N60201.AR.000610
NS MAYPORT
5090.3a

ANNUAL MONITORING REPORT GROUNDWATER MONITORING AT SOLID WASTE MANAGEMENT UNIT 15 FROM 1 APRIL 2001 THROUGH 31 MARCH 2002 NS MAYPORT FL

7/1/2002

CH2M HILL

Annual Monitoring Report

Revision No. 00

Contract No. N62467-98-D-0995

Contract Task Order No. 0007

Groundwater Monitoring at Solid Waste Management Unit 15

April 1, 2001 – March 31, 2002

Naval Station Mayport
Mayport, Florida

Submitted to:

U.S. Naval Facilities Engineering Command Southern Division

Prepared by:

CH2MHILL Constructors, Inc.

115 Perimeter Center Place, N.E.
Suite 700
Atlanta, GA 30346

July 2002

Contents

Acronyms ..... **iii**
1.0 Introduction **1-1**
1.1 Objective 1-1
1.2 Site Background 1-1
2.0 Monitoring Results and Recommendations **2-3**
2.1 Groundwater Monitoring 2-3
2.2 Conclusions 2-3
3.0 References **3-1**

Figure

2-1 Site Location Map 2-2

Tables

2-1 Groundwater Analytical Results 2-3
2-2 Groundwater Field Parameters 2-4

Appendix

A Groundwater Analytical Laboratory Reports

Acronyms

BHC	beta-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
RFI	Remedial Field Investigation
SWMU	Solid Waste Management Unit
µg/L	micrograms per liter
USEPA	United States 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 (Southern Division, NAVFAC), to provide groundwater monitoring services at Solid Waste Management Unit (SWMU) 15, Naval Station Mayport, Mayport, Florida, under the Remedial Action Contract No. N62467-98-D-0995, Contract Task Order (CTO) No. 0007. The purpose of this Annual Monitoring Report is to summarize activities performed at the site during the period of April 1, 2001, to March 31, 2002.

1.1 Objective

The objective of the groundwater monitoring program at SWMU 15 is to collect analytical data to monitor the natural attenuation of 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 (CCI, 1999).

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 (CCI, 1999).

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 yield sufficient data to conduct a bench-scale treatability test prior to selecting an appropriate remedial alternative for the arsenic contamination (CCI, 1999).

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. A review of the quarterly data by Southern Division, NAVFAC, the Florida Department of Environmental Protection (FDEP), and the United States Environmental Protection Agency (EPA) determined that the data was inconclusive, and that further groundwater sampling would be required. Subsequently, CCI/J.A. Jones has performed quarterly groundwater monitoring beginning the first quarter of 2000 and continuing through the present (CCI, 1999).

2.0 Monitoring Results and Recommendations

2.1 Groundwater Monitoring

During April 1, 2001 to March 31, 2002, CCI/J.A. Jones conducted quarterly groundwater monitoring activities at SWMU 15 on July 5, 2001, September 26, 2001, December 6, 2001, and March 6, 2002, in accordance with the requirements of Response Action Contract No. N62467-98-D-0995, CTO No. 0007. 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. The groundwater samples were laboratory analyzed for arsenic by EPA SW-846 Method 6010B and for organochlorine pesticides by EPA SW-846 Method 8081A. The monitoring well locations are shown on the SWMU 15 site plan provided as Figure 2-1. The groundwater laboratory analytical results are summarized in Table 2-1. Copies of the groundwater analytical laboratory reports are provided in Appendix A.

In addition, the following field data were measured in the five onsite monitoring wells:

- Depth to water by direct read meter
- 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

The collected field data is summarized in Table 2-2.

2.2 Conclusions

During the monitoring period, the following two monitoring wells exhibited contaminant concentrations in excess of FDEP Groundwater Cleanup Target Levels, as specified in Table I of Florida Administrative Code 62-777:

- Monitoring Well MPT-15-MWO-1S: Beta-BHC (December 6, 2001, groundwater monitoring event).
- Monitoring Well MPT-15-MWO-4S: Beta-BHC (December 6, 2001, groundwater monitoring event) and arsenic (September 26, 2001, December 6, 2001, and March 6, 2002, groundwater monitoring events).

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.

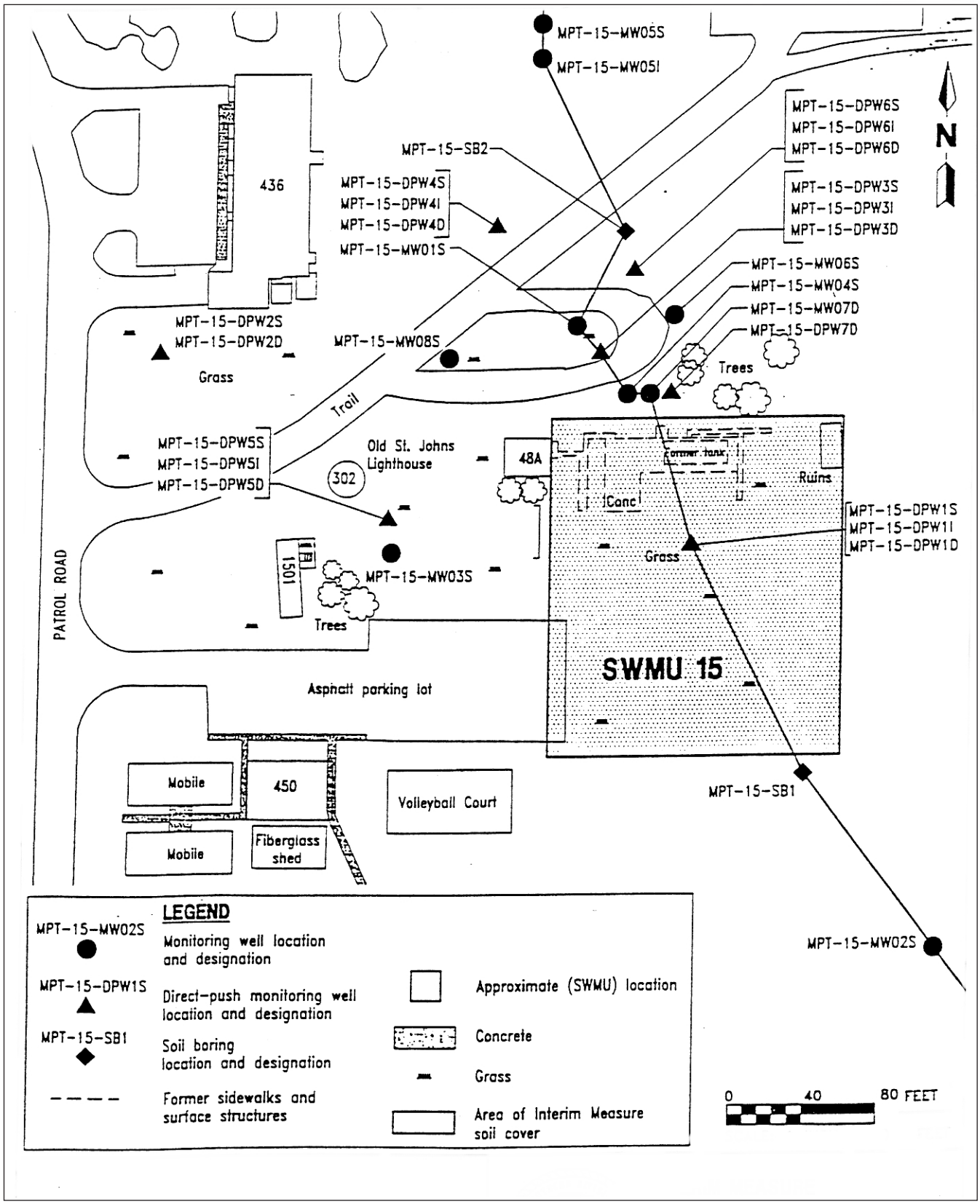


Figure 2-1
Solid Waste Management Unit (SWMU) 15
Location Map for Monitoring Wells
and Direct-Push Wells

CH2MHILL

A101999001ATL\Fig 2.FH8

TABLE 2-1
Groundwater Analytical Results

Compound	GCTL	NADS	MPT-15-MWO-1S								
	(µg/L)	(µg/L)	03/28/00	06/21/00	09/26/00	12/15/00	03/22/01	07/05/01	09/26/01	12/06/01	03/06/02
4,4'-DDD	0.1	10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.053	<0.06
4,4'-DDE	0.1	10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.053	<0.06
4,4'-DDT	0.1	10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.053	<0.06
Aldrin	0.005	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.053	<0.06
alpha-BHC	0.006	0.6	**0.020 J**	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.053	<0.06
alpha-Endosulfan	42	420	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.053	<0.06
beta-BHC	0.02	2	**0.55**	**0.80**	**0.23**	**0.31**	**0.19**	<0.02	<0.05	**0.110**	<0.06
beta-Endosulfan	42	420	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.053	<0.06
delta-BHC	2.1	21	**0.020 J**	**0.035 J**	<0.050	<0.05	<0.05	<0.02	<0.05	<0.053	<0.06
Dieldrin	0.005	0.5	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.053	<0.06
Endosulfan sulfate	42	420	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.053	<0.06
Endrin	2	20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.053	<0.06
Endrin aldehyde	2	20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.053	<0.06
gamma-BHC	0.2	20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.053	<0.06
Heptachlor	0.4	40	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.053	<0.06
Heptachlor epoxide	0.2	20	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.053	<0.06
Methoxychlor	40	400	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.053	<0.06
Toxaphene	3	300	<5	<5	<5	<5	<5	NA	<1	<1.05	<1.1
Endrin Ketone	2	20	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.053	<0.06
alpha- Chlordane	2	200	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.053	<0.06
gamma-Chlordane	2	200	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.053	<0.06
Arsenic	50	500	**33**	**27 B**	**8.9**	<5	**8.7**	**9.9**	**8.3**	**12.8**	<4.1

Compound	MPT-15-MWO-3S								
	03/29/00	06/21/00	09/26/2000	12/15/00	03/22/01	07/05/01	09/26/01	12/06/01	03/06/02
4,4'-DDD	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.071	<0.053	<0.06
4,4'-DDE	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.071	<0.053	<0.06
4,4'-DDT	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.071	<0.053	<0.06
Aldrin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.071	<0.053	<0.06
alpha-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.071	<0.053	<0.06
alpha-Endosulfan	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.071	<0.053	<0.06
beta-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.071	<0.053	<0.06
beta-Endosulfan	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.071	<0.053	<0.06
delta-BHC	<0.05	<0.05	<0.050	<0.05	<0.05	<0.02	<0.071	<0.053	<0.06
Dieldrin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.071	<0.053	<0.06
Endosulfan sulfate	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.071	<0.053	<0.06
Endrin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.071	<0.053	<0.06
Endrin aldehyde	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.071	<0.053	<0.06
gamma-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.071	<0.053	<0.06
Heptachlor	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	**0.033**	<0.053	<0.06
Heptachlor epoxide	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.071	<0.053	<0.06
Methoxychlor	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.071	<0.053	<0.06
Toxaphene	<5	<5	<5	<5	<5	NA	<1.43	<1.05	<1.1
Endrin Ketone	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.071	<0.053	<0.06
alpha- Chlordane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.071	<0.053	<0.06
gamma-Chlordane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.071	<0.053	<0.06
Arsenic	<10	<5	<5	<5	<5	**0.475 B**	<4.1	<4.1	<4.1

Compound	MPT-15-MWO-4S								
	03/29/00	06/21/00	09/26/00	12/15/00	03/22/01	07/05/01	09/26/01	12/06/01	03/06/02
4,4'-DDD	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.056	<0.06
4,4'-DDE	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.056	<0.06
4,4'-DDT	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.056	<0.06
Aldrin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.056	<0.06
alpha-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.056	<0.06
alpha-Endosulfan	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.056	<0.06
beta-BHC	**0.30**	**0.26**	**1.30**	**0.56**	**0.085**	<0.02	<0.05	**0.700**	<0.06
beta-Endosulfan	<0.05	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.056	<0.06
delta-BHC	**0.025 J**	**0.025 J**	<0.050	<0.05	<0.05	<0.02	<0.05	<0.056	<0.06
Dieldrin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.056	<0.06
Endosulfan sulfate	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.056	<0.06
Endrin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.056	<0.06
Endrin aldehyde	<0.50	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.056	<0.06
gamma-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.056	<0.06
Heptachlor	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.056	<0.06
Heptachlor epoxide	<0.05	<0.05	**0.16**	**0.035 J**	<0.05	<0.02	<0.05	<0.056	<0.06
Methoxychlor	<0.10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.056	<0.06
Toxaphene	<0.10	<5	<5	<5	<5	NA	<1	<1.11	<1.1
Endrin Ketone	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.05	<0.056	<0.06
alpha- Chlordane	**0.075**	**0.030 J**	**0.24**	**0.15**	**0.045 J**	<0.02	<0.05	<0.056	<0.06
gamma-Chlordane	**0.030 J**	<0.05	**0.13**	**0.04 J**	**0.020 J**	<0.02	<0.05	<0.056	<0.06
Arsenic	**20**	**12 B**	**300**	**37**	**34**	**22.3**	**68.2**	**69.4**	**357**

Compound	MPT-15-MWO-5S								
	03/29/00	06/21/00	09/26/00	12/15/00	03/22/01	07/05/01	09/26/01	12/06/01	03/06/02
4,4'-DDD	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.053	<0.059	<0.06
4,4'-DDE	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.053	<0.059	<0.06
4,4'-DDT	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.053	<0.059	<0.06
Aldrin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
alpha-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
alpha-Endosulfan	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
beta-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
beta-Endosulfan	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.053	<0.059	<0.06
delta-BHC	<0.050	<0.050	<0.050	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
Dieldrin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.053	<0.059	<0.06
Endosulfan sulfate	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.053	<0.059	<0.06
Endrin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.053	<0.059	<0.06
Endrin aldehyde	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.053	<0.059	<0.06
gamma-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
Heptachlor	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
Heptachlor epoxide	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
Methoxychlor	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.053	<0.059	<0.06
Toxaphene	<5	<5	<5	<5	<5	NA	<1.05	<1.18	<1.1
Endrin Ketone	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.053	<0.059	<0.06
alpha- Chlordane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
gamma-Chlordane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.053	<0.059	<0.06
Arsenic	<10	<5	<5	<5	<5	**0.607 B**	<4.1	<4.1	<4.1

Compound	MPT-15-MWO-8S								
	03/29/00	06/21/00	09/26/00	12/15/00	03/22/01	07/05/01	09/26/01	12/06/01	03/06/02
4,4'-DDD	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.051	<0.056	<0.06
4,4'-DDE	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.051	<0.056	<0.06
4,4'-DDT	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.051	<0.056	<0.06
Aldrin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.051	<0.056	<0.06
alpha-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.051	<0.056	<0.06
alpha-Endosulfan	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.051	<0.056	<0.06
beta-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.051	<0.056	<0.06
beta-Endosulfan	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.051	<0.056	<0.06
delta-BHC	<0.050	<0.050	<0.050	<0.05	<0.05	<0.02	<0.051	<0.056	<0.06
Dieldrin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.051	<0.056	<0.06
Endosulfan sulfate	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.051	<0.056	<0.06
Endrin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.051	<0.056	<0.06
Endrin aldehyde	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.051	<0.056	<0.06
gamma-BHC	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.051	<0.056	<0.06
Heptachlor	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	**0.029**	<0.056	<0.06
Heptachlor epoxide	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.051	<0.056	<0.06
Methoxychlor	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.051	<0.056	<0.06
Toxaphene	<5	<5	<5	<5	<5	NA	<0.051	<1.11	<1.1
Endrin Ketone	<0.10	<0.10	<0.10	<0.10	<0.10	<0.02	<0.051	<0.056	<0.06
alpha- Chlordane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.051	<0.056	<0.06
gamma-Chlordane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.051	<0.056	<0.06
Arsenic	<10	**6.5 B**	<5	<5	<5	**0.673 B**	<4.1	<4.1	<4.1

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.
8) NA indicates compound not analyzed for.
9) Duplicate for 09/26/01 sampling event was MPT-15-MWO-8S. MPT-15-MWO-4S was duplicate for prior sampling events.

TABLE 2-2
Monitoring Well Field Measurements

Well Identification	Date	Depth to Water	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (^oC)
MPT-15-MWO-1S	03/28/00	7.17	6.7	1.94	84	0.45	20.9
	06/21/00	7.80	7.36	1.56	0	0.74	23.4
	09/26/00	4.29	6.94	0.787	0	1.84	25.5
	12/15/00	6.74	6.99	1.62	2	1.00	21.4
	03/22/01	7.11	7.1	1.4	10	2.40	19.0
	07/05/01	7.15	6.93	1.23	0	0.01	23.6
	09/26/01	4.33	4.8	0.459	0	2.27	25.2
	12/06/01	5.93	8.48	0.589	0	3.51	22.5
	03/06/02	5.72	6	0.331	0	4.37	18.6
MPT-15-MWO-3S	03/28/00	6.12	7.15	0.519	79	2.19	21.9
	06/21/00	6.72	7.87	0.436	10	1.60	25.7
	09/26/00	3.30	7.23	0.301	0	3.19	26.9
	12/15/00	5.65	7.35	0.392	1	2.70	22.0
	03/22/01	5.90	7.4	0.37	8	2.60	20.0
	07/05/01	6.03	7.2	0.334	0	0.00	25.4
	09/26/01	3.24	6.32	0.275	0	4.12	26.4
	12/06/01	4.90	9.84	0.326	0	3.64	23.5
	03/06/02	4.53	6	0.313	0	3.90	19.6
MPT-15-MWO-4S	03/28/00	6.83	6.7	10.1	98	0.20	21.1
	06/21/00	7.46	8.16	6.49	0	0.51	21.3
	09/26/00	3.40	6.96	1.55	6	1.17	24.2
	12/15/00	6.30	7	4.64	0	0.18	20.4
	03/22/01	6.87	7	7.8	NM	0.80	18.0
	07/05/01	6.79	6.83	7.15	0	0.11	21.9
	09/26/01	3.39	7.84	0.958	0	0.49	23.6
	12/06/01	5.41	10.63	3.7	0	1.18	21.5
	03/06/02	5.37	7	7.39	0	0.01	19.2
MPT-15-MWO-5S	03/28/00	8.52	6.85	0.541	49	1.14	22.4
	06/21/00	9.05	7.83	0.445	2	1.05	25.0
	09/26/00	6.04	6.6	0.367	0	2.45	27.4
	12/15/00	8.20	7.08	0.315	0	0.80	23.4
	03/22/01	8.54	7.2	0.36	NM	1.90	21.0
	07/05/01	8.60	6.84	0.37	0	0.00	25.6
	09/26/01	5.96	6.72	0.312	0	2.56	26.5
	12/06/01	5.64	8.33	0.318	0	4.40	22.4
	03/06/02	7.52	7	0.282	0	1.53	20.7
MPT-15-MWO-8S	03/28/00	6.89	7.16	0.7	63	2.96	20.6
	06/21/00	7.60	7.78	0.5	3	5.42	24.1
	09/26/00	4.01	7.22	0.3	0	4.53	25.8
	12/15/00	6.44	7.31	0.4	0	3.50	20.3
	03/22/01	6.75	7.50	0.3	NM	6.10	19.0
	07/05/01	6.82	7.11	0.4	0	0.19	25.3
	09/26/01	4.04	5.75	0.3	0	4.03	25.4
	12/06/01	7.48	9.00	0.3	0	2.35	24.4
	03/06/02	5.36	6.00	0.3	0	5.01	18.2

Depth to Water is measured as feet below top of well casing.
mS/cm = millisiemans per centimeter.
NTU = nephelmetric turbidity units.
mg/L = milligrams per liter
^oC = degrees celcius.
NM = Not Measured

3.0 References

CH2M HILL Constructors, Inc. October 1999. 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

(on CD only)

ACCREDITED IN ACCORDANCE WITH nelac

Columbia Analytical Services INC.
An Employee-Owned Company

August 01, 2001

Service Request No. J2102024

Jeff Wilmoth
CH2M Hill Constructors, Inc.
115 Perimeter Center Place N.E.
Atlanta, GA 30346

RE: Project No.: 149294
Project Name: N.S. Mayport SWMU 15

Dear Jeff Wilmoth:

Enclosed are the results of the samples(s) submitted to our laboratory on July 05, 2001. For your reference, these analyses have been assigned our service request number: J2102024.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in the entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed.

Please call if you have any questions.

Respectfully submitted,

Columbia Analytical Services, Inc.

Paul Gunsaulies
Project Manager

CAS Jacksonville is NELAC-accredited by the State of Florida (E82502). Other state accreditations include: LA, AI 30759; MA, M-FL937; NH, 2942; NC, 527; SC, 96021; WA, C278.

NAVY RAC PMO
- 3 2001

8540 Baycenter Rd. ▪ Jacksonville, FL 32256 ▪ (904) 739-2277 ▪ 800-695-7222 ▪ Fax (904) 739-2011

TABLE OF CONTENTS

CAS Lab Reference Nos.: J2102024
Non-CLP Tier IV (Tier IV w/Raw Data)

	Page No.
Cover Page	i
Table of Contents	ii
Organic Data Qualifiers	iii
Organic Sample ID Qualifiers	iv
Inorganic Qualifiers	v
Sample Identification Cross-Reference	vi
GC Pesticides	001
Case Narrative	002
Sample Results	003
QC Summary	093
Standards Data	106
Cations	168
Case Narrative	169
Sample Results	171
Standards Logs	197
Prep Logs	201
Raw Data	203
Chain of Custody Documentation	269

Organic Sample ID Qualifiers

DL -- Diluted reanalysis. Indicates that the results were determined in an analysis of a secondary dilution of a sample or extract. The "DL" suffix may be followed by a digit to indicate multiple dilutions of the sample or extract. The results of more than one diluted reanalyses may be reported.

MS -- Matrix spike (may be followed by a digit to indicate multiple matrix spikes within a sample set).

MSD - Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spikes within a sample set).

R -- Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. May be followed by a digit to indicate multiple reanalyses of the sample at the same dilution.

RE -- Re-extraction analysis. The sample was re-extracted and reanalyzed. May be followed by a digit to indicate multiple re-extracted analyses of the sample at the same dilution.

Inorganic Qualifiers

C (Concentration) Qualifier -- Enter "B" if the reported value obtained was less than the CRDL but greater than or equal to the IDL. Enter "U" if the value was less than the IDL or was not detected.

Q Qualifier -- Entries and their meanings are:

E -- The reported value is estimated because of interference. An explanatory comment must be included in the case narrative if the problem applies to all samples in this data package or on the individual FORM I if it is an isolated problem.

M -- Duplicate injection precision was not met (two analyses of the same sample did not agree).

N -- Spiked sample recovery not within control limits.

S -- The reported value was determined by the Method of Standard Additions (MSA).

W -- Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

* -- Duplicate analysis not within control limits

+ -- Correlation coefficient for the MSA is less than 0.995.

Entering "S", "W", or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field.

M (Method) Qualifier – Enter one of the following:

P -- ICP
A -- Flame AA
F -- Furnace AA
CV -- Manual Cold Vapor AA
AV -- Automated Cold Vapor AA
AS -- Semi-Automated Spectrophotometric
CA -- Manual Spectrophotometric
T -- Titrimetric
NR -- Analyte was not required by your lab

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

CROSS REFERENCE

Lab Sample ID	Client Sample ID	Date/Time Collected	Matrix
J2102024-001	007-MW01S-Q2-01	7/05/01 1227	Ground Water
J2102024-002*	007-MW03S-Q2-01	7/05/01 1145	Ground Water
J2102024-003	007-MW04S-Q2-01	7/05/01 1205	Ground Water
J2102024-004	007-MW05S-Q2-01	7/05/01 1245	Ground Water
J2102024-005	007-MW08S-Q2-01	7/05/01 1055	Ground Water
J2102024-006	007-DUP-Q2-01	7/05/01 NA	Ground Water
J2102024-007	007-EQB-Q2-01	7/05/01 1100	Water QC

*J2102024-002 has client specified MS/MSD.

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

GC Organochlorine Pesticides

CASE NARRATIVE
GC Pesticides

CAS Lab Reference No./SDG#: J2102024

Client/Project: CH2M Hill Constructors, Inc. / N.S. Mayport SWMU 15

I. RECEIPT

No exceptions were encountered unless noted on the Cooler Receipt and Preservation Form included with this data package.

II. HOLDING TIMES

A. Sample preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: SW846 3510C

Analysis: SW846 8081A

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration: Calibration verification primary column had three analytes biased high and six biased low. Second calibration verification had three analytes biased high and four biased low. All analytes were detected at the project specific MRL standard. Since no target analytes detected on samples impact deemed minimal.

B. Blanks: All acceptance criteria were met.

C. Surrogates: 007-MW04S-Q2-01 and 007-DUP-Q2-01 surrogate failed due to matrix interference. Samples presented emultions at the preparation steps.

D. Spikes: All acceptance criteria were met.

E. LCS: All acceptance criteria were met.

F. Internal standards: All acceptance criteria were met.

G. Samples: Sample analyses proceeded normally.

H. Other:

I certify that this data package is in compliance with the terms and conditions agreed to by Columbia Analytical Services, Inc. and by the client, both technically, and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this hard copy data package:

Signed: Martha Montero Date: 7/31/01

Martha Montero.
Operations Manager

R:\WORDPROC\CASE\012024SV.DOC

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Phone: (904) 739-2277
Fax: (904) 739-2011

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Sample Data

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

007-MW01S-Q2-01

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: J2102024-001

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-33

Level: (low/med) LOW Date Received: 07/05/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.020	U
58-89-9	gamma-BHC (Lindane)	0.020	U
319-85-7	beta-BHC	0.020	U
76-44-8	Heptachlor	0.020	U
319-86-8	delta-BHC	0.020	U
309-00-2	Aldrin	0.020	U
1024-57-3	Heptachlor epoxide	0.020	U
5103-74-2	g-Chlordane	0.020	U
5103-71-9	a-Chlordane	0.020	U
72-55-9	4,4'-DDE	0.020	U
60-57-1	Dieldrin	0.020	U
72-20-8	Endrin	0.020	U
72-54-8	4,4'-DDD	0.020	U
33213-65-9	Endosulfan II	0.020	U
50-29-3	4,4'-DDT	0.020	U
7421-93-4	Endrin aldehyde	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.020	U
959-98-8	Endosulfan I	0.020	U

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-33.D
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-33.D
Lab Smp Id: J2102024-001 Client Smp ID: 007-MW01S-Q2-01
Inj Date : 18-JUL-2001 03:56
Operator : LC Inst ID: GC03.i
Smp Info : J2102024-001
Misc Info : EX210383; J2102024-001
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 30 Isodrin (time reference)	9.143	9.110	(1.000)	569175	0.50000	
$ 1 TCMX	4.953	4.946	(0.542)	208150	0.25524	0.26
$ 22 Decachlorobiphenyl	17.410	17.436	(1.904)	181520	0.23179	0.23
2 alpha-BHC	Compound Not Detected.					
3 gamma-BHC (Lindane)	Compound Not Detected.					
4 beta-BHC	Compound Not Detected.					
6 delta-BHC	Compound Not Detected.					
5 Heptachlor	Compound Not Detected.					
7 Aldrin	Compound Not Detected.					
8 Heptachlor epoxide	Compound Not Detected.					
9 g-Chlordane	Compound Not Detected.					
10 a-Chlordane	Compound Not Detected.					
12 4,4'-DDE	Compound Not Detected.					
11 Endosulfan I	Compound Not Detected.					
13 Dieldrin	Compound Not Detected.					
14 Endrin	Compound Not Detected.					

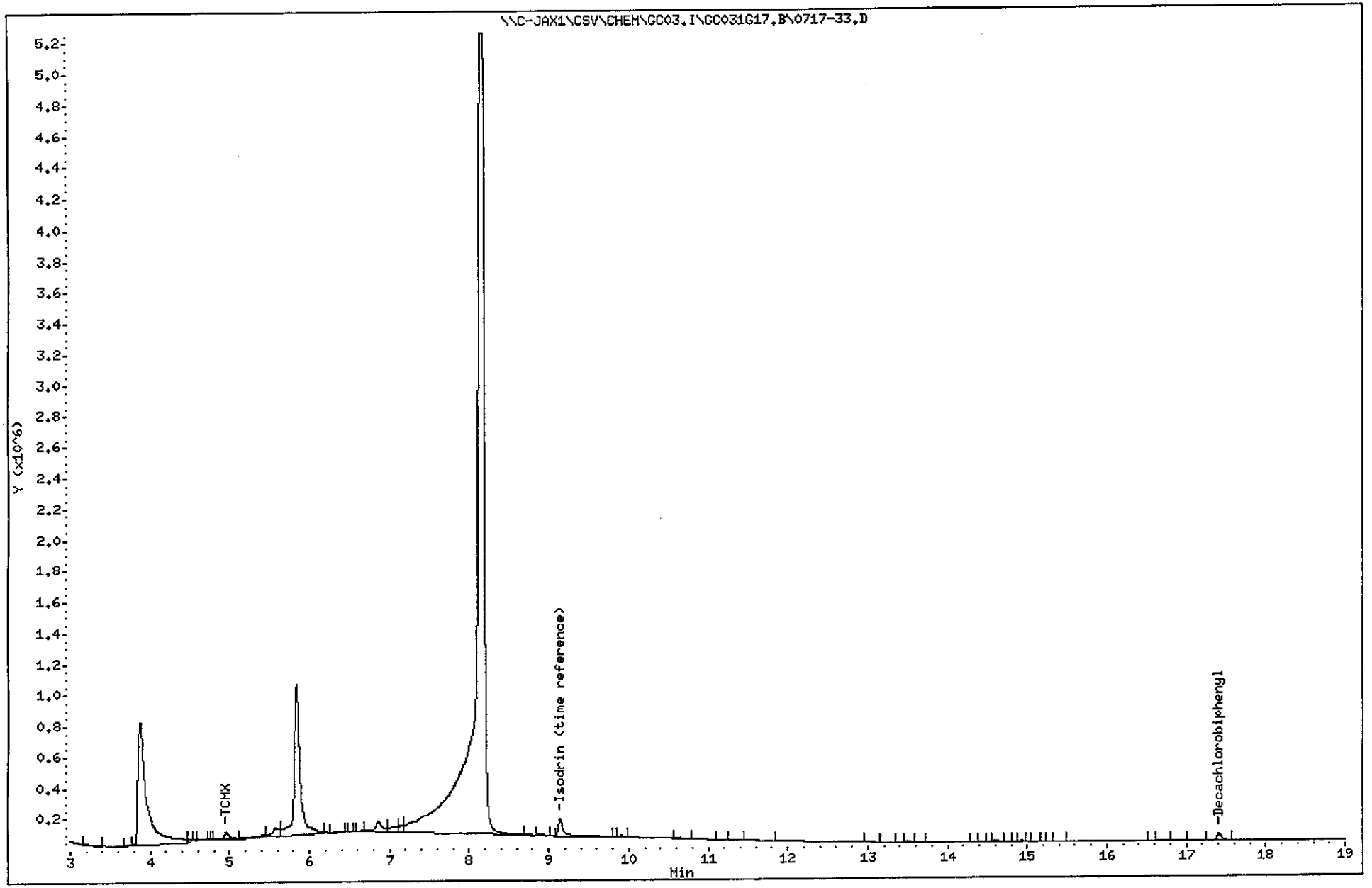
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-33.D
Report Date: 31-Jul-2001 12:17

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
15 4,4'-DDD	Compound Not Detected.					
16 Endosulfan II	Compound Not Detected.					
17 4,4'-DDT	Compound Not Detected.					
18 Endrin aldehyde	Compound Not Detected.					
20 Methoxychlor	Compound Not Detected.					
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-33.D
Date : 18-JUL-2001 03:56
Client ID: 007-MW01S-Q2-01
Sample Info: J2102024-001
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-33Confirm.d
Report Date: 31-Jul-2001 12:18

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-33C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-33.D
Inj Date : 18-JUL-2001 03:56
Sample Info: J2102024-001
Misc Info : EX210383; J2102024-001
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.543	9.143	3752071	569175	0.50	0.50		100.00	
TCMX	4.290	4.953	1606735	208150	0.35	0.26		100.00	
Decachlorobiphenyl	17.303	17.410	227343	181520	0.039	0.23		100.00(R)	
alpha-BHC		Compound Not Detected.							
gamma-BHC (Lindane)		Compound Not Detected.							
beta-BHC		Compound Not Detected.							
delta-BHC		Compound Not Detected.							
Heptachlor		Compound Not Detected.							
Aldrin		Compound Not Detected.							
Heptachlor epoxide		Compound Not Detected.							
g-Chlordane		Compound Not Detected.							
a-Chlordane		Compound Not Detected.							
4,4'-DDE		Compound Not Detected.							
Endosulfan I		Compound Not Detected.							
Dieldrin		Compound Not Detected.							
Endrin		Compound Not Detected.							
4,4'-DDD		Compound Not Detected.							
Endosulfan II		Compound Not Detected.							
4,4'-DDT		Compound Not Detected.							
Endrin aldehyde		Compound Not Detected.							
Methoxychlor		Compound Not Detected.							
Endosulfan sulfate		Compound Not Detected.							
Endrin ketone		Compound Not Detected.							

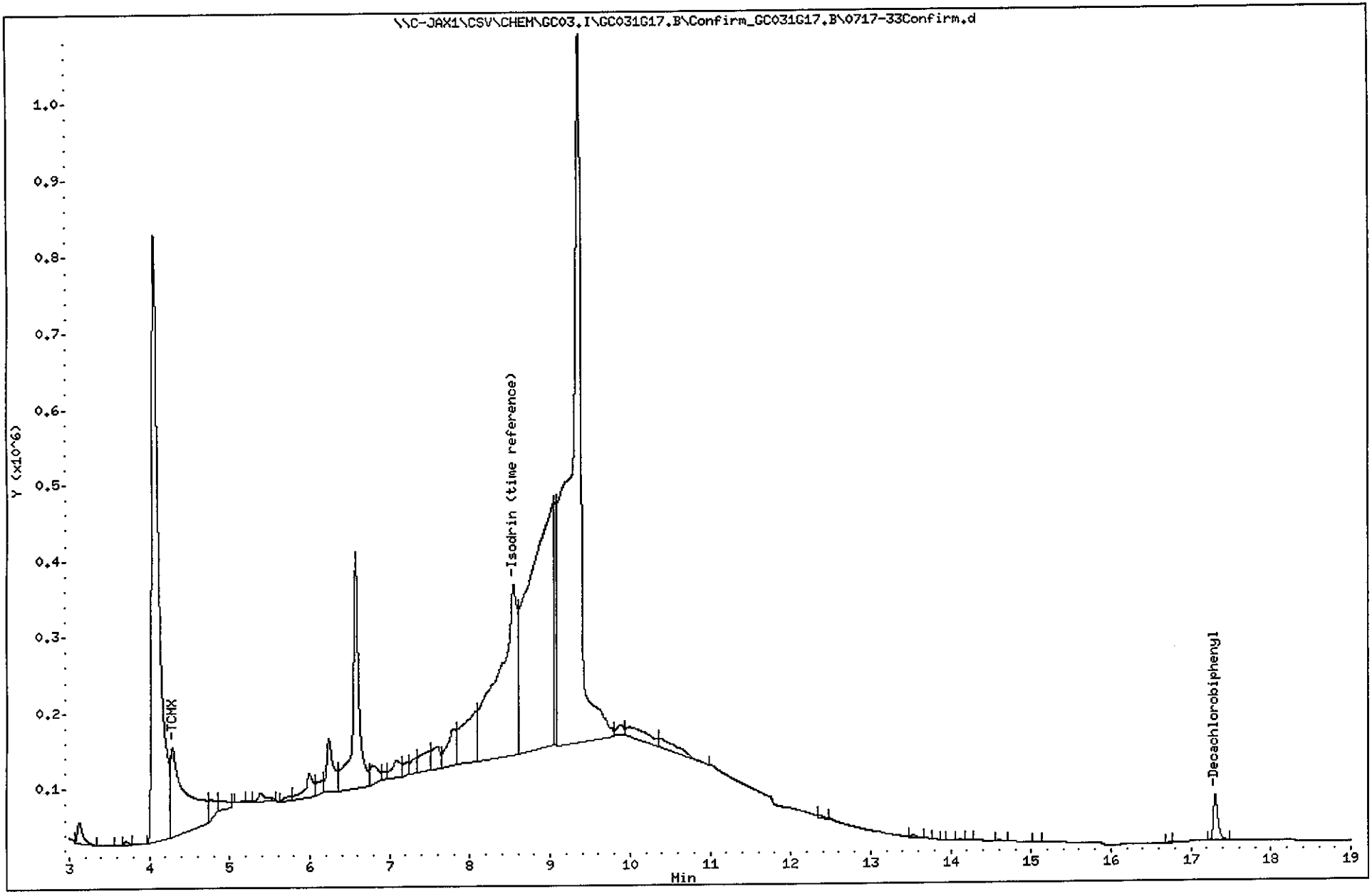
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-33Confirm.d
Date : 18-JUL-2001 03:56
Client ID: 007-MW01S-Q2-01
Sample Info: J2102024-001
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-MW01S-Q2-01

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-001 Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Isodrin (time refer*	1	9.143	9.110	0.033	569175	0.500	0.500	
	2	8.543	8.533	0.010	3752071	0.500	0.500	0.00
TCMX *	1	4.953	4.947	0.006	208150	0.255	0.260	
	2	4.290	4.297	0.007	1606735	0.347	0.350	34.62
Decachlorobiphenyl	1	17.410	17.437	0.027	181520	0.232	0.230	
*	2	17.303	17.307	0.004	227343	0.039	0.039	489.74

* Column used for quantitation

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

007-MW03S-Q2-01

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: J2102024-002

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-26

Level: (low/med) LOW Date Received: 07/05/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.020	U
58-89-9	gamma-BHC (Lindane)	0.020	U
319-85-7	beta-BHC	0.020	U
76-44-8	Heptachlor	0.020	U
319-86-8	delta-BHC	0.020	U
309-00-2	Aldrin	0.020	U
1024-57-3	Heptachlor epoxide	0.020	U
5103-74-2	g-Chlordane	0.020	U
5103-71-9	a-Chlordane	0.020	U
72-55-9	4,4'-DDE	0.020	U
60-57-1	Dieldrin	0.020	U
72-20-8	Endrin	0.020	U
72-54-8	4,4'-DDD	0.020	U
33213-65-9	Endosulfan II	0.020	U
50-29-3	4,4'-DDT	0.020	U
7421-93-4	Endrin aldehyde	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.020	U
959-98-8	Endosulfan I	0.020	U

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-26.D
Report Date: 31-Jul-2001 12:16

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-26.D
Lab Smp Id: J2102024-002 Client Smp ID: 007-MW03S-Q2-01
Inj Date : 18-JUL-2001 01:14
Operator : LC Inst ID: GC03.i
Smp Info : J2102024-002
Misc Info : EX210383; J2102024-002
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 30 Isodrin (time reference)	9.116	9.110	(1.000)	508309	0.50000	
$ 1 TCMX	4.943	4.946	(0.542)	243801	0.33475	0.33
$ 22 Decachlorobiphenyl	17.430	17.436	(1.912)	222142	0.31763	0.32
2 alpha-BHC	Compound Not Detected.					
3 gamma-BHC (Lindane)	Compound Not Detected.					
4 beta-BHC	Compound Not Detected.					
6 delta-BHC	Compound Not Detected.					
5 Heptachlor	Compound Not Detected.					
7 Aldrin	Compound Not Detected.					
8 Heptachlor epoxide	Compound Not Detected.					
9 g-Chlordane	Compound Not Detected.					
10 a-Chlordane	Compound Not Detected.					
12 4,4'-DDE	Compound Not Detected.					
11 Endosulfan I	Compound Not Detected.					
13 Dieldrin	Compound Not Detected.					
14 Endrin	Compound Not Detected.					

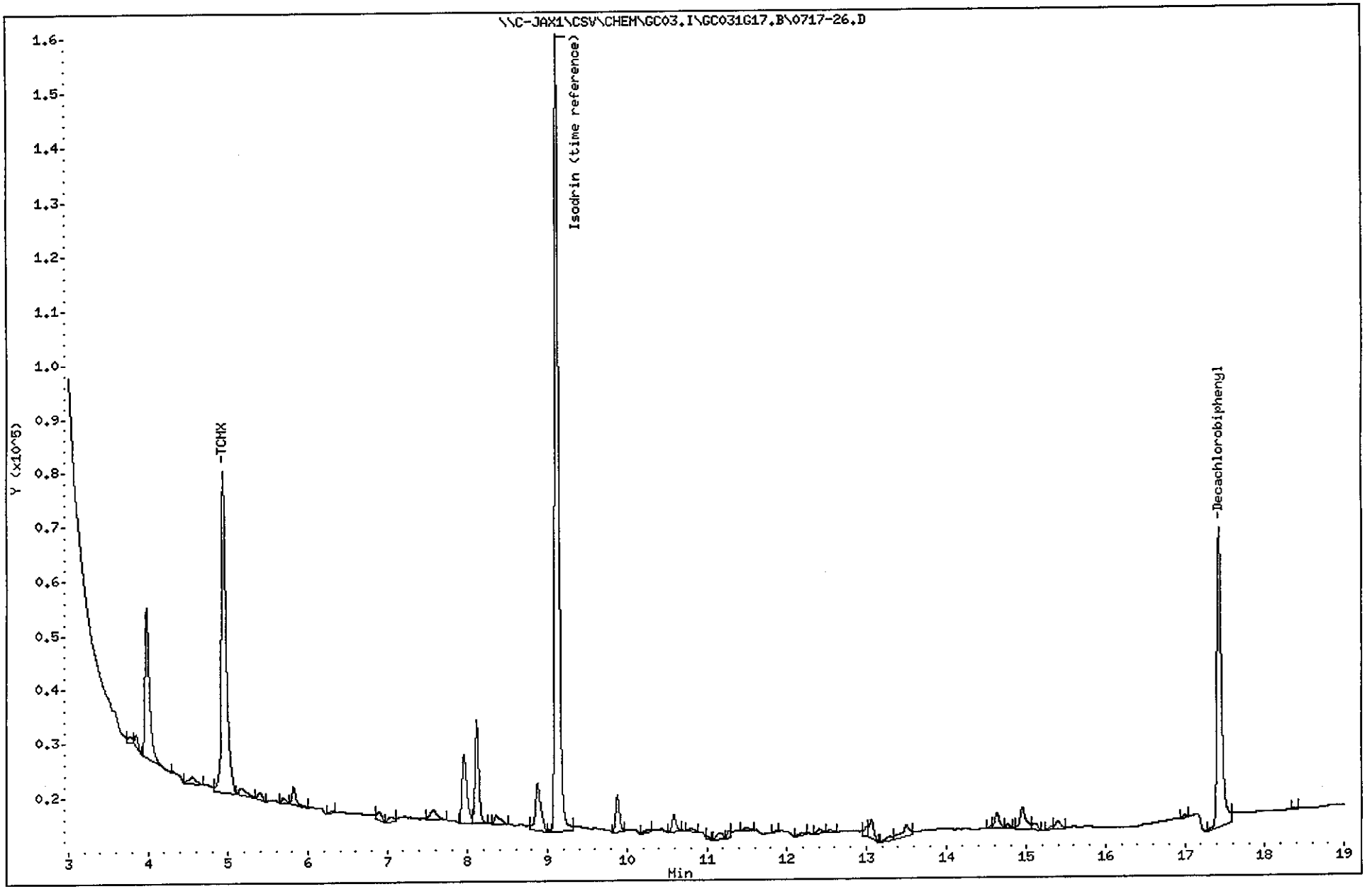
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-26.D
Report Date: 31-Jul-2001 12:16

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
15 4,4'-DDD	Compound Not Detected.					
16 Endosulfan II	Compound Not Detected.					
17 4,4'-DDT	Compound Not Detected.					
18 Endrin aldehyde	Compound Not Detected.					
20 Methoxychlor	Compound Not Detected.					
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-26.D
Date : 18-JUL-2001 01:14
Client ID: 007-MW03S-Q2-01
Sample Info: J2102024-002
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-26Confirm.d
Report Date: 31-Jul-2001 12:18

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-26C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-26.D
Inj Date : 18-JUL-2001 01:14
Sample Info: J2102024-002
Misc Info : EX210383; J2102024-002
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

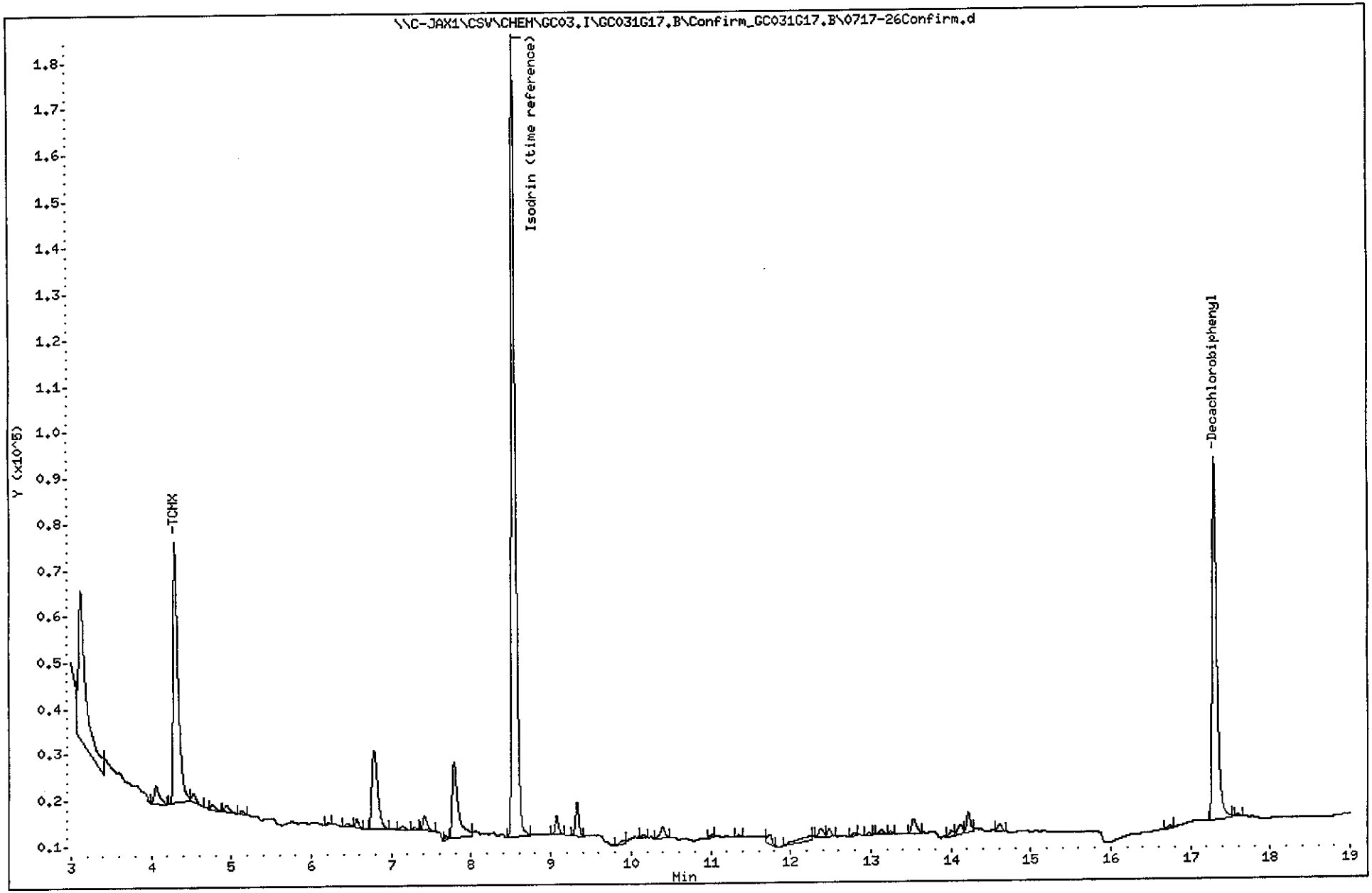
Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.117	620356	508309	0.50	0.50		100.00	
TCMX	4.297	4.943	243764	243801	0.32	0.33		100.00	
Decachlorobiphenyl	17.300	17.430	306934	222142	0.32	0.32		100.00	
alpha-BHC		Compound Not Detected.							
gamma-BHC (Lindane)		Compound Not Detected.							
beta-BHC		Compound Not Detected.							
delta-BHC		Compound Not Detected.							
Heptachlor		Compound Not Detected.							
Aldrin		Compound Not Detected.							
Heptachlor epoxide		Compound Not Detected.							
g-Chlordane		Compound Not Detected.							
a-Chlordane		Compound Not Detected.							
4,4'-DDE		Compound Not Detected.							
Endosulfan I		Compound Not Detected.							
Dieldrin		Compound Not Detected.							
Endrin		Compound Not Detected.							
4,4'-DDD		Compound Not Detected.							
Endosulfan II		Compound Not Detected.							
4,4'-DDT		Compound Not Detected.							
Endrin aldehyde		Compound Not Detected.							
Methoxychlor		Compound Not Detected.							
Endosulfan sulfate		Compound Not Detected.							
Endrin ketone		Compound Not Detected.							

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-26Confirm.d
Date : 18-JUL-2001 01:14
Client ID: 007-MW03S-Q2-01
Sample Info: J2102024-002
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-MW03S-Q2-01

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-002 Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Isodrin (time refer*	1	9.117	9.110	0.007	508309	0.500	0.500	
	2	8.537	8.533	0.004	620356	0.500	0.500	0.00
TCMX	1	4.943	4.947	0.004	243801	0.335	0.330	
	* 2	4.297	4.297	0.000	243764	0.318	0.320	3.12
Decachlorobiphenyl *	1	17.430	17.437	0.007	222142	0.318	0.320	
	2	17.300	17.307	0.007	306934	0.319	0.320	0.00

* Column used for quantitation

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

007-MW03
S-Q2-01MS

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: J2102024-002MS

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-24

Level: (low/med) LOW Date Received: 07/05/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.34	
58-89-9	gamma-BHC (Lindane)	0.39	
319-85-7	beta-BHC	0.37	
76-44-8	Heptachlor	0.36	
319-86-8	delta-BHC	0.42	
309-00-2	Aldrin	0.30	
1024-57-3	Heptachlor epoxide	0.38	
5103-74-2	g-Chlordane	0.38	
5103-71-9	a-Chlordane	0.36	
72-55-9	4,4'-DDE	0.39	
60-57-1	Dieldrin	0.40	
72-20-8	Endrin	0.40	
72-54-8	4,4'-DDD	0.39	
33213-65-9	Endosulfan II	0.33	
50-29-3	4,4'-DDT	0.40	
7421-93-4	Endrin aldehyde	0.37	
1031-07-8	Endosulfan sulfate	0.44	
72-43-5	Methoxychlor	0.41	
53494-70-5	Endrin ketone	0.40	
959-98-8	Endosulfan I	0.24	P

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-24.D
Report Date: 31-Jul-2001 12:16

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-24.D
Lab Smp Id: J2102024-002MS Client Smp ID: 007-MW03S-Q2-01MS
Inj Date : 18-JUL-2001 00:28
Operator : LC Inst ID: GC03.i
Smp Info : J2102024-002 MS
Misc Info : EX210383; J2102024-002MS
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 24 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 30 Isodrin (time reference)	9.133	9.110	(1.000)	508298	0.50000	
$ 1 TCMX	4.953	4.946	(0.542)	256093	0.35163	0.35
$ 22 Decachlorobiphenyl	17.410	17.436	(1.906)	217657	0.31122	0.31
2 alpha-BHC	6.026	6.036	(0.660)	397002	0.39563	0.40
3 gamma-BHC (Lindane)	6.680	6.686	(0.731)	374691	0.39212	0.39
4 beta-BHC	6.850	6.856	(0.750)	191725	0.37283	0.37
6 delta-BHC	7.246	7.253	(0.793)	309354	0.44337	0.44
5 Heptachlor	7.700	7.696	(0.843)	342115	0.37011	0.37
7 Aldrin	8.373	8.370	(0.917)	338931	0.35452	0.35
8 Heptachlor epoxide	9.726	9.713	(1.065)	311213	0.38343	0.38
9 g-Chlordane	10.006	9.993	(1.096)	319752	0.37608	0.38
10 a-Chlordane	10.306	10.290	(1.128)	316317	0.37729	0.38
12 4,4'-DDE	10.446	10.426	(1.144)	303274	0.38769	0.39
11 Endosulfan I	10.640	10.620	(1.165)	236141	0.31316	0.31
13 Dieldrin	11.183	11.166	(1.224)	311614	0.39672	0.40
14 Endrin	11.730	11.713	(1.284)	266217	0.39541	0.40

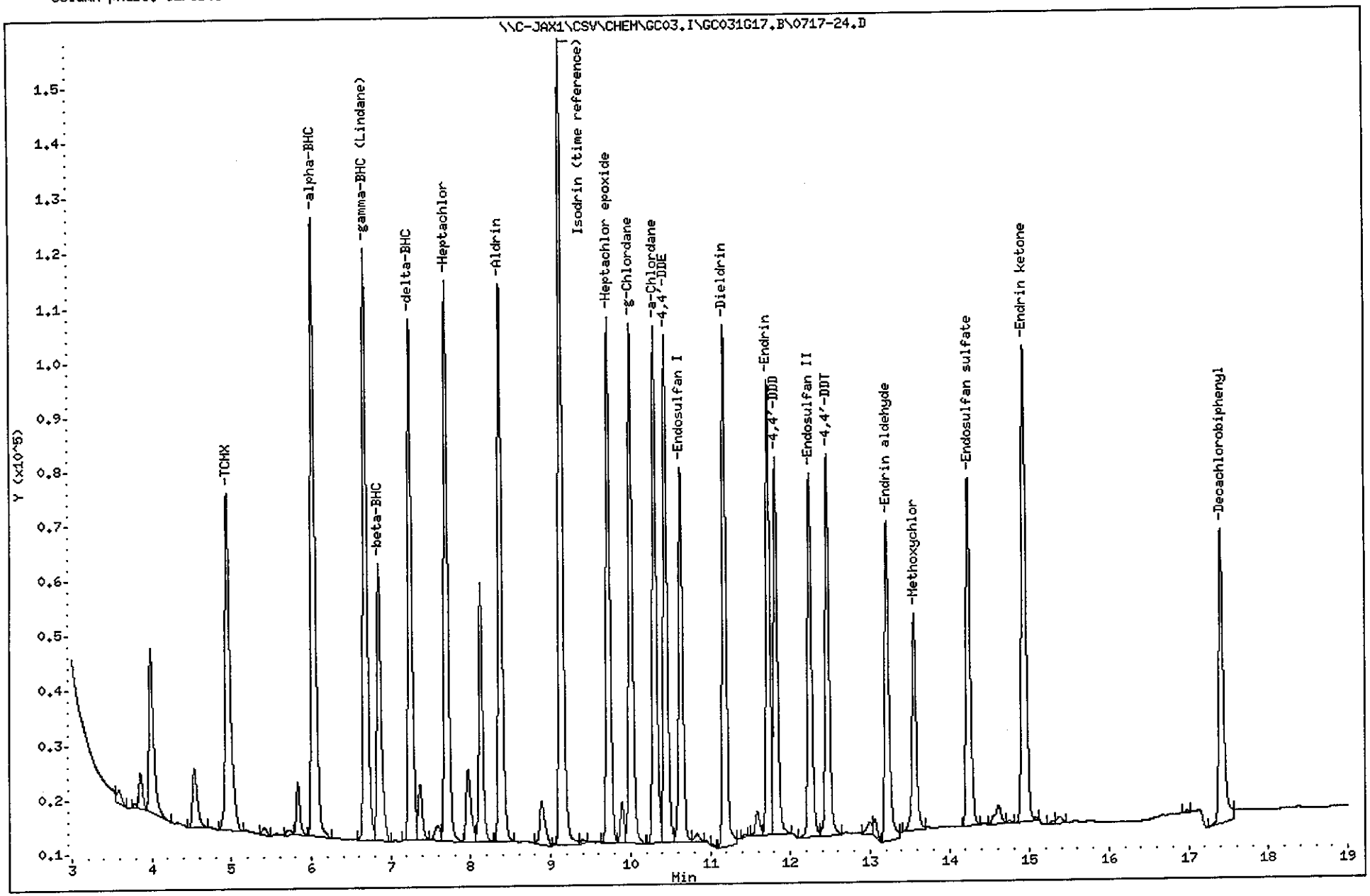
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-24.D
Report Date: 31-Jul-2001 12:16

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
15 4,4'-DDD	11.823	11.806	(1.295)	234574	0.39142	0.39
16 Endosulfan II	12.250	12.233	(1.341)	231098	0.33061	0.33
17 4,4'-DDT	12.466	12.443	(1.365)	235309	0.41187	0.41
18 Endrin aldehyde	13.216	13.210	(1.447)	213457	0.37391	0.37
20 Methoxychlor	13.560	13.553	(1.485)	143640	0.40603	0.41
19 Endosulfan sulfate	14.240	14.240	(1.559)	222108	0.45519	0.46
21 Endrin ketone	14.933	14.936	(1.635)	332298	0.40152	0.40

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-24.D
Date : 18-JUL-2001 00:28
Client ID: 007-MW03S-Q2-01MS
Sample Info: J2102024-002 MS
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-24Confirm.d
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-24C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-24.D
Inj Date : 18-JUL-2001 00:28
Sample Info: J2102024-002 MS
Misc Info : EX210383; J2102024-002MS
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.533	9.133	612130	508298	0.50	0.50		100.00	
TCMX	4.293	4.953	272259	256093	0.36	0.35		100.00	
Decachlorobiphenyl	17.300	17.410	298864	217657	0.31	0.31		100.00	
alpha-BHC	5.380	6.027	416999	397002	0.34	0.40		100.00	
gamma-BHC (Lindane)	6.080	6.680	398554	374691	0.39	0.39		100.00	
beta-BHC	6.233	6.850	200553	191725	0.37	0.37		100.00	
delta-BHC	6.847	7.247	374939	309354	0.42	0.44		100.00	
Heptachlor	6.987	7.700	406518	342115	0.36	0.37		100.00	
Aldrin	7.680	8.373	334262	338931	0.30	0.35		100.00	
Heptachlor epoxide	8.913	9.727	370669	311213	0.38	0.38		100.00	
g-Chlordane	9.327	10.007	434117	319752	0.42	0.38		100.00	
a-Chlordane	9.653	10.307	349651	316317	0.36	0.38		100.00	
4,4'-DDE	10.023	10.447	355948	303274	0.39	0.39		100.00	
Endosulfan I	9.783	10.640	222833	236141	0.24	0.31		100.00	
Dieldrin	10.397	11.183	394194	311614	0.42	0.40		100.00	
Endrin	11.087	11.730	367736	266217	0.44	0.40		100.00	
4,4'-DDD	11.327	11.823	305275	234574	0.48	0.39		100.00	

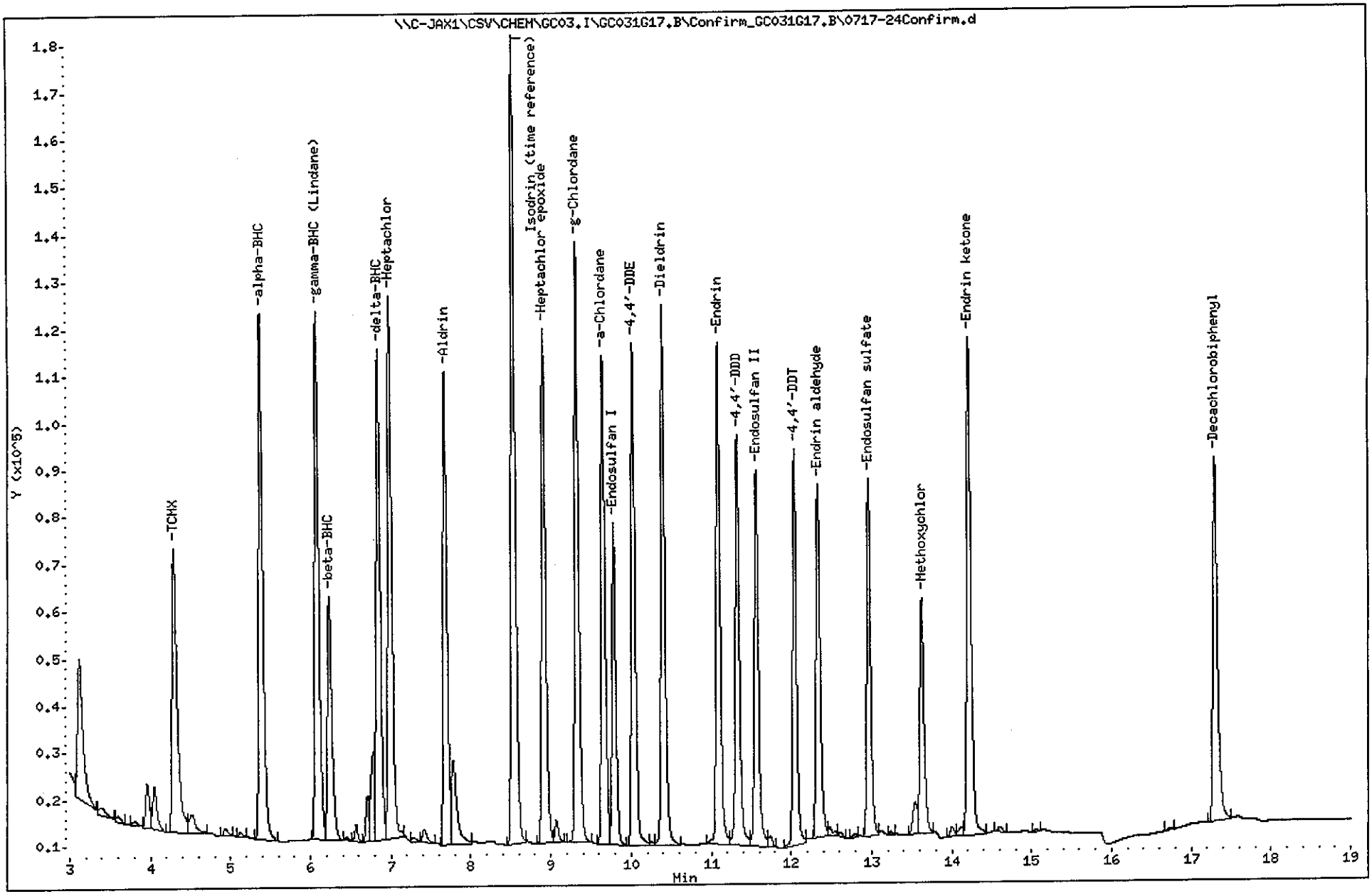
Data File: 0717-24Confirm.d
Report Date: 31-Jul-2001 12:17

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Endosulfan II	11.563	12.250	284116	231098	0.34	0.33		100.00	
4,4'-DDT	12.043	12.467	276213	235309	0.40	0.41		100.00	
Endrin aldehyde	12.333	13.217	270042	213457	0.41	0.37		100.00	
Methoxychlor	13.627	13.560	178142	143640	0.44	0.41		100.00	
Endosulfan sulfate	12.967	14.240	251030	222108	0.44	0.46		100.00	
Endrin ketone	14.217	14.933	393201	332298	0.42	0.40		100.00	

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-24Confirm.d
Date : 18-JUL-2001 00:28
Client ID: 007-MW03S-Q2-01MS
Sample Info: J2102024-002 MS
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-MW03
S-Q2-01MS

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-002MS Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
alpha-BHC	1	6.027	6.037	0.010	397002	0.396	0.400	
	* 2	5.380	5.380	0.000	416999	0.339	0.340	17.65
gamma-BHC (Lindane)	* 1	6.680	6.687	0.007	374691	0.392	0.390	
	2	6.080	6.080	0.000	398554	0.394	0.390	0.00
beta-BHC	* 1	6.850	6.857	0.007	191725	0.373	0.370	
	2	6.233	6.237	0.004	200553	0.371	0.370	0.00
Heptachlor	1	7.700	7.697	0.003	342115	0.370	0.370	
	* 2	6.987	6.987	0.000	406518	0.364	0.360	2.78
delta-BHC	1	7.247	7.253	0.006	309354	0.443	0.440	
	* 2	6.847	6.850	0.003	374939	0.421	0.420	4.76
Aldrin	1	8.373	8.370	0.003	338931	0.354	0.350	
	* 2	7.680	7.680	0.000	334262	0.305	0.300	16.67
Heptachlor epoxide	* 1	9.727	9.713	0.014	311213	0.383	0.380	
	2	8.913	8.917	0.004	370669	0.386	0.380	0.00
g-Chlordane	* 1	10.007	9.993	0.014	319752	0.376	0.380	
	2	9.327	9.333	0.006	434117	0.424	0.420	10.53
a-Chlordane	1	10.307	10.290	0.017	316317	0.377	0.380	
	* 2	9.653	9.657	0.004	349651	0.359	0.360	5.56
4,4'-DDE	* 1	10.447	10.427	0.020	303274	0.388	0.390	
	2	10.023	10.030	0.007	355948	0.389	0.390	0.00
Dieldrin	* 1	11.183	11.167	0.016	311614	0.397	0.400	
	2	10.397	10.400	0.003	394194	0.425	0.420	5.00
Endrin	* 1	11.730	11.713	0.017	266217	0.395	0.400	
	2	11.087	11.090	0.003	367736	0.438	0.440	10.0
4,4'-DDD	* 1	11.823	11.807	0.016	234574	0.391	0.390	
	2	11.327	11.333	0.006	305275	0.481	0.480	23.08

* Column used for quantitation

EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-MW03
S-Q2-01MS

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-002MS Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Endosulfan II	* 1	12.250	12.233	0.017	231098	0.331	0.330	
	2	11.563	11.573	0.010	284116	0.344	0.340	3.03
4,4'-DDT	1	12.467	12.443	0.024	235309	0.412	0.410	
	* 2	12.043	12.043	0.000	276213	0.404	0.400	2.50
Endrin aldehyde	* 1	13.217	13.210	0.007	213457	0.374	0.370	
	2	12.333	12.340	0.007	270042	0.408	0.410	10.81
Endosulfan sulfate	1	14.240	14.240	0.000	222108	0.455	0.460	
	* 2	12.967	12.970	0.003	251030	0.435	0.440	4.54
Methoxychlor	* 1	13.560	13.553	0.007	143640	0.406	0.410	
	2	13.627	13.627	0.000	178142	0.437	0.440	7.32
Endrin ketone	* 1	14.933	14.937	0.004	332298	0.402	0.400	
	2	14.217	14.220	0.003	393201	0.425	0.420	5.00
Endosulfan I	1	10.640	10.620	0.020	236141	0.313	0.310	
	* 2	9.783	9.790	0.007	222833	0.242	0.240	29.17
Isodrin (time refer	* 1	9.133	9.110	0.023	508298	0.500	0.500	
	2	8.533	8.533	0.000	612130	0.500	0.500	0.00
TCMX	* 1	4.953	4.947	0.006	256093	0.352	0.350	
	2	4.293	4.297	0.004	272259	0.360	0.360	2.86
Decachlorobiphenyl	* 1	17.410	17.437	0.027	217657	0.311	0.310	
	2	17.300	17.307	0.007	298864	0.315	0.310	0.00

* Column used for quantitation

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

007-MW03S
-Q2-01MSD

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: J2102024-002MSD

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-25

Level: (low/med) LOW Date Received: 07/05/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.33	
58-89-9	gamma-BHC (Lindane)	0.38	
319-85-7	beta-BHC	0.36	
76-44-8	Heptachlor	0.35	
319-86-8	delta-BHC	0.41	
309-00-2	Aldrin	0.28	
1024-57-3	Heptachlor epoxide	0.37	
5103-74-2	g-Chlordane	0.36	
5103-71-9	a-Chlordane	0.34	
72-55-9	4,4'-DDE	0.36	
60-57-1	Dieldrin	0.38	
72-20-8	Endrin	0.38	
72-54-8	4,4'-DDD	0.37	
33213-65-9	Endosulfan II	0.32	
50-29-3	4,4'-DDT	0.38	
7421-93-4	Endrin aldehyde	0.36	
1031-07-8	Endosulfan sulfate	0.42	
72-43-5	Methoxychlor	0.38	
53494-70-5	Endrin ketone	0.38	
959-98-8	Endosulfan I	0.23	P

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-25.D
Report Date: 31-Jul-2001 12:16

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-25.D
Lab Smp Id: J2102024-002MSD Client Smp ID: 007-MW03S-Q2-01MSD
Inj Date : 18-JUL-2001 00:51
Operator : LC Inst ID: GC03.i
Smp Info : J2102024-002 MSD
Misc Info : EX210383; J2102024-002MSD
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 25 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 30 Isodrin (time reference)	9.106	9.110	(1.000)	515723	0.50000	
$ 1 TCMX	4.953	4.946	(0.544)	255166	0.34532	0.34
$ 22 Decachlorobiphenyl	17.426	17.436	(1.914)	226603	0.31935	0.32
2 alpha-BHC	6.023	6.036	(0.661)	394756	0.38773	0.39
3 gamma-BHC (Lindane)	6.670	6.686	(0.732)	369403	0.38102	0.38
4 beta-BHC	6.840	6.856	(0.751)	188737	0.36173	0.36
6 delta-BHC	7.233	7.253	(0.794)	305384	0.43138	0.43
5 Heptachlor	7.683	7.696	(0.844)	331183	0.35312	0.35
7 Aldrin	8.353	8.370	(0.917)	328782	0.33895	0.34
8 Heptachlor epoxide	9.700	9.713	(1.065)	308130	0.37416	0.37
9 g-Chlordane	9.983	9.993	(1.096)	314363	0.36442	0.36
10 a-Chlordane	10.280	10.290	(1.129)	312831	0.36776	0.37
12 4,4'-DDE	10.420	10.426	(1.144)	297476	0.37480	0.37
11 Endosulfan I	10.610	10.620	(1.165)	235220	0.30745	0.31
13 Dieldrin	11.156	11.166	(1.225)	306346	0.38440	0.38
14 Endrin	11.703	11.713	(1.285)	260320	0.38108	0.38

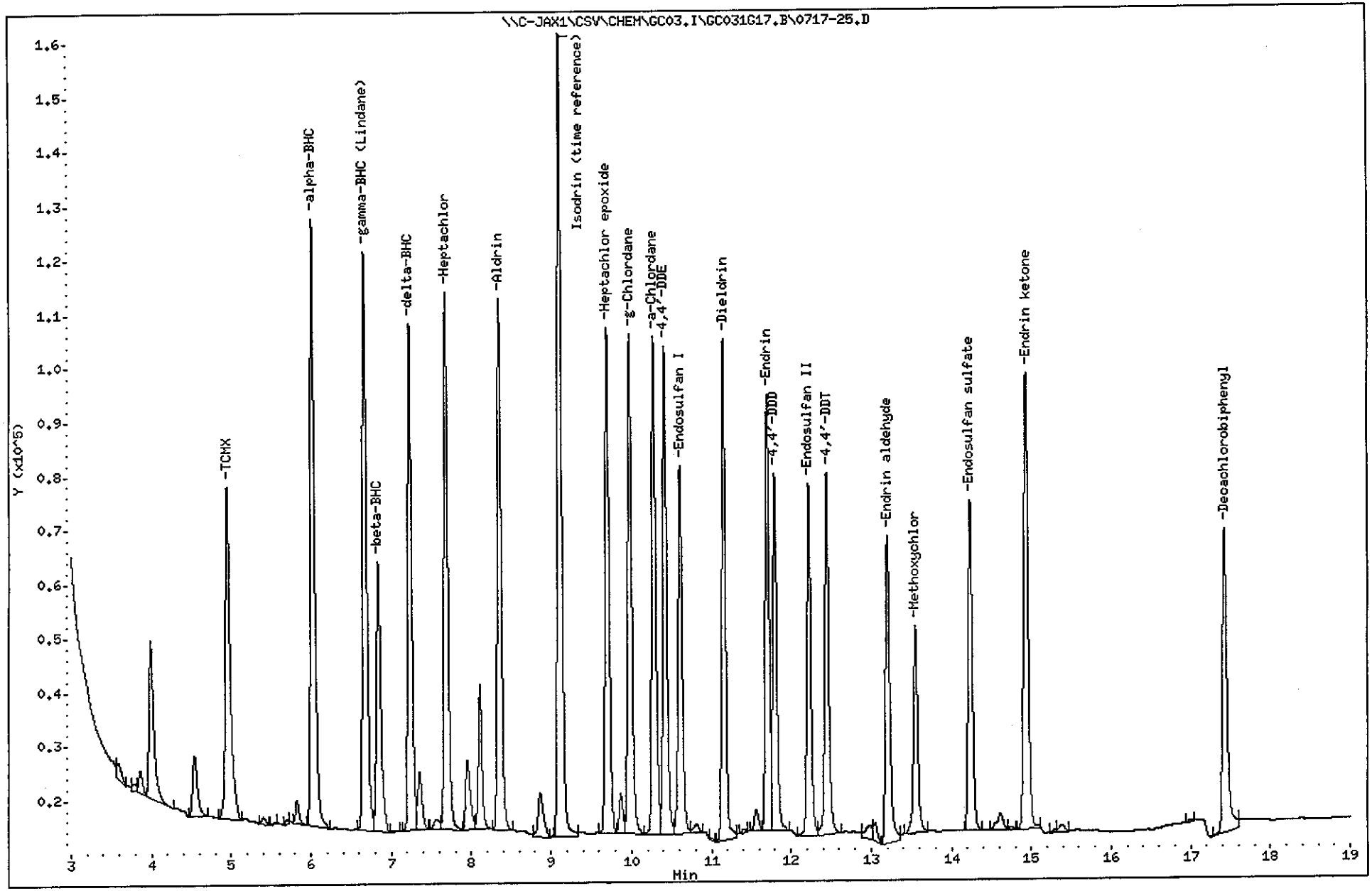
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-25.D
Report Date: 31-Jul-2001 12:16

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
15 4,4'-DDD	11.800	11.806	(1.296)	224994	0.37003	0.37
16 Endosulfan II	12.226	12.233	(1.343)	226161	0.31889	0.32
17 4,4'-DDT	12.450	12.443	(1.367)	226734	0.39115	0.39
18 Endrin aldehyde	13.203	13.210	(1.450)	209165	0.36112	0.36
20 Methoxychlor	13.550	13.553	(1.488)	138347	0.38543	0.38
19 Endosulfan sulfate	14.236	14.240	(1.563)	215163	0.43461	0.43
21 Endrin ketone	14.936	14.936	(1.640)	322622	0.38421	0.38

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-25.D
Date : 18-JUL-2001 00:51
Client ID: 007-MW03S-Q2-01MSD
Sample Info: J2102024-002 MSD
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-25Confirm.d
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-25C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-25.D
Inj Date : 18-JUL-2001 00:51
Sample Info: J2102024-002 MSD
Misc Info : EX210383; J2102024-002MSD
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.107	624390	515723	0.50	0.50		100.00	
TCMX	4.293	4.953	260010	255166	0.34	0.34		100.00	
Decachlorobiphenyl	17.300	17.427	314294	226603	0.32	0.32		100.00	
alpha-BHC	5.380	6.023	413084	394756	0.33	0.39		100.00	
gamma-BHC (Lindane)	6.080	6.670	390805	369403	0.38	0.38		100.00	
beta-BHC	6.237	6.840	196391	188737	0.36	0.36		100.00	
delta-BHC	6.847	7.233	368756	305384	0.41	0.43		100.00	
Heptachlor	6.990	7.683	401259	331183	0.35	0.35		100.00	
Aldrin	7.680	8.353	316776	328782	0.28	0.34		100.00	
Heptachlor epoxide	8.917	9.700	359835	308130	0.37	0.37		100.00	
g-Chlordane	9.330	9.983	398889	314363	0.38	0.36		100.00	
a-Chlordane	9.653	10.280	333391	312831	0.34	0.37		100.00	
4,4'-DDE	10.027	10.420	338555	297476	0.36	0.37		100.00	
Endosulfan I	9.787	10.610	214777	235220	0.23	0.31		100.00	
Dieldrin	10.400	11.157	379349	306346	0.40	0.38		100.00	
Endrin	11.090	11.703	350386	260320	0.41	0.38		100.00	
4,4'-DDD	11.330	11.800	278595	224994	0.43	0.37		100.00	

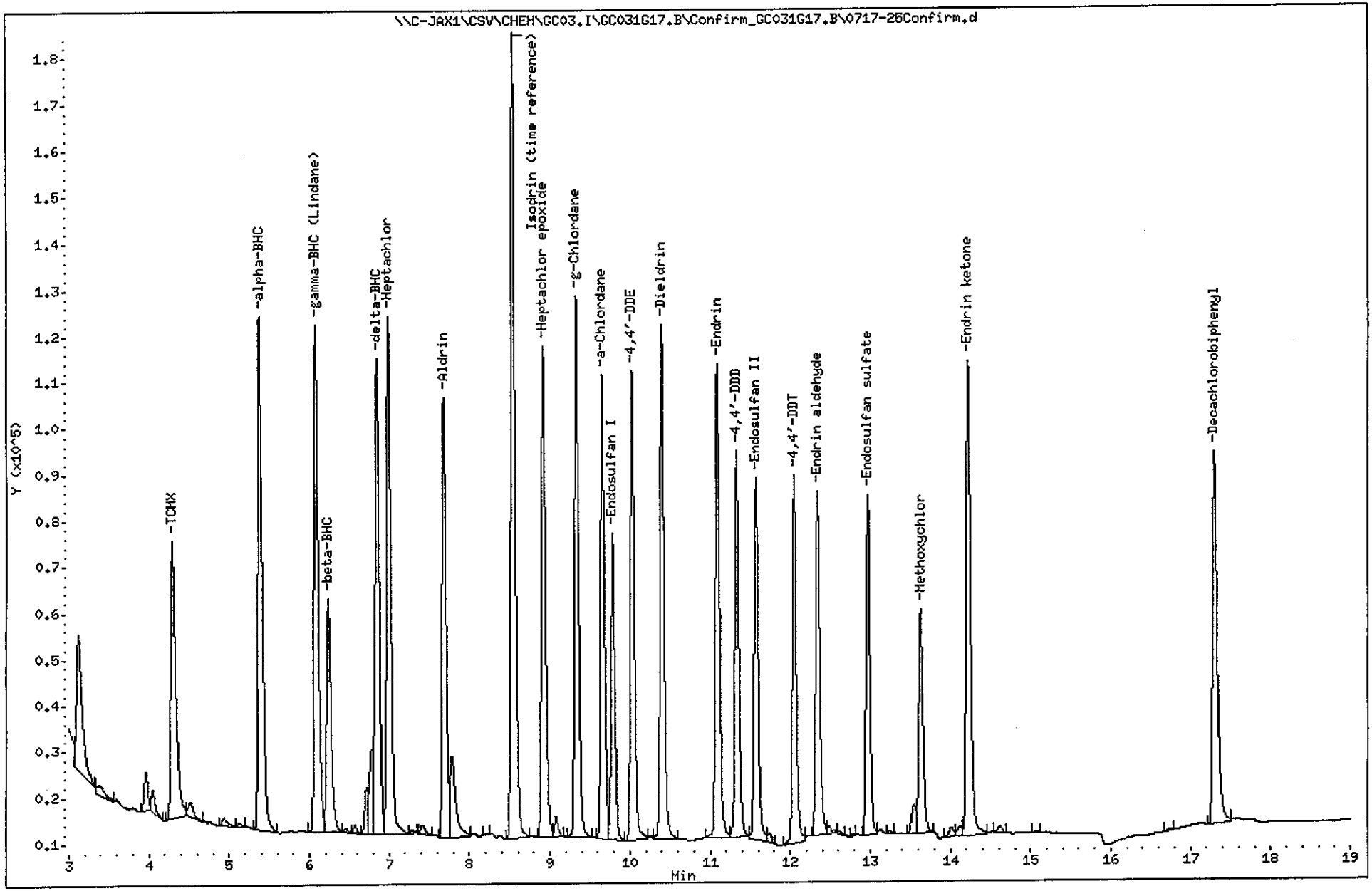
Data File: 0717-25Confirm.d
Report Date: 31-Jul-2001 12:17

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Endosulfan II	11.567	12.227	270284	226161	0.32	0.32		100.00	
4,4'-DDT	12.047	12.450	264937	226734	0.38	0.39		100.00	
Endrin aldehyde	12.337	13.203	262906	209165	0.39	0.36		100.00	
Methoxychlor	13.630	13.550	172905	138347	0.42	0.38		100.00	
Endosulfan sulfate	12.967	14.237	245608	215163	0.42	0.43		100.00	
Endrin ketone	14.217	14.937	387307	322622	0.41	0.38		100.00	

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-25Confirm.d
Date : 18-JUL-2001 00:51
Client ID: 007-MW03S-Q2-01MSD
Sample Info: J2102024-002 MSD
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-MW03S
-Q2-01MSD

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-002MSD Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
alpha-BHC	1	6.023	6.037	0.014	394756	0.388	0.390	
	* 2	5.380	5.380	0.000	413084	0.329	0.330	18.18
gamma-BHC (Lindane)	* 1	6.670	6.687	0.017	369403	0.381	0.380	
	2	6.080	6.080	0.000	390805	0.378	0.380	0.00
beta-BHC	* 1	6.840	6.857	0.017	188737	0.362	0.360	
	2	6.237	6.237	0.000	196391	0.356	0.360	0.00
Heptachlor	* 1	7.683	7.697	0.014	331183	0.353	0.350	
	2	6.990	6.987	0.003	401259	0.352	0.350	0.00
delta-BHC	1	7.233	7.253	0.020	305384	0.431	0.430	
	* 2	6.847	6.850	0.003	368756	0.406	0.410	4.88
Aldrin	1	8.353	8.370	0.017	328782	0.339	0.340	
	* 2	7.680	7.680	0.000	316776	0.283	0.280	21.43
Heptachlor epoxide	* 1	9.700	9.713	0.013	308130	0.374	0.370	
	2	8.917	8.917	0.000	359835	0.367	0.370	0.00
g-Chlordane	* 1	9.983	9.993	0.010	314363	0.364	0.360	
	2	9.330	9.333	0.003	398889	0.382	0.380	5.56
a-Chlordane	1	10.280	10.290	0.010	312831	0.368	0.370	
	* 2	9.653	9.657	0.004	333391	0.335	0.340	8.82
4,4'-DDE	1	10.420	10.427	0.007	297476	0.375	0.370	
	* 2	10.027	10.030	0.003	338555	0.362	0.360	2.78
Dieldrin	* 1	11.157	11.167	0.010	306346	0.384	0.380	
	2	10.400	10.400	0.000	379349	0.401	0.400	5.26
Endrin	* 1	11.703	11.713	0.010	260320	0.381	0.380	
	2	11.090	11.090	0.000	350386	0.410	0.410	7.89
4,4'-DDD	* 1	11.800	11.807	0.007	224994	0.370	0.370	
	2	11.330	11.333	0.003	278595	0.430	0.430	16.22

* Column used for quantitation

page 01 of 02

EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-MW03S
-Q2-01MSD

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-002MSD Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND		COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Endosulfan II	*	1	12.227	12.233	0.006	226161	0.319	0.320	
		2	11.567	11.573	0.006	270284	0.320	0.320	0.00
4,4'-DDT		1	12.450	12.443	0.007	226734	0.391	0.390	
	*	2	12.047	12.043	0.004	264937	0.380	0.380	2.63
Endrin aldehyde	*	1	13.203	13.210	0.007	209165	0.361	0.360	
		2	12.337	12.340	0.003	262906	0.389	0.390	8.33
Endosulfan sulfate		1	14.237	14.240	0.003	215163	0.435	0.430	
	*	2	12.967	12.970	0.003	245608	0.418	0.420	2.38
Methoxychlor	*	1	13.550	13.553	0.003	138347	0.385	0.380	
		2	13.630	13.627	0.003	172905	0.416	0.420	10.53
Endrin ketone	*	1	14.937	14.937	0.000	322622	0.384	0.380	
		2	14.217	14.220	0.003	387307	0.410	0.410	7.89
Endosulfan I		1	10.610	10.620	0.010	235220	0.307	0.310	
	*	2	9.787	9.790	0.003	214777	0.229	0.230	34.78
Isodrin (time refer	*	1	9.107	9.110	0.003	515723	0.500	0.500	
		2	8.537	8.533	0.004	624390	0.500	0.500	0.00
TCMX	*	1	4.953	4.947	0.006	255166	0.345	0.340	
		2	4.293	4.297	0.004	260010	0.338	0.340	0.00
Decachlorobiphenyl	*	1	17.427	17.437	0.010	226603	0.319	0.320	
		2	17.300	17.307	0.007	314294	0.325	0.320	0.00

* Column used for quantitation

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

007-MW04S-Q2-01

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: J2102024-003

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-34

Level: (low/med) LOW Date Received: 07/05/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.020	U
58-89-9	gamma-BHC (Lindane)	0.020	U
319-85-7	beta-BHC	0.020	U
76-44-8	Heptachlor	0.020	U
319-86-8	delta-BHC	0.020	U
309-00-2	Aldrin	0.020	U
1024-57-3	Heptachlor epoxide	0.020	U
5103-74-2	g-Chlordane	0.020	U
5103-71-9	a-Chlordane	0.020	U
72-55-9	4,4'-DDE	0.020	U
60-57-1	Dieldrin	0.020	U
72-20-8	Endrin	0.020	U
72-54-8	4,4'-DDD	0.020	U
33213-65-9	Endosulfan II	0.020	U
50-29-3	4,4'-DDT	0.020	U
7421-93-4	Endrin aldehyde	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.020	U
959-98-8	Endosulfan I	0.020	U

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-34.D
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-34.D
Lab Smp Id: J2102024-003 Client Smp ID: 007-MW04S-Q2-01
Inj Date : 18-JUL-2001 04:19
Operator : LC Inst ID: GC03.i
Smp Info : J2102024-003
Misc Info : EX210383; J2102024-003
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 30 Isodrin (time reference)	9.126	9.110	(1.000)	920840	0.50000	
$ 1 TCMX	4.966	4.946	(0.544)	1898983	1.43929	1.4(AR)
$ 22 Decachlorobiphenyl	17.430	17.436	(1.910)	154833	0.12221	0.12
2 alpha-BHC	Compound Not Detected.					
3 gamma-BHC (Lindane)	Compound Not Detected.					
4 beta-BHC	Compound Not Detected.					
6 delta-BHC	Compound Not Detected.					
5 Heptachlor	Compound Not Detected.					
7 Aldrin	Compound Not Detected.					
8 Heptachlor epoxide	Compound Not Detected.					
9 g-Chlordane	Compound Not Detected.					
10 a-Chlordane	Compound Not Detected.					
12 4,4'-DDE	Compound Not Detected.					
11 Endosulfan I	Compound Not Detected.					
13 Dieldrin	Compound Not Detected.					
14 Endrin	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-34.D
Report Date: 31-Jul-2001 12:17

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
15 4,4'-DDD	Compound Not Detected.					
16 Endosulfan II	Compound Not Detected.					
17 4,4'-DDT	Compound Not Detected.					
18 Endrin aldehyde	Compound Not Detected.					
20 Methoxychlor	Compound Not Detected.					
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					

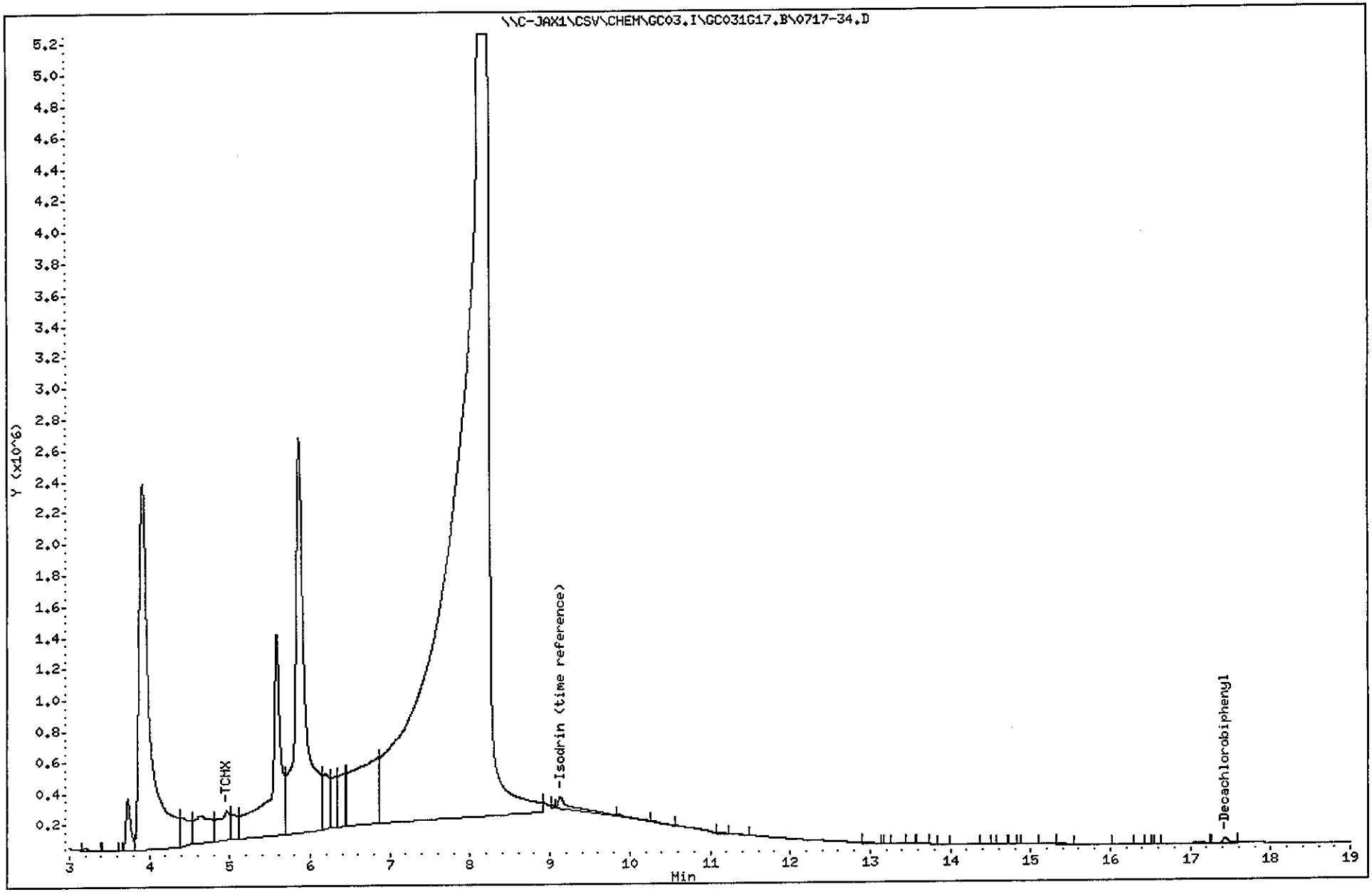
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-34.D
Date : 18-JUL-2001 04:19
Client ID: 007-MW04S-Q2-01
Sample Info: J2102024-003
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-34Confirm.d
Report Date: 31-Jul-2001 12:18

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-34C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-34.D
Inj Date : 18-JUL-2001 04:19
Sample Info: J2102024-003
Misc Info : EX210383; J2102024-003
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	0.000	9.127	0	920840	0.00	0.50			
TCMX	4.290	4.967	2745318	1898983		1.4		100.00(aR)	
Decachlorobiphenyl	17.303	17.430	205558	154833		0.12		100.00(aR)	
alpha-BHC		Compound Not Detected.							
gamma-BHC (Lindane)		Compound Not Detected.							
beta-BHC		Compound Not Detected.							
delta-BHC		Compound Not Detected.							
Heptachlor		Compound Not Detected.							
Aldrin		Compound Not Detected.							
Heptachlor epoxide		Compound Not Detected.							
g-Chlordane		Compound Not Detected.							
a-Chlordane		Compound Not Detected.							
4,4'-DDE		Compound Not Detected.							
Endosulfan I		Compound Not Detected.							
Dieldrin		Compound Not Detected.							
Endrin		Compound Not Detected.							
4,4'-DDD		Compound Not Detected.							
Endosulfan II		Compound Not Detected.							
4,4'-DDT		Compound Not Detected.							
Endrin aldehyde		Compound Not Detected.							
Methoxychlor		Compound Not Detected.							
Endosulfan sulfate		Compound Not Detected.							
Endrin ketone		Compound Not Detected.							

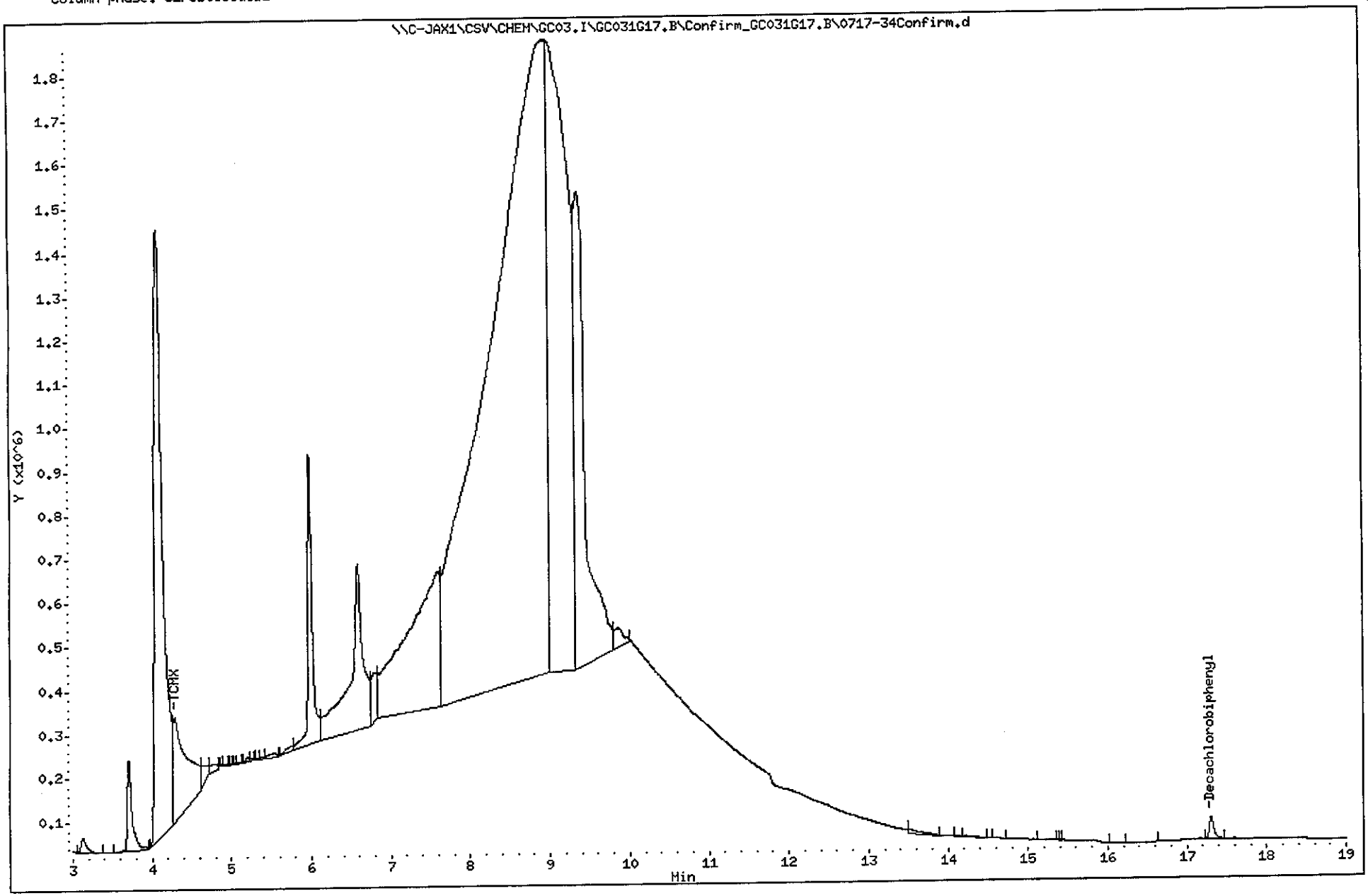
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-34Confirm.d
Date : 18-JUL-2001 04:19
Client ID: 007-MW04S-Q2-01
Sample Info: J2102024-003
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-MW04S-Q2-01

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-003 Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
TCMX	1	4.967	4.947	0.020	1898983	1.439	1.400	
	* 2	4.290	4.297	0.007	2745318	0.000	0.000	--
Decachlorobiphenyl	1	17.430	17.437	0.007	154833	0.122	0.120	
	* 2	17.303	17.307	0.004	205558	0.000	0.000	--

* Column used for quantitation

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

007-MW05S-Q2-01

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: J2102024-004

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-35

Level: (low/med) LOW Date Received: 07/05/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.020	U
58-89-9	gamma-BHC (Lindane)	0.020	U
319-85-7	beta-BHC	0.020	U
76-44-8	Heptachlor	0.020	U
319-86-8	delta-BHC	0.020	U
309-00-2	Aldrin	0.020	U
1024-57-3	Heptachlor epoxide	0.020	U
5103-74-2	g-Chlordane	0.020	U
5103-71-9	a-Chlordane	0.020	U
72-55-9	4,4'-DDE	0.020	U
60-57-1	Dieldrin	0.020	U
72-20-8	Endrin	0.020	U
72-54-8	4,4'-DDD	0.020	U
33213-65-9	Endosulfan II	0.020	U
50-29-3	4,4'-DDT	0.020	U
7421-93-4	Endrin aldehyde	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.020	U
959-98-8	Endosulfan I	0.020	U

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-35.D
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-35.D
Lab Smp Id: J2102024-004 Client Smp ID: 007-MW05S-Q2-01
Inj Date : 18-JUL-2001 04:42
Operator : LC Inst ID: GC03.i
Smp Info : J2102024-004
Misc Info : EX210383; J2102024-004
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 30 Isodrin (time reference)	9.126	9.110	(1.000)	171895	0.50000	
$ 1 TCMX	4.936	4.946	(0.541)	48152	0.19551	0.20
$ 22 Decachlorobiphenyl	17.436	17.436	(1.911)	42325	0.17896	0.18
2 alpha-BHC	Compound Not Detected.					
3 gamma-BHC (Lindane)	Compound Not Detected.					
4 beta-BHC	Compound Not Detected.					
6 delta-BHC	Compound Not Detected.					
5 Heptachlor	Compound Not Detected.					
7 Aldrin	Compound Not Detected.					
8 Heptachlor epoxide	Compound Not Detected.					
9 g-Chlordane	Compound Not Detected.					
10 a-Chlordane	Compound Not Detected.					
12 4,4'-DDE	Compound Not Detected.					
11 Endosulfan I	Compound Not Detected.					
13 Dieldrin	Compound Not Detected.					
14 Endrin	Compound Not Detected.					

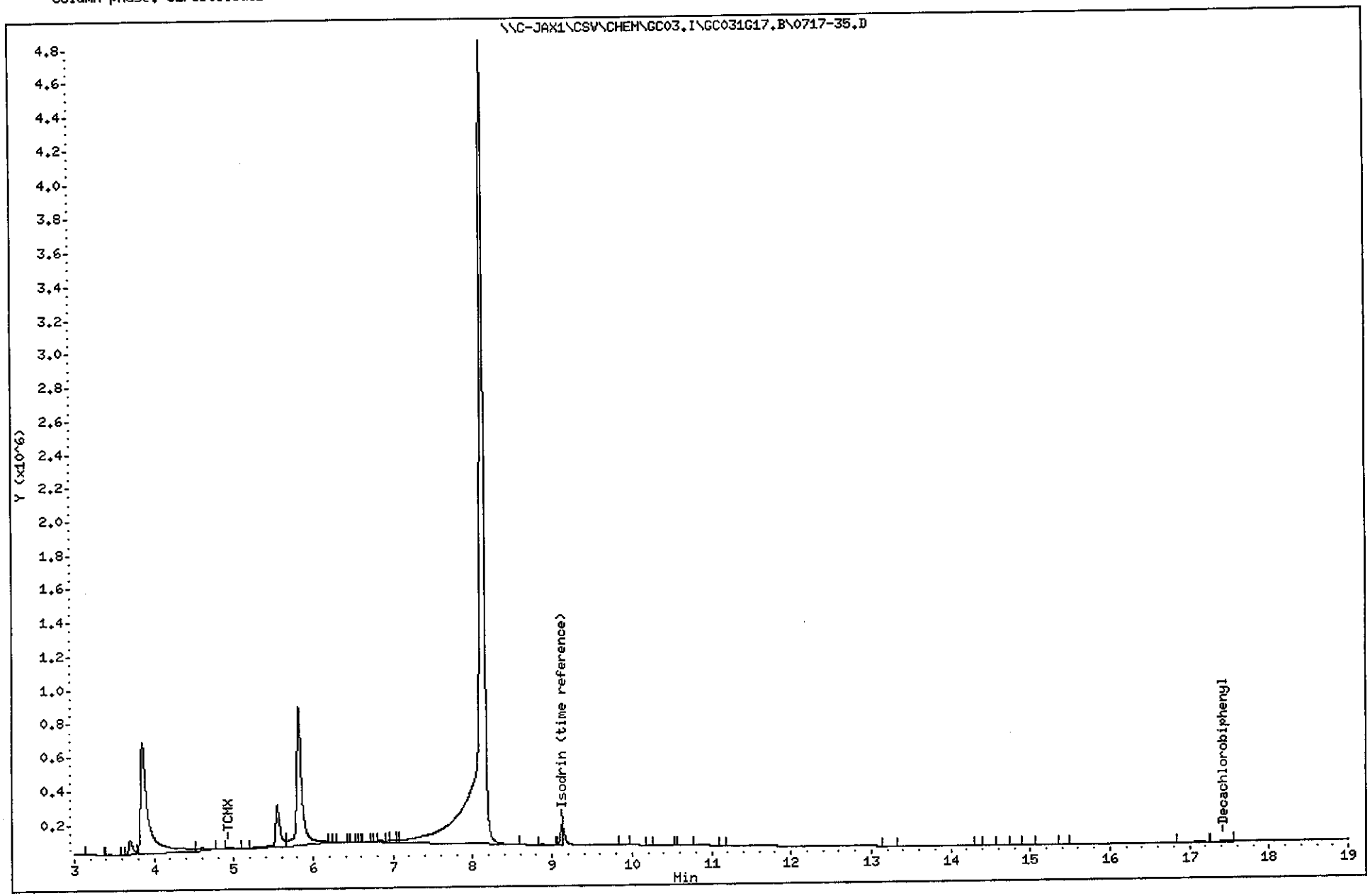
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-35.D
Report Date: 31-Jul-2001 12:17

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
15 4,4'-DDD	Compound Not Detected.					
16 Endosulfan II	Compound Not Detected.					
17 4,4'-DDT	Compound Not Detected.					
18 Endrin aldehyde	Compound Not Detected.					
20 Methoxychlor	Compound Not Detected.					
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-35.D
Date : 18-JUL-2001 04:42
Client ID: 007-MW05S-Q2-01
Sample Info: J2102024-004
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-35Confirm.d
Report Date: 31-Jul-2001 12:18

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-35C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-35.D
Inj Date : 18-JUL-2001 04:42
Sample Info: J2102024-004
Misc Info : EX210383; J2102024-004
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.540	9.127	2332133	171895	0.50	0.50		100.00	
TCMX	4.290	4.937	472584	48152	0.16	0.20		100.00	
Decachlorobiphenyl	17.303	17.437	38794	42325	0.011	0.18		100.00(aR)	
alpha-BHC		Compound Not Detected.							
gamma-BHC (Lindane)		Compound Not Detected.							
beta-BHC		Compound Not Detected.							
delta-BHC		Compound Not Detected.							
Heptachlor		Compound Not Detected.							
Aldrin		Compound Not Detected.							
Heptachlor epoxide		Compound Not Detected.							
g-Chlordane		Compound Not Detected.							
a-Chlordane		Compound Not Detected.							
4,4'-DDE		Compound Not Detected.							
Endosulfan I		Compound Not Detected.							
Dieldrin		Compound Not Detected.							
Endrin		Compound Not Detected.							
4,4'-DDD		Compound Not Detected.							
Endosulfan II		Compound Not Detected.							
4,4'-DDT		Compound Not Detected.							
Endrin aldehyde		Compound Not Detected.							
Methoxychlor		Compound Not Detected.							
Endosulfan sulfate		Compound Not Detected.							
Endrin ketone		Compound Not Detected.							

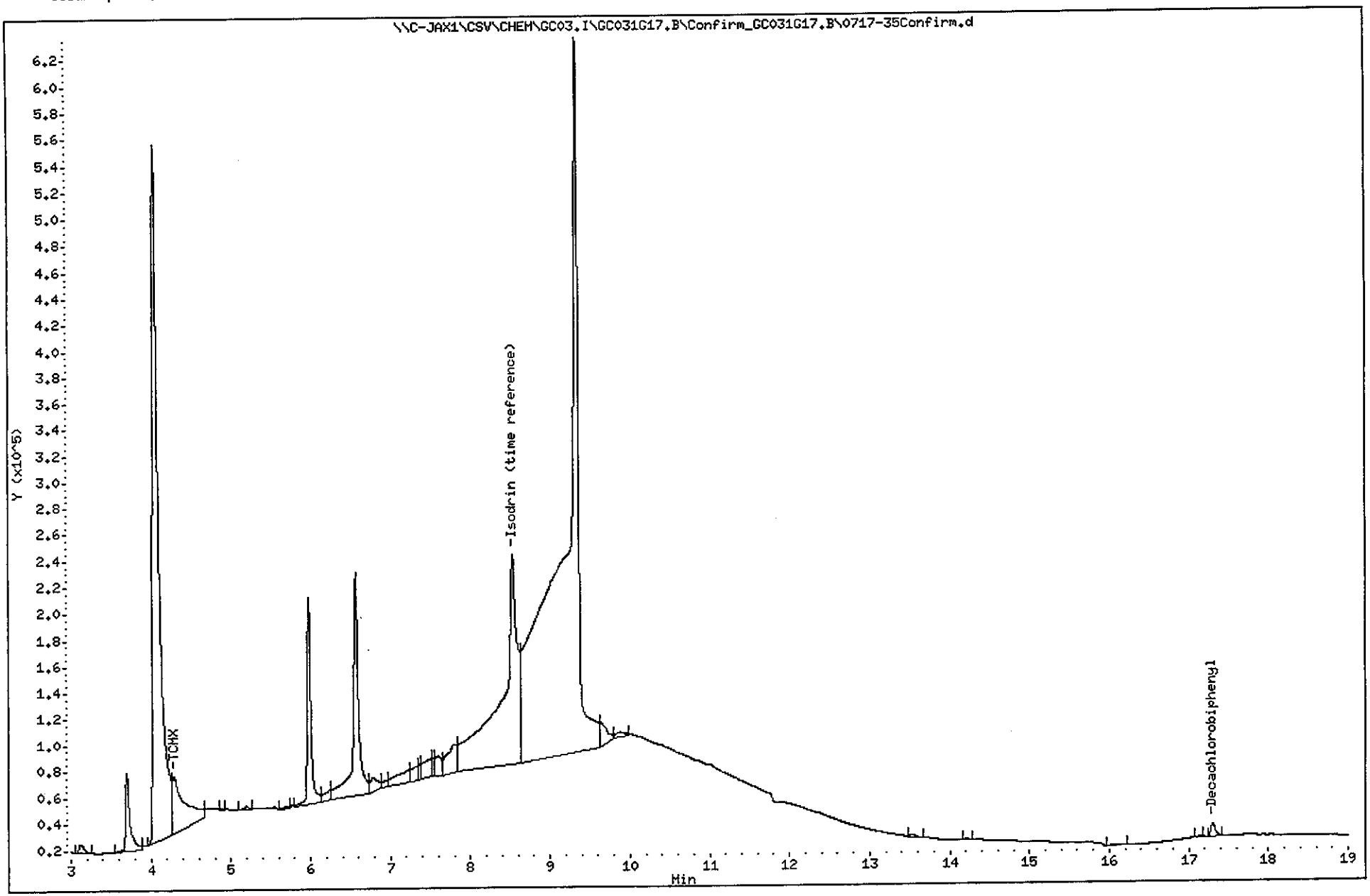
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-35Confirm.d
Date : 18-JUL-2001 04:42
Client ID: 007-MW05S-Q2-01
Sample Info: J2102024-004
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-MW05S-Q2-01

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-004 Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Isodrin (time refer	* 1	9.127	9.110	0.017	171895	0.500	0.500	
	2	8.540	8.533	0.007	2332133	0.500	0.500	0.00
TCMX	1	4.937	4.947	0.010	48152	0.196	0.200	
	* 2	4.290	4.297	0.007	472584	0.164	0.160	25.00
Decachlorobiphenyl	1	17.437	17.437	0.000	42325	0.179	0.180	
	* 2	17.303	17.307	0.004	38794	0.011	0.011	1536.4

* Column used for quantitation

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

007-MW08S-Q2-01

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: J2102024-005

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-36

Level: (low/med) LOW Date Received: 07/05/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.020	U
58-89-9	gamma-BHC (Lindane)	0.020	U
319-85-7	beta-BHC	0.020	U
76-44-8	Heptachlor	0.020	U
319-86-8	delta-BHC	0.020	U
309-00-2	Aldrin	0.020	U
1024-57-3	Heptachlor epoxide	0.020	U
5103-74-2	g-Chlordane	0.020	U
5103-71-9	a-Chlordane	0.020	U
72-55-9	4,4'-DDE	0.020	U
60-57-1	Dieldrin	0.020	U
72-20-8	Endrin	0.020	U
72-54-8	4,4'-DDD	0.020	U
33213-65-9	Endosulfan II	0.020	U
50-29-3	4,4'-DDT	0.020	U
7421-93-4	Endrin aldehyde	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.020	U
959-98-8	Endosulfan I	0.020	U

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-36.D
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-36.D
Lab Smp Id: J2102024-005 Client Smp ID: 007-MW08S-Q2-01
Inj Date : 18-JUL-2001 05:06
Operator : LC Inst ID: GC03.i
Smp Info : J2102024-005
Misc Info : EX210383; J2102024-005
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 30 Isodrin (time reference)	9.140	9.110	(1.000)	612634	0.50000	
$ 1 TCMX	4.960	4.946	(0.543)	202721	0.23095	0.23
$ 22 Decachlorobiphenyl	17.403	17.436	(1.904)	212914	0.25259	0.25
2 alpha-BHC	Compound Not Detected.					
3 gamma-BHC (Lindane)	Compound Not Detected.					
4 beta-BHC	Compound Not Detected.					
6 delta-BHC	Compound Not Detected.					
5 Heptachlor	Compound Not Detected.					
7 Aldrin	Compound Not Detected.					
8 Heptachlor epoxide	Compound Not Detected.					
9 g-Chlordane	Compound Not Detected.					
10 a-Chlordane	Compound Not Detected.					
12 4,4'-DDE	Compound Not Detected.					
11 Endosulfan I	Compound Not Detected.					
13 Dieldrin	Compound Not Detected.					
14 Endrin	Compound Not Detected.					

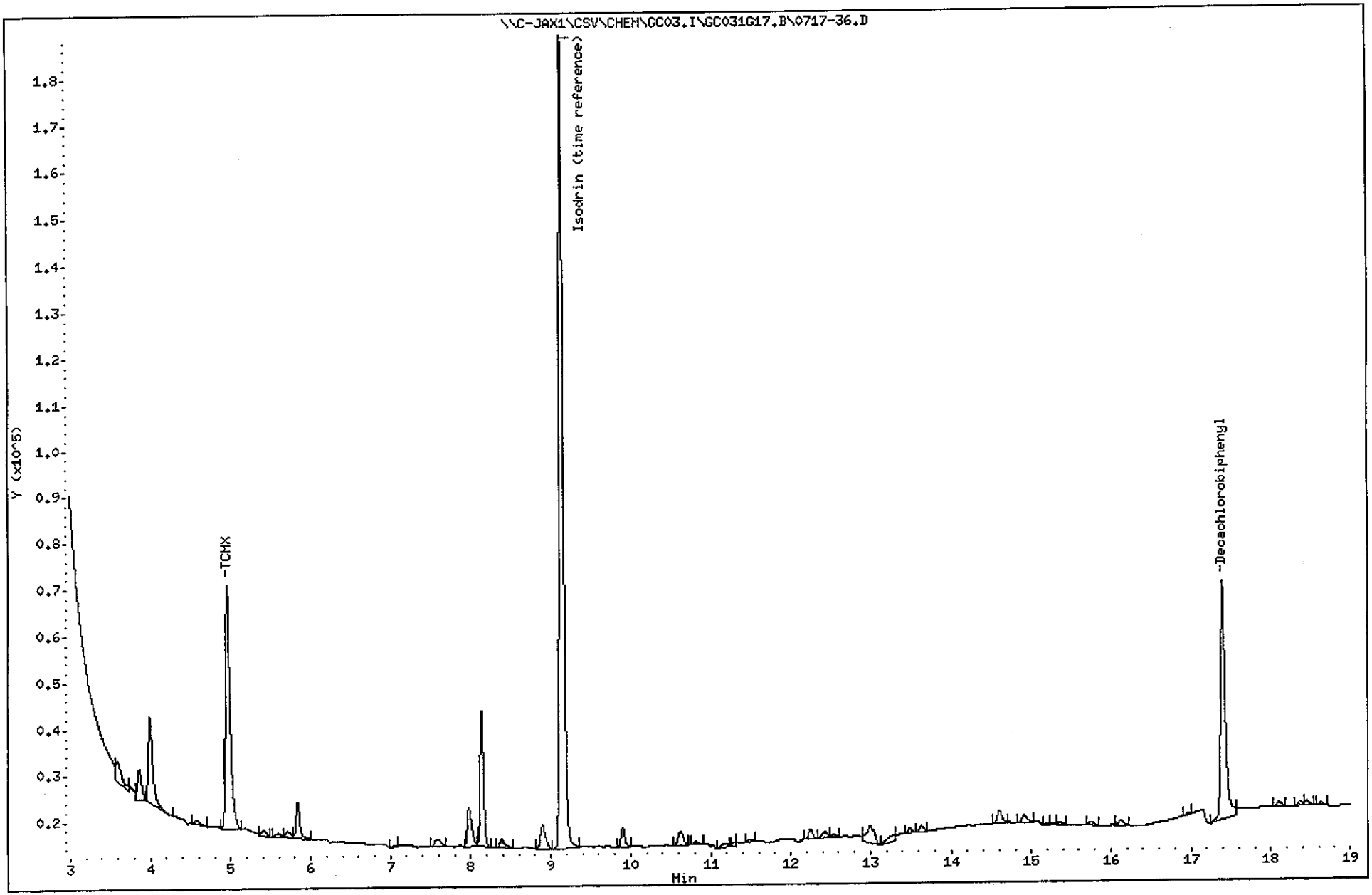
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-36.D
Report Date: 31-Jul-2001 12:17

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
15 4,4'-DDD	Compound Not Detected.					
16 Endosulfan II	Compound Not Detected.					
17 4,4'-DDT	Compound Not Detected.					
18 Endrin aldehyde	Compound Not Detected.					
20 Methoxychlor	Compound Not Detected.					
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-36.D
Date : 18-JUL-2001 05:06
Client ID: 007-MW08S-Q2-01
Sample Info: J2102024-005
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-36Confirm.d
Report Date: 31-Jul-2001 12:18

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-36C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-36.D
Inj Date : 18-JUL-2001 05:06
Sample Info: J2102024-005
Misc Info : EX210383; J2102024-005
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.140	719425	612634	0.50	0.50		100.00	
TCMX	4.293	4.960	235021	202721	0.26	0.23		100.00	
Decachlorobiphenyl	17.303	17.403	277646	212914	0.25	0.25		100.00	
alpha-BHC		Compound Not Detected.							
gamma-BHC (Lindane)		Compound Not Detected.							
beta-BHC		Compound Not Detected.							
delta-BHC		Compound Not Detected.							
Heptachlor		Compound Not Detected.							
Aldrin		Compound Not Detected.							
Heptachlor epoxide		Compound Not Detected.							
g-Chlordane		Compound Not Detected.							
a-Chlordane		Compound Not Detected.							
4,4'-DDE		Compound Not Detected.							
Endosulfan I		Compound Not Detected.							
Dieldrin	10.393	0.000	7568	0	0.0070	0.00		100.00(a)	
Endrin		Compound Not Detected.							
4,4'-DDD		Compound Not Detected.							
Endosulfan II		Compound Not Detected.							
4,4'-DDT		Compound Not Detected.							
Endrin aldehyde		Compound Not Detected.							
Methoxychlor		Compound Not Detected.							
Endosulfan sulfate		Compound Not Detected.							
Endrin ketone		Compound Not Detected.							

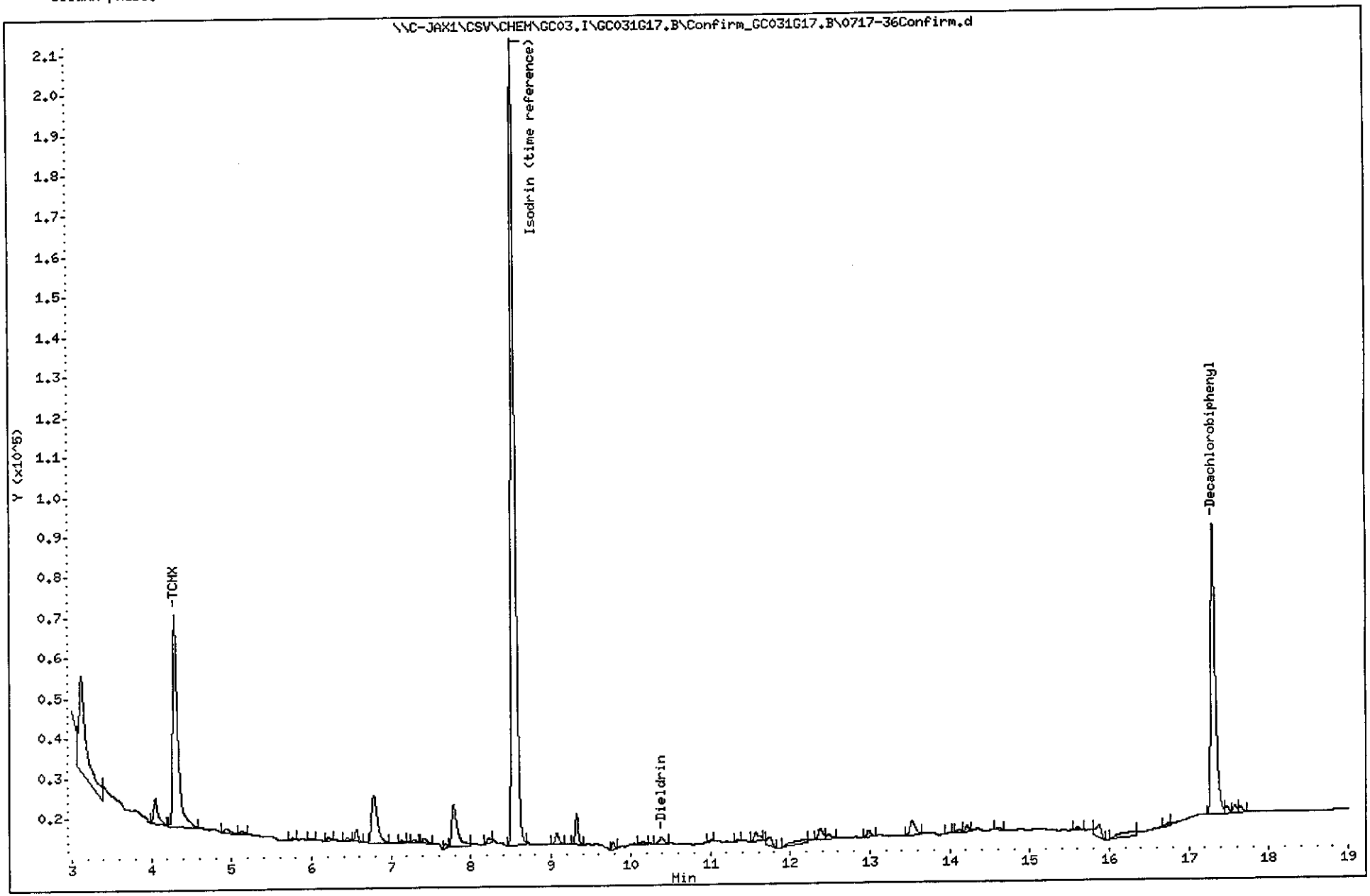
QC Flag Legend

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

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-36Confirm.d
Date : 18-JUL-2001 05:06
Client ID: 007-MW08S-Q2-01
Sample Info: J2102024-005
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-MW08S-Q2-01

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-005 Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Isodrin (time refer*	1	9.140	9.110	0.030	612634	0.500	0.500	
	2	8.537	8.533	0.004	719425	0.500	0.500	0.00
TCMX *	1	4.960	4.947	0.013	202721	0.231	0.230	
	2	4.293	4.297	0.004	235021	0.265	0.260	13.04
Decachlorobiphenyl *	1	17.403	17.437	0.034	212914	0.252	0.250	
	2	17.303	17.307	0.004	277646	0.249	0.250	0.00

* Column used for quantitation

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

007-DUP-Q2-01

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: J2102024-006

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-37

Level: (low/med) LOW Date Received: 07/05/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.020	U
58-89-9	gamma-BHC (Lindane)	0.020	U
319-85-7	beta-BHC	0.020	U
76-44-8	Heptachlor	0.020	U
319-86-8	delta-BHC	0.020	U
309-00-2	Aldrin	0.020	U
1024-57-3	Heptachlor epoxide	0.020	U
5103-74-2	g-Chlordane	0.020	U
5103-71-9	a-Chlordane	0.020	U
72-55-9	4,4'-DDE	0.020	U
60-57-1	Dieldrin	0.020	U
72-20-8	Endrin	0.020	U
72-54-8	4,4'-DDD	0.020	U
33213-65-9	Endosulfan II	0.020	U
50-29-3	4,4'-DDT	0.020	U
7421-93-4	Endrin aldehyde	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.020	U
959-98-8	Endosulfan I	0.020	U

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-37.D
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-37.D
Lab Smp Id: J2102024-006 Client Smp ID: 007-DUP-Q2-01
Inj Date : 18-JUL-2001 05:29
Operator : LC Inst ID: GC03.i
Smp Info : J2102024-006
Misc Info : EX210383; J2102024-006
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 37
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 30 Isodrin (time reference)	9.116	9.110	(1.000)	2429143	0.50000	
$ 1 TCMX	4.946	4.946	(0.543)	303212	0.08712	0.087(R)
$ 22 Decachlorobiphenyl	17.443	17.436	(1.913)	94991	0.02842	0.028(R)
2 alpha-BHC	Compound Not Detected.					
3 gamma-BHC (Lindane)	Compound Not Detected.					
4 beta-BHC	Compound Not Detected.					
6 delta-BHC	Compound Not Detected.					
5 Heptachlor	Compound Not Detected.					
7 Aldrin	Compound Not Detected.					
8 Heptachlor epoxide	Compound Not Detected.					
9 g-Chlordane	Compound Not Detected.					
10 a-Chlordane	Compound Not Detected.					
12 4,4'-DDE	Compound Not Detected.					
11 Endosulfan I	Compound Not Detected.					
13 Dieldrin	Compound Not Detected.					
14 Endrin	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-37.D
Report Date: 31-Jul-2001 12:17

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
15 4,4'-DDD	Compound Not Detected.					
16 Endosulfan II	Compound Not Detected.					
17 4,4'-DDT	Compound Not Detected.					
18 Endrin aldehyde	Compound Not Detected.					
20 Methoxychlor	Compound Not Detected.					
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					

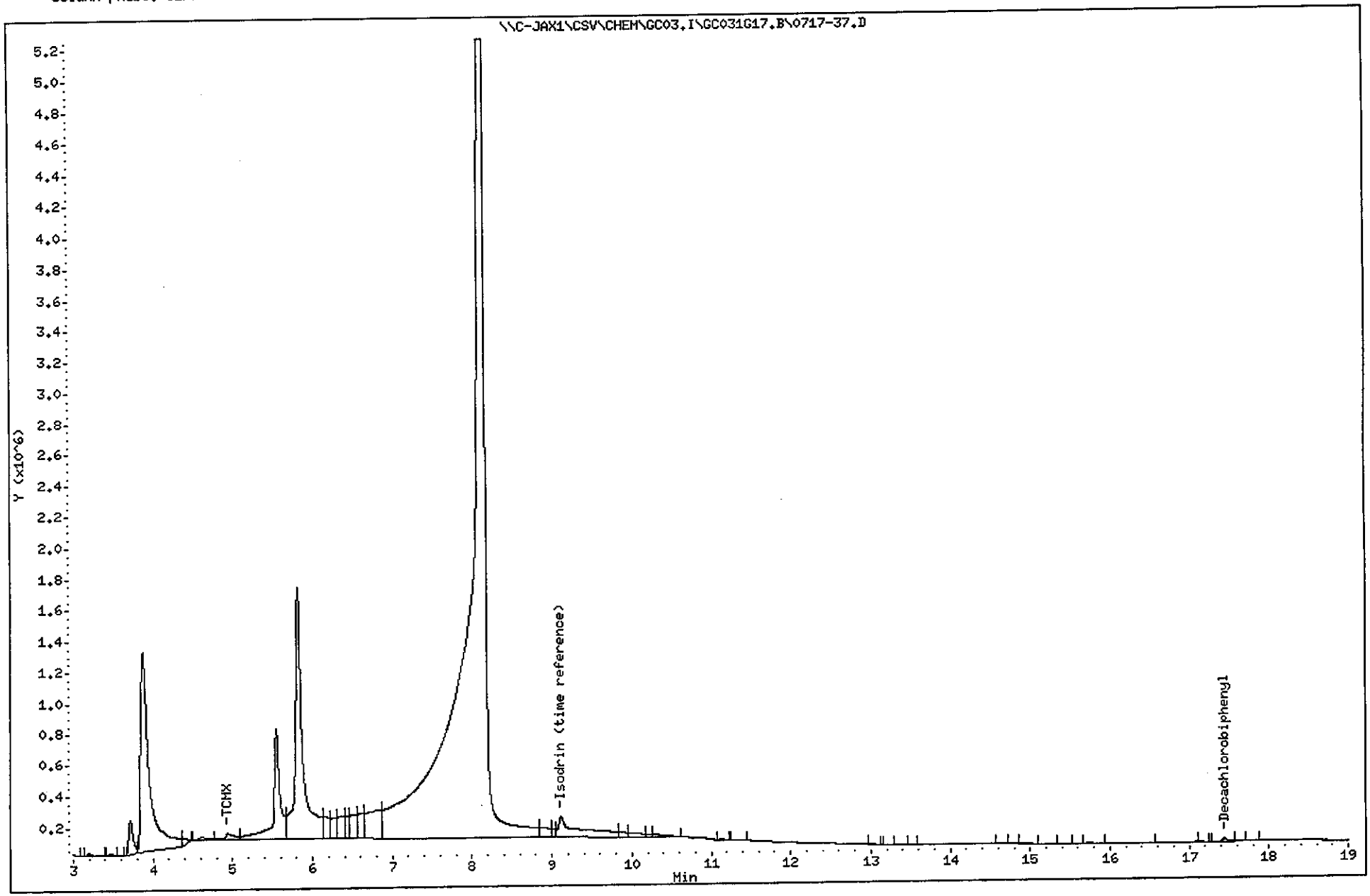
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-37.D
Date : 18-JUL-2001 05:29
Client ID: 007-DUP-Q2-01
Sample Info: J2102024-006
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-37Confirm.d
Report Date: 31-Jul-2001 12:18

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-37C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-37.D
Inj Date : 18-JUL-2001 05:29
Sample Info: J2102024-006
Misc Info : EX210383; J2102024-006
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.553	9.117	13412275	2429143	0.50	0.50		100.00	
TCMX	4.293	4.947	1006542	303212	0.061	0.087		100.00(R)	
Decachlorobiphenyl	17.307	17.443	119098	94991	0.0057	0.028		100.00(aR)	
alpha-BHC		Compound Not Detected.							
gamma-BHC (Lindane)		Compound Not Detected.							
beta-BHC		Compound Not Detected.							
delta-BHC		Compound Not Detected.							
Heptachlor		Compound Not Detected.							
Aldrin		Compound Not Detected.							
Heptachlor epoxide		Compound Not Detected.							
g-Chlordane		Compound Not Detected.							
a-Chlordane		Compound Not Detected.							
4,4'-DDE		Compound Not Detected.							
Endosulfan I		Compound Not Detected.							
Dieldrin		Compound Not Detected.							
Endrin		Compound Not Detected.							
4,4'-DDD		Compound Not Detected.							
Endosulfan II		Compound Not Detected.							
4,4'-DDT		Compound Not Detected.							
Endrin aldehyde		Compound Not Detected.							
Methoxychlor		Compound Not Detected.							
Endosulfan sulfate		Compound Not Detected.							
Endrin ketone		Compound Not Detected.							

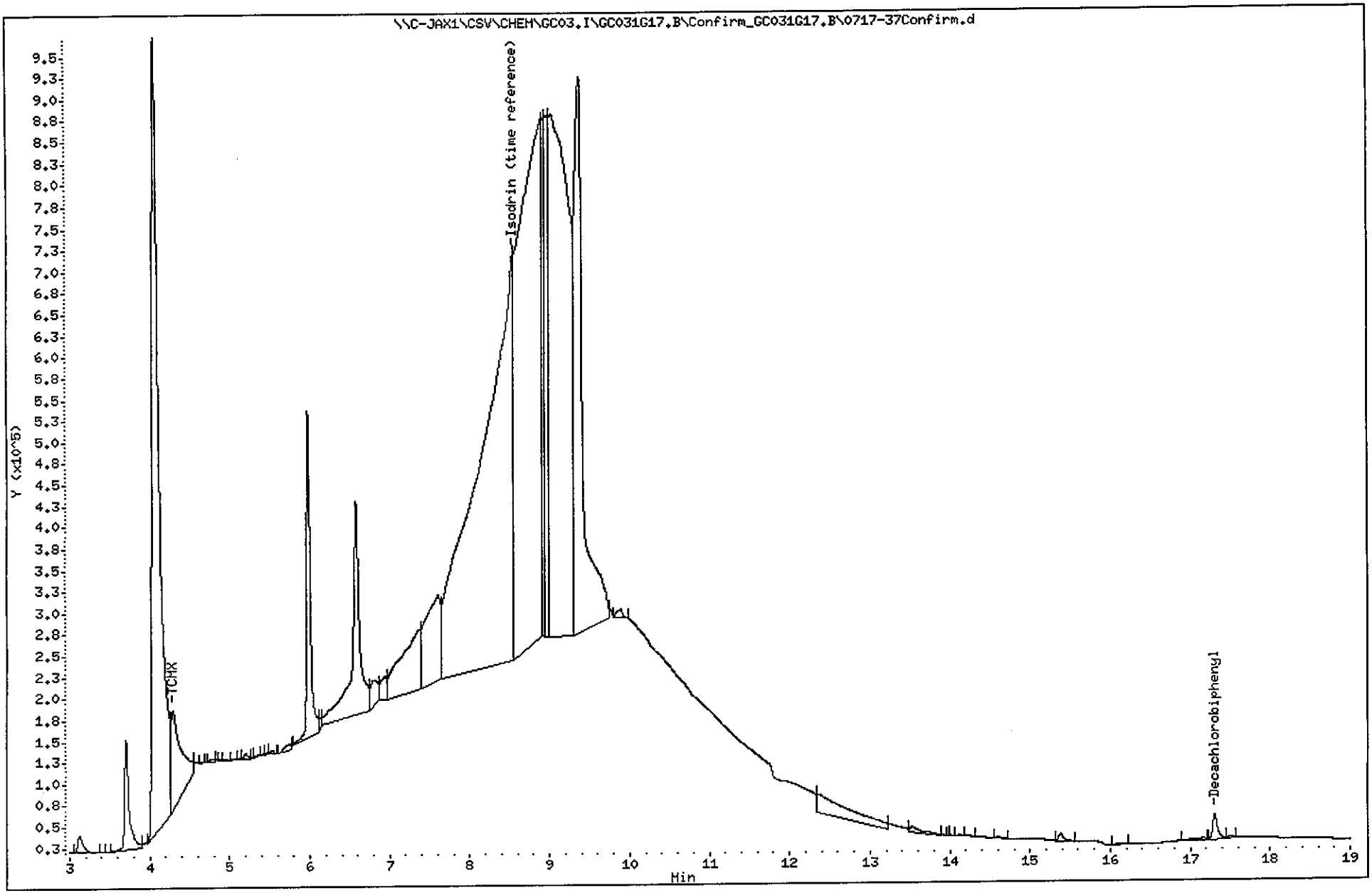
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-37Confirm.d
Date : 18-JUL-2001 05:29
Client ID: 007-DUP-Q2-01
Sample Info: J2102024-006
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-DUP-Q2-01

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-006 Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Isodrin (time refer*	1	9.117	9.110	0.007	2429143	0.500	0.500	
	2	8.553	8.533	0.020	13412275	0.500	0.500	0.00
TCMX	1	4.947	4.947	0.000	303212	0.087	0.087	
	* 2	4.293	4.297	0.004	1006542	0.061	0.061	42.62
Decachlorobiphenyl	1	17.443	17.437	0.006	94991	0.028	0.028	
	* 2	17.307	17.307	0.000	119098	0.006	0.006	366.67

* Column used for quantitation

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

007-EQB-Q2-01

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: J2102024-007

Sample wt/vol: 0.950 (g/L) L Lab File ID: 0717-38

Level: (low/med) LOW Date Received: 07/05/01

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/18/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.021	U
58-89-9	gamma-BHC (Lindane)	0.021	U
319-85-7	beta-BHC	0.021	U
76-44-8	Heptachlor	0.021	U
319-86-8	delta-BHC	0.021	U
309-00-2	Aldrin	0.021	U
1024-57-3	Heptachlor epoxide	0.021	U
5103-74-2	g-Chlordane	0.021	U
5103-71-9	a-Chlordane	0.021	U
72-55-9	4,4'-DDE	0.021	U
60-57-1	Dieldrin	0.021	U
72-20-8	Endrin	0.021	U
72-54-8	4,4'-DDD	0.021	U
33213-65-9	Endosulfan II	0.021	U
50-29-3	4,4'-DDT	0.021	U
7421-93-4	Endrin aldehyde	0.021	U
1031-07-8	Endosulfan sulfate	0.021	U
72-43-5	Methoxychlor	0.52	U
53494-70-5	Endrin ketone	0.021	U
959-98-8	Endosulfan I	0.021	U

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-38.D
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-38.D
Lab Smp Id: J2102024-007 Client Smp ID: 007-EQB-Q2-01
Inj Date : 18-JUL-2001 05:52
Operator : LC Inst ID: GC03.i
Smp Info : J2102024-007
Misc Info : EX210383; J2102024-007
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	0.950	Sample Volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 30 Isodrin (time reference)	9.133	9.110	(1.000)	457533	0.50000	
$ 1 TCMX	4.946	4.946	(0.542)	223463	0.34087	0.36
$ 22 Decachlorobiphenyl	17.420	17.436	(1.907)	132121	0.20988	0.22
2 alpha-BHC	Compound Not Detected.					
3 gamma-BHC (Lindane)	Compound Not Detected.					
4 beta-BHC	Compound Not Detected.					
6 delta-BHC	Compound Not Detected.					
5 Heptachlor	Compound Not Detected.					
7 Aldrin	Compound Not Detected.					
8 Heptachlor epoxide	Compound Not Detected.					
9 g-Chlordane	Compound Not Detected.					
10 a-Chlordane	Compound Not Detected.					
12 4,4'-DDE	Compound Not Detected.					
11 Endosulfan I	Compound Not Detected.					
13 Dieldrin	Compound Not Detected.					
14 Endrin	Compound Not Detected.					

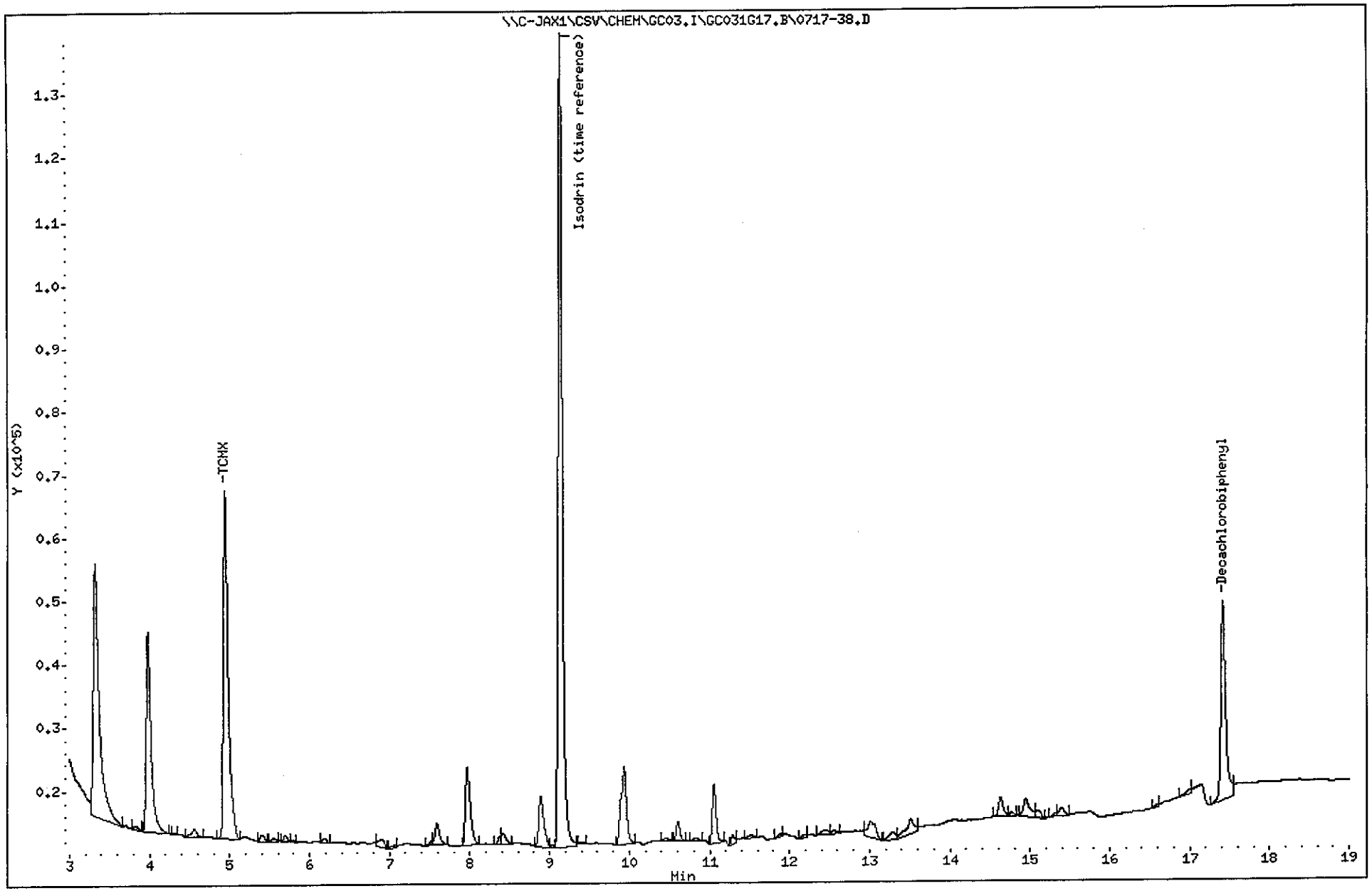
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-38.D
Report Date: 31-Jul-2001 12:17

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
15 4,4'-DDD	Compound Not Detected.					
16 Endosulfan II	Compound Not Detected.					
17 4,4'-DDT	Compound Not Detected.					
18 Endrin aldehyde	Compound Not Detected.					
20 Methoxychlor	Compound Not Detected.					
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-38.D
Date : 18-JUL-2001 05:52
Client ID: 007-EQB-Q2-01
Sample Info: J2102024-007
Purge Volume: 0.9
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-38Confirm.d
Report Date: 31-Jul-2001 12:18

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-38C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-38.D
Inj Date : 18-JUL-2001 05:52
Sample Info: J2102024-007
Misc Info : EX210383; J2102024-007
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

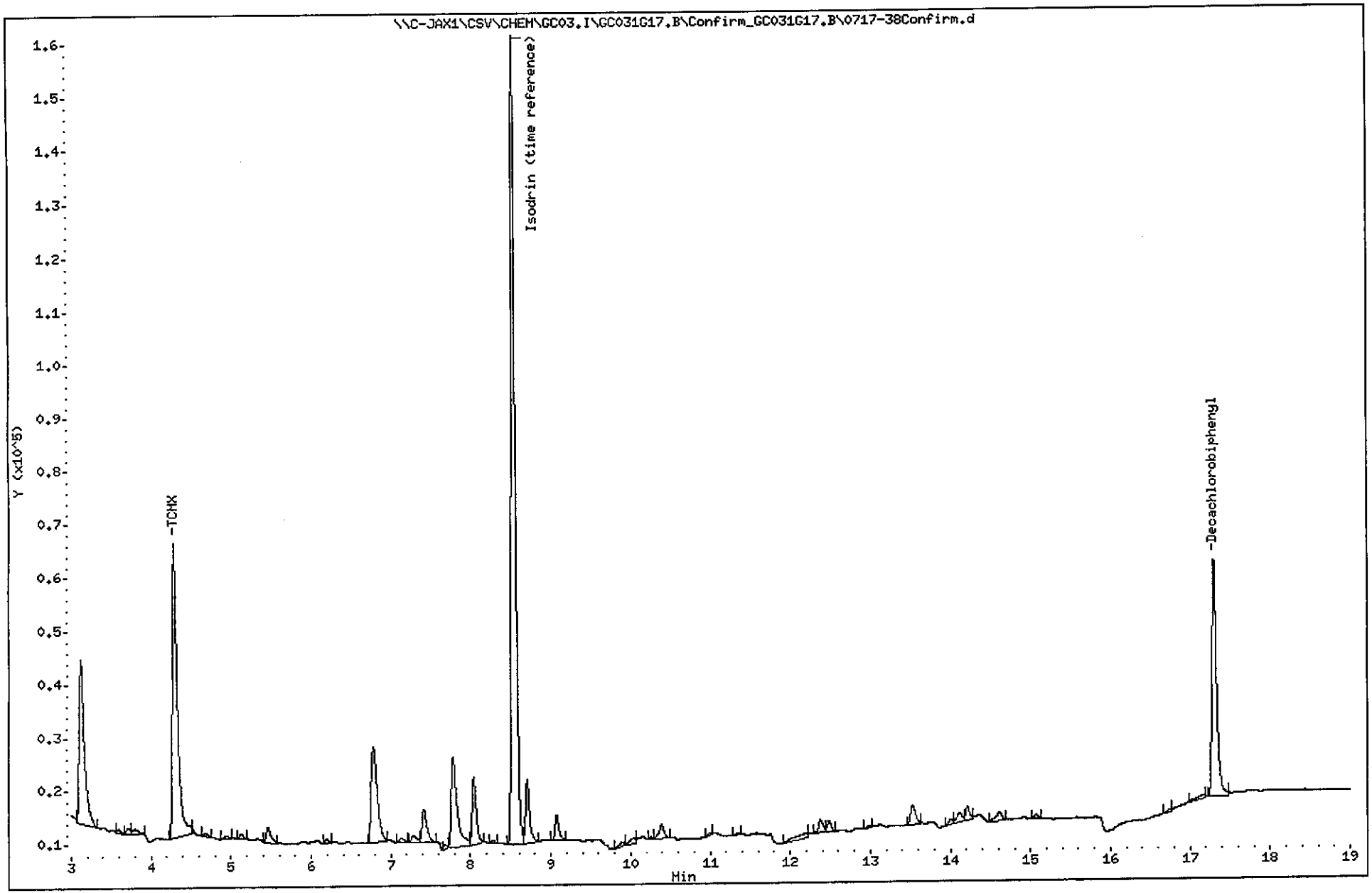
Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	0.950	Sample Volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.133	540125	457533	0.53	0.53		100.00	
TCMX	4.293	4.947	244915	223463	0.39	0.36		100.00	
Decachlorobiphenyl	17.303	17.420	170761	132121	0.21	0.22		100.00	
alpha-BHC		Compound Not Detected.							
gamma-BHC (Lindane)		Compound Not Detected.							
beta-BHC		Compound Not Detected.							
delta-BHC		Compound Not Detected.							
Heptachlor		Compound Not Detected.							
Aldrin		Compound Not Detected.							
Heptachlor epoxide		Compound Not Detected.							
g-Chlordane		Compound Not Detected.							
a-Chlordane		Compound Not Detected.							
4,4'-DDE		Compound Not Detected.							
Endosulfan I		Compound Not Detected.							
Dieldrin		Compound Not Detected.							
Endrin		Compound Not Detected.							
4,4'-DDD		Compound Not Detected.							
Endosulfan II		Compound Not Detected.							
4,4'-DDT		Compound Not Detected.							
Endrin aldehyde		Compound Not Detected.							
Methoxychlor		Compound Not Detected.							
Endosulfan sulfate		Compound Not Detected.							
Endrin ketone		Compound Not Detected.							

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-38Confirm.d
Date : 18-JUL-2001 05:52
Client ID: 007-EQB-Q2-01
Sample Info: J2102024-007
Purge Volume: 0.9
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

007-EQB-Q2-01

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: J2102024-007 Date(s) Analyzed: 07/18/01 07/18/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Isodrin (time refer*	1	9.133	9.110	0.023	457533	0.500	0.500	
	2	8.537	8.533	0.004	540125	0.500	0.500	0.00
TCMX *	1	4.947	4.947	0.000	223463	0.341	0.360	
	2	4.293	4.297	0.004	244915	0.368	0.390	8.33
Decachlorobiphenyl	1	17.420	17.437	0.017	132121	0.210	0.220	
	* 2	17.303	17.307	0.004	170761	0.204	0.210	4.76

* Column used for quantitation

page 01 of 01

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EX210383MB

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: EX210383

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-20

Level: (low/med) LOW Date Received: _____

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/17/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.020	U
58-89-9	gamma-BHC (Lindane)	0.020	U
319-85-7	beta-BHC	0.020	U
76-44-8	Heptachlor	0.020	U
319-86-8	delta-BHC	0.020	U
309-00-2	Aldrin	0.020	U
1024-57-3	Heptachlor epoxide	0.020	U
5103-74-2	g-Chlordane	0.020	U
5103-71-9	a-Chlordane	0.020	U
72-55-9	4,4'-DDE	0.020	U
60-57-1	Dieldrin	0.020	U
72-20-8	Endrin	0.020	U
72-54-8	4,4'-DDD	0.020	U
33213-65-9	Endosulfan II	0.020	U
50-29-3	4,4'-DDT	0.020	U
7421-93-4	Endrin aldehyde	0.020	U
1031-07-8	Endosulfan sulfate	0.020	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.020	U
959-98-8	Endosulfan I	0.020	U

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-20.D
Report Date: 31-Jul-2001 12:16

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-20.D
Lab Smp Id: EX210383 Client Smp ID: EX210383MB
Inj Date : 17-JUL-2001 22:55
Operator : LC Inst ID: GC03.i
Smp Info : EX210383-MB
Misc Info : EX210383; METHOD BLANK
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 20 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PESTPCB.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 30 Isodrin (time reference)	9.130	9.110	(1.000)	541911	0.50000	
$ 1 TCMX	4.956	4.946	(0.543)	153238	0.19736	0.20
$ 22 Decachlorobiphenyl	17.413	17.436	(1.907)	177438	0.23797	0.24
2 alpha-BHC	Compound Not Detected.					
3 gamma-BHC (Lindane)	Compound Not Detected.					
4 beta-BHC	Compound Not Detected.					
6 delta-BHC	Compound Not Detected.					
5 Heptachlor	Compound Not Detected.					
7 Aldrin	Compound Not Detected.					
8 Heptachlor epoxide	Compound Not Detected.					
9 g-Chlordane	Compound Not Detected.					
10 a-Chlordane	Compound Not Detected.					
12 4,4'-DDE	Compound Not Detected.					
11 Endosulfan I	Compound Not Detected.					
13 Dieldrin	Compound Not Detected.					
14 Endrin	Compound Not Detected.					

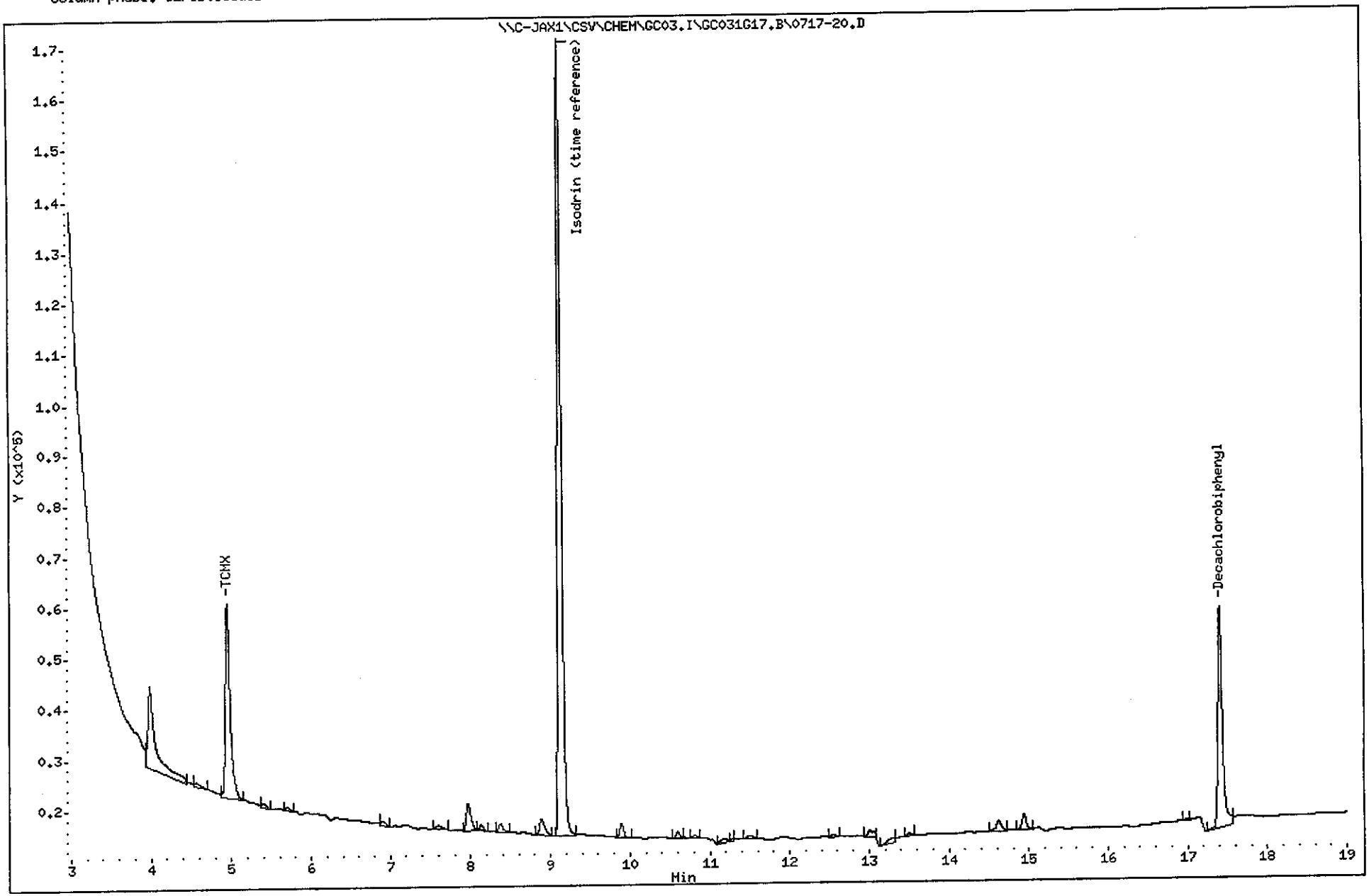
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-20.D
Report Date: 31-Jul-2001 12:16

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
15 4,4'-DDD	Compound Not Detected.					
16 Endosulfan II	Compound Not Detected.					
17 4,4'-DDT	Compound Not Detected.					
18 Endrin aldehyde	Compound Not Detected.					
20 Methoxychlor	Compound Not Detected.					
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					
23 Aroclor 1221	Compound Not Detected.					
24 Aroclor 1232	Compound Not Detected.					
25 Aroclor 1016/1242	Compound Not Detected.					
26 Aroclor 1248	Compound Not Detected.					
27 Aroclor 1254	Compound Not Detected.					
28 Aroclor 1260	Compound Not Detected.					
29 Toxaphene	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-20.D
Date : 17-JUL-2001 22:55
Client ID: EX210383MB
Sample Info: EX210383-MB
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-20Confirm.d
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-20C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-20.D
Inj Date : 17-JUL-2001 22:55
Sample Info: EX210383-MB
Misc Info : EX210383; METHOD BLANK
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PESTPCB.sub
Sub List #2 : PESTPCB.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.130	657240	541911	0.50	0.50		100.00	
TCMX	4.297	4.957	177999	153238	0.22	0.20		100.00	
Decachlorobiphenyl	17.303	17.413	236042	177438	0.23	0.24		100.00	
alpha-BHC		Compound Not Detected.							
gamma-BHC (Lindane)		Compound Not Detected.							
beta-BHC		Compound Not Detected.							
delta-BHC		Compound Not Detected.							
Heptachlor		Compound Not Detected.							
Aldrin		Compound Not Detected.							
Heptachlor epoxide		Compound Not Detected.							
g-Chlordane		Compound Not Detected.							
a-Chlordane		Compound Not Detected.							
4,4'-DDE		Compound Not Detected.							
Endosulfan I		Compound Not Detected.							
Dieldrin		Compound Not Detected.							
Endrin		Compound Not Detected.							
4,4'-DDD		Compound Not Detected.							
Endosulfan II		Compound Not Detected.							
4,4'-DDT		Compound Not Detected.							
Endrin aldehyde		Compound Not Detected.							
Methoxychlor		Compound Not Detected.							
Endosulfan sulfate		Compound Not Detected.							
Endrin ketone	14.217	0.000	10366	0	0.010	0.00		100.00(a)	
Aroclor 1221		Compound Not Detected.							
Aroclor 1232		Compound Not Detected.							
Aroclor 1016/1242		Compound Not Detected.							
Aroclor 1248		Compound Not Detected.							
Aroclor 1254		Compound Not Detected.							

Aroclor 1260	Compound Not Detected.
Toxaphene	Compound Not Detected.

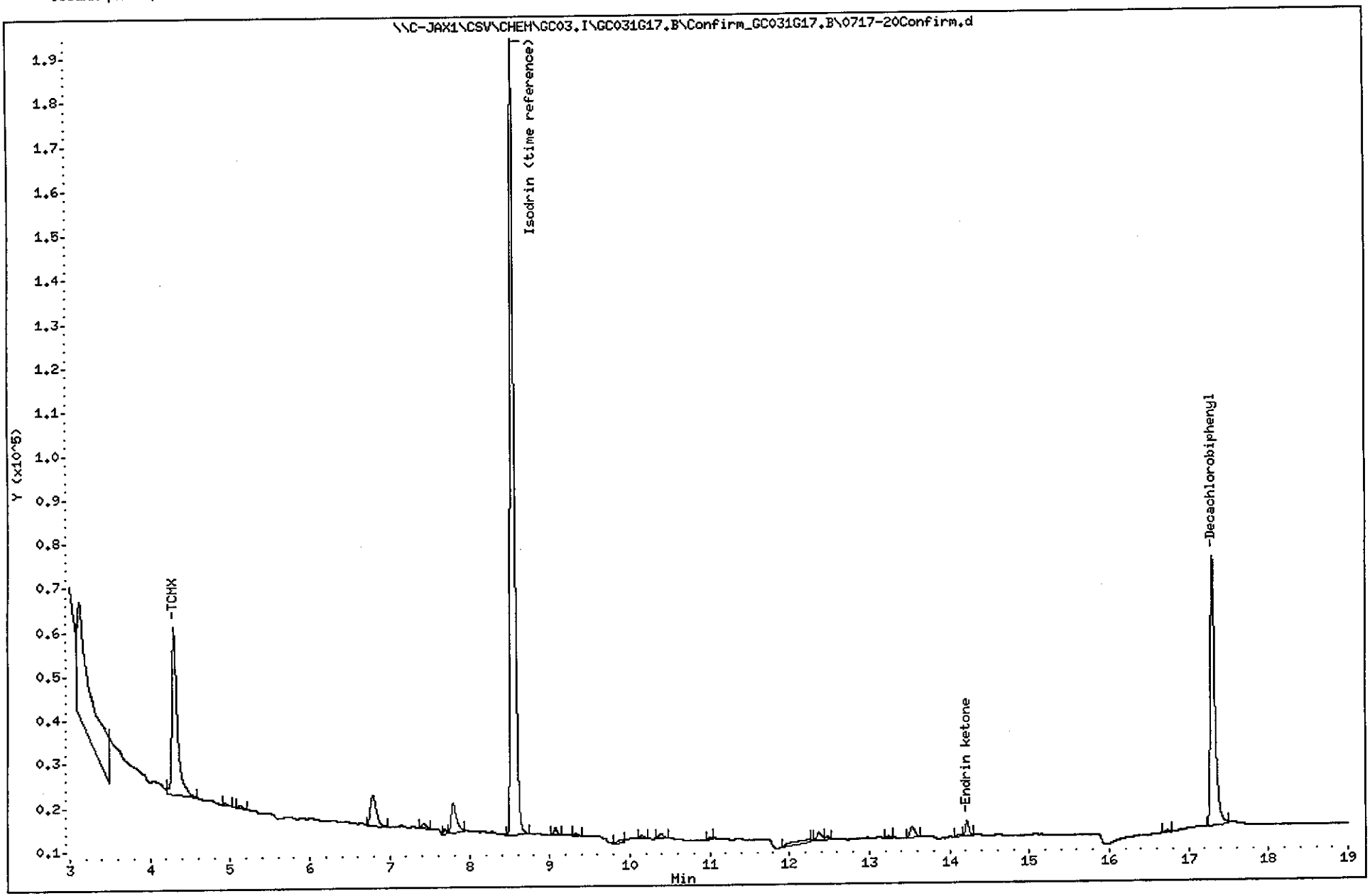
QC Flag Legend

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

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-20Confirm.d
Date : 17-JUL-2001 22:55
Client ID: EX210383MB
Sample Info: EX210383-MB
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

EX210383MB

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: EX210383 Date(s) Analyzed: 07/17/01 07/17/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Isodrin (time refer*	1	9.130	9.110	0.020	541911	0.500	0.500	
	2	8.537	8.533	0.004	657240	0.500	0.500	0.00
TCMX *	1	4.957	4.947	0.010	153238	0.197	0.200	
	2	4.297	4.297	0.000	177999	0.220	0.220	10.0
Decachlorobiphenyl	1	17.413	17.437	0.024	177438	0.238	0.240	
	* 2	17.303	17.307	0.004	236042	0.232	0.230	4.35

* Column used for quantitation

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EX210383MBLCS

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: EX210383LCS

Sample wt/vol: 1.000 (g/L) L Lab File ID: 0717-21

Level: (low/med) LOW Date Received: _____

% Moisture: _____ Decanted: (Y/N)___ Date Extracted: 07/10/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/17/01

Injection Volume: _____(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.38	
58-89-9	gamma-BHC (Lindane)	0.43	
319-85-7	beta-BHC	0.40	
76-44-8	Heptachlor	0.39	
319-86-8	delta-BHC	0.46	
309-00-2	Aldrin	0.33	
1024-57-3	Heptachlor epoxide	0.43	
5103-74-2	g-Chlordane	0.42	
5103-71-9	a-Chlordane	0.40	
72-55-9	4,4'-DDE	0.44	
60-57-1	Dieldrin	0.44	
72-20-8	Endrin	0.45	
72-54-8	4,4'-DDD	0.46	
33213-65-9	Endosulfan II	0.37	
50-29-3	4,4'-DDT	0.46	
7421-93-4	Endrin aldehyde	0.41	
1031-07-8	Endosulfan sulfate	0.49	
72-43-5	Methoxychlor	0.45	
53494-70-5	Endrin ketone	0.45	
959-98-8	Endosulfan I	0.27	P

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-21.D
Report Date: 31-Jul-2001 12:16

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-21.D
Lab Smp Id: EX210383LCS Client Smp ID: EX210383MBLCS
Inj Date : 17-JUL-2001 23:18
Operator : LC Inst ID: GC03.i
Smp Info : EX210383-LCS (PEST)
Misc Info : EX210383; 0.4 ppb 608/8081 LCS STD
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 21 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX009

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 30 Isodrin (time reference)	9.133	9.110	(1.000)	501966	0.50000	
$ 1 TCMX	4.956	4.946	(0.543)	262185	0.36454	0.36
$ 22 Decachlorobiphenyl	17.420	17.436	(1.907)	233471	0.33804	0.34
2 alpha-BHC	6.033	6.036	(0.661)	446880	0.45095	0.45
3 gamma-BHC (Lindane)	6.686	6.686	(0.732)	409810	0.43428	0.43
4 beta-BHC	6.856	6.856	(0.751)	207338	0.40827	0.41
6 delta-BHC	7.253	7.253	(0.794)	344335	0.49973	0.50
5 Heptachlor	7.706	7.696	(0.844)	370733	0.40613	0.41
7 Aldrin	8.376	8.370	(0.917)	368521	0.39033	0.39
8 Heptachlor epoxide	9.726	9.713	(1.065)	345094	0.43053	0.43
9 g-Chlordane	10.006	9.993	(1.096)	360493	0.42935	0.43
10 a-Chlordane	10.306	10.290	(1.128)	360642	0.43558	0.44
12 4,4'-DDE	10.443	10.426	(1.143)	347820	0.45024	0.45
11 Endosulfan I	10.633	10.620	(1.164)	269745	0.36224	0.36
13 Dieldrin	11.176	11.166	(1.224)	344301	0.44386	0.44
14 Endrin	11.720	11.713	(1.283)	301437	0.45336	0.45

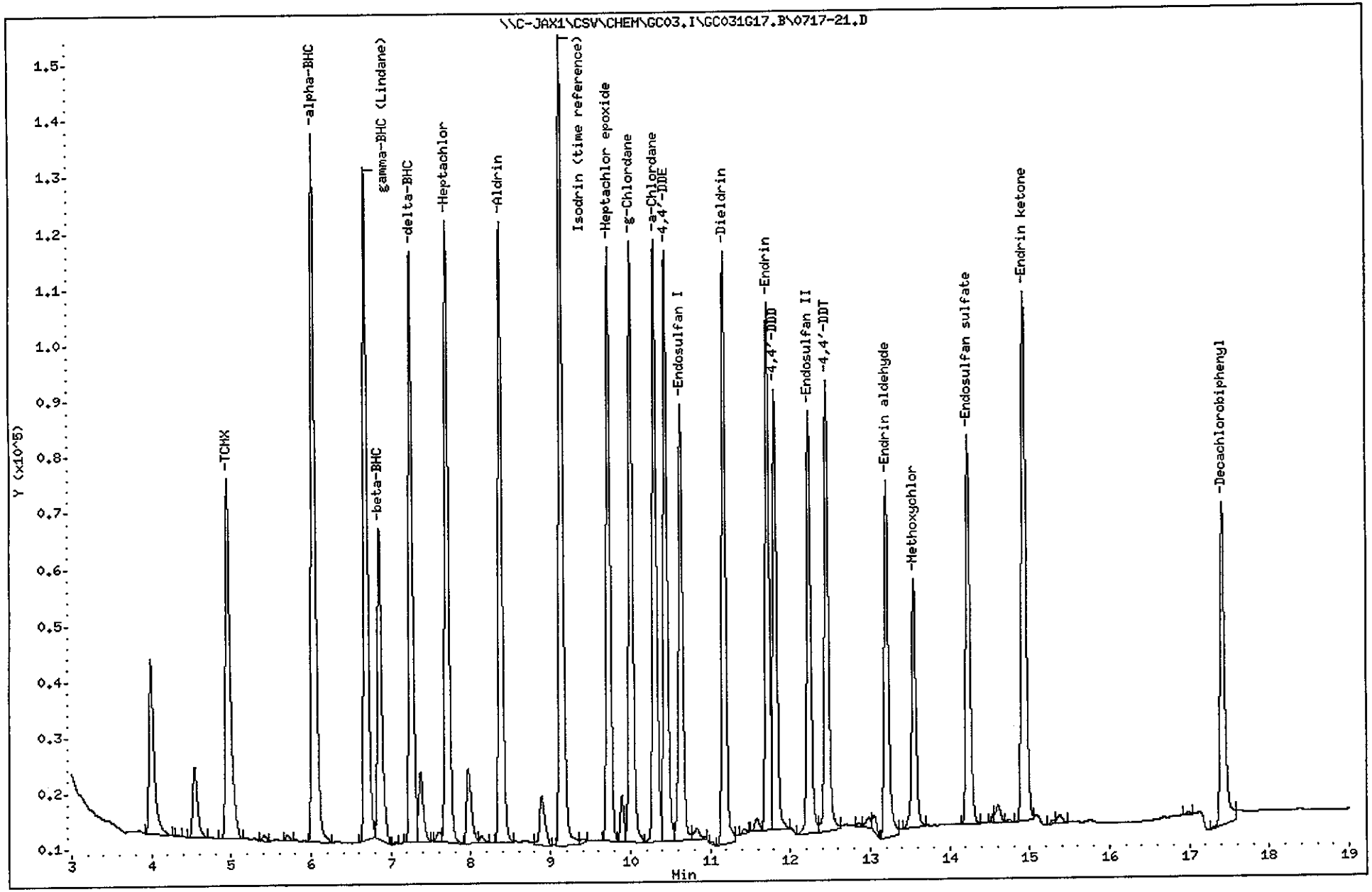
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-21.D
Report Date: 31-Jul-2001 12:16

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
15 4,4'-DDD	11.813	11.806	(1.293)	270582	0.45720	0.46
16 Endosulfan II	12.236	12.233	(1.340)	265283	0.38430	0.38
17 4,4'-DDT	12.456	12.443	(1.364)	273712	0.48513	0.48
18 Endrin aldehyde	13.203	13.210	(1.446)	232095	0.41169	0.41
20 Methoxychlor	13.550	13.553	(1.484)	157348	0.45039	0.45
19 Endosulfan sulfate	14.230	14.240	(1.558)	247228	0.51306	0.51
21 Endrin ketone	14.930	14.936	(1.635)	364727	0.44626	0.45

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-21.D
Date : 17-JUL-2001 23:18
Client ID: EX210383MBLCS
Sample Info: EX210383-LCS (PEST)
Purge Volume: 1.0
Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-21Confirm.d
Report Date: 31-Jul-2001 12:17

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-21C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-21.D
Inj Date : 17-JUL-2001 23:18
Sample Info: EX210383-LCS (PEST)
Misc Info : EX210383; 0.4 ppb 608/8081 LCS STD
Cal Date : 20-JUL-2001 09:04
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Extract volume (mL)
Vo	1.000	Sample Volume (L)

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.133	612742	501966	0.50	0.50		100.00	
TCMX	4.293	4.957	293600	262185	0.39	0.36		100.00	
Decachlorobiphenyl	17.303	17.420	328319	233471	0.34	0.34		100.00	
alpha-BHC	5.380	6.033	475463	446880	0.38	0.45		100.00	
gamma-BHC (Lindane)	6.080	6.687	441996	409810	0.44	0.43		100.00	
beta-BHC	6.237	6.857	216356	207338	0.40	0.41		100.00	
delta-BHC	6.847	7.253	413864	344335	0.46	0.50		100.00	
Heptachlor	6.990	7.707	436405	370733	0.39	0.41		100.00	
Aldrin	7.680	8.377	359230	368521	0.33	0.39		100.00	
Heptachlor epoxide	8.917	9.727	418027	345094	0.43	0.43		100.00	
g-Chlordane	9.330	10.007	434880	360493	0.42	0.43		100.00	
a-Chlordane	9.653	10.307	385991	360642	0.40	0.44		100.00	
4,4'-DDE	10.027	10.443	400410	347820	0.44	0.45		100.00	
Endosulfan I	9.787	10.633	245488	269745	0.27	0.36		100.00	
Dieldrin	10.400	11.177	443273	344301	0.48	0.44		100.00	
Endrin	11.090	11.720	411799	301437	0.49	0.45		100.00	
4,4'-DDD	11.330	11.813	322499	270582	0.51	0.46		100.00	

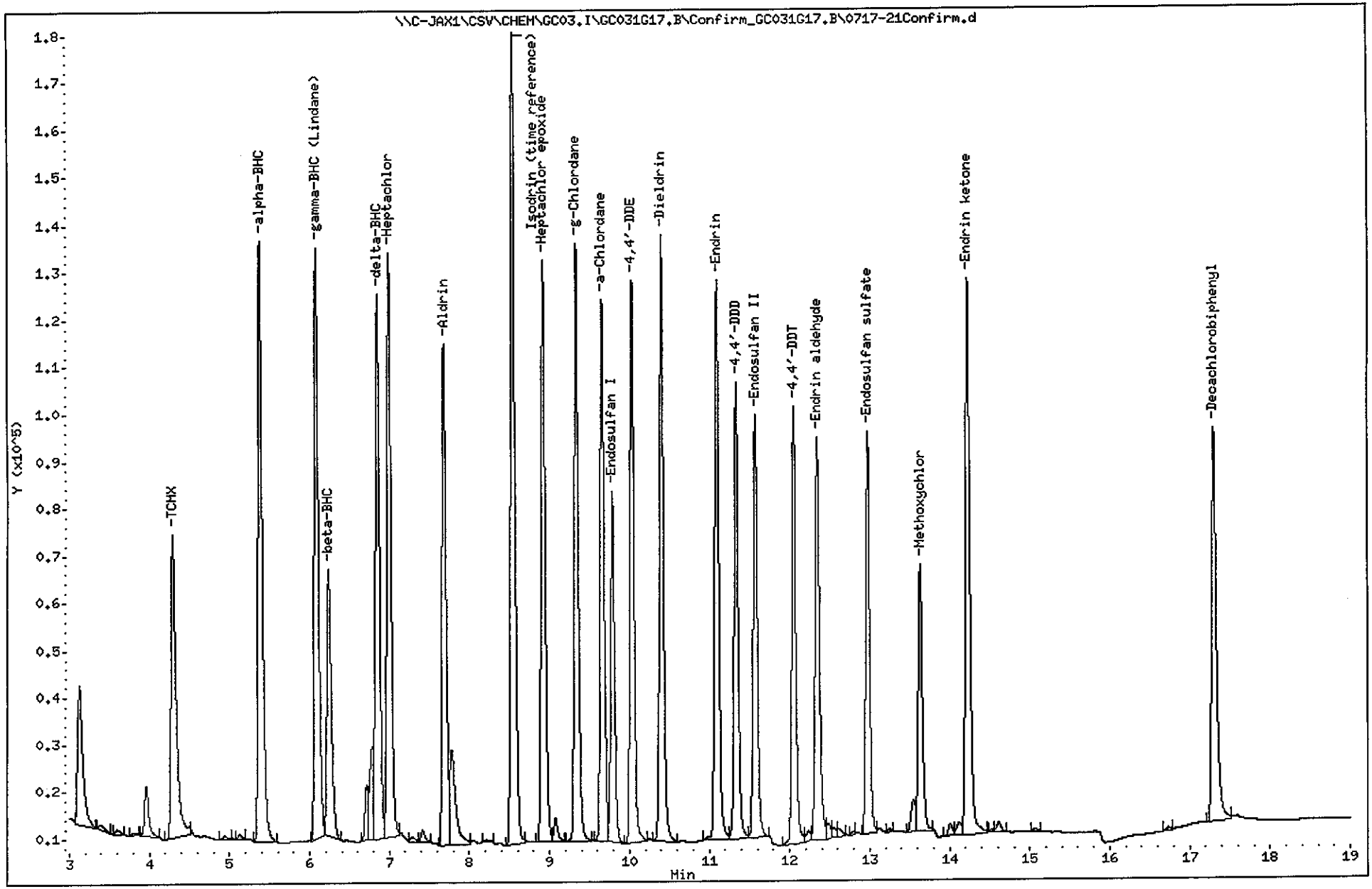
Data File: 0717-21Confirm.d
Report Date: 31-Jul-2001 12:17

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio	Review Cod
Endosulfan II	11.567	12.237	304505	265283	0.37	0.38		100.00	
4,4'-DDT	12.047	12.457	313276	273712	0.46	0.48		100.00	
Endrin aldehyde	12.337	13.203	316251	232095	0.48	0.41		100.00	
Methoxychlor	13.630	13.550	199560	157348	0.49	0.45		100.00	
Endosulfan sulfate	12.970	14.230	284979	247228	0.49	0.51		100.00	
Endrin ketone	14.220	14.930	444835	364727	0.48	0.45		100.00	

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-21Confirm.d
Date : 17-JUL-2001 23:18
Client ID: EX210383MBLCS
Sample Info: EX210383-LCS (PEST)
Purge Volume: 1.0
Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

EX210383MBLCS

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: EX210383LCS Date(s) Analyzed: 07/17/01 07/17/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
alpha-BHC	1	6.033	6.037	0.004	446880	0.451	0.450	
	* 2	5.380	5.380	0.000	475463	0.384	0.380	18.42
gamma-BHC (Lindane)	* 1	6.687	6.687	0.000	409810	0.434	0.430	
	2	6.080	6.080	0.000	441996	0.436	0.440	2.32
beta-BHC	1	6.857	6.857	0.000	207338	0.408	0.410	
	* 2	6.237	6.237	0.000	216356	0.400	0.400	2.50
Heptachlor	1	7.707	7.697	0.010	370733	0.406	0.410	
	* 2	6.990	6.987	0.003	436405	0.390	0.390	5.13
delta-BHC	1	7.253	7.253	0.000	344335	0.500	0.500	
	* 2	6.847	6.850	0.003	413864	0.462	0.460	8.70
Aldrin	1	8.377	8.370	0.007	368521	0.390	0.390	
	* 2	7.680	7.680	0.000	359230	0.327	0.330	18.18
Heptachlor epoxide	* 1	9.727	9.713	0.014	345094	0.430	0.430	
	2	8.917	8.917	0.000	418027	0.435	0.430	0.00
g-Chlordane	1	10.007	9.993	0.014	360493	0.429	0.430	
	* 2	9.330	9.333	0.003	434880	0.424	0.420	2.38
a-Chlordane	1	10.307	10.290	0.017	360642	0.436	0.440	
	* 2	9.653	9.657	0.004	385991	0.396	0.400	10.0
4,4'-DDE	1	10.443	10.427	0.016	347820	0.450	0.450	
	* 2	10.027	10.030	0.003	400410	0.437	0.440	2.27
Dieldrin	* 1	11.177	11.167	0.010	344301	0.444	0.440	
	2	10.400	10.400	0.000	443273	0.478	0.480	9.09
Endrin	* 1	11.720	11.713	0.007	301437	0.453	0.450	
	2	11.090	11.090	0.000	411799	0.490	0.490	8.89
4,4'-DDD	* 1	11.813	11.807	0.006	270582	0.457	0.460	
	2	11.330	11.333	0.003	322499	0.508	0.510	10.87

* Column used for quantitation

EPA SAMPLE NO.

SEMIVOLATILE DUAL COLUMN CONFIRMATION CHECK

EX210383MBLCS

Lab Name: Columbia Analytical Servi Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.:NA

Lab Sample ID: EX210383LCS Date(s) Analyzed: 07/17/01 07/17/01

Instrument ID (1): GC03 Instrument ID (2): GC03

GC Column(1): CLPESTICIDESID: 0.32(mm) GC Column(2): CLPESTICIDES2ID: 0.32(mm)

COMPOUND	COL	RT	EXP RT	DIFF	AREA	AMOUNT	CONC	%D
Endosulfan II	1	12.237	12.233	0.004	265283	0.384	0.380	
	* 2	11.567	11.573	0.006	304505	0.368	0.370	2.70
4,4'-DDT	1	12.457	12.443	0.014	273712	0.485	0.480	
	* 2	12.047	12.043	0.004	313276	0.458	0.460	4.35
Endrin aldehyde	* 1	13.203	13.210	0.007	232095	0.412	0.410	
	2	12.337	12.340	0.003	316251	0.477	0.480	17.07
Endosulfan sulfate	1	14.230	14.240	0.010	247228	0.513	0.510	
	* 2	12.970	12.970	0.000	284979	0.494	0.490	4.08
Methoxychlor	* 1	13.550	13.553	0.003	157348	0.450	0.450	
	2	13.630	13.627	0.003	199560	0.489	0.490	8.89
Endrin ketone	* 1	14.930	14.937	0.007	364727	0.446	0.450	
	2	14.220	14.220	0.000	444835	0.480	0.480	6.67
Endosulfan I	1	10.633	10.620	0.013	269745	0.362	0.360	
	* 2	9.787	9.790	0.003	245488	0.266	0.270	33.33
Isodrin (time refer	* 1	9.133	9.110	0.023	501966	0.500	0.500	
	2	8.537	8.533	0.004	612742	0.500	0.500	0.00
TCMX	* 1	4.957	4.947	0.010	262185	0.364	0.360	
	2	4.293	4.297	0.004	293600	0.388	0.390	8.33
Decachlorobiphenyl	* 1	17.420	17.437	0.017	233471	0.338	0.340	
	2	17.303	17.307	0.004	328319	0.346	0.340	0.00

* Column used for quantitation

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

QC Summary

FORM 2
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

GC Column(1):CLPESTICIDES ID:0.32(mm) GC Column(2):CLPESTICIDES2ID:0.32(mm)

	SAMPLE NO.	S1 1 #	S1 2 #	S2 1 (DCB) #	S2 2 (DCB) #	S3 1 #	S3 2 #	S4 1 #	S4 2 #	TOT OUT
01	EX210383MB	50	55	60	58					
02	EX210383MBLC	90	98	85	85					
03	007-MW03S-Q2	88	90	78	78					
04	007-MW03S-Q2	85	85	80	80					
05	007-MW03S-Q2	82	80	80	80					
06	007-MW01S-Q2	65	88	58	10*					
07	007-MW04S-Q2	350*	0*	30	0*					
08	007-MW05S-Q2	50	40	45	3*					
09	007-MW08S-Q2	58	65	62	62					
10	007-DUP-Q2-0	22*	15*	7*	1*					
11	007-EQB-Q2-0	86	93	52	50					
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

		QC LIMITS	
S1	= TCMX	(26-124)	
S2 (DCB)	= Decachlorobiphenyl	(26-124)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 3
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix Spike - Sample No.: 007-MW03S-Q

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
alpha-BHC	0.40	0.00	0.34	85	45-144
gamma-BHC (Lindane)	0.40	0.00	0.39	98	53-141
beta-BHC	0.40	0.00	0.37	92	44-152
Heptachlor	0.40	0.00	0.36	90	44-142
delta-BHC	0.40	0.00	0.42	105	39-197
Aldrin	0.40	0.00	0.30	80	39-143
Heptachlor epoxide	0.40	0.00	0.38	95	50-142
g-Chlordane	0.40	0.00	0.38	95	50-150
a-Chlordane	0.40	0.00	0.36	90	50-150
4,4'-DDE	0.40	0.00	0.39	98	58-156
Dieldrin	0.40	0.00	0.40	100	44-170
Endrin	0.40	0.00	0.40	100	54-157
4,4'-DDD	0.40	0.00	0.39	98	43-189
Endosulfan II	0.40	0.00	0.33	82	53-155
4,4'-DDT	0.40	0.00	0.40	100	44-163
Endrin aldehyde	0.40	0.00	0.37	92	19-161
Endosulfan sulfate	0.40	0.00	0.44	110	57-152
Methoxychlor	0.40	0.00	0.41	102	36-220
Endrin ketone	0.40	0.00	0.40	100	50-150
Endosulfan I	0.40	0.00	0.24	60	50-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix Spike - Sample No.: 007-MW03S-Q

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	0.40	0.33	82	3	30	45-144
gamma-BHC (Lindane)	0.40	0.38	95	3	30	53-141
beta-BHC	0.40	0.36	90	2	30	44-152
Heptachlor	0.40	0.35	88	3	30	44-142
delta-BHC	0.40	0.41	102	2	30	39-197
Aldrin	0.40	0.28	70	7	30	39-143
Heptachlor epoxide	0.40	0.37	92	3	30	50-142
g-Chlordane	0.40	0.36	90	5	30	50-150
a-Chlordane	0.40	0.34	85	6	30	50-150
4,4'-DDE	0.40	0.36	90	8	30	58-156
Dieldrin	0.40	0.38	95	5	30	44-170
Endrin	0.40	0.38	95	5	30	54-157
4,4'-DDD	0.40	0.37	92	6	30	43-189
Endosulfan II	0.40	0.32	80	2	30	53-155
4,4'-DDT	0.40	0.38	95	5	30	44-163
Endrin aldehyde	0.40	0.36	90	2	30	19-161
Endosulfan sulfate	0.40	0.42	105	5	30	57-152
Methoxychlor	0.40	0.38	95	7	30	36-220
Endrin ketone	0.40	0.38	95	5	30	50-150
Endosulfan I	0.40	0.23	58	4	30	50-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 20 outside limits
Spike Recovery: 0 out of 40 outside limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Matrix Spike - Sample No.: EX210383MB

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
alpha-BHC	0.40	0.00	0.38	95	45-144
gamma-BHC (Lindane)	0.40	0.00	0.43	108	53-141
beta-BHC	0.40	0.00	0.40	100	44-152
Heptachlor	0.40	0.00	0.39	98	44-142
delta-BHC	0.40	0.00	0.46	115	39-197
Aldrin	0.40	0.00	0.33	82	39-143
Heptachlor epoxide	0.40	0.00	0.43	108	50-142
g-Chlordane	0.40	0.00	0.42	105	50-150
a-Chlordane	0.40	0.00	0.40	100	50-150
4,4'-DDE	0.40	0.00	0.44	110	58-156
Dieldrin	0.40	0.00	0.44	110	44-170
Endrin	0.40	0.00	0.45	112	54-157
4,4'-DDD	0.40	0.00	0.46	115	43-189
Endosulfan II	0.40	0.00	0.37	92	53-155
4,4'-DDT	0.40	0.00	0.46	115	44-163
Endrin aldehyde	0.40	0.00	0.41	102	19-161
Endosulfan sulfate	0.40	0.00	0.49	122	57-152
Methoxychlor	0.40	0.00	0.45	112	36-220
Endrin ketone	0.40	0.012	0.45	110	50-150
Endosulfan I	0.40	0.00	0.27	68	50-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 20 outside limits

COMMENTS: _____

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

EX210383MB

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Lab File ID: 0717-20 Lab Sample ID: EX210383

Instrument ID: GC03 Matrix: (soil/water) WATER

Level: (low/med) LOW Date Extracted:

Date Analyzed (1): 07/17/01 Date Analyzed (2): 07/17/01

Time Analyzed (1): 2255 Time Analyzed (2): 2255

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EX210383MBLC	EX210383LCS	0717-21	07/17/01	07/17/01
02	007-MW03S-Q2	J2102024-002MS	0717-24	07/18/01	07/18/01
03	007-MW03S-Q2	J2102024-002MS	0717-25	07/18/01	07/18/01
04	007-MW03S-Q2	J2102024-002	0717-26	07/18/01	07/18/01
05	007-MW01S-Q2	J2102024-001	0717-33	07/18/01	07/18/01
06	007-MW04S-Q2	J2102024-003	0717-34	07/18/01	07/18/01
07	007-MW05S-Q2	J2102024-004	0717-35	07/18/01	07/18/01
08	007-MW08S-Q2	J2102024-005	0717-36	07/18/01	07/18/01
09	007-DUP-Q2-0	J2102024-006	0717-37	07/18/01	07/18/01
10	007-EQB-Q2-0	J2102024-007	0717-38	07/18/01	07/18/01
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

COMMENTS:

FORM IV SV

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-03.D
Report Date: 18-Jul-2001 12:54

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-03.D
Lab Smp Id: J210717-DEG CHK Client Smp ID: J210717-DEG CHK
Inj Date : 17-JUL-2001 16:20
Operator : LC Inst ID: GC03.i
Smp Info : J210717-DEG CHK STD
Misc Info : ;0.05 ug/mL DEG CHK STD (01-SVA-0485)
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 18-Jul-2001 12:10 lcarley Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX-TRG-01

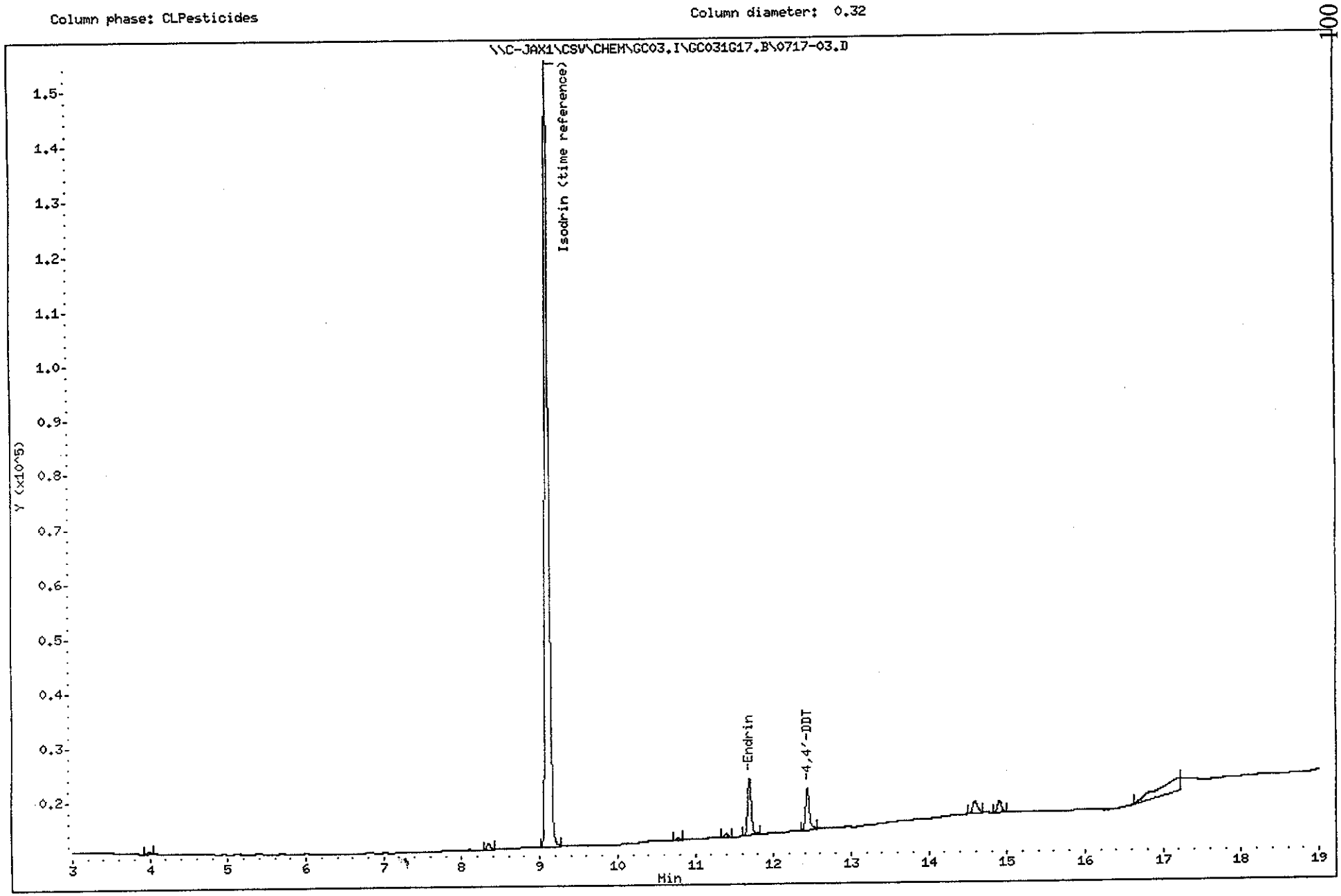
Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
* 30 Isodrin (time reference)	9.100	9.096	(1.000)	486531	0.50000	
$ 1 TCMX	Compound Not Detected.					
$ 22 Decachlorobiphenyl	Compound Not Detected.					
2 alpha-BHC	Compound Not Detected.					
3 gamma-BHC (Lindane)	Compound Not Detected.					
4 beta-BHC	Compound Not Detected.					
6 delta-BHC	Compound Not Detected.					
5 Heptachlor	Compound Not Detected.					
7 Aldrin	Compound Not Detected.					
8 Heptachlor epoxide	Compound Not Detected.					
9 g-Chlordane	Compound Not Detected.					
10 a-Chlordane	Compound Not Detected.					
12 4,4'-DDE	Compound Not Detected.					
11 Endosulfan I	Compound Not Detected.					
13 Dieldrin	Compound Not Detected.					
14 Endrin	11.693	11.690	(1.285)	34586	0.05367	0.054
15 4,4'-DDD	Compound Not Detected.					
16 Endosulfan II	Compound Not Detected.					
17 4,4'-DDT	12.436	12.433	(1.367)	25398	0.04644	0.046
18 Endrin aldehyde	Compound Not Detected.					
20 Methoxychlor	Compound Not Detected.					
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-03.D
Date : 17-JUL-2001 16:20
Client ID: J210717-DEG CHK
Sample Info: J210717-DEG CHK STD

Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-03Confirm.d
Report Date: 18-Jul-2001 12:53

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-03C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-03.D
Inj Date : 17-JUL-2001 16:20
Sample Info: J210717-DEG CHK STD
Misc Info : ;0.05 ug/mL DEG CHK STD (01-SVA-0485)
Cal Date : 18-JUL-2001 12:09
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

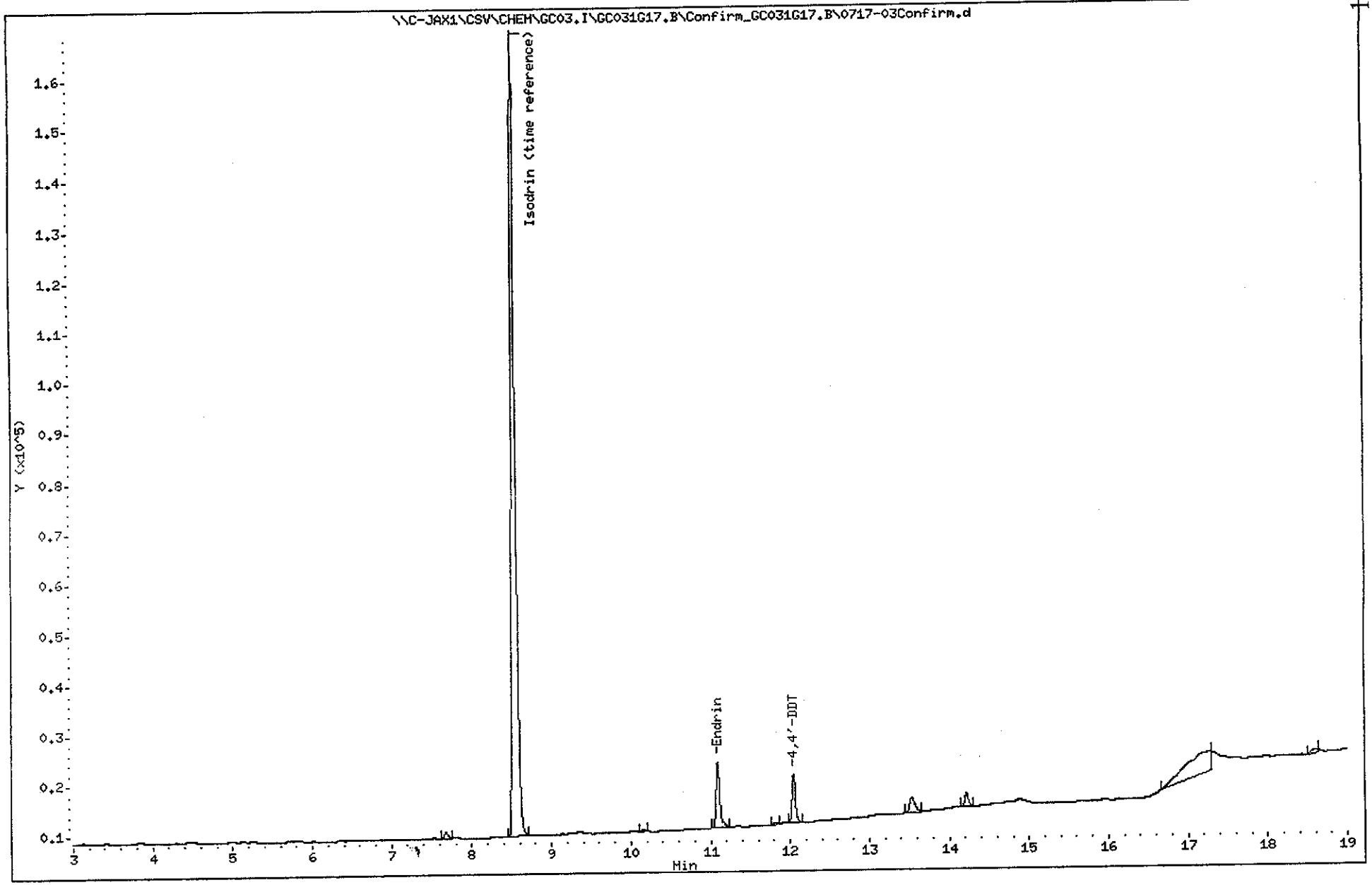
Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.100	571964	486531	0.50	0.50		100.00	
TCMX		Compound Not Detected.							
Decachlorobiphenyl		Compound Not Detected.							
alpha-BHC		Compound Not Detected.							
gamma-BHC (Lindane)		Compound Not Detected.							
beta-BHC		Compound Not Detected.							
delta-BHC		Compound Not Detected.							
Heptachlor		Compound Not Detected.							
Aldrin		Compound Not Detected.							
Heptachlor epoxide		Compound Not Detected.							
g-Chlordane		Compound Not Detected.							
a-Chlordane		Compound Not Detected.							
4,4'-DDE		Compound Not Detected.							
Endosulfan I		Compound Not Detected.							
Dieldrin		Compound Not Detected.							
Endrin	11.087	11.693	41912	34586	0.053	0.054		100.00	
4,4'-DDD		Compound Not Detected.							
Endosulfan II		Compound Not Detected.							
4,4'-DDT	12.043	12.437	28017	25398	0.044	0.046		100.00	
Endrin aldehyde		Compound Not Detected.							
Methoxychlor		Compound Not Detected.							
Endosulfan sulfate		Compound Not Detected.							
Endrin ketone		Compound Not Detected.							

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-03Confirm.d
Date : 17-JUL-2001 16:20
Client ID: J210717-DEG CHK
Sample Info: J210717-DEG CHK STD

Column phase: CLPesticides2

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



FORM 8
SEMIVOLATILE ANALYTICAL SEQUENCE

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

GC Column: CLPESTICIDES ID: 0.32(mm) Init. Calib. Date(s): 07/17/01 07/17/01

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.95 DCB: 17.44

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	J210717-IB1	J210717-IB1	07/17/01	1557		
02	J210717-DEG	J210717-DEG	07/17/01	1620		
03	J210717-CAL	J210717-CAL	07/17/01	1644	4.93	17.40
04	J210717-CAL	J21071-CAL #	07/17/01	1707	4.94	17.40
05	J210717-CAL	J210717-CAL	07/17/01	1730	4.94	17.40
06	J210717-CAL	J210717-CAL	07/17/01	1753	4.94	17.40
07	J210717-CAL	J210717-CAL	07/17/01	1817	4.94	17.41
08	J210717-CAL	J210717-CAL	07/17/01	1840	4.94	
09	EX210383MB	EX210383	07/17/01	2255	4.96	17.41
10	EX210383MBLC	EX210383LCS	07/17/01	2318	4.96	17.42
11	007-MW03S-Q2	J2102024-002	07/18/01	0028	4.95	17.41
12	007-MW03S-Q2	J2102024-002	07/18/01	0051	4.95	17.43
13	007-MW03S-Q2	J2102024-002	07/18/01	0114	4.94	17.43
14	J210717-CC1	J210717-CC1	07/18/01	0310	4.96	17.43
15	007-MW01S-Q2	J2102024-001	07/18/01	0356	4.95	17.41
16	007-MW04S-Q2	J2102024-003	07/18/01	0419	4.97	17.43
17	007-MW05S-Q2	J2102024-004	07/18/01	0442	4.94	17.44
18	007-MW08S-Q2	J2102024-005	07/18/01	0506	4.96	17.40
19	007-DUP-Q2-0	J2102024-006	07/18/01	0529	4.95	17.44
20	007-EQB-Q2-0	J2102024-007	07/18/01	0552	4.95	17.42
21	J210717-CC2	J210717-CC2	07/18/01	0725	4.96	17.43
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

	QC LIMITS
S1 = TCMX	(+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.05 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE ANALYTICAL SEQUENCE

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

GC Column: CLPESTICIDES2 ID: 0.32(mm) Init. Calib. Date(s): 07/17/01 07/17/01

Instrument ID: GC03

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 4.30 DCB: 17.31

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	J210717-IB1	J210717-IB1	07/17/01	1557		17.27
02	J210717-DEG	J210717-DEG	07/17/01	1620		
03	J210717-CAL	J210717-CAL	07/17/01	1644	4.29	17.30
04	J210717-CAL	J21071-CAL #	07/17/01	1707	4.29	17.30
05	J210717-CAL	J210717-CAL	07/17/01	1730	4.29	17.30
06	J210717-CAL	J210717-CAL	07/17/01	1753	4.29	17.30
07	J210717-CAL	J210717-CAL	07/17/01	1817	4.29	17.30
08	J210717-CAL	J210717-CAL	07/17/01	1840	4.29	17.30
09	EX210383MB	EX210383	07/17/01	2255	4.30	17.30
10	EX210383MBLC	EX210383LCS	07/17/01	2318	4.29	17.30
11	007-MW03S-Q2	J2102024-002	07/18/01	0028	4.29	17.30
12	007-MW03S-Q2	J2102024-002	07/18/01	0051	4.29	17.30
13	007-MW03S-Q2	J2102024-002	07/18/01	0114	4.30	17.30
14	J210717-CC1	J210717-CC1	07/18/01	0310	4.29	17.30
15	007-MW01S-Q2	J2102024-001	07/18/01	0356	4.29	17.30
16	007-MW04S-Q2	J2102024-003	07/18/01	0419	4.29	17.30
17	007-MW05S-Q2	J2102024-004	07/18/01	0442	4.29	17.30
18	007-MW08S-Q2	J2102024-005	07/18/01	0506	4.29	17.30
19	007-DUP-Q2-0	J2102024-006	07/18/01	0529	4.29	17.31
20	007-EQB-Q2-0	J2102024-007	07/18/01	0552	4.29	17.30
21	J210717-CC2	J210717-CC2	07/18/01	0725	4.29	17.30
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

	QC LIMITS
S1 = TCMX	(+/- 0.09 MINUTES)
DCB = Decachlorobiphenyl	(+/- 0.35 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

CAS Jacksonville
EXTRACTION BENCH WORKSHEET

Prep technique: 3510 Analysis method: 8081/8082 Matrix: waters

Sample ID	Initial amt.	Final vol.	pH Initial	pH Adj 1	pH Adj 2	Spike volumes Surr	Spike	Witness	Emulsion	Comments
Method blank	1000mL	1.0 mL				1mL		EL		
LCS 8081							1mL			
LCS 8082							1mL			
MS 8081 2024-2							1mL			
MSD 8081 2024-2							1mL			
1. LCSD 8082							1mL			
2. 2024-1									mod	
3. -2										
4. -3									mod	
5. -4										
6. -5										
7. -6									mod	
8. -7	950mL								mod	
9. 1961-1	100mL								mod	
10. 2055-1	100mL									
11. 2017-1	100mL									
12. 2011-1	100mL									
13. 2064-5	870mL									
14.										
15.										
16.										
17.										
18.										
19.										
20.										

General comments: MB and 2024-6 leaked during rotations (a lot) - 1961-1 leaked

SOLVENTS		
Extraction	Source	Lot
CH_2Cl_2	EMScience	41008
Exchange	Source	Lot

SPIKE SOLUTIONS IDs
Surrogate
01-SVP-0294
LCS/MS
8081 01-SVP-0276 8082 01-SVP-0299

REAGENTS	
Name	ID

Was sonicator tuned? ☐ Yes ☐ No	
KD water temp: 75 °C	
N-evap water temp: 35 °C	

Extraction by: AK
Concentration by:
Review by: MJ

Prep start date: 7-10-01
Prep start time: 1500
Prep end date: 7/11/01

Batch No.: EX210383

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Standards Data

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date(s): 07/17/01 07/17/01

Column: CLPESTICIDES ID: 0.32 (mm) Calibration Time(s): 1644 1840

LAB FILE ID: RF0.02: 0717-04 RF0.04: 0717-05 RF0.1: 0717-0
RF0.2: 0717-07 RF0.4: 0717-08

COMPOUND	RF0.02	RF0.04	RF0.1	RF0.2	RF0.4
alpha-BHC	0.769	0.859	1.007	1.074	1.121
gamma-BHC (Lindane)	0.800	0.851	0.960	1.009	1.033
beta-BHC	0.493	0.509	0.513	0.521	0.516
Heptachlor	0.828	0.852	0.916	0.953	0.973
delta-BHC	0.539	0.578	0.675	0.739	0.791
Aldrin	0.979	0.911	0.932	0.948	0.960
Heptachlor epoxide	0.706	0.747	0.805	0.842	0.863
g-Chlordane	0.770	0.806	0.845	0.872	0.883
a-Chlordane	0.782	0.809	0.848	0.856	0.852
4,4'-DDE	0.657	0.699	0.780	0.826	0.842
Dieldrin	0.680	0.688	0.764	0.822	0.852
Endrin	0.561	0.583	0.658	0.713	0.741
4,4'-DDD	0.510	0.533	0.580	0.612	0.659
Endosulfan II	0.626	0.653	0.687	0.719	0.735
4,4'-DDT	0.489	0.529	0.551	0.592	0.612
Endrin aldehyde	0.550	0.541	0.568	0.571	0.582
Endosulfan sulfate	0.470	0.452	0.476	0.490	0.511
Methoxychlor	0.372	0.349	0.351	0.349	0.344
Endrin ketone	0.975	0.842	0.765	0.748	0.740
Endosulfan I	0.654	0.680	0.759	0.792	0.799
TCMX	0.712	0.718	0.744	0.738	0.720
Decachlorobiphenyl	0.694	0.650	0.668	0.785	0.643

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date(s): 07/17/01 07/17/01

Column: CLPESTICIDES ID: 0.32 (mm) Calibration Time(s): 1644 1840

RF1: 0717-09

COMPOUND	RF1	CURVE	COEFFICENT A1	%RSD OR R^2	
alpha-BHC	1.091	AVRG	0.98709131	14.4	
gamma-BHC (Lindane)	0.986	AVRG	0.93996261	9.9	
beta-BHC	0.484	AVRG	0.50585077	2.9	
Heptachlor	0.934	AVRG	0.90927516	6.3	
delta-BHC	0.795	AVRG	0.68634024	15.8	
Aldrin	0.913	AVRG	0.94042992	2.8	
Heptachlor epoxide	0.827	AVRG	0.79841101	7.5	
g-Chlordane	0.842	AVRG	0.83633332	5.0	
a-Chlordane	0.800	AVRG	0.82471529	3.8	
4,4'-DDE	0.813	AVRG	0.76949058	9.7	
Dieldrin	0.828	AVRG	0.77265445	9.6	
Endrin	0.718	AVRG	0.66228512	11.4	
4,4'-DDD	0.644	AVRG	0.58950583	10.1	
Endosulfan II	0.705	AVRG	0.68759668	6.0	
4,4'-DDT	0.599	AVRG	0.56199350	8.4	
Endrin aldehyde	0.556	AVRG	0.56155124	2.6	
Endosulfan sulfate		AVRG	0.47997807	4.6	<-
Methoxychlor	0.322	AVRG	0.34799431	4.6	
Endrin ketone		AVRG	0.81409482	12.1	<-
Endosulfan I	0.766	AVRG	0.74174144	8.2	
TCMX	0.666	AVRG	0.71640524	3.8	
Decachlorobiphenyl		AVRG	0.68795081	8.4	<-

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date(s): 07/17/01 07/17/01

Column: CLPESTICIDES2 ID: 0.32 (mm) Calibration Time(s): 1644 1840

LAB FILE ID: RF0.02: 0717-04CONFIRM RF0.04: 0717-05CONFIRM RF0.1: 0717-0
RF0.2: 0717-07CONFIRM RF0.4: 0717-08CONFIRM

COMPOUND	RF0.02	RF0.04	RF0.1	RF0.2	RF0.4
alpha-BHC	0.616	0.686	0.860	0.963	1.038
gamma-BHC (Lindane)	0.643	0.691	0.831	0.910	0.957
beta-BHC	0.388	0.403	0.442	0.465	0.478
delta-BHC	0.425	0.465	0.581	0.664	0.731
Heptachlor	0.764	0.826	0.916	0.974	1.011
Aldrin	0.854	0.830	0.880	0.924	0.958
Heptachlor epoxide	0.656	0.706	0.787	0.838	0.873
g-Chlordane	0.755	0.768	0.832	0.880	0.910
a-Chlordane	0.703	0.739	0.808	0.842	0.863
Endosulfan I	0.635	0.672	0.750	0.798	0.836
4,4'-DDE	0.603	0.643	0.745	0.800	0.858
Dieldrin	0.596	0.635	0.754	0.820	0.874
4,4'-DDD	0.419	0.443	0.510	0.553	0.596
Endrin	0.543	0.589	0.677	0.734	0.787
Endosulfan II	0.603	0.615	0.668	0.704	0.738
Endosulfan sulfate	0.394	0.410	0.456	0.491	0.530
Endrin aldehyde	0.509	0.507	0.537	0.554	0.576
Methoxychlor	0.298	0.314	0.330	0.344	0.359
Endrin ketone	0.909	0.765	0.722	0.714	0.728
4,4'-DDT	0.440	0.466	0.545	0.595	0.646
TCMX	0.578	0.596	0.636	0.646	0.642
Decachlorobiphenyl	0.860	0.829	0.796	0.761	0.736

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date(s): 07/17/01 07/17/01

Column: CLPESTICIDES2 ID: 0.32 (mm) Calibration Time(s): 1644 1840

RF1: 0717-09CONFIRM

COMPOUND	RF1	CURVE	COEFFICENTS A0	A1	%RSD OR R^2
alpha-BHC	1.027	LINR	2.373e-002	0.95937880	1.000
gamma-BHC (Lindane)	0.929	AVRG		0.82683661	15.9
beta-BHC	0.469	AVRG		0.44111786	8.4
delta-BHC	0.747	LINR	3.505e-002	1.31612654	1.000
Heptachlor	0.987	AVRG		0.91295858	10.8
Aldrin	0.927	AVRG		0.89556979	5.4
Heptachlor epoxide	0.847	AVRG		0.78451719	11.0
g-Chlordane	0.879	AVRG		0.83723690	7.6
a-Chlordane	0.823	AVRG		0.79628714	7.8
Endosulfan I	0.818	AVRG		0.75157163	10.9
4,4'-DDE	0.836	AVRG		0.74773669	14.0
Dieldrin	0.862	AVRG		0.75674109	15.6
4,4'-DDD	0.587	AVRG		0.51817588	14.3
Endrin	0.779	AVRG		0.68495529	14.8
Endosulfan II	0.723	AVRG		0.67536025	8.4
Endosulfan sulfate	0.544	AVRG		0.47104339	13.1
Endrin aldehyde	0.564	AVRG		0.54115597	5.3
Methoxychlor	0.351	AVRG		0.33286757	6.9
Endrin ketone	0.697	AVRG		0.75574103	10.4
4,4'-DDT	0.656	AVRG		0.55809367	16.3
TCMX	0.603	AVRG		0.61687149	4.5
Decachlorobiphenyl	0.669	AVRG		0.77505565	8.9

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date(s): 07/17/01 07/17/01

Column: CLPESTICIDES ID: 0.32 (mm) Calibration Time(s): 1644 1840

LAB FILE ID: RT1: 0717-04 RT2: 0717-05 RT3: 0717-06
RT4: 0717-07 RT5: 0717-08

COMPOUND	RT1	RT2	RT3	RT4	RT5
alpha-BHC	6.000	6.010	6.010	6.010	6.037
gamma-BHC (Lindane)	6.650	6.660	6.660	6.660	6.687
beta-BHC	6.820	6.830	6.830	6.830	6.857
Heptachlor	7.670	7.680	7.680	7.680	7.697
delta-BHC	7.220	7.230	7.220	7.230	7.253
Aldrin	8.340	8.350	8.350	8.350	8.370
Heptachlor epoxide	9.690	9.700	9.700	9.700	9.713
g-Chlordane	9.970	9.980	9.980	9.980	9.993
a-Chlordane	10.270	10.280	10.280	10.280	10.290
4,4'-DDE	10.410	10.420	10.420	10.420	10.427
Dieldrin	11.150	11.150	11.150	11.160	11.167
Endrin	11.690	11.700	11.700	11.700	11.713
4,4'-DDD	11.790	11.800	11.800	11.800	11.807
Endosulfan II	12.210	12.220	12.220	12.220	12.233
4,4'-DDT	12.430	12.440	12.440	12.450	12.443
Endrin aldehyde	13.190	13.190	13.200	13.200	13.210
Endosulfan sulfate	14.210	14.220	14.220	14.220	14.240
Methoxychlor	13.530	13.540	13.540	13.540	13.553
Endrin ketone	14.910	14.920	14.920	14.920	14.937
Endosulfan I	10.600	10.610	10.610	10.610	10.620
TCMX	4.930	4.940	4.940	4.940	4.947
Decachlorobiphenyl	17.400	17.400	17.400	17.400	17.437

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date(s): 07/17/01 07/17/01

Column: CLPESTICIDES ID: 0.32 (mm) Calibration Time(s): 1644 1840

RT6: 0717-09

COMPOUND	RT6	MEAN RT	RT WINDOW FROM	RT WINDOW TO	
alpha-BHC	6.010	6.013	5.991	6.082	
gamma-BHC (Lindane)	6.660	6.663	6.641	6.732	
beta-BHC	6.830	6.833	6.811	6.902	
Heptachlor	7.680	7.681	7.651	7.742	
delta-BHC	7.220	7.229	7.208	7.299	
Aldrin	8.350	8.352	8.324	8.415	
Heptachlor epoxide	9.700	9.700	9.668	9.759	
g-Chlordane	9.980	9.981	9.948	10.039	
a-Chlordane	10.280	10.280	10.244	10.336	
4,4'-DDE	10.420	10.420	10.381	10.472	
Dieldrin	11.160	11.156	11.121	11.212	
Endrin	11.700	11.701	11.668	11.759	
4,4'-DDD	11.800	11.800	11.761	11.852	
Endosulfan II	12.220	12.220	12.188	12.279	
4,4'-DDT	12.440	12.440	12.398	12.489	
Endrin aldehyde	13.190	13.197	13.164	13.256	
Endosulfan sulfate		14.222	14.194	14.285	<-
Methoxychlor	13.540	13.541	13.508	13.599	
Endrin ketone		14.921	14.891	14.982	<-
Endosulfan I	10.610	10.610	10.574	10.665	
TCMX	4.940	4.939	4.901	4.992	
Decachlorobiphenyl		17.407	17.391	17.482	<-

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date(s): 07/17/01 07/17/01

Column: CLPESTICIDES2 ID: 0.32 (mm) Calibration Time(s): 1644 1840

LAB FILE ID: RT1: 0717-04CONFIRM RT2: 0717-05CONFIRM RT3: 0717-06CONFIRM
RT4: 0717-07CONFIRM RT5: 0717-08CONFIRM

COMPOUND	RT1	RT2	RT3	RT4	RT5
alpha-BHC	5.380	5.380	5.380	5.380	5.380
gamma-BHC (Lindane)	6.080	6.080	6.080	6.080	6.080
beta-BHC	6.230	6.240	6.230	6.230	6.237
delta-BHC	6.840	6.850	6.850	6.850	6.850
Heptachlor	6.990	6.990	6.990	6.990	6.987
Aldrin	7.680	7.680	7.680	7.680	7.680
Heptachlor epoxide	8.910	8.910	8.910	8.910	8.917
g-Chlordane	9.330	9.330	9.330	9.330	9.333
a-Chlordane	9.650	9.650	9.650	9.650	9.657
Endosulfan I	9.780	9.780	9.780	9.780	9.790
4,4'-DDE	10.020	10.030	10.030	10.030	10.030
Dieldrin	10.400	10.400	10.400	10.400	10.400
4,4'-DDD	11.330	11.330	11.330	11.330	11.333
Endrin	11.080	11.090	11.090	11.090	11.090
Endosulfan II	11.560	11.570	11.570	11.570	11.573
Endosulfan sulfate	12.960	12.970	12.970	12.970	12.970
Endrin aldehyde	12.330	12.330	12.340	12.330	12.340
Methoxychlor	13.630	13.630	13.630	13.630	13.627
Endrin ketone	14.220	14.220	14.220	14.220	14.220
4,4'-DDT	12.040	12.040	12.040	12.040	12.043
TCMX	4.290	4.290	4.290	4.290	4.297
Decachlorobiphenyl	17.300	17.300	17.300	17.300	17.307

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date(s): 07/17/01 07/17/01

Column: CLPESTICIDES2 ID: 0.32 (mm) Calibration Time(s): 1644 1840

RT6: 0717-09CONFIRM

COMPOUND	RT6	MEAN RT	RT WINDOW FROM	RT WINDOW TO
alpha-BHC	5.380	5.380	5.272	5.488
gamma-BHC (Lindane)	6.080	6.080	5.958	6.202
beta-BHC	6.230	6.233	6.112	6.361
delta-BHC	6.840	6.847	6.713	6.987
Heptachlor	6.990	6.989	6.847	7.126
Aldrin	7.680	7.680	7.526	7.834
Heptachlor epoxide	8.910	8.911	8.738	9.095
g-Chlordane	9.330	9.331	9.147	9.520
a-Chlordane	9.650	9.651	9.464	9.850
Endosulfan I	9.780	9.782	9.594	9.986
4,4'-DDE	10.020	10.027	9.829	10.231
Dieldrin	10.400	10.400	10.192	10.608
4,4'-DDD	11.330	11.331	11.107	11.560
Endrin	11.090	11.088	10.868	11.312
Endosulfan II	11.560	11.567	11.342	11.805
Endosulfan sulfate	12.960	12.967	12.711	13.229
Endrin aldehyde	12.330	12.333	12.093	12.587
Methoxychlor	13.630	13.630	13.354	13.899
Endrin ketone	14.220	14.220	13.936	14.504
4,4'-DDT	12.040	12.041	11.802	12.284
TCMX	4.290	4.291	4.211	4.383
Decachlorobiphenyl	17.300	17.301	16.961	17.653

FORM VI SV

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-04.D
Report Date: 18-Jul-2001 12:10

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-04.D
Lab Smp Id: J210717-CAL #1 PEST Client Smp ID: J210717-CAL #1 PEST
Inj Date : 17-JUL-2001 16:44
Operator : LC Inst ID: GC03.i
Smp Info : J210717-CAL STD #1 (PEST)
Misc Info : ;0.02 ug/mL 608/8081 CAL STD (01-SVA-0517)
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 18-Jul-2001 12:10 lcarley Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX-TRG-01

Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 30 Isodrin (time reference)	9.096	9.096	(1.000)	579566	0.50000	
$ 1 TCMX	4.930	4.930	(0.542)	16517	0.02000	0.020
$ 22 Decachlorobiphenyl	17.396	17.396	(1.912)	16091	0.02000	0.020(M)
2 alpha-BHC	6.000	6.000	(0.660)	17825	0.02000	0.016
3 gamma-BHC (Lindane)	6.653	6.653	(0.731)	18546	0.02000	0.017
4 beta-BHC	6.823	6.823	(0.750)	11421	0.02000	0.019
6 delta-BHC	7.216	7.216	(0.793)	12506	0.02000	0.016
5 Heptachlor	7.666	7.666	(0.843)	19189	0.02000	0.018
7 Aldrin	8.340	8.340	(0.917)	22691	0.02000	0.021
8 Heptachlor epoxide	9.690	9.690	(1.065)	16375	0.02000	0.018
9 g-Chlordane	9.973	9.973	(1.096)	17852	0.02000	0.018
10 a-Chlordane	10.270	10.270	(1.129)	18141	0.02000	0.019
12 4,4'-DDE	10.410	10.410	(1.144)	15232	0.02000	0.017
11 Endosulfan I	10.600	10.600	(1.165)	15161	0.02000	0.018
13 Dieldrin	11.146	11.146	(1.225)	15770	0.02000	0.018
14 Endrin	11.690	11.690	(1.285)	12999	0.02000	0.017
15 4,4'-DDD	11.786	11.786	(1.296)	11824	0.02000	0.017
16 Endosulfan II	12.213	12.213	(1.343)	14514	0.02000	0.018
17 4,4'-DDT	12.433	12.433	(1.367)	11338	0.02000	0.017
18 Endrin aldehyde	13.186	13.186	(1.450)	12759	0.02000	0.020
20 Methoxychlor	13.533	13.533	(1.488)	8629	0.02000	0.021
19 Endosulfan sulfate	14.213	14.213	(1.562)	10906	0.02000	0.020
21 Endrin ketone	14.910	14.910	(1.639)	22595	0.02000	0.024

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-04.D
Report Date: 18-Jul-2001 12:10

QC Flag Legend

M - Compound response manually integrated.

Data File: 0717-04Confirm.d
Report Date: 18-Jul-2001 12:09

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-04C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-04.D
Inj Date : 17-JUL-2001 16:44
Sample Info: J210717-CAL STD #1 (PEST)
Misc Info : ;0.02 ug/mL 608/8081 CAL STD (01-SVA-0517)
Cal Date : 18-JUL-2001 12:09
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.097	685574	579566	0.50	0.50		100.00	
TCMX	4.293	4.930	15863	16517	0.019	0.020		100.00	
Decachlorobiphenyl	17.300	17.397	23582	16091	0.022	0.020		100.00(M)	
alpha-BHC	5.377	6.000	16899	17825	0.024	0.016		100.00	
gamma-BHC (Lindane)	6.077	6.653	17638	18546	0.016	0.017		100.00	
beta-BHC	6.233	6.823	10655	11421	0.018	0.019		100.00	
delta-BHC	6.843	7.217	11664	12506	0.029	0.016		100.00	
Heptachlor	6.987	7.667	20954	19189	0.017	0.018		100.00	
Aldrin	7.677	8.340	23430	22691	0.019	0.021		100.00	
Heptachlor epoxide	8.913	9.690	17995	16375	0.017	0.018		100.00	
g-Chlordane	9.327	9.973	20708	17852	0.018	0.018		100.00	
a-Chlordane	9.653	10.270	19275	18141	0.018	0.019		100.00	
4,4'-DDE	10.023	10.410	16545	15232	0.016	0.017		100.00	
Endosulfan I	9.783	10.600	17423	15161	0.017	0.018		100.00	
Dieldrin	10.397	11.147	16342	15770	0.016	0.018		100.00	
Endrin	11.083	11.690	14887	12999	0.016	0.017		100.00	
4,4'-DDD	11.327	11.787	11500	11824	0.016	0.017		100.00	
Endosulfan II	11.563	12.213	16537	14514	0.018	0.018		100.00	
4,4'-DDT	12.040	12.433	12054	11338	0.016	0.017		100.00	
Endrin aldehyde	12.333	13.187	13951	12759	0.019	0.020		100.00	
Methoxychlor	13.627	13.533	8188	8629	0.018	0.021		100.00	
Endosulfan sulfate	12.963	14.213	10808	10906	0.017	0.020		100.00	
Endrin ketone	14.217	14.910	24928	22595	0.024	0.024		100.00	

Data File: 0717-04Confirm.d
Report Date: 18-Jul-2001 12:09

QC Flag Legend

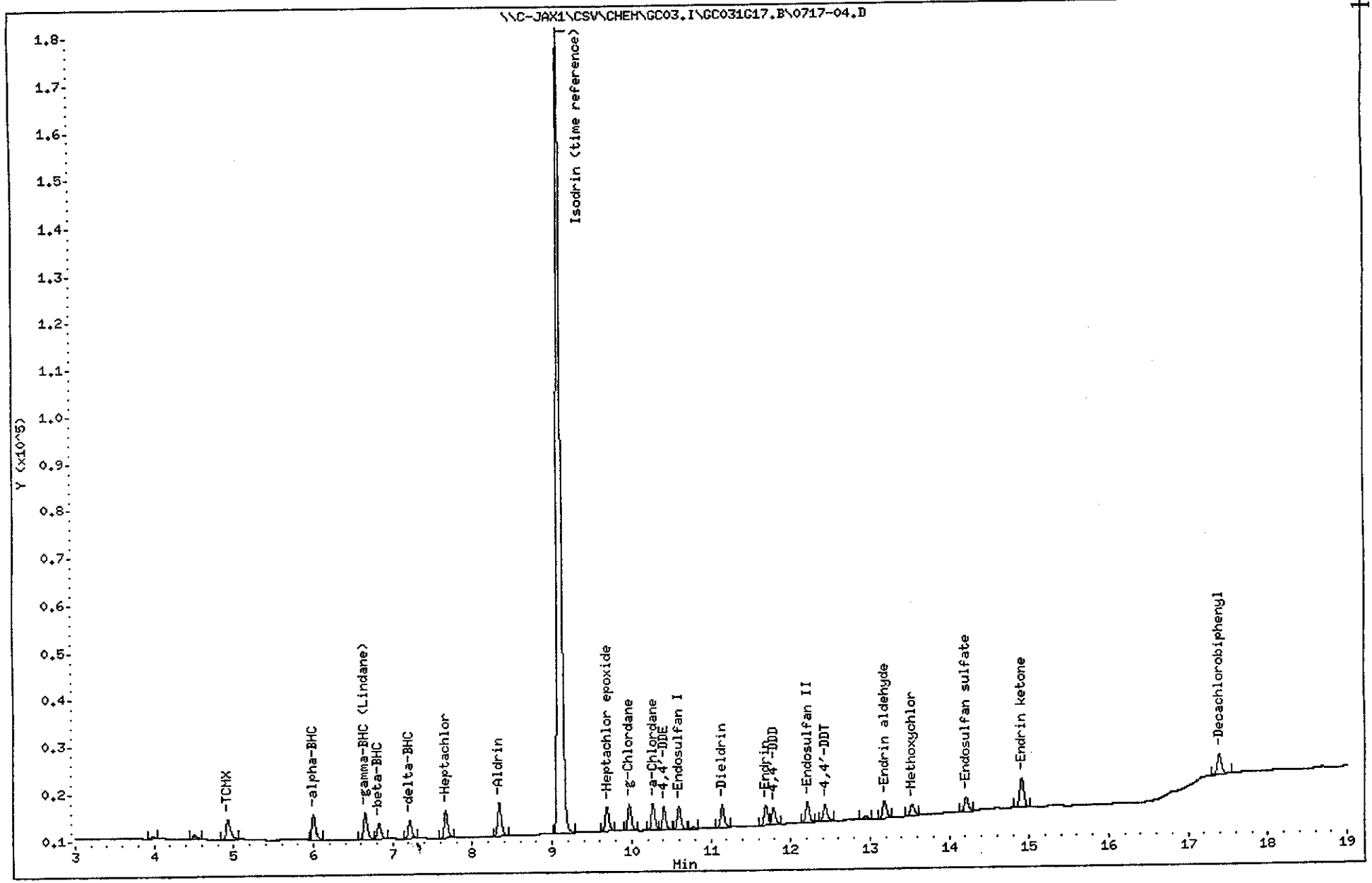
M - Compound response manually integrated.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-04.D
Date : 17-JUL-2001 16:44
Client ID: J210717-CAL #1 PEST
Sample Info: J210717-CAL STD #1 (PEST)

Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32

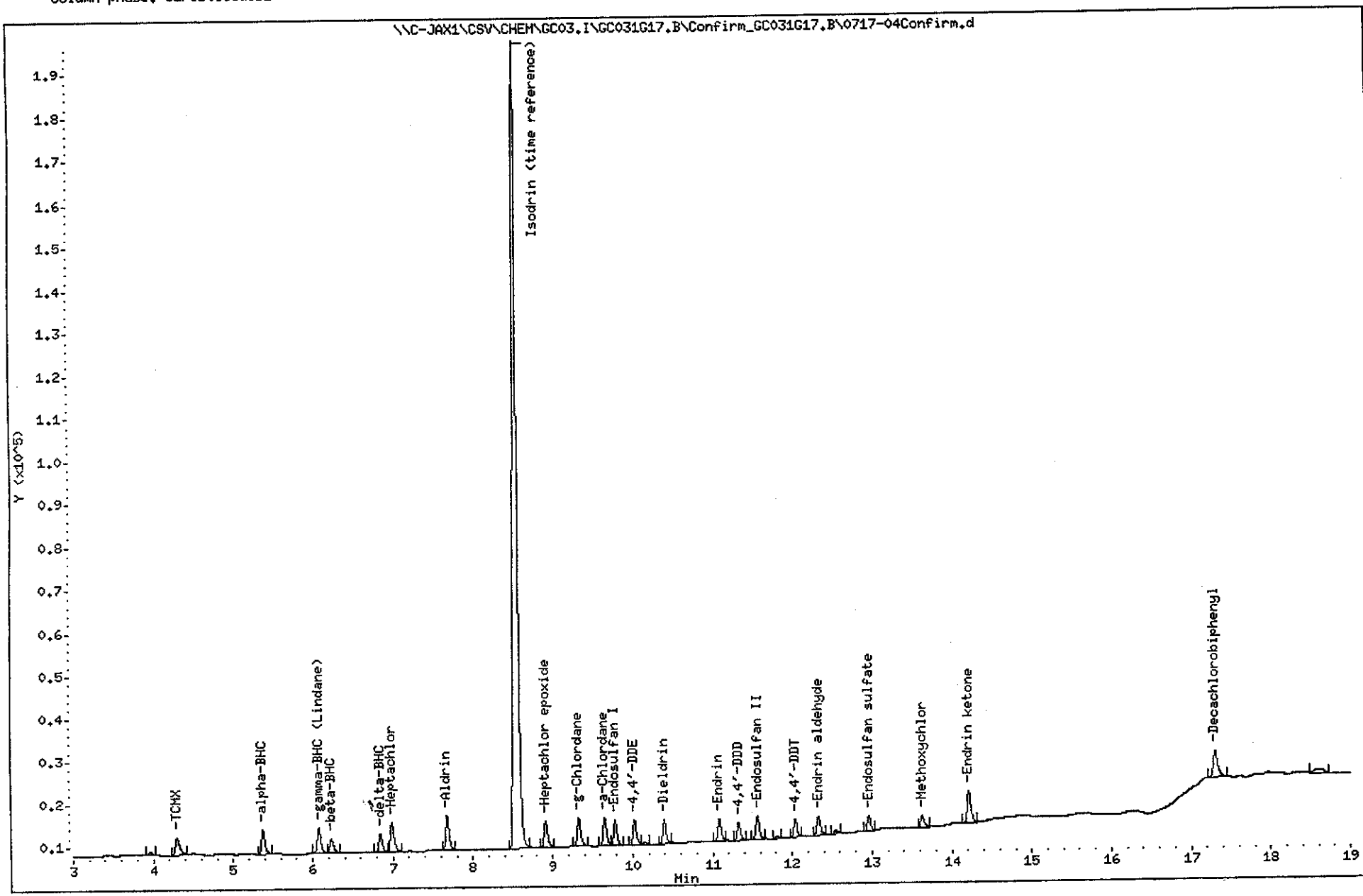


Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-04Confirm.d
Date : 17-JUL-2001 16:44
Client ID: J210717-CAL #1 PEST
Sample Info: J210717-CAL STD #1 (PEST)

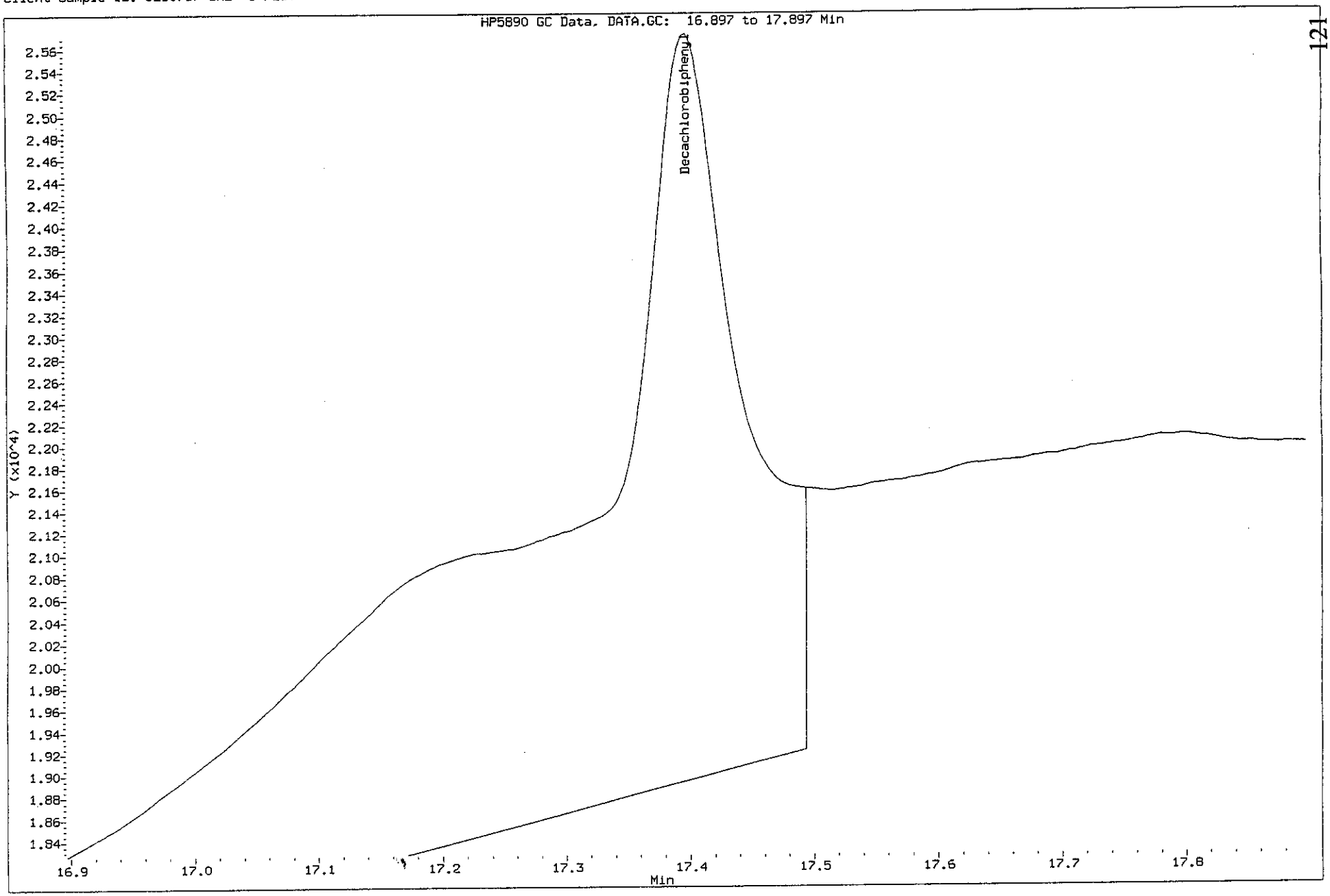
Column phase: CLPesticides2

Instrument: GC03.i

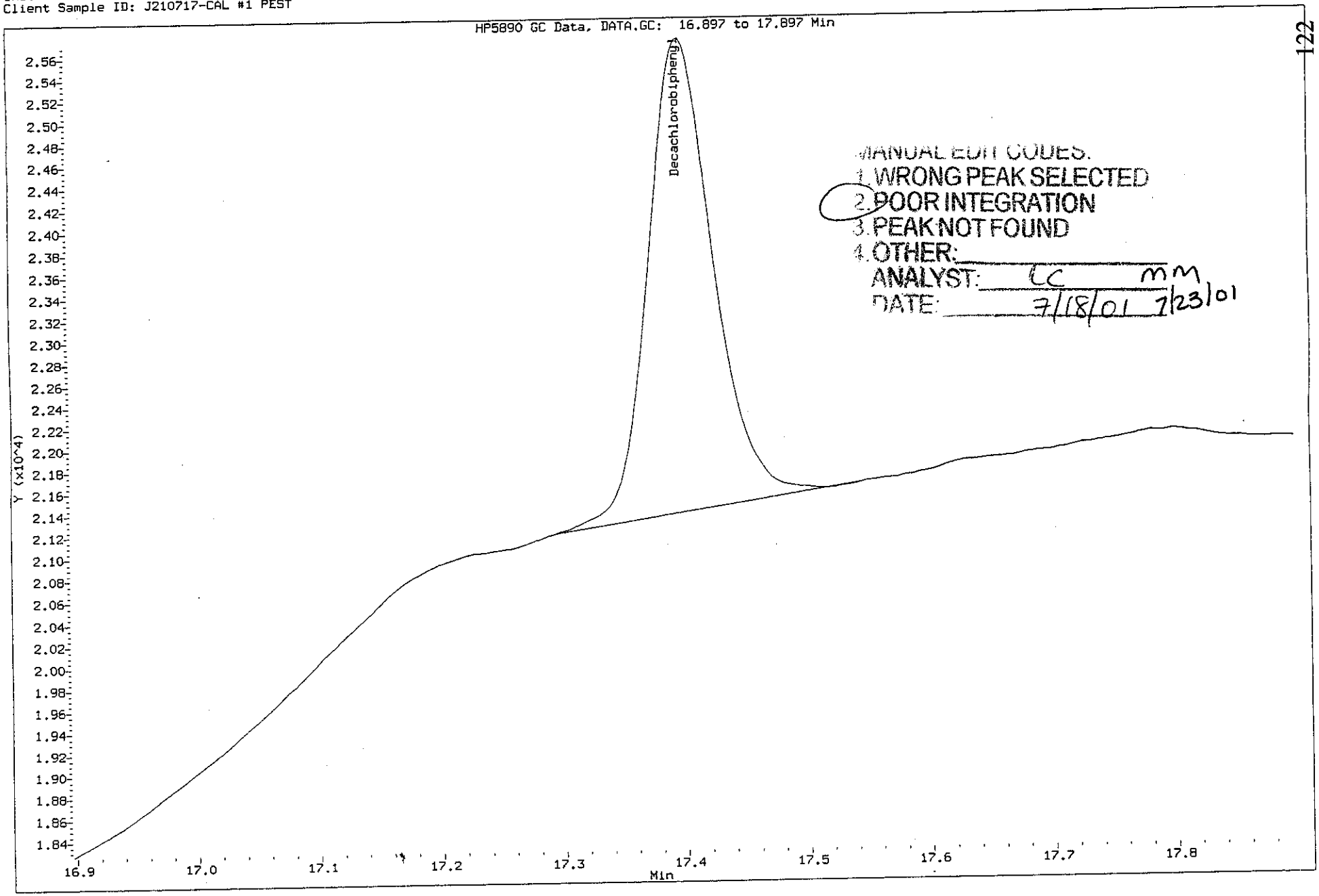
Operator: LC
Column diameter: 0.32



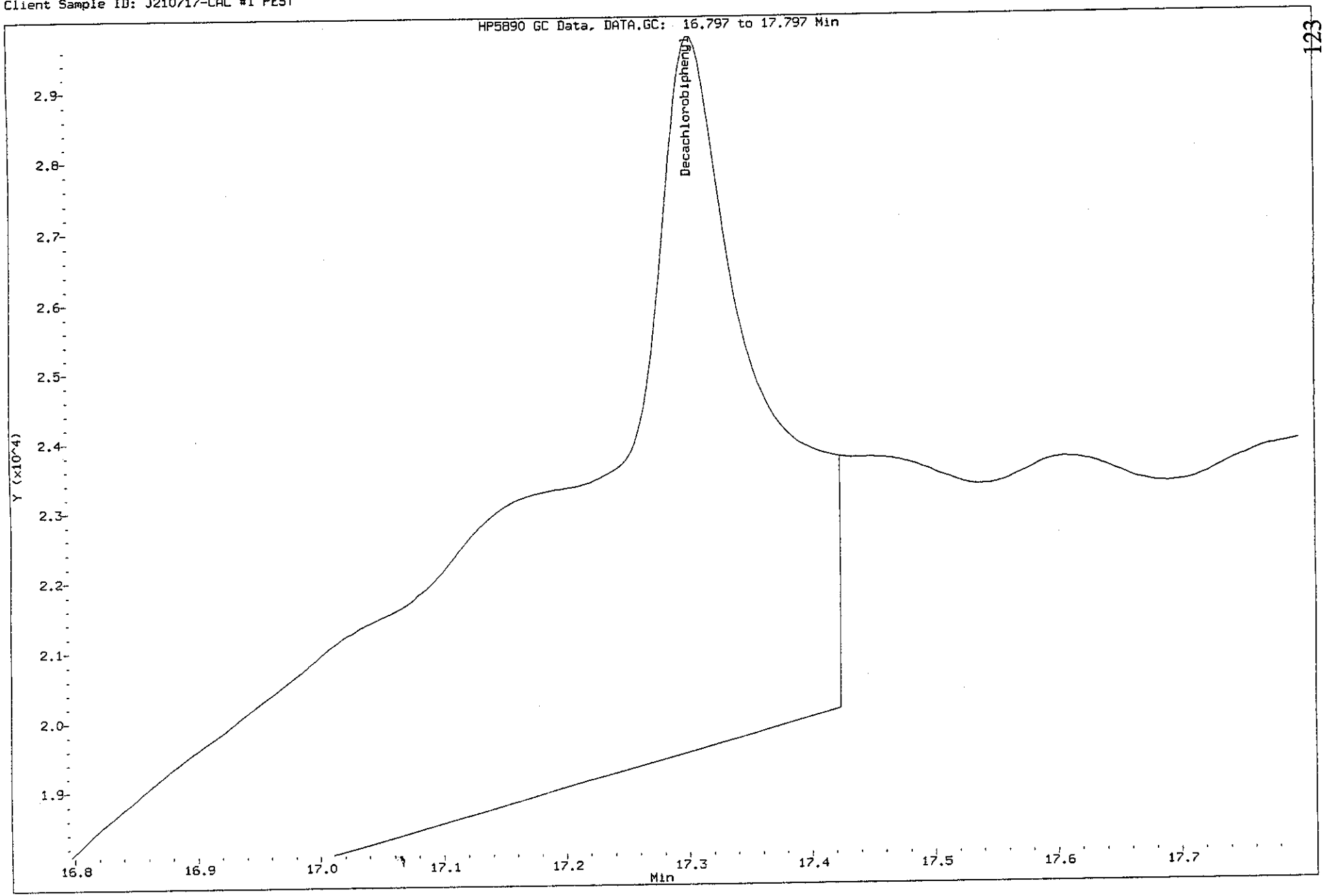
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-04.D
Injection Date: 17-JUL-2001 16:44
Instrument: GC03.1
Client Sample ID: J210717-CAL #1 PEST



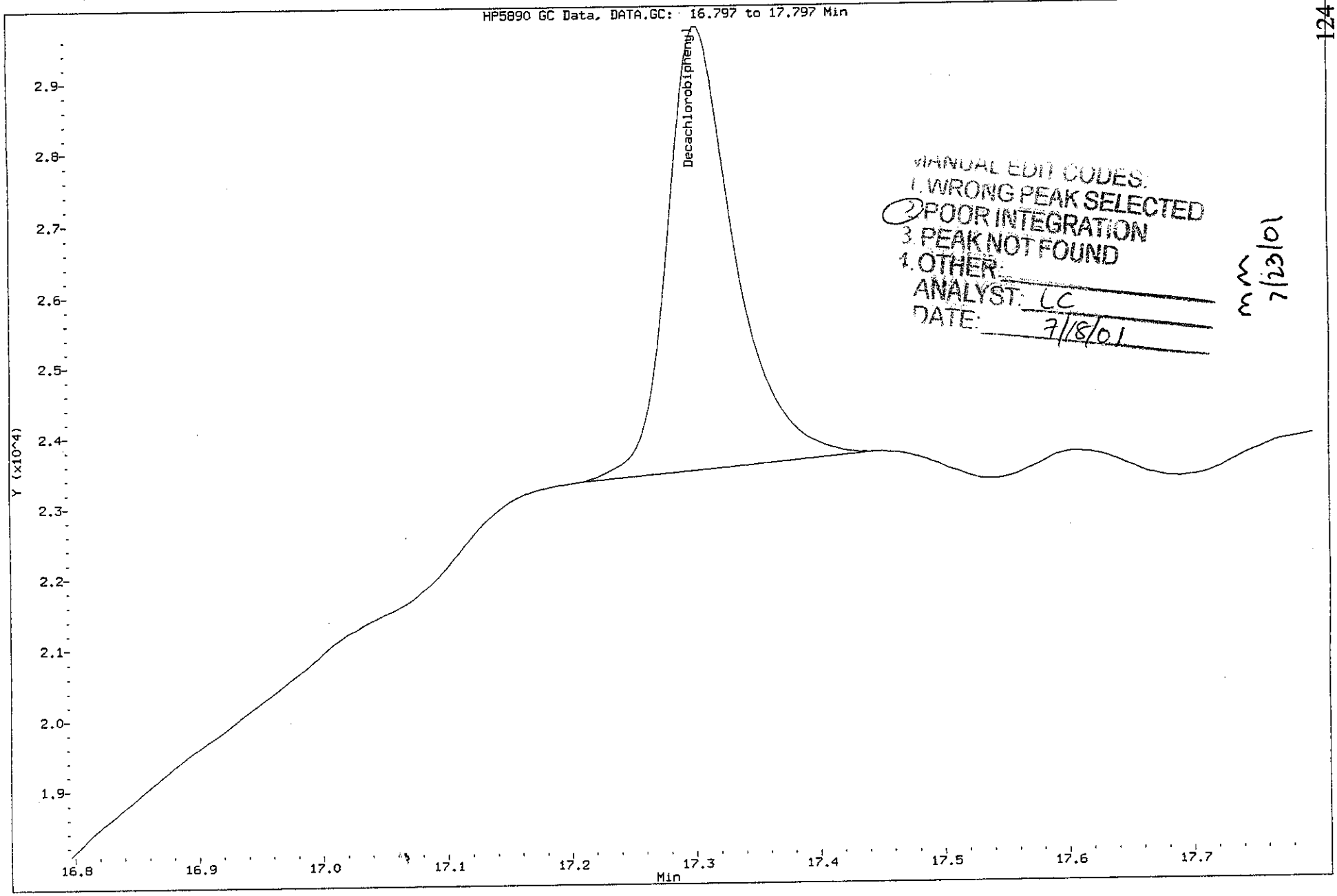
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-04.D
Injection Date: 17-JUL-2001 16:44
Instrument: GC03.1
Client Sample ID: J210717-CAL #1 PEST



Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-04Confirm.d
Injection Date: 17-JUL-2001 16:44
Instrument: GC03.i
Client Sample ID: J210717-CAL #1 PEST



Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-04Confirm.d
Injection Date: 17-JUL-2001 16:44
Instrument: GC03.i
Client Sample ID: J210717-CAL #1 PEST



MANUAL EDIT CODES:
1. WRONG PEAK SELECTED
2. POOR INTEGRATION
3. PEAK NOT FOUND
4. OTHER:
ANALYST: LC
DATE: 7/18/01

MM 7/23/01

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-05.D
Report Date: 18-Jul-2001 11:51

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-05.D
Lab Smp Id: J21071-CAL #2 PEST Client Smp ID: J210717-CAL #2 PEST
Inj Date : 17-JUL-2001 17:07
Operator : LC Inst ID: GC03.i
Smp Info : J210717-CAL STD #2 (PEST)
Misc Info : ;0.04 ug/mL 608/8081 CAL STD (01-SVA-0518)
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 18-Jul-2001 11:51 lcarley Quant Type: ISTD
Cal Date : 17-JUL-2001 17:07 Cal File: 0717-05.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX-TRG-01

Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 30 Isodrin (time reference)	9.106	9.106	(1.000)	598327	0.50000	
$ 1 TCMX	4.940	4.940	(0.542)	34347	0.04000	0.040
$ 22 Decachlorobiphenyl	17.403	17.403	(1.911)	31090	0.04000	0.039(M)
2 alpha-BHC	6.010	6.010	(0.660)	41139	0.04000	0.042
3 gamma-BHC (Lindane)	6.660	6.660	(0.731)	40745	0.04000	0.041
4 beta-BHC	6.833	6.833	(0.750)	24364	0.04000	0.041
6 delta-BHC	7.226	7.226	(0.794)	27677	0.04000	0.041
5 Heptachlor	7.676	7.676	(0.843)	40764	0.04000	0.040
7 Aldrin	8.350	8.350	(0.917)	43616	0.04000	0.038
8 Heptachlor epoxide	9.700	9.700	(1.065)	35761	0.04000	0.041
9 g-Chlordane	9.980	9.980	(1.096)	38585	0.04000	0.041
10 a-Chlordane	10.280	10.280	(1.129)	38716	0.04000	0.041
12 4,4'-DDE	10.416	10.416	(1.144)	33480	0.04000	0.041
11 Endosulfan I	10.610	10.610	(1.165)	32533	0.04000	0.041
13 Dieldrin	11.153	11.153	(1.225)	32941	0.04000	0.040
14 Endrin	11.700	11.700	(1.285)	27907	0.04000	0.041
15 4,4'-DDD	11.796	11.796	(1.295)	25507	0.04000	0.041
16 Endosulfan II	12.223	12.223	(1.342)	31242	0.04000	0.041
17 4,4'-DDT	12.443	12.443	(1.366)	25305	0.04000	0.042
18 Endrin aldehyde	13.193	13.193	(1.449)	25910	0.04000	0.040
20 Methoxychlor	13.543	13.543	(1.487)	16691	0.04000	0.039
19 Endosulfan sulfate	14.220	14.220	(1.561)	21636	0.04000	0.039
21 Endrin ketone	14.920	14.920	(1.638)	40329	0.04000	0.037

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-05.D
Report Date: 18-Jul-2001 11:51

QC Flag Legend

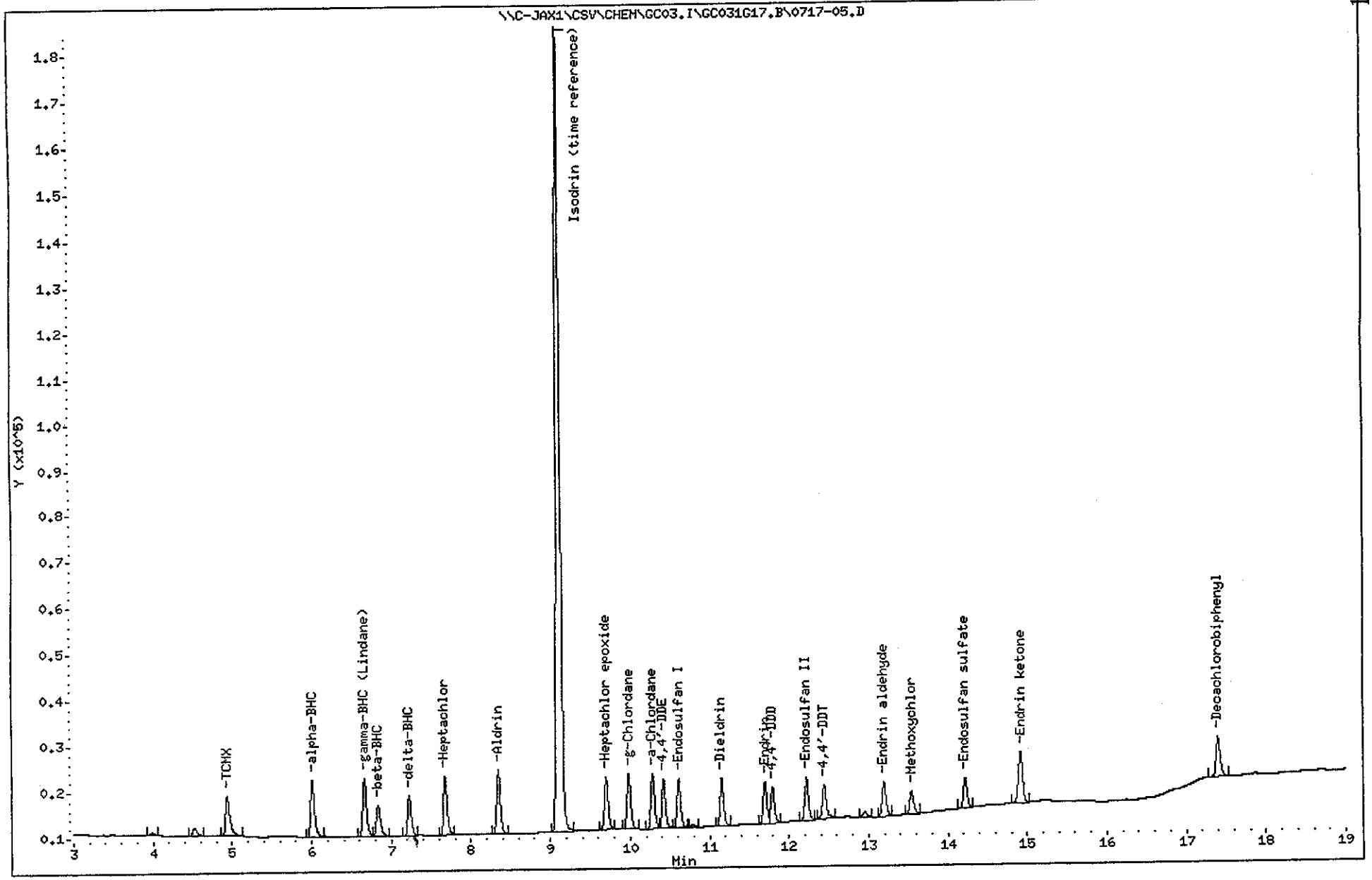
M - Compound response manually integrated.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-05.D
Date : 17-JUL-2001 17:07
Client ID: J210717-CAL #2 PEST
Sample Info: J210717-CAL STD #2 (PEST)

Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-05Confirm.d
Report Date: 18-Jul-2001 11:59

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-05C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-05.D
Inj Date : 17-JUL-2001 17:07
Sample Info: J210717-CAL STD #2 (PEST)
Misc Info : ;0.04 ug/mL 608/8081 CAL STD (01-SVA-0518)
Cal Date : 18-JUL-2001 11:59
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.107	707159	598327	0.50	0.50		100.00	
TCMX	4.293	4.940	33739	34347	0.041	0.040		100.00	
Decachlorobiphenyl	17.303	17.403	46919	31090	0.039	0.038		100.00(M)	
alpha-BHC	5.377	6.010	38834	41139	0.040	0.035		100.00	
gamma-BHC (Lindane)	6.080	6.660	39104	40745	0.041	0.036		100.00	
beta-BHC	6.237	6.833	22827	24364	0.041	0.040		100.00	
delta-BHC	6.847	7.227	26314	27677	0.040	0.034		100.00	
Heptachlor	6.987	7.677	46747	40764	0.042	0.037		100.00	
Aldrin	7.680	8.350	46964	43616	0.039	0.039		100.00	
Heptachlor epoxide	8.913	9.700	39961	35761	0.041	0.037		100.00	
g-Chlordane	9.327	9.980	43434	38585	0.040	0.038		100.00	
a-Chlordane	9.653	10.280	41811	38716	0.041	0.039		100.00	
4,4'-DDE	10.027	10.417	36366	33480	0.041	0.036		100.00	
Endosulfan I	9.783	10.610	37991	32533	0.041	0.037		100.00	
Dieldrin	10.397	11.153	35905	32941	0.041	0.036		100.00	
Endrin	11.087	11.700	33321	27907	0.042	0.035		100.00	
4,4'-DDD	11.330	11.797	25080	25507	0.041	0.036		100.00	
Endosulfan II	11.567	12.223	34786	31242	0.040	0.038		100.00	
4,4'-DDT	12.043	12.443	26378	25305	0.041	0.038		100.00	
Endrin aldehyde	12.333	13.193	28693	25910	0.040	0.038		100.00	
Methoxychlor	13.630	13.543	17782	16691	0.041	0.040		100.00	
Endosulfan sulfate	12.967	14.220	23221	21636	0.041	0.038		100.00	
Endrin ketone	14.217	14.920	43294	40329	0.036	0.041		100.00	

Data File: 0717-05Confirm.d
Report Date: 18-Jul-2001 11:59

QC Flag Legend

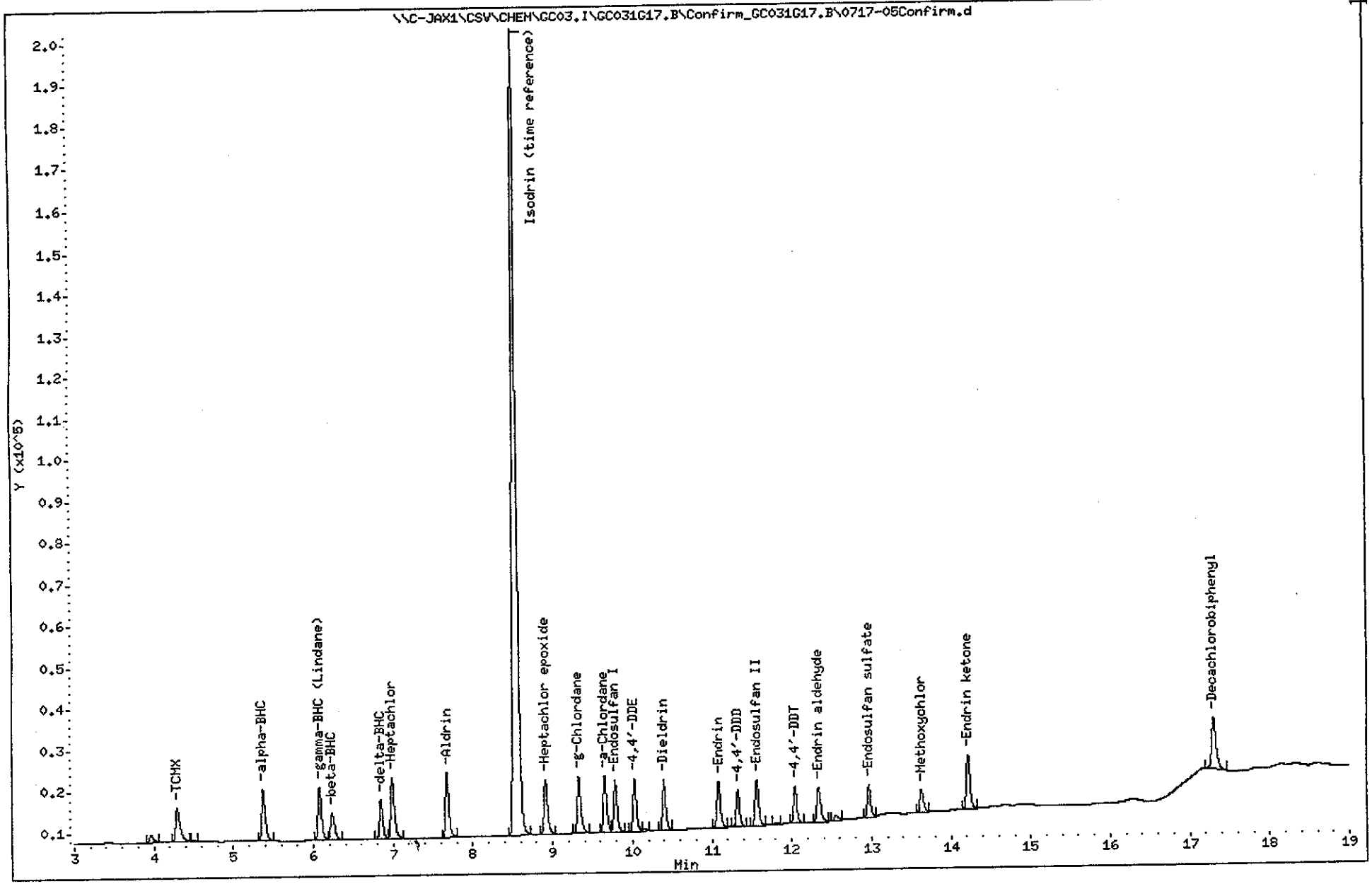
M - Compound response manually integrated.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-05Confirm.d
Date : 17-JUL-2001 17:07
Client ID: J210717-CAL #2 PEST
Sample Info: J210717-CAL STD #2 (PEST)

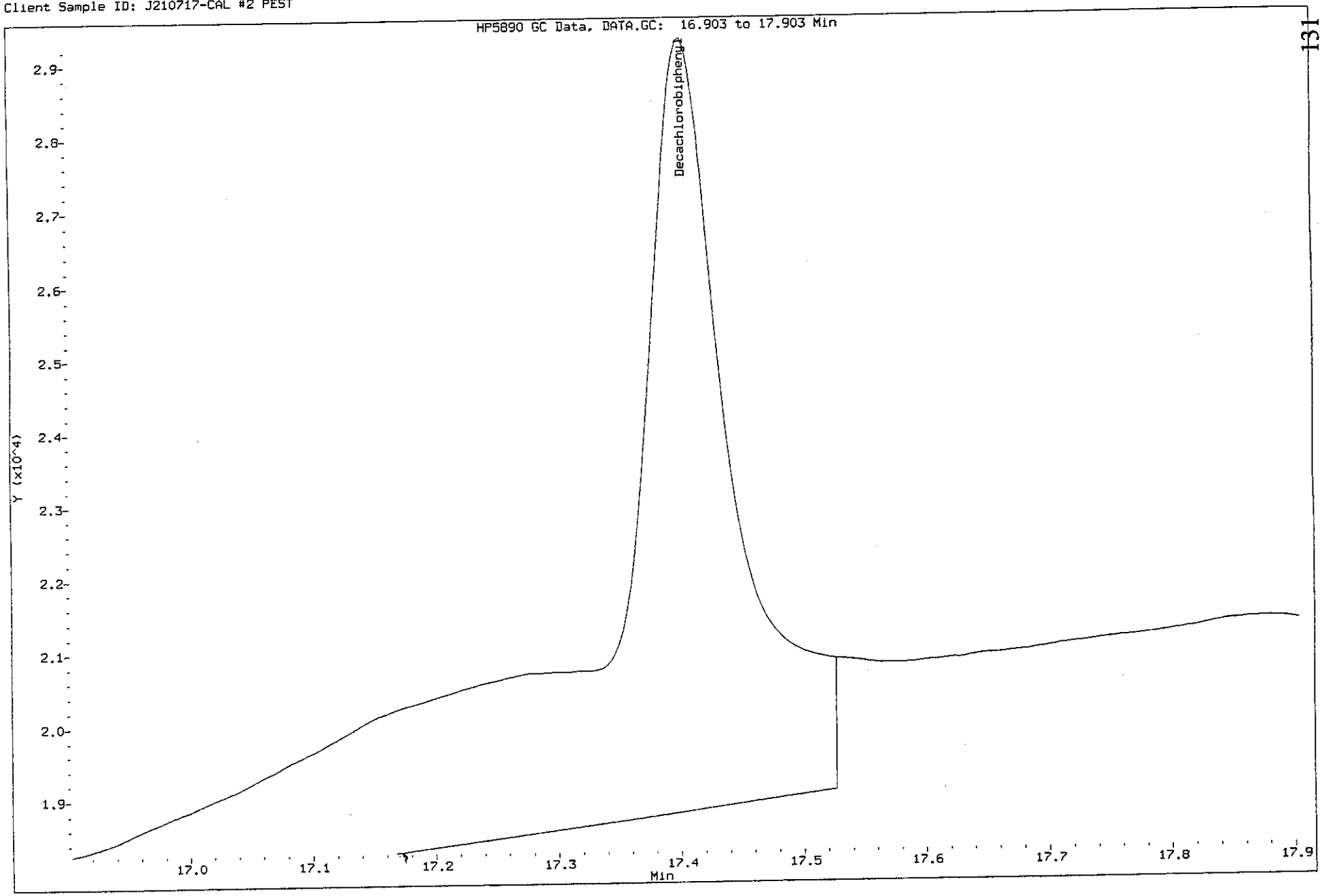
Instrument: GC03.i

Operator: LC
Column diameter: 0.32

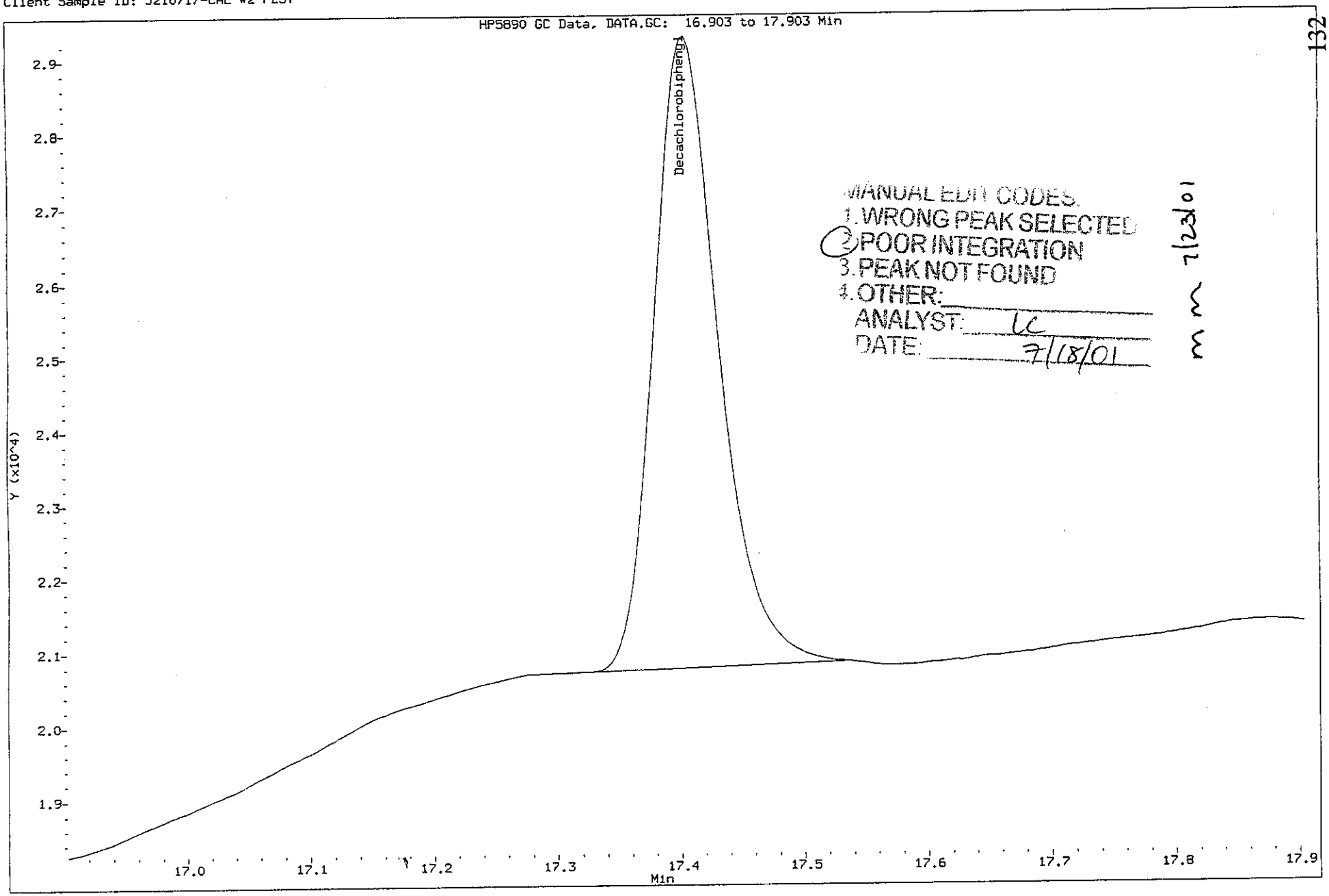
Column phase: CLPesticides2



Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-05.D
Injection Date: 17-JUL-2001 17:07
Instrument: GC03.i
Client Sample ID: J210717-CAL #2 PEST



Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-05.D
Injection Date: 17-JUL-2001 17:07
Instrument: GC03.i
Client Sample ID: J210717-CAL #2 PEST

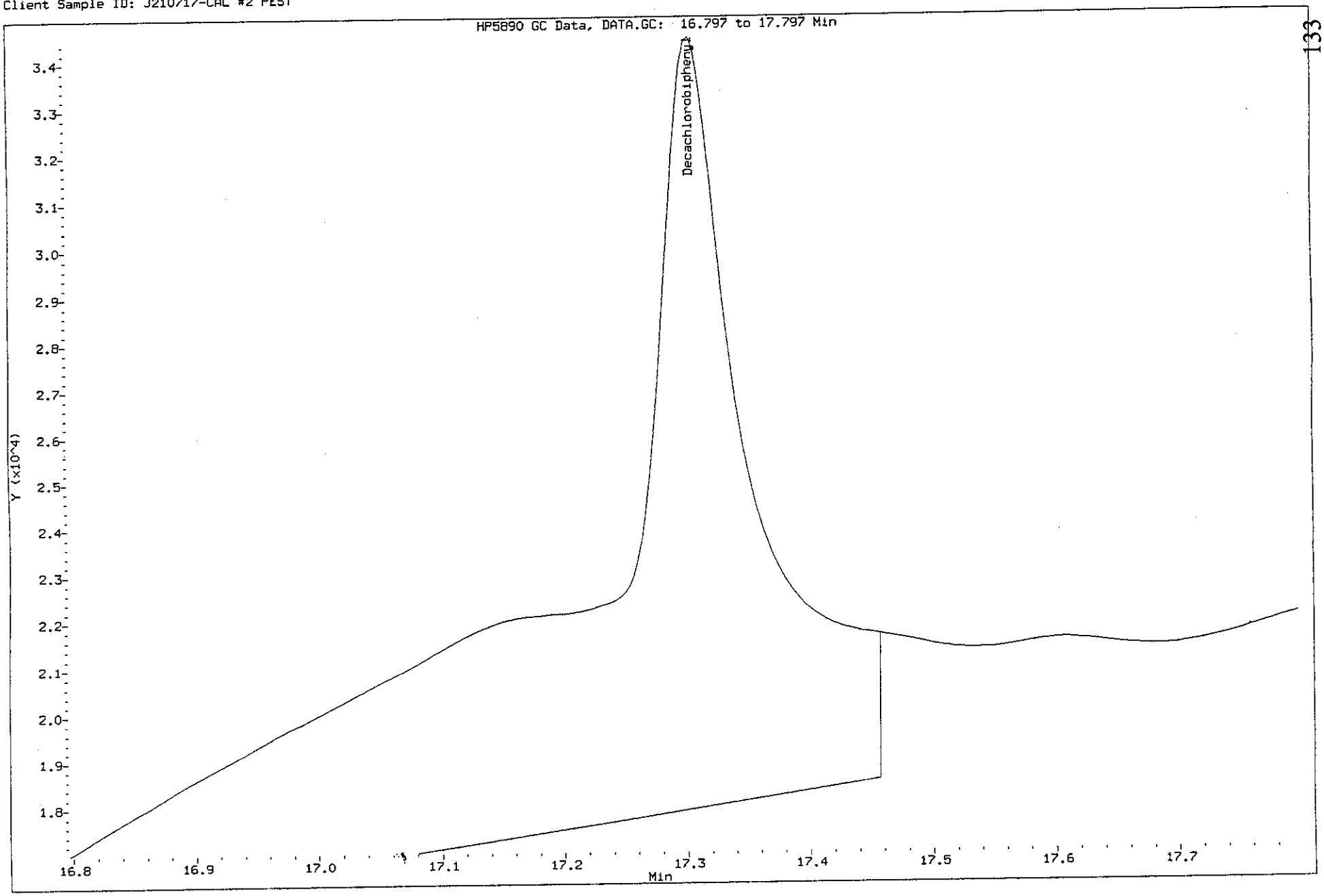


MANUAL EDIT CODES:
1. WRONG PEAK SELECTED
2. POOR INTEGRATION
3. PEAK NOT FOUND
4. OTHER: _____
ANALYST: LC
DATE: 7/18/01

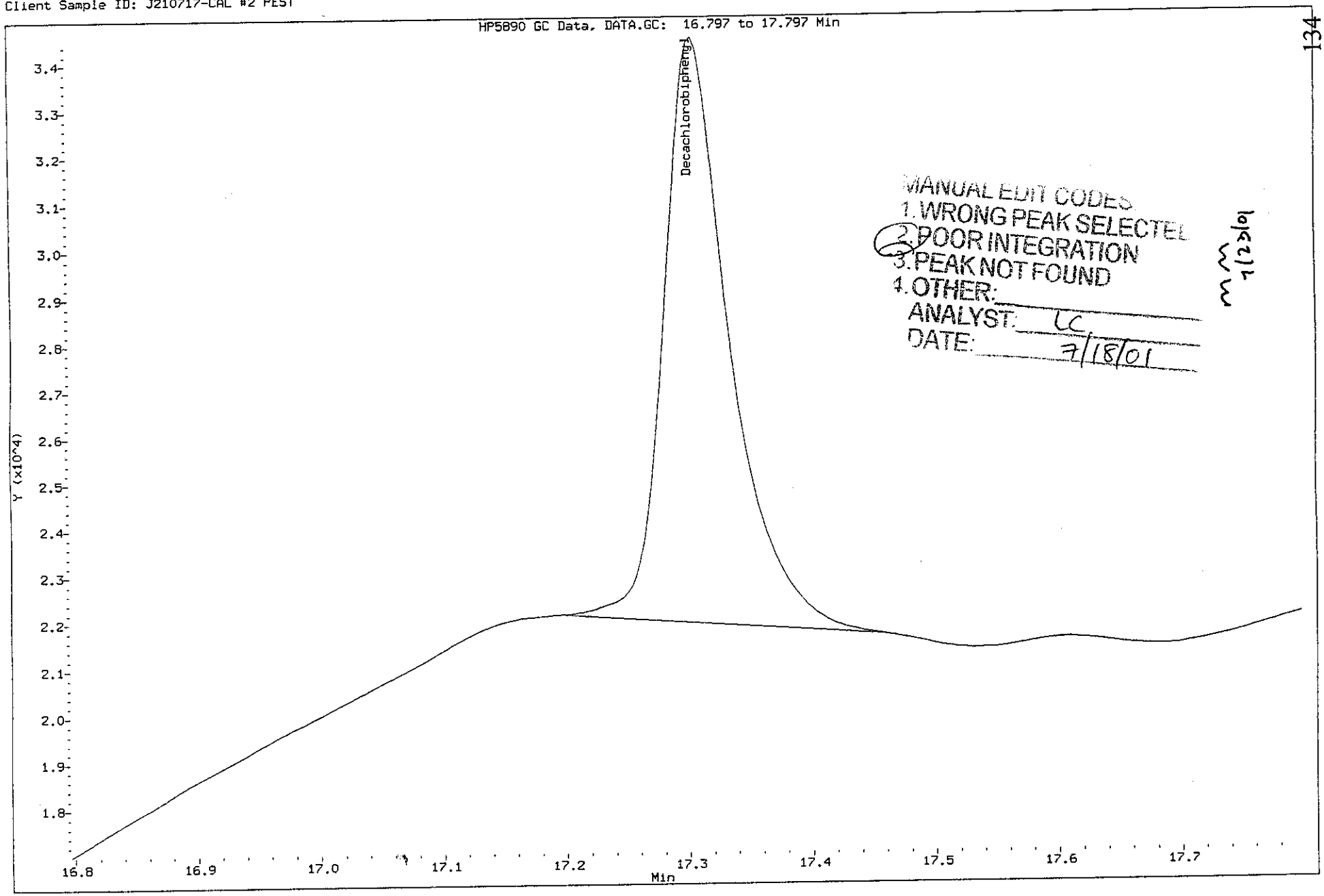
7/23/01

132

Data File: //C-JAX1/CSV/CHEM/GC03.I/GC031G17.B/Confirm_GC031G17.B/0717-05Confirm.d
Injection Date: 17-JUL-2001 17:07
Instrument: GC03.i
Client Sample ID: J210717-CAL #2 PEST



Data File: //C-JAX1/CSV/CHEM/GC03.I/GC031G17.B/Confirm_GC031G17.B/0717-05Confirm.d
Injection Date: 17-JUL-2001 17:07
Instrument: GC03.i
Client Sample ID: J210717-CAL #2 PEST



MANUAL EDIT CODES
1. WRONG PEAK SELECTED
2. POOR INTEGRATION
3. PEAK NOT FOUND
4. OTHER:
ANALYST: LC
DATE: 7/18/01

7/23/01

134

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-06.D
Report Date: 18-Jul-2001 11:51

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-06.D
Lab Smp Id: J210717-CAL #3 PEST Client Smp ID: J210717-CAL #3 PEST
Inj Date : 17-JUL-2001 17:30
Operator : LC Inst ID: GC03.i
Smp Info : J210717-CAL STD #3 (PEST)
Misc Info : ;0.1 ug/mL 608/8081 CAL STD (01-SVA-0519)
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 18-Jul-2001 11:51 lcarley Quant Type: ISTD
Cal Date : 17-JUL-2001 17:30 Cal File: 0717-06.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX-TRG-01

Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 30 Isodrin (time reference)	9.103	9.103	(1.000)	613020	0.50000	
$ 1 TCMX	4.936	4.936	(0.542)	91201	0.10000	0.10
$ 22 Decachlorobiphenyl	17.400	17.400	(1.911)	81891	0.10000	0.100(M)
2 alpha-BHC	6.006	6.006	(0.660)	123501	0.10000	0.11
3 gamma-BHC (Lindane)	6.660	6.660	(0.732)	117685	0.10000	0.11
4 beta-BHC	6.830	6.830	(0.750)	62877	0.10000	0.10
6 delta-BHC	7.223	7.223	(0.793)	82787	0.10000	0.11
5 Heptachlor	7.676	7.676	(0.843)	112300	0.10000	0.10
7 Aldrin	8.346	8.346	(0.917)	114206	0.10000	0.099
8 Heptachlor epoxide	9.696	9.696	(1.065)	98712	0.10000	0.11
9 g-Chlordane	9.976	9.976	(1.096)	103652	0.10000	0.10
10 a-Chlordane	10.276	10.276	(1.129)	103996	0.10000	0.10
12 4,4'-DDE	10.416	10.416	(1.144)	95572	0.10000	0.11
11 Endosulfan I	10.606	10.606	(1.165)	93061	0.10000	0.11
13 Dieldrin	11.153	11.153	(1.225)	93702	0.10000	0.11
14 Endrin	11.700	11.700	(1.285)	80667	0.10000	0.11
15 4,4'-DDD	11.796	11.796	(1.296)	71061	0.10000	0.11
16 Endosulfan II	12.220	12.220	(1.342)	84272	0.10000	0.10
17 4,4'-DDT	12.443	12.443	(1.367)	67610	0.10000	0.10
18 Endrin aldehyde	13.196	13.196	(1.450)	69709	0.10000	0.10
20 Methoxychlor	13.543	13.543	(1.488)	43007	0.10000	0.098
19 Endosulfan sulfate	14.223	14.223	(1.562)	58315	0.10000	0.10
21 Endrin ketone	14.920	14.920	(1.639)	93842	0.10000	0.089

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-06.D
Report Date: 18-Jul-2001 11:51

QC Flag Legend

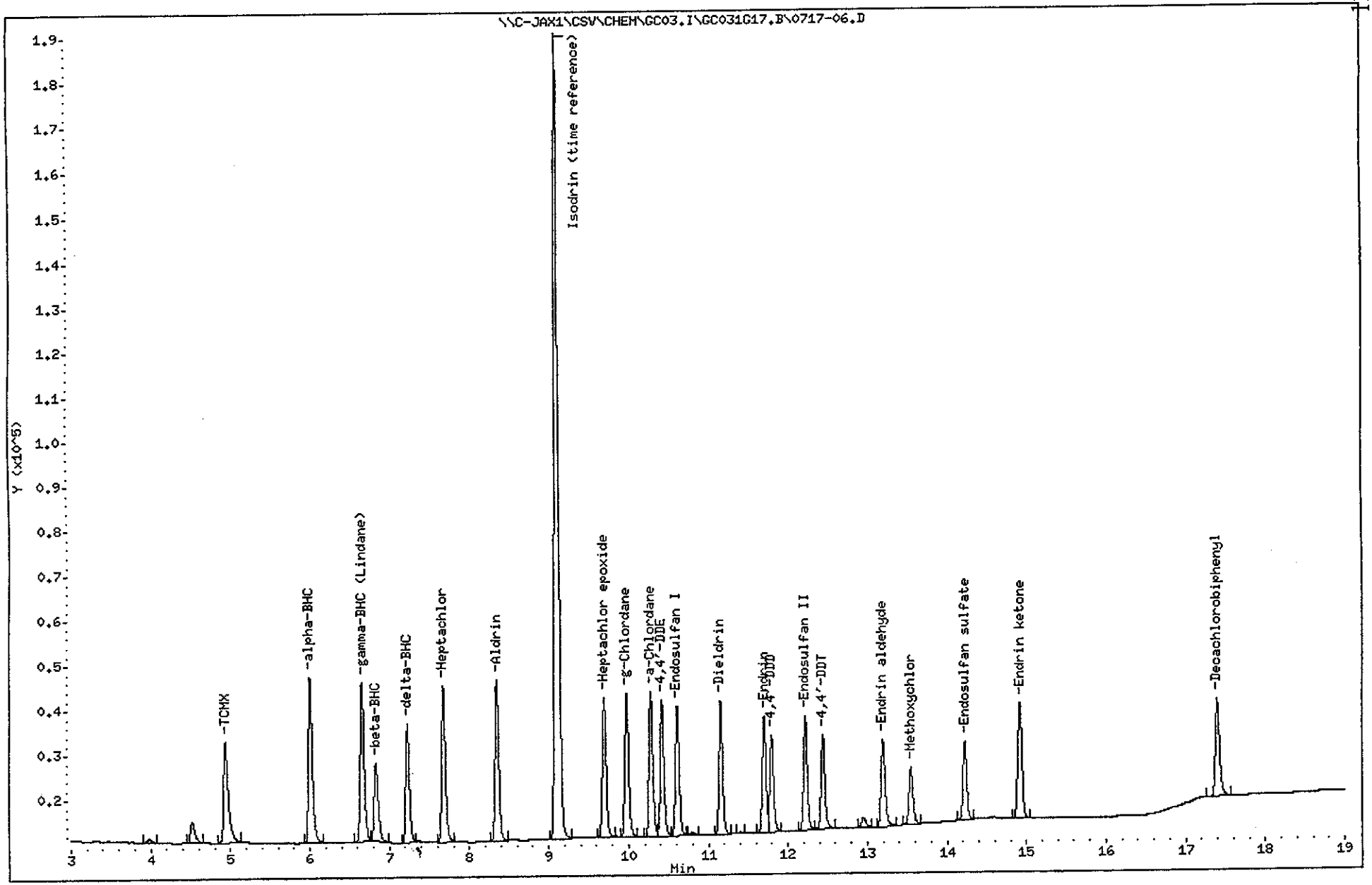
M - Compound response manually integrated.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-06.D
Date : 17-JUL-2001 17:30
Client ID: J210717-CAL #3 PEST
Sample Info: J210717-CAL STD #3 (PEST)

Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-06Confirm.d
Report Date: 18-Jul-2001 11:59

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-06C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-06.D
Inj Date : 17-JUL-2001 17:30
Sample Info: J210717-CAL STD #3 (PEST)
Misc Info : ;0.1 ug/mL 608/8081 CAL STD (01-SVA-0519)
Cal Date : 18-JUL-2001 11:59
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.533	9.103	727835	613020	0.50	0.50		100.00	
TCMX	4.290	4.937	92570	91201	0.10	0.10		100.00	
Decachlorobiphenyl	17.300	17.400	115822	81891	0.096	0.097		100.00(M)	
alpha-BHC	5.377	6.007	125128	123501	0.10	0.10		100.00	
gamma-BHC (Lindane)	6.077	6.660	121033	117685	0.12	0.10		100.00	
beta-BHC	6.233	6.830	64416	62877	0.11	0.10		100.00	
delta-BHC	6.847	7.223	84554	82787	0.10	0.098		100.00	
Heptachlor	6.987	7.677	133288	112300	0.11	0.10		100.00	
Aldrin	7.677	8.347	128109	114206	0.10	0.099		100.00	
Heptachlor epoxide	8.913	9.697	114585	98712	0.11	0.10		100.00	
g-Chlordane	9.327	9.977	121049	103652	0.10	0.10		100.00	
a-Chlordane	9.653	10.277	117679	103996	0.11	0.10		100.00	
4,4'-DDE	10.027	10.417	108469	95572	0.11	0.10		100.00	
Endosulfan I	9.783	10.607	109239	93061	0.11	0.10		100.00	
Dieldrin	10.397	11.153	109704	93702	0.11	0.099		100.00	
Endrin	11.087	11.700	98521	80667	0.11	0.099		100.00	
4,4'-DDD	11.330	11.797	74239	71061	0.11	0.098		100.00	
Endosulfan II	11.567	12.220	97305	84272	0.11	0.10		100.00	
4,4'-DDT	12.043	12.443	79372	67610	0.11	0.098		100.00	
Endrin aldehyde	12.337	13.197	78242	69709	0.10	0.10		100.00	
Methoxychlor	13.627	13.543	48055	43007	0.10	0.10		100.00	
Endosulfan sulfate	12.967	14.223	66369	58315	0.11	0.099		100.00	
Endrin ketone	14.217	14.920	105079	93842	0.090	0.094		100.00	

