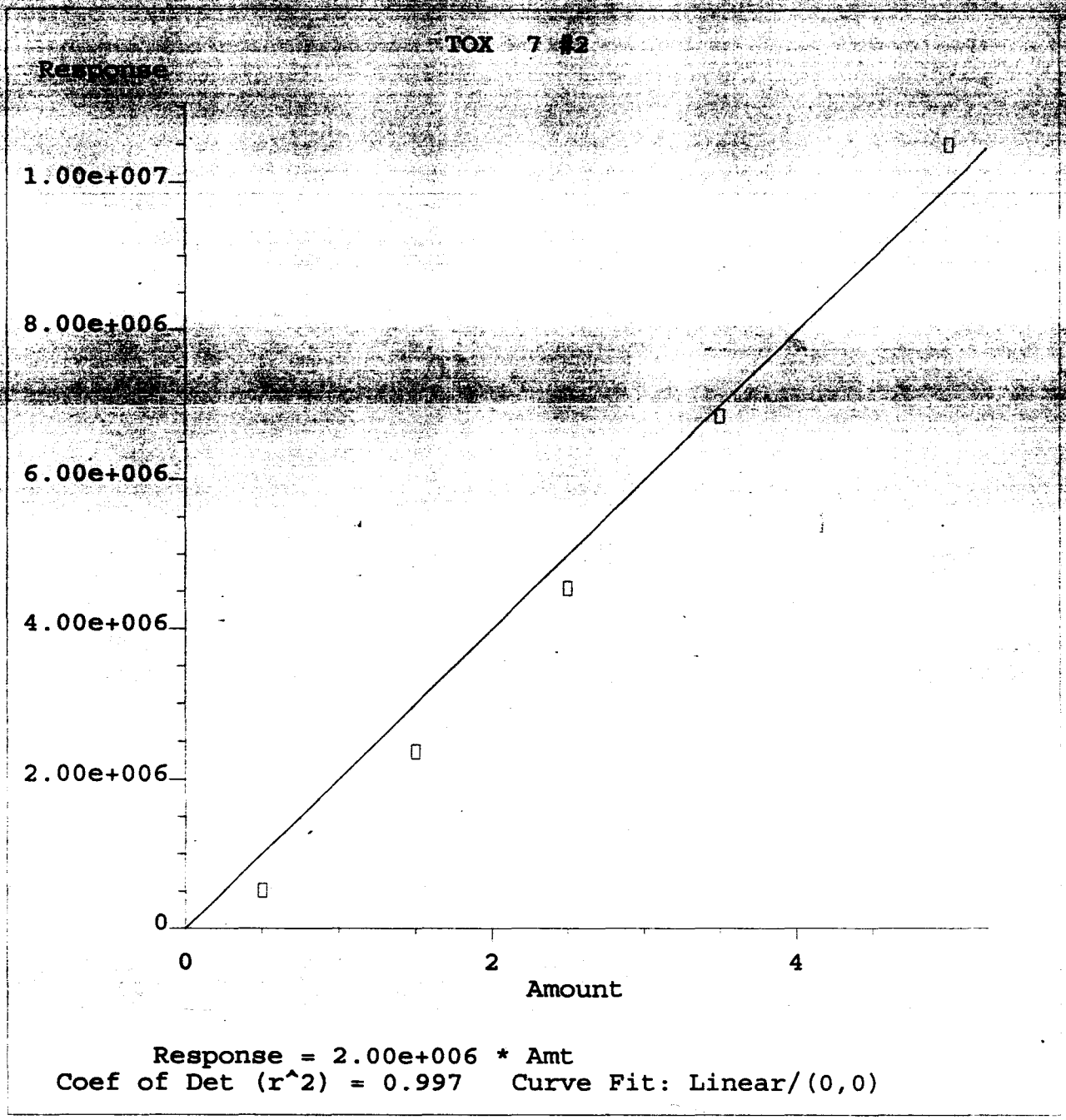
	Compound	5	3.5	2.5	1.5	0.5	Avg	%RSD
1) L	TOX 1	1.554	1.516	1.617	1.559	1.338	1.517 E6	6.99
2) L	TOX 2	2.495	2.345	2.449	2.352	1.958	2.320 E6	9.15
3) L	TOX 3	3.419	3.356	3.516	3.398	2.826	3.303 E6	8.27
4) L	TOX 4	3.488	3.374	3.408	3.293	2.468	3.206 E6	13.05
5) L	TOX 5	4.372	4.307	4.398	4.348	3.745	4.234 E6	6.51
6) L	TOX 6	2.903	2.762	2.760	2.526	3.020	2.794 E6	6.63
7) L	TOX 7	1.525	1.432	1.350	1.190	1.556	1.411 E6	10.46

Signal #2 Calibration Files
5 =08010016.D 3.5 =08010015.D 2.5 =08010014.D
1.5 =08010013.D 0.5 =08010012.D

	Compound	5	3.5	2.5	1.5	0.5	Avg	%RSD
1) L	TOX 1	4.471	4.360	4.702	4.531	3.269	4.267 E6	13.39
2) L	TOX 2	2.799	2.641	2.620	2.414	1.641	2.423 E6	18.90
3) L	TOX 3	3.683	3.590	3.573	3.487	2.934	3.454 E6	8.65
4) L	TOX 4	4.500	4.448	4.554	4.415	3.895	4.362 E6	6.11
5) L	TOX 5	3.770	3.673	3.673	3.469	2.813	3.480 E6	11.16
6) L	TOX 6	2.564	2.482	2.461	2.292	1.839	2.327 E6	12.48
7) L	TOX 7	2.105	1.958	1.818	1.577	1.022	1.696 E6	25.01

OK
See PLOT
$r = 0.997$

(#) = Out of Range



Method Name: C:\HPCHEM\1\METHODS\080100TX.M
Calibration Table Last Updated: Wed Aug 02 08:57:05 2000

[redacted]

Last Update : Wed Aug 02 09:45:31 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

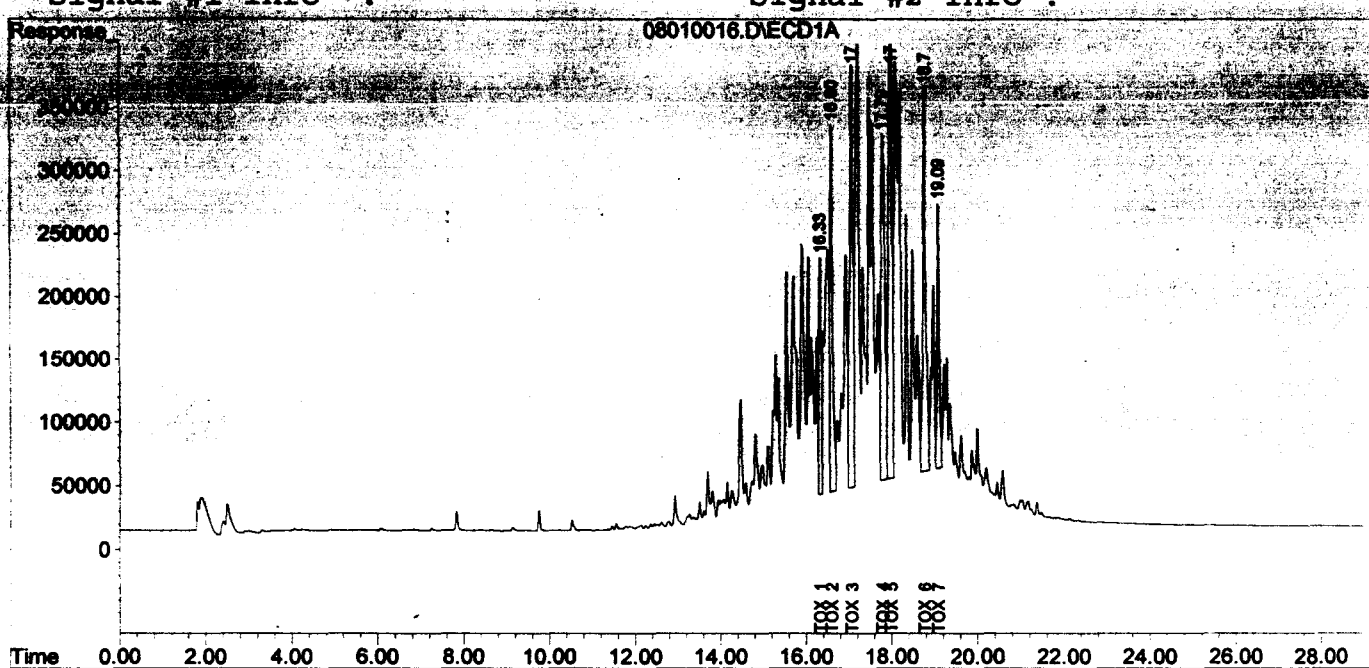
	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1) L	TOX	1	16.33	16.41	7772416	22357334	5.009	5.002
2) L	TOX	2	16.60	16.81	12477119	13993903	5.115	5.169
3) L	TOX	3	17.07	16.97	17094175	18415867	5.011	5.074
4) L	TOX	4	17.79	18.06	17440849	22500080	5.082	5.016
5) L	TOX	5	17.99	18.18	21857683	18851494	5.021	5.080
6) L	TOX	6	18.77	18.90	14516845	12819334	5.132	5.106
7) L	TOX	7	19.09	19.29	7626871	10525813	5.222	5.275
Sum	TOX	1			98785958	119.5E6	35.594	35.721
Average	TOX	1					5.085	5.103

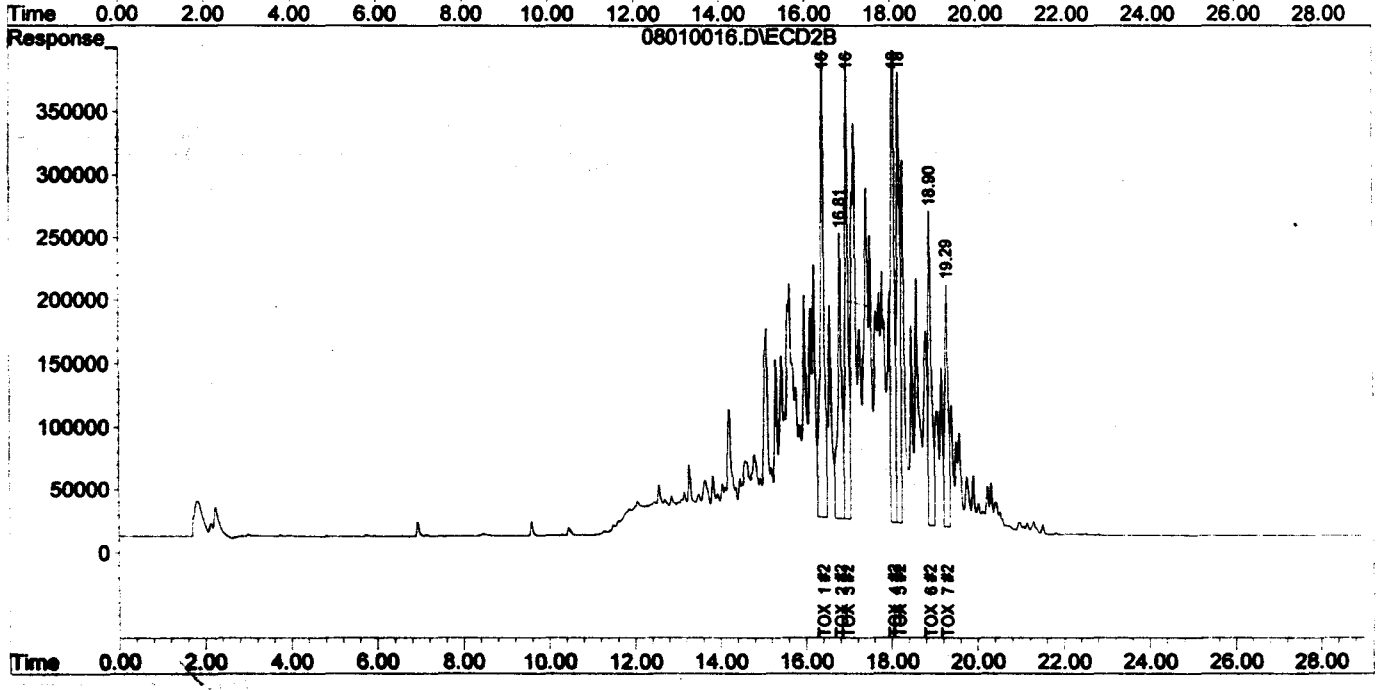
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

[illegible] pm
Sample [illegible] IC TOX 5.0 PPM [illegible]
Misc [illegible] Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:59 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Sample : TC TOX 3.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:58 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

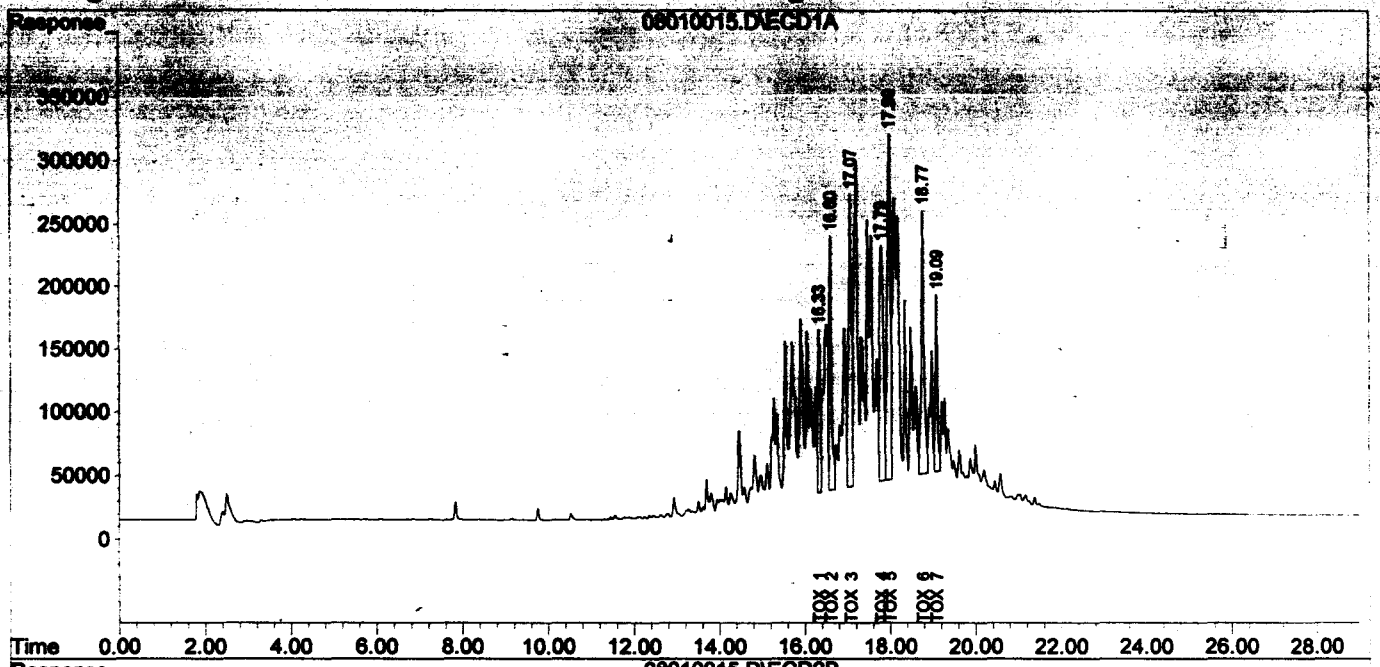
	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1)	L TOX	1	16.33	16.41	5304916	15259079	3.419	3.414
2)	L TOX	2	16.60	16.81	8206249	9244517	3.364	3.414
3)	L TOX	3	17.07	16.97	11744717	12565438	3.443	3.462
4)	L TOX	4	17.79	18.06	11808479	15567468	3.441	3.470
5)	L TOX	5	17.99	18.18	15073424	12854160	3.463	3.464
6)	L TOX	6	18.77	18.90	9667838	8686095	3.418	3.460
7)	L TOX	7	19.09	19.29	5011059	6853677	3.431	3.435
	Sum TOX	1			66816681	81030434	23.979	24.119
Average	TOX	1					3.426	3.446

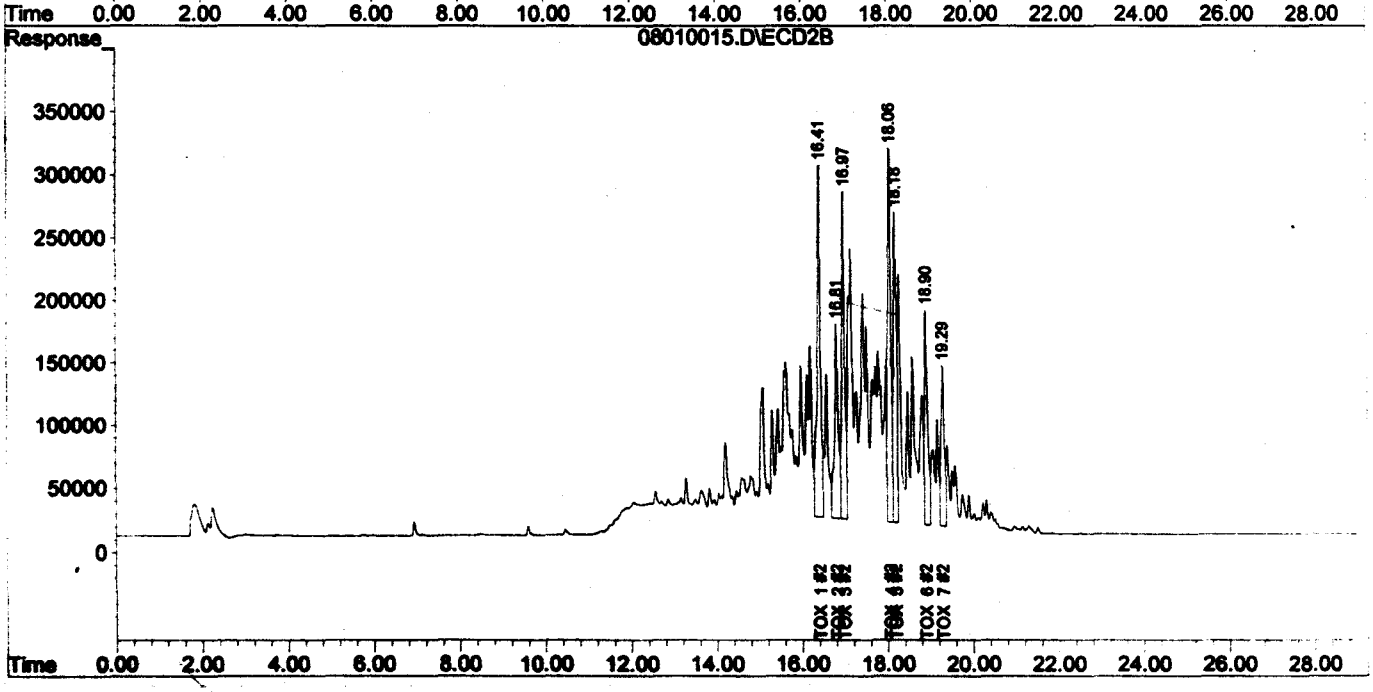
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

[illegible] GC/ECD [illegible]
Multiplr: 1.00
[illegible] IntFile Signal #2: autoint2.e
Quan[illegible] Aug 2 9:58 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\[illegible]\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Sample : IC TOX 2.50 PPM Inst : GC/ECD
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:58 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

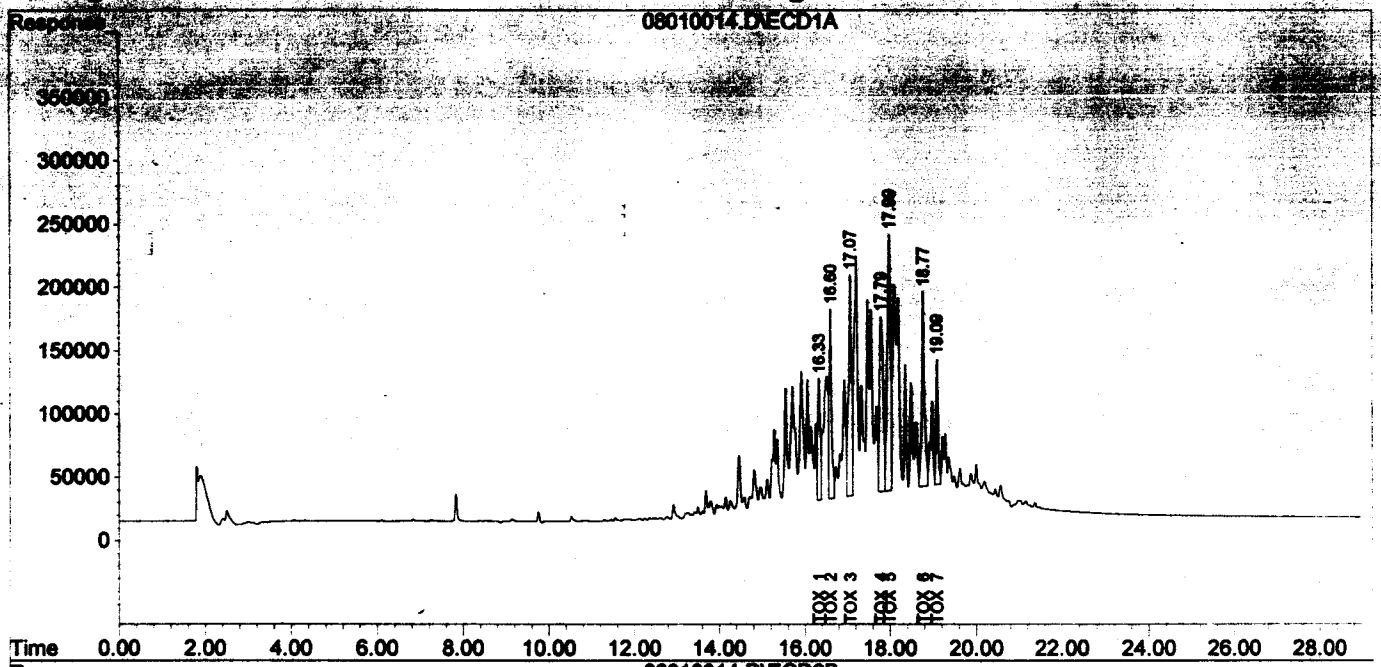
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
Target Compounds						
1) L TOX 1	16.33	16.41	4041734	11755831	2.605	2.630
2) L TOX 2	16.60	16.81	6123506	6550782	2.511	2.420
3) L TOX 3	17.07	16.97	8791121	8932906	2.577	2.461
4) L TOX 4	17.79	18.06	8519152	11383823	2.482	2.538
5) L TOX 5	17.99	18.18	10994566	9182427	2.526	2.474
6) L TOX 6	18.77	18.90	6901089	6151902	2.440	2.450
7) L TOX 7	19.09	19.29	3375921	4545945	2.312	2.278
Sum TOX 1			48747089	58503615	17.452	17.251
Average TOX 1					2.493	2.464

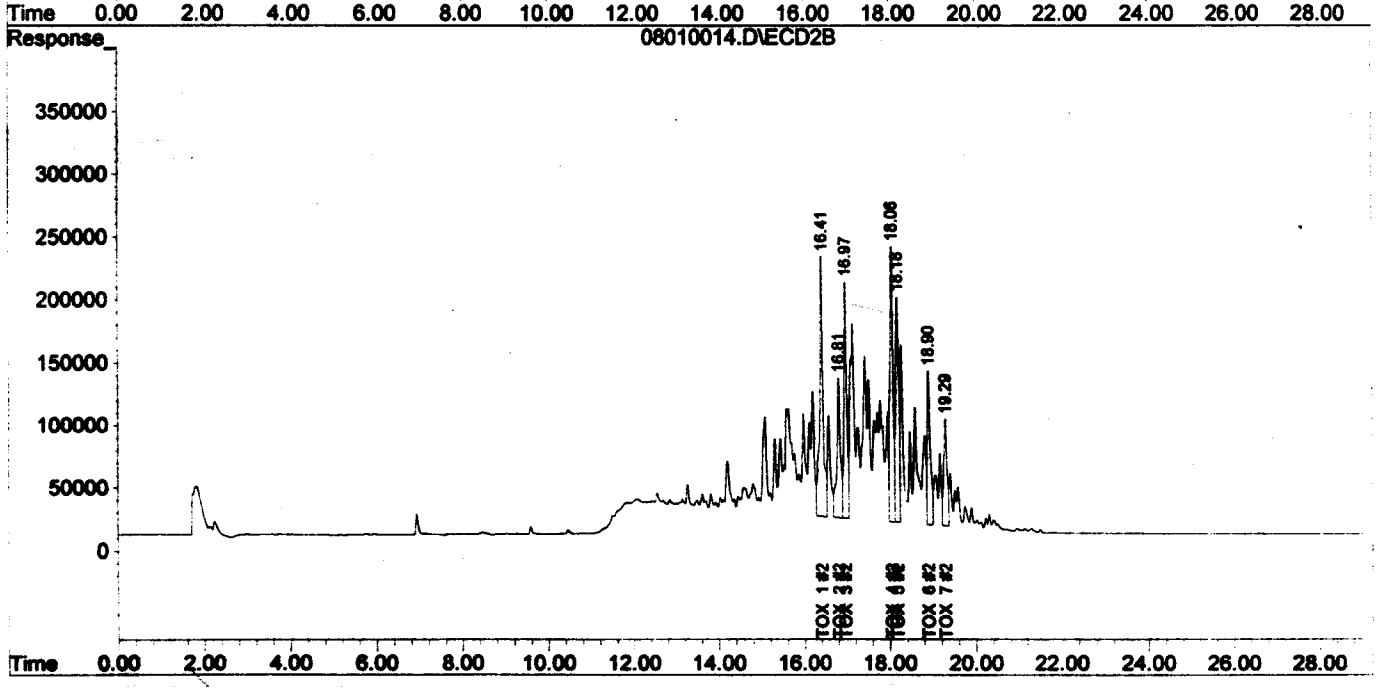
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quant Time: Aug 2 9:58 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A;08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





[redacted]

Sample : IC [illegible] Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: [illegible] IntFile Signal #2: autoint2.e
Quant Time: Aug 2 [illegible] 2000 Quant Results File: 080100TX.RES

Quant Method : C:\[illegible]\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOX[illegible] ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
Target Compounds						
1) L TOX 1	16.33	16.41	2337754	6795875	1.507	1.521
2) L TOX 2	16.60	16.81	3528475	3620402	1.447	1.337
3) L TOX 3	17.07	16.97	5097016	5231132	1.494	1.441
4) L TOX 4	17.79	18.06	4940205	6622628	1.440	1.476
5) L TOX 5	17.99	18.18	6522679	5203173	1.498	1.402
6) L TOX 6	18.77	18.90	3788651	3437939	1.339	1.369
7) L TOX 7	19.09	19.30	1785524	2365225	1.223	1.185
Sum TOX 1			28000304	33276373	9.947	9.732
Average TOX 1					1.421	1.390

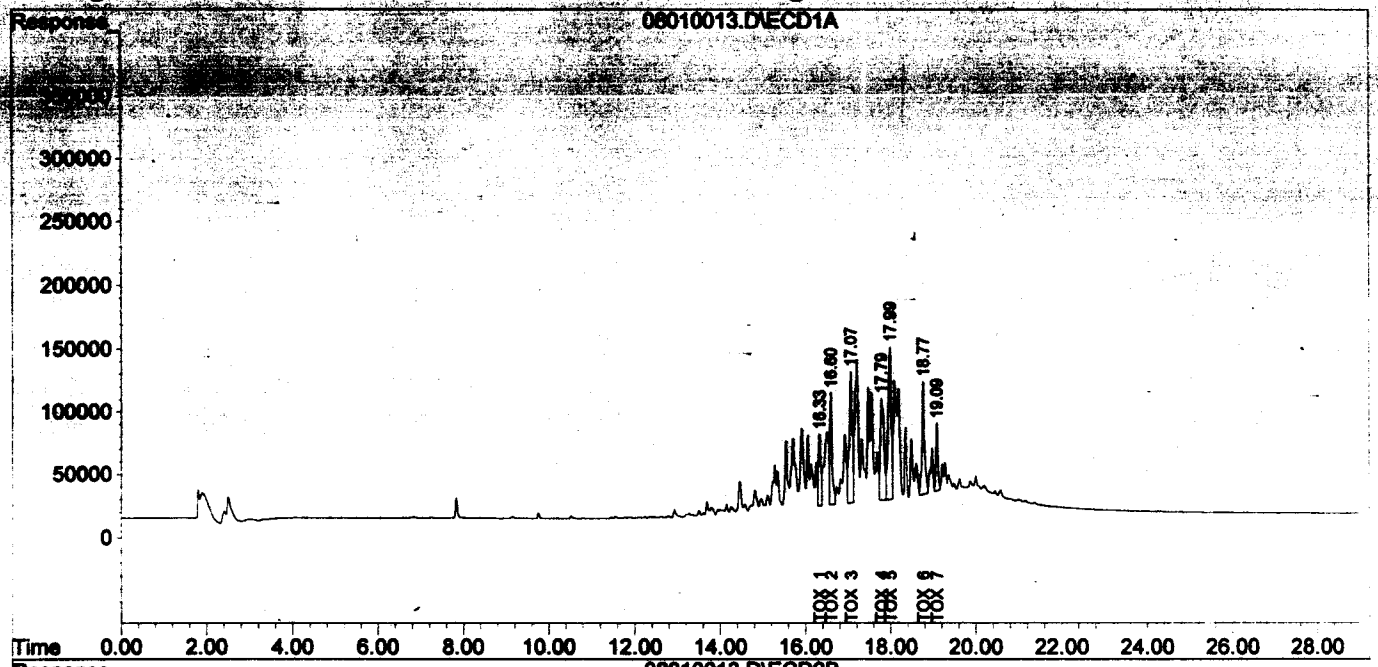
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

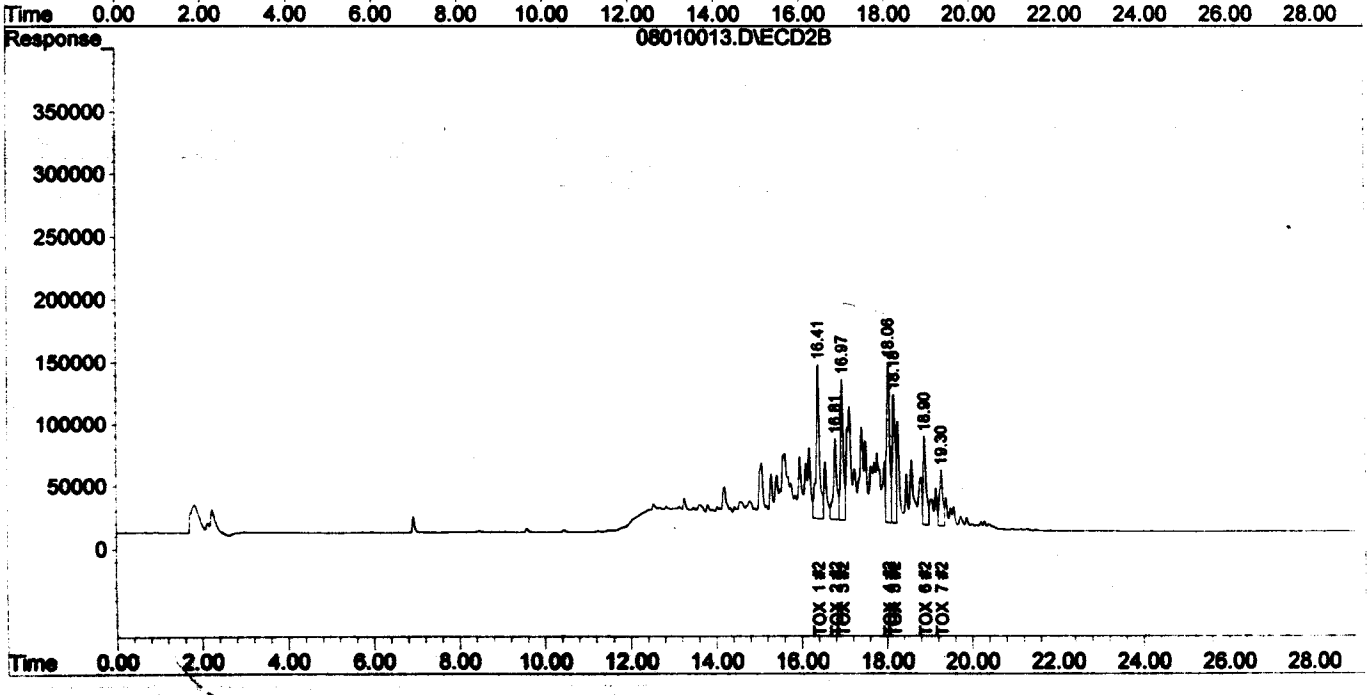
[redacted]

Quant Time: Aug [redacted] Quant Results File: [redacted]

Quant Method : C:\[redacted]\080100TX.M (Chemstation Integrator)
Title : [redacted]
Last Update : Wed Aug 02 [redacted]:41 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





[redacted]

Aug 2 09:57 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A, 08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

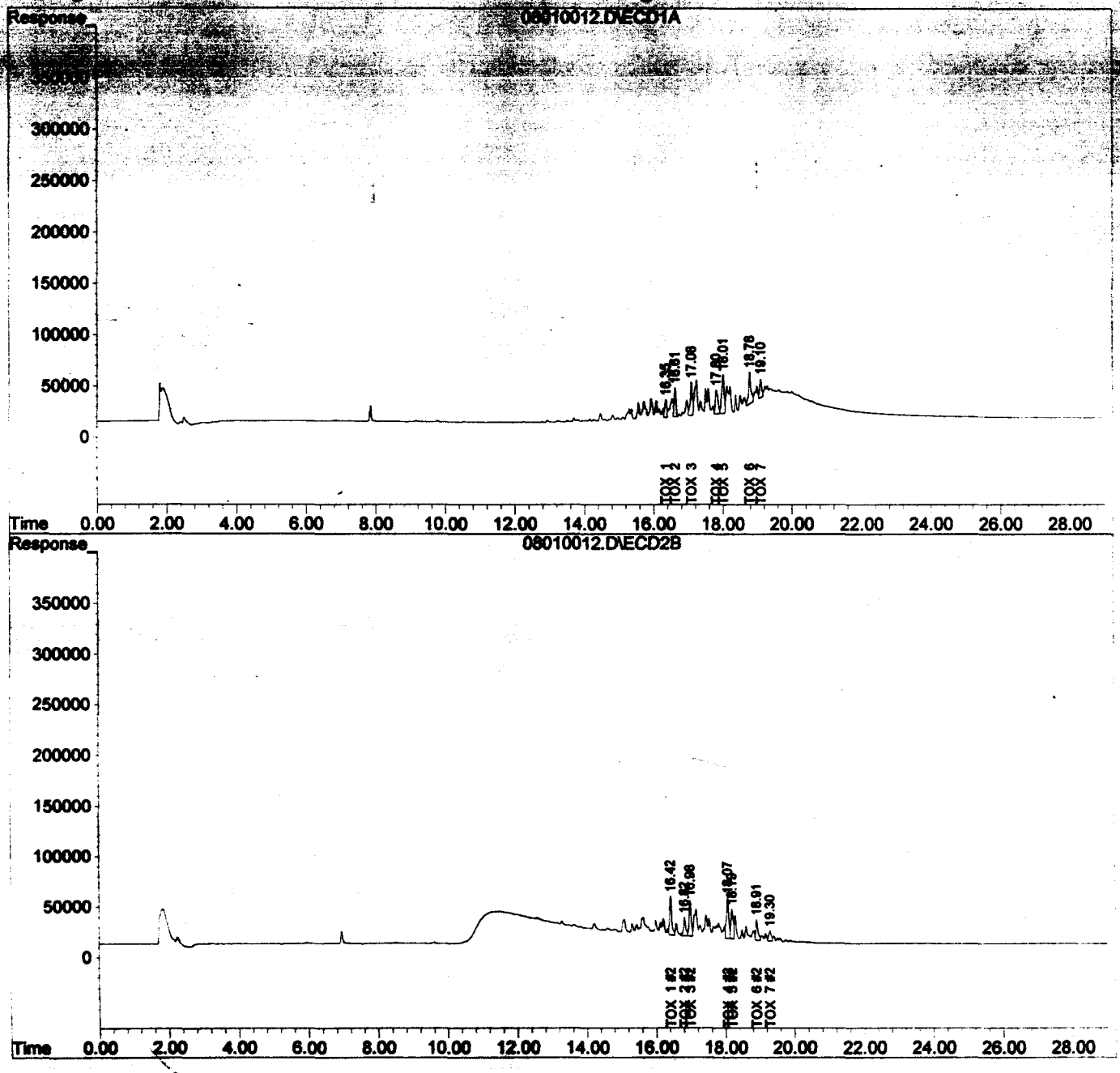
	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1) L	TOX	1	16.35	16.42	669177	1634390	0.431	0.366	
2) L	TOX	2	16.61	16.82	978983	820749	0.401	0.303	
3) L	TOX	3	17.08	16.98	1412837	1467037	0.414	0.404	
4) L	TOX	4	17.80	18.07	1234099	1947539	0.360	0.434	
5) L	TOX	5	18.01	18.19	1872357	1406646	0.430	0.379	
6) L	TOX	6	18.78	18.91	1510204	919458	0.534	0.366	#
7) L	TOX	7	19.10	19.30	778235	510964	0.533	0.256	#
Sum	TOX	1			8455891	8706782	3.103	2.508	
Average	TOX	1					0.443	0.358	

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

Inst
Multip
IntFile Signal #2: autoint2.e
Quant Aug 2 09:57 2000 Quant Results File: 080100TX.RES

Quant Method : C:\...\1\...DS\080100TX.M (Chemstation Integrator)
Title : TOX...NE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 08:...:05 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



[illegible] GC/ECD [illegible]
[illegible] 1.00 [illegible]
[illegible] Signal [illegible] autoinc2.e
Quant [illegible] Aug 2 9:51 2000 [illegible] File: 080100TX.RES

[illegible] : C:\HPCHEM\[illegible] (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS [illegible] GC A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
Target Compounds						
1) L TOX 1	16.34	16.41	1561981	8729000	1.007	1.953 #
2) L TOX 2	16.60	16.81	4499191	5268368	1.845	1.946
3) L TOX 3	17.07	16.97	8660515	8965570	2.539	2.470
4) L TOX 4	17.79	18.06	3438742	14324967	1.002	3.193 #
5) L TOX 5	17.98	18.19	11764893	5173145	2.703	1.394 #
6) L TOX 6	18.77	18.90	10490363	9284722	3.709	3.698
7) L TOX 7	19.09	19.29	6295358	8155495	4.311	4.087
Sum TOX 1			46711044	59901268	17.114	18.741
Average TOX 1					2.445 ✓	2.677 ✓

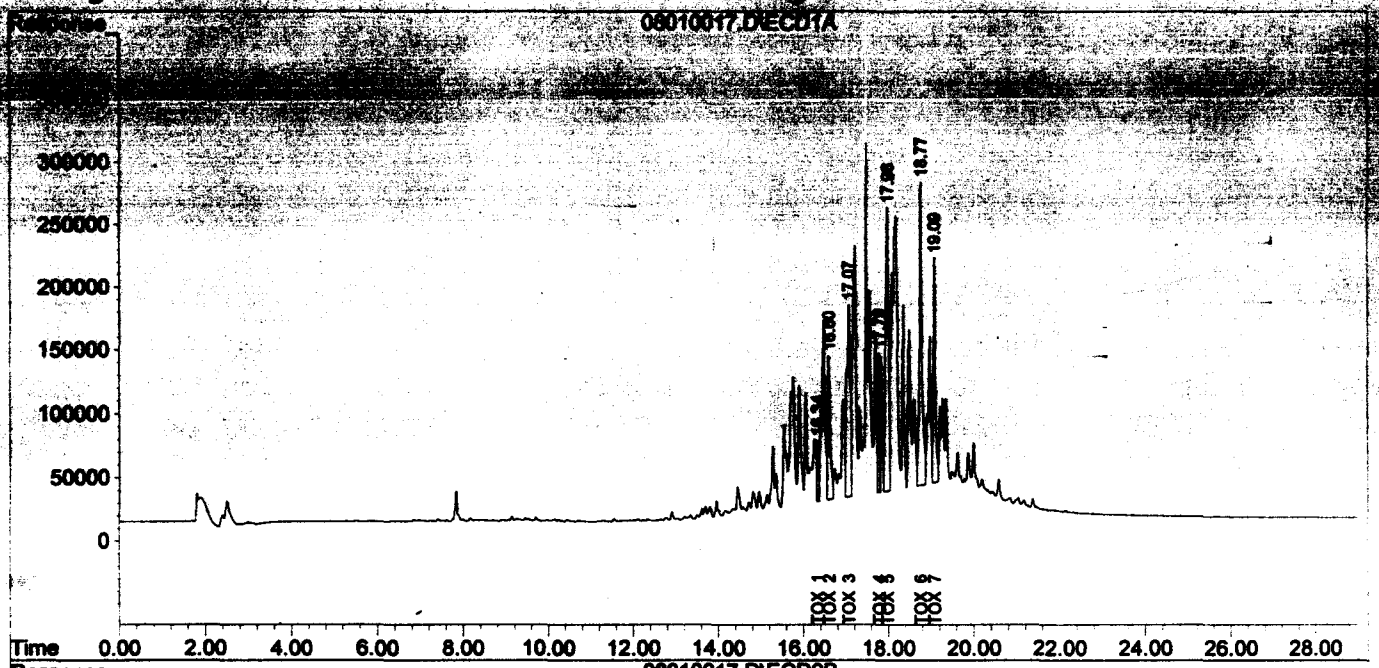
98%

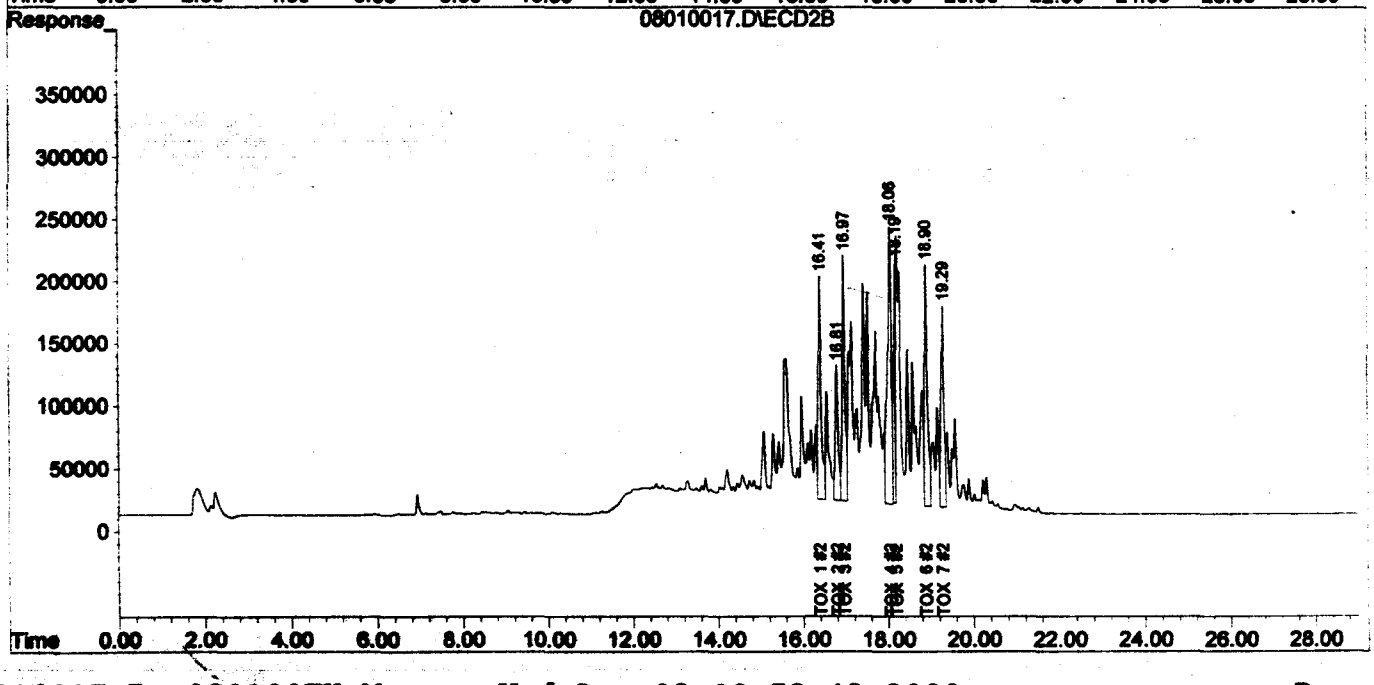
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Last Update : Wed Aug 02 08:57:05 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :

Signal #2 Phase:
Signal #2 Info :





GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 08/01/00
Analyst Initials: YGL
Instrument Method: 8081D1
Calibration Column: Rtx-CLP1
Confirmation Column: Rtx-CLP2

DDT Breakdown % (<15%): 3.1%
Endrin Breakdown % (<15%): 5.8%

Pest Calibration Date: 08/01/00
PCB Calibration Date: —

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	35-110	18-135
Water	16-159	D-139

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	080100P	Std	1X	NA	NA	
2	Hexane		Soln				
3	PEM		Std				P00112
4	ccv Pest .25 ppm						P00115
5	ic Pest .010 ppm						P00023
6	.050 ppm						P00023
7	.10 ppm						P00022
8	.25 ppm						P00115
9	.35 ppm						P00020
10	.50 ppm						P00019
11	Icv Pest .25 ppm				112	110	P00025
12	ic TCX .50 ppm	080100TX			NA	NA	[redacted]
13	ic TCX .5 ppm						P00068
14	[redacted]						P00113
15	.35 ppm						P00066
16	.5 ppm						P00065
17	Icv TCX .25 ppm						[redacted]
18	Hexane	080100P	Soln				
19	ccv Pest .25 ppm		Std				P00115
20	ccv Chlord .25 ppm						P00111
	YGL	08/02/00					

Signature/Date: [signature] 08/02/00

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Toxaphene, std
Lab Standard ID#: P00065 - P00069
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.	
Toxaphene, interm.	P00064	100 ppm	200 µL	5.0 ppm	P00065
			140 µL	3.5 ppm	P00066
			100 µL	2.5 ppm	P00067
			60 µL	1.5 ppm	P00068
			20 µL	0.50 ppm	P00069
Hexane	Ex 99135	100%	to 4.0 mL each		
YGK	03/06/00				

Standard Name: Toxaphene, std interm (ICV)
Lab Standard ID#: P00070
Prepared By: YGK

Date Made: 03/06/00
Expire Date: 09/06/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Toxaphene, stock	S99A198	1000 ppm	200 µL	50 ppm
Hexane	Ex 99135	100%	to 4.0 mL	
	03/06/00			
YGK				

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Pest. mix std
Lab Standard ID# P00121 - P00124
Prepared By: YGK

Date Made: 08/18/00
Expire Date: 02/18/01
Matrix:

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.	
Pest mix. interm. std	P00018	10 ppm	100 µL	0.25 ppm	00121
Hexane	Ex 00035	100%	to 4.0 mL		
Pest. mix interm	P00018	10 ppm	100 µL	0.25 ppm	00122
Pest mix interm	"	"	"	"	00123
Pest mix interm	"	"	"	"	00124
Hexane	Ex 00035	100%	to 4.0 ml each		
YGK 08/18/00					

Standard Name: Pest. mix. std
Lab Standard ID# P00125 - P00129
Prepared By: YGK

Date Made: 08/18/00
Expire Date: 02/18/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.	
interm. std	P00018	10 ppm	200 µL	0.50 ppm	00125
"	"	"	140 µL	0.35 ppm	00126
"	"	"	40 µL	0.10 ppm	00127
"	"	"	20 µL	0.050 ppm	00128
mix. std	P00125	0.50 ppm	80 µL	0.010 ppm	00129
Hexane	Ex 00035	100%	to 4.0 mL each		
YGK 08/18/00					

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Toxaphene, std 2.5 ppm
Lab Standard ID# P00130
Prepared By: YGK

Date Made: 09/05/00
Expire Date: 03/05/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Toxaphene, interm	P00064	100 ppm	100 µL	2.5 ppm
Hexane	Ex00035	100%	to 4.0 mL	
YGK 09/05/00				

Standard Name: Toxaphene, std 2.5 ppm
Lab Standard ID# P00131
Prepared By: YGK

Date Made: 09/05/00
Expire Date: 03/05/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used:	Final Conc.
Toxaphene, interm.	P00064	100 ppm	100 µL	2.5 ppm
Hexane	Ex 00035	100%	to 4.0 mL	
YGK 09/05/00				

SVO GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

DATE / INSTRUMENT: 09/28/00 PEST-A	METHOD: (circle applicable methods)		
MATRIX:	(8081A)	8082	8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst: YGR	Reviewer:
Date: 09/29/00 Time: 10:00	Date: 10.03.2000 Time: 1430

Response Factor Report GC/ECD IN

Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Fri Sep 29 09:18:41 2000

Calibration Files
0.01 =09280005.D 0.05 =09280006.D 0.1 =09280007.D
0.25 =09280008.D 0.35 =09280009.D 0.50 =09280010.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	TCMX (SURR)	1.295	1.428	1.250	1.103	1.025	0.966	1.178	E8	14.95
2)	T	A-BHC	1.702	1.921	1.799	1.647	1.551	1.505	1.688	E8	9.19
3)	T	B-BHC	8.161	8.124	7.390	6.872	6.561	6.499	7.268	E7	10.28
4)	T	LINDANE	1.600	1.738	1.619	1.477	1.396	1.352	1.531	E8	9.63
5)	T	D-BHC	1.378	1.646	1.538	1.450	1.383	1.364	1.460	E8	7.68
6)	T	HEPTACHLOR	1.369	1.362	1.191	1.053	0.997	0.961	1.155	E8	15.62
7)	T	ALDRIN	1.423	1.477	1.349	1.174	1.090	1.024	1.256	E8	14.83
8)	T	HEPT.EPOXIDE	1.302	1.335	1.170	1.017	0.955	0.905	1.114	E8	16.35
9)	T	ENDOSULFAN 1	1.335	1.408	1.237	1.071	0.995	0.944	1.165	E8	16.30
10)	T	GAMMA-CHLORDANE	1.461	1.449	1.312	1.171	1.104	1.057	1.259	E8	13.87
11)	T	ALPHA-CHLORDANE	1.277	1.321	1.161	1.077	1.025	0.895	1.126	E8	14.21
12)	T	DDE	1.029	1.140	1.037	0.959	0.897	0.885	0.991	E8	9.77
13)	T	DIELDRIN	1.203	1.258	1.126	1.006	0.940	0.908	1.074	E8	13.40
14)	T	ENDRIN	9.201	9.759	8.631	7.915	7.513	7.515	8.422	E7	11.07
15)	T	DDD	7.504	9.429	8.731	8.207	7.766	7.752	8.232	E7	8.86
16)	T	ENDOSULFAN 2	1.067	1.083	0.942	0.846	0.794	0.772	0.917	E8	14.76
17)	T	ENDRIN ALDEHYDE	8.646	8.431	7.357	6.665	6.291	6.411	7.300	E7	14.11
18)	T	DDT	6.663	8.399	7.579	7.612	7.335	7.857	7.574	E7	7.58
19)	T	ENDOS.SULFATE	1.009	0.955	0.843	0.762	0.734	0.739	0.840	E8	14.02
20)	T	METHOXYCHLOR		4.449	3.837	3.737	3.590	4.044	3.931	E7	8.47
21)	T	ENDRIN KETONE	1.091	1.106	0.971	0.878	0.826	0.847	0.953	E8	12.92
22)	S	DCB (SURR)	1.168	1.117	0.930	0.803	0.779	0.824	0.937	E8	17.95

ignal #2 Calibration Files
0.01 =09280005.D 0.05 =09280006.D 0.1 =09280007.D
0.25 =09280008.D 0.35 =09280009.D 0.50 =09280010.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	TCMX (SURR)	1.227	1.404	1.281	1.151	1.087	1.052	1.200	E8	10.95
2)	T	A-BHC	1.938	2.152	2.040	1.836	1.747	1.676	1.898	E8	9.50
3)	T	B-BHC	9.074	9.338	8.431	7.862	7.490	7.351	8.258	E7	10.03
4)	T	LINDANE	1.897	1.994	1.813	1.656	1.566	1.508	1.739	E8	11.08
5)	T	D-BHC	1.293	1.518	1.408	1.345	1.292	1.275	1.355	E8	6.90
6)	T	HEPTACHLOR	1.890	2.055	1.701	1.501	1.411	1.304	1.644	E8	17.69
7)	T	ALDRIN	1.820	1.839	1.655	1.460	1.360	1.253	1.565	E8	15.63
8)	T	HEPT.EPOXIDE	1.572	1.602	1.376	1.223	1.136	1.019	1.321	E8	17.91
9)	T	ENDOSULFAN 1	1.725	1.654	1.460	1.296	1.191	1.145	1.412	E8	17.13
10)	T	GAMMA-CHLORDANE	1.814	1.766	1.580	1.442	1.340	1.299	1.540	E8	14.10
11)	T	ALPHA-CHLORDANE	1.676	1.621	1.442	1.308	1.213	1.182	1.407	E8	14.84
12)	T	DDE	1.589	1.620	1.431	1.315	1.230	1.195	1.396	E8	12.94
13)	T	DIELDRIN	1.576	1.615	1.425	1.257	1.156	1.106	1.356	E8	15.91
14)	T	ENDRIN	1.080	1.208	1.058	0.946	0.879	0.877	1.008	E8	12.94
15)	T	DDD	1.155	1.131	1.048	0.911	0.897	0.896	1.006	E8	11.97
16)	T	ENDOSULFAN 2	1.414	1.419	1.261	1.113	1.029	1.008	1.207	E8	15.32
17)	T	ENDRIN ALDEHYDE	0.962	1.002	0.890	0.781	0.745	0.761	0.857	E8	12.87
18)	T	DDT	0.848	1.010	0.905	0.899	0.862	0.922	0.908	E8	6.32
19)	T	ENDOS.SULFATE	1.190	1.139	0.994	0.886	0.829	0.834	0.979	E8	16.00
20)	T	METHOXYCHLOR		4.996	4.187	3.943	3.787	4.169	4.216	E7	11.06
21)	T	ENDRIN KETONE	1.304	1.272	1.101	0.985	0.920	0.926	1.085	E8	15.71
22)	S	DCB (SURR)	1.133	1.157	0.980	0.875	0.834	0.890	0.978	E8	14.10

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\092800\09280005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\092800\09280005.D\ECD2B.CH
Acq On : 28 Sep 2000 1:46 pm Operator: YGK
Sample : IC PEST 0.010 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:11 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

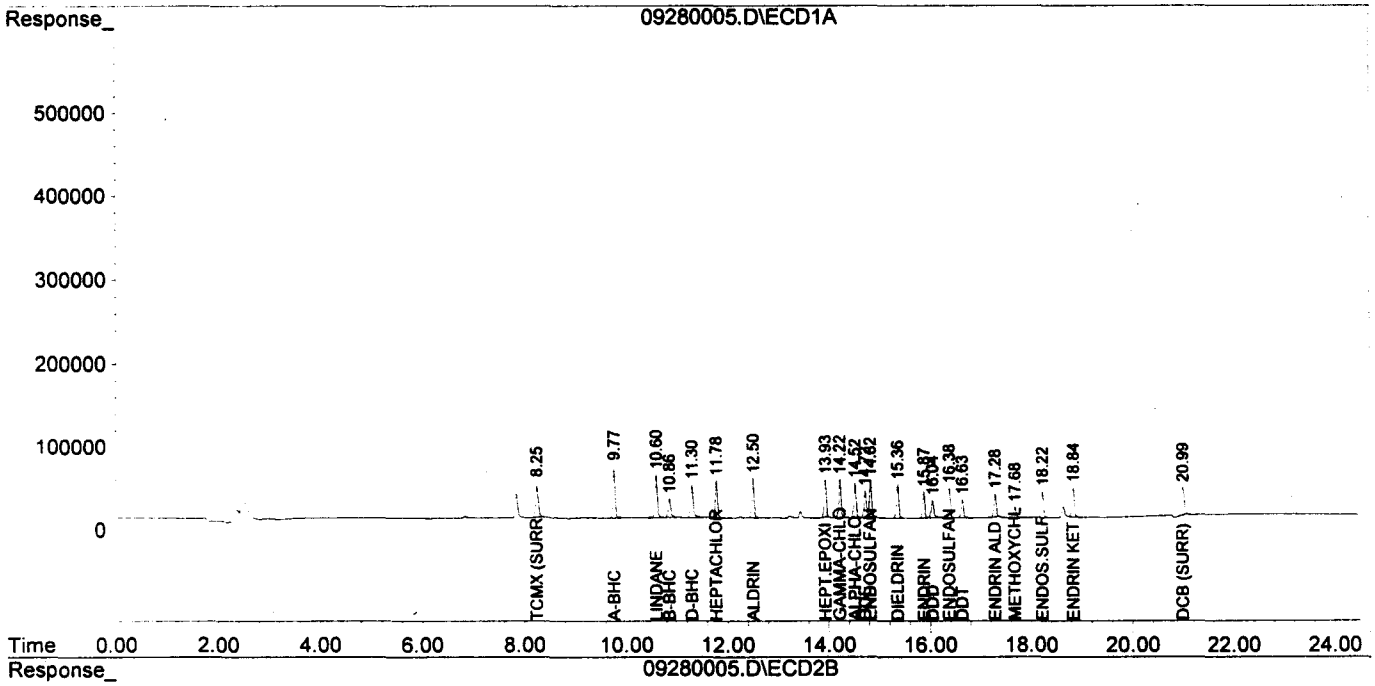
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	TCMX (SURR)	8.25	7.93	1294742	1226996	0.013	0.011	
		Spiked Amount 0.250			Recovery =		5.20%	4.40%	
22)	S	DCB (SURR)	20.99	21.40	1167736	1133409	0.014	0.013	
		Spiked Amount 0.250			Recovery =		5.60%	5.20%	
		Target Compounds							
2)	T	A-BHC	9.77	9.58	1701576	1937575	0.011	0.011	
3)	T	B-BHC	10.86	10.76	816055	907390	0.012	0.012	
4)	T	LINDANE	10.60	10.50	1599951	1896543	0.012	0.012	
5)	T	D-BHC	11.30	11.47	1378004	1293486	0.010	0.010	
6)	T	HEPTACHLOR	11.78	11.54	1369271	1889935	0.014	0.014	
7)	T	ALDRIN	12.50	12.29	1423118	1820440	0.013	0.014	
8)	T	HEPT.EPOXIDE	13.93	13.63	1302446	1571695	0.014	0.014	
9)	T	ENDOSULFAN 1	14.82	14.50	1335418	1724635	0.014	0.015	
10)	T	GAMMA-CHLORDANE	14.22	14.05	1461040	1814260	0.013	0.014	
11)	T	ALPHA-CHLORDANE	14.52	14.38	1277252	1675783	0.013	0.014	
12)	T	DDE	14.72	14.80	1028935	1588575	0.011	0.013	
13)	T	DIELDRIN	15.36	15.10	1203275	1576142	0.013	0.014	
14)	T	ENDRIN	15.87	15.76	920075	1080071	0.012	0.012	
15)	T	DDD	16.04	16.06	750411	1155028	0.010	0.013	#
16)	T	ENDOSULFAN 2	16.38	16.24	1066669	1414160	0.013	0.014	
17)	T	ENDRIN ALDEHYDE	17.28	16.96	864615	961723	0.013	0.013	
18)	T	DDT	16.63	16.71	666255	847563	0.009	0.009	
19)	T	ENDOS.SULFATE	18.22	17.55	1009411	1190066	0.014	0.014	
20)	T	METHOXYCHLOR	17.68	18.18	420442	604714	0.011	0.015	#
21)	T	ENDRIN KETONE	18.84	18.70	1090724	1303791	0.013	0.014	

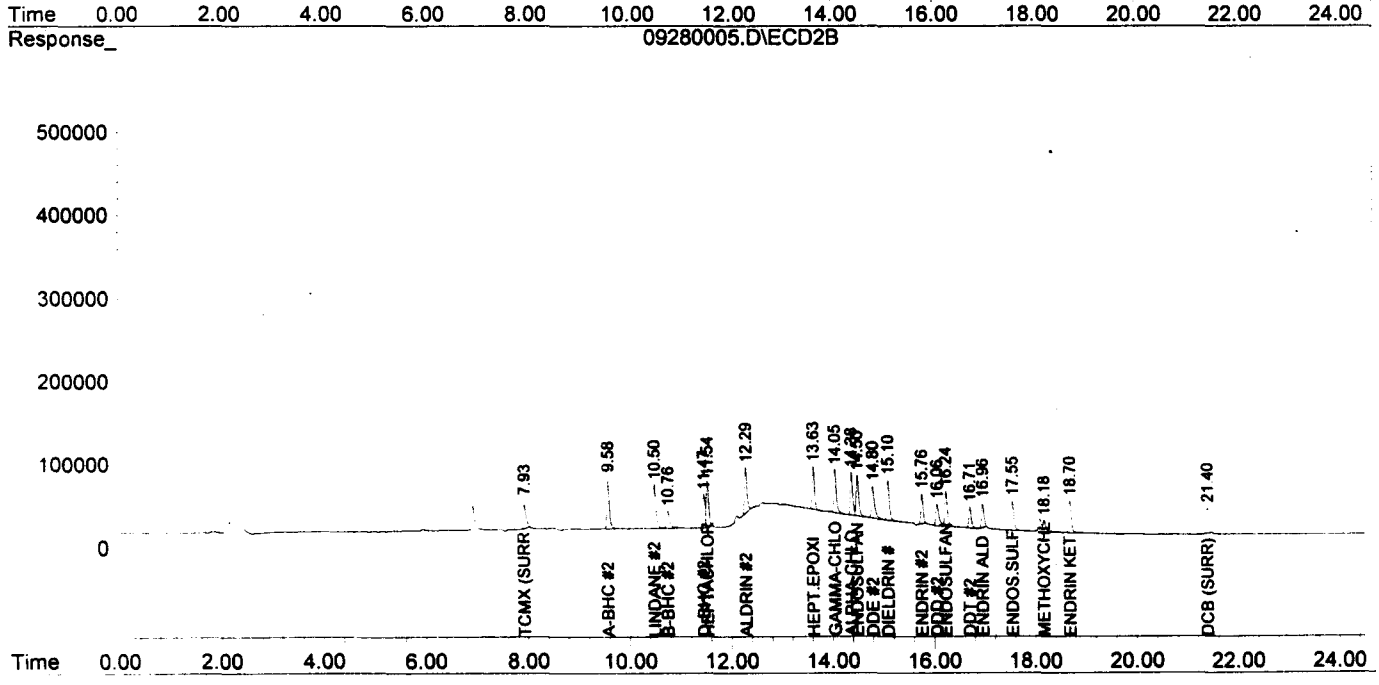
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\092800\09280005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\092800\09280005.D\ECD2B.CH
Acq On : 28 Sep 2000 1:46 pm Operator: YGK
Sample : IC PEST 0.010 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:11 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\092800\09280006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\092800\09280006.D\ECD2B.CH
Acq On : 28 Sep 2000 2:15 pm Operator: YGK
Sample : IC PEST 0.050 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:36 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

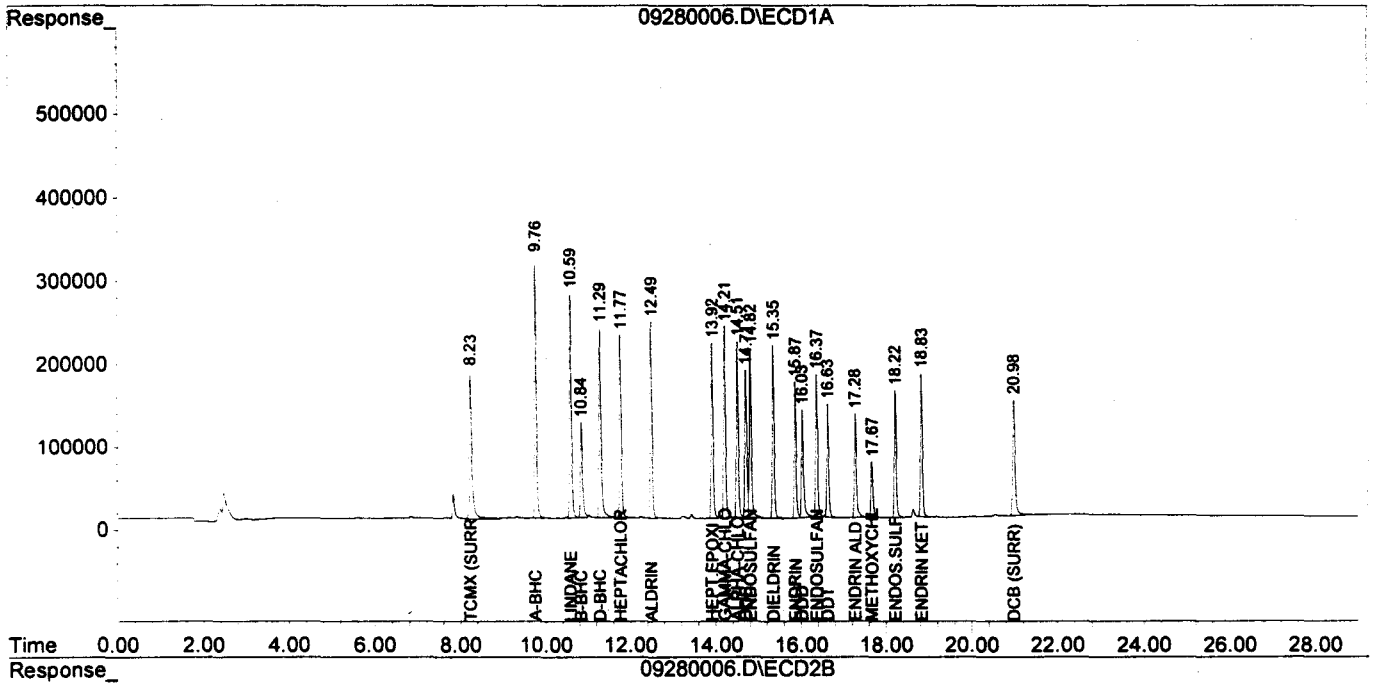
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.23	7.92	7139223	7022358	0.071	0.065
		Spiked Amount 0.250			Recovery	=	28.40%	26.00%
22)	S	DCB (SURR)	20.99	21.39	5582922	5784055	0.069	0.066
		Spiked Amount 0.250			Recovery	=	27.60%	26.40%
		Target Compounds						
2)	T	A-BHC	9.76	9.58	9603898	10760652	0.062	0.062
3)	T	B-BHC	10.84	10.74	4061847	4669207	0.062	0.062
4)	T	LINDANE	10.59	10.49	8692427	9971961	0.063	0.064
5)	T	D-BHC	11.29	11.45	8232118	7590595	0.059	0.059
6)	T	HEPTACHLOR	11.77	11.53	6808690	10274366	0.069	0.075
7)	T	ALDRIN	12.49	12.29	7384552	9197253	0.069	0.069
8)	T	HEPT.EPOXIDE	13.92	13.62	6674401	8008891	0.071	0.073
9)	T	ENDOSULFAN 1	14.82	14.49	7041684	8271867	0.072	0.070
10)	T	GAMMA-CHLORDANE	14.21	14.05	7246624	8831420	0.066	0.066
11)	T	ALPHA-CHLORDANE	14.51	14.38	6606767	8106729	0.068	0.067
12)	T	DDE	14.71	14.79	5702053	8098570	0.063	0.066
13)	T	DIELDRIN	15.35	15.10	6291626	8075915	0.067	0.070
14)	T	ENDRIN	15.87	15.76	4879647	6040061	0.064	0.068
15)	T	DDD	16.03	16.05	4714677	5653891	0.060	0.063
16)	T	ENDOSULFAN 2	16.37	16.23	5412524	7096816	0.068	0.068
17)	T	ENDRIN ALDEHYDE	17.28	16.96	4227264	5009779	0.066	0.066
18)	T	DDT	16.63	16.70	4199594	5050400	0.055	0.056
19)	T	ENDOS.SULFATE	18.22	17.55	4774433	5693678	0.064	0.067
20)	T	METHOXYCHLOR	17.67	18.18	2224337	2498027	0.057	0.062
21)	T	ENDRIN KETONE	18.83	18.69	5530127	6357753	0.065	0.068

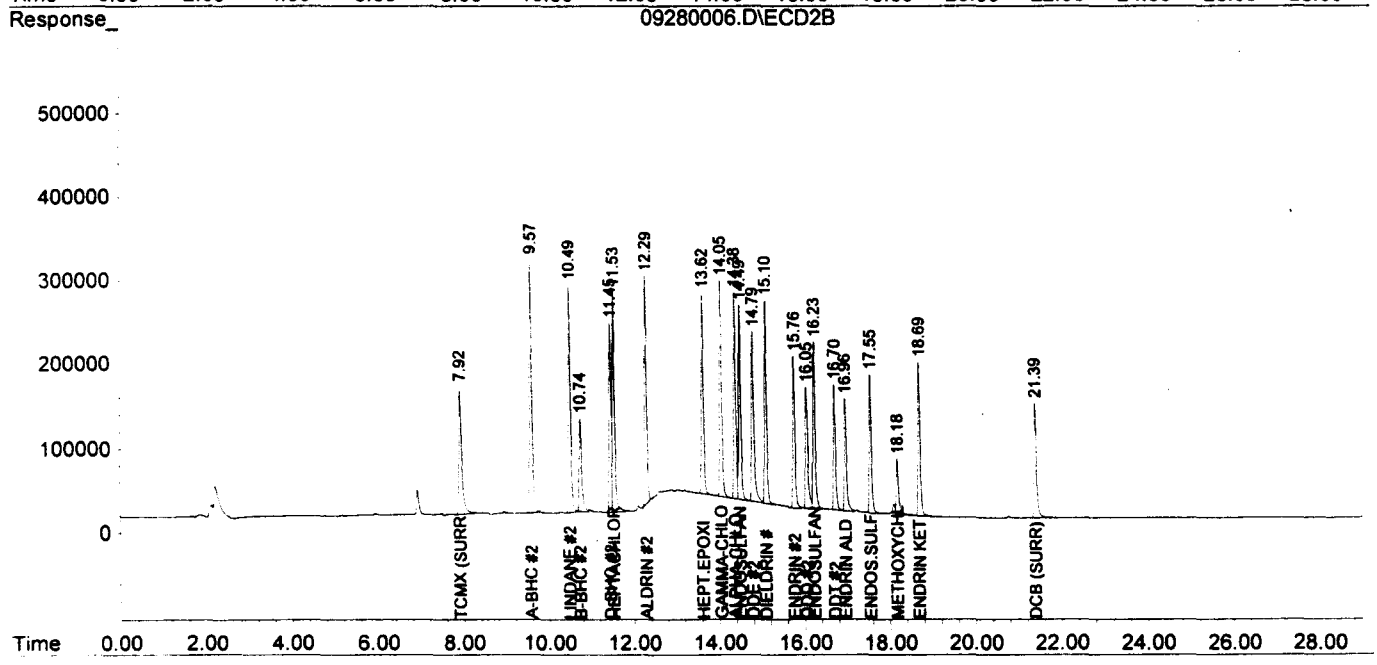
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\092800\09280006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\092800\09280006.D\ECD2B.CH
Acq On : 28 Sep 2000 2:15 pm Operator: YGK
Sample : IC PEST 0.050 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:36 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\092800\09280007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\092800\09280007.D\ECD2B.CH
Acq On : 28 Sep 2000 2:50 pm Operator: YGK
Sample : IC PEST 0.10 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:37 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
	System Monitoring Compounds						
1) S	TCMX (SURR)	8.24	7.92	12503979	12811759	0.124	0.118
	Spiked Amount 0.250			Recovery =		49.60%	47.20%
2) S	DCB (SURR)	20.99	21.39	9298023	9796880	0.114	0.112
	Spiked Amount 0.250			Recovery =		45.60%	44.80%
	Target Compounds						
2) T	A-BHC	9.76	9.58	17989073	20398766	0.116	0.118
3) T	B-BHC	10.84	10.74	7389515	8431393	0.112	0.112
4) T	LINDANE	10.59	10.49	16188999	18133823	0.116	0.117
5) T	D-BHC	11.29	11.45	15382224	14078665	0.111	0.109
6) T	HEPTACHLOR	11.77	11.53	11910120	17006641	0.120	0.124
7) T	ALDRIN	12.50	12.29	13490874	16546683	0.126	0.125
8) T	HEPT.EPOXIDE	13.92	13.62	11700547	13759844	0.124	0.126
9) T	ENDOSULFAN 1	14.82	14.49	12373627	14603142	0.126	0.123
10) T	GAMMA-CHLORDANE	14.21	14.05	13124474	15801990	0.120	0.118
11) T	ALPHA-CHLORDANE	14.51	14.38	11605624	14421742	0.120	0.119
12) T	DDE	14.71	14.79	10373949	14312232	0.115	0.116
13) T	DIELDRIN	15.35	15.10	11260540	14249305	0.120	0.124
14) T	ENDRIN	15.87	15.76	8630687	10579001	0.113	0.118
15) T	DDD	16.03	16.05	8730523	10476418	0.111	0.116
16) T	ENDOSULFAN 2	16.37	16.23	9421834	12609366	0.119	0.122
17) T	ENDRIN ALDEHYDE	17.28	16.96	7373708	8895316	0.114	0.116
18) T	DDT	16.63	16.70	7578946	9050492	0.099	0.100
19) T	ENDOS.SULFATE	18.22	17.55	8428359	9943639	0.113	0.118
20) T	METHOXYCHLOR	17.67	18.18	3917579	4187208	0.101	0.104
21) T	ENDRIN KETONE	18.83	18.69	9707810	11005205	0.114	0.117

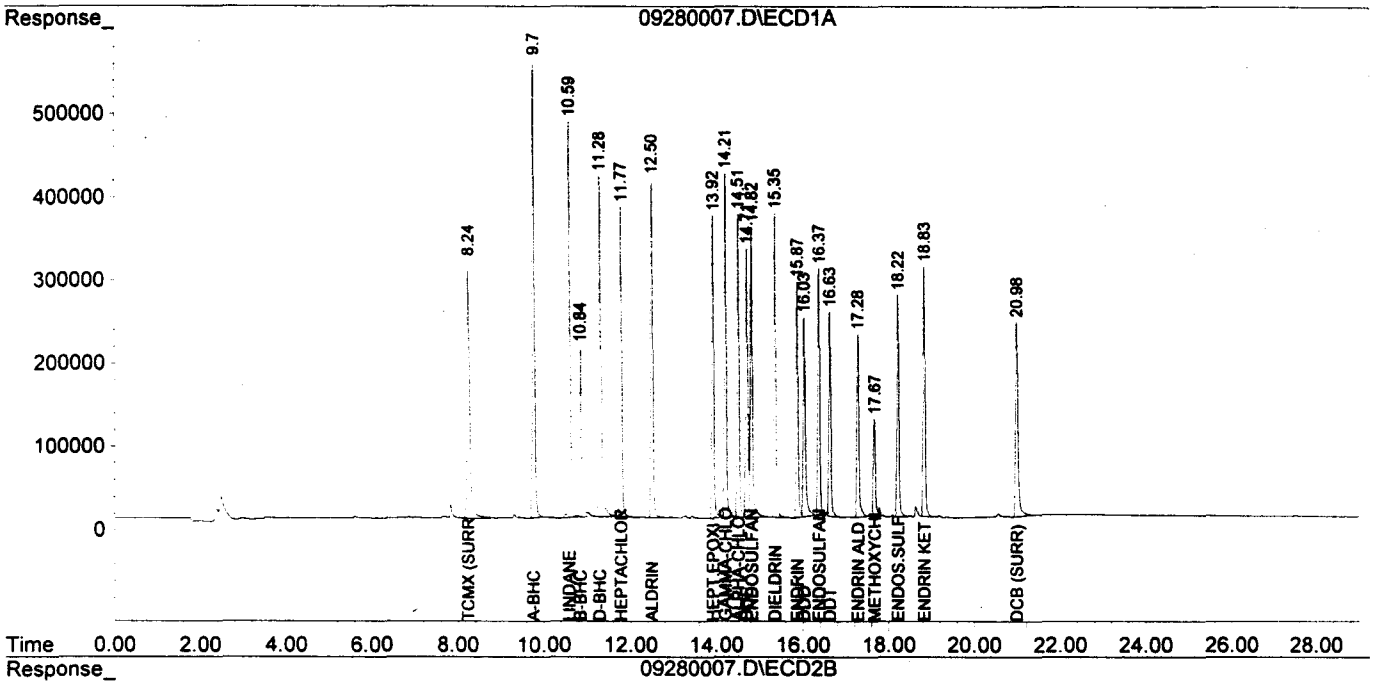
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

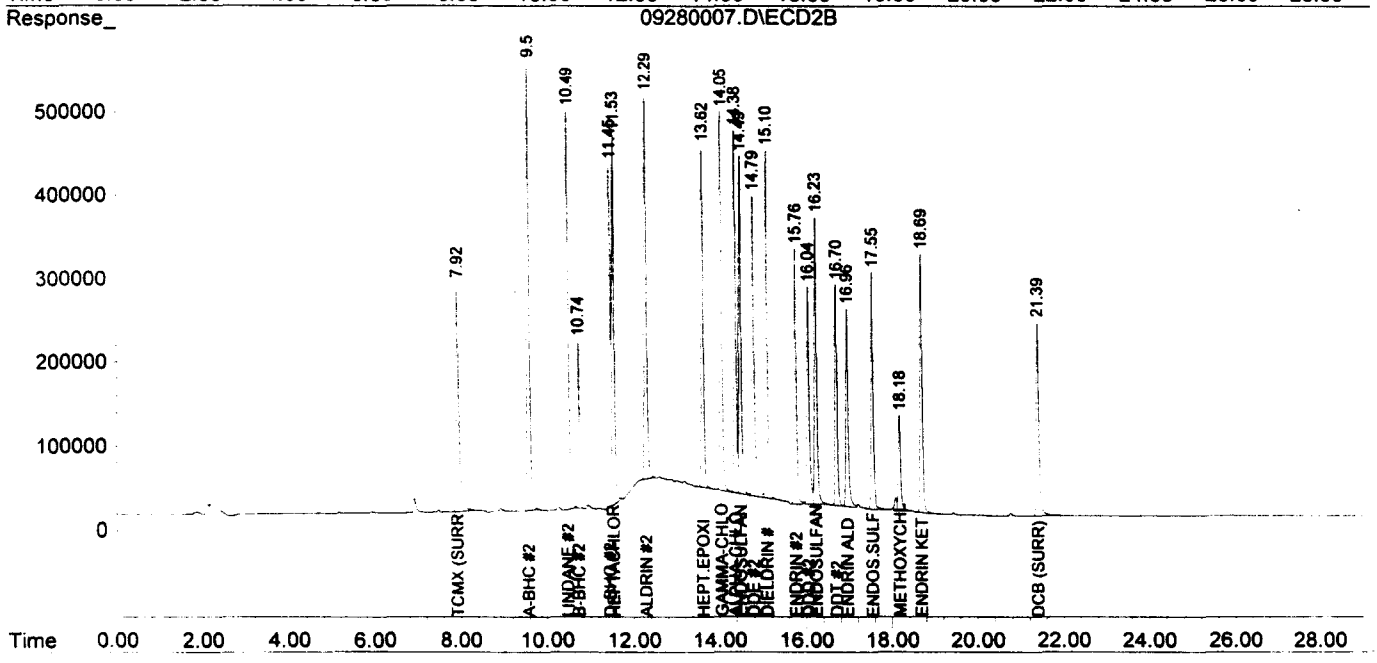
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\092800\09280007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\092800\09280007.D\ECD2B.CH
Acq On : 28 Sep 2000 2:50 pm Operator: YGK
Sample : IC PEST 0.10 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:37 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\092800\09280008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\092800\09280008.D\ECD2B.CH
Acq On : 28 Sep 2000 3:24 pm Operator: YGK
Sample : IC PEST 0.25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:38 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.23	7.91	27581460	28772616	0.273	0.266
		Spiked Amount 0.250			Recovery	=	109.20%	106.40%
22)	S	DCB (SURR)	20.98	21.39	20070623	21875693	0.247	0.250
		Spiked Amount 0.250			Recovery	=	98.80%	100.00%
		Target Compounds						
2)	T	A-BHC	9.76	9.57	41185766	45889026	0.266	0.266
3)	T	B-BHC	10.84	10.73	17178931	19655544	0.260	0.262
4)	T	LINDANE	10.59	10.49	36935452	41404378	0.266	0.266
5)	T	D-BHC	11.28	11.44	36243707	33618811	0.261	0.260
6)	T	HEPTACHLOR	11.77	11.53	26322890	37531373	0.266	0.273
7)	T	ALDRIN	12.49	12.29	29345046	36487613	0.274	0.276
8)	T	HEPT.EPOXIDE	13.92	13.62	25413977	30562750	0.270	0.280
9)	T	ENDOSULFAN 1	14.81	14.49	26769330	32400799	0.272	0.273
10)	T	GAMMA-CHLORDANE	14.21	14.05	29269936	36046963	0.268	0.269
11)	T	ALPHA-CHLORDANE	14.51	14.37	26913978	32689939	0.279	0.269
12)	T	DDE	14.70	14.78	23964880	32867050	0.265	0.267
13)	T	DIELDRIN	15.35	15.10	25153382	31421258	0.268	0.273
14)	T	ENDRIN	15.86	15.76	19786655	23651940	0.260	0.265
15)	T	DDD	16.02	16.04	20517220	22775941	0.261	0.252
16)	T	ENDOSULFAN 2	16.37	16.23	21140662	27834998	0.266	0.269
17)	T	ENDRIN ALDEHYDE	17.27	16.95	16716281	19514808	0.259	0.256
18)	T	DDT	16.62	16.70	19029285	22483194	0.248	0.249
19)	T	ENDOS.SULFATE	18.21	17.54	19057457	22152416	0.256	0.262
20)	T	METHOXYCHLOR	17.66	18.18	9552684	9858514	0.247	0.244
21)	T	ENDRIN KETONE	18.83	18.69	21959585	24629347	0.258	0.262