Data File: 0717-06Confirm.d
Report Date: 18-Jul-2001 11:59

QC Flag Legend

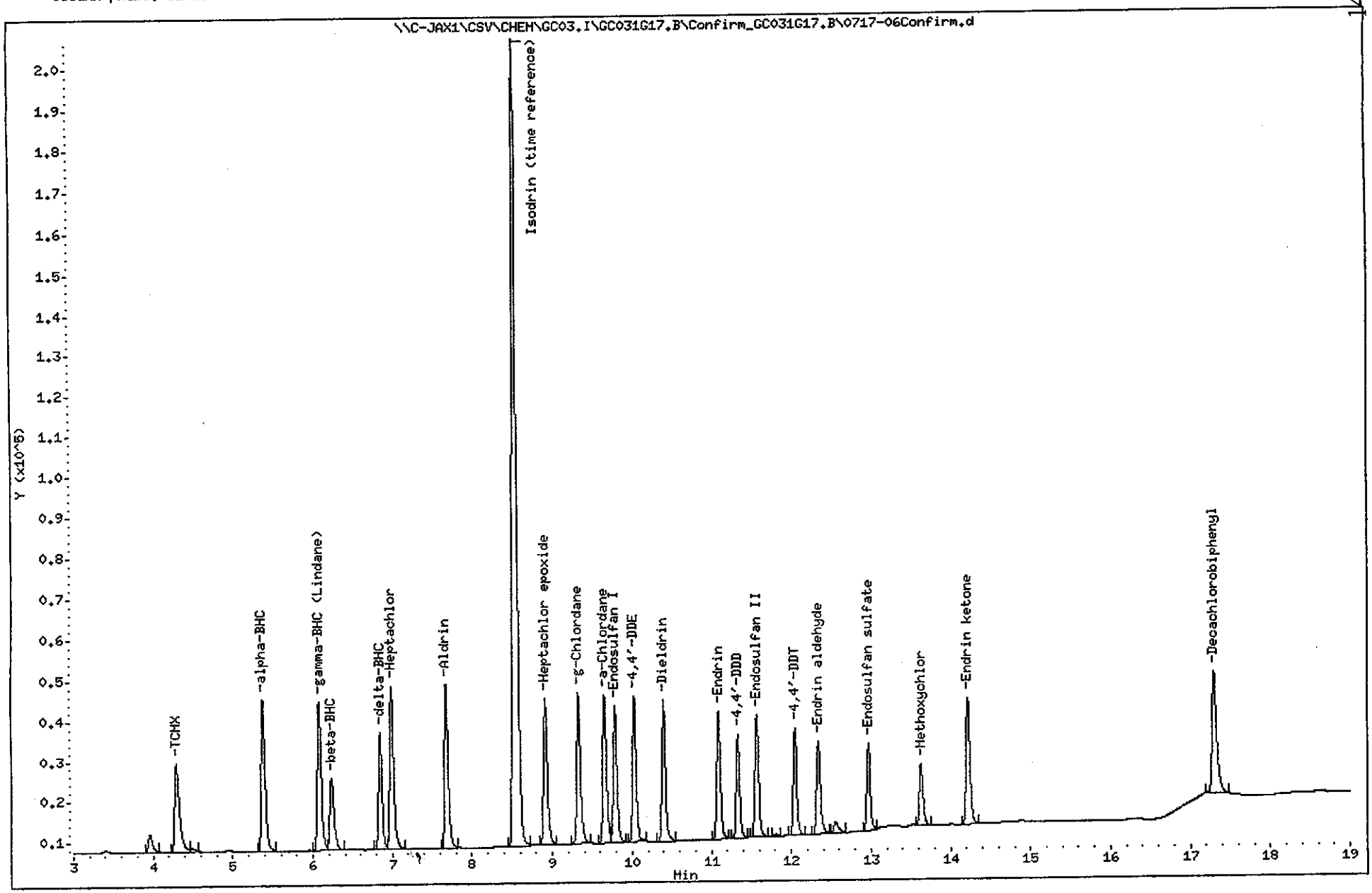
M - Compound response manually integrated.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-06Confirm.d
Date : 17-JUL-2001 17:30
Client ID: J210717-CAL #3 PEST
Sample Info: J210717-CAL STD #3 (PEST)

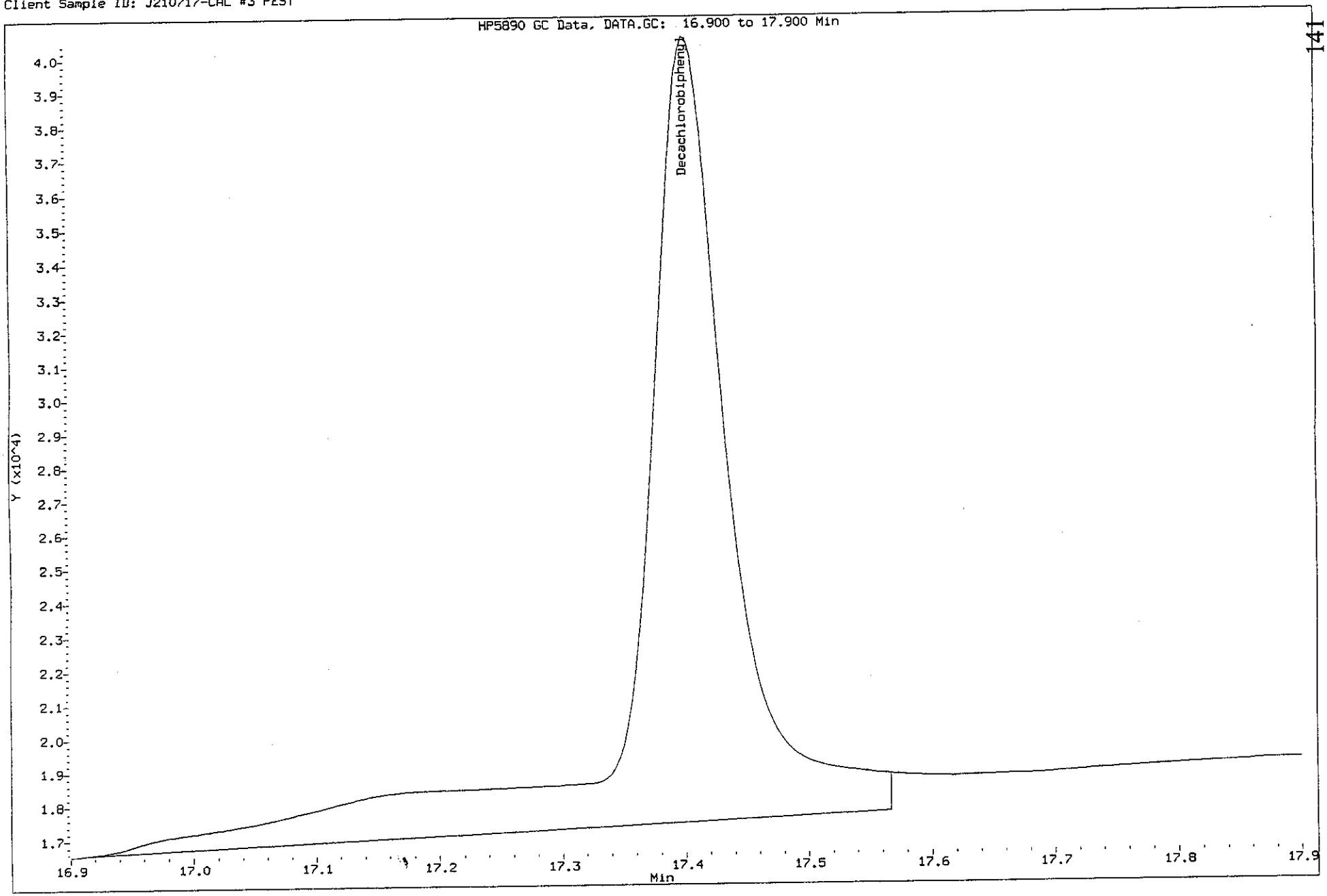
Instrument: GC03.i

Operator: LC
Column diameter: 0.32

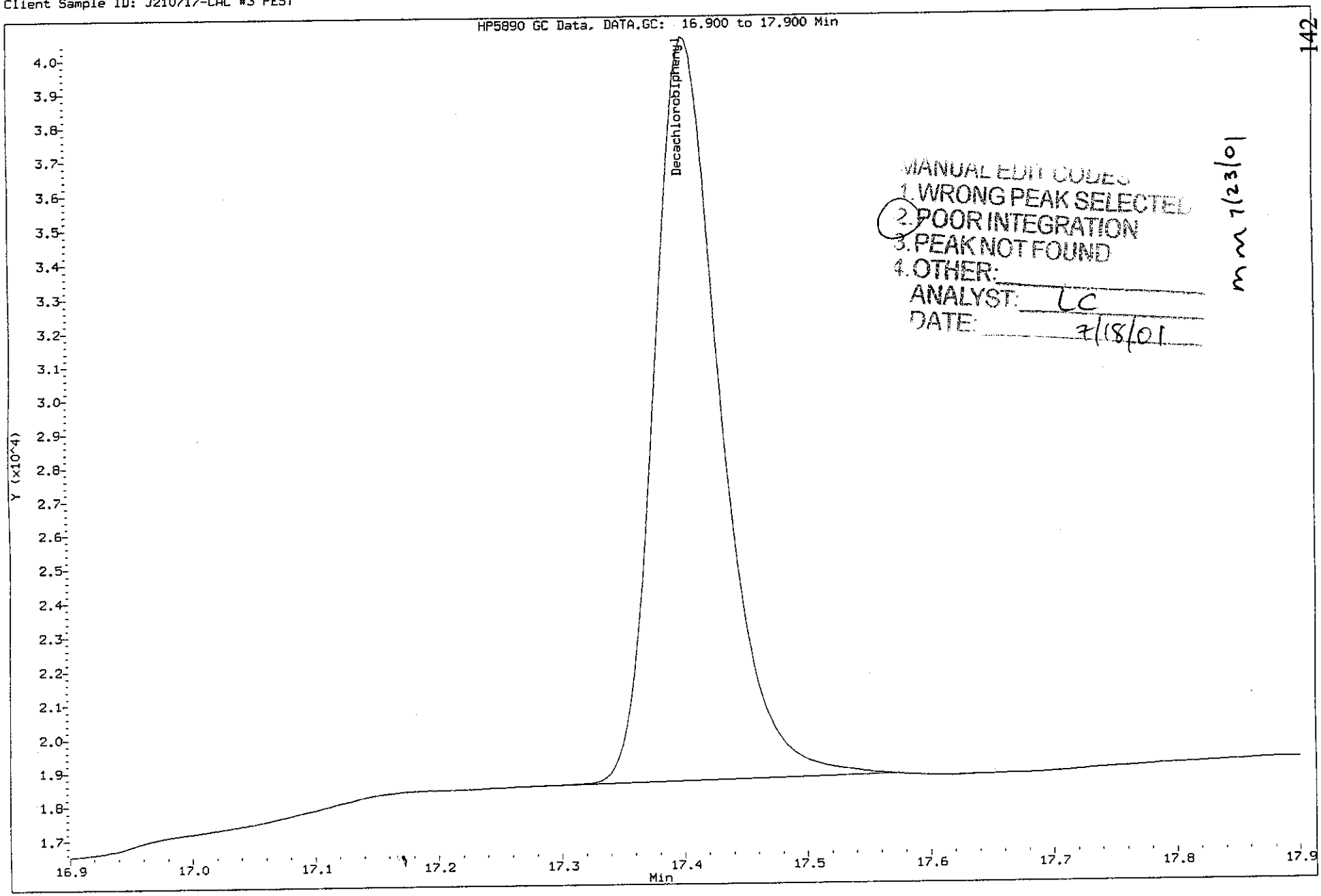
Column phase: CLPesticides2



Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-06.D
Injection Date: 17-JUL-2001 17:30
Instrument: GC03.i
Client Sample ID: J210717-CAL #3 PEST



Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-06.D
Injection Date: 17-JUL-2001 17:30
Instrument: GC03.i
Client Sample ID: J210717-CAL #3 PEST

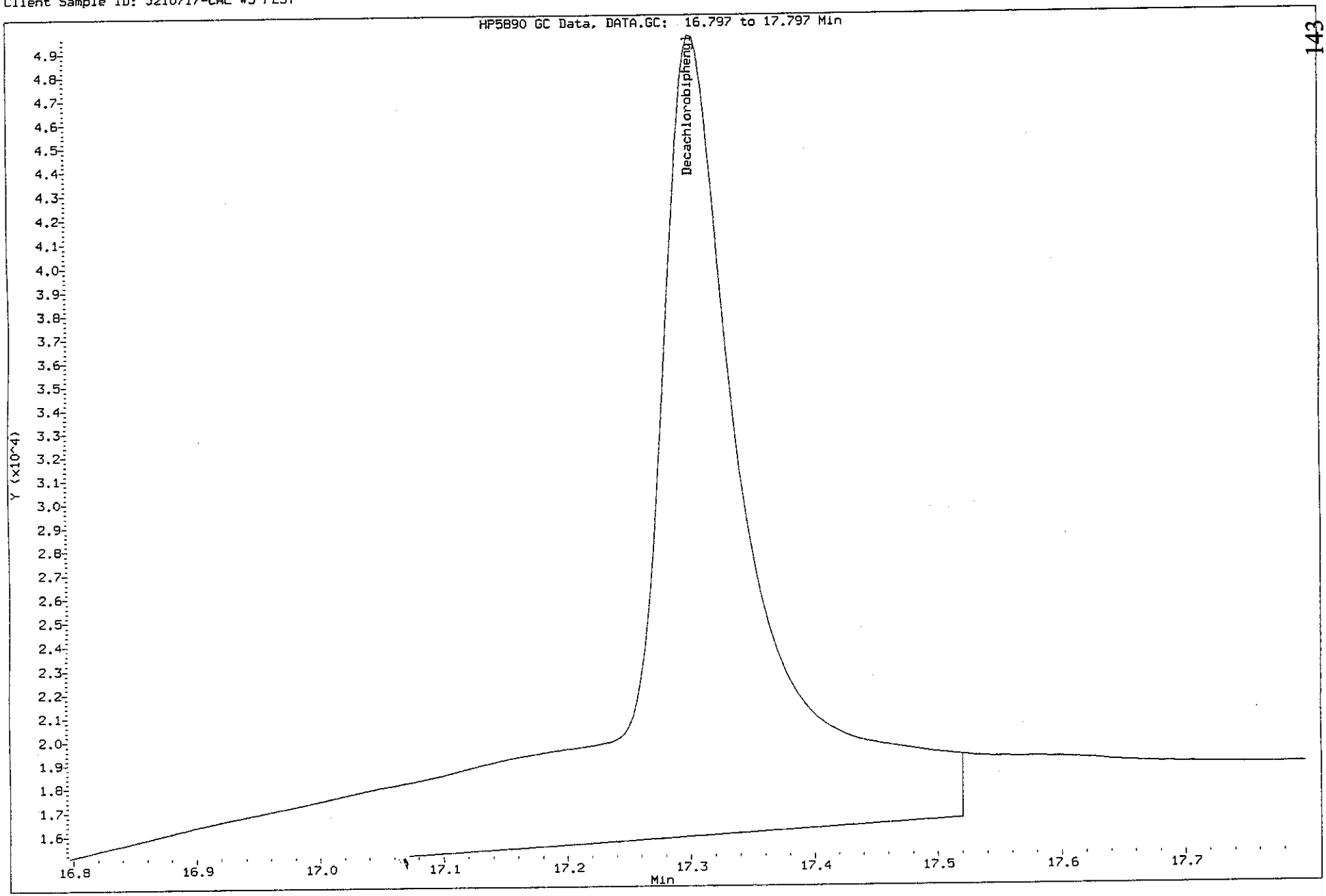


MANUAL EDIT CODES
1. WRONG PEAK SELECTED
2. POOR INTEGRATION
3. PEAK NOT FOUND
4. OTHER:
ANALYST: LC
DATE: 7/18/01

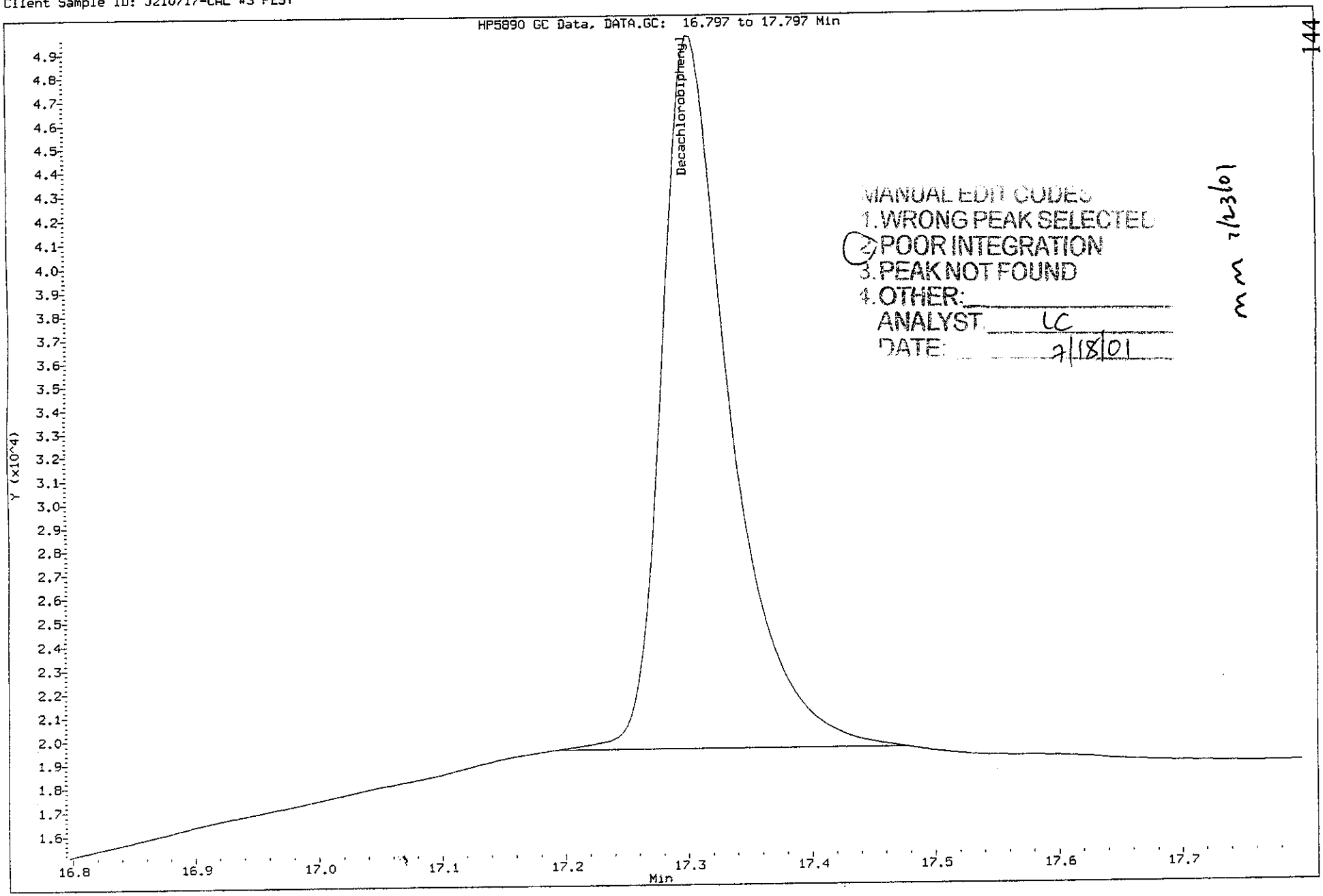
MM 7/23/01

142

Data File: //C-JAX1/CSV/CHEM/GC03.I/GC031G17.B/Confirm_GC031G17.B/0717-06Confirm.d
Injection Date: 17-JUL-2001 17:30
Instrument: GC03.i
Client Sample ID: J210717-CAL #3 PEST



Data File: //C-JAX1/CSV/CHEM/GC03.I/GC031G17.B/Confirm_GC031G17.B/0717-06Confirm.d
Injection Date: 17-JUL-2001 17:30
Instrument: GC03.i
Client Sample ID: J210717-CAL #3 PEST



MANUAL EDIT CODES
1. WRONG PEAK SELECTED
2. POOR INTEGRATION
3. PEAK NOT FOUND
4. OTHER:
ANALYST LC
DATE: 7/18/01

MM 7/23/01

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-07.D
Report Date: 18-Jul-2001 11:52

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-07.D
Lab Smp Id: J210717-CAL #4 PEST Client Smp ID: J210717-CAL #4 PEST
Inj Date : 17-JUL-2001 17:53
Operator : LC Inst ID: GC03.i
Smp Info : J210717-CAL STD #4 (PEST)
Misc Info : ;0.2 ug/mL 608/8081 CAL STD (01-SVA-0520)
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 18-Jul-2001 11:52 lcarley Quant Type: ISTD
Cal Date : 17-JUL-2001 17:53 Cal File: 0717-07.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX-TRG-01

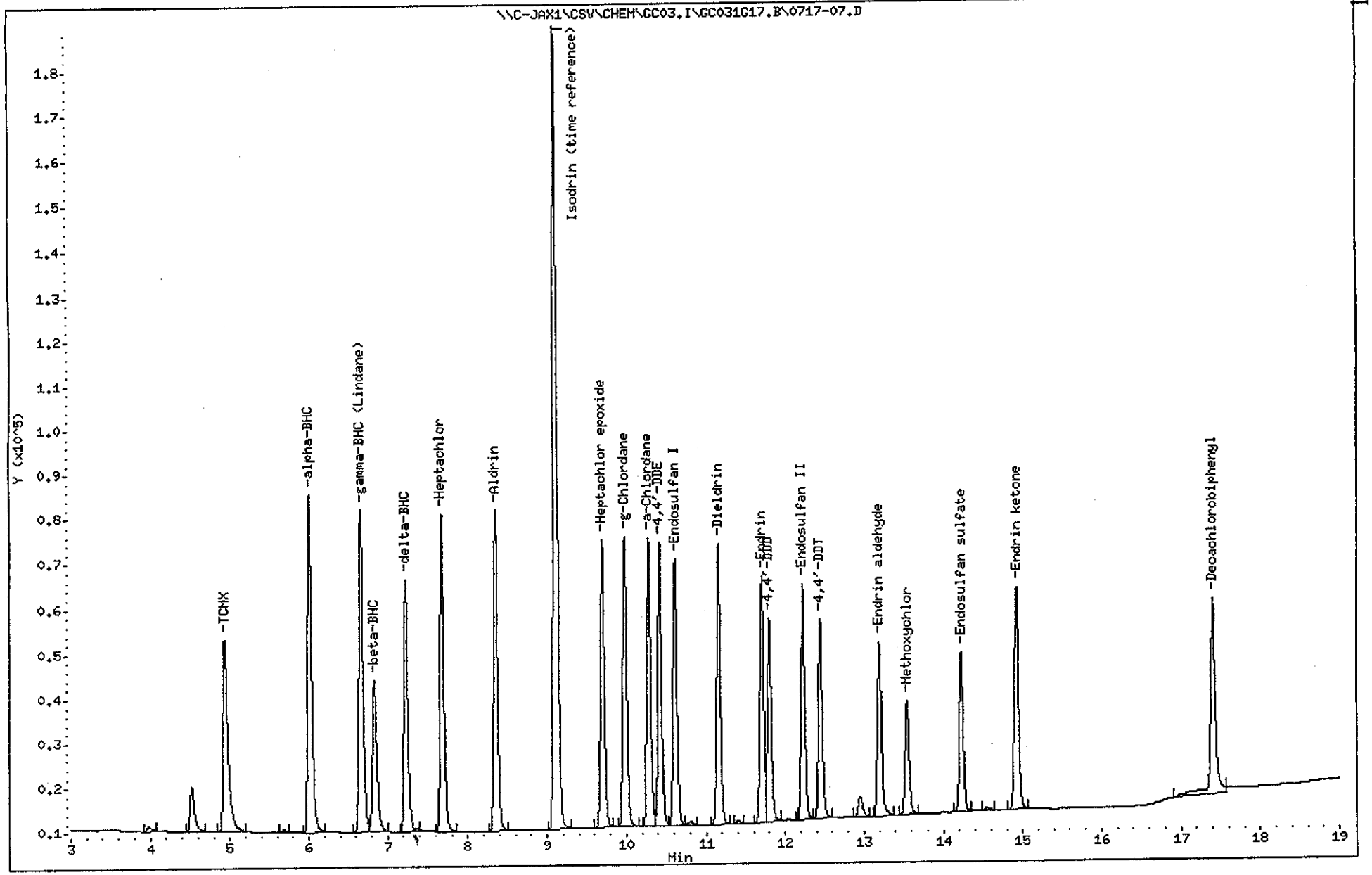
Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 30 Isodrin (time reference)	9.106	9.106	(1.000)	611811	0.50000	
$ 1 TCMX	4.936	4.936	(0.542)	180670	0.20000	0.20
$ 22 Decachlorobiphenyl	17.403	17.403	(1.911)	192177	0.20000	0.22
2 alpha-BHC	6.010	6.010	(0.660)	262937	0.20000	0.23
3 gamma-BHC (Lindane)	6.660	6.660	(0.731)	246957	0.20000	0.22
4 beta-BHC	6.830	6.830	(0.750)	127453	0.20000	0.20
6 delta-BHC	7.226	7.226	(0.794)	180929	0.20000	0.23
5 Heptachlor	7.676	7.676	(0.843)	233320	0.20000	0.21
7 Aldrin	8.350	8.350	(0.917)	231992	0.20000	0.20
8 Heptachlor epoxide	9.700	9.700	(1.065)	205947	0.20000	0.22
9 g-Chlordane	9.983	9.983	(1.096)	213285	0.20000	0.21
10 a-Chlordane	10.280	10.280	(1.129)	209583	0.20000	0.21
12 4,4'-DDE	10.420	10.420	(1.144)	202253	0.20000	0.22
11 Endosulfan I	10.610	10.610	(1.165)	193840	0.20000	0.22
13 Dieldrin	11.156	11.156	(1.225)	201300	0.20000	0.22
14 Endrin	11.703	11.703	(1.285)	174551	0.20000	0.23
15 4,4'-DDD	11.800	11.800	(1.296)	149695	0.20000	0.22
16 Endosulfan II	12.223	12.223	(1.342)	176037	0.20000	0.21
17 4,4'-DDT	12.446	12.446	(1.367)	144950	0.20000	0.22
18 Endrin aldehyde	13.196	13.196	(1.449)	139820	0.20000	0.20
20 Methoxychlor	13.543	13.543	(1.487)	85496	0.20000	0.20
19 Endosulfan sulfate	14.223	14.223	(1.562)	120052	0.20000	0.21
21 Endrin ketone	14.920	14.920	(1.638)	182967	0.20000	0.18

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-07.D
Date : 17-JUL-2001 17:53
Client ID: J210717-CAL #4 PEST
Sample Info: J210717-CAL STD #4 (PEST)

Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



Data File: 0717-07Confirm.d
Report Date: 18-Jul-2001 11:59

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-07C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-07.D
Inj Date : 17-JUL-2001 17:53
Sample Info: J210717-CAL STD #4 (PEST)
Misc Info : ;0.2 ug/mL 608/8081 CAL STD (01-SVA-0520)
Cal Date : 18-JUL-2001 11:59
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.537	9.107	723596	611811	0.50	0.50		100.00	
TCMX	4.290	4.937	186855	180670	0.21	0.21		100.00	
Decachlorobiphenyl	17.300	17.403	220189	192177	0.19	0.23		100.00(M)	
alpha-BHC	5.377	6.010	278819	262937	0.20	0.22		100.00	
gamma-BHC (Lindane)	6.080	6.660	263248	246957	0.24	0.21		100.00	
beta-BHC	6.233	6.830	134587	127453	0.22	0.20		100.00	
delta-BHC	6.847	7.227	192162	180929	0.20	0.22		100.00	
Heptachlor	6.987	7.677	281910	233320	0.22	0.21		100.00	
Aldrin	7.677	8.350	267424	231992	0.21	0.20		100.00	
Heptachlor epoxide	8.913	9.700	242445	205947	0.22	0.21		100.00	
g-Chlordane	9.327	9.983	254802	213285	0.22	0.21		100.00	
a-Chlordane	9.653	10.280	243676	209583	0.22	0.21		100.00	
4,4'-DDE	10.027	10.420	231580	202253	0.23	0.21		100.00	
Endosulfan I	9.783	10.610	231116	193840	0.22	0.21		100.00	
Dieldrin	10.397	11.157	237220	201300	0.23	0.21		100.00	
Endrin	11.087	11.703	212545	174551	0.23	0.22		100.00	
4,4'-DDD	11.330	11.800	160194	149695	0.23	0.21		100.00	
Endosulfan II	11.567	12.223	203842	176037	0.22	0.21		100.00	
4,4'-DDT	12.043	12.447	172273	144950	0.23	0.21		100.00	
Endrin aldehyde	12.333	13.197	160471	139820	0.21	0.20		100.00	
Methoxychlor	13.627	13.543	99514	85496	0.21	0.20		100.00	
Endosulfan sulfate	12.967	14.223	142174	120052	0.22	0.20		100.00	
Endrin ketone	14.217	14.920	206602	182967	0.18	0.18		100.00	

Data File: 0717-07Confirm.d
Report Date: 18-Jul-2001 11:59

QC Flag Legend

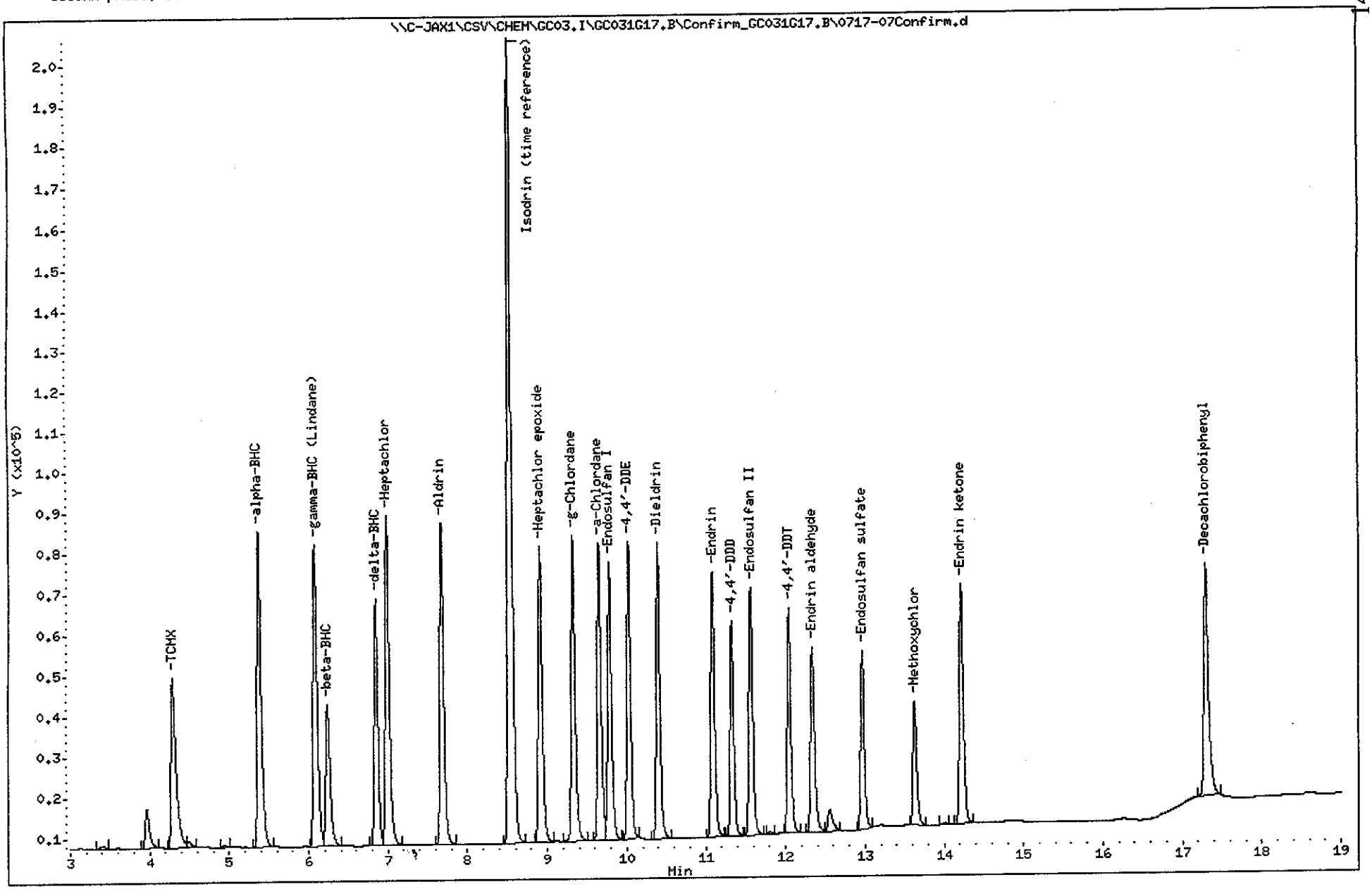
M - Compound response manually integrated.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-07Confirm.d
Date : 17-JUL-2001 17:53
Client ID: J210717-CAL #4 PEST
Sample Info: J210717-CAL STD #4 (PEST)

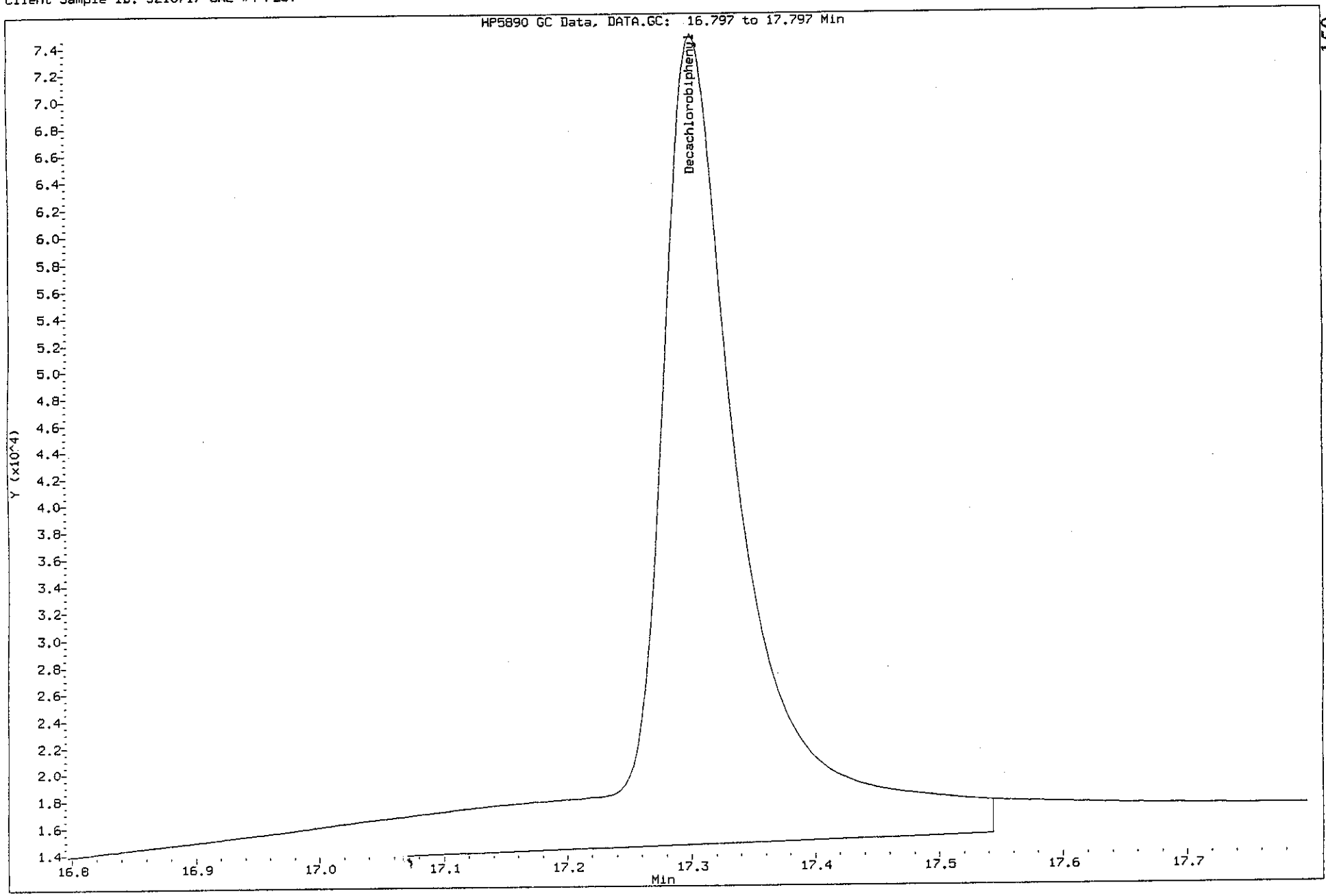
Column phase: CLPesticides2

Instrument: GC03.i

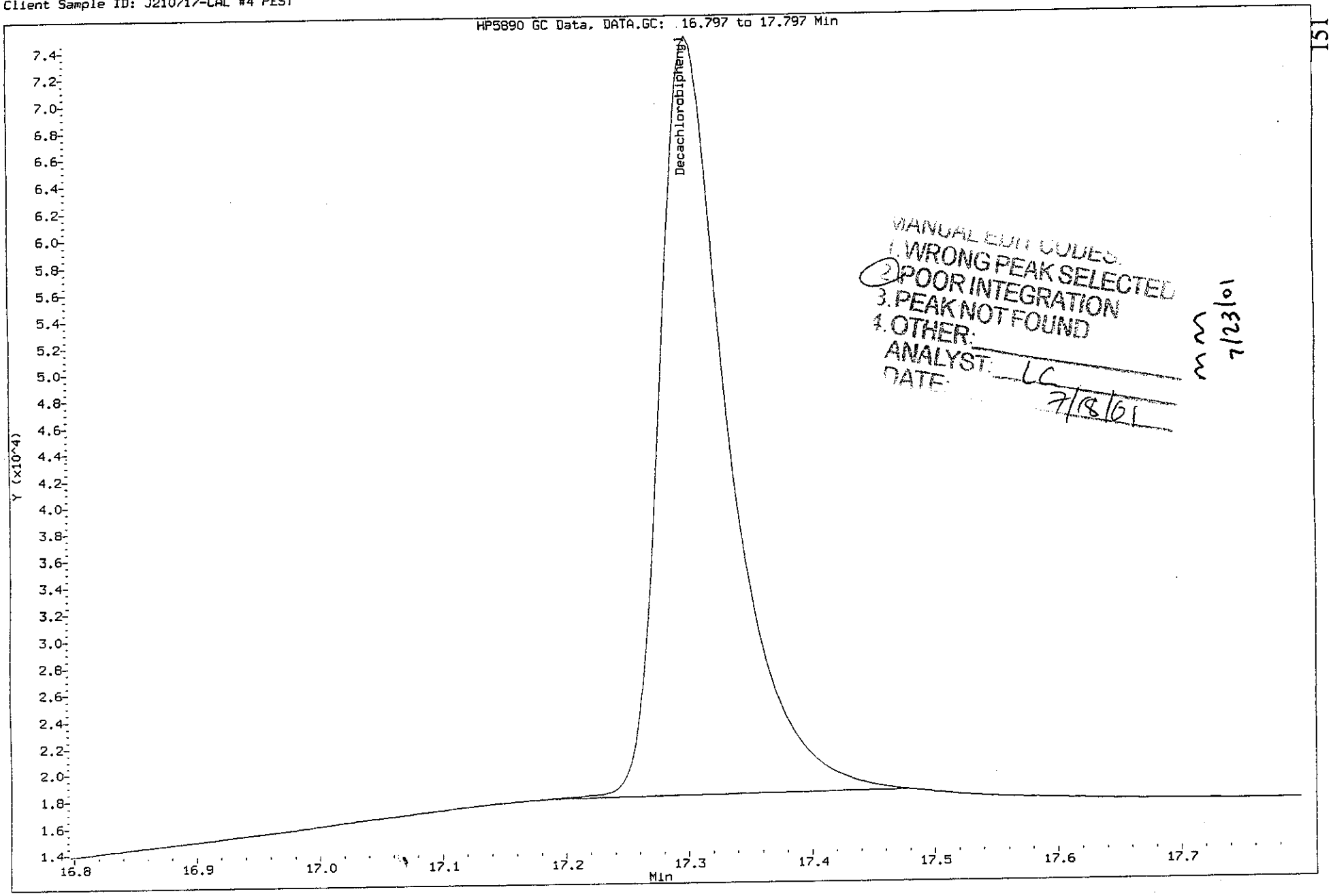
Operator: LC
Column diameter: 0.32



Data File: //C-JAX1/CSV/CHEM/GC03.I/GC031G17.B/Confirm_GC031G17.B/0717-07Confirm.d
Injection Date: 17-JUL-2001 17:53
Instrument: GC03.i
Client Sample ID: J210717-CAL #4 PEST



Data File: //C-JAX1/CSV/CHEM/GC03.I/GC031G17.B/Confirm_GC031G17.B/0717-07Confirm.d
Injection Date: 17-JUL-2001 17:53
Instrument: GC03.i
Client Sample ID: J210717-CAL #4 PEST



MANUAL EDIT CODES:
1. WRONG PEAK SELECTED
2. POOR INTEGRATION
3. PEAK NOT FOUND
4. OTHER:
ANALYST: LC
DATE: 7/18/01

MM 7/23/01

151

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-08.D
Report Date: 18-Jul-2001 11:53

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-08.D
Lab Smp Id: J210717-CAL #5 PEST Client Smp ID: J210717-CAL #5 PEST
Inj Date : 17-JUL-2001 18:17
Operator : LC Inst ID: GC03.i
Smp Info : J210717-CAL STD #5 (PEST)
Misc Info : ;0.4 ug/mL 608/8081 CAL STD (01-SVA-0521)
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 18-Jul-2001 11:52 lcarley Quant Type: ISTD
Cal Date : 17-JUL-2001 18:17 Cal File: 0717-08.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX-TRG-01

Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 30 Isodrin (time reference)	9.106	9.106	(1.000)	624180	0.50000	
$ 1 TCMX	4.936	4.936	(0.542)	359373	0.40000	0.40
$ 22 Decachlorobiphenyl	17.406	17.406	(1.911)	321042	0.40000	0.37
2 alpha-BHC	6.006	6.006	(0.660)	559808	0.40000	0.46
3 gamma-BHC (Lindane)	6.660	6.660	(0.731)	515829	0.40000	0.44
4 beta-BHC	6.830	6.830	(0.750)	257724	0.40000	0.40
6 delta-BHC	7.226	7.226	(0.794)	394784	0.40000	0.48
5 Heptachlor	7.676	7.676	(0.843)	486055	0.40000	0.43
7 Aldrin	8.350	8.350	(0.917)	479372	0.40000	0.40
8 Heptachlor epoxide	9.700	9.700	(1.065)	431082	0.40000	0.44
9 g-Chlordane	9.980	9.980	(1.096)	440975	0.40000	0.42
10 a-Chlordane	10.280	10.280	(1.129)	425427	0.40000	0.41
12 4,4'-DDE	10.420	10.420	(1.144)	420321	0.40000	0.44
11 Endosulfan I	10.610	10.610	(1.165)	399200	0.40000	0.43
13 Dieldrin	11.156	11.156	(1.225)	425622	0.40000	0.45
14 Endrin	11.703	11.703	(1.285)	369882	0.40000	0.46
15 4,4'-DDD	11.796	11.796	(1.295)	329186	0.40000	0.46
16 Endosulfan II	12.223	12.223	(1.342)	367230	0.40000	0.43
17 4,4'-DDT	12.443	12.443	(1.366)	305425	0.40000	0.44
18 Endrin aldehyde	13.196	13.196	(1.449)	290439	0.40000	0.41
20 Methoxychlor	13.543	13.543	(1.487)	172007	0.40000	0.39
19 Endosulfan sulfate	14.223	14.223	(1.562)	255287	0.40000	0.43
21 Endrin ketone	14.920	14.920	(1.638)	369631	0.40000	0.36

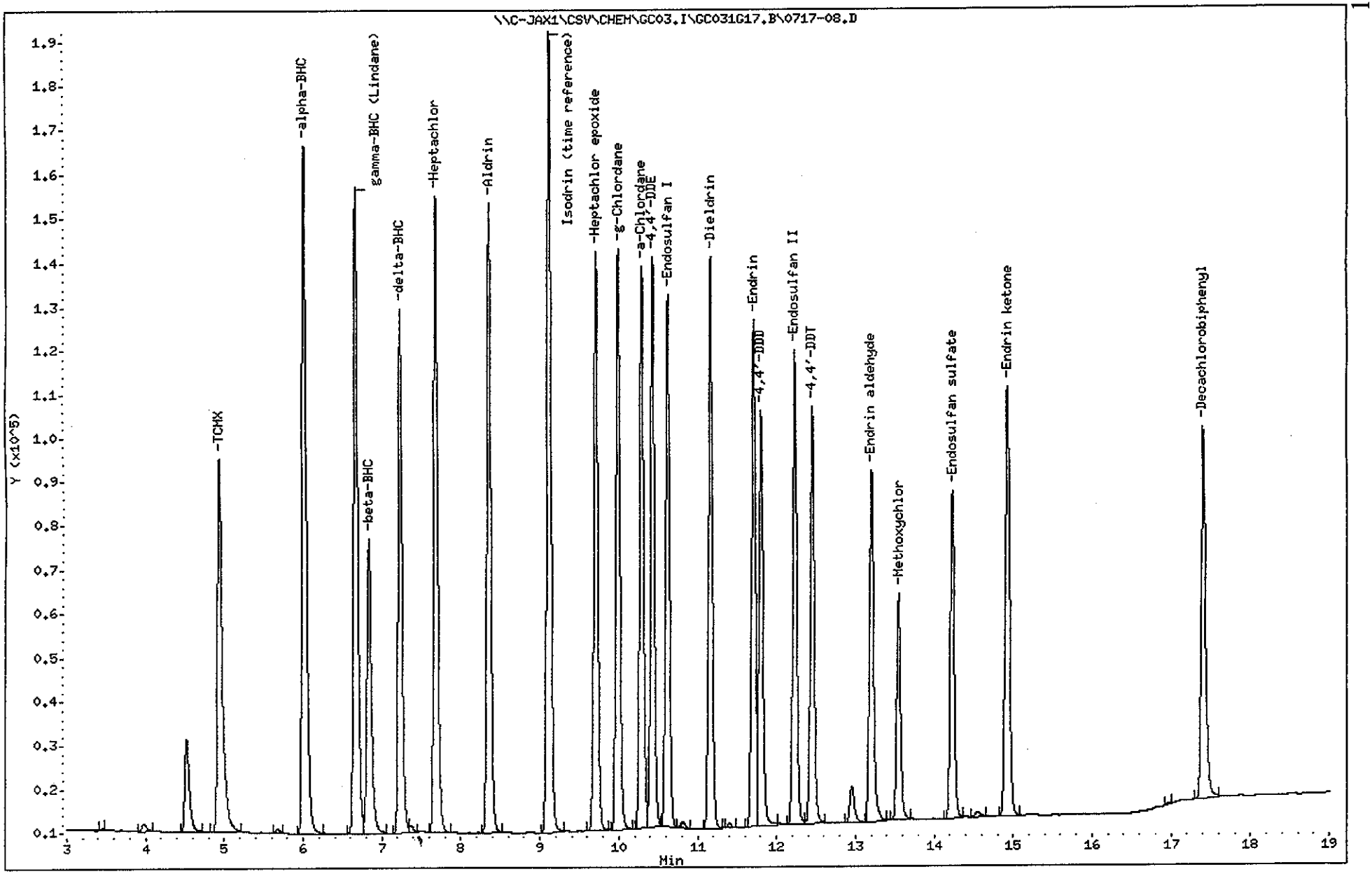
Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-08.D
Date : 17-JUL-2001 18:17
Client ID: J210717-CAL #5 PEST
Sample Info: J210717-CAL STD #5 (PEST)

Instrument: GC03.i

Operator: LC

Column phase: CLPesticides

Column diameter: 0.32



Data File: 0717-08Confirm.d
Report Date: 18-Jul-2001 11:59

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-08C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-08.D
Inj Date : 17-JUL-2001 18:17
Sample Info: J210717-CAL STD #5 (PEST)
Misc Info : ;0.4 ug/mL 608/8081 CAL STD (01-SVA-0521)
Cal Date : 18-JUL-2001 11:59
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.533	9.107	741174	624180	0.50	0.50		100.00	
TCMX	4.290	4.937	380383	359373	0.41	0.40		100.00	
Decachlorobiphenyl	17.297	17.407	436387	321042	0.37	0.37		100.00	
alpha-BHC	5.377	6.007	615190	559808	0.40	0.45		100.00	
gamma-BHC (Lindane)	6.080	6.660	567299	515829	0.47	0.44		100.00	
beta-BHC	6.233	6.830	283465	257724	0.44	0.41		100.00	
delta-BHC	6.847	7.227	433203	394784	0.40	0.46		100.00	
Heptachlor	6.987	7.677	599498	486055	0.45	0.43		100.00	
Aldrin	7.677	8.350	568055	479372	0.43	0.41		100.00	
Heptachlor epoxide	8.913	9.700	517491	431082	0.45	0.43		100.00	
g-Chlordane	9.327	9.980	539464	440975	0.44	0.42		100.00	
a-Chlordane	9.653	10.280	511541	425427	0.44	0.41		100.00	
4,4'-DDE	10.023	10.420	509087	420321	0.47	0.44		100.00	
Endosulfan I	9.783	10.610	495551	399200	0.45	0.43		100.00	
Dieldrin	10.397	11.157	518528	425622	0.48	0.44		100.00	
Endrin	11.087	11.703	466843	369882	0.47	0.45		100.00	
4,4'-DDD	11.327	11.797	353384	329186	0.47	0.45		100.00	
Endosulfan II	11.563	12.223	437891	367230	0.44	0.43		100.00	
4,4'-DDT	12.043	12.443	382954	305425	0.48	0.44		100.00	
Endrin aldehyde	12.333	13.197	341239	290439	0.43	0.41		100.00	
Methoxychlor	13.627	13.543	212949	172007	0.44	0.40		100.00	
Endosulfan sulfate	12.963	14.223	314515	255287	0.46	0.43		100.00	
Endrin ketone	14.217	14.920	431527	369631	0.38	0.36		100.00	

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-09.D
Report Date: 18-Jul-2001 11:53

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-09.D
Lab Smp Id: J210717-CAL #6 PEST Client Smp ID: J210717-CAL #6 PEST
Inj Date : 17-JUL-2001 18:40
Operator : LC Inst ID: GC03.i
Smp Info : J210717-CAL STD #6 (PEST)
Misc Info : ;1.0 ug/mL 608/8081 CAL STD (01-SVA-0516)
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 18-Jul-2001 11:53 lcarley Quant Type: ISTD
Cal Date : 17-JUL-2001 18:40 Cal File: 0717-09.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX-TRG-01

Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 30 Isodrin (time reference)	9.106	9.106	(1.000)	643719	0.50000	
$ 1 TCMX	4.936	4.936	(0.542)	858180	1.00000	0.93
$ 22 Decachlorobiphenyl	Compound Not Detected.					
2 alpha-BHC	6.006	6.006	(0.660)	1405072	1.00000	1.1(A)
3 gamma-BHC (Lindane)	6.660	6.660	(0.731)	1270106	1.00000	1.0(A)
4 beta-BHC	6.830	6.830	(0.750)	622702	1.00000	0.96
6 delta-BHC	7.223	7.223	(0.793)	1023781	1.00000	1.2(A)
5 Heptachlor	7.676	7.676	(0.843)	1201890	1.00000	1.0(A)
7 Aldrin	8.350	8.350	(0.917)	1175560	1.00000	0.97
8 Heptachlor epoxide	9.700	9.700	(1.065)	1064766	1.00000	1.0(A)
9 g-Chlordane	9.980	9.980	(1.096)	1083737	1.00000	1.0(A)
10 a-Chlordane	10.280	10.280	(1.129)	1030369	1.00000	0.97
12 4,4'-DDE	10.420	10.420	(1.144)	1046344	1.00000	1.0(A)
11 Endosulfan I	10.610	10.610	(1.165)	986488	1.00000	1.0(A)
13 Dieldrin	11.156	11.156	(1.225)	1066386	1.00000	1.1(A)
14 Endrin	11.703	11.703	(1.285)	924418	1.00000	1.1(A)
15 4,4'-DDD	11.796	11.796	(1.295)	828587	1.00000	1.1(A)
16 Endosulfan II	12.223	12.223	(1.342)	907270	1.00000	1.0(A)
17 4,4'-DDT	12.443	12.443	(1.366)	770950	1.00000	1.1(A)
18 Endrin aldehyde	13.193	13.193	(1.449)	715931	1.00000	0.99
20 Methoxychlor	13.540	13.540	(1.487)	415127	1.00000	0.93
19 Endosulfan sulfate	Compound Not Detected.					
21 Endrin ketone	Compound Not Detected.					

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-09.D
Report Date: 18-Jul-2001 11:53

QC Flag Legend

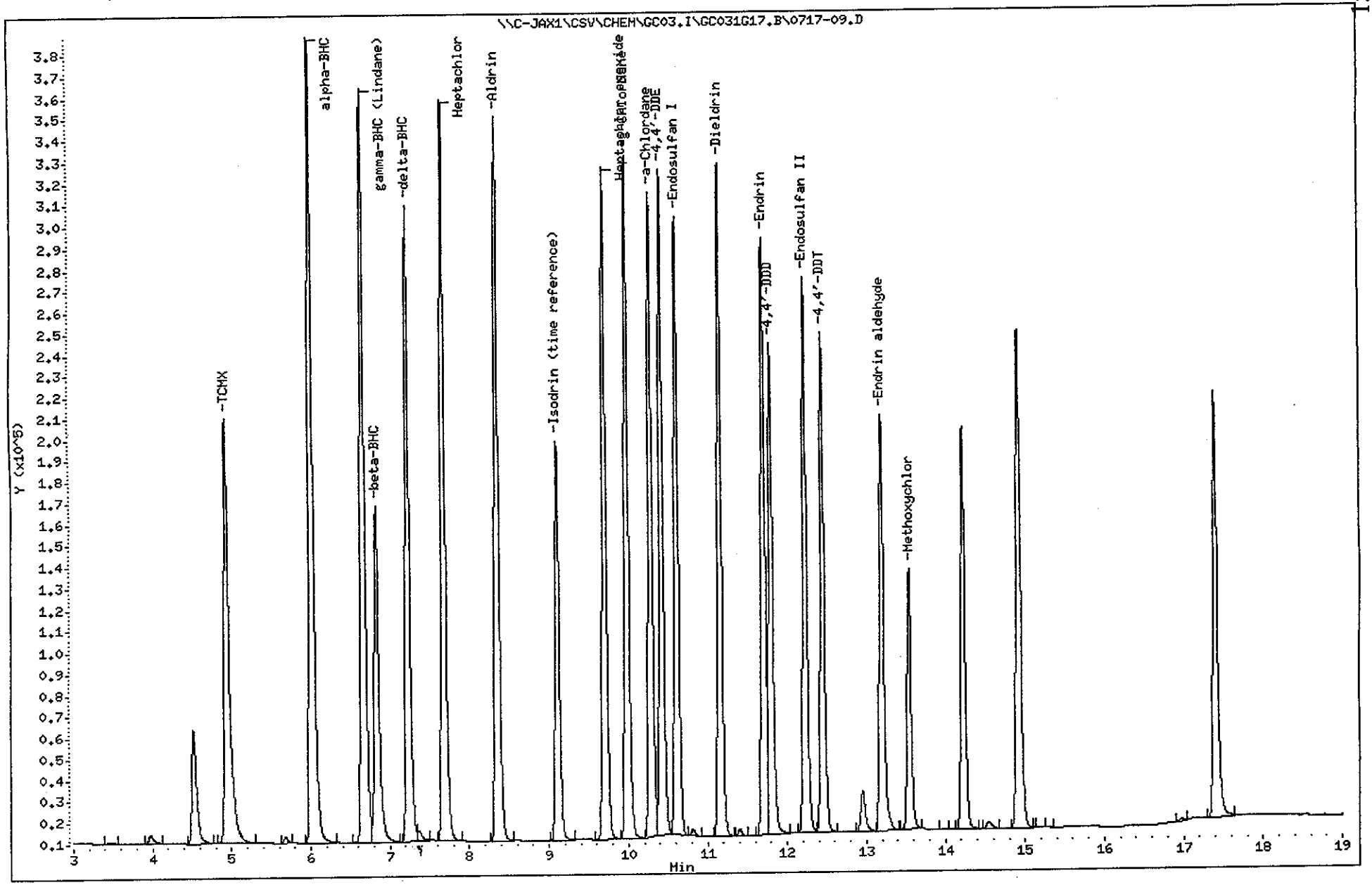
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-09.D
Date : 17-JUL-2001 18:40
Client ID: J210717-CAL #6 PEST
Sample Info: J210717-CAL STD #6 (PEST)

Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32



157

Data File: 0717-09Confirm.d
Report Date: 18-Jul-2001 12:00

Columbia Analytical Services, Inc. (JAX)

Sample #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-09C
Sample #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-09.D
Inj Date : 17-JUL-2001 18:40
Sample Info: J210717-CAL STD #6 (PEST)
Misc Info : ;1.0 ug/mL 608/8081 CAL STD (01-SVA-0516)
Cal Date : 18-JUL-2001 11:59
Operator : LC
Inst ID : GC03.i
Dil Factor : 1.000000

Method #1 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.M\PestPCB-IS
Method #2 : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Sub List #1 : PestStandard.sub
Sub List #2 : PestStandard.sub
Col #1 Phase : CLPesticides2
Col #2 Phase : CLPesticides

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio	Review Cod
Isodrin (time reference)	8.533	9.107	763879	643719	0.50	0.50		100.00	
TCMX	4.290	4.937	921793	858180	0.98	0.93		100.00	
Decachlorobiphenyl	17.297	0.000	1021552	0	0.86	0.00		100.00	
alpha-BHC	5.377	6.007	1568848	1405072	1.0	1.1		100.00	
gamma-BHC (Lindane)	6.077	6.660	1419119	1270106	1.1	1.0		100.00(A)	
beta-BHC	6.233	6.830	716651	622702	1.1	0.96		100.00(A)	
delta-BHC	6.843	7.223	1141437	1023781	1.0	1.2		100.00(A)	
Heptachlor	6.987	7.677	1507335	1201890	1.1	1.0		100.00(A)	
Aldrin	7.677	8.350	1415972	1175560	1.0	0.97		100.00(A)	
Heptachlor epoxide	8.913	9.700	1293977	1064766	1.1	1.0		100.00(A)	
g-Chlordane	9.327	9.980	1342621	1083737	1.0	1.0		100.00(A)	
a-Chlordane	9.653	10.280	1256958	1030369	1.0	0.97		100.00(A)	
4,4'-DDE	10.023	10.420	1277883	1046344	1.1	1.0		100.00(A)	
Endosulfan I	9.783	10.610	1249483	986488	1.1	1.0		100.00(A)	
Dieldrin	10.397	11.157	1317124	1066386	1.1	1.1		100.00(A)	
Endrin	11.087	11.703	1190719	924418	1.1	1.1		100.00(A)	
4,4'-DDD	11.327	11.797	896679	828587	1.1	1.1		100.00(A)	
Endosulfan II	11.563	12.223	1104577	907270	1.1	1.0		100.00(A)	
4,4'-DDT	12.043	12.443	1002852	770950	1.2	1.1		100.00(A)	
Endrin aldehyde	12.333	13.193	861028	715931	1.0	0.99		100.00(A)	
Methoxychlor	13.627	13.540	536580	415127	1.0	0.93		100.00(A)	
Endosulfan sulfate	12.963	0.000	831254	0	1.2	0.00		100.00(A)	
Endrin ketone	14.217	0.000	1064400	0	0.92	0.00		100.00	

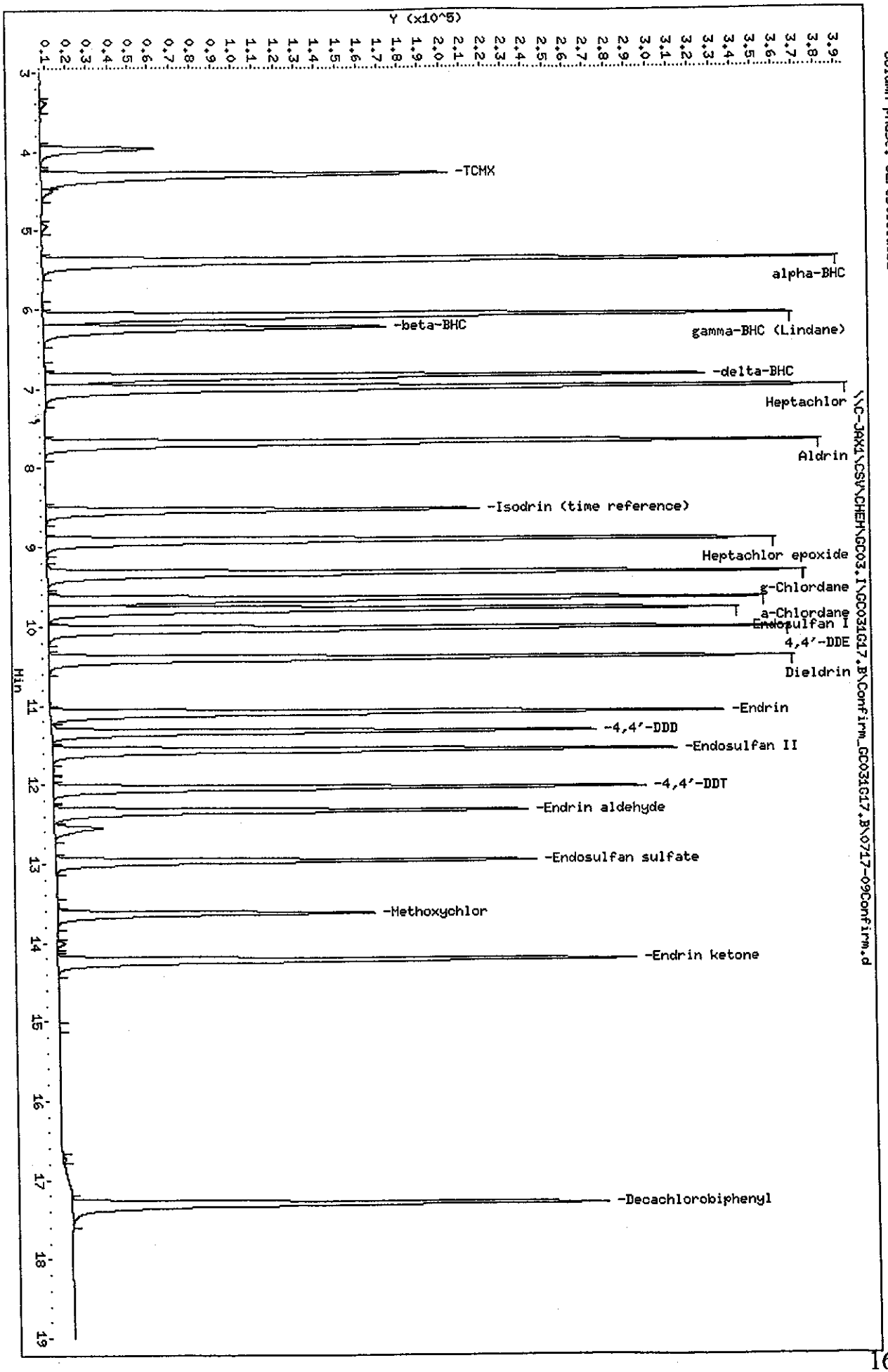
Data File: 0717-09Confirm.d
Report Date: 18-Jul-2001 12:00

QC Flag Legend

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

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-09Confirm.d
Date : 17-JUL-2001 18:40
Client ID: J210717-CAL #6 PEST
Sample Info: J210717-CAL STD #6 (PEST)
Column phase: CLPesticides2

Instrument: GC03.i
Operator: LC
Column diameter: 0.32



FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date: 07/18/01 Time: 0310

Lab File ID: 0717-31 Init. Calib. Date(s): 07/17/01 07/17/01

Init. Calib. Times: 1644 1840

GC Column: CLPESTICIDES ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.4	MIN RRF	%D	MAX %D	
alpha-BHC	0.987	1.104	0.01	11.8	15.0	
gamma-BHC (Lindane)	0.940	0.782	0.01	16.8	15.0	<-
beta-BHC	0.506	0.431	0.01	14.8	15.0	
Heptachlor	0.909	0.312	0.01	65.7	15.0	<-
delta-BHC	0.686	0.819	0.01	19.4	15.0	<-
Aldrin	0.940	0.962	0.01	2.3	15.0	
Heptachlor epoxide	0.798	0.856	0.01	7.3	15.0	
g-Chlordane	0.836	0.885	0.01	5.9	15.0	
a-Chlordane	0.824	0.847	0.01	2.8	15.0	
4,4'-DDE	0.770	0.854	0.01	10.9	15.0	
Dieldrin	0.772	0.899	0.01	16.4	15.0	<-
Endrin	0.662	0.553	0.01	16.5	15.0	<-
4,4'-DDD	0.590	0.730	0.01	23.7	15.0	<-
Endosulfan II	0.688	0.707	0.01	2.8	15.0	
4,4'-DDT	0.562	0.300	0.01	46.6	15.0	<-
Endrin aldehyde	0.561	0.551	0.01	1.8	15.0	
Endosulfan sulfate	0.480	0.493	0.01	2.7	15.0	
Methoxychlor	0.348	0.016	0.01	95.4	15.0	<-
Endrin ketone	0.814	0.219	0.01	73.1	15.0	<-
Endosulfan I	0.742	0.845	0.01	13.9	15.0	
TCMX	0.716	0.683	0.01	4.6	15.0	
Decachlorobiphenyl	0.688	0.709	0.01	3.0	15.0	

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date: 07/18/01 Time: 0310

Lab File ID: 0717-31CONFIRM Init. Calib. Date(s): 07/17/01 07/17/01

Init. Calib. Times: 1644 1840

GC Column: CLPESTICIDES2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.4 AMOUNT	CURVE	%D	MAX %d		
alpha-BHC		0.41	0.40	LINR	2.5	15.0	
gamma-BHC (Lindane)		0.35	0.40	AVRG	12.5	15.0	
beta-BHC		0.36	0.40	AVRG	10.0	15.0	
delta-BHC		0.42	0.40	LINR	5.0	15.0	
Heptachlor		0.14	0.40	AVRG	65.0	15.0	<-
Aldrin		0.42	0.40	AVRG	5.0	15.0	
Heptachlor epoxide		0.43	0.40	AVRG	7.5	15.0	
g-Chlordane		0.42	0.40	AVRG	5.0	15.0	
a-Chlordane		0.42	0.40	AVRG	5.0	15.0	
Endosulfan I		0.46	0.40	AVRG	15.0	15.0	
4,4'-DDE		0.46	0.40	AVRG	15.0	15.0	
Dieldrin		0.48	0.40	AVRG	20.0	15.0	<-
4,4'-DDD		0.54	0.40	AVRG	35.0	15.0	<-
Endrin		0.34	0.40	AVRG	15.0	15.0	
Endosulfan II		0.59	0.40	AVRG	47.5	15.0	<-
Endosulfan sulfate		0.43	0.40	AVRG	7.5	15.0	
Endrin aldehyde		0.44	0.40	AVRG	10.0	15.0	
Methoxychlor		0.016	0.40	AVRG	96.0	15.0	<-
Endrin ketone		0.11	0.40	AVRG	72.5	15.0	<-
4,4'-DDT		0.015	0.40	AVRG	96.2	15.0	<-
TCMX		0.42	0.40	AVRG	5.0	15.0	
Decachlorobiphenyl		0.44	0.40	AVRG	10.0	15.0	

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date: 07/18/01 Time: 0725

Lab File ID: 0717-42 Init. Calib. Date(s): 07/17/01 07/17/01

Init. Calib. Times: 1644 1840

GC Column: CLPESTICIDES ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF0.4	MIN RRF	%D	MAX %D	
alpha-BHC	0.987	1.140	0.01	15.5	15.0	<-
gamma-BHC (Lindane)	0.940	0.896	0.01	4.7	15.0	
beta-BHC	0.506	0.480	0.01	5.1	15.0	
Heptachlor	0.909	0.518	0.01	43.0	15.0	<-
delta-BHC	0.686	0.848	0.01	23.6	15.0	<-
Aldrin	0.940	0.974	0.01	3.6	15.0	
Heptachlor epoxide	0.798	0.876	0.01	9.8	15.0	
g-Chlordane	0.836	0.902	0.01	7.9	15.0	
a-Chlordane	0.824	0.867	0.01	5.2	15.0	
4,4'-DDE	0.770	0.858	0.01	11.4	15.0	
Dieldrin	0.772	0.872	0.01	13.0	15.0	
Endrin	0.662	0.646	0.01	2.4	15.0	
4,4'-DDD	0.590	0.824	0.01	39.7	15.0	<-
Endosulfan II	0.688	0.752	0.01	9.3	15.0	
4,4'-DDT	0.562	0.278	0.01	50.5	15.0	<-
Endrin aldehyde	0.561	0.596	0.01	6.2	15.0	
Endosulfan sulfate	0.480	0.512	0.01	6.7	15.0	
Methoxychlor	0.348	0.051	0.01	85.3	15.0	<-
Endrin ketone	0.814	0.390	0.01	52.1	15.0	<-
Endosulfan I	0.742	0.835	0.01	12.5	15.0	
TCMX	0.716	0.710	0.01	0.8	15.0	
Decachlorobiphenyl	0.688	0.684	0.01	0.6	15.0	

FORM VII SV

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COLUMBIA ANALYTICAL SERVI Contract: NA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA

Instrument ID: GC03 Calibration Date: 07/18/01 Time: 0725

Lab File ID: 0717-42CONFIRM Init. Calib. Date(s): 07/17/01 07/17/01

Init. Calib. Times: 1644 1840

GC Column: CLPESTICIDES2 ID: 0.32 (mm)

COMPOUND	SAMPLE AMOUNT	CAL0.4 AMOUNT	CURVE	%D	MAX %d		
alpha-BHC		0.43	0.40	LINR	7.5	15.0	
gamma-BHC (Lindane)		0.41	0.40	AVRG	2.5	15.0	
beta-BHC		0.41	0.40	AVRG	2.5	15.0	
delta-BHC		0.44	0.40	LINR	10.0	15.0	
Heptachlor		0.22	0.40	AVRG	45.0	15.0	<-
Aldrin		0.44	0.40	AVRG	10.0	15.0	
Heptachlor epoxide		0.45	0.40	AVRG	12.5	15.0	
g-Chlordane		0.44	0.40	AVRG	10.0	15.0	
a-Chlordane		0.44	0.40	AVRG	10.0	15.0	
Endosulfan I		0.46	0.40	AVRG	15.0	15.0	
4,4'-DDE		0.47	0.40	AVRG	17.5	15.0	<-
Dieldrin		0.49	0.40	AVRG	22.5	15.0	<-
4,4'-DDD		0.62	0.40	AVRG	55.0	15.0	<-
Endrin		0.40	0.40	AVRG	0.0	15.0	
Endosulfan II		0.57	0.40	AVRG	42.5	15.0	<-
Endosulfan sulfate		0.47	0.40	AVRG	17.5	15.0	<-
Endrin aldehyde		0.45	0.40	AVRG	12.5	15.0	
Methoxychlor		0.054	0.40	AVRG	86.5	15.0	<-
Endrin ketone		0.20	0.40	AVRG	50.0	15.0	<-
4,4'-DDT		0.038	0.40	AVRG	90.5	15.0	<-
TCMX		0.43	0.40	AVRG	7.5	15.0	
Decachlorobiphenyl		0.41	0.40	AVRG	2.5	15.0	

FORM VII SV

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-42.D
Report Date: 31-Jul-2001 13:05

Columbia Analytical Services, Inc. (JAX)

Organochlorine Pesticides/PCB by GC/ECD

Data file : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-42.D
Lab Smp Id: J210717-CC2 PEST Client Smp ID: J210717-CC2 PEST
Inj Date : 18-JUL-2001 07:25
Operator : LC Inst ID: GC03.i
Smp Info : J210717-CC2 (PEST)
Misc Info : ;0.4 ug/mL 608/8081 CCV STD (01-SVA-0521
Comment :
Method : \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\PESTPCB-ISTD.m
Meth Date : 31-Jul-2001 11:21 gjohnson Quant Type: ISTD
Cal Date : 17-JUL-2001 19:26 Cal File: 0717-11.D
Als bottle: 42 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PestStandard.sub
Target Version: 4.04
Processing Host: JAX-TRG-01

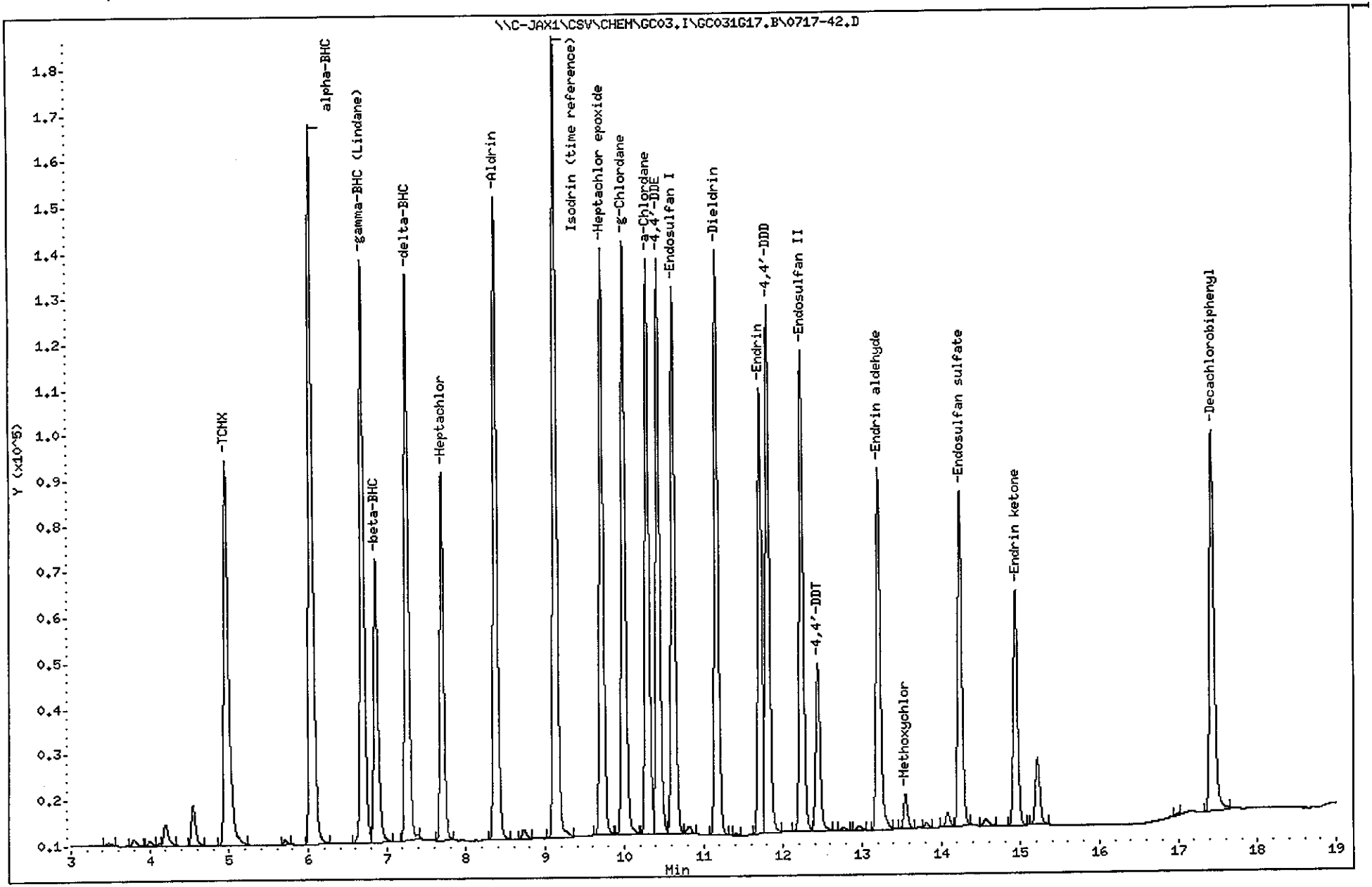
Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 30 Isodrin (time reference)	9.123	9.110	(1.000)	613966	0.50000	
$ 1 TCMX	4.963	4.946	(0.544)	348836	0.40000	0.40
$ 22 Decachlorobiphenyl	17.426	17.436	(1.910)	336217	0.40000	0.40
2 alpha-BHC	6.036	6.036	(0.662)	559847	0.40000	0.46
3 gamma-BHC (Lindane)	6.686	6.686	(0.733)	440309	0.40000	0.38
4 beta-BHC	6.856	6.856	(0.752)	235704	0.40000	0.38
6 delta-BHC	7.253	7.253	(0.795)	416753	0.40000	0.49
5 Heptachlor	7.696	7.696	(0.844)	254543	0.40000	0.23
7 Aldrin	8.370	8.370	(0.917)	478267	0.40000	0.41
8 Heptachlor epoxide	9.713	9.713	(1.065)	430145	0.40000	0.44
9 g-Chlordane	9.993	9.993	(1.095)	443216	0.40000	0.43
10 a-Chlordane	10.290	10.290	(1.128)	425794	0.40000	0.42
12 4,4'-DDE	10.426	10.426	(1.143)	421669	0.40000	0.45
11 Endosulfan I	10.620	10.620	(1.164)	409957	0.40000	0.45
13 Dieldrin	11.166	11.166	(1.224)	428239	0.40000	0.45
14 Endrin	11.713	11.713	(1.284)	317277	0.40000	0.39
15 4,4'-DDD	11.806	11.806	(1.294)	404860	0.40000	0.56
16 Endosulfan II	12.233	12.233	(1.341)	369333	0.40000	0.44
17 4,4'-DDT	12.443	12.443	(1.364)	136584	0.40000	0.20
18 Endrin aldehyde	13.210	13.210	(1.448)	292696	0.40000	0.42
20 Methoxychlor	13.553	13.553	(1.486)	24854	0.40000	0.058
19 Endosulfan sulfate	14.240	14.240	(1.561)	251767	0.40000	0.43
21 Endrin ketone	14.936	14.936	(1.637)	191552	0.40000	0.19

Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\0717-42.D
Date : 18-JUL-2001 07:25
Client ID: J210717-CC2 PEST
Sample Info: J210717-CC2 (PEST)

Column phase: CLPesticides

Instrument: GC03.i

Operator: LC
Column diameter: 0.32

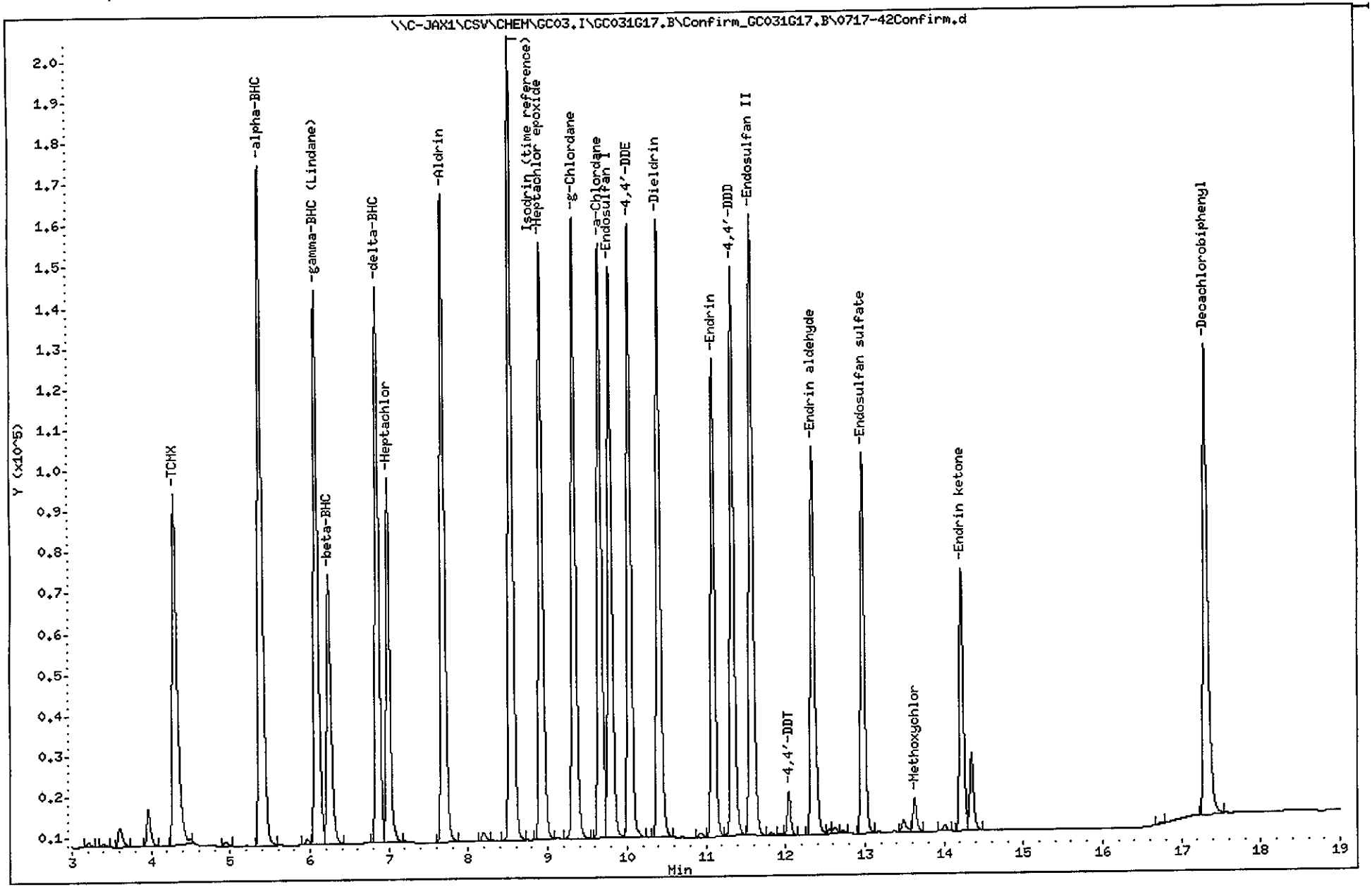


Data File: \\C-JAX1\CSV\CHEM\GC03.I\GC031G17.B\Confirm_GC031G17.B\0717-42Confirm.d
Date : 18-JUL-2001 07:25
Client ID: J210717-CC2 PEST
Sample Info: J210717-CC2 (PEST)

Instrument: GC03.i

Operator: LC
Column diameter: 0.32

Column phase: CLPesticides2



Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Cations - Water

CASE NARRATIVE
Inorganic Analysis

CAS Lab Reference No./SDG#: J2102024

Client/Project: CH2M Hill Constructors, Inc. / N.S. Mayport SWMU 15

I. RECEIPT

No exceptions were encountered unless noted on the Cooler Receipt and Preservation Form included with this data package.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: 3020A

Analysis: 6020

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration: All acceptance criteria were met.

B. Blanks: The continuing and preparation blanks have values greater than the MDL but less than the CRDL and are signified by "B" on form 3. All other acceptance criteria were met.

C. Spikes: All acceptance criteria were met.

D. Duplicates: All acceptance criteria were met.

E. Samples: Analyses proceeded normally.

F. Other: The serial dilution is outside of acceptance criteria, however the post spike is within method criteria therefore, no further action is necessary.

I certify that this data package is in compliance with the terms and conditions agreed to by Columbia Analytical Services, Inc. and by the client, both technically, and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this hard copy data package:

Signed: Theresa Small Date: 7/18/01

Theresa Small
Metals Department Manager

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Phone: (904) 739-2277
Fax: (904) 739-2011

Columbia Analytical Services, Inc.

TOTAL METALS
- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Contract: CH2M Hill Constructors, Inc. SDG No.: J2102024

Lab Code: JAX Case No.: 149294 SAS No.:

SOW No.:

Sample No.	Lab Sample ID.
007-MW01S-Q2-01	J2102024-001
007-MW03S-Q2-01	J2102024-002
007-MW03S-Q2-01S	J2102024-002S
007-MW03S-Q2-01SD	J2102024-002SD
007-MW04S-Q2-01	J2102024-003
007-MW05S-Q2-01	J2102024-004
007-MW08S-Q2-01	J2102024-005
007-DUP-Q2-01	J2102024-006
007-EQB-Q2-01	J2102024-007

Were ICP interelement corrections applied? Yes/No NA

Were ICP background corrections applied? Yes/No NA

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

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

Signature: Theresa Small Name: Theresa Small

Date: 7/18/01 Title: Metals Dept Manager

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Sample Data

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW01S-Q2-01

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Lab Sample ID: J2102024-001

Level (low/med): LOW Date Received: 07/05/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	9.860			MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW03S-Q2-01

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Lab Sample ID: J2102024-002

Level (low/med): LOW Date Received: 07/05/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.475	B		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW04S-Q2-01

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Lab Sample ID: J2102024-003

Level (low/med): LOW Date Received: 07/05/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	22.3			MS

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW05S-Q2-01

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Lab Sample ID: J2102024-004

Level (low/med): LOW Date Received: 07/05/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.607	B		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW08S-Q2-01

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Lab Sample ID: J2102024-005

Level (low/med): LOW Date Received: 07/05/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.673	B		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-DUP-Q2-01

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Lab Sample ID: J2102024-006

Level (low/med): LOW Date Received: 07/05/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	20.8			MS

Color Before: LT.BROWN Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-EQB-Q2-01

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Lab Sample ID: J2102024-007

Level (low/med): LOW Date Received: 07/05/01

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	0.400	U		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Initial Calibration Source: INORGANIC / ENVIRONMENTAL

Continuing Calibration Source: CPI / ULTRA / INORGANIC

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	50	52.9	106	25	24.1	96	25.4	102	MS

TOTAL METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Initial Calibration Source:

Continuing Calibration Source: CPI / ULTRA / INORGANIC

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				25	25.5	102	25.8	103	MS

TOTAL METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Initial Calibration Source:

Continuing Calibration Source: CPI / ULTRA / INORGANIC

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				25	25.1	100			MS

TOTAL METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG No.: J2102024

AA CRDL Standard Source:

ICP CRDL Standard Source: CPI / ULTRA / INORGANIC

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				0.50	0.33	66	0.440	88

TOTAL METALS
- 3 -
BLANKS

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	0.200	U	0.200	U	-0.430	B	-0.420	B	-0.780	B	MS

TOTAL METALS
- 3 -
BLANKS

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			0.200	U	0.200	U					MS

TOTAL METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

ICP ID Number: VG ICPMS ICS Source: INORGANIC

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic		20	-0.600	21.1	106			

TOTAL METALS
- 5a -
SPIKE SAMPLE RECOVERY

SAMPLE NO.

007-MW03S-Q2-01S

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	55.4		0.475	B	50.0	110		MS

Comments:

TOTAL METALS
- 5a -
SPIKE SAMPLE RECOVERY

SAMPLE NO.

007-MW03S-Q2-01SD

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	53.4		0.475	B	50.0	106		MS

Comments:

TOTAL METALS
- 5b -
POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

007-MW03S-Q2-01A

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic		21.6		0.237	B	20.0	107		MS

Comments:

TOTAL METALS
- 6 -
DUPLICATES

SAMPLE NO.

007-MW03S-Q2-01S

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic		55.4		53.4		4		MS

TOTAL METALS
- 7 -
LABORATORY CONTROL SAMPLE

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Solid LCS Source:

Aqueous LCS Source: CPI

Analyte	Aqueous ug/L True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Arsenic	50.0	54.8	110					

TOTAL METALS
- 9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

007-MW03S-Q2-01L

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	0.237	B	1.01	B	324		MS

TOTAL METALS
-10-
METHOD DETECTION LIMITS

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

ICP ID Number: VG ICPMS Date: 7/28/00

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	M
Arsenic	75		0.500	0.200	MS

Comments

TOTAL METALS
- 12 -
ICP LINEAR RANGES

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

ICP ID Number: VG ICPMS Date: 10/31/00

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Arsenic	15.00	600.0	MS

Comments:

TOTAL METALS
- 13 -
PREPARATION LOG

Contract: CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG NO.: J2102024

Method MS

Sample No.	Preparation Date	Weight (grams)	Volume (mL)
007-DUP-Q2-01	7/6/01		50
007-EQB-Q2-01	7/6/01		50
007-MW01S-Q2-01	7/6/01		50
007-MW03S-Q2-01	7/6/01		50
007-MW03S-Q2-01	7/6/01		50
007-MW03S-Q2-01	7/6/01		50
007-MW04S-Q2-01	7/6/01		50
007-MW05S-Q2-01	7/6/01		50
007-MW08S-Q2-01	7/6/01		50
LCSW	7/6/01		50
PBW	7/6/01		50

TOTAL METALS
- 14 -
ANALYSIS RUN LOG

Contract CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG No.: J2102024

Instrument ID Number: VG ICPMS Method: MS

Start Date: 7/17/01 End Date: 7/17/01

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calibration Blank 07	1.00	15:11				X																					
Calibration Standard	1.00	15:14				X																					
ICV1	1.00	15:18				X																					
ICB1	1.00	15:21				X																					
CRDL1	1.00	15:24				X																					
ICSA1	1.00	15:27				X																					
ICS-AB1	1.00	15:30				X																					
CCV1	1.00	15:33				X																					
CCB1	1.00	15:36				X																					
PBW	2.00	15:39				X																					
LCSW	2.00	15:42				X																					
007-MW01S-Q2-01	2.00	15:45				X																					
007-MW03S-Q2-01	2.00	15:48				X																					
007-MW03S-Q2-01L	10.00	15:51				X																					
007-MW03S-Q2-01A	2.00	15:55				X																					
007-MW03S-Q2-01S	2.00	15:58				X																					
007-MW03S-Q2-01SD	2.00	16:01				X																					
007-MW04S-Q2-01	2.00	16:04				X																					
007-MW05S-Q2-01	2.00	16:07				X																					
CCV2	1.00	16:10				X																					
CCB2	1.00	16:13				X																					
007-MW08S-Q2-01	2.00	16:16				X																					
007-DUP-Q2-01	2.00	16:19				X																					
007-EQB-Q2-01	2.00	16:22				X																					
CCV3	1.00	16:25				X																					
CCB3	1.00	16:28				X																					
ZZZZZZ	1.00	16:31																									
ZZZZZZ	1.00	16:34																									
ZZZZZZ	0.99	16:38																									
ZZZZZZ	4.95	16:41																									
ZZZZZZ	0.49	16:44																									
ZZZZZZ	0.97	16:47																									
ZZZZZZ	0.97	16:50																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

TOTAL METALS
- 14 -
ANALYSIS RUN LOG

Contract CH2M Hill Constructors, Inc.

Lab Code: JAX Case No.: 149294 SAS No.: SDG No.: J2102024

Instrument ID Number: VG ICPMS Method: MS

Start Date: 7/17/01 End Date: 7/17/01

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	0.99	16:53																									
ZZZZZZ	1.00	16:56																									
ZZZZZZ	0.93	16:59																									
CCV4	1.00	17:02				X																					
CCB4	1.00	17:05				X																					
ZZZZZZ	0.98	17:08																									
ZZZZZZ	0.92	17:11																									
ZZZZZZ	0.96	17:14																									
ZZZZZZ	0.93	17:17																									
ZZZZZZ	0.97	17:21																									
CRDL2	1.00	17:24				X																					
ZZZZZZ	1.00	17:27																									
CCV5	1.00	17:30				X																					
CCB5	1.00	17:33				X																					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Standards Logs

Solution Name: ICP-MS ICS-A Solution

Analyst: [signature] **Date:** 7/17/01

Solution	Source	Lot #	Expiration Date	Aliquot of Solution	Check Off	Final Volume
6020 ICS-A	Inorganic Vent.	R-MEB93116	01/02	0.5ml	✓	50ml

Solution Name: ICP-MS ICS-A+B Solution

Analyst: [signature] **Date:** 7/17/01

Solution	Source	Lot #	Expiration Date	Aliquot of Solution	Check Off	Final Volume
6020 ICS-A	Inorganic Vent.	R-MEB93116	01/02	0.5ml	✓	50ml
6020 ICS-B	Inorganic Vent.	P-MEB93028	01/02	0.5ml	✓	50ml

Solution Name: ICP-MS Intermediate MRL Standard

Analyst: [signature] **Date:** 7/6/01

Element	Source	Lot #	Expiration Date	Aliquot of 1000 ppm Std.	Check Off	Final Volume
Al	Ultra Scientific	IH-0081	3/2004	1.0 ml.	✓	1000ml
Sb	Ultra Scientific	IG-0278	8/2002	0.2ml	✓	1000ml
As	Ultra Scientific	IG-0140	5/2002	0.05ml	✓	1000ml
Ba	Ultra Scientific	IG-0302	9/2002	0.2ml	✓	1000ml
Be	Ultra Scientific	IG-0386	11/2002	0.1ml	✓	1000ml
Cd	Ultra Scientific	IG-0262	8/2002	0.05ml	✓	1000ml
Cr	C.P.I.	OFJ-133	5/7/2002	0.2ml	✓	1000ml
Co	C.P.I.	OHM-138	10/16/2002	0.1ml	✓	1000ml
Cu	Ultra Scientific	IG-0257	8/2002	0.2ml	✓	1000ml
Pb	Ultra Scientific	IG-0303	9/2002	0.1ml	✓	1000ml
Mn	Ultra Scientific	IFO338	9/2002	0.1ml	✓	1000ml
Mo	C.P.I.	OAF-117	5/22/2002	0.2ml	✓	1000ml
Ni	Ultra Scientific	IH0018	2/2004	0.2ml	✓	1000ml
Se	Ultra Scientific	IH-0080	3/2004	0.2ml	✓	1000ml
Ag	C.P.I.	OJS086	5/22/02	0.05ml	✓	1000ml
Tl	Ultra Scientific	IG-0102	4/2002	0.1ml	✓	1000ml
V	C.P.I.	OFF-021	5/7/2002	0.2ml	✓	1000ml
Zn	Ultra Scientific	IG-0432	12/2002	1.0 ml.	✓	1000ml

Solution Name: ICP-MS MRL Standard

Analyst: [signature] **Date:** 7/17/01

Solution	Aliquot of Stock	Check Off	Final Volume
ICP-MS Intermediate MRL Standard	0.5ml	✓	50ml

ICSAB.XLS

Solution Name: ICP-MS Intermediate ICV Stock Solution #1
Solution Source: Inorganic Ventures QCP-CICV-1
Analyst: [signature] **Date:** 7/2/01

Solution	Source	Lot #	Expiration Date	Aliquot of Stock	Check Off	Final Volume
HNO3	J.T. Baker	M44052	-	5ml		100ml
QCP-CICV-1	Inorganic Vent.	R-MEB93119	7/1/02	2ml	✓	100ml

Solution Name: ICP-MS Intermediate ICV Stock Solution #2
Solution Source: Inorganic Ventures QCP-CICV-2
Analyst: [signature] **Date:** 7/2/01

Solution	Source	Lot #	Expiration Date	Aliquot of Stock	Check Off	Final Volume
HNO3	J.T. Baker	M444052	-	5ml		100ml
QCP-CICV-2	Inorganic Vent.	P-MEB93103	7/1/02	1ml	✓	100ml

Solution Name: ICP-MS Intermediate ICV Stock Solution #3
Solution Source: Inorganic Ventures QCP-CICV-3
Analyst: [signature] **Date:** 7/2/01

Solution	Source	Lot #	Expiration Date	Aliquot of Stock	Check Off	Final Volume
HNO3	J.T. Baker	M44052	-	5ml		100ml
QCP-CICV-3	Inorganic Vent.	S-CICP10067	7/1/02	1ml	✓	100ml

Solution Name: ICP-MS Initial Calibration Verification Solution 07/701
Analyst: [signature] **Date:** 7/17/01

Solution	Aliquot of Stock	Check Off	Final Volume
HNO3 (Baker Ultrex M24540)	3ml	✓	100ml
ICP-MS Intermediate ICV Stock Solution #1	1ml	✓	100ml
ICP-MS Intermediate ICV Stock Solution #2	1ml	✓	100ml
ICP-MS Intermediate ICV Stock Solution #3	1ml	✓	100ml

MSICV1.XLS

SOLUTION: ICP-MS, 200.8 INTERMEDIATE STOCK
MATRIX: 5% HNO3 (Optima)
VOLUME: 1000 ml.
DATE: 6/28/01
ANALYST: [illegible]

SOLUTION EXPIRATION DATE: 5/7/02

ELEMENT	SOURCE	LOT #	EXPIRATION DATE	ALIQUOT OF 1000 ppm Std./1000ml	CHECK OFF	CONCENTRATION (µg/L)
HNO3	E.M. Science	40160	-	50.0 ml.	✓	5%
Al	Ultra Scientific	IH-0081	3/2004	1.0 ml.	✓	1000
Sb	Ultra Scientific	IG-0278	8/2002	1.0 ml.	✓	1000
As	Ultra Scientific	IG-0140	5/2002	1.0 ml.	✓	1000
Ba	Ultra Scientific	IG-0302	9/2002	1.0 ml.	✓	1000
Be	Ultra Scientific	IG-0386	11/2002	1.0 ml.	✓	1000
Cd	Ultra Scientific	IG-0262	8/2002	1.0 ml.	✓	1000
Cr	C.P.I.	OFJ-133	5/7/2002	1.0 ml.	✓	1000
Co	C.P.I.	OHM-138	10/16/2002	1.0 ml.	✓	1000
Cu	Ultra Scientific	IG-0257	8/2002	1.0 ml.	✓	1000
Pb	Ultra Scientific	IG-0303	9/2002	1.0 ml.	✓	1000
Mn	Ultra Scientific	IFO338	9/2002	1.0 ml.	✓	1000
Mo	C.P.I.	OAF-117	5/22/2002	1.0 ml.	✓	1000
Ni	Ultra Scientific	IH0018	2/2004	1.0 ml.	✓	1000
Se	Ultra Scientific	IH-0080	3/2004	1.0 ml.	✓	1000
Tl	Ultra Scientific	IG-0102	4/2002	1.0 ml.	✓	1000
V	C.P.I.	OFF-021	5/7/2002	1.0 ml.	✓	1000
Zn	Ultra Scientific	IG-0432	12/2002	1.0 ml.	✓	1000

SOLUTION: ICP-MS, 200.8 SILVER INTERMEDIATE STOCK
MATRIX: 5% HNO3
VOLUME: 1000 ml.
DATE: 1/2/01
ANALYST: [illegible]

SOLUTION EXPIRATION DATE: 5/22/02

ELEMENT	SOURCE	LOT #	EXPIRATION DATE	ALIQUOT OF 1000 ppm Std./1000ml	CHECK OFF	CONCENTRATION (µg/L)
HNO3	E.M. Science	40160	-	50.0	✓	5%
Ag	C.P.I.	OJS086	5/22/02	1.0	✓	1000

SOLUTION: ICP-MS 25ppb Calibration Standard and CCV 07/701
MATRIX: 3% HNO3 (Optima)
VOLUME: 100 ml.
DATE: 7/17/01
ANALYST: [illegible]

SOURCE	ALIQUOT PER 100 ml.	CHECK OFF	CONCENTRATION (µg/L)
HNO3	3.0	✓	3%
INTERMEDIATE STOCK	2.5	✓	25.0
SILVER INTERMEDIATE STOCK	2.5	✓	25.0

ICPMSSTD.XLS

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Prep Logs

Metals Digestion Log
Water

Service Request Numbers: 2013 2017 2018 1998 1974 2023, 2024

Analysis for: FLAA / ICP ICP-MS / GFAA

Method Number: 3005 Diss 3010 FLAA/ICP 3020 GFAA/ICP

	Sample Number	Initial Vol (mL)	Final Vol (mL)	Matrix	Initial Color / Clarity	Final Color / Clarity	Spike Added (mL)	Comments
1	7/6 MB-1	50	50	H2O	Colorless C	Colorless C		
2	7/6 LCS-1						0.2	
3	2013-1							
4	-15						0.2	
5	-15D						0.2	
6	-2							
7	2017-1				DKBRN O			
8	2018-1				Colorless C			
9	1998-1							
10	1974-1							
11	2018-2							
12	2023-1							
13	2024-1							TICL IV +1
14	-2							
15	-25						0.2	
16	-25D						0.2	
17	-3				LT-Brn C			
18	-4				Colorless C			
19	-5							
20	-6				LT. Brn C			
21	-7				Colorless C			
22								
23								
24								
25								
26								

all samples have a pH of <2 unless noted otherwise

Reagent	Standard ID #
HNO_3	MET 1-8C
HCl	MET 1-9E (50µl HCl)

Standard	Standard ID #
ICP Spike A	NA
ICP Spike B	NA
ICP-MS Spike	MET 1-1A

Clarity: Clear Cloudy Opaque

Hot Block Temp.: ✓ (90-95degC)

Analyst: JKG	Date: 7/6/01 Time: 1:00pm	Page Number
Reviewed By: JW	Date: 7/6/01	

r:gfa\bench\Dig 1

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Raw Data

MASS CALIBRATION DATA
Tue 17 Jul 2001
08:26:44

Actual Mass	Found DAC	Calculated DAC	Calculated Mass
9.01218E+0	2083	2086	8.99864E+0
2.39850E+1	5905	5897	2.40175E+1
5.89332E+1	14784	14792	5.89026E+1
1.14904E+2	29045	29041	1.14917E+2
1.74941E+2	44333	44332	1.74942E+2
2.08980E+2	53004	53005	2.08977E+2

New Mass calibration coeffs
y = a + bx + cx^2 + dx^3
8.12712E-1 3.92998E-3 -4.98464E-11 0.00000E+0
Regression coeff = 1.0000E+0

Integrated Counts Per Second Values Tue 17 Jul 2001
Statistics for Integrated CPS Determination.
User Name : MANAGER Experiment name : CALIB
Analysis procedure : SHORT TERM STABILITY
Reduction method : DEFAULT
First repeat started at : Tue Jul 17 2001 08:37:20
Last repeat started at : Tue Jul 17 2001 08:39:41
Sample name : Short Term Stability Check
Interference Equations : (NONE)
Dilution Factor : 1

Element	Beryllium	Magnesium	Cobalt	Indium	Lutetium	Bismuth
Isotope	Be 9	Mg 24	Co 59	In 115	Lu 175	Bi 209
Detector	PC	PC	PC	PC	PC	PC
Run 1	1.552E+4	2.759E+5	3.806E+4	5.81E+4	5.646E+4	3.122E+4
Run 2	1.526E+4	2.72E+5	3.801E+4	5.755E+4	5.644E+4	3.138E+4
Run 3	1.439E+4	2.567E+5	3.548E+4	5.444E+4	5.258E+4	2.967E+4
Run 4	1.519E+4	2.708E+5	3.805E+4	5.9E+4	5.778E+4	3.225E+4
Run 5	1.497E+4	2.688E+5	3.792E+4	5.918E+4	5.724E+4	3.267E+4
Mean	1.507E+4	2.689E+5	3.75E+4	5.765E+4	5.61E+4	3.144E+4
Std Dev	426.5	7254	1134	1913	2047	1158
%SD	2.831	2.698	3.024	3.319	3.649	3.683

Quality Control Report : Short Term Stability Check
All tests within specified limits

Multi-Element Calibration Tue 17 Jul 2001

User Name : MANAGER

Experiment name : 071701A
Analysis procedure : EPA Method 6020/200.8
First sample started at : Tue Jul 17 2001 15:11:05
Last sample started at :
Polynomial fit : y = a0 + a1.x + a2.x^2
Units of response : y = counts per second
Units of concentration : x = PPB

Element	Symbol	Mass	a0	a1	a2	Regression
Chromium	Cr	52	8676	3498	0	1
Chromium	Cr	53	224.8	411.1	0	1
Nickel	Ni	60	377	684.4	0	1
Nickel	Ni	61	1741	34.19	0	1
Nickel	Ni	62	74.52	104.6	0	1
Copper	Cu	63	831.4	1722	0	1
Copper	Cu	65	358.1	832.7	0	1
Zinc	Zn	66	822.3	490.3	0	1
Zinc	Zn	67	130.9	92.23	0	1
Zinc	Zn	68	613.5	376.6	0	1
Arsenic	As	75	-524.6	437.3	0	1
Selenium	Se	77	195.1	49.4	0	1
Selenium	Se	78	924.5	147.3	0	1
Selenium	Se	82	14.64	59.02	0	1
Molybdenum	Mo	95	158.5	539.1	0	1
Molybdenum	Mo	97	98.03	330	0	1
Molybdenum	Mo	98	252.6	841.2	0	1
Silver	Ag	107	132.9	1960	0	1
Silver	Ag	109	129.2	1855	0	1
Cadmium	Cd	111	14.93	360.6	0	1
Cadmium	Cd	112	34.07	671.9	0	1
Cadmium	Cd	114	33.12	808.8	0	1
Lead	Pb	206	87.08	528.5	0	1
Lead	Pb	207	65.47	448.9	0	1
Lead	Pb	208	327.9	2094	0	1

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:11:05
Last repeat started at : Tue Jul 17 2001 15:12:19

Sample name : Calibration Blank 071701
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0546	0.0477	0.0504	-1.02	0.0428	-0.0046	0.0147	0.0594
Run 2	0.0388	0.0041	-0.0054	4.386	0.0103	0.0101	-0.0333	0.014
Run 3	-0.0934	-0.0518	-0.045	-3.365	-0.0532	-0.0056	0.0186	-0.0735
Mean	1.867E-7	1.734E-7	7.397E-8	5.898E-6	2.425E-7	7.079E-8	1.219E-7	3.711E-7
Std Dev	0.0812	0.0499	0.0479	3.975	0.0488	0.0088	0.0289	0.0675
%SD	4.35E+7	2.875E+7	6.481E+7	6.739E+7	2.013E+7	1.241E+7	2.371E+7	1.82E+7

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.1153	0.0833	-0.1142	0.5263	0.431	0.1855	0.0392	0.0495
Run 2	-0.0299	-0.0048	0.1634	-0.5662	-0.099	-0.1167	0.0112	0.0324
Run 3	-0.0854	-0.0784	-0.0492	0.0399	-0.332	-0.0688	-0.0504	-0.0819
Mean	5.797E-7	-1.091E-7	-1.855E-7	-6.342E-7	1.106E-6	1.116E-7	3.759E-8	3.638E-8
Std Dev	0.1036	0.081	0.1452	0.5473	0.391	0.1624	0.0458	0.0714
%SD	1.788E+7	-7.418E+7	-7.825E+7	-8.63E+7	3.536E+7	1.456E+8	1.219E+8	1.964E+8

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0772	9.717E-6	0.0011	-0.0064	-0.0084	0.0117	-0.02	-0.0153
Run 2	-0.0086	0.0037	0.0008	-0.0069	0.0072	-0.0101	0.0033	-0.0016
Run 3	-0.0686	-0.0037	-0.0019	0.0132	0.0012	-0.0016	0.0167	0.0169
Mean	4.851E-8	1.296E-8	2.327E-8	1.819E-9	8.678E-9	3.752E-9	1.455E-8	2.607E-8
Std Dev	0.0733	0.0037	0.0016	0.0115	0.0079	0.011	0.0185	0.0161
%SD	1.511E+8	2.826E+7	7.021E+6	6.3E+8	9.096E+7	2.933E+8	1.274E+8	6.192E+7

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0052
Run 2	-0.007
Run 3	0.0019
Mean	2.429E-8
Std Dev	0.0063
%SD	2.594E+7

Sample : Calibration Blank 071701

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	95.45	98.32	95.2
Run 2	100.8	99.48	103
Run 3	103.8	102.2	101.8

Sample : Calibration Blank 071701

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:14:38
Last repeat started at : Tue Jul 17 2001 15:15:52

Sample name : Calibration Standard 071701
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	24.78	24.68	25.01	19.85	24.47	25.19	24.96	24.89
Run 2	25.61	25.87	26.05	32.65	26.59	25.49	25.92	26.21
Run 3	24.61	24.46	23.94	22.5	23.94	24.32	24.12	23.9
Mean	25	25	25	25	25	25	25	25
Std Dev	0.5351	0.7572	1.054	6.757	1.402	0.6079	0.9025	1.158
%SD	2.14	3.029	4.216	27.03	5.608	2.432	3.61	4.633

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	24.3	24.24	24.48	25.06	25.04	24.47	24.53	23.62
Run 2	25.87	26	25.97	25.18	26.31	25.97	25.67	27.2
Run 3	24.83	24.76	24.55	24.76	23.65	24.56	24.8	24.18
Mean	25	25	25	25	25	25	25	25
Std Dev	0.7978	0.9056	0.8374	0.2135	1.332	0.8413	0.5987	1.927
%SD	3.191	3.623	3.35	0.854	5.328	3.365	2.395	7.707

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	25.4	24.98	24.88	25.25	25	25.16	24.47	25.4
Run 2	25.88	25.43	25.45	25.25	26.09	25.33	26.62	26.12
Run 3	23.72	24.59	24.66	24.5	23.91	24.51	23.9	23.49
Mean	25	25	25	25	25	25	25	25
Std Dev	1.13	0.419	0.4076	0.4305	1.089	0.4315	1.436	1.36
%SD	4.522	1.676	1.631	1.722	4.355	1.726	5.743	5.441

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	25.14
Run 2	25.79
Run 3	24.07
Mean	25
Std Dev	0.8723
%SD	3.489

Sample : Calibration Standard 071701

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	98.3	97.87	93.34
Run 2	95.72	98.66	95.57
Run 3	102.8	101.5	100.1

Sample : Calibration Standard 071701

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:18:11
Last repeat started at : Tue Jul 17 2001 15:19:26

Sample name : ICV1
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	20.7	22	53.46	49.36	51.35	25.93	26.55	52.32
Run 2	19.89	19.58	48.39	48.42	47.78	25.01	24.69	49.2
Run 3	20.47	20.8	52.55	48.9	49.03	25.28	25.65	51.48
Mean	20.35	20.79	51.47	48.89	49.39	25.41	25.63	51
Std Dev	0.4129	1.21	2.699	0.4717	1.808	0.4737	0.9313	1.616
%SD	2.029	5.818	5.245	0.9647	3.661	1.864	3.634	3.168

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	72.08	65.61	54.14	50.91	49.29	50.21	51.1	54.2
Run 2	67.19	64.5	52.49	48.62	47.43	47.9	50.66	50.93
Run 3	69.72	64.64	52.19	47.87	48.45	47.59	51.28	53.3
Mean	69.66	64.92	52.94	49.14	48.39	48.57	51.01	52.81
Std Dev	2.447	0.6034	1.049	1.583	0.9292	1.433	0.3152	1.689
%SD	3.513	0.9295	1.982	3.221	1.92	2.951	0.618	3.198

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	54.11	24.28	24.11	25.12	25.53	25.37	52.27	52.63
Run 2	49.19	23.82	23.59	24.48	24.2	24.21	52.51	49.65
Run 3	53.14	23.66	23.44	25.23	24.57	24.86	55.9	55.13
Mean	52.14	23.92	23.71	24.94	24.77	24.81	53.56	52.47
Std Dev	2.608	0.3238	0.3497	0.4028	0.6869	0.584	2.031	2.741
%SD	5.002	1.354	1.475	1.615	2.773	2.354	3.791	5.224

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	51.49
Run 2	50.13
Run 3	54.26
Mean	51.96
Std Dev	2.102
%SD	4.046

Sample : ICV1

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	90.38	96.86	96.6
Run 2	103.1	101	101.9
Run 3	97.35	99.62	93.83

Sample : ICV1

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:21:15
Last repeat started at : Tue Jul 17 2001 15:22:31

Sample name : ICB1
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.1238	-0.1567	0.1469	-4.44	0.1198	0.0183	0.0701	0.235
Run 2	-0.0048	-0.2194	-0.0288	-0.6528	0.0534	0.0271	0.0106	0.0384
Run 3	-0.053	-0.1581	-0.02	-2.115	0.1164	0.0055	0.0107	0.038
Mean	0.022	-0.1781	0.0327	-2.403	0.0965	0.0169	0.0305	0.1038
Std Dev	0.0914	0.0358	0.099	1.91	0.0374	0.0109	0.0343	0.1136
%SD	415.2	-20.11	302.9	-79.49	38.76	64.07	112.7	109.4

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.1493	0.416	-0.0537	0.3493	0.8173	-0.068	0.2912	0.248
Run 2	0.2479	0.0344	-0.0835	0.2351	-0.1743	-0.0271	-0.0384	0.0186
Run 3	0.1251	0.0406	-0.0632	0.2077	0.0416	-0.0016	-0.0924	-0.154
Mean	0.1741	0.1636	-0.0668	0.264	0.2282	-0.0323	0.0535	0.0375
Std Dev	0.0651	0.2186	0.0152	0.0751	0.5215	0.0335	0.2077	0.2017
%SD	37.38	133.6	-22.81	28.44	228.5	-103.8	388.5	537.5

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.2731	0.0651	0.0563	0.0616	0.0177	0.0638	0.1158	0.1161
Run 2	-0.0813	0.0107	0.04	0.0164	-0.003	0.0026	0.0267	0.031
Run 3	-0.1283	0.0081	0.0028	0.0192	-0.0043	-0.0043	-0.0088	0.0557
Mean	0.0212	0.028	0.033	0.0324	0.0035	0.0207	0.0445	0.0676
Std Dev	0.2194	0.0322	0.0274	0.0253	0.0123	0.0375	0.0642	0.0438
%SD	1037	115.1	82.94	78.15	354.7	181	144.2	64.79

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.1014
Run 2	0.001
Run 3	0.0132
Mean	0.0385
Std Dev	0.0548
%SD	142.2

Sample : ICB1

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	84.7	87.86	90.94
Run 2	96.76	96.73	99.59
Run 3	95.61	99.49	95.93

Sample : ICB1

2

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:24:20
Last repeat started at : Tue Jul 17 2001 15:25:35

Sample name : MRL1
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	2.147	1.773	1.731	-1.393	1.731	1.795	1.778	10.2
Run 2	1.952	1.854	1.801	3.148	1.78	1.887	2.059	10.32
Run 3	1.847	1.744	1.749	-1.058	1.453	1.818	1.729	9.319
Mean	1.982	1.79	1.761	0.2325	1.655	1.833	1.855	9.945
Std Dev	0.1519	0.057	0.0364	2.53	0.1765	0.048	0.1783	0.5453
%SD	7.662	3.183	2.066	1088	10.67	2.617	9.61	5.483

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	8.902	9.359	0.4145	2.025	3.133	1.691	1.373	1.49
Run 2	8.816	9.053	0.1211	2.696	1.632	1.571	1.38	1.539
Run 3	7.605	8.929	0.456	2.058	1.463	2.216	1.349	1.218
Mean	8.441	9.114	0.3305	2.259	2.076	1.826	1.367	1.416
Std Dev	0.7249	0.2214	0.1826	0.3782	0.919	0.3427	0.0164	0.1731
%SD	8.588	2.429	55.23	16.74	44.26	18.77	1.202	12.23

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.476	0.4607	0.465	0.4226	0.4521	0.578	0.9985	0.8205
Run 2	1.363	0.4984	0.4829	0.4741	0.5146	0.5623	1.093	0.8521
Run 3	1.339	0.5133	0.455	0.4958	0.4934	0.5153	0.9692	0.8165
Mean	1.393	0.4908	0.4676	0.4642	0.4867	0.5519	1.02	0.8297
Std Dev	0.073	0.0271	0.0142	0.0376	0.0318	0.0326	0.0645	0.0195
%SD	5.24	5.526	3.027	8.096	6.524	5.907	6.324	2.35

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.9021
Run 2	0.8934
Run 3	0.8998
Mean	0.8985
Std Dev	0.0045
%SD	0.5022

Sample : MRL1

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	83.53	89.26	86.48
Run 2	94.91	95.96	95.16
Run 3	99.28	99.22	97.24

Sample : MRL1

2

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:27:25
Last repeat started at : Tue Jul 17 2001 15:28:41

Sample name : ICSA1
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.4315	6.555	1.837	1.32	2.457	0.4224	0.1435	-0.4845
Run 2	0.2751	6.077	1.852	9.795	2.237	0.3938	0.1281	-0.5943
Run 3	0.2322	6.561	1.961	6.403	2.239	0.431	0.1744	-0.6651
Mean	0.3129	6.398	1.884	5.839	2.311	0.4157	0.1487	-0.5813
Std Dev	0.1049	0.2779	0.0678	4.266	0.1262	0.0195	0.0236	0.091
%SD	33.53	4.344	3.601	73.05	5.463	4.694	15.86	-15.65

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	2.835	-0.8783	-0.5187	2.284	1.189	-0.353	222.2	233
Run 2	2.366	-1.107	-0.8554	2.905	0.733	-0.6866	231.5	234.5
Run 3	2.587	-1.217	-0.4335	2.348	0.7277	-0.333	225.9	234
Mean	2.596	-1.067	-0.6025	2.512	0.8832	-0.4575	226.5	233.8
Std Dev	0.2346	0.1726	0.2231	0.3414	0.2648	0.1986	4.667	0.7694
%SD	9.039	-16.17	-37.02	13.59	29.99	-43.41	2.06	0.3291

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	228.4	-0.0256	-0.0121	0.3883	0.1798	0.2322	-0.0081	-0.026
Run 2	221.2	-0.0187	-0.0298	0.3741	0.1998	0.2588	-0.0475	-0.0403
Run 3	226.2	-0.0137	-0.0232	0.3671	0.1579	0.2057	-0.0305	-0.0352
Mean	225.2	-0.0194	-0.0217	0.3765	0.1792	0.2322	-0.0287	-0.0338
Std Dev	3.699	0.006	0.0089	0.0108	0.021	0.0265	0.0198	0.0073
%SD	1.642	-30.75	-41.21	2.862	11.71	11.42	-68.86	-21.51

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.032
Run 2	-0.0461
Run 3	-0.0338
Mean	-0.0373
Std Dev	0.0076
%SD	-20.52

Sample : ICSA1

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	74.08	77.21	74.88
Run 2	84.64	83.76	85.06
Run 3	87.1	86.23	87.4

Sample : ICSA1

2

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:30:31
Last repeat started at : Tue Jul 17 2001 15:31:45

Sample name : ICSAB1
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	20.51	27.25	21.78	25.85	22.08	20.09	18.84	19.47
Run 2	20.74	28.09	22.98	27.95	23.16	20.27	20.11	20.7
Run 3	20.22	26.99	22.65	23.09	21.64	19.6	19.09	20.34
Mean	20.49	27.44	22.47	25.63	22.29	19.98	19.35	20.17
Std Dev	0.2572	0.5763	0.6205	2.441	0.7797	0.3471	0.6718	0.6323
%SD	1.255	2.1	2.761	9.524	3.498	1.737	3.472	3.135

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	18.7	17.11	20.83	2.069	0.1905	-0.033	205.7	212.8
Run 2	20.63	17.2	21.11	2.056	0.2696	-0.2468	207.4	222.9
Run 3	20.11	17.08	21.41	2.36	-0.2092	-0.3056	207	211.5
Mean	19.81	17.13	21.12	2.162	0.0836	-0.1951	206.7	215.8
Std Dev	0.9996	0.0608	0.2916	0.1721	0.2567	0.1435	0.8624	6.222
%SD	5.046	0.3551	1.381	7.961	306.9	-73.53	0.4172	2.884

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	215.3	19.11	18.83	19.34	18.86	19.27	-0.0042	-0.0131
Run 2	217.3	19.59	19.05	19.98	19.88	19.75	0.0269	0.002
Run 3	217.1	19.73	19.17	19.72	19.27	19.88	-0.0118	-0.0323
Mean	216.6	19.48	19.02	19.68	19.34	19.63	0.0036	-0.0145
Std Dev	1.105	0.3217	0.1741	0.3222	0.512	0.325	0.0205	0.0172
%SD	0.5101	1.652	0.9157	1.637	2.647	1.655	564.8	-119

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0169
Run 2	-0.0081
Run 3	-0.0198
Mean	-0.0149
Std Dev	0.0061
%SD	-40.92

Sample : ICSAB1

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	84.26	88.12	85.85
Run 2	86.8	91.25	88.73
Run 3	89.69	91.49	88.22

Sample : ICSAB1

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:33:33
Last repeat started at : Tue Jul 17 2001 15:34:49

Sample name : CCV1
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	23.87	24.38	25.05	16.1	23.2	23.89	23.61	24.12
Run 2	24.41	24.64	25.19	16.64	23.94	24.66	24.55	25.45
Run 3	24.38	23.78	24.11	20.72	22.96	24.57	24.1	23.88
Mean	24.22	24.27	24.78	17.82	23.37	24.37	24.09	24.48
Std Dev	0.3053	0.4391	0.5904	2.525	0.5088	0.4235	0.471	0.8482
%SD	1.261	1.81	2.382	14.17	2.177	1.738	1.955	3.465

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	23.74	23.68	23.36	22.86	23.47	22.82	25.56	26.71
Run 2	23.55	24.8	24.78	23.7	24.76	24.51	24.58	25.8
Run 3	25.16	25	24.27	23.5	24.58	24.33	24.57	25.41
Mean	24.15	24.49	24.14	23.36	24.27	23.89	24.9[illegible]	25.97
Std Dev	0.8779	0.7092	0.7171	0.4372	0.6964	0.9302	0.5692	0.6688
%SD	3.635	2.895	2.971	1.872	2.869	3.894	2.286	2.575

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	28.25	24.69	24.72	24.38	24.51	25.03	26.74	25.57
Run 2	26.93	24.58	24.88	24.47	25.11	24.94	25.58	24.44
Run 3	25.16	24.82	24.98	24.25	24.53	24.59	25.58	24.26
Mean	26.78	24.7	24.86	24.37	24.71	24.85	25.97	24.76
Std Dev	1.55	0.1226	0.1315	0.1145	0.3402	0.2311	0.6693	0.7108
%SD	5.787	0.4964	0.529	0.4701	1.377	0.93	2.577	2.871

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	25.72
Run 2	24.8
Run 3	24.77
Mean	25.1
Std Dev	0.5399
%SD	2.151

Sample : CCV1

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	88.04	92.55	90.96
Run 2	93.27	95.25	94.15
Run 3	95.14	96.09	95.37

Sample : CCV1

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:36:39
Last repeat started at : Tue Jul 17 2001 15:37:51

Sample name : CCB1
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.2166	-0.0386	0.0526	-0.5946	0.329	0.0164	0.0938	0.1186
Run 2	-0.038	-0.0405	0.0043	-3.417	0.0474	0.0185	0.0721	0.0741
Run 3	-0.0865	-0.1932	-0.0015	-3.212	0.0425	0.0583	0.027	0.2522
Mean	0.0307	-0.0908	0.0184	-2.408	0.1397	0.0311	0.0643	0.1483
Std Dev	0.1628	0.0887	0.0297	1.574	0.164	0.0236	0.034	0.0927
%SD	530.2	-97.79	161.2	-65.36	117.4	75.96	52.94	62.5

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.0097	0.0141	-0.0657	0.1037	0.5728	-0.2439	0.2138	0.2656
Run 2	0.2009	0.0726	-0.0681	0.2703	0.194	0.1048	-0.037	-0.0268
Run 3	0.0356	0.0566	0.1307	-0.3695	-0.7033	0.0215	-0.1009	-0.1058
Mean	0.0821	0.0478	-0.001	0.0015	0.0212	-0.0392	0.0253	0.0443
Std Dev	0.1037	0.0302	0.1141	0.3319	0.6554	0.1821	0.1663	0.1956
%SD	126.3	63.24	-1.137E+4	2.185E+4	3097	-464.3	657.6	441.2

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.228	0.0676	0.0721	0.0496	0.0212	0.0549	0.0081	0.0541
Run 2	-0.0276	0.0111	0.0257	0.0249	0.0323	-0.0074	0.0182	0.0418
Run 3	-0.0865	0.003	0.0043	0.0023	0.0009	-0.0019	0.0278	0.0495
Mean	0.038	0.0272	0.0341	0.0256	0.0182	0.0152	0.018	0.0484
Std Dev	0.1672	0.0352	0.0347	0.0236	0.0159	0.0345	0.0098	0.0062
%SD	440.5	129.1	101.8	92.29	87.68	227.5	54.55	12.84

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0343
Run 2	0.0229
Run 3	0.0341
Mean	0.0304
Std Dev	0.0065
%SD	21.42

Sample : CCB1

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	83.87	90.11	95
Run 2	97.61	97.21	99.39
Run 3	98.1	98.29	99

Sample : CCB1

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:39:40
Last repeat started at : Tue Jul 17 2001 15:40:56

Sample name : 0706-MB1
Dilution Factor : 1 1/2 Dil Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.237	5.321	-0.2481	-6.285	-0.2176	-0.1388	-0.1263	-0.2235
Run 2	-0.0535	5.185	-0.2653	-5.436	-0.2182	-0.2162	-0.1601	-0.153
Run 3	-0.1083	5.294	-0.2352	-2.791	-0.1495	-0.1713	-0.2161	-0.2438
Mean	0.0251	5.267	-0.2495	-4.837	-0.1951	-0.1754	-0.1675	-0.2068
Std Dev	0.1856	0.0719	0.0151	1.822	0.0395	0.0389	0.0453	0.0476
%SD	739.9	1.366	-6.058	-37.67	-20.24	-22.17	-27.08	-23.04

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.3041	-0.0678	-0.9022	1.663	1.173	-1.843	-0.0714	-0.1124
Run 2	0.0187	-0.2754	-0.0142	0.8458	-0.019	-0.0245	-0.1247	-0.1685
Run 3	-0.1265	-0.1803	-0.2486	0.8694	0.0752	-0.6917	-0.1555	-0.1839
Mean	0.0654	-0.1745	-0.3883	1.126	0.4097	-0.853	-0.1172	-0.1549
Std Dev	0.2191	0.1039	0.4602	0.4652	0.6625	0.9198	0.0426	0.0377
%SD	334.7	-59.56	-118.5	41.31	161.7	-107.8	-36.32	-24.32

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	-0.0943	0.004	-0.001	0.0113	0.0002	-0.001	-0.0169	-0.0271
Run 2	-0.1937	-0.0177	-0.0194	0.004	0.0078	0.0036	-0.0424	-0.0545
Run 3	-0.1865	-0.0133	-0.0286	-0.0145	-0.005	-0.013	-0.0387	-0.0363
Mean	-0.1582	-0.009	-0.0163	0.0003	0.001	-0.0035	-0.0327	-0.0393
Std Dev	0.0554	0.0115	0.0141	0.0133	0.0064	0.0086	0.0138	0.0139
%SD	-35.04	-127.6	-86.05	4925	637.5	-247.6	-42.26	-35.44

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0361
Run 2	-0.0602
Run 3	-0.027
Mean	-0.0411
Std Dev	0.0171
%SD	-41.65

Sample : 0706-MB1

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	80.59	81.65	87.26
Run 2	96.38	94.56	98.28
Run 3	94.4	95.88	97.72

Sample : 0706-MB1

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:42:45
Last repeat started at : Tue Jul 17 2001 15:44:00

Sample name : 0706-LCS1
Dilution Factor : 1 1/2 Dil Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	26.21	34.42	26.5	22.95	26.12	26.33	25.73	28.47
Run 2	25.23	33.56	27.03	23.13	27.2	25.95	25.99	29.19
Run 3	24.58	32.3	25.23	16.48	24.21	25.08	24.63	27.36
Mean	25.34	33.42	26.25	20.85	25.84	25.79	25.45	28.34
Std Dev	0.8191	1.067	0.9268	3.789	1.514	0.6366	0.7214	0.9243
%SD	3.233	3.192	3.53	18.17	5.857	2.469	2.835	3.261

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	27.31	27.47	28.39	23.8	25.94	26.12	11.1	11.46
Run 2	29.85	28.71	27.23	27.17	26.11	26.4	10.86	11.73
Run 3	27.27	27.04	26.71	25.65	23.43	25.71	11.21	10.8
Mean	28.15	27.74	27.44	25.54	25.16	26.08	11.06	11.33
Std Dev	1.476	0.8681	0.8606	1.691	1.501	0.3501	0.1752	0.4766
%SD	5.244	3.129	3.136	6.621	5.968	1.342	1.584	4.206

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	11.25	24.42	24.08	10.42	12.23	11.26	27.91	24.88
Run 2	11.12	24.08	24.25	10.88	12.27	11.71	29.17	25.82
Run 3	10.7	23.97	24.55	10.76	11.89	11.69	27.29	24.06
Mean	11.02	24.15	24.29	10.68	12.13	11.55	28.12	24.92
Std Dev	0.2905	0.2326	0.2368	0.2391	0.2109	0.2553	0.9583	0.8793
%SD	2.636	0.9631	0.975	2.237	1.739	2.21	3.407	3.529

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	25.74
Run 2	26.55
Run 3	25.27
Mean	25.85
Std Dev	0.6442
%SD	2.492

Sample : 0706-LCS1

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	78.93	83.15	85.23
Run 2	96.17	97.52	96.89
Run 3	102.3	98.12	101.5

Sample : 0706-LCS1

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:45:47
Last repeat started at : Tue Jul 17 2001 15:47:03

Sample name : 2024-001
Dilution Factor : 1 1/2 DIL Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.8184	11.25	6.85	14.3	0.3132	3.529	0.2302	7.624
Run 2	0.4066	12.64	7.485	22.83	-0.1953	3.432	0.0753	7.511
Run 3	0.4148	12.78	7.713	18.41	0.1141	3.436	0.0685	7.689
Mean	0.5466	12.22	7.349	18.51	0.0774	3.465	0.1247	7.608
Std Dev	0.2354	0.8479	0.4476	4.263	0.2562	0.055	0.0915	0.09
%SD	43.07	6.937	6.09	23.03	331.2	1.588	73.37	1.184

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	7.37	7.866	4.832	4.464	1.136	1.098	0.7676	0.6961
Run 2	7.221	7.86	5.463	3.289	0.4445	1.511	0.5147	0.4855
Run 3	7.592	7.907	4.49	4.899	0.1423	1.598	0.4887	0.5828
Mean	7.394	7.878	4.928	4.218	0.5744	1.402	0.5903	0.5881
Std Dev	0.1864	0.0254	0.4937	0.8327	0.5096	0.2671	0.1541	0.1054
%SD	2.521	0.3221	10.02	19.74	88.72	19.05	26.1	17.92

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.584	0.1964	0.1885	0.0617	0.044	0.0544	2.512	2.22
Run 2	0.5217	0.0458	0.0588	0.0263	0.01	0.02	2.351	2.128
Run 3	0.4651	0.0446	0.0279	0.0392	0.0187	0.0315	2.421	2.33
Mean	0.5236	0.0956	0.0918	0.0424	0.0242	0.0353	2.428	2.226
Std Dev	0.0595	0.0873	0.0852	0.018	0.0176	0.0175	0.0804	0.101
%SD	11.36	91.31	92.87	42.36	72.8	49.62	3.313	4.539

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	2.398
Run 2	2.224
Run 3	2.339
Mean	2.32
Std Dev	0.088
%SD	3.792

Sample : 2024-001

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	82.46	70.15	77.81
Run 2	93.17	75.21	86.85
Run 3	95.39	79.09	85.63

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:48:53
Last repeat started at : Tue Jul 17 2001 15:50:09

Sample name : 2024-002
Dilution Factor : 1 1/2 Dil Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.3759	8.901	7.408	21.8	-0.0953	0.0275	0.1294	0.5293
Run 2	0.2119	8.662	7.699	23.87	0.0138	0.0301	0.031	0.2798
Run 3	0.2135	8.829	7.49	29.77	0.0748	0.047	0.038	0.3081
Mean	0.2671	8.797	7.532	25.15	-0.0022	0.0349	0.0661	0.3724
Std Dev	0.0943	0.1227	0.1503	4.133	0.0862	0.0106	0.0549	0.1366
%SD	35.3	1.395	1.996	16.43	-3890	30.4	83.02	36.69

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.397	1.138	0.2332	4.001	0.9591	0.2641	0.8286	0.7576
Run 2	1.345	0.9422	0.2159	3.65	0.4456	0.1287	0.7474	0.7446
Run 3	1.387	0.9088	0.2635	3.855	0.6177	0.0488	0.9228	0.6989
Mean	1.376	0.9965	0.2375	3.835	0.6741	0.1472	0.833	0.7337
Std Dev	0.0277	0.1241	0.0241	0.1765	0.2614	0.1088	0.0878	0.0308
%SD	2.01	12.45	10.14	4.601	38.77	73.93	10.54	4.202

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.7689	-0.0075	-0.0098	0.1232	0.0847	0.0995	0.0726	0.0937
Run 2	0.7286	-0.0197	-0.0167	0.0859	0.0686	0.12	0.0629	0.0073
Run 3	0.8293	-0.0146	-0.0141	0.0809	0.1011	0.1026	0.0547	0.0442
Mean	0.7756	-0.0139	-0.0136	0.0967	0.0848	0.1074	0.0634	0.0484
Std Dev	0.0507	0.0061	0.0035	0.0231	0.0163	0.0111	0.0089	0.0433
%SD	6.54	-43.75	-25.79	23.91	19.18	10.31	14.08	89.54

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0548
Run 2	0.0273
Run 3	0.0349
Mean	0.039
Std Dev	0.0142
%SD	36.41

Sample : 2024-002

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	90.67	83.13	86.51
Run 2	105.8	90.25	90.18
Run 3	105.2	90.57	90.86

Sample : 2024-002

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:51:59
Last repeat started at : Tue Jul 17 2001 15:53:15

Sample name : 2024-002L
Dilution Factor : 1 1/2 + 1/8 Dil Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.3439	2.035	0.7544	-8.871	-0.2928	-0.2367	-0.1688	-0.0886
Run 2	-0.0719	1.715	0.6717	-8.23	-0.3722	-0.2269	-0.2122	-0.1797
Run 3	-0.0301	1.648	0.7094	-9.367	-0.2558	-0.2393	-0.1935	-0.2327
Mean	0.0806	1.799	0.7118	-8.823	-0.3069	-0.2343	-0.1915	-0.167
Std Dev	0.2289	0.2071	0.0414	0.5704	0.0595	0.0065	0.0218	0.0729
%SD	283.9	11.51	5.816	-6.465	-19.38	-2.79	-11.37	-43.63

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	-0.0134	0.1116	0.4087	0.6856	1.479	1.035	-0.0258	-0.0292
Run 2	0.1776	-0.2017	0.0714	0.3689	0.3648	-0.2554	-0.0609	-0.045
Run 3	0.0908	-0.2414	0.1262	0.1367	0.8557	-0.3836	-0.022	-0.0882
Mean	0.085	-0.1105	0.2021	0.3971	0.8997	0.1321	-0.0362	-0.0541
Std Dev	0.0956	0.1934	0.181	0.2755	0.5582	0.7848	0.0214	0.0306
%SD	112.5	-175	89.57	69.38	62.04	594.2	-59.08	-56.45

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	-0.0273	-0.0208	-0.0256	-0.001	0.01	-0.005	-0.0121	-0.0118
Run 2	-0.0543	-0.0309	-0.0291	0.0233	0.0229	-0.0017	-0.03	-0.0463
Run 3	-0.0747	-0.0314	-0.0369	0.0225	-0.0184	0.0129	-0.0602	0.0088
Mean	-0.0521	-0.0277	-0.0305	0.0149	0.0048	0.0021	-0.0341	-0.0164
Std Dev	0.0238	0.006	0.0058	0.0138	0.0211	0.0095	0.0243	0.0278
%SD	-45.59	-21.61	-18.95	92.35	436.9	463.4	-71.4	-169.3

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0318
Run 2	-0.0465
Run 3	-0.0422
Mean	-0.0402
Std Dev	0.0076
%SD	-18.81

Sample : 2024-002L

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	101	106.7	105.6
Run 2	125	112.3	111
Run 3	126.4	113.7	109.4

Sample : 2024-002L

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:55:05
Last repeat started at : Tue Jul 17 2001 15:56:20

Sample name : 2024-002A X 20 ppb
Dilution Factor : 1 1/2 DIL Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	18.26	25.45	24.72	41.18	16.91	17.97	17.61	17.33
Run 2	19.37	27.31	26.51	39.82	17.93	18.87	18.98	18.99
Run 3	19.15	27.44	26.18	37.17	18.68	18.45	18.21	18.52
Mean	18.93	26.73	25.8	39.39	17.84	18.43	18.27	18.28
Std Dev	0.5855	1.111	0.952	2.042	0.8852	0.4476	0.6888	0.8562
%SD	3.094	4.158	3.69	5.184	4.962	2.429	3.771	4.685

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	18.12	18.26	20.45	19.2	19.9	17.67	21.25	21.53
Run 2	19.8	19.98	22.44	21.23	21.45	19.85	22.14	22.32
Run 3	21.02	20.02	21.79	20.8	20.35	20.38	20.5	21.61
Mean	19.65	19.42	21.56	20.41	20.57	19.3	21.3	21.82
Std Dev	1.456	1.004	1.011	1.072	0.8	1.437	0.8222	0.432
%SD	7.41	5.171	4.69	5.252	3.89	7.445	3.861	1.98

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	21.16	19.27	19.72	19.7	19.48	19.67	18.42	17.8
Run 2	22.02	20.55	20.42	20.93	20.94	20.54	18.99	17.81
Run 3	22.16	20.53	20.3	19.41	19.79	19.8	18.91	18.42
Mean	21.78	20.11	20.15	20.01	20.07	20	18.77	18.01
Std Dev	0.5384	0.7333	0.3725	0.808	0.7686	0.4721	0.3093	0.3514
%SD	2.472	3.646	1.849	4.037	3.829	2.36	1.648	1.951

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	18.02
Run 2	18.25
Run 3	18.5
Mean	18.26
Std Dev	0.2388
%SD	1.308

Sample : 2024-002A

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	96.98	82.03	78.15
Run 2	104	87.99	84.43
Run 3	102.9	89.17	85.03

Sample : 2024-002A

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 15:58:10
Last repeat started at : Tue Jul 17 2001 15:59:23

Sample name : 2024-002S
Dilution Factor : 1 1/2 DIL Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	23.47	30.96	30.36	44.5	23.73	30.01	29.6	29.93
Run 2	23.54	31.78	31.27	41.16	24.31	30.25	29.55	30.65
Run 3	24.26	32.77	31.6	48.85	24.76	31.15	30.69	31.56
Mean	23.76	31.84	31.07	44.84	24.27	30.47	29.95	30.72
Std Dev	0.4375	0.9064	0.6447	3.857	0.5158	0.6038	0.6437	0.8151
%SD	1.842	2.847	2.075	8.601	2.126	1.982	2.149	2.654

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	29.23	30.26	25.86	27.64	25.09	23.64	12.41	11.48
Run 2	31.64	31.71	28.2	25.55	24.2	25.04	12.16	11.78
Run 3	29.8	31.99	28.97	26.15	25.31	26.35	12.54	12.76
Mean	30.22	31.32	27.68	26.45	24.87	25.01	12.37	12.01
Std Dev	1.26	0.9276	1.616	1.075	0.5908	1.354	0.1948	0.6695
%SD	4.17	2.962	5.84	4.066	2.376	5.412	1.575	5.574

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	11.39	20.26	20.45	9.862	11.34	10.52	26.16	22.91
Run 2	12.02	20.3	21.15	10.67	11.39	11.04	24.68	22.41
Run 3	12.69	20.62	20.25	10.76	11.83	11.11	25.35	22.94
Mean	12.03	20.39	20.62	10.43	11.52	10.89	25.4	22.76
Std Dev	0.6489	0.1962	0.476	0.4948	0.2723	0.323	0.7384	0.3016
%SD	5.393	0.9623	2.309	4.744	2.364	2.967	2.907	1.325

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	23.77
Run 2	22.75
Run 3	23.39
Mean	23.3
Std Dev	0.5148
%SD	2.209

Sample : 2024-002S

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:01:11
Last repeat started at : Tue Jul 17 2001 16:02:23

Sample name : 2024-002SD
Dilution Factor : 1 1/2 Dil Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	23.23	31.37	30.47	36.7	23.13	23.12	22.38	25.31
Run 2	22.85	31.52	30.17	44.89	23.58	23.41	23.07	25.45
Run 3	23.72	32.51	31.6	46.72	23.29	23.91	24.11	26.52
Mean	23.26	31.8	30.75	42.77	23.33	23.48	23.18	25.76
Std Dev	0.437	0.6193	0.7511	5.331	0.2278	0.3994	0.8716	0.6601
%SD	1.878	1.947	2.443	12.47	0.9764	1.701	3.76	2.563

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	25.61	25.59	26.13	24.03	25.49	23.38	11.26	12.38
Run 2	26.52	26.45	26.62	26.72	24.63	23.99	11.91	11.79
Run 3	26.7	26.2	27.29	25.86	24.69	23.84	12.18	12.88
Mean	26.28	26.08	26.68	25.54	24.94	23.74	11.78	12.35
Std Dev	0.5806	0.441	0.5804	1.371	0.4799	0.3184	0.4753	0.5418
%SD	2.21	1.691	2.175	5.37	1.924	1.341	4.034	4.388

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	12.28	15.66	15.76	9.723	11.78	11.07	25.23	22.36
Run 2	11.69	16.01	15.95	10.68	11.9	11.03	25.86	21.93
Run 3	11.66	15.91	16.55	10.83	11.8	11.3	26.49	22.12
Mean	11.87	15.86	16.09	10.41	11.83	11.13	25.86	22.14
Std Dev	0.3486	0.1816	0.415	0.5984	0.0661	0.1467	0.6279	0.2162
%SD	2.936	1.145	2.58	5.749	0.5591	1.318	2.428	0.9764

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	23.32
Run 2	23.07
Run 3	23.39
Mean	23.26
Std Dev	0.1699
%SD	0.7303

Sample : 2024-002SD

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	99.69	88.14	84.37
Run 2	110.4	93.39	90.07
Run 3	107.4	90.96	88.52

Sample : 2024-002SD

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:04:14
Last repeat started at : Tue Jul 17 2001 16:05:30

Sample name : 2024-003
Dilution Factor : 1 1/2 Dil Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	2.419	40.27	4.071	4.858	1.277	30.04	0.461	0.3126
Run 2	2.189	43.33	3.899	6.666	1.027	32.07	0.4658	0.2481
Run 3	2.444	42.99	4.061	9.753	1.234	34.79	0.328	0.3957
Mean	2.351	42.2	4.01	7.092	1.179	32.3	0.4183	0.3188
Std Dev	0.1404	1.676	0.0965	2.475	0.1339	2.382	0.0782	0.074
%SD	5.972	3.971	2.407	34.9	11.35	7.375	18.7	23.22

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.31	0.5204	10.09	16.33	0.5859	15.97	0.9112	0.844
Run 2	1.233	0.4492	11.56	15.4	-0.1731	17.78	0.559	0.8229
Run 3	2.218	0.8055	11.78	16.09	0.2644	18.94	0.5926	0.6137
Mean	1.587	0.5917	11.14	15.94	0.2257	17.56	0.6876	0.7602
Std Dev	0.5479	0.1885	0.917	0.4856	0.381	1.495	0.1943	0.1273
%SD	34.52	31.86	8.23	3.046	168.8	8.512	28.27	16.75

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.6628	0.164	0.1824	0.064	0.0775	0.0432	0.0046	0.0483
Run 2	0.452	0.062	0.0521	0.1117	0.0506	0.0409	0.0236	-0.0128
Run 3	0.3796	0.0546	0.0229	0.049	0.025	0.0044	-0.0354	-0.0499
Mean	0.4981	0.0936	0.0858	0.0749	0.0511	0.0295	-0.0024	-0.0048
Std Dev	0.1471	0.0612	0.0849	0.0327	0.0262	0.0218	0.0301	0.0496
%SD	29.53	65.37	99	43.68	51.39	73.93	-1275	-1039

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0099
Run 2	-0.0294
Run 3	-0.0489
Mean	-0.0228
Std Dev	0.03
%SD	-131.6

Sample : 2024-003

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	74.33	47.42	65.79
Run 2	81.18	48.68	62.27
Run 3	85.43	50.27	61.19

Sample : 2024-003

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:07:20
Last repeat started at : Tue Jul 17 2001 16:08:35

Sample name : 2024-004
Dilution Factor : 1 1/2 Dil Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	3.496	20.23	8.256	38.01	0.7819	1.259	0.2569	1.157
Run 2	0.9021	11.13	7.395	22.95	0.5955	0.3486	0.1394	0.4734
Run 3	1.05	11.71	9.053	38.47	0.6695	0.3665	0.2268	0.4758
Mean	1.816	14.36	8.235	33.14	0.6823	0.658	0.2077	0.702
Std Dev	1.457	5.097	0.8287	8.829	0.0939	0.5205	0.061	0.3938
%SD	80.24	35.51	10.06	26.64	13.76	79.1	29.38	56.1

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	4.429	2.14	0.6016	8.154	10.48	3.948	0.1613	0.3712
Run 2	2.591	1.626	0.476	4.208	3.045	1.487	0.2076	0.2426
Run 3	2.82	1.667	-0.1664	5.609	2.995	0.9391	0.3041	0.1887
Mean	3.28	1.811	0.3037	5.991	5.507	2.125	0.2243	0.2675
Std Dev	1.001	0.2854	0.412	2.001	4.308	1.603	0.0729	0.0938
%SD	30.53	15.76	135.6	33.4	78.23	75.43	32.48	35.05

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.2624	0.189	0.1198	0.0391	0.012	0.0076	0.0532	0.0424
Run 2	0.2281	0.1076	0.105	0.016	-0.0068	-0.0062	-0.0417	-0.011
Run 3	0.1666	0.1521	0.1033	0.0266	-0.0297	-0.0036	-0.0638	-0.0071
Mean	0.2191	0.1496	0.1094	0.0273	-0.0082	-0.0007	-0.0174	0.0081
Std Dev	0.0486	0.0408	0.0091	0.0116	0.0209	0.0073	0.0622	0.0298
%SD	22.16	27.25	8.321	42.41	-256.6	-1061	-357	367.5

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0177
Run 2	-0.0484
Run 3	-0.0493
Mean	-0.0267
Std Dev	0.0384
%SD	-143.9

Sample : 2024-004

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	63.49	47.1	40.36
Run 2	126.1	87.6	69.13
Run 3	118.1	86.69	69.69

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:10:23
Last repeat started at : Tue Jul 17 2001 16:11:38

Sample name : CCV2
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	26.35	28.73	24.61	20.27	24.74	25.53	24.51	22.19
Run 2	25.82	27.3	26.07	28.42	26.12	26.57	25.93	24.32
Run 3	25.06	27.32	25.08	19.76	25.46	26.03	26.03	23.76
Mean	25.74	27.78	25.25	22.82	25.44	26.04	25.49	23.42
Std Dev	0.6501	0.8189	0.7452	4.862	0.6877	0.52	0.8518	1.106
%SD	2.525	2.947	2.951	21.31	2.703	1.997	3.342	4.721

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	25.9	24.21	23.7	24.76	29.97	20.88	24.96	25.82
Run 2	26.5	24.83	26.47	25.08	28.33	25.74	27.34	26.72
Run 3	25.66	25.05	25.97	25.01	27.92	23.36	26.09	26.75
Mean	26.02	24.7	25.38	24.95	28.74	23.33	26.13	26.43
Std Dev	0.434	0.4386	1.473	0.1683	1.086	2.426	1.187	0.5303
%SD	1.668	1.776	5.805	0.6745	3.78	10.4	4.543	2.007

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	24.97	24.26	24.42	23.27	22.89	23.25	22.09	22.31
Run 2	26.4	26.09	25.63	24.42	24.78	24.48	21.3	20.97
Run 3	25.83	25.78	25.25	24.97	24.62	24.36	21.88	20.94
Mean	25.74	25.38	25.1	24.22	24.1	24.03	21.75	21.4
Std Dev	0.721	0.9812	0.6214	0.8665	1.049	0.6805	0.409	0.7803
%SD	2.802	3.867	2.476	3.577	4.353	2.832	1.88	3.646

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	22.17
Run 2	21.05
Run 3	21.32
Mean	21.51
Std Dev	0.5819
%SD	2.705

Sample : CCV2

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	86.1	66.77	46.45
Run 2	128.4	96.71	72.03
Run 3	129.9	98.16	73.1

Sample : CCV2

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:13:27
Last repeat started at : Tue Jul 17 2001 16:14:41

Sample name : CCB2
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.967	2.574	0.2335	-1.421	0.3804	0.2824	0.2467	0.16
Run 2	0.8635	1.575	0.0367	-1.725	0.2195	0.0743	0.0527	0.0867
Run 3	0.9804	1.466	0.0317	1.535	0.1565	0.0491	0.0878	0.1038
Mean	1.27	1.872	0.1006	-0.5369	0.2521	0.1353	0.1291	0.1168
Std Dev	0.6064	0.6111	0.1151	1.8	0.1155	0.1281	0.1034	0.0383
%SD	47.73	32.65	114.4	-335.3	45.8	94.67	80.08	32.79

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.8607	0.4774	~~-0.0025~~	3.611	5.188	0.0901	0.3663	0.3221
Run 2	0.4963	0.2413	-0.3843	1.615	2.588	0.2301	-0.1281	-0.0897
Run 3	0.6422	0.0659	-0.4711	1.662	2.15	0.134	-0.1749	-0.1662
Mean	0.6664	0.2615	~~-0.5793~~	2.296	3.309	0.1514	0.0211	0.022
Std Dev	0.1834	0.2065	0.2662	1.139	1.642	0.0716	0.2998	0.2626
%SD	27.52	78.96	-45.95	49.61	49.63	47.31	1420	1192

0.4277

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.4087	0.268	0.2354	0.1697	0.1592	0.1469	0.147	0.1804
Run 2	-0.0883	0.037	0.0263	0.0273	0.0026	0.0095	-0.0104	0.0132
Run 3	-0.1595	0.0148	0.0225	0.0389	0.0086	0.0106	0.0386	-0.0148
Mean	0.0536	0.1066	0.0947	0.0787	0.0568	0.0557	0.0584	0.0596
Std Dev	0.3095	0.1402	0.1218	0.0791	0.0888	0.079	0.0805	0.1056
%SD	577.1	131.5	128.6	100.5	156.4	141.9	137.8	177.1

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.1282
Run 2	0.0139
Run 3	-0.0064
Mean	0.0452
Std Dev	0.0726
%SD	160.5

Sample : CCB2

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	98.48	78.26	59.27
Run 2	130.2	98.26	75.98
Run 3	130.1	99.92	76.42

Sample : CCB2

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:16:32
Last repeat started at : Tue Jul 17 2001 16:17:44

Sample name : 2024-005
Dilution Factor : 1 1/2 Dil Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.479	7.833	7.476	18.51	0.3278	0.3317	0.2003	7.335
Run 2	0.7468	7.553	7.823	18.8	0.1765	0.2954	0.1677	7.643
Run 3	0.8476	7.485	8.468	28.36	0.1155	0.3818	0.1799	7.199
Mean	1.025	7.624	7.922	21.89	0.2066	0.3363	0.1826	7.392
Std Dev	0.3969	0.1841	0.5036	5.603	0.1093	0.0434	0.0165	0.2274
%SD	38.74	2.414	6.357	25.59	52.9	12.9	9.012	3.076

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	7.153	7.257	0.4114	4.092	4.965	-0.0301	0.5468	0.6087
Run 2	6.721	7.341	0.0636	4.374	2.014	-0.509	0.5355	0.5397
Run 3	7.705	7.739	0.5345	4.266	1.948	0.7123	0.4815	0.521
Mean	7.193	7.446	0.3365	4.244	2.976	0.0578	0.5213	0.5565
Std Dev	0.4935	0.2577	0.2442	0.1421	1.723	0.6154	0.0349	0.0462
%SD	6.861	3.461	72.58	3.349	57.9	1065	6.699	8.299

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.5253	-0.0127	-0.0066	0.0363	-0.0088	0.0119	0.7394	0.8618
Run 2	0.467	-0.009	-0.0203	0.025	-0.0148	-0.0088	0.8469	0.8375
Run 3	0.4431	-0.0156	-0.0257	-0.0062	-0.0199	-0.019	0.7874	0.7869
Mean	0.4785	-0.0124	-0.0176	0.0184	-0.0145	-0.0053	0.7913	0.8287
Std Dev	0.0422	0.0033	0.0099	0.022	0.0056	0.0157	0.0538	0.0382
%SD	8.83	-26.79	-56.09	120	-38.32	-296.2	6.803	4.611

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.794
Run 2	0.8349
Run 3	0.7642
Mean	0.7977
Std Dev	0.0355
%SD	4.45

Sample : 2024-005

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	103.6	75.83	60.66
Run 2	137	94.66	74.8
Run 3	134.8	95.55	77

Sample : 2024-005

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:19:35
Last repeat started at : Tue Jul 17 2001 16:20:51

Sample name : 2024-006
Dilution Factor : 1 1/20 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	3.423	37.85	3.989	0.246	0.8882	42.82	0.5086	0.456
Run 2	2.951	38.71	3.837	8.932	0.8718	45.81	0.497	0.2374
Run 3	2.839	40.02	3.515	-1	0.9783	45.34	0.3093	0.2289
Mean	3.071	38.86	3.78	2.726	0.9128	44.65	0.4383	0.3074
Std Dev	0.31	1.094	0.2423	5.411	0.0574	1.609	0.1119	0.1287
%SD	10.09	2.815	6.409	198.5	6.283	3.604	25.52	41.87

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.461	0.8925	10.02	18.69	5.931	14.18	0.7205	0.6569
Run 2	1.907	0.5982	10.99	16.76	2.623	15.75	0.6581	0.8216
Run 3	1.433	0.4546	10.26	17.17	2.544	14.49	0.594	0.6025
Mean	1.6	0.6485	10.42	17.54	3.699	14.8	0.6575	0.6937
Std Dev	0.2658	0.2232	0.5057	1.018	1.933	0.83	0.0632	0.1141
%SD	16.61	34.43	4.852	5.801	52.25	5.606	9.619	16.45

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.5644	0.0515	0.0129	0.1317	0.0431	0.0297	-0.0494	-0.0176
Run 2	0.4919	0.0309	0.0029	0.0155	0.0375	0.0303	-0.0692	-0.0771
Run 3	0.53	0.024	0.0071	0.038	0.0356	0.0327	-0.0643	0.0347
Mean	0.5288	0.0355	0.0076	0.0617	0.0387	0.0309	-0.061	-0.02
Std Dev	0.0362	0.0143	0.005	0.0616	0.0039	0.0016	0.0103	0.0559
%SD	6.855	40.27	65.1	99.82	9.981	5.096	-16.91	-279.9

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0417
Run 2	-0.0708
Run 3	-0.0418
Mean	-0.0514
Std Dev	0.0168
%SD	-32.59

Sample : 2024-006

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	73.04	42.99	45.76
Run 2	92.53	50.49	55.23
Run 3	99.29	51.38	55.47

Sample : 2024-006

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:22:41
Last repeat started at : Tue Jul 17 2001 16:23:56

Sample name : 2024-007
Dilution Factor : 1 1/2 Dil Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	3.902	21.81	-0.1096	-4.27	0.7536	2.752	-0.0486	2.603
Run 2	0.9998	13.51	-0.3183	-3.651	0.1075	-0.2326	-0.2482	2.252
Run 3	0.9887	12.27	-0.3531	-1.799	0.6393	-0.1379	-0.1919	2.42
Mean	1.963	15.86	-0.2603	-3.24	0.5001	0.7938	-0.1629	2.425
Std Dev	1.679	5.183	0.1317	1.286	0.3448	1.696	0.1029	0.1755
%SD	85.5	32.67	-50.57	-39.69	68.94	213.7	-63.15	7.239

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	5.709	2.749	0.1514	9.217	11.7	4.238	-0.0514	-0.0929
Run 2	4.147	2.165	-0.306	4.376	2.361	0.949	-0.2331	-0.1791
Run 3	3.93	2.01	-0.0287	3.817	2.361	1.323	-0.2438	-0.2447
Mean	4.595	2.308	-0.0611	5.803	5.476	2.17	-0.1761	-0.1722
Std Dev	0.9706	0.3897	0.2304	2.97	5.394	1.801	0.1081	0.0762
%SD	21.12	16.88	-377	51.17	98.52	82.98	-61.4	-44.22

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	-0.1159	0.0821	0.0662	0.083	0.0119	0.0078	-0.0129	-0.0296
Run 2	-0.2469	0.0756	0.0388	0.0059	-0.0228	-0.0136	-0.0084	-0.0492
Run 3	-0.2419	0.0531	0.0519	-0.003	-0.0185	-0.0158	-0.036	-0.0356
Mean	-0.2016	0.0703	0.0523	0.0287	-0.0098	-0.0072	-0.0191	-0.0381
Std Dev	0.0742	0.0152	0.0137	0.0473	0.0189	0.0131	0.0148	0.01
%SD	-36.81	21.65	26.2	165	-193.3	-181.1	-77.62	-26.3

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	-0.0013
Run 2	-0.0392
Run 3	-0.0315
Mean	-0.024
Std Dev	0.02
%SD	-83.35

Sample : 2024-007

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	67.81	50.84	38.62
Run 2	135.7	97.69	75.02
Run 3	133.4	98.76	75.17

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:25:44
Last repeat started at : Tue Jul 17 2001 16:26:59

Sample name : CCV3
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	25.36	29.45	25.95	16	27.11	25.68	25.35	23.1
Run 2	24.64	26.15	25.49	18.11	24.31	24.87	24.74	23.37
Run 3	25.92	27.6	26.9	23.37	24.41	26.05	26.4	24.67
Mean	25.31	27.73	26.11	19.16	25.28	25.54	25.5	23.71
Std Dev	0.6431	1.657	0.7165	3.795	1.585	0.6031	0.8376	0.838
%SD	2.541	5.975	2.744	19.81	6.269	2.362	3.285	3.534

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	26.29	23.86	25.15	25.45	28.8	24.57	25.47	27.88
Run 2	25.78	24.63	25.26	25.03	27.54	25.35	25.77	26.2
Run 3	26.12	25.04	26.16	26.15	28.07	25.25	28.39	27.87
Mean	26.06	24.51	25.52	25.54	28.14	25.06	26.54	27.32
Std Dev	0.2594	0.5957	0.5575	0.5679	0.6332	0.4246	1.603	0.9667
%SD	0.9952	2.43	2.184	2.224	2.25	1.695	6.04	3.539

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	26.46	24.28	24.55	23.85	24.03	23.65	21.75	20.84
Run 2	27.5	25.57	25.09	23.85	24.4	24.83	22.41	21.22
Run 3	27.55	25.63	25.54	25	24.96	24.46	22.02	20.89
Mean	27.17	25.16	25.06	24.23	24.46	24.31	22.06	20.98
Std Dev	0.6154	0.7625	0.4947	0.6619	0.4656	0.6036	0.3302	0.2046
%SD	2.265	3.031	1.974	2.731	1.903	2.483	1.497	0.9752

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	21.06
Run 2	21.29
Run 3	21.44
Mean	21.26
Std Dev	0.187
%SD	0.8797

Sample : CCV3

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	104.7	81.19	60.16
Run 2	134.6	96.88	71.78
Run 3	127.5	96.72	71.56

Sample : CCV3

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 16:28:48
Last repeat started at : Tue Jul 17 2001 16:30:03

Sample name : CCB3
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.518	1.918	0.0577	-8.14	1.007	0.1995	0.1467	0.0051
Run 2	1.128	1.604	0.014	-0.6533	0.5284	0.136	0.1078	0.151
Run 3	0.8732	1.236	-0.0433	-0.1965	0.8641	0.1391	0.0955	0.0283
Mean	1.173	1.586	0.0095	-2.996	0.7999	0.1582	0.1167	0.0615
Std Dev	0.3247	0.3414	0.0506	4.46	0.2457	0.0358	0.0267	0.0784
%SD	27.68	21.52	533.7	-148.8	30.72	22.62	22.9	127.5

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.5849	0.2223	-0.4155	1.737	4.925	-0.0025	0.1303	0.1765
Run 2	0.9536	0.0427	-0.5035	1.322	3.133	-0.4469	-0.0488	-0.0656
Run 3	0.6139	0.0366	-0.3444	1.178	2.255	-0.1151	-0.1402	-0.1146
Mean	0.7175	0.1005	-0.4211	1.412	3.438	-0.1882	-0.0196	-0.0012
Std Dev	0.205	0.1055	0.0797	0.2903	1.361	0.231	0.1376	0.1558
%SD	28.57	105	-18.93	20.56	39.6	-122.8	-703.3	-1.256E+4

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.1683	0.0815	0.1318	0.0874	0.0737	0.0561	0.0211	0.1018
Run 2	-0.0751	0.0174	0.0314	0.0599	0.0181	0.0167	0.0331	0.0095
Run 3	-0.1232	0.0342	0.045	0.0195	0.0173	0.0377	-0.0096	-0.0078
Mean	-0.01	0.0444	0.0694	0.0556	0.0364	0.0368	0.0149	0.0345
Std Dev	0.1562	0.0332	0.0545	0.0341	0.0323	0.0197	0.0221	0.0589
%SD	-1562	74.78	78.52	61.45	88.84	53.4	148.3	170.7

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0422
Run 2	0.0265
Run 3	-0.0038
Mean	0.0217
Std Dev	0.0234
%SD	108

Sample : CCB3

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	104.6	78.65	59.95
Run 2	125.4	95.92	75.59
Run 3	130.3	96.96	77.52

Sample : CCB3

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 17:02:40
Last repeat started at : Tue Jul 17 2001 17:03:56

Sample name : CCV4
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	24.52	30.05	23.66	16.08	23.09	23.47	23.39	22.02
Run 2	24.69	30.77	25.1	16.48	23.91	25.37	25.28	24.36
Run 3	25.48	29.13	25.29	17.79	24.28	25.36	25.28	24.2
Mean	24.89	29.98	24.68	16.78	23.76	24.73	24.65	23.53
Std Dev	0.5126	0.8235	0.8888	0.8962	0.6075	1.092	1.088	1.305
%SD	2.059	2.747	3.601	5.339	2.557	4.415	4.414	5.545

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	25.15	23.85	24.65	22.79	24.69	22.99	25.82	26.15
Run 2	25.04	24.5	26.03	25.1	26.39	25.7	26.74	28.31
Run 3	25.12	24.44	26.79	25.38	25.38	25.17	27.02	28.17
Mean	25.1	24.26	25.82	24.42	25.49	24.62	26.53	27.54
Std Dev	0.0548	0.3584	1.089	1.42	0.8593	1.433	0.625	1.207
%SD	0.2184	1.477	4.218	5.815	3.371	5.819	2.356	4.383

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	25.86	24.71	25.01	24.48	23.34	24.01	23.2	22.4
Run 2	27.39	25.21	25.49	25.75	24.92	24.4	23.89	22.94
Run 3	26.9	25.02	25.15	25.32	24.96	24.6	23.43	22.65
Mean	26.72	24.98	25.21	25.18	24.4	24.34	23.51	22.67
Std Dev	0.7827	0.2497	0.2476	0.6439	0.9244	0.3026	0.3533	0.2704
%SD	2.93	0.9999	0.9821	2.557	3.788	1.244	1.503	1.193

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	22.37
Run 2	22.83
Run 3	22.7
Mean	22.64
Std Dev	0.2399
%SD	1.06

Sample : CCV4

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	96.38	85.23	79.72
Run 2	107.1	92.38	85.99
Run 3	107.4	92.64	87.26

Sample : CCV4

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 17:05:45
Last repeat started at : Tue Jul 17 2001 17:06:59

Sample name : CCB4
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.253	4.427	0.0319	-4.764	0.3963	0.1805	0.2463	0.2549
Run 2	0.3266	3.18	0.006	-8.481	0.0119	0.0183	0.0614	0.0142
Run 3	0.3068	3.105	-0.0274	-6.583	0.0388	-0.0161	0.0714	0.0187
Mean	0.6288	3.571	0.0035	-6.609	0.149	0.0609	0.1264	0.0959
Std Dev	0.5406	0.7427	0.0297	1.859	0.2146	0.105	0.104	0.1377
%SD	85.98	20.8	846.1	-28.12	144	172.5	82.29	143.5

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.39	0.3761	-0.3432	1.101	4.21	-0.8686	0.3565	0.354
Run 2	1.093	-0.0054	-0.071	1.052	1.231	0.3653	-0.1024	-0.1778
Run 3	0.9655	-0.0339	-0.1322	1.074	1.522	0.0048	-0.1319	-0.1496
Mean	1.149	0.1123	-0.1821	1.076	2.321	-0.1662	0.0407	0.0089
Std Dev	0.2176	0.2289	0.1428	0.0243	1.643	0.6345	0.2739	0.2992
%SD	18.93	203.9	-78.4	2.255	70.78	-381.8	672.4	3379

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.2722	0.1371	0.151	0.0806	0.0992	0.071	0.0373	0.1842
Run 2	-0.1145	0.0348	0.035	0.036	0.0179	0.0102	0.0097	0.0398
Run 3	-0.1843	0.036	0.0293	-0.0097	0.0176	0.0141	0.0005	0.0297
Mean	-0.0089	0.0693	0.0717	0.0356	0.0449	0.0318	0.0158	0.0846
Std Dev	0.2459	0.0587	0.0687	0.0451	0.047	0.034	0.0191	0.0865
%SD	-2774	84.7	95.69	126.7	104.8	107.1	120.7	102.2

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0942
Run 2	0.0153
Run 3	0.0128
Mean	0.0408
Std Dev	0.0463
%SD	113.6

Sample : CCB4

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	82.36	73.48	71.14
Run 2	113.3	93.3	87.41
Run 3	113.2	93.76	90.49

Sample : CCB4

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 17:24:04
Last repeat started at : Tue Jul 17 2001 17:25:20

Sample name : MRL2
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	2.678	8.017	1.738	-5.576	2.145	1.768	1.695	8.835
Run 2	2.217	5.856	1.726	-7.084	1.654	1.77	1.691	9.242
Run 3	2.161	5.058	1.744	-7.481	2.078	1.805	1.712	9.272
Mean	2.352	6.31	1.736	-6.714	1.959	1.781	1.699	9.116
Std Dev	0.2834	1.531	0.009	1.005	0.2661	0.0209	0.0114	0.244
%SD	12.05	24.26	0.5202	-14.97	13.58	1.172	0.6679	2.677

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	9.222	8.351	0.0108	4.239	4.331	1.397	1.439	1.44
Run 2	9.877	8.656	0.61	2.143	2.321	1.777	1.502	1.569
Run 3	9.039	8.357	0.6991	2.222	2.201	2.28	1.517	1.483
Mean	9.379	8.455	0.4399	2.868	2.951	1.818	1.486	1.498
Std Dev	0.4406	0.1743	0.3743	1.188	1.197	0.443	0.0414	0.0659
%SD	4.697	2.062	85.09	41.42	40.55	24.37	2.786	4.402

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	1.506	0.4948	0.472	0.4136	0.5361	0.4757	0.8849	0.7925
Run 2	1.425	0.5145	0.4574	0.5597	0.4917	0.4836	0.942	0.7047
Run 3	1.374	0.4853	0.4551	0.495	0.5566	0.4192	0.8755	0.7351
Mean	1.435	0.4982	0.4615	0.4895	0.5282	0.4595	0.9008	0.7441
Std Dev	0.0664	0.0149	0.0092	0.0732	0.0332	0.0351	0.036	0.0446
%SD	4.628	2.991	1.984	14.95	6.279	7.649	3.996	5.992

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.8058
Run 2	0.8201
Run 3	0.7585
Mean	0.7948
Std Dev	0.0323
%SD	4.058

Sample : MRL2

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 17:27:11
Last repeat started at : Tue Jul 17 2001 17:28:27

Sample name : HIGH CHECK STD.
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	106.6	110.1	103	105.8	99.93	100.5	99.18	75.54
Run 2	102.2	107	102.5	108.4	100.4	100.5	96.27	76.37
Run 3	106.2	110.9	105.5	106.2	99.32	100.5	100.6	78.83
Mean	105	109.3	103.7	106.8	99.87	100.5	98.68	76.91
Std Dev	2.443	2.038	1.614	1.429	0.5326	0.0168	2.208	1.709
%SD	2.327	1.864	1.557	1.338	0.5333	0.0167	2.237	2.222

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	80.43	81.03	87.12	73.86	71.39	69.88	109.6	110.5
Run 2	83.6	81.17	86.07	68.72	69.92	70.63	103.7	105.7
Run 3	83.54	80.59	87.96	71.57	74.03	71.73	109	112.8
Mean	82.52	80.93	87.05	71.38	71.78	70.74	107.4	109.7
Std Dev	1.815	0.3031	0.949	2.575	2.082	0.9319	3.265	3.636
%SD	2.199	0.3746	1.09	3.608	2.9	1.317	3.04	3.316

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	104.8	102.8	103.1	86.95	84.75	82.82	103.7	101.5
Run 2	110.2	102.5	102	83.62	83.21	84.68	107.4	105.4
Run 3	109.8	103.2	104.5	85.58	87.72	87.55	106.1	103.1
Mean	108.3	102.9	103.2	85.38	85.23	85.02	105.7	103.3
Std Dev	3.004	0.336	1.255	1.672	2.294	2.382	1.866	1.976
%SD	2.774	0.3266	1.216	1.958	2.692	2.801	1.765	1.912

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	101.6
Run 2	106.7
Run 3	103
Mean	103.8
Std Dev	2.628
%SD	2.533

Sample : HIGH CHECK STD.

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	85.27	80.11	75.28
Run 2	101.1	93.88	84.31
Run 3	98.69	91.77	88.75

Sample : HIGH CHECK STD.

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 17:30:15
Last repeat started at : Tue Jul 17 2001 17:31:30

Sample name : CCV5
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	25.64	26.99	25.16	8.488	23.71	24.76	24.56	23.67
Run 2	23.6	25.15	23.1	8.712	24.22	23.59	23.12	22.65
Run 3	23.8	25.86	23.42	14.99	22.14	23.99	23.42	22.37
Mean	24.35	26	23.89	10.73	23.36	24.11	23.7	22.9
Std Dev	1.123	0.9275	1.112	3.692	1.08	0.5934	0.7598	0.6862
%SD	4.613	3.567	4.654	34.41	4.625	2.461	3.206	2.997

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	24.76	25.82	25.02	23.78	25.89	23.71	29.54	28.22
Run 2	23.37	23.87	25.02	22.62	24.62	24.1	26.44	26.24
Run 3	23.9	23.61	25.26	22.08	23.21	24.71	26.63	25.84
Mean	24.01	24.43	25.1	22.82	24.57	24.17	27.54	26.76
Std Dev	0.6997	1.208	0.1373	0.866	1.344	0.5025	1.737	1.275
%SD	2.914	4.943	0.547	3.794	5.471	2.079	6.309	4.764

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	28.48	26.37	26.66	25.83	25.63	25.69	23.74	23.13
Run 2	26	24.93	25.18	24.53	24.21	24.53	23.42	22.91
Run 3	26.22	24.84	24.71	25.08	24.11	24.72	23.69	21.95
Mean	26.9	25.38	25.52	25.15	24.65	24.98	23.62	22.67
Std Dev	1.372	0.8629	1.017	0.6501	0.8505	0.6244	0.1738	0.6276
%SD	5.1	3.4	3.985	2.585	3.45	2.5	0.7359	2.769

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	23.2
Run 2	22.79
Run 3	22.51
Mean	22.83
Std Dev	0.3478
%SD	1.523

Sample : CCV5

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	86.23	77.83	79.25
Run 2	104.2	89.93	89.16
Run 3	104.8	90.72	90.22

Sample : CCV5

Multi-Element Concentrations Tue 17 Jul 2001

Experiment name : 071701A

Analysis procedure : EPA Method 6020/200.8
First repeat started at : Tue Jul 17 2001 17:33:19
Last repeat started at : Tue Jul 17 2001 17:34:34

Sample name : CCB5
Dilution Factor : 1 Concentration units : PPB

Element	Chromium	Chromium	Nickel	Nickel	Nickel	Copper	Copper	Zinc
Isotope	Cr 52	Cr 53	Ni 60	Ni 61	Ni 62	Cu 63	Cu 65	Zn 66
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.8408	2.002	0.1209	-10.26	0.2188	0.2049	0.0588	0.1138
Run 2	0.3056	1.646	0.0183	-6.107	0.2878	0.0249	0.0156	-0.0034
Run 3	0.132	1.43	-0.0434	-11.3	-0.081	0.0098	0.0434	-0.0816
Mean	0.4261	1.693	0.0319	-9.221	0.1419	0.0798	0.0393	0.0096
Std Dev	0.3695	0.2887	0.083	2.747	0.196	0.1085	0.0219	0.0984
%SD	86.7	17.05	260	-29.79	138.2	135.9	55.72	1023

Element	Zinc	Zinc	Arsenic	Selenium	Selenium	Selenium	Molybdenum	Molybdenum
Isotope	Zn 67	Zn 68	As 75	Se 77	Se 78	Se 82	Mo 95	Mo 97
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.7031	0.3333	-0.1769	0.3884	3.034	-0.8827	0.2315	0.2319
Run 2	0.8661	-0.096	-0.0475	0.351	0.8766	-0.1584	-0.109	-0.0565
Run 3	0.7179	-0.0511	0.0476	0.064	0.3699	-0.1952	-0.1104	-0.1062
Mean	0.7624	0.0621	-0.059	0.2678	1.427	-0.4121	0.004	0.0231
Std Dev	0.0902	0.2359	0.1127	0.1775	1.415	0.408	0.197	0.1826
%SD	11.83	380.2	-191.1	66.28	99.15	-98.99	4881	791.1

Element	Molybdenum	Silver	Silver	Cadmium	Cadmium	Cadmium	Lead	Lead
Isotope	Mo 98	Ag 107	Ag 109	Cd 111	Cd 112	Cd 114	Pb 206	Pb 207
Detector	PC	PC	PC	PC	PC	PC	PC	PC
Run 1	0.2152	0.148	0.145	0.1125	0.0987	0.0861	0.0873	0.1509
Run 2	-0.0784	0.0602	0.0527	-0.0022	0.0309	0.0336	0.085	0.0206
Run 3	-0.1739	0.0637	0.0433	0.0108	0.008	0.0208	0.0318	0.0354
Mean	-0.0124	0.0906	0.0803	0.0403	0.0459	0.0469	0.068	0.069
Std Dev	0.2028	0.0497	0.0562	0.0628	0.0472	0.0346	0.0314	0.0713
%SD	-1640	54.85	69.97	155.7	102.9	73.8	46.16	103.5

Element	Lead
Isotope	Pb 208
Detector	PC
Run 1	0.0999
Run 2	0.0317
Run 3	0.0096
Mean	0.0471
Std Dev	0.0471
%SD	99.95

Sample : CCB5

Internal Standard Drift; % relative to mean of first sample :

Element	Scandium	Indium	Lutetium
Isotope	Sc 45	In 115	Lu 175
Detector	PC	PC	PC
Run 1	77.69	72.32	72.15
Run 2	97.26	87.23	89.23
Run 3	104.5	89.73	89.53

Columbia Analytical Services inc.
An Employee-Owned Company

Columbia Analytical Services
8540 Baycenter Road
Jacksonville, FL 32256
Tel 904-739-2277
Fax 904-739-2011

Chain of Custody Documentation

Cooler Receipt and Preservation Form

Project/Client: N.S. Mayport SWMU 15/CH2M Hill Constructors, Inc. **SR Number:** J2102024

Cooler received on 7/5/01 by: THT

Courier: CAS ☐ UPS ☐ FEDEX ☐
CLIENT ☒ CD&L ☐ OTHER ☐

	Yes	No	N/A
1. Were custody seals on the outside of the cooler?	☐	☐	☒
2. Were custody seals intact?	☐	☐	☒
3. Were custody papers properly filled out(ink, singed, ect.)?	☒	☐	☐
4. Did all bottles arrive in good condition(unbroken)?	☒	☐	☐
5. Did any VOA vials contain significant air bubbles?	☐	☐	☒
6. Were ice or ice packs present?	☒	☐	☐
7. Did all samples arrive within appropriate holding times?	☒	☐	☐
8. Where did the bottles originate? CAS/JAX	☒	CLIENT	☐

9. Temperature of cooler(s) upon receipt/within 0-6C?:

	Temp.	Yes	No	N/A		Temp.	Yes	No	N/A
Cooler 1:	3.2	☒	☐	☐	Cooler 3:		☐	☐	☐
Cooler 2:	4.1	☒	☐	☐	Cooler 4:		☐	☐	☐

Date/Time Temperature Taken: 7/5/01 17:00 **If No/NA, Explain**

Thermometer ID: 2618380101-0015 ☐ Temp Blank: ☐ Cooler Temp.: ☐
15-078-J-4 ☐ Sample Bottle: ☐ IR. Gun: ☒

If out of temperature, client approval to run samples

Cooler Breakdown: Date: 7/5/01 By: THT

	Yes	No	N/A
1. Were all the bottle labels complete(i.e. analysis, preservation, ect.)	☒	☐	☐
2. Did all bottle labels and tags agree with custody papers?	☒	☐	☐
3. Were correct containers used for the test indicated?	☒	☐	☐

4. Air samples: Cassettes/Tubes Intact: ☐ Tedlar Bags Inflated: ☐
Canisters Pressurized: ☐ NA: ☒

Explain any discrepancies

		Yes	No	Sample ID	Reagent	Volume Added
pH	Reagent					
>12	NaOH					
>9	NaOH+ZnAc					
<2	HNO3	X				
<2	H2SO4					
<2	HCl					
5-9*	P/PCB (608 Only)					

* If pH adjustment is required, use NaOH/or H2SO4 PM OK to adjust pH_____

YES= All samples OK NO=Samples were preserved at lab as listed

VOC Vial pH Verification(Tested after Analysis) Following Samples Exhibited pH >2				

Other Comments:

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
149294-05

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	Paul Gonzaulis Columbia Analytical Services	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	3032	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.):
Randy Dumaop J.A. Jones Environmental	Ph:(904)777-4812 Fax:(904) 777-4262	Ph:(904) 739-2277 Fax:(904) 739-2011		2024

271

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-Q2-01	MPT-15-MWO-1S	W	7/5/01	1227	III/C	14	2	1									Grab		
2	007-MW03S-Q2-01	MPT-15-MWO-3S	W	"	1145	III/C	14	2	1									Grab	MS/MSD	
3	007-MW04S-Q2-01	MPT-15-MWO-4S	W	"	1205	III/C	14	2	1									Grab		
4	007-MW05S-Q2-01	MPT-15-MWO-5S	W	"	1245	III/C	14	2	1									Grab		
5	007-MW08S-Q2-01	MPT-15-MWO-8S	W	"	1055	III/C	14	2	1									Grab		
6	007-DUP-Q2-01	Duplicate	W	"	NA	III/C	14	2	1									Grab		
7	007-EQB-Q2-01	Equipment Blank	W	"	1100	III/C	14	2	1									Grab	Prepared in the Field	
8																				
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Roger Deisler / Willie Bonner J.A. Jones Environmental Services	Drop off at CAS.	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R. Deisler ROGER DEISLER			Columbia Analytical Services [signature]	7/5/01	17:00
Printed Name and Signature:			Printed Name and Signature:		
Roger Deisler					
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

CH2MHILL DATA DELIVERABLE EVALUATION

Project Name: NS Mayport SWMU 15

CTO: 7 **Project Number:** 149294 **SDG#:** 109160

Project Manager Mike Halil *Laboratory* GPL

Preliminary Data

Date Due _____ **Date Received** _____

Final Data

Date Due 10/11/01 **Date Received** 10/15/01

Evaluation

- CCI Level: A B (C)
- Electronic Data Deliverables Received? **yes** **no**
- Review Level Needed: Evaluation: ✓ Validation: _____

- **Validated Data**
  Date Due _____ **Date Received** _____

Archiving

- Total pages of final report: 227
- Out-sourced? **Yes or No**

Comments

_____

_____

_____

_____

_____

Analytical Report For 109160

for

CH2M Hill Constructors, Inc.

Project Manager: Mike Halil

Project Name : NS Mayport, SWMU 15

October 12, 2001

GPL

Laboratories

GPL Laboratories, LLLP Certifies that the test results meet all requirements of the NELAC Standards unless otherwise noted.

Reviewed by,
Project Manager

Approved by,
Laboratory Director

202 Perry Parkway Gaithersburg, MD 20877 Phone (301) 926-6802 Fax: (301) 840-1209
www.gplab.com

TOTAL # OF PAGES : 23

CASE NARRATIVE FOR GPL #109160

CLIENT: CH2MHILL CONSTRUCTORS INC
PROJECT/SITE: NS MAYPORT SWMU 15
WORK ORDER(S): 109160
REVIEW DATE: 10/12/01

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Analytical Report are integral parts of GPL Laboratories' report package. If you did not receive all of these documents please contact GPL immediately.

Sample Receipt

Seven water samples were received on 09/27/01. The samples were delivered by Federal Express. The samples were received intact. Sample receipt conditions and temperatures are documented on the Sample Receipt Checklist.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Analytical Report of Analysis.

Pesticides

1. Seven water samples were extracted and analyzed for Pesticide compounds using method 8081A.

2. MS/MSD was performed on sample 007-MW03S-Q3-01. A laboratory control sample was extracted with these samples.

3. Percent surrogate recoveries were out of QC limits for the following: BKS14282, 007-MW03S-Q3-01, 007-DUP-Q3-01 for DCB on both columns, 007-MW03S-Q3-01 MS, 007-MW055-Q3-01, and 007-MW08S-Q3-01 for DCB on column RTx-CLP2, 007-MW04S-Q3-01 for TCX on column RTx-CLP and for DCB on both columns, and 007-MW-04S-Q3-01 for DCB on column RTx-CLP2.

4. Percent LCS recoveries were out of QC limits for the following: beta-BHC, delta-BHC, 4,4'-DDT, Methoxychlor, Endrin Ketone.

5. Percent MS recoveries were out of QC limits for the following: beta-BHC, Endosulfan I, Endrin, Endosulfan II, 4,4-DDT, Methoxychlor, and Endrin Ketone. Percent MSD recoveries were out of QC limits for all compounds except delta-BHC. Percent RPD were out of QC limits for Aldrin, delta-BHC 4,4'-DDD, 4,4'-DDT, Endosulfan Sulfate, Methoxychlor, and Endrin Ketone.

6. Continuing calibration file L20562 failed QC limits for delta-BHC, 4,4'-DDT, Endosulfan Sulfate, Endrin Ketone and Methoxychlor. Continuing calibration file L20566 failed QC limits for delta-BHC, Endosulfan Sulfate, and Endrin Ketone. Continuing calibration file L20579 failed QC limits for alpha-BHC, gamma-BHC, delta-BHC, 4,4'-DDD, 4,4'-DDT, Endosulfan Sulfate, and Methoxychlor. The percent deviation for each of the above compounds was above 15% on both columns.

7. Concentrations reported on Form 1 are the higher values of results generated by two columns. However, the analyst determines the most reliable results based on the evaluation of quality control parameters. Flagged concentrations (*) on Form 1 indicate that reported results are the lower values.

8. Due to software limitations, some forms were corrected manually.

CASE NARRATIVE FOR GPL #109160

Metals

1. Seven water samples were analyzed for arsenic by EPA SW846 methods.
2. A matrix spike, duplicate, and serial dilution were performed on the batch sample 109156-004. They were within the control limits.
3. Calibration standards are verified against independent check standards purchased from a commercial vendor of environmental standards.
4. Results were reported to GPL's MDL for arsenic.
5. All GPL QA/QC criteria were met.

Project Manager

Lab Director

Summary of Analytical Results

Client ID 007-MW01S-Q3-01
GPL ID: 109160-001-02-1/I
Matrix: Water
Date Collected: Sep-26-2001
Date Received: Sep-27-2001

Prep Method: SW3010A
Prep Date: 10/02/01
Prep Time: 09:17

Analytical Method: SW6010B_AS
Date Analyzed: Oct-10-2001
Time Analyzed 09:47

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	8.29	4.1	ug/L	B	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW03S-Q3-01
GPL ID: 109160-002-03-1/1
Matrix: Water
Date Collected: Sep-26-2001
Date Received: Sep-27-2001

Prep Method: SW3010A
Prep Date: 10/02/01
Prep Time: 09:17

Analytical Method: SW6010B_AS
Date Analyzed: Oct-10-2001
Time Analyzed 09:54

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW04S-Q3-01
GPL ID: 109160-003-03-1/1
Matrix: Water
Date Collected: Sep-26-2001
Date Received: Sep-27-2001

Prep Method: SW3010A
Prep Date: 10/02/01
Prep Time: 09:17

Analytical Method: SW6010B_AS
Date Analyzed: Oct-10-2001
Time Analyzed 10:15

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	68.2	4.1	ug/L		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW05S-Q3-01
GPL ID: 109160-004-02-1/1
Matrix: Water
Date Collected: Sep-26-2001
Date Received: Sep-27-2001

Prep Method: SW3010A
Prep Date: 10/02/01
Prep Time: 09:17

Analytical Method: SW6010B_AS
Date Analyzed: Oct-10-2001
Time Analyzed 10:21

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW08S-Q3-01
GPL ID: 109160-005-03-1/1
Matrix: Water
Date Collected: Sep-26-2001
Date Received: Sep-27-2001

Prep Method: SW3010A
Prep Date: 10/02/01
Prep Time: 09:17

Analytical Method: SW6010B_AS
Date Analyzed: Oct-10-2001
Time Analyzed 10:28

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-DUP-Q3-01
GPL ID: 109160-006-03-1/1
Matrix: Water
Date Collected: Sep-26-2001
Date Received: Sep-27-2001

Prep Method: SW3010A
Prep Date: 10/02/01
Prep Time: 09:17

Analytical Method: SW6010B_AS
Date Analyzed: Oct-10-2001
Time Analyzed 10:35

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-EQB-Q3-01
GPL ID: 109160-007-03-1/1
Matrix: Water
Date Collected: Sep-26-2001
Date Received: Sep-27-2001

Prep Method: SW3010A
Prep Date: 10/02/01
Prep Time: 09:17

Analytical Method: SW6010B_AS
Date Analyzed: Oct-10-2001
Time Analyzed 10:42

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW01S-Q3-01
GPL ID: 109160-001-01-1/1
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/09/01
Time Analyzed 22:43
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.05	ug/L	U	1
4,4-DDE	BQL	0.05	ug/L	U	1
4,4-DDT	BQL	0.05	ug/L	U	1
Aldrin	BQL	0.05	ug/L	U	1
Alpha-BHC	BQL	0.05	ug/L	U	1
Alpha-Chlordane	BQL	0.05	ug/L	U	1
Beta-BHC	BQL	0.05	ug/L	U	1
Chlordane	BQL	1	ug/L	U	1
Delta-BHC	BQL	0.05	ug/L	U	1
Dieldrin	BQL	0.05	ug/L	U	1
Endosulfan I	BQL	0.05	ug/L	U	1
Endosulfan II	BQL	0.05	ug/L	U	1
Endosulfan Sulfate	BQL	0.05	ug/L	U	1
Endrin	BQL	0.05	ug/L	U	1
Endrin Aldehyde	BQL	0.05	ug/L	U	1
Endrin Ketone	BQL	0.05	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.05	ug/L	U	1
Gamma-Chlordane	BQL	0.05	ug/L	U	1
Heptachlor	BQL	0.05	ug/L	U	1
Heptachlor Epoxide	BQL	0.05	ug/L	U	1
Methoxychlor	BQL	0.05	ug/L	U	1
Toxaphene	BQL	1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW03S-Q3-01
GPL ID: 109160-002-01-1/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/09/01
Time Analyzed 23:10
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.071	ug/L	U	1
4,4-DDE	BQL	0.071	ug/L	U	1
4,4-DDT	BQL	0.071	ug/L	U	1
Aldrin	BQL	0.071	ug/L	U	1
Alpha-BHC	BQL	0.071	ug/L	U	1
Alpha-Chlordane	BQL	0.071	ug/L	U	1
Beta-BHC	BQL	0.071	ug/L	U	1
Chlordane	BQL	1.43	ug/L	U	1
Delta-BHC	BQL	0.071	ug/L	U	1
Dieldrin	BQL	0.071	ug/L	U	1
Endosulfan I	BQL	0.071	ug/L	U	1
Endosulfan II	BQL	0.071	ug/L	U	1
Endosulfan Sulfate	BQL	0.071	ug/L	U	1
Endrin	BQL	0.071	ug/L	U	1
Endrin Aldehyde	BQL	0.071	ug/L	U	1
Endrin Ketone	BQL	0.071	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.071	ug/L	U	1
Gamma-Chlordane	BQL	0.071	ug/L	U	1
Heptachlor	0.033	0.071	ug/L	J	1
Heptachlor Epoxide	BQL	0.071	ug/L	U	1
Methoxychlor	BQL	0.071	ug/L	U	1
Toxaphene	BQL	1.43	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW04S-Q3-01
GPL ID: 109160-003-01-1/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 13:32
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.05	ug/L	U	1
4,4-DDE	BQL	0.05	ug/L	U	1
4,4-DDT	BQL	0.05	ug/L	U	1
Aldrin	BQL	0.05	ug/L	U	1
Alpha-BHC	BQL	0.05	ug/L	U	1
Alpha-Chlordane	BQL	0.05	ug/L	U	1
Beta-BHC	BQL	0.05	ug/L	U	1
Chlordane	BQL	1	ug/L	U	1
Delta-BHC	BQL	0.05	ug/L	U	1
Dieldrin	BQL	0.05	ug/L	U	1
Endosulfan I	BQL	0.05	ug/L	U	1
Endosulfan II	BQL	0.05	ug/L	U	1
Endosulfan Sulfate	BQL	0.05	ug/L	U	1
Endrin	BQL	0.05	ug/L	U	1
Endrin Aldehyde	BQL	0.05	ug/L	U	1
Endrin Ketone	BQL	0.05	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.05	ug/L	U	1
Gamma-Chlordane	BQL	0.05	ug/L	U	1
Heptachlor	BQL	0.05	ug/L	U	1
Heptachlor Epoxide	BQL	0.05	ug/L	U	1
Methoxychlor	BQL	0.05	ug/L	U	1
Toxaphene	BQL	1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW05S-Q3-01
GPL ID: 109160-004-01-1/1
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 00:59
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.053	ug/L	U	1
4,4-DDE	BQL	0.053	ug/L	U	1
4,4-DDT	BQL	0.053	ug/L	U	1
Aldrin	BQL	0.053	ug/L	U	1
Alpha-BHC	BQL	0.053	ug/L	U	1
Alpha-Chlordane	BQL	0.053	ug/L	U	1
Beta-BHC	BQL	0.053	ug/L	U	1
Chlordane	BQL	1.05	ug/L	U	1
Delta-BHC	BQL	0.053	ug/L	U	1
Dieldrin	BQL	0.053	ug/L	U	1
Endosulfan I	BQL	0.053	ug/L	U	1
Endosulfan II	BQL	0.053	ug/L	U	1
Endosulfan Sulfate	BQL	0.053	ug/L	U	1
Endrin	BQL	0.053	ug/L	U	1
Endrin Aldehyde	BQL	0.053	ug/L	U	1
Endrin Ketone	BQL	0.053	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.053	ug/L	U	1
Gamma-Chlordane	BQL	0.053	ug/L	U	1
Heptachlor	BQL	0.053	ug/L	U	1
Heptachlor Epoxide	BQL	0.053	ug/L	U	1
Methoxychlor	BQL	0.053	ug/L	U	1
Toxaphene	BQL	1.05	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW08S-Q3-01
GPL ID: 109160-005-01-1/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 01:26
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.051	ug/L	U	1
4,4-DDE	BQL	0.051	ug/L	U	1
4,4-DDT	BQL	0.051	ug/L	U	1
Aldrin	BQL	0.051	ug/L	U	1
Alpha-BHC	BQL	0.051	ug/L	U	1
Alpha-Chlordane	BQL	0.051	ug/L	U	1
Beta-BHC	BQL	0.051	ug/L	U	1
Chlordane	BQL	1.02	ug/L	U	1
Delta-BHC	BQL	0.051	ug/L	U	1
Dieldrin	BQL	0.051	ug/L	U	1
Endosulfan I	BQL	0.051	ug/L	U	1
Endosulfan II	BQL	0.051	ug/L	U	1
Endosulfan Sulfate	BQL	0.051	ug/L	U	1
Endrin	BQL	0.051	ug/L	U	1
Endrin Aldehyde	BQL	0.051	ug/L	U	1
Endrin Ketone	BQL	0.051	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.051	ug/L	U	1
Gamma-Chlordane	BQL	0.051	ug/L	U	1
Heptachlor	0.029	0.051	ug/L	J	1
Heptachlor Epoxide	BQL	0.051	ug/L	U	1
Methoxychlor	BQL	0.051	ug/L	U	1
Toxaphene	BQL	1.02	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-DUP-Q3-01
GPL ID: 109160-006-02-2/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 01:54
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.051	ug/L	U	1
4,4-DDE	BQL	0.051	ug/L	U	1
4,4-DDT	BQL	0.051	ug/L	U	1
Aldrin	BQL	0.051	ug/L	U	1
Alpha-BHC	BQL	0.051	ug/L	U	1
Alpha-Chlordane	BQL	0.051	ug/L	U	1
Beta-BHC	BQL	0.051	ug/L	U	1
Chlordane	BQL	1.02	ug/L	U	1
Delta-BHC	BQL	0.051	ug/L	U	1
Dieldrin	BQL	0.051	ug/L	U	1
Endosulfan I	BQL	0.051	ug/L	U	1
Endosulfan II	BQL	0.051	ug/L	U	1
Endosulfan Sulfate	BQL	0.051	ug/L	U	1
Endrin	BQL	0.051	ug/L	U	1
Endrin Aldehyde	BQL	0.051	ug/L	U	1
Endrin Ketone	BQL	0.051	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.051	ug/L	U	1
Gamma-Chlordane	BQL	0.051	ug/L	U	1
Heptachlor	0.038	0.051	ug/L	J	1
Heptachlor Epoxide	BQL	0.051	ug/L	U	1
Methoxychlor	BQL	0.051	ug/L	U	1
Toxaphene	BQL	1.02	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-EQB-Q3-01
GPL ID: 109160-007-01-1/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 02:21
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.053	ug/L	U	1
4,4-DDE	BQL	0.053	ug/L	U	1
4,4-DDT	BQL	0.053	ug/L	U	1
Aldrin	BQL	0.053	ug/L	U	1
Alpha-BHC	BQL	0.053	ug/L	U	1
Alpha-Chlordane	BQL	0.053	ug/L	U	1
Beta-BHC	BQL	0.053	ug/L	U	1
Chlordane	BQL	1.05	ug/L	U	1
Delta-BHC	BQL	0.053	ug/L	U	1
Dieldrin	BQL	0.053	ug/L	U	1
Endosulfan I	BQL	0.053	ug/L	U	1
Endosulfan II	BQL	0.053	ug/L	U	1
Endosulfan Sulfate	BQL	0.053	ug/L	U	1
Endrin	BQL	0.053	ug/L	U	1
Endrin Aldehyde	BQL	0.053	ug/L	U	1
Endrin Ketone	BQL	0.053	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.053	ug/L	U	1
Gamma-Chlordane	BQL	0.053	ug/L	U	1
Heptachlor	0.032	0.053	ug/L	J	1
Heptachlor Epoxide	BQL	0.053	ug/L	U	1
Methoxychlor	BQL	0.053	ug/L	U	1
Toxaphene	BQL	1.05	ug/L	U	1

GPL LABORATORIES, LLP
ANALYTICAL RESULTS

Project Name : NS Mayport, SWMU 15

Date Printe October 12, 2001

GPL ID	Client ID
109160-001-02-1/1	007-MW01S-Q3-01
109160-002-03-1/1	007-MW03S-Q3-01
109160-003-03-1/1	007-MW04S-Q3-01
109160-004-02-1/1	007-MW05S-Q3-01
109160-005-03-1/1	007-MW08S-Q3-01
109160-006-03-1/1	007-DUP-Q3-01
109160-007-03-1/1	007-EQB-Q3-01
109160-001-01-1/1	007-MW01S-Q3-01
109160-002-01-1/2	007-MW03S-Q3-01
109160-003-01-1/2	007-MW04S-Q3-01
109160-004-01-1/1	007-MW05S-Q3-01
109160-005-01-1/2	007-MW08S-Q3-01
109160-006-02-2/2	007-DUP-Q3-01
109160-007-01-1/2	007-EQB-Q3-01
EVAL	BKS14282
EVAL	BKS14282
TOXAPHENE-3	BKS14282

GPL LABORATORIES, LLLP

Qualifier Definitions

U = Indicates that the compound was analyzed for but not detected at or above the reporting limit

Organics:

B = Indicates that the analyte was found in the associated blank as well as in the sample

D = Indicates that the analyte was reported from a diluted analysis

E = Indicates that the concentration detected exceeded the calibration range of the instrument

J = Value is less than the reporting limits but greater than the MDL

P = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns

Metals:

B = Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL

E = Indicates that reported value is estimated because of the possible presence of interference (i.e., the serial dilution not within control limits)

H = Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit

N = Spiked sample recovery not within control limits

• = Duplicate analysis not within control limits

10/30/00
I:USER/G_SECURE/LOGFORMS/QUALDEF.DOC
Form:Gen-004

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
149294-06

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	GPL Laura Petrik	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	3418	Christelle Newsome / 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 J.A. Jones Environmental	Ph:(904)777-4812 Fax:(904) 777-4262	Ph: (301) 926-6802 Fax: (301) 840-1209		

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-Q3-01	MPT-15-MWO-1S	W	09/26/01	10:40	III/C	14	2	1									Grab		
2	007-MW03S-Q3-01	MPT-15-MWO-3S	W	09/26/01	11:20	III/C	14	2	1									Grab		
3	007-MW04S-Q3-01	MPT-15-MWO-4S	W	09/26/01	11:50	III/C	14	2	1									Grab		
4	007-MW05S-Q3-01	MPT-15-MWO-5S	W	09/26/01	12:30	III/C	14	2	1									Grab		
5	007-MW08S-Q3-01	MPT-15-MWO-8S	W	09/26/01	11:00	III/C	14	2	1									Grab		
6	007-DUP-Q3-01	Duplicate	W	09/26/01	NA	III/C	14	2	1									Grab		
7	007-EQB-Q3-01	Equipment Blank	W	09/26/01	12:05	III/C	14	2	1									Grab	Prepared in the Field	
8	NA	Temperature Blank	W	NA	NA	NA	NA			1									Prepaed by lab	
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER.	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Roger Deisler / Roger Deisler / Scott Sloan J.A. Jones Environmental Services	Federal Express Tracking # 7916 6562 1220	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R. Dumaop	9/26/01	18:00	Federal Express	9/26/01	18:00
Printed Name and Signature:			Printed Name and Signature:		
Printed Name and Signature:			Printed Name and Signature: Scott Grimm	09/27/01	10:00

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

Form CC1001, Rev 02/00

petrik, laura

From: petrik, laura
Sent: Friday, September 28, 2001 2:33 PM
To: 'CH2M - Mike Halil'
Subject: NS Mayport SWMU 15

Our Sample Management office noted that one pesticide bottle for 007-MW01S-Q3-01 and 007-MW05S-Q3-01 had broken in shipment. We have the second bottle to use for analysis.

GPL Laboratories, LLLP

Sample Preservation Check Documentation Form

Work Order: 109160

Parameter:	Metals	Phenol	TPH O&G	Classical Parameters	Cyanide	Sulfide	Radiology	Other
Preservative: pH Value	HN03 <2	H2SO4 <2	H2SO4 <2	H2SO4 <2	NaOH >12	NaOH >9	H2SO4 <2	Preservations
Client ID								
007-MW015-Q3-01	<2							
007-MW036-Q3-01	<2							
007-MW015-Q3-01	<2							
007-MW055-Q3-01	<2							
007-MW045-Q3-01	<2							
007 DUP Q3-01	<2							
007 EQB Q3-01	<2							

Sample Preservation Check Performed By: [signature] Date: 09/28/01

GPL Laboratories, LLLP

Figure 1
SAMPLE RECEIPT CHECKLIST

W.O. No: 109160

Client Name: CH2MHill

Date Received: 09/27/01

Time Received: 10:00 AM

Received By: [signature]

Carrier Name: FedEx

Prepared (Logged In) By: [signature] 09/27/01
Initials Date

Project: N.S. Mayport

Site:

VOA Holding Blank I.D. No:

	YES	NO
Airbill/Manifest Present? No. 79165621220	✓	
Shipping Container in Good Condition?	✓	
Custody Seals Present on Shipping Container? Condition: Broken ___ Intact-not dated or signed ___ Intact-dated and signed ✓	✓	
Usage of Tamper Evident Type	✓	
Chain-of-Custody Present?	✓	
Chain-of-Custody Agrees with Sample Labels?	✓	
Chain-of-Custody Signed?	✓	
Packing Present in Shipping Container? Type of Packing Bubblepump	✓	
Custody seals on Sample Bottles? Condition: Good ___ Broken ___		✓
Total Number of Sample Bottles 21		
Total Number of Samples 7		
Samples Intact?		✓
Sufficient Sample Volume for Indicated Test?	✓	

	YES	NO
Trip Blanks: No. of Sets ___		✓
Field Blanks: No. of Sets ___		✓
Equip. Blank: No. of Sets ___		✓
Field Duplicate: No. of Sets ___		✓
MS/MSD: No of Sets ___		✓
VOA Vials Have Zero Headspace?		✓
Preservatives Added to Sample?	✓	
pH Check Required? Performed By? [signature]	✓	
Ice Present in Shipping Container?	✓	

Container #	Temp.	Container #	Temp.
#1	2.0°C		

09/27/01

Project Manager Contacted?
Name: Lanca Petrik
Date Contacted: 09/27/01

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A/

COMMENTS: Samples 007-MW015-Q3-01 and 007-MW055-Q3-01 one bottle for Pesticides broken in shipping client notified - see e-mail lp 9/28/01

Checklist Completed By: [signature]

Date: 09/27/01

SOP No: F.2V11

SAMPLE DATA PACKAGE

PESTICIDE DATA

A. QC Summary

B. Sample Data

C. Standards Data

D. Raw QC Data

GPL Laboratories, LLLP

A. QC Summary

1. Surrogate Percent Recovery Summary
2. Matrix Spike/ Matrix Spike Duplicate Summary
3. Laboratory Control Standard Summary (where applicable)
4. Method Blank Summary

GPL Laboratories, LLLP

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

	CLIENT SAMPLE ID	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	BLK14282	80	94	130	130	0
02	BKS14282	95	98	158 *	157 *	2
03	007-MW01S-Q3-0	88	87	122	135	0
04	007-MW03S-Q3-0	100	101	155 *	179 *	2
05	007-MW03S-Q3-0 MS	111	104	151	175 *	1
06	007-MW03S-Q3-0 MS	159 *	137	193 *	235 *	3
07	007-MW05S-Q3-0	115	88	130	156 *	1
08	007-MW08S-Q3-0	103	122	155	189 *	1
09	007-DUP-Q3-01	133	133	197 *	243 *	2
10	007-EQB-Q3-01	94	91	114	139	0
11	007-MW04S-Q3-0	121	45	81	77	0

lp 10-12-01

			ADVISORY QC LIMITS
TCX	=	Tetrachloro-m-xylene	(6-154)
DCB	=	Decachlorobiphenyl	(16-155)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3F

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GP Environmental Services Contract: CH2M HILL

Lab Code: GPENV Case No.: 109160 SAS No.: N/A SDG No.: N/A

EPA Sample No.: 007-MW03S-Q3-01 GP ID: 109160-002-01-1/1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC.
alpha-BHC	0.7	0.0	0.71	99	37-136
gamma-BHC (Lindane)	0.7	0.0	0.72	101	41-137
Heptachlor	0.7	0.0	0.87	117	29-136
Aldrin	0.7	0.0	0.85	119	12-145
beta-BHC	0.7	0.0	1.25	174 *	63-125
delta-BHC	0.7	0.0	0.39	54	2-104
Heptachlor Epoxide	0.7	0.0	0.85	119	42-128
Endosulfan I	0.7	0.0	0.81	114 *	72-106
gamma-Chlordane	0.7	0.0	0.83	116	17-139
alpha-Chlordane	0.7	0.0	0.87	122	19-152
4,4'-DDE	0.7	0.0	0.84	118	21-138
Dieldrin	0.7	0.0	0.84	117	28-128
Endrin	0.7	0.0	0.95	133 *	44-124
Endosulfan II	0.7	0.0	0.86	120 *	69-100
4,4'-DDD	0.7	0.0	0.97	136	16-139
4,4'-DDT	0.7	0.0	1.21	170 *	4-155
Endrin Aldehyde	0.7	0.0	0.90	126	7-141
Endosulfan Sulfate	0.7	0.0	0.94	132	43-140
Methoxychlor	0.7	0.0	1.17	163 *	44-121
Endrin Ketone	0.7	0.0	0.98	138 *	61-114

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	0.7	0.98	138 *	33	35	37-136
gamma-BHC (Lindane)	0.7	1.00	140 *	32	35	41-137
Heptachlor	0.7	1.16	158 *	30	35	29-136
Aldrin	0.7	1.23	172 *	36 *	35	12-145
beta-BHC	0.7	1.33	186 *	7	35	63-125
delta-BHC	0.7	0.71	99	59 *	35	2-104
Heptachlor Epoxide	0.7	1.19	166 *	33	35	42-128
Endosulfan I	0.7	1.10	154 *	30	35	72-106
gamma-Chllordane	0.7	1.16	163 *	34	35	17-139
alpha-Chlordane	0.7	1.13	158 *	26	35	19-152
4,4'-DDE	0.7	1.13	158 *	29	35	21-138
Dieldrin	0.7	1.18	165 *	34	35	28-128
Endrin	0.7	1.34	187 *	34	35	44-124
Endosulfan II	0.7	1.20	168 *	33	35	69-100
4,4'-DDD	0.7	1.47	206 *	41 *	35	16-139
4,4'-DDT	0.7	1.76	246 *	37 *	35	4-155
Endrin Aldehyde	0.7	1.19	167 *	28	35	7-141
Endosulfan Sulfate	0.7	1.38	193 *	38 *	35	43-140
Methoxychlor	0.7	1.69	237 *	37 *	35	44-121
Endrin Ketone	0.7	1.43	200 *	37 *	35	61-114

* Value outside of QC limits

RPD: 7 out of 20 outside limits.

Spike Recovery: 26 out of 40 outside limits.

WATER LABORATORY CONTROL SPIKE RECOVERY

Lab Name: GP Environmental Services Contract: CH2M HILL

Lab Code: GPES Case No.: 109160 SAS No.: N/A SDG No.: N/A

EPA Sample No.: BKS14282 GP Lab ID: 109160-BKS14282

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC		QC LIMITS REC
alpha-BHC	0.50	0.47	94		68-124
gamma-BHC (Lindane)	0.50	0.48	97		72-118
Heptachlor	0.50	0.53	106		60-124
Aldrin	0.50	0.52	105		61-109
beta-BHC	0.50	0.61	123	*	67-122
delta-BHC	0.50	0.47	93	*	21-92
Heptachlor Epoxide	0.50	0.53	107		73-111
Endosulfan I	0.50	0.52	104		65-117
gamma-Chlordane	0.50	0.53	106		63-108
alpha-Chlordane	0.50	0.53	106		70-115
4,4'- DDE	0.50	0.53	106		62-119
Dieldrin	0.50	0.52	103		62-113
Endrin	0.50	0.58	115		68-115
Endosulfan II	0.50	0.57	114		57-123
4,4'- DDD	0.50	0.58	116		58-118
4,4'- DDT	0.50	0.67	134	*	77-115
Endrin Aldehyde	0.50	0.58	116		58-127
Endosulfan Sulfate	0.50	0.63	125		37-135
Methoxychlor	0.50	0.66	132	*	66-112
Endrin Ketone	0.50	0.63	127	*	74-124

* Value outside QC limits

Spike Recovery: 5 out of 20 outside limits

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLK14282

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Lab Sample ID: BLK14282 Lab File ID: L20551.D

Matrix: (soil/water) WATER Extraction: (SepF/Cont/Sonc) CONT

Sulfur Cleanup: (Y/N) N Date Extracted: 10/01/01

Date Analyzed (1) : 10/09/01 Date Analyzed (2) : 10/09/01

Time Analyzed (1) : 2148 Time Analyzed (2) : 2148

Instrument ID (1) : GC-L Instrument ID (2) : GC-L

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BKS14282	BKS14282	10/09/01	10/09/01
02	007-MW01S-Q3-01	109160-001-01-1/1	10/09/01	10/09/01
03	007-MW03S-Q3-01	109160-002-01-1/1	10/09/01	10/09/01
04	007-MW03S-Q3-01 MS	109160-002-01-1/1 MS	10/09/01	10/09/01
05	007-MW03S-Q3-01 MS	109160-002-01-1/1 MSD	10/10/01	10/10/01
06	007-MW05S-Q3-01	109160-004-01-1/1	10/10/01	10/10/01
07	007-MW08S-Q3-01	109160-005-01-1/1	10/10/01	10/10/01
08	007-DUP-Q3-01	109160-006-02-2/2	10/10/01	10/10/01
09	007-EQB-Q3-01	109160-007-02-2/2	10/10/01	10/10/01
10	007-MW04S-Q3-01	109160-003-01-1/1	10/10/01	10/10/01

COMMENTS:

B. Sample Data

1. TCL Result
2. Chromatographs from Primary and Confirmatory Analyses
3. Integration Report for Primary and Confirmatory Analyses

GPL Laboratories, LLLP

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW01S-Q3-01
GPL ID: 109160-001-01-1/1
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/09/01
Time Analyzed 22:43
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.05	ug/L	U	1
4,4-DDE	BQL	0.05	ug/L	U	1
4,4-DDT	BQL	0.05	ug/L	U	1
Aldrin	BQL	0.05	ug/L	U	1
Alpha-BHC	BQL	0.05	ug/L	U	1
Alpha-Chlordane	BQL	0.05	ug/L	U	1
Beta-BHC	BQL	0.05	ug/L	U	1
Chlordane	BQL	1	ug/L	U	1
Delta-BHC	BQL	0.05	ug/L	U	1
Dieldrin	BQL	0.05	ug/L	U	1
Endosulfan I	BQL	0.05	ug/L	U	1
Endosulfan II	BQL	0.05	ug/L	U	1
Endosulfan Sulfate	BQL	0.05	ug/L	U	1
Endrin	BQL	0.05	ug/L	U	1
Endrin Aldehyde	BQL	0.05	ug/L	U	1
Endrin Ketone	BQL	0.05	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.05	ug/L	U	1
Gamma-Chlordane	BQL	0.05	ug/L	U	1
Heptachlor	BQL	0.05	ug/L	U	1
Heptachlor Epoxide	BQL	0.05	ug/L	U	1
Methoxychlor	BQL	0.05	ug/L	U	1
Toxaphene	BQL	1	ug/L	U	1

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW01S-Q3-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 109160-001-01-1/1

Sample wt/vol: 1000 (g/ml) ML Lab File ID: L20553.D

% Moisture: _____ decanted:(Y/N) N Date Received: 09/27/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/09/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
5103-71-9	alpha-Chlordane	0.050	U
72-55-9	4,4-DDE	0.050	U
60-57-1	Dieldrin	0.050	U
72-20-8	Endrin	0.050	U
33213-65-9	Endosulfan II	0.050	U
72-54-8	4,4-DDD	0.050	U
50-29-3	4,4-DDT	0.050	U
7421-93-4	Endrin Aldehyde	0.050	U
1031-07-8	Endosulfan Sulfate	0.050	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin Ketone	0.050	U
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20553.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\L\OCT0901\L20553.D\ECD2B.CH
Acq On : 9 Oct 2001 22:43 Operator: PY
Sample : 109160-001-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW01S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:08 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.12f	6.14f	460714	1242732	17.605	17.393
Spiked Amount 20.000 Range 30 - 150 Recovery =					88.02%	86.97%
22) S Decachlorobiphen	20.08f	21.31f	537592	959413	24.344m	27.021m
Spiked Amount 20.000 Range 30 - 150 Recovery =					121.72%	135.11%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

001010

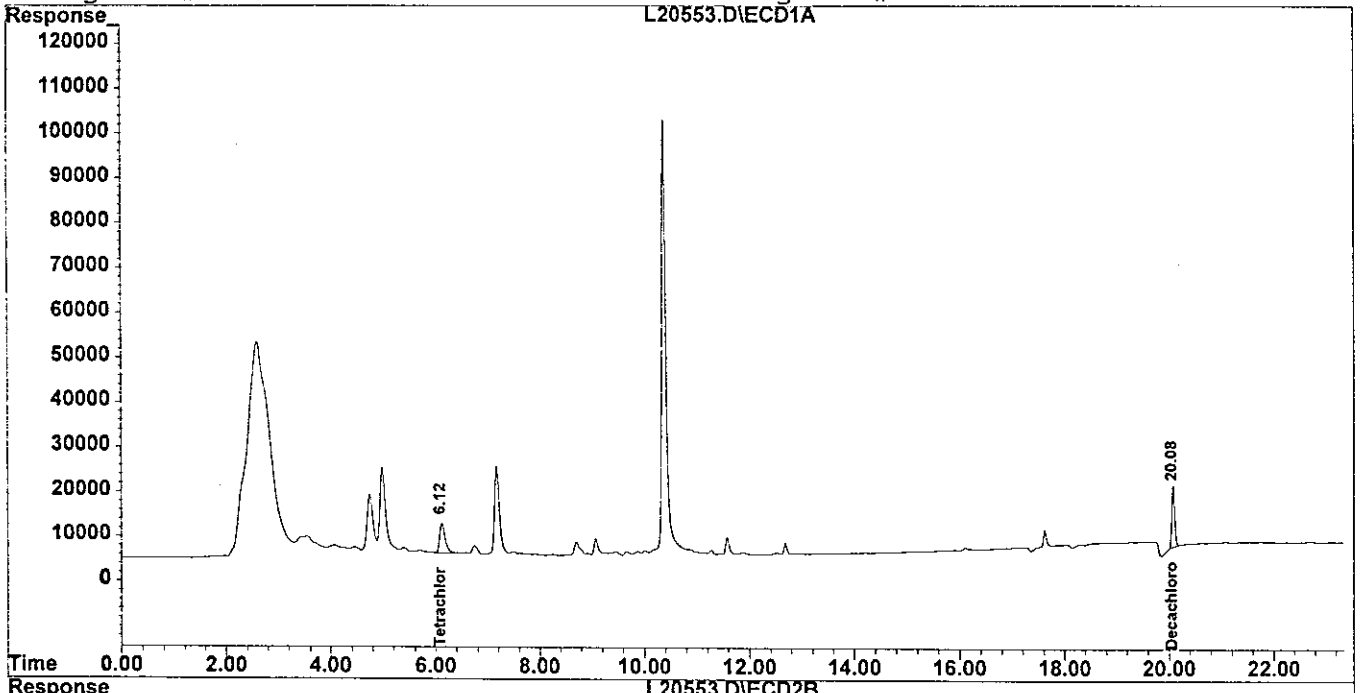
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

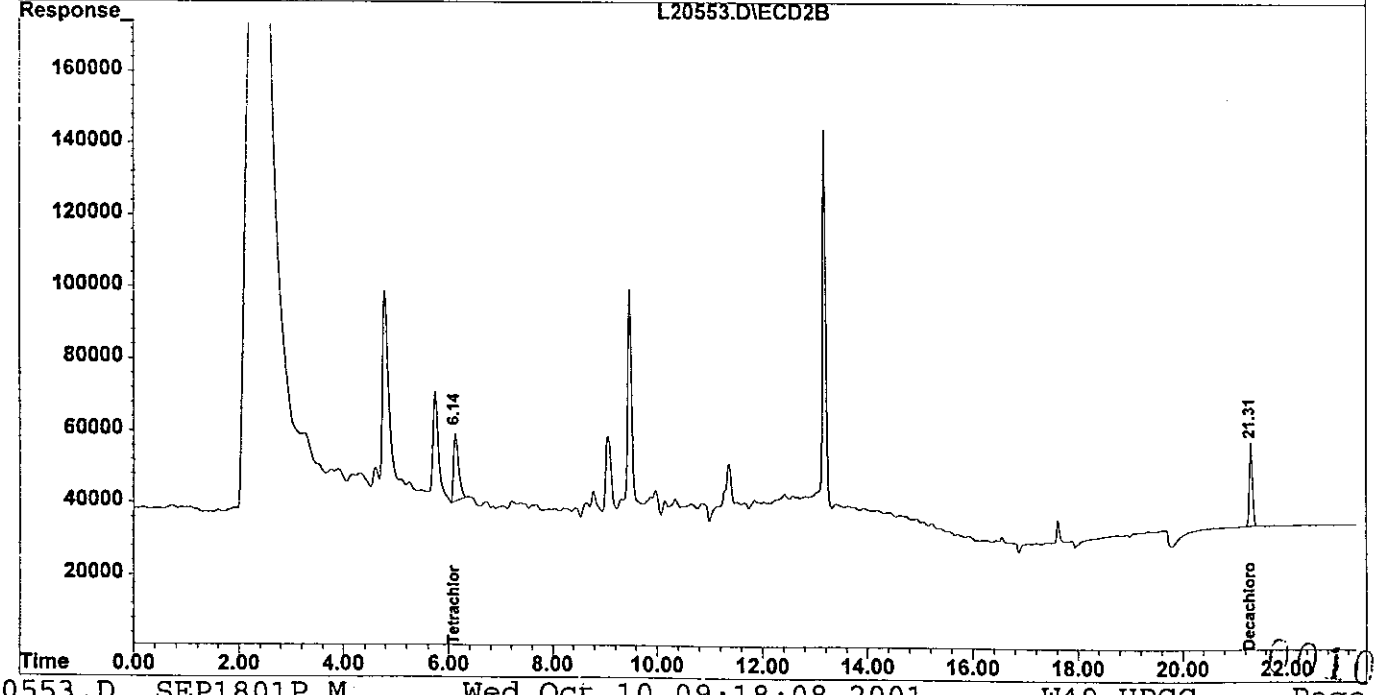
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20553.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\L\OCT0901\L20553.D\ECD2B.CH
Acq On : 9 Oct 2001 22:43 Operator: PY
Sample : 109160-001-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW01S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:08 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW03S-Q3-01
GPL ID: 109160-002-01-1/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/09/01
Time Analyzed 23:10
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.071	ug/L	U	1
4,4-DDE	BQL	0.071	ug/L	U	1
4,4-DDT	BQL	0.071	ug/L	U	1
Aldrin	BQL	0.071	ug/L	U	1
Alpha-BHC	BQL	0.071	ug/L	U	1
Alpha-Chlordane	BQL	0.071	ug/L	U	1
Beta-BHC	BQL	0.071	ug/L	U	1
Chlordane	BQL	1.43	ug/L	U	1
Delta-BHC	BQL	0.071	ug/L	U	1
Dieldrin	BQL	0.071	ug/L	U	1
Endosulfan I	BQL	0.071	ug/L	U	1
Endosulfan II	BQL	0.071	ug/L	U	1
Endosulfan Sulfate	BQL	0.071	ug/L	U	1
Endrin	BQL	0.071	ug/L	U	1
Endrin Aldehyde	BQL	0.071	ug/L	U	1
Endrin Ketone	BQL	0.071	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.071	ug/L	U	1
Gamma-Chlordane	BQL	0.071	ug/L	U	1
Heptachlor	0.033	0.071	ug/L	J	1
Heptachlor Epoxide	BQL	0.071	ug/L	U	1
Methoxychlor	BQL	0.071	ug/L	U	1
Toxaphene	BQL	1.43	ug/L	U	1

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW03S-Q3-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 109160-002-01-1/1

Sample wt/vol: 700 (g/ml) ML Lab File ID: L20554.D

% Moisture: decanted:(Y/N) N Date Received: 09/27/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/09/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.071	U
58-89-9	gamma-BHC (Lindane)	0.071	U
76-44-8	Heptachlor	0.033	J
309-00-2	Aldrin	0.071	U
319-85-7	beta-BHC	0.071	U
319-86-8	delta-BHC	0.071	U
1024-57-3	Heptachlor Epoxide	0.071	U
959-98-8	Endosulfan I	0.071	U
5103-74-2	gamma-Chlordane	0.071	U
5103-71-9	alpha-Chlordane	0.071	U
72-55-9	4,4-DDE	0.071	U
60-57-1	Dieldrin	0.071	U
72-20-8	Endrin	0.071	U
33213-65-9	Endosulfan II	0.071	U
72-54-8	4,4-DDD	0.071	U
50-29-3	4,4-DDT	0.071	U
7421-93-4	Endrin Aldehyde	0.071	U
1031-07-8	Endosulfan Sulfate	0.071	U
72-43-5	Methoxychlor	0.071	U
53494-70-5	Endrin Ketone	0.071	U
12789-03-6	Chlordane	1.4	U
8001-35-2	Toxaphene	1.4	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20554.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\OCT0901\L20554.D\ECD2B.CH
Acq On : 9 Oct 2001 23:10 Operator: PY
Sample : 109160-002-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW03S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 9:13 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.12f	6.14f	524808	1441040	20.054m	20.169
Spiked Amount 20.000 Range 30 - 150 Recovery =					100.27%	100.85%
22) S Decachlorobiphen	20.08f	21.31f	685129	1273504	31.025m	35.867
Spiked Amount 20.000 Range 30 - 150 Recovery =					155.13%#	179.34%#
Target Compounds						
4) MA Heptachlor	9.88	10.15	35985	251003	0.991m	2.332m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

00-10-14

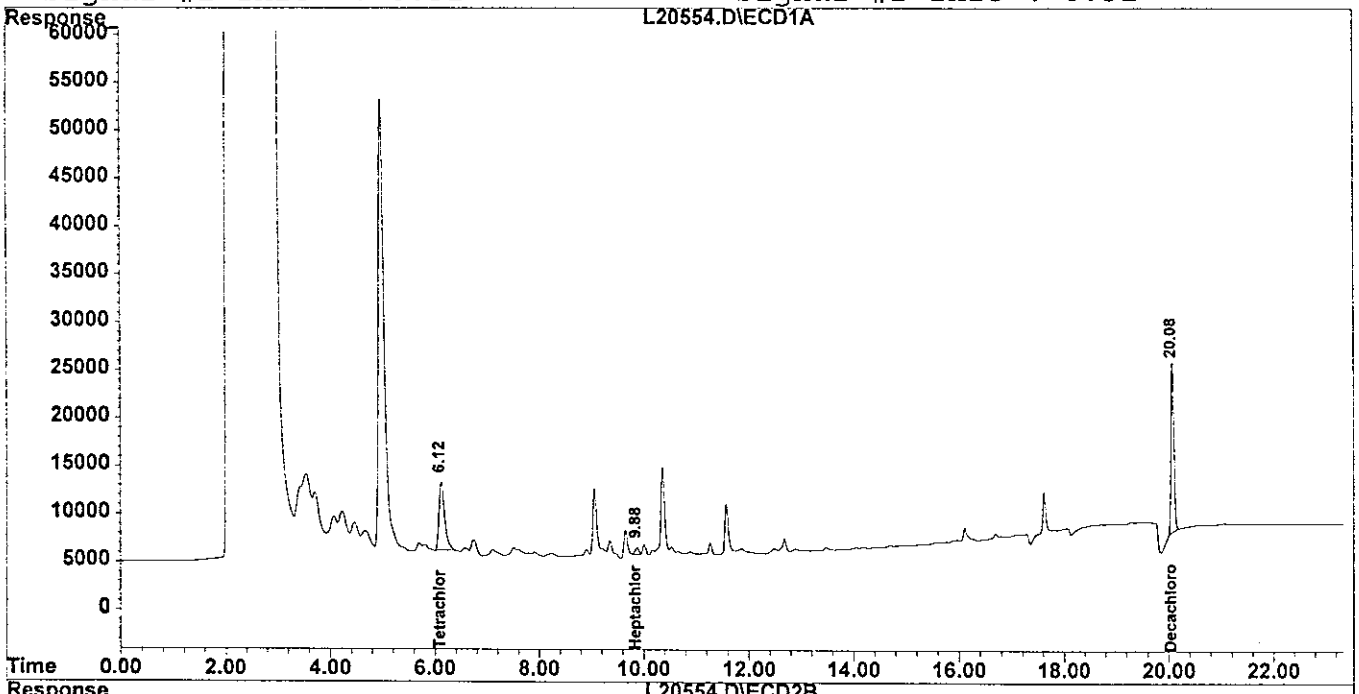
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

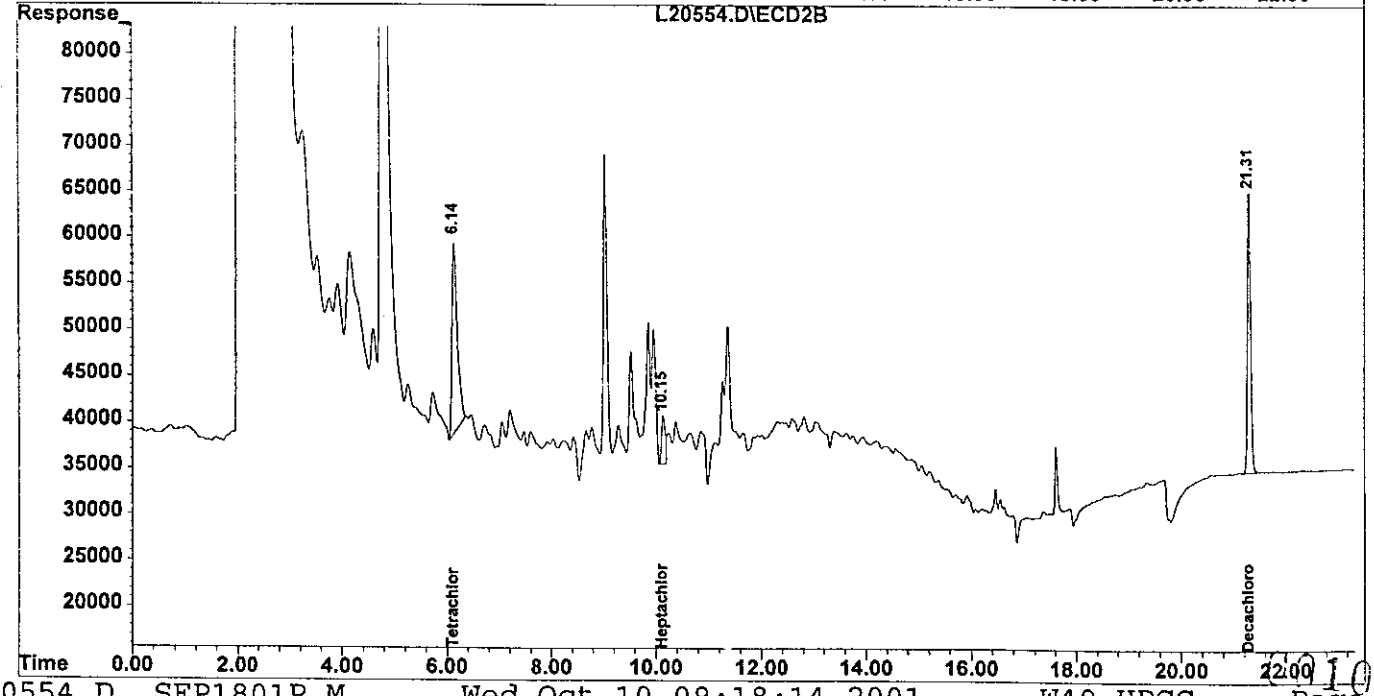
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20554.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\OCT0901\L20554.D\ECD2B.CH
Acq On : 9 Oct 2001 23:10 Operator: PY
Sample : 109160-002-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW03S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 9:13 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW04S-Q3-01
GPL ID: 109160-003-01-1/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 13:32
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.05	ug/L	U	1
4,4-DDE	BQL	0.05	ug/L	U	1
4,4-DDT	BQL	0.05	ug/L	U	1
Aldrin	BQL	0.05	ug/L	U	1
Alpha-BHC	BQL	0.05	ug/L	U	1
Alpha-Chlordane	BQL	0.05	ug/L	U	1
Beta-BHC	BQL	0.05	ug/L	U	1
Chlordane	BQL	1	ug/L	U	1
Delta-BHC	BQL	0.05	ug/L	U	1
Dieldrin	BQL	0.05	ug/L	U	1
Endosulfan I	BQL	0.05	ug/L	U	1
Endosulfan II	BQL	0.05	ug/L	U	1
Endosulfan Sulfate	BQL	0.05	ug/L	U	1
Endrin	BQL	0.05	ug/L	U	1
Endrin Aldehyde	BQL	0.05	ug/L	U	1
Endrin Ketone	BQL	0.05	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.05	ug/L	U	1
Gamma-Chlordane	BQL	0.05	ug/L	U	1
Heptachlor	BQL	0.05	ug/L	U	1
Heptachlor Epoxide	BQL	0.05	ug/L	U	1
Methoxychlor	BQL	0.05	ug/L	U	1
Toxaphene	BQL	1	ug/L	U	1

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW04S-Q3-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 109160-003-01-1/1

Sample wt/vol: 1000 (g/ml) ML Lab File ID: L20568.D

% Moisture: _____ decanted:(Y/N) N Date Received: 09/27/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/10/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
5103-71-9	alpha-Chlordane	0.050	U
72-55-9	4,4-DDE	0.050	U
60-57-1	Dieldrin	0.050	U
72-20-8	Endrin	0.050	U
33213-65-9	Endosulfan II	0.050	U
72-54-8	4,4-DDD	0.050	U
50-29-3	4,4-DDT	0.050	U
7421-93-4	Endrin Aldehyde	0.050	U
1031-07-8	Endosulfan Sulfate	0.050	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin Ketone	0.050	U
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT1001\L20568.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\L\OCT1001\L20568.D\ECD2B.CH
Acq On : 10 Oct 2001 13:32 Operator: PY
Sample : 109160-003-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW04S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 11 8:55 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.13f	6.15f	634780	644168	24.256m	9.016m#
Spiked Amount 20.000 Range 30 - 150 Recovery =					121.28%	45.08%
22) S Decachlorobiphen	20.08f	21.30f	357682	547163	16.197	15.410m
Spiked Amount 20.000 Range 30 - 150 Recovery =					80.99%	77.05%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

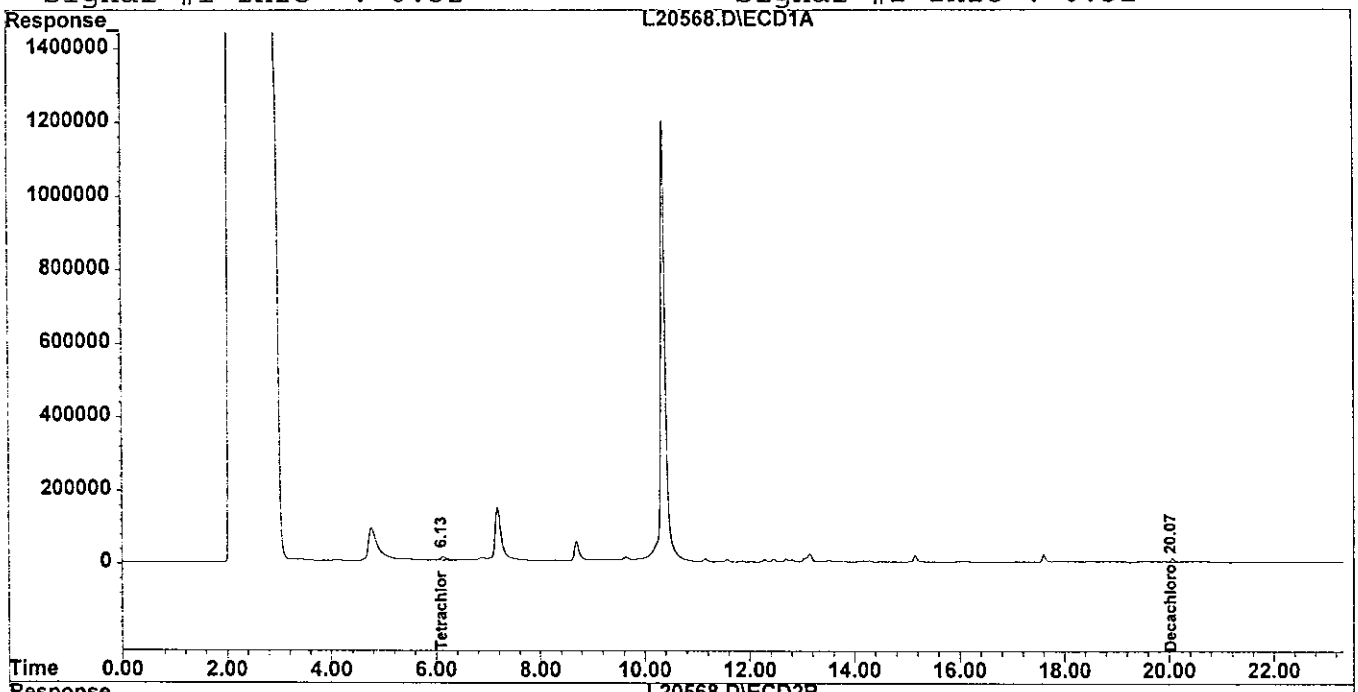
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

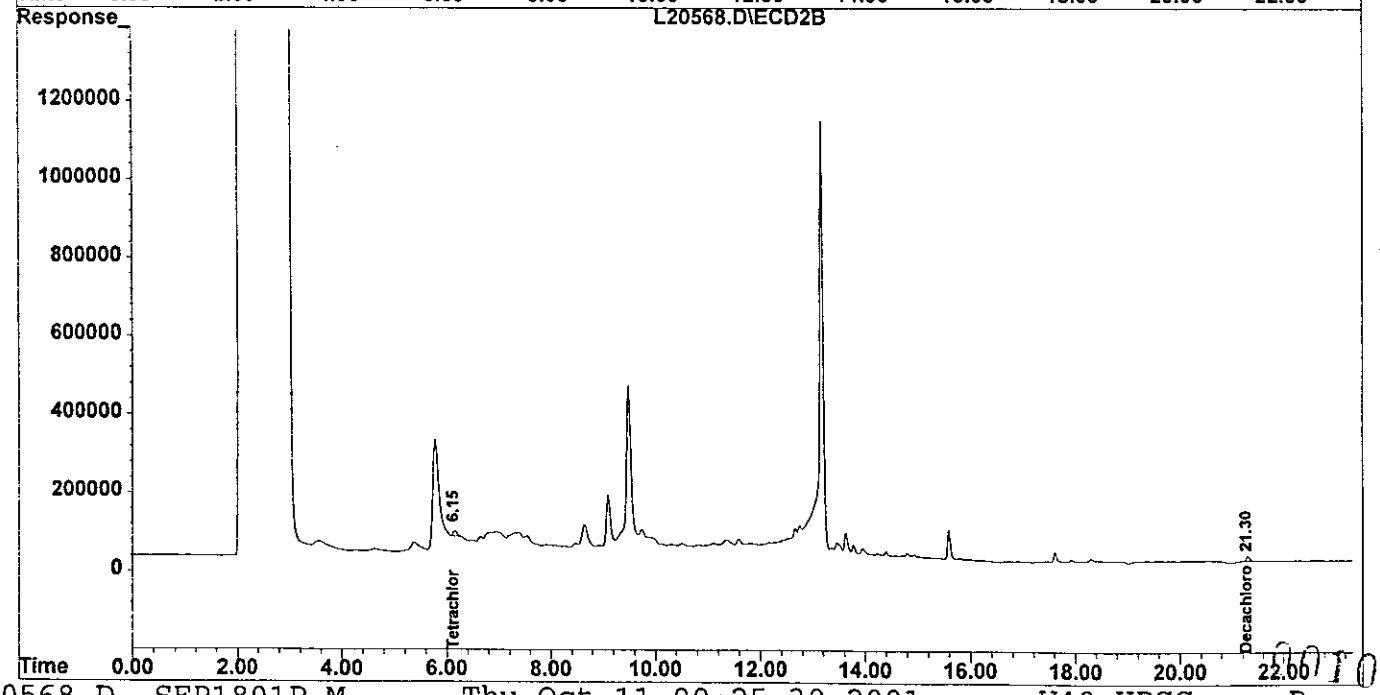
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT1001\L20568.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\L\OCT1001\L20568.D\ECD2B.CH
Acq On : 10 Oct 2001 13:32 Operator: PY
Sample : 109160-003-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW04S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 11 8:55 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW05S-Q3-01
GPL ID: 109160-004-01-1/1
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 00:59
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.053	ug/L	U	1
4,4-DDE	BQL	0.053	ug/L	U	1
4,4-DDT	BQL	0.053	ug/L	U	1
Aldrin	BQL	0.053	ug/L	U	1
Alpha-BHC	BQL	0.053	ug/L	U	1
Alpha-Chlordane	BQL	0.053	ug/L	U	1
Beta-BHC	BQL	0.053	ug/L	U	1
Chlordane	BQL	1.05	ug/L	U	1
Delta-BHC	BQL	0.053	ug/L	U	1
Dieldrin	BQL	0.053	ug/L	U	1
Endosulfan I	BQL	0.053	ug/L	U	1
Endosulfan II	BQL	0.053	ug/L	U	1
Endosulfan Sulfate	BQL	0.053	ug/L	U	1
Endrin	BQL	0.053	ug/L	U	1
Endrin Aldehyde	BQL	0.053	ug/L	U	1
Endrin Ketone	BQL	0.053	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.053	ug/L	U	1
Gamma-Chlordane	BQL	0.053	ug/L	U	1
Heptachlor	BQL	0.053	ug/L	U	1
Heptachlor Epoxide	BQL	0.053	ug/L	U	1
Methoxychlor	BQL	0.053	ug/L	U	1
Toxaphene	BQL	1.05	ug/L	U	1

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW05S-Q3-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 109160-004-01-1/1

Sample wt/vol: 950 (g/ml) ML Lab File ID: L20558.D

% Moisture: _____ decanted:(Y/N) N Date Received: 09/27/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/10/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.053	U
58-89-9	gamma-BHC (Lindane)	0.053	U
76-44-8	Heptachlor	0.053	U
309-00-2	Aldrin	0.053	U
319-85-7	beta-BHC	0.053	U
319-86-8	delta-BHC	0.053	U
1024-57-3	Heptachlor Epoxide	0.053	U
959-98-8	Endosulfan I	0.053	U
5103-74-2	gamma-Chlordane	0.053	U
5103-71-9	alpha-Chlordane	0.053	U
72-55-9	4,4-DDE	0.053	U
60-57-1	Dieldrin	0.053	U
72-20-8	Endrin	0.053	U
33213-65-9	Endosulfan II	0.053	U
72-54-8	4,4-DDD	0.053	U
50-29-3	4,4-DDT	0.053	U
7421-93-4	Endrin Aldehyde	0.053	U
1031-07-8	Endosulfan Sulfate	0.053	U
72-43-5	Methoxychlor	0.053	U
53494-70-5	Endrin Ketone	0.053	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20558.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\L\OCT0901\L20558.D\ECD2B.CH
Acq On : 10 Oct 2001 00:59 Operator: PY
Sample : 109160-004-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW05S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:53 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.12f	6.14f	601697	1256454	22.992m	17.585
Spiked Amount 20.000 Range 30 - 150 Recovery =					114.96%	87.93%
22) S Decachlorobiphen	20.08f	21.31f	572002	1106271	25.902m	31.157m
Spiked Amount 20.000 Range 30 - 150 Recovery =					129.51%	155.79%#
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

001022

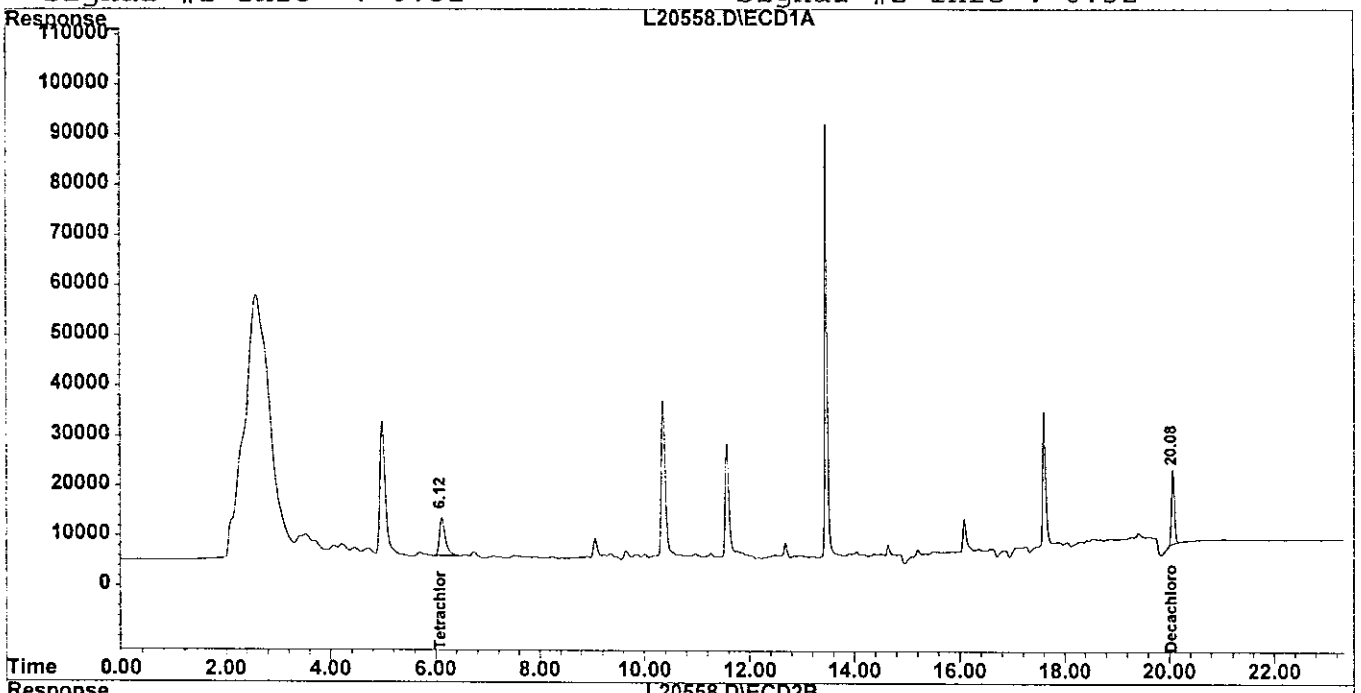
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

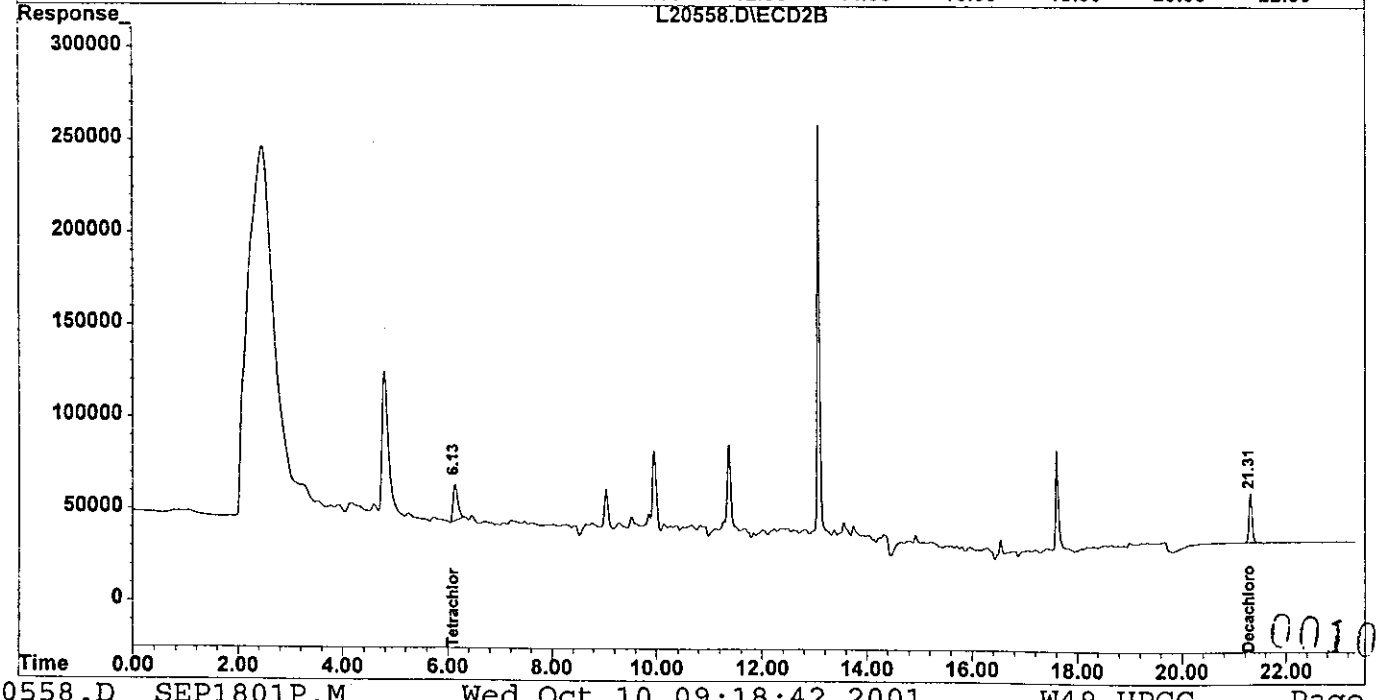
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20558.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\L\OCT0901\L20558.D\ECD2B.CH
Acq On : 10 Oct 2001 00:59 Operator: PY
Sample : 109160-004-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW05S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:53 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001023

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW08S-Q3-01
GPL ID: 109160-005-01-1/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 01:26
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.051	ug/L	U	1
4,4-DDE	BQL	0.051	ug/L	U	1
4,4-DDT	BQL	0.051	ug/L	U	1
Aldrin	BQL	0.051	ug/L	U	1
Alpha-BHC	BQL	0.051	ug/L	U	1
Alpha-Chlordane	BQL	0.051	ug/L	U	1
Beta-BHC	BQL	0.051	ug/L	U	1
Chlordane	BQL	1.02	ug/L	U	1
Delta-BHC	BQL	0.051	ug/L	U	1
Dieldrin	BQL	0.051	ug/L	U	1
Endosulfan I	BQL	0.051	ug/L	U	1
Endosulfan II	BQL	0.051	ug/L	U	1
Endosulfan Sulfate	BQL	0.051	ug/L	U	1
Endrin	BQL	0.051	ug/L	U	1
Endrin Aldehyde	BQL	0.051	ug/L	U	1
Endrin Ketone	BQL	0.051	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.051	ug/L	U	1
Gamma-Chlordane	BQL	0.051	ug/L	U	1
Heptachlor	0.029	0.051	ug/L	J	1
Heptachlor Epoxide	BQL	0.051	ug/L	U	1
Methoxychlor	BQL	0.051	ug/L	U	1
Toxaphene	BQL	1.02	ug/L	U	1

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW08S-Q3-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 109160-005-01-1/1

Sample wt/vol: 980 (g/ml) ML Lab File ID: L20559.D

% Moisture: _____ decanted:(Y/N) N Date Received: 09/27/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/10/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)	0.051	U
76-44-8	Heptachlor	0.029	J
309-00-2	Aldrin	0.051	U
319-85-7	beta-BHC	0.051	U
319-86-8	delta-BHC	0.051	U
1024-57-3	Heptachlor Epoxide	0.051	U
959-98-8	Endosulfan I	0.051	U
5103-74-2	gamma-Chlordane	0.051	U
5103-71-9	alpha-Chlordane	0.051	U
72-55-9	4,4-DDE	0.051	U
60-57-1	Dieldrin	0.051	U
72-20-8	Endrin	0.051	U
33213-65-9	Endosulfan II	0.051	U
72-54-8	4,4-DDD	0.051	U
50-29-3	4,4-DDT	0.051	U
7421-93-4	Endrin Aldehyde	0.051	U
1031-07-8	Endosulfan Sulfate	0.051	U
72-43-5	Methoxychlor	0.051	U
53494-70-5	Endrin Ketone	0.051	U
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20559.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\L\OCT0901\L20559.D\ECD2B.CH
Acq On : 10 Oct 2001 1:26 Operator: PY
Sample : 109160-005-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW08S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 9:13 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.12f	6.13f	539128	1747716	20.601	24.461m
Spiked Amount 20.000 Range 30 - 150 Recovery =					103.01%	122.31%
22) S Decachlorobiphen	20.08f	21.31f	684570	1339215	31.000m	37.718
Spiked Amount 20.000 Range 30 - 150 Recovery =					155.00%#	188.59%#
Target Compounds						
4) MA Heptachlor	9.87	10.14	37484	308336	1.032m	2.865m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

001026

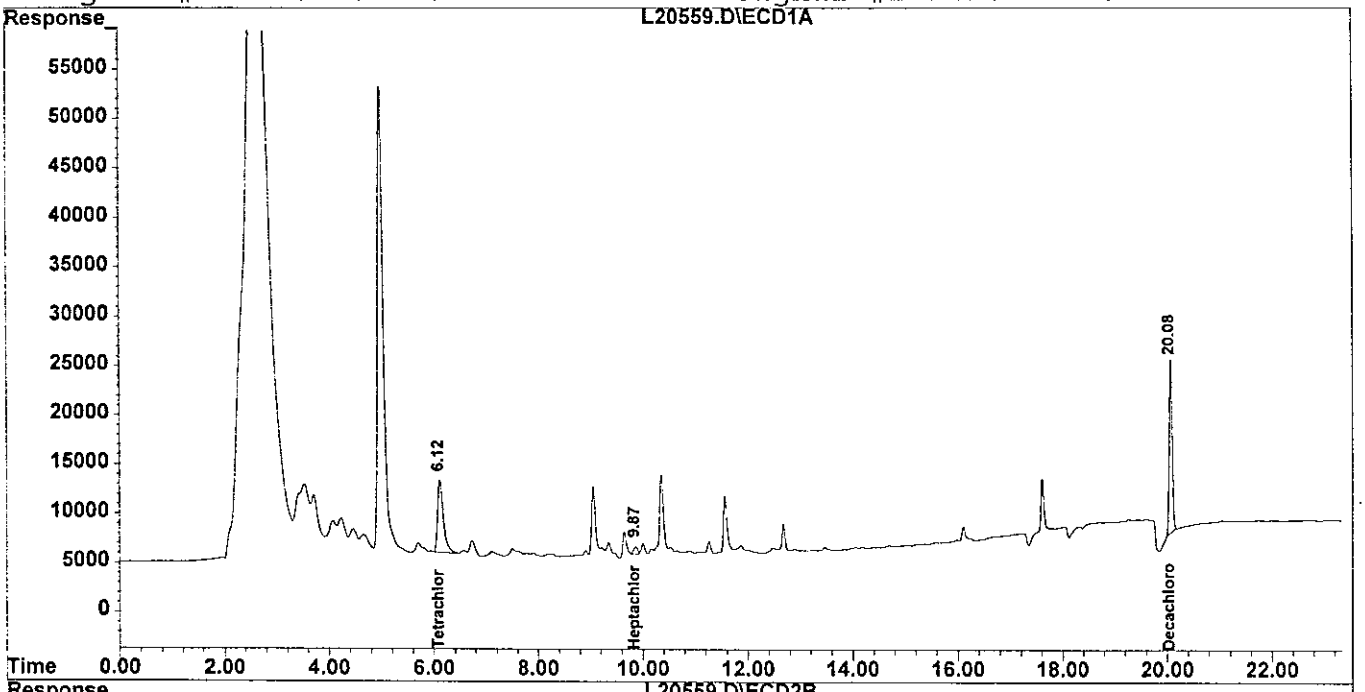
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

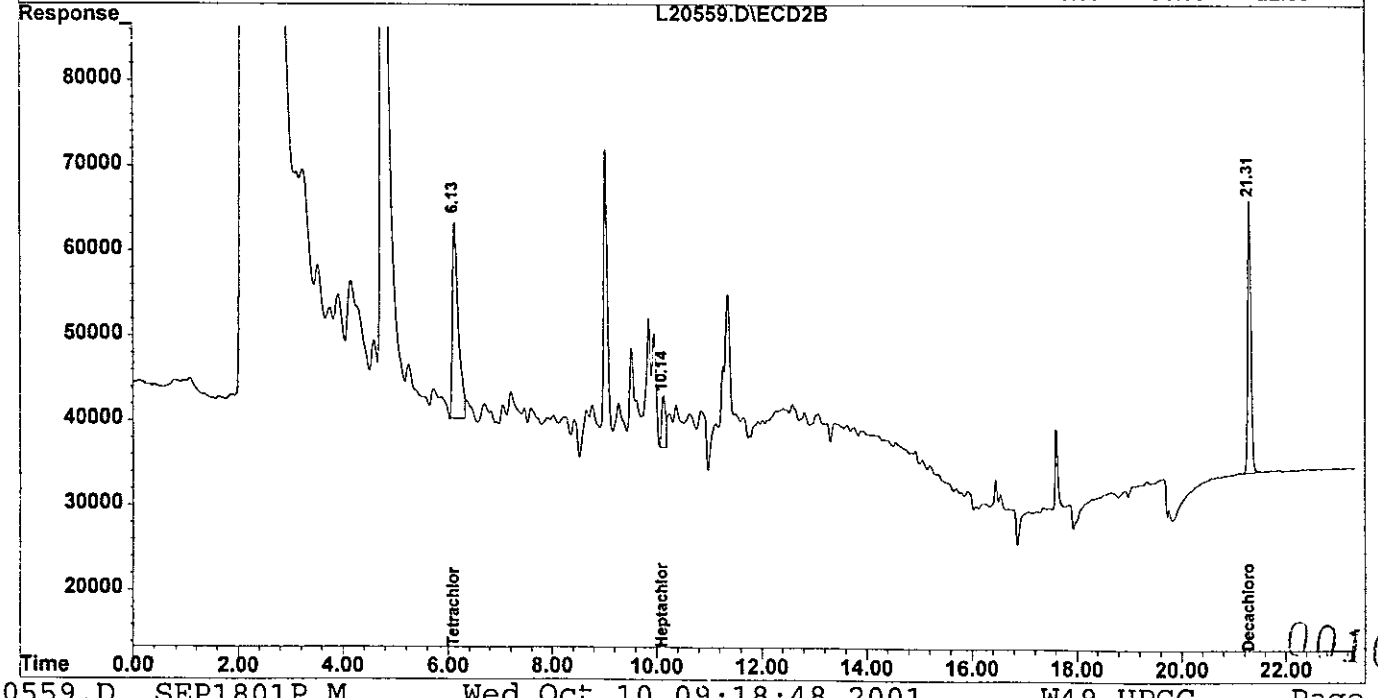
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20559.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\L\OCT0901\L20559.D\ECD2B.CH
Acq On : 10 Oct 2001 1:26 Operator: PY
Sample : 109160-005-01-1/1 Inst : GC-L
Misc : 8081A-W-007-MW08S-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 9:13 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-DUP-Q3-01
GPL ID: 109160-006-02-2/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 01:54
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.051	ug/L	U	1
4,4-DDE	BQL	0.051	ug/L	U	1
4,4-DDT	BQL	0.051	ug/L	U	1
Aldrin	BQL	0.051	ug/L	U	1
Alpha-BHC	BQL	0.051	ug/L	U	1
Alpha-Chlordane	BQL	0.051	ug/L	U	1
Beta-BHC	BQL	0.051	ug/L	U	1
Chlordane	BQL	1.02	ug/L	U	1
Delta-BHC	BQL	0.051	ug/L	U	1
Dieldrin	BQL	0.051	ug/L	U	1
Endosulfan I	BQL	0.051	ug/L	U	1
Endosulfan II	BQL	0.051	ug/L	U	1
Endosulfan Sulfate	BQL	0.051	ug/L	U	1
Endrin	BQL	0.051	ug/L	U	1
Endrin Aldehyde	BQL	0.051	ug/L	U	1
Endrin Ketone	BQL	0.051	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.051	ug/L	U	1
Gamma-Chlordane	BQL	0.051	ug/L	U	1
Heptachlor	0.038	0.051	ug/L	J	1
Heptachlor Epoxide	BQL	0.051	ug/L	U	1
Methoxychlor	BQL	0.051	ug/L	U	1
Toxaphene	BQL	1.02	ug/L	U	1

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-DUP-Q3-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 109160-006-02-2/2

Sample wt/vol: 980 (g/ml) ML Lab File ID: L20560.D

% Moisture: _____ decanted:(Y/N) N Date Received: 09/27/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/10/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)	0.051	U
76-44-8	Heptachlor	0.038	J
309-00-2	Aldrin	0.051	U
319-85-7	beta-BHC	0.051	U
319-86-8	delta-BHC	0.051	U
1024-57-3	Heptachlor Epoxide	0.051	U
959-98-8	Endosulfan I	0.051	U
5103-74-2	gamma-Chlordane	0.051	U
5103-71-9	alpha-Chlordane	0.051	U
72-55-9	4,4-DDE	0.051	U
60-57-1	Dieldrin	0.051	U
72-20-8	Endrin	0.051	U
33213-65-9	Endosulfan II	0.051	U
72-54-8	4,4-DDD	0.051	U
50-29-3	4,4-DDT	0.051	U
7421-93-4	Endrin Aldehyde	0.051	U
1031-07-8	Endosulfan Sulfate	0.051	U
72-43-5	Methoxychlor	0.051	U
53494-70-5	Endrin Ketone	0.051	U
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20560.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\L\OCT0901\L20560.D\ECD2B.CH
Acq On : 10 Oct 2001 1:54 Operator: PY
Sample : 109160-006-02-2/2 Inst : GC-L
Misc : 8081A-W-007-DUP-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 9:09 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.12f	6.14f	695806	1897662	26.588	26.559
Spiked Amount 20.000 Range 30 - 150 Recovery =					132.94%	132.80%
22) S Decachlorobiphen	20.08f	21.31f	872085	1725836	39.491m	48.607m
Spiked Amount 20.000 Range 30 - 150 Recovery =					197.46%#	243.04%#
Target Compounds						
4) MA Heptachlor	9.87	10.14	54746	405144	1.508m	3.764m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

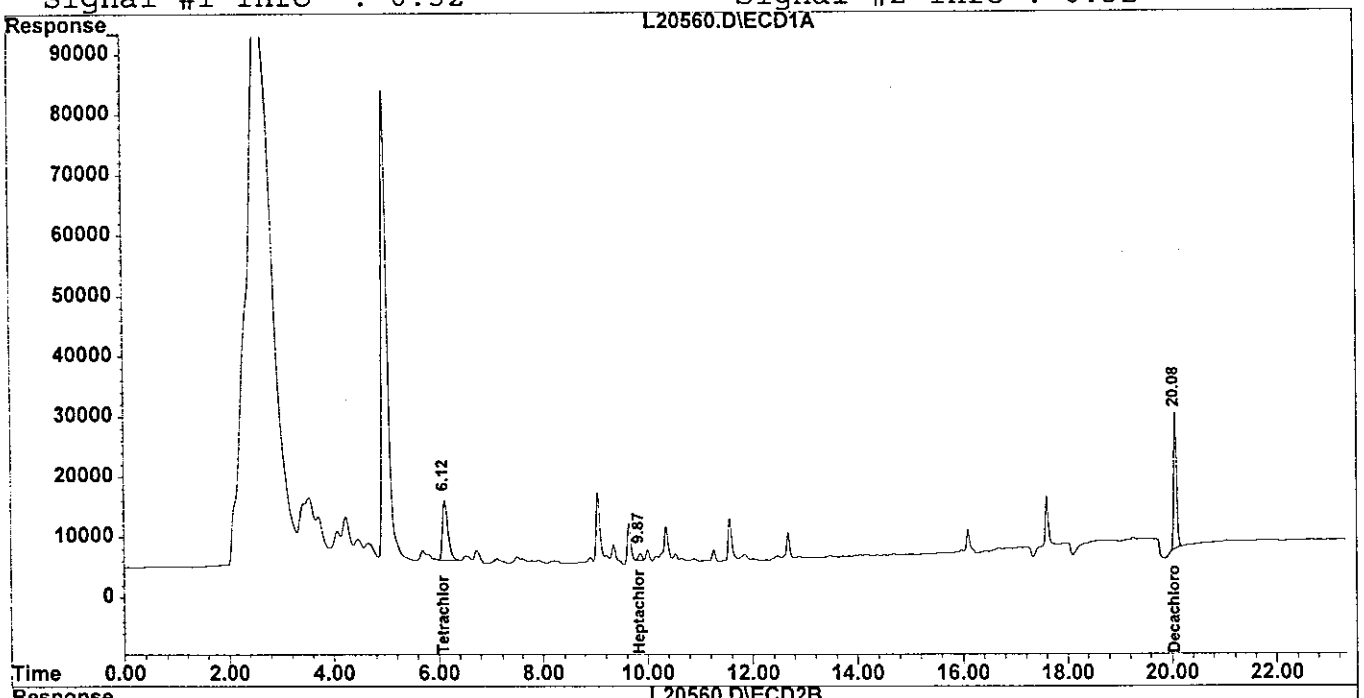
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
L20560.D SEP1801P.M Wed Oct 10 09:18:53 2001 W49_HPGC Page 1

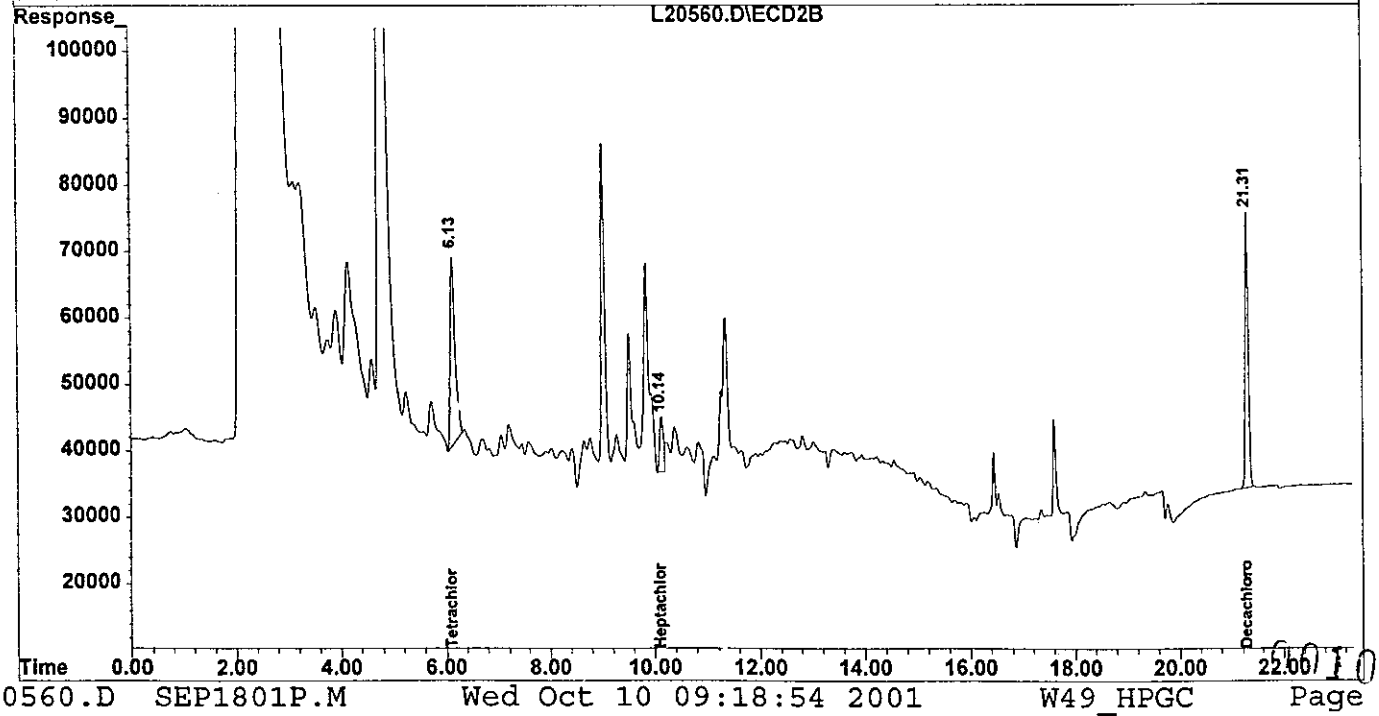
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20560.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\L\OCT0901\L20560.D\ECD2B.CH
Acq On : 10 Oct 2001 1:54 Operator: PY
Sample : 109160-006-02-2/2 Inst : GC-L
Misc : 8081A-W-007-DUP-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 9:09 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-EQB-Q3-01
GPL ID: 109160-007-01-1/2
Matrix: Water
Date Collected: 09/26/01
Date Received: 09/27/01

Prep Method: SW3520C
Prep Date: 10/01/01
Prep Time: 12:00
Prep Batch 14282

Analytical Method: SW8081A
Date Analyzed: 10/10/01
Time Analyzed 02:21
Analysis Batch 12385

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.053	ug/L	U	1
4,4-DDE	BQL	0.053	ug/L	U	1
4,4-DDT	BQL	0.053	ug/L	U	1
Aldrin	BQL	0.053	ug/L	U	1
Alpha-BHC	BQL	0.053	ug/L	U	1
Alpha-Chlordane	BQL	0.053	ug/L	U	1
Beta-BHC	BQL	0.053	ug/L	U	1
Chlordane	BQL	1.05	ug/L	U	1
Delta-BHC	BQL	0.053	ug/L	U	1
Dieldrin	BQL	0.053	ug/L	U	1
Endosulfan I	BQL	0.053	ug/L	U	1
Endosulfan II	BQL	0.053	ug/L	U	1
Endosulfan Sulfate	BQL	0.053	ug/L	U	1
Endrin	BQL	0.053	ug/L	U	1
Endrin Aldehyde	BQL	0.053	ug/L	U	1
Endrin Ketone	BQL	0.053	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.053	ug/L	U	1
Gamma-Chlordane	BQL	0.053	ug/L	U	1
Heptachlor	0.032	0.053	ug/L	J	1
Heptachlor Epoxide	BQL	0.053	ug/L	U	1
Methoxychlor	BQL	0.053	ug/L	U	1
Toxaphene	BQL	1.05	ug/L	U	1

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-EQB-Q3-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 109160-007-02-2/2

Sample wt/vol: 950 (g/ml) ML Lab File ID: L20561.D

% Moisture: _____ decanted:(Y/N) N Date Received: 09/27/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/10/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.053	U
58-89-9	gamma-BHC (Lindane)	0.053	U
76-44-8	Heptachlor	0.032	J
309-00-2	Aldrin	0.053	U
319-85-7	beta-BHC	0.053	U
319-86-8	delta-BHC	0.053	U
1024-57-3	Heptachlor Epoxide	0.053	U
959-98-8	Endosulfan I	0.053	U
5103-74-2	gamma-Chlordane	0.053	U
5103-71-9	alpha-Chlordane	0.053	U
72-55-9	4,4-DDE	0.053	U
60-57-1	Dieldrin	0.053	U
72-20-8	Endrin	0.053	U
33213-65-9	Endosulfan II	0.053	U
72-54-8	4,4-DDD	0.053	U
50-29-3	4,4-DDT	0.053	U
7421-93-4	Endrin Aldehyde	0.053	U
1031-07-8	Endosulfan Sulfate	0.053	U
72-43-5	Methoxychlor	0.053	U
53494-70-5	Endrin Ketone	0.053	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20561.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\L\OCT0901\L20561.D\ECD2B.CH
Acq On : 10 Oct 2001 2:21 Operator: PY
Sample : 109160-007-02-2/2 Inst : GC-L
Misc : 8081A-W-007-EQB-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 9:12 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.12f	6.14f	490628	1306141	18.748	18.281
Spiked Amount 20.000 Range 30 - 150 Recovery =					93.74%	91.40%
22) S Decachlorobiphen	20.08f	21.31f	505068	988352	22.871m	27.836
Spiked Amount 20.000 Range 30 - 150 Recovery =					114.36%	139.18%
Target Compounds						
4) MA Heptachlor	9.87	10.14	57815	324437	1.592	3.014m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

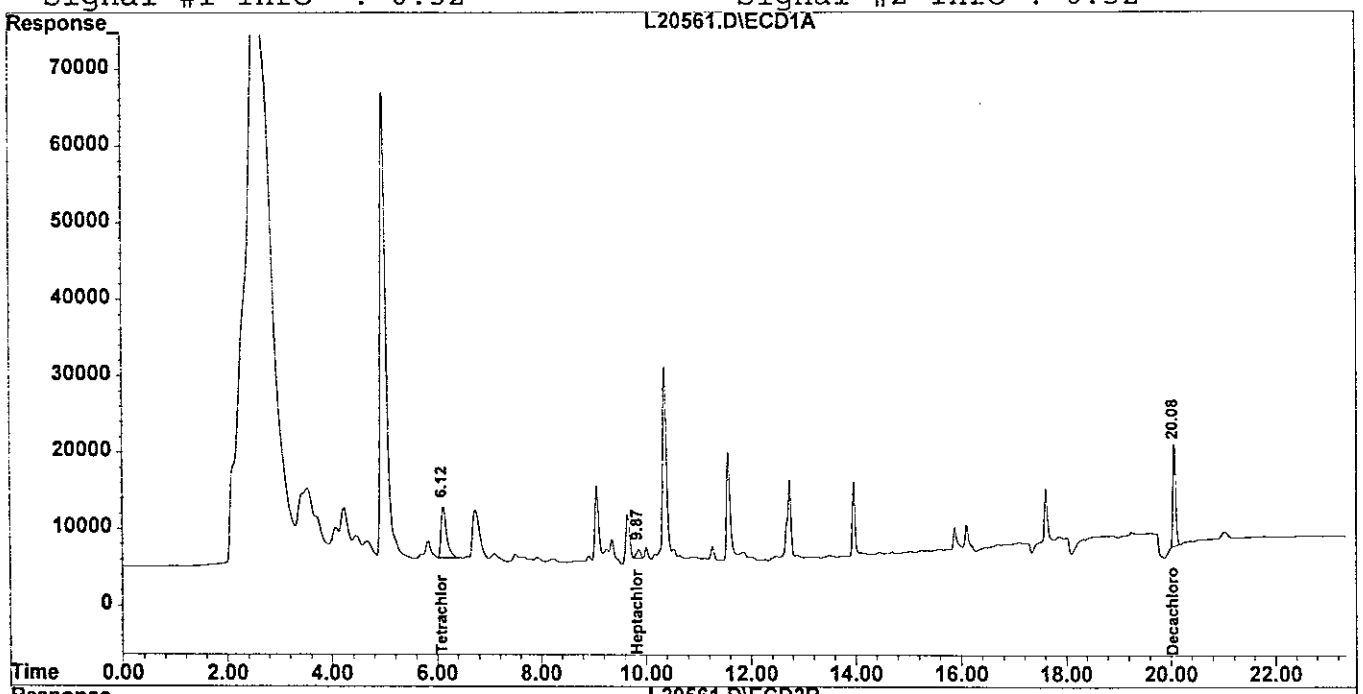
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

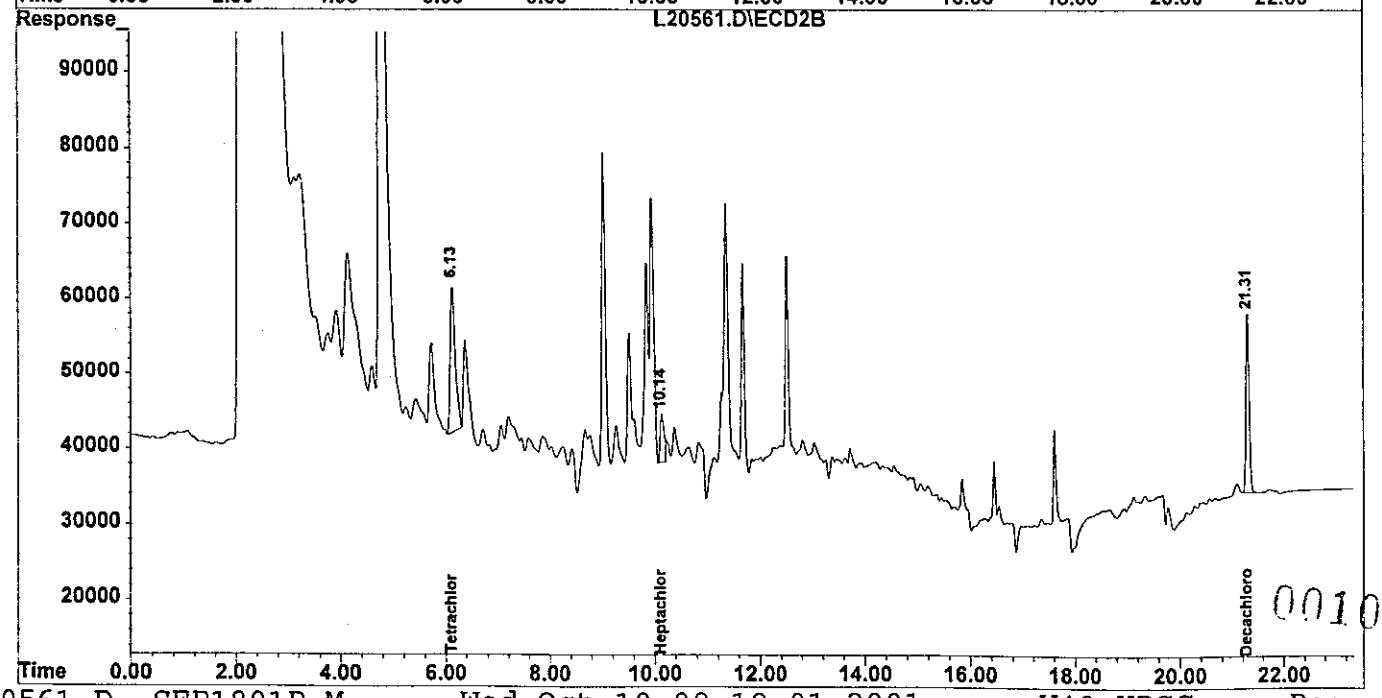
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20561.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\L\OCT0901\L20561.D\ECD2B.CH
Acq On : 10 Oct 2001 2:21 Operator: PY
Sample : 109160-007-02-2/2 Inst : GC-L
Misc : 8081A-W-007-EQB-Q3-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 9:12 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001035

C. Standard Data

1. Initial Calibration Data
2. Continuing Calibration Data

GPL Laboratories, LLLP

Response Factor Report GC-L

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001

Calibration Files
P005 =L20216.D P025 =L20215.D P050 =L20211.D
P075 =L20213.D P100 =L20212.D

		Compound	P005	P025	P050	P075	P100	Avg		%RSD
1)	S	Tetrachloro-m-xylene	2.514	2.567	2.660	2.672	2.671	2.617	E4	2.75
2)	A	alpha-BHC	1.986	2.353	2.995	3.354	3.566	2.851	E4	23.41
3)	MA	gamma-BHC (Lindane)	2.058	2.447	3.060	3.314	3.493	2.874	E4	21.01
4)	MA	Heptachlor	2.897	3.488	3.862	3.933	3.975	3.631	E4	12.49
5)	MB	Aldrin	2.859	3.367	3.782	3.888	3.957	3.570	E4	12.86
6)	B	beta-BHC	1.354	1.560	1.667	1.702	1.768	1.610	E4	10.05
7)	B	delta-BHC	0.705	0.753	0.919	0.902	1.032	0.862	E4	15.37
8)	B	Heptachlor Epoxide	3.438	3.693	3.802	3.783	3.750	3.693	E4	4.02
9)	A	Endosulfan I	3.856	4.225	4.423	4.248	4.273	4.205	E4	4.99
10)	A	gamma-Chlordane	3.441	3.636	3.759	3.747	3.723	3.661	E4	3.60
11)	A	alpha-Chlordane	7.638	8.079	8.008	7.774	7.585	7.817	E4	2.81
12)	B	4,4-DDE	0.933	1.095	1.425	1.507	1.859	1.364	E4	26.63
13)	MA	Dieldrin	2.790	3.152	3.425	3.489	3.521	3.275	E4	9.41
14)	MA	Endrin	2.331	2.386	2.590	2.650	2.702	2.532	E4	6.49
15)	B	Endosulfan II	2.761	3.004	3.110	3.066	3.039	2.996	E4	4.58
16)	A	4,4-DDD	1.508	1.249	1.421	1.541	1.719	1.488	E4	11.56
17)	MA	4,4-DDT	1.030	1.268	1.511	1.635	1.729	1.435	E4	19.83
18)	B	Endrin Aldehyde	2.385	2.384	2.343	2.178	2.188	2.296	E4	4.54
19)	B	Endosulfan Sulfate	1.418	1.477	1.526	1.503	1.456	1.476	E4	2.83
20)	A	Methoxychlor	0.690	0.859	0.989	1.008	1.053	0.920	E4	16.00
21)	B	Endrin Ketone	1.997	2.299	2.432	2.430	2.403	2.312	E4	7.99
22)	S	Decachlorobiphenyl	2.396	2.245	2.257	2.127	2.016	2.208	E4	6.50
23)	L8	Toxaphene			1.949			1.949	E2	0.00
24)	L8	Toxaphene {2}			7.897			7.897	E2	0.00
25)	L8	Toxaphene {3}			3.699			3.699	E2	0.00
26)	L8	Toxaphene {4}			2.659			2.659	E2	0.00
27)	L8	Toxaphene {5}			5.318			5.318	E2	0.00
28)	L9	Chlordane			2.499			2.499	E3	0.00
29)	L9	Chlordane {2}			2.179			2.179	E3	0.00
30)	L9	Chlordane {3}			4.256			4.256	E3	0.00
31)	L9	Chlordane {4}			6.969			6.969	E3	0.00
32)	L9	Chlordane {5}			1.233			1.233	E3	0.00

Signal #2 Calibration Files
P005 =L20216.D P025 =L20215.D P050 =L20211.D
P075 =L20213.D P100 =L20212.D

		Compound	P005	P025	P050	P075	P100	Avg		%RSD
1)	S	Tetrachloro-m-xylene	7.853	7.288	7.127	6.840	6.617	7.145	E4	6.62
2)	A	alpha-BHC	1.372	1.393	1.385	1.340	1.313	1.361	E5	2.43
3)	MA	gamma-BHC (Lindane)	1.262	1.281	1.270	1.220	1.192	1.245	E5	3.04
4)	MA	Heptachlor	0.974	1.129	1.121	1.096	1.062	1.076	E5	5.87
5)	MB	Aldrin	1.242	1.258	1.225	1.184	1.146	1.211	E5	3.77
6)	B	beta-BHC	6.280	6.150	5.973	5.774	5.566	5.949	E4	4.81

001037

(#) = Out of Range

Response Factor Report GC-L

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001

Calibration Files
P005 =L20216.D P025 =L20215.D P050 =L20211.D
P075 =L20213.D P100 =L20212.D

		Compound	P005	P025	P050	P075	P100	Avg		%RSD
7)	B	delta-BHC	5.733	5.809	6.034	5.733	5.589	5.780	E4	2.82
8)	B	Heptachlor Epoxide	1.039	1.052	1.026	0.992	0.962	1.014	E5	3.63
9)	A	Endosulfan I	8.928	9.723	9.338	8.982	8.697	9.134	E4	4.39
10)	A	gamma-Chlordane	1.064	1.073	1.045	1.008	0.978	1.034	E5	3.87
11)	A	alpha-Chlordane	9.267	9.085	8.774	8.435	8.219	8.756	E4	4.98
12)	B	4,4-DDE	1.004	1.020	0.989	0.950	0.937	0.980	E5	3.63
13)	MA	Dieldrin	9.476	9.951	9.794	9.448	9.297	9.594	E4	2.81
14)	MA	Endrin	7.066	7.064	7.063	6.898	6.790	6.976	E4	1.82
15)	B	Endosulfan II	7.634	7.787	7.616	7.385	7.211	7.527	E4	3.02
16)	A	4,4-DDD	6.426	6.619	6.512	6.426	6.231	6.443	E4	2.22
17)	MA	4,4-DDT	4.006	4.799	5.096	5.034	5.097	4.806	E4	9.65
18)	B	Endrin Aldehyde	4.663	4.660	4.536	4.442	4.310	4.522	E4	3.33
19)	B	Endosulfan Sulfate	3.400	3.489	3.556	3.420	3.351	3.443	E4	2.33
20)	A	Methoxychlor	1.636	2.141	2.315	2.309	2.321	2.144	E4	13.71
21)	B	Endrin Ketone	5.012	5.387	5.506	5.332	5.213	5.290	E4	3.55
22)	S	Decachlorobiphenyl	3.742	3.525	3.667	3.474	3.346	3.551	E4	4.42
23)	L8	Toxaphene			2.554			2.554	E2	0.00
24)	L8	Toxaphene {2}			3.841			3.841	E2	0.00
25)	L8	Toxaphene {3}			5.011			5.011	E2	0.00
26)	L8	Toxaphene {4}			1.317			1.317	E3	0.00
27)	L8	Toxaphene {5}			1.039			1.039	E3	0.00
28)	L9	Chlordane			7.738			7.738	E3	0.00
29)	L9	Chlordane {2}			4.804			4.804	E3	0.00
30)	L9	Chlordane {3}			1.057			1.057	E4	0.00
31)	L9	Chlordane {4}			9.125			9.125	E3	0.00
32)	L9	Chlordane {5}			3.103			3.103	E3	0.00