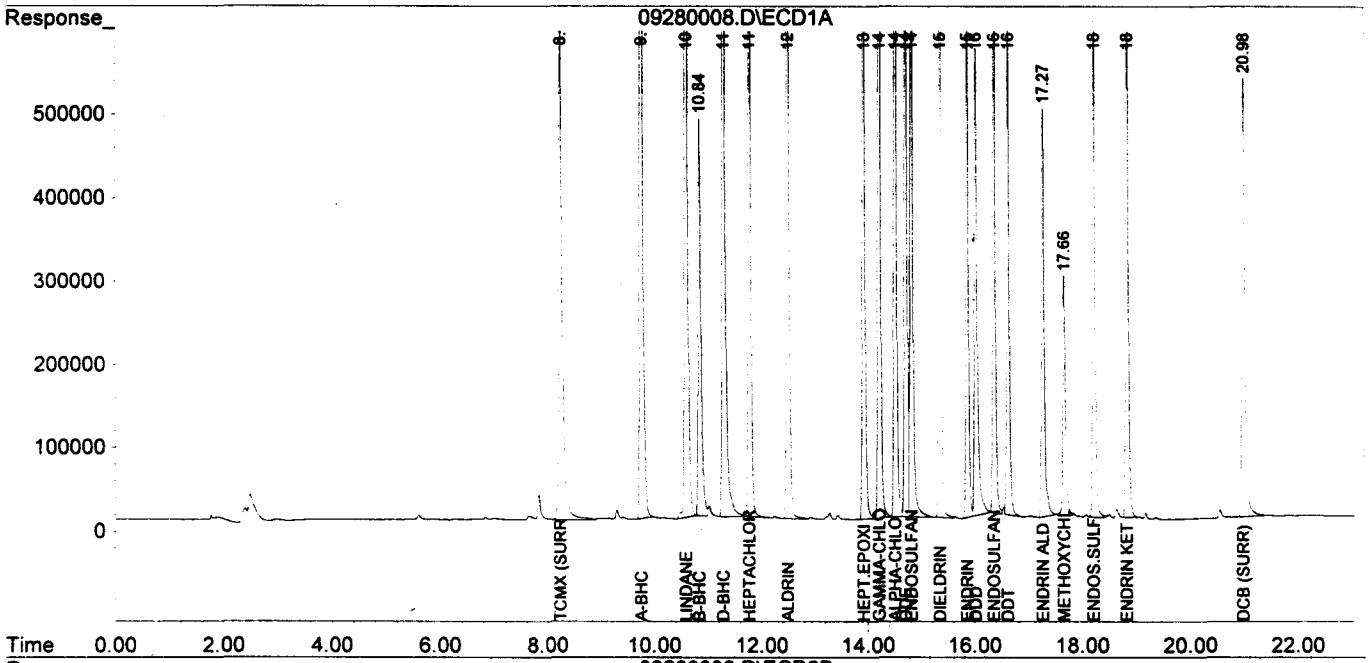
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

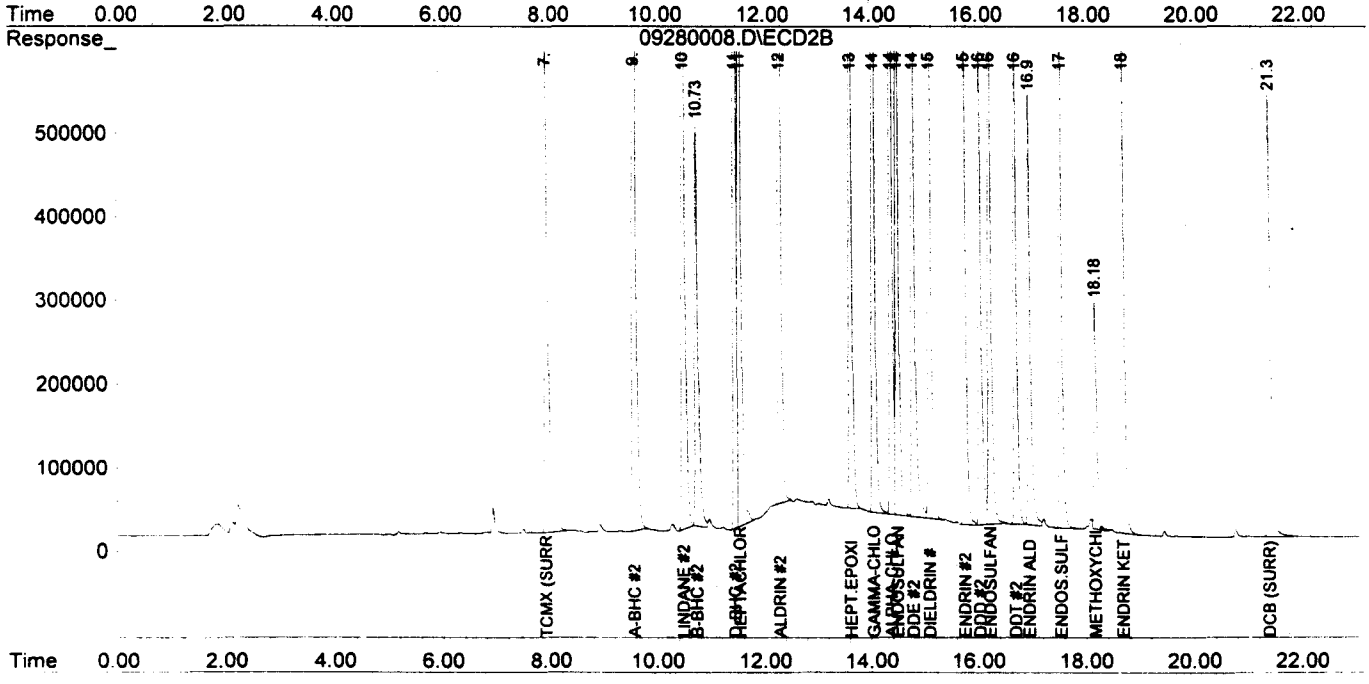
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\092800\09280008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\092800\09280008.D\ECD2B.CH
Acq On : 28 Sep 2000 3:24 pm Operator: YGK
Sample : IC PEST 0.25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:38 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\092800\09280009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\092800\09280009.D\ECD2B.CH
Acq On : 28 Sep 2000 4:22 pm Operator: YGK
Sample : IC PEST 0.35 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:39 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

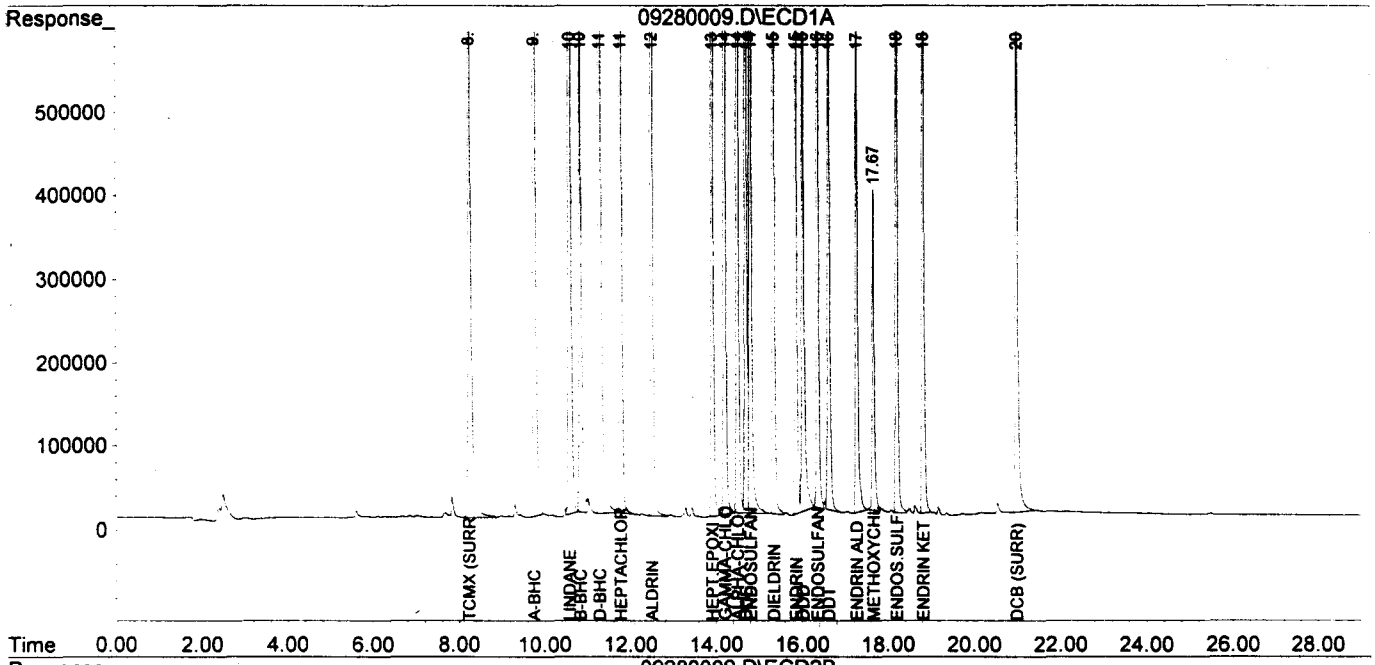
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.23	7.91	35890876	38037374	0.355	0.351
		Spiked Amount 0.250			Recovery	=	142.00%	140.40%
12)	S	DCB (SURR)	20.98	21.39	27263621	29196185	0.335	0.333
		Spiked Amount 0.250			Recovery	=	134.00%	133.20%
		Target Compounds						
2)	T	A-BHC	9.76	9.57	54291853	61132138	0.351	0.354
3)	T	B-BHC	10.84	10.73	22962724	26213609	0.348	0.350
4)	T	LINDANE	10.59	10.49	48859029	54804442	0.352	0.353
5)	T	D-BHC	11.28	11.44	48405536	45207004	0.349	0.349
6)	T	HEPTACHLOR	11.77	11.53	34880957	49378139	0.352	0.359
7)	T	ALDRIN	12.50	12.29	38164110	47607383	0.356	0.360
8)	T	HEPT.EPOXIDE	13.92	13.62	33437559	39767514	0.355	0.365
9)	T	ENDOSULFAN 1	14.82	14.49	34821601	41689499	0.354	0.351
10)	T	GAMMA-CHLORDANE	14.21	14.05	38645460	46903748	0.353	0.350
11)	T	ALPHA-CHLORDANE	14.51	14.37	35882146	42441956	0.372	0.349
12)	T	DDE	14.71	14.78	31403906	43044707	0.348	0.350
13)	T	DIELDRIN	15.35	15.10	32884840	40446893	0.351	0.351
14)	T	ENDRIN	15.87	15.76	26295476	30781716	0.346	0.344
15)	T	DDD	16.02	16.04	27181573	31399037	0.346	0.348
16)	T	ENDOSULFAN 2	16.37	16.23	27801388	36012253	0.350	0.348
17)	T	ENDRIN ALDEHYDE	17.27	16.95	22009637	26057690	0.341	0.341
18)	T	DDT	16.62	16.70	25673550	30168769	0.334	0.334
19)	T	ENDOS.SULFATE	18.22	17.54	25689598	29012552	0.345	0.343
20)	T	METHOXYCHLOR	17.67	18.18	12883807	13253336	0.333	0.328
21)	T	ENDRIN KETONE	18.83	18.69	28899192	32211201	0.340	0.343

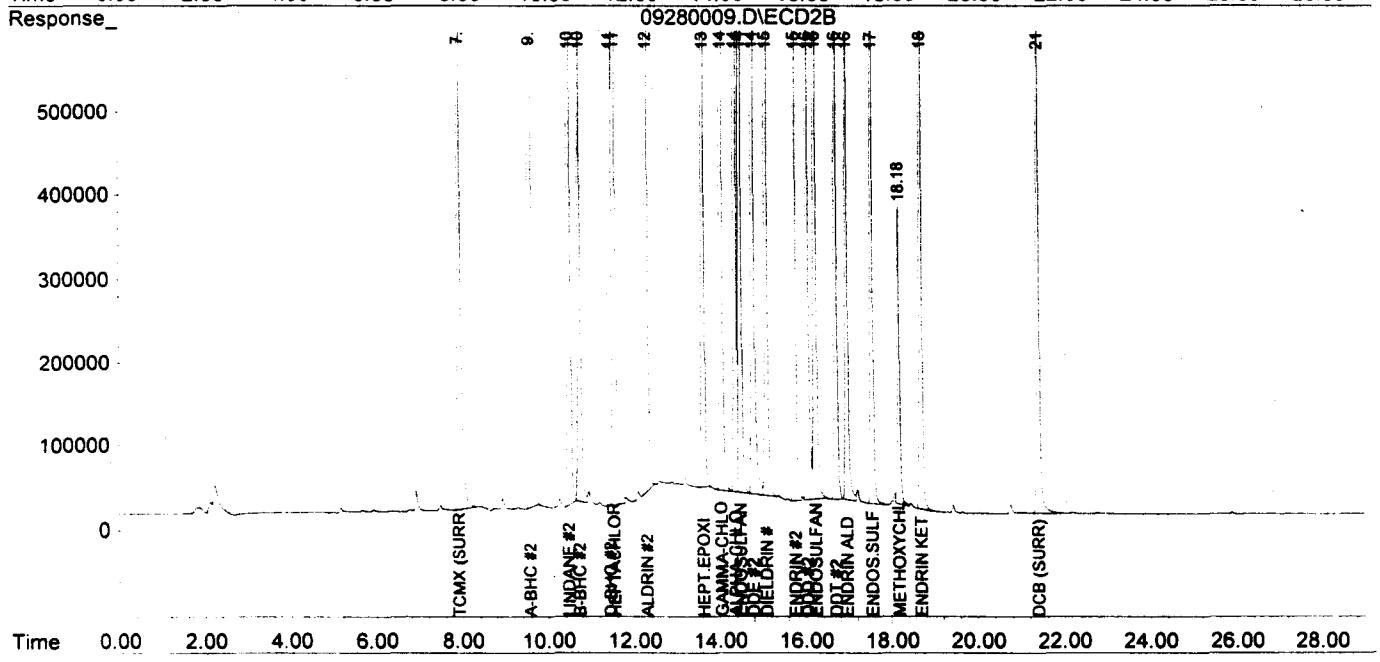
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\092800\09280009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\092800\09280009.D\ECD2B.CH
Acq On : 28 Sep 2000 4:22 pm Operator: YGK
Sample : IC PEST 0.35 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:39 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\092800\09280010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\092800\09280010.D\ECD2B.CH
Acq On : 28 Sep 2000 5:15 pm Operator: YGK
Sample : IC PEST 0.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:18 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

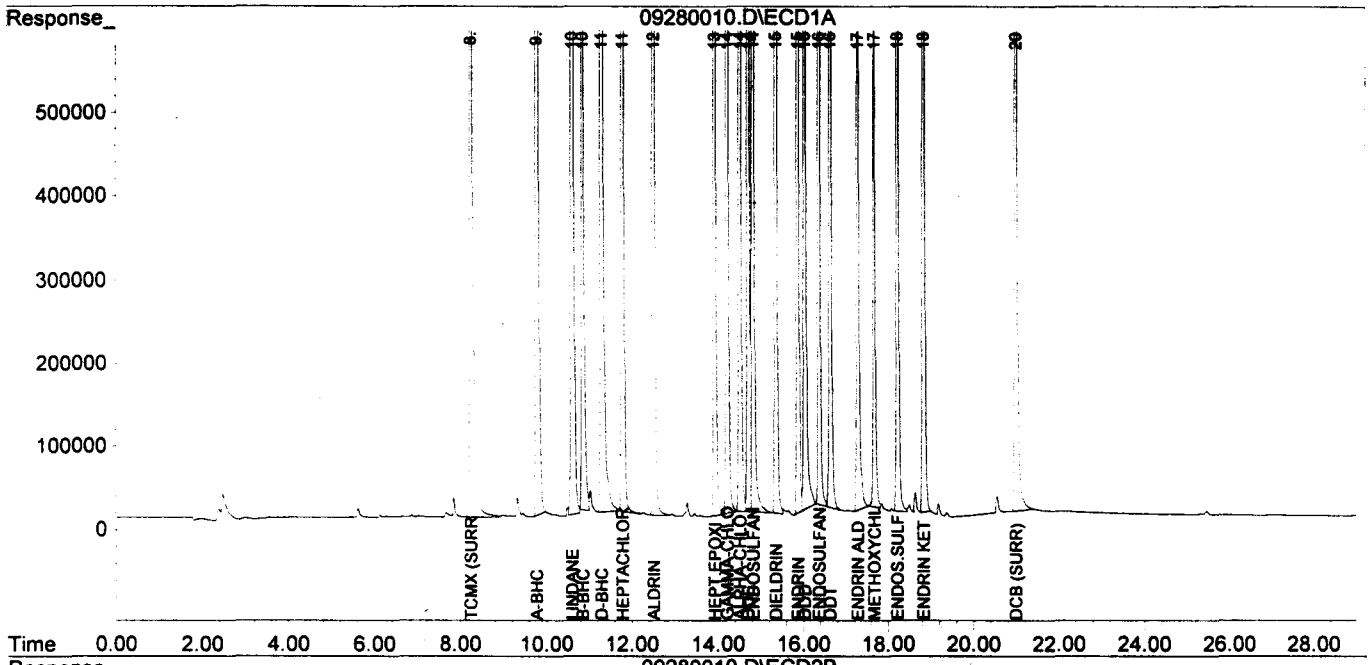
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.25	7.92	48297526	52588795	0.478	0.486
		Spiked Amount 0.250			Recovery	=	191.20%	194.40%
12)	S	DCB (SURR)	20.99	21.40	41205235	44496308	0.507	0.508
		Spiked Amount 0.250			Recovery	=	202.80%	203.20%
		Target Compounds						
2)	T	A-BHC	9.77	9.58	75269677	83788930	0.487	0.485
3)	T	B-BHC	10.85	10.74	32497129	36753337	0.493	0.490
4)	T	LINDANE	10.60	10.49	67617407	75423251	0.486	0.485
5)	T	D-BHC	11.29	11.45	68212374	63764660	0.492	0.493
6)	T	HEPTACHLOR	11.79	11.54	48066239	65211323	0.485	0.475
7)	T	ALDRIN	12.51	12.30	51179712	62664443	0.477	0.473
8)	T	HEPT.EPOXIDE	13.93	13.63	45242244	50929367	0.480	0.469
9)	T	ENDOSULFAN 1	14.83	14.50	47184352	57236418	0.479	0.482
10)	T	GAMMA-CHLORDANE	14.22	14.05	52833863	64938527	0.483	0.485
11)	T	ALPHA-CHLORDANE	14.52	14.38	44766645	59084927	0.464	0.486
12)	T	DDE	14.71	14.79	44261890	59731182	0.490	0.486
13)	T	DIELDRIN	15.36	15.10	45416071	55319820	0.484	0.481
14)	T	ENDRIN	15.87	15.76	37573688	43873979	0.494	0.491
15)	T	DDD	16.03	16.04	38761026	44778606	0.494	0.496
16)	T	ENDOSULFAN 2	16.37	16.23	38591256	50376912	0.486	0.486
17)	T	ENDRIN ALDEHYDE	17.28	16.96	32055167	38056661	0.497	0.498
18)	T	DDT	16.63	16.70	39282972	46106463	0.512	0.511
19)	T	ENDOS.SULFATE	18.22	17.55	36946254	41690209	0.496	0.493
20)	T	METHOXYCHLOR	17.67	18.18	20221780	20845011	0.522	0.516
21)	T	ENDRIN KETONE	18.84	18.69	42337512	46321075	0.498	0.493

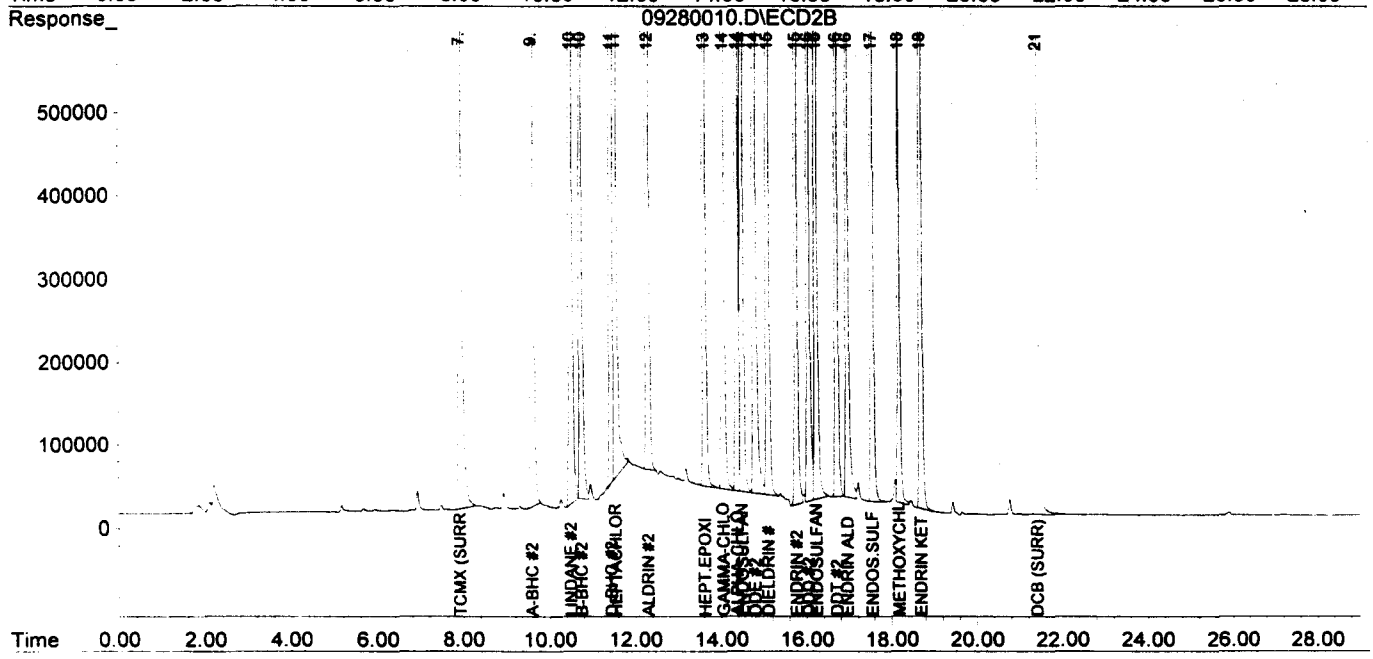
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\092800\09280010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\092800\09280010.D\ECD2B.CH
Acq On : 28 Sep 2000 5:15 pm Operator: YGK
Sample : IC PEST 0.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:18 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\092800\09280011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\092800\09280011.D\ECD2B.CH
Acq On : 28 Sep 2000 5:49 pm Operator: YGK
Sample : ICV PEST 0.25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:39 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	TCMX (SURR)	8.23	7.91	27445237	28412302	0.272	0.263
		Spiked Amount 0.250			Recovery =		108.80% ✓	105.20%
22)	S	DCB (SURR)	20.98	21.39	20219107	21554629	0.249	0.246
		Spiked Amount 0.250			Recovery =		99.60% ✓	98.40%
		Target Compounds						
2)	T	A-BHC	9.75	9.57	39477226	43586157	0.255	0.252
3)	T	B-BHC	10.84	10.73	16527466	18714358	0.251	0.250
4)	T	LINDANE	10.59	10.48	36061700	39569336	0.259	0.255
5)	T	D-BHC	11.28	11.44	34944853	31756463	0.252	0.245
6)	T	HEPTACHLOR	11.77	11.53	25865671	37395604	0.261	0.272
7)	T	ALDRIN	12.49	12.29	27923388	34950159	0.260	0.264
8)	T	HEPT.EPOXIDE	13.92	13.62	24345353	28679287	0.258	0.263
9)	T	ENDOSULFAN 1	14.81	14.49	25604996	30896583	0.260	0.260
10)	T	GAMMA-CHLORDANE	14.21	14.05	27920242	33722664	0.255	0.252
11)	T	ALPHA-CHLORDANE	14.51	14.37	25439674	31227124	0.264	0.257
12)	T	DDE	14.70	14.78	22696911	31494975	0.251	0.256
13)	T	DIELDRIN	15.35	15.09	24110036	30446277	0.257	0.265
14)	T	ENDRIN	15.86	15.76	19319117	22853604	0.254	0.256
15)	T	DDD	16.02	16.04	19675407	23109029	0.251	0.256
16)	T	ENDOSULFAN 2	16.37	16.23	19979468	26496102	0.252	0.256
17)	T	ENDRIN ALDEHYDE	17.27	16.95	14587587	17281245	0.226	0.226
18)	T	DDT	16.62	16.70	18283400	21692040	0.238	0.240
19)	T	ENDOS.SULFATE	18.21	17.54	18382359	21304720	0.247	0.252
20)	T	METHOXYCHLOR	17.66	18.18	8849625	9069594	0.228	0.225
21)	T	ENDRIN KETONE	18.83	18.69	20832599	23389017	0.245	0.249

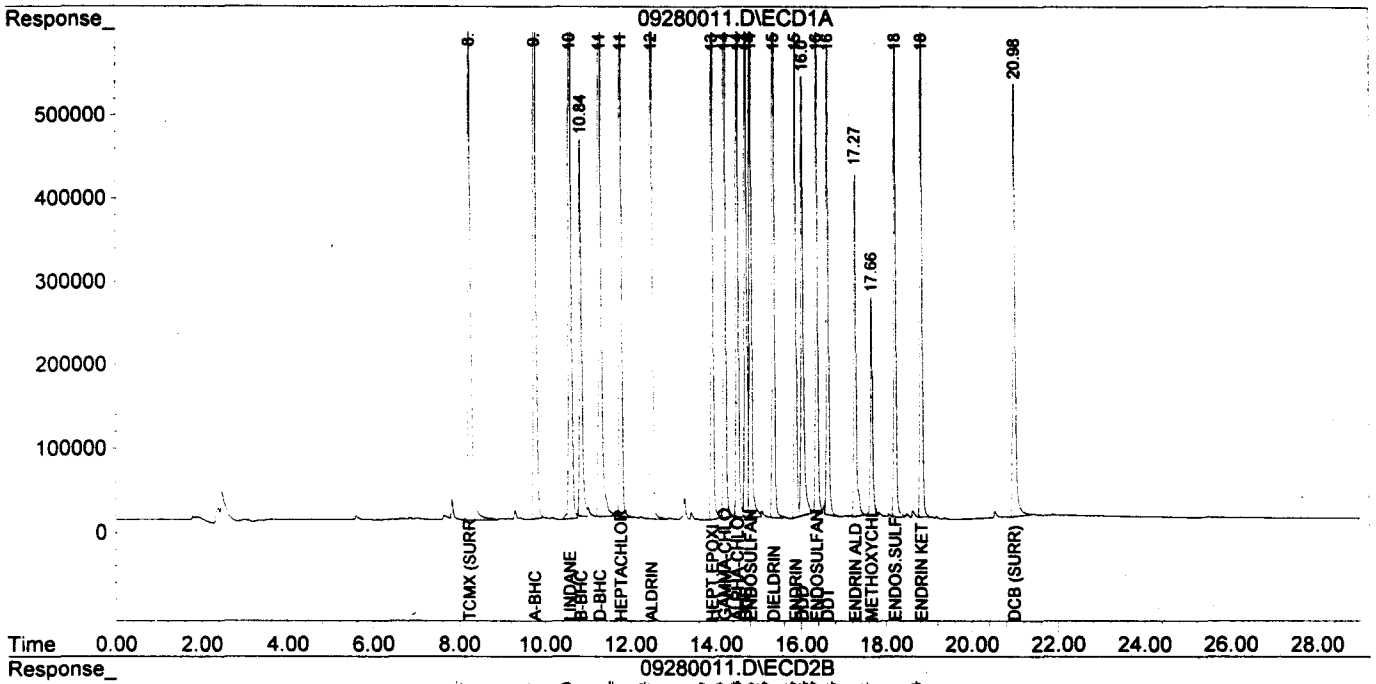
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

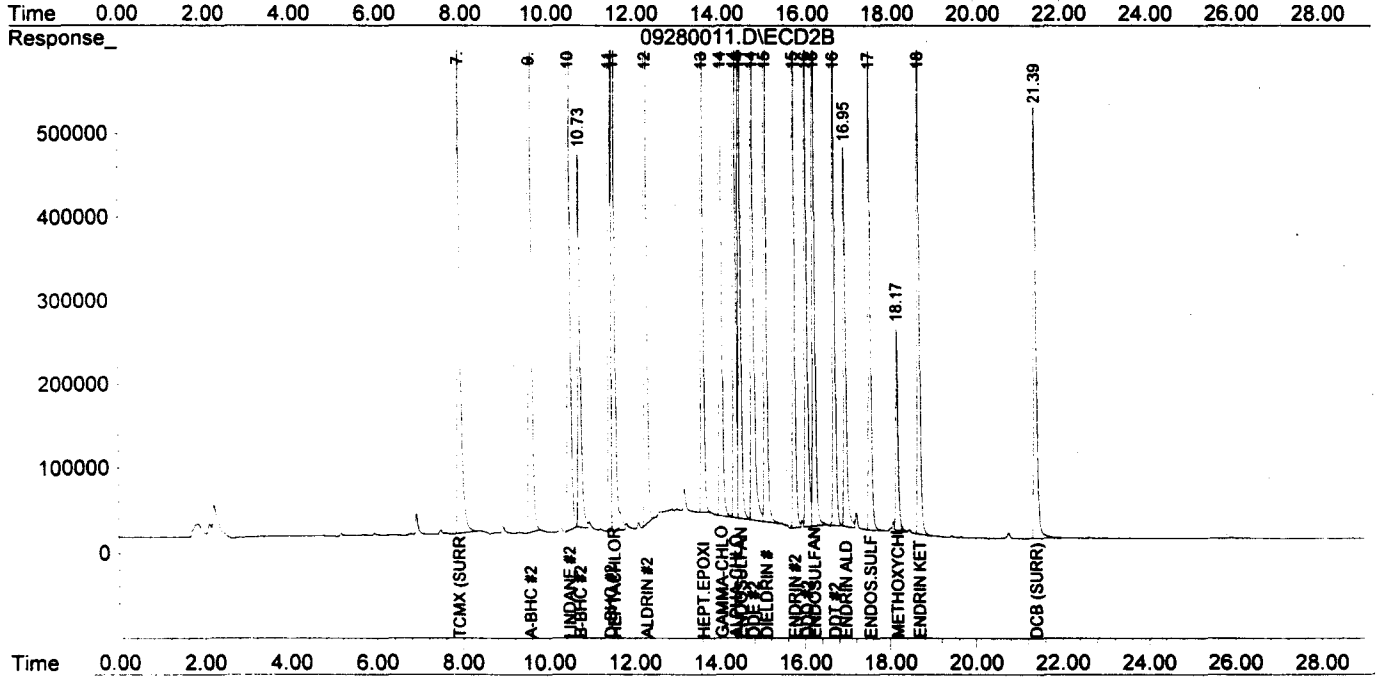
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\092800\09280011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\092800\09280011.D\ECD2B.CH
Acq On : 28 Sep 2000 5:49 pm Operator: YGK
Sample : ICV PEST 0.25 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Sep 29 9:39 2000 Quant Results File: 092800P.RES

Quant Method : C:\HPCHEM\1\METHODS\092800P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (09/28/00)
Last Update : Tue Aug 01 14:57:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 09/28/00
Analyst Initials: YGK
Instrument Method: 8081D1
Calibration Column: Rtx-CLP1 (F)
Confirmation Column: Rtx-CLP 2

DDT Breakdown % (<15%): 5.6%
Endrin Breakdown % (<15%): 8.1%

Pest Calibration Date: 09/28/00
PCB Calibration Date: —

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	50-116	43-152
Water	21-131	D-160

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	092800P	std	1X	NA	NA	
2	Hexane		solv				
3	PEM		std				P00119
4	ccv Pest .25 ppm						P00123
5	IC Pest .010 ppm						P00129
6	.050 ppm						P00128
7	.10 ppm						P00127
8	.25 ppm						P00123
9	.35 ppm						P00126
10	.50 ppm						P00125
	ICV .25 ppm				109	100	P00120
	ccv Chlord .25 ppm	080309CL			NA	NA	102% P00118
13	ICV TCX 2.5 ppm	080100TX					99% P00131
14	Hexane	092800P	solv				
15	BLANK W 09/25		W		76	72	
16	LCS W 09/25				80	72	
17	99299 W 1:5			5X	90	86	
18	99299 W 1:3			3X	88	79	
09/28 17	99299 W			1X	75	69	
	BLANK W 09/28				77	73	
	LCS W 09/28				77	68	
	LCSW DUP 09/28				76	68	
	99897 W				68	42	

Signature/Date: [signature] 09/28/00

SVO GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

TOX

DATE / INSTRUMENT: 08/01/00, PEST-A	METHOD: (circle applicable methods)
MATRIX:	(8081A) 8082 8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst: YGK	Reviewer:
Date: 08/04/00 Time: 14:50	Date: 08.07.2000 Time: 08:30

Response Factor Report GC/ECD IN

Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000

Calibration Files
5 =08010016.D 3.5 =08010015.D 2.5 =08010014.D
1.5 =08010013.D 0.5 =08010012.D

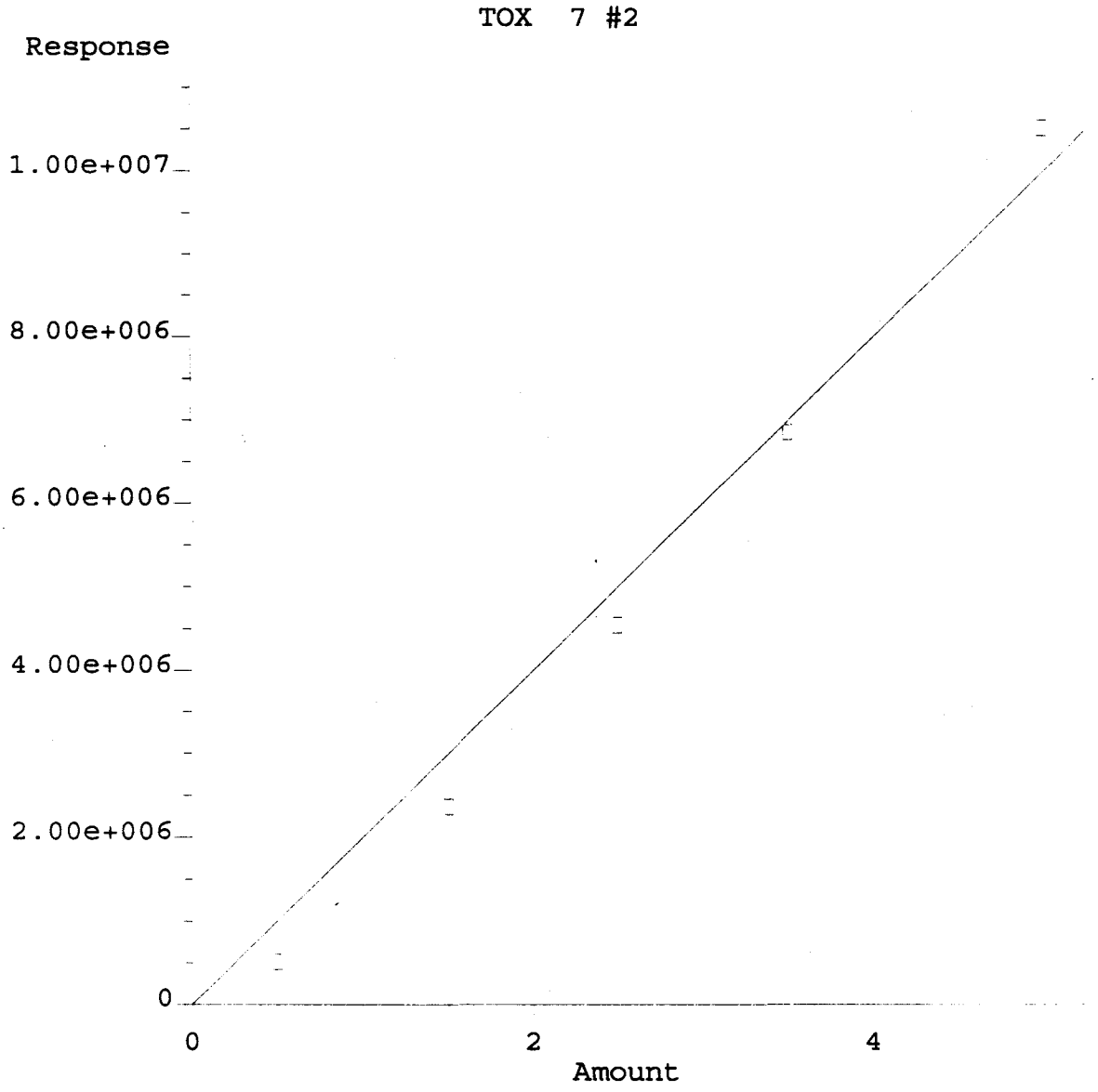
	Compound	5	3.5	2.5	1.5	0.5	Avg		%RSD
1) L	TOX 1	1.554	1.516	1.617	1.559	1.338	1.517	E6	6.99
2) L	TOX 2	2.495	2.345	2.449	2.352	1.958	2.320	E6	9.15
3) L	TOX 3	3.419	3.356	3.516	3.398	2.826	3.303	E6	8.27
4) L	TOX 4	3.488	3.374	3.408	3.293	2.468	3.206	E6	13.05
5) L	TOX 5	4.372	4.307	4.398	4.348	3.745	4.234	E6	6.51
6) L	TOX 6	2.903	2.762	2.760	2.526	3.020	2.794	E6	6.63
7) L	TOX 7	1.525	1.432	1.350	1.190	1.556	1.411	E6	10.46

Signal #2 Calibration Files
5 =08010016.D 3.5 =08010015.D 2.5 =08010014.D
1.5 =08010013.D 0.5 =08010012.D

	Compound	5	3.5	2.5	1.5	0.5	Avg		%RSD
1) L	TOX 1	4.471	4.360	4.702	4.531	3.269	4.267	E6	13.39
2) L	TOX 2	2.799	2.641	2.620	2.414	1.641	2.423	E6	18.90
3) L	TOX 3	3.683	3.590	3.573	3.487	2.934	3.454	E6	8.65
4) L	TOX 4	4.500	4.448	4.554	4.415	3.895	4.362	E6	6.11
5) L	TOX 5	3.770	3.673	3.673	3.469	2.813	3.480	E6	11.16
6) L	TOX 6	2.564	2.482	2.461	2.292	1.839	2.327	E6	12.48
7) L	TOX 7	2.105	1.958	1.818	1.577	1.022	1.696	E6	25.01

OK
See PLOT
$r = 0.997$

#) = Out of Range



Response = 2.00e+006 * Amt
Coef of Det (r^2) = 0.997 Curve Fit: Linear/(0,0)

Method Name: C:\HPCHEM\1\METHODS\080100TX.M
Calibration Table Last Updated: Wed Aug 02 08:57:05 2000

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\080100\08010016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\080100\08010016.D\ECD2B.CH
Acq On : 1 Aug 2000 7:34 pm Operator: YGK
Sample : IC TOX 5.0 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:59 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

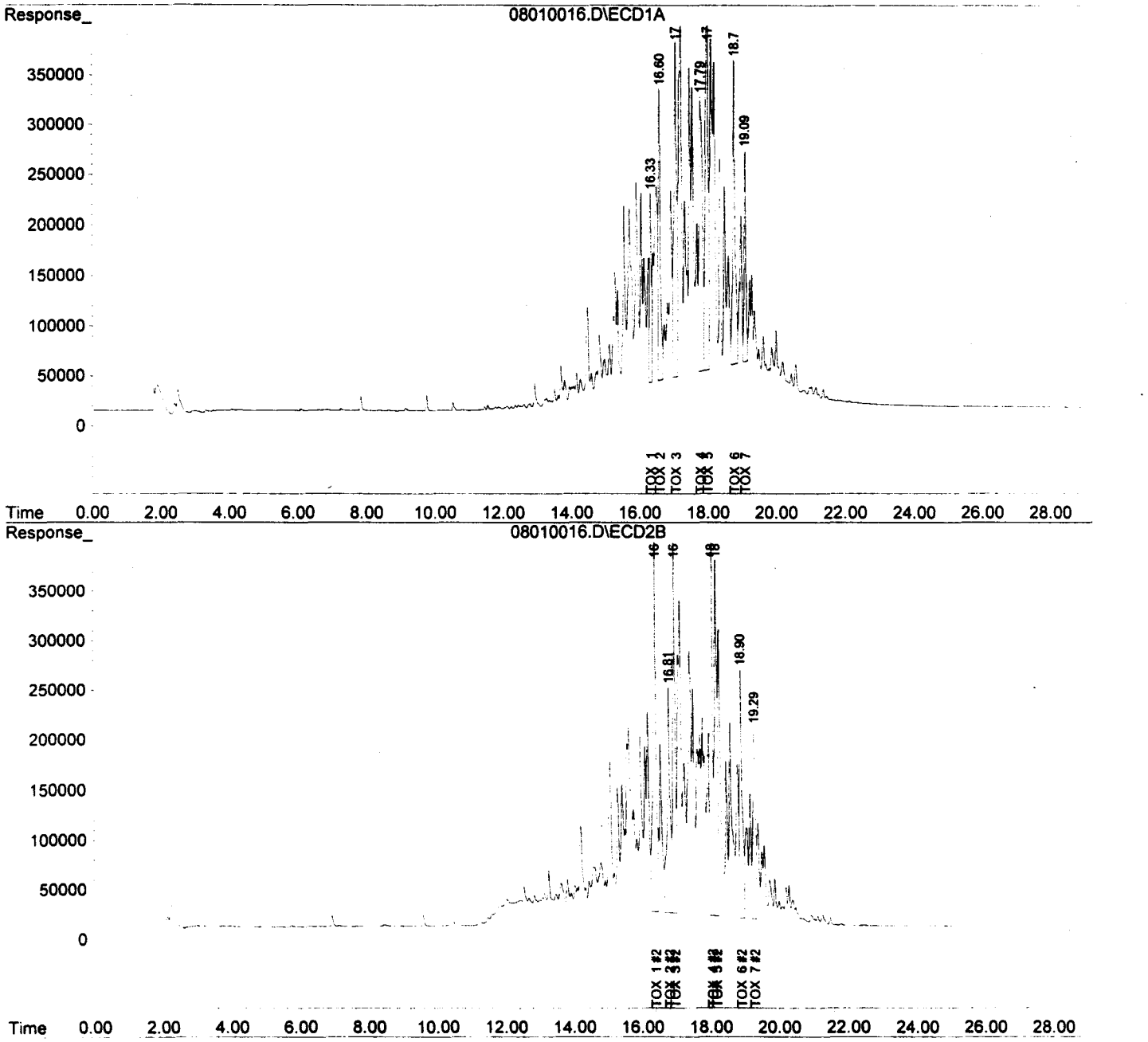
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L TOX 1	16.33	16.41	7772416	22357334	5.009	5.002
2)	L TOX 2	16.60	16.81	12477119	13993903	5.115	5.169
3)	L TOX 3	17.07	16.97	17094175	18415867	5.011	5.074
4)	L TOX 4	17.79	18.06	17440849	22500080	5.082	5.016
5)	L TOX 5	17.99	18.18	21857683	18851494	5.021	5.080
6)	L TOX 6	18.77	18.90	14516845	12819334	5.132	5.106
7)	L TOX 7	19.09	19.29	7626871	10525813	5.222	5.275
	Sum TOX 1			98785958	119.5E6	35.594	35.721
	Average TOX 1					5.085	5.103

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\080100\08010016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\080100\08010016.D\ECD2B.CH
Acq On : 1 Aug 2000 7:34 pm Operator: YGK
Sample : IC TOX 5.0 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:59 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\080100\08010015.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\080100\08010015.D\ECD2B.CH
Acq On : 1 Aug 2000 6:59 pm Operator: YGK
Sample : IC TOX 3.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:58 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

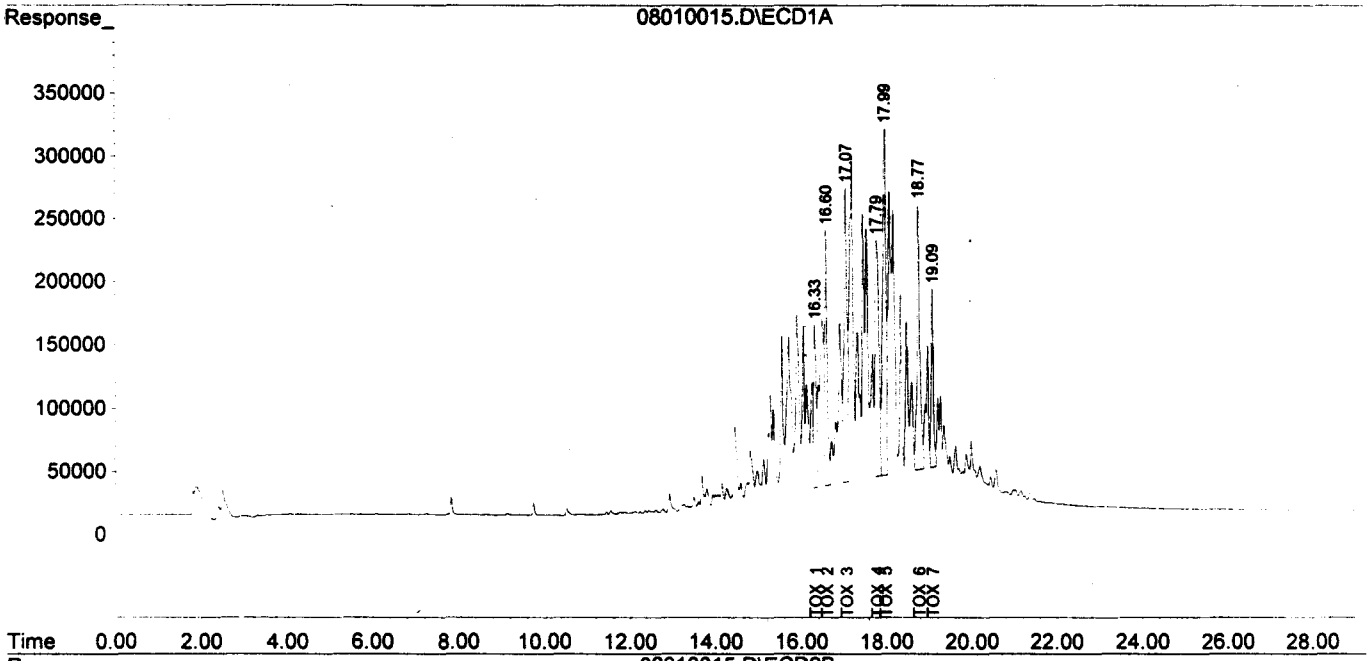
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L TOX 1	16.33	16.41	5304916	15259079	3.419	3.414
2)	L TOX 2	16.60	16.81	8206249	9244517	3.364	3.414
3)	L TOX 3	17.07	16.97	11744717	12565438	3.443	3.462
4)	L TOX 4	17.79	18.06	11808479	15567468	3.441	3.470
5)	L TOX 5	17.99	18.18	15073424	12854160	3.463	3.464
6)	L TOX 6	18.77	18.90	9667838	8686095	3.418	3.460
7)	L TOX 7	19.09	19.29	5011059	6853677	3.431	3.435
	Sum TOX 1			66816681	81030434	23.979	24.119
verage	TOX 1					3.426	3.446

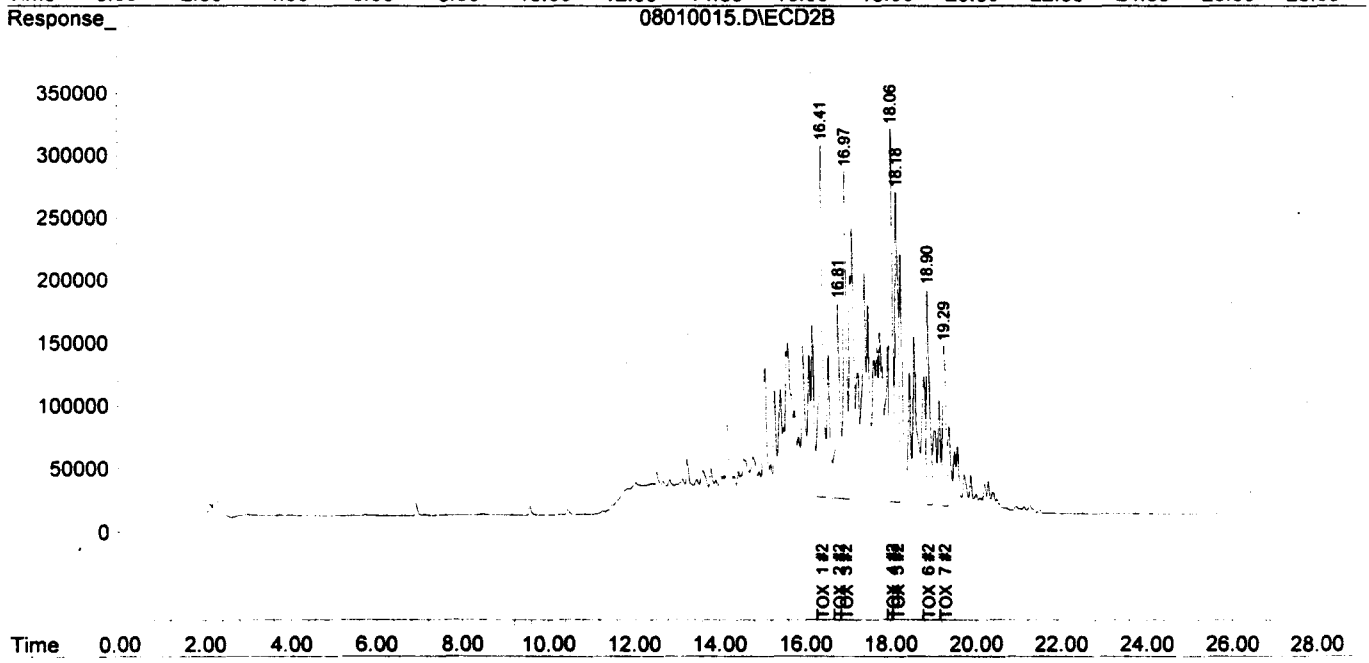
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\080100\08010015.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\080100\08010015.D\ECD2B.CH
Acq On : 1 Aug 2000 6:59 pm Operator: YGK
Sample : IC TOX 3.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:58 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\080100\08010014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\080100\08010014.D\ECD2B.CH
Acq On : 1 Aug 2000 6:25 pm Operator: YGK
Sample : IC TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:58 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

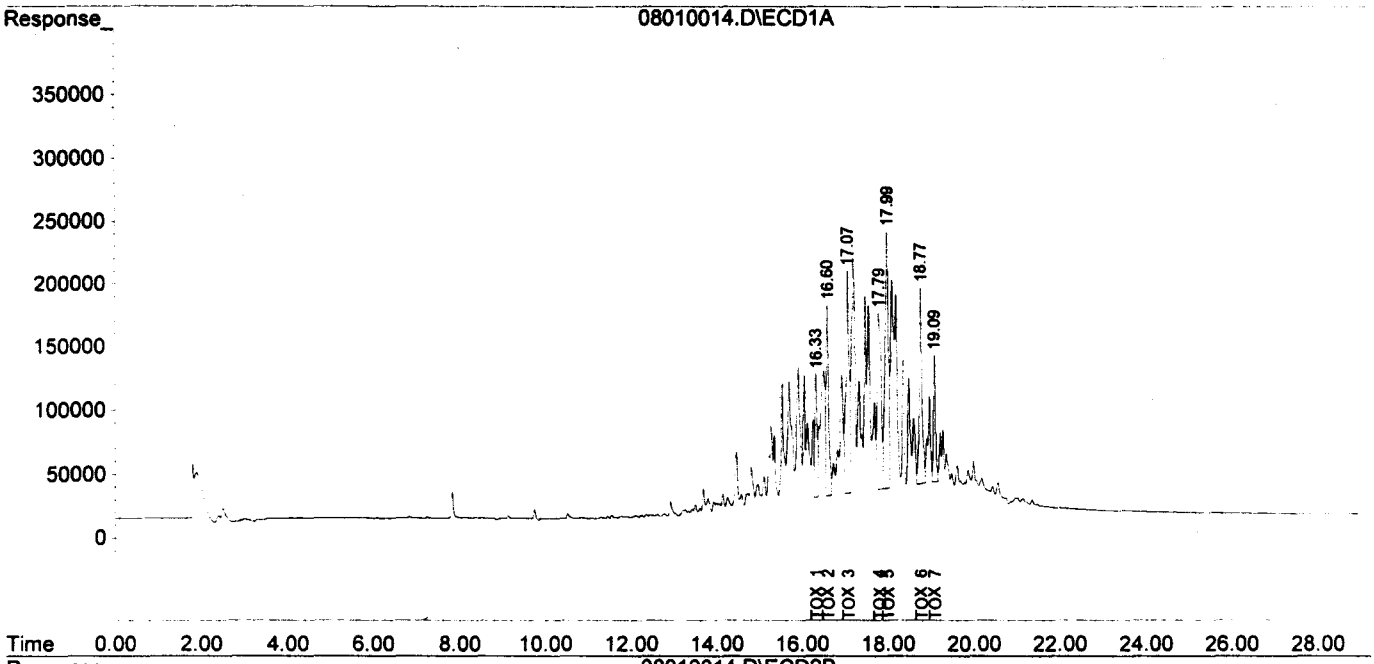
	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1)	L	TOX 1	16.33	16.41	4041734	11755831	2.605	2.630
2)	L	TOX 2	16.60	16.81	6123506	6550782	2.511	2.420
3)	L	TOX 3	17.07	16.97	8791121	8932906	2.577	2.461
4)	L	TOX 4	17.79	18.06	8519152	11383823	2.482	2.538
5)	L	TOX 5	17.99	18.18	10994566	9182427	2.526	2.474
6)	L	TOX 6	18.77	18.90	6901089	6151902	2.440	2.450
7)	L	TOX 7	19.09	19.29	3375921	4545945	2.312	2.278
	Sum	TOX 1			48747089	58503615	17.452	17.251
Average		TOX 1					2.493	2.464

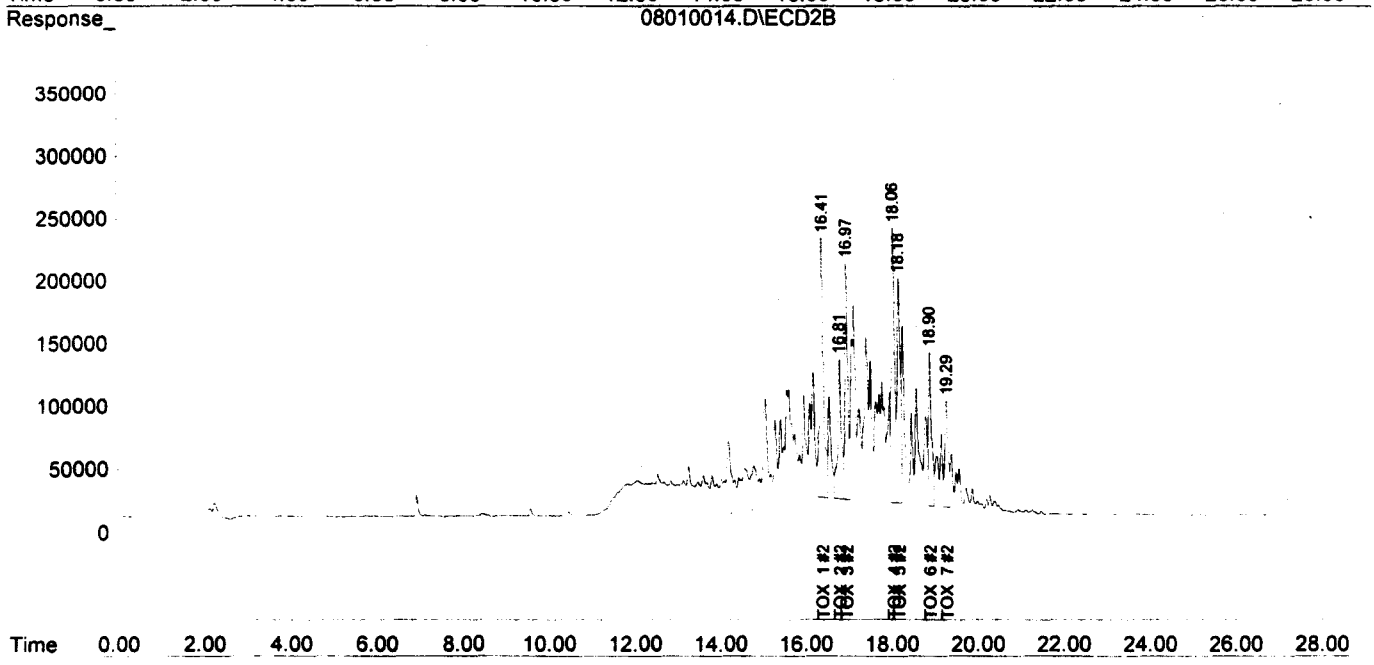
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\080100\08010014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\080100\08010014.D\ECD2B.CH
Acq On : 1 Aug 2000 6:25 pm Operator: YGK
Sample : IC TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:58 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\080100\08010013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\080100\08010013.D\ECD2B.CH
Acq On : 1 Aug 2000 5:51 pm Operator: YGK
Sample : IC TOX 1.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:57 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

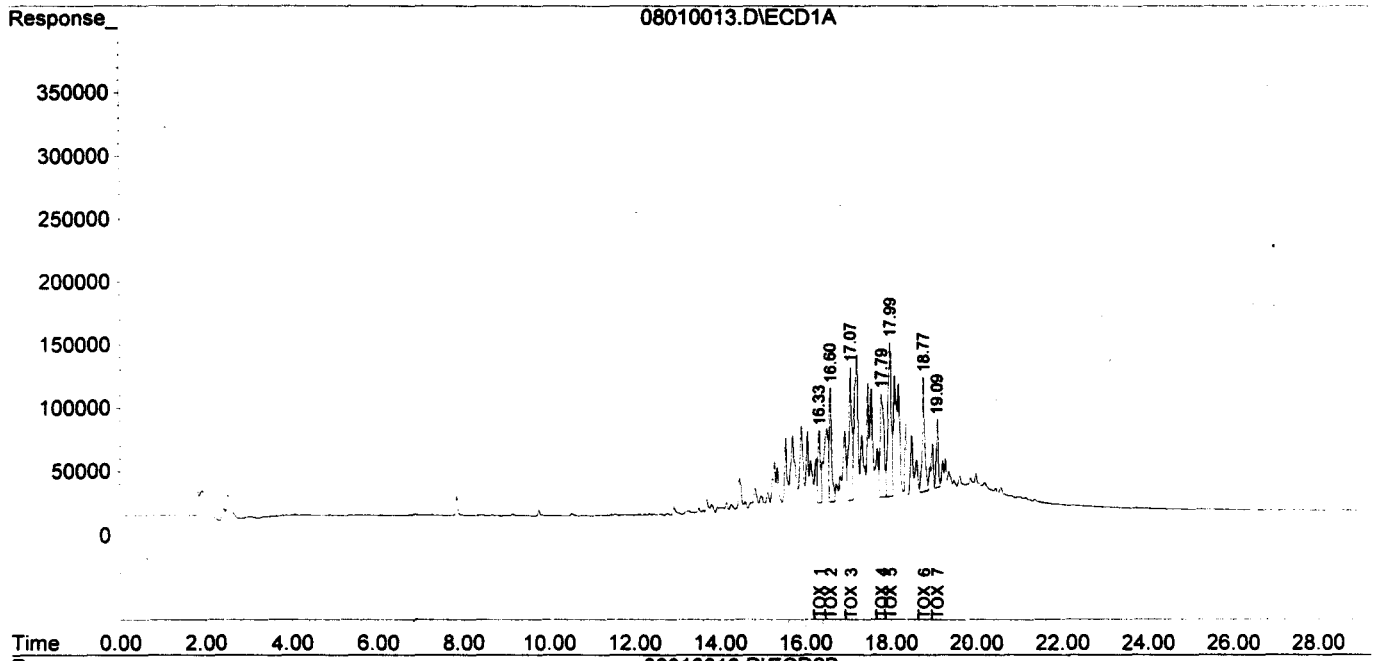
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L TOX 1	16.33	16.41	2337754	6795875	1.507	1.521
2)	L TOX 2	16.60	16.81	3528475	3620402	1.447	1.337
3)	L TOX 3	17.07	16.97	5097016	5231132	1.494	1.441
4)	L TOX 4	17.79	18.06	4940205	6622628	1.440	1.476
5)	L TOX 5	17.99	18.18	6522679	5203173	1.498	1.402
6)	L TOX 6	18.77	18.90	3788651	3437939	1.339	1.369
7)	L TOX 7	19.09	19.30	1785524	2365225	1.223	1.185
	Sum TOX 1			28000304	33276373	9.947	9.732
Average	TOX 1					1.421	1.390

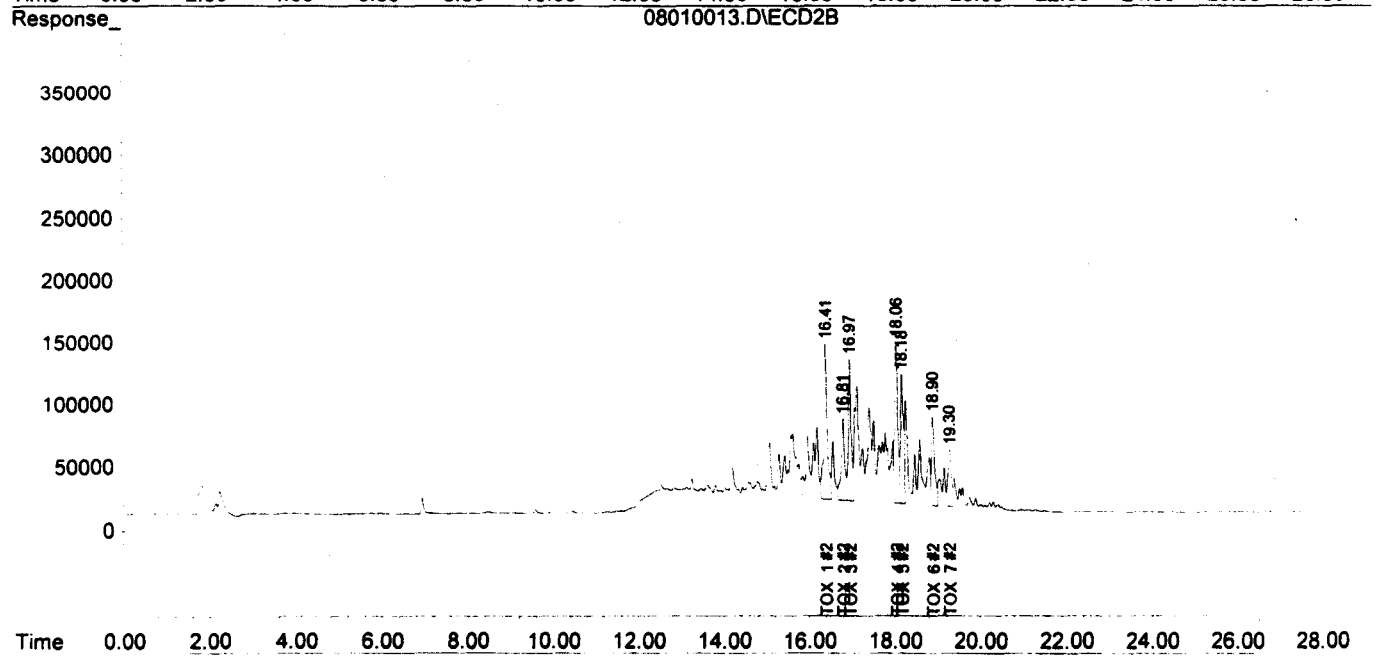
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\080100\08010013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\080100\08010013.D\ECD2B.CH
Acq On : 1 Aug 2000 5:51 pm Operator: YGK
Sample : IC TOX 1.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:57 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 09:45:41 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\080100\08010012.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\080100\08010012.D\ECD2B.CH
Acq On : 1 Aug 2000 5:16 pm Operator: YGK
Sample : IC TOX 0.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:57 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.35	16.42	669177	1634390	0.431	0.366	
2)	L TOX 2	16.61	16.82	978983	820749	0.401	0.303	
3)	L TOX 3	17.08	16.98	1412837	1467037	0.414	0.404	
4)	L TOX 4	17.80	18.07	1234099	1947539	0.360	0.434	
5)	L TOX 5	18.01	18.19	1872357	1406646	0.430	0.379	
6)	L TOX 6	18.78	18.91	1510204	919458	0.534	0.366	#
7)	L TOX 7	19.10	19.30	778235	510964	0.533	0.256	#
	Sum TOX 1			8455891	8706782	3.103	2.508	
	Average TOX 1					0.443	0.358	

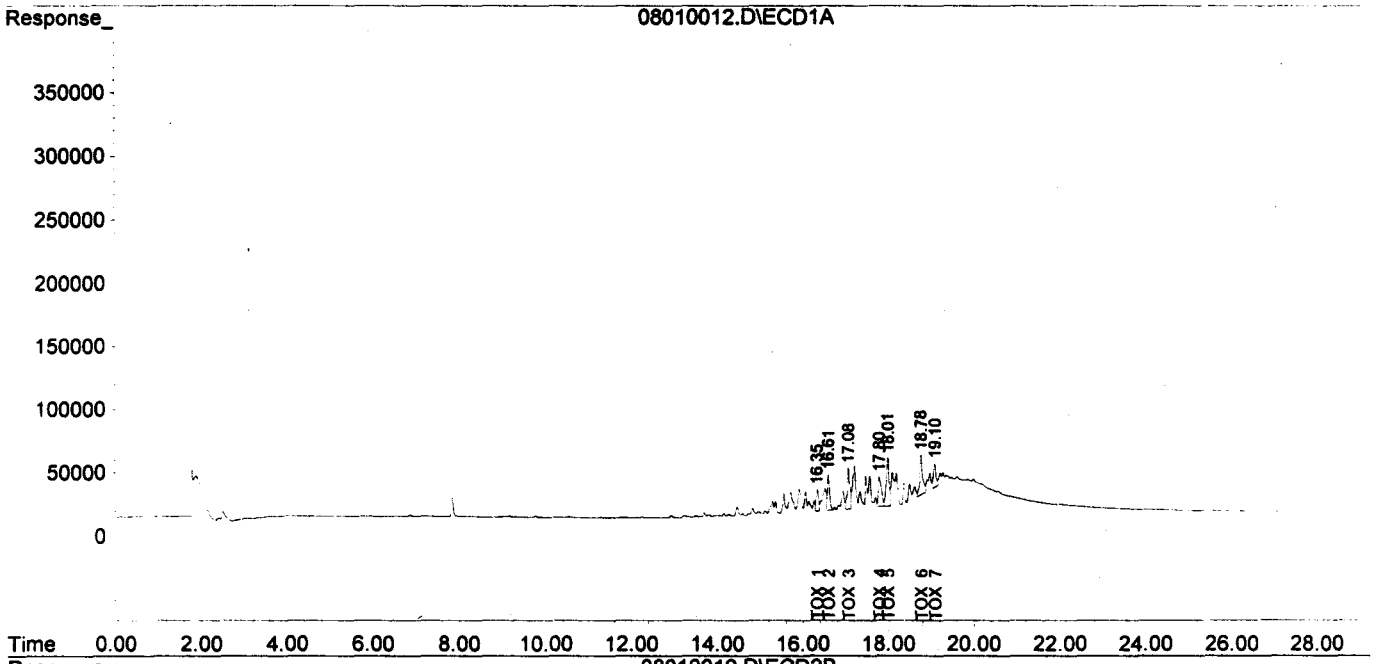
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

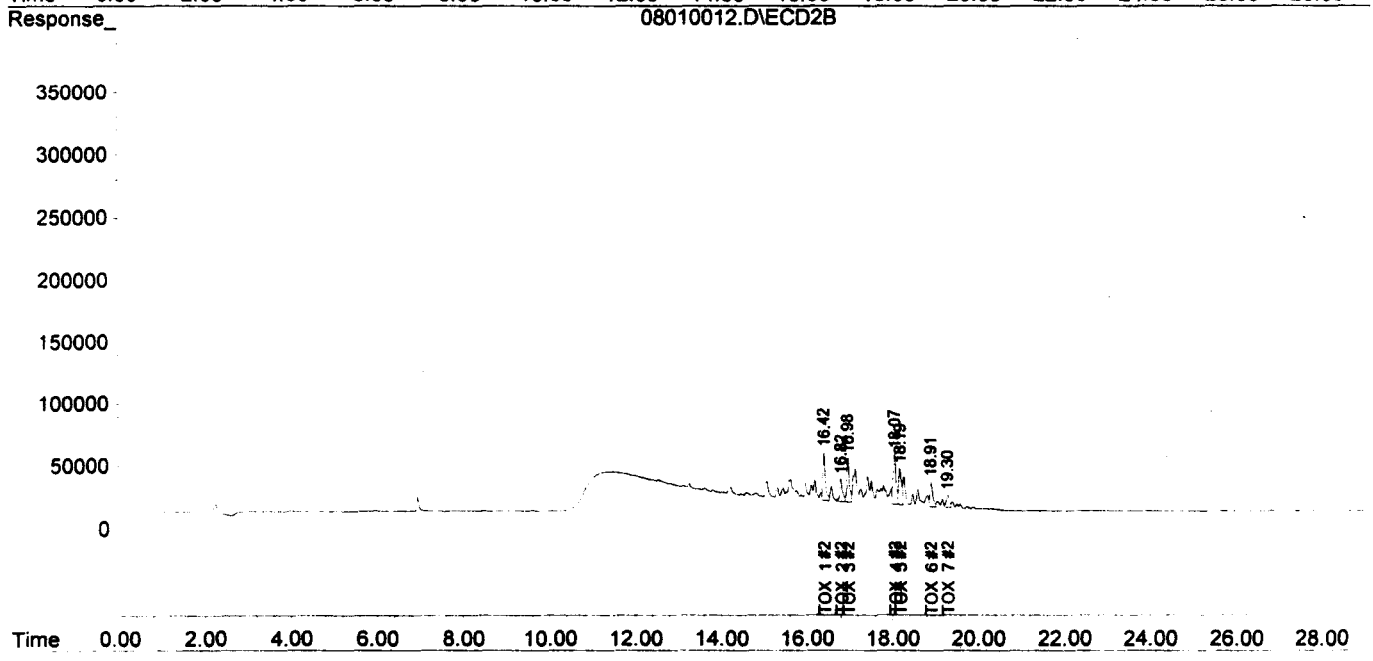
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\080100\08010012.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\080100\08010012.D\ECD2B.CH
Acq On : 1 Aug 2000 5:16 pm Operator: YGK
Sample : IC TOX 0.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:57 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\080100\08010017.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\080100\08010017.D\ECD2B.CH
Acq On : 1 Aug 2000 8:08 pm Operator: YGK
Sample : ICV TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:51 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds									
1)	L	TOX 1	16.34	16.41	1561981	8729000	1.007	1.953	#
2)	L	TOX 2	16.60	16.81	4499191	5268368	1.845	1.946	
3)	L	TOX 3	17.07	16.97	8660515	8965570	2.539	2.470	
4)	L	TOX 4	17.79	18.06	3438742	14324967	1.002	3.193	#
5)	L	TOX 5	17.98	18.19	11764893	5173145	2.703	1.394	#
6)	L	TOX 6	18.77	18.90	10490363	9284722	3.709	3.698	
7)	L	TOX 7	19.09	19.29	6295358	8155495	4.311	4.087	
Sum		TOX 1			46711044	59901268	17.114	18.741	
Average		TOX 1					2.445 ✓	2.677 ✓	

98%

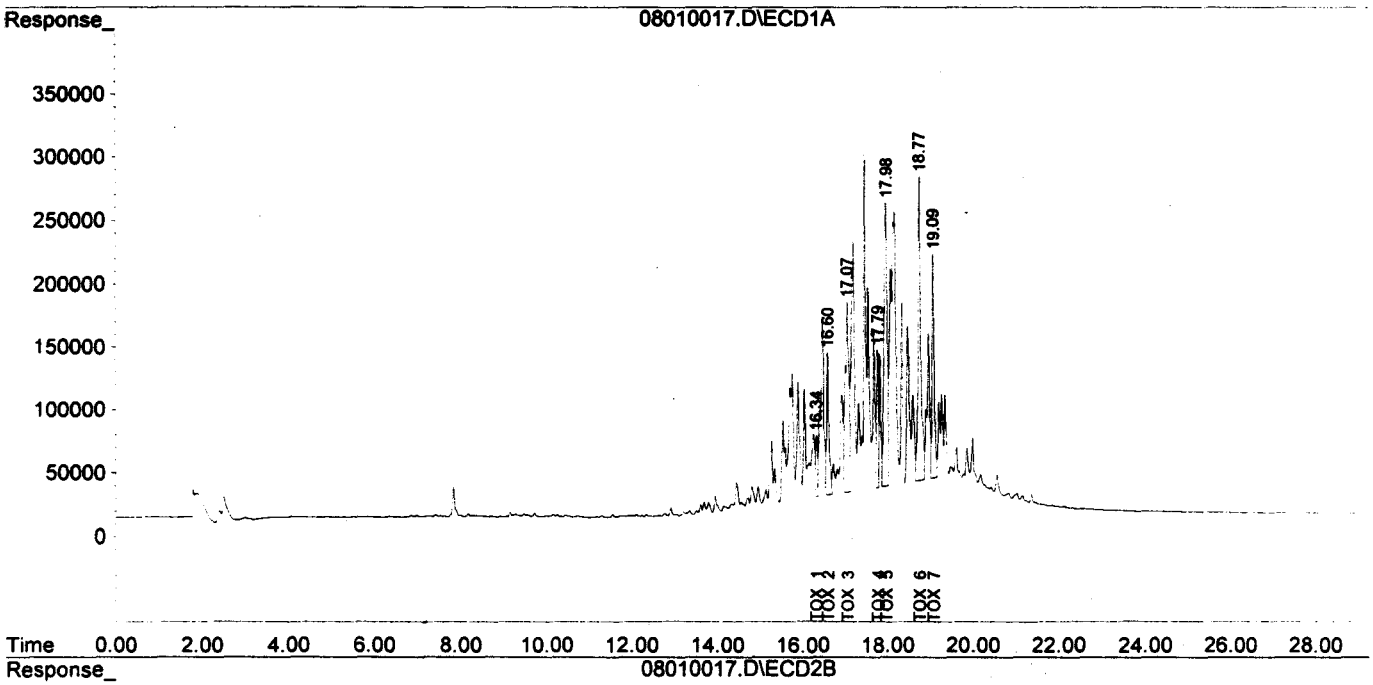
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

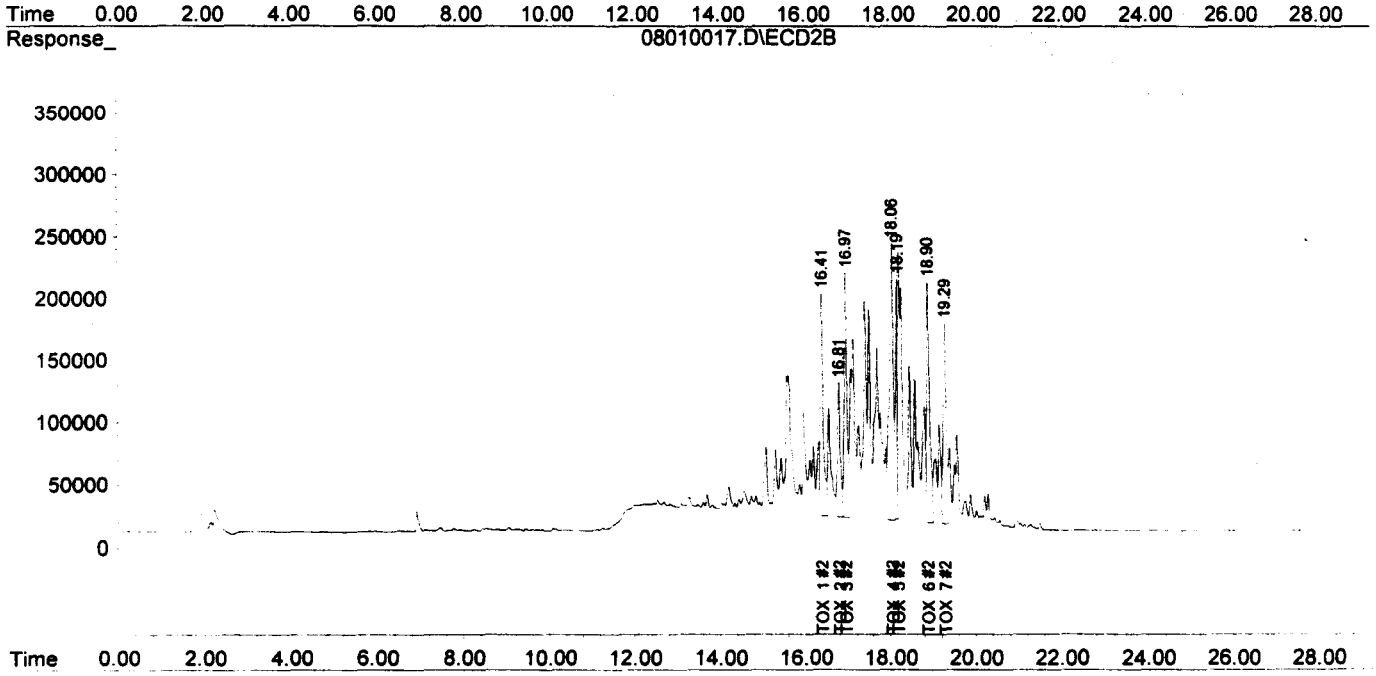
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\080100\08010017.D\ECD1A.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\080100\08010017.D\ECD2B.CH
Acq On : 1 Aug 2000 8:08 pm Operator: YGK
Sample : ICV TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Aug 2 9:51 2000 Quant Results File: 080100TX.RES

Quant Method : C:\HPCHEM\1\METHODS\080100TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,08/01/00
Last Update : Wed Aug 02 08:57:05 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 08/01/00
Analyst Initials: YGK
Instrument Method: 8081D1
Calibration Column: Rtx-CLP1
Confirmation Column: Rtx-CLP2

DDT Breakdown % (<15%): 3.1%
Endrin Breakdown % (<15%): 5.8%

Pest Calibration Date: 08/01/00
PCB Calibration Date: —

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	35-110	18-135
Water	16-159	D-139

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	080100P	Std	1X	NA	NA	
2	Hexane		Solv				
3	PEM		Std				P00112
4	ccv Pest .25ppm						P00115
5	ic Pest .010ppm						P00024
6	.050ppm						P00023
7	.10ppm						P00022
8	.25ppm						P00115
9	.35ppm						P00020
10	.50ppm						P00019
11	icv Pest .25ppm				112	110	P00025
12	ic TCX.50ppm	080100TX			NA	NA	P00069
13	ic TCX 1.5ppm						P00068
14	2.5ppm						P00113
15	3.5ppm						P00066
16	5.0ppm						P00065
17	icv TCX 2.5ppm						98% P00071
18	Hexane	080100P	Solv				
19	ccv Pest .25ppm		Std				P00115
20	ccv Chlord .25ppm						P00111
	YGK	08/02/00					

Signature/Date: 08/02/00

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Checklist

Project #: 25473 **Instrument Used: Trace ICAP/ICAP/GFAA/FIMS Hg**

Reviewer Questions

1. Is the ICV within ± 10% for 6010B, or 5% for 200.7? ✓
2. For Hg and GFAA, is the curve acceptable, (>0.995 correlation coefficient)? NA
3. Verified the correct dates and times are entered. ✓
4. Verified the sample results reported with the proper significant figures in the logbook and in the LIMS. ✓
5. Verified all dilution factors are taken into account for the calculation. ✓
6. Verified the RDL is correct according to dilutions and reported with the correct significant figures. ✓

Analyst Questions

7. Is the Blank <1/2 RDL? yes If not, has the RDL been raised or the samples reanalyzed? _____
8. Are the LCS/LCSD within limits? yes If not, why, or are the samples being reanalyzed? _____
9. Duplicate AAL sample number 00100
   Is the RPD acceptable? yes If not, what is the reason? _____
10. MS/MSD AAL sample number 00100
    Are the recoveries acceptable? yes If not, what is the reason? _____
11. Sample numbers requiring dilution? _____
    Reason for dilution. _____
12. Are all special requirements on project sheet completed? _____ If unable to complete, has the project manager been notified? _____
13. Any additional comments. _____

Analyst entering results in Labworks. [signature] Date: 10/4/00

Peer Reviewer: RL Date: 10/10/00

Peer review is responsible for reviewing all above questions.

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Digestion Log for Waters

QZ RL 16-2-00

Date: 10-02-00
Analyst: RL
Started: 08:00
Ended: 14:00
Matrix: water

BATCH #: 100100A
HNO_3 Acid Lot # M.99222
1:1 HCL Acid Lot # M.99218
Digestion Method: 3010A
Hot Plate Temp: 95.1 °C

QCS 19 Lot #: M.99214 Amount: 0.5
QCS 7 Lot #: M.99215 Amount: 0.5
ICV Sn Lot #: M.99208 Amount: 0.1
Sample Vials Lot #: 0996

	Sample Volume (mL)	Conc. HNO_3	HCl	Final Volume	Dilution	Spike Added QCS 19	QCS 7	ICV Sn	Comments
mk	50	1.5+1.5	5	50	1:1				
53						✓	✓	✓	
50						✓	✓	✓	
10							—		
11									
12									
13									
14									
15									
50									
13MS						✓	✓	✓	
15MSD						✓	✓	✓	
84									
85									
96									
97									
98									
99									
00									
00									
MS						✓	✓	✓	
MSD						✓	✓	✓	
24									

RL
10.4.00

Reviewed By:

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Digestion Log for Waters

Date: 10/7.00
Analyst: RL
Time Started: 10:20
Time Ended: 15:00
Matrix: water

BATCH #: 101700A
HNO_3 Acid Lot # M.99176
1:1 HCL Acid Lot # M.99219
Digestion Method: 3010A
Hot Plate Temp: 95.1°C

QCS 19 Lot #: M.99233 Amount: 0.5
QCS 7 Lot #: M.99232 Amount: 0.5
ICV Sn Lot #: M.99208 Amount: 0.1
Sample Vials Lot #: 0996

AAL #	Sample Volume (mL)	Conc. HNO_3	HCl	Final Volume	Dilution	Spike Added QCS-19	QCS-7	ICV Sn	Comments
Blank	50	1.5+1.5	5	50	1:1				
LCS	↓	↓	↓	↓	↓	✓	✓	✓	
LCSD	↓	↓	↓	↓	↓	✓	✓	✓	
00455	↓	↓	↓	↓	↓		-		
00457	↓	↓	↓	↓	↓				
00459	↓	↓	↓	↓	↓				
00460	↓	↓	↓	↓	↓				
00461	↓	↓	↓	↓	↓				
00462	↓	↓	↓	↓	↓				
00832	↓	↓	↓	↓	↓				
00833	↓	↓	↓	↓	↓				
00833D	↓	↓	↓	↓	↓				
00833MS	↓	↓	↓	↓	↓	✓	✓	✓	
00833MSD	↓	↓	↓	↓	↓	✓	✓	✓	
00834	↓	↓	↓	↓	↓				
00835	↓	↓	↓	↓	↓				
00336	↓	↓	↓	↓	↓				No preservative
01577	↓	↓	↓	↓	↓				
01578	↓	↓	↓	↓	↓				
01579	↓	↓	↓	↓	↓				
99551	↓	↓	↓	↓	↓				
00095	↓	↓	↓	↓	↓				
00095D	↓	↓	↓	↓	↓				
00095MS	↓	↓	↓	↓	↓	✓	✓	✓	
00095MSD	↓	↓	↓	↓	↓	✓	✓	✓	
~~00552~~ RL 10.17.00									

RL
10.18.00

Reviewed By:_____ 3010wdig Page #_____

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA

Std #8	Lot #
Ag	M99150

Std #3	Lot #
Al	M99073
Be	M99146
Fe	M99076
Ni	M99151
Sb	M99090
Sn	M99087
Tl	M99088

Std #2	Lot #
Ba	M99096
Ca	M99014
Cd	M99075
Co	M99144
Cu	M99148
K	M99152
Mg	M99018
Mn	M99077
Pb	M99089
Zn	M99083

Std #4	Lot #
As	M99074
Cr	M99149
Se	M99086
V	M99145

ICV #1& 2	Lot #
QCS 19	M99129
QCS 7	M99111
ICV Sn	M99153

SS I	Lot #
SS I	M99085

ICS A	Lot #
INFCS IV	M99084

ICS AB	Lot #
INFCS I	M99095
INFCS IV	M99084
INFCS Ag	M99094

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
	hno3 5/8/00	1 (Blank)	6010B/200.7				
		2	6010B/200.7		hno3 5/8/00		
		3	6010B/200.7				
		4	6010B/200.7				
		8	6010B/200.7				
05/8/00	T40F	ICV 1	6010B/200.7	06/8/00	RL	500mL	
05/8/00	T40G	ICV 2	6010B/200.7	06/8/00	RL	500mL	
	hcl 5/8/00	ICS A	6010B/200.7				
		ICS AB	6010B/200.7		hno3	5/8/00	
		SS I	6010B/200.7				
		SS I Low	6010B/200.7				

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

Reviewed By:_____

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA
	See p84

Std #8	Lot #
Ag	

Std #3	Lot #
Al	
Be	
Fe	See p84
Ni	
Sb	
Sn	
Tl	

Std #2	Lot #
Ba	M99091
Ca	M99143
Cd	
Co	
Cu	See p84
K	
Mg	
Mn	
Pb	
Zn	

Std #4	Lot #
As	
Cr	
Se	See p84
V	

ICV #1& 2	Lot #
QCS 19	
QCS 7	
ICV Sn	

SS I	Lot #
SS I	

ICS A	Lot #
INFCS IV	See p84

ICS AB	Lot #
INFCS I	
INFCS IV	M99186
INFCS Ag	See p84

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
6/11/00	43A	1 (Blank)	6010B/200.7	07/11/00	Th.G.	500mL	
	43B	2	6010B/200.7				
	C	3	6010B/200.7				
	D	4	6010B/200.7				
	E	8	6010B/200.7			100mL	
	F	ICV 1	6010B/200.7			500mL	
	G	ICV 2	6010B/200.7		10	100mL	
	H	ICS A	6010B/200.7			500mL	
	I	ICS AB	6010B/200.7				
	J	SS I	6010B/200.7				
	K	SS I Low	6010B/200.7			100mL	

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

L 55Ag

Reviewed By:_____

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA

Std #8	Lot #
Ag	

Std #3	Lot #
Al	
Be	
Fe	
Ni	
Sb	
Sn	
Tl	

Std #2	Lot #
Ba	
Ca	
Cd	
Co	
Cu	
K	
Mg	
Mn	
Pb	
Zn	

See p844

Std #4	Lot #
As	
Cr	
Se	
V	

ICV #1& 2	Lot #
QCS 19	
QCS 7	
ICV Sn	

SS I	Lot #
SS I	

ICS A	Lot #
INFCS IV	

ICS AB	Lot #
INFCS I	
INFCS IV	
INFCS Ag	

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
9/14/00	T99A	1 (Blank)	6010B/200.7	10/14/00	SM.G	500mL	
	B	2	6010B/200.7				
	C	3	6010B/200.7				
	D	4	6010B/200.7				
	E	8	6010B/200.7			100mL	
	F	ICV 1	6010B/200.7				
	G	ICV 2	6010B/200.7				
	H	ICS A	6010B/200.7				
	I	ICS AB	6010B/200.7				
	J	SS I	6010B/200.7				
	K	SS I Low	6010B/200.7				

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

Reviewed By:_____

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1-Blank	APR0300	WATERS2	10/03/00	06:03		X	IR
2	STD8	APR0300	WATERS2	10/03/00	06:10		X	IR
3	STD3	APR0300	WATERS2	10/03/00	06:16		X	IR
4	STD4	APR0300	WATERS2	10/03/00	06:25		X	IR
5	STD2	APR0300	WATERS2	10/03/00	06:30		X	IR
6	icv 1	APR0300	WATERS2	10/03/00	06:38	sch	Q	CONC
7	icv 2	APR0300	WATERS2	10/03/00	06:49	sch	Q	CONC
8	icb	APR0300	WATERS2	10/03/00	06:59	sch	B	CONC
9	ss i	APR0300	WATERS2	10/03/00	07:06	sch	Q	CONC
10	ss i low	APR0300	WATERS2	10/03/00	07:14	sch	Q	CONC
11	ics a	APR0300	WATERS2	10/03/00	07:25	sch	Q	CONC
12	ics ab	APR0300	WATERS2	10/03/00	07:32	sch	Q	CONC
13	STD1-Blank	APR0300	WATERS2	10/03/00	07:42		X	IR
14	blk0922tl	APR0300	WATERS2	10/03/00	07:52	sch	S	CONC
15	blkrertl	APR0300	WATERS2	10/03/00	08:00	sch	S	CONC
16	99251 diss	APR0300	WATERS2	10/03/00	08:10	sch	S	CONC
17	blk0929tl	APR0300	WATERS2	10/03/00	08:17	sch	S	CONC
18	99578 tl	APR0300	WATERS2	10/03/00	08:26	sch	S	CONC
19	99580 tl	APR0300	WATERS2	10/03/00	08:39	sch	S	CONC
20	99582 tl	APR0300	WATERS2	10/03/00	09:30	sch	S	CONC
21	99583 tl	APR0300	WATERS2	10/03/00	09:36	sch	S	CONC
22	99586 tl	APR0300	WATERS2	10/03/00	09:45	sch	S	CONC
23	99587 tl	APR0300	WATERS2	10/03/00	09:54	sch	S	CONC
24	icv 1	APR0300	WATERS2	10/03/00	10:02	sch	Q	CONC
25	icv 1	APR0300	WATERS2	10/03/00	10:21	sch	Q	CONC
26	icv 2	APR0300	WATERS2	10/03/00	10:31	sch	Q	CONC
27	icb	APR0300	WATERS2	10/03/00	10:40	sch	B	CONC
28	prepblk 0800	APR0300	WATERS2	10/03/00	10:46	sch	S	CONC
29	lcs 100200a	APR0300	WATERS2	10/03/00	10:55	sch	S	CONC
30	lcsd 100200a	APR0300	WATERS2	10/03/00	11:03	sch	S	CONC
31	00110	APR0300	WATERS2	10/03/00	11:11	sch	S	CONC
32	00111	APR0300	WATERS2	10/03/00	11:21	sch	S	CONC
33	00112	APR0300	WATERS2	10/03/00	11:29	sch	S	CONC
34	00113	APR0300	WATERS2	10/03/00	11:38	sch	S	CONC
35	00114	APR0300	WATERS2	10/03/00	11:49	sch	S	CONC
36	00115	APR0300	WATERS2	10/03/00	11:58	sch	S	CONC
37	00115 d	APR0300	WATERS2	10/03/00	12:06	sch	S	CONC
38	icv 1	APR0300	WATERS2	10/03/00	12:14	sch	Q	CONC
39	icv 2	APR0300	WATERS2	10/03/00	12:24	sch	Q	CONC
40	icb	APR0300	WATERS2	10/03/00	12:31	sch	B	CONC
41	STD1-Blank	APR0300	WATERS2	10/03/00	13:01		X	IR
42	STD8	APR0300	WATERS2	10/03/00	13:08		X	IR
43	STD3	APR0300	WATERS2	10/03/00	13:13		X	IR
44	STD4	APR0300	WATERS2	10/03/00	13:19		X	IR
45	STD2	APR0300	WATERS2	10/03/00	13:43		X	IR
46	icv 1	APR0300	WATERS2	10/03/00	13:50	sch	Q	CONC
47	icv 2	APR0300	WATERS2	10/03/00	13:56	sch	Q	CONC
48	icb	APR0300	WATERS2	10/03/00	14:04	sch	B	CONC
49	00115 ms	APR0300	WATERS2	10/03/00	14:10	sch	S	CONC
50	00115 msd	APR0300	WATERS2	10/03/00	14:17	sch	S	CONC
51	00094	APR0300	WATERS2	10/03/00	14:25	sch	S	CONC
52	00095	APR0300	WATERS2	10/03/00	14:33	sch	S	CONC
53	00096	APR0300	WATERS2	10/03/00	14:40	sch	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	00097	APR0300	WATERS2	10/03/00	14:50	sch	S	CONC
55	00098	APR0300	WATERS2	10/03/00	14:58	sch	S	CONC
56	00099	APR0300	WATERS2	10/03/00	15:09	sch	S	CONC
57	00100	APR0300	WATERS2	10/03/00	15:16	sch	S	CONC
58	00100 d	APR0300	WATERS2	10/03/00	15:23	sch	S	CONC
59	icv 1	APR0300	WATERS2	10/03/00	15:29	sch	Q	CONC
60	icv 2	APR0300	WATERS2	10/03/00	15:36	sch	Q	CONC
61	icb	APR0300	WATERS2	10/03/00	15:42	sch	B	CONC
62	00100 ms	APR0300	WATERS2	10/03/00	15:48	sch	S	CONC
63	00100 msd	APR0300	WATERS2	10/03/00	15:53	sch	S	CONC
64	00124	APR0300	WATERS2	10/03/00	16:02	sch	S	CONC
65	00110 1:4sd	APR0300	WATERS2	10/03/00	16:08	sch	S	CONC
66	00110 1:1msa	APR0300	WATERS2	10/03/00	16:15	sch	S	CONC
67	icv 1	APR0300	WATERS2	10/03/00	16:22	sch	Q	CONC
68	icv 2	APR0300	WATERS2	10/03/00	17:29	sch	Q	CONC
69	icb	APR0300	WATERS2	10/03/00	17:37	sch	B	CONC
70	ss i	APR0300	WATERS2	10/03/00	17:42	sch	Q	CONC
71	ss i low	APR0300	WATERS2	10/03/00	17:50	sch	Q	CONC
72	ics a	APR0300	WATERS2	10/03/00	17:57	sch	Q	CONC
73	ics ab	APR0300	WATERS2	10/03/00	18:04	sch	Q	CONC

#	Element	STD'lank	STD8	STD3	STD4	STD2	icv 1
1	Ag3280	-.00185	1.00719				.2038
2	Al3082	.02776		.10216			Q.2452
3	As1890	-.00118			.65938		.1935
4	Ba4934	.0001				2.27529	.2011
5	Be3130	-.00604		2.78666			.2016
6	Ca3179	.00118				.06836	Q.2192
7	Cd2265	-.00079				1.45921	.1985
8	Co2286	-.00094				.93585	.1993
9	Cr2677	.00026			.6599		.2000
10	Cu3247	.01809				.7007	.1951
11	Fe2714	.00076		.03528			Q.2473
12	K_7664	.04732				1.3636	Q1.745
13	Mg2790	.00002				.06241	Q.1790
14	Mn2576	.00033				.77349	.1985
15	Ni2316	-.00198		.66158			.1984
16	2203/1	.00657				2.82597	.1956
17	2203/2	-.003				2.62111	.2076
18	1960/1	-.02936			2.5519		.2034
19	1960/2	.00334			1.04819		.2009
20	Sb2068	.00311		.6163			.1913
21	Sn1899	.00049		.42499			.1973
22	Tl1908	-.00151		.16716			.2008
23	V_2924	-.00079			.29888		.1955
24	Zn2062	-.00022				.35899	.2027
25	Pb2203						.1999
26	Se1960						.2028

#	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
1	Ag3280	1.024	.0008	Q.0012	.0005	-.0001	.3209
2	Al3082	1.026	H.0589	Q.1043	.0908	49.52	50.38
3	As1890	.9886	L-.0078	.0366	Q.0011	-.0058	1.000
4	Ba4934	.9997	.0001	.0403	.0110	.0001	.3039
5	Be3130	.9960	.0002	.0012	.0004	.0001	.1004
6	Ca3179	.9797	-.0007	.0401	.0264	49.55	50.17
7	Cd2265	.9817	.0009	Q.0008	.0004	.0035	.3056
8	Co2286	.9933	.0009	.0106	Q.0032	.0010	.3039
9	Cr2677	.9922	.0013	.0039	Q.0003	-.0006	.3037
10	Cu3247	.9859	-.0019	Q.0018	-.0008	Q.0282	.3448
11	Fe2714	Q1.101	-.0021	Q.0781	.0356	50.30	51.09
12	K_7664	Q9.428	.0411	-.1142	-.0498	.0554	Q31.12
13	Mg2790	.9475	-.0041	-.0053	-.0117	50.98	51.77
14	Mn2576	.9854	.0003	.0103	Q.0030	.0014	.2045
15	Ni2316	.9838	.0022	.0086	Q.0020	-.0007	.2977
16	2203/1	.9931	-.0039	.0085	-.0034	.0258	1.065
17	2203/2	.9826	.0011	.0080	.0076	.0009	1.029
18	1960/1	.9890	.0014	.0442	.0211	.0099	.5152
19	1960/2	.9799	.0035	.0467	.0126	.0131	.5142
20	Sb2068	.9638	-.0010	Q.0055	-.0019	.0063	.9912
21	Sn1899	.9787	.0006	.0000	-.0022	-.0041	1.007
22	Tl1908	.9935	H.0023	Q.0513	.0111	Q.0426	1.072
23	V_2924	.9752	.0010	.0106	Q.0033	.0010	.3018

#	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
24	Zn2062	.9853	.0005	.0107	.0025	.0026	.3023
25	Pb2203	.9900	-.0019	.0087	Q.0006	.0178	1.053
26	Se1960	.9862	.0024	.0453	Q.0186	.0110	.5149

#	Element	STD'lank	blk'22tl	blkrertl	992'diss	blk'29tl	99578 tl
1	Ag3280	-.0015	.0041		-.0013	-.0009	-.0015
2	Al3082	.03142	.4382		-3.130	-.1424	2.436
3	As1890	-.00315	.0054		-.0160	.0005	-.0006
4	Ba4934	.00002	.0050		.0073	.0002	.0803
5	Be3130	-.00577	.0047		.0003	.0008	.0034
6	Ca3179	.00119	.0277		383.4	.0876	8.194
7	Cd2265	-.00087	.0048		-.0003	.0004	.0003
8	Co2286	-.0007	.0046		.0023	-.0003	.0018
9	Cr2677	.00015	.0045		.0011	.0003	.0062
10	Cu3247	.01629	.0066		.0831	-.0091	-.0049
11	Fe2714	.00084	.0604		-.0903	.0083	3.128
12	K_7664	.04287	-.0063		14.82	.2148	1.320
13	Mg2790	-.00004	.0071		440.1	.0759	1.378
14	Mn2576	.0003	.0059		.7030	.0005	.0081
15	Ni2316	-.00139	.0025		.0060	.0011	.0046
16	2203/1	.00236	.0065		.0280	-.0005	.0016
17	2203/2	-.00065	.0056		-.0100	-.0022	-.0002
18	1960/1	-.02494	.0085		.0603	.0120	.0062
19	1960/2	.00587	-.0009		.0036	-.0021	-.0028
20	Sb2068	.00241	.0037		-.0028	-.0036	.0018
21	Sn1899	-.00068	.0115		.0628	.0025	.0030
22	Tl1908	-.00112	.0035	-.0003	-.0373	.0036	.0020
23	V_2924	-.00054	.0045		-.0057	.0001	.0078
24	Zn2062	-.00022	.0114		.0004	.0196	.0348
25	Pb2203		.0065		.0157	-.0007	.0013
26	Se1960		.0056		.0417	.0075	.0035

#	Element	99580 tl	99582 tl	99583 tl	99586 tl	99587 tl	icv 1
1	Ag3280	-.0009	-.0008	-.0007	-.0007	-.0005	.2031
2	Al3082	14.38	-.1435	-.0837	4.573	.8181	Q.0923
3	As1890	.0032	.0043	.0033	.0006	-.0008	Q.2281
4	Ba4934	.2052	.2488	.0005	.0431	.0215	Q.1791
5	Be3130	.0028	.0023	.0008	.0011	.0009	Q.2419
6	Ca3179	9.530	8.384	.0413	1.831	3.183	Q.2725
7	Cd2265	.0009	.0007	.0001	.0007	.0033	Q.2379
8	Co2286	.0103	.0037	.0001	.0082	.0049	Q.2384
9	Cr2677	.0190	.0064	.0004	.0155	.0074	Q.2306
10	Cu3247	.0052	-.0021	-.0096	.0028	-.0041	Q.1643
11	Fe2714	15.79	8.551	.0160	9.051	2.405	Q.2549
12	K_7664	1.984	27.89	.1255	1.372	.6564	Q1.574
13	Mg2790	2.532	3.051	.0008	1.407	.7370	.1908
14	Mn2576	.0340	.1403	.0003	.0495	.0040	Q.2252
15	Ni2316	.0100	.0035	-.0017	.0083	.0063	Q.2264
16	2203/1	.0103	.0066	.0047	.1007	.0439	.2445
17	2203/2	.0045	-.0025	-.0016	.0894	.0383	.2349

#	Element	99580 tl	99582 tl	99583 tl	99586 tl	99587 tl	icv 1
18	1960/1	.0028	.0070	.0018	.0080	.0055	.2169
19	1960/2	.0018	-.0023	-.0036	.0031	-.0033	.2063
20	Sb2068	.0009	-.0001	-.0017	.0015	-.0017	.1966
21	Sn1899	.0058	.0043	.0020	.0014	.0047	Q.2474
22	Tl1908	.0100	.0070	.0016	.0032	.0088	Q.2313
23	V_2924	.0270	.0025	.0006	.0221	.0044	.2080
24	Zn2062	.0644	.0513	.0209	.0446	.0531	Q.2782
25	Pb2203	.0087	.0039	.0030	.0973	.0424	Q.2416
26	Se1960	.0026	.0042	.0003	.0066	.0028	Q.2137

#	Element	icv 1	icv 2	icb	pre'0800	lcs'200a	lcs'200a
1	Ag3280	.2053	1.031	-.0004	-.0008	1.006	1.013
2	Al3082	Q.3821	Q1.194	H.1896	.2688	1.309	1.391
3	As1890	.1971	.9841	-.0007	.0004	.9556	.9711
4	Ba4934	.2044	1.017	.0001	.0003	1.001	1.012
5	Be3130	.1986	.9848	-.0002	-.0003	.9485	.9610
6	Ca3179	.1997	Q.9256	-.0095	.1296	1.220	1.241
7	Cd2265	Q.1843	Q.9262	.0001	.0001	.8921	.9010
8	Co2286	Q.1880	.9545	-.0001	-.0006	.9285	.9416
9	Cr2677	.1901	.9531	.0005	-.0009	.9215	.9312
10	Cu3247	.2056	1.032	.0004	-.0002	1.019	1.029
11	Fe2714	Q.2328	1.051	-.0116	-.0124	1.010	1.052
12	K_7664	Q1.793	9.673	-.0425	-.1585	9.812	9.868
13	Mg2790	Q.1760	Q.9235	-.0056	-.0004	.9274	.9276
14	Mn2576	.1921	.9577	.0001	.0005	.9339	.9453
15	Ni2316	Q.1846	Q.9207	.0014	-.0006	.8955	.9029
16	2203/1	.1793	.9771	.0021	-.0031	.9543	.9709
17	2203/2	.1940	.9611	-.0004	-.0022	.9438	.9570
18	1960/1	.2024	.9821	.0014	.0039	.9373	.9676
19	1960/2	.1944	.9875	-.0036	.0018	.9596	.9676
20	Sb2068	Q.1859	Q.9351	-.0021	-.0016	.9079	.9190
21	Sn1899	.1929	.9560	H.0041	.0080	1.873	1.895
22	Tl1908	.2006	.9999	-.0013	-.0083	.9796	.9944
23	V_2924	.1902	.9544	-.0005	-.0006	.9289	.9369
24	Zn2062	Q.1818	Q.9069	.0003	.0070	.8832	.8927
25	Pb2203	Q.1845	.9721	.0016	-.0025	.9511	.9666
26	Se1960	.2000	.9842	.0000	.0035	.9450	.9679

#	Element	00110	00111	00112	00113	00114	00115
1	Ag3280	-.0002	.0001	.0002	-.0001	-.0000	.0001
2	Al3082	.5096	.5996	.8031	.7056	.6887	1.121
3	As1890	.0009	-.0007	.0003	.0010	.0005	-.0014
4	Ba4934	.0069	.0129	.0287	.0031	.0026	.0040
5	Be3130	-.0003	-.0003	-.0003	-.0003	-.0003	-.0003
6	Ca3179	4.232	6.869	15.48	2.335	2.704	5.142
7	Cd2265	.0002	-.0001	.0006	-.0001	-.0002	-.0002
8	Co2286	-.0010	.0004	-.0001	.0016	.0008	.0001
9	Cr2677	.0009	.0019	.0005	.0004	.0011	.0005
10	Cu3247	.0013	.0008	.0013	.0013	.0005	.0009
11	Fe2714	.0297	.0181	.0095	.0463	.0323	.0500

#	Element	00110	00111	00112	00113	00114	00115
12	K_7664	25.68	42.06	73.56	5.876	8.718	17.21
13	Mg2790	.0466	.0386	.0415	.0782	.0405	.0619
14	Mn2576	.0024	.0018	.0024	.0039	.0019	.0030
15	Ni2316	-.0015	-.0013	-.0012	-.0019	-.0022	-.0020
16	2203/1	-.0002	.0004	.0004	.0003	-.0026	-.0023
17	2203/2	-.0025	-.0033	.0016	-.0010	.0001	.0004
18	1960/1	-.0018	-.0017	.0065	-.0032	-.0021	.0007
19	1960/2	.0002	.0002	.0005	-.0013	.0023	-.0006
20	Sb2068	-.0001	.0000	.0006	.0014	-.0002	-.0018
21	Sn1899	.0026	.0043	.0027	.0050	.0068	.0001
22	Tl1908	.0012	-.0001	-.0009	-.0017	.0016	-.0027
23	V_2924	.0008	.0015	-.0001	.0002	.0003	.0013
24	Zn2062	.0201	.0272	.0160	.0125	.0204	.0406
25	Pb2203	-.0007	-.0005	.0011	.0002	-.0014	-.0011
26	Se1960	-.0008	-.0008	.0048	-.0022	-.0004	.0006

#	Element	00115 d	icv 1	icv 2	icb	STD'lank	STD8
1	Ag3280	-.0001	.2065	1.005	-.0003	-.00138	1.05436
2	Al3082	1.173	Q.4609	Q1.231	H.2589	.04464	
3	As1890	-.0015	.1968	.9505	.0003	-.00192	
4	Ba4934	.0038	.2049	.9910	.0001	.00019	
5	Be3130	-.0003	.1993	.9535	-.0002	-.0067	
6	Ca3179	5.280	.1968	Q.8837	-.0109	.00084	
7	Cd2265	-.0006	Q.1852	Q.8780	.0007	-.00192	
8	Co2286	.0000	.1906	Q.9165	-.0005	-.00205	
9	Cr2677	-.0002	.1904	Q.9132	.0011	.00051	
10	Cu3247	.0048	.2052	1.008	-.0023	.01698	
11	Fe2714	.0420	.2096	1.013	.0100	.00116	
12	K_7664	18.88	1.899	Q9.196	.0012	.05565	
13	Mg2790	.0551	Q.1796	Q.8905	-.0046	.00007	
14	Mn2576	.0032	.1922	Q.9229	.0001	.00035	
15	Ni2316	-.0003	Q.1824	Q.8755	-.0018	-.0014	
16	2203/1	.0028	.1947	.9600	.0013	-.00594	
17	2203/2	-.0019	.1955	.9440	.0031	.00126	
18	1960/1	.0024	.1937	.9477	.0043	-.02351	
19	1960/2	-.0020	.1965	.9567	-.0025	.00666	
20	Sb2068	-.0001	Q.1866	Q.8975	.0016	.0025	
21	Sn1899	.0099	.1912	Q.9181	.0005	.00099	
22	Tl1908	.0031	.1964	.9783	.0010	-.00116	
23	V_2924	.0015	.1893	Q.9188	.0003	-.0006	
24	Zn2062	.0218	Q.1818	Q.8579	-.0003	-.0003	
25	Pb2203	.0016	.1953	.9550	.0022		
26	Se1960	.0012	.1949	.9510	.0024		

#	Element	STD3	STD4	STD2	icv 1	icv 2	icb
1	Ag3280				.2020	1.010	.0001
2	Al3082	.12051			.1995	.9654	-.0089
3	As1890		.67072		.1962	.9789	-.0034
4	Ba4934			2.37012	.1965	.9770	.0001
5	Be3130	2.79964			.2004	.9856	.0003

#	Element	STD3	STD4	STD2	icv 1	icv 2	icb
6	Ca3179			.06241	Q.2147	.9678	-.0017
7	Cd2265			1.32015	.1984	.9775	.0009
8	Co2286			.87876	.1998	.9808	.0026
9	Cr2677		.61202		.1977	.9875	-.0007
10	Cu3247			.76944	.1913	.9616	-.0005
11	Fe2714	.03293			.2104	Q1.084	-.0195
12	K_7664			1.30089	Q1.626	Q9.077	-.0867
13	Mg2790			.06173	Q.1830	Q.9447	-.0091
14	Mn2576			.73955	.1960	.9711	.0001
15	Ni2316	.58967			.1975	.9823	-.0010
16	2203/1			2.74477	.1978	.9781	.0065
17	2203/2			2.54392	.1896	.9717	.0014
18	1960/1		2.58613		.1940	.9780	.0050
19	1960/2		1.07894		.1907	.9758	-.0054
20	Sb2068	.60066			.1970	.9721	-.0007
21	Sn1899	.41236			Q.1885	.9804	L-.0079
22	Tl1908	.17197			.1926	.9713	-.0008
23	V_2924		.29023		.1941	.9671	.0008
24	Zn2062			.31989	.2015	.9845	.0004
25	Pb2203				.1956	.9763	H.0052
26	Se1960				.1933	.9777	.0019

#	Element	00115 ms	001' msd	00094	00095	00096	00097
1	Ag3280	.9813	1.013	-.0004	-.0001	-.0005	-.0000
2	Al3082	1.831	1.838	-.3037	-.1643	-.3431	-.2645
3	As1890	.9469	.9762	.0089	-.0036	.3046	.0000
4	Ba4934	.9541	.9832	.0066	.0056	.0028	.0114
5	Be3130	.9341	.9641	.0003	.0001	.0003	.0000
6	Ca3179	6.458	6.372	82.97	64.05	76.14	79.68
7	Cd2265	.9359	.9640	.0028	.0014	.0006	.0014
8	Co2286	.9475	.9776	.0026	.0027	.0027	.0020
9	Cr2677	.9479	.9771	.0003	-.0006	.0009	-.0006
10	Cu3247	.9466	.9781	.0089	.0071	.0079	.0089
11	Fe2714	1.112	1.130	.0611	.3449	.4179	.1607
12	K_7664	28.07	28.23	9.723	1.641	17.43	.9001
13	Mg2790	.9943	1.026	11.65	1.756	18.87	3.092
14	Mn2576	.9415	.9708	.0111	.0397	.0470	.0036
15	Ni2316	.9548	.9782	-.0056	-.0021	.0002	.0009
16	2203/1	.9556	.9794	.0020	-.0022	.0063	.0077
17	2203/2	.9401	.9775	-.0005	.0048	-.0073	-.0027
18	1960/1	.9415	.9781	.0003	-.0046	-.0030	-.0032
19	1960/2	.9424	.9738	.0002	.0051	-.0042	-.0041
20	Sb2068	.9273	.9586	.0009	.0017	-.0005	-.0005
21	Sn1899	1.912	1.959	-.0077	-.0019	-.0051	-.0093
22	Tl1908	.9519	.9814	.0002	.0009	-.0112	.0029
23	V_2924	.9285	.9581	.0000	.0020	.0018	.0027
24	Zn2062	.9537	.9779	.0186	.0139	.0096	.0150
25	Pb2203	.9509	.9792	.0016	.0006	.0022	.0047
26	Se1960	.9422	.9770	.0006	-.0010	-.0030	-.0031

#	Element	00098	00099	00100	00100 d	icv 1	icv 2
1	Ag3280	-.0003	-.0003	-.0009	-.0005	.2015	1.021
2	Al3082	-.2118	-.3387	.0726	.0664	Q.2205	.9867
3	As1890	-.0036	.2963	-.0031	-.0086	.1967	1.011
4	Ba4934	.0038	.0033	.0004	.0002	.1964	.9787
5	Be3130	.0001	.0000	-.0000	.0000	.2056	1.029
6	Ca3179	68.42	77.44	.1814	.1593	Q.2181	.9935
7	Cd2265	.0011	.0015	.0021	.0010	.2008	.9895
8	Co2286	.0012	.0040	.0030	.0018	.1996	.9952
9	Cr2677	.0003	.0022	-.0016	-.0014	.1974	1.003
10	Cu3247	.0079	.0116	.0004	-.0005	.1915	.9634
11	Fe2714	-.0067	.4134	-.0236	-.0326	.1943	Q1.105
12	K_7664	.6690	29.28	-.0256	-.1569	Q1.714	Q8.794
13	Mg2790	1.812	30.23	.0052	.0026	Q.1799	Q.9414
14	Mn2576	.0008	.0451	.0013	.0000	.1962	.9859
15	Ni2316	-.0040	-.0015	-.0015	-.0025	.1942	.9873
16	2203/1	.0058	.0047	.0051	.0069	.2004	.9847
17	2203/2	.0033	.0018	-.0012	.0003	.1903	.9782
18	1960/1	-.0064	.0044	-.0045	-.0020	.1954	1.013
19	1960/2	-.0060	-.0006	-.0038	-.0013	.2060	1.011
20	Sb2068	.0051	.0050	-.0017	-.0009	.1965	.9795
21	Sn1899	-.0022	-.0047	-.0059	-.0067	.1947	.9999
22	Tl1908	.0030	.0042	-.0012	-.0046	.1911	.9956
23	V_2924	.0011	.0027	-.0003	-.0002	.1948	.9815
24	Zn2062	.0151	.0245	.0094	.0087	.2047	1.023
25	Pb2203	.0054	.0041	.0035	.0051	.1976	.9829
26	Se1960	-.0059	.0031	-.0039	-.0014	.1993	1.013

#	Element	icb	00100 ms	001' msd	00124	001':4sd	001'1msa
1	Ag3280	.0002	1.080	1.027	.0001	-.0018	.2038
2	Al3082	H.0535	1.130	1.074	-.3917	.7586	.8517
3	As1890	L-.0076	1.077	1.003	-.0050	.0166	.1923
4	Ba4934	.0001	1.050	.9881	.1051	.0073	.2040
5	Be3130	.0003	1.088	1.016	.0003	.0014	.2087
6	Ca3179	-.0015	1.195	1.105	29.37	4.468	4.738
7	Cd2265	H.0023	1.045	.9740	.0041	.0096	.1998
8	Co2286	.0034	1.058	.9820	.0089	.0157	.2038
9	Cr2677	-.0004	1.057	.9807	-.0005	-.0078	.1992
10	Cu3247	-.0004	1.030	.9668	.0136	-.0155	.1920
11	Fe2714	-.0313	1.172	1.095	55.56	-.1473	.2116
12	K_7664	.0585	9.377	8.869	5.066	18.90	23.07
13	Mg2790	.0048	1.021	.9452	7.482	.0127	.2499
14	Mn2576	.0003	1.048	.9738	1.790	.0034	.1995
15	Ni2316	-.0034	1.050	.9707	.0000	-.0018	.1909
16	2203/1	.0072	1.063	.9841	.0147	.0421	.2082
17	2203/2	-.0081	1.052	.9750	-.0054	-.0074	.1890
18	1960/1	.0011	1.096	.9987	-.0015	.0238	.1915
19	1960/2	.0022	1.088	.9952	-.0009	-.0271	.2029
20	Sb2068	.0010	1.030	.9614	-.0005	-.0024	.2013
21	Sn1899	L-.0066	2.173	2.034	-.0022	-.0311	.1911
22	Tl1908	.0007	1.061	.9842	.0411	-.0258	.1837
23	V_2924	.0013	1.035	.9674	.0014	.0051	.1975

#	Element	icb	00100 ms	001' msd	00124	001':4sd	001'1msa
24	Zn2062	.0008	1.094	1.017	.0409	.0242	.2292
25	Pb2203	H.0025	1.060	.9817	.0084	.0278	.2028
26	Se1960	.0018	1.094	.9979	-.0009	.0087	.1961

#	Element	icv 1	icv 2	icb	ss i	ss i low	ics a
1	Ag3280	.2024	1.025	-.0002	.0011	-.0008	.0002
2	Al3082	Q.3345	Q1.132	H.1919	Q.2304	.2136	47.76
3	As1890	.2002	1.007	L-.0060	.0380	Q.0062	-.0051
4	Ba4934	.1949	.9615	.0001	.0388	.0105	.0002
5	Be3130	.2079	1.044	.0003	Q.0013	.0004	.0002
6	Ca3179	Q.2129	.9793	-.0046	.0363	.0218	50.27
7	Cd2265	.1959	.9630	H.0018	Q.0029	.0013	.0031
8	Co2286	.1995	.9870	.0035	Q.0124	Q.0055	.0051
9	Cr2677	.1965	.9844	-.0002	Q.0025	Q.0021	-.0001
10	Cu3247	.1901	.9616	L-.0051	Q-.0007	-.0035	Q.0248
11	Fe2714	.1908	Q1.103	-.0304	Q.0755	-.0018	52.52
12	K_7664	Q1.630	Q8.418	.0499	-.0531	.0487	Q.3414
13	Mg2790	Q.1793	Q.9203	-.0020	-.0052	-.0062	49.77
14	Mn2576	.1954	.9756	.0000	.0103	.0029	.0013
15	Ni2316	.1907	.9548	-.0020	Q.0068	.0020	-.0005
16	2203/1	.1954	.9782	.0180	.0175	-.0015	.0379
17	2203/2	.1931	.9800	.0024	.0096	.0003	-.0044
18	1960/1	.2004	1.000	.0039	.0416	.0151	.0066
19	1960/2	.1978	1.006	-.0062	.0354	.0104	.0152
20	Sb2068	.1947	.9501	-.0002	Q.0035	.0013	.0107
21	Sn1899	.1954	1.007	L-.0026	-.0065	-.0048	-.0016
22	Tl1908	.1997	1.003	L-.0054	.0352	.0084	Q.0361
23	V_2924	.1944	.9662	.0008	.0113	Q.0035	.0031
24	Zn2062	.2036	1.007	.0012	.0109	.0035	.0039
25	Pb2203	.1951	.9793	H.0132	Q.0153	Q-.0005	Q.0243
26	Se1960	.1999	1.003	.0009	.0399	Q.0139	.0095

#	Element	ics ab
1	Ag3280	.3204
2	Al3082	48.35
3	As1890	1.015
4	Ba4934	.2948
5	Be3130	.1044
6	Ca3179	50.51
7	Cd2265	.3007
8	Co2286	.3067
9	Cr2677	.3040
10	Cu3247	.3356
11	Fe2714	52.99
12	K_7664	Q29.07
13	Mg2790	50.40
14	Mn2576	.2042
15	Ni2316	.2988
16	2203/1	1.058
17	2203/2	1.027

#	Element	ics ab
18	1960/1	.5097
19	1960/2	.5145
20	Sb2068	.9836
21	Sn1899	1.030
22	Tl1908	1.070
23	V_2924	.2971
24	Zn2062	.3124
25	Pb2203	1.048
26	Se1960	.5114

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1-Blank	APR1800	WATERS2	10/18/00	05:40		X	IR
2	STD8	APR1800	WATERS2	10/18/00	05:49		X	IR
3	STD3	APR1800	WATERS2	10/18/00	05:56		X	IR
4	STD4	APR1800	WATERS2	10/18/00	06:01		X	IR
5	STD2	APR1800	WATERS2	10/18/00	06:08		X	IR
6	icv 1	APR1800	WATERS2	10/18/00	06:15	sch	Q	CONC
7	icv 2	APR1800	WATERS2	10/18/00	06:27	sch	Q	CONC
8	icb	APR1800	WATERS2	10/18/00	06:35	sch	B	CONC
9	ss i	APR1800	WATERS2	10/18/00	06:42	sch	Q	CONC
10	ss i low	APR1800	WATERS2	10/18/00	06:51	sch	Q	CONC
11	ics a	APR1800	WATERS2	10/18/00	06:59	sch	Q	CONC
12	ics ab	APR1800	WATERS2	10/18/00	07:08	sch	Q	CONC
13	lcs1010rersb	APR1800	WATERS2	10/18/00	07:21	sch	S	CONC
14	lcsd1010rersb	APR1800	WATERS2	10/18/00	07:25	sch	S	CONC
15	lcs1010rersb	APR1800	WATERS2	10/18/00	07:32	sch	S	CONC
16	lcsd1010rersb	APR1800	WATERS2	10/18/00	07:38	sch	S	CONC
17	icv 1	APR1800	WATERS2	10/18/00	07:44	sch	Q	CONC
18	icv 2	APR1800	WATERS2	10/18/00	07:51	sch	Q	CONC
19	icb	APR1800	WATERS2	10/18/00	07:56	sch	B	CONC
20	prepblk 0945	APR1800	WATERS2	10/18/00	08:01	sch	S	CONC
21	lcs 101300a	APR1800	WATERS2	10/18/00	08:07	sch	S	CONC
22	lcsd 101300a	APR1800	WATERS2	10/18/00	08:12	sch	S	CONC
23	00944	APR1800	WATERS2	10/18/00	08:20	sch	S	CONC
24	00945	APR1800	WATERS2	10/18/00	08:27	sch	S	CONC
25	00946	APR1800	WATERS2	10/18/00	08:32	sch	S	CONC
26	00947	APR1800	WATERS2	10/18/00	08:36	sch	S	CONC
27	00948	APR1800	WATERS2	10/18/00	08:41	sch	S	CONC
28	00949	APR1800	WATERS2	10/18/00	08:52	sch	S	CONC
29	00950	APR1800	WATERS2	10/18/00	08:58	sch	S	CONC
30	icv 1	APR1800	WATERS2	10/18/00	09:07	sch	Q	CONC
31	icv 2	APR1800	WATERS2	10/18/00	09:13	sch	Q	CONC
32	icb	APR1800	WATERS2	10/18/00	09:21	sch	B	CONC
33	00951	APR1800	WATERS2	10/18/00	09:24	sch	S	CONC
34	00952	APR1800	WATERS2	10/18/00	09:29	sch	S	CONC
35	00953	APR1800	WATERS2	10/18/00	09:41	sch	S	CONC
36	00954	APR1800	WATERS2	10/18/00	09:45	sch	S	CONC
37	00955	APR1800	WATERS2	10/18/00	09:50	sch	S	CONC
38	00956	APR1800	WATERS2	10/18/00	09:58	sch	S	CONC
39	00957	APR1800	WATERS2	10/18/00	10:02	sch	S	CONC
40	00958	APR1800	WATERS2	10/18/00	10:10	sch	S	CONC
41	00958 d	APR1800	WATERS2	10/18/00	10:13	sch	S	CONC
42	00958 ms	APR1800	WATERS2	10/18/00	10:20	sch	S	CONC
43	icv 1	APR1800	WATERS2	10/18/00	10:25	sch	Q	CONC
44	icv 2	APR1800	WATERS2	10/18/00	10:32	sch	Q	CONC
45	icb	APR1800	WATERS2	10/18/00	10:39	sch	B	CONC
46	00958 msd	APR1800	WATERS2	10/18/00	10:45	sch	S	CONC
47	icv 1	APR1800	WATERS2	10/18/00	10:54	sch	Q	CONC
48	icv 2	APR1800	WATERS2	10/18/00	11:03	sch	Q	CONC
49	icb	APR1800	WATERS2	10/18/00	11:11	sch	B	CONC
50	prepblk 1020	APR1800	WATERS2	10/18/00	11:22	sch	S	CONC
51	lcs 101700a	APR1800	WATERS2	10/18/00	11:31	sch	S	CONC
52	lcsd 101700a	APR1800	WATERS2	10/18/00	11:40	sch	S	CONC
53	00455	APR1800	WATERS2	10/18/00	11:48	sch	S	CONC

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AS Rules project specific QC.

	Sample Name	File	Method	Date	Time	OpID	Type	Mode
4	00457	APR1800	WATERS2	10/18/00	11:55	sch	S	CONC
5	00459	APR1800	WATERS2	10/18/00	12:02	sch	S	CONC
6	00459	APR1800	WATERS2	10/18/00	12:32	sch	S	CONC
7	00460	APR1800	WATERS2	10/18/00	12:39	sch	S	CONC
8	00461	APR1800	WATERS2	10/18/00	12:46	sch	S	CONC
9	00462	APR1800	WATERS2	10/18/00	12:54	sch	S	CONC
0	icv 1	APR1800	WATERS2	10/18/00	13:02	sch	Q	CONC
1	icv 2	APR1800	WATERS2	10/18/00	13:09	sch	Q	CONC
2	icb	APR1800	WATERS2	10/18/00	13:17	sch	B	CONC
3	00832	APR1800	WATERS2	10/18/00	13:23	sch	S	CONC
4	00833	APR1800	WATERS2	10/18/00	13:32	sch	S	CONC
5	00833 d	APR1800	WATERS2	10/18/00	13:38	sch	S	CONC
6	00833 ms	APR1800	WATERS2	10/18/00	13:44	sch	S	CONC
7	00833 msd	APR1800	WATERS2	10/18/00	13:50	sch	S	CONC
8	00834	APR1800	WATERS2	10/18/00	13:58	sch	S	CONC
9	00835	APR1800	WATERS2	10/18/00	14:04	sch	S	CONC
0	00336	APR1800	WATERS2	10/18/00	14:11	sch	S	CONC
1	01577	APR1800	WATERS2	10/18/00	14:41	sch	S	CONC
2	01578	APR1800	WATERS2	10/18/00	14:47	sch	S	CONC
3	icv 1	APR1800	WATERS2	10/18/00	14:56	sch	Q	CONC
4	icv 2	APR1800	WATERS2	10/18/00	15:01	sch	Q	CONC
5	icb	APR1800	WATERS2	10/18/00	15:09	sch	B	CONC
6	01579	APR1800	WATERS2	10/18/00	15:15	sch	S	CONC
7	99554	APR1800	WATERS2	10/18/00	15:25	sch	S	CONC
8	00095	APR1800	WATERS2	10/18/00	15:34	sch	S	CONC
9	00095 d	APR1800	WATERS2	10/18/00	15:39	sch	S	CONC
0	00095 ms	APR1800	WATERS2	10/18/00	15:45	sch	S	CONC
1	00095 msd	APR1800	WATERS2	10/18/00	15:50	sch	S	CONC
2	00455 1:4sd	APR1800	WATERS2	10/18/00	15:58	sch	S	CONC
3	00455 1:1msa	APR1800	WATERS2	10/18/00	16:03	sch	S	CONC
4	icv 1	APR1800	WATERS2	10/18/00	16:10	sch	Q	CONC
5	icv 2	APR1800	WATERS2	10/18/00	16:16	sch	Q	CONC
6	icb	APR1800	WATERS2	10/18/00	16:22	sch	B	CONC
7	ss i	APR1800	WATERS2	10/18/00	16:28	sch	Q	CONC
8	ss i low	APR1800	WATERS2	10/18/00	16:33	sch	Q	CONC
9	ics a	APR1800	WATERS2	10/18/00	16:39	sch	Q	CONC
0	ics ab	APR1800	WATERS2	10/18/00	16:46	sch	Q	CONC

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	Element	STD'lank	STD8	STD3	STD4	STD2	icv 1
1	Ag3280	-.00151	.80915				.2020
2	Al3082	.02532		.08152			Q.1810
3	As1890	.00104			.54944		Q.1886
4	Ba4934	-.00001				1.81153	.1982
5	Be3130	-.00513		2.33742			.2027
6	Ca3179	.00125				.0522	Q.2211
7	Cd2265	-.00063				1.10153	.1985
8	Co2286	-.00126				.69901	.2004
9	Cr2677	-.00034			.49682		.2009
0	Cu3247	.01596				.54966	.1901
1	Fe2714	.00121		.02588			.2090
2	K_7664	.04236				.83933	Q1.842
3	Mg2790	-.00054				.0486	.2069
4	Mn2576	.00033				.58164	.1972
5	Ni2316	-.00204		.48469			.2088
6	2203/1	-.00628				2.1162	.2050
7	2203/2	.01062				1.94533	.1831
8	1960/1	-.02507			2.16812		.2000
9	1960/2	.00526			.85835		.2004
0	Sb2068	.00097		.48482			.2006
1	Sn1899	-.00061		.33096			.2026
2	Tl1908	-.00067		.12724			.1909
3	V_2924	-.00058			.22973		.1947
4	Zn2062	-.0001				.29165	.2003
5	Pb2203						.1980
6	Se1960						.2004

	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
1	Ag3280	.9869	.0001	Q.0006	-.0001	-.0004	.3135
2	Al3082	.9564	-.0045	Q.0607	.0531	50.41	50.57
3	As1890	.9722	L-.0081	Q.0264	Q-.0008	Q-.0145	.9831
4	Ba4934	.9779	.0000	.0402	.0111	.0003	.3025
5	Be3130	.9966	.0003	Q.0013	.0005	.0003	.1016
6	Ca3179	.9870	-.0013	.0937	.0698	50.42	50.46
7	Cd2265	.9810	-.0004	Q.0014	.0005	.0028	.3083
8	Co2286	.9872	.0019	.0111	Q.0048	.0034	.3081
9	Cr2677	.9872	.0013	Q.0062	Q.0040	.0027	.3087
0	Cu3247	.9674	L-.0043	Q.0001	-.0039	Q.0258	.3424
1	Fe2714	Q1.154	-.0034	Q.0857	.0711	54.10	54.26
2	K_7664	Q8.765	L-.2690	-.0803	.3407	Q.4323	Q31.02
3	Mg2790	.9587	.0068	.0089	.0250	50.71	50.86
4	Mn2576	.9774	-.0000	.0103	Q.0031	.0013	.2068
5	Ni2316	.9937	.0003	Q.0123	Q.0048	.0024	.3111
6	2203/1	.9781	.0176	.0169	.0152	.0428	1.070
7	2203/2	.9763	-.0158	-.0004	-.0089	-.0180	1.034
8	1960/1	.9763	-.0001	.0429	.0170	.0103	.5065
9	1960/2	.9913	-.0053	.0440	.0094	.0119	.5127
0	Sb2068	.9638	-.0003	Q.0137	-.0009	.0138	.9920
1	Sn1899	.9926	H.0065	-.0001	.0022	.0052	1.030
2	Tl1908	.9984	L-.0072	.0371	Q.0054	Q.0365	1.091
3	V_2924	.9688	-.0003	.0114	Q.0039	.0014	.3047

#	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
24	Zn2062	.9901	-.0007	.0102	.0024	.0014	.3070
25	Pb2203	.9779	H.0068	.0115	Q.0076	Q.0229	1.058
26	Se1960	.9816	-.0015	.0436	Q.0147	.0109	.5086

#	Element	lcs'ersb	lcs'ersb	lcs'ersb	lcs'ersb	icv 1	icv 2
1	Ag3280						
2	Al3082	2.330	2.263	.0887	.1148	Q.2905	Q1.084
3	As1890						
4	Ba4934						
5	Be3130						
6	Ca3179	2.143	2.111	1.002	1.016	Q.2141	.9859
7	Cd2265						
8	Co2286						
9	Cr2677	2.067	2.033	1.006	1.027	.2005	.9942
10	Cu3247						
11	Fe2714	2.416	2.380	1.150	1.174	Q.2268	Q1.181
12	K_7664						
13	Mg2790	2.149	2.112	.9701	.9869	.2010	.9483
14	Mn2576						
15	Ni2316						
16	2203/1						
17	2203/2						
18	1960/1						
19	1960/2						
20	Sb2068	1.916	1.889	.9745	.9983	.1967	.9549
21	Sn1899						
22	Tl1908						
23	V_2924						
24	Zn2062						
25	Pb2203						
26	Se1960						

#	Element	icb	pre'0945	lcs'300a	lcs'300a	00944	00945
1	Ag3280						
2	Al3082	H.1062	.0943	.1469	.1161	.5315	.6771
3	As1890						
4	Ba4934						
5	Be3130						
6	Ca3179	-.0046	.0044	.9599	1.020	2.688	4.500
7	Cd2265						
8	Co2286						
9	Cr2677	.0031	.0038	.9709	1.024	.0016	.0025
10	Cu3247						
11	Fe2714	-.0441	.1427	1.141	1.168	.0767	.0366
12	K_7664						
13	Mg2790	.0176	.0370	.9613	.9943	.0728	.0783
14	Mn2576						
15	Ni2316						
16	2203/1						
17	2203/2						

#	Element	icb	pre'0945	lcs'300a	lcs'300a	00944	00945
18	1960/1						
19	1960/2						
20	Sb2068	H.0040	.0045	.9501	.9924	.0063	.0023
21	Sn1899						
22	Tl1908						
23	V_2924						
24	Zn2062						
25	Pb2203						
26	Se1960						

#	Element	00946	00947	00948	00949	00950	icv 1
1	Ag3280						
2	Al3082	.7593	.5100	.6320	.9454	.5443	Q.3022
3	As1890						
4	Ba4934						
5	Be3130						
6	Ca3179	7.818	2.816	4.000	6.633	2.665	Q.2184
7	Cd2265						
8	Co2286						
9	Cr2677	.0025	.0021	.0033	.0017	.0029	.2042
10	Cu3247						
11	Fe2714	.0035	.0585	.0437	.0228	.0477	Q.2625
12	K_7664						
13	Mg2790	.0645	.0797	.0843	.0525	.0783	.1984
14	Mn2576						
15	Ni2316						
16	2203/1						
17	2203/2						
18	1960/1						
19	1960/2						
20	Sb2068	.0024	.0030	.0042	.0009	.0042	.2001
21	Sn1899						
22	Tl1908						
23	V_2924						
24	Zn2062						
25	Pb2203						
26	Se1960						

#	Element	icv 2	icb	00951	00952	00953	00954
1	Ag3280						
2	Al3082	Q1.080	H.0593	.6830	.8665	.5043	.6775
3	As1890						
4	Ba4934						
5	Be3130						
6	Ca3179	.9884	-.0014	4.858	8.663	2.420	4.423
7	Cd2265						
8	Co2286						
9	Cr2677	.9951	.0016	.0025	.0018	.0032	.0024
10	Cu3247						
11	Fe2714	Q1.196	-.0109	.0395	.0515	.1521	.1012

	Element	icv 2	icb	00951	00952	00953	00954
2	K_7664						
3	Mg2790	.9462	.0171	.0995	.0866	.0747	.0923
4	Mn2576						
5	Ni2316						
6	2203/1						
7	2203/2						
8	1960/1						
9	1960/2						
0	Sb2068	.9637	H.0057	.0034	.0034	.0035	.0040
1	Sn1899						
2	Tl1908						
3	V_2924						
4	Zn2062						
5	Pb2203						
6	Se1960						

	Element	00955	00956	00957	00958	00958 d	00958 ms
1	Ag3280						
2	Al3082	.6396	.5554	.7376	1.029	.9382	1.049
3	As1890						
4	Ba4934						
5	Be3130						
6	Ca3179	7.863	2.267	3.940	8.936	8.599	9.879
7	Cd2265						
8	Co2286						
9	Cr2677	.0037	.0026	.0024	.0019	.0026	1.013
0	Cu3247						
1	Fe2714	.0223	.0639	.0226	.1095	.0944	1.233
2	K_7664						
3	Mg2790	.0660	.0609	.0693	.0988	.1062	1.073
4	Mn2576						
5	Ni2316						
6	2203/1						
7	2203/2						
8	1960/1						
9	1960/2						
0	Sb2068	.0052	.0030	.0075	.0018	.0048	.9667
1	Sn1899						
2	Tl1908						
3	V_2924						
4	Zn2062						
5	Pb2203						
6	Se1960						

	Element	icv 1	icv 2	icb	009' msd	icv 1	icv 2
1	Ag3280					.2068	1.009
2	Al3082	Q.3073	Q1.127	H.0900	1.045	Q.2892	1.053
3	As1890					Q.1854	.9815
4	Ba4934					.2012	.9896
5	Be3130					.2061	1.016

#	Element	icv 1	icv 2	icb	009' msd	icv 1	icv 2
6	Ca3179	Q.2173	1.009	-.0016	9.717	.2030	1.008
7	Cd2265					.1980	.9914
8	Co2286					.2043	1.009
9	Cr2677	.2035	1.013	.0023	.9968	.2042	1.006
10	Cu3247					.1931	.9849
11	Fe2714	Q.2450	Q1.198	-.0280	1.263	Q.1882	Q1.178
12	K_7664					Q1.643	Q9.088
13	Mg2790	.1992	.9554	.0176	1.056	.1978	.9602
14	Mn2576					.2009	.9985
15	Ni2316					.2005	1.003
16	2203/1					.2007	1.007
17	2203/2					.1903	1.006
18	1960/1					.1923	.9778
19	1960/2					.2035	.9873
20	Sb2068	.2028	.9709	H.0027	.9575	.1992	.9711
21	Sn1899					.2076	1.008
22	Tl1908					.2089	1.034
23	V_2924					.1975	.9823
24	Zn2062					.1988	.9976
25	Pb2203					.1976	1.007
26	Se1960					.1963	.9813

#	Element	icb	pre'1020 11:22	lcs'700a	lcs'700a	00455	00457
1	Ag3280	-.0001	.0003	1.070	1.036	-.0000	-.0005
2	Al3082	H.0815	.1277	1.146	1.122	-.1433	-.3592
3	As1890	L-.0127	-.0111	1.042	1.022	-.0172	-.0154
4	Ba4934	.0001	.0002	1.051	1.028	.0085	.1222
5	Be3130	.0003	.0002	1.068	1.047	.0004	.0004
6	Ca3179	-.0071	.0969	1.105	1.042	70.05	156.6
7	Cd2265	.0007	.0004	1.042	1.023	-.0003	-.0007
8	Co2286	.0013	.0014	1.067	1.046	.0019	.0005
9	Cr2677	.0008	.0029	1.061	1.040	.0029	.0035
10	Cu3247	L-.0078	-.0062	1.060	1.031	.0011	.0085
11	Fe2714	L-.0619	-.0078	1.216	1.153	.0127	.2011
12	K_7664	.0914	.2724	10.46	10.21	.1527	.8448
13	Mg2790	.0101	.0259	1.034	1.012	4.291	3.849
14	Mn2576	.0002	.0004	1.057	1.037	.0032	.0085
15	Ni2316	.0026	.0020	1.055	1.037	.0016	.0042
16	2203/1	.0105	.0054	1.079	1.058	.0029	.0092
17	2203/2	-.0069	-.0114	1.055	1.040	-.0080	-.0065
18	1960/1	-.0001	.0052	1.027	1.015	-.0031	.0072
19	1960/2	.0012	.0035	1.038	1.026	.0012	.0064
20	Sb2068	H.0055	.0015	1.026	1.004	.0050	.0058
21	Sn1899	H.0078	.0044	2.129	2.107	.0034	-.0007
22	Tl1908	L-.0049	.0016	1.079	1.073	.0030	-.0110
23	V_2924	.0006	.0018	1.040	1.016	.0013	.0011
24	Zn2062	.0002	.0213	1.085	1.065	.0303	.0268
25	Pb2203	H.0050	.0002	1.072	1.052	-.0004	.0043
26	Se1960	.0007	.0049	1.031	1.019	-.0014	.0073

#	Element	00459	00459	00460	00461	00462	icv 1
1	Ag3280	.0025	-.0003	-.0009	-.0006	-.0015	Q.2123
2	Al3082	17.09	.1061	.0460	.0937	.1714	Q.2865
3	As1890	-.2426	-.0094	-.0160	-.0127	-.0071	.1959
4	Ba4934	.2628	.0120	.0094	.0000	.1621	.2035
5	Be3130	-.0612	.0005	.0003	.0002	.0003	Q.2120
6	Ca3179	162.3	7.215	59.48	.0111	41.13	Q.2116
7	Cd2265	-.0267	.0001	-.0001	.0004	-.0001	.2050
8	Co2286	.0109	.0047	.0013	.0010	.0064	Q.2112
9	Cr2677	.0233	.0033	.0097	.0024	.0036	.2109
10	Cu3247	.9380	-.0046	.0003	-.0062	-.0005	.1958
11	Fe2714	2.054	.0230	.1762	-.0450	7.954	Q.2389
12	K_7664	44.55	1.047	1.518	.1226	19.45	1.961
13	Mg2790	11.98	.5697	1.767	.0173	4.660	.2080
14	Mn2576	.8054	.0350	.0131	-.0003	3.750	.2066
15	Ni2316	-.0488	.0015	.0016	.0007	.0029	.2091
16	2203/1	-.0092	.0076	-.0002	.0080	.0066	.2204
17	2203/2	.1229	-.0094	-.0068	-.0037	-.0043	.2004
18	1960/1	-.4126	.0035	-.0002	.0014	.0012	.2043
19	1960/2	.2359	.0049	-.0031	.0036	-.0055	.1950
20	Sb2068	.2372	.0013	.0034	.0026	.0042	.2044
21	Sn1899	.0906	.0011	-.0007	.0017	-.0008	Q.2165
22	Tl1908	-.4647	-.0075	.0024	-.0036	.0068	.2070
23	V_2924	-.0678	.0016	.0011	-.0001	.0028	.2027
24	Zn2062	.8499	.0388	.0297	.0245	.0306	.2072
25	Pb2203	.0416	.0023	-.0021	.0045	.0034	Q.2141
26	Se1960	-.1906	.0043	-.0009	.0024	-.0007	.2015

#	Element	icv 2	icb	00832	00833	00833 d	00833 ms
1	Ag3280	1.044	.0003	.0019	-.0006	-.0008	1.149
2	Al3082	Q1.109	H.1022	139.2	.5119	.5033	1.686
3	As1890	1.020	L-.0093	.2079	-.0197	-.0145	1.086
4	Ba4934	1.014	.0001	2.717	.0329	.0334	1.140
5	Be3130	1.051	.0003	.0135	.0003	.0003	1.096
6	Ca3179	1.049	-.0079	1392.	12.14	12.29	13.57
7	Cd2265	1.025	.0008	.0100	.0002	-.0004	1.083
8	Co2286	1.047	.0032	.0806	.0012	.0010	1.119
9	Cr2677	1.043	.0020	.3363	.0043	.0064	1.110
10	Cu3247	1.011	L-.0069	.5110	-.0032	-.0044	1.140
11	Fe2714	Q1.251	-.0366	132.9	.2636	.2328	1.540
12	K_7664	Q9.321	.0332	35.55	5.195	5.375	17.79
13	Mg2790	.9836	.0131	58.15	1.049	1.065	2.165
14	Mn2576	1.034	.0002	1.569	.0213	.0220	1.130
15	Ni2316	1.039	-.0011	.1830	-.0010	.0024	1.106
16	2203/1	1.036	.0052	.2049	.0024	.0079	1.117
17	2203/2	1.046	-.0088	.0990	-.0131	-.0113	1.116
18	1960/1	1.008	.0051	.0390	.0019	-.0000	1.066
19	1960/2	1.017	-.0036	.0394	.0023	-.0079	1.077
20	Sb2068	.9938	.0010	.0234	.0032	.0035	1.060
21	Sn1899	1.055	H.0033	.0302	.0106	.0070	2.235
22	Tl1908	1.053	L-.0040	.1173	-.0018	-.0059	1.143
23	V_2924	1.016	.0013	.3255	.0094	.0088	1.092

#	Element	icv 2	icb	00832	00833	00833 d	00833 ms
24	Zn2062	1.037	-.0001	.6545	.0611	.0774	1.151
25	Pb2203	1.040	.0009	.1699	-.0024	.0019	1.117
26	Se1960	1.011	.0025	.0386	.0023	-.0023	1.070

#	Element	008' msd	00834	00835	00336	01577	01578
1	Ag3280	1.081	-.0005	-.0006	-.0003	.0010	-.0002
2	Al3082	1.610	8.443	.1407	.0966	4.217	.0314
3	As1890	1.039	-.0145	-.0192	-.0085	-.0115	-.0104
4	Ba4934	1.092	.1139	.0002	.0286	.1514	.0136
5	Be3130	1.046	.0013	.0003	.0004	.0004	.0003
6	Ca3179	13.13	7.786	.0646	3.265	24.05	10.76
7	Cd2265	1.033	.0002	-.0005	-.0002	.0022	-.0000
8	Co2286	1.070	.0102	.0021	.0026	.0083	.0005
9	Cr2677	1.063	.0126	.0024	.0022	.0561	.0027
10	Cu3247	1.086	.0013	-.0041	-.0060	.1058	.0127
11	Fe2714	1.454	13.31	-.0402	1.131	6.369	-.0625
12	K_7664	15.55	5.464	-.0141	1.454	59.67	2.119
13	Mg2790	2.061	4.752	.0184	1.456	2.658	1.427
14	Mn2576	1.080	.2130	-.0002	.0069	.1450	.0061
15	Ni2316	1.057	.0073	-.0030	.0041	.0160	.0027
16	2203/1	1.073	.0149	-.0003	.0056	.1037	.0341
17	2203/2	1.080	-.0065	-.0149	-.0115	.0923	.0079
18	1960/1	1.014	.0024	.0080	.0055	.0016	.0018
19	1960/2	1.044	-.0012	.0003	-.0008	.0014	.0012
20	Sb2068	1.012	.0086	.0064	.0014	.0093	.0103
21	Sn1899	2.147	.0079	.0022	.0083	.0182	.0077
22	Tl1908	1.092	.0058	-.0126	.0045	.0009	.0005
23	V_2924	1.043	.0177	.0002	.0006	.0112	-.0003
24	Zn2062	1.098	.0575	.0247	.0221	3.259	.0532
25	Pb2203	1.076	.0081	-.0048	.0003	.1003	.0257
26	Se1960	1.024	.0014	.0058	.0038	.0018	.0019

#	Element	icv 1	icv 2	icb	01579	99554	00095
							15:39
1	Ag3280	Q.2132	1.039	-.0006	.0022	.0001	-.0001
2	Al3082	Q.2835	Q1.111	H.0884	6.911	16.18	-.1082
3	As1890	.1932	1.012	L-.0123	-.0106	-.0136	-.0085
4	Ba4934	.2074	1.021	.0001	.2656	.1216	.0070
5	Be3130	Q.2120	1.046	.0002	.0006	.0012	.0001
6	Ca3179	Q.2237	1.031	-.0060	27.59	2.660	70.93
7	Cd2265	.2069	1.014	-.0002	.0058	.0001	-.0007
8	Co2286	Q.2115	1.035	.0005	.0098	.0124	.0013
9	Cr2677	Q.2138	1.033	.0012	.0697	.0155	.0047
10	Cu3247	.2017	1.021	L-.0046	.4266	.0052	.0045
11	Fe2714	Q.2703	Q1.217	-.0263	14.27	11.42	.9473
12	K_7664	2.024	Q9.163	-.0265	48.13	1.249	2.253
13	Mg2790	Q.2159	.9898	.0152	3.408	2.697	1.912
14	Mn2576	.2075	1.024	-.0001	.2199	.0999	.1263
15	Ni2316	.2110	1.029	.0034	.0386	.0091	.0016
16	2203/1	.2186	1.025	.0027	.2069	.0120	.0029
17	2203/2	.1931	1.036	-.0151	.2012	-.0015	-.0101

	Element	icv 1	icv 2	icb	01579	99554	00095
8	1960/1	.2093	1.014	.0069	.0011	.0030	.0065
9	1960/2	.1995	1.017	.0010	-.0014	-.0001	-.0036
0	Sb2068	.2075	.9979	H.0036	.0185	.0048	.0069
1	Sn1899	.2099	1.034	H.0072	.0400	.0003	.0053
2	Tl1908	Q.2120	Q1.055	-.0006	.0045	-.0020	-.0151
3	V_2924	.2046	1.012	.0012	.0158	.0190	.0020
4	Zn2062	.2059	1.020	.0000	3.769	.0500	.0253
5	Pb2203	.2105	1.029	L-.0029	.2054	.0079	-.0010
6	Se1960	.2063	1.015	H.0052	.0005	.0022	.0035

	Element	00095 d	00095 ms	000' msd	004':4sd	004'1msa	icv 1
1	Ag3280	-.0001	1.101	1.102	.0036	.2210	Q.2149
2	Al3082	-.1018	1.002 104	1.005 105	.7769	.4947	Q.3787
3	As1890	-.0106	1.064	1.051	-.0548	.1924	.1957
4	Ba4934	.0070	1.088	1.086	.0105	.2200	.2089
5	Be3130	.0003	1.077	1.072	.0019	.2166	Q.2184
6	Ca3179	72.84	72.67	73.47	71.67	72.10	Q.2205
7	Cd2265	-.0004	1.049	1.040	.0023	.2040	.2039
8	Co2286	.0017	1.080	1.070	.0094	.2125	.2089
9	Cr2677	.0031	1.069	1.063	.0101	.2132	.2103
0	Cu3247	.0031	1.115	1.116	-.0306	.2101	.2023
1	Fe2714	.9804	2.182	2.180	-.4075	.2317	Q.2522
2	K_7664	1.726	13.48	12.55	.6063	2.738	Q1.873
3	Mg2790	1.951	2.968	2.986	4.331	4.571	.1998
4	Mn2576	.1295	1.197	1.194	.0022	.2114	.2071
5	Ni2316	.0008	1.067	1.064	.0255	.2117	.2076
6	2203/1	.0081	1.087	1.083	.0059	.2281	.2259
7	2203/2	-.0169	1.076	1.089	-.0488	.1990	.1902
8	1960/1	.0039	1.055	1.053	.0488	.2113	.2160
9	1960/2	-.0062	1.066	1.072	-.0548	.2018	.2099
0	Sb2068	.0015	1.021	1.029	.0167	.2114	.2087
1	Sn1899	.0006	2.188	2.176	.0266	.2285	.2102
2	Tl1908	-.0063	1.110	1.125	.0277	.2080	.2102
3	V_2924	.0028	1.042	1.036	.0050	.2067	.2044
4	Zn2062	.0282	1.087	1.080	.0267	.2381	.2062
5	Pb2203	.0002	1.084	1.085	-.0105	.2192	Q.2143
6	Se1960	.0008	1.059	1.060	.0159	.2088	Q.2143

ms/msd
90RPD
0.9590

	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
1	Ag3280	1.054	-.0001	.0009	-.0000	-.0002	.3345
2	Al3082	Q1.192	H.1746	Q.2045	.1805	52.63	53.00
3	As1890	1.031	L-.0102	Q.0257	Q-.0012	Q-.0161	1.059
4	Ba4934	1.030	.0002	.0419	.0115	.0004	.3214
5	Be3130	Q1.078	.0002	Q.0013	.0006	.0003	.1094
6	Ca3179	1.032	-.0106	.0879	.0660	53.32	53.37
7	Cd2265	1.013	-.0007	Q.0006	-.0002	.0019	.3193
8	Co2286	1.040	.0030	Q.0142	.0026	.0030	.3250
9	Cr2677	1.036	.0017	Q.0075	Q.0031	.0022	.3258
0	Cu3247	1.035	L-.0071	Q-.0025	-.0066	Q.0254	Q.3655
1	Fe2714	Q1.206	-.0274	Q.0540	.0133	57.16	57.38

#	Element	icv 2	icb	ss i	ss i low	ics a	ics ab
12	K_7664	Q9.003	.0239	.2017	-.0803	Q.3347	Q32.39
13	Mg2790	.9769	.0173	.0217	.0046	52.86	53.19
14	Mn2576	1.030	.0001	.0106	Q.0032	.0014	.2179
15	Ni2316	1.023	.0024	Q.0153	.0025	.0002	.3203
16	2203/1	1.045	.0045	.0190	.0077	.0374	1.134
17	2203/2	1.039	-.0080	-.0005	-.0112	-.0117	1.102
18	1960/1	1.027	.0058	.0409	.0178	.0104	.5354
19	1960/2	1.047	-.0014	.0426	.0053	.0099	.5407
20	Sb2068	.9985	H.0038	Q.0128	.0081	.0185	1.028
21	Sn1899	Q1.056	.0005	-.0001	.0027	.0090	1.104
22	Tl1908	Q1.080	H.0023	.0426	.0093	Q.0352	1.186
23	V_2924	1.019	.0016	.0118	Q.0043	.0018	.3203
24	Zn2062	1.033	-.0003	.0093	.0027	.0035	.3190
25	Pb2203	1.043	.0007	Q.0129	Q.0018	Q.0214	1.124
26	Se1960	1.034	.0037	.0418	Q.0140	.0103	.5372

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CASE NARRATIVE for Project Number: 26529
Client Project: N.S. Mayport SWMU 15 / 149294-CTO 0007
Task Order Manager: David Garrity

The following items were noted concerning this project:

1. The following samples were received by Accura Analytical Laboratory on 12/16/00 at 1120:

Client I.D.	Laboratory I.D.
007-MW01S-Q4-00	AC05278
007-MW03S-Q4-00	AC05279
007-MW04S-Q4-00	AC05280
007-MW05S-Q4-00	AC05281
007-MW08S-Q4-00	AC05282
007-DUP-Q4-00	AC05283
007-EQB-Q3-00	AC05284

2. The sample cooler temperature was 2^0C upon receipt.

3. The J values noted for the Pesticides analyses indicate estimated values where the compounds are present at concentrations that are less than the quantitation limits, but above the method detection limits.

4. The following samples underwent TBA cleanup due to the sample matrix:

Pesticides – SW-846-8081A
007-MW01S-Q4-00
007-MW04S-Q4-00
007-DUP-Q4-00

All analytes for these samples except for Endrin aldehyde were reported from the TBA cleaned extract. All Endrin aldehyde results were reported from the non-TBA cleaned extract due to breakdown of the analyte during the cleanup process.

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5. The batch QC for the following analysis consisted of LCS/LCSD due to insufficient sample volume for MS/MSD analysis:

   Pesticides – SW-846-8081A

   The LCS/LCSD results are reported on the QC spreadsheet in the MS/MSD columns.

Quality Assurance

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FL Certification # E87429 NC Certification # 483 SC Certification # 98015 USACE-MRD Approved

LABORATORY REPORT

Accura Sample ID #: AC05278 **Accura Project #: 26529**

Client: CH2M HILL - CCI Date Sampled: 12/15/00

Client Contact: DAVID GARRITY Date Received: 12/16/00

Client Project Number: 149294 - CTO 0007 Date Reported: 1/3/01

Client Project Name: N.S. Mayport SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW01S-Q4-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 12/18/00 Date Analyzed: 12/20/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/22/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.31	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/22/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-160)	44	
Tetrachloro-m-xylene (Range 21-131)	78	

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LABORATORY REPORT

Accura Sample ID #: AC05279 **Accura Project #: 26529**

Client: CH2M HILL - CCI Date Sampled: 12/15/00

Client Contact: DAVID GARRITY Date Received: 12/16/00

Client Project Number: 149294 - CTO 0007 Date Reported: 1/3/01

Client Project Name: N.S. Mayport SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW03S-Q4-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 12/18/00 Date Analyzed: 12/20/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-160)	81	
Tetrachloro-m-xylene (Range 21-131)	83	

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LABORATORY REPORT

Accura Sample ID #: AC05280 **Accura Project #: 26529**

Client: CH2M HILL - CCI Date Sampled: 12/15/00

Client Contact: DAVID GARRITY Date Received: 12/16/00

Client Project Number: 149294 - CTO 0007 Date Reported: 1/3/01

Client Project Name: N.S. Mayport SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW04S-Q4-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 12/18/00 Date Analyzed: 12/20/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.037	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/22/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	0.15	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.56	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	0.040J	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	0.035J	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/22/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-160)	25	
Tetrachloro-m-xylene (Range 21-131)	74	

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LABORATORY REPORT

Accura Sample ID #: AC05281 **Accura Project #: 26529**

Client: CH2M HILL - CCI Date Sampled: 12/15/00

Client Contact: DAVID GARRITY Date Received: 12/16/00

Client Project Number: 149294 - CTO 0007 Date Reported: 1/3/01

Client Project Name: N.S. Mayport SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW05S-Q4-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 12/18/00 Date Analyzed: 12/20/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-160)	89	
Tetrachloro-m-xylene (Range 21-131)	82	

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LABORATORY REPORT

Accura Sample ID #: AC05282 **Accura Project #: 26529**

Client: CH2M HILL - CCI Date Sampled: 12/15/00

Client Contact: DAVID GARRITY Date Received: 12/16/00

Client Project Number: 149294 - CTO 0007 Date Reported: 1/3/01

Client Project Name: N.S. Mayport SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-MW08S-Q4-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 12/18/00 Date Analyzed: 12/20/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-160)	90	
Tetrachloro-m-xylene (Range 21-131)	130	

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LABORATORY REPORT

Accura Sample ID #: AC05283 **Accura Project #: 26529**

Client: CH2M HILL - CCI Date Sampled: 12/15/00

Client Contact: DAVID GARRITY Date Received: 12/16/00

Client Project Number: 149294 - CTO 0007 Date Reported: 1/3/01

Client Project Name: N.S. Mayport SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-DUP-Q4-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 12/18/00 Date Analyzed: 12/20/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	0.028	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/22/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	0.11	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	0.61	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	0.040J	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	0.040J	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/22/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-160)	27	
Tetrachloro-m-xylene (Range 21-131)	119	

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LABORATORY REPORT

Accura Sample ID #: AC05284 **Accura Project #: 26529**

Client: CH2M HILL - CCI Date Sampled: 12/15/00

Client Contact: DAVID GARRITY Date Received: 12/16/00

Client Project Number: 149294 - CTO 0007 Date Reported: 1/3/01

Client Project Name: N.S. Mayport SWMU 15 Sample Matrix: WATER

Client Sample ID: 007-EQB-Q3-00

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 12/18/00 Date Analyzed: 12/20/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest Sample Surrogates (Water Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range D-160)	59	
Tetrachloro-m-xylene (Range 21-131)	81	

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LABORATORY REPORT

Accura Sample ID #: AC05285 **Accura Project #: 26529**

Client: CH2M HILL - CCI Date Sampled: 12/15/00

Client Contact: DAVID GARRITY Date Received: 12/16/00

Client Project Number: 149294 - CTO 0007 Date Reported: 1/15/01

Client Project Name: N.S. Mayport SWMU 15 Sample Matrix: WATER

Client Sample ID: METHOD BLANK

ANALYSIS: Metals Method Ref: 3010A/6010B

Date Ext/Dig/Prep: 12/18/00 Date Analyzed: 12/20/00 Result Units: mg/L

Analyte Name	Analytical Results	Reported Detection Limits
Arsenic	<RDL	0.0050

ANALYSIS: Pesticides Navy Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: ug/L

Analyte Name	Analytical Results	Reported Detection Limits
4,4'-DDD	<RDL	0.10
4,4'-DDE	<RDL	0.10
4,4'-DDT	<RDL	0.10
Aldrin	<RDL	0.050
alpha- Chlordane	<RDL	0.050
alpha-BHC	<RDL	0.050
alpha-Endosulfan	<RDL	0.050
beta-BHC	<RDL	0.050
beta-Endosulfan	<RDL	0.10
delta-BHC	<RDL	0.050
Dieldrin	<RDL	0.10
Endosulfan sulfate	<RDL	0.10
Endrin	<RDL	0.10
Endrin aldehyde	<RDL	0.10
Endrin Ketone	<RDL	0.10
gamma-BHC	<RDL	0.050
gamma-Chlordane	<RDL	0.050
Heptachlor	<RDL	0.050
Heptachlor epoxide	<RDL	0.050
Methoxychlor	<RDL	0.50
Toxaphene	<RDL	5.0

ANALYSIS: X Pest QC Surrogates (Waters) Method Ref: 8081A

Date Ext/Dig/Prep: 12/20/00 Date Analyzed: 12/21/00 Result Units: %

Analyte Name	Analytical Results	Reported Detection Limits
Decachlorobiphenyl (Range 42-153)	72	
Tetrachloro-m-xylene (Range 51-123)	82	

Accura Analytical Laboratory, Inc.