(#) = Out of Range

Signal #1 : H:\GCDATA\L\SEP1801\L20210.D\ECD1A.CH Vial: 2
Signal #2 : H:\GCDATA\L\SEP1801\L20210.D\ECD2B.CH
Acq On : 18 Sep 2001 14:13 Operator: PY
Sample : TOX-3 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:25 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
23) L8 Toxaphene	14.39	14.62	97440	127684	512.497m	500.157m
24) L8 Toxaphene {2}	15.24	15.65	394852	192047	510.768m	500.000
25) L8 Toxaphene {3}	16.05	16.39	184968	250560	502.101m	510.543m
26) L8 Toxaphene {4}	16.56	16.57	132954	658637	481.899m	500.000
27) L8 Toxaphene {5}	17.03	17.72	265894	519294	500.166m	500.000
Sum Toxaphene			1076108	1748222	NoCal	NoCal
Average Toxaphene					501.486	502.140
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

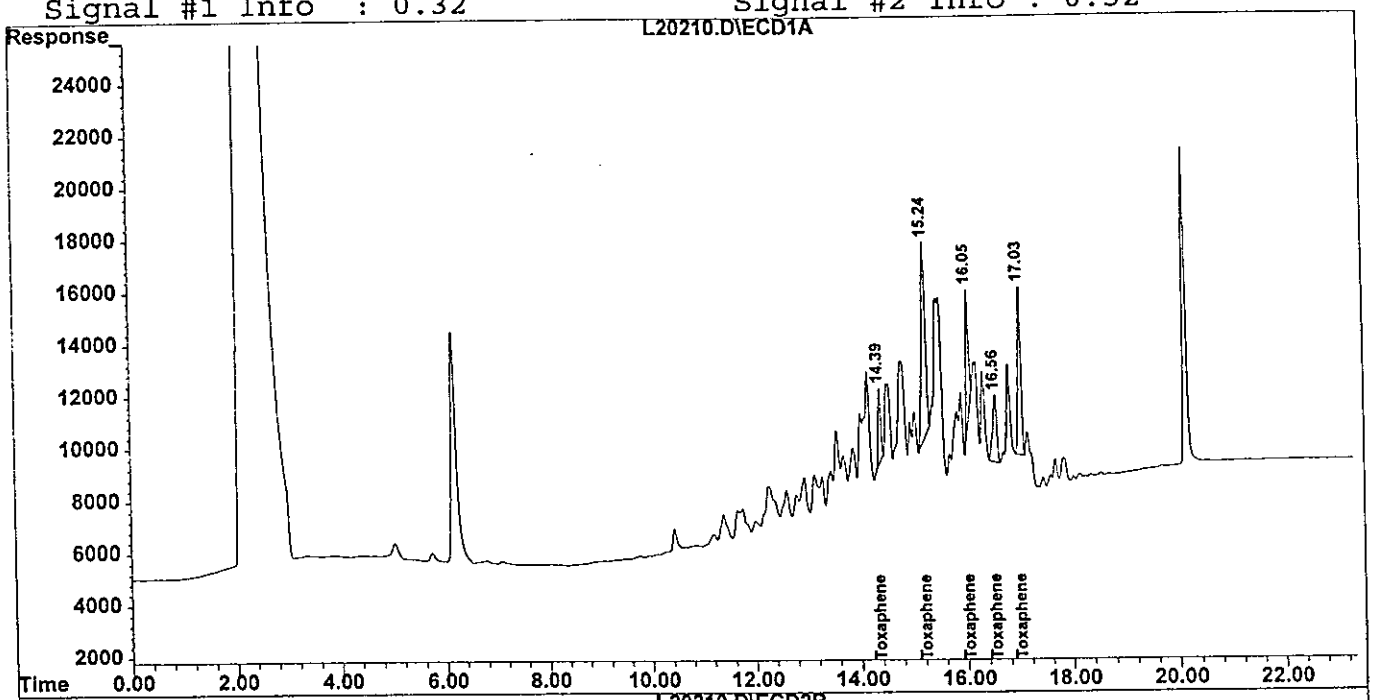
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

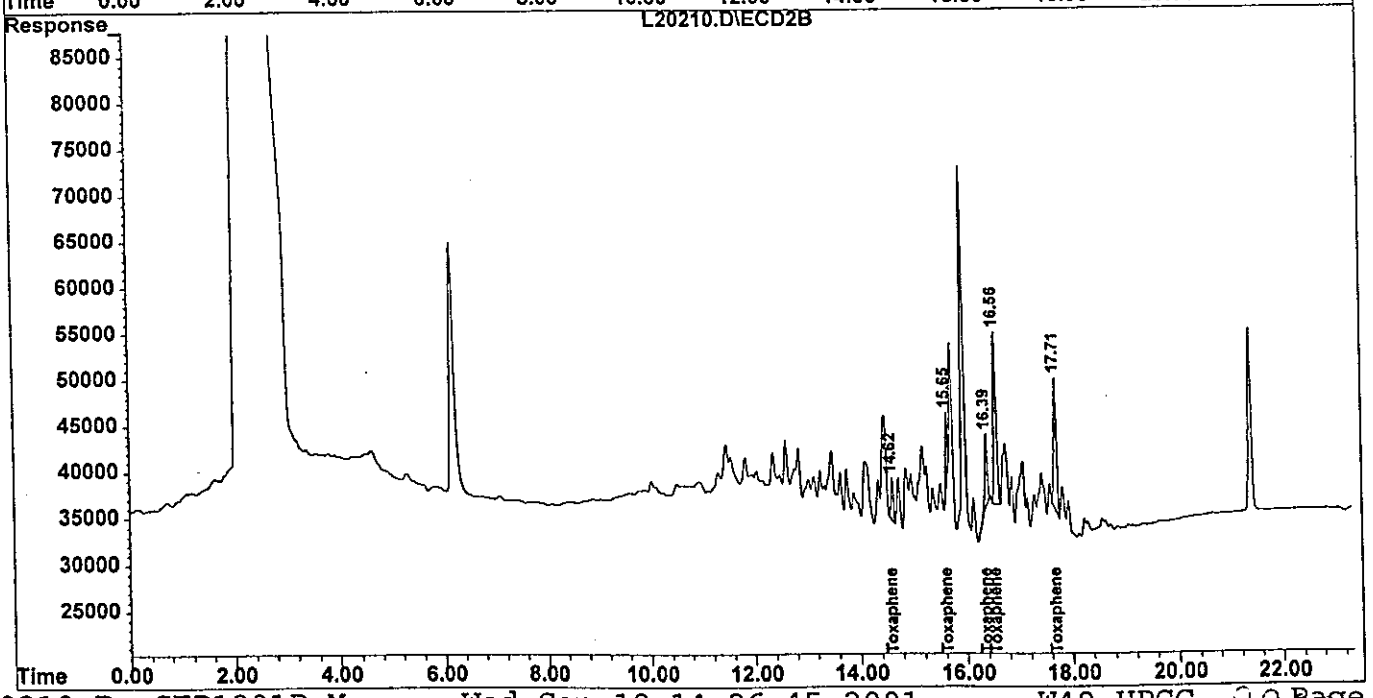
Quantitation Report

Signal #1 : H:\GCDATA\L\SEP1801\L20210.D\ECD1A.CH Vial: 2
Signal #2 : H:\GCDATA\L\SEP1801\L20210.D\ECD2B.CH
Acq On : 18 Sep 2001 14:13 Operator: PY
Sample : TOX-3 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:25 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001040

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\SEP1801\L20211.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\L\SEP1801\L20211.D\ECD2B.CH
Acq On : 18 Sep 2001 14:41 Operator: PY
Sample : CHLOR-3 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:29 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
28) L9 Chlordane	9.95	10.24	1249703	3868889	500.000	500.000
29) L9 Chlordane {2}	11.22	11.64	1089666	2402180	506.122m	499.241m
30) L9 Chlordane {3}	12.86	13.30	2128162	5285726	501.894m	500.063m
31) L9 Chlordane {4}	13.19	13.54	3484469	4562724	502.137	504.768m
32) L9 Chlordane {5}	15.12	15.88	616484	1551387	499.702m	500.000
Sum Chlordane			8568484	17670907	2509.855	2504.072
Average Chlordane					501.971	500.814

001041

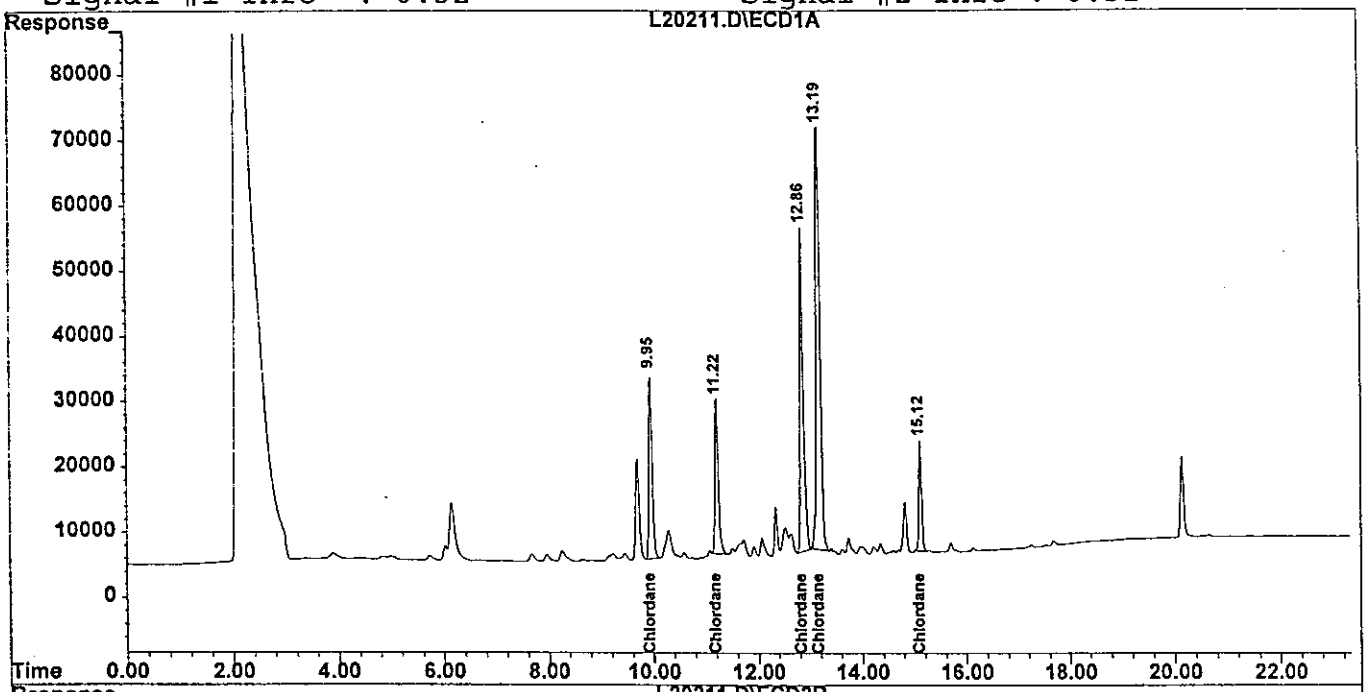
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

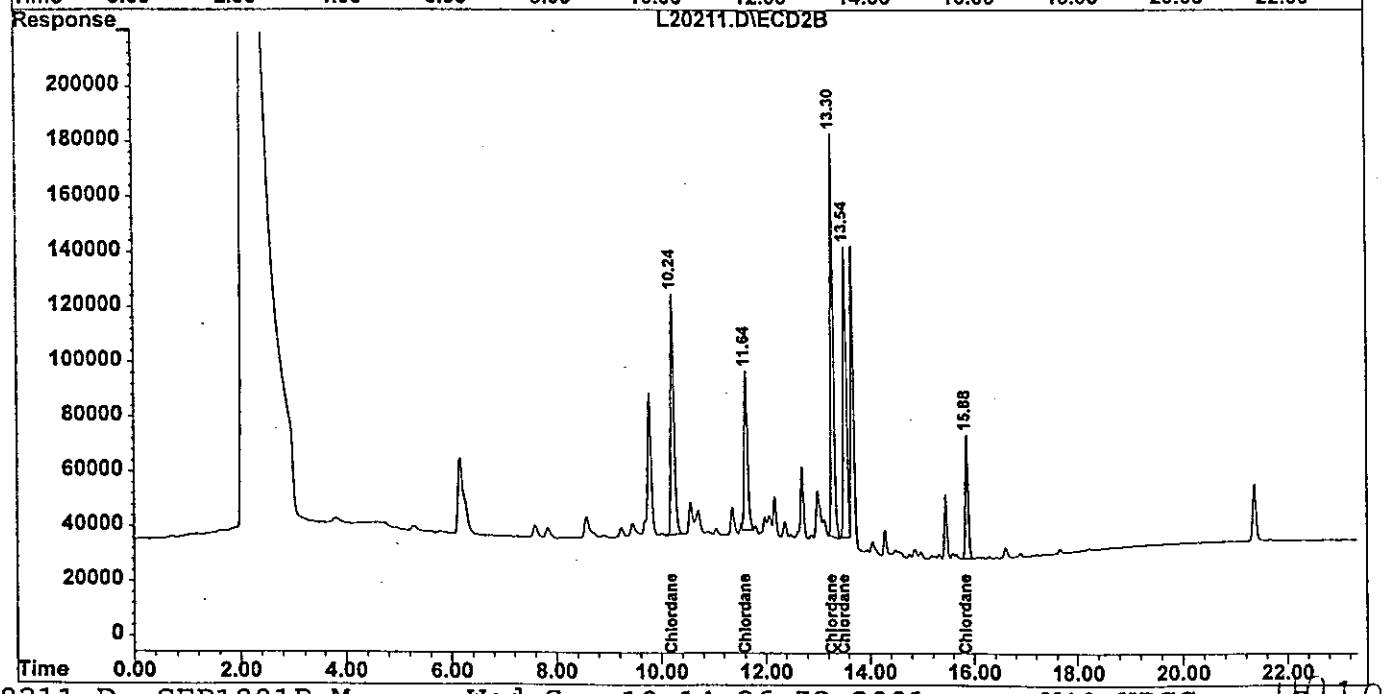
Quantitation Report

Signal #1 : H:\GCDATA\L\SEP1801\L20211.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\L\SEP1801\L20211.D\ECD2B.CH
Acq On : 18 Sep 2001 14:41 Operator: PY
Sample : CHLOR-3 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:29 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\SEP1801\L20212.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\L\SEP1801\L20212.D\ECD2B.CH
Acq On : 18 Sep 2001 15:08 Operator: PY
Sample : PEST-6 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:39 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

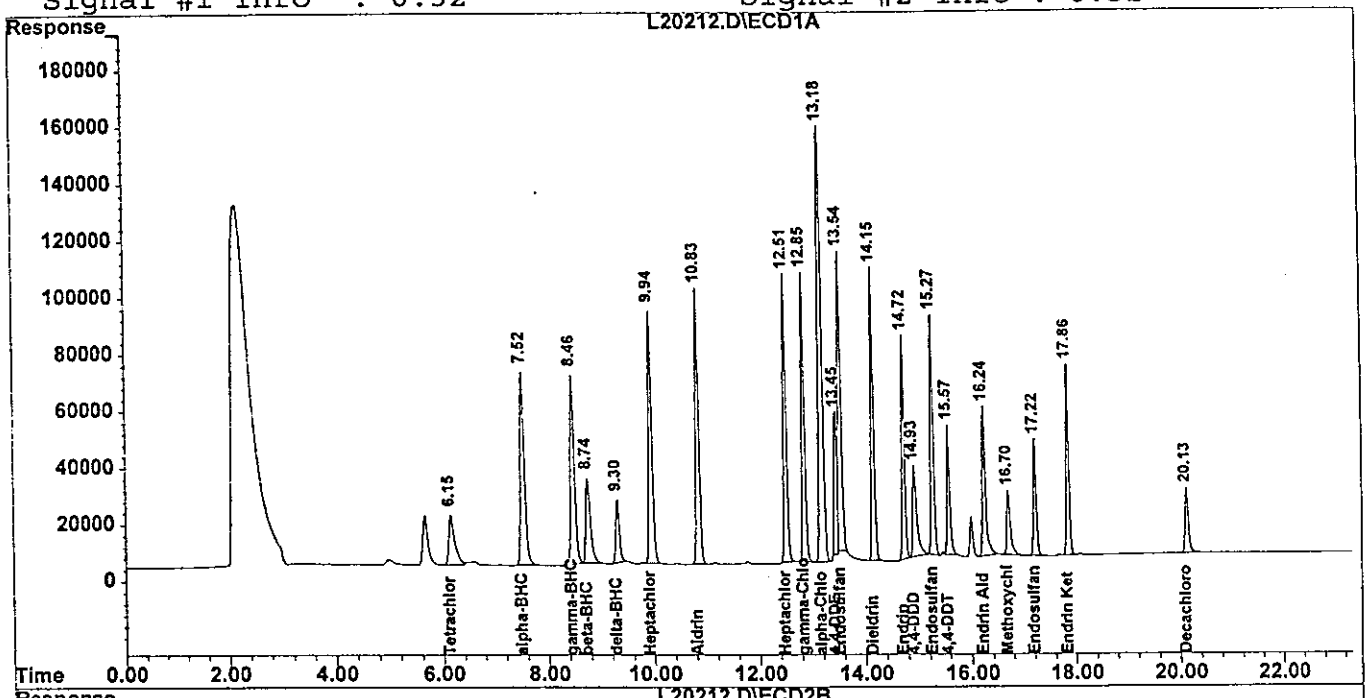
Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

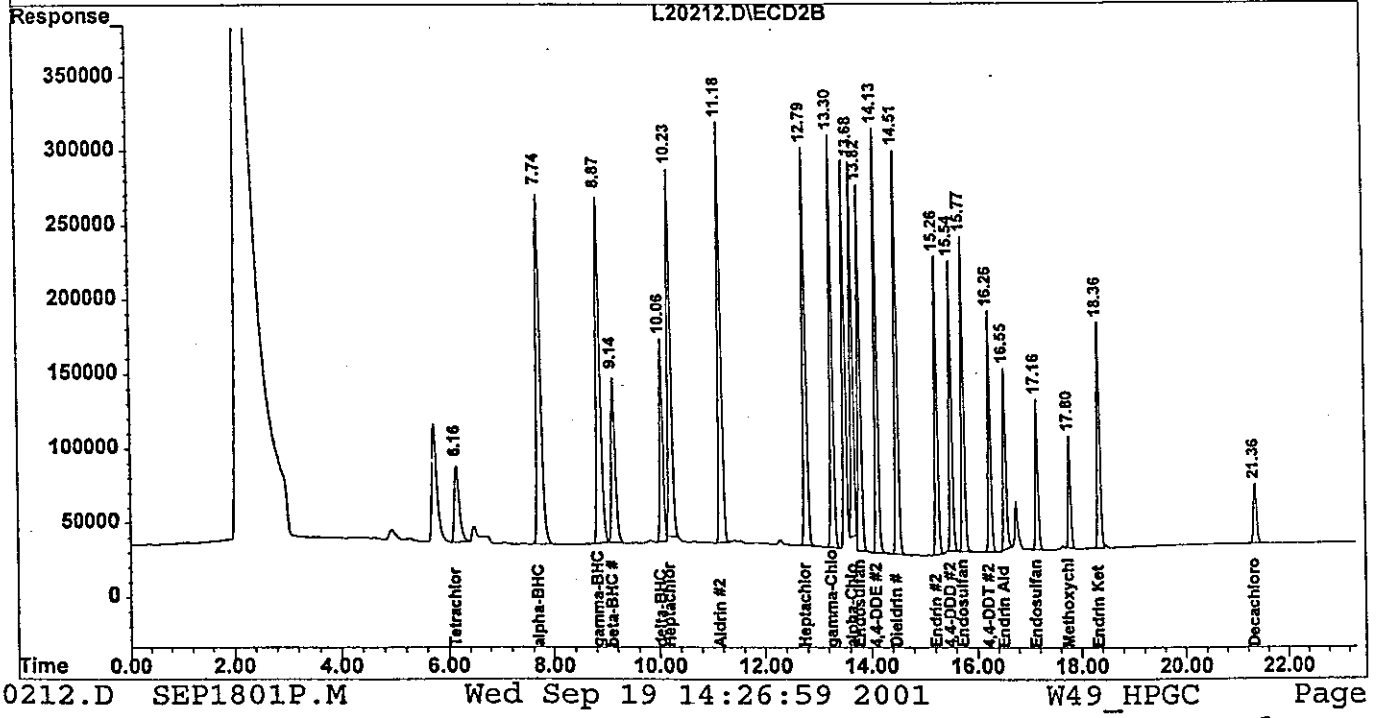
		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.15	6.16	1335522	3308356	50.984m	46.315
Spiked Amount			20.000	Range	30 - 150	Recovery	= 254.92%#	231.58%#
22)	S	Decachlorobiphen	20.13	21.37	1008248	1673014	45.252m	46.585
Spiked Amount			20.000	Range	30 - 150	Recovery	= 226.26%#	232.93%#
		Target Compounds						
2)	A	alpha-BHC	7.52	7.74	3566243	13133958	125.769m	96.129
3)	MA	gamma-BHC (Linda	8.47	8.87	3493293	11916293	122.422	95.714
4)	MA	Heptachlor	9.94	10.23	3974945	10618285	109.752m	97.730m
5)	MB	Aldrin	10.83	11.18	3956820	11462122	110.671m	94.731
6)	B	beta-BHC	8.74	9.14	1768368	5566075	109.048m	93.492
7)	B	delta-BHC	9.30	10.06	1031738	5588879	115.199m	96.484m
8)	B	Heptachlor Epoxi	12.51	12.79	3750107	9619554	101.307m	93.424
9)	A	Endosulfan I	13.54	13.82	4272963	8696894	102.148m	94.703m
10)	A	gamma-Chlordane	12.85	13.30	3722519	9780038	101.869	94.499
11)	A	alpha-Chlordane	13.18	13.68	7584551	8218869	97.059	93.868
12)	B	4,4-DDE	13.45f	14.13	1859152	9365254	125.865m	95.248
13)	MA	Dieldrin	14.15	14.51	3520564	9297405	107.460m	96.840
14)	MA	Endrin	14.72	15.26	2702342	6789665	106.599m	97.317m
15)	B	Endosulfan II	15.27	15.77	3039380	7211057	101.473	95.656
16)	A	4,4-DDD	14.93f	15.54	1719405	6230579	111.981	96.191m
17)	MA	4,4-DDT	15.57	16.26	1729281	5096998	115.883m	106.524
18)	B	Endrin Aldehyde	16.24	16.55	2187839	4310177	94.820	94.184
19)	B	Endosulfan Sulfa	17.22	17.16	1455582	3351150	98.236	97.043m
20)	A	Methoxychlor	16.70	17.80	1053035	2321424	111.484	107.741m
21)	B	Endrin Ketone	17.86	18.36	2403420	5212621	103.313m	98.113m
		Sum Toxaphene			0	0	N.D.	N.D.
		Average Toxaphene					0.000	0.000
		Sum Chlordane			0	0	N.D.	N.D.
		Average Chlordane					0.000	0.000

Signal #1 : H:\GCDATA\L\SEP1801\L20212.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\L\SEP1801\L20212.D\ECD2B.CH
Acq On : 18 Sep 2001 15:08 Operator: PY
Sample : PEST-6 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:39 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001044

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\SEP1801\L20213.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\L\SEP1801\L20213.D\ECD2B.CH
Acq On : 18 Sep 2001 15:35 Operator: PY
Sample : PEST-5 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:48 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

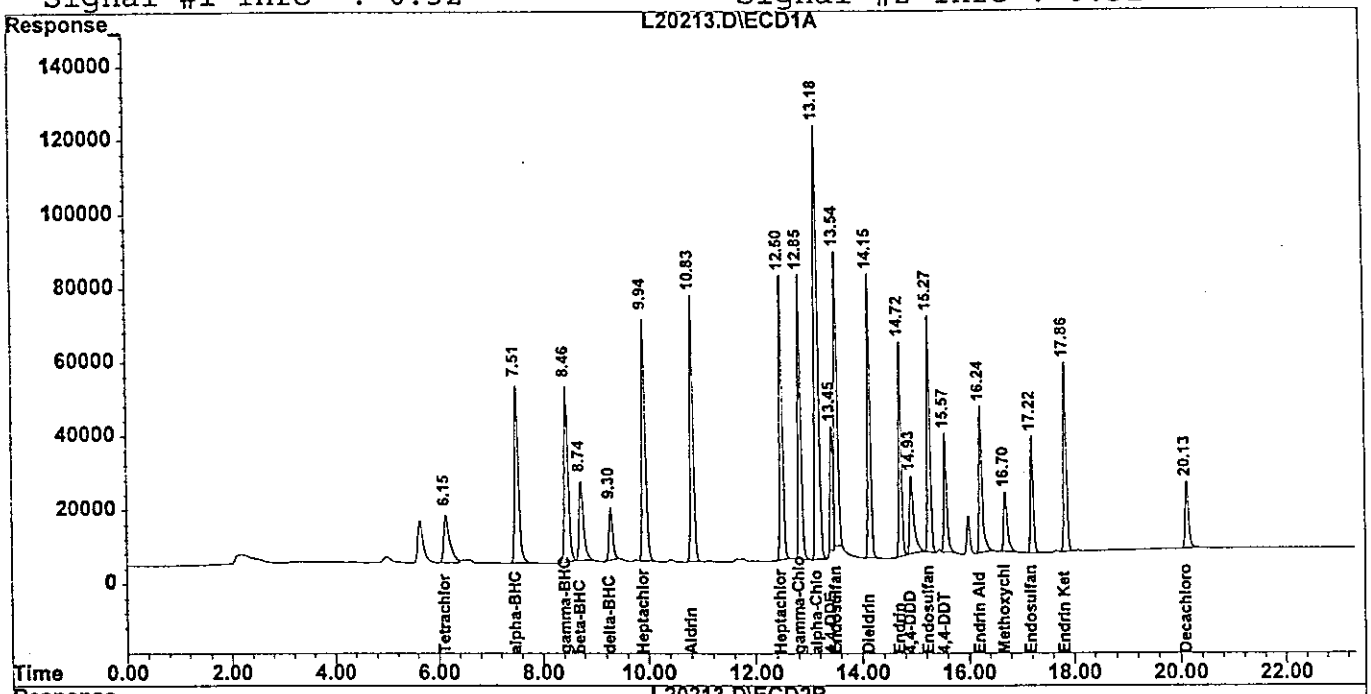
		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds								
1)	S	Tetrachloro-m-xy	6.15	6.16	1002037	2565145	38.293m	35.907
Spiked Amount			20.000	Range	30 - 150	Recovery	= 191.47%#	179.54%#
22)	S	Decachlorobiphen	20.13	21.36	797585	1302753	35.962m	36.275
Spiked Amount			20.000	Range	30 - 150	Recovery	= 179.81%#	181.38%#
Target Compounds								
2)	A	alpha-BHC	7.51	7.74	2515648	10053340	88.874m	73.581
3)	MA	gamma-BHC (Linda	8.46	8.87	2485198	9148830	87.093	73.485
4)	MA	Heptachlor	9.94	10.22	2949407	8217531	81.516m	75.972m
5)	MB	Aldrin	10.83	11.18	2915831	8878578	81.648m	73.379m
6)	B	beta-BHC	8.74	9.14	1276803	4330396	78.813m	72.737m
7)	B	delta-BHC	9.30	10.06	676267	4299928	76.626	74.329m
8)	B	Heptachlor Epoxi	12.51	12.79	2837545	7437132	76.793	72.228
9)	A	Endosulfan I	13.54	13.81	3185840	6736847	76.028m	73.416m
10)	A	gamma-Chlordane	12.85	13.29	2810449	7560654	76.910m	73.054
11)	A	alpha-Chlordane	13.18	13.68	5830441	6325878	74.612m	72.248
12)	B	4,4-DDE	13.45	14.13	1130605	7124938	78.122m	72.464m
13)	MA	Dieldrin	14.15	14.51	2617110	7086328	79.899	73.810m
14)	MA	Endrin	14.72	15.25	1987219	5173264	78.874	74.281m
15)	B	Endosulfan II	15.27	15.77	2299432	5539124	76.769	73.477
16)	A	4,4-DDD	14.93	15.53	1156088	4819625	75.293m	74.546m
17)	MA	4,4-DDT	15.57	16.26	1226169	3775392	83.283m	78.903m
18)	B	Endrin Aldehyde	16.24	16.55	1633379	3331194	70.790m	72.916m
19)	B	Endosulfan Sulfa	17.22	17.16	1127054	2565367	76.134m	74.259m
20)	A	Methoxychlor	16.70	17.80	756013	1731663	80.818	80.425m
21)	B	Endrin Ketone	17.86	18.36	1822769	3999212	78.345m	75.262m
Sum Toxaphene					0	0	N.D.	N.D.
Average Toxaphene							0.000	0.000
Sum Chlordane					0	0	N.D.	N.D.
Average Chlordane							0.000	0.000

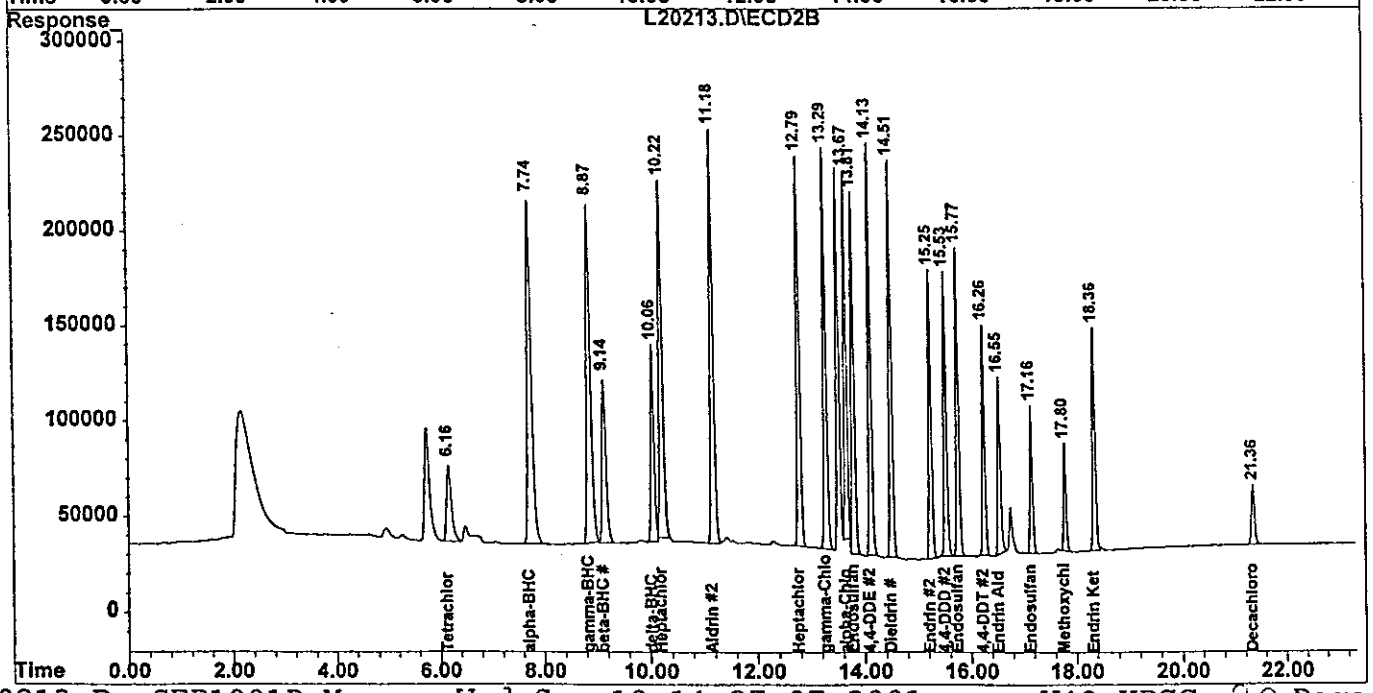
Quantitation Report

Signal #1 : H:\GCDATA\L\SEP1801\L20213.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\L\SEP1801\L20213.D\ECD2B.CH
Acq On : 18 Sep 2001 15:35 Operator: PY
Sample : PEST-5 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:48 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\SEP1801\L20214.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\L\SEP1801\L20214.D\ECD2B.CH
Acq On : 18 Sep 2001 16:03 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:54 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

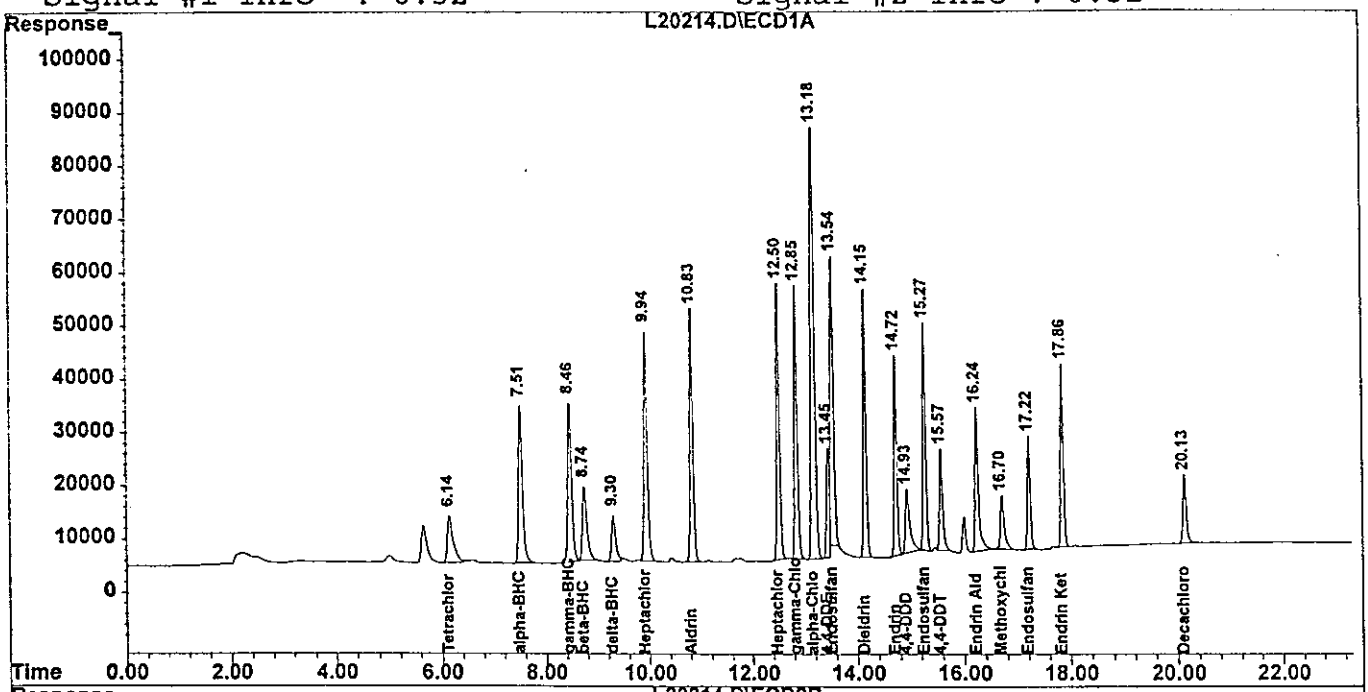
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	6.14	6.16	664966	1781642	25.359m	24.940m
Spiked Amount	20.000 Range 30 - 150 Recovery =					126.80%	124.70%
22) S	Decachlorobiphen	20.13	21.36	564281	916647	25.468m	25.524
Spiked Amount	20.000 Range 30 - 150 Recovery =					127.34%	127.62%
	Target Compounds						
2) A	alpha-BHC	7.51	7.73	1497636	6924107	52.779m	50.678m
3) MA	gamma-BHC (Linda	8.46	8.87	1530152	6351587	53.624	51.017
4) MA	Heptachlor	9.94	10.22	1930953	5607392	53.331m	52.164m
5) MB	Aldrin	10.83	11.18	1891216	6125403	53.009	50.577
6) B	beta-BHC	8.74	9.14	833641	2986453	51.659m	50.066
7) B	delta-BHC	9.30	10.06	459580	3017210	53.121m	52.102m
8) B	Heptachlor Epoxi	12.51	12.79	1900809	5132157	51.442	49.843
9) A	Endosulfan I	13.54	13.81	2211341	4668776	52.991m	50.874m
10) A	gamma-Chlordane	12.85	13.29	1879314	5226616	51.379	50.502
11) A	alpha-Chlordane	13.18	13.67	4003849	4387077	51.219	50.105
12) B	4,4-DDE	13.45	14.13	712380	4944952	51.483m	50.385m
13) MA	Dieldrin	14.15	14.51	1712567	4897145	52.284	51.028
14) MA	Endrin	14.72	15.25	1294990	3531561	51.393	50.674m
15) B	Endosulfan II	15.27	15.76	1554850	3807911	51.910m	50.493m
16) A	4,4-DDD	14.93	15.53	710292	3256178	46.503m	50.365m
17) MA	4,4-DDT	15.57	16.26	755489	2547776	51.695m	53.410m
18) B	Endrin Aldehyde	16.24	16.55	1171489	2268171	50.863m	50.124
19) B	Endosulfan Sulfa	17.22	17.16	763240	1778017	51.465	51.456
20) A	Methoxychlor	16.70	17.80	494392	1157446	53.684m	54.004
21) B	Endrin Ketone	17.86	18.36	1216144	2753149	52.287	51.800m
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

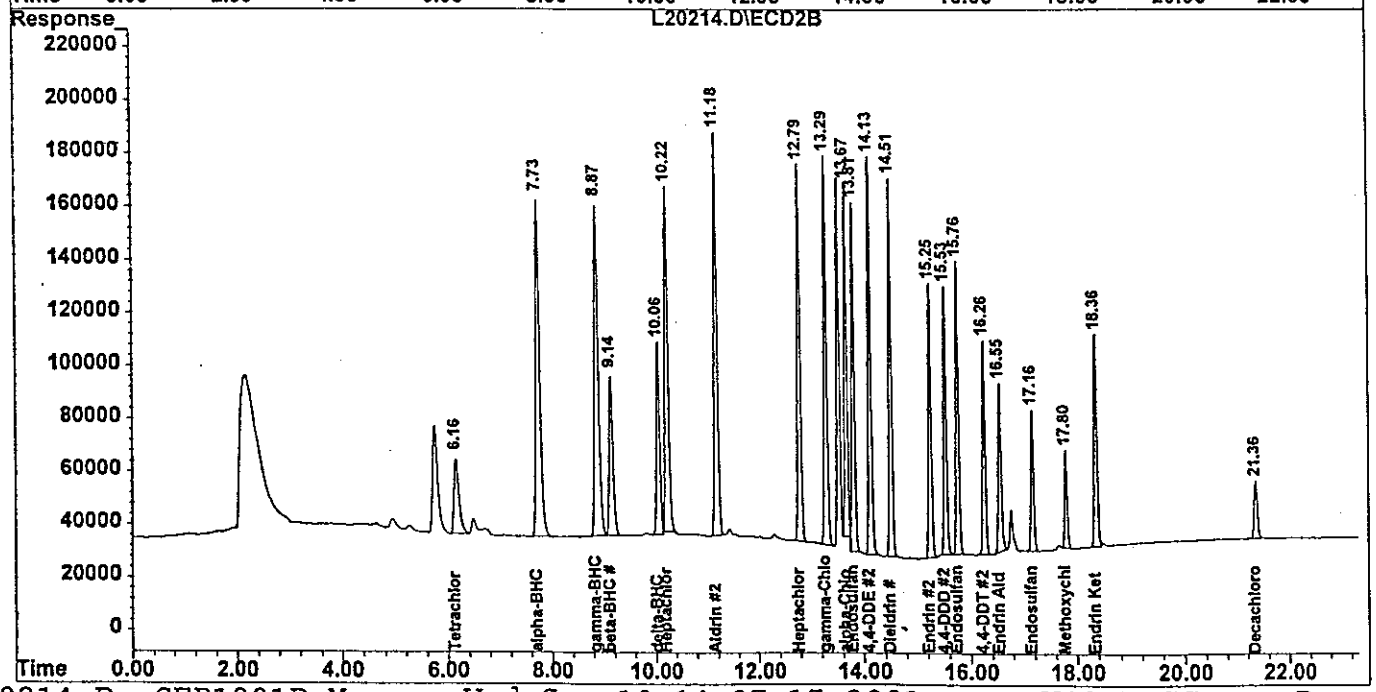
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\SEP1801\L20214.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\L\SEP1801\L20214.D\ECD2B.CH
Acq On : 18 Sep 2001 16:03 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 10:54 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001048

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\SEP1801\L20215.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\SEP1801\L20215.D\ECD2B.CH
Acq On : 18 Sep 2001 16:30 Operator: PY
Sample : PEST-3 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:01 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	6.15	6.16	320930	910996	12.256m	12.755m
Spiked Amount	20.000 Range 30 - 150 Recovery =					61.28%	63.78%
22) S	Decachlorobiphen	20.14	21.36	280597	440607	12.685m	12.269
Spiked Amount	20.000 Range 30 - 150 Recovery =					63.43%	61.35%
	Target Compounds						
2) A	alpha-BHC	7.51	7.74	588206	3481610	20.686m	25.522m
3) MA	gamma-BHC (Linda	8.46	8.87	611819	3203052	21.441m	25.728
4) MA	Heptachlor	9.94	10.22	871878	2823175	24.045m	26.195m
5) MB	Aldrin	10.83	11.18	841693	3145241	23.592	25.970
6) B	beta-BHC	8.75	9.14	389988	1537432	24.127m	25.774
7) B	delta-BHC	9.30	10.06	188209	1452229	21.721m	25.119m
8) B	Heptachlor Epoxi	12.50	12.79	923373	2629710	24.990m	25.539m
9) A	Endosulfan I	13.54	13.81	1056219	2430641	25.353m	26.504m
10) A	gamma-Chlordane	12.85	13.29	909036	2683553	24.853	25.930m
11) A	alpha-Chlordane	13.18	13.67	2019661	2271144	25.836	25.939
12) B	4,4-DDE	13.48	14.13	273781	2551077	19.637m	26.022m#
13) MA	Dieldrin	14.15	14.51	787916	2487813	24.055	25.923m
14) MA	Endrin	14.72	15.25	596495	1766028	23.818	25.337m
15) B	Endosulfan II	15.27	15.77	751111	1946786	25.068m	25.835
16) A	4,4-DDD	14.94	15.53	312352	1654812	20.443m	25.640m#
17) MA	4,4-DDT	15.58	16.26	317026	1199792	21.851m	25.198
18) B	Endrin Aldehyde	16.24	16.55	595947	1164935	25.855m	25.744m
19) B	Endosulfan Sulfa	17.22	17.16	369249	872278	24.992m	25.255
20) A	Methoxychlor	16.71	17.80	214694	535143	23.466m	24.969
21) B	Endrin Ketone	17.86	18.36	574803	1346854	24.848m	25.363m
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

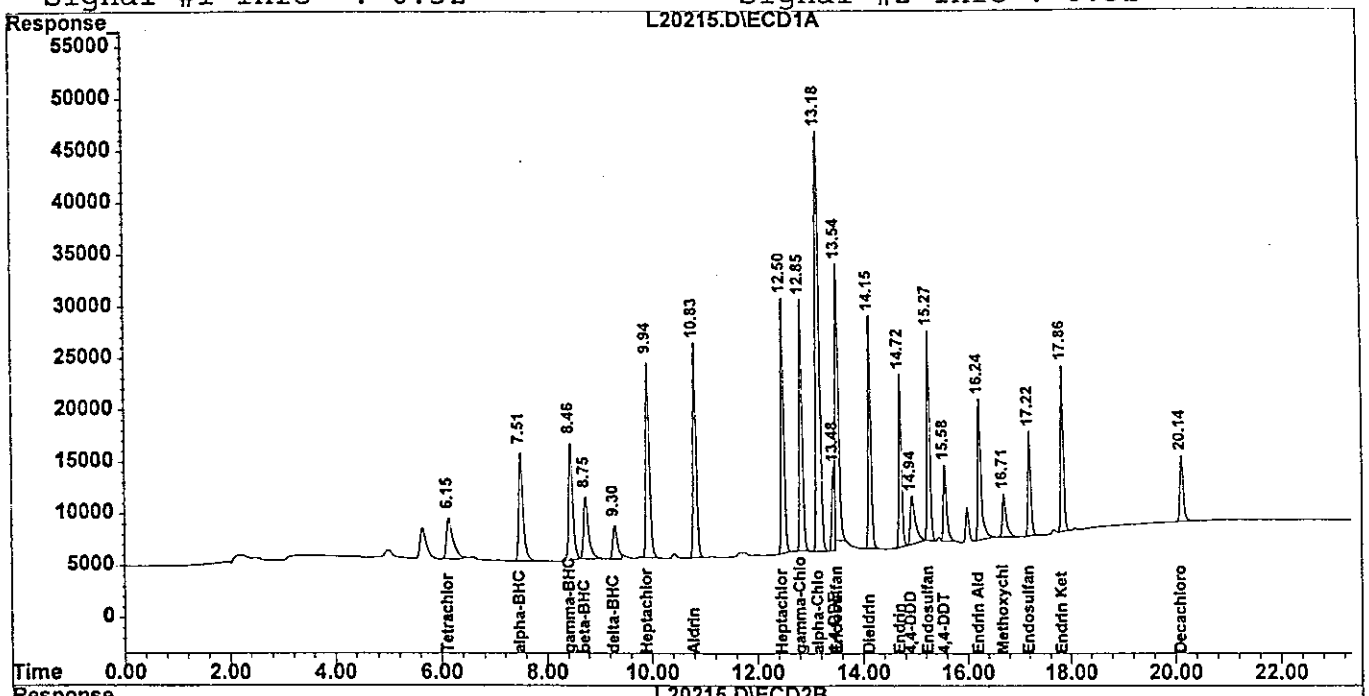
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

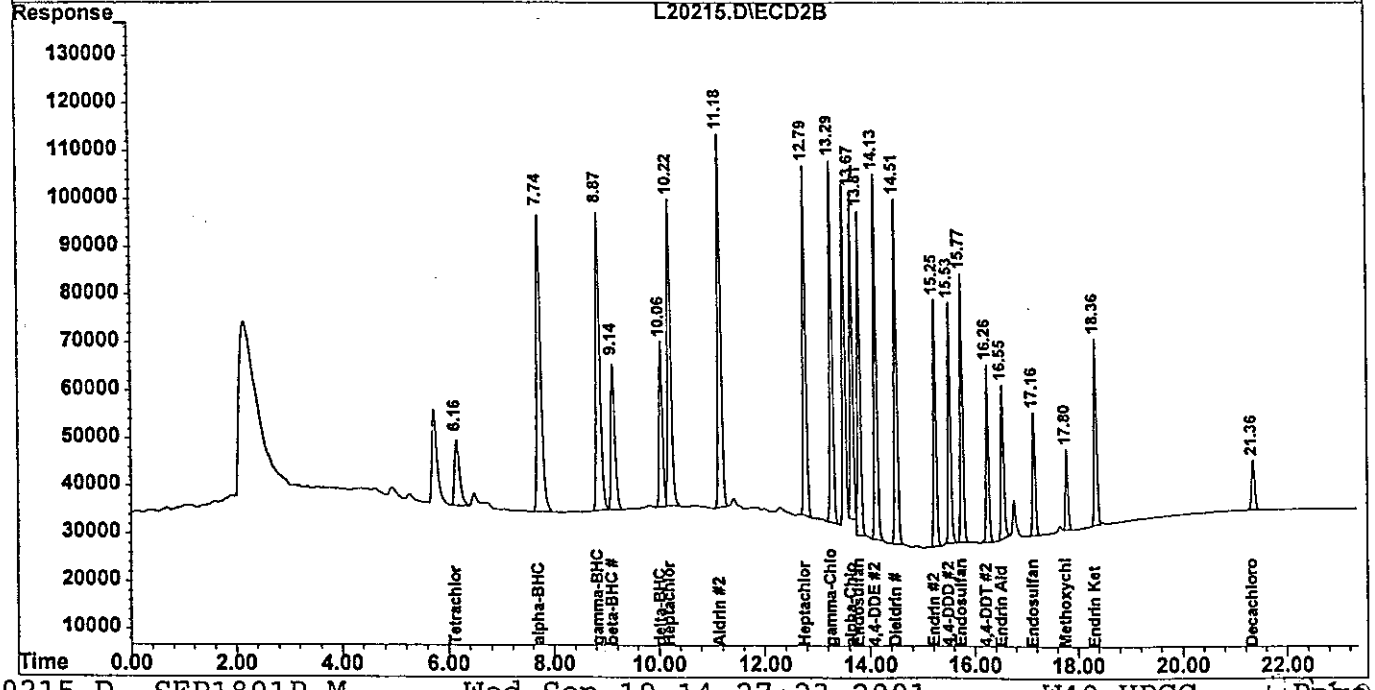
Quantitation Report

Signal #1 : H:\GCDATA\L\SEP1801\L20215.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\SEP1801\L20215.D\ECD2B.CH
Acq On : 18 Sep 2001 16:30 Operator: PY
Sample : PEST-3 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:01 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\SEP1801\L20216.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\L\SEP1801\L20216.D\ECD2B.CH
Acq On : 18 Sep 2001 16:57 Operator: PY
Sample : PEST-2 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:16 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

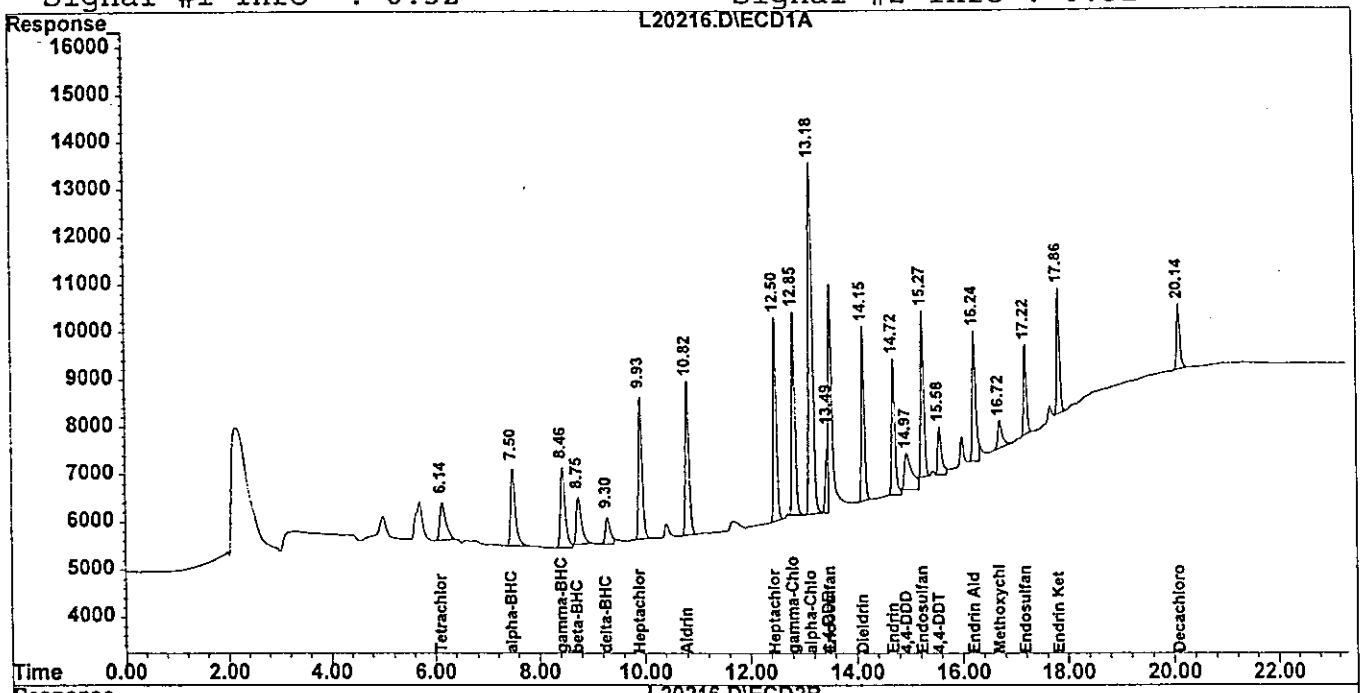
Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

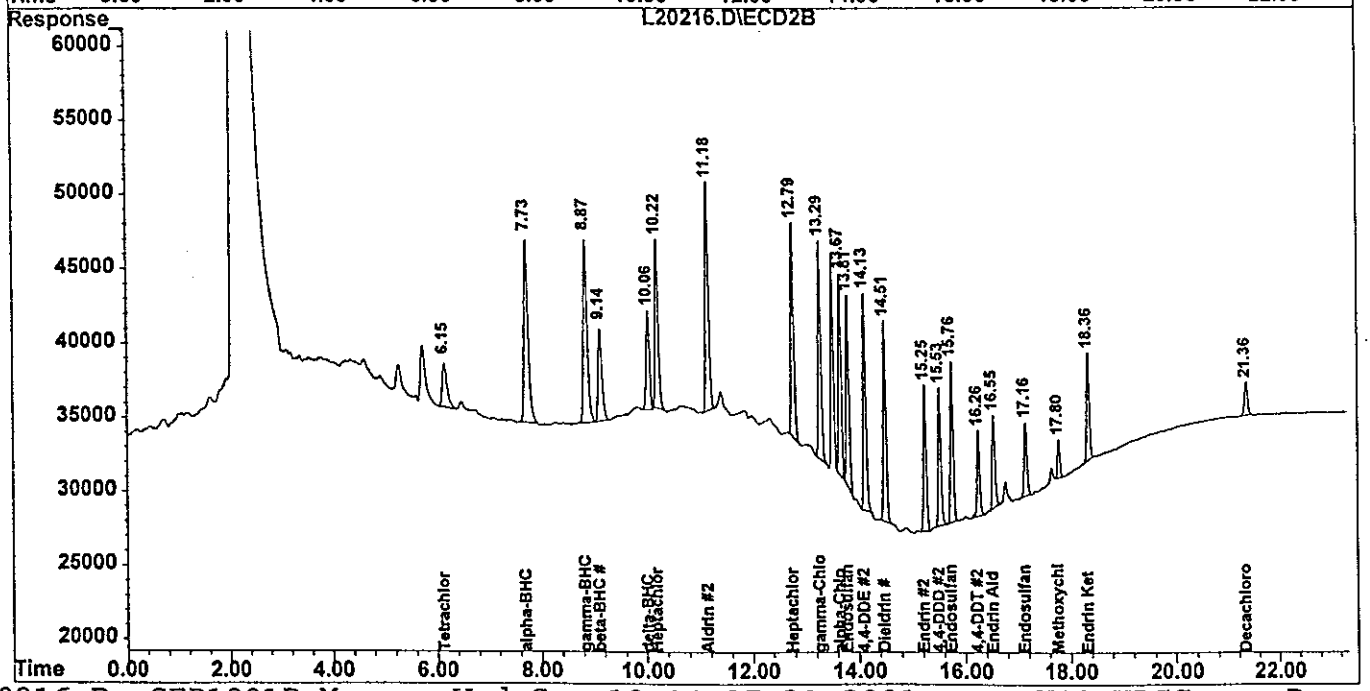
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	6.14	6.15	62859	196332	2.403m	2.746m
Spiked Amount	20.000 Range 30 - 150 Recovery =					12.02%#	13.73%#
22) S	Decachlorobiphen	20.14	21.36	59908	93539	2.712m	2.605m
Spiked Amount	20.000 Range 30 - 150 Recovery =					13.56%#	13.03%#
	Target Compounds						
2) A	alpha-BHC	7.50	7.73	99304	686007	3.489m	5.035 #
3) MA	gamma-BHC (Linda	8.46	8.87	102899	630970	3.600m	5.068 #
4) MA	Heptachlor	9.93	10.22	144827	486782	3.988m	4.512m
5) MB	Aldrin	10.82	11.18	142926	621178	4.006m	5.129 #
6) B	beta-BHC	8.75	9.14	67718	314005	4.176m	5.264m#
7) B	delta-BHC	9.30	10.06	35244	286669	4.080m	4.959m
8) B	Heptachlor Epoxi	12.50	12.79	171900	519433	4.650m	5.044
9) A	Endosulfan I	13.54	13.81	192779	446406	4.653m	4.868
10) A	gamma-Chlordane	12.85	13.29	172070	532140	4.704m	5.147
11) A	alpha-Chlordane	13.18	13.67	381898	463327	4.885m	5.292
12) B	4,4-DDE	13.49	14.13	46637	501912	3.399m	5.120m#
13) MA	Dieldrin	14.15	14.51	139479	473824	4.258m	4.939
14) MA	Endrin	14.72	15.25	116543	353318	4.654m	5.068m
15) B	Endosulfan II	15.27	15.76	138030	381689	4.607m	5.065m
16) A	4,4-DDD	14.97	15.54	75402	321296	5.069m	4.978
17) MA	4,4-DDT	15.58	16.26	51524	200298	3.571m	4.207m
18) B	Endrin Aldehyde	16.24	16.55	119258	233171	5.192m	5.160m
19) B	Endosulfan Sulfa	17.22	17.16	70922	169981	4.790m	4.921m
20) A	Methoxychlor	16.72	17.80	34516	81820	3.789m	3.818m
21) B	Endrin Ketone	17.86	18.36	99835	250596	4.320m	4.735m
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

Signal #1 : H:\GCDATA\L\SEP1801\L20216.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\L\SEP1801\L20216.D\ECD2B.CH
Acq On : 18 Sep 2001 16:57 Operator: PY
Sample : PEST-2 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:16 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\SEP1801\L20209.D\ECD1A.CH Vial: 1
Signal #2 : H:\GCDATA\L\SEP1801\L20209.D\ECD2B.CH
Acq On : 18 Sep 2001 13:46 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:32 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.15	6.17	596760	1724922	22.804m	24.142
Spiked Amount 20.000 Range 30 - 150 Recovery =					114.02%	120.71%
22) S Decachlorobiphen	20.15	21.39f	325153	520960	14.724	14.672
Spiked Amount 20.000 Range 30 - 150 Recovery =					73.62%	73.36%
Target Compounds						
12) B 4,4-DDE	13.46	14.15	55211	326201	4.048m	3.329m
14) MA Endrin	14.74	15.28	1364614	3687385	53.900	52.857
16) A 4,4-DDD	14.94	15.56	37879	228165	2.546m	3.541 #
17) MA 4,4-DDT	15.59	16.28	747854	2296062	52.124	47.772
18) B Endrin Aldehyde	16.26	16.58f	7061	14829	0.308m	0.328m
21) B Endrin Ketone	17.87	18.38f	11154	34147	0.482m	0.645m#
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

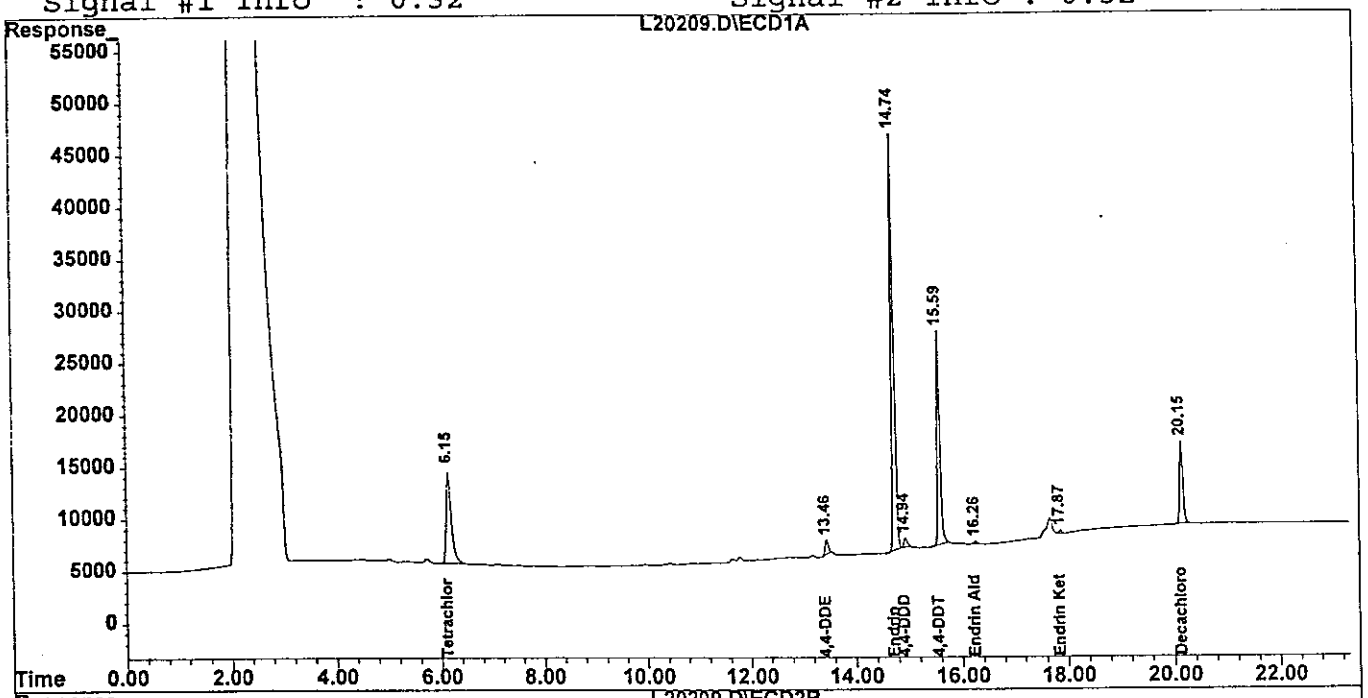
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

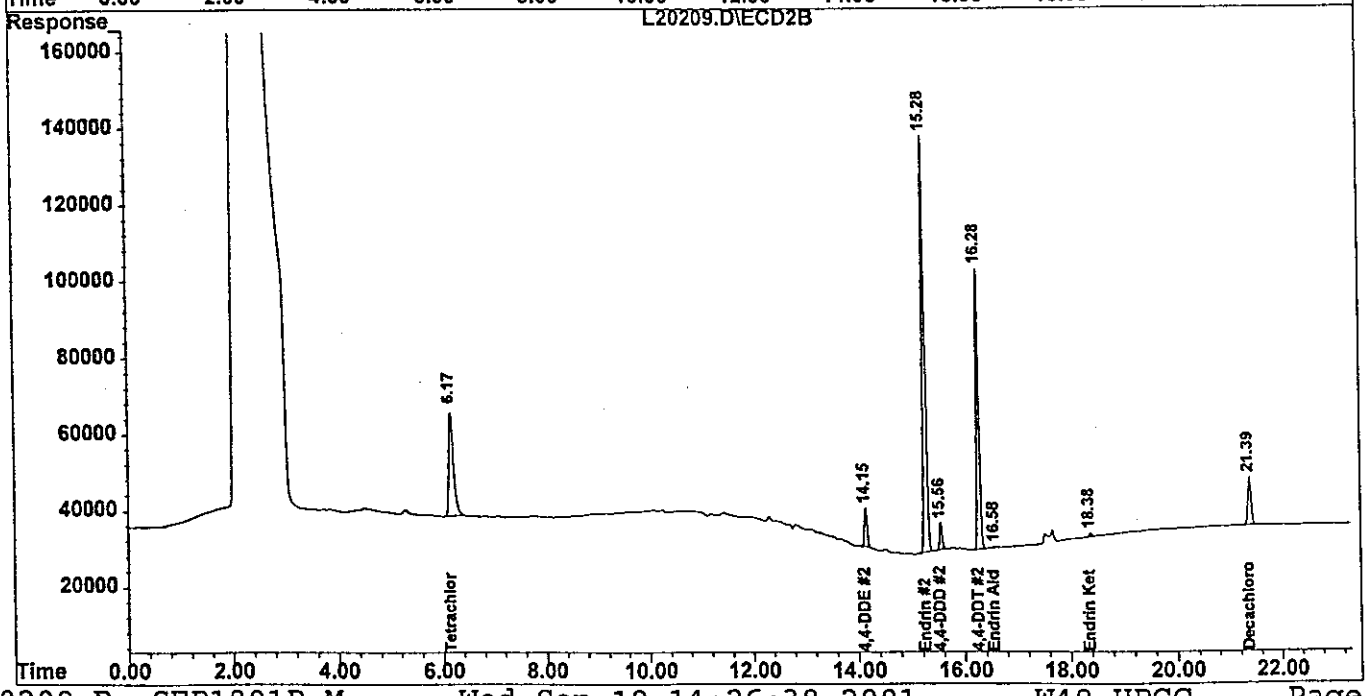
Quantitation Report

Signal #1 : H:\GCDATA\L\SEP1801\L20209.D\ECD1A.CH Vial: 1
Signal #2 : H:\GCDATA\L\SEP1801\L20209.D\ECD2B.CH
Acq On : 18 Sep 2001 13:46 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 11:32 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**1.32**	**1.31**
DDT	**11.07**	**19.45**

	RAW RESPONSE	
ENDRIN KETONE	11154.00	34147.00
ENDRIN ALDEHYDE	7061.00	14829.00
ENDRIN	1364614.00	3687385.00

DDE	55211.00	326201.00
DDD	37879.00	228165.00
DDT	747854.00	2296062.00

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\SEP1801\L20219.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\L\SEP1801\L20219.D\ECD2B.CH
Acq On : 18 Sep 2001 18:19 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 12:00 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.14	6.16	605263	1834648	23.128m	25.677
Spiked Amount 20.000 Range 30 - 150 Recovery =					115.64%	128.39%
22) S Decachlorobiphen	20.13	21.36	364402	582675	16.501m	16.411
Spiked Amount 20.000 Range 30 - 150 Recovery =					82.51%	82.06%
Target Compounds						
12) B 4,4-DDE	13.48	14.13	65661	366466	4.814m	3.740
14) MA Endrin	14.72	15.25	1277350	3537843	50.453	50.713
16) A 4,4-DDD	14.95	15.54	31063	204324	2.088m	3.171m#
17) MA 4,4-DDT	15.58	16.26	689569	2438662	48.062	50.739
18) B Endrin Aldehyde	16.25	16.55	41786	84483	1.820m	1.868m
21) B Endrin Ketone	17.86	18.36	26283	68872	1.137m	1.302m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

001056

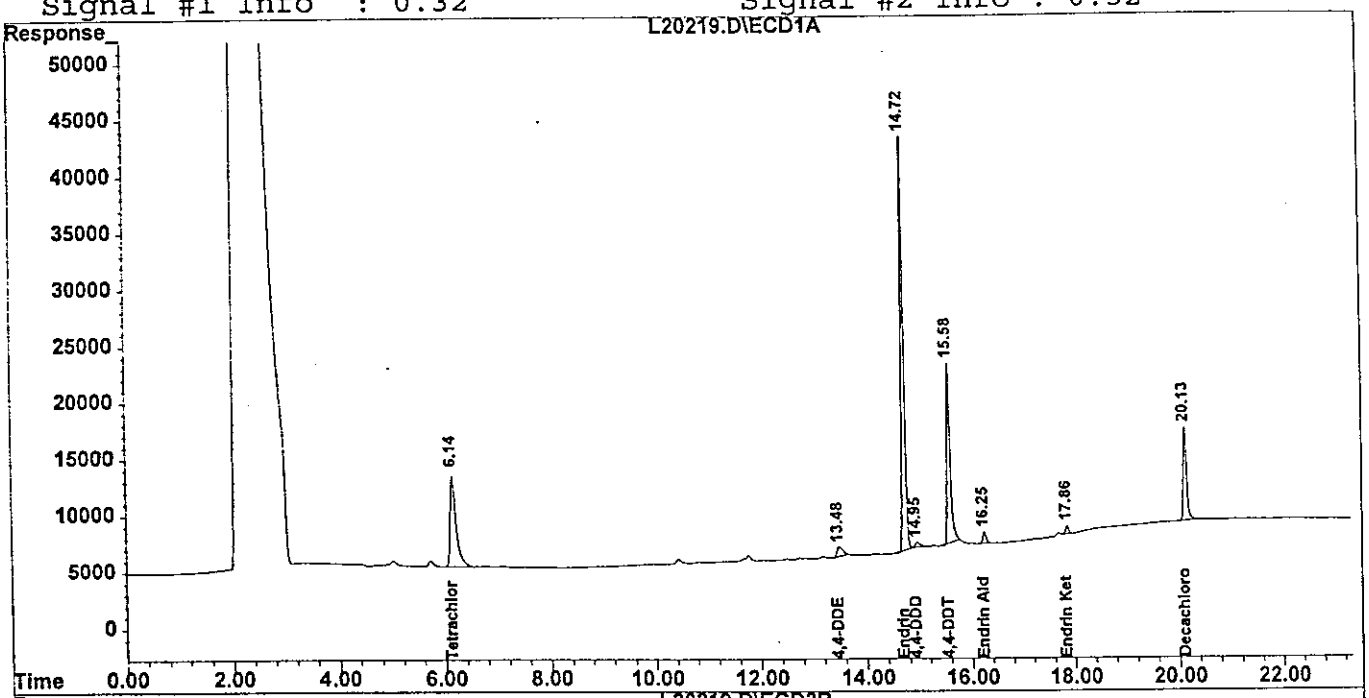
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

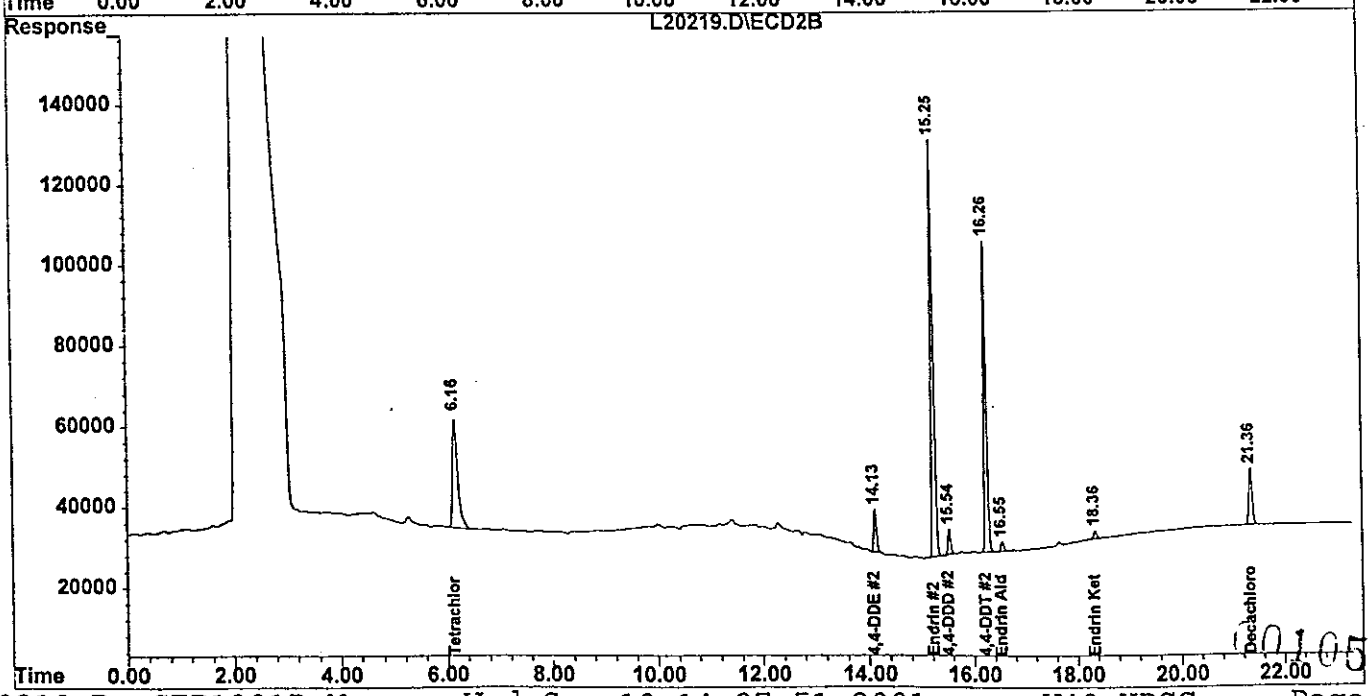
Quantitation Report

Signal #1 : H:\GCDATA\L\SEP1801\L20219.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\L\SEP1801\L20219.D\ECD2B.CH
Acq On : 18 Sep 2001 18:19 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Sep 19 12:00 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001057

% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**5.06**	**4.15**
DDT	**12.30**	**18.97**

	RAW RESPONSE	
ENDRIN KETONE	26283.00	68872.00
ENDRIN ALDEHYDE	41786.00	84483.00
ENDRIN	1277350.00	3537843.00

DDE	65661.00	366466.00
DDD	31063.00	204324.00
DDT	689569.00	2438662.00

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\OCT0901\L20549.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\L\OCT0901\L20549.D\ECD2B.CH
Acq On : 9 Oct 2001 20:53 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Oct 04 14:54:07 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	26.170	27.878 E3	-6.5	0#	0.02
2	A	alpha-BHC	28.509	29.369 E3	-3.0	0#	0.03
3	MA	gamma-BHC (Lindane)	28.745	30.068 E3	-4.6	0#	0.04
4	MA	Heptachlor	36.307	41.815 E3	-15.2#	0#	0.03
5	MB	Aldrin	35.705	40.341 E3	-13.0	0#	0.03
6	B	beta-BHC	16.105	18.199 E3	-13.0	0#	0.03
7	B	delta-BHC	8.621	8.838 E3	-2.5	0#	0.03
8	B	Heptachlor Epoxide	36.933	41.092 E3	-11.3	0#	0.03
9	A	Endosulfan I	42.048	42.432 E3	-0.9	0#	0.03
10	A	gamma-Chlordane	36.612	40.404 E3	-10.4	0#	0.03
11	A	alpha-Chlordane	78.166	85.290 E3	-9.1	0#	0.03
12	B	4,4-DDE	13.638	23.703 E3	-73.8#	0#	0.03
13	MA	Dieldrin	32.753	36.074 E3	-10.1	0#	0.03
14	MA	Endrin	25.318	27.828 E3	-9.9	0#	0.03
15	B	Endosulfan II	29.960	31.468 E3	-5.0	0#	0.03
16	A	4,4-DDD	14.878	15.223 E3	-2.3	0#	0.03
17	MA	4,4-DDT	14.347	13.533 E3	5.7	0#	0.03
18	B	Endrin Aldehyde	22.955	21.328 E3	7.1	0#	0.03
19	B	Endosulfan Sulfate	14.760	15.171 E3	-2.8	0#	0.03
20	A	Methoxychlor	9.198	9.347 E3	-1.6	0#	0.03
21	B	Endrin Ketone	23.124	20.925 E3	9.5	0#	0.03
22	S	Decachlorobiphenyl	22.083	34.184 E3	-54.8#	0#	0.04

Signal #2

1	S	Tetrachloro-m-xylene	71.450	75.819 E3	-6.1	0#	0.02
2	A	alpha-BHC	136.066	137.757 E3	-1.2	0#	0.03
3	MA	gamma-BHC (Lindane)	124.499	126.709 E3	-1.8	0#	0.03
4	MA	Heptachlor	107.636	115.718 E3	-7.5	0#	0.03
5	MB	Aldrin	121.111	130.587 E3	-7.8	0#	0.03
6	B	beta-BHC	59.485	62.400 E3	-4.9	0#	0.03
7	B	delta-BHC	57.798	58.168 E3	-0.6	0#	0.03
8	B	Heptachlor Epoxide	101.415	109.277 E3	-7.8	0#	0.02
9	A	Endosulfan I	91.335	99.177 E3	-8.6	0#	0.03
10	A	gamma-Chlordane	103.382	114.819 E3	-11.1	0#	0.03
11	A	alpha-Chlordane	87.557	94.419 E3	-7.8	0#	0.03
12	B	4,4-DDE	97.995	109.474 E3	-11.7	0#	0.03
13	MA	Dieldrin	95.936	105.229 E3	-9.7	0#	0.03
14	MA	Endrin	69.762	76.429 E3	-9.6	0#	0.03
15	B	Endosulfan II	75.267	77.462 E3	-2.9	0#	0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\OCT0901\L20549.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\L\OCT0901\L20549.D\ECD2B.CH
Acq On : 9 Oct 2001 20:53 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Oct 04 14:54:07 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
16	A	4,4-DDD	64.429	65.078 E3	-1.0	0#	0.03
17	MA	4,4-DDT	48.063	43.050 E3	10.4	0#	0.03
18	B	Endrin Aldehyde	45.223	41.921 E3	7.3	0#	0.03
19	B	Endosulfan Sulfate	34.433	35.183 E3	-2.2	0#	0.03
20	A	Methoxychlor	21.444	19.747 E3	7.9	0#	0.03
21	B	Endrin Ketone	52.901	47.312 E3	10.6	0#	0.03
22	S	Decachlorobiphenyl	35.506	55.390 E3	-56.0#	0#	0.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20549.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\L\OCT0901\L20549.D\ECD2B.CH
Acq On : 9 Oct 2001 20:53 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 7:39 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.12f	6.14f	696947	1895469	26.632m	26.529
		Spiked Amount 20.000 Range 30 - 150 Recovery =					133.16%	132.65%
22)	S	Decachlorobiphen	20.09f	21.32f	854589	1384752	38.699	39.000m
		Spiked Amount 20.000 Range 30 - 150 Recovery =					193.50%#	195.00%#
		Target Compounds						
2)	A	alpha-BHC	7.48f	7.70f	1468463	6887872	51.508	50.621
3)	MA	gamma-BHC (Linda	8.42f	8.83f	1503420	6335472	52.302	50.888
4)	MA	Heptachlor	9.90f	10.18	2090733	5785912	57.585m	53.754m
5)	MB	Aldrin	10.79f	11.14f	2017040	6529358	56.492	53.912
6)	B	beta-BHC	8.70f	9.10f	909940	3119993	56.501m	52.450m
7)	B	delta-BHC	9.25f	10.02f	441897	2908423	51.261	50.321m
8)	B	Heptachlor Epoxi	12.46f	12.75f	2054581	5463844	55.630m	53.876m
9)	A	Endosulfan I	13.50f	13.77	2121619	4958848	50.457m	54.293m
10)	A	gamma-Chlordane	12.81	13.25	2020190	5740961	55.179	55.531m
11)	A	alpha-Chlordane	13.14	13.64	4264511	4720974	54.557	53.919
12)	B	4,4-DDE	13.39	14.09	1185156	5473718	86.898m	55.857m#
13)	MA	Dieldrin	14.11	14.47	1803680	5261431	55.069m	54.843m
14)	MA	Endrin	14.68	15.22	1391391	3821428	54.958	54.778
15)	B	Endosulfan II	15.23	15.73	1573398	3873092	52.516	51.458m
16)	A	4,4-DDD	14.88	15.50	761170	3253903	51.162	50.504
17)	MA	4,4-DDT	15.53	16.22	676650	2152485	47.162m	44.785
18)	B	Endrin Aldehyde	16.20f	16.51f	1066418	2096052	46.456	46.350
19)	B	Endosulfan Sulfa	17.18f	17.13f	758535	1759161	51.390	51.090
20)	A	Methoxychlor	16.66f	17.77f	467333	987332	50.809	46.042
21)	B	Endrin Ketone	17.82f	18.32f	1046273	2365617	45.246	44.718m
		Sum Toxaphene			0	0	N.D.	N.D.
		Average Toxaphene					0.000	0.000
		Sum Chlordane			0	0	N.D.	N.D.
		Average Chlordane					0.000	0.000

001061

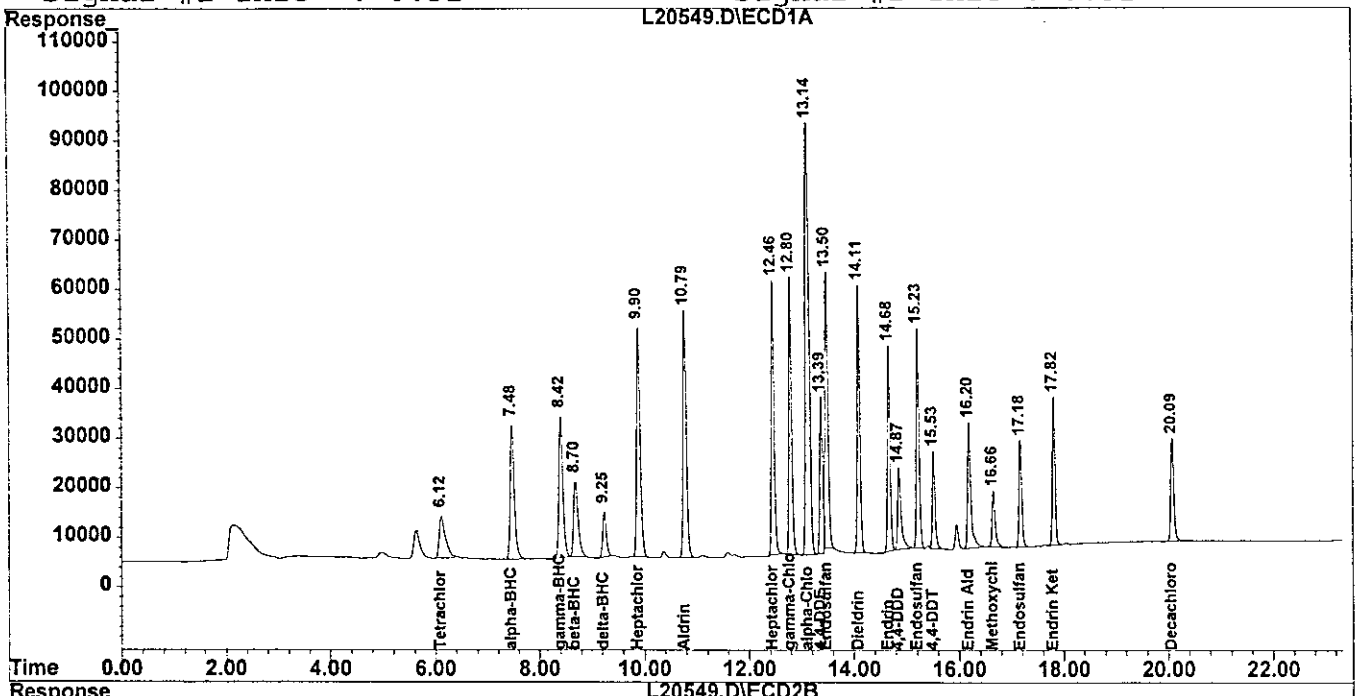
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

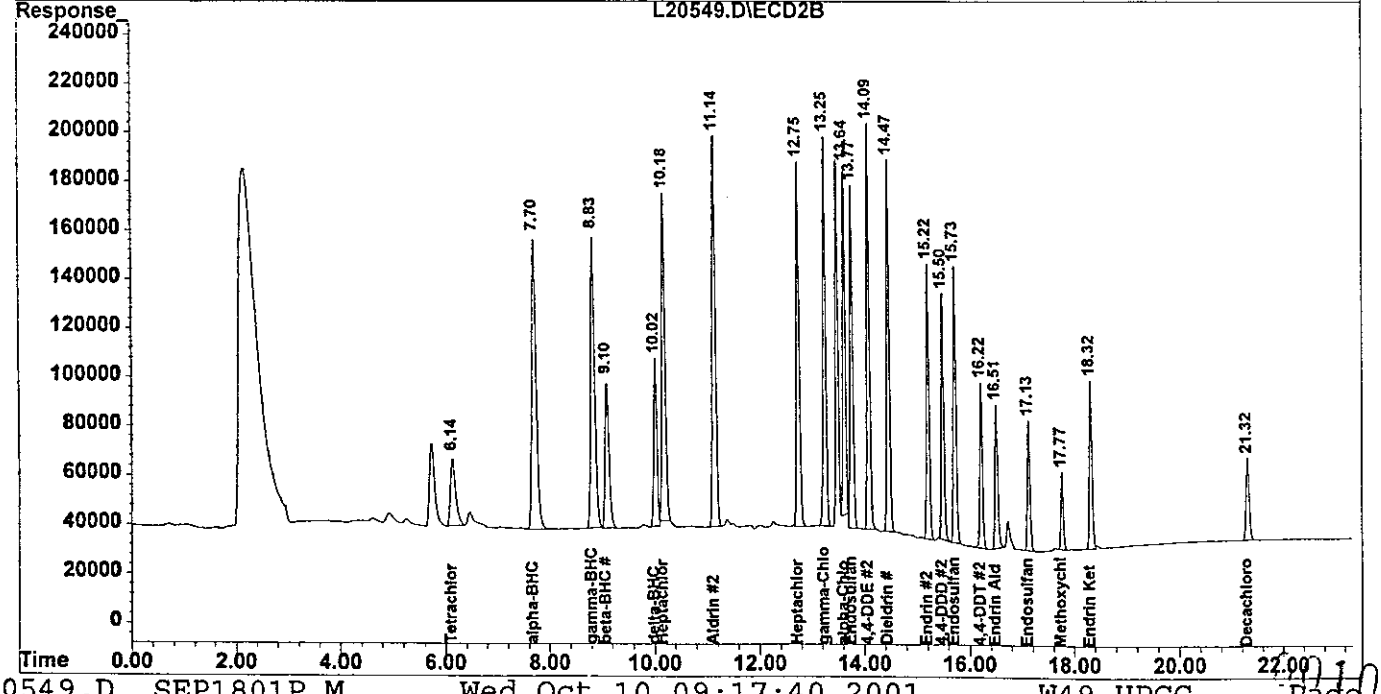
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20549.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\L\OCT0901\L20549.D\ECD2B.CH
Acq On : 9 Oct 2001 20:53 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 7:39 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\OCT0901\L20562.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\OCT0901\L20562.D\ECD2B.CH
Acq On : 10 Oct 2001 2:48 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Oct 04 14:54:07 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	26.170	28.194 E3	-7.7	0#	0.02
2	A	alpha-BHC	28.509	33.192 E3	-16.4#	0#	0.02
3	MA	gamma-BHC (Lindane)	28.745	34.016 E3	-18.3#	0#	0.03
4	MA	Heptachlor	36.307	41.159 E3	-13.4	0#	0.03
5	MB	Aldrin	35.705	40.404 E3	-13.2	0#	0.03
6	B	beta-BHC	16.105	18.383 E3	-14.1	0#	0.03
7	B	delta-BHC	8.621	17.212 E3	-99.7#	0#	0.03
8	B	Heptachlor Epoxide	36.933	41.195 E3	-11.5	0#	0.02
9	A	Endosulfan I	42.048	43.449 E3	-3.3	0#	0.02
10	A	gamma-Chlordane	36.612	40.375 E3	-10.3	0#	0.02
11	A	alpha-Chlordane	78.166	86.283 E3	-10.4	0#	0.02
12	B	4,4-DDE	13.638	19.967 E3	-46.4#	0#	0.03
13	MA	Dieldrin	32.753	36.794 E3	-12.3	0#	0.02
14	MA	Endrin	25.318	28.196 E3	-11.4	0#	0.03
15	B	Endosulfan II	29.960	33.690 E3	-12.4	0#	0.02
16	A	4,4-DDD	14.878	15.709 E3	-5.6	0#	0.03
17	MA	4,4-DDT	14.347	18.674 E3	-30.2#	0#	0.03
18	B	Endrin Aldehyde	22.955	24.216 E3	-5.5	0#	0.03
19	B	Endosulfan Sulfate	14.760	21.558 E3	-46.1#	0#	0.03
20	A	Methoxychlor	9.198	10.994 E3	-19.5#	0#	0.03
21	B	Endrin Ketone	23.124	29.838 E3	-29.0#	0#	0.03
22	S	Decachlorobiphenyl	22.083	36.360 E3	-64.7#	0#	0.03

Signal #2

1	S	Tetrachloro-m-xylene	71.450	77.966 E3	-9.1	0#	0.02
2	A	alpha-BHC	136.066	154.381 E3	-13.5	0#	0.02
3	MA	gamma-BHC (Lindane)	124.499	142.513 E3	-14.5	0#	0.02
4	MA	Heptachlor	107.636	115.978 E3	-7.8	0#	0.02
5	MB	Aldrin	121.111	134.782 E3	-11.3	0#	0.02
6	B	beta-BHC	59.485	64.738 E3	-8.8	0#	0.02
7	B	delta-BHC	57.798	96.935 E3	-67.7#	0#	0.02
8	B	Heptachlor Epoxide	101.415	114.091 E3	-12.5	0#	0.02
9	A	Endosulfan I	91.335	104.828 E3	-14.8	0#	0.02
10	A	gamma-Chlordane	103.382	117.546 E3	-13.7	0#	0.02
11	A	alpha-Chlordane	87.557	99.665 E3	-13.8	0#	0.02
12	B	4,4-DDE	97.995	110.407 E3	-12.7	0#	0.02
13	MA	Dieldrin	95.936	110.303 E3	-15.0	0#	0.02
14	MA	Endrin	69.762	79.900 E3	-14.5	0#	0.02
15	B	Endosulfan II	75.267	84.827 E3	-12.7	0#	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\OCT0901\L20562.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\OCT0901\L20562.D\ECD2B.CH
Acq On : 10 Oct 2001 2:48 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Oct 04 14:54:07 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
16	A	4,4-DDD	64.429	72.400 E3	-12.4	0#	0.02
17	MA	4,4-DDT	48.063	59.403 E3	-23.6#	0#	0.02
18	B	Endrin Aldehyde	45.223	49.743 E3	-10.0	0#	0.02
19	B	Endosulfan Sulfate	34.433	52.101 E3	-51.3#	0#	0.02
20	A	Methoxychlor	21.444	25.762 E3	-20.1#	0#	0.02
21	B	Endrin Ketone	52.901	67.570 E3	-27.7#	0#	0.02
22	S	Decachlorobiphenyl	35.506	59.304 E3	-67.0#	0#	0.03

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20562.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\OCT0901\L20562.D\ECD2B.CH
Acq On : 10 Oct 2001 2:48 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 7:45 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	6.12f	6.13	704858	1949155	26.934	27.280
Spiked Amount		20.000	Range	30 - 150	Recovery	= 134.67%	136.40%
22) S	Decachlorobiphen	20.08f	21.31f	909003	1482594	41.163	41.756
Spiked Amount		20.000	Range	30 - 150	Recovery	= 205.82%#	208.78%#
	Target Compounds						
2) A	alpha-BHC	7.47f	7.70f	1659601	7719072	58.213m	56.730m
3) MA	gamma-BHC (Linda	8.42f	8.83f	1700812	7125651	59.169	57.235
4) MA	Heptachlor	9.89	10.18	2057951	5798923	56.682m	53.875m
5) MB	Aldrin	10.78f	11.13	2020176	6739105	56.580	55.644
6) B	beta-BHC	8.69f	9.10f	919141	3236899	57.073m	54.415
7) B	delta-BHC	9.25f	10.02f	860581	4846733	99.828m	83.857m
8) B	Heptachlor Epoxi	12.46f	12.74	2059743	5704568	55.769m	56.250m
9) A	Endosulfan I	13.49	13.77	2172439	5241405	51.666m	57.386m
10) A	gamma-Chlordane	12.80	13.25	2018729	5877298	55.139m	56.850
11) A	alpha-Chlordane	13.13	13.63	4314148	4983232	55.192	56.914
12) B	4,4-DDE	13.39	14.09	998364	5520373	73.202m	56.333m
13) MA	Dieldrin	14.10	14.46	1839684	5515171	56.169m	57.488m
14) MA	Endrin	14.68	15.21	1409781	3994994	55.684	57.266m
15) B	Endosulfan II	15.22	15.72	1684502	4241339	56.225	56.351m
16) A	4,4-DDD	14.88	15.50	785432	3620018	52.792	56.187
17) MA	4,4-DDT	15.52	16.22	933718	2970128	65.079m	61.796m
18) B	Endrin Aldehyde	16.19f	16.51	1210823	2487158	52.747	54.998
19) B	Endosulfan Sulfa	17.17f	17.12	1077886	2605037	73.025m	75.656
20) A	Methoxychlor	16.66f	17.76	549694	1288094	59.763m	60.067
21) B	Endrin Ketone	17.81f	18.32f	1491911	3378490	64.518	63.864m
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

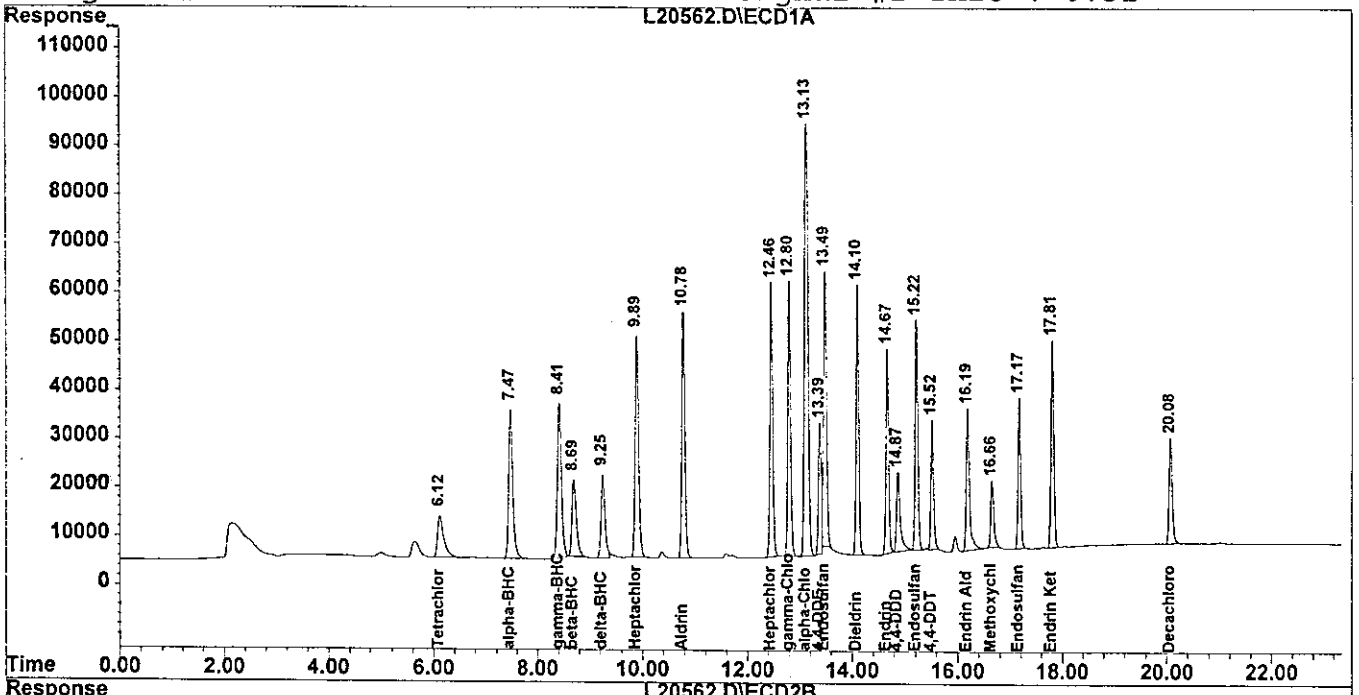
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

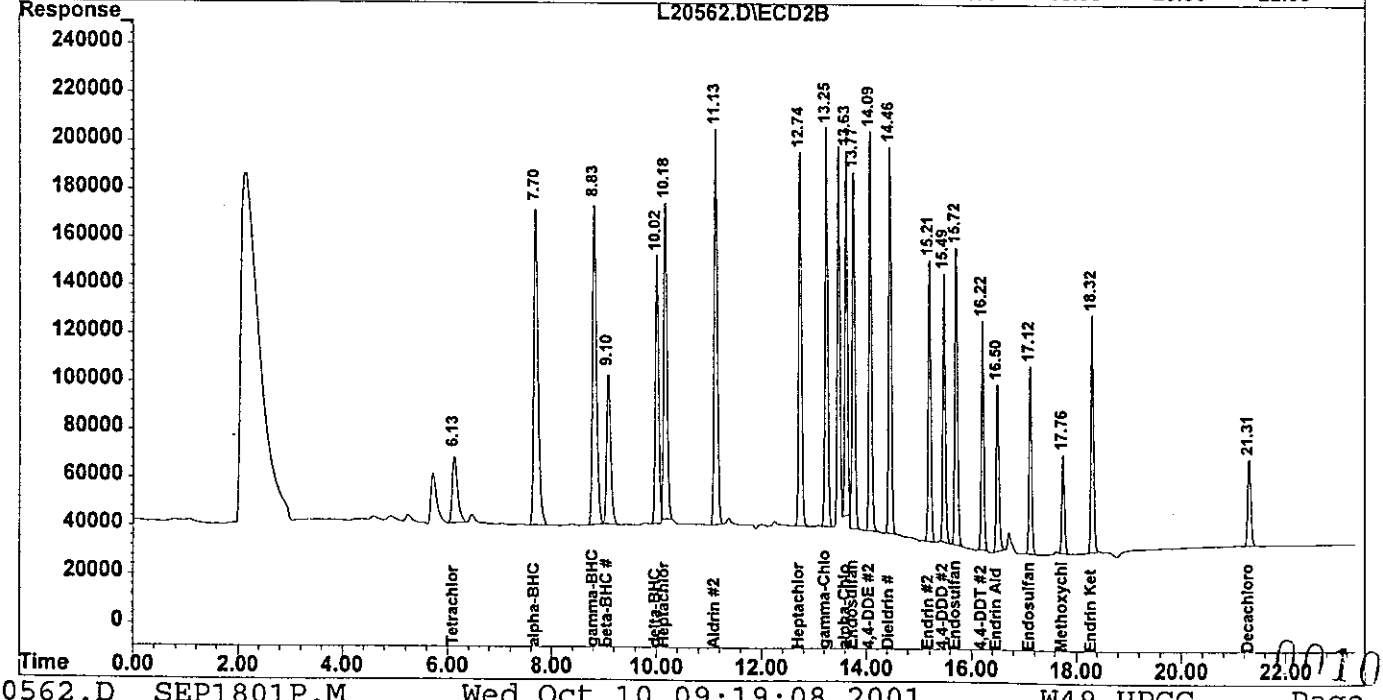
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20562.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\OCT0901\L20562.D\ECD2B.CH
Acq On : 10 Oct 2001 2:48 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 7:45 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001066

% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**4.20**	**3.59**
DDT	**12.55**	**20.06**

	RAW RESPONSE	
ENDRIN KETONE	31067.00	77805.00
ENDRIN ALDEHYDE	32169.00	69511.00
ENDRIN	1441508.00	3958480.00
DDE	98780.00	491584.00
DDD	26576.00	160558.00
DDT	873202.00	2598687.00

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT1001\L20564.D\ECD1A.CH Vial: 1
Signal #2 : H:\GCDATA\L\OCT1001\L20564.D\ECD2B.CH
Acq On : 10 Oct 2001 9:46 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 11:16 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.12f	6.14f	636868	1994814	24.336m	27.919
Spiked Amount 20.000 Range 30 - 150 Recovery =					121.68%	139.60%
22) S Decachlorobiphen	20.09f	21.32f	539223	880084	24.418m	24.787m
Spiked Amount 20.000 Range 30 - 150 Recovery =					122.09%	123.94%
Target Compounds						
12) B 4,4-DDE	13.40f	14.10	98780	491584	7.243m	5.016m#
14) MA Endrin	14.68	15.22	1441508	3958480	56.937m	56.743m
16) A 4,4-DDD	14.88f	15.51	26576	160558	1.786m	2.492m#
17) MA 4,4-DDT	15.53f	16.23f	873202	2598687	60.861	54.068
18) B Endrin Aldehyde	16.21f	16.52f	32169	69511	1.401m	1.537m
21) B Endrin Ketone	17.82f	18.33f	31067	77805	1.343	1.471m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

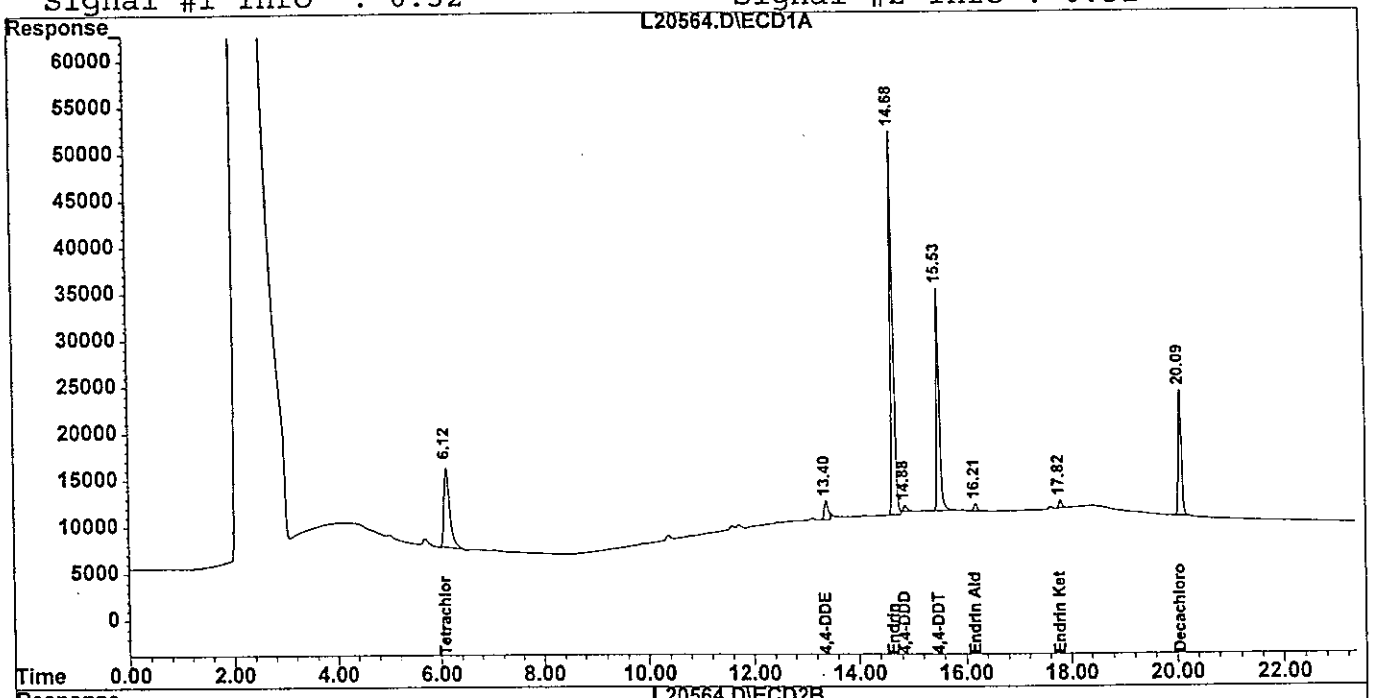
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

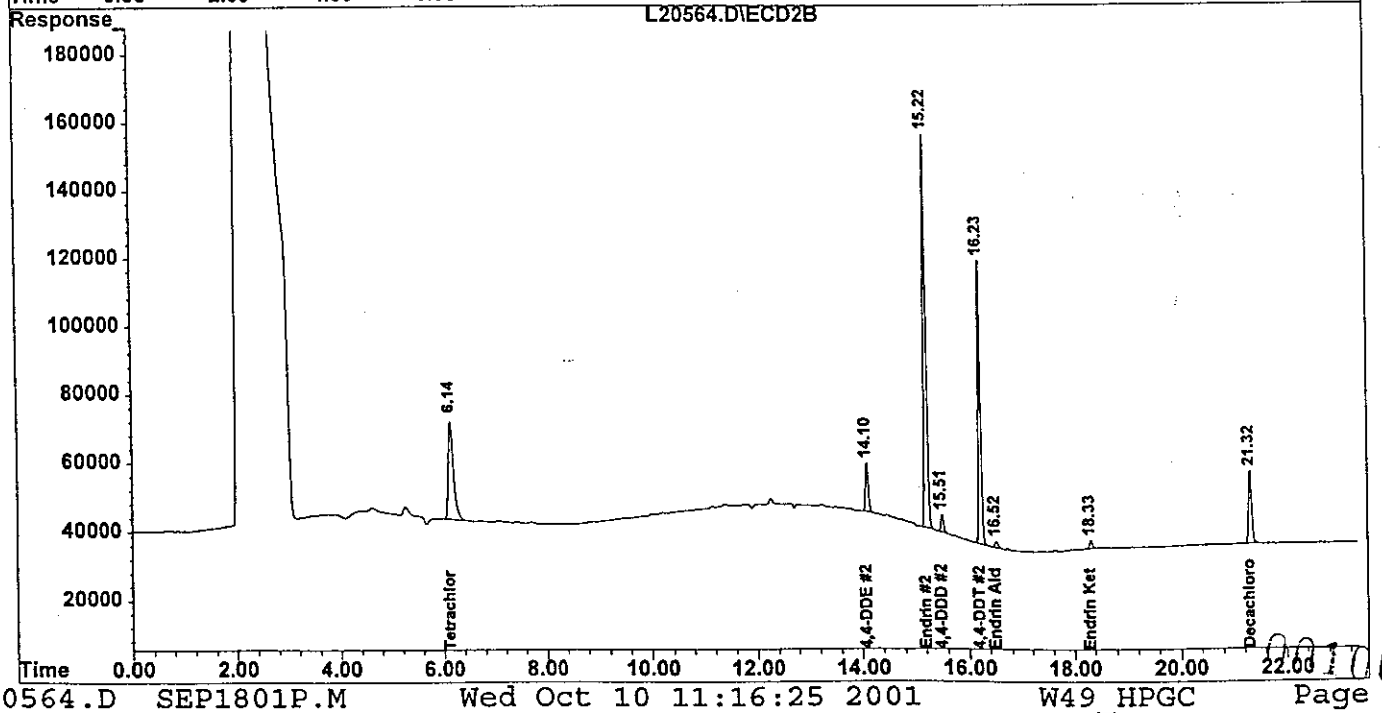
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT1001\L20564.D\ECD1A.CH Vial: 1
Signal #2 : H:\GCDATA\L\OCT1001\L20564.D\ECD2B.CH
Acq On : 10 Oct 2001 9:46 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 11:16 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





0017069

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\OCT1001\L20566.D\ECD1A.CH Vial: 2
Signal #2 : H:\GCDATA\L\OCT1001\L20566.D\ECD2B.CH
Acq On : 10 Oct 2001 12:16 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Fri Oct 12 07:06:08 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	26.170	28.129 E3	-7.5	0#	0.07
2	A	alpha-BHC	28.509	31.936 E3	-12.0	0#	0.08
3	MA	gamma-BHC (Lindane)	28.745	33.022 E3	-14.9	0#	0.10
4	MA	Heptachlor	36.307	38.544 E3	-6.2	0#	0.09
5	MB	Aldrin	35.705	40.532 E3	-13.5	0#	0.09
6	B	beta-BHC	16.105	17.997 E3	-11.7	0#	0.10
7	B	delta-BHC	8.621	15.885 E3	-84.3#	0#	0.10
8	B	Heptachlor Epoxide	36.933	40.735 E3	-10.3	0#	0.08
9	A	Endosulfan I	42.048	44.624 E3	-6.1	0#	0.08
10	A	gamma-Chlordane	36.612	40.644 E3	-11.0	0#	0.09
11	A	alpha-Chlordane	78.166	85.988 E3	-10.0	0#	0.08
12	B	4,4-DDE	13.638	20.089 E3	-47.3#	0#	0.09
13	MA	Dieldrin	32.753	36.660 E3	-11.9	0#	0.08
14	MA	Endrin	25.318	26.651 E3	-5.3	0#	0.09
15	B	Endosulfan II	29.960	33.643 E3	-12.3	0#	0.08
16	A	4,4-DDD	14.878	15.875 E3	-6.7	0#	0.09
17	MA	4,4-DDT	14.347	17.230 E3	-20.1#	0#	0.08
18	B	Endrin Aldehyde	22.955	22.578 E3	1.6	0#	0.09
19	B	Endosulfan Sulfate	14.760	20.980 E3	-42.1#	0#	0.09
20	A	Methoxychlor	9.198	10.314 E3	-12.1	0#	0.09
21	B	Endrin Ketone	23.124	29.009 E3	-25.4#	0#	0.09
22	S	Decachlorobiphenyl	22.083	33.639 E3	-52.3#	0#	0.10

Signal #2

1	S	Tetrachloro-m-xylene	71.450	79.249 E3	-10.9	0#	0.07
2	A	alpha-BHC	136.066	155.547 E3	-14.3	0#	0.09
3	MA	gamma-BHC (Lindane)	124.499	142.710 E3	-14.6	0#	0.09
4	MA	Heptachlor	107.636	104.772 E3	2.7	0#	0.09
5	MB	Aldrin	121.111	136.514 E3	-12.7	0#	0.09
6	B	beta-BHC	59.485	65.414 E3	-10.0	0#	0.09
7	B	delta-BHC	57.798	91.782 E3	-58.8#	0#	0.09
8	B	Heptachlor Epoxide	101.415	105.519 E3	-4.0	0#	0.08
9	A	Endosulfan I	91.335	104.292 E3	-14.2	0#	0.08
10	A	gamma-Chlordane	103.382	117.523 E3	-13.7	0#	0.08
11	A	alpha-Chlordane	87.557	98.812 E3	-12.9	0#	0.08
12	B	4,4-DDE	97.995	110.943 E3	-13.2	0#	0.08
13	MA	Dieldrin	95.936	110.093 E3	-14.8	0#	0.08
14	MA	Endrin	69.762	75.254 E3	-7.9	0#	0.08
15	B	Endosulfan II	75.267	83.903 E3	-11.5	0#	0.08

(#) = Out of Range

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\OCT1001\L20566.D\ECD1A.CH Vial: 2
Signal #2 : H:\GCDATA\L\OCT1001\L20566.D\ECD2B.CH
Acq On : 10 Oct 2001 12:16 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Fri Oct 12 07:06:08 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
16	A	4,4-DDD	64.429	71.341 E3	-10.7	0#	0.08
17	MA	4,4-DDT	48.063	55.196 E3	-14.8	0#	0.08
18	B	Endrin Aldehyde	45.223	47.882 E3	-5.9	0#	0.08
19	B	Endosulfan Sulfate	34.433	48.715 E3	-41.5#	0#	0.08
20	A	Methoxychlor	21.444	22.154 E3	-3.3	0#	0.08
21	B	Endrin Ketone	52.901	64.992 E3	-22.9#	0#	0.08
22	S	Decachlorobiphenyl	35.506	53.945 E3	-51.9#	0#	0.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
L20566.D SEP1801P.M Fri Oct 12 09:44:47 2001 RPT1

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : H:\GCDATA\L\OCT1001\L20566.D\ECD1A.CH Vial: 2
Signal #2 : H:\GCDATA\L\OCT1001\L20566.D\ECD2B.CH
Acq On : 10 Oct 2001 12:16 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Fri Oct 12 07:06:08 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
23	L8 Toxaphene	194.880	0.000	100.0#	0#	-14.39#
24	L8 Toxaphene {2}	789.704	0.000	100.0#	0#	-15.24#
25	L8 Toxaphene {3}	369.936	0.000	100.0#	0#	-16.05#
26	L8 Toxaphene {4}	265.908	0.000	100.0#	0#	-16.56#
27	L8 Toxaphene {5}	531.788	0.000	100.0#	0#	-17.03#
28	L9 Chlordane	2.499	0.000 E3	100.0#	0#	-9.95#
29	L9 Chlordane {2}	2.179	0.000 E3	100.0#	0#	-11.22#
30	L9 Chlordane {3}	4.256	0.000 E3	100.0#	0#	-12.86#
31	L9 Chlordane {4}	6.969	0.000 E3	100.0#	0#	-13.19#
32	L9 Chlordane {5}	1.233	0.000 E3	100.0#	0#	-15.12#

Signal #2

23	L8 Toxaphene	255.368	0.000	100.0#	0#	-14.62#
24	L8 Toxaphene {2}	384.094	0.000	100.0#	0#	-15.65#
25	L8 Toxaphene {3}	501.120	0.000	100.0#	0#	-16.39#
26	L8 Toxaphene {4}	1.317	0.000 E3	100.0#	0#	-16.57#
27	L8 Toxaphene {5}	1.039	0.000 E3	100.0#	0#	-17.72#
28	L9 Chlordane	7.738	0.000 E3	100.0#	0#	-10.24#
29	L9 Chlordane {2}	4.804	0.000 E3	100.0#	0#	-11.64#
30	L9 Chlordane {3}	10.571	0.000 E3	100.0#	0#	-13.30#
31	L9 Chlordane {4}	9.125	0.000 E3	100.0#	0#	-13.54#
32	L9 Chlordane {5}	3.103	0.000 E3	100.0#	0#	-15.88#

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT1001\L20566.D\ECD1A.CH Vial: 2
Signal #2 : H:\GCDATA\L\OCT1001\L20566.D\ECD2B.CH
Acq On : 10 Oct 2001 12:16 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 13:01 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	6.12f	6.14f	703228	1981236	26.872	27.729
Spiked Amount	20.000 Range	30 - 150		Recovery	=	134.36%	138.65%
22) S	Decachlorobiphen	20.08f	21.30f	840982	1348634	38.082m	37.983m
Spiked Amount	20.000 Range	30 - 150		Recovery	=	190.41%#	189.92%#
	Target Compounds						
2) A	alpha-BHC	7.48f	7.70f	1596816	7777338	56.010m	57.158
3) MA	gamma-BHC (Linda	8.42f	8.82	1651110	7135476	57.440	57.314
4) MA	Heptachlor	9.89	10.18	1927219	5238605	53.081m	48.670m
5) MB	Aldrin	10.78f	11.13	2026616	6825712	56.761	56.359m
6) B	beta-BHC	8.70f	9.09	899855	3270703	55.875m	54.983m
7) B	delta-BHC	9.25f	10.01	794239	4589083	92.132	79.399m
8) B	Heptachlor Epoxi	12.45	12.74	2036742	5275957	55.147m	52.023
9) A	Endosulfan I	13.49	13.76	2231205	5214620	53.064m	57.093m
10) A	gamma-Chlordane	12.80	13.25	2032216	5876145	55.507	56.839
11) A	alpha-Chlordane	13.13	13.63	4299406	4940616	55.004	56.427
12) B	4,4-DDE	13.39	14.08	1004442	5547156	73.648m	56.606
13) MA	Dieldrin	14.10	14.46	1832984	5504667	55.964m	57.379m
14) MA	Endrin	14.67	15.21	1332560	3762684	52.634	53.936
15) B	Endosulfan II	15.22	15.72	1682171	4195145	56.147	55.737m
16) A	4,4-DDD	14.88	15.49	793747	3567057	53.351	55.365
17) MA	4,4-DDT	15.52	16.21	861515	2759807	60.047m	57.421
18) B	Endrin Aldehyde	16.19	16.50	1128880	2394118	49.178m	52.941
19) B	Endosulfan Sulfa	17.17f	17.12	1049019	2435760	71.069	70.739
20) A	Methoxychlor	16.66f	17.76	515700	1107708	56.067	51.655
21) B	Endrin Ketone	17.81f	18.31f	1450442	3249577	62.725	61.427m
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

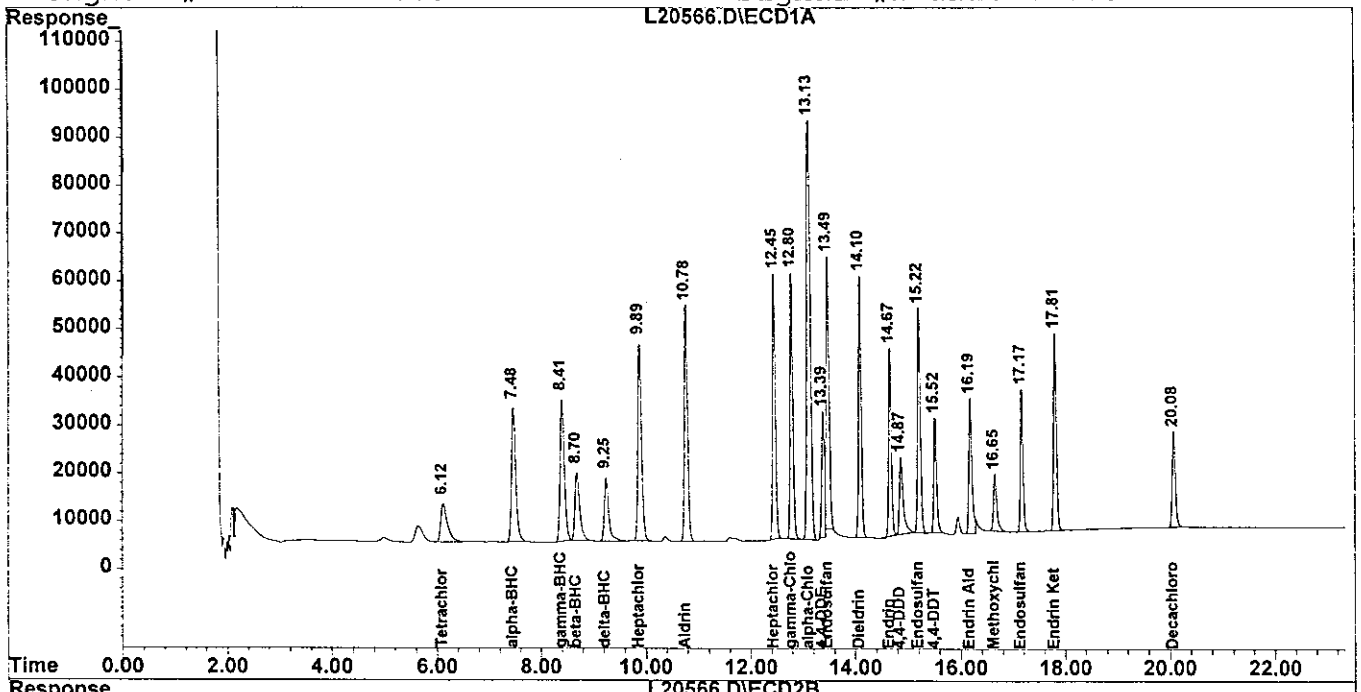
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

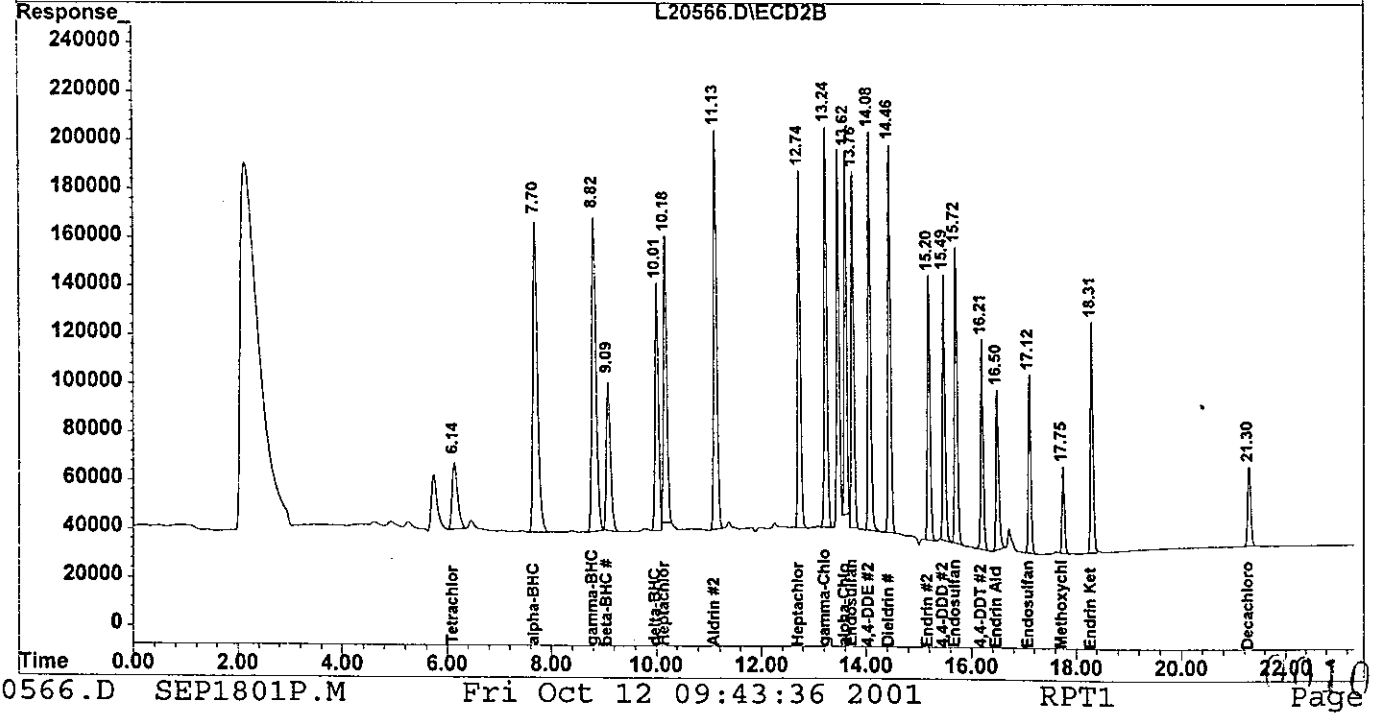
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT1001\L20566.D\ECD1A.CH Vial: 2
Signal #2 : H:\GCDATA\L\OCT1001\L20566.D\ECD2B.CH
Acq On : 10 Oct 2001 12:16 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 13:01 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\OCT1001\L20579.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\OCT1001\L20579.D\ECD2B.CH
Acq On : 10 Oct 2001 18:40 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Fri Oct 12 07:06:08 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	26.170	27.641 E3	-5.6	0#	0.06
2	A	alpha-BHC	28.509	37.493 E3	-31.5#	0#	0.09
3	MA	gamma-BHC (Lindane)	28.745	37.110 E3	-29.1#	0#	0.10
4	MA	Heptachlor	36.307	38.920 E3	-7.2	0#	0.09
5	MB	Aldrin	35.705	41.414 E3	-16.0#	0#	0.09
6	B	beta-BHC	16.105	20.212 E3	-25.5#	0#	0.09
7	B	delta-BHC	8.621	25.605 E3	-197.0#	0#	0.10
8	B	Heptachlor Epoxide	36.933	41.672 E3	-12.8	0#	0.09
9	A	Endosulfan I	42.048	41.220 E3	2.0	0#	0.09
10	A	gamma-Chlordane	36.612	40.929 E3	-11.8	0#	0.09
11	A	alpha-Chlordane	78.166	86.808 E3	-11.1	0#	0.09
12	B	4,4-DDE	13.638	23.381 E3	-71.4#	0#	0.08
13	MA	Dieldrin	32.753	36.496 E3	-11.4	0#	0.09
14	MA	Endrin	25.318	28.331 E3	-11.9	0#	0.09
15	B	Endosulfan II	29.960	33.902 E3	-13.2	0#	0.09
16	A	4,4-DDD	14.878	25.093 E3	-68.7#	0#	0.08
17	MA	4,4-DDT	14.347	7.162 E3	50.1#	0#	0.08
18	B	Endrin Aldehyde	22.955	24.931 E3	-8.6	0#	0.09
19	B	Endosulfan Sulfate	14.760	25.429 E3	-72.3#	0#	0.09
20	A	Methoxychlor	9.198	4.578 E3	50.2#	0#	0.08
21	B	Endrin Ketone	23.124	24.920 E3	-7.8	0#	0.09
22	S	Decachlorobiphenyl	22.083	32.455 E3	-47.0#	0#	0.10

Signal #2

1	S	Tetrachloro-m-xylene	71.450	78.464 E3	-9.8	0#	0.07
2	A	alpha-BHC	136.066	162.711 E3	-19.6#	0#	0.09
3	MA	gamma-BHC (Lindane)	124.499	146.864 E3	-18.0#	0#	0.10
4	MA	Heptachlor	107.636	107.673 E3	-0.0	0#	0.09
5	MB	Aldrin	121.111	134.052 E3	-10.7	0#	0.09
6	B	beta-BHC	59.485	66.442 E3	-11.7	0#	0.10
7	B	delta-BHC	57.798	120.963 E3	-109.3#	0#	0.10
8	B	Heptachlor Epoxide	101.415	114.331 E3	-12.7	0#	0.09
9	A	Endosulfan I	91.335	101.894 E3	-11.6	0#	0.09
10	A	gamma-Chlordane	103.382	113.008 E3	-9.3	0#	0.09
11	A	alpha-Chlordane	87.557	96.247 E3	-9.9	0#	0.09
12	B	4,4-DDE	97.995	103.065 E3	-5.2	0#	0.08
13	MA	Dieldrin	95.936	108.076 E3	-12.7	0#	0.09
14	MA	Endrin	69.762	75.948 E3	-8.9	0#	0.09
15	B	Endosulfan II	75.267	91.389 E3	-21.4#	0#	0.09

(#) = Out of Range

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\OCT1001\L20579.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\OCT1001\L20579.D\ECD2B.CH
Acq On : 10 Oct 2001 18:40 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Fri Oct 12 07:06:08 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
16	A	4,4-DDD	64.429	93.617 E3	-45.3#	0#	0.08
17	MA	4,4-DDT	48.063	25.101 E3	47.8#	0#	0.08
18	B	Endrin Aldehyde	45.223	50.133 E3	-10.9	0#	0.09
19	B	Endosulfan Sulfate	34.433	58.294 E3	-69.3#	0#	0.09
20	A	Methoxychlor	21.444	9.927 E3	53.7#	0#	0.08
21	B	Endrin Ketone	52.901	56.332 E3	-6.5	0#	0.09
22	S	Decachlorobiphenyl	35.506	52.250 E3	-47.2#	0#	0.12

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : H:\GCDATA\L\OCT1001\L20579.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\OCT1001\L20579.D\ECD2B.CH
Acq On : 10 Oct 2001 18:40 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Fri Oct 12 07:06:08 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
23	L8 Toxaphene	194.880	0.000	100.0#	0#	-14.39#
24	L8 Toxaphene {2}	789.704	0.000	100.0#	0#	-15.24#
25	L8 Toxaphene {3}	369.936	0.000	100.0#	0#	-16.05#
26	L8 Toxaphene {4}	265.908	0.000	100.0#	0#	-16.56#
27	L8 Toxaphene {5}	531.788	0.000	100.0#	0#	-17.03#
28	L9 Chlordane	2.499	0.000 E3	100.0#	0#	-9.95#
29	L9 Chlordane {2}	2.179	0.000 E3	100.0#	0#	-11.22#
30	L9 Chlordane {3}	4.256	0.000 E3	100.0#	0#	-12.86#
31	L9 Chlordane {4}	6.969	0.000 E3	100.0#	0#	-13.19#
32	L9 Chlordane {5}	1.233	0.000 E3	100.0#	0#	-15.12#

Signal #2

23	L8 Toxaphene	255.368	0.000	100.0#	0#	-14.62#
24	L8 Toxaphene {2}	384.094	0.000	100.0#	0#	-15.65#
25	L8 Toxaphene {3}	501.120	0.000	100.0#	0#	-16.39#
26	L8 Toxaphene {4}	1.317	0.000 E3	100.0#	0#	-16.57#
27	L8 Toxaphene {5}	1.039	0.000 E3	100.0#	0#	-17.72#
28	L9 Chlordane	7.738	0.000 E3	100.0#	0#	-10.24#
29	L9 Chlordane {2}	4.804	0.000 E3	100.0#	0#	-11.64#
30	L9 Chlordane {3}	10.571	0.000 E3	100.0#	0#	-13.30#
31	L9 Chlordane {4}	9.125	0.000 E3	100.0#	0#	-13.54#
32	L9 Chlordane {5}	3.103	0.000 E3	100.0#	0#	-15.88#

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT1001\L20579.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\OCT1001\L20579.D\ECD2B.CH
Acq On : 10 Oct 2001 18:40 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 11 8:38 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.12f	6.14f	691034	1961604	26.406m	27.454
Spiked Amount		20.000 Range 30 - 150 Recovery =					132.03%	137.27%
22)	S	Decachlorobiphen	20.08f	21.31f	811368	1306242	36.741m	36.789m
Spiked Amount		20.000 Range 30 - 150 Recovery =					183.71%#	183.95%#
		Target Compounds						
2)	A	alpha-BHC	7.48f	7.70f	1874674	8135541	65.757m	59.791m
3)	MA	gamma-BHC (Linda	8.41f	8.83f	1855502	7343215	64.551m	58.982m
4)	MA	Heptachlor	9.89	10.18	1946021	5383662	53.599m	50.017m
5)	MB	Aldrin	10.78f	11.13	2070721	6702587	57.996	55.342m
6)	B	beta-BHC	8.69f	9.10f	1010595	3322090	62.751m	55.847m
7)	B	delta-BHC	9.25f	10.02f	1280264	6048134	148.512m	104.643m#
8)	B	Heptachlor Epoxi	12.46f	12.74	2083588	5716548	56.415m	56.368m
9)	A	Endosulfan I	13.49	13.77	2060993	5094696	49.015m	55.780m
10)	A	gamma-Chlordane	12.80	13.25	2046462	5650399	55.896m	54.655
11)	A	alpha-Chlordane	13.13	13.63	4340385	4812367	55.528	54.963
12)	B	4,4-DDE	13.38	14.09	1169056	5153241	85.717m	52.587m#
13)	MA	Dieldrin	14.11	14.47	1824808	5403802	55.714	56.327m
14)	MA	Endrin	14.68	15.21	1416543	3797405	55.951m	54.434
15)	B	Endosulfan II	15.22	15.72	1695111	4569435	56.579	60.710m
16)	A	4,4-DDD	14.86	15.49	1254650	4680867	84.331m	72.652m
17)	MA	4,4-DDT	15.52	16.22	358119	1255038	24.960m	26.112m
18)	B	Endrin Aldehyde	16.19f	16.51	1246559	2506668	54.304	55.430
19)	B	Endosulfan Sulfa	17.17f	17.12	1271454	2914704	86.139	84.649m
20)	A	Methoxychlor	16.65	17.76	228916	496337	24.888m	23.145
21)	B	Endrin Ketone	17.81f	18.32f	1246010	2816586	53.884	53.243m
		Sum Toxaphene			0	0	N.D.	N.D.
		Average Toxaphene					0.000	0.000
		Sum Chlordane			0	0	N.D.	N.D.
		Average Chlordane					0.000	0.000

001078

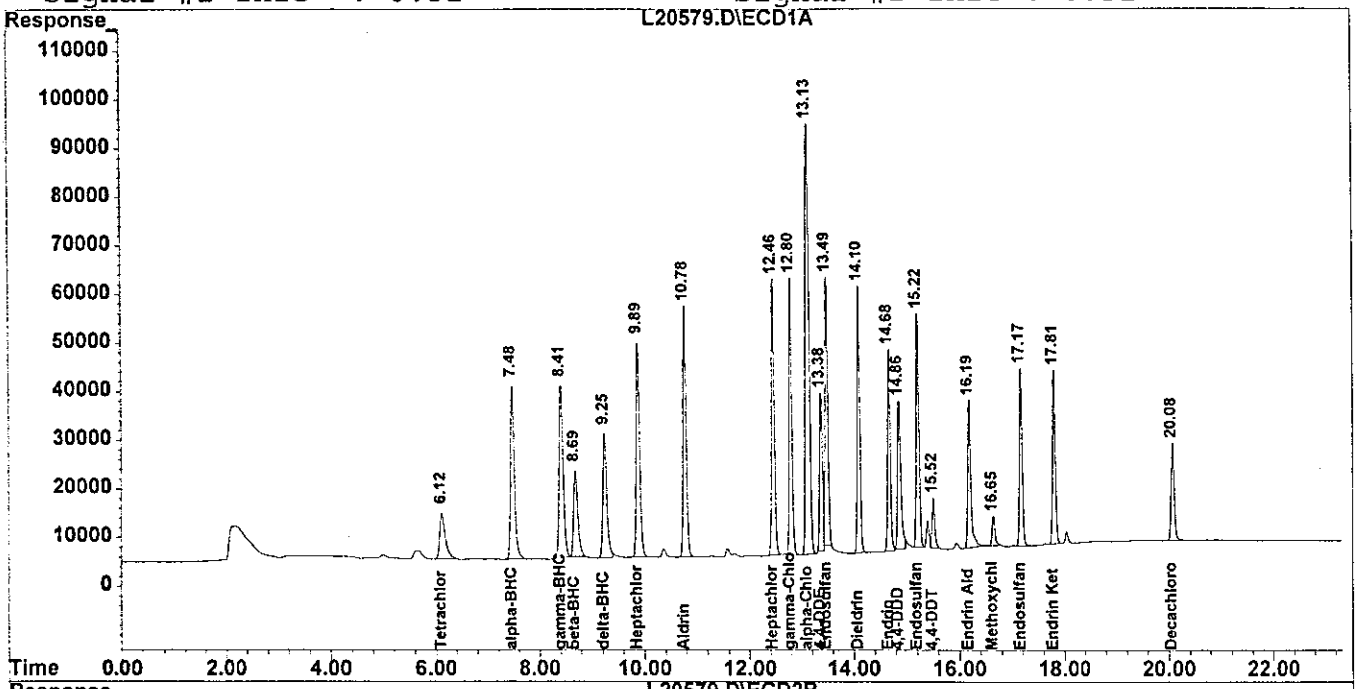
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

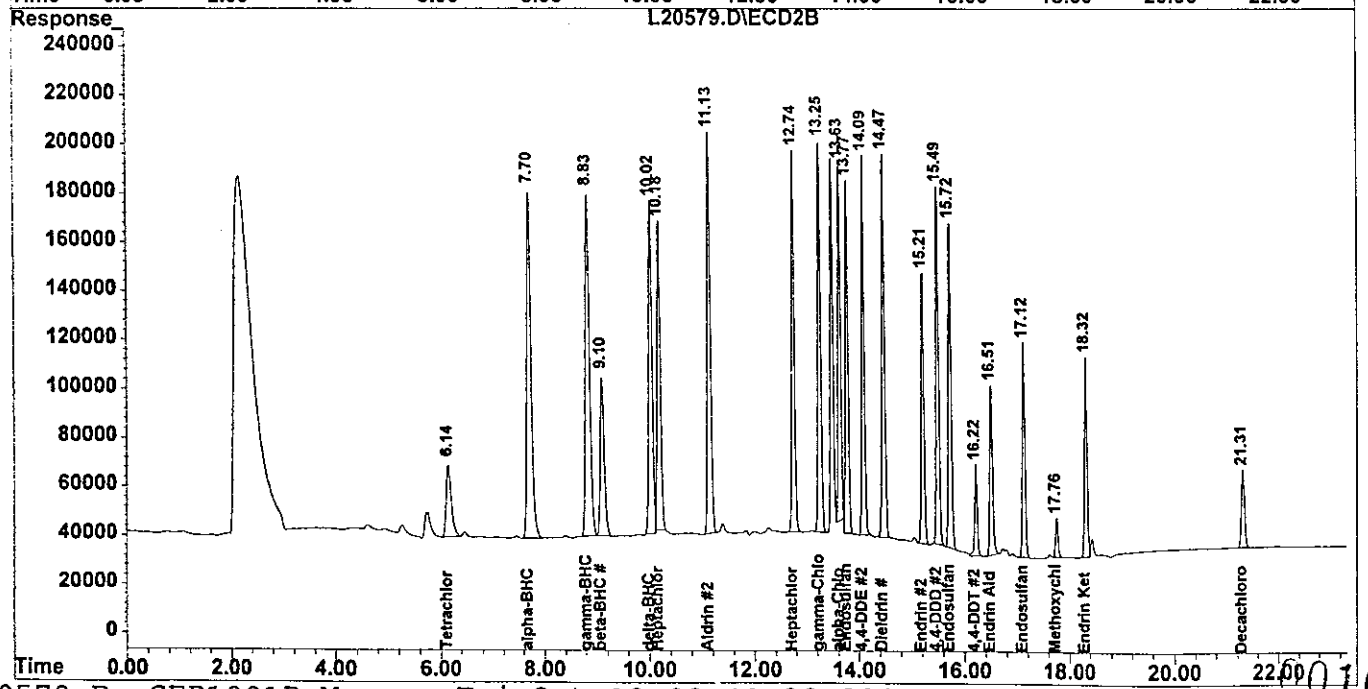
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT1001\L20579.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\OCT1001\L20579.D\ECD2B.CH
Acq On : 10 Oct 2001 18:40 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 11 8:38 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





D. Raw QC Data

1. Blank Data
2. Matrix Spike Data
3. Matrix Spike Duplicate Data
4. Laboratory Control Standard Data (where applicable)
5. Extraction Logsheet
6. Injection Logsheet
7. Retention time windows

GPL Laboratories, LLLP

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK14282

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: BLK14282

Sample wt/vol: 1000 (g/ml) ML Lab File ID: L20551.D

% Moisture: _____ decanted:(Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/09/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
5103-71-9	alpha-Chlordane	0.050	U
72-55-9	4,4-DDE	0.050	U
60-57-1	Dieldrin	0.050	U
72-20-8	Endrin	0.050	U
33213-65-9	Endosulfan II	0.050	U
72-54-8	4,4-DDD	0.050	U
50-29-3	4,4-DDT	0.050	U
7421-93-4	Endrin Aldehyde	0.050	U
1031-07-8	Endosulfan Sulfate	0.050	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin Ketone	0.050	U
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20551.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\L\OCT0901\L20551.D\ECD2B.CH
Acq On : 9 Oct 2001 21:48 Operator: PY
Sample : BLK14282 Inst : GC-L
Misc : 8081A-W-BLK. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:01 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	6.13f	6.15f	420122	1347323	16.054m	18.857m
Spiked Amount 20.000 Range 30 - 150 Recovery =					80.27%	94.29%
22) S Decachlorobiphen	20.09f	21.32f	571965	925588	25.900m	26.068m
Spiked Amount 20.000 Range 30 - 150 Recovery =					129.50%	130.34%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

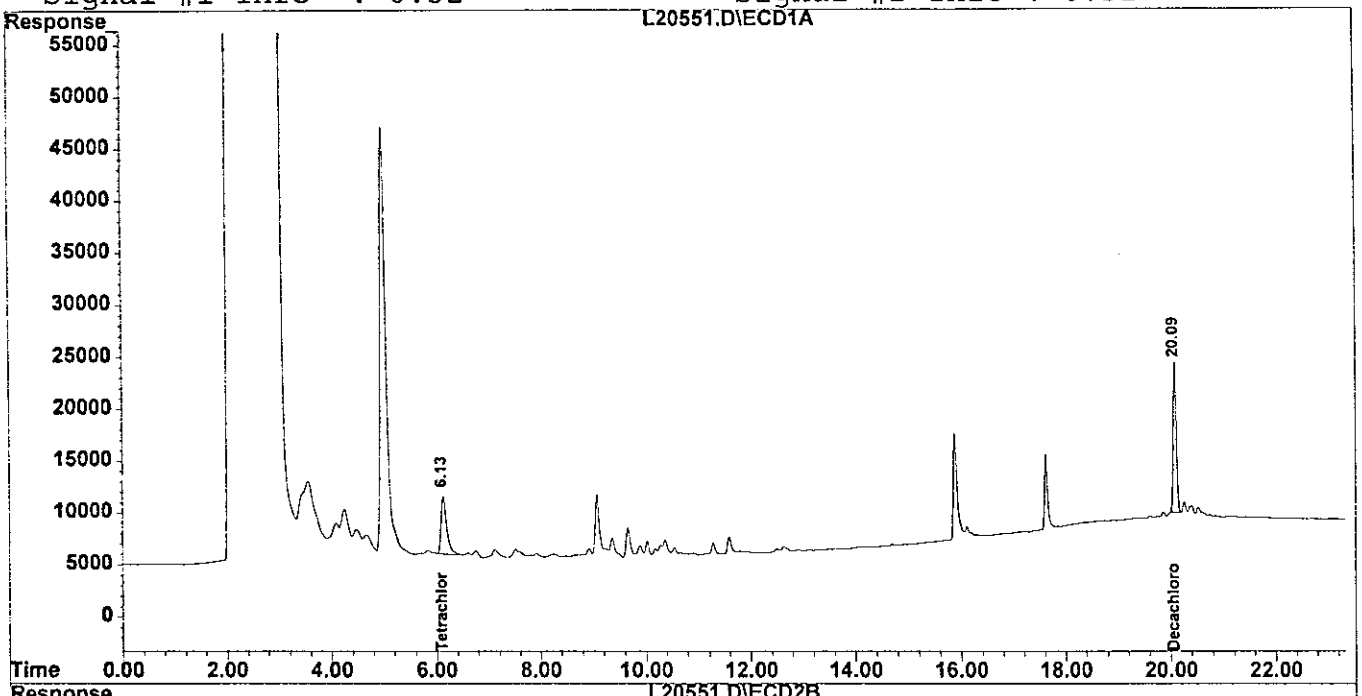
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
L20551.D SEP1801P.M Wed Oct 10 09:17:52 2001 W49_HPGC Page 1

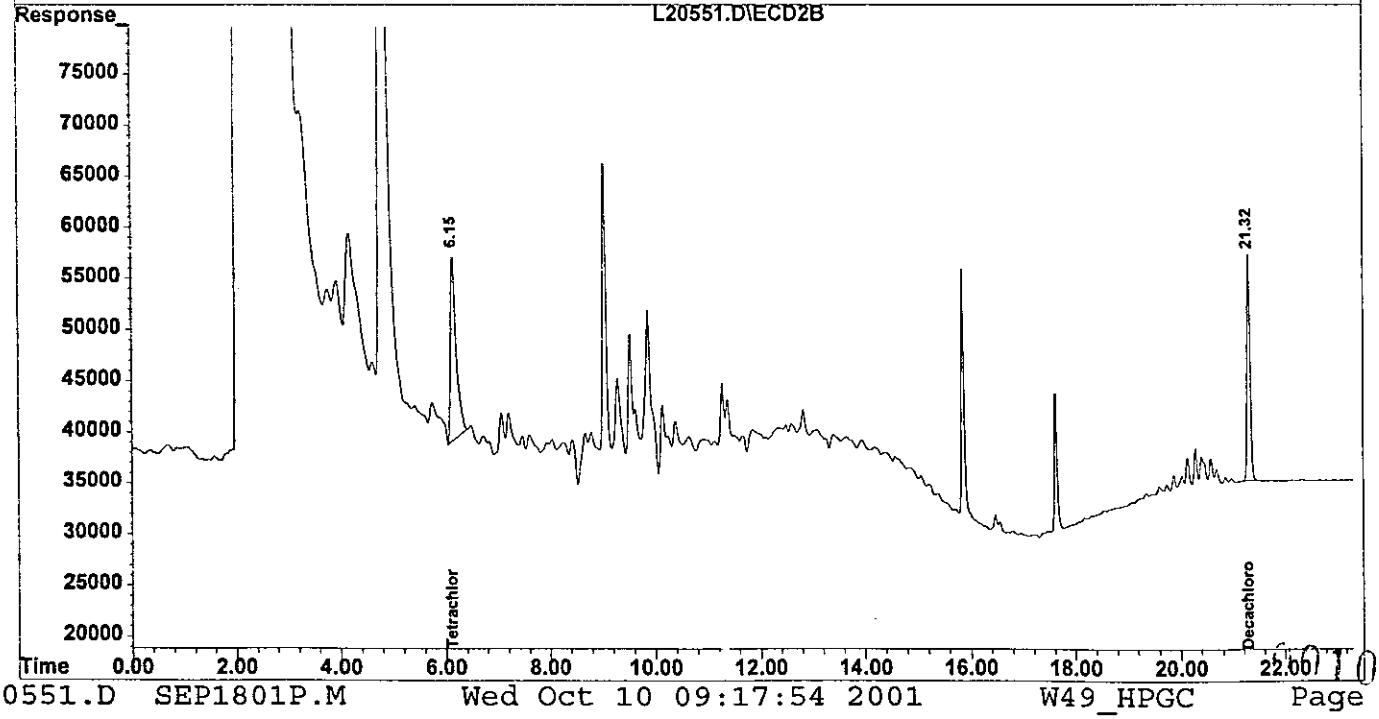
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20551.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\L\OCT0901\L20551.D\ECD2B.CH
Acq On : 9 Oct 2001 21:48 Operator: PY
Sample : BLK14282 Inst : GC-L
Misc : 8081A-W-BLK. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:01 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C07-MW03S-Q3-01 MS

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 109160-002-01-1/1 MS

Sample wt/vol: 700 (g/ml) ML Lab File ID: L20555.D

% Moisture: _____ decanted:(Y/N) N Date Received: 09/27/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/09/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.71 ~~0.87~~ X	
58-89-9	gamma-BHC (Lindane)	0.72 ~~0.84~~ X	
76-44-8	Heptachlor	0.87 ~~0.94~~ X	
309-00-2	Aldrin	0.85	
319-85-7	beta-BHC	1.2	
319-86-8	delta-BHC	0.39	
1024-57-3	Heptachlor Epoxide	0.85	
959-98-8	Endosulfan I	0.81	
5103-74-2	gamma-Chlordane	0.83	
5103-71-9	alpha-Chlordane	0.87	
72-55-9	4,4-DDE	0.84 ~~1.7~~ X	EP
60-57-1	Dieldrin	0.84	
72-20-8	Endrin	0.95	
33213-65-9	Endosulfan II	0.86	
72-54-8	4,4-DDD	0.97	
50-29-3	4,4-DDT	1.2	
7421-93-4	Endrin Aldehyde	0.90	
1031-07-8	Endosulfan Sulfate	0.94	
72-43-5	Methoxychlor	1.2	
53494-70-5	Endrin Ketone	0.98	
12789-03-6	Chlordane	1.4	U
8001-35-2	Toxaphene	1.4	U

mp 10/10/01

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20555.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\L\OCT0901\L20555.D\ECD2B.CH
Acq On : 9 Oct 2001 23:37 Operator: PY
Sample : 109160-002-01-1/1 MS Inst : GC-L
Misc : 8081A-W-007-MW03S-Q3-01 MS Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:37 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	6.12f	6.14f	582805	1483809	22.270m	20.767
Spiked Amount	20.000 Range 30 - 150 Recovery =					111.35%	103.84%
22) S	Decachlorobiphen	20.08f	21.31f	665066	1239262	30.116m	34.903m
Spiked Amount	20.000 Range 30 - 150 Recovery =					150.58%#	174.52%#
	Target Compounds						
2) A	alpha-BHC	7.48f	7.70f	1738866	6735068	60.993	49.498
3) MA	gamma-BHC (Linda	8.42f	8.83f	1692226	6316569	58.871	50.736
4) MA	Heptachlor	9.89	10.18	2397912	6552544	66.046m	60.877
5) MB	Aldrin	10.78f	11.13	2131642	6209853	59.702	51.274m
6) B	beta-BHC	8.69f	9.08	1026202	5184625	63.721	87.158 #
7) B	delta-BHC	9.24f	10.02f	233516	1348714	27.088m	23.335
8) B	Heptachlor Epoxi	12.46f	12.74	2204664	5836290	59.693	57.549m
9) A	Endosulfan I	13.49	13.77	2143797	5206159	50.985m	57.001m
10) A	gamma-Chlordane	12.80	13.25	2123369	5941069	57.997m	57.467
11) A	alpha-Chlordane	13.15f	13.63	2178204	5324794	27.867	60.815m#
12) B	4,4-DDE	13.37	14.09	1663419	5781611	121.965m	58.999 #
13) MA	Dieldrin	14.11	14.46	1918046	5354992	58.561	55.819m
14) MA	Endrin	14.68	15.21	1680545	4497181	66.379	64.465
15) B	Endosulfan II	15.22	15.72	1799682	4376878	60.069	58.152m
16) A	4,4-DDD	14.86	15.49	1010463	3620059	67.918	56.187m
17) MA	4,4-DDT	15.52	16.22	1217382	3304777	84.850	68.759
18) B	Endrin Aldehyde	16.19f	16.50	1003654	2842521	43.722m	62.856 #
19) B	Endosulfan Sulfa	17.17f	17.12	959927	2275934	65.034m	66.098
20) A	Methoxychlor	16.64	17.76	751068	1527320	81.657m	71.223m
21) B	Endrin Ketone	17.81f	18.32f	1592620	3495001	68.873	66.067m
Sum	Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

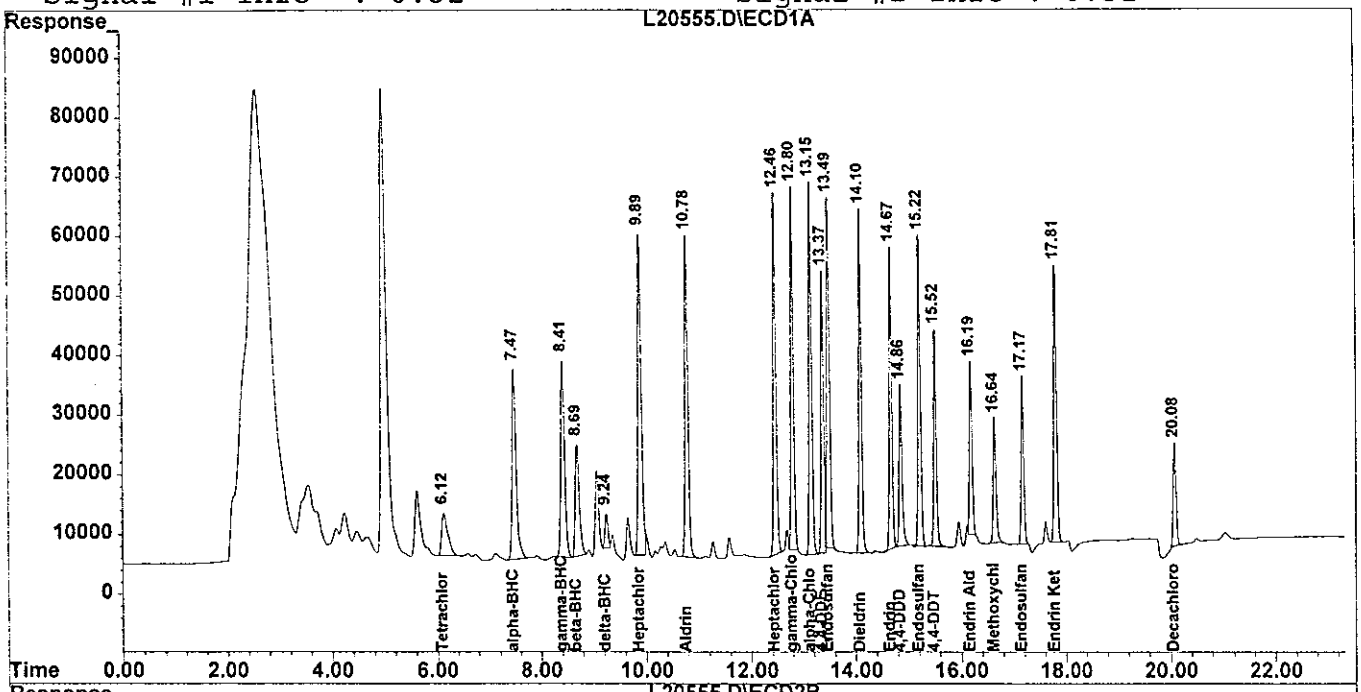
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

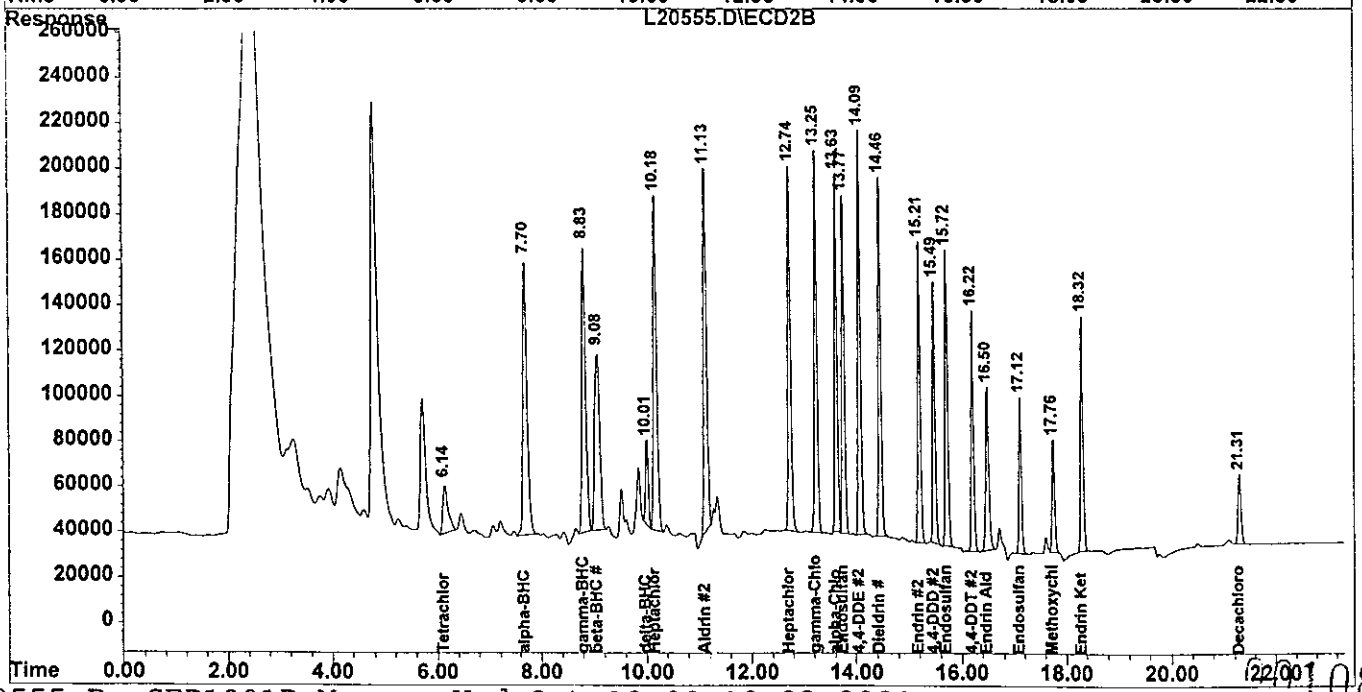
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20555.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\L\OCT0901\L20555.D\ECD2B.CH
Acq On : 9 Oct 2001 23:37 Operator: PY
Sample : 109160-002-01-1/1 MS Inst : GC-L
Misc : 8081A-W-007-MW03S-Q3-01 MS Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:37 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C07-MW03S-Q3-01 MS D

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 109160-002-01-1/1 MSD

Sample wt/vol: 700 (g/ml) ML Lab File ID: L20556.D

% Moisture: decanted:(Y/N) N Date Received: 09/27/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/10/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.98 ~~1.3~~ *	P
58-89-9	gamma-BHC (Lindane)	1.00 ~~1.3~~ *	P
76-44-8	Heptachlor	1.16 ~~1.4~~ *	
309-00-2	Aldrin	1.2	
319-85-7	beta-BHC	1.3	
319-86-8	delta-BHC	0.71	P
1024-57-3	Heptachlor Epoxide	1.2	
959-98-8	Endosulfan I	1.1	
5103-74-2	gamma-Chlordane	1.2	
5103-71-9	alpha-Chlordane	1.1	
72-55-9	4,4-DDE	1.13 ~~2.5~~ *	EP
60-57-1	Dieldrin	1.2	
72-20-8	Endrin	1.3	
33213-65-9	Endosulfan II	1.2	
72-54-8	4,4-DDD	1.5	EP
50-29-3	4,4-DDT	1.8	EP
7421-93-4	Endrin Aldehyde	1.2	
1031-07-8	Endosulfan Sulfate	1.4	
72-43-5	Methoxychlor	1.7	E
53494-70-5	Endrin Ketone	1.4	
12789-03-6	Chlordane	1.4	U
8001-35-2	Toxaphene	1.4	U

mp 10/10/01

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20556.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\L\OCT0901\L20556.D\ECD2B.CH
Acq On : 10 Oct 2001 00:05 Operator: PY
Sample : 109160-002-01-1/1 MSD Inst : GC-L
Misc : 8081A-W-007-MW03S-Q3-01 MSD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:41 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	6.11	6.13	831843	1964154	31.787m	27.490
Spiked Amount		20.000	Range 30 - 150		Recovery =	158.94%#	137.45%
22) S	Decachlorobiphen	20.08f	21.31f	852716	1665934	38.614m	46.920m
Spiked Amount		20.000	Range 30 - 150		Recovery =	193.07%#	234.60%#
	Target Compounds						
2) A	alpha-BHC	7.47f	7.69f	2612158	9362018	91.625	68.805
3) MA	gamma-BHC (Linda	8.41f	8.82	2620210	8722621	91.154m	70.062
4) MA	Heptachlor	9.89	10.18	3461725	8726453	95.346	81.074
5) MB	Aldrin	10.78f	11.13	3062224	8617784	85.765m	71.156m
6) B	beta-BHC	8.69f	9.09	1484830	5522988	92.198	92.846
7) B	delta-BHC	9.24f	10.01	427074	2157263	49.541m	37.324
8) B	Heptachlor Epoxi	12.46f	12.74	3070232	7793744	83.129	76.850m
9) A	Endosulfan I	13.49	13.77	2965861	7011043	70.535m	76.762m
10) A	gamma-Chlordane	12.80	13.25	2975986	7978328	81.285	77.173
11) A	alpha-Chlordane	13.15f	13.63	2996188	6918817	38.331	79.020 #
12) B	4,4-DDE	13.37	14.09	2402966	7739897	176.190m	78.982 #
13) MA	Dieldrin	14.10	14.46	2704793	7295723	82.582	76.048m
14) MA	Endrin	14.68	15.21	2371902	6145294	93.686	88.090
15) B	Endosulfan II	15.22	15.72	2511183	5988632	83.818	79.566
16) A	4,4-DDD	14.86	15.49	1531496	5043141	102.939	78.275
17) MA	4,4-DDT	15.52	16.22	1766988	4687850	123.157m	97.535
18) B	Endrin Aldehyde	16.19	16.50	1615425	3772923	70.373m	83.430m
19) B	Endosulfan Sulfa	17.17f	17.12	1426451	3307421	96.640m	96.054m
20) A	Methoxychlor	16.64	17.76	1089887	2176800	118.493	101.509m
21) B	Endrin Ketone	17.81f	18.32f	2312091	5007612	99.987	94.660m
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

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

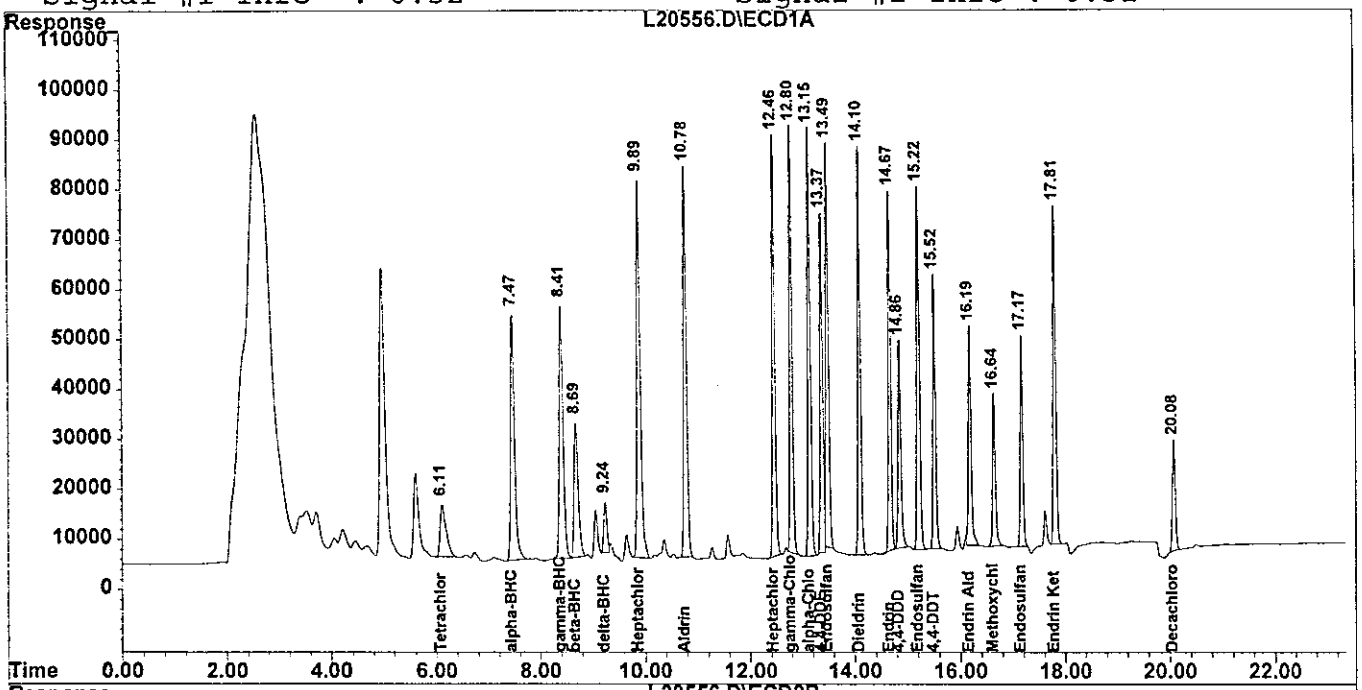
011088

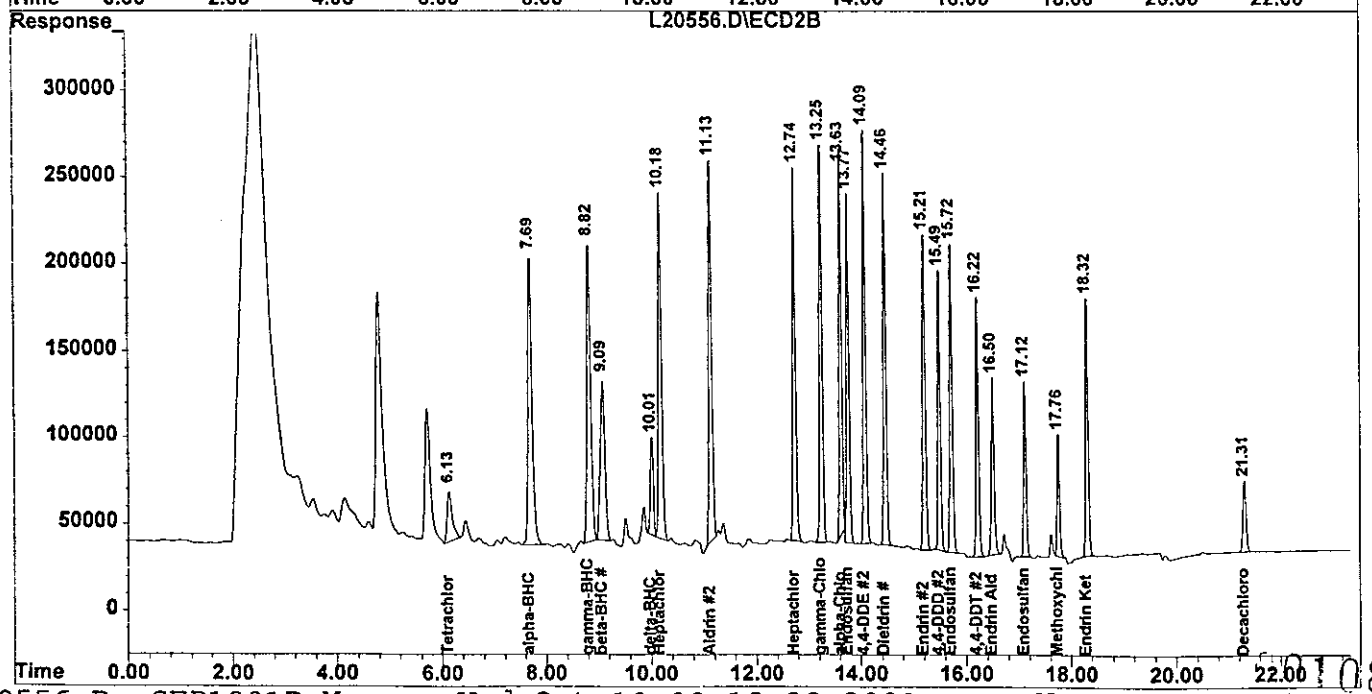
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20556.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\L\OCT0901\L20556.D\ECD2B.CH
Acq On : 10 Oct 2001 00:05 Operator: PY
Sample : 109160-002-01-1/1 MSD Inst : GC-L
Misc : 8081A-W-007-MW03S-Q3-01 MSD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:41 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKS14282

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPL Case No.: 109160 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: BKS14282

Sample wt/vol: 1000 (g/ml) ML Lab File ID: L20552.D

% Moisture: _____ decanted:(Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 10/01/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/09/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.47 ~~0.51~~ *	
58-89-9	gamma-BHC (Lindane)	0.48 ~~0.53~~ *	
76-44-8	Heptachlor	0.53 ~~0.59~~ *	
309-00-2	Aldrin	0.52	
319-85-7	beta-BHC	0.61	
319-86-8	delta-BHC	0.47	
1024-57-3	Heptachlor Epoxide	0.53	
959-98-8	Endosulfan I	0.52	
5103-74-2	gamma-Chlordane	0.53	
5103-71-9	alpha-Chlordane	0.53	
72-55-9	4,4-DDE	0.53 ~~1.0~~ *	EP
60-57-1	Dieldrin	0.52	
72-20-8	Endrin	0.58	
33213-65-9	Endosulfan II	0.57	
72-54-8	4,4-DDD	0.58	
50-29-3	4,4-DDT	0.67	
7421-93-4	Endrin Aldehyde	0.58	
1031-07-8	Endosulfan Sulfate	0.63	
72-43-5	Methoxychlor	0.66	
53494-70-5	Endrin Ketone	0.63	
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

mp 10/16/01

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\OCT0901\L20552.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\L\OCT0901\L20552.D\ECD2B.CH
Acq On : 9 Oct 2001 22:15 Operator: PY
Sample : BKS14282 Inst : GC-L
Misc : 8081A-W-BLK.LCS. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:06 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	6.12f	6.14f	495661	1397142	18.940m	19.554
Spiked Amount			20.000	Range	30 - 150	Recovery	= 94.70%	97.77%
22)	S	Decachlorobiphen	20.09f	21.32f	699156	1118064	31.660m	31.489m
Spiked Amount			20.000	Range	30 - 150	Recovery	= 158.30%#	157.45%#
		Target Compounds						
2)	A	alpha-BHC	7.48f	7.71f	1453772	6397152	50.993	47.015
3)	MA	gamma-BHC (Linda	8.42f	8.83f	1533539	6017445	53.350m	48.333
4)	MA	Heptachlor	9.90f	10.19f	2146808	5684121	59.130	52.809
5)	MB	Aldrin	10.79f	11.14f	1872095	5908549	52.433m	48.786m
6)	B	beta-BHC	8.70f	9.10f	921545	3643513	57.222	61.251
7)	B	delta-BHC	9.25f	10.01	222957	2696525	25.863m	46.655m#
8)	B	Heptachlor Epoxi	12.46f	12.75f	1969785	5286220	53.334m	52.125m
9)	A	Endosulfan I	13.50f	13.77	2006735	4759817	47.725m	52.114m
10)	A	gamma-Chlordane	12.80	13.26	1932277	5220164	52.777m	50.494
11)	A	alpha-Chlordane	13.15f	13.64	1955815	4621481	25.021	52.782 #
12)	B	4,4-DDE	13.38	14.09	1402552	5201155	102.838m	53.076m#
13)	MA	Dieldrin	14.11	14.47	1694456	4828442	51.735m	50.330m
14)	MA	Endrin	14.68	15.22	1459189	3959166	57.635	56.753
15)	B	Endosulfan II	15.23	15.73	1708060	4167370	57.011	55.368m
16)	A	4,4-DDD	14.87	15.50	862911	3306835	58.000m	51.326
17)	MA	4,4-DDT	15.52	16.22	962445	2770921	67.081m	57.652
18)	B	Endrin Aldehyde	16.20f	16.51f	1124015	2632037	48.966m	58.202
19)	B	Endosulfan Sulfa	17.18f	17.13f	924369	2143480	62.625m	62.251m
20)	A	Methoxychlor	16.65	17.77f	606692	1239995	65.960m	57.824
21)	B	Endrin Ketone	17.82f	18.32f	1464538	3208702	63.334	60.655m
		Sum Toxaphene			0	0	N.D.	N.D.
		Average Toxaphene					0.000	0.000
		Sum Chlordane			0	0	N.D.	N.D.
		Average Chlordane					0.000	0.000

001091

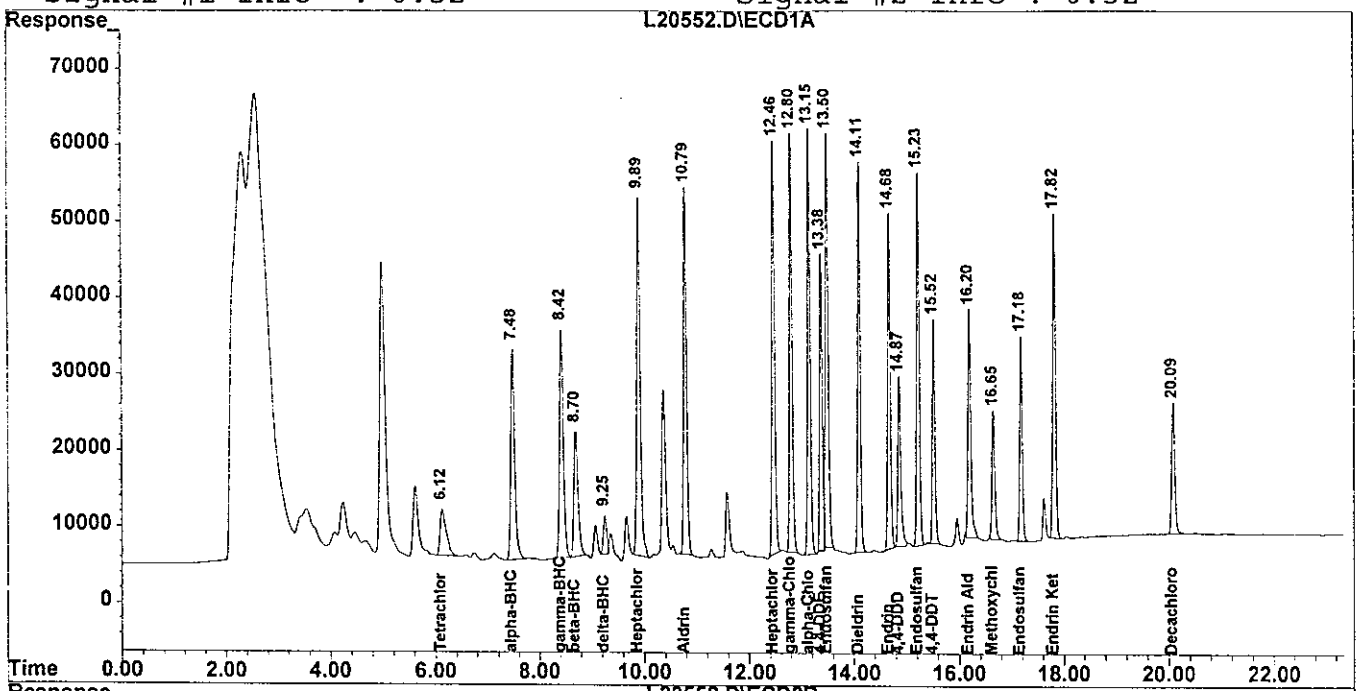
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

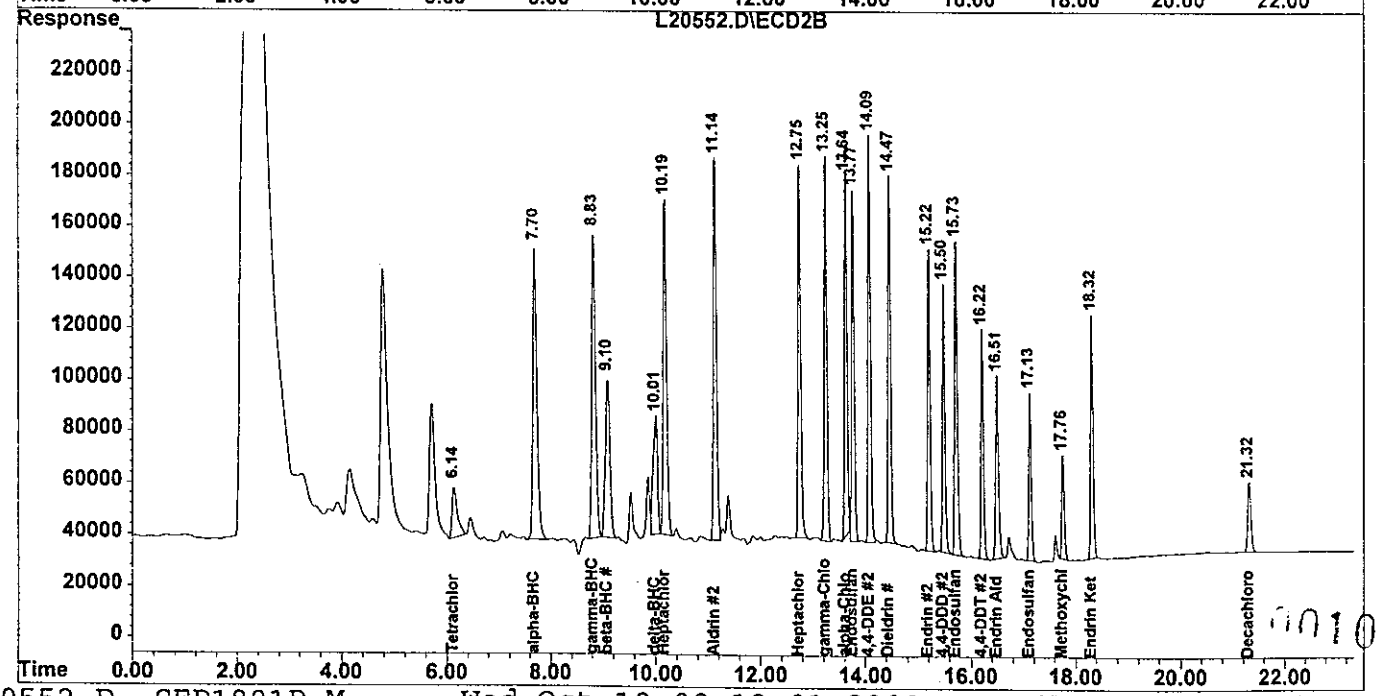
Quantitation Report

Signal #1 : H:\GCDATA\L\OCT0901\L20552.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\L\OCT0901\L20552.D\ECD2B.CH
Acq On : 9 Oct 2001 22:15 Operator: PY
Sample : BKS14282 Inst : GC-L
Misc : 8081A-W-BLK.LCS. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Oct 10 8:06 2001 Quant Results File: SEP1801P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\SEP1801P.M (Chemstation Integrato
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Sep 19 10:04:21 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001092

PESTICIDE/PCB EXTRACTION LOG

SOIL / (WATER) / WIPES / OIL

Sep. Funnel 3510C / (Continuous 3520C) / Soxhlet 3540C / Sonication 3550B / Waste Dilution 3580A

Approval / Date: BS 10/03/01

GPC: Y / (N)

Analysis Method: 8081 (W)

Ext. Chemist: VT Date: 10-01-01

Conc. Chemist: VT Date: 10-2-01

Cleanup:

Florisil (3620B)(F) Date 10-3-01 Acid(3665A)(A) Date — Sulfur (3660B)(S) Date: —

Lot #: Y05553 Lot #: — Lot #: —

Spike Witness Initials: MP

GPL W. O. #	Frac.	Init pH	Sample Vol. gram / (mL)	Surr. Vol. mL	Spike Vol. mL	Adjust. pH	F / A / S Cleanup	F.V. mL
109160	BLK 14289	7	1000	1.0	—	—	F	10.0
	BKS	7	1000		1.0			
	001	7	1000		—			
	002	7	700/1L					
	003	7	1000					
	004	7	950/1L					
	005	7	980/1L					
	006	7	980/1L					
	007	7	950/1L					
	002 (MS)	7	700/1L		1.0			
	002 (MSD)	7	700/1L					

Solvent: (DCM) / Acetone Lot #: CB383

Solvent: Hexane Lot #: 003841

Surrogate Soln#: 15484 Surr. Soln Conc(s): 0.200 PPM

Matrix Spike Soln #: 13572 MS Soln Conc(s): 0.5 PPM

Comments & Observations:

GC ANALYSIS LOG

Instrument ID: HP5890 # L Reviewed by: AK Date: 9/19/01

Data Acquisition Method:	Pest32 / PCB32 / Herb32 /
Injector Temp (oC):	180 / 200 / 240 /
Detector Temp(oC):	300
Oven Initial Temp(oC):	60 / 150 /
Initial Time (min):	0.0 / 0.50 / 1.0 / 14 min
Ramp Rate (oC/min) :	8-190°-1
Final Temp(oC):	200 / 275 / 300 / 190°
Injection Volume(uL):	1.0 / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: Sep 1801.m Analyst: PY

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
Sep1801	L20205	Pest-4 14859	NA	STD	9/18/01	
	L 206					
	L 207					
	L 208					
	L 209	EVALMIX 13380				
	L 210	TOX-3 13425				
	L 211	CHLOR-3 13431				
	L 202	Pest-6 14857				
	L 213	5 14858				
	L 214	4 14859				
	L 215	3 14860				
	L 216	2 14861				
	L 217	INDAM 13128				
	L 218	INDBM 13124				
	L 219	EVALMIX 13380				
	L 220	108214-009-02-1/1	1.0	Soil		
	L 221	010				
	L 222	011				
	L 223	012				
	L 224	014				
	L 225	015				
	L 226	016				
	L 227	017				
	L 228	018				
	L 229	EVALMIX	NA	STD		

Comments:

GC ANALYSIS LOG

Instrument ID: HP5890 # L Reviewed by: AK Date: 10/10/01

Data Acquisition Method:	Pest32 / PCB32 / Herb32 /
Injector Temp (oC):	180 / 200 / 240 /
Detector Temp(oC):	300
Oven Initial Temp(oC):	60 / 150 /
Initial Time (min):	0.0 / 0.50 / 1.0 /
Ramp Rate (oC/min) :	15-200-4.0 / 10-300-5.0
Final Temp(oC):	200 / 275 / 300 /
Injection Volume(uL):	1.0 / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: SEP1801.01 Analyst: PG

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
OCT0801	L 20544	HEXANE	—	—	10/9/01	
↓	L 545	PEST-4 # 14859	N/A	STD	↓	
OCT0901	L 546	Pest Prime	—	—	10/9/01	
	L 547	↓	↓	↓		
	L 548	EVAL MIX 15548	NA	STD		
	L 549	Pest-4 14859				
	L 550	↓	↓	↓		
	L 551	BLK 14282	1.0	water		
	L 552	BKS 14282				
	L 553	109160-001-01-1/1				
	L 554	002-01-1/1				
	L 555	MS			↓	
	L 556	↓ MSD			10/10/01	
	L 557	109160-003-01-1/1				
	L 558	004-01-1/1				
	L 559	005-01-1/1				
	L 560	006-02-2/2				
	L 561	↓ 007-02-2/2	↓	↓		
	L 562	Pest-4 14859	NA	STD		
↓	L ↓ 563	↓	↓	↓	↓	
OCT1001	L 20564	EVAL MIX #15548	—	STD	10/10/01	
	L 565	PEST-4 #14859				
	L 566	PEST-4 #14859				
	L 567	PEST-2 #14861	↓	↓		
↓	L 568	109160-003-01-4,	1.0	H2O	↓	

Comments:

GC ANALYSIS LOG

Instrument ID: HP5890 # L Reviewed by: AK Date: 10/12/01

Data Acquisition Method:	Pest32 / PCB32 / Herb32 /
Injector Temp (oC):	180 / 200 / 240 /
Detector Temp(oC):	300
Oven Initial Temp(oC):	60 / 150 /
Initial Time (min):	0.0 / 0.50 / 1.0 /
Ramp Rate (oC/min) :	15-200-4.0 / 10-300-5.0
Final Temp(oC):	200 / 275 / 300 /
Injection Volume(uL):	1.0 / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: SEP1801.M Analyst: PY

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
OCT1001	L 20569	BLK14147	1.0	soil	10/10/01	
	L 570	BKS14147				
	L 571	109099-001-02-Y1				
	L 572	-002-02-Y1				
	L 573	BLK14271 PEST				
	L 574	BKS14271 PEST				
	L 575	109110-001-02-Y1				
	L 576	-001-02-Y1 MS				
	L 577	-001-02-Y1 MSD				
	L 578	PEST-2 #14861	—	STD		
	L 579	PEST-4 #14859	—			
	L 580	109110-002-02-Y1	1.0	soil		
	L 581	-003-02-Y1				
	L 582	-004-02-Y1				
	L 583	-005-02-Y1				
	L 584	-007-02-Y1				
	L 585	-008-02-Y1				
	L 586	-009-02-Y1				
	L 587	-010-02-Y1				
	L 588	-011-02-Y1				
	L 589	-012-02-Y1				
	L 590	-013-02-Y1				
	L 591	PEST-2 #14861	—	STD	10/11/01	
	L 592	PEST-4 #14859	—			
	L					

Comments:

001096

METALS PACKAGE

GPL Laboratories, LLLP

GPL Laboratories, LLLP

TOTAL METALS
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: SDG No.: 109160

Lab Code: Case No.: SAS No.:

SOW No.:

Sample No.	Lab Sample ID.
PBSW2030008	109156-004-12-3/3
PBSW2030008D	109156-004-12-3/3D
PBSW2030008S	109156-004-12-3/3S
007-MW01S-Q3-01	109160-001-02-1/1
007-MW03S-Q3-01	109160-002-03-1/1
007-MW04S-Q3-01	109160-003-03-1/1
007-MW05S-Q3-01	109160-004-02-1/1
007-MW08S-Q3-01	109160-005-03-1/1
007-DUP-Q3-01	109160-006-03-1/1
007-EQB-Q3-01	109160-007-03-1/1

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

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

Signature: Steve Dill Name: Steve Dill

Date: 10-11-01 Title: Metals Supervisor 2002

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW01S-Q3-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Matrix (soil/water): WATER Lab Sample ID: 109160-001-02-1/1

Level (low/med): LOW Date Received: 09/27/2001

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	8.3	B		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

2003

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW03S-Q3-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Matrix (soil/water): WATER Lab Sample ID: 109160-002-03-1/1

Level (low/med): LOW Date Received: 09/27/2001

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

2004

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW04S-Q3-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Matrix (soil/water): WATER Lab Sample ID: 109160-003-03-1/1

Level (low/med): LOW Date Received: 09/27/2001

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	68.2			P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

2005

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW05S-Q3-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Matrix (soil/water): WATER Lab Sample ID: 109160-004-02-1/1

Level (low/med): LOW Date Received: 09/27/2001

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

002006

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW08S-Q3-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Matrix (soil/water): WATER Lab Sample ID: 109160-005-03-1/1

Level (low/med): LOW Date Received: 09/27/2001

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

002007

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-DUP-Q3-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Matrix (soil/water): WATER Lab Sample ID: 109160-006-03-1/1

Level (low/med): LOW Date Received: 09/27/2001

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

002008

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-EQB-Q3-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Matrix (soil/water): WATER Lab Sample ID: 109160-007-03-1/1

Level (low/med): LOW Date Received: 09/27/2001

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

002009

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Initial Calibration Source: HIGH PURITY

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	400.0	401.65	100.4	1000.0	998.51	99.9	1019.12	101.9	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002010

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1015.31	101.5	1023.26	102.3	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002011

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1026.99	102.7	1021.36	102.1	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002012

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1010.64	101.1	1014.18	101.4	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002013

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1010.45	101.0	1009.32	100.9	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002014

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1041.40	104.1	1009.36	100.9	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002015

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1014.90	101.5	1008.42	100.8	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002016

TOTAL METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract:

Lab Code: Case No.: SAS No.: SDG No.: 109160

AA CRDL Standard Source:

ICP CRDL Standard Source: HIGH PURITY

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				20.0	19.36	96.8		

002017

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	4.1	U	4.1	U	4.1	U	4.1	U	4.100	U	P

002018

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			4.1	U	4.1	U	4.1	U			P

002019

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			4.1	U	4.1	U	4.1	U			P

002020

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			4.1	U	4.1	U	4.1	U			P

002021

SW-846

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			4.1	U	4.1	U					P

TOTAL METALS
- 4 -
ICP INTERFERENCE CHECK SAMPLE

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

ICP ID Number: TJA61 ICP ICS Source: HIGH PURITY

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic		100	-1	101.8	101.8			

002023

TOTAL METALS
-5A-
SPIKE SAMPLE RECOVERY

SAMPLE NO.

PBSW2030008S

Contract:

Lab Code: Case No.: SAS SDG NO.: 109160

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	48.4783		4.1000	U	50.00	97.0		P

Comments:

002024

TOTAL METALS

-6-

DUPLICATES

SAMPLE NO.

PBSW2030008D

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic		4.1000	U	4.1000	U			P

002025

TOTAL METALS
-7-
LABORATORY CONTROL SAMPLE

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Solid LCS Source:

Aqueous LCS Source: HIGH PURITY

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Arsenic	50.0	48.59	97.2					

002026

TOTAL METALS

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

PBSW2030008L

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 109160

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	4.10	U	20.50	U			P

002027

GTL Laboratories, LLLP

ICP ANALYSIS LOG

Document Control No: GP_M_078

Instrument ID: Trace ~~Vacuum~~ 10.9.01	Inst. Method: TRACE2	Nebulizer:
Profile: 0.0000	Intensity: 2221	At Setting: 435

Analytical Batch No: 011009

Workorder	Project/SDG #	Prep. Seq.	Batch #	Matrix s/w/e	Prep. Date	Method	Dil.	Comments
109069	CHEM HILL	14165	038	S	9.19.01	ILM04.1		
109073	↓		↓	↓	↓	↓		
109100	↓		057	W	9.24.01	↓		PBW057: Cr, Zn FAILED - RERUN.
109100	↓		070	↓	9.26.01	↓		
109107	↓	↓	↓	↓	↓	↓		
IDL								
109139	CHEM HILL		093	W	10.2.01	3010		
109156	↓	↓	↓	↓	↓	↓		
109160	↓	↓	↓	↓	↓	↓		

10.9.01

Source Solution Numbers

Stds.	Number	Stds.	Number
S0	057-073-04	ICV	15615
S1	15737	CCV	15721
S2	15738	ICSA	15736
S3	″	ICSAB	15720
S4	″	CRI	15719
S5	″	Low Ck	15443
Ints	15694	LR	15526

Post Digestion Spikes

Spike 9.9 mls of sample with 0.1 mls of 14416

Samples:

109073-003-04-1/1
109100-011-07-1/1
109107-002-17-2/3
109107-013-21-3/3
109156-004-12-3/3

Analyst: [signature] Date: 10.10.01 Reviewed: [signature] Date: 10/11/01

GPL Laboratories, LLLP

ICP ANALYSIS LOG

Document Control No: GP_M_078

Seq	Sample ID	Dil.	Analysis Date Time
1.	CAL-STD0	1	10/9/0115:47
2.	CAL-STD0	1	10/9/0115:55
3.	CAL-STD1	1	10/9/0116:01
4.	CAL-STD2	1	10/9/0116:08
5.	CAL-STD3	1	10/9/0116:14
6.	ICV1	1	10/9/0116:21
7.	ICB1	1	10/9/0116:27
8.	CCV1	1	10/9/0116:47
9.	CCB1 10-10-01	1	10/9/0116:54
10.	PQL-LOWCHE	1	10/9/0117:00
11.	CRDL1	1	10/9/0117:07
12.	ICS-A1	1	10/9/0117:17
13.	FE	500	10/9/0117:26
14.	ICS-A2	1	10/9/0117:33
15.	ICV2	1	10/9/0117:43
16.	ICB2	1	10/9/0117:50
17.	CCV2	1	10/9/0117:57
18.	CCB2	1	10/9/0118:03
19.	PQL-LOWCHE As, Na FAILED	1	10/9/0118:10
20.	CRDL2	1	10/9/0118:16
21.	ICS-A3	1	10/9/0118:23
22.	ICS-AB1	1	10/9/0118:30
23	LR As FAILED		10/9/0118:40
24.	CCV3	1	10/9/0118:50
25.	CCB3	1	10/9/0118:57
26.	PBS038	1	10/9/0119:04
27.	SS038	1	10/9/0119:11
28.	109069-016-01-1		10/9/0119:17
29.	109069-017-01-1		10/9/0119:24
30.	109069-018-01-1		10/9/0119:31
31.	109069-019-01-1		10/9/0119:38
32.	109069-020-01-1		10/9/0119:45
33.	109069-021-01-1		10/9/0119:52
34.	109069-022-01-1		10/9/0119:59
35.	109073-003-04-1		10/9/0120:06
36.	CCV4	1	10/9/0120:12
37.	CCB4	1	10/9/0120:19
38.	109073-003-04-1		10/9/0120:26
39.	109073-003-04-1		10/9/0120:33
40.	109073-003-04-1		10/9/0120:40
41.	109073-003-04-5		10/9/0120:47
42.	109073-006-04-1		10/9/0120:54
43.	109073-009-04-1		10/9/0121:01
44.	109073-019-04-1		10/9/0121:08
45.	CRDL3	1	10/9/0121:14
46.	ICS-A4	1	10/9/0121:21
47.	ICS-AB2	1	10/9/0121:28
48.	CCV5	1	10/9/0121:35
49.	CCB5	1	10/9/0121:42
50.	109073-022-04-1		10/9/0121:49
51.	109073-027-04-1		10/9/0121:56
52.	109073-030-04-1		10/9/0122:03
53.	PBW057	1	10/9/0122:10
54.	SW057	1	10/9/0122:16
55.	109100-001-07-1		10/9/0122:23
56.	109100-002-01-1		10/9/0122:30
57.	109100-003-07-1		10/9/0122:37
58.	109100-004-01-1		10/9/0122:44
59.	109100-005-07-1		10/9/0122:51
60.	CCV6	1	10/9/0122:58
61.	CCB6	1	10/9/0123:05
62.	109100-006-01-1		10/9/0123:12
63.	109100-007-07-1		10/9/0123:18
64.	109100-008-01-1		10/9/0123:25
65.	109100-009-07-1		10/9/0123:32
66.	109100-010-01-1		10/9/0123:39
67.	109100-011-07-1		10/9/0123:46
68.	109100-011-07-1		10/9/0123:53
69.	CRDL4	1	10/10/000:00
70.	ICS-A5	1	10/10/000:07
71.	ICS-AB3	1	10/10/000:14
72.	CCV7	1	10/10/000:20
73.	CCB7	1	10/10/000:27
74.	109100-011-07-1		10/10/000:34
75.	109100-011-07-1		10/10/000:41
76.	109100-011-07-5		10/10/000:48
77.	109100-012-01-1		10/10/000:55
78.	109100-013-07-1		10/10/001:02
79.	109100-014-01-1		10/10/001:09
80.	109100-015-07-1		10/10/001:16
81.	109100-016-01-1		10/10/001:23
82.	109100-017-07-1		10/10/001:29
83.	109100-018-01-1		10/10/001:36
84.	CCV8	1	10/10/001:43
85.	CCB8	1	10/10/001:50
86.	109100-019-07-1		10/10/001:57
87.	109100-020-01-1		10/10/002:04
88.	PBW070	1	10/10/002:11
89.	SW070	1	10/10/002:18
90.	109100-021-07-1		10/10/002:25
91.	109100-022-01-1		10/10/002:32
92.	109100-024-07-1		10/10/002:38
93.	CRDL5	1	10/10/002:45
94.	ICS-A6	1	10/10/002:52
95.	ICS-AB4	1	10/10/002:59
96.	CCV9	1	10/10/003:06
97.	CCB9	1	10/10/003:13
98.	109100-025-01-1		10/10/003:20
99.	109107-001-06-1		10/10/003:27
100.	109107-002-17-1		10/10/003:34
101.	109107-002-17-1		10/10/003:41
102.	109107-002-17-1		10/10/003:48
103.	109107-002-17-1		10/10/003:54
104.	109107-002-17-5		10/10/004:01
105.	109107-003-06-1		10/10/004:08
106.	109107-007-06-1		10/10/004:15
107.	109107-008-06-1		10/10/004:22
108.	CCV10	1	10/10/004:29
109.	CCB10	1	10/10/004:36
110.	109107-009-07-1		10/10/004:43
111.	109107-010-01-1		10/10/004:50
112.	109107-011-07-1		10/10/004:57
113.	109107-012-01-1		10/10/005:04
114.	109107-013-21-1		10/10/005:10
115.	109107-013-21-1		10/10/005:17
116.	109107-013-21-1		10/10/005:24
117	CRDL6 Se FAILED		10/10/005:31
118.	ICS-A7	1	10/10/005:38
119.	ICS-AB5	1	10/10/005:45
120.	CCV11	1	10/10/005:52
121.	CCB11	1	10/10/005:59
122.	109107-013-21-1		10/10/006:06
123.	109107-013-21-5		10/10/006:13
124.	109107-014-01-1		10/10/006:19
125.	109107-015-07-1		10/10/006:26
126.	109107-016-01-1		10/10/006:33
127.	109107-017-06-1		10/10/006:40
128.	IDL1	1	10/10/006:47
129.	IDL2	1	10/10/006:54
130.	IDL3	1	10/10/007:01
131.	IDL4	1	10/10/007:08
132.	CCV12	1	10/10/007:15
133.	CCB12	1	10/10/007:22
134.	IDL5	1	10/10/007:29
135.	IDL6	1	10/10/007:36
136.	IDL7	1	10/10/007:42
137.	PBW093	1	10/10/007:49
138.	SW093	1	10/10/007:56
139.	109139-015-04-1		10/10/008:03
140.	109139-016-04-1		10/10/008:10
141.	CRDL7	1	10/10/008:17
142.	ICS-A8	1	10/10/008:24
143.	ICS-AB6	1	10/10/008:31
144.	CCV13	1	10/10/008:38
145.	CCB13	1	10/10/008:45
146.	109156-004-12-1		10/10/008:52
147.	109156-004-12-1		10/10/008:58
148.	109156-004-12-1		10/10/009:05
149.	109156-004-12-1		10/10/009:12
150.	109156-004-12-5		10/10/009:19
151.	109156-008-04-1		10/10/009:26
152.	109156-009-04-1		10/10/009:33
153.	109156-012-04-1		10/10/009:40
154.	109160-001-02-1		10/10/009:47
155.	109160-002-03-1		10/10/009:54
156.	CCV14	1	10/10/010:01
157.	CCB14	1	10/10/010:08
158.	109160-003-03-1		10/10/010:15
159.	109160-004-02-1		10/10/010:21
160.	109160-005-03-1		10/10/010:28
161.	109160-006-03-1		10/10/010:35
162.	109160-007-03-1		10/10/010:42
163.	CRDL8	1	10/10/010:49
164.	ICS-A Ti FAILED		10/10/010:56
165.	ICS-AB7	1	10/10/011:03
166.	CCV15	1	10/10/011:10
167.	CCB15	1	10/10/011:17

Analyst Signature 10-10-01

Analyst Signature 10-10-01

Sample Dilutions:

Method: TRACE2 Standard: STD0
Run Time: 10/09/01 15:55:33

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	.01938	.00162	-.00078	.00043	-.01339	-.00066	.06527
#1	.01963	.00155	-.00106	.00058	-.01341	-.00069	.06510
#2	.01914	.00168	-.00049	.00029	-.01338	-.00064	.06544

Elem	CR	CO	CU	FE	MG	MN	NI
Avge	.00007	.00004	.01904	.00194	.00069	.00048	-.00291
#1	-.00029	-.00035	.01937	.00158	.00075	.00055	-.00089
#2	.00043	.00043	.01870	.00229	.00064	.00041	-.00492

Elem	K	AG	NA	TL	V	ZN	B
Avge	.00918	.00170	-.00261	-.00102	.00032	.00163	.00087
#1	.00351	.00127	-.00389	-.00052	.00026	.00176	.00014
#2	.01485	.00214	-.00133	-.00151	.00038	.00151	.00159

Elem	MO	SN	SR	TI	1/PB	2/PB	1/SE
Avge	-.00017	-.00075	.00035	.00041	-.00663	-.00227	-.00115
#1	-.00032	-.00153	.00026	.00003	-.00898	-.00253	-.00409
#2	-.00003	.00003	.00043	.00078	-.00429	-.00200	.00180

Elem	2/SE	SI
Avge	.00260	.07837
#1	.00294	.07892
#2	.00226	.07783

Standardization Report 10/09/01 04:01:05 PM page 1

Method: TRACE2 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AL	308.215	Multiple	Standards	13003.4	-257.183	10/09/01 03:55:33
SB	206.838	Multiple	Standards	2179.57	-3.61020	10/09/01 03:55:33
AS	189.042	Multiple	Standards	2842.05	2.07538	10/09/01 03:55:33
BA	493.409	Multiple	Standards	218.281	-.148487	10/09/01 03:55:33
BE	313.042	Multiple	Standards	323.059	4.32019	10/09/01 03:55:33
CD	226.502	Multiple	Standards	227.846	.077099	10/09/01 03:55:33
CA	317.933	STD3	STD0	.842939	.003917	10/09/01 03:55:33
CR	267.716	Multiple	Standards	887.674	-.130783	10/09/01 03:55:33
CO	228.616	Multiple	Standards	809.297	-.099607	10/09/01 03:55:33
CU	324.753	Multiple	Standards	742.289	-14.1713	10/09/01 03:55:33
FE	271.441	Multiple	Standards	8321.88	-22.2489	10/09/01 03:55:33
PB	220.353	NONE	NONE	1.00000	.000000	*10/09/01 03:55:33
MG	279.078	STD3	STD0	.810690	-.000449	10/09/01 03:55:33
MN	257.610	Multiple	Standards	577.613	-.335573	10/09/01 03:55:33
NI	231.604	Multiple	Standards	522.697	1.44392	10/09/01 03:55:33
K	766.491	STD3	STD0	1.12259	-.004352	10/09/01 03:55:33
SE	196.026	NONE	NONE	1.00000	.000000	*10/09/01 03:55:33
AG	328.068	Multiple	Standards	1096.83	-1.87310	10/09/01 03:55:33
NA	330.232	STD3	STD0	1.08333	.000210	10/09/01 03:55:33
TL	190.864	Multiple	Standards	5458.99	5.42735	10/09/01 03:55:33
V	292.402	Multiple	Standards	3291.77	-1.10160	10/09/01 03:55:33
ZN	206.200	Multiple	Standards	1383.00	-2.34098	10/09/01 03:55:33
B	249.678	Multiple	Standards	885.956	-.824953	10/09/01 03:55:33
MO	202.030	Multiple	Standards	1525.06	.209996	10/09/01 03:55:33
SN	189.989	Multiple	Standards	1994.67	1.42404	10/09/01 03:55:33
SR	421.552	Multiple	Standards	152.760	-.111306	10/09/01 03:55:33
TI	334.941	Multiple	Standards	304.240	-.184649	10/09/01 03:55:33
1/PB	220.351	Multiple	Standards	602.994	3.92896	10/09/01 03:55:33
2/PB	220.352	Multiple	Standards	513.470	1.10852	10/09/01 03:55:33
1/SE	196.021	Multiple	Standards	1955.80	2.10860	10/09/01 03:55:33
2/SE	196.022	Multiple	Standards	1205.58	-3.23136	10/09/01 03:55:33
SI	288.158	Multiple	Standards	2100.15	-164.660	10/09/01 03:55:33

Method: TRACE2

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AL	308.215	STD0	.000000	-5.12264	5.12264
		STD1	50000.0	51027.7	-1027.73
		STD2	100000.	97957.3	2042.66

CorCoef: 0.99971

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SB	206.838	STD0	.000000	-.086288	.086288
		STD1	1000.00	1019.50	-19.5045
		STD2	2000.00	1969.98	30.0211

CorCoef: 0.99979

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AS	189.042	STD0	.000000	-.137373	.137373
		STD1	1000.00	1026.93	-26.9337
		STD2	2000.00	1943.97	56.0314

CorCoef: 0.99947

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BA	493.409	STD0	.000000	-.054061	.054061
		STD1	500.000	511.124	-11.1241
		STD2	1000.00	978.999	21.0006

CorCoef: 0.99967

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BE	313.042	STD0	.000000	-.007082	.007082
		STD1	50.0000	51.9251	-1.92506
		STD2	100.000	98.1845	1.81549

CorCoef: 0.99944

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CD	226.502	STD0	.000000	-.074164	.074164
		STD1	500.000	518.096	-18.0958
		STD2	1000.00	976.861	23.1393

CorCoef: 0.99938

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
CA	317.933	STD0	.058936	.065271	-.006335
		STD3	30.9830	36.7512	-5.76827

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CR	267.716	STD0	.000000	-.065759	.065759
		STD1	500.000	512.272	-12.2722
		STD2	1000.00	971.938	28.0624

CorCoef: 0.99951

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CO	228.616	STD0	.000000	-.063617	.063617
		STD1	500.000	514.113	-14.1133
		STD2	1000.00	977.333	22.6665

CorCoef: 0.99955

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CU	324.753	STD0	.000000	-.040024	.040024
		STD1	500.000	508.678	-8.67828
		STD2	1000.00	985.337	14.6633

CorCoef: 0.99982

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
FE	271.441	STD0	.000000	-6.14434	6.14434
		STD1	50000.0	51266.7	-1266.70
		STD2	100000.	97617.9	2382.06

CorCoef: 0.99958

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
PB	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
MG	279.078	STD0	.000113	.000693	-.000580
		STD3	17.8496	22.0183	-4.16874

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MN	257.610	STD0	.000000	-.060566	.060566
		STD1	500.000	511.742	-11.7424
		STD2	1000.00	975.032	24.9683

CorCoef: 0.99959

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
NI	231.604	STD0	.000000	-.075704	.075704
		STD1	500.000	515.070	-15.0703
		STD2	1000.00	969.578	30.4225

CorCoef: 0.99935

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K	766.491	STD0	.005956	.009183	-.003227
		STD3	44.3604	39.5198	4.84055

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SE	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AG	328.068	STD0	.000000	-.003533	.003533
		STD1	50.0000	50.6403	-.640327
		STD2	100.000	98.4543	1.54573

CorCoef: 0.99986

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
NA	330.232	STD0	-.002616	-.002609	-.000007
		STD3	2.06402	1.90507	.158955

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TL	190.864	STD0	.000000	-.118343	.118343
		STD1	1000.00	1039.55	-39.5507
		STD2	2000.00	1984.43	15.5728

CorCoef: 0.99962

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	STD0	.000000	-.055729	.055729
		STD1	500.000	508.998	-8.99799
		STD2	1000.00	973.412	26.5875

CorCoef: 0.99965

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
ZN	206.200	STD0	.000000	-.085765	.085765
		STD1	500.000	517.753	-17.7530
		STD2	1000.00	966.894	33.1059

CorCoef: 0.99916

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	STD0	.000000	-.055757	.055757
		STD1	500.000	510.767	-10.7674
		STD2	1000.00	976.929	23.0707

CorCoef: 0.99965

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MO	202.030	STD0	.000000	-.053498	.053498
		STD1	500.000	510.700	-10.6996
		STD2	1000.00	978.601	21.3992

CorCoef: 0.99968

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SN	189.989	STD0	.000000	-.068448	.068448
		STD1	500.000	514.714	-14.7136
		STD2	1000.00	974.669	25.3311

CorCoef: 0.99947

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SR	421.552	STD0	.000000	-.058348	.058348
		STD1	500.000	511.670	-11.6695
		STD2	1000.00	976.661	23.3391

CorCoef: 0.99962

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TI	334.941	STD0	.000000	-.061347	.061347
		STD1	500.000	512.269	-12.2693
		STD2	1000.00	975.461	24.5387

CorCoef: 0.99958

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/PB	220.351	STD0	.000000	-.070451	.070451
		STD1	500.000	558.525	-58.5248
		STD2	1000.00	1060.69	-60.6887

CorCoef: 0.99953

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/PB	220.352	STD0	.000000	-.054658	.054658
		STD1	500.000	493.147	6.85318
		STD2	1000.00	942.567	57.4327

CorCoef: 0.99964

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/SE	196.021	STD0	.000000	-.132542	.132542
		STD1	1000.00	1027.64	-27.6401
		STD2	2000.00	1949.25	50.7533

CorCoef: 0.99951

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/SE	196.022	STD0	.000000	-.100353	.100353
		STD1	1000.00	1003.30	-3.29767
		STD2	2000.00	1926.31	73.6871

CorCoef: 0.99971

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SI	288.158	STD0	.000000	-.060606	.060606
		STD1	500.000	512.121	-12.1211
		STD2	1000.00	975.758	24.2423

CorCoef: 0.99959

Method: TRACE2 Standard: STD1
Run Time: 10/09/01 16:01:38

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	4.1881	.48878	.36353	2.5461	.15158	2.3419	.60782
#1	4.1906	.48849	.36040	2.5440	.15136	2.3420	.60712
#2	4.1856	.48907	.36666	2.5482	.15180	2.3418	.60853

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	.66189	.74042	6.4001	.92627	1.0315	.05001	.19379
#1	.66147	.74035	6.3929	.92565	1.0327	.04991	.19376
#2	.66231	.74048	6.4074	.92688	1.0303	.05011	.19382

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.16253	.38459	.60163	.34556	.26561	3.5879	1.7917
#1	.16235	.38396	.59971	.34436	.26586	3.5865	1.7905
#2	.16271	.38523	.60356	.34676	.26536	3.5892	1.7929

Elem	1/PB	2/PB	1/SE	2/SE	SI
Avge	.95456	1.0015	.53610	.85440	.33454
#1	.95104	1.0044	.53599	.85252	.33385
#2	.95808	.99871	.53621	.85628	.33523

Method: TRACE2 Standard: STD2
Run Time: 10/09/01 16:08:16

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	8.2632	.96237	.72271	5.0807	.31631	4.6606	1.2140
#1	8.2811	.96083	.72169	5.0826	.31579	4.6572	1.2127
#2	8.2452	.96392	.72373	5.0787	.31682	4.6640	1.2153

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	1.3229	1.4543	12.738	1.8428	2.0676	.09857	.38713
#1	1.3214	1.4560	12.729	1.8422	2.0680	.09828	.38727
#2	1.3245	1.4527	12.747	1.8435	2.0671	.09886	.38698

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.32332	.76350	1.1986	.68807	.53149	7.1171	3.5746
#1	.32292	.76231	1.1981	.68568	.52972	7.1243	3.5741
#2	.32373	.76469	1.1991	.69045	.53327	7.1100	3.5751

Elem	1/PB	2/PB	1/SE	2/SE	SI
Avge	1.9061	1.9863	1.0610	1.7023	.59171
#1	1.9076	1.9844	1.0598	1.7028	.59137
#2	1.9046	1.9881	1.0623	1.7018	.59205

Method: TRACE2 Standard: STD3
Run Time: 10/09/01 16:14:54

Elem	CA	MG	K	NA
Avge	39.850	24.383	42.197	2.0816
#1	39.767	24.331	42.157	2.0813
#2	39.932	24.434	42.238	2.0819

Standardization Report 10/09/01 04:20:54 PM page 1

Method: TRACE2 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AL	308.215	Multiple	Standards	12061.2	-225.893	10/09/01 04:08:16
SB	206.838	Multiple	Standards	2069.83	-2.11432	10/09/01 04:08:16
AS	189.042	Multiple	Standards	2753.10	2.16041	10/09/01 04:08:16
BA	493.409	Multiple	Standards	196.716	.029428	10/09/01 04:08:16
BE	313.042	Multiple	Standards	305.801	4.20017	10/09/01 04:08:16
CD	226.502	Multiple	Standards	215.299	.406975	10/09/01 04:08:16
CA	317.933	STD3	STD0	.777319	.006972	10/09/01 04:14:54
CR	267.716	Multiple	Standards	821.559	.124961	10/09/01 04:08:16
CO	228.616	Multiple	Standards	757.082	.597356	10/09/01 04:08:16
CU	324.753	Multiple	Standards	695.664	-13.0648	10/09/01 04:08:16
FE	271.441	Multiple	Standards	7838.68	-11.0059	10/09/01 04:08:16
PB	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
MG	279.078	STD3	STD0	.732057	.000092	10/09/01 04:14:54
MN	257.610	Multiple	Standards	540.982	-.202999	10/09/01 04:08:16
NI	231.604	Multiple	Standards	482.465	2.28797	10/09/01 04:08:16
K	766.491	STD3	STD0	1.05073	.022393	10/09/01 04:14:54
SE	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
AG	328.068	Multiple	Standards	1022.48	-1.10844	10/09/01 04:08:16
NA	330.232	STD3	STD0	.990982	.001155	10/09/01 04:14:54
TL	190.864	Multiple	Standards	5212.50	8.46074	10/09/01 04:08:16
V	292.402	Multiple	Standards	3071.76	-.089079	10/09/01 04:08:16
ZN	206.200	Multiple	Standards	1310.14	-1.87668	10/09/01 04:08:16
B	249.678	Multiple	Standards	832.378	-.265601	10/09/01 04:08:16
MO	202.030	Multiple	Standards	1449.49	.295707	10/09/01 04:08:16
SN	189.989	Multiple	Standards	1887.95	-.752032	10/09/01 04:08:16
SR	421.552	Multiple	Standards	139.929	.006369	10/09/01 04:08:16
TI	334.941	Multiple	Standards	279.406	-.000028	10/09/01 04:08:16
1/PB	220.351	Multiple	Standards	568.945	2.35541	10/09/01 04:08:16
2/PB	220.352	Multiple	Standards	483.528	-.027536	10/09/01 04:08:16
1/SE	196.021	Multiple	Standards	1877.42	-.136118	10/09/01 04:08:16
2/SE	196.022	Multiple	Standards	1153.15	-.202408	10/09/01 04:08:16
SI	288.158	Multiple	Standards	1941.85	-149.417	10/09/01 04:08:16

Method: TRACE2

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AL	308.215	STD0	.000000	-1.42272	1.42272
		STD1	50000.0	50287.7	-287.742
		STD2	100000.	99437.3	562.688

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SB	206.838	STD0	.000000	-.036651	.036651
		STD1	1000.00	1009.58	-9.57721
		STD2	2000.00	1989.83	10.1663

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AS	189.042	STD0	.000000	-.017680	.017680
		STD1	1000.00	1003.00	-2.99512
		STD2	2000.00	1991.85	8.15393

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BA	493.409	STD0	.000000	-.002871	.002871
		STD1	500.000	500.886	-.886078
		STD2	1000.00	999.475	.524536

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BE	313.042	STD0	.000000	-.000226	.000226
		STD1	50.0000	50.5539	-.553940
		STD2	100.000	100.927	-.926750

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CD	226.502	STD0	.000000	-.006745	.006745
		STD1	500.000	504.612	-4.61197
		STD2	1000.00	1003.83	-3.82825

CorCoef: 1.00000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
CA	317.933	STD0	.058936	.066851	-.007915
		STD3	30.9830	39.8498	-8.86683

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CR	267.716	STD0	.000000	-.001837	.001837
		STD1	500.000	499.488	.512054
		STD2	1000.00	997.506	2.49396

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CO	228.616	STD0	.000000	-.001571	.001571
		STD1	500.000	501.704	-1.70435
		STD2	1000.00	1002.15	-2.15149

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CU	324.753	STD0	.000000	-.006715	.006715
		STD1	500.000	502.016	-2.01639
		STD2	1000.00	998.660	1.33954
CorCoef:	1.00000				

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
FE	271.441	STD0	.000000	-.598939	.598939
		STD1	50000.0	50157.6	-157.625
		STD2	100000.	99836.1	163.898
CorCoef:	1.00000				

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
PB	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
MG	279.078	STD0	.000113	.000029	.000084
		STD3	17.8496	24.3827	-6.53307

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MN	257.610	STD0	.000000	-.006304	.006304
		STD1	500.000	500.890	-.890015
		STD2	1000.00	996.737	3.26331
CorCoef:	1.00000				

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
NI	231.604	STD0	.000000	-.000095	.000095
		STD1	500.000	499.948	.051544
		STD2	1000.00	999.821	.178955
CorCoef:	1.00000				

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K	766.491	STD0	.005956	-.015644	.021600
		STD3	44.3604	42.1972	2.16314

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SE	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AG	328.068	STD0	.000000	-.000479	.000479
		STD1	50.0000	50.0296	-.029606
		STD2	100.000	99.6757	.324295
CorCoef:	1.00000				

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
NA	330.232	STD0	-.002616	-.003806	.001190
		STD3	2.06402	2.08164	-.017616

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TL	190.864	STD0	.000000	-.013524	.013524
		STD1	1000.00	1018.59	-18.5869
		STD2	2000.00	2026.35	-26.3549

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	STD0	.000000	-.006544	.006544
		STD1	500.000	499.161	.838989
		STD2	1000.00	993.086	6.91351

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
ZN	206.200	STD0	.000000	-.006974	.006974
		STD1	500.000	501.995	-1.99478
		STD2	1000.00	998.411	1.58948

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	STD0	.000000	-.004513	.004513
		STD1	500.000	500.519	-.518677
		STD2	1000.00	997.427	2.57330

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MO	202.030	STD0	.000000	-.005897	.005897
		STD1	500.000	501.179	-1.17938
		STD2	1000.00	997.641	2.35876

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SN	189.989	STD0	.000000	.001594	-.001594
		STD1	500.000	500.705	-.705231
		STD2	1000.00	1002.69	-2.68555

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SR	421.552	STD0	.000000	-.010254	.010254
		STD1	500.000	502.051	-2.05075
		STD2	1000.00	995.898	4.10156

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TI	334.941	STD0	.000000	-.003085	.003085
		STD1	500.000	500.617	-.616943
		STD2	1000.00	998.766	1.23389

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/PB	220.351	STD0	.000000	-.005068	.005068
		STD1	500.000	545.448	-45.4481
		STD2	1000.00	1086.84	-86.8420

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/PB	220.352	STD0	.000000	-.010126	.010126
		STD1	500.000	484.240	15.7596
		STD2	1000.00	960.380	39.6199

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/SE	196.021	STD0	.000000	-.026102	.026102
		STD1	1000.00	1006.35	-6.35217
		STD2	2000.00	1991.82	8.17761

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/SE	196.022	STD0	.000000	-.009110	.009110
		STD1	1000.00	985.049	14.9509
		STD2	2000.00	1962.81	37.1899

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SI	288.158	STD0	.000000	-.001035	.001035
		STD1	500.000	500.206	-.205536
		STD2	1000.00	999.589	.411133

CorCoef: 1.00000

Analysis Report QC Standard 10/09/01 04:27:31 PM page 1

Method: TRACE2 Sample Name: IVICV Operator: LCM
Run Time: 10/09/01 16:21:00
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5034.422	399.4708	399.4821	402.0128	40.31301	40.78718	5006.017
#1	5034.497	397.9539	399.7267	401.9442	40.34268	40.66902	5012.116
#2	5034.346	400.9876	399.2374	402.0814	40.28335	40.90533	4999.917
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	402.5570	399.5562	398.3498	5016.710	405.2323	4943.852	402.0568
#1	402.5358	399.9040	398.6547	5011.524	406.2794	4942.155	402.2560
#2	402.5781	399.2083	398.0448	5021.897	404.1852	4945.549	401.8575
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	404.4242	5082.510	404.8393	40.52100	9874.461	403.8313	404.1707
#1	403.8390	5087.898	408.9552	40.83667	9815.934	406.9826	404.2976
#2	405.0094	5077.121	400.7234	40.20534	9932.988	400.6800	404.0439
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	406.4709	402.0155	405.2477	399.8089	405.9761	402.6254	415.0900
#1	406.6843	404.3198	405.1643	399.8570	406.6834	402.5906	411.6397
#2	406.2574	399.7112	405.3312	399.7608	405.2689	402.6601	418.5404
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	400.3030	406.3169	404.1001	437.1547
#1	403.5989	410.4145	408.2251	436.1735
#2	397.0071	402.2194	399.9751	438.1359
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				400.0000
Range				10.00000

Method: TRACE2 Sample Name: BIICB Operator: LCM
Run Time: 10/09/01 16:27:37
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	8.509636	2.157816	.5307702	.1044543	.2483695	.1390684	-12.1255
#1	4.701754	3.321200	-1.48846	.0793757	.2421766	.2006361	-11.0445
#2	12.31752	.9944312	2.550000	.1295329	.2545624	.0775007	-13.2065
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.2295408	-.193435	-.183558	2.859937	-.284763	7.899590	.0492310
#1	.1712602	-.491279	-.470448	-2.12351	-.337368	7.290140	.0411888
#2	.2878215	.1044099	.1033329	7.843381	-.232158	8.509040	.0572732
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.2987977	11.25521	-.407058	.2350048	28.12691	2.116344	-.045336
#1	-.202426	12.08987	-.756121	-.012793	24.29945	2.586777	-.089020
#2	.8000212	10.42054	-.057994	.4828027	31.95437	1.645913	-.001652
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0849313	.7805973	.7869618	-2.69649	.0459079	.0434271	-1.47825
#1	-.066374	.9553194	.8270701	-3.94635	.0379355	.0157299	-.471654
#2	.2362362	.6058752	.7468536	-1.44664	.0538802	.0711242	-2.48485
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.3116413	-.134231	-.543853	-.767741
#1	-.270563	-1.40678	-.431173	-2.33694
#2	.8938458	1.138318	-.656532	.8014570
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: CVCCV Operator: LCM
Run Time: 10/09/01 16:47:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	49807.93	996.7792	1002.904	502.8863	49.43525	487.5183	98298.78
#1	49823.43	998.2932	997.3248	503.1710	49.41686	487.5980	98338.64
#2	49792.42	995.2651	1008.484	502.6017	49.45363	487.4386	98258.93
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	492.4393	487.4216	496.8701	48528.09	489.1891	100641.6	491.0380
#1	492.6718	487.9801	496.3202	48528.82	489.6805	100677.5	491.3222
#2	492.2068	486.8631	497.4199	48527.36	488.6977	100605.8	490.7538
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	490.9717	24810.38	1003.929	50.72690	101052.1	976.6209	493.9921
#1	491.9364	24782.50	1004.603	50.50235	101129.7	975.6743	494.2035
#2	490.0071	24838.26	1003.255	50.95145	100974.5	977.5674	493.7807
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	483.6873	503.9849	489.4991	492.2210	502.3400	499.4705	486.7140
#1	484.3940	503.9137	489.6052	488.1054	502.0836	500.5218	486.0175
#2	482.9804	504.0560	489.3930	496.3366	502.5962	498.4193	487.4105
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	490.4263	993.9635	1008.911	513.9298
#1	491.5116	994.1611	1009.823	515.5652
#2	489.3410	993.7659	1007.999	512.2944
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB Operator: LCM
Run Time: 10/09/01 16:54:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	6.515861	-1.10297	1.012234	.1170221	.2327229	.2697050	-3.63161
#1	8.299515	-1.57524	.1805368	.0916097	.2491590	.1148881	-3.69407
#2	4.732208	-.630703	1.843931	.1424345	.2162869	.4245219	-3.56914
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.0542881	.0959812	.0703110	15.25893	-.024069	15.06957	.0849810
#1	-.182022	-.034731	-.276912	14.71107	.3769448	14.22339	.0928565
#2	.2905987	.2266935	.4175342	15.80679	-.425082	15.91574	.0771055
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.5186502	18.45220	-1.17240	.4208079	71.27431	5.159782	.7508591
#1	.4556103	25.49161	.0549126	.4211540	107.5444	8.979060	.9717190
#2	.5816901	11.41278	-2.39971	.4204618	35.00417	1.340505	.5299993
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.1579147	1.051350	.0664389	-.399372	.0808228	.1446153	-4.45838
#1	.0453537	1.530550	.1706090	-.372084	.0788280	.1125045	-4.69037
#2	.2704758	.5721497	-.037731	-.426660	.0828177	.1767260	-4.22639
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.192717	-4.91481	.6984146	.9881076
#1	2.910209	-2.89102	1.527486	.0180481
#2	1.475224	-6.93860	-.130657	1.958167
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: PQL-LOWCHECK Operator: LCM
Run Time: 10/09/01 17:00:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	210.0645	22.10844	23.18535	5.124991	2.266640	3.256943	975.2986
#1	212.4523	22.83659	21.60015	5.151649	2.248922	3.263796	979.0699
#2	207.6767	21.38029	Q24.77055	5.098334	2.284358	3.250091	971.5273
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.337496	5.317594	9.972608	148.1755	8.700563	257.7673	4.998754
#1	5.642474	5.888397	10.16963	155.5677	8.677110	257.4126	5.038451
#2	5.032517	4.746790	9.775580	140.7833	8.724015	258.1220	4.959056
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	10.56710	265.8127	20.28498	3.535309	2547.097	33.23912	10.79390
#1	10.05764	267.3211	20.36158	Q3.891570	2501.828	31.79676	10.80166
#2	11.07657	264.3043	20.20838	3.179048	2592.366	34.68148	10.78615
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	250.0000	20.00000	3.000000	2500.000	30.00000	10.00000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	20.50173	15.28856	5.676595	24.52769	5.085578	25.16915	9.284574
#1	20.58791	16.04778	5.681201	24.45783	5.113366	25.49775	9.299433
#2	20.41556	14.52933	5.671990	24.59754	5.057790	24.84055	9.269717
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	8.408130	17.10036	21.87692	51.51704
#1	8.365519	16.16649	22.45873	52.37602
#2	8.450740	18.03423	21.29512	50.65807
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				50.00000
Range				20.00000

Method: TRACE2 Sample Name: CRCRI Operator: LCM
Run Time: 10/09/01 17:07:32
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	397.7014	123.1995	22.02925	399.4587	10.17994	10.35633	479.7287
#1	400.3869	123.6227	21.95724	400.4933	10.25114	10.40496	480.3860
#2	395.0159	122.7763	22.10127	398.4242	10.10875	10.30771	479.0714
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	19.15990	99.08001	48.20441	195.5710	7.217454	496.4863	30.53611
#1	19.26394	99.54187	48.64928	191.6394	6.176152	498.5097	30.61643
#2	19.05587	98.61815	47.75954	199.5025	Q8.258757	494.4629	30.45578
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	79.18205	505.0016	11.06677	19.55328	898.3170	21.81283	99.80568
#1	79.05845	509.2170	11.69849	19.44015	937.3853	20.41822	100.2185
#2	79.30564	500.7862	10.43506	19.66640	859.2487	23.20744	99.39281
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	41.49320	16.30563	5.390322	26.14871	5.049794	25.25481	4.611440
#1	41.69007	16.17670	6.153759	26.94627	5.071787	25.34266	6.959126
#2	41.29634	16.43456	4.626885	25.35115	5.027802	25.16697	2.263754
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	8.520028	11.45068	10.87447	12.93130
#1	5.784234	11.36992	11.86242	13.42677
#2	11.25582	11.53144	9.886518	12.43582
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACE2 Sample Name: IAICSAI Operator: LCM
Run Time: 10/09/01 17:17:41
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	478223.9	-.419643	1.798076	1.067056	.7516890	2.306586	486313.1
#1	474069.9	-2.15953	1.591692	1.068407	.7650036	2.318079	481203.2
#2	482378.0	1.320240	2.004460	1.065705	.7383743	2.295094	491422.9
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	30.00000	20.00000	20.00000	10.00000	10.00000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7754477	1.090987	.2000816	187101.6	-2.99056	487939.7	9.644301
#1	.7982163	1.141905	-.025625	185410.5	-4.63211	483042.2	9.584666
#2	.7526791	1.040069	.4257880	188792.8	-1.34900	492837.2	9.703937
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	20.00000	100.0000	50.00000	40000.00	6.000000	100000.0	30.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.155417	13.21201	-6.10886	.5284461	25.20198	19.17728	2.338890
#1	-.390136	12.44775	-7.00661	.3667789	-31.5573	19.35555	1.896045
#2	.0793011	13.97627	-5.21111	.6901134	81.96123	18.99902	2.781735
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	80.00000	1000.000	10.00000	20.00000	1000.000	20.00000	100.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	26.92142	-.454565	-1.93016	-.200901	13.08745	2.676719	-120.999
#1	26.20185	-.819400	-2.47333	1.109609	12.96083	2.800190	-123.624
#2	27.64098	-.089730	-1.38698	-1.51141	13.21407	2.553249	-118.375
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	35.00000	50.00000	10.00000	10.00000	50.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	56.01335	-2.34204	-7.99280	21.63285
#1	54.86325	-2.68173	-9.16958	19.79875
#2	57.16346	-2.00236	-6.81602	23.46696
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Method: TRACE2 Sample Name: IVICV Operator: LCM
Run Time: 10/09/01 17:43:44
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5056.073	402.9766	401.6466	404.3936	40.66899	41.12311	4972.945
#1	5058.878	404.4494	399.1701	404.9114	40.77483	41.05403	4978.618
#2	5053.268	401.5038	404.1231	403.8759	40.56315	41.19218	4967.271
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	405.1323	401.1033	398.8774	5030.106	403.2520	4971.462	402.8724
#1	406.0838	402.4973	399.3440	5041.185	405.4815	4982.388	403.5924
#2	404.1809	399.7092	398.4108	5019.027	401.0226	4960.535	402.1525
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	407.8819	5071.688	405.8567	41.30797	9928.346	404.7723	406.9333
#1	410.2226	5077.020	412.1281	41.81526	9886.990	408.7366	407.4623
#2	405.5412	5066.355	399.5854	40.80067	9969.702	400.8080	406.4043
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	408.2199	401.8741	403.1727	403.2944	408.2914	403.0445	410.6296
#1	409.9232	401.9011	405.1946	405.0275	408.6202	403.6059	415.6258
#2	406.5165	401.8471	401.1507	401.5613	407.9625	402.4831	405.6334
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	399.5629	399.7723	408.8986	Q442.0186
#1	400.4090	407.1077	414.6380	Q443.8742
#2	398.7168	392.4368	403.1592	Q440.1630
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				400.0000
Range				10.00000

Method: TRACE2 Sample Name: BIICB Operator: LCM
Run Time: 10/09/01 17:50:26
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	9.397787	1.131414	2.354751	.0714546	.3317279	.4073310	-17.0336
#1	10.02504	3.782268	2.081324	.0633244	.3257936	.4318206	-15.3962
#2	8.770532	-1.51944	2.628179	.0795847	.3376622	.3828415	-18.6710
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.0664080	.4031958	-.268533	-2.08337	-.248768	4.604242	-.002535
#1	.0777187	.4662819	-.316990	-.906930	-.248705	4.273602	-.001120
#2	.0550974	.3401096	-.220076	-3.25980	-.248831	4.934882	-.003950
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.5080544	15.33226	-.594353	.5675281	-7.86657	5.298008	.3514084
#1	.7088101	22.24266	-.854631	.4481691	89.87444	5.358854	.7049876
#2	.3072988	8.421851	-.334075	.6868870	-105.608	5.237161	-.002171
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0105497	.6854756	.9372453	.0833265	.0403351	.1521771	-.693387
#1	.0425763	.9532740	1.045137	.2236646	.0465618	.2648182	-1.67289
#2	-.021477	.4176773	.8293536	-.057012	.0341084	.0395361	.2861160
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.026801	-3.95305	1.084565	-.276721
#1	.4630424	-6.06841	1.751909	-.993332
#2	-.516644	-1.83769	.4172211	.4398892
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: CVCCV Operator: LCM
Run Time: 10/09/01 17:57:02
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	49832.27	996.2026	998.5094	503.1721	49.13571	483.5862	97189.39
#1	49698.48	989.4529	990.7833	501.8571	49.01909	482.9001	96987.15
#2	49966.06	1002.952	1006.236	504.4870	49.25234	484.2722	97391.64
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	490.5061	485.5089	496.2549	48138.64	486.5364	99956.28	488.9794
#1	488.8140	484.0641	494.0820	48021.06	484.0703	99876.91	487.7968
#2	492.1982	486.9537	498.4279	48256.22	489.0026	100035.7	490.1619
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	488.3020	24829.92	995.8191	50.42953	101218.5	964.2970	491.6775
#1	488.5817	24745.55	991.7837	50.12060	100768.3	963.6884	490.0508
#2	488.0223	24914.28	999.8546	50.73846	101668.6	964.9056	493.3043
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	479.8612	501.4644	486.2017	489.4542	501.7648	498.7707	475.1067
#1	478.8402	499.5145	484.5106	490.4721	500.2886	497.7233	467.3638
#2	480.8820	503.4144	487.8929	488.4362	503.2409	499.8181	482.8495
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	492.2509	984.9094	1001.274	516.4089
#1	492.4232	971.9179	1001.716	514.0743
#2	492.0786	997.9009	1000.831	518.7435
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB Operator: LCM
Run Time: 10/09/01 18:03:39
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	8.787296	-.282988	-.187178	.0523518	.2471751	.2470160	-10.9174
#1	10.78630	-.001907	.7155589	.0866357	.2311033	.1801982	-9.62182
#2	6.788288	-.564068	-1.08992	.0180679	.2632469	.3138337	-12.2129
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4938790	.6308975	-.415561	7.948498	-1.62159	10.67109	-.006982
#1	.4605815	.8175207	-.265374	12.93788	-.856202	12.20227	.0177656
#2	.5271765	.4442743	-.565748	2.959114	-2.38698	9.139899	-.031729
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.8852677	15.43788	-.580713	.6249743	-60.0880	5.384170	.8912746
#1	1.121302	12.98419	.0493009	.6506993	-166.789	5.893113	.9865987
#2	.6492337	17.89157	-1.21073	.5992494	46.61280	4.875228	.7959505
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.2692811	.4227963	.5474572	.7179403	.0753508	.1415836	-.066688
#1	.4535398	.6561886	.5070385	-.366937	.0838935	.1303293	.0726964
#2	.0850223	.1894040	.5878758	1.802817	.0668080	.1528379	-.206072
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-2.39939	-1.55204	-.095553	-2.70178
#1	-1.32100	-6.04911	3.097975	-2.98954
#2	-3.47777	2.945037	-3.28908	-2.41402
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

002054

Method: TRACE2 Sample Name: PQL-LOWCHECK Operator: LCM
Run Time: 10/09/01 18:10:15
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	216.4255	22.21141	Q24.49768	5.224171	2.295904	3.388984	958.9677
#1	216.0830	20.87478	Q28.65374	5.251563	2.229281	3.404928	959.7010
#2	216.7680	23.54805	20.34161	5.196779	2.362526	3.373040	958.2344
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.787678	5.287390	10.25116	161.9897	8.625774	255.5392	5.009347
#1	5.535421	5.010694	10.39333	153.9341	8.856242	256.2112	5.048702
#2	Q6.039934	5.564086	10.10898	170.0453	8.395307	254.8672	4.969993
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	10.56177	253.6470	22.04552	Q3.607113	2210.960	33.94239	9.604137
#1	9.891664	250.1469	20.09704	3.227737	2177.526	34.79663	9.239153
#2	11.23188	257.1471	23.99399	Q3.986489	2244.394	33.08815	9.969122
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	10.00000	250.0000	20.00000	3.000000	2500.000	30.00000	10.00000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	20.63617	16.01699	5.820329	24.74899	5.109362	25.19201	9.088499
#1	20.78104	15.98456	Q6.065073	23.96611	5.147191	25.18656	7.974254
#2	20.49130	16.04942	5.575583	25.53186	5.071533	25.19746	10.20274
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	8.393985	20.44756	22.84406	53.94025
#1	9.296807	16.14395	22.07306	55.37604
#2	7.491163	24.75117	23.61507	52.50445
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				50.00000
Range				20.00000

Method: TRACE2 Sample Name: CRCRI Operator: LCM
Run Time: 10/09/01 18:16:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	401.0735	121.8534	19.36022	399.8248	10.16478	10.18130	474.8541
#1	405.4365	123.4423	22.24316	400.1436	10.15747	10.28057	473.9556
#2	396.7105	120.2646	16.47728	399.5060	10.17210	10.08202	475.7526
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	19.42887	99.26294	48.25017	195.7875	5.778703	493.5850	30.57729
#1	19.93476	99.52941	48.19404	197.0736	5.469396	496.2807	30.68699
#2	18.92298	98.99646	48.30630	194.5015	6.088010	490.8892	30.46759
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	78.20228	509.9798	12.35042	19.23900	926.8740	21.24055	99.85051
#1	78.38255	510.1178	11.72589	19.06592	953.0002	18.93354	99.78648
#2	78.02200	509.8418	Q12.97496	19.41207	900.7478	23.54757	99.91453
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	41.38575	15.78257	5.031862	23.82627	5.074311	25.39615	1.105320
#1	42.08138	16.13692	5.096183	26.08046	5.108079	25.45519	-.798991
#2	40.69013	15.42822	4.967541	21.57209	5.040544	25.33712	3.009631
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	8.114956	7.815630	14.61736	11.57475
#1	8.603149	11.22542	11.97569	14.23718
#2	7.626762	4.405840	17.25904	8.912317
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACE2 Sample Name: IAICSAI Operator: LCM
Run Time: 10/09/01 18:23:32
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	487669.1	.7718251	-1.35284	1.045708	.6090483	2.444474	498411.5
#1	487787.9	3.942937	-2.07153	1.089107	.6379060	2.605038	499215.0
#2	487550.2	-2.39929	-.634148	1.002308	.5801906	2.283911	497607.9
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	30.00000	20.00000	20.00000	10.00000	10.00000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3797880	.7099743	-.109312	190254.0	-2.31638	495737.3	9.723965
#1	.7790677	.7931552	-.415227	190319.6	.1251632	495622.0	9.781695
#2	-.019492	.6267934	.1966032	190188.4	-4.75793	495852.6	9.666233
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	20.00000	100.0000	50.00000	40000.00	6.000000	100000.0	30.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.317239	11.62018	-2.73223	.1116677	-117.498	4.942860	2.403369
#1	.8467078	14.87115	-3.44698	.3937049	-100.299	7.419083	2.823723
#2	1.787771	8.369211	-2.01748	-.170369	-134.697	2.466637	1.983015
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	80.00000	1000.000	10.00000	20.00000	1000.000	20.00000	100.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	26.53046	.2867395	1.468844	-.797356	13.31418	2.605269	-119.817
#1	26.73853	-.045163	2.288394	-1.11395	13.29682	2.654627	-120.799
#2	26.32239	.6186416	.6492953	-.480766	13.33153	2.555911	-118.836
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	35.00000	50.00000	10.00000	10.00000	50.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	56.43351	1.151863	-4.67474	22.57647
#1	60.58649	5.394886	-7.86837	21.55318
#2	52.28053	-3.09116	-1.48110	23.59974
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Method: TRACE2 Sample Name: IBICSABI Operator: LCM
Run Time: 10/09/01 18:30:07
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	489737.1	610.7299	101.7729	522.0429	507.5884	948.5912	497964.7
#1	494145.2	613.4269	100.7866	526.2978	511.8339	957.1272	503193.5
#2	485328.9	608.0328	102.7591	517.7879	503.3430	940.0552	492735.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	489.3438	479.4840	525.9818	191243.7	44.05019	499930.8	503.9906
#1	493.2670	483.0632	530.4067	192954.4	44.03666	503835.7	508.3260
#2	485.4205	475.9047	521.5569	189532.9	44.06370	496025.8	499.6551
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	963.2014	5325.537	43.55849	210.3034	5254.783	104.7264	499.1982
#1	970.3944	5363.113	42.63265	212.2387	5310.421	102.5488	502.8209
#2	956.0085	5287.961	44.48432	208.3681	5199.145	106.9040	495.5754
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	957.9724	1074.460	963.4239	972.6573	13.50739	993.5148	-71.4164
#1	964.3588	1084.316	971.7819	974.6463	13.63455	1001.782	-72.5968
#2	951.5861	1064.604	955.0660	970.6683	13.38023	985.2477	-70.2360
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000		1000.000	
Range	20.00000	20.00000	20.00000	20.00000		20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	101.7829	51.05469	39.80999	Q1473.969
#1	102.3529	47.05030	40.42346	Q1488.283
#2	101.2129	55.05907	39.19651	Q1459.654
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Analysis Report QC Standard 10/09/01 06:46:54 PM page 1

Method: TRACE2 Sample Name: LR Operator: LCM
Run Time: 10/09/01 18:40:22
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	247447.4	4980.632	Q5313.206	10013.59	481.2629	1965.111	13.36862
#1	250242.2	5032.936	Q5366.966	10120.52	486.0902	1986.014	17.77287
#2	244652.7	4928.329	Q5259.445	9906.664	476.4355	1944.207	8.964377
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	NOCHECK
Value	250000.0	5000.000	5000.000	10000.00	500.0000	2000.000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	9924.275	9850.513	10189.35	501171.1	19775.06	36.95233	9701.339
#1	10023.52	9947.110	10303.90	506428.4	19924.28	39.30672	9802.226
#2	9825.032	9753.915	10074.80	495913.7	19625.85	34.59793	9600.452
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass
Value	10000.00	10000.00	10000.00	500000.0	20000.00		10000.00
Range	5.000000	5.000000	5.000000	5.000000	5.000000		5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	7435.126	19.22822	1976.102	1015.771	1402.396	2013.074	10003.10
#1	7511.571	19.32240	1994.064	1026.110	1471.858	2029.608	10112.45
#2	7358.680	19.13403	1958.140	1005.432	1332.934	1996.539	9893.751
Errors	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	7500.000		2000.000	1000.000		2000.000	10000.00
Range	5.000000		5.000000	5.000000		5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4859.155	4999.956	9785.766	-3.69311	1999.436	9846.922	20162.40
#1	4907.369	5049.643	9883.276	-3.67894	2020.747	9943.463	20323.35
#2	4810.942	4950.269	9688.255	-3.70729	1978.124	9750.380	20001.46
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK
Value	5000.000	5000.000	10000.00		2000.000	10000.00	
Range	5.000000	5.000000	5.000000		5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	19581.40	1971.497	1978.404	1.717182
#1	19724.74	1989.172	1996.509	2.992363
#2	19438.05	1953.822	1960.299	.4420015
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACE2 Sample Name: CVCCV3 Operator: LCM
Run Time: 10/09/01 18:50:58
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50319.54	1012.100	1019.116	506.0577	49.93772	492.8132	98490.16
#1	50275.86	1014.975	1014.526	506.1722	49.90097	491.5491	98288.65
#2	50363.22	1009.225	1023.706	505.9433	49.97447	494.0773	98691.66
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	498.0453	493.6326	499.6395	48877.05	493.6623	101645.1	495.9731
#1	497.6748	493.3924	498.8475	48786.31	490.2984	101539.8	495.2994
#2	498.4158	493.8729	500.4315	48967.79	497.0261	101750.4	496.6467
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	498.2800	24899.65	1015.579	51.46579	101958.7	988.5139	498.0406
#1	499.6407	24904.64	1015.309	50.60364	101854.6	982.1898	497.2039
#2	496.9194	24894.65	1015.849	52.32794	102062.9	994.8379	498.8773
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	488.6556	512.1791	495.8188	495.8238	506.2150	503.5128	492.0427
#1	487.8644	510.9807	494.8868	491.3397	506.1607	503.5623	490.0213
#2	489.4467	513.3775	496.7509	500.3079	506.2693	503.4631	494.0640
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	494.4716	1011.021	1017.857	520.9294
#1	490.4365	1009.790	1018.068	520.1865
#2	498.5067	1012.253	1017.647	521.6725
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB3 Operator: LCM
Run Time: 10/09/01 18:57:33
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	13.36459	-.580159	2.754388	.3127854	.2799852	.4060031	-7.65718
#1	19.25071	-2.76063	3.745891	.3859852	.2469506	.4242733	-5.90992
#2	7.478469	1.600311	1.762886	.2395855	.3130198	.3877330	-9.40444
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4098613	.2470777	.0928396	14.51498	-1.73506	15.46788	.1714158
#1	.1726221	.5315060	.2124692	20.33095	-1.27588	19.57869	.2019988
#2	.6471005	-.037351	-.026790	8.699004	-2.19425	11.35707	.1408327
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.028759	17.46283	-.705298	.6019798	-18.9874	4.963146	.7094787
#1	1.246747	13.49555	.4770402	.3928801	-135.256	5.371649	.3539327
#2	.8107712	21.43011	-1.88764	.8110796	97.28072	4.554643	1.065025
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.3704844	1.366177	1.257289	.6110165	.0950778	.2498081	-.683674
#1	.6501459	1.555485	1.088563	-.969854	.1312493	.2010673	-.446384
#2	.0908230	1.176868	1.426016	2.191887	.0589062	.2985489	-.920964
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-2.26110	-3.41292	.6481432	-1.14990
#1	-1.69098	-2.89352	2.161929	.8521381
#2	-2.83123	-3.93232	-.865642	-3.15193
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: PBS038 Operator: LCM
Run Time: 10/09/01 19:04:08
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	18.71799	2.575356	-.783207	.3878542	.2660246	.2203833	53.87627
#1	20.22904	2.772175	2.875054	.4938715	.2776525	.2126772	54.55799
#2	17.20694	2.378538	-4.44147	.2818369	.2543967	.2280894	53.19455
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7514139	-.216971	-.114948	18.40517	.6528630	11.41509	.8373457
#1	1.096292	-.079924	.2661003	28.31770	.9955423	14.73293	.9199711
#2	.4065360	-.354017	-.495997	8.492639	.3101837	8.097261	.7547204
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.943749	29.10325	1.968114	.1547593	440.7668	-.764194	.0014979
#1	-.869167	36.30849	2.282074	.5421109	440.9533	-1.38135	.2668976
#2	-1.01833	21.89800	1.654153	-.232592	440.5802	-.147043	-.263902
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1.450105	2.479253	.6701216	9.946178	.3516455	.4491924	1.601139
#1	1.672584	2.182006	.7134898	10.61993	.3693512	.5314872	.7960622
#2	1.227626	2.776500	.6267535	9.272423	.3339397	.3668976	2.406217
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.1783812	2.111844	1.895840	10.81797
#1	1.094936	-.678012	3.761683	12.61433
#2	-.738174	4.901700	.0299966	9.021608
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				50.00000
Low				-50.0000

Method: TRACE2 Sample Name: LCSS038 Operator: LCM
Run Time: 10/09/01 19:11:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	9976.822	94.87541	100.5617	1015.998	49.74464	100.0252	9896.285
#1	9990.148	96.21928	99.29442	1017.949	49.82273	100.0207	9901.836
#2	9963.496	93.53155	101.8291	1014.048	49.66656	100.0298	9890.733
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.00	120.0000	120.0000	1200.000	60.00000	120.0000	12000.00
Low	8000.000	80.00000	80.00000	800.0000	40.00000	80.00000	8000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	505.5579	504.0149	502.4367	10011.63	1006.905	9831.070	502.3084
#1	506.3263	505.1758	501.6981	10009.84	1008.068	9834.875	502.7052
#2	504.7895	502.8540	503.1753	10013.42	1005.744	9827.265	501.9115
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	600.0000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	400.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	503.1104	9971.170	99.79222	99.67053	10414.98	103.0376	504.7350
#1	503.5416	9994.190	100.2185	99.79733	10445.67	101.9542	505.3214
#2	502.6793	9948.149	99.36598	99.54372	10384.29	104.1210	504.1486
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	12000.00	120.0000	120.0000	12000.00	120.0000	600.0000
Low	400.0000	8000.000	80.00000	80.00000	8000.000	80.00000	400.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1011.022	983.0269	496.2305	515.1901	1010.417	2011.923	1023.239
#1	1012.084	983.5212	495.9936	514.4233	1012.177	2016.978	1023.233
#2	1009.961	982.5325	496.4674	515.9567	1008.657	2006.868	1023.244
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1200.000	1200.000	600.0000	600.0000	1200.000	2400.000	
Low	800.0000	800.0000	400.0000	400.0000	800.0000	1600.000	

Elem	2/PB	1/SE	2/SE	SI
Avge	998.7388	92.81563	103.2801	L4036.308
#1	1000.485	88.87900	105.8878	L4038.006
#2	996.9930	96.75225	100.6724	L4034.610
Errors	NOCHECK	NOCHECK	NOCHECK	LC Low
High				12000.00
Low				8000.000

Method: TRACE2 Sample Name: S 109069-016-01-1/1 Operator: LCM
Run Time: 10/09/01 19:17:54
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	36766.59	9.504414	19.55324	98.27525	1.955587	4.836701	15281.45
#1	36858.89	8.921781	17.90476	98.23105	1.933105	4.745141	15252.20
#2	36674.30	10.08705	21.20172	98.31944	1.978069	4.928260	15310.70
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	95.19183	16.67534	131.2670	69583.58	141.4056	12724.19	515.2423
#1	94.49201	16.18606	131.2336	69416.42	140.7368	12675.79	514.3287
#2	95.89166	17.16463	131.3005	69750.74	142.0743	12772.60	516.1558
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	45.33631	7556.420	3.282184	2.642233	20588.67	-.373470	104.3940
#1	45.08224	7602.073	2.299554	2.642078	20612.01	-.711157	104.3097
#2	45.59037	7510.767	4.264813	2.642389	20565.34	-.035784	104.4784
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1053.926	66.98231	8.421353	20.69909	276.5488	1013.388	133.4404
#1	1048.618	66.62296	8.803178	19.96028	276.3785	1012.188	132.5311
#2	1059.234	67.34168	8.039529	21.43790	276.7192	1014.589	134.3497
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	145.3878	-6.46371	8.154685	1653.301
#1	144.8393	-5.11823	6.007914	1648.916
#2	145.9364	-7.80919	10.30146	1657.685
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109069-017-01-1/1 Operator: LCM
Run Time: 10/09/01 19:24:47
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	45364.65	1.478288	29.92213	107.4808	2.297473	1.573832	14943.13
#1	45411.20	1.533214	28.21932	107.6279	2.227366	1.505683	14979.08
#2	45318.09	1.423362	31.62494	107.3336	2.367581	1.641980	14907.19
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	91.10443	20.20122	83.70164	74115.19	86.57593	14747.82	483.0766
#1	91.21305	20.01585	84.32665	74271.02	86.55872	14780.85	484.2429
#2	90.99581	20.38660	83.07664	73959.35	86.59314	14714.79	481.9103
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	50.67662	8861.117	1.322804	.8715413	20643.13	2.534450	109.7218
#1	51.72630	8856.161	-2.96689	.5713904	20677.46	.4208031	110.8396
#2	49.62694	8866.072	5.612499	1.171692	20608.81	4.648096	108.6039
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	488.6543	68.20576	6.599163	14.86682	272.2330	1216.899	78.83041
#1	489.7572	68.88569	6.521613	17.02884	272.5950	1216.388	79.22473
#2	487.5514	67.52583	6.676712	12.70481	271.8710	1217.411	78.43610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	90.44817	-5.45221	4.709831	1285.181
#1	90.22520	-14.2837	2.690987	1285.019
#2	90.67114	3.379285	6.728676	1285.344
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109069-018-01-1/1 Operator: LCM
Run Time: 10/09/01 19:31:39
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	7297.586	2.791128	5.820076	21.05700	.7329824	.3241540	1632.102
#1	7238.438	2.385512	4.915549	20.84183	.7774851	.3231851	1614.278
#2	7356.734	3.196744	6.724602	21.27216	.6884797	.3251230	1649.927
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	18.96697	3.499280	27.74725	16148.80	29.16455	3060.187	89.95282
#1	18.57223	3.607319	27.07600	16009.05	27.77400	3027.998	89.11176
#2	19.36171	3.391240	28.41850	16288.55	30.55510	3092.377	90.79388
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	8.476775	1859.727	.5002014	.9771141	8852.644	-1.26401	26.13553
#1	7.866980	1855.702	-.143359	.9701597	8847.944	-2.81723	26.04026
#2	9.086571	1863.752	1.143762	.9840686	8857.343	.2891974	26.23080
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	129.8223	17.43766	2.909952	10.68413	23.08394	281.2684	27.61564
#1	128.3635	17.24253	2.882863	8.672296	22.87684	279.4015	28.86933
#2	131.2810	17.63280	2.937041	12.69596	23.29103	283.1352	26.36195
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	29.93858	-9.76605	5.632933	1260.304
#1	27.22591	-11.6281	5.598569	1247.420
#2	32.65124	-7.90402	5.667297	1273.189
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109069-019-01-1/1 Operator: LCM
Run Time: 10/09/01 19:38:32
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	12417.32	2.164848	8.006000	39.24149	1.023106	.1187270	1596.277
#1	12424.51	1.686681	10.16193	39.39945	1.019787	.2695118	1598.403
#2	12410.13	2.643016	5.850068	39.08352	1.026425	-.032058	1594.151
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	25.78013	5.910661	105.1778	14440.75	195.8678	3361.295	94.77051
#1	26.00080	6.014574	105.8592	14479.32	197.3865	3376.828	95.04631
#2	25.55946	5.806748	104.4964	14402.18	194.3491	3345.761	94.49470
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	46.12266	2389.601	3.426154	-.029086	10040.31	-2.52060	48.34685
#1	47.61944	2378.154	3.738376	.3637549	10030.27	-1.85545	48.37754
#2	44.62589	2401.048	3.113932	-.421926	10050.36	-3.18576	48.31616
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	462.9972	34.98214	3.252156	47.97195	27.92315	359.1923	198.9135
#1	464.7296	34.74006	3.153150	48.87033	27.96996	359.1749	200.3813
#2	461.2648	35.22422	3.351162	47.07358	27.87634	359.2096	197.4457
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	194.3446	.3474999	4.965060	1880.603
#1	195.8887	-.368048	5.791144	1896.023
#2	192.8004	1.063048	4.138977	1865.184
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109069-020-01-1/1 Operator: LCM
Run Time: 10/09/01 19:45:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	6099.977	2.517678	7.391171	17.80769	.4524086	.3074964	1600.803
#1	6113.871	2.608302	7.112747	17.77597	.4388769	.2147430	1599.179
#2	6086.082	2.427054	7.669593	17.83940	.4659403	.4002498	1602.426
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	15.94254	2.021456	20.43162	8892.353	17.70773	2437.821	54.95362
#1	15.69285	1.900932	20.00912	8884.614	17.43672	2428.859	54.87378
#2	16.19223	2.141980	20.85412	8900.092	17.97874	2446.783	55.03346
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	5.406688	1671.325	2.081272	.3873694	8533.298	-1.01636	17.51558
#1	4.919020	1682.655	1.979045	.0921281	8569.362	-3.07412	17.91357
#2	5.894356	1659.996	2.183499	.6826106	8497.233	1.041407	17.11760
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	94.86162	16.10473	5.066125	12.95977	20.52375	323.2151	17.19639
#1	94.68851	15.94793	4.898594	12.85003	20.53523	323.4068	18.46612
#2	95.03473	16.26154	5.233656	13.06950	20.51227	323.0235	15.92667
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	17.96287	-4.08433	5.163700	1416.755
#1	16.92150	-.723531	3.329941	1421.444
#2	19.00425	-7.44513	6.997458	1412.067
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109069-021-01-1/1 Operator: LCM
Run Time: 10/09/01 19:52:18
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	11146.59	-.204446	8.516499	44.45242	.7656924	.3621754	43391.81
#1	11139.35	.5425460	7.987882	44.29342	.7364250	.2379779	43355.64
#2	11153.83	-.951437	9.045115	44.61142	.7949598	.4863730	43427.98
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	22.64950	3.767312	20.76524	16730.81	20.73793	3886.764	97.40964
#1	22.51422	3.936684	20.56383	16698.28	19.31477	3871.172	97.18047
#2	22.78478	3.597940	20.96666	16763.34	22.16108	3902.356	97.63882
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	8.965734	2463.858	.0505644	.3196869	9475.772	1.626960	30.78818
#1	8.717009	2470.088	3.199939	.3319325	9465.668	-.546717	30.77724
#2	9.214459	2457.628	-3.09881	.3074414	9485.877	3.800637	30.79912
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	126.1532	21.34713	2.851328	11.95537	342.6651	361.1633	18.07427
#1	126.1139	21.69330	2.972460	12.47840	342.5343	360.5221	17.91271
#2	126.1926	21.00096	2.730197	11.43233	342.7959	361.8044	18.23583
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	22.06932	-6.80561	3.478211	1472.275
#1	20.01537	-.742662	5.170890	1469.378
#2	24.12326	-12.8686	1.785532	1475.172
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109069-022-01-1/1 Operator: LCM
Run Time: 10/09/01 19:59:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	18683.27	-1.37815	12.88509	42.53855	.9031969	.1595804	2647.053
#1	18501.76	-2.75190	14.57339	42.24372	.9063627	.1119856	2622.433
#2	18864.79	-.004396	11.19679	42.83338	.9000312	.2071753	2671.674
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	42.30423	6.663954	18.48320	28306.17	23.11968	6798.679	229.6367
#1	41.04703	5.930399	18.25235	28064.49	23.44181	6744.541	227.6941
#2	43.56143	7.397509	18.71405	28547.85	22.79754	6852.818	231.5793
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	18.51786	4112.286	1.734508	.1637021	9954.414	-2.20184	44.69754
#1	18.73287	4075.272	3.400160	-.570011	9697.790	-4.45317	44.30318
#2	18.30284	4149.301	.0688556	.8974153	10211.04	.0494900	45.09191
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	127.7482	28.63468	3.102795	11.87160	30.01799	708.1675	16.50792
#1	127.1487	27.19637	2.687364	9.892166	29.73759	702.3850	15.90796
#2	128.3477	30.07299	3.518226	13.85104	30.29838	713.9500	17.10788
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	26.42515	-7.65972	6.431219	1549.807
#1	27.20838	-6.11486	8.157231	1540.075
#2	25.64192	-9.20457	4.705206	1559.538
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109073-003-04-1/1 Operator: LCM
Run Time: 10/09/01 20:06:03
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	18386.85	3.481960	32.48378	189.0677	-.261667	.9656243	8219.330
#1	18393.77	2.502409	35.60569	189.2183	-.338474	1.042522	8213.693
#2	18379.93	4.461512	29.36187	188.9172	-.184860	.8887267	8224.968
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	59.18613	14.76323	196.3011	32397.99	115.2774	4083.824	337.4307
#1	59.22213	14.33645	196.3481	32365.19	114.5988	4085.232	337.2764
#2	59.15013	15.19001	196.2541	32430.78	115.9559	4082.416	337.5849
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	164.8970	2176.577	3.178972	2.130193	2952.999	8.415316	985.0804
#1	164.2335	2169.048	4.648010	2.229965	2915.793	8.285978	983.8899
#2	165.5604	2184.106	1.709934	2.030421	2990.206	8.544652	986.2708
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	348.9240	17.30991	5.909753	17.55920	147.2241	708.1217	114.8811
#1	347.9935	17.00879	5.671920	15.95801	147.3577	708.0843	113.1256
#2	349.8546	17.61102	6.147585	19.16038	147.0906	708.1591	116.6365
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	115.4751	-.196856	4.866399	1884.702
#1	115.3351	1.596305	6.173330	1880.060
#2	115.6152	-1.99002	3.559469	1889.344
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: CVCCV3 Operator: LCM
Run Time: 10/09/01 20:12:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50691.30	1015.144	1015.311	507.7081	49.85989	491.2242	99021.56
#1	50709.05	1014.591	1015.370	507.4578	49.90548	490.5178	99041.07
#2	50673.54	1015.697	1015.252	507.9585	49.81430	491.9305	99002.05
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.4447	492.0716	502.4672	48956.28	492.9474	101493.1	495.9961
#1	497.7947	492.5565	502.3883	48958.39	492.4538	101403.9	495.8631
#2	497.0948	491.5867	502.5462	48954.18	493.4409	101582.3	496.1291
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	494.3389	25328.63	1018.110	51.50748	103532.7	983.5299	499.7630
#1	494.4343	25323.26	1011.052	51.86747	103552.0	977.9794	499.0321
#2	494.2435	25334.01	1025.168	51.14748	103513.4	989.0803	500.4939
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	485.9356	510.0878	495.3131	497.6901	507.5834	504.4808	489.5897
#1	485.0752	509.8598	494.5534	496.6769	507.6984	504.7037	488.1237
#2	486.7960	510.3158	496.0727	498.7032	507.4683	504.2580	491.0557
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	494.6257	1018.380	1017.975	522.7543
#1	494.6184	1012.712	1010.221	521.4089
#2	494.6331	1024.047	1025.728	524.0998
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB3 Operator: LCM
Run Time: 10/09/01 20:19:50
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19.11609	2.394926	3.025900	.1139934	.2933453	.1724344	-13.4029
#1	20.29421	3.178504	2.713869	.1705248	.3276723	.2142013	-11.6293
#2	17.93796	1.611348	3.337932	.0574621	.2590183	.1306674	-15.1765
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.0551767	.3918861	-.324852	9.857526	.3141051	10.77273	.0214584
#1	.2196224	.6616934	.3953937	18.65503	.5195939	10.80712	.0299850
#2	-.109269	.1220787	-1.04510	1.060025	.1086162	10.73835	.0129318
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.135945	19.62418	-.053751	.3405233	-149.703	5.101030	.3960217
#1	1.180582	26.15700	1.134124	.5941555	-61.1702	6.552950	.7936136
#2	1.091307	13.09135	-1.24163	.0868912	-238.236	3.649110	-.001570
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0537257	1.270249	.6276226	.2214070	.0985462	.1840843	-1.27594
#1	.0789791	1.263502	.6702315	.6567187	.1268866	.2566620	-1.56653
#2	.0284723	1.276997	.5850138	-.213905	.0702058	.1115066	-.985348
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.108761	-1.86880	.8533021	1.951244
#1	1.562310	-5.74234	4.571832	2.108937
#2	.6552128	2.004729	-2.86523	1.793551
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: D 109073-003-04-1/1 Operator: LCM
Run Time: 10/09/01 20:26:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	15446.77	1.463890	29.30703	144.3822	L-2.03581	.7020425	6078.491
#1	15449.14	2.047866	28.66166	144.4711	L-2.02222	.7530279	6077.764
#2	15444.40	.8799139	29.95241	144.2933	L-2.04939	.6510571	6079.218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	50.70690	11.46570	150.2262	28103.57	94.94518	3349.760	256.3733
#1	51.17635	11.69271	150.2464	28145.53	96.77364	3362.698	256.7330
#2	50.23746	11.23869	150.2060	28061.61	93.11671	3336.822	256.0136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	197.0598	1876.040	4.472277	1.437768	2585.692	5.901783	1194.305
#1	197.5283	1877.305	3.228985	1.611139	2641.628	7.634803	1195.491
#2	196.5914	1874.775	5.715568	1.264397	2529.757	4.168762	1193.118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	306.2225	14.26741	4.987711	17.33139	102.4585	586.4734	92.05422
#1	307.8964	14.50750	4.845938	18.43937	102.5520	587.6892	90.43637
#2	304.5486	14.02731	5.129483	16.22340	102.3650	585.2575	93.67207
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	96.39027	-2.68410	8.050085	1874.672
#1	99.94193	-2.95540	6.320778	1877.995
#2	92.83861	-2.41280	9.779391	1871.349
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SP109073-003-04-1/1 Operator: LCM
Run Time: 10/09/01 20:33:36
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	17580.66	64.76115	61.00259	2173.291	48.70793	51.49768	9702.234
#1	17599.41	63.05326	62.89903	2174.718	48.64175	51.29062	9696.129
#2	17561.92	66.46903	59.10615	2171.865	48.77411	51.70474	9708.340
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	249.7619	519.5891	372.6901	25301.40	96.92509	7828.853	720.8409
#1	249.2179	519.0375	372.9198	25285.68	96.81221	7816.704	720.4689
#2	250.3058	520.1407	372.4603	25317.11	97.03797	7841.002	721.2129
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	668.1912	2803.439	11.98641	52.99630	7329.452	57.71736	1522.707
#1	666.8655	2813.884	11.64962	52.74149	7354.365	58.39797	1522.457
#2	669.5168	2792.994	12.32320	53.25111	7304.540	57.03675	1522.956
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	766.0444	509.5898	106.1864	115.1451	185.6225	626.8413	94.50574
#1	765.0358	509.4906	105.7487	116.2801	185.6406	624.2600	95.39862
#2	767.0531	509.6891	106.6242	114.0101	185.6044	629.4226	93.61285
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	98.13429	9.344835	13.30673	1799.507
#1	97.51849	10.68877	12.12960	1799.118
#2	98.75009	8.000902	14.48386	1799.896
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: PS109073-003-04-1/1 Operator: LCM
Run Time: 10/09/01 20:40:30
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	18998.94	78.03482	109.8111	205.9460	9.685055	20.39623	10927.37
#1	18743.78	76.88509	110.5203	203.7541	9.544937	20.29498	10825.14
#2	19254.11	79.18456	109.1020	208.1378	9.825172	20.49749	11029.60
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	77.40036	43.28798	221.5306	32214.38	141.1841	4405.373	351.0477
#1	76.90431	43.24414	219.7098	31932.68	139.4708	4372.097	347.9793
#2	77.89642	43.33181	223.3514	32496.09	142.8973	4438.648	354.1162
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	200.8904	2338.604	70.43150	40.14686	7458.360	98.46279	985.6772
#1	200.5862	2305.223	66.90084	40.11233	7467.391	98.35907	976.8266
#2	201.1946	2371.984	73.96217	40.18139	7449.330	98.56651	994.5278
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	418.8752	87.51497	35.54836	115.6437	164.4353	718.9841	140.1311
#1	416.3474	87.05328	35.28518	114.9661	162.6649	712.0560	140.7504
#2	421.4030	87.97665	35.81153	116.3213	166.2057	725.9122	139.5118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	141.7101	67.98920	71.65230	6565.703
#1	138.8306	61.90651	69.39762	6500.221
#2	144.5897	74.07188	73.90697	6631.185
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SE109073-003-04-1/1 Operator: LCM
Run Time: 10/09/01 20:47:23
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	3689.290	2.376111	9.550528	37.41948	.1966344	.4578624	1617.498
#1	3693.461	2.159710	7.707974	37.34744	.1790741	.3634727	1619.175
#2	3685.119	2.592512	11.39308	37.49152	.2141946	.5522520	1615.820
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	12.63532	3.586802	38.35859	6422.450	21.17828	825.7506	66.60565
#1	12.13252	2.985480	38.10678	6415.123	21.17334	821.3523	66.69728
#2	13.13813	4.188124	38.61041	6429.777	21.18322	830.1490	66.51402
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	33.26865	443.2224	1.516628	1.163991	502.4452	2.661296	194.6963
#1	33.20077	440.3582	3.006407	.3757845	408.7987	2.734525	194.7024
#2	33.33654	446.0865	.0268479	1.952197	596.0916	2.588068	194.6902
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	70.47052	3.650316	1.233913	3.037482	29.02931	139.9497	18.61649
#1	70.43034	3.264808	1.631819	4.593268	29.05595	139.9067	16.90142
#2	70.51070	4.035824	.8360075	1.481696	29.00268	139.9927	20.33156
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	22.45883	-5.51777	5.033457	384.6691
#1	23.30895	-2.48136	5.749943	388.6338
#2	21.60870	-8.55419	4.316971	380.7043
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109073-006-04-1/1 Operator: LCM
Run Time: 10/09/01 20:54:16
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	15062.11	4.086795	19.57356	113.5421	1.227434	.3115097	3531.323
#1	15064.34	3.854671	21.17711	113.6894	1.177622	.3260539	3528.606
#2	15059.88	4.318920	17.97002	113.3949	1.277247	.2969655	3534.041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	40.08112	8.369889	119.4961	28134.73	76.10091	4327.044	232.7941
#1	39.36103	7.969392	119.6295	28115.61	76.75788	4324.666	232.7535
#2	40.80121	8.770387	119.3626	28153.85	75.44394	4329.422	232.8347
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	37.84979	2247.806	.2788636	.7464976	5783.830	1.286791	156.0153
#1	37.28590	2253.016	-1.48929	.0952962	5787.782	1.339599	155.7747
#2	38.41369	2242.597	2.047020	1.397699	5779.877	1.233983	156.2558
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	332.9778	18.32745	2.774116	12.41798	86.23511	439.4163	74.31476
#1	332.2039	17.12972	2.355169	9.962645	86.27122	439.1878	76.62182
#2	333.7517	19.52519	3.193064	14.87332	86.19899	439.6448	72.00769
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	76.99353	-6.22881	3.532262	1496.023
#1	76.82539	-8.70663	2.118936	1500.589
#2	77.16167	-3.75099	4.945588	1491.458
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109073-009-04-1/1 Operator: LCM
Run Time: 10/09/01 21:01:09
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19975.44	.5788847	21.19687	69.96580	.9934551	.4735262	2605.035
#1	19996.40	2.158811	22.14274	70.04509	.9905609	.6738052	2607.759
#2	19954.49	-1.00104	20.25100	69.88650	.9963492	.2732472	2602.311
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	42.10318	11.86406	49.77011	30513.19	38.24986	5724.474	194.5941
#1	41.98810	11.70360	50.10144	30526.91	38.23042	5736.526	194.8117
#2	42.21825	12.02451	49.43877	30499.46	38.26931	5712.421	194.3765
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	39.32122	3543.763	4.181972	-.372092	5862.760	-.097817	98.27013
#1	40.44594	3549.687	4.886261	-.062113	5754.038	.0105524	98.26720
#2	38.19650	3537.839	3.477684	-.682071	5971.483	-.206186	98.27306
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	203.9032	21.01046	3.689317	12.83361	48.80542	672.2203	34.52473
#1	203.9914	21.00060	3.352499	11.81646	48.88262	672.4280	31.80066
#2	203.8151	21.02031	4.026135	13.85076	48.72822	672.0126	37.24881
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	40.11199	-5.97698	9.261007	1650.428
#1	41.44495	-7.43996	11.04902	1653.334
#2	38.77904	-4.51399	7.472996	1647.521
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109073-019-04-1/1 Operator: LCM
Run Time: 10/09/01 21:08:02
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10122.46	2.628052	13.04656	37.38623	.7049164	.3060052	2410.317
#1	10184.55	4.114273	12.62287	37.57194	.6601108	.3218665	2419.981
#2	10060.36	1.141832	13.47025	37.20052	.7497218	.2901438	2400.654
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	25.28081	5.536577	46.85285	20958.89	44.23865	3633.161	92.28763
#1	25.01036	5.548964	47.58243	21035.62	44.26381	3646.628	92.59566
#2	25.55126	5.524191	46.12327	20882.17	44.21349	3619.694	91.97960
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	11.08427	2214.465	1.394435	.4249799	10413.09	-1.36359	40.07297
#1	10.99673	2234.956	2.175078	.1758772	10541.07	-4.20216	40.36943
#2	11.17180	2193.974	.6137907	.6740826	10285.11	1.474983	39.77651
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	162.2420	20.19228	2.777217	15.24593	41.09200	381.6284	41.92578
#1	162.9640	19.72566	2.900698	14.14080	41.24447	382.7586	41.67231
#2	161.5200	20.65889	2.653736	16.35106	40.93954	380.4981	42.17925
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	45.39459	-7.26823	5.725314	1439.967
#1	45.55911	-7.22840	6.876360	1443.934
#2	45.23008	-7.30806	4.574268	1436.001
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Analysis Report QC Standard 10/09/01 09:21:45 PM page 1

Method: TRACE2 Sample Name: CRCRI Operator: LCM
Run Time: 10/09/01 21:14:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	404.9150	123.6577	21.30247	402.1139	10.23549	10.29775	475.0091
#1	406.7772	125.3774	21.25023	402.1748	10.22584	10.53728	478.5922
#2	403.0528	121.9380	21.35471	402.0529	10.24515	10.05822	471.4260
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	20.03402	99.96928	48.26563	204.0946	5.611598	497.1093	30.66614
#1	20.32942	100.2168	48.46975	211.1983	5.029755	498.3589	30.75872
#2	19.73861	99.72182	48.06151	196.9909	6.193440	495.8598	30.57356
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	80.10500	517.8925	10.81881	19.83261	935.2504	23.28543	100.4632
#1	80.16818	519.2270	12.30858	20.00939	1022.292	23.64939	100.6827
#2	80.04181	516.5579	9.329040	19.65583	848.2091	22.92146	100.2438
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	41.68164	16.35307	5.237348	26.03376	5.111840	25.50798	6.096764
#1	41.92878	16.95273	4.877656	29.53755	5.151964	25.60540	6.298098
#2	41.43450	15.75342	5.597041	22.52996	5.071717	25.41057	5.895429
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	5.368582	9.809723	11.32288	13.16403
#1	4.395150	10.06161	13.43154	15.47314
#2	6.342014	9.557837	9.214211	10.85492
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 10/09/01 09:28:39 PM page 1

Method: TRACE2 Sample Name: IAICSAI Operator: LCM
Run Time: 10/09/01 21:21:50
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	492974.1	2.515022	2.579351	1.201172	.7182571	2.200800	503730.8
#1	495167.6	2.988082	3.589973	1.178496	.7481965	2.213736	506845.2
#2	490780.7	2.041963	1.568730	1.223848	.6883177	2.187863	500616.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	30.00000	20.00000	20.00000	10.00000	10.00000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.2762294	.9951470	.2228877	191917.7	-2.26862	504479.0	10.09094
#1	.3388667	1.097600	.0167807	192704.5	-1.31501	506142.2	10.03016
#2	.2135921	.8926938	.4289948	191130.8	-3.22224	502815.9	10.15171
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	20.00000	100.0000	50.00000	40000.00	6.000000	100000.0	30.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.187104	3.993604	-2.32520	.0595105	-219.145	12.86961	2.111544
#1	1.104613	11.71780	-.723857	.1067931	-149.106	14.27514	2.464236
#2	1.269594	-3.73059	-3.92654	.0122280	-289.183	11.46408	1.758852
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	80.00000	1000.000	10.00000	20.00000	1000.000	20.00000	100.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	27.54739	.3799588	-.210970	-.147103	13.59502	2.780434	-129.501
#1	26.88147	.0887012	-.497572	.4815164	13.64197	2.862863	-127.900
#2	28.21330	.6712162	.0756330	-.775723	13.54808	2.698005	-131.102
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	35.00000	50.00000	10.00000	10.00000	50.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	61.34708	-.120826	-3.42781	29.65764
#1	61.97691	-2.32622	.0768661	29.18202
#2	60.71724	2.084565	-6.93250	30.13327
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Analysis Report QC Standard 10/09/01 09:35:33 PM page 1

Method: TRACE2 Sample Name: IBICSABI Operator: LCM
Run Time: 10/09/01 21:28:44
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	493620.6	620.8932	103.7459	526.6689	511.7131	956.0480	502864.2
#1	493512.1	619.5653	102.8082	526.3696	510.4391	953.9669	501635.4
#2	493729.1	622.2211	104.6837	526.9681	512.9871	958.1291	504093.0
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	494.6082	483.4507	528.9938	192665.5	46.03087	505430.5	507.6548
#1	493.7406	481.7290	528.0938	192270.3	45.41298	504254.2	506.6968
#2	495.4758	485.1725	529.8937	193060.7	46.64876	506606.9	508.6128
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	974.2593	5366.074	49.58121	212.9308	5502.977	113.3621	503.8139
#1	970.2517	5389.259	49.67941	213.0099	5387.484	109.3220	502.5441
#2	978.2670	5342.890	49.48300	212.8516	5618.469	117.4023	505.0836
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	965.7602	1087.244	969.2038	981.2820	13.62543	1002.157	-77.4881
#1	962.7830	1086.149	966.5540	977.4935	13.62178	1001.966	-82.8054
#2	968.7374	1088.338	971.8536	985.0706	13.62907	1002.347	-72.1707
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000		1000.000	
Range	20.00000	20.00000	20.00000	20.00000		20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	107.7897	55.77424	46.48429	Q1491.938
#1	109.5216	53.56274	47.73730	Q1491.491
#2	106.0579	57.98573	45.23128	Q1492.386
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Method: TRACE2 Sample Name: CVCCV3 Operator: LCM
Run Time: 10/09/01 21:35:38
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50754.33	1016.799	1023.256	512.0921	50.15455	492.3244	98443.44
#1	50719.42	1018.477	1027.415	511.9932	50.22320	493.4854	98556.21
#2	50789.24	1015.120	1019.098	512.1910	50.08590	491.1634	98330.67
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	500.8293	494.5589	503.1900	49033.52	493.4795	101998.1	497.6088
#1	501.6346	495.9282	503.3579	49121.21	492.1030	102178.0	498.2009
#2	500.0240	493.1897	503.0221	48945.82	494.8560	101818.1	497.0168
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	500.5568	25186.32	1026.046	51.54135	102995.2	988.1887	499.9319
#1	502.3560	25092.00	1024.893	52.20995	102832.1	985.3103	500.4146
#2	498.7576	25280.65	1027.198	50.87275	103158.2	991.0672	499.4493
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	490.0026	513.7831	495.1668	502.1647	511.1922	507.8694	490.1100
#1	491.5529	513.8470	495.7450	506.8557	511.2569	507.9907	489.8025
#2	488.4522	513.7192	494.5887	497.4736	511.1276	507.7481	490.4174
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	495.1638	1023.181	1027.477	529.3439
#1	493.2529	1021.567	1026.555	530.5687
#2	497.0748	1024.794	1028.400	528.1192
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB3 Operator: LCM
Run Time: 10/09/01 21:42:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	29.90297	-.183860	-.007884	.0828548	.3438126	.3351400	-.313968
#1	38.27669	-.503696	.4196796	.0632552	.3245617	.3134626	-3.29786
#2	21.52925	.1359752	-.435448	.1024544	.3630636	.3568174	2.669928
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3952282	.5749394	-.545595	13.32844	-.806445	26.62167	.0217156
#1	.1487872	.5101386	-.548279	11.27054	-.443356	27.30109	-.000880
#2	.6416692	.6397402	-.542912	15.38633	-1.16953	25.94225	.0443109
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.1085852	20.45628	.6573536	1.030714	-103.000	9.231198	.3492510
#1	-.706751	13.81154	2.455278	1.066343	-234.324	7.258359	-.530005
#2	.9239217	27.10102	-1.14057	.9950858	28.32299	Q11.20404	1.228507
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0759751	1.367173	.7728552	-.670813	.0845470	.1718541	-4.56221
#1	.2319450	1.050070	.5873392	-.535153	.0787627	.0802799	-3.05658
#2	-.079995	1.684277	.9583712	-.806473	.0903312	.2634284	-6.06783
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.071068	-4.64780	3.309495	-.552393
#1	.8628673	-1.91695	4.640956	1.111287
#2	1.279268	-7.37865	1.978032	-2.21607
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: S 109073-022-04-1/1 Operator: LCM
Run Time: 10/09/01 21:49:24
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	14666.01	3.285410	11.57095	30.79674	.6393907	.3439498	1781.022
#1	14577.08	2.595151	12.20235	30.49971	.6762778	.1536769	1764.718
#2	14754.94	3.975670	10.93955	31.09376	.6025036	.5342227	1797.326
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	29.22011	6.101689	66.49919	16297.71	57.81312	4631.185	96.58012
#1	28.77421	5.956978	65.56578	16095.40	56.94246	4572.504	95.49348
#2	29.66601	6.246400	67.43259	16500.03	58.68378	4689.867	97.66676
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	13.81888	3184.377	2.584333	1.386572	14725.52	-.187338	59.86662
#1	12.82022	3200.356	1.018565	1.210375	14566.14	-1.17822	59.11098
#2	14.81753	3168.398	4.150102	1.562769	14884.91	.8035421	60.62225
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	134.0768	28.63129	4.963908	15.19609	31.53154	411.7969	53.87612
#1	132.2502	28.02647	5.064978	15.00414	31.21238	407.3869	52.51734
#2	135.9034	29.23610	4.862838	15.38804	31.85070	416.2069	55.23490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	59.78113	-2.88942	5.320787	1527.926
#1	59.15458	-6.53310	4.793996	1501.961
#2	60.40768	.7542496	5.847579	1553.890
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109073-027-04-1/1 Operator: LCM
Run Time: 10/09/01 21:56:17
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	12212.71	1.526162	19.87875	36.80072	.5617305	.0641403	1626.823
#1	12213.92	2.286200	22.71417	36.83907	.5388096	.1260511	1627.233
#2	12211.50	.7661230	17.04333	36.76237	.5846514	.0022295	1626.412
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	17.57591	8.131659	29.60634	14631.02	40.76651	1892.149	73.58278
#1	17.77360	8.288375	29.58069	14635.69	40.63205	1891.734	73.63873
#2	17.37821	7.974943	29.63199	14626.34	40.90097	1892.566	73.52682
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	8.259562	999.6295	.9929506	.1436229	2204.815	-2.92721	30.19611
#1	8.048895	998.1385	2.673770	.1273777	2181.462	-4.70082	30.16473
#2	8.470229	1001.120	-.687869	.1598681	2228.167	-1.15361	30.22748
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	56.75156	13.14533	3.003592	9.183167	22.36828	225.0489	37.66575
#1	56.72722	13.11909	4.058917	9.447549	22.35062	225.1930	39.03607
#2	56.77590	13.17156	1.948266	8.918786	22.38593	224.9047	36.29544
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	42.31647	-4.79045	3.884120	1579.787
#1	41.42960	-2.34627	5.183262	1576.757
#2	43.20334	-7.23462	2.584977	1582.817
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109073-030-04-1/1 Operator: LCM
Run Time: 10/09/01 22:03:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	7177.325	1.318926	6.213757	17.79549	.5470301	.3794385	1494.043
#1	7183.587	3.632542	7.892873	17.72216	.5829548	.3633075	1491.744
#2	7171.062	-.994690	4.534639	17.86883	.5111053	.3955696	1496.342
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	19.69882	2.251404	21.39164	11155.59	22.95960	3272.934	65.60266
#1	19.70769	2.335904	21.61724	11147.43	22.83025	3263.488	65.55104
#2	19.68995	2.166904	21.16604	11163.75	23.08894	3282.380	65.65428
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.069573	2035.656	1.587542	.3848806	12199.25	-.840745	21.61251
#1	5.291156	2043.020	2.440183	.6658742	12213.53	-.249121	21.89591
#2	6.847990	2028.292	.7349014	.1038871	12184.96	-1.43237	21.32912
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	84.93499	22.16579	3.337083	9.915313	27.05564	324.0341	21.04468
#1	84.79566	22.43787	3.079455	12.89769	27.01820	324.2043	18.70898
#2	85.07432	21.89370	3.594710	6.932932	27.09308	323.8638	23.38037
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	23.91655	-2.48888	3.625312	1415.872
#1	24.89035	-.160511	3.740178	1416.393
#2	22.94275	-4.81725	3.510446	1415.351
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: PBW057 Operator: LCM
Run Time: 10/09/01 22:10:03
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	45.44031	.4756495	.8062089	1.200519	.2576634	.2586582	282.3863
#1	46.56378	-.161980	1.524219	1.190947	.2737522	.2459515	283.5271
#2	44.31685	1.113279	.0881993	1.210090	.2415746	.2713650	281.2455
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	H7.886057	.6175781	.8633593	57.99308	.1041492	28.34658	1.228254
#1	H7.754935	.4418165	.9872181	57.20271	-.307754	28.87832	1.246256
#2	H8.017178	.7933397	.7395006	58.78345	.5160524	27.81485	1.210252
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.899498	130.9630	.6217591	.2910634	286.7307	2.503620	.7674882
#1	3.144571	134.0231	-.597094	.2040904	294.1905	2.602210	.7240513
#2	4.654426	127.9029	1.840612	.3780365	279.2707	2.405030	.8109251
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	H28.77520	9.966816	.3783134	-.891583	1.010903	.6982760	-3.51967
#1	H28.70899	9.136254	-.674758	-1.52274	1.016543	.6506459	-5.04274
#2	H28.84140	10.79738	1.431385	-.260425	1.005262	.7459062	-1.99660
Errors	LC High	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.915686	.4539838	.7052326	H100.6606
#1	2.059385	-3.03688	.6224057	H101.2217
#2	1.771988	3.944850	.7880595	H100.0995
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				50.00000
Low				-50.0000

Method: TRACE2 Sample Name: LCSW057 Operator: LCM
Run Time: 10/09/01 22:16:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	4985.395	46.76796	49.58292	504.7056	25.13587	49.46081	5133.335
#1	4992.464	47.24785	49.62530	505.2553	25.13680	49.54950	5140.105
#2	4978.327	46.28807	49.54052	504.1560	25.13495	49.37212	5126.565
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.000	60.00000	60.00000	600.0000	30.00000	60.00000	6000.000
Low	4000.000	40.00000	40.00000	400.0000	20.00000	40.00000	4000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	252.3494	247.6909	249.1834	4919.152	496.2443	4873.998	247.8156
#1	252.6260	247.5790	249.2962	4924.329	492.9571	4871.923	247.9951
#2	252.0727	247.8029	249.0707	4913.975	499.5317	4876.072	247.6361
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	300.0000	300.0000	6000.000	600.0000	6000.000	300.0000
Low	200.0000	200.0000	200.0000	4000.000	400.0000	4000.000	200.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	251.6902	4598.297	49.97622	49.56541	5157.664	51.88394	247.9435
#1	250.5537	4606.645	49.87015	49.25634	5146.418	54.36302	247.8342
#2	252.8266	4589.949	50.08229	49.87447	5168.909	49.40487	248.0529
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	6000.000	60.00000	60.00000	6000.000	60.00000	300.0000
Low	200.0000	4000.000	40.00000	40.00000	4000.000	40.00000	200.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	509.9012	510.3021	243.8016	247.0357	500.3713	994.0367	506.0503
#1	510.3115	511.1907	244.6842	250.1939	500.5141	994.6357	506.3332
#2	509.4909	509.4134	242.9190	243.8774	500.2285	993.4377	505.7674
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	600.0000	300.0000	300.0000	600.0000	1200.000	
Low	400.0000	400.0000	200.0000	200.0000	400.0000	800.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	491.3409	49.70304	50.11243	5110.084
#1	486.2685	48.04697	50.78134	5109.284
#2	496.4133	51.35912	49.44353	5110.884
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				6000.000
Low				4000.000