#26529 / 2°C Sul

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite 700
Atlanta, GA 30346-1278
Tel No (770) 604-9182 ; Fax No (770) 604-9282

CHAIN-OF-CUSTODY RECORD

AAL# 26529

COC NUMBER: **149294-03**

PROJECT NAME:	PROJECT NUMBER:	LAB NAME AND CONTACT:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 1 (Name and Company)	RECIPIENT 1 (Address, Tel No. , and Fax No.):
N.S. Mayport SWMU 15	**149294**	**Bonnie Hogue Accura Analytical Laboratory**	**Jennifer Zimmerman J.A Jones Env. Services**	**6219 Authority Ave. Building 1 Jacksonville, FL 32221 Ph:(904) 7774812 Fax: (904) 7774262**
PROJECT PHASE/SITE/TASK:	CTO OR DO NUMBER:	LAB PO NUMBER:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 2 (Name and Company)	RECIPIENT 2 (Address, Tel No. , and Fax No.):
SWMU 15 Quarterly GW	**0007**	**1786**	**Jeff Wilmoth CH2M Hill Constuctors, Inc.**	**115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 30346 Ph:(770)604-9182 Ext.561 Fax:604-9282**
PROJECT CONTACT:	PROJECT TEL NO AND FAX NO:	LAB TEL NO AND FAX NO:	FAX AND MAIL REPORTS/EDD TO:: RECIPIENT 3 (Name and Company)	RECIPIENT 3 (Address, Tel No. , and Fax No.):
David Garrity	**Ph:(904)777-4812 Fax:(904) 777-4262**	**Ph:(770) 449-8800 Fax:(770) 449-5477**		

ANALYSES REQUIRED (Include Method Numbers)

ITEM	SAMPLE IDENTIFIER	SAMPLE DESCRIPTION/LOCATION	MATRIX (see codes on back)	DATE COLLECTED	TIME COLLECTED	DATA PKG LEVEL (see codes on back)	TAT (calendar days)	TCL Pesticides by 8081A	Arsenic by 7060A									SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID AC
1	007-MW01S-Q4-00	MPT-15-MWO-1S	W	12/15/00	9:35	III/C	14	2	1									Grab		05278
2	007-MW03S-Q4-00	MPT-15-MWO-3S	W	12/15/00	10:25	III/C	14	2	1									Grab		05279
3	007-MW04S-Q4-00	MPT-15-MWO-4S	W	12/15/00	11:00	III/C	14	2	1									Grab		05280
4	007-MW05S-Q4-00	MPT-15-MWO-5S	W	12/15/00	11:25	III/C	14	2	1									Grab		05281
5	007-MW08S-Q4-00	MPT-15-MWO-8S	W	12/15/00	9:55	III/C	14	2	1									Grab		05282
6	007-DUP-Q4-00	Duplicate	W			III/C	14	2	1									Grab		05283
7	007-EQB-Q3-00	Equipment Blank	W	12/15/00	9:15	III/C	14	2	1									Grab	Prepared in the Field	05284
8																				
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Randy Dumaop / Sott Sloan J.A. Jones Environmental Services	**Federal Express TRK#** 790424872658, 791923279009. Saturday Delivery	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature: R.Dumaop	12/15/00	17:00	Printed Name and Signature: Federal Express	12/15/00	17:00
Printed Name and Signature: Fedex	12/16/00	11:20	Printed Name and Signature:	12/16/00	11:20
Printed Name and Signature:			Printed Name and Signature:		

Distribution: [ ] **Original** - Laboratory (To be returned with Analytical Report); [ ] **Copy 1** - Project File; [ ] **Copy 2** - PMO

Form CCI001, Rev 02/00

TABLE 2-3
PROJECT QUALITY CONTROL OBJECTIVES
AAL PROJECT #26529

		Project Control Recoveries				Accuracy Limits		Project Control		Precision Limits		Project Control Recoveries		Accuracy Limits		Project Control		Precision Limits	
		MS	MSD	MS	MSD	MS/MSD Recoveries		MS/MSD % Deviation		MS/MSD Deviation		LSC	LCS	LCS Recoveries		Field Dup % Deviation		Field Dup Deviation	
Method No	Analyte / Component	Water		Soil		Water	Soil	Water	Soil	Water	Soil	Water	Soil	Water	Soil			Water	Soil
TCL PESTICIDES/AROCHLORS						%	%			%	%			%	%			%	%
8081A	alpha-BHC	78	88			60-140	20-150	12%	#DIV/0!	<30	<50	80		75-125	65-135			<50	<75
8081A	beta-BHC	81	95			60-140	20-150	16%	#VALUE!	<30	<50	85		51-125	41-133			<50	<75
8081A	delta-BHC	85	92			60-140	20-150	8%	#VALUE!	<30	<50	84		75-126	65-136			<50	<75
8081A	gamma-BHC (Lindane)	84	94			60-140	20-150	11%	#VALUE!	<30	<50	86		73-125	63-130			<50	<75
8081A	Heptachlor	92	99			60-140	20-150	7%	#VALUE!	<30	<50	98		45-128	35-138			<50	<75
8081A	Aldrin	96	107			60-140	20-150	11%	#VALUE!	<30	<50	102		47-125	37-126			<50	<75
8081A	Heptachlor epoxide	103	107			60-140	20-150	4%	#VALUE!	<30	<50	104		53-134	43-144			<50	<75
8081A	Endosulfan I	97	100			60-140	20-150	3%	#VALUE!	<30	<50	91		49-143	39-153			<50	<75
8081A	Dieldrin	104	108			60-140	20-150	4%	#VALUE!	<30	<50	99		42-132	32-142			<50	<75
8081A	4,4'-DDE	107	114			60-140	20-150	6%	#VALUE!	<30	<50	103		45-139	35-149			<50	<75
8081A	Endrin	114	117			60-140	20-150	3%	#VALUE!	<30	<50	107		43-134	33-144			<50	<75
8081A	Endosulfan II	105	107			60-140	20-150	2%	#VALUE!	<30	<50	97		75-159	65-169			<50	<75
8081A	4,4'-DDD	106	112			60-140	20-150	6%	#VALUE!	<30	<50	96		48-136	38-146			<50	<75
8081A	Endosulfan sulfate	109	111			60-140	20-150	2%	#VALUE!	<30	<50	103		46-141	36-151			<50	<75
8081A	4,4'-DDT	93	98			60-140	20-150	5%	#VALUE!	<30	<50	96		34-143	25-153			<50	<75
8081A	Methoxychlor	95	97			60-140	20-150	2%	#VALUE!	<30	<50	100		73-142	63-152			<50	<75
8081A	Endrin ketone	101	104			60-140	20-150	3%	#VALUE!	<30	<50	96		43-134	33-144			<50	<75
8081A	Endrin aldehyde	98	102			60-140	20-150	4%	#VALUE!	<30	<50	98		75-150	35-160			<50	<75
8081A	alpha-Chlordane	106	112			60-140	20-150	6%	#VALUE!	<30	<50	106		41-125	31-135			<50	<75
8081A	gamma-Chlordane	98	104			60-140	20-150	6%	#VALUE!	<30	<50	99		41-125	31-133			<50	<75
8081A	Toxaphene					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Arochlor-1016					60-140	20-150	#VALUE!	#VALUE!	<30	<50			54-125	44-127			<50	<75
8081A	Arochlor-1221					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Arochlor-1232					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Arochlor-1242					60-140	20-150	#VALUE!	#VALUE!	<30	<50			39-150	29-160			<50	<75
8081A	Arochlor-1248					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Arochlor-1254					60-140	20-150	#VALUE!	#VALUE!	<30	<50			29-131	25-141			<50	<75
8081A	Arochlor-1260					60-140	20-150	#VALUE!	#VALUE!	<30	<50			41-126	31-136			<50	<75
8081A	Decachlorobiphenyl (DCBP) (Surr)	72	76			34-133	25-143	5%	#VALUE!			73							
8081A	Tetrachloro-m-xylene (TCMX) (Surr)	71	76			45-125	35-135	7%	#VALUE!			65							
TAL METALS BY ICP						mg/L	mg/kg			%	%			%	%			%	%
6010B	Arsenic	108	105			50-150	30-170	3%	#VALUE!	<30	<50	100		80-120	80-120			<50	<75

Notes:
1) SW-846 Methods unless otherwise noted
2) Includes sediments, waste, solids

NS = Not Specified
NA = Not Applicable

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Checklist

Project #: 26529 **Instrument Used:** Trace ICAP/ICAP/GFAA/FIMS Hg

Reviewer Questions

1. Is the ICV within ± 10% for 6010B, or 5% for 200.7? yes
2. For Hg and GFAA, is the curve acceptable, (>0.995 correlation coefficient)? –
3. Verified the correct dates and times are entered. yes
4. Verified the sample results reported with the proper significant figures in the logbook and in the LIMS. yes
5. Verified all dilution factors are taken into account for the calculation. yes
6. Verified the RDL is correct according to dilutions and reported with the correct significant figures. yes

Analyst Questions

7. Is the Blank <1/2 RDL? yes If not, has the RDL been raised or the samples reanalyzed? _____
8. Are the LCS/LCSD within limits? yes If not, why, or are the samples being reanalyzed? _____
9. Duplicate AAL sample number 05283
   Is the RPD acceptable? yes If not, what is the reason? _____
10. MS/MSD AAL sample number 05283
    Are the recoveries acceptable? yes If not, what is the reason? _____
11. Sample numbers requiring dilution? _____
    Reason for dilution. _____
12. Are all special requirements on project sheet completed? _____ If unable to complete, has the project manager been notified? _____
13. Any additional comments. MS/MSD, LCS 90 Rec. enter on QC table.

Analyst entering results in Labworks. [illegible] Date: 12/21/00

Peer Reviewer: _____ mp Date: 12/21/00

Peer review is responsible for reviewing all above questions.

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1-Blank	DEC2000	WATERS2	12/20/00	10:48		X	IR
2	STD8	DEC2000	WATERS2	12/20/00	10:54		X	IR
3	STD3	DEC2000	WATERS2	12/20/00	10:58		X	IR
4	STD4	DEC2000	WATERS2	12/20/00	11:03		X	IR
5	STD2	DEC2000	WATERS2	12/20/00	11:07		X	IR
6	ICV 2	DEC2000	WATERS2	12/20/00	11:12	ma	Q	CONC
7	ICV 1	DEC2000	WATERS2	12/20/00	11:18	ma	Q	CONC
8	ICB	DEC2000	WATERS2	12/20/00	11:25	ma	B	CONC
9	ICS A	DEC2000	WATERS2	12/20/00	11:31	ma	Q	CONC
10	ICS AB	DEC2000	WATERS2	12/20/00	11:38	ma	Q	CONC
11	SS I	DEC2000	WATERS2	12/20/00	11:46	ma	Q	CONC
12	SS I LOW	DEC2000	WATERS2	12/20/00	11:52	ma	Q	CONC
13	blk 1214rerpb	DEC2000	WATERS2	12/20/00	11:58	ma	S	CONC
14	04815 tl	DEC2000	WATERS2	12/20/00	12:04	ma	S	CONC
15	04819 tl	DEC2000	WATERS2	12/20/00	12:11	ma	S	CONC
16	04827 tl	DEC2000	WATERS2	12/20/00	12:17	ma	S	CONC
17	ICV 2	DEC2000	WATERS2	12/20/00	12:25	ma	Q	CONC
18	ICB	DEC2000	WATERS2	12/20/00	12:32	ma	B	CONC
19	qmw1218004 1345	DEC2000	WATERS2	12/20/00	12:38	ma	S	CONC
20	qmw1218005lcs	DEC2000	WATERS2	12/20/00	12:44	ma	S	CONC
21	qmw1218006lcsd	DEC2000	WATERS2	12/20/00	12:50	ma	S	CONC
22	05138	DEC2000	WATERS2	12/20/00	12:56	ma	S	CONC
23	05139	DEC2000	WATERS2	12/20/00	13:02	ma	S	CONC
24	05140	DEC2000	WATERS2	12/20/00	13:09	ma	S	CONC
25	05141	DEC2000	WATERS2	12/20/00	13:15	ma	S	CONC
26	05142	DEC2000	WATERS2	12/20/00	13:21	ma	S	CONC
27	05143	DEC2000	WATERS2	12/20/00	13:27	ma	S	CONC
28	05144	DEC2000	WATERS2	12/20/00	13:33	ma	S	CONC
29	ICV 2	DEC2000	WATERS2	12/20/00	13:41	ma	Q	CONC
30	ICV 1	DEC2000	WATERS2	12/20/00	13:48	ma	Q	CONC
31	ICB	DEC2000	WATERS2	12/20/00	13:55	ma	B	CONC
32	05188	DEC2000	WATERS2	12/20/00	14:02	ma	S	CONC
33	05191	DEC2000	WATERS2	12/20/00	14:08	ma	S	CONC
34	05194	DEC2000	WATERS2	12/20/00	14:14	ma	S	CONC
35	05194 d	DEC2000	WATERS2	12/20/00	14:20	ma	S	CONC
36	05194 ms	DEC2000	WATERS2	12/20/00	14:26	ma	S	CONC
37	05194 msd	DEC2000	WATERS2	12/20/00	14:32	ma	S	CONC
38	05197	DEC2000	WATERS2	12/20/00	14:39	ma	S	CONC
39	05278	DEC2000	WATERS2	12/20/00	14:45	ma	S	CONC
40	05279	DEC2000	WATERS2	12/20/00	14:51	ma	S	CONC
41	05280	DEC2000	WATERS2	12/20/00	14:57	ma	S	CONC
42	ICV 2	DEC2000	WATERS2	12/20/00	15:05	ma	Q	CONC
43	ICV 1	DEC2000	WATERS2	12/20/00	15:12	ma	Q	CONC
44	ICB	DEC2000	WATERS2	12/20/00	15:19	ma	B	CONC
45	05281	DEC2000	WATERS2	12/20/00	15:25	ma	S	CONC
46	05282	DEC2000	WATERS2	12/20/00	15:31	ma	S	CONC
47	05284	DEC2000	WATERS2	12/20/00	15:37	ma	S	CONC
48	05283	DEC2000	WATERS2	12/20/00	15:43	ma	S	CONC
49	05283 d	DEC2000	WATERS2	12/20/00	15:49	ma	S	CONC
50	05283 ms	DEC2000	WATERS2	12/20/00	15:56	ma	S	CONC
51	05283 msd	DEC2000	WATERS2	12/20/00	16:02	ma	S	CONC
52	05138 1:4sd	DEC2000	WATERS2	12/20/00	16:08	ma	S	CONC
53	05138 1:1msa	DEC2000	WATERS2	12/20/00	16:14	ma	S	CONC

PrOj 24529 (AS)

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	04518 TL	DEC2000	WATERS2	12/20/00	16:29	ma	S	CONC
55	ICV 2	DEC2000	WATERS2	12/20/00	16:34	ma	Q	CONC
56	ICV 1	DEC2000	WATERS2	12/20/00	16:41	ma	Q	CONC
57	ICB	DEC2000	WATERS2	12/20/00	16:48	ma	B	CONC
58	SS I	DEC2000	WATERS2	12/20/00	16:54	ma	Q	CONC
59	SS I LOW	DEC2000	WATERS2	12/20/00	17:00	ma	Q	CONC
60	ICS A	DEC2000	WATERS2	12/20/00	17:07	ma	Q	CONC
61	ICS AB	DEC2000	WATERS2	12/20/00	17:13	ma	Q	CONC

#	Element	STD'lank	STD8	STD3	STD4	STD2	ICV 2
1	Ag3280	-.00094	.76292				1.031
2	Al3082	.01755		.10701			Q.9379
3	As1890	-.0043			.39865		Q.9356
4	Ba4934	.00001				2.44422	1.021
5	Be3130	-.00297		1.33336			Q1.067
6	Ca3179	.00114				.04839	1.010
7	Cd2265	-.00071				1.06365	1.006
8	Co2286	-.00132				.80244	1.020
9	Cr2677	.00034			.56686		.9693
10	Cu3247	.0096				.72777	1.008
11	Fe2714	.00055		.02911			Q1.089
12	K_7664	.00948				3.5207	Q8.899
13	Mg2790	-.00004				.0539	.9737
14	Mn2576	.00043				.67742	1.018
15	Ni2316	-.00334		.55702			1.005
16	2203/1	.0081				2.58223	1.015
17	2203/2	.00305				2.33383	1.007
18	1960/1	-.0426			1.60588		.9959
19	1960/2	.01092			.75537		.9832
20	Sb2068	.00231		.49872			.9925
21	Sn1899	-.00134		.30502			.9908
22	Tl1908	-.00137		.15624			1.042
23	V_2924	-.00002			.01371		.9615
24	Zn2062	-.0002				.13442	1.003
25	Pb2203						1.013
26	Se1960						.9918

#	Element	ICV 1	ICB	ICS A	ICS AB	SS I	SS I LOW
1	Ag3280	.2023	.0000	.0003	.3218	.0010	.0000
2	Al3082	Q.1705	-.0181	47.42	49.94	Q.0489	.0061
3	As1890	.1981	-.0047	-.0025	1.022	.0397	Q.0052
4	Ba4934	.2059	.0001	.0002	.3104	.0412	.0109
5	Be3130	Q.2129	.0002	.0002	.1015	Q.0013	.0005
6	Ca3179	.1983	-.0058	48.95	51.17	.0664	.0001
7	Cd2265	.1998	.0000	.0072	.3126	.0009	-.0002
8	Co2286	.2041	.0007	.0016	.3099	.0106	Q.0036
9	Cr2677	.1925	.0001	.0013	.2892	.0034	Q.0005
10	Cu3247	.2009	-.0021	Q.0280	.3506	Q.0020	-.0019
11	Fe2714	Q.2249	.0005	47.22	49.66	Q.0380	.0135
12	K_7664	Q1.740	-.0136	Q.2005	Q26.70	-.0266	-.0245
13	Mg2790	.1951	.0003	49.09	51.37	.0128	.0041
14	Mn2576	.2032	-.0000	.0011	.2057	.0103	.0026
15	Ni2316	.2011	.0011	.0035	.3084	.0117	Q.0041
16	2203/1	.1970	-.0005	.0188	1.066	.0097	.0012
17	2203/2	.1986	-.0013	.0020	1.062	.0104	.0028
18	1960/1	.1994	.0036	.0196	.5403	.0531	.0139
19	1960/2	.2011	.0011	-.0027	.5299	.0417	.0087
20	Sb2068	.2005	.0007	.0106	1.071	.0097	.0021
21	Sn1899	.2000	.0036	.0074	1.049	.0054	.0066
22	Tl1908	.2066	.0035	Q.0407	1.168	.0432	Q.0159
23	V_2924	.1915	.0001	.0000	.2952	.0111	Q.0038

#	Element	ICV 1	ICB	ICS A	ICS AB	SS I	SS I LOW
24	Zn2062	.1978	.0008	.0029	.3005	.0092	.0021
25	Pb2203	.1978	-.0005	.0135	1.065	.0102	.0020
26	Se1960	.2002	.0030	.0121	.5368	Q.0495	Q.0124

#	Element	blk'erpb	04815 tl	04819 tl	04827 tl	ICV 2	ICB
1	Ag3280	-.0002	-.0001	-.0004	.0001	1.053	.0001
2	Al3082	.0128	4.263	-.3102	1.132	1.035	.0473
3	As1890	-.0099	-.0022	.0094	-.0056	.9629	.0001
4	Ba4934	.0027	.0503	.0000	.3106	1.044	.0002
5	Be3130	.0002	.0006	.0034	.0004	Q1.086	.0004
6	Ca3179	.1107	71.75	-.0090	44.91	1.015	-.0088
7	Cd2265	-.0002	.0010	.0004	.0006	1.004	-.0003
8	Co2286	.0005	.0021	.0016	.0045	1.022	.0006
9	Cr2677	.0038	.0060	-.0007	.0175	.9647	-.0001
10	Cu3247	-.0034	.0192	-.0220	.0106	1.049	-.0040
11	Fe2714	.0288	9.201	-.0122	6.151	Q1.089	.0042
12	K_7664	.0028	1.602	.0151	.9376	Q9.142	-.0124
13	Mg2790	.0420	39.95	.0029	21.31	.9735	.0028
14	Mn2576	.0010	.1567	-.0008	.2440	1.023	.0001
15	Ni2316	.0015	.0113	.0055	.0185	.9970	.0022
16	2203/1	.0251	.0094	.0000	.0068	1.007	.0007
17	2203/2	.0233	.0090	.0011	.0044	1.021	.0014
18	1960/1	.0075	.0005	.0300	.0011	.9817	.0088
19	1960/2	.0013	.0037	-.0166	.0014	.9916	-.0018
20	Sb2068	.0015	.0042	-.0069	.0012	.9938	.0009
21	Sn1899	-.0028	.0030	.0006	.0002	.9916	.0046
22	Tl1908	-.0008	.0099	.0117	.0044	Q1.083	.0008
23	V_2924	.0002	.0114	.0028	.0074	.9606	.0002
24	Zn2062	.0013	.0277	.0014	.0362	.9791	.0005
25	Pb2203	.0247	.0095	.0005	.0062	1.012	.0012
26	Se1960	.0057	.0017	.0146	.0014	.9852	.0055

#	Element	qmw'1345	qmw'5lcs	qmw'lcsd	05138	05139	05140
		12:38					
1	Ag3280	.0002	.9343	.8670	.0000	.0001	-.0002
2	Al3082	.0291	1.033	.9526	15.76	15.34	15.27
3	As1890	-.0097	.9951	.9402	.0049	.0017	-.0006
4	Ba4934	.0084	1.055	.9922	.1168	.0984	.0959
5	Be3130	.0004	1.031	.9707	.0033	.0032	.0015
6	Ca3179	.0613	1.084	1.036	22.42	23.67	33.42
7	Cd2265	-.0007	1.022	.9596	.0054	.0048	.0048
8	Co2286	.0002	1.036	.9731	.0136	.0114	.0152
9	Cr2677	-.0003	.9756	.9150	.1643	.1623	.3091
10	Cu3247	-.0043	1.050	.9791	.0167	.0146	.0205
11	Fe2714	.0118	1.105	1.028	17.01	15.22	13.92
12	K_7664	-.0127	9.899	9.140	1.720	1.700	2.275
13	Mg2790	.0017	.9760	.9080	1.825	1.830	3.610
14	Mn2576	.0003	1.043	.9785	1.654	1.465	2.460
15	Ni2316	.0010	1.008	.9520	.0415	.0401	.0347
16	2203/1	.0043	1.008	.9500	.0190	.0167	.0143
17	2203/2	.0006	1.021	.9712	.0161	.0128	.0118

#	Element	qmw'1345	qmw'5lcs	qmw'lcsd	05138	05139	05140
18	1960/1	.0015	.9509	.8979	.0132	.0125	.0069
19	1960/2	.0043	.9624	.9078	.0007	-.0022	.0004
20	Sb2068	.0018	1.001	.9432	.0066	.0035	.0053
21	Sn1899	.0013	2.064	1.946	.0061	.0070	.0050
22	Tl1908	-.0021	1.065	.9941	.0167	.0163	.0160
23	V_2924	.0002	.9716	.9106	.0431	.0423	.0352
24	Zn2062	.0023	1.004	.9507	.2502	.2483	.2438
25	Pb2203	.0033	1.013	.9573	.0182	.0156	.0137
26	Se1960	.0026	.9549	.9014	.0091	.0077	.0048

#	Element	05141	05142	05143	05144	ICV 2	ICV 1
1	Ag3280	.0001	-.0002	.0002	.0001	1.046	.2079
2	Al3082	-.1939	9.299	3.827	.0519	1.025	Q.3051
3	As1890	-.0067	.0020	-.0030	-.0086	.9532	.1999
4	Ba4934	.0432	.1421	.0690	.0216	1.018	.2082
5	Be3130	.0001	.0010	.0004	.0001	Q1.094	Q.2227
6	Ca3179	84.40	65.93	105.0	5.625	1.024	.1994
7	Cd2265	-.0005	.0005	-.0004	-.0014	1.001	.2039
8	Co2286	.0007	.0076	.0059	-.0006	1.022	.2086
9	Cr2677	.0148	.0675	.0199	.0005	.9648	.1964
10	Cu3247	.0065	.0560	.0150	-.0016	1.022	.2031
11	Fe2714	.0818	7.081	3.257	.0196	Q1.091	Q.2270
12	K_7664	.9372	3.140	2.778	2.157	Q8.835	Q1.695
13	Mg2790	3.296	5.207	7.092	1.682	.9454	.1909
14	Mn2576	.0193	1.842	.4504	.0007	1.022	.2084
15	Ni2316	.0022	.0167	.0253	.0025	.9938	.2042
16	2203/1	.0030	.0115	.0046	-.0028	1.000	.2017
17	2203/2	.0003	.0077	.0021	.0021	1.020	.2064
18	1960/1	.0037	.0083	.0074	.0026	.9666	.1994
19	1960/2	.0027	-.0019	.0024	.0034	.9746	.2013
20	Sb2068	.0020	.0046	.0033	.0026	.9785	.2034
21	Sn1899	-.0007	.0048	.0010	.0026	.9928	.2041
22	Tl1908	.0033	.0058	.0044	.0007	Q1.085	Q.2178
23	V_2924	.0026	.0292	.0074	.0038	.9538	.1945
24	Zn2062	.0093	.1472	.0691	.0100	.9907	.2026
25	Pb2203	.0024	.0105	.0040	-.0010	1.007	.2035
26	Se1960	.0036	.0050	.0060	.0031	.9694	.2002

#	Element	ICB	05188	05191	05194	05194 d	05194 ms
1	Ag3280	.0003	.0002	.0143	.0053	.0057	.8238
2	Al3082	.0918	3.058	3.912	4.781	4.709	8.433
3	As1890	-.0057	-.0058	-.0038	-.0025	-.0035	.9471
4	Ba4934	.0003	.0388	.0803	.1037	.1007	1.102
5	Be3130	.0004	.0002	.0005	.0004	.0003	1.005
6	Ca3179	-.0137	7.116	20.18	9.182	9.100	10.32
7	Cd2265	.0000	-.0001	.0002	.0007	.0006	.9709
8	Co2286	.0014	.0021	.0043	.0044	.0047	.9945
9	Cr2677	.0001	.0035	.0088	.0098	.0095	.9327
10	Cu3247	-.0042	.0169	.0730	.0637	.0627	1.086
11	Fe2714	.0055	3.577	4.151	5.910	5.825	6.664

#	Element	ICB	05188	05191	05194	05194 d	05194 ms
12	K_7664	-.0150	4.287	6.934	4.563	4.427	15.17
13	Mg2790	.0026	1.108	2.531	1.719	1.703	2.696
14	Mn2576	.0001	.0608	.2192	.1654	.1638	1.155
15	Ni2316	.0021	.0042	.0081	.0076	.0076	.9681
16	2203/1	-.0001	.0187	.0353	.0555	.0567	1.031
17	2203/2	.0006	.0175	.0319	.0523	.0552	1.055
18	1960/1	.0049	.0053	.0054	.0076	.0089	.8910
19	1960/2	.0044	.0057	.0018	.0035	-.0004	.9115
20	Sb2068	.0035	.0018	.0038	.0042	.0052	.9212
21	Sn1899	.0045	.0031	.0047	.0069	.0051	1.860
22	Tl1908	.0009	.0025	.0055	.0067	.0059	1.056
23	V_2924	.0001	.0112	.0112	.0111	.0123	.9375
24	Zn2062	.0001	.0676	.2344	.2919	.2897	1.254
25	Pb2203	.0004	.0186	.0344	.0547	.0564	1.040
26	Se1960	.0049	.0056	.0044	.0064	.0060	.8980

#	Element	051' msd	05197	05278	05279	05280	ICV 2
				14:45	14:51	14:57	
1	Ag3280	.8693	.0028	.0002	.0002	.0002	1.004
2	Al3082	8.561	6.514	-.3812	-.2613	-.3792	.9763
3	As1890	.9431	-.0037	.0012	-.0085	.0373	Q.9396
4	Ba4934	1.088	.0843	.0196	.0120	.0220	.9857
5	Be3130	.9961	.0008	.0002	.0002	.0000	Q1.082
6	Ca3179	9.992	10.05	106.3	90.89	86.24	Q1.066
7	Cd2265	.9604	.0007	-.0003	-.0010	-.0010	.9845
8	Co2286	.9844	.0050	.0010	-.0003	.0004	1.000
9	Cr2677	.9257	.0087	.0036	.0004	.0041	.9465
10	Cu3247	1.072	.0436	.0147	.0062	.0129	.9910
11	Fe2714	6.785	7.372	2.313	.1634	.1442	Q1.235
12	K_7664	14.69	4.225	35.94	1.777	66.48	Q8.307
13	Mg2790	2.632	1.750	39.88	2.449	65.47	Q.9197
14	Mn2576	1.140	.1886	.1929	.0161	.0132	1.003
15	Ni2316	.9570	.0084	.0033	.0026	.0044	.9682
16	2203/1	1.023	.0725	.0673	.0027	-.0003	.9791
17	2203/2	1.045	.0698	.0660	.0016	-.0023	1.016
18	1960/1	.8876	.0068	.0078	.0043	.0123	.9318
19	1960/2	.9038	-.0011	.0013	.0024	-.0021	.9545
20	Sb2068	.9151	.0035	.0038	.0026	.0018	.9487
21	Sn1899	1.817	.0072	.0006	.0007	.0005	.9697
22	Tl1908	1.056	.0095	.0040	.0008	-.0031	1.053
23	V_2924	.9264	.0194	.0038	.0002	.0038	Q.9333
24	Zn2062	1.238	.2176	.0196	.0031	.0043	.9875
25	Pb2203	1.031	.0719	.0671	.0026	-.0007	.9915
26	Se1960	.8931	.0043	.0058	.0038	.0077	Q.9396

#	Element	ICV 1	ICB	05281	05282	05283	05284
				15:25	15:31	15:37	15:43
1	Ag3280	.2034	.0002	.0001	.0001	.0001	-.0002
2	Al3082	Q.2781	.0836	-.1581	-.2254	.1106	-.3698
3	As1890	.1984	-.0084	-.0048	-.0085	-.0069	.0275
4	Ba4934	.2020	.0001	.0188	.0115	.0064	.0097
5	Be3130	Q.2203	.0003	.0002	.0000	.0002	.0000

#	Element	ICV 1	ICB	05281	05282	05284	05284
6	Ca3179	.2011	-.0168	69.26	85.92	.0642	81.69
7	Cd2265	.1998	-.0005	-.0010	-.0010	-.0006	-.0013
8	Co2286	.2039	.0014	.0005	.0000	.0010	.0008
9	Cr2677	.1932	.0001	.0000	.0010	-.0002	.0039
10	Cu3247	.1965	-.0058	.0023	.0049	-.0055	.0134
11	Fe2714	Q.2299	-.0150	.1414	.0203	.0060	.0918
12	K_7664	Q1.591	.0081	.5550	1.700	-.0139	74.31
13	Mg2790	Q.1884	.0019	1.933	2.757	.0038	73.02
14	Mn2576	.2043	-.0001	.0043	.0025	-.0002	.0111
15	Ni2316	.1985	.0026	.0031	.0014	.0019	.0045
16	2203/1	.2006	.0024	.0014	.0054	.0015	.0011
17	2203/2	.2017	-.0010	-.0001	.0006	-.0002	-.0020
18	1960/1	.2014	.0091	.0037	.0046	.0039	.0097
19	1960/2	.1919	-.0002	.0026	.0027	-.0016	-.0044
20	Sb2068	.1982	.0006	.0020	.0054	.0001	.0032
21	Sn1899	.1980	-.0008	.0021	-.0002	.0019	.0079
22	Tl1908	Q.2127	.0001	.0021	.0008	.0010	-.0023
23	V_2924	.1915	.0002	.0002	.0001	-.0009	.0077
24	Zn2062	.2003	.0007	.0073	.0164	.0020	.0043
25	Pb2203	.2012	.0015	.0012	.0040	.0012	.0003
26	Se1960	.1985	.0062	.0035	.0042	.0022	.0052

#	Element	05283 d	05283 ms	052' msd	051':4sd	051'1msa	04518 TL
1	Ag3280	-.0001	1.074	1.091	.0014	.1860	
2	Al3082	-.3846	.7044 104	.7003 105	22.22	18.83	
3	As1890	.0285	1.112	1.074	.0148	.1777	
4	Ba4934	.0129	.9478	.9502	.1604	.3130	
5	Be3130	.0000	1.083	1.038	.0071	.2027	
6	Ca3179	85.29	85.12	85.41	33.75	27.62	
7	Cd2265	-.0009	1.040	.9994	.0085	.1878	
8	Co2286	.0011	1.086	1.036	.0266	.2051	
9	Cr2677	.0047	.9890	.9493	.2379	.3757	
10	Cu3247	.0134	1.125	1.072	-.0013	.1962	
11	Fe2714	.1081	1.228	1.176	24.90	20.85	
12	K_7664	75.33	92.27	90.67	2.338	3.515	
13	Mg2790	75.10	74.65	74.66	2.714	2.321	
14	Mn2576	.0116	1.059	1.015	2.396	2.171	
15	Ni2316	.0040	1.039	.9954	.0779	.2309	
16	2203/1	.0009	1.096	1.055	.0160	.2075	
17	2203/2	-.0002	1.146	1.096	.0240	.2055	
18	1960/1	.0104	.6095	.5423	.1162	.1926	
19	1960/2	-.0013	.6122	.5501	-.0418	.1725	
20	Sb2068	.0005	1.048	1.004	-.0010	.1790	
21	Sn1899	-.0011	2.199	2.126	.0401	.1957	
22	Tl1908	.0016	1.299	1.240	.0571	.2030	-.0012
23	V_2924	.0064	.9771	.9396	.0688	.2304	
24	Zn2062	.0052	1.071	1.022	.3893	.5009	
25	Pb2203	.0008	1.113	1.069	.0198	.2073	
26	Se1960	.0067	.6106	.5451	.0644	.1862	

#	Element	ICV 2	ICV 1	ICB	SS I	SS I LOW	ICS A
1	Ag3280	Q1.060	.2079	.0002	.0012	.0002	.0001
2	Al3082	1.034	Q.3010	.0892	Q.1277	.0751	44.39
3	As1890	.9849	.2076	-.0039	.0412	Q.0024	-.0014
4	Ba4934	1.019	.2030	.0002	.0406	.0108	.0003
5	Be3130	Q1.151	Q.2275	.0004	Q.0015	.0006	.0004
6	Ca3179	Q1.134	.2030	-.0171	.0536	-.0096	51.45
7	Cd2265	1.041	.2064	-.0001	Q.0004	-.0003	.0046
8	Co2286	Q1.059	.2101	.0013	.0117	Q.0036	.0022
9	Cr2677	1.007	.1993	-.0002	.0034	.0009	.0013
10	Cu3247	1.022	.1964	-.0059	Q-.0013	-.0045	Q.0241
11	Fe2714	Q1.360	Q.2470	-.0080	Q.0320	.0184	48.52
12	K_7664	Q8.369	Q1.563	.0006	-.0173	-.0112	Q.2071
13	Mg2790	Q.9415	Q.1858	.0011	.0073	.0047	46.85
14	Mn2576	Q1.063	.2107	-.0001	.0105	.0025	.0010
15	Ni2316	1.018	.2040	.0022	Q.0127	Q.0042	.0045
16	2203/1	1.023	.2025	.0012	.0102	.0026	.0205
17	2203/2	1.055	.2066	-.0018	.0103	.0034	.0018
18	1960/1	.9628	.1936	.0066	.0492	.0186	.0167
19	1960/2	.9830	.1912	-.0007	.0367	.0108	-.0038
20	Sb2068	.9815	.2011	.0009	.0110	.0021	.0115
21	Sn1899	1.028	.2064	-.0000	.0040	.0008	.0102
22	Tl1908	Q1.104	Q.2144	.0042	.0474	Q.0134	Q.0402
23	V_2924	.9790	.1942	.0002	.0109	Q.0038	.0002
24	Zn2062	Q1.074	Q.2113	.0011	.0112	.0021	.0024
25	Pb2203	1.034	.2041	.0004	.0105	Q.0031	.0145
26	Se1960	.9697	.1930	.0044	.0453	Q.0162	.0098

#	Element	ICS AB
1	Ag3280	.3237
2	Al3082	46.82
3	As1890	1.027
4	Ba4934	.3006
5	Be3130	.1064
6	Ca3179	53.51
7	Cd2265	.3132
8	Co2286	.3139
9	Cr2677	.2960
10	Cu3247	.3379
11	Fe2714	50.82
12	K_7664	Q24.30
13	Mg2790	49.00
14	Mn2576	.2097
15	Ni2316	.3036
16	2203/1	1.070
17	2203/2	1.083
18	1960/1	.5198
19	1960/2	.5107
20	Sb2068	1.043
21	Sn1899	1.064
22	Tl1908	1.173
23	V_2924	.2937

#	Element	ICS AB
24	Zn2062	.3147
25	Pb2203	1.075
26	Se1960	.5167

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1-Blank	DEC2000	WATERS2	12/20/00	10:48		X	IR
2	STD8	DEC2000	WATERS2	12/20/00	10:54		X	IR
3	STD3	DEC2000	WATERS2	12/20/00	10:58		X	IR
4	STD4	DEC2000	WATERS2	12/20/00	11:03		X	IR
5	STD2	DEC2000	WATERS2	12/20/00	11:07		X	IR
6	ICV 2	DEC2000	WATERS2	12/20/00	11:12	ma	Q	CONC
7	ICV 1	DEC2000	WATERS2	12/20/00	11:18	ma	Q	CONC
8	ICB	DEC2000	WATERS2	12/20/00	11:25	ma	B	CONC
9	ICS A	DEC2000	WATERS2	12/20/00	11:31	ma	Q	CONC
10	ICS AB	DEC2000	WATERS2	12/20/00	11:38	ma	Q	CONC
11	SS I	DEC2000	WATERS2	12/20/00	11:46	ma	Q	CONC
12	SS I LOW	DEC2000	WATERS2	12/20/00	11:52	ma	Q	CONC
13	blk 1214rerpb	DEC2000	WATERS2	12/20/00	11:58	ma	S	CONC
14	04815 tl	DEC2000	WATERS2	12/20/00	12:04	ma	S	CONC
15	04819 tl	DEC2000	WATERS2	12/20/00	12:11	ma	S	CONC
16	04827 tl	DEC2000	WATERS2	12/20/00	12:17	ma	S	CONC
17	ICV 2	DEC2000	WATERS2	12/20/00	12:25	ma	Q	CONC
18	ICB	DEC2000	WATERS2	12/20/00	12:32	ma	B	CONC
19	qmw1218004 1345	DEC2000	WATERS2	12/20/00	12:38	ma	S	CONC
20	qmw1218005lcs	DEC2000	WATERS2	12/20/00	12:44	ma	S	CONC
21	qmw1218006lcsd	DEC2000	WATERS2	12/20/00	12:50	ma	S	CONC
22	05138	DEC2000	WATERS2	12/20/00	12:56	ma	S	CONC
23	05139	DEC2000	WATERS2	12/20/00	13:02	ma	S	CONC
24	05140	DEC2000	WATERS2	12/20/00	13:09	ma	S	CONC
25	05141	DEC2000	WATERS2	12/20/00	13:15	ma	S	CONC
26	05142	DEC2000	WATERS2	12/20/00	13:21	ma	S	CONC
27	05143	DEC2000	WATERS2	12/20/00	13:27	ma	S	CONC
28	05144	DEC2000	WATERS2	12/20/00	13:33	ma	S	CONC
29	ICV 2	DEC2000	WATERS2	12/20/00	13:41	ma	Q	CONC
30	ICV 1	DEC2000	WATERS2	12/20/00	13:48	ma	Q	CONC
31	ICB	DEC2000	WATERS2	12/20/00	13:55	ma	B	CONC
32	05188	DEC2000	WATERS2	12/20/00	14:02	ma	S	CONC
33	05191	DEC2000	WATERS2	12/20/00	14:08	ma	S	CONC
34	05194	DEC2000	WATERS2	12/20/00	14:14	ma	S	CONC
35	05194 d	DEC2000	WATERS2	12/20/00	14:20	ma	S	CONC
36	05194 ms	DEC2000	WATERS2	12/20/00	14:26	ma	S	CONC
37	05194 msd	DEC2000	WATERS2	12/20/00	14:32	ma	S	CONC
38	05197	DEC2000	WATERS2	12/20/00	14:39	ma	S	CONC
39	05278	DEC2000	WATERS2	12/20/00	14:45	ma	S	CONC
40	05279	DEC2000	WATERS2	12/20/00	14:51	ma	S	CONC
41	05280	DEC2000	WATERS2	12/20/00	14:57	ma	S	CONC
42	ICV 2	DEC2000	WATERS2	12/20/00	15:05	ma	Q	CONC
43	ICV 1	DEC2000	WATERS2	12/20/00	15:12	ma	Q	CONC
44	ICB	DEC2000	WATERS2	12/20/00	15:19	ma	B	CONC
45	05281	DEC2000	WATERS2	12/20/00	15:25	ma	S	CONC
46	05282	DEC2000	WATERS2	12/20/00	15:31	ma	S	CONC
47	05283	DEC2000	WATERS2	12/20/00	15:37	ma	S	CONC
48	05284	DEC2000	WATERS2	12/20/00	15:43	ma	S	CONC
49	05283 d	DEC2000	WATERS2	12/20/00	15:49	ma	S	CONC
50	05283 ms	DEC2000	WATERS2	12/20/00	15:56	ma	S	CONC
51	05283 msd	DEC2000	WATERS2	12/20/00	16:02	ma	S	CONC
52	05138 1:4sd	DEC2000	WATERS2	12/20/00	16:08	ma	S	CONC
53	05138 1:1msa	DEC2000	WATERS2	12/20/00	16:14	ma	S	CONC

Prep 24529 (AS)

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	04518 TL	DEC2000	WATERS2	12/20/00	16:29	ma	S	CONC
55	ICV 2	DEC2000	WATERS2	12/20/00	16:34	ma	Q	CONC
56	ICV 1	DEC2000	WATERS2	12/20/00	16:41	ma	Q	CONC
57	ICB	DEC2000	WATERS2	12/20/00	16:48	ma	B	CONC
58	SS I	DEC2000	WATERS2	12/20/00	16:54	ma	Q	CONC
59	SS I LOW	DEC2000	WATERS2	12/20/00	17:00	ma	Q	CONC
60	ICS A	DEC2000	WATERS2	12/20/00	17:07	ma	Q	CONC
61	ICS AB	DEC2000	WATERS2	12/20/00	17:13	ma	Q	CONC

#	Element	STD'lank	STD8	STD3	STD4	STD2	ICV 2
1	Ag3280	-.00094	.76292				1.031
2	Al3082	.01755		.10701			Q.9379
3	As1890	-.0043			.39865		Q.9356
4	Ba4934	.00001				2.44422	1.021
5	Be3130	-.00297		1.33336			Q1.067
6	Ca3179	.00114				.04839	1.010
7	Cd2265	-.00071				1.06365	1.006
8	Co2286	-.00132				.80244	1.020
9	Cr2677	.00034			.56686		.9693
10	Cu3247	.0096				.72777	1.008
11	Fe2714	.00055		.02911			Q1.089
12	K_7664	.00948				3.5207	Q8.899
13	Mg2790	-.00004				.0539	.9737
14	Mn2576	.00043				.67742	1.018
15	Ni2316	-.00334		.55702			1.005
16	2203/1	.0081				2.58223	1.015
17	2203/2	.00305				2.33383	1.007
18	1960/1	-.0426			1.60588		.9959
19	1960/2	.01092			.75537		.9832
20	Sb2068	.00231		.49872			.9925
21	Sn1899	-.00134		.30502			.9908
22	Tl1908	-.00137		.15624			1.042
23	V_2924	-.00002			.01371		.9615
24	Zn2062	-.0002				.13442	1.003
25	Pb2203						1.013
26	Se1960						.9918

#	Element	ICV 1	ICB	ICS A	ICS AB	SS I	SS I LOW
1	Ag3280	.2023	.0000	.0003	.3218	.0010	.0000
2	Al3082	Q.1705	-.0181	47.42	49.94	Q.0489	.0061
3	As1890	.1981	-.0047	-.0025	1.022	.0397	Q.0052
4	Ba4934	.2059	.0001	.0002	.3104	.0412	.0109
5	Be3130	Q.2129	.0002	.0002	.1015	Q.0013	.0005
6	Ca3179	.1983	-.0058	48.95	51.17	.0664	.0001
7	Cd2265	.1998	.0000	.0072	.3126	.0009	-.0002
8	Co2286	.2041	.0007	.0016	.3099	.0106	Q.0036
9	Cr2677	.1925	.0001	.0013	.2892	.0034	Q.0005
10	Cu3247	.2009	-.0021	Q.0280	.3506	Q.0020	-.0019
11	Fe2714	Q.2249	.0005	47.22	49.66	Q.0380	.0135
12	K_7664	Q1.740	-.0136	Q.2005	Q26.70	-.0266	-.0245
13	Mg2790	.1951	.0003	49.09	51.37	.0128	.0041
14	Mn2576	.2032	-.0000	.0011	.2057	.0103	.0026
15	Ni2316	.2011	.0011	.0035	.3084	.0117	Q.0041
16	2203/1	.1970	-.0005	.0188	1.066	.0097	.0012
17	2203/2	.1986	-.0013	.0020	1.062	.0104	.0028
18	1960/1	.1994	.0036	.0196	.5403	.0531	.0139
19	1960/2	.2011	.0011	-.0027	.5299	.0417	.0087
20	Sb2068	.2005	.0007	.0106	1.071	.0097	.0021
21	Sn1899	.2000	.0036	.0074	1.049	.0054	.0066
22	Tl1908	.2066	.0035	Q.0407	1.168	.0432	Q.0159
23	V_2924	.1915	.0001	.0000	.2952	.0111	Q.0038

#	Element	ICV 1	ICB	ICS A	ICS AB	SS I	SS I LOW
24	Zn2062	.1978	.0008	.0029	.3005	.0092	.0021
25	Pb2203	.1978	-.0005	.0135	1.065	.0102	.0020
26	Se1960	.2002	.0030	.0121	.5368	Q.0495	Q.0124

#	Element	blk'erpb	04815 tl	04819 tl	04827 tl	ICV 2	ICB
1	Ag3280	-.0002	-.0001	-.0004	.0001	1.053	.0001
2	Al3082	.0128	4.263	-.3102	1.132	1.035	.0473
3	As1890	-.0099	-.0022	.0094	-.0056	.9629	.0001
4	Ba4934	.0027	.0503	.0000	.3106	1.044	.0002
5	Be3130	.0002	.0006	.0034	.0004	Q1.086	.0004
6	Ca3179	.1107	71.75	-.0090	44.91	1.015	-.0088
7	Cd2265	-.0002	.0010	.0004	.0006	1.004	-.0003
8	Co2286	.0005	.0021	.0016	.0045	1.022	.0006
9	Cr2677	.0038	.0060	-.0007	.0175	.9647	-.0001
10	Cu3247	-.0034	.0192	-.0220	.0106	1.049	-.0040
11	Fe2714	.0288	9.201	-.0122	6.151	Q1.089	.0042
12	K_7664	.0028	1.602	.0151	.9376	Q9.142	-.0124
13	Mg2790	.0420	39.95	.0029	21.31	.9735	.0028
14	Mn2576	.0010	.1567	-.0008	.2440	1.023	.0001
15	Ni2316	.0015	.0113	.0055	.0185	.9970	.0022
16	2203/1	.0251	.0094	.0000	.0068	1.007	.0007
17	2203/2	.0233	.0090	.0011	.0044	1.021	.0014
18	1960/1	.0075	.0005	.0300	.0011	.9817	.0088
19	1960/2	.0013	.0037	-.0166	.0014	.9916	-.0018
20	Sb2068	.0015	.0042	-.0069	.0012	.9938	.0009
21	Sn1899	-.0028	.0030	.0006	.0002	.9916	.0046
22	Tl1908	-.0008	.0099	.0117	.0044	Q1.083	.0008
23	V_2924	.0002	.0114	.0028	.0074	.9606	.0002
24	Zn2062	.0013	.0277	.0014	.0362	.9791	.0005
25	Pb2203	.0247	.0095	.0005	.0062	1.012	.0012
26	Se1960	.0057	.0017	.0146	.0014	.9852	.0055

#	Element	qmw'1345	qmw'5lcs	qmw'lcsd	05138	05139	05140
		12:38					
1	Ag3280	.0002	.9343	.8670	.0000	.0001	-.0002
2	Al3082	.0291	1.033	.9526	15.76	15.34	15.27
3	As1890	-.0097	.9951	.9402	.0049	.0017	-.0006
4	Ba4934	.0084	1.055	.9922	.1168	.0984	.0959
5	Be3130	.0004	1.031	.9707	.0033	.0032	.0015
6	Ca3179	.0613	1.084	1.036	22.42	23.67	33.42
7	Cd2265	-.0007	1.022	.9596	.0054	.0048	.0048
8	Co2286	.0002	1.036	.9731	.0136	.0114	.0152
9	Cr2677	-.0003	.9756	.9150	.1643	.1623	.3091
10	Cu3247	-.0043	1.050	.9791	.0167	.0146	.0205
11	Fe2714	.0118	1.105	1.028	17.01	15.22	13.92
12	K_7664	-.0127	9.899	9.140	1.720	1.700	2.275
13	Mg2790	.0017	.9760	.9080	1.825	1.830	3.610
14	Mn2576	.0003	1.043	.9785	1.654	1.465	2.460
15	Ni2316	.0010	1.008	.9520	.0415	.0401	.0347
16	2203/1	.0043	1.008	.9500	.0190	.0167	.0143
17	2203/2	.0006	1.021	.9712	.0161	.0128	.0118

#	Element	qmw'1345	qmw'5lcs	qmw'lcsd	05138	05139	05140
18	1960/1	.0015	.9509	.8979	.0132	.0125	.0069
19	1960/2	.0043	.9624	.9078	.0007	-.0022	.0004
20	Sb2068	.0018	1.001	.9432	.0066	.0035	.0053
21	Sn1899	.0013	2.064	1.946	.0061	.0070	.0050
22	Tl1908	-.0021	1.065	.9941	.0167	.0163	.0160
23	V_2924	.0002	.9716	.9106	.0431	.0423	.0352
24	Zn2062	.0023	1.004	.9507	.2502	.2483	.2438
25	Pb2203	.0033	1.013	.9573	.0182	.0156	.0137
26	Se1960	.0026	.9549	.9014	.0091	.0077	.0048

#	Element	05141	05142	05143	05144	ICV 2	ICV 1
1	Ag3280	.0001	-.0002	.0002	.0001	1.046	.2079
2	Al3082	-.1939	9.299	3.827	.0519	1.025	Q.3051
3	As1890	-.0067	.0020	-.0030	-.0086	.9532	.1999
4	Ba4934	.0432	.1421	.0690	.0216	1.018	.2082
5	Be3130	.0001	.0010	.0004	.0001	Q1.094	Q.2227
6	Ca3179	84.40	65.93	105.0	5.625	1.024	.1994
7	Cd2265	-.0005	.0005	-.0004	-.0014	1.001	.2039
8	Co2286	.0007	.0076	.0059	-.0006	1.022	.2086
9	Cr2677	.0148	.0675	.0199	.0005	.9648	.1964
10	Cu3247	.0065	.0560	.0150	-.0016	1.022	.2031
11	Fe2714	.0818	7.081	3.257	.0196	Q1.091	Q.2270
12	K_7664	.9372	3.140	2.778	2.157	Q8.835	Q1.695
13	Mg2790	3.296	5.207	7.092	1.682	.9454	.1909
14	Mn2576	.0193	1.842	.4504	.0007	1.022	.2084
15	Ni2316	.0022	.0167	.0253	.0025	.9938	.2042
16	2203/1	.0030	.0115	.0046	-.0028	1.000	.2017
17	2203/2	.0003	.0077	.0021	.0021	1.020	.2064
18	1960/1	.0037	.0083	.0074	.0026	.9666	.1994
19	1960/2	.0027	-.0019	.0024	.0034	.9746	.2013
20	Sb2068	.0020	.0046	.0033	.0026	.9785	.2034
21	Sn1899	-.0007	.0048	.0010	.0026	.9928	.2041
22	Tl1908	.0033	.0058	.0044	.0007	Q1.085	Q.2178
23	V_2924	.0026	.0292	.0074	.0038	.9538	.1945
24	Zn2062	.0093	.1472	.0691	.0100	.9907	.2026
25	Pb2203	.0024	.0105	.0040	-.0010	1.007	.2035
26	Se1960	.0036	.0050	.0060	.0031	.9694	.2002

#	Element	ICB	05188	05191	05194	05194 d	05194 ms
1	Ag3280	.0003	.0002	.0143	.0053	.0057	.8238
2	Al3082	.0918	3.058	3.912	4.781	4.709	8.433
3	As1890	-.0057	-.0058	-.0038	-.0025	-.0035	.9471
4	Ba4934	.0003	.0388	.0803	.1037	.1007	1.102
5	Be3130	.0004	.0002	.0005	.0004	.0003	1.005
6	Ca3179	-.0137	7.116	20.18	9.182	9.100	10.32
7	Cd2265	.0000	-.0001	.0002	.0007	.0006	.9709
8	Co2286	.0014	.0021	.0043	.0044	.0047	.9945
9	Cr2677	.0001	.0035	.0088	.0098	.0095	.9327
10	Cu3247	-.0042	.0169	.0730	.0637	.0627	1.086
11	Fe2714	.0055	3.577	4.151	5.910	5.825	6.664

#	Element	ICB	05188	05191	05194	05194 d	05194 ms
12	K_7664	-.0150	4.287	6.934	4.563	4.427	15.17
13	Mg2790	.0026	1.108	2.531	1.719	1.703	2.696
14	Mn2576	.0001	.0608	.2192	.1654	.1638	1.155
15	Ni2316	.0021	.0042	.0081	.0076	.0076	.9681
16	2203/1	-.0001	.0187	.0353	.0555	.0567	1.031
17	2203/2	.0006	.0175	.0319	.0523	.0552	1.055
18	1960/1	.0049	.0053	.0054	.0076	.0089	.8910
19	1960/2	.0044	.0057	.0018	.0035	-.0004	.9115
20	Sb2068	.0035	.0018	.0038	.0042	.0052	.9212
21	Sn1899	.0045	.0031	.0047	.0069	.0051	1.860
22	Tl1908	.0009	.0025	.0055	.0067	.0059	1.056
23	V_2924	.0001	.0112	.0112	.0111	.0123	.9375
24	Zn2062	.0001	.0676	.2344	.2919	.2897	1.254
25	Pb2203	.0004	.0186	.0344	.0547	.0564	1.040
26	Se1960	.0049	.0056	.0044	.0064	.0060	.8980

#	Element	051' msd	05197	05278	05279	05280	ICV 2
				14:45	14:51	14:57	
1	Ag3280	.8693	.0028	.0002	.0002	.0002	1.004
2	Al3082	8.561	6.514	-.3812	-.2613	-.3792	.9763
3	As1890	.9431	-.0037	.0012	-.0085	.0373	Q.9396
4	Ba4934	1.088	.0843	.0196	.0120	.0220	.9857
5	Be3130	.9961	.0008	.0002	.0002	.0000	Q1.082
6	Ca3179	9.992	10.05	106.3	90.89	86.24	Q1.066
7	Cd2265	.9604	.0007	-.0003	-.0010	-.0010	.9845
8	Co2286	.9844	.0050	.0010	-.0003	.0004	1.000
9	Cr2677	.9257	.0087	.0036	.0004	.0041	.9465
10	Cu3247	1.072	.0436	.0147	.0062	.0129	.9910
11	Fe2714	6.785	7.372	2.313	.1634	.1442	Q1.235
12	K_7664	14.69	4.225	35.94	1.777	66.48	Q8.307
13	Mg2790	2.632	1.750	39.88	2.449	65.47	Q.9197
14	Mn2576	1.140	.1886	.1929	.0161	.0132	1.003
15	Ni2316	.9570	.0084	.0033	.0026	.0044	.9682
16	2203/1	1.023	.0725	.0673	.0027	-.0003	.9791
17	2203/2	1.045	.0698	.0660	.0016	-.0023	1.016
18	1960/1	.8876	.0068	.0078	.0043	.0123	.9318
19	1960/2	.9038	-.0011	.0013	.0024	-.0021	.9545
20	Sb2068	.9151	.0035	.0038	.0026	.0018	.9487
21	Sn1899	1.817	.0072	.0006	.0007	.0005	.9697
22	Tl1908	1.056	.0095	.0040	.0008	-.0031	1.053
23	V_2924	.9264	.0194	.0038	.0002	.0038	Q.9333
24	Zn2062	1.238	.2176	.0196	.0031	.0043	.9875
25	Pb2203	1.031	.0719	.0671	.0026	-.0007	.9915
26	Se1960	.8931	.0043	.0058	.0038	.0077	Q.9396

#	Element	ICV 1	ICB	05281	05282	05283	05284
				15:25	15:31	15:37	15:43
1	Ag3280	.2034	.0002	.0001	.0001	.0001	-.0002
2	Al3082	Q.2781	.0836	-.1581	-.2254	.1106	-.3698
3	As1890	.1984	-.0084	-.0048	-.0085	-.0069	.0275
4	Ba4934	.2020	.0001	.0188	.0115	.0064	.0097
5	Be3130	Q.2203	.0003	.0002	.0000	.0002	.0000

#	Element	ICV 1	ICB	05281	05282	05283	05284
6	Ca3179	.2011	-.0168	69.26	85.92	.0642	81.69
7	Cd2265	.1998	-.0005	-.0010	-.0010	-.0006	-.0013
8	Co2286	.2039	.0014	.0005	.0000	.0010	.0008
9	Cr2677	.1932	.0001	.0000	.0010	-.0002	.0039
10	Cu3247	.1965	-.0058	.0023	.0049	-.0055	.0134
11	Fe2714	Q.2299	-.0150	.1414	.0203	.0060	.0918
12	K_7664	Q1.591	.0081	.5550	1.700	-.0139	74.31
13	Mg2790	Q.1884	.0019	1.933	2.757	.0038	73.02
14	Mn2576	.2043	-.0001	.0043	.0025	-.0002	.0111
15	Ni2316	.1985	.0026	.0031	.0014	.0019	.0045
16	2203/1	.2006	.0024	.0014	.0054	.0015	.0011
17	2203/2	.2017	-.0010	-.0001	.0006	-.0002	-.0020
18	1960/1	.2014	.0091	.0037	.0046	.0039	.0097
19	1960/2	.1919	-.0002	.0026	.0027	-.0016	-.0044
20	Sb2068	.1982	.0006	.0020	.0054	.0001	.0032
21	Sn1899	.1980	-.0008	.0021	-.0002	.0019	.0079
22	Tl1908	Q.2127	.0001	.0021	.0008	.0010	-.0023
23	V_2924	.1915	.0002	.0002	.0001	-.0009	.0077
24	Zn2062	.2003	.0007	.0073	.0164	.0020	.0043
25	Pb2203	.2012	.0015	.0012	.0040	.0012	.0003
26	Se1960	.1985	.0062	.0035	.0042	.0022	.0052

#	Element	05283 d	05283 ms	052' msd	051':4sd	051'1msa	04518 TL
1	Ag3280	-.0001	1.074	1.091	.0014	.1860	
2	Al3082	-.3846	.7044	.7003	22.22	18.83	
3	As1890	.0285	1.112	1.074	.0148	.1777	
4	Ba4934	.0129	.9478	.9502	.1604	.3130	
5	Be3130	.0000	1.083	1.038	.0071	.2027	
6	Ca3179	85.29	85.12	85.41	33.75	27.62	
7	Cd2265	-.0009	1.040	.9994	.0085	.1878	
8	Co2286	.0011	1.086	1.036	.0266	.2051	
9	Cr2677	.0047	.9890	.9493	.2379	.3757	
10	Cu3247	.0134	1.125	1.072	-.0013	.1962	
11	Fe2714	.1081	1.228	1.176	24.90	20.85	
12	K_7664	75.33	92.27	90.67	2.338	3.515	
13	Mg2790	75.10	74.65	74.66	2.714	2.321	
14	Mn2576	.0116	1.059	1.015	2.396	2.171	
15	Ni2316	.0040	1.039	.9954	.0779	.2309	
16	2203/1	.0009	1.096	1.055	.0160	.2075	
17	2203/2	-.0002	1.146	1.096	.0240	.2055	
18	1960/1	.0104	.6095	.5423	.1162	.1926	
19	1960/2	-.0013	.6122	.5501	-.0418	.1725	
20	Sb2068	.0005	1.048	1.004	-.0010	.1790	
21	Sn1899	-.0011	2.199	2.126	.0401	.1957	
22	Tl1908	.0016	1.299	1.240	.0571	.2030	-.0012
23	V_2924	.0064	.9771	.9396	.0688	.2304	
24	Zn2062	.0052	1.071	1.022	.3893	.5009	
25	Pb2203	.0008	1.113	1.069	.0198	.2073	
26	Se1960	.0067	.6106	.5451	.0644	.1862	

#	Element	ICV 2	ICV 1	ICB	SS I	SS I LOW	ICS A
1	Ag3280	Q1.060	.2079	.0002	.0012	.0002	.0001
2	Al3082	1.034	Q.3010	.0892	Q.1277	.0751	44.39
3	As1890	.9849	.2076	-.0039	.0412	Q.0024	-.0014
4	Ba4934	1.019	.2030	.0002	.0406	.0108	.0003
5	Be3130	Q1.151	Q.2275	.0004	Q.0015	.0006	.0004
6	Ca3179	Q1.134	.2030	-.0171	.0536	-.0096	51.45
7	Cd2265	1.041	.2064	-.0001	Q.0004	-.0003	.0046
8	Co2286	Q1.059	.2101	.0013	.0117	Q.0036	.0022
9	Cr2677	1.007	.1993	-.0002	.0034	.0009	.0013
10	Cu3247	1.022	.1964	-.0059	Q-.0013	-.0045	Q.0241
11	Fe2714	Q1.360	Q.2470	-.0080	Q.0320	.0184	48.52
12	K_7664	Q8.369	Q1.563	.0006	-.0173	-.0112	Q.2071
13	Mg2790	Q.9415	Q.1858	.0011	.0073	.0047	46.85
14	Mn2576	Q1.063	.2107	-.0001	.0105	.0025	.0010
15	Ni2316	1.018	.2040	.0022	Q.0127	Q.0042	.0045
16	2203/1	1.023	.2025	.0012	.0102	.0026	.0205
17	2203/2	1.055	.2066	-.0018	.0103	.0034	.0018
18	1960/1	.9628	.1936	.0066	.0492	.0186	.0167
19	1960/2	.9830	.1912	-.0007	.0367	.0108	-.0038
20	Sb2068	.9815	.2011	.0009	.0110	.0021	.0115
21	Sn1899	1.028	.2064	-.0000	.0040	.0008	.0102
22	Tl1908	Q1.104	Q.2144	.0042	.0474	Q.0134	Q.0402
23	V_2924	.9790	.1942	.0002	.0109	Q.0038	.0002
24	Zn2062	Q1.074	Q.2113	.0011	.0112	.0021	.0024
25	Pb2203	1.034	.2041	.0004	.0105	Q.0031	.0145
26	Se1960	.9697	.1930	.0044	.0453	Q.0162	.0098

#	Element	ICS AB
1	Ag3280	.3237
2	Al3082	46.82
3	As1890	1.027
4	Ba4934	.3006
5	Be3130	.1064
6	Ca3179	53.51
7	Cd2265	.3132
8	Co2286	.3139
9	Cr2677	.2960
10	Cu3247	.3379
11	Fe2714	50.82
12	K_7664	Q24.30
13	Mg2790	49.00
14	Mn2576	.2097
15	Ni2316	.3036
16	2203/1	1.070
17	2203/2	1.083
18	1960/1	.5198
19	1960/2	.5107
20	Sb2068	1.043
21	Sn1899	1.064
22	Tl1908	1.173
23	V_2924	.2937

#	Element	ICS AB
24	Zn2062	.3147
25	Pb2203	1.075
26	Se1960	.5167

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Digestion Log for Waters

Date: 12.18.00
Analyst: RL
Started: 13:45
Ended: 07:35 12.20.00
Matrix: Water

BATCH #: 1218000C
HNO_3 Acid Lot #: M.99245:3
1:1 HCL Acid Lot #: M.99243-5
Digestion Method: 3010A
Hot Plate Temp: 95.1°C

QCS 19 Lot #: M.99245 Amount: 0.5
QCS 7 Lot #: M.99244 Amount: 0.5
ICV Sn Lot #: M.99208 Amount: 0.1
Sample Vials Lot #: 0997

L #	Sample Volume (mL)	Conc. HNO_3	1:1 HCL	Final Volume	Dilution	Spikes Added: QCS 19	QCS 7	ICV Sn	Comments
blank	50	1.5+1.5	5	50	1:1				QMLW1218004
LCS						✓	✓	✓	QMLW1218005
LCSD						✓	✓	✓	QMLW1218006
05138							26403505		(Cu)
05139									
05140									
05141									
05142									
05143									
05144									
05188					200.7		26491-A (Pb, Zn, Ni, Cd, Cu)		
05191							26492-A (Pb, Zn, Ni, Cd, Cu)		
05194							26493-A (Pb, Zn, Ni, Cd, Cu)		
05194D									
05194MS						✓	✓	✓	
05194MSD						✓	✓	✓	
05197							26494-A (Pb, Zn, Ni, Cd, Cu)		
05278							26589 (As) RL .005 ppm		
05279									
05280									
05281									
05282									
05283									
05284									
05283D									
05283MS						✓	✓	✓	
05283MSD	✓	✓	✓	✓	✓	✓	✓	✓	

RL
D 45.00

Reviewed By:_____ 3010wdig Page #_____

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA

Std #8	Lot #
Ag	

Std #3	Lot #
Al	
Be	
Fe	
Ni	
Sb	
Sn	
Tl	

Std #2	Lot #
Ba	
Ca	
Cd	
Co	
Cu	
K	
Mg	
Mn	
Pb	
Zn	

See p952

Std #4	Lot #
As	
Cr	
Se	
V	

ICV #1& 2	Lot #
QCS 19	
QCS 7	
ICV Sn	

SS I	Lot #
SS I	

ICS A	Lot #
INFCS IV	

ICS AB	Lot #
INFCS I	
INFCS IV	
INFCS Ag	

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
12/7/00	TS4A	1 (Blank)	6010B/200.7	01/7/01	mg/mp	500mL	
	B	2	6010B/200.7				
	C	3	6010B/200.7				
	D	4	6010B/200.7				
	E	8	6010B/200.7			100mL	
	F	ICV 1	6010B/200.7			500mL	
	G	ICV 2	6010B/200.7				
	H	ICS A	6010B/200.7				
	I	ICS AB	6010B/200.7				
	J	SS I	6010B/200.7				
	K	SS I Low	6010B/200.7				

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

Reviewed By:_____

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

TRACE ICAP STANDARDS PREPARATION

Std #1	Lot #
Blank	NA

Std #8	Lot #
Ag	M99150

Std #3	Lot #
Al	M99073
Be	M99146
Fe	M99075 179
Ni	M99151
Sb	M99228
Sn	M99229
Tl	M99226
Mg	M99078

Std #2	Lot #
Ba	M99230
Ca	M99143
Cd	M99075
Co	M99144
Cu	M99148
K	M99152
Mg	M99078 M7
Mn	M99077
Pb	M99231
Zn	M99227

Std #4	Lot #
As	M99074
Cr	M99149
Se	M99225
V	M99145

ICV #1& 2	Lot #
QCS 19	M99216
QCS 7	M99187
ICV Sn	M99153

SS I	Lot #
SS I	M99085

ICS A	Lot #
INFCS IV	M99186

ICS AB	Lot #
INFCS I	M99095
INFCS IV	M99186
INFCS Ag	M99094

Concentrations:
Stds 2,3,4, & 8 = 2ppm
ICV1 = 0.2ppm except K = 2ppm
ICV2= 1.0ppm except K = 20ppm
SSI = mixed, see SOP for conc.
ICS A = 50ppm for Al, Ca, Fe, & Mg
ICS AB = mixed, see SOP for conc.

Date Made	AAL Lot #	Standard #	Method	Date Expire	Analyst	Volume	Comments
10/30/00	51 A	1 (Blank)	6010B/200.7	11/30/00	YnG	500mL	
	B	2	6010B/200.7				
	C	3	6010B/200.7				
	D	4	6010B/200.7				
	E	8	6010B/200.7			100mL	
	F	ICV 1	6010B/200.7			500mL	
	G	ICV 2	6010B/200.7			100mL	
	H	ICS A	6010B/200.7			500mL	
	I	ICS AB	6010B/200.7				
	J	SS I	6010B/200.7				
	K	SS I Low	6010B/200.7			100mL	

Standards are approximately 1% Nitric and 5% Hydrochloric Acid.

L SSAg

Reviewed By:_____

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Metals Digestion Log for Waters

Date: 12.18.00
nalyst: RL
tarted: 13:45
Ended: 07:35 12.20.00
Matrix: Water

BATCH #: 121800C
HNO_3 Acid Lot # M.99245.3
1:1 HCL Acid Lot # M.99243-5
Digestion Method: 3010A
Hot Plate Temp: 95.1°C

QCS 19 Lot #: M.99245 Amount: 0.5
QCS 7 Lot #: M.99244 Amount: 0.5
ICV Sn Lot #: M.99208 Amount: 0.1
Sample Vials Lot #: D997

L #	Sample Volume (mL)	Conc. HNO_3	1:1 HCL	Final Volume	Dilution	Spikes Added QCS 19	QCS 7	ICV Sn	Comments
Blank	50	1.5+1.5	5	50	1:1				QMW1218004
LCS						✓	✓	✓	QMW1218005
LCSD						✓	✓	✓	QMW1218006
05138							26403505 (Cr)		
05139									
05140									
05141									
05142									
05143									
05144									
05188					200.7		26491-A (Pb, Zn, Ni, Cd, Cu)		
05191							26492-A (Pb, Zn, Ni, Cd, Cu)		
05194							26493-A (Pb, Zn, Ni, Cd, Cu)		
05194D							?		
05194MS						✓	✓	✓	
05194MSD						✓	✓	✓	
05197							26494-A (Pb, Zn, Ni, Cd, Cu)		
05278							26529 (As) RL .005 ppm		
05279									
05280									
05281									
05282									
05283									
05284									
05283D									
05283MS						✓	✓	✓	
05283MSD						✓	✓	✓	

RL 12.20.00

Reviewed By: 3010wdig Page #

SVO GC DATA CHECKLIST
SW-846-8081A / 8082 / 8151A

PROJECT #: 26529	METHOD: (circle applicable methods)		
MATRIX: WATER	(8081A)	8082	8151A

INITIAL ANALYST ASSESSMENT

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Are continuing calibrations compliant with method requirements?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is blank result less than 1/2 RDL for analytes of interest?	(Y)	N	NA
Are all spike recoveries acceptable for the LCS/LCSD?	(Y)	N	NA
Are all surrogate standard recoveries acceptable (blank, LCS, samples)?	(Y)	N	NA
If blank, LCS or surrogate results are unacceptable, was re-extraction performed to confirm?	Y	N	(NA)
Are all requested analytes below the upper calibration limit?	(Y)	N	NA
Were sample analyses performed within holding times?	(Y)	N	NA
Were analyses performed such that carryover was not a problem?	(Y)	N	NA
For Pesticides & Herbicides, were all hits verified with second column confirmation?	(Y)	N	NA
Are quantitations based on the latest acceptable initial calibration?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA
Are all applicable runlog and extraction sheets signed, dated, and included?	(Y)	N	NA
Are all analytes to be reported indicated as such on the raw data?	(Y)	N	NA
Was analysis completed as instructed on the Log-in Record?	(Y)	N	NA
Has all data been entered into LIMS?	(Y)	N	NA

Analyst: YGL	
Date: 12/28/00	Time: 15:10

PEER REVIEW

Are continuing calibrations compliant with method requirements?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Are all blank and QC results acceptable?	(Y)	N	NA
Are all surrogate standard recoveries acceptable (blank, LCS, samples)?	(Y)	N	NA
Are all calculations correct and reported in the proper units?	(Y)	N	NA
Were sample analyses performed within holding times?	(Y)	N	NA
Are quantitations based on the latest acceptable initial calibration?	(Y)	N	NA
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Was analysis completed as instructed on the Log-in Record?	(Y)	N	NA
Have all LIMS entries been checked for accuracy?	(Y)	N	NA

Reviewer:	
Date: 10/02/2001	Time: 1230

ACCURA ANALYTICAL LABORATORIES

EXTRACTION LOG

ANALYSIS: (PEST) / PCB

MATRIX: (WATER) TCLP

EXT. METHOD: 3510 (3520)

DATE/TIME: 12/20/00 900

ANALYST: KC

INSTRUMENT: GC/ECD

AAL I.D.	SAMPLE VOLUME	SURR 1.0 mL	SPIKE 1.0 mL	SOLVENT EXCHANGE	FINAL VOLUME	ACID CLEANED	COMMENTS
QPW122001	1L	KC		Hexane	5.0 mL	na	Blank
QPW122002			KC				LCS
05278							
05279							
05280							
05281							
05282							
05283							
05284							

KC 12/21/00

START TIME: 1300 STOP TIME: 800 RapidVap TEMP.: 45°C

CH2CL2 I.D.: EX00128 HEXANE I.D.: EX00109

SURROGATE I.D. : P00E141 CONC. : 1.25ppm INITIAL : KC

SPIKE I.D. : P00E138 CONC. : 1.25 ppm INITIAL : KC

SPIKE I.D. : P00E122 CONC. : 5.0 ppm INITIAL : KC

EXTRACT STORAGE: REFRIGERATOR # 5, BOX # P- 180

GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 12/21/00
Analyst Initials: YGK
Instrument Method: 8081DIA
Calibration Column: Rtx-CLP1 (F)
Confirmation Column: Rtx-CLP 2

DDT Breakdown % (<15%): 4.0%
Endrin Breakdown % (<15%): 12.4%

Pest Calibration Date: 12/12/00
PCB Calibration Date:

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	50-116	43-152
Water	21-131	D-160

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	121200P	std	1X	NA	NA	
2	Hexane	"	solv	"	NA	NA	
3	PEM	"	std	"	"	"	P00170
4	ccv Pest. 25 ppm	"	"	"	106	104	P00185
5	ccv Chlord. 25 ppm	080300CL	"	"	NA	NA	113% P00132
6	ccv TOX 2.5 ppm	110800TX	"	"	"	"	100% P00176
7	Hexane	121200P	solv	"	NA	NA	
8	QPW1220001	"	w	"	82	72	
9	" 2	"	"	"	73	65	
10	05278 w	"	"	"	72	44	
11	05279 w	"	"	"	83	81	
12	05280 w	"	"	"	106	22	
13	05281 w	"	"	"	82	89	
14	05282 w	"	"	"	130	90	
15	05283 w	"	"	"	1230	23	SSI - coeluter, rerun - 138%
16	05284 w	"	"	"	81	59	
17	QPW1215001	"	"	"	79	62	
18	" 2	"	"	"	83	66	
19	04779 w	"	"	"	138	23	
20	05241 w	"	"	"	143	27	
21	Hexane	"	solv	"	NA	NA	
22	PEM	"	std	"	"	"	P00170
23	ccv Pest. 25 ppm	"	"	"	100	97	P00185

Signature/Date: [signature] 12/21/00

↓ Cont

GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 12/21/00
Analyst Initials: YGK
Instrument Method: 8081D1A
Calibration Column:
Confirmation Column:

DDT Breakdown % (<15%):
Endrin Breakdown % (<15%):

Pest Calibration Date:
PCB Calibration Date:

Continued from p. 46

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil		
Water		

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
28	QPW1220001	121200P	W	1X	83	80	TBA clean-up
29	1 2	"	"	"	71	70	
30	05278 W				78	44	
31	05280 W				488 *	25	* Coel., Mear - 74%
32	05283 W				119	27	
33	Hexane		Solv		NA	NA	
34	PEM		Std		"	"	P00170
35	ccv Pest. 25 ppm		"		107	106	P00185
36	Hexane		Solv		NA	NA	
24	04779 W 10X		W		76	40	
25	05241 W 10X		"		92	48	
26	Hexane		Solv		NA	NA	
27	ccv Pest. 25 ppm	"	Std	"	104	107	P00185
						YGK 12/22/00	
		YGK 12/22/00					

Signature/Date: Yefim Zykova 12/22/00

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210030.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\122100\12210030.D\ECD2B.CH
Acq On : 22 Dec 2000 12:04 Operator: YGK
Sample : 05278 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:23 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.05	7.74	21602949	23551447	0.195	0.199	
		Spiked Amount 0.250			Recovery	=	78.00% L	79.60%	
22)	S	Decachlorobiphen	20.82	21.23	11193825	11679746	0.111	0.107	
		Spiked Amount 0.250			Recovery	=	44.40% L	42.80%	
		Target Compounds							
2)	T	alpha-BHC	9.60	9.43	407848	554737	0.002	0.003	#
3)	T	beta-BHC	10.70	10.62	4942472	4146411	0.061	0.058	
4)	T	gamma-BHC (Linda	10.44	10.36	204058	8293	0.001	0.000	#
5)	T	delta-BHC	11.16	11.35	364468	363260	0.002	0.003	#
6)	T	Heptachlor	0.00	11.35f	0	363260	N.D.	0.003	#
7)	T	Aldrin	12.32f	0.00	16430	0	0.000	N.D.	#
8)	T	Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	T	Endosulfan I	14.68	14.39	140613	110308	0.001	0.001	
10)	T	gamma-Chlordane	14.03f	13.91	355797	81276	0.003	0.001	#
11)	T	alpha-Chlordane	14.44f	14.24	120314	37502	0.001	0.000	#
12)	T	4,4'-DDE	14.51f	0.00	66974	0	0.001	N.D.	#
13)	T	Dieldrin	15.22	15.04f	14606	4534	0.000	0.000	#
14)	T	Endrin	15.70	15.63	4678	72055	0.000	0.001	#
15)	T	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	Endosulfan II	16.24	16.13	887550	32105	0.010	0.000	#
17)	T	Endrin aldehyde	17.13	16.82	8757	13350	0.000	0.000	#
18)	T	4,4'-DDT	0.00	16.61	0	3597	N.D.	0.000	#
19)	T	Endosulfan sulfa	18.03f	17.41	15254	26952	0.000	0.000	#
20)	T	Methoxychlor	17.54	17.96f	114558	1026588	0.002	0.022	#
21)	T	Endrin ketone	18.74	0.00	47416	0	0.000	N.D.	#

D.L: 0.005

B-BHC: 0.31 ppb

rest Pest < DL (Endrin Aldehyde - from run w/o TBA clean-up)

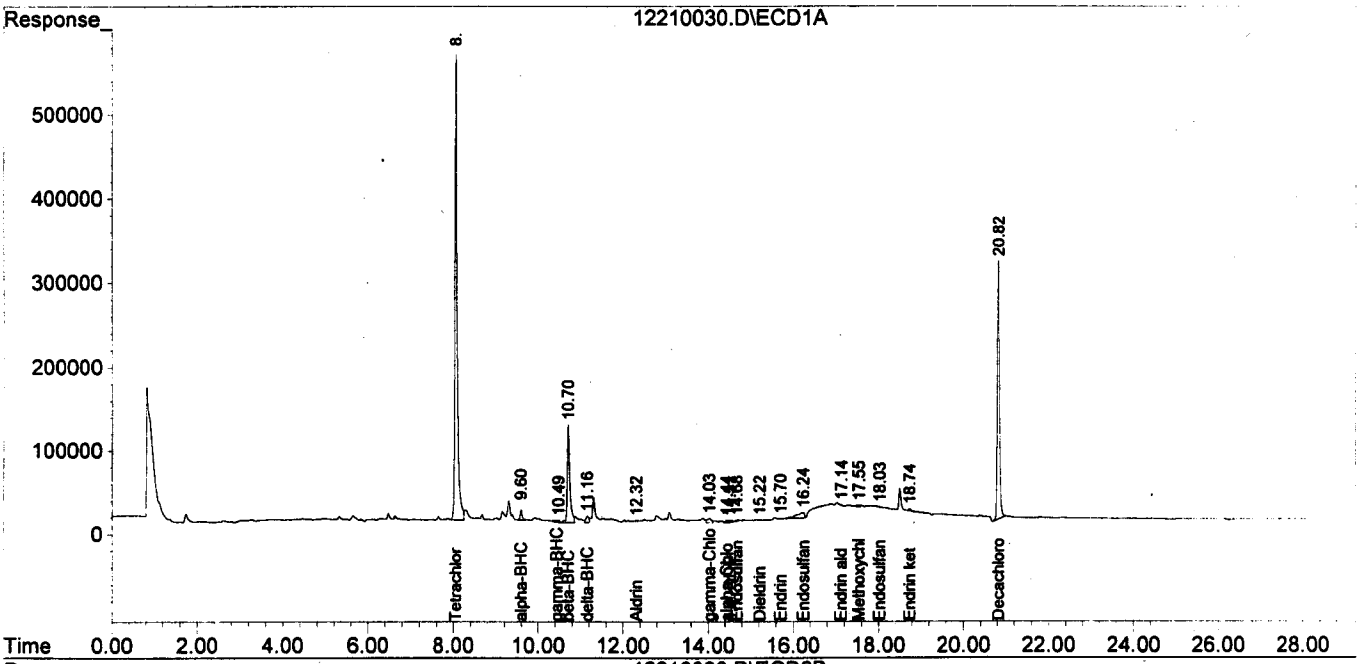
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

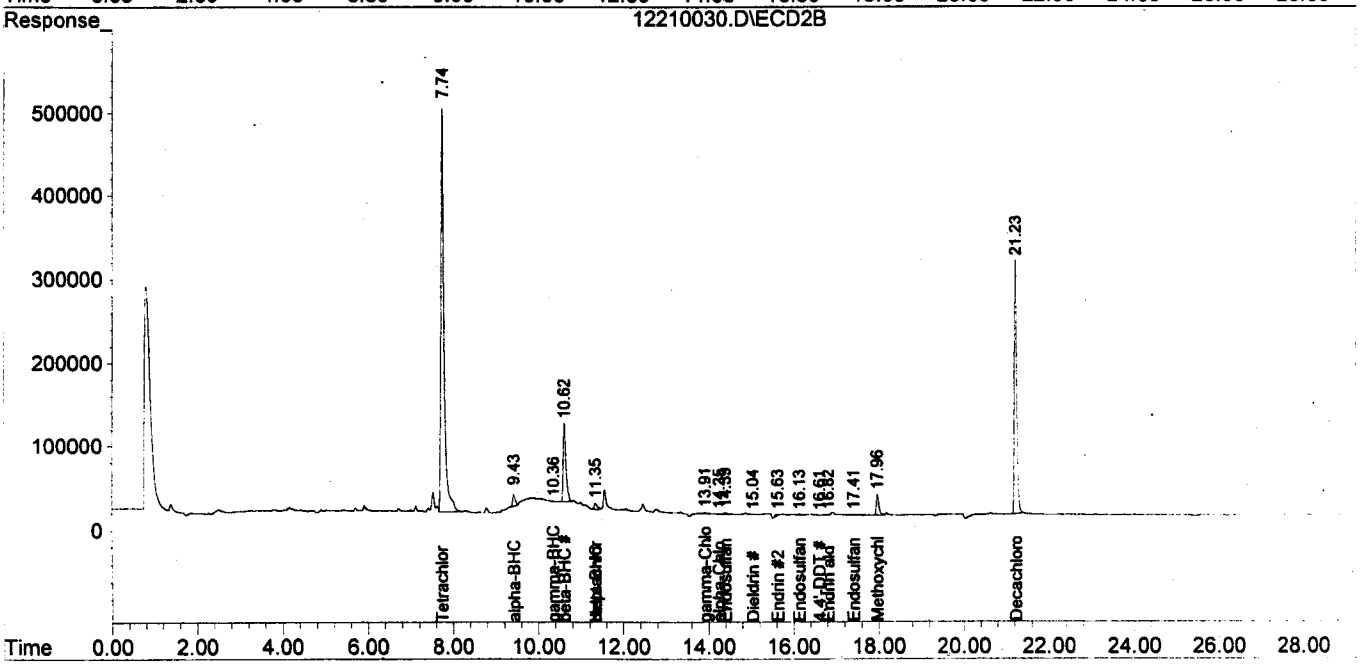
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210030.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\122100\12210030.D\ECD2B.CH
Acq On : 22 Dec 2000 12:04 Operator: YGK
Sample : 05278 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:23 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\122100\12210010.D\ECD2B.CH
Acq On : 21 Dec 2000 15:06 Operator: YGK
Sample : 05278 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:40 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.08	7.76	19791241	22292547	0.179	0.188	
		Spiked Amount 0.250			Recovery	=	71.60% ✓	75.20%	
22)	S	Decachlorobiphen	20.84	21.24	11058725	11478921	0.110	0.106	
		Spiked Amount 0.250			Recovery	=	44.00% ✓	42.40%	
		Target Compounds							
2)	T	alpha-BHC	9.62	9.45	447531	966029	0.003	0.006	#
3)	T	beta-BHC	10.72	10.62	7656552	4076780	0.095	0.057	#
4)	T	gamma-BHC (Linda	0.00	0.00	0	0	N.D.	N.D.	
5)	T	delta-BHC	0.00	11.34	0	88470	N.D.	0.001	#
6)	T	Heptachlor	0.00	11.34f	0	88470	N.D.	0.001	#
7)	T	Aldrin	12.34	12.14	-6701	38952	N.D.	0.000	
8)	T	Heptachlor epoxi	13.78	13.43f	93079	1468495	0.001	0.014	#
9)	T	Endosulfan I	0.00	0.00	0	0	N.D.	N.D.	
10)	T	gamma-Chlordane	14.15f	13.85f	3277	-1260093963	0.000	N.D.	#
11)	T	alpha-Chlordane	14.37	0.00	37159	0	0.000	N.D.	#
12)	T	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	T	Dieldrin	15.23	0.00	30186	0	0.000	N.D.	#
14)	T	Endrin	0.00	15.58f	0	-113900	N.D.	N.D.	
15)	T	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	Endosulfan II	16.21	0.00	107508	0	0.001	N.D.	#
17)	T	Endrin aldehyde	0.00	16.93f	0	35483	N.D.	0.000	#
18)	T	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
19)	T	Endosulfan sulfa	18.15f	17.41	79472	10565	0.001	0.000	#
20)	T	Methoxychlor	17.65f	17.98f	10473	780565	0.000	0.017	#
21)	T	Endrin ketone	18.75f	18.56	54599	12326	0.001	0.000	#

Endr. Ald. < DC

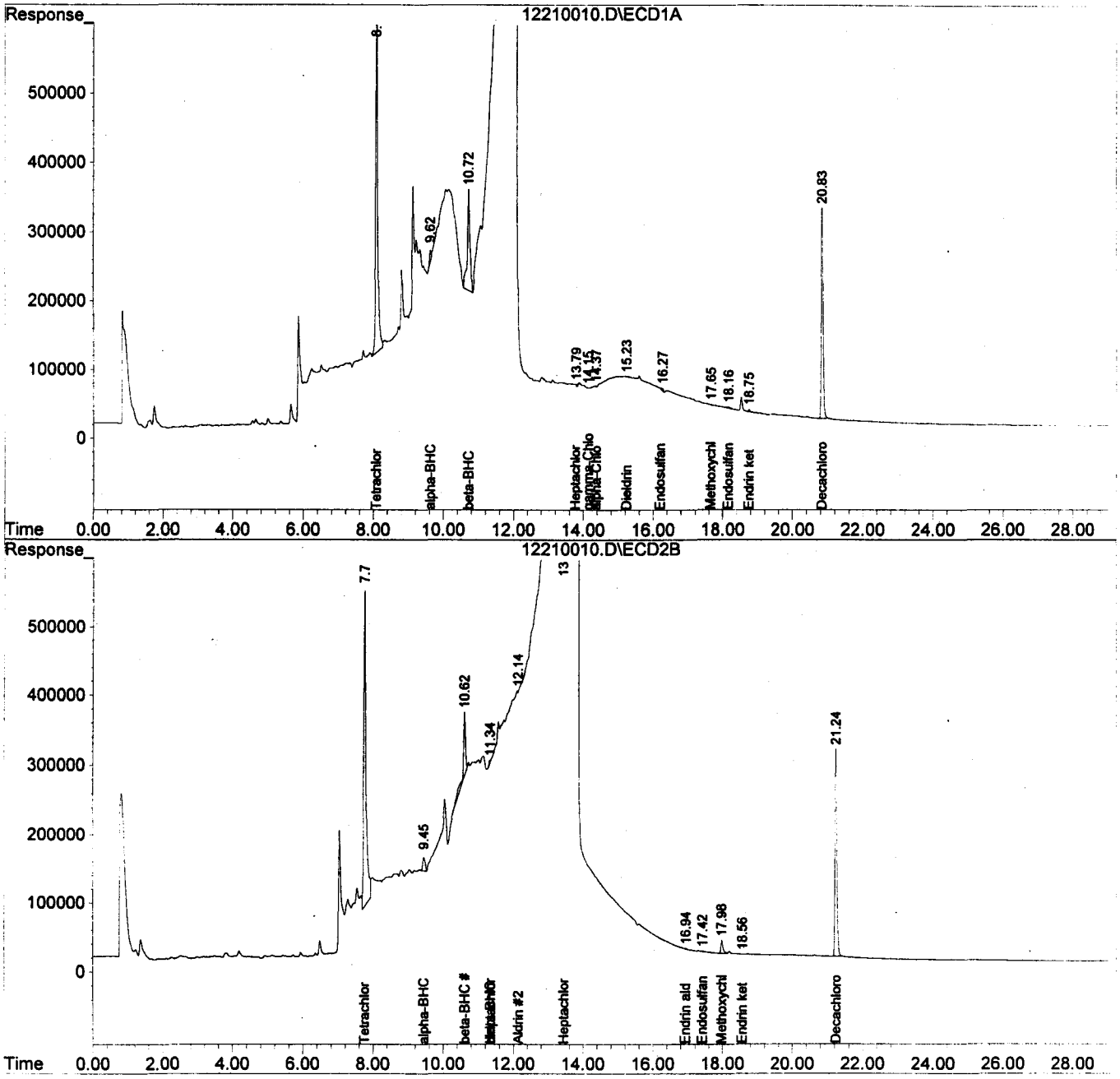
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210010.D\ECD1A.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\122100\12210010.D\ECD2B.CH
Acq On : 21 Dec 2000 15:06 Operator: YGK
Sample : 05278 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:40 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210030.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\122100\12210030.D\ECD2B.CH
Acq On : 22 Dec 2000 12:04 Operator: YGK
Sample : 05278 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:56 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.24	16.28	887279	233709	0.625	0.043	#
2)	L TOX 2	0.00	16.72	0	255496	N.D.	0.069	#
3)	L TOX 3	16.89f	16.82	4798167	249059	1.356	0.052	#
4)	L TOX 4	17.62	17.97	552076	1620230	0.155	0.268	#
5)	L TOX 5	17.84	17.97f	628763	1620230	0.143	0.334	#
6)	L TOX 6	18.74f	18.71f	369167	560019	0.115	0.158	#
7)	L TOX 7	0.00	19.09f	0	555344	N.D.	0.215	#
	Sum TOX 1			7235451	5094088	2.393	1.139	
	Average TOX 1					0.479	0.163	

TOX-02

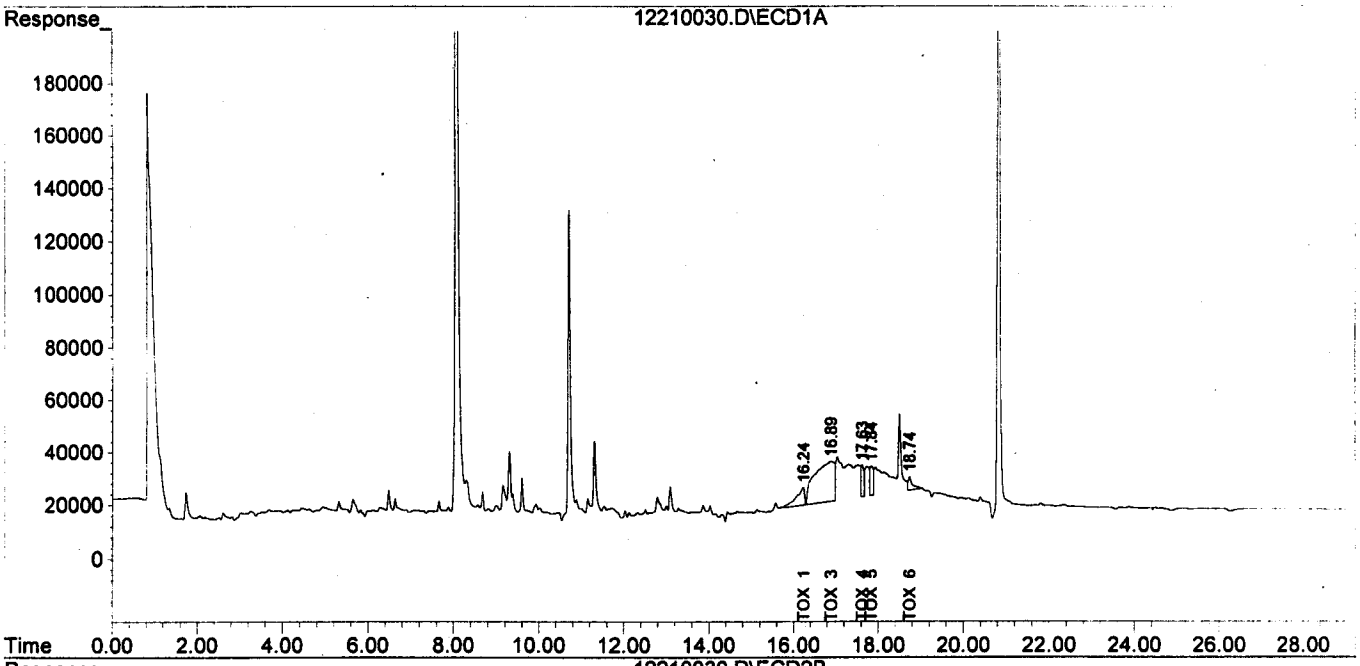
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

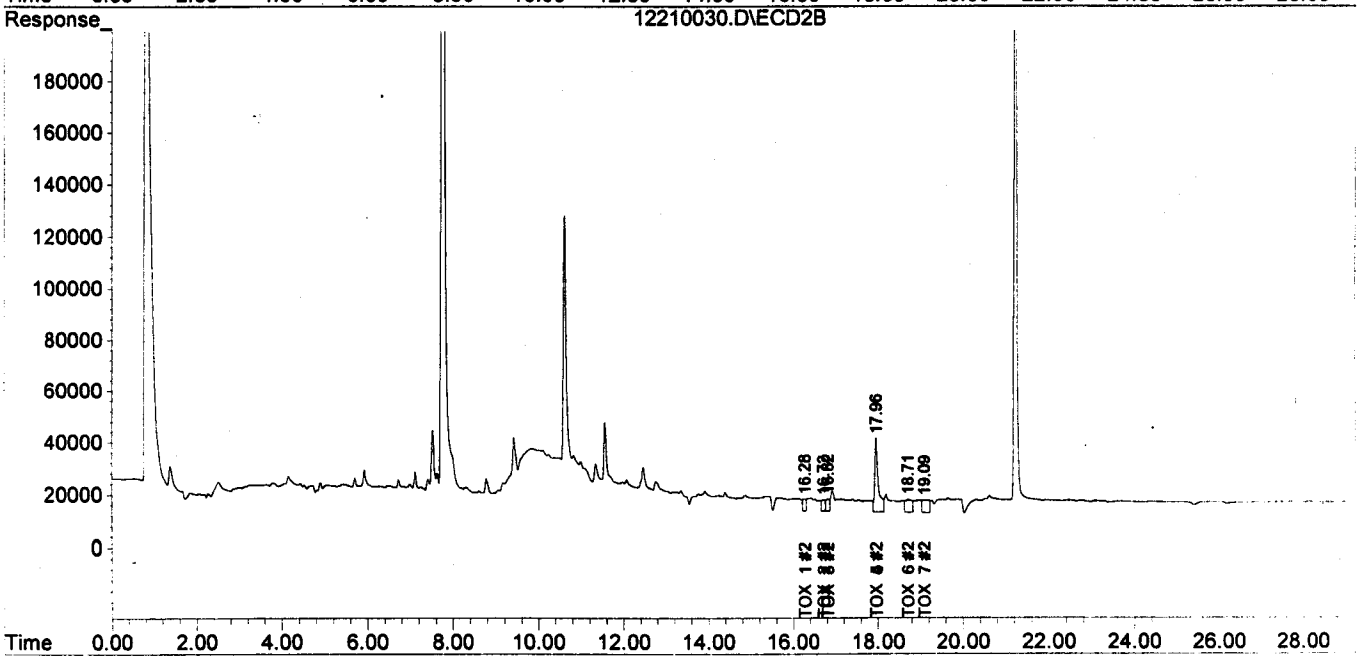
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210030.D\ECD1A.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\122100\12210030.D\ECD2B.CH
Acq On : 22 Dec 2000 12:04 Operator: YGK
Sample : 05278 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:56 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\122100\12210011.D\ECD2B.CH
Acq On : 21 Dec 2000 15:40 Operator: YGK
Sample : 05279 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:40 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.06	7.74	22952995	25526170	0.207	0.215	
		Spiked Amount 0.250			Recovery	=	82.80%	86.00%	
22)	S	Decachlorobiphen	20.82	21.23	20522883	22121770	0.203	0.203	
		Spiked Amount 0.250			Recovery	=	81.20%	81.20%	
		Target Compounds							
2)	T	alpha-BHC	9.60	9.48f	7414	207254	0.000	0.001	#
3)	T	beta-BHC	10.75f	10.59	195956	274916	0.002	0.004	#
4)	T	gamma-BHC (Linda	0.00	10.42f	0	23335	N.D.	0.000	#
5)	T	delta-BHC	11.16	11.31	211272	48046	0.001	0.000	#
6)	T	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
7)	T	Aldrin	12.31f	0.00	10032	0	0.000	N.D.	#
8)	T	Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	T	Endosulfan I	14.68	14.41-	669405	311444	0.006	0.003	#
10)	T	gamma-Chlordane	14.08	13.92	197724	8345	0.002	0.000	#
11)	T	alpha-Chlordane	14.33f	14.24	630998	89789	0.006-	0.001	#
12)	T	4,4'-DDE	14.68f	14.70	669405	83317	0.007-	0.001	#
13)	T	Dieldrin	15.24	14.96	105044	79842	0.001	0.001	#
14)	T	Endrin	15.71	15.72f	9342	608821	0.000	0.008	#
15)	T	4,4'-DDD	15.89	15.83f	55422	560637	0.001	0.006	#
16)	T	Endosulfan II	16.22	16.17f	535395	95092	0.006 -	0.001	#
17)	T	Endrin aldehyde	17.16	0.00	982	0	0.000	N.D.	#
18)	T	4,4'-DDT	16.51	16.59	37328	7029	0.000	0.000	#
19)	T	Endosulfan sulfa	18.14f	17.41	362241	41483	0.004	0.000	#
20)	T	Methoxychlor	0.00	17.97f	0	23978731	N.D.	0.510	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Pest cq 2

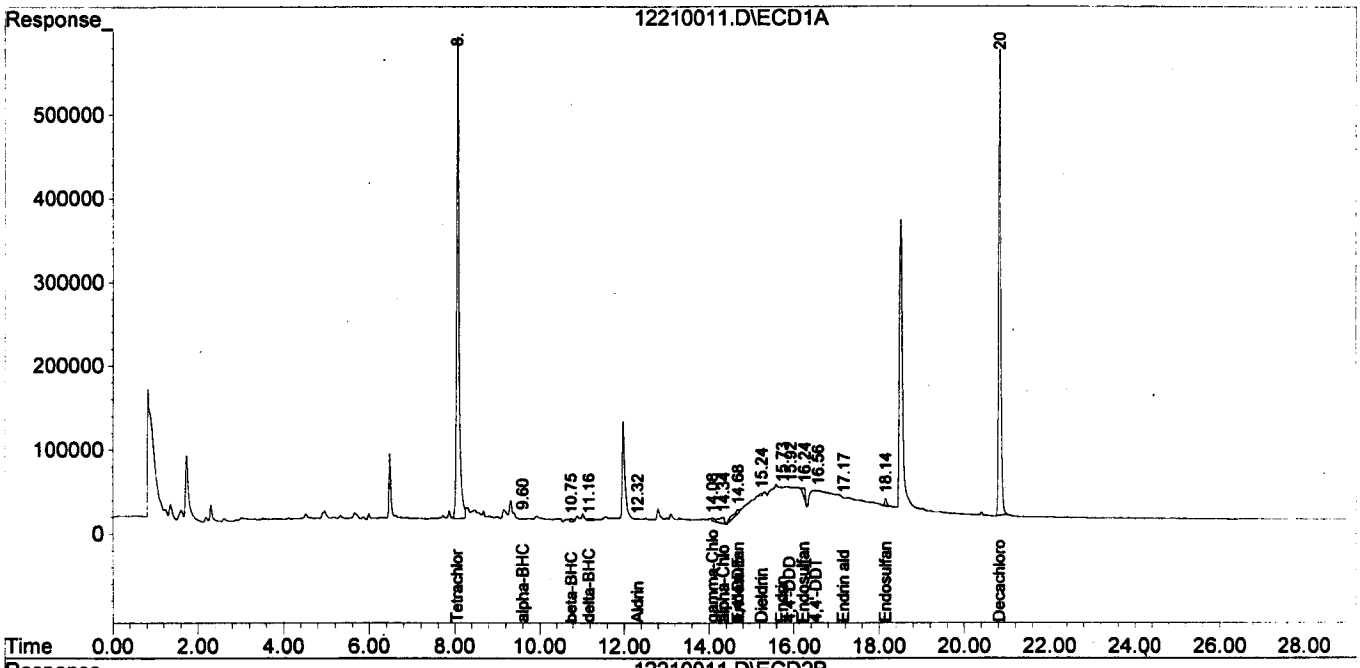
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

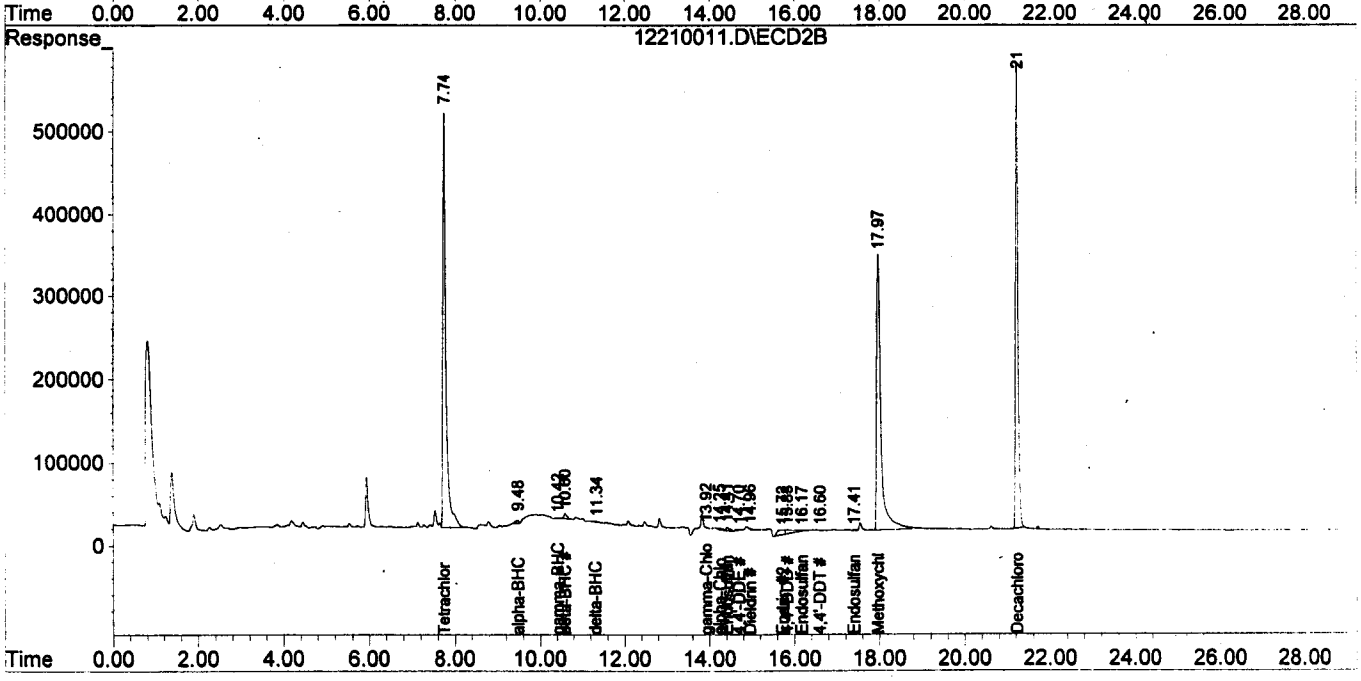
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\122100\12210011.D\ECD2B.CH
Acq On : 21 Dec 2000 15:40 Operator: YGK
Sample : 05279 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:40 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\122100\12210011.D\ECD2B.CH
Acq On : 21 Dec 2000 15:40 Operator: YGK
Sample : 05279 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:51 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
Target Compounds						
1) L TOX 1	16.21	16.27	1275819	341373	0.899	0.063 #
2) L TOX 2	16.51	16.71	7088117	368676	2.683	0.099 #
3) L TOX 3	17.04f	16.82	1556728	282806	0.440	0.059 #
4) L TOX 4	17.75f	17.97	409690	26023473	0.115	4.303 #
5) L TOX 5	17.85	17.97f	902681	26023473	0.205	5.365 #
6) L TOX 6	0.00	18.80	0	1129251	N.D.	0.319 #
7) L TOX 7	0.00	0.00	0	0	N.D.	N.D.
Sum TOX 1			11233035	54169052	4.341	10.208
Average TOX 1					0.868	1.701

Tox<DL

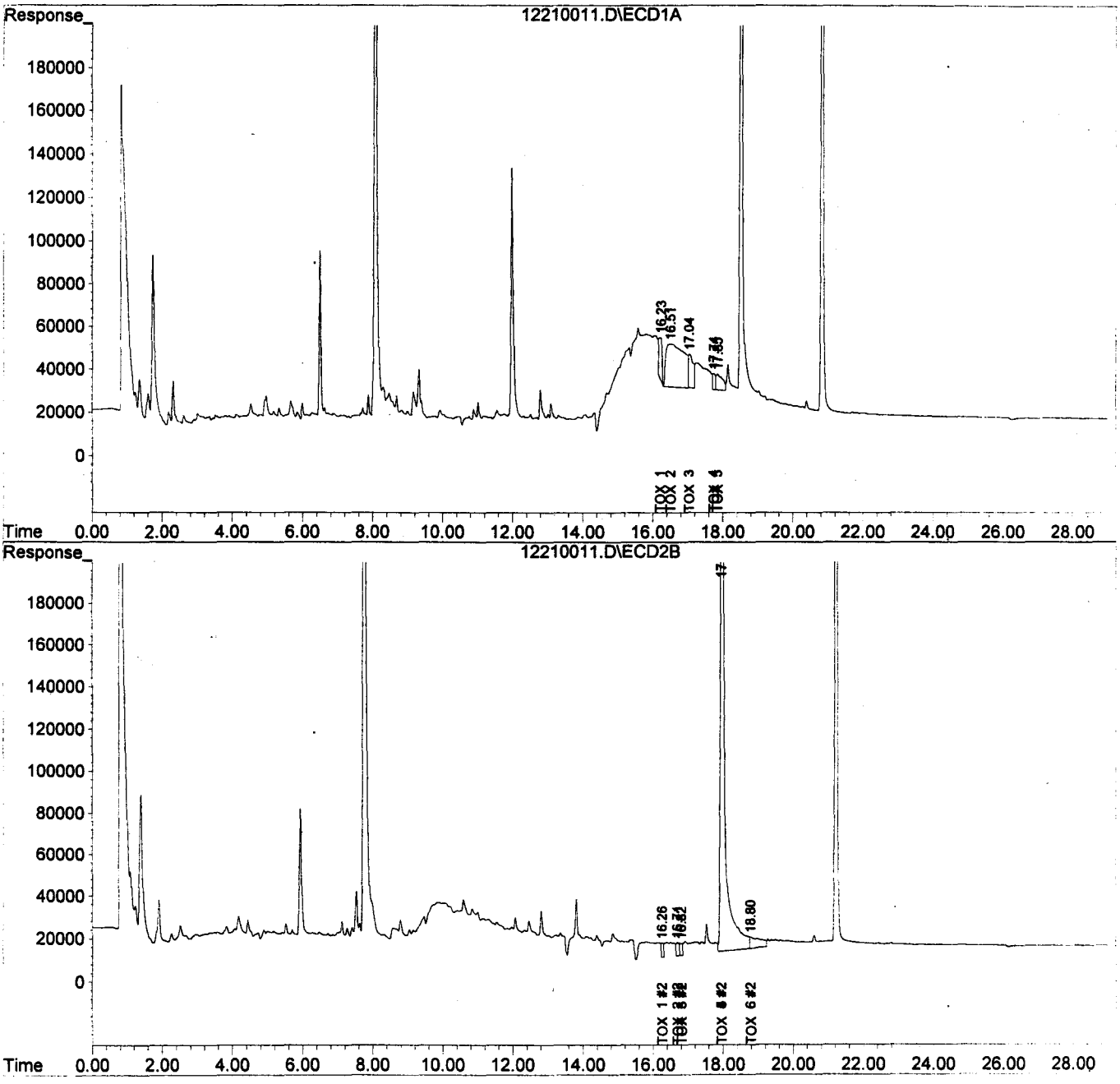
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\122100\12210011.D\ECD2B.CH
Acq On : 21 Dec 2000 15:40 Operator: YGK
Sample : 05279 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:51 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210031.D\ECD1A.CH Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\122100\12210031.D\ECD2B.CH
Acq On : 22 Dec 2000 12:38 Operator: YGK
Sample : 05280 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:24 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.00f	7.74	135.0E6	21831005	1.221	0.184	#
		Spiked Amount 0.250			Recovery	=	488.40% coel.	73.60% ✓ in report	
22)	S	Decachlorobiphen	20.82	21.23	6222993	6332209	0.062	0.058	
		Spiked Amount 0.250			Recovery	=	24.80% ✓	23.20%	
		Target Compounds							
2)	T	alpha-BHC	9.60	9.43	316824	421582	0.002	0.002	#
3)	T	beta-BHC	10.70 ✓	10.61 ✓	8779977	7932212	0.109	0.111 ✓	
4)	T	gamma-BHC (Linda	10.44	10.35	140962	14182	0.001	0.000	#
5)	T	delta-BHC	11.15	11.34	312158	152196	0.002	0.001	#
6)	T	Heptachlor	11.65	11.34f	15927	152196	0.000	0.001	#
7)	T	Aldrin	12.40f	12.16	1053647	12567	0.010	0.000	#
8)	T	Heptachlor epoxi	13.78 ✓	13.48 ✓	753350	436787	0.007 ✓	0.004	#
9)	T	Endosulfan I	14.71	14.39	733763	226110	0.006 -	0.002	#
10)	T	gamma-Chlordane	14.07 ✓	13.92	1004813	815996	0.008 ✓	0.006	
11)	T	alpha-Chlordane	14.37 ✓	14.24 ✓	3020246	2663506	0.029 ✓	0.023	
12)	T	4,4'-DDE	14.61	14.77f	6102	84159	0.000	0.001	#
13)	T	Dieldrin	15.21	14.96	164077	271685	0.002	0.002	#
14)	T	Endrin	15.66f	15.60	11758	99926	0.000	0.001	#
15)	T	4,4'-DDD	15.99f	15.92	334869	206653	0.004 -	0.002	#
16)	T	Endosulfan II	16.22	16.14	828132	161998	0.009 -	0.002	#
17)	T	Endrin aldehyde	17.08f	16.83	843853	7738	0.011 -	0.000	#
18)	T	4,4'-DDT	16.51	16.61	679227	32855	0.007 -	0.000	#
19)	T	Endosulfan sulfa	18.14f	17.41	45925	62790	0.001	0.001	#
20)	T	Methoxychlor	17.62f	17.96f	66111	1088006	0.001	0.023	#
21)	T	Endrin ketone	18.67	18.60	946	46444	0.000	0.000	#

d.l. 0.005

B-BHC : 0.56 ppb, G-Chlord. : 0.04 J

A-Chlordane : 0.15 ppb, Hept. Epox. : 0.035 J

rest Pest < DL (Endr. Ald. - from run w/o TBA clean-up)

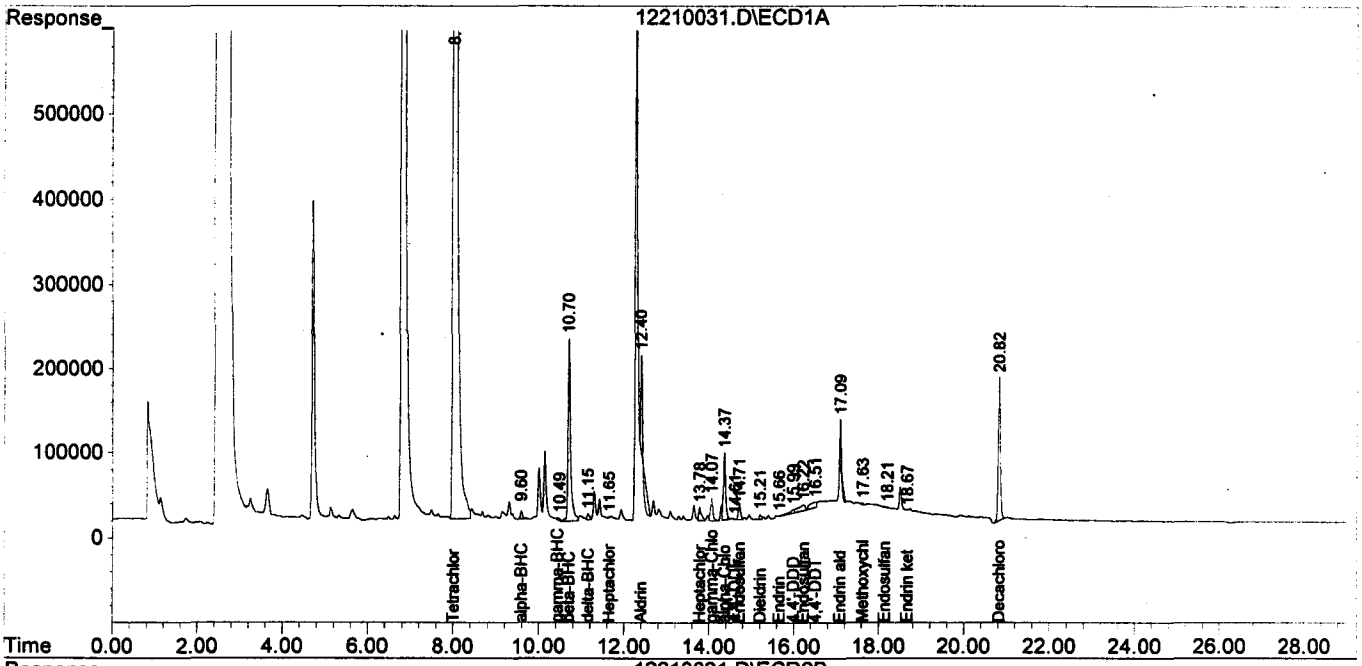
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

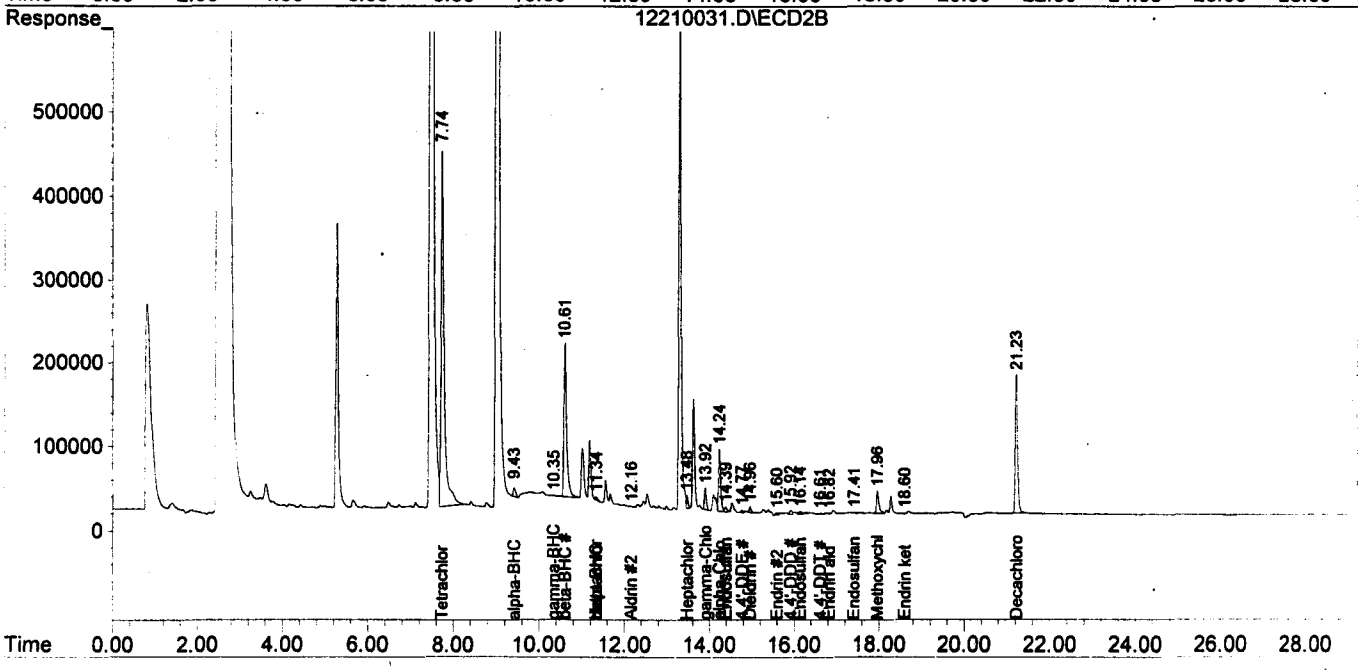
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210031.D\ECD1A.CH Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\122100\12210031.D\ECD2B.CH
Acq On : 22 Dec 2000 12:38 Operator: YGK
Sample : 05280 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:24 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210012.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\122100\12210012.D\ECD2B.CH
Acq On : 21 Dec 2000 16:14 Operator: YGK
Sample : 05280 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:41 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.05	7.73	29228886	75772015	0.264	0.639	#
		Spiked Amount 0.250			Recovery	=	105.60% ✓	255.60%	
22)	S	Decachlorobiphen	20.82	21.22	5409521	5540053	0.054	0.051	
		Spiked Amount 0.250			Recovery	=	21.60% ✓	20.40%	
		Target Compounds							
2)	T	alpha-BHC	0.00	9.50f	0	4735649	N.D.	0.027	#
3)	T	beta-BHC	10.69	0.00	9370772	0	0.116 —	N.D.	#
4)	T	gamma-BHC (Linda	0.00	10.35	0	1366805	N.D.	0.010	#
5)	T	delta-BHC	0.00	0.00	0	0	N.D.	N.D.	
6)	T	Heptachlor	0.00	0.00	0	0	N.D.	N.D.	
7)	T	Aldrin	12.41f	0.00	11082615	0	0.102	N.D.	#
8)	T	Heptachlor epoxi	13.78	0.00	1347129	0	0.013 ~	N.D.	#
9)	T	Endosulfan I	14.70	0.00	523036	0	0.005	N.D.	#
10)	T	gamma-Chlordane	14.07	13.86f	746532	-161116175	0.006 ~	N.D.	#
11)	T	alpha-Chlordane	14.36 ✓	14.24 ✓	2642656	1431029	0.025	0.012	#
12)	T	4,4'-DDE	14.54f	0.00	40118	0	0.000	N.D.	#
13)	T	Dieldrin	15.20	14.95	164438	-172306	0.002	N.D.	#
14)	T	Endrin	15.63f	0.00	59311	0	0.001	N.D.	#
15)	T	4,4'-DDD	15.96f	0.00	35769	0	0.000	N.D.	#
16)	T	Endosulfan II	16.33f	0.00	34481	0	0.000	N.D.	#
17)	T	Endrin aldehyde	17.22f	16.91f	30484	49951	0.000	0.001	#
18)	T	4,4'-DDT	16.58f	16.58	137793	-19436	0.001	N.D.	#
19)	T	Endosulfan sulfa	18.04	17.39	6222	20536	0.000	0.000	#
20)	T	Methoxychlor	17.63f	17.96f	23052	495233	0.000	0.011	#
21)	T	Endrin ketone	18.73	18.54	95133	19484	0.001	0.000	#

Endo. Ald < DL

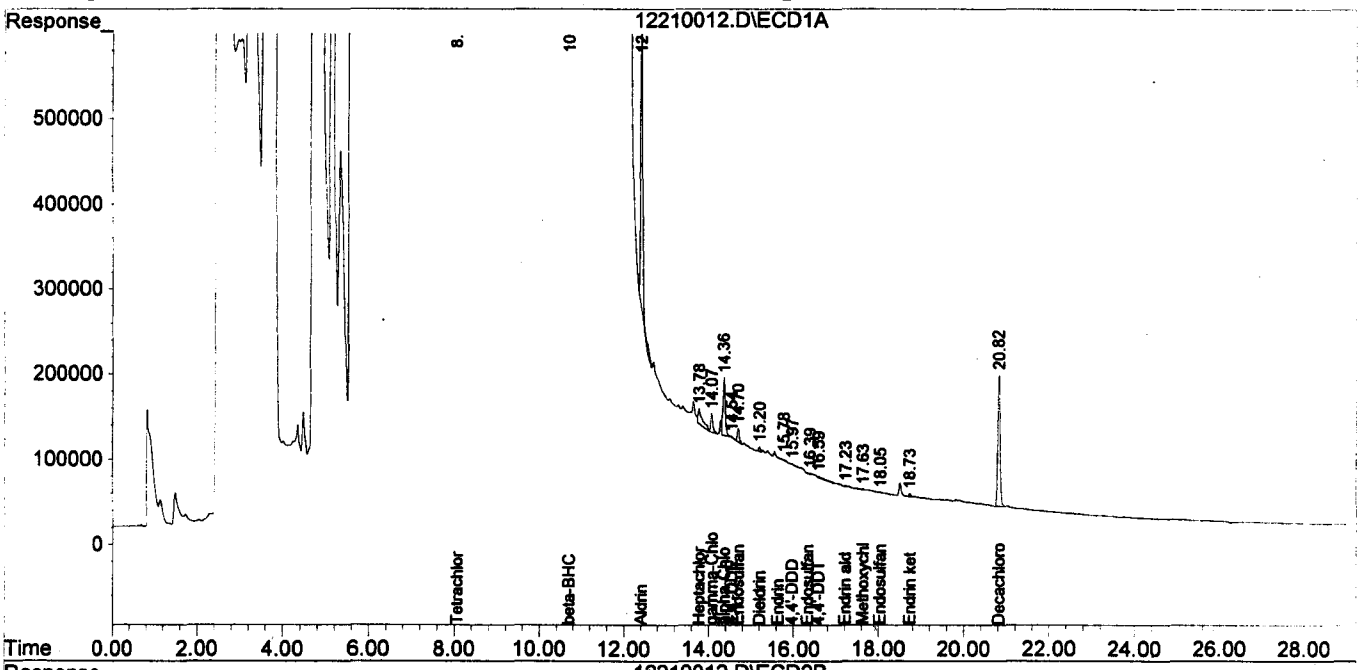
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

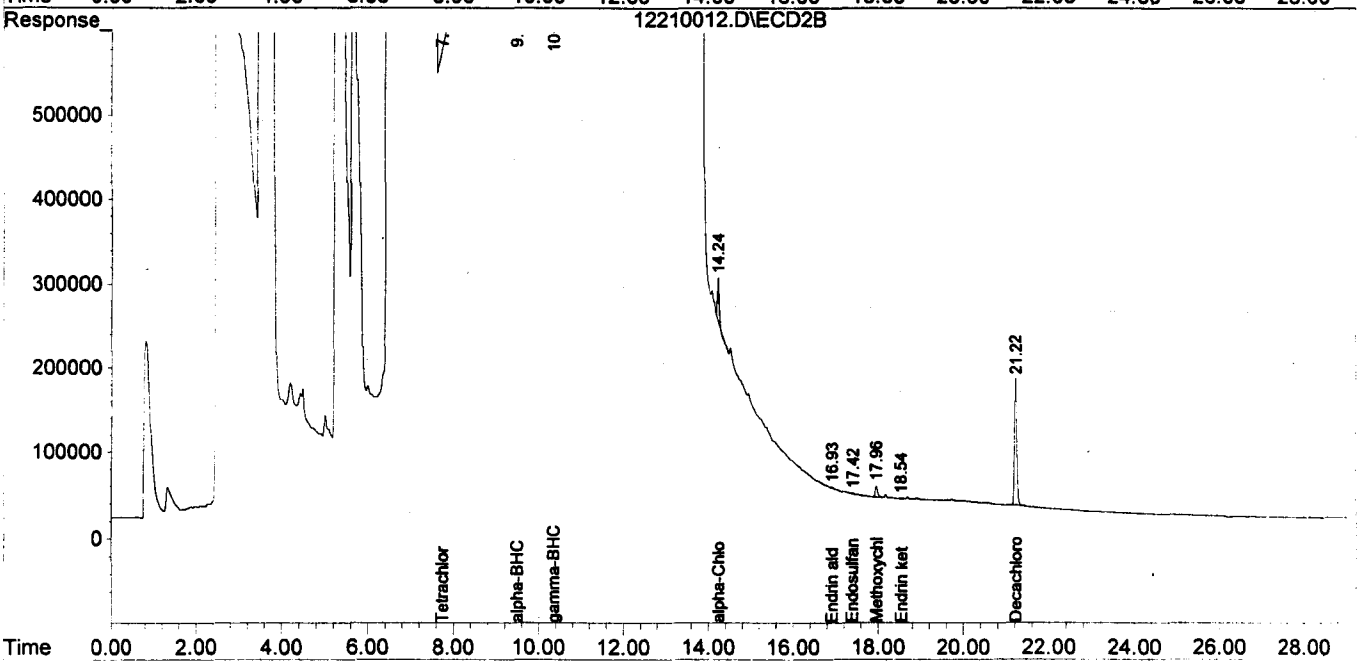
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210012.D\ECD1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\122100\12210012.D\ECD2B.CH
Acq On : 21 Dec 2000 16:14 Operator: YGK
Sample : 05280 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:41 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210031.D\ECD1A.CH Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\122100\12210031.D\ECD2B.CH
Acq On : 22 Dec 2000 12:38 Operator: YGK
Sample : 05280 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:57 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L TOX 1	16.23	16.28	1879055	215184	1.324	0.040 #
2)	L TOX 2	16.51	16.73	2029116	204663	0.768	0.055 #
3)	L TOX 3	16.88f	16.82	1981520	184422	0.560	0.038 #
4)	L TOX 4	17.62	17.96	723417	1733377	0.203	0.287 #
5)	L TOX 5	17.84	17.96f	792136	1733377	0.180	0.357 #
6)	L TOX 6	18.67	18.69f	143039	578739	0.045	0.163 #
7)	L TOX 7	0.00	19.17	0	194769	N.D.	0.075 #
	Sum TOX 1			7548284	4844529	3.079	1.016
	Average TOX 1					0.513	0.145

TX402

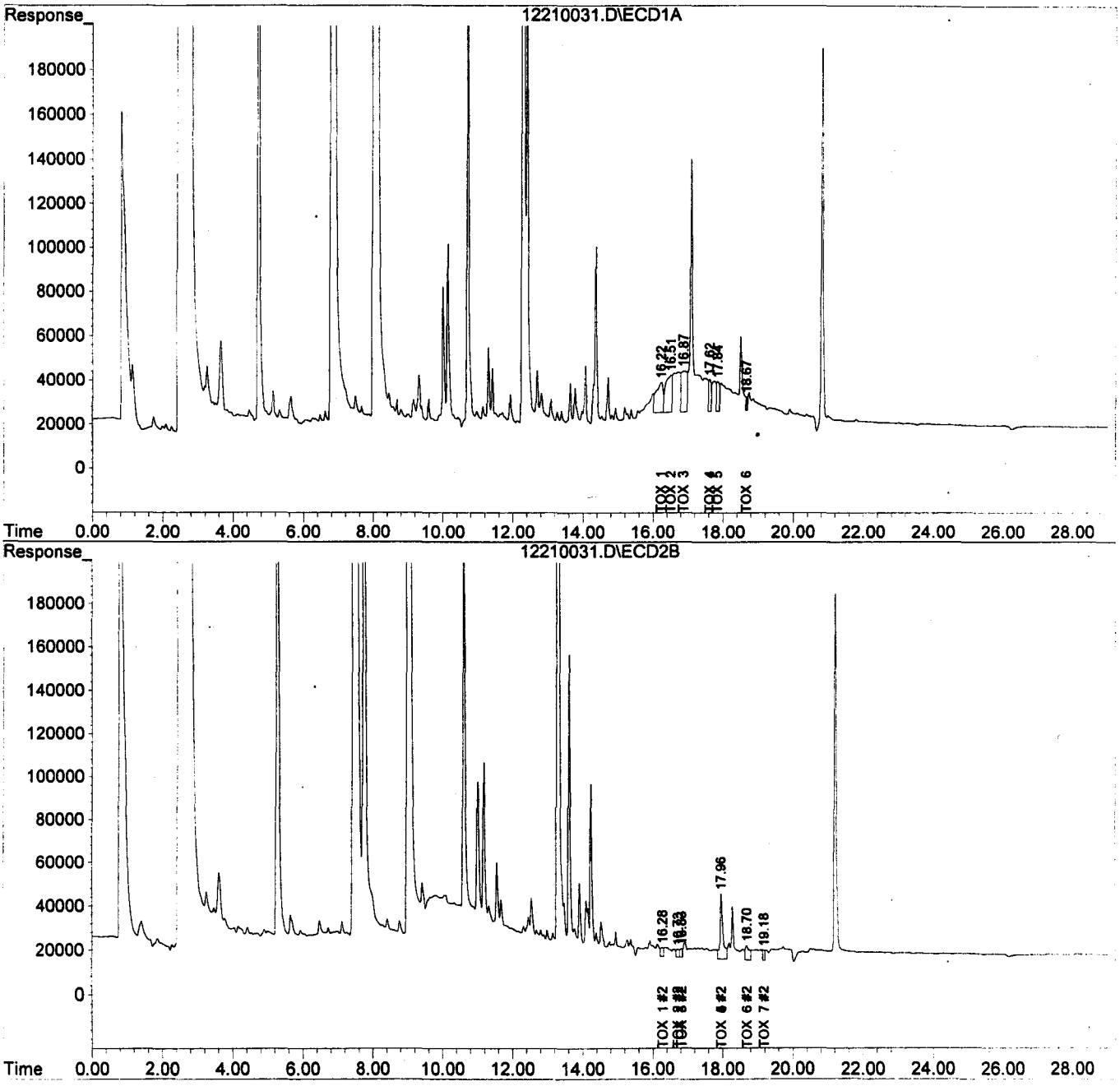
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210031.D\ECD1A.CH Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\122100\12210031.D\ECD2B.CH
Acq On : 22 Dec 2000 12:38 Operator: YGK
Sample : 05280 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:57 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\122100\12210013.D\ECD2B.CH
Acq On : 21 Dec 2000 16:49 Operator: YGK
Sample : 05281 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:42 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.05	7.74	22564616	25955384	0.204	0.219	
		Spiked Amount 0.250			Recovery	=	81.60% ✓	87.60%	
22)	S	Decachlorobiphen	20.82	21.22	22481121	24213389	0.223	0.223	
		Spiked Amount 0.250			Recovery	=	89.20% ✓	89.20%	
		Target Compounds							
2)	T	alpha-BHC	9.56f	9.47f	25374	247175	0.000	0.001	#
3)	T	beta-BHC	10.74f	10.59	138867	653468	0.002	0.009	#
4)	T	gamma-BHC (Linda	10.44	10.40f	53026	99144	0.000	0.001	#
5)	T	delta-BHC	11.16	11.29f	95645	54169	0.001	0.000	
6)	T	Heptachlor	0.00	11.46f	0	11218	N.D.	0.000	#
7)	T	Aldrin	12.38	0.00	18523	0	0.000	N.D.	#
8)	T	Heptachlor epoxi	0.00	13.49	0	319637	N.D.	0.003	#
9)	T	Endosulfan I	14.67	14.40	815551	317457	0.007 -	0.003	#
10)	T	gamma-Chlordane	14.02f	0.00	830214	0	0.007	N.D.	#
11)	T	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
12)	T	4,4'-DDE	14.67f	14.70	815551	106396	0.008	0.001	#
13)	T	Dieldrin	0.00	14.95	0	32724	N.D.	0.000	#
14)	T	Endrin	0.00	15.71f	0	587193	N.D.	0.007	#
15)	T	4,4'-DDD	15.95	15.98f	156361	241279	0.002	0.003	#
16)	T	Endosulfan II	16.22	16.13	500681	175040	0.006 -	0.002	#
17)	T	Endrin aldehyde	17.23f	16.81	2919	10169	0.000	0.000	#
18)	T	4,4'-DDT	16.51	16.59	181756	4533	0.002	0.000	#
19)	T	Endosulfan sulfa	18.14f	17.40	254825	24754	0.003	0.000	#
20)	T	Methoxychlor	17.50	17.97f	25868	19388690	0.001	0.412	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Pest-QC

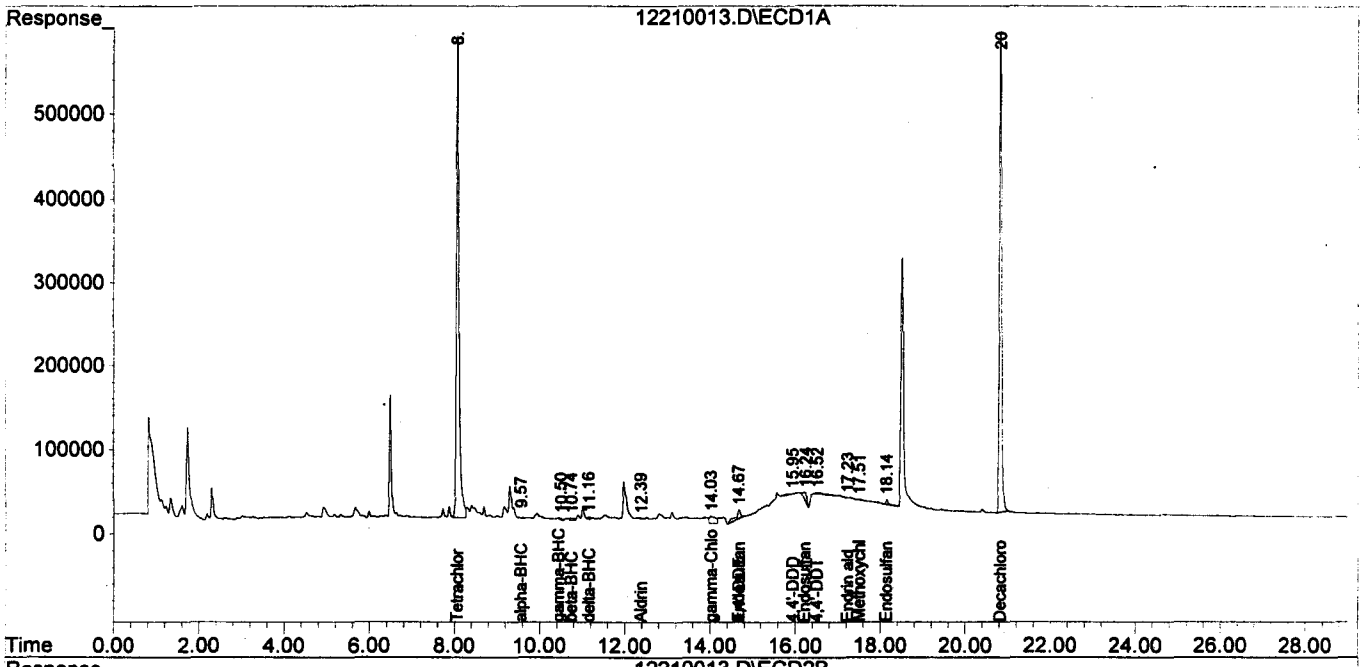
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

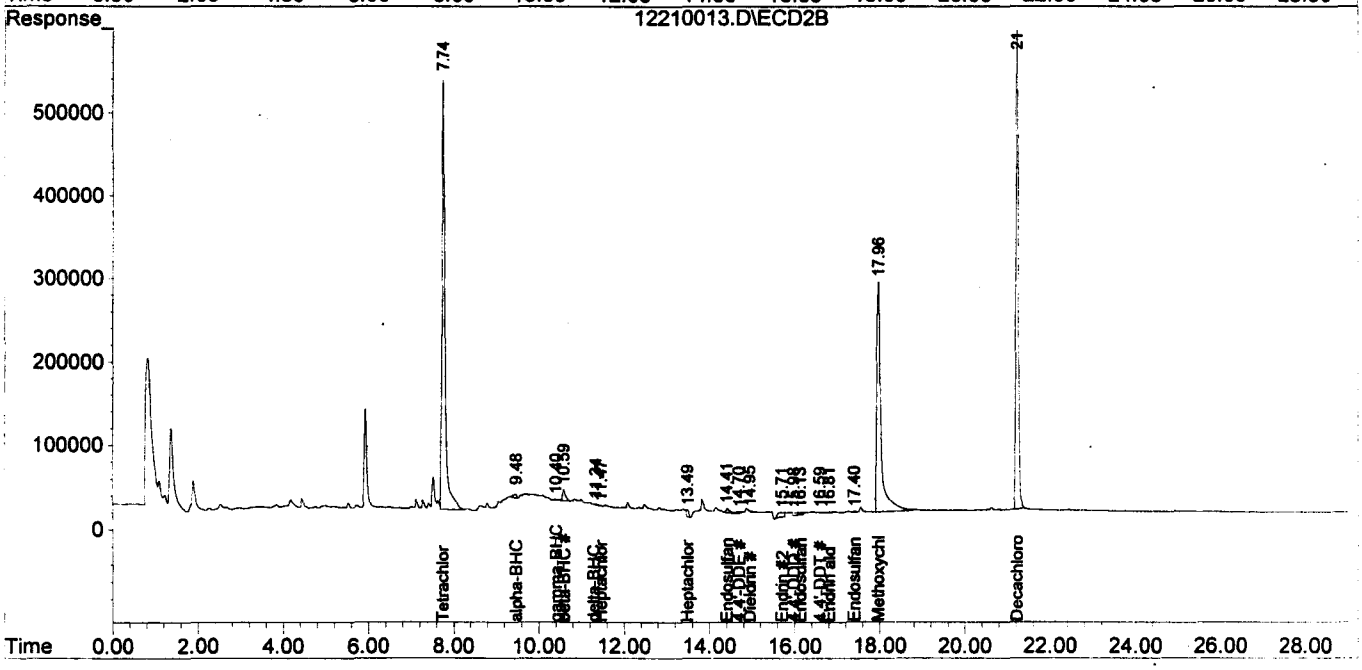
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\122100\12210013.D\ECD2B.CH
Acq On : 21 Dec 2000 16:49 Operator: YGK
Sample : 05281 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:42 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\122100\12210013.D\ECD2B.CH
Acq On : 21 Dec 2000 16:49 Operator: YGK
Sample : 05281 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:52 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.21	16.27	1152786	414506	0.812	0.076	#
2)	L TOX 2	16.51	16.71	6310661	390334	2.389	0.105	#
3)	L TOX 3	17.04f	16.81	1700909	240702	0.481	0.050	#
4)	L TOX 4	17.63	17.97	353238	21116503	0.099	3.492	#
5)	L TOX 5	17.83	17.97f	418824	21116503	0.095	4.354	#
6)	L TOX 6	0.00	18.80	0	635502	N.D.	0.179	#
7)	L TOX 7	19.02f	19.07f	106765	311371	0.063	0.120	#
	Sum TOX 1			10043183	44225420	3.938	8.377	
	Average TOX 1					0.656	1.197	

toxc40c

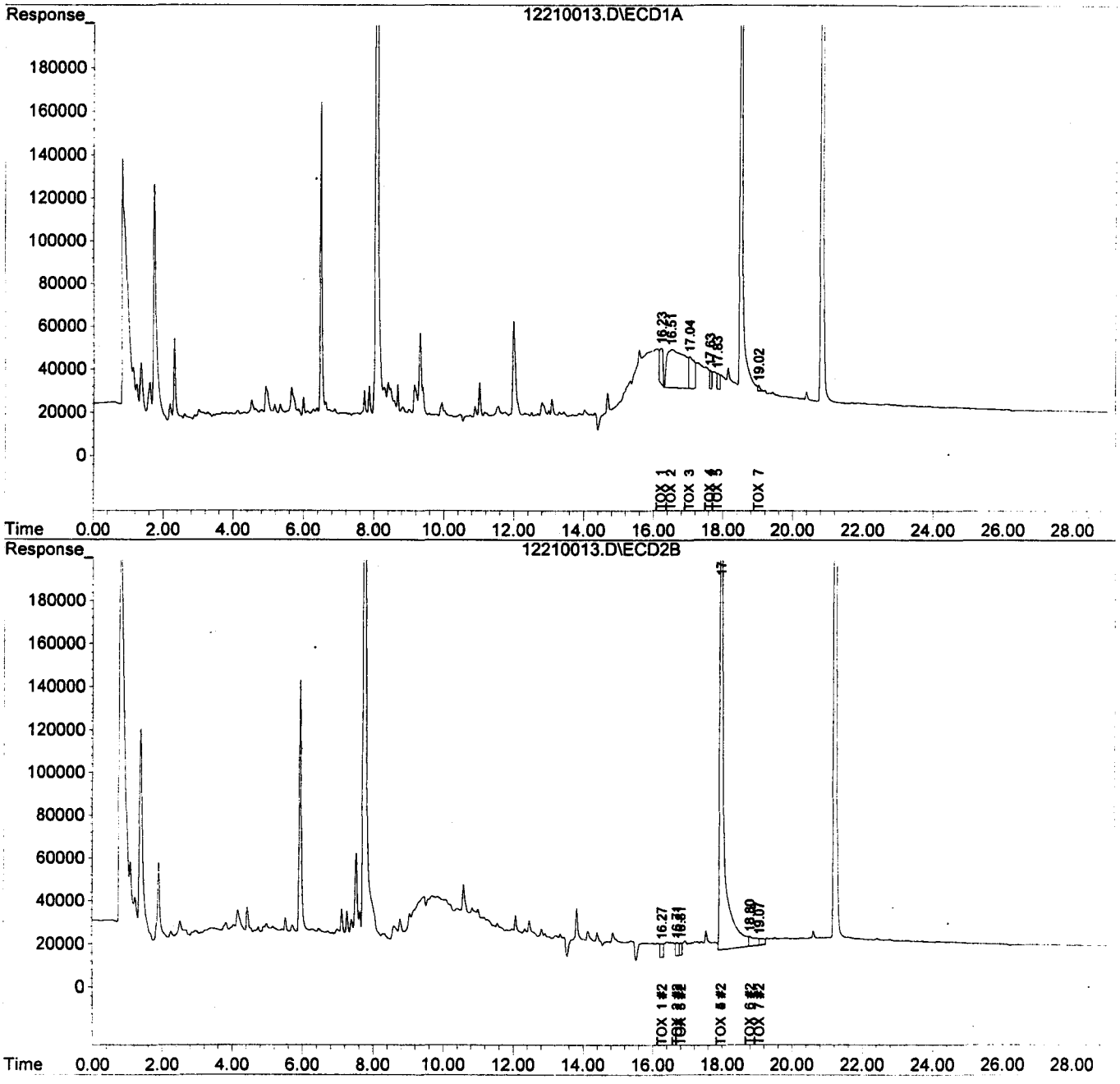
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\122100\12210013.D\ECD2B.CH
Acq On : 21 Dec 2000 16:49 Operator: YGK
Sample : 05281 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:52 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\122100\12210014.D\ECD2B.CH
Acq On : 21 Dec 2000 17:23 Operator: YGK
Sample : 05282 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:43 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.05	7.74	35862347	26453335	0.324	0.223	#
		Spiked Amount 0.250			Recovery	=	129.60%	89.20%	
22)	S	Decachlorobiphen	20.82	21.22	22838747	25049094	0.226	0.230	
		Spiked Amount 0.250			Recovery	=	90.40%	92.00%	
		Target Compounds							
2)	T	alpha-BHC	9.59	9.47f	5006	270906	0.000	0.002	#
3)	T	beta-BHC	10.74f	10.59	185742	284680	0.002	0.004	#
4)	T	gamma-BHC (Linda	10.47	10.42f	221529	22633	0.001	0.000	#
5)	T	delta-BHC	11.15	11.35	131675	79648	0.001	0.001	
6)	T	Heptachlor	0.00	11.35f	0	79648	N.D.	0.001	#
7)	T	Aldrin	12.30f	0.00	-9284	0	N.D.	N.D.	
8)	T	Heptachlor epoxi	0.00	13.50	0	107261	N.D.	0.001	#
9)	T	Endosulfan I	14.68	14.41	553295	68714	0.005	0.001	#
10)	T	gamma-Chlordane	14.03f	0.00	95958	0	0.001	N.D.	#
11)	T	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
12)	T	4,4'-DDE	14.68f	14.70	553295	16602	0.006	0.000	#
13)	T	Dieldrin	0.00	14.88f	0	182315	N.D.	0.002	#
14)	T	Endrin	0.00	15.62	0	50615	N.D.	0.001	#
15)	T	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	Endosulfan II	16.22	0.00	164790	0	0.002	N.D.	#
17)	T	Endrin aldehyde	17.04f	16.82	2637	2966	0.000	0.000	
18)	T	4,4'-DDT	16.45	16.60	307425	3658	0.003	0.000	#
19)	T	Endosulfan sulfa	18.14f	17.41	15178	8275	0.000	0.000	#
20)	T	Methoxychlor	17.51	17.96f	24889	2028016	0.001	0.043	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Pest<D2

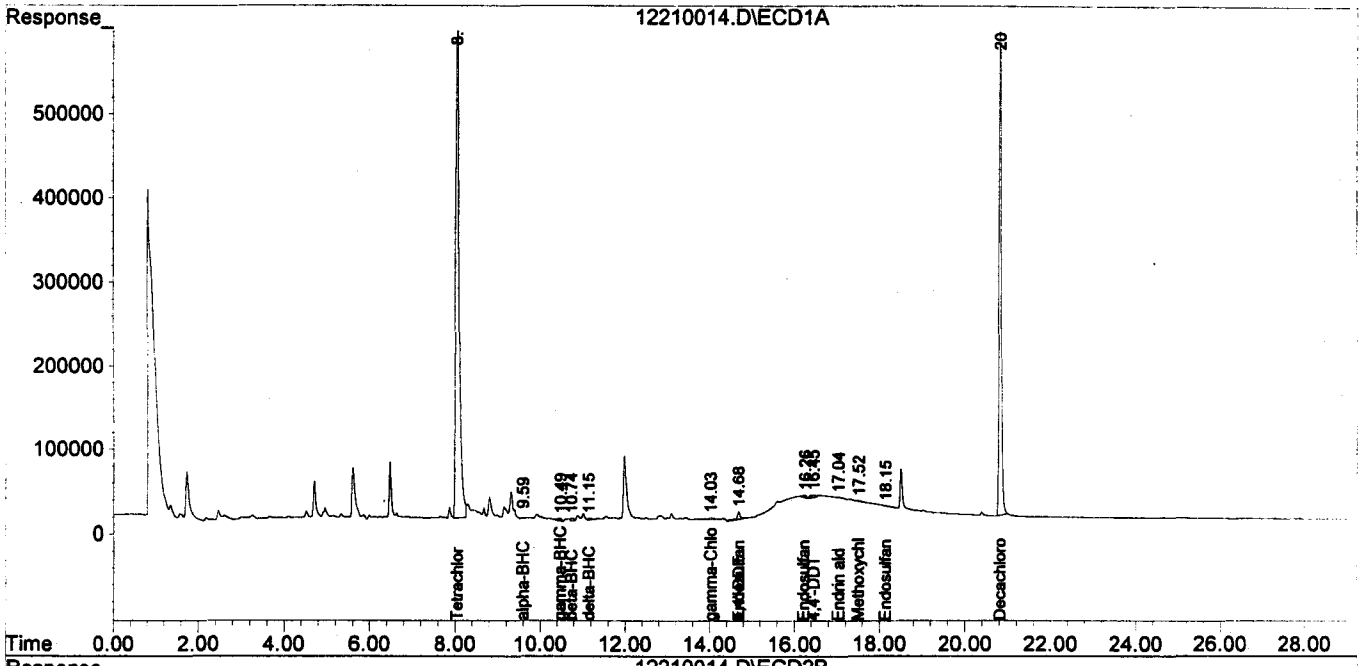
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

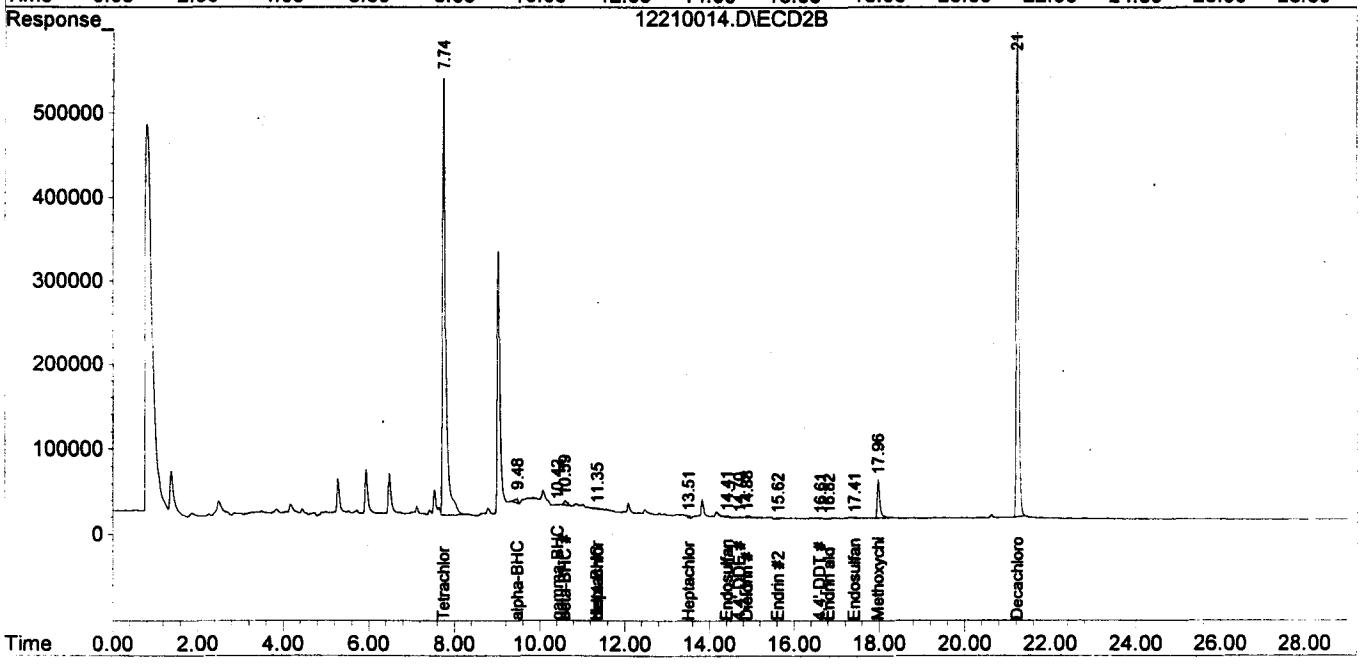
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\122100\12210014.D\ECD2B.CH
Acq On : 21 Dec 2000 17:23 Operator: YGK
Sample : 05282 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:43 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\122100\12210014.D\ECD2B.CH
Acq On : 21 Dec 2000 17:23 Operator: YGK
Sample : 05282 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:52 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.22	16.27	929391	43950	0.655	0.008	#
2)	L TOX 2	16.45	16.72	1391318	36815	0.527	0.010	#
3)	L TOX 3	17.04f	16.82	2457816	29473	0.694	0.006	#
4)	L TOX 4	17.74f	17.96	294293	2122659	0.083	0.351	#
5)	L TOX 5	17.83	17.96f	307534	2122659	0.070	0.438	#
6)	L TOX 6	0.00	18.73	0	73491	N.D.	0.021	#
7)	L TOX 7	19.03f	19.19	59992	18377	0.035	0.007	#
	Sum TOX 1			5440344	4447424	2.063	0.841	
	Average TOX 1					0.344	0.120	

TOXC9D2

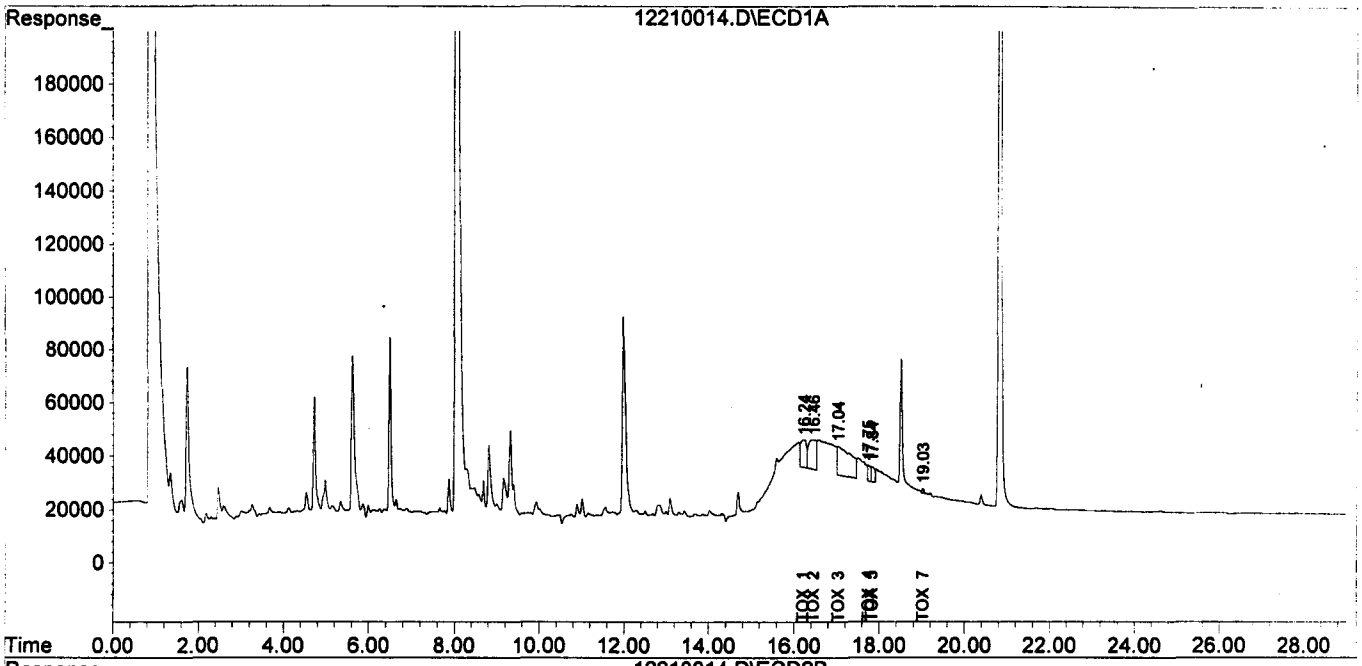
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

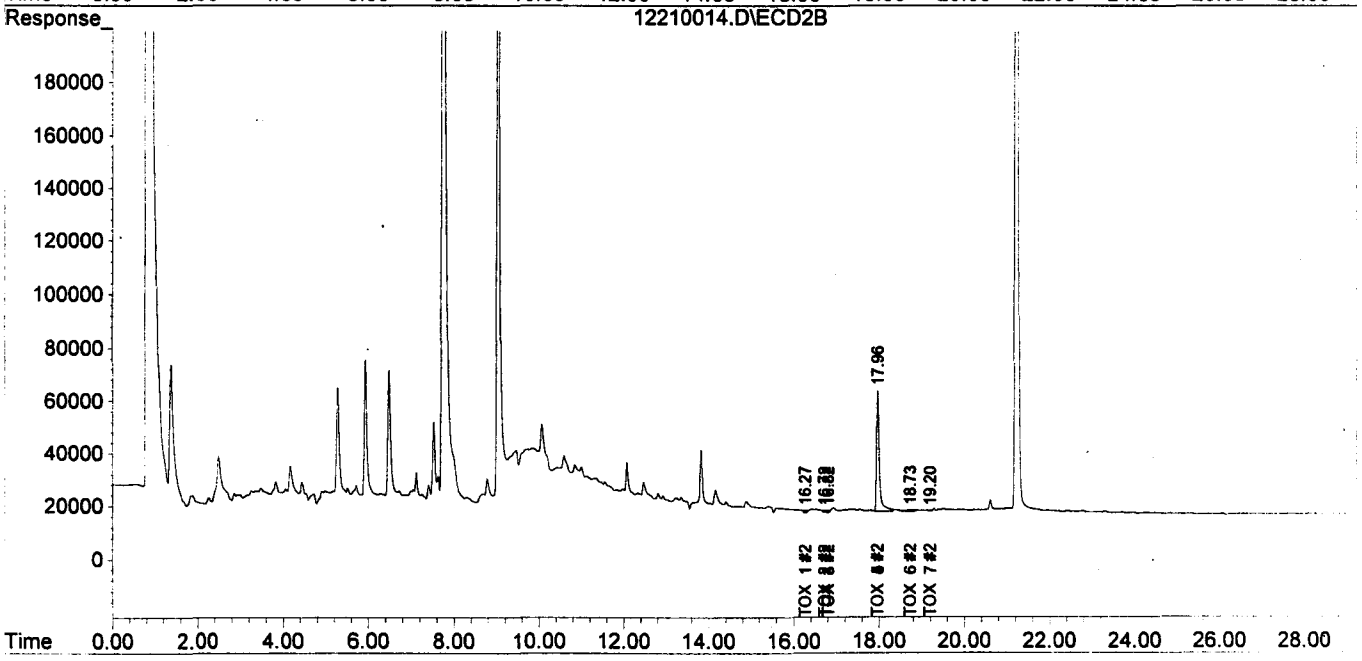
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\122100\12210014.D\ECD2B.CH
Acq On : 21 Dec 2000 17:23 Operator: YGK
Sample : 05282 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:52 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210032.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\122100\12210032.D\ECD2B.CH
Acq On : 22 Dec 2000 13:13 Operator: YGK
Sample : 05283 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:25 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.05	7.74	32836925	20171386	0.297	0.170	#
		Spiked Amount 0.250			Recovery	=	118.80%	68.00%	
22)	S	Decachlorobiphen	20.82	21.23	6832158	6982065	0.068	0.064	
		Spiked Amount 0.250			Recovery	=	27.20%	25.60%	
		Target Compounds							
2)	T	alpha-BHC	9.60	9.43	265196	452611	0.001	0.003	#
3)	T	beta-BHC	10.70	10.61	9369225	8605976	0.116	0.121	
4)	T	gamma-BHC (Linda	10.44	10.35	153248	15684	0.001	0.000	#
5)	T	delta-BHC	11.15	11.34	310426	289435	0.002	0.003	#
6)	T	Heptachlor	11.64	11.34f	2307	289435	0.000	0.002	#
7)	T	Aldrin	12.42f	12.16	58672	17226	0.001	0.000	#
8)	T	Heptachlor epoxi	13.78	13.48	803744	520789	0.008	0.005	#
9)	T	Endosulfan I	14.70	14.39	528143	242979	0.005	0.002	#
10)	T	gamma-Chlordane	14.07	13.92	1000035	777541	0.008	0.006	#
11)	T	alpha-Chlordane	14.36	14.24	2365527	2567032	0.022	0.022	
12)	T	4,4'-DDE	14.61	14.70	7078	1402	0.000	0.000	#
13)	T	Dieldrin	15.21	14.96	164505	194735	0.002	0.002	
14)	T	Endrin	15.66f	15.62	12506	183169	0.000	0.002	#
15)	T	4,4'-DDD	15.98f	16.01f	535028	289657	0.006	0.003	#
16)	T	Endosulfan II	16.22	16.16f	1376677	107232	0.015	0.001	#
17)	T	Endrin aldehyde	0.00	16.82	0	6878	N.D.	0.000	#
18)	T	4,4'-DDT	16.49	16.60	1169353	29599	0.012	0.000	#
19)	T	Endosulfan sulfa	18.14f	17.41	68981	61136	0.001	0.001	
20)	T	Methoxychlor	17.50	17.96f	112164	2276365	0.002	0.048	#
21)	T	Endrin ketone	18.73	18.56	77453	10640	0.001	0.000	#

d.l : 0.005

B-BHC : 0.61 ppb, G-Chlordane : 0.004 ppb J
YGK 12/28
A-Chlordane : 0.11 ppb, Hept. Epox. : 0.040 ppb J
pest Pest <QL (Endrin Ald. — from run w/o TBA)