Method: TRACE2 Sample Name: S 109100-001-07-1/1 Operator: LCM
Run Time: 10/09/01 22:23:49
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	223.1864	.4936367	.0722182	38.70029	.3916417	.1490269	10380.70
#1	224.5535	-.129409	1.143987	38.68613	.3279928	.0770705	10398.49
#2	221.8192	1.116682	-.999550	38.71446	.4552907	.2209834	10362.91
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.396581	1.018195	8.239752	9907.232	.3343749	5783.042	504.1684
#1	5.249415	.9419597	8.221016	9930.222	.2976011	5794.367	504.9050
#2	5.543746	1.094431	8.258489	9884.242	.3711486	5771.718	503.4317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.437432	3702.990	2.685332	.3821515	9581.152	.7184367	.8616426
#1	3.722305	3710.927	3.374099	.3581881	9668.089	.7280536	.9983923
#2	3.152560	3695.054	1.996565	.4061149	9494.217	.7088199	.7248928
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	50.44340	53.25353	1.115618	-.224429	85.67355	4.235313	-1.20446
#1	50.66378	53.39856	.7607787	-.689258	85.83216	4.637225	1.385491
#2	50.22302	53.10848	1.470457	.2404011	85.51493	3.833399	-3.79440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.103353	2.738025	2.658550	H32789.05
#1	-.246780	4.522604	2.799410	H32878.26
#2	2.453487	.9534456	2.517690	H32699.84
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-002-01-1/1 Operator: LCM
Run Time: 10/09/01 22:30:42
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	102.1296	.9843460	2.087998	33.99540	.3232557	.0991400	10359.26
#1	99.30476	1.764838	3.535610	33.96707	.2873042	.0493082	10344.00
#2	104.9545	.2038539	.6403868	34.02374	.3592071	.1489718	10374.51
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.251221	.2708075	3.421534	8560.733	.2261904	5688.199	490.1800
#1	3.040470	.2603433	3.324831	8544.963	-.348176	5670.843	489.3762
#2	3.461971	.2812716	3.518237	8576.504	.8005570	5705.555	490.9838
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	2.747797	3645.601	.4683301	.7163725	9580.783	2.261678	.6340919
#1	2.739692	3639.734	.1128197	.9513007	9547.030	3.904593	.4081418
#2	2.755901	3651.468	.8238404	.4814442	9614.536	.6187634	.8600419
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	35.25325	47.53931	.8250471	-.180650	88.30151	2.109402	-3.55456
#1	35.21028	47.28897	.7603856	-1.34000	88.18607	2.165994	-3.23230
#2	35.29622	47.78965	.8897086	.9787014	88.41695	2.052809	-3.87682
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.116035	.1966444	.6038004	H32305.96
#1	1.093357	-.160636	.2491541	H32262.01
#2	3.138714	.5539251	.9584466	H32349.91
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-003-07-1/1 Operator: LCM
Run Time: 10/09/01 22:37:35
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	172.0285	-1.04207	3.527562	67.35428	.3136467	.6853577	20607.37
#1	174.2384	-2.04831	2.239129	67.56670	.3265991	.7251775	20622.06
#2	169.8186	-.035841	4.815994	67.14186	.3006944	.6455379	20592.68
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	10.73884	.4971833	6.400440	15109.00	2.502817	13023.75	1877.224
#1	10.69321	.5882321	6.441788	15130.17	2.276933	13043.21	1880.159
#2	10.78447	.4061345	6.359092	15087.84	2.728701	13004.29	1874.289
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	12.99531	5219.331	2.273986	.7001882	14417.94	.6675775	1.126764
#1	12.57468	5228.805	1.648368	.2479703	14326.90	-1.56092	.8479642
#2	13.41594	5209.857	2.899604	1.152406	14508.97	2.896070	1.405564
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	61.72349	82.33385	4.333298	1.887342	153.9174	1.531268	-.235921
#1	62.10695	81.41416	4.080109	1.168056	154.5510	1.450564	-3.63259
#2	61.34003	83.25353	4.586487	2.606629	153.2839	1.611971	3.160747
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	3.871687	.9537039	2.933607	H35093.53
#1	5.231149	.2111992	2.366456	H35191.48
#2	2.512225	1.696209	3.500758	H34995.57
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-004-01-1/1 Operator: LCM
Run Time: 10/09/01 22:44:28
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	122.5823	-.066256	-.559517	66.33220	.2140049	.6147962	20728.66
#1	123.2793	1.418413	-.691653	66.54930	.1956041	.6094762	20791.70
#2	121.8852	-1.55093	-.427382	66.11510	.2324056	.6201162	20665.62
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	4.087975	1.082767	5.644436	213.6772	-.717208	12988.29	1869.828
#1	4.040982	1.050973	5.875444	209.3551	-.822392	13024.08	1876.340
#2	4.134969	1.114561	5.413428	217.9993	-.612024	12952.50	1863.316
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	12.91502	5188.377	.0919227	.2486291	14182.52	-1.72351	.2401183
#1	12.12278	5201.624	1.105730	.1776248	14246.52	-3.88376	.0132936
#2	13.70726	5175.130	-.921885	.3196334	14118.52	.4367422	.4669430
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	78.60880	98.27443	1.414452	1.710419	153.4839	.5510905	-2.75212
#1	78.91304	99.52406	1.719321	1.887089	153.9957	.5737562	.2843313
#2	78.30454	97.02481	1.109584	1.533748	152.9719	.5284249	-5.78856
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.2997107	-1.80675	1.040860	H33563.27
#1	-1.37629	1.639638	.8383747	H33674.59
#2	1.975709	-5.25315	1.243344	H33451.93
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-005-07-1/1 Operator: LCM
Run Time: 10/09/01 22:51:22
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	45172.23	-.131764	3.403833	67.97977	15.20809	1.944890	51519.93
#1	45191.50	.0801855	3.606397	67.91204	15.19451	1.975992	51558.54
#2	45152.97	-.343713	3.201268	68.04749	15.22166	1.913788	51481.31
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	16.30379	213.1993	119.8050	10599.42	27.59361	40113.31	3220.589
#1	16.21561	213.6519	120.0933	10599.76	26.57517	40125.44	3221.118
#2	16.39197	212.7467	119.5168	10599.07	28.61206	40101.18	3220.060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	211.6661	9312.936	-1.77685	.0122719	21108.81	3.028773	3.189415
#1	211.1163	9327.842	-1.88561	.2079006	21202.71	3.629856	3.641805
#2	212.2160	9298.031	-1.66808	-.183357	21014.91	2.427690	2.737026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	294.5246	2681.879	1.545006	1.437210	418.2628	2.666330	17.62863
#1	294.7404	2681.396	1.186464	2.460687	418.4826	2.739061	15.36711
#2	294.3087	2682.362	1.903547	.4137321	418.0429	2.593600	19.89014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	32.57575	-3.21541	-1.05809	H58363.33
#1	32.17884	-5.35752	-.150191	H58375.95
#2	32.97266	-1.07330	-1.96600	H58350.71
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: CVCCV4 Operator: LCM
Run Time: 10/09/01 22:58:15
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51082.65	1028.136	1026.990	510.3761	49.91684	493.2484	99513.31
#1	51107.29	1031.290	1034.565	510.3566	50.16389	495.7636	99977.38
#2	51058.01	1024.982	1019.414	510.3957	49.66978	490.7331	99049.26
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	496.9985	492.7590	507.9298	49318.35	492.8793	101397.9	498.7125
#1	498.9364	495.3144	508.8671	49536.84	494.5040	101978.4	500.5323
#2	495.0605	490.2037	506.9925	49099.87	491.2546	100817.5	496.8927
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	494.9513	25609.57	1022.404	51.34238	104187.0	984.8682	501.7381
#1	496.4460	25567.20	1025.944	51.11845	104134.9	989.1464	503.4178
#2	493.4565	25651.94	1018.865	51.56632	104239.1	980.5901	500.0585
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	486.5928	513.7170	498.4732	497.9375	509.9910	506.6584	492.5041
#1	490.1568	515.6879	498.7060	499.4399	510.5346	507.8743	495.6579
#2	483.0289	511.7461	498.2404	496.4352	509.4473	505.4425	489.3504
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	493.0663	1029.137	1019.038	525.8242
#1	493.9265	1032.878	1022.477	527.1735
#2	492.2062	1025.395	1015.599	524.4749
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB4 Operator: LCM
Run Time: 10/09/01 23:05:09
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	11.36744	1.014558	1.561326	.1920296	.1623865	.3373547	-4.78492
#1	10.98295	.2310178	2.400178	.1663350	.1628627	.3932874	-4.07375
#2	11.75193	1.798097	.7224743	.2177243	.1619104	.2814219	-5.49609
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.2563256	.2564323	.4275700	14.00036	-1.02465	15.32448	.1345458
#1	.1252937	-.259442	.4364702	17.67619	-1.61396	16.78802	.1582169
#2	.3873575	.7723062	.4186699	10.32454	-.435347	13.86094	.1108747
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.378275	19.92952	-1.02608	.7309642	-21.8188	5.566406	.6691878
#1	1.167622	18.56229	-.082570	.4933725	-118.064	4.475422	.7137191
#2	1.588927	21.29674	-1.96960	.9685560	74.42689	6.657390	.6246564
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0618466	.8091306	.8424861	.6995390	.1322289	.1337574	-.081642
#1	-.052488	.5559074	.5059628	-.971136	.1322127	-.032452	-.361823
#2	.1761810	1.062354	1.179010	2.370214	.1322452	.2999664	.1985393
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.49651	-2.31585	-.381636	3.044939
#1	-2.24038	-1.66184	.7066284	3.757701
#2	-.752639	-2.96987	-1.46990	2.332177
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: S 109100-006-01-1/1 Operator: LCM
Run Time: 10/09/01 23:12:03
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41469.16	.7957175	4.242455	66.89989	13.93178	1.815312	48497.18
#1	41711.56	-.411772	6.417654	67.18124	13.89842	1.790973	48661.07
#2	41226.75	2.003207	2.067256	66.61853	13.96514	1.839650	48333.29
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	14.25647	204.2280	112.5424	17897.88	24.97391	37695.31	3102.276
#1	14.21486	204.4794	113.0999	17967.87	26.32236	37791.60	3113.555
#2	14.29808	203.9767	111.9849	17827.88	23.62546	37599.00	3090.998
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	197.5394	8983.139	1.144630	.0699470	20505.06	-.009862	1.661517
#1	198.0414	9055.346	-.023756	.1470791	20632.05	.6473913	1.935411
#2	197.0375	8910.931	2.313016	-.007185	20378.07	-.667116	1.387624
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	285.9671	2593.708	.8027901	1.245089	395.8726	1.187063	15.16013
#1	286.6875	2604.651	.4229456	2.875356	397.4374	1.209958	17.40876
#2	285.2467	2582.766	1.182635	-.385179	394.3079	1.164168	12.91150
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	29.88042	5.228260	-.897576	H57763.77
#1	30.77876	4.305526	-2.18879	H57991.91
#2	28.98209	6.150994	.3936355	H57535.61
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-007-07-1/1 Operator: LCM
Run Time: 10/09/01 23:18:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	159.9627	2.711707	-1.57679	122.3703	.5082330	.4532223	18046.41
#1	140.1219	1.270323	-3.45559	121.7331	.4117670	-.018951	18083.57
#2	179.8036	4.153091	.3020125	123.0075	.6046990	.9253951	18009.24
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	7.471932	9.528256	1.549143	23242.60	-.492249	12265.86	5937.096
#1	6.805794	9.326480	-1.05202	23225.38	-.595817	12271.51	5948.610
#2	8.138070	9.730031	4.150304	23259.83	-.388681	12260.20	5925.581
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	23.43154	4742.448	-2.89790	2.567353	24387.23	-1.97011	3.484705
#1	20.60629	4685.895	-2.65205	1.375295	23859.80	-5.71353	1.774027
#2	26.25680	4799.000	-3.14375	3.759411	24914.66	1.773306	5.195383
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	59.30761	85.22043	2.406730	3.004773	166.2480	2.240857	39.76682
#1	58.43818	84.66645	1.794974	-.178386	165.9670	1.808296	57.36029
#2	60.17704	85.77441	3.018487	6.187933	166.5290	2.673418	22.17335
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-20.6222	33.72517	-21.2099	H11405.07
#1	-29.5744	55.27248	-31.6148	H11394.22
#2	-11.6700	12.17787	-10.8051	H11415.92
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-008-01-1/1 Operator: LCM
Run Time: 10/09/01 23:25:49
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	175.4351	-.348854	4.625578	120.0775	.3642697	1.363787	18139.31
#1	175.3664	-.361980	5.569196	120.1552	.3418750	1.492696	18160.43
#2	175.5038	-.335728	3.681959	119.9998	.3866644	1.234877	18118.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	4.572233	9.067241	3.149008	21941.66	-.334582	12352.84	5945.436
#1	4.482501	9.028368	3.500492	21981.78	.2136496	12361.37	5951.887
#2	4.661966	9.106113	2.797523	21901.53	-.882814	12344.30	5938.986
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	25.20338	4783.234	-1.49933	1.036893	24217.57	-1.34082	1.406696
#1	24.98200	4769.209	-2.39678	1.016553	24151.68	-3.48484	1.728032
#2	25.42475	4797.258	-.601865	1.057233	24283.46	.8031940	1.085360
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	60.73191	107.0564	.9173224	1.961103	165.8167	.8811395	.7234297
#1	60.65261	107.3874	1.411380	.3881248	165.6998	.9181098	-1.78149
#2	60.81120	106.7253	.4232647	3.534081	165.9335	.8441691	3.228348
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.863985	1.595004	-3.04691	H11549.86
#1	1.210862	.6983767	-3.94476	H11548.77
#2	-2.93883	2.491632	-2.14905	H11550.95
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-009-07-1/1 Operator: LCM
Run Time: 10/09/01 23:32:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	210.4769	.6316223	6.742073	123.5512	.4554581	1.573234	18113.14
#1	206.7430	-1.56307	5.885373	123.6560	.4248206	1.372952	18102.78
#2	214.2107	2.826319	7.598774	123.4464	.4860954	1.773516	18123.50
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.252022	8.779184	5.226487	23653.17	.6099893	12390.81	5958.594
#1	5.087939	8.713073	4.660209	23609.89	.6841750	12358.55	5954.434
#2	5.416104	8.845295	5.792766	23696.44	.5358036	12423.08	5962.754
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	26.20552	4694.854	-1.96108	.7483638	24127.31	3.460504	1.423202
#1	26.29501	4728.633	-3.34656	.3698609	24113.34	1.498716	.9686647
#2	26.11603	4661.075	-.575592	1.126867	24141.28	5.422291	1.877739
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	58.51921	97.73287	.7862873	1.760749	166.9593	2.297727	-.152376
#1	58.51751	97.80055	.7216683	1.646155	167.0231	2.446824	-.764377
#2	58.52091	97.66519	.8509064	1.875342	166.8955	2.148631	.4596256
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.9906417	-3.93345	-.975314	H11509.81
#1	1.407921	-3.15622	-3.44213	H11509.57
#2	.5733622	-4.71068	1.491505	H11510.06
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-010-01-1/1 Operator: LCM
Run Time: 10/09/01 23:39:36
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	96.56996	.8084566	3.986105	114.5592	.3972198	1.254555	17192.21
#1	98.56340	1.093655	1.976745	114.7628	.3696735	1.276996	17210.74
#2	94.57652	.5232579	5.995465	114.3555	.4247661	1.232113	17173.67
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	6.959853	8.489571	3.594305	21018.80	1.836531	11755.00	5682.541
#1	6.972177	8.375506	3.513917	21043.14	2.666107	11775.84	5689.027
#2	6.947529	8.603636	3.674694	20994.46	1.006955	11734.17	5676.055
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	29.38665	4768.034	-2.59582	1.142381	23272.93	-.377150	1.413866
#1	29.39589	4783.565	-4.62860	.8213301	23294.90	-1.94203	1.417453
#2	29.37741	4752.502	-.563037	1.463432	23250.96	1.187732	1.410280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	62.91966	80.04481	1.568807	.4339608	157.7501	.5603765	2.485911
#1	62.75797	80.23237	1.488639	.2727517	157.8644	.5420014	4.867999
#2	63.08135	79.85725	1.648974	.5951698	157.6358	.5787517	.1038230
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.511380	-1.87989	-2.95413	H11147.22
#1	1.564633	-5.17900	-4.35375	H11159.30
#2	1.458127	1.419213	-1.55451	H11135.15
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-011-07-1/1 Operator: LCM
Run Time: 10/09/01 23:46:29
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	309.7554	1.130604	1.454721	75.42643	.3716977	.3216463	3311.547
#1	313.0080	2.616139	.6075868	75.51868	.3460175	.3459076	3317.696
#2	306.5027	-.354931	2.301854	75.33418	.3973778	.2973851	3305.398
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	11.63267	36.66783	18.65807	5457.871	6.063447	8580.971	7598.340
#1	11.68964	36.56762	19.05603	5471.375	6.891377	8580.869	7605.343
#2	11.57571	36.76804	18.26011	5444.367	5.235517	8581.072	7591.337
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	19.25004	3991.840	.6638718	.9939164	55601.67	1.813081	.3472155
#1	19.80324	3989.737	.4660063	1.592792	55530.04	1.656173	.3026464
#2	18.69685	3993.944	.8617371	.3950408	55673.31	1.969989	.3917846
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	41.30663	103.8683	.4019111	1.215840	44.85468	1.748799	7.386565
#1	41.21643	104.1418	.5081153	1.159687	44.93327	1.834273	3.396528
#2	41.39684	103.5947	.2957070	1.271993	44.77608	1.663324	11.37660
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	5.401493	2.982734	-.496085	8057.838
#1	8.638403	2.565285	-.584159	8061.990
#2	2.164583	3.400183	-.408011	8053.686
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: D 109100-011-07-1/1 Operator: LCM
Run Time: 10/09/01 23:53:22
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	232.0488	1.741025	1.770004	76.22540	.3411997	.2726917	3067.819
#1	235.9155	-.038969	2.055769	76.31545	.3115165	.3708262	3069.204
#2	228.1820	3.521019	1.484238	76.13534	.3708830	.1745572	3066.435
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	6.199850	37.26994	13.73725	5504.541	6.941319	8699.701	7723.036
#1	5.945043	37.25342	14.31344	5494.142	6.878369	8704.707	7733.369
#2	6.454658	37.28645	13.16107	5514.940	7.004268	8694.694	7712.703
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	8.023681	3972.415	-2.66265	1.499520	56127.11	1.336307	.9324306
#1	7.836609	3991.786	-2.84348	1.684711	56327.32	3.708785	1.381220
#2	8.210752	3953.044	-2.48183	1.314328	55926.90	-1.03617	.4836417
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	14.99295	96.05756	.8926773	-.448946	44.45276	1.605703	6.272253
#1	14.78834	96.71709	1.189320	1.052236	44.54451	1.689707	5.296030
#2	15.19754	95.39802	.5960348	-1.95013	44.36100	1.521698	7.248475
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	7.275430	1.338367	-4.66358	8181.736
#1	7.669097	2.257936	-5.39462	8183.124
#2	6.881764	.4187973	-3.93254	8180.349
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: CRCRI Operator: LCM
Run Time: 10/10/01 00:00:16
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	405.8502	123.3087	23.46634	404.3777	10.19931	10.17601	482.0223
#1	410.0364	124.6328	19.95271	404.8664	10.18511	10.15791	483.7664
#2	401.6641	121.9846	Q26.97998	403.8889	10.21350	10.19412	480.2782
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	19.34545	100.2052	49.50035	203.8460	6.606630	500.5803	31.39262
#1	19.76880	100.4291	49.89314	213.2292	6.125552	503.7754	31.50973
#2	18.92209	99.98128	49.10756	194.4628	7.087708	497.3852	31.27551
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	79.93200	512.6398	10.17949	19.71704	801.3130	22.60691	100.9785
#1	80.24734	508.2146	9.526210	19.96715	765.5798	23.65065	100.4914
#2	79.61666	517.0651	10.83277	19.46693	837.0462	21.56316	101.4656
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	41.62223	17.63741	4.921015	24.90414	5.174662	25.33952	4.121465
#1	42.00714	17.86807	4.363098	23.81755	5.217197	25.53838	2.986570
#2	41.23732	17.40675	5.478932	25.99074	5.132127	25.14065	5.256361
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	7.848774	8.552904	10.99235	17.72214
#1	7.694603	7.837492	10.37013	20.58007
#2	8.002945	9.268316	11.61457	14.86420
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 10/10/01 00:13:59 AM page 1

Method: TRACE2 Sample Name: IAICSAI Operator: LCM
Run Time: 10/10/01 00:07:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	496999.5	-2.79479	-3.05861	1.034190	.4815103	2.319447	505693.5
#1	496219.8	-4.19102	-3.49379	1.055070	.4027442	2.336924	505087.6
#2	497779.2	-1.39857	-2.62344	1.013311	.5602763	2.301969	506299.4
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	30.00000	20.00000	20.00000	10.00000	10.00000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.136006	.7202733	-.000102	192940.3	-3.23262	501610.0	10.05077
#1	-.588294	.4703481	-.048314	192761.4	-.832869	501162.2	10.06633
#2	.3162832	.9701984	.0481101	193119.2	-5.63237	502057.8	10.03522
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	20.00000	100.0000	50.00000	40000.00	6.000000	100000.0	30.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.3179401	-7.05350	-3.01303	-.615667	-488.031	9.779247	1.347432
#1	.2607899	-23.8080	-1.48507	-.915590	-648.695	13.74648	.4792552
#2	.3750904	9.700951	-4.54099	-.315744	-327.366	5.812019	2.215609
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	80.00000	1000.000	10.00000	20.00000	1000.000	20.00000	100.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	27.94271	.0782524	.1155098	.8073873	13.57479	2.691920	-129.726
#1	27.93875	.1620796	-.691680	.6355355	13.56335	2.621345	-132.845
#2	27.94667	-.005575	.9227000	.9792391	13.58623	2.762495	-126.607
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	35.00000	50.00000	10.00000	10.00000	50.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	60.01355	7.490682	-8.26539	22.90100
#1	65.17255	5.297780	-4.87695	23.14561
#2	54.85455	9.683584	-11.6538	22.65639
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Analysis Report QC Standard 10/10/01 00:20:52 AM page 1

Method: TRACE2 Sample Name: IBICSABI Operator: LCM
Run Time: 10/10/01 00:14:04
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	495442.9	619.3917	105.3211	525.5623	512.3554	956.9772	505802.2
#1	495167.2	619.7313	105.9595	525.0630	511.9460	955.9145	505046.8
#2	495718.6	619.0520	104.6828	526.0616	512.7648	958.0399	506557.7
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	493.2994	482.6360	532.5657	193400.3	45.69400	502072.9	506.7384
#1	492.6904	481.8481	531.9355	193181.2	45.38034	501570.7	506.3614
#2	493.9085	483.4239	533.1960	193619.4	46.00766	502575.2	507.1154
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	966.4547	5383.013	49.02837	213.6996	5323.216	111.2517	504.2451
#1	966.2742	5389.085	47.33577	213.6655	5267.568	109.6017	504.5658
#2	966.6353	5376.940	50.72097	213.7337	5378.864	112.9016	503.9244
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	961.5141	1087.030	974.2500	979.6205	13.59564	999.9756	-71.5420
#1	960.0003	1085.657	972.0326	979.7889	13.58028	999.1057	-72.7812
#2	963.0279	1088.402	976.4674	979.4520	13.61100	1000.845	-70.3028
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000		1000.000	
Range	20.00000	20.00000	20.00000	20.00000		20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	104.3114	55.39318	45.84558	Q1485.912
#1	104.4606	53.90832	44.04909	Q1486.952
#2	104.1623	56.87803	47.64207	Q1484.872
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Analysis Report QC Standard 10/10/01 00:27:46 AM page 1

Method: TRACE2 Sample Name: CVCCV4 Operator: LCM
Run Time: 10/10/01 00:20:58
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50805.78	1018.599	1021.357	510.8335	49.94778	491.7800	98555.62
#1	50956.96	1020.085	1022.433	511.8498	50.06579	493.0326	98822.38
#2	50654.60	1017.113	1020.282	509.8172	49.82976	490.5274	98288.86
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	498.5634	493.5877	505.9883	49158.98	495.7465	101254.8	496.2112
#1	499.0368	494.8043	508.0287	49281.06	496.8987	101483.5	497.5457
#2	498.0901	492.3711	503.9480	49036.89	494.5942	101026.2	494.8767
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	497.3907	25271.14	1030.168	51.59354	103181.4	985.2191	500.1550
#1	497.2995	25376.68	1030.889	51.28536	103393.2	988.3691	501.1631
#2	497.4818	25165.60	1029.447	51.90172	102969.7	982.0690	499.1468
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	485.9283	513.9437	496.3030	496.3124	510.4003	506.3407	491.7349
#1	487.3797	515.1030	496.8892	499.6437	511.2094	506.8449	493.3843
#2	484.4769	512.7844	495.7169	492.9812	509.5912	505.8365	490.0855
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	497.7518	1030.053	1030.226	525.9053
#1	498.6554	1031.151	1030.758	527.6870
#2	496.8482	1028.954	1029.694	524.1235
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB4 Operator: LCM
Run Time: 10/10/01 00:27:52
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	23.20182	4.341812	2.241340	.0553374	.3549352	.0680202	-4.92600
#1	26.67723	1.768779	2.401314	.0925036	.2220925	.1305461	-2.96881
#2	19.72641	6.914845	2.081365	.0181711	.4877779	.0054943	-6.88319
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.5152236	.8217327	-.569580	2.768498	-.343545	21.15700	-.062220
#1	.2927266	.2436736	-.365195	2.475640	-.539827	23.76778	-.045257
#2	.7377207	1.399792	-.773965	3.061355	-.147262	18.54622	-.079183
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.014209	29.07467	.3021381	1.002196	-2.37183	8.188156	1.015775
#1	1.247011	15.19428	.9382880	.5317435	-206.851	7.276822	.2695832
#2	.7814079	42.95506	-.334012	1.472649	202.1078	9.099490	1.761967
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.037635	1.907333	1.599278	1.638575	.0266063	.2734857	2.379546
#1	.1102511	1.287915	2.071259	.2388922	.0267742	.1222073	.6409074
#2	-.185521	2.526751	1.127297	3.038258	.0264385	.4247642	4.118185
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.70541	-.133610	.5196430	-1.83372
#1	-1.13050	-3.03887	2.926472	-.693817
#2	-2.28032	2.771653	-1.88719	-2.97361
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: SP109100-011-07-1/1 Operator: LCM
Run Time: 10/10/01 00:34:45
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	2179.525	97.44740	38.97300	2017.758	49.30207	48.74204	7738.150
#1	2182.155	96.90037	38.13821	2018.573	49.20272	48.58505	7728.408
#2	2176.894	97.99444	39.80778	2016.943	49.40141	48.89903	7747.894
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	199.9847	518.7915	254.4848	6346.360	27.18035	13298.50	8009.095
#1	199.8442	518.7342	254.6416	6338.126	27.38656	13280.94	8005.093
#2	200.1252	518.8489	254.3281	6354.594	26.97415	13316.05	8013.097
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	493.7249	4831.509	7.367969	49.38526	60114.85	50.13213	485.5056
#1	493.0883	4841.259	8.503776	49.30899	60003.92	53.62419	485.6132
#2	494.3615	4821.759	6.232162	49.46154	60225.78	46.64006	485.3981
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	497.5999	588.2229	96.18573	95.64785	141.6030	99.13636	28.62144
#1	496.9894	588.8162	95.53363	96.83959	141.6884	99.03471	28.16702
#2	498.2103	587.6297	96.83784	94.45611	141.5175	99.23801	29.07585
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	26.45939	9.146278	6.478361	8564.510
#1	26.99591	6.308209	9.601168	8567.029
#2	25.92288	11.98435	3.355555	8561.991
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: PS109100-011-07-1/1 Operator: LCM
Run Time: 10/10/01 00:41:39
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1308.056	79.06900	83.59232	94.47830	10.94874	20.20961	6181.118
#1	1310.745	78.62190	82.20817	94.52906	10.95449	20.15213	6185.597
#2	1305.366	79.51611	84.97646	94.42754	10.94299	20.26709	6176.639
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	33.00350	66.33742	48.57584	5837.313	36.97895	8899.918	7509.171
#1	33.23469	66.47691	48.89188	5840.095	37.66935	8910.865	7513.417
#2	32.77232	66.19794	48.25982	5834.531	36.28856	8888.970	7504.926
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	60.43276	4138.130	70.69025	40.83355	59892.21	96.84428	21.18044
#1	61.87275	4117.904	71.16010	40.81388	59656.74	94.37569	21.22308
#2	58.99278	4158.355	70.22038	40.85323	60127.69	99.31287	21.13780
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	121.2155	176.0750	30.40546	103.4745	64.48811	22.12808	37.73542
#1	121.3633	176.2480	30.46686	103.2471	64.48444	22.30901	37.97857
#2	121.0677	175.9022	30.34406	103.7019	64.49178	21.94715	37.49227
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	36.60028	72.99985	69.53503	H13448.76
#1	37.51430	74.56752	69.45601	H13449.51
#2	35.68626	71.43217	69.61406	H13448.01
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SE109100-011-07-1/1 Operator: LCM
Run Time: 10/10/01 00:48:32
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	74.85805	-.931862	-.012389	14.98760	.3366249	.2650411	641.8251
#1	76.83900	-.930420	.8239477	15.00579	.2967818	.2864854	644.5492
#2	72.87711	-.933303	-.848726	14.96940	.3764680	.2435969	639.1010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.409251	7.379827	3.551085	1078.419	1.074010	1708.893	1529.976
#1	1.921113	7.143541	3.825064	1083.621	1.853555	1716.728	1534.343
#2	2.897389	7.616112	3.277106	1073.218	.2944654	1701.059	1525.609
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.567235	828.4905	.8773144	-.251661	10673.68	4.318751	-.312894
#1	4.480906	818.5369	-.942584	-.695013	10575.35	4.644790	-.490023
#2	4.653565	838.4440	2.697213	.1916899	10772.02	3.992712	-.135765
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	9.014066	20.39810	.2541134	.2536484	8.905127	.2257875	1.073505
#1	9.059167	20.66473	.0450843	-2.38872	8.934066	.1046447	-1.77366
#2	8.968965	20.13147	.4631425	2.896012	8.876186	.3469302	3.920672
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.073917	-.179406	1.405242	1618.283
#1	3.666815	-5.46207	1.316724	1627.786
#2	-1.51898	5.103260	1.493759	1608.780
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-012-01-1/1 Operator: LCM
Run Time: 10/10/01 00:55:26
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	170.6953	2.341086	2.461338	75.06377	.5247060	.3539512	3101.360
#1	170.9408	1.366789	2.782670	74.79572	.5288757	.3523012	3084.085
#2	170.4498	3.315384	2.140005	75.33183	.5205364	.3556012	3118.635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	8.200179	37.83943	13.64494	5389.159	4.316142	8640.713	7647.305
#1	8.118679	37.61011	13.55435	5361.105	4.009987	8600.189	7606.221
#2	8.281679	38.06875	13.73552	5417.213	4.622297	8681.237	7688.388
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	8.301810	3935.393	-1.08961	1.914728	55903.43	2.627335	1.508678
#1	8.034174	3924.962	-2.37648	1.403211	55796.27	.9760456	1.461155
#2	8.569447	3945.824	.1972480	2.426245	56010.60	4.278624	1.556201
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	37.90694	108.7207	.3172012	1.846788	44.50918	1.021094	5.221637
#1	37.72854	108.5375	.0417686	1.264774	44.34064	.8484328	4.838609
#2	38.08534	108.9040	.5926339	2.428801	44.67772	1.193756	5.604665
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	3.863023	.0514376	-1.66060	8195.795
#1	3.595326	-7.26314	.0663290	8166.283
#2	4.130719	7.366011	-3.38752	8225.307
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-013-07-1/1 Operator: LCM
Run Time: 10/10/01 01:02:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	90.46211	-1.71272	1.159778	15.86274	.2495257	.3068030	18409.72
#1	85.79488	-2.08460	.4384972	15.79029	.2395489	.1838291	18376.63
#2	95.12933	-1.34084	1.881058	15.93520	.2595025	.4297768	18442.81
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.398643	.1325852	2.361166	4346.018	.8175356	8605.543	412.7951
#1	3.586214	.7123941	1.769593	4329.881	.8288937	8573.651	412.0721
#2	3.211072	-.447224	2.952739	4362.154	.8061774	8637.434	413.5180
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	2.802352	4485.310	.8564292	.6154095	11303.43	3.011556	.3468662
#1	1.909005	4512.217	1.245826	.8911226	11270.36	3.479696	-.105423
#2	3.695699	4458.402	.4670322	.3396963	11336.51	2.543416	.7991559
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	11.15392	82.85438	1.976264	2.998074	138.3320	1.327538	-2.90680
#1	11.06552	83.09673	1.691052	2.092345	138.3781	1.295916	-1.97441
#2	11.24232	82.61204	2.261475	3.903803	138.2860	1.359160	-3.83919
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.679307	-4.08562	3.327013	H33066.69
#1	2.230151	-4.94594	4.341178	H33017.63
#2	3.128461	-3.22531	2.312848	H33115.75
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-014-01-1/1 Operator: LCM
Run Time: 10/10/01 01:09:13
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	61.95587	3.020289	2.107289	14.58836	.2838653	.3396938	18344.81
#1	61.22835	2.586742	3.233988	14.56411	.2841633	.2897351	18326.12
#2	62.68340	3.453836	.9805909	14.61261	.2835673	.3896526	18363.48
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.631559	.3808892	2.138559	2541.453	.2768866	8552.068	325.0736
#1	3.559082	.5908077	1.994855	2535.712	1.062543	8546.767	325.0212
#2	3.704035	.1709708	2.282264	2547.193	-.508770	8557.370	325.1259
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.743380	4415.483	2.628011	.7311882	11369.70	6.433344	.7710792
#1	4.526397	4425.854	2.553209	.8057553	11322.93	8.556641	.8156086
#2	2.960363	4405.112	2.702813	.6566210	11416.48	4.310048	.7265499
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	13.43175	66.96318	2.054278	1.499463	136.6559	.6370596	-.861183
#1	13.41132	67.75999	1.100727	2.823655	136.5458	.7676907	.2952629
#2	13.45218	66.16637	3.007829	.1752722	136.7661	.5064284	-2.01763
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.8455257	2.454021	2.714524	H32992.88
#1	1.445788	1.795259	2.931658	H33005.21
#2	.2452635	3.112783	2.497391	H32980.54
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-015-07-1/1 Operator: LCM
Run Time: 10/10/01 01:16:07
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	514.3921	-.093267	9.696154	62.91397	2.620562	.3273041	6546.543
#1	520.6913	-.719103	9.754213	63.68532	2.657291	.3473924	6629.346
#2	508.0929	.5325700	9.638093	62.14262	2.583833	.3072158	6463.739
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.619353	.7869595	6.645063	25841.51	1.620123	5519.787	612.3555
#1	4.069745	.7862612	6.660363	26153.60	1.835349	5582.066	619.9880
#2	3.168961	.7876579	6.629764	25529.42	1.404896	5457.507	604.7230
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.929369	3774.404	.3778481	.3995214	10858.07	1.943598	5.244942
#1	7.026568	3816.191	2.045752	.8609126	11097.80	4.403829	5.965757
#2	6.832170	3732.616	-1.29006	-.061870	10618.34	-.516633	4.524127
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	43.52025	42.07400	1.682218	.9571322	33.14756	5.821646	-.530201
#1	44.13057	42.96951	2.266786	.1938465	33.53729	6.021338	.1404934
#2	42.90993	41.17850	1.097650	1.720418	32.75782	5.621952	-1.20090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.694866	.6359175	.2483287	H27104.66
#1	2.682378	1.768056	2.184068	H27397.60
#2	2.707354	-.496221	-1.68741	H26811.72
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-016-01-1/1 Operator: LCM
Run Time: 10/10/01 01:23:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	57.08875	1.350689	3.865323	22.33147	.5384186	.1450664	6057.064
#1	54.82681	4.219621	4.217173	22.16723	.5832320	.0482834	6013.462
#2	59.35068	-1.51824	3.513473	22.49571	.4936053	.2418495	6100.665
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.992080	-.079899	1.030030	12560.04	1.237499	5105.976	558.9724
#1	2.304684	.1028918	.8949077	12476.45	2.150968	5070.005	555.0856
#2	1.679475	-.262689	1.165152	12643.63	.3240292	5141.946	562.8592
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.473523	3603.200	.3547819	.9021058	11007.09	5.060207	.9632679
#1	4.393724	3565.091	-.441368	1.729299	11001.57	5.505764	1.091613
#2	4.553322	3641.308	1.150932	.0749125	11012.61	4.614650	.8349226
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	17.93357	47.85602	1.250380	2.575238	28.92049	1.182801	.2324882
#1	17.71052	47.90559	1.861485	3.605561	28.68906	1.248048	.9103068
#2	18.15661	47.80645	.6392763	1.544915	29.15193	1.117554	-.445330
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.739562	-1.69665	1.380100	H26474.85
#1	2.770859	-6.10269	2.388893	H26250.02
#2	.7082639	2.709383	.3713074	H26699.68
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-017-07-1/1 Operator: LCM
Run Time: 10/10/01 01:29:55
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	82.14111	2.008861	.7599522	90.72068	.4345845	.1711525	1801.024
#1	80.64637	.7464632	.2332970	90.73774	.4381894	.1834725	1800.938
#2	83.63586	3.271258	1.286607	90.70362	.4309796	.1588324	1801.111
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.831115	2.575540	10.34436	1087.645	3.716442	3856.014	96.51187
#1	1.665004	2.356514	10.08200	1088.227	4.994506	3851.877	96.50245
#2	1.997227	2.794567	10.60672	1087.062	2.438378	3860.151	96.52129
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.695978	2465.449	1.747299	.4362092	26548.09	2.294536	.2675304
#1	4.543600	2465.937	4.682088	.2436237	26487.31	2.097643	.1328113
#2	4.848357	2464.961	-1.18749	.6287948	26608.87	2.491428	.4022494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	11.55339	33.62326	.6149404	.5192961	27.47905	.5896345	3.010274
#1	11.61142	34.20977	.9766058	3.011953	27.47813	.5167742	2.353943
#2	11.49536	33.03675	.2532749	-1.97336	27.47996	.6624948	3.666606
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	4.069173	2.452736	1.394142	8941.825
#1	6.314433	1.686005	6.179687	8942.631
#2	1.823914	3.219467	-3.39140	8941.020
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-018-01-1/1 Operator: LCM
Run Time: 10/10/01 01:36:48
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	79.53122	4.695659	2.012046	91.48642	.4837150	.3917953	1877.530
#1	75.27683	4.332725	2.174159	90.72271	.4780880	.2281994	1863.496
#2	83.78561	5.058592	1.849932	92.25014	.4893420	.5553911	1891.564
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.773333	3.385718	10.48314	1104.536	4.002243	3902.898	97.52165
#1	1.843739	2.893214	9.990867	1093.850	4.745082	3868.048	96.79650
#2	3.702927	3.878222	10.97542	1115.222	3.259404	3937.749	98.24681
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	5.501488	2492.431	-.066141	1.156287	26864.90	3.120745	.2668755
#1	5.185537	2473.061	.8629223	.7389196	26686.96	2.557847	.5787780
#2	5.817440	2511.802	-.995204	1.573654	27042.83	3.683642	-.045027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	17.02529	33.59296	.7839661	1.880808	27.86890	.9218571	6.330298
#1	16.76225	31.88567	.7599114	-.317793	27.61919	.6751464	7.093930
#2	17.28834	35.30024	.8080207	4.079410	28.11860	1.168568	5.566666
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.837844	-1.77793	.7893572	9009.369
#1	3.570267	-2.75777	2.672874	8943.452
#2	2.105422	-.798089	-1.09416	9075.285
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: CVCCV4 Operator: LCM
Run Time: 10/10/01 01:43:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50570.09	1012.378	1010.637	508.6308	49.81054	489.4987	98867.00
#1	50599.32	1013.530	1012.457	508.5678	49.82727	489.6043	98916.35
#2	50540.86	1011.226	1008.818	508.6938	49.79380	489.3932	98817.66
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.5401	491.2158	504.2823	48912.57	490.6456	101367.6	493.6331
#1	497.3696	491.5232	504.7190	48933.89	492.2043	101457.2	493.6973
#2	497.7106	490.9085	503.8455	48891.25	489.0870	101277.9	493.5690
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	493.9250	25239.00	1026.060	51.95850	103477.1	984.1434	499.7707
#1	493.4108	25289.69	1022.848	51.70879	103424.4	983.6841	498.8429
#2	494.4392	25188.32	1029.272	52.20820	103529.7	984.6027	500.6985
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	485.4061	512.5239	494.9416	492.9418	508.3471	505.2644	487.7948
#1	486.2146	513.5608	494.1334	491.3921	508.7115	505.0691	487.4841
#2	484.5976	511.4870	495.7498	494.4916	507.9827	505.4597	488.1055
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	492.0706	1030.791	1023.694	522.0527
#1	494.5639	1022.486	1023.029	521.0288
#2	489.5773	1039.095	1024.360	523.0767
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB4 Operator: LCM
Run Time: 10/10/01 01:50:38
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	12.11451	1.741489	2.439870	.0809079	.1826887	.2156168	-14.3484
#1	14.89425	4.211214	3.842993	.1438605	.1860612	.2750842	-12.6879
#2	9.334777	-.728236	1.036747	.0179553	.1793162	.1561494	-16.0089
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3401958	.4313234	-.299996	1.291419	.1829659	8.380653	.0096056
#1	.5075871	.6848800	.0123767	5.828546	-.434412	10.95287	.0330380
#2	.1728045	.1777668	-.612368	-3.24571	.8003440	5.808434	-.013827
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.269882	16.97471	2.709173	.0975334	-127.884	4.704245	.3584991
#1	1.109459	20.80653	4.997577	.3496502	-33.8240	3.132175	.4478685
#2	1.430305	13.14288	.4207692	-.154583	-221.944	6.276315	.2691297
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.1266876	1.006238	.2954522	-.397030	.0307986	.1382393	-.886201
#1	.1821468	1.744463	.5909891	2.159556	.0593076	.2357798	-1.31670
#2	.0712284	.2680134	-.000085	-2.95362	.0022895	.0406987	-.455699
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.7171991	4.537748	1.794494	-.296781
#1	.0063836	5.928067	4.531941	1.412871
#2	1.428015	3.147430	-.942953	-2.00643
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: S 109100-019-07-1/1 Operator: LCM
Run Time: 10/10/01 01:57:32
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	223.7317	-.320422	.0023188	111.2978	.3916569	.4222789	1630.765
#1	225.3723	-.884719	-.568447	111.5208	.3729786	.5132660	1637.296
#2	222.0910	.2438752	.5730843	111.0747	.4103353	.3312917	1624.235
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.652443	2.690385	16.12534	391.5210	3.356688	3684.394	34.17968
#1	2.676556	2.325820	15.81171	390.5304	3.761616	3696.800	34.27512
#2	2.628330	3.054950	16.43896	392.5115	2.951761	3671.988	34.08424
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.111597	1534.770	1.083564	-.318479	63720.64	2.473482	2.608342
#1	6.515365	1538.313	.9864138	-.180831	63814.79	1.894293	2.889244
#2	5.707829	1531.227	1.180714	-.456127	63626.50	3.052671	2.327440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	13.77816	21.43603	.7377596	1.625238	22.85697	.8651516	1.481329
#1	14.23481	21.14179	.6345266	.0173010	22.89416	.8490216	1.683462
#2	13.32151	21.73028	.8409927	3.233175	22.81978	.8812817	1.279196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	4.293974	1.401532	.9241007	7490.425
#1	4.800297	1.872945	.5427109	7512.919
#2	3.787652	.9301201	1.305491	7467.930
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-020-01-1/1 Operator: LCM
Run Time: 10/10/01 02:04:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	156.8150	1.004581	4.589164	111.2270	.4128734	.3373276	1662.151
#1	155.9043	-2.00620	4.176249	111.2039	.3827451	.2903449	1659.772
#2	157.7257	4.015364	5.002079	111.2501	.4430016	.3843102	1664.530
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.300564	2.922397	14.49972	342.4382	3.708180	3732.284	34.31395
#1	1.067207	2.659157	14.56902	339.1663	4.756040	3720.009	34.22293
#2	1.533922	3.185637	14.43043	345.7100	2.660320	3744.559	34.40498
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.797427	1479.439	.1277676	.1231284	63784.54	1.544780	2.898665
#1	5.219227	1484.200	.0780481	-.181413	63830.78	-.943013	2.526792
#2	4.375627	1474.678	.1774870	.4276695	63738.29	4.032573	3.270539
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	9.934500	21.78244	1.038556	-.968409	23.06220	.5331395	6.136769
#1	9.716894	21.23536	1.312042	-2.90515	23.05900	.3836305	4.520983
#2	10.15211	22.32952	.7650693	.9683348	23.06540	.6826484	7.752554
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.493536	-4.84382	2.613120	7521.194
#1	4.873218	-2.56878	1.401024	7505.069
#2	.1138543	-7.11886	3.825215	7537.319
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: PBW070 Operator: LCM
Run Time: 10/10/01 02:11:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	20.76552	.7197226	2.081013	.4360271	.2321583	.2403372	178.2211
#1	20.84864	3.328595	1.757581	.4726190	.2284829	.3166904	179.0553
#2	20.68239	-1.88915	2.404445	.3994352	.2358337	.1639840	177.3869
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.766987	.4638603	.7299393	29.39849	.5965883	31.00234	.5681301
#1	1.786975	.1305557	1.022100	28.51654	.7488061	31.54429	.5742152
#2	1.747000	.7971648	.4377783	30.28044	.4443704	30.46038	.5620450
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.8562456	50.23309	.2439080	.4395467	288.1968	4.281608	.8155446
#1	.9160881	57.75360	2.220639	.3004312	392.1585	4.781405	.9937790
#2	.7964031	42.71258	-1.73282	.5786622	184.2351	3.781811	.6373101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.147325	7.929077	.2529003	2.490028	.8348646	.3653142	-.988456
#1	2.961453	7.541811	.3381921	3.508170	.8389471	.3684998	1.435698
#2	3.333197	8.316343	.1676086	1.471886	.8307822	.3621286	-3.41261
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.388757	-1.68261	1.206724	H77.41726
#1	.4050092	-1.40289	4.031962	H79.78494
#2	2.372504	-1.96232	-1.61851	H75.04958
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				50.00000
Low				-50.0000

Method: TRACE2 Sample Name: LCSW070 Operator: LCM
Run Time: 10/10/01 02:18:14
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	4943.034	50.44295	45.67560	494.3359	24.76880	48.59364	4978.309
#1	4949.800	50.55208	44.50831	494.0270	24.72473	48.51883	4971.086
#2	4936.268	50.33382	46.84289	494.6447	24.81286	48.66845	4985.531
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.000	60.00000	60.00000	600.0000	30.00000	60.00000	6000.000
Low	4000.000	40.00000	40.00000	400.0000	20.00000	40.00000	4000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	244.2791	243.9021	245.7834	4908.038	488.4178	4834.958	243.4757
#1	243.9604	242.7768	245.8332	4891.042	488.8669	4818.427	243.1350
#2	244.5978	245.0273	245.7336	4925.034	487.9688	4851.489	243.8164
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	300.0000	300.0000	6000.000	600.0000	6000.000	300.0000
Low	200.0000	200.0000	200.0000	4000.000	400.0000	4000.000	200.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	243.9790	4490.898	50.31128	48.83593	5166.790	51.22156	244.1752
#1	243.3988	4518.446	52.40306	48.92020	5178.260	49.95642	244.2784
#2	244.5593	4463.350	48.21949	48.75166	5155.321	52.48669	244.0719
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	6000.000	60.00000	60.00000	6000.000	60.00000	300.0000
Low	200.0000	4000.000	40.00000	40.00000	4000.000	40.00000	200.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	490.9842	506.7366	241.1353	242.9754	492.0750	981.8112	499.6420
#1	490.1939	506.2815	240.7149	242.2123	491.8717	981.3782	498.9311
#2	491.7746	507.1917	241.5558	243.7385	492.2783	982.2441	500.3530
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	600.0000	300.0000	300.0000	600.0000	1200.000	
Low	400.0000	400.0000	200.0000	200.0000	400.0000	800.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	482.8053	52.89748	49.01773	5070.440
#1	483.8344	57.11297	50.04762	5064.204
#2	481.7762	48.68200	47.98784	5076.676
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				6000.000
Low				4000.000

Method: TRACE2 Sample Name: S 109100-021-07-1/1 Operator: LCM
Run Time: 10/10/01 02:25:08
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	537.8248	1.672582	1.216662	35.92116	.5233036	.3710909	2271.561
#1	533.3220	.7311856	.3281392	35.74330	.5433896	.3407520	2258.582
#2	542.3276	2.613978	2.105186	36.09901	.5032176	.4014298	2284.540
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	6.170278	8.302888	14.51698	26831.91	8.016169	5610.900	613.9866
#1	6.275347	8.272543	14.29756	26678.67	7.624623	5568.049	610.0474
#2	6.065208	8.333233	14.73640	26985.15	8.407714	5653.752	617.9259
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.985711	1645.763	.2676397	.9768995	8779.415	.9852476	2.267051
#1	3.638651	1655.783	.6615742	1.264873	8809.130	.3959417	2.706220
#2	4.332771	1635.744	-.126295	.6889264	8749.700	1.574553	1.827882
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	17.72968	63.27357	1.171011	4.571568	20.98982	2.965751	5.385743
#1	17.18903	62.84086	1.614919	5.344504	20.87985	2.846424	6.028665
#2	18.27034	63.70628	.7271019	3.798633	21.09979	3.085078	4.742821
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	9.331025	-4.99030	2.896117	4790.889
#1	8.422249	-7.39943	4.691629	4762.029
#2	10.23980	-2.58117	1.100604	4819.749
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-022-01-1/1 Operator: LCM
Run Time: 10/10/01 02:32:02
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	76.73804	2.537854	2.685071	33.98674	.4412693	.1800541	2150.436
#1	82.54766	3.123912	2.079782	34.06855	.4293900	.3442966	2151.913
#2	70.92841	1.951795	3.290360	33.90492	.4531487	.0158116	2148.960
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.850238	7.604331	1.889429	15983.35	2.423709	5463.285	569.1179
#1	1.899283	7.718849	2.519740	15989.27	1.948792	5466.127	569.5219
#2	1.801192	7.489814	1.259118	15977.44	2.898626	5460.443	568.7138
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.872081	1573.112	-.952332	1.142186	8921.890	.5691285	.8194776
#1	2.374398	1577.738	-.334206	1.683260	9010.980	-2.12664	1.675765
#2	1.369764	1568.487	-1.57046	.6011118	8832.799	3.264900	-.036810
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	11.03505	63.32015	.3173212	1.092731	19.45777	.6515625	1.543317
#1	11.42635	63.37883	.9762901	-.041691	19.48269	.8199127	-.655905
#2	10.64375	63.26147	-.341648	2.227153	19.43285	.4832123	3.742539
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.863552	-2.29915	-.279274	4447.880
#1	3.250786	-2.43825	.7174649	4452.880
#2	2.476317	-2.16005	-1.27601	4442.879
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109100-023-07-1/1 Operator: LCM
Run Time: 10/10/01 02:38:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	20.53595	2.170028	1.199833	.4330935	.2850438	.1880400	180.1087
#1	24.17208	3.620206	2.083477	.5136015	.2784302	.5237507	180.5522
#2	16.89981	.7198506	.3161879	.3525854	.2916575	-.147671	179.6653
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.9886292	.1104902	.5577607	29.04584	.4538516	34.86440	.6500034
#1	.7013868	.4415576	.8890116	35.67680	-.542220	38.32845	.7135567
#2	1.275872	-.220577	.2265097	22.41489	1.449923	31.40036	.5864502
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.8162316	100.2160	-1.97435	.1916079	319.9925	4.801630	.9888090
#1	1.104615	103.3387	-2.09980	.1474856	364.5343	4.229976	1.258308
#2	.5278478	97.09329	-1.84890	.2357302	275.4507	5.373284	.7193101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	17.60740	11.28810	.6762915	-.008409	.6129229	.3670059	.8508300
#1	17.82700	12.05880	.2533770	.7908963	.6438470	.4242717	3.379060
#2	17.38781	10.51740	1.099206	-.807714	.5819988	.3097400	-1.67740
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.2550114	-.959455	-2.48224	162.7002
#1	-2.50321	1.286845	-3.79356	165.2588
#2	3.013230	-3.20575	-1.17092	160.1416
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Analysis Report QC Standard 10/10/01 02:52:40 AM page 1

Method: TRACE2 Sample Name: CRCRI Operator: LCM
Run Time: 10/10/01 02:45:51
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	406.3986	123.1385	19.72573	404.8891	10.27173	10.13650	476.3032
#1	406.5858	125.5812	18.73170	405.4446	10.28125	10.14788	476.3617
#2	406.2114	120.6957	20.71977	404.3336	10.26221	10.12513	476.2448
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	19.45785	99.95833	49.06356	195.2702	5.301338	499.1911	30.73047
#1	19.63109	100.2102	48.94352	197.8478	5.195975	498.3833	30.73323
#2	19.28461	99.70645	49.18361	192.6925	5.406700	499.9989	30.72770
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	79.47664	499.9929	9.453312	20.12418	836.1830	22.04734	100.5412
#1	79.72709	501.8076	10.16610	20.08245	835.0269	20.39523	100.8080
#2	79.22620	498.1782	8.740519	20.16590	837.3391	23.69946	100.2744
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	41.26367	16.21820	4.949891	25.66714	5.155857	25.57487	6.219643
#1	41.22387	16.84245	4.975142	25.13605	5.160282	25.69926	2.861181
#2	41.30347	15.59396	4.924640	26.19823	5.151433	25.45048	9.578104
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	4.841724	11.54758	8.405786	12.12561
#1	6.362886	6.162454	12.16753	12.32135
#2	3.320562	16.93270	4.644041	11.92986
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACE2 Sample Name: IAICSAI Operator: LCM
Run Time: 10/10/01 02:52:45
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	492707.8	1.050664	2.477294	1.054753	.6327386	2.394453	502261.3
#1	493165.0	1.014037	4.164977	1.001618	.5986686	2.395774	502943.8
#2	492250.7	1.087292	.7896111	1.107889	.6668087	2.393131	501578.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	30.00000	20.00000	20.00000	10.00000	10.00000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7430706	.8808017	.2841169	191402.2	-2.48453	500044.6	9.815103
#1	1.199106	.9307637	.2279195	191475.2	-1.70239	500830.5	9.750580
#2	.2870350	.8308396	.3403143	191329.1	-3.26667	499258.7	9.879626
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	20.00000	100.0000	50.00000	40000.00	6.000000	100000.0	30.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.5498028	6.643979	-1.57287	.1374548	-236.249	10.80659	1.937457
#1	.3814425	9.367050	-2.79849	.2843120	-135.259	10.19437	1.966166
#2	.7181630	3.920908	-.347247	-.009402	-337.239	11.41882	1.908749
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	80.00000	1000.000	10.00000	20.00000	1000.000	20.00000	100.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	27.34338	.6299649	.8252706	-.709686	13.45801	2.673640	-123.439
#1	27.35619	.4795041	-.465569	-.880960	13.44659	2.805390	-124.838
#2	27.33057	.7804258	2.116110	-.538412	13.46944	2.541889	-122.039
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	35.00000	50.00000	10.00000	10.00000	50.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	57.99196	10.47405	-7.59671	22.07726
#1	59.86479	6.631718	-7.51395	20.42020
#2	56.11912	14.31637	-7.67946	23.73431
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Analysis Report QC Standard 10/10/01 03:06:29 AM page 1

Method: TRACE2 Sample Name: IBICSABI Operator: LCM
Run Time: 10/10/01 02:59:40
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	493820.6	618.8532	103.5914	525.8310	509.6189	948.7202	501938.2
#1	494183.3	617.5635	104.3512	525.9282	510.1716	950.2542	502591.7
#2	493457.8	620.1427	102.8317	525.7338	509.0662	947.1862	501284.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	491.2482	480.9431	532.5714	192063.2	45.45921	500865.4	504.7380
#1	491.0218	481.6373	532.7966	192279.6	44.84819	501281.3	505.5010
#2	491.4746	480.2489	532.3462	191846.8	46.07022	500449.5	503.9749
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	962.1699	5364.607	47.41257	213.5786	5187.560	110.0937	502.4341
#1	963.2174	5363.224	47.51083	213.8322	5159.161	110.2650	503.0484
#2	961.1225	5365.990	47.31432	213.3250	5215.958	109.9223	501.8197
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	954.3484	1083.393	966.3030	972.6221	13.59906	998.4238	-75.0093
#1	955.7919	1086.050	965.3160	970.0338	13.60003	998.7672	-81.5383
#2	952.9049	1080.735	967.2900	975.2105	13.59809	998.0804	-68.4803
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000		1000.000	
Range	20.00000	20.00000	20.00000	20.00000		20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	105.6929	53.23618	44.50032	Q1481.017
#1	108.0409	53.75630	44.38759	Q1482.792
#2	103.3450	52.71605	44.61305	Q1479.242
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Method: TRACE2 Sample Name: CVCCV5 Operator: LCM
Run Time: 10/10/01 03:06:35
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50794.22	1013.908	1014.175	510.8475	49.83941	489.0811	98141.88
#1	50849.31	1012.750	1014.003	511.7704	49.80537	489.4432	98169.73
#2	50739.12	1015.066	1014.348	509.9246	49.87345	488.7189	98114.03
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.5001	491.6225	505.4670	48914.64	491.6450	101032.9	494.9462
#1	497.5935	491.6733	505.8232	48954.92	493.4197	101063.4	495.2721
#2	497.4066	491.5717	505.1108	48874.36	489.8703	101002.4	494.6203
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	495.1093	25292.91	1019.752	51.90600	103754.4	978.5711	499.9422
#1	493.2893	25362.33	1023.715	52.21419	104076.9	978.6317	500.6073
#2	496.9293	25223.49	1015.790	51.59781	103431.8	978.5106	499.2771
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	483.7537	512.4983	493.5888	493.1539	509.6821	505.6662	488.3416
#1	483.6965	511.7532	493.9862	491.2495	510.2588	505.7928	491.9727
#2	483.8108	513.2433	493.1913	495.0582	509.1055	505.5396	484.7106
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	493.2962	1017.884	1020.687	519.6923
#1	494.1428	1018.091	1026.527	516.1770
#2	492.4497	1017.676	1014.846	523.2076
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB5 Operator: LCM
Run Time: 10/10/01 03:13:30
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	25.66935	.8805429	1.800077	.1067495	.3103125	.3592085	-9.90319
#1	24.45564	1.091220	2.561684	.0925124	.3039064	.3753473	-8.59610
#2	26.88305	.6698661	1.038469	.1209866	.3167186	.3430698	-11.2103
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.5202110	.5642508	-.247617	12.13515	.4150372	21.40551	.0569812
#1	.6998403	1.346686	-.228325	6.040139	.3333381	22.77576	.0017368
#2	.3405818	-.218185	-.266909	18.23017	.4967363	20.03526	.1122256
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.7074943	27.98530	-2.27799	.7089049	-45.0305	4.950995	1.164098
#1	.8551932	23.65539	-2.22643	1.156973	-40.6945	6.678792	.4489204
#2	.5597954	32.31522	-2.32956	.2608372	-49.3666	3.223198	1.879277
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.063906	1.589629	1.456912	.5938942	.0593658	.1670202	.2377758
#1	-.119835	2.354039	1.394371	-1.24812	.0634788	.4316787	1.090965
#2	-.007977	.8252196	1.519453	2.435905	.0552528	-.097638	-.615413
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.5033182	-2.10488	-2.36498	-1.37067
#1	-.045825	-.902892	-2.88863	-.476668
#2	1.052461	-3.30687	-1.84133	-2.26467
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: S 109100-024-01-1/1 Operator: LCM
Run Time: 10/10/01 03:20:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	25.63487	1.374679	-.696142	.4407939	.2864814	.2423874	438.7958
#1	27.29067	-.508205	-.499290	.4300609	.2844268	.1916995	439.9165
#2	23.97907	3.257563	-.892994	.4515269	.2885361	.2930754	437.6751
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.257562	.0736561	.8291664	88.96551	-.219625	73.19875	1.454871
#1	3.503564	-.116066	.9242267	87.76920	-.431564	75.42100	1.418033
#2	3.011559	.2633777	.7341061	90.16181	-.007687	70.97650	1.491709
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.2643978	116.3694	2.547595	.1840886	682.2518	5.763298	1.087317
#1	.1193440	121.7433	3.888005	-.023592	664.2174	6.961221	1.089404
#2	.4094515	110.9956	1.207185	.3917691	700.2861	4.565376	1.085229
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	41.03601	4.859137	1.420796	2.427849	.9148458	.3687077	-3.07198
#1	40.62767	4.672623	.9340759	1.741239	.9061092	.4839813	-.864428
#2	41.44435	5.045649	1.907516	3.114459	.9235824	.2534339	-5.27954
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.206156	-3.87709	5.759495	120.2628
#1	-.215528	.0239881	5.819571	119.6886
#2	2.627839	-7.77817	5.699419	120.8370
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-001-06-1/1 Operator: LCM
Run Time: 10/10/01 03:27:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1431.002	.8308929	.1233521	57.90446	.3832992	.1679010	4047.059
#1	1427.394	.3978619	1.625724	57.82795	.3463691	.2857021	4042.384
#2	1434.609	1.263924	-1.37902	57.98097	.4202294	.0501000	4051.734
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.499131	.5911796	.8000070	2985.302	.1286194	4522.400	58.12278
#1	2.373452	.5152250	.6791698	2977.025	.3023494	4510.557	57.97809
#2	2.624809	.6671342	.9208442	2993.579	-.045111	4534.244	58.26747
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.873954	1806.766	-1.31500	-.113876	37356.17	3.028860	3.045620
#1	1.867636	1807.881	-1.35107	-.386631	37316.69	3.440196	2.903614
#2	1.880273	1805.651	-1.27894	.1588787	37395.65	2.617524	3.187627
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	8.087539	40.58836	.3387845	.0046408	37.97173	21.55493	.8008428
#1	8.201801	39.83058	.1255168	.5320320	37.87662	20.66788	-1.37900
#2	7.973276	41.34615	.5520521	-.522751	38.06684	22.44198	2.980688
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.207889	-2.51534	-.715364	8885.926
#1	1.142628	-4.38792	.1668314	8877.349
#2	-1.55841	-.642755	-1.59756	8894.504
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-002-17-2/3 Operator: LCM
Run Time: 10/10/01 03:34:13
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	322.1402	.8462766	.1845234	132.9438	.5148820	.2984028	10510.23
#1	323.4964	-.480358	.2143900	133.7113	.4537516	.3366244	10562.61
#2	320.7840	2.172911	.1546567	132.1764	.5760125	.2601812	10457.85
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.745495	14.81610	.6753371	1572.580	.8340273	10845.16	504.3875
#1	1.814847	15.40832	.2967064	1572.667	.6450916	10897.82	506.8360
#2	1.676142	14.22387	1.053968	1572.493	1.022963	10792.49	501.9391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	5.294679	3262.015	1.169668	.6927545	18866.59	2.647733	.9709216
#1	4.627294	3282.403	-.688591	.8989912	19016.85	4.061267	1.430458
#2	5.962063	3241.626	3.027927	.4865179	18716.33	1.234198	.5113851
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	13.73238	41.00850	-.130960	.8952030	89.48065	4.493646	-1.75972
#1	13.68157	41.71158	.2095370	3.555308	90.04656	4.526277	-1.29293
#2	13.78319	40.30541	-.471456	-1.76490	88.91473	4.461015	-2.22650
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.130454	-4.67479	4.091471	8873.602
#1	1.613657	-5.58709	1.760255	8922.277
#2	2.647252	-3.76248	6.422687	8824.925
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: D 109107-002-17-2/3 Operator: LCM
Run Time: 10/10/01 03:41:07
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	308.3860	1.672870	-1.84332	136.1474	.4740414	.3038506	10809.21
#1	310.5147	1.170381	-1.57904	136.1761	.4687297	.3073240	10826.39
#2	306.2572	2.175360	-2.10761	136.1187	.4793530	.3003773	10792.03
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.939663	15.00347	1.366572	1631.552	1.654824	11128.44	516.3104
#1	2.178994	15.32078	1.223184	1627.942	1.763348	11144.36	516.8777
#2	1.700331	14.68615	1.509960	1635.161	1.546300	11112.52	515.7430
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.206443	3345.752	-.834196	.4194541	19275.86	1.125029	1.333435
#1	6.297906	3361.201	-2.77344	.7139111	19363.69	1.372659	1.521722
#2	6.114979	3330.303	1.105050	.1249972	19188.03	.8773988	1.145149
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	15.89842	49.21617	.3385086	.6858639	91.83817	4.079868	1.936176
#1	15.75552	49.45141	.3387230	1.027594	91.85829	4.104437	-.468416
#2	16.04132	48.98094	.3382941	.3441337	91.81804	4.055299	4.340768
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.513617	.7973866	-1.65036	9033.406
#1	2.878694	-3.29933	-2.51086	9044.158
#2	.1485393	4.894102	-.789870	9022.655
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SP109107-002-17-2/3 Operator: LCM
Run Time: 10/10/01 03:48:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	2244.372	97.67732	40.74567	2055.767	48.54219	48.24185	15388.24
#1	2250.278	99.25269	40.06028	2056.586	48.59678	48.31848	15392.88
#2	2238.467	96.10195	41.43105	2054.948	48.48761	48.16523	15383.60
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	192.1846	485.0633	240.0104	2589.720	19.85949	15714.19	979.8942
#1	192.4315	484.9999	240.1810	2598.322	19.79682	15733.42	979.9468
#2	191.9378	485.1266	239.8397	2581.118	19.92215	15694.96	979.8415
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	478.3701	4204.748	9.199415	48.67057	24117.07	51.00557	477.2007
#1	479.6933	4232.015	9.626024	48.95708	24294.21	51.28041	477.7560
#2	477.0469	4177.481	8.772807	48.38406	23939.93	50.73073	476.6455
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	483.2803	528.6453	94.98934	94.71014	189.5188	101.8669	19.01607
#1	483.5827	527.6962	94.67314	95.84808	189.6558	102.1282	21.16403
#2	482.9778	529.5944	95.30554	93.57219	189.3818	101.6057	16.86811
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	20.28076	6.077803	10.75978	9427.382
#1	19.11278	1.835921	13.52054	9435.127
#2	21.44874	10.31969	7.999018	9419.637
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: PS109107-002-17-2/3 Operator: LCM
Run Time: 10/10/01 03:54:55
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1314.147	81.39000	84.43773	151.5783	10.90604	20.17975	13262.19
#1	1316.962	80.62437	84.67157	151.8434	10.95106	20.19407	13277.79
#2	1311.331	82.15562	84.20389	151.3132	10.86103	20.16543	13246.59
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	21.55608	43.18370	30.52964	1936.670	29.76609	11092.48	516.1008
#1	21.63366	43.28673	30.65047	1941.170	31.13640	11103.08	517.0694
#2	21.47850	43.08068	30.40882	1932.170	28.39579	11081.87	515.1321
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	45.05333	3426.626	70.89583	39.94274	23404.22	99.02850	20.76185
#1	44.90672	3425.532	73.60392	39.92400	23564.73	100.0135	20.83557
#2	45.19993	3427.721	68.18774	39.96148	23243.71	98.04347	20.68812
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	92.70740	114.2294	30.01318	97.43520	108.5844	24.74494	28.88225
#1	93.22114	113.4340	30.13889	98.62189	108.7884	24.67638	30.14433
#2	92.19367	115.0248	29.88747	96.24850	108.3803	24.81350	27.62016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	30.20758	69.33939	71.67366	H13682.65
#1	31.63198	68.16789	76.32157	H13697.69
#2	28.78317	70.51090	67.02574	H13667.62
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SE109107-002-17-2/3 Operator: LCM
Run Time: 10/10/01 04:01:49
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	78.30940	.4088455	1.851314	26.36200	.4077384	.1742050	2067.957
#1	78.62022	.6114344	.0159287	26.33670	.4344149	.0941431	2063.360
#2	77.99858	.2062566	3.686700	26.38730	.3810619	.2542670	2072.555
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.9882240	2.934833	-.206358	318.3257	-.726085	2162.421	99.79614
#1	1.104189	2.685162	-.282341	312.5108	.1581872	2156.188	99.52625
#2	.8722589	3.184506	-.130376	324.1406	-1.61036	2168.654	100.0660
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.792701	715.5559	.6787808	.3454294	3790.914	5.308762	.9473014
#1	1.409395	717.9242	-.618161	.2216290	3748.399	5.629519	1.077155
#2	2.176006	713.1876	1.975723	.4692299	3833.429	4.988005	.8174475
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.667252	8.827258	-.188553	.9435582	17.72223	1.024912	-.839720
#1	3.571569	8.565630	.0443778	.6089554	17.72608	1.057725	-2.32977
#2	3.762936	9.088886	-.421484	1.278161	17.71838	.9920981	.6503287
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.669877	4.401995	-1.18324	1768.348
#1	1.401470	2.915830	-2.38559	1764.446
#2	-2.74122	5.888159	.0191135	1772.251
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-003-06-1/1 Operator: LCM
Run Time: 10/10/01 04:08:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	664.2305	1.679776	1.701890	137.1249	.6166462	.2975016	10804.27
#1	668.8226	2.628476	2.994470	137.5042	.5955490	.5366784	10815.85
#2	659.6382	.7310759	.4093094	136.7454	.6377434	.0583248	10792.70
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.093900	15.07015	.6669616	2156.568	1.237090	11110.09	517.5418
#1	2.795096	14.81537	1.137013	2170.609	.5482034	11126.63	518.4584
#2	3.392704	15.32493	.1969097	2142.526	1.925976	11093.55	516.6252
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.083687	3340.865	4.330785	.5442961	19350.02	-.430070	2.560405
#1	6.376405	3350.535	3.267510	.1855089	19485.39	1.423181	2.878261
#2	5.790970	3331.195	5.394059	.9030834	19214.65	-2.28332	2.242550
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	22.34027	43.43817	.7212058	.7731950	91.93803	10.42213	1.881413
#1	22.45535	43.74179	.8491607	.2759071	92.14196	10.29095	4.707263
#2	22.22519	43.13455	.5932508	1.270483	91.73412	10.55331	-.944437
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.9145324	3.281649	4.854912	9365.732
#1	-1.53172	2.953296	3.424176	9375.717
#2	3.360785	3.610001	6.285647	9355.748
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-007-06-1/1 Operator: LCM
Run Time: 10/10/01 04:15:38
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	35.56144	1.567001	2.014111	78.49000	.4342955	.1430171	35780.55
#1	38.40466	2.739602	1.646330	78.40006	.4273923	.2498894	35828.87
#2	32.71821	.3943990	2.381893	78.57995	.4411986	.0361448	35732.23
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.130286	.5855396	-.301573	22126.68	-.449125	15972.14	588.8859
#1	1.400137	.5184762	.0842192	22151.85	-.950477	15985.27	589.4816
#2	.8604342	.6526029	-.687365	22101.50	.0522257	15959.00	588.2900
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.942921	5554.205	.6458539	-.182985	481965.3	2.827843	1.460329
#1	1.556362	5545.752	.6433548	.1983144	481339.0	3.283277	2.100602
#2	2.329481	5562.659	.6483530	-.564285	482591.7	2.372409	.8200561
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.585014	142.3889	.2953522	.1405571	165.1754	.4304948	-2.36373
#1	4.085722	142.0411	.1665065	1.178033	164.9855	.4399590	-1.72764
#2	3.084307	142.7366	.4241979	-.896918	165.3654	.4210306	-2.99982
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.5077525	.0897500	.9234166	7269.469
#1	-.562297	-1.43844	1.683806	7267.140
#2	1.577802	1.617942	.1630273	7271.797
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-008-06-1/1 Operator: LCM
Run Time: 10/10/01 04:22:33
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	48.03758	1.188305	1.351863	75.58674	.4761848	.1049829	34859.55
#1	49.71411	.1598751	-.978827	75.84630	.4559974	.0957400	34996.05
#2	46.36106	2.216735	3.682553	75.32718	.4963721	.1142258	34723.05
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.057784	.7948205	.0790377	22134.31	.0588835	15585.91	570.6611
#1	2.479584	.9642894	-.113697	22202.84	.5512829	15648.52	573.0310
#2	1.635984	.6253517	.2717725	22065.78	-.433516	15523.29	568.2911
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	2.388711	5497.780	1.816816	.7284819	502612.4	1.971560	1.050849
#1	2.632918	5500.142	2.610704	1.206096	503554.4	3.252241	1.191702
#2	2.144504	5495.418	1.022928	.2508672	501670.4	.6908789	.9099955
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.431192	142.1489	.5984113	1.814965	160.9075	.6878797	-1.37029
#1	2.929058	142.4701	1.029541	1.125821	161.4969	.7238904	-1.20826
#2	3.933326	141.8277	.1672813	2.504110	160.3181	.6518689	-1.53232
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.7730471	.0499716	2.699747	7141.474
#1	1.430651	1.192383	3.319326	7174.180
#2	.1154436	-1.09244	2.080167	7108.768
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: CVCCV5 Operator: LCM
Run Time: 10/10/01 04:29:28
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50474.98	1007.937	1010.446	509.4450	49.76354	485.4728	98016.16
#1	50472.07	1004.730	1010.741	509.6144	49.62768	484.3876	97850.34
#2	50477.90	1011.143	1010.150	509.2757	49.89940	486.5580	98181.98
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.1363	489.2579	501.7822	48577.91	485.5974	101151.7	492.4967
#1	496.0491	488.0282	501.3290	48496.28	484.8982	100990.5	491.8246
#2	498.2236	490.4877	502.2353	48659.55	486.2966	101313.0	493.1689
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	494.0415	25237.02	1008.791	51.84959	103864.8	973.5127	497.1670
#1	493.3086	25259.42	1004.285	51.60880	103953.2	969.5332	496.2663
#2	494.7744	25214.62	1013.298	52.09039	103776.4	977.4923	498.0678
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	480.6360	509.4119	490.3113	490.0665	508.3856	506.1868	482.3440
#1	479.3659	507.5034	488.6955	487.0344	508.4390	505.7030	481.2466
#2	481.9062	511.3204	491.9271	493.0986	508.3322	506.6706	483.4414
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	487.2236	1011.388	1007.493	518.7136
#1	486.7235	1004.351	1004.251	517.2960
#2	487.7237	1018.425	1010.734	520.1313
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 10/10/01 04:43:12 AM page 1

Method: TRACE2 Sample Name: BCCCB5 Operator: LCM
Run Time: 10/10/01 04:36:23
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	18.88727	1.114866	2.558362	.1712687	.4634995	.2980216	-23.4639
#1	19.54114	2.010081	3.988192	.1656392	.4475639	.0589846	-22.6164
#2	18.23339	.2196510	1.128533	.1768982	.4794352	.5370586	-24.3113
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4096926	.6191114	-.682820	2.860576	.5550762	13.65983	.0543668
#1	.8838383	1.143070	-.997214	1.357548	-.406236	12.33038	.0309553
#2	-.064453	.0951525	-.368427	4.363604	1.516388	14.98927	.0777782
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.321353	16.28417	-.960111	.9269687	-106.008	6.472537	.5319508
#1	1.091912	14.08166	-.259504	1.046159	-130.594	8.473779	1.064315
#2	1.550794	18.48668	-1.66072	.8077782	-81.4223	4.471296	-.000413
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0887831	.6707664	.7976450	-1.18735	.0790309	.1652901	-.763278
#1	.2789167	1.319146	1.048832	.0104255	.0790729	.2983847	-1.76649
#2	-.101351	.0223866	.5464583	-2.38512	.0789889	.0321955	.2399320
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.213906	-3.71283	.4158358	.2680971
#1	.2735424	-6.36877	2.794694	-.205525
#2	2.154269	-1.05689	-1.96302	.7417189
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: S 109107-009-07-1/1 Operator: LCM
Run Time: 10/10/01 04:43:18
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	354.8773	-.926546	24.07589	138.4648	.3028548	2.082707	63664.47
#1	357.8125	-2.87250	23.28161	139.3333	.2579845	2.163390	64004.08
#2	351.9420	1.019404	24.87017	137.5963	.3477251	2.002025	63324.86
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	6.132617	.0675038	4.688663	89392.23	1.542021	51190.30	989.2114
#1	5.919010	.0653244	4.982190	89883.45	1.668040	51410.15	994.3130
#2	6.346224	.0696832	4.395136	88901.02	1.416002	50970.44	984.1097
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	14.86469	6718.542	-3.17698	.2221801	167679.2	5.219013	55.47875
#1	14.46432	6763.148	-3.09418	.6802599	168556.9	3.456020	56.18246
#2	15.26505	6673.936	-3.25979	-.235900	166801.5	6.982006	54.77504
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	19.00963	589.2744	1.151547	2.357826	410.2929	8.980153	2.788565
#1	19.08223	592.1841	1.411763	3.123834	412.7103	8.348795	.7294340
#2	18.93703	586.3646	.8913308	1.591817	407.8755	9.611511	4.847695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.9183514	-3.57933	-2.97620	5779.730
#1	2.136898	-5.03525	-2.12399	5805.166
#2	-.300195	-2.12341	-3.82841	5754.295
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-011-07-1/1 Operator: LCM
Run Time: 10/10/01 04:57:07
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	87.04242	.1557705	22.52832	138.9333	.3079632	1.029951	64077.90
#1	85.86174	.3214803	24.40364	140.0520	.2572071	.8732071	64512.32
#2	88.22310	-.009939	20.65301	137.8145	.3587193	1.186695	63643.48
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.488640	.0758699	1.743476	90649.66	.3776776	53000.40	961.8918
#1	3.328244	-.096882	1.501179	91299.79	-.051435	53358.18	969.0328
#2	3.649035	.2486216	1.985772	89999.54	.8067902	52642.62	954.7509
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	12.92036	6755.545	-.888123	.2547770	174003.0	5.309196	59.41028
#1	12.83175	6795.319	1.221405	.1417036	175090.6	3.065956	60.22257
#2	13.00897	6715.770	-2.99765	.3678504	172915.3	7.552437	58.59798
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	9.607828	599.0128	1.112501	1.140836	414.9191	1.588535	2.465863
#1	9.441854	603.2766	1.289087	.0053796	418.2205	1.515208	1.871511
#2	9.773802	594.7490	.9359142	2.276293	411.6178	1.661861	3.060215
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.666880	-2.42543	-.119916	5251.387
#1	-1.01344	1.368158	1.147493	5290.478
#2	-.320318	-6.21901	-1.38733	5212.295
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-010-01-1/1 Operator: LCM
Run Time: 10/10/01 04:50:12
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	62.96804	1.928293	21.89920	134.4824	.3549171	.3909070	62576.94
#1	63.64547	1.658104	19.03077	134.5659	.3112620	.3290272	62588.44
#2	62.29061	2.198482	24.76763	134.3989	.3985722	.4527869	62565.46
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.646691	-.014261	.9698715	88177.27	-.611350	51345.10	945.3074
#1	4.101076	.0776824	1.154532	88198.90	-.446865	51380.29	945.6451
#2	3.192306	-.106205	.7852110	88155.62	-.775835	51309.91	944.9696
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	12.82927	6531.700	1.072260	.3944231	166934.0	9.304884	56.46137
#1	12.37647	6528.707	2.258303	.7009804	166807.7	9.501800	56.96115
#2	13.28207	6534.694	-.113783	.0878658	167060.2	9.107967	55.96159
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	9.659246	575.0612	.5317943	1.913155	402.5835	1.800888	-2.36814
#1	9.809051	575.4052	1.022053	2.119617	402.5804	2.001317	-.153723
#2	9.509443	574.7173	.0415359	1.706692	402.5865	1.600459	-4.58255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.2666463	-.499319	1.857652	5257.243
#1	-.593833	6.090288	.3419590	5258.795
#2	1.127126	-7.08893	3.373344	5255.691
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-012-01-1/1 Operator: LCM
Run Time: 10/10/01 05:04:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	45.87697	-1.99541	22.34397	133.7690	.3299038	.3905420	61611.09
#1	44.88341	-1.17151	23.65917	133.6359	.3240480	.3620801	61580.71
#2	46.87053	-2.81931	21.02877	133.9021	.3357597	.4190040	61641.47
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.727371	-.089292	.3361324	86838.36	1.152929	50793.43	925.7072
#1	3.215619	.2714334	-.031245	86812.66	1.121326	50746.04	925.6124
#2	2.239123	-.450018	.7035097	86864.06	1.184532	50840.81	925.8021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	12.38109	6529.826	.0742462	.4729222	166978.5	7.611221	55.99432
#1	12.09148	6524.791	-3.52000	.6557968	166924.2	5.889515	56.10175
#2	12.67070	6534.861	3.668491	.2900477	167032.9	9.332928	55.88689
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	7.927348	569.8964	.1232510	2.126264	400.3816	.7806790	.0363450
#1	8.067380	569.3448	-.221498	2.155499	399.9900	.7477030	-1.12715
#2	7.787316	570.4479	.4680001	2.097030	400.7734	.8136551	1.199837
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.710796	-2.83096	1.526403	5009.393
#1	2.245159	-5.14681	-2.70700	5004.236
#2	1.176433	-.515120	5.759804	5014.550
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-013-21-3/3 Operator: LCM
Run Time: 10/10/01 05:10:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	79.31761	-.964128	1.394936	48.18530	.5121443	.5269970	34031.34
#1	79.15334	-.995658	3.096678	48.19973	.5135063	.4784640	33972.74
#2	79.48187	-.932597	-.306806	48.17086	.5107824	.5755299	34089.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.179210	.6139182	1.841067	12706.41	-.481581	16078.05	1150.076
#1	3.327568	1.069579	2.032780	12681.49	-.608125	16059.24	1148.527
#2	3.030852	.1582577	1.649354	12731.33	-.355038	16096.85	1151.626
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.563485	5635.881	-.182168	.5003458	18561.86	1.258135	2.549754
#1	4.373073	5652.678	-1.90769	.7812412	18523.66	2.312999	2.813535
#2	4.753897	5619.084	1.543355	.2194503	18600.07	.2032704	2.285973
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	16.01329	88.43478	.9975599	44.42245	466.4201	.8082594	.2528763
#1	15.94235	88.81513	1.400303	45.12427	465.9112	1.048213	2.115030
#2	16.08424	88.05443	.5948169	43.72064	466.9291	.5683054	-1.60928
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.849185	-1.61110	.5318148	H28673.47
#1	-1.97010	-1.33175	-2.19619	H28640.70
#2	.2717266	-1.89046	3.259819	H28706.23
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: D 109107-013-21-3/3 Operator: LCM
Run Time: 10/10/01 05:17:50
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	184.6913	1.046568	1.588977	46.84081	.4182230	.4420263	33355.90
#1	176.3261	2.268221	3.742261	45.77934	.4984230	.5328219	32609.04
#2	193.0566	-.175086	-.564307	47.90228	.3380229	.3512307	34102.76
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.726243	.8081869	1.670144	12490.70	.7092958	15799.77	1129.996
#1	2.605269	1.009329	1.577099	12204.54	.8972874	15454.73	1104.664
#2	2.847218	.6070449	1.763188	12776.85	.5213043	16144.81	1155.328
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.757960	5597.078	-1.56477	1.001341	18060.85	1.608370	2.486719
#1	4.686639	5489.436	-1.75881	1.239726	17752.67	.9511652	2.714760
#2	4.829282	5704.721	-1.37073	.7629551	18369.04	2.265576	2.258678
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	9.060783	80.37530	1.072775	.9784564	458.7941	1.669146	-.111108
#1	8.927423	78.61433	1.319537	.8632896	447.8293	1.685716	.4169639
#2	9.194145	82.13628	.8260135	1.093623	469.7588	1.652576	-.639180
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.119093	-2.14959	-1.27279	H28352.32
#1	1.137007	-.593089	-2.34207	H27712.55
#2	1.101180	-3.70609	-.203501	H28992.10
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SP109107-013-21-3/3 Operator: LCM
Run Time: 10/10/01 05:24:44
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1985.086	94.86269	43.66543	2002.522	48.89436	47.82632	38095.61
#1	1987.350	94.60445	44.41622	2003.818	48.78090	47.68821	38030.53
#2	1982.821	95.12094	42.91463	2001.226	49.00781	47.96443	38160.69
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	194.2014	474.8166	244.4915	13398.21	19.93582	20530.38	1601.329
#1	193.2386	473.2541	243.8292	13378.96	19.89081	20473.52	1599.441
#2	195.1643	476.3791	245.1537	13417.46	19.98082	20587.24	1603.217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	484.3043	6422.066	9.393278	49.26126	23086.76	50.73020	483.2587
#1	484.0497	6465.798	10.04675	48.72506	23122.24	50.98471	482.8189
#2	484.5589	6378.334	8.739809	49.79746	23051.28	50.47570	483.6984
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	479.6246	573.9625	96.35938	97.82343	557.1241	98.72755	18.28426
#1	477.9709	572.6746	96.34383	96.12980	557.3642	98.50462	17.98864
#2	481.2784	575.2505	96.37493	99.51706	556.8841	98.95049	18.57988
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	20.76120	7.707917	10.23560	H28642.02
#1	20.84154	5.517177	12.31118	H28618.81
#2	20.68085	9.898658	8.160027	H28665.23
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Analysis Report QC Standard 10/10/01 05:38:27 AM page 1

Method: TRACE2 Sample Name: CRCRII Operator: LCM
Run Time: 10/10/01 05:31:38
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	407.5818	121.6210	20.83812	406.6281	10.33213	10.04814	461.7770
#1	407.6008	122.6382	18.95406	406.4736	10.34619	10.31932	461.3428
#2	407.5628	120.6039	22.72218	406.7826	10.31808	9.776968	462.2112
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	19.47758	99.39674	48.50520	195.0682	5.359245	495.2438	30.60367
#1	19.51156	98.91839	48.31956	195.6195	5.283458	496.0536	30.61745
#2	19.44360	99.87510	48.69083	194.5169	5.435032	494.4340	30.58988
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	79.21611	509.1525	Q12.96294	19.68099	842.8268	23.27970	100.3291
#1	78.44538	504.6628	Q13.70658	19.54770	812.8917	21.11523	100.2377
#2	79.98684	513.6423	12.21930	19.81429	872.7618	Q25.44417	100.4205
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	40.80800	17.21268	4.720485	24.78155	5.185792	25.46156	4.780036
#1	40.94223	17.11588	4.842110	24.10934	5.191071	25.53766	5.745146
#2	40.67377	17.30947	4.598859	25.45376	5.180513	25.38546	3.814926
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	5.648409	16.55052	11.16870	14.31460
#1	5.052175	17.49233	11.81325	14.80445
#2	6.244643	15.60871	10.52415	13.82474
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACE2 Sample Name: IAICSAII Operator: LCM
Run Time: 10/10/01 05:38:32
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	493648.9	1.702820	4.739821	1.043539	.7610846	2.193125	497299.8
#1	494860.7	.9280100	3.476975	.9472239	.7658139	2.219122	498001.9
#2	492437.0	2.477630	6.002668	1.139854	.7563552	2.167128	496597.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	30.00000	20.00000	20.00000	10.00000	10.00000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1340059	.3261378	-.997854	190349.3	-1.32792	499399.2	10.08062
#1	.1996129	.7532880	-1.38412	190601.4	-2.42131	500183.2	9.959738
#2	.0683990	-.101012	-.611592	190097.2	-.234533	498615.2	10.20150
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	20.00000	100.0000	50.00000	40000.00	6.000000	100000.0	30.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.020094	7.116416	-3.94095	-.726276	-132.197	13.78828	2.236699
#1	.7186925	3.304020	-1.99346	-.096781	-169.977	15.46212	2.132304
#2	1.321496	10.92881	-5.88845	-1.35577	-94.4181	12.11443	2.341095
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	80.00000	1000.000	10.00000	20.00000	1000.000	20.00000	100.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	27.09732	1.322405	-.300322	-.096496	13.53054	2.449899	-131.386
#1	26.90121	2.009138	.8767236	.0531171	13.52824	2.550078	-130.186
#2	27.29343	.6356728	-1.47737	-.246110	13.53283	2.349719	-132.586
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	35.00000	50.00000	10.00000	10.00000	50.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	63.70042	8.223745	-10.0238	21.58833
#1	61.46036	12.99287	-9.48707	19.49022
#2	65.94049	3.454622	-10.5605	23.68644
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Method: TRACE2 Sample Name: IBICSABII Operator: LCM
Run Time: 10/10/01 05:45:26
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	495704.9	623.5435	100.4603	528.1619	511.4278	950.7932	502356.1
#1	494940.6	623.3306	97.84623	526.9589	510.4106	949.5466	501085.9
#2	496469.2	623.7563	103.0743	529.3649	512.4451	952.0399	503626.2
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	496.4707	483.4992	534.2101	192562.1	43.78283	504271.0	506.9556
#1	495.2383	482.7103	533.1818	192025.2	42.46386	503045.2	506.1722
#2	497.7032	484.2881	535.2383	193099.0	45.10179	505496.7	507.7389
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	967.2969	5378.353	47.39964	215.7626	5514.730	109.1473	505.2764
#1	965.8735	5377.550	50.26913	215.3733	5593.677	109.7037	504.7034
#2	968.7202	5379.156	44.53016	216.1520	5435.783	108.5909	505.8495
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	958.2363	1089.799	971.7451	970.9466	13.67097	1006.457	-76.7215
#1	954.8741	1087.830	970.9358	972.9593	13.65231	1004.782	-76.1137
#2	961.5986	1091.768	972.5544	968.9338	13.68963	1008.133	-77.3293
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000		1000.000	
Range	20.00000	20.00000	20.00000	20.00000		20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	104.0344	53.86148	44.16831	Q1488.934
#1	101.7521	59.83690	45.48483	Q1487.474
#2	106.3168	47.88606	42.85179	Q1490.394
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Analysis Report QC Standard 10/10/01 05:59:09 AM page 1

Method: TRACE2 Sample Name: CVCCV5 Operator: LCM
Run Time: 10/10/01 05:52:21
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50627.16	1006.218	1009.323	509.3145	49.68515	485.8060	97424.83
#1	50560.36	1006.726	1007.061	508.5409	49.75798	485.7275	97364.91
#2	50693.95	1005.710	1011.585	510.0880	49.61232	485.8844	97484.75
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	496.3152	489.1186	503.1979	48601.59	486.3630	100695.5	492.7505
#1	496.4251	488.8212	502.9591	48590.65	486.5341	100525.9	492.4968
#2	496.2054	489.4159	503.4366	48612.54	486.1918	100865.1	493.0041
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	491.5503	25246.21	1011.980	51.45567	103614.4	970.7979	497.4377
#1	491.4180	25151.09	1015.354	51.57872	103416.3	965.8571	497.0487
#2	491.6827	25341.33	1008.606	51.33262	103812.6	975.7387	497.8267
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	481.2867	509.5551	491.7446	492.2881	508.4107	505.0831	484.2358
#1	480.4317	510.0054	492.0503	491.3736	507.3840	504.6895	483.1334
#2	482.1418	509.1048	491.4388	493.2027	509.4375	505.4767	485.3381
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	487.4262	1013.528	1011.206	518.2129
#1	488.2340	1011.912	1017.074	517.4857
#2	486.6183	1015.143	1005.338	518.9402
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB5 Operator: LCM
Run Time: 10/10/01 05:59:16
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	26.88560	-.596056	2.120049	.1042779	.3475761	.0908549	-11.8151
#1	30.66151	-1.44096	2.079619	.0756396	.3240125	-.029474	-10.7726
#2	23.10969	.2488507	2.160480	.1329162	.3711398	.2111843	-12.8575
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.5101801	.2308866	-.533726	9.421787	-.716025	22.01386	-.036587
#1	.5108164	.1307389	-.798730	9.232734	.6928942	22.66502	-.044217
#2	.5095437	.3310343	-.268722	9.610842	-2.12494	21.36270	-.028958
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6269316	21.35745	-.442642	.3591504	-84.6661	4.977883	.7655164
#1	.2071890	10.80244	-.912226	.3615029	-164.159	4.780125	.1820532
#2	1.046674	31.91247	.0269411	.3567979	-5.17341	5.175641	1.348980
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.111823	1.392060	.8903389	-.724390	.0596272	.1184943	.9646863
#1	-.339222	1.248593	1.018679	-.585933	.0433181	.0245652	.0095617
#2	.1155755	1.535526	.7619987	-.862847	.0759362	.2124234	1.919811
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.55671	5.248232	-3.28847	-.473478
#1	1.034252	2.397387	-2.56738	-.260546
#2	-4.14767	8.099076	-4.00956	-.686409
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: PS109107-013-21-3/3 Operator: LCM
Run Time: 10/10/01 06:06:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1090.611	81.57904	84.32914	68.46893	10.93487	20.35206	37043.67
#1	1088.264	80.99335	86.45514	68.22564	10.88420	20.13569	36869.32
#2	1092.958	82.16472	82.20314	68.71223	10.98554	20.56844	37218.02
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	23.06645	30.11777	32.45780	13149.01	30.02564	16437.11	1173.132
#1	23.21432	30.43348	32.30655	13093.04	29.33768	16375.99	1168.350
#2	22.91857	29.80206	32.60904	13204.98	30.71360	16498.23	1177.914
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	44.45136	5851.208	71.21766	40.98844	23385.97	101.8619	22.13951
#1	45.11296	5851.569	70.19255	41.41127	23303.86	101.5262	21.73966
#2	43.78977	5850.848	72.24277	40.56560	23468.08	102.1975	22.53936
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	95.48250	163.8930	31.72111	144.4836	486.5453	21.53180	29.96048
#1	95.58939	163.7067	31.86763	144.1526	484.4568	21.58241	29.65027
#2	95.37560	164.0794	31.57458	144.8145	488.6337	21.48119	30.27070
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	30.05778	72.24584	70.70310	H33613.42
#1	29.18085	72.11028	69.23320	H33513.11
#2	30.93470	72.38140	72.17300	H33713.73
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SE109107-013-21-3/3 Operator: LCM
Run Time: 10/10/01 06:13:04
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	27.41865	-.389211	.6575291	9.571810	.3451509	.3079480	6829.522
#1	29.63078	-.608414	.8995039	9.609207	.3459235	.3298823	6830.240
#2	25.20652	-.170007	.4155544	9.534411	.3443782	.2860138	6828.804
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.8948744	.4952364	-.066021	2596.641	-.939710	3221.428	231.6176
#1	1.062825	.6720919	-.069710	2598.037	-.492251	3225.408	231.6757
#2	.7269235	.3183809	-.062332	2595.245	-1.38717	3217.447	231.5595
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.881055	1226.195	1.978273	-.031754	3660.120	6.407064	1.265002
#1	2.015417	1226.377	2.244521	.0875351	3676.076	4.443242	1.624056
#2	1.746693	1226.013	1.712025	-.151044	3644.163	8.370887	.9059476
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.355351	17.62016	.3170294	10.02941	92.80146	.2000924	.2505364
#1	4.525868	18.36920	-.127986	9.612003	92.92339	.3184926	1.746226
#2	4.184835	16.87111	.7620451	10.44681	92.67953	.0816922	-1.24515
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.53523	2.378445	1.777661	5746.478
#1	-1.61188	3.750009	1.491252	5747.690
#2	-1.45857	1.006881	2.064070	5745.267
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-014-01-1/3 Operator: LCM
Run Time: 10/10/01 06:19:59
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	34.39420	.8782792	.9001502	38.54903	.3229531	.2390752	33320.03
#1	38.90450	1.858114	2.080748	38.59988	.3272908	.2984347	33334.96
#2	29.88391	-.101556	-.280448	38.49819	.3186153	.1797157	33305.09
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.250647	1.382615	1.050423	8080.654	1.275200	15665.48	1118.136
#1	3.162435	1.415020	1.423498	8090.086	.3980548	15664.38	1118.269
#2	3.338860	1.350210	.6773479	8071.222	2.152345	15666.58	1118.002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.915948	5445.469	.9268092	1.021183	17913.43	1.374012	2.842966
#1	4.034964	5452.714	5.779312	1.426351	18003.78	3.452511	3.021609
#2	3.796932	5438.224	-3.92569	.6160160	17823.08	-.704487	2.664324
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	12.14876	83.86331	2.135857	2.250479	449.9219	.8251369	.1856148
#1	12.13217	83.77776	2.604587	4.393515	449.6078	.8159228	-1.28656
#2	12.16534	83.94886	1.667128	.1074431	450.2360	.8343511	1.657789
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.819549	-1.79510	2.287277	H27790.84
#1	1.239918	4.720682	6.308096	H27780.10
#2	2.399180	-8.31089	-1.73354	H27801.58
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-015-07-1/1 Operator: LCM
Run Time: 10/10/01 06:26:53
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	275.2121	.6480099	-1.32203	1.173450	.3606354	.2346564	146.4210
#1	276.8063	2.029057	-1.58390	1.225839	.3754563	.2966022	146.5233
#2	273.6179	-.733037	-1.06017	1.121061	.3458145	.1727107	146.3187
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	7.741694	.6703066	.4170860	690.1167	-.071604	35.30652	5.518428
#1	8.436071	1.127619	.5093834	703.1779	-.498046	37.72859	5.572836
#2	7.047315	.2129940	.3247886	677.0555	.3548372	32.88445	5.464020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.419327	91.83199	-1.14796	.7190077	431.1403	2.504395	1.211960
#1	1.308608	104.2655	-1.46057	1.466893	533.6940	5.059521	1.943821
#2	1.530046	79.39844	-.835343	-.028878	328.5865	-.050732	.4800997
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	5.064725	10.86008	3.222122	.6187891	.9959689	8.245815	.0552433
#1	5.294655	11.77755	3.387213	-.041678	1.013617	8.417408	-1.40757
#2	4.834796	9.942613	3.057031	1.279257	.9783210	8.074222	1.518061
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.135558	-2.42719	-.508720	550.5782
#1	-.043815	-4.32035	-.031086	553.9691
#2	-.227301	-.534027	-.986353	547.1873
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-016-01-1/1 Operator: LCM
Run Time: 10/10/01 06:33:48
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	276.8742	1.219999	1.674770	.4168780	.2736681	.0914267	112.8999
#1	276.6143	1.525892	.2966016	.4052241	.2292110	.1390656	112.8328
#2	277.1342	.9141061	3.052938	.4285318	.3181252	.0437878	112.9670
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.238352	-.172465	.3417514	24.45251	.8168124	23.11281	.5858921
#1	.8752581	-.673788	-.018300	22.98449	1.027382	21.74141	.5301241
#2	1.601445	.3288584	.7018030	25.92053	.6062431	24.48421	.6416600
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.015794	37.63254	-.044741	.1715054	209.0962	1.853259	.1389149
#1	1.008187	42.03023	-.361359	.3971388	299.0582	3.901162	.1837738
#2	1.023402	33.23486	.2718757	-.054128	119.1343	-.194644	.0940560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.617789	8.804581	-.301856	-.446597	.6182942	.3208822	-2.23959
#1	2.674974	8.362323	-.515190	-2.19783	.6243794	.2385505	-1.77789
#2	2.560604	9.246838	-.088523	1.304636	.6122091	.4032138	-2.70129
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.344657	-5.41637	2.640693	140.1097
#1	2.429661	-9.58966	4.252431	139.5496
#2	2.259654	-1.24308	1.028954	140.6698
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109107-017-06-1/1 Operator: LCM
Run Time: 10/10/01 06:40:42
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	55.86480	1.980512	2.563013	.5029271	.2777871	.0950797	150.1523
#1	55.29347	3.367393	1.998486	.5164893	.2738261	.1566883	151.0420
#2	56.43613	.5936305	3.127541	.4893648	.2817480	.0334712	149.2626
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.309573	.2287707	.5887438	32.08650	-.694498	31.24463	.4333397
#1	1.604439	.5493398	.5652716	37.54483	-.347254	30.75835	.4837322
#2	1.014707	-.091798	.6122159	26.62817	-1.04174	31.73091	.3829473
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.1769294	49.04287	-2.21468	.6815190	327.8019	6.238297	.0507919
#1	.5085046	56.37491	-4.85968	1.154915	445.0859	5.880439	.6385032
#2	-.154646	41.71084	.4303072	.2081227	210.5178	6.596156	-.536919
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1.895952	7.223099	-.043394	.2699123	.8718994	1.359337	.7036286
#1	1.950585	8.160008	.3384832	-.197483	.8735599	1.492432	3.079291
#2	1.841320	6.286190	-.425271	.7373073	.8702388	1.226241	-1.67203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.39391	-3.59096	-1.52699	153.2363
#1	-2.06088	-5.01280	-4.78356	154.4217
#2	-.726948	-2.16912	1.729579	152.0508
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: IDL1 Operator: LCM
Run Time: 10/10/01 06:47:37
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	112.3938	15.07165	9.350740	.4661058	.6698520	.7477869	27.06454
#1	115.7194	14.89451	11.97315	.5500369	.6939402	.8297661	27.41395
#2	109.0683	15.24879	6.728328	.3821747	.6457639	.6658076	26.71514
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.124551	3.545626	1.324839	358.2971	8.570180	62.05688	1.967742
#1	5.362218	3.573556	1.941435	363.2732	7.563573	67.34559	2.027360
#2	4.886883	3.517696	.7082419	353.3211	9.576787	56.76817	1.908124
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	5.784095	117.6098	8.655106	3.258099	482.9976	20.47930	5.344544
#1	6.473132	118.6830	10.84924	3.490478	576.7638	19.82157	5.311129
#2	5.095058	116.5367	6.460970	3.025719	389.2314	21.13704	5.377960
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.930839	4.370745	3.168749	9.401049	.4163363	.6433290	7.439875
#1	3.245998	4.234640	3.343551	11.15484	.4681447	.6609188	8.284484
#2	2.615681	4.506851	2.993948	7.647255	.3645279	.6257392	6.595266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	9.134982	11.63118	7.166657	14.74255
#1	7.202768	17.07173	7.737565	17.31058
#2	11.06720	6.190628	6.595749	12.17451
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: IDL2 Operator: LCM
Run Time: 10/10/01 06:54:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	112.9360	15.88433	8.297116	.4034802	.6331851	.7712201	26.46443
#1	113.6788	15.29089	6.863989	.3750900	.6283683	.8830757	27.60034
#2	112.1931	16.47777	9.730243	.4318705	.6380019	.6593645	25.32853
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	4.289849	3.132507	1.372823	244.0829	8.199685	60.77280	1.050989
#1	4.029008	3.220527	1.304469	249.4392	7.580811	58.70282	1.051189
#2	4.550690	3.044488	1.441176	238.7266	8.818560	62.84277	1.050789
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	5.604966	117.6531	9.968512	3.034084	367.9572	13.67725	5.167742
#1	4.760823	112.8712	7.289954	2.442869	328.3336	12.01882	5.079551
#2	6.449110	122.4350	12.64707	3.625298	407.5808	15.33568	5.255932
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.973048	4.914389	2.518748	8.588098	.3950853	.5295509	8.510632
#1	2.784082	5.155991	2.560992	7.933791	.3870396	.5094095	8.288640
#2	3.162014	4.672786	2.476503	9.242407	.4031309	.5496923	8.732623
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	8.043757	7.680665	11.11204	11.99281
#1	7.226420	4.476572	8.696253	10.91892
#2	8.861095	10.88476	13.52783	13.06671
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: IDL3 Operator: LCM
Run Time: 10/10/01 07:01:26
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	110.2635	15.41046	8.222422	.4663463	.6393574	.9305212	24.29324
#1	112.1004	15.22452	8.841505	.4933577	.5934519	1.038731	24.36960
#2	108.4266	15.59641	7.603339	.4393350	.6852630	.8223115	24.21688
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	4.391099	3.104979	1.546793	252.2942	8.537630	62.55621	.9970135
#1	4.283535	2.781123	1.709476	251.5874	7.796365	63.22582	1.032043
#2	4.498664	3.428835	1.384111	253.0010	9.278896	61.88658	.9619842
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.445169	113.7771	9.507501	3.659534	468.9210	17.52840	4.758068
#1	6.857298	112.7135	9.582810	3.643368	441.4906	20.62887	4.861269
#2	6.033042	114.8406	9.432191	3.675699	496.3513	14.42793	4.654867
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.179799	4.502641	2.810155	8.110292	.4264087	.6718285	6.280215
#1	3.366068	4.528618	3.176392	10.28134	.4316859	.7022461	7.550348
#2	2.993530	4.476665	2.443919	5.939244	.4211314	.6414108	5.010082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	9.665899	7.410904	10.55541	14.44682
#1	7.918935	8.417120	10.16526	16.35776
#2	11.41286	6.404688	10.94555	12.53588
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: IDL4 Operator: LCM
Run Time: 10/10/01 07:08:20
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	113.2891	16.76259	13.11333	.4897748	.6214246	.9183378	24.54884
#1	115.2470	18.00921	14.75371	.5352419	.5817231	1.065960	24.99803
#2	111.3312	15.51597	11.47296	.4443077	.6611261	.7707156	24.09965
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	4.989756	3.346647	2.879765	251.0236	7.637768	65.11915	1.037526
#1	5.211510	3.586618	3.059498	253.2527	7.244365	67.62202	1.067361
#2	4.768002	3.106677	2.700032	248.7944	8.031170	62.61627	1.007691
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	5.320398	119.8110	6.693350	3.484860	492.6996	18.17037	5.244911
#1	5.684390	125.5525	6.601740	3.627965	484.8574	19.38704	5.507586
#2	4.956407	114.0695	6.784960	3.341756	500.5418	16.95370	4.982236
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.851539	4.928682	3.998015	11.27441	.4397865	.7832099	8.603432
#1	2.959685	5.128288	4.162592	11.25581	.4535040	.9173728	7.798404
#2	2.743393	4.729076	3.833437	11.29301	.4260691	.6490471	9.408460
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	7.154474	8.022608	6.028304	14.21145
#1	6.966863	3.600174	8.102082	15.61491
#2	7.342085	12.44504	3.954526	12.80798
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Analysis Report QC Standard 10/10/01 07:22:05 AM page 1

Method: TRACE2 Sample Name: CVCCV6 Operator: LCM
Run Time: 10/10/01 07:15:15
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	52178.77	1045.997	1041.402	523.9706	51.24927	503.3199	101953.4
#1	53342.66	1068.977	1057.760	535.5195	52.27678	513.3654	104142.0
#2	51014.87	1023.017	1025.045	512.4218	50.22177	493.2744	99764.84
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	511.9615	506.1127	521.8721	50418.01	503.1849	104165.5	510.4326
#1	522.7757	517.2482	532.8827	51478.89	510.2534	106376.8	521.1711
#2	501.1474	494.9773	510.8616	49357.12	496.1165	101954.2	499.6941
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	505.3415	25933.09	1043.455	53.57735	106700.2	1014.994	514.7084
#1	515.4208	26430.48	1060.686	54.68398	108852.4	1034.374	524.5387
#2	495.2622	25435.69	1026.224	52.47073	104547.9	995.6148	504.8781
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	497.2268	528.3887	510.5333	511.2956	523.5069	520.1339	496.4824
#1	507.9055	539.7114	521.3268	517.9836	534.7101	531.6293	501.5009
#2	486.5482	517.0659	499.7397	504.6076	512.3036	508.6386	491.4639
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	506.5357	1049.529	1040.418	533.7689
#1	514.6291	1068.738	1056.660	545.5412
#2	498.4423	1030.319	1024.176	521.9966
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 10/10/01 07:29:01 AM page 1

Method: TRACE2 Sample Name: BCCCB6 Operator: LCM
Run Time: 10/10/01 07:22:11
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	7.604628	-1.38563	-.659659	.0725954	.2571997	.1515354	-11.9408
#1	4.607982	-.171201	.3876459	.0697736	.2792585	.1169734	-13.1705
#2	10.60127	-2.60006	-1.70696	.0754173	.2351408	.1860974	-10.7111
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.2332304	.1538123	-.330222	3.899759	.1899367	10.51704	-.013005
#1	.3894792	-.134402	-.503075	1.858544	-.971679	11.75209	-.012944
#2	.0769815	.4420262	-.157370	5.940974	1.351552	9.281999	-.013065
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.8619999	16.45783	-2.41812	.2531468	-116.483	4.207298	.5405428
#1	1.101608	19.69051	-1.06511	.1484360	-57.9116	7.018721	.7204045
#2	.6223919	13.22515	-3.77113	.3578577	-175.055	1.395876	.3606812
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.017062	.1484389	.4017760	1.071139	.0411788	.1226348	-1.02305
#1	-.227865	.6845719	.8047901	.5738082	.0432276	.1880580	2.201529
#2	.1937416	-.387694	-.001238	1.568470	.0391300	.0572117	-4.24762
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.7960755	-1.75728	-2.74896	-1.79600
#1	-2.55863	.8525299	-2.02437	-1.64895
#2	4.150783	-4.36709	-3.47354	-1.94305
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: IDL5 Operator: LCM
Run Time: 10/10/01 07:29:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	113.9341	15.49966	9.352035	.4837187	.6284188	.9752933	27.75943
#1	113.4628	16.00000	9.345408	.4314301	.6187437	.9341532	28.00185
#2	114.4053	14.99933	9.358664	.5360074	.6380938	1.016433	27.51700
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	4.528370	3.222787	1.737587	247.4043	7.258518	63.96359	.9890797
#1	4.777354	3.586580	1.448525	241.2776	7.376882	63.66158	.9719748
#2	4.279387	2.858993	2.026648	253.5309	7.140155	64.26559	1.006185
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	5.375138	111.3197	9.908343	3.226606	503.4839	17.69620	5.241505
#1	5.528658	98.77625	9.493113	3.477664	435.4511	15.60090	4.695887
#2	5.221618	123.8632	10.32357	2.975548	571.5166	19.79149	5.787123
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.232933	5.120489	2.996007	6.419150	.4251287	.6966381	6.850793
#1	3.036183	5.347242	3.227465	6.384730	.4247497	.8517643	8.850368
#2	3.429683	4.893735	2.764549	6.453570	.4255077	.5415119	4.851218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	7.461941	7.927076	10.89856	13.92620
#1	6.639700	8.498173	9.990188	13.32256
#2	8.284183	7.355979	11.80693	14.52984
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: IDL6 Operator: LCM
Run Time: 10/10/01 07:36:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	114.3437	13.89657	10.69152	.5183217	.5758047	1.052473	27.17107
#1	113.6211	13.08071	10.91071	.4154157	.5509987	.8265755	26.20199
#2	115.0662	14.71244	10.47232	.6212277	.6006106	1.278370	28.14015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.135045	3.123550	1.940911	273.8182	8.558081	65.85536	1.180645
#1	5.036499	2.817575	1.746640	268.3157	8.315857	61.40601	1.104038
#2	5.233591	3.429525	2.135182	279.3206	8.800304	70.30473	1.257253
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.963785	126.2862	7.366667	3.499239	501.8621	12.87796	5.876684
#1	7.100334	116.0286	5.673880	3.073205	457.2156	12.85019	5.437476
#2	6.827236	136.5439	9.059455	3.925273	546.5085	12.90574	6.315892
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.293353	4.588376	3.338819	7.113954	.4438358	.7258137	5.679203
#1	3.092285	5.099360	3.451350	5.633331	.4056881	.6411402	7.382496
#2	3.494421	4.077393	3.226289	8.594576	.4819835	.8104872	3.975911
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	9.996988	5.561355	8.268883	14.66515
#1	8.782007	5.159509	5.930624	13.00050
#2	11.21197	5.963201	10.60714	16.32979
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: IDL7 Operator: LCM
Run Time: 10/10/01 07:42:55
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	113.3434	15.52796	10.19940	.5354986	.6111126	1.008908	27.00338
#1	115.6059	17.96158	11.61625	.6568282	.6315829	.9957961	25.76939
#2	111.0810	13.09434	8.782550	.4141689	.5906422	1.022019	28.23738
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	4.612536	3.444202	2.121501	262.4000	7.722228	64.07660	1.052414
#1	5.000253	3.789109	2.403447	274.2198	7.489257	67.69045	1.068851
#2	4.224821	3.099294	1.839555	250.5802	7.955199	60.46275	1.035977
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.393868	122.3511	7.980590	3.856151	577.5818	17.37762	5.285823
#1	6.537503	130.5944	8.698811	4.473174	642.5543	19.08513	5.694319
#2	6.250235	114.1077	7.262369	3.239128	512.6092	15.67011	4.877328
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.289290	5.131895	3.123343	9.241901	.4579021	.8155835	7.041165
#1	3.387449	5.011997	3.315897	9.107338	.4950385	1.033132	3.327198
#2	3.191131	5.251794	2.930790	9.376465	.4207657	.5980347	10.75513
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	8.062275	8.530950	7.704993	15.11973
#1	9.569756	7.625733	9.234909	16.35817
#2	6.554795	9.436168	6.175077	13.88128
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: PBW093 Operator: LCM
Run Time: 10/10/01 07:49:50
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19.30270	4.013352	-.717844	.5740532	.1924916	.3741069	53.08709
#1	20.18094	6.613407	-.380094	.6311483	.1816112	.3771941	52.88628
#2	18.42447	1.413298	-1.05559	.5169581	.2033720	.3710196	53.28790
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.658886	.6055777	.8471006	57.79783	1.307929	14.75403	.4276814
#1	2.034741	.7747627	1.106454	61.32371	2.918090	13.70411	.4580882
#2	1.283030	.4363927	.5877469	54.27195	-.302231	15.80395	.3972745
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.031917	45.02672	-.441974	1.274365	631.1636	-.583409	1.382054
#1	1.727820	50.61847	-1.81160	1.511542	614.7718	.4936776	1.561560
#2	.3360141	39.43498	.9276529	1.037188	647.5552	-1.66049	1.202547
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	6.949224	7.604743	.3404575	1.728877	.3156882	.9762167	2.422877
#1	6.981142	7.916508	-.136046	1.439064	.3314732	1.123518	1.537274
#2	6.917305	7.292977	.8169614	2.018690	.2999032	.8289155	3.308479
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.7500985	-1.89270	.2830300	H77.65805
#1	3.608139	-5.89807	.2312692	H77.95606
#2	-2.10794	2.112660	.3347908	H77.36005
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				50.00000
Low				-50.0000

Method: TRACE2 Sample Name: LCSW093 Operator: LCM
Run Time: 10/10/01 07:56:45
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5054.617	49.03990	48.58682	511.9730	25.04430	50.10917	5029.513
#1	5058.571	48.61916	46.73024	512.0010	25.00833	50.17049	5036.126
#2	5050.664	49.46064	50.44339	511.9450	25.08026	50.04785	5022.900
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.000	60.00000	60.00000	600.0000	30.00000	60.00000	6000.000
Low	4000.000	40.00000	40.00000	400.0000	20.00000	40.00000	4000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	252.8942	251.3547	255.6076	5020.406	500.6618	4907.624	252.1055
#1	252.6949	251.6533	255.9434	5022.477	501.8148	4908.672	252.3927
#2	253.0936	251.0562	255.2719	5018.336	499.5089	4906.575	251.8183
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	300.0000	300.0000	6000.000	600.0000	6000.000	300.0000
Low	200.0000	200.0000	200.0000	4000.000	400.0000	4000.000	200.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	251.1971	5080.977	51.05826	50.65596	5479.773	49.91250	254.3194
#1	252.5741	5084.748	51.92859	51.05361	5594.033	52.06658	254.2664
#2	249.8201	5077.206	50.18792	50.25831	5365.514	47.75842	254.3724
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	6000.000	60.00000	60.00000	6000.000	60.00000	300.0000
Low	200.0000	4000.000	40.00000	40.00000	4000.000	40.00000	200.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	507.4580	509.7988	248.0279	247.9033	509.6325	1011.578	509.8101
#1	507.4406	509.8938	248.3661	246.3651	509.5827	1012.292	508.3343
#2	507.4754	509.7039	247.6897	249.4415	509.6822	1010.865	511.2858
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	600.0000	300.0000	300.0000	600.0000	1200.000	
Low	400.0000	400.0000	200.0000	200.0000	400.0000	800.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	496.0872	49.22175	51.97615	5112.025
#1	498.5545	48.59293	53.59611	5111.227
#2	493.6199	49.85057	50.35620	5112.822
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				6000.000
Low				4000.000

Method: TRACE2 Sample Name: S 109139-015-04-1/1 Operator: LCM
Run Time: 10/10/01 08:03:39
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	99.83382	.5711291	.5535611	27.21701	.1995288	-.036760	11496.29
#1	99.06142	2.823771	3.707513	27.23227	.1581481	-.037352	11508.79
#2	100.6062	-1.68151	-2.60039	27.20175	.2409095	-.036167	11483.79
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.517159	-.324044	1.149720	191.8562	2.657904	3664.516	15.96383
#1	1.579484	.0748001	1.159315	192.2256	1.713341	3664.491	16.04223
#2	1.454834	-.722888	1.140126	191.4867	3.602468	3664.541	15.88542
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.387810	2760.471	.0638054	.1875362	11247.62	-.146975	.4153184
#1	-.015189	2767.104	.9125776	.4899510	11313.62	-1.93674	.1903115
#2	-.760431	2753.838	-.784967	-.114879	11181.62	1.642789	.6403254
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	30.77937	27.00746	2.958513	.2188520	64.90939	1.129509	1.708852
#1	30.97956	26.96004	2.813148	1.857135	64.89006	1.283050	-.365448
#2	30.57917	27.05488	3.103879	-1.41943	64.92873	.9759678	3.783152
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	3.131989	-6.49212	3.341235	3745.190
#1	2.752292	-5.17671	3.956688	3748.982
#2	3.511686	-7.80753	2.725782	3741.399
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109139-016-04-1/1 Operator: LCM
Run Time: 10/10/01 08:10:34
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	57.73823	.2073561	1.191545	28.85056	.2040760	.6213758	11748.64
#1	54.49256	.9396484	2.332755	28.76602	.2289351	.5321740	11737.38
#2	60.98389	-.524936	.0503354	28.93510	.1792169	.7105776	11759.90
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.9673870	.0183900	2.151423	213.7327	3.804851	3744.141	15.54314
#1	1.221988	-.127243	2.089307	211.0313	3.761761	3736.121	15.47594
#2	.7127862	.1640229	2.213539	216.4340	3.847940	3752.161	15.61034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.3431420	2784.820	-1.10229	-.120989	11574.47	-.614109	.9642607
#1	1.001067	2776.602	.5319681	.0750023	11699.59	2.160617	1.554424
#2	-.314783	2793.038	-2.73655	-.316980	11449.36	-3.38883	.3740970
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	42.08355	22.69395	1.646686	.4193835	66.08858	1.087112	3.237305
#1	42.28496	22.57913	1.795847	-.810691	65.97333	1.206224	4.990216
#2	41.88213	22.80877	1.497525	1.649458	66.20383	.9679997	1.484394
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	4.088179	-7.89983	2.296074	3826.514
#1	3.147091	-5.75563	3.675319	3820.501
#2	5.029267	-10.0440	.9168285	3832.527
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: CRCRII Operator: LCM
Run Time: 10/10/01 08:17:28
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	406.5037	124.9320	20.55309	407.3248	10.37539	10.47994	484.6076
#1	408.8778	125.6507	18.00753	407.3517	10.34895	10.32087	482.3770
#2	404.1296	124.2132	23.09865	407.2979	10.40183	10.63901	486.8382
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	20.05196	101.9999	49.66280	200.4323	6.584627	505.4343	31.09824
#1	19.97715	101.9906	49.41670	193.7773	Q7.571264	504.0273	31.00916
#2	20.12676	102.0092	49.90890	207.0873	5.597990	506.8412	31.18732
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	80.81246	510.2057	10.88404	20.72152	800.4659	22.73804	101.9316
#1	81.10889	509.4139	Q12.76277	20.73823	855.9523	23.41135	102.0698
#2	80.51604	510.9976	9.005309	20.70482	Q744.9795	22.06474	101.7934
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	41.66474	17.86487	5.498925	26.98438	5.202768	25.73351	8.649527
#1	41.68514	17.93921	5.299401	24.71677	5.195956	25.82772	8.235645
#2	41.64433	17.79053	5.698448	29.25198	5.209581	25.63930	9.063410
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	5.551735	15.54922	8.551058	14.68708
#1	7.238632	16.00014	11.14369	13.64010
#2	3.864839	15.09829	5.958424	15.73406
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACE2 Sample Name: IAICSAII Operator: LCM
Run Time: 10/10/01 08:24:22
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	496471.2	-3.44133	-.054116	1.076124	.5881046	2.700355	505348.8
#1	493907.8	-4.47282	-.471033	1.075991	.5729437	2.508717	502882.8
#2	499034.7	-2.40985	.3628018	1.076257	.6032655	2.891993	507814.6
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	30.00000	20.00000	20.00000	10.00000	10.00000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.2996526	.6917714	.0043466	192677.7	-4.00062	502813.7	10.04883
#1	.2955494	.4970348	-.063286	191792.1	-2.90528	500067.1	9.901528
#2	.3037558	.8865080	.0719793	193563.2	-5.09595	505560.4	10.19613
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	20.00000	100.0000	50.00000	40000.00	6.000000	100000.0	30.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.097414	7.531363	-3.18763	.2793640	-88.9531	10.87466	1.702983
#1	.9777668	8.962145	-3.39764	-.197225	-85.5307	9.736626	1.831354
#2	1.217062	6.100580	-2.97762	.7559526	-92.3756	12.01270	1.574612
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	80.00000	1000.000	10.00000	20.00000	1000.000	20.00000	100.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	27.37063	-.382620	-.575201	-2.41232	13.57576	2.770405	-128.464
#1	27.56818	-.052636	-.059520	-6.43977	13.50903	2.773181	-128.921
#2	27.17307	-.712603	-1.09088	1.615138	13.64249	2.767630	-128.007
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	35.00000	50.00000	10.00000	10.00000	50.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	58.23047	.6372562	-5.10043	21.10004
#1	60.10199	-3.05729	-3.56818	19.88069
#2	56.35895	4.331799	-6.63269	22.31938
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Method: TRACE2 Sample Name: IBICSABII Operator: LCM
Run Time: 10/10/01 08:31:16
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	497864.2	620.8316	102.9050	529.6451	514.3251	958.0248	506351.8
#1	497714.9	617.5938	101.3642	529.7048	513.9823	956.9269	505738.8
#2	498013.6	624.0694	104.4458	529.5855	514.6680	959.1227	506964.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	496.9012	484.9663	537.6671	193948.3	43.80357	505071.5	510.6547
#1	495.9688	484.0574	536.9625	193741.1	42.64867	504569.6	510.4350
#2	497.8336	485.8751	538.3716	194155.4	44.95847	505573.4	510.8743
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	969.8552	5405.252	46.29852	215.5627	5350.260	110.4399	507.7496
#1	968.2993	5409.680	50.06032	215.2042	5456.550	108.0547	506.9463
#2	971.4111	5400.825	42.53672	215.9212	5243.970	112.8251	508.5529
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	961.9871	1094.127	978.4252	979.3740	13.70781	1005.268	-77.7328
#1	959.8221	1093.372	978.9104	978.7926	13.69958	1005.186	-77.3183
#2	964.1521	1094.881	977.9399	979.9555	13.71603	1005.350	-78.1474
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000		1000.000	
Range	20.00000	20.00000	20.00000	20.00000		20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	104.5712	56.37872	41.25806	Q1493.392
#1	102.6316	56.93921	46.62051	Q1491.757
#2	106.5108	55.81822	35.89561	Q1495.026
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Analysis Report QC Standard 10/10/01 08:45:00 AM page 1

Method: TRACE2 Sample Name: CVCCV6 Operator: LCM
Run Time: 10/10/01 08:38:11
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50394.78	1007.847	1009.365	506.4825	49.62420	486.1451	97453.88
#1	49730.79	996.6467	995.1437	499.5547	48.86738	478.5563	96019.28
#2	51058.78	1019.048	1023.586	513.4103	50.38101	493.7340	98888.47
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	494.8795	488.6975	501.9800	48582.09	491.1547	100410.6	492.5398
#1	488.0532	481.4824	494.4918	47905.85	486.3270	99015.10	485.7788
#2	501.7058	495.9124	509.4682	49258.33	495.9824	101806.1	499.3009
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	489.3795	25101.50	1018.805	51.70206	103071.3	978.4060	496.6263
#1	483.5183	24847.59	1011.718	50.53262	101877.1	967.4825	489.2484
#2	495.2407	25355.41	1025.892	52.87149	104265.5	989.3295	504.0043
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	480.8777	509.5468	491.0162	488.3457	505.6414	501.4341	489.8191
#1	474.3394	502.7753	483.4204	478.6640	498.6671	494.8042	484.9472
#2	487.4160	516.3183	498.6120	498.0274	512.6158	508.0640	494.6911
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	491.8220	1020.244	1018.085	515.4934
#1	487.0165	1015.750	1009.701	506.1085
#2	496.6276	1024.737	1026.470	524.8783
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB6 Operator: LCM
Run Time: 10/10/01 08:45:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	26.95952	.2704263	1.482305	.1496654	.3832495	.2442399	-8.09914
#1	29.19645	.0099320	2.160479	.1730026	.3504088	.3437800	-5.50617
#2	24.72260	.5309206	.8041307	.1263281	.4160903	.1446999	-10.6921
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3760842	.8934844	-.244232	5.586107	-.595745	24.45585	.0327989
#1	.3890266	.6853149	-.344986	5.668461	-.248158	26.26699	.0023156
#2	.3631418	1.101654	-.143479	5.503753	-.943332	22.64470	.0632821
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.114407	11.08698	-1.00110	.3946818	-239.173	7.649647	-.089310
#1	.4426574	11.39649	.5697954	.5940652	-263.179	8.804551	-.268067
#2	1.786158	10.77747	-2.57199	.1952984	-215.166	6.494743	.0894477
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.1060223	1.296840	1.034154	.6504960	.0633985	.1508025	.1954575
#1	.2664030	1.557533	1.142531	1.177738	.0717684	.2611485	-.261622
#2	-.054358	1.036147	.9257771	.1232540	.0550287	.0404565	.6525369
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.991695	.0191315	-1.51160	-.458851
#1	-.241777	-2.00114	1.854866	.3896711
#2	-1.74161	2.039401	-4.87807	-1.30737
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: S 109156-004-12-3/3 Operator: LCM
Run Time: 10/10/01 08:52:02
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	210.2313	.7361701	-.090865	29.53259	.3538514	-.052634	13300.41
#1	208.4597	-1.26298	-1.29837	29.49911	.3319870	-.161946	13273.82
#2	212.0029	2.735316	1.116642	29.56608	.3757159	.0566773	13327.01
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.456645	.3786149	1.381428	411.8511	-.406322	4211.629	26.55455
#1	1.190010	.0464440	1.078500	402.6184	-.745311	4189.760	26.48191
#2	1.723279	.7107859	1.684356	421.0838	-.067333	4233.498	26.62720
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.555079	3054.815	2.402134	.4822528	12323.92	2.546238	1.726903
#1	1.491993	3086.845	3.580921	-.388688	12381.21	.8869571	1.454079
#2	1.618165	3022.786	1.223346	1.353193	12266.64	4.205518	1.999727
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	13.14985	28.34224	3.014015	-.787721	68.36958	5.215979	-.347854
#1	13.15061	28.17293	3.265532	-2.58567	68.38366	5.127661	-1.91827
#2	13.14908	28.51155	2.762499	1.010225	68.35551	5.304296	1.222565
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.435930	-2.35393	4.779742	3735.977
#1	-.159182	-2.51614	6.629009	3729.960
#2	-.712677	-2.19171	2.930476	3741.994
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: D 109156-004-12-3/3 Operator: LCM
Run Time: 10/10/01 08:58:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	192.2434	2.472173	.1787829	29.61129	.3708953	.0431550	13228.84
#1	192.0355	2.862682	1.841952	29.65150	.3810393	.0878879	13231.38
#2	192.4512	2.081664	-1.48439	29.57108	.3607512	-.001578	13226.30
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.449398	.0989816	1.662201	421.6790	-.563709	4201.927	26.65057
#1	1.604721	.5339602	1.907635	423.4744	.3463073	4202.465	26.74079
#2	1.294074	-.335997	1.416767	419.8836	-1.47373	4201.388	26.56035
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	2.061361	3042.883	.0502224	.7270126	12182.59	4.090248	1.192297
#1	2.977781	3034.055	.1441660	.8749015	12183.32	3.383100	.8292721
#2	1.144941	3051.711	-.043721	.5791237	12181.86	4.797396	1.555321
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	5.460689	27.02084	2.299606	.5158429	68.04459	4.812853	.6825764
#1	5.585451	27.25233	2.552705	.5141197	68.08871	4.785669	1.688613
#2	5.335928	26.78936	2.046506	.5175662	68.00046	4.840036	-.323460
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.18725	.4798800	-.165047	3746.241
#1	-.325241	2.218508	-.893444	3751.611
#2	-2.04926	-1.25875	.5633495	3740.870
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SP109156-004-12-3/3 Operator: LCM
Run Time: 10/10/01 09:05:51
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5367.018	49.48613	48.47833	545.0259	25.41011	49.91439	18271.48
#1	5375.756	50.66494	49.46182	545.5083	25.39922	49.92367	18263.36
#2	5358.279	48.30732	47.49485	544.5435	25.42100	49.90512	18279.60
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	255.3605	252.8380	256.5832	5452.962	503.4676	9180.010	279.3961
#1	255.1252	252.5314	257.4198	5455.417	501.9901	9176.184	279.4156
#2	255.5958	253.1447	255.7466	5450.507	504.9451	9183.836	279.3766
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	254.2026	7792.910	48.36377	51.06727	17522.12	48.92034	256.3508
#1	254.5766	7804.321	47.55488	51.36131	17556.84	48.01924	256.3828
#2	253.8285	7781.499	49.17265	50.77323	17487.40	49.82145	256.3188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	514.1323	529.2946	250.7870	250.5066	579.5697	1019.243	516.0532
#1	513.5191	530.0637	251.3548	251.6815	579.5768	1020.737	516.7087
#2	514.7455	528.5254	250.2191	249.3316	579.5626	1017.750	515.3976
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	497.1745	46.18131	49.45461	8994.631
#1	494.6305	48.82613	46.91885	8996.276
#2	499.7185	43.53650	51.99036	8992.985
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: PS109156-004-12-3/3 Operator: LCM
Run Time: 10/10/01 09:12:46
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1156.488	74.79511	76.84209	48.70068	10.19844	19.35829	15966.61
#1	1153.761	73.86922	77.44143	48.71401	10.14863	19.31009	15960.51
#2	1159.216	75.72099	76.24276	48.68735	10.24825	19.40649	15972.72
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	20.54418	28.58703	30.33433	789.2694	30.01819	4537.248	45.51482
#1	20.71913	28.55765	30.40486	791.3013	30.42764	4542.480	45.47671
#2	20.36923	28.61640	30.26381	787.2375	29.60875	4532.018	45.55292
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	39.73062	3231.171	65.87780	38.70861	16878.04	95.74797	20.94445
#1	39.82334	3220.852	67.02680	38.67291	16837.95	92.09854	20.89914
#2	39.63790	3241.491	64.72880	38.74431	16918.13	99.39739	20.98976
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	90.06292	97.98445	31.41177	94.65467	87.27769	24.85227	29.39952
#1	90.25632	98.31280	31.64656	96.28925	87.19767	24.75359	31.23869
#2	89.86952	97.65611	31.17697	93.02009	87.35770	24.95096	27.56035
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	30.32714	59.91329	68.85968	8380.221
#1	30.02172	61.52009	69.77975	8380.583
#2	30.63255	58.30649	67.93960	8379.859
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SE109156-004-12-3/3 Operator: LCM
Run Time: 10/10/01 09:19:41
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	53.14207	1.908327	2.203161	5.948374	.3677811	.3888342	2632.788
#1	49.97745	-1.94240	1.444338	5.894138	.3400490	.4517310	2629.358
#2	56.30668	5.759056	2.961983	6.002611	.3955132	.3259373	2636.218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.151685	.5255048	-.040771	83.11923	-.001192	845.1006	5.297683
#1	.8397958	.1638247	-.660565	76.25545	.4351270	842.5970	5.294825
#2	1.463574	.8871848	.5790233	89.98299	-.437511	847.6041	5.300540
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.7974352	625.5734	1.689299	.9098865	2463.596	4.185042	.5388640
#1	.6949517	620.7191	1.829112	.3127406	2427.521	2.131568	.2698813
#2	.8999186	630.4277	1.549485	1.507032	2499.670	6.238517	.8078467
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.481300	6.171439	.8430211	2.179775	13.61150	1.333557	2.056763
#1	3.128910	5.253701	.4635562	-.152990	13.60120	1.132395	-.885533
#2	3.833689	7.089176	1.222486	4.512540	13.62181	1.534719	4.999058
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.03056	5.963082	-.448025	749.3184
#1	1.095065	4.045412	.7205296	747.8469
#2	-3.15618	7.880752	-1.61658	750.7899
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109156-008-04-1/1 Operator: LCM
Run Time: 10/10/01 09:26:36
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1721.094	1.390719	-2.00916	46.79246	.4411493	.1250603	13063.84
#1	1721.383	.6532105	-3.37273	46.68791	.4420638	.1010816	13035.73
#2	1720.804	2.128228	-.645598	46.89701	.4402349	.1490390	13091.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	3.993268	2.337929	5.097094	2802.193	6.524959	4488.546	174.3256
#1	3.753601	1.923131	4.639891	2785.621	5.813413	4474.220	173.9790
#2	4.232935	2.752728	5.554298	2818.766	7.236504	4502.873	174.6723
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.933525	3441.390	2.824937	.3083424	11622.35	-.635301	4.645380
#1	4.770120	3464.329	3.456408	.0943275	11719.84	-2.02951	4.767649
#2	5.096929	3418.450	2.193466	.5223573	11524.85	.7589058	4.523111
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	21.73553	22.65558	3.978638	-1.64670	69.78042	80.35806	8.238855
#1	21.65338	22.30125	3.819805	-.728613	69.77296	79.70044	9.013682
#2	21.81769	23.00991	4.137471	-2.56478	69.78787	81.01569	7.464027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	5.667528	-2.10905	5.291396	5544.049
#1	4.212842	-4.75039	7.559272	5532.246
#2	7.122213	.5322959	3.023520	5555.852
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109156-009-04-1/1 Operator: LCM
Run Time: 10/10/01 09:33:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	137.4016	3.386934	1.636658	27.91841	.4108039	.1649125	12056.95
#1	140.3413	2.314670	.2223126	27.95073	.3940024	.1992812	12060.94
#2	134.4618	4.459198	3.051003	27.88609	.4276053	.1305438	12052.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.311179	.3031741	1.777560	365.2950	-.078824	3745.000	20.00035
#1	1.122181	.3133516	1.784478	359.9547	.0712237	3747.318	19.97824
#2	1.500178	.2929967	1.770641	370.6354	-.228871	3742.683	20.02247
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.613110	2983.266	1.904079	.4210662	11169.72	2.181468	1.095907
#1	2.042482	2988.637	-.097229	.2161527	11182.86	-.490246	1.189401
#2	1.183738	2977.896	3.905386	.6259798	11156.57	4.853182	1.002414
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	11.06464	22.40190	1.273201	-.314791	65.03303	3.272715	-.759878
#1	11.18330	22.77998	1.276355	.0741795	65.11362	3.254602	-1.83102
#2	10.94598	22.02382	1.270047	-.703761	64.95245	3.290828	.3112676
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.2613512	-1.13374	3.422567	3728.155
#1	1.021993	-7.49478	3.601144	3732.440
#2	-.499290	5.227301	3.243990	3723.871
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109156-012-04-1/1 Operator: LCM
Run Time: 10/10/01 09:40:26
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	60.07641	1.085566	-2.52097	1.113769	.4394449	.2242971	113.1873
#1	62.88430	.1170130	.3820017	1.184207	.4165720	.3027433	113.8338
#2	57.26852	2.054118	-5.42394	1.043332	.4623178	.1458508	112.5409
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.318874	-.036278	5.705339	39.61754	.7664999	24.39970	1.011890
#1	1.284209	-.136893	6.309113	44.05689	.0861642	26.65484	1.053090
#2	1.353539	.0643366	5.101566	35.17820	1.446836	22.14455	.9706894
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.246779	61.45205	3.753674	.2722671	359.8762	-1.42231	.7251341
#1	-.193360	70.73786	.4653155	.3639658	484.9723	1.356542	1.176943
#2	-.300197	52.16624	7.042033	.1805683	234.7800	-4.20116	.2733248
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.698009	7.184909	-.150985	-.862197	.8810196	.5943540	-.813037
#1	4.165925	7.193887	-.215318	.6335695	.9108017	.5499650	-3.11491
#2	3.230094	7.175931	-.086653	-2.35796	.8512375	.6387431	1.488836
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.555915	-1.38667	6.323405	146.5825
#1	1.686346	-9.67966	5.537354	147.6464
#2	1.425484	6.906308	7.109456	145.5186
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109160-001-02-1/1 Operator: LCM
Run Time: 10/10/01 09:47:21
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	39.82681	.3152161	8.289916	7.348134	.3516243	.2576988	93447.67
#1	40.45598	4.450695	9.541846	7.379092	.4349605	.2765800	93813.85
#2	39.19763	-3.82026	7.037985	7.317176	.2682881	.2388175	93081.50
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4185321	-.479212	.9480501	233.9231	20.31955	5005.426	13.14195
#1	1.192977	.3235630	1.211678	239.1955	19.84768	5027.852	13.24131
#2	-.355913	-1.28199	.6844222	228.6507	20.79141	4982.999	13.04259
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.381842	3333.440	4.279425	-.038074	37421.53	3.305210	.7774887
#1	.1263492	3336.928	2.083978	1.422279	37497.54	6.440690	1.999372
#2	-.890032	3329.952	6.474871	-1.49843	37345.52	.1697302	-.444394
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	19.19876	85.22765	1.021883	-.735001	726.6028	5.289317	18.60438
#1	19.52708	86.24105	.9358031	.5158018	726.4135	5.815573	17.86773
#2	18.87044	84.21425	1.107964	-1.98580	726.7921	4.763062	19.34104
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	21.17666	1.818887	5.509249	9909.621
#1	20.83716	1.014704	2.618260	9913.739
#2	21.51616	2.623070	8.400238	9905.503
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109160-002-03-1/1 Operator: LCM
Run Time: 10/10/01 09:54:16
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	53.93894	3.213560	2.092507	6.462978	.4344812	.2160821	67944.15
#1	52.43171	1.946545	.9660871	6.453880	.4406557	.3052052	67802.39
#2	55.44617	4.480576	3.218928	6.472076	.4283067	.1269590	68085.91
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.874315	-.120872	.6224554	399.6129	-.318954	1820.947	49.28235
#1	1.686983	-.327581	.6177542	394.1652	-1.08997	1813.857	49.17445
#2	2.061646	.0858366	.6271566	405.0607	.4520618	1828.037	49.39026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.5842739	1788.339	2.988358	.6741037	6535.969	3.023133	2.305290
#1	.3159963	1789.313	.1744173	.2334057	6587.502	6.640936	2.609505
#2	.8525514	1787.366	5.802299	1.114802	6484.436	-.594670	2.001075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	23.24183	30.21961	.7220246	-.698041	519.4968	.8543034	2.088084
#1	23.13894	29.49865	.0847188	-1.13942	518.0938	.6506999	1.799501
#2	23.34473	30.94057	1.359330	-.256664	520.8997	1.057907	2.376668
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.52282	-.037335	4.500830	H10701.21
#1	-2.53505	-3.54983	2.036144	H10671.08
#2	-.510592	3.475158	6.965516	H10731.35
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: CVCCV6 Operator: LCM
Run Time: 10/10/01 10:01:12
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51052.72	1016.752	1014.896	520.2190	50.38732	490.4783	98660.77
#1	50900.71	1021.233	1023.465	519.9066	50.74134	495.0455	99270.88
#2	51204.72	1012.272	1006.328	520.5314	50.03330	485.9111	98050.66
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	503.2669	495.6562	507.4890	49034.81	493.5676	102857.5	498.7001
#1	506.3008	499.4056	506.8147	49349.28	499.4860	103682.8	501.3592
#2	500.2329	491.9068	508.1633	48720.33	487.6492	102032.1	496.0410
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	500.0885	25469.41	1030.901	52.11012	104730.5	981.5891	502.6635
#1	504.7427	25186.29	1040.984	52.66507	103945.5	982.6257	505.4949
#2	495.4344	25752.53	1020.818	51.55517	105515.5	980.5525	499.8321
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	486.5290	517.7203	493.7491	498.4254	516.6998	513.8515	491.0496
#1	491.6879	519.7277	494.1399	500.8658	517.2073	515.1633	496.0568
#2	481.3702	515.7129	493.3582	495.9851	516.1923	512.5397	486.0423
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	494.8261	1033.940	1029.381	527.7003
#1	501.2001	1036.976	1042.988	530.3838
#2	488.4522	1030.905	1015.775	525.0167
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB6 Operator: LCM
Run Time: 10/10/01 10:08:08
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	23.92325	-1.93312	-.981154	-.009866	.4505236	.1012686	-32.5785
#1	19.96447	-.980639	1.765667	-.077653	.4131924	-.036537	-31.7586
#2	27.88202	-2.88559	-3.72798	.0579215	.4878548	.2390741	-33.3984
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.074407	-.362057	-1.45064	-8.24435	-.895082	5.260191	-.062582
#1	-.511201	-.183725	-1.53757	-13.9111	-1.53236	3.056878	-.125544
#2	.3623878	-.540388	-1.36371	-2.57764	-.257805	7.463504	.0003793
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6419020	10.02166	.2552283	-.710936	-303.492	1.170755	-.088353
#1	.6280777	5.870767	.6523997	-.756690	-314.272	.7430643	-.354182
#2	.6557264	14.17255	-.141943	-.665182	-292.711	1.598445	.1774764
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.161013	.5730846	.4644673	.7968726	.0225949	-.072251	-1.81819
#1	-.073624	.5934238	.0048202	.8178499	-.005666	-.112172	-3.17361
#2	-.248401	.5527454	.9241145	.7758954	.0508560	-.032330	-.462767
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.434047	-.404068	.5844654	-2.89956
#1	-.712248	5.676902	-1.86023	-6.06526
#2	-.155845	-6.48504	3.029165	.2661440
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: S 109160-003-03-1/1 Operator: LCM
Run Time: 10/10/01 10:15:03
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	54.29352	1.795292	68.21677	3.549734	.5185474	.0541065	88091.77
#1	52.87849	2.637104	69.42441	3.473887	.5255327	.0929966	87988.09
#2	55.70855	.9534800	67.00912	3.625581	.5115622	.0152164	88195.44
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.127639	-.241282	-.505283	742.9315	-.932081	23358.28	12.94173
#1	2.184048	.2268977	-.702593	737.7886	-1.22866	23323.78	12.90869
#2	2.071231	-.709461	-.307974	748.0745	-.635499	23392.77	12.97476
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.103127	12715.90	.9424483	.5288523	160652.2	2.666085	2.193080
#1	.9361959	12724.75	-.218548	.5107016	160722.9	4.195462	2.188665
#2	1.270058	12707.06	2.103444	.5470030	160581.5	1.136707	2.197496
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	18.24249	297.0977	1.890969	1.485274	778.3934	3.046122	.5703726
#1	17.80066	297.3881	1.824137	.7331075	778.1096	3.028043	.2996595
#2	18.68431	296.8074	1.957801	2.237441	778.6773	3.064200	.8410858
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.68375	-3.45268	3.139613	H15333.12
#1	-1.99326	-6.75194	3.047750	H15311.27
#2	-1.37423	-.153416	3.231476	H15354.97
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109160-004-02-1/1 Operator: LCM
Run Time: 10/10/01 10:21:58
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	70.82700	4.239804	2.869094	12.00584	.4999989	.2966211	76462.80
#1	72.08112	4.778815	3.471394	12.08143	.5219807	.3367619	76476.90
#2	69.57288	3.700793	2.266793	11.93024	.4780171	.2564802	76448.70
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.545781	.3807253	.5903524	2284.297	.6534237	2881.051	17.08722
#1	1.390358	.1710918	.7133701	2294.221	1.116149	2877.726	17.12828
#2	1.701204	.5903587	.4673347	2274.374	.1906987	2884.377	17.04617
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.2608434	1066.602	2.232519	.5783517	6694.766	-1.14005	3.579593
#1	-.091508	1064.949	-1.92486	.8319313	6733.513	-2.37086	3.580150
#2	.6131951	1068.255	6.389894	.3247721	6656.018	.0907465	3.579036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	19.56842	30.84614	1.310172	1.686247	576.4466	1.629626	-2.02711
#1	19.37908	31.31035	.7607306	1.824167	576.4219	1.564577	-1.87981
#2	19.75776	30.38194	1.859613	1.548327	576.4713	1.694674	-2.17442
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.993297	-.504915	3.600709	9393.530
#1	2.613730	-4.17321	-.801210	9386.183
#2	1.372864	3.163375	8.002627	9400.878
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109160-005-03-1/1 Operator: LCM
Run Time: 10/10/01 10:28:52
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	42.25667	-.670254	-.322489	4.761468	.5228771	.0234476	73087.98
#1	42.42022	.0562113	1.281894	4.763682	.4816495	.1740160	73069.97
#2	42.09312	-1.39672	-1.92687	4.759254	.5641047	-.127121	73105.98
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4241233	-.422073	.1407651	13.21311	.3157250	1885.685	.9151093
#1	.2446099	-.211967	.2017408	15.11747	1.050993	1883.183	.9142453
#2	.6036366	-.632179	.0797895	11.30875	-.419543	1888.188	.9159733
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.857990	924.0424	-2.02739	-.080327	4122.253	.5413269	1.610568
#1	-1.02388	920.8573	-1.74745	-.423311	3986.510	2.508550	1.072835
#2	-.692102	927.2275	-2.30732	.2626562	4257.997	-1.42590	2.148300
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	11.71649	25.07430	.4642617	-.753202	568.0038	.8009611	.4335543
#1	11.68733	25.22500	.7172502	-1.02792	568.7026	.7881696	-1.18799
#2	11.74566	24.92360	.2112732	-.478482	567.3050	.8137526	2.055096
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.2564831	-3.03143	-1.52589	6595.800
#1	2.170176	-5.65202	.2043068	6608.234
#2	-1.65721	-.410833	-3.25609	6583.366
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109160-006-03-1/1 Operator: LCM
Run Time: 10/10/01 10:35:46
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	42.38880	4.968114	2.482461	4.637523	.6179758	.0740071	72548.81
#1	43.10931	5.584742	2.882637	4.655205	.6245265	.0856797	72685.95
#2	41.66830	4.351486	2.082285	4.619841	.6114252	.0623346	72411.66
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.115190	.0087860	-.017230	24.58929	.6808178	1838.411	.8099633
#1	1.319870	.2050275	.0588816	27.37662	.4790306	1843.293	.8355049
#2	.9105113	-.187455	-.093341	21.80196	.8826050	1833.530	.7844217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.881924	835.9814	-2.46177	.9704303	4187.824	-.387410	1.159870
#1	.0571540	836.1013	-3.31295	1.360349	4117.613	-2.28247	.8060164
#2	-1.82100	835.8615	-1.61059	.5805114	4258.035	1.507654	1.513723
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	8.503530	21.44088	.6329958	1.902358	558.0811	1.082633	.2401365
#1	8.676229	22.00333	1.012268	1.332210	558.5128	1.145603	.9778814
#2	8.330830	20.87842	.2537237	2.472505	557.6494	1.019663	-.497608
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.9008099	-9.09626	.8550525	6227.576
#1	.2292567	-7.07122	-1.43421	6238.962
#2	1.572363	-11.1213	3.144317	6216.190
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 109160-007-03-1/1 Operator: LCM
Run Time: 10/10/01 10:42:41
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50.11848	1.987834	1.772275	.3871456	.6046085	.2515004	61.38114
#1	53.96081	2.416124	2.161093	.3955234	.5417346	.3162113	63.66804
#2	46.27616	1.559544	1.383458	.3787677	.6674825	.1867895	59.09424
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	262500.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.5634532	-.188754	-.304193	19.99820	-.634145	23.77959	.3837808
#1	.5143867	-.075926	.2761243	22.18811	.6586995	23.10829	.3897053
#2	.6125197	-.301583	-.884510	17.80828	-1.92699	24.45089	.3778563
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.009033	52.94936	.4772615	.3512455	224.5737	-.090444	.9492652
#1	-.111546	68.67502	2.806979	.8287917	469.9881	-1.85891	1.639537
#2	.0934804	37.22371	-1.85246	-.126301	-20.8407	1.678018	.2589932
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.782713	7.294301	.1124694	.0649906	.6238501	.5214614	1.097867
#1	2.854055	7.495469	.3386104	1.202833	.6524823	.5458013	2.932900
#2	2.711370	7.093134	-.113672	-1.07285	.5952179	.4971215	-.737165
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.50050	-2.30610	1.868507	80.52885
#1	-.478754	-2.24848	5.334259	87.04218
#2	-2.52224	-2.36373	-1.59724	74.01553
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Analysis Report QC Standard 10/10/01 10:56:23 AM page 1

Method: TRACE2 Sample Name: CRCRII Operator: LCM
Run Time: 10/10/01 10:49:35
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	425.6565	123.6434	21.00798	412.6263	10.67846	10.37599	451.3108
#1	429.5349	123.1373	23.61188	412.5266	10.65840	10.52171	453.3542
#2	421.7780	124.1494	18.40409	412.7261	10.69853	10.23028	449.2673
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	20.46786	101.2159	48.21763	196.7801	5.387649	507.1776	30.90076
#1	20.65445	101.3905	48.63485	208.2594	6.960993	510.7786	30.99180
#2	20.28128	101.0414	47.80041	185.3007	Q3.814306	503.5766	30.80971
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	81.20308	515.3116	8.657101	19.99097	937.9296	23.00610	101.0599
#1	82.08775	510.5585	Q6.573979	20.30206	990.9723	24.02770	101.2364
#2	80.31842	520.0646	10.74022	19.67988	884.8870	21.98450	100.8835
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	42.12309	17.87195	4.679388	27.42379	5.243859	26.16142	3.470950
#1	42.42923	18.41877	4.996389	28.99682	5.277609	26.35814	7.046145
#2	41.81695	17.32513	4.362387	25.85076	5.210109	25.96469	-.104245
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	6.345566	7.871418	9.049510	15.83308
#1	6.917982	6.457160	6.631955	18.47602
#2	5.773149	9.285676	11.46706	13.19015
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 10/10/01 11:03:18 AM page 1

Method: TRACE2 Sample Name: IAICSAII Operator: LCM
Run Time: 10/10/01 10:56:29
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	493145.0	.7008095	1.587926	1.167844	1.054107	1.775434	496954.2
#1	493436.0	1.332301	2.833172	1.167820	1.072756	1.880674	497374.8
#2	492854.0	.0693178	.3426790	1.167868	1.035459	1.670194	496533.6
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	30.00000	20.00000	20.00000	10.00000	10.00000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1791543	.3492385	-.672272	191231.3	-2.04522	510635.8	10.48329
#1	-.204151	.0634134	-.891368	191285.8	-3.62313	510931.2	10.46872
#2	.5624595	.6350636	-.453175	191176.8	-.467299	510340.5	10.49787
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	20.00000	100.0000	50.00000	40000.00	6.000000	100000.0	30.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.7551123	10.58199	-3.91296	-.150035	-239.741	Q22.89506	2.402141
#1	.5577614	6.043621	-4.44859	-.304014	-284.290	Q22.31154	1.801343
#2	.9524632	15.12037	-3.37733	.0039427	-195.193	Q23.47858	3.002939
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	80.00000	1000.000	10.00000	20.00000	1000.000	20.00000	100.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	27.76106	-.374942	.2083631	1.239346	13.73082	2.518481	-128.918
#1	27.98171	-.236114	.6016248	1.780201	13.73045	2.501956	-128.670
#2	27.54042	-.513769	-.184899	.6984915	13.73118	2.535007	-129.166
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	35.00000	50.00000	10.00000	10.00000	50.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	61.39077	.6900179	-6.21489	25.52921
#1	58.89994	5.217465	-9.28197	25.11244
#2	63.88160	-3.83743	-3.14782	25.94598
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Method: TRACE2 Sample Name: IBICSABII Operator: LCM
Run Time: 10/10/01 11:03:23
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	494462.6	618.8295	104.7135	537.4478	512.4377	952.7459	498381.8
#1	494816.2	619.7946	106.1193	538.2904	513.4571	954.2574	499169.8
#2	494109.1	617.8643	103.3078	536.6050	511.4184	951.2344	497593.9
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	500.5168	486.1382	531.3710	192405.2	45.07205	512495.6	509.3239
#1	501.5828	487.3971	531.2291	192640.2	44.45647	513630.3	510.2655
#2	499.4508	484.8794	531.5129	192170.2	45.68764	511360.9	508.3823
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	981.1285	5362.016	45.29289	214.7435	5229.023	116.9187	504.3408
#1	983.6674	5341.097	45.22084	214.9157	5176.309	116.8204	504.1409
#2	978.5896	5382.934	45.36495	214.5714	5281.737	117.0171	504.5407
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	966.8629	1095.105	965.8876	986.0273	13.82675	1018.529	-73.5599
#1	968.7392	1096.154	963.0892	984.1475	13.86293	1020.697	-78.5614
#2	964.9866	1094.056	968.6860	987.9072	13.79057	1016.360	-68.5585
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000		1000.000	
Range	20.00000	20.00000	20.00000	20.00000		20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	104.3876	52.06403	41.90690	Q1506.734
#1	105.9650	50.72798	42.46681	Q1509.818
#2	102.8102	53.40008	41.34698	Q1503.650
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Method: TRACE2 Sample Name: CVCCV1 Operator: LCM
Run Time: 10/10/01 11:10:17
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50571.11	1007.068	1008.420	518.4938	50.29719	487.5212	97166.98
#1	50529.73	1004.823	1005.190	518.8516	50.27626	487.2808	97017.17
#2	50612.49	1009.313	1011.649	518.1359	50.31813	487.7616	97316.80
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	501.9295	493.1515	500.8248	48601.28	488.7686	102528.4	495.5610
#1	500.9737	492.4820	501.0013	48584.22	489.1804	102479.6	495.4735
#2	502.8852	493.8210	500.6484	48618.34	488.3567	102577.1	495.6486
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	501.2246	25152.03	1026.030	51.79462	103358.2	976.1442	498.1717
#1	502.7330	25123.30	1027.162	51.83955	103195.6	974.3419	498.3177
#2	499.7162	25180.75	1024.897	51.74969	103520.9	977.9465	498.0258
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	487.4695	515.5342	488.5763	500.1363	514.7247	512.1826	488.3379
#1	486.8322	515.2216	488.4699	497.5502	514.9982	512.3851	488.0062
#2	488.1067	515.8469	488.6826	502.7224	514.4512	511.9800	488.6697
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	488.9834	1020.786	1028.651	527.4927
#1	489.7670	1024.321	1028.583	526.2626
#2	488.1998	1017.252	1028.719	528.7228
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB1 Operator: LCM
Run Time: 10/10/01 11:17:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	57.60159	.3300741	2.358347	.1936123	.6697922	.3475682	-32.6242
#1	58.67701	-2.23731	2.001871	.2107082	.6500907	.4434133	-31.4759
#2	56.52618	2.897461	2.714824	.1765164	.6894937	.2517231	-33.7726
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.5744876	.6076130	-.989790	10.05930	-1.26535	24.31521	.0617015
#1	.5511950	.3133703	-.960861	12.24179	.0378293	27.36582	.0775601
#2	.5977801	.9018557	-1.01872	7.876814	-2.56853	21.26460	.0458429
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.184505	19.63507	1.763653	.4073633	-365.721	6.169869	.3093722
#1	1.106883	17.08111	.7772964	.3054172	-366.264	7.141154	-.088208
#2	1.262128	22.18902	2.750011	.5093095	-365.177	5.198585	.7069524
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0466640	.7524205	.9002836	-.263257	.0688149	.1487813	-3.57969
#1	.0479999	.7654336	.2539509	-.371637	.0829576	.1609516	-1.93915
#2	.0453281	.7394075	1.546616	-.154877	.0546722	.1366110	-5.22022
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.108700	4.295931	.4970850	3.051573
#1	1.025801	5.650297	-1.65963	4.920402
#2	-1.24320	2.941565	2.653802	1.182745
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Metals Preparation & Sample Description Log

Date: 010-02-01 Prep. Method: ILMO4.1 / 200.7 / 3005A / 3020A / 3050B / 3010A Batch No: 81- 093

Analyst: MSS Comments: HOT PLATE DIGESTION

Reviewed by: [illegible] Date: 10/1/01 Spike Witness: RP Prep. Seq: 14388

	GPL Work Order No.	Sample	Frac	SIZE mL (g)	Final Vol. mL	Matrix S, W Other	Color Before	Color After	Clarity Before or Soil Texture	Clarity After Clear, Cloudy, Opaque	Soil Artifacts or Water pH
							R, Bl, Y, G, O, V, W, Colorless, Br, Grey, Bk.				
1	PBW	093		100	100	WATER	colorless	colorless	clear	clear	<2
2	LCSW	093									
3	109139	015	-04-1/1								
4		016									
5	109156	004	-12-3/3								
6		DUP									
7		SPK									
8		008	-04-1/1								
9		009									
10		012									
11	109160	001	-02-1/1								
12		002	-03-1/1								
13		003									
14		004	-02-1/1								
15		005	-03-1/1								
16		006									
17		007									
18											
19											
20											
21						MIS	010-02-01				
22											
23											
24											

LCS ID / Amt. Added (ml , g): 0.1ML (13972, 15604, 15605)	HNO3(1+1) ID: —
Spiking ID / Amt Added (ml): 0.1ML (13972, 15604, 15605)	HNO3(conc) ID: GP-057-004-04
	HCl(conc) ID: —
Temperature, C: 94°C	HCl(1+1) ID: GP-057-079-02
	Peroxide ID: —

112204

Analytical Report For 112013

for

CH2M Hill Constructors, Inc.

Project Manager: Mike Halil

Project Name : NS Mayport, SWMU 15

December 20, 2001

GPL

Laboratories

GPL Laboratories, LLLP Certifies that the test results meet all requirements of the NELAC Standards unless otherwise noted.

Reviewed by,
Project Manager

Approved by,
Laboratory Director

202 Perry Parkway Gaithersburg, MD 20877 Phone (301) 926-6802 Fax: (301) 840-1209
www.gplab.com

TOTAL # OF PAGES : 23

CASE NARRATIVE FOR GPL #112013

CLIENT: CH2M HILL CONSTRUCTORS, INC.
PROJECT/SITE: NS MAYPORT, SWMU 15
WORK ORDER(S): 112013
REVIEW DATE: 12/20/01

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Analytical Report are integral parts of GPL Laboratories' report package. If you did not receive all of these documents please contact GPL immediately.

Sample Receipt

Seven water samples were received on 12/07/01. The samples were delivered by Fed Ex. The samples were received intact. Sample receipt conditions and temperatures are documented on the Sample Receipt Checklist.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Analytical Report of Analysis.

Pesticides/PCBs

1. Seven water samples were extracted and analyzed for Pesticide compounds using method 8081A.
2. No MS/MSD analysis was performed due to insufficient volume. A laboratory control sample was extracted with this batch of samples.
3. Percent LCS recovery for Methoxychlor was out of QC limits.
4. Continuing calibration file L21932 failed QC limits for Endrin and delta-BHC. Continuing calibration files L21943 and L21952 failed QC limits for delta-BHC. The percent deviation for each of the above compounds was above 15% on both columns.
5. Percent Endrin breakdown was out of QC limits on both columns for continuing breakdown files L21931 and L21951.
6. Concentrations reported on Form 1 are the higher values of results generated by two columns. However, the analyst determines the most reliable results based on the evaluation of quality control parameters. Flagged concentrations (*) on Form 1 indicate that reported results are the lower values.
7. Due to software limitations, some forms were corrected manually.

Metals

1. Seven water samples were analyzed for arsenic by EPA SW846 methods.
2. A matrix spike, duplicate and serial dilution were performed on sample 007-MW01S-Q4-01 for all required ICP analytes. They were within the control limits.

CASE NARRATIVE FOR GPL #112013

3. Calibration standards are verified against independent check standards purchased from a commercial vendor of environmental standards.

4. All GPL QA/QC criteria were met.

Project Manager

Lab Director

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW01S-Q4-01
GPL ID: 112013-001-03-1/1
Matrix: Water
Date Collected: Dec-06-2001
Date Received: Dec-07-2001

Prep Method: SW3010A
Prep Date: Dec-15-2001
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Dec-16-2001
Time Analyzed 21:20

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	12.8	4.1	ug/L	B	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW03S-Q4-01
GPL ID: 112013-002-03-1/1
Matrix: Water
Date Collected: Dec-06-2001
Date Received: Dec-07-2001

Prep Method: SW3010A
Prep Date: Dec-15-2001
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Dec-16-2001
Time Analyzed 22:11

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW04S-Q4-01
GPL ID: 112013-003-03-1/1
Matrix: Water
Date Collected: Dec-06-2001
Date Received: Dec-07-2001

Prep Method: SW3010A
Prep Date: Dec-15-2001
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Dec-16-2001
Time Analyzed 22:19

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	69.4	4.1	ug/L		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW05S-Q4-01
GPL ID: 112013-004-03-1/1
Matrix: Water
Date Collected: Dec-06-2001
Date Received: Dec-07-2001

Prep Method: SW3010A
Prep Date: Dec-15-2001
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Dec-16-2001
Time Analyzed 22:26

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW08S-Q4-01
GPL ID: 112013-005-03-1/1
Matrix: Water
Date Collected: Dec-06-2001
Date Received: Dec-07-2001

Prep Method: SW3010A
Prep Date: Dec-15-2001
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Dec-16-2001
Time Analyzed 22:33

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-DUP-Q4-01
GPL ID: 112013-006-03-1/1
Matrix: Water
Date Collected: Dec-06-2001
Date Received: Dec-07-2001

Prep Method: SW3010A
Prep Date: Dec-15-2001
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Dec-16-2001
Time Analyzed 22:41

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-EQB-Q4-01
GPL ID: 112013-007-03-1/1
Matrix: Water
Date Collected: Dec-06-2001
Date Received: Dec-07-2001

Prep Method: SW3010A
Prep Date: Dec-15-2001
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Dec-16-2001
Time Analyzed 22:48

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW01S-Q4-01
GPL ID: 112013-001-01-1/2
Matrix: Water
Date Collected: 12/06/01
Date Received: 12/07/01

Prep Method: SW3520C
Prep Date: 12/11/01
Prep Time: 10:04
Prep Batch 52027

Analytical Method: SW8081A
Date Analyzed: 12/18/01
Time Analyzed 21:59
Analysis Batch 51356

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.053	ug/L	U	1
4,4-DDE	BQL	0.053	ug/L	U	1
4,4-DDT	BQL	0.053	ug/L	U	1
Aldrin	BQL	0.053	ug/L	U	1
Alpha-BHC	BQL	0.053	ug/L	U	1
Alpha-Chlordane	BQL	0.053	ug/L	U	1
Beta-BHC	0.110	0.053	ug/L		1
Chlordane	BQL	1.05	ug/L	U	1
Delta-BHC	BQL	0.053	ug/L	U	1
Dieldrin	BQL	0.053	ug/L	U	1
Endosulfan I	BQL	0.053	ug/L	U	1
Endosulfan II	BQL	0.053	ug/L	U	1
Endosulfan Sulfate	BQL	0.053	ug/L	U	1
Endrin	BQL	0.053	ug/L	U	1
Endrin Aldehyde	BQL	0.053	ug/L	U	1
Endrin Ketone	BQL	0.053	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.053	ug/L	U	1
Gamma-Chlordane	BQL	0.053	ug/L	U	1
Heptachlor	BQL	0.053	ug/L	U	1
Heptachlor Epoxide	BQL	0.053	ug/L	U	1
Methoxychlor	BQL	0.053	ug/L	U	1
Toxaphene	BQL	1.05	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW03S-Q4-01
GPL ID: 112013-002-01-1/2
Matrix: Water
Date Collected: 12/06/01
Date Received: 12/07/01

Prep Method: SW3520C
Prep Date: 12/11/01
Prep Time: 10:04
Prep Batch 52027

Analytical Method: SW8081A
Date Analyzed: 12/18/01
Time Analyzed 22:26
Analysis Batch 51356

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.053	ug/L	U	1
4,4-DDE	BQL	0.053	ug/L	U	1
4,4-DDT	BQL	0.053	ug/L	U	1
Aldrin	BQL	0.053	ug/L	U	1
Alpha-BHC	BQL	0.053	ug/L	U	1
Alpha-Chlordane	BQL	0.053	ug/L	U	1
Beta-BHC	BQL	0.053	ug/L	U	1
Chlordane	BQL	1.05	ug/L	U	1
Delta-BHC	BQL	0.053	ug/L	U	1
Dieldrin	BQL	0.053	ug/L	U	1
Endosulfan I	BQL	0.053	ug/L	U	1
Endosulfan II	BQL	0.053	ug/L	U	1
Endosulfan Sulfate	BQL	0.053	ug/L	U	1
Endrin	BQL	0.053	ug/L	U	1
Endrin Aldehyde	BQL	0.053	ug/L	U	1
Endrin Ketone	BQL	0.053	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.053	ug/L	U	1
Gamma-Chlordane	BQL	0.053	ug/L	U	1
Heptachlor	BQL	0.053	ug/L	U	1
Heptachlor Epoxide	BQL	0.053	ug/L	U	1
Methoxychlor	BQL	0.053	ug/L	U	1
Toxaphene	BQL	1.05	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW04S-Q4-01
GPL ID: 112013-003-01-1/2
Matrix: Water
Date Collected: 12/06/01
Date Received: 12/07/01

Prep Method: SW3520C
Prep Date: 12/11/01
Prep Time: 10:04
Prep Batch 52027

Analytical Method: SW8081A
Date Analyzed: 12/18/01
Time Analyzed 22:54
Analysis Batch 51356

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.056	ug/L	U	1
4,4-DDE	BQL	0.056	ug/L	U	1
4,4-DDT	BQL	0.056	ug/L	U	1
Aldrin	BQL	0.056	ug/L	U	1
Alpha-BHC	BQL	0.056	ug/L	U	1
Alpha-Chlordane	BQL	0.056	ug/L	U	1
Beta-BHC	0.700	0.056	ug/L		1
Chlordane	BQL	1.11	ug/L	U	1
Delta-BHC	BQL	0.056	ug/L	U	1
Dieldrin	BQL	0.056	ug/L	U	1
Endosulfan I	BQL	0.056	ug/L	U	1
Endosulfan II	BQL	0.056	ug/L	U	1
Endosulfan Sulfate	BQL	0.056	ug/L	U	1
Endrin	BQL	0.056	ug/L	U	1
Endrin Aldehyde	BQL	0.056	ug/L	U	1
Endrin Ketone	BQL	0.056	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.056	ug/L	U	1
Gamma-Chlordane	BQL	0.056	ug/L	U	1
Heptachlor	BQL	0.056	ug/L	U	1
Heptachlor Epoxide	BQL	0.056	ug/L	U	1
Methoxychlor	BQL	0.056	ug/L	U	1
Toxaphene	BQL	1.11	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW05S-Q4-01
GPL ID: 112013-004-01-1/2
Matrix: Water
Date Collected: 12/06/01
Date Received: 12/07/01

Prep Method: SW3520C
Prep Date: 12/11/01
Prep Time: 10:04
Prep Batch 52027

Analytical Method: SW8081A
Date Analyzed: 12/18/01
Time Analyzed 23:22
Analysis Batch 51356

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.059	ug/L	U	1
4,4-DDE	BQL	0.059	ug/L	U	1
4,4-DDT	BQL	0.059	ug/L	U	1
Aldrin	BQL	0.059	ug/L	U	1
Alpha-BHC	BQL	0.059	ug/L	U	1
Alpha-Chlordane	BQL	0.059	ug/L	U	1
Beta-BHC	BQL	0.059	ug/L	U	1
Chlordane	BQL	1.18	ug/L	U	1
Delta-BHC	BQL	0.059	ug/L	U	1
Dieldrin	BQL	0.059	ug/L	U	1
Endosulfan I	BQL	0.059	ug/L	U	1
Endosulfan II	BQL	0.059	ug/L	U	1
Endosulfan Sulfate	BQL	0.059	ug/L	U	1
Endrin	BQL	0.059	ug/L	U	1
Endrin Aldehyde	BQL	0.059	ug/L	U	1
Endrin Ketone	BQL	0.059	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.059	ug/L	U	1
Gamma-Chlordane	BQL	0.059	ug/L	U	1
Heptachlor	BQL	0.059	ug/L	U	1
Heptachlor Epoxide	BQL	0.059	ug/L	U	1
Methoxychlor	BQL	0.059	ug/L	U	1
Toxaphene	BQL	1.18	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW08S-Q4-01
GPL ID: 112013-005-01-1/2
Matrix: Water
Date Collected: 12/06/01
Date Received: 12/07/01

Prep Method: SW3520C
Prep Date: 12/11/01
Prep Time: 10:04
Prep Batch 52027

Analytical Method: SW8081A
Date Analyzed: 12/18/01
Time Analyzed 23:50
Analysis Batch 51356

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.056	ug/L	U	1
4,4-DDE	BQL	0.056	ug/L	U	1
4,4-DDT	BQL	0.056	ug/L	U	1
Aldrin	BQL	0.056	ug/L	U	1
Alpha-BHC	BQL	0.056	ug/L	U	1
Alpha-Chlordane	BQL	0.056	ug/L	U	1
Beta-BHC	BQL	0.056	ug/L	U	1
Chlordane	BQL	1.11	ug/L	U	1
Delta-BHC	BQL	0.056	ug/L	U	1
Dieldrin	BQL	0.056	ug/L	U	1
Endosulfan I	BQL	0.056	ug/L	U	1
Endosulfan II	BQL	0.056	ug/L	U	1
Endosulfan Sulfate	BQL	0.056	ug/L	U	1
Endrin	BQL	0.056	ug/L	U	1
Endrin Aldehyde	BQL	0.056	ug/L	U	1
Endrin Ketone	BQL	0.056	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.056	ug/L	U	1
Gamma-Chlordane	BQL	0.056	ug/L	U	1
Heptachlor	BQL	0.056	ug/L	U	1
Heptachlor Epoxide	BQL	0.056	ug/L	U	1
Methoxychlor	BQL	0.056	ug/L	U	1
Toxaphene	BQL	1.11	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-DUP-Q4-01
GPL ID: 112013-006-01-1/2
Matrix: Water
Date Collected: 12/06/01
Date Received: 12/07/01

Prep Method: SW3520C
Prep Date: 12/11/01
Prep Time: 10:04
Prep Batch 52027

Analytical Method: SW8081A
Date Analyzed: 12/19/01
Time Analyzed 00:18
Analysis Batch 51356

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.05	ug/L	U	1
4,4-DDE	BQL	0.05	ug/L	U	1
4,4-DDT	BQL	0.05	ug/L	U	1
Aldrin	BQL	0.05	ug/L	U	1
Alpha-BHC	BQL	0.05	ug/L	U	1
Alpha-Chlordane	BQL	0.05	ug/L	U	1
Beta-BHC	BQL	0.05	ug/L	U	1
Chlordane	BQL	1	ug/L	U	1
Delta-BHC	BQL	0.05	ug/L	U	1
Dieldrin	BQL	0.05	ug/L	U	1
Endosulfan I	BQL	0.05	ug/L	U	1
Endosulfan II	BQL	0.05	ug/L	U	1
Endosulfan Sulfate	BQL	0.05	ug/L	U	1
Endrin	BQL	0.05	ug/L	U	1
Endrin Aldehyde	BQL	0.05	ug/L	U	1
Endrin Ketone	BQL	0.05	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.05	ug/L	U	1
Gamma-Chlordane	BQL	0.05	ug/L	U	1
Heptachlor	BQL	0.05	ug/L	U	1
Heptachlor Epoxide	BQL	0.05	ug/L	U	1
Methoxychlor	BQL	0.05	ug/L	U	1
Toxaphene	BQL	1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-EQB-Q4-01
GPL ID: 112013-007-01-1/2
Matrix: Water
Date Collected: 12/06/01
Date Received: 12/07/01

Prep Method: SW3520C
Prep Date: 12/11/01
Prep Time: 10:04
Prep Batch 52027

Analytical Method: SW8081A
Date Analyzed: 12/19/01
Time Analyzed 00:45
Analysis Batch 51356

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.056	ug/L	U	1
4,4-DDE	BQL	0.056	ug/L	U	1
4,4-DDT	BQL	0.056	ug/L	U	1
Aldrin	BQL	0.056	ug/L	U	1
Alpha-BHC	BQL	0.056	ug/L	U	1
Alpha-Chlordane	BQL	0.056	ug/L	U	1
Beta-BHC	BQL	0.056	ug/L	U	1
Chlordane	BQL	1.11	ug/L	U	1
Delta-BHC	BQL	0.056	ug/L	U	1
Dieldrin	BQL	0.056	ug/L	U	1
Endosulfan I	BQL	0.056	ug/L	U	1
Endosulfan II	BQL	0.056	ug/L	U	1
Endosulfan Sulfate	BQL	0.056	ug/L	U	1
Endrin	BQL	0.056	ug/L	U	1
Endrin Aldehyde	BQL	0.056	ug/L	U	1
Endrin Ketone	BQL	0.056	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.056	ug/L	U	1
Gamma-Chlordane	BQL	0.056	ug/L	U	1
Heptachlor	BQL	0.056	ug/L	U	1
Heptachlor Epoxide	BQL	0.056	ug/L	U	1
Methoxychlor	BQL	0.056	ug/L	U	1
Toxaphene	BQL	1.11	ug/L	U	1

GPL LABORATORIES, LLP
ANALYTICAL RESULTS

Project Name : NS Mayport, SWMU 15

Date Printe December 20, 2001

GPL ID	Client ID
112013-001-03-1/1	007-MW01S-Q4-01
112013-002-03-1/1	007-MW03S-Q4-01
112013-003-03-1/1	007-MW04S-Q4-01
112013-004-03-1/1	007-MW05S-Q4-01
112013-005-03-1/1	007-MW08S-Q4-01
112013-006-03-1/1	007-DUP-Q4-01
112013-007-03-1/1	007-EQB-Q4-01
112013-001-01-1/2	007-MW01S-Q4-01
112013-002-01-1/2	007-MW03S-Q4-01
112013-003-01-1/2	007-MW04S-Q4-01
112013-004-01-1/2	007-MW05S-Q4-01
112013-005-01-1/2	007-MW08S-Q4-01
112013-006-01-1/2	007-DUP-Q4-01
112013-007-01-1/2	007-EQB-Q4-01

GPL LABORATORIES, LLLP

Qualifier Definitions

U = Indicates that the compound was analyzed for but not detected at or above the reporting limit

Organics:

B = Indicates that the analyte was found in the associated blank as well as in the sample

D = Indicates that the analyte was reported from a diluted analysis

E = Indicates that the concentration detected exceeded the calibration range of the instrument

J = Value is less than the reporting limits but greater than the MDL

P = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns

Metals:

B = Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL

E = Indicates that reported value is estimated because of the possible presence of interference (i.e., the serial dilution not within control limits)

H = Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit

N = Spiked sample recovery not within control limits

• = Duplicate analysis not within control limits

CH2M Hill Constructors, Inc.
115 Perimeter Center Place, Suite "00
Atlanta, GA 30346-12"8
Tel No ("")0) 604-9182 ; Fax No ("")0) 604-9282

CHAIN-OF-CUSTODY RECORD

COC NUMBER
149294-007

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	GPL Laura Petrik	Bill Canelos J.A. Jones Environmental 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	3418	Christelle Newsome / 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 J.A. Jones Environmental	Ph:(904)777-4812 Fax:(904) 777-4262	Ph: (301) 926-6802 Fax: (301) 840-1209		

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 6010B									SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	007-MW01S-Q4-01	MPT-15-MWO-1S	W	12/06/01	10:40	III/C	14	2	1									Grab	-001-03-1/1	
2	007-MW03S-Q4-01	MPT-15-MWO-3S	W	12/06/01	11:25	III/C	14	2	1									Grab	-002-03-1/1	
3	007-MW04S-Q4-01	MPT-15-MWO-4S	W	12/06/01	11:00	III/C	14	2	1									Grab	003-03-1/1	
4	007-MW05S-Q4-01	MPT-15-MWO-5S	W	12/06/01	10:20	III/C	14	2	1									Grab	004-03-1/1	
5	007-MW08S-Q4-01	MPT-15-MWO-8S	W	12/06/01	11:50	III/C	14	2	1									Grab	005-03-1/1	
6	007-DUP-Q4-01	Duplicate	W	12/06/01	NA	III/C	14	2	1									Grab	006-03-1/1	
7	007-EQB-Q4-01	Equipment Blank	W	12/06/01	11:35	III/C	14	2	1									Grab	007-03-1/1	
8	NA	Temperature Blank	W	NA	NA	NA	NA			2									Prepaed by lab	
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Roger Deisler / Sean Smith J.A. Jones Environmental Services	Federal Express Tracking # 791724752110, 791724752030.	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R. Dumaop	12/6/01	18:00	Federal Express	12/6/01	18:00
Printed Name and Signature:			Printed Name and Signature:		
Printed Name and Signature:			Printed Name and Signature:		
			Scott Garman	12/6/01	9:25 Am

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

Form CC1001, Rev 02/00

020

****
*** TX REPORT ***
****

TRANSMISSION OK

TX/RX NO	2980
CONNECTION TEL	916785798100p8002
SUBADDRESS	
CONNECTION ID	
ST. TIME	12/11 10:26
USAGE T	01'25
PGS.	4
RESULT	OK

GPL

GPL Laboratories, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
PHONE: (301) 926-6802
FAX: (301) 840-1209

FACSIMILE COVER SHEET

FYI:

GPL can provide a full range of explosives analysis:
PETN, Nitrocellulose, Nitroguanidine, Nitroglycerine, 8330 compounds.

DATE: 12-11-01

To: Stacy Kondrat

From: ***Laura Petrik***

Message: CTO 7 samples rec'd 12-7-01
GPL # 112013

Total number of sheets (including cover sheet): 4

GPL Laboratories, LLLP

Sample Preservation Check Documentation Form

Work Order: 112013

Parameter:	Metals	Phenol	TPH O&G	Classical Parameters	Cyanide	Sulfide	Radiology	Other
Preservative: pH Value	HN03 <2	H2SO4 <2	H2SO4 <2	H2SO4 <2	NaOH >12	NaOH >9	H2SO4 <2	Preservations
Client ID								
007MW015Q-01	<2							
007MW03SQ401	<2							
007MW04SQ401	<2							
007MW05SQ401	<2							
007MW09SQ401	<2							
007FVPQ01	<2							
007EQBQ401	<2							

12/10/01

Sample Preservation Check Performed By: [signature] Date: 12/10/01

GPL Laboratories, LLLP

Figure 1
SAMPLE RECEIPT CHECKLIST

W.O. No: 112013

Client Name: CH2M HILL CONST.

Date Received: 12/7/01

Time Received: 9:25 AM

Received By: [illegible]

Carrier Name: FED EX

Prepared (Logged In) By: [illegible] 12/10/01 (Initials Date)

Project: NS Mayport SWMU 15

Site:

VOA Holding Blank I.D. No: /

	YES	NO
Airbill/Manifest Present?	✓	
No. 7917 2475 2030 / 7917 2475 2110		
Shipping Container in Good Condition?	✓	
Custody Seals Present on Shipping Container?	✓	
Condition: Broken ____		
Intact-not dated or signed ____		
Intact-dated and signed ✓		
Usage of Tamper Evident Type	✓	
Chain-of-Custody Present?	✓	
Chain-of-Custody Agrees with Sample Labels?	✓	
Chain-of-Custody Signed?	✓	
Packing Present in Shipping Container?	✓	
Type of Packing: Bubble wrap		
Custody seals on Sample Bottles?		✓
Condition: Good ____ Broken ____		
Total Number of Sample Bottles 21		
Total Number of Samples 7		
Samples Intact?	✓	
Sufficient Sample Volume for Indicated Test?	✓	

	YES	NO
Trip Blanks: No. of Sets ____		✓
Field Blanks: No. of Sets ____		✓
Equip. Blank: No. of Sets 1	✓	
Field Duplicate: No. of Sets 1	✓	
MS/MSD: No of Sets ____		
VOA Vials Have Zero Headspace? NA		✓
Preservatives Added to Sample?	✓	
pH Check Required?		✓
Performed By? [illegible]	✓	
Ice Present in Shipping Container?	✓	

Container #	Temp.	Container #	Temp.
#1	2.0°C		
#2	2.0°C		

12/10/01

Project Manager Contacted?
Name: Carmen Patrick
Date Contacted: 12/10/01

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A/

COMMENTS: Temperature by Temp Blank

Checklist Completed By: [illegible]

Date: 12/10/01

SOP No: F.2V11

SAMPLE DATA PACKAGE

PESTICIDE DATA

A. QC Summary

B. Sample Data

C. Standards Data

D. Raw QC Data

GPL Laboratories, LLLP

A. QC Summary

1. Surrogate Percent Recovery Summary
2. Matrix Spike/ Matrix Spike Duplicate Summary
3. Laboratory Control Standard Summary (where applicable)
4. Method Blank Summary

GPL Laboratories, LLLP

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

	CLIENT SAMPLE ID	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	BKS52027	91	91	91	95	0
02	BLK52027	70	86	94	95	0
03	007-MW01S-Q4-01	87	67	68	72	0
04	007-MW03S-Q4-01	31	83	84	89	0
05	007-MW04S-Q4-01	82	47	18	16	0
06	007-MW05S-Q4-01	61	80	71	70	0
07	007-MW08S-Q4-01	108	88	60	60	0
08	007-DUP-Q4-01	95	101	79	78	0
09	007-EQB-Q4-01	79	109	68	64	0

			ADVISORY QC LIMITS
TCX	=	Tetrachloro-m-xylene	(6-154)
DCB	=	Decachlorobiphenyl	(16-155)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

WATER LABORATORY CONTROL SPIKE RECOVERY

Lab Name: GPL Laboratories Contract: CH2M HILL

Lab Code: GPLL Case No.: 112013 SDG No.: N/A

EPA Sample No.: BKS52027 GP Lab ID: BKS52027

COMPOUND	SPIKE ADDED (ug/L)	LCS CONC. (ug/L)	LCS % REC	QC LIMITS LOW	HIGH
alpha-BHC	0.50	0.57	114	68	124
gamma-BHC (Lindane)	0.50	0.55	110	72	118
Heptachlor	0.50	0.51	103	60	124
Aldrin	0.50	0.52	104	61	109
beta-BHC	0.50	0.53	106	67	122
delta-BHC	0.50	0.32	64	21	92
Heptachlor Epoxide	0.50	0.51	102	73	111
Endosulfan I	0.50	0.52	103	65	117
gamma-Chlordane	0.50	0.48	95	63	108
alpha-Chlordane	0.50	0.54	109	70	115
4,4'- DDE	0.50	0.52	103	62	119
Dieldrin	0.50	0.51	102	62	113
Endrin	0.50	0.50	100	68	115
Endosulfan II	0.50	0.54	108	57	123
4,4'- DDD	0.50	0.52	103	58	118
4,4'- DDT	0.50	0.58	115	77	115
Endrin Aldehyde	0.50	0.58	115	58	127
Endosulfan Sulfate	0.50	0.57	113	73	135
Methoxychlor	0.50	0.57	113 *	66	112
Endrin Ketone	0.50	0.59	118	74	124

* Value outside QC limits

Spike Recovery: 1 of 20 outside limits.

COMMENTS:

8081

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLK52027

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Lab Sample ID: BLKS52027 Lab File ID: L21938.D

Matrix: (soil/water) WATER Extraction: (SepF/Cont/Sonc) CONT

Sulfur Cleanup: (Y/N) N Date Extracted: 12/11/01

Date Analyzed (1) : 12/18/01 Date Analyzed (2) : 12/18/01

Time Analyzed (1) : 1912 Time Analyzed (2) : 1912

Instrument ID (1) : GC-L Instrument ID (2) : GC-L

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BKS52027	BKS52027	12/18/01	12/18/01
02	007-MW01S-Q4-01	112013-001-01-1/2	12/18/01	12/18/01
03	007-MW03S-Q4-01	112013-002-01-1/2	12/18/01	12/18/01
04	007-MW04S-Q4-01	112013-003-01-1/2	12/18/01	12/18/01
05	007-MW05S-Q4-01	112013-004-01-1/2	12/18/01	12/18/01
06	007-MW08S-Q4-01	112013-005-01-1/2	12/18/01	12/18/01
07	007-DUP-Q4-01	112013-006-01-1/2	12/19/01	12/19/01
08	007-EQB-Q4-01	112013-007-01-1/2	12/19/01	12/19/01

COMMENTS:

B. Sample Data

1. TCL Result
2. Chromatographs from Primary and Confirmatory Analyses
3. Integration Report for Primary and Confirmatory Analyses

GPL Laboratories, LLLP

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW01S-Q4-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 112013-001-01-1/2

Sample wt/vol: 950 (g/ml) ML Lab File ID: L21944.D

% Moisture: _____ decanted:(Y/N) N Date Received: 12/07/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/11/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/18/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.053	U
58-89-9	gamma-BHC (Lindane)	0.053	U
76-44-8	Heptachlor	0.053	U
309-00-2	Aldrin	0.053	U
319-85-7	beta-BHC	0.11	
319-86-8	delta-BHC	0.053	U
1024-57-3	Heptachlor Epoxide	0.053	U
959-98-8	Endosulfan I	0.053	U
5103-74-2	gamma-Chlordane	0.053	U
5103-71-9	alpha-Chlordane	0.053	U
72-55-9	4,4-DDE	0.053	U
60-57-1	Dieldrin	0.053	U
72-20-8	Endrin	0.053	U
33213-65-9	Endosulfan II	0.053	U
72-54-8	4,4-DDD	0.053	U
50-29-3	4,4-DDT	0.053	U
7421-93-4	Endrin Aldehyde	0.053	U
1031-07-8	Endosulfan Sulfate	0.053	U
72-43-5	Methoxychlor	0.053	U
53494-70-5	Endrin Ketone	0.053	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21944.D\ECD1A.CH Vial: 19
Signal #2 : H:\GCDATA\L\DEC1801\L21944.D\ECD2B.CH
Acq On : 18 Dec 2001 21:59 Operator: PY
Sample : 112013-001-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW01S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:34 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.76f	7.16f	384584	616066	17.299	13.452m
Spiked Amount 20.000 Range 30 - 150 Recovery =					86.50%	67.26%
22) S Decachlorobiphen	22.88	23.24	384424	716298	13.521m	14.376
Spiked Amount 20.000 Range 30 - 150 Recovery =					67.61%	71.88%
Target Compounds						
6) B beta-BHC	10.81	10.43	155370	392671	10.005m	10.539m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int
L21944.D DEC1201P.M Wed Dec 19 10:53:46 2001 W49_HPGC Page 1

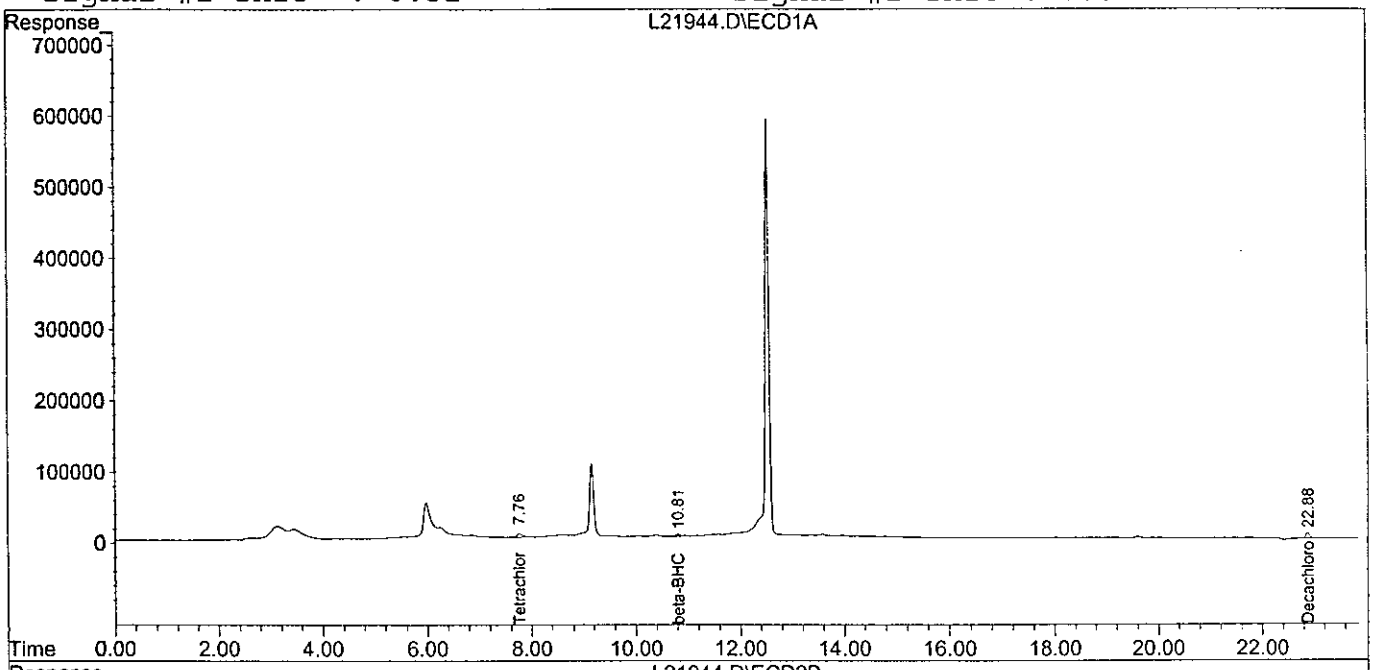
010068

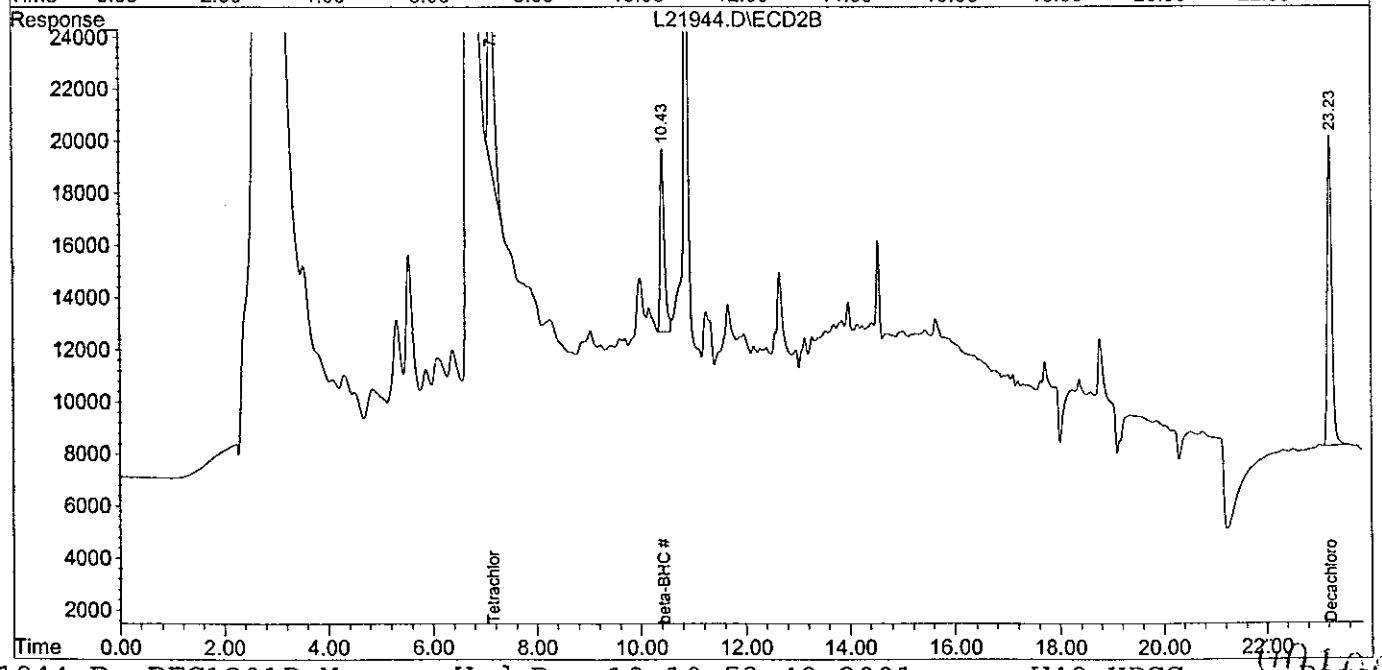
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1801\L21944.D\ECD1A.CH Vial: 19
Signal #2 : H:\GCDATA\L\DEC1801\L21944.D\ECD2B.CH
Acq On : 18 Dec 2001 21:59 Operator: PY
Sample : 112013-001-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW01S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:34 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW03S-Q4-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 112013-002-01-1/2

Sample wt/vol: 950 (g/ml) ML Lab File ID: L21945.D

% Moisture: _____ decanted:(Y/N) N Date Received: 12/07/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/11/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/18/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.053	U
58-89-9	gamma-BHC (Lindane)	0.053	U
76-44-8	Heptachlor	0.053	U
309-00-2	Aldrin	0.053	U
319-85-7	beta-BHC	0.053	U
319-86-8	delta-BHC	0.053	U
1024-57-3	Heptachlor Epoxide	0.053	U
959-98-8	Endosulfan I	0.053	U
5103-74-2	gamma-Chlordane	0.053	U
5103-71-9	alpha-Chlordane	0.053	U
72-55-9	4,4-DDE	0.053	U
60-57-1	Dieldrin	0.053	U
72-20-8	Endrin	0.053	U
33213-65-9	Endosulfan II	0.053	U
72-54-8	4,4-DDD	0.053	U
50-29-3	4,4-DDT	0.053	U
7421-93-4	Endrin Aldehyde	0.053	U
1031-07-8	Endosulfan Sulfate	0.053	U
72-43-5	Methoxychlor	0.053	U
53494-70-5	Endrin Ketone	0.053	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21945.D\ECD1A.CH Vial: 20
Signal #2 : H:\GCDATA\L\DEC1801\L21945.D\ECD2B.CH
Acq On : 18 Dec 2001 22:26 Operator: PY
Sample : 112013-002-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW03S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:36 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.75f	7.16f	358899	756782	16.144m	16.525
Spiked Amount 20.000 Range 30 - 150 Recovery =					80.72%	82.63%
22) S Decachlorobiphen	22.88	23.24	477334	886878	16.789m	17.799m
Spiked Amount 20.000 Range 30 - 150 Recovery =					83.95%	89.00%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

001011

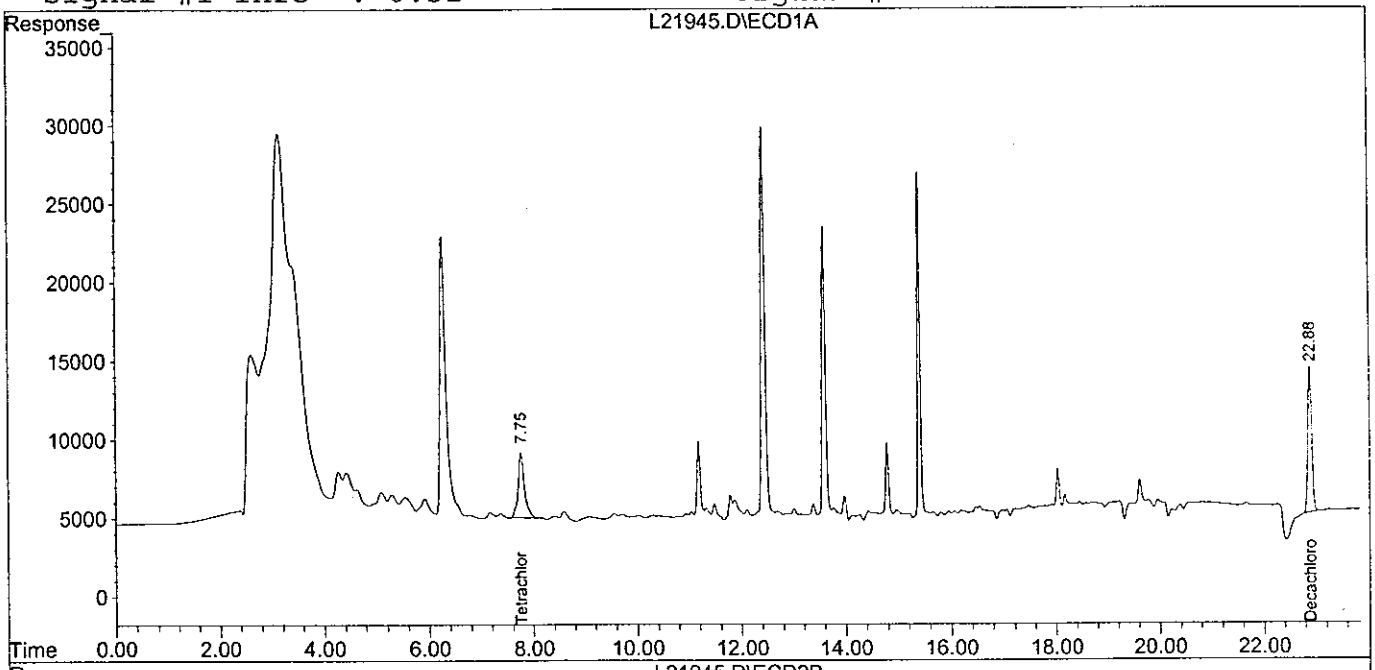
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

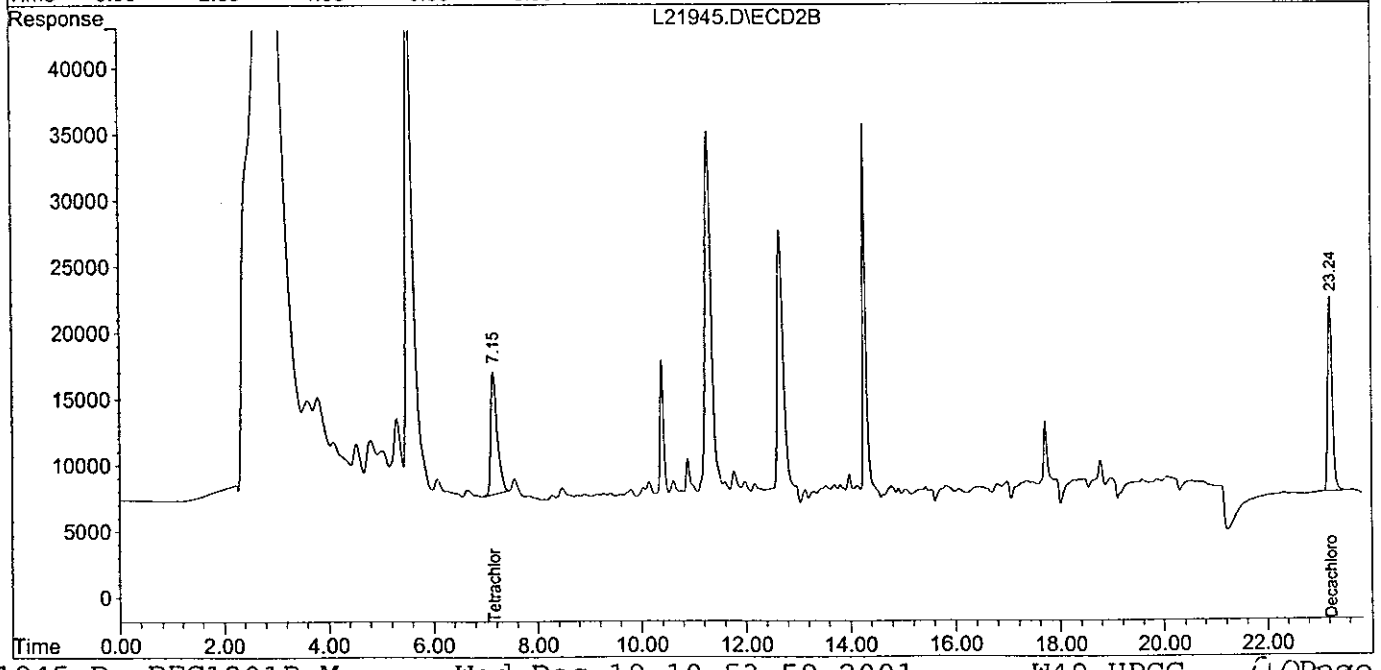
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1801\L21945.D\ECD1A.CH Vial: 20
Signal #2 : H:\GCDATA\L\DEC1801\L21945.D\ECD2B.CH
Acq On : 18 Dec 2001 22:26 Operator: PY
Sample : 112013-002-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW03S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:36 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW04S-Q4-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 112013-003-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: L21946.D

% Moisture: _____ decanted:(Y/N) N Date Received: 12/07/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/11/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/18/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.70	
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21946.D\ECD1A.CH Vial: 21
Signal #2 : H:\GCDATA\L\DEC1801\L21946.D\ECD2B.CH
Acq On : 18 Dec 2001 22:54 Operator: PY
Sample : 112013-003-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW04S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:39 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

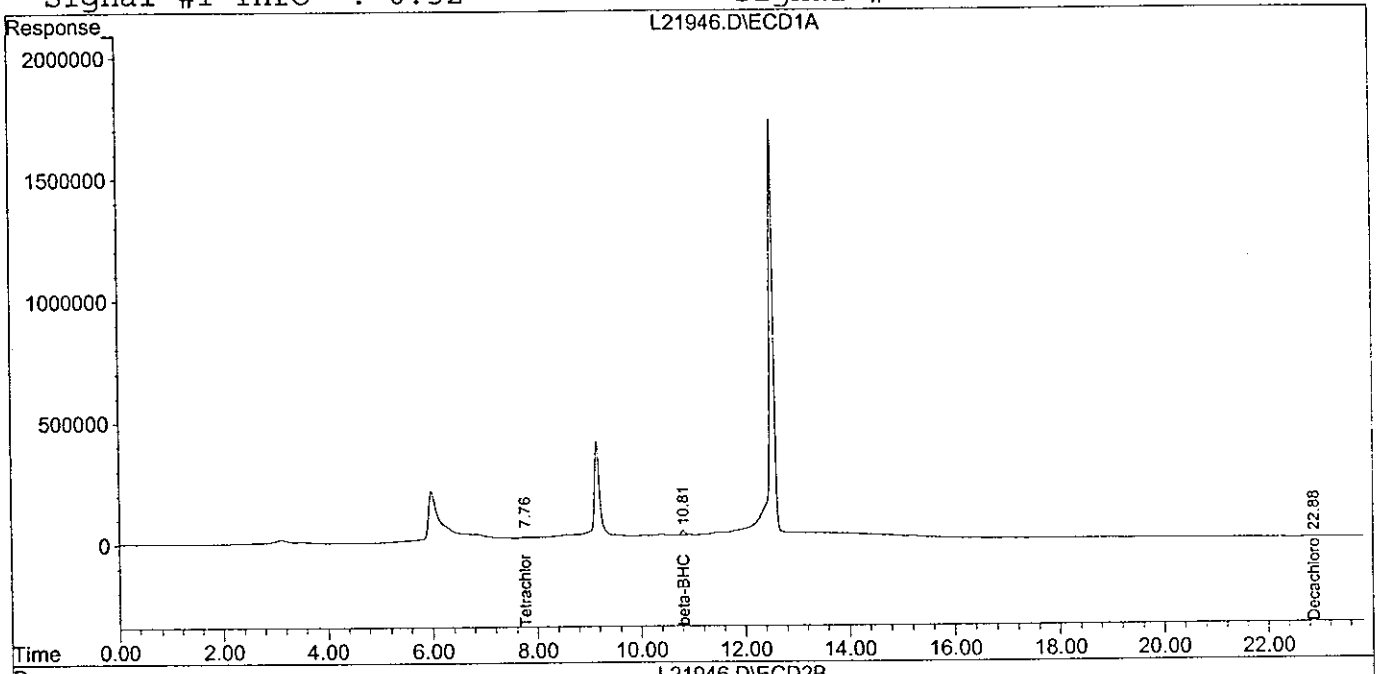
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.76	7.16f	364482	431897	16.395m	9.431m#
Spiked Amount 20.000 Range 30 - 150 Recovery =					81.97%	47.15%
22) S Decachlorobiphen	22.88	23.23	101655	161039	3.575m	3.232m
Spiked Amount 20.000 Range 30 - 150 Recovery =					17.88%#	16.16%#
Target Compounds						
6) B beta-BHC	10.81	10.44	899462	2335869	57.919m	62.696m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

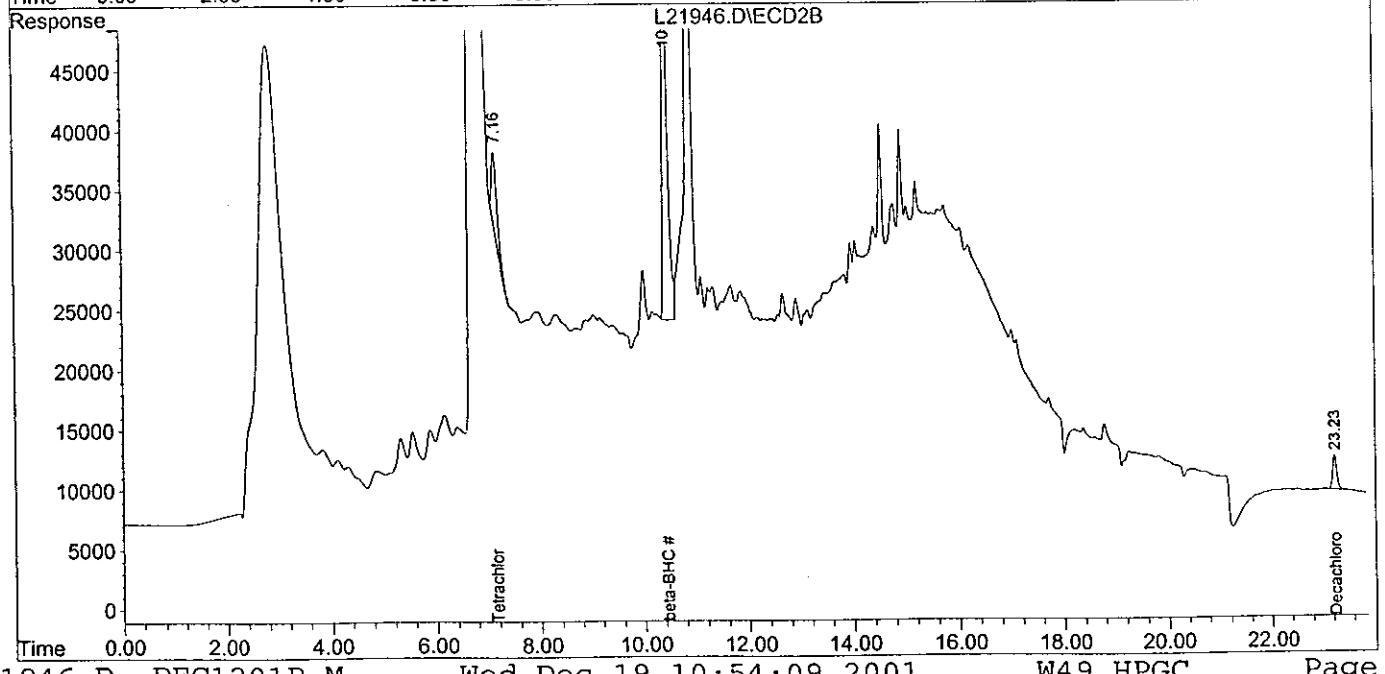
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1801\L21946.D\ECD1A.CH Vial: 21
Signal #2 : H:\GCDATA\L\DEC1801\L21946.D\ECD2B.CH
Acq On : 18 Dec 2001 22:54 Operator: PY
Sample : 112013-003-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW04S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:39 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW05S-Q4-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 112013-004-01-1/2

Sample wt/vol: 850 (g/ml) ML Lab File ID: L21947.D

% Moisture: _____ decanted:(Y/N) N Date Received: 12/07/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/11/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: **12/18/01**

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.059	U
58-89-9	gamma-BHC (Lindane)	0.059	U
76-44-8	Heptachlor	0.059	U
309-00-2	Aldrin	0.059	U
319-85-7	beta-BHC	0.059	U
319-86-8	delta-BHC	0.059	U
1024-57-3	Heptachlor Epoxide	0.059	U
959-98-8	Endosulfan I	0.059	U
5103-74-2	gamma-Chlordane	0.059	U
5103-71-9	alpha-Chlordane	0.059	U
72-55-9	4,4-DDE	0.059	U
60-57-1	Dieldrin	0.059	U
72-20-8	Endrin	0.059	U
33213-65-9	Endosulfan II	0.059	U
72-54-8	4,4-DDD	0.059	U
50-29-3	4,4-DDT	0.059	U
7421-93-4	Endrin Aldehyde	0.059	U
1031-07-8	Endosulfan Sulfate	0.059	U
72-43-5	Methoxychlor	0.059	U
53494-70-5	Endrin Ketone	0.059	U
12789-03-6	Chlordane	1.2	U
8001-35-2	Toxaphene	1.2	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21947.D\ECD1A.CH Vial: 22
Signal #2 : H:\GCDATA\L\DEC1801\L21947.D\ECD2B.CH
Acq On : 18 Dec 2001 23:22 Operator: PY
Sample : 112013-004-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW05S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:41 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

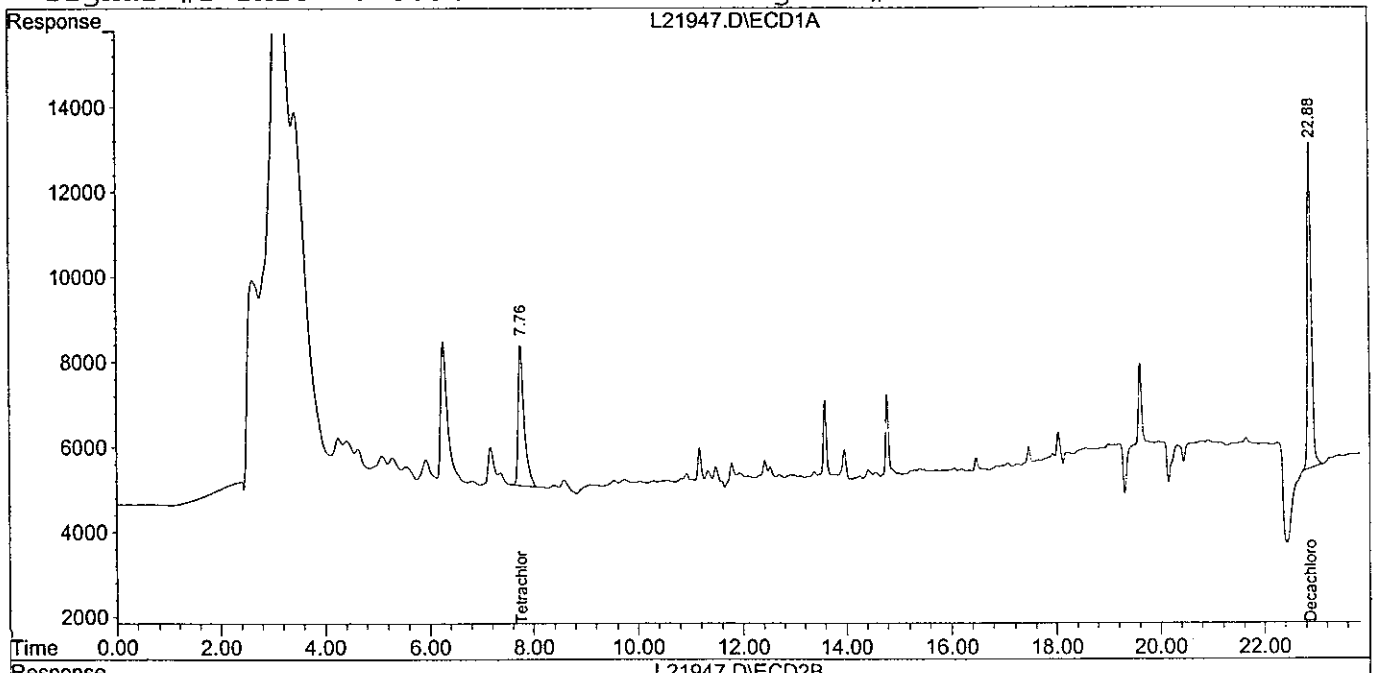
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.76	7.16	272690	735956	12.266	16.070 #
Spiked Amount 20.000 Range 30 - 150 Recovery =					61.33%	80.35%
22) S Decachlorobiphen	22.88	23.24	404349	698243	14.222m	14.013
Spiked Amount 20.000 Range 30 - 150 Recovery =					71.11%	70.07%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

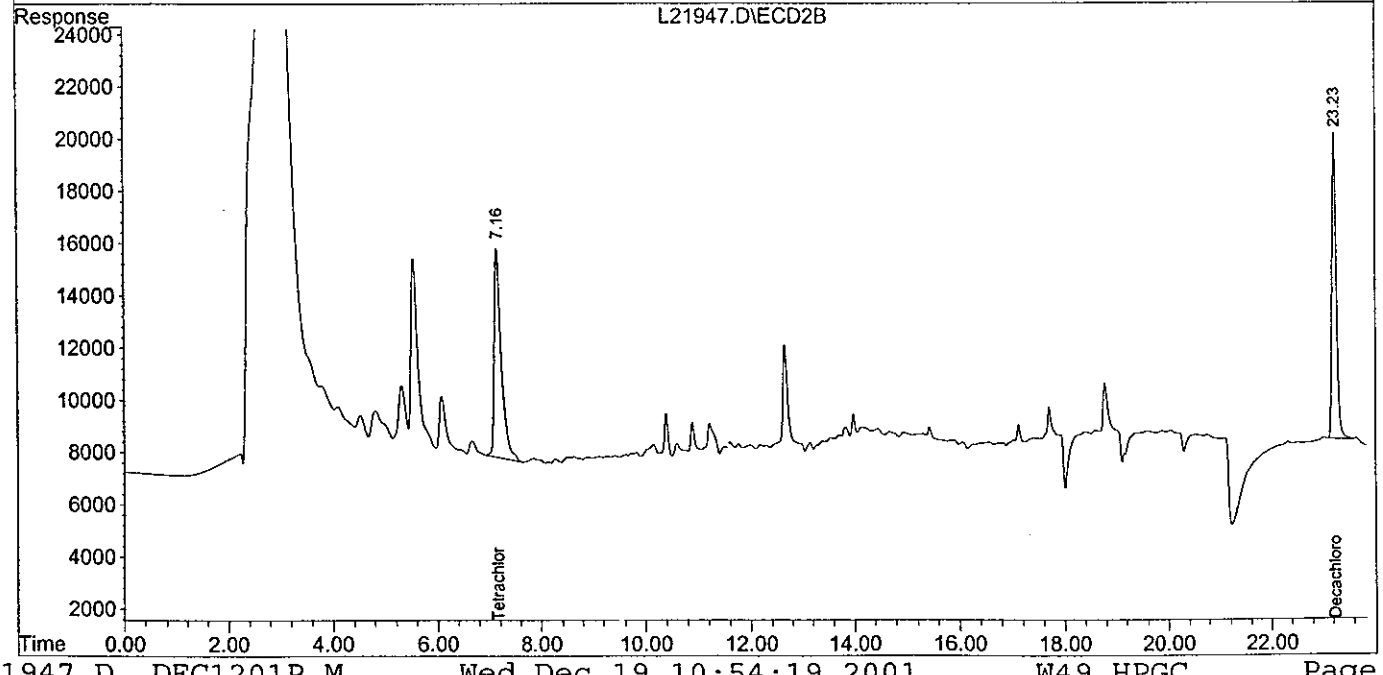
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1801\L21947.D\ECD1A.CH Vial: 22
Signal #2 : H:\GCDATA\L\DEC1801\L21947.D\ECD2B.CH
Acq On : 18 Dec 2001 23:22 Operator: PY
Sample : 112013-004-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW05S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:41 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW08S-Q4-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 112013-005-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: L21948.D

% Moisture: _____ decanted:(Y/N) N Date Received: 12/07/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/11/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/18/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21948.D\ECD1A.CH Vial: 23
Signal #2 : H:\GCDATA\L\DEC1801\L21948.D\ECD2B.CH
Acq On : 18 Dec 2001 23:50 Operator: PY
Sample : 112013-005-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW08S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:42 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.78	7.18	477925	808508	21.498	17.654
Spiked Amount 20.000 Range 30 - 150 Recovery =					107.49%	88.27%
22) S Decachlorobiphen	22.88	23.23	338759	602319	11.915m	12.088
Spiked Amount 20.000 Range 30 - 150 Recovery =					59.58%	60.44%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

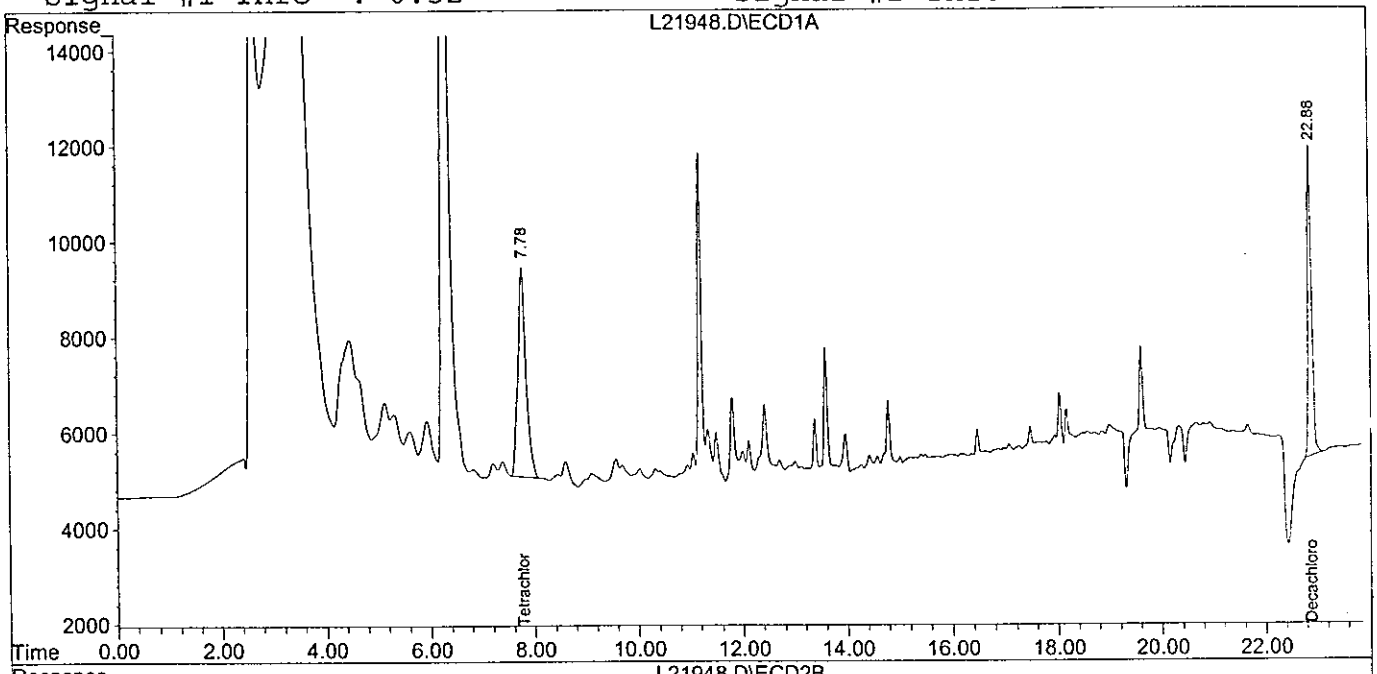
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

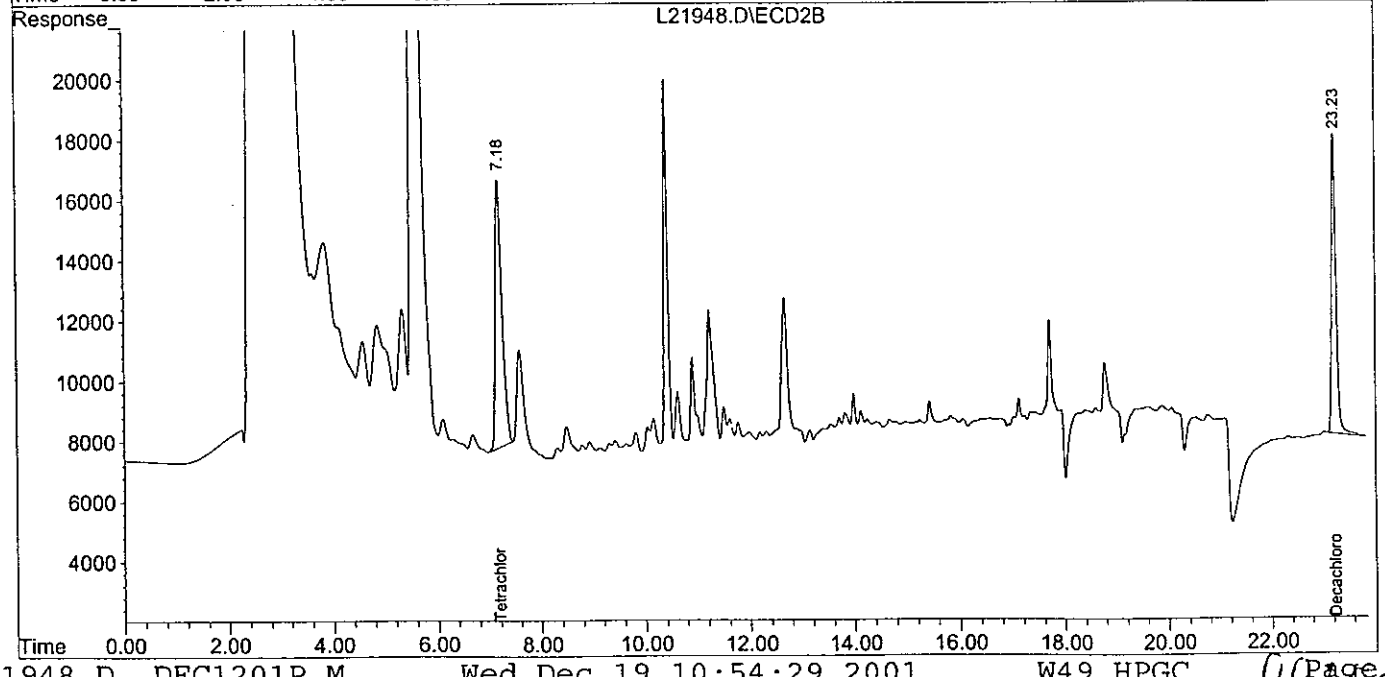
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1801\L21948.D\ECD1A.CH Vial: 23
Signal #2 : H:\GCDATA\L\DEC1801\L21948.D\ECD2B.CH
Acq On : 18 Dec 2001 23:50 Operator: PY
Sample : 112013-005-01-1/2 Inst : GC-L
Misc : 8081A-W-007-MW08S-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:42 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-DUP-Q4-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 112013-006-01-1/2

Sample wt/vol: 1000 (g/ml) ML Lab File ID: L21949.D

% Moisture: _____ decanted:(Y/N) N Date Received: 12/07/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/11/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/19/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
5103-71-9	alpha-Chlordane	0.050	U
72-55-9	4,4-DDE	0.050	U
60-57-1	Dieldrin	0.050	U
72-20-8	Endrin	0.050	U
33213-65-9	Endosulfan II	0.050	U
72-54-8	4,4-DDD	0.050	U
50-29-3	4,4-DDT	0.050	U
7421-93-4	Endrin Aldehyde	0.050	U
1031-07-8	Endosulfan Sulfate	0.050	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin Ketone	0.050	U
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21949.D\ECD1A.CH Vial: 24
Signal #2 : H:\GCDATA\L\DEC1801\L21949.D\ECD2B.CH
Acq On : 19 Dec 2001 00:18 Operator: PY
Sample : 112013-006-01-1/2 Inst : GC-L
Misc : 8081A-W-007-DUP-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:43 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.77	7.17	421708	926008	18.969	20.220
Spiked Amount 20.000 Range 30 - 150 Recovery =					94.85%	101.10%
22) S Decachlorobiphen	22.88	23.24	447005	778519	15.722m	15.624
Spiked Amount 20.000 Range 30 - 150 Recovery =					78.61%	78.12%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

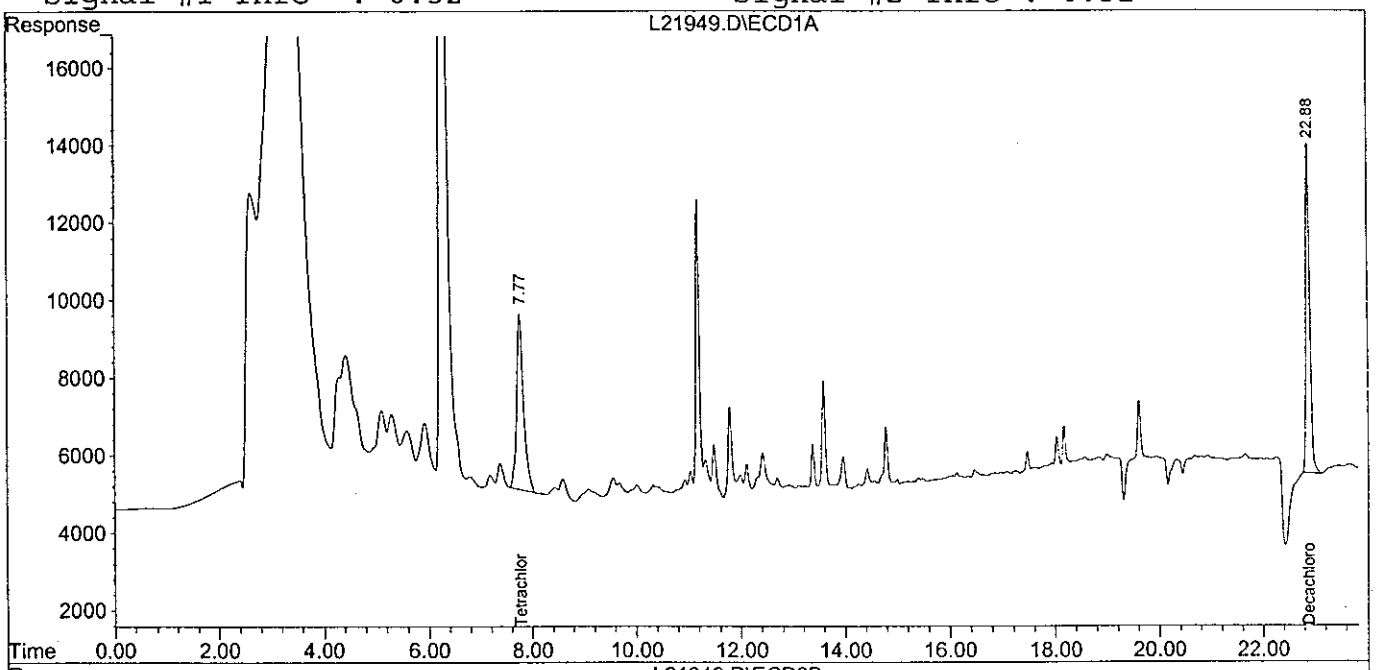
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

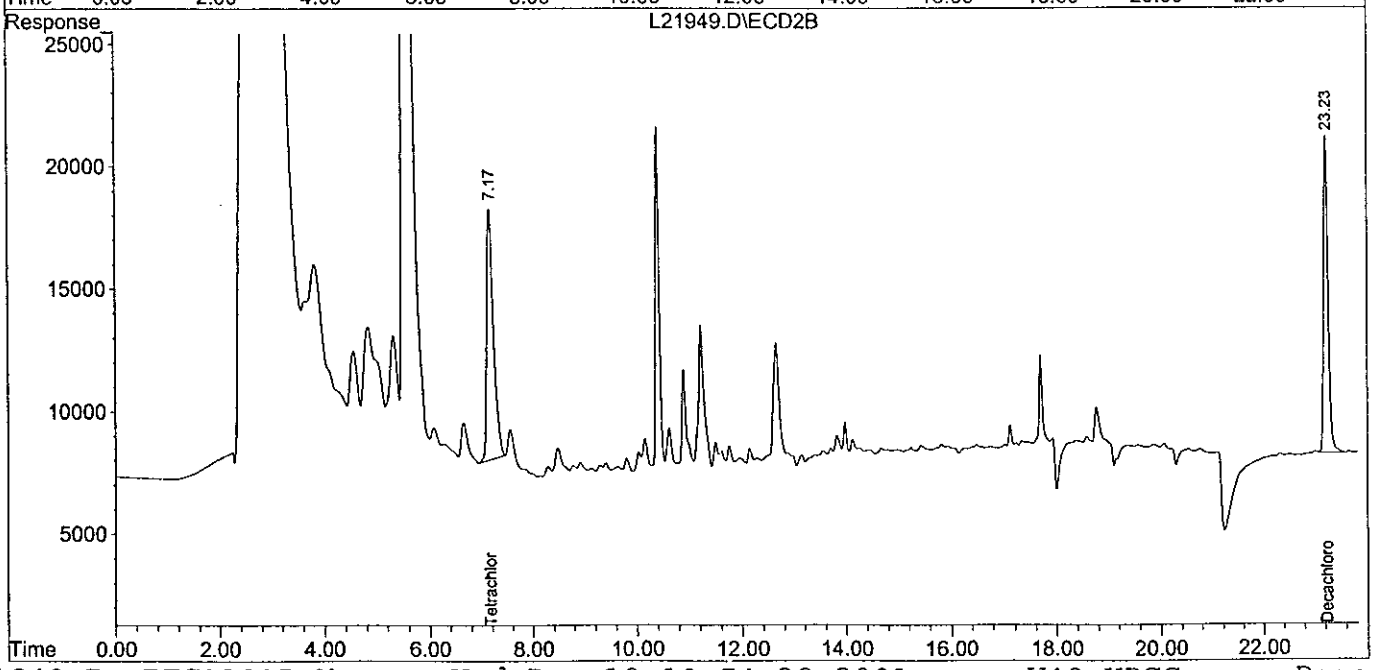
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1801\L21949.D\ECD1A.CH Vial: 24
Signal #2 : H:\GCDATA\L\DEC1801\L21949.D\ECD2B.CH
Acq On : 19 Dec 2001 00:18 Operator: PY
Sample : 112013-006-01-1/2 Inst : GC-L
Misc : 8081A-W-007-DUP-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:43 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-EQB-Q4-01

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 112013-007-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: L21950.D

% Moisture: _____ decanted:(Y/N) N Date Received: 12/07/01

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/11/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/19/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21950.D\ECD1A.CH Vial: 25
Signal #2 : H:\GCDATA\L\DEC1801\L21950.D\ECD2B.CH
Acq On : 19 Dec 2001 00:45 Operator: PY
Sample : 112013-007-01-1/2 Inst : GC-L
Misc : 8081A-W-007-EQB-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:45 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.77	7.17	349639	996908	15.727	21.768 #
Spiked Amount 20.000 Range 30 - 150 Recovery =					78.64%	108.84%
22) S Decachlorobiphen	22.88	23.24	385195	636948	13.548m	12.783
Spiked Amount 20.000 Range 30 - 150 Recovery =					67.74%	63.92%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

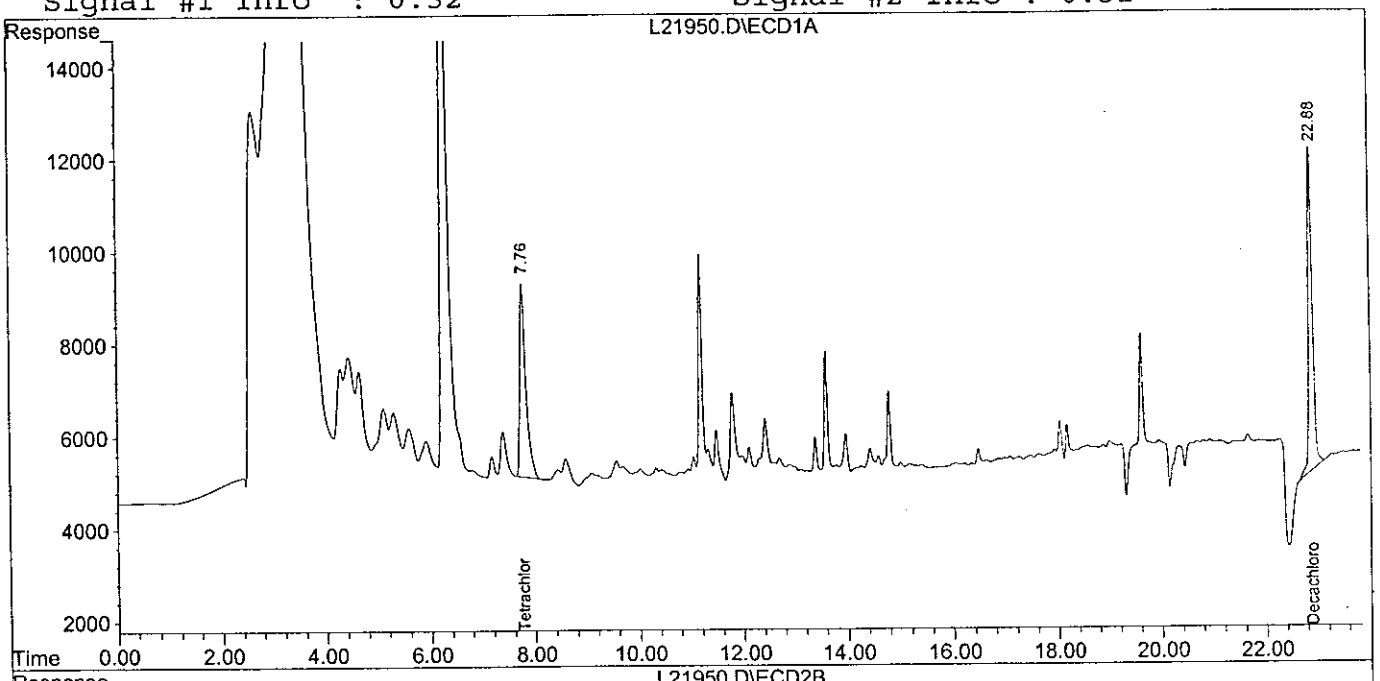
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

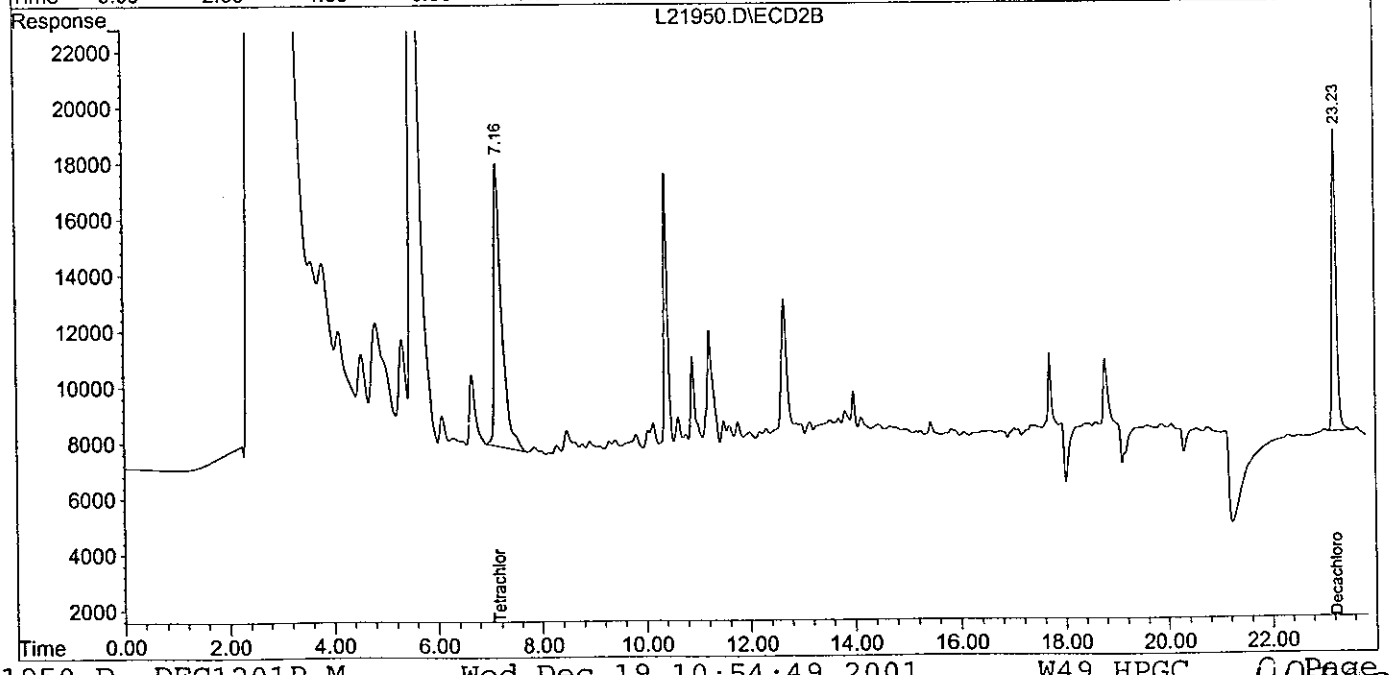
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1801\L21950.D\ECD1A.CH Vial: 25
Signal #2 : H:\GCDATA\L\DEC1801\L21950.D\ECD2B.CH
Acq On : 19 Dec 2001 00:45 Operator: PY
Sample : 112013-007-01-1/2 Inst : GC-L
Misc : 8081A-W-007-EQB-Q4-01 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 9:45 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





C. Standard Data

1. Initial Calibration Data
2. Continuing Calibration Data

GPL Laboratories, LLLP

Response Factor Report GC-L

Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 09:53:58 2001

Calibration Files
P005 =L21773.D P025 =L21772.D P050 =L21768.D
P075 =L21770.D P100 =L21769.D

		Compound	P005	P025	P050	P075	P100	Avg		%RSD
1)	S	Tetrachloro-m-xylene	2.384	2.242	2.327	1.999	2.164	2.223	E4	6.79
2)	A	alpha-BHC	1.811	2.184	2.881	2.827	2.993	2.539	E4	20.30
3)	MA	gamma-BHC (Lindane)	1.919	2.275	2.976	2.854	2.937	2.592	E4	18.18
4)	MA	Heptachlor	3.113	3.285	3.654	3.374	3.391	3.363	E4	5.83
5)	MB	Aldrin	2.372	2.683	3.163	2.989	3.046	2.851	E4	11.26
6)	B	beta-BHC	1.438	1.515	1.689	1.557	1.565	1.553	E4	5.87
7)	B	delta-BHC	1.053	1.230	1.622	1.605	1.705	1.443	E4	19.74
8)	B	Heptachlor Epoxide	2.890	3.021	3.326	3.052	3.048	3.067	E4	5.19
9)	A	Endosulfan I	2.585	2.762	3.020	2.783	2.759	2.782	E4	5.58
10)	A	gamma-Chlordane	2.986	3.001	3.278	3.013	2.988	3.053	E4	4.13
11)	A	alpha-Chlordane	3.083	3.322	3.463	3.240	3.292	3.280	E4	4.20
12)	B	4,4-DDE	2.000	2.366	2.768	2.644	2.672	2.490	E4	12.52
13)	MA	Dieldrin	2.314	2.607	3.008	2.832	2.846	2.722	E4	9.88
14)	MA	Endrin	1.303	1.341	1.568	1.486	1.665	1.473	E4	10.32
15)	B	Endosulfan II	2.350	2.514	2.703	2.507	2.476	2.510	E4	5.04
16)	A	4,4-DDD	1.646	1.989	2.222	2.143	2.249	2.050	E4	12.08
17)	MA	4,4-DDT	1.417	1.721	1.998	1.941	1.997	1.815	E4	13.77
18)	B	Endrin Aldehyde	1.913	1.876	1.948	1.794	1.767	1.860	E4	4.15
19)	B	Endosulfan Sulfate	1.582	1.641	1.777	1.653	1.620	1.654	E4	4.43
20)	A	Methoxychlor	1.051	1.168	1.244	1.167	1.141	1.154	E4	6.01
21)	B	Endrin Ketone	1.962	2.238	2.496	2.347	2.303	2.269	E4	8.66
22)	S	Decachlorobiphenyl	3.029	2.971	2.917	2.722	2.577	2.843	E4	6.63
23)	L8	Toxaphene			1.738			1.738	E2	0.00
24)	L8	Toxaphene {2}			3.837			3.837	E2	0.00
25)	L8	Toxaphene {3}			4.812			4.812	E2	0.00
26)	L8	Toxaphene {4}			6.721			6.721	E2	0.00
27)	L8	Toxaphene {5}			5.000			5.000	E2	0.00
28)	L9	Chlordane	1.708	1.593	1.355	1.327	1.282	1.453	E2	12.84
29)	L9	Chlordane {2}	1.320	1.346	1.380	1.428	1.429	1.381	E3	3.53
30)	L9	Chlordane {3}	3.221	3.408	3.727	3.313	3.312	3.396	E3	5.78
31)	L9	Chlordane {4}	5.276	5.563	6.209	5.210	5.110	5.474	E3	8.12
32)	L9	Chlordane {5}	7.072	7.024	7.271	7.429	7.655	7.290	E2	3.57

Signal #2 Calibration Files
P005 =L21773.D P025 =L21772.D P050 =L21768.D
P075 =L21770.D P100 =L21769.D

		Compound	P005	P025	P050	P075	P100	Avg		%RSD
1)	S	Tetrachloro-m-xylene	4.358	4.545	4.905	4.506	4.585	4.580	E4	4.39
2)	A	alpha-BHC	6.060	7.381	8.821	8.248	8.318	7.766	E4	13.97

(#) = Out of Range

Response Factor Report GC-L

Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 09:53:58 2001

Calibration Files
P005 =L21773.D P025 =L21772.D P050 =L21768.D
P075 =L21770.D P100 =L21769.D

		Compound	P005	P025	P050	P075	P100	Avg		%RSD
3)	MA	gamma-BHC (Lindane)	6.116	7.311	8.255	7.624	7.628	7.387	E4	10.68
4)	MA	Heptachlor	6.775	7.163	7.851	7.222	7.215	7.245	E4	5.33
5)	MB	Aldrin	6.246	7.221	8.112	7.569	7.627	7.355	E4	9.47
6)	B	beta-BHC	3.723	3.742	3.925	3.594	3.644	3.726	E4	3.40
7)	B	delta-BHC	4.012	4.167	4.958	4.642	4.664	4.488	E4	8.67
8)	B	Heptachlor Epoxide	6.345	7.035	7.622	7.088	7.039	7.026	E4	6.46
9)	A	Endosulfan I	5.786	6.352	6.868	6.303	6.496	6.361	E4	6.14
10)	A	gamma-Chlordane	6.385	6.905	7.555	7.036	6.900	6.956	E4	6.00
11)	A	alpha-Chlordane	5.902	6.055	6.296	5.729	5.575	5.911	E4	4.75
12)	B	4,4-DDE	5.622	6.573	7.199	6.806	6.760	6.592	E4	8.92
13)	MA	Dieldrin	5.743	6.611	7.413	6.878	6.847	6.698	E4	9.10
14)	MA	Endrin	3.462	4.064	4.596	4.434	4.501	4.211	E4	11.04
15)	B	Endosulfan II	4.972	5.572	6.065	5.634	5.580	5.565	E4	7.00
16)	A	4,4-DDD	3.776	4.327	4.695	4.403	4.322	4.305	E4	7.73
17)	MA	4,4-DDT	3.178	3.845	4.311	4.127	4.181	3.928	E4	11.52
18)	B	Endrin Aldehyde	4.202	4.015	4.294	3.927	3.888	4.065	E4	4.33
19)	B	Endosulfan Sulfate	3.097	3.380	3.764	3.515	3.511	3.453	E4	7.03
20)	A	Methoxychlor	1.864	2.091	2.171	2.060	2.037	2.045	E4	5.51
21)	B	Endrin Ketone	4.408	4.940	5.383	4.998	4.926	4.931	E4	7.04
22)	S	Decachlorobiphenyl	5.202	5.104	5.124	4.908	4.576	4.983	E4	5.05
23)	L8	Toxaphene			8.353			8.353	E2	0.00
24)	L8	Toxaphene {2}			1.711			1.711	E3	0.00
25)	L8	Toxaphene {3}			8.682			8.682	E2	0.00
26)	L8	Toxaphene {4}			6.463			6.463	E2	0.00
27)	L8	Toxaphene {5}			8.097			8.097	E2	0.00
28)	L9	Chlordane	2.914	3.003	3.075	3.118	3.071	3.036	E3	2.63
29)	L9	Chlordane {2}	1.295	1.384	1.627	1.269	1.375	1.390	E3	10.20
30)	L9	Chlordane {3}	7.003	7.401	8.085	7.145	7.021	7.331	E3	6.14
31)	L9	Chlordane {4}	6.245	6.449	7.036	6.327	6.188	6.449	E3	5.31
32)	L9	Chlordane {5}	1.584	1.635	1.692	1.680	1.673	1.653	E3	2.66

(#) = Out of Range

Signal #1 : H:\GCDATA\L\DEC1201\L21768.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\L\DEC1201\L21768.D\ECD2B.CH
Acq On : 13 Dec 2001 2:02 Operator: AK
Sample : TOX-3 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:53 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

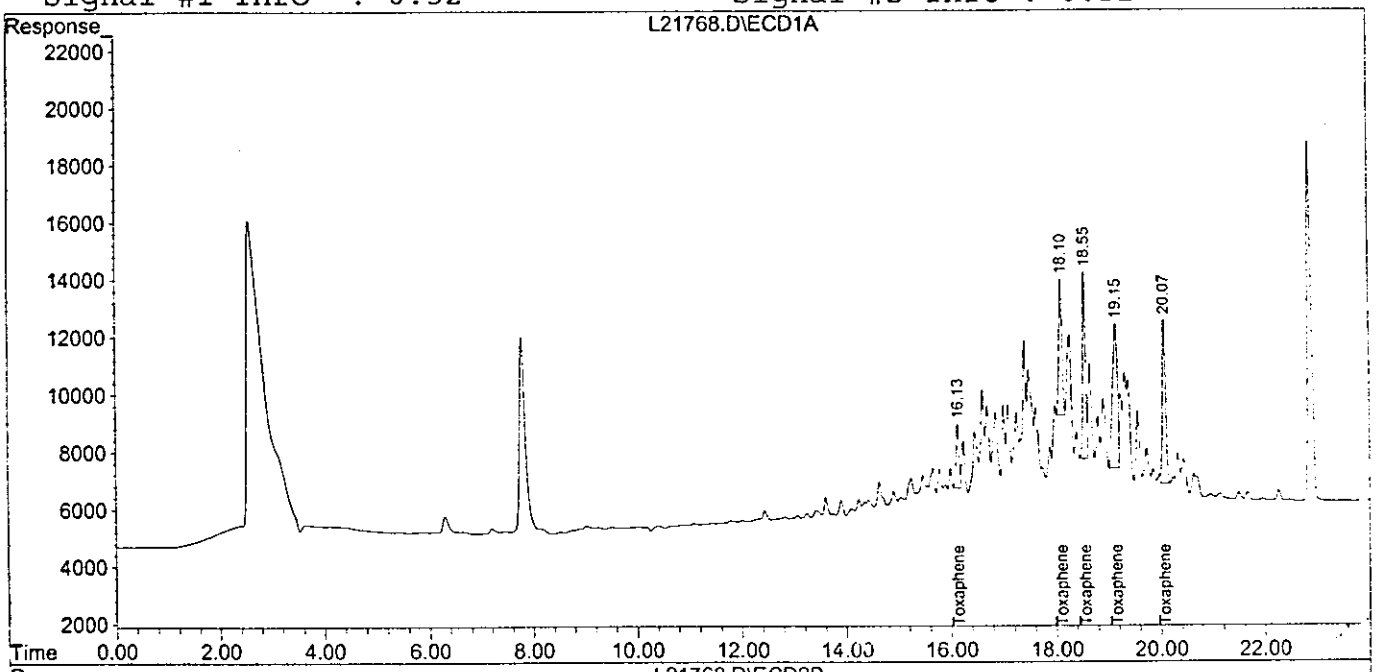
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
23) L8 Toxaphene	16.13	16.73	86892	417660	503.897m	500.984m
24) L8 Toxaphene {2}	18.10	17.20	191864	855618	499.209m	503.154m
25) L8 Toxaphene {3}	18.55	17.80	240622	434094	503.069m	497.992m
26) L8 Toxaphene {4}	19.15	18.29	336052	323140	503.539m	502.045m
27) L8 Toxaphene {5}	20.07	19.98	250000	404828	499.904m	500.797m
Sum Toxaphene			1105430	2435240	2509.618	2504.972
Average Toxaphene					501.924	500.994
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

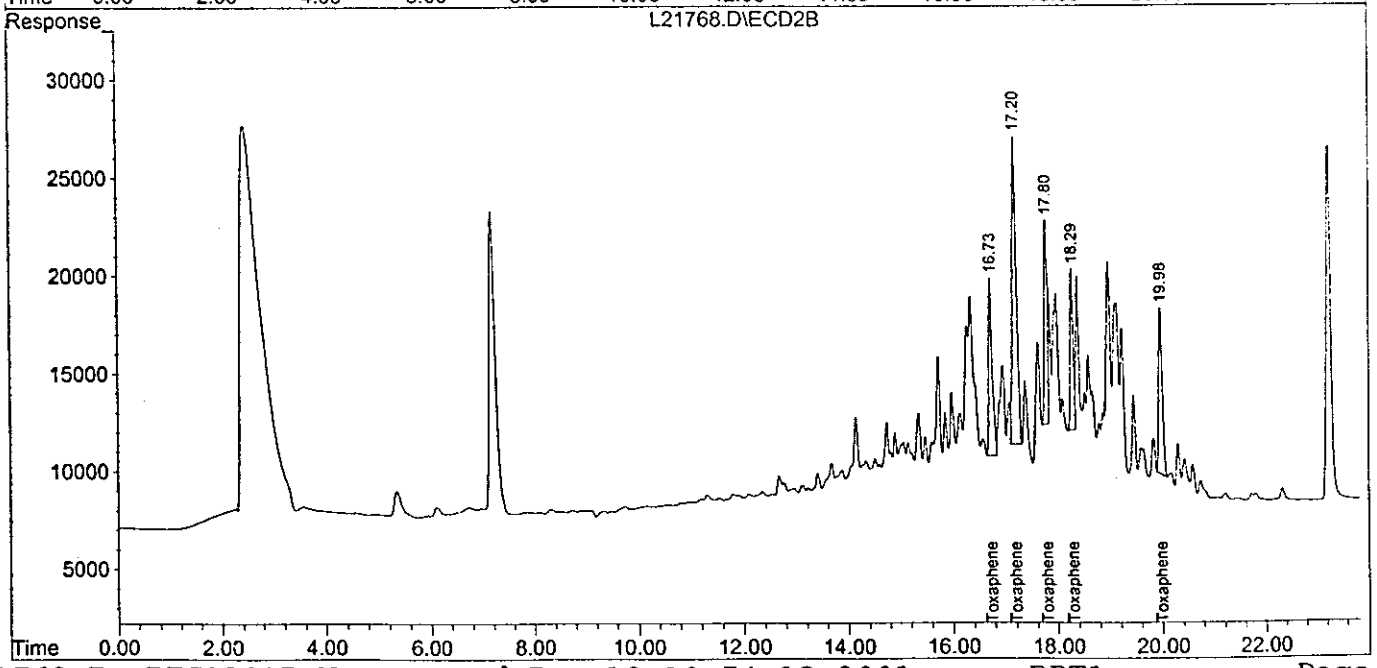
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21768.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\L\DEC1201\L21768.D\ECD2B.CH
Acq On : 13 Dec 2001 2:02 Operator: AK
Sample : TOX-3 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:53 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : H:\GCDATA\L\DEC1201\L21769.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\L\DEC1201\L21769.D\ECD2B.CH
Acq On : 13 Dec 2001 2:30 Operator: AK
Sample : CHLORDANE-5 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:34 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

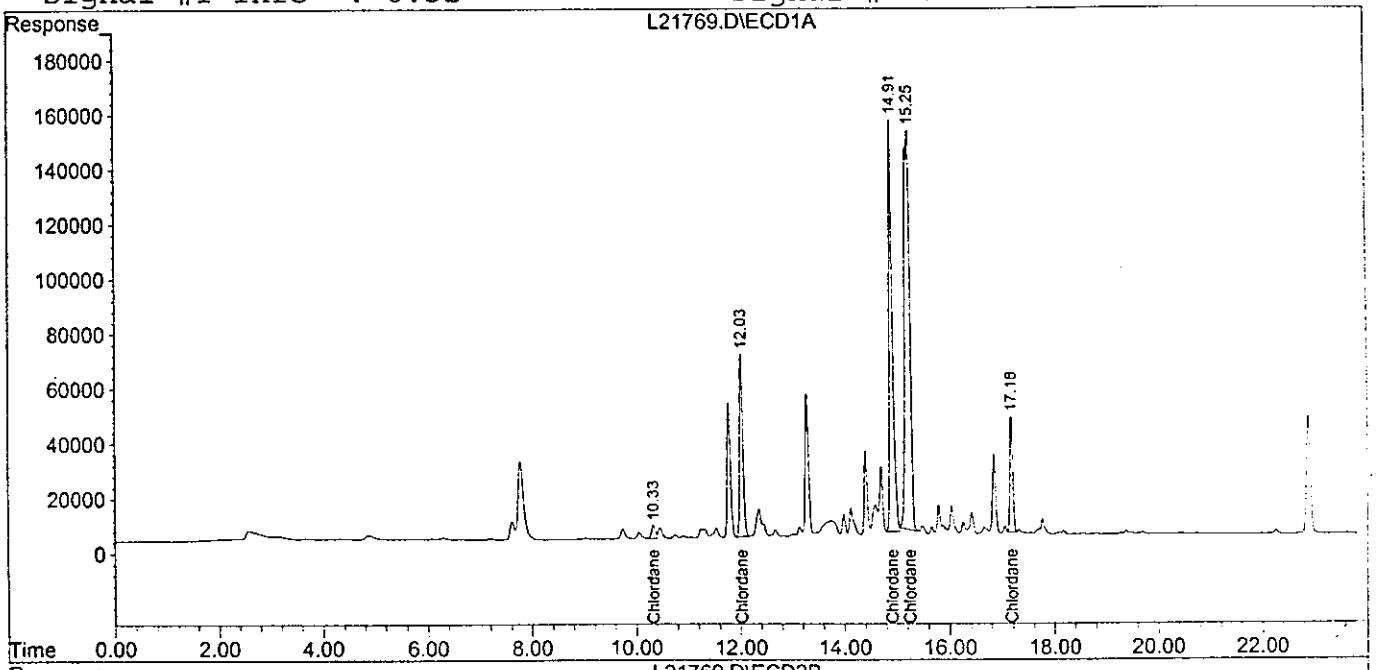
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
28) L9 Chlordane	10.33	11.56	256466	6141787	1776.833m	2022.427
29) L9 Chlordane {2}	12.03	13.98	2858253	2749810	2068.903	1953.237m
30) L9 Chlordane {3}	14.91	14.57	6624644	14042770	1948.058m	1913.032m
31) L9 Chlordane {4}	15.24	14.94	10219371	12376316	1863.227	1914.086m
32) L9 Chlordane {5}	17.18	17.13	1530912	3345441	2100.433	2024.080
Sum Chlordane			21489645	38656123	9757.454	9826.862
Average Chlordane					1951.491	1965.372

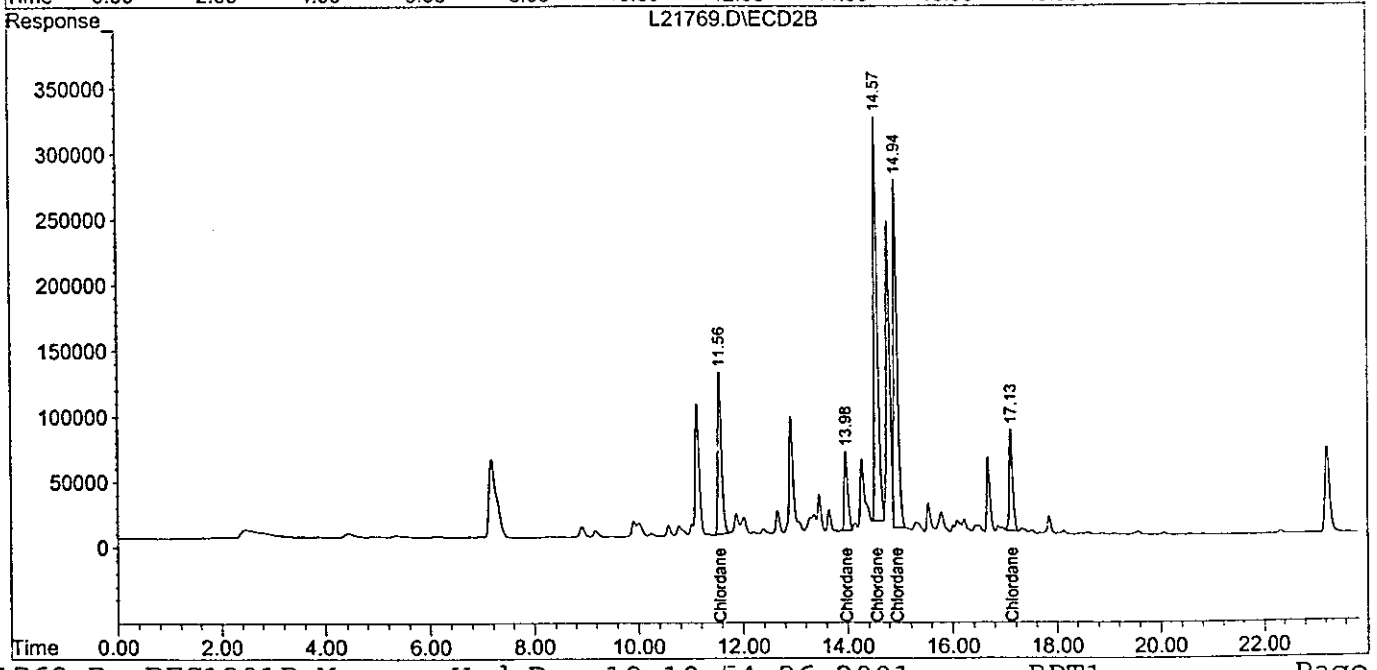
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21769.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\L\DEC1201\L21769.D\ECD2B.CH
Acq On : 13 Dec 2001 2:30 Operator: AK
Sample : CHLORDANE-5 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:34 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : H:\GCDATA\L\DEC1201\L21770.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\L\DEC1201\L21770.D\ECD2B.CH
Acq On : 13 Dec 2001 2:58 Operator: AK
Sample : CHLORDANE-4 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:36 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

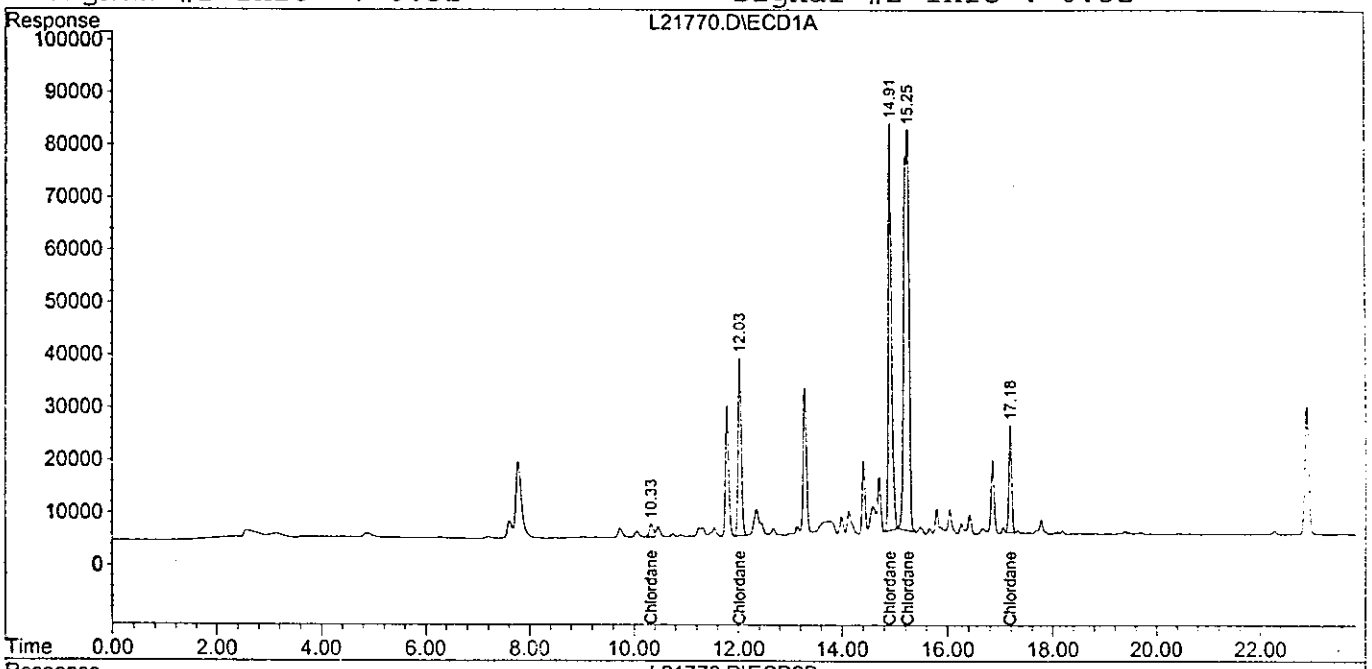
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
28) L9 Chlordane	10.33	11.56	132730	3117583	918.080m	1026.588
29) L9 Chlordane {2}	12.03	13.98	1428257	1268526	1033.822	899.918m
30) L9 Chlordane {3}	14.91	14.57	3313127	7144596	974.151	973.829m
31) L9 Chlordane {4}	15.25	14.94	5209532	6327242	949.818	978.179m
32) L9 Chlordane {5}	17.19	17.13	742868	1680117	1019.226	1016.515
Sum Chlordane			10826513	19538064	4895.097	4895.028
Average Chlordane					979.019	979.006

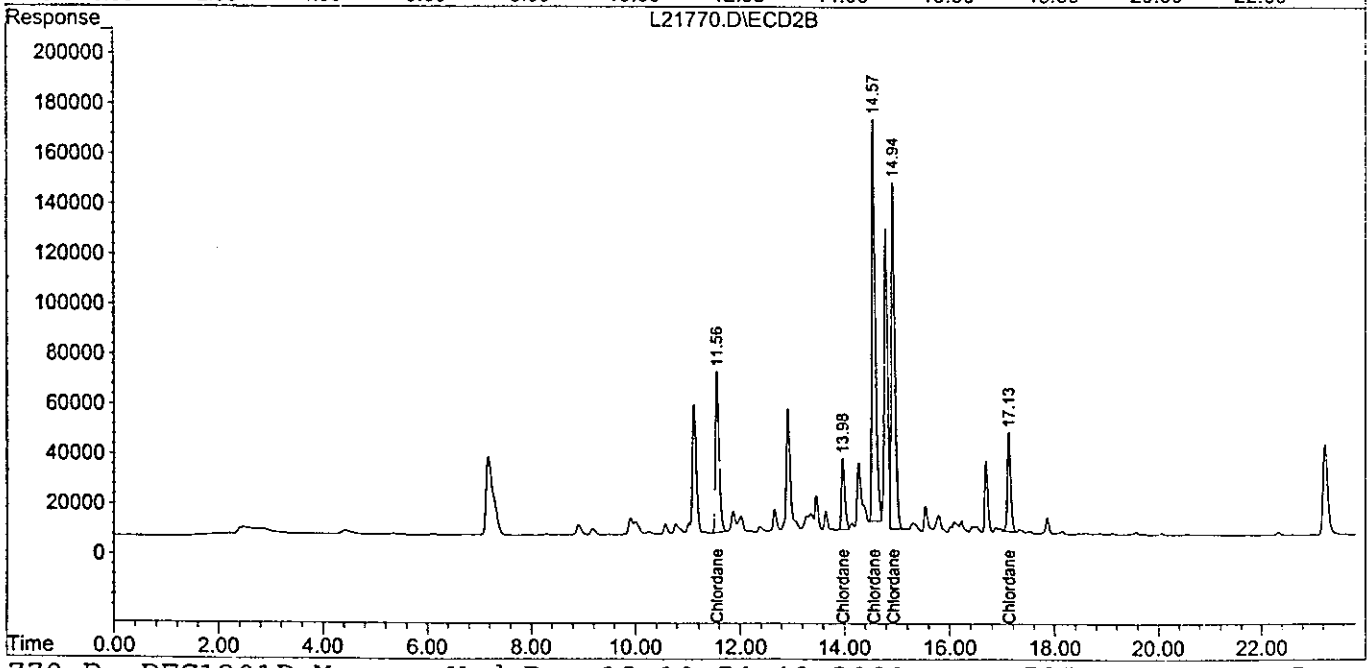
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21770.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\L\DEC1201\L21770.D\ECD2B.CH
Acq On : 13 Dec 2001 2:58 Operator: AK
Sample : CHLORDANE-4 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:36 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : H:\GCDATA\L\DEC1201\L21771.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\DEC1201\L21771.D\ECD2B.CH
Acq On : 13 Dec 2001 3:26 Operator: AK
Sample : CHLORDANE-3 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:40 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

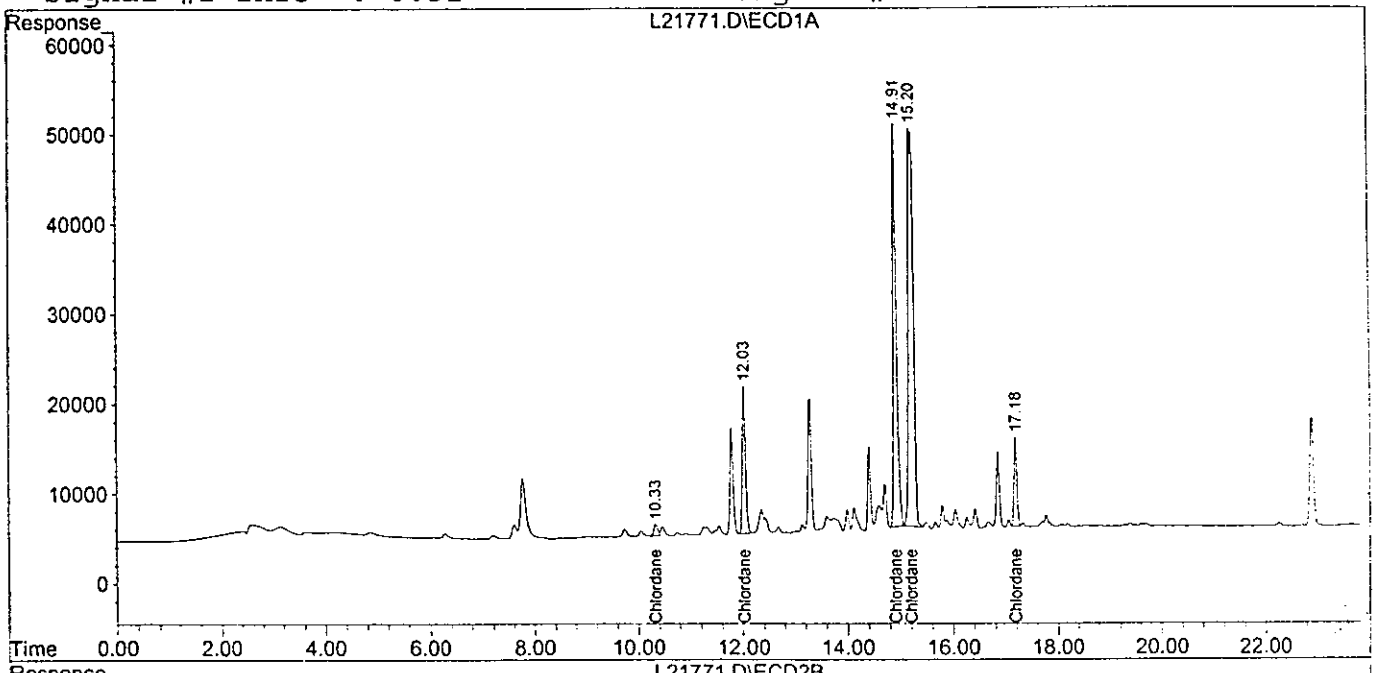
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
28) L9 Chlordane	10.33	11.56	67744	1537263	468.257m	506.205
29) L9 Chlordane {2}	12.03	13.98	689847	813712	499.335	577.390m
30) L9 Chlordane {3}	14.91	14.57	1863569	4042486	547.941	551.191m
31) L9 Chlordane {4}	15.21	14.94	3104619	3518040	566.044	543.194m
32) L9 Chlordane {5}	17.18	17.13	363534	846228	498.774m	511.991
Sum Chlordane			6089313	10757730	2580.351	2689.971
Average Chlordane					516.070	537.994

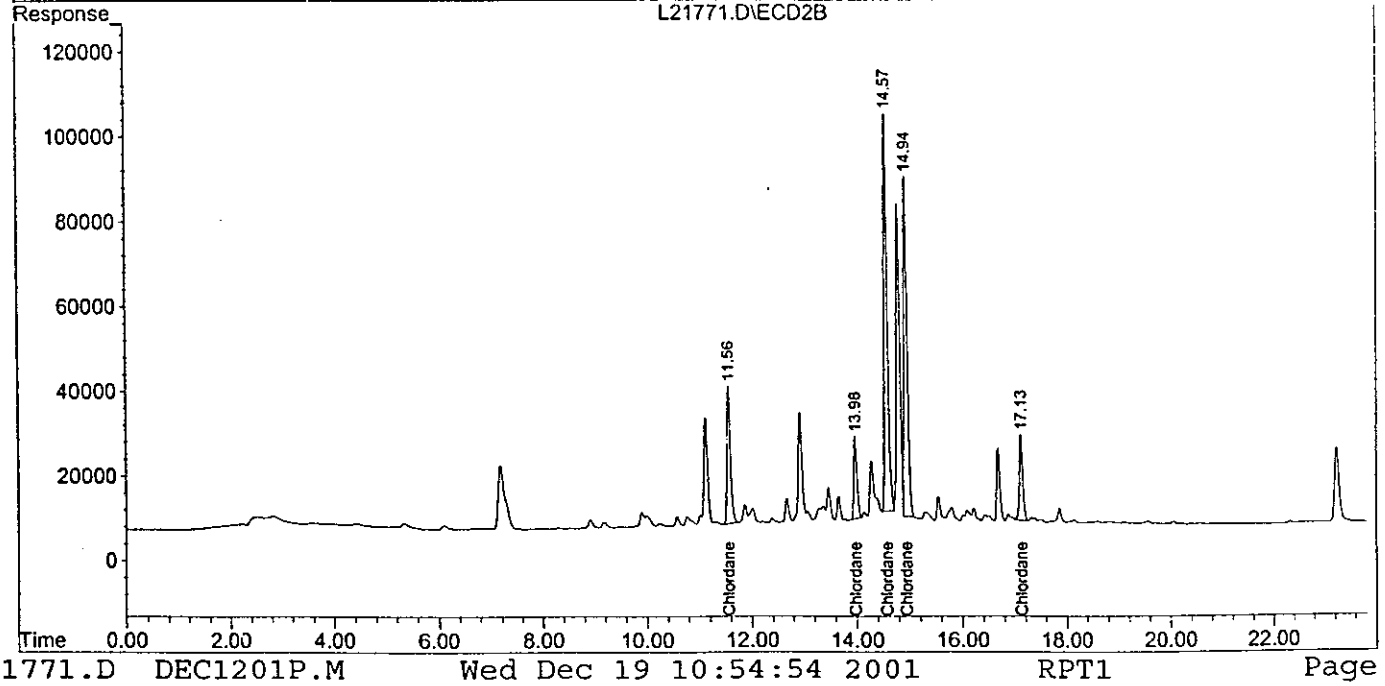
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21771.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\DEC1201\L21771.D\ECD2B.CH
Acq On : 13 Dec 2001 3:26 Operator: AK
Sample : CHLORDANE-3 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:40 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : H:\GCDATA\L\DEC1201\L21772.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\L\DEC1201\L21772.D\ECD2B.CH
Acq On : 13 Dec 2001 3:53 Operator: AK
Sample : CHLORDANE-2 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:44 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
28) L9 Chlordane	10.33	11.56	39832	750774	273.573m	247.294
29) L9 Chlordane {2}	12.03	13.98	336545	345912	243.759	247.021m
30) L9 Chlordane {3}	14.91	14.57	852113	1850126	250.796	252.141m
31) L9 Chlordane {4}	15.25	14.94	1390844	1612270	253.583m	249.518m
32) L9 Chlordane {5}	17.18	17.13	175600	408830	240.912m	247.329m
Sum Chlordane			2794934	4967912	1262.623	1243.303
Average Chlordane					252.525	248.661

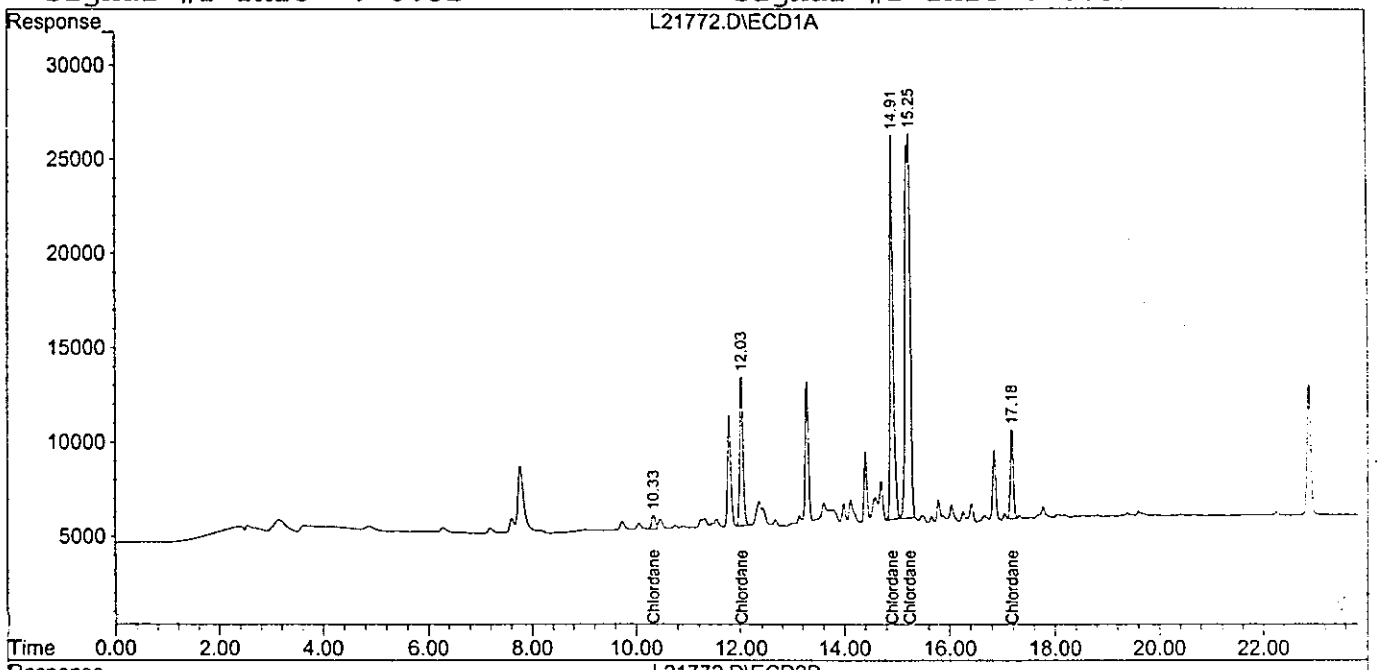
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

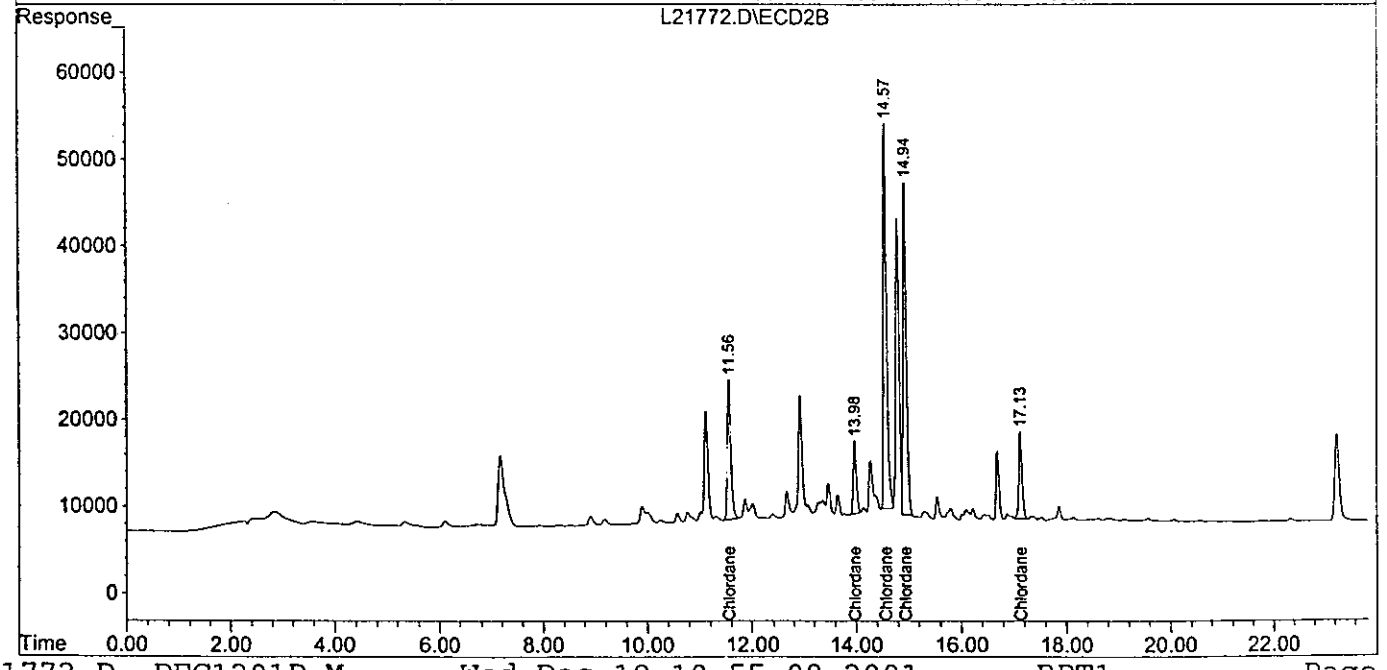
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1201\L21772.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\L\DEC1201\L21772.D\ECD2B.CH
Acq On : 13 Dec 2001 3:53 Operator: AK
Sample : CHLORDANE-2 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:44 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1201\L21773.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\L\DEC1201\L21773.D\ECD2B.CH
Acq On : 13 Dec 2001 4:21 Operator: AK
Sample : CHLORDANE-1 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:46 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
28) L9 Chlordane	10.33	11.56	17080	291365	117.693m	95.972
29) L9 Chlordane {2}	12.03	13.98	131996	129490	95.605	93.103m
30) L9 Chlordane {3}	14.91	14.57	322134	700336	94.811m	95.535m
31) L9 Chlordane {4}	15.24	14.94	527623	624548	96.394	96.956m
32) L9 Chlordane {5}	17.18	17.13	70720	158402	97.023m	95.815m
Sum Chlordane			1069553	1904141	501.525	477.381
Average Chlordane					100.305	95.476

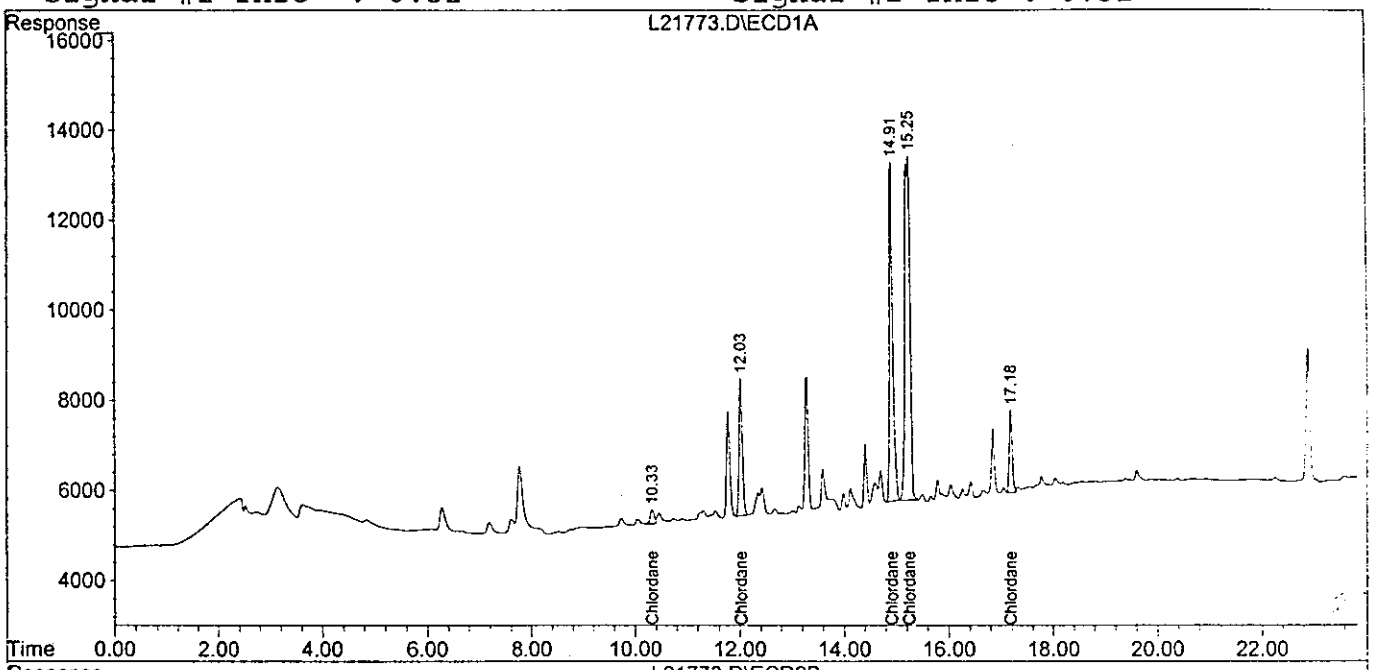
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

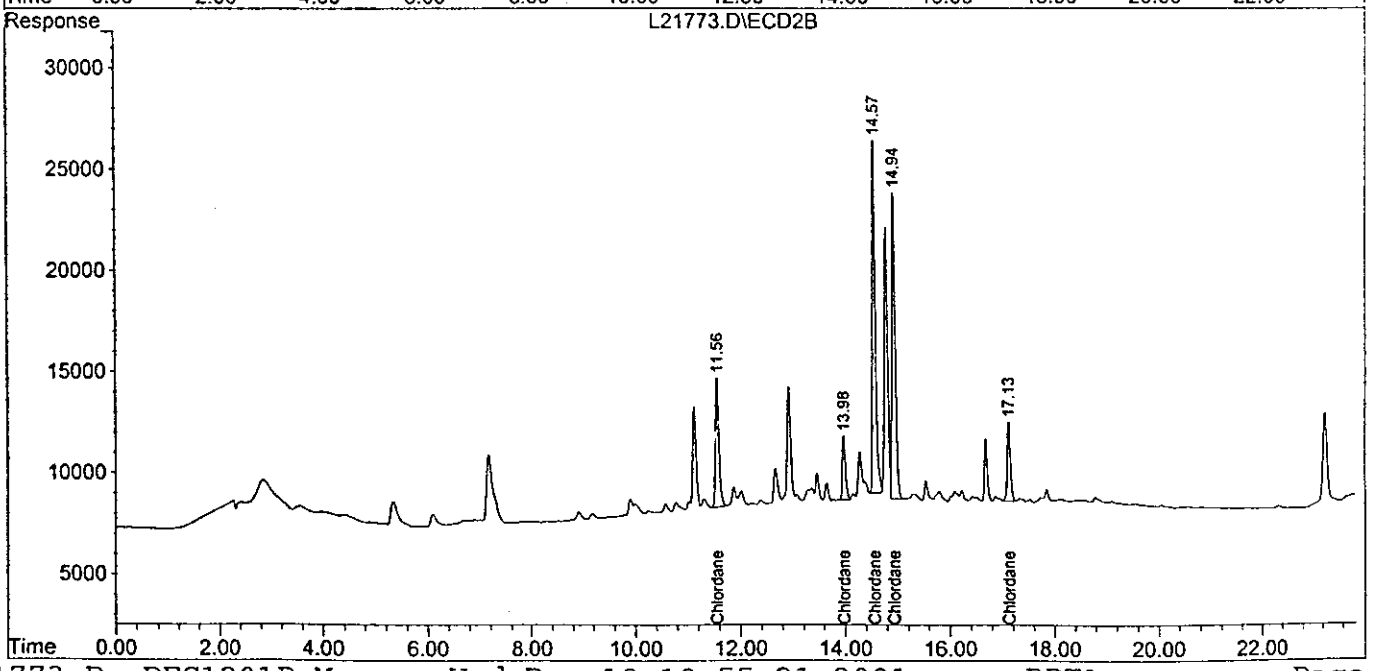
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1201\L21773.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\L\DEC1201\L21773.D\ECD2B.CH
Acq On : 13 Dec 2001 4:21 Operator: AK
Sample : CHLORDANE-1 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:46 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1201\L21774.D\ECD1A.CH Vial: 10
Signal #2 : H:\GCDATA\L\DEC1201\L21774.D\ECD2B.CH
Acq On : 13 Dec 2001 4:49 Operator: AK
Sample : PEST-6 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 8:23 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.78	7.18	1081989	2292357	47.080m	50.055
Spiked Amount 20.000 Range 30 - 150 Recovery =					235.40%#	250.28%#
22) S Decachlorobiphen	22.89	23.25	1288359	2288239	45.444	45.831
Spiked Amount 20.000 Range 30 - 150 Recovery =					227.22%#	229.16%#
Target Compounds						
2) A alpha-BHC	9.56	9.07	2992809	8318172	112.414	107.095
3) MA gamma-BHC (Linda	10.57	10.21	2936902	7628118	113.758m	103.833
4) MA Heptachlor	12.03	11.56	3391159	7215177	100.566	100.494m
5) MB Aldrin	12.92	12.51	3046400	7627138	106.908	105.670m
6) B beta-BHC	10.82	10.45	1565249	3643848	100.790	98.829m
7) B delta-BHC	11.39	11.36	1704933	4663688	119.621	104.447
8) B Heptachlor Epoxi	14.59	14.08	3047541	7038808	99.441m	99.525
9) A Endosulfan I	15.63	15.10	2758507	6496145	98.850	111.894m
10) A gamma-Chlordane	14.91	14.57	2987592	6900207	97.859	98.209m
11) A alpha-Chlordane	15.25	14.94	3292429	5575307	102.164m	98.272m
12) B 4,4-DDE	15.40	15.34	2671636	6760212	147.002m	102.494 #
13) MA Dieldrin	16.23	15.78	2846350	6847220	105.083	102.509
14) MA Endrin	16.81	16.52	1665000	4500630	107.868m	106.611m
15) B Endosulfan II	17.35	17.02	2476092	5580008	98.033m	100.070
16) A 4,4-DDD	16.87	16.72	2248613	4322325	109.489m	99.756
17) MA 4,4-DDT	17.54	17.45	1996676	4180617	110.025	105.923m
18) B Endrin Aldehyde	18.33	17.79	1767354	3887619	94.924m	95.709m
19) B Endosulfan Sulfa	19.39	18.41	1620216	3510717	98.071m	100.877
20) A Methoxychlor	18.59	18.97	1140867	2037119	98.955	98.976m
21) B Endrin Ketone	20.15	19.73	2302528	4925922	101.413	100.274m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

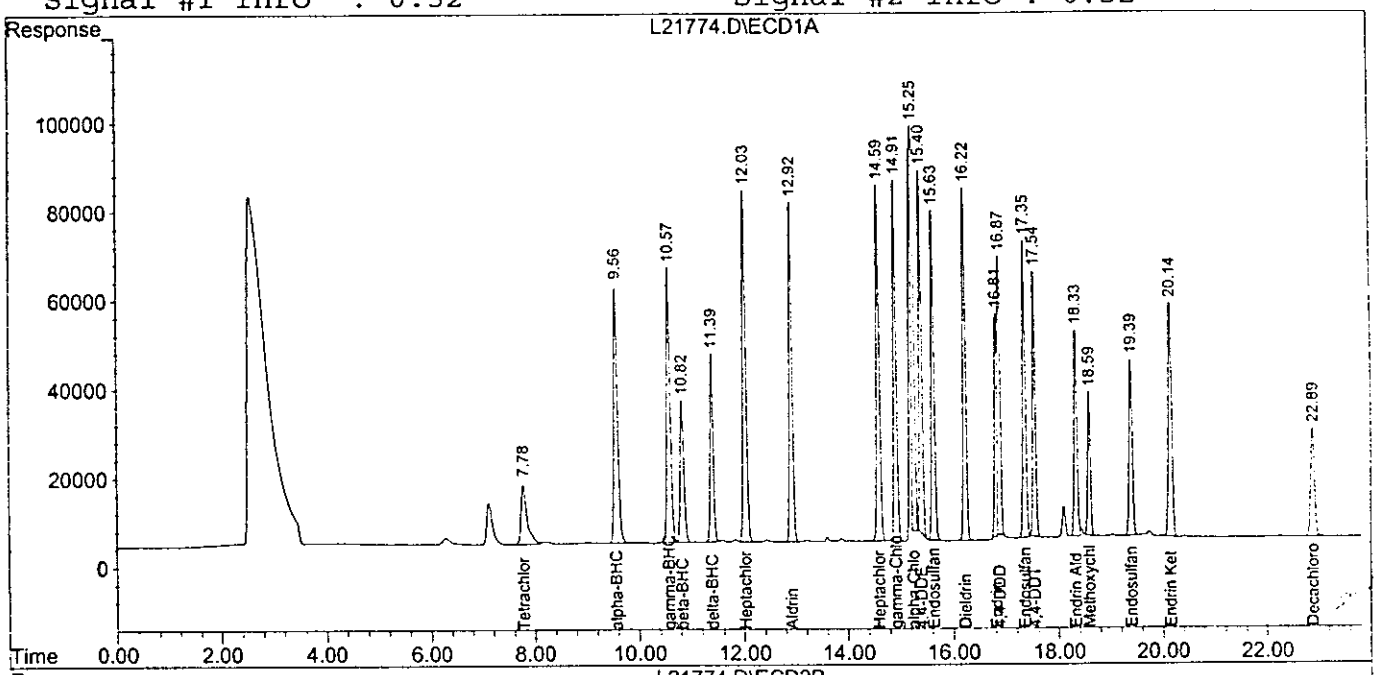
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

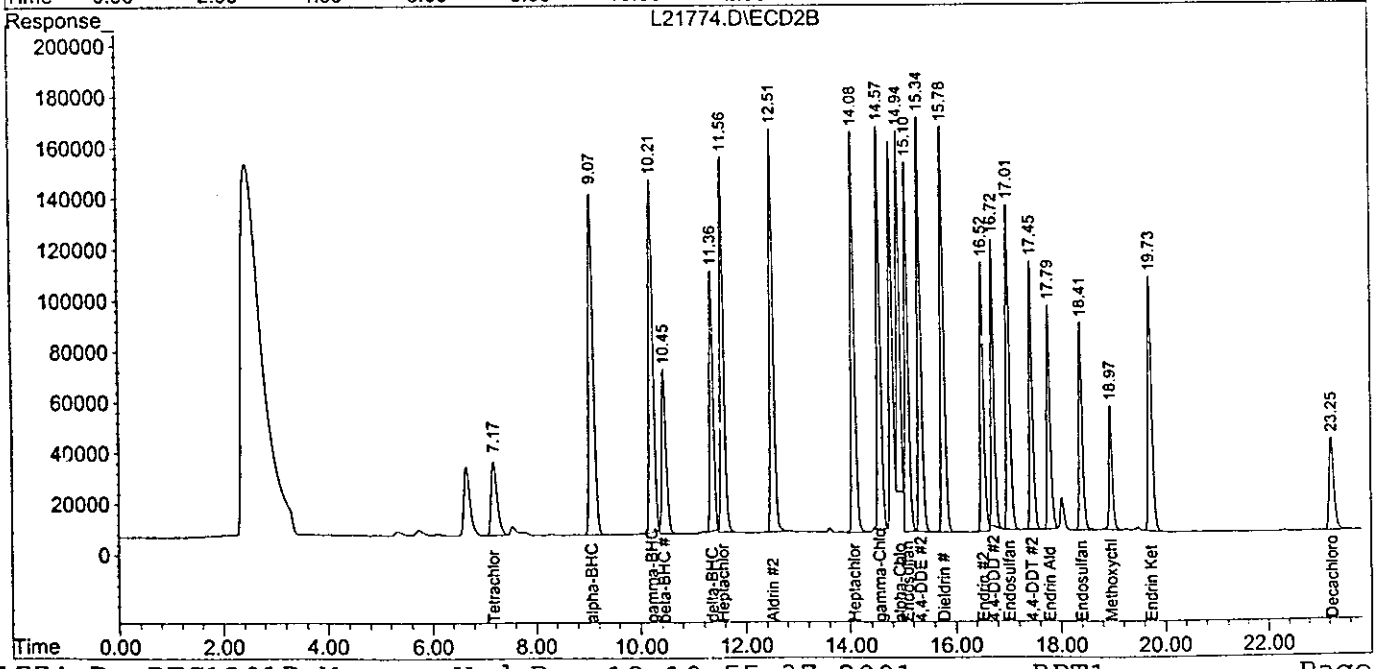
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1201\L21774.D\ECD1A.CH Vial: 10
Signal #2 : H:\GCDATA\L\DEC1201\L21774.D\ECD2B.CH
Acq On : 13 Dec 2001 4:49 Operator: AK
Sample : PEST-6 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 8:23 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001044

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1201\L21775.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\L\DEC1201\L21775.D\ECD2B.CH
Acq On : 13 Dec 2001 5:17 Operator: AK
Sample : PEST-5 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 8:36 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	7.78	7.17	749468	1689746	32.303	36.897
Spiked Amount	20.000 Range	30 - 150	Recovery	=		161.52%#	184.49%#
22) S	Decachlorobiphen	22.88	23.25	1020804	1840382	36.007m	36.861
Spiked Amount	20.000 Range	30 - 150	Recovery	=		180.04%#	184.31%#
	Target Compounds						
2) A	alpha-BHC	9.56	9.07	2120336	6186014	79.643	79.644m
3) MA	gamma-BHC (Linda	10.57	10.21	2140487	5717729	82.808m	77.829
4) MA	Heptachlor	12.03	11.56	2530531	5416232	75.044	75.214m
5) MB	Aldrin	12.92	12.51	2241866	5676732	78.675m	78.613m
6) B	beta-BHC	10.82	10.45	1168019	2695697	75.212	72.505m
7) B	delta-BHC	11.38	11.36	1203645	3481376	84.450m	77.968
8) B	Heptachlor Epoxi	14.59	14.08	2289307	5316136	74.696m	75.168
9) A	Endosulfan I	15.63	15.10	2087184	4727039	74.793m	78.588m
10) A	gamma-Chlordane	14.91	14.57	2259456	5277000	74.009	75.291
11) A	alpha-Chlordane	15.24	14.94	2430147	4296388	74.676m	74.896m
12) B	4,4-DDE	15.40	15.34	1983121	5104481	79.576m	77.391
13) MA	Dieldrin	16.23	15.78	2124178	5158176	78.422	77.222
14) MA	Endrin	16.81	16.52	1114686	3325189	72.193m	77.835m
15) B	Endosulfan II	17.35	17.01	1880204	4225703	74.314	75.782
16) A	4,4-DDD	16.87	16.72	1607443	3302334	78.460m	76.215
17) MA	4,4-DDT	17.54	17.45	1455774	3095273	80.219m	78.496m
18) B	Endrin Aldehyde	18.33	17.79	1345241	2945385	72.270m	72.454
19) B	Endosulfan Sulfa	19.39	18.40	1239381	2636172	74.888	75.748m
20) A	Methoxychlor	18.59	18.97	875439	1544718	75.933	75.263
21) B	Endrin Ketone	20.14	19.73	1760461	3748717	77.538	76.215m
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

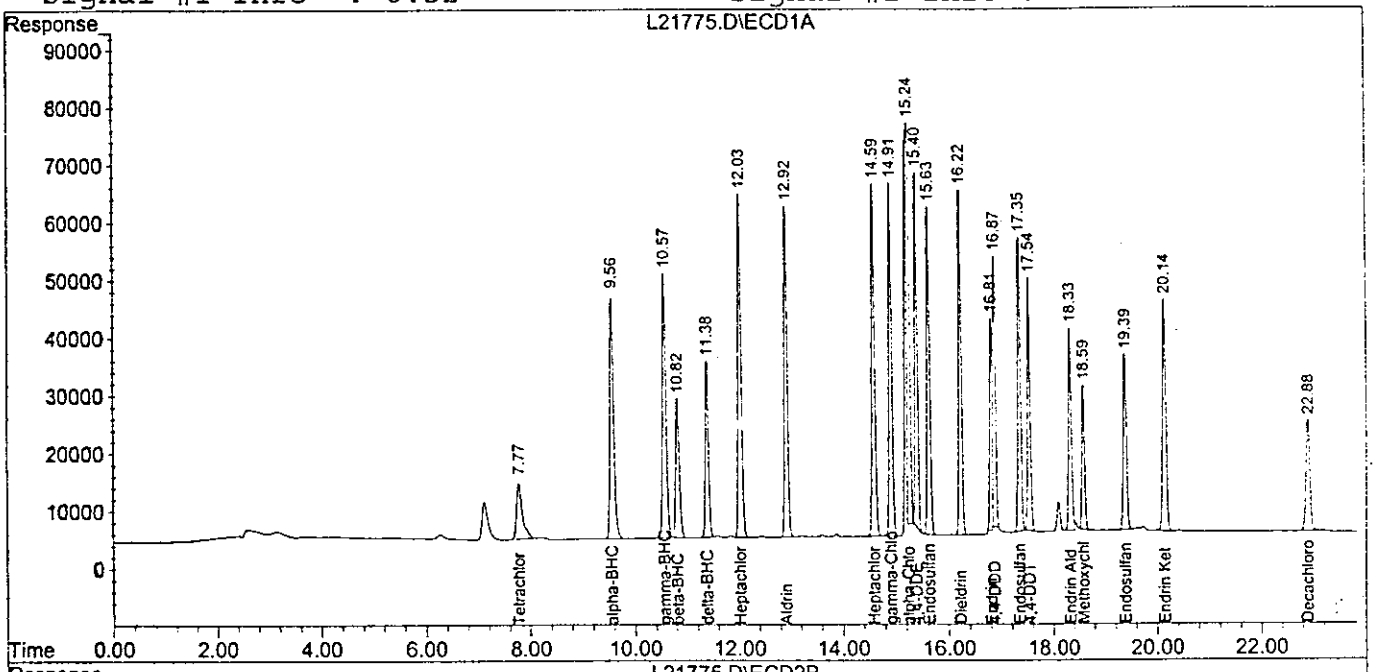
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

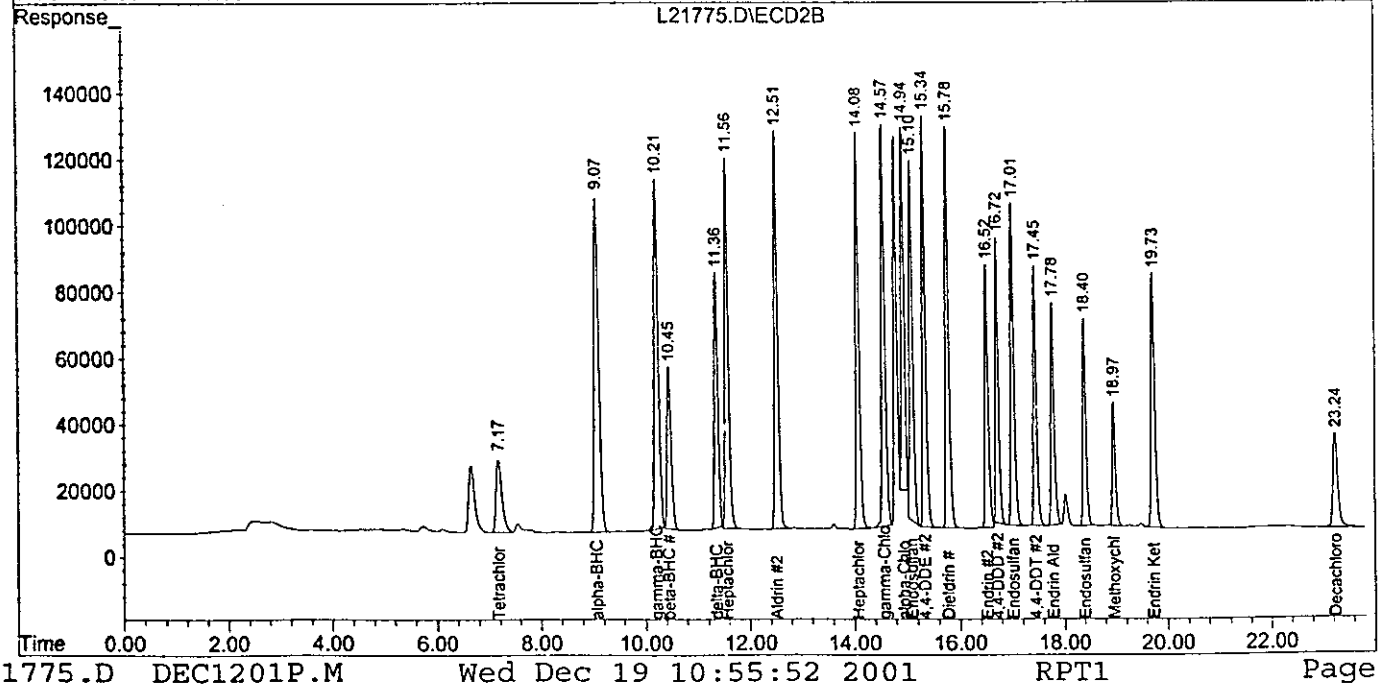
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1201\L21775.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\L\DEC1201\L21775.D\ECD2B.CH
Acq On : 13 Dec 2001 5:17 Operator: AK
Sample : PEST-5 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 8:36 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001046

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1201\L21776.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\L\DEC1201\L21776.D\ECD2B.CH
Acq On : 13 Dec 2001 5:44 Operator: AK
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 8:44 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	7.77	7.17	581736	1226239	25.068m	26.776
Spiked Amount	20.000 Range 30 - 150 Recovery =					125.34%	133.88%
22) S	Decachlorobiphen	22.89	23.25	729179	1280996	25.722	25.657
Spiked Amount	20.000 Range 30 - 150 Recovery =					128.61%	128.29%
	Target Compounds						
2) A	alpha-BHC	9.56	9.07	1440655	4410449	54.113m	56.792m
3) MA	gamma-BHC (Linda	10.57	10.21	1488179	4127331	57.582m	56.181
4) MA	Heptachlor	12.03	11.56	1826924	3925593	54.178	54.303m
5) MB	Aldrin	12.92	12.51	1581679	4056075	55.500	56.165m
6) B	beta-BHC	10.82	10.45	844462	1962533	54.377	52.675
7) B	delta-BHC	11.38	11.36	810955	2478904	56.793m	55.517
8) B	Heptachlor Epoxi	14.59	14.08	1663033	3810975	54.261m	53.885m
9) A	Endosulfan I	15.63	15.10	1510017	3434138	54.100	55.666m
10) A	gamma-Chlordane	14.91	14.57	1638832	3777630	53.680	53.898m
11) A	alpha-Chlordane	15.24	14.94	1731677	3148144	52.523m	54.243m
12) B	4,4-DDE	15.40	15.34	1383849	3599616	55.577	54.575m
13) MA	Dieldrin	16.23	15.78	1504196	3706396	55.533	55.488
14) MA	Endrin	16.81	16.52	784004	2297941	50.974m	53.796
15) B	Endosulfan II	17.35	17.01	1351709	3032511	53.425m	54.384
16) A	4,4-DDD	16.87	16.72	1111170	2347703	54.762m	54.183m
17) MA	4,4-DDT	17.54	17.45	999247	2155526	55.085m	54.747m
18) B	Endrin Aldehyde	18.33	17.79	974153	2147010	52.260m	52.815
19) B	Endosulfan Sulfa	19.39	18.40	888322	1881795	53.676m	54.200m
20) A	Methoxychlor	18.59	18.97	622100	1085359	53.959	52.881m
21) B	Endrin Ketone	20.14	19.73	1248219	2691275	54.977m	54.656m
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

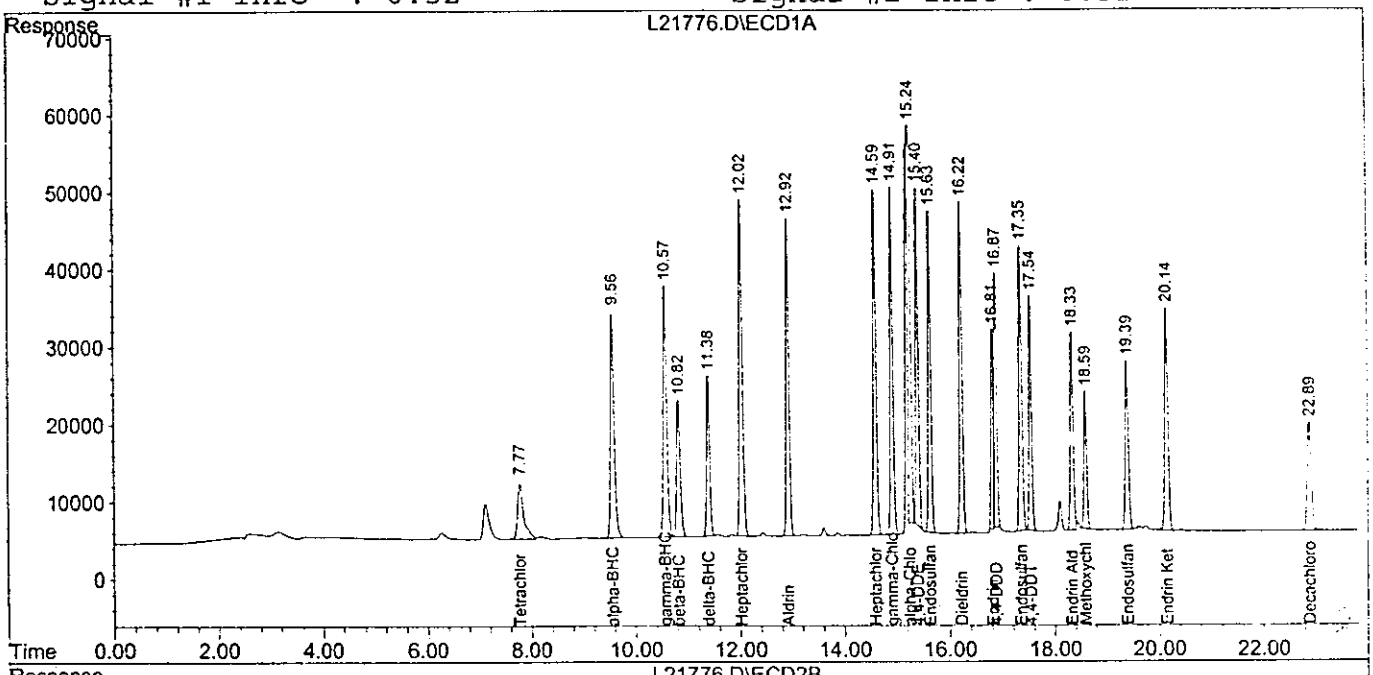
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

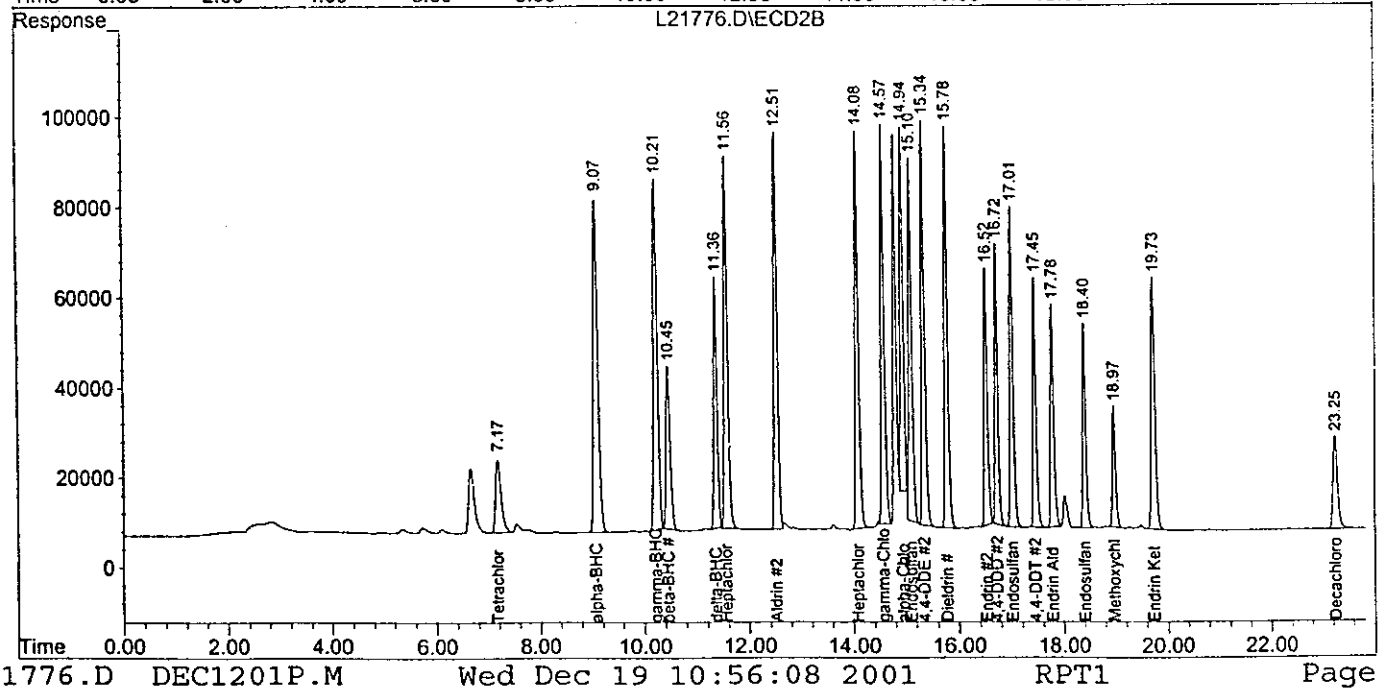
001047

Signal #1 : H:\GCDATA\L\DEC1201\L21776.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\L\DEC1201\L21776.D\ECD2B.CH
Acq On : 13 Dec 2001 5:44 Operator: AK
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 8:44 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : H:\GCDATA\L\DEC1201\L21777.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\L\DEC1201\L21777.D\ECD2B.CH
Acq On : 13 Dec 2001 6:12 Operator: AK
Sample : PEST-3 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 8:52 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

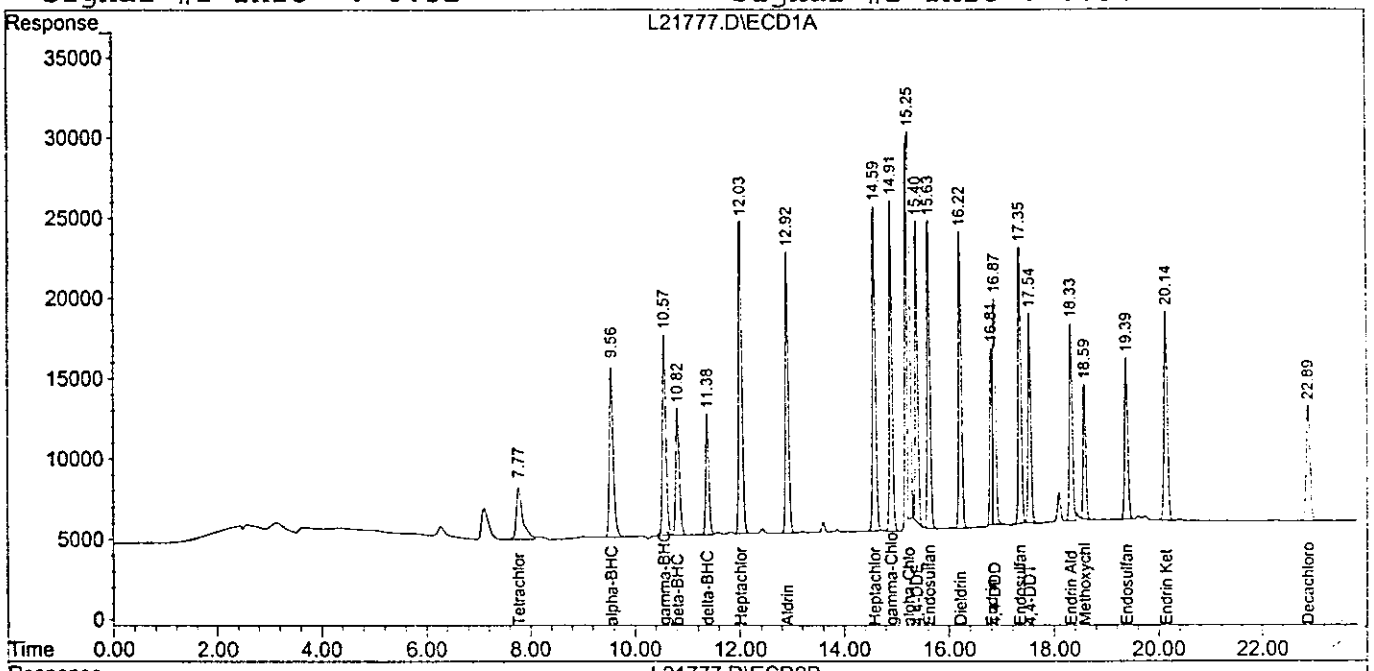
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	7.77	7.17	280232	568111	11.934m	12.405
Spiked Amount	20.000 Range 30 - 150 Recovery =					59.67%	62.03%
22) S	Decachlorobiphen	22.89	23.25	371418	637993	13.102m	12.778m
Spiked Amount	20.000 Range 30 - 150 Recovery =					65.51%	63.89%
	Target Compounds						
2) A	alpha-BHC	9.56	9.07	545936	1845146	20.507m	23.762m
3) MA	gamma-BHC (Linda	10.57	10.21	568732	1827813	22.000m	24.880m
4) MA	Heptachlor	12.03	11.56	821345	1790794	24.357	24.717
5) MB	Aldrin	12.92	12.51	670632	1805177	23.532m	24.975m
6) B	beta-BHC	10.82	10.45	378717	935566	24.386	25.111
7) B	delta-BHC	11.38	11.36	307379	1041673	21.486m	23.329
8) B	Heptachlor Epoxi	14.59	14.08	755252	1758723	24.634m	24.892
9) A	Endosulfan I	15.63	15.10	690421	1588070	24.736	25.923m
10) A	gamma-Chlordane	14.91	14.57	750218	1726179	24.574	24.716m
11) A	alpha-Chlordane	15.25	14.94	830435	1513635	25.303m	26.116m
12) B	4,4-DDE	15.40	15.34	591613	1643370	23.753m	24.929
13) MA	Dieldrin	16.22	15.78	651683	1652750	24.059m	24.743
14) MA	Endrin	16.81	16.52	335266	1015900	22.264m	23.783m
15) B	Endosulfan II	17.35	17.02	628513	1392981	24.860	24.981
16) A	4,4-DDD	16.87	16.73	497128	1081719	24.675m	24.970
17) MA	4,4-DDT	17.54	17.45	430168	961359	23.709m	24.447m
18) B	Endrin Aldehyde	18.33	17.79	469034	1003853	25.174m	24.694
19) B	Endosulfan Sulfa	19.39	18.41	410134	845004	24.773m	24.336m
20) A	Methoxychlor	18.59	18.97	292105	522688	25.336m	25.503
21) B	Endrin Ketone	20.14	19.73	559409	1234876	24.655m	25.063m
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

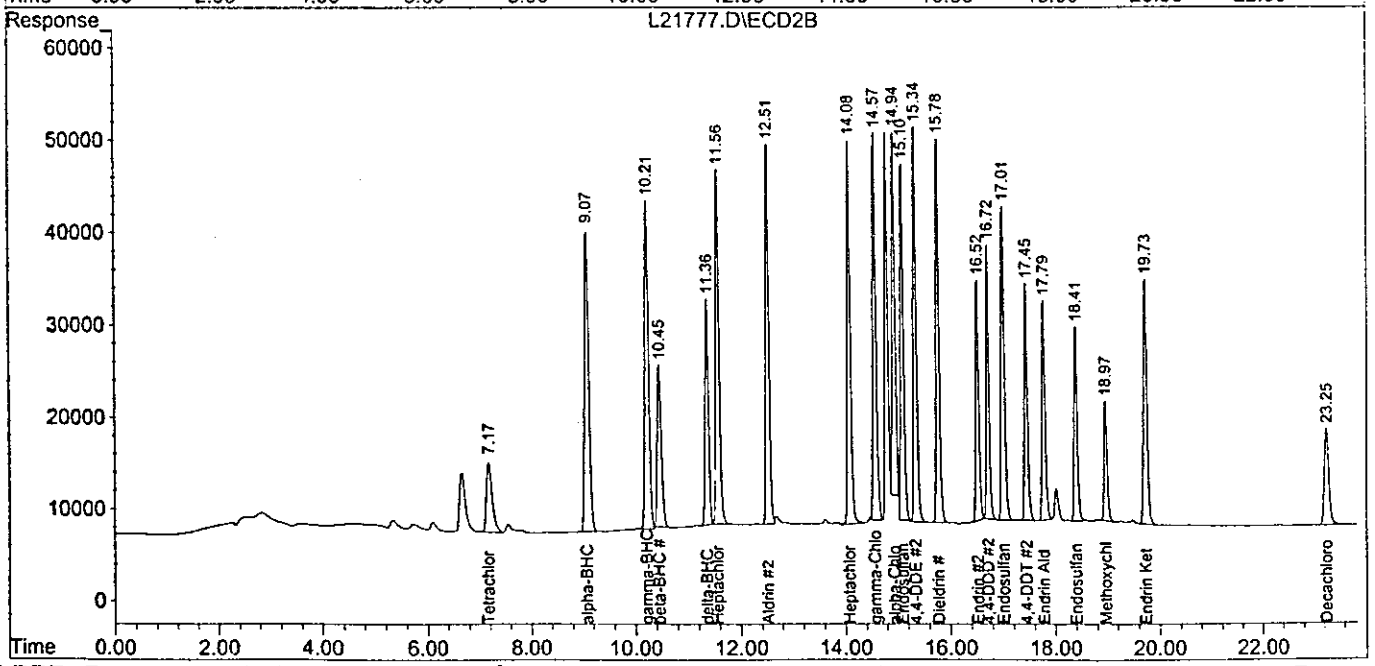
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21777.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\L\DEC1201\L21777.D\ECD2B.CH
Acq On : 13 Dec 2001 6:12 Operator: AK
Sample : PEST-3 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 8:52 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : H:\GCDATA\L\DEC1201\L21778.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\L\DEC1201\L21778.D\ECD2B.CH
Acq On : 13 Dec 2001 6:40 Operator: AK
Sample : PEST-2 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:01 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

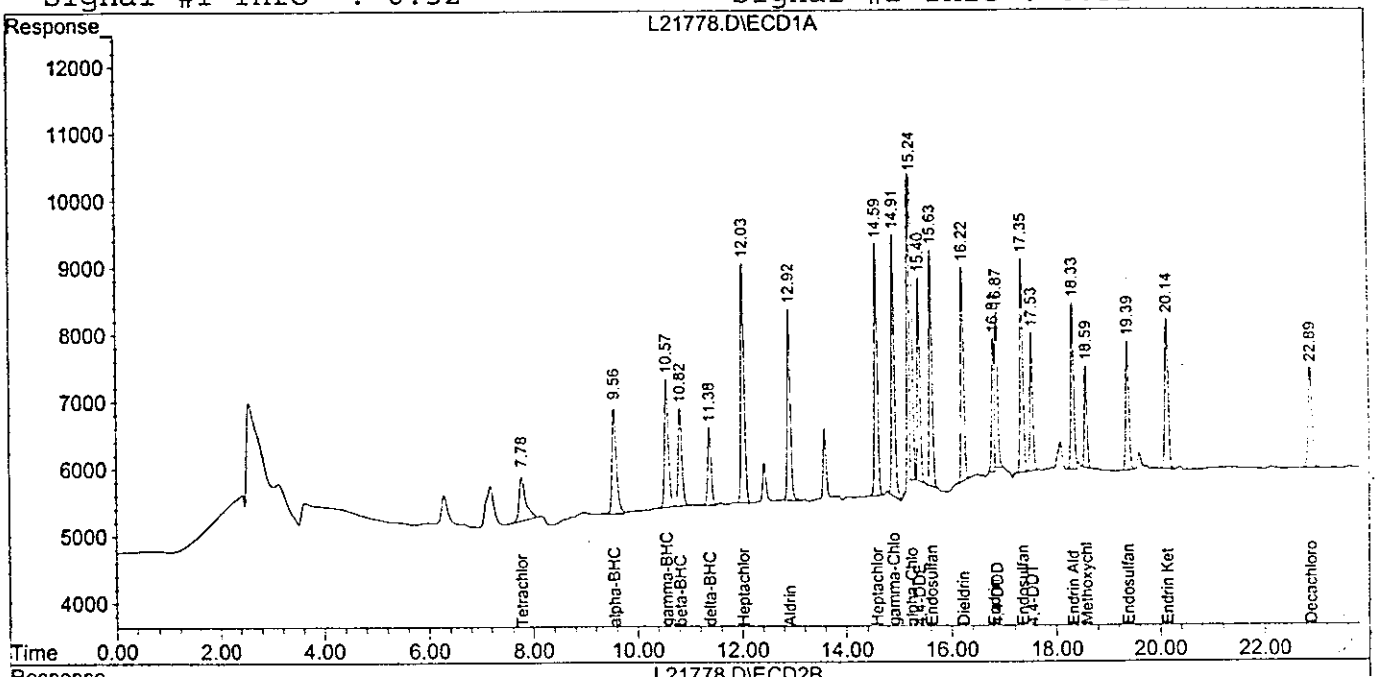
		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	7.78	7.18	59611	108947	2.534m	2.379
Spiked Amount		20.000 Range 30 - 150 Recovery =					12.67%#	11.90%#
22)	S	Decachlorobiphen	22.89	23.25	75723	130040	2.667m	2.610
Spiked Amount		20.000 Range 30 - 150 Recovery =					13.34%#	13.05%#
		Target Compounds						
2)	A	alpha-BHC	9.56	9.07	90531	302996	3.395m	3.903m
3)	MA	gamma-BHC (Linda	10.57	10.21	95968	305783	3.702	4.147m
4)	MA	Heptachlor	12.03	11.56	155653	338768	4.616m	4.676
5)	MB	Aldrin	12.92	12.51	118611	312304	4.161	4.296m
6)	B	beta-BHC	10.82	10.45	71924	186162	4.631	4.997
7)	B	delta-BHC	11.38	11.35	52657	200583	3.667m	4.492m
8)	B	Heptachlor Epoxi	14.59	14.08	144481	317237	4.713m	4.490m
9)	A	Endosulfan I	15.63	15.10	129248	289299	4.631m	4.617m
10)	A	gamma-Chlordane	14.91	14.57	149302	319257	4.890	4.586m
11)	A	alpha-Chlordane	15.24	14.94	154139	295078	4.698m	5.036m
12)	B	4,4-DDE	15.40	15.34	100013	281104	4.017m	4.264
13)	MA	Dieldrin	16.22	15.78	115702	287150	4.270m	4.299m
14)	MA	Endrin	16.81	16.52	65159	173085	4.385m	4.073m
15)	B	Endosulfan II	17.35	17.01	117506	248623	4.648m	4.459m
16)	A	4,4-DDD	16.87	16.72	82287	188800	4.043m	4.358m
17)	MA	4,4-DDT	17.54	17.45	70861	158894	3.905	4.045
18)	B	Endrin Aldehyde	18.33	17.79	95636	210080	5.128m	5.168
19)	B	Endosulfan Sulfa	19.39	18.40	79118	154828	4.785m	4.467m
20)	A	Methoxychlor	18.59	18.97	52564	93221	4.553	4.548m
21)	B	Endrin Ketone	20.14	19.73	98089	220412	4.324m	4.470
		Sum Toxaphene			0	0	N.D.	N.D.
		Average Toxaphene					0.000	0.000
		Sum Chlordane			0	0	N.D.	N.D.
		Average Chlordane					0.000	0.000

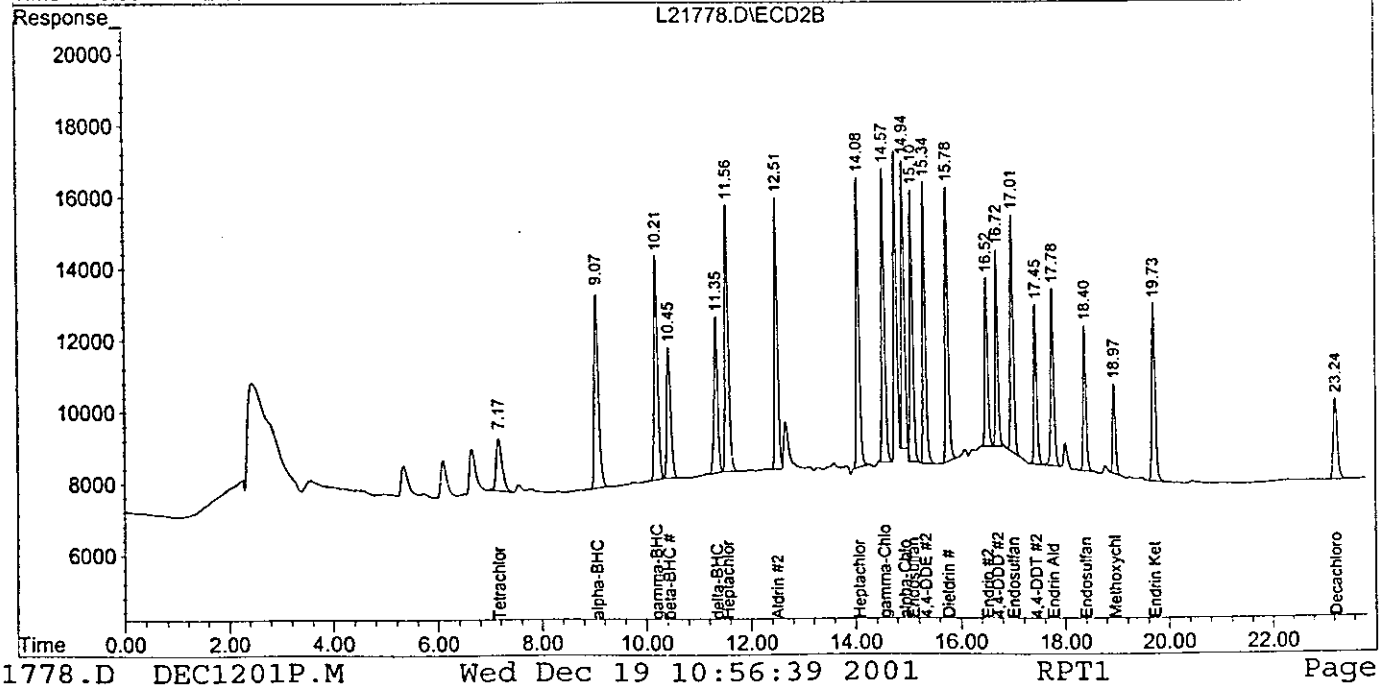
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21778.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\L\DEC1201\L21778.D\ECD2B.CH
Acq On : 13 Dec 2001 6:40 Operator: AK
Sample : PEST-2 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 13 9:01 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**5.91**	**5.06**
DDT	**6.07**	**10.23**

	RAW RESPONSE	
ENDRIN KETONE	33702.00	60305.00
ENDRIN ALDEHYDE	23692.00	59544.00
ENDRIN	913573.00	2250746.00
DDE	55125.00	141535.00
DDD	0.00	66702.00
DDT	853547.00	1827015.00

Signal #1 : H:\GCDATA\L\DEC1201\L21767.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\L\DEC1201\L21767.D\ECD2B.CH
Acq On : 13 Dec 2001 1:34 Operator: AK
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 10:36 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

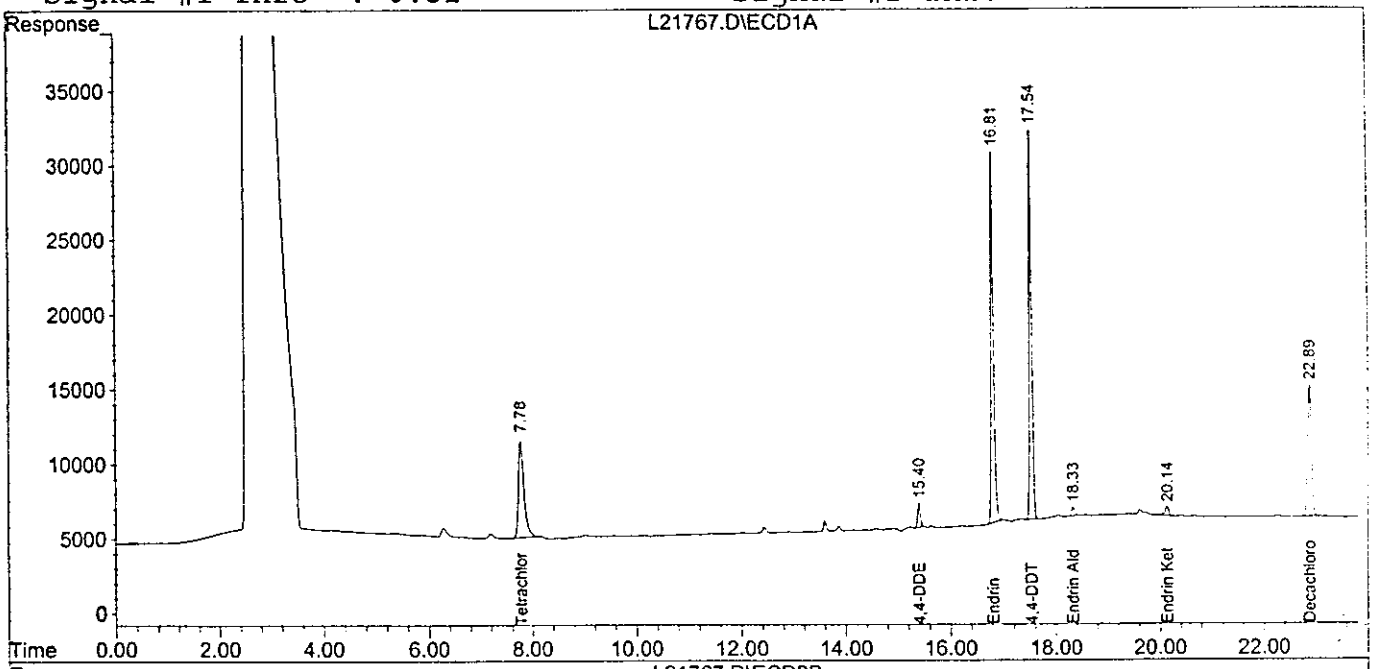
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	7.78	7.18	481842	1133397	21.674m	24.748
Spiked Amount	20.000 Range 30 - 150 Recovery =					108.37%	123.74%
22) S	Decachlorobiphen	22.89	23.25	451923	777894	15.895	15.612
Spiked Amount	20.000 Range 30 - 150 Recovery =					79.47%	78.06%
	Target Compounds						
12) B	4,4-DDE	15.40	15.34	55125	141535	2.214	2.147m
14) MA	Endrin	16.81	16.52	913573	2250746	62.034m	53.448m
16) A	4,4-DDD	0.00	16.72	0	66702	N.D. d	1.550m#
17) MA	4,4-DDT	17.54	17.45	853547	1827015	47.032	46.508m
18) B	Endrin Aldehyde	18.33	17.79	23692	59544	1.274m	1.465
21) B	Endrin Ketone	20.14	19.73	33702	60305	1.485	1.223m
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

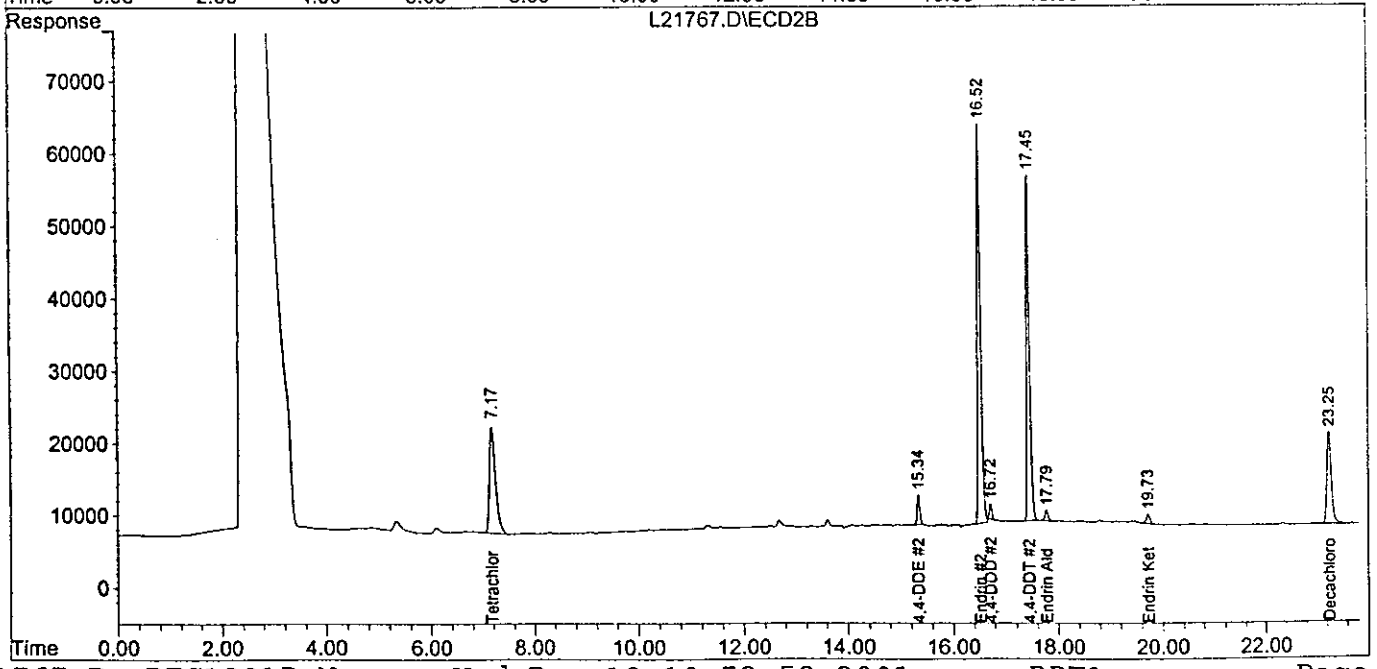
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21767.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\L\DEC1201\L21767.D\ECD2B.CH
Acq On : 13 Dec 2001 1:34 Operator: AK
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 10:36 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**10.36**	**9.58**
DDT	**6.88**	**11.01**

	RAW RESPONSE	
ENDRIN KETONE	40374.00	94699.00
ENDRIN ALDEHYDE	60531.00	131540.00
ENDRIN	872715.00	2134828.00

DDE	62126.00	151468.00
DDD	0.00	74590.00
DDT	841402.00	1827994.00

Signal #1 : H:\GCDATA\L\DEC1201\L21781.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\L\DEC1201\L21781.D\ECD2B.CH
Acq On : 13 Dec 2001 8:03 Operator: AK
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 10:32 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

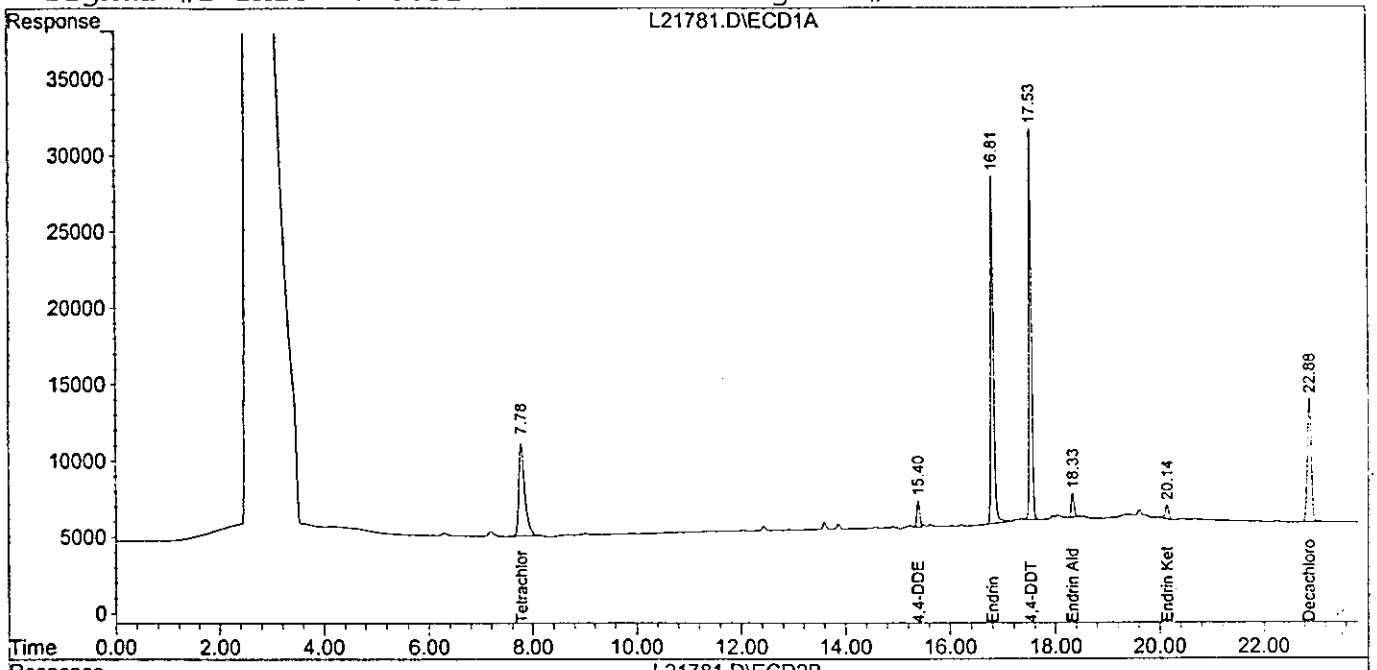
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.78	7.18	486615	1168015	21.888m	25.504m
Spiked Amount 20.000 Range 30 - 150 Recovery =					109.44%	127.52%
22) S Decachlorobiphen	22.88	23.24	417416	724894	14.681m	14.548
Spiked Amount 20.000 Range 30 - 150 Recovery =					73.41%	72.74%
Target Compounds						
12) B 4,4-DDE	15.40	15.34	62126	151468	2.495m	2.298
14) MA Endrin	16.81	16.52	872715	2134828	59.260m	50.695m
16) A 4,4-DDD	0.00	16.72	0	74590	N.D. d	1.733m#
17) MA 4,4-DDT	17.54	17.45	841402	1827994	46.363	46.533
18) B Endrin Aldehyde	18.33	17.79	60531	131540	3.255m	3.236
21) B Endrin Ketone	20.14	19.73	40374	94699	1.779	1.921
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

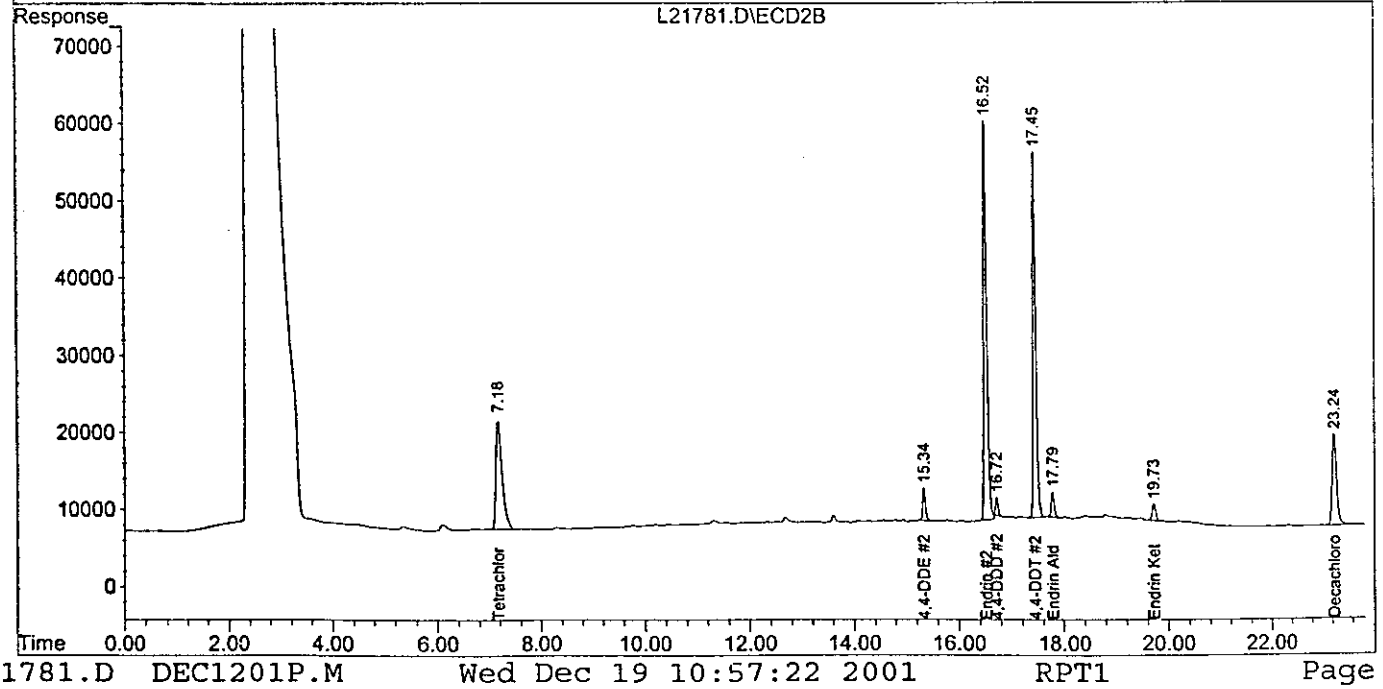
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21781.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\L\DEC1201\L21781.D\ECD2B.CH
Acq On : 13 Dec 2001 8:03 Operator: AK
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 10:32 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1201\L21779.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\DEC1201\L21779.D\ECD2B.CH
Acq On : 13 Dec 2001 7:08 Operator: AK
Sample : INDAM Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 10:25 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

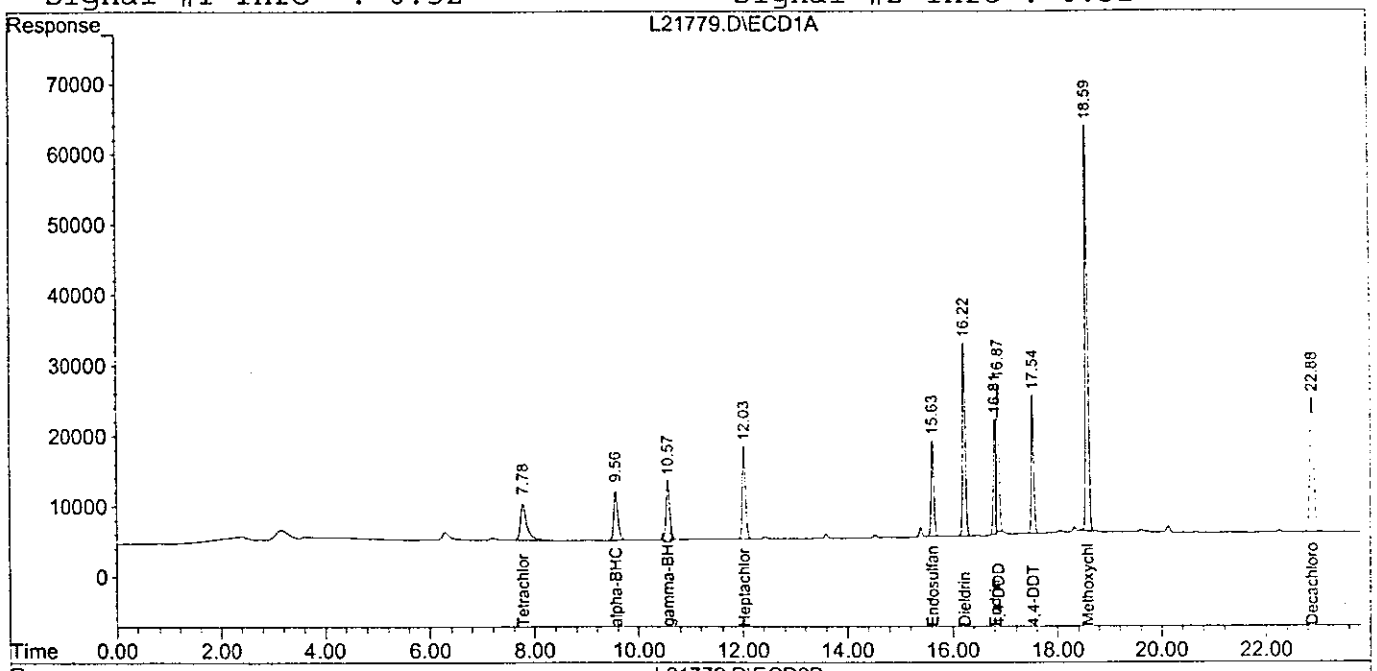
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	7.78	7.18	456700	977845	20.543	21.352m
Spiked Amount	20.000 Range 30 - 150 Recovery =					102.72%	106.76%
22) S	Decachlorobiphen	22.89	23.24	1004936	1765128	35.346	35.425
Spiked Amount	20.000 Range 30 - 150 Recovery =					176.73%#	177.13%#
	Target Compounds						
2) A	alpha-BHC	9.56	9.07	375279	1328012	14.780m	17.101m
3) MA	gamma-BHC (Linda	10.57	10.21	407952	1304663	15.737m	17.662m
4) MA	Heptachlor	12.03	11.57	570350	1252792	16.957m	17.291
9) A	Endosulfan I	15.63	15.10	495331	1129131	17.807m	17.751m
13) MA	Dieldrin	16.22	15.78	956898	2405662	35.160m	35.914m
14) MA	Endrin	16.81	16.52	534393	1540157	36.287m	36.574m
16) A	4,4-DDD	16.87	16.72	712957	1565109	34.784m	36.358
17) MA	4,4-DDT	17.54	17.45	646949	1414897	35.648m	36.017
20) A	Methoxychlor	18.59	18.97	2061738	3668786	178.598	179.444
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

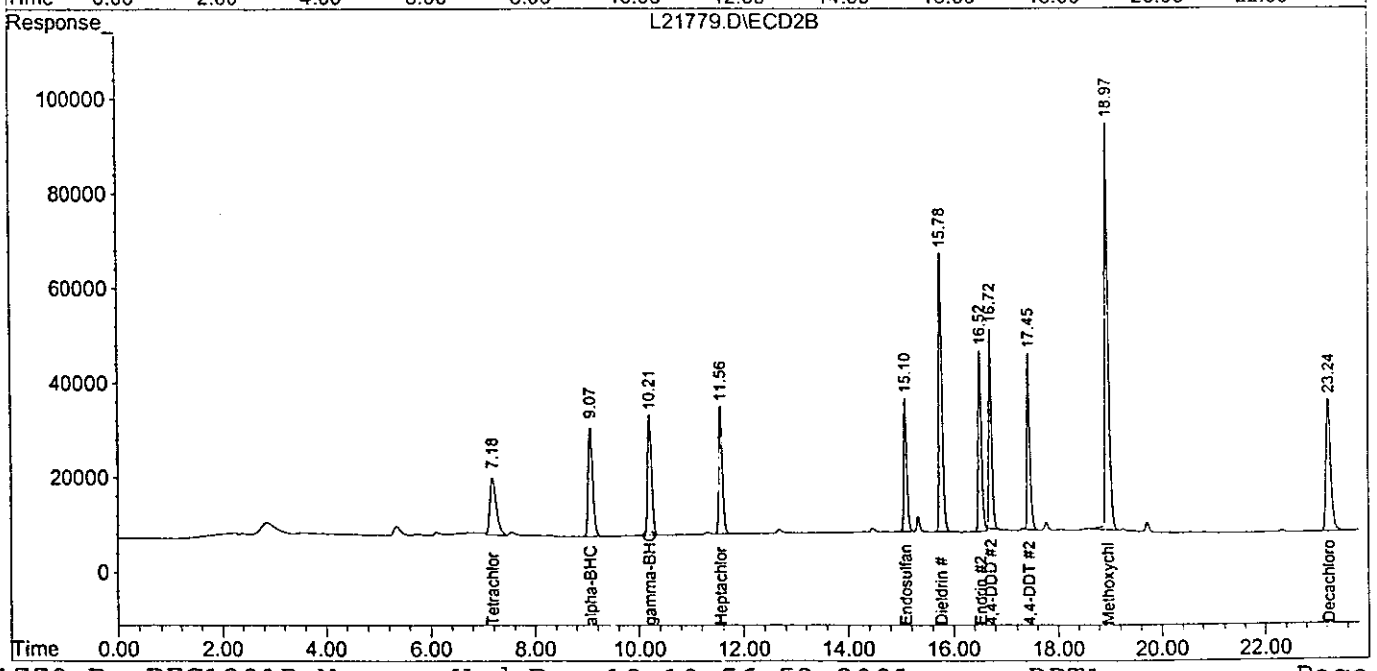
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21779.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\L\DEC1201\L21779.D\ECD2B.CH
Acq On : 13 Dec 2001 7:08 Operator: AK
Sample : INDAM Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 10:25 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1201\L21780.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\L\DEC1201\L21780.D\ECD2B.CH
Acq On : 13 Dec 2001 7:35 Operator: AK
Sample : INDBM Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 10:29 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

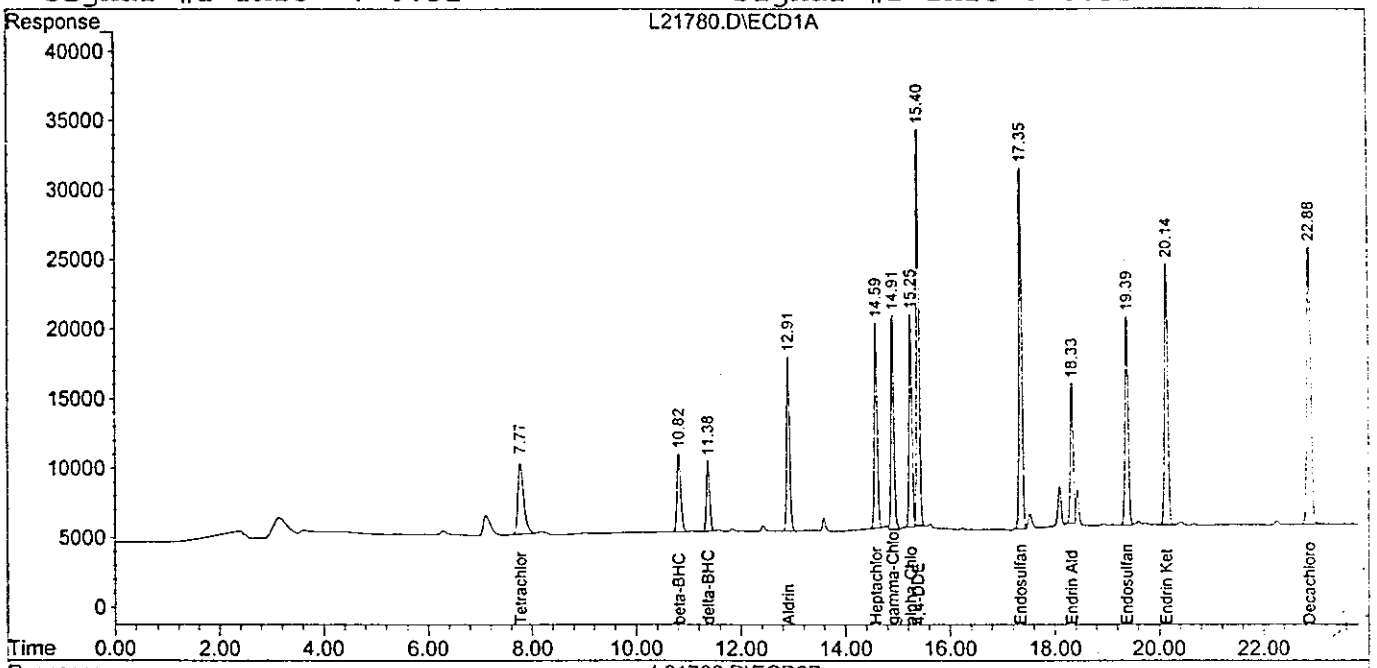
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	7.77	7.17	403030	985975	18.129m	21.529
	Spiked Amount 20.000 Range 30 - 150 Recovery =					90.65%	107.65%
22) S	Decachlorobiphen	22.88	23.24	1048819	1860450	36.889	37.338
	Spiked Amount 20.000 Range 30 - 150 Recovery =					184.45%#	186.69%#
	Target Compounds						
5) MB	Aldrin	12.91	12.51	492596	1340853	17.280m	18.230m
6) B	beta-BHC	10.82	10.45	284957	718790	18.349m	19.293m
7) B	delta-BHC	11.38	11.35	215908	769551	14.964	17.146
8) B	Heptachlor Epoxi	14.59	14.08	546974	1323966	17.832m	18.845
10) A	gamma-Chlordane	14.91	14.57	575359	1306311	18.846m	18.779
11) A	alpha-Chlordane	15.25	14.94	557845	1304733	17.007m	22.072m#
12) B	4,4-DDE	15.40	15.34	928144	2376004	37.274m	36.043
15) B	Endosulfan II	17.35	17.01	953866	2141906	38.001m	38.491
18) B	Endrin Aldehyde	18.33	17.79	378292	853268	20.342m	20.990
19) B	Endosulfan Sulfa	19.39	18.40	609400	1271641	36.834m	36.825
21) B	Endrin Ketone	20.14	19.73	807909	1784335	35.604m	36.187m
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

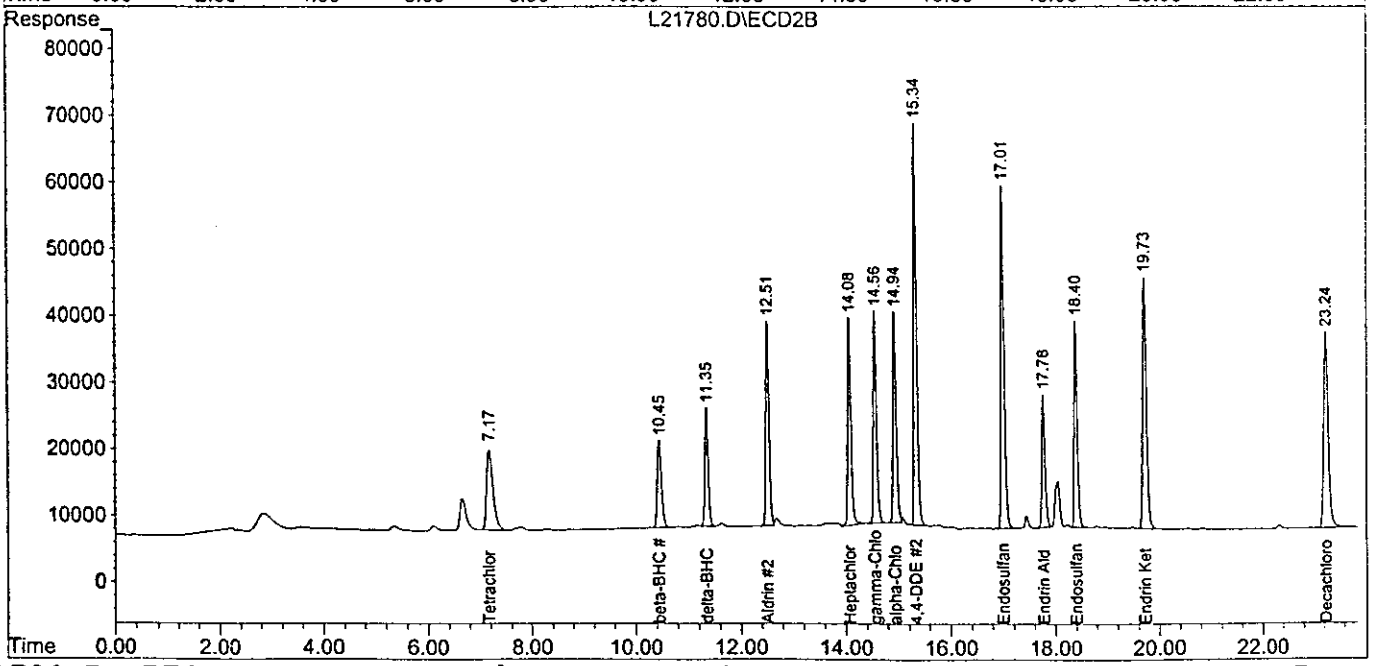
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\L\DEC1201\L21780.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\L\DEC1201\L21780.D\ECD2B.CH
Acq On : 13 Dec 2001 7:35 Operator: AK
Sample : INDBM Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 10:29 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





PESTICIDES INITIAL CALIBRATION VERIFICATION STANDARD

Lab Name: GPL Laboratories
Lab Code: GPL

EPA Sample No.: CVS GP Lab ID: INDAM/INDBM- L21779/21780

FRONT COLUMN - RTx-CLP

COMPOUND	STD AMOUNT (ug/L)	CVS CONCENTRATION (ug/L)	CVS % REC .		QC LIMITS REC .
alpha-BHC	0.20	0.15	74	*	85-115
gamma-BHC (Lindane)	0.20	0.16	79	*	85-115
Heptachlor	0.20	0.17	85		85-115
Aldrin	0.20	0.17	86		85-115
beta-BHC	0.20	0.18	92		85-115
delta-BHC	0.20	0.15	75	*	85-115
Heptachlor Epoxide	0.20	0.18	89		85-115
Endosulfan I	0.20	0.18	89		85-115
gamma-Chlordane	0.20	0.19	94		85-115
alpha-Chlordane	0.20	0.17	85		85-115
4,4'- DDE	0.40	0.37	93		85-115
Dieldrin	0.40	0.35	88		85-115
Endrin	0.40	0.36	91		85-115
Endosulfan II	0.40	0.38	95		85-115
4,4'- DDD	0.40	0.35	87		85-115
4,4'- DDT	0.40	0.36	89		85-115
Endrin Aldehyde	0.40	0.20	51	*	85-115
Endosulfan Sulfate	0.40	0.37	92		85-115
Methoxychlor	2.00	1.79	89		85-115
Endrin Ketone	0.40	0.36	89		85-115

REAR COLUMN - RTx-CLP2

COMPOUND	STD AMOUNT (ug/L)	CVS CONCENTRATION (ug/L)	CVS % REC .	QC LIMITS REC .
alpha-BHC	0.20	0.17	86	85-115
gamma-BHC (Lindane)	0.20	0.18	88	85-115
Heptachlor	0.20	0.17	86	85-115
Aldrin	0.20	0.18	91	85-115
beta-BHC	0.20	0.19	96	85-115
delta-BHC	0.20	0.17	86	85-115
Heptachlor Epoxide	0.20	0.19	94	85-115
Endosulfan I	0.20	0.18	89	85-115
gamma-Chlordane	0.20	0.19	94	85-115
alpha-Chlordane	0.20	0.22	110	85-115
4,4'- DDE	0.40	0.36	90	85-115
Dieldrin	0.40	0.36	90	85-115
Endrin	0.40	0.37	91	85-115
Endosulfan II	0.40	0.38	96	85-115
4,4'- DDD	0.40	0.36	91	85-115
4,4'- DDT	0.40	0.36	90	85-115
Endrin Aldehyde	0.40	0.21	52 *	85-115
Endosulfan Sulfate	0.40	0.37	92	85-115
Methoxychlor	2.00	1.79	90	85-115
Endrin Ketone	0.40	0.36	90	85-115

% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**26.10**	**22.94**
DDT	**4.04**	**8.12**

	RAW RESPONSE	
ENDRIN KETONE	108387.00	240591.00
ENDRIN ALDEHYDE	136380.00	312688.00
ENDRIN	693217.00	1858954.00

DDE	34410.00	89850.00
DDD	0.00	86820.00
DDT	817857.00	1999378.00

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21931.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\L\DEC1801\L21931.D\ECD2B.CH
Acq On : 18 Dec 2001 15:57 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 17:11 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.78	7.16	493264	1274775	22.188	27.835m#
Spiked Amount 20.000 Range 30 - 150 Recovery =					110.94%	139.18%
22) S Decachlorobiphen	22.89	23.24	428222	750489	15.061m	15.062
Spiked Amount 20.000 Range 30 - 150 Recovery =					75.31%	75.31%
Target Compounds						
12) B 4,4-DDE	15.41	15.34	34410	89850	1.382	1.363m
14) MA Endrin	16.81	16.52	693217	1858954	47.071	44.144m
16) A 4,4-DDD	0.00	16.72	0	86820	N.D. d	2.017 #
17) MA 4,4-DDT	17.54	17.45	817857	1999378	45.066m	50.895
18) B Endrin Aldehyde	18.33	17.79	136380	312688	7.334m	7.692
21) B Endrin Ketone	20.15	19.73	108387	240591	4.777	4.879m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

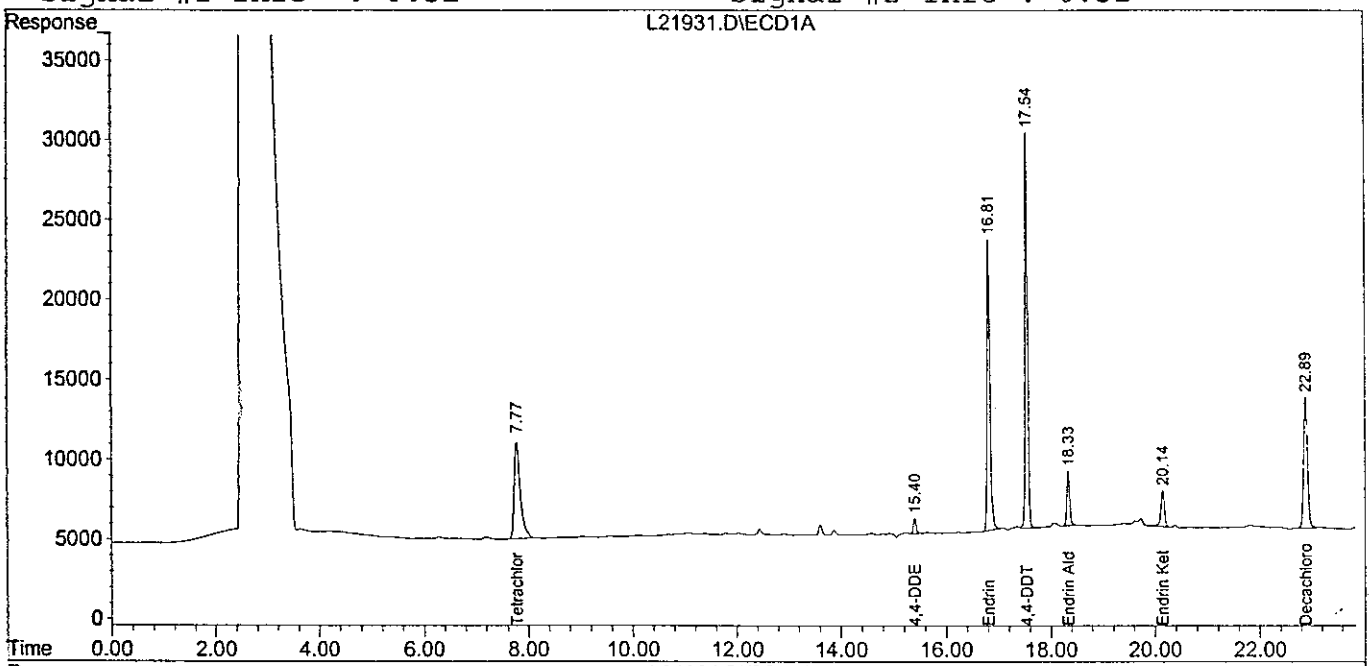
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

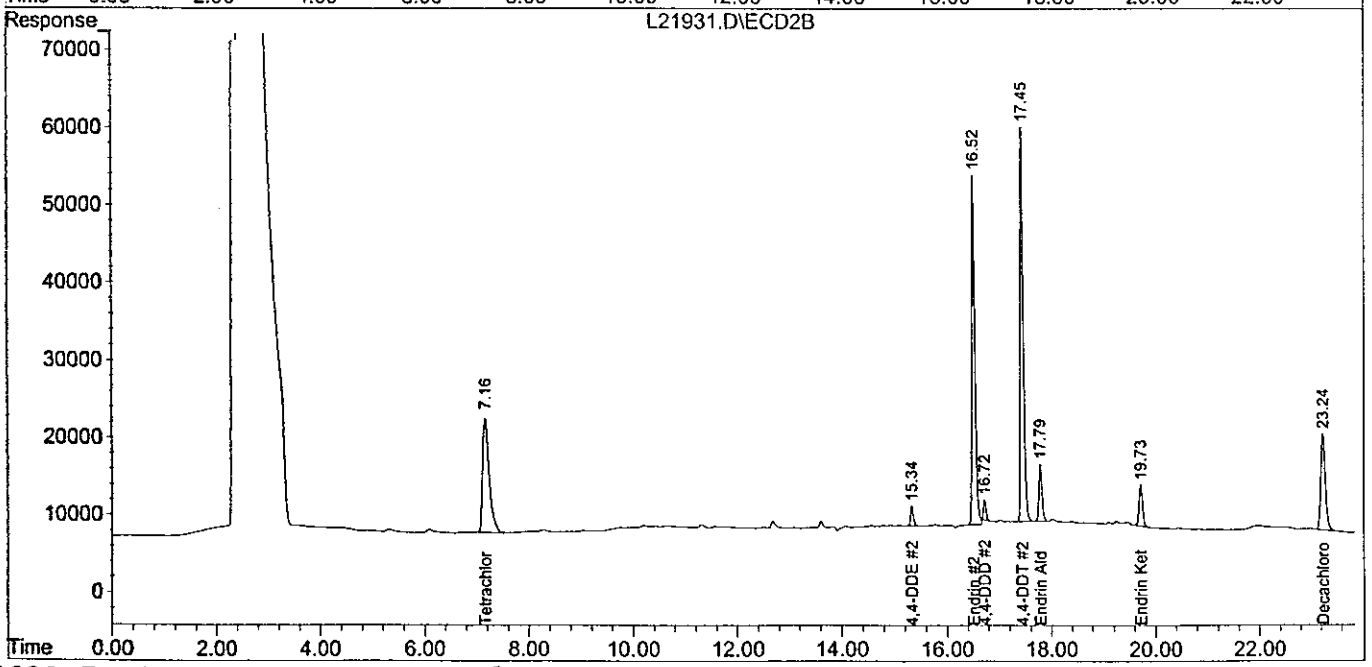
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1801\L21931.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\L\DEC1801\L21931.D\ECD2B.CH
Acq On : 18 Dec 2001 15:57 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 18 17:11 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\DEC1801\L21932.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\DEC1801\L21932.D\ECD2B.CH
Acq On : 18 Dec 2001 16:25 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 09:53:58 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	22.232	20.852 E3	6.2	0#	-0.01
2	A	alpha-BHC	25.391	27.107 E3	-6.8	0#	0.00
3	MA	gamma-BHC (Lindane)	25.923	27.650 E3	-6.7	0#	0.00
4	MA	Heptachlor	33.635	30.124 E3	10.4	0#	0.00
5	MB	Aldrin	28.507	28.863 E3	-1.2	0#	0.00
6	B	beta-BHC	15.530	15.721 E3	-1.2	0#	0.00
7	B	delta-BHC	14.429	19.430 E3	-34.7#	0#	0.00
8	B	Heptachlor Epoxide	30.673	30.225 E3	1.5	0#	0.00
9	A	Endosulfan I	27.816	27.741 E3	0.3	0#	0.00
10	A	gamma-Chlordane	30.530	30.035 E3	1.6	0#	0.00
11	A	alpha-Chlordane	32.801	32.926 E3	-0.4	0#	0.00
12	B	4,4-DDE	24.900	25.083 E3	-0.7	0#	0.00
13	MA	Dieldrin	27.216	27.127 E3	0.3	0#	0.00
14	MA	Endrin	14.727	12.439 E3	15.5#	0#	0.00
15	B	Endosulfan II	25.101	25.107 E3	-0.0	0#	0.00
16	A	4,4-DDD	20.497	19.824 E3	3.3	0#	0.00
17	MA	4,4-DDT	18.148	17.363 E3	4.3	0#	0.00
18	B	Endrin Aldehyde	18.596	19.783 E3	-6.4	0#	0.00
19	B	Endosulfan Sulfate	16.545	18.343 E3	-10.9	0#	0.00
20	A	Methoxychlor	11.544	10.074 E3	12.7	0#	0.00
21	B	Endrin Ketone	22.691	25.222 E3	-11.2	0#	0.00
22	S	Decachlorobiphenyl	28.432	27.083 E3	4.7	0#	0.00
		Signal #2					
1	S	Tetrachloro-m-xylene	45.797	49.687 E3	-8.5	0#	-0.01
2	A	alpha-BHC	77.655	89.902 E3	-15.8#	0#	0.00
3	MA	gamma-BHC (Lindane)	73.867	82.944 E3	-12.3	0#	0.00
4	MA	Heptachlor	72.453	74.969 E3	-3.5	0#	0.00
5	MB	Aldrin	73.550	78.005 E3	-6.1	0#	0.00
6	B	beta-BHC	37.257	38.543 E3	-3.5	0#	0.00
7	B	delta-BHC	44.883	62.333 E3	-38.9#	0#	0.00
8	B	Heptachlor Epoxide	70.257	73.647 E3	-4.8	0#	0.00
9	A	Endosulfan I	63.611	67.269 E3	-5.8	0#	0.00
10	A	gamma-Chlordane	69.563	72.662 E3	-4.5	0#	0.00
11	A	alpha-Chlordane	59.112	59.653 E3	-0.9	0#	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\DEC1801\L21932.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\DEC1801\L21932.D\ECD2B.CH
Acq On : 18 Dec 2001 16:25 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 09:53:58 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
12	B	4,4-DDE	65.922	67.113 E3	-1.8	0#	0.00
13	MA	Dieldrin	66.983	69.962 E3	-4.4	0#	0.00
14	MA	Endrin	42.111	35.470 E3	15.8#	0#	0.00
15	B	Endosulfan II	55.647	58.789 E3	-5.6	0#	0.00
16	A	4,4-DDD	43.047	45.774 E3	-6.3	0#	0.00
17	MA	4,4-DDT	39.284	42.390 E3	-7.9	0#	0.00
18	B	Endrin Aldehyde	40.652	45.805 E3	-12.7	0#	0.00
19	B	Endosulfan Sulfate	34.532	40.809 E3	-18.2#	0#	0.00
20	A	Methoxychlor	20.445	20.420 E3	0.1	0#	0.00
21	B	Endrin Ketone	49.309	58.706 E3	-19.1#	0#	0.00
22	S	Decachlorobiphenyl	49.827	50.439 E3	-1.2	0#	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21932.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\DEC1801\L21932.D\ECD2B.CH
Acq On : 18 Dec 2001 16:25 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 8:27 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.77	7.16	521296	1242166	23.448m	27.123
Spiked Amount 20.000 Range 30 - 150 Recovery =					117.24%	135.62%
2) S Decachlorobiphen	22.88	23.24	677084	1260979	23.814	25.307
Spiked Amount 20.000 Range 30 - 150 Recovery =					119.07%	126.54%
Target Compounds						
2) A alpha-BHC	9.55	9.06	1355340	4495082	53.378	57.885m
3) MA gamma-BHC (Linda	10.56	10.20	1382512	4147184	53.331	56.144m
4) MA Heptachlor	12.02	11.56	1506204	3748459	44.781	51.736m
5) MB Aldrin	12.91	12.51	1443125	3900264	50.623	53.029m
6) B beta-BHC	10.82	10.44	786062	1927126	50.616	51.725
7) B delta-BHC	11.38	11.35	971489	3116660	67.330	69.439
8) B Heptachlor Epoxi	14.58	14.08	1511248	3682359	49.269m	52.413
9) A Endosulfan I	15.62	15.09	1387032	3363432	49.864	52.875m
10) A gamma-Chlordane	14.91	14.56	1501757	3633101	49.190	52.228
11) A alpha-Chlordane	15.24	14.94	1646321	2982651	50.191m	50.457m
12) B 4,4-DDE	15.39	15.34	1254155	3355645	50.367m	50.903m
13) MA Dieldrin	16.22	15.77	1356354	3498102	49.838	52.224
14) MA Endrin	16.80	16.52	621966	1773508	42.233m	42.115m
15) B Endosulfan II	17.34	17.01	1255330	2939453	50.011m	52.823
16) A 4,4-DDD	16.87	16.72	991207	2288705	48.359m	53.167m
17) MA 4,4-DDT	17.53	17.44	868154	2119513	47.837m	53.954
18) B Endrin Aldehyde	18.32	17.78	989143	2290234	53.190m	56.338
19) B Endosulfan Sulfa	19.38	18.40	917131	2040467	55.434m	59.090m
20) A Methoxychlor	18.59	18.96	503685	1021002	43.632	49.938
21) B Endrin Ketone	20.14	19.73	1261090	2935280	55.576m	59.528m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

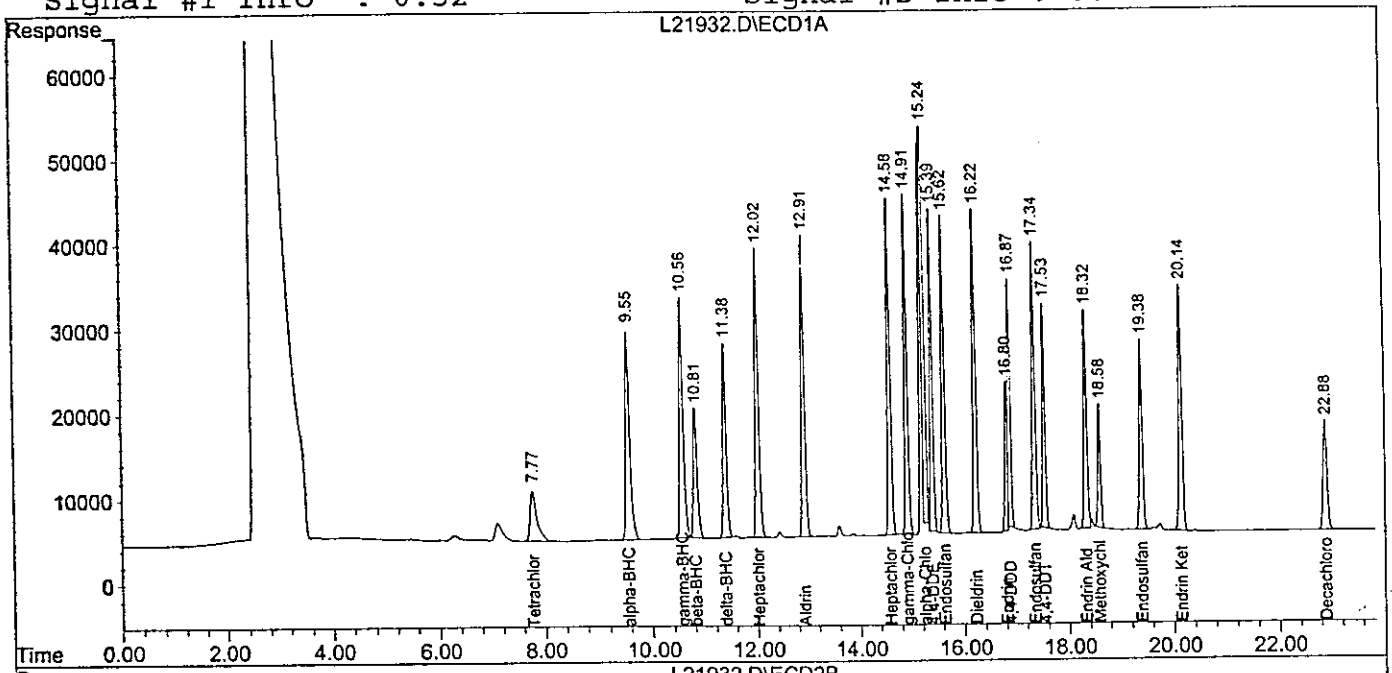
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

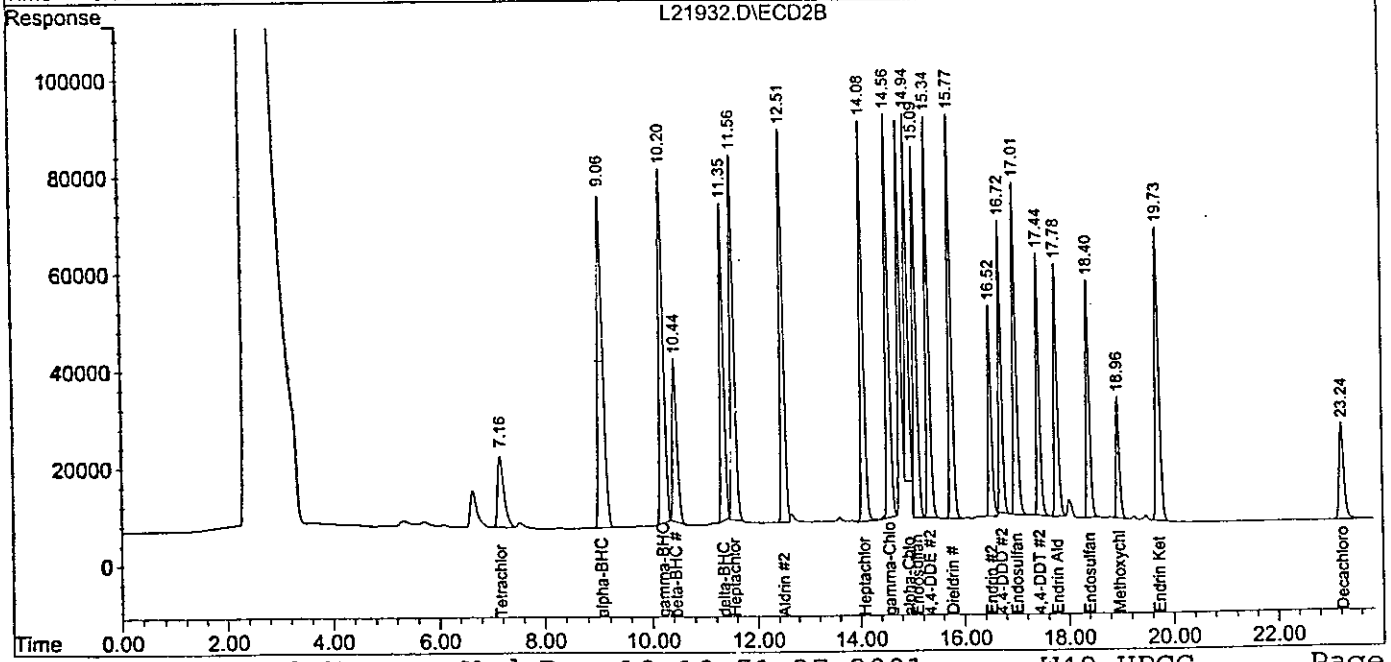
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1801\L21932.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\L\DEC1801\L21932.D\ECD2B.CH
Acq On : 18 Dec 2001 16:25 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 8:27 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\DEC1801\L21943.D\ECD1A.CH Vial: 18
Signal #2 : H:\GCDATA\L\DEC1801\L21943.D\ECD2B.CH
Acq On : 18 Dec 2001 21:31 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 09:53:58 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	22.232	20.452 E3	8.0	0#	-0.01
2	A	alpha-BHC	25.391	26.331 E3	-3.7	0#	0.00
3	MA	gamma-BHC (Lindane)	25.923	27.173 E3	-4.8	0#	0.00
4	MA	Heptachlor	33.635	29.378 E3	12.7	0#	0.00
5	MB	Aldrin	28.507	28.354 E3	0.5	0#	0.00
6	B	beta-BHC	15.530	15.436 E3	0.6	0#	-0.01
7	B	delta-BHC	14.429	19.355 E3	-34.1#	0#	0.00
8	B	Heptachlor Epoxide	30.673	29.975 E3	2.3	0#	0.00
9	A	Endosulfan I	27.816	27.425 E3	1.4	0#	0.00
10	A	gamma-Chlordane	30.530	29.667 E3	2.8	0#	0.00
11	A	alpha-Chlordane	32.801	33.022 E3	-0.7	0#	0.00
12	B	4,4-DDE	24.900	24.945 E3	-0.2	0#	0.00
13	MA	Dieldrin	27.216	27.088 E3	0.5	0#	0.00
14	MA	Endrin	14.727	12.944 E3	12.1	0#	0.00
15	B	Endosulfan II	25.101	24.938 E3	0.6	0#	0.00
16	A	4,4-DDD	20.497	19.865 E3	3.1	0#	0.00
17	MA	4,4-DDT	18.148	17.359 E3	4.3	0#	0.00
18	B	Endrin Aldehyde	18.596	19.633 E3	-5.6	0#	0.00
19	B	Endosulfan Sulfate	16.545	18.661 E3	-12.8	0#	0.00
20	A	Methoxychlor	11.544	10.456 E3	9.4	0#	0.00
21	B	Endrin Ketone	22.691	25.368 E3	-11.8	0#	0.00
22	S	Decachlorobiphenyl	28.432	28.668 E3	-0.8	0#	0.00

Signal #2

1	S	Tetrachloro-m-xylene	45.797	48.121 E3	-5.1	0#	-0.01
2	A	alpha-BHC	77.655	86.807 E3	-11.8	0#	0.00
3	MA	gamma-BHC (Lindane)	73.867	81.786 E3	-10.7	0#	0.00
4	MA	Heptachlor	72.453	73.683 E3	-1.7	0#	0.00
5	MB	Aldrin	73.550	76.167 E3	-3.6	0#	0.00
6	B	beta-BHC	37.257	37.325 E3	-0.2	0#	0.00
7	B	delta-BHC	44.883	60.966 E3	-35.8#	0#	0.00
8	B	Heptachlor Epoxide	70.257	71.702 E3	-2.1	0#	0.00
9	A	Endosulfan I	63.611	66.012 E3	-3.8	0#	0.00
10	A	gamma-Chlordane	69.563	70.726 E3	-1.7	0#	0.00
11	A	alpha-Chlordane	59.112	58.932 E3	0.3	0#	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\DEC1801\L21943.D\ECD1A.CH Vial: 18
Signal #2 : H:\GCDATA\L\DEC1801\L21943.D\ECD2B.CH
Acq On : 18 Dec 2001 21:31 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 09:53:58 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
12	B	4,4-DDE	65.922	66.214 E3	-0.4	0#	0.00
13	MA	Dieldrin	66.983	68.840 E3	-2.8	0#	0.00
14	MA	Endrin	42.111	36.601 E3	13.1	0#	0.00
15	B	Endosulfan II	55.647	58.113 E3	-4.4	0#	0.00
16	A	4,4-DDD	43.047	44.817 E3	-4.1	0#	0.00
17	MA	4,4-DDT	39.284	42.654 E3	-8.6	0#	0.00
18	B	Endrin Aldehyde	40.652	44.918 E3	-10.5	0#	0.00
19	B	Endosulfan Sulfate	34.532	41.147 E3	-19.2#	0#	0.00
20	A	Methoxychlor	20.445	21.174 E3	-3.6	0#	0.00
21	B	Endrin Ketone	49.309	58.432 E3	-18.5#	0#	0.00
22	S	Decachlorobiphenyl	49.827	52.651 E3	-5.7	0#	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21943.D\ECD1A.CH Vial: 18
Signal #2 : H:\GCDATA\L\DEC1801\L21943.D\ECD2B.CH
Acq On : 18 Dec 2001 21:31 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 8:34 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
1) S	Tetrachloro-m-xy	7.76	7.16	511304	1203031	22.999	26.269
Spiked Amount	20.000 Range 30 - 150 Recovery =					115.00%	131.35%
2) S	Decachlorobiphen	22.88	23.23	716697	1316281	25.208	26.417
Spiked Amount	20.000 Range 30 - 150 Recovery =					126.04%	132.09%
	Target Compounds						
2) A	alpha-BHC	9.55	9.06	1316549	4340346	51.851	55.893m
3) MA	gamma-BHC (Linda	10.56	10.20	1358664	4089280	52.411	55.360m
4) MA	Heptachlor	12.02	11.55	1468907	3684150	43.672	50.849m
5) MB	Aldrin	12.91	12.50	1417683	3808326	49.730	51.779m
6) B	beta-BHC	10.81	10.44	771797	1866239	49.698	50.091
7) B	delta-BHC	11.38	11.35	967731	3048291	67.070	67.916
8) B	Heptachlor Epoxi	14.58	14.07	1498773	3585081	48.862m	51.028m
9) A	Endosulfan I	15.62	15.09	1371262	3300598	49.297	51.887m
.0) A	gamma-Chlordane	14.91	14.56	1483330	3536295	48.587	50.836m
.1) A	alpha-Chlordane	15.24	14.93	1651092	2946606	50.337m	49.847m
.2) B	4,4-DDE	15.39	15.33	1247246	3310717	50.089m	50.222m
.3) MA	Dieldrin	16.22	15.77	1354381	3441989	49.765	51.386m
.4) MA	Endrin	16.80	16.51	647205	1830054	43.947m	43.458m
.5) B	Endosulfan II	17.34	17.00	1246914	2905655	49.675	52.215m
.6) A	4,4-DDD	16.87	16.72	993260	2240862	48.459m	52.056
.7) MA	4,4-DDT	17.53	17.44	867945	2132712	47.825m	54.290
.8) B	Endrin Aldehyde	18.32	17.78	981670	2245884	52.788m	55.247
.9) B	Endosulfan Sulfa	19.38	18.40	933068	2057348	56.397m	59.579m
20) A	Methoxychlor	18.58	18.96	522813	1058704	45.289	51.782
21) B	Endrin Ketone	20.13	19.72	1268419	2921610	55.899m	59.251m
	Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene						0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane						0.000	0.000

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

011073

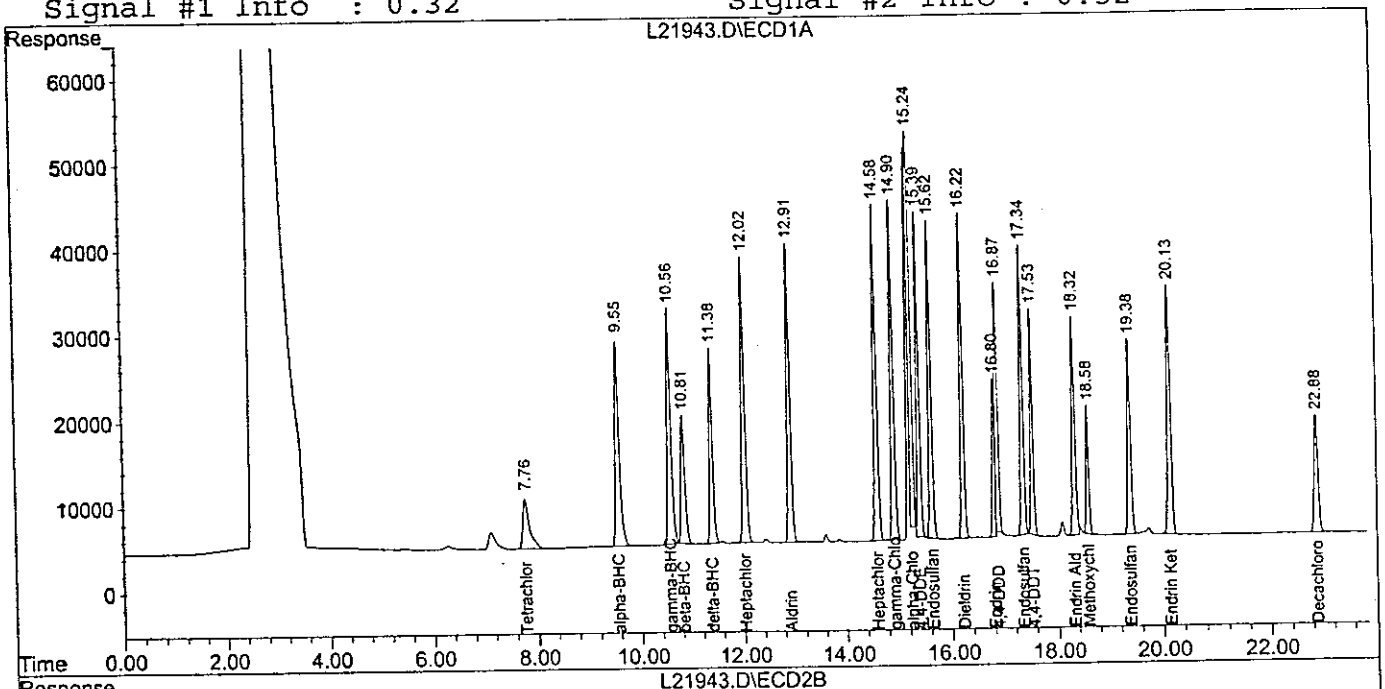
Quantitation Report

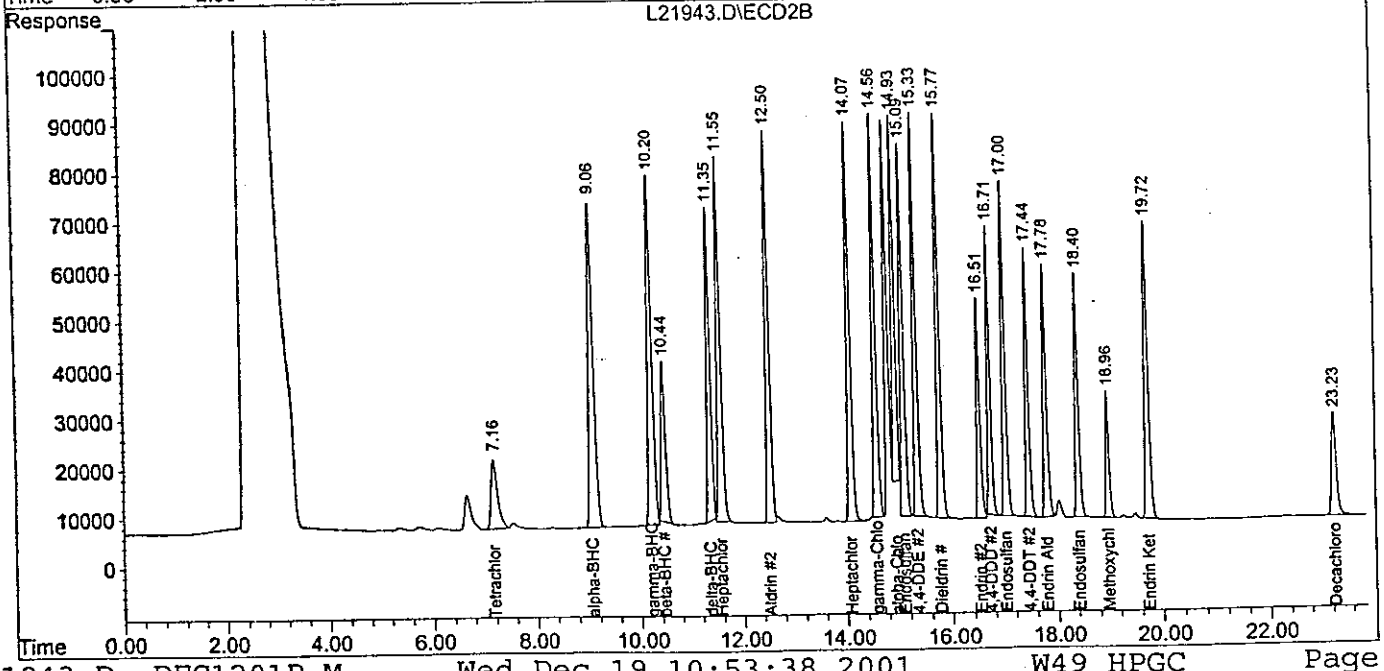
Signal #1 : H:\GCDATA\L\DEC1801\L21943.D\ECD1A.CH
Signal #2 : H:\GCDATA\L\DEC1801\L21943.D\ECD2B.CH
Acq On : 18 Dec 2001 21:31
Sample : PEST-4
Misc : 8081A-STD.
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 8:34 2001 Quant Results File: DEC1201P.RES

Vial: 18
Operator: PY
Inst : GC-L
Multiplr: 1.00

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP
Signal #1 Info : 0.32
Signal #2 Phase: RTx-CLP2
Signal #2 Info : 0.32





% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**21.98**	**20.76**
DDT	**3.47**	**8.32**

	RAW RESPONSE	
ENDRIN KETONE	84258.00	199969.00
ENDRIN ALDEHYDE	114279.00	264249.00
ENDRIN	704693.00	1771757.00

DDE	28010.00	74947.00
DDD	0.00	89487.00
DDT	779272.00	1812421.00

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21951.D\ECD1A.CH Vial: 26
Signal #2 : H:\GCDATA\L\DEC1801\L21951.D\ECD2B.CH
Acq On : 19 Dec 2001 1:13 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 8:58 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.77	7.17	492778	1255415	22.166	27.413
Spiked Amount 20.000 Range 30 - 150 Recovery =					110.83%	137.07%
22) S Decachlorobiphen	22.88	23.23	387934	690266	13.644m	13.853
Spiked Amount 20.000 Range 30 - 150 Recovery =					68.22%	69.27%
Target Compounds						
12) B 4,4-DDE	15.40	15.34	28010	74947	1.125m	1.137m
14) MA Endrin	16.80	16.51	704693	1771757	47.850m	42.074m
16) A 4,4-DDD	0.00	16.72	0	89487	N.D. d	2.079m#
17) MA 4,4-DDT	17.53	17.44	779272	1812421	42.939	46.136
18) B Endrin Aldehyde	18.33	17.78	114279	264249	6.145m	6.500m
21) B Endrin Ketone	20.14	19.72	84258	199969	3.713m	4.055m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

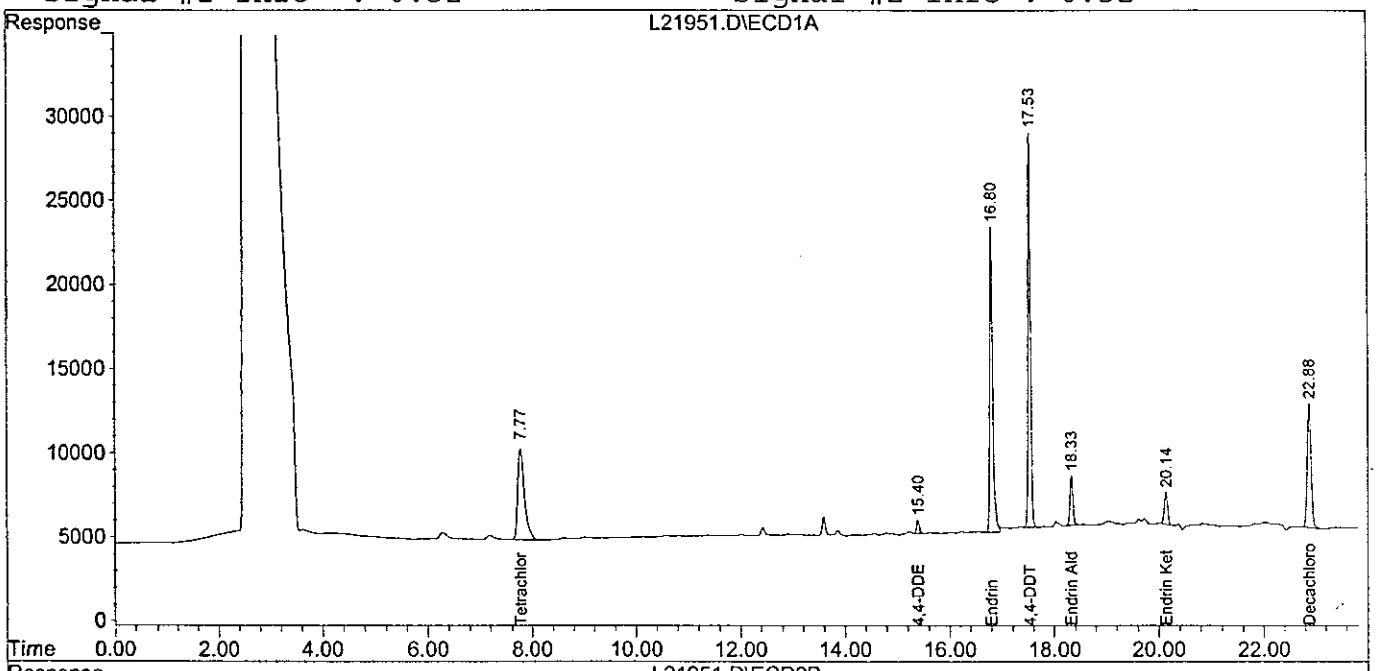
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

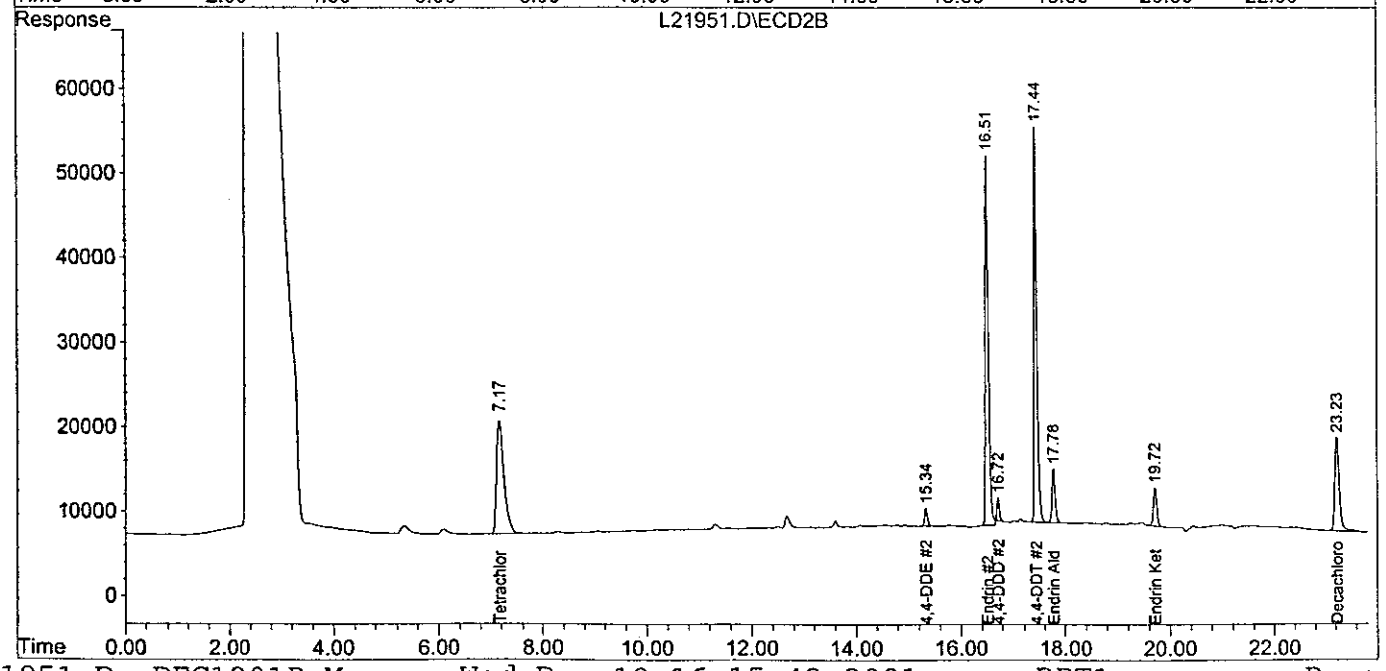
Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1801\L21951.D\ECD1A.CH Vial: 26
Signal #2 : H:\GCDATA\L\DEC1801\L21951.D\ECD2B.CH
Acq On : 19 Dec 2001 1:13 Operator: PY
Sample : EVAL MIX Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 8:58 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001077

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\DEC1801\L21952.D\ECD1A.CH Vial: 27
Signal #2 : H:\GCDATA\L\DEC1801\L21952.D\ECD2B.CH
Acq On : 19 Dec 2001 1:41 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 09:53:58 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	22.232	21.047 E3	5.3	0#	-0.01
2	A	alpha-BHC	25.391	27.893 E3	-9.9	0#	0.00
3	MA	gamma-BHC (Lindane)	25.923	28.543 E3	-10.1	0#	-0.01
4	MA	Heptachlor	33.635	31.160 E3	7.4	0#	0.00
5	MB	Aldrin	28.507	29.275 E3	-2.7	0#	0.00
6	B	beta-BHC	15.530	16.194 E3	-4.3	0#	0.00
7	B	delta-BHC	14.429	20.728 E3	-43.7#	0#	0.00
8	B	Heptachlor Epoxide	30.673	30.895 E3	-0.7	0#	0.00
9	A	Endosulfan I	27.816	28.255 E3	-1.6	0#	0.00
10	A	gamma-Chlordane	30.530	30.586 E3	-0.2	0#	0.00
11	A	alpha-Chlordane	32.801	32.759 E3	0.1	0#	0.00
12	B	4,4-DDE	24.900	25.803 E3	-3.6	0#	0.00
13	MA	Dieldrin	27.216	27.781 E3	-2.1	0#	0.00
14	MA	Endrin	14.727	13.226 E3	10.2	0#	0.00
15	B	Endosulfan II	25.101	25.679 E3	-2.3	0#	0.00
16	A	4,4-DDD	20.497	20.730 E3	-1.1	0#	0.00
17	MA	4,4-DDT	18.148	18.408 E3	-1.4	0#	0.00
18	B	Endrin Aldehyde	18.596	19.656 E3	-5.7	0#	0.00
19	B	Endosulfan Sulfate	16.545	18.758 E3	-13.4	0#	0.00
20	A	Methoxychlor	11.544	11.092 E3	3.9	0#	0.00
21	B	Endrin Ketone	22.691	26.092 E3	-15.0	0#	0.00
22	S	Decachlorobiphenyl	28.432	28.959 E3	-1.9	0#	0.00

Signal #2

1	S	Tetrachloro-m-xylene	45.797	49.400 E3	-7.9	0#	-0.01
2	A	alpha-BHC	77.655	90.251 E3	-16.2#	0#	0.00
3	MA	gamma-BHC (Lindane)	73.867	83.942 E3	-13.6	0#	0.00
4	MA	Heptachlor	72.453	65.792 E3	9.2	0#	-0.01
5	MB	Aldrin	73.550	77.812 E3	-5.8	0#	0.00
6	B	beta-BHC	37.257	38.543 E3	-3.5	0#	0.00
7	B	delta-BHC	44.883	64.808 E3	-44.4#	0#	0.00
8	B	Heptachlor Epoxide	70.257	72.648 E3	-3.4	0#	0.00
9	A	Endosulfan I	63.611	65.689 E3	-3.3	0#	0.00
10	A	gamma-Chlordane	69.563	71.693 E3	-3.1	0#	0.00
11	A	alpha-Chlordane	59.112	60.405 E3	-2.2	0#	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\L\DEC1801\L21952.D\ECD1A.CH
Signal #2 : H:\GCDATA\L\DEC1801\L21952.D\ECD2B.CH
Acq On : 19 Dec 2001 1:41
Sample : PEST-4
Misc : 8081A-STD.
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Vial: 27
Operator: PY
Inst : GC-L
Multiplr: 1.00

Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 09:53:58 2001
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
12	B	4,4-DDE	65.922	68.302 E3	-3.6	0#	0.00
13	MA	Dieldrin	66.983	69.897 E3	-4.4	0#	0.00
14	MA	Endrin	42.111	37.941 E3	9.9	0#	0.00
15	B	Endosulfan II	55.647	58.879 E3	-5.8	0#	0.00
16	A	4,4-DDD	43.047	46.953 E3	-9.1	0#	0.00
17	MA	4,4-DDT	39.284	42.580 E3	-8.4	0#	0.00
18	B	Endrin Aldehyde	40.652	44.081 E3	-8.4	0#	0.00
19	B	Endosulfan Sulfate	34.532	41.510 E3	-20.2#	0#	0.00
20	A	Methoxychlor	20.445	20.240 E3	1.0	0#	0.00
21	B	Endrin Ketone	49.309	58.865 E3	-19.4#	0#	0.00
22	S	Decachlorobiphenyl	49.827	50.020 E3	-0.4	0#	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\L\DEC1801\L21952.D\ECD1A.CH Vial: 27
Signal #2 : H:\GCDATA\L\DEC1801\L21952.D\ECD2B.CH
Acq On : 19 Dec 2001 1:41 Operator: PY
Sample : PEST-4 Inst : GC-L
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 8:40 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.76	7.16	526177	1235001	23.668	26.967
Spiked Amount 20.000 Range 30 - 150 Recovery =					118.34%	134.84%
2) S Decachlorobiphen	22.88	23.23	723976	1250489	25.464m	25.096m
Spiked Amount 20.000 Range 30 - 150 Recovery =					127.32%	125.48%
Target Compounds						
2) A alpha-BHC	9.55	9.06	1394637	4512530	54.926	58.110m
3) MA gamma-BHC (Linda	10.56	10.20	1427161	4197100	55.054m	56.820m
4) MA Heptachlor	12.02	11.55	1558007	3289586	46.321	45.403m
5) MB Aldrin	12.91	12.50	1463726	3890588	51.346	52.897m
6) B beta-BHC	10.81	10.44	809694	1927145	52.138	51.725
7) B delta-BHC	11.38	11.35	1036376	3240402	71.827	72.196
8) B Heptachlor Epoxi	14.58	14.08	1544747	3632407	50.361	51.702
9) A Endosulfan I	15.62	15.09	1412731	3284465	50.788	51.634m
0) A gamma-Chlordane	14.91	14.56	1529309	3584628	50.093	51.531m
1) A alpha-Chlordane	15.24	14.94	1637952	3020242	49.936m	51.093m
2) B 4,4-DDE	15.39	15.33	1290150	3415088	51.812m	51.805m
3) MA Dieldrin	16.22	15.77	1389068	3494847	51.040	52.175
4) MA Endrin	16.80	16.51	661284	1897060	44.903m	45.049m
5) B Endosulfan II	17.34	17.01	1283958	2943969	51.151	52.904
6) A 4,4-DDD	16.87	16.72	1036518	2347631	50.569m	54.536
7) MA 4,4-DDT	17.53	17.44	920396	2129022	50.716	54.196m
8) B Endrin Aldehyde	18.32	17.78	982804	2204064	52.849m	54.218
9) B Endosulfan Sulfa	19.38	18.40	937924	2075483	56.691	60.104m
0) A Methoxychlor	18.58	18.96	554593	1011993	48.042	49.498m
1) B Endrin Ketone	20.14	19.72	1304623	2943250	57.494m	59.690m
Sum Toxaphene			0	0	N.D.	N.D.
verage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
verage Chlordane					0.000	0.000

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

Quantitation Report

Signal #1 : H:\GCDATA\L\DEC1801\L21952.D\ECD1A.CH
Signal #2 : H:\GCDATA\L\DEC1801\L21952.D\ECD2B.CH
Acq On : 19 Dec 2001 1:41
Sample : PEST-4
Misc : 8081A-STD.

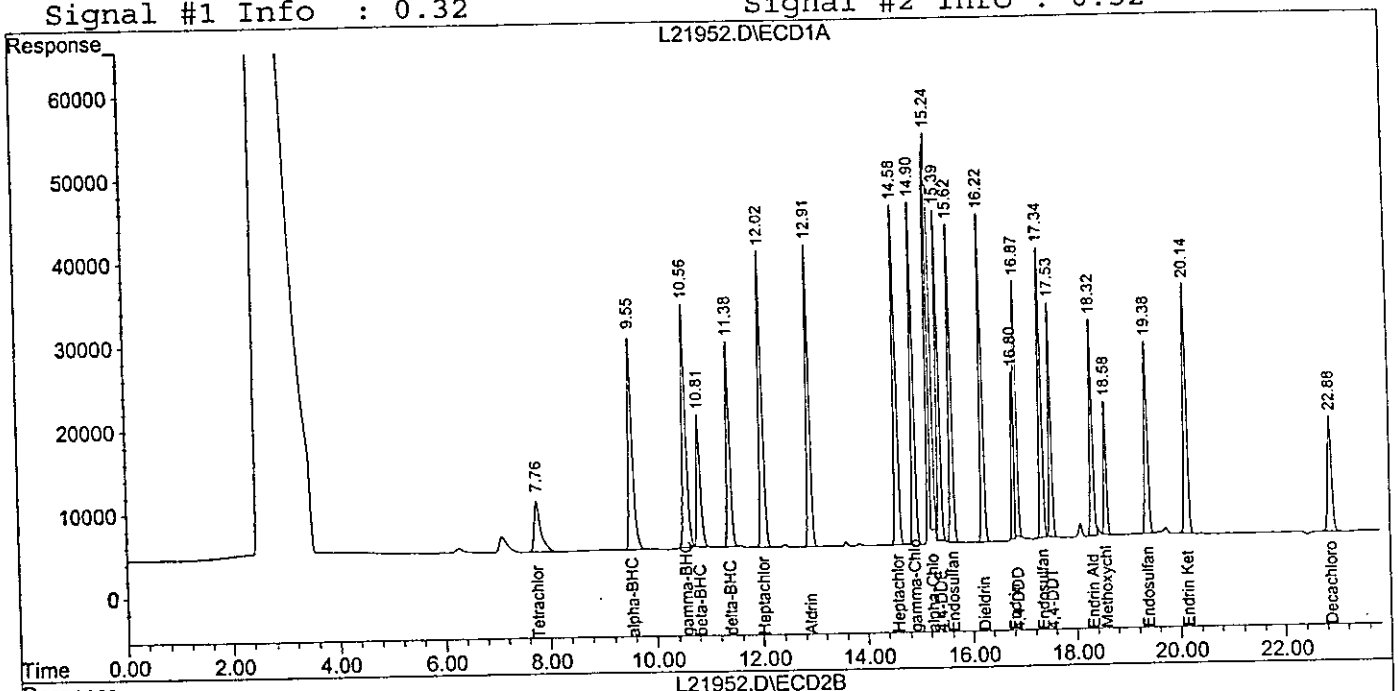
Vial: 27
Operator: PY
Inst : GC-L
Multiplr: 1.00

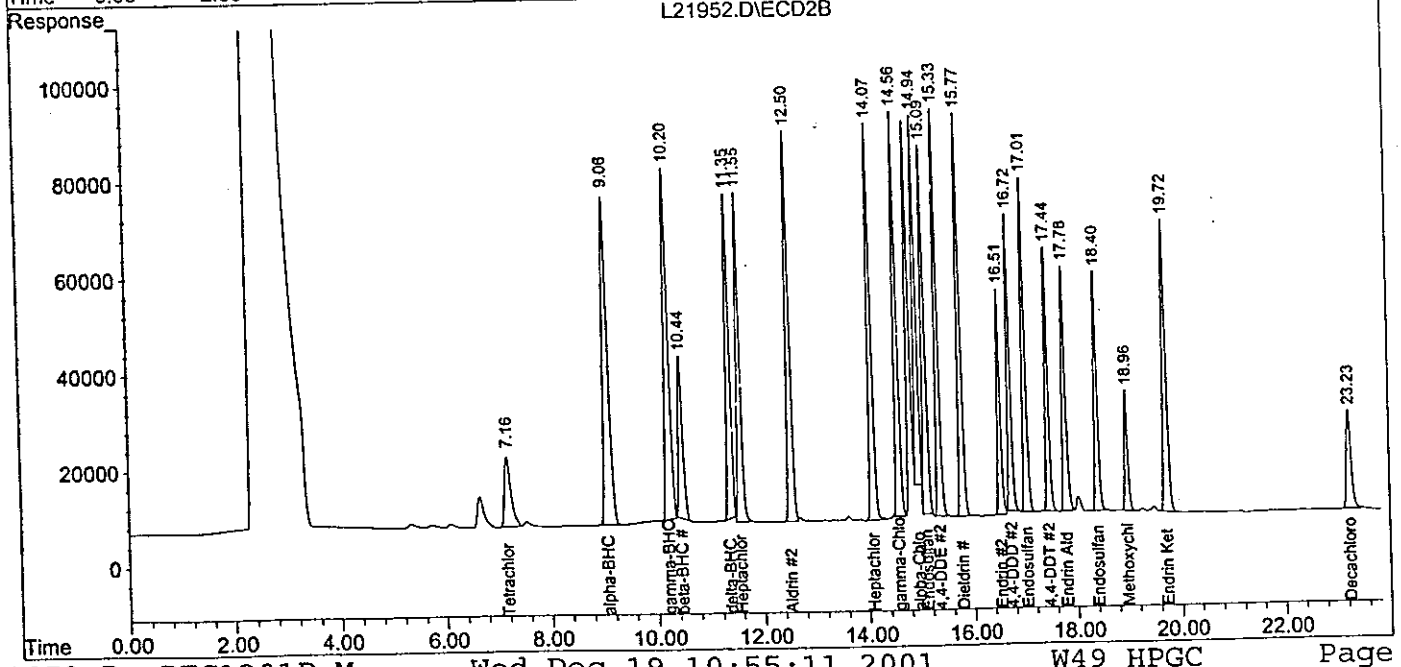
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 19 8:40 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP
Signal #1 Info : 0.32

Signal #2 Phase: RTx-CLP2
Signal #2 Info : 0.32





001081

D. Raw QC Data

1. Blank Data
2. Matrix Spike Data
3. Matrix Spike Duplicate Data
4. Laboratory Control Standard Data (where applicable)
5. Extraction Logsheet
6. Injection Logsheet
7. Retention time windows

GPL Laboratories, LLLP

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK52027

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: BLKS52027

Sample wt/vol: 1000 (g/ml) ML Lab File ID: L21938.D

% Moisture: _____ decanted:(Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/11/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/18/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
5103-71-9	alpha-Chlordane	0.050	U
72-55-9	4,4-DDE	0.050	U
60-57-1	Dieldrin	0.050	U
72-20-8	Endrin	0.050	U
33213-65-9	Endosulfan II	0.050	U
72-54-8	4,4-DDD	0.050	U
50-29-3	4,4-DDT	0.050	U
7421-93-4	Endrin Aldehyde	0.050	U
1031-07-8	Endosulfan Sulfate	0.050	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin Ketone	0.050	U
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

Quantitation Report (QT Reviewed)

Data File : H:\GCDATA\L\DEC1801\L21938.D\ECD1A.CH Vial: 13
Acq On : 18 Dec 2001 19:12 Operator: PY
Sample : BLKS52027 Inst : GC-L
Misc : 8081A-W-BLK52027 Multiplr: 1.00
IntFile : events.e

Data File : H:\GCDATA\L\DEC1801\L21938.D\ECD2B.CH Vial: 13
Acq On : 18 Dec 2001 19:12 Operator: PY
Sample : BKS52027 Inst : GC-L
Misc : 8081A-W-BKS52027-LCS Multiplr: 1.00
IntFile : events2.e
Quant Time: Dec 19 9:18 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S Tetrachloro-m-xy	7.76f	7.16f	310692	783819	13.975	17.115m
Spiked Amount 20.000 Range 30 - 150 Recovery =					69.88%	85.57%
22) S Decachlorobiphen	22.88	23.23	536427	942870	18.867m	18.923m
Spiked Amount 20.000 Range 30 - 150 Recovery =					94.34%	94.61%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

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

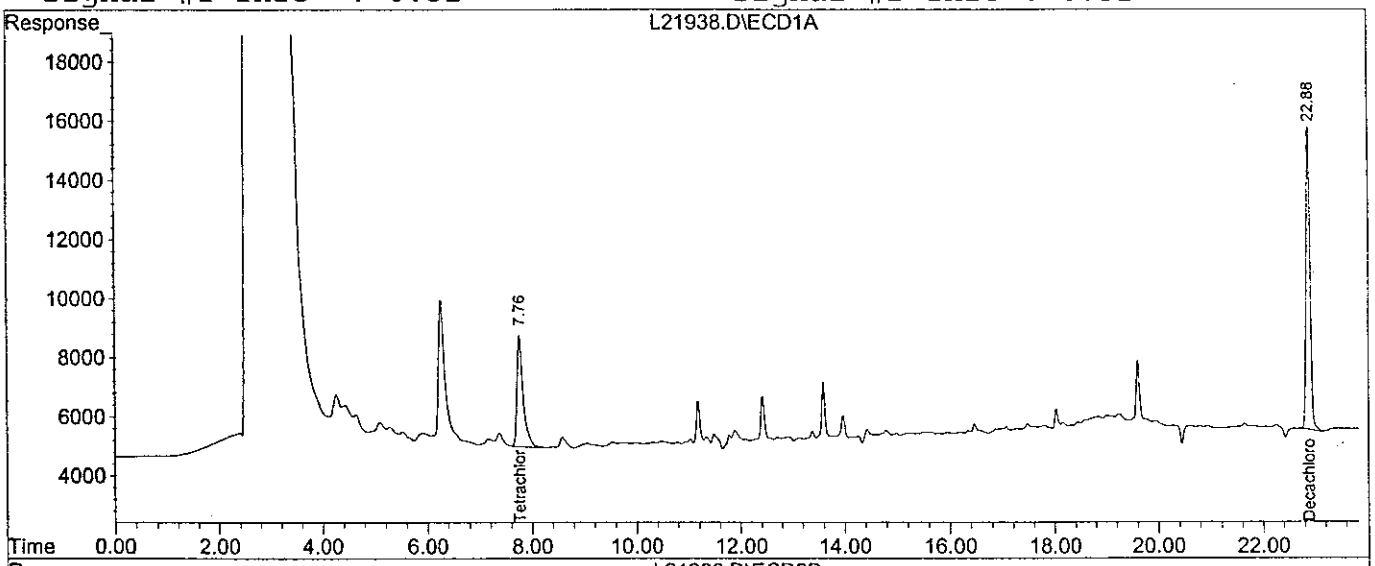
Quantitation Report

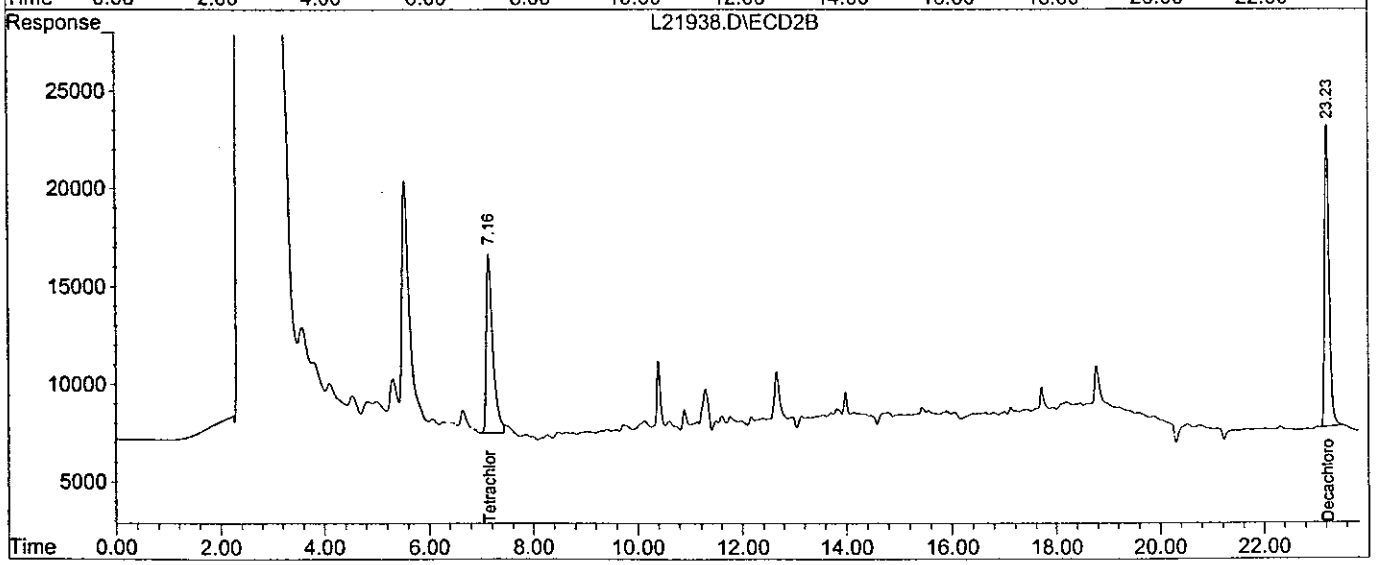
Data File : H:\GCDATA\L\DEC1801\L21938.D\ECD1A.CH Vial: 13
Acq On : 18 Dec 2001 19:12 Operator: PY
Sample : BLKS52027 Inst : GC-L
Misc : 8081A-W-BLK52027 Multiplr: 1.00
IntFile : events.e

Data File : H:\GCDATA\L\DEC1801\L21938.D\ECD2B.CH Vial: 13
Acq On : 18 Dec 2001 19:12 Operator: PY
Sample : BKS52027 Inst : GC-L
Misc : 8081A-W-BKS52027-LCS Multiplr: 1.00
IntFile : events2.e
Quant Time: Dec 19 9:18 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKS52027

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M_HILL

Lab Code: GPLL Case No.: 112013 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: BKS52027

Sample wt/vol: 1000 (g/ml) ML Lab File ID: L21937.D

% Moisture: _____ decanted:(Y/N) N Date Received: _____

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/11/01

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/18/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.57	
58-89-9	gamma-BHC (Lindane)	0.55	
76-44-8	Heptachlor	0.51	
309-00-2	Aldrin	0.52	
319-85-7	beta-BHC	0.53 ~~0.65~~ *	
319-86-8	delta-BHC	0.32 ~~0.74~~ *	
1024-57-3	Heptachlor Epoxide	0.51	
959-98-8	Endosulfan I	0.52	
5103-74-2	gamma-Chlordane	0.48	
5103-71-9	alpha-Chlordane	0.54	
72-55-9	4,4-DDE	0.52	
60-57-1	Dieldrin	0.51	
72-20-8	Endrin	0.50	
33213-65-9	Endosulfan II	0.54	
72-54-8	4,4-DDD	0.52	
50-29-3	4,4-DDT	0.58	
7421-93-4	Endrin Aldehyde	0.58	
1031-07-8	Endosulfan Sulfate	0.57 ~~0.60~~ *	
72-43-5	Methoxychlor	0.57	
53494-70-5	Endrin Ketone	0.59 ~~0.63~~ *	
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

mp 12/19/01

Quantitation Report (QT Reviewed)

Data File : H:\GCDATA\L\DEC1801\L21937.D\ECD1A.CH Vial: 12
Acq On : 18 Dec 2001 18:44 Operator: PY
Sample : BKS52027 Inst : GC-L
Misc : 8081A-W-BKS52027-LCS Multiplr: 1.00
IntFile : events.e

Data File : H:\GCDATA\L\DEC1801\L21937.D\ECD2B.CH Vial: 12
Acq On : 18 Dec 2001 18:44 Operator: PY
Sample : BLK52027 Inst : GC-L
Misc : 8081A-W-BLK52027 Multiplr: 1.00
IntFile : events2.e
Quant Time: Dec 19 9:16 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		System Monitoring Compounds						
1)	S	Tetrachloro-m-xy	7.76	7.17	405899	837758	18.258	18.293
		Spiked Amount 20.000 Range 30 - 150 Recovery =					91.29%	91.47%
22)	S	Decachlorobiphen	22.88	23.23	517064	942774	18.186m	18.921m
		Spiked Amount 20.000 Range 30 - 150 Recovery =					90.93%	94.60%
		Target Compounds						
2)	A	alpha-BHC	9.55	9.06	1426894	4409308	56.196	56.781
3)	MA	gamma-BHC (Linda	10.56	10.21	1423232	3987066	54.902	53.977
4)	MA	Heptachlor	12.02	11.56	1642600	3730754	48.836	51.492
5)	MB	Aldrin	12.91	12.51	1482858	3768583	52.017	51.238m
6)	B	beta-BHC	10.82	10.43	820488	2407765	52.833	64.625m
7)	B	delta-BHC	11.38	11.35	458979	3328818	31.810m	74.166m#
8)	B	Heptachlor Epoxi	14.58	14.08	1512059	3586010	49.296	51.041
9)	A	Endosulfan I	15.62	15.09	1438414	3250076	51.711	51.093m
10)	A	gamma-Chlordane	14.91	14.56	1455769	3311876	47.684m	47.610
11)	A	alpha-Chlordane	15.25	14.94	1433272	3209906	43.696m	54.302m
12)	B	4,4-DDE	15.39	15.34	1285164	3363779	51.612m	51.027
13)	MA	Dieldrin	16.22	15.77	1340679	3407662	49.262	50.873
14)	MA	Endrin	16.80	16.52	718379	2097357	48.780m	49.806
15)	B	Endosulfan II	17.34	17.01	1357693	2971971	54.089m	53.407
16)	A	4,4-DDD	16.87	16.72	1055403	2223114	51.491m	51.643
17)	MA	4,4-DDT	17.53	17.44	934287	2263025	51.481m	57.607m
18)	B	Endrin Aldehyde	18.32	17.78	978865	2343027	52.638	57.637
19)	B	Endosulfan Sulfa	19.38	18.40	936519	2055986	56.606	59.539
20)	A	Methoxychlor	18.58	18.96	622396	1158485	53.915	56.663
21)	B	Endrin Ketone	20.14	19.73	1344167	3116248	59.237	63.198

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

Quantitation Report (QT Reviewed)

Data File : H:\GCDATA\L\DEC1801\L21937.D\ECD1A.CH Vial: 12
Acq On : 18 Dec 2001 18:44 Operator: PY
Sample : BKS52027 Inst : GC-L
Misc : 8081A-W-BKS52027-LCS Multiplr: 1.00
IntFile : events.e

Data File : H:\GCDATA\L\DEC1801\L21937.D\ECD2B.CH Vial: 12
Acq On : 18 Dec 2001 18:44 Operator: PY
Sample : BLK52027 Inst : GC-L
Misc : 8081A-W-BLK52027 Multiplr: 1.00
IntFile : events2.e
Quant Time: Dec 19 9:16 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Initial Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

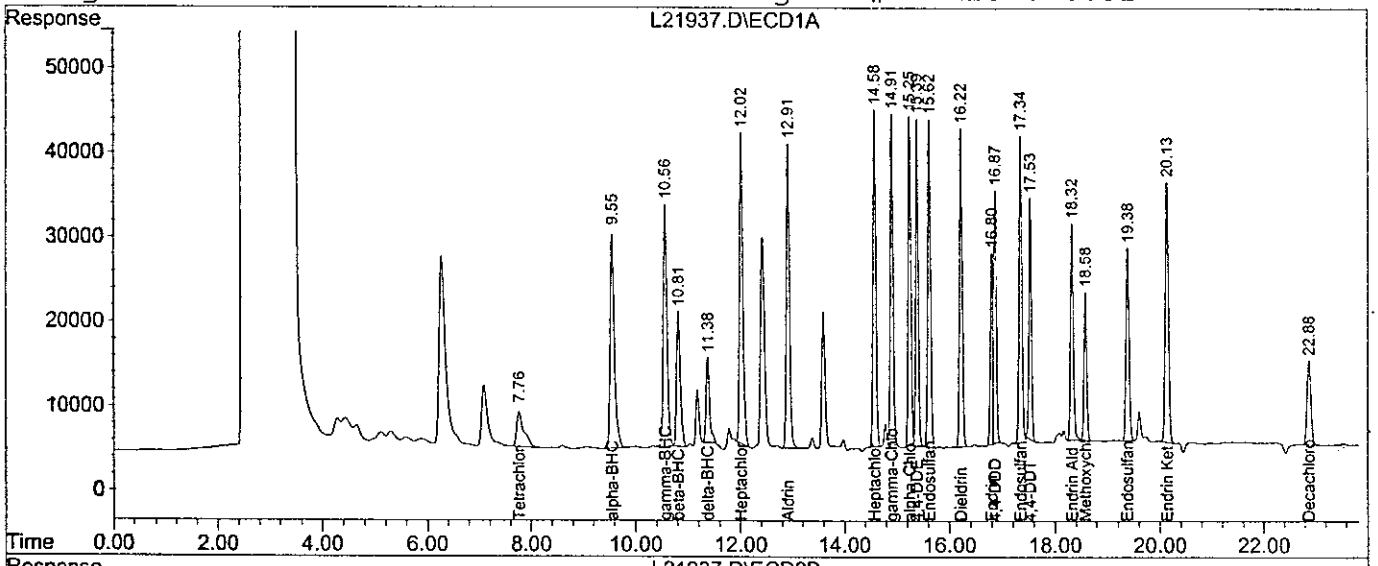
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

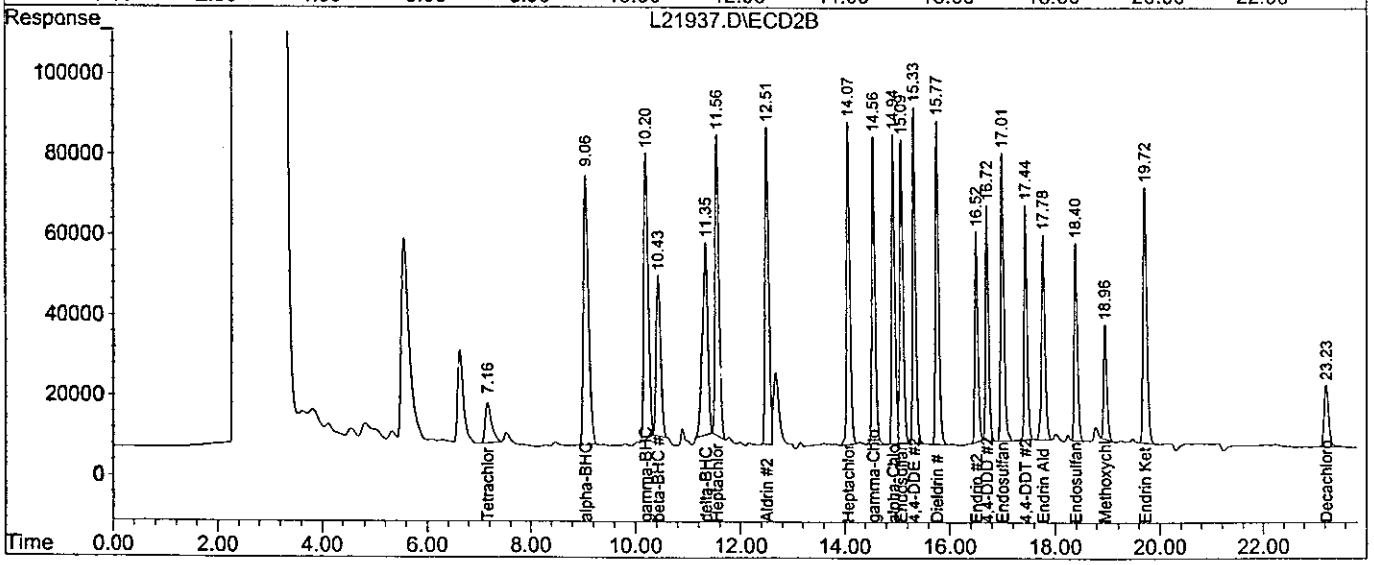
Data File : H:\GCDATA\L\DEC1801\L21937.D\ECD1A.CH Vial: 12
Acq On : 18 Dec 2001 18:44 Operator: PY
Sample : BKS52027 Inst : GC-L
Misc : 8081A-W-BKS52027-LCS Multiplr: 1.00
IntFile : events.e

Data File : H:\GCDATA\L\DEC1801\L21937.D\ECD2B.CH Vial: 12
Acq On : 18 Dec 2001 18:44 Operator: PY
Sample : BLK52027 Inst : GC-L
Misc : 8081A-W-BLK52027 Multiplr: 1.00
IntFile : events2.e
Quant Time: Dec 19 9:16 2001 Quant Results File: DEC1201P.RES

Quant Method : H:\GCDATA\METHODS\L_ICAL\DEC1201P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Thu Dec 13 08:06:46 2001
Response via : Multiple Level Calibration
DataAcq Meth : PEST32L.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





GPL Laboratories, LLLP

Document Control No: GP_E_133

Rush

PESTICIDE/PCB EXTRACTION LOG

SOIL / WATER / WIPES / OIL

Sep. Funnel 3510C / Continuous 3520C / Soxhlet 3540C / Sonication 3550B / Waste Dilution 3580A

GPC: Y / N

Approval / Date: 12/12/01

Analysis Method: 8081

Ext. Chemist: VT Date: 12-11-01

Conc. Chemist: VT Date: 12-11-01

Cleanup:

Florisil (3620B)(F) Date: 12-12-01 Acid(3665A)(A) Date: — Sulfur (3660B)(S) Date: —

Lot #: V05553 Lot #: — Lot #: —

Spike Witness Initials: KC

GPL W. O. #	Frac.	Init pH	Sample Vol. gram / mL	Surr. Vol. mL	Spike Vol. mL	Adjust. pH	F / A / S Cleanup	F.V. mL
112013	BLK 52027	7	1000	1.0	—	—	F	10.0
	BKS 52027	7	1000		1.0			
	001	7	950/1L		—			
	002	7	950/1L					
	003	7	900/1L					
	004	7	850/1L					
	005	7	900/1L					
	006	7	1000					
	007	7	900/1L					

DS 12/12/01

Solvent: DCM / Acetone Lot #: 007404

Solvent: Hexane Lot #: 003841

Surrogate Soln#: 16297 Surr. Soln Conc(s): 0.0 PPM

Matrix Spike Soln #: 15871 MS Soln Conc(s): 0.5 PPM

Comments & Observations: Due to insufficient volume QC was not done

001090

GC ANALYSIS LOG

Instrument ID: HP5890 # L

Reviewed by: AK Date: 12/19/01

Data Acquisition Method:	(Pest32) / PCB32 / Herb32 /
Injector Temp (oC):	180 / (200) / 240 /
Detector Temp(oC):	(300)
Oven Initial Temp(oC):	60 / (150) /
Initial Time (min):	0.0 / 0.50 / (1.0) /
Ramp Rate (oC/min) :	15-200-4 / 10-300-5.0
Final Temp(oC):	200 / 275 / (300) /
Injection Volume(uL):	(1.0) / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: DEC1201PM

Analyst: AK

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
DEC1201	L 21764	PEST PRIME	–	–	12/13/01	
	L 765	PEST PRIME				
	L 766	HEXANE				
	L 767	EVAL MIX #15548		STD		
	L 768	TOX-3 #15774				
	L 769	CHLORDANE-5 #15777				
	L 770	-4 #15778				
	L 771	-3 #15779				
	L 772	-2 #15780				
	L 773	-1 #15781				
	L 774	PEST - 6 #14857				
	L 775	-5 #14858				
	L 776	-4 #15816				
	L 777	-3 #14860				
	L 778	-2 #14861				
	L 779	INDAM #15268				
	L 780	TNDBM #15264				
	L 781	EVAL MIX #15548				
	L 782	BLK51943	1.0	H_2O		
	L 783	BKS51943				
	L 784	111225-001-01-Y1				
	L 785	-001-01-Y1 MS				
	L 786	B011204TCLP				
	L 787	BLK51745		soil		
	L 788	BKS51745				

Comments:

001091

GPL Laboratories, LLLP **GC ANALYSIS LOG** *Document Control No: GP_G_045*

Instrument ID: HP5890 **# L** Reviewed by: AL Date: 12/19/01

Data Acquisition Method:	(Pest32) / PCB32 / Herb32 /
Injector Temp (oC):	180 / (200) / 240 /
Detector Temp(oC):	(300)
Oven Initial Temp(oC):	60 / (150) /
Initial Time (min):	0.0 / 0.50 / (1.0) /
Ramp Rate (oC/min) :	15-200-4 / 10-300-5.50
Final Temp(oC):	200 / 275 / (300) /
Injection Volume(uL):	(1.0) / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: DEC1201PM Analyst: PY

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
DEC1801	L 21924	PEST-4 #15816	—	STD	12/18/01	
	L 925	PEST-4 #15816		↓		
	L 926	PEST PRIME		—		
	L 927	PEST-4 #15816		STD		
	L 928	PEST-4 #15816				
	L 929	TOX-3 #15774				
	L 930	CHLORDANE-3 #15779				
	L 931	EVAL MIX #15548				
	L 932	PEST-4 #15816	↓	↓		
	L 933	BLK52128	1.0	H_2O		
	L 934	BKS52128				
	L 935	112025-001-01-Y1				
	L 936	B011213TCLP				
	L 937	BKS52027				
	L 938	BLK52027		↓		
	L 939	BLK51666 PEST		Soil		
	L 940	BKS51666 PEST				
	L 941	BLK51650 PEST				
	L 942	BKS51651 PEST	↓	↓		
	L 943	PEST-4 #15816	—	STD		
	L 944	112013-001-01-Y2	1.0	H_2O		
	L 945	-002-01-Y2				
	L 946	-003-01-Y2				
	L 947	-004-01-Y2				
↓	L 948	↓ -005-01-Y2	↓	↓	12/19/01	

Comments:

MT092

Instrument ID: HP5890 # L Reviewed by: AK Date: 12/19/01

Data Acquisition Method:	(Pest32) / PCB32 / Herb32 /
Injector Temp (oC):	180 / (200) / 240 /
Detector Temp(oC):	(300)
Oven Initial Temp(oC):	60 / (150) /
Initial Time (min):	0.0 / 0.50 / (1.0) /
Ramp Rate (oC/min) :	15-200-4 / 10-300-5.50
Final Temp(oC):	200 / 275 / (300) /
Injection Volume(uL):	(1.0) / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: DEC1201PM Analyst: PY

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
DEC1801	L 21949	112013-006-01-Y2	1.0	H2O	12/19/01	
	L 950	-007-01-Y2				
	L 951	EVAL MIX #15548	—	STD		
	L 952	PEST-4 #15816				
	L 953	111138-002-01-Y1	1.0	soil		
	L 954	-003-01-Y1				
	L 955	-004-01-Y1				
	L 956	-005-01-Y1				
	L 957	-006-01-Y1				
	L 958	-007-01-Y1				
	L 959	-007-01-Y1 MS				
	L 960	-007-01-Y1 MSD				
	L 961	PEST-4 #15816	—	STD		
	L 962	111138-008-01-Y1	1.0	soil		
	L 963	111164-001-01-Y1				
	L 964	-001-01-Y1	4X			
	L 965	-002-01-Y1	1.0			
	L 966	-003-01-Y1				
	L 967	-003-01-Y1	10X			
	L 968	PEST-4 #15816	—	STD		
	L 969	DCM LOT CK #719	—	Solvent		
	L 970	PEST-4 #15816		STD		
	L 971	PEST-4 #15816				
	L 972	DCM LOT CK #719	—	Solvent		
	L 973	#692				
	L 974	#653				
Comments:	L 975	#995				

001093

METALS PACKAGE

GPL Laboratories, LLLP

GPL Laboratories, LLLP

TOTAL METALS
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: SDG No.: 112013

Lab Code: Case No.: SAS No.:

SOW No.:

Sample No.	Lab Sample ID.
007-MW01S-Q4-01	112013-001-03-1/1
007-MW01S-Q4-01D	112013-001-03-1/1D
007-MW01S-Q4-01S	112013-001-03-1/1S
007-MW03S-Q4-01	112013-002-03-1/1
007-MW04S-Q4-01	112013-003-03-1/1
007-MW05S-Q4-01	112013-004-03-1/1
007-MW08S-Q4-01	112013-005-03-1/1
007-DUP-Q4-01	112013-006-03-1/1
007-EQB-Q4-01	112013-007-03-1/1

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

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

Signature: SLSimina Name: SIMINA LAL

Date: 12.19.01 Title: Metals Reporting 002062

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW01S-Q4-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Matrix (soil/water): WATER Lab Sample ID: 112013-001-03-1/1

Level (low/med): LOW Date Received: 07-DEC-01

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	12.8	B		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002003

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW03S-Q4-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Matrix (soil/water): WATER Lab Sample ID: 112013-002-03-1/1

Level (low/med): LOW Date Received: 07-DEC-01

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002004

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW04S-Q4-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Matrix (soil/water): WATER Lab Sample ID: 112013-003-03-1/1

Level (low/med): LOW Date Received: 07-DEC-01

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	69.4			P

Color Before: BROWN Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

002005

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW05S-Q4-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Matrix (soil/water): WATER Lab Sample ID: 112013-004-03-1/1

Level (low/med): LOW Date Received: 07-DEC-01

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002006

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW08S-Q4-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Matrix (soil/water): WATER Lab Sample ID: 112013-005-03-1/1

Level (low/med): LOW Date Received: 07-DEC-01

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002007

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-DUP-Q4-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Matrix (soil/water): WATER Lab Sample ID: 112013-006-03-1/1

Level (low/med): LOW Date Received: 07-DEC-01

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002008

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-EQB-Q4-01

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Matrix (soil/water): WATER Lab Sample ID: 112013-007-03-1/1

Level (low/med): LOW Date Received: 07-DEC-01

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002009

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Initial Calibration Source: HIGH PURITY

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	400.0	428.90	107.2	1000.0	1014.33	101.4	1013.08	101.3	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002010

SW-846

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1003.00	100.3	1004.85	100.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002011

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	988.52	98.9			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002012

TOTAL METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract:

Lab Code: Case No.: SAS No.: SDG No.: 112013

AA CRDL Standard Source:

ICP CRDL Standard Source: HIGH PURITY

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				20.0	15.96	79.8		

002013

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	-4.4	B	4.1	U	-4.3	B	4.1	U	-5.449	B	P

002014

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			4.1	U	4.1	U					P

TOTAL METALS
- 4 -
ICP INTERFERENCE CHECK SAMPLE

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

ICP ID Number: TJA61 ICP ICS Source: HIGH PURITY

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic		100	-4	99.0	99.0			

002016

TOTAL METALS
-5A-
SPIKE SAMPLE RECOVERY

SAMPLE NO.

007-MW01S-Q4-01S

Contract:

Lab Code: Case No.: SAS SDG NO.: 112013

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	59.1038		12.8489	B	50.00	92.5		P

Comments:

002017

TOTAL METALS

-6-

DUPLICATES

SAMPLE NO.

007-MW01S-Q4-01D

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic		12.8489	B	11.2432	B	13.3		P

TOTAL METALS
-7-
LABORATORY CONTROL SAMPLE

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Solid LCS Source:

Aqueous LCS Source: HIGH PURITY

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Arsenic	50.0	44.83	89.7					

TOTAL METALS

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

007-MW01S-Q4-01L

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 112013

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	12.85	B	20.50	U	100.0		P

002020

Instrument ID: Trace	Inst. Method: TRACE2	Nebulizer:
Profile: -0.0097	Intensity: 1567	At Setting: 426

Analytical Batch No: 011216

012021

Workorder	Project/SDG #	Prep. Seq.	Batch #	Matrix s/w/e	Prep. Date	Method	Dil.	Comments
112012	IT	52108	025	S	12.15.01	3050		
112013	CH2M HILL	52111	026	W	12.14.01	3010		
111250	TETRATECH	↓	↓	↓	↓	↓		
112025	↓		024	E	↓	↓		
111238	PARSONS	52072 ~~52070~~	014	W	12.13.01	↓		
112009	↓	52039	006	↓	12.12.01	↓		
112052	↓	52118	027	E	12.15.01	↓		RERUN FOR Se
112023	↓	52078	016	S	12.13.01	3050		

12.17.01

Source Solution Numbers				Post Digestion Spikes
Stds.	Number	Stds.	Number	Spike 9.9 mls of sample with 0.1 mls of 14416
S0	057-073-07	ICV	16342	Samples:
S1	16375	CCV	16403	112012-003-02-1/1
S2	16376	ICSA	16324	112013-001-03-1/1
S3	16442	ICSAB	16269	112009-012-01-1/1
S4	'	CRI	16463	112023-017-01-1/1
S5	'	Low Ck	16323	
Ints	16443	LR	15899	

Analyst: [signature] Date: 12.17.01 Reviewed: [signature] Date: 12-18-01

Seq	Sample ID	Dil.	Analysis Date Time	Seq	Sample ID	Dil.	Analysis Date Time	Seq	Sample ID	Dil.	Analysis Date Time
1.	CAL-STD0	1	12/16/015:59	42.	112013-001-03-1		12/16/021:28	83.	CCB8	1	12/17/002:28
2.	CAL-STD1	1	12/16/016:08	43.	112013-001-03-1		12/16/021:35	84.	112009-014-01-1		12/17/002:35
3.	CAL-STD2	1	12/16/016:15	44.	112013-001-03-1		12/16/021:42	85.	BLK52118	1	12/17/002:43
4.	CAL-STD3	1	12/16/016:22	45.	112013-001-03-5		12/16/021:49	86.	BKS52118	1	12/17/002:50
5.	ICV1	1	12/16/016:28	46.	CCV5	1	12/16/021:57	87.	112052-001-03-1		12/17/002:57
6.	ICB1	1	12/16/016:35	47.	CCB5	1	12/16/022:04	88.	112052-001-03-1		12/17/003:05
7.	CCV1	1	12/16/016:42	48.	112013-002-03-1		12/16/022:11	89.	112052-001-03-1		12/17/003:12
8.	CCB1	1	12/16/016:49	49.	112013-003-03-1		12/16/022:19	90.	112052-001-03-5		12/17/003:19
9.	-LOWCHEC	1	12/16/016:56	50.	112013-004-03-1		12/16/022:26	91.	B011214	1	12/17/003:27
10.	CRDL1	1	12/16/017:03	51.	112013-005-03-1		12/16/022:33	92.	BLK52078	1	12/17/003:34
11.	ICS-A1	1	12/16/017:14	52.	112013-006-03-1		12/16/022:41	93.	BKS52078	1	12/17/003:41
12.	FE	500	12/16/017:28	53.	112013-007-03-1		12/16/022:48	94.	CCV9	1	12/17/003:49
13.	ICV2	1	12/16/017:41	54.	111250-010-04-1		12/16/022:55	95.	CCB9	1	12/17/003:56
14.	ICB2	1	12/16/017:48	55.	111250-011-04-1		12/16/023:03	96.	112023-017-01-1		12/17/004:03
15.	CCV2	1	12/16/017:55	56.	111250-012-04-1		12/16/023:10	97.	112023-017-01-1		12/17/004:11
16.	CCB2	1	12/16/018:02	57.	111250-013-04-1		12/16/023:17	98.	112023-017-01-1		12/17/004:18
17.	LOWCHEC As failed		12/16/018:09	58.	CCV6	1	12/16/023:25	99.	112023-017-01-1		12/17/004:25
18.	CRDL2	1	12/16/018:16	59.	CCB6	1	12/16/023:32	100.	112023-017-01-5		12/17/004:33
19.	ICS-A2	1	12/16/018:23	60.	111250-014-04-1		12/16/023:39	101.	112023-022-01-1		12/17/004:40
20.	ICS-AB1	1	12/16/018:31	61.	PBW024	1	12/16/023:47	102.	112023-023-01-1		12/17/004:47
21.	LB As failed		12/16/018:40	62.	SW024	1	12/16/023:54	103.	112023-024-01-1		12/17/004:55
22.	CCV3	1	12/16/018:51	63.	112025-001-01-1		12/17/000:01	104.	112023-025-01-1		12/17/005:02
23.	CCB3	1	12/16/018:58	64.	112025-001-01-1		12/17/000:09	105.	112023-026-01-1		12/17/005:09
24.	BLK52108	1	12/16/019:16	65.	112025-001-01-1		12/17/000:16	106.	CCV10	1	12/17/005:17
25.	BKS52108	1	12/16/019:23	66.	112025-001-01-5		12/17/000:23	107.	CCB10	1	12/17/005:24
26.	112012-003-02-1		12/16/019:30	67.	CRDL3	1	12/17/000:31	108.	112023-027-01-1		12/17/005:31
27.	112012-003-02-1		12/16/019:38	68.	ICS-A3	1	12/17/000:38	109.	112023-028-01-1		12/17/005:39
28.	112012-003-02-1		12/16/019:45	69.	ICS-AB2	1	12/17/000:45	110.	112023-029-01-1		12/17/005:46
29.	112012-003-02-1		12/16/019:52	70.	CCV7	1	12/17/000:53	111.	112023-030-01-1		12/17/005:53
30.	112012-003-02-5		12/16/020:00	71.	CCB7	1	12/17/001:00	112.	112023-031-01-1		12/17/006:01
31.	112012-004-02-1		12/16/020:07	72.	B011213	1	12/17/001:07	113.	112023-032-01-1		12/17/006:08
32.	112012-005-02-1		12/16/020:14	73.	111238-015-01-1		12/17/001:15	114.	112023-033-01-1		12/17/006:15
33.	112012-008-02-1		12/16/020:22	74.	111238-016-01-1		12/17/001:22	115.	112023-034-01-1		12/17/006:23
34.	CCV4	1	12/16/020:29	75.	PBW006	1	12/17/001:29	116.	112023-035-01-1		12/17/006:30
35.	CCB4	1	12/16/020:36	76.	SW006	1	12/17/001:37	117.	112023-036-01-1		12/17/006:37
36.	112012-009-02-1		12/16/020:44	77.	112009-012-01-1		12/17/001:44	118.	CCV11	1	12/17/006:45
37.	112012-011-02-1		12/16/020:51	78.	112009-012-01-1		12/17/001:51	119.	CCB11	1	12/17/006:52
38.	112012-012-02-1		12/16/020:58	79.	112009-012-01-1		12/17/001:59	120.	112023-037-01-1		12/17/007:00
39.	BLK52111	1	12/16/021:06	80.	112009-012-01-1		12/17/002:06	121.	112023-038-01-1		12/17/007:07
40.	BKS52111	1	12/16/021:13	81.	112009-012-01-5		12/17/002:13	122.	112023-039-01-1		12/17/007:14
41.	112013-001-03-1		12/16/021:20	82.	CCV8	1	12/17/002:21	123.	CRDL4 EMPTY		12/17/007:22

Analyst Signature 12-17-01

Seq	Sample ID	Dil.	Analysis Date Time	Seq	Sample ID	Dil.	Analysis Date Time	Seq	Sample ID	Dil.	Analysis Date Time
124.	ICS-A4 EMPTY		12/17/007:29								
125.	ICS-AB1 Sc failed		12/17/007:36								
126.	CCV12	1	12/17/007:44								
127.	CCB12	1	12/17/007:51								

Analyst Signature 12-17-01

002022

Sample Dilutions:

Method: TRACE2 Standard: STD0
Run Time: 12/16/01 15:59:48

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	.01367	.00135	-.00006	.00024	-.00372	-.00056	.05611
#1	.01362	.00159	-.00029	.00044	-.00371	-.00003	.05634
#2	.01372	.00112	.00018	.00003	-.00374	-.00109	.05587

Elem	CR	CO	CU	FE	MG	MN	NI
Avge	.00034	-.00026	.01439	.00074	-.00006	.00032	-.00374
#1	.00062	-.00018	.01441	.00082	.00003	.00032	-.00456
#2	.00006	-.00035	.01437	.00065	-.00015	.00032	-.00291

Elem	K	AG	NA	TL	V	ZN	B
Avge	.01016	.00132	-.00172	-.00099	.00024	.00084	.00225
#1	.01403	.00132	-.00085	-.00106	.00032	.00100	.00259
#2	.00630	.00132	-.00259	-.00091	.00015	.00068	.00191

Elem	MO	SN	SR	TI	1/PB	2/PB	1/SE
Avge	-.00006	.00006	.00035	.00051	-.00599	-.00046	-.00266
#1	-.00012	.00024	.00044	.00044	-.00423	-.00018	-.00262
#2	.00000	-.00012	.00026	.00059	-.00774	-.00074	-.00271

Elem	2/SE	SI
Avge	.00537	.06076
#1	.00423	.06067
#2	.00651	.06085

Method: TRACE2 Standard: STD1
Run Time: 12/16/01 16:08:22

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	4.0119	.39825	.25517	2.7058	.11762	1.5430	.47368
#1	4.0055	.39837	.25598	2.7080	.11795	1.5493	.47468
#2	4.0182	.39813	.25437	2.7036	.11729	1.5367	.47268

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	.48245	.69737	4.7150	.74380	.74659	.04253	.13947
#1	.48309	.69758	4.7262	.74563	.74886	.04264	.13987
#2	.48182	.69716	4.7038	.74197	.74432	.04241	.13907

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.13496	.21613	.45844	.26577	.17223	3.5704	1.6288
#1	.13508	.21666	.45817	.26512	.17250	3.5748	1.6326
#2	.13483	.21561	.45870	.26642	.17195	3.5659	1.6251

Elem	1/PB	2/PB	1/SE	2/SE	SI
Avge	.64322	.73534	.39630	.63347	.27022
#1	.64392	.73939	.39771	.63272	.27044
#2	.64252	.73129	.39489	.63421	.27001

Method: TRACE2 Standard: STD2
Run Time: 12/16/01 16:15:26

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	7.9225	.78869	.50731	5.3758	.23638	3.0499	.94117
#1	7.9193	.78843	.50483	5.3773	.23636	3.0497	.94126
#2	7.9258	.78895	.50980	5.3743	.23640	3.0502	.94107

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	.95803	1.3733	9.3496	1.4763	1.4851	.08339	.27889
#1	.95728	1.3738	9.3459	1.4756	1.4862	.08366	.27796
#2	.95878	1.3728	9.3533	1.4769	1.4840	.08312	.27983

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.26810	.42587	.90582	.52654	.34354	7.0703	3.2376
#1	.26782	.42664	.90508	.52576	.34382	7.0727	3.2390
#2	.26839	.42509	.90657	.52733	.34326	7.0680	3.2362

Elem	1/PB	2/PB	1/SE	2/SE	SI
Avge	1.2753	1.4544	.77861	1.2468	.47426
#1	1.2785	1.4576	.78119	1.2510	.47344
#2	1.2720	1.4513	.77604	1.2427	.47509

Method: TRACE2 Standard: STD3
Run Time: 12/16/01 16:22:30

Elem	CA	MG	K	NA
Avge	28.982	16.950	52.333	2.2755
#1	29.000	16.936	52.474	2.2856
#2	28.965	16.963	52.193	2.2655

Standardization Report 12/16/01 04:28:25 PM page 1

Method: TRACE2 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AL	308.215	Multiple	Standards	12575.5	-173.239	12/16/01 04:15:26
SB	206.838	Multiple	Standards	2535.57	-3.45182	12/16/01 04:15:26
AS	189.042	Multiple	Standards	3927.83	.215506	12/16/01 04:15:26
BA	493.409	Multiple	Standards	185.533	-.051880	12/16/01 04:15:26
BE	313.042	Multiple	Standards	415.483	1.54506	12/16/01 04:15:26
CD	226.502	Multiple	Standards	328.970	.168946	12/16/01 04:15:26
CA	317.933	STD3	STD0	1.06906	-.001047	12/16/01 04:22:30
CR	267.716	Multiple	Standards	1057.74	-.365476	12/16/01 04:15:26
CO	228.616	Multiple	Standards	1042.55	.266822	12/16/01 04:15:26
CU	324.753	Multiple	Standards	734.970	-10.5808	12/16/01 04:15:26
FE	271.441	Multiple	Standards	10659.3	-8.90049	12/16/01 04:15:26
PB	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
MG	279.078	STD3	STD0	1.05308	.000175	12/16/01 04:22:30
MN	257.610	Multiple	Standards	674.527	-.227590	12/16/01 04:15:26
NI	231.604	Multiple	Standards	668.927	2.48937	12/16/01 04:15:26
K	766.491	STD3	STD0	.847700	-.002659	12/16/01 04:22:30
SE	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
AG	328.068	Multiple	Standards	1214.44	-1.60844	12/16/01 04:15:26
NA	330.232	STD3	STD0	.907508	-.001053	12/16/01 04:22:30
TL	190.864	Multiple	Standards	7326.82	7.21194	12/16/01 04:15:26
V	292.402	Multiple	Standards	3706.30	-.879480	12/16/01 04:15:26
ZN	206.200	Multiple	Standards	2340.36	-1.97853	12/16/01 04:15:26
B	249.678	Multiple	Standards	1100.53	-2.48897	12/16/01 04:15:26
MO	202.030	Multiple	Standards	1889.93	.099230	12/16/01 04:15:26
SN	189.989	Multiple	Standards	2913.72	-.174303	12/16/01 04:15:26
SR	421.552	Multiple	Standards	140.748	-.062000	12/16/01 04:15:26
TI	334.941	Multiple	Standards	307.992	-.166123	12/16/01 04:15:26
1/PB	220.351	Multiple	Standards	819.718	4.89117	12/16/01 04:15:26
2/PB	220.352	Multiple	Standards	669.573	.291505	12/16/01 04:15:26
1/SE	196.021	Multiple	Standards	2535.63	6.69900	12/16/01 04:15:26
2/SE	196.022	Multiple	Standards	1571.54	-8.46830	12/16/01 04:15:26
SI	288.158	Multiple	Standards	2412.97	-146.621	12/16/01 04:15:26

Method: TRACE2

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AL	308.215	STD0	.000000	-1.37372	1.37372
		STD1	50000.0	50277.9	-277.949
		STD2	100000.	99456.9	543.094

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SB	206.838	STD0	.000000	-.020420	.020420
		STD1	1000.00	1006.33	-6.33112
		STD2	2000.00	1996.33	3.67419

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AS	189.042	STD0	.000000	-.015145	.015145
		STD1	1000.00	1002.49	-2.48798
		STD2	2000.00	1992.86	7.13965

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BA	493.409	STD0	.000000	-.008229	.008229
		STD1	500.000	501.958	-1.95773
		STD2	1000.00	997.332	2.66791

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BE	313.042	STD0	.000000	-.001338	.001338
		STD1	50.0000	50.4136	-.413620
		STD2	100.000	99.7568	.243233

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CD	226.502	STD0	.000000	-.015047	.015047
		STD1	500.000	507.772	-7.77237
		STD2	1000.00	1003.51	-3.50751

CorCoef: 0.99998

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
CA	317.933	STD0	.058936	.056108	.002828
		STD3	30.9830	28.9824	2.00058

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CR	267.716	STD0	.000000	-.007735	.007735
		STD1	500.000	500.668	-.667542
		STD2	1000.00	995.147	4.85309

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CO	228.616	STD0	.000000	-.009294	.009294
		STD1	500.000	503.249	-3.24878
		STD2	1000.00	999.063	.937317

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CU	324.753	STD0	.000000	-.006456	.006456
		STD1	500.000	501.964	-1.96436
		STD2	1000.00	998.764	1.23553

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
FE	271.441	STD0	.000000	-1.06042	1.06042
		STD1	50000.0	50249.9	-249.922
		STD2	100000.	99651.5	348.500

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
PB	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
MG	279.078	STD0	.000113	-.000059	.000172
		STD3	17.8496	16.9498	.899851

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MN	257.610	STD0	.000000	-.009282	.009282
		STD1	500.000	501.486	-1.48560
		STD2	1000.00	995.545	4.45453

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
NI	231.604	STD0	.000000	-.009873	.009873
		STD1	500.000	501.904	-1.90402
		STD2	1000.00	995.910	4.09009

CorCoef: 0.99999

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K	766.491	STD0	.005956	.010163	-.004207
		STD3	44.3604	52.3334	-7.97306

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SE	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AG	328.068	STD0	.000000	-.000516	.000516
		STD1	50.0000	50.0370	-.037025
		STD2	100.000	99.6609	.339119

CorCoef: 1.00000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
NA	330.232	STD0	-.002616	-.001722	-.000894
		STD3	2.06402	2.27555	-.211523

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TL	190.864	STD0	.000000	-.009431	.009431
		STD1	1000.00	1029.07	-29.0685
		STD2	2000.00	2050.59	-50.5920

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	STD0	.000000	-.007269	.007269
		STD1	500.000	499.306	.694122
		STD2	1000.00	992.797	7.20331

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
ZN	206.200	STD0	.000000	-.016257	.016257
		STD1	500.000	503.851	-3.85144
		STD2	1000.00	994.697	5.30280

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	STD0	.000000	-.012089	.012089
		STD1	500.000	502.034	-2.03384
		STD2	1000.00	994.396	5.60364

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MO	202.030	STD0	.000000	-.011925	.011925
		STD1	500.000	502.385	-2.38492
		STD2	1000.00	995.230	4.76984

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SN	189.989	STD0	.000000	-.003114	.003114
		STD1	500.000	501.647	-1.64691
		STD2	1000.00	1000.80	-.802246

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SR	421.552	STD0	.000000	-.012313	.012313
		STD1	500.000	502.462	-2.46249
		STD2	1000.00	995.075	4.92505

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TI	334.941	STD0	.000000	-.007529	.007529
		STD1	500.000	501.506	-1.50586
		STD2	1000.00	996.988	3.01178

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/PB	220.351	STD0	.000000	-.017581	.017581
		STD1	500.000	532.151	-32.1508
		STD2	1000.00	1050.24	-50.2367

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/PB	220.352	STD0	.000000	-.013948	.013948
		STD1	500.000	492.655	7.34515
		STD2	1000.00	974.151	25.8487

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/SE	196.021	STD0	.000000	-.052715	.052715
		STD1	1000.00	1011.57	-11.5748
		STD2	2000.00	1980.98	19.0227

CorCoef: 0.99992

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/SE	196.022	STD0	.000000	-.028881	.028881
		STD1	1000.00	987.053	12.9467
		STD2	2000.00	1951.00	48.9984

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SI	288.158	STD0	.000000	-.016342	.016342
		STD1	500.000	505.419	-5.41901
		STD2	1000.00	997.762	2.23792

CorCoef: 0.99997

Method: TRACE2 Sample Name: IVICV Operator: LCM
Run Time: 12/16/01 16:28:32
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5027.341	395.8939	Q429.1202	402.7760	40.46200	41.30941	4899.834
#1	5030.730	398.9934	Q430.7246	402.6918	40.49962	41.43608	4906.458
#2	5023.953	392.7943	Q427.5157	402.8602	40.42437	41.18274	4893.210
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	392.3780	393.3569	395.1374	5010.380	399.1809	4828.677	392.6542
#1	392.2394	392.8901	395.3070	5023.196	398.8049	4832.923	392.8408
#2	392.5166	393.8237	394.9678	4997.563	399.5568	4824.431	392.4676
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	395.6498	4858.203	400.1587	40.44815	10063.44	393.8303	394.3644
#1	396.1150	4868.065	405.2060	40.52652	10057.68	394.0606	394.7136
#2	395.1846	4848.342	395.1114	40.36979	10069.21	393.5999	394.0152
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	394.1827	398.1522	394.2925	398.1483	392.5701	388.1754	401.3816
#1	393.9567	398.5669	395.3347	402.3418	392.6916	387.9963	403.0329
#2	394.4088	397.7375	393.2502	393.9548	392.4485	388.3545	399.7304
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	398.0801	403.8310	398.3221	Q453.0765
#1	396.6906	410.1767	402.7202	Q454.9025
#2	399.4697	397.4853	393.9241	Q451.2505
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				400.0000
Range				10.00000

Analysis Report QC Standard 12/16/01 04:42:37 PM

Method: TRACE2 Sample Name: BIICB Operator: LCM
Run Time: 12/16/01 16:35:40
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	8.593733	1.827744	-2.09962	.0643872	-.077547	-.076042	-1.77458
#1	6.527464	3.513046	-4.41486	.0464475	-.058942	-.200572	-.783826
#2	10.66000	.1424421	.2156100	.0823269	-.096153	.0484881	-2.76533
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3132942	-.174595	.6809051	12.89345	.0693877	6.599896	.0543434
#1	.2582434	.3899045	.5085338	11.80639	-.607922	5.998115	.0308666
#2	.3683451	-.739094	.8532765	13.98050	.7466973	7.201678	.0778201
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4907800	.3340498	-.007795	-.216797	-25.5375	2.853177	-.101476
#1	-.014006	-2.00338	-1.84516	-.033553	73.01609	1.369593	-.441863
#2	.9955661	2.671479	1.829571	-.400041	-124.091	4.336760	.2389114
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.1128702	.3153242	1.078490	1.656983	.0470972	-.147759	1.069982
#1	.2285546	.3977154	1.658848	1.028131	.0458529	-.147968	1.457036
#2	-.002814	.2329330	.4981304	2.285836	.0483414	-.147550	.6829269
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.431445	3.901268	-1.96270	2.821465
#1	-1.64093	.6453336	-3.09080	1.512751
#2	.7780398	7.157202	-.834603	4.130180
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Analysis Report QC Standard 12/16/01 04:49:39 PM page 1

Method: TRACE2 Sample Name: CVCCV Operator: LCM
Run Time: 12/16/01 16:42:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50723.54	1006.478	1007.135	495.7168	49.31748	491.5077	98800.12
#1	50690.94	1008.098	1007.589	496.2508	49.39001	491.6956	98868.46
#2	50756.14	1004.858	1006.681	495.1828	49.24495	491.3198	98731.79
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	492.6041	490.4541	502.6310	48857.34	495.4290	99557.29	492.5065
#1	493.1897	491.1286	503.0411	48927.03	495.6109	99688.43	492.8198
#2	492.0186	489.7797	502.2208	48787.66	495.2470	99426.15	492.1932
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	489.5731	24674.37	1008.673	50.56481	100739.2	996.9641	497.8298
#1	490.0438	24670.82	1011.364	50.75655	100591.3	1003.222	498.4291
#2	489.1023	24677.92	1005.982	50.37307	100887.1	990.7057	497.2304
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	486.0645	505.8308	497.5763	500.2024	498.0160	499.7657	495.5781
#1	486.8739	508.0476	496.7216	498.0826	498.8431	500.1784	496.5823
#2	485.2550	503.6141	498.4311	502.3221	497.1889	499.3529	494.5740
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	495.3540	1020.464	1002.777	520.1677
#1	495.1248	1024.018	1005.036	519.4667
#2	495.5831	1016.910	1000.517	520.8687
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB Operator: LCM
Run Time: 12/16/01 16:49:46
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	7.045181	-1.79392	.5642739	.0522648	-.026810	.0370854	4.283480
#1	9.770086	-1.33970	1.145092	.0468043	-.064592	.0119737	5.670084
#2	4.320275	-2.24814	-.016544	.0577253	.0109718	.0621971	2.896875
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.224837	.0662394	.8895854	6.069124	.4551400	9.421928	-.018210
#1	-.459081	-.226616	1.005948	13.19223	.1188044	12.47417	-.027896
#2	.0094073	.3590953	.7732231	-1.05399	.7914755	6.369687	-.008524
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.3642161	3.385998	-2.85238	-.675367	15.66792	-1.12948	-.277098
#1	.8269613	-1.12454	-2.84708	-1.03372	-87.0913	1.567495	-.550485
#2	-.098529	7.896539	-2.85768	-.317018	118.4271	-3.82645	-.003711
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0966993	-.618697	.6020575	-1.68272	.0482570	-.002331	.5017781
#1	.1671354	-.958634	.7141072	-3.62130	.0670493	-.111467	.5211213
#2	.0262632	-.278761	.4900079	.2558575	.0294647	.1068046	.4824349
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.4312889	2.613461	-5.58565	1.264725
#1	-.082886	1.598803	-5.07037	2.893774
#2	.9454640	3.628118	-6.10093	-.364324
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: CR-LOWCHECK Operator: LCM
Run Time: 12/16/01 16:56:48
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	210.9090	21.80534	17.89146	5.061758	1.963232	3.162248	998.1273
#1	212.0629	20.78095	19.17162	5.032064	1.963015	3.053684	997.8671
#2	209.7551	22.82973	16.61129	5.091451	1.963449	3.270813	998.3876
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.070723	5.121093	10.83902	160.5856	10.10243	248.6725	5.018202
#1	5.021171	5.274593	11.03796	155.8991	9.846215	246.0437	4.975802
#2	5.120274	4.967593	10.64008	165.2721	10.35865	251.3013	5.060601
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	11.14460	249.1327	20.77923	2.573802	2291.702	34.16249	9.339521
#1	11.28091	249.0023	19.18357	2.517838	2280.793	31.86259	9.500843
#2	11.00830	249.2632	22.37489	2.629765	2302.611	Q36.46238	9.178200
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	250.0000	20.00000	3.000000	2500.000	30.00000	10.00000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	20.78686	14.72058	5.054409	25.91415	5.098256	25.39100	8.718901
#1	20.81259	14.84458	5.502896	26.77188	5.085689	25.32562	11.86784
#2	20.76113	14.59658	4.605922	25.05643	5.110824	25.45637	5.569961
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	10.79380	20.85489	20.74097	52.91666
#1	8.835003	22.32235	17.61378	52.94414
#2	12.75259	19.38743	23.86817	52.88917
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				50.00000
Range				20.00000

Analysis Report QC Standard 12/16/01 05:10:47 PM page 1

Method: TRACE2 Sample Name: CRCRI Operator: LCM
Run Time: 12/16/01 17:03:51
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	431.9709	131.7291	19.69251	425.2504	10.54471	10.89192	525.3036
#1	435.1453	132.7979	19.89150	425.4728	10.57437	10.79287	528.1474
#2	428.7964	130.6603	19.49352	425.0279	10.51505	10.99097	522.4598
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	21.06027	107.1275	53.58118	216.3001	6.576803	516.7692	32.84135
#1	21.44731	107.6467	53.83501	223.1792	7.296843	519.7512	32.82307
#2	20.67323	106.6083	53.32734	209.4211	5.856764	513.7872	32.85963
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	85.28424	554.2743	7.884161	20.69677	955.9521	22.36811	106.1293
#1	85.42854	555.7741	9.503158	21.28194	1005.463	23.03506	106.6484
#2	85.13994	552.7745	Q6.265164	20.11160	906.4414	21.70116	105.6102
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	43.86649	16.87518	Q6.251426	30.13394	5.344176	27.06229	6.488511
#1	44.40892	18.05543	Q6.482878	Q32.93092	5.363478	27.25607	8.235306
#2	43.32406	15.69493	6.019974	27.33696	5.324874	26.86851	4.741716
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	6.620551	8.087229	7.782095	17.70668
#1	6.827213	10.33985	9.084282	18.16322
#2	6.413888	5.834612	6.479908	17.25015
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACE2 Sample Name: IAICSAI Operator: LCM
Run Time: 12/16/01 17:14:48
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	486951.2	-7.69152	-1.51831	.7247626	.7521150	Q3.385035	495605.4
#1	487302.4	-10.4148	-5.63708	.7212563	.7255474	Q3.626564	495075.9
#2	486600.1	-4.96823	2.600454	.7282689	.7786825	Q3.143505	496134.9
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	20.00000	20.00000	5.000000	2.000000	3.000000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.135792	-.355389	1.089831	188718.5	2.431159	485630.5	Q8.312268
#1	.3362072	-.511312	1.078239	188462.9	3.849345	484918.6	Q8.283260
#2	-.607791	-.199465	1.101422	188974.1	1.012973	486342.4	Q8.341276
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	40000.00	6.000000	100000.0	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.1091049	-11.8795	Q-10.7537	-1.58687	-176.898	Q20.63805	2.221306
#1	.6245754	-14.1207	Q-13.7370	-1.45402	-240.495	19.27696	2.151309
#2	-.406366	-9.63832	-7.77039	-1.71972	-113.300	Q21.99915	2.291302
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	10.00000	3.000000	2500.000	20.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	Q24.25242	-1.08745	-1.37763	2.163288	Q12.69525	1.461001	-25.0939
#1	Q23.87511	-1.02466	-1.20153	-.383657	Q12.66330	1.471886	-27.8965
#2	Q24.62973	-1.15025	-1.55373	4.710233	Q12.72720	1.450117	-22.2913
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	16.19319	1.845432	-17.0537	18.64114
#1	19.72170	-8.65615	-16.2780	20.18146
#2	12.66469	12.34701	-17.8295	17.10082
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Method: TRACE2 Sample Name: FE:500PPM Operator: LCM
Run Time: 12/16/01 17:28:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19.29885	-8.31997	-2.92813	-.378070	.8806302	-.646255	8.665318
#1	22.17037	-8.76924	-2.94616	-.338174	.8779609	-.798157	6.972059
#2	16.42733	-7.87071	-2.91010	-.417967	.8832996	-.494354	10.35858
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.698185	-.949884	.3388530	501993.1	3.325969	-15.0924	-.551620
#1	1.075511	-1.22747	.5300407	503533.1	2.688042	-13.2070	-.659641
#2	2.320858	-.672299	.1476653	500453.1	3.963896	-16.9777	-.443599
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-2.42897	4.449727	L-132.445	-1.37077	-366.364	321.7379	3.795369
#1	-3.18833	4.664348	L-131.818	-1.46127	-343.859	321.4819	3.627410
#2	-1.66961	4.235106	L-133.071	-1.28027	-388.870	321.9939	3.963328
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.641863	-3.18129	-1.95048	1.901536	.0461738	-.129051	5.812298
#1	2.455515	-2.91142	-2.01581	2.482615	.0614559	-.138176	7.491566
#2	2.828212	-3.45116	-1.88515	1.320456	.0308918	-.119925	4.133030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.082377	3.585649	-200.460	-10.4286
#1	.2858753	5.336057	-200.395	-6.17768
#2	3.878880	1.835241	-200.525	-14.6795
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: IVICV Operator: LCM
Run Time: 12/16/01 17:41:30
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5021.494	398.4086	Q428.8959	399.9103	40.58198	41.84470	4885.155
#1	5017.549	397.1670	Q429.8785	400.1513	40.62177	Q42.13335	4891.536
#2	5025.440	399.6502	Q427.9132	399.6692	40.54218	41.55603	4878.774
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	393.6834	394.8431	393.1976	5033.971	400.7246	4813.363	393.2268
#1	393.6020	395.1674	393.8890	5043.509	402.5176	4814.518	393.5303
#2	393.7648	394.5188	392.5063	5024.433	398.9315	4812.208	392.9234
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	395.4434	4843.463	404.3523	40.71972	10137.07	403.8379	394.6248
#1	395.2199	4845.971	403.7767	40.77230	10038.64	400.1861	394.9989
#2	395.6669	4840.955	404.9279	40.66713	10235.50	407.4897	394.2507
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	397.0189	399.4884	393.4676	399.4858	390.9504	387.2552	405.8376
#1	397.9031	399.3841	392.7524	402.1042	391.1968	387.2373	410.9305
#2	396.1348	399.5927	394.1829	396.8674	390.7040	387.2730	400.7447
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	398.1676	408.4275	402.3143	Q454.9921
#1	398.3107	408.4715	401.4290	Q454.4036
#2	398.0245	408.3836	403.1995	Q455.5807
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				400.0000
Range				10.00000

Method: TRACE2 Sample Name: BIICB Operator: LCM
Run Time: 12/16/01 17:48:38
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	6.638421	-1.00383	-4.38374	.0443285	-.056062	.1485780	-5.19156
#1	7.206792	-1.48563	-5.02450	.0416108	-.068527	.1387050	-8.04432
#2	6.070050	-.522020	-3.74299	.0470461	-.043596	.1584510	-2.33880
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.349637	-.273942	.9770833	8.659700	-.129233	3.146682	.0225219
#1	-.333927	-.165684	.9449696	10.07536	-.402984	6.742536	.0725164
#2	-.365346	-.382200	1.009197	7.244037	.1445189	-.449171	-.027472
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.0993023	-3.46209	-1.44983	-.528403	-123.424	6.011630	-.220192
#1	-.525379	-1.15679	-.432580	-.672345	-133.458	8.725596	-.110202
#2	.7239841	-5.76739	-2.46708	-.384460	-113.390	3.297666	-.330183
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.0333395	.2355997	.1553004	1.596520	.0277082	-.088517	-.021350
#1	-.105289	.2520409	.7715910	1.726244	.0423181	-.111337	.5859496
#2	.1719678	.2191585	-.460990	1.466796	.0130983	-.065697	-.628650
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.183707	2.376569	-3.36356	1.698559
#1	-.897984	.5346751	-.916740	.2428733
#2	.5305691	4.218463	-5.81038	3.154245
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: CVCCV Operator: LCM
Run Time: 12/16/01 17:55:40
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50686.69	1009.565	1014.328	491.3937	49.25670	492.1260	97945.34
#1	50774.94	1006.062	1005.599	491.8283	49.23413	491.3733	97855.04
#2	50598.43	1013.068	1023.058	490.9593	49.27926	492.8787	98035.63
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	489.0480	488.5511	502.6928	48717.04	496.4355	98757.98	491.3660
#1	487.8152	488.4705	503.3838	48631.57	496.9482	98641.35	490.8453
#2	490.2809	488.6317	502.0019	48802.51	495.9228	98874.61	491.8867
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	495.1498	24633.86	1020.285	50.50844	100648.9	1007.619	495.7089
#1	487.3102	24709.47	1025.792	50.06154	100868.6	1009.727	495.5151
#2	502.9894	24558.25	1014.779	50.95534	100429.1	1005.512	495.9027
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	486.6812	506.5826	496.9711	499.4904	494.5990	496.3117	495.2586
#1	485.4692	505.8127	496.2653	497.3045	495.0261	496.2342	490.3162
#2	487.8933	507.3525	497.6769	501.6762	494.1719	496.3891	500.2009
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	497.0236	1024.566	1018.145	519.5608
#1	500.2638	1026.390	1025.493	518.9957
#2	493.7833	1022.742	1010.797	520.1259
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB Operator: LCM
Run Time: 12/16/01 18:02:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1.349077	-2.57749	-2.34515	.0169240	-.018451	-.045685	10.29632
#1	2.291988	-1.41761	-2.92729	.0197075	-.018524	-.153287	10.79725
#2	.4061668	-3.73737	-1.76301	.0141404	-.018378	.0619167	9.795402
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.381087	-.613233	.7986791	1.101089	-.305179	8.361802	-.037535
#1	.0421114	-.474557	.7228687	5.039801	-.372634	9.979423	-.027527
#2	-.804286	-.751909	.8744894	-2.83762	-.237723	6.744182	-.047544
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.7044999	-4.20230	-2.06505	-.924728	-104.745	1.349982	-.275660
#1	.5856155	-1.34153	.1085790	-.780759	-104.743	-.173684	-.330068
#2	.8233843	-7.06308	-4.23867	-1.06870	-104.747	2.873649	-.221251
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.383500	-.792582	.5472537	-1.42582	.0234997	-.230002	1.198202
#1	-.591507	-.238145	.5472793	-.778541	.0255899	-.120488	.6385837
#2	-.175493	-1.34702	.5472282	-2.07311	.0214095	-.339517	1.757820
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.05740	4.407461	-5.30165	.4939721
#1	-.878776	10.83151	-5.25323	.3949414
#2	-1.23603	-2.01658	-5.35007	.5930028
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: CR-LOWCHECK Operator: LCM
Run Time: 12/16/01 18:09:45
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	205.4138	17.79599	Q15.95965	4.990454	1.929331	3.038291	991.0521
#1	203.8910	18.06378	18.34704	4.997945	1.898817	3.112737	991.0204
#2	206.9366	17.52821	Q13.57226	4.982963	1.959845	2.963845	991.0839
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	4.998478	5.100674	10.70013	152.2132	10.31131	245.1980	4.968739
#1	5.047461	4.933048	10.58975	148.5068	9.870655	245.1142	5.040641
#2	4.949495	5.268300	10.81052	155.9195	10.75196	245.2818	4.896837
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	10.34740	250.8723	17.53896	2.596256	2298.510	28.31913	9.372074
#1	9.282176	249.8005	17.25538	2.741609	2289.413	25.62096	9.211654
#2	11.41263	251.9442	17.82254	2.450903	2307.606	31.01731	9.532494
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	250.0000	20.00000	3.000000	2500.000	30.00000	10.00000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	20.51211	13.67999	5.380518	24.64112	5.028257	24.99857	11.72435
#1	20.65958	13.84926	5.131139	23.05688	5.038621	25.12706	11.58301
#2	20.36463	13.51073	5.629896	26.22537	5.017893	24.87009	11.86569
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	9.604435	19.47421	16.57089	51.13179
#1	9.014125	18.46739	16.64893	50.81875
#2	10.19475	20.48103	16.49285	51.44484
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				50.00000
Range				20.00000

Method: TRACE2 Sample Name: CRCRI Operator: LCM
Run Time: 12/16/01 18:16:53
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	432.8341	128.8753	20.48345	425.4968	10.54814	11.00878	520.4368
#1	431.9887	126.8201	21.06208	425.8555	10.49122	11.00230	520.1888
#2	433.6796	130.9304	19.90482	425.1381	10.60506	11.01526	520.6847
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	20.87800	106.6969	53.18331	212.6293	5.789575	521.9867	32.91981
#1	21.01541	106.7876	53.20509	210.0547	6.839069	520.9993	32.91406
#2	20.74059	106.6063	53.16153	215.2039	4.740079	522.9741	32.92557
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	84.24937	552.8817	11.58200	20.05141	932.9748	22.06136	106.6467
#1	84.34457	551.1641	10.14141	20.06567	922.8334	22.38451	106.4634
#2	84.15417	554.5993	Q13.02260	20.03715	943.1161	21.73822	106.8299
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	44.60583	16.06004	5.169521	28.32697	5.351603	27.02791	7.181628
#1	44.42441	16.00780	5.028587	28.36535	5.344413	26.97302	9.915404
#2	44.78726	16.11228	5.310455	28.28859	5.358791	27.08280	4.447852
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	5.093149	14.92778	9.908583	16.78015
#1	5.300506	12.89692	8.763120	16.57335
#2	4.885793	16.95864	11.05405	16.98695
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACE2 Sample Name: IAICSAI Operator: LCM
Run Time: 12/16/01 18:23:55
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	485218.1	-4.27630	-3.56099	.7481092	.7675982	Q3.386530	500081.3
#1	485681.5	-1.12991	-5.54279	.7355294	.8382545	Q3.306272	500593.2
#2	484754.7	-7.42270	-1.57919	.7606889	.6969419	Q3.466787	499569.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	20.00000	20.00000	5.000000	2.000000	3.000000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.6832042	1.029795	1.563861	189911.2	2.815802	487342.4	Q8.157058
#1	.5811300	1.181945	1.419412	189962.7	1.386510	487903.0	Q8.123615
#2	.7852783	.8776457	1.708309	189859.8	4.245093	486781.7	Q8.190500
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	40000.00	6.000000	100000.0	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.061958	-5.68116	-2.83634	-.556618	-119.428	6.814575	2.537705
#1	.0215614	-1.31163	.8860829	-.727043	-48.5712	4.640488	3.000661
#2	-.145477	-10.0507	-6.55877	-.386193	-190.285	8.988663	2.074748
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	10.00000	3.000000	2500.000	20.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	Q25.45205	-.609667	.7216689	2.267240	Q12.67761	1.580737	-19.6248
#1	Q24.75484	.2017605	-.138629	1.721896	Q12.68762	1.568502	-16.1835
#2	Q26.14926	-1.42110	1.581967	2.812583	Q12.66760	1.592972	-23.0662
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	14.03559	8.693227	-8.60159	16.79696
#1	10.17094	20.61006	-8.97636	15.42664
#2	17.90024	-3.22361	-8.22682	18.16729
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Method: TRACE2 Sample Name: IBICSABI Operator: LCM
Run Time: 12/16/01 18:31:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	489146.9	605.3583	99.03773	502.6294	475.8104	956.3203	500216.9
=1	491578.4	607.7415	97.66714	504.1995	477.5051	959.8107	502837.5
=2	486715.4	602.9750	100.4083	501.0592	474.1157	952.8299	497596.4
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	475.2180	473.4810	525.4564	191007.4	48.65266	486617.9	491.9261
=1	476.9619	475.9817	528.2026	191685.1	49.78022	488347.7	493.7408
=2	473.4741	470.9802	522.7103	190329.7	47.52511	484888.2	490.1113
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	927.3611	5514.846	46.52240	210.9688	5031.040	100.9799	492.2986
=1	930.7610	5548.353	49.63919	211.8664	5062.227	96.54812	493.9820
=2	923.9612	5481.338	43.40562	210.0711	4999.852	105.4116	490.6152
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	940.5350	1054.679	970.5995	981.6422	Q12.75780	968.7313	26.35094
=1	944.9813	1056.422	976.0973	989.7347	Q12.82038	971.6332	25.97525
=2	936.0886	1052.936	965.1018	973.5497	Q12.69522	965.8295	26.72662
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	59.80309	59.13377	40.21629	Q1393.532
=1	61.68221	66.21931	41.34867	Q1397.002
=2	57.92397	52.04822	39.08390	Q1390.062
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Method: TRACE2 Sample Name: LR Operator: LCM
Run Time: 12/16/01 18:40:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	Q250038.4	5065.248	Q2177.639	9894.129	522.2164	2066.646	44.19506
#1	Q250452.3	5065.161	Q2178.803	9921.043	522.7716	2069.773	44.24364
#2	Q249624.5	5065.336	Q2176.474	9867.216	521.6614	2063.518	44.14649
Errors	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500000.0	5000.000	5000.000	10000.00	500.0000	2000.000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	9946.853	10013.68	10266.63	512751.9	20093.43	61.98331	9770.176
#1	9965.251	10025.47	10285.41	513312.8	20091.93	64.20917	9783.045
#2	9928.455	10001.90	10247.85	512191.0	20094.92	59.75746	9757.308
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass
Value	10000.00	10000.00	10000.00	500000.0	20000.00		10000.00
Range	5.000000	5.000000	5.000000	5.000000	5.000000		5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	7444.120	5.332603	2036.802	1036.139	1258.673	Q2100.289	10066.35
#1	7452.062	9.374214	2037.565	1037.890	1328.823	Q2104.171	10079.70
#2	7436.178	1.290990	2036.040	1034.388	1188.523	2096.407	10053.00
Errors	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Fail	QC Pass
Value	7500.000		2000.000	1000.000		2000.000	10000.00
Range	5.000000		5.000000	5.000000		5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	Q4929.453	4901.796	10058.16	2.309487	1975.239	9756.500	20157.43
#1	Q4936.377	4910.039	10058.33	.4529762	1978.269	9783.650	20173.75
#2	Q4922.529	4893.553	10057.98	4.165998	1972.210	9729.350	20141.12
Errors	QC Fail	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK
Value	10000.00	5000.000	10000.00		2000.000	10000.00	
Range	5.000000	5.000000	5.000000		5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	20061.42	2047.201	2031.603	3.169293
#1	20051.03	2045.714	2033.490	4.044275
#2	20071.82	2048.688	2029.716	2.294312
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 12/16/01 06:58:03 PM page 1

Method: TRACE2 Sample Name: CVCCV3 Operator: LCM
Run Time: 12/16/01 18:51:07
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50372.66	1009.152	1013.085	482.3981	49.10955	492.0925	97494.47
#1	50282.98	1002.344	1010.380	482.0414	48.99033	490.5700	97129.35
#2	50462.35	1015.961	1015.789	482.7548	49.22876	493.6150	97859.59
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	484.8175	485.9235	498.4142	48706.59	500.1544	97583.48	488.4587
#1	483.4248	483.8310	497.0698	48529.89	497.4379	97266.55	487.0607
#2	486.2102	488.0160	499.7585	48883.29	502.8709	97900.41	489.8567
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	482.6785	24533.36	1028.041	50.43094	99929.08	1008.073	493.2443
#1	480.3944	24536.07	1024.435	49.80783	99829.80	1007.929	491.2550
#2	484.9626	24530.64	1031.648	51.05404	100028.3	1008.217	495.2335
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	483.6365	501.4068	500.1462	496.8760	488.3086	489.3305	500.3309
#1	482.8228	500.3561	498.2996	493.6477	487.3630	487.7950	503.4025
#2	484.4503	502.4576	501.9928	500.1043	489.2543	490.8660	497.2593
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	500.0657	1033.191	1025.466	513.0582
#1	494.4550	1026.990	1023.156	513.2744
#2	505.6764	1039.392	1027.776	512.8420
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB3 Operator: LCM
Run Time: 12/16/01 18:58:08
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-.866804	.7695188	-4.29478	.1336211	.0266921	.0310835	22.74048
#1	.5905792	.6571116	-3.41972	.1586583	-.005510	-.008571	22.28554
#2	-2.32419	.8819261	-5.16985	.1085840	.0588943	.0707382	23.19542
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.365105	-.168567	.9172803	4.473228	-.543977	6.055117	.1044788
#1	.0135695	.0172148	.8061276	7.648781	-.783498	4.248517	.0745534
#2	-.743779	-.354349	1.028433	1.297674	-.304457	7.861716	.1344042
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4636375	1.888368	-.999282	-.358586	-27.4123	3.494925	.2258823
#1	.3923574	-1.56837	1.246424	-.303207	-49.1236	1.958492	.1166146
#2	.5349177	5.345102	-3.24499	-.413965	-5.70100	5.031359	.3351501
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.407738	.0554798	1.790697	1.129238	.0345679	.0821074	1.201537
#1	-.371577	.0410466	1.961221	1.043046	.0346473	.2844378	3.740605
#2	-.443899	.0699131	1.620173	1.215429	.0344885	-.120223	-1.33753
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.41727	4.698338	-3.84845	1.297707
#1	-3.04608	9.877929	-3.06968	1.203302
#2	.2115431	-.481253	-4.62721	1.392113
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: BLK52108 Operator: LCM
Run Time: 12/16/01 19:16:15
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	129.7290	2.858489	-8.66788	1.282044	.0132584	-.207004	263.4804
#1	130.9647	2.693670	-7.26771	1.285486	.0124418	-.087639	264.3485
#2	128.4934	3.023308	L-10.0680	1.278603	.0140750	-.326369	262.6122
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.691095	-.786429	9.379881	39.25761	2.469521	42.73284	1.640671
#1	1.943390	-.982832	9.294533	35.42355	2.788498	43.85715	1.659785
#2	1.438800	-.590026	9.465228	43.09168	2.150545	41.60853	1.621557
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-2.87207	29.67936	.3990282	.0834111	495.6866	-8.48905	.3699886
#1	-2.44728	28.95435	.6089842	.1099505	466.2486	-6.09444	.2625214
#2	-3.29685	30.40437	.1890721	.0568717	525.1247	L-10.8837	.4774558
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	11.87604	5.338997	.9095385	21.91597	1.229783	.6585249	1.515036
#1	11.97704	5.056045	1.086808	18.63246	1.227246	.6953822	1.749726
#2	11.77503	5.621950	.7322686	25.19947	1.232320	.6216675	1.280347
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.946213	-12.8166	7.006291	28.92816
#1	3.307329	-13.7230	7.774448	29.75395
#2	2.585096	-11.9102	6.238134	28.10239
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				50.00000
Low				-50.0000

Method: TRACE2 Sample Name: BKS52108 Operator: LCM
Run Time: 12/16/01 19:23:34
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10015.88	94.62841	91.90356	990.3941	48.80487	99.11423	10054.81
#1	10032.64	95.99734	91.60564	991.2259	48.75829	99.05698	10054.41
#2	9999.117	93.25948	92.20149	989.5623	48.85145	99.17146	10055.22
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.00	120.0000	120.0000	1200.000	60.00000	120.0000	12000.00
Low	8000.000	80.00000	80.00000	800.0000	40.00000	80.00000	8000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	495.8478	494.1837	508.4692	10082.72	978.0281	9353.774	496.7938
#1	495.5963	494.8228	508.8141	10086.48	977.3463	9358.532	496.9102
#2	496.0992	493.5446	508.1242	10078.96	978.7100	9349.017	496.6773
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	600.0000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	400.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	484.1254	9448.434	86.18729	99.51340	9875.983	100.5564	502.4572
#1	483.8041	9447.790	87.05434	99.49437	10012.36	96.72687	502.5897
#2	484.4467	9449.077	85.32025	99.53243	9739.610	104.3860	502.3247
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	12000.00	120.0000	120.0000	12000.00	120.0000	600.0000
Low	400.0000	8000.000	80.00000	80.00000	8000.000	80.00000	400.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1000.891	934.7397	503.4237	522.9065	981.9950	2008.519	991.4689
#1	1001.057	934.1880	502.8628	527.0933	982.5380	2008.900	993.3998
#2	1000.724	935.2914	503.9845	518.7198	981.4520	2008.137	989.5380
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1200.000	1200.000	600.0000	600.0000	1200.000	2400.000	
Low	800.0000	800.0000	400.0000	400.0000	800.0000	1600.000	

Elem	2/PB	1/SE	2/SE	SI
Avge	971.3074	77.04667	90.75712	L4927.244
#1	969.3192	77.86218	91.64999	L4928.779
#2	973.2956	76.23116	89.86424	L4925.708
Errors	NOCHECK	NOCHECK	NOCHECK	LC Low
High				12000.00
Low				8000.000

Method: TRACE2 Sample Name: S 112012-003-02-1/1 Operator: LCM
Run Time: 12/16/01 19:30:54
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19667.50	-.382889	-4.66683	55.01093	.4385646	-.112558	632.3183
#1	19747.12	1.048222	-5.32983	54.92808	.4498773	.0139056	632.7343
#2	19587.88	-1.81400	-4.00384	55.09379	.4272518	-.239022	631.9023
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	17.57518	1.286986	13.06207	7059.933	17.60008	457.8174	80.87064
#1	17.58061	.9269730	13.36974	7050.031	17.50706	460.3991	80.81474
#2	17.56975	1.647000	12.75439	7069.835	17.69310	455.2357	80.92654
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.996270	455.4742	-3.06037	-.880312	601.0547	.3872998	25.20370
#1	4.069002	456.1561	-1.39726	-1.39648	599.8768	2.840643	25.17852
#2	3.923538	454.7924	-4.72349	-.364142	602.2325	-2.06604	25.22889
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	34.58662	6.956381	1.564642	22.01574	7.329261	738.5373	19.56545
#1	34.55987	6.482720	1.537679	22.70951	7.333915	737.9832	20.34185
#2	34.61336	7.430042	1.591605	21.32196	7.324606	739.0914	18.78906
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	16.61694	-13.5020	2.160055	2824.450
#1	16.08921	-11.8684	3.837949	2815.642
#2	17.14467	-15.1355	.4821601	2833.258
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: D 112012-003-02-1/1 Operator: LCM
Run Time: 12/16/01 19:38:13
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19846.56	.8715273	-6.51773	58.11283	.3939494	-.043196	539.8683
#1	19871.24	1.775630	-7.36644	58.14641	.3731332	-.036000	537.7393
#2	19821.88	-.032576	-5.66902	58.07926	.4147655	-.050392	541.9973
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	16.62643	1.934295	18.56221	7085.446	18.22997	423.5110	91.69044
#1	16.51166	2.130813	18.41296	7072.002	19.28200	423.1627	91.61836
#2	16.74119	1.737778	18.71146	7098.891	17.17794	423.8593	91.76252
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.210141	458.1420	-2.79211	-.492045	411.8735	-1.12354	25.06128
#1	3.745842	456.4501	-2.89156	-.250029	357.8355	-6.03230	24.43040
#2	4.674441	459.8338	-2.69267	-.734061	465.9115	3.785215	25.69217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	51.64771	8.794496	.7326251	21.00421	7.770577	656.6542	18.21874
#1	51.20990	8.278635	1.308635	20.29088	7.765303	656.5674	19.58441
#2	52.08553	9.310356	.1566150	21.71756	7.775852	656.7410	16.85307
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	18.23513	-14.1323	2.877531	2600.612
#1	19.13034	-13.5906	2.457528	2601.300
#2	17.33992	-14.6740	3.297534	2599.924
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SP112012-003-02-1/1 Operator: LCM
Run Time: 12/16/01 19:45:32
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	48447.89	90.01629	93.69920	1121.131	51.01488	101.7245	10700.46
#1	48522.55	90.58537	94.98508	1122.253	51.10395	102.2878	10720.26
#2	48373.23	89.44720	92.41331	1120.010	50.92580	101.1613	10680.66
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	532.9341	512.0811	533.2803	19096.79	1018.783	10163.45	605.2035
#1	533.3403	512.8392	534.5363	19107.92	1022.194	10179.73	606.0676
#2	532.5280	511.3230	532.0244	19085.66	1015.372	10147.18	604.3395
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	511.2886	11391.14	90.47940	106.8496	10358.74	105.7506	551.8762
#1	513.4944	11405.98	89.33823	107.6391	10442.00	103.4658	552.9270
#2	509.0829	11376.30	91.62058	106.0600	10275.48	108.0354	550.8255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1053.160	966.9277	539.3760	555.1954	1029.274	3033.157	1019.892
#1	1054.243	967.5790	538.9614	555.6620	1030.628	3034.402	1024.905
#2	1052.076	966.2764	539.7905	554.7288	1027.921	3031.912	1014.879
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1018.232	82.61598	94.41056	7264.408
#1	1020.842	81.62820	93.19269	7291.858
#2	1015.621	83.60377	95.62843	7236.958
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: PS112012-003-02-1/1 Operator: LCM
Run Time: 12/16/01 19:52:51
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	20326.47	75.96493	72.10422	74.34117	10.25510	20.19607	3568.479
#1	20393.74	76.10519	73.65546	74.39307	10.22144	20.03712	3562.322
#2	20259.21	75.82468	70.55297	74.28928	10.28877	20.35501	3574.636
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	36.60759	30.81313	42.98811	7346.561	46.40744	829.5883	99.77529
#1	36.68805	30.56608	43.11678	7342.973	44.78176	830.2893	99.75158
#2	36.52712	31.06017	42.85945	7350.150	48.03312	828.8874	99.79900
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	44.79146	644.3317	59.68206	38.88178	5105.591	97.78374	44.67517
#1	44.08408	648.0237	58.22499	38.82261	5206.758	98.69785	44.79376
#2	45.49884	640.6395	61.13914	38.94096	5004.424	96.86964	44.55657
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	113.3382	75.31703	31.36564	120.6493	27.62972	748.8090	45.25729
#1	113.2515	74.39099	32.13203	121.5834	27.69151	749.3357	47.10287
#2	113.4250	76.24307	30.59926	119.7152	27.56792	748.2823	43.41171
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	46.98210	46.62911	66.20802	7556.045
#1	43.62080	50.14022	62.26687	7568.831
#2	50.34341	43.11800	70.14915	7543.258
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SE112012-003-02-1/1 Operator: LCM
Run Time: 12/16/01 20:00:10
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	3978.479	.4769643	-3.61994	10.76977	.0747013	-.102204	135.1563
#1	3961.508	1.903361	-1.63729	10.79253	.0989005	-.088404	134.4510
#2	3995.450	-.949432	-5.60259	10.74702	.0505022	-.116003	135.8616
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	4.105823	.0428890	2.992148	1410.856	4.343387	93.06687	15.83897
#1	4.610203	.4601692	3.029115	1419.833	5.025923	96.16081	15.84411
#2	3.601444	-.374391	2.955182	1401.880	3.660850	89.97293	15.83382
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.795399	88.50923	-2.12248	-.430365	61.28461	-2.80490	4.813743
#1	1.875163	93.66806	-2.85125	-.159371	184.5279	-3.25006	4.871295
#2	1.715635	83.35040	-1.39372	-.701358	-61.9587	-2.35974	4.756192
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	6.904750	.7865629	.3518987	4.126027	1.418324	145.0034	5.975128
#1	6.837972	1.245148	.3239046	4.516441	1.435526	145.3475	5.204647
#2	6.971528	.3279779	.3798928	3.735613	1.401121	144.6593	6.745608
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	3.527072	-.519503	-2.92451	574.9184
#1	4.936116	-1.68962	-3.43260	572.2466
#2	2.118028	.6506178	-2.41642	577.5902
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112012-004-02-1/1 Operator: LCM
Run Time: 12/16/01 20:07:29
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	23118.09	2.187308	-3.72501	74.80582	.5524050	.0091793	576.9110
#1	22981.91	2.203483	-5.50344	74.00957	.5263463	.0334868	569.0656
#2	23254.28	2.171134	-1.94658	75.60205	.5784637	-.015128	584.7565
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	18.93828	3.793185	11.48806	12540.86	18.20608	832.9806	149.4656
#1	18.65087	3.443608	11.54392	12383.74	17.48450	821.6617	147.7188
#2	19.22569	4.142763	11.43220	12697.99	18.92765	844.2994	151.2124
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.968330	843.7288	-1.75420	.0289719	514.1887	-5.37774	31.72245
#1	4.832491	840.5972	-1.12149	-.110125	522.3140	-3.01614	31.19700
#2	5.104170	846.8604	-2.38690	.1680693	506.0634	-7.73935	32.24791
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	28.43378	6.995768	1.108033	23.70087	7.274377	629.7429	19.51926
#1	27.94259	6.370059	1.362148	23.88139	7.282675	624.6487	21.18696
#2	28.92498	7.621478	.8539172	23.52034	7.266080	634.8371	17.85156
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	17.54901	-12.6624	3.699469	3450.242
#1	15.63274	-8.44761	2.541152	3383.494
#2	19.46528	-16.8772	4.857787	3516.990
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112012-005-02-1/1 Operator: LCM
Run Time: 12/16/01 20:14:47
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19844.66	.8431300	-1.74583	546.5749	.6887360	.0956206	4018.727
#1	19838.93	.1491193	-.971702	546.5182	.6873924	.1299770	4024.931
#2	19850.40	1.537141	-2.51996	546.6318	.6900796	.0612643	4012.522
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	18.63134	.5126694	17.00673	12003.84	60.12989	1215.994	302.3971
#1	18.93452	.3846420	17.31750	12028.14	59.46499	1218.797	302.6196
#2	18.32817	.6406969	16.69596	11979.55	60.79480	1213.192	302.1745
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	5.245468	1106.854	-2.15661	-.417181	636.0942	-6.68045	31.07342
#1	5.269837	1111.066	-1.21092	-.433766	691.1082	-6.92750	31.17976
#2	5.221099	1102.643	-3.10229	-.400596	581.0802	-6.43341	30.96708
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	63.26763	11.27081	2.025792	25.14698	36.22138	644.1002	60.66246
#1	63.86725	11.19184	1.769931	27.66923	36.23047	645.1030	60.35509
#2	62.66801	11.34978	2.281652	22.62472	36.21229	643.0974	60.96983
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	59.86325	-17.8705	5.699863	4291.693
#1	59.01958	-18.5260	7.446131	4236.842
#2	60.70692	-17.2151	3.953596	4346.544
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112012-008-02-1/1 Operator: LCM
Run Time: 12/16/01 20:22:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	76549.97	.9552336	13.25017	485.6413	5.305391	.1635787	2498.942
#1	76597.43	2.004227	7.280559	485.8396	5.278011	.1688156	2495.766
#2	76502.51	-.093760	19.21979	485.4430	5.332772	.1583419	2502.119
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	66.81192	23.70781	28.27921	52063.14	46.27182	3457.232	481.6751
#1	66.78582	23.68154	28.10763	52064.16	46.22368	3451.330	481.2812
#2	66.83801	23.73407	28.45079	52062.12	46.31997	3463.134	482.0690
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	35.50013	2321.874	-.023079	-1.20937	785.2307	.6969957	104.0283
#1	36.20092	2325.688	.9134771	-1.15422	773.3839	1.600414	104.0249
#2	34.79935	2318.061	-.959636	-1.26452	797.0776	-.206423	104.0316
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	159.3943	11.88410	1.952480	26.46345	27.60749	1094.130	41.68399
#1	159.1395	12.39676	2.609934	26.58804	27.60235	1089.956	40.02563
#2	159.6492	11.37143	1.295027	26.33887	27.61264	1098.304	43.34235
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	48.56524	-12.0545	5.992181	4517.846
#1	49.32224	-12.6469	7.693189	4510.479
#2	47.80824	-11.4621	4.291174	4525.212
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: CVCCV3 Operator: LCM
Run Time: 12/16/01 20:29:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50256.15	1002.239	1003.004	482.4474	48.50326	485.3352	96723.42
#1	50276.61	1001.203	1004.341	482.6987	48.52836	486.5644	96820.94
#2	50235.69	1003.275	1001.667	482.1960	48.47818	484.1060	96625.91
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	481.4385	480.8005	495.4739	48085.23	491.2104	97288.19	483.3975
#1	481.2273	480.9022	495.5598	48087.84	489.7978	97341.00	483.7610
#2	481.6497	480.6988	495.3881	48082.61	492.6231	97235.38	483.0340
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	482.4266	24591.82	1017.793	50.27429	100617.6	998.0442	489.4068
#1	482.0745	24634.08	1020.566	50.25048	100804.0	997.3408	489.7107
#2	482.7786	24549.57	1015.020	50.29810	100431.2	998.7476	489.1028
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	477.4288	497.5745	493.1054	498.4183	488.0106	488.6438	488.5658
#1	477.0575	497.0597	491.3049	497.3745	488.1119	488.3984	487.8770
#2	477.8000	498.0894	494.9059	499.4620	487.9092	488.8892	489.2546
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	492.5324	1019.708	1016.836	513.0923
#1	490.7578	1028.247	1016.725	513.3606
#2	494.3069	1011.168	1016.946	512.8240
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB3 Operator: LCM
Run Time: 12/16/01 20:36:45
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-.665613	-.145996	-3.94835	.0684944	.0231135	.1241064	18.71196
#1	-.482744	-1.25167	-.833250	.0252022	.0043884	.0806532	18.14361
#2	-.848482	.9596832	-7.06345	.1117865	.0418385	.1675596	19.28030
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.0401179	.0506405	.8385141	9.658756	.0608611	10.83541	.0014412
#1	-.145727	-.042662	.7567361	4.705653	.6101811	7.471637	-.047423
#2	.2259633	.1439436	.9202921	14.61186	-.488459	14.19918	.0503056
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6918671	1.043420	-.520701	-.210770	-58.4821	-1.46879	-.387077
#1	.8817343	.3524563	-.543936	-.563577	-107.904	-4.74988	-.549546
#2	.5020000	1.734383	-.497465	.1420366	-9.06071	1.812300	-.224608
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.077766	-.262778	1.411889	.5190580	.0501596	-.002385	-.016992
#1	-.173297	-.497107	1.557071	1.641036	.0256910	-.010784	-1.01851
#2	.0177658	-.028448	1.266706	-.602920	.0746282	.0060147	.9845277
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.0992560	5.003291	-3.28318	1.716822
#1	1.423993	2.711420	-2.17206	1.423687
#2	-1.22548	7.295162	-4.39430	2.009957
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: S 112012-009-02-1/1 Operator: LCM
Run Time: 12/16/01 20:44:04
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	172622.9	3.006772	-3.24489	166.2947	2.333643	.0113474	788.5388
#1	173235.6	4.768364	-3.73464	166.6101	2.330028	.0836062	788.2675
#2	172010.2	1.245181	-2.75515	165.9794	2.337258	-.060911	788.8102
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	80.89569	6.683219	24.06452	23174.83	31.18161	1981.447	125.6990
#1	80.91640	6.740699	24.09460	23172.71	32.87937	1981.448	125.9052
#2	80.87498	6.625740	24.03444	23176.94	29.48385	1981.445	125.4927
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	28.27801	2179.704	-1.52589	-.665925	677.7036	1.215214	85.15593
#1	27.84988	2191.268	-.277396	-.460067	699.7493	-2.09053	85.50458
#2	28.70614	2168.141	-2.77438	-.871782	655.6580	4.520956	84.80728
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	75.03309	10.41484	1.447687	21.56520	11.70830	971.8611	20.75693
#1	74.37492	10.75845	1.538369	20.40383	11.71026	974.0483	24.32826
#2	75.69125	10.07124	1.357006	22.72656	11.70635	969.6740	17.18560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	36.39349	-10.2384	2.829894	4165.145
#1	37.15437	-3.21423	1.190561	4177.535
#2	35.63260	-17.2625	4.469227	4152.756
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112012-011-02-1/1 Operator: LCM
Run Time: 12/16/01 20:51:24
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	23053.54	1.361342	11.55587	92.02481	.5434056	.3126110	1712.595
#1	23042.13	2.649084	13.73856	92.10926	.5543671	.4124209	1708.991
#2	23064.96	.0735990	9.373177	91.94037	.5324443	.2128011	1716.199
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	22.35835	1.310081	34.31963	13598.39	106.6375	1184.956	121.5191
#1	22.20106	1.235216	34.49516	13580.46	107.1023	1190.638	121.4002
#2	22.51565	1.384947	34.14410	13616.32	106.1727	1179.274	121.6380
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.276276	912.9965	-2.61415	-.798617	675.0115	-4.88638	32.87032
#1	5.924604	919.0018	-2.96478	-1.09473	685.9991	-6.11287	33.26517
#2	6.627946	906.9911	-2.26352	-.502501	664.0238	-3.65989	32.47548
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	115.6406	7.716621	1.718409	21.59308	24.27738	561.5925	107.1667
#1	115.7642	7.631899	1.258249	23.05824	24.27889	561.4099	106.6742
#2	115.5171	7.801343	2.178570	20.12793	24.27587	561.7752	107.6594
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	106.3723	-11.4912	1.823823	3985.234
#1	107.3158	-13.2670	2.185781	3990.783
#2	105.4289	-9.71540	1.461866	3979.686
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112012-012-02-1/1 Operator: LCM
Run Time: 12/16/01 20:58:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	22584.67	2.341174	-1.15352	74.59164	.4672744	.2368741	1765.996
#1	22569.08	2.963801	.3474921	74.65377	.4402251	.2909153	1774.964
#2	22600.26	1.718548	-2.65453	74.52950	.4943237	.1828330	1757.027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	26.69546	1.560334	19.12233	12279.06	22.94762	1067.962	92.45416
#1	26.89988	1.914861	18.83091	12313.98	22.58088	1069.437	92.65005
#2	26.49104	1.205807	19.41375	12244.14	23.31436	1066.488	92.25828
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	5.998345	868.5554	-4.54468	-.484143	561.1681	-8.03421	32.01153
#1	6.557000	863.0479	-4.35636	-.129246	566.0651	-4.93237	31.83670
#2	5.439690	874.0629	-4.73300	-.839040	556.2711	-11.1361	32.18635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	64.14503	6.823322	3.164858	22.44350	21.20768	642.7948	23.35597
#1	64.17609	6.989550	2.706784	22.48006	21.22569	642.9278	21.80316
#2	64.11399	6.657095	3.622932	22.40694	21.18967	642.6618	24.90878
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	22.74299	-15.6093	.9871181	3898.651
#1	22.96929	-14.5576	.7437682	3888.362
#2	22.51670	-16.6610	1.230468	3908.941
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: BLK52111 Operator: LCM
Run Time: 12/16/01 21:06:03
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	27.58503	-.335841	-5.44871	1.114836	-.031699	.0118454	195.7112
#1	25.17623	1.315586	-6.58908	1.107945	-.021207	.0862305	197.8222
#2	29.99383	-1.98727	-4.30835	1.121726	-.042191	-.062540	193.6002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.2612385	-.541092	4.076367	21.90538	2.411241	37.99867	.3154604
#1	.4708703	-.368281	4.162597	25.49373	2.535959	38.96945	.3059254
#2	.0516067	-.713902	3.990138	18.31703	2.286524	37.02788	.3249955
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-1.38988	36.81495	-2.76614	-.150448	238.6564	.1950303	-.147062
#1	-.704255	38.22854	-.880841	.3123474	213.8587	1.852572	.0229936
#2	-2.07550	35.40137	-4.65143	-.613244	263.4542	-1.46251	-.317118
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	9.070162	H16.22395	.0698982	1.858423	.7926317	1.124325	3.317924
#1	8.907004	H16.81648	-.417873	1.861065	.7766621	1.135372	1.636518
#2	9.233318	H15.63142	.5576694	1.855780	.8086013	1.113278	4.999329
Errors	LC Pass	LC High	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.957355	-8.46157	.0811661	H118.6885
#1	2.985132	-3.78556	.5711076	H117.1690
#2	.9295777	-13.1376	-.408775	H120.2081
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				50.00000
Low				-50.0000

Analysis Report 12/16/01 09:20:36 PM page 1

Method: TRACE2 Sample Name: BKS52111 Operator: LCM
Run Time: 12/16/01 21:13:22
Comment: UG/L
Code: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5019.875	45.97536	44.83479	493.1331	24.08526	49.35232	5168.218
#1	5028.301	45.65242	47.13182	494.0221	24.10031	49.39635	5177.872
#2	5011.449	46.29830	42.53777	492.2441	24.07020	49.30828	5158.565
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.000	60.00000	60.00000	600.0000	30.00000	60.00000	6000.000
Low	4000.000	40.00000	40.00000	400.0000	20.00000	40.00000	4000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	244.3916	245.3467	250.2550	4948.157	489.5650	4719.782	245.2863
#1	244.3785	245.9417	251.1656	4962.831	489.9960	4735.883	245.7233
#2	244.4047	244.7517	249.3444	4933.484	489.1340	4703.680	244.8493
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	300.0000	300.0000	6000.000	600.0000	6000.000	300.0000
Low	200.0000	200.0000	200.0000	4000.000	400.0000	4000.000	200.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	243.1360	4863.029	44.06486	49.04152	5070.484	50.23742	247.2079
#1	243.3611	4877.990	45.44844	48.79069	5059.837	47.26741	247.8539
#2	242.9109	4848.069	42.68129	49.29234	5081.131	53.20743	246.5619
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	6000.000	60.00000	60.00000	6000.000	60.00000	300.0000
Low	200.0000	4000.000	40.00000	40.00000	4000.000	40.00000	200.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	499.1310	536.8704	247.4470	249.3636	489.1682	985.5154	490.2506
#1	500.6115	537.3341	247.8643	250.7598	489.9565	986.1644	493.2027
#2	497.6504	536.4067	247.0298	247.9673	488.3799	984.8664	487.2985
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	600.0000	300.0000	300.0000	600.0000	1200.000	
Low	400.0000	400.0000	200.0000	200.0000	400.0000	800.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	489.2217	43.47934	44.35716	5287.640
#1	488.3922	48.67371	43.83532	5302.081
#2	490.0513	38.28497	44.87900	5273.198
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				6000.000
Low				4000.000

Method: TRACE2 Sample Name: S 112013-001-03-1/1 Operator: LCM
Run Time: 12/16/01 21:20:42
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	130.1807	2.514262	12.84889	10.29775	-.030574	-.015554	101877.8
#1	128.9144	3.002941	11.73091	10.32764	-.067358	-.164198	102307.4
#2	131.4470	2.025583	13.96687	10.26785	.0062102	.1330902	101448.3
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.890683	-.758825	5.325482	5033.898	197.6695	12672.02	94.81918
#1	2.257315	-.891156	5.394253	5053.619	198.1630	12720.27	95.20911
#2	1.524051	-.626494	5.256712	5014.177	197.1760	12623.77	94.42926
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.608199	7427.241	-.511474	-.344771	99907.33	-1.75548	2.347195
#1	-.193111	7446.947	-.113091	-.209577	100287.6	-3.59574	2.643705
#2	-1.02329	7407.536	-.909856	-.479965	99527.02	.0847697	2.050686
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	42.78680	158.2808	1.182351	.0635561	745.6433	4.403688	197.9248
#1	43.06111	159.1719	1.624071	-1.73901	748.2520	4.488387	196.6070
#2	42.51248	157.3898	.7406318	1.866126	743.0346	4.318990	199.2425
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	197.5414	-1.52274	-.006236	H11320.45
#1	198.9406	-2.76291	1.211446	H11356.18
#2	196.1423	-.282564	-1.22392	H11284.73
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: D 112013-001-03-1/1 Operator: LCM
Run Time: 12/16/01 21:28:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	110.1670	2.224896	11.24317	10.12096	-.009298	-.213672	100751.7
#1	112.4636	1.350806	10.49501	10.12235	.0124449	-.270386	100808.2
#2	107.8704	3.098987	11.99134	10.11957	-.031040	-.156958	100695.1
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.533654	-.727794	4.323099	4985.921	197.0806	12554.60	93.73029
#1	1.727877	-.273781	4.527973	4990.736	196.9031	12543.48	93.74200
#2	1.339432	-1.18181	4.118225	4981.105	197.2580	12565.72	93.71857
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.077849	7347.627	-1.04962	-.228643	98942.42	-4.12286	2.525652
#1	-.021496	7349.144	2.012874	-.287253	98922.19	-3.09228	2.520991
#2	-.134201	7346.110	-4.11212	-.170032	98962.66	-5.15344	2.530314
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	40.48200	152.6961	1.301073	-.608018	739.3103	3.890793	196.1597
#1	40.88826	151.9949	1.563122	-.291109	739.1061	3.984872	195.0734
#2	40.07575	153.3972	1.039023	-.924927	739.5144	3.796714	197.2460
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	197.5405	-1.07497	-1.03744	H11210.84
#1	197.8175	2.516820	1.760345	H11217.46
#2	197.2635	-4.66675	-3.83523	H11204.21
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: SP112013-001-03-1/1 Operator: LCM
Run Time: 12/16/01 21:35:20
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5267.756	50.23394	59.10383	502.6773	24.22980	48.88846	105402.1
#1	5261.792	48.67828	57.99006	502.8274	24.24164	48.81780	105407.3
#2	5273.720	51.78959	60.21759	502.5271	24.21795	48.95913	105396.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	244.1788	243.1968	257.6556	9906.238	686.0618	17245.71	337.6467
#1	244.3369	243.1319	257.3055	9909.455	685.1215	17267.72	337.7977
#2	244.0208	243.2617	258.0058	9903.022	687.0021	17223.69	337.4958
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	240.5130	12272.07	44.73467	49.74304	103916.6	46.52600	251.3696
#1	240.1003	12241.48	42.63029	49.84636	103667.6	43.77465	251.4418
#2	240.9256	12302.67	46.83906	49.63972	104165.6	49.27735	251.2975
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	527.7385	653.4465	247.6581	248.6821	1216.824	993.2208	688.5284
#1	529.1521	652.8647	247.5123	247.1623	1217.694	994.1020	689.9407
#2	526.3249	654.0283	247.8038	250.2020	1215.955	992.3396	687.1161
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	684.8291	41.71130	46.24595	H16225.33
#1	682.7126	36.92364	45.48312	H16213.66
#2	686.9457	46.49897	47.00878	H16237.01
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: PS112013-001-03-1/1 Operator: LCM
Run Time: 12/16/01 21:42:39
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1169.045	83.87213	90.23677	30.48774	10.01567	20.69745	103767.8
#1	1167.193	83.26905	90.80100	30.44825	10.02856	20.69387	103734.9
#2	1170.896	84.47522	89.67255	30.52723	10.00277	20.70103	103800.8
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	22.28303	29.43627	36.21883	5429.084	226.3557	12983.00	114.2714
#1	22.13722	29.44873	36.14244	5430.470	225.8559	12981.28	114.1749
#2	22.42884	29.42382	36.29523	5427.699	226.8556	12984.71	114.3679
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	39.74512	7546.976	66.52782	41.18443	103518.7	104.0077	23.06681
#1	39.41853	7520.958	65.74790	41.40066	103257.9	104.5036	23.39042
#2	40.07171	7572.994	67.30774	40.96820	103779.4	103.5118	22.74320
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	123.6855	229.7883	31.80498	104.0694	757.0418	25.09934	229.2042
#1	123.9870	230.1613	32.55682	102.8288	757.8726	25.13329	231.5842
#2	123.3840	229.4154	31.05314	105.3101	756.2110	25.06539	226.8243
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	224.9311	62.71434	68.43409	H16121.33
#1	222.9913	67.98964	64.62657	H16114.39
#2	226.8709	57.43905	72.24161	H16128.27
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Analysis Report 12/16/01 09:57:13 PM page 1

Method: TRACE2 Sample Name: SE112013-001-03-1/1 Operator: LCM
Run Time: 12/16/01 21:49:58
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	24.52825	-.320363	-.300392	2.027661	-.011806	-.089450	19488.63
=1	24.24438	.7363755	-.945057	2.057069	-.017252	.0132053	19551.84
=2	24.81211	-1.37710	.3442741	1.998253	-.006359	-.192104	19425.43
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.5375149	-.217800	1.256515	1000.685	39.43571	2490.826	18.25916
=1	.7897998	.1554425	1.579109	1006.843	38.54675	2497.379	18.34059
=2	.2852299	-.591043	.9339214	994.5277	40.32466	2484.273	18.17773
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.290028	1428.775	-3.45819	-.393140	18749.76	1.306817	.4302899
=1	-.078504	1425.796	-2.44411	.0232222	18702.24	2.616882	.4853813
=2	-.501551	1431.753	-4.47227	-.809502	18797.28	-.003248	.3751986
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	8.560089	30.36877	.2966443	.6458979	144.1608	.7441101	38.33179
=1	8.554787	31.15726	.4376067	2.602440	144.2742	.9183667	36.12452
=2	8.565392	29.58029	.1556818	-1.31064	144.0474	.5698535	40.53907
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	39.98713	-2.17820	-4.09867	2206.728
=1	39.75733	-.357152	-3.48803	2207.651
=2	40.21692	-3.99925	-4.70931	2205.806
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Analysis Report QC Standard 12/16/01 10:04:32 PM page 1

Method: TRACE2 Sample Name: CVCCV3 Operator: LCM
Run Time: 12/16/01 21:57:18
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50668.83	1010.014	1004.855	486.2772	48.56502	486.9772	96730.73
#1	50729.10	1010.471	1003.037	487.0868	48.56027	487.1750	96769.54
#2	50608.56	1009.557	1006.672	485.4677	48.56976	486.7794	96691.92
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	483.1403	482.5468	500.7677	48270.13	493.5617	97767.20	485.6119
#1	483.9109	482.7384	501.8188	48276.97	497.4921	97843.09	485.7594
#2	482.3696	482.3553	499.7167	48263.29	489.6313	97691.31	485.4644
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	482.4375	24897.03	1021.289	50.19248	101521.9	992.8278	492.5721
#1	482.8200	24899.13	1025.600	50.03170	101606.6	993.1715	491.8908
#2	482.0550	24894.93	1016.979	50.35326	101437.2	992.4841	493.2534
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	476.9651	502.2152	492.8978	496.6584	490.8225	491.5231	490.5770
#1	476.2994	502.8258	493.5666	495.6465	491.2274	491.9390	495.5756
#2	477.6309	501.6046	492.2289	497.6703	490.4177	491.1072	485.5783
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	495.0537	1023.366	1020.251	516.8248
#1	498.4500	1027.535	1024.631	518.3911
#2	491.6574	1019.196	1015.870	515.2586
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB3 Operator: LCM
Run Time: 12/16/01 22:04:37
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-.597918	-2.94980	-3.49911	.0167099	-.020294	.0028349	13.59889
#1	-1.12790	-4.03291	-4.54435	.0139225	.0101296	.0414431	13.85201
#2	-.067941	-1.86669	-2.45386	.0194974	-.050718	-.035773	13.34578
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.584129	-.241452	.2682015	8.606609	.8681237	9.238936	-.048033
#1	-.677897	-.164624	.3456026	11.28226	1.846142	11.75003	-.047997
#2	-.490361	-.318281	.1908005	5.930959	-.109895	6.727840	-.048070
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6207699	-1.02775	-1.29183	-.800961	-49.8184	2.440070	-.605772
#1	.6106551	.2128602	-.329613	-.854642	21.42068	3.736870	-.550946
#2	.6308846	-2.26836	-2.25404	-.747280	-121.058	1.143269	-.660598
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.387823	-1.04125	.8253523	-.001651	.0399079	-.147914	2.238256
#1	-.180102	-1.08982	1.048882	1.376059	.0378448	-.120605	2.540801
#2	-.595544	-.992678	.6018222	-1.37936	.0419709	-.175223	1.935711
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.1825269	4.600908	-4.23864	.7760940
#1	1.498282	7.298140	-4.14393	-1.33916
#2	-1.13323	1.903677	-4.33334	2.891345
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE2 Sample Name: S 112013-002-03-1/1 Operator: LCM
Run Time: 12/16/01 22:11:56
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41.53661	.8164870	-3.08734	6.114557	-.064978	-.037136	72976.44
#1	40.96427	-.257824	-2.31433	6.128577	-.050400	-.078245	73139.70
#2	42.10894	1.890798	-3.86035	6.100538	-.079557	.0039722	72813.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1895751	-.575043	2.826193	254.2430	.7381900	2118.215	43.19302
#1	.0291554	-.210245	3.043049	257.8723	.8261417	2119.926	43.30155
#2	.3499948	-.939842	2.609336	250.6137	.6502383	2116.504	43.08448
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.167768	1305.512	-.148265	-.751523	4574.009	-3.86675	.8337371
#1	-.061868	1307.455	-.302703	-.451588	4597.840	-3.11256	1.178965
#2	-.273668	1303.569	.0061720	-1.05146	4550.178	-4.62095	.4885095
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	5.330384	41.11860	1.227960	.0458952	527.3877	.4848503	1.372227
#1	5.422051	41.38945	1.202108	-.355148	527.9874	.5055005	1.287426
#2	5.238716	40.84775	1.253812	.4469387	526.7880	.4642002	1.457028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.4207584	-2.82843	1.191331	10380.68
#1	.5950852	-.796472	-.056326	10383.24
#2	.2464316	-4.86038	2.438988	10378.11
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112013-003-03-1/1 Operator: LCM
Run Time: 12/16/01 22:19:15
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	66.76942	1.481324	69.44739	7.129825	.0320054	-.029916	82761.42
#1	65.39111	.2100183	69.19810	7.112717	-.015103	-.081322	82703.36
#2	68.14774	2.752629	69.69668	7.146933	.0791135	.0214895	82819.48
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.767948	.1214393	3.135368	124.4424	-.407756	55431.79	4.958454
#1	2.937176	-.009670	2.788522	118.3329	-1.13241	55428.56	4.962931
#2	2.598721	.2525490	3.482215	130.5519	.3168995	55435.03	4.953978
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-1.07401	30356.56	.0683008	-.230261	H561106.4	-1.82661	4.320744
#1	-1.79369	30190.88	-1.48903	-.076038	H558817.5	1.862211	4.266809
#2	-.354329	30522.24	1.625628	-.384483	H563395.4	-5.51543	4.374680
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.323611	993.3898	1.826128	.5897860	746.9858	10.13303	.3674592
#1	4.292296	992.1401	2.184853	1.829766	747.2224	10.05950	-.138426
#2	4.354926	994.6395	1.467403	-.650194	746.7493	10.20655	.8733440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.795835	-.174515	.1891888	H20754.69
#1	-1.62988	-.499807	-1.98420	H20731.76
#2	.0382055	.1507763	2.362581	H20777.62
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112013-004-03-1/1 Operator: LCM
Run Time: 12/16/01 22:26:35
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	32.02424	3.229401	-4.89531	5.024280	-.064638	-.072381	79004.63
#1	32.52864	5.163727	-7.12409	4.976496	-.046795	-.067159	79092.41
#2	31.51984	1.295075	-2.66653	5.072065	-.082481	-.077602	78916.86
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.076994	-.972705	3.471977	43.09380	2.616941	2299.561	1.363719
#1	1.515171	-.782004	3.480781	39.84756	2.841531	2299.752	1.385326
#2	.6388163	-1.16341	3.463172	46.34004	2.392349	2299.371	1.342112
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.974823	1187.154	.2707510	-.305085	6464.362	-4.36809	.3718545
#1	-1.18161	1194.090	-.839664	-.081108	6455.205	-8.07204	1.053926
#2	-.768036	1180.217	1.381166	-.529062	6473.519	-.664136	-.310217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	14.57731	67.97031	1.516867	-1.06627	608.9159	.6262069	2.513725
#1	14.37306	68.77406	.9100586	1.342373	609.2872	.6644495	3.943104
#2	14.78155	67.16657	2.123675	-3.47491	608.5447	.5879644	1.084346
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.667997	-2.35252	1.581927	8479.849
#1	2.290195	-6.51263	1.996358	8483.337
#2	3.045799	1.807588	1.167496	8476.360
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112013-005-03-1/1 Operator: LCM
Run Time: 12/16/01 22:33:54
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	48.76961	1.168333	-8.30065	9.890730	-.036440	-.041568	67416.39
#1	49.20657	1.474135	-10.2162	9.889971	-.016288	-.011412	67356.75
#2	48.33264	.8625297	-6.38509	9.891489	-.056592	-.071723	67476.02
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.519555	-1.30699	2.619203	511.7696	.6010524	2347.903	6.376068
#1	1.389018	-1.19454	2.520478	513.2122	.8956366	2345.071	6.351118
#2	1.650092	-1.41943	2.717927	510.3270	.3064682	2350.735	6.401018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-1.40443	618.8546	-.814511	-.938772	6513.037	-1.95808	.8401308
#1	-1.21771	619.6470	-1.65099	-.976369	6500.094	-1.17122	.6123650
#2	-1.59115	618.0623	.0219666	-.901176	6525.980	-2.74494	1.067897
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	13.82620	143.9295	.9081950	-.668352	488.7577	.7423906	2.278941
#1	13.45813	143.9346	.6765762	.7124662	489.2984	.7747484	.7265093
#2	14.19426	143.9244	1.139814	-2.04917	488.2170	.7100329	3.831372
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.238441	-4.97284	1.264190	8036.862
#1	.9796504	-9.34454	2.195414	8030.992
#2	-1.45653	-.601136	.3329669	8042.731
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112013-006-03-1/1 Operator: LCM
Run Time: 12/16/01 22:41:14
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	75.28601	.9714425	-2.02756	6.720425	-.023281	-.189594	82138.75
#1	75.82886	1.357131	-3.21206	6.769112	-.031748	-.170861	82187.91
#2	74.74316	.5857539	-.843063	6.671737	-.014814	-.208327	82089.59
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1161312	-.543815	3.029439	228.9469	.9449020	2396.845	39.39598
#1	.2441911	-.607420	3.026747	234.9006	1.982833	2400.073	39.45251
#2	-.011929	-.480210	3.032131	222.9933	-.093029	2393.618	39.33945
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-1.20665	1481.822	-.760883	-.657872	5055.589	-3.43585	.1878575
#1	-1.52392	1476.104	-.912553	-.400840	5048.063	-2.68382	.1339828
#2	-.889376	1487.540	-.609213	-.914904	5063.114	-4.18787	.2417321
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	5.057661	25.36960	1.037085	-1.14077	593.4926	.5794056	1.593347
#1	5.067619	25.75701	1.010001	-1.58015	593.2039	.4646771	2.451101
#2	5.047702	24.98218	1.064170	-.701394	593.7814	.6941339	.7355925
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.6202741	-5.82320	1.769867	H11827.64
#1	1.748293	-4.46831	.8649611	H11827.97
#2	-.507745	-7.17810	2.674774	H11827.30
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 112013-007-03-1/1 Operator: LCM
Run Time: 12/16/01 22:48:33
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	14.53987	.5863079	-7.01655	.9605573	-.042530	-.015370	199.0340
#1	13.59885	1.127229	-4.48564	.9435506	-.023488	-.055379	201.2800
#2	15.48089	.0453869	-9.54745	.9775642	-.061572	.0246385	196.7880
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7387171	-.580747	2.973919	24.85735	1.061499	38.95758	.3939000
#1	.7062930	-.628625	3.020794	20.61079	.6736096	38.58882	.3732331
#2	.7711411	-.532869	2.927045	29.10392	1.449389	39.32633	.4145670
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.991874	23.66838	-1.48971	-.266097	279.2695	-2.69869	-.252397
#1	-1.41315	19.54239	-3.21694	-.638678	225.9926	-4.27318	-.536897
#2	-.570599	27.79436	.2375140	.1064846	332.5464	-1.12419	.0321027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.845233	14.02946	.0701796	-.711487	.8149486	.3348884	-.262825
#1	5.061509	13.49076	-.364877	-.264315	.8107222	.2971294	-.501662
#2	4.628958	14.56816	.5052363	-1.15866	.8191749	.3726474	-.023987
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.723108	-3.61370	-.428226	150.3986
#1	1.260692	-5.75478	-1.94848	151.6524
#2	2.185524	-1.47262	1.092029	149.1447
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 111250-010-04-1/1 Operator: LCM
Run Time: 12/16/01 22:55:53
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	9.418434	.3628590	.9413056	119.6199	.0019359	-.095886	46167.40
#1	8.068557	-1.53692	1.907031	119.5699	.0195585	-.237424	46077.12
#2	10.76831	2.262636	-.024420	119.6698	-.015687	.0456520	46257.68
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.274647	-.738639	3.448842	18.79287	.5479403	15793.62	1.875299
#1	.8378938	-1.25184	3.294527	16.38728	1.253280	15769.23	1.867275
#2	1.711401	-.225437	3.603158	21.19846	-.157399	15818.02	1.883324
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-1.33400	11007.00	-.531195	-.302944	16670.03	-2.33938	19.32440
#1	-2.42750	11022.07	-.154747	-.674536	16647.83	-3.69891	18.94697
#2	-.240492	10991.93	-.907644	.0686485	16692.23	-.979852	19.70183
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	5.495734	84.14883	5.003438	.6753026	625.5151	.3114471	2.941184
#1	5.288057	84.42679	4.921567	.8105465	625.3601	.2410151	3.003157
#2	5.703412	83.87086	5.085308	.5400588	625.6703	.3818792	2.879211
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.649048	.2733490	-.933928	H29801.38
#1	.3779732	.6172948	-.541229	H29633.81
#2	-1.67607	-.070597	-1.32663	H29968.96
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 111250-011-04-1/1 Operator: LCM
Run Time: 12/16/01 23:03:12
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	16.95368	-1.31565	.1589139	149.3259	-.049983	-.200645	49258.07
#1	18.03332	-.454438	.3391101	149.3269	-.027085	-.054581	49206.30
#2	15.87403	-2.17687	-.021282	149.3249	-.072881	-.346708	49309.85
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7559087	-.789513	3.561737	231.1627	.7360757	16976.20	3.347043
#1	.7737974	-.886915	3.618433	224.6840	.5820869	16951.10	3.373447
#2	.7380201	-.692112	3.505040	237.6415	.8900645	17001.31	3.320640
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.238969	10606.84	2.306652	-.418747	13076.59	-3.01327	18.13274
#1	-.755355	10600.79	3.922469	-.714216	13037.42	-3.36304	17.99319
#2	.2774169	10612.88	.6908346	-.123279	13115.76	-2.66350	18.27229
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	5.576813	76.15962	5.248658	.6706864	659.5311	.2815572	-1.36351
#1	5.624973	76.40511	5.604126	.0924889	659.1256	.1927186	-2.36453
#2	5.528654	75.91412	4.893190	1.248884	659.9366	.3703958	-.362489
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.785408	-1.92653	4.422688	H28866.18
#1	2.054934	-4.81224	8.289263	H28860.22
#2	1.515882	.9591797	.5561122	H28872.15
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 111250-012-04-1/1 Operator: LCM
Run Time: 12/16/01 23:10:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	6.231182	-.707153	-.431647	155.0223	.0263078	-.115667	48451.81
#1	3.308024	-.753167	-.252639	154.6097	.0133705	-.257357	48173.76
#2	9.154341	-.661139	-.610655	155.4349	.0392451	.0260231	48729.85
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.6505235	-.624833	3.455514	40.50915	.1121275	17258.02	3.241155
#1	.4881471	-.871116	3.513562	37.44556	-.063234	17140.41	3.197958
#2	.8128999	-.378550	3.397466	43.57276	.2874891	17375.64	3.284352
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-1.28282	10995.00	.5060544	-.569319	15774.24	-.582125	18.56830
#1	-1.10868	11034.41	-.059465	-.846251	15876.75	-2.96869	18.16228
#2	-1.45695	10955.58	1.071574	-.292386	15671.74	1.804437	18.97432
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.546454	86.88766	5.000131	.0035572	685.1243	.3512236	-.359128
#1	4.452063	87.05037	5.010234	-1.04517	682.7070	.2754332	.9029458
#2	4.640847	86.72497	4.990027	1.052289	687.5416	.4270139	-1.62120
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.3473728	-4.10163	2.809464	H28496.95
#1	-.546682	-3.07325	1.447023	H28325.51
#2	1.241427	-5.13000	4.171906	H28668.40
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: S 111250-013-04-1/1 Operator: LCM
Run Time: 12/16/01 23:17:51
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	26.03618	-.176240	1.888533	153.1300	-.013554	.1066226	49531.86
#1	27.12835	-.407884	2.244577	153.3771	.0263034	.0169177	49415.28
#2	24.94400	.0554049	1.532489	152.8829	-.053412	.1963275	49648.43
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.161754	-1.46738	4.514722	20.74919	1.279411	16925.99	1.505067
#1	1.015190	-1.55934	4.496273	18.60949	2.321224	16895.11	1.472177
#2	1.308317	-1.37542	4.533171	22.88888	.2375975	16956.87	1.537957
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.1091300	11007.61	.5381536	-.333741	15407.46	-5.46390	19.22589
#1	-.233591	11081.84	.5297673	-.464459	15491.66	-4.44590	19.03186
#2	.4518510	10933.38	.5465399	-.203023	15323.26	-6.48189	19.41992
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	13.24028	104.0436	4.865775	.2686319	676.0358	.3440521	.0858270
#1	13.50592	103.1927	5.032161	-.440108	676.2631	.2638668	1.200004
#2	12.97463	104.8946	4.699389	.9773717	675.8085	.4242373	-1.02835
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	7.875837	-4.86312	3.238397	H29420.69
#1	2.881469	-3.61589	2.602181	H29357.88
#2	.8702050	-6.11034	3.874612	H29483.50
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				10500.00
Low				-50.0000

Method: TRACE2 Sample Name: CVCCV4 Operator: LCM
Run Time: 12/16/01 23:25:11
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	49922.13	988.8727	988.5231	482.2931	47.78749	478.8130	94610.31
#1	49847.08	985.0417	989.4909	482.2581	47.85239	479.2718	94802.15
#2	49997.18	992.7036	987.5553	482.3281	47.72258	478.3542	94418.47
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	477.7133	477.0848	492.1852	47362.19	483.9561	96906.34	478.4776
#1	477.7676	477.2005	491.3572	47386.21	485.4020	96980.83	478.8408
#2	477.6589	476.9692	493.0132	47338.17	482.5101	96831.84	478.1144
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	475.3540	24662.54	1007.234	49.86591	100514.3	985.6309	486.0536
#1	476.1538	24559.71	1007.172	49.44891	100266.0	985.7617	485.6238
#2	474.5542	24765.38	1007.296	50.28290	100762.6	985.5000	486.4834
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	471.0947	496.3827	485.3584	489.4031	485.6053	486.6375	483.8971
#1	471.6687	496.5991	484.5427	490.2093	485.4729	486.7602	480.1476
#2	470.5206	496.1664	486.1740	488.5968	485.7378	486.5148	487.6466
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	483.9851	1006.287	1007.708	Q566.6147
#1	488.0288	1002.756	1009.380	Q574.3966
#2	479.9414	1009.817	1006.035	Q558.8329
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				500.0000
Range				10.00000

Method: TRACE2 Sample Name: BCCCB4 Operator: LCM
Run Time: 12/16/01 23:32:31
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	3.692171	-.627137	-3.91272	.0360446	-.036275	-.070579	-.990277
#1	5.165782	-.286220	-3.04870	.0308339	-.021057	-.134097	.2279851
#2	2.218560	-.968055	-4.77675	.0412553	-.051493	-.007060	-2.20854
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1043440	.2507288	.0965395	7.338677	.7756977	10.69973	-.027791
#1	-.020077	.0811150	.3256430	4.069699	-.819034	12.51411	-.027373
#2	.2287650	.4203425	-.132564	10.60766	2.370430	8.885343	-.028210
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.7347475	5.690983	-3.97928	.0093480	19.70141	-.828406	.0540882
#1	.0276055	4.919595	Q-5.11774	-.419042	15.10406	-3.66303	.1106644
#2	1.441890	6.462371	-2.84082	.4377381	24.29876	2.006219	-.002488
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	-.177161	-.957803	.8261465	2.456483	.0651628	.0436194	1.075831
#1	-.589363	-1.34576	.4357835	1.814660	.0716753	.0075574	.5336005
#2	.2350410	-.569844	1.216510	3.098307	.0586502	.0796814	1.618062
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.6250981	-2.91966	-4.50954	25.62198
#1	-1.49588	-5.41735	-4.96839	26.11632
#2	2.746081	-.421967	-4.05069	25.12764
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Metals Preparation & Sample Description Log

Date: 12-14-01 Prep: 200.7 / 3005A / 3020A / 3050B / (3010A) ILC03.1 / ILM04.1 / ILM05.1 Batch No: 85-026

Analyst: HSS Comments: HOT PLATE DIGESTION

Reviewed by: SL Date: 12·19·01 Spike Witness: SL Prep. Seq: 52111

	GPL Work Order No.	Sample	Frac	SIZE (ml) (g)	Final Vol. (mL)	Matrix S, W Other	Color Before (R, Bl, Y, G, O, V, W, Colorless, Br, Grey, Bk.)	Color After	Clarity Before or Soil Texture	Clarity After Clear, Cloudy, Opaque	Soil Artifacts or Water pH
1	PBW	026		100	100	WATER	colorless	colorless	clear	clear	<2
2	LCSW	026									
3	112013	001	-03-1/1								
4		DUP									
5		SPK									
6		002									
7		003					BROWN	YELLOW			
8		004					colorless				
9		005									
10		006									
11		007									
12	111250	010	-04-1/1								
13		011									
14		012									
15		013									
16		014									
17											
18											
19											
20							012-15-01				
21						HSS					
22											
23											
24											

LCS ID / Amt. Added (ml, g): 0.1 ml (15604, 15605, 15603)	HNO3(1+1) ID: —
Spiking ID / Amt Added (ml): 0.1 ml (15604, 15605, 15603)	HNO3(conc) ID: GP-057-004-11
	HCl(conc) ID: —
Temperature, C: 94°C	HCl(1+1) ID: GP-057-079-08 HSS
	Peroxide ID: —

002087

Support doc

CH2MHILL

Copy Center Request Form

32310

Emp. Name/Number: Christelle Newsome

Project #: 149294.31.02.14.91

Job Name: CTO 0007

☐ Call when ready **Ext.** _____

Date Submitted: 4/5/02

Due Date/Time: 4/8/02 3:00

Completed: _____

☐ Please deliver

Copying Instructions

Number of Copies 1

☒ Copy One-Sided

☐ Copy Two-Sided

☐ Copy as is

☐ Reduce to (Specify Size):

Copy Size:

☐ 8 ½ x 11

☐ 8 ½ x 14

☐ 11 x 17

☐ Color (Y or N) _____

Type of Stock

☐ 20# Bond ☐ Color: _____

Tabs: ☐ Insert ☐ Create ☐ Copy

☐ 67# Cover ☐ Color: _____

☐ Other Paper _____

Finishing

☐ Collated ☐ Stapled ☐ Clipped

☐ Slipsheet

☐ 3-Hole Drill (side)

Binding: ☐ GBC ☐ Spiral

Circle Spine Color: Black / White Black / White

*Rubber Band

3-ring Binder ☐ 1" ☐ 2" ☐ 3"

(MUST ORDER IN ADVANCE)

Special Instructions

Copy Center Use

Ending Read 411339 @ 8:40 VWA

Beginning Read 411123 @ 8:30 VWA

Total Count _____

Copy Labor _____

Miscellaneous _____

Binding Labor _____

CTO 7

Analytical Report For 203025

for

CH2M Hill Constructors, Inc.

Project Manager : Bill Canelos

Project Name : NS Mayport, SWMU 15

March 22, 2002

GPL

Laboratories

CCI NAVY
MAR 25 2002

GPL Laboratories, LLLP Certifies that the test results meet all requirements of the NELAC Standards unless otherwise noted.

Reviewed by,
Project Manager

Approved by,
Laboratory Director

202 Perry Parkway Gaithersburg, MD 20877 Phone (301) 926-6802 Fax: (301) 840-1209
www.gplab.com

TOTAL # OF PAGES : 25

GPL LABORATORIES, LLP
ANALYTICAL RESULTS

Project Name : NS Mayport, SWMU 15

Date Printe March 22, 2002

GPL ID	Client ID
203025-006-01-1/2	007-DUP-Q1-02
203025-006-03-1/1	007-DUP-Q1-02
203025-007-01-1/2	007-EQB-Q1-02
203025-007-03-1/1	007-EQB-Q1-02
203025-001-01-1/2	007-MW01S-Q1-02
203025-001-03-1/1	007-MW01S-Q1-02
203025-002-01-1/6	007-MW03S-Q1-02
203025-002-07-1/3	007-MW03S-Q1-02
203025-003-01-1/2	007-MW04S-Q1-02
203025-003-03-1/1	007-MW04S-Q1-02
203025-004-01-1/2	007-MW05S-Q1-02
203025-004-03-1/1	007-MW05S-Q1-02
203025-005-01-1/2	007-MW08S-Q1-02
203025-005-03-1/1	007-MW08S-Q1-02

CCI NAVY RAC PMO
MAR 25 2002

GPL

Laboratories

CASE NARRATIVE FOR GPL #203025

CLIENT: CH2MHILL CONSTRUCTORS INC
PROJECT/SITE: NS MAYPORT SWMU 15
WORK ORDER(S): 203025
REVIEW DATE: 03/22/02

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Analytical Report are integral parts of GPL Laboratories' report package. If you did not receive all of these documents please contact GPL immediately.

Sample Receipt

Seven water samples were received on 03/07/02. The samples were delivered by GPL Courier. The samples were received intact. Sample receipt conditions and temperatures are documented on the Sample Receipt Checklist.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Analytical Report of Analysis.

Pesticides/PCBs

1. Seven water samples were extracted and analyzed for Pesticide compounds using method 8081A.

2. MS/MSD analysis was performed on sample 007-MW03S-Q1-02. A laboratory control sample was extracted with this batch of samples.

3. Percent surrogate recoveries were out of QC limits for DCB on column RTx-CLP for samples 007-MW01S-Q1-02, 007-MW08S-Q1-02. Percent surrogate recoveries were out of QC limits for TCX on column RTx-CLP for sample 007-DUP-Q1-02 and on both columns for TCX for sample 007-MW04S-Q1-02 due to matrix interference.

4. Percent recovery for Endrin Ketone was above QC limits in the LCS, MS and MSD analyses.

5. Continuing calibration file I117330 failed QC limits for delta-BHC, Endosulfan Sulfate. Continuing calibration file I117342 failed QC limits for delta-BHC, Endosulfan Sulfate and Endrin Ketone. The percent deviation for each of the above compounds was above 15% on both columns.

6. Concentrations reported on Form 1 are the higher values of results generated by two columns. However, the analyst determines the most reliable results based on the evaluation of quality control parameters. Flagged concentrations (*) on Form 1 indicate that reported results are the lower values.

7. Due to software limitations, some forms were corrected manually.

Metals

1. Seven water samples were analyzed for arsenic by EPA SW846 methods.

2. A matrix spike, duplicate, and serial dilution were performed on sample 007-MW03S-Q1-02. They were within the control limits.

CASE NARRATIVE FOR GPL #203025

3. Calibration standards are verified against independent check standards purchased from a commercial vendor of environmental standards.

4. All GPL QA/QC criteria were met.

Project Manager

Lab Director

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW01S-Q1-02
GPL ID: 203025-001-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 11:54
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW03S-Q1-02
GPL ID: 203025-002-01-1/6
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 12:22
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW04S-Q1-02
GPL ID: 203025-003-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 13:46
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW05S-Q1-02
GPL ID: 203025-004-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 14:14
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW08S-Q1-02
GPL ID: 203025-005-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 14:42
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-DUP-Q1-02
GPL ID: 203025-006-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 15:10
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-EQB-Q1-02
GPL ID: 203025-007-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 15:38
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.2	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.2	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW01S-Q1-02
GPL ID: 203025-001-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 21:07

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW03S-Q1-02
GPL ID: 203025-002-07-1/3
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 21:14

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW04S-Q1-02
GPL ID: 203025-003-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:10

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	357	4.1	ug/L		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW05S-Q1-02
GPL ID: 203025-004-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:18

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW08S-Q1-02
GPL ID: 203025-005-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:26

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-DUP-Q1-02
GPL ID: 203025-006-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:34

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	368	4.1	ug/L		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-EQB-Q1-02
GPL ID: 203025-007-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:42

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Qualifier Definitions

U = Indicates that the compound was analyzed for but not detected at or above the reporting limit

Organics:

B = Indicates that the analyte was found in the associated blank as well as in the sample

D = Indicates that the analyte was reported from a diluted analysis

E = Indicates that the concentration detected exceeded the calibration range of the instrument

J = Value is less than the reporting limits but greater than the MDL

P = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns

Metals:

B = Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL

E = Indicates that reported value is estimated because of the possible presence of interference (i.e., the serial dilution not within control limits)

H = Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit

N = Spiked sample recovery not within control limits

* = Duplicate analysis not within control limits

From: Randy Dumaop (904)777-4812
CCI / J.A. JONES ENV. SERVICES
6219 Authority Ave

Jacksonville, FL, 32221

REVENUE BARCODE

FedEx.

To: Laura Petrik (301)926-6802
GPL Laboratories
202 Perry Parkway

Gaithersburg, MD, 20877

SHIP DATE: 06MAR02
WEIGHT: 55 LBS

Ref: 149294/99.22.01.01/30857

DELIVERY ADDRESS BARCODE(FEDEX-EDR)

TRK # 7909 9789 2979 FORM 0201

FedEx **PRIORITY OVERNIGHT**

20877-MD-US **XA EDGA** IAD

THU
A2
Deliver by:
07MAR02

---

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping label pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Use of this system constitutes your agreement to the service conditions in the current FedEx service Guide, available upon request.

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

From: Randy Dumaop (904)777-4812
CCI / J.A. JONES ENV. SERVICES
6219 Authority Ave

Jacksonville, FL, 32221

REVENUE BARCODE

FedEx.

To: Laura Petrik (301)926-6802
GPL Laboratories
202 Perry Parkway

Gaithersburg, MD, 20877

SHIP DATE: 06MAR02
WEIGHT: 55 LBS

Ref: 149294/99.22.01.01/30857

DELIVERY ADDRESS BARCODE(FEDEX-EDR)

TRK # 7903 3381 7667 FORM 0201

FedEx PRIORITY OVERNIGHT

IAD

20877-MD-US XA EDGA

THU
A2
Deliver by:
07MAR02

Please fold this document in half and place it in the waybill [illegible] billing charges, along with the cancellation of your FedEx [illegible]

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping label pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Use of this system constitutes your agreement to the service conditions in the current FedEx service Guide, available upon request.

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

****
*** TX REPORT ***
****

TRANSMISSION OK

TX/RX NO	3239
CONNECTION TEL	916785798100p8002
SUBADDRESS	
CONNECTION ID	
ST. TIME	03/07 12:46
USAGE T	01'28
PGS.	4
RESULT	OK

GPL

GPL Laboratories, LLLP

202 Perry Parkway
Gaithersburg, MD 20877
PHONE: (301) 926-6802
FAX: (301) 840-1209

FACSIMILE COVER SHEET

FYI:
GPL can provide a full range of explosives analysis:
PETN, Nitrocellulose, Nitroguanidine, Nitroglycerine, 8330 compounds.

DATE: 3-7-02

To: *Stacey Kondrat*

From: *Laura Petrik*

Message: GPL # 203025 NS Mayport CTO 7
sample CoC & Receipt Checklist

GPL Laboratories, LLLP

Sample Preservation Check Documentation Form

Work Order: 203025

Parameter:	Metals	~~Phenol~~	TPH O&G	Classical Parameters	Cyanide	Sulfide	Radiology	Other
Preservative: pH Value	HN03 <2	~~H2SO4 <2~~	H2SO4 <2	H2SO4 <2	NaOH >12	NaOH >9	H2SO4 <2	Preservations
Client ID								
007-MW015Q102	<2							
007-MW035Q102	<2/<2/<2							
007-MW045Q102	<2							
007-MW055Q102	<2							
007 MW07Q102	<2							
007 DUP Q102	<2							
007 EQB Q102	<2							

MW-15D

03/07/02

Sample Preservation Check Performed By: [signature] Date: 03/07/02

GPL Laboratories, LLLP

Figure 1
SAMPLE RECEIPT CHECKLIST

W.O. No: 203025

Client Name: CH2M Hill

Date Received: 03/07/02

Time Received: 9:40 Am

Received By: [illegible]

Carrier Name: Fed Ex

Prepared (Logged In) By: [illegible] 03/07/02 (Initials Date)

Project: NS. Mayport SWMU 15

Site:

VOA Holding Blank I.D. No: /

	YES	NO
Airbill/Manifest Present?	✓	
No. 7905 3381 7667 7909 9789 2979		
Shipping Container in Good Condition?	✓	
Custody Seals Present on Shipping Container?	✓	
Condition: Broken ___ Intact-not dated or signed ___ Intact-dated and signed ✓		
Usage of Tamper Evident Type	✓	
Chain-of-Custody Present?	✓	
Chain-of-Custody Agrees with Sample Labels?	[illegible]	✓
Chain-of-Custody Signed?	✓	
Packing Present in Shipping Container? Type of Packing Bubble wrap	✓	
Custody seals on Sample Bottles? Condition: Good ___ Broken ___		✓
Total Number of Sample Bottles 27		
Total Number of Samples 7		
Samples Intact?	✓	
Sufficient Sample Volume for Indicated Test?	✓	

	YES	NO
Trip Blanks: No. of Sets ___		✓
Field Blanks: No. of Sets ___		✓
Equip. Blank: No. of Sets 1	✓	✓
Field Duplicate: No. of Sets 1	✓	✓
MS/MSD: No of Sets 1	✓	
VOA Vials Have Zero Headspace?	✓	
Preservatives Added to Sample?	✓	
pH Check Required? Performed By? [illegible]	✓	
Ice Present in Shipping Container?	✓	

Container #	Temp.	Container #	Temp.
#1	2.0°C		
#2	2.0°C		

03/07/02

Project Manager Contacted?
Name: Carlton Patrick
Date Contacted: 03/07/02

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A/

COMMENTS: Sample 007-MW055-01-02 marked 007-MW075-01-02 on sample labels. (Times match) Temperature by Temp Blank. 3-7-02 B. Canales notified about ID discrepancy Patrick

Checklist Completed By: [illegible]

Date: 03/07/02

SOP No: F.2V11

000025

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
149294-008

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	GPL Laura Petrik	Bill Canelos J.A. Jones Environmental 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	3418	Christelle Newsome / CH2M Hill Constuctors, Inc.	115 Perimeter Center Place, N.E. Suite 700 Atlanta, GA 3034 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 J.A. Jones Environmental	Ph:(904)777-4812 Fax:(904) 777-4262	Ph: (301) 926-6802 Fax: (301) 840-1209		

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 6010B									SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	007-MW01S-Q1-02	MPT-15-MWO-1S	W	03/06/02	11:55	III/C	14	2	1									Grab		
2	007-MW03S-Q1-02	MPT-15-MWO-3S	W	03/06/02	10:50	III/C	14	6	3									Grab	MS/MSD	
3	007-MW04S-Q1-02	MPT-15-MWO-4S	W	03/06/02	13:20	III/C	14	2	1									Grab		
4	007-MW05S-Q1-02	MPT-15-MWO-5S	W	03/06/02	14:00	III/C	14	2	1									Grab		
5	007-MW08S-Q1-02	MPT-15-MWO-8S	W	03/06/02	11:25	III/C	14	2	1									Grab		
6	007-DUP-Q1-02	Duplicate	W	03/06/02	NA	III/C	14	2	1									Grab		
7	007-EQB-Q1-02	Equipment Blank	W	03/06/02	12:50	III/C	14	2	1									Grab		
8	NA	Temperature Blank	W	NA	NA	NA	NA			2									Prepaed by lab	
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)	COURIER AND SHIPPING NUMBER:	SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:
Roger Deisler / Sean Smith J.A. Jones Environmental Services	Federal Express Tracking #790333817667, 790997892979 .	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R. Dumaop	3/6/02	18:00	Federal Express	3/6/02	18:00
Printed Name and Signature:			Printed Name and Signature:		
Printed Name and Signature:			Printed Name and Signature:		
				03/07/02	9:40

CCI NAVY PAC PMO MAR 25 2002

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

Form CCI001, Rev 02/00

SAMPLE DATA PACKAGE

PESTICIDE DATA

A. QC Summary

B. Sample Data

C. Standards Data

D. Raw QC Data

GPL Laboratories, LLLP

A. QC Summary

1. Surrogate Percent Recovery Summary
2. Matrix Spike/ Matrix Spike Duplicate Summary
3. Laboratory Control Standard Summary (where applicable)
4. Method Blank Summary

GPL Laboratories, LLLP

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

	CLIENT SAMPLE ID	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	BLK53565	64	66	133	118	0
02	BKS53565	75	64	130	114	0
03	007-MW01S-Q1-02	82	80	164 *	136	1
04	007-MW03S-Q1-02	69	64	125	108	0
05	007-MW03S-Q1-02 MS	67	54	101	90	0
06	007-MW03S-Q1-02 MSD	68	55	104	87	0
07	007-MW04S-Q1-02	0 *	0 *	27	26	2
08	007-MW05S-Q1-02	78	66	124	105	0
09	007-MW08S-Q1-02	82	82	159 *	132	1
10	007-DUP-Q1-02	0 *	40	33	28	1
11	007-EQB-Q1-02	63	60	106	92	0

			ADVISORY QC LIMITS
TCX	=	Tetrachloro-m-xylene	(6-154)
DCB	=	Decachlorobiphenyl	(16-155)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3F

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GPL Laboratories Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

EPA Sample No.: 007-MW03S-Q1-02 GP ID: 203025-002-01-1/2

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC.
alpha-BHC	0.6	0.0	0.37	67	37-136
gamma-BHC (Lindane)	0.6	0.0	0.37	67	41-137
Heptachlor	0.6	0.0	0.37	67	29-136
Aldrin	0.6	0.0	0.39	70	12-145
beta-BHC	0.6	0.0	0.45	81	63-125
delta-BHC	0.6	0.0	0.16	28	2-104
Heptachlor Epoxide	0.6	0.0	0.41	75	42-128
Endosulfan I	0.6	0.0	0.41	75	72-106
gamma-Chlordane	0.6	0.0	0.44	80	17-139
alpha-Chlordane	0.6	0.0	0.40	71	19-152
4,4'-DDE	0.6	0.0	0.46	83	21-138
Dieldrin	0.6	0.0	0.42	75	28-128
Endrin	0.6	0.0	0.51	92	44-124
Endosulfan II	0.6	0.0	0.43	77	69-100
4,4'-DDD	0.6	0.0	0.41	74	16-139
4,4'-DDT	0.6	0.0	0.43	78	4-155
Endrin Aldehyde	0.6	0.0	0.39	71	7-141
Endosulfan Sulfate	0.6	0.0	0.55	98	43-140
Methoxychlor	0.6	0.0	0.42	76	44-121
Endrin Ketone	0.6	0.0	0.72	129 *	61-114

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	0.6	0.38	68	1	35	37-136
gamma-BHC (Lindane)	0.6	0.38	68	1	35	41-137
Heptachlor	0.6	0.37	67	0	35	29-136
Aldrin	0.6	0.39	70	0	35	12-145
beta-BHC	0.6	0.46	82	1	35	63-125
delta-BHC	0.6	0.17	30	7	35	2-104
Heptachlor Epoxide	0.6	0.42	75	0	35	42-128
Endosulfan I	0.6	0.44	79	5	35	72-106
gamma-Chlordane	0.6	0.46	83	4	35	17-139
alpha-Chlordane	0.6	0.39	71	0	35	19-152
4,4'-DDE	0.6	0.46	83	0	35	21-138
Dieldrin	0.6	0.42	75	0	35	28-128
Endrin	0.6	0.51	92	0	35	44-124
Endosulfan II	0.6	0.43	78	1	35	69-100
4,4'-DDD	0.6	0.41	75	1	35	16-139
4,4'-DDT	0.6	0.43	78	0	35	4-155
Endrin Aldehyde	0.6	0.40	71	0	35	7-141
Endosulfan Sulfate	0.6	0.54	97	1	35	43-140
Methoxychlor	0.6	0.43	77	1	35	44-121
Endrin Ketone	0.6	0.74	133 *	3	35	61-114

* Value outside of QC limits

RPD: 0 out of 20 outside limits.

Spike Recovery: 2 out of 40 outside limits.

WATER LABORATORY CONTROL SPIKE RECOVERY

Lab Name: GPL Laboratories Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SDG No.: N/A

EPA Sample No.: BKS53565 GP Lab ID: BKS53565

COMPOUND	SPIKE ADDED (ug/L)	LCS CONC. (ug/L)	LCS % REC	QC LIMITS LOW	HIGH
alpha-BHC	0.50	0.44	88	68	124
gamma-BHC (Lindane)	0.50	0.44	88	72	118
Heptachlor	0.50	0.42	85	60	124
Aldrin	0.50	0.45	89	61	109
beta-BHC	0.50	0.50	101	67	122
delta-BHC	0.50	0.20	40	21	92
Heptachlor Epoxide	0.50	0.46	92	73	111
Endosulfan I	0.50	0.49	97	65	117
gamma-Chlordane	0.50	0.49	98	63	108
alpha-Chlordane	0.50	0.43	86	70	115
4,4'- DDE	0.50	0.51	102	62	119
Dieldrin	0.50	0.47	95	62	113
Endrin	0.50	0.54	109	68	115
Endosulfan II	0.50	0.52	103	57	123
4,4'- DDD	0.50	0.44	88	58	118
4,4'- DDT	0.50	0.53	106	77	115
Endrin Aldehyde	0.50	0.48	96	58	127
Endosulfan Sulfate	0.50	0.63	126	73	135
Methoxychlor	0.50	0.47	94	66	112
Endrin Ketone	0.50	0.93	186 *	74	124

* Value outside QC limits

Spike Recovery: 1 of 20 outside limits.

COMMENTS:

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLK53565

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Lab Sample ID: BLK53565 Lab File ID: I117331.D

Matrix: (soil/water) WATER Extraction: (SepF/Cont/Sonc) CONT

Sulfur Cleanup: (Y/N) N Date Extracted: 03/11/02

Date Analyzed (1) : 03/21/02 Date Analyzed (2) : 03/21/02

Time Analyzed (1) : 1058 Time Analyzed (2) : 1058

Instrument ID (1) : GC-I Instrument ID (2) : GC-I

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BKS53565	BKS53565	03/21/02	03/21/02
02	007-MW01S-Q1-02	203025-001-01-1/2	03/21/02	03/21/02
03	007-MW03S-Q1-02	203025-002-01-1/2	03/21/02	03/21/02
04	007-MW03S-Q1-02 MS	203025-002-01-1/2 MS	03/21/02	03/21/02
05	007-MW03S-Q1-02 MS	203025-002-01-1/2 MSD	03/21/02	03/21/02
06	007-MW04S-Q1-02	203025-003-01-1/2	03/21/02	03/21/02
07	007-MW05S-Q1-02	203025-004-01-1/2	03/21/02	03/21/02
08	007-MW08S-Q1-02	203025-005-01-1/2	03/21/02	03/21/02
09	007-DUP-Q1-02	203025-006-01-1/2	03/21/02	03/21/02
10	007-EQB-Q1-02	203025-007-01-1/2	03/21/02	03/21/02

COMMENTS:

B. Sample Data

1. TCL Result
2. Chromatographs from Primary and Confirmatory Analyses
3. Integration Report for Primary and Confirmatory Analyses

GPL Laboratories, LLLP

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW01S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-001-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117333.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117333.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\I\MAR2102\I117333.D\ECD2B.CH
Acq On : 21 Mar 2002 11:54 Operator: PY
Sample : 203025-001-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW01S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:10 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

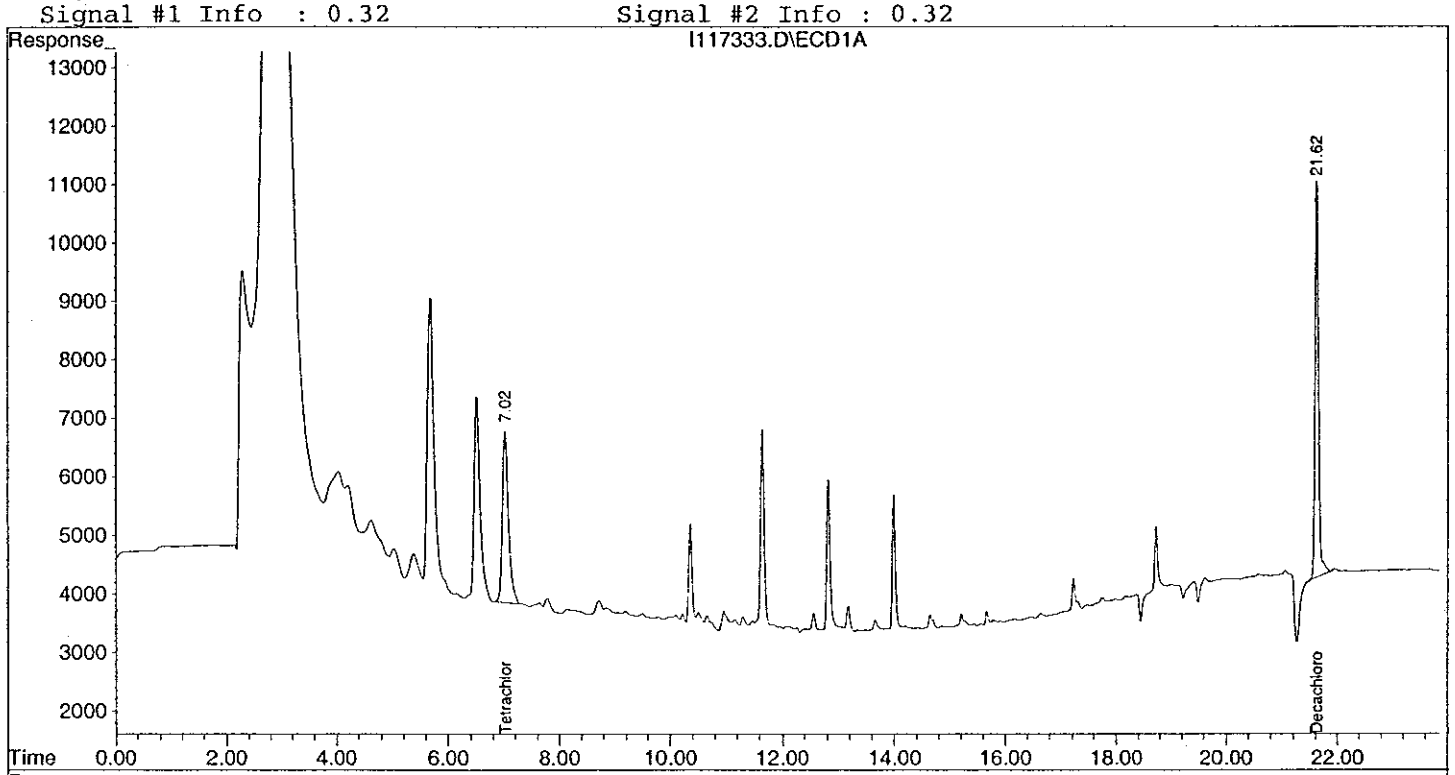
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	7.02	6.58	223824	1403625	16.479m	16.068
Spiked Amount 20.000 Range 30 - 150 Recovery =					82.40%	80.34%
) S Decachlorobiphen	21.62	22.16	302759	1328800	32.785m	27.124
Spiked Amount 20.000 Range 30 - 150 Recovery =					163.93%#	135.62%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

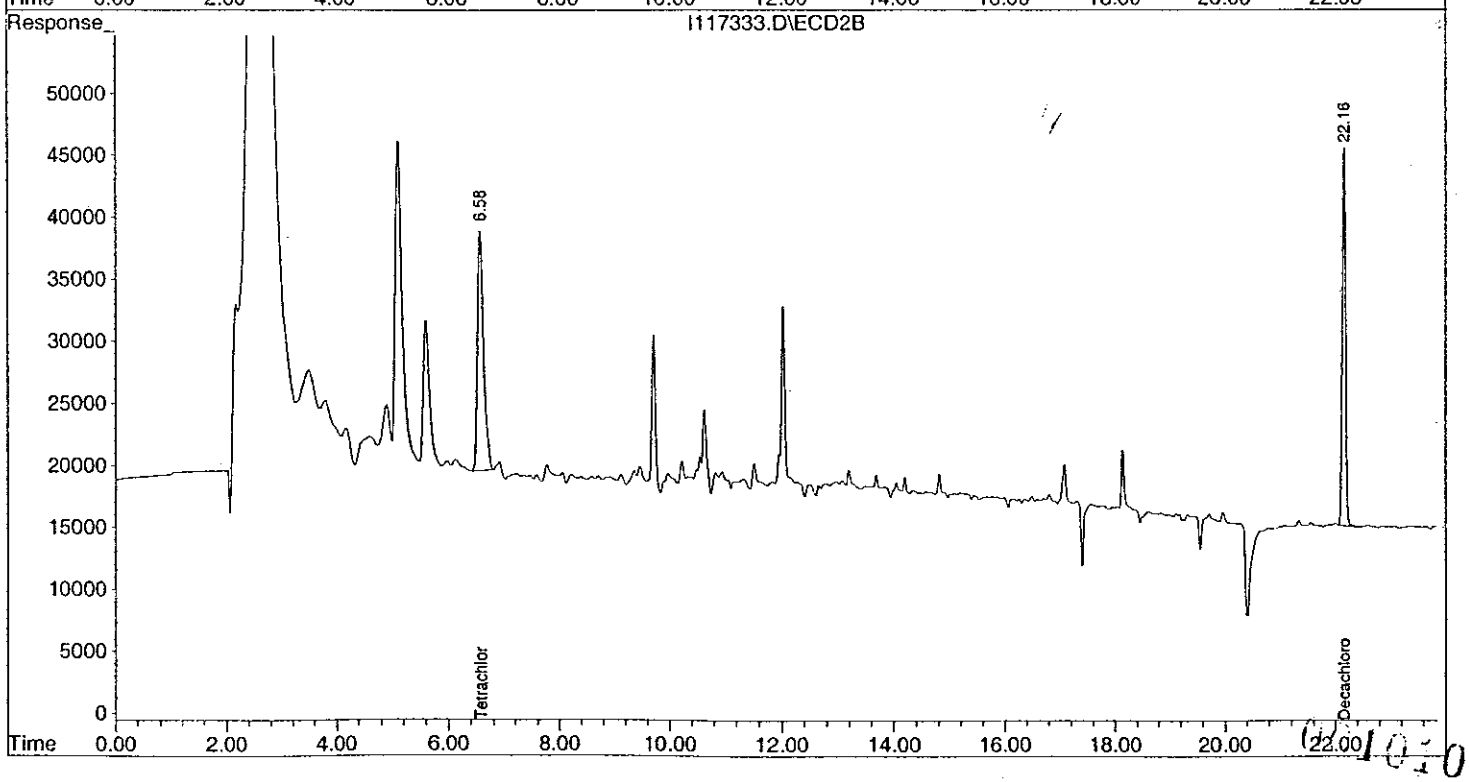
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR2102\I117333.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\I\MAR2102\I117333.D\ECD2B.CH
Acq On : 21 Mar 2002 11:54 Operator: PY
Sample : 203025-001-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW01S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:10 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW03S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-002-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117334.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117334.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\I\MAR2102\I117334.D\ECD2B.CH
Acq On : 21 Mar 2002 12:22 Operator: PY
Sample : 203025-002-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
S Tetrachloro-m-xy	7.02	6.58	186465	1120011	13.729	12.821
Spiked Amount 20.000 Range 30 - 150 Recovery =					68.65%	64.11%
S Decachlorobiphen	21.62	22.16	231425	1054835	25.061m	21.532
Spiked Amount 20.000 Range 30 - 150 Recovery =					125.31%	107.66%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

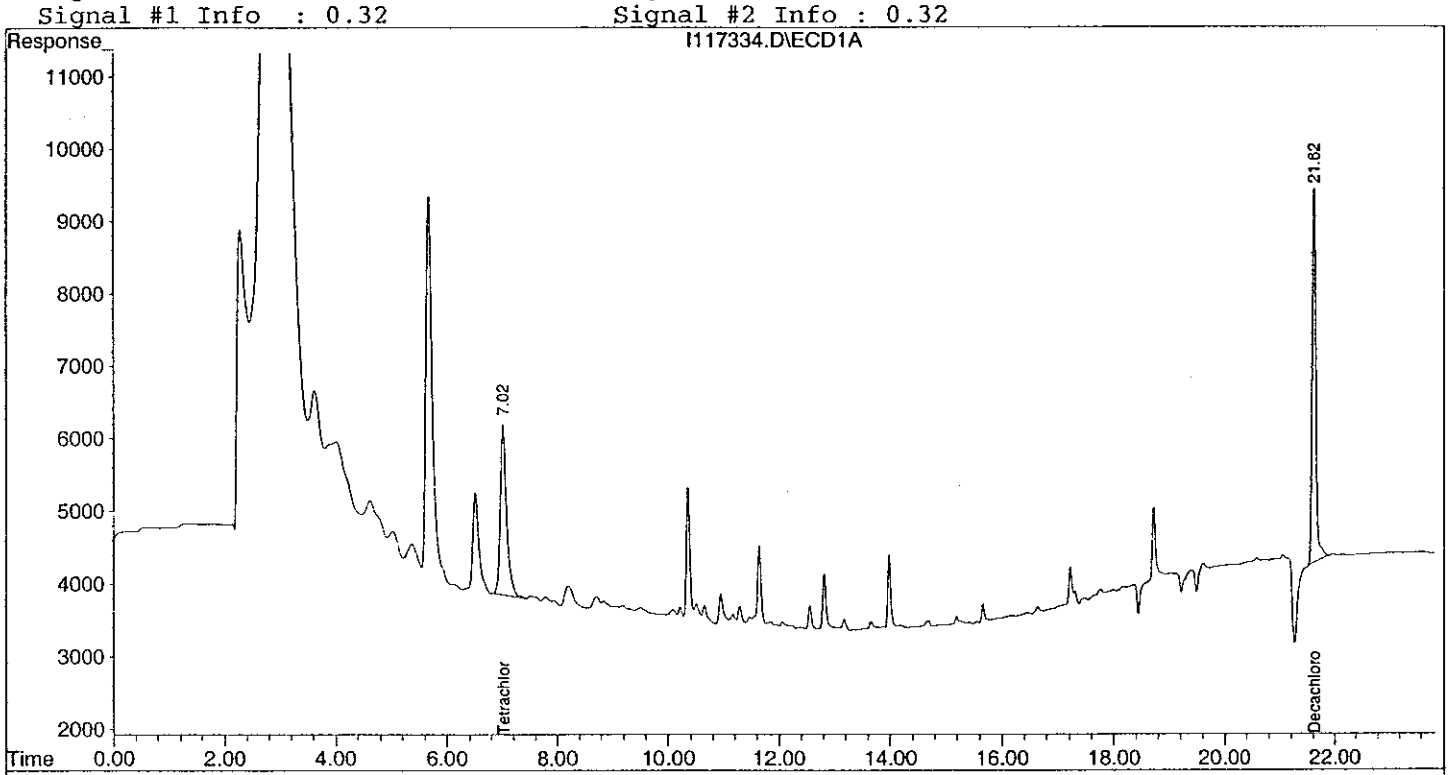
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

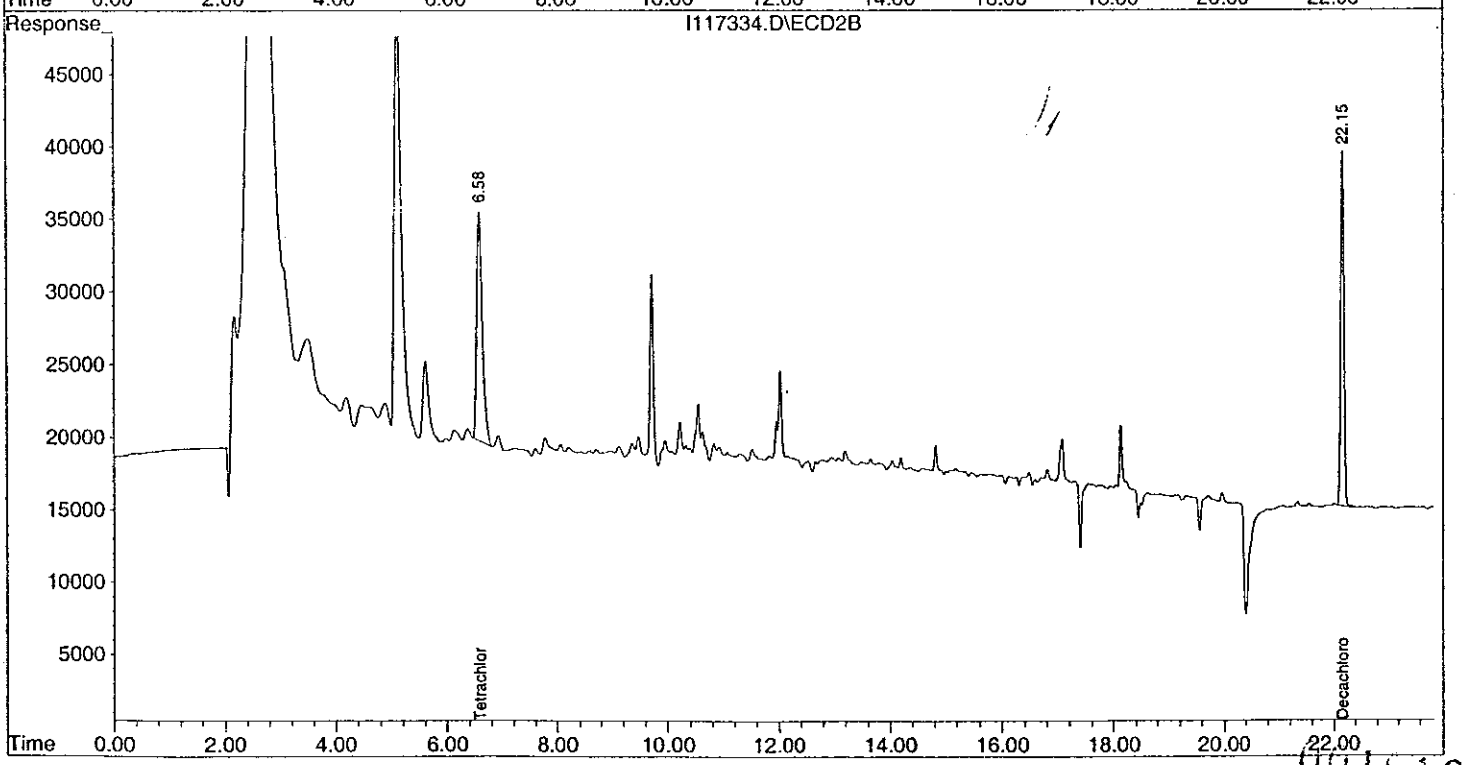
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117334.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\I\MAR2102\I117334.D\ECD2B.CH
Acq On : 21 Mar 2002 12:22 Operator: PY
Sample : 203025-002-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW04S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-003-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117337.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Signal #1 : H:\GCDATA\I\MAR2102\I117337.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\I\MAR2102\I117337.D\ECD2B.CH
Acq On : 21 Mar 2002 13:46 Operator: PY
Sample : 203025-003-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW04S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 14:17 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

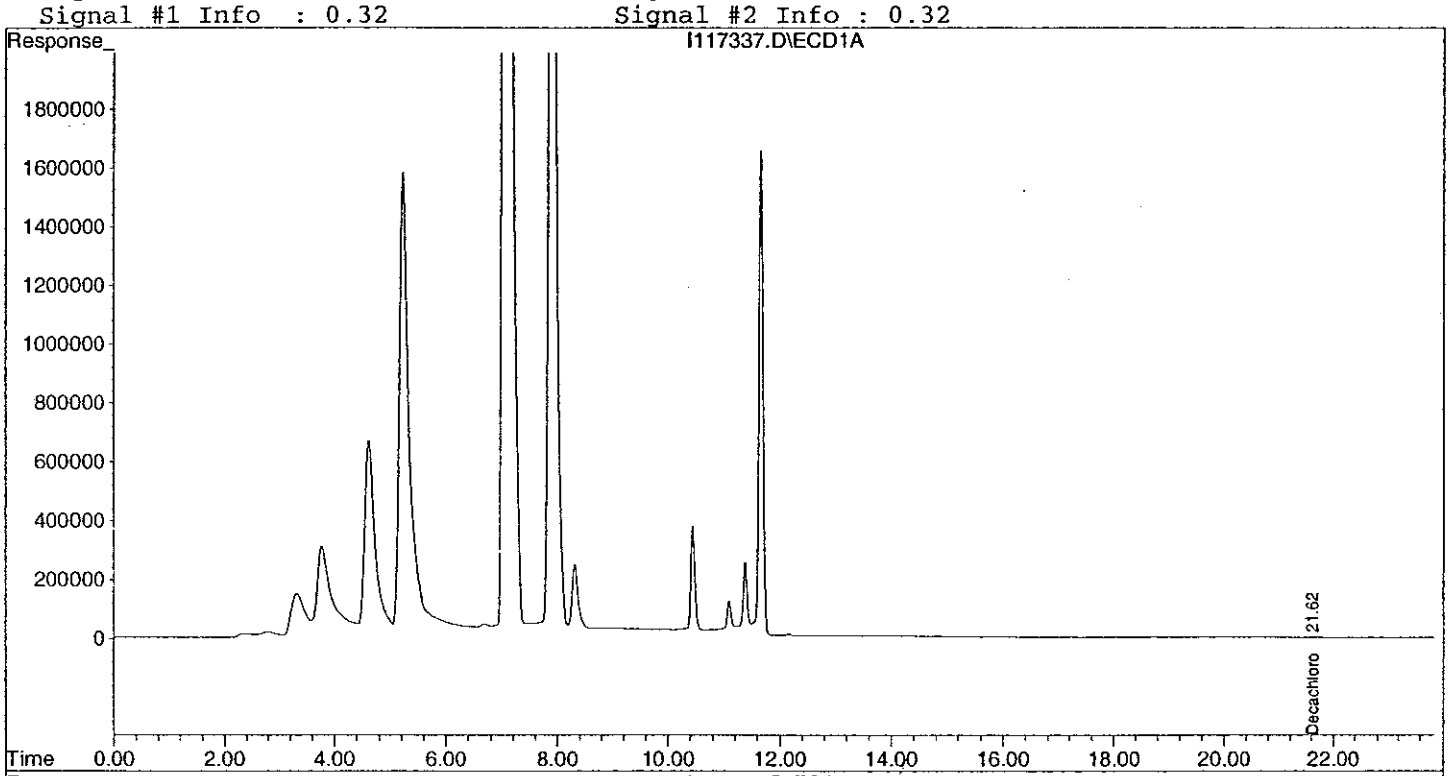
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Decachlorobiphen	21.62	22.15	50700	255719	5.490m	5.220
Spiked Amount	20.000	Range	30 - 150	Recovery	= 27.45%#	26.10%#
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

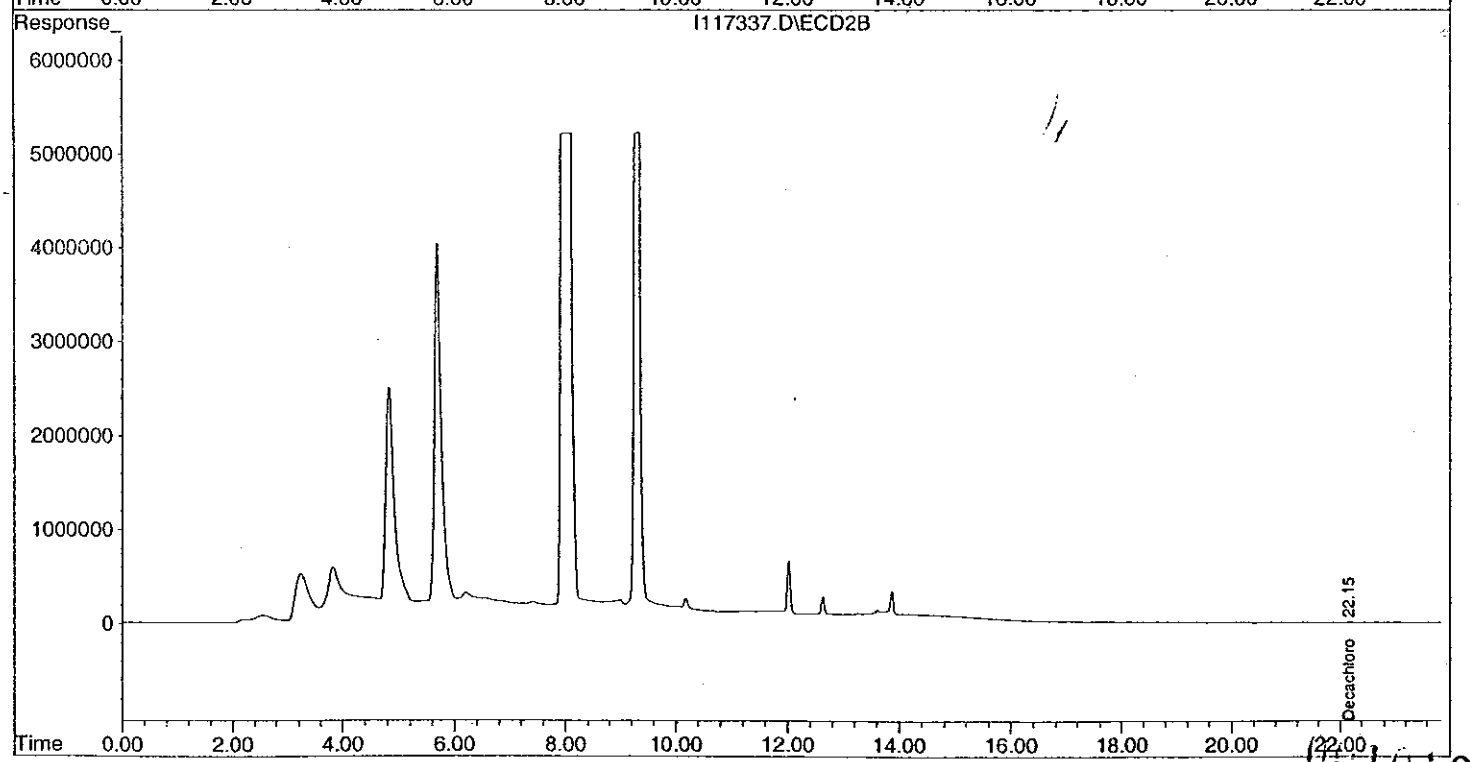
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR2102\I117337.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\I\MAR2102\I117337.D\ECD2B.CH
Acq On : 21 Mar 2002 13:46 Operator: PY
Sample : 203025-003-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW04S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 14:17 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW05S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-004-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117338.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Signal #1 : H:\GCDATA\I\MAR2102\I117338.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\I\MAR2102\I117338.D\ECD2B.CH
Acq On : 21 Mar 2002 14:14 Operator: PY
Sample : 203025-004-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW05S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:34 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

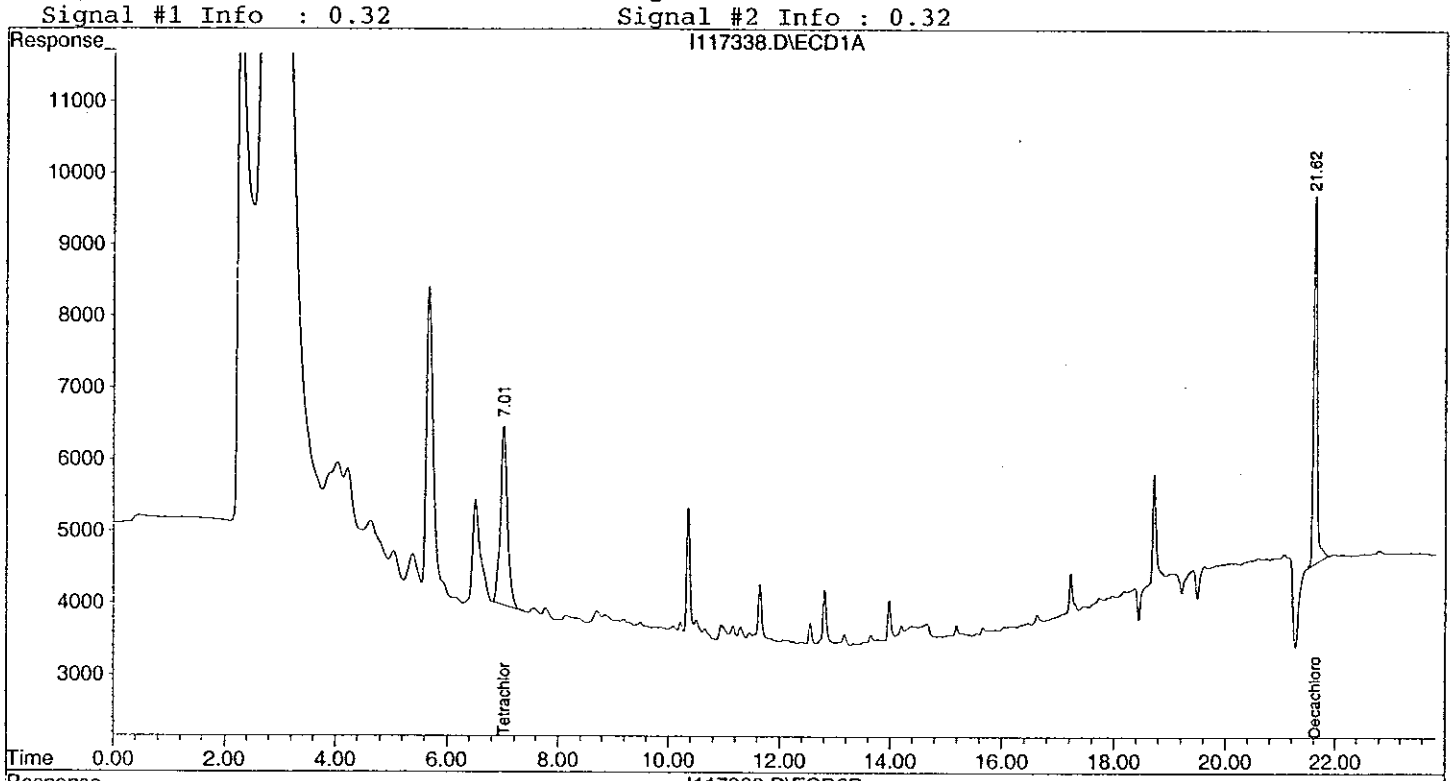
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	7.01	6.58	212798	1148691	15.668	13.150
Spiked Amount	20.000	Range	30 - 150	Recovery	= 78.34%	65.75%
) S Decachlorobiphen	21.62	22.15	229637	1027748	24.867m	20.979
Spiked Amount	20.000	Range	30 - 150	Recovery	= 124.34%	104.90%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

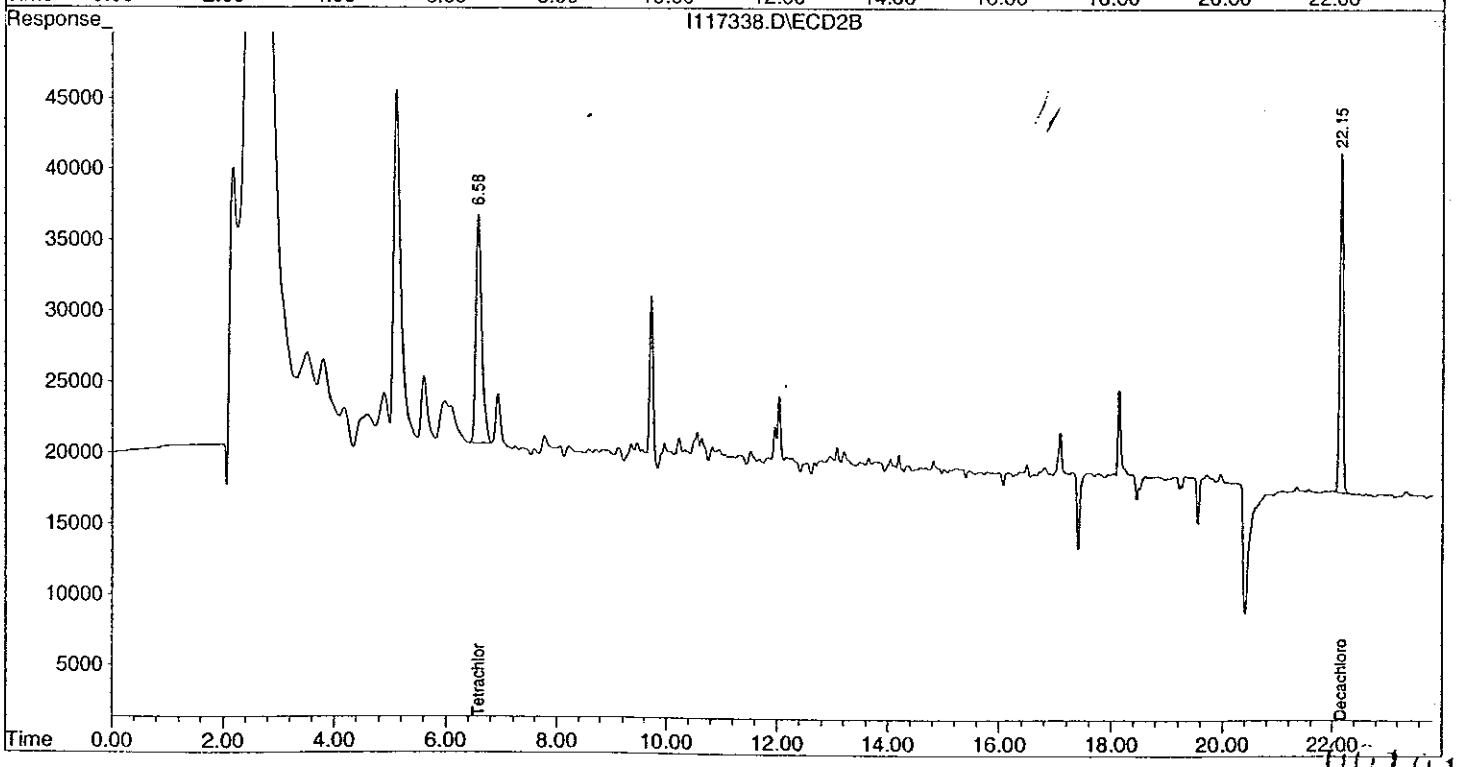
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR2102\I117338.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\I\MAR2102\I117338.D\ECD2B.CH
Acq On : 21 Mar 2002 14:14 Operator: PY
Sample : 203025-004-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW05S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:34 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW08S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-005-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117339.D

% Moisture: decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Signal #1 : H:\GCDATA\I\MAR2102\I117339.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\I\MAR2102\I117339.D\ECD2B.CH
Acq On : 21 Mar 2002 14:42 Operator: PY
Sample : 203025-005-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW08S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:36 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

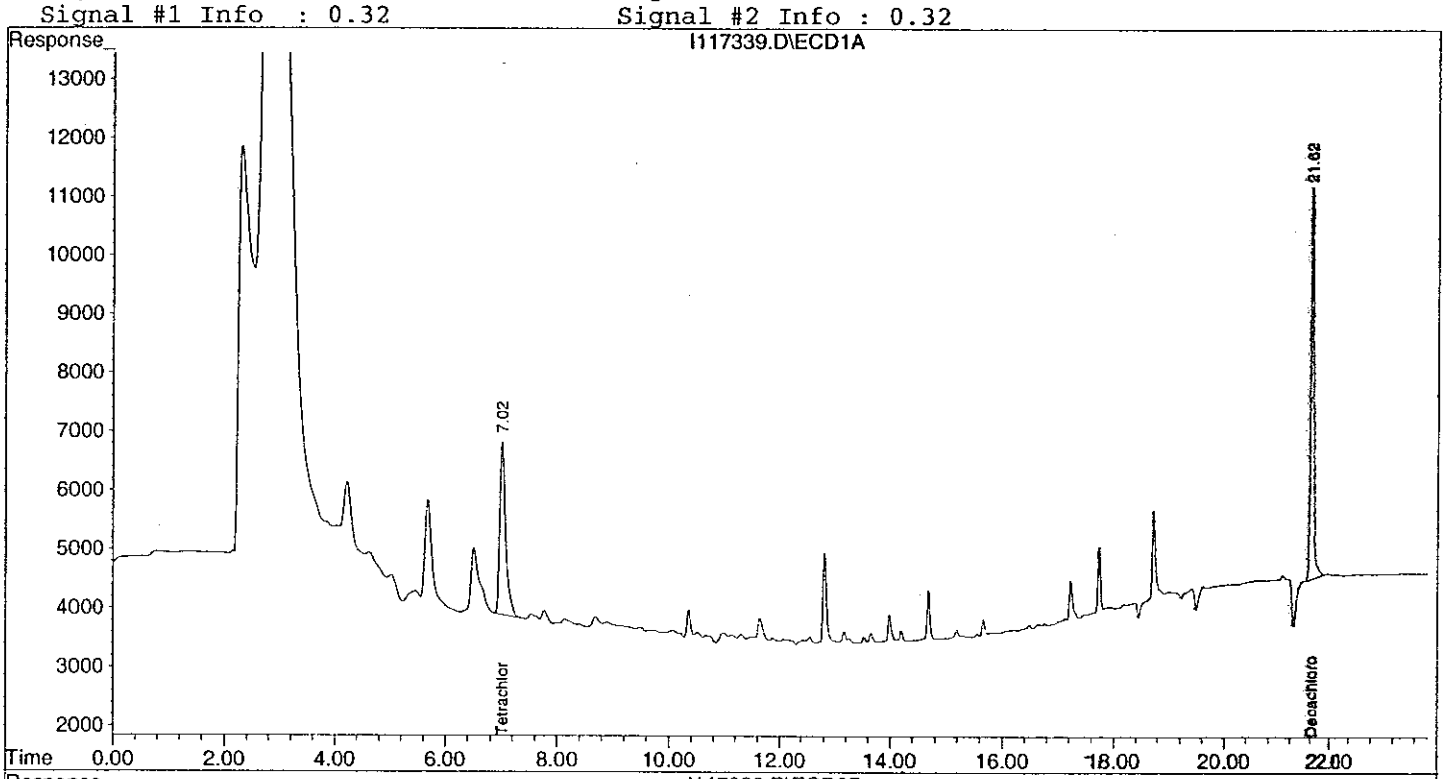
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	7.02	6.58	223534	1435670	16.458m	16.435
Spiked Amount 20.000 Range 30 - 150 Recovery =					82.29%	82.18%
) S Decachlorobiphen	21.62	22.15	292842	1296733	31.711m	26.469
Spiked Amount 20.000 Range 30 - 150 Recovery =					158.56%#	132.35%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

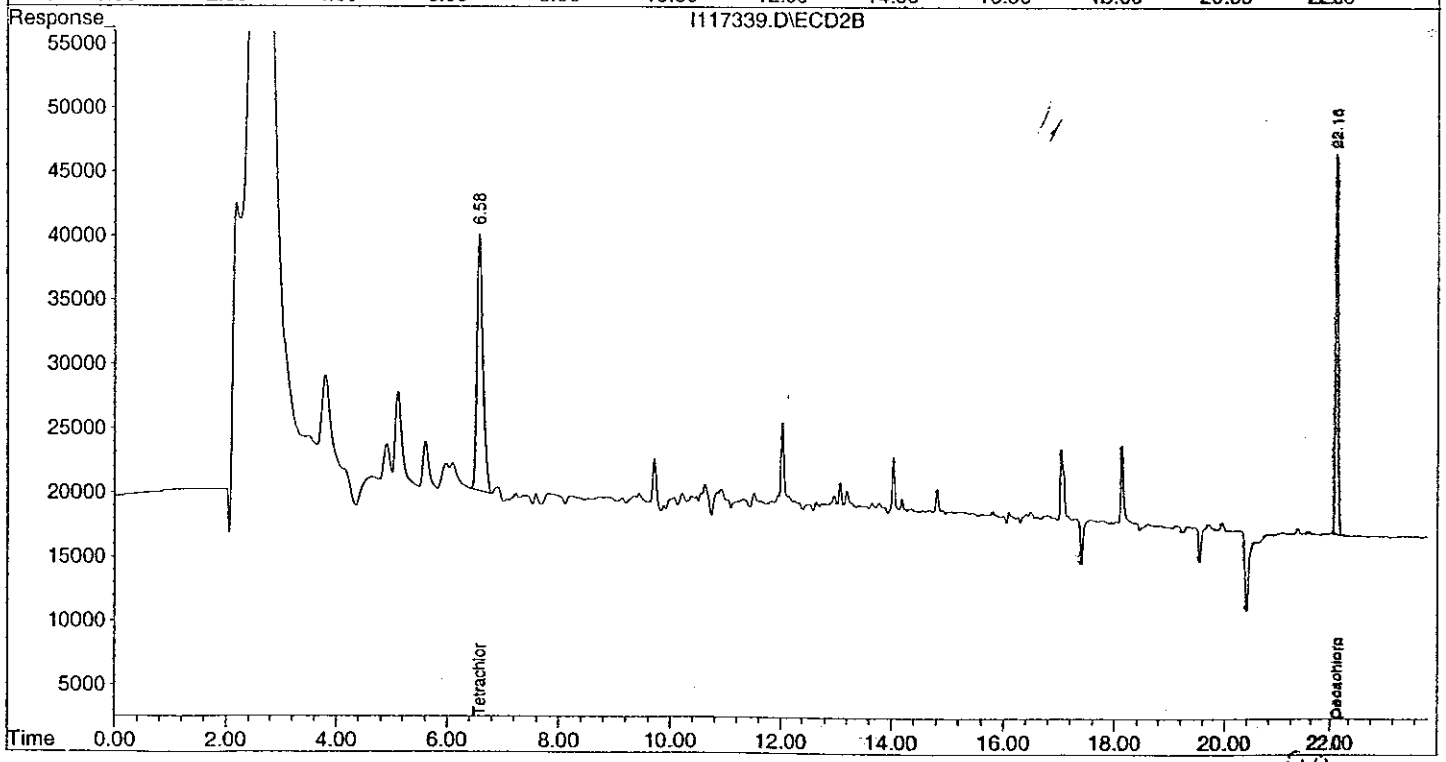
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR2102\I117339.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\I\MAR2102\I117339.D\ECD2B.CH
Acq On : 21 Mar 2002 14:42 Operator: PY
Sample : 203025-005-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW08S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:36 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-DUP-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-006-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117340.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Signal #1 : H:\GCDATA\I\MAR2102\I117340.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\I\MAR2102\I117340.D\ECD2B.CH
Acq On : 21 Mar 2002 15:10 Operator: PY
Sample : 203025-006-01-1/2 Inst : GC-I
Misc : 8081A-W-007-DUP-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:38 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
S Tetrachloro-m-xy	0.00	6.58	0	690637	N.D.	7.906 #
Spiked Amount 20.000 Range 30 - 150 Recovery =					0.00%#	39.53%
S Decachlorobiphen	21.62	22.15	61389	276413	6.648m	5.642m
Spiked Amount 20.000 Range 30 - 150 Recovery =					33.24%	28.21%#
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

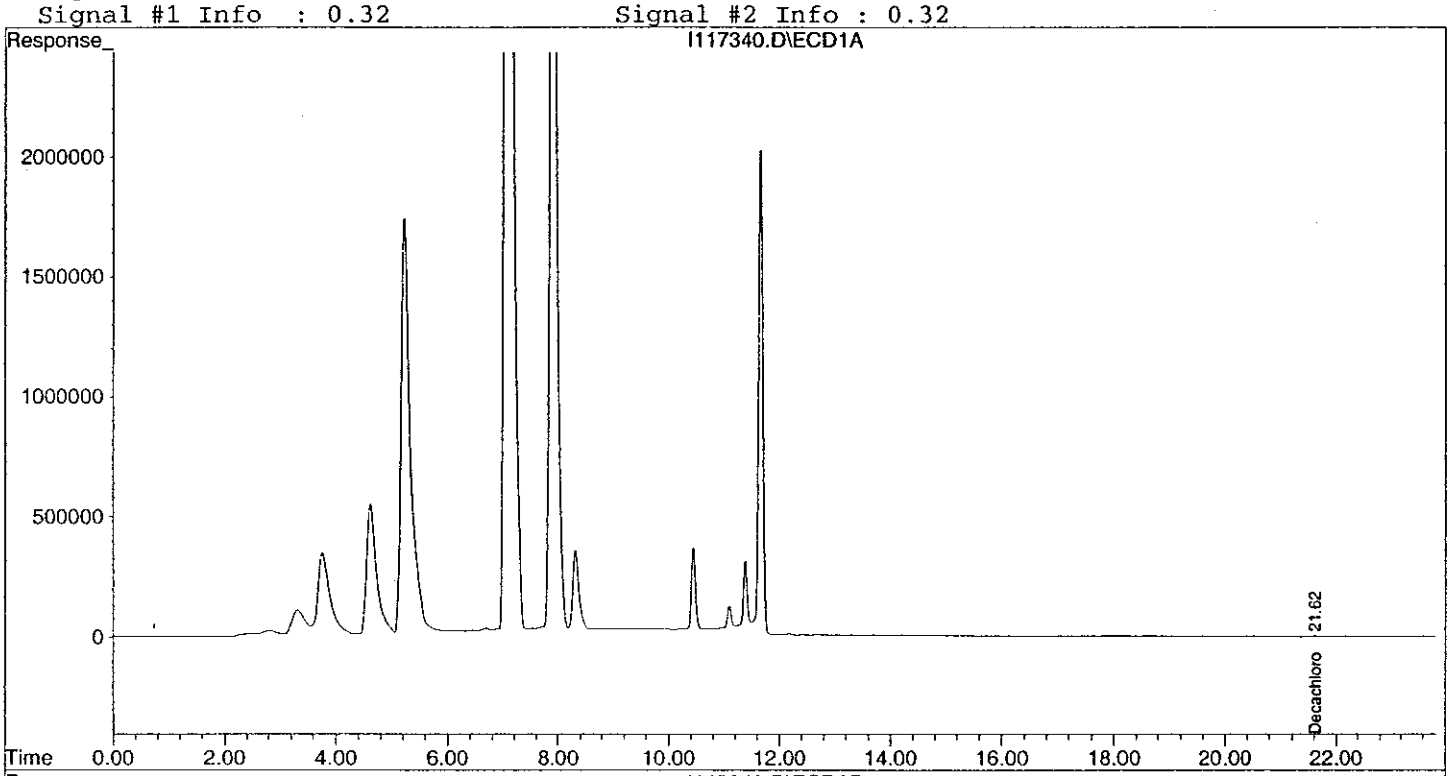
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
117340.D MAR1902P.M Fri Mar 22 07:42:14 2002 W49_HPGC

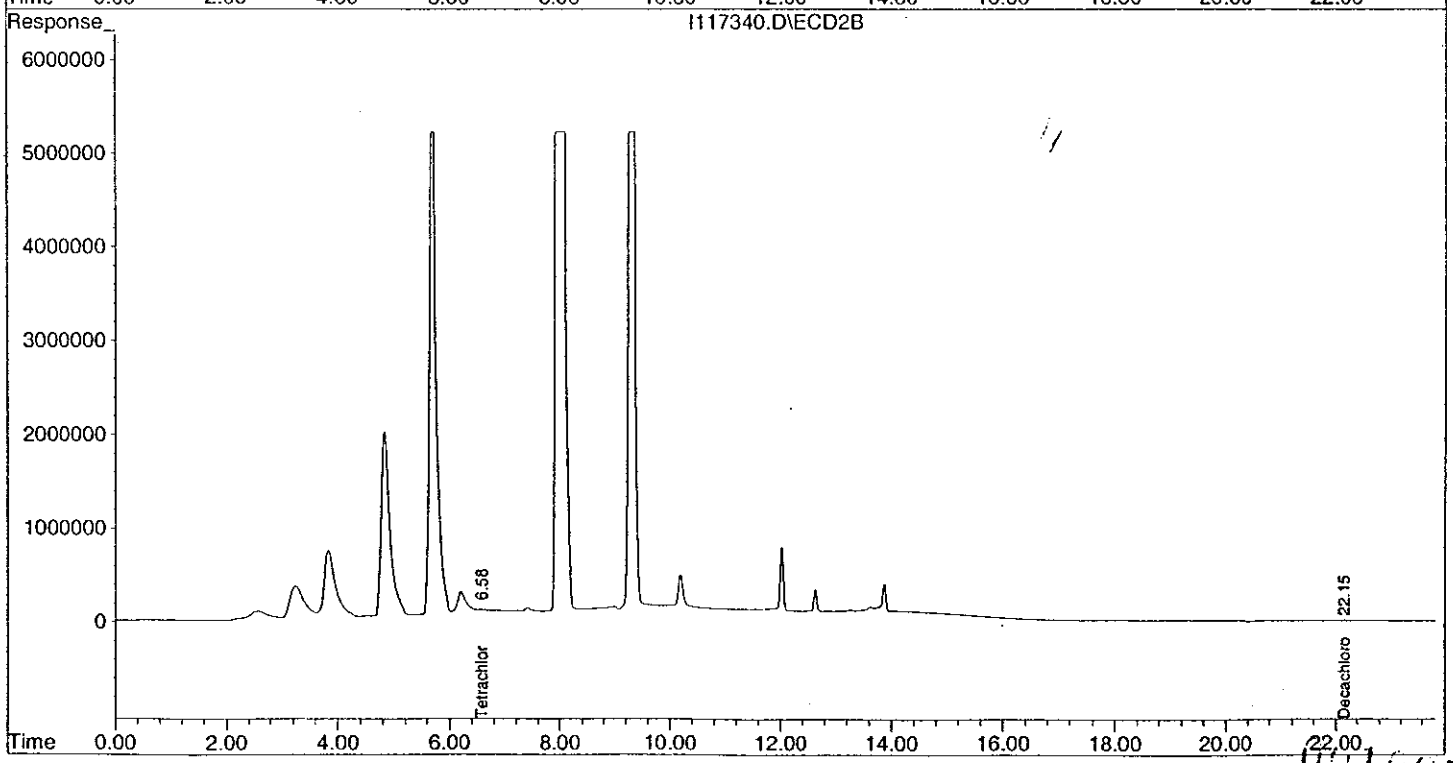
001024

Signal #1 : H:\GCDATA\I\MAR2102\I117340.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\I\MAR2102\I117340.D\ECD2B.CH
Acq On : 21 Mar 2002 15:10 Operator: PY
Sample : 203025-006-01-1/2 Inst : GC-I
Misc : 8081A-W-007-DUP-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:38 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-EQB-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-007-01-1/2

Sample wt/vol: 850 (g/ml) ML Lab File ID: I117341.D

% Moisture: decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.059	U
58-89-9	gamma-BHC (Lindane)	0.059	U
76-44-8	Heptachlor	0.059	U
309-00-2	Aldrin	0.059	U
319-85-7	beta-BHC	0.059	U
319-86-8	delta-BHC	0.059	U
1024-57-3	Heptachlor Epoxide	0.059	U
959-98-8	Endosulfan I	0.059	U
5103-74-2	gamma-Chlordane	0.059	U
5103-71-9	alpha-Chlordane	0.059	U
72-55-9	4,4-DDE	0.059	U
60-57-1	Dieldrin	0.059	U
72-20-8	Endrin	0.059	U
33213-65-9	Endosulfan II	0.059	U
72-54-8	4,4-DDD	0.059	U
50-29-3	4,4-DDT	0.059	U
7421-93-4	Endrin Aldehyde	0.059	U
1031-07-8	Endosulfan Sulfate	0.059	U
72-43-5	Methoxychlor	0.059	U
53494-70-5	Endrin Ketone	0.059	U
12789-03-6	Chlordane	1.2	U
8001-35-2	Toxaphene	1.2	U

Signal #1 : H:\GCDATA\I\MAR2102\I117341.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\I\MAR2102\I117341.D\ECD2B.CH
Acq On : 21 Mar 2002 15:38 Operator: PY
Sample : 203025-007-01-1/2 Inst : GC-I
Misc : 8081A-W-007-EQB-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:39 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	7.02	6.58	171222	1051890	12.606m	12.042
Spiked Amount 20.000 Range 30 - 150 Recovery =					63.03%	60.21%
) S Decachlorobiphen	21.62	22.16	195951	897879	21.219m	18.328
Spiked Amount 20.000 Range 30 - 150 Recovery =					106.10%	91.64%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

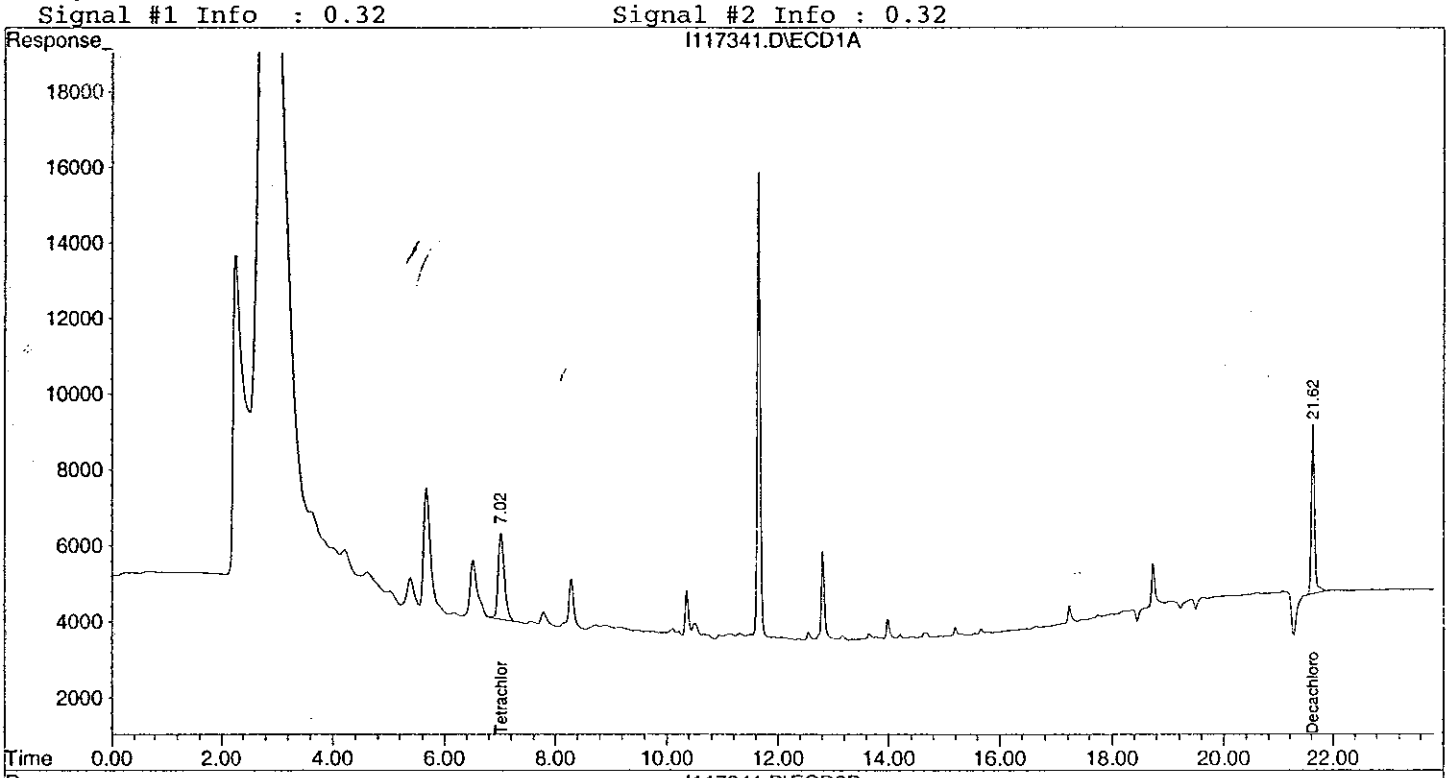
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

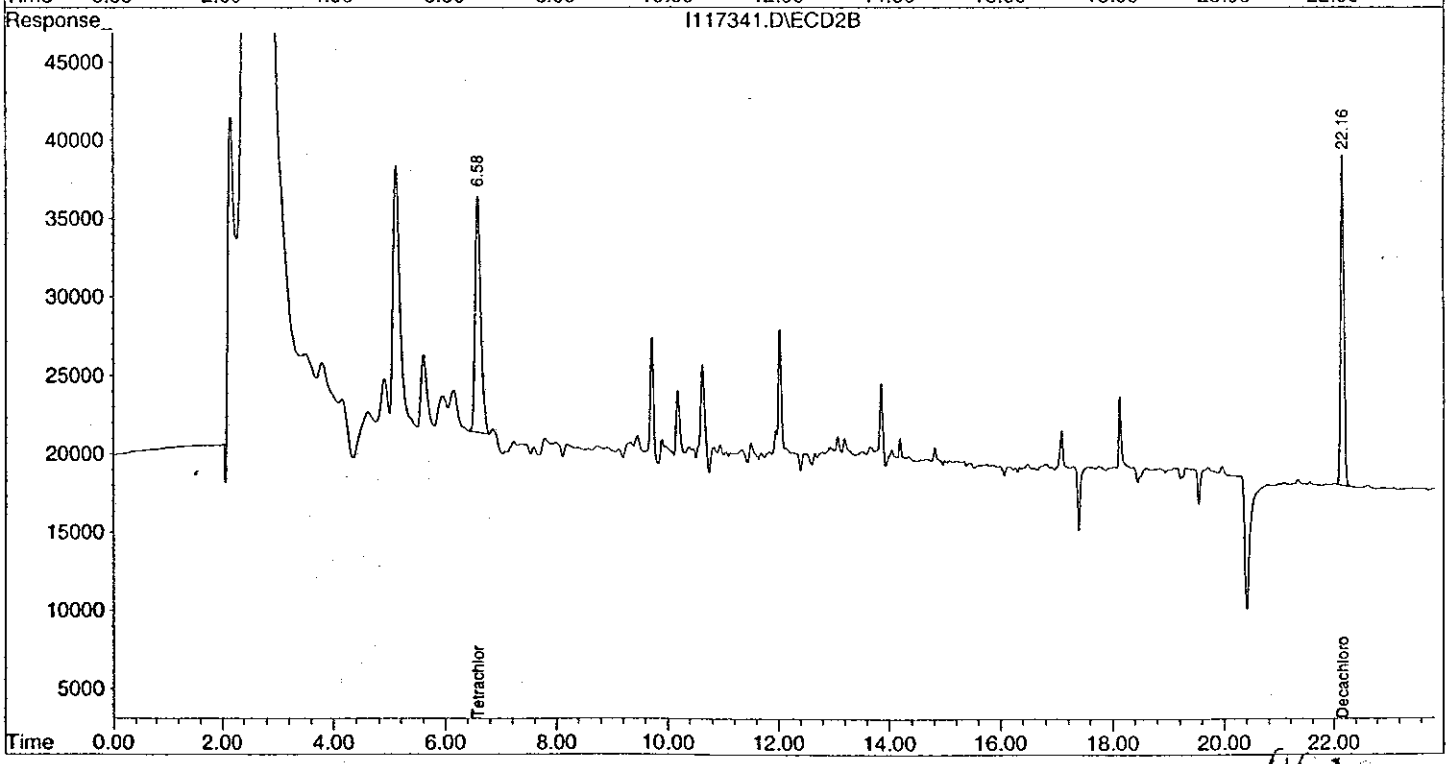
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117341.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\I\MAR2102\I117341.D\ECD2B.CH
Acq On : 21 Mar 2002 15:38 Operator: PY
Sample : 203025-007-01-1/2 Inst : GC-I
Misc : 8081A-W-007-EQB-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:39 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001028

C. Standard Data

1. Initial Calibration Data
2. Continuing Calibration Data

GPL Laboratories, LLLP

Response Factor Report GC-I

Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 11:15:13 2002

Calibration Files
P005 =I117305.D P025 =I117304.D P050 =I117303.D
P075 =I117302.D P100 =I117301.D

	Compound	P005	P025	P050	P075	P100	Avg		%RSD
S	Tetrachloro-m-xylene	1.412	1.328	1.358	1.369	1.324	1.358	E4	2.62
A	alpha-BHC	0.883	0.975	1.117	1.291	1.351	1.124	E4	17.78
MA	gamma-BHC (Lindane)	0.939	1.055	1.208	1.375	1.416	1.198	E4	17.02
MA	Heptachlor	1.262	1.234	1.274	1.354	1.354	1.296	E4	4.24
MB	Aldrin	1.164	1.221	1.343	1.479	1.510	1.343	E4	11.38
B	beta-BHC	7.420	7.405	7.628	7.932	7.806	7.638	E3	3.05
B	delta-BHC	5.455	6.686	7.791	9.209	9.768	7.782	E3	22.80
B	Heptachlor Epoxide	1.382	1.341	1.397	1.493	1.481	1.419	E4	4.64
A	Endosulfan I	1.231	1.211	1.254	1.339	1.330	1.273	E4	4.60
A	gamma-Chlordane	1.457	1.395	1.418	1.511	1.502	1.456	E4	3.48
A	alpha-Chlordane	1.575	1.578	1.657	1.714	1.812	1.667	E4	5.96
B	4,4-DDE	1.053	1.056	1.123	1.206	1.193	1.126	E4	6.48
MA	Dieldrin	1.135	1.129	1.189	1.294	1.299	1.209	E4	6.89
MA	Endrin	7.598	7.410	7.528	8.098	8.003	7.728	E3	3.93
B	Endosulfan II	1.046	1.020	1.058	1.145	1.123	1.079	E4	4.93
A	4,4-DDD	6.687	6.923	7.299	7.766	7.708	7.276	E3	6.52
MA	4,4-DDT	7.230	7.569	8.117	8.726	8.730	8.075	E3	8.36
B	Endrin Aldehyde	9.192	8.903	9.070	9.229	9.169	9.113	E3	1.44
B	Endosulfan Sulfate	3.059	3.652	3.971	4.383	4.376	3.888	E3	14.28
A	Methoxychlor	4.585	4.248	4.036	3.997	3.782	4.130	E3	7.35
B	Endrin Ketone	4.347	4.585	4.931	5.438	5.562	4.973	E3	10.58
S	Decachlorobiphenyl	1.041	0.943	0.886	0.894	0.853	0.923	E4	7.94
L8	Toxaphene			9.731			9.731	E1	0.00
L8	Toxaphene (2)			3.069			3.069	E1	0.00
L8	Toxaphene (3)			2.360			2.360	E2	0.00
L8	Toxaphene (4)			1.692			1.692	E2	0.00
L8	Toxaphene (5)			1.328			1.328	E2	0.00
L9	Chlordane	5.148	5.046	5.162	5.015	5.318	5.138	E2	2.32
L9	Chlordane (2)	5.808	5.633	5.807	5.618	5.543	5.682	E2	2.10
L9	Chlordane (3)	1.517	1.527	1.773	1.581	1.724	1.624	E3	7.22
L9	Chlordane (4)	1.334	1.301	1.401	1.445	1.472	1.391	E3	5.18
L9	Chlordane (5)	3.392	3.445	3.679	3.659	3.924	3.620	E2	5.86

gnal #2 Calibration Files
P005 =I117305.D P025 =I117304.D P050 =I117303.D
P075 =I117302.D P100 =I117301.D

	Compound	P005	P025	P050	P075	P100	Avg		%RSD
S	Tetrachloro-m-xylene	1.031	0.901	0.843	0.820	0.773	0.874	E5	11.37
A	alpha-BHC	9.373	9.182	9.097	9.153	8.780	9.117	E4	2.36
MA	gamma-BHC (Lindane)	9.389	8.916	8.656	8.599	8.193	8.751	E4	5.04
MA	Heptachlor	9.228	7.729	7.138	6.944	6.549	7.518	E4	13.92
MB	Aldrin	9.587	8.447	7.937	7.725	7.300	8.199	E4	10.72
B	beta-BHC	5.856	4.996	4.613	4.469	4.185	4.824	E4	13.41
B	delta-BHC	6.111	6.324	6.436	6.600	6.384	6.371	E4	2.79
B	Heptachlor Epoxide	1.002	0.817	0.743	0.718	0.671	0.790	E5	16.43
A	Endosulfan I	8.875	7.308	6.798	6.309	6.081	7.074	E4	15.72
A	gamma-Chlordane	9.910	8.167	7.456	7.213	6.785	7.906	E4	15.52
A	alpha-Chlordane	9.424	7.743	7.030	6.772	6.393	7.472	E4	16.02
B	4,4-DDE	9.029	7.691	7.126	6.912	6.488	7.449	E4	13.20
MA	Dieldrin	8.605	7.275	6.657	6.430	6.030	6.999	E4	14.35
MA	Endrin	5.762	4.814	4.360	4.257	4.056	4.650	E4	14.65
B	Endosulfan II	7.272	6.338	5.760	5.558	5.243	6.034	E4	13.24
A	4,4-DDD	6.009	5.214	4.829	4.707	4.424	5.037	E4	12.17
MA	4,4-DDT	5.652	5.117	4.892	4.776	4.532	4.994	E4	8.49
B	Endrin Aldehyde	2.866	2.297	2.062	1.989	1.851	2.213	E4	18.03
B	Endosulfan Sulfate	2.257	2.439	2.440	2.482	2.395	2.403	E4	3.62
A	Methoxychlor	3.074	2.523	2.302	2.177	1.949	2.405	E4	17.78
B	Endrin Ketone	3.117	2.938	2.814	2.819	2.705	2.879	E4	5.45

= Out of Range

Response Factor Report GC-I

Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 11:15:13 2002

Calibration Files
P005 =I117305.D P025 =I117304.D P050 =I117303.D
P075 =I117302.D P100 =I117301.D

		Compound	P005	P025	P050	P075	P100	Avg		%RSD
	S	Decachlorobiphenyl	6.409	5.236	4.565	4.314	3.970	4.899	E4	19.66
	L8	Toxaphene			3.243			3.243	E2	0.00
	L8	Toxaphene {2}			2.292			2.292	E3	0.00
	L8	Toxaphene {3}			7.169			7.169	E2	0.00
	L8	Toxaphene {4}			2.896			2.896	E2	0.00
	L8	Toxaphene {5}			1.134			1.134	E3	0.00
	L9	Chlordane	3.745	3.537	3.415	2.987	2.798	3.296	E3	11.92
	L9	Chlordane {2}	3.147	3.173	2.966	2.564	2.351	2.840	E3	12.89
	L9	Chlordane {3}	8.701	8.035	8.103	6.567	6.074	7.496	E3	14.91
	L9	Chlordane {4}	7.713	7.147	7.374	5.815	5.413	6.692	E3	15.16
	L9	Chlordane {5}	2.500	2.360	2.300	2.006	1.857	2.205	E3	12.03

- Out of Range

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117295.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\I\MAR1902\I117295.D\ECD2B.CH
Acq On : 19 Mar 2002 20:35 Operator: AK
Sample : TOX-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 8:49 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

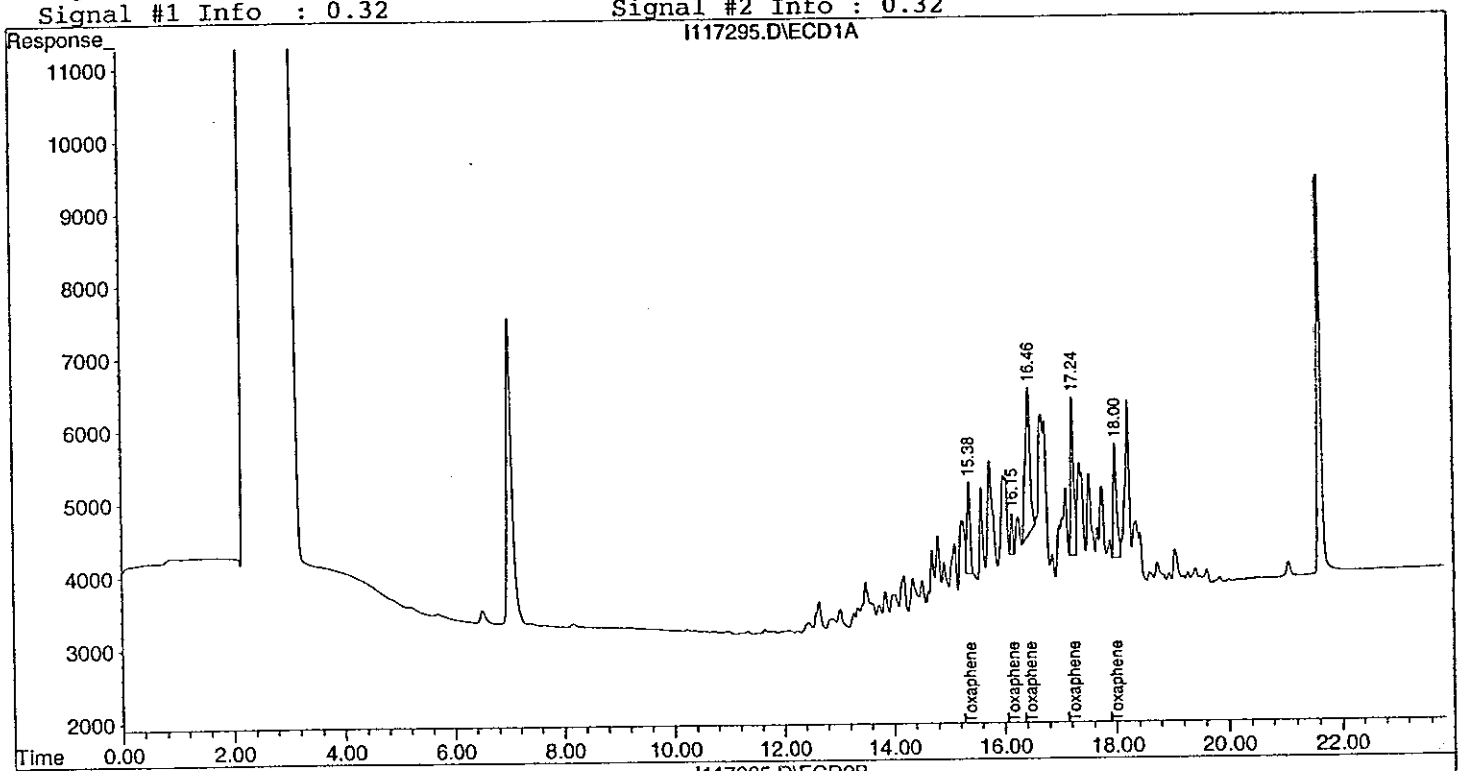
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
L8 Toxaphene	15.38	15.33	48654	162144	500.865m	501.758m
L8 Toxaphene {2}	16.15	16.53	15344	1146162	501.897m	498.794m
L8 Toxaphene {3}	16.46	16.96	118010	358462	500.414	501.834m
L8 Toxaphene {4}	17.24	17.64	84580	144800	501.804m	499.042m
L8 Toxaphene {5}	18.00	18.27	66410	566854	503.015m	500.092m
Sum Toxaphene			332998	2378422	NoCal	NoCal
rage Toxaphene					501.599	500.304
Sum Chlordane			0	0	N.D.	N.D.
rage Chlordane					0.000	0.000

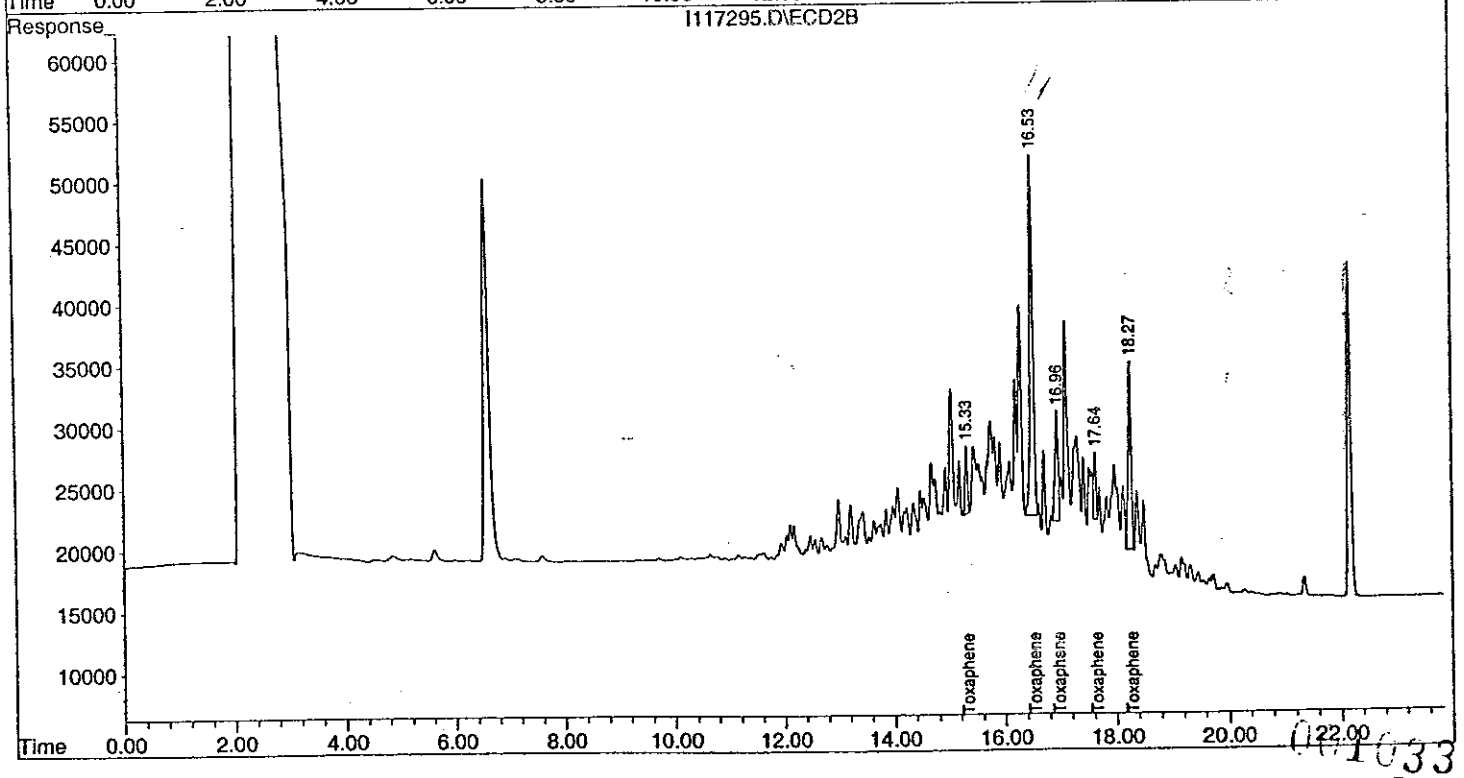
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117295.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\I\MAR1902\I117295.D\ECD2B.CH
Acq On : 19 Mar 2002 20:35 Operator: AK
Sample : TOX-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 8:49 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantification Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117296.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR1902\I117296.D\ECD2B.CH
Acq On : 19 Mar 2002 21:03 Operator: AK
Sample : CHLORDANE-5 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:01 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

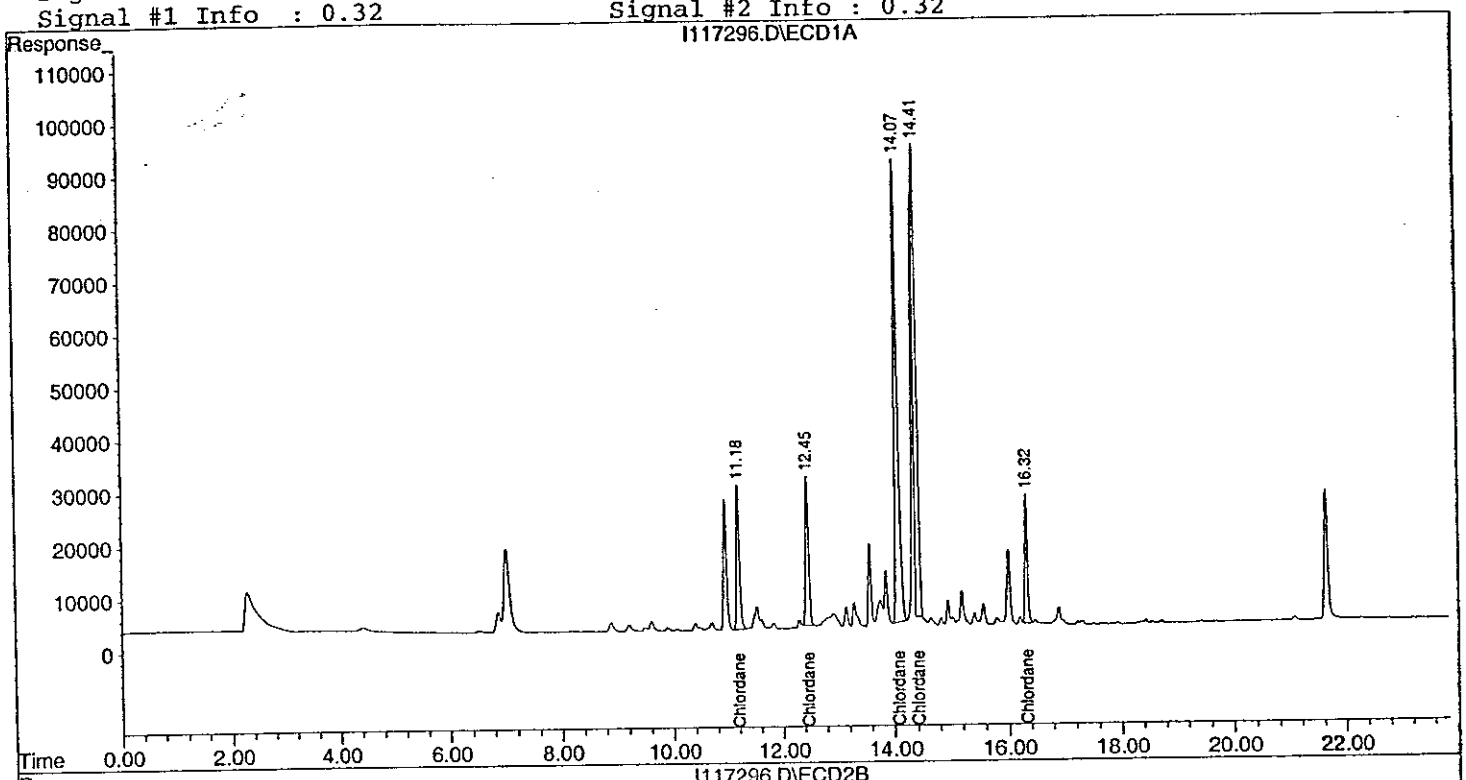
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
age Toxaphene					0.000	0.000
L9 Chlordane	11.18	10.87	1063665	5595420	2066.572	1703.862m
L9 Chlordane {2}	12.45	12.26	1108690	4702722	1952.806	1763.631m
L9 Chlordane {3}	14.07	13.90	3448973	12147486	2121.766	1627.282m
L9 Chlordane {4}	14.41	14.28	2943572	10826168	2096.141m	1603.534m
L9 Chlordane {5}	16.32	16.45	784866	3713339	2174.947	1677.076
Sum Chlordane			9349766	36985135	10412.231	8375.385
age Chlordane					2082.446	1675.077

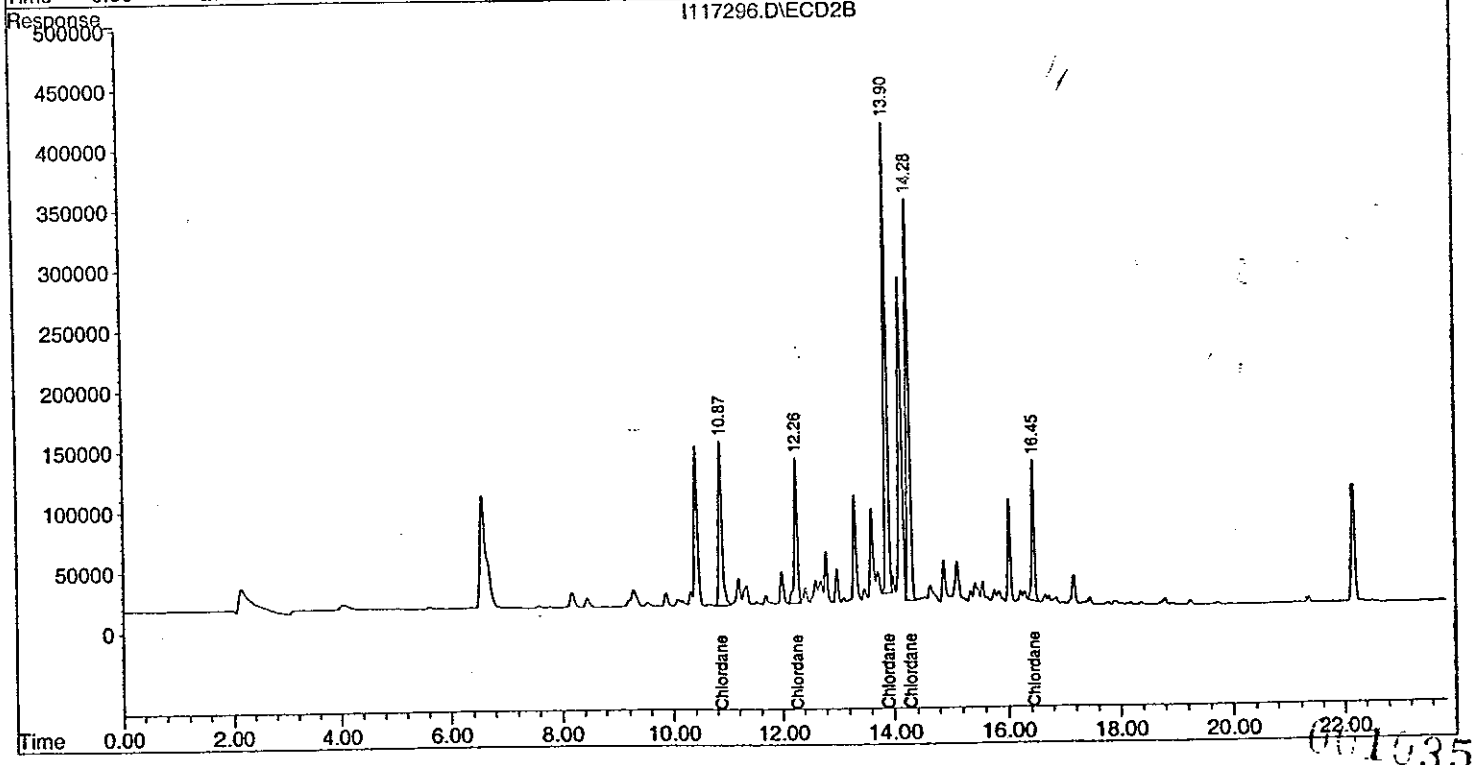
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117296.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR1902\I117296.D\ECD2B.CH
Acq On : 19 Mar 2002 21:03 Operator: AK
Sample : CHLORDANE-5 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:01 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantification Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117297.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\I\MAR1902\I117297.D\ECD2B.CH
Acq On : 19 Mar 2002 21:31 Operator: AK
Sample : CHLORDANE-4 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:03 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

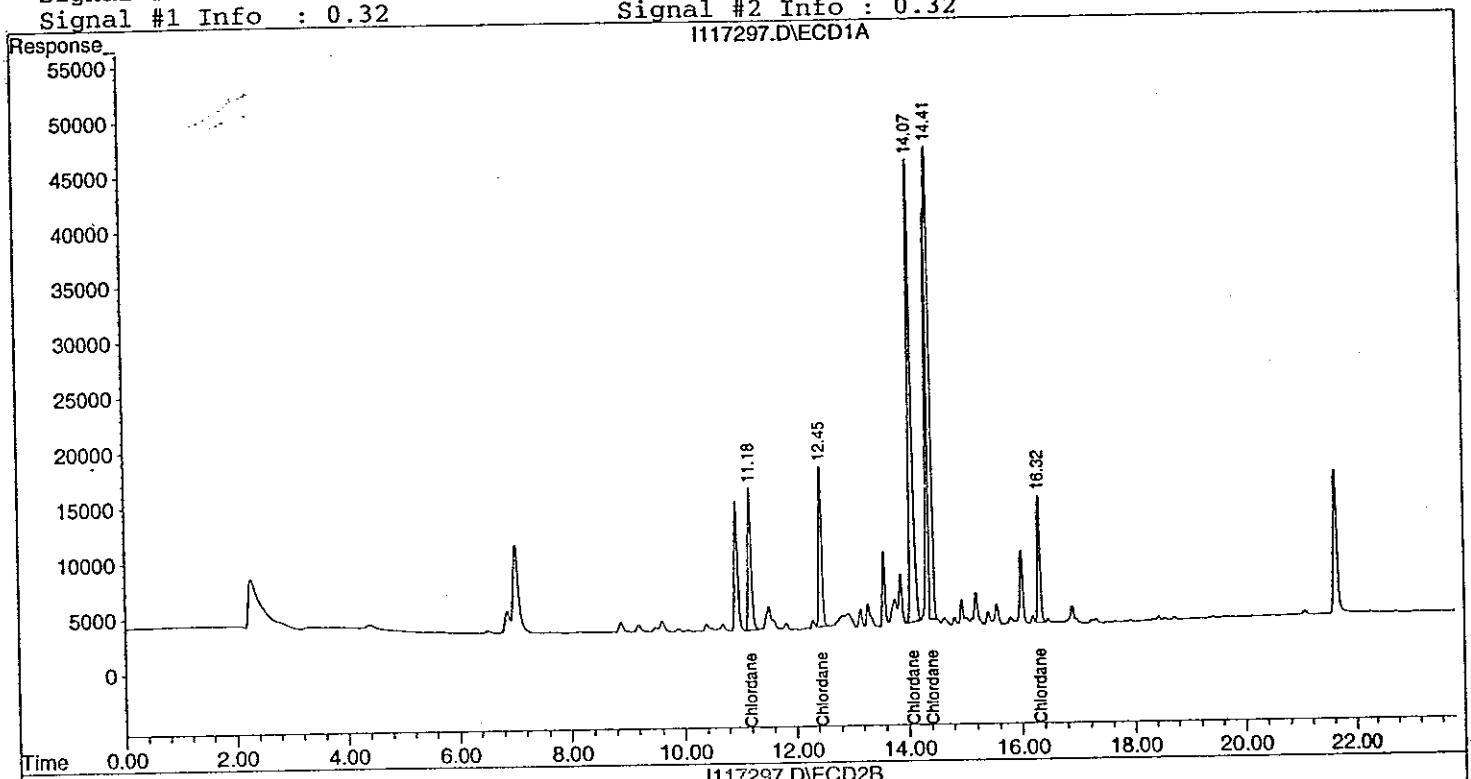
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
:age Toxaphene					0.000	0.000
L9 Chlordane	11.18	10.87	501526	2986853	976.139	906.156
L9 Chlordane {2}	12.45	12.26	561802	2563647	993.099m	937.467
L9 Chlordane {3}	14.07	13.90	1581270	6567046	973.395	876.021m
L9 Chlordane {4}	14.41	14.28	1445144	5815104	1042.257m	859.757m
L9 Chlordane {5}	16.32	16.45	365934	2006084	1010.885	909.931
Sum Chlordane			4455676	19938734	4995.776	4489.333
:age Chlordane					999.155	897.867

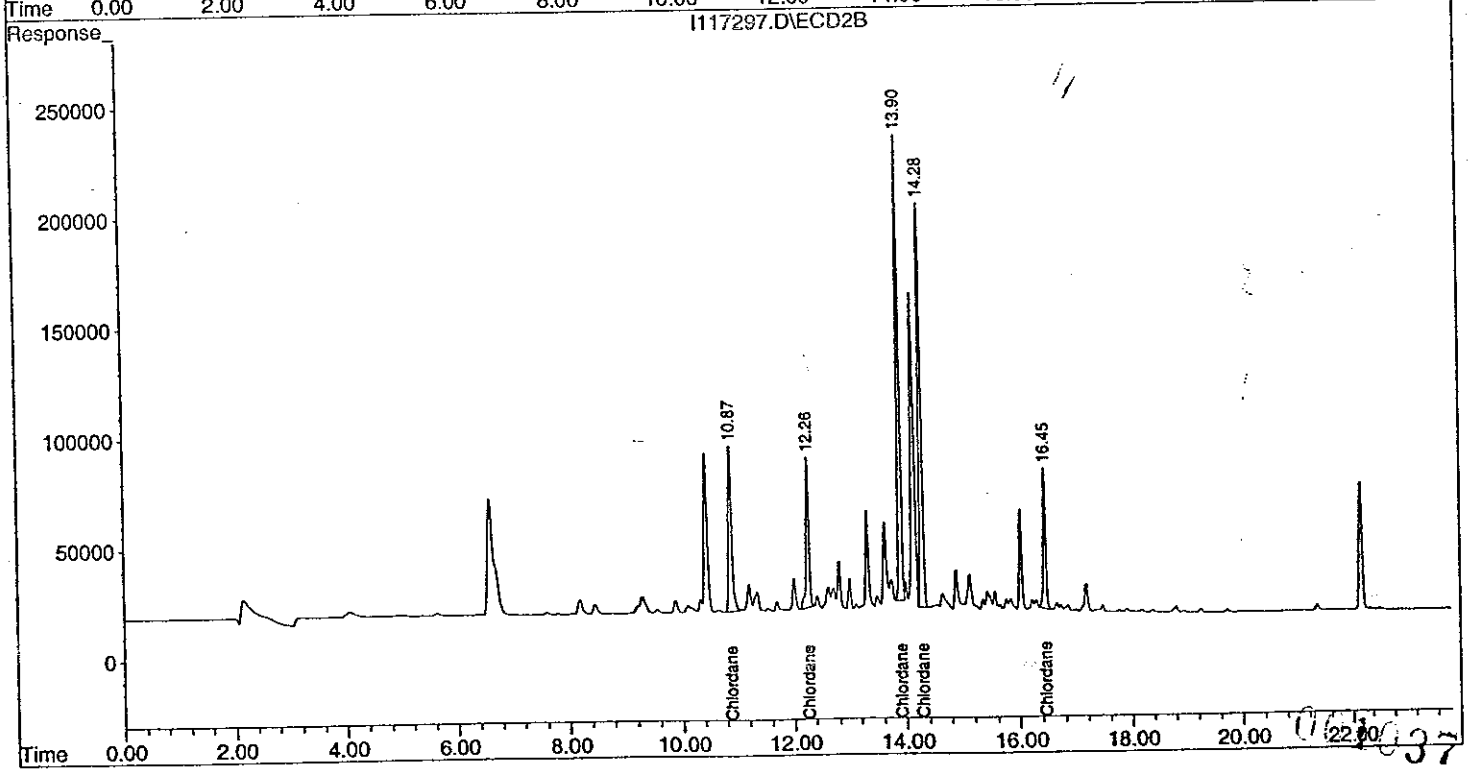
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117297.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\I\MAR1902\I117297.D\ECD2B.CH
Acq On : 19 Mar 2002 21:31 Operator: AK
Sample : CHLORDANE-4 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:03 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117298.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\I\MAR1902\I117298.D\ECD2B.CH
Acq On : 19 Mar 2002 21:59 Operator: AK
Sample : CHLORDANE-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:08 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

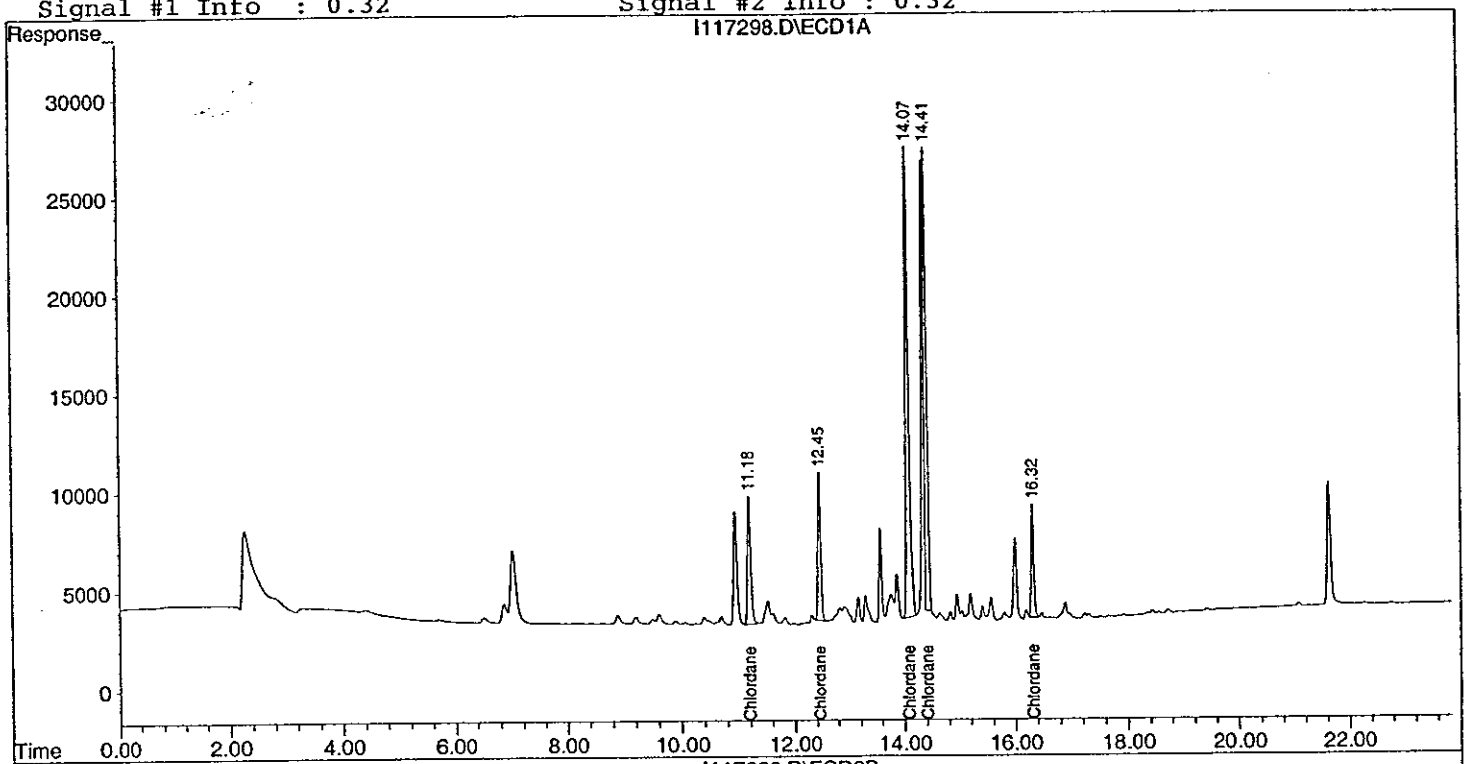
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
age Toxaphene					0.000	0.000
L9 Chlordane	11.18	10.87	258123	1707499	502.395	518.024
L9 Chlordane {2}	12.45	12.26	290331	1482827	510.977	531.529
L9 Chlordane {3}	14.07	13.90	886420	4051356	545.660	540.477
L9 Chlordane {4}	14.41	14.28	700502	3686868	500.719m	545.546m
L9 Chlordane {5}	16.32	16.45	183942	1150017	508.136	521.631
Sum Chlordane			2319319	12078567	2567.888	2657.206
age Chlordane					513.578	531.441

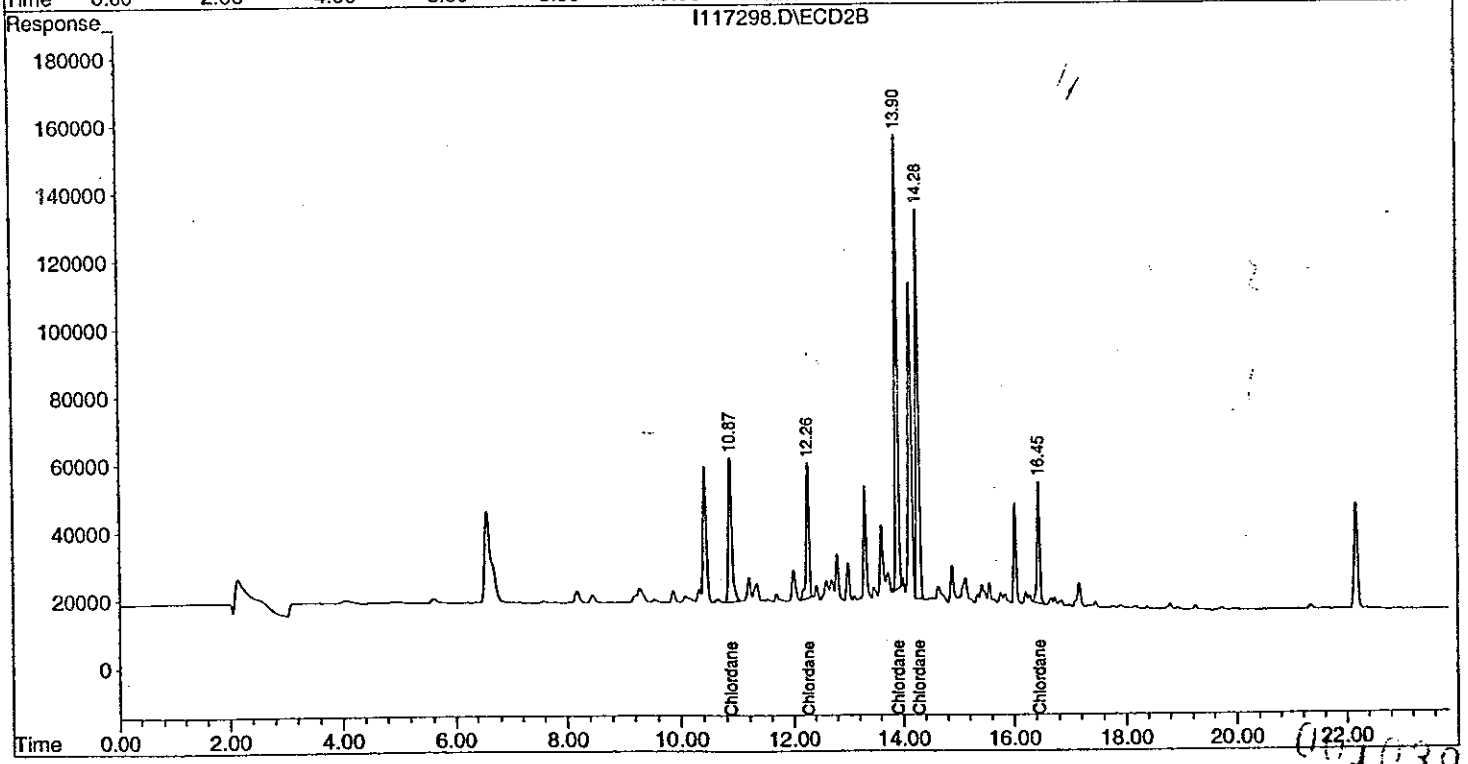
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117298.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\I\MAR1902\I117298.D\ECD2B.CH
Acq On : 19 Mar 2002 21:59 Operator: AK
Sample : CHLORDANE-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:08 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117299.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\I\MAR1902\I117299.D\ECD2B.CH
Acq On : 19 Mar 2002 22:27 Operator: AK
Sample : CHLORDANE-2 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:10 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

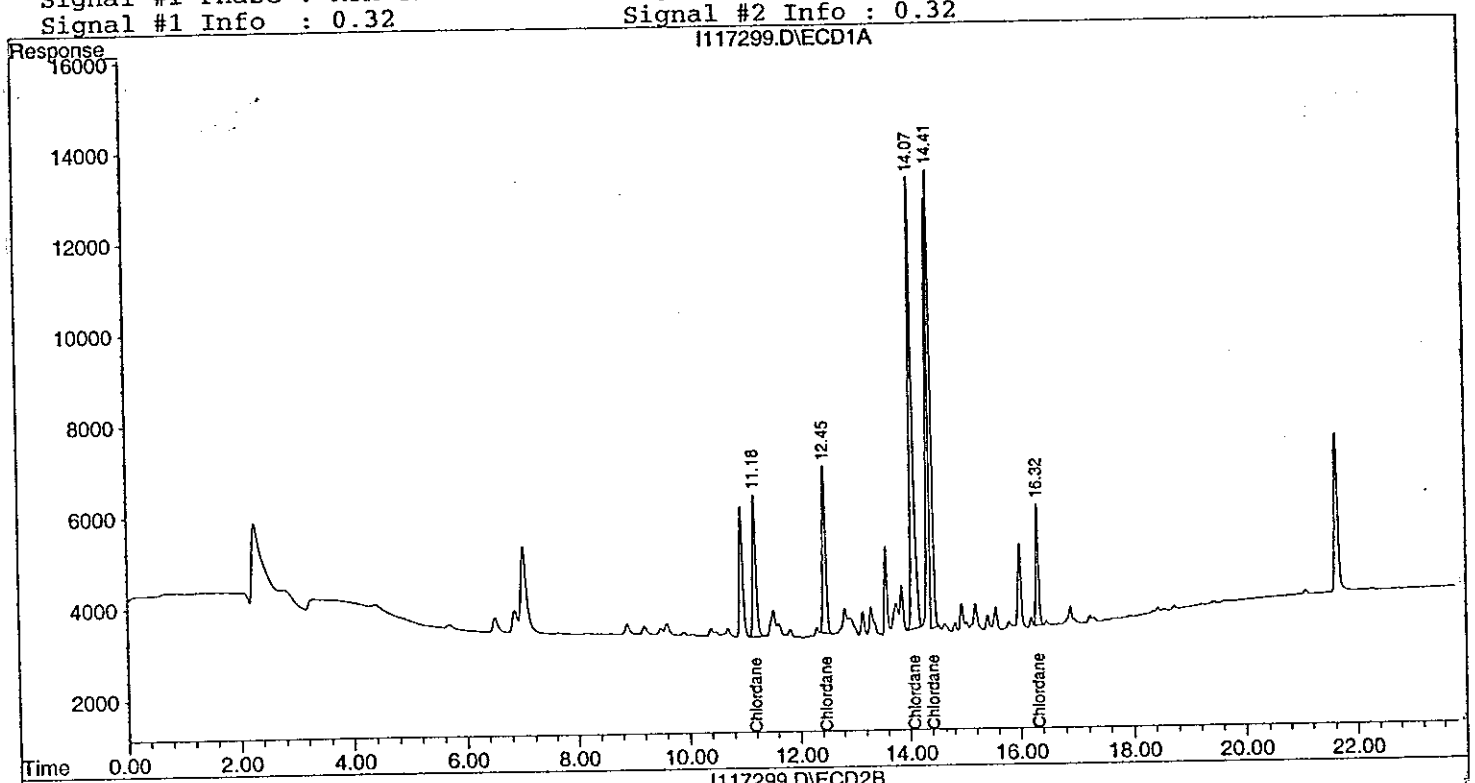
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
um Toxaphene			0	0	N.D.	N.D.
ge Toxaphene					0.000	0.000
9 Chlordane	11.18	10.87	126142	884136	245.515	268.231
9 Chlordane {2}	12.45	12.26	140829	793313	247.856	279.323
.9 Chlordane {3}	14.07	13.90	381809	2008715	235.033	267.975
,9 Chlordane {4}	14.41	14.28	325360	1786632	236.025m	264.808
,9 Chlordane {5}	16.32	16.45	86127	590017	237.924	267.623
um Chlordane			1060267	6062813	1202.353	1347.960
ge Chlordane					240.471	269.592

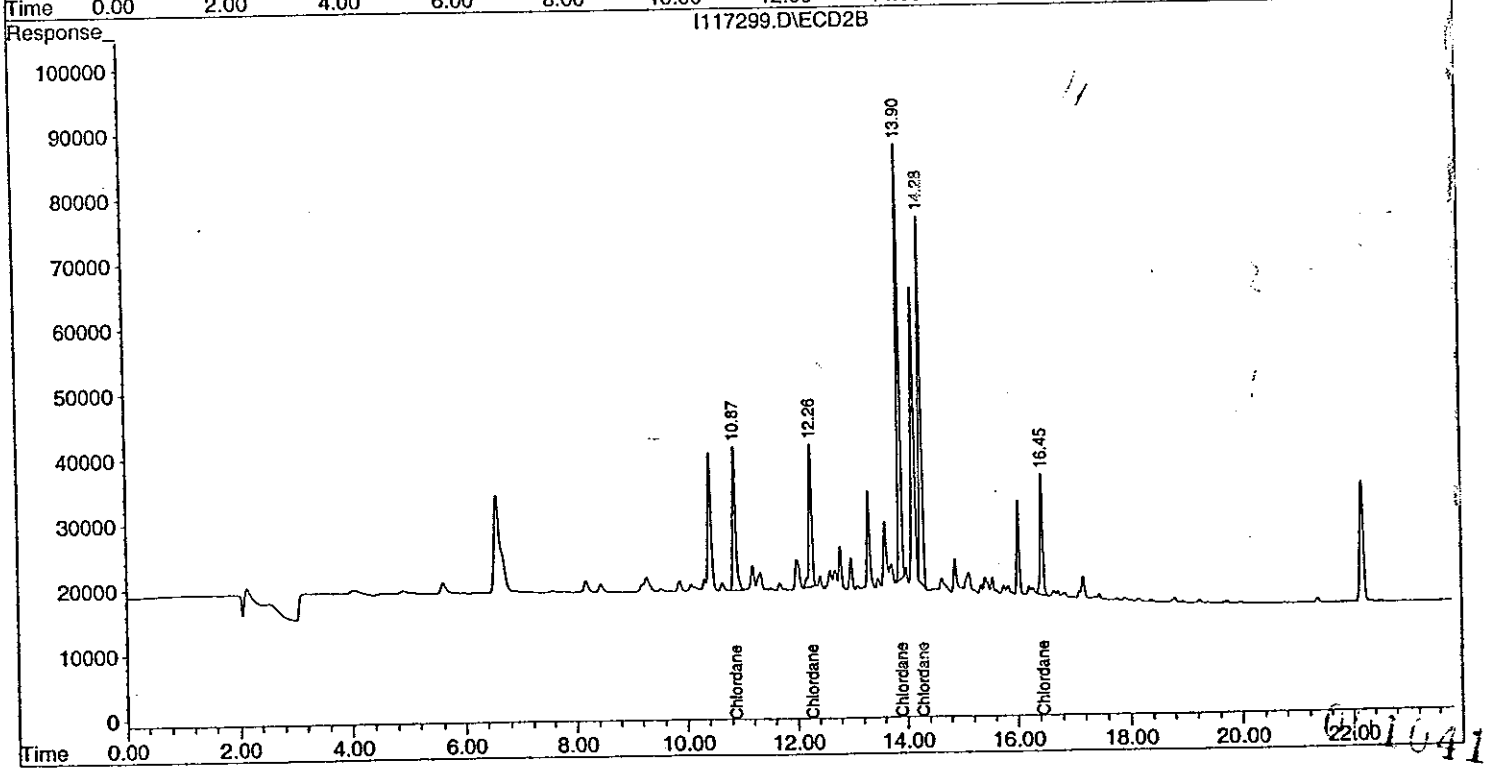
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117299.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\I\MAR1902\I117299.D\ECD2B.CH
Acq On : 19 Mar 2002 22:27 Operator: AK
Sample : CHLORDANE-2 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:10 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117300.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\I\MAR1902\I117300.D\ECD2B.CH
Acq On : 19 Mar 2002 22:55 Operator: AK
Sample : CHLORDANE-1 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:11 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

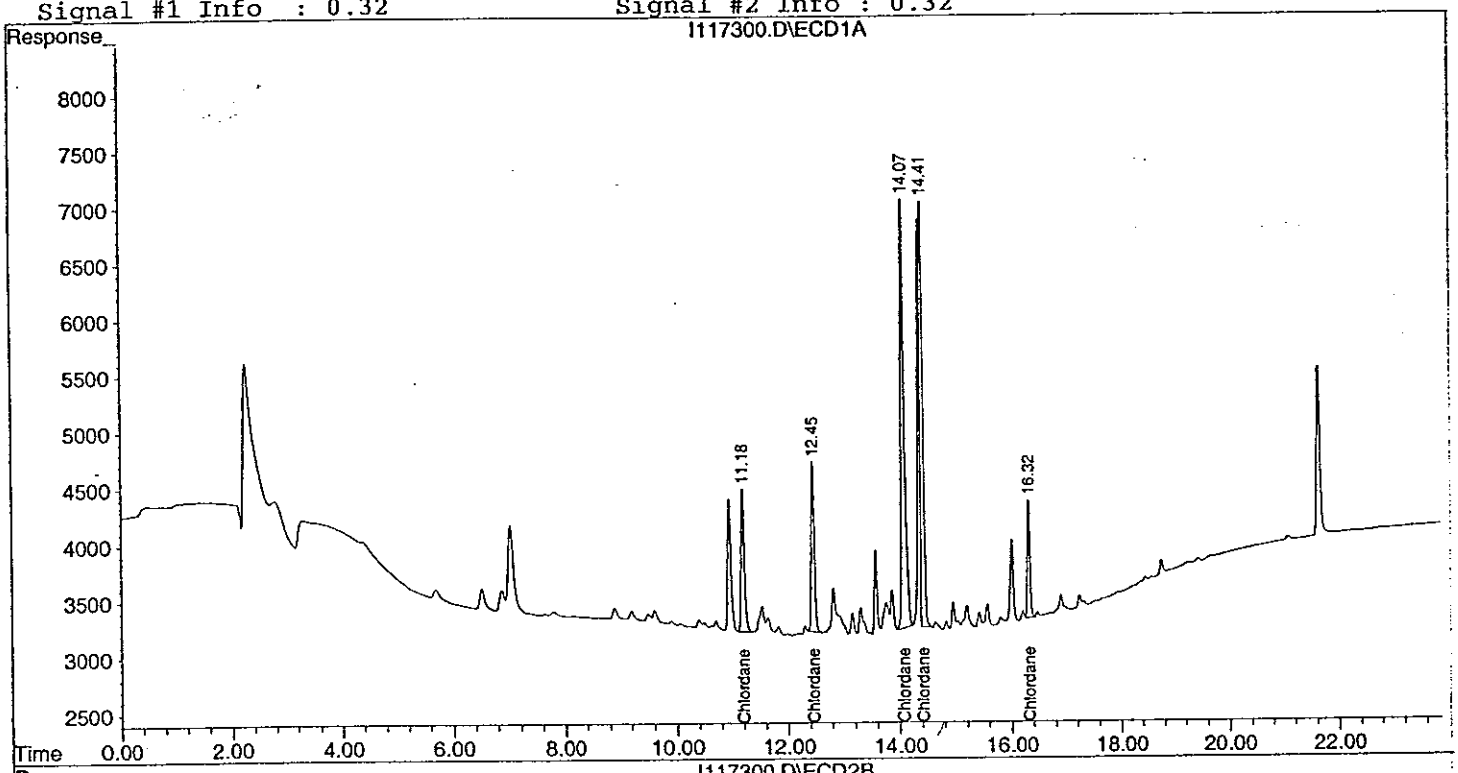
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
age Toxaphene					0.000	0.000
L9 Chlordane	11.18	10.87	51475	374479	100.188	113.610
L9 Chlordane {2}	12.45	12.26	58082	314673	102.223	110.795
L9 Chlordane {3}	14.07	13.90	151662	870109	93.360	116.078
L9 Chlordane {4}	14.41	14.28	133440	771332	96.984m	115.256
L9 Chlordane {5}	16.32	16.45	33921	250043	93.706	113.416
Sum Chlordane			428580	2580636	486.461	569.155
age Chlordane					97.292	113.831

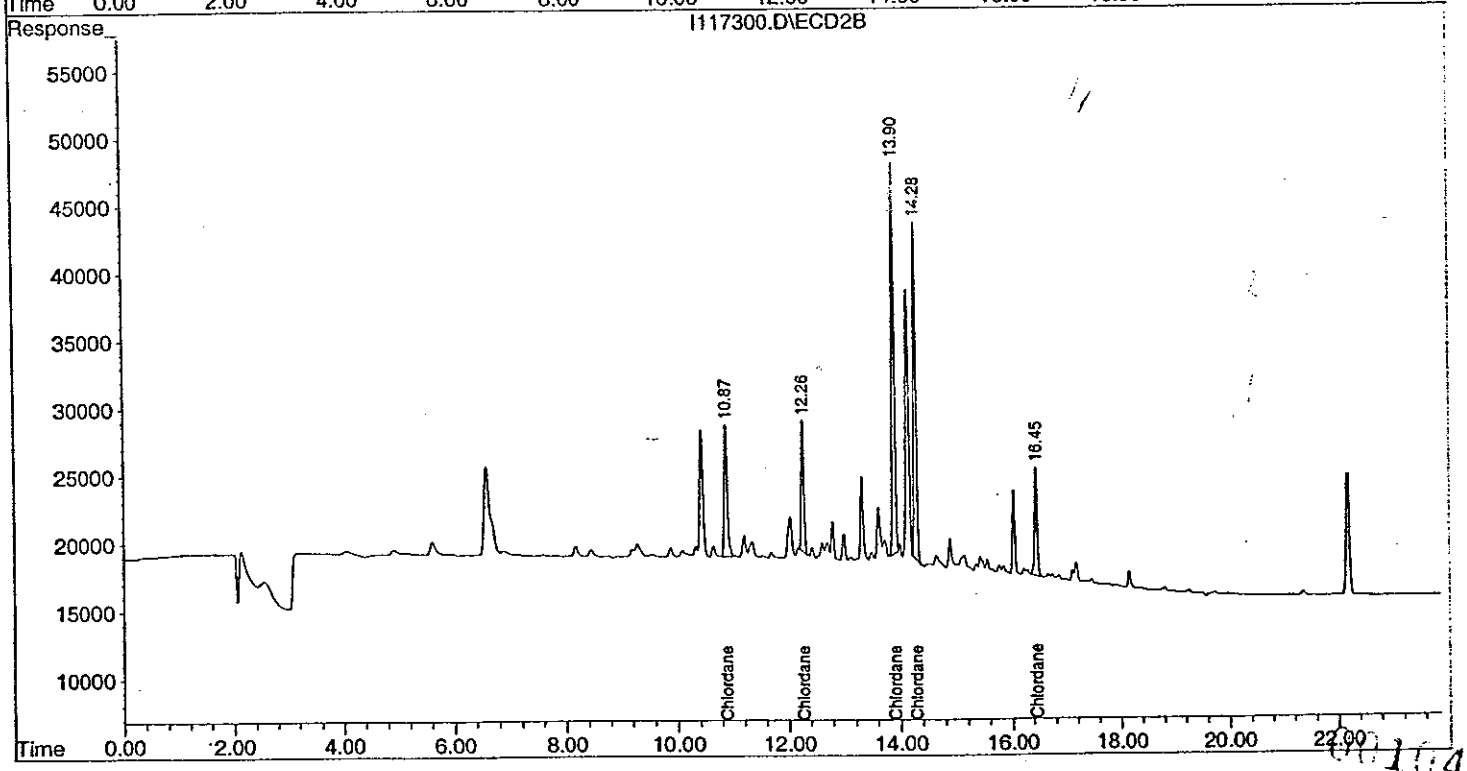
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117300.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\I\MAR1902\I117300.D\ECD2B.CH
Acq On : 19 Mar 2002 22:55 Operator: AK
Sample : CHLORDANE-1 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:11 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117301.D\ECD1A.CH Vial: 10
Signal #2 : H:\GCDATA\I\MAR1902\I117301.D\ECD2B.CH
Acq On : 19 Mar 2002 23:23 Operator: AK
Sample : PEST-6 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 07:38:38 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

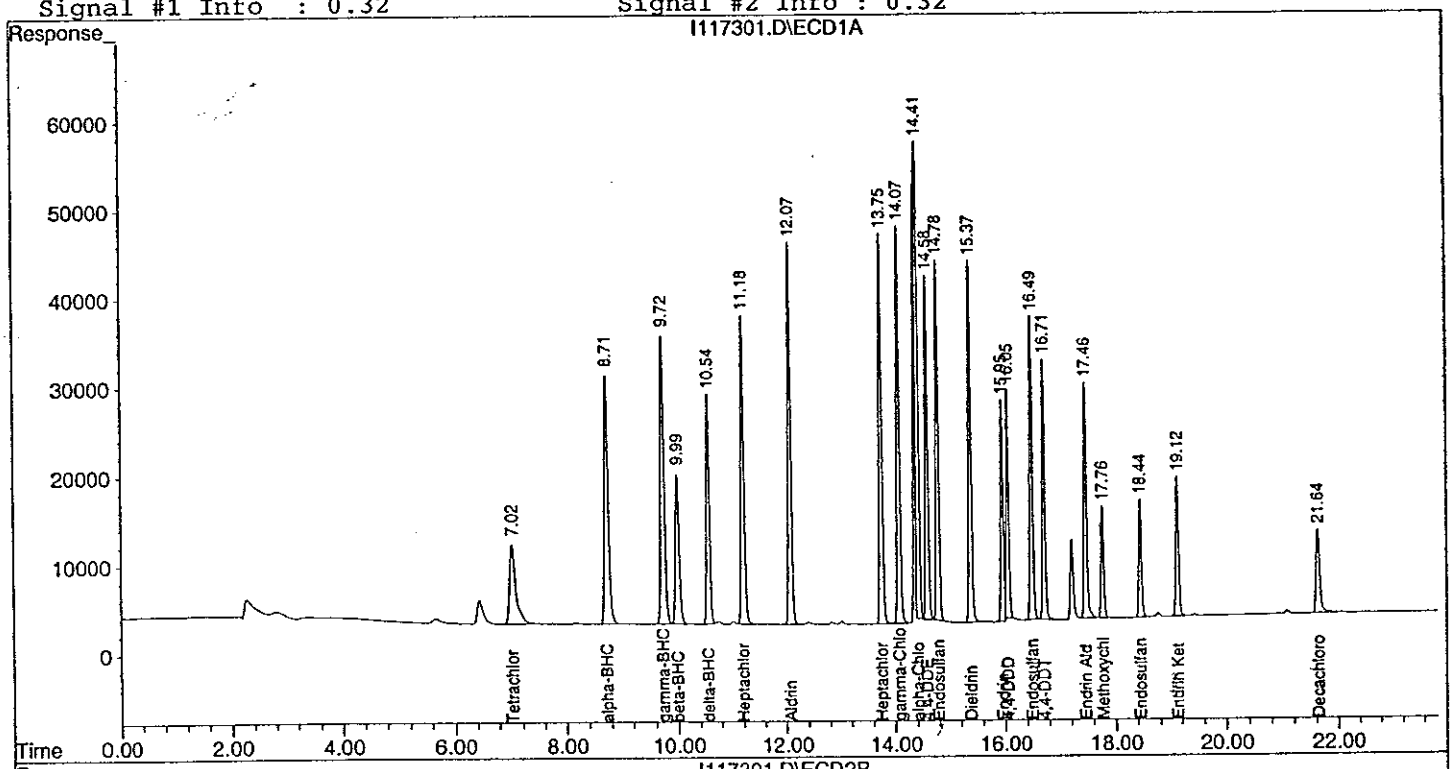
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	662134	3863041	49.465	44.185
iked Amount	20.000 Range	30 - 150	Recovery	=		247.33%#	220.93%#
S	Decachlorobiphen	21.64	22.17	426624	1985000	46.601	40.516
iked Amount	20.000 Range	30 - 150	Recovery	=		233.01%#	202.58%#
	Target Compounds						
A	alpha-BHC	8.71	8.35	1351368	8780411	120.216	96.336
MA	gamma-BHC (Linda	9.72	9.51	1415756	8192701	117.928	93.587
MA	Heptachlor	11.19	10.87	1353673	6549308	104.493	87.563m
MB	Aldrin	12.07	11.83	1510493	7299682	112.614	89.077m
B	beta-BHC	9.99	9.76	780607	4184599	103.078	86.105
B	delta-BHC	10.54	10.68	976768	6384120	125.475m	100.061m
B	Heptachlor Epoxi	13.75	13.41	1481104	6709046	104.471	85.012m
A	Endosulfan I	14.78	14.42	1330486	6080790	103.759	86.530m
A	gamma-Chlordane	14.07	13.90	1501558	6785375	102.627	85.374
A	alpha-Chlordane	14.41	14.28f	1811640	6393354	109.285m	86.113m
B	4,4-DDE	14.59	14.70	1193396	6488367	105.857	86.894
MA	Dieldrin	15.37	15.11	1299455	6030048	107.881m	85.552
MA	Endrin	15.95	15.84	800267	4056213	103.967m	87.524m
B	Endosulfan II	16.49	16.34	1123156	5242841	104.723	86.947
A	4,4-DDD	16.05	16.08	770800	4423641	106.550m	87.907
MA	4,4-DDT	16.71	16.80	872997	4531946	108.380	90.708
B	Endrin Aldehyde	17.46	17.32	916873	1851256	100.878	84.422m
B	Endosulfan Sulfa	18.44	17.72	437588	2395474	112.260m	99.359
A	Methoxychlor	17.76	18.29	378153	1949322	91.261	81.826
B	Endrin Ketone	19.12	18.94	556206	2704677	111.965	93.740
	Sum Toxaphene			0	0	N.D.	N.D.
	age Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	age Chlordane					0.000	0.000

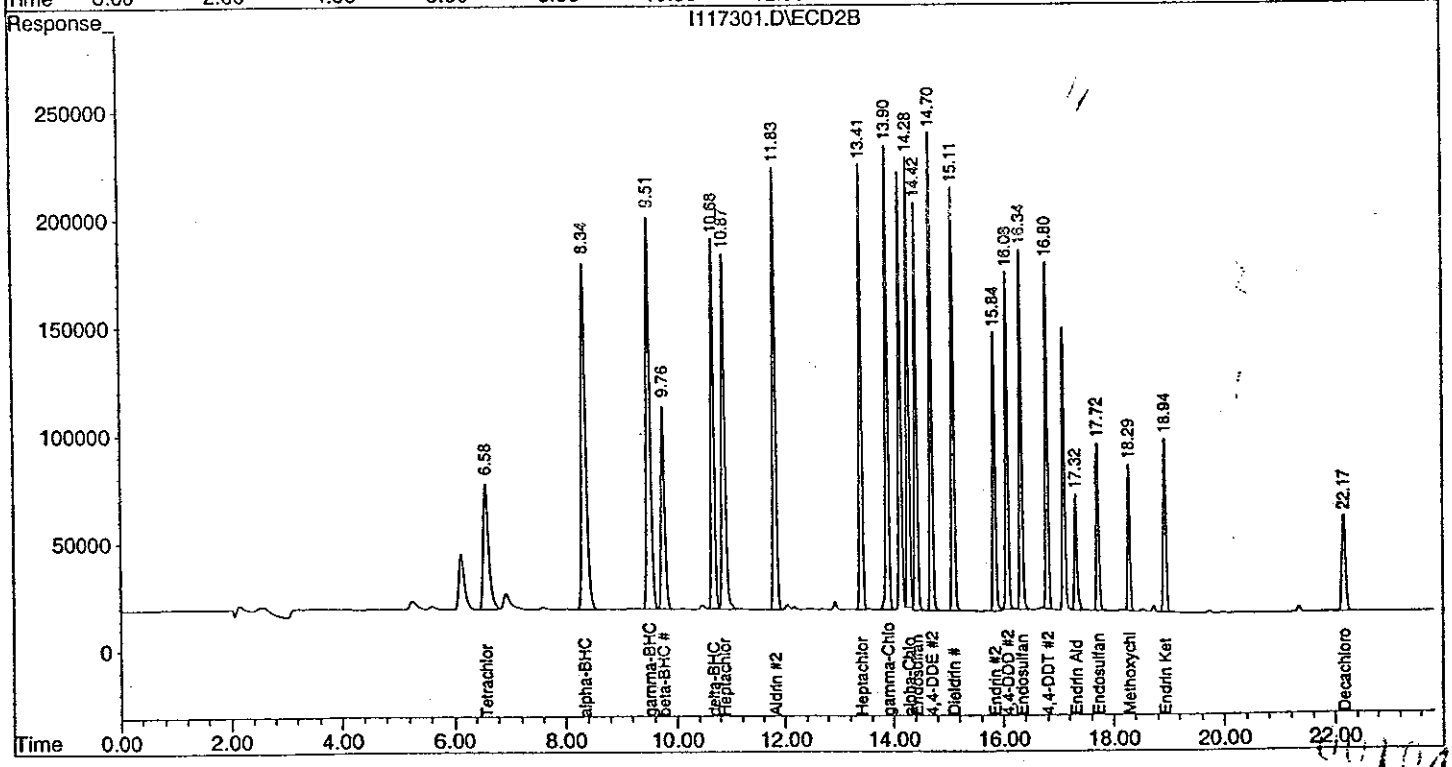
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117301.D\ECD1A.CH Vial: 10
Signal #2 : H:\GCDATA\I\MAR1902\I117301.D\ECD2B.CH
Acq On : 19 Mar 2002 23:23 Operator: AK
Sample : PEST-6 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 07:38:38 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (Q- Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117302.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\I\MAR1902\I117302.D\ECD2B.CH
Acq On : 19 Mar 2002 23:51 Operator: AK
Sample : PEST-5 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 07:38:38 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
; Tetrachloro-m-xy	7.02	6.58	513312	3075265	38.347	35.174
.ked Amount 20.000 Range 30 - 150 Recovery =					191.74%#	175.87%#
; Decachlorobiphen	21.64	22.17	335173	1617920	36.611	33.024
.ked Amount 20.000 Range 30 - 150 Recovery =					183.06%#	165.12%#
Target Compounds						
\ alpha-BHC	8.71	8.35	968029	6864716	86.115	75.317
MA gamma-BHC (Linda	9.72	9.51	1030977	6449370	85.877	73.673
MA Heptachlor	11.18	10.87	1015157	5207976	78.362	69.515m
MB Aldrin	12.07	11.83	1109052	5793649	82.685	70.690m
3 beta-BHC	9.99	9.76	594931	3351964	78.560	68.972m
3 delta-BHC	10.54	10.68	690699	4950006	88.597	77.539
3 Heptachlor Epoxi	13.75	13.41	1119474	5385291	78.963m	68.209m
\ Endosulfan I	14.78	14.43	1004609	4731763	78.345	67.030
\ gamma-Chlordane	14.07	13.90	1132927	5409860	77.432	68.067
\ alpha-Chlordane	14.41	14.28f	1285593	5079285	77.291m	68.225m
3 4,4-DDE	14.59	14.70	904843	5183724	80.262	69.422
MA Dieldrin	15.38	15.11	970225	4822863	80.436	68.425m
MA Endrin	15.95	15.85	607334	3192451	79.024m	68.715
3 Endosulfan II	16.49	16.34	858913	4168176	80.085m	69.125
\ 4,4-DDD	16.05	16.08	582415	3530431	80.341m	70.157
MA 4,4-DDT	16.71	16.80	654459	3581815	81.249	71.691
3 Endrin Aldehyde	17.46	17.32	692204	1491693	76.159	67.841m
3 Endosulfan Sulfa	18.44	17.72	328757	1861715	84.311m	77.220m
A Methoxychlor	17.76	18.29	299808	1632488	72.354	68.526
B Endrin Ketone	19.12	18.94	407849	2114246	82.101	73.277m
Sum Toxaphene			0	0	N.D.	N.D.
age Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
age Chlordane					0.000	0.000

001046

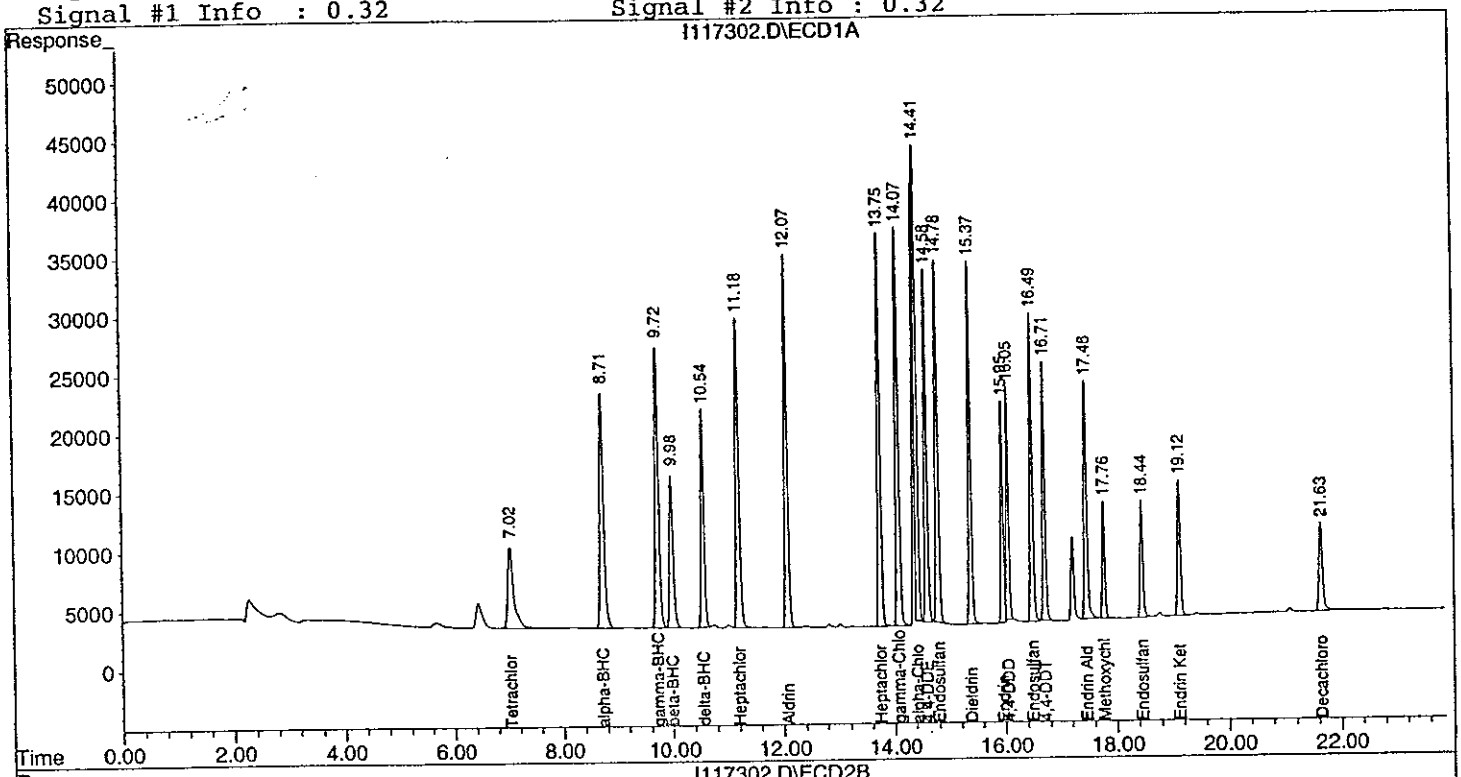
(#) = Peak not found. (m)=manual int.

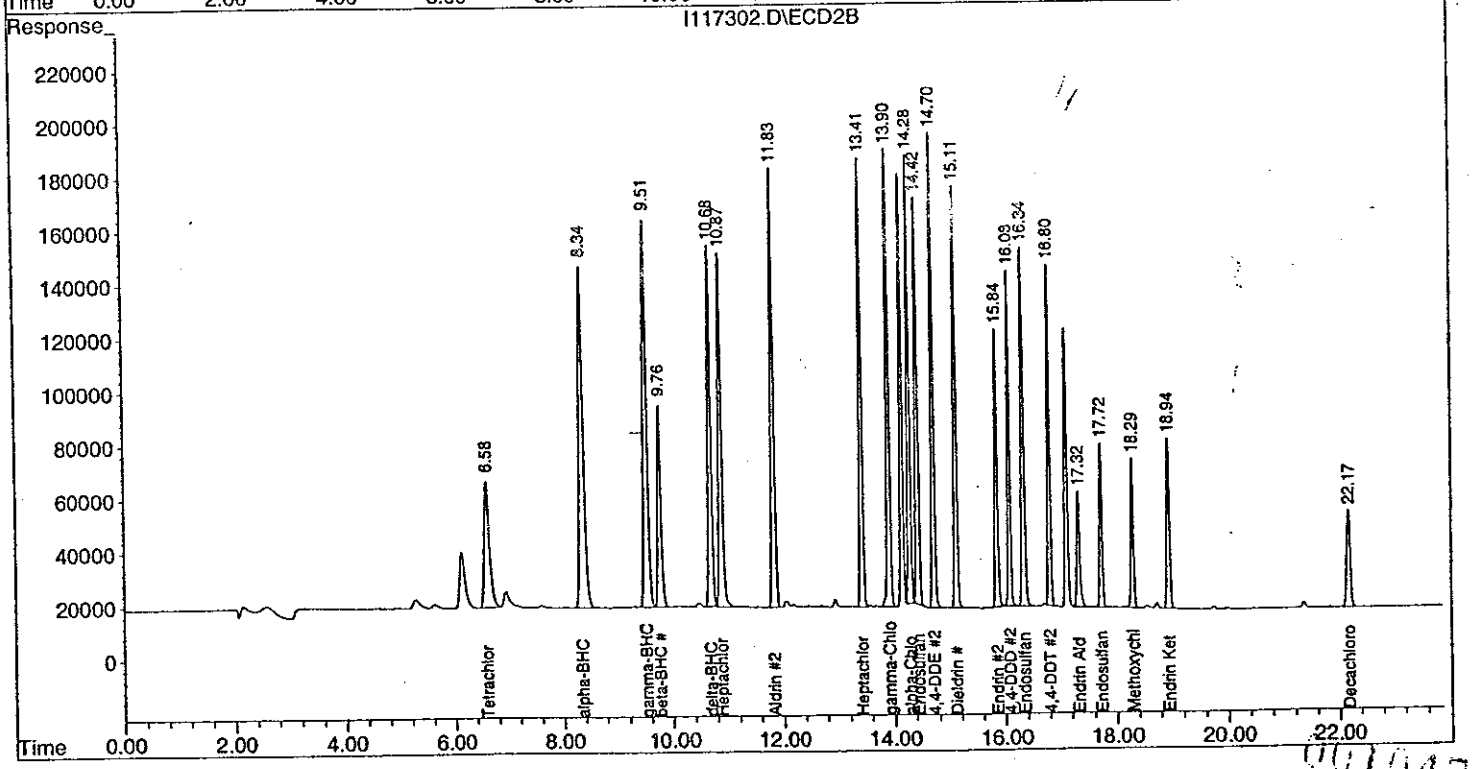
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117302.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\I\MAR1902\I117302.D\ECD2B.CH
Acq On : 19 Mar 2002 23:51 Operator: AK
Sample : PEST-5 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 07:38:38 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117303.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\I\MAR1902\I117303.D\ECD2B.CH
Acq On : 20 Mar 2002 00:19 Operator: AK
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:13 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

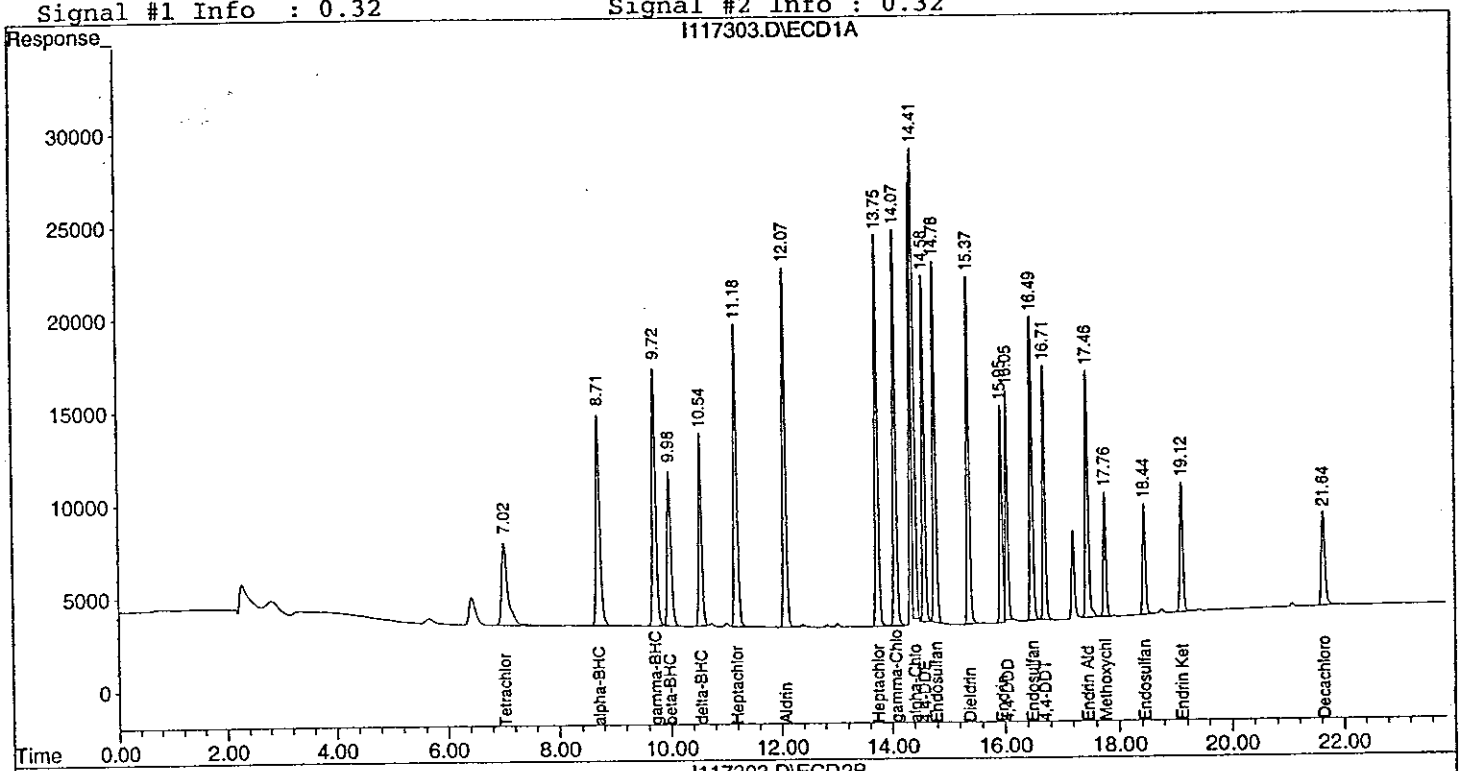
Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

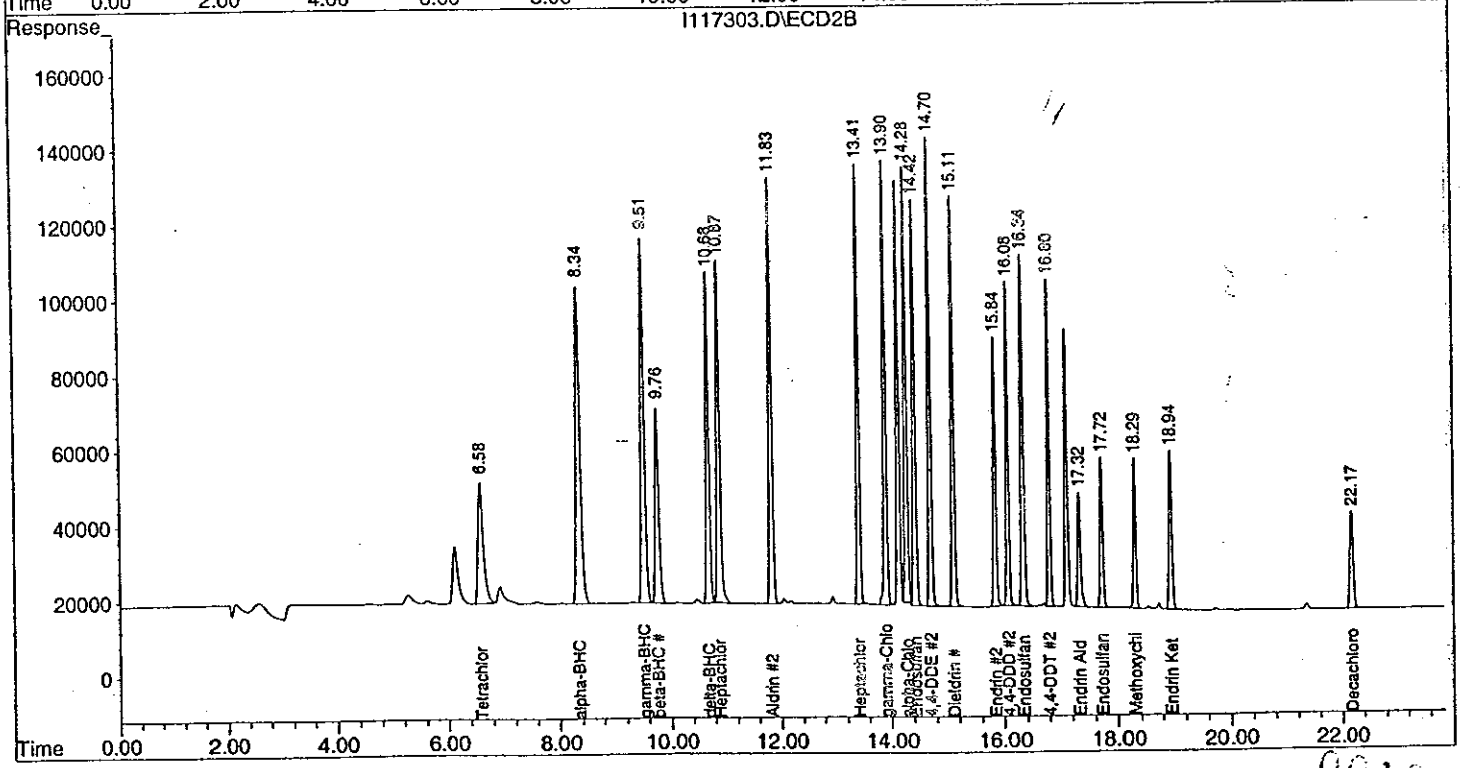
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	339492	2108366	25.362	24.115
piked Amount	20.000 Range	30 - 150	Recovery	=		126.81%	120.58%
S	Decachlorobiphen	21.64	22.17	221551	1141217	24.200	23.294
piked Amount	20.000 Range	30 - 150	Recovery	=		121.00%	116.47%
	Target Compounds						
A	alpha-BHC	8.71	8.35	558661	4548462	49.698	49.904
MA	gamma-BHC (Linda	9.72	9.51	604075	4328106	50.318	49.441
MA	Heptachlor	11.18	10.87	636993	3569054	49.171	47.563
MB	Aldrin	12.07	11.83	671570	3968728	50.069	48.421
B	beta-BHC	9.99	9.76	381423	2306351	50.366	47.428
B	delta-BHC	10.55	10.68	389556	3217771	49.969	50.404
B	Heptachlor Epoxi	13.75	13.41	698252	3715941	49.229	46.990
A	Endosulfan I	14.78	14.42	626930	3399232	48.892	48.153m
A	gamma-Chlordane	14.07	13.90	708851	3727897	48.448	46.905
A	alpha-Chlordane	14.41	14.28f	828731	3515237	50.551m	47.097m
B	4,4-DDE	14.59	14.70	561703	3562814	49.824	47.714
MA	Dieldrin	15.37	15.11	594304	3328536	49.271	47.343
MA	Endrin	15.95	15.84	376407	2179886	48.966m	46.920
B	Endosulfan II	16.49	16.34	528945	2880207	49.137	47.765
A	4,4-DDD	16.05	16.08	364940	2414533	50.386m	47.982
MA	4,4-DDT	16.71	16.80	405847	2445769	50.385	48.953m
B	Endrin Aldehyde	17.46	17.33	453521	1030857	49.898	46.729
B	Endosulfan Sulfa	18.44	17.72	198541	1220001	50.861m	50.684
A	Methoxychlor	17.76	18.29	201793	1151208	48.699	48.324
B	Endrin Ketone	19.12	18.94	246573	1407048	49.635	48.840
Sum	Toxaphene			0	0	N.D.	N.D.
rage	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
rage	Chlordane					0.000	0.000

Signal #1 : H:\GCDATA\I\MAR1902\I117303.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\I\MAR1902\I117303.D\ECD2B.CH
Acq On : 20 Mar 2002 00:19 Operator: AK
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:13 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117304.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\I\MAR1902\I117304.D\ECD2B.CH
Acq On : 20 Mar 2002 00:46 Operator: AK
Sample : PEST-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

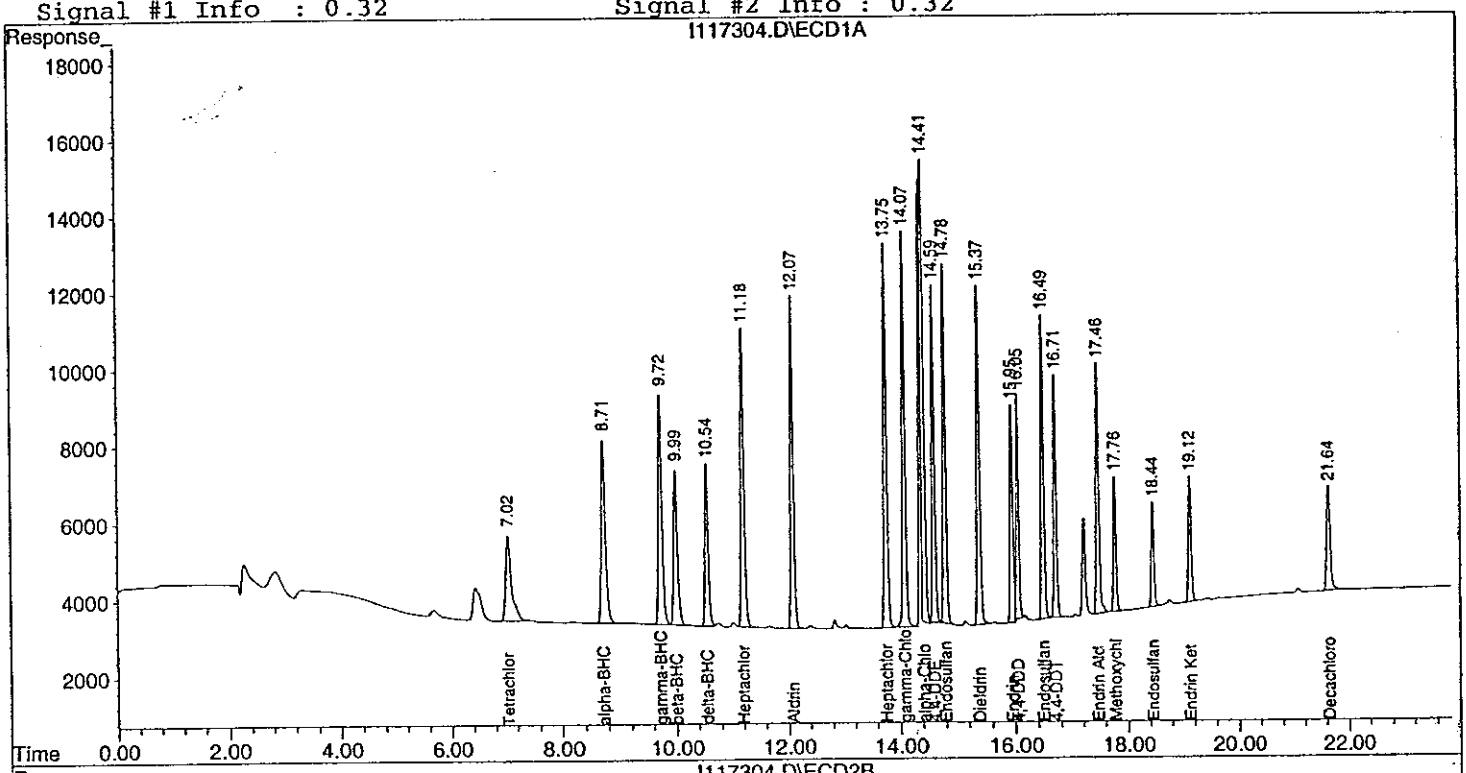
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	166005	1126022	12.222	12.890
piked Amount	20.000 Range	30 - 150	Recovery	=		61.11%	64.45%
S	Decachlorobiphen	21.64	22.17	117825	654544	12.830	13.362
piked Amount	20.000 Range	30 - 150	Recovery	=		64.15%	66.81%
	Target Compounds						
A	alpha-BHC	8.71	8.35	243799	2295462	21.698	25.178
MA	gamma-BHC (Linda	9.72	9.51	263645	2228957	22.000	25.472
MA	Heptachlor	11.19	10.87	308622	1932283	23.822	25.703
MB	Aldrin	12.07	11.83	305255	2111685	22.722	25.755
B	beta-BHC	9.99	9.76	185114	1248877	24.273	25.891
B	delta-BHC	10.54	10.68	167161	1580908	21.549m	24.815
B	Heptachlor Epoxi	13.75	13.41	335132	2042612	23.624	25.845
A	Endosulfan I	14.78	14.43	302748	1827044	23.757	25.836
A	gamma-Chlordane	14.07	13.90	348673	2041836	23.941	25.735
A	alpha-Chlordane	14.41	14.28f	394473	1935665	23.997m	25.898m
B	4,4-DDE	14.59	14.70	263950	1922873	23.434	25.813
MA	Dieldrin	15.38	15.11	282139	1818686	23.404	25.950
MA	Endrin	15.95	15.84	185262	1203563	24.049m	25.884
B	Endosulfan II	16.49	16.34	255099	1584412	23.701	26.257
A	4,4-DDD	16.05	16.08	173064	1303514	23.871m	25.881
MA	4,4-DDT	16.71	16.80	189229	1279238	23.474	25.618
B	Endrin Aldehyde	17.46	17.33	222578	574346	24.425	25.953
B	Endosulfan Sulfa	18.44	17.72	91310	609733	23.491m	25.408
A	Methoxychlor	17.76	18.29	106212	630773	25.777	26.292m
B	Endrin Ketone	19.12	18.94	114630	734482	23.085	25.522
	Sum Toxaphene			0	0	N.D.	N.D.
	rage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	rage Chlordane					0.000	0.000

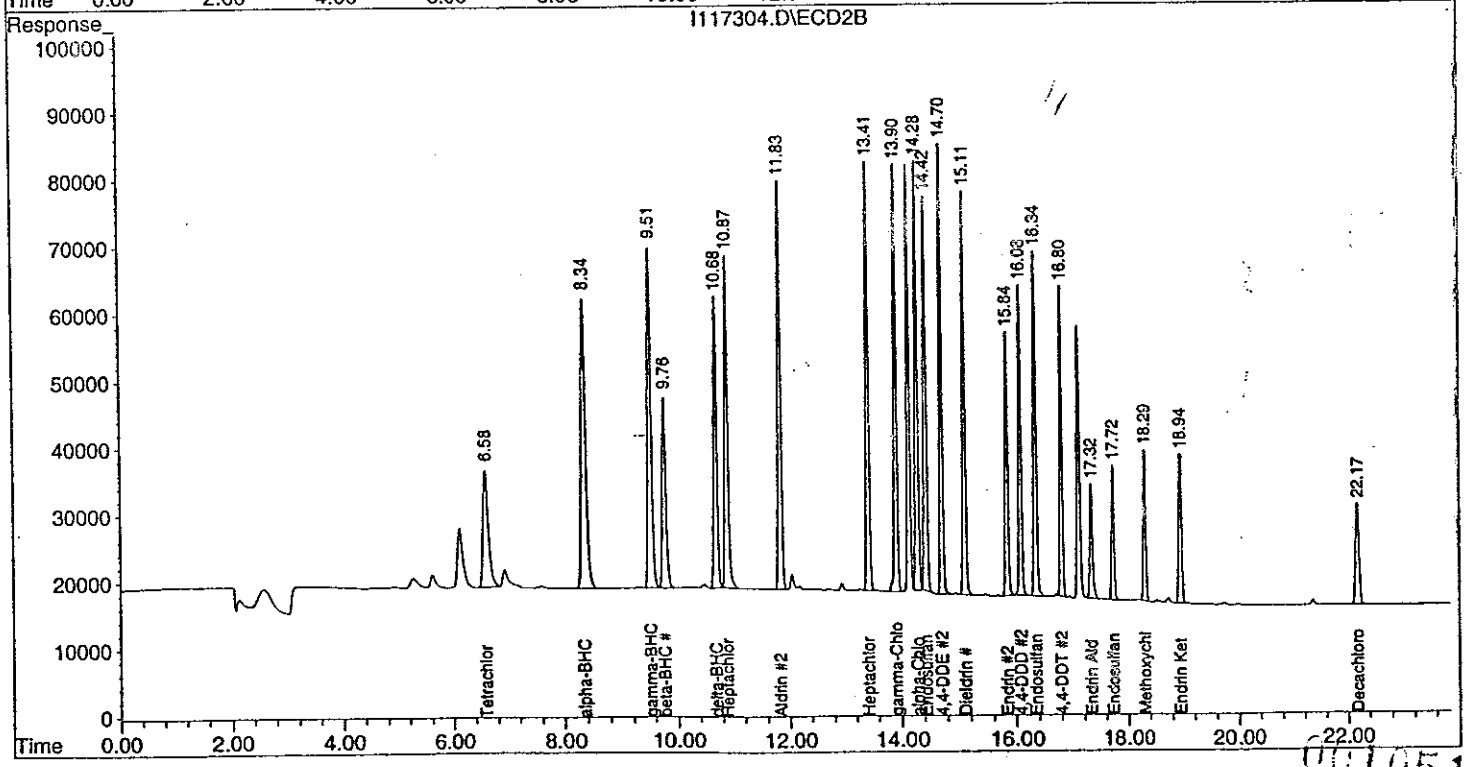
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117304.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\I\MAR1902\I117304.D\ECD2B.CH
Acq On : 20 Mar 2002 00:46 Operator: AK
Sample : PEST-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : H:\GCDATA\I\MAR1902\I117305.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\I\MAR1902\I117305.D\ECD2B.CH
Acq On : 20 Mar 2002 1:14 Operator: AK
Sample : PEST-2 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

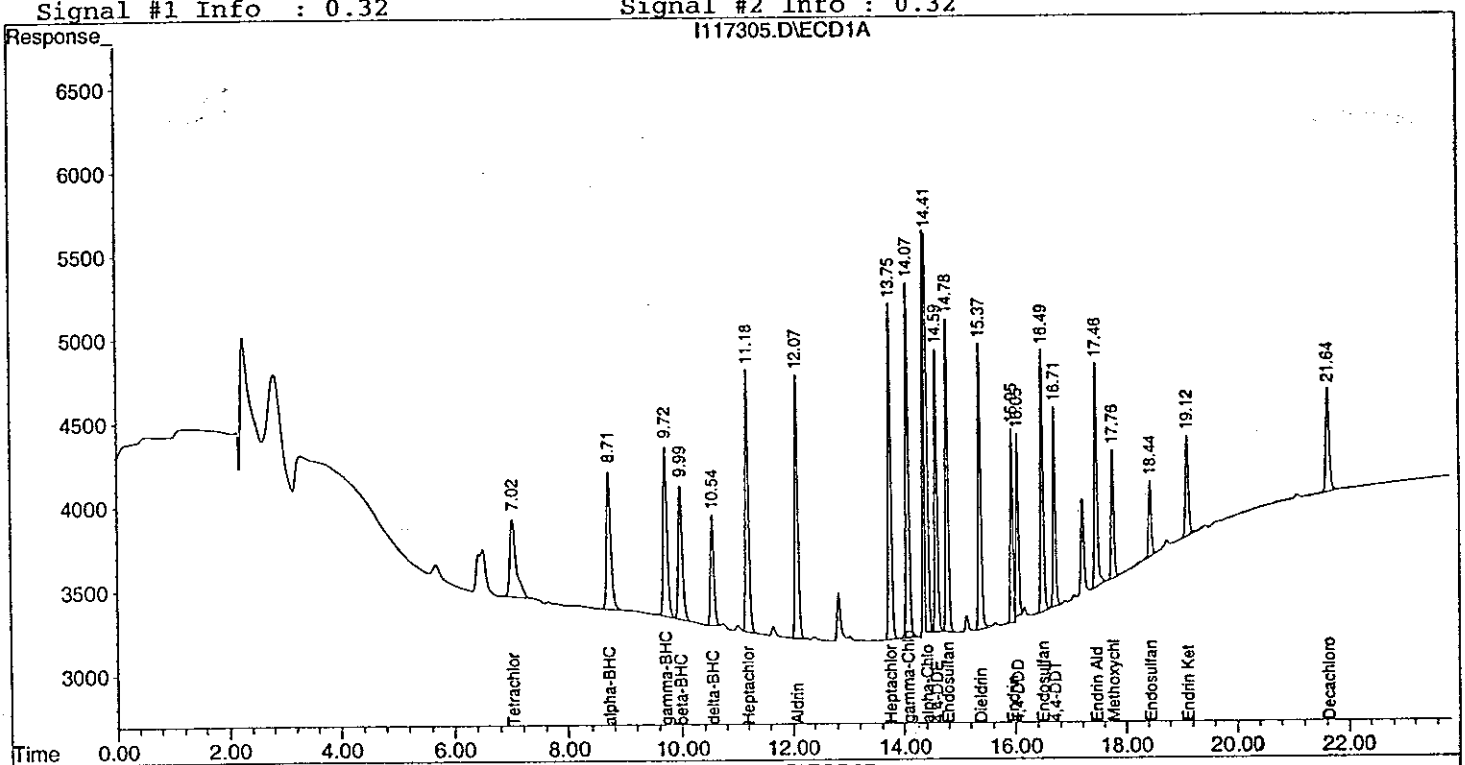
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	35298	257729	2.599	2.950
piked Amount	20.000 Range 30 - 150 Recovery =					13.00%#	14.75%#
S	Decachlorobiphen	21.64	22.17	26036	160236	2.835m	3.271m
piked Amount	20.000 Range 30 - 150 Recovery =					14.18%#	16.36%#
	Target Compounds						
A	alpha-BHC	8.71	8.35	44169	468671	3.931	5.141 #
MA	gamma-BHC (Linda	9.72	9.51	46941	469467	3.917	5.365 #
MA	Heptachlor	11.19	10.87	63095	461402	4.870	6.138 #
MB	Aldrin	12.07	11.83	58197	479373	4.332m	5.847 #
B	beta-BHC	9.99	9.76	37102	292796	4.865m	6.070
B	delta-BHC	10.54	10.68	27276	305543	3.506m	4.796 #
B	Heptachlor Epoxi	13.75	13.41	69109	501231	4.872	6.342 #
A	Endosulfan I	14.78	14.43	61552	443726	4.830	6.275 #
A	gamma-Chlordane	14.07	13.90	72869	495475	5.003	6.245m
A	alpha-Chlordane	14.41	14.28f	78770	471176	4.765m	6.304m#
B	4,4-DDE	14.59	14.70	52635	451429	4.673	6.060 #
MA	Dieldrin	15.37	15.11	56745	430257	4.707m	6.139m#
MA	Endrin	15.95	15.84	37992	288095	4.914m	6.196 #
B	Endosulfan II	16.49	16.34	52300	363610	4.859m	6.026
A	4,4-DDD	16.05	16.08	33433	300442	4.609m	5.965 #
MA	4,4-DDT	16.71	16.80	36152	282581	4.485m	5.659 #
B	Endrin Aldehyde	17.46	17.33	45958	143286	5.043	6.475 #
B	Endosulfan Sulfa	18.44	17.72	15295	112865	3.927m	4.703m
A	Methoxychlor	17.76	18.29	22923	153685	5.563m	6.400m
B	Endrin Ketone	19.12	18.94	21737	155867	4.377m	5.416m
	Sum Toxaphene			0	0	N.D.	N.D.
	rage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	rage Chlordane					0.000	0.000

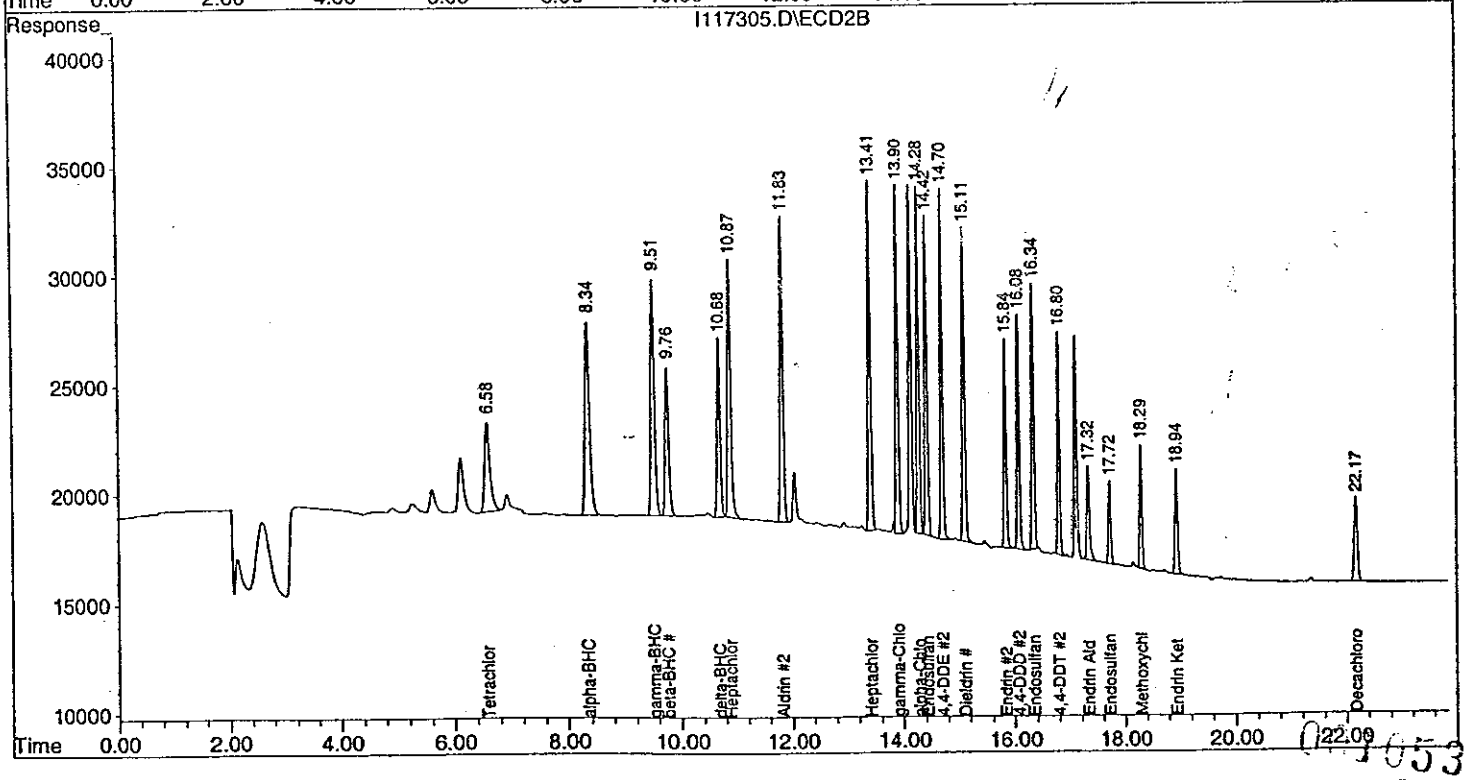
Quantification Report

Signal #1 : H:\GCDATA\I\MAR1902\I117305.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\I\MAR1902\I117305.D\ECD2B.CH
Acq On : 20 Mar 2002 1:14 Operator: AK
Sample : PEST-2 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117306.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\I\MAR1902\I117306.D\ECD2B.CH
Acq On : 20 Mar 2002 1:42 Operator: AK
Sample : INDAM Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:45 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

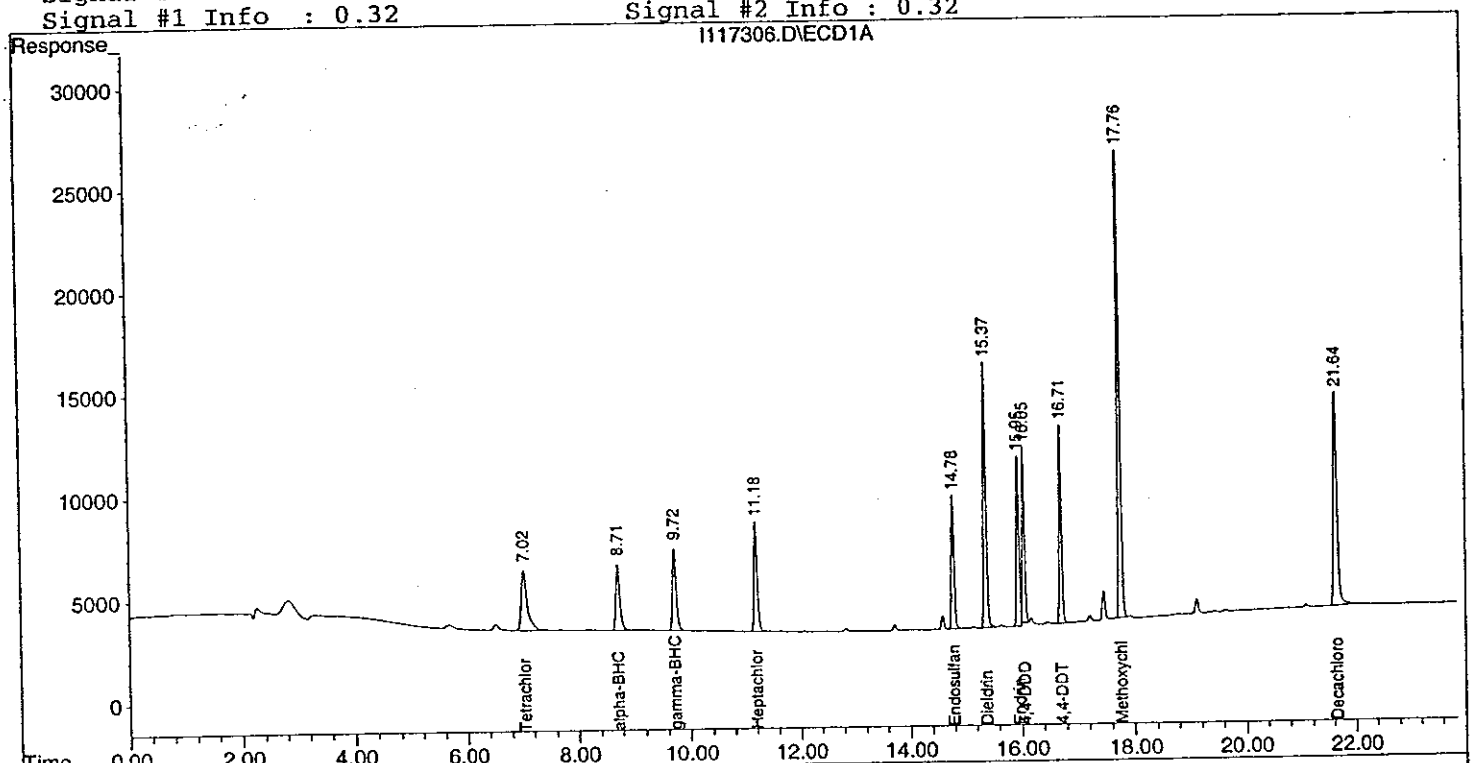
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	213650	1428570	15.730	16.354
	iked Amount 20.000 Range 30 - 150 Recovery =					78.65%	81.77%
S	Decachlorobiphen	21.64	22.17	467767	2132292	50.654	43.525
	iked Amount 20.000 Range 30 - 150 Recovery =					253.27%#	217.63%#
	Target Compounds						
A	alpha-BHC	8.71	8.35	166504	1628909	14.819	17.867
MA	gamma-BHC (Linda	9.72	9.51	180020	1606212	15.022	18.355
MA	Heptachlor	11.19	10.87	212190	1352879	16.379	17.996
A	Endosulfan I	14.78	14.43	214605	1366517	16.856	19.317
MA	Dieldrin	15.38	15.11	409963	2496897	33.908	35.673
MA	Endrin	15.95	15.85	266700	1672778	34.513m	35.976
A	4,4-DDD	16.05	16.08	250171	1797066	34.382m	35.680
MA	4,4-DDT	16.71	16.80	284169	1824269	35.193	36.532m
A	Methoxychlor	17.76	18.29	697102	3373212	168.808	140.256
	Sum Toxaphene			0	0	N.D.	N.D.
	age Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	age Chlordane					0.000	0.000

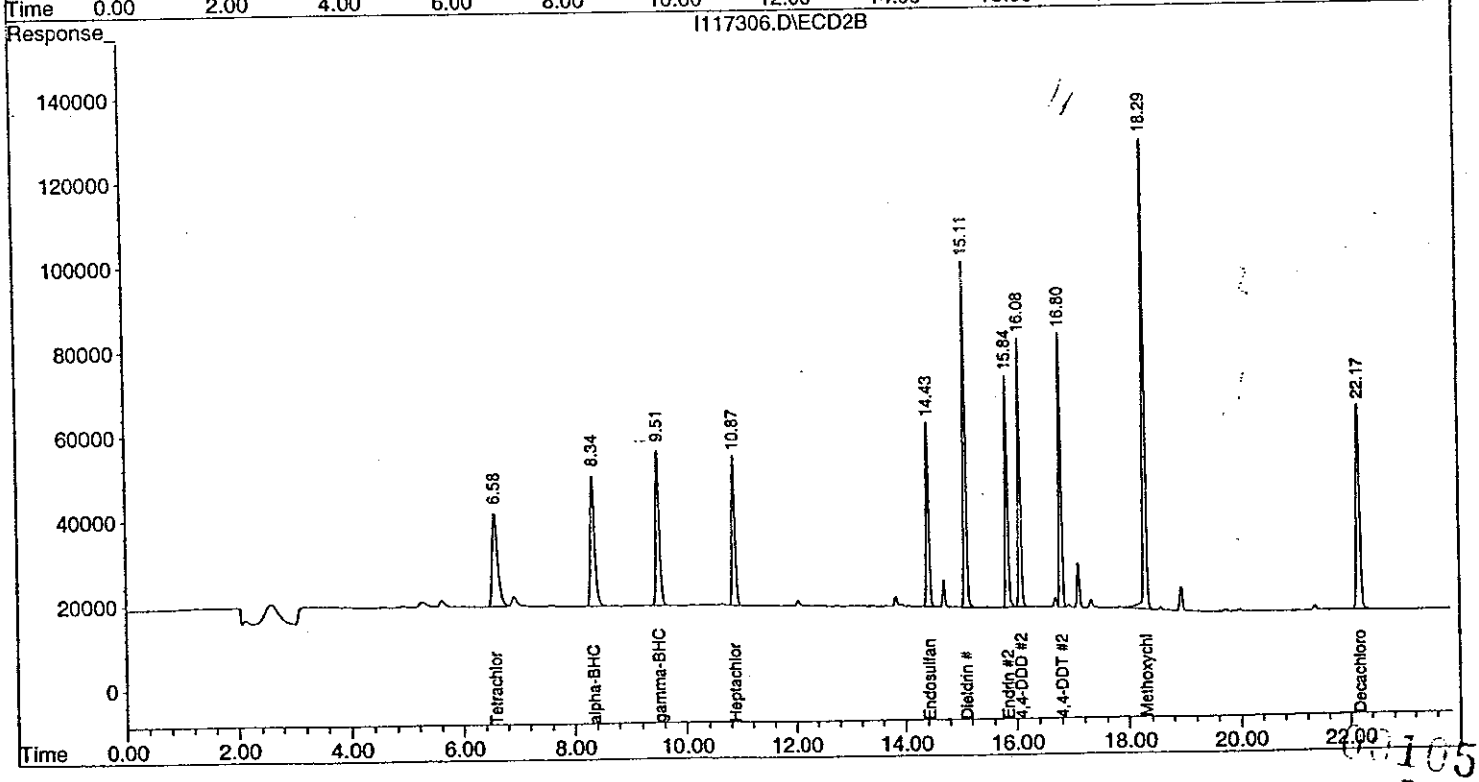
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117306.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\I\MAR1902\I117306.D\ECD2B.CH
Acq On : 20 Mar 2002 1:42 Operator: AK
Sample : INDAM Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:45 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117307.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\I\MAR1902\I117307.D\ECD2B.CH
Acq On : 20 Mar 2002 2:10 Operator: AK
Sample : INDBM Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:48 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	198158	1464964	14.590	16.770
iked Amount	20.000 Range 30 - 150 Recovery =					72.95%	83.85%
S	Decachlorobiphen	21.64	22.17	470160	2159488	50.913	44.080
iked Amount	20.000 Range 30 - 150 Recovery =					254.57%#	220.40%#
	Target Compounds						
MB	Aldrin	12.07	11.83	215686	1568582	16.054m	19.131m
B	beta-BHC	9.99	9.76	131821	923785	17.258	19.151
B	delta-BHC	10.54	10.68	109188	1088090	14.031m	17.079
B	Heptachlor Epoxi	13.75	13.42	236138	1530947	16.646	19.371
A	gamma-Chlordane	14.07	13.90	257972	1532436	17.713	19.383
B	4,4-DDE	14.59	14.70	383310	2571408	34.031	34.520
B	Endosulfan II	16.49	16.34	375637	2163707	34.829m	35.858
B	Endrin Aldehyde	17.46	17.32	179557	750387	19.704m	33.908m#
B	Endosulfan Sulfa	18.44	17.72	132552	859420	34.090m	35.767
B	Endrin Ketone	19.12	18.94	141489	883999	28.453m	30.709
Sum	Toxaphene			0	0	N.D.	N.D.
age	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
age	Chlordane					0.000	0.000

001056

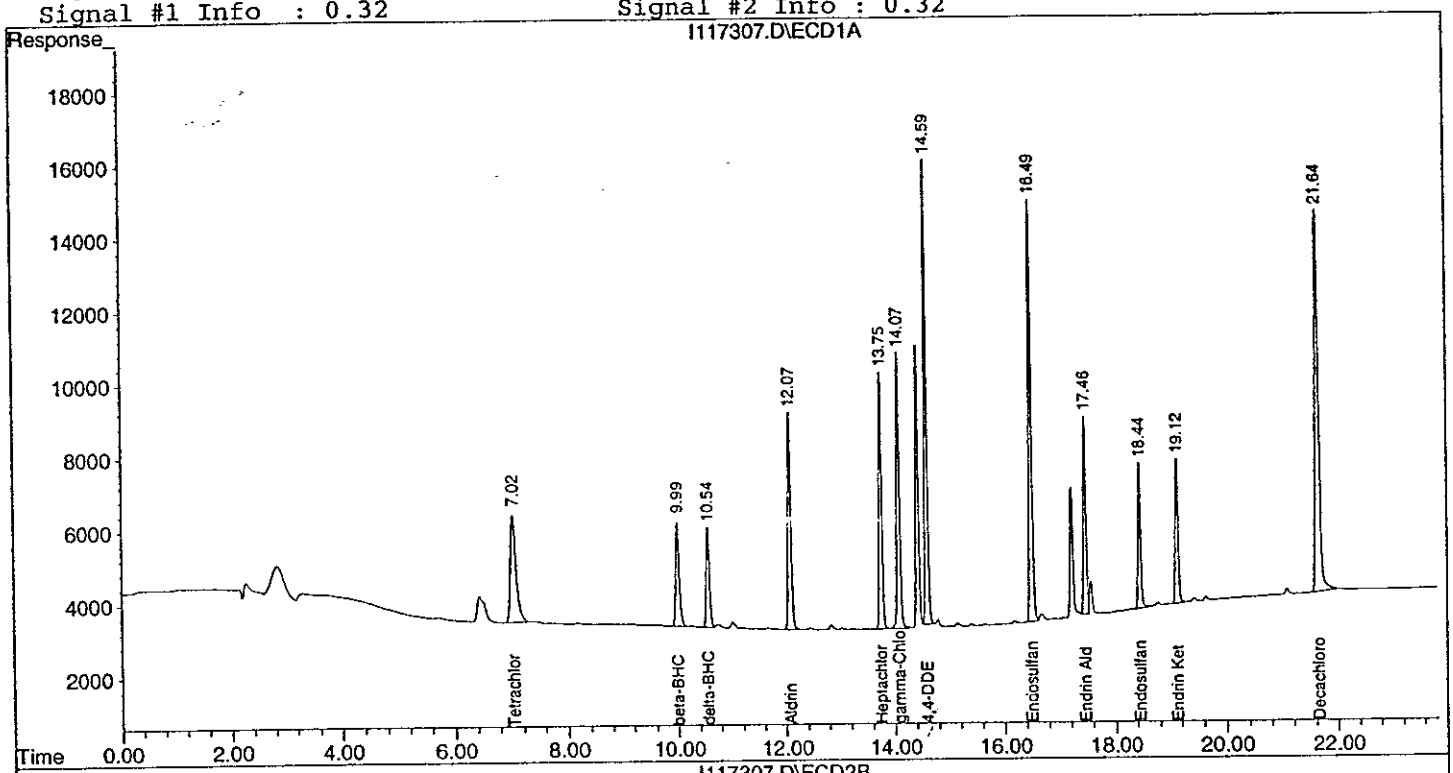
1/2 Window (#)=Amounts differ by > 25% (m)=manual int

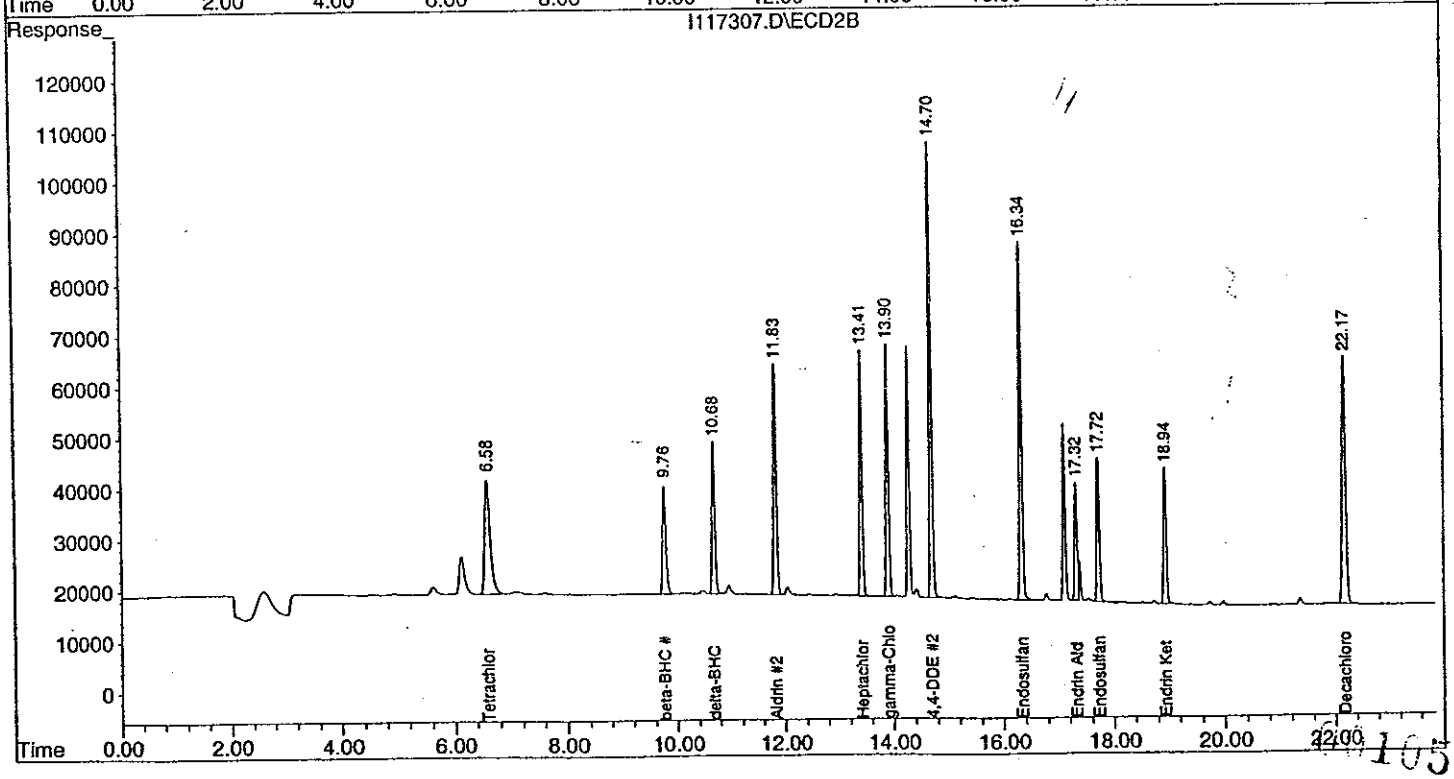
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117307.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\I\MAR1902\I117307.D\ECD2B.CH
Acq On : 20 Mar 2002 2:10 Operator: AK
Sample : INDBM Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:48 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





PESTICIDES INITIAL CALIBRATION VERIFICATION STANDARD

Lab Name: GPL Laboratories
Lab Code: GPL

EPA Sample No.: CVS GP Lab ID: INDAM/INDBM- I117306/I117307

FRONT COLUMN - DB-5

COMPOUND	STD AMOUNT (ug/L)	CVS CONCENTRATION (ug/L)	CVS % REC .		QC LIMITS REC .
alpha-BHC	0.20	0.15	74	*	85-115
gamma-BHC (Lindane)	0.20	0.15	75	*	85-115
Heptachlor	0.20	0.16	82	*	85-115
Aldrin	0.20	0.16	80	*	85-115
beta-BHC	0.20	0.17	86		85-115
delta-BHC	0.20	0.14	70	*	85-115
Heptachlor Epoxide	0.20	0.17	83	*	85-115
Endosulfan I	0.20	0.17	84	*	85-115
gamma-Chlordane	0.20	0.18	89		85-115
alpha-Chlordane	0.20	0.00	0	*	85-115
4,4'- DDE	0.40	0.34	85		85-115
Dieldrin	0.40	0.34	85		85-115
Endrin	0.40	0.35	86		85-115
Endosulfan II	0.40	0.35	87		85-115
4,4'- DDD	0.40	0.34	86		85-115
4,4'- DDT	0.40	0.35	88		85-115
Endrin Aldehyde	0.40	0.20	49	*	85-115
Endosulfan Sulfate	0.40	0.34	85		85-115
Methoxychlor	2.00	1.69	84	*	85-115
Endrin Ketone	0.40	0.28	71	*	85-115

REAR COLUMN - RTx-1701

COMPOUND	STD AMOUNT (ug/L)	CVS CONCENTRATION (ug/L)	CVS % REC .		QC LIMITS REC .
alpha-BHC	0.20	0.18	89		85-115
gamma-BHC (Lindane)	0.20	0.18	92		85-115
Heptachlor	0.20	0.18	90		85-115
Aldrin	0.20	0.19	96		85-115
beta-BHC	0.20	0.19	96		85-115
delta-BHC	0.20	0.171	85		85-115
Heptachlor Epoxide	0.20	0.19	97		85-115
Endosulfan I	0.20	0.19	97		85-115
gamma-Chlordane	0.20	0.19	97		85-115
alpha-Chlordane	0.20	0.00	0	*	85-115
4,4'- DDE	0.40	0.35	86		85-115
Dieldrin	0.40	0.36	89		85-115
Endrin	0.40	0.36	90		85-115
Endosulfan II	0.40	0.36	90		85-115
4,4'- DDD	0.40	0.36	89		85-115
4,4'- DDT	0.40	0.37	91		85-115
Endrin Aldehyde	0.40	0.34	85		85-115
Endosulfan Sulfate	0.40	0.36	89		85-115
Methoxychlor	2.00	1.40	70	*	85-115
Endrin Ketone	0.40	0.31	77	*	85-115

% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**17.95**	**10.58**
DDT	**12.27**	**15.34**

	RAW RESPONSE	
ENDRIN KETONE	28690.00	200565.00
ENDRIN ALDEHYDE	52084.00	47167.00
ENDRIN	369237.00	2092690.00

DDE	36989.00	305769.00
DDD	6889.00	60484.00
DDT	313590.00	2021598.00

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117294.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\I\MAR1902\I117294.D\ECD2B.CH
Acq On : 19 Mar 2002 20:07 Operator: AK
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 8:41 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

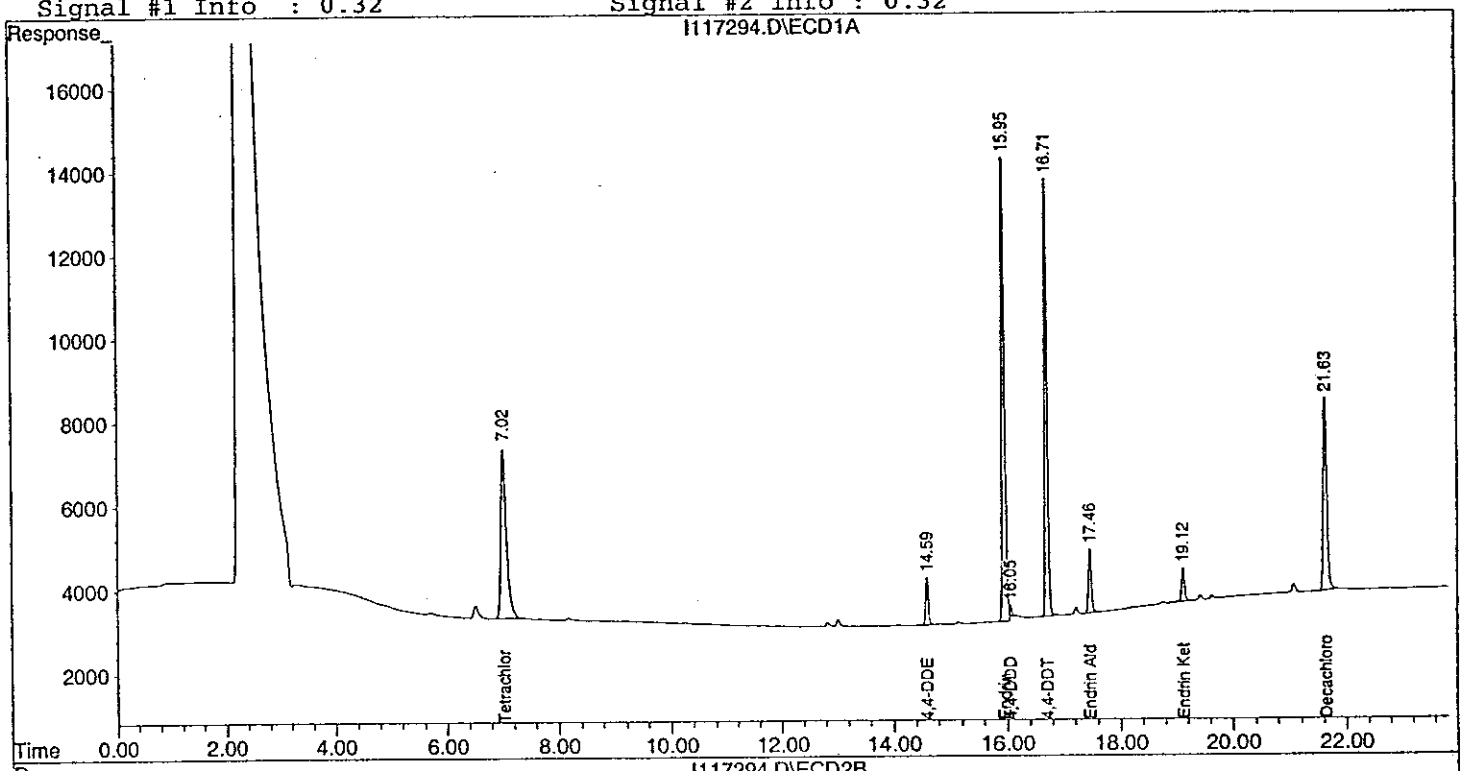
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	276053	1972843	20.325	22.584
iked Amount	20.000 Range 30 - 150 Recovery =					101.63%	112.92%
S	Decachlorobiphen	21.63	22.17	200485	1036371	21.710	21.155
iked Amount	20.000 Range 30 - 150 Recovery =					108.55%	105.78%
	Target Compounds						
B	4,4-DDE	14.59	14.70	36989	305769	3.284	4.105
MA	Endrin	15.95	15.84	369237	2092690	47.782m	45.007
A	4,4-DDD	16.05	16.08	6889	60484	0.947m	1.201m#
MA	4,4-DDT	16.71	16.80	313590	2021598	38.837m	40.484
B	Endrin Aldehyde	17.46	17.32	52084	47167	5.716	2.131m#
B	Endrin Ketone	19.12	18.94	28690	200565	5.769	6.967
Sum	Toxaphene			0	0	N.D.	N.D.
age	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
age	Chlordane					0.000	0.000

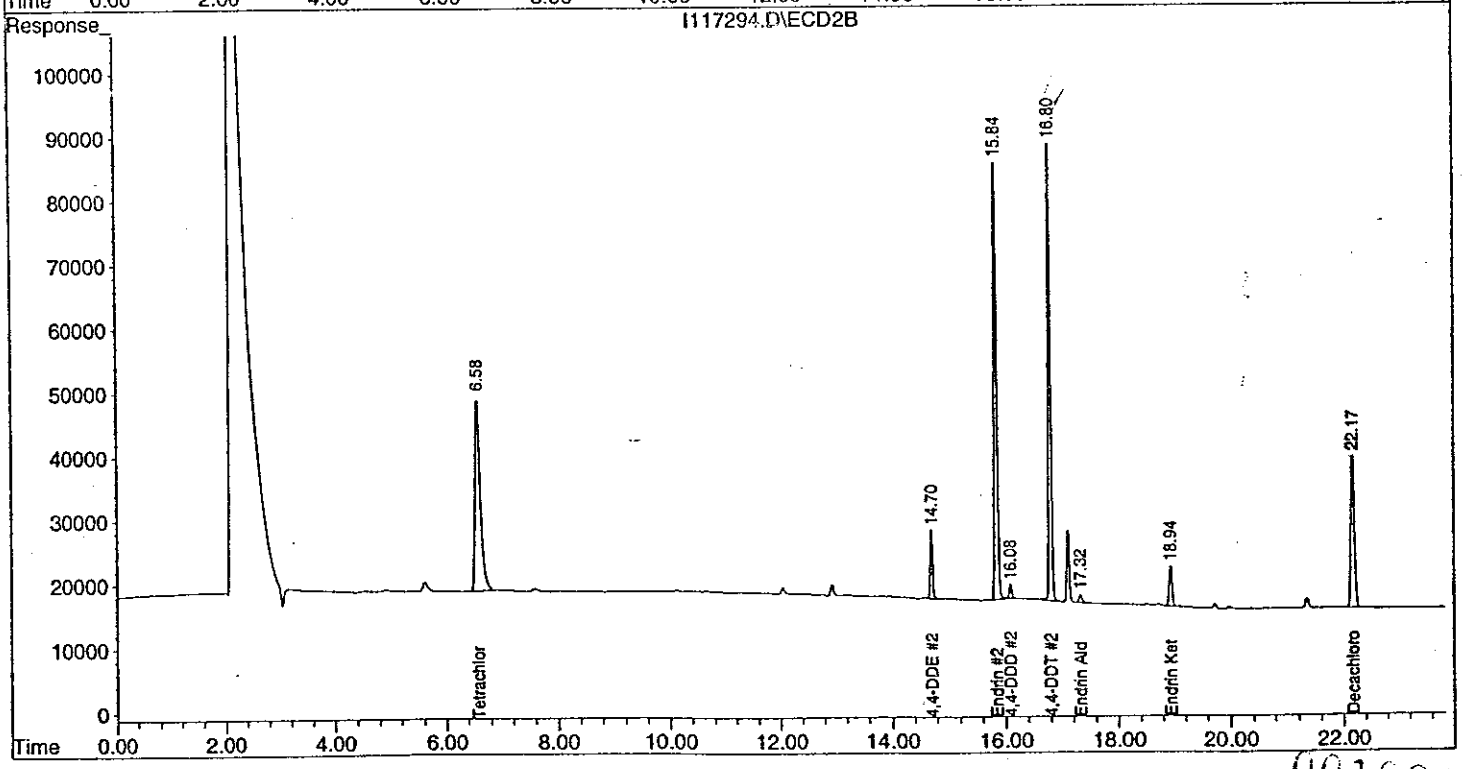
Quantification Report

Signal #1 : H:\GCDATA\I\MAR1902\I117294.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\I\MAR1902\I117294.D\ECD2B.CH
Acq On : 19 Mar 2002 20:07 Operator: AK
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 8:41 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





_I117308BRKDWN.XLT

% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**20.90**	**12.26**
DDT	**8.30**	**12.46**

	RAW RESPONSE	
ENDRIN KETONE	31814.00	232279.00
ENDRIN ALDEHYDE	69454.00	73003.00
ENDRIN	383254.00	2183968.00

DDE	31202.00	263105.00
DDD	2233.00	61379.00
DDT	369214.00	2280499.00

Quantification Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117308.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR1902\I117308.D\ECD2B.CH
Acq On : 20 Mar 2002 2:38 Operator: AK
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:49 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

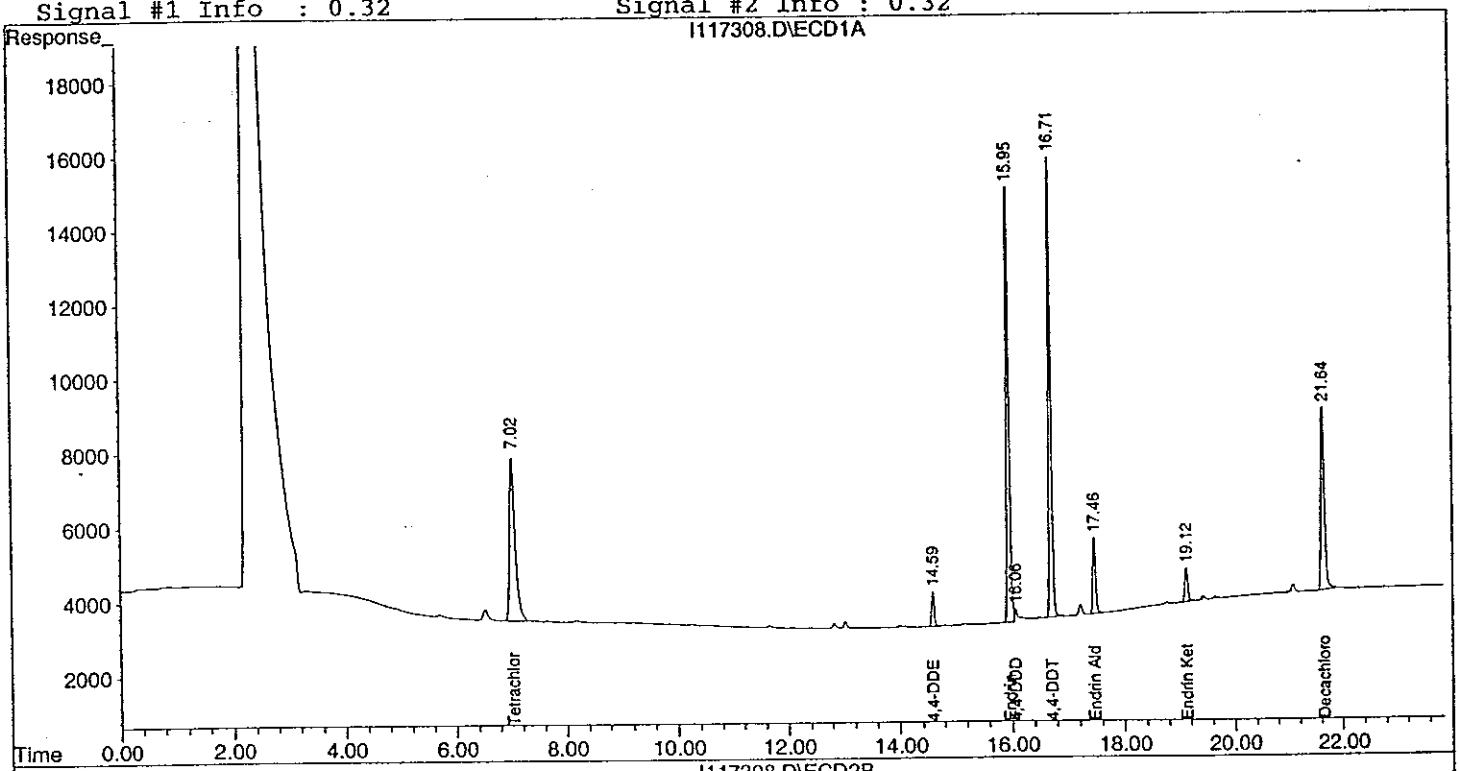
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	297264	2084557	21.887	23.863
iked Amount	20.000 Range 30 - 150 Recovery =					109.44%	119.32%
S	Decachlorobiphen	21.64	22.17	213942	1118265	23.167	22.826
iked Amount	20.000 Range 30 - 150 Recovery =					115.84%	114.13%
	Target Compounds						
B	4,4-DDE	14.59	14.70	31202	263105	2.770m	3.532 #
MA	Endrin	15.95	15.84	383254	2183968	49.596m	46.970
A	4,4-DDD	16.06	16.08	2233	61379	0.307m	1.219m#
MA	4,4-DDT	16.71	16.80	369214	2280499	45.726	45.669
B	Endrin Aldehyde	17.46	17.33	69454	73003	7.622	3.299 #
B	Endrin Ketone	19.12	18.94	31814	232279	6.398	8.069m#
Sum	Toxaphene			0	0	N.D.	N.D.
rage	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
rage	Chlordane					0.000	0.000

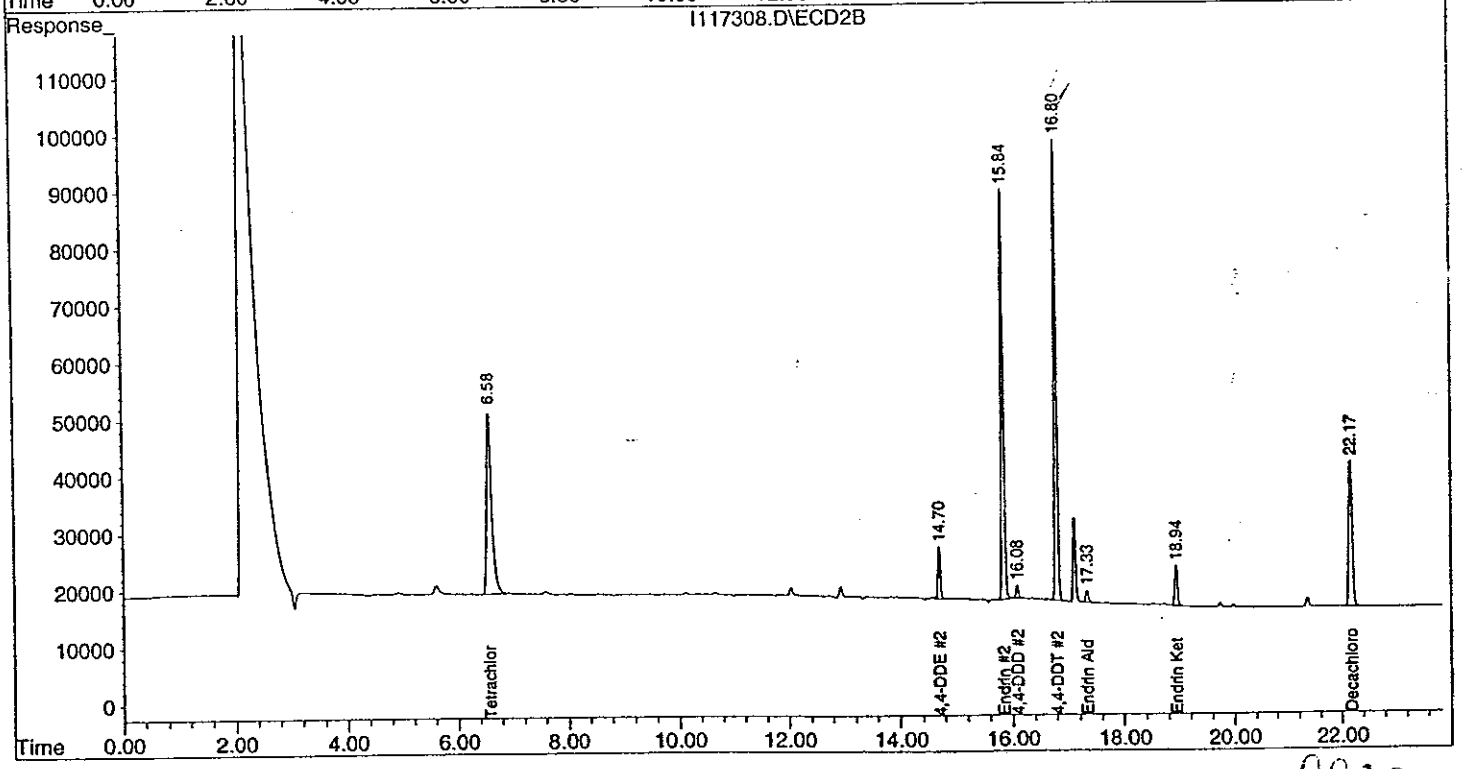
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117308.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR1902\I117308.D\ECD2B.CH
Acq On : 20 Mar 2002 2:38 Operator: AK
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:49 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**9.51**	**5.43**
DDT	**13.77**	**19.52**

	RAW RESPONSE	
ENDRIN KETONE	14790.00	112368.00
ENDRIN ALDEHYDE	32558.00	29283.00
ENDRIN	450739.00	2467848.00

DDE	52359.00	415028.00
DDD	3261.00	77807.00
DDT	348327.00	2031590.00

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117329.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\I\MAR2102\I117329.D\ECD2B.CH
Acq On : 21 Mar 2002 9:49 Operator: PY
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
) S	Tetrachloro-m-xy	7.02	6.58	283637	1953785	20.883	22.366
Spiked Amount	20.000 Range 30 - 150 Recovery =					104.42%	111.83%
) S	Decachlorobiphen	21.63	22.16	217378	1092690	23.540	22.304
Spiked Amount	20.000 Range 30 - 150 Recovery =					117.70%	111.52%
	Target Compounds						
) B	4,4-DDE	14.58	14.70	52359	415028	4.649m	5.571
) MA	Endrin	15.94	15.84	450739	2467848	58.329m	53.075
) A	4,4-DDD	16.05	16.08	3261	77807	0.448m	1.545m#
) MA	4,4-DDT	16.70	16.79	348327	2031590	43.139	40.684m
) B	Endrin Aldehyde	17.45	17.32	32558	29283	3.573	1.323 #
) B	Endrin Ketone	19.11	18.93	14790	112368	2.974	3.904 #
	Sum Toxaphene			0	0	N.D.	N.D.
	erage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	erage Chlordane					0.000	0.000

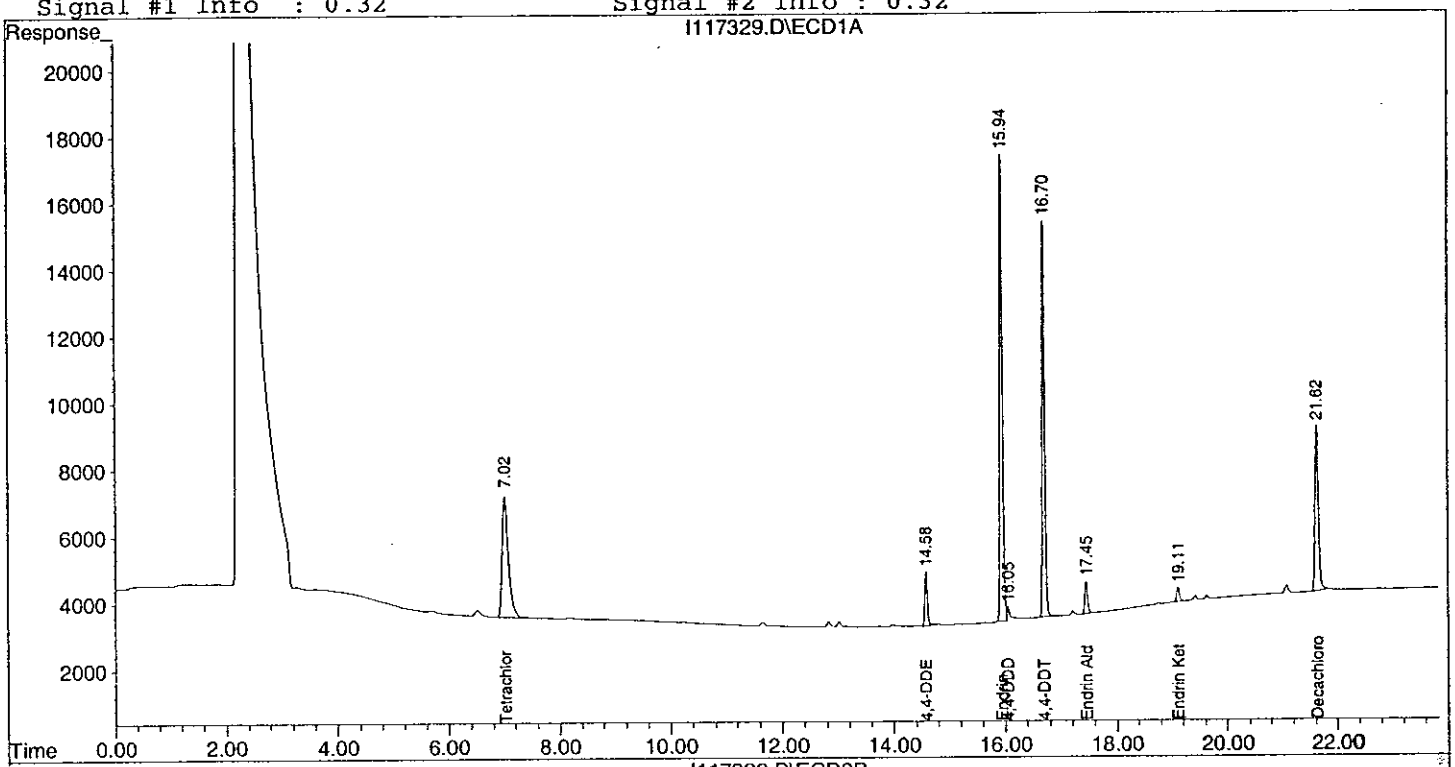
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

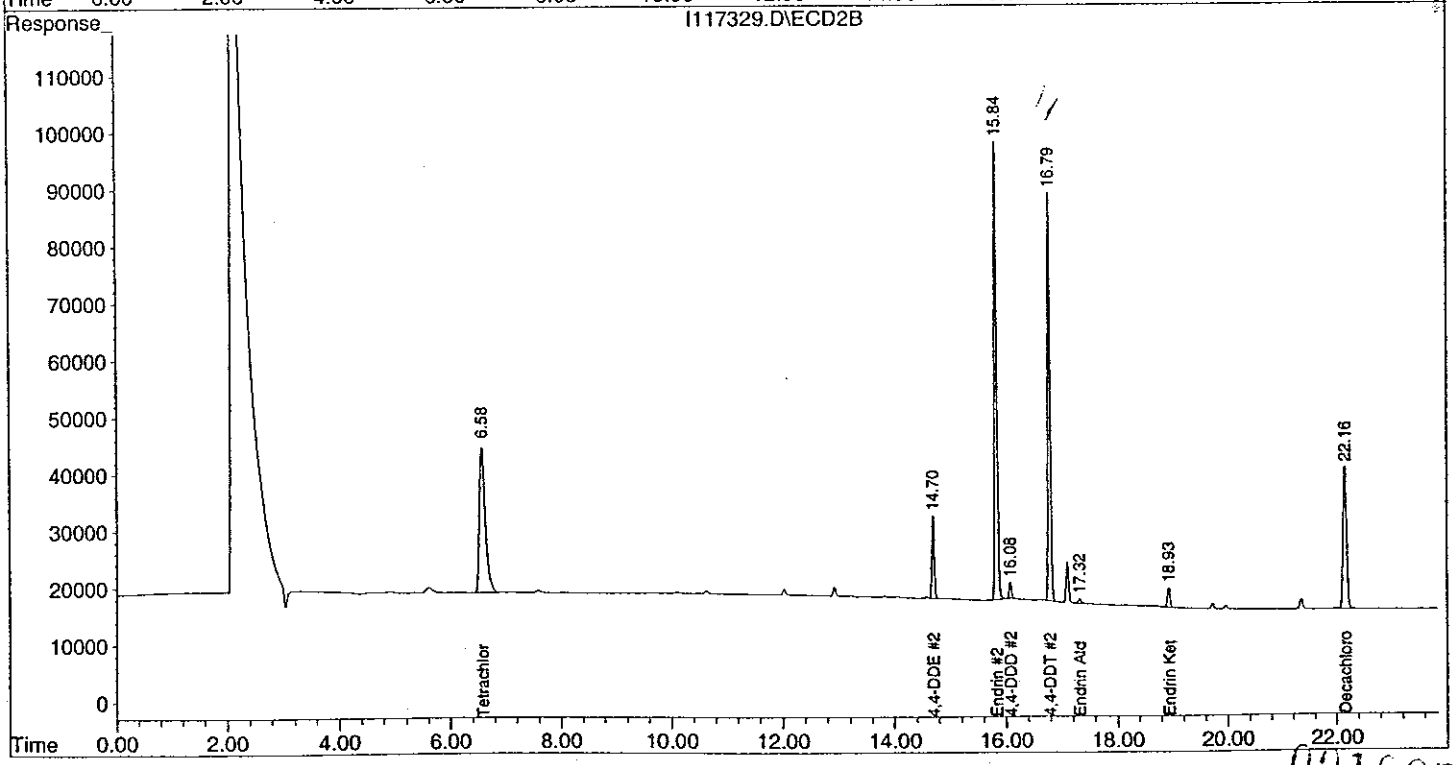
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117329.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\I\MAR2102\I117329.D\ECD2B.CH
Acq On : 21 Mar 2002 9:49 Operator: PY
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\I\MAR2102\I117330.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR2102\I117330.D\ECD2B.CH
Acq On : 21 Mar 2002 10:17 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 11:15:13 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	13.582	13.897 E3	-2.3	0#	0.00
2	A	alpha-BHC	11.236	10.054 E3	10.5	0#	0.00
3	MA	gamma-BHC (Lindane)	11.984	10.893 E3	9.1	0#	0.00
4	MA	Heptachlor	12.955	12.839 E3	0.9	0#	0.00
5	MB	Aldrin	13.435	13.043 E3	2.9	0#	0.00
6	B	beta-BHC	7.638	7.336 E3	4.0	0#	0.00
7	B	delta-BHC	7.782	6.252 E3	19.7#	0#	-0.01
8	B	Heptachlor Epoxide	14.186	14.152 E3	0.2	0#	0.00
9	A	Endosulfan I	12.732	12.702 E3	0.2	0#	0.00
10	A	gamma-Chlordane	14.564	14.669 E3	-0.7	0#	0.00
11	A	alpha-Chlordane	16.673	16.503 E3	1.0	0#	0.00
12	B	4,4-DDE	11.264	12.601 E3	-11.9	0#	0.00
13	MA	Dieldrin	12.090	12.657 E3	-4.7	0#	0.00
14	MA	Endrin	7.728	9.272 E3	-20.0#	0#	0.00
15	B	Endosulfan II	10.785	10.732 E3	0.5	0#	0.00
16	A	4,4-DDD	7.276	8.332 E3	-14.5	0#	0.00
17	MA	4,4-DDT	8.075	8.659 E3	-7.2	0#	0.00
18	B	Endrin Aldehyde	9.113	9.215 E3	-1.1	0#	0.00
19	B	Endosulfan Sulfate	3.888	4.703 E3	-21.0#	0#	-0.01
20	A	Methoxychlor	4.130	4.813 E3	-16.5#	0#	0.00
21	B	Endrin Ketone	4.973	5.372 E3	-8.0	0#	0.00
22	S	Decachlorobiphenyl	9.235	9.771 E3	-5.8	0#	-0.01

Signal #2

1	S	Tetrachloro-m-xylene	87.355	81.905 E3	6.2	0#	0.00
2	A	alpha-BHC	91.171	85.021 E3	6.7	0#	0.00
3	MA	gamma-BHC (Lindane)	87.506	81.122 E3	7.3	0#	0.00
4	MA	Heptachlor	75.177	70.531 E3	6.2	0#	0.00
5	MB	Aldrin	81.992	77.235 E3	5.8	0#	0.00
6	B	beta-BHC	48.236	44.582 E3	7.6	0#	0.00
7	B	delta-BHC	63.708	53.988 E3	15.3#	0#	0.00
8	B	Heptachlor Epoxide	79.033	73.477 E3	7.0	0#	0.00
9	A	Endosulfan I	70.742	65.598 E3	7.3	0#	0.00
10	A	gamma-Chlordane	79.062	74.122 E3	6.2	0#	0.00
11	A	alpha-Chlordane	74.725	69.103 E3	7.5	0#	0.00
12	B	4,4-DDE	74.491	72.768 E3	2.3	0#	0.00
13	MA	Dieldrin	69.995	68.808 E3	1.7	0#	0.00
14	MA	Endrin	46.497	51.177 E3	-10.1	0#	0.00
15	B	Endosulfan II	60.341	57.294 E3	5.0	0#	0.00
16	A	4,4-DDD	50.366	50.475 E3	-0.2	0#	0.00
17	MA	4,4-DDT	49.936	48.077 E3	3.7	0#	0.00
18	B	Endrin Aldehyde	22.130	16.336 E3	26.2#	0#	0.00
19	B	Endosulfan Sulfate	24.028	27.792 E3	-15.7#	0#	0.00
20	A	Methoxychlor	24.050	23.565 E3	2.0	0#	0.00
21	B	Endrin Ketone	28.786	29.914 E3	-3.9	0#	0.00
22	S	Decachlorobiphenyl	48.990	47.789 E3	2.5	0#	-0.01

#) = Out of Range SPCC's out = 0 CCC's out = 0
117330.D MAR1902P.M Fri Mar 22 07:43:37 2002 W49_HPGC

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117330.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR2102\I117330.D\ECD2B.CH
Acq On : 21 Mar 2002 10:17 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 10:53 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
) S	Tetrachloro-m-xy	7.02	6.58	347413	2047632	25.579	23.440
Spiked Amount	20.000 Range	30 - 150	Recovery	=		127.90%	117.20%
) S	Decachlorobiphen	21.62	22.16	244271	1194724	26.452	24.387
Spiked Amount	20.000 Range	30 - 150	Recovery	=		132.26%	121.94%
	Target Compounds						
) A	alpha-BHC	8.71	8.34	502695	4251028	44.740	46.627
) MA	gamma-BHC (Linda	9.72	9.50	544655	4056111	45.449	46.352
) MA	Heptachlor	11.18	10.87	641941	3526543	49.551	46.910
) MB	Aldrin	12.07	11.82	652152	3861727	48.543	47.099
) B	beta-BHC	9.98	9.76	366801	2229096	48.021	46.212
) B	delta-BHC	10.53	10.67	312604	2699390	40.170m	42.371m
) B	Heptachlor Epoxi	13.74	13.41	707590	3673853	49.880	46.485
) A	Endosulfan I	14.77	14.42	635113	3279908	49.884	46.364
) A	gamma-Chlordane	14.07	13.90	733444	3706123	50.361	46.876
) A	alpha-Chlordane	14.40	14.27	825171	3455146	49.491m	46.238
) B	4,4-DDE	14.58	14.70	630042	3638418	55.937	48.843
) MA	Dieldrin	15.37	15.10	632843	3440380	52.343	49.152
) MA	Endrin	15.94	15.84	463585	2558844	59.992m	55.032
) B	Endosulfan II	16.48	16.33	536619	2864695	49.755	47.475
) A	4,4-DDD	16.04	16.08	416620	2523761	57.257m	50.109
) MA	4,4-DDT	16.70	16.79	432954	2403838	53.620	48.139
) B	Endrin Aldehyde	17.45	17.32	460771	816802	50.564	36.909 #
) B	Endosulfan Sulfa	18.43	17.71	235155	1389583	60.478m	57.832m
) A	Methoxychlor	17.75	18.29	240645	1178268	58.274	48.992
) B	Endrin Ketone	19.11	18.93	268577	1495708	54.009	51.959
	Sum Toxaphene			0	0	N.D.	N.D.
	erage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	erage Chlordane					0.000	0.000

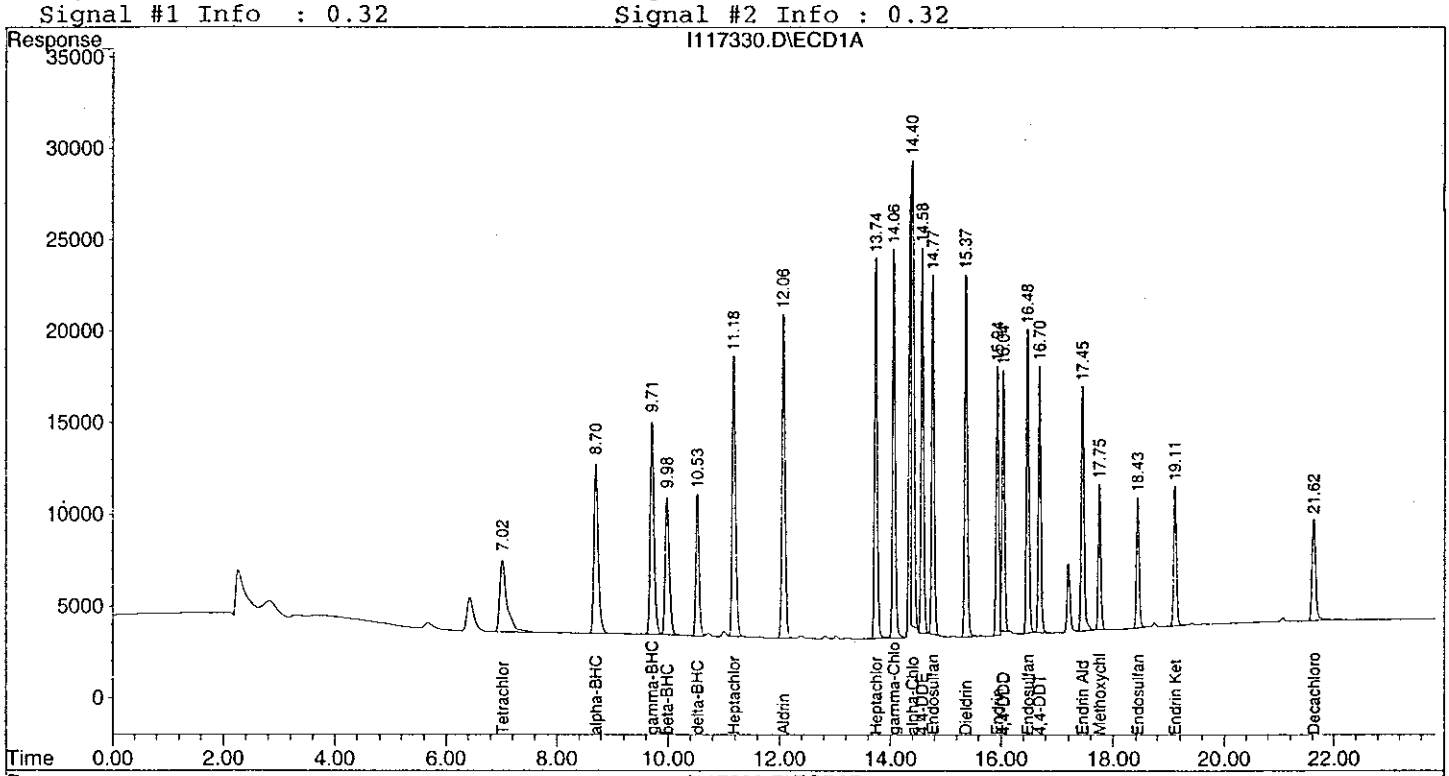
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

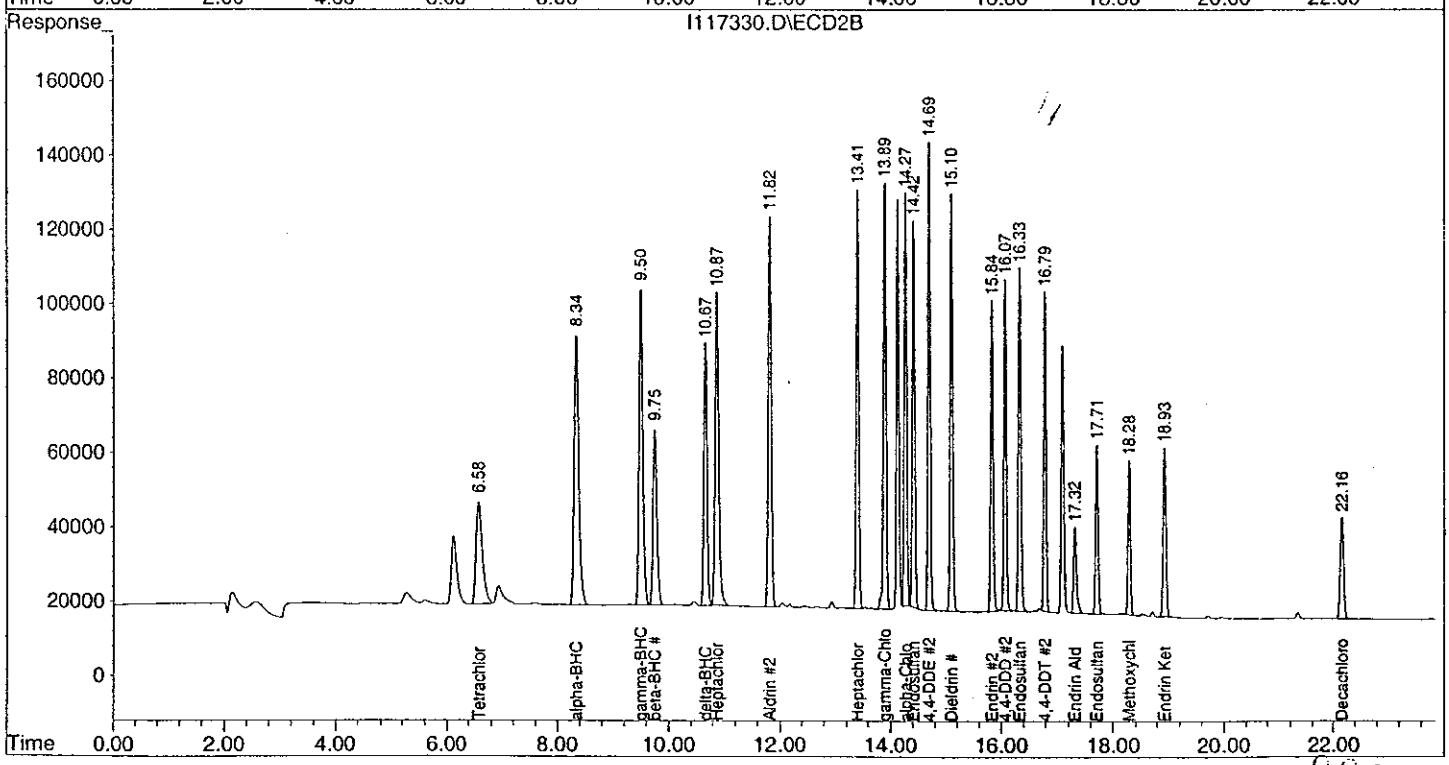
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117330.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR2102\I117330.D\ECD2B.CH
Acq On : 21 Mar 2002 10:17 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 10:53 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001070

Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\I\MAR2102\I117342.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR2102\I117342.D\ECD2B.CH
Acq On : 21 Mar 2002 16:06 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 11:15:13 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	13.582	13.028 E3	4.1	0#	0.00
2	A	alpha-BHC	11.236	11.363 E3	-1.1	0#	0.00
3	MA	gamma-BHC (Lindane)	11.984	12.070 E3	-0.7	0#	0.00
4	MA	Heptachlor	12.955	15.223 E3	-17.5#	0#	0.00
5	MB	Aldrin	13.435	13.103 E3	2.5	0#	0.00
6	B	beta-BHC	7.638	7.599 E3	0.5	0#	0.00
7	B	delta-BHC	7.782	9.396 E3	-20.7#	0#	0.00
8	B	Heptachlor Epoxide	14.186	13.933 E3	1.8	0#	0.00
9	A	Endosulfan I	12.732	12.758 E3	-0.2	0#	0.00
0	A	gamma-Chlordane	14.564	14.650 E3	-0.6	0#	0.00
1	A	alpha-Chlordane	16.673	16.558 E3	0.7	0#	0.00
2	B	4,4-DDE	11.264	12.281 E3	-9.0	0#	0.00
3	MA	Dieldrin	12.090	12.536 E3	-3.7	0#	0.00
4	MA	Endrin	7.728	9.382 E3	-21.4#	0#	0.00
5	B	Endosulfan II	10.785	11.729 E3	-8.8	0#	0.00
6	A	4,4-DDD	7.276	8.747 E3	-20.2#	0#	0.00
7	MA	4,4-DDT	8.075	9.289 E3	-15.0#	0#	0.00
8	B	Endrin Aldehyde	9.113	9.410 E3	-3.3	0#	0.00
9	B	Endosulfan Sulfate	3.888	6.877 E3	-76.9#	0#	0.00
0	A	Methoxychlor	4.130	5.216 E3	-26.3#	0#	0.00
1	B	Endrin Ketone	4.973	9.937 E3	-99.8#	0#	0.00
2	S	Decachlorobiphenyl	9.235	9.593 E3	-3.9	0#	0.00

Signal #2

1	S	Tetrachloro-m-xylene	87.355	80.823 E3	7.5	0#	0.00
2	A	alpha-BHC	91.171	92.857 E3	-1.8	0#	0.00
3	MA	gamma-BHC (Lindane)	87.506	87.361 E3	0.2	0#	0.00
4	MA	Heptachlor	75.177	74.097 E3	1.4	0#	0.00
5	MB	Aldrin	81.992	77.294 E3	5.7	0#	0.00
6	B	beta-BHC	48.236	45.331 E3	6.0	0#	0.00
7	B	delta-BHC	63.708	74.237 E3	-16.5#	0#	0.00
8	B	Heptachlor Epoxide	79.033	72.786 E3	7.9	0#	0.00
9	A	Endosulfan I	70.742	66.263 E3	6.3	0#	0.00
0	A	gamma-Chlordane	79.062	72.223 E3	8.7	0#	0.00
1	A	alpha-Chlordane	74.725	68.345 E3	8.5	0#	0.00
2	B	4,4-DDE	74.491	69.919 E3	6.1	0#	0.00
3	MA	Dieldrin	69.995	67.967 E3	2.9	0#	0.00
4	MA	Endrin	46.497	51.921 E3	-11.7	0#	0.00
5	B	Endosulfan II	60.341	60.494 E3	-0.3	0#	0.00
6	A	4,4-DDD	50.366	50.714 E3	-0.7	0#	0.00
7	MA	4,4-DDT	49.936	47.595 E3	4.7	0#	0.00
8	B	Endrin Aldehyde	22.130	9.786 E3	55.8#	0#	0.00
9	B	Endosulfan Sulfate	24.028	37.741 E3	-57.1#	0#	0.00
0	A	Methoxychlor	24.050	23.853 E3	0.8	0#	0.00
1	B	Endrin Ketone	28.786	47.603 E3	-65.4#	0#	0.00
2	S	Decachlorobiphenyl	48.990	44.993 E3	8.2	0#	-0.01

#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117342.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR2102\I117342.D\ECD2B.CH
Acq On : 21 Mar 2002 16:06 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:04 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
) S	Tetrachloro-m-xy	7.02	6.58	325693	2020576	23.980	23.131
Spiked Amount	20.000 Range	30 - 150		Recovery	=	119.90%	115.66%
) S	Decachlorobiphen	21.63	22.16	239826	1124825	25.970	22.960
Spiked Amount	20.000 Range	30 - 150		Recovery	=	129.85%	114.80%
	Target Compounds						
) A	alpha-BHC	8.71	8.34	568171	4642872	50.567	50.925
) MA	gamma-BHC (Linda	9.72	9.50	603483	4368042	50.358	49.917
) MA	Heptachlor	11.18	10.87	761155	3704873	58.753m	49.282
) MB	Aldrin	12.07	11.82	655127	3864710	48.764	47.135
) B	beta-BHC	9.98	9.76	379949	2266563	49.742	46.989
) B	delta-BHC	10.54	10.68	469792	3711842	60.369	58.263
) B	Heptachlor Epoxi	13.74	13.41	696668	3639301	49.110	46.048
) A	Endosulfan I	14.77	14.42	637910	3313156	50.104	46.834m
) A	gamma-Chlordane	14.07	13.90	732516	3611132	50.297	45.674
) A	alpha-Chlordane	14.40	14.27	827887	3417247	49.654m	45.731
) B	4,4-DDE	14.58	14.70	614032	3495943	54.515	46.931
) MA	Dieldrin	15.37	15.10	626788	3398367	51.842	48.552
) MA	Endrin	15.94	15.84	469087	2596068	60.704m	55.832
) B	Endosulfan II	16.48	16.33	586434	3024708	54.373	50.127
) A	4,4-DDD	16.04	16.07	437343	2535696	60.105m	50.346
) MA	4,4-DDT	16.70	16.79	464461	2379729	57.522m	47.656
) B	Endrin Aldehyde	17.45	17.32	470516	489315	51.633	22.111 #
) B	Endosulfan Sulfa	18.44	17.71	343856	1887042	88.434m	78.535m
) A	Methoxychlor	17.76	18.29	260787	1192636	63.151	49.589
) B	Endrin Ketone	19.11	18.93	496828	2380132	99.909	82.683
	Sum Toxaphene			0	0	N.D.	N.D.
erage	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
erage	Chlordane					0.000	0.000

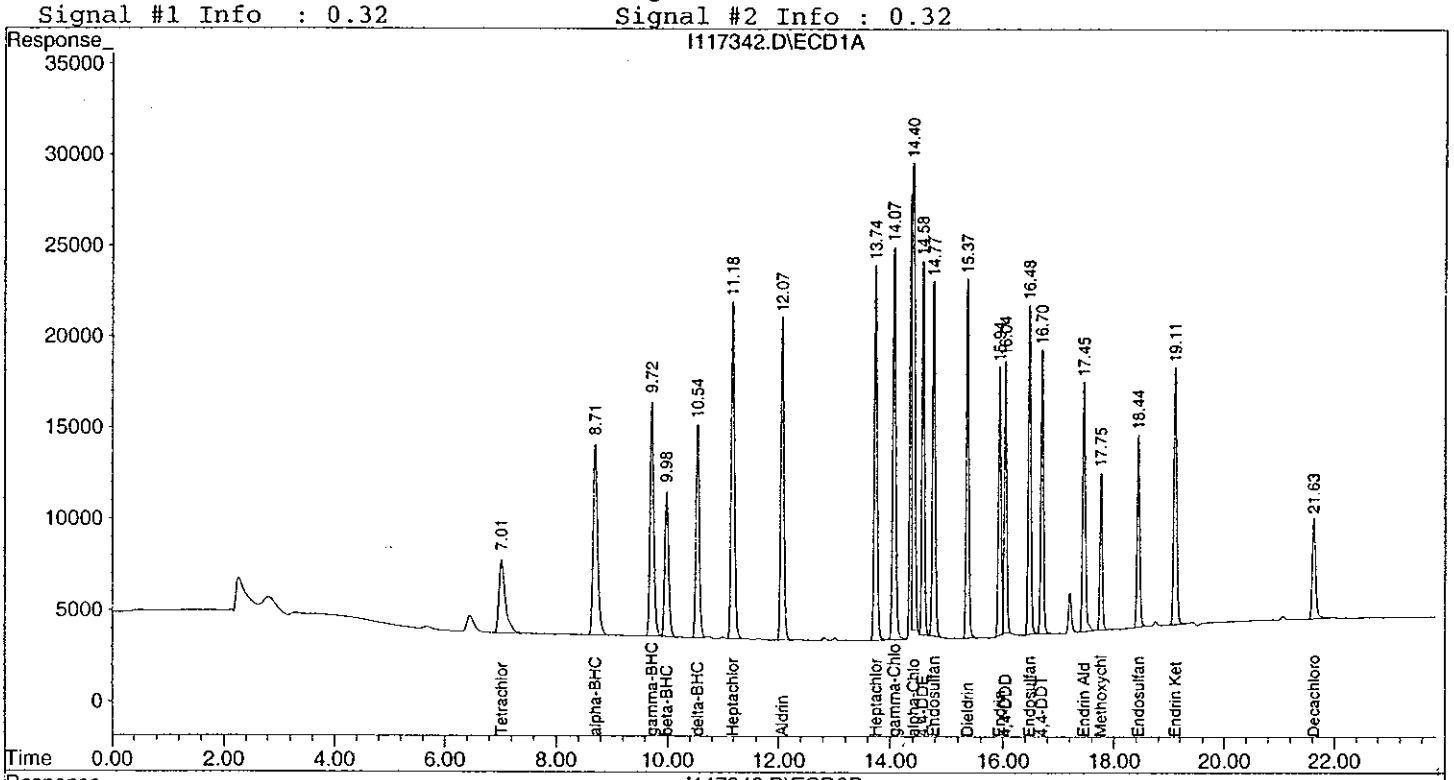
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

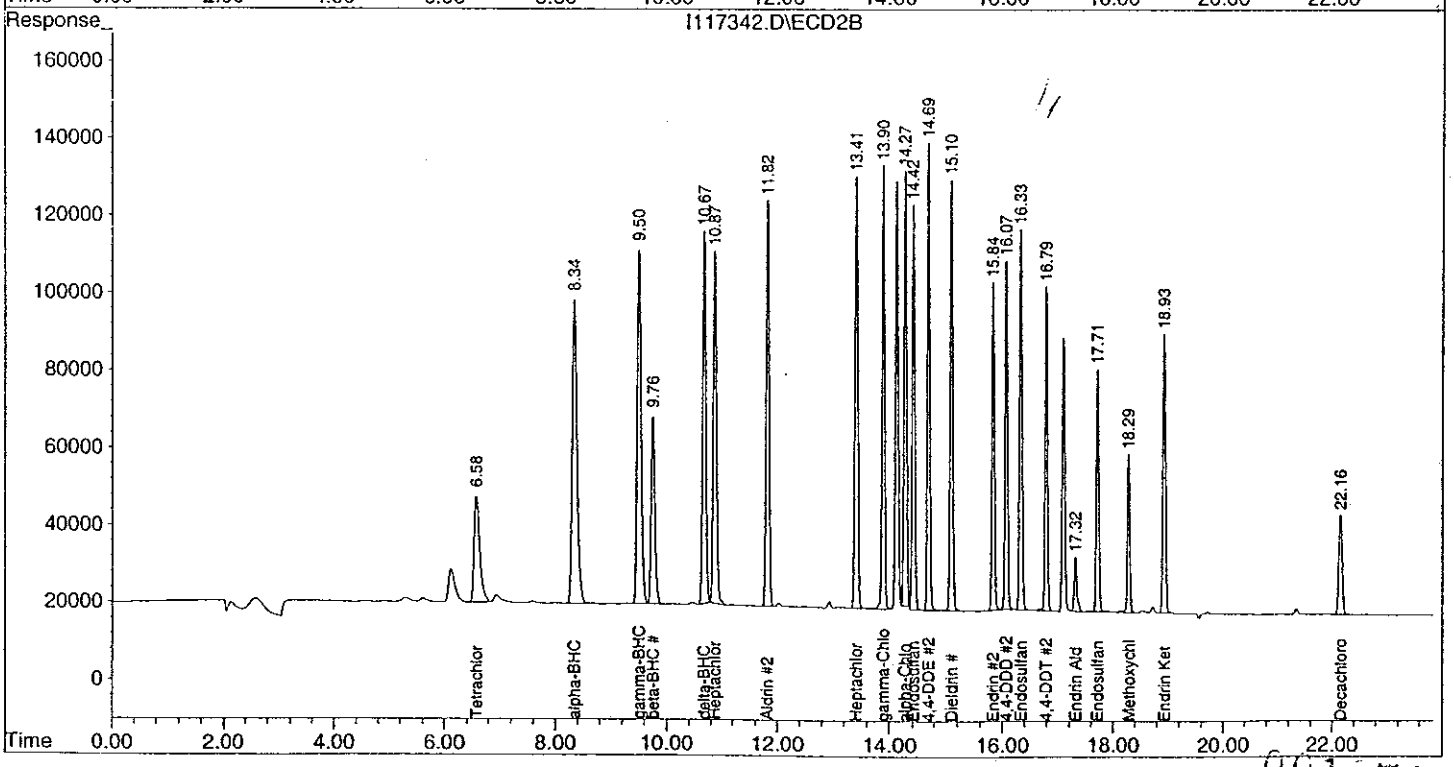
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117342.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR2102\I117342.D\ECD2B.CH
Acq On : 21 Mar 2002 16:06 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:04 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





001073

D. Raw QC Data

1. Blank Data
2. Matrix Spike Data
3. Matrix Spike Duplicate Data
4. Laboratory Control Standard Data (where applicable)
5. Extraction Logsheet
6. Injection Logsheet
7. Retention time windows

GPL Laboratories, LLLP

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK53565

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: BLK53565

Sample wt/vol: 1000 (g/ml) ML Lab File ID: I117331.D

% Moisture: decanted:(Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
5103-71-9	alpha-Chlordane	0.050	U
72-55-9	4,4-DDE	0.050	U
60-57-1	Dieldrin	0.050	U
72-20-8	Endrin	0.050	U
33213-65-9	Endosulfan II	0.050	U
72-54-8	4,4-DDD	0.050	U
50-29-3	4,4-DDT	0.050	U
7421-93-4	Endrin Aldehyde	0.050	U
1031-07-8	Endosulfan Sulfate	0.050	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin Ketone	0.050	U
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117331.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\I\MAR2102\I117331.D\ECD2B.CH
Acq On : 21 Mar 2002 10:58 Operator: PY
Sample : BLK53565 Inst : GC-I
Misc : 8081A-W-BLK53565 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:06 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
S Tetrachloro-m-xy	7.05f	6.60f	172541	1147633	12.704m	13.138
Spiked Amount 20.000 Range 30 - 150 Recovery =					63.52%	65.69%
S Decachlorobiphen	21.63	22.16	245326	1152003	26.566	23.515
Spiked Amount 20.000 Range 30 - 150 Recovery =					132.83%	117.58%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

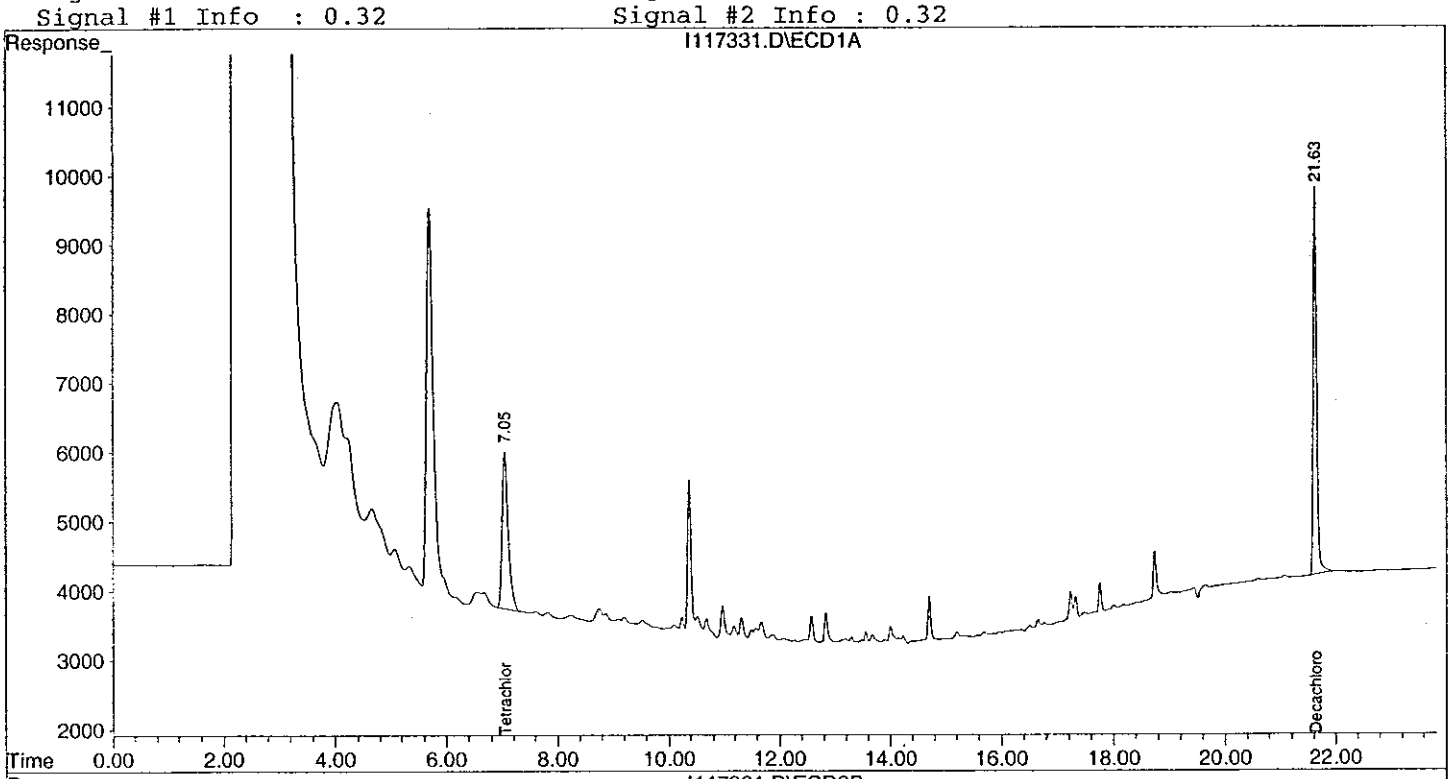
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

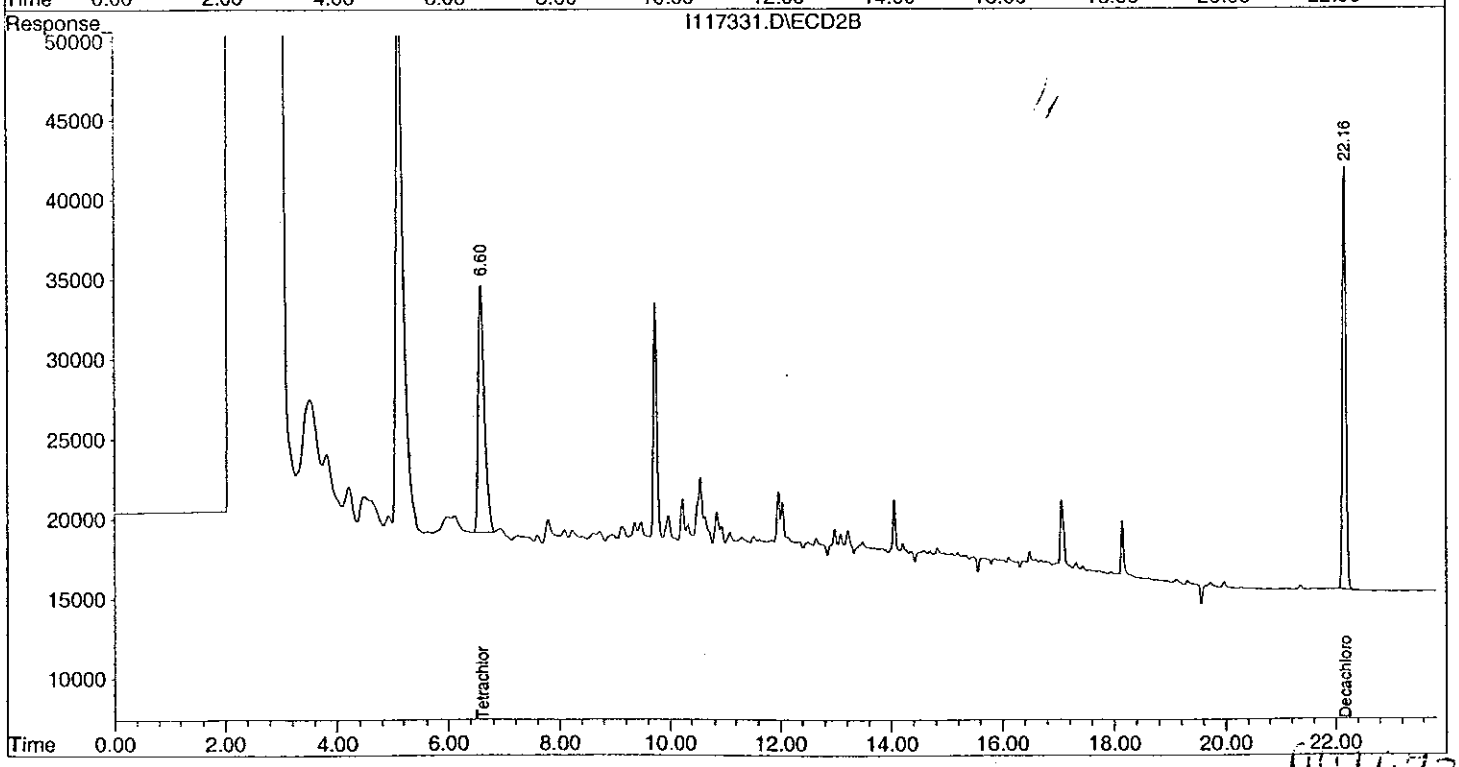
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117331.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\I\MAR2102\I117331.D\ECD2B.CH
Acq On : 21 Mar 2002 10:58 Operator: PY
Sample : BLK53565 Inst : GC-I
Misc : 8081A-W-BLK53565 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:06 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW03S-Q1-02 MS

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-002-01-1/2 MS

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117335.D

% Moisture: decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.37	
58-89-9	gamma-BHC (Lindane)	0.37	
76-44-8	Heptachlor	0.37	
309-00-2	Aldrin	0.39	
319-85-7	beta-BHC	0.45	
319-86-8	delta-BHC	0.16	
1024-57-3	Heptachlor Epoxide	0.41	
959-98-8	Endosulfan I	0.41	
5103-74-2	gamma-Chlordane	0.44	
5103-71-9	alpha-Chlordane	0.40	
72-55-9	4,4-DDE	0.46	
60-57-1	Dieldrin	0.42	
72-20-8	Endrin	0.51 ~~0.55~~ *	
33213-65-9	Endosulfan II	0.43	
72-54-8	4,4-DDD	0.41 ~~0.48~~ *	
50-29-3	4,4-DDT	0.43	
7421-93-4	Endrin Aldehyde	0.39	P
1031-07-8	Endosulfan Sulfate	0.55	
72-43-5	Methoxychlor	0.42 ~~0.56~~ *	P
53494-70-5	Endrin Ketone	0.72	
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

mp 3/22/02

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117335.D\ECD1A.CH Vial: 10
Signal #2 : H:\GCDATA\I\MAR2102\I117335.D\ECD2B.CH
Acq On : 21 Mar 2002 12:50 Operator: PY
Sample : 203025-002-01-1/2 MS Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 MS Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:58 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

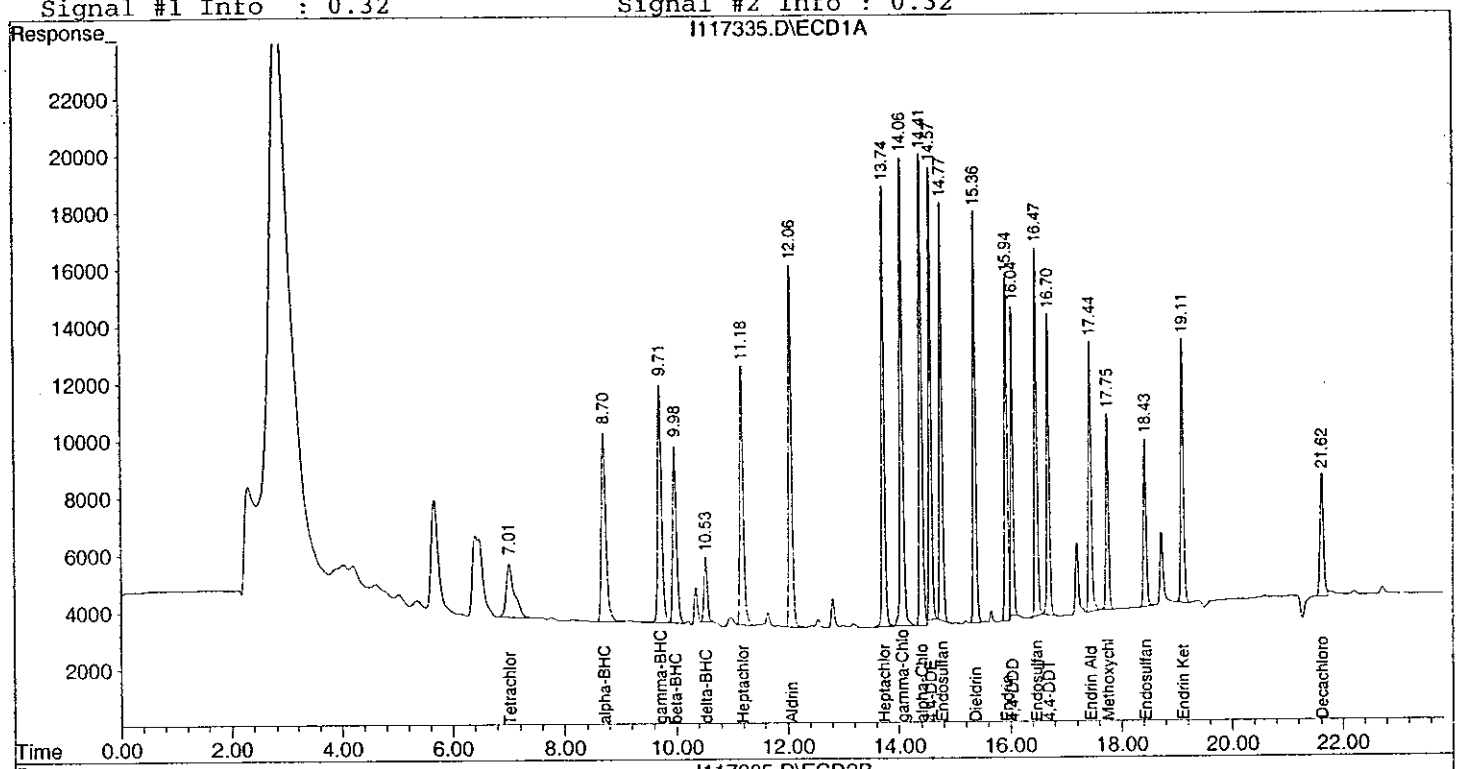
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.01	6.58	180812	950597	13.313m	10.882
piked Amount	20.000 Range	30 - 150	Recovery	=		66.57%	54.41%
S	Decachlorobiphen	21.62	22.15	187102	883825	20.261m	18.041m
piked Amount	20.000 Range	30 - 150	Recovery	=		101.31%	90.21%
	Target Compounds						
A	alpha-BHC	8.70	8.34	368003	3047716	32.752	33.429
MA	gamma-BHC (Linda	9.71	9.50	394866	2949218	32.950	33.703
MA	Heptachlor	11.18	10.86	383881	2501304	29.631	33.272
MB	Aldrin	12.06	11.82	472075	2835547	35.139m	34.583m
B	beta-BHC	9.98	9.75	292852	1960243	38.339	40.639
B	delta-BHC	10.53	10.67	92837	900387	11.930m	14.133
B	Heptachlor Epoxi	13.74	13.40	529591	2756851	37.332m	34.882
A	Endosulfan I	14.77	14.42	475376	2493616	37.338	35.249
A	gamma-Chlordane	14.06	13.89	580403	2774482	39.852	35.092
A	alpha-Chlordane	14.41	14.27	558375	2660419	33.490m	35.603m
B	4,4-DDE	14.58	14.69	467410	2671219	41.498	35.859
MA	Dieldrin	15.36	15.10	455949	2576934	37.712	36.816
MA	Endrin	15.94	15.83	385153	2128760	49.842m	45.782
B	Endosulfan II	16.47	16.33	415614	2163216	38.535	35.850
A	4,4-DDD	16.04	16.07	315786	1859968	43.399m	36.929
MA	4,4-DDT	16.70	16.79	314697	1769784	38.974	35.441
B	Endrin Aldehyde	17.45	17.31	322429	524907	35.383	23.719 #
B	Endosulfan Sulfa	18.43	17.71	191167	1137233	49.165m	47.330
A	Methoxychlor	17.75	18.28	208865	917550	50.578	38.151m
B	Endrin Ketone	19.11	18.93	321709	1615021	64.694	56.104
Sum	Toxaphene			0	0	N.D.	N.D.
rage	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
rage	Chlordane					0.000	0.000

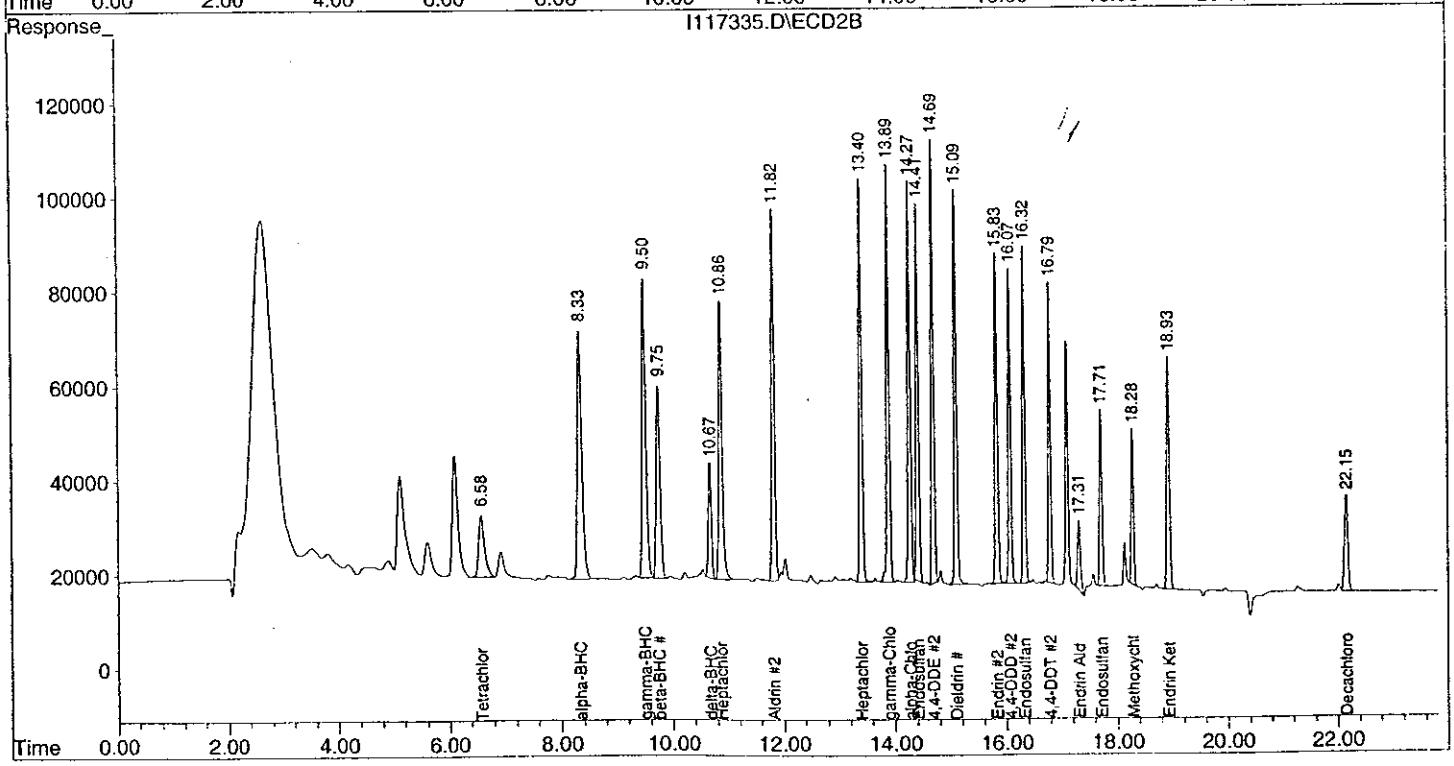
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

nal #1 : H:\GCDATA\I\MAR2102\I117335.D\ECD1A.CH Vial: 10
nal #2 : H:\GCDATA\I\MAR2102\I117335.D\ECD2B.CH
On : 21 Mar 2002 12:50 Operator: PY
ample : 203025-002-01-1/2 MS Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 MS Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:58 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

07-MW03S-Q1-02 MSD

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-002-01-1/2 MSD

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117336.D

% Moisture: decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.38	
58-89-9	gamma-BHC (Lindane)	0.38	
76-44-8	Heptachlor	0.37	
309-00-2	Aldrin	0.39	
319-85-7	beta-BHC	0.46	
319-86-8	delta-BHC	0.17	
1024-57-3	Heptachlor Epoxide	0.42	
959-98-8	Endosulfan I	0.44	
5103-74-2	gamma-Chlordane	0.46	
5103-71-9	alpha-Chlordane	0.39	
72-55-9	4,4-DDE	0.46	
60-57-1	Dieldrin	0.42	
72-20-8	Endrin	0.51 ~~0.57~~ *	
33213-65-9	Endosulfan II	0.43	
72-54-8	4,4-DDD	0.41 ~~0.49~~ *	
50-29-3	4,4-DDT	0.43	
7421-93-4	Endrin Aldehyde	0.40	P
1031-07-8	Endosulfan Sulfate	0.54	
72-43-5	Methoxychlor	0.43 ~~0.56~~ *	P
53494-70-5	Endrin Ketone	0.74	
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

mp 3/22/02

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117336.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\I\MAR2102\I117336.D\ECD2B.CH
Acq On : 21 Mar 2002 13:18 Operator: PY
Sample : 203025-002-01-1/2 MSD Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 MSD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 14:04 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
) S	Tetrachloro-m-xy	7.02	6.58	184906	962948	13.614	11.023
Spiked Amount	20.000 Range	30 - 150	Recovery	=		68.07%	55.12%
) S	Decachlorobiphen	21.62	22.15	191144	848102	20.699m	17.312
Spiked Amount	20.000 Range	30 - 150	Recovery	=		103.50%	86.56%
	Target Compounds						
) A	alpha-BHC	8.71	8.34	376840	3097849	33.539	33.978
) MA	gamma-BHC (Linda	9.71	9.50	403228	2982732	33.648	34.086
) MA	Heptachlor	11.18	10.87	378779	2520947	29.238	33.533
) MB	Aldrin	12.06	11.82	472738	2814066	35.188	34.321
) B	beta-BHC	9.98	9.75	297182	1980446	38.906	41.057
) B	delta-BHC	10.53	10.67	94271	963679	12.114m	15.126m
) B	Heptachlor Epoxi	13.74	13.40	530410	2768505	37.390	35.030
) A	Endosulfan I	14.77	14.42	500081	2520967	39.278	35.636
) A	gamma-Chlordane	14.06	13.89	601604	2807310	41.308	35.508
) A	alpha-Chlordane	14.41	14.27	550066	2642346	32.991	35.361
) B	4,4-DDE	14.58	14.69	467242	2704941	41.483	36.312
) MA	Dieldrin	15.36	15.10	456312	2575220	37.742	36.791
) MA	Endrin	15.94	15.83	393402	2135929	50.909m	45.936
) B	Endosulfan II	16.47	16.33	420332	2199017	38.973	36.443
) A	4,4-DDD	16.04	16.07	319732	1877188	43.942m	37.271
) MA	4,4-DDT	16.70	16.79	314564	1783665	38.958	35.719
) B	Endrin Aldehyde	17.45	17.31	324503	556378	35.610	25.141 #
) B	Endosulfan Sulfa	18.43	17.71	185432	1164252	47.690m	48.454
) A	Methoxychlor	17.75	18.28	209072	931815	50.628	38.744m
) B	Endrin Ketone	19.11	18.93	330672	1641994	66.496	57.041
Sum	Toxaphene			0	0	N.D.	N.D.
erage	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
erage	Chlordane					0.000	0.000

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

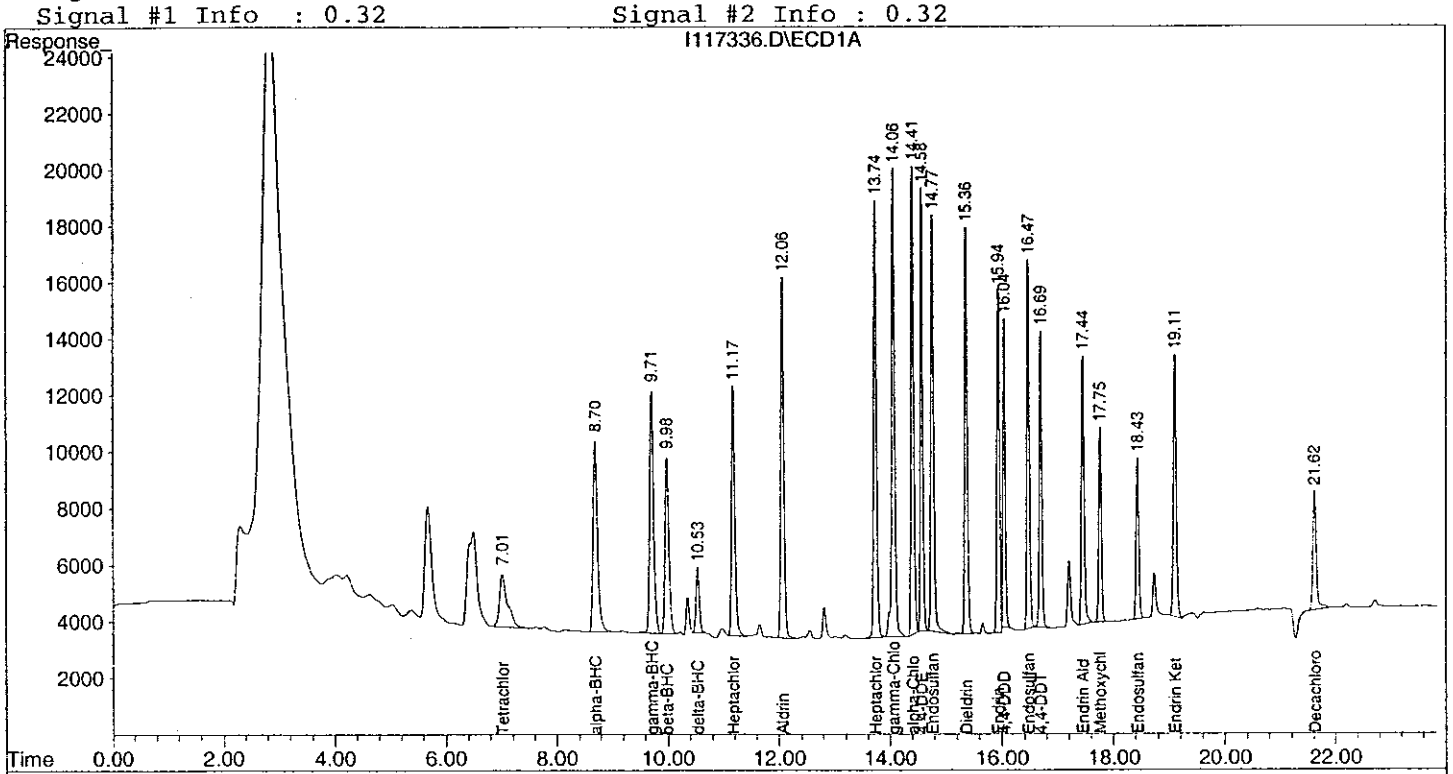
001080

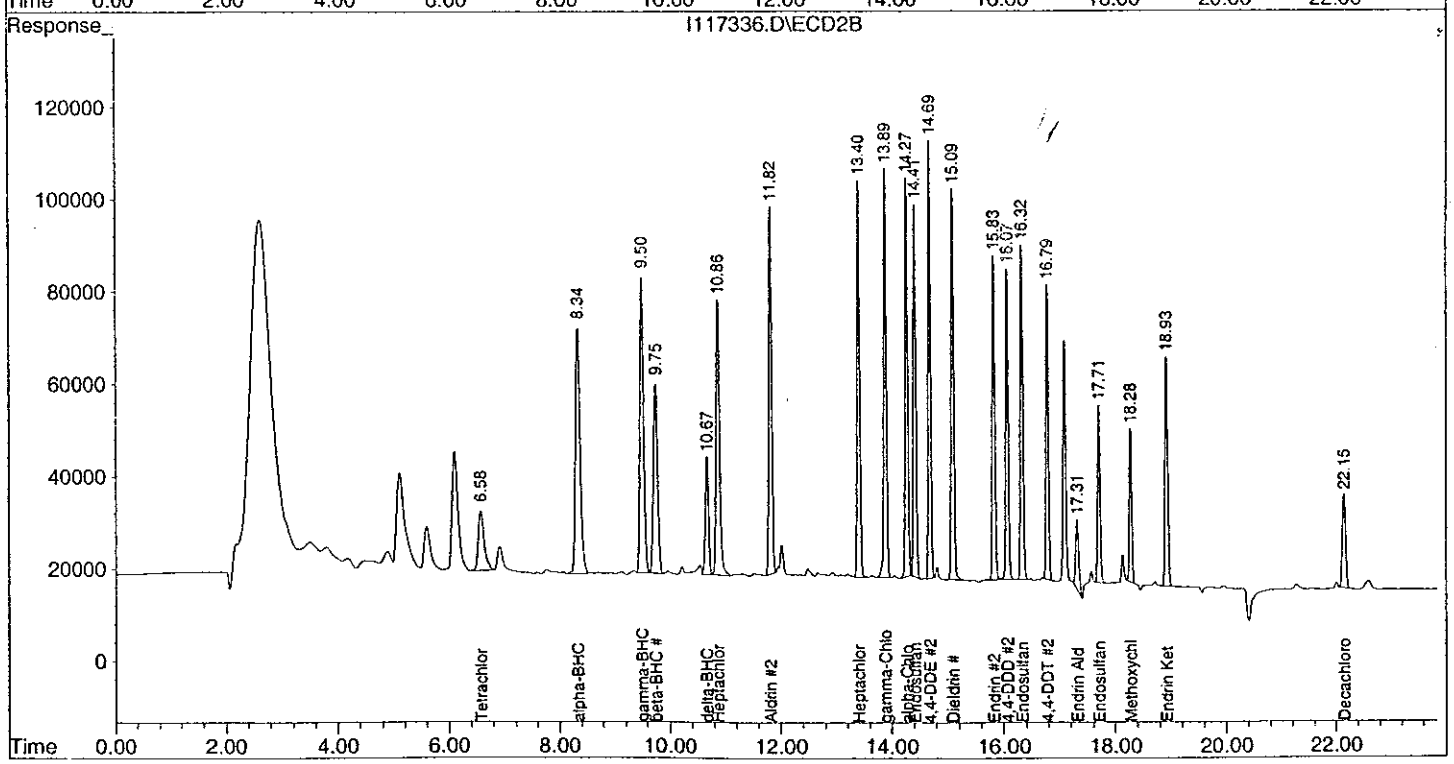
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117336.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\I\MAR2102\I117336.D\ECD2B.CH
Acq On : 21 Mar 2002 13:18 Operator: PY
Sample : 203025-002-01-1/2 MSD Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 MSD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 14:04 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKS53565

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: BKS53565

Sample wt/vol: 1000 (g/ml) ML Lab File ID: I117332.D

% Moisture: decanted:(Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.44	
58-89-9	gamma-BHC (Lindane)	0.44	
76-44-8	Heptachlor	0.42 ~~0.44~~ *	
309-00-2	Aldrin	0.45	
319-85-7	beta-BHC	0.50	
319-86-8	delta-BHC	0.20	
1024-57-3	Heptachlor Epoxide	0.46	
959-98-8	Endosulfan I	0.49	
5103-74-2	gamma-Chlordane	0.49	
5103-71-9	alpha-Chlordane	0.43	
72-55-9	4,4-DDE	0.51	
60-57-1	Dieldrin	0.47	
72-20-8	Endrin	0.54 ~~0.61~~ *	
33213-65-9	Endosulfan II	0.52	
72-54-8	4,4-DDD	0.44 ~~0.56~~ *	
50-29-3	4,4-DDT	0.53	
7421-93-4	Endrin Aldehyde	0.48	P
1031-07-8	Endosulfan Sulfate	0.63 ~~0.71~~ *	
72-43-5	Methoxychlor	0.47 ~~0.87~~ *	P
53494-70-5	Endrin Ketone	0.93	
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

mp 3/22/02

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117332.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\I\MAR2102\I117332.D\ECD2B.CH
Acq On : 21 Mar 2002 11:26 Operator: PY
Sample : BKS53565 Inst : GC-I
Misc : 8081A-W-BKS53565 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:50 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
S	Tetrachloro-m-xy	7.03	6.59	204889	1113103	15.085m	12.742	
Spiked Amount		20.000	Range	30 - 150	Recovery	=	75.43%	63.71%
S	Decachlorobiphen	21.63	22.16	240109	1112146	26.001	22.701	
Spiked Amount		20.000	Range	30 - 150	Recovery	=	130.01%	113.51%
	Target Compounds							
A	alpha-BHC	8.72	8.35	492655	3808599	43.846	41.774	
MA	gamma-BHC (Linda	9.73	9.51	529235	3699192	44.162	42.273	
MA	Heptachlor	11.19	10.87	575488	3184739	44.421	42.363	
MB	Aldrin	12.07	11.82	598164	3432672	44.524	41.866m	
B	beta-BHC	9.99	9.76	367504	2431260	48.113	50.403	
B	delta-BHC	10.54	10.68	130832	1273438	16.812m	19.989m	
B	Heptachlor Epoxi	13.74	13.41	653377	3334250	46.058	42.188	
A	Endosulfan I	14.77	14.42	618308	3075552	48.564m	43.476	
A	gamma-Chlordane	14.07	13.90	714245	3332257	49.042	42.147	
A	alpha-Chlordane	14.41	14.27	690410	3208748	41.409m	42.941m	
B	4,4-DDE	14.58	14.70	577074	3253094	51.234m	43.671m	
MA	Dieldrin	15.37	15.10	573763	3087776	47.456	44.114	
MA	Endrin	15.94	15.84	470689	2533023	60.911m	54.477	
B	Endosulfan II	16.48	16.33	556801	2805298	51.626	46.490	
A	4,4-DDD	16.05	16.08	407781	2215730	56.042m	43.993	
MA	4,4-DDT	16.70	16.79	427891	2253267	52.993	45.123	
B	Endrin Aldehyde	17.45	17.32	436726	481668	47.925	21.765	#
B	Endosulfan Sulfa	18.44	17.71	277860	1514217	71.461	63.019	
A	Methoxychlor	17.76	18.29	277865	1135625	67.287	47.219	#
B	Endrin Ketone	19.11	18.93	462820	2231738	93.070	77.528	
Sum	Toxaphene			0	0	N.D.	N.D.	
erage	Toxaphene					0.000	0.000	
Sum	Chlordane			0	0	N.D.	N.D.	
erage	Chlordane					0.000	0.000	

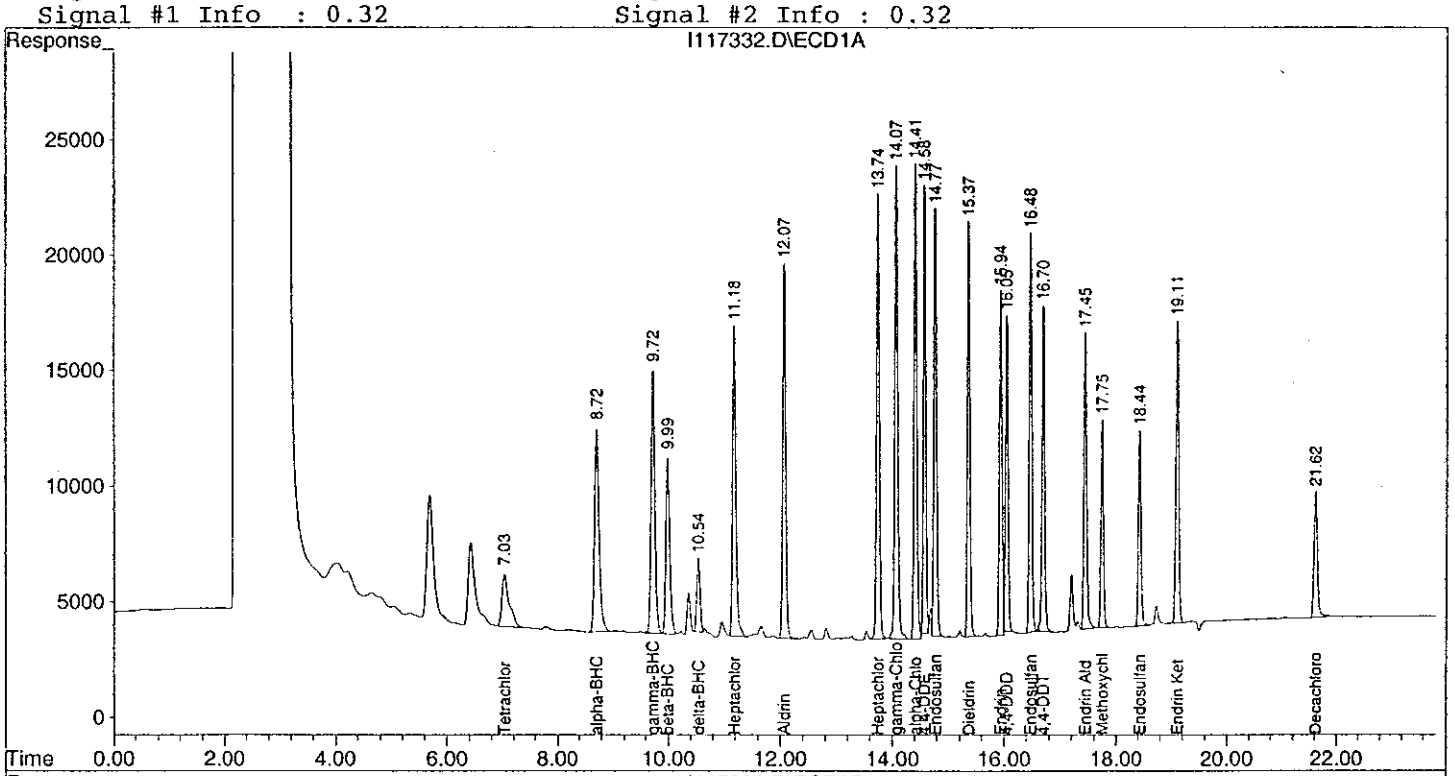
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

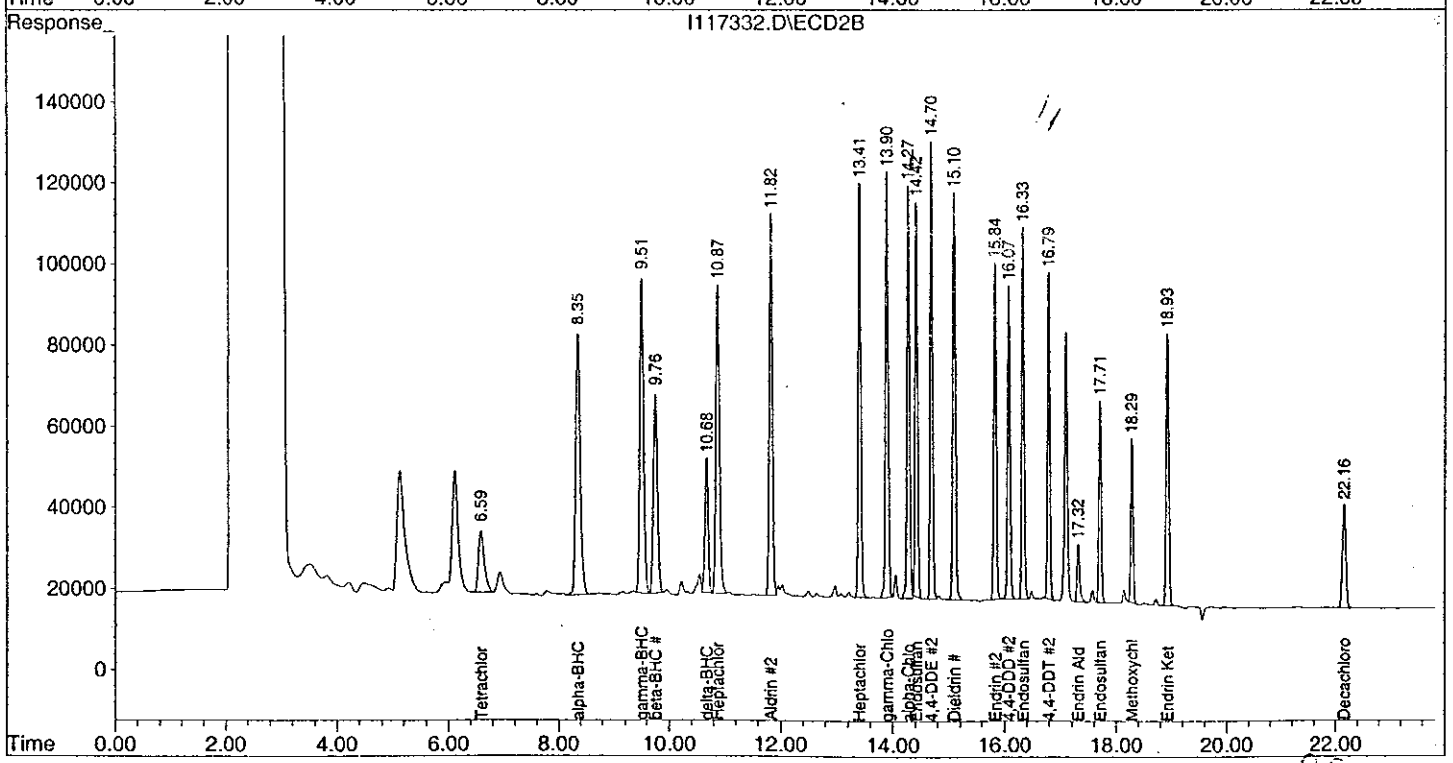
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117332.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\I\MAR2102\I117332.D\ECD2B.CH
Acq On : 21 Mar 2002 11:26 Operator: PY
Sample : BKS53565 Inst : GC-I
Misc : 8081A-W-BKS53565 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:50 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





GPL Laboratories, LLLP *Document Control No: GP_E_139*

PESTICIDE/PCB EXTRACTION LOG

SOIL / WATER / WIPES / OIL

Sep. Funnel 3510C / Continuous 3520C / Soxhlet 3540C / Sonication 3550B / Waste Dilution 3580A

OLCO3.2 / OLMO4.2 / OLMO3.2

Approval / Date: 03/12/02

GPC: Y / N

Analysis Method: 8081 (W)

Ext. Chemist: VT Date: 03-11-02 Conc. Chemist: VT Date: 03-12-02

Cleanup:

Florisil (3620B)(F) Date: 03-12-02 Acid(3665A)(A) Date — Sulfur (3660B)(S) Date: —

Lot #: V05553 Lot #: — Lot #: —

Spike Witness Initials: STr

GPL W. O. #	Frac.	Init pH	Sample Vol. gram / mL	Surr. Vol. mL	Spike Vol. mL	Adjust. pH	F / A / S Cleanup	F.V. mL
203025	BLK 53565	7	1000	1.0	—	—	F	10.0
	BKS	7	1000		1.0			
	001	7	900/1L		—			
	002	7	900/1L		—			
	002(MS)	7	900/1L		1.0			
	002(MSD)	7	900/1L		1.0			
	003	7	900/1L		—			
	004	7	900/1L					
	005	7	900/1L					
	006	7	900/1L					
	007	7	850/1L					

VT 03-12-02

Solvent: DCM / Acetone Lot #: CD 650

Solvent: Hexane Lot #: 003841

Surrogate Soln#: 16591 Surr. Soln Conc(s): 0.2 ppm

Matrix Spike Soln #: 15871 MS Soln Conc(s): 0.5 ppm

Comments & Observations:

GPL Laboratories, LLLP

Document Control No: GP_G_042

GC ANALYSIS LOG

Intrument ID: HP5890 # I

Reviewed by: AK Date: 3/22/02

Data Acquisition Method:	Pest32 / PCB32 / Herb32 /
Injector Temp (oC):	180 / 200 / 240 /
Detector Temp(oC):	300
Oven Initial Temp(oC):	60 / 150 /
Initial Time (min):	0.0 / 0.50 / 1.0 /
Ramp Rate (oC/min) :	15-200-4 / 10-300-5.5
Final Temp(oC):	200 / 275 / 300 /
Injection Volume(uL):	1.0 / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: MAR1902PM

Analyst: AK

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
MAR1902	I 117292	PRIME	—	—	03/19/02	
	I 293	HEXANE		—		
	I 294	EVAL MIX # 17608		STD		
	I 295	TOX-3 # 17133				
	I 296	CHLORDANE -5 #15777				
	I 297	-4 #15778				
	I 298	-3 #15779				
	I 299	-2 #15780				
	I 117300	-1 #15781				
	I 301	PEST - 6 #16841				
	I 302	5 #16842				
	I 303	4 #16843			03/20/02	
	I 304	3 #16844				
	I 305	2 #16845				
	I 306	INDAM #17405				
	I 307	INDBM #17408				
	I 308	EVAL MIX #17608				
	I					
	I					
	I					
	I					
	I					
	I					
	I					

Comments:

001088

GPL Laboratories, LLLP

Document Control No: GP_G_042

GC ANALYSIS LOG

Intrument ID: HP5890 # I

Reviewed by: AK Date: 3/22/02

Data Acquisition Method:	(Pest32) / PCB32 / Herb32 /
Injector Temp (oC):	180 / (200) / 240 /
Detector Temp(oC):	(300)
Oven Initial Temp(oC):	60 / (150) /
Initial Time (min):	0.0 / 0.50 / (1.0) /
Ramp Rate (oC/min) :	15-200-4 / 10-300-5.5
Final Temp(oC):	200 / 275 / (300) /
Injection Volume(uL):	(1.0) / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: MAR1902P.M

Analyst: PY

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
MAR2002	I 117309	PEST-4 #16843	—	STD	03/20/02	
	I 310	BLK53563	1.0	H_2O		
	I 311	BKS53563				
	I 312	203019-004-03-1/2				
	I 313	BLK53510		soil		
	I 314	BKS53510				
	I 315	PEST-4 #16843	—	STD		
	I 316	203019-001-01-1/4	1.0	soil		
	I 317	-001-01-1/4 MS				
	I 318	-001-01-1/4MSD				
	I 319	-002-01-1/2				
	I 320	-003-01-1/2				
	I 321	CHLORDANE-3 #15779	—	STD		
	I 322	PEST-4 #16843			//	
	I 323	PEST-4 #16843				
	I 324	PEST-4 #16843				
mar2102	I 325	Pest-4 16843	—	STD	3/21/02	
	I 326					
	I 327	TOX-3 17133				
	I 328	Chlordane-3 15779				
	I 329	EVAL mix 17608				
	I 330	Pest-4 16843				
	I 331	BLK53565	1.0	water		
	I 332	BKS53565				

Comments:

Injection Log

GPL Laboratories, LLLP

Document Control No: GP_G_042

GC ANALYSIS LOG

Reviewed by: AR Date: 3/22/02

Intrument ID: HP5890 #1

Data Acquisition Method:	Pest32 / PCB32 / Herb32 /
Injector Temp (oC):	180 / 200 / 240 /
Detector Temp(oC):	300
Oven Initial Temp(oC):	60 / 150
Initial Time (min):	0.0 / 0.50 / 1.0
Ramp Rate (oC/min) :	15-200-4/10-300-5.5
Final Temp(oC):	200 / 275 / 300
Injection Volume(uL):	1.0 / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: MAR 19 02 P.M

Analyst: PY

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
mar2102	117 333	203025-001-01-1/2	1.0	water	3/21/02	
	334	002				
	335	MS				
	336	MSD				
	337	003				
	338	004				
	339	005				
	340	006				
	341	007				
	342	Pest-4 16843	—	STD		
	343	BLK 53669	1.0	water		
	344	BKS 53669				
	345	203075-001-01-1/1				
	346	002				
	347	003				
	348	004				
	349	Hexane	—	—		
	350	203075-005-01-1/1	1.0	water		
	351	006				
	352	007				
	353	MS				
	354	008				
	355	009				
	356	Pest-4 16843	—	STD		

Comments:

METALS PACKAGE

GPL Laboratories, LLLP

GPL Laboratories, LLLP

TOTAL METALS
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: SDG No.: 203025

Lab Code: Case No.: SAS No.:

SOW No.: SW-846

Sample No.	Lab Sample ID.
007-MW01S-Q1-02	203025-001-03-1/1
007-MW03S-Q1-02	203025-002-07-1/3
007-MW03S-Q1-02D	203025-002-07-1/3D
007-MW03S-Q1-02S	203025-002-07-1/3S
007-MW04S-Q1-02	203025-003-03-1/1
007-MW05S-Q1-02	203025-004-03-1/1
007-MW08S-Q1-02	203025-005-03-1/1
007-DUP-Q1-02	203025-006-03-1/1
007-EQB-Q1-02	203025-007-03-1/1

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

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

Signature: Rita Amin Name: RITA AMIN

Date: 3-20-02 Title: Metals Reporting Mgr

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW01S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-001-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW03S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-002-07-1/3

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW04S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-003-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	357			P

Color Before: BROWN Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

002005

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW05S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-004-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002066

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW08S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-005-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002067

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-DUP-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-006-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	368			P

Color Before: BROWN Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

002008

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-EQB-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-007-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002069

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Initial Calibration Source: HIGH PURITY

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	400.0	405.25	101.3	1000.0	1019.61	102.0	1015.12	101.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002010

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1022.05	102.2	1010.73	101.1	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002011

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1014.79	101.5	1016.40	101.6	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002012

TOTAL METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract:

Lab Code: Case No.: SAS No.: SDG No.: 203025

AA CRDL Standard Source:

ICP CRDL Standard Source: HIGH PURITY

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				20.0	21.40	107.0		

002013

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	4.1	U	4.1	U	4.1	U	4.1	U	4.100	U	P

002014

SW-846

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			4.1	U	4.1	U	4.1	U			P

002015

TOTAL METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

ICP ID Number: TJA61 ICP ICS Source: HIGH PURITY

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic		100	-3	102.7	102.7			

002016

TOTAL METALS
-5A-
SPIKE SAMPLE RECOVERY

SAMPLE NO.

007-MW03S-Q1-02S

Contract:

Lab Code: Case No.: SAS SDG NO.: 203025

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	50.8241		4.1000	U	50.00	101.6		P

Comments:

002017

TOTAL METALS

-6-

DUPLICATES

SAMPLE NO.

007-MW03S-Q1-02D

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic		4.1000	U	4.1000	U			P

002018

TOTAL METALS
-7-
LABORATORY CONTROL SAMPLE

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Solid LCS Source:

Aqueous LCS Source: HIGH PURITY

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Arsenic	50.0	47.48	95.0					

002019

TOTAL METALS

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

007-MW03S-Q1-02L

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Arsenic	4.10	U	20.50	U			P

//

002020

Instrument ID: Trace	Inst. Method: TRACE 3	Nebulizer: 65137
Profile: -0.0028	Intensity: 4423	At Setting: 455

Analytical Batch No: 020319

Workorder	Project/SDG #	Prep. Seq.	Batch #	Matrix s/w/e	Prep. Date	Method	Dil.	Comments
203028	IT	53547	048	W	3.8.02	3010	2	009,014
202159	HYDROGEOLOGIC		066	S	3.15.02	3050		
203025	CH2M HILL	53538	047	W	3.8.02	3010		
203075	ENVIROTEST	53649	068	E	3.18.02	↓		
203051	ESC		064	↓	3.15.02	↓		
203036	CDM	53560	054	S	3.11.02	3050		BLK53560: Al, Cr, Cu, Pb, Mn, Ni: FAILED BLK53560: Sb, Cu, Ag, Mo FAILED ↖ OK. K ONLY ↗

3.20.02

Source Solution Numbers				Post Digestion Spikes
Stds.	Number	Stds.	Number	Spike 9.9 mls of sample with 0.1 mls of 166605
S0	057-101-03	ICV	17580	Samples:
S1	17485	CCV	17635	202159-001-13-1/3
S2	17427	ICSA	17732	203025-002-07-1/3
S3	17204	ICSAB	17659	203036-001-02-1/1
S4	'	CRI	17658	
S5	'	Low Ck	17557	
Ints	17581	LR	17627	

Analyst: [signature] Date: 3.20.02 Reviewed: [signature] Date: 3-20-02

002022

Seq	Sample ID	Dil.	Analysis Date Time
1.	CAL-STD0	1	3/19/0212:46
2.	CAL-STD1	1	3/19/0212:55
3.	CAL-STD2	1	3/19/0213:03
4.	CAL-STD3	1	3/19/0213:11
5.	ICV1	1	3/19/0213:21
6.	ICV2	1	3/19/0213:39
7.	ICV3	1	3/19/0213:54
8.	ICB1	1	3/19/0214:01
9.	CCV1	1	3/19/0214:09
10.	CCB1	1	3/19/0214:17
11.	PQL-LOWCHE	1	3/19/0214:24
12.	CRDL1	1	3/19/0214:32
13.	ICS-A1	1	3/19/0214:40
14.	FE	500	3/19/0214:51
15.	ICV4	1	3/19/0215:27
16.	ICB2	1	3/19/0215:35
17.	CCV2	1	3/19/0215:42
18.	CCB2	1	3/19/0215:50
19.	PQL-LOWCHE	1	3/19/0215:58
20.	CRDL2	1	3/19/0216:05
21.	ICS-A2	1	3/19/0216:15
22.	ICS-AB1	1	3/19/0216:23
23.	LR	1	3/19/0216:32
24.	CCV3	1	3/19/0216:44
25.	CCB3	1	3/19/0216:52
26.	203028-009-01-2		3/19/0217:01
27.	203028-009-01-2		3/19/0217:09
28.	203028-009-01-2		3/19/0217:17
29.	203028-009-01-2		3/19/0217:25
30.	203028-009-01-10		3/19/0217:33
31.	203028-014-01-2		3/19/0217:40
32.	BLK(066)	1	3/19/0217:48
33.	BKS(066)	1	3/19/0217:56
34.	202159-001-13-1		3/19/0218:04
35.	202159-001-13-1		3/19/0218:12
36.	CCV4	1	3/19/0218:20
37.	CCB4	1	3/19/0218:28
38.	202159-001-13-1		3/19/0218:36
39.	202159-001-13-1		3/19/0218:44
40.	202159-001-13-5		3/19/0218:52
41.	202159-002-04-1		3/19/0219:00

Seq	Sample ID	Dil.	Analysis Date Time
42.	202159-005-05-1		3/19/0219:08
43.	202159-006-05-1		3/19/0219:16
44.	202159-007-05-1		3/19/0219:23
45.	202159-008-05-1		3/19/0219:31
46.	202159-009-05-1		3/19/0219:39
47.	202159-010-05-1		3/19/0219:47
48.	CCV5	1	3/19/0219:55
49.	CCB5	1	3/19/0220:03
50.	202159-011-04-1		3/19/0220:11
51.	202159-012-04-1		3/19/0220:19
52.	202159-013-05-1		3/19/0220:27
53.	202159-014-05-1		3/19/0220:35
54.	202159-015-05-1		3/19/0220:43
55.	BLK53538	1	3/19/0220:51
56.	BKS53538	1	3/19/0220:59
57.	203025-001-03-1		3/19/0221:07
58.	203025-002-07-1		3/19/0221:14
59.	203025-002-07-1		3/19/0221:22
60.	CCV6	1	3/19/0221:30
61.	CCB6	1	3/19/0221:38
62.	203025-002-07-1		3/19/0221:46
63.	203025-002-07-1		3/19/0221:54
64.	203025-002-07-5		3/19/0222:02
65.	203025-003-03-1		3/19/0222:10
66.	203025-004-03-1		3/19/0222:18
67.	203025-005-03-1		3/19/0222:26
68.	203025-006-03-1		3/19/0222:34
69.	203025-007-03-1		3/19/0222:42
70.	BLK53649	1	3/19/0222:50
71.	BKS53649	1	3/19/0222:58
72.	CCV7	1	3/19/0223:05
73.	CCB7	1	3/19/0223:13
74.	203075-001-02-1		3/19/0223:21
75.	203075-001-02-1		3/19/0223:29
76.	203075-001-02-1		3/19/0223:37
77.	203075-001-02-5		3/19/0223:45
78.	203075-002-02-1		3/19/0223:53
79.	203075-003-02-1		3/20/0200:01
80.	203075-004-02-1		3/20/0200:09
81.	CRDL3	1	3/20/0200:17
82.	ICS-A		3/20/0200:25

Seq	Sample ID	Dil.	Analysis Date Time
83.	ICS-AB2	1	3/20/0200:33
84.	CCV8	1	3/20/0200:41
85.	CCB8	1	3/20/0200:49
86.	203075-005-02-1		3/20/0200:57
87.	203075-006-02-1		3/20/0201:05
88.	203075-007-02-1		3/20/0201:12
89.	203075-008-02-1		3/20/0201:20
90.	203075-009-02-1		3/20/0201:28
91.	203075-010-02-1		3/20/0201:36
92.	203075-011-02-1		3/20/0201:44
93.	203075-012-02-1		3/20/0201:52
94.	203075-013-02-1		3/20/0202:00
95.	203075-014-02-1		3/20/0202:08
96.	CCV9	1	3/20/0202:16
97.	CCB9	1	3/20/0202:24
98.	203075-015-02-1		3/20/0202:32
99.	203075-016-02-1		3/20/0202:40
100.	203075-017-02-1		3/20/0202:48
101.	203075-018-02-1		3/20/0202:56
102.	203075-019-02-1		3/20/0203:04
103.	BLK(064)	1	3/20/0203:12
104.	BKS(064)	1	3/20/0203:20
105.	203051-001-01-1		3/20/0203:27
106.	203051-002-01-1		3/20/0203:35
107.	203051-002-01-1		3/20/0203:43
108.	CCV10	1	3/20/0203:51
109.	CCB10	1	3/20/0203:59
110.	203051-002-01-1		3/20/0204:07
111.	203051-002-01-5		3/20/0204:15
112.	203051-003-01-1		3/20/0204:23
113.	203051-004-01-1		3/20/0204:31
114.	203051-005-01-1		3/20/0204:39
115.	203051-006-01-1		3/20/0204:47
116.	203051-007-01-1		3/20/0204:55
117.	203051-008-01-1		3/20/0205:03
118.	203051-009-01-1		3/20/0205:11
119.	203051-010-01-1		3/20/0205:19
120.	CCV11	1	3/20/0205:27
121.	CCB11	1	3/20/0205:35
122.	203051-011-01-1		3/20/0205:43
123.	203051-012-01-1		3/20/0205:51

Analyst Signature 3.20.02

Seq	Sample ID	Dil.	Analysis Date Time
124.	203051-013-01-1		3/20/0205:59
125.	203051-014-01-1		3/20/0206:06
126.	203051-014-01-1		3/20/0206:14
127.	203051-014-01-1		3/20/0206:22
128.	203051-014-01-5		3/20/0206:30
129.	B020313	1	3/20/0206:38
130.	B020314	1	3/20/0206:46
131.	BLK53560	1	3/20/0206:54
132.	CCV12	1	3/20/0207:02
133.	CCB12	1	3/20/0207:10
134.	BKS53560	1	3/20/0207:18
135.	203036-001-02-1		3/20/0207:26
136.	203036-001-02-1		3/20/0207:34
137.	203036-001-02-1		3/20/0207:42
138.	203036-001-02-1		3/20/0207:50
139.	203036-001-02-5		3/20/0207:58
140.	203036-002-02-1		3/20/0208:06
141.	203036-003-02-1		3/20/0208:14
142.	CCV13	1	3/20/0208:22
143.	CCB13	1	3/20/0208:30
144.	CRDL4	1	3/20/0208:38
145.	ICS-A		3/20/0208:46
146.	ICS-AB3	1	3/20/0208:54
147.	CCV14	1	3/20/0209:02
148.	CCB14	1	3/20/0209:09

Analyst Signature 3.20.02

2

Sample Dilutions:

203025-003-03-1 / 1:5x For Na

203025-006-03-1 / 1:5x For Na

Standardization Rpt. 03/19/02 12:53:57 PM

Method: TRACE3 Standard: STD0
Run Time: 03/19/02 12:46:24

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	.01672	.00206	.00008	-.00006	-.00400	-.00102	.04679
#1	.01690	.00197	-.00053	-.00005	-.00391	-.00071	.04683
#2	.01655	.00215	.00068	-.00007	-.00409	-.00132	.04676

Elem	CR	CO	CU	FE	MG	MN	NI
Avge	.00003	-.00050	.01138	.00073	-.00015	.00025	-.00308
#1	-.00009	-.00073	.01132	.00114	-.00005	.00025	-.00318
#2	.00016	-.00027	.01144	.00032	-.00025	.00025	-.00299

Elem	K	AG	NA	TL	V	ZN	B
Avge	-.00526	.00091	-.00393	-.00170	.00014	.00166	.00019
#1	-.00096	.00121	-.00348	-.00247	.00023	.00199	.00005
#2	-.00957	.00062	-.00438	-.00094	.00005	.00132	.00034

Elem	MO	SN	SR	TI	1/PB	2/PB	1/SE
Avge	-.00002	-.00024	-.00005	.00027	-.00755	.00110	-.00213
#1	-.00025	.00005	.00005	.00041	-.00510	-.00119	-.00007
#2	.00021	-.00053	-.00014	.00014	-.01000	.00338	-.00420

Elem	2/SE	SI
Avge	-.00001	.05574
#1	-.00167	.05558
#2	.00164	.05589

Standardization Rpt. 03/19/02 01:03:21 PM

Method: TRACE3 Standard: STD1
Run Time: 03/19/02 12:55:48

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	3.9175	.61065	.52804	1.9799	.14946	2.5536	.64162
#1	3.9214	.61131	.52780	1.9801	.14940	2.5547	.64156
#2	3.9135	.60999	.52829	1.9796	.14953	2.5526	.64169

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	.73263	.64220	6.0569	.97446	1.1930	.04035	.28255
#1	.73197	.64251	6.0541	.97429	1.1924	.04028	.28260
#2	.73329	.64189	6.0598	.97463	1.1936	.04042	.28250

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.14682	.47320	.55026	.49082	.38450	2.7593	1.7705
#1	.14669	.47256	.55031	.49012	.38477	2.7587	1.7701
#2	.14695	.47385	.55022	.49153	.38423	2.7600	1.7710

Elem	1/PB	2/PB	1/SE	2/SE	SI
Avge	1.0709	1.2504	.77910	1.2088	.28925
#1	1.0686	1.2504	.77679	1.2055	.28902
#2	1.0731	1.2504	.78140	1.2120	.28949

Standardization Rpt. 03/19/02 01:11:01 PM

Method: TRACE3 Standard: STD2
Run Time: 03/19/02 13:03:28

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	7.7293	1.2124	1.0516	3.9311	.30019	5.0516	1.2752
#1	7.6861	1.2030	1.0439	3.9080	.29767	5.0160	1.2655
#2	7.7725	1.2218	1.0593	3.9542	.30270	5.0871	1.2850

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	1.4564	1.2593	12.033	1.9336	2.3816	.07882	.56349
#1	1.4464	1.2519	11.940	1.9198	2.3665	.07805	.55901
#2	1.4663	1.2667	12.126	1.9475	2.3966	.07958	.56798

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.29139	.93372	1.0943	.97944	.76937	5.4553	3.5261
#1	.28933	.92628	1.0869	.97179	.76297	5.4227	3.5023
#2	.29345	.94115	1.1016	.98710	.77577	5.4879	3.5498

Elem	1/PB	2/PB	1/SE	2/SE	SI
Avge	2.1253	2.4874	1.5359	2.3962	.52052
#1	2.1071	2.4726	1.5229	2.3894	.51745
#2	2.1436	2.5022	1.5489	2.4030	.52359

ethod: TRACE3 Standard: STD3
un Time: 03/19/02 13:11:08

Elem	CA	MG	K	NA
Avge	36.319	24.252	34.361	2.0723
#1	36.447	24.349	34.507	2.0811
#2	36.190	24.155	34.216	2.0635

Standardization Report 03/19/02 01:17:08 PM page 1

Method: TRACE3 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AL	308.215	Multiple	Standards	12892.4	-217.056	03/19/02 01:03:28
SB	206.838	Multiple	Standards	1652.26	-3.41156	03/19/02 01:03:28
AS	189.042	Multiple	Standards	1889.37	-.160593	03/19/02 01:03:28
BA	493.409	Multiple	Standards	253.458	.005397	03/19/02 01:03:28
BE	313.042	Multiple	Standards	330.364	1.31978	03/19/02 01:03:28
CD	226.502	Multiple	Standards	198.353	.187589	03/19/02 01:03:28
CA	317.933	STD3	STD0	1.16937	-.004964	03/19/02 01:11:08
CR	267.716	Multiple	Standards	780.526	-.034448	03/19/02 01:03:28
CO	228.616	Multiple	Standards	686.117	.336951	03/19/02 01:03:28
CU	324.753	Multiple	Standards	796.857	-9.08051	03/19/02 01:03:28
FE	271.441	Multiple	Standards	8289.54	-6.89337	03/19/02 01:03:28
PB	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
MG	279.078	STD3	STD0	1.25878	.000986	03/19/02 01:11:08
MN	257.610	Multiple	Standards	515.231	-.139156	03/19/02 01:03:28
NI	231.604	Multiple	Standards	418.694	1.28760	03/19/02 01:03:28
K	766.491	STD3	STD0	1.06973	-.009054	03/19/02 01:11:08
SE	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
AG	328.068	Multiple	Standards	1268.86	-1.16145	03/19/02 01:03:28
NA	330.232	STD3	STD0	1.14881	-.000338	03/19/02 01:11:08
TL	190.864	Multiple	Standards	3576.63	6.07525	03/19/02 01:03:28
V	292.402	Multiple	Standards	3384.91	-.473178	03/19/02 01:03:28
ZN	206.200	Multiple	Standards	1066.60	-1.78176	03/19/02 01:03:28
B	249.678	Multiple	Standards	911.626	-.183846	03/19/02 01:03:28
MO	202.030	Multiple	Standards	1019.81	.020633	03/19/02 01:03:28
SN	189.989	Multiple	Standards	1301.12	.312087	03/19/02 01:03:28
SR	421.552	Multiple	Standards	182.251	-.006092	03/19/02 01:03:28
TI	334.941	Multiple	Standards	283.036	-.082821	03/19/02 01:03:28
1/PB	220.351	Multiple	Standards	497.085	3.73791	03/19/02 01:03:28
2/PB	220.352	Multiple	Standards	390.354	-.433464	03/19/02 01:03:28
1/SE	196.021	Multiple	Standards	1290.59	2.71582	03/19/02 01:03:28
2/SE	196.022	Multiple	Standards	815.574	-.011440	03/19/02 01:03:28
SI	288.158	Multiple	Standards	2353.28	-131.173	03/19/02 01:03:28

Method: TRACE3

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AL	308.215	STD0	.000000	-1.43102	1.43102
		STD1	50000.0	50288.4	-288.406
		STD2	100000.	99432.0	568.000

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SB	206.838	STD0	.000000	-.014073	.014073
		STD1	1000.00	1005.55	-5.54755
		STD2	2000.00	1999.84	.163086

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AS	189.042	STD0	.000000	-.010326	.010326
		STD1	1000.00	997.507	2.49329
		STD2	2000.00	1986.75	13.2473

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BA	493.409	STD0	.000000	-.009078	.009078
		STD1	500.000	501.816	-1.81564
		STD2	1000.00	996.369	3.63129

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BE	313.042	STD0	.000000	-.001130	.001130
		STD1	50.0000	50.6976	-.697598
		STD2	100.000	100.491	-.490791

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CD	226.502	STD0	.000000	-.014040	.014040
		STD1	500.000	506.708	-6.70810
		STD2	1000.00	1002.18	-2.18384

CorCoef: 0.99998

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
CA	317.933	STD0	.049754	.046793	.002961
		STD3	42.4648	36.3185	6.14633

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CR	267.716	STD0	.000000	-.007769	.007769
		STD1	500.000	500.768	-.768219
		STD2	1000.00	995.321	4.67853

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CO	228.616	STD0	.000000	-.008044	.008044
		STD1	500.000	503.007	-3.00677
		STD2	1000.00	999.579	.421448

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CU	324.753	STD0	.000000	-.013627	.013627
		STD1	500.000	502.660	-2.65991
		STD2	1000.00	994.418	5.58179

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
FE	271.441	STD0	.000000	-.830110	.830110
		STD1	50000.0	50202.1	-202.129
		STD2	100000.	99740.2	259.828

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
PB	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
MG	279.078	STD0	.000799	-.000148	.000948
		STD3	30.5289	24.2520	6.27694

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MN	257.610	STD0	.000000	-.009663	.009663
		STD1	500.000	501.933	-1.93268
		STD2	1000.00	996.135	3.86536

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
NI	231.604	STD0	.000000	-.003888	.003888
		STD1	500.000	500.778	-.777618
		STD2	1000.00	998.445	1.55518

CorCoef: 1.00000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K	766.491	STD0	-.014685	-.005263	-.009421
		STD3	36.7485	34.3615	2.38700

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SE	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AG	328.068	STD0	.000000	-.001531	.001531
		STD1	50.0000	50.0372	-.037197
		STD2	100.000	98.8496	1.15039

CorCoef: 0.99997

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
NA	330.232	STD0	-.004853	-.003930	-.000923
		STD3	2.38033	2.07230	.308032

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TL	190.864	STD0	.000000	-.014789	.014789
		STD1	1000.00	1016.66	-16.6578
		STD2	2000.00	2021.48	-21.4841

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	STD0	.000000	-.008922	.008922
		STD1	500.000	496.499	3.50055
		STD2	1000.00	985.861	14.1389

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
ZN	206.200	STD0	.000000	-.014691	.014691
		STD1	500.000	502.938	-2.93820
		STD2	1000.00	994.124	5.87628

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	STD0	.000000	-.006898	.006898
		STD1	500.000	501.451	-1.45102
		STD2	1000.00	997.384	2.61603

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MO	202.030	STD0	.000000	-.002835	.002835
		STD1	500.000	500.567	-.566986
		STD2	1000.00	998.866	1.13397

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SN	189.989	STD0	.000000	.000210	-.000210
		STD1	500.000	500.593	-.592590
		STD2	1000.00	1001.35	-1.35284

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SR	421.552	STD0	.000000	-.014409	.014409
		STD1	500.000	502.882	-2.88174
		STD2	1000.00	994.237	5.76349

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TI	334.941	STD0	.000000	-.005191	.005191
		STD1	500.000	501.038	-1.03815
		STD2	1000.00	997.924	2.07635

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/PB	220.351	STD0	.000000	-.014850	.014850
		STD1	500.000	536.046	-36.0460
		STD2	1000.00	1060.21	-60.2120

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/PB	220.352	STD0	.000000	-.006001	.006001
		STD1	500.000	487.669	12.3312
		STD2	1000.00	970.537	29.4634

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/SE	196.021	STD0	.000000	-.039342	.039342
		STD1	1000.00	1008.21	-8.20789
		STD2	2000.00	1984.94	15.0577

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/SE	196.022	STD0	.000000	-.021729	.021729
		STD1	1000.00	985.841	14.1588
		STD2	2000.00	1954.30	45.7008

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SI	288.158	STD0	.000000	-.006617	.006617
		STD1	500.000	549.523	-49.5233
		STD2	1000.00	1093.75	-93.7515

CorCoef: 1.00000

Analysis Report QC Standard 03/19/02 01:28:42 PM page 1

Method: TRACE3 Sample Name: IVICV Operator: LCM
Run Time: 03/19/02 13:21:09
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5010.309	402.1733	412.5047	403.1246	40.31617	41.17101	5030.195
#1	5002.491	402.5473	413.1297	402.4413	40.27225	41.20779	5029.127
#2	5018.127	401.7992	411.8797	403.8078	40.36010	41.13423	5031.263
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	408.0843	400.8666	398.8452	5053.579	406.7701	4960.175	404.7097
#1	408.1664	400.1027	398.5937	5058.084	405.8866	4955.432	404.7085
#2	408.0022	401.6305	399.0967	5049.075	407.6536	4964.917	404.7110
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	Q438.9153	4896.476	409.9533	40.78904	10038.33	406.0481	404.9840
#1	Q449.5784	4886.442	408.8543	40.60365	9993.733	402.7780	404.4827
#2	Q428.2522	4906.509	411.0523	40.97443	10082.93	409.3182	405.4853
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	406.7171	405.4888	405.8341	403.0174	403.5596	405.5114	408.5596
#1	406.3852	404.4316	403.6988	402.4522	402.9536	404.7730	407.4400
#2	407.0489	406.5460	407.9694	403.5826	404.1655	406.2498	409.6791
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	405.8750	410.3309	409.7642	435.9752
#1	405.1095	404.5366	411.0129	437.0008
#2	406.6405	416.1253	408.5156	434.9495
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				400.0000
Range				10.00000

Method: TRACE3 Sample Name: IVICV Operator: LCM
Run Time: 03/19/02 13:39:14
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5100.053	410.2192	417.7708	411.2786	40.99668	41.87012	5093.936
#1	5047.938	406.7836	416.4911	406.8316	40.55072	41.40093	5038.901
#2	5152.167	413.6548	419.0505	415.7257	41.44264	Q42.33931	5148.972
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	416.8809	409.3775	403.6386	5135.455	412.0546	5078.713	410.8843
#1	412.5872	404.7304	399.5529	5079.032	408.6440	5027.443	406.7239
#2	Q421.1746	414.0247	407.7242	5191.878	415.4651	5129.983	415.0447
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	Q421.5760	4981.232	414.7282	41.34814	10232.02	411.5896	411.7879
#1	417.4503	4935.235	410.6439	40.92402	10128.32	406.4602	406.9994
#2	Q425.7017	5027.230	418.8126	41.77226	10335.71	416.7190	416.5764
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	415.4347	411.8247	412.4517	411.4345	411.0163	414.8200	419.1464
#1	410.9510	406.7693	408.1163	406.2373	406.3154	410.2359	415.0441
#2	419.9184	416.8800	416.7872	416.6317	415.7172	419.4039	423.2487
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	408.5082	417.7392	413.2225	Q444.1028
#1	405.4436	412.0702	409.9304	438.5066
#2	411.5729	423.4081	416.5145	Q449.6989
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				400.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 02:01:40 PM page 1

Method: TRACE3 Sample Name: IVICV Operator: LCM
Run Time: 03/19/02 13:54:07
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5013.002	406.8314	411.1120	404.3353	40.32629	41.29089	5022.518
#1	5011.008	406.1701	411.1655	404.6003	40.33175	41.30037	5020.904
#2	5014.996	407.4928	411.0584	404.0702	40.32084	41.28140	5024.131
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	407.9355	401.8084	398.0404	5035.484	409.4219	4986.913	403.7241
#1	408.2289	401.7045	398.1010	5028.333	409.3656	4985.257	403.6995
#2	407.6422	401.9123	397.9799	5042.635	409.4782	4988.568	403.7486
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	409.2187	4927.133	410.4647	40.71727	9985.750	406.6014	405.1209
#1	409.2779	4925.094	410.9402	40.44748	9922.836	408.6113	404.7943
#2	409.1595	4929.172	409.9892	40.98706	10048.67	404.5914	405.4474
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	407.8038	403.7203	404.8055	407.3573	405.0747	406.0827	409.5817
#1	408.1853	403.5215	404.7332	407.8169	405.3329	406.0073	410.2201
#2	407.4222	403.9191	404.8777	406.8976	404.8166	406.1581	408.9434
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	409.3416	410.2953	410.5491	432.1753
#1	408.9380	410.4062	411.2070	432.4248
#2	409.7452	410.1845	409.8913	431.9259
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				400.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 02:09:19 PM page 1

Method: TRACE3 Sample Name: BIICB Operator: LCM
Run Time: 03/19/02 14:01:46
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	8.102531	-.724930	-1.04429	.1810858	-.046954	.1727338	-9.49566
#1	13.03585	-1.30173	2.011806	.1820104	-.076131	.1508013	-10.0165
#2	3.169216	-.148133	-4.10039	.1801611	-.017778	.1946662	-8.97480
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.003092	.2972374	-.315256	18.36637	-.366706	4.924767	.3100284
#1	.7903300	.0594148	-.482942	14.34613	.0815741	4.738420	.2893517
#2	1.215855	.5350601	-.147570	22.38662	-.814987	5.111115	.3307051
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	7.169765	.8313793	2.812656	.2129680	-55.5070	.8383152	-.015404
#1	6.840292	-3.76076	2.589929	-.106090	-287.371	1.811707	-.242039
#2	7.499237	5.423519	3.035384	.5320262	176.3570	-.135077	.2112323
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.4838098	.7312980	.3612396	.6289379	.1081624	-.032524	-1.32868
#1	.4718843	.3284523	.0894026	.0197452	.1372891	-.095545	.0867017
#2	.4957352	1.134144	.6330765	1.238131	.0790357	.0304969	-2.74407
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.1139462	-.010310	4.223735	-2.35441
#1	.0786732	.1917852	3.788595	-1.46577
#2	.1492193	-.212406	4.658875	-3.24306
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

nalysis Report QC Standard 03/19/02 02:16:58 PM page 1

ethod: TRACE3 Sample Name: CVCCV Operator: LCM
un Time: 03/19/02 14:09:25
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50531.39	1011.030	1009.445	502.7746	49.77864	495.6590	99624.62
#1	50533.30	1010.549	1010.563	502.4386	49.79074	495.5141	99590.98
#2	50529.48	1011.510	1008.328	503.1105	49.76654	495.8039	99658.26
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	498.0181	493.0990	500.0539	49301.13	495.7368	99231.94	496.7912
#1	497.6712	493.0668	500.1814	49281.53	495.0477	99222.66	496.5511
#2	498.3650	493.1312	499.9264	49320.74	496.4259	99241.20	497.0313
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	494.2462	25059.98	1007.539	50.64680	100334.8	1000.605	499.9153
#1	494.9619	25073.53	1006.419	50.48568	100531.6	999.0244	499.8604
#2	493.5305	25046.44	1008.660	50.80792	100137.9	1002.185	499.9703
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	490.8897	507.4401	501.0586	501.3089	504.1587	505.1791	499.4593
#1	490.5248	507.7565	500.4432	501.7119	503.9954	504.7673	498.8066
#2	491.2547	507.1236	501.6740	500.9058	504.3220	505.5909	500.1120
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	493.8752	1012.460	1005.079	522.7153
#1	493.1679	1010.712	1004.272	519.6271
#2	494.5826	1014.208	1005.885	525.8036
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

ethod: TRACE3 Sample Name: BCCCB Operator: LCM
un Time: 03/19/02 14:17:04
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	14.28601	.0803804	-.892588	.1100403	-.028091	.2564148	8.136668
#1	19.07301	1.126821	-1.76521	.0698760	-.040006	.2316981	12.52114
#2	9.499014	-.966060	-.019965	.1502046	-.016175	.2811315	3.752198
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.356873	.2590104	.0784773	21.87603	.0743069	17.74046	.1689590
#1	1.410020	.4635202	-.013521	22.60675	.6017259	23.15984	.1944836
#2	1.303726	.0545005	.1704758	21.14532	-.453112	12.32108	.1434344
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	2.633773	1.045924	.2668187	-.067680	-67.3498	2.420963	-.426572
#1	2.401155	5.389366	-.655592	-.104917	50.82682	3.425740	-.309106
#2	2.866391	-3.29752	1.189229	-.030443	-185.526	1.416187	-.544037
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.2051852	.6337725	.6071864	.4017977	.0945662	.0214461	-.070451
#1	.3396208	.6805534	.6810135	.4022983	.1119249	.0480942	1.035373
#2	.0707496	.5869916	.5333594	.4012970	.0772074	-.005202	-1.17628
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.1463583	-.420461	.6101824	.4901407
#1	.3845557	-1.43309	-.267122	.5695232
#2	-.091839	.5921651	1.487487	.4107583
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

nalysis Report QC Standard 03/19/02 02:32:15 PM page 1

lethod: TRACE3 Sample Name: PQL-LOWCHECK Operator: LCM
un Time: 03/19/02 14:24:43
omment: UG/L
lode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	203.3130	20.71396	21.57700	5.145968	2.022945	3.215494	949.8826
#1	201.4146	21.26009	19.66801	5.102639	2.040122	3.131610	951.8519
#2	205.2113	20.16783	23.48600	5.189298	2.005767	3.299377	947.9133
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.869430	5.200378	9.819792	151.6500	10.55812	244.2025	5.245012
#1	5.484161	5.175301	9.435997	145.0829	10.00028	240.4375	5.219119
#2	Q6.254697	5.225456	10.20359	158.2172	11.11596	247.9675	5.270905
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	Q16.29616	227.1679	22.24191	3.023225	2586.857	28.95577	10.06012
#1	Q15.91732	226.7687	21.05853	3.122285	2474.362	30.37457	10.05061
#2	Q16.67499	227.5670	23.42528	2.924164	2699.352	27.53698	10.06964
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	250.0000	20.00000	3.000000	2500.000	30.00000	10.00000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	20.02184	16.08966	4.958381	23.25964	5.027505	24.00683	9.005456
#1	19.88883	15.82315	5.030856	22.86370	5.023117	23.95905	7.998397
#2	20.15486	16.35616	4.885905	23.65557	5.031893	24.05460	10.01252
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	11.33411	18.85896	23.93304	Q22.11381
#1	11.00087	14.00082	24.58697	Q20.04408
#2	11.66735	23.71711	23.27910	Q24.18355
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				50.00000
Range				20.00000

nalysis Report QC Standard 03/19/02 02:39:54 PM page 1

Method: TRACE3 Sample Name: CRCRI Operator: LCM
Run Time: 03/19/02 14:32:22
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	405.5983	124.5527	22.50204	410.5048	10.15232	10.63021	505.9996
#1	403.2917	124.8066	22.26652	410.2200	10.15524	10.47104	505.0408
#2	407.9049	124.2989	22.73757	410.7897	10.14940	10.78938	506.9585
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	20.31471	102.0669	50.28711	212.9040	6.031980	514.4501	31.67180
#1	20.37326	102.2733	50.15008	212.5996	5.473325	513.2199	31.65209
#2	20.25615	101.8605	50.42415	213.2083	6.590634	515.6802	31.69151
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	80.47897	514.7228	11.08585	20.90947	1171.568	20.33110	102.9213
#1	79.90768	515.9731	12.29024	21.16034	Q1251.246	20.08735	103.1792
#2	81.05026	513.4724	9.881472	20.65859	1091.889	20.57485	102.6634
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	43.00085	18.00919	5.522900	26.92975	5.149057	26.10225	5.413411
#1	42.96002	18.44470	5.318612	27.40553	5.130759	26.06825	5.075792
#2	43.04167	17.57367	5.727188	26.45398	5.167355	26.13626	5.751030
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	6.340992	12.51500	10.37094	12.21877
#1	5.671820	11.75157	12.55923	13.29116
#2	7.010165	13.27843	8.182653	11.14638
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 03/19/02 02:47:32 PM page 1

Method: TRACE3 Sample Name: IAICSAI Operator: LCM
Run Time: 03/19/02 14:40:00
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	493959.2	-.266716	.4759045	1.691045	.2470535	-.418705	494884.9
#1	493624.5	-1.84154	-1.29172	1.649572	.2629842	-.283937	494626.3
#2	494294.0	1.308104	2.243528	1.732518	.2311228	-.553472	495143.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	20.00000	20.00000	5.000000	2.000000	3.000000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.2183255	.9702798	1.442254	194606.5	.8171980	488599.5	Q10.01707
#1	.3255932	.8426728	1.047497	194468.8	.8965682	488569.1	9.999111
#2	.1110578	1.097887	1.837012	194744.2	.7378278	488629.9	Q10.03504
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	40000.00	6.000000	100000.0	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.263299	-7.02690	8.140730	-.157878	103.7324	10.09330	1.854481
#1	4.395971	-11.1947	7.896699	-.158547	33.77148	10.20310	1.522515
#2	4.130628	-2.85911	8.384761	-.157209	173.6933	9.983494	2.186448
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	10.00000	3.000000	2500.000	20.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	37.87338	-3.85003	.8043283	3.216288	Q6.997387	1.864116	-3.07727
#1	37.57974	-3.38188	1.049705	5.155096	Q6.995498	1.848426	-4.40741
#2	38.16702	-4.31817	.5589516	1.277480	Q6.999276	1.879806	-1.74713
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.764015	17.04049	3.690426	23.66571
#1	3.548157	17.18951	3.249870	24.00871
#2	1.979874	16.89147	4.130981	23.32272
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Analysis Report 03/19/02 02:59:21 PM page 1

Method: TRACE3 Sample Name: FE:500PPM Operator: LCM
Run Time: 03/19/02 14:51:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41.72493	.2485900	-3.60721	2.154280	-.494421	L-7.78211	34.29675
#1	53.61638	2.379335	-1.70250	2.138104	-.493701	L-7.89699	45.40246
#2	29.83348	-1.88216	-5.51191	2.170455	-.495142	L-7.66724	23.19104
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.755330	.8362472	3.173037	512775.3	.6654935	128.3356	-.687364
#1	1.651059	1.068179	3.309372	512589.5	.7605137	138.9273	-.728202
#2	1.859601	.6043153	3.036703	512961.1	.5704733	117.7438	-.646526
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.305648	13.86541	L-109.947	1.373174	269.0487	149.5955	3.280287
#1	4.274552	17.76985	L-109.369	1.662626	421.0739	150.0983	3.636081
#2	4.336745	9.960980	L-110.525	1.083721	117.0235	149.0927	2.924494
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	8.029850	-10.3542	-.539841	2.707774	.1774022	.1373132	-2.27217
#1	8.144235	-9.50142	-.026003	3.881840	.1856001	.2342928	-2.95926
#2	7.915464	-11.2070	-1.05368	1.533707	.1692043	.0403335	-1.58508
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.133935	9.993796	-169.918	9.024717
#1	2.620052	12.95619	-170.532	9.269731
#2	1.647818	7.031405	-169.304	8.779704
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002041

Analysis Report QC Standard 03/19/02 03:34:58 PM page 1

Method: TRACE3 Sample Name: IVICV Operator: LCM
Run Time: 03/19/02 15:27:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5054.451	403.9661	405.2500	401.7663	40.42023	40.91345	5021.575
#1	5100.547	408.4532	407.1013	404.5230	40.67337	41.10899	5056.055
#2	5008.355	399.4789	403.3987	399.0096	40.16709	40.71790	4987.096
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	403.5543	398.5911	402.3220	5034.411	404.7541	4893.542	402.8169
#1	406.0513	400.8094	405.1868	5066.257	406.4779	4925.120	405.5205
#2	401.0573	396.2928	399.4573	5002.565	403.0303	4861.964	400.1132
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	399.8453	4929.904	406.6684	41.12266	10376.98	403.8000	405.6913
#1	401.7025	4972.959	406.7102	41.57495	Q10528.83	405.4505	408.7861
#2	397.9880	4886.849	406.6266	40.67037	10225.14	402.1495	402.5966
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	402.3143	403.0286	405.4246	395.5064	403.4410	402.9389	408.0427
#1	404.0330	405.5972	407.2762	398.7912	406.5282	405.5272	409.9931
#2	400.5957	400.4600	403.5731	392.2216	400.3539	400.3506	406.0922
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	403.1095	408.1878	405.9084	429.4559
#1	404.7200	409.8991	405.1154	432.6617
#2	401.4990	406.4765	406.7013	426.2500
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				400.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 03:42:37 PM page 1

Method: TRACE3 Sample Name: BIICB Operator: LCM
Run Time: 03/19/02 15:35:04
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-4.31593	-1.52066	-2.30497	.0692947	.0032472	.0246269	6.083110
#1	-5.69189	-1.00222	-1.70699	.0922094	-.000365	.0731564	6.927136
#2	-2.93998	-2.03909	-2.90296	.0463800	.0068591	-.023903	5.239085
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7813442	.3920781	-.021263	12.38613	-.020461	4.921938	.0974377
#1	.7856587	.3681723	-.110158	15.41748	-.483251	4.583979	.1079048
#2	.7770297	.4159839	.0676324	9.354774	.4423302	5.259896	.0869706
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	2.180546	1.520509	.7137554	.1223530	57.57512	-1.43877	.2330056
#1	1.574413	-1.07053	1.196088	-.147307	9.706632	-2.25937	-.005281
#2	2.786678	4.111554	.2314224	.3920131	105.4436	-.618179	.4712923
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.847320	.5603198	.5841016	1.525147	.0691291	.0116785	.3940639
#1	2.943078	.3990089	.3466419	1.025160	.0896227	-.031118	.5965061
#2	2.751561	.7216307	.8215612	2.025135	.0486355	.0544750	.1916218
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.228067	2.807373	-.333396	-1.03580
#1	-1.02347	4.866720	-.639567	-1.11758
#2	.5673378	.7480265	-.027226	-.954020
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE3 Sample Name: CVCCV Operator: LCM
Run Time: 03/19/02 15:42:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50754.13	1015.955	1019.611	499.4304	50.27468	499.4835	100334.4
#1	50797.32	1015.719	1025.216	499.7800	50.36278	500.5926	100552.4
#2	50710.94	1016.192	1014.005	499.0808	50.18658	498.3744	100116.4
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	499.1901	495.2939	503.4983	49744.42	497.9785	98910.37	499.9299
#1	500.3940	496.6900	503.7826	49837.94	499.2757	99157.26	500.8360
#2	497.9861	493.8978	503.2139	49650.90	496.6812	98663.48	499.0239
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	498.9830	24915.73	1003.558	51.59379	100585.0	1002.578	504.4941
#1	499.8453	24899.75	1004.514	51.29818	100523.2	1005.675	505.7341
#2	498.1208	24931.71	1002.602	51.88940	100646.8	999.4801	503.2542
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	494.7049	506.4165	506.8619	504.5994	502.4801	502.5718	498.4873
#1	496.3989	507.6895	506.0389	504.9050	503.1355	503.3549	499.1688
#2	493.0110	505.1436	507.6849	504.2938	501.8247	501.7886	497.8059
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	497.7236	999.3881	1005.643	519.9983
#1	499.3288	1001.726	1005.908	520.3512
#2	496.1184	997.0498	1005.378	519.6455
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 03:57:55 PM page 1

Method: TRACE3 Sample Name: BCCCB Operator: LCM
Run Time: 03/19/02 15:50:22
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	2.548936	-.397387	-1.56054	.1619894	.0619252	.1468879	18.57569
#1	1.944876	-1.11811	-.957708	.1525063	.0880106	.1338805	22.97142
#2	3.152997	.3233331	-2.16336	.1714725	.0358398	.1598953	14.17995
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3513551	.3843269	.0481156	8.826570	-.190435	17.51758	.0633105
#1	.3490073	.1686688	-.239636	7.352425	-.292511	20.98782	.0678743
#2	.3537028	.5999851	.3358669	10.30071	-.088359	14.04734	.0587466
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6949585	4.357996	2.231030	.2486099	-39.0244	.6300765	.1408898
#1	.7361466	6.391907	3.381167	.3398243	-5.99572	-1.90387	.2148604
#2	.6537703	2.324084	1.080893	.1573954	-72.0530	3.164020	.0669191
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.3150706	1.157383	1.060750	2.503633	.0879760	.0580999	-1.01199
#1	.1706725	1.118606	1.386566	2.490637	.0996874	-.120731	-.346279
#2	.4594687	1.196161	.7349334	2.516631	.0762646	.2369305	-1.67770
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.2200049	1.713677	2.489437	-4.04917
#1	-.265961	4.444254	2.849357	-5.80990
#2	.7059711	-1.01690	2.129518	-2.28844
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Analysis Report QC Standard 03/19/02 04:05:33 PM page 1

Method: TRACE3 Sample Name: PQL-LOWCHECK Operator: LCM
Run Time: 03/19/02 15:58:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	192.4997	19.11426	21.39743	5.164503	2.088759	3.218955	973.5814
#1	191.1692	17.32268	20.51629	5.131452	2.078626	3.203676	968.2134
#2	193.8303	20.90584	22.27857	5.197555	2.098893	3.234233	978.9495
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.608062	5.321737	10.37314	153.6188	9.457766	247.1256	5.113278
#1	4.919419	5.037771	9.920981	150.8820	9.969270	243.3217	5.112003
#2	Q6.296704	5.605703	10.82530	156.3557	8.946261	250.9294	5.114554
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	Q12.60159	227.3930	21.04885	3.258815	2613.758	30.91829	10.30566
#1	Q12.49870	223.5532	20.68943	3.083540	2537.627	32.50554	10.03321
#2	Q12.70449	231.2327	21.40827	3.434090	2689.889	29.33105	10.57811
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	250.0000	20.00000	3.000000	2500.000	30.00000	10.00000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	20.33012	15.34024	5.411046	25.55006	5.033084	23.97991	10.63892
#1	20.32352	15.24271	5.356703	24.73153	5.006609	23.74783	11.15369
#2	20.33672	15.43777	5.465389	26.36860	5.059558	24.21199	10.12415
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	8.866778	23.07491	20.03551	Q20.82211
#1	9.376652	21.88188	20.09291	Q20.41771
#2	8.356905	24.26793	19.97811	Q21.22650
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				50.00000
Range				20.00000

Analysis Report QC Standard 03/19/02 04:13:12 PM page 1

Method: TRACE3 Sample Name: CRCRI Operator: LCM
Run Time: 03/19/02 16:05:40
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	401.1144	123.6709	19.63488	410.3951	10.15584	10.41664	513.6469
#1	404.3855	122.7279	18.72760	410.8148	10.14978	10.47833	515.3027
#2	397.8434	124.6139	20.54217	409.9754	10.16190	10.35495	511.9912
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	20.14438	101.6624	50.69929	208.3137	7.232185	507.9612	31.64882
#1	19.90372	101.1535	51.04321	212.7699	5.923402	508.6642	31.68078
#2	20.38504	102.1713	50.35539	203.8575	Q8.540968	507.2582	31.61686
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	79.23752	508.0393	11.32166	20.13704	1049.893	21.79885	102.9295
#1	78.58164	505.3945	12.01858	19.92261	954.7939	22.47444	103.3405
#2	79.89339	510.6841	10.62475	20.35146	1144.992	21.12326	102.5185
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	42.36272	17.19461	5.370762	28.45149	5.157867	25.81168	9.097517
#1	42.55885	16.70267	5.261291	28.46357	5.176513	25.81744	7.945571
#2	42.16660	17.68655	5.480232	28.43940	5.139223	25.80592	10.24946
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	6.299245	15.24702	9.358661	11.50542
#1	4.912043	17.17397	9.440575	10.27303
#2	7.686448	13.32008	9.276747	12.73781
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 03/19/02 04:23:00 PM page 1

Method: TRACE3 Sample Name: IAICSAI Operator: LCM
Run Time: 03/19/02 16:15:28
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	497656.4	1.441031	-2.63625	1.682290	.3407415	.1766067	494696.2
#1	498162.1	1.433501	-4.29140	1.639968	.3749292	.0567589	495348.0
#2	497150.7	1.448560	-.981105	1.724612	.3065538	.2964544	494044.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	20.00000	20.00000	5.000000	2.000000	3.000000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.5394583	1.322123	1.522042	194201.8	.8807799	482519.7	9.737490
#1	.8306785	1.585151	1.314111	194453.1	1.508575	482829.5	9.716283
#2	.2482381	1.059094	1.729972	193950.5	.2529843	482209.8	9.758698
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	40000.00	6.000000	100000.0	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.245019	-4.87425	-2.27887	.5186697	241.9228	-6.07304	1.539799
#1	3.845136	-7.88366	-5.37597	.7064010	217.9297	-10.8681	1.618475
#2	4.644902	-1.86484	.8182374	.3309384	265.9159	-1.27801	1.461124
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	10.00000	3.000000	2500.000	20.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	38.38502	-2.43163	.9731896	3.467421	Q7.018772	2.185176	-5.54491
#1	38.19197	-2.77986	.6410877	3.000679	Q6.992792	2.252212	-.171234
#2	38.57808	-2.08339	1.305292	3.934163	Q7.044752	2.118141	-10.9186
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	4.093254	11.86826	-9.35279	24.41201
#1	2.348114	12.33158	-14.2301	23.43894
#2	5.838394	11.40494	-4.47547	25.38509
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Analysis Report QC Standard 03/19/02 04:30:42 PM page 1

Method: TRACE3 Sample Name: IBICSABI Operator: LCM
Run Time: 03/19/02 16:23:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	501124.2	611.7692	102.7109	520.8602	494.2511	972.5841	497739.4
#1	502023.1	614.7944	106.3137	521.9772	495.4974	974.6145	498947.1
#2	500225.3	608.7440	99.10802	519.7432	493.0049	970.5536	496531.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	491.7037	482.2007	529.2711	196886.6	48.90456	486964.8	508.5059
#1	493.1282	483.2841	529.7946	197369.9	48.36315	488087.2	509.6951
#2	490.2792	481.1173	528.7477	196403.3	49.44597	485842.4	507.3167
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	944.1090	5446.042	48.27190	214.4794	5594.545	96.35515	506.9570
#1	946.8628	5456.054	46.78078	214.7597	5655.753	96.86373	507.7027
#2	941.3550	5436.031	49.76302	214.1991	5533.336	95.84656	506.2112
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	976.5126	1060.585	989.5830	981.9656	Q7.521584	987.3853	39.85301
#1	979.2332	1063.314	991.7736	983.6482	Q7.552394	989.7348	40.58484
#2	973.7921	1057.856	987.3925	980.2830	Q7.490773	985.0357	39.12118
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	53.42997	59.25844	42.77824	Q1414.336
#1	52.25201	59.56684	40.38732	Q1416.807
#2	54.60793	58.95004	45.16915	Q1411.864
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Method: TRACE3 Sample Name: LR Operator: LCM
Run Time: 03/19/02 16:32:52
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	244892.9	4910.116	2077.315	9924.348	492.8799	2047.683	58.85677
#1	242271.2	4856.109	2056.649	9825.901	487.8227	2026.461	71.46818
#2	247514.6	4964.123	2097.981	10022.80	497.9372	2068.904	46.24535
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	250000.0	5000.000	2000.000	10000.00	500.0000	2000.000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	9697.831	9881.959	10199.37	505481.5	19682.67	122.4401	9597.481
#1	9595.422	9782.542	10096.37	500265.5	19511.90	134.6173	Q9498.554
#2	9800.240	9981.375	10302.37	510697.5	19853.44	110.2630	9696.409
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass
Value	10000.00	10000.00	10000.00	500000.0	20000.00		10000.00
Range	5.000000	5.000000	5.000000	5.000000	5.000000		5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	7262.893	10.38880	2018.048	1017.467	198.4229	2011.784	9987.070
#1	7193.501	10.38710	2002.502	1009.096	129.7624	1992.170	9879.093
#2	7332.284	10.39051	2033.594	1025.838	267.0834	2031.398	10095.05
Errors	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	7500.000		2000.000	1000.000		2000.000	10000.00
Range	5.000000		5.000000	5.000000		5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4765.599	4993.983	9654.962	4.295518	1966.449	9715.191	19752.04
#1	Q4719.706	4945.944	9553.237	5.154631	1947.799	9617.270	19585.95
#2	4811.492	5042.022	9756.686	3.436406	1985.099	9813.113	19918.13
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK
Value	5000.000	5000.000	10000.00		2000.000	10000.00	
Range	5.000000	5.000000	5.000000		5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	19647.99	2034.859	2009.643	-606.656
#1	19474.87	2020.564	1993.471	-601.543
#2	19821.10	2049.154	2025.814	-611.768
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 03/19/02 04:51:56 PM page 1

Method: TRACE3 Sample Name: CVCCV3 Operator: LCM
Run Time: 03/19/02 16:44:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50809.48	1018.127	1015.121	498.7726	50.28170	499.9783	100030.7
#1	50788.31	1016.911	1016.243	499.0825	50.19214	498.9504	99888.02
#2	50830.65	1019.342	1013.998	498.4627	50.37125	501.0063	100173.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	499.6587	496.4288	502.2569	49712.77	502.6721	98973.66	500.4688
#1	499.3801	496.3613	502.1956	49657.69	504.3009	98904.69	500.1906
#2	499.9374	496.4962	502.3182	49767.85	501.0432	99042.63	500.7469
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	493.3248	24907.24	1005.420	51.74923	100654.6	996.3970	505.0264
#1	494.1913	24914.58	1002.923	51.88864	100688.2	995.3021	504.4853
#2	492.4583	24899.90	1007.917	51.60982	100621.0	997.4920	505.5675
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	495.7391	511.1616	509.7369	502.7634	502.6471	503.2736	503.9180
#1	494.8005	510.4696	508.7829	500.6258	502.4496	503.2826	503.7673
#2	496.6777	511.8537	510.6908	504.9010	502.8445	503.2647	504.0688
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	502.0487	1010.720	1002.770	520.5732
#1	504.5674	1006.740	1001.015	519.5580
#2	499.5300	1014.701	1004.525	521.5883
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

nalysis Report QC Standard 03/19/02 04:59:34 PM page 1

ethod: TRACE3 Sample Name: BCCCB3 Operator: LCM
un Time: 03/19/02 16:52:02
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	3.705054	-.227608	.7857422	.2725639	.0014289	.2467209	21.64245
#1	5.874883	.9579642	.1863377	.3386245	-.021003	.3388143	26.18837
#2	1.535226	-1.41318	1.385147	.2065034	.0238610	.1546275	17.09652
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1339660	.3443482	.6739474	20.05800	-.412297	24.57311	.1937130
#1	.0720352	.4764309	.6373266	21.08202	-.009443	27.85338	.2228950
#2	.1958968	.2122655	.7105682	19.03398	-.815152	21.29284	.1645310
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6944013	3.947383	2.787916	.1474210	26.87996	3.165859	.3477277
#1	.5473169	1.748130	4.051672	-.240947	-47.8238	.4939444	.3895536
#2	.8414856	6.146636	1.524159	.5357887	101.5837	5.837774	.3059019
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.5514640	2.130665	2.887205	.1497336	.1261113	.1192821	-3.02463
#1	.7568617	2.192531	3.626828	-.219036	.1550244	.1930567	-2.64202
#2	.3460662	2.068799	2.147582	.5185031	.0971982	.0455076	-3.40723
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.8935258	.6818963	3.840584	-2.80884
#1	1.306506	2.920054	4.617209	-1.87254
#2	.4805458	-1.55626	3.063958	-3.74514
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

:ethod: TRACE3 Sample Name: S 203029-009-01-1/1 Operator: LCM
.un Time: 03/19/02 17:01:19
:omment: UG/L 2
:ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5.229654	-.936474	-1.61122	15.22831	-.019839	.0751304	14373.10
#1	5.508237	-2.54852	-.538238	15.25666	-.052143	.0111344	14393.43
#2	4.951072	.6755694	-2.68420	15.19995	.0124650	.1391265	14352.77
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	7.937249	-.053297	.7623869	-34.4542	-.675225	37451.59	.9025160
#1	7.354420	-.658333	.4057486	-39.2326	-.861809	37515.50	.9130037
#2	8.520079	.5517395	1.119025	-29.6758	-.488641	37387.66	.8920283
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.272928	10985.17	2.946583	.0628371	282766.9	.0650179	.0633341
#1	1.326464	10994.13	4.432135	-.454959	282890.1	1.533186	-.372430
#2	1.219392	10976.22	1.461031	.5806337	282643.6	-1.40315	.4990980
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.237290	173.7906	1.454694	1.177875	232.9340	.1935923	-.504935
#1	3.416032	172.6950	1.274904	-1.83175	233.3111	.0813813	-2.14496
#2	3.058549	174.8861	1.634483	4.187504	232.5568	.3058032	1.135088
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.760683	1.936973	3.450970	440.3669
#1	-.220548	1.308337	5.993614	440.3813
#2	-1.30082	2.565608	.9083252	440.3525
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 05:17:05 PM page 1

Method: TRACE3 Sample Name: D 203029-009-01-1/1 Operator: LCM
Run Time: 03/19/02 17:09:15
Comment: UG/L 2
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	11.26914	-.780231	-1.68594	15.95364	.0089876	.0888234	15292.74
#1	11.68740	.9295032	-2.27890	15.96990	.0493736	.0868420	15314.69
#2	10.85088	-2.48996	-1.09298	15.93739	-.031398	.0908048	15270.79
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	8.578215	.2099788	.5159756	-57.6772	.7616503	39923.83	.8442776
#1	8.407888	.0748594	.3892493	-63.2866	1.359024	39981.17	.7918156
#2	8.748542	.3450981	.6427020	-52.0677	.1642764	39866.48	.8967397
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.926465	11518.41	1.958411	.4089993	296911.7	.5922904	.0617088
#1	1.500982	11559.46	1.373477	.4549007	297982.8	-2.42972	.1815552
#2	2.351949	11477.37	2.543346	.3630979	295840.7	3.614305	-.058138
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.857222	183.0501	1.543149	2.343453	245.6173	.2217637	1.481061
#1	3.802310	183.9666	2.028696	1.999624	246.2164	.2777946	.9842319
#2	3.912133	182.1336	1.057603	2.687283	245.0181	.1657328	1.977890
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.4016160	1.446047	2.214176	464.2617
#1	1.546107	.4443154	1.837640	463.4359
#2	-.742875	2.447777	2.590714	465.0876
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 05:25:00 PM page 1

Method: TRACE3 Sample Name: SP203029-009-01-1/1 Operator: LCM
Run Time: 03/19/02 17:17:10
Comment: UG/L 2
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	2461.189	22.09267	24.10799	262.2084	12.36407	24.87521	18220.90
#1	2497.389	21.43400	23.73717	265.9510	12.51963	25.30938	18470.65
#2	2424.988	22.75133	24.47881	258.4657	12.20852	24.44103	17971.15
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	131.7867	123.7117	124.9451	2420.804	248.2631	42938.69	125.5915
#1	133.6435	125.3526	126.8025	2463.114	252.0795	43545.03	127.2798
#2	129.9300	122.0708	123.0877	2378.494	244.4466	42332.36	123.9032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	123.5608	14227.55	24.61969	24.78210	305324.0	25.08299	124.9613
#1	124.8207	14435.09	25.47861	25.18889	309614.8	27.16938	126.9579
#2	122.3009	14020.00	23.76078	24.37532	301033.3	22.99659	122.9647
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	256.9221	428.9617	120.5006	1.574444	493.9836	.3355532	248.6172
#1	260.2168	434.5552	121.9806	1.997699	501.2172	.3756546	250.8551
#2	253.6276	423.3681	119.0207	1.151190	486.7500	.2954517	246.3793
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	248.0850	23.43363	25.21234	471.5167
#1	252.6907	24.71265	25.86124	479.7862
#2	243.4793	22.15461	24.56344	463.2470
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 05:32:56 PM page 1

Method: TRACE3 Sample Name: PS203029-009-01-1/1 Operator: LCM
Run Time: 03/19/02 17:25:05
Comment: UG/L 2
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1054.717	83.14899	83.06422	35.79311	10.45366	21.14642	19939.25
#1	1074.057	85.29452	83.10053	36.47768	10.60375	21.50591	20263.51
#2	1035.377	81.00346	83.02792	35.10853	10.30358	20.78694	19615.00
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	29.07207	31.63435	32.01604	1010.344	32.11075	43216.98	22.10267
#1	29.81154	31.99928	32.78951	1031.080	33.68348	43889.43	22.47869
#2	28.33260	31.26942	31.24257	989.6084	30.53801	42544.52	21.72665
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	42.90492	16346.48	74.13434	42.22841	289902.2	104.1893	21.60445
#1	43.74356	16588.56	73.95145	42.58598	294205.4	105.5533	21.89336
#2	42.06627	16104.40	74.31722	41.87084	285599.0	102.8252	21.31553
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	89.29715	248.4273	32.96634	107.3095	256.4978	21.17798	31.45882
#1	90.97635	252.1555	33.89324	109.2365	260.8879	21.51451	31.58015
#2	87.61795	244.6992	32.03945	105.3825	252.1076	20.84145	31.33749
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	32.43629	75.12344	73.63948	6106.215
#1	34.73472	74.28857	73.78255	6203.884
#2	30.13787	75.95832	73.49641	6008.546
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002056

Analysis Report 03/19/02 05:40:51 PM page 1

Method: TRACE3 Sample Name: SE203029-009-01-1/1 Operator: LCM
Run Time: 03/19/02 17:33:00
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-6.69056	-2.15784	-4.79736	3.145292	.0213120	.0878089	2933.565
#1	-4.76353	-2.01238	-3.34479	3.203161	-.013209	.1506741	2965.752
#2	-8.61758	-2.30329	-6.24993	3.087424	.0558330	.0249436	2901.377
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.132894	-.086365	.3168200	.9914222	-.524183	7610.310	.3643538
#1	1.829884	.0044775	.6958327	1.445364	.8054782	7697.013	.3985633
#2	2.435906	-.177207	-.062193	.5374806	-1.85384	7523.609	.3301443
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.212511	2049.948	1.339521	.1812750	57604.69	2.175619	-.041921
#1	4.734797	2068.099	1.503793	.3393508	58312.91	2.672498	-.234427
#2	3.690224	2031.797	1.175248	.0231993	56896.47	1.678740	.1505851
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1.455896	36.39484	.0182730	-.072227	46.73584	-.024815	-.657274
#1	1.706130	36.58309	-.239534	.4027192	47.26219	-.082821	.4433898
#2	1.205662	36.20659	.2760798	-.547172	46.20950	.0331912	-1.75794
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.458052	1.602147	1.207863	88.26025
#1	.9861047	-.157903	2.334292	92.09356
#2	-1.90221	3.362197	.0814340	84.42695
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 05:48:46 PM page 1

Method: TRACE3 Sample Name: S 203029-014-01-1/1 Operator: LCM
Run Time: 03/19/02 17:40:55
Comment: UG/L 2
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1.730548	-.187722	.3868378	15.61208	.0037692	.1155137	16009.60
#1	2.599595	.0004145	.6282135	15.56879	-.009613	.0306046	16042.48
#2	.8615012	-.375859	.1454622	15.65536	.0171514	.2004228	15976.72
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.034413	-.005281	1.149825	-45.8466	.5572620	41367.27	45.51907
#1	.1101283	.2016662	1.088793	-45.0783	.4990889	41433.11	45.56585
#2	-.178954	-.212228	1.210856	-46.6149	.6154351	41301.43	45.47229
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6486191	12058.52	2.042464	.4832316	310707.3	-.401880	.7064753
#1	.0873034	12055.27	1.939089	.6571046	310692.2	.3124767	.7070906
#2	1.209935	12061.76	2.145839	.3093586	310722.4	-1.11624	.7058601
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.243605	186.0071	1.224230	.3255817	254.9872	.3529252	-1.58224
#1	2.163653	186.8016	1.623869	1.093705	255.1071	.3752258	-1.58053
#2	2.323556	185.2126	.8245911	-.442542	254.8673	.3306246	-1.58394
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.626663	-.345562	3.236093	375.8840
#1	1.538550	-1.40195	3.609192	375.9867
#2	1.714775	.7108303	2.862995	375.7812
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: BLK(066) Operator: LCM
Run Time: 03/19/02 17:48:51
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	152.5199	1.875660	.8577895	.6502414	.0812274	-.070168	243.4372
#1	154.5504	3.020371	1.344476	.5818593	.0696295	-.155407	244.0331
#2	150.4895	.7309483	.3711033	.7186233	.0928253	.0150713	242.8413
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.365979	-.442083	6.211732	35.80480	1.104069	24.01311	1.792006
#1	1.650084	-.317560	5.917802	30.07843	1.912104	25.75769	1.797959
#2	1.081875	-.566607	6.505662	41.53118	.2960346	22.26853	1.786054
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.683525	53.77861	4.051512	1.069825	723.2812	-4.93335	.2777555
#1	3.153275	55.53497	3.756465	1.047319	770.8531	-2.64722	.4783685
#2	4.213775	52.02226	4.346559	1.092331	675.7094	-7.21947	.0771425
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.091984	8.718379	.4230576	25.03914	.8013982	.7392108	1.764603
#1	4.258154	9.230922	.8490042	24.43795	.8017788	.8039550	2.074518
#2	3.925815	8.205836	-.002889	25.64032	.8010175	.6744667	1.454689
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.7734730	-8.62185	10.38786	36.16825
#1	1.830584	-9.92573	10.59724	34.88166
#2	-.283638	-7.31798	10.17847	37.45485
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				50.00000
Low				-50.0000

Analysis Report 03/19/02 06:04:36 PM page 1

Method: TRACE3 Sample Name: BKS(066) Operator: LCM
Run Time: 03/19/02 17:56:46
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10117.94	95.17448	98.49817	1029.941	50.84876	101.3255	10432.92
#1	10105.87	94.97745	96.19751	1029.781	50.72426	101.0295	10414.24
#2	10130.02	95.37151	100.7988	1030.101	50.97327	101.6215	10451.61
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.00	120.0000	120.0000	1200.000	60.00000	120.0000	12000.00
Low	8000.000	80.00000	80.00000	800.0000	40.00000	80.00000	8000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	513.6758	506.4325	526.6414	10206.55	1008.905	9606.993	515.1315
#1	512.6459	505.0374	526.1637	10178.00	1008.773	9591.217	514.2294
#2	514.7057	507.8275	527.1191	10235.09	1009.037	9622.770	516.0335
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	600.0000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	400.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	500.1362	9424.863	94.50889	100.9298	10482.73	96.60429	519.0809
#1	498.5063	9431.243	93.30692	100.7797	10488.20	96.25912	518.5128
#2	501.7661	9418.484	95.71086	101.0798	10477.25	96.94946	519.6492
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	12000.00	120.0000	120.0000	12000.00	120.0000	600.0000
Low	400.0000	8000.000	80.00000	80.00000	8000.000	80.00000	400.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1013.515	969.6276	512.0421	528.3834	1020.516	2046.793	1014.176
#1	1010.603	969.0843	511.4323	525.5324	1020.087	2044.952	1015.304
#2	1016.428	970.1708	512.6520	531.2344	1020.946	2048.635	1013.047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1200.000	1200.000	600.0000	600.0000	1200.000	2400.000	
Low	800.0000	800.0000	400.0000	400.0000	800.0000	1600.000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1006.270	84.91867	99.30378	L6324.478
#1	1005.507	84.69212	97.61408	L6316.365
#2	1007.032	85.14523	100.9935	L6332.591
Errors	NOCHECK	NOCHECK	NOCHECK	LC Low
High				12000.00
Low				8000.000

Method: TRACE3 Sample Name: S 202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:04:41
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41908.52	1.701896	29.37248	295.8109	2.053962	.0960718	6011.214
#1	41958.63	-1.12721	28.55168	295.9961	2.017447	.0875938	6011.307
#2	41858.41	4.530999	30.19329	295.6255	2.090478	.1045499	6011.120
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	69.87285	7.783053	43.47667	40663.59	270.4514	4300.323	477.4518
#1	69.34358	7.173452	43.69929	40650.51	270.7921	4299.543	477.7255
#2	70.40211	8.392654	43.25405	40676.66	270.1107	4301.104	477.1782
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	29.78081	2555.898	.7747353	-1.06485	645.7963	-5.34891	134.2410
#1	29.43118	2549.387	.2962575	-2.01044	444.6237	-4.33525	133.4047
#2	30.13043	2562.407	1.253213	-.119253	846.9689	-6.36256	135.0772
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	920.8818	16.40265	2.502204	32.61268	50.94228	1113.856	270.4586
#1	921.0942	16.08667	2.778762	31.32682	51.10344	1114.374	270.9795
#2	920.6695	16.71864	2.225646	33.89853	50.78110	1113.338	269.9377
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	270.4475	-9.71090	6.017159	4867.925
#1	270.6981	-11.0790	5.983530	4826.127
#2	270.1969	-8.34279	6.050787	4909.724
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 06:20:26 PM page 1

Method: TRACE3 Sample Name: D 202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:12:36
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41021.96	-.354130	30.24903	279.5892	2.016336	.1347187	6138.368
#1	40931.93	-1.36056	30.32623	278.9917	2.066948	.0691071	6137.612
#2	41112.00	.6523035	30.17184	280.1868	1.965723	.2003303	6139.125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	67.24585	7.876829	45.27810	37431.50	287.5750	4437.628	485.4244
#1	67.75282	8.365830	45.38851	37433.06	287.9792	4442.580	485.1458
#2	66.73888	7.387828	45.16769	37429.95	287.1707	4432.675	485.7031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	28.83270	2632.728	3.068150	-1.03749	628.6544	-5.87761	134.5657
#1	29.31413	2634.461	2.235858	-.488977	798.9224	-5.59502	135.0507
#2	28.35126	2630.994	3.900441	-1.58601	458.3863	-6.16019	134.0807
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	971.6721	18.51200	2.556423	31.98789	48.23775	1115.235	286.4517
#1	973.2469	19.12749	2.535744	33.43471	48.16869	1117.690	287.1962
#2	970.0972	17.89651	2.577102	30.54107	48.30681	1112.780	285.7072
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	288.1362	-5.87890	7.541354	4444.080
#1	288.3704	-8.50418	7.605519	4428.834
#2	287.9021	-3.25363	7.477189	4459.326
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report QC Standard 03/19/02 06:28:22 PM page 1

Method: TRACE3 Sample Name: CVCCV3 Operator: LCM
Run Time: 03/19/02 18:20:32
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51178.73	1023.036	1022.048	499.8967	50.66031	500.4998	101456.3
#1	51223.24	1019.810	1021.740	500.1410	50.66946	500.7179	101521.9
#2	51134.21	1026.262	1022.356	499.6523	50.65115	500.2818	101390.7
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	500.0401	497.0302	508.0600	50069.11	500.0567	99176.58	502.2190
#1	500.1241	497.4683	508.2007	50098.18	501.2077	99234.21	502.5505
#2	499.9561	496.5921	507.9192	50040.05	498.9058	99118.94	501.8875
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	491.9978	25158.00	1006.278	51.73875	101788.0	1007.223	509.1423
#1	492.1844	25175.54	1007.666	51.62535	101757.4	1001.992	509.7717
#2	491.8112	25140.47	1004.890	51.85215	101818.7	1012.454	508.5129
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	495.9141	509.9675	508.1432	501.3741	504.7208	503.7054	502.1408
#1	496.0344	510.6025	507.9652	500.8614	505.2685	503.6727	502.8054
#2	495.7938	509.3326	508.3212	501.8867	504.1730	503.7382	501.4762
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	499.0143	1004.483	1007.175	522.5491
#1	500.4085	1005.432	1008.783	523.4202
#2	497.6202	1003.534	1005.567	521.6780
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 06:36:18 PM page 1

Method: TRACE3 Sample Name: BCCCB3 Operator: LCM
Run Time: 03/19/02 18:28:27
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-3.18936	-1.44131	-2.29669	.1375936	.0768311	.1457476	32.31742
#1	1.642982	-1.12165	-.710774	.2468303	.1055237	.2303584	39.66272
#2	-8.02171	-1.76097	-3.88260	.0283569	.0481385	.0611367	24.97212
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3199166	.4456432	.3016631	18.54776	-.401114	23.22602	.0885966
#1	.6564345	.6942137	.8233091	28.41544	-1.01541	31.96322	.1646639
#2	-.016601	.1970726	-.219983	8.680083	.2131824	14.48883	.0125293
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4335200	3.863688	1.186482	-.039597	-11.7778	-1.17943	.1091136
#1	.3285100	10.39652	1.720595	.3063631	76.26502	.8792855	.5348514
#2	.5385299	-2.66914	.6523691	-.385557	-99.8205	-3.23815	-.316624
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.4180665	1.644815	1.061017	1.373162	.1033917	.0776266	-.220426
#1	.5889019	1.966385	1.524027	.8725161	.1427113	.1932059	-.164646
#2	.2472311	1.323244	.5980066	1.873808	.0640720	-.037953	-.276207
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.491798	.8165563	1.371105	-4.69725
#1	-1.44113	3.944529	.6082894	-4.45848
#2	.4575372	-2.31142	2.133920	-4.93601
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Analysis Report 03/19/02 06:44:13 PM page 1

Method: TRACE3 Sample Name: SP202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:36:23
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	75122.27	76.54802	123.4212	1435.657	52.91938	100.1628	16772.53
#1	75095.26	76.77077	125.1302	1436.234	52.88786	100.2075	16766.78
#2	75149.29	76.32526	121.7123	1435.079	52.95090	100.1182	16778.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	592.0063	511.1883	576.7998	48202.73	1281.845	14670.65	987.9277
#1	591.6263	511.1112	577.1159	48220.42	1284.158	14676.85	988.3255
#2	592.3865	511.2654	576.4836	48185.03	1279.532	14664.44	987.5299
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	527.1410	14358.65	88.75176	100.7778	10841.26	95.94662	676.0673
#1	528.0594	14350.56	87.24549	100.6364	10698.45	93.72968	676.4580
#2	526.2227	14366.75	90.25803	100.9192	10984.07	98.16357	675.6766
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2244.050	985.7836	498.2452	506.6324	1096.019	3655.092	1279.905
#1	2243.090	985.1946	497.4238	504.7021	1097.043	3660.342	1277.005
#2	2245.010	986.3726	499.0665	508.5627	1094.995	3649.842	1282.805
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1282.815	76.80401	94.72546	8785.848
#1	1287.734	73.34274	94.19667	8752.085
#2	1277.896	80.26528	95.25424	8819.611
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 06:52:09 PM page 1

Method: TRACE3 Sample Name: PS202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:44:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	42568.82	79.61706	108.2735	313.1441	12.09756	20.35710	11098.78
#1	42634.82	81.48431	106.4495	313.3495	12.10839	20.48472	11115.76
#2	42502.82	77.74981	110.0975	312.9387	12.08673	20.22948	11081.81
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	89.35013	38.39655	74.61681	41295.68	297.2807	9059.100	493.3499
#1	89.43967	38.69706	74.46630	41373.61	298.3499	9076.764	494.0967
#2	89.26059	38.09605	74.76730	41217.74	296.2115	9041.436	492.6032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	70.16765	7343.582	65.81921	39.81646	5688.122	96.35109	154.1888
#1	70.62510	7356.147	65.14478	39.86570	5812.018	95.07221	155.1101
#2	69.71020	7331.017	66.49364	39.76722	5564.227	97.62997	153.2676
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	988.9248	84.35245	33.46842	132.3359	71.34244	1114.888	295.8503
#1	991.4048	85.04147	34.19682	133.8306	71.46809	1115.709	297.2471
#2	986.4448	83.66342	32.74002	130.8413	71.21677	1114.067	294.4536
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	297.9955	49.42112	74.01782	10070.35
#1	298,9010	47.97293	73.73028	10072.36
#2	297.0901	50.86930	74.30537	10068.34
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 07:00:05 PM

Method: TRACE3 Sample Name: SE202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:52:15
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	8500.041	.9187375	6.879615	58.46315	.4448128	.1409088	1219.092
#1	8554.367	1.357889	7.105236	58.88944	.4394746	.1169952	1225.406
#2	8445.716	.4795858	6.653994	58.03686	.4501510	.1648223	1212.779
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	13.95243	1.686556	8.847400	8154.549	54.52451	892.6760	94.85446
#1	13.96474	1.482474	8.828522	8211.654	54.96907	897.6478	95.40448
#2	13.94012	1.890637	8.866278	8097.444	54.07996	887.7042	94.30444
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.369532	512.8285	1.442844	.0434628	129.1543	-1.02894	26.78867
#1	6.691601	515.7836	1.601601	.1899676	85.61464	-2.51830	27.10073
#2	6.047462	509.8735	1.284087	-.103042	172.6940	.4604266	26.47661
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	186.8667	4.113481	.6131307	8.850771	10.03254	216.7985	55.69666
#1	188.2972	4.337554	.8578219	8.787551	10.09292	218.4443	56.18043
#2	185.4363	3.889407	.3684396	8.913992	9.972163	215.1526	55.21290
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	53.93807	-2.08736	3.207617	929.9121
#1	54.36298	-1.74290	3.273507	954.0061
#2	53.51314	-2.43181	3.141727	905.8180
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 07:08:01 PM

Method: TRACE3 Sample Name: S 202159-002-04-1/1 Operator: LCM
Run Time: 03/19/02 19:00:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	99365.04	3.831895	44.43304	366.6456	2.452881	.4567425	8015.254
#1	99444.01	3.684270	46.16528	366.9061	2.454979	.3878016	8014.106
#2	99286.07	3.979521	42.70081	366.3851	2.450782	.5256834	8016.401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	126.3735	16.90413	67.48293	94499.30	252.6041	5938.451	399.2680
#1	126.5231	16.91295	67.62848	94500.95	250.6636	5936.590	399.3371
#2	126.2239	16.89530	67.33739	94497.66	254.5446	5940.312	399.1989
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	52.62340	4104.896	2.079208	.3210038	1040.170	-7.16844	277.2465
#1	52.35296	4111.480	.5394168	.5155979	945.3436	-7.36090	276.5801
#2	52.89385	4098.314	3.618999	.1264096	1134.996	-6.97599	277.9129
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	945.6313	21.31062	6.485156	29.79655	60.86732	1092.105	247.0525
#1	945.0497	21.25877	5.989115	29.78591	60.92062	1089.950	244.1908
#2	946.2131	21.36246	6.981196	29.80719	60.81402	1094.259	249.9141
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	255.3796	-10.4411	8.339004	5643.043
#1	253.8996	-10.1499	5.883657	5659.118
#2	256.8596	-10.7324	10.79435	5626.968
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 07:15:57 PM

Method: TRACE3 Sample Name: S 202159-005-05-1/1 Operator: LCM
Run Time: 03/19/02 19:08:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	208834.2	1.652953	58.54123	530.4531	5.085013	-1.02618	6575.557
#1	208820.9	1.764811	57.36033	530.6796	5.059341	-1.04056	6578.959
#2	208847.5	1.541095	59.72212	530.2266	5.110686	-1.01180	6572.155
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	362.1791	21.71941	63.04035	164110.2	121.4039	13794.38	258.6719
#1	362.5529	21.94447	63.26042	164162.0	122.7642	13801.08	258.8063
#2	361.8054	21.49434	62.82029	164058.4	120.0436	13787.68	258.5376
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	65.42000	14047.11	2.825662	-.155651	1118.830	-6.44849	585.8424
#1	65.46661	14032.98	1.560412	.1014137	1017.553	-7.43456	586.1440
#2	65.37340	14061.24	4.090911	-.412715	1220.106	-5.46241	585.5408
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	220.2432	70.75573	15.94216	32.33467	75.73236	2084.340	113.7672
#1	220.4282	69.73450	15.89081	33.48138	75.74555	2083.793	115.1161
#2	220.0581	71.77696	15.99351	31.18795	75.71917	2084.888	112.4184
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	125.2219	-2.77460	5.625380	5153.352
#1	126.5879	-3.19329	3.936832	5151.505
#2	123.8559	-2.35591	7.313927	5155.199
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 07:23:52 PM page 1

Method: TRACE3 Sample Name: S 202159-006-05-1/1 Operator: LCM
Run Time: 03/19/02 19:16:02
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	61182.88	1.623854	46.90020	225.6714	1.960151	.0337892	3337.060
#1	61311.25	.5907984	47.08878	226.2666	1.958860	-.025588	3343.628
#2	61054.50	2.656910	46.71161	225.0762	1.961443	.0931659	3330.492
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	92.30649	8.538079	157.1811	60786.24	179.1897	3919.257	359.5628
#1	92.49834	8.241301	157.3109	60930.32	178.5676	3929.386	360.3121
#2	92.11465	8.834858	157.0512	60642.16	179.8118	3909.128	358.8134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	29.49502	2946.397	5.853128	-.383091	933.7364	-4.30452	156.7503
#1	29.87750	2949.025	4.402184	-.144951	884.8875	-3.52783	157.1505
#2	29.11254	2943.769	7.304072	-.621231	982.5853	-5.08122	156.3500
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1665.200	22.35152	3.608697	29.86729	29.84631	831.5017	176.6816
#1	1667.747	23.10923	3.680687	30.75799	29.96750	834.6195	175.6654
#2	1662.653	21.59381	3.536706	28.97660	29.72513	828.3840	177.6979
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	180.4434	-7.12957	12.34408	5212.011
#1	180.0183	-9.87519	11.54051	5154.315
#2	180.8685	-4.38395	13.14766	5269.707
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 07:31:48 PM page 1

Method: TRACE3 Sample Name: S 202159-007-05-1/1 Operator: LCM
Run Time: 03/19/02 19:23:57
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	39846.98	.8635791	34.53009	93.43185	2.080550	-.643710	1901.430
#1	39869.57	-.172375	34.10479	93.55458	2.093815	-.679571	1902.118
#2	39824.38	1.899533	34.95539	93.30913	2.067286	-.607850	1900.742
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	101.3812	7.067368	23.00020	77943.50	53.01599	4677.604	145.2435
#1	101.3530	6.944870	23.01926	77916.65	53.60180	4678.066	145.1562
#2	101.4094	7.189867	22.98114	77970.36	52.43018	4677.142	145.3307
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	15.28123	6265.321	5.322634	-.534712	979.3477	-8.73465	168.4980
#1	14.84134	6268.286	4.839401	-.490032	927.3514	-8.62912	168.0196
#2	15.72112	6262.356	5.805866	-.579393	1031.344	-8.84018	168.9764
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	85.84762	51.58215	4.025636	27.79434	26.47066	1146.937	51.93391
#1	85.90157	51.80423	3.922787	29.37064	26.47643	1145.862	52.77763
#2	85.79367	51.36008	4.128484	26.21804	26.46489	1148.011	51.09020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	53.55667	-3.35644	9.661848	3947.242
#1	54.01360	-2.58957	8.553530	3946.263
#2	53.09975	-4.12331	10.77017	3948.221
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002071

Analysis Report 03/19/02 07:39:43 PM page 1

Method: TRACE3 Sample Name: S 202159-008-05-1/1 Operator: LCM
Run Time: 03/19/02 19:31:53
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50461.68	3.241514	36.74307	223.2843	1.659036	.3502463	4960.566
#1	50531.30	.8053088	34.02496	223.6237	1.629350	.3389163	4956.192
#2	50392.06	5.677719	39.46119	222.9449	1.688722	.3615763	4964.940
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	69.45384	7.243132	50.70602	44221.77	171.6047	3947.845	303.8564
#1	69.19803	6.970925	50.78274	44215.46	172.6474	3944.655	304.0659
#2	69.70965	7.515338	50.62929	44228.08	170.5620	3951.034	303.6470
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	23.82844	2611.990	4.246441	-.624814	973.9349	-5.75145	126.9866
#1	23.07642	2613.374	3.038121	-.758859	845.0811	-6.75604	126.3465
#2	24.58045	2610.607	5.454761	-.490768	1102.789	-4.74686	127.6267
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	229.4534	21.37347	3.147819	30.87241	39.75055	827.5237	169.4770
#1	228.9889	21.50036	3.153786	30.37600	39.80922	830.9055	168.2670
#2	229.9179	21.24658	3.141851	31.36881	39.69188	824.1418	170.6870
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	172.6681	-5.46406	9.101296	4958.066
#1	174.8372	-10.6225	9.867973	4966.276
#2	170.4991	-.305671	8.334620	4949.856
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: S 202159-009-05-1/1 Operator: LCM
Run Time: 03/19/02 19:39:48
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	65567.25	2.035540	45.40049	194.4359	2.962785	-.704054	4139.308
#1	65070.56	.9325790	44.73779	192.8644	2.983001	-.722070	4111.429
#2	66063.93	3.138502	46.06319	196.0074	2.942568	-.686038	4167.186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	109.6794	21.22114	28.18293	95110.66	65.31606	5365.970	272.0530
#1	108.5405	21.35236	28.07619	94438.41	64.35226	5327.492	270.0501
#2	110.8183	21.08992	28.28967	95782.90	66.27986	5404.448	274.0560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	27.41241	6441.188	3.207393	-.344436	871.5083	-6.48561	172.9434
#1	26.82702	6397.530	1.633543	-.440262	870.9976	-5.08148	171.7646
#2	27.99781	6484.845	4.781244	-.248610	872.0190	-7.88975	174.1222
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	82.29655	50.00088	9.966898	26.89997	29.98776	1111.522	63.32037
#1	81.73235	49.82403	9.437148	27.06729	29.72404	1102.310	62.06856
#2	82.86074	50.17773	10.49665	26.73264	30.25148	1120.734	64.57219
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	66.31361	-7.09320	8.357295	3645.430
#1	65.49384	-6.93557	5.917673	3608.685
#2	67.13338	-7.25083	10.79692	3682.175
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 07:55:34 PM page 1

Method: TRACE3 Sample Name: S 202159-010-05-1/1 Operator: LCM
Run Time: 03/19/02 19:47:44
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	34070.96	3.837273	28.41414	236.3907	1.344396	.8308460	14207.50
#1	34082.33	3.433967	28.53958	236.4574	1.359551	.8261750	14199.55
#2	34059.59	4.240578	28.28870	236.3240	1.329241	.8355169	14215.45
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	72.39613	5.589323	49.80596	40005.84	185.0842	3536.471	413.1731
#1	72.44119	5.537587	49.89310	39994.34	185.1543	3538.182	412.9663
#2	72.35107	5.641059	49.71883	40017.35	185.0140	3534.760	413.3799
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	21.94760	2577.266	3.239749	-.238811	1003.211	-6.29190	107.3254
#1	22.01050	2586.318	2.684429	.0117975	1059.098	-8.28350	107.5748
#2	21.88470	2568.214	3.795069	-.489419	947.3250	-4.30031	107.0760
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1904.632	18.32887	2.854378	30.72437	75.02737	770.8012	183.6031
#1	1903.143	18.12258	3.221227	29.45927	75.02102	771.9974	183.2217
#2	1906.120	18.53515	2.487529	31.98947	75.03371	769.6050	183.9845
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	185.8243	-7.61251	8.665574	4455.183
#1	186.1203	-10.1457	9.099169	4418.030
#2	185.5283	-5.07932	8.231979	4492.336
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

nalysis Report QC Standard 03/19/02 08:03:29 PM page 1

Method: TRACE3 Sample Name: CVCCV3 Operator: LCM
Run Time: 03/19/02 19:55:39
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51272.12	1023.350	1010.729	496.8311	50.74929	498.1374	101930.6
#1	51119.14	1022.030	1003.866	495.5686	50.62101	496.3654	101682.0
#2	51425.10	1024.670	1017.592	498.0936	50.87758	499.9094	102179.2
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.0609	495.1675	510.5297	50041.25	499.6248	98363.02	501.1687
#1	496.5322	494.2697	508.7749	49894.83	498.9381	98099.80	499.7797
#2	497.5895	496.0653	512.2846	50187.66	500.3115	98626.24	502.5577
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	485.2238	25248.70	996.4866	52.19546	102073.3	1003.696	508.4313
#1	485.4570	25182.17	993.2775	52.33889	101743.5	1001.276	506.3438
#2	484.9907	25315.22	999.6957	52.05204	102403.0	1006.116	510.5187
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	492.5929	506.9931	509.0093	500.5394	504.1123	500.3533	499.6834
#1	491.1444	505.3184	507.2836	498.6560	502.7354	499.3525	499.6621
#2	494.0413	508.6679	510.7351	502.4227	505.4892	501.3541	499.7047
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	499.5951	1000.910	994.2745	516.5829
#1	498.5758	996.6077	991.6121	514.8360
#2	500.6145	1005.213	996.9369	518.3299
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 08:11:25 PM page 1

Method: TRACE3 Sample Name: BCCCB3 Operator: LCM
Run Time: 03/19/02 20:03:34
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-10.6850	-1.46184	-1.76787	.1755819	.0594336	.2647139	45.41782
#1	-4.72228	.0333231	-2.16620	.1948950	.0697865	.2845309	50.39359
#2	-16.6477	-2.95701	-1.36953	.1562688	.0490808	.2448970	40.44206
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4270359	.2348946	.5380390	23.39463	-.077893	24.64463	.1424099
#1	.6379577	.2432024	.5240192	24.65411	-.950013	30.70446	.1526711
#2	.2161141	.2265867	.5520588	22.13515	.7942280	18.58480	.1321487
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6259819	1.649281	1.015323	.3560746	-28.6206	1.717362	-.005042
#1	.4148928	4.806745	1.754982	.3047968	39.96160	1.049242	-.005455
#2	.8370709	-1.50818	.2756642	.4073524	-97.2029	2.385482	-.004629
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.4176236	1.381692	.7622952	.9877773	.1099562	.1072576	-.885921
#1	.2239325	1.757594	1.060349	2.080619	.1425547	.1223783	-1.08026
#2	.6113146	1.005790	.4642415	-.105064	.0773578	.0921369	-.691582
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.3257792	-1.29344	2.169294	-4.81248
#1	-.885230	.8731558	2.195486	-4.95258
#2	1.536788	-3.46004	2.143102	-4.67237
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Analysis Report 03/19/02 08:19:20 PM page 1

Method: TRACE3 Sample Name: S 202159-011-04-1/1 Operator: LCM
Run Time: 03/19/02 20:11:30
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	136973.7	1.248306	69.77861	275.8019	4.008789	-.869740	9021.615
#1	136688.7	3.510420	69.90302	275.0651	4.026287	-.963054	8997.968
#2	137258.6	-1.01381	69.65421	276.5386	3.991291	-.776427	9045.263
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	223.2831	18.29197	53.05836	165345.2	96.19290	9872.799	268.7056
#1	222.7955	18.06800	52.82259	164975.4	96.98525	9855.263	268.0290
#2	223.7708	18.51594	53.29412	165714.9	95.40057	9890.336	269.3821
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	46.18360	11073.18	2.481373	-.712384	1091.722	-7.62221	407.7147
#1	45.91629	11045.96	3.194161	-.744144	1080.646	-9.00380	407.1338
#2	46.45091	11100.39	1.768586	-.680624	1102.798	-6.24062	408.2957
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	173.0857	61.09862	11.95892	31.28996	62.70748	1776.656	94.24208
#1	172.5453	61.32844	11.95013	32.45901	62.58328	1773.590	95.16663
#2	173.6260	60.86880	11.96772	30.12092	62.83169	1779.721	93.31754
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	97.16794	-5.09024	6.266857	4220.804
#1	97.89420	-2.83506	6.208416	4213.388
#2	96.44167	-7.34541	6.325298	4228.220
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 08:27:16 PM page 1

Method: TRACE3 Sample Name: S 202159-012-04-1/1 Operator: LCM
Run Time: 03/19/02 20:19:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	108155.6	2.404145	46.67079	377.2365	2.561532	.6515040	8255.650
#1	108229.1	2.741787	46.63933	377.4710	2.598115	.7293425	8260.954
#2	108082.0	2.066503	46.70225	377.0020	2.524948	.5736656	8250.346
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	136.0271	17.89768	69.76854	103895.6	270.4205	6337.799	413.4580
#1	136.2289	18.09836	69.88349	103942.0	268.7191	6338.802	413.8071
#2	135.8253	17.69700	69.65358	103849.1	272.1220	6336.796	413.1090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	53.92758	4383.016	3.973876	.0161303	1028.351	-7.55094	295.9183
#1	53.39182	4391.815	4.250518	.2721082	998.9106	-6.11137	295.5768
#2	54.46335	4374.217	3.697234	-.239848	1057.790	-8.99051	296.2598
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	981.3283	21.20112	6.935959	28.92672	58.43387	1112.136	267.1198
#1	982.1953	21.03360	7.049698	29.99529	58.43402	1112.685	266.7503
#2	980.4611	21.36864	6.822220	27.85814	58.43371	1111.586	267.4892
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	272.0707	-3.32438	7.622713	4792.858
#1	269.7032	-.304262	6.527620	4786.569
#2	274.4382	-6.34449	8.717806	4799.148
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

nalysis Report 03/19/02 08:35:11 PM page 1

ethod: TRACE3 Sample Name: S 202159-013-05-1/1 Operator: LCM
un Time: 03/19/02 20:27:21
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	59641.81	-.623098	26.11785	125.3665	2.540343	-.157839	3116.846
#1	59646.20	.4337420	25.52112	125.3893	2.554008	-.087173	3121.878
#2	59637.41	-1.67994	26.71459	125.3437	2.526678	-.228504	3111.815
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	151.2328	11.44133	28.91611	69996.88	65.93658	6997.148	236.4357
#1	151.9264	11.16902	28.95811	70113.12	66.33656	7013.555	236.8576
#2	150.5392	11.71363	28.87410	69880.65	65.53661	6980.741	236.0139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	25.21207	8633.840	3.161334	-.470952	1035.379	-5.99656	207.1349
#1	25.74256	8627.042	2.550574	-.157394	1176.821	-6.99423	207.2790
#2	24.68157	8640.639	3.772095	-.784510	893.9382	-4.99888	206.9908
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	116.7390	61.91071	3.481457	26.73556	35.75740	1513.737	64.09727
#1	116.8772	62.22324	3.613196	28.79622	35.73365	1513.064	62.91414
#2	116.6009	61.59819	3.349719	24.67490	35.78115	1514.411	65.28041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	66.85593	-8.36889	8.926084	3876.741
#1	68.04741	-13.4168	10.53388	3866.526
#2	65.66444	-3.32101	7.318288	3886.957
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002079

lethod: TRACE3 Sample Name: S 202159-014-05-1/1 Operator: LCM
:un Time: 03/19/02 20:35:17
:omment: UG/L
lode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	180812.9	-.647646	52.62868	380.7582	2.996174	.9405599	6036.475
#1	178787.9	.7209797	53.07713	376.6173	2.981140	.9963770	5973.122
#2	182837.9	-2.01627	52.18024	384.8991	3.011207	.8847427	6099.828
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	195.4723	26.13734	76.32939	164826.9	133.6808	8434.106	458.2803
#1	193.5959	25.80784	75.61211	163087.5	132.1892	8344.069	453.2122
#2	197.3488	26.46685	77.04667	166566.4	135.1724	8524.144	463.3484
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	75.56355	5881.918	5.529742	.3253272	1159.576	-9.93262	334.8367
#1	74.21703	5828.474	5.306809	.3853491	1256.475	-8.15942	331.0818
#2	76.91008	5935.361	5.752676	.2653052	1062.678	-11.7058	338.5916
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1807.759	26.06928	8.133289	28.79977	52.99595	1480.414	131.6006
#1	1788.518	25.52642	8.308459	27.79561	52.41571	1464.543	129.8299
#2	1827.000	26.61212	7.958119	29.80393	53.57618	1496.285	133.3712
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	134.7207	-1.30646	8.947472	4727.352
#1	133.3686	-.331992	8.125893	4686.889
#2	136.0727	-2.28093	9.769051	4767.815
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

nalysis Report 03/19/02 08:51:03 PM page 1

ethod: TRACE3 Sample Name: S 202159-015-05-1/1 Operator: LCM
un Time: 03/19/02 20:43:12
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50826.67	1.133639	38.08939	111.2396	2.439133	-.350374	2539.927
#1	50820.60	1.909486	37.79971	111.3446	2.416308	-.368488	2538.989
#2	50832.74	.3577914	38.37906	111.1347	2.461958	-.332259	2540.865
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	120.2915	16.99435	36.16618	80349.21	63.77455	5796.991	293.6133
#1	120.6251	16.75267	36.67485	80378.50	63.31802	5795.777	293.6783
#2	119.9579	17.23603	35.65750	80319.92	64.23109	5798.206	293.5483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	20.96722	7484.122	3.385399	-.249352	972.7994	-7.31903	219.2883
#1	21.61103	7484.002	3.297014	-.383037	1014.757	-6.35606	219.5549
#2	20.32342	7484.241	3.473784	-.115666	930.8421	-8.28200	219.0218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	111.3817	55.29398	7.420672	27.04400	36.31912	1277.919	61.46932
#1	111.3619	55.32109	7.400341	25.22364	36.37326	1278.677	61.20740
#2	111.4015	55.26687	7.441001	28.86436	36.26498	1277.161	61.73125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	64.92677	-7.54038	8.847894	3299.814
#1	64.37290	-4.95389	7.422108	3297.214
#2	65.48063	-10.1269	10.27368	3302.414
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

nalysis Report 03/19/02 08:58:59 PM page 1

ethod: TRACE3 Sample Name: BLK53538 Operator: LCM
un Time: 03/19/02 20:51:08
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19.15426	-3.26277	-1.94642	.2423308	.0804205	.0341791	201.7533
#1	20.75745	-2.45012	-1.56762	.2418227	.1021557	.0824570	201.3456
#2	17.55107	-4.07542	-2.32522	.2428390	.0586853	-.014099	202.1610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3857537	-.265643	1.273111	33.98774	.2051609	12.56736	.4086445
#1	.3120633	-.192331	1.530243	43.19430	.3971273	14.03322	.4375719
#2	.4594440	-.338955	1.015979	24.78117	.0131944	11.10151	.3797171
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.301662	20.39551	1.606216	.2622299	450.8284	-3.54501	.1220848
#1	-.665186	23.34777	2.346045	.1999164	507.0962	-4.11202	.3990197
#2	.0618619	17.44325	.8663873	.3245435	394.5606	-2.97800	-.154850
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.169024	6.707294	.1154541	-.081974	.4496355	.4165725	-.725811
#1	2.197940	7.107955	.3535796	-.902123	.4529173	.4188087	-.392390
#2	2.140108	6.306634	-.122671	.7381749	.4463537	.4143363	-1.05923
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.6703309	-5.93226	5.375150	H83.64281
#1	.7915707	-3.12401	5.080755	H85.71477
#2	.5490911	-8.74051	5.669545	H81.57086
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				50.00000
Low				-50.0000

002082

nalysis Report 03/19/02 09:06:54 PM page 1

ethod: TRACE3 Sample Name: BKS53538 Operator: LCM
un Time: 03/19/02 20:59:04
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5182.827	47.41237	47.48196	507.6099	25.65363	51.51170	5443.792
#1	5217.132	47.71371	47.88857	510.3215	25.79654	51.79519	5474.751
#2	5148.522	47.11103	47.07535	504.8983	25.51072	51.22820	5412.833
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.000	60.00000	60.00000	600.0000	30.00000	60.00000	6000.000
Low	4000.000	40.00000	40.00000	400.0000	20.00000	40.00000	4000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	254.2860	253.2686	262.8045	5216.024	511.7990	4918.745	257.2996
#1	255.9573	254.9381	263.9322	5246.002	513.6085	4943.989	258.6637
#2	252.6146	251.5990	261.6768	5186.046	509.9896	4893.502	255.9354
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	300.0000	300.0000	6000.000	600.0000	6000.000	300.0000
Low	200.0000	200.0000	200.0000	4000.000	400.0000	4000.000	200.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	246.0109	5014.378	50.18113	49.75968	5759.082	49.91798	260.9665
#1	247.9665	5038.083	50.68090	49.92612	5699.992	49.29231	262.2066
#2	244.0552	4990.674	49.68135	49.59324	5818.173	50.54365	259.7264
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	6000.000	60.00000	60.00000	6000.000	60.00000	300.0000
Low	200.0000	4000.000	40.00000	40.00000	4000.000	40.00000	200.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	512.0626	493.3036	247.0064	L.5950512	509.3170	L.4430036	513.1454
#1	514.1482	495.9579	247.7201	L.1004996	511.7772	L.3633271	515.7709
#2	509.9771	490.6492	246.2927	L1.089603	506.8567	L.5226801	510.5199
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Low	NOCHECK
High	600.0000	600.0000	300.0000	300.0000	600.0000	1200.000	
Low	400.0000	400.0000	200.0000	200.0000	400.0000	800.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	511.1265	45.05191	52.74538	L97.36912
#1	512.5280	43.27704	54.38255	L98.56961
#2	509.7250	46.82677	51.10822	L96.16863
Errors	NOCHECK	NOCHECK	NOCHECK	LC Low
High				6000.000
Low				4000.000

002083

nalysis Report 03/19/02 09:14:50 PM page 1

ethod: TRACE3 Sample Name: S 203025-001-03-1/1 Operator: LCM
un Time: 03/19/02 21:07:00
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	6.839035	1.667776	-1.10734	3.663047	.1116317	-.066804	79731.72
#1	5.289733	.6573716	-.244397	3.626247	.0987744	-.104951	79686.56
#2	8.388336	2.678181	-1.97028	3.699847	.1244889	-.028657	79776.88
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7559447	.0282592	2.795177	20.96257	2.231988	2094.172	2.284514
#1	.6306815	-.280497	2.756388	15.24343	2.534859	2088.802	2.241099
#2	.8812081	.3370159	2.833964	26.68171	1.929117	2099.541	2.327929
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.166929	640.2631	2.729496	.7968287	11059.60	-2.41276	.7279665
#1	.2163084	635.4220	3.230278	.4318814	10984.74	-3.50313	.0126988
#2	-.550167	645.1041	2.228714	1.161776	11134.48	-1.32239	1.443234
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	5.121654	23.24378	.9927643	.6533992	495.5755	.7080247	2.906203
#1	4.965086	22.34225	.6004846	1.667505	496.0083	.6950127	1.567104
#2	5.278222	24.14531	1.385044	-.360706	495.1428	.7210366	4.245302
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.894527	.8871328	3.650341	5468.864
#1	3.018380	-2.54499	6.117553	5469.344
#2	.7706742	4.319256	1.183128	5468.385
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002084

ethod: TRACE3 Sample Name: S 203025-002-07-1/3 Operator: LCM
ın Time: 03/19/02 21:14:55
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	52.38534	-1.33638	.4423196	5.908845	.0667773	-.099108	78601.75
#1	48.07008	-1.39138	-.989089	5.864032	.0732673	-.124868	77689.18
#2	56.70059	-1.28139	1.873728	5.953659	.0602873	-.073349	79514.32
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.377147	-.195934	2.054435	679.5113	-.072873	2060.528	103.7616
#1	1.292218	-.426102	2.124009	674.1622	-.080515	2036.058	102.5739
#2	1.462074	.0342328	1.984862	684.8605	-.065231	2084.998	104.9492
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.3124996	1152.094	2.994870	.1435022	7176.851	.5090083	1.397908
#1	.6117046	1140.841	1.381165	.1778224	7134.079	1.189751	1.063351
#2	.0132946	1163.347	4.608576	.1091821	7219.622	-.171735	1.732464
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.179539	19.37258	.8744437	.9281151	535.4524	1.162899	-.800569
#1	4.257047	19.16048	.8795561	.4629316	529.1952	1.069369	-1.24213
#2	4.102030	19.58467	.8693311	1.393299	541.7095	1.256428	-.359004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.2906209	-.567123	4.775528	10753.39
#1	.4999430	-3.88855	4.015665	10627.51
#2	.0812988	2.754299	5.535392	10879.27
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: D 203025-002-07-1/3 Operator: LCM
Run Time: 03/19/02 21:22:51
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50.94209	-1.76551	1.610839	5.849503	.0717270	-.103478	78733.55
#1	51.05221	-2.59199	1.437868	5.860833	.0788773	-.046230	78753.92
#2	50.83198	-.939018	1.783810	5.838173	.0645768	-.160727	78713.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.352900	-.071092	2.262851	683.2965	.3889366	2069.762	117.4606
#1	1.589807	.1204629	2.425327	688.0135	.7305217	2070.026	117.4506
#2	1.115992	-.262647	2.100374	678.5795	.0473516	2069.497	117.4707
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.2006017	1113.253	2.722675	.4074412	7139.230	-2.39578	1.136938
#1	-.389530	1115.842	3.141483	.2899772	7154.542	-3.14906	1.139774
#2	.7907329	1110.664	2.303867	.5249053	7123.918	-1.64250	1.134101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.710981	29.45159	1.255219	.3261551	531.9060	1.116292	.4003999
#1	4.602006	29.32624	1.540620	1.128881	531.3362	1.050914	.5608608
#2	4.819957	29.57694	.9698189	-.476571	532.4758	1.181670	.2399390
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.3828558	-.216353	4.191907	10794.88
#1	.8150027	-1.07387	5.248876	10793.14
#2	-.049291	.6411634	3.134938	10796.62
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

nalysis Report QC Standard 03/19/02 09:38:38 PM page 1

ethod: TRACE3 Sample Name: CVCCV4 Operator: LCM
un Time: 03/19/02 21:30:47
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	52086.08	1032.745	1014.792	502.4177	51.01591	498.0197	102824.2
#1	52183.32	1035.747	1017.133	502.6831	50.95508	499.1748	103076.3
#2	51988.84	1029.744	1012.450	502.1523	51.07676	496.8645	102572.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.0203	494.4882	522.4828	50406.94	499.4013	97827.00	505.2500
#1	497.8544	495.7463	522.4362	50513.62	501.3834	98028.62	505.9397
#2	496.1862	493.2301	522.5295	50300.27	497.4192	97625.38	504.5602
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	481.0763	25679.68	1004.615	52.18681	103066.6	1017.097	512.5285
#1	482.2110	25694.20	1006.815	52.31952	103091.6	1014.462	512.6171
#2	479.9417	25665.17	1002.415	52.05410	103041.5	1019.732	512.4399
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	488.7212	510.9199	510.5044	495.9142	510.0945	501.9159	496.4803
#1	490.2476	511.7680	511.3475	497.3791	510.5427	502.2054	496.5533
#2	487.1950	510.0717	509.6613	494.4494	509.6463	501.6264	496.4072
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	500.8615	1009.453	1002.196	524.2455
#1	503.7982	1009.005	1005.719	526.6330
#2	497.9248	1009.900	998.6726	521.8581
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

002087

Analysis Report QC Standard 03/19/02 09:46:34 PM page 1

Method: TRACE3 Sample Name: BCCCB4 Operator: LCM
Run Time: 03/19/02 21:38:44
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-19.2305	-2.22552	.3647057	.1547100	.0685218	.2229225	55.52270
#1	-14.8525	-1.41800	.6249077	.1930295	.0588815	.2273864	62.80942
#2	-23.6086	-3.03304	.1045038	.1163905	.0781620	.2184587	48.23598
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1004032	-.210350	1.205632	16.87220	.0174103	24.69539	.1047487
#1	-.232726	-.488507	1.427145	19.23698	.3087454	32.99143	.1111507
#2	.4335321	.0678079	.9841186	14.50742	-.273925	16.39934	.0983467
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.205501	8.474981	1.968963	.0692142	126.5150	.0038706	.1934963
#1	1.248855	5.668393	2.162257	.0715109	18.39371	.2849143	-.235071
#2	1.162148	11.28157	1.775668	.0669175	234.6363	-.277173	.6220635
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.4101776	1.720218	.4565649	1.287244	.1328701	.0183537	-1.74911
#1	.3896231	1.186983	.6104398	.6131510	.1794205	-.050082	-1.61277
#2	.4307320	2.253453	.3026899	1.961337	.0863198	.0867893	-1.88545
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.9003228	1.358234	2.273980	-3.87808
#1	1.269156	.6851394	2.900468	-4.18278
#2	.5314898	2.031329	1.647493	-3.57337
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Analysis Report 03/19/02 09:54:30 PM page 1

Method: TRACE3 Sample Name: SP203025-002-07-1/3 Operator: LCM
Run Time: 03/19/02 21:46:40
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5325.871	46.30666	50.82409	522.9187	25.87188	51.10000	83529.16
#1	5327.972	47.20601	51.45336	523.8098	25.88238	51.22411	83645.59
#2	5323.770	45.40732	50.19482	522.0277	25.86138	50.97589	83412.73
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	255.4498	253.4486	269.6285	5898.537	511.2505	6914.290	373.8871
#1	255.4912	254.0235	270.1190	5906.528	511.9979	6916.692	374.3270
#2	255.4084	252.8736	269.1380	5890.546	510.5031	6911.889	373.4472
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	245.7032	6387.957	50.84774	50.61975	12662.74	49.82029	265.4413
#1	245.5590	6400.238	52.46583	50.98154	12746.91	47.62903	265.8561
#2	245.8474	6375.675	49.22964	50.25795	12578.56	52.01156	265.0265
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	509.8127	512.7474	249.7723	2.576635	1048.989	1.199897	512.4724
#1	510.2995	513.5673	249.5089	1.331629	1050.377	1.236471	511.8802
#2	509.3260	511.9275	250.0356	3.821641	1047.602	1.163323	513.0646
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	510.6392	45.06549	53.73843	10876.62
#1	512.0565	44.95049	56.22306	10888.32
#2	509.2220	45.18048	51.25380	10864.93
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: PS203025-002-07-1/3 Operator: LCM
Run Time: 03/19/02 21:54:35
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1099.831	80.66788	81.71989	26.19022	10.30689	20.58808	81248.94
#1	1101.334	80.62114	80.24839	26.19908	10.29248	20.47102	81301.87
#2	1098.328	80.71461	83.19141	26.18135	10.32131	20.70515	81196.02
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	21.28784	29.96999	34.68297	1681.012	30.43800	6800.739	121.8264
#1	21.29063	30.01130	34.43470	1678.244	30.14462	6800.820	121.9138
#2	21.28505	29.92868	34.93125	1683.781	30.73137	6800.659	121.7390
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	39.63457	6365.130	68.87390	41.89842	12270.65	101.2428	22.03200
#1	39.67611	6371.559	69.63230	41.87784	12289.65	102.6107	22.04665
#2	39.59302	6358.702	68.11551	41.91900	12251.64	99.87492	22.01734
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	85.49374	89.80260	32.63296	102.4441	545.1349	21.61841	29.43147
#1	85.61887	90.01524	33.06122	102.6867	545.4915	21.56382	29.18759
#2	85.36861	89.58994	32.20470	102.2016	544.7783	21.67299	29.67535
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	30.94091	65.24124	70.68988	15950.22
#1	30.62278	67.09173	70.90224	15961.95
#2	31.25903	63.39075	70.47753	15938.48
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 10:10:22 PM page 1

Method: TRACE3 Sample Name: SE203025-002-07-1/3 Operator: LCM
Run Time: 03/19/02 22:02:31
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-10.1693	1.431076	-1.20521	1.258904	.0960613	.2023122	15484.72
#1	-11.5406	1.511131	-1.26408	1.165736	.1167988	.2005117	15350.95
#2	-8.79807	1.351020	-1.14633	1.352072	.0753237	.2041128	15618.49
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4955880	.0275265	1.511867	142.2576	-.349845	423.5227	20.52840
#1	.5653514	-.035096	1.377194	132.8290	-.307342	418.6700	20.36375
#2	.4258246	.0901488	1.646541	151.6863	-.392348	428.3753	20.69305
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4848714	220.0436	.9400039	.3260078	1541.875	-1.65447	.6986224
#1	-.098389	220.0056	1.852531	.1499455	1514.043	-1.38424	.7291403
#2	1.068131	220.0817	.0274772	.5020703	1569.706	-1.92469	.6681045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1.282085	4.400391	.9865021	-.117057	106.3165	.1043215	2.288859
#1	1.423448	4.032384	.8346644	-.360115	105.3446	.1431042	3.164930
#2	1.140722	4.768397	1.138340	.1260013	107.2883	.0655389	1.412787
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.66955	1.224227	.7975380	2149.619
#1	-2.04383	6.698971	-.571038	2127.151
#2	-1.29527	-4.25052	2.166114	2172.087
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: S 203025-003-03-1/1 Operator: LCM
Run Time: 03/19/02 22:10:27
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	107.5016	.5241162	357.0853	6.024347	.2372388	.0317406	67072.36
#1	107.6483	.1436797	356.2311	6.029395	.2018311	.1694671	67116.69
#2	107.3548	.9045528	357.9395	6.019299	.2726465	-.105986	67028.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	8.224665	1.616735	2.645511	-18.0306	.2354801	114039.9	8.955843
#1	8.041032	1.620351	2.861646	-20.8218	1.152752	114109.6	8.977735
#2	8.408297	1.613119	2.429376	-15.2395	-.681792	113970.3	8.933951
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.597625	67860.84	1.330169	.5882469	H1174699.	-3.26322	10.80585
#1	.8395349	67976.59	2.538703	.7341950	H1176997.	-2.97587	10.83103
#2	2.355715	67745.11	.1216357	.4422989	H1172401.	-3.55057	10.78067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.176073	2019.564	2.172032	2.258668	826.1500	27.68742	1.223225
#1	4.031529	2020.748	1.873382	.2124435	827.3987	27.48724	.3410437
#2	4.320617	2018.380	2.470682	4.304894	824.9013	27.88761	2.105407
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.258839	-1.89052	2.940139	32970.59
#1	1.558157	-2.97495	5.295155	32874.62
#2	-2.07583	-.806085	.5851238	33066.57
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 10:26:13 PM page 1

Method: TRACE3 Sample Name: S 203025-004-03-1/1 Operator: LCM
Run Time: 03/19/02 22:18:23
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	28.15229	4.232576	-3.05291	8.016327	.0823333	.0805416	64687.15
#1	28.41784	3.026302	-1.35956	8.022999	.0701612	.0503669	64757.85
#2	27.88674	5.438851	-4.74625	8.009656	.0945054	.1107163	64616.46
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.6594318	.0774103	2.614042	201.2753	-.840787	2035.227	3.322167
#1	.5951680	-.133107	2.666443	197.2781	.0483441	2042.283	3.317674
#2	.7236956	.2879273	2.561640	205.2724	-1.72992	2028.171	3.326660
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6399947	552.9067	3.379021	.3675991	8526.642	-.316469	.7816042
#1	.5952067	554.3037	4.036573	.2484292	8658.002	1.793876	.6613077
#2	.6847826	551.5097	2.721470	.4867689	8395.281	-2.42681	.9019006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	9.035614	22.68797	1.465434	.6641660	442.2824	.6857346	-1.65454
#1	8.927246	22.55856	1.321611	-.149741	442.6986	.5992030	.3032441
#2	9.143983	22.81737	1.609257	1.478073	441.8662	.7722663	-3.61231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.434321	-2.18056	6.158455	7348.256
#1	-.079496	-.095181	6.102163	7371.592
#2	-.789147	-4.26594	6.214747	7324.919
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: S 203025-005-03-1/1 Operator: LCM
Run Time: 03/19/02 22:26:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	20.82086	1.826303	-1.68341	3.906733	.0998485	.0383427	75174.77
#1	19.86054	1.464371	-.962125	3.928285	.0861945	.0478039	75109.80
#2	21.78119	2.188236	-2.40469	3.885180	.1135024	.0288816	75239.72
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7185789	-.136897	2.947768	36.30767	2.911488	2208.434	1.050778
#1	.6525146	.0435938	3.158152	38.79828	3.439383	2205.089	1.036802
#2	.7846431	-.317389	2.737385	33.81706	2.383594	2211.778	1.064755
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.217506	1085.522	2.124688	.1981435	9839.606	-2.82831	.9495285
#1	-.334969	1081.673	3.350587	.2566214	9773.199	-2.00748	.5036057
#2	-.100043	1089.372	.8987884	.1396656	9906.014	-3.64913	1.395451
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	7.411206	21.87965	1.817579	1.613367	554.6304	.6585570	2.356638
#1	7.372608	21.51155	1.693595	.8990908	554.0031	.5833652	2.743591
#2	7.449805	22.24776	1.941564	2.327644	555.2577	.7337488	1.969685
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	3.188560	.0851453	3.144172	7670.062
#1	3.786894	1.517721	4.266733	7662.110
#2	2.590226	-1.34743	2.021610	7678.015
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 10:42:05 PM page 1

Method: TRACE3 Sample Name: S 203025-006-03-1/1 Operator: LCM
Run Time: 03/19/02 22:34:15
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	117.2672	-.415998	368.4768	6.104911	.2498715	.0199633	66548.55
#1	115.7802	.2666390	366.9649	6.049825	.2388335	.0087390	66112.79
#2	118.7541	-1.09864	369.9888	6.159997	.2609096	.0311877	66984.32
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	8.030493	.7638745	2.590585	-20.0320	-1.53718	112015.2	9.137571
#1	7.759103	.6091860	2.493736	-22.6893	-1.23682	111308.3	9.117411
#2	8.301883	.9185631	2.687435	-17.3747	-1.83754	112722.2	9.157731
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.660391	68544.19	3.117801	.0494938	H1171796.	-2.96007	10.54993
#1	1.658557	68163.73	1.830839	-.317365	H1166984.	-3.22304	10.45352
#2	1.662225	68924.64	4.404762	.4163530	H1176607.	-2.69711	10.64635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.412964	1979.798	1.521053	2.328118	826.3714	27.75716	-.272631
#1	3.809468	1970.349	1.576725	.7254085	821.3271	27.56417	-.006236
#2	3.016459	1989.247	1.465382	3.930828	831.4157	27.95014	-.539027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-2.16983	.1432335	4.604674	32998.43
#1	-1.85249	-.402649	2.947213	32647.32
#2	-2.48717	.6891163	6.262135	33349.54
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 10:50:01 PM page 1

Method: TRACE3 Sample Name: S 203025-007-03-1/1 Operator: LCM
Run Time: 03/19/02 22:42:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10.24659	-1.47497	-.575629	.2562869	.0847625	.0285154	186.1563
#1	11.22248	-1.76180	-1.30326	.2947370	.0727608	.0097802	190.4261
#2	9.270698	-1.18815	.1519990	.2178368	.0967642	.0472505	181.8866
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4293650	-.063236	1.822737	25.65648	-.157308	31.20719	.4848250
#1	.2568744	-.430669	1.891193	28.30133	-.104909	34.68506	.4850256
#2	.6018557	.3043964	1.754280	23.01163	-.209707	27.72933	.4846245
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.077605	53.07660	3.096208	.6414003	810.9202	-2.59739	.0793888
#1	-.146303	52.54760	3.923219	.8488529	788.2098	-1.51663	.1578651
#2	-.008907	53.60561	2.269198	.4339478	833.6306	-3.67816	.0009125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.776579	7.693090	-.240645	.0394012	.5457174	.1841420	-.073086
#1	2.840147	7.823015	-.288231	.8878199	.5840961	.1611563	.2201190
#2	2.713012	7.563166	-.193058	-.809018	.5073387	.2071277	-.366292
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.199768	-1.26807	5.277926	196.4597
#1	-.267773	-2.66708	7.217944	217.0875
#2	-.131764	.1309361	3.337908	175.8319
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: BLK53649 Operator: LCM
Run Time: 03/19/02 22:50:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-7.34508	-.803029	-2.83356	.2810266	.0912263	.0863871	208.1094
#1	-7.38469	-1.71141	-2.32685	.2426392	.0752198	.2139468	208.8433
#2	-7.30548	.1053496	-3.34028	.3194141	.1072328	-.041172	207.3756
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.0023144	-.024638	1.095265	19.57948	.1884281	16.19713	.3729748
#1	.0205890	-.145093	.9142123	19.11717	.5988885	15.77989	.3551672
#2	-.015960	.0958164	1.276318	20.04179	-.222032	16.61437	.3907823
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4160595	7.992770	.8099545	.3669887	452.2740	-.246119	-.036300
#1	.4058108	5.576528	-1.57868	.3529460	435.8188	-1.46241	-.155772
#2	.4263081	10.40901	3.198588	.3810314	468.7291	.9701765	.0831724
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.381927	5.871244	.1755622	.3871692	.5693502	.1753206	1.061274
#1	3.135169	5.597243	-.027095	-1.08862	.5696514	.1224979	.9144716
#2	3.628684	6.145246	.3782191	1.862958	.5690491	.2281433	1.208076
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.248310	-.953269	1.691162	49.60752
#1	.4407813	-2.93226	-.902274	H53.94318
#2	-.937401	1.025722	4.284598	45.27186
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				50.00000
Low				-50.0000

nalysis Report 03/19/02 11:05:52 PM page 1

:ethod: TRACE3 Sample Name: BKS53649 Operator: LCM
.un Time: 03/19/02 22:58:02
:omment: UG/L
:ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10085.99	97.04137	98.18770	995.0928	51.19959	101.9435	10573.71
#1	10110.31	96.83124	98.18298	995.9538	51.20016	102.0798	10579.14
#2	10061.66	97.25148	98.19243	994.2317	51.19903	101.8072	10568.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.00	120.0000	120.0000	1200.000	60.00000	120.0000	12000.00
Low	8000.000	80.00000	80.00000	800.0000	40.00000	80.00000	8000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	501.4697	503.1326	515.7490	10150.65	1006.498	9568.230	514.6035
#1	501.6974	503.0933	516.5163	10153.86	1006.063	9570.980	514.8158
#2	501.2419	503.1718	514.9816	10147.44	1006.933	9565.481	514.3912
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	600.0000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	400.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	490.0149	9738.639	96.85912	102.2373	10514.80	96.74694	515.4352
#1	489.8921	9759.550	96.29371	102.1414	10531.81	97.49090	515.8792
#2	490.1378	9717.727	97.42451	102.3332	10497.78	96.00298	514.9913
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	12000.00	120.0000	120.0000	12000.00	120.0000	600.0000
Low	400.0000	8000.000	80.00000	80.00000	8000.000	80.00000	400.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1004.938	1007.198	506.9889	498.2520	994.1183	1991.504	1008.621
#1	1004.652	1007.299	506.0330	497.5464	994.7983	1992.239	1007.267
#2	1005.225	1007.097	507.9448	498.9576	993.4384	1990.768	1009.974
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1200.000	1200.000	600.0000	600.0000	1200.000	2400.000	
Low	800.0000	800.0000	400.0000	400.0000	800.0000	1600.000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1005.436	91.93892	99.31897	10593.36
#1	1005.461	92.32895	98.27582	10613.09
#2	1005.411	91.54890	100.3621	10573.64
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				12000.00
Low				8000.000

Analysis Report QC Standard 03/19/02 11:13:49 PM page 1

Method: TRACE3 Sample Name: CVCCV4 Operator: LCM
Run Time: 03/19/02 23:05:58
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51816.89	1028.730	1016.399	502.8191	51.13844	497.9556	102490.2
#1	51935.16	1029.752	1024.951	503.6227	51.26927	498.9177	102785.5
#2	51698.61	1027.708	1007.848	502.0155	51.00760	496.9936	102194.9
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.7004	495.8636	521.2120	50357.28	498.1429	98066.84	505.0529
#1	498.5678	496.0762	522.6464	50459.03	499.8081	98246.12	506.3148
#2	496.8329	495.6511	519.7776	50255.52	496.4776	97887.55	503.7910
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	484.0005	25628.67	1006.338	52.36910	103080.7	1012.217	513.4034
#1	484.7109	25651.66	1005.970	52.44916	103250.5	1013.399	513.6124
#2	483.2901	25605.68	1006.706	52.28905	102910.9	1011.034	513.1945
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	490.6510	511.6954	512.0376	494.7426	508.7722	503.0009	498.4168
#1	492.0087	512.7068	512.4853	494.5685	509.8163	503.7139	499.3639
#2	489.2933	510.6840	511.5899	494.9167	507.7282	502.2879	497.4697
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	498.0055	1015.136	1001.939	528.9045
#1	500.0299	1016.315	1000.797	529.7116
#2	495.9812	1013.957	1003.081	528.0975
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 11:21:45 PM page 1

Method: TRACE3 Sample Name: BCCCB4 Operator: LCM
Run Time: 03/19/02 23:13:54
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-17.8159	-.627209	-1.12931	.1919455	.1127621	.1587700	49.10017
#1	-15.3159	.7295935	-1.08711	.2722011	.1452539	.2089825	56.00058
#2	-20.3158	-1.98401	-1.17150	.1116899	.0802703	.1085574	42.19976
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.0933016	.4084958	1.355455	14.58505	-1.13899	22.73566	.1255134
#1	.0754935	.3523172	1.246261	23.15027	-1.05578	29.54345	.1501027
#2	.1111098	.4646744	1.464649	6.019834	-1.22220	15.92786	.1009242
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4224638	8.157099	.7589837	.0977756	78.62306	-1.56698	.0839420
#1	.3767366	9.155008	.2329894	.2040338	77.81935	-1.70771	-.229910
#2	.4681910	7.159189	1.284978	-.008483	79.42677	-1.42625	.3977945
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.1104523	1.434476	.7947443	1.256804	.1365131	.1651558	-1.16266
#1	.0146620	1.884645	.9748602	2.898826	.1729652	.2614644	.6648190
#2	.2062425	.9843074	.6146283	-.385218	.1000611	.0688472	-2.99014
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.12746	-1.74117	2.008710	-2.06937
#1	-1.91639	-.515034	.6066498	-1.27183
#2	-.338542	-2.96731	3.410771	-2.86691
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

GPL Laboratories, LLLP *Document Control No: GP_M_094*

Metals Preparation & Sample Description Log

Date: 3-8-02 Prep: 200.7 / 3005A / 3020A / 3050B / 3010A / ILC03.1 / ILM04.1 / ILM05.1 Batch No: 9447

Analyst: ~~MSS~~ MSS Comments: Hot Plate Digestion

Reviewed by: RA Date: 3-20-02 Spike Witness: ABM Prep. Seq: 53538

	GPL Work Order No.	Sample	Frac	SIZE mL (g)	Final Vol. (mL)	Matrix S, W Other	Color Before	Color After	Clarity Before or Soil Texture	Clarity After Clear, Cloudy, Opaque	Soil Artifacts or Water pH
							R, Bl, Y, G, O, V, W, Colorless, Br, Grey, Bk.				
1	BLK	047	—	100	100	W	colorless	colorless	clear	clear	—
2	BKS	047	—								
3	203025	001	03-1/3								
4		002	07-1/3								
5		DUP									
6		SPK									
7		003	03-1/1				BROWN	YELLOW			
8		004					colorless	colorless			
9		005									
10		006					BROWN	YELLOW			
11		007					colorless	colorless			
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

03-08-02

MSS

LCS ID / Amt. Added (ml, g): 0.1 ml (15603, 15605) 1.0 ml PPM	HNO3(1+1) ID: —
Spiking ID / Amt Added (ml): 0.1 ml (15603, 15605) 1.0 ml PPM	HNO3(conc) ID: GP-057-005-09
	HCl(conc) ID: —
Temperature, C: 94°C	HCl(1+1) ID: GP-057-090-05
	Peroxide ID: ~~GP-057-MSS~~

Analytical Report For 203025

for

CH2M Hill Constructors, Inc.

Project Manager : Bill Canelos

Project Name : NS Mayport, SWMU 15

March 22, 2002

GPL

Laboratories

CCI NAV
MAR 25

GPL Laboratories, LLLP Certifies that the test results meet all requirements of the NELAC Standards unless otherwise noted.

Reviewed by,
Project Manager

Approved by,
Laboratory Director

202 Perry Parkway Gaithersburg, MD 20877 Phone (301) 926-6802 Fax: (301) 840-1209
www.gplab.com

TOTAL # OF PAGES : 25

GPL LABORATORIES, LLP
ANALYTICAL RESULTS

Project Name : NS Mayport, SWMU 15

Date Printe March 22, 2002

GPL ID	Client ID
203025-006-01-1/2	007-DUP-Q1-02
203025-006-03-1/1	007-DUP-Q1-02
203025-007-01-1/2	007-EQB-Q1-02
203025-007-03-1/1	007-EQB-Q1-02
203025-001-01-1/2	007-MW01S-Q1-02
203025-001-03-1/1	007-MW01S-Q1-02
203025-002-01-1/6	007-MW03S-Q1-02
203025-002-07-1/3	007-MW03S-Q1-02
203025-003-01-1/2	007-MW04S-Q1-02
203025-003-03-1/1	007-MW04S-Q1-02
203025-004-01-1/2	007-MW05S-Q1-02
203025-004-03-1/1	007-MW05S-Q1-02
203025-005-01-1/2	007-MW08S-Q1-02
203025-005-03-1/1	007-MW08S-Q1-02

CCI NAVY RAC PMO
MAR 25

CASE NARRATIVE FOR GPL #203025

CLIENT: CH2MHILL CONSTRUCTORS INC
PROJECT/SITE: NS MAYPORT SWMU 15
WORK ORDER(S): 203025
REVIEW DATE: 03/22/02

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Analytical Report are integral parts of GPL Laboratories' report package. If you did not receive all of these documents please contact GPL immediately.

Sample Receipt

Seven water samples were received on 03/07/02. The samples were delivered by GPL Courier. The samples were received intact. Sample receipt conditions and temperatures are documented on the Sample Receipt Checklist.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Analytical Report of Analysis.

Pesticides/PCBs

1. Seven water samples were extracted and analyzed for Pesticide compounds using method 8081A.

2. MS/MSD analysis was performed on sample 007-MW03S-Q1-02. A laboratory control sample was extracted with this batch of samples.

3. Percent surrogate recoveries were out of QC limits for DCB on column RTx-CLP for samples 007-MW01S-Q1-02, 007-MW08S-Q1-02. Percent surrogate recoveries were out of QC limits for TCX on column RTx-CLP for sample 007-DUP-Q1-02 and on both columns for TCX for sample 007-MW04S-Q1-02 due to matrix interference.

4. Percent recovery for Endrin Ketone was above QC limits in the LCS, MS and MSD analyses.

5. Continuing calibration file I117330 failed QC limits for delta-BHC, Endosulfan Sulfate. Continuing calibration file I117342 failed QC limits for delta-BHC, Endosulfan Sulfate and Endrin Ketone. The percent deviation for each of the above compounds was above 15% on both columns.

6. Concentrations reported on Form 1 are the higher values of results generated by two columns. However, the analyst determines the most reliable results based on the evaluation of quality control parameters. Flagged concentrations (*) on Form 1 indicate that reported results are the lower values.

7. Due to software limitations, some forms were corrected manually.

Metals

1. Seven water samples were analyzed for arsenic by EPA SW846 methods.

2. A matrix spike, duplicate, and serial dilution were performed on sample 007-MW03S-Q1-02. They were within the control limits.

CASE NARRATIVE FOR GPL #203025

3. Calibration standards are verified against independent check standards purchased from a commercial vendor of environmental standards.

4. All GPL QA/QC criteria were met.

Project Manager

Lab Director

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW01S-Q1-02
GPL ID: 203025-001-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 11:54
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW03S-Q1-02
GPL ID: 203025-002-01-1/6
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 12:22
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW04S-Q1-02
GPL ID: 203025-003-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 13:46
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW05S-Q1-02
GPL ID: 203025-004-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 14:14
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW08S-Q1-02
GPL ID: 203025-005-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 14:42
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-DUP-Q1-02
GPL ID: 203025-006-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 15:10
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.1	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-EQB-Q1-02
GPL ID: 203025-007-01-1/2
Matrix: WATER
Date Collected: 03/06/2002
Date Received: 03/07/2002

Prep Method: SW8081A
Prep Date: 03/11/2002
Prep Time: 08:43
Prep Batch 53565

Analytical Method: SW8081A
Date Analyzed: 03/21/2002
Time Analyzed 15:38
Analysis Batch 52902

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
4,4-DDD	BQL	0.060	ug/L	U	1
4,4-DDE	BQL	0.060	ug/L	U	1
4,4-DDT	BQL	0.060	ug/L	U	1
Aldrin	BQL	0.060	ug/L	U	1
Alpha-BHC	BQL	0.060	ug/L	U	1
Alpha-Chlordane	BQL	0.060	ug/L	U	1
Beta-BHC	BQL	0.060	ug/L	U	1
Chlordane	BQL	1.2	ug/L	U	1
Delta-BHC	BQL	0.060	ug/L	U	1
Dieldrin	BQL	0.060	ug/L	U	1
Endosulfan I	BQL	0.060	ug/L	U	1
Endosulfan II	BQL	0.060	ug/L	U	1
Endosulfan Sulfate	BQL	0.060	ug/L	U	1
Endrin	BQL	0.060	ug/L	U	1
Endrin Aldehyde	BQL	0.060	ug/L	U	1
Endrin Ketone	BQL	0.060	ug/L	U	1
Gamma-BHC (Lindane)	BQL	0.060	ug/L	U	1
Gamma-Chlordane	BQL	0.060	ug/L	U	1
Heptachlor	BQL	0.060	ug/L	U	1
Heptachlor Epoxide	BQL	0.060	ug/L	U	1
Methoxychlor	BQL	0.060	ug/L	U	1
Toxaphene	BQL	1.2	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW01S-Q1-02
GPL ID: 203025-001-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 21:07

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW03S-Q1-02
GPL ID: 203025-002-07-1/3
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 21:14

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW04S-Q1-02
GPL ID: 203025-003-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:10

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	357	4.1	ug/L		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW05S-Q1-02
GPL ID: 203025-004-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:18

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-MW08S-Q1-02
GPL ID: 203025-005-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:26

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-DUP-Q1-02
GPL ID: 203025-006-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:34

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	368	4.1	ug/L		1

GPL LABORATORIES, LLLP

Summary of Analytical Results

Client ID 007-EQB-Q1-02
GPL ID: 203025-007-03-1/1
Matrix: Water
Date Collected: Mar-06-2002
Date Received: Mar-07-2002

Prep Method: SW3010A
Prep Date: Mar-08-2002
Prep Time: 12:00

Analytical Method: SW6010B_AS
Date Analyzed: Mar-19-2002
Time Analyzed 22:42

Parameter	Result	Rep Limit	Units	Qualifier	D.F.
Arsenic	BQL	4.1	ug/L	U	1

GPL LABORATORIES, LLLP

Qualifier Definitions

U = Indicates that the compound was analyzed for but not detected at or above the reporting limit

Organics:

B = Indicates that the analyte was found in the associated blank as well as in the sample

D = Indicates that the analyte was reported from a diluted analysis

E = Indicates that the concentration detected exceeded the calibration range of the instrument

J = Value is less than the reporting limits but greater than the MDL

P = Indicates that there is greater than 25% difference for detected pesticide/Aroclor results between the two GC columns

Metals:

B = Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL

E = Indicates that reported value is estimated because of the possible presence of interference (i.e., the serial dilution not within control limits)

H = Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit

N = Spiked sample recovery not within control limits

* = Duplicate analysis not within control limits

From: Randy Dumaop (904)777-4812
CCI / J.A. JONES ENV. SERVICES
6219 Authority Ave

Jacksonville, FL, 32221

REVENUE BARCODE

FedEx.

To: Laura Petrik (301)926-6802
GPL Laboratories
202 Perry Parkway

Gaithersburg, MD, 20877

SHIP DATE: 06MAR02
WEIGHT: 55 LBS

Ref: 149294/99.22.01.01/30857

DELIVERY ADDRESS BARCODE(FEDEX-EDR)

TRK # 7909 9789 2979 FORM 0201

FedEx **PRIORITY OVERNIGHT**

20877-MD-US **XA EDGA** IAD

THU
A2
Deliver by:
07MAR02

---

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping label pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Use of this system constitutes your agreement to the service conditions in the current FedEx service Guide, available upon request.

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

From: Randy Dumaop (904)777-4812
CCI / J.A. JONES ENV. SERVICES
6219 Authority Ave

Jacksonville, FL, 32221

REVENUE BARCODE

FedEx.

To: Laura Petrik (301)926-6802
GPL Laboratories
202 Perry Parkway

Gaithersburg, MD, 20877

SHIP DATE: 06MAR02
WEIGHT: 55 LBS

Ref: 149294/99.22.01.01/30857

DELIVERY ADDRESS BARCODE(FEDEX-EDR)

TRK # 7903 3381 7667 FORM 0201

FedEx PRIORITY OVERNIGHT

IAD

THU
A2
Deliver by:
07MAR02

20877-MD-US XA EDGA

---

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping label pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Use of this system constitutes your agreement to the service conditions in the current FedEx service Guide, available upon request.

FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

****
*** TX REPORT ***
****

TRANSMISSION OK

TX/RX NO	3239
CONNECTION TEL	916785798100p8002
SUBADDRESS	
CONNECTION ID	
ST. TIME	03/07 12:46
USAGE T	01'28
PGS.	4
RESULT	OK

GPL Laboratories, LLLP

GPL

202 Perry Parkway
Gaithersburg, MD 20877
PHONE: (301) 926-6802
FAX: (301) 840-1209

FACSIMILE COVER SHEET

FYI:

GPL can provide a full range of explosives analysis:
PETN, Nitrocellulose, Nitroguanidine, Nitroglycerine, 8330 compounds.

DATE: 3-7-02

To: *Stacey Kondrat*

From: *Laura Petrik*

Message: GPL # 203025 NS Mayport CTO 7
sample CoC & Receipt Checklist

GPL Laboratories, LLLP

Sample Preservation Check Documentation Form

Work Order: 203025

Parameter:	Metals	~~Phenol~~	TPH O&G	Classical Parameters	Cyanide	Sulfide	Radiology	Other
Preservative: pH Value	HN03 <2	~~H2SO4 <2~~	H2SO4 <2	H2SO4 <2	NaOH >12	NaOH >9	H2SO4 <2	Preservations
Client ID								
002-MW015Q102	<2							
003-MW035Q102	<2/<2/<2							
007-MW045Q102	<2							
007-MW055Q102	<2							
007 MW057Q102	<2							
007 DUP Q102	<2							
007 EQB Q102	<2							

MW-15D

03/07/02

Sample Preservation Check Performed By: [signature] Date: 03/07/02

GPL Laboratories, LLLP

Figure 1
SAMPLE RECEIPT CHECKLIST

W.O. No: 203025

Client Name: CH2M Hill

Date Received: 03/07/02

Time Received: 9:40 Am

Received By: [illegible]

Carrier Name: Fed EX

Prepared (Logged In) By: [illegible] 03/07/02 (Initials Date)

Project: NS. Mayport SWMU 15

Site:

VOA Holding Blank I.D. No: /

	YES	NO
Airbill/Manifest Present?	✓	
No. 7903 3381 7667 7909 9789 2979		
Shipping Container in Good Condition?	✓	
Custody Seals Present on Shipping Container?	✓	
Condition: Broken ___ Intact-not dated or signed ___ Intact-dated and signed ✓		
Usage of Tamper Evident Type	✓	
Chain-of-Custody Present?	✓	
Chain-of-Custody Agrees with Sample Labels?	✓	
Chain-of-Custody Signed?	✓	
Packing Present in Shipping Container? Type of Packing Bubble wrap	✓	
Custody seals on Sample Bottles? Condition: Good ___ Broken ___		✓
Total Number of Sample Bottles 27		
Total Number of Samples 7		
Samples Intact?	✓	
Sufficient Sample Volume for Indicated Test?	✓	

	YES	NO
Trip Blanks: No. of Sets ___		✓
Field Blanks: No. of Sets ___		✓
Equip. Blank: No. of Sets 1	✓	✓
Field Duplicate: No. of Sets 1	✓	✓
MS/MSD: No of Sets 1	✓	
VOA Vials Have Zero Headspace?	✓	
Preservatives Added to Sample?	✓	
pH Check Required? Performed By? [illegible]	✓	
Ice Present in Shipping Container?	✓	

Container #	Temp.	Container #	Temp.
#1	2.0°C		
#2	2.0°C		

03/07/02

Project Manager Contacted?
Name: Lauren Petrik
Date Contacted: 03/07/02

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or contracts, they should be marked N/A/

COMMENTS: Sample 007-MW055-Q1-02 marked 007-MW085-Q1-02 on sample Labels. (Times match) Temperature by Temp Blank. 3-7-02 B Canales notified about ID discrepancy Petrik

Checklist Completed By: [illegible]

Date: 03/07/02

SOP No: F.2V11

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
149294-008

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	GPL Laura Petrik	Bill Canelos J.A. Jones Environmental 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	3418	Christelle Newsome / 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 J.A. Jones Environmental	Ph:(904)777-4812 Fax:(904) 777-4262	Ph: (301) 926-6802 Fax: (301) 840-1209		

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 6010B									SAMPLE TYPE (see codes on back)	COMMENTS/ SCREENING READINGS	LAB ID
1	007-MW01S-Q1-02	MPT-15-MWO-1S	W	03/06/02	11:55	III/C	14	2	1									Grab		
2	007-MW03S-Q1-02	MPT-15-MWO-3S	W	03/06/02	10:50	III/C	14	6	3									Grab	MS/MSD	
3	007-MW04S-Q1-02	MPT-15-MWO-4S	W	03/06/02	13:20	III/C	14	2	1									Grab		
4	007-MW05S-Q1-02	MPT-15-MWO-5S	W	03/06/02	14:00	III/C	14	2	1									Grab		
5	007-MW08S-Q1-02	MPT-15-MWO-8S	W	03/06/02	11:25	III/C	14	2	1									Grab		
6	007-DUP-Q1-02	Duplicate	W	03/06/02	NA	III/C	14	2	1									Grab		
7	007-EQB-Q1-02	Equipment Blank	W	03/06/02	12:50	III/C	14	2	1									Grab		
8	NA	Temperature Blank	W	NA	NA	NA	NA			2									Prepaed by lab	
9																				
10																				

SAMPLER(S) AND COMPANY: (please print)
Roger Deisler / Sean Smith
J.A. Jones Environmental Services

COURIER AND SHIPPING NUMBER:
Federal Express Tracking #790333817667, 790997892979 .

SAMPLES TEMPERATURE AND CONDITION UPON RECEIPT:

CCI NAVY PAC PMO MAR 25 2002

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Printed Name and Signature:			Printed Name and Signature:		
R. Dumaop	3/6/02	18:00	Federal Express	3/6/02	18:00
Printed Name and Signature:			Printed Name and Signature:		
Printed Name and Signature:			Printed Name and Signature:		
				3/7/02	9:40

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

Form CC7001, Rev 02/00

SAMPLE DATA PACKAGE

PESTICIDE DATA

A. QC Summary

B. Sample Data

C. Standards Data

D. Raw QC Data

GPL Laboratories, LLLP

A. QC Summary

1. **Surrogate Percent Recovery Summary**
2. **Matrix Spike/ Matrix Spike Duplicate Summary**
3. **Laboratory Control Standard Summary** (where applicable)
4. **Method Blank Summary**

GPL Laboratories, LLLP

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

	CLIENT SAMPLE ID	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	TOT OUT
01	BLK53565	64	66	133	118	0
02	BKS53565	75	64	130	114	0
03	007-MW01S-Q1-02	82	80	164 *	136	1
04	007-MW03S-Q1-02	69	64	125	108	0
05	007-MW03S-Q1-02 MS	67	54	101	90	0
06	007-MW03S-Q1-02 MSD	68	55	104	87	0
07	007-MW04S-Q1-02	0 *	0 *	27	26	2
08	007-MW05S-Q1-02	78	66	124	105	0
09	007-MW08S-Q1-02	82	82	159 *	132	1
10	007-DUP-Q1-02	0 *	40	33	28	1
11	007-EQB-Q1-02	63	60	106	92	0

			ADVISORY QC LIMITS
TCX	=	Tetrachloro-m-xylene	(6-154)
DCB	=	Decachlorobiphenyl	(16-155)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3F

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: GPL Laboratories Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

EPA Sample No.: 007-MW03S-Q1-02 GP ID: 203025-002-01-1/2

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC.
alpha-BHC	0.6	0.0	0.37	67	37-136
gamma-BHC (Lindane)	0.6	0.0	0.37	67	41-137
Heptachlor	0.6	0.0	0.37	67	29-136
Aldrin	0.6	0.0	0.39	70	12-145
beta-BHC	0.6	0.0	0.45	81	63-125
delta-BHC	0.6	0.0	0.16	28	2-104
Heptachlor Epoxide	0.6	0.0	0.41	75	42-128
Endosulfan I	0.6	0.0	0.41	75	72-106
gamma-Chlordane	0.6	0.0	0.44	80	17-139
alpha-Chlordane	0.6	0.0	0.40	71	19-152
4,4'-DDE	0.6	0.0	0.46	83	21-138
Dieldrin	0.6	0.0	0.42	75	28-128
Endrin	0.6	0.0	0.51	92	44-124
Endosulfan II	0.6	0.0	0.43	77	69-100
4,4'-DDD	0.6	0.0	0.41	74	16-139
4,4'-DDT	0.6	0.0	0.43	78	4-155
Endrin Aldehyde	0.6	0.0	0.39	71	7-141
Endosulfan Sulfate	0.6	0.0	0.55	98	43-140
Methoxychlor	0.6	0.0	0.42	76	44-121
Endrin Ketone	0.6	0.0	0.72	129 *	61-114

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
alpha-BHC	0.6	0.38	68	1	35	37-136
gamma-BHC (Lindane)	0.6	0.38	68	1	35	41-137
Heptachlor	0.6	0.37	67	0	35	29-136
Aldrin	0.6	0.39	70	0	35	12-145
beta-BHC	0.6	0.46	82	1	35	63-125
delta-BHC	0.6	0.17	30	7	35	2-104
Heptachlor Epoxide	0.6	0.42	75	0	35	42-128
Endosulfan I	0.6	0.44	79	5	35	72-106
gamma-Chlordane	0.6	0.46	83	4	35	17-139
alpha-Chlordane	0.6	0.39	71	0	35	19-152
4,4'-DDE	0.6	0.46	83	0	35	21-138
Dieldrin	0.6	0.42	75	0	35	28-128
Endrin	0.6	0.51	92	0	35	44-124
Endosulfan II	0.6	0.43	78	1	35	69-100
4,4'-DDD	0.6	0.41	75	1	35	16-139
4,4'-DDT	0.6	0.43	78	0	35	4-155
Endrin Aldehyde	0.6	0.40	71	0	35	7-141
Endosulfan Sulfate	0.6	0.54	97	1	35	43-140
Methoxychlor	0.6	0.43	77	1	35	44-121
Endrin Ketone	0.6	0.74	133 *	3	35	61-114

* Value outside of QC limits

RPD: 0 out of 20 outside limits.

Spike Recovery: 2 out of 40 outside limits.

WATER LABORATORY CONTROL SPIKE RECOVERY

Lab Name: GPL Laboratories Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SDG No.: N/A

EPA Sample No.: BKS53565 GP Lab ID: BKS53565

COMPOUND	SPIKE ADDED (ug/L)	LCS CONC. (ug/L)	LCS % REC	QC LIMITS LOW	HIGH
alpha-BHC	0.50	0.44	88	68	124
gamma-BHC (Lindane)	0.50	0.44	88	72	118
Heptachlor	0.50	0.42	85	60	124
Aldrin	0.50	0.45	89	61	109
beta-BHC	0.50	0.50	101	67	122
delta-BHC	0.50	0.20	40	21	92
Heptachlor Epoxide	0.50	0.46	92	73	111
Endosulfan I	0.50	0.49	97	65	117
gamma-Chlordane	0.50	0.49	98	63	108
alpha-Chlordane	0.50	0.43	86	70	115
4,4'- DDE	0.50	0.51	102	62	119
Dieldrin	0.50	0.47	95	62	113
Endrin	0.50	0.54	109	68	115
Endosulfan Ii	0.50	0.52	103	57	123
4,4'- DDD	0.50	0.44	88	58	118
4,4'- DDT	0.50	0.53	106	77	115
Endrin Aldehyde	0.50	0.48	96	58	127
Endosulfan Sulfate	0.50	0.63	126	73	135
Methoxychlor	0.50	0.47	94	66	112
Endrin Ketone	0.50	0.93	186 *	74	124

* Value outside QC limits

Spike Recovery: 1 of 20 outside limits.

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLK53565

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Lab Sample ID: BLK53565 Lab File ID: I117331.D

Matrix: (soil/water) WATER Extraction: (SepF/Cont/Sonc) CONT

Sulfur Cleanup: (Y/N) N Date Extracted: 03/11/02

Date Analyzed (1) : 03/21/02 Date Analyzed (2) : 03/21/02

Time Analyzed (1) : 1058 Time Analyzed (2) : 1058

Instrument ID (1) : GC-I Instrument ID (2) : GC-I

GC Column (1) : RTx-CLP ID: 0.32 (mm) GC Column (2) : RTx-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	BKS53565	BKS53565	03/21/02	03/21/02
02	007-MW01S-Q1-02	203025-001-01-1/2	03/21/02	03/21/02
03	007-MW03S-Q1-02	203025-002-01-1/2	03/21/02	03/21/02
04	007-MW03S-Q1-02 MS	203025-002-01-1/2 MS	03/21/02	03/21/02
05	007-MW03S-Q1-02 MS	203025-002-01-1/2 MSD	03/21/02	03/21/02
06	007-MW04S-Q1-02	203025-003-01-1/2	03/21/02	03/21/02
07	007-MW05S-Q1-02	203025-004-01-1/2	03/21/02	03/21/02
08	007-MW08S-Q1-02	203025-005-01-1/2	03/21/02	03/21/02
09	007-DUP-Q1-02	203025-006-01-1/2	03/21/02	03/21/02
10	007-EQB-Q1-02	203025-007-01-1/2	03/21/02	03/21/02

COMMENTS:

B. Sample Data

1. TCL Result
2. Chromatographs from Primary and Confirmatory Analyses
3. Integration Report for Primary and Confirmatory Analyses

GPL Laboratories, LLLP

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW01S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-001-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117333.D

% Moisture: decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117333.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\I\MAR2102\I117333.D\ECD2B.CH
Acq On : 21 Mar 2002 11:54 Operator: PY
Sample : 203025-001-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW01S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:10 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	7.02	6.58	223824	1403625	16.479m	16.068
Spiked Amount 20.000 Range 30 - 150 Recovery =					82.40%	80.34%
) S Decachlorobiphen	21.62	22.16	302759	1328800	32.785m	27.124
Spiked Amount 20.000 Range 30 - 150 Recovery =					163.93%#	135.62%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

001009

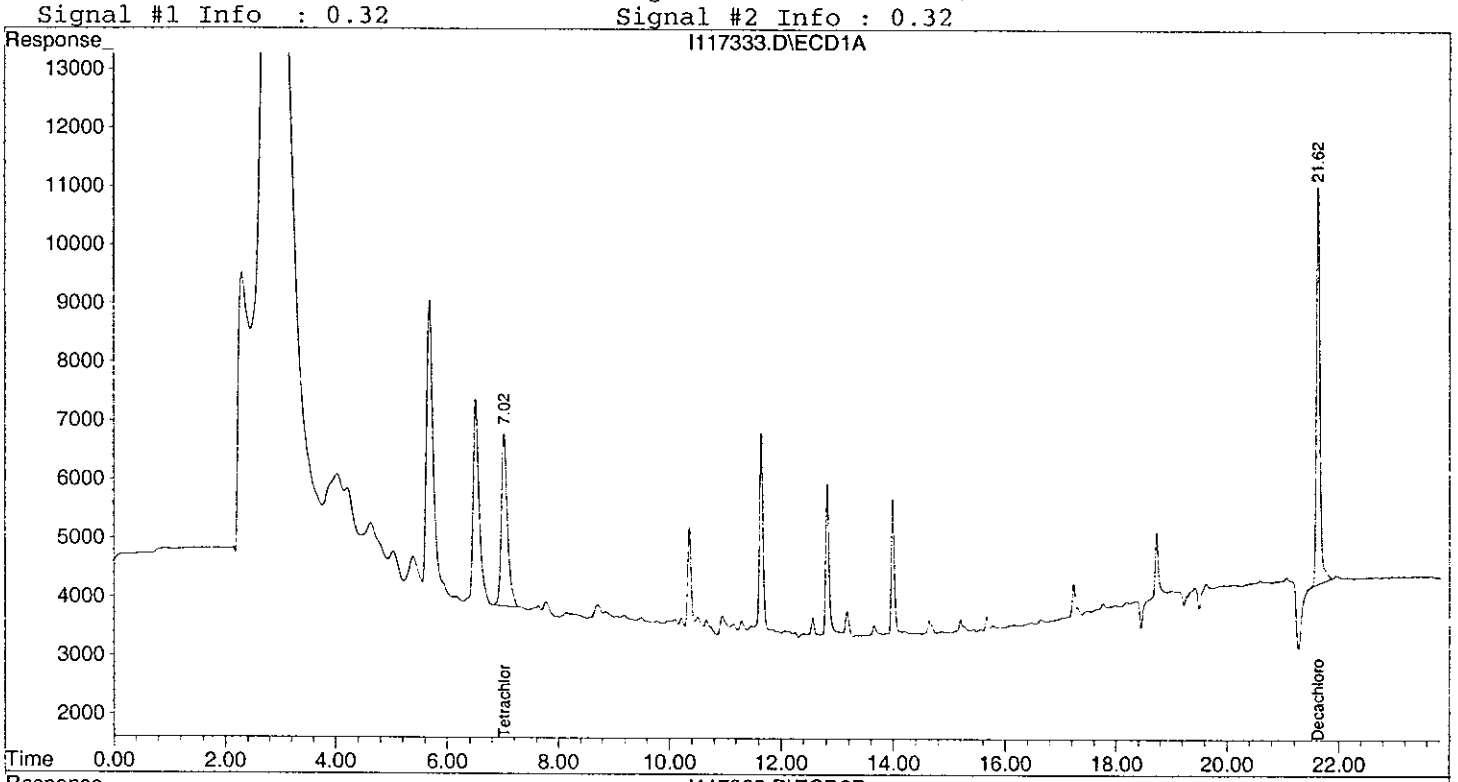
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

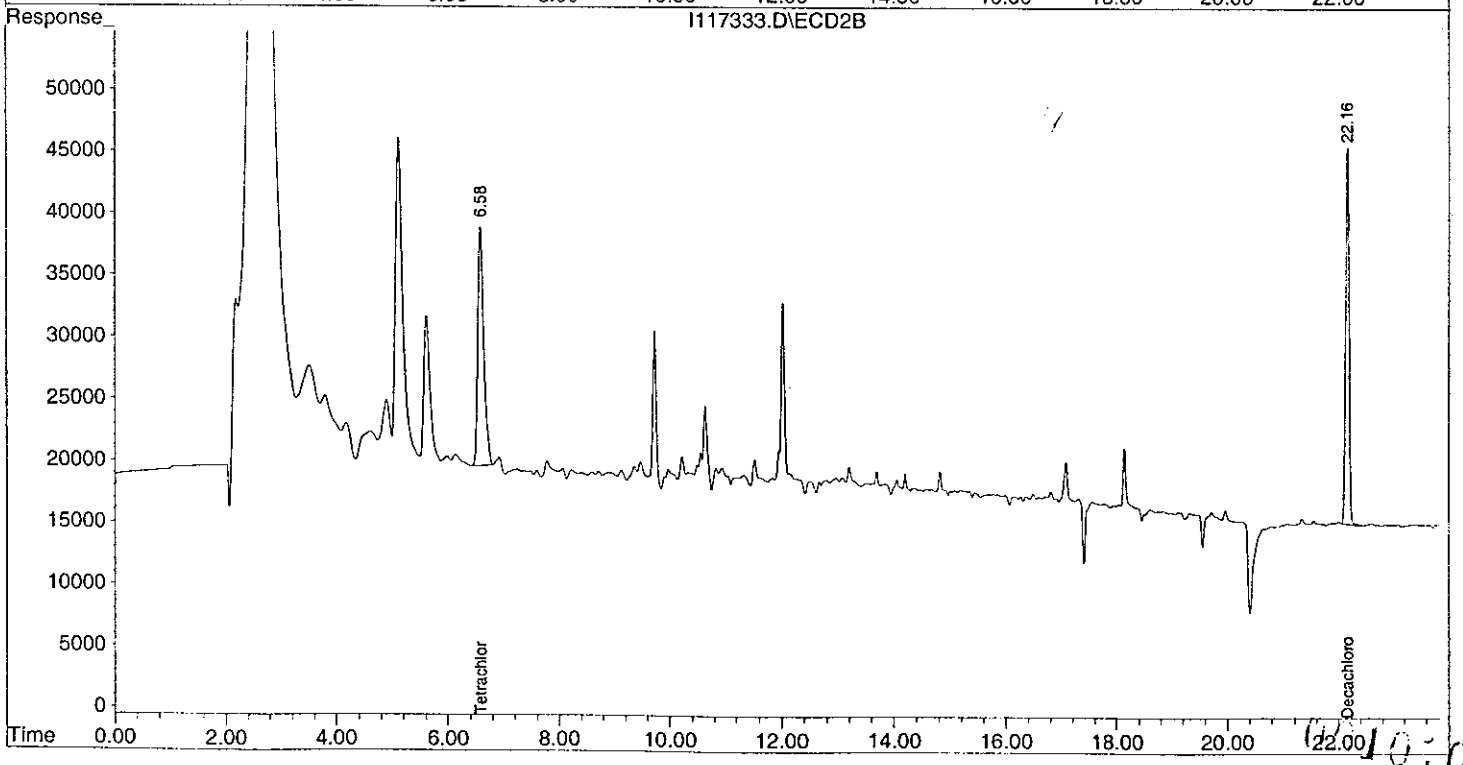
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117333.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\I\MAR2102\I117333.D\ECD2B.CH
Acq On : 21 Mar 2002 11:54 Operator: PY
Sample : 203025-001-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW01S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:10 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW03S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-002-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117334.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117334.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\I\MAR2102\I117334.D\ECD2B.CH
Acq On : 21 Mar 2002 12:22 Operator: PY
Sample : 203025-002-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	7.02	6.58	186465	1120011	13.729	12.821
Spiked Amount 20.000 Range 30 - 150 Recovery =					68.65%	64.11%
) S Decachlorobiphen	21.62	22.16	231425	1054835	25.061m	21.532
Spiked Amount 20.000 Range 30 - 150 Recovery =					125.31%	107.66%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

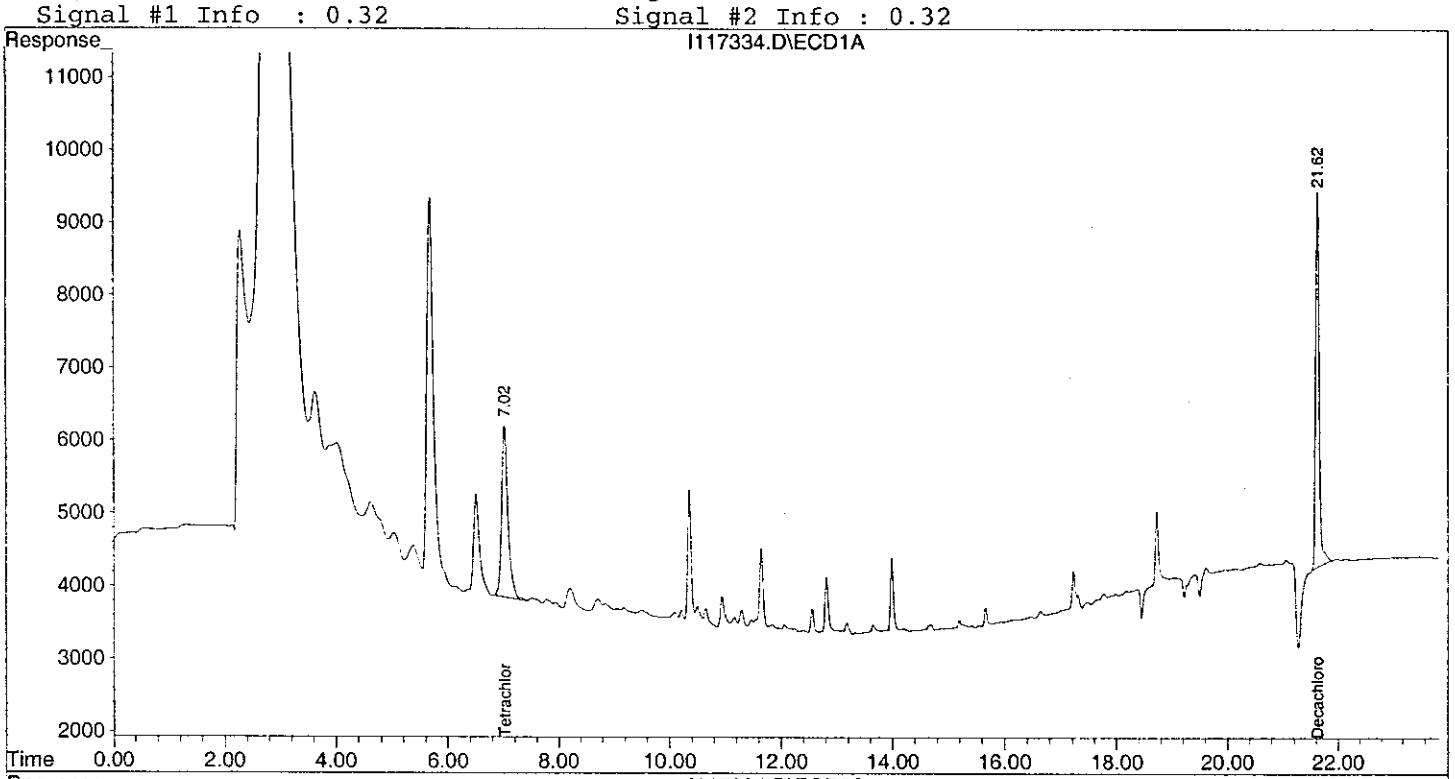
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

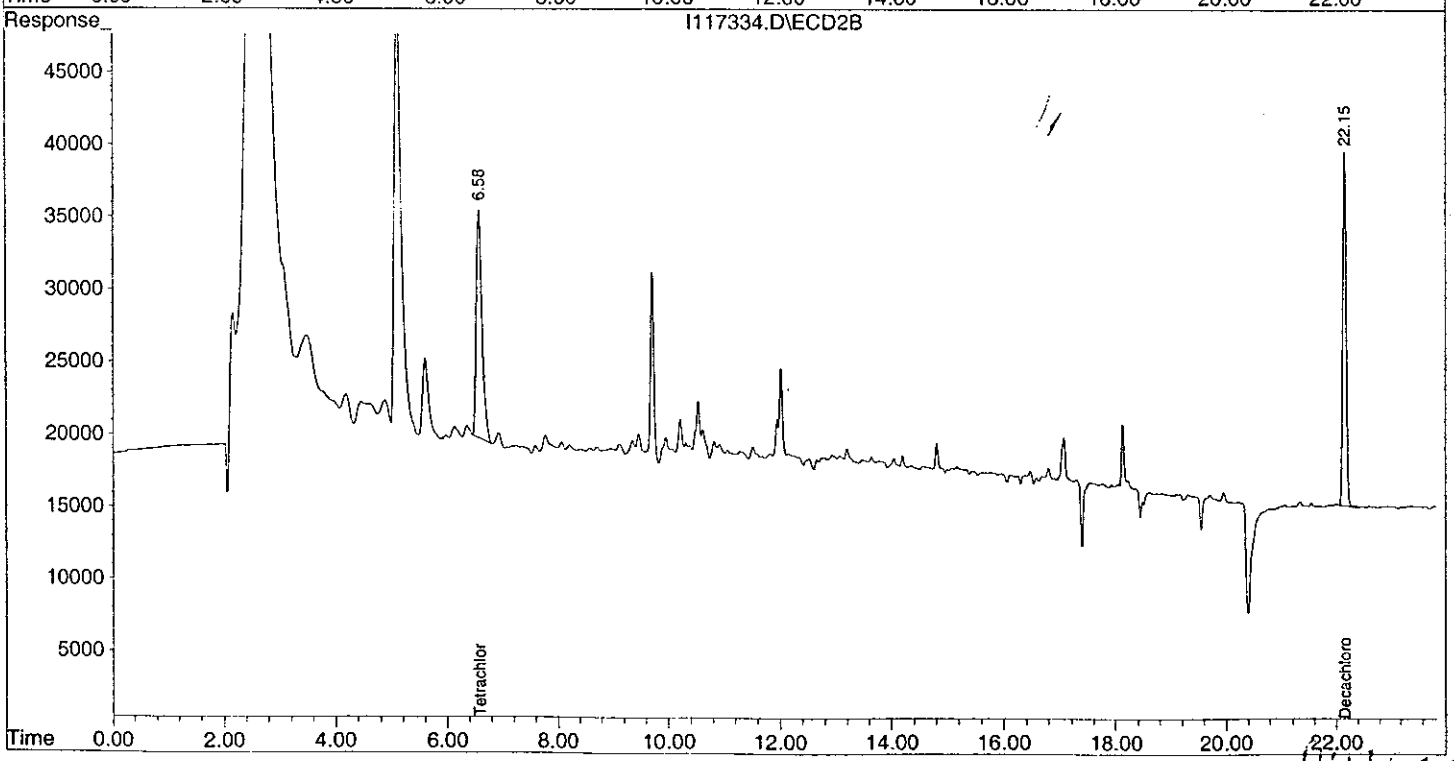
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117334.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\I\MAR2102\I117334.D\ECD2B.CH
Acq On : 21 Mar 2002 12:22 Operator: PY
Sample : 203025-002-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW04S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-003-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117337.D

% Moisture: decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117337.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\I\MAR2102\I117337.D\ECD2B.CH
Acq On : 21 Mar 2002 13:46 Operator: PY
Sample : 203025-003-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW04S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 14:17 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Decachlorobiphen	21.62	22.15	50700	255719	5.490m	5.220
Spiked Amount	20.000	Range	30 - 150	Recovery	= 27.45%#	26.10%#
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

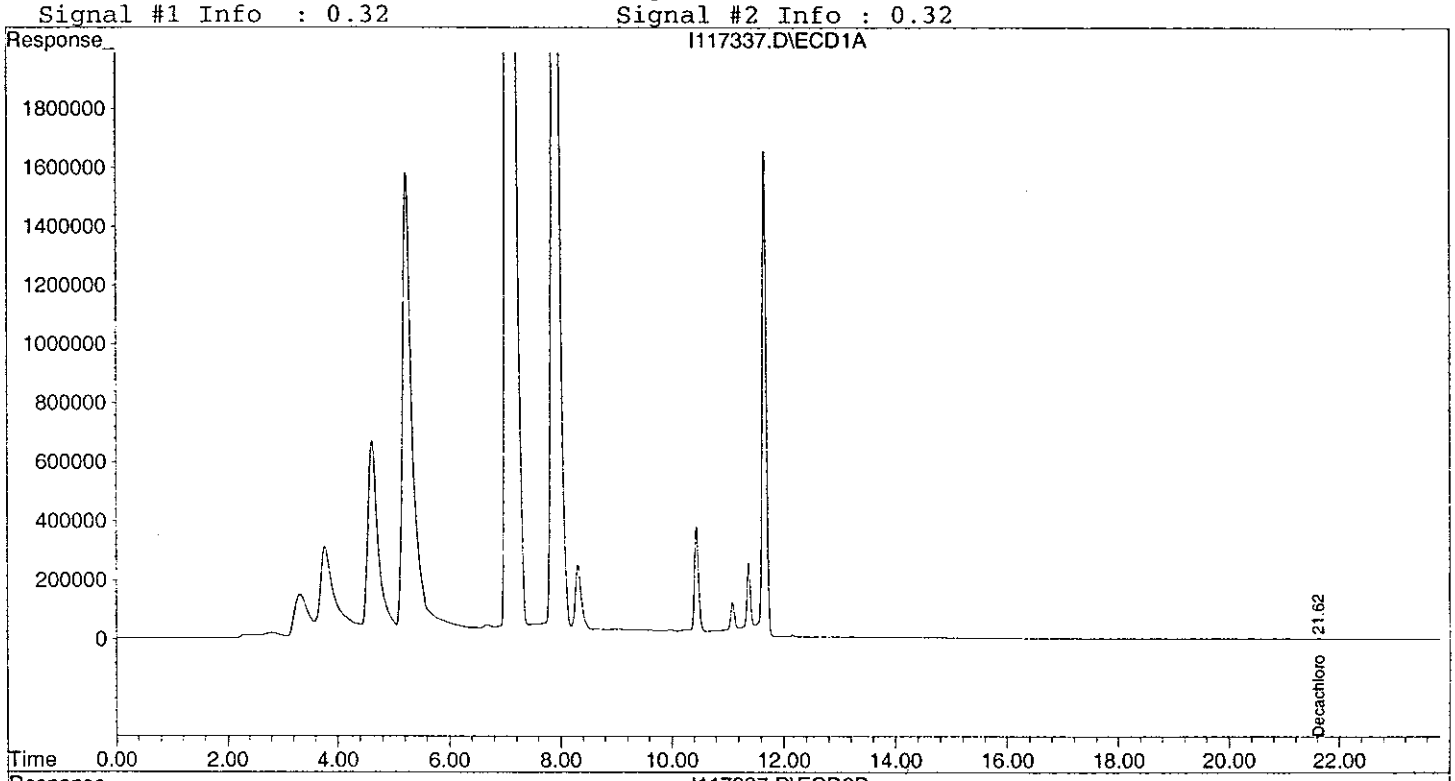
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

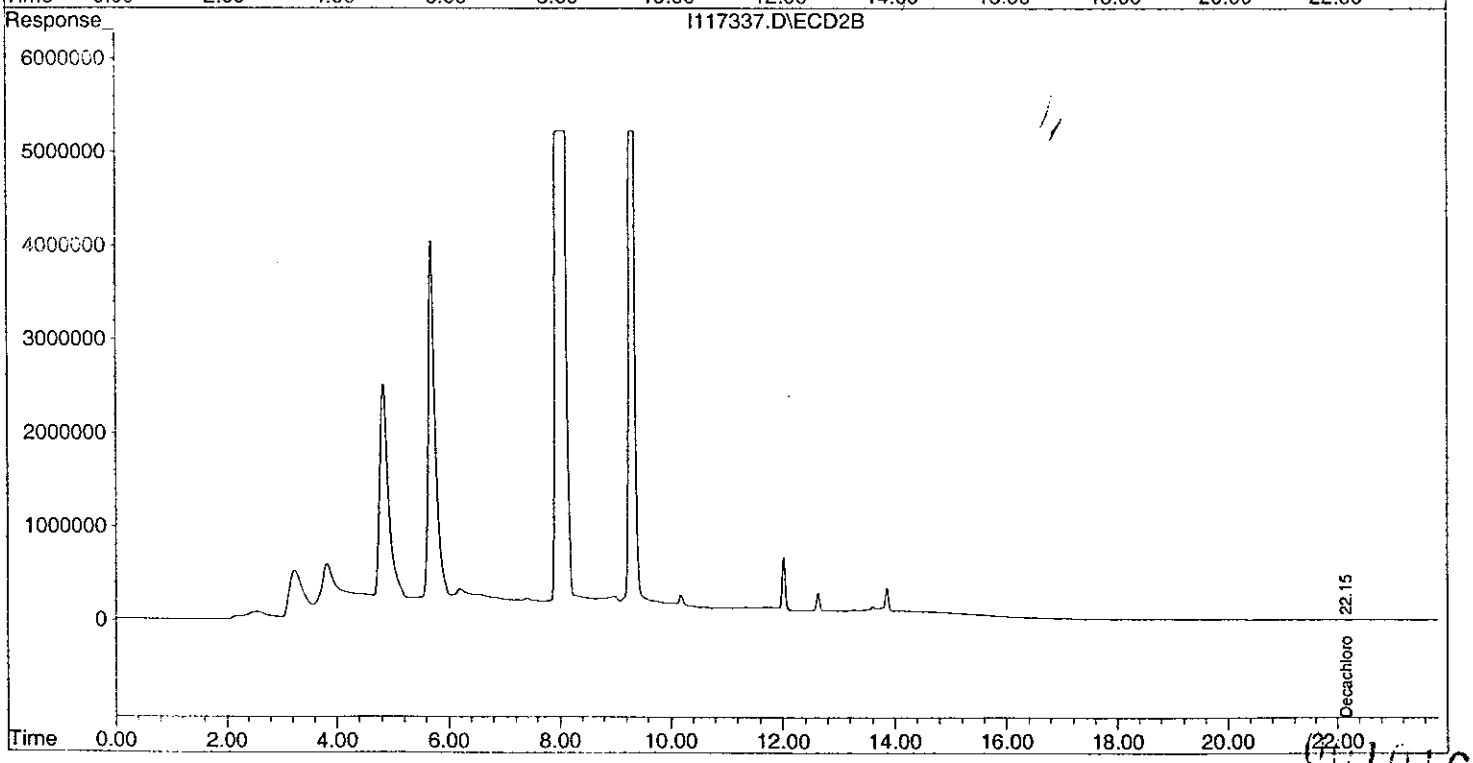
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117337.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\I\MAR2102\I117337.D\ECD2B.CH
Acq On : 21 Mar 2002 13:46 Operator: PY
Sample : 203025-003-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW04S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 14:17 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW05S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-004-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117338.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117338.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\I\MAR2102\I117338.D\ECD2B.CH
Acq On : 21 Mar 2002 14:14 Operator: PY
Sample : 203025-004-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW05S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:34 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	7.01	6.58	212798	1148691	15.668	13.150
Spiked Amount 20.000 Range 30 - 150 Recovery =					78.34%	65.75%
) S Decachlorobiphen	21.62	22.15	229637	1027748	24.867m	20.979
Spiked Amount 20.000 Range 30 - 150 Recovery =					124.34%	104.90%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

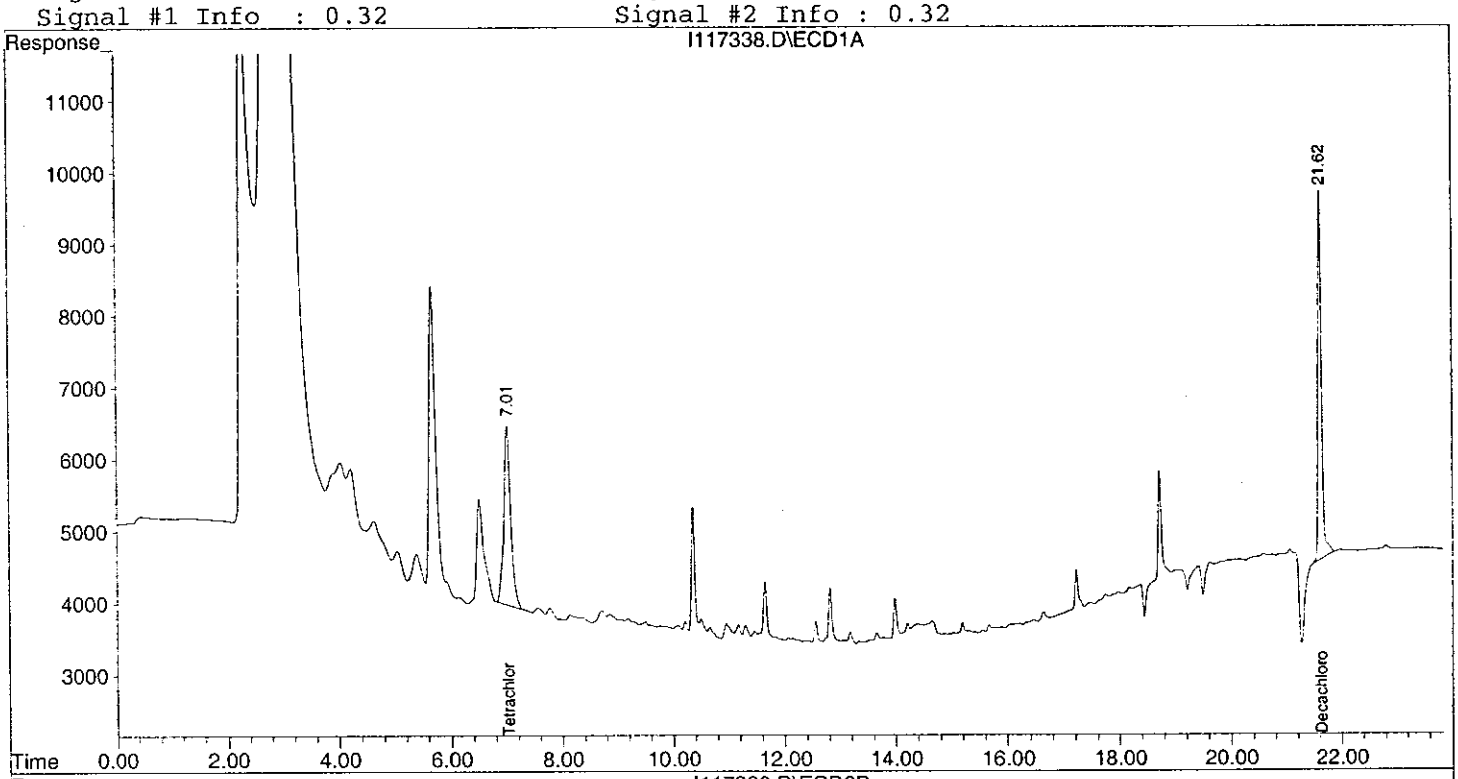
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

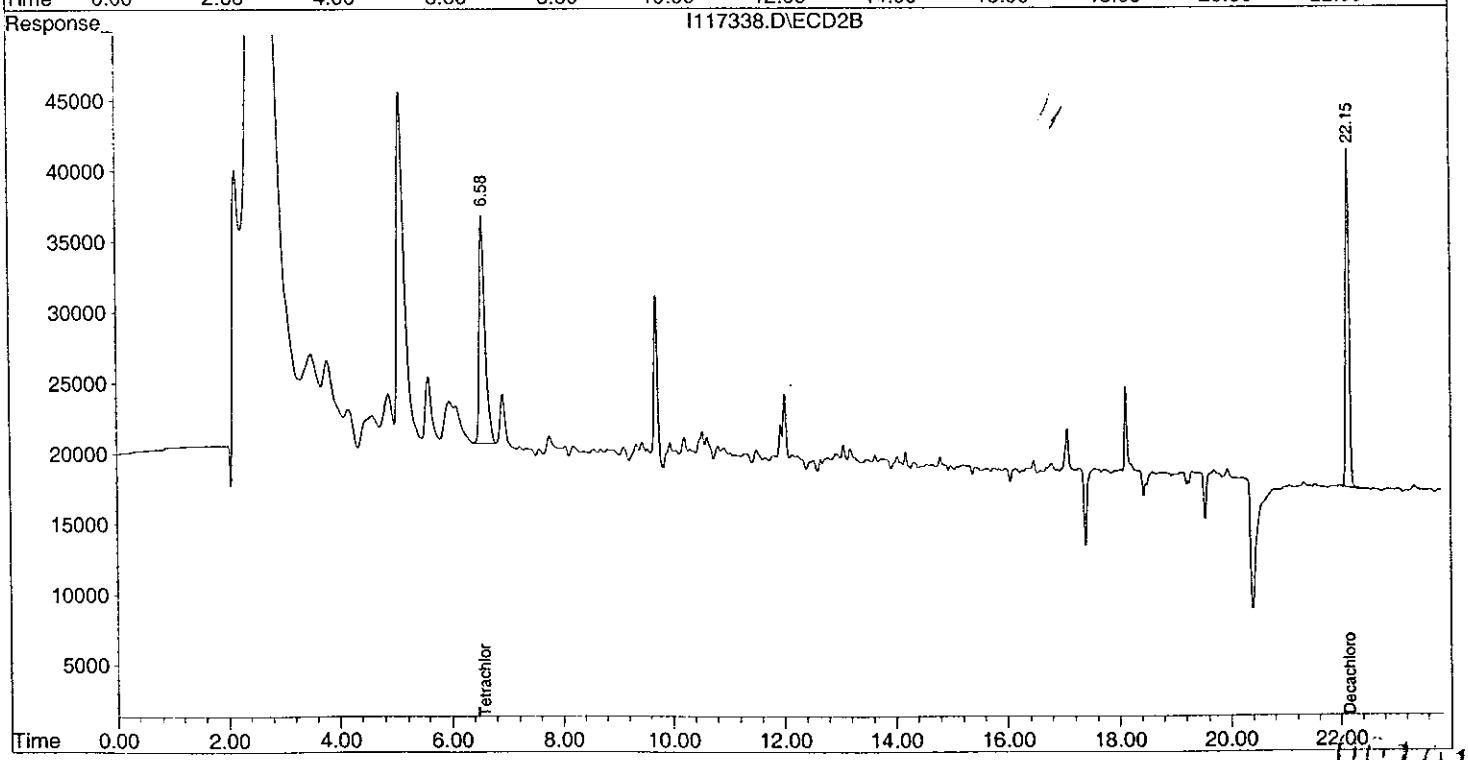
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117338.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\I\MAR2102\I117338.D\ECD2B.CH
Acq On : 21 Mar 2002 14:14 Operator: PY
Sample : 203025-004-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW05S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:34 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW08S-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-005-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117339.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117339.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\I\MAR2102\I117339.D\ECD2B.CH
Acq On : 21 Mar 2002 14:42 Operator: PY
Sample : 203025-005-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW08S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:36 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

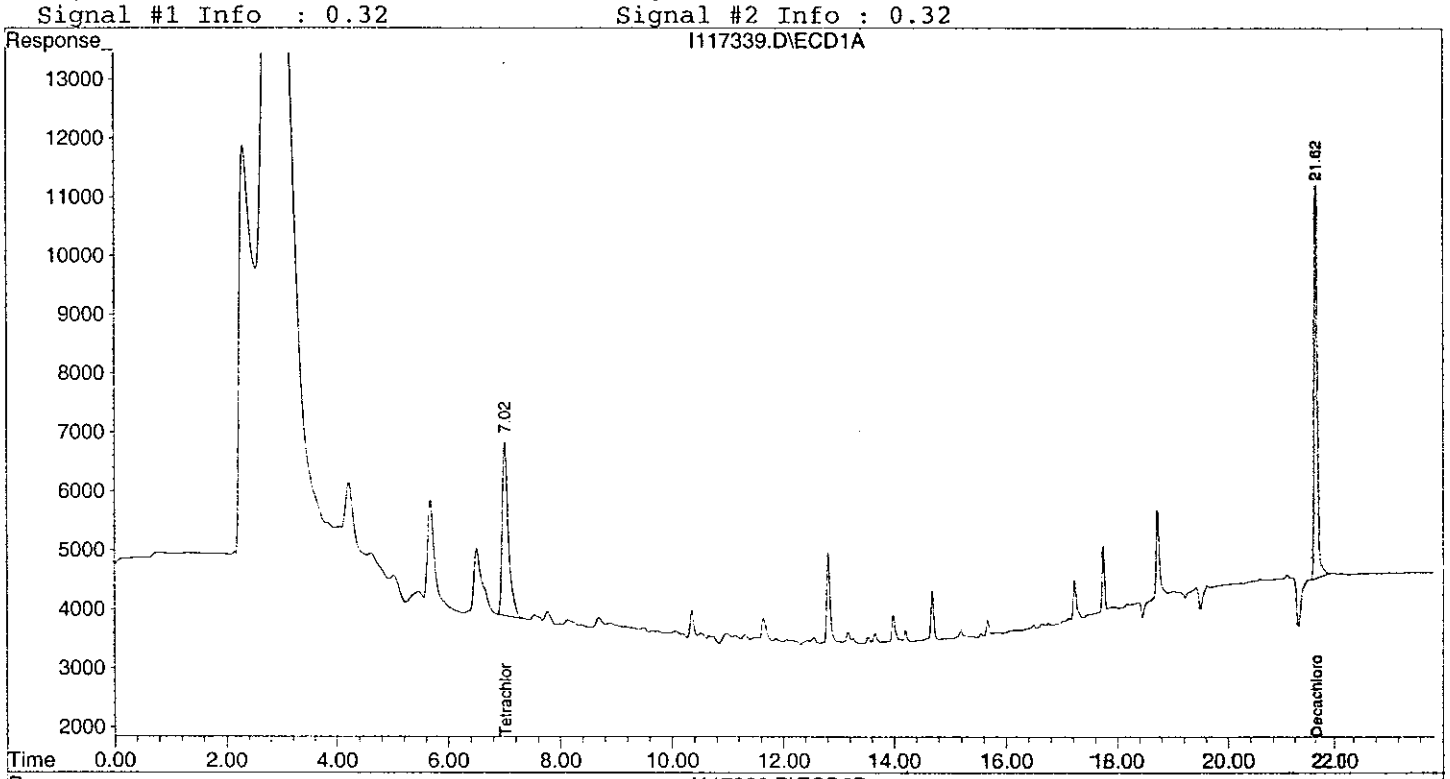
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	7.02	6.58	223534	1435670	16.458m	16.435
Spiked Amount 20.000 Range 30 - 150 Recovery =					82.29%	82.18%
) S Decachlorobiphen	21.62	22.15	292842	1296733	31.711m	26.469
Spiked Amount 20.000 Range 30 - 150 Recovery =					158.56%#	132.35%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

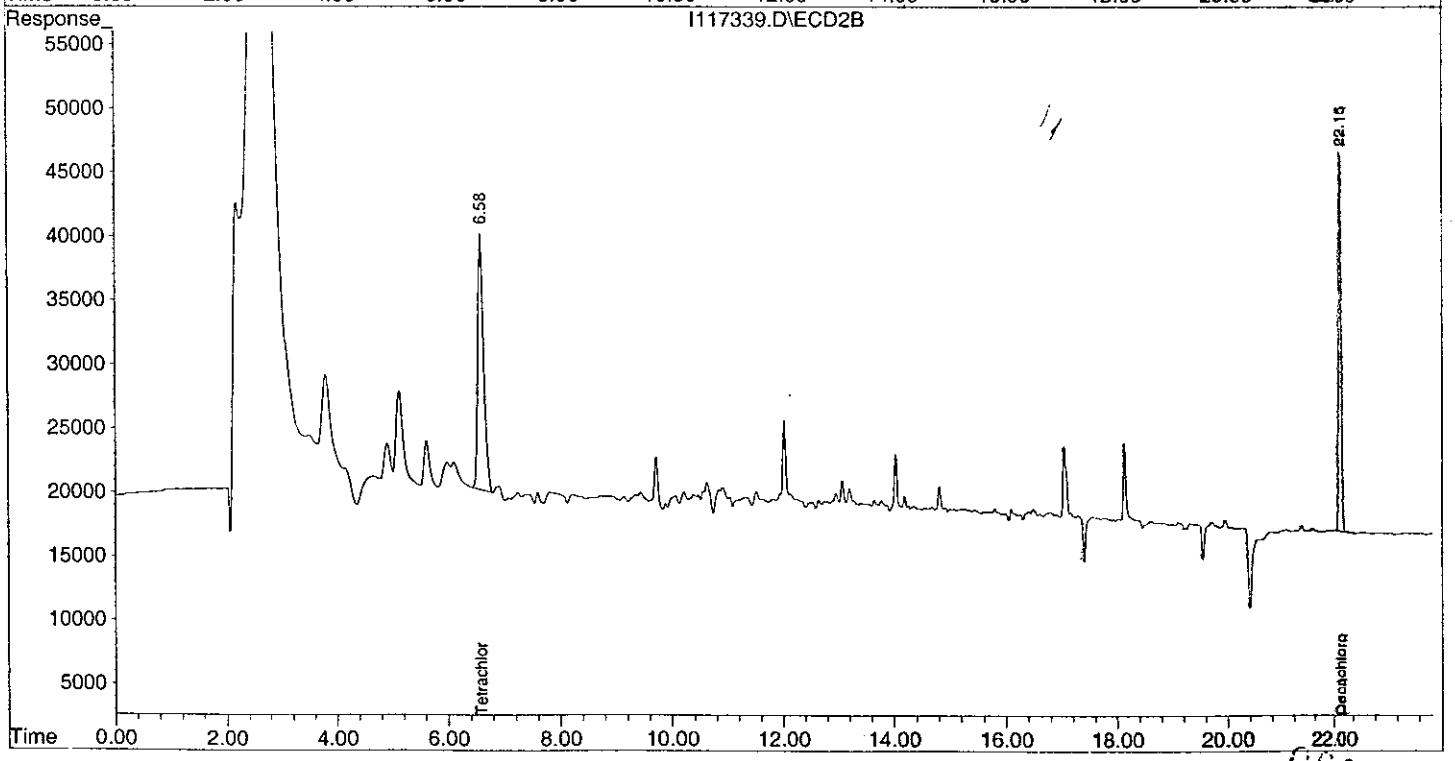
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR2102\I117339.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\I\MAR2102\I117339.D\ECD2B.CH
Acq On : 21 Mar 2002 14:42 Operator: PY
Sample : 203025-005-01-1/2 Inst : GC-I
Misc : 8081A-W-007-MW08S-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:36 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-DUP-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-006-01-1/2

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117340.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
319-85-7	beta-BHC	0.056	U
319-86-8	delta-BHC	0.056	U
1024-57-3	Heptachlor Epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
5103-71-9	alpha-Chlordane	0.056	U
72-55-9	4,4-DDE	0.056	U
60-57-1	Dieldrin	0.056	U
72-20-8	Endrin	0.056	U
33213-65-9	Endosulfan II	0.056	U
72-54-8	4,4-DDD	0.056	U
50-29-3	4,4-DDT	0.056	U
7421-93-4	Endrin Aldehyde	0.056	U
1031-07-8	Endosulfan Sulfate	0.056	U
72-43-5	Methoxychlor	0.056	U
53494-70-5	Endrin Ketone	0.056	U
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

Signal #1 : H:\GCDATA\I\MAR2102\I117340.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\I\MAR2102\I117340.D\ECD2B.CH
Acq On : 21 Mar 2002 15:10 Operator: PY
Sample : 203025-006-01-1/2 Inst : GC-I
Misc : 8081A-W-007-DUP-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:38 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

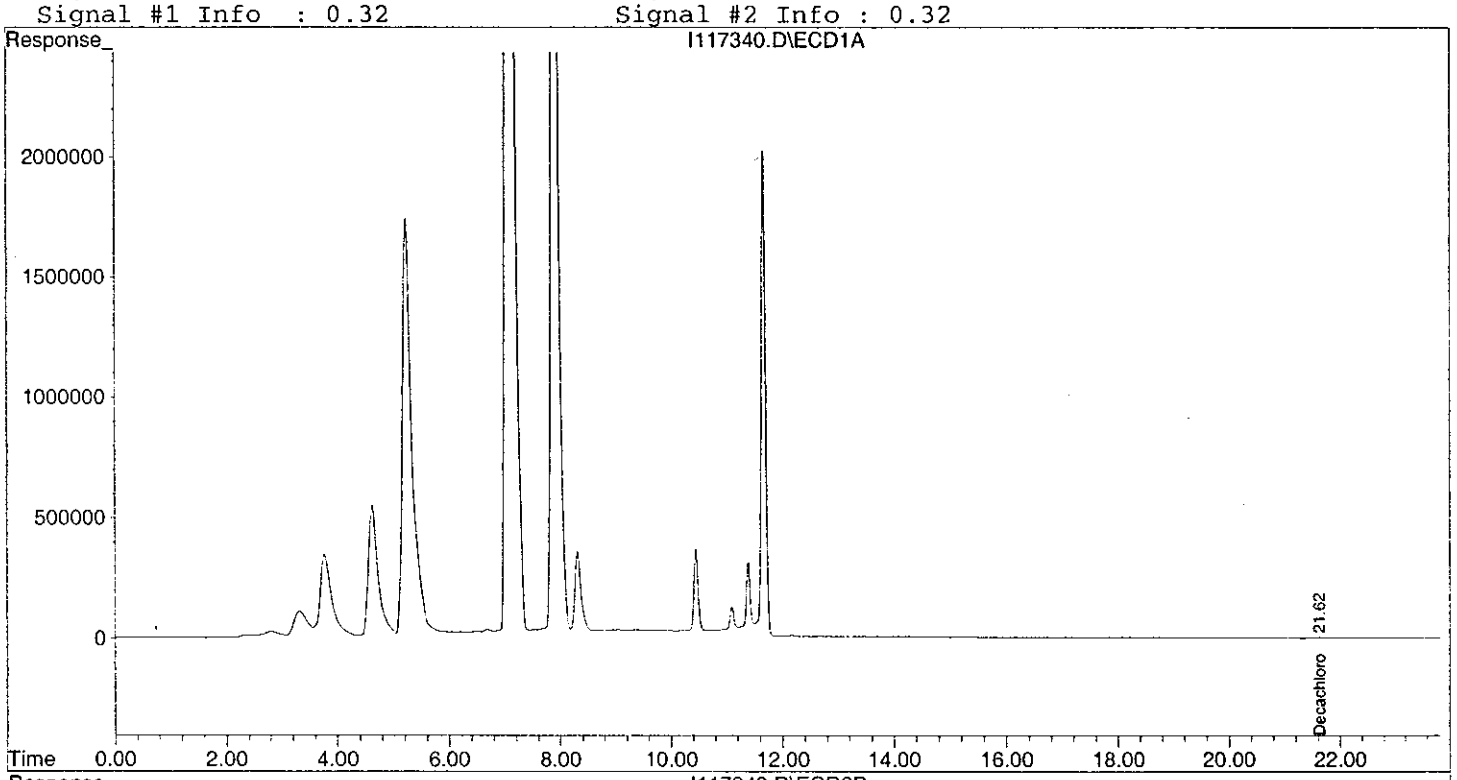
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	0.00	6.58	0	690637	N.D.	7.906 #
Spiked Amount 20.000 Range 30 - 150 Recovery =					0.00%#	39.53%
) S Decachlorobiphen	21.62	22.15	61389	276413	6.648m	5.642m
Spiked Amount 20.000 Range 30 - 150 Recovery =					33.24%	28.21%#
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

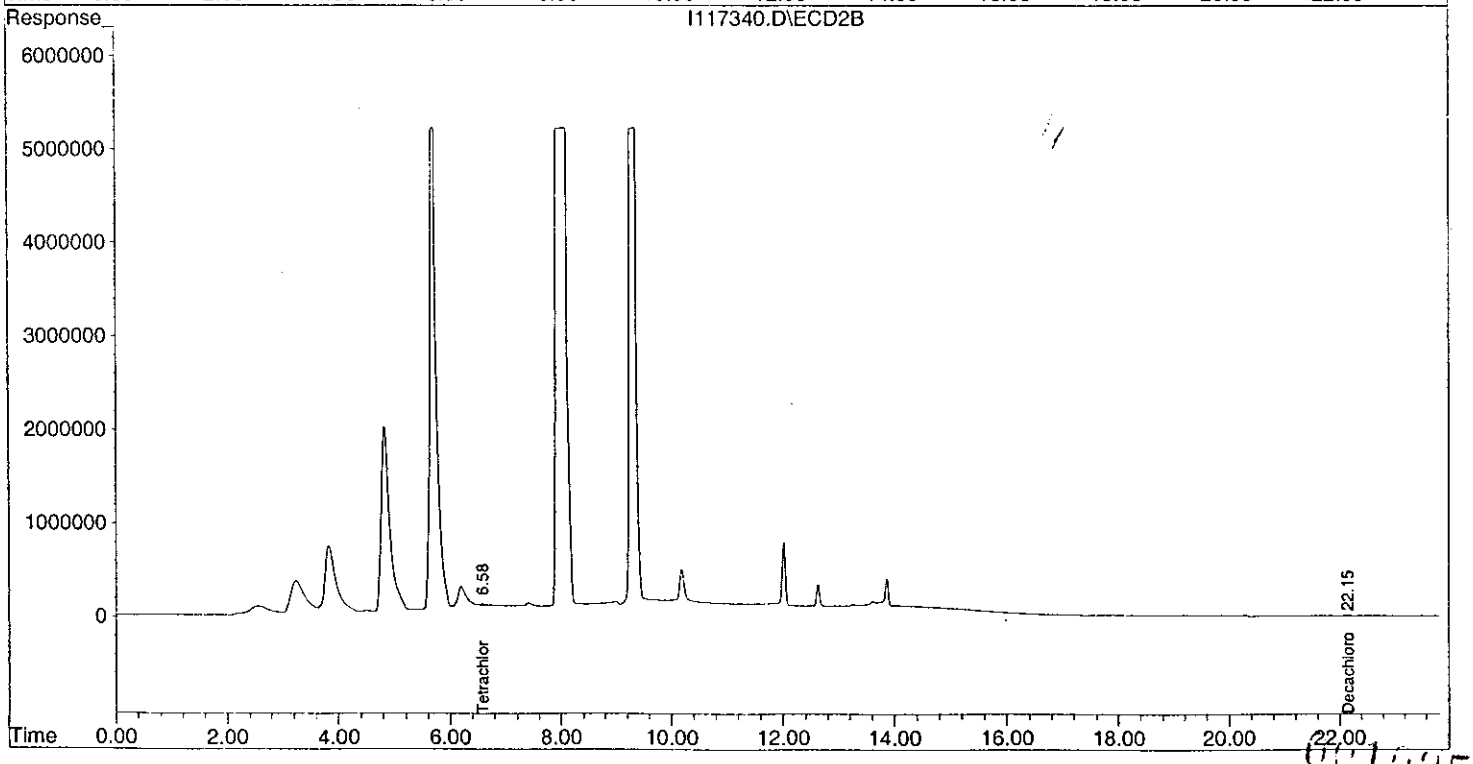
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR2102\I117340.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\I\MAR2102\I117340.D\ECD2B.CH
Acq On : 21 Mar 2002 15:10 Operator: PY
Sample : 203025-006-01-1/2 Inst : GC-I
Misc : 8081A-W-007-DUP-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:38 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-EQB-Q1-02

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-007-01-1/2

Sample wt/vol: 850 (g/ml) ML Lab File ID: I117341.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.059	U
58-89-9	gamma-BHC (Lindane)	0.059	U
76-44-8	Heptachlor	0.059	U
309-00-2	Aldrin	0.059	U
319-85-7	beta-BHC	0.059	U
319-86-8	delta-BHC	0.059	U
1024-57-3	Heptachlor Epoxide	0.059	U
959-98-8	Endosulfan I	0.059	U
5103-74-2	gamma-Chlordane	0.059	U
5103-71-9	alpha-Chlordane	0.059	U
72-55-9	4,4-DDE	0.059	U
60-57-1	Dieldrin	0.059	U
72-20-8	Endrin	0.059	U
33213-65-9	Endosulfan II	0.059	U
72-54-8	4,4-DDD	0.059	U
50-29-3	4,4-DDT	0.059	U
7421-93-4	Endrin Aldehyde	0.059	U
1031-07-8	Endosulfan Sulfate	0.059	U
72-43-5	Methoxychlor	0.059	U
53494-70-5	Endrin Ketone	0.059	U
12789-03-6	Chlordane	1.2	U
8001-35-2	Toxaphene	1.2	U

Signal #1 : H:\GCDATA\I\MAR2102\I117341.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\I\MAR2102\I117341.D\ECD2B.CH
Acq On : 21 Mar 2002 15:38 Operator: PY
Sample : 203025-007-01-1/2 Inst : GC-I
Misc : 8081A-W-007-EQB-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:39 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
) S Tetrachloro-m-xy	7.02	6.58	171222	1051890	12.606m	12.042
Spiked Amount 20.000 Range 30 - 150 Recovery =					63.03%	60.21%
) S Decachlorobiphen	21.62	22.16	195951	897879	21.219m	18.328
Spiked Amount 20.000 Range 30 - 150 Recovery =					106.10%	91.64%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
erage Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
erage Chlordane					0.000	0.000

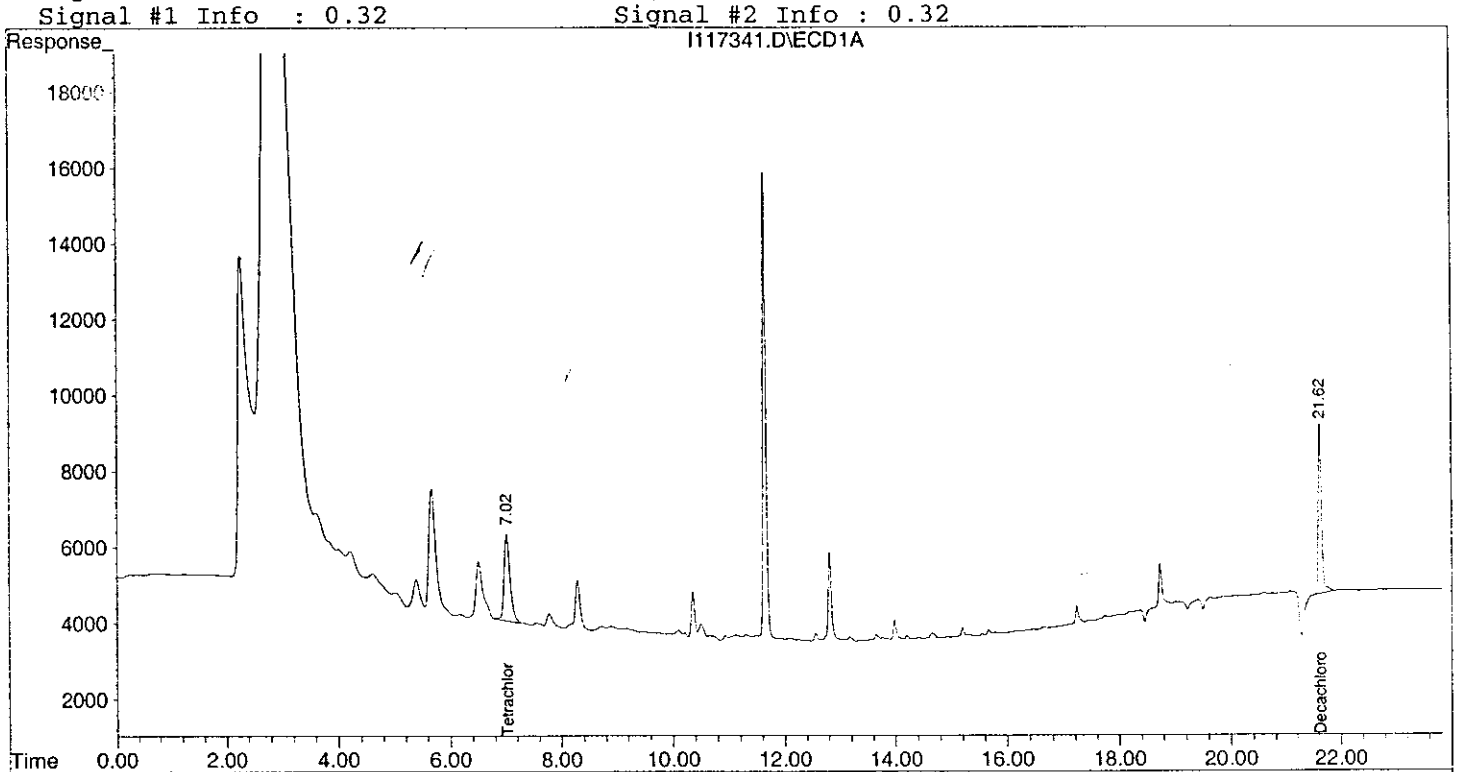
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

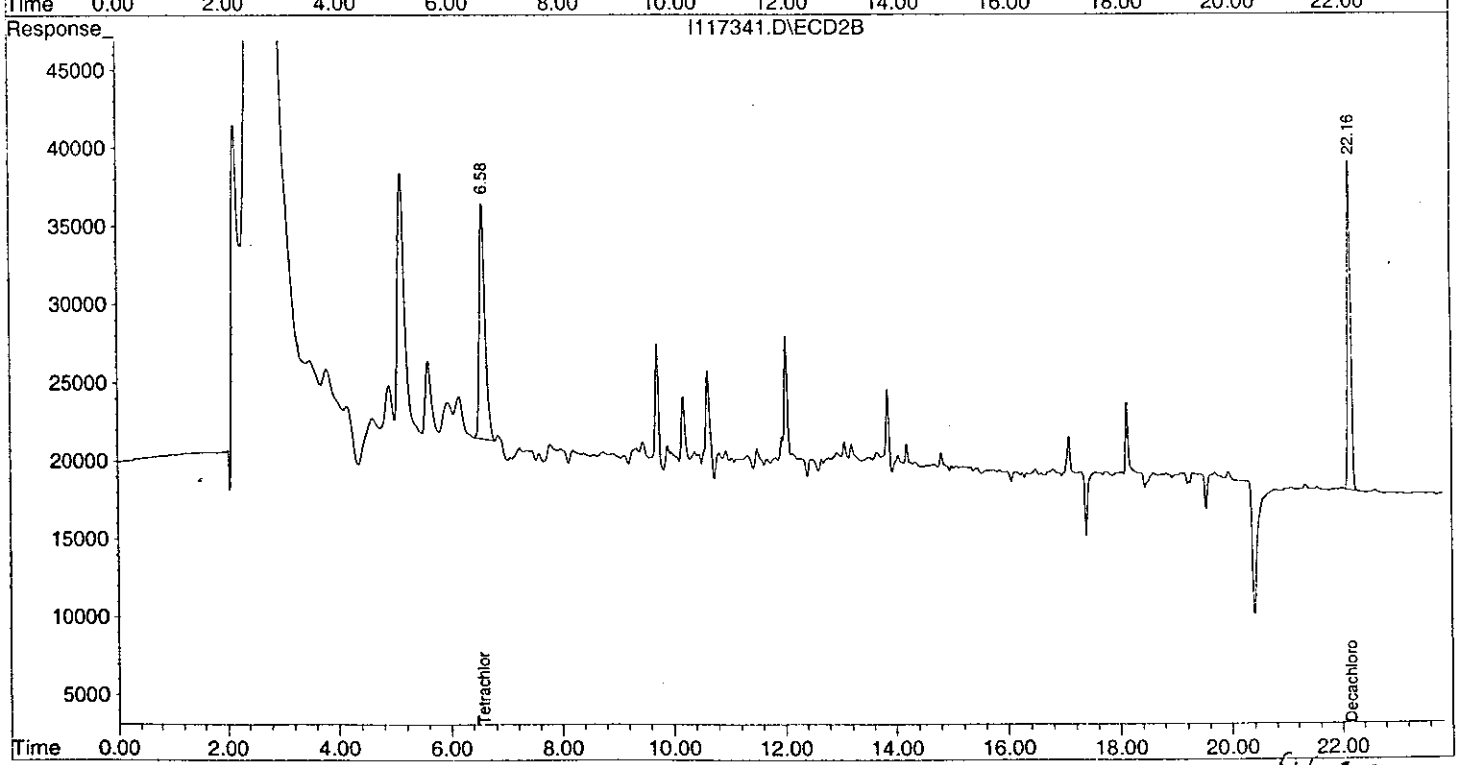
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117341.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\I\MAR2102\I117341.D\ECD2B.CH
Acq On : 21 Mar 2002 15:38 Operator: PY
Sample : 203025-007-01-1/2 Inst : GC-I
Misc : 8081A-W-007-EQB-Q1-02 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:39 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





C. Standard Data

1. Initial Calibration Data
2. Continuing Calibration Data

GPL Laboratories, LLLP

Response Factor Report GC-I

Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 11:15:13 2002

Calibration Files
P005 =I117305.D P025 =I117304.D P050 =I117303.D
P075 =I117302.D P100 =I117301.D

	Compound	P005	P025	P050	P075	P100	Avg		%RSD
S	Tetrachloro-m-xylene	1.412	1.328	1.358	1.369	1.324	1.358	E4	2.62
A	alpha-BHC	0.883	0.975	1.117	1.291	1.351	1.124	E4	17.78
MA	gamma-BHC (Lindane)	0.939	1.055	1.208	1.375	1.416	1.198	E4	17.02
MA	Heptachlor	1.262	1.234	1.274	1.354	1.354	1.296	E4	4.24
MB	Aldrin	1.164	1.221	1.343	1.479	1.510	1.343	E4	11.38
B	beta-BHC	7.420	7.405	7.628	7.932	7.806	7.638	E3	3.05
B	delta-BHC	5.455	6.686	7.791	9.209	9.768	7.782	E3	22.80
B	Heptachlor Epoxide	1.382	1.341	1.397	1.493	1.481	1.419	E4	4.64
A	Endosulfan I	1.231	1.211	1.254	1.339	1.330	1.273	E4	4.60
A	gamma-Chlordane	1.457	1.395	1.418	1.511	1.502	1.456	E4	3.48
A	alpha-Chlordane	1.575	1.578	1.657	1.714	1.812	1.667	E4	5.96
B	4,4-DDE	1.053	1.056	1.123	1.206	1.193	1.126	E4	6.48
MA	Dieldrin	1.135	1.129	1.189	1.294	1.299	1.209	E4	6.89
MA	Endrin	7.598	7.410	7.528	8.098	8.003	7.728	E3	3.93
B	Endosulfan II	1.046	1.020	1.058	1.145	1.123	1.079	E4	4.93
A	4,4-DDD	6.687	6.923	7.299	7.766	7.708	7.276	E3	6.52
MA	4,4-DDT	7.230	7.569	8.117	8.726	8.730	8.075	E3	8.36
B	Endrin Aldehyde	9.192	8.903	9.070	9.229	9.169	9.113	E3	1.44
B	Endosulfan Sulfate	3.059	3.652	3.971	4.383	4.376	3.888	E3	14.28
A	Methoxychlor	4.585	4.248	4.036	3.997	3.782	4.130	E3	7.35
B	Endrin Ketone	4.347	4.585	4.931	5.438	5.562	4.973	E3	10.58
S	Decachlorobiphenyl	1.041	0.943	0.886	0.894	0.853	0.923	E4	7.94
L8	Toxaphene			9.731			9.731	E1	0.00
L8	Toxaphene {2}			3.069			3.069	E1	0.00
L8	Toxaphene {3}			2.360			2.360	E2	0.00
L8	Toxaphene {4}			1.692			1.692	E2	0.00
L8	Toxaphene {5}			1.328			1.328	E2	0.00
L9	Chlordane	5.148	5.046	5.162	5.015	5.318	5.138	E2	2.32
L9	Chlordane {2}	5.808	5.633	5.807	5.618	5.543	5.682	E2	2.10
L9	Chlordane {3}	1.517	1.527	1.773	1.581	1.724	1.624	E3	7.22
L9	Chlordane {4}	1.334	1.301	1.401	1.445	1.472	1.391	E3	5.18
L9	Chlordane {5}	3.392	3.445	3.679	3.659	3.924	3.620	E2	5.86

ignal #2 Calibration Files
P005 =I117305.D P025 =I117304.D P050 =I117303.D
P075 =I117302.D P100 =I117301.D

	Compound	P005	P025	P050	P075	P100	Avg		%RSD
S	Tetrachloro-m-xylene	1.031	0.901	0.843	0.820	0.773	0.874	E5	11.37
A	alpha-BHC	9.373	9.182	9.097	9.153	8.780	9.117	E4	2.36
MA	gamma-BHC (Lindane)	9.389	8.916	8.656	8.599	8.193	8.751	E4	5.04
MA	Heptachlor	9.228	7.729	7.138	6.944	6.549	7.518	E4	13.92
MB	Aldrin	9.587	8.447	7.937	7.725	7.300	8.199	E4	10.72
B	beta-BHC	5.856	4.996	4.613	4.469	4.185	4.824	E4	13.41
B	delta-BHC	6.111	6.324	6.436	6.600	6.384	6.371	E4	2.79
B	Heptachlor Epoxide	1.002	0.817	0.743	0.718	0.671	0.790	E5	16.43
A	Endosulfan I	8.875	7.308	6.798	6.309	6.081	7.074	E4	15.72
A	gamma-Chlordane	9.910	8.167	7.456	7.213	6.785	7.906	E4	15.52
A	alpha-Chlordane	9.424	7.743	7.030	6.772	6.393	7.472	E4	16.02
B	4,4-DDE	9.029	7.691	7.126	6.912	6.488	7.449	E4	13.20
MA	Dieldrin	8.605	7.275	6.657	6.430	6.030	6.999	E4	14.35
MA	Endrin	5.762	4.814	4.360	4.257	4.056	4.650	E4	14.65
B	Endosulfan II	7.272	6.338	5.760	5.558	5.243	6.034	E4	13.24
A	4,4-DDD	6.009	5.214	4.829	4.707	4.424	5.037	E4	12.17
MA	4,4-DDT	5.652	5.117	4.892	4.776	4.532	4.994	E4	8.49
B	Endrin Aldehyde	2.866	2.297	2.062	1.989	1.851	2.213	E4	18.03
B	Endosulfan Sulfate	2.257	2.439	2.440	2.482	2.395	2.403	E4	3.62
A	Methoxychlor	3.074	2.523	2.302	2.177	1.949	2.405	E4	17.78
B	Endrin Ketone	3.117	2.938	2.814	2.819	2.705	2.879	E4	5.45

= Out of Range

001030

Response Factor Report GC-I

Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 11:15:13 2002

Calibration Files
P005 =I117305.D P025 =I117304.D P050 =I117303.D
P075 =I117302.D P100 =I117301.D

		Compound	P005	P025	P050	P075	P100	Avg		%RSD
)	S	Decachlorobiphenyl	6.409	5.236	4.565	4.314	3.970	4.899	E4	19.66
)	L8	Toxaphene			3.243			3.243	E2	0.00
)	L8	Toxaphene {2}			2.292			2.292	E3	0.00
)	L8	Toxaphene {3}			7.169			7.169	E2	0.00
)	L8	Toxaphene {4}			2.896			2.896	E2	0.00
)	L8	Toxaphene {5}			1.134			1.134	E3	0.00
)	L9	Chlordane	3.745	3.537	3.415	2.987	2.798	3.296	E3	11.92
)	L9	Chlordane {2}	3.147	3.173	2.966	2.564	2.351	2.840	E3	12.89
)	L9	Chlordane {3}	8.701	8.035	8.103	6.567	6.074	7.496	E3	14.91
)	L9	Chlordane {4}	7.713	7.147	7.374	5.815	5.413	6.692	E3	15.16
)	L9	Chlordane {5}	2.500	2.360	2.300	2.006	1.857	2.205	E3	12.03

) = Out of Range

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117295.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\I\MAR1902\I117295.D\ECD2B.CH
Acq On : 19 Mar 2002 20:35 Operator: AK
Sample : TOX-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 8:49 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

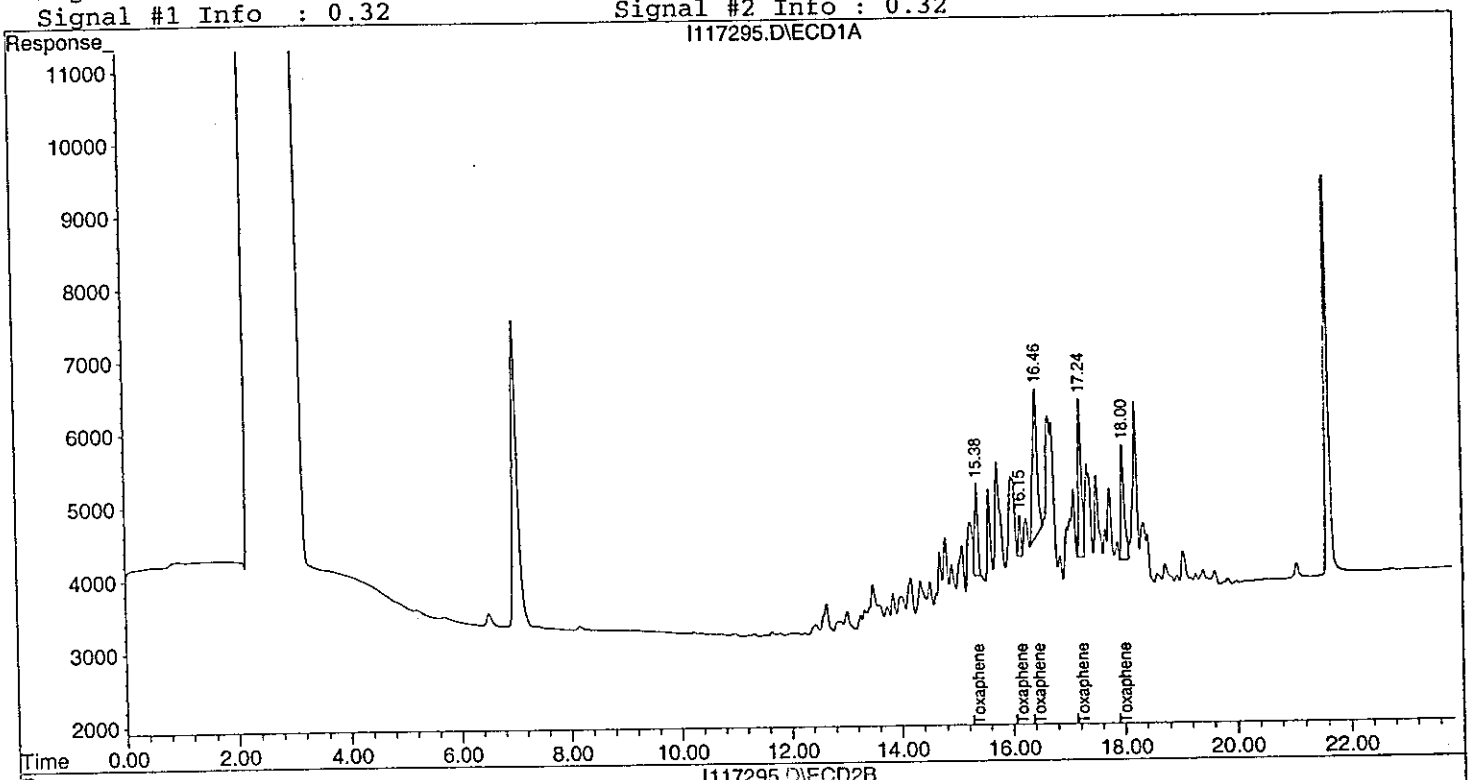
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
L8 Toxaphene	15.38	15.33	48654	162144	500.865m	501.758m
L8 Toxaphene {2}	16.15	16.53	15344	1146162	501.897m	498.794m
L8 Toxaphene {3}	16.46	16.96	118010	358462	500.414	501.834m
L8 Toxaphene {4}	17.24	17.64	84580	144800	501.804m	499.042m
L8 Toxaphene {5}	18.00	18.27	66410	566854	503.015m	500.092m
Sum Toxaphene			332998	2378422	NoCal	NoCal
rage Toxaphene					501.599	500.304
Sum Chlordane			0	0	N.D.	N.D.
rage Chlordane					0.000	0.000

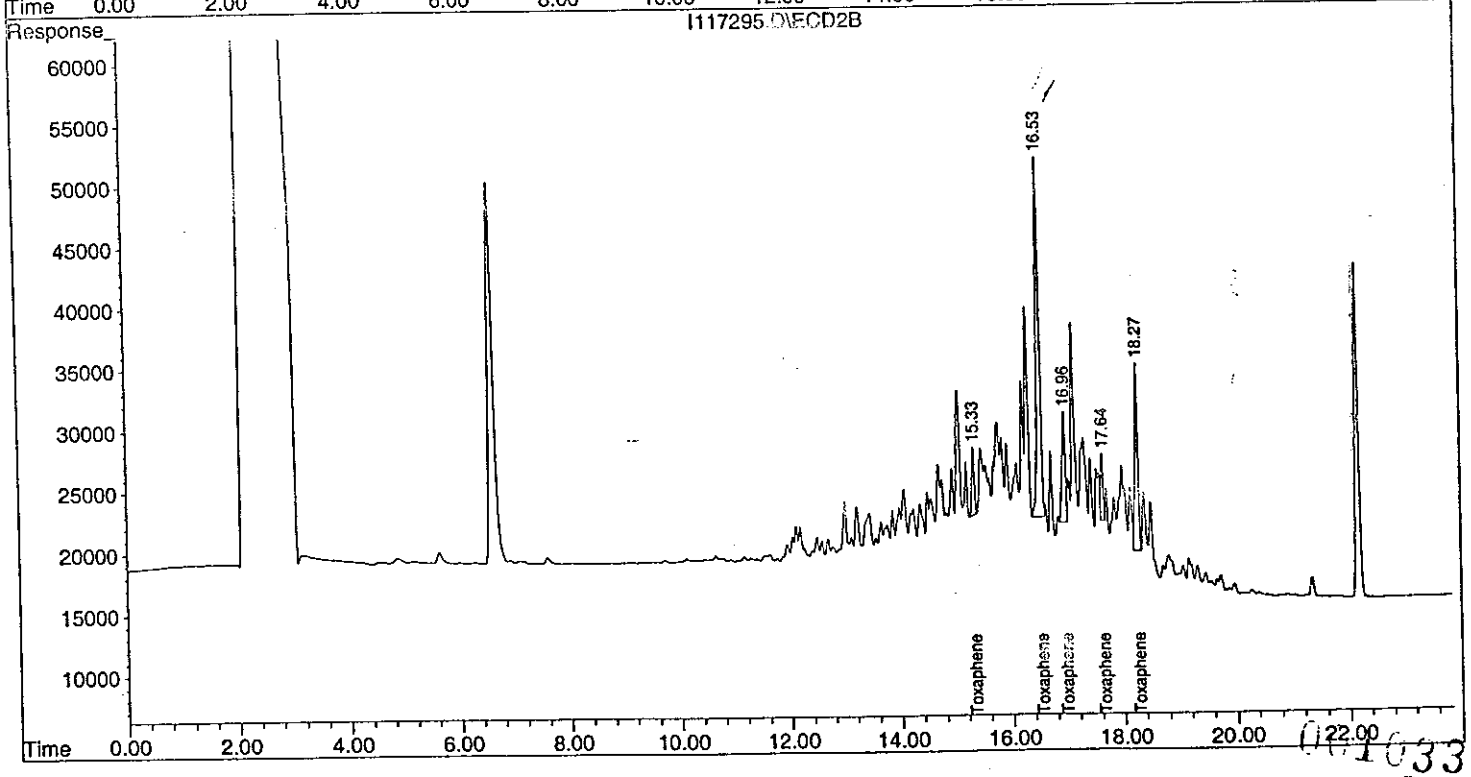
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR1902\I117295.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\I\MAR1902\I117295.D\ECD2B.CH
Acq On : 19 Mar 2002 20:35 Operator: AK
Sample : TOX-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 8:49 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117296.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR1902\I117296.D\ECD2B.CH
Acq On : 19 Mar 2002 21:03 Operator: AK
Sample : CHLORDANE-5 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:01 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
·age Toxaphene					0.000	0.000
L9 Chlordane	11.18	10.87	1063665	5595420	2066.572	1703.862m
L9 Chlordane {2}	12.45	12.26	1108690	4702722	1952.806	1763.631m
L9 Chlordane {3}	14.07	13.90	3448973	12147486	2121.766	1627.282m
L9 Chlordane {4}	14.41	14.28	2943572	10826168	2096.141m	1603.534m
L9 Chlordane {5}	16.32	16.45	784866	3713339	2174.947	1677.076
Sum Chlordane			9349766	36985135	10412.231	8375.385
·age Chlordane					2082.446	1675.077

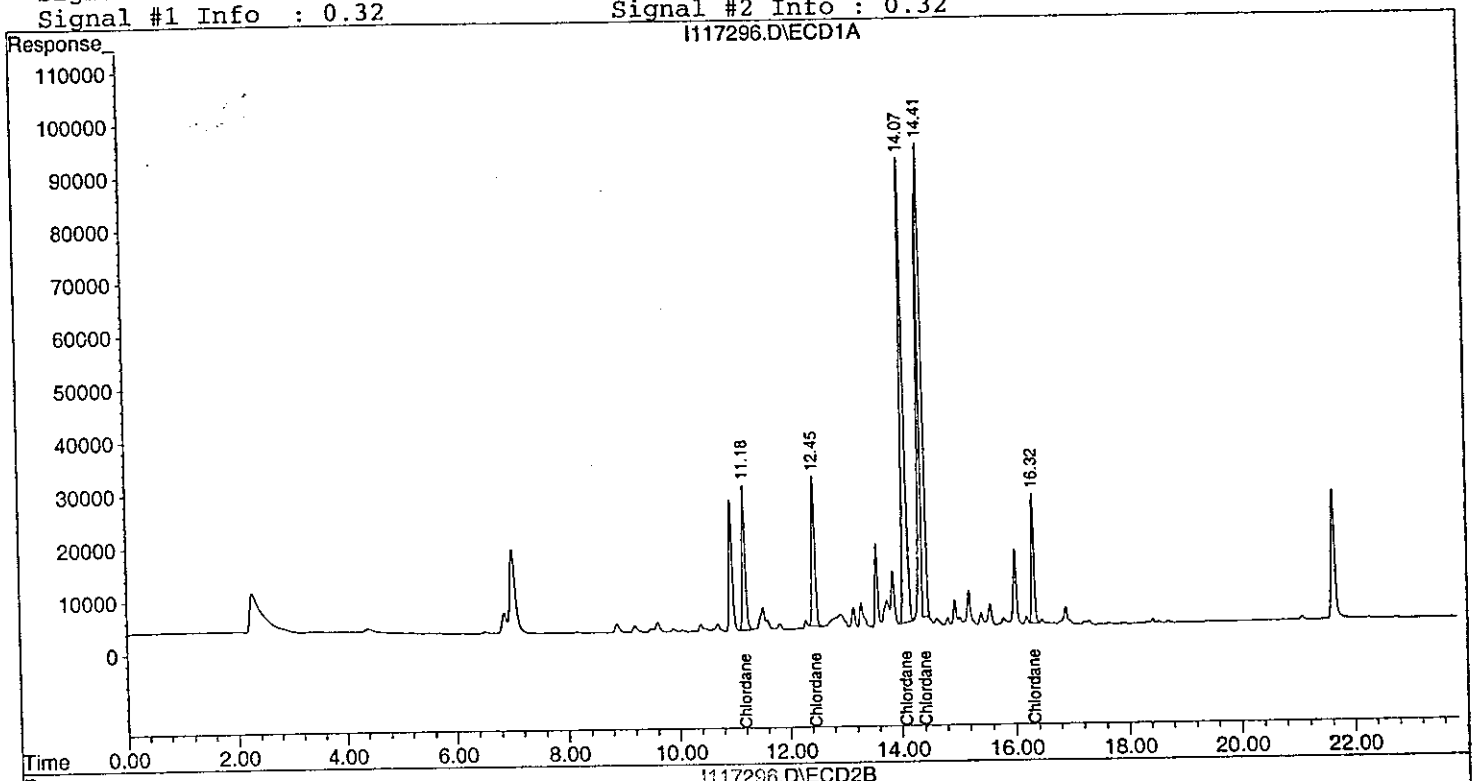
001034

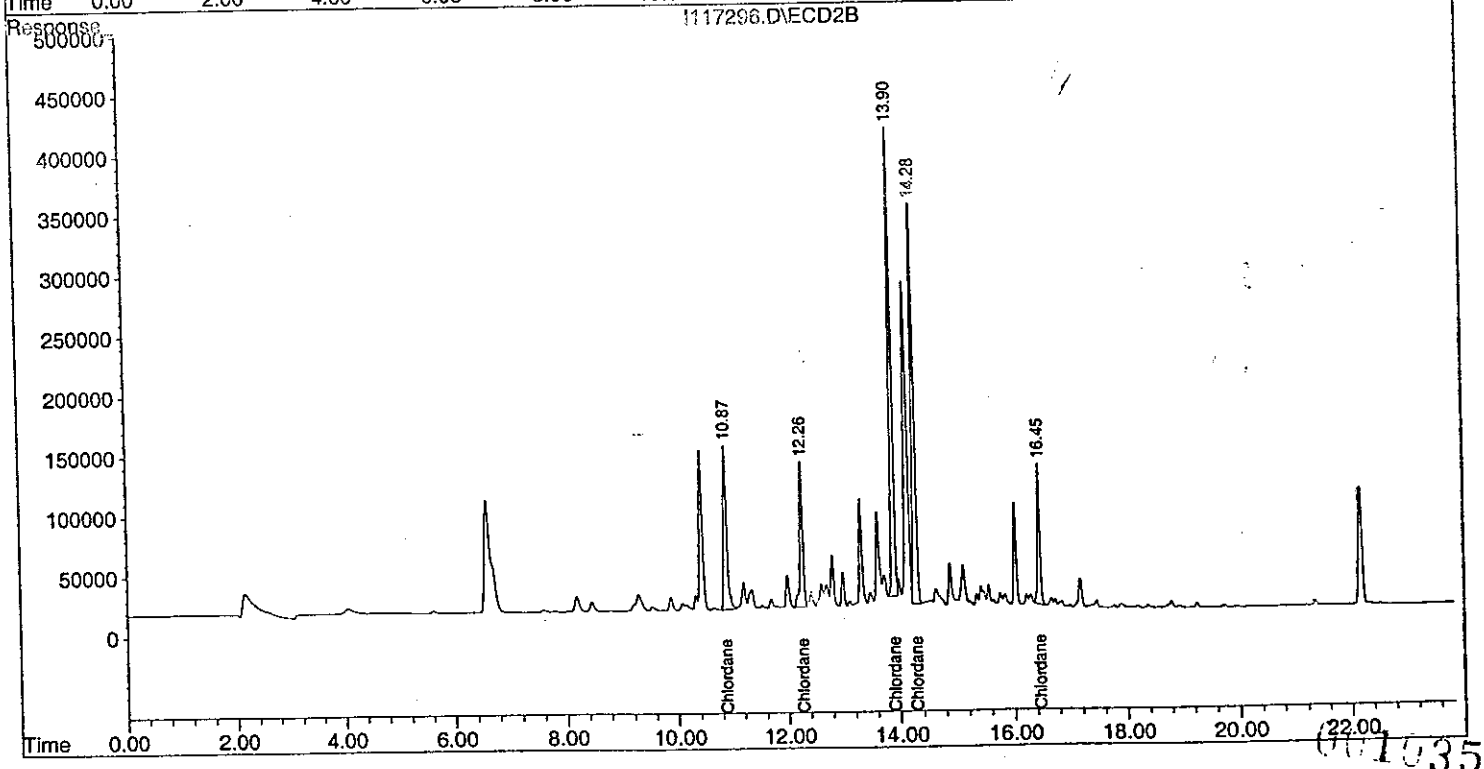
f)-RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR1902\I117296.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR1902\I117296.D\ECD2B.CH
Acq On : 19 Mar 2002 21:03 Operator: AK
Sample : CHLORDANE-5 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:01 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117297.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\I\MAR1902\I117297.D\ECD2B.CH
Acq On : 19 Mar 2002 21:31 Operator: AK
Sample : CHLORDANE-4 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:03 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
rage Toxaphene					0.000	0.000
L9 Chlordane	11.18	10.87	501526	2986853	976.139	906.156
L9 Chlordane {2}	12.45	12.26	561802	2563647	993.099m	937.467
L9 Chlordane {3}	14.07	13.90	1581270	6567046	973.395	876.021m
L9 Chlordane {4}	14.41	14.28	1445144	5815104	1042.257m	859.757m
L9 Chlordane {5}	16.32	16.45	365934	2006084	1010.885	909.931
Sum Chlordane			4455676	19938734	4995.776	4489.333
rage Chlordane					999.155	897.867

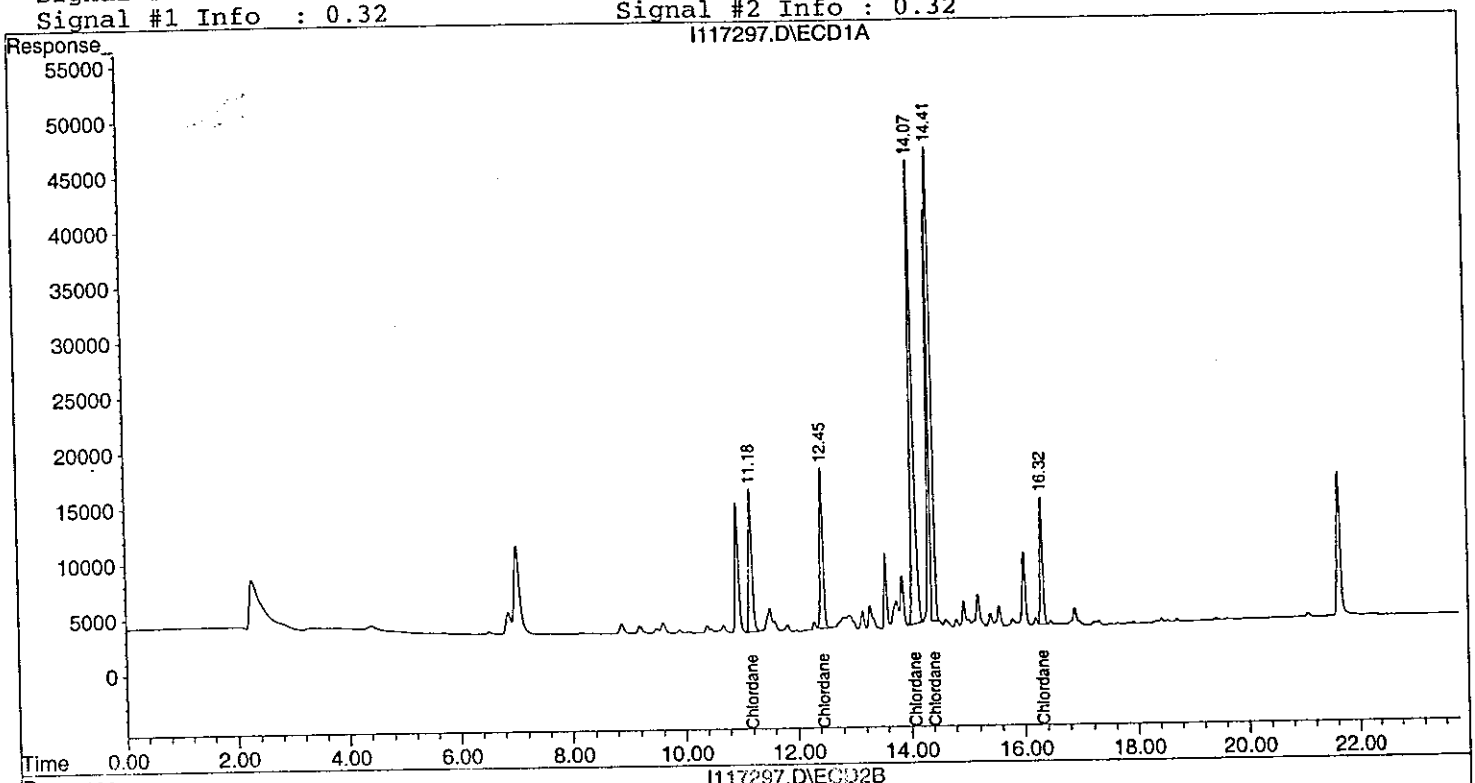
001036

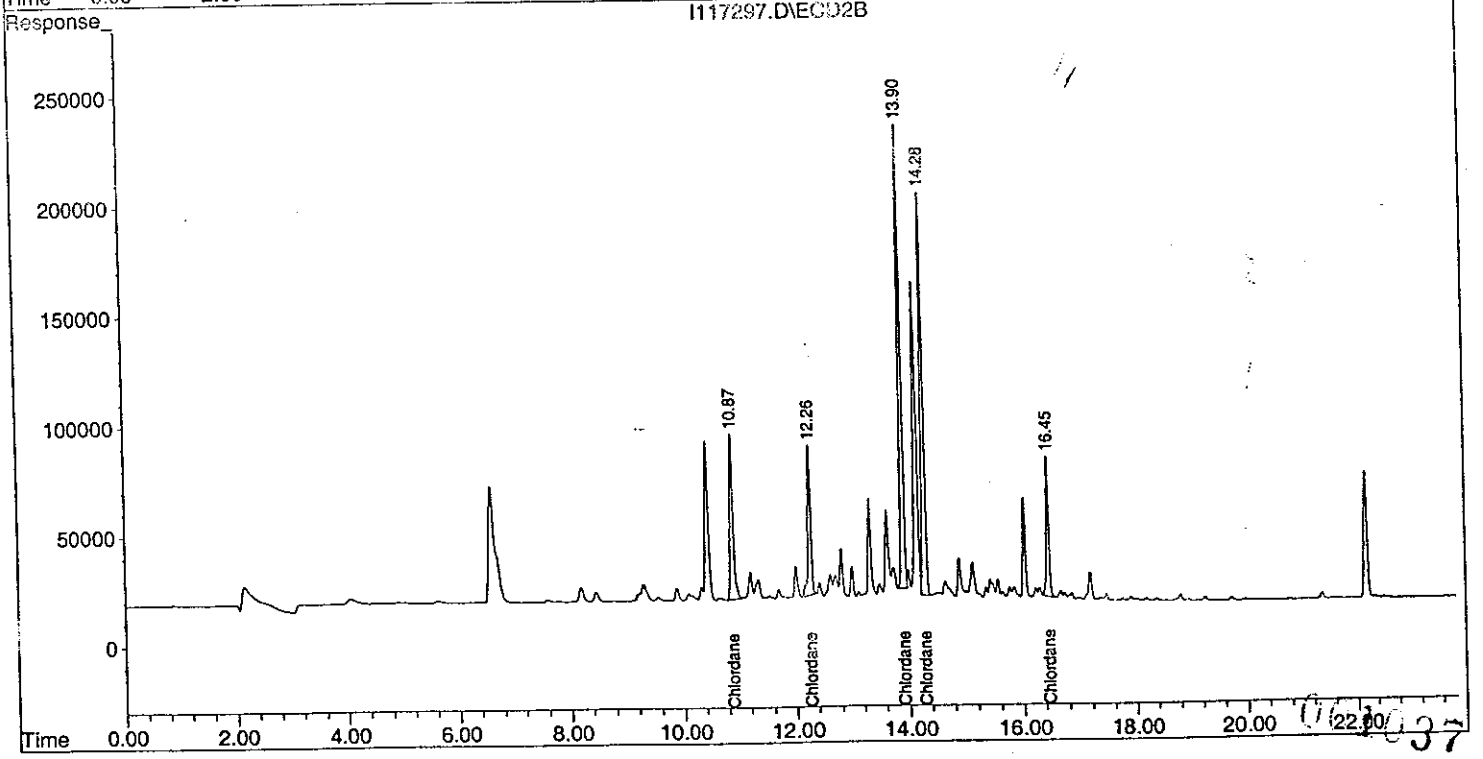
(f) RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR1902\I117297.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\I\MAR1902\I117297.D\ECD2B.CH
Acq On : 19 Mar 2002 21:31 Operator: AK
Sample : CHLORDANE-4 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:03 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117298.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\I\MAR1902\I117298.D\ECD2B.CH
Acq On : 19 Mar 2002 21:59 Operator: AK
Sample : CHLORDANE-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:08 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
age Toxaphene					0.000	0.000
L9 Chlordane	11.18	10.87	258123	1707499	502.395	518.024
L9 Chlordane {2}	12.45	12.26	290331	1482827	510.977	531.529
L9 Chlordane {3}	14.07	13.90	886420	4051356	545.660	540.477
L9 Chlordane {4}	14.41	14.28	700502	3686868	500.719m	545.546m
L9 Chlordane {5}	16.32	16.45	183942	1150017	508.136	521.631
Sum Chlordane			2319319	12078567	2567.888	2657.206
age Chlordane					513.578	531.441

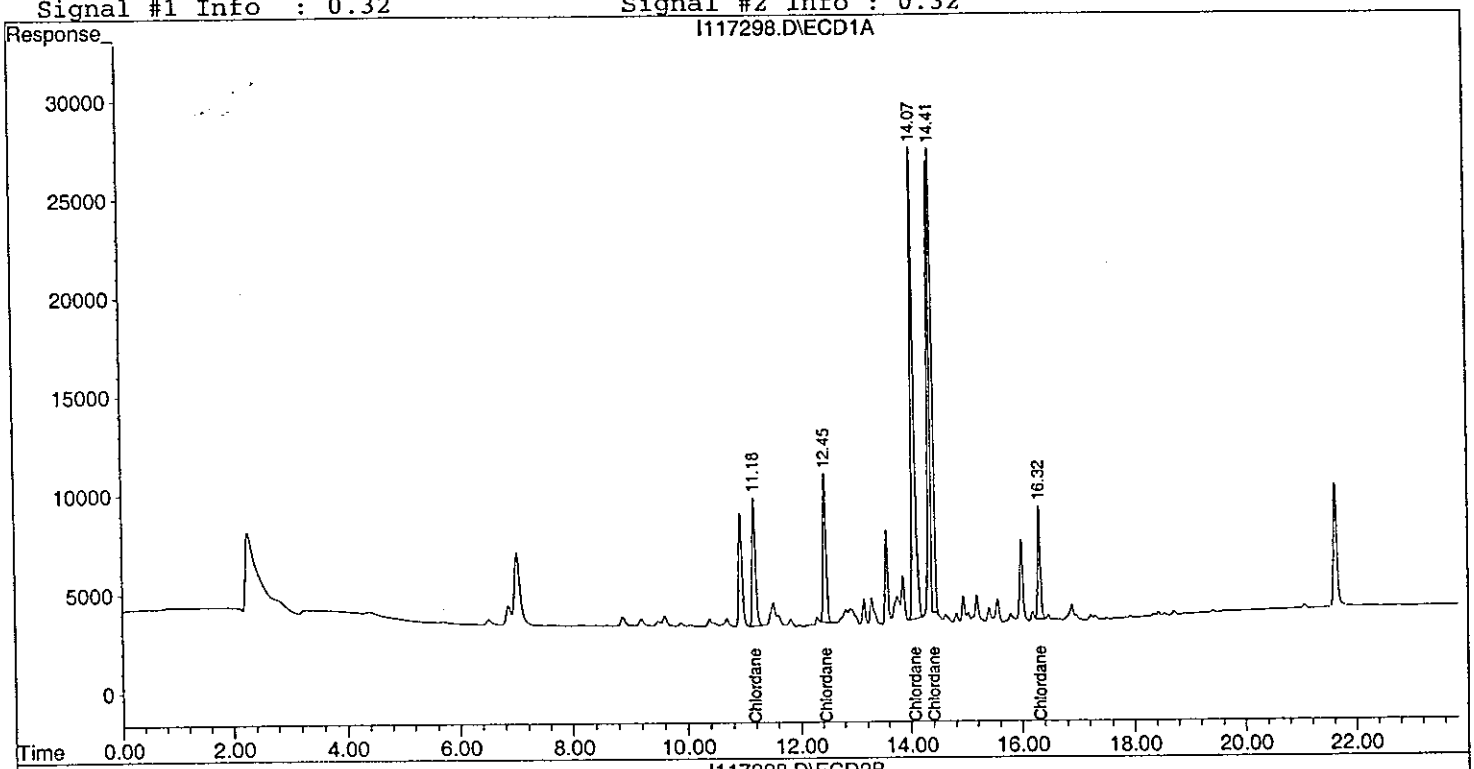
001038

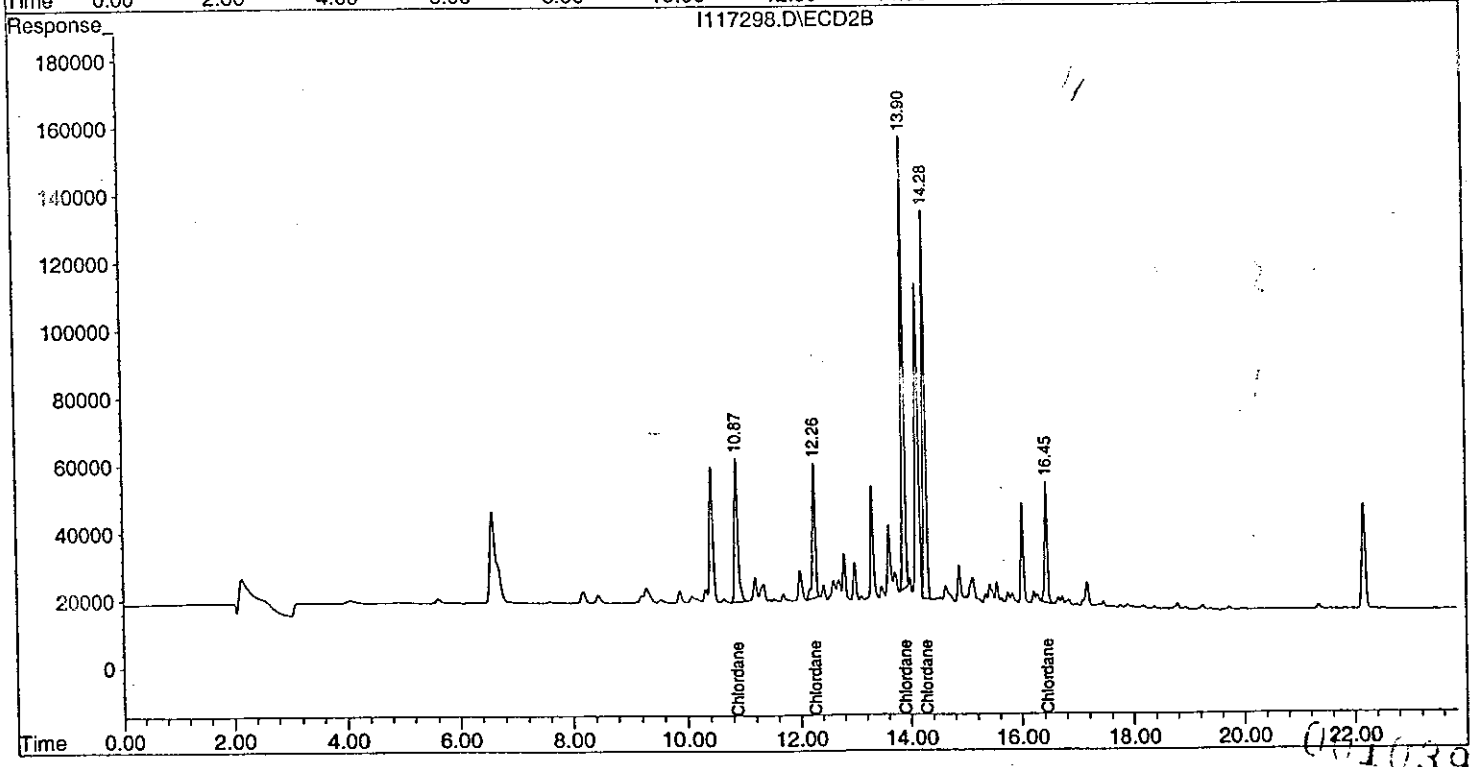
(#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR1902\I117298.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\I\MAR1902\I117298.D\ECD2B.CH
Acq On : 19 Mar 2002 21:59 Operator: AK
Sample : CHLORDANE-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:08 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117299.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\I\MAR1902\I117299.D\ECD2B.CH
Acq On : 19 Mar 2002 22:27 Operator: AK
Sample : CHLORDANE-2 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:10 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

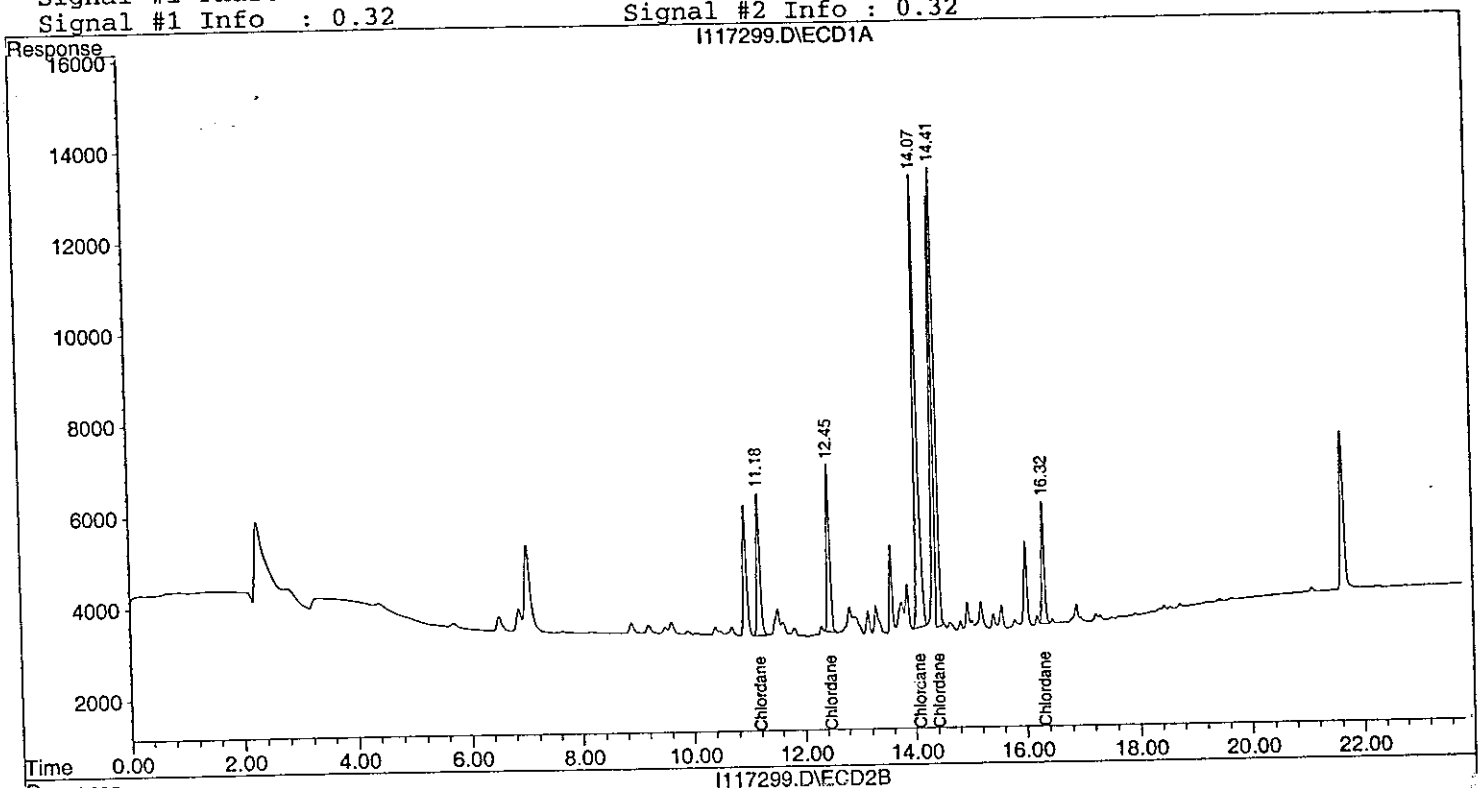
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
um Toxaphene			0	0	N.D.	N.D.
ge Toxaphene					0.000	0.000
,9 Chlordane	11.18	10.87	126142	884136	245.515	268.231
,9 Chlordane {2}	12.45	12.26	140829	793313	247.856	279.323
,9 Chlordane {3}	14.07	13.90	381809	2008715	235.033	267.975
,9 Chlordane {4}	14.41	14.28	325360	1786632	236.025m	264.808
,9 Chlordane {5}	16.32	16.45	86127	590017	237.924	267.623
Sum Chlordane			1060267	6062813	1202.353	1347.960
ıge Chlordane					240.471	269.592

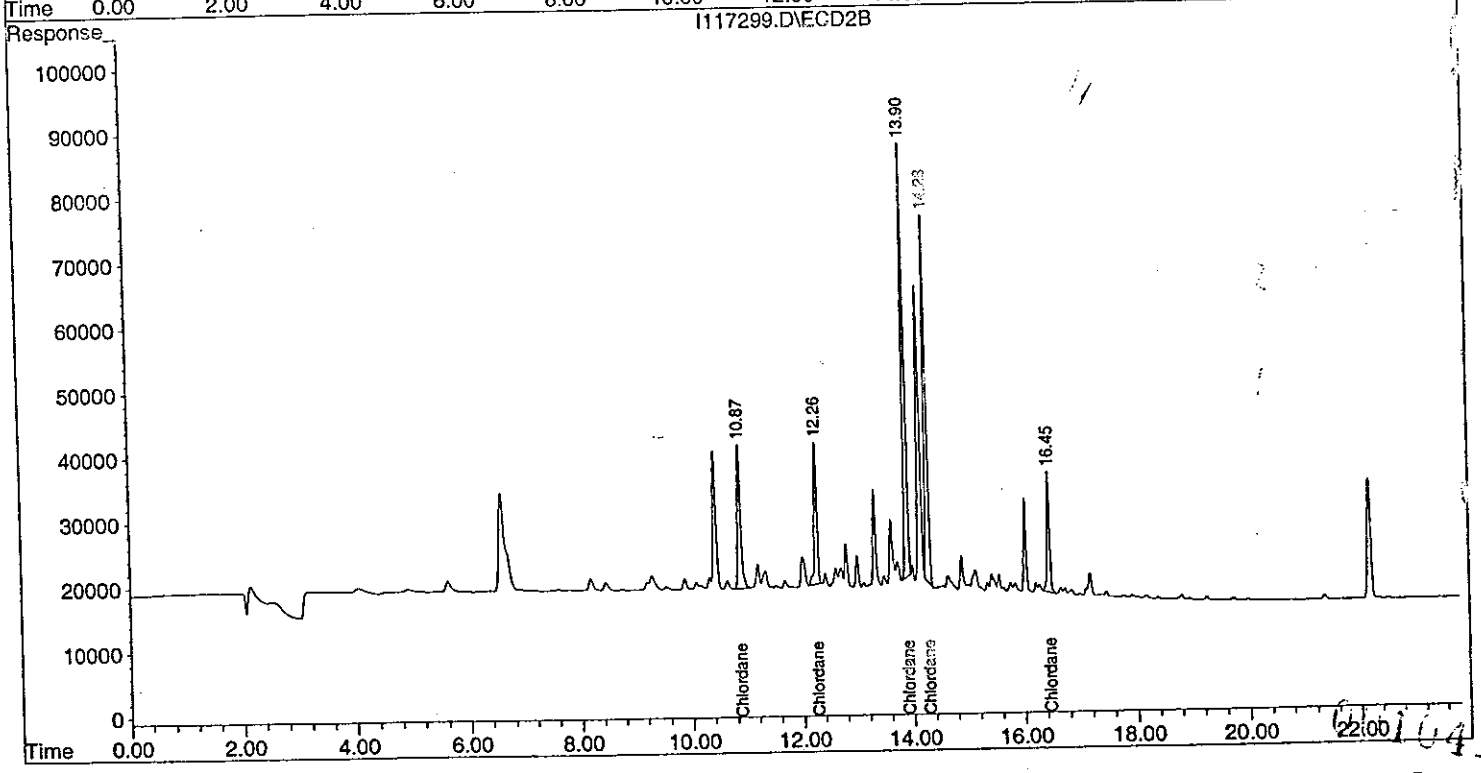
001040

Signal #1 : H:\GCDATA\I\MAR1902\I117299.D\ECD1A.CH Vial: 8
Signal #2 : H:\GCDATA\I\MAR1902\I117299.D\ECD2B.CH
Acq On : 19 Mar 2002 22:27 Operator: AK
Sample : CHLORDANE-2 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:10 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117300.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\I\MAR1902\I117300.D\ECD2B.CH
Acq On : 19 Mar 2002 22:55 Operator: AK
Sample : CHLORDANE-1 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:11 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
age Toxaphene					0.000	0.000
L9 Chlordane	11.18	10.87	51475	374479	100.188	113.610
L9 Chlordane {2}	12.45	12.26	58082	314673	102.223	110.795
L9 Chlordane {3}	14.07	13.90	151662	870109	93.360	116.078
L9 Chlordane {4}	14.41	14.28	133440	771332	96.984m	115.256
L9 Chlordane {5}	16.32	16.45	33921	250043	93.706	113.416
Sum Chlordane			428580	2580636	486.461	569.155
age Chlordane					97.292	113.831

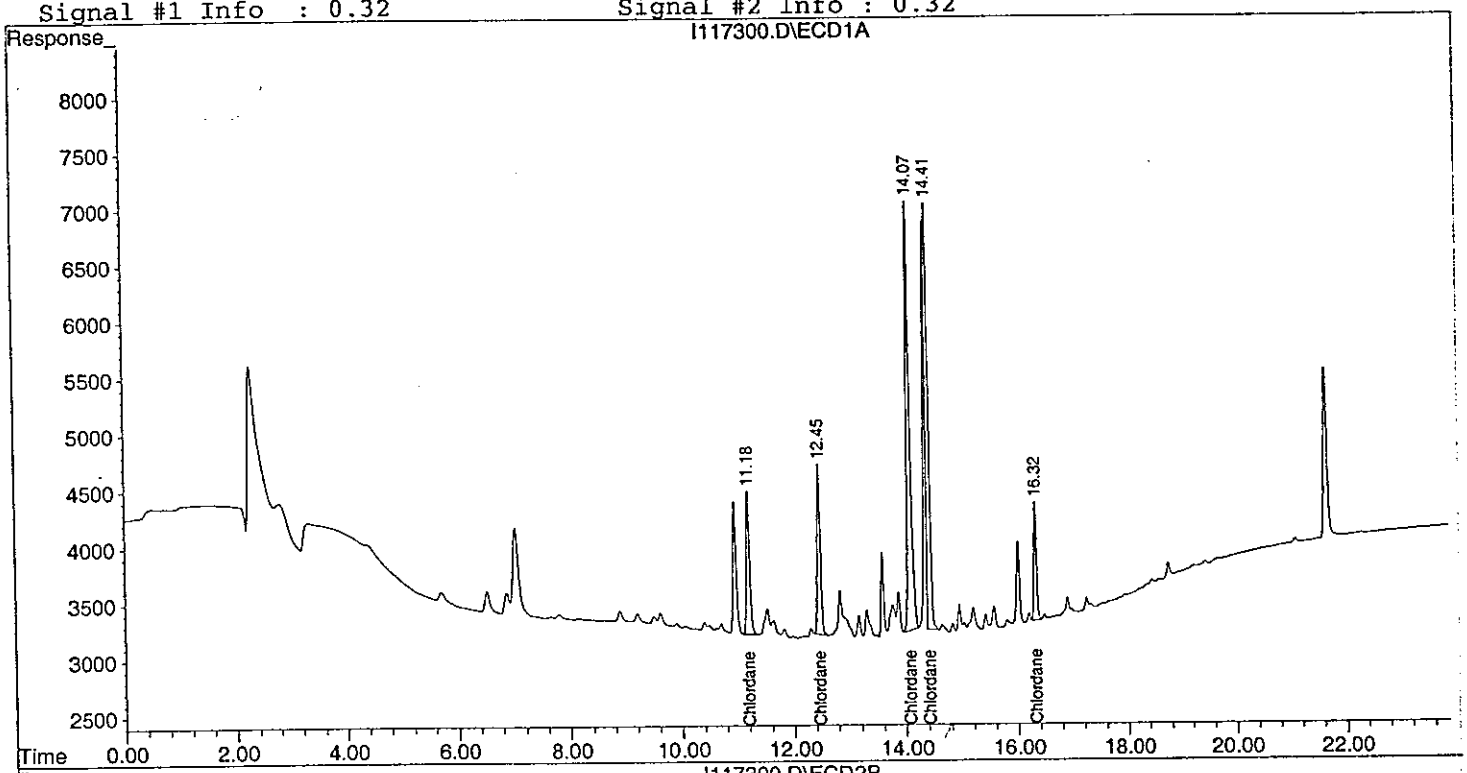
001042

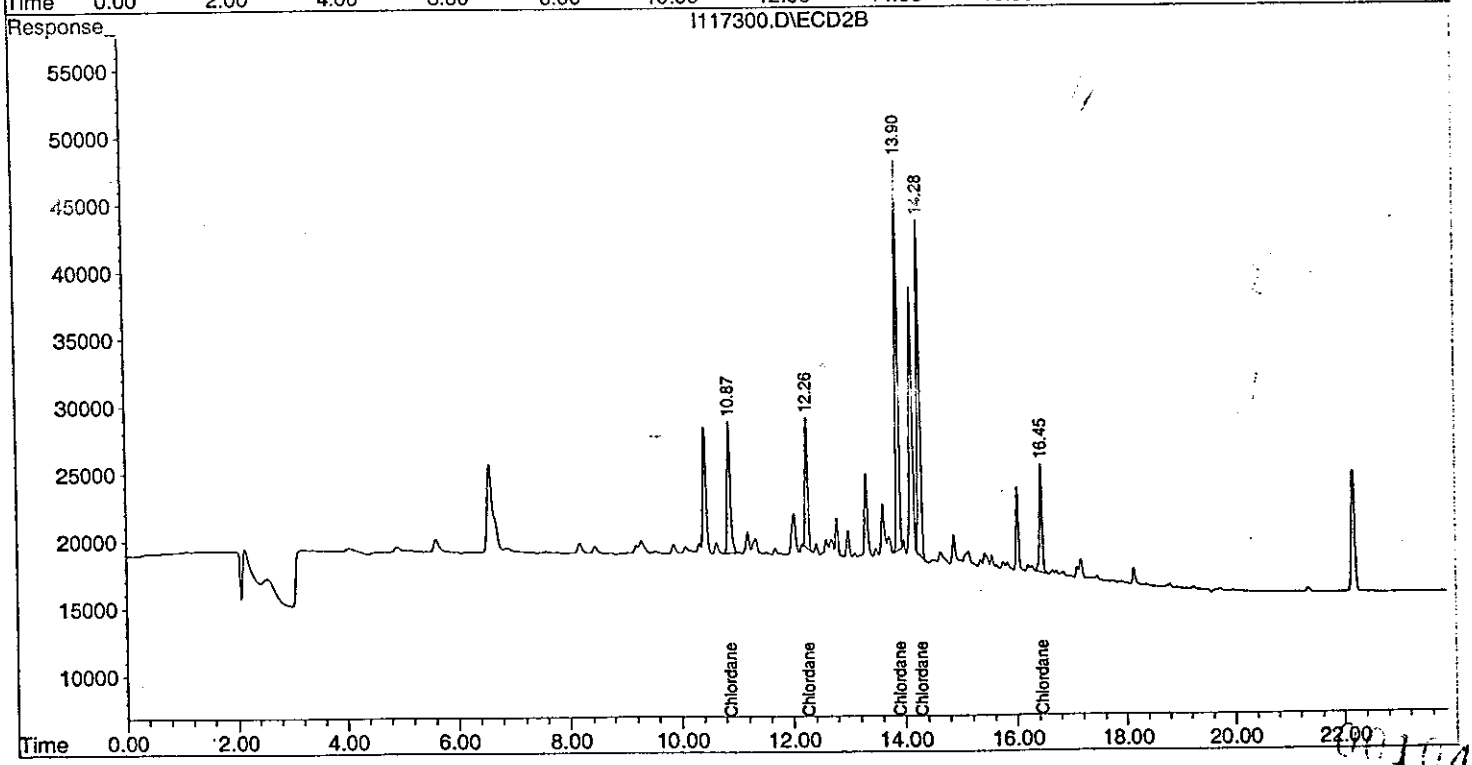
f) RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR1902\I117300.D\ECD1A.CH Vial: 9
Signal #2 : H:\GCDATA\I\MAR1902\I117300.D\ECD2B.CH
Acq On : 19 Mar 2002 22:55 Operator: AK
Sample : CHLORDANE-1 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:11 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117301.D\ECD1A.CH Vial: 10
Signal #2 : H:\GCDATA\I\MAR1902\I117301.D\ECD2B.CH
Acq On : 19 Mar 2002 23:23 Operator: AK
Sample : PEST-6 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 07:38:38 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

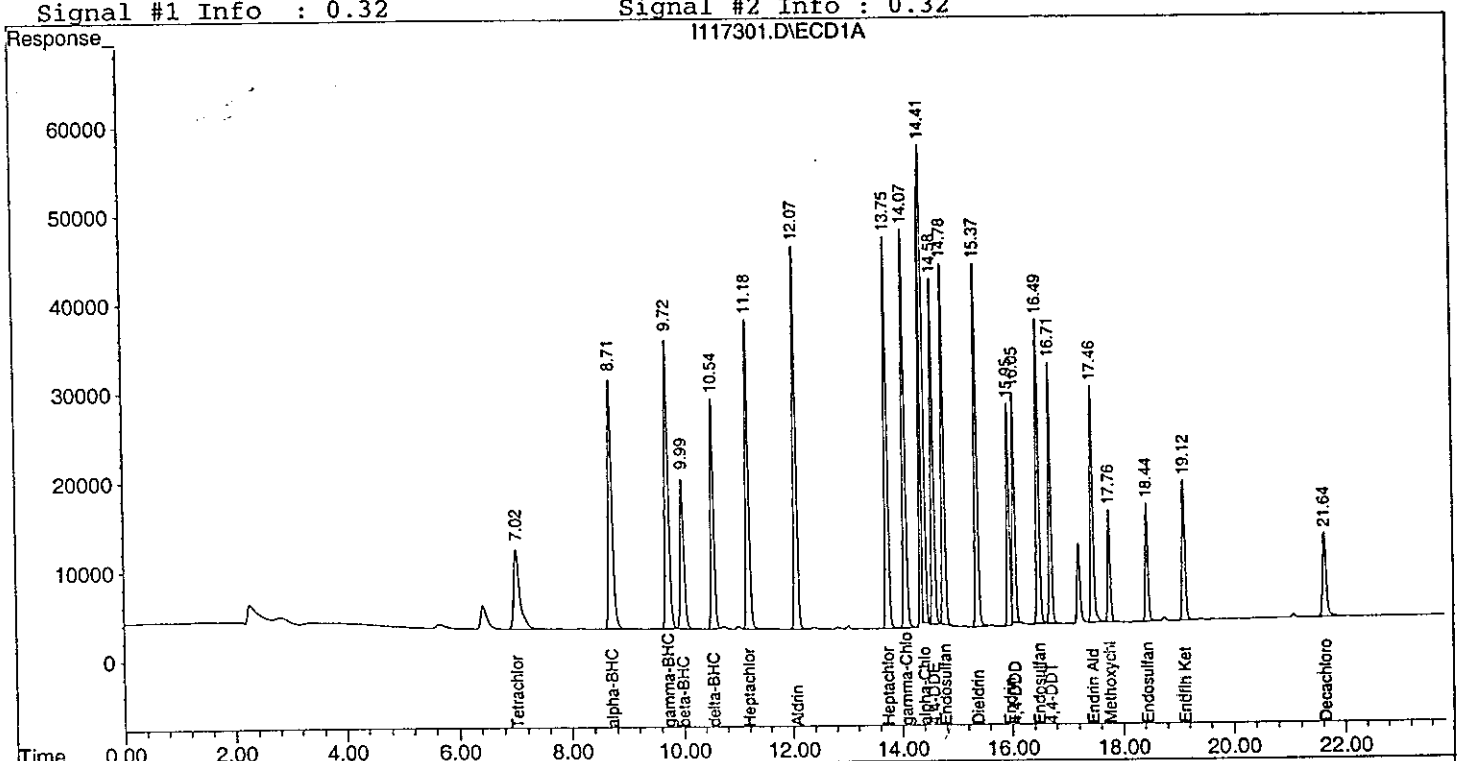
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	662134	3863041	49.465	44.185
	iked Amount 20.000 Range 30 - 150 Recovery =					247.33%#	220.93%#
S	Decachlorobiphen	21.64	22.17	426624	1985000	46.601	40.516
	iked Amount 20.000 Range 30 - 150 Recovery =					233.01%#	202.58%#
	Target Compounds						
A	alpha-BHC	8.71	8.35	1351368	8780411	120.216	96.336
MA	gamma-BHC (Linda	9.72	9.51	1415756	8192701	117.928	93.587
MA	Heptachlor	11.19	10.87	1353673	6549308	104.493	87.563m
MB	Aldrin	12.07	11.83	1510493	7299682	112.614	89.077m
B	beta-BHC	9.99	9.76	780607	4184599	103.078	86.105
B	delta-BHC	10.54	10.68	976768	6384120	125.475m	100.061m
B	Heptachlor Epoxi	13.75	13.41	1481104	6709046	104.471	85.012m
A	Endosulfan I	14.78	14.42	1330486	6080790	103.759	86.530m
A	gamma-Chlordane	14.07	13.90	1501558	6785375	102.627	85.374
A	alpha-Chlordane	14.41	14.28f	1811640	6393354	109.285m	86.113m
B	4,4-DDE	14.59	14.70	1193396	6488367	105.857	86.894
MA	Dieldrin	15.37	15.11	1299455	6030048	107.881m	85.552
MA	Endrin	15.95	15.84	800267	4056213	103.967m	87.524m
B	Endosulfan II	16.49	16.34	1123156	5242841	104.723	86.947
A	4,4-DDD	16.05	16.08	770800	4423641	106.550m	87.907
MA	4,4-DDT	16.71	16.80	872997	4531946	108.380	90.708
B	Endrin Aldehyde	17.46	17.32	916873	1851256	100.878	84.422m
B	Endosulfan Sulfa	18.44	17.72	437588	2395474	112.260m	99.359
A	Methoxychlor	17.76	18.29	378153	1949322	91.261	81.826
B	Endrin Ketone	19.12	18.94	556206	2704677	111.965	93.740
	Sum Toxaphene			0	0	N.D.	N.D.
	rage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	rage Chlordane					0.000	0.000

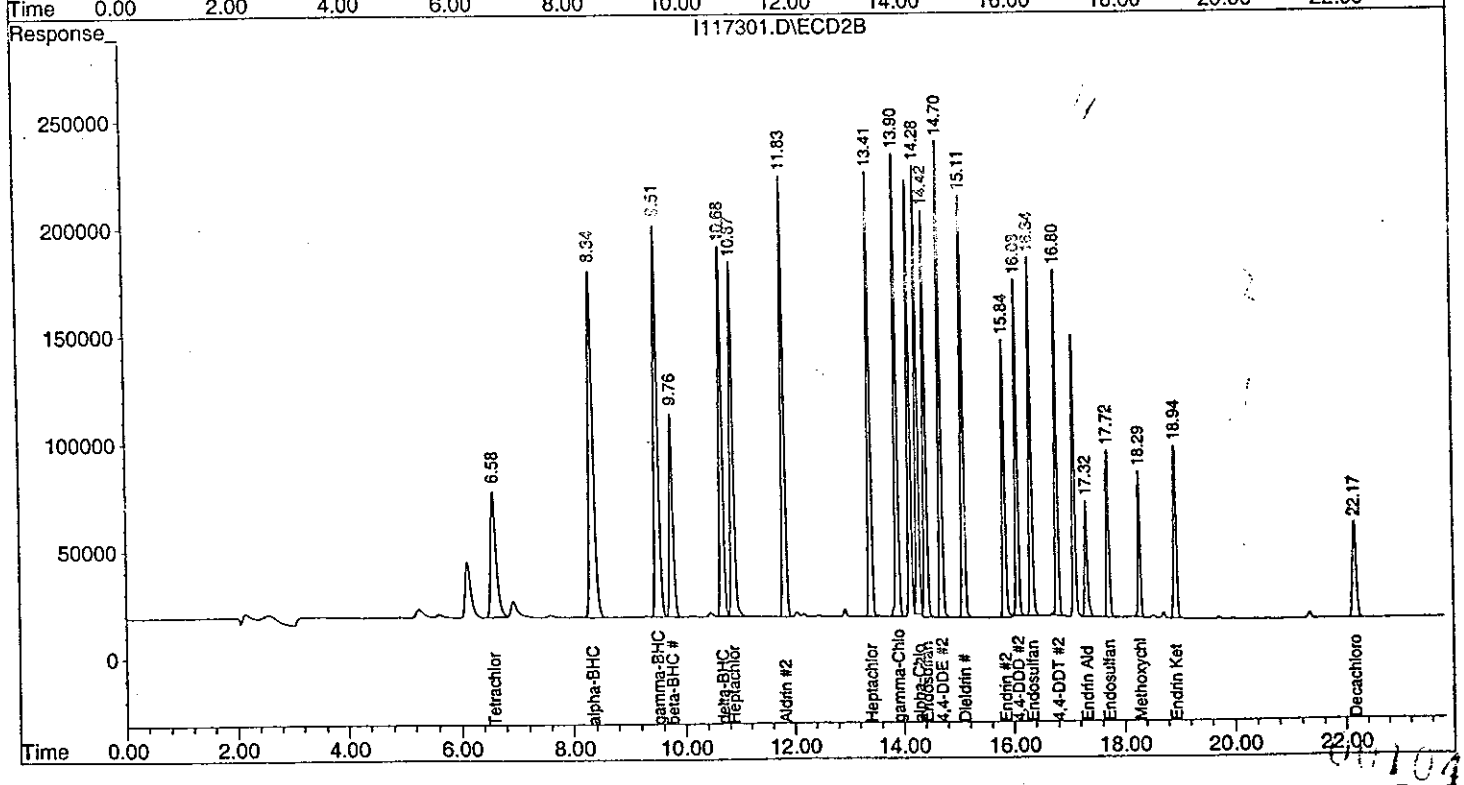
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR1902\I117301.D\ECD1A.CH Vial: 10
Signal #2 : H:\GCDATA\I\MAR1902\I117301.D\ECD2B.CH
Acq On : 19 Mar 2002 23:23 Operator: AK
Sample : PEST-6 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 07:38:38 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantification Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117302.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\I\MAR1902\I117302.D\ECD2B.CH
Acq On : 19 Mar 2002 23:51 Operator: AK
Sample : PEST-5 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 07:38:38 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	513312	3075265	38.347	35.174
	iked Amount 20.000 Range 30 - 150 Recovery =					191.74%#	175.87%#
S	Decachlorobiphen	21.64	22.17	335173	1617920	36.611	33.024
	iked Amount 20.000 Range 30 - 150 Recovery =					183.06%#	165.12%#
	Target Compounds						
A	alpha-BHC	8.71	8.35	968029	6864716	86.115	75.317
MA	gamma-BHC (Linda	9.72	9.51	1030977	6449370	85.877	73.673
MA	Heptachlor	11.18	10.87	1015157	5207976	78.362	69.515m
MB	Aldrin	12.07	11.83	1109052	5793649	82.685	70.690m
B	beta-BHC	9.99	9.76	594931	3351964	78.560	68.972m
B	delta-BHC	10.54	10.68	690699	4950006	88.597	77.539
B	Heptachlor Epoxi	13.75	13.41	1119474	5385291	78.963m	68.209m
A	Endosulfan I	14.78	14.43	1004609	4731763	78.345	67.030
A	gamma-Chlordane	14.07	13.90	1132927	5409860	77.432	68.067
A	alpha-Chlordane	14.41	14.28f	1285593	5079285	77.291m	68.225m
B	4,4-DDE	14.59	14.70	904843	5183724	80.262	69.422
MA	Dieldrin	15.38	15.11	970225	4822863	80.436	68.425m
MA	Endrin	15.95	15.85	607334	3192451	79.024m	68.715
B	Endosulfan II	16.49	16.34	858913	4168176	80.085m	69.125
A	4,4-DDD	16.05	16.08	582415	3530431	80.341m	70.157
MA	4,4-DDT	16.71	16.80	654459	3581815	81.249	71.691
B	Endrin Aldehyde	17.46	17.32	692204	1491693	76.159	67.841m
B	Endosulfan Sulfa	18.44	17.72	328757	1861715	84.311m	77.220m
A	Methoxychlor	17.76	18.29	299808	1632488	72.354	68.526
B	Endrin Ketone	19.12	18.94	407849	2114246	82.101	73.277m
	Sum Toxaphene			0	0	N.D.	N.D.
	rage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	rage Chlordane					0.000	0.000

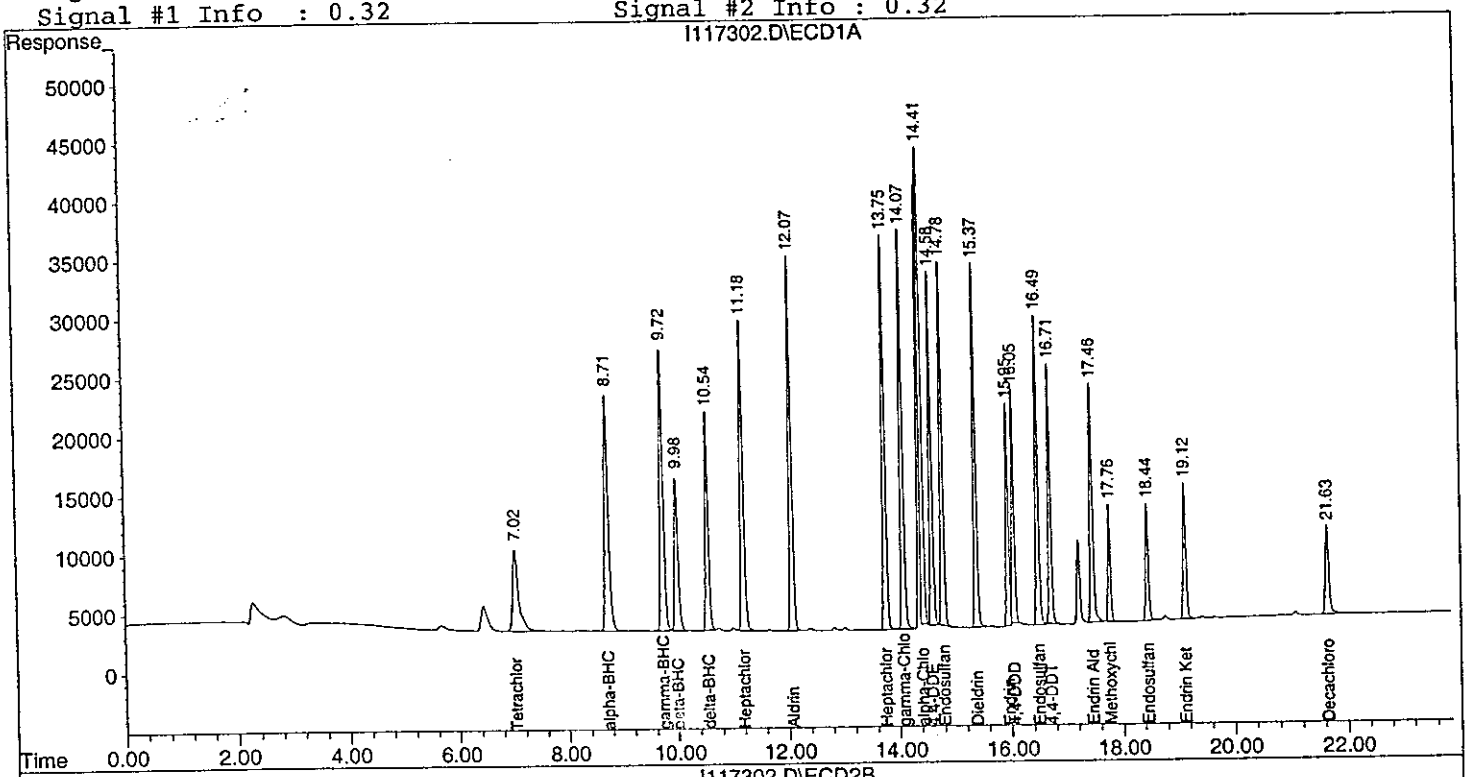
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

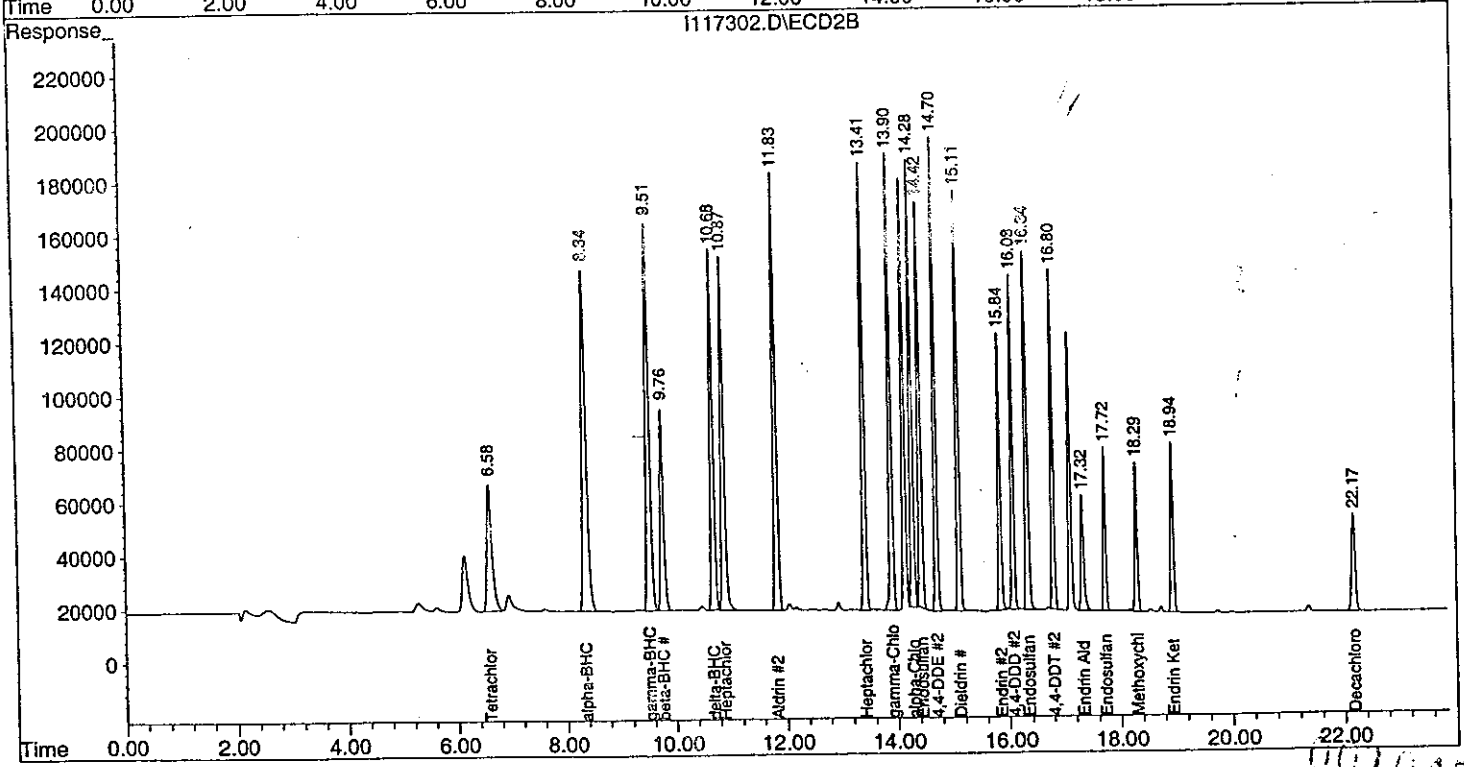
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117302.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\I\MAR1902\I117302.D\ECD2B.CH
Acq On : 19 Mar 2002 23:51 Operator: AK
Sample : PEST-5 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:12 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 07:38:38 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117303.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\I\MAR1902\I117303.D\ECD2B.CH
Acq On : 20 Mar 2002 00:19 Operator: AK
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:13 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	339492	2108366	25.362	24.115
piked Amount	20.000 Range 30 - 150 Recovery =					126.81%	120.58%
S	Decachlorobiphen	21.64	22.17	221551	1141217	24.200	23.294
piked Amount	20.000 Range 30 - 150 Recovery =					121.00%	116.47%
	Target Compounds						
A	alpha-BHC	8.71	8.35	558661	4548462	49.698	49.904
MA	gamma-BHC (Linda	9.72	9.51	604075	4328106	50.318	49.441
MA	Heptachlor	11.18	10.87	636993	3569054	49.171	47.563
MB	Aldrin	12.07	11.83	671570	3968728	50.069	48.421
B	beta-BHC	9.99	9.76	381423	2306351	50.366	47.428
B	delta-BHC	10.55	10.68	389556	3217771	49.969	50.404
B	Heptachlor Epoxi	13.75	13.41	698252	3715941	49.229	46.990
A	Endosulfan I	14.78	14.42	626930	3399232	48.892	48.153m
A	gamma-Chlordane	14.07	13.90	708851	3727897	48.448	46.905
A	alpha-Chlordane	14.41	14.28f	828731	3515237	50.551m	47.097m
B	4,4-DDE	14.59	14.70	561703	3562814	49.824	47.714
MA	Dieldrin	15.37	15.11	594304	3328536	49.271	47.343
MA	Endrin	15.95	15.84	376407	2179886	48.966m	46.920
B	Endosulfan II	16.49	16.34	528945	2880207	49.137	47.765
A	4,4-DDD	16.05	16.08	364940	2414533	50.386m	47.982
MA	4,4-DDT	16.71	16.80	405847	2445769	50.385	48.953m
B	Endrin Aldehyde	17.46	17.33	453521	1030857	49.898	46.729
B	Endosulfan Sulfa	18.44	17.72	198541	1220001	50.861m	50.684
A	Methoxychlor	17.76	18.29	201793	1151208	48.699	48.324
B	Endrin Ketone	19.12	18.94	246573	1407048	49.635	48.840
	Sum Toxaphene			0	0	N.D.	N.D.
erage	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
erage	Chlordane					0.000	0.000

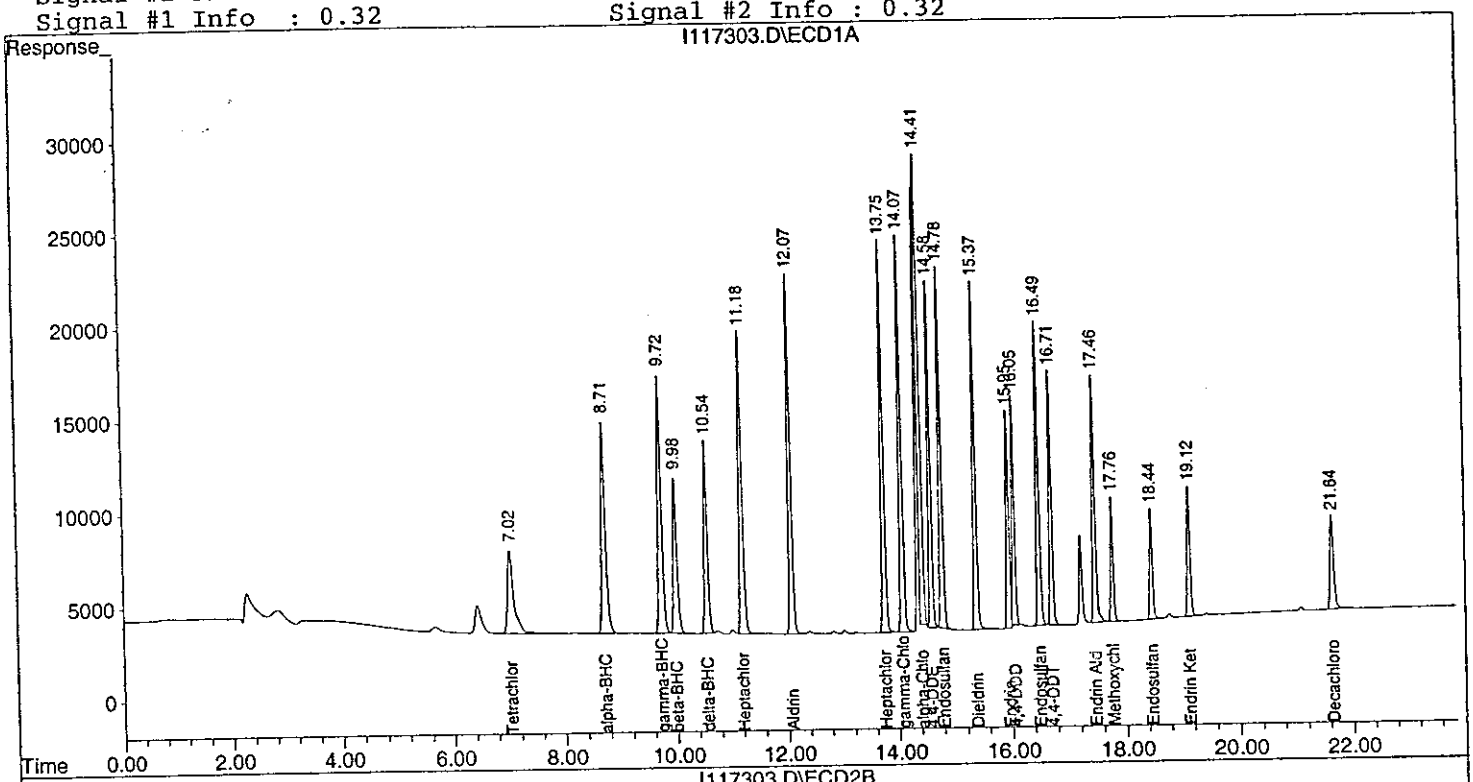
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

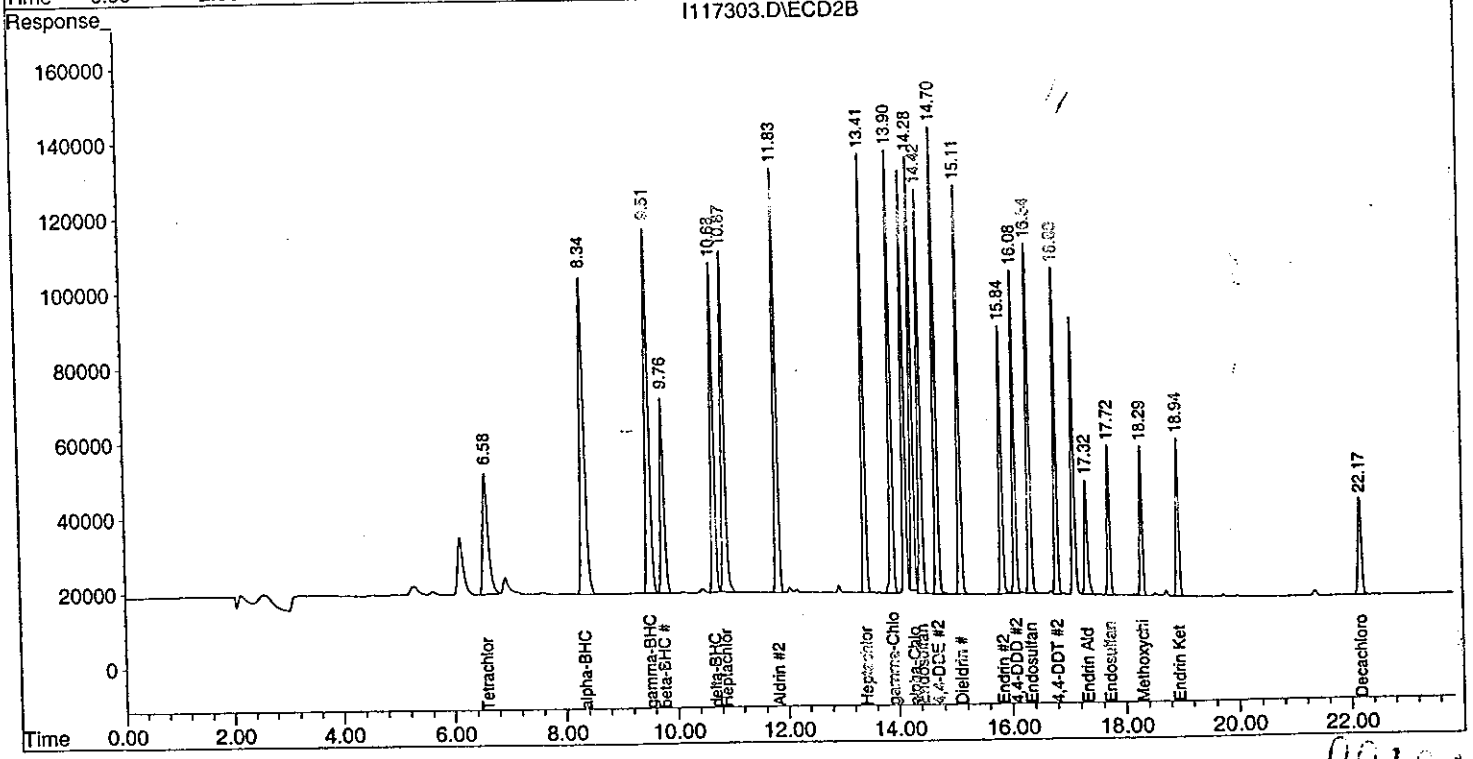
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117303.D\ECD1A.CH Vial: 12
Signal #2 : H:\GCDATA\I\MAR1902\I117303.D\ECD2B.CH
Acq On : 20 Mar 2002 00:19 Operator: AK
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:13 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117304.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\I\MAR1902\I117304.D\ECD2B.CH
Acq On : 20 Mar 2002 00:46 Operator: AK
Sample : PEST-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

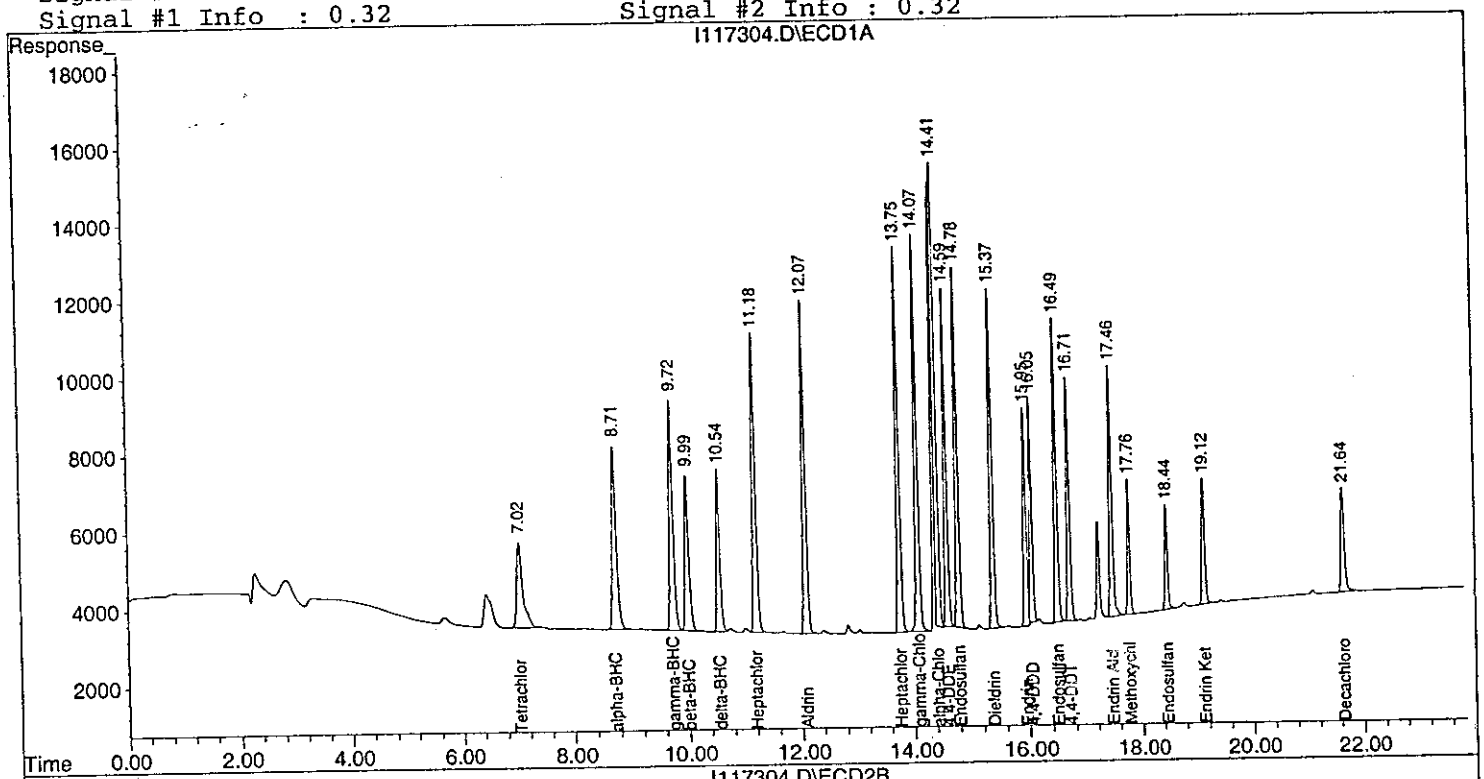
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	166005	1126022	12.222	12.890
piked Amount	20.000 Range	30 - 150	Recovery	=		61.11%	64.45%
S	Decachlorobiphen	21.64	22.17	117825	654544	12.830	13.362
piked Amount	20.000 Range	30 - 150	Recovery	=		64.15%	66.81%
	Target Compounds						
A	alpha-BHC	8.71	8.35	243799	2295462	21.698	25.178
MA	gamma-BHC (Linda	9.72	9.51	263645	2228957	22.000	25.472
MA	Heptachlor	11.19	10.87	308622	1932283	23.822	25.703
MB	Aldrin	12.07	11.83	305255	2111685	22.722	25.755
B	beta-BHC	9.99	9.76	185114	1248877	24.273	25.891
B	delta-BHC	10.54	10.68	167161	1580908	21.549m	24.815
B	Heptachlor Epoxi	13.75	13.41	335132	2042612	23.624	25.845
A	Endosulfan I	14.78	14.43	302748	1827044	23.757	25.836
A	gamma-Chlordane	14.07	13.90	348673	2041836	23.941	25.735
A	alpha-Chlordane	14.41	14.28f	394473	1935665	23.997m	25.898m
B	4,4-DDE	14.59	14.70	263950	1922873	23.434	25.813
MA	Dieldrin	15.38	15.11	282139	1818686	23.404	25.950
MA	Endrin	15.95	15.84	185262	1203563	24.049m	25.884
B	Endosulfan II	16.49	16.34	255099	1584412	23.701	26.257
A	4,4-DDD	16.05	16.08	173064	1303514	23.871m	25.881
MA	4,4-DDT	16.71	16.80	189229	1279238	23.474	25.618
B	Endrin Aldehyde	17.46	17.33	222578	574346	24.425	25.953
B	Endosulfan Sulfa	18.44	17.72	91310	609733	23.491m	25.408
A	Methoxychlor	17.76	18.29	186212	630773	25.777	26.292m
B	Endrin Ketone	19.12	18.94	114630	734482	23.085	25.522
	Sum Toxaphene			0	0	N.D.	N.D.
erage	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
erage	Chlordane					0.000	0.000

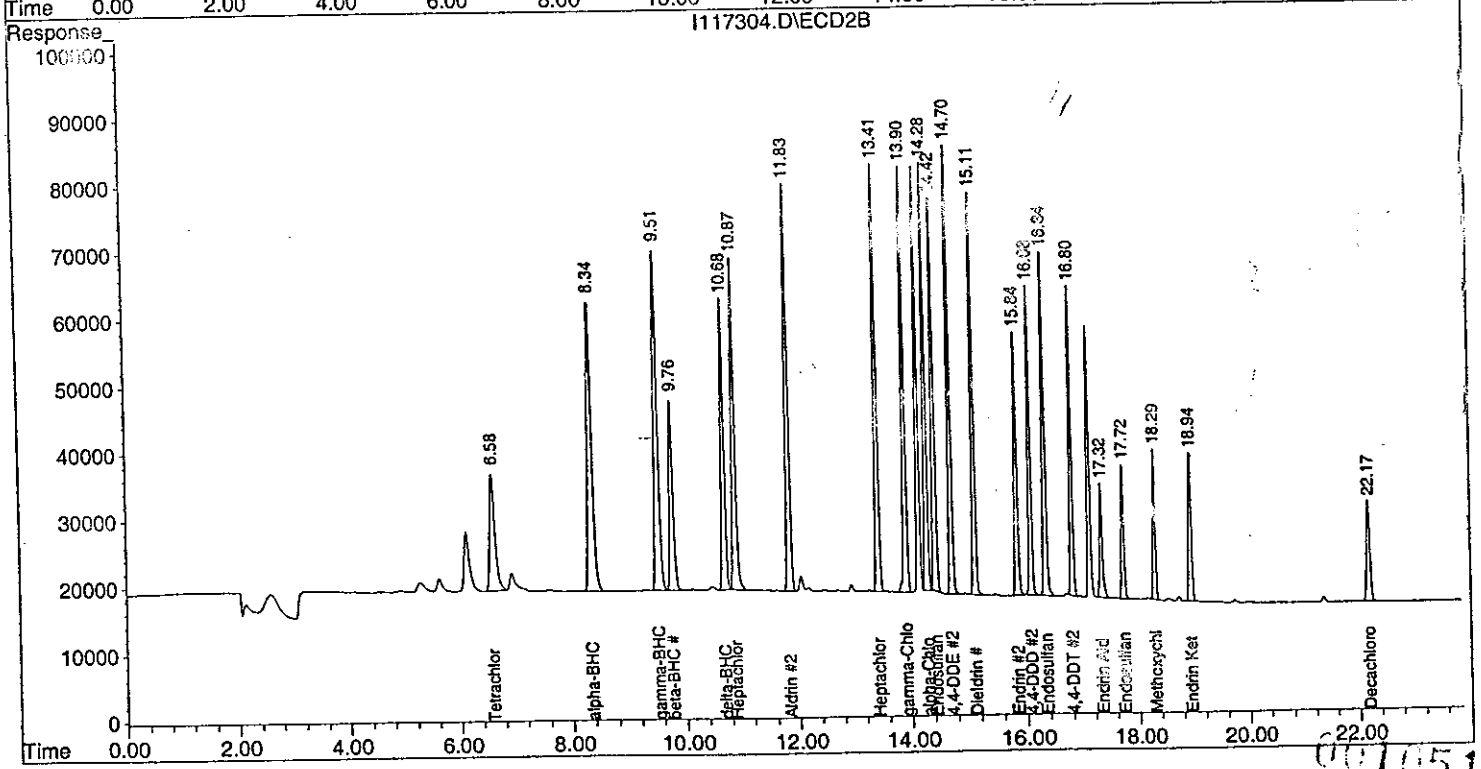
(f)-RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR1902\I117304.D\ECD1A.CH Vial: 13
Signal #2 : H:\GCDATA\I\MAR1902\I117304.D\ECD2B.CH
Acq On : 20 Mar 2002 00:46 Operator: AK
Sample : PEST-3 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Signal #1 : H:\GCDATA\I\MAR1902\I117305.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\I\MAR1902\I117305.D\ECD2B.CH
Acq On : 20 Mar 2002 1:14 Operator: AK
Sample : PEST-2 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	35298	257729	2.599	2.950
piked Amount	20.000 Range 30 - 150 Recovery =					13.00%#	14.75%#
S	Decachlorobiphen	21.64	22.17	26036	160236	2.835m	3.271m
piked Amount	20.000 Range 30 - 150 Recovery =					14.18%#	16.36%#
	Target Compounds						
A	alpha-BHC	8.71	8.35	44169	468671	3.931	5.141 #
MA	gamma-BHC (Linda	9.72	9.51	46941	469467	3.917	5.365 #
MA	Heptachlor	11.19	10.87	63095	461402	4.870	6.138 #
MB	Aldrin	12.07	11.83	58197	479373	4.332m	5.847 #
B	beta-BHC	9.99	9.76	37102	292796	4.865m	6.070
B	delta-BHC	10.54	10.68	27276	305543	3.506m	4.796 #
B	Heptachlor Epoxi	13.75	13.41	69109	501231	4.872	6.342 #
A	Endosulfan I	14.78	14.43	61552	443726	4.830	6.275 #
A	gamma-Chlordane	14.07	13.90	72869	495475	5.003	6.245m
A	alpha-Chlordane	14.41	14.28f	78770	471176	4.765m	6.304m#
B	4,4-DDE	14.59	14.70	52635	451429	4.673	6.060 #
MA	Dieldrin	15.37	15.11	56745	430257	4.707m	6.139m#
MA	Endrin	15.95	15.84	37992	288095	4.914m	6.196 #
B	Endosulfan II	16.49	16.34	52300	363610	4.859m	6.026
A	4,4-DDD	16.05	16.08	33433	300442	4.609m	5.965 #
MA	4,4-DDT	16.71	16.80	36152	282581	4.485m	5.659 #
B	Endrin Aldehyde	17.46	17.33	45958	143286	5.043	6.475 #
B	Endosulfan Sulfa	18.44	17.72	15295	112865	3.927m	4.703m
A	Methoxychlor	17.76	18.29	22923	153685	5.563m	6.400m
B	Endrin Ketone	19.12	18.94	21737	155867	4.377m	5.416m
	Sum Toxaphene			0	0	N.D.	N.D.
erage	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
erage	Chlordane					0.000	0.000

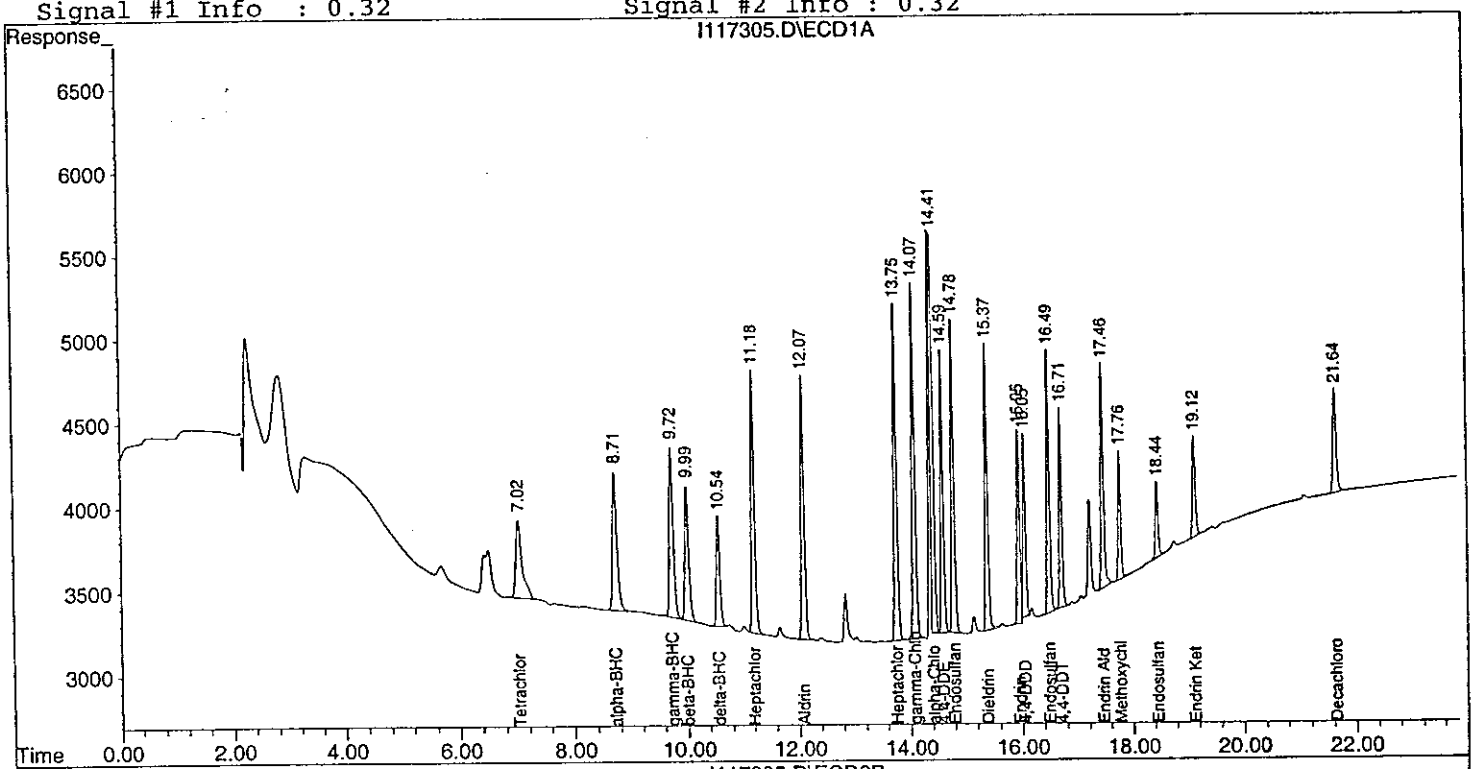
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

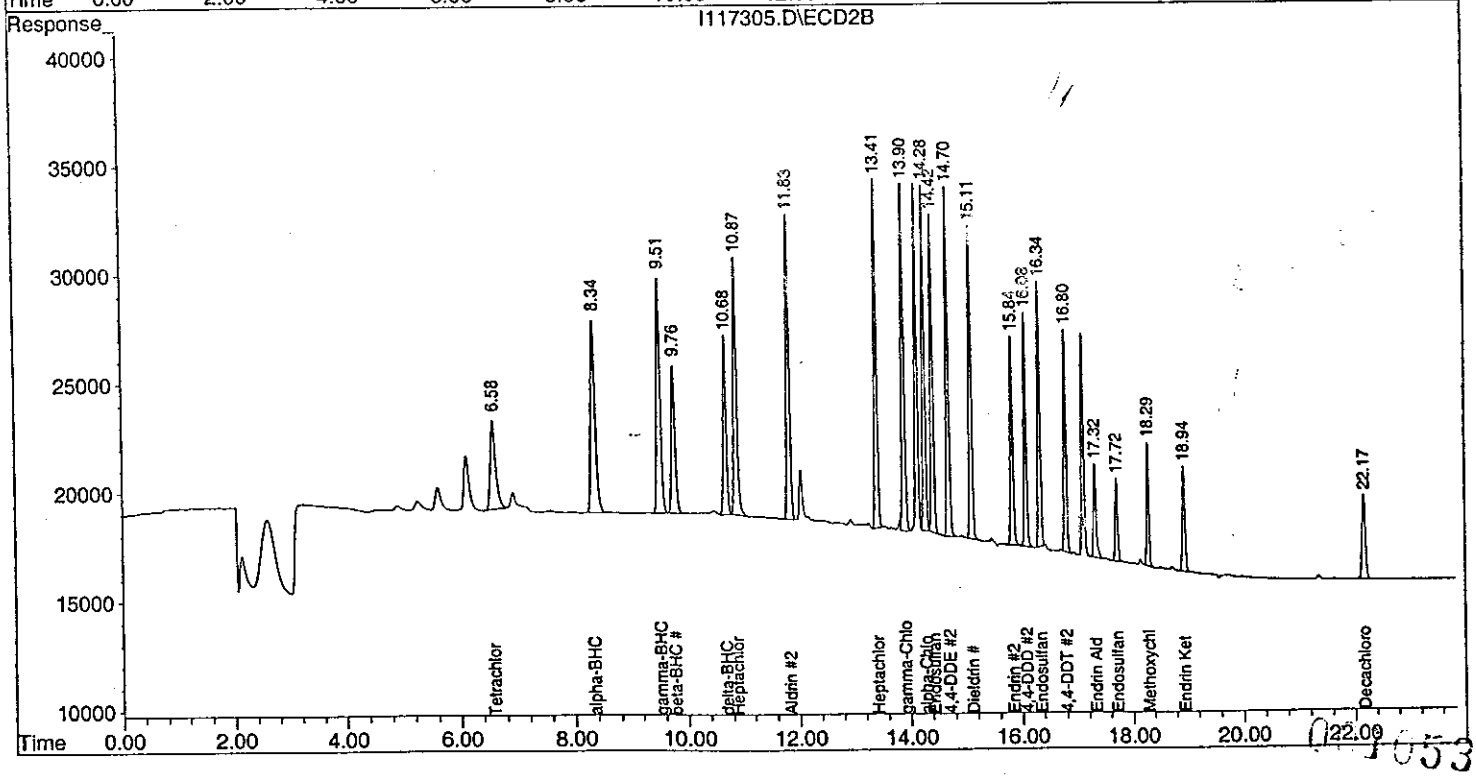
001052

Signal #1 : H:\GCDATA\I\MAR1902\I117305.D\ECD1A.CH Vial: 14
Signal #2 : H:\GCDATA\I\MAR1902\I117305.D\ECD2B.CH
Acq On : 20 Mar 2002 1:14 Operator: AK
Sample : PEST-2 Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117306.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\I\MAR1902\I117306.D\ECD2B.CH
Acq On : 20 Mar 2002 1:42 Operator: AK
Sample : INDAM Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:45 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

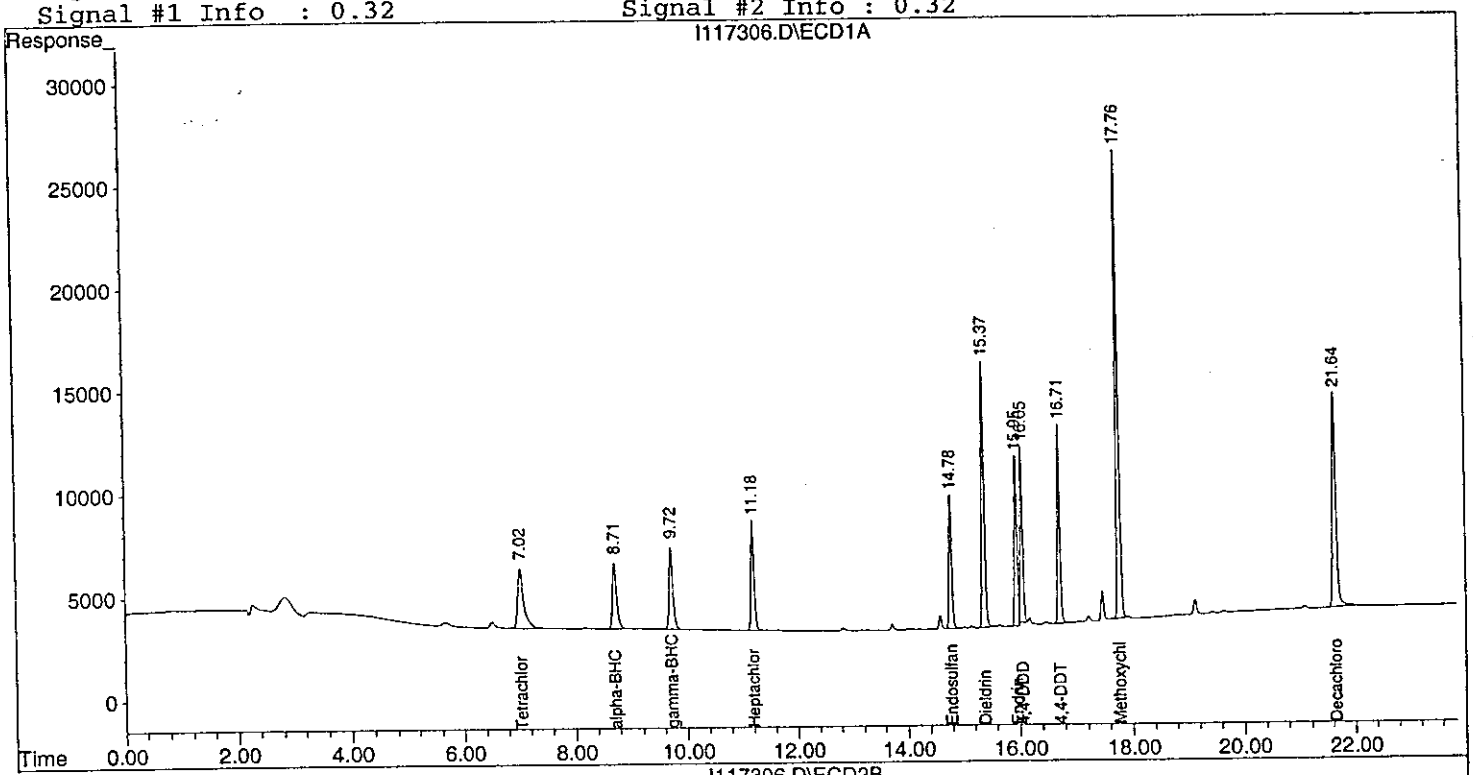
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	213650	1428570	15.730	16.354
	iked Amount 20.000 Range 30 - 150 Recovery =					78.65%	81.77%
S	Decachlorobiphen	21.64	22.17	467767	2132292	50.654	43.525
	iked Amount 20.000 Range 30 - 150 Recovery =					253.27%#	217.63%#
	Target Compounds						
A	alpha-BHC	8.71	8.35	166504	1628909	14.819	17.867
MA	gamma-BHC (Linda	9.72	9.51	180020	1606212	15.022	18.355
MA	Heptachlor	11.19	10.87	212190	1352879	16.379	17.996
A	Endosulfan I	14.78	14.43	214605	1366517	16.856	19.317
MA	Dieldrin	15.38	15.11	409963	2496897	33.908	35.673
MA	Endrin	15.95	15.85	266700	1672778	34.513m	35.976
A	4,4-DDD	16.05	16.08	250171	1797066	34.382m	35.680
MA	4,4-DDT	16.71	16.80	284169	1824269	35.193	36.532m
A	Methoxychlor	17.76	18.29	697102	3373212	168.808	140.256
	Sum Toxaphene			0	0	N.D.	N.D.
	rage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	rage Chlordane					0.000	0.000

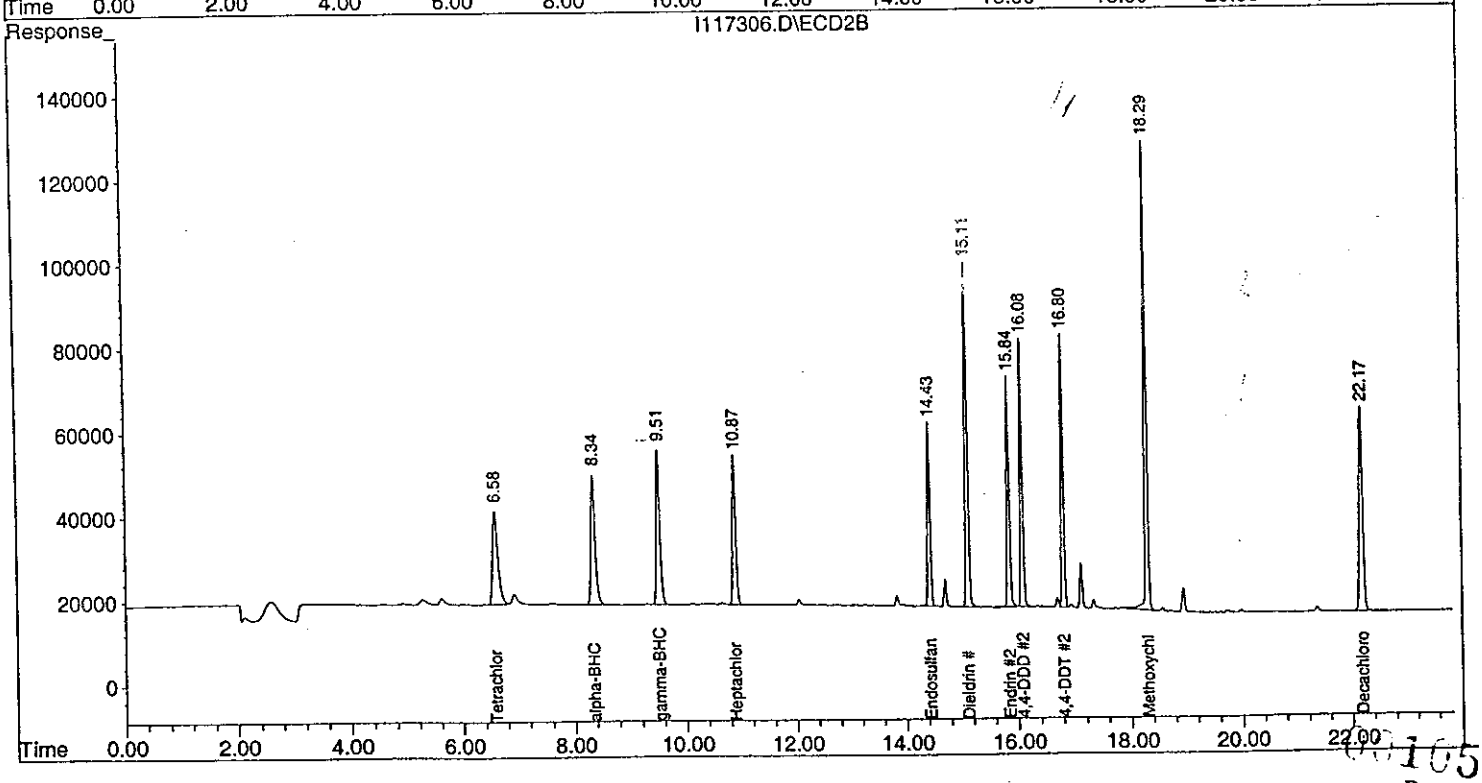
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR1902\I117306.D\ECD1A.CH Vial: 15
Signal #2 : H:\GCDATA\I\MAR1902\I117306.D\ECD2B.CH
Acq On : 20 Mar 2002 1:42 Operator: AK
Sample : INDAM Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:45 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117307.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\I\MAR1902\I117307.D\ECD2B.CH
Acq On : 20 Mar 2002 2:10 Operator: AK
Sample : INDBM Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:48 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	198158	1464964	14.590	16.770
iked Amount	20.000 Range 30 - 150 Recovery =					72.95%	83.85%
S	Decachlorobiphen	21.64	22.17	470160	2159488	50.913	44.080
iked Amount	20.000 Range 30 - 150 Recovery =					254.57%#	220.40%#
	Target Compounds						
MB	Aldrin	12.07	11.83	215686	1568582	16.054m	19.131m
B	beta-BHC	9.99	9.76	131821	923785	17.258	19.151
B	delta-BHC	10.54	10.68	109188	1088090	14.031m	17.079
B	Heptachlor Epoxi	13.75	13.42	236138	1530947	16.646	19.371
A	gamma-Chlordane	14.07	13.90	257972	1532436	17.713	19.383
B	4,4-DDE	14.59	14.70	383310	2571408	34.031	34.520
B	Endosulfan II	16.49	16.34	375637	2163707	34.829m	35.858
B	Endrin Aldehyde	17.46	17.32	179557	750387	19.704m	33.908m#
B	Endosulfan Sulfa	18.44	17.72	132552	859420	34.090m	35.767
B	Endrin Ketone	19.12	18.94	141489	883999	28.453m	30.709
	Sum Toxaphene			0	0	N.D.	N.D.
	:age Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	:age Chlordane					0.000	0.000

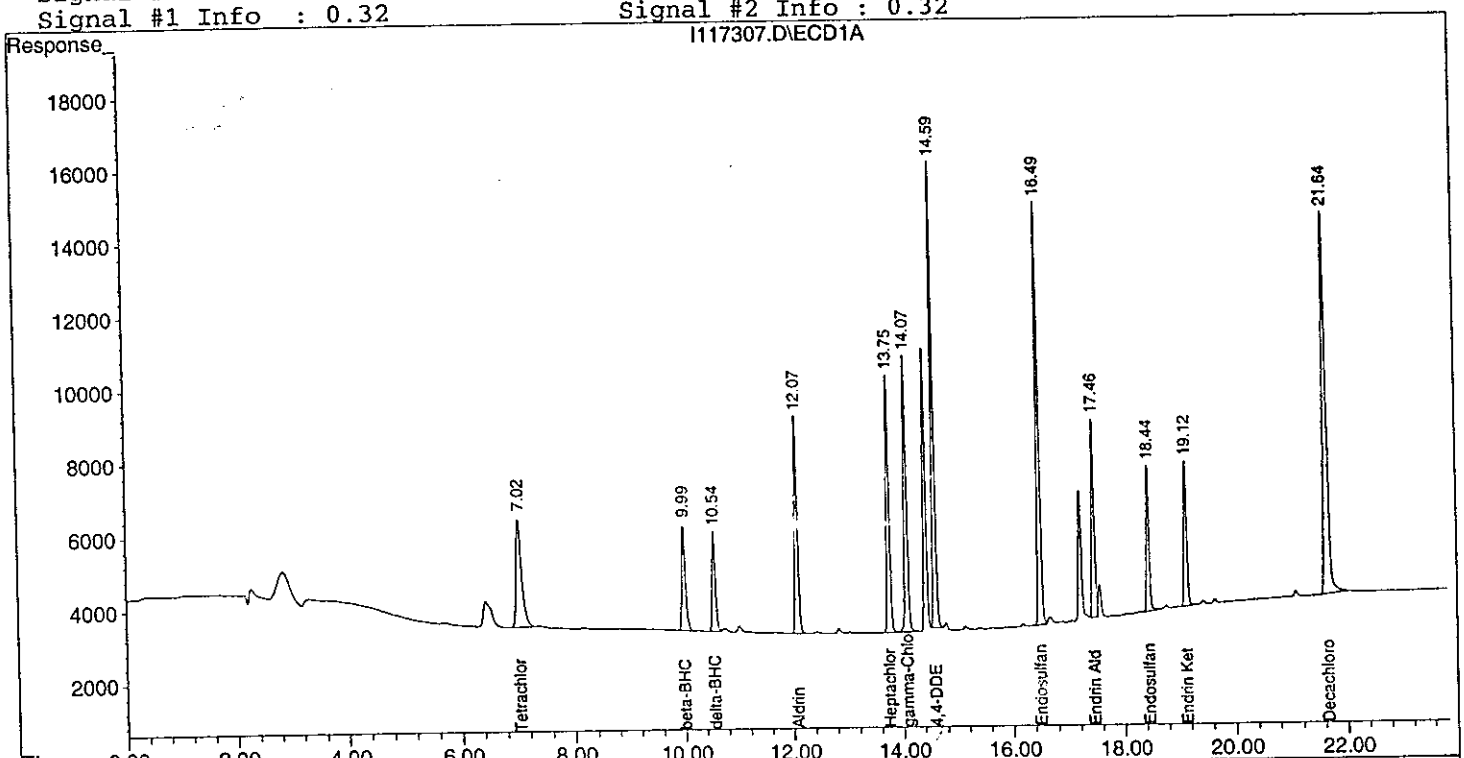
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

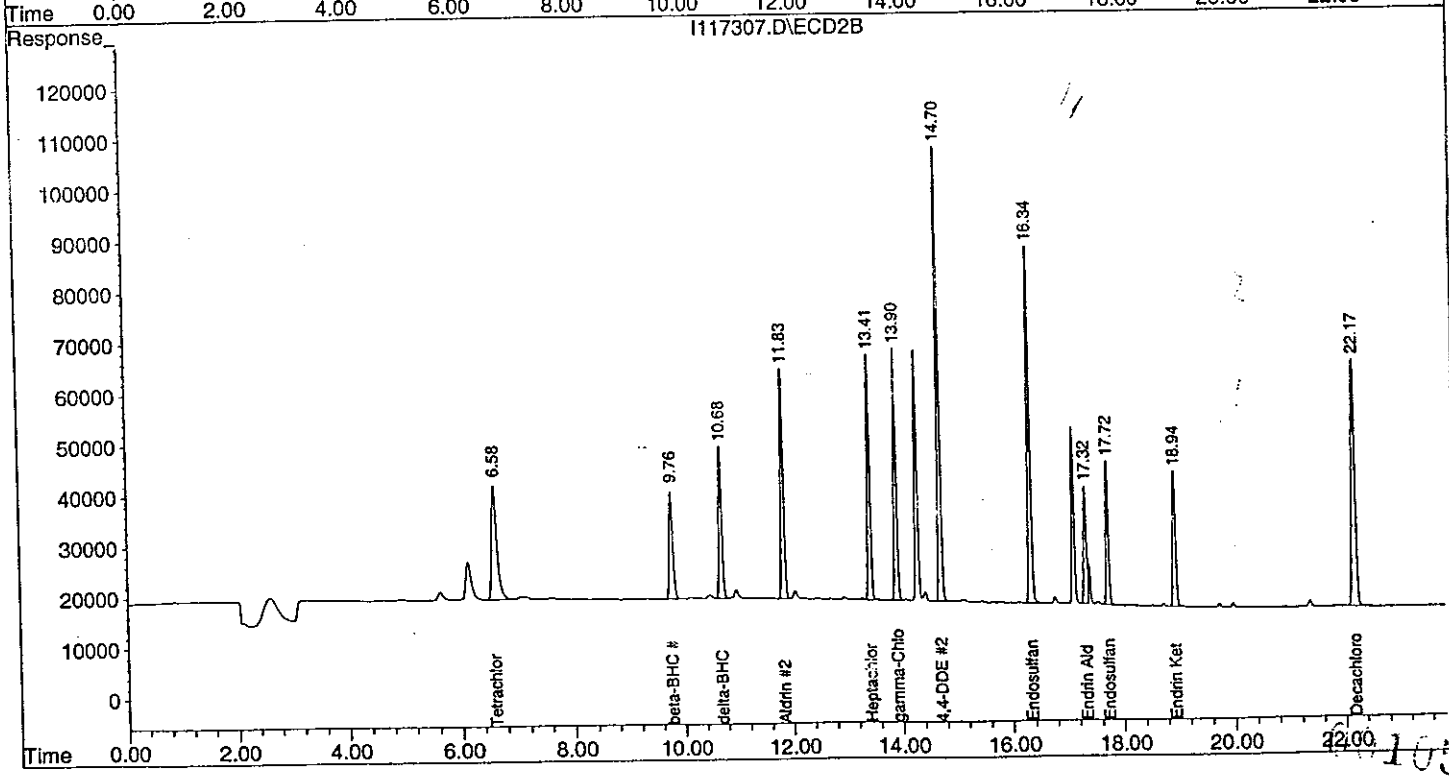
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117307.D\ECD1A.CH Vial: 16
Signal #2 : H:\GCDATA\I\MAR1902\I117307.D\ECD2B.CH
Acq On : 20 Mar 2002 2:10 Operator: AK
Sample : INDBM Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:48 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





PESTICIDES INITIAL CALIBRATION VERIFICATION STANDARD

Lab Name: GPL Laboratories
Lab Code: GPL

EPA Sample No.: CVS GP Lab ID: INDAM/INDBM- I117306/I117307

FRONT COLUMN - DB-5

COMPOUND	STD AMOUNT (ug/L)	CVS CONCENTRATION (ug/L)	CVS % REC .		QC LIMITS REC .
alpha-BHC	0.20	0.15	74	*	85-115
gamma-BHC (Lindane)	0.20	0.15	75	*	85-115
Heptachlor	0.20	0.16	82	*	85-115
Aldrin	0.20	0.16	80	*	85-115
beta-BHC	0.20	0.17	86		85-115
delta-BHC	0.20	0.14	70	*	85-115
Heptachlor Epoxide	0.20	0.17	83	*	85-115
Endosulfan I	0.20	0.17	84	*	85-115
gamma-Chlordane	0.20	0.18	89		85-115
alpha-Chlordane	0.20	0.00	0	*	85-115
4,4'- DDE	0.40	0.34	85		85-115
Dieldrin	0.40	0.34	85		85-115
Endrin	0.40	0.35	86		85-115
Endosulfan II	0.40	0.35	87		85-115
4,4'- DDD	0.40	0.34	86		85-115
4,4'- DDT	0.40	0.35	88		85-115
Endrin Aldehyde	0.40	0.20	49	*	85-115
Endosulfan Sulfate	0.40	0.34	85		85-115
Methoxychlor	2.00	1.69	84	*	85-115
Endrin Ketone	0.40	0.28	71	*	85-115

REAR COLUMN - RTx-1701

COMPOUND	STD AMOUNT (ug/L)	CVS CONCENTRATION (ug/L)	CVS % REC .		QC LIMITS REC .
alpha-BHC	0.20	0.18	89		85-115
gamma-BHC (Lindane)	0.20	0.18	92		85-115
Heptachlor	0.20	0.18	90		85-115
Aldrin	0.20	0.19	96		85-115
beta-BHC	0.20	0.19	96		85-115
delta-BHC	0.20	0.171	85		85-115
Heptachlor Epoxide	0.20	0.19	97		85-115
Endosulfan I	0.20	0.19	97		85-115
gamma-Chlordane	0.20	0.19	97		85-115
alpha-Chlordane	0.20	0.00	0	*	85-115
4,4'- DDE	0.40	0.35	86		85-115
Dieldrin	0.40	0.36	89		85-115
Endrin	0.40	0.36	90		85-115
Endosulfan II	0.40	0.36	90		85-115
4,4'- DDD	0.40	0.36	89		85-115
4,4'- DDT	0.40	0.37	91		85-115
Endrin Aldehyde	0.40	0.34	85		85-115
Endosulfan Sulfate	0.40	0.36	89		85-115
Methoxychlor	2.00	1.40	70	*	85-115
Endrin Ketone	0.40	0.31	77	*	85-115

% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**17.95**	**10.58**
DDT	**12.27**	**15.34**

	RAW RESPONSE	
ENDRIN KETONE	28690.00	200565.00
ENDRIN ALDEHYDE	52084.00	47167.00
ENDRIN	369237.00	2092690.00

DDE	36989.00	305769.00
DDD	6889.00	60484.00
DDT	313590.00	2021598.00

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117294.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\I\MAR1902\I117294.D\ECD2B.CH
Acq On : 19 Mar 2002 20:07 Operator: AK
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 8:41 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	276053	1972843	20.325	22.584
	iked Amount 20.000 Range 30 - 150 Recovery =					101.63%	112.92%
S	Decachlorobiphen	21.63	22.17	200485	1036371	21.710	21.155
	iked Amount 20.000 Range 30 - 150 Recovery =					108.55%	105.78%
	Target Compounds						
B	4,4-DDE	14.59	14.70	36989	305769	3.284	4.105
MA	Endrin	15.95	15.84	369237	2092690	47.782m	45.007
A	4,4-DDD	16.05	16.08	6889	60484	0.947m	1.201m#
MA	4,4-DDT	16.71	16.80	313590	2021598	38.837m	40.484
B	Endrin Aldehyde	17.46	17.32	52084	47167	5.716	2.131m#
B	Endrin Ketone	19.12	18.94	28690	200565	5.769	6.967
	Sum Toxaphene			0	0	N.D.	N.D.
	:age Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	:age Chlordane					0.000	0.000

001060

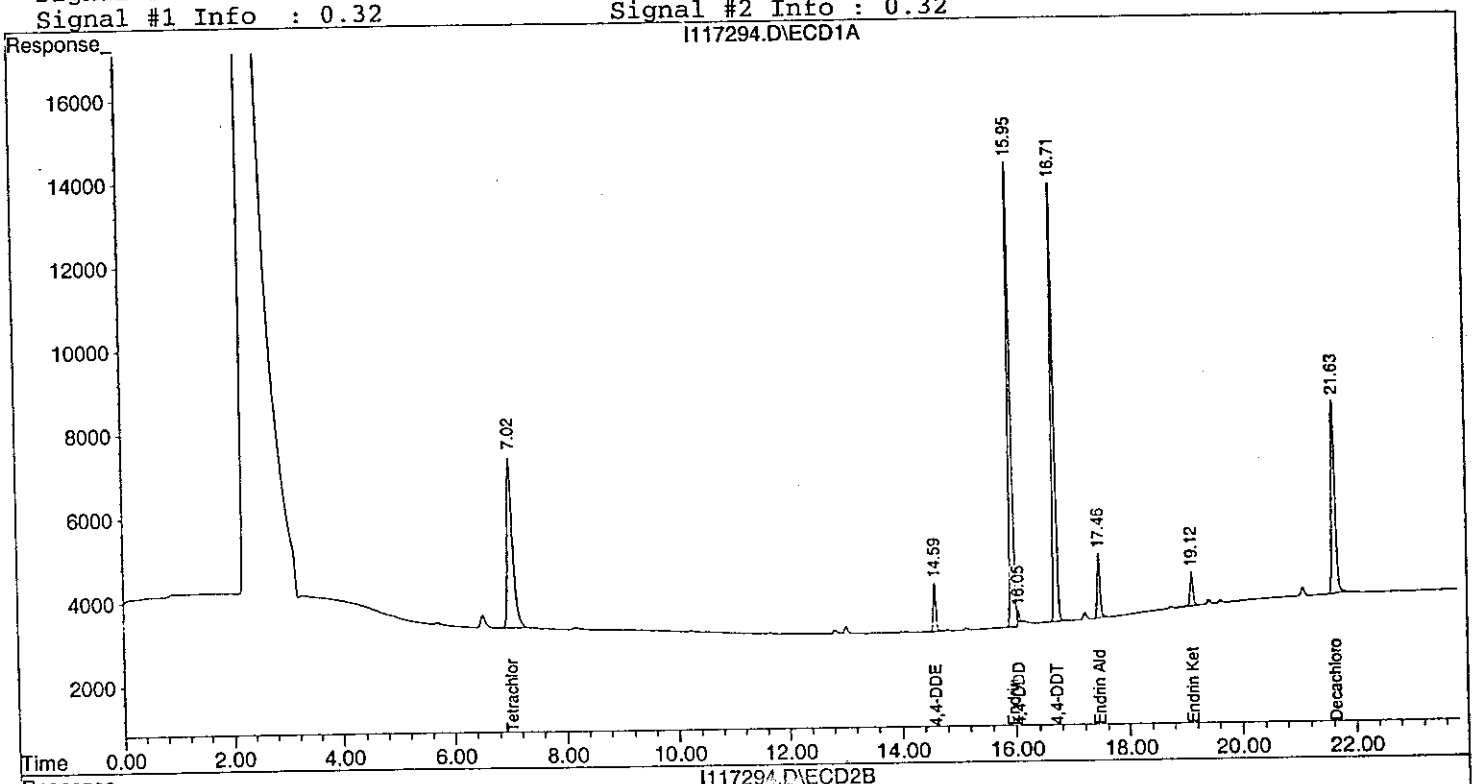
f)-RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

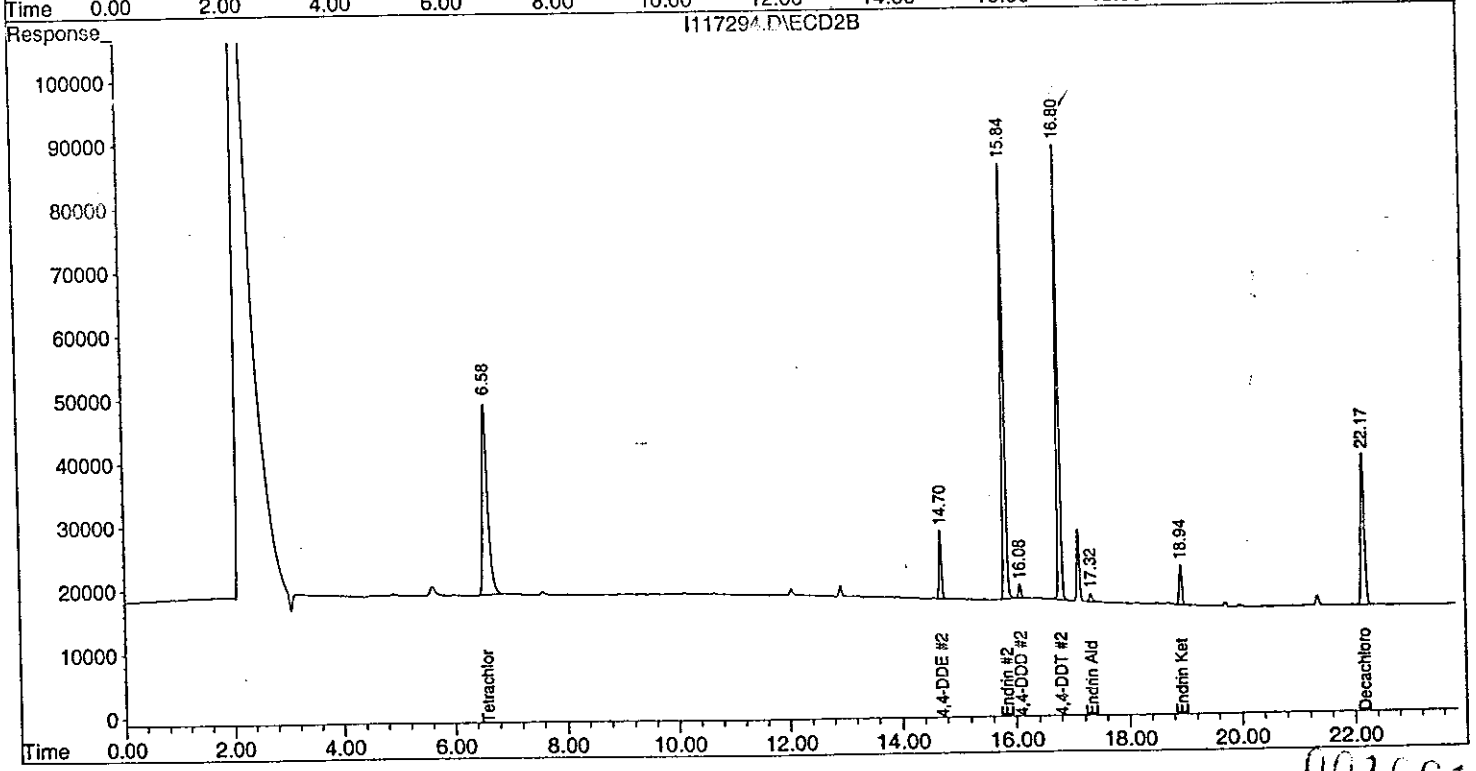
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR1902\I117294.D\ECD1A.CH Vial: 3
Signal #2 : H:\GCDATA\I\MAR1902\I117294.D\ECD2B.CH
Acq On : 19 Mar 2002 20:07 Operator: AK
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 8:41 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**20.90**	**12.26**
DDT	**8.30**	**12.46**

	RAW RESPONSE	
ENDRIN KETONE	31814.00	232279.00
ENDRIN ALDEHYDE	69454.00	73003.00
ENDRIN	383254.00	2183968.00

DDE	31202.00	263105.00
DDD	2233.00	61379.00
DDT	369214.00	2280499.00

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR1902\I117308.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR1902\I117308.D\ECD2B.CH
Acq On : 20 Mar 2002 2:38 Operator: AK
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:49 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

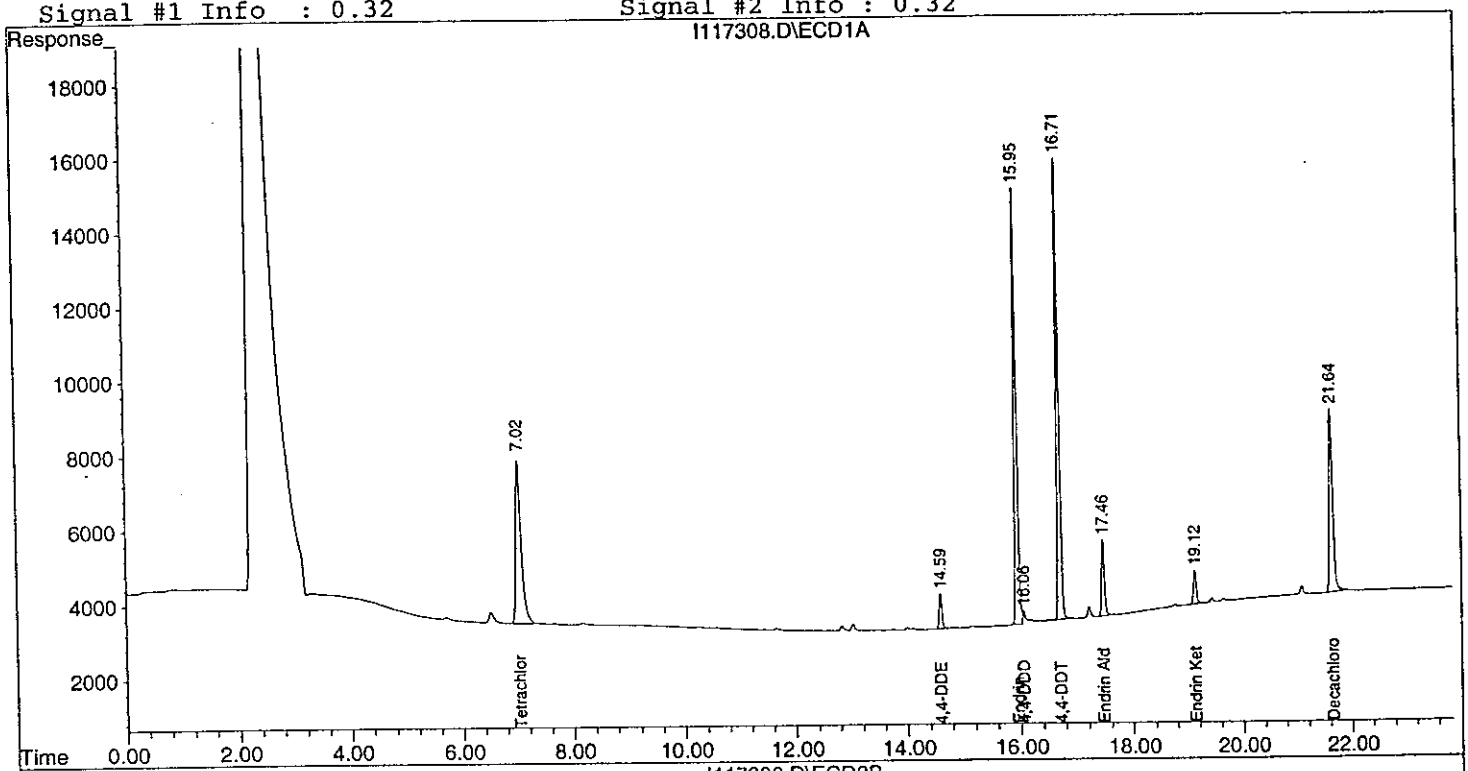
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.02	6.58	297264	2084557	21.887	23.863
	iked Amount 20.000 Range 30 - 150 Recovery =					109.44%	119.32%
S	Decachlorobiphen	21.64	22.17	213942	1118265	23.167	22.826
	iked Amount 20.000 Range 30 - 150 Recovery =					115.84%	114.13%
	Target Compounds						
B	4,4-DDE	14.59	14.70	31202	263105	2.770m	3.532 #
MA	Endrin	15.95	15.84	383254	2183968	49.596m	46.970
A	4,4-DDD	16.06	16.08	2233	61379	0.307m	1.219m#
MA	4,4-DDT	16.71	16.80	369214	2280499	45.726	45.669
B	Endrin Aldehyde	17.46	17.33	69454	73003	7.622	3.299 #
B	Endrin Ketone	19.12	18.94	31814	232279	6.398	8.069m#
	Sum Toxaphene			0	0	N.D.	N.D.
	age Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	age Chlordane					0.000	0.000

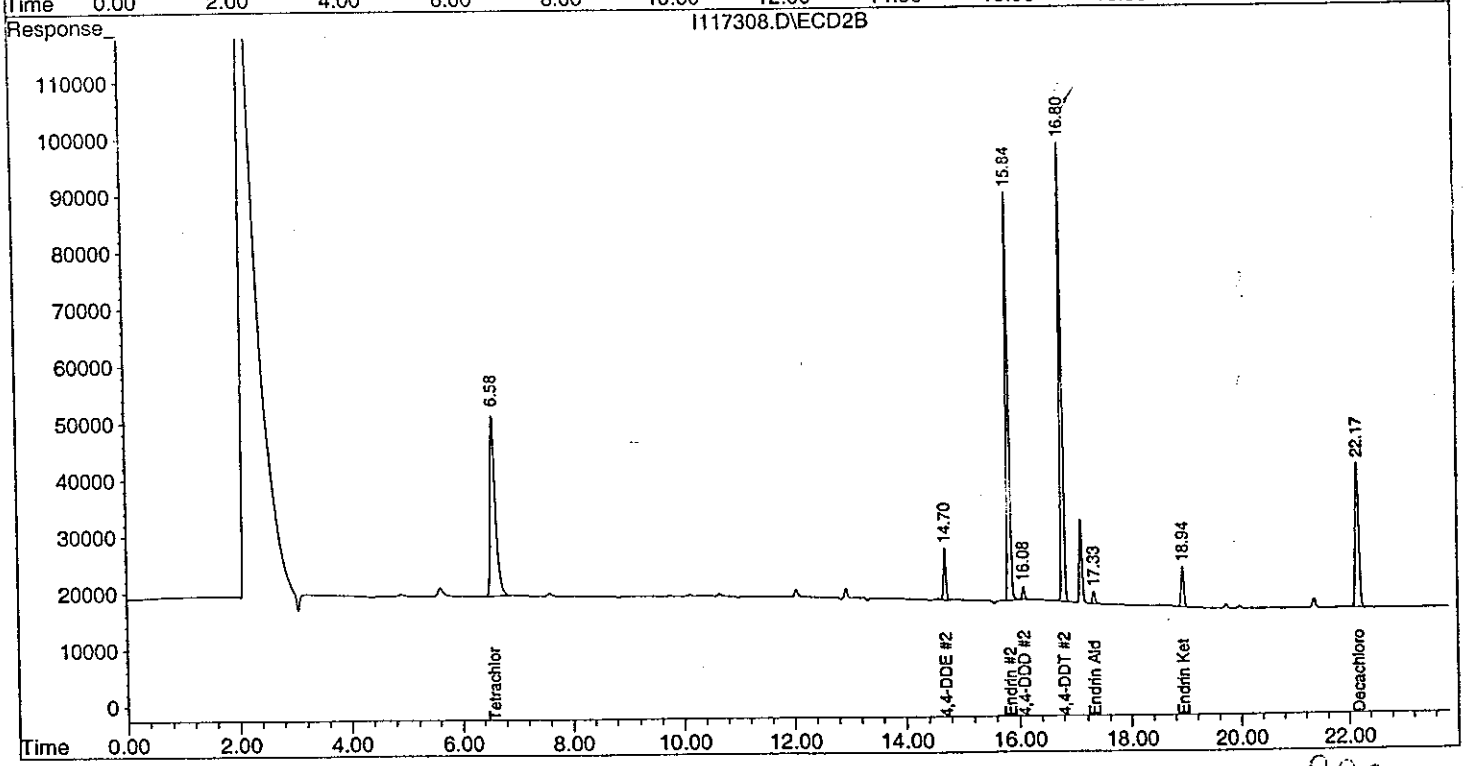
f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : H:\GCDATA\I\MAR1902\I117308.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR1902\I117308.D\ECD2B.CH
Acq On : 20 Mar 2002 2:38 Operator: AK
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 20 9:49 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





% BREAKDOWN	SIGNAL 1 RTx-CLP	SIGNAL 2 RTx-CLP2
ENDRIN	**9.51**	**5.43**
DDT	**13.77**	**19.52**

	RAW RESPONSE	
ENDRIN KETONE	14790.00	112368.00
ENDRIN ALDEHYDE	32558.00	29283.00
ENDRIN	450739.00	2467848.00

DDE	52359.00	415028.00
DDD	3261.00	77807.00
DDT	348327.00	2031590.00

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117329.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\I\MAR2102\I117329.D\ECD2B.CH
Acq On : 21 Mar 2002 9:49 Operator: PY
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
) S	Tetrachloro-m-xy	7.02	6.58	283637	1953785	20.883	22.366
Spiked Amount	20.000 Range 30 - 150 Recovery =					104.42%	111.83%
) S	Decachlorobiphen	21.63	22.16	217378	1092690	23.540	22.304
Spiked Amount	20.000 Range 30 - 150 Recovery =					117.70%	111.52%
	Target Compounds						
) B	4,4-DDE	14.58	14.70	52359	415028	4.649m	5.571
) MA	Endrin	15.94	15.84	450739	2467848	58.329m	53.075
) A	4,4-DDD	16.05	16.08	3261	77807	0.448m	1.545m#
) MA	4,4-DDT	16.70	16.79	348327	2031590	43.139	40.684m
) B	Endrin Aldehyde	17.45	17.32	32558	29283	3.573	1.323 #
) B	Endrin Ketone	19.11	18.93	14790	112368	2.974	3.904 #
	Sum Toxaphene			0	0	N.D.	N.D.
	erage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	erage Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
[117329.D MAR1902P.M Thu Mar 21 11:14:34 2002 W49 HPCC

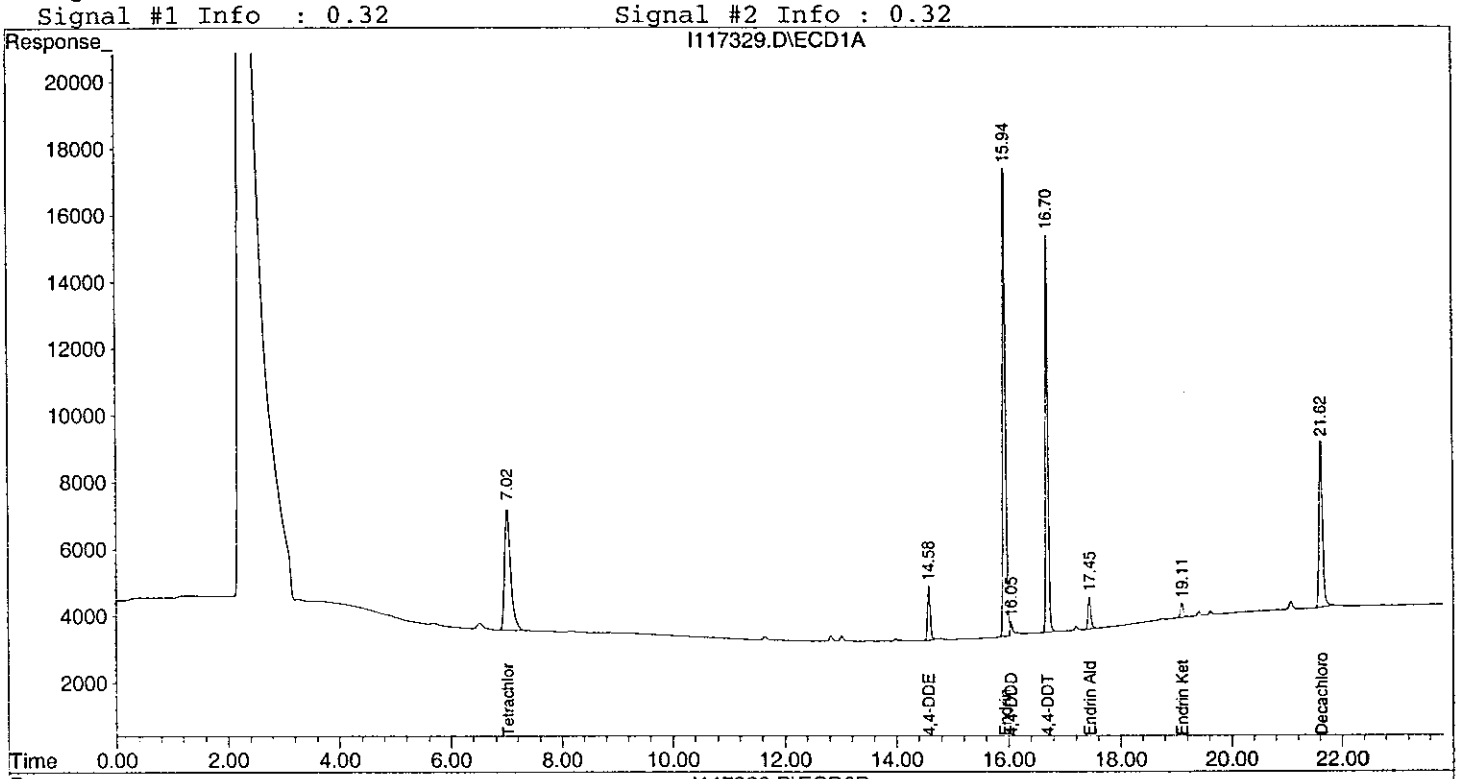
001066

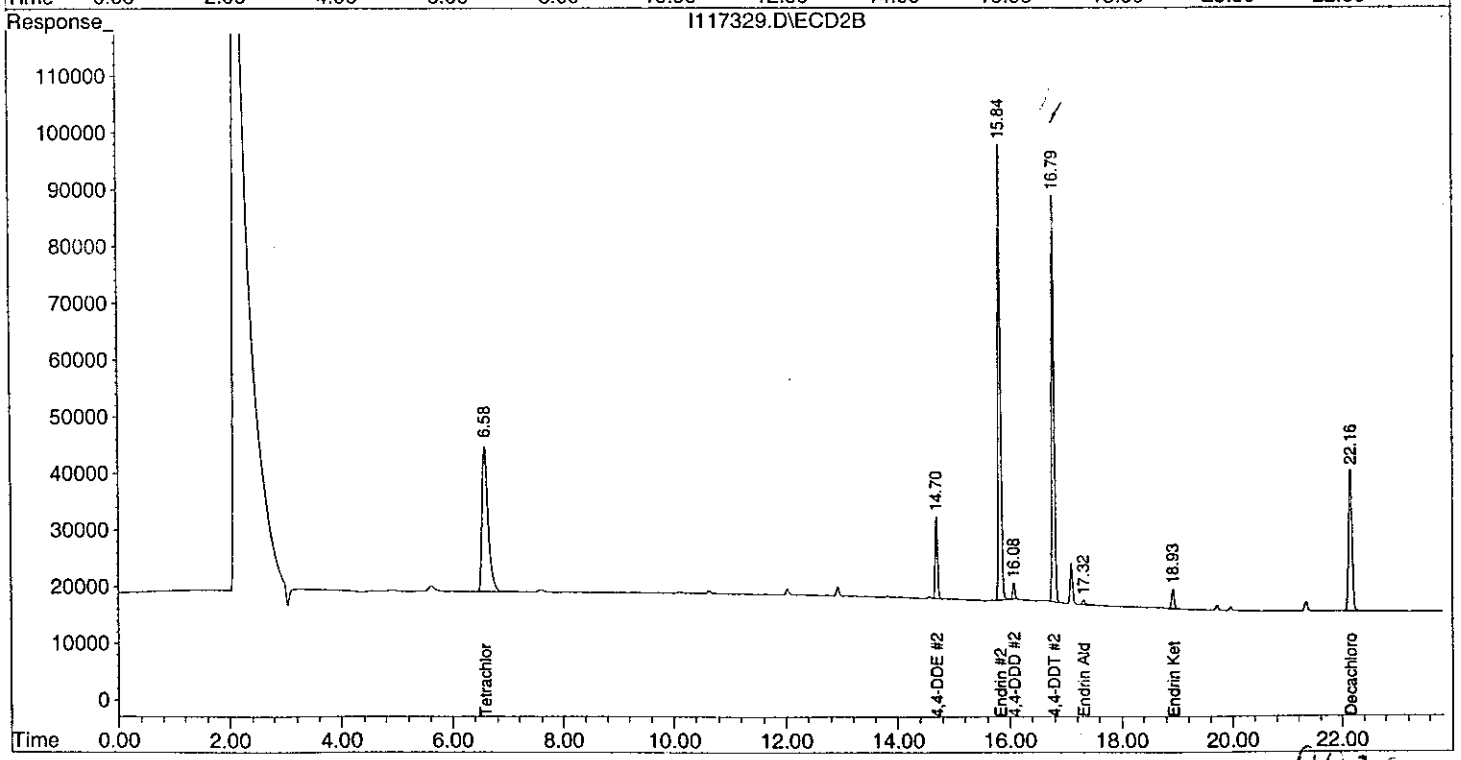
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117329.D\ECD1A.CH Vial: 4
Signal #2 : H:\GCDATA\I\MAR2102\I117329.D\ECD2B.CH
Acq On : 21 Mar 2002 9:49 Operator: PY
Sample : EVAL MIX Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 11:14 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\I\MAR2102\I117330.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR2102\I117330.D\ECD2B.CH
Acq On : 21 Mar 2002 10:17 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 11:15:13 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	13.582	13.897 E3	-2.3	0#	0.00
2	A	alpha-BHC	11.236	10.054 E3	10.5	0#	0.00
3	MA	gamma-BHC (Lindane)	11.984	10.893 E3	9.1	0#	0.00
4	MA	Heptachlor	12.955	12.839 E3	0.9	0#	0.00
5	MB	Aldrin	13.435	13.043 E3	2.9	0#	0.00
6	B	beta-BHC	7.638	7.336 E3	4.0	0#	0.00
7	B	delta-BHC	7.782	6.252 E3	19.7#	0#	-0.01
8	B	Heptachlor Epoxide	14.186	14.152 E3	0.2	0#	0.00
9	A	Endosulfan I	12.732	12.702 E3	0.2	0#	0.00
0	A	gamma-Chlordane	14.564	14.669 E3	-0.7	0#	0.00
1	A	alpha-Chlordane	16.673	16.503 E3	1.0	0#	0.00
2	B	4,4-DDE	11.264	12.601 E3	-11.9	0#	0.00
3	MA	Dieldrin	12.090	12.657 E3	-4.7	0#	0.00
4	MA	Endrin	7.728	9.272 E3	-20.0#	0#	0.00
5	B	Endosulfan II	10.785	10.732 E3	0.5	0#	0.00
6	A	4,4-DDD	7.276	8.332 E3	-14.5	0#	0.00
7	MA	4,4-DDT	8.075	8.659 E3	-7.2	0#	0.00
8	B	Endrin Aldehyde	9.113	9.215 E3	-1.1	0#	0.00
9	B	Endosulfan Sulfate	3.888	4.703 E3	-21.0#	0#	-0.01
0	A	Methoxychlor	4.130	4.813 E3	-16.5#	0#	0.00
1	B	Endrin Ketone	4.973	5.372 E3	-8.0	0#	0.00
2	S	Decachlorobiphenyl	9.235	9.771 E3	-5.8	0#	-0.01

Signal #2

1	S	Tetrachloro-m-xylene	87.355	81.905 E3	6.2	0#	0.00
2	A	alpha-BHC	91.171	85.021 E3	6.7	0#	0.00
3	MA	gamma-BHC (Lindane)	87.506	81.122 E3	7.3	0#	0.00
4	MA	Heptachlor	75.177	70.531 E3	6.2	0#	0.00
5	MB	Aldrin	81.992	77.235 E3	5.8	0#	0.00
6	B	beta-BHC	48.236	44.582 E3	7.6	0#	0.00
7	B	delta-BHC	63.708	53.988 E3	15.3#	0#	0.00
8	B	Heptachlor Epoxide	79.033	73.477 E3	7.0	0#	0.00
9	A	Endosulfan I	70.742	65.598 E3	7.3	0#	0.00
0	A	gamma-Chlordane	79.062	74.122 E3	6.2	0#	0.00
1	A	alpha-Chlordane	74.725	69.103 E3	7.5	0#	0.00
2	B	4,4-DDE	74.491	72.768 E3	2.3	0#	0.00
3	MA	Dieldrin	69.995	68.808 E3	1.7	0#	0.00
4	MA	Endrin	46.497	51.177 E3	-10.1	0#	0.00
5	B	Endosulfan II	60.341	57.294 E3	5.0	0#	0.00
6	A	4,4-DDD	50.366	50.475 E3	-0.2	0#	0.00
7	MA	4,4-DDT	49.936	48.077 E3	3.7	0#	0.00
8	B	Endrin Aldehyde	22.130	16.336 E3	26.2#	0#	0.00
9	B	Endosulfan Sulfate	24.028	27.792 E3	-15.7#	0#	0.00
0	A	Methoxychlor	24.050	23.565 E3	2.0	0#	0.00
.	B	Endrin Ketone	28.786	29.914 E3	-3.9	0#	0.00
2	S	Decachlorobiphenyl	48.990	47.789 E3	2.5	0#	-0.01

#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117330.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR2102\I117330.D\ECD2B.CH
Acq On : 21 Mar 2002 10:17 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 10:53 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
) S	Tetrachloro-m-xy	7.02	6.58	347413	2047632	25.579	23.440
Spiked Amount	20.000 Range 30 - 150 Recovery =					127.90%	117.20%
) S	Decachlorobiphen	21.62	22.16	244271	1194724	26.452	24.387
Spiked Amount	20.000 Range 30 - 150 Recovery =					132.26%	121.94%
	Target Compounds						
) A	alpha-BHC	8.71	8.34	502695	4251028	44.740	46.627
) MA	gamma-BHC (Linda	9.72	9.50	544655	4056111	45.449	46.352
) MA	Heptachlor	11.18	10.87	641941	3526543	49.551	46.910
) MB	Aldrin	12.07	11.82	652152	3861727	48.543	47.099
) B	beta-BHC	9.98	9.76	366801	2229096	48.021	46.212
) B	delta-BHC	10.53	10.67	312604	2699390	40.170m	42.371m
) B	Heptachlor Epoxi	13.74	13.41	707590	3673853	49.880	46.485
) A	Endosulfan I	14.77	14.42	635113	3279908	49.884	46.364
) A	gamma-Chlordane	14.07	13.90	733444	3706123	50.361	46.876
) A	alpha-Chlordane	14.40	14.27	825171	3455146	49.491m	46.238
) B	4,4-DDE	14.58	14.70	630042	3638418	55.937	48.843
) MA	Dieldrin	15.37	15.10	632843	3440380	52.343	49.152
) MA	Endrin	15.94	15.84	463585	2558844	59.992m	55.032
) B	Endosulfan II	16.48	16.33	536619	2864695	49.755	47.475
) A	4,4-DDD	16.04	16.08	416620	2523761	57.257m	50.109
) MA	4,4-DDT	16.70	16.79	432954	2403838	53.620	48.139
) B	Endrin Aldehyde	17.45	17.32	460771	816802	50.564	36.909 #
) B	Endosulfan Sulfa	18.43	17.71	235155	1389583	60.478m	57.832m
) A	Methoxychlor	17.75	18.29	240645	1178[illegible]68	58.274	48.992
) B	Endrin Ketone	19.11	18.93	268577	1495708	54.009	51.959
	Sum Toxaphene			0	0	N.D.	N.D.
	erage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	erage Chlordane					0.000	0.000

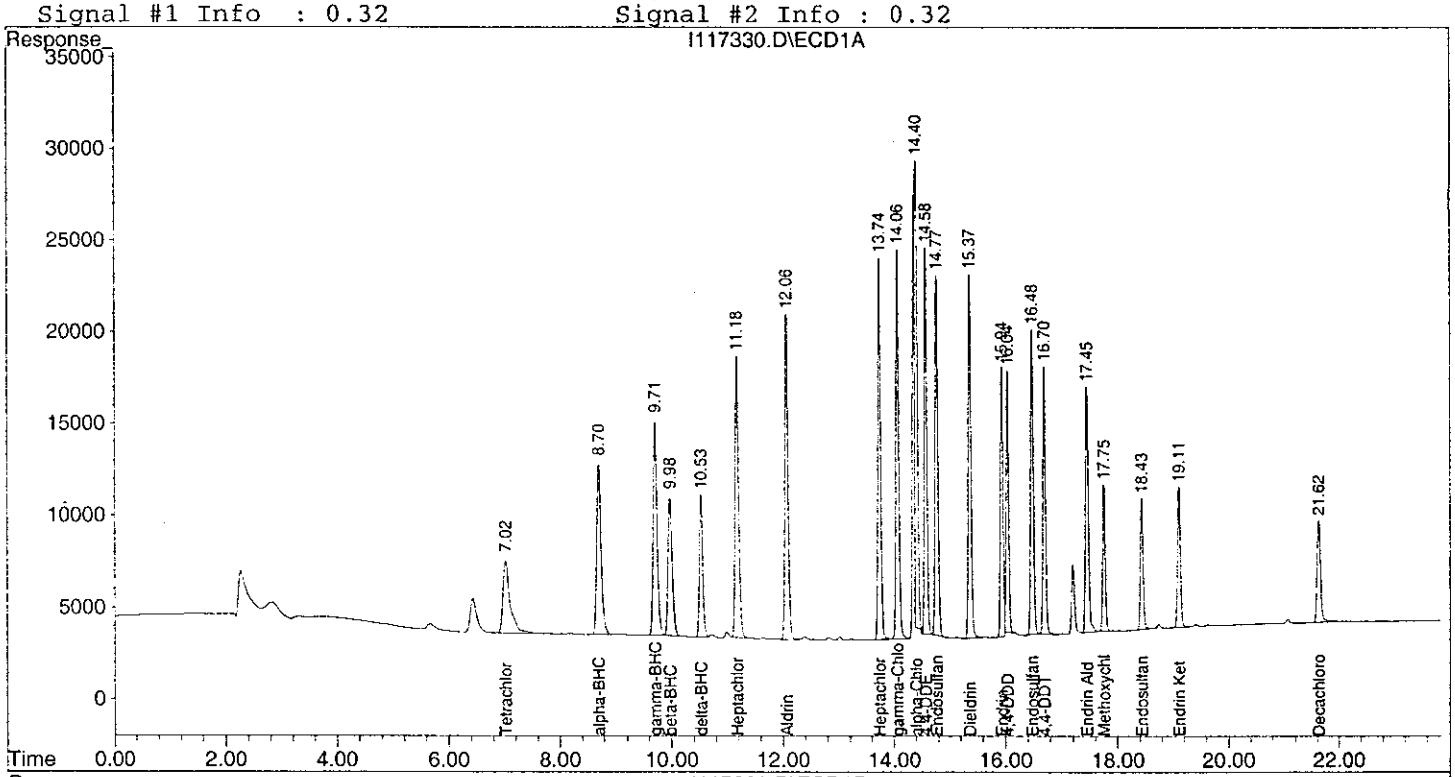
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

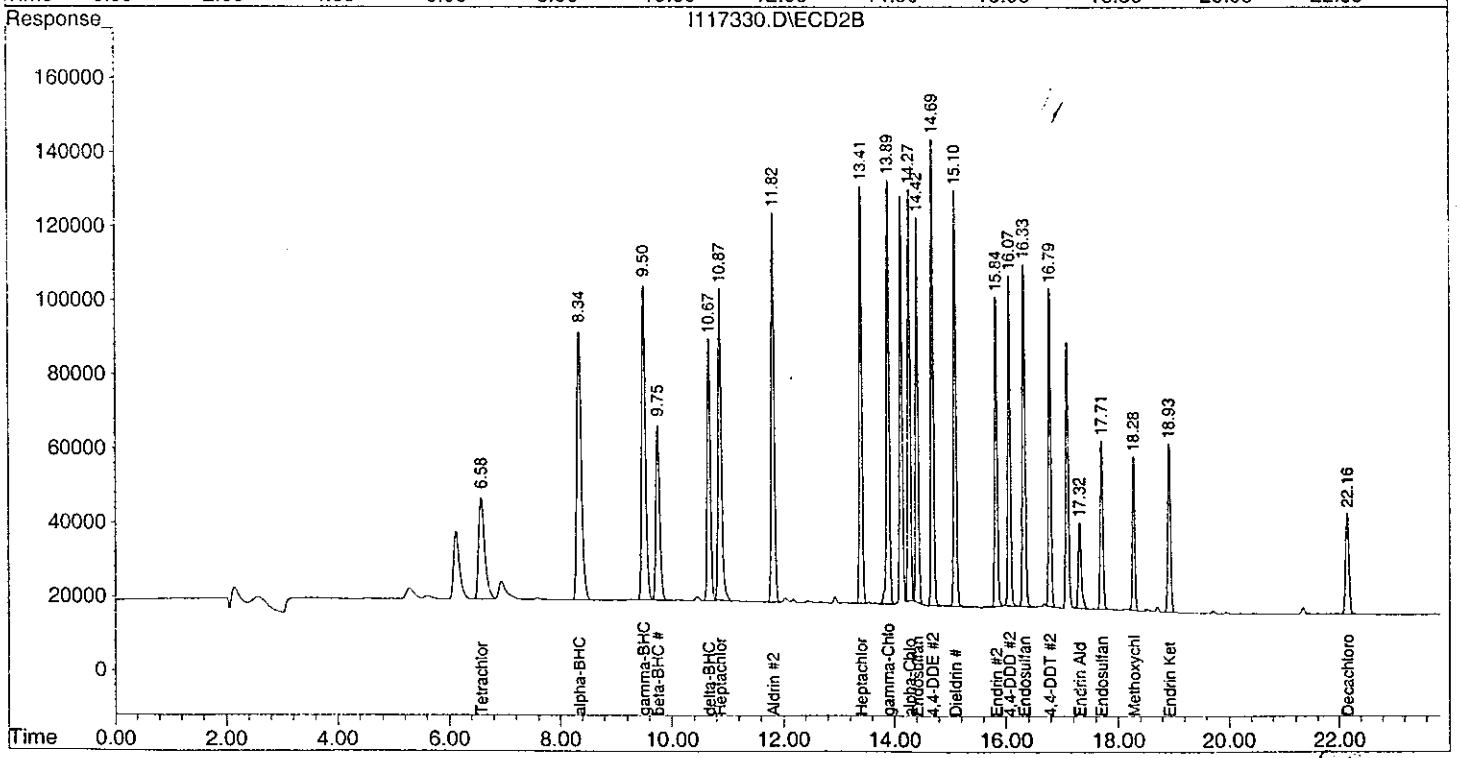
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117330.D\ECD1A.CH Vial: 5
Signal #2 : H:\GCDATA\I\MAR2102\I117330.D\ECD2B.CH
Acq On : 21 Mar 2002 10:17 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 10:53 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





Evaluate Continuing Calibration Report

Signal #1 : H:\GCDATA\I\MAR2102\I117342.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR2102\I117342.D\ECD2B.CH
Acq On : 21 Mar 2002 16:06 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 11:15:13 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	S	Tetrachloro-m-xylene	13.582	13.028	E3	4.1	0#	0.00
2	A	alpha-BHC	11.236	11.363	E3	-1.1	0#	0.00
3	MA	gamma-BHC (Lindane)	11.984	12.070	E3	-0.7	0#	0.00
4	MA	Heptachlor	12.955	15.223	E3	-17.5#	0#	0.00
5	MB	Aldrin	13.435	13.103	E3	2.5	0#	0.00
6	B	beta-BHC	7.638	7.599	E3	0.5	0#	0.00
7	B	delta-BHC	7.782	9.396	E3	-20.7#	0#	0.00
8	B	Heptachlor Epoxide	14.186	13.933	E3	1.8	0#	0.00
9	A	Endosulfan I	12.732	12.758	E3	-0.2	0#	0.00
0	A	gamma-Chlordane	14.564	14.650	E3	-0.6	0#	0.00
1	A	alpha-Chlordane	16.673	16.558	E3	0.7	0#	0.00
2	B	4,4-DDE	11.264	12.281	E3	-9.0	0#	0.00
3	MA	Dieldrin	12.090	12.536	E3	-3.7	0#	0.00
4	MA	Endrin	7.728	9.382	E3	-21.4#	0#	0.00
5	B	Endosulfan II	10.785	11.729	E3	-8.8	0#	0.00
6	A	4,4-DDD	7.276	8.747	E3	-20.2#	0#	0.00
7	MA	4,4-DDT	8.075	9.289	E3	-15.0#	0#	0.00
8	B	Endrin Aldehyde	9.113	9.410	E3	-3.3	0#	0.00
9	B	Endosulfan Sulfate	3.888	6.877	E3	-76.9#	0#	0.00
0	A	Methoxychlor	4.130	5.216	E3	-26.3#	0#	0.00
1	B	Endrin Ketone	4.973	9.937	E3	-99.8#	0#	0.00
2	S	Decachlorobiphenyl	9.235	9.593	E3	-3.9	0#	0.00

Signal #2

1	S	Tetrachloro-m-xylene	87.355	80.823	E3	7.5	0#	0.00
2	A	alpha-BHC	91.171	92.857	E3	-1.8	0#	0.00
3	MA	gamma-BHC (Lindane)	87.506	87.361	E3	0.2	0#	0.00
4	MA	Heptachlor	75.177	74.097	E3	1.4	0#	0.00
5	MB	Aldrin	81.992	77.294	E3	5.7	0#	0.00
6	B	beta-BHC	48.236	45.331	E3	6.0	0#	0.00
7	B	delta-BHC	63.708	74.237	E3	-16.5#	0#	0.00
8	B	Heptachlor Epoxide	79.033	72.786	E3	7.9	0#	0.00
9	A	Endosulfan I	70.742	66.263	E3	6.3	0#	0.00
0	A	gamma-Chlordane	79.062	72.223	E3	8.7	0#	0.00
1	A	alpha-Chlordane	74.725	68.345	E3	8.5	0#	0.00
2	B	4,4-DDE	74.491	69.910	E3	6.1	0#	0.00
3	MA	Dieldrin	69.995	67.967	E3	2.9	0#	0.00
4	MA	Endrin	46.497	51.921	E3	-11.7	0#	0.00
5	B	Endosulfan II	60.341	60.494	E3	-0.3	0#	0.00
6	A	4,4-DDD	50.366	50.714	E3	-0.7	0#	0.00
7	MA	4,4-DDT	49.936	47.595	E3	4.7	0#	0.00
8	B	Endrin Aldehyde	22.130	9.786	E3	55.8#	0#	0.00
9	B	Endosulfan Sulfate	24.028	37.741	E3	-57.1#	0#	0.00
0	A	Methoxychlor	24.050	23.853	E3	0.8	0#	0.00
1	B	Endrin Ketone	28.786	47.603	E3	-65.4#	0#	0.00
2	S	Decachlorobiphenyl	48.990	44.993	E3	8.2	0#	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

001071

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117342.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR2102\I117342.D\ECD2B.CH
Acq On : 21 Mar 2002 16:06 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:04 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
) S	Tetrachloro-m-xy	7.02	6.58	325693	2020576	23.980	23.131
Spiked Amount	20.000 Range 30 - 150 Recovery =					119.90%	115.66%
) S	Decachlorobiphen	21.63	22.16	239826	1124825	25.970	22.960
Spiked Amount	20.000 Range 30 - 150 Recovery =					129.85%	114.80%
	Target Compounds						
) A	alpha-BHC	8.71	8.34	568171	4642872	50.567	50.925
) MA	gamma-BHC (Linda	9.72	9.50	603483	4368042	50.358	49.917
) MA	Heptachlor	11.18	10.87	761155	3704873	58.753m	49.282
) MB	Aldrin	12.07	11.82	655127	3864710	48.764	47.135
) B	beta-BHC	9.98	9.76	379949	2266563	49.742	46.989
) B	delta-BHC	10.54	10.68	469792	3711842	60.369	58.263
) B	Heptachlor Epoxi	13.74	13.41	696668	3639301	49.110	46.048
) A	Endosulfan I	14.77	14.42	637910	3313156	50.104	46.834m
) A	gamma-Chlordane	14.07	13.90	732516	3611132	50.297	45.674
) A	alpha-Chlordane	14.40	14.27	827887	3417247	49.654m	45.731
) B	4,4-DDE	14.58	14.70	614032	3495943	54.515	46.931
) MA	Dieldrin	15.37	15.10	626788	3398367	51.842	48.552
) MA	Endrin	15.94	15.84	469087	2596068	60.704m	55.832
) B	Endosulfan II	16.48	16.33	586434	3024708	54.373	50.127
) A	4,4-DDD	16.04	16.07	437343	2535696	60.105m	50.346
) MA	4,4-DDT	16.70	16.79	464461	2379729	57.522m	47.656
) B	Endrin Aldehyde	17.45	17.32	470516	489315	51.633	22.111 #
) B	Endosulfan Sulfa	18.44	17.71	343856	1887042	88.434m	78.535m
) A	Methoxychlor	17.76	18.29	260787	1192636	63.151	49.589
) B	Endrin Ketone	19.11	18.93	496828	2380132	99.909	82.683
	Sum Toxaphene			0	0	N.D.	N.D.
	erage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	erage Chlordane					0.000	0.000

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

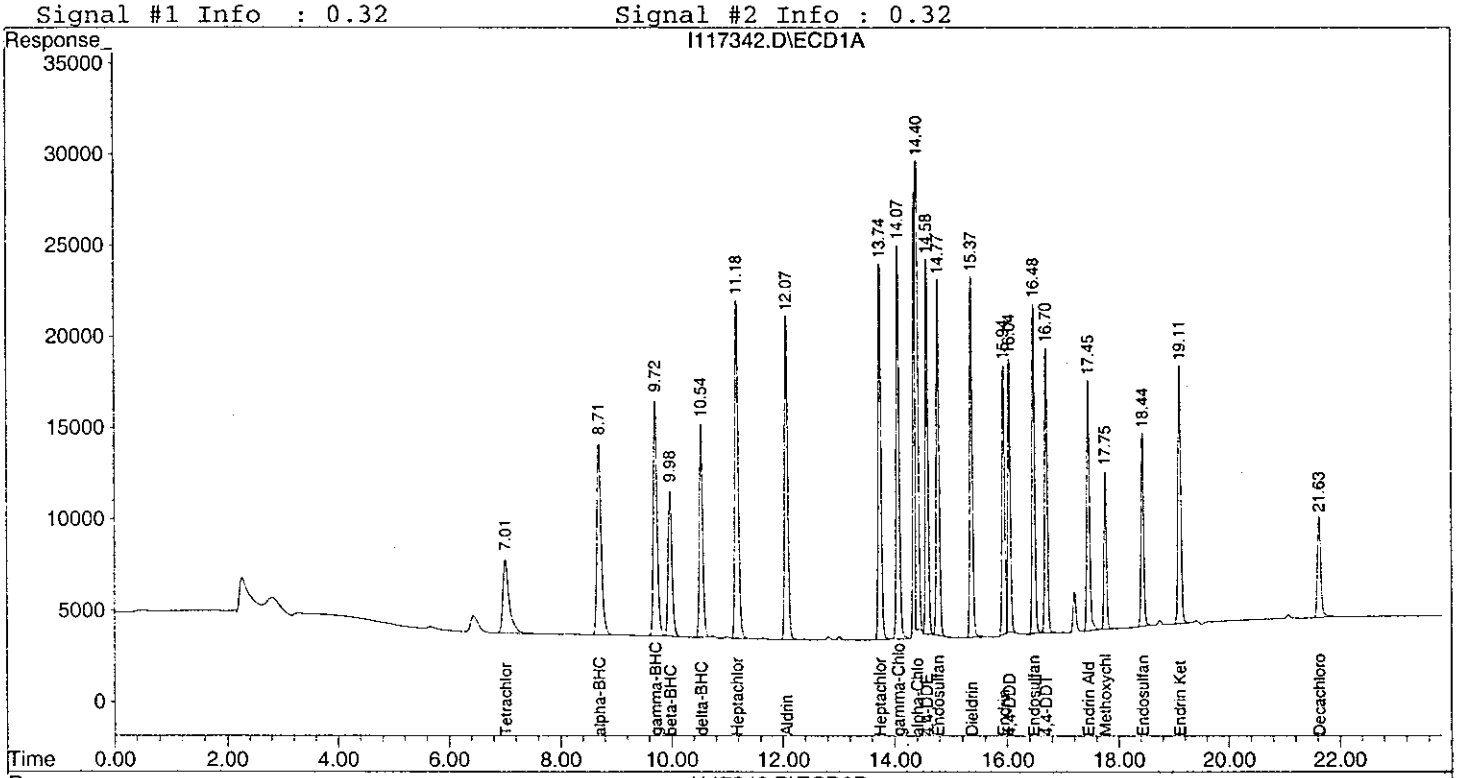
001072

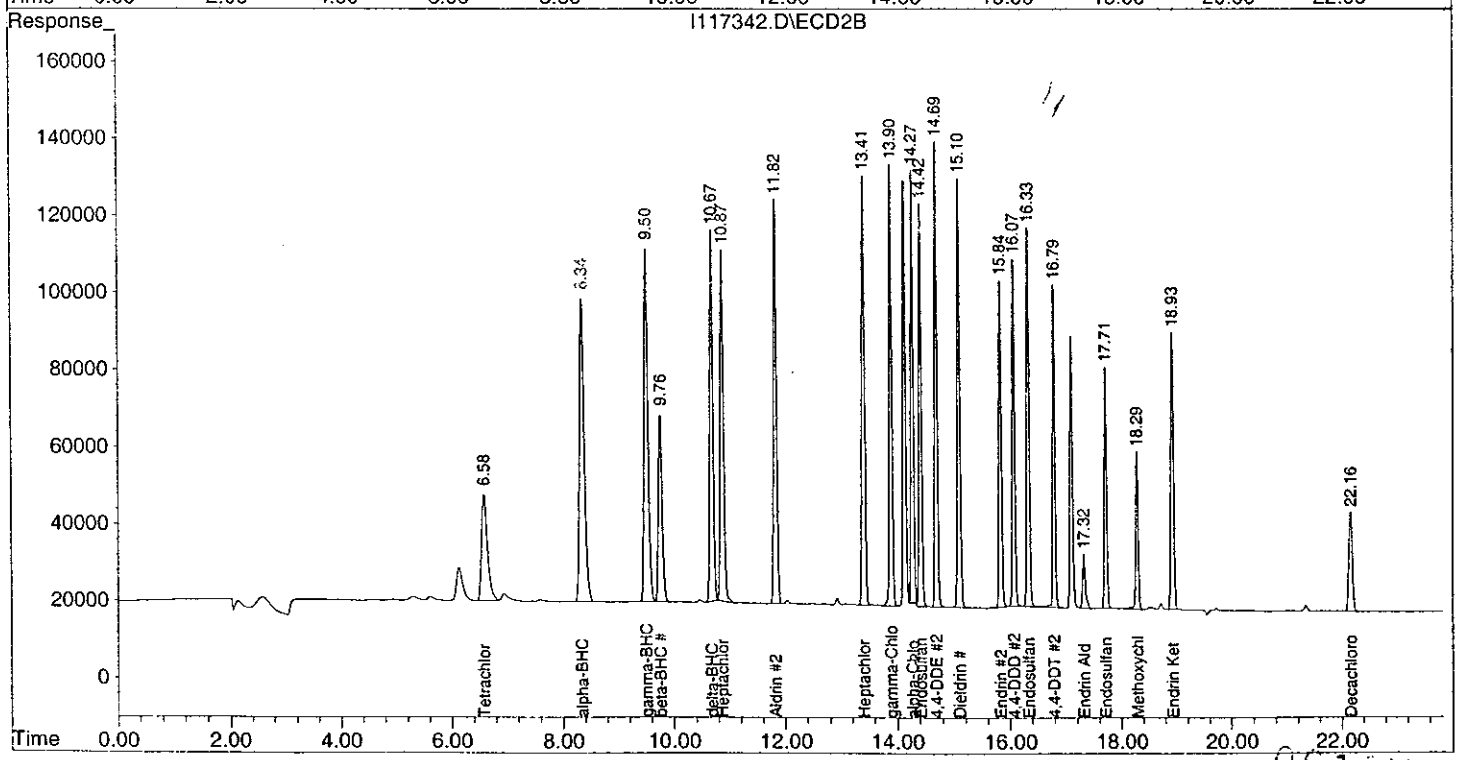
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117342.D\ECD1A.CH Vial: 17
Signal #2 : H:\GCDATA\I\MAR2102\I117342.D\ECD2B.CH
Acq On : 21 Mar 2002 16:06 Operator: PY
Sample : PEST-4 Inst : GC-I
Misc : 8081A-STD. Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:04 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





D. Raw QC Data

1. Blank Data
2. Matrix Spike Data
3. Matrix Spike Duplicate Data
4. Laboratory Control Standard Data (where applicable)
5. Extraction Logsheet
6. Injection Logsheet
7. Retention time windows

GPL Laboratories, LLLP

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BLK53565

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: BLK53565

Sample wt/vol: 1000 (g/ml) ML Lab File ID: I117331.D

% Moisture: decanted:(Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
1024-57-3	Heptachlor Epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
5103-71-9	alpha-Chlordane	0.050	U
72-55-9	4,4-DDE	0.050	U
60-57-1	Dieldrin	0.050	U
72-20-8	Endrin	0.050	U
33213-65-9	Endosulfan II	0.050	U
72-54-8	4,4-DDD	0.050	U
50-29-3	4,4-DDT	0.050	U
7421-93-4	Endrin Aldehyde	0.050	U
1031-07-8	Endosulfan Sulfate	0.050	U
72-43-5	Methoxychlor	0.050	U
53494-70-5	Endrin Ketone	0.050	U
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117331.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\I\MAR2102\I117331.D\ECD2B.CH
Acq On : 21 Mar 2002 10:58 Operator: PY
Sample : BLK53565 Inst : GC-I
Misc : 8081A-W-BLK53565 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:06 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

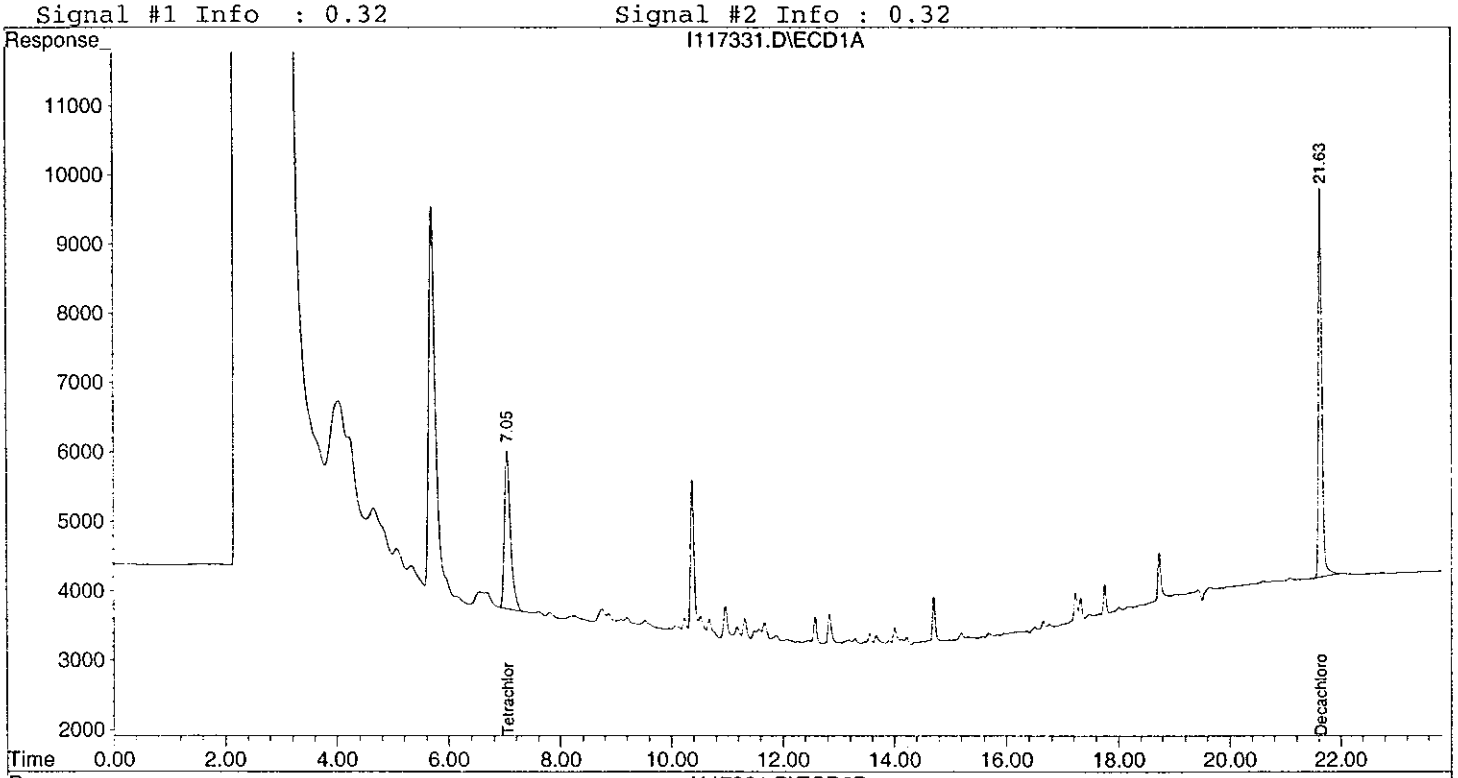
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
S Tetrachloro-m-xy	7.05f	6.60f	172541	1147633	12.704m	13.138
Spiked Amount 20.000 Range 30 - 150 Recovery =					63.52%	65.69%
S Decachlorobiphen	21.63	22.16	245326	1152003	26.566	23.515
Spiked Amount 20.000 Range 30 - 150 Recovery =					132.83%	117.58%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

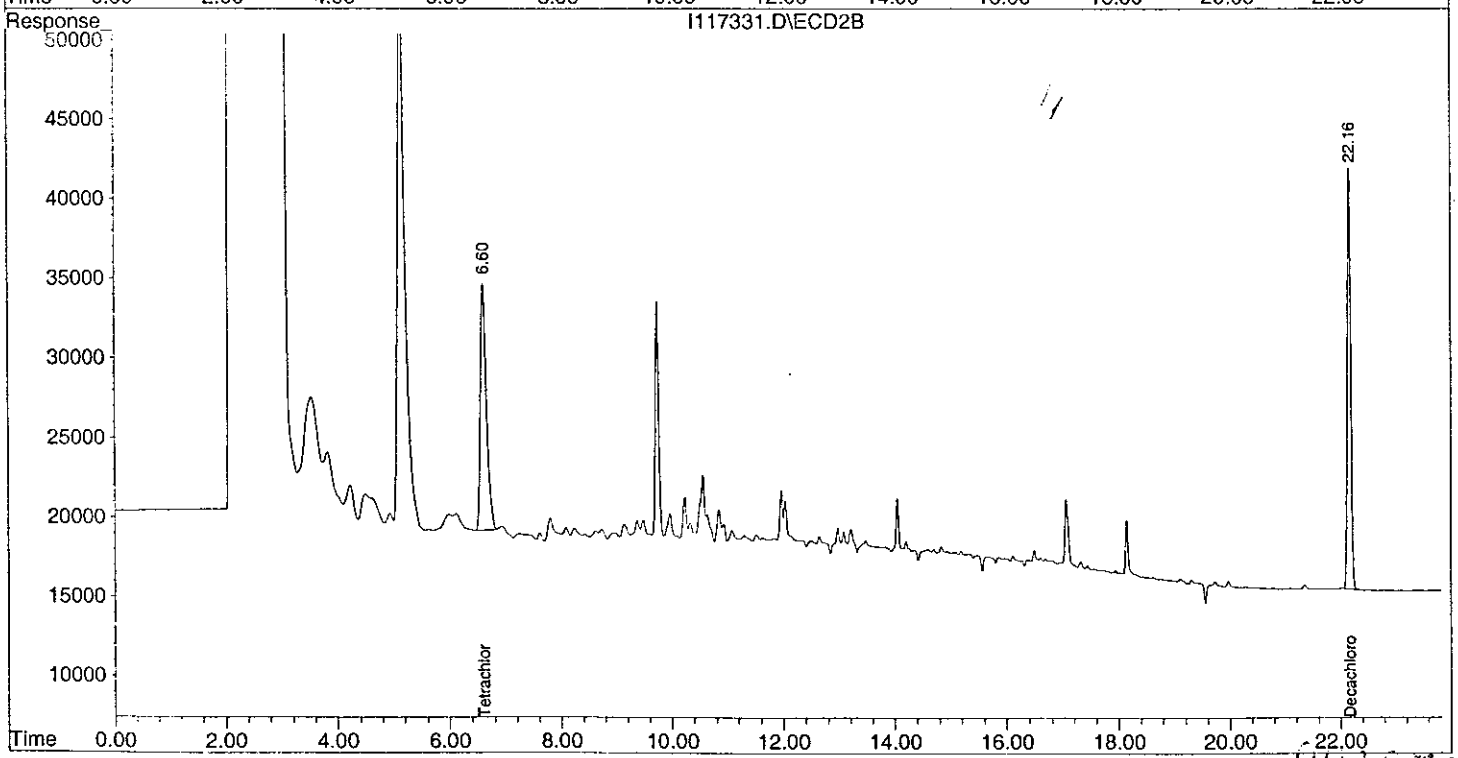
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117331.D\ECD1A.CH Vial: 6
Signal #2 : H:\GCDATA\I\MAR2102\I117331.D\ECD2B.CH
Acq On : 21 Mar 2002 10:58 Operator: PY
Sample : BLK53565 Inst : GC-I
Misc : 8081A-W-BLK53565 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:06 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

007-MW03S-Q1-02 MS

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-002-01-1/2 MS

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117335.D

% Moisture: decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.37	
58-89-9	gamma-BHC (Lindane)	0.37	
76-44-8	Heptachlor	0.37	
309-00-2	Aldrin	0.39	
319-85-7	beta-BHC	0.45	
319-86-8	delta-BHC	0.16	
1024-57-3	Heptachlor Epoxide	0.41	
959-98-8	Endosulfan I	0.41	
5103-74-2	gamma-Chlordane	0.44	
5103-71-9	alpha-Chlordane	0.40	
72-55-9	4,4-DDE	0.46	
60-57-1	Dieldrin	0.42	
72-20-8	Endrin	0.51 ~~0.55~~ *	
33213-65-9	Endosulfan II	0.43	
72-54-8	4,4-DDD	0.41 ~~0.48~~ *	
50-29-3	4,4-DDT	0.43	
7421-93-4	Endrin Aldehyde	0.39	P
1031-07-8	Endosulfan Sulfate	0.55	
72-43-5	Methoxychlor	0.42 ~~0.56~~ *	P
53494-70-5	Endrin Ketone	0.72	
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

mp 3/22/02

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117335.D\ECD1A.CH Vial: 10
Signal #2 : H:\GCDATA\I\MAR2102\I117335.D\ECD2B.CH
Acq On : 21 Mar 2002 12:50 Operator: PY
Sample : 203025-002-01-1/2 MS Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 MS Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:58 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

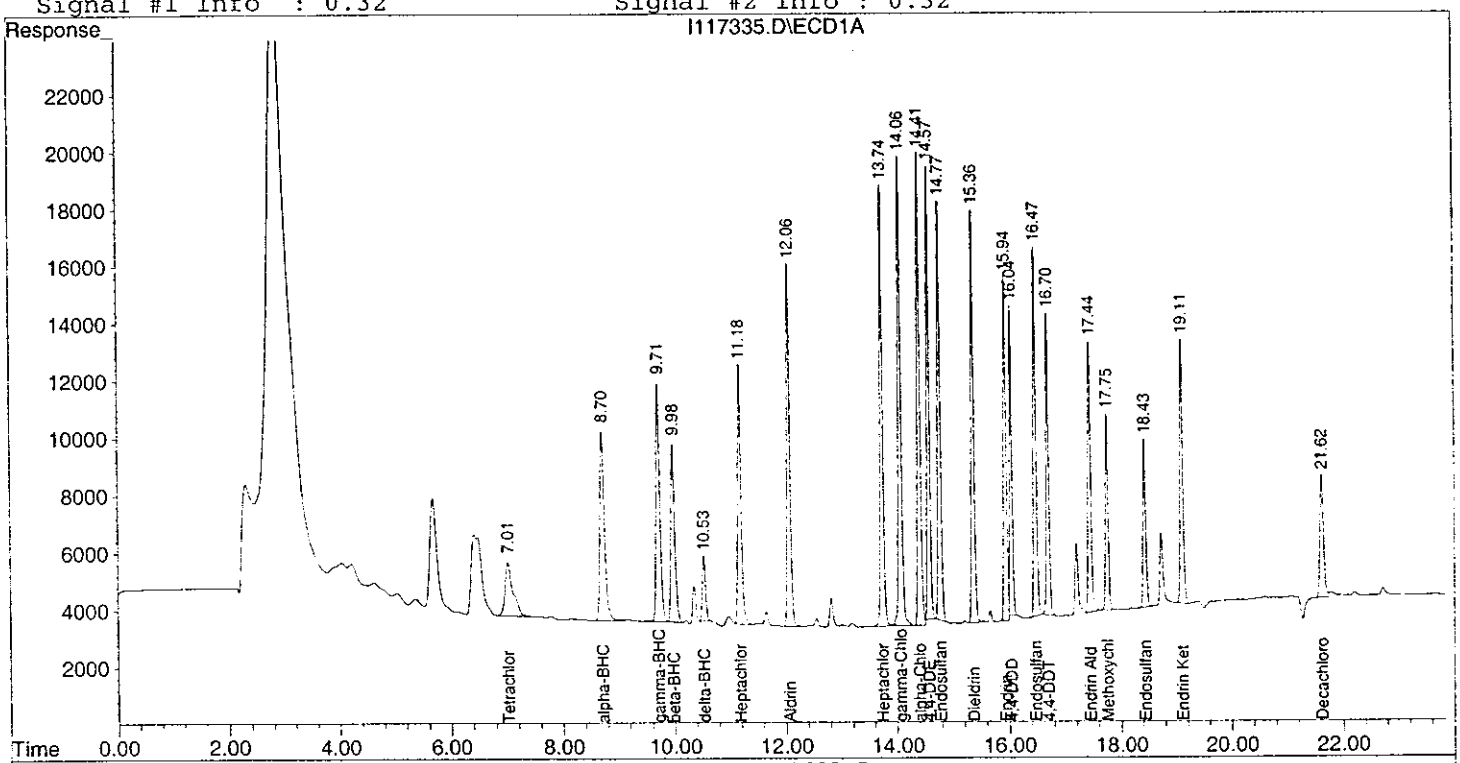
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
S	Tetrachloro-m-xy	7.01	6.58	180812	950597	13.313m	10.882
Spiked Amount	20.000 Range	30 - 150		Recovery	=	66.57%	54.41%
S	Decachlorobiphen	21.62	22.15	187102	883825	20.261m	18.041m
Spiked Amount	20.000 Range	30 - 150		Recovery	=	101.31%	90.21%
	Target Compounds						
A	alpha-BHC	8.70	8.34	368003	3047716	32.752	33.429
MA	gamma-BHC (Linda	9.71	9.50	394866	2949218	32.950	33.703
MA	Heptachlor	11.18	10.86	383881	2501304	29.631	33.272
MB	Aldrin	12.06	11.82	472075	2835547	35.139m	34.583m
B	beta-BHC	9.98	9.75	292852	1960243	38.339	40.639
B	delta-BHC	10.53	10.67	92837	900387	11.930m	14.133
B	Heptachlor Epoxi	13.74	13.40	529591	2756851	37.332m	34.882
A	Endosulfan I	14.77	14.42	475376	2493616	37.338	35.249
A	gamma-Chlordane	14.06	13.89	580403	2774482	39.852	35.092
A	alpha-Chlordane	14.41	14.27	558375	2660419	33.490m	35.603m
B	4,4-DDE	14.58	14.69	467410	2671219	41.498	35.859
MA	Dieldrin	15.36	15.10	455949	2576934	37.712	36.816
MA	Endrin	15.94	15.83	385153	2128760	49.842m	45.782
B	Endosulfan II	16.47	16.33	415614	2163216	38.535	35.850
A	4,4-DDD	16.04	16.07	315786	1859968	43.399m	36.929
MA	4,4-DDT	16.70	16.79	314697	1769784	38.974	35.441
B	Endrin Aldehyde	17.45	17.31	322429	524907	35.383	23.719 #
B	Endosulfan Sulfa	18.43	17.71	191167	1137233	49.165m	47.330
A	Methoxychlor	17.75	18.28	208865	917550	50.578	38.151m
B	Endrin Ketone	19.11	18.93	321709	1615021	64.694	56.104
Sum	Toxaphene			0	0	N.D.	N.D.
erage	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
erage	Chlordane					0.000	0.000

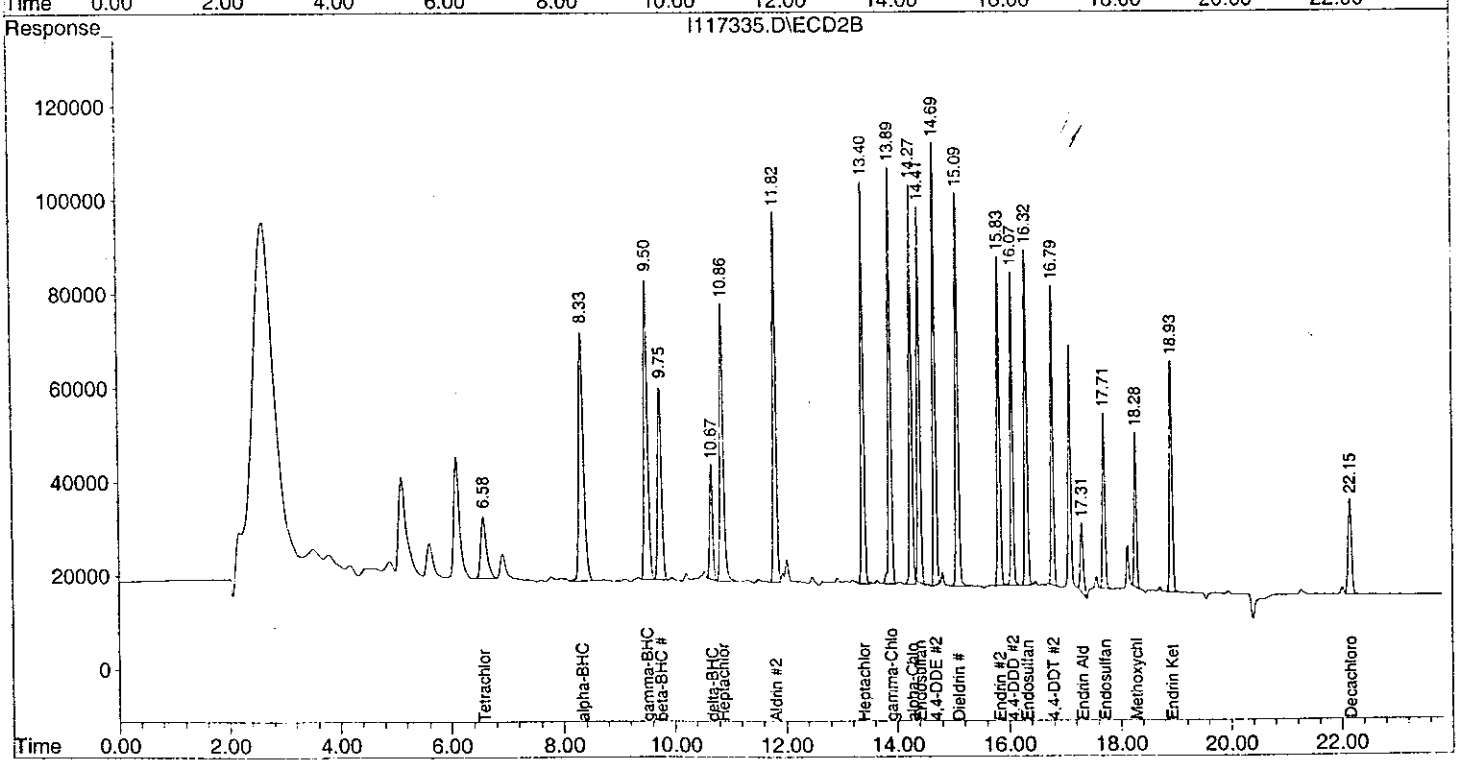
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

nal #1 : H:\GCDATA\I\MAR2102\I117335.D\ECD1A.CH Vial: 10
nal #2 : H:\GCDATA\I\MAR2102\I117335.D\ECD2B.CH
On : 21 Mar 2002 12:50 Operator: PY
ample : 203025-002-01-1/2 MS Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 MS Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 13:58 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

07-MW03S-Q1-02 MSD

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 203025-002-01-1/2 MSD

Sample wt/vol: 900 (g/ml) ML Lab File ID: I117336.D

% Moisture: _____ decanted:(Y/N) N Date Received: 03/07/02

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.38	
58-89-9	gamma-BHC (Lindane)	0.38	
76-44-8	Heptachlor	0.37	
309-00-2	Aldrin	0.39	
319-85-7	beta-BHC	0.46	
319-86-8	delta-BHC	0.17	
1024-57-3	Heptachlor Epoxide	0.42	
959-98-8	Endosulfan I	0.44	
5103-74-2	gamma-Chlordane	0.46	
5103-71-9	alpha-Chlordane	0.39	
72-55-9	4,4-DDE	0.46	
60-57-1	Dieldrin	0.42	
72-20-8	Endrin	0.51 ~~0.57~~ *	
33213-65-9	Endosulfan II	0.43	
72-54-8	4,4-DDD	0.41 ~~0.49~~ *	
50-29-3	4,4-DDT	0.43	
7421-93-4	Endrin Aldehyde	0.40	P
1031-07-8	Endosulfan Sulfate	0.54	
72-43-5	Methoxychlor	0.43 ~~0.56~~ *	P
53494-70-5	Endrin Ketone	0.74	
12789-03-6	Chlordane	1.1	U
8001-35-2	Toxaphene	1.1	U

mp 3/22/02

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117336.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\I\MAR2102\I117336.D\ECD2B.CH
Acq On : 21 Mar 2002 13:18 Operator: PY
Sample : 203025-002-01-1/2 MSD Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 MSD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 14:04 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
) S	Tetrachloro-m-xy	7.02	6.58	184906	962948	13.614	11.023
Spiked Amount	20.000 Range	30 - 150	Recovery	=		68.07%	55.12%
) S	Decachlorobiphen	21.62	22.15	191144	848102	20.699m	17.312
Spiked Amount	20.000 Range	30 - 150	Recovery	=		103.50%	86.56%
	Target Compounds						
) A	alpha-BHC	8.71	8.34	376840	3097849	33.539	33.978
) MA	gamma-BHC (Linda	9.71	9.50	403228	2982732	33.648	34.086
) MA	Heptachlor	11.18	10.87	378779	2520947	29.238	33.533
) MB	Aldrin	12.06	11.82	472738	2814066	35.188	34.321
) B	beta-BHC	9.98	9.75	297182	1980446	38.906	41.057
) B	delta-BHC	10.53	10.67	94271	963679	12.114m	15.126m
) B	Heptachlor Epoxi	13.74	13.40	530410	2768505	37.390	35.030
) A	Endosulfan I	14.77	14.42	500081	2520967	39.278	35.636
) A	gamma-Chlordane	14.06	13.89	601604	2807310	41.308	35.508
) A	alpha-Chlordane	14.41	14.27	550066	2642346	32.991	35.361
) B	4,4-DDE	14.58	14.69	467242	2704941	41.483	36.312
) MA	Dieldrin	15.36	15.10	456312	2575220	37.742	36.791
) MA	Endrin	15.94	15.83	393402	2135929	50.909m	45.936
) B	Endosulfan II	16.47	16.33	420332	2199017	38.973	36.443
) A	4,4-DDD	16.04	16.07	319732	1877188	43.942m	37.271
) MA	4,4-DDT	16.70	16.79	314564	1783665	38.958	35.719
) B	Endrin Aldehyde	17.45	17.31	324503	556378	35.610	25.141 #
) B	Endosulfan Sulfa	18.43	17.71	185432	1164252	47.690m	48.454
) A	Methoxychlor	17.75	18.23	209072	931815	50.628	38.744m
) B	Endrin Ketone	19.11	18.93	330672	1641994	66.496	57.041
	Sum Toxaphene			0	0	N.D.	N.D.
	erage Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	erage Chlordane					0.000	0.000

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

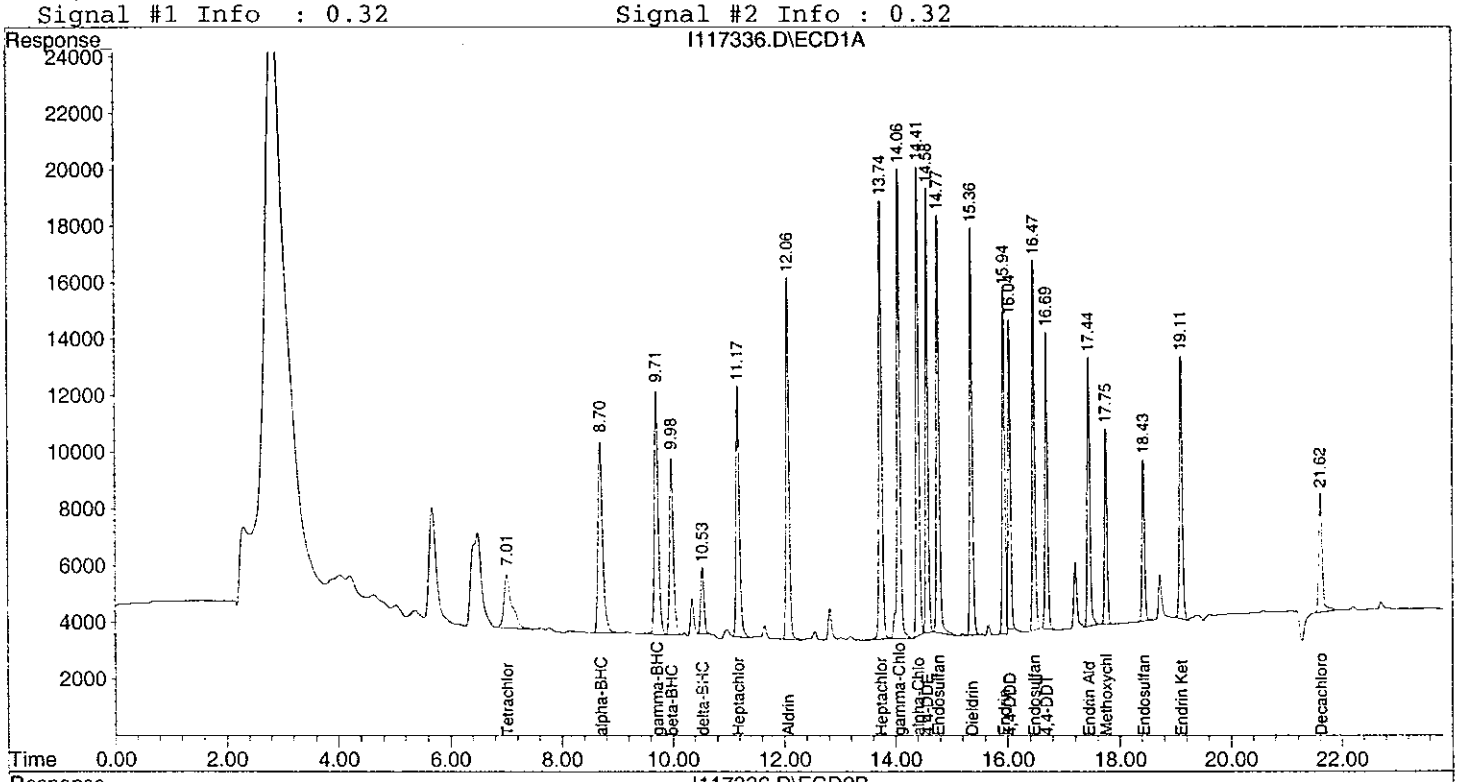
001082

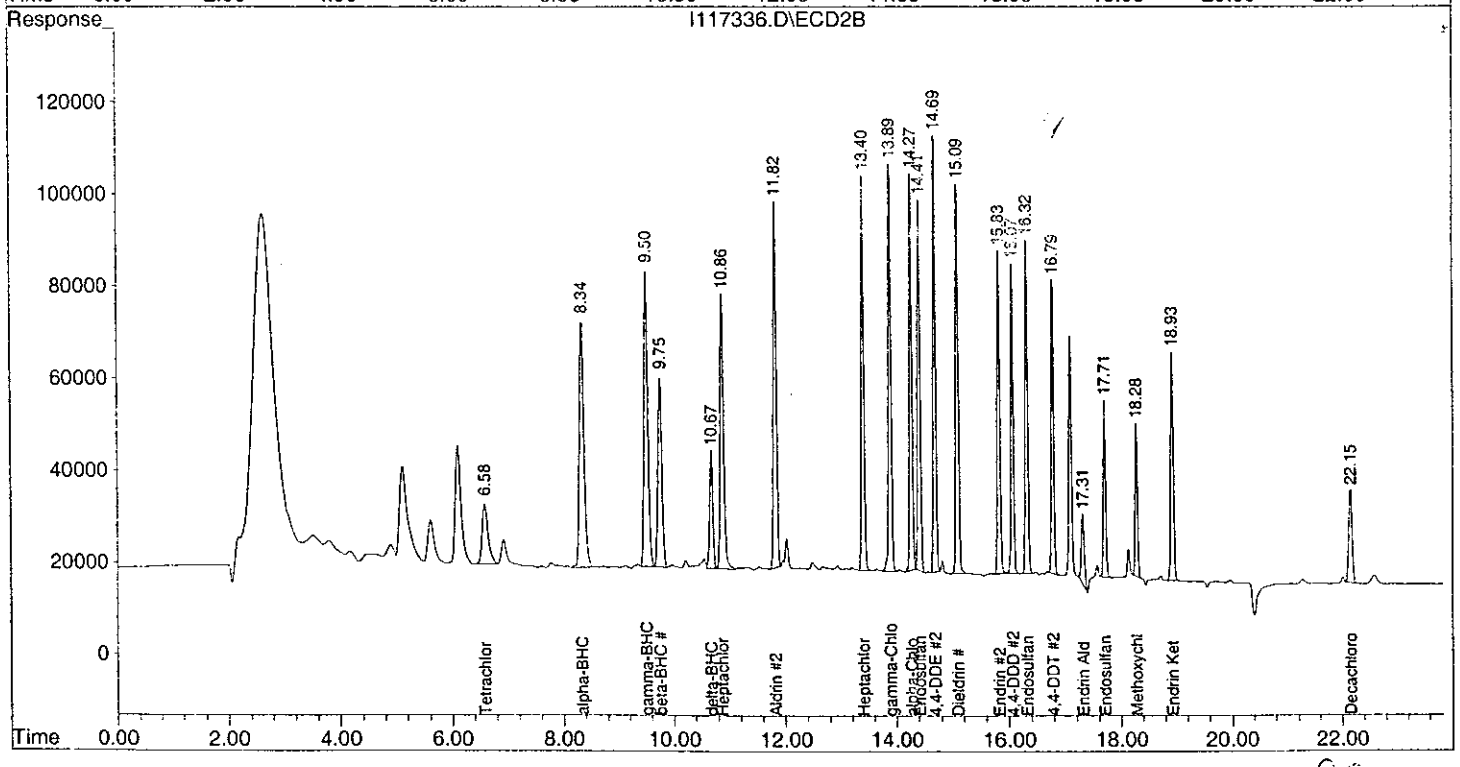
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117336.D\ECD1A.CH Vial: 11
Signal #2 : H:\GCDATA\I\MAR2102\I117336.D\ECD2B.CH
Acq On : 21 Mar 2002 13:18 Operator: PY
Sample : 203025-002-01-1/2 MSD Inst : GC-I
Misc : 8081A-W-007-MW03S-Q1-02 MSD Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 21 14:04 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BKS53565

Lab Name: GPL LABORATORIES, LLLP Contract: CH2M HILL

Lab Code: GPLL Case No.: 203025 SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: BKS53565

Sample wt/vol: 1000 (g/ml) ML Lab File ID: I117332.D

% Moisture: decanted:(Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 03/11/02

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/21/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.44	
58-89-9	gamma-BHC (Lindane)	0.44	
76-44-8	Heptachlor	0.42 ~~0.44~~ *	
309-00-2	Aldrin	0.45	
319-85-7	beta-BHC	0.50	
319-86-8	delta-BHC	0.20	
1024-57-3	Heptachlor Epoxide	0.46	
959-98-8	Endosulfan I	0.49	
5103-74-2	gamma-Chlordane	0.49	
5103-71-9	alpha-Chlordane	0.43	
72-55-9	4,4-DDE	0.51	
60-57-1	Dieldrin	0.47	
72-20-8	Endrin	0.54 ~~0.61~~ *	
33213-65-9	Endosulfan II	0.52	
72-54-8	4,4-DDD	0.44 ~~0.56~~ *	
50-29-3	4,4-DDT	0.53	
7421-93-4	Endrin Aldehyde	0.48	P
1031-07-8	Endosulfan Sulfate	0.63 ~~0.71~~ *	
72-43-5	Methoxychlor	0.47 ~~0.87~~ *	P
53494-70-5	Endrin Ketone	0.93	
12789-03-6	Chlordane	1.0	U
8001-35-2	Toxaphene	1.0	U

mp 3/22/02

Quantitation Report (QT Reviewed)

Signal #1 : H:\GCDATA\I\MAR2102\I117332.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\I\MAR2102\I117332.D\ECD2B.CH
Acq On : 21 Mar 2002 11:26 Operator: PY
Sample : BKS53565 Inst : GC-I
Misc : 8081A-W-BKS53565 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:50 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Initial Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
) S	Tetrachloro-m-xy	7.03	6.59	204889	1113103	15.085m	12.742
Spiked Amount	20.000 Range	30 - 150	Recovery	=		75.43%	63.71%
) S	Decachlorobiphen	21.63	22.16	240109	1112146	26.001	22.701
Spiked Amount	20.000 Range	30 - 150	Recovery	=		130.01%	113.51%
	Target Compounds						
) A	alpha-BHC	8.72	8.35	492655	3808599	43.846	41.774
) MA	gamma-BHC (Linda	9.73	9.51	529235	3699192	44.162	42.273
) MA	Heptachlor	11.19	10.87	575488	3184739	44.421	42.363
) MB	Aldrin	12.07	11.82	598164	3432672	44.524	41.866m
) B	beta-BHC	9.99	9.76	367504	2431260	48.113	50.403
) B	delta-BHC	10.54	10.68	130832	1273438	16.812m	19.989m
) B	Heptachlor Epoxi	13.74	13.41	653377	3334250	46.058	42.188
) A	Endosulfan I	14.77	14.42	618308	3075552	48.564m	43.476
) A	gamma-Chlordane	14.07	13.90	714245	3332257	49.042	42.147
) A	alpha-Chlordane	14.41	14.27	690410	3208748	41.409m	42.941m
) B	4,4-DDE	14.58	14.70	577074	3253094	51.234m	43.671m
) MA	Dieldrin	15.37	15.10	573763	3087776	47.456	44.114
) MA	Endrin	15.94	15.84	470689	2533023	60.911m	54.477
) B	Endosulfan II	16.48	16.33	556801	2805298	51.626	46.490
) A	4,4-DDD	16.05	16.08	407781	2215730	56.042m	43.993
) MA	4,4-DDT	16.70	16.79	427891	2253267	52.993	45.123
) B	Endrin Aldehyde	17.45	17.32	436726	481668	47.925	21.765 #
) B	Endosulfan Sulfa	18.44	17.71	277860	1514217	71.461	63.019
) A	Methoxychlor	17.76	18.29	277865	1135625	67.287	47.219 #
) B	Endrin Ketone	19.11	18.93	462820	2231738	93.070	77.528
Sum	Toxaphene			0	0	N.D.	N.D.
erage	Toxaphene					0.000	0.000
Sum	Chlordane			0	0	N.D.	N.D.
erage	Chlordane					0.000	0.000

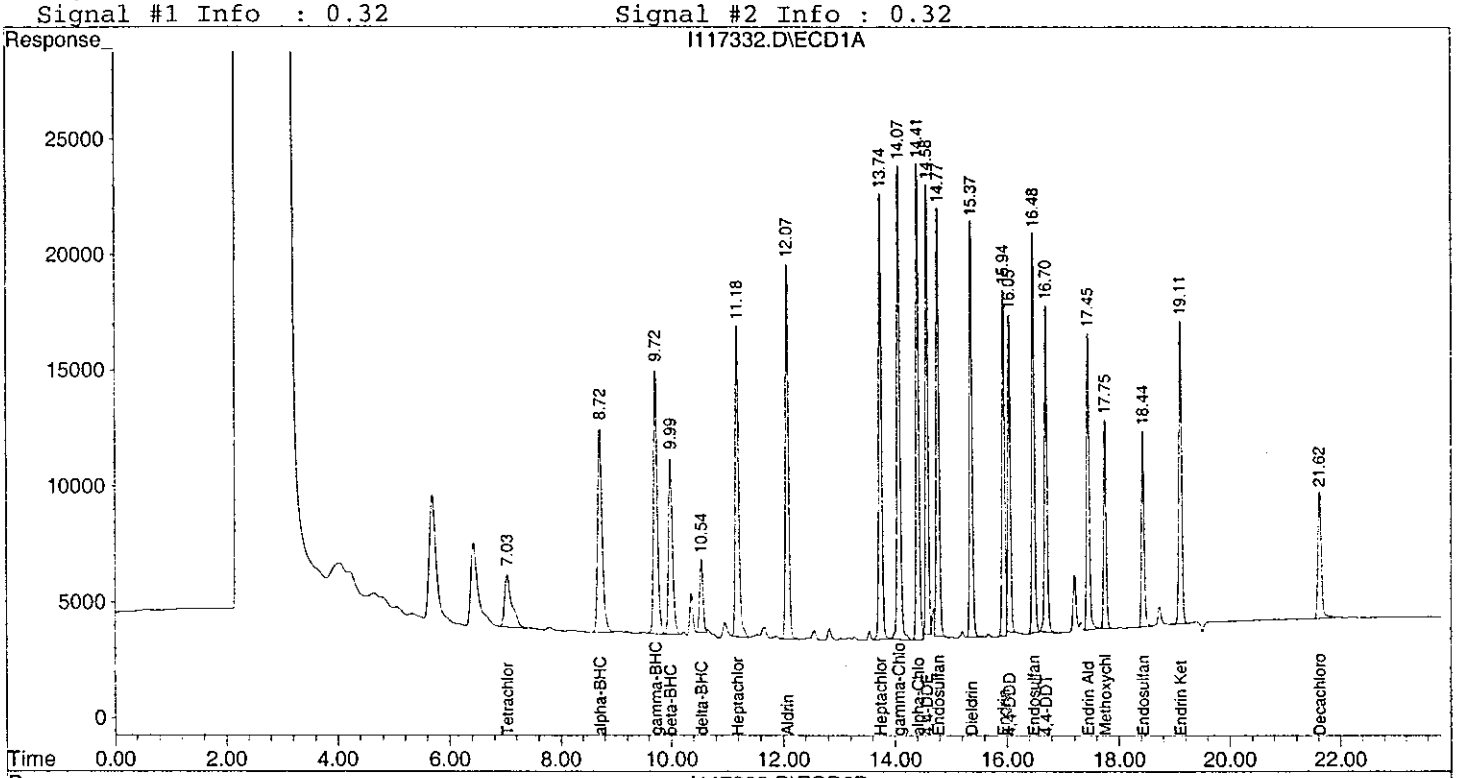
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

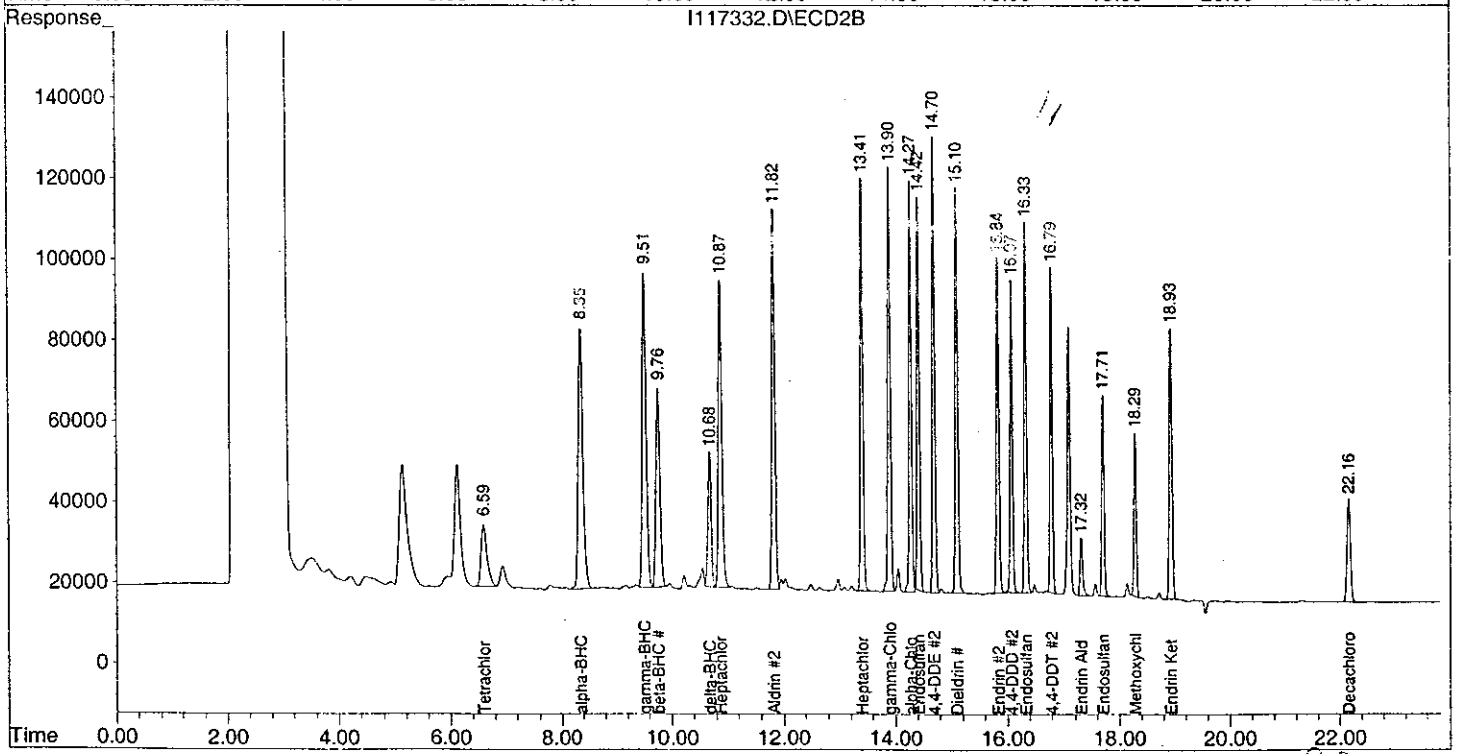
Quantitation Report

Signal #1 : H:\GCDATA\I\MAR2102\I117332.D\ECD1A.CH Vial: 7
Signal #2 : H:\GCDATA\I\MAR2102\I117332.D\ECD2B.CH
Acq On : 21 Mar 2002 11:26 Operator: PY
Sample : BKS53565 Inst : GC-I
Misc : 8081A-W-BKS53565 Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Mar 22 7:50 2002 Quant Results File: MAR1902P.RES

Quant Method : H:\GCDATA\METHODS\I_ICAL\MAR1902P.M (Chemstation Integrator)
Title : 8081A-Pest_Tox_Chlor Method
Last Update : Wed Mar 20 08:13:54 2002
Response via : Multiple Level Calibration
DataAcq Meth : PEST32I.M

Volume Inj. : 1.0uL
Signal #1 Phase : RTx-CLP Signal #2 Phase: RTx-CLP2
Signal #1 Info : 0.32 Signal #2 Info : 0.32





GPL Laboratories, LLLP

Document Control No: GP_E_139

PESTICIDE/PCB EXTRACTION LOG

SOIL / WATER / WIPES / OIL

Sep. Funnel 3510C / Continuous 3520C / Soxhlet 3540C / Sonication 3550B / Waste Dilution 3580A
OLCO3.2 / OLMO4.2 / OLMO3.2

Approval / Date: DJ 03/12/02

GPC: Y / N

Analysis Method: 8081 (W)

Ext. Chemist: VT Date: 03-11-02 Conc. Chemist: VT Date: 03-12-02

Cleanup:

Florisil (3620B)(F) Date: 03-12-02 Acid(3665A)(A) Date — Sulfur (3660B)(S) Date: —

Lot #: V05553 Lot #: — Lot #: —

Spike Witness Initials: ST

GPL W. O. #	Frac.	Init pH	Sample Vol. gram / mL	Surr. Vol. mL	Spike Vol. mL	Adjust. pH	F / A / S Cleanup	F.V. mL
203025	BLK 53565	7	1000	1.0	—	—	F	10.0
	BKS	7	1000		1.0			
	001	7	900/1L		—			
	002	7	900/1L		—			
	002(MS)	7	900/1L		1.0			
	002(MSD)	7	900/1L		1.0			
	003	7	900/1L		—			
	004	7	900/1L					
	005	7	900/1L					
	006	7	900/1L					
	007	7	850/1L					

VT 03-12-02

Solvent: DCM / Acetone Lot #: CD 650

Solvent: Hexane Lot #: 003841

Surrogate Soln#: 16591 Surr. Soln Conc(s): 0.2 ppm

Matrix Spike Soln #: 15871 MS Soln Conc(s): 0.5 ppm

Comments & Observations:

GPL Laboratories, LLLP

Document Control No: GP_G_042

GC ANALYSIS LOG

Intrument ID: HP5890 #1

Reviewed by: AK Date: 3/22/02

Data Acquisition Method:	Pest32 / PCB32 / Herb32 /
Injector Temp (oC):	180 / 200 / 240 /
Detector Temp(oC):	300
Oven Initial Temp(oC):	60 / 150 /
Initial Time (min):	0.0 / 0.50 / 1.0 /
Ramp Rate (oC/min) :	15-200-4 / 10-300-5.5
Final Temp(oC):	200 / 275 / 300 /
Injection Volume(uL):	1.0 / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP	30meter
ID:	0.32 mm	

Detector B

Column:	RTX-CLP2	30 meter
ID:	0.32 mm	

ICAL Method: MAR1902PM

Analyst: AK

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
MAR1902	117292	PRIME	—	—	03/19/02	
	293	HEXANE		—		
	294	EVAL MIX # 17608		STD		
	295	TOX-3 # 17133				
	296	CHLORDANE -5 #15777				
	297	-4 #15778				
	298	-3 #15779				
	299	-2 #15780				
	117300	-1 #15781				
	301	PEST - 6 #16841				
	302	5 #16842				
	303	4 #16843			03/20/02	
	304	3 #16844				
	305	2 #16845				
	306	INDAM #17405				
	307	INDBM #17408				
	308	EVAL MIX #17608				

Comments:

001088

GPL Laboratories, LLLP

Document Control No: GP_G_042

GC ANALYSIS LOG

Intrument ID: HP5890 #1

Reviewed by: AHL Date: 3/22/02

Data Acquisition Method:	(Pest32) / PCB32 / Herb32 /
Injector Temp (oC):	180 / (200) / 240 /
Detector Temp(oC):	(300)
Oven Initial Temp(oC):	60 / (150) /
Initial Time (min):	0.0 / 0.50 / (1.0) /
Ramp Rate (oC/min) :	15-200-4 / 10-300-5.5
Final Temp(oC):	200 / 275 / (300) /
Injection Volume(uL):	(1.0) / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP	30meter
ID:	0.32 mm	

Detector B

Column:	RTX-CLP2	30 meter
ID:	0.32 mm	

ICAL Method: MAR1902P.M

Analyst: PY

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
MAR2002	1 117309	PEST-4 #16843	—	STD	03/20/02	
	1 310	BLK53563	1.0	H_2O		
	1 311	BKS53563				
	1 312	203019-004-03-½				
	1 313	BLK53510		soil		
	1 314	BKS53510				
	1 315	PEST-4 #16843	—	STD		
	1 316	203019-001-01-¼	1.0	soil		
	1 317	-001-01-¼ MS				
	1 318	-001-01-¼MSD				
	1 319	-002-01-½				
	1 320	-003-01-½				
	1 321	CHLORDANE-3 #15779	—	STD		
	1 322	PEST-4 #16843				
	1 323	PEST-4 #16843				
	1 324	PEST-4 #16843				
mar2102	1 325	Pest-4 16843	—	STD	3/21/02	
	1 326					
	1 327	TOX-3 17133				
	1 328	Chlordane-3 15779				
	1 329	EVAL MIX 17608				
	1 330	Pest-4 16843				
	1 331	BLK 53565	1.0	water		
	1 332	BKS 53565				

Comments:

001089

GPL Laboratories, LLLP

Document Control No: GP_G_042

GC ANALYSIS LOG

Reviewed by: AK Date: 3/22/02

Intrument ID: HP5890 #1

Data Acquisition Method:	Pest32 / PCB32 / Herb32 /
Injector Temp (oC):	180 / 200 / 240 /
Detector Temp(oC):	300
Oven Initial Temp(oC):	60 / 150
Initial Time (min):	0.0 / 0.50 / 1.0
Ramp Rate (oC/min) :	15-200-4/10-300-5.5
Final Temp(oC):	200 / 275 / 300
Injection Volume(uL):	1.0 / 2.0 / 2.5 /

Detector A

Column:	RTX-CLP 30meter
ID:	0.32 mm

Detector B

Column:	RTX-CLP2 30 meter
ID:	0.32 mm

ICAL Method: MAR 1902PM

Analyst: PY

Seq.	File ID	GPL ID	Dil	Matrix	Date	Comments
mar2102	117 333	203025-001-01-1/2	1.0	water	3/21/02	
	334	002				
	335	MS				
	336	MSD				
	337	003				
	338	004				
	339	005				
	340	006				
	341	007				
	342	Pest-4 16843	—	STD		
	343	BLK 531669	1.0	water		
	344	BKS 531669				
	345	203075-001-01-1/1				
	346	002				
	347	003				
	348	004				
	349	Hexane	—	—		
	350	203075-005-01-1/1	1.0	water		
	351	006				
	352	007				
	353	MS				
	354	008				
	355	009				
	356	Pest-4 16843	—	STD		

Comments:

1090

METALS PACKAGE

GPL Laboratories, LLLP

GPL Laboratories, LLLP

TOTAL METALS
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: SDG No.: 203025

Lab Code: Case No.: SAS No.:

SOW No.: SW-846

Sample No.	Lab Sample ID.
007-MW01S-Q1-02	203025-001-03-1/1
007-MW03S-Q1-02	203025-002-07-1/3
007-MW03S-Q1-02D	203025-002-07-1/3D
007-MW03S-Q1-02S	203025-002-07-1/3S
007-MW04S-Q1-02	203025-003-03-1/1
007-MW05S-Q1-02	203025-004-03-1/1
007-MW08S-Q1-02	203025-005-03-1/1
007-DUP-Q1-02	203025-006-03-1/1
007-EQB-Q1-02	203025-007-03-1/1

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

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

Signature: Rita Amin Name: RITA AMIN

Date: 3-20-02 Title: Metals Reporting Mgr

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW01S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-001-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

1/1

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

00203

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW03S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-002-07-1/3

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002004

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW04S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-003-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	357			P

Color Before: BROWN Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

002005

TOTAL METALS

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-MW05S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-004-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002066

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-MW08S-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-005-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002067

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.
007-DUP-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-006-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	368			P

Color Before: BROWN Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

002008

TOTAL METALS
-1-
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

007-EQB-Q1-02

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Lab Sample ID: 203025-007-03-1/1

Level (low/med): LOW Date Received: 07-MAR-02

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	4.1	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

002009

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Initial Calibration Source: HIGH PURITY

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	400.0	405.25	101.3	1000.0	1019.03	102.0	1015.12	101.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002010

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1022.05	102.2	1010.73	101.1	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002011

SW-846

TOTAL METALS

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Initial Calibration Source:

Continuing Calibration Source: HIGH PURITY

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000.0	1014.75	101.5	1016.40	101.6	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

002012

TOTAL METALS
-2B-

CRDL STANDARD FOR AA AND ICP

Contract:

Lab Code: Case No.: SAS No.: SDG No.: 203025

AA CRDL Standard Source:

ICP CRDL Standard Source: HIGH PURITY

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				20.0	21.40	107.0		

002013

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	4.1	U	4.1	U	4.1	U	4.1	U	4.100	U	P

002014

TOTAL METALS

-3-

BLANKS

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			4.1	U	4.1	U	4.1	U			P

002015

TOTAL METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

ICP ID Number: TJA61 ICP ICS Source: HIGH PURITY

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic		100	-3	102.7	102.7			

002016

TOTAL METALS
-5A-
SPIKE SAMPLE RECOVERY

SAMPLE NO.

007-MW03S-Q1-02S

Contract:

Lab Code: Case No.: SAS SDG NO.: 203025

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Arsenic	75 - 125	50.8241		4.1000	U	50.00	101.6		P

Comments:

002017

TOTAL METALS

-6-

DUPLICATES

SAMPLE NO.

007-MW03S-Q1-02D

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight): µG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic		4.1000	U	4.1000	U			P

002018

TOTAL METALS

-7-

LABORATORY CONTROL SAMPLE

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Solid LCS Source:

Aqueous LCS Source: HIGH PURITY

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Arsenic	50.0	47.40	95.0					

002019

TOTAL METALS

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

007-MW03S-Q1-02L

Contract:

Lab Code: Case No.: SAS No.: SDG NO.: 203025

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-ence	Q	M
Arsenic	4.10	U	20.50	U			P

002020

GPL Laboratories, LLLP ICP ANALYSIS LOG *Document Control No: GP_M_095*

Instrument ID: Trace	Inst. Method: Trace 3	Nebulizer: 65137
Profile: -0.0028	Intensity: 4033	At Setting: 455

Analytical Batch No: 020319

Workorder	Project/SDG #	Prep. Seq.	Batch #	Matrix s/w/e	Prep. Date	Method	Dil.	Comments
203028	IT	53547	048	W	3.8.02	3010	2	009,014
202159	HYDROGEOLOGIC		060	S	3.15.02	3050		
203025	CH2M HILL	53538	047	W	3.8.02	3010		
203075	ENVIROTEST	53649	068	E	3.18.02	↓		
203051	ESC		064	↓	3.15.02	↓		
203036	COM	53560	054	S	3.11.02	3050		BLK53560: Al, Cr, Cu, Pb, Mn, Ni: FAILED BLK53560: Sb, Cu, Ag, Mo FAILED ↖ OK. K ONLY ↗

Source Solution Numbers				Post Digestion Spikes
Stds.	Number	Stds.	Number	Spike 9.9 mls of sample with 0.1 mls of 166605
S0	057-101-03	ICV	17580	Samples:
S1	17435	CCV	17635	202159-001-13-1/3
S2	17427	ICSA	17732	203025-002-07-1/3
S3	17204	ICSAB	17659	203036-001-02-1/1
S4	'	CRI	17658	
S5	'	Low Ck	17557	
Ints	17581	LR	17627	

Analyst: [signature] Date: 3.20.02 Reviewed: [signature] Date: 3-20-02

GPL Laboratories, LLLP

ICP ANALYSIS LOG

Document Control No: GP_M_095

002022

Seq	Sample ID	Dil.	Analysis Date Time
1.	CAL-STD0	1	3/19/02 12:46
2.	CAL-STD1	1	3/19/02 12:55
3.	CAL-STD2	1	3/19/02 13:03
4.	CAL-STD3	1	3/19/02 13:11
5.	ICV1	1	3/19/02 13:21
6.	ICV2	1	3/19/02 13:39
7.	ICV3	1	3/19/02 13:54
8.	ICB1		3/19/02 14:01
9.	CCV1	1	3/19/02 14:09
10.	CCB1	1	3/19/02 14:17
11.	POL-LOWCHE	1	3/19/02 14:24
12.	CRDL1	1	3/19/02 14:32
13.	ICS-A1	1	3/19/02 14:40
14.	FE	500	3/19/02 14:51
15.	ICV4	1	3/19/02 15:27
16.	ICB2	1	3/19/02 15:35
17.	CCV2	1	3/19/02 15:42
18.	CCB2	1	3/19/02 15:50
19.	POL-LOWCHE		3/19/02 15:58
20.	CRDL2	1	3/19/02 16:05
21.	ICS-A2	1	3/19/02 16:15
22.	ICS-AB1	1	3/19/02 16:23
23.	LR	1	3/19/02 16:32
24.	CCV3	1	3/19/02 16:44
25.	CCB3	1	3/19/02 16:52
26.	203028-009-01-2		3/19/02 17:01
27.	203028-009-01-2		3/19/02 17:09
28.	203028-009-01-2		3/19/02 17:17
29.	203028-009-01-2		3/19/02 17:25
30.	203028-009-01-10		3/19/02 17:33
31.	203028-014-01-2		3/19/02 17:40
32.	BLK(066)	1	3/19/02 17:48
33.	BKS(066)	1	3/19/02 17:56
34.	202159-001-13-1		3/19/02 18:04
35.	202159-001-13-1		3/19/02 18:12
36.	CCV4	1	3/19/02 18:20
37.	CCB4	1	3/19/02 18:28
38.	202159-001-13-1		3/19/02 18:36
39.	202159-001-13-1		3/19/02 18:44
40.	202159-001-13-5		3/19/02 18:52
41.	202159-002-04-1		3/19/02 19:00

Seq	Sample ID	Dil.	Analysis Date Time
42.	202159-005-05-1		3/19/02 19:08
43.	202159-006-05-1		3/19/02 19:16
44.	202159-007-05-1		3/19/02 19:23
45.	202159-008-05-1		3/19/02 19:31
46.	202159-009-05-1		3/19/02 19:39
47.	202159-010-05-1		3/19/02 19:47
48.	CCV5	1	3/19/02 19:55
49.	CCB5	1	3/19/02 20:03
50.	202159-011-04-1		3/19/02 20:11
51.	202159-012-04-1		3/19/02 20:19
52.	202159-013-05-1		3/19/02 20:27
53.	202159-014-05-1		3/19/02 20:35
54.	202159-015-05-1		3/19/02 20:43
55.	BLK53538	1	3/19/02 20:51
56.	BKS53538	1	3/19/02 20:59
57.	203025-001-03-1		3/19/02 21:07
58.	203025-002-07-1		3/19/02 21:14
59.	203025-002-07-1		3/19/02 21:22
60.	CCV6	1	3/19/02 21:30
61.	CCB6	1	3/19/02 21:38
62.	203025-002-07-1		3/19/02 21:46
63.	203025-002-07-1		3/19/02 21:54
64.	203025-002-07-5		3/19/02 22:02
65.	203025-003-03-1		3/19/02 22:10
66.	203025-004-03-1		3/19/02 22:18
67.	203025-005-03-1		3/19/02 22:26
68.	203025-006-03-1		3/19/02 22:34
69.	203025-007-03-1		3/19/02 22:42
70.	BLK53649	1	3/19/02 22:50
71.	BKS53649	1	3/19/02 22:58
72.	CCV7	1	3/19/02 23:05
73.	CCB7	1	3/19/02 23:13
74.	203075-001-02-1		3/19/02 23:21
75.	203075-001-02-1		3/19/02 23:29
76.	203075-001-02-1		3/19/02 23:37
77.	203075-001-02-5		3/19/02 23:45
78.	203075-002-02-1		3/19/02 23:53
79.	203075-003-02-1		3/20/02 00:01
80.	203075-004-02-1		3/20/02 00:09
81.	CRDL3	1	3/20/02 00:17
82.	ICS-A3		3/20/02 00:25

Seq	Sample ID	Dil.	Analysis Date Time
83.	ICS-AB2	1	3/20/02 00:33
84.	CCV8	1	3/20/02 00:41
85.	CCB8	1	3/20/02 00:49
86.	203075-005-02-1		3/20/02 00:57
87.	203075-006-02-1		3/20/02 01:05
88.	203075-007-02-1		3/20/02 01:12
89.	203075-008-02-1		3/20/02 01:20
90.	203075-009-02-1		3/20/02 01:28
91.	203075-010-02-1		3/20/02 01:36
92.	203075-011-02-1		3/20/02 01:44
93.	203075-012-02-1		3/20/02 01:52
94.	203075-013-02-1		3/20/02 02:00
95.	203075-014-02-1		3/20/02 02:08
96.	CCV9	1	3/20/02 02:16
97.	CCB9	1	3/20/02 02:24
98.	203075-015-02-1		3/20/02 02:32
99.	203075-016-02-1		3/20/02 02:40
100.	203075-017-02-1		3/20/02 02:48
101.	203075-018-02-1		3/20/02 02:56
102.	203075-019-02-1		3/20/02 03:04
103.	BLK(064)	1	3/20/02 03:12
104.	BKS(064)	1	3/20/02 03:20
105.	203051-001-01-1		3/20/02 03:27
106.	203051-002-01-1		3/20/02 03:35
107.	203051-002-01-1		3/20/02 03:43
108.	CCV10	1	3/20/02 03:51
109.	CCB10	1	3/20/02 03:59
110.	203051-002-01-1		3/20/02 04:07
111.	203051-002-01-5		3/20/02 04:15
112.	203051-003-01-1		3/20/02 04:23
113.	203051-004-01-1		3/20/02 04:31
114.	203051-005-01-1		3/20/02 04:39
115.	203051-006-01-1		3/20/02 04:47
116.	203051-007-01-1		3/20/02 04:55
117.	203051-008-01-1		3/20/02 05:03
118.	203051-009-01-1		3/20/02 05:11
119.	203051-010-01-1		3/20/02 05:19
120.	CCV11	1	3/20/02 05:27
121.	CCB11	1	3/20/02 05:35
122.	203051-011-01-1		3/20/02 05:43
123.	203051-012-01-1		3/20/02 05:51

Seq	Sample ID	Dil.	Analysis Date Time
124.	203051-013-01-1		3/20/02 05:59
125.	203051-014-01-1		3/20/02 06:06
126.	203051-014-01-1		3/20/02 06:14
127.	203051-014-01-1		3/20/02 06:22
128.	203051-014-01-5		3/20/02 06:30
129.	B020313	1	3/20/02 06:38
130.	B020314	1	3/20/02 06:46
131.	BLK53560	1	3/20/02 06:54
132.	CCV12	1	3/20/02 07:02
133.	CCB12	1	3/20/02 07:10
134.	BKS53560	1	3/20/02 07:18
135.	203036-001-02-1		3/20/02 07:26
136.	203036-001-02-1		3/20/02 07:34
137.	203036-001-02-1		3/20/02 07:42
138.	203036-001-02-1		3/20/02 07:50
139.	203036-001-02-5		3/20/02 07:58
140.	203036-002-02-1		3/20/02 08:06
141.	203036-003-02-1		3/20/02 08:14
142.	CCV13	1	3/20/02 08:22
143.	CCB13	1	3/20/02 08:30
144.	CRDL4	1	3/20/02 08:38
145.	ICS-A4		3/20/02 08:46
146.	ICS-AB3	1	3/20/02 08:54
147.	CCV14	1	3/20/02 09:02
148.	CCB14	1	3/20/02 09:09

Seq Sample ID	Dil.	Analysis Date Time	Seq Sample ID	Dil.	Analysis Date Time

Analyst Signature 3.20.02

Analyst Signature 3.20.02

2

Sample Dilutions:

203025-003-03-1 / 1:5x For Na

203025-006-03-1 / 1:5x For Na

Method: TRACE3 Standard: STD0
Run Time: 03/19/02 12:46:24

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	.01672	.00206	.00008	-.00006	-.00400	-.00102	.04679
#1	.01690	.00197	-.00053	-.00005	-.00391	-.00071	.04683
#2	.01655	.00215	.00068	-.00007	-.00409	-.00132	.04676

Elem	CR	CO	CU	FE	MG	MN	NI
Avge	.00003	-.00050	.01138	.00073	-.00015	.00025	-.00308
#1	-.00009	-.00073	.01132	.00114	-.00005	.00025	-.00318
#2	.00016	-.00027	.01144	.00032	-.00025	.00025	-.00299

Elem	K	AG	NA	TL	V	ZN	B
Avge	-.00526	.00091	-.00393	-.00170	.00014	.00166	.00019
#1	-.00096	.00121	-.00348	-.00247	.00023	.00199	.00005
#2	-.00957	.00062	-.00438	-.00094	.00005	.00132	.00034

Elem	MO	SN	SR	TI	1/PB	2/PB	1/SE
Avge	-.00002	-.00024	-.00005	.00027	-.00755	.00110	-.00213
#1	-.00025	.00005	.00005	.00041	-.00510	-.00119	-.00007
#2	.00021	-.00053	-.00014	.00014	-.01000	.00338	-.00420

Elem	2/SE	SI
Avge	-.00001	.05574
#1	-.00167	.05558
#2	.00164	.05589

Standardization Rpt. 03/19/02 01:03:21 PM page 1

Method: TRACE3 Standard: STD1
Run Time: 03/19/02 12:55:48

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	3.9175	.61065	.52804	1.9799	.14946	2.5536	.64162
#1	3.9214	.61131	.52780	1.9801	.14940	2.5547	.64156
#2	3.9135	.60999	.52829	1.9796	.14953	2.5526	.64169

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	.73263	.64220	6.0569	.97446	1.1930	.04035	.28255
#1	.73197	.64251	6.0541	.97429	1.1924	.04028	.28260
#2	.73329	.64189	6.0598	.97463	1.1936	.04042	.28250

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.14682	.47320	.55026	.49082	.38450	2.7593	1.7705
#1	.14669	.47256	.55031	.49012	.38477	2.7587	1.7701
#2	.14695	.47385	.55022	.49153	.38423	2.7600	1.7710

Elem	1/PB	2/PB	1/SE	2/SE	SI
Avge	1.0709	1.2504	.77910	1.2088	.28925
#1	1.0686	1.2504	.77679	1.2055	.28902
#2	1.0731	1.2504	.78140	1.2120	.28949

Standardization Rpt. 03/19/02 01:11:01 PM page 1

Method: TRACE3 Standard: STD2
Run Time: 03/19/02 13:03:28

Elem	AL	SB	AS	BA	BE	CD	CR
Avge	7.7293	1.2124	1.0516	3.9311	.30019	5.0516	1.2752
#1	7.6861	1.2030	1.0439	3.9080	.29767	5.0160	1.2655
#2	7.7725	1.2218	1.0593	3.9542	.30270	5.0871	1.2850

Elem	CO	CU	FE	MN	NI	AG	TL
Avge	1.4564	1.2593	12.033	1.9336	2.3816	.07882	.56349
#1	1.4464	1.2519	11.940	1.9198	2.3665	.07805	.55901
#2	1.4663	1.2667	12.126	1.9475	2.3966	.07958	.56798

Elem	V	ZN	B	MO	SN	SR	TI
Avge	.29139	.93372	1.0943	.97944	.76937	5.4553	3.5261
#1	.28933	.92628	1.0869	.97179	.76297	5.4227	3.5023
#2	.29345	.94115	1.1016	.98710	.77577	5.4879	3.5498

Elem	1/PB	2/PB	1/SE	2/SE	SI
Avge	2.1253	2.4874	1.5359	2.3962	.52052
#1	2.1071	2.4726	1.5229	2.3894	.51745
#2	2.1436	2.5022	1.5489	2.4030	.52359

ethod: TRACE3 Standard: STD3
un Time: 03/19/02 13:11:08

Elem	CA	MG	K	NA
Avge	36.319	24.252	34.361	2.0723
#1	36.447	24.349	34.507	2.0811
#2	36.190	24.155	34.216	2.0635

Standardization Report 03/19/02 01:17:08 PM page 1

Method: TRACE3 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AL	308.215	Multiple	Standards	12892.4	-217.056	03/19/02 01:03:28
SB	206.838	Multiple	Standards	1652.26	-3.41156	03/19/02 01:03:28
AS	189.042	Multiple	Standards	1889.37	-.160593	03/19/02 01:03:28
BA	493.409	Multiple	Standards	253.458	.005397	03/19/02 01:03:28
BE	313.042	Multiple	Standards	330.364	1.31978	03/19/02 01:03:28
CD	226.502	Multiple	Standards	198.353	.187589	03/19/02 01:03:28
CA	317.933	STD3	STD0	1.16937	-.004964	03/19/02 01:11:08
CR	267.716	Multiple	Standards	780.526	-.034448	03/19/02 01:03:28
CO	228.616	Multiple	Standards	686.117	.336951	03/19/02 01:03:28
CU	324.753	Multiple	Standards	796.857	-9.08051	03/19/02 01:03:28
FE	271.441	Multiple	Standards	8289.54	-6.89337	03/19/02 01:03:28
PB	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
MG	279.078	STD3	STD0	1.25878	.000986	03/19/02 01:11:08
MN	257.610	Multiple	Standards	515.231	-.139156	03/19/02 01:03:28
NI	231.604	Multiple	Standards	418.694	1.28760	03/19/02 01:03:28
K	766.491	STD3	STD0	1.06973	-.009054	03/19/02 01:11:08
SE	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
AG	328.068	Multiple	Standards	1268.86	-1.16145	03/19/02 01:03:28
NA	330.232	STD3	STD0	1.14881	-.000338	03/19/02 01:11:08
TL	190.864	Multiple	Standards	3576.63	6.07525	03/19/02 01:03:28
V	292.402	Multiple	Standards	3384.91	-.473178	03/19/02 01:03:28
ZN	206.200	Multiple	Standards	1066.60	-1.78176	03/19/02 01:03:28
B	249.678	Multiple	Standards	911.626	-.183846	03/19/02 01:03:28
MO	202.030	Multiple	Standards	1019.81	.020633	03/19/02 01:03:28
SN	189.989	Multiple	Standards	1301.12	.312087	03/19/02 01:03:28
SR	421.552	Multiple	Standards	182.251	-.006092	03/19/02 01:03:28
TI	334.941	Multiple	Standards	283.036	-.082821	03/19/02 01:03:28
1/PB	220.351	Multiple	Standards	497.085	3.73791	03/19/02 01:03:28
2/PB	220.352	Multiple	Standards	390.354	-.433464	03/19/02 01:03:28
1/SE	196.021	Multiple	Standards	1290.59	2.71582	03/19/02 01:03:28
2/SE	196.022	Multiple	Standards	815.574	-.011440	03/19/02 01:03:28
SI	288.158	Multiple	Standards	2353.28	-131.173	03/19/02 01:03:28

Method: TRACE3

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AL	308.215	STD0	.000000	-1.43102	1.43102
		STD1	50000.0	50288.4	-288.406
		STD2	100000.	99432.0	568.000

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SB	206.838	STD0	.000000	-.014073	.014073
		STD1	1000.00	1005.55	-5.54755
		STD2	2000.00	1999.84	.163086

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AS	189.042	STD0	.000000	-.010326	.010326
		STD1	1000.00	997.507	2.49329
		STD2	2000.00	1986.75	13.2473

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BA	493.409	STD0	.000000	-.009078	.009078
		STD1	500.000	501.816	-1.81564
		STD2	1000.00	996.369	3.63129

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
BE	313.042	STD0	.000000	-.001130	.001130
		STD1	50.0000	50.6976	-.697598
		STD2	100.000	100.491	-.490791

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CD	226.502	STD0	.000000	-.014040	.014040
		STD1	500.000	506.708	-6.70810
		STD2	1000.00	1002.18	-2.18384

CorCoef: 0.99998

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
CA	317.933	STD0	.049754	.046793	.002961
		STD3	42.4648	36.3185	6.14633

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CR	267.716	STD0	.000000	-.007769	.007769
		STD1	500.000	500.768	-.768219
		STD2	1000.00	995.321	4.67853

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CO	228.616	STD0	.000000	-.008044	.008044
		STD1	500.000	503.007	-3.00677
		STD2	1000.00	999.579	.421448

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
CU	324.753	STD0	.000000	-.013627	.013627
		STD1	500.000	502.660	-2.65991
		STD2	1000.00	994.418	5.58179

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
FE	271.441	STD0	.000000	-.830110	.830110
		STD1	50000.0	50202.1	-202.129
		STD2	100000.	99740.2	259.828

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
PB	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
MG	279.078	STD0	.000799	-.000148	.000948
		STD3	30.5289	24.2520	6.27694

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MN	257.610	STD0	.000000	-.009663	.009663
		STD1	500.000	501.933	-1.93268
		STD2	1000.00	996.135	3.86536

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
NI	231.604	STD0	.000000	-.003888	.003888
		STD1	500.000	500.778	-.777618
		STD2	1000.00	998.445	1.55518

CorCoef: 1.00000

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K	766.491	STD0	-.014685	-.005263	-.009421
		STD3	36.7485	34.3615	2.38700

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SE	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
AG	328.068	STD0	.000000	-.001531	.001531
		STD1	50.0000	50.0372	-.037197
		STD2	100.000	98.8496	1.15039

CorCoef: 0.99997

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
NA	330.232	STD0	-.004853	-.003930	-.000923
		STD3	2.38033	2.07230	.308032

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TL	190.864	STD0	.000000	-.014789	.014789
		STD1	1000.00	1016.66	-16.6578
		STD2	2000.00	2021.48	-21.4841

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	STD0	.000000	-.008922	.008922
		STD1	500.000	496.499	3.50055
		STD2	1000.00	985.861	14.1389

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
ZN	206.200	STD0	.000000	-.014691	.014691
		STD1	500.000	502.938	-2.93820
		STD2	1000.00	994.124	5.87628

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B	249.678	STD0	.000000	-.006898	.006898
		STD1	500.000	501.451	-1.45102
		STD2	1000.00	997.384	2.61603

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
MO	202.030	STD0	.000000	-.002835	.002835
		STD1	500.000	500.567	-.566986
		STD2	1000.00	998.866	1.13397

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SN	189.989	STD0	.000000	.000210	-.000210
		STD1	500.000	500.593	-.592590
		STD2	1000.00	1001.35	-1.35284

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SR	421.552	STD0	.000000	-.014409	.014409
		STD1	500.000	502.882	-2.88174
		STD2	1000.00	994.237	5.76349

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
TI	334.941	STD0	.000000	-.005191	.005191
		STD1	500.000	501.038	-1.03815
		STD2	1000.00	997.924	2.07635

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/PB	220.351	STD0	.000000	-.014850	.014850
		STD1	500.000	536.046	-36.0460
		STD2	1000.00	1060.21	-60.2120

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/PB	220.352	STD0	.000000	-.006001	.006001
		STD1	500.000	487.669	12.3312
		STD2	1000.00	970.537	29.4634

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/SE	196.021	STD0	.000000	-.039342	.039342
		STD1	1000.00	1008.21	-8.20789
		STD2	2000.00	1984.94	15.0577

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/SE	196.022	STD0	.000000	-.021729	.021729
		STD1	1000.00	985.841	14.1588
		STD2	2000.00	1954.30	45.7008

CorCoef: 0.99999

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
SI	288.158	STD0	.000000	-.006617	.006617
		STD1	500.000	549.523	-49.5233
		STD2	1000.00	1093.75	-93.7515

CorCoef: 1.00000

Analysis Report QC Standard 03/19/02 01:28:42 PM page 1

Method: TRACE3 Sample Name: IVICV Operator: LCM
Run Time: 03/19/02 13:21:09
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5010.309	402.1733	412.5047	403.1246	40.31617	41.17101	5030.195
#1	5002.491	402.5473	413.1297	402.4413	40.27225	41.20779	5029.127
#2	5018.127	401.7992	411.8797	403.8078	40.36010	41.13423	5031.263
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	408.0843	400.8666	398.8452	5053.579	406.7701	4960.175	404.7097
#1	408.1664	400.1027	398.5937	5058.084	405.8866	4955.432	404.7085
#2	408.0022	401.6305	399.0967	5049.075	407.6536	4964.917	404.7110
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	Q438.9153	4896.476	409.9533	40.78904	10038.33	406.0481	404.9840
#1	Q449.5784	4886.442	408.8543	40.60365	9993.733	402.7780	404.4827
#2	Q428.2522	4906.509	411.0523	40.97443	10082.93	409.3182	405.4853
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	406.7171	405.4888	405.8341	403.0174	403.5596	405.5114	408.5596
#1	406.3852	404.4316	403.6988	402.4522	402.9536	404.7730	407.4400
#2	407.0489	406.5460	407.9694	403.5826	404.1655	406.2498	409.6791
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	405.8750	410.3309	409.7642	435.9752
#1	405.1095	404.5366	411.0129	437.0008
#2	406.6405	416.1253	408.5156	434.9495
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				400.0000
Range				10.00000

Method: TRACE3 Sample Name: IVICV Operator: LCM
Run Time: 03/19/02 13:39:14
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5100.053	410.2192	417.7708	411.2786	40.99668	41.87012	5093.936
#1	5047.938	406.7836	416.4911	406.8316	40.55072	41.40093	5038.901
#2	5152.167	413.6548	419.0505	415.7257	41.44264	Q42.33931	5148.972
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	416.8809	409.3775	403.6386	5135.455	412.0546	5078.713	410.8843
#1	412.5872	404.7304	399.5529	5079.032	408.6440	5027.443	406.7239
#2	Q421.1746	414.0247	407.7242	5191.878	415.4651	5129.983	415.0447
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	Q421.5760	4981.232	414.7282	41.34814	10232.02	411.5896	411.7879
#1	417.4503	4935.235	410.6439	40.92402	10128.32	406.4602	406.9994
#2	Q425.7017	5027.230	418.8126	41.77226	10335.71	416.7190	416.5764
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	415.4347	411.8247	412.4517	411.4345	411.0163	414.8200	419.1464
#1	410.9510	406.7693	408.1163	406.2373	406.3154	410.2359	415.0441
#2	419.9184	416.8800	416.7872	416.6317	415.7172	419.4039	423.2487
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	408.5082	417.7392	413.2225	Q444.1028
#1	405.4436	412.0702	409.9304	438.5066
#2	411.5729	423.4081	416.5145	Q449.6989
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				400.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 02:01:40 PM page 1

Method: TRACE3 Sample Name: IVICV Operator: LCM
Run Time: 03/19/02 13:54:07
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5013.002	406.8314	411.1120	404.3353	40.32629	41.29089	5022.518
#1	5011.008	406.1701	411.1655	404.6003	40.33175	41.30037	5020.904
#2	5014.996	407.4928	411.0584	404.0702	40.32084	41.28140	5024.131
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	407.9355	401.8084	398.0404	5035.484	409.4219	4986.913	403.7241
#1	408.2289	401.7045	398.1010	5028.333	409.3656	4985.257	403.6995
#2	407.6422	401.9123	397.9799	5042.635	409.4782	4988.568	403.7486
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	409.2187	4927.133	410.4647	40.71727	9985.750	406.6014	405.1209
#1	409.2779	4925.094	410.9402	40.44748	9922.836	408.6113	404.7943
#2	409.1595	4929.172	409.9892	40.98706	10048.67	404.5914	405.4474
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	407.8038	403.7203	404.8055	407.3573	405.0747	406.0827	409.5817
#1	408.1853	403.5215	404.7332	407.8169	405.3329	406.0073	410.2201
#2	407.4222	403.9191	404.8777	406.8976	404.8166	406.1581	408.9434
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	409.3416	410.2953	410.5491	432.1753
#1	408.9380	410.4062	411.2070	432.4248
#2	409.7452	410.1845	409.8913	431.9259
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				400.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 02:09:19 PM page 1

Method: TRACE3 Sample Name: BIICB Operator: LCM
Run Time: 03/19/02 14:01:46
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	8.102531	-.724930	-1.04429	.1810858	-.046954	.1727338	-9.49566
#1	13.03585	-1.30173	2.011806	.1820104	-.076131	.1508013	-10.0165
#2	3.169216	-.148133	-4.10039	.1801611	-.017778	.1946662	-8.97480
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.003092	.2972374	-.315256	18.36637	-.366706	4.924767	.3100284
#1	.7903300	.0594148	-.482942	14.34613	.0815741	4.738420	.2893517
#2	1.215855	.5350601	-.147570	22.38662	-.814987	5.111115	.3307051
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	7.169765	.8313793	2.812656	.2129680	-55.5070	.8383152	-.015404
#1	6.840292	-3.76076	2.589929	-.106090	-287.371	1.811707	-.242039
#2	7.499237	5.423519	3.035384	.5320262	176.3570	-.135077	.2112323
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.4838098	.7312980	.3612396	.6289379	.1081624	-.032524	-1.32868
#1	.4718843	.3284523	.0894026	.0197452	.1372891	-.095545	.0867017
#2	.4957352	1.134144	.6330765	1.238131	.0790357	.0304969	-2.74407
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.1139462	-.010310	4.223735	-2.35441
#1	.0786732	.1917852	3.788595	-1.46577
#2	.1492193	-.212406	4.658875	-3.24306
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

nalysis Report QC Standard 03/19/02 02:16:58 PM page 1

ethod: TRACE3 Sample Name: CVCCV Operator: LCM
un Time: 03/19/02 14:09:25
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50531.39	1011.030	1009.445	502.7746	49.77864	495.6590	99624.62
#1	50533.30	1010.549	1010.563	502.4386	49.79074	495.5141	99590.98
#2	50529.48	1011.510	1008.328	503.1105	49.76654	495.8039	99658.26
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	498.0181	493.0990	500.0539	49301.13	495.7368	99231.94	496.7912
#1	497.6712	493.0668	500.1814	49281.53	495.0477	99222.66	496.5511
#2	498.3650	493.1312	499.9264	49320.74	496.4259	99241.20	497.0313
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	494.2462	25059.98	1007.539	50.64680	100334.8	1000.605	499.9153
#1	494.9619	25073.53	1006.419	50.48568	100531.6	999.0244	499.8604
#2	493.5305	25046.44	1008.660	50.80792	100137.9	1002.185	499.9703
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	490.8897	507.4401	501.0586	501.3089	504.1587	505.1791	499.4593
#1	490.5248	507.7565	500.4432	501.7119	503.9954	504.7673	498.8066
#2	491.2547	507.1236	501.6740	500.9058	504.3220	505.5909	500.1120
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	493.8752	1012.460	1005.079	522.7153
#1	493.1679	1010.712	1004.272	519.6271
#2	494.5826	1014.208	1005.885	525.8036
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

ethod: TRACE3 Sample Name: BCCCB Operator: LCM
un Time: 03/19/02 14:17:04
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	14.28601	.0803804	-.892588	.1100403	-.028091	.2564148	8.136668
#1	19.07301	1.126821	-1.76521	.0698760	-.040006	.2316981	12.52114
#2	9.499014	-.966060	-.019965	.1502046	-.016175	.2811315	3.752198
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.356873	.2590104	.0784773	21.87603	.0743069	17.74046	.1689590
#1	1.410020	.4635202	-.013521	22.60675	.6017259	23.15984	.1944836
#2	1.303726	.0545005	.1704758	21.14532	-.453112	12.32108	.1434344
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	2.633773	1.045924	.2668187	-.067680	-67.3498	2.420963	-.426572
#1	2.401155	5.389366	-.655592	-.104917	50.82682	3.425740	-.309106
#2	2.866391	-3.29752	1.189229	-.030443	-185.526	1.416187	-.544037
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.2051852	.6337725	.6071864	.4017977	.0945662	.0214461	-.070451
#1	.3396208	.6805534	.6810135	.4022983	.1119249	.0480942	1.035373
#2	.0707496	.5869916	.5333594	.4012970	.0772074	-.005202	-1.17628
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.1463583	-.420461	.6101824	.4901407
#1	.3845557	-1.43309	-.267122	.5695232
#2	-.091839	.5921651	1.487487	.4107583
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

ethod: TRACE3 Sample Name: PQL-LOWCHECK Operator: LCM
un Time: 03/19/02 14:24:43
omment: UG/L
lode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	203.3130	20.71396	21.57700	5.145968	2.022945	3.215494	949.8826
#1	201.4146	21.26009	19.66801	5.102639	2.040122	3.131610	951.8519
#2	205.2113	20.16783	23.48600	5.189298	2.005767	3.299377	947.9133
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.869430	5.200378	9.819792	151.6500	10.55812	244.2025	5.245012
#1	5.484161	5.175301	9.435997	145.0829	10.00028	240.4375	5.219119
#2	Q6.254697	5.225456	10.20359	158.2172	11.11596	247.9675	5.270905
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	Q16.29616	227.1679	22.24191	3.023225	2586.857	28.95577	10.06012
#1	Q15.91732	226.7687	21.05853	3.122285	2474.362	30.37457	10.05061
#2	Q16.67499	227.5670	23.42528	2.924164	2699.352	27.53698	10.06964
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	250.0000	20.00000	3.000000	2500.000	30.00000	10.00000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	20.02184	16.08966	4.958381	23.25964	5.027505	24.00683	9.005456
#1	19.88883	15.82315	5.030856	22.86370	5.023117	23.95905	7.998397
#2	20.15486	16.35616	4.885905	23.65557	5.031893	24.05460	10.01252
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	11.33411	18.85896	23.93304	Q22.11381
#1	11.00087	14.00082	24.58697	Q20.04408
#2	11.66735	23.71711	23.27910	Q24.18355
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				50.00000
Range				20.00000

nalysis Report QC Standard 03/19/02 02:39:54 PM page 1

lethod: TRACE3 Sample Name: CRCRI Operator: LCM
un Time: 03/19/02 14:32:22
omment: UG/L
lode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	405.5983	124.5527	22.50204	410.5048	10.15232	10.63021	505.9996
#1	403.2917	124.8066	22.26652	410.2200	10.15524	10.47104	505.0408
#2	407.9049	124.2989	22.73757	410.7897	10.14940	10.78938	506.9585
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	20.31471	102.0669	50.28711	212.9040	6.031980	514.4501	31.67180
#1	20.37326	102.2733	50.15008	212.5996	5.473325	513.2199	31.65209
#2	20.25615	101.8605	50.42415	213.2083	6.590634	515.6802	31.69151
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	80.47897	514.7228	11.08585	20.90947	1171.568	20.33110	102.9213
#1	79.90768	515.9731	12.29024	21.16034	Q1251.246	20.08735	103.1792
#2	81.05026	513.4724	9.881472	20.65859	1091.889	20.57485	102.6634
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	43.00085	18.00919	5.522900	26.92975	5.149057	26.10225	5.413411
#1	42.96002	18.44470	5.318612	27.40553	5.130759	26.06825	5.075792
#2	43.04167	17.57367	5.727188	26.45398	5.167355	26.13626	5.751030
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	6.340992	12.51500	10.37094	12.21877
#1	5.671820	11.75157	12.55923	13.29116
#2	7.010165	13.27843	8.182653	11.14638
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 03/19/02 02:47:32 PM page 1

Method: TRACE3 Sample Name: IAICSAI Operator: LCM
Run Time: 03/19/02 14:40:00
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	493959.2	-.266716	.4759045	1.691045	.2470535	-.418705	494884.9
#1	493624.5	-1.84154	-1.29172	1.649572	.2629842	-.283937	494626.3
#2	494294.0	1.308104	2.243528	1.732518	.2311228	-.553472	495143.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	20.00000	20.00000	5.000000	2.000000	3.000000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.2183255	.9702798	1.442254	194606.5	.8171980	488599.5	Q10.01707
#1	.3255932	.8426728	1.047497	194468.8	.8965682	488569.1	9.999111
#2	.1110578	1.097887	1.837012	194744.2	.7378278	488629.9	Q10.03504
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	40000.00	6.000000	100000.0	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.263299	-7.02690	8.140730	-.157878	103.7324	10.09330	1.854481
#1	4.395971	-11.1947	7.896699	-.158547	33.77148	10.20310	1.522515
#2	4.130628	-2.85911	8.384761	-.157209	173.6933	9.983494	2.186448
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	10.00000	3.000000	2500.000	20.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	37.87338	-3.85003	.8043283	3.216288	Q6.997387	1.864116	-3.07727
#1	37.57974	-3.38188	1.049705	5.155096	Q6.995498	1.848426	-4.40741
#2	38.16702	-4.31817	.5589516	1.277480	Q6.999276	1.879806	-1.74713
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.764015	17.04049	3.690426	23.66571
#1	3.548157	17.18951	3.249870	24.00871
#2	1.979874	16.89147	4.130981	23.32272
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Analysis Report 03/19/02 02:59:21 PM page 1

Method: TRACE3 Sample Name: FE:500PPM Operator: LCM
Run Time: 03/19/02 14:51:48
Comment:
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41.72493	.2485900	-3.60721	2.154280	-.494421	L-7.78211	34.29675
#1	53.61638	2.379335	-1.70250	2.138104	-.493701	L-7.89699	45.40246
#2	29.83348	-1.88216	-5.51191	2.170455	-.495142	L-7.66724	23.19104
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.755330	.8362472	3.173037	512775.3	.6654935	128.3356	-.687364
#1	1.651059	1.068179	3.309372	512589.5	.7605137	138.9273	-.728202
#2	1.859601	.6043153	3.036703	512961.1	.5704733	117.7438	-.646526
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.305648	13.86541	L-109.947	1.373174	269.0487	149.5955	3.280287
#1	4.274552	17.76985	L-109.369	1.662626	421.0739	150.0983	3.636081
#2	4.336745	9.960980	L-110.525	1.083721	117.0235	149.0927	2.924494
Errors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	8.029850	-10.3542	-.539841	2.707774	.1774022	.1373132	-2.27217
#1	8.144235	-9.50142	-.026003	3.881840	.1856001	.2342928	-2.95926
#2	7.915464	-11.2070	-1.05368	1.533707	.1692043	.0403335	-1.58508
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	2.133935	9.993796	-169.918	9.024717
#1	2.620052	12.95619	-170.532	9.269731
#2	1.647818	7.031405	-169.304	8.779704
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report QC Standard 03/19/02 03:34:58 PM page 1

Method: TRACE3 Sample Name: IVICV Operator: LCM
Run Time: 03/19/02 15:27:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5054.451	403.9661	405.2500	401.7663	40.42023	40.91345	5021.575
#1	5100.547	408.4532	407.1013	404.5230	40.67337	41.10899	5056.055
#2	5008.355	399.4789	403.3987	399.0096	40.16709	40.71790	4987.096
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	403.5543	398.5911	402.3220	5034.411	404.7541	4893.542	402.8169
#1	406.0513	400.8894	405.1868	5066.257	406.4779	4925.120	405.5205
#2	401.0573	396.2928	399.4573	5002.565	403.0303	4861.964	400.1132
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	399.8453	4929.904	406.6684	41.12266	10376.98	403.8000	405.6913
#1	401.7025	4972.959	406.7102	41.57495	Q10528.83	405.4505	408.7861
#2	397.9880	4886.849	406.6266	40.67037	10225.14	402.1495	402.5966
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	5000.000	400.0000	40.00000	10000.00	400.0000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	402.3143	403.0286	405.4246	395.5064	403.4410	402.9389	408.0427
#1	404.0330	405.5972	407.2762	398.7912	406.5282	405.5272	409.9931
#2	400.5957	400.4600	403.5731	392.2216	400.3539	400.3506	406.0922
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	403.1095	408.1878	405.9084	429.4559
#1	404.7200	409.8991	405.1154	432.6617
#2	401.4990	406.4765	406.7013	426.2500
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				400.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 03:42:37 PM page 1

Method: TRACE3 Sample Name: BIICB Operator: LCM
Run Time: 03/19/02 15:35:04
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-4.31593	-1.52066	-2.30497	.0692947	.0032472	.0246269	6.083110
#1	-5.69189	-1.00222	-1.70699	.0922094	-.000365	.0731564	6.927136
#2	-2.93998	-2.03909	-2.90296	.0463800	.0068591	-.023903	5.239085
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7813442	.3920781	-.021263	12.38613	-.020461	4.921938	.0974377
#1	.7856587	.3681723	-.110158	15.41748	-.483251	4.583979	.1079048
#2	.7770297	.4159839	.0676324	9.354774	.4423302	5.259896	.0869706
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	2.180546	1.520509	.7137554	.1223530	57.57512	-1.43877	.2330056
#1	1.574413	-1.07053	1.196088	-.147307	9.706632	-2.25937	-.005281
#2	2.786678	4.111554	.2314224	.3920131	105.4436	-.618179	.4712923
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.847320	.5603198	.5841016	1.525147	.0691291	.0116785	.3940639
#1	2.943078	.3990089	.3466419	1.025160	.0896227	-.031118	.5965061
#2	2.751561	.7216307	.8215612	2.025135	.0486355	.0544750	.1916218
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.228067	2.807373	-.333396	-1.03580
#1	-1.02347	4.866720	-.639567	-1.11758
#2	.5673378	.7480265	-.027226	-.954020
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Method: TRACE3 Sample Name: CVCCV Operator: LCM
Run Time: 03/19/02 15:42:43
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50754.13	1015.955	1019.611	499.4304	50.27468	499.4835	100334.4
#1	50797.32	1015.719	1025.216	499.7800	50.36278	500.5926	100552.4
#2	50710.94	1016.192	1014.005	499.0808	50.18658	498.3744	100116.4
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	499.1901	495.2939	503.4983	49744.42	497.9785	98910.37	499.9299
#1	500.3940	496.6900	503.7826	49837.94	499.2757	99157.26	500.8360
#2	497.9861	493.8978	503.2139	49650.90	496.6812	98663.48	499.0239
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	498.9830	24915.73	1003.558	51.59379	100585.0	1002.578	504.4941
#1	499.8453	24899.75	1004.514	51.29818	100523.2	1005.675	505.7341
#2	498.1208	24931.71	1002.602	51.88940	100646.8	999.4801	503.2542
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	494.7049	506.4165	506.8619	504.5994	502.4801	502.5718	498.4873
#1	496.3989	507.6895	506.0389	504.9050	503.1355	503.3549	499.1688
#2	493.0110	505.1436	507.6849	504.2938	501.8247	501.7886	497.8059
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	497.7236	999.3881	1005.643	519.9983
#1	499.3288	1001.726	1005.908	520.3512
#2	496.1184	997.0498	1005.378	519.6455
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 03:57:55 PM page 1

Method: TRACE3 Sample Name: BCCCB Operator: LCM
Run Time: 03/19/02 15:50:22
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	2.548936	-.397387	-1.56054	.1619894	.0619252	.1468879	18.57569
#1	1.944876	-1.11811	-.957708	.1525063	.0880106	.1338805	22.97142
#2	3.152997	.3233331	-2.16336	.1714725	.0358398	.1598953	14.17995
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3513551	.3843269	.0481156	8.826570	-.190435	17.51758	.0633105
#1	.3490073	.1686688	-.239636	7.352425	-.292511	20.98782	.0678743
#2	.3537028	.5999851	.3358669	10.30071	-.088359	14.04734	.0587466
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6949585	4.357996	2.231030	.2486099	-39.0244	.6300765	.1408898
#1	.7361466	6.391907	3.381167	.3398243	-5.99572	-1.90387	.2148604
#2	.6537703	2.324084	1.080893	.1573954	-72.0530	3.164020	.0669191
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.3150706	1.157383	1.060750	2.503633	.0879760	.0580999	-1.01199
#1	.1706725	1.118606	1.386566	2.490637	.0996874	-.120731	-.346279
#2	.4594687	1.196161	.7349334	2.516631	.0762646	.2369305	-1.67770
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.2200049	1.713677	2.489437	-4.04917
#1	-.265961	4.444254	2.849357	-5.80990
#2	.7059711	-1.01690	2.129518	-2.28844
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Analysis Report QC Standard 03/19/02 04:05:33 PM page 1

Method: TRACE3 Sample Name: PQL-LOWCHECK Operator: LCM
Run Time: 03/19/02 15:58:01
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	192.4997	19.11426	21.39743	5.164503	2.088759	3.218955	973.5814
#1	191.1692	17.32268	20.51629	5.131452	2.078626	3.203676	968.2134
#2	193.8303	20.90584	22.27857	5.197555	2.098893	3.234233	978.9495
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	3.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	5.608062	5.321737	10.37314	153.6188	9.457766	247.1256	5.113278
#1	4.919419	5.037771	9.920981	150.8820	9.969270	243.3217	5.112003
#2	Q6.296704	5.605703	10.82530	156.3557	8.946261	250.9294	5.114554
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	Q12.60159	227.3930	21.04885	3.258815	2613.758	30.91829	10.30566
#1	Q12.49870	223.5532	20.68943	3.083540	2537.627	32.50554	10.03321
#2	Q12.70449	231.2327	21.40827	3.434090	2689.889	29.33105	10.57811
Errors	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	250.0000	20.00000	3.000000	2500.000	30.00000	10.00000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	20.33012	15.34024	5.411046	25.55006	5.033084	23.97991	10.63892
#1	20.32352	15.24271	5.356703	24.73153	5.006609	23.74783	11.15369
#2	20.33672	15.43777	5.465389	26.36860	5.059558	24.21199	10.12415
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	20.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	8.866778	23.07491	20.03551	Q20.82211
#1	9.376652	21.88188	20.09291	Q20.41771
#2	8.356905	24.26793	19.97811	Q21.22650
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				50.00000
Range				20.00000

002046

Analysis Report QC Standard 03/19/02 04:13:12 PM page 1

Method: TRACE3 Sample Name: CRCRI Operator: LCM
Run Time: 03/19/02 16:05:40
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	401.1144	123.6709	19.63488	410.3951	10.15584	10.41664	513.6469
#1	404.3855	122.7279	18.72760	410.8148	10.14978	10.47833	515.3027
#2	397.8434	124.6139	20.54217	409.9754	10.16190	10.35495	511.9912
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	20.14438	101.6624	50.69929	208.3137	7.232185	507.9612	31.64882
#1	19.90372	101.1535	51.04321	212.7699	5.923402	508.6642	31.68078
#2	20.38504	102.1713	50.35539	203.8575	Q8.540968	507.2582	31.61686
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	79.23752	508.0393	11.32166	20.13704	1049.893	21.79885	102.9295
#1	78.58164	505.3945	12.01858	19.92261	954.7939	22.47444	103.3405
#2	79.89339	510.6841	10.62475	20.35146	1144.992	21.12326	102.5185
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	80.00000	500.0000	10.00000	20.00000	1000.000	20.00000	100.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	42.36272	17.19461	5.370762	28.45149	5.157867	25.81168	9.097517
#1	42.55885	16.70267	5.261291	28.46357	5.176513	25.81744	7.945571
#2	42.16660	17.68655	5.480232	28.43940	5.139223	25.80592	10.24946
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	6.299245	15.24702	9.358661	11.50542
#1	4.912043	17.17397	9.440575	10.27303
#2	7.686448	13.32008	9.276747	12.73781
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

002047

Analysis Report QC Standard 03/19/02 04:23:00 PM page 1

Method: TRACE3 Sample Name: IAICSAI Operator: LCM
Run Time: 03/19/02 16:15:28
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	497656.4	1.441031	-2.63625	1.682290	.3407415	.1766067	494696.2
#1	498162.1	1.433501	-4.29140	1.639968	.3749292	.0567589	495348.0
#2	497150.7	1.448560	-.981105	1.724612	.3065538	.2964544	494044.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	100000.0	20.00000	20.00000	5.000000	2.000000	3.000000	100000.0

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.5394583	1.322123	1.522042	194201.8	.8807799	482519.7	9.737490
#1	.8306785	1.585451	1.314111	194453.1	1.508575	482829.5	9.716283
#2	.2482381	1.059094	1.729972	193950.5	.2529843	482209.8	9.758698
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	40000.00	6.000000	100000.0	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.245019	-4.87425	-2.27887	.5186697	241.9228	-6.07304	1.539799
#1	3.845136	-7.88366	-5.37597	.7064010	217.9297	-10.8681	1.618475
#2	4.644902	-1.86484	.8182374	.3309384	265.9159	-1.27801	1.461124
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	10.00000	3.000000	2500.000	20.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	38.38502	-2.43163	.9731896	3.467421	Q7.018772	2.185176	-5.54491
#1	38.19197	-2.77986	.6410877	3.000679	Q6.992792	2.252212	-.171234
#2	38.57808	-2.08339	1.305292	3.934163	Q7.044752	2.118141	-10.9186
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	40.00000	15.00000	5.000000	25.00000	5.000000	25.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	4.093254	11.86826	-9.35279	24.41201
#1	2.348114	12.33158	-14.2301	23.43894
#2	5.838394	11.40494	-4.47547	25.38509
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				1000.000

Analysis Report QC Standard 03/19/02 04:30:42 PM page 1

Method: TRACE3 Sample Name: IBICSABI Operator: LCM
Run Time: 03/19/02 16:23:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	501124.2	611.7692	102.7109	520.8602	494.2511	972.5841	497739.4
#1	502023.1	614.7944	106.3137	521.9772	495.4974	974.6145	498947.1
#2	500225.3	608.7440	99.10802	519.7432	493.0049	970.5536	496531.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	491.7037	482.2007	529.2711	196886.6	48.90456	486964.8	508.5059
#1	493.1282	483.2841	529.7946	197369.9	48.36315	488087.2	509.6951
#2	490.2792	481.1173	528.7477	196403.3	49.44597	485842.4	507.3167
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	944.1090	5446.042	48.27190	214.4794	5594.545	96.35515	506.9570
#1	946.8628	5456.054	46.78078	214.7597	5655.753	96.86373	507.7027
#2	941.3550	5436.031	49.76302	214.1991	5533.336	95.84656	506.2112
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.000	5000.000	50.00000	200.0000	5000.000	100.0000	500.0000
Range	20.00000	40.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	976.5126	1060.585	989.5830	981.9656	Q7.521584	987.3853	39.85301
#1	979.2332	1063.314	991.7736	983.6482	Q7.552394	989.7348	40.58484
#2	973.7921	1057.856	987.3925	980.2830	Q7.490773	985.0357	39.12118
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	1000.000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	53.42997	59.25844	42.77824	Q1414.336
#1	52.25201	59.56684	40.38732	Q1416.807
#2	54.60793	58.95004	45.16915	Q1411.864
Errors	NOCHECK	NOCHECK	NOCHECK	QC Fail
Value				1000.000
Range				20.00000

Method: TRACE3 Sample Name: LR Operator: LCM
Run Time: 03/19/02 16:32:52
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	244892.9	4910.116	2077.315	9924.348	492.8799	2047.683	58.85677
#1	242271.2	4856.109	2056.649	9825.901	487.8227	2026.461	71.46818
#2	247514.6	4964.123	2097.981	10022.80	497.9372	2068.904	46.24535
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	250000.0	5000.000	2000.000	10000.00	500.0000	2000.000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	9697.831	9881.959	10199.37	505481.5	19682.67	122.4401	9597.481
#1	9595.422	9782.542	10096.37	500265.5	19511.90	134.6173	Q9498.554
#2	9800.240	9981.375	10302.37	510697.5	19853.44	110.2630	9696.409
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass
Value	10000.00	10000.00	10000.00	500000.0	20000.00		10000.00
Range	5.000000	5.000000	5.000000	5.000000	5.000000		5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	7262.893	10.38880	2018.048	1017.467	198.4229	2011.784	9987.070
#1	7193.501	10.38710	2002.502	1009.096	129.7624	1992.170	9879.093
#2	7332.284	10.39051	2033.594	1025.838	267.0834	2031.398	10095.05
Errors	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	7500.000		2000.000	1000.000		2000.000	10000.00
Range	5.000000		5.000000	5.000000		5.000000	5.000000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4765.599	4993.983	9654.962	4.295518	1966.449	9715.191	19752.04
#1	Q4719.706	4945.944	9553.237	5.154631	1947.799	9617.270	19585.95
#2	4811.492	5042.022	9756.686	3.436406	1985.099	9813.113	19918.13
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK
Value	5000.000	5000.000	10000.00		2000.000	10000.00	
Range	5.000000	5.000000	5.000000		5.000000	5.000000	

Elem	2/PB	1/SE	2/SE	SI
Avge	19647.99	2034.859	2009.643	-606.656
#1	19474.87	2020.564	1993.471	-601.543
#2	19821.10	2049.154	2025.814	-611.768
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report QC Standard 03/19/02 04:51:56 PM page 1

Method: TRACE3 Sample Name: CVCCV3 Operator: LCM
Run Time: 03/19/02 16:44:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50809.48	1018.127	1015.121	498.7726	50.28170	499.9783	100030.7
#1	50788.31	1016.911	1016.243	499.0825	50.19214	498.9504	99888.02
#2	50830.65	1019.342	1013.998	498.4627	50.37125	501.0063	100173.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	499.6587	496.4288	502.2569	49712.77	502.6721	98973.66	500.4688
#1	499.3801	496.3613	502.1956	49657.69	504.3009	98904.69	500.1906
#2	499.9374	496.4962	502.3182	49767.85	501.0432	99042.63	500.7469
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	493.3248	24907.24	1005.420	51.74923	100654.6	996.3970	505.0264
#1	494.1913	24914.58	1002.923	51.88864	100688.2	995.3021	504.4853
#2	492.4583	24899.90	1007.917	51.60982	100621.0	997.4920	505.5675
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	495.7391	511.1616	509.7369	502.7634	502.6471	503.2736	503.9180
#1	494.8005	510.4696	508.7829	500.6258	502.4496	503.2826	503.7673
#2	496.6777	511.8537	510.6908	504.9010	502.8445	503.2647	504.0688
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	502.0487	1010.720	1002.770	520.5732
#1	504.5674	1006.740	1001.015	519.5580
#2	499.5300	1014.701	1004.525	521.5883
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

nalysis Report QC Standard 03/19/02 04:59:34 PM page 1

ethod: TRACE3 Sample Name: BCCCB3 Operator: LCM
un Time: 03/19/02 16:52:02
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	3.705054	-.227608	.7857422	.2725639	.0014289	.2467209	21.64245
#1	5.874883	.9579642	.1863377	.3386245	-.021003	.3388143	26.18837
#2	1.535226	-1.41318	1.385147	.2065034	.0238610	.1546275	17.09652
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1339660	.3443482	.6739474	20.05800	-.412297	24.57311	.1937130
#1	.0720352	.4764309	.6373266	21.08202	-.009443	27.85338	.2228950
#2	.1958968	.2122655	.7105682	19.03398	-.815152	21.29284	.1645310
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6944013	3.947383	2.787916	.1474210	26.87996	3.165859	.3477277
#1	.5473169	1.748130	4.051672	-.240947	-47.8238	.4939444	.3895536
#2	.8414856	6.146636	1.524159	.5357887	101.5837	5.837774	.3059019
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.5514640	2.130665	2.887205	.1497336	.1261113	.1192821	-3.02463
#1	.7568617	2.192531	3.626828	-.219036	.1550244	.1930567	-2.64202
#2	.3460662	2.068799	2.147582	.5185031	.0971982	.0455076	-3.40723
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.8935258	.6818963	3.840584	-2.80884
#1	1.306506	2.920054	4.617209	-1.87254
#2	.4805458	-1.55626	3.063958	-3.74514
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

:ethod: TRACE3 Sample Name: S 203029-009-01-1/1 Operator: LCM
.un Time: 03/19/02 17:01:19
:omment: UG/L 2
:ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5.229654	-.936474	-1.61122	15.22831	-.019839	.0751304	14373.10
#1	5.508237	-2.54852	-.538238	15.25666	-.052143	.0111344	14393.43
#2	4.951072	.6755694	-2.68420	15.19995	.0124650	.1391265	14352.77
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	7.937249	-.053297	.7623869	-34.4542	-.675225	37451.59	.9025160
#1	7.354420	-.658333	.4057486	-39.2326	-.861809	37515.50	.9130037
#2	8.520079	.5517395	1.119025	-29.6758	-.488641	37387.66	.8920283
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.272928	10985.17	2.946583	.0628371	282766.9	.0650179	.0633341
#1	1.326464	10994.13	4.432135	-.454959	282890.1	1.533186	-.372430
#2	1.219392	10976.22	1.461031	.5806337	282643.6	-1.40315	.4990980
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.237290	173.7906	1.454694	1.177875	232.9340	.1935923	-.504935
#1	3.416032	172.6950	1.274904	-1.83175	233.3111	.0813813	-2.14496
#2	3.058549	174.8861	1.634483	4.187504	232.5568	.3058032	1.135088
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.760683	1.936973	3.450970	440.3669
#1	-.220548	1.308337	5.993614	440.3813
#2	-1.30082	2.565608	.9083252	440.3525
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 05:17:05 PM page 1

Method: TRACE3 Sample Name: D 203029-009-01-1/1 Operator: LCM
Run Time: 03/19/02 17:09:15
Comment: UG/L 2
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	11.26914	-.780231	-1.68594	15.95364	.0089876	.0888234	15292.74
#1	11.68740	.9295032	-2.27890	15.96990	.0493736	.0868420	15314.69
#2	10.85088	-2.48996	-1.09298	15.93739	-.031398	.0908048	15270.79
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	8.578215	.2099788	.5159756	-57.6772	.7616503	39923.83	.8442776
#1	8.407888	.0748594	.3892493	-63.2866	1.359024	39981.17	.7918156
#2	8.748542	.3450981	.6427020	-52.0677	.1642764	39866.48	.8967397
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.926465	11518.41	1.958411	.4089993	296911.7	.5922904	.0617088
#1	1.500982	11559.46	1.373477	.4549007	297982.8	-2.42972	.1815552
#2	2.351949	11477.37	2.543346	.3630979	295840.7	3.614305	-.058138
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.857222	183.0501	1.543149	2.343453	245.6173	.2217637	1.481061
#1	3.802310	183.9666	2.028696	1.999624	246.2164	.2777946	.9842319
#2	3.912133	182.1336	1.057603	2.687283	245.0181	.1657328	1.977890
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.4016160	1.446047	2.214176	464.2617
#1	1.546107	.4443154	1.837640	463.4359
#2	-.742875	2.447777	2.590714	465.0876
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: SP203029-009-01-1/1 Operator: LCM
Run Time: 03/19/02 17:17:10
Comment: UG/L 2
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	2461.189	22.09267	24.10799	262.2084	12.36407	24.87521	18220.90
#1	2497.389	21.43400	23.73717	265.9510	12.51963	25.30938	18470.65
#2	2424.988	22.75133	24.47881	258.4657	12.20852	24.44103	17971.15
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	131.7867	123.7117	124.9451	2420.804	248.2631	42938.69	125.5915
#1	133.6435	125.3526	126.8025	2463.114	252.0795	43545.03	127.2798
#2	129.9300	122.0708	123.0877	2378.494	244.4466	42332.36	123.9032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	123.5608	14227.55	24.61969	24.78210	305324.0	25.08299	124.9613
#1	124.8207	14435.09	25.47861	25.18889	309614.8	27.16938	126.9579
#2	122.3009	14020.00	23.76078	24.37532	301033.3	22.99659	122.9647
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	256.9221	428.9617	120.5006	1.574444	493.9836	.3355532	248.6172
#1	260.2168	434.5552	121.9806	1.997699	501.2172	.3756546	250.8551
#2	253.6276	423.3681	119.0207	1.151190	486.7500	.2954517	246.3793
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	248.0850	23.43363	25.21234	471.5167
#1	252.6907	24.71265	25.86124	479.7862
#2	243.4793	22.15461	24.56344	463.2470
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 05:32:56 PM page 1

Method: TRACE3 Sample Name: PS203029-009-01-1/1 Operator: LCM
Run Time: 03/19/02 17:25:05
Comment: UG/L 2
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1054.717	83.14899	83.06422	35.79311	10.45366	21.14642	19939.25
#1	1074.057	85.29452	83.10053	36.47768	10.60375	21.50591	20263.51
#2	1035.377	81.00346	83.02792	35.10853	10.30358	20.78694	19615.00
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	29.07207	31.63435	32.01604	1010.344	32.11075	43216.98	22.10267
#1	29.81154	31.99928	32.78951	1031.080	33.68348	43889.43	22.47869
#2	28.33260	31.26942	31.24257	989.6084	30.53801	42544.52	21.72665
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	42.90492	16346.48	74.13434	42.22841	289902.2	104.1893	21.60445
#1	43.74356	16588.56	73.95145	42.58598	294205.4	105.5533	21.89336
#2	42.06627	16104.40	74.31722	41.87084	285599.0	102.8252	21.31553
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	89.29715	248.4273	32.96634	107.3095	256.4978	21.17798	31.45882
#1	90.97635	252.1555	33.89324	109.2365	260.8879	21.51451	31.58015
#2	87.61795	244.6992	32.03945	105.3825	252.1076	20.84145	31.33749
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	32.43629	75.12344	73.63948	6106.215
#1	34.73472	74.28857	73.78255	6203.884
#2	30.13787	75.95832	73.49641	6008.546
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002056

Analysis Report 03/19/02 05:40:51 PM page 1

Method: TRACE3 Sample Name: SE203029-009-01-1/1 Operator: LCM
Run Time: 03/19/02 17:33:00
Comment: UG/L 10
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-6.69056	-2.15784	-4.79736	3.145292	.0213120	.0878089	2933.565
#1	-4.76353	-2.01238	-3.34479	3.203161	-.013209	.1506741	2965.752
#2	-8.61758	-2.30329	-6.24993	3.087424	.0558330	.0249436	2901.377
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	2.132894	-.086365	.3168200	.9914222	-.524183	7610.310	.3643538
#1	1.829884	.0044775	.6958327	1.445364	.8054782	7697.013	.3985633
#2	2.435906	-.177207	-.062193	.5374806	-1.85384	7523.609	.3301443
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	4.212511	2049.948	1.339521	.1812750	57604.69	2.175619	-.041921
#1	4.734797	2068.099	1.503793	.3393508	58312.91	2.672498	-.234427
#2	3.690224	2031.797	1.175248	.0231993	56896.47	1.678740	.1505851
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1.455896	36.39484	.0182730	-.072227	46.73584	-.024815	-.657274
#1	1.706130	36.58309	-.239534	.4027192	47.26219	-.082821	.4433898
#2	1.205662	36.20659	.2760798	-.547172	46.20950	.0331912	-1.75794
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.458052	1.602147	1.207863	88.26025
#1	.9861047	-.157903	2.334292	92.09356
#2	-1.90221	3.362197	.0814340	84.42695
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 05:48:46 PM page 1

Method: TRACE3 Sample Name: S 203029-014-01-1/1 Operator: LCM
Run Time: 03/19/02 17:40:55
Comment: UG/L 2
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1.730548	-.187722	.3868378	15.61208	.0037692	.1155137	16009.60
#1	2.599595	.0004145	.6282135	15.56879	-.009613	.0306046	16042.48
#2	.8615012	-.375859	.1454622	15.65536	.0171514	.2004228	15976.72
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	-.034413	-.005281	1.149825	-45.8466	.5572620	41367.27	45.51907
#1	.1101283	.2016662	1.088793	-45.0783	.4990889	41433.11	45.56585
#2	-.178954	-.212228	1.210856	-46.6149	.6154351	41301.43	45.47229
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6486191	12058.52	2.042464	.4832316	310707.3	-.401880	.7064753
#1	.0873034	12055.27	1.939089	.6571046	310692.2	.3124767	.7070906
#2	1.209935	12061.76	2.145839	.3093586	310722.4	-1.11624	.7058601
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.243605	186.0071	1.224230	.3255817	254.9872	.3529252	-1.58224
#1	2.163653	186.8016	1.623869	1.093705	255.1071	.3752258	-1.58053
#2	2.323556	185.2126	.8245911	-.442542	254.8673	.3306246	-1.58394
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.626663	-.345562	3.236093	375.8840
#1	1.538550	-1.40195	3.609192	375.9867
#2	1.714775	.7108303	2.862995	375.7812
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 05:56:41 PM page 1

Method: TRACE3 Sample Name: BLK(066) Operator: LCM
Run Time: 03/19/02 17:48:51
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	152.5199	1.875660	.8577895	.6502414	.0812274	-.070168	243.4372
#1	154.5504	3.020371	1.344476	.5818593	.0696295	-.155407	244.0331
#2	150.4895	.7309483	.3711033	.7186233	.0928253	.0150713	242.8413
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.365979	-.442083	6.211732	35.80480	1.104069	24.01311	1.792006
#1	1.650084	-.317560	5.917802	30.07843	1.912104	25.75769	1.797959
#2	1.081875	-.566607	6.505662	41.53118	.2960346	22.26853	1.786054
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	3.683525	53.77861	4.051512	1.069825	723.2812	-4.93335	.2777555
#1	3.153275	55.53497	3.756465	1.047319	770.8531	-2.64722	.4783685
#2	4.213775	52.02226	4.346559	1.092331	675.7094	-7.21947	.0771425
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.091984	8.718379	.4230576	25.03914	.8013982	.7392108	1.764603
#1	4.258154	9.230922	.8490042	24.43795	.8017788	.8039550	2.074518
#2	3.925815	8.205836	-.002889	25.64032	.8010175	.6744667	1.454689
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.7734730	-8.62185	10.38786	36.16825
#1	1.830584	-9.92573	10.59724	34.88166
#2	-.283638	-7.31798	10.17847	37.45485
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				50.00000
Low				-50.0000

Analysis Report 03/19/02 06:04:36 PM page 1

Method: TRACE3 Sample Name: BKS(066) Operator: LCM
Run Time: 03/19/02 17:56:46
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10117.94	95.17448	98.49817	1029.941	50.84876	101.3255	10432.92
#1	10105.87	94.97745	96.19751	1029.781	50.72426	101.0295	10414.24
#2	10130.02	95.37151	100.7988	1030.101	50.97327	101.6215	10451.61
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.00	120.0000	120.0000	1200.000	60.00000	120.0000	12000.00
Low	8000.000	80.00000	80.00000	800.0000	40.00000	80.00000	8000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	513.6758	506.4325	526.6414	10206.55	1008.905	9606.993	515.1315
#1	512.6459	505.0874	526.1637	10178.00	1008.773	9591.217	514.2294
#2	514.7057	507.8275	527.1191	10235.09	1009.037	9622.770	516.0335
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	600.0000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	400.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	500.1362	9424.863	94.50889	100.9298	10482.73	96.60429	519.0809
#1	498.5063	9431.243	93.30692	100.7797	10488.20	96.25912	518.5128
#2	501.7661	9418.484	95.71086	101.0798	10477.25	96.94946	519.6492
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	12000.00	120.0000	120.0000	12000.00	120.0000	600.0000
Low	400.0000	8000.000	80.00000	80.00000	8000.000	80.00000	400.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1013.515	969.6276	512.0421	528.3834	1020.516	2046.793	1014.176
#1	1010.603	969.0843	511.4323	525.5324	1020.087	2044.952	1015.304
#2	1016.428	970.1708	512.6520	531.2344	1020.946	2048.635	1013.047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1200.000	1200.000	600.0000	600.0000	1200.000	2400.000	
Low	800.0000	800.0000	400.0000	400.0000	800.0000	1600.000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1006.270	84.91867	99.30378	L6324.478
#1	1005.507	84.69212	97.61408	L6316.365
#2	1007.032	85.14523	100.9935	L6332.591
Errors	NOCHECK	NOCHECK	NOCHECK	LC Low
High				12000.00
Low				8000.000

002060

Analysis Report 03/19/02 06:12:31 PM page 1

Method: TRACE3 Sample Name: S 202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:04:41
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41908.52	1.701896	29.37248	295.8109	2.053962	.0960718	6011.214
#1	41958.63	-1.12721	28.55168	295.9961	2.017447	.0875938	6011.307
#2	41858.41	4.530999	30.19329	295.6255	2.090478	.1045499	6011.120
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	69.87285	7.783053	43.47667	40663.59	270.4514	4300.323	477.4518
#1	69.34358	7.173452	43.69929	40650.51	270.7921	4299.543	477.7255
#2	70.40211	8.392654	43.25405	40676.66	270.1107	4301.104	477.1782
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	29.78081	2555.898	.7747353	-1.06485	645.7963	-5.34891	134.2410
#1	29.43118	2549.387	.2962575	-2.01044	444.6237	-4.33525	133.4047
#2	30.13043	2562.407	1.253213	-.119253	846.9689	-6.36256	135.0772
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	920.8818	16.40265	2.502204	32.61268	50.94228	1113.856	270.4586
#1	921.0942	16.08667	2.778762	31.32682	51.10344	1114.374	270.9795
#2	920.6695	16.71864	2.225646	33.89853	50.78110	1113.338	269.9377
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	270.4475	-9.71090	6.017159	4867.925
#1	270.6981	-11.0790	5.983530	4826.127
#2	270.1969	-8.34279	6.050787	4909.724
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: D 202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:12:36
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	41021.96	-.354130	30.24903	279.5892	2.016336	.1347187	6138.368
#1	40931.93	-1.36056	30.32623	278.9917	2.066948	.0691071	6137.612
#2	41112.00	.6523035	30.17184	280.1868	1.965723	.2003303	6139.125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	67.24585	7.876829	45.27810	37431.50	287.5750	4437.628	485.4244
#1	67.75282	8.365830	45.38851	37433.06	287.9792	4442.580	485.1458
#2	66.73888	7.387828	45.16769	37429.95	287.1707	4432.675	485.7031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	28.83270	2632.728	3.068150	-1.03749	628.6544	-5.87761	134.5657
#1	29.31413	2634.461	2.235858	-.488977	798.9224	-5.59502	135.0507
#2	28.35126	2630.994	3.900441	-1.58601	458.3863	-6.16019	134.0807
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	971.6721	18.51200	2.556423	31.98789	48.23775	1115.235	286.4517
#1	973.2469	19.12749	2.535744	33.43471	48.16869	1117.690	287.1962
#2	970.0972	17.89651	2.577102	30.54107	48.30681	1112.780	285.7072
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	288.1362	-5.87890	7.541354	4444.080
#1	288.3704	-8.50418	7.605519	4428.834
#2	287.9021	-3.25363	7.477189	4459.326
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report QC Standard 03/19/02 06:28:22 PM page 1

Method: TRACE3 Sample Name: CVCCV3 Operator: LCM
Run Time: 03/19/02 18:20:32
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51178.73	1023.036	1022.048	499.8967	50.66031	500.4998	101456.3
#1	51223.24	1019.810	1021.740	500.1410	50.66946	500.7179	101521.9
#2	51134.21	1026.262	1022.356	499.6523	50.65115	500.2818	101390.7
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	500.0401	497.0302	508.0600	50069.11	500.0567	99176.58	502.2190
#1	500.1241	497.4683	508.2007	50098.18	501.2077	99234.21	502.5505
#2	499.9561	496.5921	507.9192	50040.05	498.9058	99118.94	501.8875
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	491.9978	25158.00	1006.278	51.73875	101788.0	1007.223	509.1423
#1	492.1844	25175.54	1007.666	51.62535	101757.4	1001.992	509.7717
#2	491.8112	25140.47	1004.890	51.85215	101818.7	1012.454	508.5129
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	495.9141	509.9675	508.1432	501.3741	504.7208	503.7054	502.1408
#1	496.0344	510.6025	507.9652	500.8614	505.2685	503.6727	502.8054
#2	495.7938	509.3326	508.3212	501.8867	504.1730	503.7382	501.4762
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	499.0143	1004.483	1007.175	522.5491
#1	500.4085	1005.432	1008.783	523.4202
#2	497.6202	1003.534	1005.567	521.6780
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 06:36:18 PM page 1

Method: TRACE3 Sample Name: BCCCB3 Operator: LCM
Run Time: 03/19/02 18:28:27
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-3.18936	-1.44131	-2.29669	.1375936	.0768311	.1457476	32.31742
#1	1.642982	-1.12165	-.710774	.2468303	.1055237	.2303584	39.66272
#2	-8.02171	-1.76097	-3.88260	.0283569	.0481385	.0611367	24.97212
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3199166	.4456432	.3016631	18.54776	-.401114	23.22602	.0885966
#1	.6564345	.6942137	.8233091	28.41544	-1.01541	31.96322	.1646639
#2	-.016601	.1970726	-.219983	8.680083	.2131824	14.48883	.0125293
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4335200	3.863688	1.186482	-.039597	-11.7778	-1.17943	.1091136
#1	.3285100	10.39652	1.720595	.3063631	76.26502	.8792855	.5348514
#2	.5385299	-2.66914	.6523691	-.385557	-99.8205	-3.23815	-.316624
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.4180665	1.644815	1.061017	1.373162	.1033917	.0776266	-.220426
#1	.5889019	1.966385	1.524027	.8725161	.1427113	.1932059	-.164646
#2	.2472311	1.323244	.5980066	1.873808	.0640720	-.037953	-.276207
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.491798	.8165563	1.371105	-4.69725
#1	-1.44113	3.944529	.6082894	-4.45848
#2	.4575372	-2.31142	2.133920	-4.93601
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Analysis Report 03/19/02 06:44:13 PM page 1

Method: TRACE3 Sample Name: SP202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:36:23
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	75122.27	76.54802	123.4212	1435.657	52.91938	100.1628	16772.53
#1	75095.26	76.77077	125.1302	1436.234	52.88786	100.2075	16766.78
#2	75149.29	76.32526	121.7123	1435.079	52.95090	100.1182	16778.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-1000.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	592.0063	511.1883	576.7998	48202.73	1281.845	14670.65	987.9277
#1	591.6263	511.1112	577.1159	48220.42	1284.158	14676.85	988.3255
#2	592.3865	511.2654	576.4836	48185.03	1279.532	14664.44	987.5299
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	527.1410	14358.65	88.75176	100.7778	10841.26	95.94662	676.0673
#1	528.0594	14350.56	87.24549	100.6364	10698.45	93.72968	676.4580
#2	526.2227	14366.75	90.25803	100.9192	10984.07	98.16357	675.6766
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2244.050	985.7836	498.2452	506.6324	1096.019	3655.092	1279.905
#1	2243.090	985.1946	497.4238	504.7021	1097.043	3660.342	1277.005
#2	2245.010	986.3726	499.0665	508.5627	1094.995	3649.842	1282.805
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1282.815	76.80401	94.72546	8785.848
#1	1287.734	73.34274	94.19667	8752.085
#2	1277.896	80.26528	95.25424	8819.611
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 06:52:09 PM page 1

Method: TRACE3 Sample Name: PS202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:44:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	42568.82	79.61706	108.2735	313.1441	12.09756	20.35710	11098.78
#1	42634.82	81.48431	106.4495	313.3495	12.10839	20.48472	11115.76
#2	42502.82	77.74981	110.0975	312.9387	12.08673	20.22948	11081.81
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	89.35013	38.39655	74.61631	41295.68	297.2807	9059.100	493.3499
#1	89.43967	38.69706	74.46630	41373.61	298.3499	9076.764	494.0967
#2	89.26059	38.09605	74.76730	41217.74	296.2115	9041.436	492.6032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	70.16765	7343.582	65.81921	39.81646	5688.122	96.35109	154.1888
#1	70.62510	7356.147	65.14478	39.86570	5812.018	95.07221	155.1101
#2	69.71020	7331.017	66.49364	39.76722	5564.227	97.62997	153.2676
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	988.9248	84.35245	33.46842	132.3359	71.34244	1114.888	295.8503
#1	991.4048	85.04147	34.19682	133.8306	71.46809	1115.709	297.2471
#2	986.4448	83.66342	32.74002	130.8413	71.21677	1114.067	294.4536
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	297.9955	49.42112	74.01782	10070.35
#1	298,9010	47.97293	73.73028	10072.36
#2	297.0901	50.86930	74.30537	10068.34
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002066

Analysis Report 03/19/02 07:00:05 PM

Method: TRACE3 Sample Name: SE202159-001-13-1/3 Operator: LCM
Run Time: 03/19/02 18:52:15
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	8500.041	.9187375	6.879615	58.46315	.4448128	.1409088	1219.092
#1	8554.367	1.357889	7.105236	58.88944	.4394746	.1169952	1225.406
#2	8445.716	.4795858	6.653994	58.03686	.4501510	.1648223	1212.779
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	525[illegible]	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.[illegible]000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	13.95243	1.686556	8.847400	8154.549	54.52451	892.6760	94.85446
#1	13.96474	1.482474	8.828522	8211.654	54.96907	897.6478	95.40448
#2	13.94012	1.890637	8.866278	8097.444	54.07996	887.7042	94.30444
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	6.369532	512.8285	1.442844	.0434628	129.1543	-1.02894	26.78867
#1	6.691601	515.7836	1.601601	.1899676	85.61464	-2.51830	27.10073
#2	6.047462	509.8735	1.284087	-.103042	172.6940	.4604266	26.47661
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	186.8667	4.113481	.6131307	8.850771	10.03254	216.7985	55.69666
#1	188.2972	4.337554	.8578219	8.787551	10.09292	218.4443	56.18043
#2	185.4363	3.889407	.3684396	8.913992	9.972163	215.1526	55.21290
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	53.93807	-2.08736	3.207617	929.9121
#1	54.36298	-1.74290	3.273507	954.0061
#2	53.51314	-2.43181	3.141727	905.8180
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: S 202159-002-04-1/1 Operator: LCM
Run Time: 03/19/02 19:00:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	99365.04	3.831895	44.43304	366.6456	2.452881	.4567425	8015.254
#1	99444.01	3.684270	46.16528	366.9061	2.454979	.3878016	8014.106
#2	99286.07	3.979521	42.70081	366.3851	2.450782	.5256834	8016.401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	126.3735	16.90413	67.48293	94499.30	252.6041	5938.451	399.2680
#1	126.5231	16.91295	67.62848	94500.95	250.6636	5936.590	399.3371
#2	126.2239	16.89530	67.33739	94497.66	254.5446	5940.312	399.1989
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	52.62340	4104.896	2.079208	.3210038	1040.170	-7.16844	277.2465
#1	52.35296	4111.480	.5394168	.5155979	945.3436	-7.36090	276.5801
#2	52.89385	4098.314	3.618999	.1264096	1134.996	-6.97599	277.9129
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	945.6313	21.31062	6.485156	29.79655	60.86732	1092.105	247.0525
#1	945.0497	21.25877	5.989115	29.78591	60.92062	1089.950	244.1908
#2	946.2131	21.36246	6.981196	29.80719	60.81402	1094.259	249.9141
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	255.3796	-10.4411	8.339004	5643.043
#1	253.8996	-10.1499	5.883657	5659.118
#2	256.8596	-10.7324	10.79435	5626.968
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 07:15:57 PM

Method: TRACE3 Sample Name: S 202159-005-05-1/1 Operator: LCM
Run Time: 03/19/02 19:08:06
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	208834.2	1.652953	58.54123	530.4531	5.085013	-1.02618	6575.557
#1	208820.9	1.764811	57.36033	530.6796	5.059341	-1.04056	6578.959
#2	208847.5	1.541095	59.72212	530.2266	5.110686	-1.01180	6572.155
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	362.1791	21.71941	63.04035	164110.2	121.4039	13794.38	258.6719
#1	362.5529	21.94447	63.26042	164162.0	122.7642	13801.08	258.8063
#2	361.8054	21.49434	62.82029	164058.4	120.0436	13787.68	258.5376
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	65.42000	14047.11	2.825662	-.155651	1118.830	-6.44849	585.8424
#1	65.46661	14032.98	1.560412	.1014137	1017.553	-7.43456	586.1440
#2	65.37340	14061.24	4.090911	-.412715	1220.106	-5.46241	585.5408
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	220.2432	70.75573	15.94216	32.33467	75.73236	2084.340	113.7672
#1	220.4282	69.73450	15.89081	33.48138	75.74555	2083.793	115.1161
#2	220.0581	71.77696	15.99351	31.18795	75.71917	2084.888	112.4184
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	125.2219	-2.77460	5.625380	5153.352
#1	126.5879	-3.19329	3.936832	5151.505
#2	123.8559	-2.35591	7.313927	5155.199
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 07:23:52 PM page 1

Method: TRACE3 Sample Name: S 202159-006-05-1/1 Operator: LCM
Run Time: 03/19/02 19:16:02
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	61182.88	1.623854	46.90020	225.6714	1.960151	.0337892	3337.060
#1	61311.25	.5907984	47.08878	226.2666	1.958860	-.025588	3343.628
#2	61054.50	2.656910	46.71161	225.0762	1.961443	.0931659	3330.492
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	92.30649	8.538079	157.1811	60786.24	179.1897	3919.257	359.5628
#1	92.49834	8.241301	157.3109	60930.32	178.5676	3929.386	360.3121
#2	92.11465	8.834858	157.0512	60642.16	179.8118	3909.128	358.8134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	29.49502	2946.397	5.853128	-.383091	933.7364	-4.30452	156.7503
#1	29.87750	2949.025	4.402184	-.144951	884.8875	-3.52783	157.1505
#2	29.11254	2943.769	7.304072	-.621231	982.5853	-5.08122	156.3500
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1665.200	22.35152	3.608697	29.86729	29.84631	831.5017	176.6816
#1	1667.747	23.10923	3.680687	30.75799	29.96750	834.6195	175.6654
#2	1662.653	21.59381	3.536706	28.97660	29.72513	828.3840	177.6979
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	180.4434	-7.12957	12.34408	5212.011
#1	180.0183	-9.87519	11.54051	5154.315
#2	180.8685	-4.38395	13.14766	5269.707
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002070

Analysis Report 03/19/02 07:31:48 PM page 1

Method: TRACE3 Sample Name: S 202159-007-05-1/1 Operator: LCM
Run Time: 03/19/02 19:23:57
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	39846.98	.8635791	34.53009	93.43185	2.080550	-.643710	1901.430
#1	39869.57	-.172375	34.10479	93.55458	2.093815	-.679571	1902.118
#2	39824.38	1.899533	34.95539	93.30913	2.067286	-.607850	1900.742
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	101.3812	7.067368	23.00020	77943.50	53.01599	4677.604	145.2435
#1	101.3530	6.944870	23.01926	77916.65	53.60180	4678.066	145.1562
#2	101.4094	7.189867	22.98114	77970.36	52.43018	4677.142	145.3307
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	15.28123	6265.321	5.322634	-.534712	979.3477	-8.73465	168.4980
#1	14.84134	6268.286	4.839401	-.490032	927.3514	-8.62912	168.0196
#2	15.72112	6262.356	5.805866	-.579393	1031.344	-8.84018	168.9764
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	85.84762	51.58215	4.025636	27.79434	26.47066	1146.937	51.93391
#1	85.90157	51.80423	3.922787	29.37064	26.47643	1145.862	52.77763
#2	85.79367	51.36008	4.128484	26.21804	26.46489	1148.011	51.09020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	53.55667	-3.35644	9.661848	3947.242
#1	54.01360	-2.58957	8.553530	3946.263
#2	53.09975	-4.12331	10.77017	3948.221
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002071

Analysis Report 03/19/02 07:39:43 PM page 1

Method: TRACE3 Sample Name: S 202159-008-05-1/1 Operator: LCM
Run Time: 03/19/02 19:31:53
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50461.68	3.241514	36.74307	223.2843	1.659036	.3502463	4960.566
#1	50531.30	.8053088	34.02496	223.6237	1.629350	.3389163	4956.192
#2	50392.06	5.677719	39.46119	222.9449	1.688722	.3615763	4964.940
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	69.45384	7.243132	50.70602	44221.77	171.6047	3947.845	303.8564
#1	69.19803	6.970925	50.78274	44215.46	172.6474	3944.655	304.0659
#2	69.70965	7.515338	50.62929	44228.08	170.5620	3951.034	303.6470
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	23.82844	2611.990	4.246441	-.624814	973.9349	-5.75145	126.9866
#1	23.07642	2613.374	3.038121	-.758859	845.0811	-6.75604	126.3465
#2	24.58045	2610.607	5.454761	-.490768	1102.789	-4.74686	127.6267
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	229.4534	21.37347	3.147819	30.87241	39.75055	827.5237	169.4770
#1	228.9889	21.50036	3.153786	30.37600	39.80922	830.9055	168.2670
#2	229.9179	21.24658	3.141851	31.36881	39.69188	824.1418	170.6870
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	172.6681	-5.46406	9.101296	4958.066
#1	174.8372	-10.6225	9.867973	4966.276
#2	170.4991	-.305671	8.334620	4949.856
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: S 202159-009-05-1/1 Operator: LCM
Run Time: 03/19/02 19:39:48
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	65567.25	2.035540	45.40049	194.4359	2.962785	-.704054	4139.308
#1	65070.56	.9325790	44.73779	192.8644	2.983001	-.722070	4111.429
#2	66063.93	3.138502	46.06319	196.0074	2.942568	-.686038	4167.186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	109.6794	21.22114	28.18293	95110.66	65.31606	5365.970	272.0530
#1	108.5405	21.35236	28.07619	94438.41	64.35226	5327.492	270.0501
#2	110.8183	21.08992	28.28967	95782.90	66.27986	5404.448	274.0560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	27.41241	6441.188	3.207393	-.344436	871.5083	-6.48561	172.9434
#1	26.82702	6397.530	1.633543	-.440262	870.9976	-5.08148	171.7646
#2	27.99781	6484.845	4.781244	-.248610	872.0190	-7.88975	174.1222
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	82.29655	50.00088	9.966898	26.89997	29.98776	1111.522	63.32037
#1	81.73235	49.82403	9.437148	27.06729	29.72404	1102.310	62.06856
#2	82.86074	50.17773	10.49665	26.73264	30.25148	1120.734	64.57219
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	66.31361	-7.09320	8.357295	3645.430
#1	65.49384	-6.93557	5.917673	3608.685
#2	67.13338	-7.25083	10.79692	3682.175
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 07:55:34 PM

Method: TRACE3 Sample Name: S 202159-010-05-1/1 Operator: LCM
Run Time: 03/19/02 19:47:44
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	34070.96	3.837273	28.41414	236.3907	1.344396	.8308460	14207.50
#1	34082.33	3.433967	28.53958	236.4574	1.359551	.8261750	14199.55
#2	34059.59	4.240578	28.28870	236.3240	1.329241	.8355169	14215.45
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	72.39613	5.589323	49.80596	40005.84	185.0842	3536.471	413.1731
#1	72.44119	5.537587	49.89310	39994.34	185.1543	3538.182	412.9663
#2	72.35107	5.641059	49.71883	40017.35	185.0140	3534.760	413.3799
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	21.94760	2577.266	3.239749	-.238811	1003.211	-6.29190	107.3254
#1	22.01050	2586.318	2.684429	.0117975	1059.098	-8.28350	107.5748
#2	21.88470	2568.214	3.795069	-.489419	947.3250	-4.30031	107.0760
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1904.632	18.32887	2.854378	30.72437	75.02737	770.8012	183.6031
#1	1903.143	18.12258	3.221227	29.45927	75.02102	771.9974	183.2217
#2	1906.120	18.53515	2.487529	31.98947	75.03371	769.6050	183.9845
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	185.8243	-7.61251	8.665574	4455.183
#1	186.1203	-10.1457	9.099169	4418.030
#2	185.5283	-5.07932	8.231979	4492.336
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

lethod: TRACE3 Sample Name: CVCCV3 Operator: LCM
un Time: 03/19/02 19:55:39
omment: UG/L
lode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51272.12	1023.350	1010.729	496.8311	50.74929	498.1374	101930.6
#1	51119.14	1022.030	1003.866	495.5686	50.62101	496.3654	101682.0
#2	51425.10	1024.670	1017.592	498.0936	50.87758	499.9094	102179.2
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.0609	495.1675	510.5297	50041.25	499.6248	98363.02	501.1687
#1	496.5322	494.2697	508.7749	49894.83	498.9381	98099.80	499.7797
#2	497.5895	496.0653	512.2846	50187.66	500.3115	98626.24	502.5577
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	485.2238	25248.70	996.4866	52.19546	102073.3	1003.696	508.4313
#1	485.4570	25182.17	993.2775	52.33889	101743.5	1001.276	506.3438
#2	484.9907	25315.22	999.6957	52.05204	102403.0	1006.116	510.5187
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	492.5929	506.9931	509.0093	500.5394	504.1123	500.3533	499.6834
#1	491.1444	505.3184	507.2836	498.6560	502.7354	499.3525	499.6621
#2	494.0413	508.6679	510.7351	502.4227	505.4892	501.3541	499.7047
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	499.5951	1000.910	994.2745	516.5829
#1	498.5758	996.6077	991.6121	514.8360
#2	500.6145	1005.213	996.9369	518.3299
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 08:11:25 PM page 1

Method: TRACE3 Sample Name: BCCCB3 Operator: LCM
Run Time: 03/19/02 20:03:34
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-10.6850	-1.46184	-1.76787	.1755819	.0594336	.2647139	45.41782
#1	-4.72228	.0333231	-2.16620	.1948950	.0697865	.2845309	50.39359
#2	-16.6477	-2.95701	-1.36953	.1562688	.0490808	.2448970	40.44206
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4270359	.2348946	.5380390	23.39463	-.077893	24.64463	.1424099
#1	.6379577	.2432024	.5240192	24.65411	-.950013	30.70446	.1526711
#2	.2161141	.2265867	.5520588	22.13515	.7942280	18.58480	.1321487
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6259819	1.649281	1.015323	.3560746	-28.6206	1.717362	-.005042
#1	.4148928	4.806745	1.754982	.3047968	39.96160	1.049242	-.005455
#2	.8370709	-1.50818	.2756642	.4073524	-97.2029	2.385482	-.004629
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.4176236	1.381692	.7622952	.9877773	.1099562	.1072576	-.885921
#1	.2239325	1.757594	1.060349	2.080619	.1425547	.1223783	-1.08026
#2	.6113146	1.005790	.4642415	-.105064	.0773578	.0921369	-.691582
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.3257792	-1.29344	2.169294	-4.81248
#1	-.885230	.8731558	2.195486	-4.95258
#2	1.536788	-3.46004	2.143102	-4.67237
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

Analysis Report 03/19/02 08:19:20 PM page 1

Method: TRACE3 Sample Name: S 202159-011-04-1/1 Operator: LCM
Run Time: 03/19/02 20:11:30
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	136973.7	1.248306	69.77861	275.8019	4.008789	-.869740	9021.615
#1	136688.7	3.510420	69.90302	275.0651	4.026287	-.963054	8997.968
#2	137258.6	-1.01381	69.65421	276.5386	3.991291	-.776427	9045.263
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	223.2831	18.29197	53.05836	165345.2	96.19290	9872.799	268.7056
#1	222.7955	18.06800	52.82259	164975.4	96.98525	9855.263	268.0290
#2	223.7708	18.51594	53.29412	165714.9	95.40057	9890.336	269.3821
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	46.18360	11073.18	2.481373	-.712384	1091.722	-7.62221	407.7147
#1	45.91629	11045.96	3.194161	-.744144	1080.646	-9.00380	407.1338
#2	46.45091	11100.39	1.768586	-.680624	1102.798	-6.24062	408.2957
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	173.0857	61.09862	11.95892	31.28996	62.70748	1776.656	94.24208
#1	172.5453	61.32844	11.95013	32.45901	62.58328	1773.590	95.16663
#2	173.6260	60.86880	11.96772	30.12092	62.83169	1779.721	93.31754
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	97.16794	-5.09024	6.266857	4220.804
#1	97.89420	-2.83506	6.208416	4213.388
#2	96.44167	-7.34541	6.325298	4228.220
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 08:27:16 PM page 1

Method: TRACE3 Sample Name: S 202159-012-04-1/1 Operator: LCM
Run Time: 03/19/02 20:19:25
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	108155.6	2.404145	46.67079	377.2365	2.561532	.6515040	8255.650
#1	108229.1	2.741787	46.63933	377.4710	2.598115	.7293425	8260.954
#2	108082.0	2.066503	46.70225	377.0020	2.524948	.5736656	8250.346
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	136.0271	17.89768	69.76854	103895.6	270.4205	6337.799	413.4580
#1	136.2289	18.09836	69.88349	103942.0	268.7191	6338.802	413.8071
#2	135.8253	17.69700	69.65358	103849.1	272.1220	6336.796	413.1090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	53.92758	4383.016	3.973876	.0161303	1028.351	-7.55094	295.9183
#1	53.39182	4391.815	4.250518	.2721082	998.9106	-6.11137	295.5768
#2	54.46335	4374.217	3.697234	-.239848	1057.790	-8.99051	296.2598
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	981.3283	21.20112	6.935959	28.92672	58.43387	1112.136	267.1198
#1	982.1953	21.03360	7.049698	29.99529	58.43402	1112.685	266.7503
#2	980.4611	21.36864	6.822220	27.85814	58.43371	1111.586	267.4892
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	272.0707	-3.32438	7.622713	4792.858
#1	269.7032	-.304262	6.527620	4786.569
#2	274.4382	-6.34449	8.717806	4799.148
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

nalysis Report 03/19/02 08:35:11 PM page 1

ethod: TRACE3 Sample Name: S 202159-013-05-1/1 Operator: LCM
un Time: 03/19/02 20:27:21
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	59641.81	-.623098	26.11785	125.3665	2.540343	-.157839	3116.846
#1	59646.20	.4337420	25.52112	125.3893	2.554008	-.087173	3121.878
#2	59637.41	-1.67994	26.71459	125.3437	2.526678	-.228504	3111.815
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	151.2328	11.44133	28.91611	69996.88	65.93658	6997.148	236.4357
#1	151.9264	11.16902	28.95811	70113.12	66.33656	7013.555	236.8576
#2	150.5392	11.71363	28.87410	69880.65	65.53661	6980.741	236.0139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	25.21207	8633.840	3.161334	-.470952	1035.379	-5.99656	207.1349
#1	25.74256	8627.042	2.550574	-.157394	1176.821	-6.99423	207.2790
#2	24.68157	8640.639	3.772095	-.784510	893.9382	-4.99888	206.9908
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	116.7390	61.91071	3.481457	26.73556	35.75740	1513.737	64.09727
#1	116.8772	62.22324	3.613196	28.79622	35.73365	1513.064	62.91414
#2	116.6009	61.59819	3.349719	24.67490	35.78115	1514.411	65.28041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	66.85593	-8.36889	8.926084	3876.741
#1	68.04741	-13.4168	10.53388	3866.526
#2	65.66444	-3.32101	7.318288	3886.957
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002073

Method: TRACE3 Sample Name: S 202159-014-05-1/1 Operator: LCM
Run Time: 03/19/02 20:35:17
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	180812.9	-.647646	52.62868	380.7582	2.996174	.9405599	6036.475
#1	178787.9	.7209797	53.07713	376.6173	2.981140	.9963770	5973.122
#2	182837.9	-2.01627	52.18024	384.8991	3.011207	.8847427	6099.828
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	195.4723	26.13734	76.32939	164826.9	133.6808	8434.106	458.2803
#1	193.5959	25.80784	75.61211	163087.5	132.1892	8344.069	453.2122
#2	197.3488	26.46685	77.04667	166566.4	135.1724	8524.144	463.3484
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	75.56355	5881.918	5.529742	.3253272	1159.576	-9.93262	334.8367
#1	74.21703	5828.474	5.306809	.3853491	1256.475	-8.15942	331.0818
#2	76.91008	5935.361	5.752676	.2653052	1062.678	-11.7058	338.5916
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1807.759	26.06928	8.133289	28.79977	52.99595	1480.414	131.6006
#1	1788.518	25.52642	8.308459	27.79561	52.41571	1464.543	129.8299
#2	1827.000	26.61212	7.958119	29.80393	53.57618	1496.285	133.3712
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	134.7207	-1.30646	8.947472	4727.352
#1	133,3686	-.331992	8.125893	4686.889
#2	136.0727	-2.28093	9.769051	4767.815
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

ethod: TRACE3 Sample Name: S 202159-015-05-1/1 Operator: LCM
un Time: 03/19/02 20:43:12
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50826.67	1.133639	38.08939	111.2396	2.439133	-.350374	2539.927
#1	50820.60	1.909486	37.79971	111.3446	2.416308	-.368488	2538.989
#2	50832.74	.3577914	38.37906	111.1347	2.461958	-.332259	2540.865
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	120.2915	16.99435	36.16618	80349.21	63.77455	5796.991	293.6133
#1	120.6251	16.75267	36.67485	80378.50	63.31802	5795.777	293.6783
#2	119.9579	17.23603	35.65750	80319.92	64.23109	5798.206	293.5483
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	20.96722	7484.122	3.385399	-.249352	972.7994	-7.31903	219.2883
#1	21.61103	7484.002	3.297014	-.383037	1014.757	-6.35606	219.5549
#2	20.32342	7484.241	3.473784	-.115666	930.8421	-8.28200	219.0218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	111.3817	55.29398	7.420672	27.04400	36.31912	1277.919	61.46932
#1	111.3619	55.32109	7.400341	25.22364	36.37326	1278.677	61.20740
#2	111.4015	55.26687	7.441001	28.86436	36.26498	1277.161	61.73125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	64.92677	-7.54038	8.847894	3299.814
#1	64.37290	-4.95389	7.422108	3297.214
#2	65.48063	-10.1269	10.27368	3302.414
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

:ethod: TRACE3 Sample Name: BLK53538 Operator: LCM
.un Time: 03/19/02 20:51:08
:omment: UG/L
!ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	19.15426	-3.26277	-1.94642	.2423308	.0804205	.0341791	201.7533
#1	20.75745	-2.45012	-1.56762	.2418227	.1021557	.0824570	201.3456
#2	17.55107	-4.07542	-2.32522	.2428390	.0586853	-.014099	202.1610
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.3957537	-.265643	1.273111	33.98774	.2051609	12.56736	.4086445
#1	.3120633	-.192331	1.530243	43.19430	.3971273	14.03322	.4375719
#2	.4594440	-.338955	1.015979	24.78117	.0131944	11.10151	.3797171
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.301662	20.39551	1.606216	.2622299	450.8284	-3.54501	.1220848
#1	-.665186	23.34777	2.346045	.1999164	507.0962	-4.11202	.3990197
#2	.0618619	17.44325	.8663873	.3245435	394.5606	-2.97800	-.154850
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.169024	6.707294	.1154541	-.081974	.4496355	.4165725	-.725811
#1	2.197940	7.107955	.3535796	-.902123	.4529173	.4188087	-.392390
#2	2.140108	6.306634	-.122671	.7381749	.4463537	.4143363	-1.05923
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.6703309	-5.93226	5.375150	H83.64281
#1	.7915707	-3.12401	5.080755	H85.71477
#2	.5490911	-8.74051	5.669545	H81.57086
Errors	NOCHECK	NOCHECK	NOCHECK	LC High
High				50.00000
Low				-50.0000

ethod: TRACE3 Sample Name: BKS53538 Operator: LCM
un Time: 03/19/02 20:59:04
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5182.827	47.41237	47.48196	507.6099	25.65363	51.51170	5443.792
#1	5217.132	47.71371	47.88857	510.3215	25.79654	51.79519	5474.751
#2	5148.522	47.11103	47.07535	504.8983	25.51072	51.22820	5412.833
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	6000.000	60.00000	60.00000	600.0000	30.00000	60.00000	6000.000
Low	4000.000	40.00000	40.00000	400.0000	20.00000	40.00000	4000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	254.2860	253.2686	262.8045	5216.024	511.7990	4918.745	257.2996
#1	255.9573	254.9381	263.9322	5246.002	513.6085	4943.989	258.6637
#2	252.6146	251.5990	261.6768	5186.046	509.9896	4893.502	255.9354
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	300.0000	300.0000	6000.000	600.0000	6000.000	300.0000
Low	200.0000	200.0000	200.0000	4000.000	400.0000	4000.000	200.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	246.0109	5014.378	50.18113	49.75968	5759.082	49.91798	260.9665
#1	247.9665	5038.083	50.68090	49.92612	5699.992	49.29231	262.2066
#2	244.0552	4990.674	49.68135	49.59324	5818.173	50.54365	259.7264
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	300.0000	6000.000	60.00000	60.00000	6000.000	60.00000	300.0000
Low	200.0000	4000.000	40.00000	40.00000	4000.000	40.00000	200.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	512.0626	493.3036	247.0064	L.5950512	509.3170	L.4430036	513.1454
#1	514.1482	495.9579	247.7201	L.1004996	511.7772	L.3633271	515.7709
#2	509.9771	490.6492	246.2927	L1.089603	506.8567	L.5226801	510.5199
Errors	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Low	NOCHECK
High	600.0000	600.0000	300.0000	300.0000	600.0000	1200.000	
Low	400.0000	400.0000	200.0000	200.0000	400.0000	800.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	511.1265	45.05191	52.74538	L97.36912
#1	512.5280	43.27704	54.38255	L98.56961
#2	509.7250	46.82677	51.10822	L96.16863
Errors	NOCHECK	NOCHECK	NOCHECK	LC Low
High				6000.000
Low				4000.000

ethod: TRACE3 Sample Name: S 203025-001-03-1/1 Operator: LCM
un Time: 03/19/02 21:07:00
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	6.839035	1.667776	-1.10734	3.663047	.1116317	-.066804	79731.72
#1	5.289733	.6573716	-.244397	3.626247	.0987744	-.104951	79686.56
#2	8.388336	2.678181	-1.97028	3.699847	.1244889	-.028657	79776.88
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7559447	.0282592	2.795177	20.96257	2.231988	2094.172	2.284514
#1	.6306815	-.280497	2.756388	15.24343	2.534859	2088.802	2.241099
#2	.8812081	.3370159	2.833964	26.68171	1.929117	2099.541	2.327929
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.166929	640.2631	2.729496	.7968287	11059.60	-2.41276	.7279665
#1	.2163084	635.4220	3.230278	.4318814	10984.74	-3.50313	.0126988
#2	-.550167	645.1041	2.228714	1.161776	11134.48	-1.32239	1.443234
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	5.121654	23.24378	.9927643	.6533992	495.5755	.7080247	2.906203
#1	4.965086	22.34225	.6004846	1.667505	496.0083	.6950127	1.567104
#2	5.278222	24.14531	1.385044	-.360706	495.1428	.7210366	4.245302
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1.894527	.8871328	3.650341	5468.864
#1	3.018380	-2.54499	6.117553	5469.344
#2	.7706742	4.319256	1.183128	5468.385
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

ethod: TRACE3 Sample Name: S 203025-002-07-1/3 Operator: LCM
ın Time: 03/19/02 21:14:55
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	52.38534	-1.33638	.4423196	5.908845	.0667773	-.099108	78601.75
#1	48.07008	-1.39138	-.989089	5.864032	.0732673	-.124868	77689.18
#2	56.70059	-1.28139	1.873728	5.953659	.0602873	-.073349	79514.32
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.377147	-.195934	2.054435	679.5113	-.072873	2060.528	103.7616
#1	1.292218	-.426102	2.124009	674.1622	-.080515	2036.058	102.5739
#2	1.462074	.0342328	1.984862	684.8605	-.065231	2084.998	104.9492
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.3124996	1152.094	2.994870	.1435022	7176.851	.5090083	1.397908
#1	.6117046	1140.841	1.381165	.1778224	7134.079	1.189751	1.063351
#2	.0132946	1163.347	4.608576	.1091821	7219.622	-.171735	1.732464
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.179539	19.37258	.8744437	.9281151	535.4524	1.162899	-.800569
#1	4.257047	19.16048	.8795561	.4629316	529.1952	1.069369	-1.24213
#2	4.102030	19.58467	.8693311	1.393299	541.7095	1.256428	-.359004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.2906209	-.567123	4.775528	10753.39
#1	.4999430	-3.88855	4.015665	10627.51
#2	.0812988	2.754299	5.535392	10879.27
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: D 203025-002-07-1/3 Operator: LCM
Run Time: 03/19/02 21:22:51
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	50.94209	-1.76551	1.610839	5.849503	.0717270	-.103478	78733.55
#1	51.05221	-2.59199	1.437868	5.860833	.0788773	-.046230	78753.92
#2	50.83198	-.939018	1.783810	5.838173	.0645768	-.160727	78713.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	1.352900	-.071092	2.262851	683.2965	.3889366	2069.762	117.4606
#1	1.589807	.1204629	2.425327	688.0135	.7305217	2070.026	117.4506
#2	1.115992	-.262647	2.100374	678.5795	.0473516	2069.497	117.4707
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.2006017	1113.253	2.722675	.4074412	7139.230	-2.39578	1.136938
#1	-.389530	1115.842	3.141483	.2899772	7154.542	-3.14906	1.139774
#2	.7907329	1110.664	2.303867	.5249053	7123.918	-1.64250	1.134101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.710981	29.45159	1.255219	.3261551	531.9060	1.116292	.4003999
#1	4.602006	29.32624	1.540620	1.128881	531.3362	1.050914	.5608608
#2	4.819957	29.57694	.9698189	-.476571	532.4758	1.181670	.2399390
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.3828558	-.216353	4.191907	10794.88
#1	.8150027	-1.07387	5.248876	10793.14
#2	-.049291	.6411634	3.134938	10796.62
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

nalysis Report QC Standard 03/19/02 09:38:38 PM page 1

ethod: TRACE3 Sample Name: CVCCV4 Operator: LCM
un Time: 03/19/02 21:30:47
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	52086.08	1032.745	1014.792	502.4177	51.01591	498.0197	102824.2
#1	52183.32	1035.747	1017.133	502.6831	50.95508	499.1748	103076.3
#2	51988.84	1029.744	1012.450	502.1523	51.07676	496.8645	102572.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.0203	494.4882	522.4828	50406.94	499.4013	97827.00	505.2500
#1	497.8544	495.7463	522.4362	50513.62	501.3834	98028.62	505.9397
#2	496.1862	493.2301	522.5295	50300.27	497.4192	97625.38	504.5602
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	481.0763	25679.68	1004.615	52.18681	103066.6	1017.097	512.5285
#1	482.2110	25694.20	1006.815	52.31952	103091.6	1014.462	512.6171
#2	479.9417	25665.17	1002.415	52.05410	103041.5	1019.732	512.4399
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	488.7212	510.9199	510.5044	495.9142	510.0945	501.9159	496.4803
#1	490.2476	511.7680	511.3475	497.3791	510.5427	502.2054	496.5533
#2	487.1950	510.0717	509.6613	494.4494	509.6463	501.6264	496.4072
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	500.8615	1009.453	1002.196	524.2455
#1	503.7982	1009.005	1005.719	526.6330
#2	497.9248	1009.900	998.6726	521.8581
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 09:46:34 PM page 1

Method: TRACE3 Sample Name: BCCCB4 Operator: LCM
Run Time: 03/19/02 21:38:44
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-19.2305	-2.22552	.3647057	.1547100	.0685218	.2229225	55.52270
#1	-14.8525	-1.41800	.6249077	.1930295	.0588815	.2273864	62.80942
#2	-23.6086	-3.03304	.1045038	.1163905	.0781620	.2184587	48.23598
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.1004032	-.210350	1.205632	16.87220	.0174103	24.69539	.1047487
#1	-.232726	-.488507	1.427145	19.23698	.3087454	32.99143	.1111507
#2	.4335321	.0678079	.9841186	14.50742	-.273925	16.39934	.0983467
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.205501	8.474981	1.968963	.0692142	126.5150	.0038706	.1934963
#1	1.248855	5.668393	2.162257	.0715109	18.39371	.2849143	-.235071
#2	1.162148	11.28157	1.775668	.0669175	234.6363	-.277173	.6220635
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.4101776	1.720218	.4565649	1.287244	.1328701	.0183537	-1.74911
#1	.3896231	1.186983	.6104398	.6131510	.1794205	-.050082	-1.61277
#2	.4307320	2.253453	.3026899	1.961337	.0863198	.0867893	-1.88545
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	.9003228	1.358234	2.273980	-3.87808
#1	1.269156	.6851394	2.900468	-4.18278
#2	.5314898	2.031329	1.647493	-3.57337
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

002088

Analysis Report 03/19/02 09:54:30 PM page 1

Method: TRACE3 Sample Name: SP203025-002-07-1/3 Operator: LCM
Run Time: 03/19/02 21:46:40
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	5325.871	46.30666	50.82409	522.9187	25.87188	51.10000	83529.16
#1	5327.972	47.20601	51.45336	523.8098	25.88238	51.22411	83645.59
#2	5323.770	45.40732	50.19482	522.0277	25.86138	50.97589	83412.73
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	255.4498	253.4486	269.6285	5898.537	511.2505	6914.290	373.8871
#1	255.4912	254.0235	270.1190	5906.528	511.9979	6916.692	374.3270
#2	255.4084	252.8736	269.1380	5890.546	510.5031	6911.889	373.4472
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	245.7032	6387.957	50.84774	50.61975	12662.74	49.82029	265.4413
#1	245.5590	6400.238	52.46583	50.98154	12746.91	47.62903	265.8561
#2	245.8474	6375.675	49.22964	50.25795	12578.56	52.01156	265.0265
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	509.8127	512.7474	249.7723	2.576635	1048.989	1.199897	512.4724
#1	510.2995	513.5673	249.5089	1.331629	1050.377	1.236471	511.8802
#2	509.3260	511.9275	250.0356	3.821641	1047.602	1.163323	513.0646
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	510.6392	45.06549	53.73843	10876.62
#1	512.0565	44.95049	56.22306	10888.32
#2	509.2220	45.18048	51.25380	10864.93
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

002089

Method: TRACE3 Sample Name: PS203025-002-07-1/3 Operator: LCM
Run Time: 03/19/02 21:54:35
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	1099.831	80.66788	81.71989	26.19022	10.30689	20.58808	81248.94
#1	1101.334	80.62114	80.24839	26.19908	10.29248	20.47102	81301.87
#2	1098.328	80.71461	83.19141	26.18135	10.32131	20.70515	81196.02
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	21.28784	29.96999	34.68297	1681.012	30.43800	6800.739	121.8264
#1	21.29063	30.01130	34.43470	1678.244	30.14462	6800.820	121.9138
#2	21.28505	29.92868	34.93125	1683.781	30.73137	6800.659	121.7390
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	39.63457	6365.130	68.87390	41.89842	12270.65	101.2428	22.03200
#1	39.67611	6371.559	69.63230	41.87784	12289.65	102.6107	22.04665
#2	39.59302	6358.702	68.11551	41.91900	12251.64	99.87492	22.01734
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	85.49374	89.80260	32.63296	102.4441	545.1349	21.61841	29.43147
#1	85.61887	90.01524	33.06122	102.6867	545.4915	21.56382	29.18759
#2	85.36861	89.58994	32.20470	102.2016	544.7783	21.67299	29.67535
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	30.94091	65.24124	70.68988	15950.22
#1	30.62278	67.09173	70.90224	15961.95
#2	31.25903	63.39075	70.47753	15938.48
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 10:10:22 PM

Method: TRACE3 Sample Name: SE203025-002-07-1/3 Operator: LCM
Run Time: 03/19/02 22:02:31
Comment: UG/L 5
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-10.1693	1.431076	-1.20521	1.258904	.0960613	.2023122	15484.72
#1	-11.5406	1.511131	-1.26408	1.165736	.1167988	.2005117	15350.95
#2	-8.79807	1.351020	-1.14633	1.352072	.0753237	.2041128	15618.49
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4955880	.0275265	1.511867	142.2576	-.349845	423.5227	20.52840
#1	.5653514	-.035096	1.377194	132.8290	-.307342	418.6700	20.36375
#2	.4258246	.0901488	1.646541	151.6863	-.392348	428.3753	20.69305
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4848714	220.0436	.9400039	.3260078	1541.875	-1.65447	.6986224
#1	-.098389	220.0056	1.852531	.1499455	1514.043	-1.38424	.7291403
#2	1.068131	220.0817	.0274772	.5020703	1569.706	-1.92469	.6681045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1.282085	4.400391	.9865021	-.117057	106.3165	.1043215	2.288859
#1	1.423448	4.032384	.8346644	-.360115	105.3446	.1431042	3.164930
#2	1.140722	4.768397	1.138340	.1260013	107.2883	.0655389	1.412787
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.66955	1.224227	.7975380	2149.619
#1	-2.04383	6.698971	-.571038	2127.151
#2	-1.29527	-4.25052	2.166114	2172.087
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 10:18:17 PM

Method: TRACE3 Sample Name: S 203025-003-03-1/1 Operator: LCM
Run Time: 03/19/02 22:10:27
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	107.5016	.5241162	357.0853	6.024347	.2372388	.0317406	67072.36
#1	107.6483	.1436797	356.2311	6.029395	.2018311	.1694671	67116.69
#2	107.3548	.9045528	357.9395	6.019299	.2726465	-.105986	67028.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	8.224665	1.616735	2.645511	-18.0306	.2354801	114039.9	8.955843
#1	8.041032	1.620351	2.861646	-20.8218	1.152752	114109.6	8.977735
#2	8.408297	1.613119	2.429376	-15.2395	-.681792	113970.3	8.933951
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.597625	67860.84	1.330169	.5882469	H1174699.	-3.26322	10.80585
#1	.8395349	67976.59	2.538703	.7341950	H1176997.	-2.97587	10.83103
#2	2.355715	67745.11	.1216357	.4422989	H1172401.	-3.55057	10.78067
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	4.176073	2019.564	2.172032	2.258668	826.1500	27.68742	1.223225
#1	4.031529	2020.748	1.873382	.2124435	827.3987	27.48724	.3410437
#2	4.320617	2018.380	2.470682	4.304894	824.9013	27.88761	2.105407
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.258839	-1.89052	2.940139	32970.59
#1	1.558157	-2.97495	5.295155	32874.62
#2	-2.07583	-.806085	.5851238	33066.57
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: S 203025-004-03-1/1 Operator: LCM
Run Time: 03/19/02 22:18:23
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	28.15229	4.232576	-3.05291	8.016327	.0823333	.0805416	64687.15
#1	28.41784	3.026302	-1.35956	8.022999	.0701612	.0503669	64757.85
#2	27.88674	5.438851	-4.74625	8.009656	.0945054	.1107163	64616.46
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.6594318	.0774103	2.614042	201.2753	-.840787	2035.227	3.322167
#1	.5951680	-.133107	2.666443	197.2781	.0483441	2042.283	3.317674
#2	.7236956	.2879273	2.561640	205.2724	-1.72992	2028.171	3.326660
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.6399947	552.9067	3.379021	.3675991	8526.642	-.316469	.7816042
#1	.5952067	554.3037	4.036573	.2484292	8658.002	1.793876	.6613077
#2	.6847826	551.5097	2.721470	.4867689	8395.281	-2.42681	.9019006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	9.035614	22.68797	1.465434	.6641660	442.2824	.6857346	-1.65454
#1	8.927246	22.55856	1.321611	-.149741	442.6986	.5992030	.3032441
#2	9.143983	22.81737	1.609257	1.478073	441.8662	.7722663	-3.61231
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.434321	-2.18056	6.158455	7348.256
#1	-.079496	-.095181	6.102163	7371.592
#2	-.789147	-4.26594	6.214747	7324.919
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: S 203025-005-03-1/1 Operator: LCM
Run Time: 03/19/02 22:26:19
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	20.82086	1.826303	-1.68341	3.906733	.0998485	.0383427	75174.77
#1	19.86054	1.464371	-.962125	3.928285	.0861945	.0478039	75109.80
#2	21.78119	2.188236	-2.40469	3.885180	.1135024	.0288816	75239.72
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.7185789	-.136897	2.947768	36.30767	2.911488	2208.434	1.050778
#1	.6525146	.0435938	3.158152	38.79828	3.439383	2205.089	1.036802
#2	.7846431	-.317389	2.737385	33.81706	2.383594	2211.778	1.064755
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.217506	1085.522	2.124688	.1981435	9839.606	-2.82831	.9495285
#1	-.334969	1081.673	3.350587	.2566214	9773.199	-2.00748	.5036057
#2	-.100043	1089.372	.8987884	.1396656	9906.014	-3.64913	1.395451
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	7.411206	21.87965	1.817579	1.613367	554.6304	.6585570	2.356638
#1	7.372608	21.51155	1.693595	.8990908	554.0031	.5833652	2.743591
#2	7.449805	22.24776	1.941564	2.327644	555.2577	.7337488	1.969685
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	3.188560	.0851453	3.144172	7670.062
#1	3.786894	1.517721	4.266733	7662.110
#2	2.590226	-1.34743	2.021610	7678.015
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Analysis Report 03/19/02 10:42:05 PM page 1

Method: TRACE3 Sample Name: S 203025-006-03-1/1 Operator: LCM
Run Time: 03/19/02 22:34:15
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	117.2672	-.415998	368.4768	6.104911	.2498715	.0199633	66548.55
#1	115.7802	.2666390	366.9649	6.049825	.2388335	.0087390	66112.79
#2	118.7541	-1.09864	369.9888	6.159997	.2609096	.0311877	66984.32
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	8.030493	.7638745	2.590585	-20.0320	-1.53718	112015.2	9.137571
#1	7.759103	.6091860	2.493736	-22.6893	-1.23682	111308.3	9.117411
#2	8.301883	.9185631	2.687435	-17.3747	-1.83754	112722.2	9.157731
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	1.660391	68544.19	3.117801	.0494938	H1171796.	-2.96007	10.54993
#1	1.658557	68163.73	1.830839	-.317365	H1166984.	-3.22304	10.45352
#2	1.662225	68924.64	4.404762	.4163530	H1176607.	-2.69711	10.64635
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.412964	1979.798	1.521053	2.328118	826.3714	27.75716	-.272631
#1	3.809468	1970.349	1.576725	.7254085	821.3271	27.56417	-.006236
#2	3.016459	1989.247	1.465382	3.930828	831.4157	27.95014	-.539027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-2.16983	.1432335	4.604674	32998.43
#1	-1.85249	-.402649	2.947213	32647.32
#2	-2.48717	.6891163	6.262135	33349.54
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

Method: TRACE3 Sample Name: S 203025-007-03-1/1 Operator: LCM
Run Time: 03/19/02 22:42:10
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10.24659	-1.47497	-.575629	.2562869	.0847625	.0285154	186.1563
#1	11.22248	-1.76180	-1.30326	.2947370	.0727608	.0097802	190.4261
#2	9.270698	-1.18815	.1519990	.2178368	.0967642	.0472505	181.8866
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	5250.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.4293650	-.063236	1.822737	25.55648	-.157308	31.20719	.4848250
#1	.2568744	-.430869	1.891193	28.30133	-.104909	34.68506	.4850256
#2	.6018557	.3043964	1.754280	23.01163	-.209707	27.72933	.4846245
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	-.077605	53.07660	3.096208	.6414003	810.9202	-2.59739	.0793888
#1	-.146303	52.54760	3.923219	.8488529	788.2098	-1.51663	.1578651
#2	-.008907	53.60561	2.269198	.4339478	833.6306	-3.67816	.0009125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	7875.000	105000.0	2100.000	1050.000	525000.0	2100.000	10500.00
Low	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	2.776579	7.693090	-.240645	.0394012	.5457174	.1841420	-.073086
#1	2.840147	7.823015	-.288231	.8878199	.5840961	.1611563	.2201190
#2	2.713012	7.563166	-.193058	-.809018	.5073387	.2071277	-.366292
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5250.000	5250.000	10500.00	10500.00	2100.000	10500.00	
Low	-20.0000	-15.0000	-5.00000	-25.0000	-5.00000	-10.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.199768	-1.26807	5.277926	196.4597
#1	-.267773	-2.66708	7.217944	217.0875
#2	-.131764	.1309361	3.337908	175.8319
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				52500.00
Low				-50.0000

lethod: TRACE3 Sample Name: BLK53649 Operator: LCM
un Time: 03/19/02 22:50:06
omment: UG/L
lode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-7.34508	-.803029	-2.83356	.2810266	.0912263	.0863871	208.1094
#1	-7.38469	-1.71141	-2.32685	.2426392	.0752198	.2139468	208.8433
#2	-7.30548	.1053496	-3.34028	.3194141	.1072328	-.041172	207.3756
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	200.0000	20.00000	10.00000	5.000000	2.000000	3.000000	1000.000
Low	-200.000	-20.0000	-10.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.0023144	-.024638	1.095265	19.57948	.1884281	16.19713	.3729748
#1	.0205890	-.145093	.9142123	19.11717	.5988885	15.77989	.3551672
#2	-.015960	.0958164	1.276318	20.04179	-.222032	16.61437	.3907823
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Low	-5.00000	-5.00000	-10.0000	-100.000	-3.00000	-250.000	-5.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4160595	7.992770	.8099545	.3669887	452.2740	-.246119	-.036300
#1	.4058108	5.576528	-1.57868	.3529460	435.8188	-1.46241	-.155772
#2	.4263081	10.40901	3.198588	.3810314	468.7291	.9701765	.0831724
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10.00000	250.0000	5.000000	3.000000	2500.000	10.00000	10.00000
Low	-10.0000	-250.000	-5.00000	-3.00000	-2500.00	-10.0000	-10.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	3.381927	5.871244	.1755622	.3871692	.5693502	.1753206	1.061274
#1	3.135169	5.597243	-.027095	-1.08862	.5696514	.1224979	.9144716
#2	3.628684	6.145246	.3782191	1.862958	.5690491	.2281433	1.208076
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	NOCHECK
High	20.00000	15.00000	5.000000		5.000000	20.00000	
Low	-20.0000	-15.0000	-5.00000		-5.00000	-20.0000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-.248310	-.953269	1.691162	49.60752
#1	.4407813	-2.93226	-.902274	H53.94318
#2	-.937401	1.025722	4.284598	45.27186
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				50.00000
Low				-50.0000

nalysis Report 03/19/02 11:05:52 PM page 1

ethod: TRACE3 Sample Name: BKS53649 Operator: LCM
un Time: 03/19/02 22:58:02
omment: UG/L
ode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	10085.99	97.04137	98.18770	995.0928	51.19959	101.9435	10573.71
#1	10110.31	96.83124	98.18298	995.9538	51.20016	102.0798	10579.14
#2	10061.66	97.25148	98.19243	994.2317	51.19903	101.8072	10568.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.00	120.0000	120.0000	1200.000	60.00000	120.0000	12000.00
Low	8000.000	80.00000	80.00000	800.0000	40.00000	80.00000	8000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	501.4697	503.1326	515.7490	10150.65	1006.498	9568.230	514.6035
#1	501.6974	503.0933	516.5163	10153.86	1006.063	9570.980	514.8158
#2	501.2419	503.1718	514.9816	10147.44	1006.933	9565.481	514.3912
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	600.0000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	400.0000

Elem	NI	K	SE	AG	NA	TL	V
Avge	490.0149	9738.639	96.85912	102.2373	10514.80	96.74694	515.4352
#1	489.8921	9759.550	96.29371	102.1414	10531.81	97.49090	515.8792
#2	490.1378	9717.727	97.42451	102.3332	10497.78	96.00298	514.9913
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	12000.00	120.0000	120.0000	12000.00	120.0000	600.0000
Low	400.0000	8000.000	80.00000	80.00000	8000.000	80.00000	400.0000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	1004.938	1007.198	506.9889	498.2520	994.1183	1991.504	1008.621
#1	1004.652	1007.299	506.0330	497.5464	994.7983	1992.239	1007.267
#2	1005.225	1007.097	507.9448	498.9576	993.4384	1990.768	1009.974
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	1200.000	1200.000	600.0000	600.0000	1200.000	2400.000	
Low	800.0000	800.0000	400.0000	400.0000	800.0000	1600.000	

Elem	2/PB	1/SE	2/SE	SI
Avge	1005.436	91.93892	99.31897	10593.36
#1	1005.461	92.32895	98.27582	10613.09
#2	1005.411	91.54890	100.3621	10573.64
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass
High				12000.00
Low				8000.000

Analysis Report QC Standard 03/19/02 11:13:49 PM page 1

Method: TRACE3 Sample Name: CVCCV4 Operator: LCM
Run Time: 03/19/02 23:05:58
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	51816.89	1028.730	1016.399	502.8191	51.13844	497.9556	102490.2
#1	51935.16	1029.752	1024.951	503.6227	51.26927	498.9177	102785.5
#2	51698.61	1027.708	1007.848	502.0155	51.00760	496.9936	102194.9
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	1000.000	1000.000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	497.7004	495.8636	521.2120	50357.28	498.1429	98066.84	505.0529
#1	498.5678	496.0762	522.6464	50459.03	499.8081	98246.12	506.3148
#2	496.8329	495.6511	519.7776	50255.52	496.4776	97887.55	503.7910
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	NI	K	SE	AG	NA	TL	V
Avge	484.0005	25628.67	1006.338	52.36910	103080.7	1012.217	513.4034
#1	484.7109	25651.66	1005.970	52.44916	103250.5	1013.399	513.6124
#2	483.2901	25605.68	1006.706	52.28905	102910.9	1011.034	513.1945
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	25000.00	1000.000	50.00000	100000.0	1000.000	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	490.6510	511.6954	512.0376	494.7426	508.7722	503.0009	498.4168
#1	492.0087	512.7068	512.4853	494.5685	509.8163	503.7139	499.3639
#2	489.2933	510.6840	511.5899	494.9167	507.7282	502.2879	497.4697
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	498.0055	1015.136	1001.939	528.9045
#1	500.0299	1016.315	1000.797	529.7116
#2	495.9812	1013.957	1003.081	528.0975
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				500.0000
Range				10.00000

Analysis Report QC Standard 03/19/02 11:21:45 PM page 1

Method: TRACE3 Sample Name: BCCCB4 Operator: LCM
Run Time: 03/19/02 23:13:54
Comment: UG/L
Mode: CONC Corr. Factor: 1

Elem	AL	SB	AS	BA	BE	CD	CA
Avge	-17.8159	-.627209	-1.12931	.1919455	.1127621	.1587700	49.10017
#1	-15.3159	.7295935	-1.08711	.2722011	.1452539	.2089825	56.00058
#2	-20.3158	-1.98401	-1.17150	.1116899	.0802703	.1085574	42.19976
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	15.00000	3.000000	1000.000

Elem	CR	CO	CU	FE	PB	MG	MN
Avge	.0933016	.4084958	1.355455	14.58505	-1.13899	22.73566	.1255134
#1	.0754935	.3523172	1.246261	23.15027	-1.05578	29.54345	.1501027
#2	.1111098	.4646744	1.464649	6.019834	-1.22220	15.92786	.1009242
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	NI	K	SE	AG	NA	TL	V
Avge	.4224638	8.157099	.7589837	.0977756	78.62306	-1.56698	.0839420
#1	.3767366	9.155008	.2329894	.2040338	77.81935	-1.70771	-.229910
#2	.4681910	7.159189	1.284978	-.008483	79.42677	-1.42625	.3977945
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	10.00000	250.0000	5.000000	3.000000	1000.000	10.00000	10.00000

Elem	ZN	B	MO	SN	SR	TI	1/PB
Avge	.1104523	1.434476	.7947443	1.256804	.1365131	.1651558	-1.16266
#1	.0146620	1.884645	.9748602	2.898826	.1729652	.2614644	.6648190
#2	.2062425	.9843074	.6146283	-.385218	.1000611	.0688472	-2.99014
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	20.00000	15.00000	5.000000	20.00000	5.000000	20.00000	

Elem	2/PB	1/SE	2/SE	SI
Avge	-1.12746	-1.74117	2.008710	-2.06937
#1	-1.91639	-.515034	.6066498	-1.27183
#2	-.338542	-2.96731	3.410771	-2.86691
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value				.0000000
Range				50.00000

00210

GPL Laboratories, LLLP *Document Control No: GP_M_094*

Metals Preparation & Sample Description Log

Date: 3-8-02 Prep: 200.7 / 3005A / 3020A / 3050B / 3010A / ILC03.1 / ILM04.1 / ILM05.1 Batch No: 9404 7

Analyst: ~~MSS~~ MSS Comments: Hot Plate Digestion

Reviewed by: RA Date: 3-20-02 Spike Witness: [illegible] Prep. Seq: 53538

	GPL Work Order No.	Sample	Frac	SIZE mL (g)	Final Vol. (mL)	Matrix S, W Other	Color Before	Color After	Clarity Before or Soil Texture	Clarity After Clear, Cloudy, Opaque	Soil Artifacts or Water pH
							R, Bl, Y, G, O, V, W, Colorless, Br, Grey, Bk.				
1	BLK	047	—	100	100	W	colorless	colorless	clear	clear	—
2	BKS	047	—								
3	203025	001	03-1/1								
4		002	07-1/3								
5		DUP									
6		SPIC									
7		003	03-1/1				BROWN	YELLOW			
8		004					colorless	colorless			
9		005									
10		006					BROWN	YELLOW			
11		007					colorless	colorless			
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

03-08-02

LCS ID / Amt. Added (ml , g): 0.1ml (15603, 15605) 1.0ml ppm	HNO3(1+1) ID: —
Spiking ID / Amt Added (ml): 0.1ml (15603, 15605, 1.0ml ppm	HNO3(conc) ID: GP-057-005-09
	HCl(conc) ID: —
Temperature, C: 94°C	HCl(1+1) ID: GP-057-090-05
	Peroxide ID: ~~GP-057-MSS~~