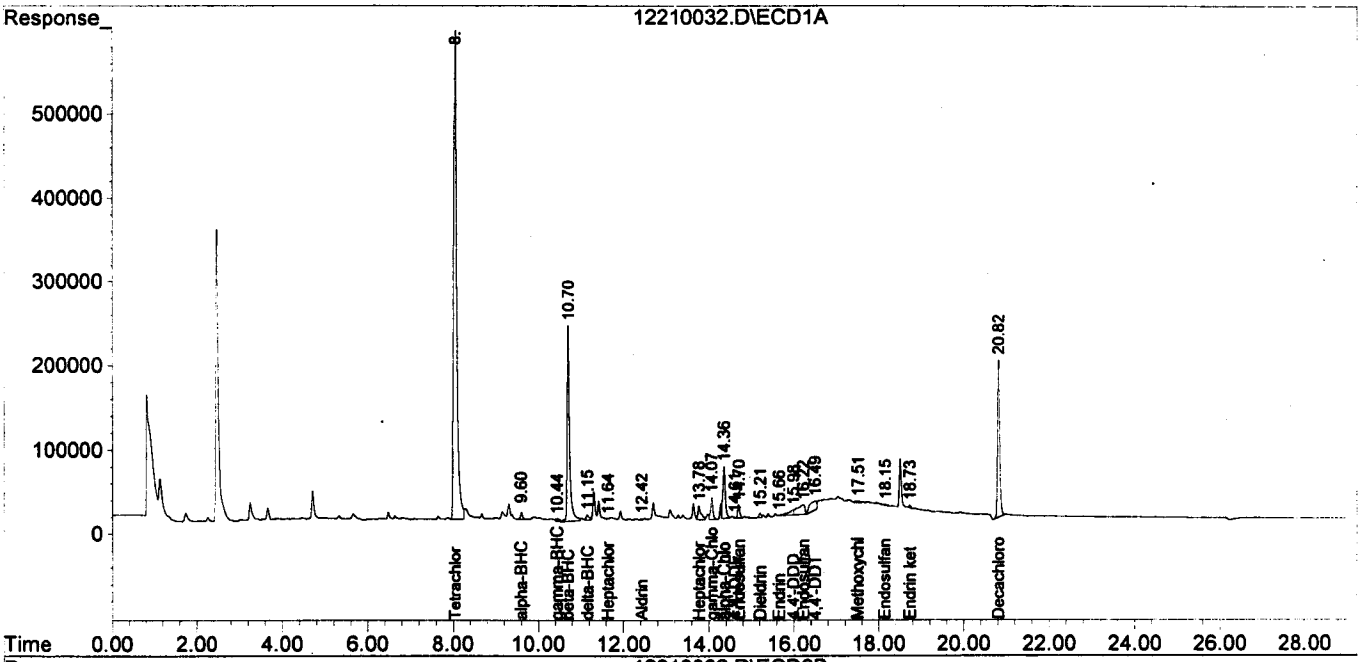
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

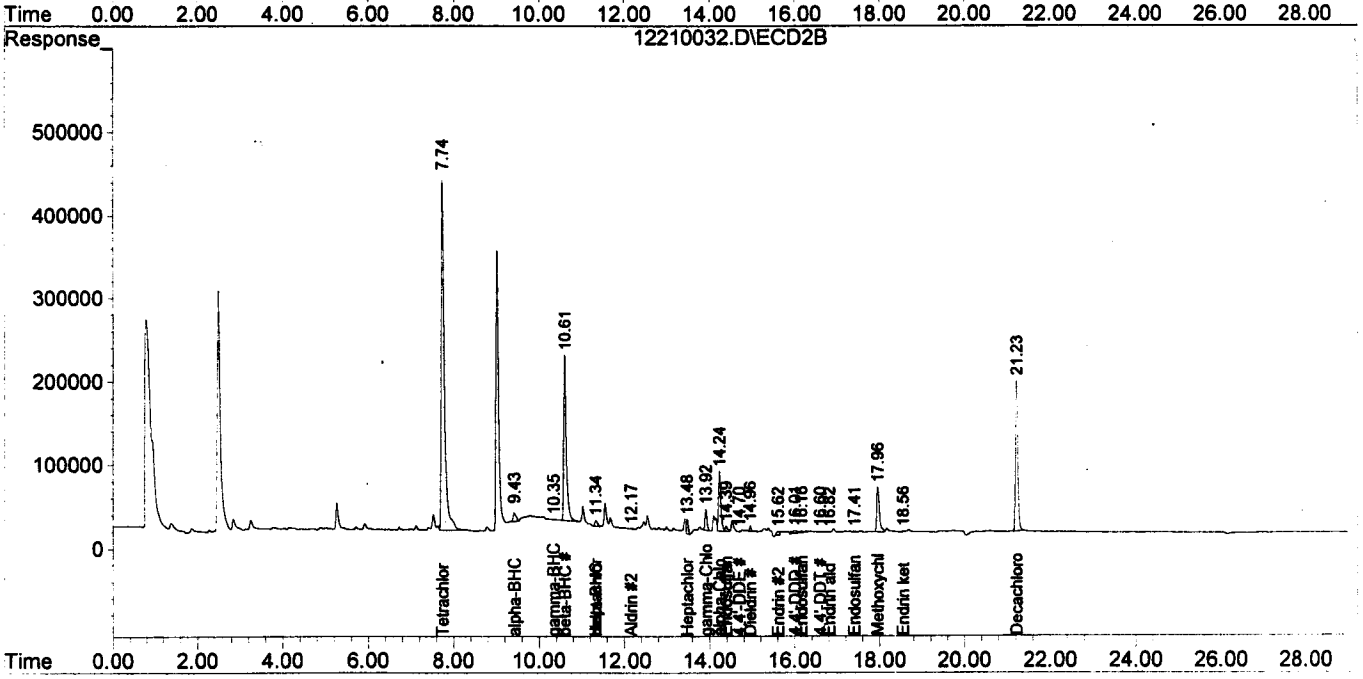
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210032.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\122100\12210032.D\ECD2B.CH
Acq On : 22 Dec 2000 13:13 Operator: YGK
Sample : 05283 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:25 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210015.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\122100\12210015.D\ECD2B.CH
Acq On : 21 Dec 2000 17:57 Operator: YGK
Sample : 05283 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:44 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.05	7.74	339.5E6	40859850	3.069	0.344	#
		Spiked Amount 0.250			Recovery	= 1227.60%		137.60%	
22)	S	Decachlorobiphen	20.82	21.22	5838386	5931287	0.058	0.055	
		Spiked Amount 0.250			Recovery	= 23.20%		22.00%	
		Target Compounds							
2)	T	alpha-BHC	9.66f	9.49f	113805	490663	0.001	0.003	#
3)	T	beta-BHC	10.69	10.60	11409372	2840672	0.141	0.040	#
4)	T	gamma-BHC (Linda	10.49f	0.00	467148	0	0.003	N.D.	#
5)	T	delta-BHC	0.00	11.36	0	639557	N.D.	0.006	#
6)	T	Heptachlor	11.64	11.36f	658	639557	0.000	0.004	#
7)	T	Aldrin	0.00	0.00	0	0	N.D.	N.D.	
8)	T	Heptachlor epoxi	13.78	13.50	2508031	104	0.024	0.000	#
9)	T	Endosulfan I	14.69	0.00	529965	0	0.005	N.D.	#
10)	T	gamma-Chlordane	14.07	13.93	1266339	4845673	0.010	0.037	#
11)	T	alpha-Chlordane	14.36	14.24	3715794	433290	0.035	0.004	#
12)	T	4,4'-DDE	0.00	0.00	0	0	N.D.	N.D.	
13)	T	Dieldrin	15.20	14.94	192770	-2272714	0.002	N.D.	#
14)	T	Endrin	0.00	0.00	0	0	N.D.	N.D.	
15)	T	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	Endosulfan II	0.00	0.00	0	0	N.D.	N.D.	
17)	T	Endrin aldehyde	0.00	16.89f	0	-1507716	N.D.	N.D.	
18)	T	4,4'-DDT	0.00	0.00	0	0	N.D.	N.D.	
19)	T	Endosulfan sulfa	17.99f	0.00	36189	0	0.000	N.D.	#
20)	T	Methoxychlor	17.63f	0.00	16959	0	0.000	N.D.	#
21)	T	Endrin ketone	18.73	18.53	101364	5690	0.001	0.000	#

Endr. Ald. <9r

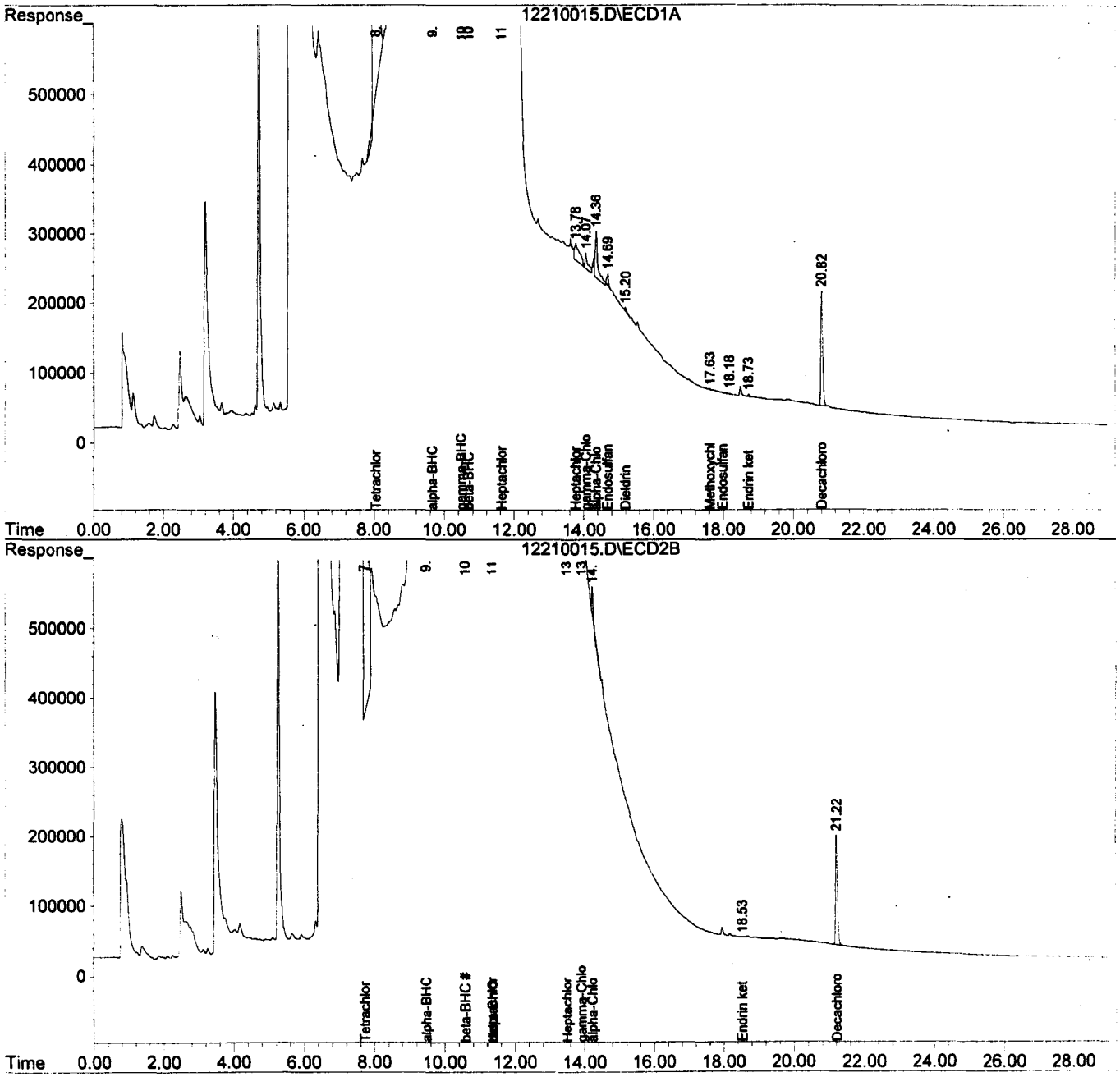
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210015.D\ECD1A.CH Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\122100\12210015.D\ECD2B.CH
Acq On : 21 Dec 2000 17:57 Operator: YGK
Sample : 05283 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:44 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210032.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\122100\12210032.D\ECD2B.CH
Acq On : 22 Dec 2000 13:13 Operator: YGK
Sample : 05283 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:58 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.22	16.28	1486863	341294	1.047	0.063	#
2)	L TOX 2	16.49	16.72	1687900	337520	0.639	0.091	#
3)	L TOX 3	16.87f	16.82	1868231	273195	0.528	0.057	#
4)	L TOX 4	17.63	17.96	593082	3110203	0.167	0.514	#
5)	L TOX 5	17.94f	17.96f	1469689	3110203	0.333	0.641	#
6)	L TOX 6	18.73f	18.69f	367090	656384	0.114	0.185	#
7)	L TOX 7	0.00	19.18	0	233695	N.D.	0.090	#
	Sum TOX 1			7472855	8062495	2.828	1.642	
	Average TOX 1					0.471	0.235	

TOX<02

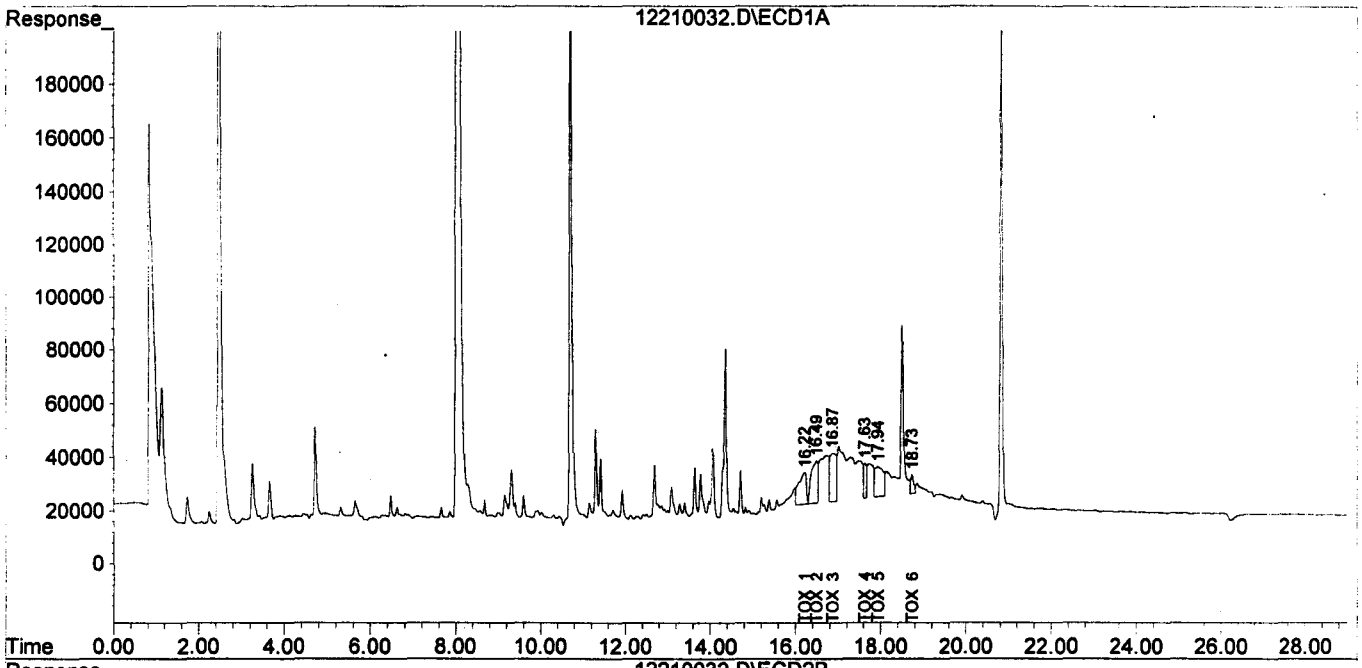
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

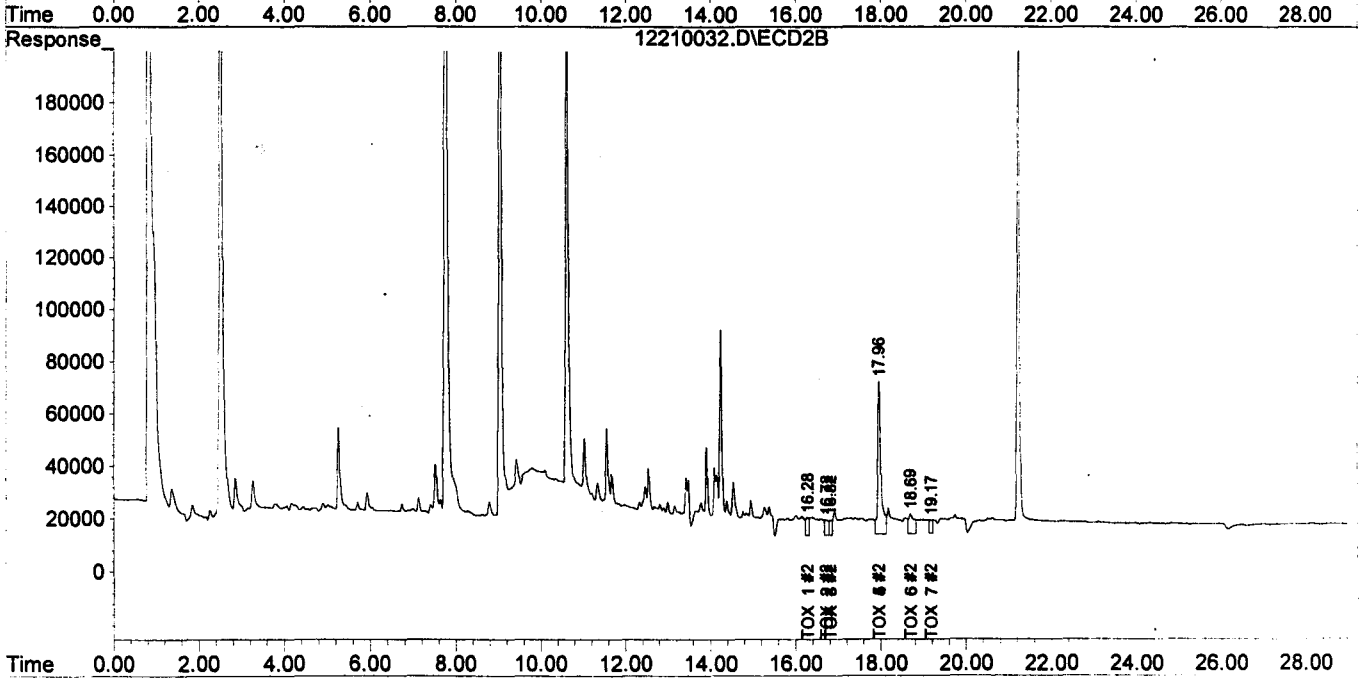
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210032.D\ECD1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\122100\12210032.D\ECD2B.CH
Acq On : 22 Dec 2000 13:13 Operator: YGK
Sample : 05283 W TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:58 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\122100\12210016.D\ECD2B.CH
Acq On : 21 Dec 2000 18:32 Operator: YGK
Sample : 05284 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:45 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.05	7.74	22367324	25538014	0.202	0.215	
		Spiked Amount 0.250			Recovery	=	80.80%	86.00%	
22)	S	Decachlorobiphen	20.82	21.23	14954731	15906454	0.148	0.146	
		Spiked Amount 0.250			Recovery	=	59.20%	58.40%	
		Target Compounds							
2)	T	alpha-BHC	0.00	9.48f	0	243029	N.D.	0.001	#
3)	T	beta-BHC	10.74f	10.59	176461	362279	0.002	0.005	#
4)	T	gamma-BHC (Linda	10.44	10.42f	180287	50779	0.001	0.000	#
5)	T	delta-BHC	11.16	11.34	77370	55986	0.000	0.001	
6)	T	Heptachlor	0.00	11.34f	0	55986	N.D.	0.000	#
7)	T	Aldrin	12.40f	0.00	4005	0	0.000	N.D.	#
8)	T	Heptachlor epoxi	13.74f	0.00	2539	0	0.000	N.D.	#
9)	T	Endosulfan I	14.67	14.41	208651	145169	0.002	0.001	#
10)	T	gamma-Chlordane	14.03f	13.93	130236	9727	0.001	0.000	#
11)	T	alpha-Chlordane	14.36	14.17f	80573	202081	0.001	0.002	#
12)	T	4,4'-DDE	14.67f	14.71	208651	1449	0.002	0.000	#
13)	T	Dieldrin	0.00	14.90f	0	114352	N.D.	0.001	#
14)	T	Endrin	0.00	15.62	0	26621	N.D.	0.000	#
15)	T	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	Endosulfan II	16.22	16.14	140424	6066	0.002	0.000	#
17)	T	Endrin aldehyde	17.05f	16.82	1605	3705	0.000	0.000	#
18)	T	4,4'-DDT	16.44f	16.54	259490	1516	0.003	0.000	#
19)	T	Endosulfan sulfa	0.00	17.41	0	29785	N.D.	0.000	#
20)	T	Methoxychlor	17.64f	17.97f	1145	659722	0.000	0.014	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Put <CDL

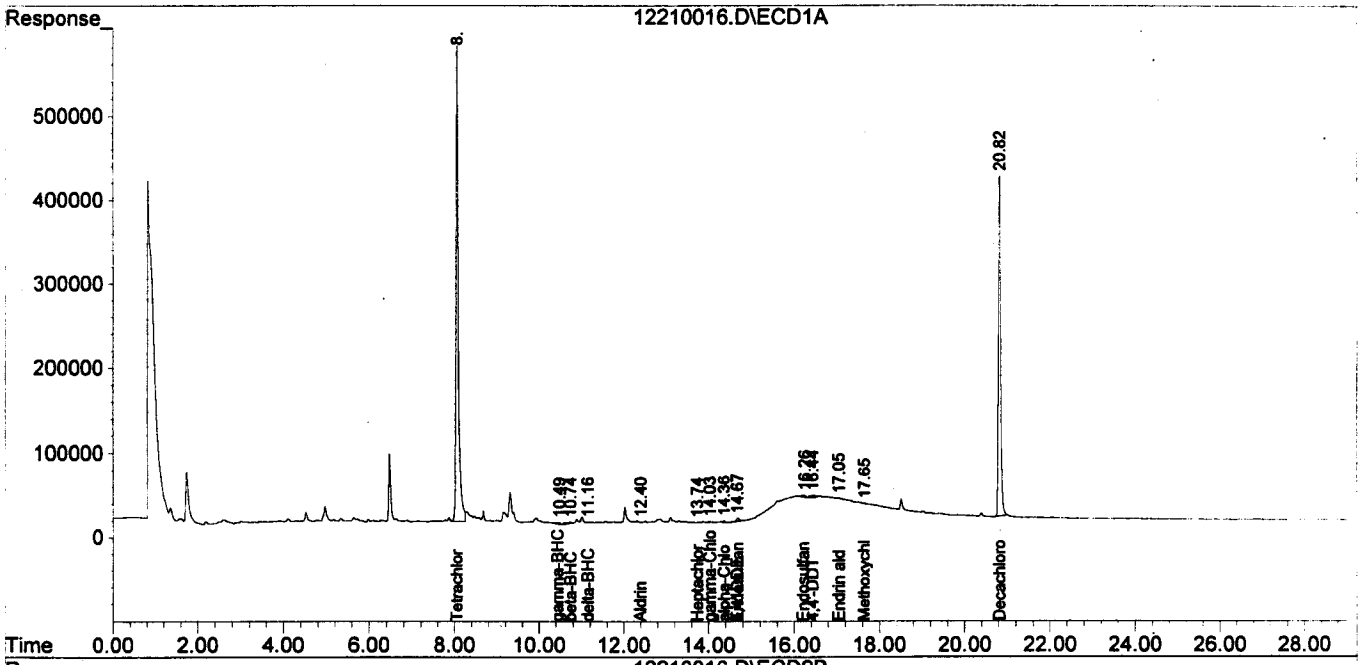
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

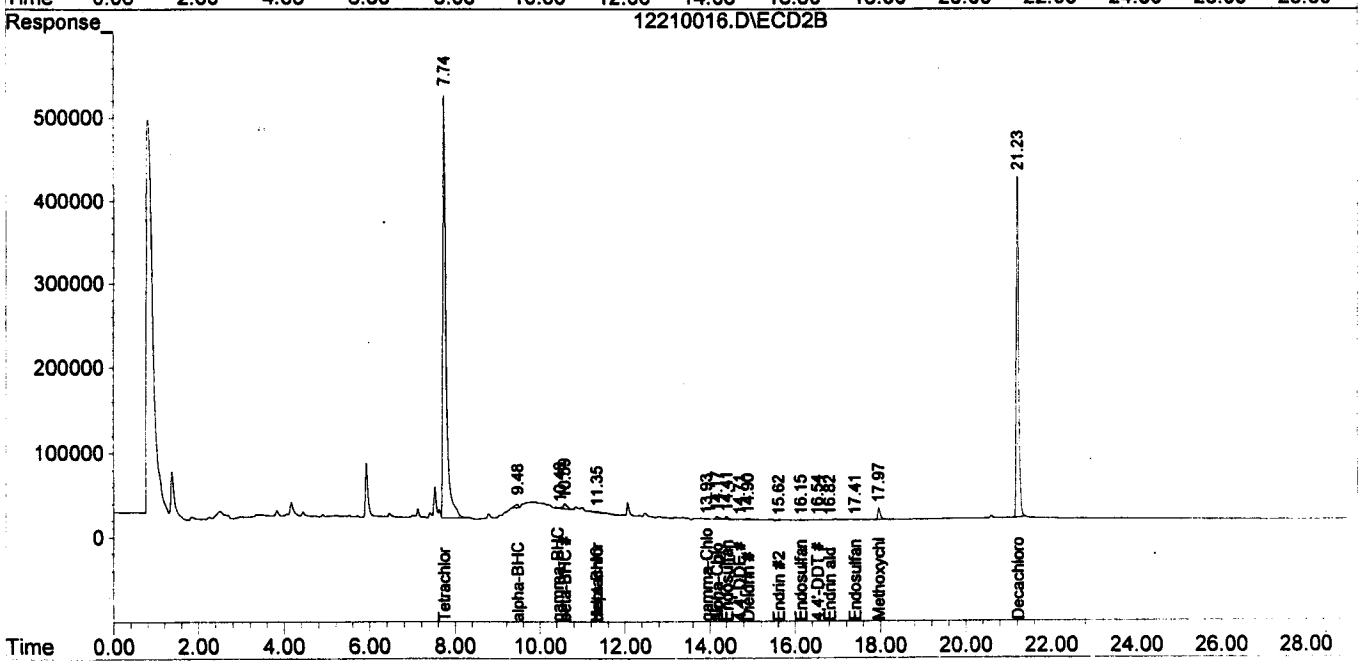
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\122100\12210016.D\ECD2B.CH
Acq On : 21 Dec 2000 18:32 Operator: YGK
Sample : 05284 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:45 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\122100\12210016.D\ECD2B.CH
Acq On : 21 Dec 2000 18:32 Operator: YGK
Sample : 05284 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:53 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.22	16.28	887468	33731	0.625	0.006	#
2)	L TOX 2	16.44	16.61f	1395959	61801	0.528	0.017	#
3)	L TOX 3	17.05f	16.82	2790275	22111	0.788	0.005	#
4)	L TOX 4	17.64	17.97	643002	708618	0.181	0.117	#
5)	L TOX 5	17.83	17.97f	1240061	708618	0.281	0.146	#
6)	L TOX 6	0.00	18.74	0	63869	N.D.	0.018	#
7)	L TOX 7	19.03f	19.20	67698	9332	0.040	0.004	#
	Sum TOX 1			7024463	1608080	2.444	0.312	
Average	TOX 1					0.407	0.045	

TOXCOL

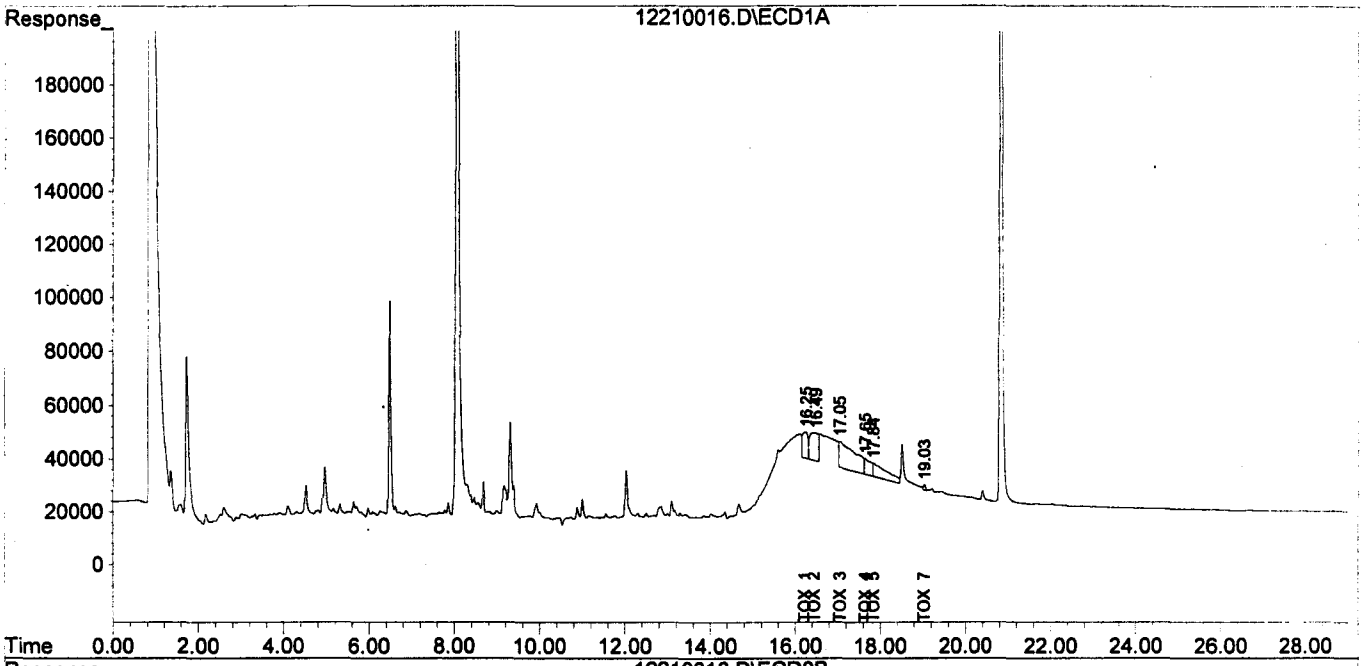
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

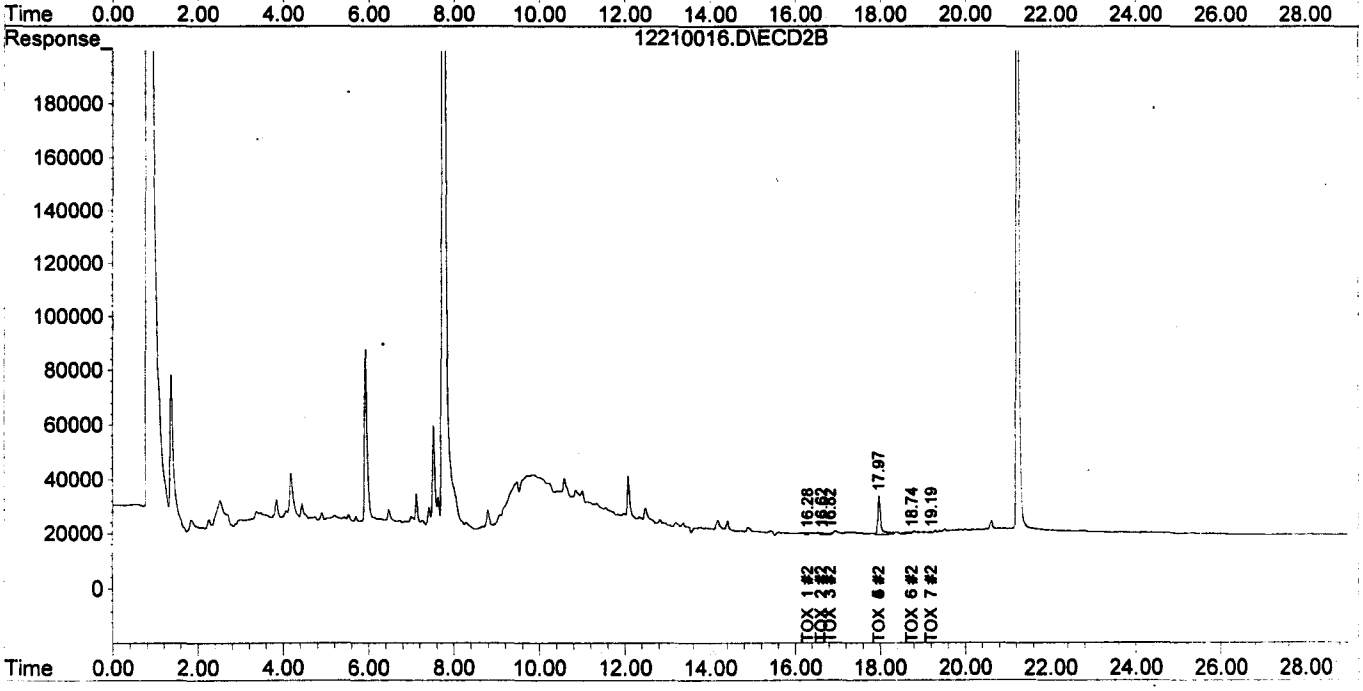
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210016.D\ECD1A.CH Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\122100\12210016.D\ECD2B.CH
Acq On : 21 Dec 2000 18:32 Operator: YGK
Sample : 05284 W Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:53 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210028.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\122100\12210028.D\ECD2B.CH
Acq On : 22 Dec 2000 11:07 Operator: YGK
Sample : QPW1220001 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:22 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.05	7.74	22951205	25064460	0.207	0.211	
		Spiked Amount 0.250			Recovery =		82.80% ✓	84.40%	
22)	S	Decachlorobiphen	20.82	21.22	20100886	20910607	0.199	0.192	
		Spiked Amount 0.250			Recovery =		79.60% ✓	76.80%	
		Target Compounds							
2)	T	alpha-BHC	9.59	9.47f	24524	197747	0.000	0.001	#
3)	T	beta-BHC	10.74f	10.59	259381	1301742	0.003	0.018	#
4)	T	gamma-BHC (Linda	10.43	10.40f	327766	124061	0.002	0.001	#
5)	T	delta-BHC	11.15	0.00	248533	0	0.002	N.D.	#
6)	T	Heptachlor	0.00	11.46f	0	14048	N.D.	0.000	#
7)	T	Aldrin	12.39	0.00	11511	0	0.000	N.D.	#
8)	T	Heptachlor epoxi	0.00	13.50	0	145671	N.D.	0.001	#
9)	T	Endosulfan I	14.67	14.41	1414809	567741	0.012 ~	0.005	#
10)	T	gamma-Chlordane	14.02f	13.92	803921	19349	0.006	0.000	#
11)	T	alpha-Chlordane	0.00	0.00	0	0	N.D.	N.D.	
12)	T	4,4'-DDE	14.67f	14.70	1414809	18922	0.015 ~	0.000	#
13)	T	Dieldrin	15.21	0.00	9594	0	0.000	N.D.	#
14)	T	Endrin	15.78	15.62	8911	188190	0.000	0.002	#
15)	T	4,4'-DDD	0.00	0.00	0	0	N.D.	N.D.	
16)	T	Endosulfan II	16.21	16.13	211533	293710	0.002	0.003	#
17)	T	Endrin aldehyde	17.14	16.81	1805	47992	0.000	0.001	#
18)	T	4,4'-DDT	16.59f	16.60	579969	9749	0.006 ~	0.000	#
19)	T	Endosulfan sulfa	18.02f	17.40	19760	45922	0.000	0.001	#
20)	T	Methoxychlor	17.51	0.00	61429	0	0.001	N.D.	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

Pest < ½ RL

Also: End. Aldehyde w/o TBA

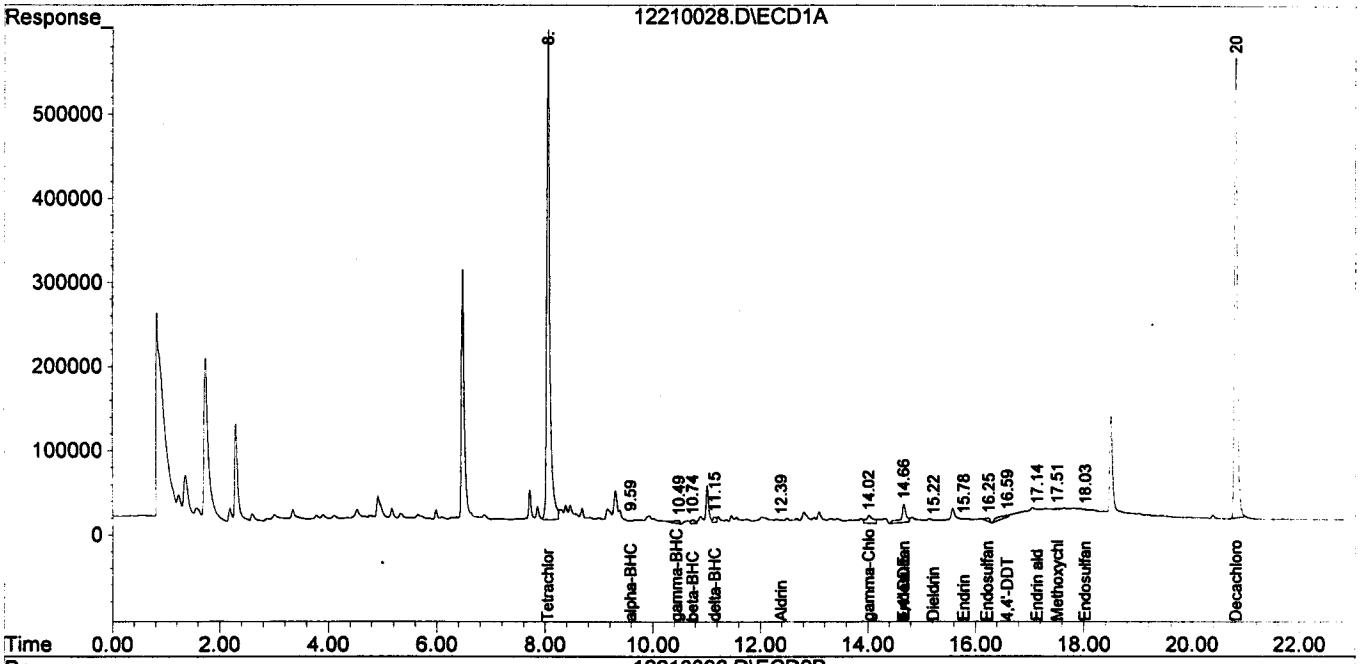
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

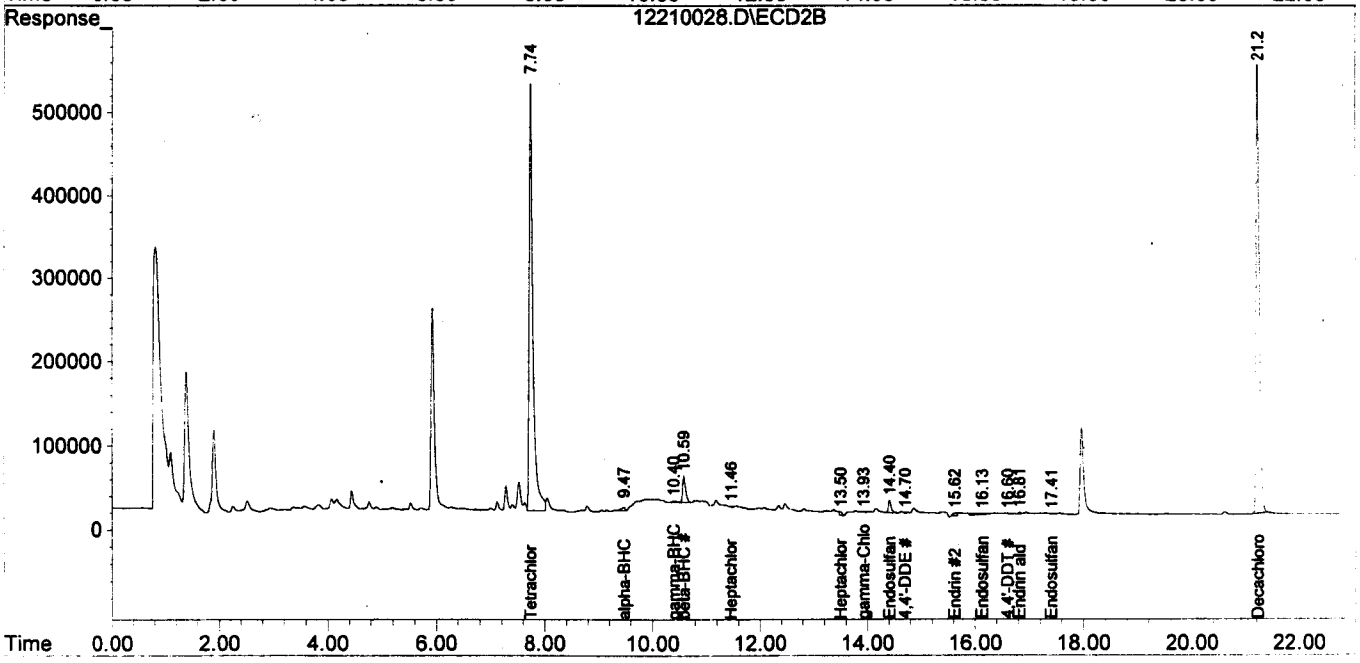
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210028.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\122100\12210028.D\ECD2B.CH
Acq On : 22 Dec 2000 11:07 Operator: YGK
Sample : QPW1220001 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:22 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210028.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\122100\12210028.D\ECD2B.CH
Acq On : 22 Dec 2000 11:07 Operator: YGK
Sample : QPW1220001 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:56 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L TOX 1	16.21	16.27	373200	226945	0.263	0.042 #
2)	L TOX 2	0.00	16.72	0	168787	N.D.	0.046 #
3)	L TOX 3	0.00	16.81	0	233578	N.D.	0.049 #
4)	L TOX 4	17.64	17.96	811020	5544534	0.228	0.917 #
5)	L TOX 5	17.84	17.96f	695941	5544534	0.158	1.143 #
6)	L TOX 6	0.00	18.80	0	159845	N.D.	0.045 #
7)	L TOX 7	18.94	19.10f	73994	123123	0.043	0.048
	Sum TOX 1			1954156	12001347	0.692	2.289
	Average TOX 1					0.173	0.327

TOX < ½ 02

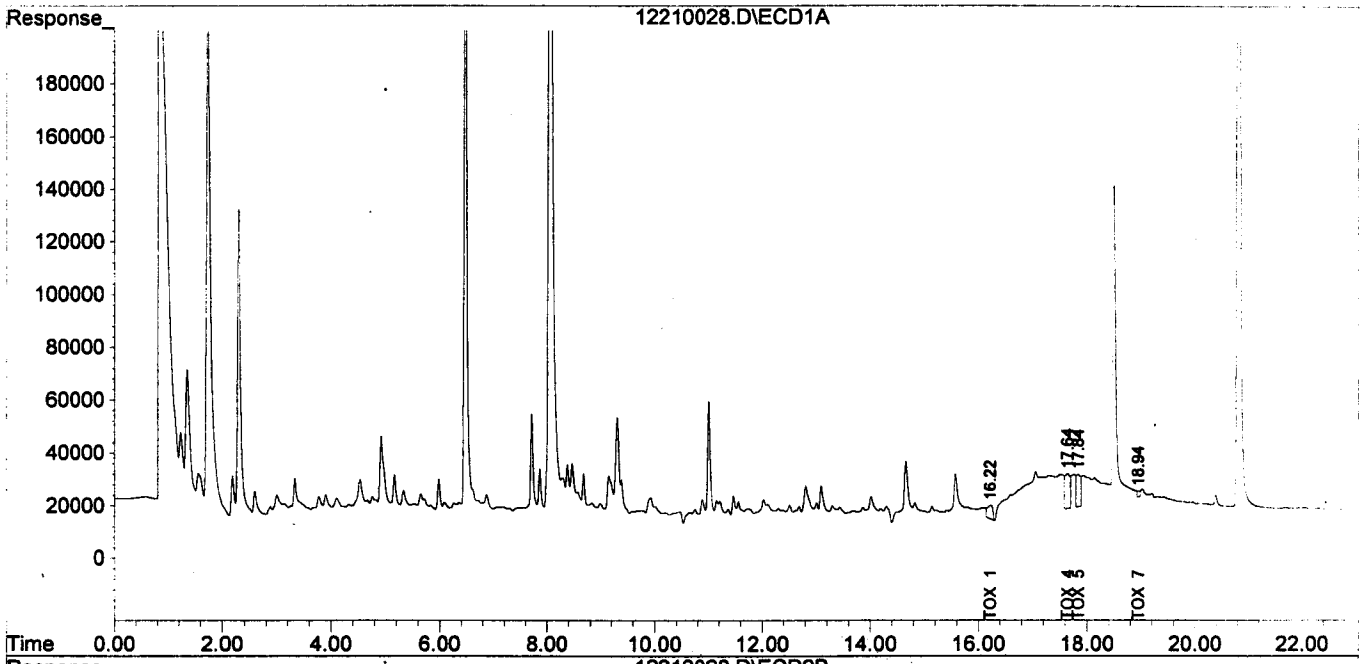
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

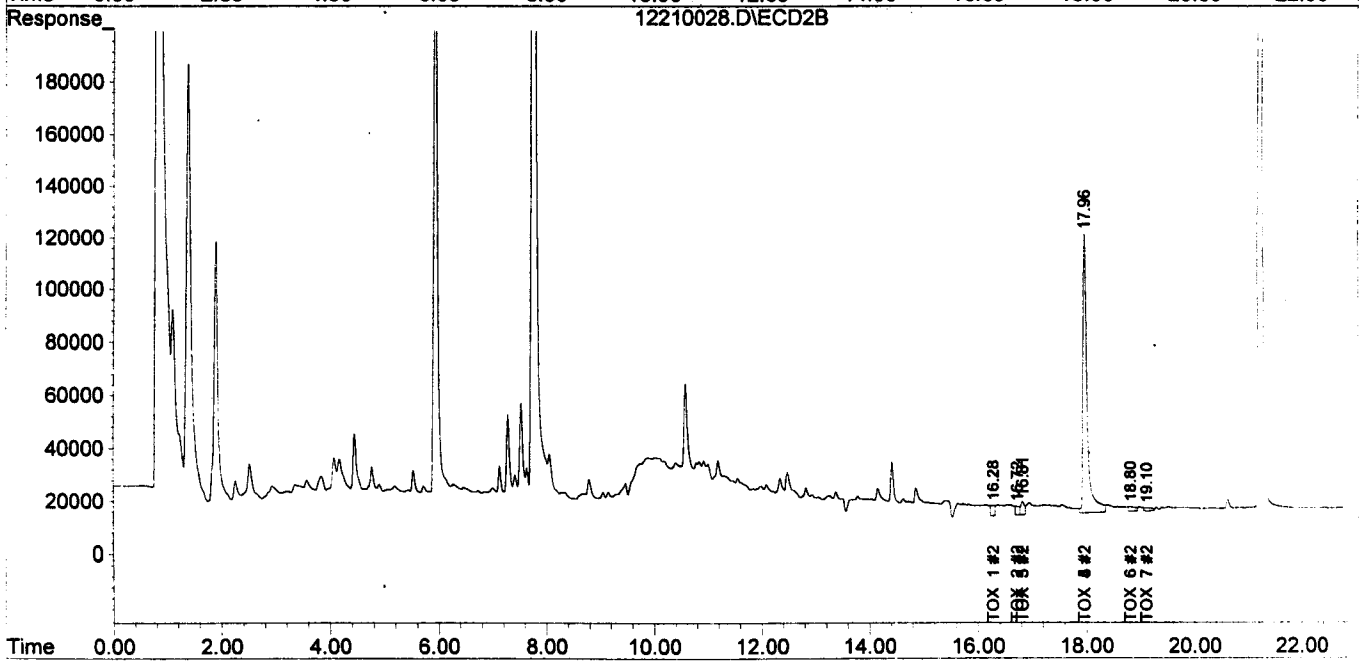
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210028.D\ECD1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\122100\12210028.D\ECD2B.CH
Acq On : 22 Dec 2000 11:07 Operator: YGK
Sample : QPW1220001 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:56 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Fri Dec 08 12:19:06 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\122100\12210008.D\ECD2B.CH
Acq On : 21 Dec 2000 13:17 Operator: YGK
Sample : QPW1220001 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:38 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.07	7.76	22520261	24290049	0.204	0.205	
		Spiked Amount 0.250			Recovery	=	81.60%	82.00%	
22)	S	Decachlorobiphen	20.84	21.25	18175857	19769053	0.180	0.182	
		Spiked Amount 0.250			Recovery	=	72.00%	72.80%	
		Target Compounds							
2)	T	alpha-BHC	9.61	9.43	23327	112338	0.000	0.001	#
3)	T	beta-BHC	10.68	10.61	233173	1242847	0.003	0.017	#
4)	T	gamma-BHC (Linda	10.46	10.42f	198758	121280	0.001	0.001	#
5)	T	delta-BHC	11.17	0.00	249518	0	0.002	N.D.	#
6)	T	Heptachlor	11.58f	0.00	139367	0	0.001	N.D.	#
7)	T	Aldrin	12.33	12.10f	27999	76887	0.000	0.001	#
8)	T	Heptachlor epoxi	0.00	0.00	0	0	N.D.	N.D.	
9)	T	Endosulfan I	14.69	14.43f	606229	544226	0.005	0.005	
10)	T	gamma-Chlordane	14.04f	13.88f	688565	71413	0.006	0.001	#
11)	T	alpha-Chlordane	14.33f	14.19f	310612	59474	0.003	0.001	#
12)	T	4,4'-DDE	14.69f	14.64	606229	47816	0.006	0.000	#
13)	T	Dieldrin	15.17	14.88f	7670	363322	0.000	0.003	#
14)	T	Endrin	15.72	15.64	1052	243872	0.000	0.003	#
15)	T	4,4'-DDD	15.91	15.84f	1457	196595	0.000	0.002	#
16)	T	Endosulfan II	16.23	16.15f	366024	5097	0.004	0.000	#
17)	T	Endrin aldehyde	17.07f	16.83	-53970	57006	N.D.	0.001	
18)	T	4,4'-DDT	16.45f	16.62	1058094	15954	0.011	0.000	#
19)	T	Endosulfan sulfa	18.16f	17.43	15238	11170	0.000	0.000	#
20)	T	Methoxychlor	0.00	17.98f	0	4766141	N.D.	0.101	#
21)	T	Endrin ketone	0.00	0.00	0	0	N.D.	N.D.	

All Pests < 1/2 DL
End. Aldehyde Pest < 1/2 DL
JD 1/4/100

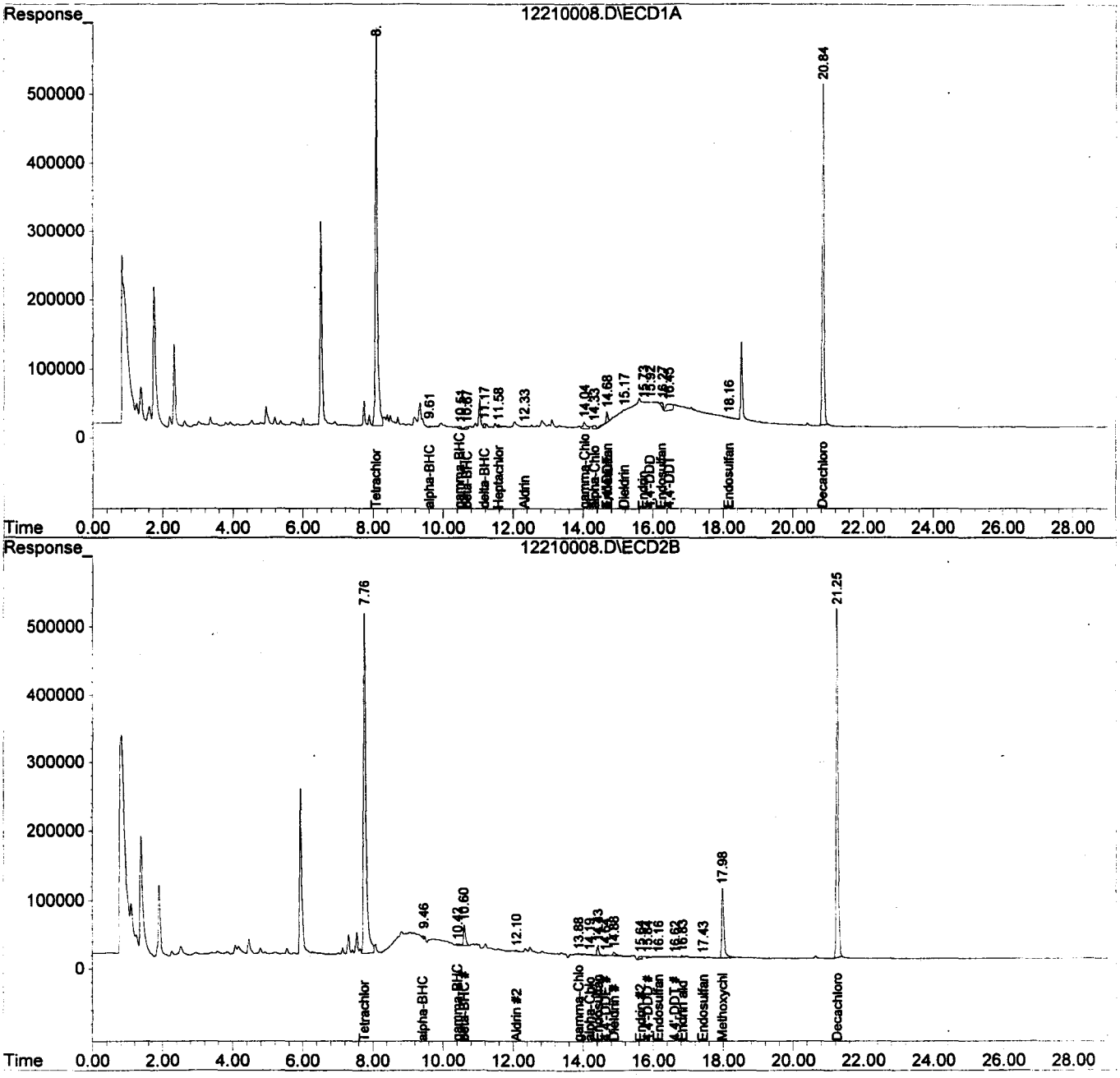
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\122100\12210008.D\ECD2B.CH
Acq On : 21 Dec 2000 13:17 Operator: YGK
Sample : QPW1220001 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:38 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\122100\12210008.D\ECD2B.CH
Acq On : 21 Dec 2000 13:17 Operator: YGK
Sample : QPW1220001 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:50 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Dec 27 10:49:38 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.23	16.29	699874	192482	0.493	0.035	#
2)	L TOX 2	16.44	16.74f	1247764	120751	0.472	0.033	#
3)	L TOX 3	0.00	16.83	0	248063	N.D.	0.052	#
4)	L TOX 4	17.66	17.98	216233	5164607	0.061	0.854	#
5)	L TOX 5	17.85	17.98f	155992	5164607	0.035	1.065	#
6)	L TOX 6	0.00	18.75	0	62904	N.D.	0.018	#
7)	L TOX 7	19.05f	0.00	31691	0	0.019	N.D.	#
	Sum TOX 1			2351554	10953414	1.080	2.056	
	Average TOX 1					0.216	0.343	

TOX < 2.07

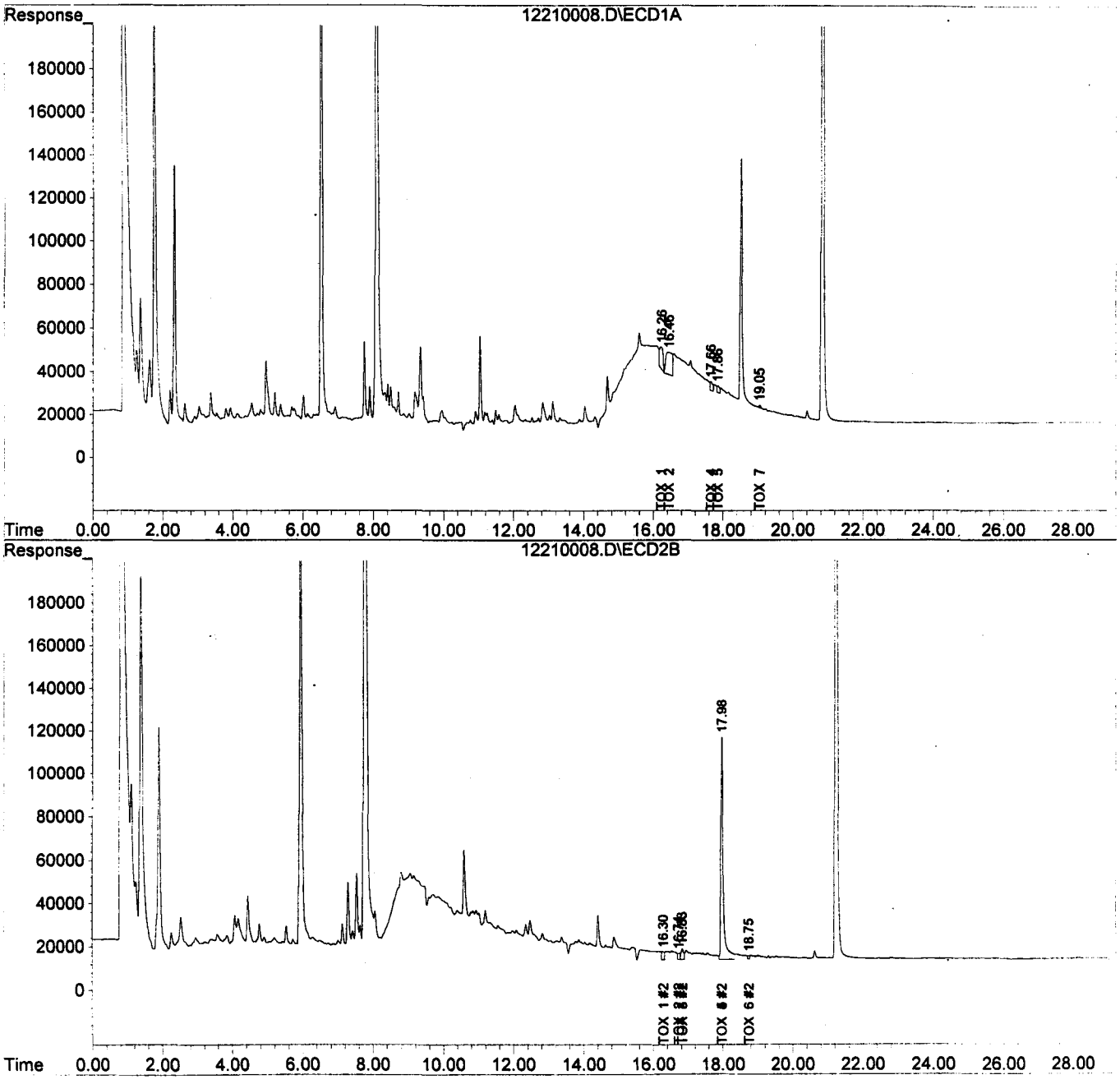
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\122100\12210008.D\ECD2B.CH
Acq On : 21 Dec 2000 13:17 Operator: YGK
Sample : QPW1220001 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 27 10:50 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Dec 27 10:49:38 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Accura Analytical Laboratory, Inc.

Pesticides LCS Report

Sample ID:	QPW1220002	**Date Acquired:**	12/21/00
Operator:	YGK	**Instrument ID:**	PESST-A
Data File:	12210009	**Bottle #:**	9
Method:	8081A	**Matrix:**	Water

Compounds	Expected Conc. (ppm)	Actual Conc. (ppm)	Percent Recovery	Recovery Limits (%)	Pass/ Fail
Aldrin	0.25	0.256	102%	67 - 120	Pass
alpha-BHC	0.25	0.201	80%	65 - 117	Pass
alpha-Chlordane	0.25	0.264	106%	30 - 150	Pass
beta-BHC	0.25	0.212	85%	67 - 120	Pass
gamma-BHC	0.25	0.216	86%	68 - 121	Pass
gamma-Chlordane	0.25	0.248	99%	30 - 150	Pass
delta-BHC	0.25	0.211	84%	72 - 115	Pass
4,4'-DDD	0.25	0.239	96%	80 - 127	Pass
4,4'-DDE	0.25	0.258	103%	77 - 129	Pass
4,4'-DDT	0.25	0.239	96%	80 - 130	Pass
Dieldrin	0.25	0.247	99%	84 - 128	Pass
Endosulfan I	0.25	0.227	91%	51 - 142	Pass
Endosulfan II	0.25	0.242	97%	54 - 125	Pass
Endosulfan Sulfate	0.25	0.258	103%	87 - 140	Pass
Endrin	0.25	0.267	107%	83 - 131	Pass
Endrin Aldehyde *	0.25	0.245	98%	84 - 121	Pass
Endrin Ketone	0.25	0.241	96%	30 - 150	Pass
Heptachlor epoxide	0.25	0.259	104%	81 - 128	Pass
Heptachlor	0.25	0.245	98%	70 - 125	Pass
Methoxychlor	0.25	0.249	100%	85 - 122	Pass

* ~~Endrin Aldehyde only - others reported from TISA clean-up run~~

WD 1/14/00

Surrogates	Expected Rec. (ppm)	Actual Rec. (ppm)	Percent Recovery	Recovery Limits (%)	Pass/ Fail
Tetrachloro-m-xylene	0.25	0.183	73%	51 - 123	Pass
Decachlorobiphenyl	0.25	0.162	65%	42 - 153	Pass

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\122100\12210009.D\ECD2B.CH
Acq On : 21 Dec 2000 13:51 Operator: YGK
Sample : QPW1220002 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:39 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L		mg/L
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.06	7.75	20243483	22185872	0.183		0.187
		Spiked Amount 0.250			Recovery =		73.20%	v	74.80%
22)	S	Decachlorobiphen	20.83	21.24	16326654	17725859	0.162		0.163
		Spiked Amount 0.250			Recovery =		64.80%	v	65.20%
		Target Compounds							
2)	T	alpha-BHC	9.61	9.43	35575454	34524041	0.201		0.199
3)	T	beta-BHC	10.70	10.61	17172520	15632988	0.212		0.220
4)	T	gamma-BHC (Linda	10.44	10.35	33997265	30321066	0.216		0.226
5)	T	delta-BHC	11.15	11.32	33903433	26145838	0.211		0.236
6)	T	Heptachlor	11.63	11.40	28555457	35274863	0.245		0.245
7)	T	Aldrin	12.36	12.16	27861015	29303876	0.256		0.244
8)	T	Heptachlor epoxi	13.79	13.50	26939299	27327258	0.259		0.260
9)	T	Endosulfan I	14.68	14.37	25809027	26075124	0.227		0.237
10)	T	gamma-Chlordane	14.08	13.93	30693405	31276650	0.248	99	0.241
11)	T	alpha-Chlordane	14.38	14.25	27992197	29392428	0.264	106	0.249
12)	T	4,4'-DDE	14.59	14.67	24843928	29085232	0.258		0.252
13)	T	Dieldrin	15.22	14.97	26009347	29173490	0.247		0.253
14)	T	Endrin	15.73	15.63	21315402	22662789	0.267		0.288
15)	T	4,4'-DDD	15.90	15.93	21270702	22218784	0.239		0.253
16)	T	Endosulfan II	16.23	16.10	21759961	24576903	0.242		0.249
17)	T	Endrin aldehyde	17.14	16.83	18684852	20687083	0.245		0.260
18)	T	4,4'-DDT	16.50	16.58	22742207	24327002	0.239		0.264
19)	T	Endosulfan sulfa	18.08	17.42	21918465	23728617	0.258		0.263
20)	T	Methoxychlor	17.54	18.06	11910064	13433040	0.249		0.286
21)	T	Endrin ketone	18.69	18.56	24364647	23964427	0.241	96	0.234

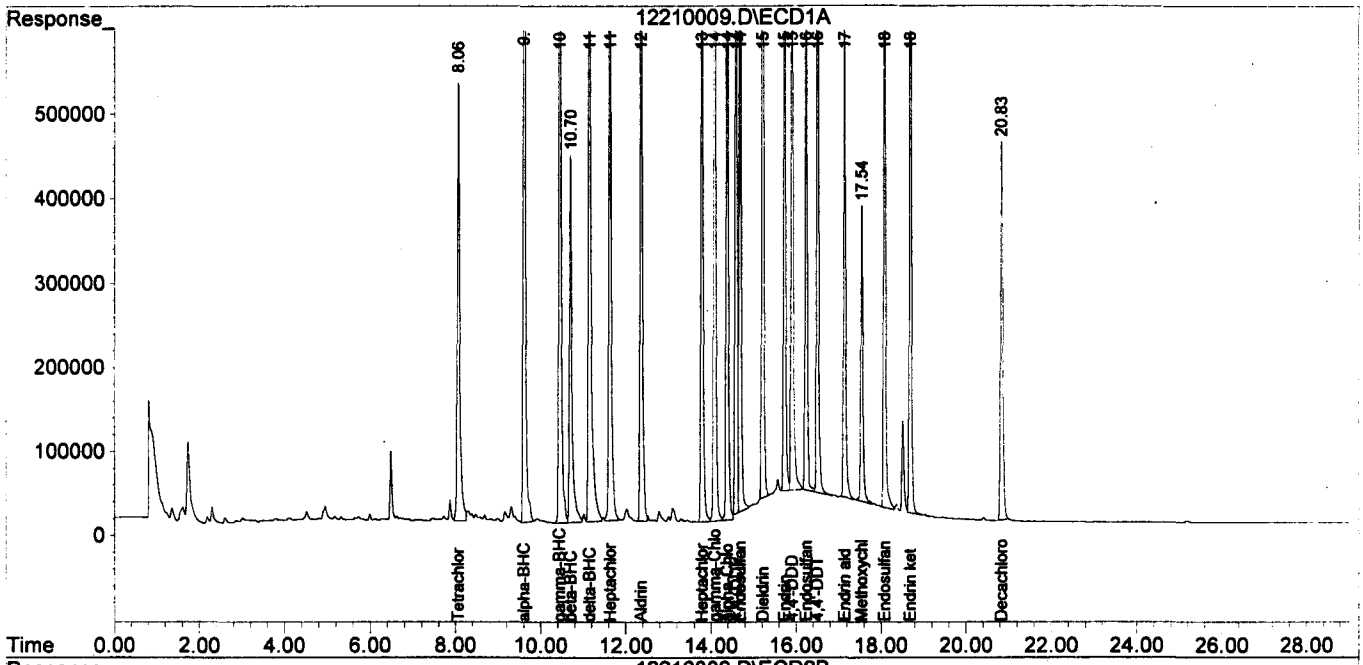
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

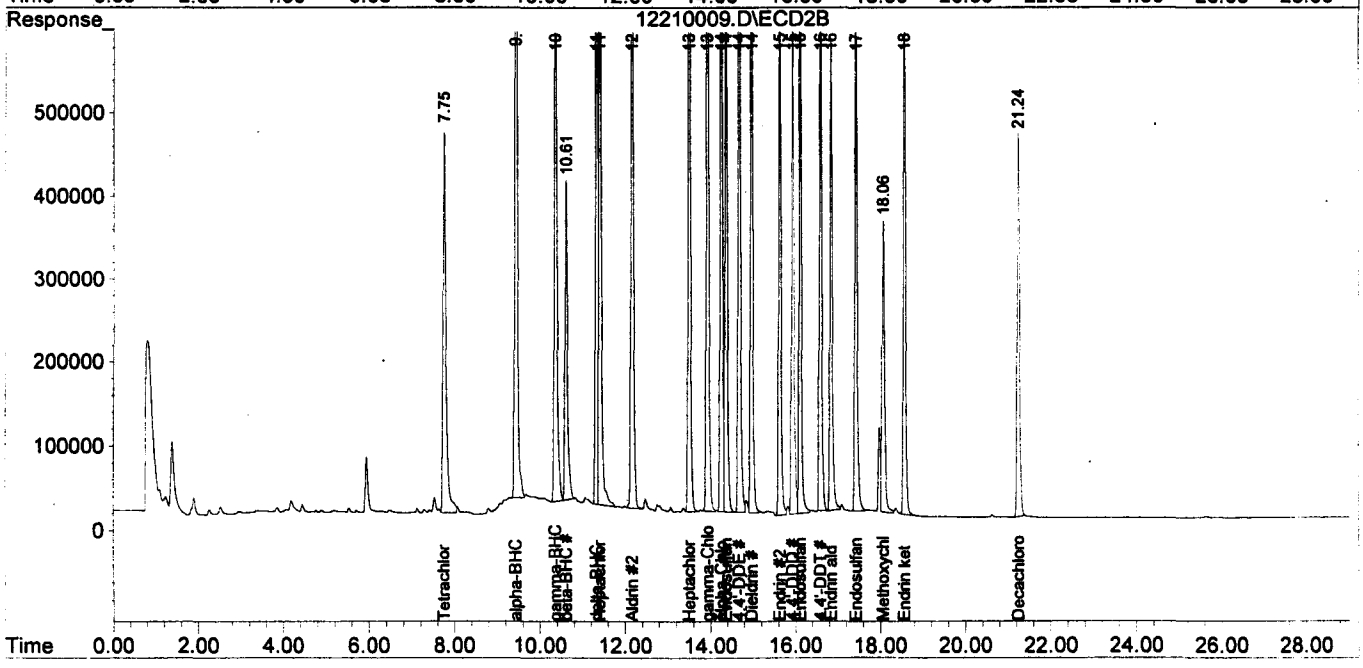
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\122100\12210009.D\ECD2B.CH
Acq On : 21 Dec 2000 13:51 Operator: YGK
Sample : QPW1220002 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:39 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Accura Analytical Laboratory, Inc.

Pesticides LCS Report

Sample ID:	QPW1220002 TBA	**Date Acquired:**	12/22/00
Operator:	YGK	**Instrument ID:**	PESST-A
Data File:	12210029	**Bottle #:**	29
Method:	8081A	**Matrix:**	Water

Compounds	Expected Conc. (ppm)	Actual Conc. (ppm)	Percent Recovery	Recovery Limits (%)	Pass/ Fail	
Aldrin	0.25	0.242	97%	67 - 120	Pass	
alpha-BHC	0.25	0.192	77%	65 - 117	Pass	
alpha-Chlordane	0.25	0.239	96%	30 - 150	Pass	
beta-BHC	0.25	0.195	78%	67 - 120	Pass	
gamma-BHC	0.25	0.203	81%	68 - 121	Pass	
gamma-Chlordane	0.25	0.227	91%	30 - 150	Pass	
delta-BHC	0.25	0.191	76%	72 - 115	Pass	
4,4'-DDD	0.25	0.243	97%	80 - 127	Pass	
4,4'-DDE	0.25	0.248	99%	77 - 129	Pass	
4,4'-DDT	0.25	0.234	94%	80 - 130	Pass	
Dieldrin	0.25	0.244	98%	84 - 128	Pass	
Endosulfan I	0.25	0.229	92%	51 - 142	Pass	
Endosulfan II	0.25	0.243	97%	54 - 125	Pass	
Endosulfan Sulfate	0.25	0.242	97%	87 - 140	Pass	
Endrin	0.25	0.277	111%	83 - 131	Pass	
Endrin Aldehyde *	0.25	0.009	4%	84 - 121	Fail	*
Endrin Ketone	0.25	0.23	92%	30 - 150	Pass	
Heptachlor epoxide	0.25	0.253	101%	81 - 128	Pass	
Heptachlor	0.25	0.231	92%	70 - 125	Pass	
Methoxychlor	0.25	0.243	97%	85 - 122	Pass	

* Endrin Aldehyde reported from run w/o TBA clean up.

Surrogates	Expected Rec. (ppm)	Actual Rec. (ppm)	Percent Recovery	Recovery Limits (%)	Pass/ Fail
Tetrachloro-m-xylene	0.25	0.177	71%	51 - 123	Pass
Decachlorobiphenyl	0.25	0.174	70%	42 - 153	Pass

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210029.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\122100\12210029.D\ECD2B.CH
Acq On : 22 Dec 2000 11:35 Operator: YGK
Sample : QPW1220002 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:23 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	8.05	7.74	19552492	20746557	0.177	0.175
		Spiked Amount 0.250			Recovery	=	70.80%	70.00%
22)	S	Decachlorobiphen	20.82	21.22	17615655	18437313	0.174	0.170
		Spiked Amount 0.250			Recovery	=	69.60%	68.00%
		Target Compounds						
2)	T	alpha-BHC	9.60	9.42	33986690	33369409	0.192	0.192
3)	T	beta-BHC	10.70	10.60	15801927	14646161	0.195	0.206
4)	T	gamma-BHC (Linda	10.43	10.34	31883014	29417114	0.203	0.219
5)	T	delta-BHC	11.14	11.31	30704601	22393827	0.191	0.202
6)	T	Heptachlor	11.62	11.39	26886406	32135471	0.231	0.223
7)	T	Aldrin	12.35	12.15	26401641	28165676	0.242	0.235
8)	T	Heptachlor epoxi	13.78	13.49	26308672	25767821	0.253	0.245
9)	T	Endosulfan I	14.67	14.35	26072248	25756912	0.229	0.234
10)	T	gamma-Chlordane	14.07	13.91	28151310	29809425	0.227	0.230
11)	T	alpha-Chlordane	14.37	14.24	25284945	27862433	0.239	0.236
12)	T	4,4'-DDE	14.57	14.66	23938094	27585883	0.248	0.239
13)	T	Dieldrin	15.21	14.96	25658973	28211205	0.244	0.245
14)	T	Endrin	15.72	15.62	22083980	22520668	0.277	0.287
15)	T	4,4'-DDD	15.89	15.91	21594903	21609118	0.243	0.246
16)	T	Endosulfan II	16.22	16.09	21834766	23973627	0.243	0.243
17)	T	Endrin aldehyde	17.13	16.82	713277	674559	0.009	0.008
18)	T	4,4'-DDT	16.49	16.57	22180785	21611481	0.234	0.235
19)	T	Endosulfan sulfa	18.07	17.41	20559667	21796831	0.242	0.241
20)	T	Methoxychlor	17.53	18.05	11612220	12861457	0.243	0.273
21)	T	Endrin ketone	18.68	18.55	23325680	22887899	0.230	0.223

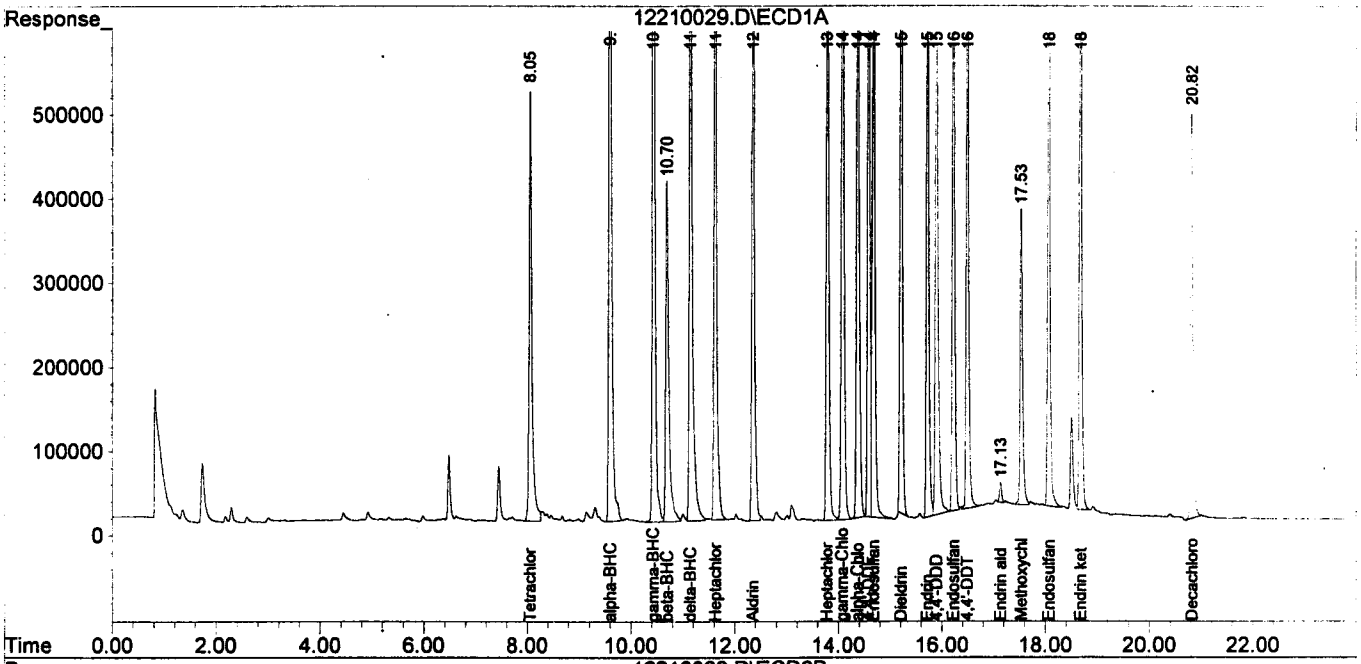
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

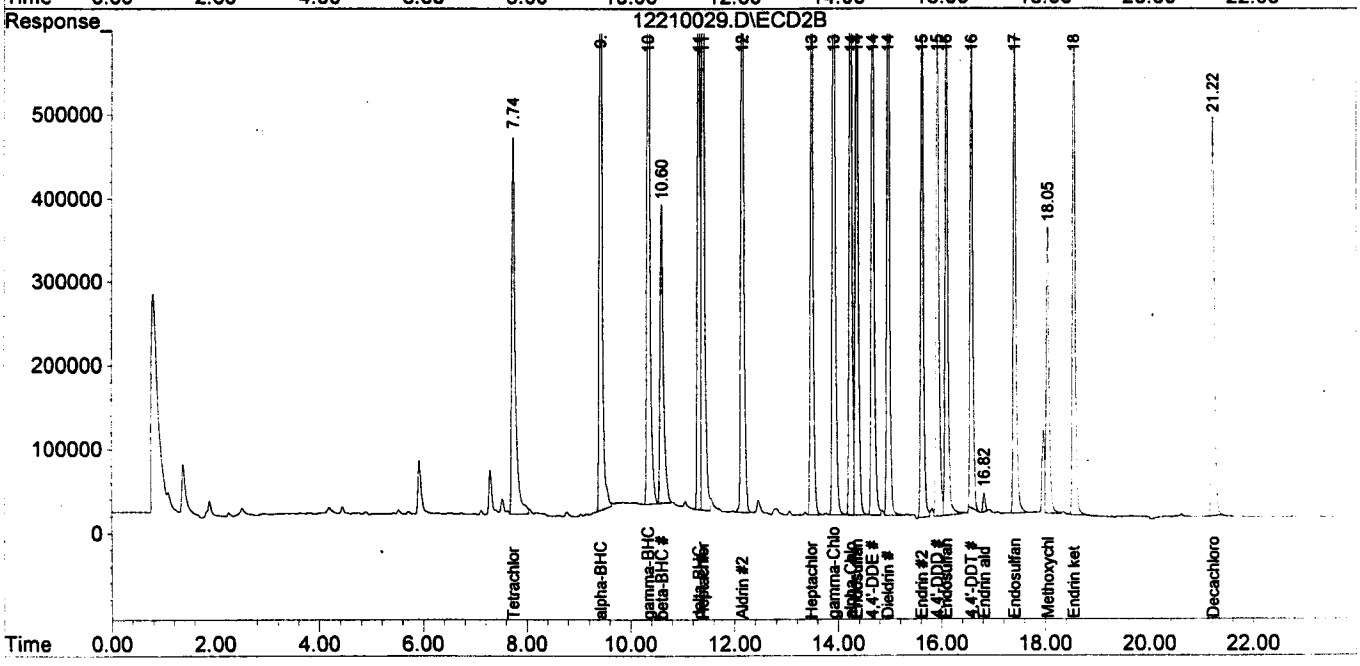
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210029.D\ECD1A.CH Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\122100\12210029.D\ECD2B.CH
Acq On : 22 Dec 2000 11:35 Operator: YGK
Sample : QPW1220002 TBA Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:23 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\121400\12140013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\121400\12140013.D\ECD2B.CH
Acq On : 14 Dec 2000 17:02 Operator: YGK
Sample : QPW1207002 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 15 10:18 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	8.07	7.76	19686611	21213463	0.178	0.179
		Spiked Amount 0.250			Recovery =		71.20% ✓	71.60%
22)	S	Decachlorobiphen	20.85	21.25	18150109	19793514	0.180	0.182
		Spiked Amount 0.250			Recovery =		72.00% ✓	72.80%
		Target Compounds						
2)	T	alpha-BHC	9.62	9.44	34395736	34212073	0.194	0.197
3)	T	beta-BHC	10.72	10.62	16434200	15940709	0.203	0.224
4)	T	gamma-BHC (Linda	10.46	10.36	32856158	29477350	0.209	0.219
5)	T	delta-BHC	11.16	11.33	34251991	27602247	0.213	0.249
6)	T	Heptachlor	11.65	11.41	26695815	32355510	0.229	0.224
7)	T	Aldrin	12.37	12.17	26308258	27679726	0.241	0.231
8)	T	Heptachlor epoxi	13.80	13.51	26782425	27683151	0.257	0.264
9)	T	Endosulfan I	14.70	14.37	27524971	27662857	0.242	0.252
10)	T	gamma-Chlordane	14.10	13.93	30151158	31128189	0.244 98	0.240
11)	T	alpha-Chlordane	14.39	14.26	28032404	29630792	0.265 106	0.251
12)	T	4,4'-DDE	14.60	14.68	25754450	29800199	0.267	0.259
13)	T	Dieldrin	15.23	14.98	27239282	30410294	0.259	0.264
14)	T	Endrin	15.75	15.64	22667898	23804402	0.284	0.303
15)	T	4,4'-DDD	15.92	15.93	23561283	24639160	0.265	0.280
16)	T	Endosulfan II	16.25	16.11	23565571	26378690	0.262	0.267
17)	T	Endrin aldehyde	17.16	16.84	18712076	21116630	0.246	0.266
18)	T	4,4'-DDT	16.51	16.59	22134443	22943209	0.233	0.249
19)	T	Endosulfan sulfa	18.09	17.43	23106518	24966532	0.272	0.277
20)	T	Methoxychlor	17.56	18.07	11412242	12265674	0.238	0.261
21)	T	Endrin ketone	18.71	18.57	25609067	26749418	0.253 101	0.261

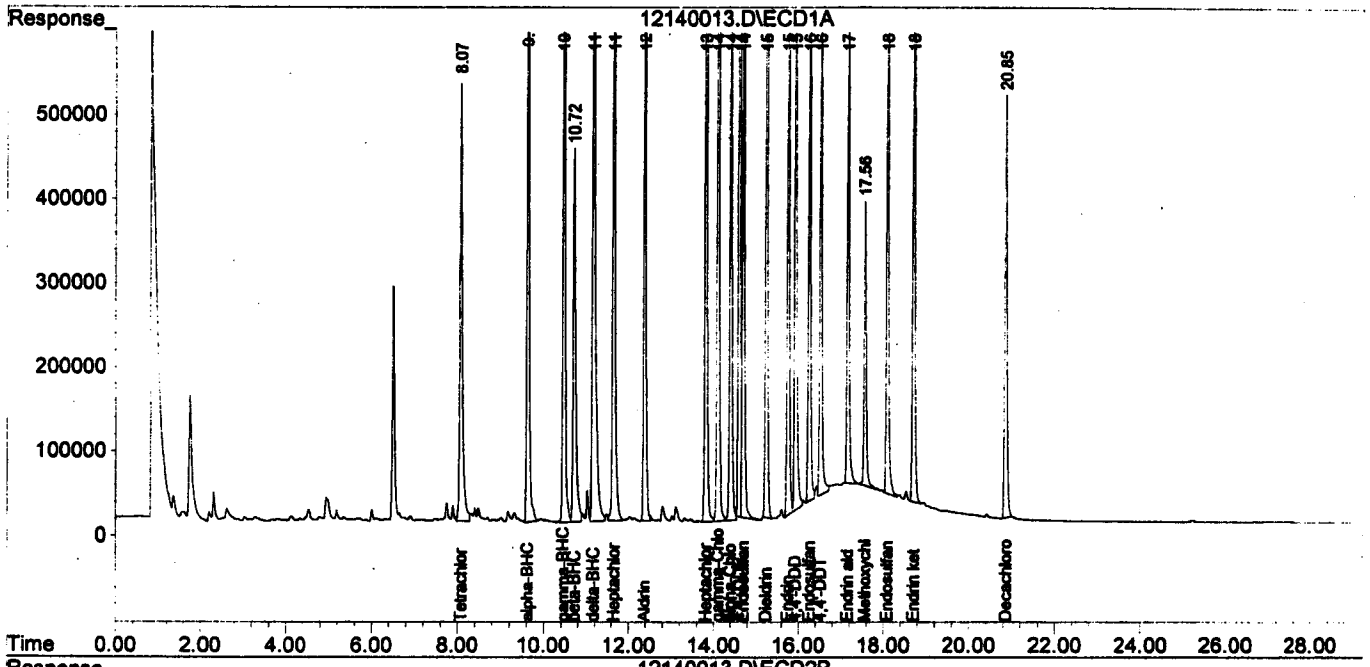
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

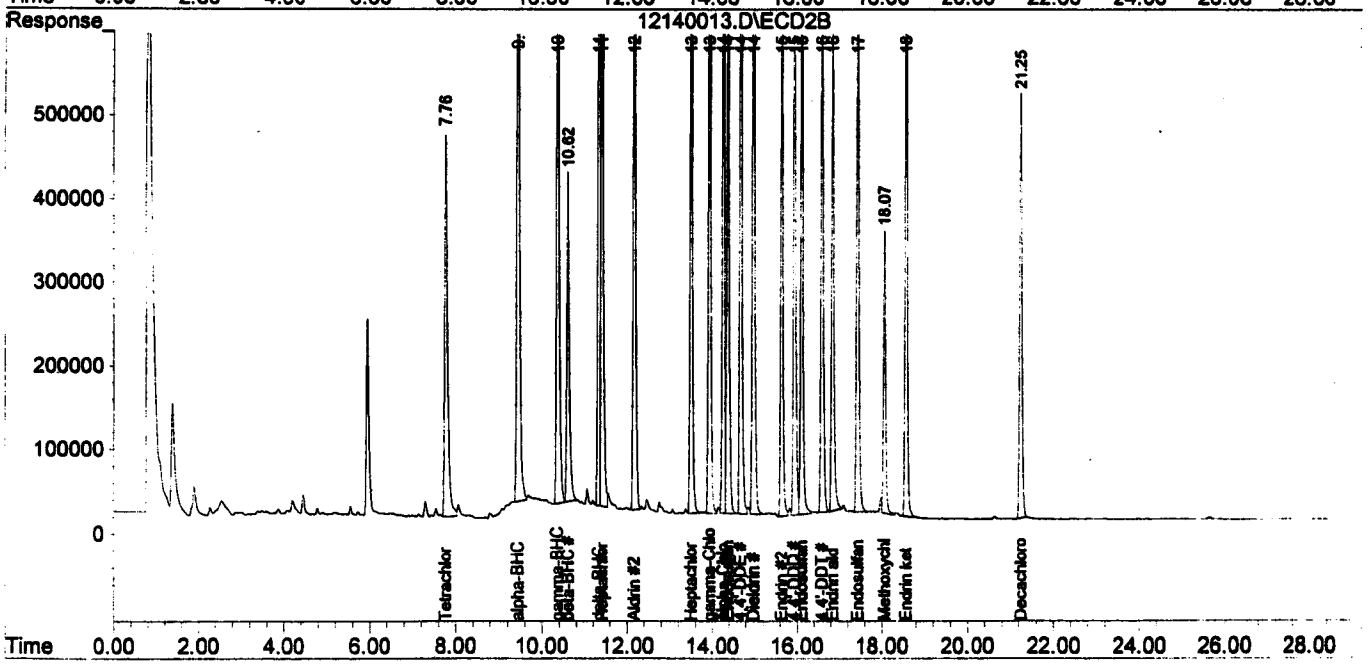
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\121400\12140013.D\ECD1A.CH Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\121400\12140013.D\ECD2B.CH
Acq On : 14 Dec 2000 17:02 Operator: YGK
Sample : QPW1207002 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 15 10:18 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\121400\12140014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\121400\12140014.D\ECD2B.CH
Acq On : 14 Dec 2000 17:36 Operator: YGK
Sample : QPW1207003 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 15 10:19 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	8.07	7.76	20930180	22003943	0.189	0.185
		Spiked Amount 0.250			Recovery =		75.60% ✓	74.00%
22)	S	Decachlorobiphen	20.85	21.25	19163143	20744499	0.190	0.191
		Spiked Amount 0.250			Recovery =		76.00% ✓	76.40%
		Target Compounds						
2)	T	alpha-BHC	9.62	9.44	38845987	38325416	0.220	0.221
3)	T	beta-BHC	10.72	10.62	19154696	18572275	0.237	0.261
4)	T	gamma-BHC (Linda	10.46	10.36	36997719	32286406	0.235	0.240
5)	T	delta-BHC	11.16	11.33	36798601	29538412	0.229	0.267
6)	T	Heptachlor	11.65	11.41	28810853	36391254	0.247	0.252
7)	T	Aldrin	12.37	12.17	29215446	30456533	0.268	0.254
8)	T	Heptachlor epoxi	13.80	13.51	27928274	28881402	0.268	0.275
9)	T	Endosulfan I	14.70	14.37	28644687	28730849	0.251	0.261
10)	T	gamma-Chlordane	14.10	13.93	32101952	33849596	0.259 104	0.261
11)	T	alpha-Chlordane	14.39	14.26	29591142	31913170	0.279 112	0.271
12)	T	4,4'-DDE	14.60	14.68	27496633	31942141	0.285	0.277
13)	T	Dieldrin	15.23	14.98	28354995	31231955	0.269	0.271
14)	T	Endrin	15.75	15.64	23301971	24303104	0.292	0.309
15)	T	4,4'-DDD	15.92	15.93	24848625	25834134	0.279	0.294
16)	T	Endosulfan II	16.25	16.11	24071615	27420920	0.268	0.277
17)	T	Endrin aldehyde	17.16	16.84	19327250	21586509	0.254	0.272
18)	T	4,4'-DDT	16.52	16.59	23288209	24102421	0.245	0.262
19)	T	Endosulfan sulfa	18.09	17.43	23580871	25472518	0.278	0.282
20)	T	Methoxychlor	17.56	18.07	11623042	12477078	0.243	0.265
21)	T	Endrin ketone	18.71	18.57	26314936	27213850	0.260 104	0.266

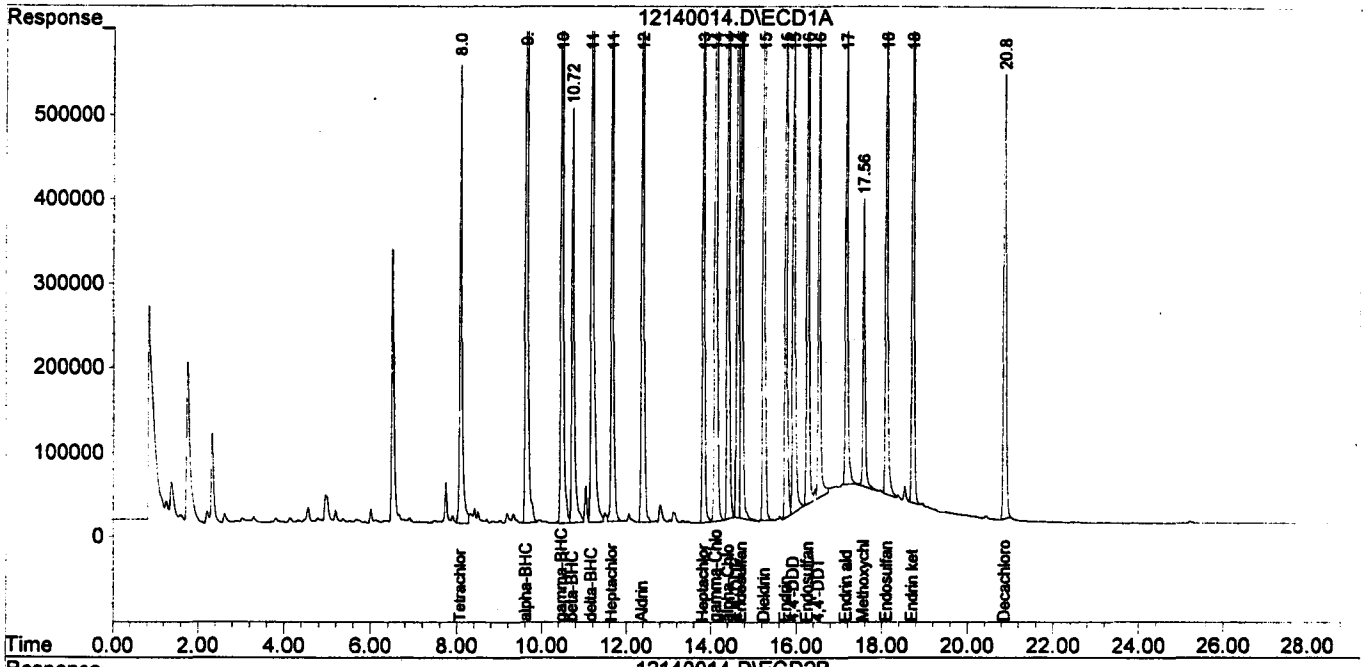
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

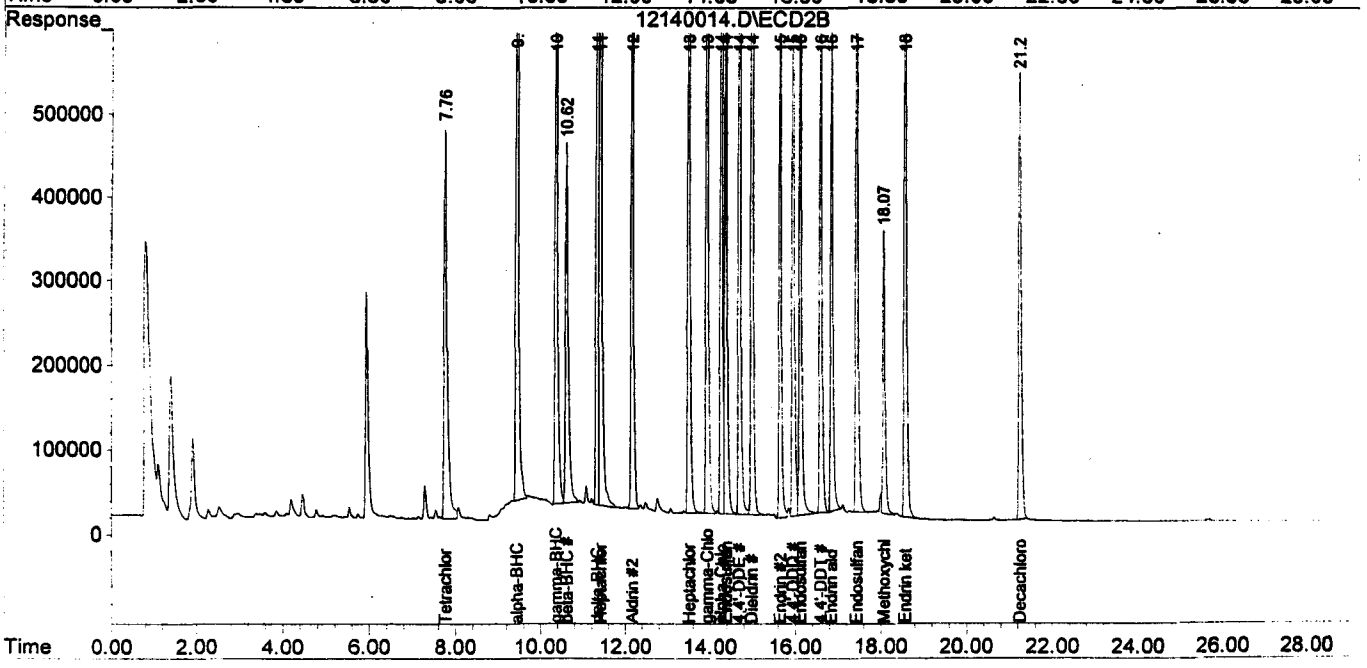
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\121400\12140014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\121400\12140014.D\ECD2B.CH
Acq On : 14 Dec 2000 17:36 Operator: YGK
Sample : QPW1207003 Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 15 10:19 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





SVO GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

DATE / INSTRUMENT: 12/12/00 PEST-A	METHOD: (circle applicable methods)
MATRIX:	(8081A) 8082 8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	(Y)	N	NA
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst: YGK	Reviewer:
Date: 12/21/00 Time: 11:00	Date: 12.28.2000 Time: 1445

Response Factor Report PEST-A

Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000

Calibration Files
0.01 =12120005.D 0.05 =12120006.D 0.1 =12120007.D
0.25 =12120008.D 0.35 =12120009.D 0.50 =12120014.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	Tetrachloro-m-xylen	1.599	1.647	1.432	1.180	1.084	1.080	1.337	E8	19.17
2)	T	alpha-BHC	2.161	2.272	2.108	1.801	1.725	1.764	1.972	E8	11.96
3)	T	beta-BHC	0.866	1.073	0.989	0.743	0.815	0.812	0.883	E8	14.05
4)	T	gamma-BHC (Lindane)	1.918	2.034	1.885	1.546	1.537	1.577	1.750	E8	12.63
5)	T	delta-BHC	1.402	2.047	1.965	1.586	1.636	1.576	1.702	E8	14.69
6)	T	Heptachlor	1.574	1.673	1.491	1.262	1.132	1.140	1.379	E8	16.82
7)	T	Aldrin	1.364	1.519	1.436	1.152	1.126	1.039	1.273	E8	15.17
8)	T	Heptachlor epoxide	1.460	1.495	1.317	1.061	1.014	1.033	1.230	E8	17.98
9)	T	Endosulfan I	1.596	1.572	1.595	1.133	1.132	1.121	1.358	E8	18.52
10)	T	gamma-Chlordane	1.672	1.691	1.559	1.249	1.209	1.232	1.436	E8	16.01
11)	T	alpha-Chlordane	1.587	1.512	1.472	1.126	1.139	0.983	1.303	E8	19.22
12)	T	4,4'-DDE	1.106	1.056	1.047	1.003	0.926	0.968	1.017	E8	6.40
13)	T	Dieldrin	1.429	1.489	1.335	1.094	1.034	1.036	1.236	E8	16.68
14)	T	Endrin	1.061	1.011	0.924	0.848	0.750	0.802	0.899	E8	13.51
15)	T	4,4'-DDD	0.966	1.055	1.018	0.904	0.858	0.895	0.950	E8	8.10
16)	T	Endosulfan II	1.239	1.272	1.138	0.940	0.889	0.881	1.060	E8	16.80
17)	T	Endrin aldehyde	0.976	1.040	0.950	0.743	0.746	0.763	0.870	E8	15.38
18)	T	4,4'-DDT	0.949	1.158	1.116	0.967	0.929	0.947	1.011	E8	9.82
19)	T	Endosulfan sulfate	1.028	1.133	1.082	0.867	0.825	0.846	0.963	E8	13.89
20)	T	Methoxychlor		5.770	5.386	4.841	4.663	4.803	5.092	E7	9.19
21)	T	Endrin ketone	1.397	1.392	1.271	1.036	0.985	1.006	1.181	E8	16.47
22)	S	Decachlorobiphenyl	1.492	1.391	1.246	1.004	0.979	1.012	1.188	E8	18.66

Signal #2 Calibration Files
0.01 =12120005.D 0.05 =12120006.D 0.1 =12120007.D
0.25 =12120008.D 0.35 =12120009.D 0.50 =12120014.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
1)	S	Tetrachloro-m-xylen	1.366	1.552	1.417	1.191	1.170	1.180	1.313	E8	11.99
2)	T	alpha-BHC	1.854	2.150	2.023	1.568	1.726	1.767	1.848	E8	11.39
3)	T	beta-BHC	7.287	8.380	9.025	6.661	7.004	7.194	7.592	E7	11.98
4)	T	gamma-BHC (Lindane)	1.745	1.853	1.716	1.354	1.413	1.288	1.561	E8	15.23
5)	T	delta-BHC	0.867	0.914	0.880	0.848	1.055	1.211	0.963	E8	14.79
6)	T	Heptachlor	1.789	1.980	2.146	1.366	1.476	1.411	1.695	E8	19.22
7)	T	Aldrin	1.699	1.656	1.496	1.188	1.186	1.192	1.403	E8	17.41
8)	T	Heptachlor epoxide	1.442	1.514	1.346	1.085	1.058	1.021	1.244	E8	17.32
9)	T	Endosulfan I	1.366	1.573	1.390	1.105	1.080	1.091	1.268	E8	16.20
10)	T	gamma-Chlordane	1.825	1.772	1.616	1.246	1.289	1.295	1.507	E8	17.40
11)	T	alpha-Chlordane	1.493	1.647	1.487	1.161	1.170	1.172	1.355	E8	15.72
12)	T	4,4'-DDE	1.258	1.537	1.421	1.150	1.142	1.144	1.275	E8	13.16
13)	T	Dieldrin	1.593	1.587	1.419	1.143	1.113	1.157	1.335	E8	16.92
14)	T	Endrin	1.012	0.944	0.859	0.825	0.734	0.797	0.862	E8	11.74
15)	T	4,4'-DDD	0.868	1.048	0.997	0.876	0.844	0.892	0.921	E8	8.89

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000

Calibration Files
0.01 =12120005.D 0.05 =12120006.D 0.1 =12120007.D
0.25 =12120008.D 0.35 =12120009.D 0.50 =12120014.D

		Compound	0.01	0.05	0.1	0.25	0.35	0.50	Avg		%RSD
16)	T	Endosulfan II	1.260	1.443	1.268	0.998	0.970	0.979	1.153	E8	17.18
17)	T	Endrin aldehyde	1.078	1.075	0.964	0.774	0.768	0.804	0.910	E8	16.17
18)	T	4,4'-DDT	1.018	1.163	1.116	0.922	0.924	0.909	1.009	E8	10.85
19)	T	Endosulfan sulfate	1.271	1.212	1.092	0.914	0.874	0.903	1.044	E8	16.46
20)	T	Methoxychlor		5.717	5.103	4.798	4.499	4.756	4.975	E7	9.39
21)	T	Endrin ketone	1.374	1.389	1.247	1.022	0.983	1.033	1.174	E8	15.74
22)	S	Decachlorobiphenyl	1.595	1.469	1.328	1.063	1.059	1.093	1.268	E8	18.23

(#) = Out of Range

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\121200\12120005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\121200\12120005.D\ECD2B.CH
Acq On : 12 Dec 2000 13:28 Operator: YGK
Sample : IC PEST .010 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 17:37 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.09	7.80	1598510	1365884	0.014	0.012	
		Spiked Amount 0.250			Recovery =		5.60%	4.80%	
22)	S	Decachlorobiphen	20.84	21.23	1492125	1595389	0.015	0.015	
		Spiked Amount 0.250			Recovery =		6.00%	6.00%	
		Target Compounds							
2)	T	alpha-BHC	9.63	9.45	2160698	1853820	0.012	0.011	
3)	T	beta-BHC	10.75	10.68f	866213	728721	0.011	0.010	
4)	T	gamma-BHC (Linda	10.47	10.38	1917644	1745275	0.012	0.013	
5)	T	delta-BHC	11.19	11.38	1401784	467047	0.009	0.004	#
6)	T	Heptachlor	11.64	11.40	1573920	1788939	0.014	0.012	
7)	T	Aldrin	12.37	12.16	1363868	1698598	0.013	0.014	
8)	T	Heptachlor epoxi	13.80	13.50	1459824	1442172	0.014	0.014	
9)	T	Endosulfan I	14.70	14.37	1596342	1366406	0.014	0.012	
10)	T	gamma-Chlordane	14.10	13.93	1671994	1824657	0.014	0.014	
11)	T	alpha-Chlordane	14.39	14.26	1586979	1492559	0.015	0.013	
12)	T	4,4'-DDE	14.62	14.71	1105575	1258468	0.011	0.011	
13)	T	Dieldrin	15.23	14.98	1429288	1593123	0.014	0.014	
14)	T	Endrin	15.75	15.64	1061075	1011886	0.013	0.013	
15)	T	4,4'-DDD	15.95	15.97	965647	868119	0.011	0.010	
16)	T	Endosulfan II	16.26	16.12	1238824	1260465	0.014	0.013	
17)	T	Endrin aldehyde	17.16	16.84	976360	1078157	0.013	0.014	
18)	T	4,4'-DDT	16.53	16.60	948637	1018475	0.010	0.011	
19)	T	Endosulfan sulfa	18.09	17.43	1028415	1271017	0.012	0.014	
20)	T	Methoxychlor	17.57	18.08	512145	789674	0.011	0.017	#
21)	T	Endrin ketone	18.71	18.57	1396852	1373576	0.014	0.013	

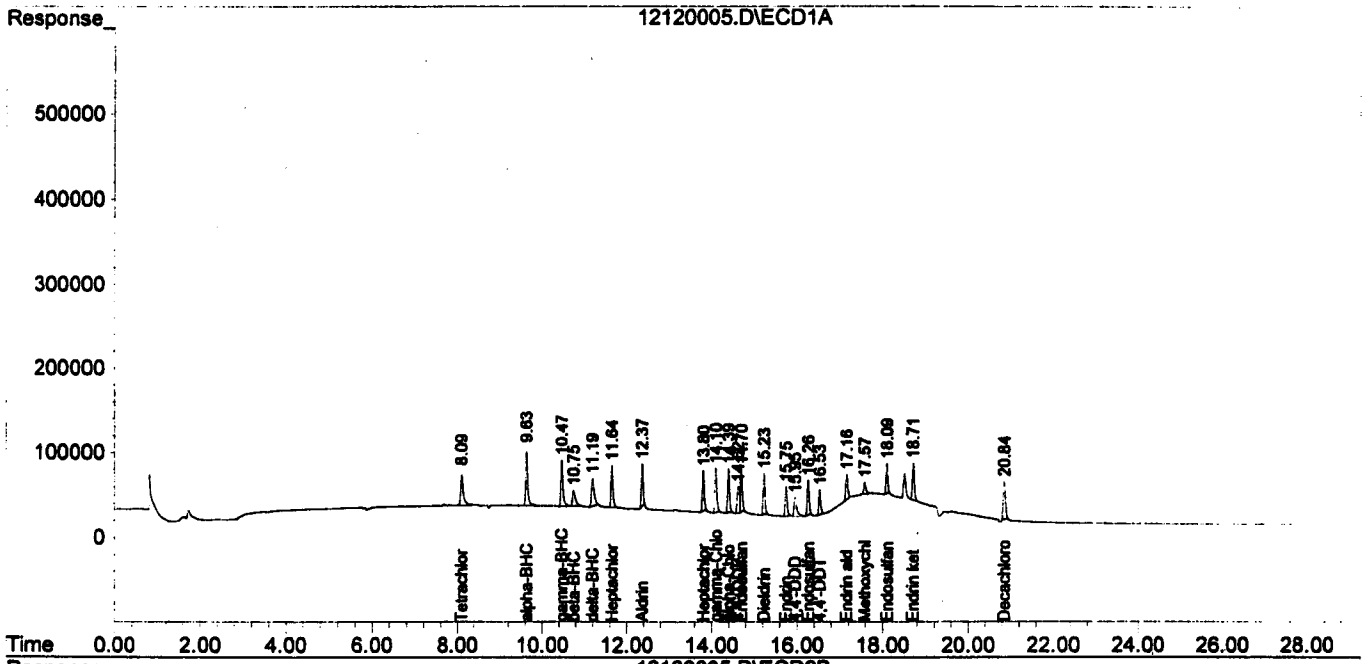
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

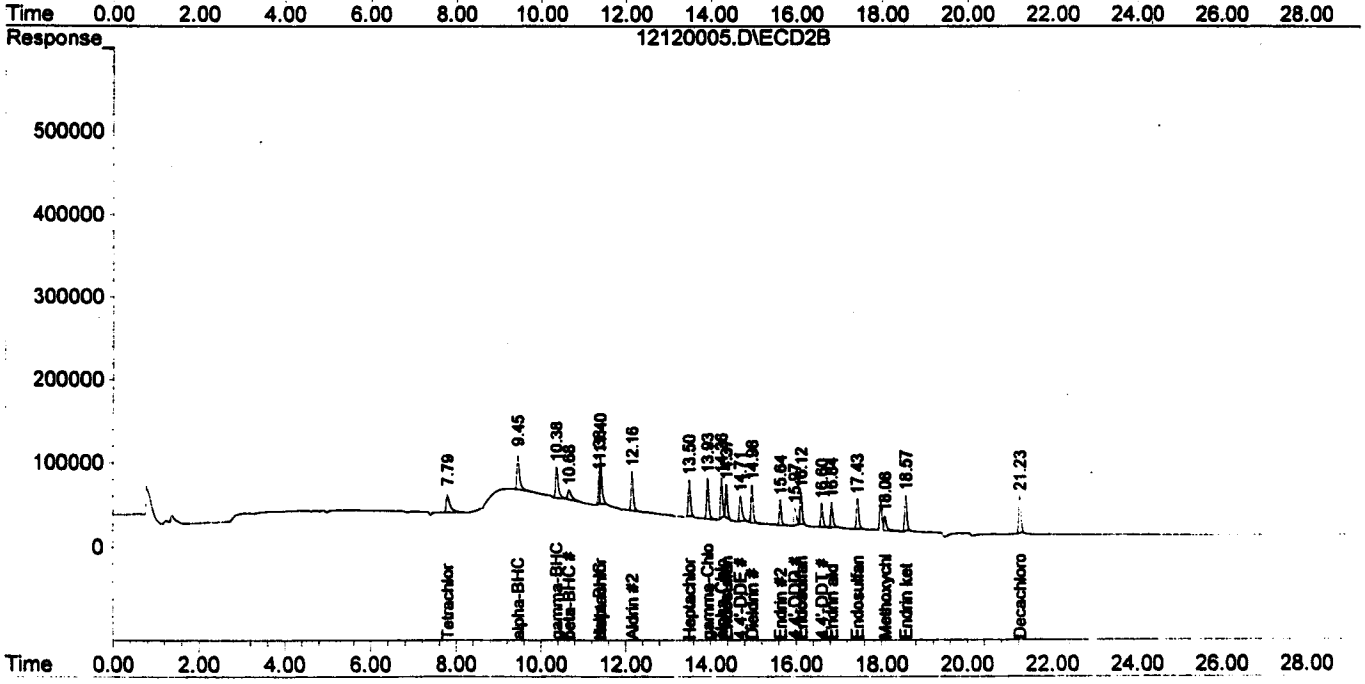
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\121200\12120005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\121200\12120005.D\ECD2B.CH
Acq On : 12 Dec 2000 13:28 Operator: YGK
Sample : IC PEST .010 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 17:37 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\121200\12120006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\121200\12120006.D\ECD2B.CH
Acq On : 12 Dec 2000 14:02 Operator: YGK
Sample : IC PEST .050 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 17:44 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

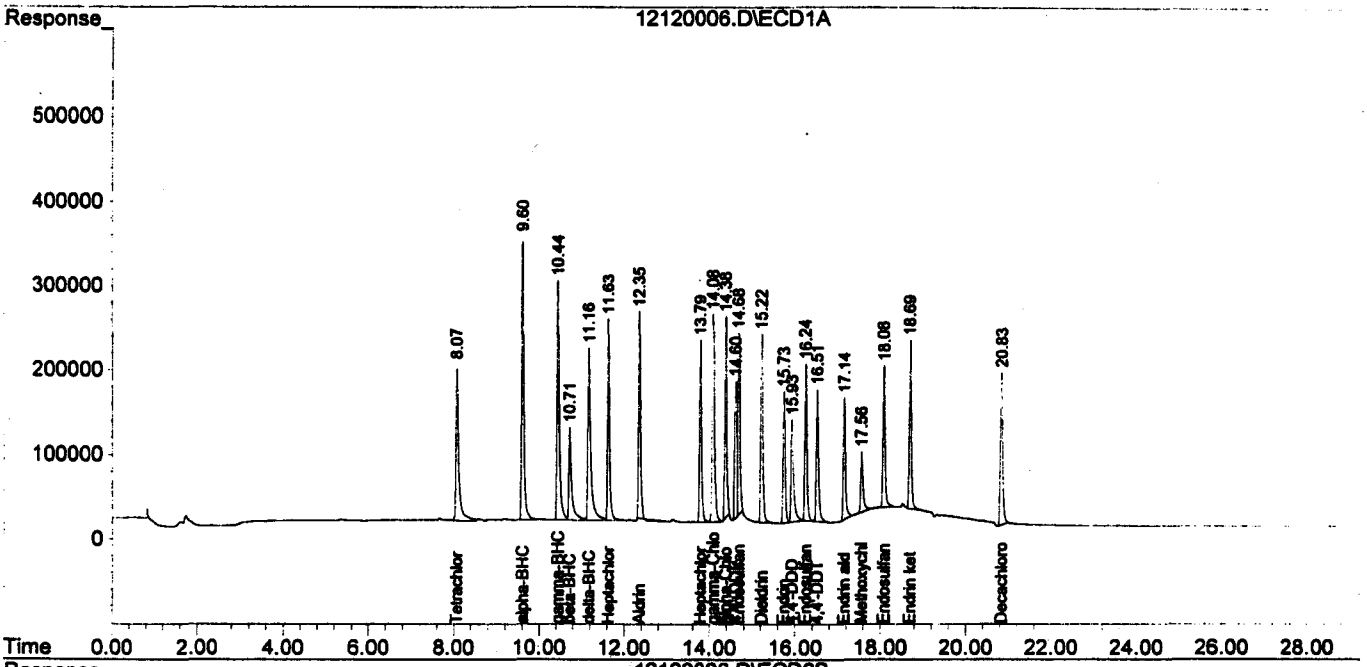
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.07	7.77	8235678	7761797	0.074	0.065	
		Spiked Amount 0.250			Recovery	=	29.60%	26.00%	
22)	S	Decachlorobiphen	20.83	21.23	6955574	7345431	0.069	0.068	
		Spiked Amount 0.250			Recovery	=	27.60%	27.20%	
		Target Compounds							
2)	T	alpha-BHC	9.60	9.44	11360587	10750611	0.064	0.062	
3)	T	beta-BHC	10.71	10.64	5366939	4190025	0.066	0.059	
4)	T	gamma-BHC (Linda	10.44	10.36	10172486	9265961	0.065	0.069	
5)	T	delta-BHC	11.16	11.36	10236108	4569087	0.064	0.041	#
6)	T	Heptachlor	11.63	11.39	8365742	9901737	0.072	0.069	
7)	T	Aldrin	12.35	12.15	7594700	8279177	0.070	0.069	
8)	T	Heptachlor epoxi	13.79	13.49	7473347	7570409	0.072	0.072	
9)	T	Endosulfan I	14.68	14.36	7858794	7864107	0.069	0.072	
10)	T	gamma-Chlordane	14.08	13.92	8456961	8862142	0.068	0.068	
11)	T	alpha-Chlordane	14.38	14.25	7557688	8235073	0.071	0.070	
12)	T	4,4'-DDE	14.60	14.69	5280269	7685153	0.055	0.067	
13)	T	Dieldrin	15.22	14.97	7445500	7933413	0.071	0.069	
14)	T	Endrin	15.73	15.63	5052912	4718963	0.063	0.060	
15)	T	4,4'-DDD	15.93	15.95	5277454	5239528	0.059	0.060	
16)	T	Endosulfan II	16.24	16.10	6361292	7213257	0.071	0.073	
17)	T	Endrin aldehyde	17.14	16.83	5198990	5375941	0.068	0.068	
18)	T	4,4'-DDT	16.51	16.59	5789503	5814358	0.061	0.063	
19)	T	Endosulfan sulfa	18.08	17.42	5664360	6058976	0.067	0.067	
20)	T	Methoxychlor	17.56	18.07	2884957	2858484	0.060	0.061	
21)	T	Endrin ketone	18.69	18.56	6959238	6944115	0.069	0.068	

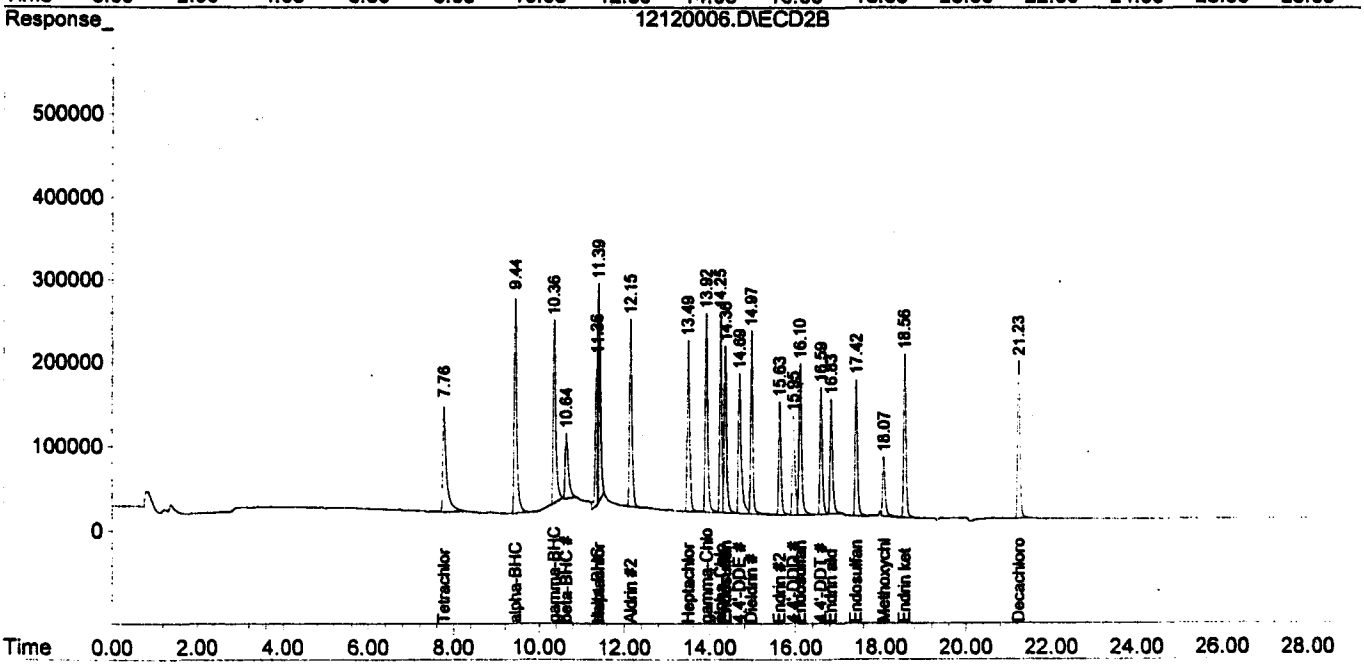
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\121200\12120006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\121200\12120006.D\ECD2B.CH
Acq On : 12 Dec 2000 14:02 Operator: YGK
Sample : IC PEST .050 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 17:44 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\121200\12120007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\121200\12120007.D\ECD2B.CH
Acq On : 12 Dec 2000 14:36 Operator: YGK
Sample : IC PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 8:51 2000 Quant Results File: 112900P.RES

Quant Method : C:\HPCHEM\1\METHODS\112900P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

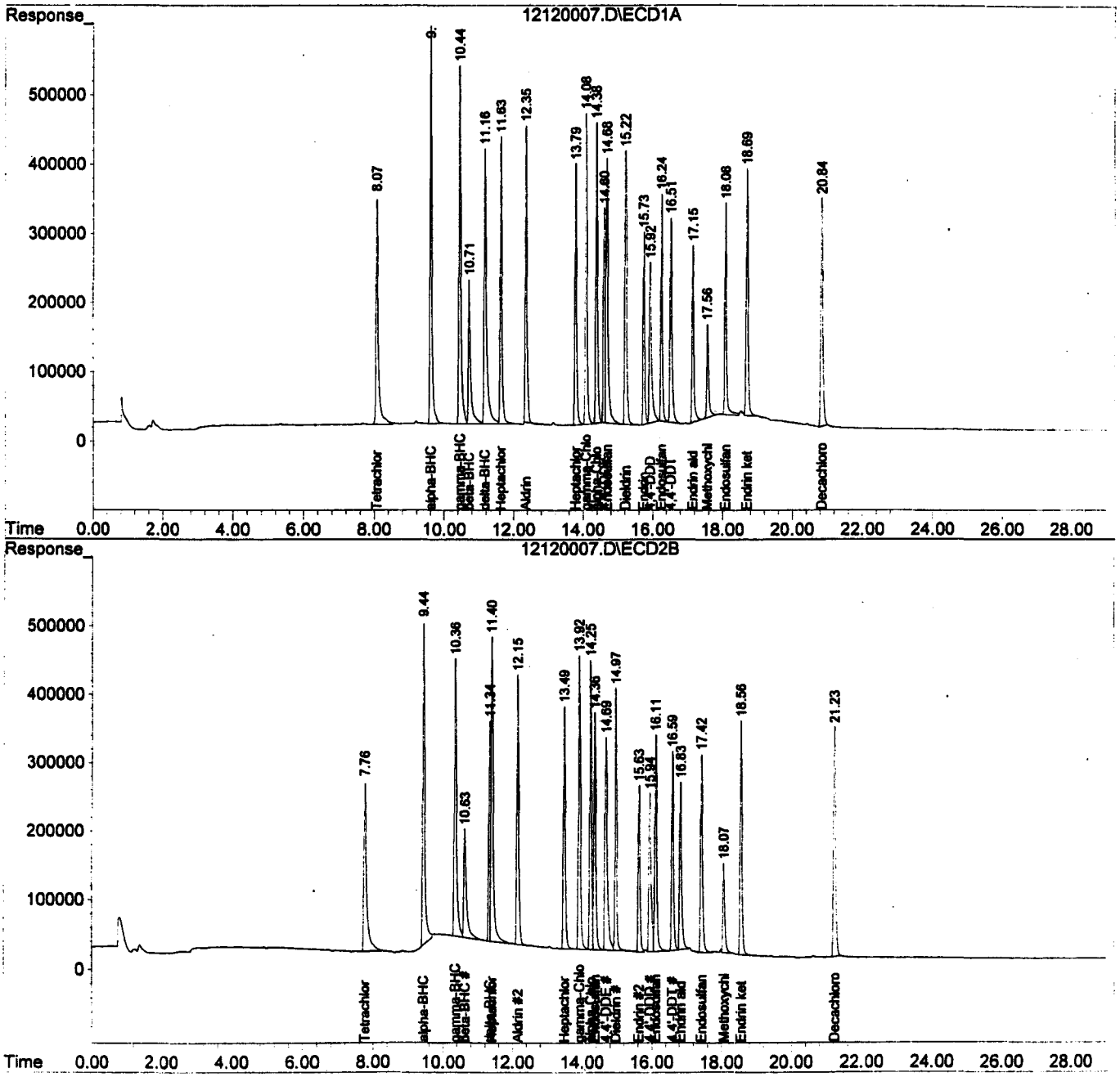
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.07	7.76	14324588	14173230	0.148	0.143	
		Spiked Amount 0.250			Recovery =		59.20%	57.20%	
22)	S	Decachlorobiphen	20.84	21.23	12461059	13276236	0.140	0.136	
		Spiked Amount 0.250			Recovery =		56.00%	54.40%	
		Target Compounds							
2)	T	alpha-BHC	9.61	9.44	21083163	20232272	0.144	0.130	
3)	T	beta-BHC	10.71	10.63	9887116	9024853	0.137	0.133	
4)	T	gamma-BHC (Linda	10.45	10.36	18849729	17155859	0.138	0.127	
5)	T	delta-BHC	11.16	11.34	19654733	8803603	0.131	0.081	#
6)	T	Heptachlor	11.63	11.40	14907523	21456587	0.145	0.163	
7)	T	Aldrin	12.36	12.15	14358854	14959792	0.136	0.135	
8)	T	Heptachlor epoxi	13.79	13.49	13169803	13459718	0.142	0.135	
9)	T	Endosulfan I	14.68	14.36	15951664	13900473	0.164	0.137	
10)	T	gamma-Chlordane	14.08	13.92	15591363	16163899	0.137	0.132	
11)	T	alpha-Chlordane	14.38	14.25	14721440	14865224	0.139	0.133	
12)	T	4,4'-DDE	14.60	14.69	10467627	14209206	0.112	0.132	
13)	T	Dieldrin	15.22	14.97	13351795	14192028	0.141	0.133	
14)	T	Endrin	15.73	15.63	9243274	8585336	0.128	0.115	
15)	T	4,4'-DDD	15.92	15.94	10184640	9970703	0.125	0.123	
16)	T	Endosulfan II	16.24	16.11	11381071	12677677	0.137	0.138	
17)	T	Endrin aldehyde	17.15	16.83	9497778	9635507	0.139	0.132	
18)	T	4,4'-DDT	16.51	16.59	11160035	11155776	0.131	0.124	
19)	T	Endosulfan sulfa	18.08	17.42	10824914	10915804	0.144	0.129	
20)	T	Methoxychlor	17.56	18.07	5385599	5103438	0.130	0.115	
21)	T	Endrin ketone	18.69	18.56	12707711	12465069	0.141	0.137	

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\121200\12120007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\121200\12120007.D\ECD2B.CH
Acq On : 12 Dec 2000 14:36 Operator: YGK
Sample : IC PEST .10 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 8:51 2000 Quant Results File: 112900P.RES

Quant Method : C:\HPCHEM\1\METHODS\112900P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\121200\12120008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\121200\12120008.D\ECD2B.CH
Acq On : 12 Dec 2000 15:31 Operator: YGK
Sample : IC PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 21 10:39 2000 Quant Results File: 112900P.RES

Quant Method : C:\HPCHEM\1\METHODS\112900P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.08	7.76	29492534	29776014	0.304	0.301	
		Spiked Amount 0.250			Recovery	=	121.60%	120.40%	
22)	S	Decachlorobiphen	20.84	21.24	25100642	26585837	0.282	0.272	
		Spiked Amount 0.250			Recovery	=	112.80%	108.80%	
		Target Compounds							
2)	T	alpha-BHC	9.62	9.44	45030691	39202731	0.307	0.252	
3)	T	beta-BHC	10.72	10.62	18573784	16653273	0.257	0.246	
4)	T	gamma-BHC (Linda	10.46	10.36	38640060	33844438	0.282	0.250	
5)	T	delta-BHC	11.17	11.33	39661630	21212455	0.264	0.195	#
6)	T	Heptachlor	11.65	11.41	31556655	34152596	0.308	0.259	
7)	T	Aldrin	12.37	12.16	28805270	29697876	0.272	0.269	
8)	T	Heptachlor epoxi	13.80	13.50	26512783	27112767	0.287	0.272	
9)	T	Endosulfan I	14.69	14.37	28327743	27619612	0.291	0.272	
10)	T	gamma-Chlordane	14.09	13.93	31226468	31143884	0.275	0.255	
11)	T	alpha-Chlordane	14.39	14.25	28145944	29014633	0.266	0.259	
12)	T	4,4'-DDE	14.60	14.67	25068990	28746101	0.268	0.266	
13)	T	Dieldrin	15.23	14.97	27339647	28568863	0.288	0.268	
14)	T	Endrin	15.74	15.63	21192178	20624284	0.294	0.277	
15)	T	4,4'-DDD	15.92	15.93	22599572	21890555	0.276	0.271	
16)	T	Endosulfan II	16.25	16.11	23510504	24955793	0.283	0.272	
17)	T	Endrin aldehyde	17.15	16.83	18573146	19358670	0.272	0.264	
18)	T	4,4'-DDT	16.51	16.59	24173361	23046555	0.283	0.257	
19)	T	Endosulfan sulfa	18.09	17.42	21672914	22841584	0.287	0.271	
20)	T	Methoxychlor	17.56	18.06	12102068	11994883	0.292	0.269	
21)	T	Endrin ketone	18.70	18.56	25910238	25556746	0.287	0.280	

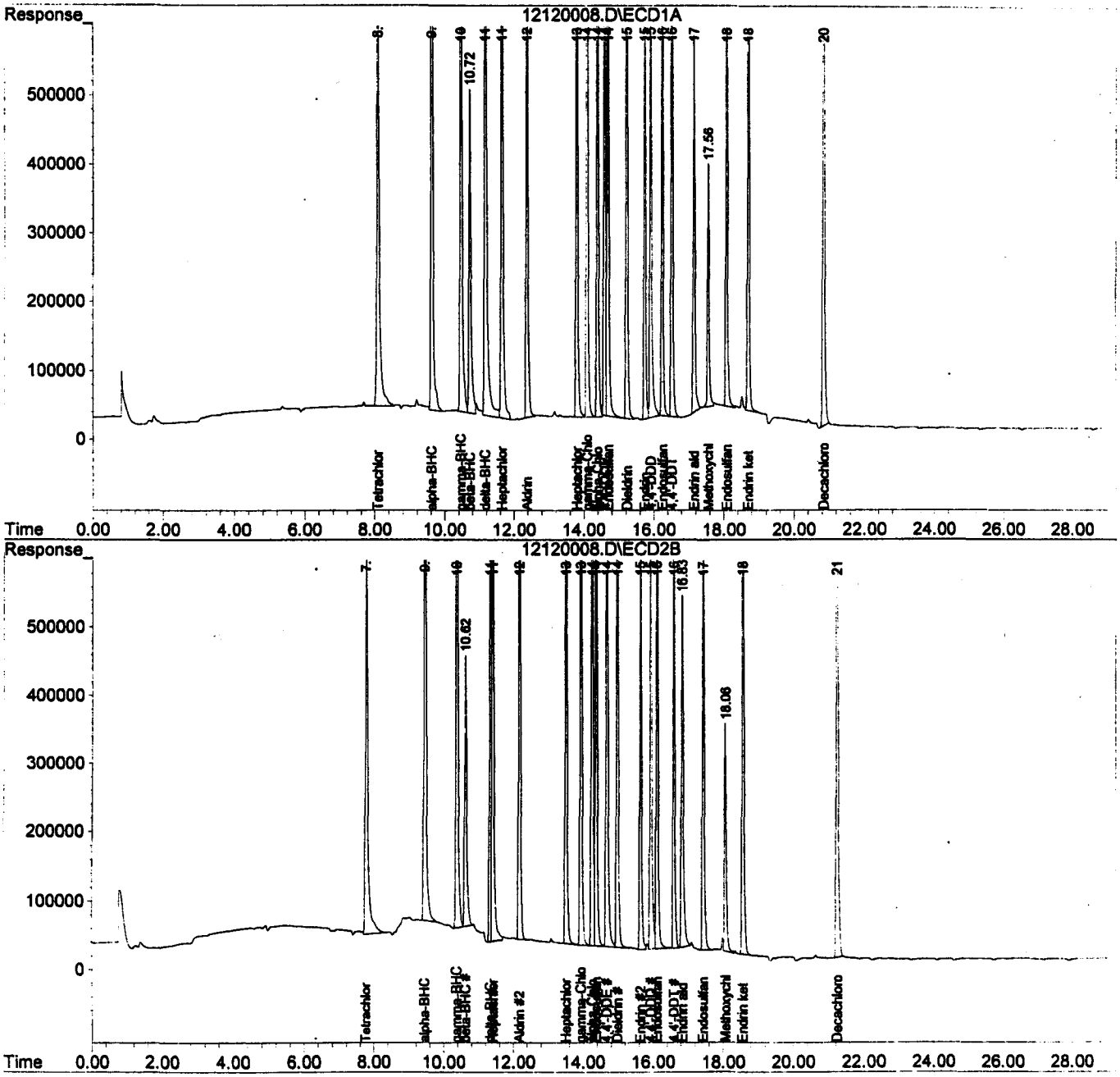
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\121200\12120008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\121200\12120008.D\ECD2B.CH
Acq On : 12 Dec 2000 15:31 Operator: YGK
Sample : IC PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 21 10:39 2000 Quant Results File: 112900P.RES

Quant Method : C:\HPCHEM\1\METHODS\112900P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\121200\12120009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\121200\12120009.D\ECD2B.CH
Acq On : 12 Dec 2000 16:05 Operator: YGK
Sample : IC PEST .35 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 21 10:40 2000 Quant Results File: 112900P.RES

Quant Method : C:\HPCHEM\1\METHODS\112900P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

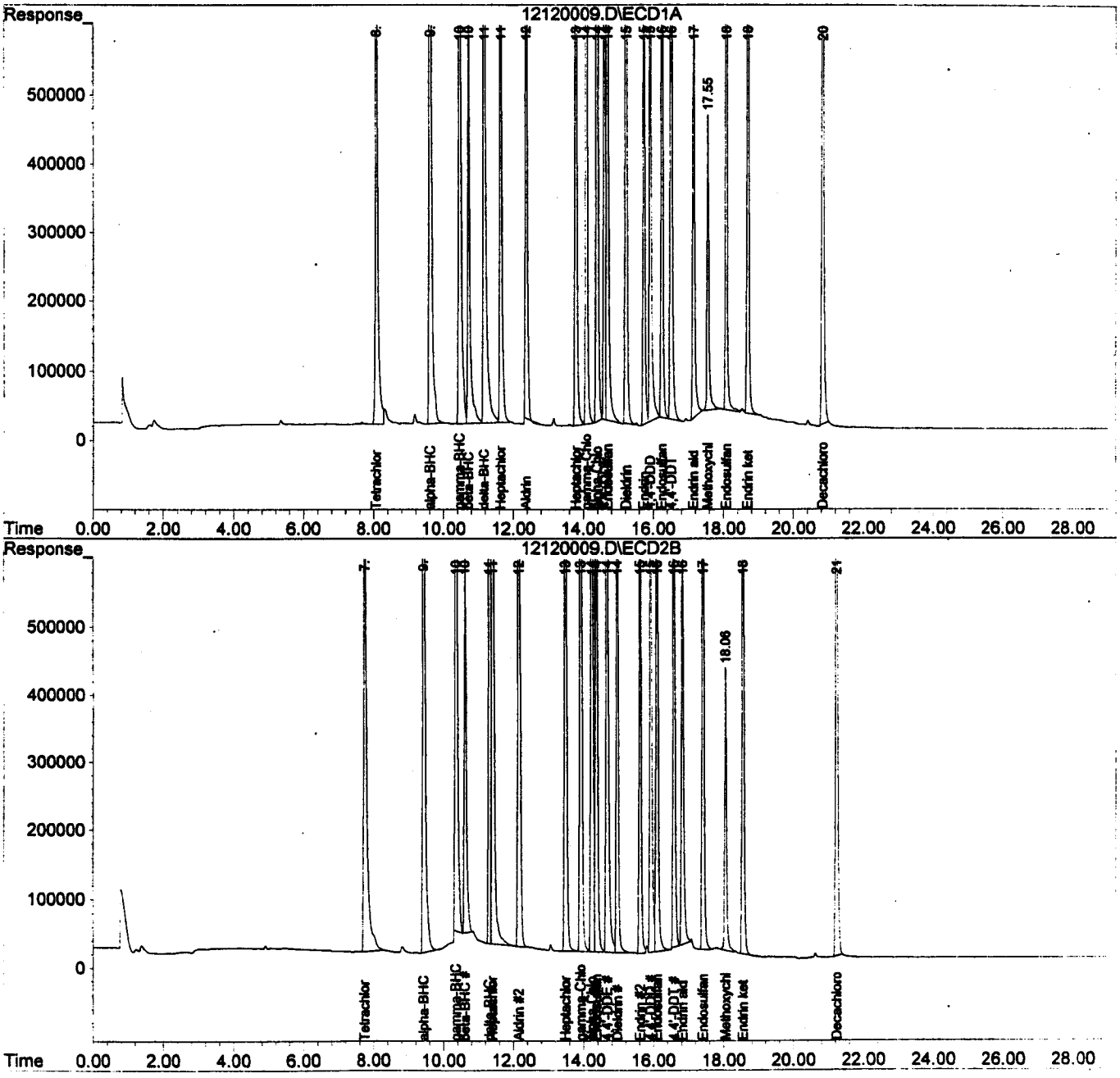
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	8.06	7.75	37946918	40960351	0.391	0.413
		Spiked Amount 0.250			Recovery	=	156.40%	165.20%
22)	S	Decachlorobiphen	20.83	21.23	34273500	37056491	0.385	0.379
		Spiked Amount 0.250			Recovery	=	154.00%	151.60%
		Target Compounds						
2)	T	alpha-BHC	9.60	9.43	60375059	60425561	0.411	0.389
3)	T	beta-BHC	10.70	10.61	28522282	24515402	0.395	0.362
4)	T	gamma-BHC (Linda	10.44	10.35	53809573	49447393	0.393	0.366
5)	T	delta-BHC	11.15	11.32	57245414	36923686	0.381	0.340
6)	T	Heptachlor	11.63	11.39	39606254	51651064	0.386	0.392
7)	T	Aldrin	12.35	12.15	39401572	41496038	0.372	0.376
8)	T	Heptachlor epoxi	13.79	13.49	35493356	37033688	0.384	0.371
9)	T	Endosulfan I	14.68	14.36	39629319	37817453	0.407	0.373
10)	T	gamma-Chlordane	14.08	13.92	42332222	45108069	0.373	0.369
11)	T	alpha-Chlordane	14.38	14.24	39850684	40951023	0.377	0.366
12)	T	4,4'-DDE	14.59	14.67	32411247	39959240	0.346	0.370
13)	T	Dieldrin	15.21	14.96	36175101	38939485	0.381	0.366
14)	T	Endrin	15.73	15.62	26234010	25684657	0.364	0.345
15)	T	4,4'-DDD	15.91	15.92	30038264	29546241	0.368	0.365
16)	T	Endosulfan II	16.23	16.10	31122448	33949401	0.375	0.370
17)	T	Endrin aldehyde	17.14	16.82	26105781	26866458	0.382	0.367
18)	T	4,4'-DDT	16.50	16.58	32521324	32344477	0.381	0.361
19)	T	Endosulfan sulfa	18.08	17.41	28864287	30597553	0.383	0.363
20)	T	Methoxychlor	17.55	18.06	16319078	15745360	0.394	0.354
21)	T	Endrin ketone	18.69	18.55	34464431	34390999	0.381	0.377

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\121200\12120009.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\121200\12120009.D\ECD2B.CH
Acq On : 12 Dec 2000 16:05 Operator: YGK
Sample : IC PEST .35 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 21 10:40 2000 Quant Results File: 112900P.RES

Quant Method : C:\HPCHEM\1\METHODS\112900P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\121200\12120014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\121200\12120014.D\ECD2B.CH
Acq On : 13 Dec 2000 9:29 Operator: YGK
Sample : IC PEST .50 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 17:13 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L	
		System Monitoring Compounds							
1)	S	Tetrachloro-m-xy	8.05	7.74	54003207	58994091	0.502	0.520	
		Spiked Amount 0.250			Recovery	=	200.80%	208.00%	
22)	S	Decachlorobiphen	20.82	21.22	50619748	54669838	0.523	0.524	
		Spiked Amount 0.250			Recovery	=	209.20%	209.60%	
		Target Compounds							
2)	T	alpha-BHC	9.59	9.42	88179790	88354738	0.515	0.551	
3)	T	beta-BHC	10.69	10.60f	40617635	35970336	0.521	0.530	
4)	T	gamma-BHC (Linda	10.43	10.34	78863672	64380489	0.518	0.474	
5)	T	delta-BHC	11.14	11.39	78789976	70531874	0.507	0.690	#
6)	T	Heptachlor	11.62	11.39	57010750	70531874	0.504	0.502	
7)	T	Aldrin	12.35	12.14	51947962	59588751	0.463	0.516	
8)	T	Heptachlor epoxi	13.78	13.48	51673928	51062759	0.517	0.493	
9)	T	Endosulfan I	14.67	14.35	56048463	54533695	0.511	0.517	
10)	T	gamma-Chlordane	14.07	13.91	61596763	64772500	0.513	0.518	
11)	T	alpha-Chlordane	14.37	14.24	49151232	58614610	0.444	0.515	
12)	T	4,4'-DDE	14.58	14.66	48380650	57185827	0.523	0.515	
13)	T	Dieldrin	15.21	14.96	51783119	57835171	0.506	0.530	
14)	T	Endrin	15.72	15.62	40099724	39866291	0.522	0.530	
15)	T	4,4'-DDD	15.89	15.91	44761956	44602588	0.524	0.537	
16)	T	Endosulfan II	16.22	16.09	44060255	48973618	0.502	0.517	
17)	T	Endrin aldehyde	17.13	16.82	38163414	40182316	0.527	0.533	
18)	T	4,4'-DDT	16.49	16.57	47328256	45446217	0.518	0.503	
19)	T	Endosulfan sulfa	18.07	17.40	42275102	45144265	0.523	0.522	
20)	T	Methoxychlor	17.54	18.05	24014287	23778053	0.523	0.523	
21)	T	Endrin ketone	18.68	18.54	50282754	51637390	0.520	0.534	

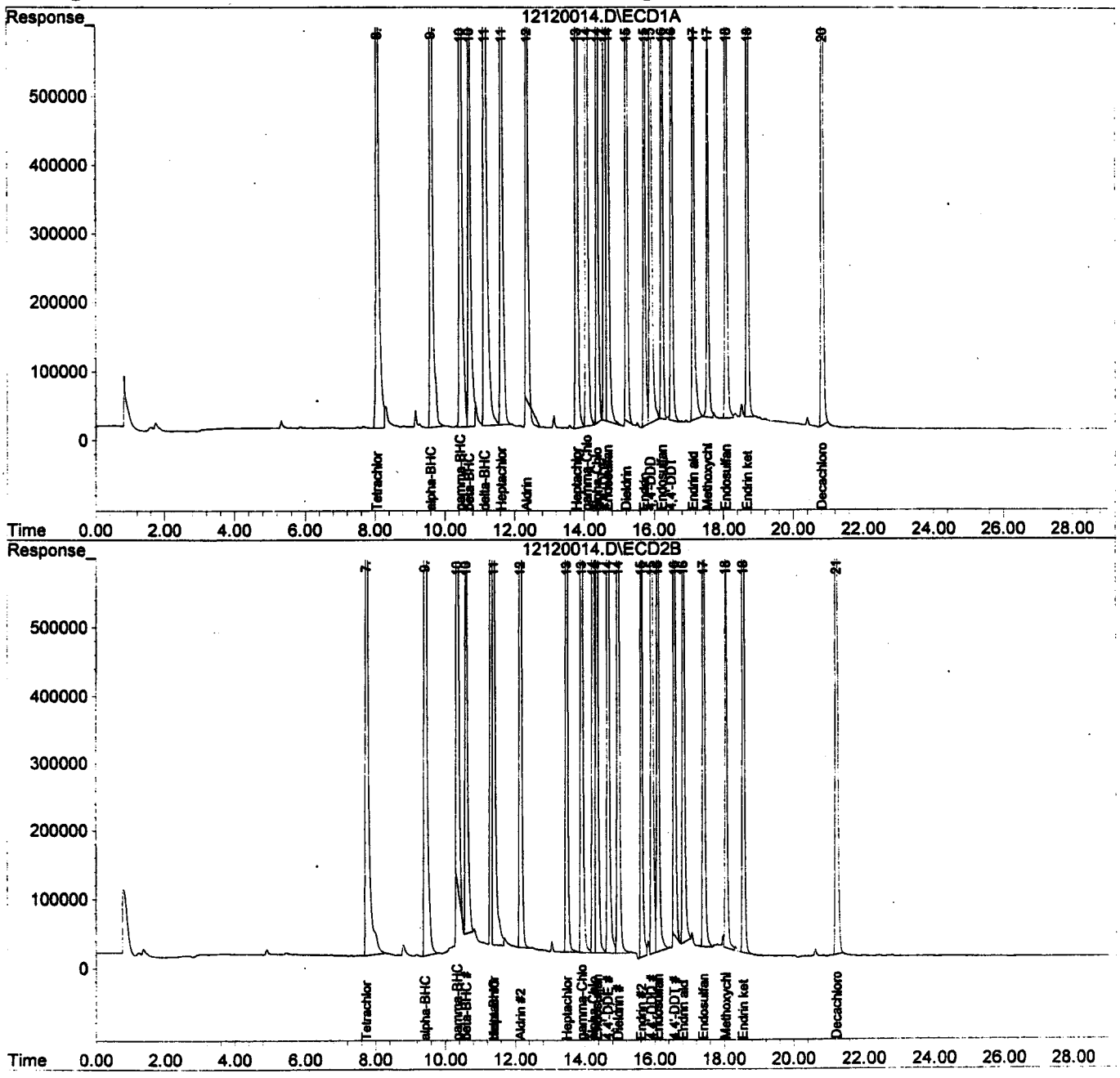
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\121200\12120014.D\ECD1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\121200\12120014.D\ECD2B.CH
Acq On : 13 Dec 2000 9:29 Operator: YGK
Sample : IC PEST .50 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 17:13 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Nov 29 15:05:20 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\121200\12120011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\121200\12120011.D\ECD2B.CH
Acq On : 12 Dec 2000 17:21 Operator: YGK
Sample : ICV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 17:51 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	8.08	7.76	29503637	30125075	0.267	0.254
		Spiked Amount 0.250			Recovery =		106.80% ✓	101.60%
22)	S	Decachlorobiphen	20.84	21.24	22830974	25385235	0.226	0.233
		Spiked Amount 0.250			Recovery =		90.40% ✓	93.20%
		Target Compounds						
2)	T	alpha-BHC	9.62	9.44	44487439	43510893	0.251	0.251
3)	T	beta-BHC	10.72	10.62	20875844	18361277	0.258	0.258
4)	T	gamma-BHC (Linda	10.46	10.36	40089157	36921120	0.255	0.275
5)	T	delta-BHC	11.17	11.34	42461603	25328808	0.265	0.229
6)	T	Heptachlor	11.64	11.40	30464749	38545573	0.261	0.267
7)	T	Aldrin	12.37	12.16	30190558	30498583	0.277	0.254
8)	T	Heptachlor epoxi	13.80	13.50	26998337	28047797	0.259	0.267
9)	T	Endosulfan I	14.69	14.37	29937889	28093421	0.263	0.256
10)	T	gamma-Chlordane	14.09	13.93	31435695	33048943	0.254	0.255
11)	T	alpha-Chlordane	14.39	14.25	29640233	30342169	0.280	0.257
12)	T	4,4'-DDE	14.60	14.68	23576069	29620678	0.245	0.257
13)	T	Dieldrin	15.23	14.97	26854140	29107601	0.255	0.253
14)	T	Endrin	15.74	15.63	22100773	20976574	0.277	0.267
15)	T	4,4'-DDD	15.92	15.94	21958602	20984003	0.247	0.238
16)	T	Endosulfan II	16.25	16.11	23159410	24864386	0.257	0.252
17)	T	Endrin aldehyde	17.15	16.83	16566889	18155355	0.218	0.228
18)	T	4,4'-DDT	16.51	16.59	23952171	23989514	0.252	0.260
19)	T	Endosulfan sulfa	18.09	17.42	21598159	22723516	0.254	0.252
20)	T	Methoxychlor	17.56	18.07	11544343	11353528	0.241	0.241
21)	T	Endrin ketone	18.70	18.56	24246146	24021905	0.239	0.234

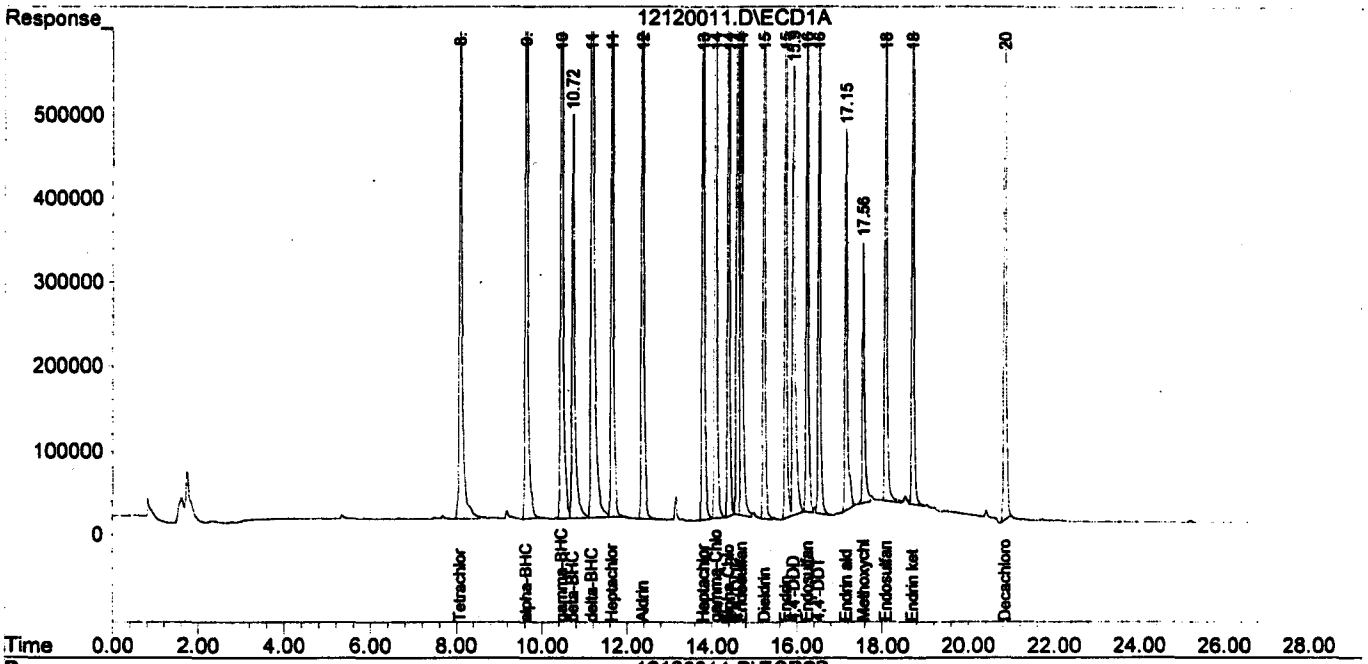
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

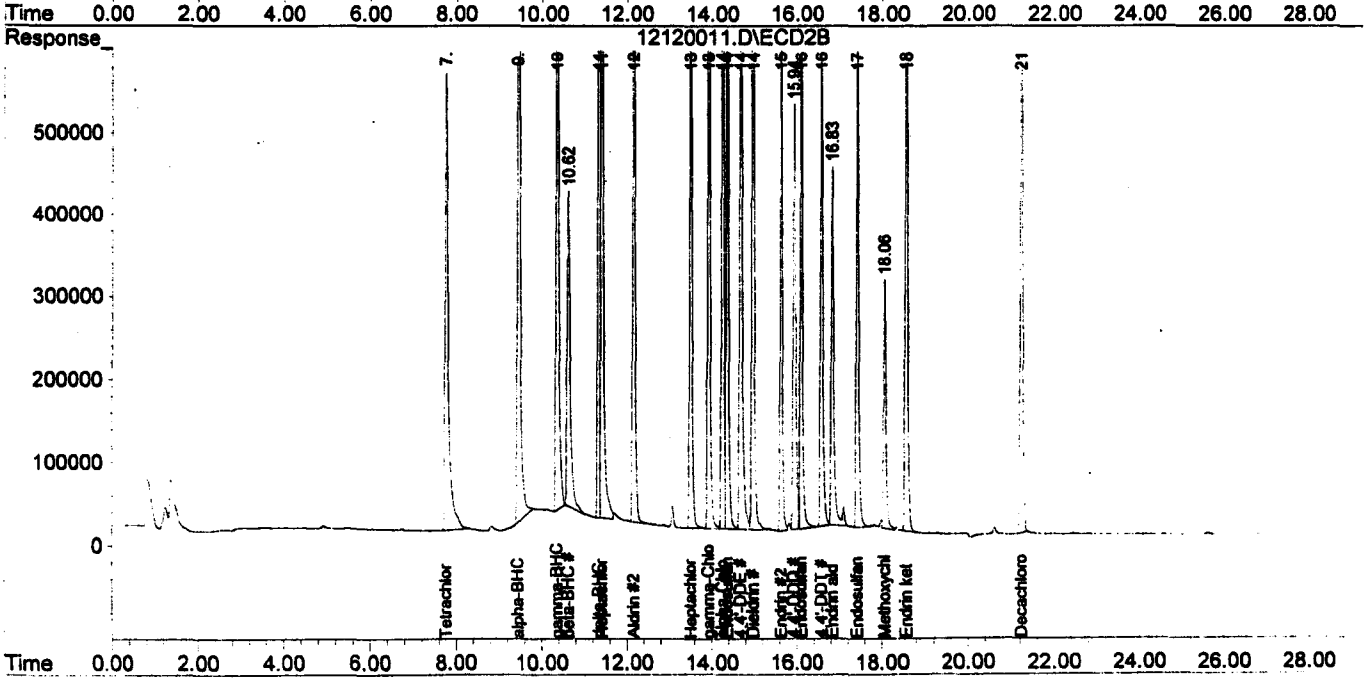
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\121200\12120011.D\ECD1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\121200\12120011.D\ECD2B.CH
Acq On : 12 Dec 2000 17:21 Operator: YGK
Sample : ICV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 13 17:51 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (11/29/00)
Last Update : Wed Dec 13 17:39:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





GC/ECD Pesticides & PCBs Instrument Run Log

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 12/12/00
Analyst Initials: YCK
Instrument Method: 8081DIA
Calibration Column: Rtx-CLP1 (F)
Confirmation Column: Rtx-CLP2

DDT Breakdown % (<15%): 2.3%
Endrin Breakdown % (<15%): 10.0%

Pest Calibration Date: 12/12/00
PCB Calibration Date: —

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	50-116	43-152
Water	21-131	10-160

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	121200P	std	1X	NA	NA	
2	Hexane	"	soln	"	"	"	
3	PEM	"	std	"	"	"	
4	ccv Pest. 25 ppm	"	"	"	"	"	P00185
5	IC Pest. 010 ppm	"	"	"	"	"	P00188
6	IC Pest. 050 ppm	"	"	"	"	"	P00187
7	IC Pest. 10 ppm	"	"	"	"	"	P00186
8	IC Pest. 25 ppm	"	"	"	"	"	P00185
9	IC Pest. 35 ppm	"	"	"	"	"	P00184
10	IC Pest. 50 ppm	"	"	"	"	"	Bad run P00183
11	ICV Pest. 25 ppm	"	"	"	107	90	P00120
12	Hexane	"	soln	"	NA	NA	
13	std 0.01 ppm	"	std	"	"	"	
14	IC Pest. 50 ppm	"	"	"	"	"	P00183

YCK 12/13/00

Signature/Date: YCK 12/13/00

SVO GC CALIBRATION CHECKLIST
SW-846-8081A / 8082 / 8151A

DATE / INSTRUMENT: 11/08/00 PEST-A	METHOD: (circle applicable methods)
MATRIX:	(8081A) 8082 8151A

Are all standards within expiration dates for both stock and serial standards?	(Y)	N	NA
Is the Initial Calibration compliant with the method specifications?	(Y)	N	NA
Were daily retention time windows updated?	(Y)	N	NA
For Pesticides, is the breakdown of the PEM <15% for DDT and Endrin?	Y	N	(NA)
Is the runlog completely filled out (including review signature/date)?	(Y)	N	NA
Are all mistakes single lined, initialled, and dated?	(Y)	N	NA

Analyst: YGK		Reviewer: [signature]	
Date: 11/09/00	Time: 14:00	Date: 11.16.2000	Time: 1330

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\110800\11080003.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\110800\11080003.D\ECD2B.CH
Acq On : 8 Nov 2000 10:19 am Operator: YGK
Sample : IC TOX 0.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:49 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

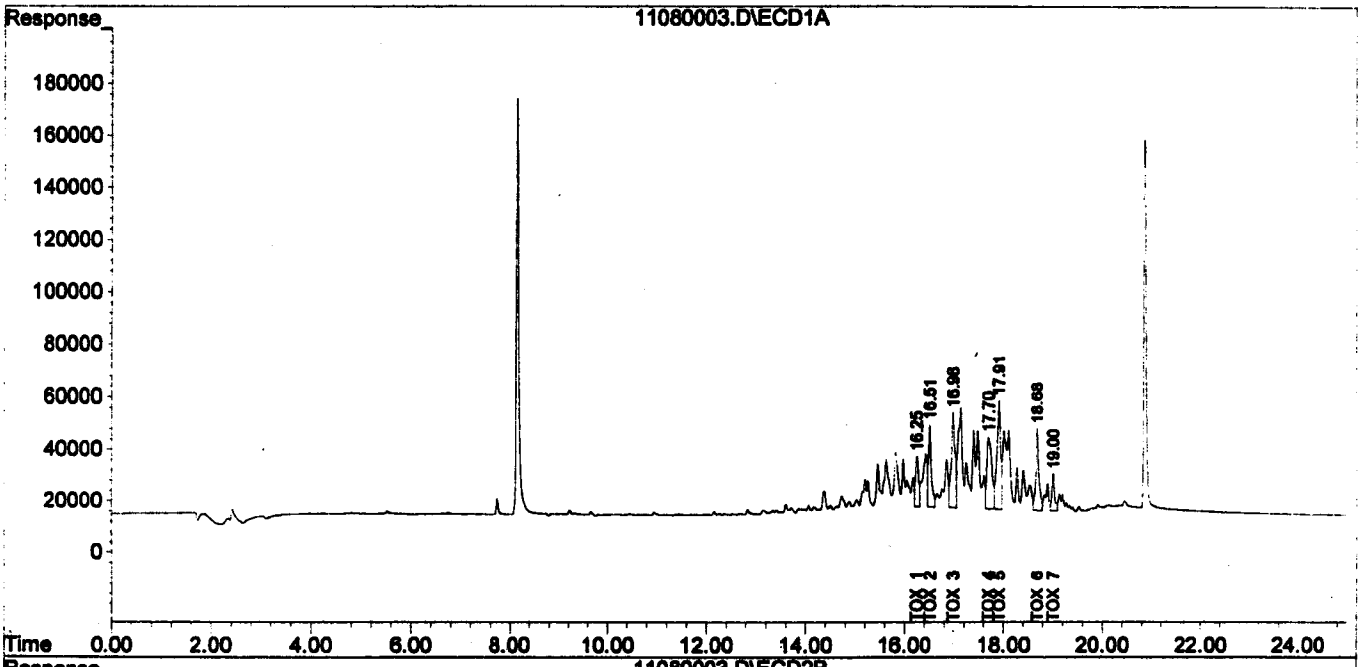
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L TOX 1	16.25	16.31	829865	2711732	0.585	0.500
2)	L TOX 2	16.51	16.70	1358287	1684005	0.514	0.454
3)	L TOX 3	16.98	16.87	1881328	2507965	0.532	0.523
4)	L TOX 4	17.70	17.95	1765556	2460218	0.496	0.407
5)	L TOX 5	17.91	18.08	2409125	2330525	0.546	0.480
6)	L TOX 6	18.68	18.79	1493232	1794267	0.465	0.507
7)	L TOX 7	19.00	19.18	576222	984160	0.339	0.380
	Sum TOX 1			10313617	14472873	3.476	3.251
	Average TOX 1					0.497	0.464

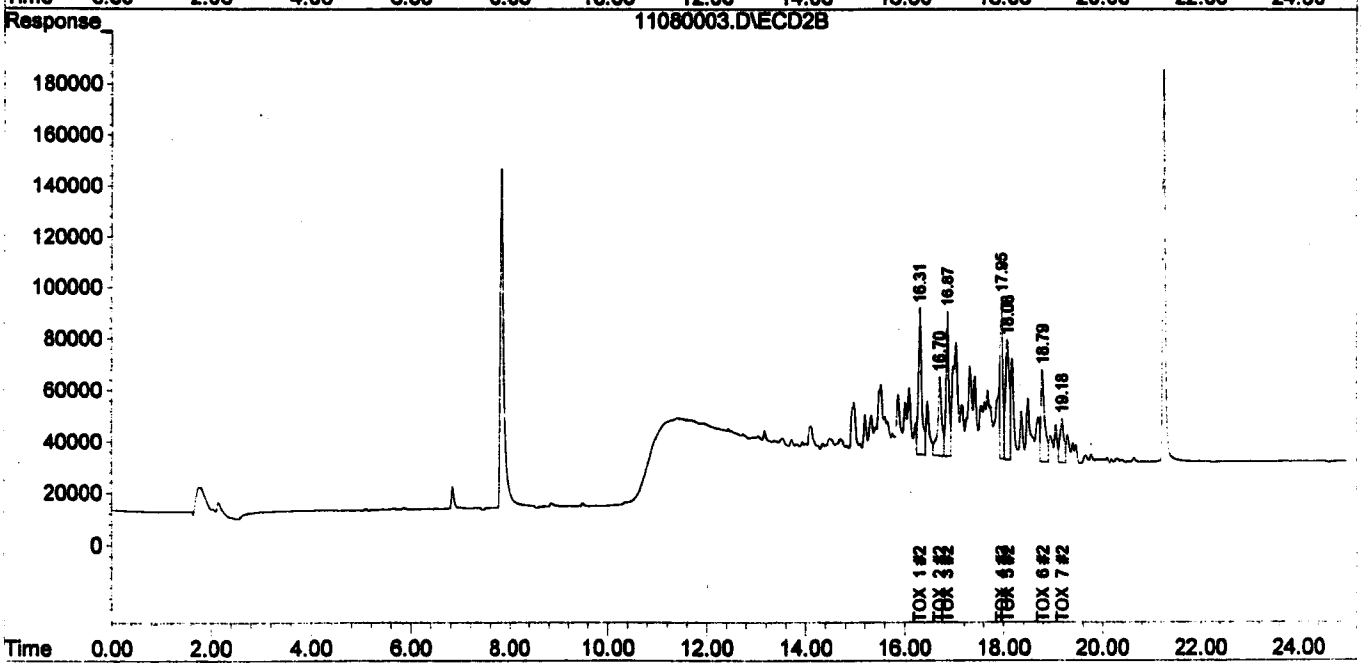
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\110800\11080003.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\110800\11080003.D\ECD2B.CH
Acq On : 8 Nov 2000 10:19 am Operator: YGK
Sample : IC TOX 0.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:49 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\110800\11080004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\110800\11080004.D\ECD2B.CH
Acq On : 8 Nov 2000 10:50 am Operator: YGK
Sample : IC TOX 1.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:50 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1) L	TOX 1	16.25	16.30	2470465	8668408	1.740	1.599
2) L	TOX 2	16.51	16.70	4336246	5487290	1.641	1.480
3) L	TOX 3	16.98	16.87	5971153	7738538	1.687	1.613
4) L	TOX 4	17.70	17.95	5792083	10119509	1.627	1.673
5) L	TOX 5	17.90	18.07	7352146	7688841	1.668	1.585
6) L	TOX 6	18.68	18.79	5083128	5576361	1.582	1.574
7) L	TOX 7	19.00	19.18	2386149	3595730	1.403	1.390
Sum	TOX 1			33391369	48874677	11.348	10.915
Average	TOX 1					1.621	1.559

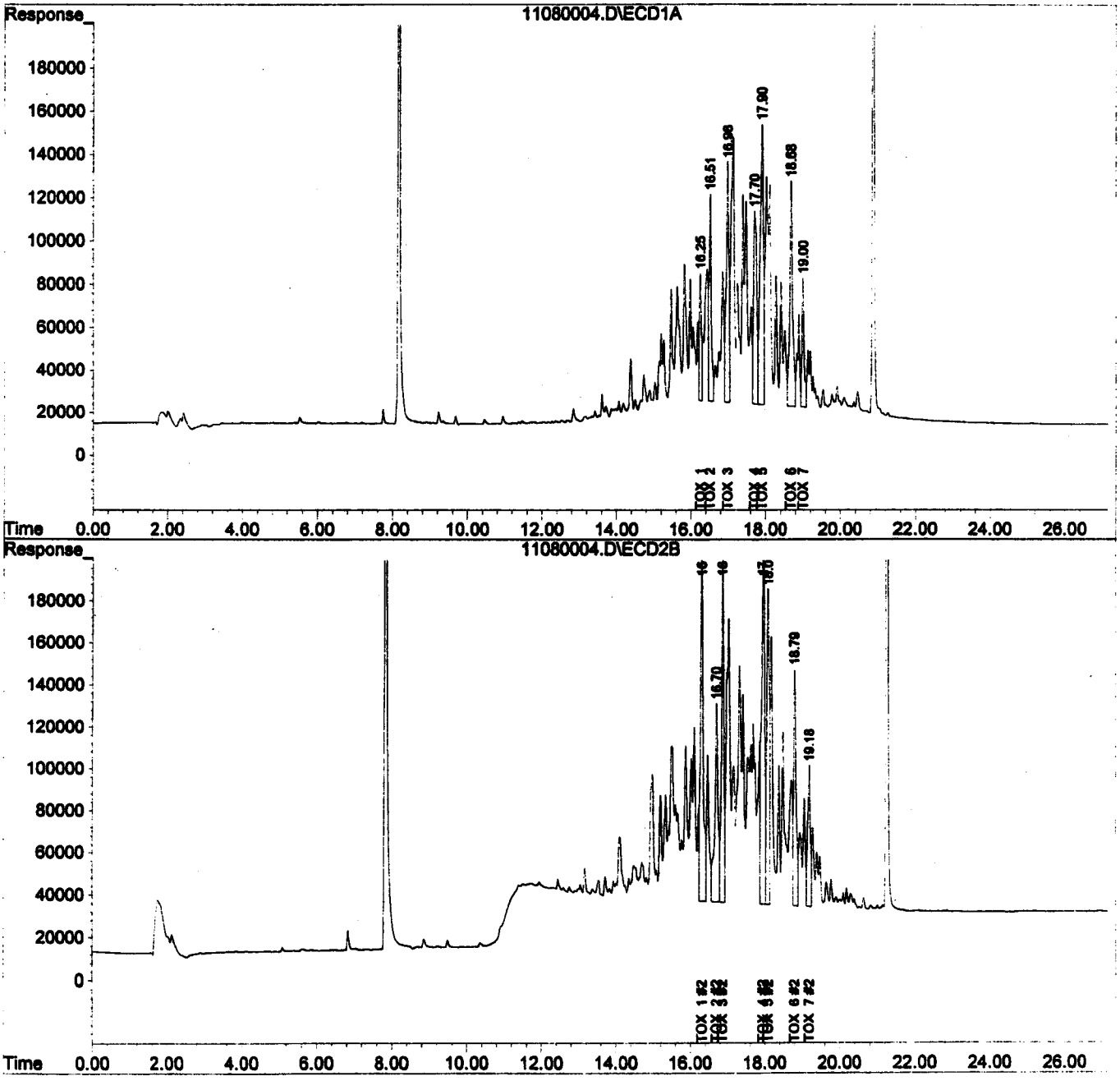
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\110800\11080004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\110800\11080004.D\ECD2B.CH
Acq On : 8 Nov 2000 10:50 am Operator: YGK
Sample : IC TOX 1.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:50 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\110800\11080005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\110800\11080005.D\ECD2B.CH
Acq On : 8 Nov 2000 11:22 am Operator: YGK
Sample : IC TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:50 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1)	L	TOX 1	16.25	16.30	3748533	13787562	2.641	2.543
2)	L	TOX 2	16.51	16.70	6789490	9345615	2.570	2.521
3)	L	TOX 3	16.98	16.87	9207172	12425873	2.601	2.589
4)	L	TOX 4	17.70	17.95	9157465	15819852	2.573	2.616
5)	L	TOX 5	17.90	18.07	11420413	12349198	2.590	2.546
6)	L	TOX 6	18.68	18.79	8112834	9093354	2.525	2.567
7)	L	TOX 7	19.00	19.18	4032386	6295288	2.370	2.434
	Sum	TOX 1			52468293	79116743	17.870	17.817
Average		TOX 1					2.553	2.545

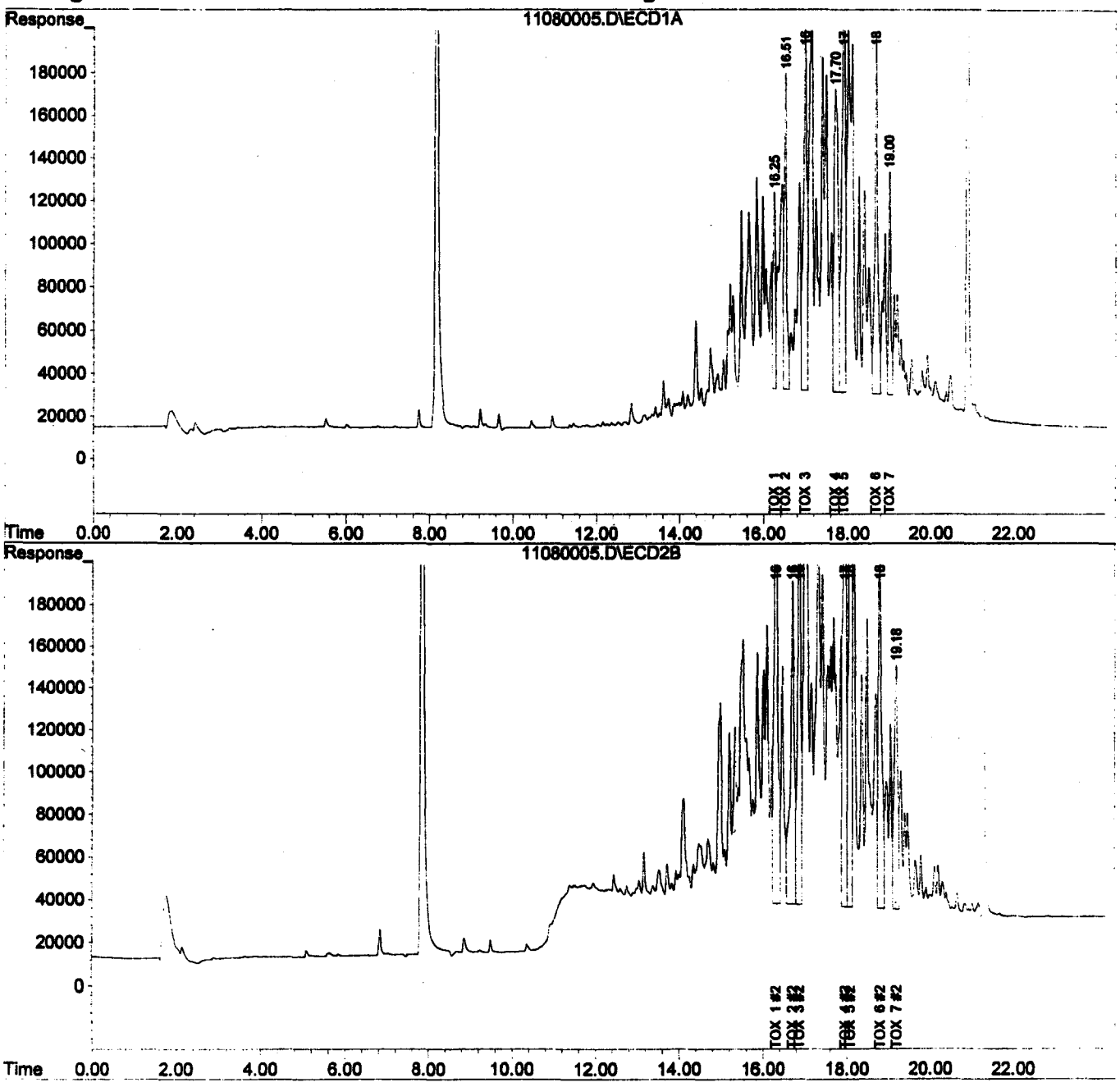
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\110800\11080005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\110800\11080005.D\ECD2B.CH
Acq On : 8 Nov 2000 11:22 am Operator: YGK
Sample : IC TOX 2.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:50 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\110800\11080006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\110800\11080006.D\ECD2B.CH
Acq On : 8 Nov 2000 11:52 am Operator: YGK
Sample : IC TOX 3.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:51 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

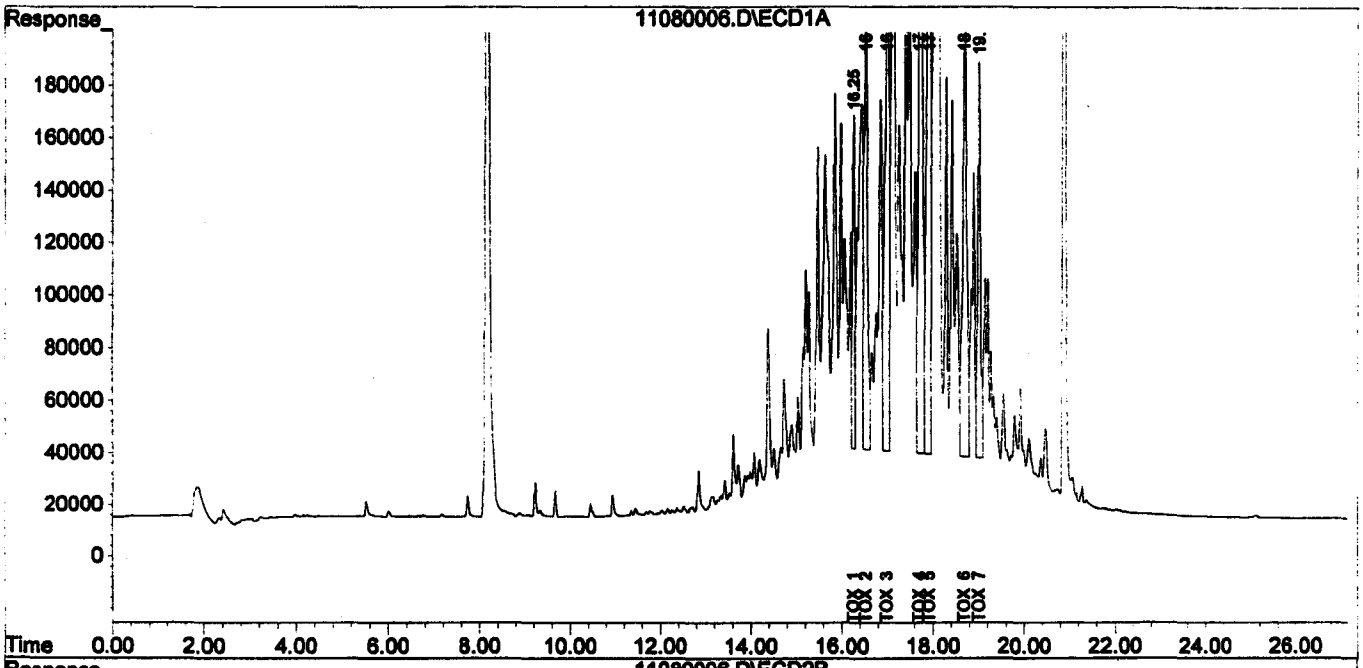
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds						
1)	L TOX 1	16.25	16.30	5141478	17608041	3.622	3.247
2)	L TOX 2	16.51	16.70	9598964	13361852	3.634	3.605
3)	L TOX 3	16.98	16.87	12852422	17335917	3.631	3.613
4)	L TOX 4	17.70	17.95	12871336	21762242	3.616	3.598
5)	L TOX 5	17.90	18.07	16045216	17499818	3.639	3.608
6)	L TOX 6	18.68	18.79	11575921	12731452	3.602	3.595
7)	L TOX 7	19.00	19.18	6129066	9244940	3.602	3.574
	Sum TOX 1			74214404	109.5E6	25.347	24.840
Average	TOX 1					3.621	3.549

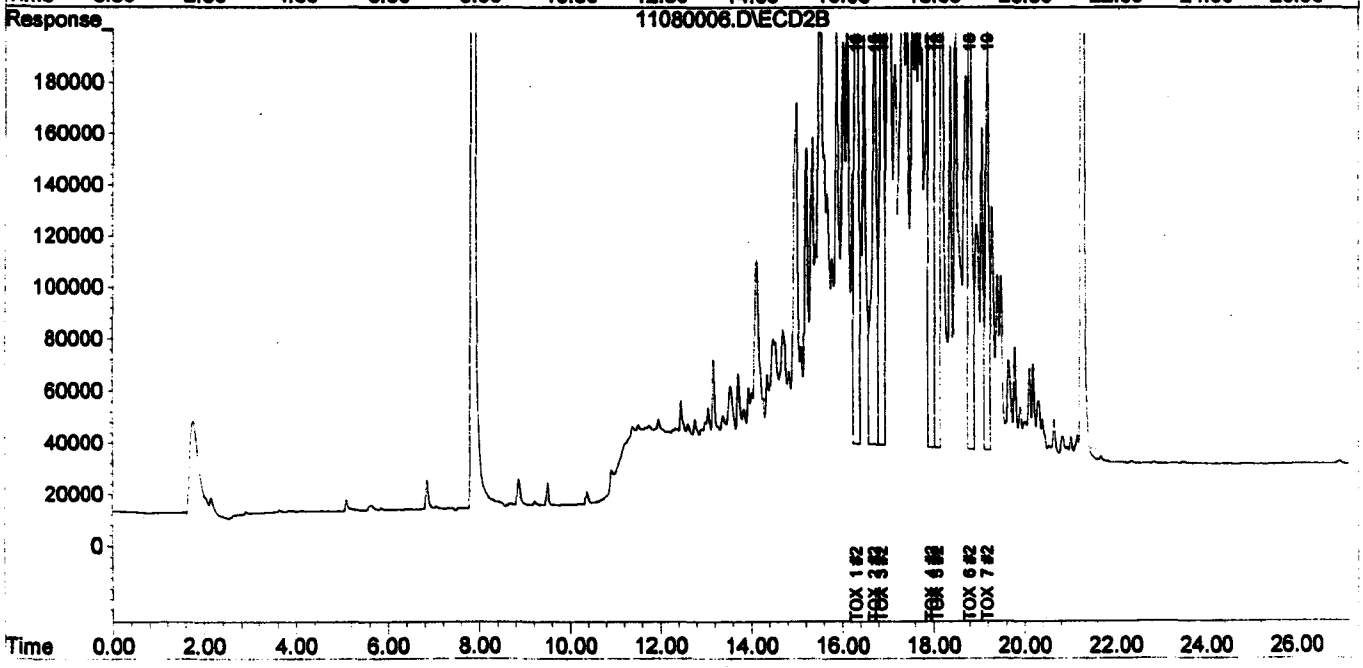
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\110800\11080006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\110800\11080006.D\ECD2B.CH
Acq On : 8 Nov 2000 11:52 am Operator: YGK
Sample : IC TOX 3.50 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:51 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\110800\11080007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\110800\11080007.D\ECD2B.CH
Acq On : 8 Nov 2000 12:25 pm Operator: YGK
Sample : IC TOX 5.0 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:52 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound		RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml
	Target Compounds							
1) L	TOX	1	16.25	16.30	6762286	27794282	4.764	5.126
2) L	TOX	2	16.51	16.70	12753721	18258069	4.828	4.926
3) L	TOX	3	16.98	16.87	16983194	23226856	4.798	4.840
4) L	TOX	4	17.70	17.95	17244292	29169155	4.845	4.823
5) L	TOX	5	17.90	18.07	21172839	23658315	4.802	4.878
6) L	TOX	6	18.68	18.79	15730243	17273696	4.895	4.877
7) L	TOX	7	19.00	19.18	8572393	12999975	5.039	5.026
Sum	TOX	1			99218967	152.4E6	33.970	34.496
Average	TOX	1					4.853	4.928

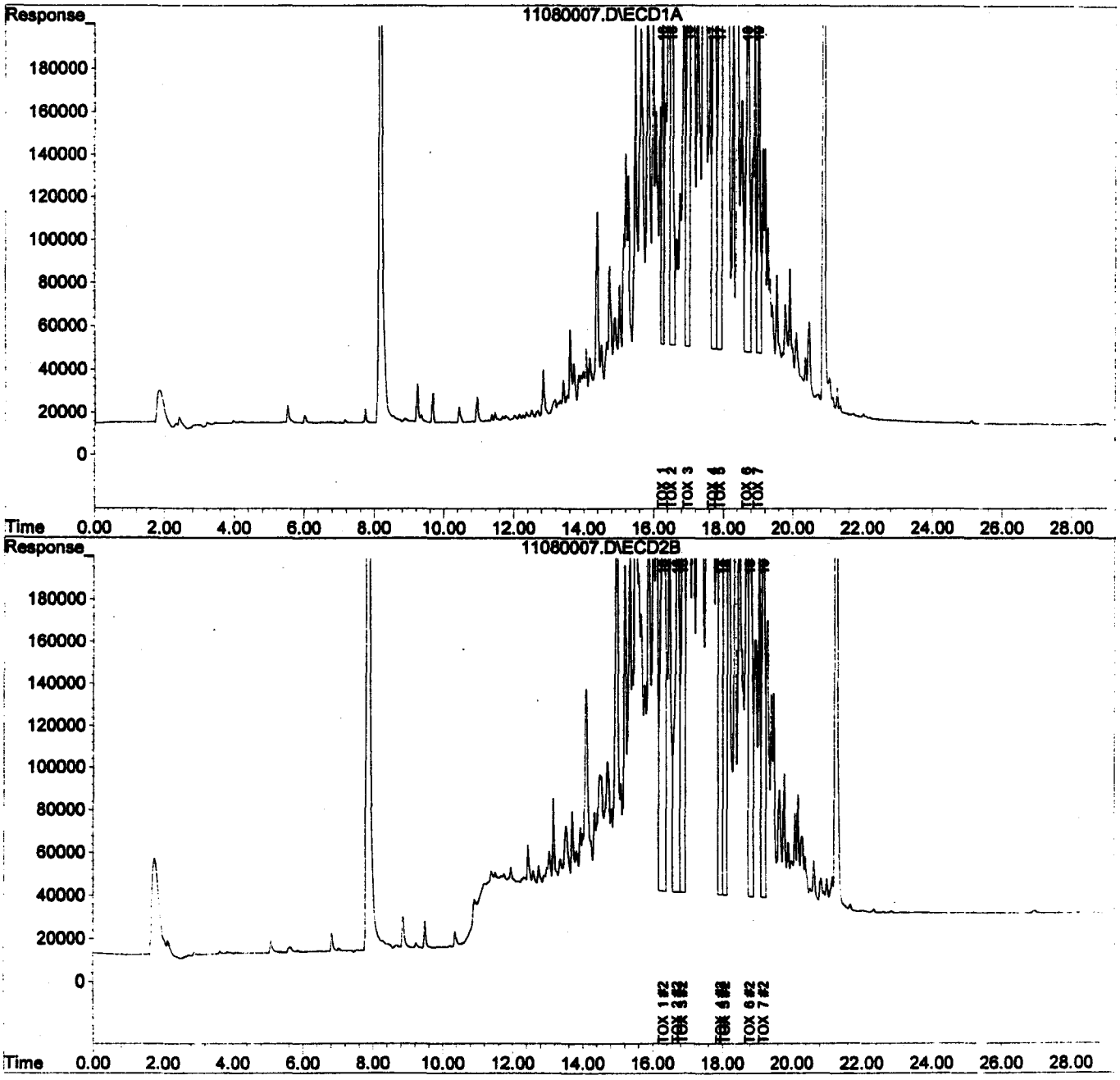
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\110800\11080007.D\ECD1A.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\110800\11080007.D\ECD2B.CH
Acq On : 8 Nov 2000 12:25 pm Operator: YGK
Sample : IC TOX 5.0 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 15:52 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\110800\11080008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\110800\11080008.D\ECD2B.CH
Acq On : 8 Nov 2000 12:59 pm Operator: YGK
Sample : ICV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 13:42 2000 Quant Results File: 110800TS.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TS.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A, ~~08/01/00~~ 11/08/00
Last Update : Wed Nov 08 13:24:49 2000 YGK 11/08
Response via : Initial Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
		System Monitoring Compounds							
1)	S	TCMX	8.15	7.83	24083782	26378190	0.273	0.277	
9)	S	DCB	20.87	21.26	19359697	24611553	0.282	0.284	
		Target Compounds							
2)	L	TOX 1	16.25	16.30	1724721	11077650	1.215	2.043	#
3)	L	TOX 2	16.52	16.70	5100481	6494300	1.931	1.752	
4)	L	TOX 3	16.99	16.87	9516679	11498113	2.689	2.396	
5)	L	TOX 4	17.70	17.95	3648948	18486431	1.025	3.057	#
6)	L	TOX 5	17.89	18.11	12561443	16437656	2.849	3.389	
7)	L	TOX 6	18.68	18.79	11452784	11787799	3.564	3.328	
8)	L	TOX 7	19.00	19.18	6488017	8906627	3.813	3.443	
		Sum TOX 1			50493073	84688575	17.086	19.409	
		Average TOX 1					2.441	2.773	

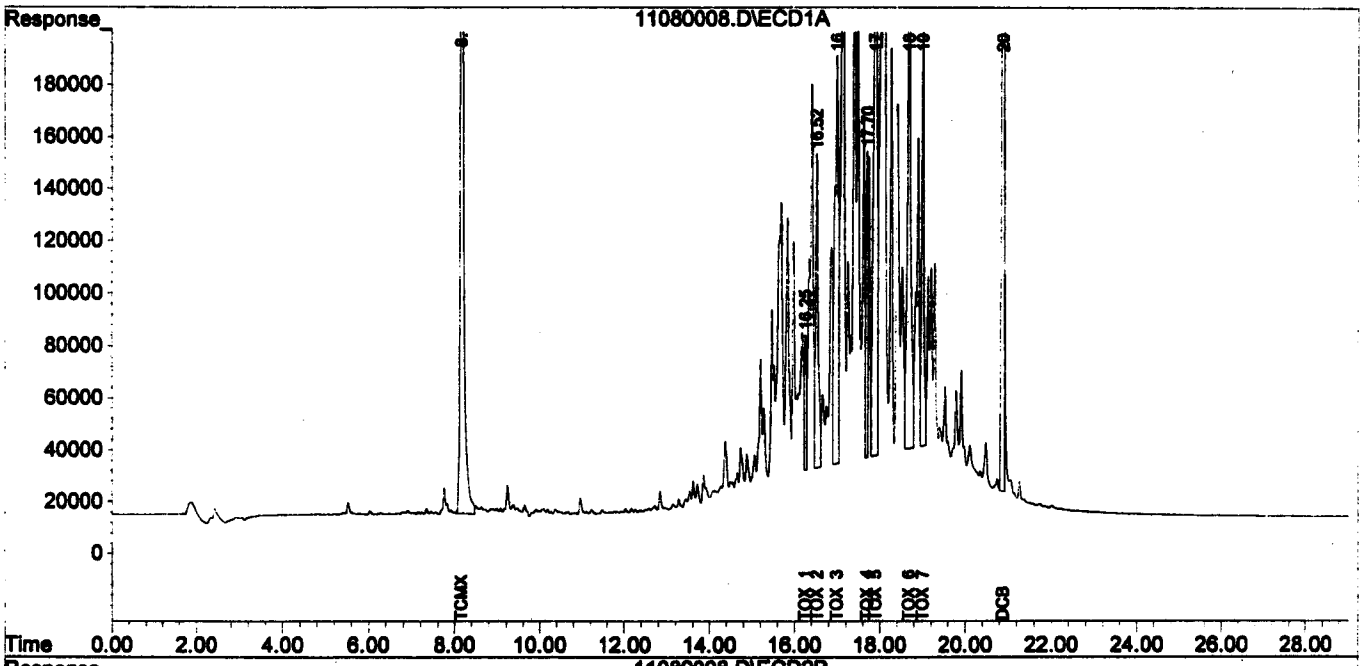
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

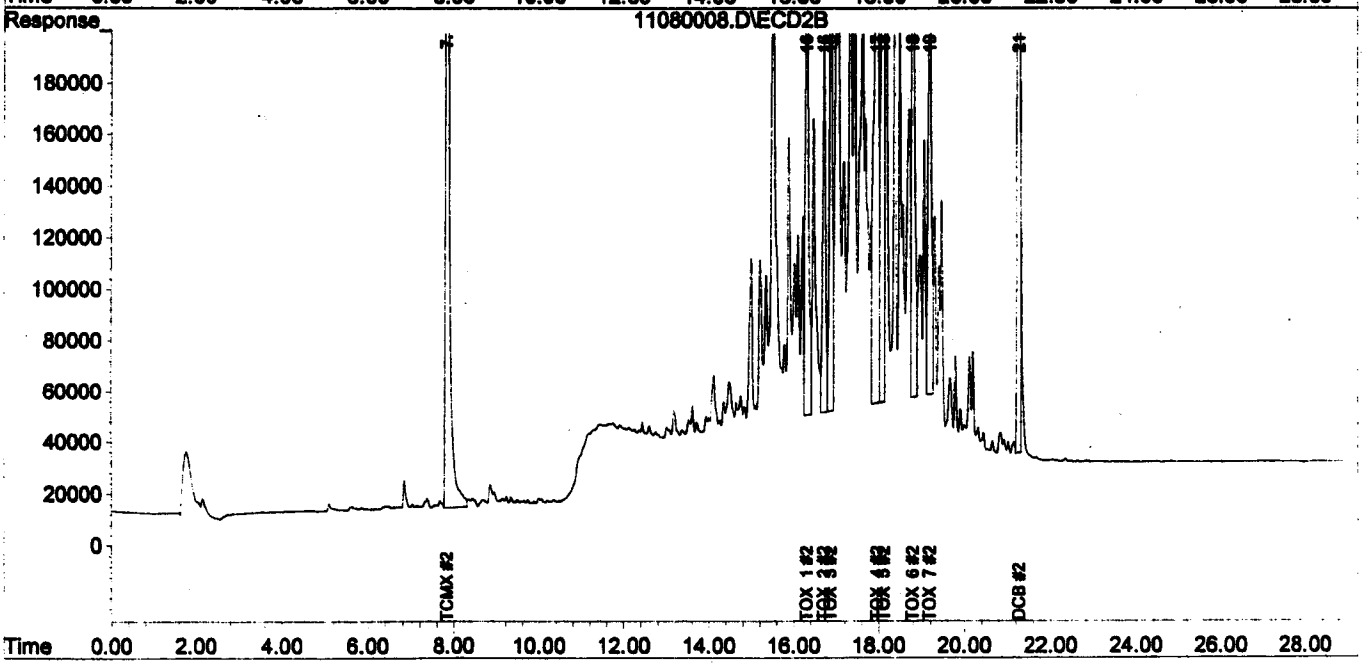
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\110800\11080008.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\110800\11080008.D\ECD2B.CH
Acq On : 8 Nov 2000 12:59 pm Operator: YGK
Sample : ICV TOX 2.5 PPM Inst : GC/ECD IN
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Nov 8 13:42 2000 Quant Results File: 110800TS.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TS.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A, ~~08/01/00~~ 11/08/00 YGK
Last Update : Wed Nov 08 13:24:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Sequence Setup Date: 11/08/00
Analyst Initials: YGK
Instrument Method: 8081D1
Calibration Column: Rtx - CLP1 (F)
Confirmation Column: Rtx - CLP2

DDT Breakdown % (<15%): NA
Endrin Breakdown % (<15%): NA

Pest Calibration Date: 10/18/00
PCB Calibration Date:
TOX 11/08/00

Surrogate Recovery Limits (%)		
	TCMX	DCB
Soil	50-116	43-152
Water	21-131	D-160

Vial Position	AAL #	Method Filename	Matrix	Dilution Factor	Surrogate Rec. TCMX	Surrogate Rec. DCB	Comments/Observations
1	PRIMER	110800TS	std	1X	NA	NA	
2	Hexane		solv				
3	IC TOX 050 ppm		std				P00178
4	1.50 ppm						P00177
5	2.5 ppm						P00176
6	3.5 ppm						P00175
7	5.0 ppm						P00174
8	ICV TOX 2.5 ppm				109	113	98% P00179
9	Hexane		solv		NA	NA	
10	BLNK T 11/07		W		65	123	
11	LCS T 11/07				YGK 11/08 ~~55~~ 60	100	
12	LCS T DUP 11/07				YGK 11/08 ~~33~~ 64	124	
13	02626 T				66	116	
14	02627 T				54	120	
15	02628 T				53	103	
16	02629 T				58	126	
17	02630 T				66	116	
18	02631 T				76	116	
19	02632 T				67	111	
20	02633 T				73	125	
21	02634 T				81	112	
22	Hexane		solv		NA	NA	
23	CCV TOX 2.5 ppm		std		114	107	109% P00176

Signature/Date: [signature] 11/08/00

↓ cont.

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: Toxaphene, std
Lab Standard ID# P00174 – P00178
Prepared By: YGK

Date Made: 11/07/00
Expire Date: 05/07/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.	
Toxaphene /SS interm	P00173	100/10 ppm	200 µL	5.0/0.50 ppm	00174
			140 µL	3.5/0.35 ppm	00175
			100 µL	2.5/0.25 ppm	00176
			60 µL	1.5/0.15 ppm	00177
			20 µL	0.50/0.050 ppm	00178
Hexane	Ex 00071	100%	to 4.0 ml each		
YGK 11/07/00					

Standard Name: Toxaphene, ICV
Lab Standard ID# P00179
Prepared By: YGK

Date Made: 11/08/00
Expire Date: 05/08/00
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc
Toxaphene stock	S99A198	1000 ppm	10 µL	2.5 ppm
Sur. Std stock	Ex 00060-4	200 ppm	5 µL	0.25 ppm
Hexane	Ex 00071	100%	to 4.0 ml	
YGK 11/08/00				

STPRLGFR.XLS

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: PEM
Lab Standard ID#: P00170
Prepared By: YGK

Date Made: 10/26/00
Expire Date: 04/26/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
PEM stock	S00A179	100 ppm	20 µL	0.5 ppm
Hexane	Ex 00071	100%	to 4.0 mL	

10/26/00
YGK

Standard Name: Pest. mix. Interm
Lab Standard ID#: P00171
Prepared By: YGK

Date Made: 10/01/00
Expire Date: 05/01/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used.	Final Conc.
Pest. mix. AB-1 stock	S00A048	200 ppm	200 µL	10 ppm
SS mix, stock	Ex 00060-4	200 ppm	200 µL	10 ppm
Hexane	Ex 00071	100%	to 4.0 mL	

11/01/00
YGK

STPRLGFR.XLS

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: PEM
Lab Standard ID#: P00119
Prepared By: YGK

Date Made: 08/15/00
Expire Date: 02/15/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
PEM, stock	S99A158	100 ppm	20 µL	0.5 ppm
Hexane	Ex 00035	100%	to 4.0 mL	

08/15/00
YGK

Standard Name: Pest. mix ICV
Lab Standard ID#: P00120
Prepared By: YGK

Date Made: 08/15/00
Expire Date: 02/15/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
Pest. mix Interm. (ICV)	P00017	10 ppm	100 µL	0.25 ppm
Hexane	Ex 00035	100%	to 4.0 mL	

08/15/00
YGK

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

Standard Name: PEM
Lab Standard ID#: P00182
Prepared By: YGK

Date Made: 11/13/00
Expire Date: 05/13/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
PEM stock	S00A179	200 ppm	20 µL	11/13 & 0.50 ppm
Hexane	Ex 0071	100%	to 4.0 mL	
YGK	11/13/00			

Standard Name: Pest. mix std
Lab Standard ID#: P00183 - P00188
Prepared By: YGK

Date Made: 11/27/00
Expire Date: 05/27/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.	
Pest. mix interm	P00171	10 ppm	200 µL	0.50 ppm	00183
			140 µL	0.35 ppm	00184
			100 µL	0.25 ppm	00185
			40 µL	0.10 ppm	00186
			20 µL	0.050 ppm	00187
Pest. mix. std	P00183	0.50 ppm	80 µL	0.010 ppm	00188
Hexane	Ex 00081	100%	to 4.0 mL each		
YGK	11/27/00				

ACCURA ANALYTICAL LABORATORY, INC.

Environmental Analytical Services

YGK 11/01

Standard Name: ~~PEM~~ Pest mix std
Lab Standard ID# P00172
Prepared By: YGK

Date Made: 11/01/00
Expire Date: 05/01/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
Pest. mix. interm.	P00171	10 ppm	100 µL	0.25 ppm
Hexane	Ex 00071	100%	To 4.0 mL	
YGK 11/01/00				

Standard Name: Toxaphene (interm)
Lab Standard ID# P00173
Prepared By: YGK

Date Made: 11/07/00
Expire Date: 05/07/01
Matrix: Hexane

Standard	Lot\Lab ID#	Conc.	Amount Used	Final Conc.
Toxaphene stock	S99A170	1000 ppm	400 µL	100 ppm
Hexane	Ex 00071	100%	to 4.0 mL	
Sur. Std Pest mix	S99A155	200 ppm	200 µL YGK 11/07	10 ppm
11/07/00				
YGK				

STPRLGFR.XLS

Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\122100\12210004.D\ECD2B.CH
Acq On : 21 Dec 2000 10:41 Operator: YGK
Sample : CCV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:35 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:28:12 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

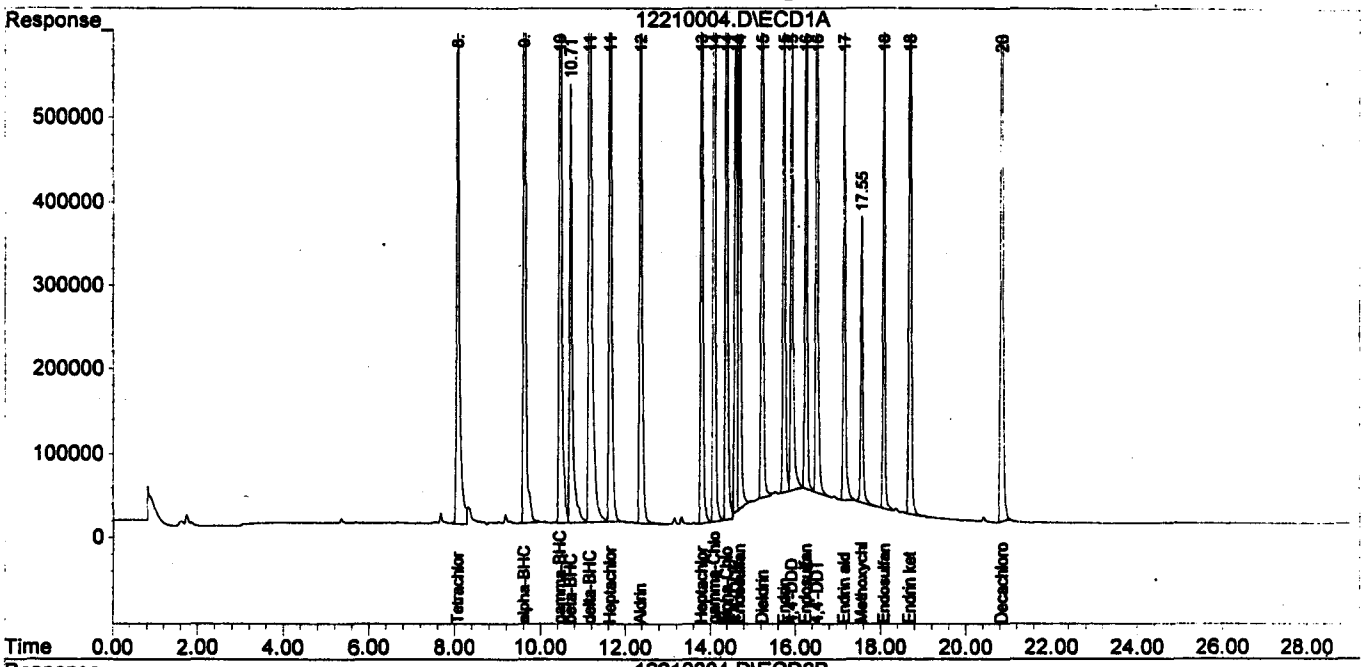
		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	8.06	7.75	29424483	33115957	0.266	0.279
		Spiked Amount 0.250			Recovery	=	106.40%	111.60%
22)	S	Decachlorobiphen	20.83	21.24	26340405	28395938	0.261	0.261
		Spiked Amount 0.250			Recovery	=	104.40%	104.40%
		Target Compounds						
2)	T	alpha-BHC	9.61	9.43	46035213	44863813	0.260	0.258
3)	T	beta-BHC	10.71	10.61	22001894	19471437	0.272	0.274
4)	T	gamma-BHC (Linda	10.44	10.35	42231167	38481601	0.269	0.286
5)	T	delta-BHC	11.15	11.33	44014885	29180662	0.274	0.263
6)	T	Heptachlor	11.63	11.40	31362666	41114264	0.269	0.285
7)	T	Aldrin	12.36	12.16	31212884	33374707	0.286	0.278
8)	T	Heptachlor epoxi	13.79	13.50	27955939	29257775	0.269	0.279
9)	T	Endosulfan I	14.68	14.37	29640136	29926405	0.260	0.272
10)	T	gamma-Chlordane	14.08	13.93	33555559	35979167	0.271	0.277
11)	T	alpha-Chlordane	14.38	14.25	30409299	32910232	0.287	0.279
12)	T	4,4'-DDE	14.59	14.67	25575708	31710923	0.265	0.275
13)	T	Dieldrin	15.22	14.97	27436000	30680600	0.261	0.267
14)	T	Endrin	15.73	15.63	19997575	20921295	0.251	0.266
15)	T	4,4'-DDD	15.91	15.93	22096698	23175253	0.248	0.263
16)	T	Endosulfan II	16.24	16.10	23215509	26438224	0.258	0.267
17)	T	Endrin aldehyde	17.14	16.83	19460616	21025946	0.256	0.265
18)	T	4,4'-DDT	16.50	16.59	23672985	25365732	0.249	0.275
19)	T	Endosulfan sulfa	18.08	17.42	21861287	24019573	0.257	0.266
20)	T	Methoxychlor	17.55	18.06	12070331	12086658	0.252	0.257
21)	T	Endrin ketone	18.69	18.56	26204989	25693519	0.259	0.251

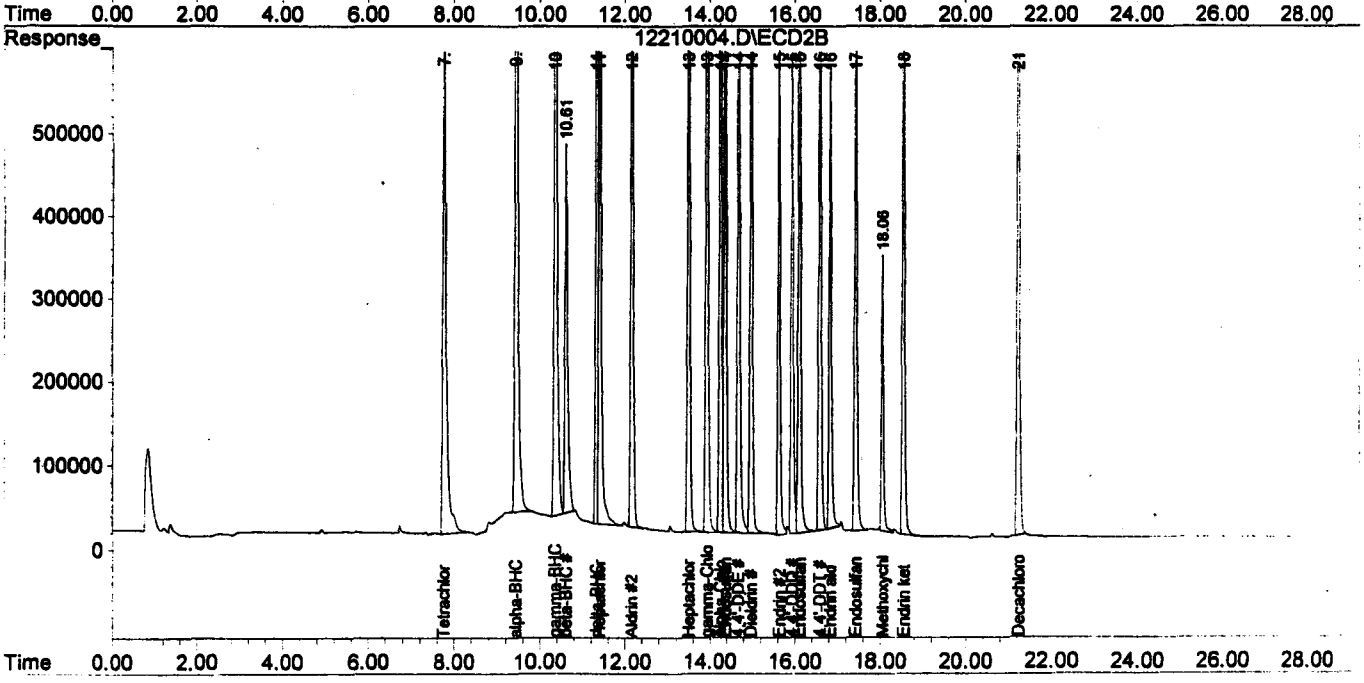
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210004.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\122100\12210004.D\ECD2B.CH
Acq On : 21 Dec 2000 10:41 Operator: YGK
Sample : CCV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 11:58 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:28:12 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210023.D\ECD1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\122100\12210023.D\ECD2B.CH
Acq On : 21 Dec 2000 22:32 Operator: YGK
Sample : CCV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:49 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

		Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	8.05	7.74	27779672	31212334	0.251	0.263
		Spiked Amount 0.250			Recovery	=	100.40%	105.20%
22)	S	Decachlorobiphen	20.82	21.22	24521468	26631692	0.243	0.245
		Spiked Amount 0.250			Recovery	=	97.20%	98.00%
		Target Compounds						
2)	T	alpha-BHC	9.59	9.42	44057903	45920085	0.249	0.265
3)	T	beta-BHC	10.69	10.60	20855042	19046300	0.258	0.268
4)	T	gamma-BHC (Linda	10.43	10.34	40559547	40014199	0.258	0.298
5)	T	delta-BHC	11.14	11.31	42114450	29098924	0.262	0.263
6)	T	Heptachlor	11.62	11.39	29589836	40920790	0.254	0.284
7)	T	Aldrin	12.34	12.14	30913563	33135317	0.284	0.276
8)	T	Heptachlor epoxi	13.77	13.48	26847245	28514829	0.258	0.271
9)	T	Endosulfan I	14.67	14.35	29733691	29322281	0.261	0.267
10)	T	gamma-Chlordane	14.07	13.91	32866390	34982051	0.265	0.270
11)	T	alpha-Chlordane	14.36	14.24	30298759	32012512	0.286	0.271
12)	T	4,4'-DDE	14.57	14.66	24992458	30651695	0.259	0.266
13)	T	Dieldrin	15.20	14.96	26033849	30106863	0.247	0.262
14)	T	Endrin	15.72	15.62	20168710	21040833	0.253	0.268
15)	T	4,4'-DDD	15.89	15.92	22229353	22885813	0.250	0.260
16)	T	Endosulfan II	16.22	16.09	22683198	26146009	0.252	0.264
17)	T	Endrin aldehyde	17.13	16.82	18556826	20112289	0.244	0.253
18)	T	4,4'-DDT	16.49	16.57	22426598	22655624	0.236	0.246
19)	T	Endosulfan sulfa	18.06	17.40	20828693	22853284	0.245	0.253
20)	T	Methoxychlor	17.53	18.05	11153082	11257392	0.233	0.239
21)	T	Endrin ketone	18.67	18.54	24963257	25782472	0.247	0.252

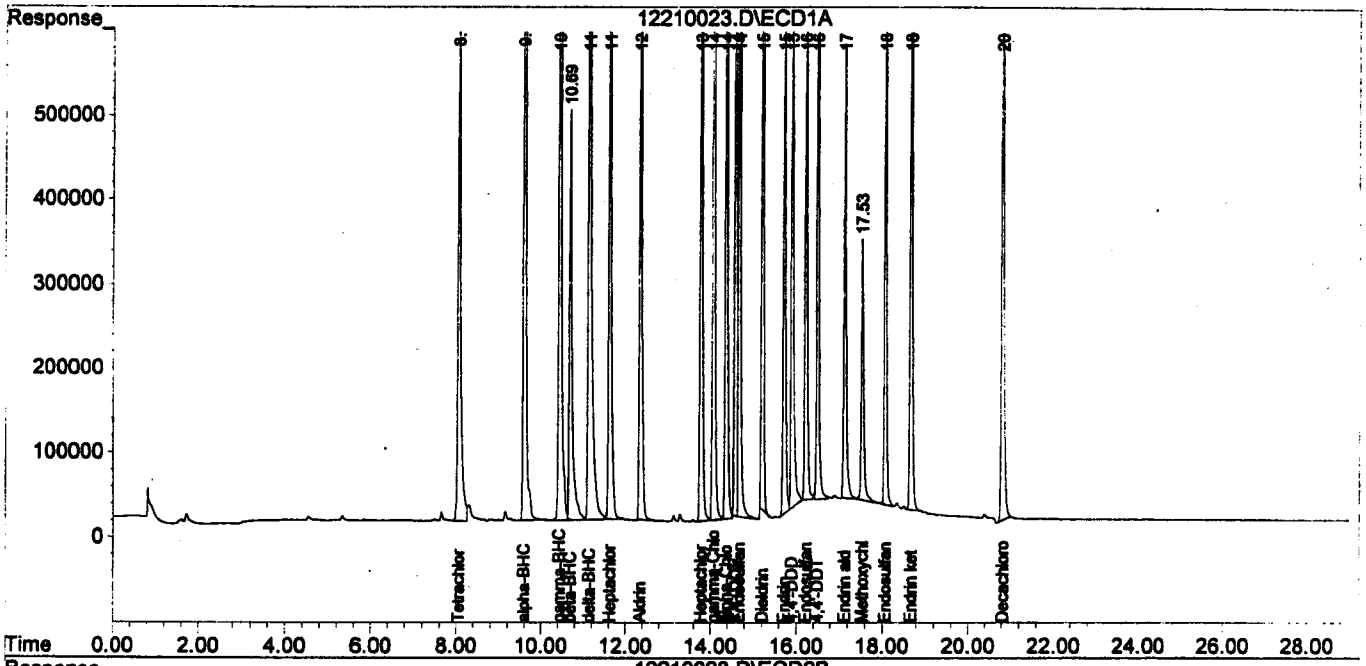
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

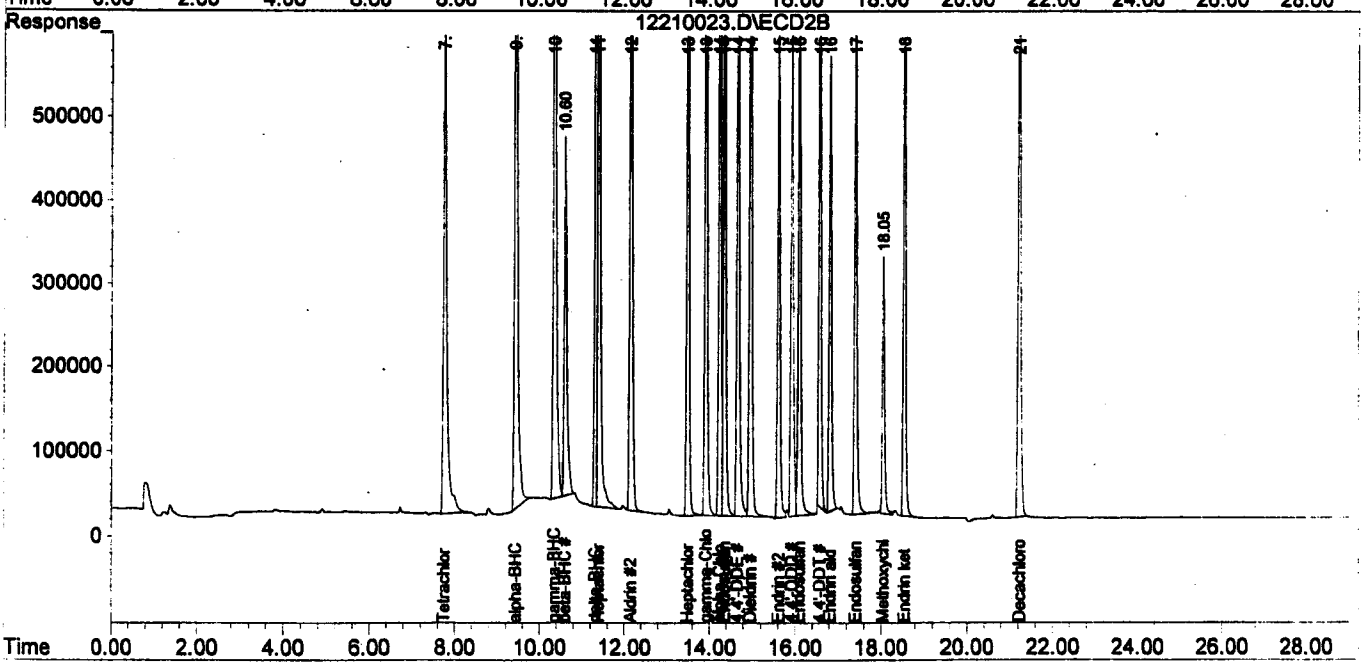
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210023.D\ECD1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\122100\12210023.D\ECD2B.CH
Acq On : 21 Dec 2000 22:32 Operator: YGK
Sample : CCV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 22 9:49 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210027.D\ECD1A.CH Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\122100\12210027.D\ECD2B.CH
Acq On : 22 Dec 2000 10:37 Operator: YGK
Sample : CCV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 12:04 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:28:12 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	8.05	7.74	28666883	30283757	0.259	0.255
	Spiked Amount 0.250			Recovery	=	103.60%	102.00%
22)	S Decachlorobiphen	20.82	21.22	27045601	28269006	0.268	0.260
	Spiked Amount 0.250			Recovery	=	107.20%	104.00%
	Target Compounds						
2)	T alpha-BHC	9.60	9.42	44275271	44924279	0.250	0.259
3)	T beta-BHC	10.70	10.61	21816370	19104768	0.270	0.269
4)	T gamma-BHC (Linda	10.43	10.34	42213511	38402524	0.269	0.286
5)	T delta-BHC	11.14	11.32	43926737	28221438	0.274	0.255
6)	T Heptachlor	11.62	11.39	30824924	40602697	0.264	0.282
7)	T Aldrin	12.35	12.15	30451506	32863376	0.279	0.274
8)	T Heptachlor epoxi	13.78	13.49	27980126	28213258	0.269	0.269
9)	T Endosulfan I	14.67	14.35	30680321	29411745	0.269	0.268
10)	T gamma-Chlordane	14.07	13.91	33969698	35111282	0.274	0.271
11)	T alpha-Chlordane	14.37	14.24	30122753	32226508	0.284	0.273
12)	T 4,4'-DDE	14.58	14.66	25750036	30910001	0.267	0.268
13)	T Dieldrin	15.21	14.96	28336745	30279689	0.269	0.263
14)	T Endrin	15.72	15.62	21158166	21078510	0.265	0.268
15)	T 4,4'-DDD	15.90	15.92	23475414	23102486	0.264	0.263
16)	T Endosulfan II	16.22	16.09	23844743	26180862	0.265	0.265
17)	T Endrin aldehyde	17.13	16.82	19780363	20927233	0.260	0.263
18)	T 4,4'-DDT	16.49	16.57	23823936	24265356	0.251	0.263
19)	T Endosulfan sulfa	18.07	17.41	21887169	23522301	0.258	0.261
20)	T Methoxychlor	17.54	18.05	12248973	11733881	0.256	0.249
21)	T Endrin ketone	18.68	18.54	26095163	25873816	0.258	0.253

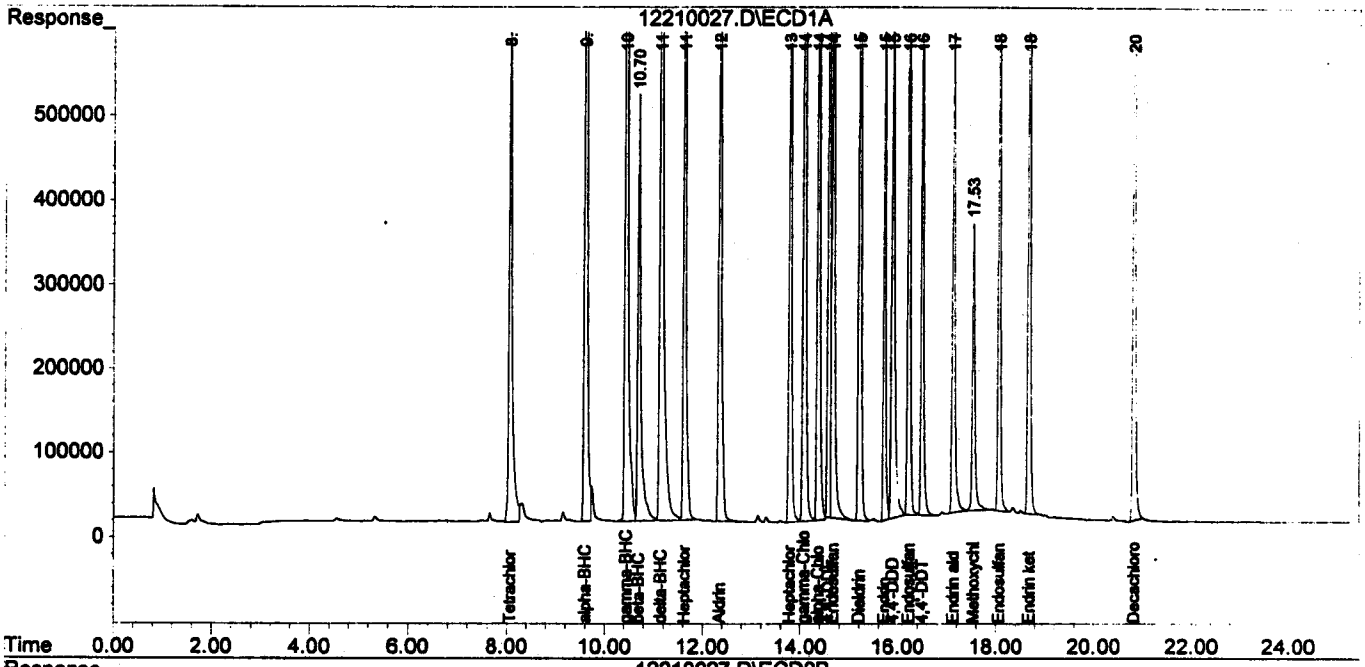
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
12210027.D 121200P.M Wed Dec 27 12:04:38 2000

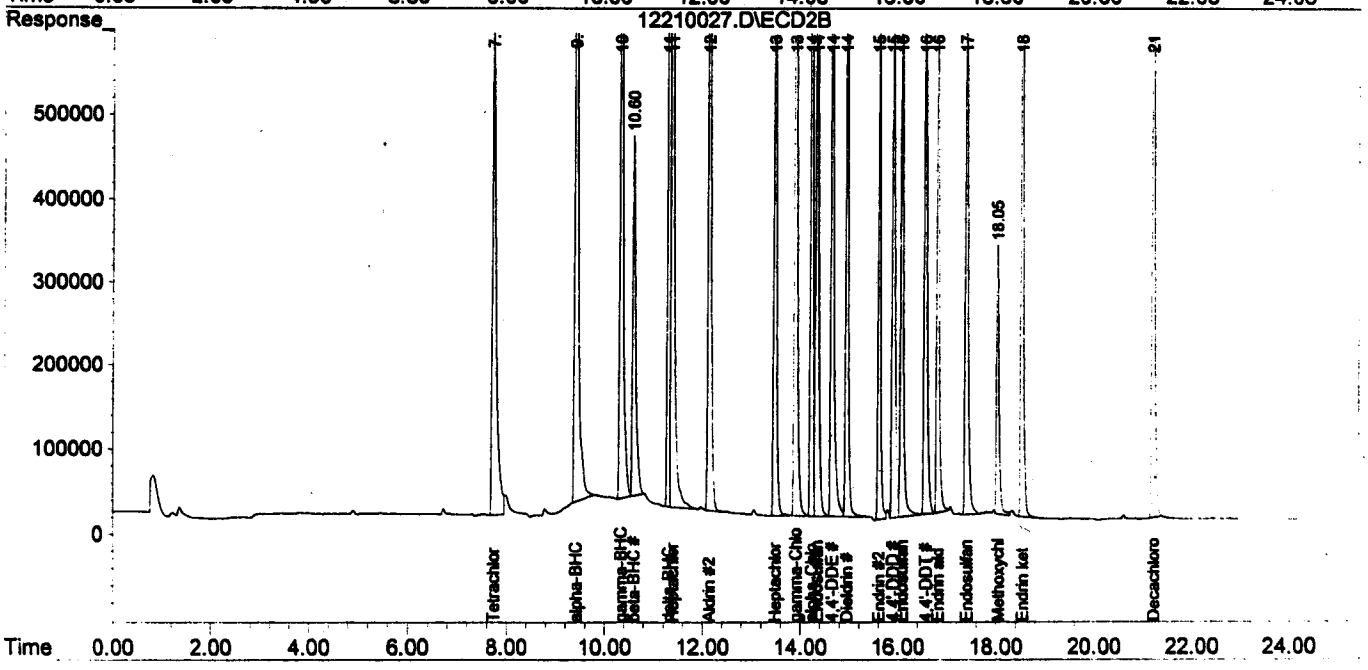
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210027.D\ECD1A.CH Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\122100\12210027.D\ECD2B.CH
Acq On : 22 Dec 2000 10:37 Operator: YGK
Sample : CCV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 12:02 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:28:12 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210035.D\ECD1A.CH Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\122100\12210035.D\ECD2B.CH
Acq On : 22 Dec 2000 14:59 Operator: YGK
Sample : CCV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 12:08 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:28:12 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
	System Monitoring Compounds						
1)	S Tetrachloro-m-xy	8.06	7.75	29526450	32543473	0.267	0.274
	Spiked Amount 0.250			Recovery =		106.80%	109.60%
22)	S Decachlorobiphen	20.83	21.23	26774193	28298886	0.265	0.260
	Spiked Amount 0.250			Recovery =		106.00%	104.00%
	Target Compounds						
2)	T alpha-BHC	9.60	9.43	46556227	45765719	0.263	0.264
3)	T beta-BHC	10.70	10.61	22066096	19414294	0.273	0.273
4)	T gamma-BHC (Linda	10.44	10.35	42328157	38683205	0.269	0.288
5)	T delta-BHC	11.15	11.32	44167719	28560017	0.275	0.258
6)	T Heptachlor	11.63	11.40	30900069	41193630	0.265	0.286
7)	T Aldrin	12.35	12.15	30720288	32958999	0.282	0.275
8)	T Heptachlor epoxi	13.79	13.49	28162949	28648505	0.271	0.273
9)	T Endosulfan I	14.68	14.36	31151419	29666024	0.274	0.270
10)	T gamma-Chlordane	14.08	13.92	33843680	35461905	0.273	0.273
11)	T alpha-Chlordane	14.37	14.25	30317106	32344192	0.286	0.274
12)	T 4,4'-DDE	14.59	14.67	25554200	31299790	0.265	0.272
13)	T Dieldrin	15.21	14.96	28410736	30489741	0.270	0.265
14)	T Endrin	15.73	15.63	20598991	20615559	0.258	0.262
15)	T 4,4'-DDD	15.90	15.92	23029968	23210794	0.259	0.264
16)	T Endosulfan II	16.23	16.10	23515074	26454387	0.261	0.268
17)	T Endrin aldehyde	17.14	16.82	19448174	20873053	0.255	0.263
18)	T 4,4'-DDT	16.50	16.58	23435237	23948193	0.247	0.260
19)	T Endosulfan sulfa	18.07	17.41	21739059	23423525	0.256	0.260
20)	T Methoxychlor	17.54	18.06	11755419	11605857	0.246	0.247
21)	T Endrin ketone	18.68	18.55	26191640	25936749	0.259	0.253

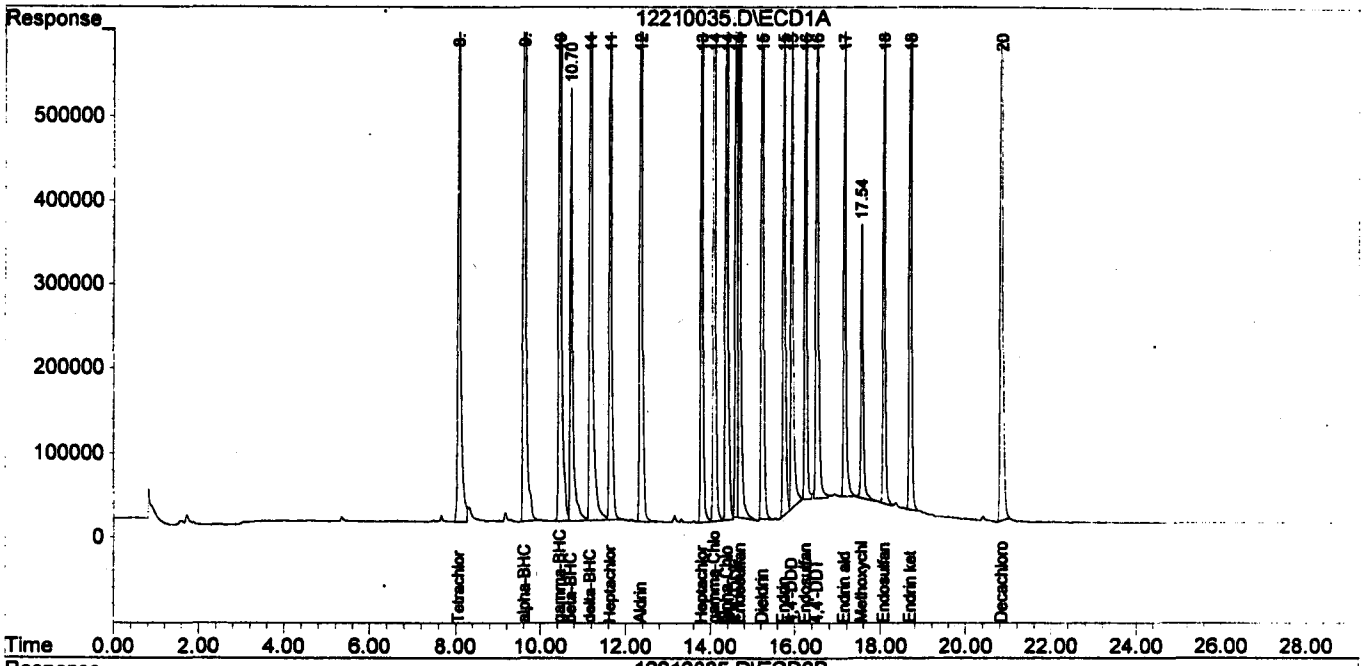
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
12210035.D 121200P.M Wed Dec 27 12:08:54 2000

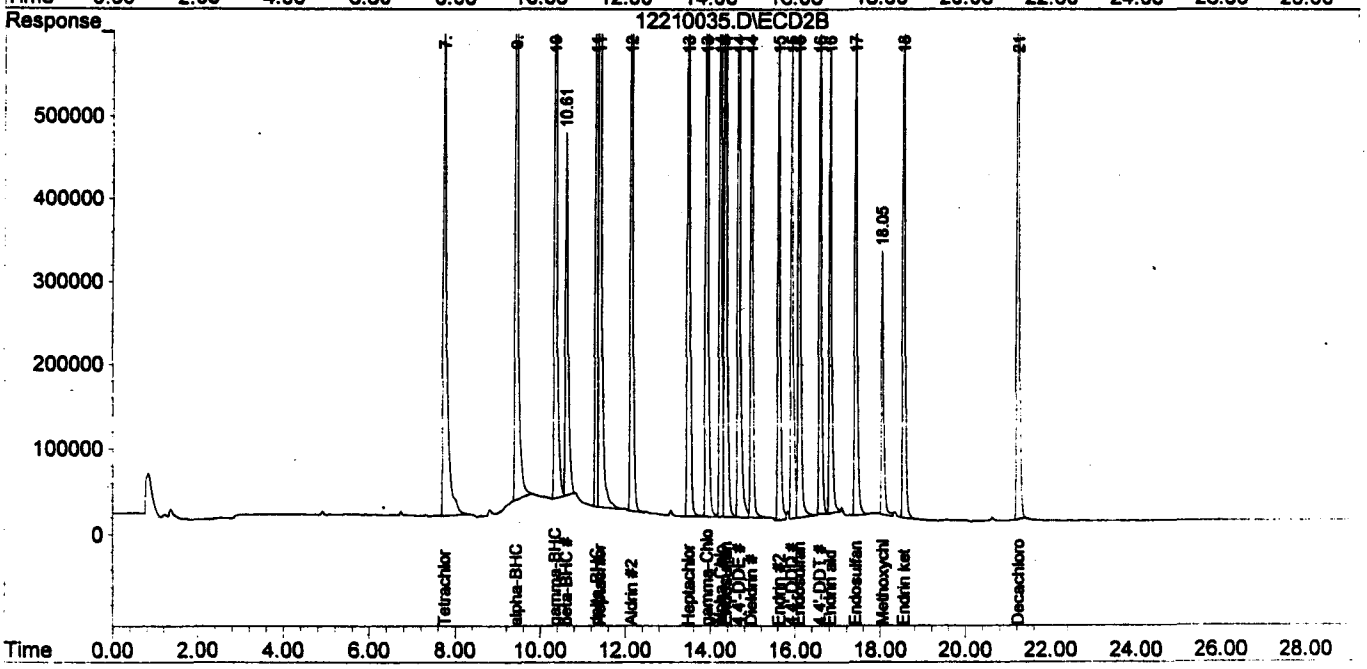
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210035.D\ECD1A.CH Vial: 35
Signal #2 : C:\HPCHEM\1\DATA\122100\12210035.D\ECD2B.CH
Acq On : 22 Dec 2000 14:59 Operator: YGK
Sample : CCV PEST .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: AUTOINT2.E IntFile Signal #2: events2.e
Quant Time: Dec 27 10:27 2000 Quant Results File: 121200P.RES

Quant Method : C:\HPCHEM\1\METHODS\121200P.M (Chemstation Integrator)
Title : Calibration for Pest By Method 8081 (12/12/00)
Last Update : Fri Dec 22 09:36:17 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\122100\12210005.D\ECD2B.CH
Acq On : 21 Dec 2000 11:29 Operator: YGK
Sample : CCV CHLORD .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 21 16:52 2000 Quant Results File: 080300CL.RES

Quant Method : C:\HPCHEM\1\METHODS\080300CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,08/03/00
Last Update : Tue Oct 17 11:02:22 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
Target Compounds								
1)	L1 CHLORD 1	11.45	11.07	1510508	1515244	0.296	0.302	
2)	L1 CHLORD 2	11.65	11.42	2557042	2561255	0.311	0.321	
3)	L1 CHLORD 3	12.72	12.57	2124671	1975220	0.329	0.329	
4)	L1 CHLORD 4	13.67	13.45	813069	972720	0.275	0.342	
5)	L1 CHLORD 5	14.10	13.94	4375293	4446587	0.281	0.304	
6)	L1 CHLORD 6	14.38	14.14	6590503	3620260	0.275	0.288	
7)	L1 CHLORD 7	15.83	14.27	557322	3804418	0.206	0.320	#
Sum	CHLORD 1			18528408	18895706	1.973	2.207	
Average	CHLORD 1					0.282	0.315	

113%

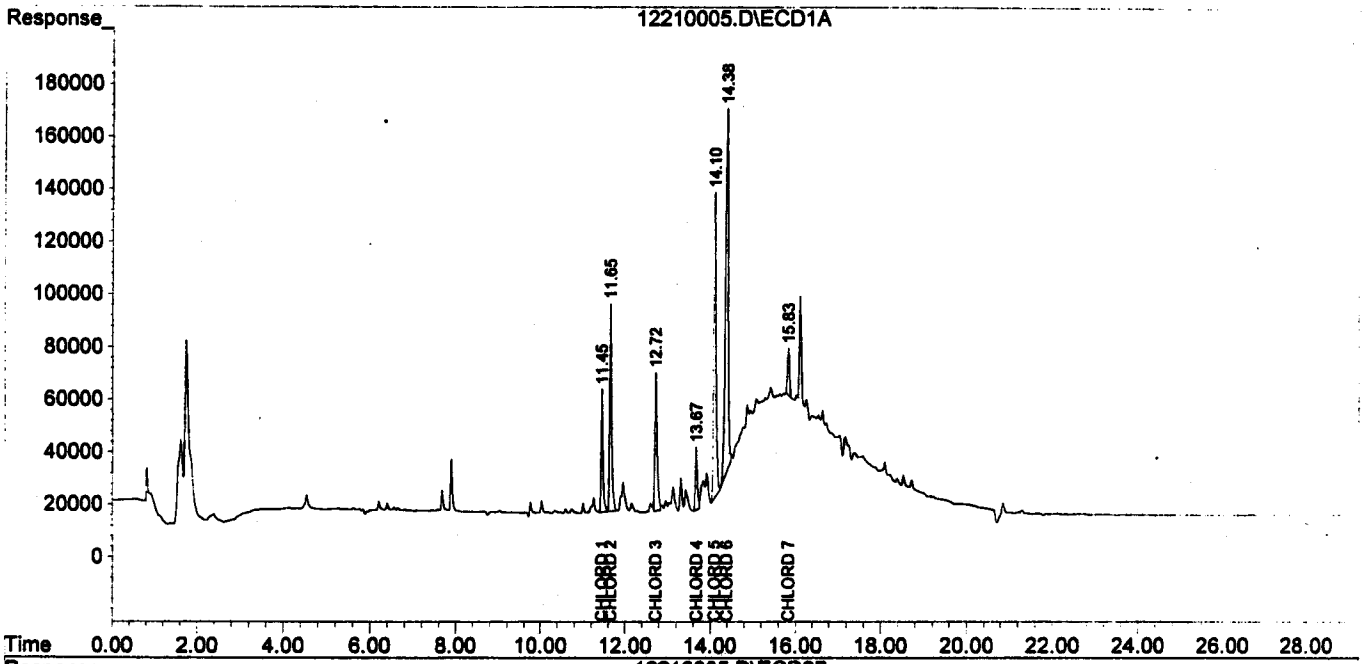
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

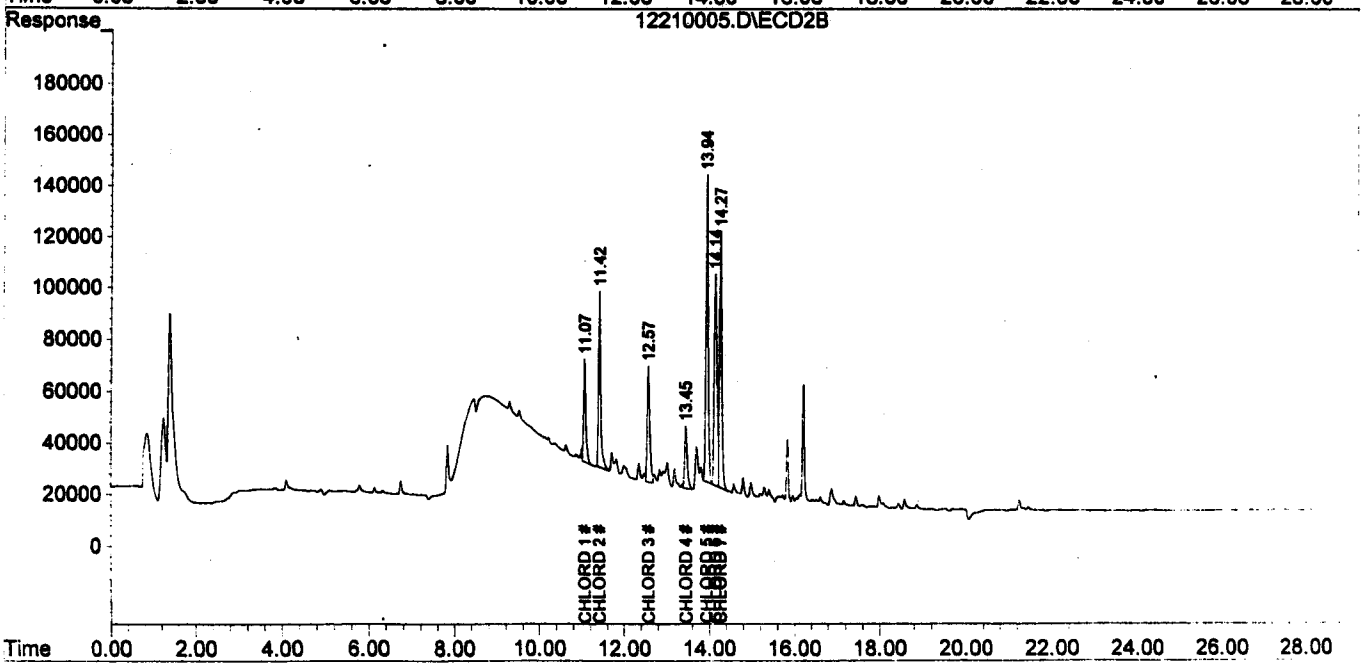
Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210005.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\122100\12210005.D\ECD2B.CH
Acq On : 21 Dec 2000 11:29 Operator: YGK
Sample : CCV CHLORD .25 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 21 16:52 2000 Quant Results File: 080300CL.RES

Quant Method : C:\HPCHEM\1\METHODS\080300CL.M (Chemstation Integrator)
Title : CHLORDANE ANALYSIS BY ECD; GC A,08/03/00
Last Update : Tue Oct 17 11:02:22 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\122100\12210006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\122100\12210006.D\ECD2B.CH
Acq On : 21 Dec 2000 12:03 Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 21 16:53 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Initial Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

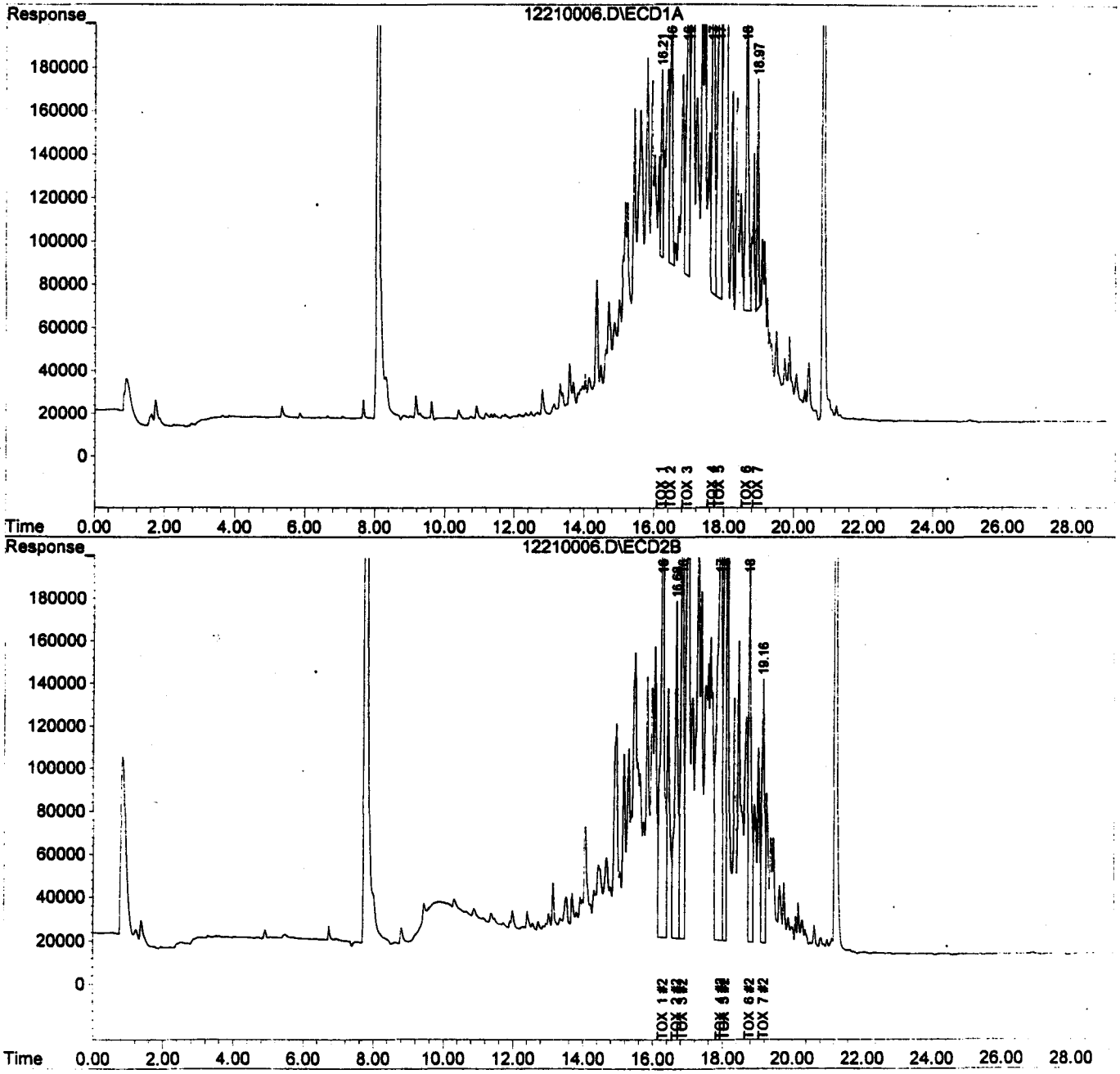
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/ml	ug/ml	
	Target Compounds							
1)	L TOX 1	16.21	16.28	3463128	16703201	2.440	3.080	#
2)	L TOX 2	16.48	16.68	6540059	10325101	2.476	2.786	
3)	L TOX 3	16.95	16.85	9205097	13020876	2.601	2.713	
4)	L TOX 4	17.67	17.93	9469952	21936197	2.660	3.627	#
5)	L TOX 5	17.86	18.06	12327103	12744378	2.796	2.628	
6)	L TOX 6	18.64	18.77	8129284	9556006	2.530	2.698	
7)	L TOX 7	18.97	19.16	3286207	6729029	1.932	2.602	#
	Sum TOX 1			52420831	91014788	17.434	20.134	
Average	TOX 1					2.491	2.876	

low C

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

Quantitation Report

Signal #1 : C:\HPCHEM\1\DATA\122100\12210006.D\ECD1A.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\122100\12210006.D\ECD2B.CH
Acq On : 21 Dec 2000 12:03 Operator: YGK
Sample : CCV TOX 2.5 PPM Inst : PEST-A
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E
Quant Time: Dec 21 16:53 2000 Quant Results File: 110800TX.RES

Quant Method : C:\HPCHEM\1\METHODS\110800TX.M (Chemstation Integrator)
Title : TOXAPHENE ANALYSIS BY ECD; GC A,11/08/00
Last Update : Wed Nov 08 13:24:49 2000
Response via : Multiple Level Calibration
DataAcq Meth : 8081D1A.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :