(AXIS Realty - all buildings demolished 1000 2000 130061 see basement cabinet

U.S. HYDROGEOLOGIC, INC.

328 MAIN MALL
POUGHKEEPSIE, NY 12601
(914) 473-0074
FAX (914) 485-5106

November 11, 1994

Barry S. Cohen
McMillan, Rather Bennett & Rigano, P.C.
Corporate Center
395 North Service Road
Melville, New York 11747

NY Labs
130061
OCT 31 1995

RE: HydroPunch Sampling ~~Results~~
Westbury Labs Site, Westbury, New York
U.S. Hydro File No. WW01880
(between & Merrick Ave & Meadowbrook)

Dear Mr. Cohen:

U.S. Hydrogeologic, Inc. (U.S. Hydro) is pleased to provide this letter report summarizing our recent activities at the referenced site. This report is based on our field activities of October 3, 1994, and subsequent laboratory analysis of groundwater samples by Laboratory Resources, Inc. It should be noted that at the request of Ms. Ann Marie Collins of GenCorp/Aerojet, additional metals analysis of laboratory-filtered groundwater samples was authorized on November 4, 1994. The results of these analyses will be available on or about November 22, 1994 and will be the subject of a subsequent transmittal.

GROUNDWATER SAMPLING

A total of 5 soil borings (Attachment A) were advanced using 3-1/4" inner diameter (I.D.) hollow stem augers and a CME-75 truck mounted drill rig for the purpose of collecting groundwater samples. Groundwater samples were collected from each borehole, with the exception of H-2, with dedicated HydroPunch II® samplers at depths ranging between 20 and 35 feet below ground surface throughout the site. A groundwater sample was not obtained from borehole H-2 due to insufficient yield upon driving the HydroPunch II® sampler. A relatively poor yield was typically encountered at each sampling location and, coupled with the amount of water required for analysis, slowed progress to the extent that a planned sixth boring was canceled due to darkness. The groundwater table was encountered at depths ranging from 18 feet below ground surface along the southern portion of the site (H-1, H-2, H-3) to 29.5 feet below ground surface at boring H-5.

The final boring locations were based on discussions with Ms. Marianna Thorpe (P.C.I., Inc.) and Mr. Barry Cohen (McMillan, Rather, Bennett & Rigano, Inc.) and U.S. Hydro personnel in the field. Drilling and HydroPunch® services were provided by Connecticut Test Borings, Inc of Seymour Connecticut. All downhole equipment was decontaminated

in accordance with ASTM Standard D 5088-90 to minimize the potential for cross contamination between boreholes.

Soil cuttings were logged for lithologic description purposes only using the Unified Soil Classification System and field screened for volatile organic compounds using a Microtip HL-2000 photoionization detector (PID). General strata descriptions of materials encountered and PID readings are provided in boring logs prepared by a U.S. Hydro geologist (Attachment B). No soil sampling or analysis was conducted during the project.

Groundwater samples were collected by driving a dedicated HydroPunch II® sampling device three feet below the final depth of the augers and removing groundwater from the sampling interval with a disposable polyethlyene bailer. During the this sampling event no free product, odor, or sheen were noted in any of the samples collected. Samples were placed in laboratory-provided glassware, stored in an ice cooler and transported under chain -of custody documentation to a New York State Department of Health approved laboratory for analysis. A field blank and trip blank were also maintained for QA/QC purposes.

LABORATORY ANALYSIS

A total of 4 groundwater samples were collected and submitted for subsequent laboratory analysis for the following parameters:

- Volatile organic compounds (EPA Method 8240)
- Polynuclear aromatic hydrocarbons (EPA Method 8270)
- Polychlorinated biphenyls (EPA Method 8080)
- Mercury by cold vapor (EPA Method 7470)
- Selenium by graphite furnace (EPA Method 7740)
- Arsenic by graphite furnace (EPA Method 7060)
- Lead by graphite furnace (EPA Method 7421)
- Priority Pollutant Metals (EPA Method 6010)
- Total petroleum hydrocarbons (EPA Method 8015)

As per the directives of your Request for Proposal (RFP), the trip blank sample was analyzed for volatile organic compounds only. Based on discussions with Ms. Thorpe and Ms. Collins, field filtering of the groundwater samples prior to laboratory analysis was not performed. However, sufficient portions of unpreserved sample were retained by the laboratory for future post-filtered metals analysis of all samples collected. As previously mentioned, authorization to proceed with these additional analyses was provided by Ms. Collins on November 4, 1994. The results of the initial round of laboratory analysis is provided in Attachment C.

We appreciate this opportunity to assist you and look forward to continuing to do so in the future. Please feel free to contact me should you have any questions or require additional information.

Sincerely,

U.S. HYDROGEOLOGIC, INC.

John D. Wylock, C.P.G.
Project Manager

JDW/bab

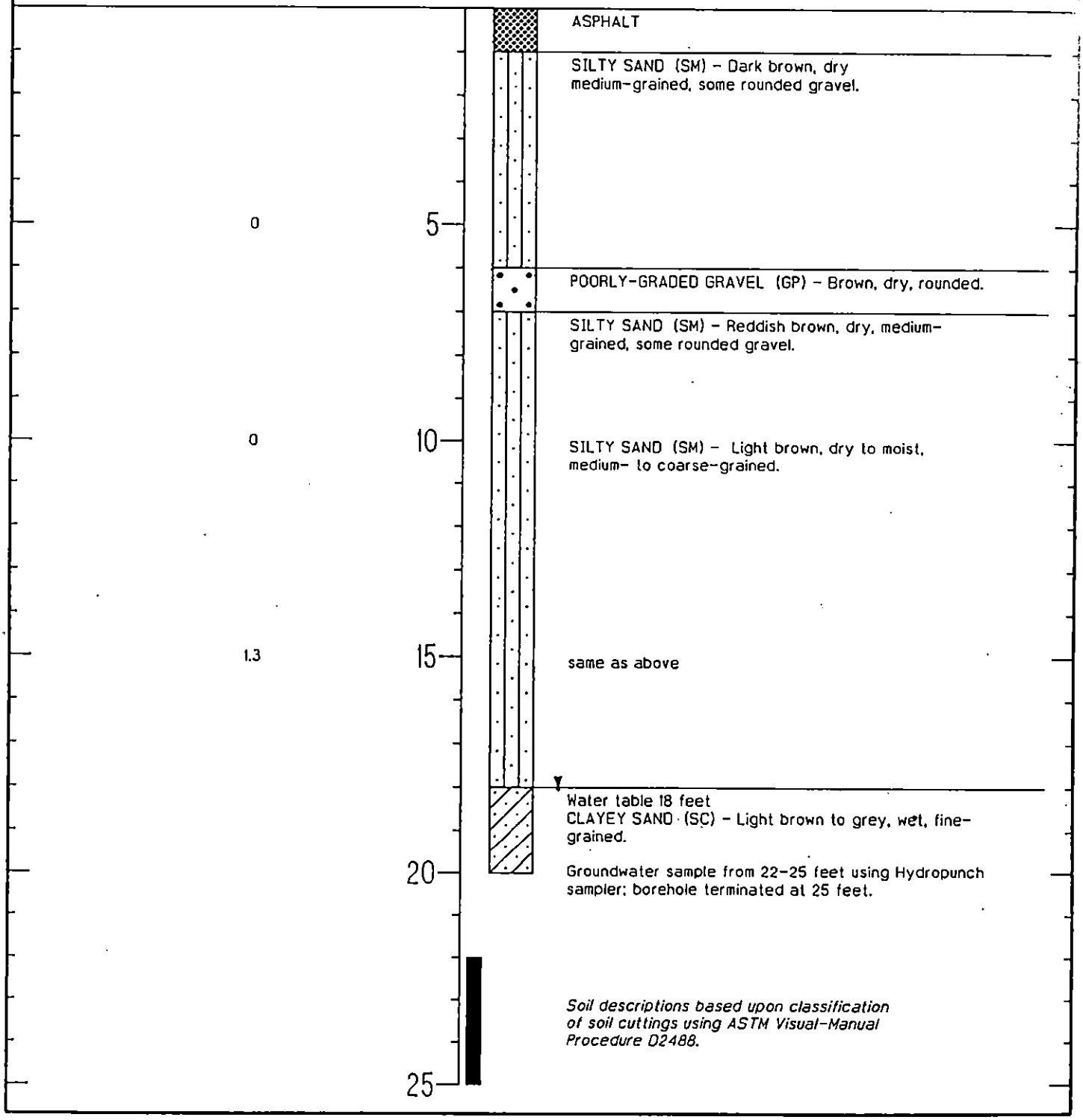
ATTACHMENT A

SITE MAP

U.S. HYDROGEOLOGIC, INC.

Groundwater and Hazardous Waste Consultants

LOG OF BORING H3



PROJECT Westbury Labs	DRILLING COMPANY Connecticut Test Borings, Inc.
LOCATION Westbury, NY	DATE DRILLED 9/3/94
JOB NUMBER WW01880	SURFACE ELEVATION Unknown
LOGGED BY AVG/JW	TOTAL DEPTH OF HOLE 25 Feet
DRILL RIG Hollow-Stem Auger/Hydropunch	INITIAL WATER LEVEL 18

U.S. HYDROGEOLOGIC, INC.

Groundwater and Hazardous Waste Consultants

LOG OF BORING H4

BLOWS/6in	PID (ppm)	SAMPLE NUMBER	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
						ASPHALT
						SILTY SAND (SM) – Dark brown, dry fine to medium-grained, some gravel.
			5			
			10			SILTY SAND (SM) – Brown, moist, fine- to medium-grained, some gravel.
			15			
			20			SILTY SAND (SM) – Grey, moist, fine- to medium-grained, trace gravel.
			25			Water table 24.5 feet
						Groundwater sample collected from 27–30 feet using Hydropunch sampler; borehole terminated at 30 feet.
						Soil descriptions based upon classification of soil cuttings using ASTM Visual-Manual Procedeure D2488.
			30			

PROJECT Westbury Labs	DRILLING COMPANY Connecticut Test Borings, Inc.
LOCATION Westbury, NY	DATE DRILLED 9/3/94
JOB NUMBER WW01880	SURFACE ELEVATION Unknown
LOGGED BY AVG/JW	TOTAL DEPTH OF HOLE 30 Feet
DRILL RIG Hollow-Stem Auger/Hydropunch	INITIAL WATER LEVEL 24.5

U.S. HYDROGEOLOGIC, INC.

Groundwater and Hazardous Waste Consultants

LOG OF BORING H5

BLOWS/6in	PID (ppm)	SAMPLE NUMBER	DEPTH (ft)	SAMPLES	SYMBOLS	MATERIALS DESCRIPTION
	0					ASPHALT AND CONCRETE
						POORLY-GRADED SAND (SP) - Black to brown, dry, medium-grained, some gravel (FILL).
	0		5			
	0		10			POORLY-GRADED GRAVEL (GP) - Brown, dry, medium-grained.
						POORLY-GRADED SAND (SP) - Black to brown, dry, medium- to coarse-grained, some gravel.
	0		15			POORLY-GRADED SAND (SP) - Light brown, dry to moist, medium- to coarse-grained, some rounded gravel.
	0		20			same as above
			25			POORLY-GRADED SAND (SP) - Dark brown, moist, fine- to coarse-grained, some gravel.
			30			Water table 29 feet SILTY CLAY (CL) - Grey, wet, clay with some silt, fine sand.
						Groundwater sample collected from 32-35 feet using Hydropunch sampler; borehole terminated at 35 feet.
			35			*Soil descriptions based upon classification of soil cuttings using Visual-Manual Procedure D2488.*

PROJECT Westbury Labs	DRILLING COMPANY Connecticut Test Borings, Inc.
LOCATION Westbury, NY	DATE DRILLED 9/3/94
JOB NUMBER WW01880	SURFACE ELEVATION Unknown
LOGGED BY AVG/JW	TOTAL DEPTH OF HOLE 35 Feet
DRILL RIG Hollow-Stem Auger/Hydropunch	INITIAL WATER LEVEL 29

ATTACHMENT C

ANALYTICAL DATA

Laboratory Resources INC.
Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700

LABORATORY ANALYSIS REPORT

Client: U.S. Hydrogeologic Inc.
328 Main Mall
Poughkeepsie NY 12601

Project Manager: Mr. John Wylock
Project: WWO1880

Laboratory Report: T410041

Date Received: 10/4/94 **Date Reported:** 10/28/94

Lab ID No.	Client Sample ID	Matrix	Collection Date & Time
T410041 - 1	H1	Water	10/03/94 9:00 AM
T410041 - 2	H3	Water	10/03/94 1:30 PM
T410041 - 3	H4	Water	10/03/94 4:00 PM
T410041 - 4	H5	Water	10/03/94 5:00 PM
T410041 - 5	FB	Water	10/03/94 3:15 PM
T410041 - 6	TB	Water	10/03/94

RECEIVED
NOV - 2 1994
U.S. Hydrogeologic, Inc.

Moe R. Amirsoleymani
Quality Assurance Manager

N.J. Certification #02046
N.Y. Certification #11321
P.A. Certification #68-420

TABLE OF CONTENTS

TABLE OF CONTENTS (CONT.)

LRI QUOTE # T4 10041 10 80

Laboratory Resources
CHAIN OF CUSTODY

PAGE 1 OF 1

CUSTOMER INFORMATION

CUSTOMER: U.S. Hydro
ADDRESS: 328 Main Mall
Poughkeepsie NY
12601
TELEPHONE: 914 473-0074
FAX: 914 485-5106

PROJECT INFORMATION

PROJECT: WW01880
PROJECT LOCATION: Long Island STATE: NY
PROJECT MANAGER: John Wylock
IN CASE WE HAVE ANY QUESTIONS WHEN SAMPLES ARRIVE WE SHOULD CALL:
NAME: John Wylock / Andy Victor-Gasper
TELEPHONE: same
FAX:

BILLING INFORMATION

BILL TO: U.S. Hydro
ADDRESS: 328 Main Mall
Poughkeepsie NY
ATTENTION: Robin
TELEPHONE: same
PO #: WW01880

LAB ID CODE	SAMPLE IDENTIFICATION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE: COMPOSITE	SAMPLE TYPE: GRAB	SAMPLE MATRIX	# OF BOTTLES	VOC 8240	PAH 8270	PCB 8080	TPH Table 8015	P.P. Metals Fe, Mn, As, Pb	PRESERVATIVES: H2SO4	HCL	HNO3	NAOH	NON-PRES
01	H1	09/3/94	9:00		X	W	9	X	X	X	X	X	X	X	X		X
02	H3		13:30		X	W	10	2X	2X	2X	2X	1X	X	X	X		X
03	H4		1600		X	W	9	X	X	X	2X	X					
04	H5		1700		X	W	9	X	X	X	X	X					
05	FB		1515		X	W	10	X	X	X	X	X					
06	TB						3	X									

Received with labels completed but not indicated on chain of custody 10/4/94 10:30

TURNAROUND (INDICATE IN CALENDAR DAYS): _____ FAX _____ HARD COPY _____ DELIV. PKG.
NAME OF LAB PERSONNEL CONFIRMING: _____
DELIVERABLES / (CIRCLE ONE): DATA DATA/QC RED/DELIV NJ/CLP I NJ/CLP II NJ/REGL NY/ASP CLP OTHER _____

SAMPLER / AFFILIATION:	Andy Victor-Gasper	DATE:
RECEIVED / AFFILIATION:		TIME:
RELINQUISHED / AFFILIATION:		DATE:
RECEIVED / AFFILIATION:		TIME:
RELINQUISHED / AFFILIATION:		DATE:
RECEIVED / AFFILIATION:		TIME:

☐ RETURN TO CLIENT FOR DISPOSAL ☐ LAB DISPOSAL
KNOWN HAZARD (FLAMMABLE, EXPLOSIVE, TOXIC)
☐ YES ☐ NO (IF YES EXPLAIN UNDER COMMENTS)

LAB USE CONDITIONS OF BOTTLES AND COOLER AT RECEIPT:
☐ COMPLIANT ☐ NOT COMPLIANT (IF NOT EXPLAIN UNDER COMMENTS)

COMMENTS • H1 (1 1/2 bottles for TPH); 1 bottle H4. BAH; 1 bottle PCB's & 1 extra bottle same for H5 & H4
• Please hold metals sample for possible filtering at a later date.

Laboratory Resources INC.
A United Water Resources Company (NYSE)

WORK TRANSFER RECLI

SENDING DIVISION: (Please Check)

☐ TETERBORO DIVISION
Teterboro, NJ
800-729-0852

☐ LEHIGH VALLEY ANALYTICS DIVISION
Bethlehem, PA
800-729-4268

☐ EASTERN SCIENTIFIC DIVISION
Brooklyn, CT
Inside CT 800-932-1150
Outside CT 800-334-0103

☐ INTECH BIOLABS DIVISION
East Brunswick, NJ
800-729-1397

RECEIVING DIVISION: EASTERN

SENT TO:	PO #: T410041	JOB #:	QA/QC: Prop. Codes	DATE: 10/6/94	NEED DAY: 10/20/94

LAB ID #	SAMPLE ID #	SAMPLE DATE	M	QTY	SZ	G	P	HNO_3	H_2SO_4	HCL	NaOH	NON	ANALYSIS
[illegible] 01	111	10/4/94											TOTAL PHENOLICS
02	H3												HYDROCARBONS BY SOXH
03	114												
04	115												
05	118												

G – GLASS
P – PLASTIC
M – MATRIX
H_2SO_4 – SULFURIC ACID
HCL – HYDROCHLORIC ACID
NaOH – SODIUM HYDROXIDE
NON – NONPRESERVED
HNO_3 – NITRIC ACID

COMMENTS: Cost $115.00

PREPARED BY:	Date 10/6/94 Time	METHOD OF SHIPMENT: VIA ADS	RELINQUISHED BY:	Date 10/6/94 Time	RECEIVED BY:	Date Time

RECEIVING DIVISION – ORIGINAL

TRANSFERRING DIVISION – DUPLICATE

COOLER 1 of 1

LETTER OF TRANSMITTAL

U.S. HYDROGEOLOGIC, INC.

328 Main Mall
Poughkeepsie, New York 12601
473-0074
FAX (914) 485-5106

Job Name: NWO 1880

Date: Oct 4 1994

TO: Laboratory Resources

Attn:

Re: Samples

FAX No:

Enclosed please find:

These are transmitted: ____ Total pages faxed

____ Copy of letter ____ Reports ____ For review and comment ____ For your use

____ Map, plans ____ Minutes ____ For your information ____ As requested

REMARKS:

Please Note: ① The Metals Sample for each location is to be analyzed for: Priority Pollutant Metals in addition to Lead, arsenic, selenium, and mercury. Run unfiltered samples initially and hold remaining sample for possible re-analysis of a filtered sample

② Due to the field conditions; for Samples H1, H5 & H4 only 1 liter bottle is being submitted each for PCB's & PAHs. An extra 1 liter bottle is also provided for each sample in case of matrix interference etc.

____ Please reply ____ No reply necessary

Copy to:

Signed: Andy

003

INTERNAL CHAIN OF CUSTODY

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot.

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Laboratory Resources Name: Krishna Daggumati	Location: Teterboro Title: Spl. Mgmt. Supervisor
Field Sample Seal No.	Date Broken ____/____/____	Military Time Seal Broken
Case No.	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO.	SAMPLE NO.	ALIQUOT/EXTRACT NO.
TH100441-01			
-02			
-03			
-04			
-05			
-06			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
10/5	5:00 P.M.	PRINTED NAME Ashok SIGNATURE A. Patel	PRINTED NAME Vikas Pawar SIGNATURE Vikas Pawar	Reg. PCB liq. depleted 01-05
10/6	9:30	PRINTED NAME ~~Ashok~~ A. Ashok SIGNATURE A. Patel	PRINTED NAME JOHN CALINOAS SIGNATURE John Calinoas	# 1C - PIIC-WX 3,4,5 Depleted
10/6	11:05	PRINTED NAME Ashok SIGNATURE A. Patel	PRINTED NAME OCTAVIO ORTIZ SIGNATURE Octavio Ortiz	Reg BN Liquid
10/6	16:05	PRINTED NAME OCTAVIO ORTIZ SIGNATURE Octavio Ortiz	PRINTED NAME Ashok SIGNATURE A. Patel	Ref.
10/7	16:35	PRINTED NAME Ashok SIGNATURE A. Patel	PRINTED NAME Anil Wen SIGNATURE Anil Wen	#1 ~ #6 GC/MS VOA Depleted
10/12	2:30	PRINTED NAME Ashok SIGNATURE AP	PRINTED NAME MARZENA GRABICUA SIGNATURE Mgrabicua	1-5 ICP, FU
10/12	16:15	PRINTED NAME MARZENA GRABICUA SIGNATURE Mgrabicua	PRINTED NAME Ashok SIGNATURE A. P	Ref
10/13	9:00	PRINTED NAME Ashok SIGNATURE AP	PRINTED NAME Kenneth Dram SIGNATURE [illegible]	My
10/13	11:30	PRINTED NAME [illegible] SIGNATURE [illegible]	PRINTED NAME MARZENA GRABICUA SIGNATURE Mgrabicua	FU (reset) 1-5 004

DISTRIBUTION: White - Original (Sent with Report) Yellow - Contractor Archive Pink - Sample Custodian - Interim Copy

INTERNAL CHAIN OF CUSTODY

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot.

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Laboratory Resources Name: Krishna Daggumati	Location: Teterboro Title: Spl. Mgmt. Supervisor
Field Sample Seal No.	Date Broken / /	Military Time Seal Broken
Case No.	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO.	SAMPLE NO.	ALIQUOT/EXTRACT NO.
T410041 -01			
02			
03			
04			
05			
06			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
10/13	12[10]	PRINTED NAME MARZENA GRABICKA SIGNATURE Mgrabicka	PRINTED NAME Ashok SIGNATURE A.P.	Ret 1-5
10/14	11:30	PRINTED NAME Ashok SIGNATURE A.P.	PRINTED NAME E SMITH SIGNATURE E Smith	05, 06 GC/MS VOA Depleted
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

Rev. 2.0. 2/92

INTERNAL CHAIN OF CUSTODY

INSTRUCTIONS: *Use 1 form for each 20 samples or aliquot.*

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: LABORATORY Resources Name: MIRIAM MERCEDES	Location: Tetenboro Title: SUPERVISOR ORG. Ex
Field Sample Seal No. T410041	Date Broken / /	Military Time Seal Broken
Case No.	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO.	SAMPLE NO.	ALIQUOT/EXTRACT NO.
T410041 - 1	Reg BN Liquid		
- 2	↓		
- 3.	↓		
- 4	↓		
- 5	↓		

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
10/6	11:00	PRINTED NAME Keller SIGNATURE E Keller	PRINTED NAME OCTAVIO ORTIZ SIGNATURE Octavio Ort	Reg BN Liq. EXT.
10/7	1:00	PRINTED NAME OCTAVIO ORTIZ SIGNATURE Octavio Ort	PRINTED NAME SOMCHAI TULAPOL SIGNATURE S Tulapol	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	006
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

Rev. 2.0, 2/92

INTERNAL CHAIN OF CUSTODY

INSTRUCTIONS: *Use 1 form for each 20 samples or aliquot.*

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Laboratory Resources Name: Miriam Mercedes	Location: Teterboro Title: Org. Ext. Supervisor
Field Sample Seal No.	Date Broken __/__/__	Military Time Seal Broken
Case No.	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO.	SAMPLE NO.	ALIQUOT/EXTRACT NO.
T410041 -01	Reg. PCB l.Q.		
-02	↓		
-03	↓		
-04	↓		
-05	↓		

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
10/5 94'	2:30 P.M	PRINTED NAME K. DAGGUMATI SIGNATURE K. Dagg[illegible]	PRINTED NAME Vikas parikh SIGNATURE Vikas parikh	Extraction of Reg. PCB l.Q.
10/6 94'		PRINTED NAME Vikas Parikh SIGNATURE Vikas parikh	PRINTED NAME William Jackson SIGNATURE [illegible]	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	007

DISTRIBUTION: White - Original (Sent with Report) Yellow - Contractor Archive Pink - Sample Custodian - Interim Copy

DEPE-077
Rev. 2.0, 2/92

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

INTERNAL CHAIN OF CUSTODY

Page 1 of 1

966

INSTRUCTIONS: *Use 1 form for each 20 samples or aliquot.*

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: ______ Name: ______	Location: ______ Title: ______
Field Sample Seal No.	Date Broken __/__/__	Military Time Seal Broken
Case No.	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO.	SAMPLE NO.	ALIQUOT/EXTRACT NO.
T410010 -1	ICP ~~FU~~ Hg		
028 - 2	↓		
039 - 1			
041 - 1 → 5	FU Hg		
044 - 1	↓ ↓		
054 - 1 → 8			
054 - 10			
069 - 1	↓		

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
10/13	10:00	PRINTED NAME MARZENA GRABICKA SIGNATURE Mgrabicka	PRINTED NAME MICHAEL POLIDORI SIGNATURE Michael Polidori	ICP ANALYSIS
10/13	10:00	PRINTED NAME MARZENA GRABICKA SIGNATURE Mgrabicka	PRINTED NAME ANIL BHAKTA SIGNATURE Abhakta	FU ANALYSIS
../13	7:70	PRINTED NAME [illegible] SIGNATURE [illegible]	PRINTED NAME [illegible] SIGNATURE [illegible]	Hg analysis
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

008

VOLATILE ORGANICS METHODOLOGY

EXTRACTION AND ANALYSIS, AQUEOUS

Code of Federal Regulations, Title 40, Part 136, Office of the Federal Register, National Archives and Records Administration, EPA/CLP internal and surrogate standards.

SAMPLE EXTRACTION, NON-AQUEOUS

Test Methods for Evaluating Solid Waste (SW-846), USEPA Office of Solid Waste and Emergency Response, Washington, DC 20460, 3rd Edition, November 1986, Method 5030, "Purge-and-Trap."

ANALYSIS, NON-AQUEOUS

Test Methods for Evaluating Solid Waste (SW-846), USEPA Office of Solid Waste and Emergency Response, Washington, DC 20460, 3rd Edition, November 1986, Method 8240, "Gas Chromatography/Mass Spectrometry for Volatile Organics."

SEMIVOLATILE ORGANICS METHODOLOGY

Sample Extraction and Analysis, Aqueous

Code of Federal Regulations, Title 40, Part 136, Office of the Federal Register, National Archives and Records Administration, Washington, DC 20402, Method 625, "Base/Neutrals and Acids", modified using EPA/CLP internal and surrogate standards.

Sample Extraction, Solids

Test Methods for Evaluating Solid Waste (SW-846), USEPA Office of Solid Waste and Emergency Response, Washington, DC 20460, 3rd Edition, November 1986, Method 3550, "Sonication Extraction."

Sample Preparation, Organic Liquids

Test Methods for Evaluating Solid Waste (SW-846), USEPA Office of Solid Waste and Emergency Response, Washington, DC 20460, 3rd Edition, November 1986, Method 3580, "Waste Dilution."

Analysis, Nonaqueous

Test Methods for Evaluating Solid Waste (SW-846), USEPA Office of Solid Waste and Emergency Response, Washington, DC 20460, 3rd Edition, November 1986, Method 8270, "Gas Chromatography/Mass Spectrometry for Semivolatile Organics: Capillary Column Technique."

METHODS SUMMARY

ORGANIC EXTRACTIONS

Routine aqueous samples are prepared using Method 3510 (separatory funnel extraction) or Method 3520 (continuous liquid-liquid extraction) cited in SW846. Soil samples are extracted using Method 3550 (sonication extraction) from SW846.

ALUMINA COLUMN CLEANUP

After the sample has been extracted for base/neutral semivolatiles using Method 3550, it then undergoes acid-base partition cleanup using SW846 Method 3650. The base neutral extract is then further separated using alumina column cleanup Method 3611 in SW846.

TCLP EXTRACTION SUMMARY

Sample requiring TCLP analyses are extracted according to Method 1311, cited in 40 CFR 261 et seq, June 29, 1990.

PESTICIDES/PCBs

Aqueous samples are analyzed for pesticides and PCBs via USEPA Method 608. Non-aqueous samples are analyzed using Method 8080 as cited in USEPA SW846.

HERBICIDES

The herbicide extraction and analysis is performed according to Method 509B, cited in the 16th edition of Standard Methods. Samples are extracted, derivitized, and then analyzed via a gas chromatograph utilizing an electron capture detector (ECD).

METHODS SUMMARY

TRACE METALS

Reference: EPA SW846 3rd Edition, 1986 Vol. 1 A

Non-aqueous samples are digested for ICAP and GFAA according to method 3050 and for CV according to method 7470. Extracts and aqueous samples (ECRA and RCRA projects) are digested for ICAP, GFAA, and CV according to methods 3010, 3020, and 7470 respectively.

ICAP analyses are conducted in accordance with Method 6010. GFAA analyses are conducted in accordance with methods 7060 for arsenic, 7421 for lead, 7740 for selenium and 7841 for thallium. CV analyses are conducted in accordance with method 7470.

Titanium and tin are analyzed for GFAA according to methods 282.2 and 283.3 respectively (EPA 600/4-79-020, 1983 revision).

TRACE METALS

Reference: EPA 600/4-79-020, 1983 revision.

Potable water, aqueous wastes, and surface water are digested according to EPA methods 4.1.4 for GFAA and FLAA, 200.7 for ICAP, and 245.1 for CV. GFAA analyses are conducted in accordance with methods 204.4 for antimony, 206.2 for arsenic, 239.2 for lead, 270.2 for selenium, 279.2 for thallium, 282.2 for tin, and 283.2 for titanium. ICAP analyses are conducted in accordance with method 200.7, CV analyses with method 245.1, and FLAA analyses with method 273.1 for sodium only.

GFAA = Graphite furnace atomic absorption.
ICAP = Inductively Coupled Argon Plasma.
FLAA = Flame atomic absorption.
CV = Cold vapor atomic absorption for Hg.

TCLP METALS

Samples are extracted and analyzed in accordance with method 1311 published in the Federal Register, 40 CFR 261, June 29, 1990.

ORGANIC NON-CONFORMANCE SUMMARY

GC/MS VOLATILE

1. Methylene chloride was detected above the quantitation limit in method blank E8065.

INORGANIC NON-CONFORMANCE SUMMARY

METALS

1. The quantitation limits are elevated due to matrix interference for Sb analysis of samples T410041-01 and 03.

2. The quantitation limits are elevated due to the dilution required for Pb analysis of samples T410041-01-04.

3. The quantitation limits are elevated due to the dilution required for As analysis of sample T410041-01.

4. Arsenic was quantitated by MSA due to matrix interference for sample T410041-01.

5. MS is outside of the control limit due to matrix interference for Sb, As, Be, Cd, Hg, Ni, Se, Ag and Zn analysis of sample T410041-01.

6. MSD is outside of the control limit due to matrix interference for Sb, As, Be, Cd, Hg, Ni, Se and Ag analysis of sample T410041-01.

7. RPD is outside of the control limit due to matrix interference for Cd analysis of sample T410041-01.

Fax:
Report: 10/22/94
Received: 10/04/94
Client: U.S. Hydrogeologic Inc.
Deliverable: Proposed Reduced Del Disk Due:
Regulation: Resource Conservation Recovery Act (Federal)
Special Requirements:

LRI Laboratory Chronicle
MS Volatiles

Report # T410041

Page: 1
10/7/94
6:27:51 PM

Q T	L b	p H	Sample	mat	Test Type	Collected Date	Collected By	Analysis Date	Analysis By	Batch	Data File	Dil File	Calc	% Sol	# Ht
✓	X	P	1A: H1	W	8240VOA-/8240	10/03		10/7/94	MW	QE1007	E7948			N/A	
✓	P	P	2A: H3	W	8240VOA-/8240	10/03		↓	↓	↓	E7949			N/A	
✓	P	P	3A: H4	W	8240VOA-/8240	10/03		↓	↓	↓	E7950			N/A	
✓	P	P	4A: H5	W	8240VOA-/8240	10/03		↓	↓	↓	E7951			N/A	
✓	X	P	5A: FB	W	8240VOA-/8240	10/03		10/14/94	MW	QE1014	E8076			N/A	
✓	P	P	6 : TB	W	8240VOA-/8240	10/03		10/14/94	MW	QE1014	E8075			N/A	

QC CHRONICLE

Blanks	#	mat		Spikes sample	M file	MS file	MSD file
QE1007		L	E7943				
~~QE1005~~		~~L~~	~~E7894~~	~~9386-01~~	~~E7895~~	~~E7904~~	~~E7905~~
QE1014		L	E8065	199-01	E8068	E8079	E8080

Calibration

	Date	File	MS
init	9/2/94		E
	10/2/94		E
chk	10/7/94	E7941	
	~~10/5/94~~	~~E7895~~	✓
	10/14/94	E8064	
			015

DL LIST: DC8240 REVIEWED: Aileen LAB TAT: CHECKED: CL 10/25/94

10-25-94

Fax:
Report: 10/22/94
Received: 10/04/94
Client: U.S. Hydrogeologic Inc.
Deliverable: Proposed Reduced Del Disk Due:
Regulation: Resource Conservation Recovery Act (Federal)
Special Requirements:

LRI Laboratory Chronicle
MS Semivolatiles

Report # T410041

Page: 1
10/11/94
10:31:52 AM

QT	Lb	pH	Sample	mat	Test Type	Extracted Date	Extracted By	Analysis Date	Analysis By	Batch	Data File	Dil File	Calc	% Sol	# Ht
✓	X		1B: H1	W	8270SVA-/PAH	10/03 10/06	OS	10-08	AP	QM7681	J3964		1.00	N/A	1
✓	X		2B: H3	W	8270SVA-/PAH	10/03 10/06					J3965		1.18	N/A	0
✓	X		3B: H4	W	8270SVA-/PAH	10/03 10/06					J3966		1.18	N/A	0
✓	X		4B: H5	W	8270SVA-/PAH	10/03 10/06					J3967		1.18	N/A	0
✓	X		5B: FB	W	8270SVA-/PAH	10/03 10/06					J3968		1.18	N/A	0

QC CHRONICLE

Blanks				Spikes			
	#	mat		sample	M file	MS file	MSD file
QM7681	1	L	A1093	09170-01	A1094	A1095	A1096
	7	L	J3963		9/17/94		

Calibration

	Date	File	MS
init			
	09-06-94	AA0931-AA0935	
	10-05-94	JJ3891-JJ3895	
chk			
	09-16-94	A1091	
	10-08-94	J3961	
		016	

DL LIST: OLPAH REVIEWED: Andy LAB TAT: CHECKED: L-Tulapol

Fax:
Report: 10/22/94
Received: 10/04/94
Client: U.S. Hydrogeologic Inc.
Deliverable: Proposed Reduced Del
Regulation: Resource Conservation Recovery Act (Federal)
Special Requirements:

LRI Laboratory Chronicle
GC Semivolatiles

Disk Due:

Report # T410041
10-10
Page: 1
10/10/94
10:41:43 AM

QT	Lb	pH	Sample	mat	Test Type	Extracted Date	Extracted By	Analysis Date	Analysis By	Batch	Data File	Dil File	Calc	% Sol	# Ht
			1B: H1	W	8080PBA-/PCB_STD	10/03 10/05	VP	10-7	WJS	7758 -1	P0455			N/A	2
			1C: H1	W	PHC_8015-/8015M	10/03								N/A	
			2B: H3	W	8080PBA-/PCB_STD	10/03 10/05	VP	10-7	WJS	7758 -1	P0456			N/A	0
			2C: H3	W	PHC_8015-/8015M	10/03								N/A	
			3B: H4	W	8080PBA-/PCB_STD	10/03 10/05	VP	10-7	WJS	7758 -1	P0457			N/A	0
			3C: H4	W	PHC_8015-/8015M	10/03								N/A	
			4B: H5	W	8080PBA-/PCB_STD	10/03 10/05	VP	10-7	WJS	7758 -1	P0458			N/A	0
			4C: H5	W	PHC_8015-/8015M	10/03								N/A	
			5B: FB	W	8080PBA-/PCB_STD	10/03 10/05	VP	10-7	WJS	7758 -1	P0459			N/A	0
			5C: FB	W	PHC_8015-/8015M	10/03								N/A	

QC CHRONICLE

Blanks				Spikes			
	#	mat		sample	M file	MS file	MSD file
7758	1	L	09279	9278-17	09280	09281	09282
	4	L	P0452				

Calibration

	Date	File	MS
init			
chk	09257		
	P0441		
			017

DL LIST: REVIEWED: LAB TAT: CHECKED:

TABLE 2-16. REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES

Name	Container[1]	Preservation	Max. Holding Time
Bacterial Tests:			
Coliform, fecal & total	P,G	Cool,4°C,0.008% $Na_2S_2O_3$	6 hours
Fecal streptococci	P,G	Cool,4°C,0.008% $Na_2S_2O_3$	6 hours
Metals:			
Chromium VI	P,G	Cool,4°C	24 hours
Mercury	P,G	HNO_3 to pH<2	28 days
Metals, except chromium VI & mercury	P,G	HNO_3 to pH<2	6 months
Inorganic Tests:			
Acidity	P,G	Cool,4°C	14 days
Alkalinity	P,G	Cool,4°C	14 days
Ammonia	P,G	Cool,4°C,H_2SO_4 to pH<2	28 days
Biochemical oxygen demand(5)	P,G	Cool,4°C	48 hours
Biochemical oxygen demand(20)	P,G	Cool,4°C	48 hours
Biochemical oxygen demand, carbonaceous	P,G	Cool,4°C	48 hours
Bromide	P,G	None required	28 days
Chemical oxygen demand	P,G	Cool,4°C, H_2SO_4 to pH<2	28 days
Chloride	P,G	None required	28 days
Chlorine, total residual	P,G	None required	Analyze immed.
Color	P,G	Cool,4°C	48 hours
Cyanide, total & amenable to chlorination	P,G	Cool,4°C, NaOH to pH>12, 0.6g ascorbic acid	14 days
Cyanide, reactive	P,G	None required	NA
Fluoride	P	None required	28 days
Hardness	P,G	HNO_3 to pH<2,H_2SO_4 to pH<2	6 months
Hydrogen ion (pH)	P,G	None required	Analyze immed.
Ignitability (flash points)	P,G	None required	NA
Kjeldahl & organic nitrogen	P,G	Cool,4°C,H_2SO_4 to pH<2	28 days
Nitrate	P,G	Cool,4°C	48 hours
Nitrate-Nitrite	P,G	Cool,4°C,H_2SO_4 to pH<2	28 days
Nitrite	P,G	Cool,4°C	48 hours
Odor	P,G	None required	Analyze immed.
Oil & Grease	G	Cool,4°C,H_2SO_4 to pH<2	28 days
Total Organic Carbon	P,G	Cool,4°C,HCl or H_2SO_4 to pH<2	28 days
Orthophosphate	P,G	Filter immediately,Cool,4°C	48 hours
Phosphate, total	P,G	H_2SO_4 to pH<2	28 days
Oxygen, Dissolved Probe	G Bottle & top	None required	Analyze immed.
Winkler	do	Fix in site & store in dark	8 hours
Phenols	G only	Cool,4°C,H_2SO_4 to pH<2	28 days
Phophorus (elemental)	G	Cool,4°C	48 hours
Phosphorus, total	P,G	Cool,4°C,H_2SO_4 to pH<2	28 days
Residue, Total	P,G	Cool,4°C	7 days
Residue, Filterable (TDS)	P,G	Cool,4°C	7 days
Residue, Nonfilterable(TSS)	P,G	Cool,4°C	7 days
Residue, Settleable	P,G	Cool,4°C	48 hours
Residue, volatile	P,G	Cool,4°C	7 days
Silica	P	Cool,4°C	28 days
Specific Conductance	P,G	Cool,4°C	28 days
Sulfate	P,G	Cool,4°C	28 days
Sulfide, reactive	P,G	Cool,4°C	NA
Sulfide, total	P,G	Cool,4°C, add zinc acetate plus sodium hydoxide to pH>9	7 days

TABLE 2-16. REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES (CONT.)

Name	Container[1]	Preservation	Max. Holding Time
Sulfite	P,G	None Required	Analyze immed.
Surfactants (MBAS)	P,G	Cool, 4°C	48 hours
TPH (water)	G	H_2SO_4 to pH<2	7 days
TPH (soil)	G	H_2SO_4 to pH<2	28 days
Temperature	P,G	None Required	Analyze
Turbidity	P,G	Cool, 4°C	48 hours
Organic Tests:			
Purgeable halocarbons	G,Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$	14 days
Purgeable aromatic hydrocarbons	G,Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$ HCl to pH2	14 days
Acrolein & acrylonitrile	G,Teflon-lined septum	Cool, 4°C, 0.008% $Na_2S_2O_3$ adjust pH to 4-5	14 days
Phenols	G,Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	7 days til extraction 40 days after extract.
Benzidines	G,Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$	7 days til extraction
Phthalate esters	G,Teflon-lined cap	Cool, 4°C	7 days til extraction 40 days after extract.
Nitrosamines	G,Teflon-lined cap	Cool, 4°C, store in dark 0.008% $Na_2S_2O_3$	40 days after extraction
PCBs, acrylonitrile	G,Teflon-lined cap	Cool, 4°C	40 days after extraction
Nitroaromatics & isophorone	G,Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$, store in dark	40 days after extraction
Polynuclear aromatic hydrocarbons	G,Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$, store in dark	40 days after extraction
Haloethers	G,Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$,	40 days after extraction
Chlorinated hydrocarbons	G,Teflon-lined cap	Cool, 4°C	40 days after extraction
TCDD	G,Teflon-lined cap	Cool, 4°C, 0.008% $Na_2S_2O_3$,	40 days after extraction
Total organic halogens	G,Teflon-lined cap	Cool, 4°C, H_2SO_4 to pH <2	28 days
Pesticides Tests:			
Pesticides	G,Teflon-lined cap	Cool, 4°C, pH 5-9	40 days after extraction
Radiological Tests:			
Alpha, beta, & radium	P,G	HNO_3 to pH<2	6 months

[1] Polyethylene (P) or Glass (G).

CASE NARRATIVE

Laboratory Resources, New Jersey Division, received four aqueous samples plus a field and trip blank for Reduced Deliverables Format on October 04, 1994. The samples were analyzed for the parameters outlined in the chain of custody.

The samples were analyzed within the required holding time. Any parameters which were outside of their respective quality control ranges are noted in the non-conformance summaries.

It should be noted that GC Fingerprint analysis was subcontracted to Eastern Scientific Division of Laboratory Resources.

Please contact us if there are any questions regarding the enclosed results.

GC/MS CONFORMANCE/NONCONFORMANCE CHECKLIST

MSW

Work order #: T410041

		No	Yes
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)	___	✓
2.	Tune Specifications		
	a. BFB Meet Criteria	___	✓
	b. DFTPP Meet Criteria	___	___
3.	Tuning Frequency Performed every 24 hours for 600 series and 12 hours for 8000 series	___	✓
4.	Calibration Frequency Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.	___	✓
5.	Calibration Requirements		
	a. Calibration Check Compounds (CCCs)	___	✓
	b. System Performance Check Compounds (SPCCs)	___	✓
6.	Blank Contamination If yes, list compounds and concentrations in each blank:	___	✓
	a. VOA Fraction — methylene Chloride = 8 PPB		
	b. B/N Fraction		
	c. Acid Fraction		
7.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	___	✓
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	If not met, were the calculations checked and the results qualified as estimated?	___	___
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	___	✓
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
9.	Internal Standard Areas and Retention Time Shifts Meet Criteria	___	✓
10.	Extraction Holding Time Met If not met, list number of days exceeded for each sample:	___	NA
11.	Analysis Holding Time Met If not met, list number of days exceeded for each sample:	___	✓

Laboratory Manager: CL

Date: 10/25/94

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: H1

Lab Sample ID: T410041-01A

Matrix: [soil/water] WATER

Lab File ID: >E7948

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

022

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: H1

Lab Sample ID: T410041-01A

Matrix: [soil/water] WATER

Lab File ID: >E7948

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
108-38-3	meta + para-Xylenes	5	U
95-47-6	ortho-Xylene	5	U

023

SADF: 1.00

Total Hit(s): 1

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: H3

Lab Sample ID: T410041-02A

Matrix: [soil/water] WATER

Lab File ID: >E7949

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

024

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: H3

Lab Sample ID: T410041-02A

Matrix: [soil/water] WATER

Lab File ID: >E7949

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
108-38-3	meta + para-Xylenes	1	J
95-47-6	ortho-Xylene	5	U

025

SADF: 1.00

Total Hit(s): 2

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Client Sample ID No.: H4

Lab Name: LRI

Lab Sample ID: T410041-03A

Matrix: [soil/water] WATER

Lab File ID: >E7950

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

026

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: H4

Lab Sample ID: T410041-03A

Matrix: [soil/water] WATER

Lab File ID: >E7950

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
108-38-3	meta + para-Xylenes	5	U
95-47-6	ortho-Xylene	5	U

027

SADF: 1.00

Total Hit(s): 1

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Client Sample ID No.: H5

Lab Name: LRI

Lab Sample ID: T410041-04A

Matrix: [soil/water] WATER

Lab File ID: >E7951

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CONCENTRATION UNITS: UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

028

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: H5

Lab Sample ID: T410041-04A

Matrix: [soil/water] WATER

Lab File ID: >E7951

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
108-38-3	meta + para-Xylenes	5	U
95-47-6	ortho-Xylene	5	U

029

SADF: 1.00

Total Hit(s): 0

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: FB

Lab Sample ID: T410041-05A

Matrix: [soil/water] WATER

Lab File ID: >E8076

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/14/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

030

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: FB

Lab Sample ID: T410041-05A

Matrix: [soil/water] WATER

Lab File ID: >E8076

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/14/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
108-38-3	meta + para-Xylenes	5	U
95-47-6	ortho-Xylene	5	U

031

SADF: 1.00

Total Hit(s): 0

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: TB

Lab Sample ID: T410041-06

Matrix: [soil/water] WATER

Lab File ID: >E8075

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/14/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

032

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: TB

Lab Sample ID: T410041-06

Matrix: [soil/water] WATER

Lab File ID: >E8075

Sample wt/vol: 5.0 [g/mL] ML

Run Type: 8240VOA

Level: [low/med] LOW

Date Received: 10/04/94

% Moisture: NA

Date Analyzed : 10/14/94

GC Column : CAP. ID: .53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
108-38-3	meta + para-Xylenes	5	U
95-47-6	ortho-Xylene	5	U

033

SADF: 1.00

Total Hit(s): 1

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

METHOD BLANK

Lab Name: LRI

Lab Sample ID: VBLK-QE1007 | VBLK07

Matrix: [soil/water] WATER | Lab File ID: >E7943

Sample wt/vol: 5.0 [g/mL] ML | Run Type: 8240VOA

Level: [low/med] LOW | Date Received:

% Moisture: NA | Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm) | Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

034

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

METHOD BLANK

Lab Name: LRI

Lab Sample ID: VBLK-QE1007 | VBLK07

Matrix: [soil/water] WATER | Lab File ID: >E7943

Sample wt/vol: 5.0 [g/mL] ML | Run Type: 8240VOA

Level: [low/med] LOW | Date Received:

% Moisture: NA | Date Analyzed : 10/07/94

GC Column : CAP. ID: .53 (mm) | Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
108-38-3	meta + para-Xylenes	5	U
95-47-6	ortho-Xylene	5	U

035

SADF: 1.00 | Total Hit(s): 0

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

METHOD BLANK

Lab Name: LRI

Lab Sample ID: VBLK-QE1014 | VBLK14

Matrix: [soil/water] WATER | Lab File ID: >E8065

Sample wt/vol: 5.0 [g/mL] ML | Run Type: 8240VOA

Level: [low/med] LOW | Date Received:

% Moisture: NA | Date Analyzed : 10/14/94

GC Column : CAP. ID: .53 (mm) | Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
110-75-8	2-Chloroethyl vinyl ether	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
591-78-6	2-Hexanone	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

036

ORGANICS ANALYSIS DATA SHEET-VOLATILE COMPOUNDS

METHOD BLANK

Lab Name: LRI

Lab Sample ID: VBLK-QE1014 | VBLK14

Matrix: [soil/water] WATER | Lab File ID: >E8065

Sample wt/vol: 5.0 [g/mL] ML | Run Type: 8240VOA

Level: [low/med] LOW | Date Received:

% Moisture: NA | Date Analyzed : 10/14/94

GC Column : CAP. ID: .53 (mm) | Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
108-38-3	meta + para-Xylenes	5	U
95-47-6	ortho-Xylene	5	U

037

SADF: 1.00

Total Hit(s): 1

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: LRI

Lab Code: LRI

Lab File ID: >E7607 BFB Injection Date: 9/12/94

Instrument ID: 5995E BFB Injection Time: 14:57

GC Column : CAP ID: 0.53(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.8
75	30.0 - 60.0% of mass 95	48.1
95	Base Peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.8
173	Less than 1.0% of mass 95	0.0(0.0)1
174	Greater than 50% of mass 95	69.3
175	5.0 - 9.0 % of mass 174	5.0(7.2)1
176	95.0 - 101.0% of mass 174	69.0(99.5)1
177	5.0 - 9.0% of mass 176	4.5(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANK, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD020	VSTD020	>E7608	940912	15:16
2	VSTD050	VSTD050	>E7609	940912	15:58
3	VSTD100	VSTD100	>E7610	940912	16:39
4	VSTD150	VSTD150	>E7611	940912	17:21
5	VSTD200	VSTD200	>E7612	940912	18:02

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: LRI

Lab Code: LRI

Lab File ID: >E8011 BFB Injection Date: 10/12/94

Instrument ID: 5995E BFB Injection Time: 10:04

GC Column : CAP ID: 0.53(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.5
75	30.0 - 60.0% of mass 95	44.7
95	Base Peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.4
173	Less than 1.0% of mass 95	0.0(0.0)1
174	Greater than 50% of mass 95	67.4
175	5.0 - 9.0 % of mass 174	5.6(8.3)1
176	95.0 - 101.0% of mass 174	67.8(100.5)1
177	5.0 - 9.0% of mass 176	5.1(7.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANK, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD020	VSTD020	>E8013	941012	11:15
2	VSTD050	VSTD050	>E8014	941012	11:58
3	VSTD100	VSTD100	>E8015	941012	12:42
4	VSTD150	VSTD150	>E8016	941012	13:26
5	VSTD200	VSTD200	>E8017	941012	14:10

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: LRI

Lab Code: LRI

Lab File ID: >E7940 BFB Injection Date: 10/07/94

Instrument ID: 5995E BFB Injection Time: 13:47

GC Column : CAP ID: 0.53(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.3
75	30.0 - 60.0% of mass 95	43.1
95	Base Peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.2
173	Less than 1.0% of mass 95	0.0(0.0)1
174	Greater than 50% of mass 95	62.6
175	5.0 - 9.0 % of mass 174	5.1(8.2)1
176	95.0 - 101.0% of mass 174	62.9(100.5)1
177	5.0 - 9.0% of mass 176	4.0(6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANK, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050 ✓	>E7941	941007	14:11
2	VBLK07	VBLK07-QE1007 ✓	>E7942	941007	15:02
3	VBLK07	VBLK-QE1007	>E7943	941007	15:46
4	UST4	T410004-06	>E7944	941007	16:31
5	LS-COMP1	T410002-01	>E7945	941007	17:14
6	UST3	T410004-05	>E7946	941007	17:56
7	H1	T410041-01A ✓	>E7948	941007	19:22
8	H3	T410041-02A ✓	>E7949	941007	20:05
9	H4	T410041-03A ✓	>E7950	941007	20:49
10	H5	T410041-04A ✓	>E7951	941007	21:31
11	FIELD BLANK	T410045-018	>E7952	941007	22:14
12	FB-2	T409370-19C	>E7953	941007	22:57

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: LRI

Lab Code: LRI

Lab File ID: >E8063 BFB Injection Date: 10/14/94

Instrument ID: 5995E BFB Injection Time: 10:18

GC Column : CAP ID: 0.53(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.0
75	30.0 - 60.0% of mass 95	41.6
95	Base Peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.4
173	Less than 1.0% of mass 95	0.0(0.0)1
174	Greater than 50% of mass 95	81.8
175	5.0 - 9.0 % of mass 174	6.9(8.4)1
176	95.0 - 101.0% of mass 174	78.8(96.3)1
177	5.0 - 9.0% of mass 176	6.0(7.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANK, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	>E8064	941014	10:53
2	VBLK14	VBLK-QE1014	>E8065	941014	11:34
3	BSM-BD-2	T409392-04TCLP	>E8067	941014	12:56
4	t-39-1	T410199-01A	>E8068	941014	13:38
5	LL1273 #03517	T410003-03TCLP	>E8069	941014	14:19
6	PILE 1-G	T410011-07TCLP	>E8070	941014	15:00
7	PILE 1-H	T410011-08TCLP	>E8071	941014	15:41
8	R-2	T410213-01TCLP	>E8072	941014	16:23
9	PILE 1-F	T410011-06TCLP	>E8073	941014	17:04
10	FB-4	T410021-24A	>E8074	941014	17:44
11	TB	T410041-06	>E8075	941014	18:26
12	FB	T410041-05A	>E8076	941014	19:07
13	FB	T410056-02A	>E8077	941014	19:48
14	FB-5	T410048-36D	>E8078	941014	20:29
15	t-39-1 MS	T410199-01MS	>E8079	941014	21:11
16	t-39-1 MSD	T410199-01MSD	>E8080	941014	21:52

VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources, Inc.

Lab Sample ID: VBLK-QE1007

Data File of Method Blank: >E7943

Instrument ID: 5995E

Date Analyzed: 941007 Time Analyzed: 15:46

Matrix: WATER

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

LAB FILE ID	LAB SAMPLE ID	DATE OF ANALYSIS	TIME OF ANALYSIS
>E7944	T410004-06	941007	16:31
>E7948	T410041-01A	941007	19:22
>E7949	T410041-02A	941007	20:05
>E7950	T410041-03A	941007	20:49
>E7951	T410041-04A	941007	21:31
>E7952	T410045-01B	941007	22:14
>E7953	T409370-19C	941007	22:57

COMMENTS:

VOLATILE METHOD BLANK SUMMARY

Lab Name: Laboratory Resources, Inc.

Lab Sample ID: VBLK-QE1014

Data File of Method Blank: >E8065

Instrument ID: 5995E

Date Analyzed: 941014 Time Analyzed: 11:34

Matrix: WATER

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

LAB FILE ID	LAB SAMPLE ID	DATE OF ANALYSIS	TIME OF ANALYSIS
>E8067	T409392-04TCLP	941014	12:56
>E8068	T410199-01A	941014	13:38
>E8069	T410003-03TCLP	941014	14:19
>E8070	T410011-07TCLP	941014	15:00
>E8071	T410011-08TCLP	941014	15:41
>E8072	T410213-01TCLP	941014	16:23
>E8073	T410011-06TCLP	941014	17:04
>E8074	T410021-24A	941014	17:44
>E8075	T410041-06	941014	18:26
>E8076	T410041-05A	941014	19:07
>E8077	T410056-02A	941014	19:48
>E8078	T410048-36D	941014	20:29
>E8079	T410199-01MS	941014	21:11
>E8080	T410199-01MSD	941014	21:52

COMMENTS:

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 5995E

Contractor: Calibration Date: ~~09/13/94~~ 09/12/94 LS

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % RSD for CCC is 30%

Laboratory ID:	>E7608	>E7609	>E7610	>E7611	>E7612					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Chloromethane	2.45946	2.05294	1.72447	1.78480	1.96759	.230	1.99785	14.532		**
Vinyl Chloride	2.07878	1.91786	1.25689	1.58784	1.70908	.244	1.71009	18.479	*	
Bromomethane	1.44486	1.03797	1.12932	1.07821	1.11241	.298	1.16056	14.022		
Chloroethane	1.00193	.90015	.78405	.72328	.78037	.319	.83796	13.359		
Acrolein	.06209	.05082	.05958	.03934	.04032	.479	.05043	20.914		(Conc=200.0,500.0,1000.0
Trichlorofluoromethane	2.45472	1.69559	1.54311	1.59894	1.65300	.371	1.78907	21.044		
Trichlorotrifluoroethane	-	-	-	-	-	-	-	-		
1,1-Dichloroethene	1.71402	1.44711	1.40656	1.37179	1.36968	.482	1.46183	9.882	*	
Carbon Disulfide	3.42871	2.68359	3.16339	2.86169	3.93161	.502	3.21380	15.315		
Acetone	.67571	.48803	.41958	.43535	.42422	.536	.48858	22.128		
Acrylonitrile	.35420	.32746	.33479	.31719	.33619	.713	.33397	4.070		(Conc=100.0,250.0,500.0,
Methylene Chloride	1.03468	1.10813	1.20318	1.26075	1.55028	.632	1.23140	16.101		
trans-1,2-Dichloroethene	1.65296	1.76035	1.77561	1.66215	1.73080	.700	1.71637	3.272		
tert-Butyl Methyl Ether	4.59338	3.62775	3.55170	2.69987	2.87089	.725	3.46872	21.600		
tert-Butyl Alcohol	.05351	.04407	.04494	.04406	.04336	.774	.04599	9.228		(Conc=200.0,500.0,1000.0
Acetonitrile	.01575	.01321	.01354	.01242	.01288	.610	.01356	9.535		(Conc=2000.0,5000.0,1000
1,1-Dichloroethane	4.30851	3.74086	3.61805	3.61378	3.61786	.809	3.77981	7.948		**
Diisopropyl Ether	7.99622	6.85664	7.03717	6.57486	7.09591	.868	7.11216	7.511		
cis-1,2-Dichloroethene	2.32185	1.95613	1.87179	1.93537	1.84341	.950	1.98571	9.740		
Chloroform	4.11212	3.51714	3.45356	3.47747	3.34473	1.039	3.58101	8.481	*	
1,2-Dichloroethane	3.38076	2.81425	2.71769	2.89796	2.91723	1.145	2.94558	8.683		
1,2-Dichloroethane-d4 (S)	2.36149	2.21967	2.06562	1.99001	2.02417	1.130	2.13219	7.286		
Vinyl Acetate	1.54999	1.33457	1.41023	1.48652	1.39826	.685	1.43591	5.819		
2-Butanone	.17290	.16220	.15468	.18144	.15425	.782	.16509	7.183		
1,1,1-Trichloroethane	.66811	.60552	.58402	.64925	.57427	.843	.61623	6.639		
Carbon Tetrachloride	.57838	.52023	.51936	.57092	.54917	.871	.54761	5.035		
Benzene	1.31638	1.14882	1.09344	1.17758	1.09894	.909	1.16703	7.759		
Trichloroethene	.41259	.36160	.34878	.36057	.31723	1.032	.36015	9.541		
1,2-Dichloropropane	.46375	.40491	.38542	.43009	.38230	1.067	.41329	8.237	*	
Bromodichloromethane	.62932	.58880	.53777	.59779	.52269	1.130	.57526	7.670		

RF - Response Factor (Subscript is amount in ppb)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 5995E

Contractor: Calibration Date: ~~09/13/94~~ 09/12/94 ds

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % RSD for CCC is 30%

Laboratory ID:	>E7608	>E7609	>E7610	>E7611	>E7612					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
2-Chloroethyl vinyl ether	.22650	.19385	.19073	.21436	.20059	1.199	.20521	7.299		
trans-1,3-Dichloropropene	.59151	.49637	.47432	.49697	.47527	1.317	.50689	9.580		
cis-1,3-Dichloropropene	.66098	.61204	.55691	.60005	.56048	1.211	.59809	7.125		
1,1,2-Trichloroethane	.28054	.23993	.24004	.24295	.23036	1.346	.24676	7.890		
Dibromochloromethane	.48536	.40561	.39636	.41597	.39566	1.411	.41979	8.950		
Bromoform	.36989	.34394	.32364	.32777	.32050	1.678	.33715	6.053		**
4-Methyl-2-Pentanone	.59802	.50438	.53567	.66463	.54801	.826	.57014	10.991		
Toluene-d8 (S)	1.28870	1.21757	1.17403	1.21692	1.08378	.826	1.19620	6.280		
Toluene	1.17812	.93237	.96646	1.01116	.94312	.834	1.00625	10.011	*	
Tetrachloroethene	.48086	.42087	.47235	.49786	.41938	.898	.45826	7.858		
2-Hexanone	.34839	.30585	.33150	.41316	.35284	.930	.35035	11.320		
Chlorobenzene	1.16630	1.01222	.97039	.99982	.95614	1.003	1.02097	8.254		**
1,1,1,2-Tetrachloroethane	.49272	.46309	.46400	.45625	.44095	1.019	.46340	4.059		
Ethylbenzene	.58694	.53101	.50310	.52599	.47249	1.024	.52391	8.044	*	
meta + para-Xylenes	.74170	.61360	.57742	.58967	.51269	1.041	.60702	13.847		(Conc=40.0,100.0,200.0,30
ortho-Xylene	.66717	.57783	.55653	.60507	.52072	1.089	.58546	9.413		
Styrene	1.22402	1.07562	1.07197	1.11997	.94377	1.093	1.08707	9.283		
Bromofluorobenzene (S)	.87474	.85028	.88233	.85396	.74731	1.156	.84172	6.473		
1,1,2,2-Tetrachloroethane	.55650	.46222	.51807	.57219	.49360	1.187	.52052	8.642		**
1,3-Dichlorobenzene	1.07619	.87323	.92001	1.06377	.81121	1.297	.94888	12.348		
1,4-Dichlorobenzene	1.03797	.87618	.89407	1.04801	.79140	1.310	.92953	11.905		
1,2-Dichlorobenzene	.91272	.79255	.82435	.91591	.69292	1.357	.82769	11.208		
Naphthalene	.84195	.79429	.87990	.98469	.84496	1.609	.86916	8.216		

RF - Response Factor (Subscript is amount in ppb)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 5995E

Contractor: Calibration Date: 10/12/94

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % RSD for CCC is 30%

Laboratory ID:	>E8013	>E8014	>E8015	>E8016	>E8017					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Chloromethane	2.29329	2.16241	2.16959	2.12792	1.98924	.234	2.14849	5.066		**
Vinyl Chloride	2.01510	1.83546	1.87818	1.85449	1.72819	.250	1.86228	5.526	*	
Bromomethane	1.31026	1.32026	1.26265	1.25933	1.14223	.302	1.25894	5.621		
Chloroethane	.86694	.86934	.86481	.86324	.75732	.325	.84433	5.767		
Acrolein	.02782	.04588	.03244	.04851	.04721	.483	.04037	23.625		(Conc=200.0,500.0,1000.
Trichlorofluoromethane	2.45762	1.82658	1.61529	1.70345	1.55338	.379	1.83126	19.925		
Trichlorotrifluoroethane	-	-	-	-	-	-	-	-		
1,1-Dichloroethene	1.48504	1.49552	1.29584	1.49015	1.43043	.489	1.43940	5.864	*	
Carbon Disulfide	5.33230	5.54148	4.89799	5.66474	5.56664	.507	5.40063	5.665		
Acetone	.39199	.47332	.35851	.39981	.44295	.541	.41331	10.901		
Acrylonitrile	.24091	.27491	.23533	.29526	.29158	.714	.26760	10.482		(Conc=100.0,250:0,500.0
Methylene Chloride	1.99710	1.85185	1.68116	1.78544	1.81062	.636	1.82523	6.295		
trans-1,2-Dichloroethene	1.60511	1.67264	1.69219	1.70691	1.69229	.705	1.67383	2.408		
tert-Butyl Methyl Ether	2.91934	2.93412	2.39793	2.94154	2.82187	.726	2.80296	8.259		
tert-Butyl Alcohol	.03676	.04051	.03397	.04220	.04105	.769	.03890	8.812		(Conc=200.0,500.0,1000.
Acetonitrile	.00903	.01099	.00923	.01146	.01140	.611	.01042	11.497		(Conc=2000.0,5000.0,100
1,1-Dichloroethane	3.40991	3.56034	3.28245	3.47632	3.48912	.808	3.44363	3.041		**
Diisopropyl Ether	5.29724	5.70929	4.87634	6.07343	5.75967	.868	5.54319	8.369		
cis-1,2-Dichloroethene	1.84937	1.89958	1.87737	1.84344	1.84648	.950	1.86325	1.311		
Chloroform	3.35540	3.43095	3.24343	3.36156	3.17246	1.039	3.31276	3.117	*	
1,2-Dichloroethane	2.74526	2.83561	2.50171	2.81428	2.68542	1.144	2.71646	4.928		
1,2-Dichloroethane-d4 (S)	2.30224	2.33001	1.97174	2.29741	1.98804	1.129	2.17789	8.323		
Vinyl Acetate	.56258	.58549	.53130	.63303	.61621	.698	.58572	6.969		
2-Butanone	.13771	.14264	.13521	.14705	.15005	.782	.14253	4.351		
1,1,1-Trichloroethane	.56712	.57226	.56771	.58663	.55716	.844	.57018	1.880		
Carbon Tetrachloride	.51469	.51012	.50047	.53737	.50999	.872	.51453	2.678		
Benzene	1.09385	1.08190	1.00181	1.09529	1.06084	.910	1.06674	3.640		
Trichloroethene	.37449	.36803	.34648	.35965	.34359	1.033	.35845	3.729		
1,2-Dichloropropane	.34515	.36340	.33746	.37758	.36206	1.067	.35713	4.454	*	
Bromodichloromethane	.50440	.54690	.50147	.55126	.53532	1.129	.52787	4.456		

RF - Response Factor (Subscript is amount in ppb)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: 5995E

Contractor: Calibration Date: 10/12/94

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % RSD for CCC is 30%

Compound	Laboratory ID: >E8013 RF 20.00	>E8014 RF 50.00	>E8015 RF 100.00	>E8016 RF 150.00	>E8017 RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
2-Chloroethyl vinyl ether	.14749	.17509	.15056	.18307	.17525	1.198	.16629	9.697			
trans-1,3-Dichloropropene	.42235	.46596	.43404	.47193	.45525	1.317	.44991	4.693			
cis-1,3-Dichloropropene	.50703	.54316	.47860	.56585	.52850	1.210	.52463	6.383			
1,1,2-Trichloroethane	.23460	.25232	.21737	.24501	.23849	1.344	.23756	5.531			
Dibromochloromethane	.37128	.40771	.37725	.40621	.38609	1.409	.38971	4.264			
Bromoform	.30477	.33424	.30487	.34352	.31725	1.675	.32093	5.442		**	
4-Methyl-2-Pentanone	.41563	.46571	.44335	.48788	.49315	.827	.46114	6.984			
Toluene-d8 (S)	1.34672	1.33889	1.21933	1.28237	1.18023	.827	1.27351	5.737			
Toluene	.86759	.86330	.85120	.88343	.87674	.835	.86845	1.431	*		
Tetrachloroethene	.45758	.44990	.45274	.44146	.43402	.898	.44714	2.099			
2-Hexanone	.24774	.28694	.27878	.30493	.31840	.930	.28736	9.396			
Chlorobenzene	.96901	.96607	.95117	.94350	.95701	1.003	.95735	1.098		**	
1,1,1,2-Tetrachloroethane	.41507	.44855	.39752	.45989	.44225	1.019	.43266	5.927			
Ethylbenzene	.50446	.51608	.49503	.49967	.49562	1.025	.50217	1.721	*		
meta + para-Xylenes	.63654	.62217	.61162	.57498	.55031	1.041	.59912	5.932			(Conc=40.0,100.0,200.0,
ortho-Xylene	.59253	.58845	.57473	.56835	.54221	1.089	.57325	3.480			
Styrene	1.00736	1.03694	.97843	1.00384	.94823	1.092	.99496	3.353			
Bromofluorobenzene (S)	.95992	.90058	.81307	.89144	.79827	1.156	.87265	7.651			
1,1,2,2-Tetrachloroethane	.43721	.45522	.44200	.46038	.46360	1.187	.45168	2.556		**	
1,3-Dichlorobenzene	.88491	.86591	.89494	.81390	.81439	1.297	.85481	4.511			
1,4-Dichlorobenzene	.87683	.89404	.91346	.82700	.80797	1.310	.86386	5.184			
1,2-Dichlorobenzene	.77600	.78879	.81071	.75703	.70990	1.357	.76849	4.961			
Naphthalene	-	-	-	-	-	-	-	-			

RF - Response Factor (Subscript is amount in ppb)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: _____ Calibration Date: 10/07/94

Contractor: _____ Time: 14:11

Contract No: _____ Laboratory ID: >E7941

Instrument ID: 5995E Initial Calibration Date: 09/13/94

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	1.99785	2.20570	10.40		**	
Vinyl Chloride	1.71009	2.03754	19.15	*		
Bromomethane	1.16056	1.48610	28.05			
Chloroethane	.83796	1.10490	31.86			
Acrolein	.05043	.04710	6.60			(Conc=500.00)
Trichlorofluoromethane	1.78907	2.48160	38.71			
Trichlorotrifluoroethane	-	-	-			
1,1-Dichloroethene	1.46183	1.69504	15.95	*		
Carbon Disulfide	3.21380	3.90095	21.38			
Acetone	.48858	.47367	3.05			
Acrylonitrile	.33397	.26956	19.29			(Conc=250.00)
Methylene Chloride	1.23140	1.98818	61.46			
trans-1,2-Dichloroethene	1.71637	1.97802	15.24			
tert-Butyl Methyl Ether	3.46872	3.61405	4.19			
tert-Butyl Alcohol	.04599	.04935	7.31			(Conc=500.00)
Acetonitrile	.01356	.01506	11.12			(Conc=5000.00)
1,1-Dichloroethane	3.77981	4.16203	10.11		**	
Diisopropyl Ether	7.11216	7.96212	11.95			
cis-1,2-Dichloroethene	1.98571	2.22719	12.16			
Chloroform	3.58101	3.95796	10.53	*		
1,2-Dichloroethane	2.94558	3.26880	10.97			
1,2-Dichloroethane-d4 (S)	2.13219	2.62039	22.90			
Vinyl Acetate	1.43591	1.44164	.40			
2-Butanone	.16509	.14259	13.63			
1,1,1-Trichloroethane	.61623	.67708	9.87			
Carbon Tetrachloride	.54761	.56090	2.43			
Benzene	1.16703	1.25047	7.15			
Trichloroethene	.36015	.36811	2.21			
1,2-Dichloropropane	.41329	.38529	6.78	*		
Bromodichloromethane	.57526	.58575	1.82			
2-Chloroethyl vinyl ether	.20521	.18336	10.65			
trans-1,3-Dichloropropene	.50689	.48875	3.58			

RF - Response Factor from daily standard file at 50.00 ppb

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 10/07/94

Contractor: Time: 14:11

Contract No: Laboratory ID: >E7941

Instrument ID: 5995E Initial Calibration Date: 09/13/94

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC	
cis-1,3-Dichloropropene		.59809	.61073	2.11			
1,1,2-Trichloroethane		.24676	.24656	.08			
Dibromochloromethane		.41979	.41323	1.56			
Bromoform		.33715	.28944	14.15		**	
4-Methyl-2-Pentanone		.57014	.45580	20.05			
Toluene-d8	(S)	1.19620	1.30214	8.86			
Toluene		1.00625	.94316	6.27	*		
Tetrachloroethene		.45826	.43930	4.14			
2-Hexanone		.35035	.27909	20.34			
Chlorobenzene		1.02097	1.03092	.97		**	
1,1,1,2-Tetrachloroethane		.46340	.53074	14.53			
Ethylbenzene		.52391	.56069	7.02	*		
meta + para-Xylenes		.60702	.67851	11.78			(Conc=100.00)
ortho-Xylene		.58546	.66100	12.90			
Styrene		1.08707	1.15790	6.52			
Bromofluorobenzene	(S)	.84172	1.00476	19.37			
1,1,2,2-Tetrachloroethane		.52052	.49191	5.50		**	
1,3-Dichlorobenzene		.94888	.94012	.92			
1,4-Dichlorobenzene		.92953	.96182	3.47			
1,2-Dichlorobenzene		.82769	.82693	.09			
Naphthalene		.86916	-	-			

RF - Response Factor from daily standard file at 50.00 ppb

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 10/14/94

Contractor: Time: 10:53

Contract No: Laboratory ID: >E8064

Instrument ID: 5995E Initial Calibration Date: 10/12/94

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	2.14849	2.23579	4.06		**	
Vinyl Chloride	1.86228	1.99717	7.24	*		
Bromomethane	1.25894	1.09899	12.71			
Chloroethane	.84433	.95421	13.01			
Acrolein	.04037	.04182	3.58			(Conc=500.00)
Trichlorofluoromethane	1.83126	2.03426	11.09			
Trichlorotrifluoroethane	-	-	-			
1,1-Dichloroethene	1.43940	1.54688	7.47	*		
Carbon Disulfide	5.40063	5.64619	4.55			
Acetone	.41331	.45147	9.23			
Acrylonitrile	.26760	.23987	10.36			(Conc=250.00)
Methylene Chloride	1.82523	1.98845	8.94			
trans-1,2-Dichloroethene	1.67383	1.67885	.30			
tert-Butyl Methyl Ether	2.80296	2.60433	7.09			
tert-Butyl Alcohol	.03890	.03562	8.42			(Conc=500.00)
Acetonitrile	.01042	.00928	10.99			(Conc=5000.00)
1,1-Dichloroethane	3.44363	3.13442	8.98		**	
Diisopropyl Ether	5.54319	5.02410	9.36			
cis-1,2-Dichloroethene	1.86325	1.80078	3.35			
Chloroform	3.31276	3.31543	.08	*		
1,2-Dichloroethane	2.71646	2.64016	2.81			
1,2-Dichloroethane-d4 (S)	2.17789	2.51287	15.38			
Vinyl Acetate	.58572	.54019	7.77			
2-Butanone	.14253	.13792	3.24			
1,1,1-Trichloroethane	.57018	.58940	3.37			
Carbon Tetrachloride	.51453	.53275	3.54			
Benzene	1.06674	1.09860	2.99			
Trichloroethene	.35845	.36810	2.69			
1,2-Dichloropropane	.35713	.34472	3.48	*		
Bromodichloromethane	.52787	.50636	4.08			
2-Chloroethyl vinyl ether	.16629	.17428	4.80			
trans-1,3-Dichloropropene	.44991	.44917	.16			

RF - Response Factor from daily standard file at 50.00 ppb

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 10/14/94

Contractor: Time: 10:53

Contract No: Laboratory ID: >E8064

Instrument ID: 5995E Initial Calibration Date: 10/12/94

Minimum $\overline{RF}$ for SPCC is 0.30 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC	
cis-1,3-Dichloropropene		.52463	.53357	1.71			
1,1,2-Trichloroethane		.23756	.23218	2.26			
Dibromochloromethane		.38971	.39499	1.35			
Bromoform		.32093	.32299	.64		**	
4-Methyl-2-Pentanone		.46114	.44575	3.34			
Toluene-d8	(S)	1.27351	1.45323	14.11			
Toluene		.86845	.87315	.54	*		
Tetrachloroethene		.44714	.45971	2.81			
2-Hexanone		.28736	.26409	8.10			
Chlorobenzene		.95735	.93801	2.02		**	
1,1,1,2-Tetrachloroethane		.43266	.40367	6.70			
Ethylbenzene		.50217	.49484	1.46	*		
meta + para-Xylenes		.59912	.58713	2.00			(Conc=100.00)
ortho-Xylene		.57325	.56724	1.05			
Styrene		.99496	1.00082	.59			
Bromofluorobenzene	(S)	.87265	.93491	7.13			
1,1,2,2-Tetrachloroethane		.45168	.41278	8.61		**	
1,3-Dichlorobenzene		.85481	.79605	6.87			
1,4-Dichlorobenzene		.86386	.80566	6.74			
1,2-Dichlorobenzene		.76849	.71086	7.50			
Naphthalene		-	-	-			

RF - Response Factor from daily standard file at 50.00 ppb

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

VOLATILE - WATER SURROGATE PERCENT RECOVERY SUMMARY

Lab Name: LRI

	SAMPLE #NO	S1 (DCE)#	S2 (TOL)#	S3 (BFB)#	TOT OUT
1	VBLK-QE1007 ✓	100	103	98	0
2	T410004-06	91	99	96	0
3	T410041-01A ✓	98	104	98	0
4	T410041-02A ✓	95	102	100	0
5	T410041-03A ✓	97	103	100	0
6	T410041-04A ✓	96	101	97	0
7	T410045-01B	99	98	97	0
8	T409370-19C	92	100	98	0

S1 (DCE) = 1,2-Dichloroethane (76-114)
S2 (TOL) = Toluene-d8 (88-110)
S3 (BFB) = Bromofluorobenzene (86-115)

Column to be used to flag recovery values
* Values outside of QC limits

VOLATILE - WATER SURROGATE PERCENT RECOVERY SUMMARY

Lab Name: LRI

	SAMPLE #NO	S1 (DCE) #	S2 (TOL) #	S3 (BFB) #	TOT OUT
1	VBLK-QE1014	94	95	106	0
2	T409392-04TCL	99	98	111	0
3	T410199-01A	96	95	105	0
4	T410003-03TCL	96	98	110	0
5	T410011-07TCL	96	96	108	0
6	T410011-08TCL	93	94	105	0
7	T410213-01TCL	94	100	105	0
8	T410011-06TCL	91	96	105	0
9	T410021-24A	95	93	104	0
10	T410041-06	96	96	108	0
11	T410041-05A	94	96	108	0
12	T410056-02A	104	102	103	0
13	T410048-36D	93	97	107	0
14	T410199-01MS	94	95	107	0
15	T410199-01MSD	91	98	106	0

S1 (DCE) = 1,2-Dichloroethane (76-114)
S2 (TOL) = Toluene-d8 (88-110)
S3 (BFB) = Bromofluorobenzene (86-115)

Column to be used to flag recovery values
* Values outside of QC limits

VOLATILE WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: LRI

Sample ID: T410199-01A

Sample Data File: >E8068

Spiked Sample Data File: >E8079

Spike Duplicate Data File: >E8080

COMPOUND	SPIKE ADDED (ug/ L)	SAMPLE CONCENTRATION (ug/ L)	MS CONCENTRATION (ug/ L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	2000	ND	1418	71	61-145
Trichloroethene	2000	ND	1979	99	71-120
Benzene	2000	ND	1697	85	76-127
Toluene	2000	ND	1795	90	76-125
Chlorobenzene	2000	ND	2111	106	75-130

COMPOUND	SPIKE ADDED (ug/ L)	MSD CONCENTRATION (ug/ L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	2000	1502	75	5	14	61-145
Trichloroethene	2000	2011	101	2	14	71-120
Benzene	2000	1705	85	0	11	76-127
Toluene	2000	1845	92	2	13	76-125
Chlorobenzene	2000	2170	108	2	13	75-130

RPD: 0 out of 5 outside limits
RECOVERY: 0 out of 10 outside limits

Comment: _____

_____

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.

Lab File ID (Standard): >E7941 Instrument ID: 5995E

Date Analyzed: 941007 Time Analyzed: 14:11

	IS1(BCM)		IS2(DFB)		IS3(CBZ)	
	AREA #	RT	AREA #	RT	AREA #	RT
12 HOUR STD	32660	9.00	181783	11.21	141473	16.95
UPPER LIMIT	65320		363566		282946	
LOWER LIMIT	16330		90892		70736	
LAB SAMPLE NO.						
VBLK07-QE1007	41720	9.02	208507	11.21	158332	16.95
VBLK-QE1007	37031	9.00	192231	11.21	156353	16.94
T410004-06	35696	8.99	197427	11.20	156620	16.93
T410002-01	31760	8.99	182755	11.20	138810	16.94
T410004-05	31050	8.96	180249	11.19	137546	16.95
T410041-01A	32923	9.02	180161	11.24	139477	16.95
T410041-02A	33051	9.01	187799	11.22	144024	16.96
T410041-03A	34012	8.99	190079	11.18	147799	16.95
T410041-04A	31610	8.97	177710	11.18	143219	16.95
T410045-01B	34301	8.97	199037	11.20	160030	16.93
T409370-19C	33730	8.97	178948	11.18	144994	16.95

IS1(BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area
LOW LIMIT = - 50% of internal standard area

Column used for flag internal standard areavalues with an asterisk

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Laboratory Resources Inc.

Lab File ID (Standard): >E8064 Instrument ID: 5995E

Date Analyzed: 941014 Time Analyzed: 10:53

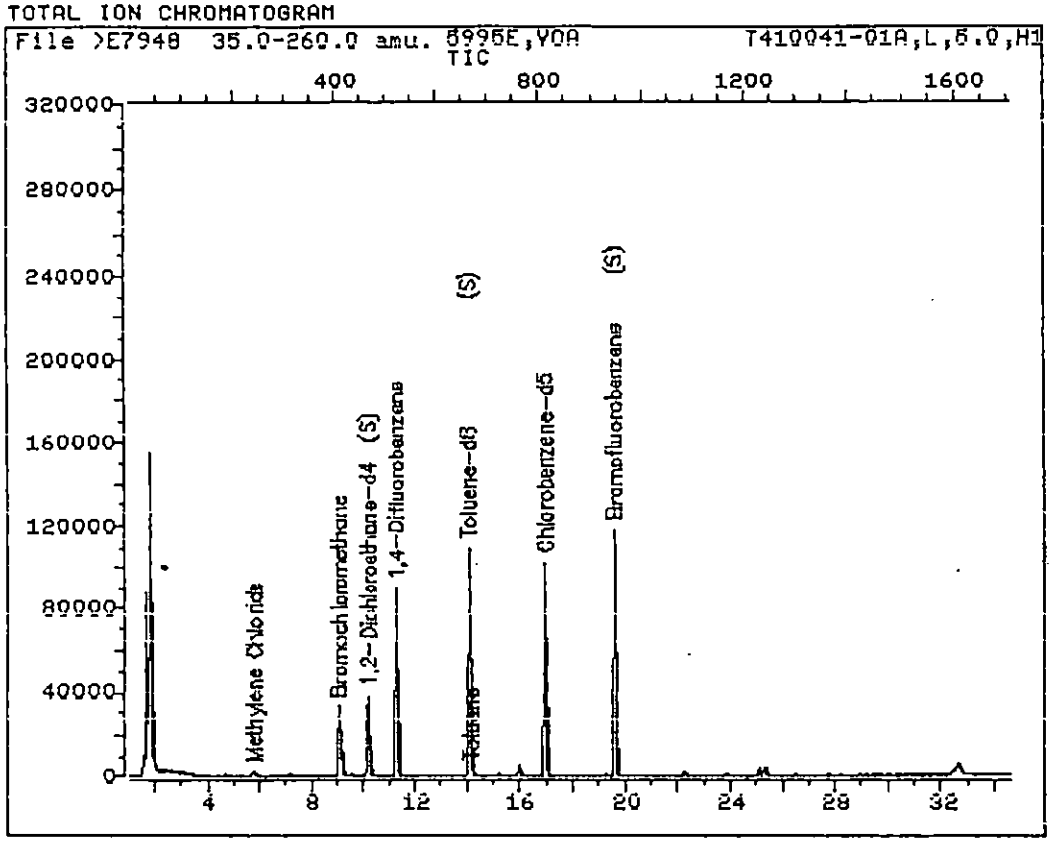
	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	51957	9.16	270470	11.35	211989	17.05
UPPER LIMIT	103914		540940		423978	
LOWER LIMIT	25979		135235		105995	
LAB SAMPLE NO.						
VBLK-QE1014	44724	9.11	231862	11.28	182495	17.07
T409392-04TCLP	41184	9.33	224001	11.54	177812	17.20
T410199-01A	44263	9.19	235726	11.39	193968	17.20
T410003-03TCLP	43724	9.31	228424	11.50	180169	17.14
T410011-07TCLP	51339	9.28	274849	11.50	220714	17.21
T410011-08TCLP	48263	9.15	254338	11.42	207797	17.11
T410213-01TCLP	46147	9.32	238265	11.50	184402	17.21
T410011-06TCLP	42543	9.18	225411	11.38	179975	17.11
T410021-24A	47426	9.20	252328	11.41	206632	17.14
T410041-06	48954	9.28	270138	11.47	220224	17.21
T410041-05A	49761	9.20	252748	11.41	202284	17.15
T410056-02A	46372	9.24	222190	11.41	192143	17.15
T410048-36D	52565	9.20	266439	11.41	210581	17.19
T410199-01MS	52479	9.24	275339	11.41	216805	17.15
T410199-01MSD	48682	9.22	251101	11.43	196508	17.15

IS1(BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

UPPER LIMIT = + 100%
ofinternal standard area
LOW LIMIT = - 50%
of internal standard area

Column used for flag internal standard areavalues with an asterisk

TOTAL ION CHROMATOGRAM



Data File: >E7948::A1 Quant Output File: ^E7948::QT
Name: 5995E,VOA Instrument ID: E
Misc: T410041-01A,L,5.0,H1,

Id File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17 Last Qcal Time: 941007 14:11

Operator ID: VOA2
Quant Time : 941007 20:10
Injected at: 941007 19:22

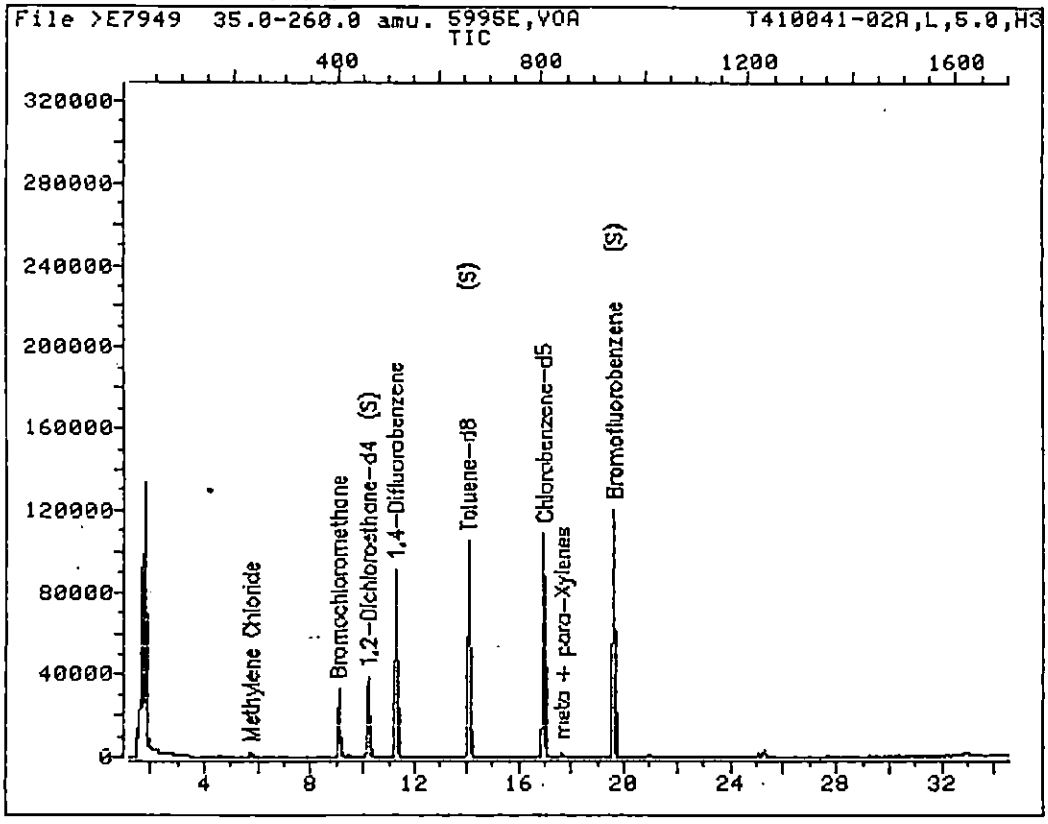
Operator ID: VOA2 Quant Rev: 7 Quant Time: 941007 20:10
Output File: ^E7948::QT Injected at: 941007 19:22
Data File: >E7948::A1 Dilution Factor: 1.00000
Name: 5995E,VOA Instrument ID: E
Misc: T410041-01A,L,5.0,H1,

ID File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17 Last Qcal Time: 941007 14:11

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		9.02	128.0	32923	50.00	ppb	87
13)	Methylene Chloride		5.76	84.0	5295	4.04	ppb	82
23)	1,2-Dichloroethane-d4	(S)	10.18	65.0	84695	49.09	ppb	92
24)	*1,4-Difluorobenzene		11.24	114.0	180161	50.00	ppb	90
39)	*Chlorobenzene-d5		16.95	117.0	139477	50.00	ppb	95
41)	Toluene-d8	(S)	14.03	98.0	188910	52.01	ppb	95
42)	Toluene		14.15	92.0	2615	~~994~~	ppb	96
51)	Bromofluorobenzene	(S)	19.59	95.0	137553	49.08	ppb	99

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E7949::A1 Quant Output File: ^E7949::QT
Name: 5995E,VOA Instrument ID: E
Misc: T410041-02A,L,5.0,H3,

Id File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17 Last Qcal Time: 941007 14:11

Operator ID: VOA2
Quant Time : 941007 20:44
Injected at: 941007 20:05

Operator ID: VOA2 Quant Rev: 7 Quant Time: 941007 20:44
Output File: ^E7949::QT Injected at: 941007 20:05
Data File: >E7949::A1 Dilution Factor: 1.00000
Name: 5995E,VOA Instrument ID: E
Misc: T410041-02A,L,5.0,H3,

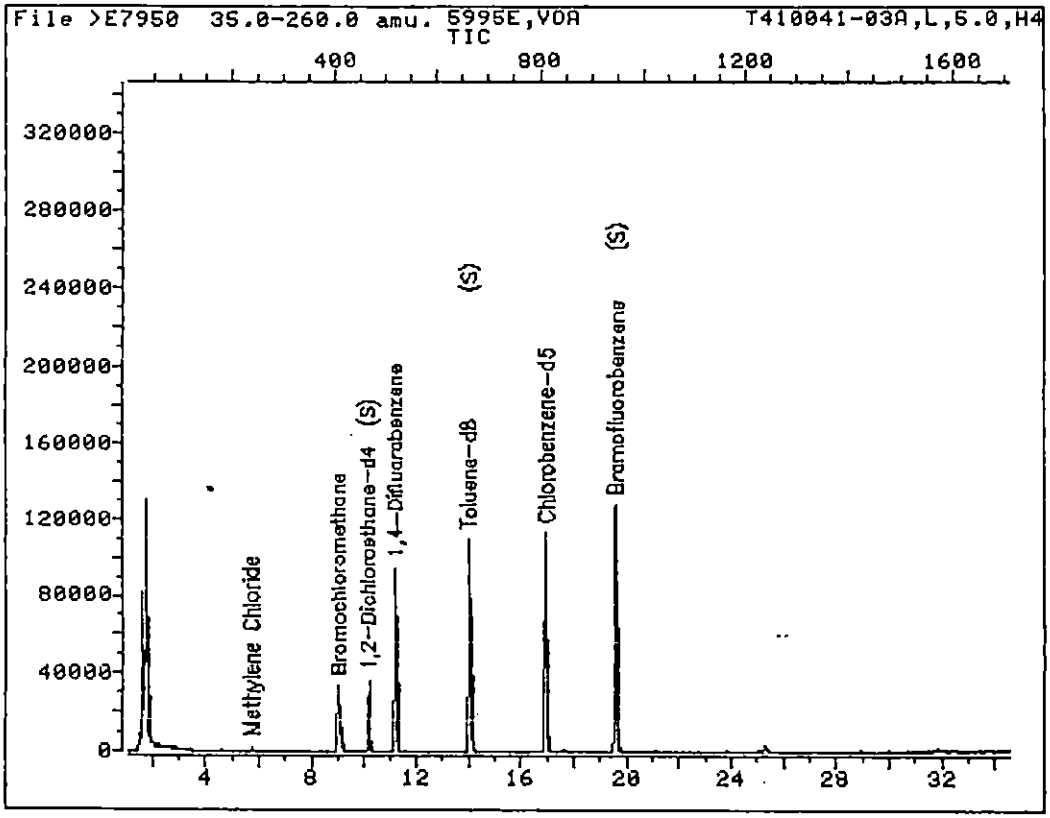
ID File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17 Last Qcal Time: 941007 14:11

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		9.01	128.0	33051	50.00	ppb	93
13)	Methylene Chloride		5.70	84.0	4195M	3.19	ppb	83
23)	1,2-Dichloroethane-d4	(S)	10.17	65.0	82367	47.55	ppb	97
24)	*1,4-Difluorobenzene		11.22	114.0	187799	50.00	ppb	93
39)	*Chlorobenzene-d5		16.96	117.0	144024	50.00	ppb	93
41)	Toluene-d8	(S)	14.02	98.0	190614	50.82	ppb	95
48)	meta + para-Xylenes		17.64	106.0	2464	1.26	ppb	92
51)	Bromofluorobenzene	(S)	19.60	95.0	145250	50.19	ppb	92

* Compound is ISTD

2 hits = MY

TOTAL ION CHROMATOGRAM



Data File: >E7950::A1
Name: 5995E,VOA
Misc: T410041-03A,L,5.0,H4,

Quant Output File: ^E7950::QT
Instrument ID: E

Id File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17

Last Qcal Time: 941007 14:11

Operator ID: VOA2
Quant Time : 941007 21:24
Injected at: 941007 20:49

Operator ID: VOA2 Quant Rev: 7 Quant Time: 941007 21:24
Output File: ^E7950::QT Injected at: 941007 20:49
Data File: >E7950::A1 Dilution Factor: 1.00000
Name: 5995E,VOA Instrument ID: E
Misc: T410041-03A,L,5.0,H4,

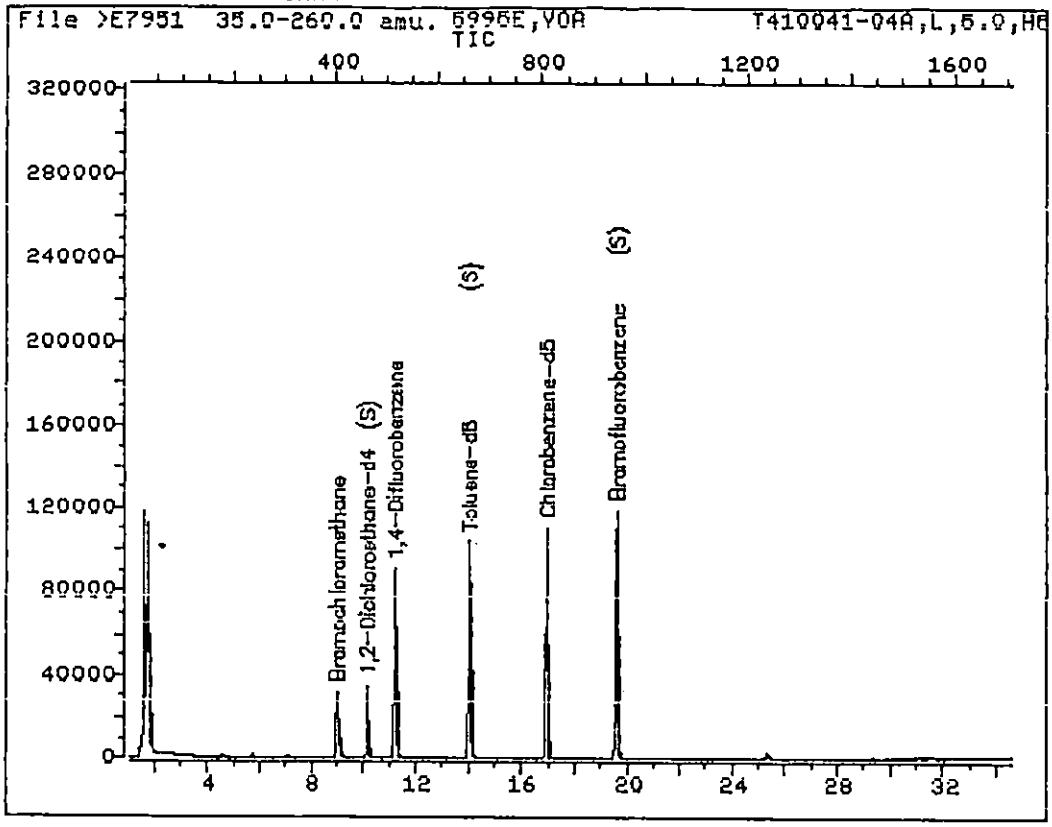
ID File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17 Last Qcal Time: 941007 14:11

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		8.99	128.0	34012	50.00	ppb	86
13)	Methylene Chloride		5.68	84.0	5947M	4.40	ppb	93
23)	1,2-Dichloroethane-d4	(S)	10.12	65.0	86853	48.73	ppb	98
24)	*1,4-Difluorobenzene		11.18	114.0	190079	50.00	ppb	92
39)	*Chlorobenzene-d5		16.95	117.0	147799	50.00	ppb	96
41)	Toluene-d8	(S)	14.00	98.0	198036	51.45	ppb	96
51)	Bromofluorobenzene	(S)	19.59	95.0	148451	49.98	ppb	94

* Compound is ISTD

1Hit-MW

TOTAL ION CHROMATOGRAM



Data File: >E7951::A1
Name: 5995E,VOA
Misc: T410041-04A,L,5.0,H5,

Quant Output File: ^E7951::QT
Instrument ID: E

Id File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17

Last Qcal Time: 941007 14:11

Operator ID: VOA2
Quant Time : 941007 22:07
Injected at: 941007 21:31

Operator ID: VOA2 Quant Rev: 7 Quant Time: 941007 22:07
Output File: ^E7951::QT Injected at: 941007 21:31
Data File: >E7951::A1 Dilution Factor: 1.00000
Name: 5995E,VOA Instrument ID: E
Misc: T410041-04A,L,5.0,H5,

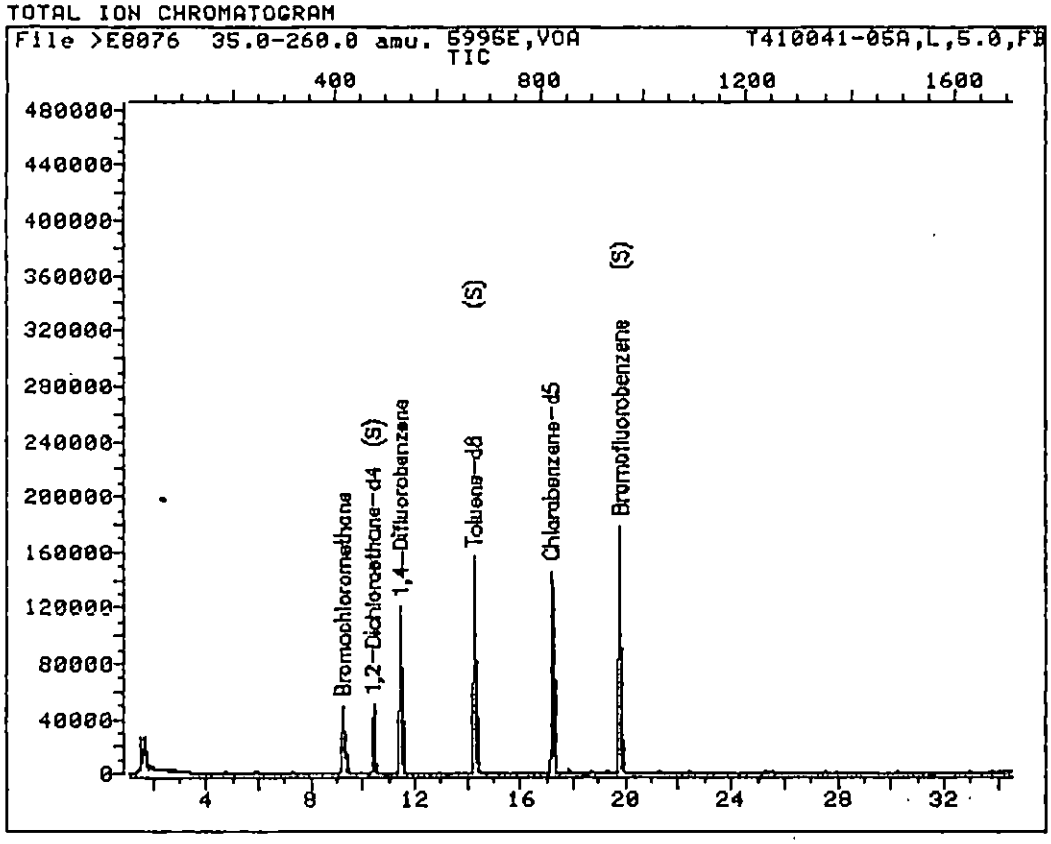
ID File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17 Last Qcal Time: 941007 14:11

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		8.97	128.0	31610	50.00	ppb	91
23)	1,2-Dichloroethane-d4	(S)	10.12	65.0	79114	47.76	ppb	99
24)	*1,4-Difluorobenzene		11.18	114.0	177710	50.00	ppb	95
39)	*Chlorobenzene-d5		16.95	117.0	143219	50.00	ppb	98
41)	Toluene-d8	(S)	14.02	98.0	187863	50.37	ppb	98
51)	Bromofluorobenzene	(S)	19.59	95.0	139650	48.52	ppb	96

* Compound is ISTD

Omit=NV

TOTAL ION CHROMATOGRAM



Data File: >E8076::A1 Quant Output File: ^E8076::QT
Name: 5995E,VOA Instrument ID: E
Misc: T410041-05A,L,5.0,FB,

Id File: IDDEL::P1
Title: IFB
Last Calibration: 941012 17:43 Last Qcal Time: 941014 10:53

Operator ID: VOA2
Quant Time : 941014 19:43
Injected at: 941014 19:07

Operator ID: VOA2 Quant Rev: 7 Quant Time: 941014 19:43
Output File: ^E8076::QT Injected at: 941014 19:07
Data File: >E8076::A1 Dilution Factor: 1.00000
Name: 5995E,VOA Instrument ID: E
Misc: T410041-05A,L,5.0,FB,

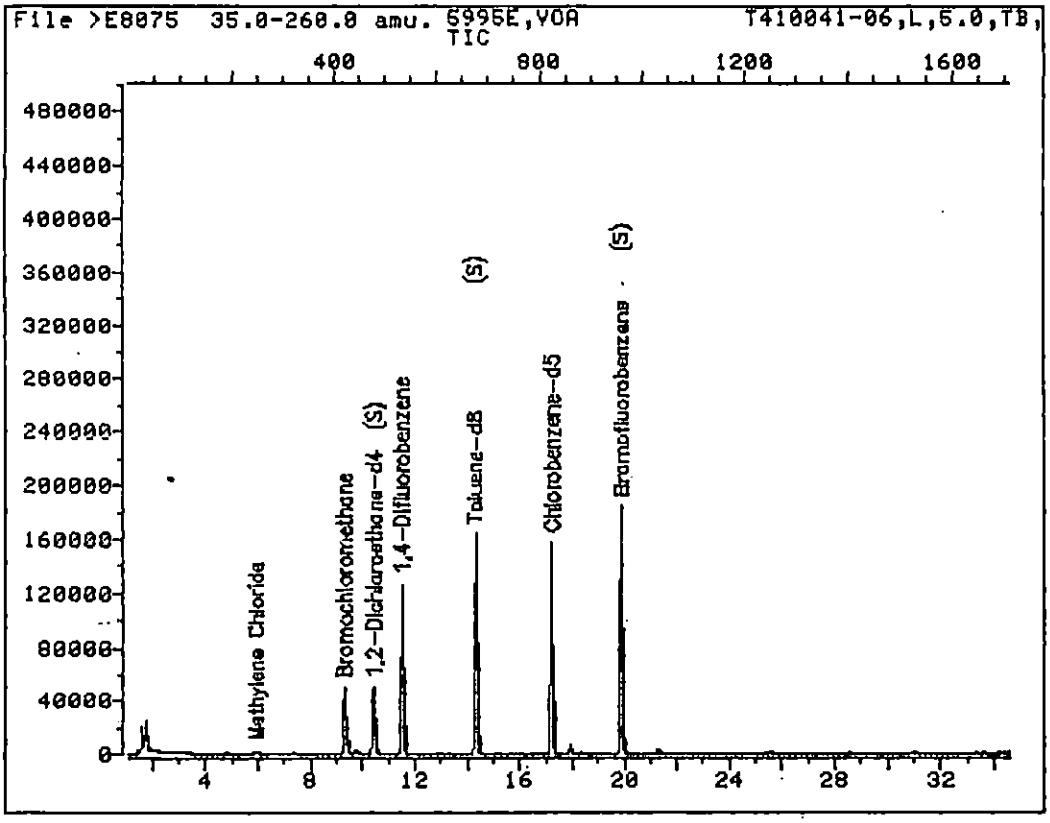
ID File: IDDEL::P1
Title: IFB
Last Calibration: 941012 17:43 Last Qcal Time: 941014 10:53

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		9.20	128.0	49761	50.00	ppb	98
23)	1,2-Dichloroethane-d4	(S)	10.36	65.0	117347	46.92	ppb	99
24)	*1,4-Difluorobenzene		11.41	114.0	252748	50.00	ppb	94
39)	*Chlorobenzene-d5		17.15	117.0	202284	50.00	ppb	97
41)	Toluene-d8	(S)	14.23	98.0	281388	47.86	ppb	94
51)	Bromofluorobenzene	(S)	19.77	95.0	203414	53.78	ppb	85

* Compound is ISTD

Omit-MY

TOTAL ION CHROMATOGRAM



Data File: >E8075::A1 Quant Output File: ^E8075::QT
Name: 5995E,VOA Instrument ID: E
Misc: T410041-06,L,5.0,TB,

Id File: IDDEL::P1
Title: IFB
Last Calibration: 941012 17:43 Last Qcal Time: 941014 10:53

Operator ID: VOA2
Quant Time : 941014 19:01
Injected at: 941014 18:26

QUANT REPORT Page 1

Operator ID: VOA2 Quant Rev: 7 Quant Time: 941014 19:01
Output File: ^E8075::QT Injected at: 941014 18:26
Data File: >E8075::A1 Dilution Factor: 1.00000
Name: 5995E,VOA Instrument ID: E
Misc: T410041-06,L,5.0,TB,

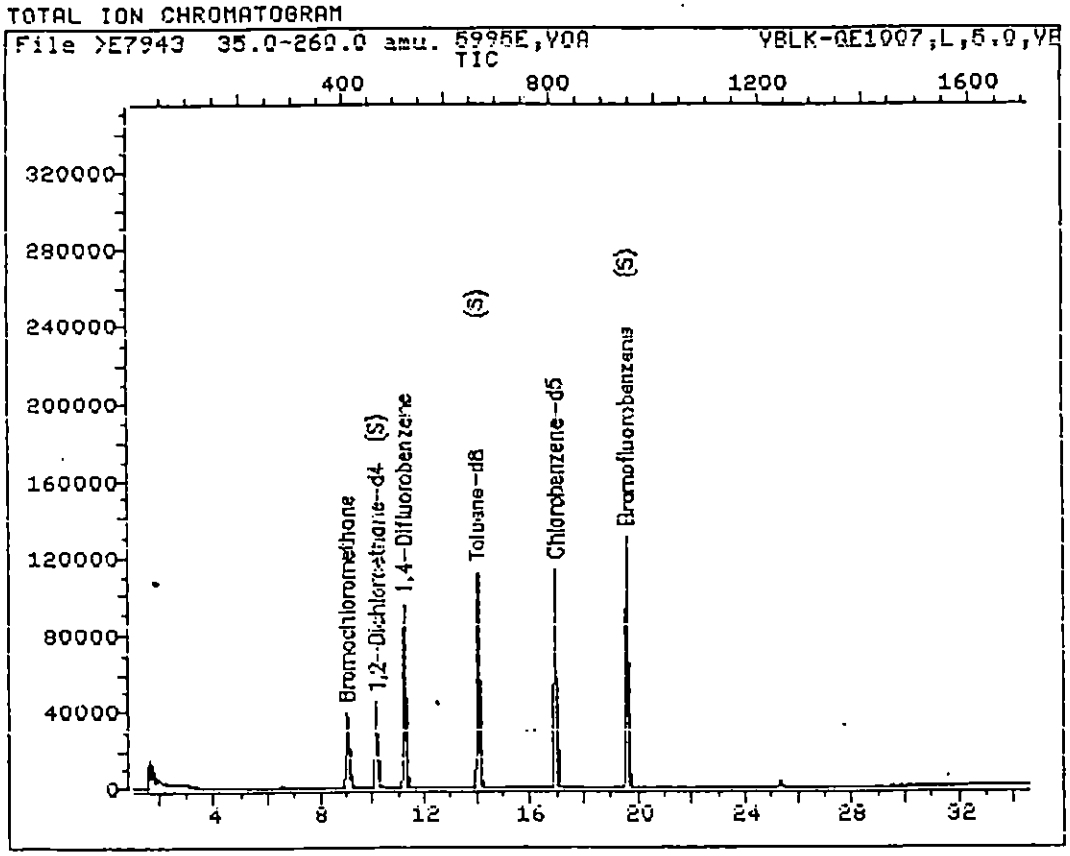
ID File: IDDEL::P1
Title: IFB
Last Calibration: 941012 17:43 Last Qcal Time: 941014 10:53

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		9.28	128.0	48954	50.00	ppb	97
13)	Methylene Chloride		5.90	84.0	5121M	2.63	ppb	85
23)	1,2-Dichloroethane-d4	(S)	10.43	65.0	117741	47.86	ppb	98
24)	*1,4-Difluorobenzene		11.47	114.0	270138	50.00	ppb	96
39)	*Chlorobenzene-d5		17.21	117.0	220224	50.00	ppb	97
41)	Toluene-d8	(S)	14.27	98.0	308018	48.12	ppb	93
51)	Bromofluorobenzene	(S)	19.85	95.0	221505	53.79	ppb	91

* Compound is ISTD

MH+-MY

TOTAL ION CHROMATOGRAM



Data File: >E7943::A1 Quant Output File: ^E7943::QT
Name: 5995E,VOA Instrument ID: E
Misc: VBLK-QE1007,L,5.0,VBLK07,

Id File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17 Last Qcal Time: 941007 14:11

Operator ID: VOA2
Quant Time : 941007 16:34
Injected at: 941007 15:46

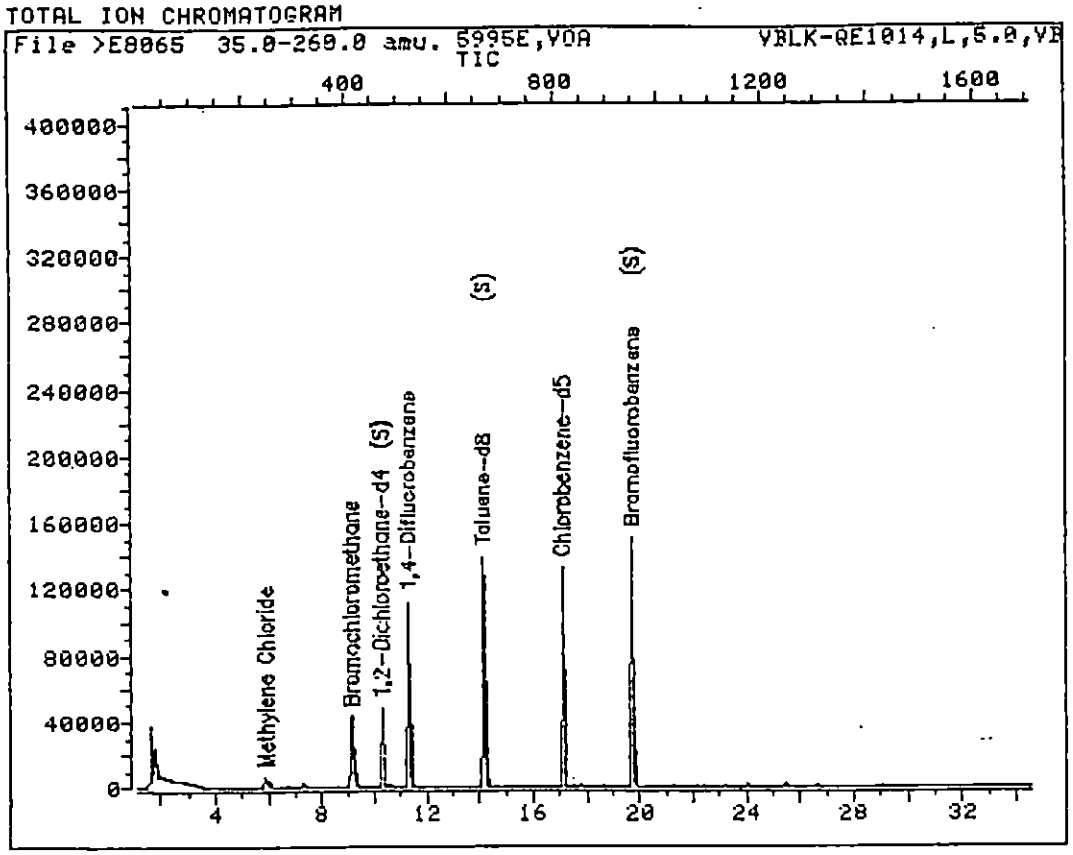
Operator ID: VOA2 Quant Rev: 7 Quant Time: 941007 16:34
Output File: ^E7943::QT Injected at: 941007 15:46
Data File: >E7943::A1 Dilution Factor: 1.00000
Name: 5995E,VOA Instrument ID: E
Misc: VBLK-QE1007,L,5.0,VBLK07,

ID File: IDDEL::P1
Title: IFB
Last Calibration: 940913 17:17 Last Qcal Time: 941007 14:11

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		9.00	128.0	37031	50.00	ppb	9
23)	1,2-Dichloroethane-d4	(S)	10.15	65.0	97459	50.22	ppb	9
24)	*1,4-Difluorobenzene		11.21	114.0	192231	50.00	ppb	9
39)	*Chlorobenzene-d5		16.94	117.0	156353	50.00	ppb	9
41)	Toluene-d8	(S)	14.01	98.0	208972	51.32	ppb	9
51)	Bromofluorobenzene	(S)	19.58	95.0	154010	49.02	ppb	9

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >E8065::A1 Quant Output File: ^E8065::QT
Name: 5995E,VOA Instrument ID: E
Misc: VBLK-QE1014,L,5.0,VBLK14,

Id File: IDDEL::P1
Title: IFB
Last Calibration: 941012 17:43 Last Qcal Time: 941014 10:53

Operator ID: VOA2
Quant Time : 941014 12:10
Injected at: 941014 11:34

Operator ID: VOA2 Quant Rev: 7 Quant Time: 941014 12:10
Output File: ^E8065::QT Injected at: 941014 11:34
Data File: >E8065::A1 Dilution Factor: 1.00000
Name: 5995E,VOA Instrument ID: E
Misc: VBLK-QE1014,L,5.0,VBLK14,

ID File: IDDEL::P1
Title: IFB
Last Calibration: 941012 17:43 Last Qcal Time: 941014 10:53

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane		9.11	128.0	44724	50.00	ppb	96
13)	Methylene Chloride		5.88	84.0	14856M	8.35	ppb	97
23)	1,2-Dichloroethane-d4	(S)	10.24	65.0	106187	47.24	ppb	99
24)	*1,4-Difluorobenzene		11.28	114.0	231862	50.00	ppb	96
39)	*Chlorobenzene-d5		17.07	117.0	182495	50.00	ppb	97
41)	Toluene-d8	(S)	14.12	98.0	252365	47.58	ppb	91
51)	Bromofluorobenzene	(S)	19.71	95.0	180053	52.77	ppb	88

* Compound is ISTD

Unit = ug

GC/MS CONFORMANCE/NONCONFORMANCE SUMMARY MSSY

WORK ORDER No. 7410041

	No	Yes
1. Chromatograms Labeled/Compounds Identified	—	✓
2. Tune Specifications		
a. BFB Meets Criteria	—	✓
b. DFTPP Meets Criteria	—	✓
3. Tuning Frequency Performed every 24 hours for 600 series and 12 hours for 8000 series	—	✓
4. Calibration Frequency Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	—	✓
5. Calibration Requirements		
a. Calibration Check Compounds (CCCs)	—	✓
b. System Performance Check Compounds (SPCCs)	—	✓
6. Blank Contamination If yes, list compounds and concentrations in each blank:	✓	—
a. VOA Fraction		
b. B/N Fraction		
c. Acid Fraction		
7. Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	—	✓
a. VOA Fraction		
b. B/N Fraction		
c. Acid Fraction		
If not met, were the calculations checked and the results qualified as estimated?	—	—
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	—	✓
a. VOA Fraction		
b. B/N Fraction		
c. Acid Fraction		
9. Internal Standard Areas and Retention Time Shifts Meet Criteria Internal standard areas between -50% and +100% of daily standard	—	✓
10. Extraction Holding Time Met If not met, list number of days exceeded for each sample:	—	✓
11. Analysis Holding Time Met If not met, list number of days exceeded for each sample:	—	✓

Laboratory Supervisor: L. Tulapol Date: 10/13/94

ORGANICS ANALYSIS DATA SHEET-SEMIVOLATILE COMPOUNDS

Client Sample ID No.: H1

Lab Name: LRI

Lab Sample ID: T410041-01

Matrix: [soil/water] WATER

Lab File ID: >J3964

Sample wt/vol: 1000 [g/mL] ML

Extract Vol: 1000 uL

Run Type: 8270SVA

Date Received: 10/04/94

% Moisture: NA

Date Extracted: 10/06/94

Dilution Factor: 1

Date Analyzed: 10/08/94

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
91-20-3	Naphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	1	J
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

SADF: 1.00

Total Hit(s): 1

ORGANICS ANALYSIS DATA SHEET-SEMIVOLATILE COMPOUNDS

Client Sample ID No.: H3

Lab Name: LRI

Lab Sample ID: T410041-02

Matrix: [soil/water] WATER

Lab File ID: >J3965

Sample wt/vol: 850 [g/mL] ML

Extract Vol: 1000 uL

Run Type: 8270SVA

Date Received: 10/04/94

% Moisture: NA

Date Extracted: 10/06/94

Dilution Factor: 1

Date Analyzed: 10/08/94

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
91-20-3	Naphthalene	12	U
208-96-8	Acenaphthylene	12	U
83-32-9	Acenaphthene	12	U
86-73-7	Fluorene	12	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

SADF: 1.18

Total Hit(s): 0

ORGANICS ANALYSIS DATA SHEET-SEMIVOLATILE COMPOUNDS

Client Sample ID No.: H4

Lab Name: LRI

Lab Sample ID: T410041-03

Matrix: [soil/water] WATER

Lab File ID: >J3966

Sample wt/vol: 850 [g/mL] ML

Extract Vol: 1000 uL

Run Type: 8270SVA

Date Received: 10/04/94

% Moisture: NA

Date Extracted: 10/06/94

Dilution Factor: 1

Date Analyzed: 10/08/94

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
91-20-3	Naphthalene	12	U
208-96-8	Acenaphthylene	12	U
83-32-9	Acenaphthene	12	U
86-73-7	Fluorene	12	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

SADF: 1.18

Total Hit(s): 0

ORGANICS ANALYSIS DATA SHEET-SEMIVOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: H5

Lab Sample ID: T410041-04

Lab File ID: >J3967

Matrix: [soil/water] WATER

Extract Vol: 1000 uL

Sample wt/vol: 850 [g/mL] ML

Date Received: 10/04/94

Run Type: 8270SVA

Date Extracted: 10/06/94

% Moisture: NA

Date Analyzed: 10/08/94

Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
91-20-3	Naphthalene	12	U
208-96-8	Acenaphthylene	12	U
83-32-9	Acenaphthene	12	U
86-73-7	Fluorene	12	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

SADF: 1.18

Total Hit(s): 0

ORGANICS ANALYSIS DATA SHEET-SEMIVOLATILE COMPOUNDS

Lab Name: LRI

Client Sample ID No.: FB

Lab Sample ID: T410041-05

Lab File ID: >J3968

Matrix: [soil/water] WATER

Extract Vol: 1000 uL

Sample wt/vol: 850 [g/mL] ML

Date Received: 10/04/94

Run Type: 8270SVA

Date Extracted: 10/06/94

% Moisture: NA

Date Analyzed: 10/08/94

Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
91-20-3	Naphthalene	12	U
208-96-8	Acenaphthylene	12	U
83-32-9	Acenaphthene	12	U
86-73-7	Fluorene	12	U
85-01-8	Phenanthrene	12	U
120-12-7	Anthracene	12	U
206-44-0	Fluoranthene	12	U
129-00-0	Pyrene	12	U
56-55-3	Benzo(a)anthracene	12	U
218-01-9	Chrysene	12	U
205-99-2	Benzo(b)fluoranthene	12	U
207-08-9	Benzo(k)fluoranthene	12	U
50-32-8	Benzo(a)pyrene	12	U
193-39-5	Indeno(1,2,3-cd)pyrene	12	U
53-70-3	Dibenz(a,h)anthracene	12	U
191-24-2	Benzo(g,h,i)perylene	12	U

SADF: 1.18

Total Hit(s): 0

ORGANICS ANALYSIS DATA SHEET-SEMIVOLATILE COMPOUNDS

METHOD BLANK

Lab Name: LRI

Lab Sample ID: SBLKQM7681T1 | SBLKQM7681T1

Matrix: [soil/water] WATER — Lab File ID: >A1093

Sample wt/vol: 1000 [g/mL] ML — Extract Vol: 1000 uL

Run Type: 8270SVA — Date Received:

% Moisture: NA — Date Extracted: 09/15/94

Dilution Factor: 1 — Date Analyzed: 09/16/94

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
91-20-3	Naphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

SADF: 1.00 — Total Hit(s): 0

ORGANICS ANALYSIS DATA SHEET-SEMIVOLATILE COMPOUNDS

METHOD BLANK

Lab Name: LRI

Lab Sample ID: SBLKQM7681T7 | SBLKQM7681T7

Matrix: [soil/water] WATER — Lab File ID: >J3963

Sample wt/vol: 1000 [g/mL] ML — Extract Vol: 1000 uL

Run Type: 8270SVA — Date Received:

% Moisture: NA — Date Extracted: 10/06/94

Dilution Factor: 1 — Date Analyzed: 10/08/94

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/L	Q
91-20-3	Naphthalene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
86-73-7	Fluorene	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

SADF: 1.00 — Total Hit(s): 0

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: LRI

Lab File ID: >A0930 DFTPP Injection Date: 9/06/94

Instrument ID: MSD/A DFTPP Injection Time: 10:25

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.8
68	Less than 2.0% of mass 69	0.0 0.0)1
69	(reference only)	72.
70	Less than 2.0% of mass 69	0.0 .0.0)1
127	40.0 - 60.0% of mass 198	41.1
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.
199	5.0 - 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	17.8
365	Greater than 1.00% of mass 198	1.52
441	0-100% of mass 443	7.2
442	Greater than 40% of mass 198	52.6
443	17.0 - 23.0% of mass 442	10.4 19.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANK, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD 50	SSTD 50	>A0931	940906	10:52
2	SSTD 160	SSTD 160	>A0932	940906	11:46
3	SSTD 120	SSTD 120	>A0933	940906	12:44
4	SSTD 80	SSTD 80	>A0934	940906	13:38
5	SSTD 20	SSTD 20	>A0935	940906	14:34

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: LRI

Lab File ID: >J3890

DFTPP Injection Date: 10/05/94

Instrument ID: MSD/J

DFTPP Injection Time: 18:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	58.6	
68	Less than 2.0% of mass 69	0.0	0.0)1
69	(reference only)	73.	
70	Less than 2.0% of mass 69	0.0	0.0)1
127	40.0 - 60.0% of mass 198	42.9	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.	
199	5.0 - 9.0% of mass 198	7.1	
275	10.0 - 30.0% of mass 198	19.9	
365	Greater than 1.00% of mass 198	2.38	
441	0-100% of mass 443	6.7	
442	Greater than 40% of mass 198	44.8	
443	17.0 - 23.0% of mass 442	8.7	19.4)2

1-Value is % mass 69

2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANK, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD 50	SSTD 50	>J3891	941005	19:32
2	SSTD 160	SSTD 160	>J3892	941005	20:22
3	SSTD 120	SSTD 120	>J3893	941005	21:13
4	SSTD 80	SSTD 80	>J3894	941005	22:03
5	SSTD 20	SSTD 20	>J3895	941005	22:53

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: LRI

Lab File ID: >A1090 DFTPP Injection Date: 9/16/94

Instrument ID: MSD/A DFTPP Injection Time: 9:28

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	59.9	
68	Less than 2.0% of mass 69	0.0	0.0)1
69	(reference only)	73.	
70	Less than 2.0% of mass 69	0.0	0.0)1
127	40.0 - 60.0% of mass 198	42.7	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.	
199	5.0 - 9.0% of mass 198	6.4	
275	10.0 - 30.0% of mass 198	18.1	
365	Greater than 1.00% of mass 198	1.34	
441	0-100% of mass 443	7.6	
442	Greater than 40% of mass 198	57.0	
443	17.0 - 23.0% of mass 442	10.3	18.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANK, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD 50	SSTD 50	>A1091	940916	09:57
2	SBLKQM7681T1	SBLKQM7681T1	>A1093	940916	11:01
3	I0914TP2	T409170-01	>A1094	940916	11:53
4	I0914TP2 MS	T409170-01MS	>A1095	940916	12:46
5	I0914TP2 MSD	T409170-01MSD	>A1096	940916	13:38
6	TP-17B	T408396-03	>A1097	940916	14:31
7	TP-20B	T408396-07	>A1098	940916	15:23
8	SBLKQM7654T4	SBLKQM7654T4	>A1099	940916	16:19
9	S3	T409142-01	>A1100	940916	17:11
10	S4	T409142-02	>A1101	940916	18:03
11	S2 18-24"	T409106-04	>A1103	940916	19:48

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: LRI

Lab File ID: >J3960 DFTPP Injection Date: 10/08/94

Instrument ID: MSD/J DFTPP Injection Time: 02:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	58.2	
68	Less than 2.0% of mass 69	0.0	0.0)1
69	(reference only)	70.	
70	Less than 2.0% of mass 69	0.0	0.0)1
127	40.0 - 60.0% of mass 198	41.2	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.	
199	5.0 - 9.0% of mass 198	6.9	
275	10.0 - 30.0% of mass 198	21.1	
365	Greater than 1.00% of mass 198	2.40	
441	0-100% of mass 443	7.2	
442	Greater than 40% of mass 198	48.1	
443	17.0 - 23.0% of mass 442	9.6	19.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANK, AND STANDARDS:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD 50	SSTD 50	>J3961	941008	02:59
2	SBLKQM7681T7	SBLKQM7681T7	>J3963	941008	04:38
3	H1	T410041-01	>J3964	941008	05:28
4	H3	T410041-02	>J3965	941008	06:17
5	H4	T410041-03	>J3966	941008	07:07
6	H5	T410041-04	>J3967	941008	07:56
7	FB	T410041-05	>J3968	941008	08:46
8	FB-5	T410048-36	>J3969	941008	09:35
9	SBLKQM7801T1	SBLKQM7801T1	>J3970	941008	10:25
10	MONTHLY SLUDGE	T409347-01	>J3972	941008	12:06

METHOD BLANK SUMMARY

Lab Name: LRI Contract No.:

Lab Sample ID: SBLKQM7681T1 Case No.:

Matrix: WATER Fraction : BNA

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

LAB FILE ID	NJDEP SAMPLE ID	LAB SAMLPE ID	DATE OF ANALYSIS	TIME OF ANALYSIS
>A1094	I0914TP2	T409170-01	09/16/94	11:53
>A1095	I0914TP2 MS	T409170-01MS	09/16/94	12:46
>A1096	I0914TP2 MSD	T409170-01MSD	09/16/94	13:38

COMMENTS:

METHOD BLANK SUMMARY

Lab Name: LRI Contract No.:

Lab Sample ID: SBLKQM7681T7 Case No.:

Matrix: WATER Fraction : BNA

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

LAB FILE ID	CLIENT SAMPLE ID	LAB SAMLPE ID	DATE OF ANALYSIS	TIME OF ANALYSIS
>J3964	H1	T410041-01	10/08/94	05:28
>J3965	H3	T410041-02	10/08/94	06:17
>J3966	H4	T410041-03	10/08/94	07:07
>J3967	H5	T410041-04	10/08/94	07:56
>J3968	FB	T410041-05	10/08/94	08:46

COMMENTS:

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: A

Contractor: LRI Calibration Date: 09/06/94

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:		>A0935	>A0931	>A0934	>A0933	>A0932					
Compound		RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Pyridine		1.57511	1.82781	1.72213	1.59221	1.40020	.338	1.62349	9.963		
N-Nitrosodimethylamine		1.18734	1.14598	1.20816	1.13494	1.04432	.341	1.14415	5.531		
2-Fluorophenol	(S)	1.35633	1.39615	1.33622	1.47984	1.19446	.673	1.35260	7.699		
Aniline		2.79281	2.69644	2.54795	2.58538	2.23856	.926	2.57223	8.159		
Phenol-d5	(S)	2.16964	2.17282	2.00150	2.05026	1.82295	.937	2.04343	7.053		
bis(2-chloroethyl)ether		1.94914	1.85764	1.59031	1.50527	1.34035	.949	1.64854	15.255		
2-Chlorophenol		1.61427	1.63782	1.46767	1.33904	1.25950	.953	1.46366	11.343		
Phenol		2.35622	2.44435	2.00870	2.08937	1.93984	.941	2.16769	10.197	*	
1,3-Dichlorobenzene		1.65279	1.58790	1.40317	1.36290	1.25572	.988	1.45250	11.294		
1,4-Dichlorobenzene		1.69388	1.66177	1.43474	1.39931	1.29118	1.005	1.49618	11.658	*	
1,2-Dichlorobenzene		1.53637	1.48649	1.28405	1.23069	1.06849	1.058	1.32122	14.512		
Benzyl alcohol		1.11567	1.07397	.99578	.98635	.88726	1.060	1.01180	8.710		
2,2'-oxybis(1-Chloropropane)		3.72618	3.02488	3.35471	3.33173	3.02980	1.105	3.29346	8.775		
2-Methylphenol		1.62361	1.44931	1.41203	1.33466	1.16484	1.107	1.39689	11.984		
Hexachloroethane		.79356	.70409	.71846	.69707	.65508	1.147	.71365	7.078		
N-Nitroso-di-n-propylamine		1.70773	1.45019	1.54109	1.38806	1.22039	1.150	1.46149	12.364		**
3&4-Methylphenol		1.84217	1.62279	1.56795	1.46066	1.33448	1.156	1.56561	12.127		(Conc=40.0,100.0,160.0,24
Nitrobenzene-d5	(S)	.43579	.49442	.46044	.47554	.47232	.849	.46770	4.621		
Nitrobenzene		.47901	.50898	.45261	.47075	.47433	.854	.47714	4.280		
Isophorone		1.08546	1.07943	1.01147	1.05159	1.02063	.906	1.04972	3.185		
2-Nitrophenol		.22791	.26938	.24517	.24827	.23379	.924	.24490	6.530	*	
2,4-Dimethylphenol		.33016	.37007	.32738	.32687	.32742	.947	.33638	5.613		
bis(2-Chloroethoxy)methane		.63058	.63520	.60222	.60002	.57681	.966	.60896	3.951		
2,4-Dichlorophenol		.31599	.34908	.31165	.30018	.29750	.978	.31488	6.545	*	
1,2,4-Trichlorobenzene		.33520	.36250	.31421	.29842	.30024	.994	.32211	8.366		
Benzoic acid		.26287	.33557	.31131	.32421	.30438	.990	.30767	9.023		
Naphthalene		1.03607	1.14599	.93630	.96926	.93822	1.005	1.00517	8.801		
4-Chloroaniline		.54768	.58764	.51603	.51812	.51325	1.030	.53654	5.922		
Hexachlorobutadiene		.16104	.18319	.16486	.15367	.15800	1.050	.16415	6.946	*	
4-Chloro-3-methylphenol		.46099	.47369	.40701	.41176	.40522	1.151	.43173	7.620	*	

RF - Response Factor (Subscript is amount in NG)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: A

Contractor: LRI Calibration Date: 09/06/94

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>A0935	>A0931	>A0934	>A0933	>A0932				
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC SPCC
2-Methylnaphthalene	.73537	.75688	.61773	.61403	.57951	1.164	.66070	12.071	
Hexachlorocyclopentadiene	.19799	.33143	.29113	.29977	.28671	.865	.28141	17.697	**
2,4,6-Trichlorophenol	.39195	.45033	.39852	.40275	.34861	.881	.39843	9.081	*
2,4,5-Trichlorophenol	.41148	.49168	.42648	.37619	.37147	.887	.41546	11.683	
2-Fluorobiphenyl - (S)	1.17999	1.23227	1.04842	1.02972	.99151	.894	1.09638	9.479	
2-Chloronaphthalene	1.07756	1.15590	1.03507	1.01527	.94305	.905	1.04537	7.522	
2-Nitroaniline	.55378	.62189	.57542	.60816	.57919	.934	.58769	4.630	
Acenaphthylene	1.91177	1.70301	1.50033	1.40299	1.22286	.974	1.54819	17.252	
Dimethylphthalate	1.56927	1.43905	1.21064	1.16644	1.04301	.973	1.28568	16.622	
2,4-Dinitrotoluene	.56564	.64652	.55643	.57402	.53101	1.047	.57472	7.526	
Acenaphthene	1.09061	1.11283	.93276	.88918	.78203	1.005	.96148	14.509	*
3-Nitroaniline	.47612	.49359	.45030	.41275	.39179	1.004	.44491	9.555	
2,4-Dinitrophenol	.16450	.30551	.29152	.29136	.28741	1.020	.26806	21.748	**
Dibenzofuran	1.75570	1.69546	1.52029	1.46148	1.31937	1.032	1.55046	11.419	
2,6-Dinitrotoluene	.36477	.42982	.38135	.38486	.35847	.983	.38385	7.286	
4-Nitrophenol	.42714	.46041	.44001	.44297	.39991	1.041	.43409	5.181	**
Fluorene	1.35853	1.32643	1.11903	1.11354	.97014	1.089	1.17753	13.789	
4-Chlorophenyl-phenylether	.62727	.64563	.55351	.52051	.45159	1.094	.55970	14.184	
Diethylphthalate	1.79485	1.72486	1.49550	1.41292	1.20872	1.092	1.52737	15.570	
4-Nitroaniline	.52154	.58429	.52676	.54675	.49564	1.108	.53500	6.175	
2,4,6-Tribromophenol (S)	.21525	.22944	.20779	.20656	.18817	1.133	.20944	7.150	
4,6-Dinitro-2-methylphenol	.19403	.25589	.23631	.24939	.23262	.896	.23365	10.308	
N-Nitrosodiphenylamine (1)	.61572	.64959	.53036	.52832	.44326	.899	.55345	14.686	*
Azobenzene	1.42833	1.33750	1.21484	1.31608	1.18042	.902	1.29544	7.679	
4-Bromophenyl-phenylether	.24146	.24991	.21077	.22375	.20255	.944	.22569	8.855	
Hexachlorobenzene	.27201	.30200	.25216	.27577	.23804	.961	.26800	9.104	
Pentachlorophenol	.19288	.22087	.19993	.21168	.19509	.987	.20409	5.814	*
Phenanthrene	1.28063	1.25487	1.04960	1.10849	.99979	1.003	1.13868	10.915	
Anthracene	1.26120	1.30335	1.06299	1.11231	1.00293	1.009	1.14856	11.225	
Carbazole	1.22549	1.35817	1.12022	1.19048	1.10398	1.036	1.19966	8.474	

RF - Response Factor (Subscript is amount in NG)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: A

Contractor: LRI Calibration Date: 09/06/94

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>A0935	>A0931	>A0934	>A0933	>A0932				
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC SPCC
Di-n-butylphthalate	2.11654	2.00663	1.79610	1.69708	1.68566	1.097	1.86040	10.351	
Fluoranthene	1.27923	1.36173	1.17834	1.12856	1.10366	1.164	1.21031	8.933	*
Benzidine	.80297	.67762	.64820	.67793	.61206	.875	.68376	10.518	
Pyrene	1.64274	1.46628	1.42066	1.42477	1.44064	.878	1.47902	6.305	
Terphenyl-d14 (S)	.96509	.92397	.84373	.87172	.86885	.899	.89467	5.478	
Butylbenzylphthalate	1.03502	.99625	1.01019	1.01444	.94512	.955	1.00021	3.377	
Benzo(a)anthracene	1.29332	1.37350	1.25622	1.27135	1.21417	.998	1.28171	4.596	
3,3'-Dichlorobenzidine	.51256	.56105	.50195	.50332	.48991	1.001	.51376	5.379	
Chrysene	1.15088	1.19344	1.03878	1.03345	.95265	1.003	1.07384	9.051	
bis(2-Ethylhexyl)phthalate	1.45709	1.36239	1.40914	1.39658	1.30090	1.015	1.38522	4.194	
Di-n-octylphthalate	2.65611	2.57571	2.53721	2.22986	2.16333	.947	2.43244	9.077	*
Benzo(b)fluoranthene	1.39776	1.43934	1.36280	1.17351	1.35043	.971	1.34477	7.569	
Benzo(k)fluoranthene	1.38811	1.36290	1.27819	.95055	1.35226	.973	1.26640	14.312	
Benzo(a)pyrene	1.37085	1.41654	1.29606	1.21008	1.14901	.996	1.28851	8.576	*
Indeno(1,2,3-cd)pyrene	1.41407	1.45046	1.29700	1.37434	1.26830	1.099	1.36083	5.655	
Dibenz(a,h)anthracene	1.14972	1.16129	1.03745	1.01772	.98663	1.102	1.07056	7.448	
Benzo(g,h,i)perylene	1.23768	1.25572	1.14172	1.15943	1.09771	1.128	1.17845	5.646	

RF - Response Factor (Subscript is amount in NG)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: A

Contractor: LRI Calibration Date: ~~09/27/94~~ 09/06/94 A. Panayiotou

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Compound		Laboratory ID: >A0935 RF 20.00	>A0931 RF 50.00	>A0934 RF 80.00	>A0933 RF 120.00	>A0932 RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
Pyridine		1.57511	1.82781	1.72213	1.59221	1.40020	.338	1.62349	9.963			
2-Fluorophenol	(S)	1.35633	1.39615	1.33622	1.47984	1.19446	.673	1.35260	7.699			
Phenol-d5	(S)	2.16964	2.17282	2.00150	2.05026	1.82295	.937	2.04343	7.053			
1,4-Dichlorobenzene		1.69388	1.66177	1.43474	1.39931	1.29118	1.005	1.49618	11.658	*		
2-Methylphenol		1.62361	1.44931	1.41203	1.33466	1.16484	1.107	1.39689	11.984			
Hexachloroethane		.79356	.70409	.71846	.69707	.65508	1.147	.71365	7.078			
3&4-Methylphenol		1.84217	1.62279	1.56795	1.46066	1.33448	1.156	1.56561	12.127			(Conc=40.0,100.0,160.0,24
Nitrobenzene-d5	(S)	.43579	.49442	.46044	.47554	.47232	.849	.46770	4.621			
Nitrobenzene		.47901	.50898	.45261	.47075	.47433	.854	.47714	4.280			
Hexachlorobutadiene		.16104	.18319	.16486	.15367	.15800	1.050	.16415	6.946	*		
2,4,6-Trichlorophenol		.39195	.45033	.39852	.40275	.34861	.881	.39843	9.081	*		
2,4,5-Trichlorophenol		.41148	.49168	.42648	.37619	.37147	.887	.41546	11.683			
2-Fluorobiphenyl	(S)	1.17999	1.23227	1.04842	1.02972	.99151	.894	1.09638	9.479			
2,4-Dinitrotoluene		.56564	.64652	.55643	.57402	.53101	1.047	.57472	7.526			
2,4,6-Tribromophenol	(S)	.21525	.22944	.20779	.20656	.18817	1.133	.20944	7.150			
Hexachlorobenzene		.27201	.30200	.25216	.27577	.23804	.961	.26800	9.104			
Pentachlorophenol		.19288	.22087	.19993	.21168	.19509	.987	.20409	5.814	*		
Terphenyl-d14	(S)	.96509	.92397	.84373	.87172	.86885	.899	.89467	5.478			

RF - Response Factor (Subscript is amount in NG)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: J

Contractor: LRI Calibration Date: ~~10/06/94~~ 10/05/94 AP

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:		>J3895	>J3891	>J3894	>J3893	>J3892					
Compound		RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Pyridine		1.03276	1.37659	1.07859	1.20816	1.21087	.268	1.18139	11.384		
N-Nitrosodimethylamine		1.32428	1.27218	1.18635	1.15828	.97266	.273	1.18275	11.404		
2-Fluorophenol	(S)	1.11233	1.03775	.98987	.94329	.93184	.631	1.00302	7.387		
Aniline		2.13402	1.95519	1.82657	1.83745	1.82957	.919	1.91656	6.937		
Phenol-d5	(S)	1.71207	1.40784	1.21382	1.06069	.94201	.948	1.26729	23.965		
bis(2-chloroethyl)ether		1.41782	1.13291	.92912	.83020	.71104	.949	1.00422	27.700		
2-Chlorophenol		1.37530	1.11527	.95719	.79369	.71730	.951	.99175	26.587		
Phenol		1.83470	1.51768	1.35228	1.10599	1.02114	.952	1.36636	23.980	*	
1,3-Dichlorobenzene		1.63882	1.45191	1.35055	1.23273	1.15891	.986	1.36658	13.821		
1,4-Dichlorobenzene		1.66682	1.50411	1.35623	1.29976	1.17198	1.005	1.39978	13.648	*	
1,2-Dichlorobenzene		1.61916	1.39723	1.27812	1.13294	1.07756	1.068	1.30100	16.716		
Benzyl alcohol		.90202	.88209	.82196	.84603	.84988	1.081	.86040	3.674		
2,2'-oxybis(1-Chloropropane)		4.14993	3.91590	3.75523	3.71637	3.72950	1.132	3.85339	4.778		
2-Methylphenol		1.41228	1.30241	1.23511	1.14156	1.10455	1.145	1.23918	10.017		
Hexachloroethane		.88057	.77521	.74726	.66939	.64625	1.168	.74374	12.534		
N-Nitroso-di-n-propylamine		1.62891	1.47666	1.36205	1.27059	1.30223	1.186	1.40809	10.395		**
3&4-Methylphenol		1.52547	1.33089	1.22202	1.09250	1.03725	1.203	1.24162	15.748		(Conc=40.0,100.0,160.0,24
Nitrobenzene-d5	(S)	.50869	.45537	.43912	.39326	.35329	.834	.42994	13.835		
Nitrobenzene		.53882	.46898	.46455	.40359	.38356	.839	.45190	13.556		
Isophorone		1.02060	.90527	.88476	.89124	.90000	.900	.92038	6.148		
2-Nitrophenol		.24519	.21678	.21042	.20693	.19428	.917	.21472	8.803	*	
2,4-Dimethylphenol		.29568	.29584	.27601	.26251	.25018	.953	.27604	7.312		
bis(2-Chloroethoxy)methane		.62149	.54223	.52204	.48249	.45608	.970	.52487	12.115		
2,4-Dichlorophenol		.38686	.33436	.30982	.29249	.26629	.983	.31796	14.414	*	
1,2,4-Trichlorobenzene		.43278	.38323	.35790	.33739	.31824	.993	.36591	12.162		
Benzoic acid		.18393	.17338	.21980	.24001	.04821	1.009	.17307	43.215		
Naphthalene		1.15880	.99569	.87336	.83485	.73695	1.005	.91993	17.670		
4-Chloroaniline		.54861	.43869	.42164	.41251	.38478	1.040	.44125	14.303		
Hexachlorobutadiene		.29456	.25837	.23743	.21794	.20475	1.058	.24261	14.596	*	
4-Chloro-3-methylphenol		.46546	.38680	.33627	.27828	.25769	1.184	.34490	24.435	*	

RF - Response Factor (Subscript is amount in NG)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: J

Contractor: LRI Calibration Date: ~~10/06/94~~ 10/05/94 AP

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>J3895	>J3891	>J3894	>J3893	>J3892					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
2-Methylnaphthalene	1.16213	.90454	.76836	.65196	.58538	1.182	.81447	28.132		
Hexachlorocyclopentadiene	.14582	.25827	.26303	.30097	.30617	.855	.25485	25.375		**
2,4,6-Trichlorophenol	.49229	.43891	.39599	.37287	.34965	.876	.40994	13.812	*	
2,4,5-Trichlorophenol	.53845	.48957	.45202	.42406	.37671	.884	.45616	13.535		
2-Fluorobiphenyl (S)	1.34582	1.12054	1.00634	.93665	.86438	.889	1.05475	17.837		
2-Chloronaphthalene	1.24703	1.05053	.95322	.90890	.80120	.898	.99218	16.961		
2-Nitroaniline	.70813	.65678	.60979	.63376	.61354	.933	.64440	6.245		
Acenaphthylene	2.15449	1.83153	1.60689	1.51829	1.31876	.971	1.68599	18.987		
Dimethylphthalate	1.69788	1.45958	1.37843	1.30172	1.25728	.978	1.41898	12.256		
2,4-Dinitrotoluene	.64293	.58226	.58038	.54864	.52842	1.055	.57652	7.536		
Acenaphthene	1.18028	.99481	.88162	.79814	.73409	1.006	.91779	19.200	*	
3-Nitroaniline	.46024	.40292	.37557	.36614	.35575	1.009	.39212	10.690		
2,4-Dinitrophenol	-	.01290	.13083	.15710	.15355	1.027	.11360	59.976		**
Dibenzofuran	2.04528	1.65515	1.48110	1.39169	1.23068	1.035	1.56078	19.943		
2,6-Dinitrotoluene	.42799	.37639	.37233	.33985	.33590	.987	.37049	9.991		
4-Nitrophenol	.40177	.39532	.39721	.39585	.36904	1.058	.39184	3.317		**
Fluorene	1.56904	1.29975	1.16912	1.03854	.95317	1.097	1.20593	20.053		
4-Chlorophenyl-phenylether	.77209	.65281	.59049	.54773	.49534	1.104	.61169	17.435		
Diethylphthalate	1.88834	1.61241	1.50654	1.42671	1.32395	1.106	1.55159	13.918		
4-Nitroaniline	.51696	.49971	.46264	.46911	.44604	1.123	.47889	6.017		
2,4,6-Tribromophenol (S)	.31060	.29829	.27826	.27572	.26709	1.145	.28599	6.253		
4,6-Dinitro-2-methylphenol	.09728	.08535	.16606	.16164	.13765	.894	.12960	28.413		
N-Nitrosodiphenylamine (1)	.50059	.39393	.32489	.28170	.24055	.897	.34833	29.371	*	
Azobenzene	1.33169	1.10104	1.00261	.89571	.77315	.898	1.02084	20.804		
4-Bromophenyl-phenylether	.28938	.25729	.23573	.22093	.20679	.944	.24202	13.392		
Hexachlorobenzene	.35541	.32023	.29401	.27492	.26925	.959	.30277	11.738		
Pentachlorophenol	.20276	.20479	.20617	.20752	.20437	.989	.20512	.884	*	
Phenanthrene	1.34909	1.12181	1.03192	.91130	.85199	1.004	1.05322	18.589		
Anthracene	1.37882	1.18233	1.07121	.93341	.87484	1.010	1.08812	18.557		
Carbazole	1.33675	1.13411	1.03373	.96638	.95321	1.040	1.08484	14.565		

RF - Response Factor (Subscript is amount in NG)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: J

Contractor: LRI Calibration Date: ~~10/06/94~~ 10/05/94 AP

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:		>J3895	>J3891	>J3894	>J3893	>J3892					
Compound		RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Di-n-butylphthalate		2.16862	1.83118	1.63006	1.45040	1.40487	1.110	1.69702	18.425		
Fluoranthene		1.59410	1.40082	1.26381	1.12894	1.10773	1.173	1.29908	15.596	*	
Benzidine		.21859	.37994	.30010	.27585	.28161	.872	.29122	19.989		
Pyrene		1.52271	1.26353	1.16570	1.04100	.97919	.872	1.19443	17.919		
Terphenyl-d14	(S)	1.01215	.89488	.82389	.77666	.73057	.897	.84763	13.004		
Butylbenzylphthalate		.99902	.84806	.79557	.72934	.70159	.957	.81471	14.462		
Benzo(a)anthracene		1.44429	1.28451	1.21227	1.17474	1.11210	.998	1.24558	10.230		
3,3'-Dichlorobenzidine		.53948	.45174	.41581	.33595	.30799	1.004	.41019	22.618		
Chrysene		1.34996	1.10708	.97016	.84198	.78678	1.003	1.01119	22.368		
bis(2-Ethylhexyl)phthalate		1.46549	1.23226	1.13958	1.00484	.94228	1.022	1.15689	17.840		
Di-n-octylphthalate		2.24887	1.84350	1.70225	1.46470	1.27389	.952	1.70664	21.896	*	
Benzo(b)fluoranthene		1.29267	1.21984	1.21188	1.28271	1.25444	.971	1.25231	2.892		
Benzo(k)fluoranthene		1.22489	.99232	.97605	.78644	.66109	.973	.92816	23.225		
Benzo(a)pyrene		1.20552	1.07924	1.05299	.99117	.94216	.996	1.05422	9.492	*	
Indeno(1,2,3-cd)pyrene		1.35078	1.23652	1.21038	1.20832	1.15498	1.079	1.23220	5.893		
Dibenz(a,h)anthracene		1.04069	.94911	.91520	.87228	.81314	1.081	.91808	9.293		
Benzo(g,h,i)perylene		1.16702	1.05960	1.04199	1.05954	.99467	1.100	1.06457	5.930		

RF - Response Factor (Subscript is amount in NG)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: J

Contractor: LRI Calibration Date: ~~10/06/94~~ 10/05/94 AP

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:		>J3895	>J3891	>J3894	>J3893	>J3892					
Compound		RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Pyridine		1.03276	1.37659	1.07859	1.20816	1.21087	.268	1.18139	11.384		
2-Fluorophenol	(S)	1.11233	1.03775	.98987	.94329	.93184	.631	1.00302	7.387		
Phenol-d5	(S)	1.71207	1.40784	1.21382	1.06069	.94201	.948	1.26729	23.965		
1,4-Dichlorobenzene		1.66682	1.50411	1.35623	1.29976	1.17198	1.005	1.39978	13.648	*	
2-Methylphenol		1.41228	1.30241	1.23511	1.14156	1.10455	1.145	1.23918	10.017		
Hexachloroethane		.88057	.77521	.74726	.66939	.64625	1.168	.74374	12.534		
3&4-Methylphenol		1.52547	1.33089	1.22202	1.09250	1.03725	1.203	1.24162	15.748		(Conc=40.0,100.0,160.0,24
Nitrobenzene-d5	(S)	.50869	.45537	.43912	.39326	.35329	.834	.42994	13.835		
Nitrobenzene		.53882	.46898	.46455	.40359	.38356	.839	.45190	13.556		
Hexachlorobutadiene		.29456	.25837	.23743	.21794	.20475	1.058	.24261	14.596	*	
2,4,6-Trichlorophenol		.49229	.43891	.39599	.37287	.34965	.876	.40994	13.812	*	
2,4,5-Trichlorophenol		.53845	.48957	.45202	.42406	.37671	.884	.45616	13.535		
2-Fluorobiphenyl	(S)	1.34582	1.12054	1.00634	.93665	.86438	.889	1.05475	17.837		
2,4-Dinitrotoluene		.64293	.58226	.58038	.54864	.52842	1.055	.57652	7.536		
2,4,6-Tribromophenol	(S)	.31060	.29829	.27826	.27572	.26709	1.145	.28599	6.253		
Hexachlorobenzene		.35541	.32023	.29401	.27492	.26925	.959	.30277	11.738		
Pentachlorophenol		.20276	.20479	.20617	.20752	.20437	.989	.20512	.884	*	
Terphenyl-d14	(S)	1.01215	.89488	.82389	.77666	.73057	.897	.84763	13.004		

RF - Response Factor (Subscript is amount in NG)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 09/16/94

Contractor: LRI Time: 09:57

Contract No: Laboratory ID: >A1091

Instrument ID: A Initial Calibration Date: 09/06/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC	
Pyridine		1.62349	1.47626	9.07			
N-Nitrosodimethylamine		1.14415	1.14300	.10			
2-Fluorophenol	(S)	1.35260	1.30567	3.47			
Aniline		2.57223	2.94938	14.66			(Conc=50.00)
Phenol-d5	(S)	2.04343	2.23745	9.49			
bis(2-chloroethyl)ether		1.64854	1.82013	10.41			
2-Chlorophenol		1.46366	1.57038	7.29			
Phenol		2.16769	2.48339	14.56	*		
1,3-Dichlorobenzene		1.45250	1.50245	3.44			
1,4-Dichlorobenzene		1.49618	1.57490	5.26	*		
1,2-Dichlorobenzene		1.32122	1.46510	10.89			
Benzyl alcohol		1.01180	1.15983	14.63			
2,2'-oxybis(1-Chloropropane)		3.29346	3.90282	18.50			
2-Methylphenol		1.39689	1.72738	23.66			
Hexachloroethane		.71365	.75582	5.91			
N-Nitroso-di-n-propylamine		1.46149	1.82577	24.93		**	
3&4-Methylphenol		1.56561	1.92331	22.85			(Conc=100.00)
Nitrobenzene-d5	(S)	.46770	.49571	5.99			
Nitrobenzene		.47714	.50548	5.94			
Isophorone		1.04972	1.15415	9.95			
2-Nitrophenol		.24490	.26556	8.44	*		
2,4-Dimethylphenol		.33638	.36455	8.37			
bis(2-Chloroethoxy)methane		.60896	.68721	12.85			
2,4-Dichlorophenol		.31488	.34807	10.54	*		
1,2,4-Trichlorobenzene		.32211	.31749	1.44			
Benzoic acid		.30767	.23581	23.36			
Naphthalene		1.00517	1.13122	12.54			
4-Chloroaniline		.53654	.57924	7.96			
Hexachlorobutadiene		.16415	.16181	1.43	*		
4-Chloro-3-methylphenol		.43173	.49744	15.22	*		
2-Methylnaphthalene		.66070	.76898	16.39			
Hexachlorocyclopentadiene		.28141	.13437	52.25		**	

RF - Response Factor from daily standard file at 50.00 NG

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 09/16/94

Contractor: LRI Time: 09:57

Contract No: Laboratory ID: >A1091

Instrument ID: A Initial Calibration Date: 09/06/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
2,4,6-Trichlorophenol		.39843	.40868	2.57	*	
2,4,5-Trichlorophenol		.41546	.44574	7.29		
2-Fluorobiphenyl	(S)	1.09638	1.16816	6.55		
2-Chloronaphthalene		1.04537	1.15385	10.38		
2-Nitroaniline		.58769	.67555	14.95		
Acenaphthylene		1.54819	1.79090	15.68		
Dimethylphthalate		1.28568	1.42206	10.61		
2,4-Dinitrotoluene		.57472	.63392	10.30		
Acenaphthene		.96148	1.06586	10.86	*	
3-Nitroaniline		.44491	.53234	19.65		
2,4-Dinitrophenol		.26806	.19217	28.31		**
Dibenzofuran		1.55046	1.76580	13.89		
2,6-Dinitrotoluene		.38385	.43707	13.86		
4-Nitrophenol		.43409	.49037	12.97		**
Fluorene		1.17753	1.37906	17.11		
4-Chlorophenyl-phenylether		.55970	.65277	16.63		
Diethylphthalate		1.52737	1.70156	11.40		
4-Nitroaniline		.53500	.67377	25.94		
2,4,6-Tribromophenol	(S)	.20944	.21776	3.97		
4,6-Dinitro-2-methylphenol		.23365	.20689	11.45		
N-Nitrosodiphenylamine (1)		.55345	.65327	18.04	*	
Azobenzene		1.29544	1.43805	11.01		
4-Bromophenyl-phenylether		.22569	.22577	.04		
Hexachlorobenzene		.26800	.27267	1.74		
Pentachlorophenol		.20409	.19311	5.38	*	
Phenanthrene		1.13868	1.29303	13.56		
Anthracene		1.14856	1.29948	13.14		
Carbazole		1.19966	1.39128	15.97		
Di-n-butylphthalate		1.86040	2.13122	14.56		
Fluoranthene		1.21031	1.45606	20.30	*	
Benzidine		.68376	.68773	.58		
Pyrene		1.47902	1.53149	3.55		

RF - Response Factor from daily standard file at 50.00 NG

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 09/16/94

Contractor: LRI Time: 09:57

Contract No: Laboratory ID: >A1091

Instrument ID: A Initial Calibration Date: 09/06/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
Terphenyl-d14	(S)	.89467	.90401	1.04		
Butylbenzylphthalate		1.00021	1.10404	10.38		
Benzo(a)anthracene		1.28171	1.43447	11.92		
3,3'-Dichlorobenzidine		.51376	.53776	4.67		
Chrysene		1.07384	1.19231	11.03		
bis(2-Ethylhexyl)phthalate		1.38522	1.55644	12.36		
Di-n-octylphthalate		2.43244	2.79641	14.96	*	
Benzo(b)fluoranthene		1.34477	1.39705	3.89		
Benzo(k)fluoranthene		1.26640	1.39540	10.19		
Benzo(a)pyrene		1.28851	1.32119	2.54	*	
Indeno(1,2,3-cd)pyrene		1.36083	1.31610	3.29		
Dibenz(a,h)anthracene		1.07056	1.02250	4.49		
Benzo(g,h,i)perylene		1.17845	1.11372	5.49		

RF - Response Factor from daily standard file at 50.00 NG

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 10/08/94

Contractor: LRI Time: 02:59

Contract No: Laboratory ID: >J3961

Instrument ID: J Initial Calibration Date: 10/06/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC	
Pyridine		1.18139	1.22086	3.34			
N-Nitrosodimethylamine		1.18275	.92442	21.84			
2-Fluorophenol	(S)	1.00302	1.00616	.31			
Aniline		1.91656	1.90261	.73			(Conc=50.00)
Phenol-d5	(S)	1.26729	1.40428	10.81			
bis(2-chloroethyl)ether		1.00422	1.12114	11.64			
2-Chlorophenol		.99175	1.14245	15.19			
Phenol		1.36636	1.49362	9.31	*		
1,3-Dichlorobenzene		1.36658	1.44070	5.42			
1,4-Dichlorobenzene		1.39978	1.46362	4.56	*		
1,2-Dichlorobenzene		1.30100	1.41026	8.40			
Benzyl alcohol		.86040	.88846	3.26			
2,2'-oxybis(1-Chloropropane)		3.85339	3.65093	5.25			
2-Methylphenol		1.23918	1.31149	5.84			
Hexachloroethane		.74374	.76185	2.43			
N-Nitroso-di-n-propylamine		1.40809	1.47482	4.74		**	
3&4-Methylphenol		1.24162	1.35196	8.89			(Conc=100.00)
Nitrobenzene-d5	(S)	.42994	.45668	6.22			
Nitrobenzene		.45190	.48374	7.05			
Isophorone		.92038	.92585	.59			
2-Nitrophenol		.21472	.22826	6.31	*		
2,4-Dimethylphenol		.27604	.29089	5.38			
bis(2-Chloroethoxy)methane		.52487	.56010	6.71			
2,4-Dichlorophenol		.31796	.34215	7.61	*		
1,2,4-Trichlorobenzene		.36591	.37795	3.29			
Benzoic acid		.17307	.24510	41.63			
Naphthalene		.91993	.98951	7.56			
4-Chloroaniline		.44125	.46854	6.19			
Hexachlorobutadiene		.24261	.24652	1.61	*		
4-Chloro-3-methylphenol		.34490	.38693	12.19	*		
2-Methylnaphthalene		.81447	.91124	11.88			
Hexachlorocyclopentadiene		.25485	.26318	3.27		**	

RF - Response Factor from daily standard file at 50.00 NG

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 10/08/94

Contractor: LRI Time: 02:59

Contract No: Laboratory ID: >J3961

Instrument ID: J Initial Calibration Date: 10/06/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
2,4,6-Trichlorophenol		.40994	.41090	.23	*	
2,4,5-Trichlorophenol		.45616	.47411	3.93		
2-Fluorobiphenyl	(S)	1.05475	1.12075	6.26		
2-Chloronaphthalene		.99218	1.06663	7.50		
2-Nitroaniline		.64440	.63527	1.42		
Acenaphthylene		1.68599	1.77194	5.10		
Dimethylphthalate		1.41898	1.49158	5.12		
2,4-Dinitrotoluene		.57652	.60169	4.36		
Acenaphthene		.91779	.97621	6.37	*	
3-Nitroaniline		.39212	.39896	1.74		
2,4-Dinitrophenol		.11360	.15434	35.87		**
Dibenzofuran		1.56078	1.69787	8.78		
2,6-Dinitrotoluene		.37049	.38547	4.04		
4-Nitrophenol		.39184	.38586	1.53		**
Fluorene		1.20593	1.31283	8.87		
4-Chlorophenyl-phenylether		.61169	.63550	3.89		
Diethylphthalate		1.55159	1.61413	4.03		
4-Nitroaniline		.47889	.49450	3.26		
2,4,6-Tribromophenol	(S)	.28599	.27175	4.98		
4,6-Dinitro-2-methylphenol		.12960	.17378	34.10		
N-Nitrosodiphenylamine (1)		.34833	.39362	13.00	*	
Azobenzene		1.02084	1.15639	13.28		
4-Bromophenyl-phenylether		.24202	.24556	1.46		
Hexachlorobenzene		.30277	.30130	.48		
Pentachlorophenol		.20512	.20909	1.93	*	
Phenanthrene		1.05322	1.14467	8.68		
Anthracene		1.08812	1.17130	7.64		
Carbazole		1.08484	1.11866	3.12		
Di-n-butylphthalate		1.69702	1.80832	6.56		
Fluoranthene		1.29908	1.34686	3.68	*	
Benzidine		.29122	.17325	40.51		
Pyrene		1.19443	1.32992	11.34		

RF - Response Factor from daily standard file at 50.00 NG

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 10/08/94

Contractor: LRI Time: 02:59

Contract No: Laboratory ID: >J3961

Instrument ID: J Initial Calibration Date: 10/06/94

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 25%

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
Terphenyl-d14	(S)	.84763	.87278	2.97		
Butylbenzylphthalate		.81471	.86655	6.36		
Benzo(a)anthracene		1.24558	1.27736	2.55		
3,3'-Dichlorobenzidine		.41019	.44684	8.93		
Chrysene		1.01119	1.08476	7.28		
bis(2-Ethylhexyl)phthalate		1.15689	1.22062	5.51		
Di-n-octylphthalate		1.70664	1.93335	13.28	*	
Benzo(b)fluoranthene		1.25231	1.15943	7.42		
Benzo(k)fluoranthene		.92816	1.15751	24.71		
Benzo(a)pyrene		1.05422	1.09384	3.76	*	
Indeno(1,2,3-cd)pyrene		1.23220	1.21739	1.20		
Dibenz(a,h)anthracene		.91808	.93614	1.97		
Benzo(g,h,i)perylene		1.06457	1.04951	1.41		

RF - Response Factor from daily standard file at 50.00 NG

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

SEMIVOLATILE SURROGATE RECOVERY DATA SHEET

Lab Name: LRI Contract No.

Case Number:

Matrix: Water Level:

	CLIENT SAMPLE NUMBER	LAB SAMPLE NUMBER	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
1	SBLKQM7681T1	SBLKQM7681T1	73	68	78	---	---	---	0
2	I0914TP2	T409170-01	75	77	77	---	---	---	0
3	I0914TP2 MS	T409170-01MS	83	70	69	---	---	---	0
4	I0914TP2 MSD	T409170-01MSD	76	72	65	---	---	---	0

S1 (NBZ) = Nitrobenzene-d5 (35-114)
S2 (FBP) = 2-Fluorobiphenyl (43-116)
S3 (TPH) = Terphenyl-d14 (33-141)
S4 (PHL) = Phenol-d6 (10- 94)
S5 (2FP) = 2-Fluorophenol (21-100)
S6 (TBP) = 2,4,6-Tribromophenol (10-123)

Column to be used to flag recovery values
* Values outside of QC limits

SEMIVOLATILE SURROGATE RECOVERY DATA SHEET

Lab Name: LRI Contract No.

Case Number:

Matrix: Water Level:

	CLIENT SAMPLE NUMBER	LAB SAMPLE NUMBER	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	TOT OUT
1	SBLKQM7681T7	SBLKQM7681T7	66	65	78	---	---	---	0
2	H1	T410041-01	69	62	47	---	---	---	0
3	H3	T410041-02	61	55	49	---	---	---	0
4	H4	T410041-03	64	60	68	---	---	---	0
5	H5	T410041-04	50	50	58	---	---	---	0
6	FB	T410041-05	76	71	80	---	---	---	0

S1 (NBZ) = Nitrobenzene-d5 (35-114)
S2 (FBP) = 2-Fluorobiphenyl (43-116)
S3 (TPH) = Terphenyl-d14 (33-141)
S4 (PHL) = Phenol-d6 (10- 94)
S5 (2FP) = 2-Fluorophenol (21-100)
S6 (TBP) = 2,4,6-Tribromophenol (10-123)

Column to be used to flag recovery values
* Values outside of QC limits

SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY SUMMARY

Lab Name: LRI Contract No.: Case No.:

Matrix: WATER Analytical Method: BN8270

Matrix Spike - Client Sample ID: I0914TP2

Matrix Spike - Lab Sample ID: T409170-01

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC	QC. LIMITS REC.
1,4-Dichlorobenzene	100	ND	74	74	36- 97
N-Nitroso-di-n-propylamine	100	ND	78	78	41-116
1,2,4-Trichlorobenzene	100	ND	79	79	39- 98
Acenaphthene	100	ND	75	75	46-118
2,4-Dinitrotoluene	100	ND	75	75	24- 96
Pyrene	100	ND	77	77	26-127

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	100	71	71	4.1	28	36- 97
N-Nitroso-di-n-propylamine	100	77	77	1.3	38	41-116
1,2,4-Trichlorobenzene	100	74	74	6.5	28	39- 98
Acenaphthene	100	79	79	5.2	31	46-118
2,4-Dinitrotoluene	100	73	73	2.7	38	24- 96
Pyrene	100	75	75	2.6	31	26-127

RPD: 0 out of 6 outside limits
RECOVERY: 0 out of 12 outside limits

Comment: _____

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: LRI

Case No.: Contract No.:

Lab File ID (Standard): >A1091 Instrument ID: MSD/A

Date Analyzed: 09/16/94 Time Analyzed: 09:57

	IS1(DBC) AREA	#	RT	IS2(NPT) AREA	#	RT	IS3(ANT) AREA	#	RT
12 HOUR STD	25661		9.45	114511		13.15	81713		18.62
UPPER LIMIT	51322			229022			163426		
LOWER LIMIT	12831			57255			40856		
LAB SAMPLE ID									
SBLKQM7681T1	33282		9.45	147250		13.15	99288		18.61
T409170-01	34269		9.44	150310		13.16	98000		18.62
T409170-01MS	38050		9.44	163038		13.16	114143		18.63
T409170-01MSD	34090		9.45	152150		13.17	101576		18.63

IS1(DCB) = 1,4-Dichlorobenzene-d10
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%
ofinternal standard area
LOW LIMIT = - 50%
of internal standard area

Column used for flag internal standard areavalues with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: LRI

Case No.: Contract No.:

Lab File ID (Standard): >A1091 Instrument ID: MSD/A

Date Analyzed: 09/16/94 Time Analyzed: 09:57

	IS4(PHN) AREA	#	RT	IS5(CRY) AREA	#	RT	IS6(PRY) AREA	#	RT
12 HOUR STD	139024		23.20	143269		31.57	144617		35.76
UPPER LIMIT	278048			286538			289234		
LOWER LIMIT	69512			71635			72308		
LAB SAMPLE ID									
SBLKQM7681T1	162959		23.18	160187		31.55	178855		35.76
T409170-01	154584		23.18	144958		31.55	164338		35.76
T409170-01MS	172126		23.19	170598		31.55	194356		35.76
T409170-01MSD	158855		23.18	156919		31.56	170211		35.77

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: LRI

Case No.: Contract No.:

Lab File ID (Standard): >J3961 Instrument ID: MSD/J

Date Analyzed: 10/08/94 Time Analyzed: 02:59

	IS1(DBC) AREA	#	RT	IS2(NPT) AREA	#	RT	IS3(ANT) AREA	#	RT
12 HOUR STD	26209		8.22	113731		11.87	90612		17.25
UPPER LIMIT	52418			227462			181224		
LOWER LIMIT	13104			56865			45306		
LAB SAMPLE ID									
SBLKQM7681T7	27026		8.20	117176		11.86	89138		17.23
T410041-01	30594		8.20	132816		11.87	99025		17.24
T410041-02	32311		8.20	141756		11.87	107530		17.24
T410041-03	29090		8.21	126961		11.87	95321		17.24
T410041-04	23757		8.20	100761		11.85	76759		17.24
T410041-05	29444		8.20	128628		11.87	96910		17.24

IS1(DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100%
ofinternal standard area
LOW LIMIT = - 50%
of internal standard area

Column used for flag internal standard areavalues with an asterisk

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: LRI

Case No.: Contract No.:

Lab File ID (Standard): >J3961 Instrument ID: MSD/J

Date Analyzed: 10/08/94 Time Analyzed: 02:59

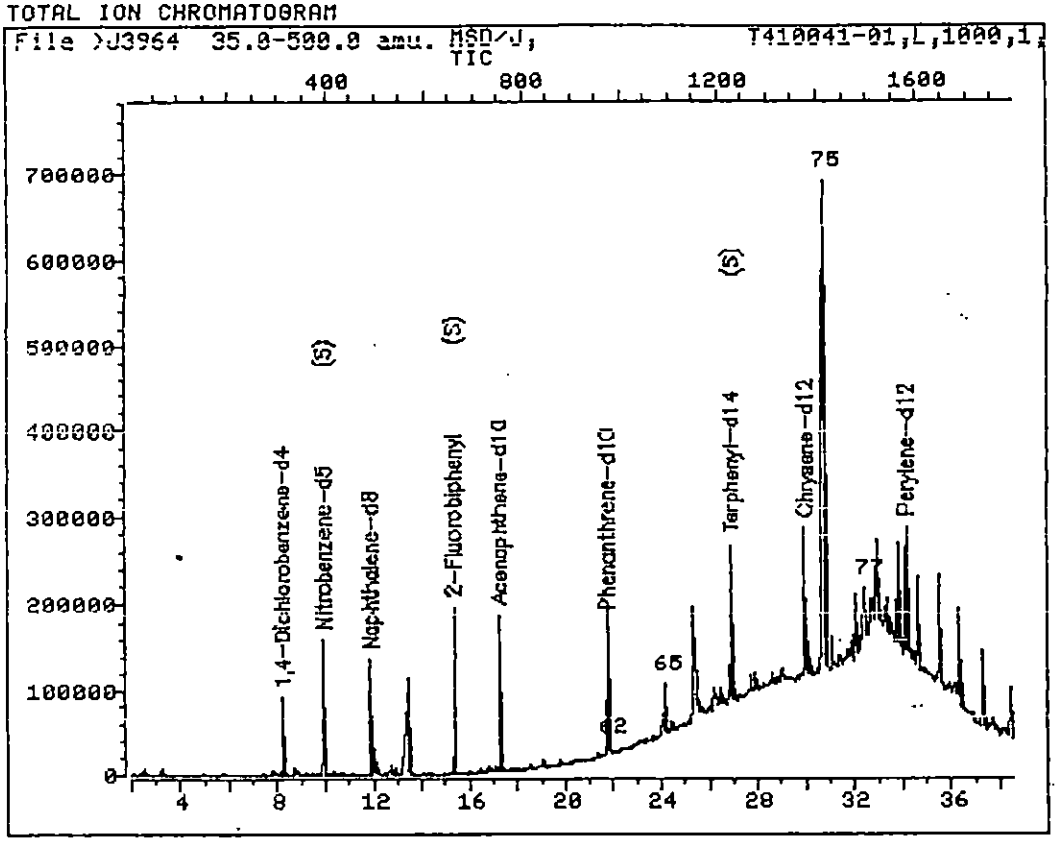
	IS4(PHN) AREA	#	RT	IS5(CRY) AREA	#	RT	IS6(PRY) AREA	#	RT
12 HOUR STD	168647		21.73	180280		29.97	200399		34.07
UPPER LIMIT	337294			360560			400798		
LOWER LIMIT	84323			90140			100199		
LAB SAMPLE ID									
SBLKQM7681T7	165112		21.73	182519		29.94	189623		34.05
T410041-01	175050		21.72	184781		29.98	196088		34.11
T410041-02	200736		21.74	231408		29.96	240149		34.07
T410041-03	178994		21.73	206870		29.94	211562		34.06
T410041-04	142036		21.71	157471		29.94	157858		34.04
T410041-05	181180		21.73	207968		29.96	213605		34.05

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area
LOWER LIMIT = - 50% of internal standard area

Column used to flag internal standard area values with an asterisk

TOTAL ION CHROMATOGRAM



Data File: >J3964::J4 Quant Output File: ^J3964::QQ
Name: MSD/J, Instrument ID: J
Misc: T410041-01,L,1000,1,1,H1, BTL#19

Id File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

Operator ID: BNA3
Quant Time : 941010 09:44
Injected at: 941008 05:28

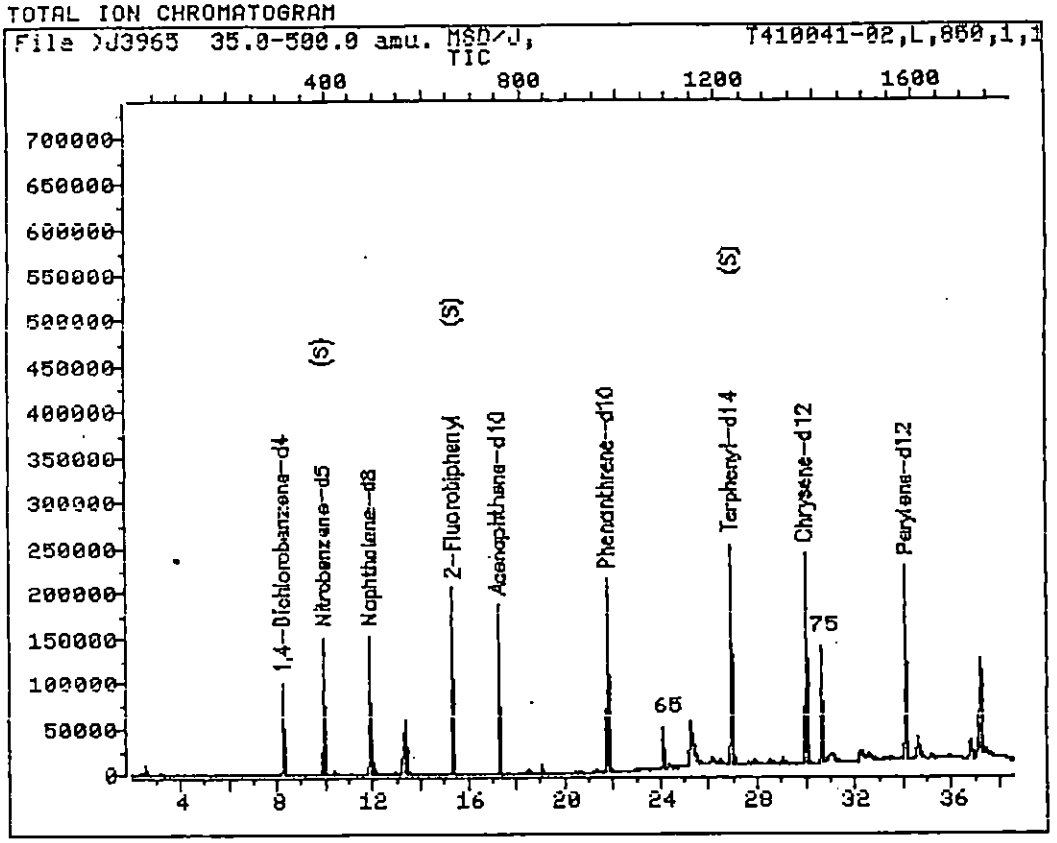
Operator ID: BNA3 Quant Rev: 7 Quant Time: 941010 09:44
Output File: ^J3964::QQ Injected at: 941008 05:28
Data File: >J3964::J4 Dilution Factor: 1.00000
Name: MSD/J, Instrument ID: J
Misc: T410041-01,L,1000,1,1,H1, BTL#19

ID File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4		8.20	152.0	30594	40.00	NG	99
19)	*Naphthalene-d8		11.87	136.0	132816	40.00	NG	93
20)	Nitrobenzene-d5	(S)	9.90	82.0	104974	69.23	NG	96
34)	*Acenaphthene-d10		17.24	164.0	99025	40.00	NG	96
38)	2-Fluorobiphenyl	(S)	15.32	172.0	172627	62.22	NG	98
55)	*Phenanthrene-d10		21.72	188.0	175050	40.00	NG	91
62)	Phenanthrene		21.78	178.0	5394	1.08	NG	97
65)	Di-n-butylphthalate		24.09	149.0	74014	9.35	NG	92
67)	*Chrysene-d12		29.98	240.0	184781	40.00	NG	91
70)	Terphenyl-d14	(S)	26.90	244.0	188755	46.82	NG	89
75)	bis(2-Ethylhexyl)phthalate		30.68	149.0	1095541	194.29	NG	91
76)	*Perylene-d12		34.11	264.0	196088	40.00	NG	95
77)	Di-n-octylphthalate		32.44	149.0	101221	10.68	NG	80

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >J3965::J4 Quant Output File: ^J3965::QQ
Name: MSD/J, Instrument ID: J
Misc: T410041-02,L,850,1,1,H3, BTL#20

Id File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

Operator ID: BNA3
Quant Time : 941010 09:58
Injected at: 941008 06:17

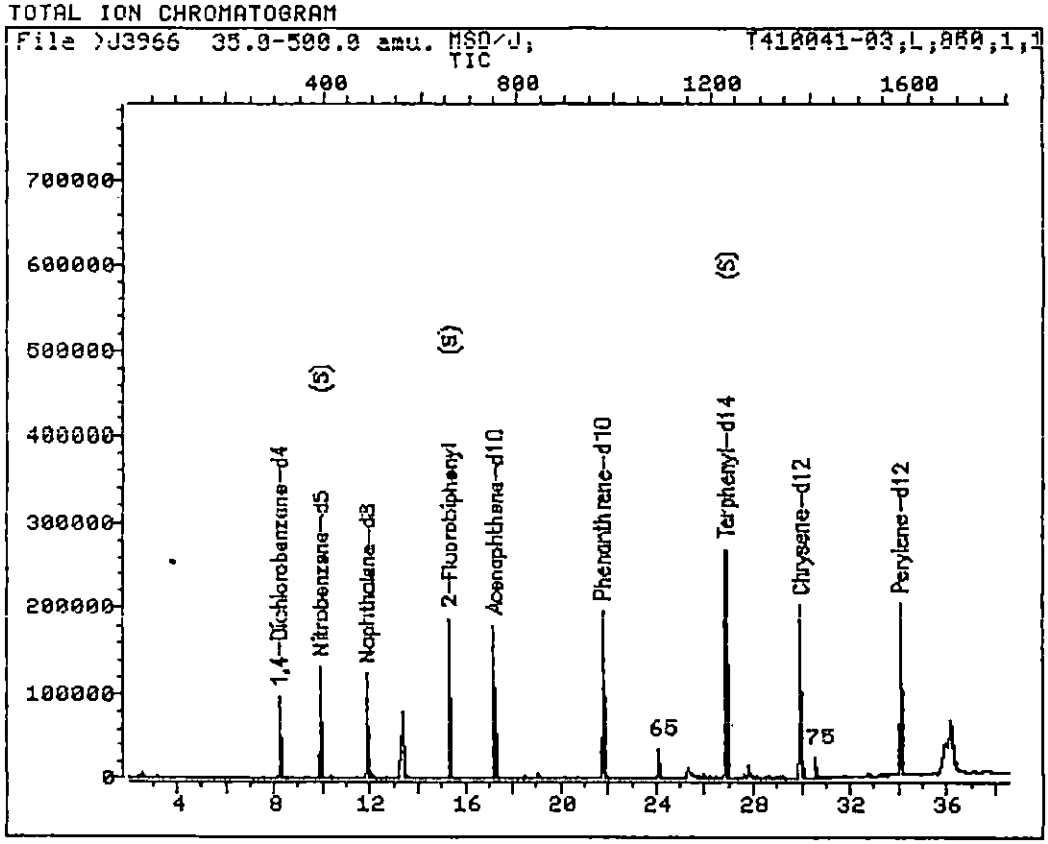
Operator ID: BNA3 Quant Rev: 7 Quant Time: 941010 09:58
Output File: ^J3965::QQ Injected at: 941008 06:17
Data File: >J3965::J4 Dilution Factor: 1.00000
Name: MSD/J, Instrument ID: J
Misc: T410041-02,L,850,1,1,H3, BTL#20

ID File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4		8.20	152.0	32311	40.00	NG	98
19)	*Naphthalene-d8		11.87	136.0	141756	40.00	NG	94
20)	Nitrobenzene-d5	(S)	9.91	82.0	98192	60.67	NG	94
34)	*Acenaphthene-d10		17.24	164.0	107530	40.00	NG	94
38)	2-Fluorobiphenyl	(S)	15.33	172.0	166041	55.11	NG	97
55)	*Phenanthrene-d10		21.74	188.0	200736	40.00	NG	83
65)	Di-n-butylphthalate		24.09	149.0	56958	6.28	NG	92
67)	*Chrysene-d12		29.96	240.0	231408	40.00	NG	91
70)	Terphenyl-d14	(S)	26.88	244.0	246544	48.83	NG	91
75)	bis(2-Ethylhexyl)phthalate		30.61	149.0	83489	11.82	NG	84
76)	*Perylene-d12		34.07	264.0	240149	40.00	NG	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >J3966::J4 Quant Output File: ^J3966::QQ
Name: MSD/J, Instrument ID: J
Misc: T410041-03,L,850,1,1,H4, BTL#23

Id File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

Operator ID: BNA3
Quant Time : 941010 10:02
Injected at: 941008 07:07

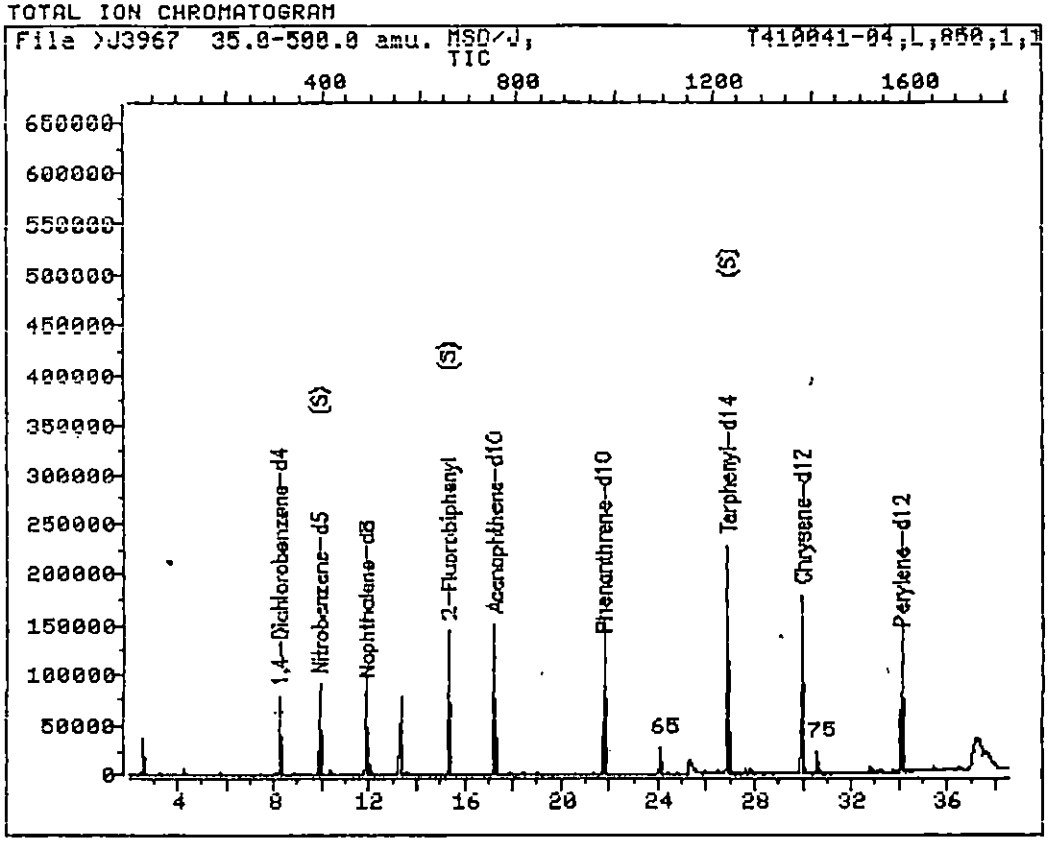
Operator ID: BNA3 Quant Rev: 7 Quant Time: 941010 10:02
Output File: ^J3966::QQ Injected at: 941008 07:07
Data File: >J3966::J4 Dilution Factor: 1.00000
Name: MSD/J, Instrument ID: J
Misc: T410041-03,L,850,1,1,H4, BTL#23

ID File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4		8.21	152.0	29090	40.00	NG	98
19)	*Naphthalene-d8		11.87	136.0	126961	40.00	NG	93
20)	Nitrobenzene-d5	(S)	9.91	82.0	92338	63.70	NG	91
34)	*Acenaphthene-d10		17.24	164.0	95321	40.00	NG	95
38)	2-Fluorobiphenyl	(S)	15.31	172.0	160716	60.18	NG	98
55)	*Phenanthrene-d10		21.73	188.0	178994	40.00	NG	82
65)	Di-n-butylphthalate		24.08	149.0	41549	5.13	NG	91
67)	*Chrysene-d12		29.94	240.0	206870	40.00	NG	91
70)	Terphenyl-d14	(S)	26.88	244.0	306756	67.96	NG	91
75)	bis(2-Ethylhexyl)phthalate		30.61	149.0	16770	2.66	NG	81
76)	*Perylene-d12		34.06	264.0	211562	40.00	NG	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >J3967::J4 Quant Output File: ^J3967::QQ
Name: MSD/J, Instrument ID: J
Misc: T410041-04,L,850,1,1,H5, BTL#24

Id File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

Operator ID: BNA3
Quant Time : 941010 10:09
Injected at: 941008 07:56

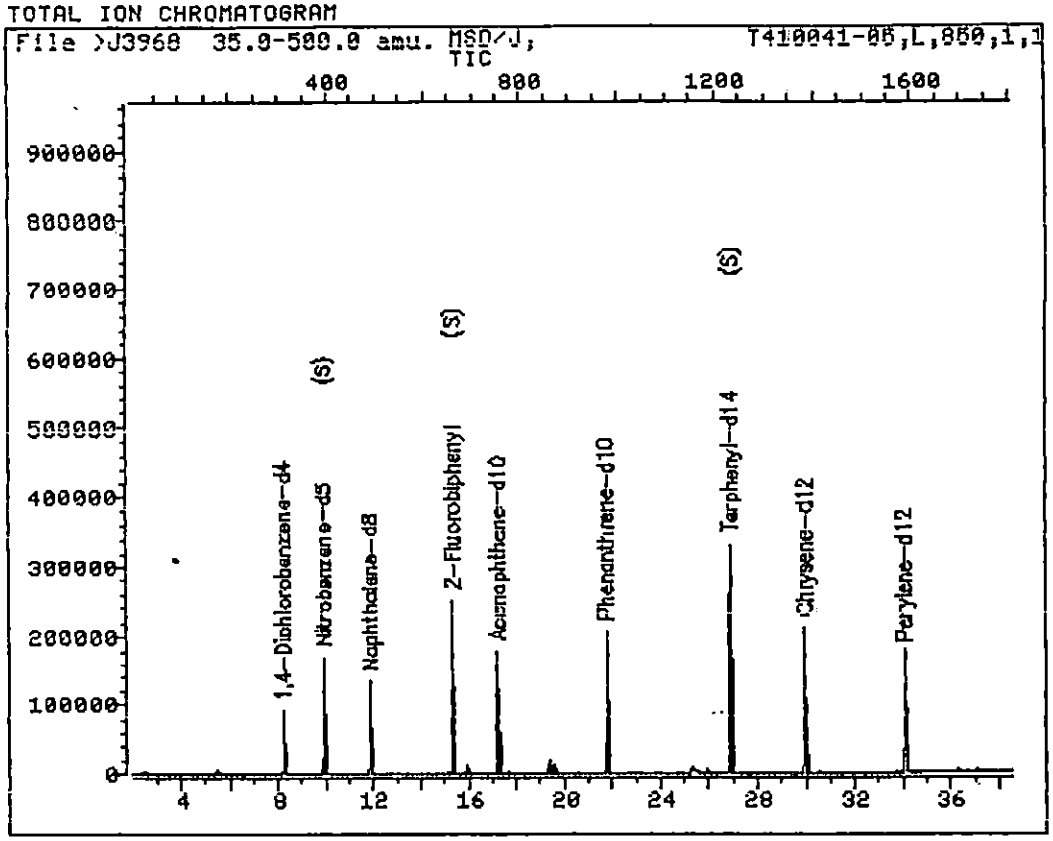
Operator ID: BNA3 Quant Rev: 7 Quant Time: 941010 10:09
Output File: ^J3967::QQ Injected at: 941008 07:56
Data File: >J3967::J4 Dilution Factor: 1.00000
Name: MSD/J, Instrument ID: J
Misc: T410041-04,L,850,1,1,H5, BTL#24

ID File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4		8.20	152.0	23757	40.00	NG	97
19)	*Naphthalene-d8		11.85	136.0	100761	40.00	NG	98
20)	Nitrobenzene-d5	(S)	9.88	82.0	57803	50.25	NG	98
34)	*Acenaphthene-d10		17.24	164.0	76759	40.00	NG	99
38)	2-Fluorobiphenyl	(S)	15.31	172.0	106506	49.52	NG	98
55)	*Phenanthrene-d10		21.71	188.0	142036	40.00	NG	95
65)	Di-n-butylphthalate		24.08	149.0	31774	4.95	NG	92
67)	*Chrysene-d12		29.94	240.0	157471	40.00	NG	91
70)	Terphenyl-d14	(S)	26.88	244.0	200677	58.41	NG	89
75)	bis(2-Ethylhexyl)phthalate		30.61	149.0	15460	3.22	NG	82
76)	*Perylene-d12		34.04	264.0	157858	40.00	NG	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >J3968::J4 Quant Output File: ^J3968::QQ
Name: MSD/J, Instrument ID: J
Misc: T410041-05,L,850,1,1,FB, BTL#25

Id File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

Operator ID: BNA3
Quant Time : 941010 10:14
Injected at: 941008 08:46

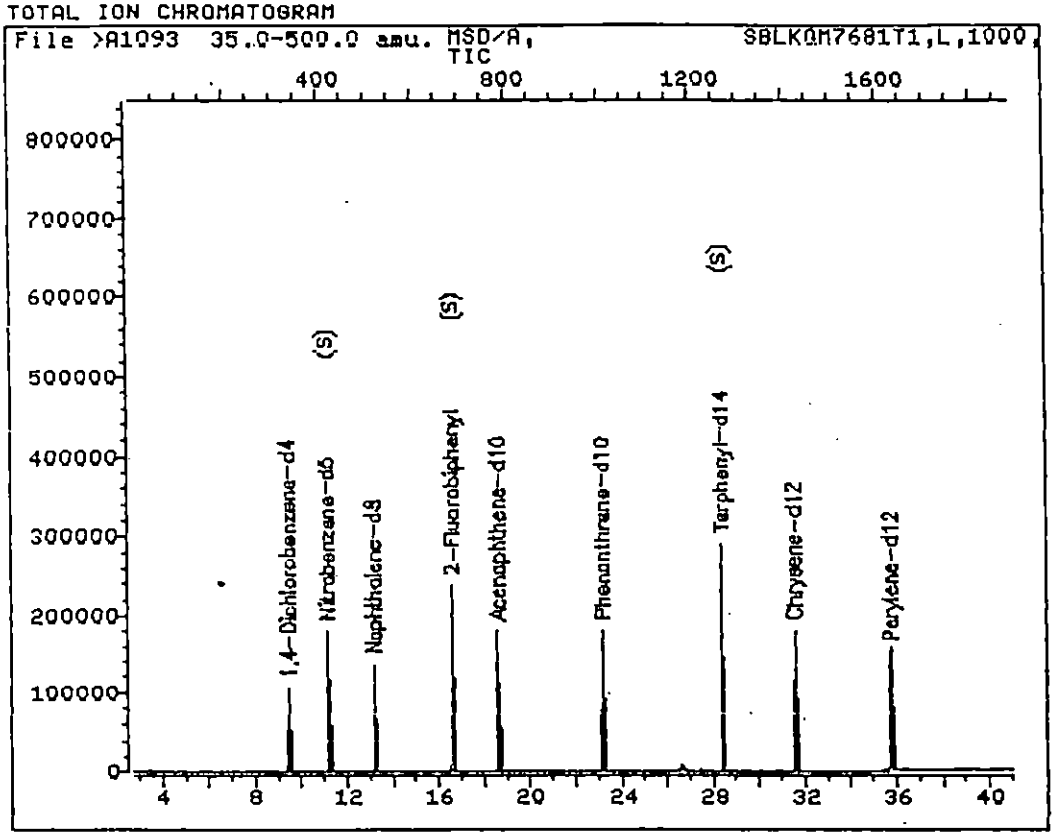
Operator ID: BNA3 Quant Rev: 7 Quant Time: 941010 10:14
Output File: ^J3968::QQ Injected at: 941008 08:46
Data File: >J3968::J4 Dilution Factor: 1.00000
Name: MSD/J, Instrument ID: J
Misc: T410041-05,L,850,1,1,FB, BTL#25

ID File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4		8.20	152.0	29444	40.00	NG	99
19)	*Naphthalene-d8		11.87	136.0	128628	40.00	NG	95
20)	Nitrobenzene-d5	(S)	9.90	82.0	112060	76.31	NG	95
34)	*Acenaphthene-d10		17.24	164.0	96910	40.00	NG	93
38)	2-Fluorobiphenyl	(S)	15.33	172.0	193112	71.12	NG	98
55)	*Phenanthrene-d10		21.73	188.0	181180	40.00	NG	84
67)	*Chrysene-d12		29.96	240.0	207968	40.00	NG	88
70)	Terphenyl-d14	(S)	26.90	244.0	363382	80.08	NG	91
76)	*Perylene-d12		34.05	264.0	213605	40.00	NG	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >A1093::A2 Quant Output File: ^A1093::QT
Name: MSD/A, Instrument ID: A
Misc: SBLKQM7681T1,L,1000,1,1,SBLKQM7681T1, BTL# 3

Id File: IDABNA::EX
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 940906 16:15 Last Qcal Time: 940916 09:57

Operator ID: BNA3
Quant Time : 940916 15:09
Injected at: 940916 11:01

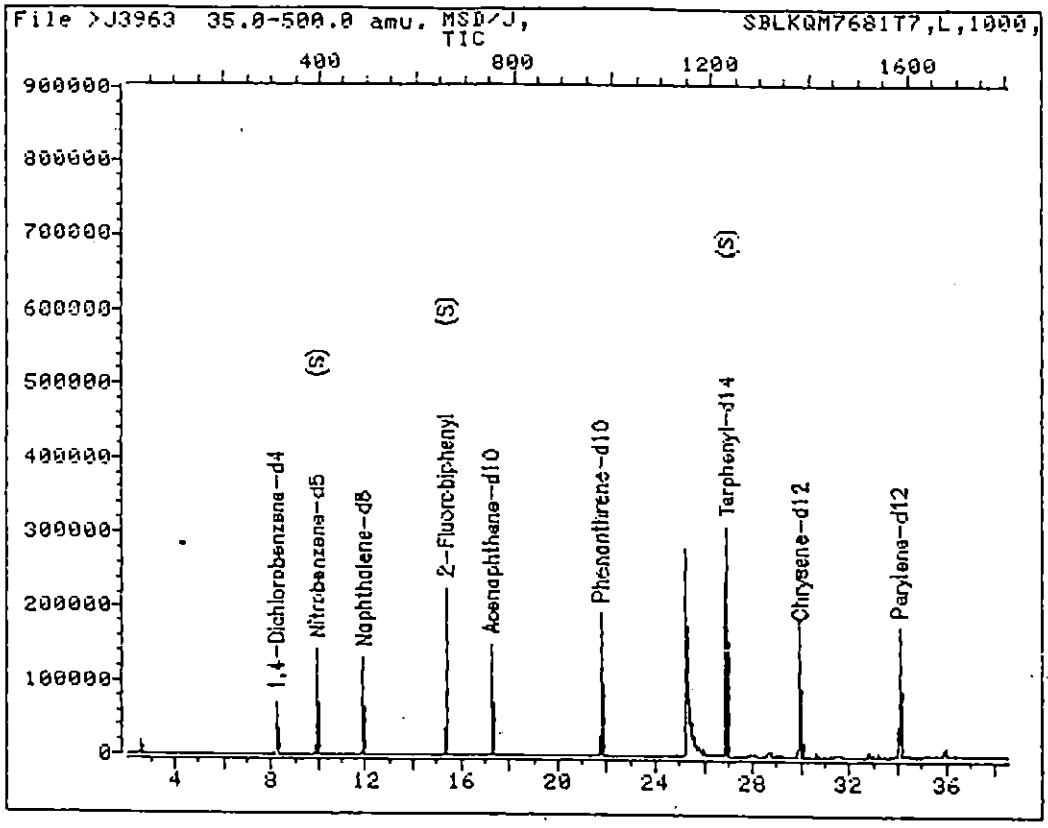
Operator ID: BNA3 Quant Rev: 7 Quant Time: 940916 15:09
Output File: ^A1093::QT Injected at: 940916 11:01
Data File: >A1093::A2 Dilution Factor: 1.00000
Name: MSD/A, Instrument ID: A
Misc: SBLKQM7681T1,L,1000,1,1,SBLKQM7681T1, BTL# 3

ID File: IDABNA::EX
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 940906 16:15 Last Qcal Time: 940916 09:57

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4		9.45	152.0	33282	40.00	NG	98
19)	*Naphthalene-d8		13.15	136.0	147250	40.00	NG	96
20)	Nitrobenzene-d5	(S)	11.14	82.0	133810	73.33	NG	85
34)	*Acenaphthene-d10		18.61	164.0	99288	40.00	NG	91
38)	2-Fluorobiphenyl	(S)	16.62	172.0	195792	67.52	NG	97
55)	*Phenanthrene-d10		23.18	188.0	162959	40.00	NG	76
67)	*Chrysene-d12		31.55	240.0	160187	40.00	NG	87
70)	Terphenyl-d14	(S)	28.38	244.0	281163	77.66	NG	79
76)	*Perylene-d12		35.76	264.0	178855	40.00	NG	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >J3963::J4 Quant Output File: ^J3963::QQ
Name: MSD/J, Instrument ID: J
Misc: SBLKQM7681T7,L,1000,1,1,SBLKQM7681T7, BTL#18

Id File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30 Last Qcal Time: 941008 02:59

Operator ID: BNA3
Quant Time : 941010 09:39
Injected at: 941008 04:38

QUANT REPORT

Operator ID: 8NA3
Output File: ^J3963::QQ
Data File: >J3963::J4
Name: MSD/J,
Misc: SBLKQM7681T7,L,1000,1,1,SBLKQM7681T7,

Quant Rev: 7
Quant Time: 941010 09:39
Injected at: 941008 04:38
Dilution Factor: 1.00000
Instrument ID: J
BTL#18

ID File: IDJBNA::N8
Title: GC/MS METHOD 625 FOR BASE/NEUTRAL & ACID EXTRACTABLES
Last Calibration: 941006 11:30
Last Qcal Time: 941008 02:59

	Compound		R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4		8.20	152.0	27026	40.00	NG	97
19)	*Naphthalene-d8		11.86	136.0	117176	40.00	NG	97
20)	Nitrobenzene-d5	(S)	9.90	82.0	88497	66.15	NG	95
34)	*Acenaphthene-d10		17.23	164.0	89138	40.00	NG	96
38)	2-Fluorobiphenyl	(S)	15.33	172.0	162657	65.13	NG	97
55)	*Phenanthrene-d10		21.73	188.0	165112	40.00	NG	86
67)	*Chrysene-d12		29.94	240.0	182519	40.00	NG	92
70)	Terphenyl-d14	(S)	26.89	244.0	311317	78.17	NG	90
76)	*Perylene-d12		34.05	264.0	189623	40.00	NG	95

* Compound is ISTD

GCV

GC CONFORMANCE/NONCONFORMANCE SUMMARY

		No	Yes
1.	Chromatograms Labeled/Compounds Identified	—	✓
2.	Standards Summary Submitted	—	✓
3.	Calibration Frequency Initial calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis	—	✓
4.	Blank Contamination If yes, list compounds and concentrations in each blank:	✓	—
	a. Volatile Fraction		
	b. Pesticides/PCBs		
	c. Herbicide Fraction		
	d. Other		
5.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	—	✓
	a. Volatile Fraction		
	b. Pesticides/PCBs		
	c. Herbicide Fraction		
	d. Other		
	If not met, were the calculations checked and the results qualified as estimated?	—	—
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	—	✓
	a. Volatile Fraction		
	b. Pesticides/PCBs		
	c. Herbicide Fraction		
	d. Other		
7.	Retention Time Shifts Meet Criteria If not, list those samples which fall outside the acceptable range:	—	✓
	a. Volatile Fraction		
	b. Pesticides/PCBs		
	c. Herbicide Fraction		
	d. Other		
8.	Extraction Holding Time Met If not met, list analysis and number of days exceeded for each sample:	—	✓
9.	Analysis Holding Time Met If not met, list analysis and number of days exceeded for each sample:	—	✓

Laboratory Supervisor: Richard [illegible] Date: 10/10/94

PCB ANALYSIS DATA SHEET

Lab Name: LRI

Lab Sample ID: T410041-01

Matrix: [soil/water] WATER

Sample wt/vol.: 1000 [g/mL] ML

Run Type: 8080PBA

%Moisture: NA

Dilution Factor 1

GC Column: RTX5 ID: 0.53

Client Sample ID No.: H1

Lab File ID: >P0455

Extract Vol. 10000 uL

Date Received: 10/04/94

Date Extracted: 10/05/94

Date Analyzed : 10/07/94

pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/ L	Q
12674-11-2	Aroclor 1016	.50	U
11104-28-2	Aroclor 1221	.50	U
11141-16-5	Aroclor 1232	.50	U
53469-21-9	Aroclor 1242	.50	U
12672-29-6	Aroclor 1248	3.6	
11097-69-1	Aroclor 1254	2.6	
11096-82-5	Aroclor 1260	.50	U

SADF: .0

PCB ANALYSIS DATA SHEET

Client Sample ID No.: H3

Lab Name: LRI

Lab Sample ID: T410041-02

Matrix: [soil/water] WATER

Lab File ID: >P0456

Sample wt/vol.: 1000 [g/mL] ML

Extract Vol. 10000 uL

Run Type: 8080PBA

Date Received: 10/04/94

%Moisture: NA

Date Extracted: 10/05/94

Dilution Factor 1

Date Analyzed : 10/07/94

GC Column: RTX5 ID: 0.53

pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/ L	Q
12674-11-2	Aroclor 1016	.50	U
11104-28-2	Aroclor 1221	.50	U
11141-16-5	Aroclor 1232	.50	U
53469-21-9	Aroclor 1242	.50	U
12672-29-6	Aroclor 1248	.50	U
11097-69-1	Aroclor 1254	.50	U
11096-82-5	Aroclor 1260	.50	U

SADF: .0

PCB ANALYSIS DATA SHEET

Lab Name: LRI

Client Sample ID No.: H4

Lab Sample ID: T410041-03

Matrix: [soil/water] WATER

Lab File ID: >P0457

Sample wt/vol.: 1000 [g/mL] ML

Extract Vol. 10000 uL

Run Type: 8080PBA

Date Received: 10/04/94

%Moisture: NA

Date Extracted: 10/05/94

Dilution Factor 1

Date Analyzed : 10/07/94

GC Column: RTX5 ID: 0.53

pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/ L	Q
12674-11-2	Aroclor 1016	.50	U
11104-28-2	Aroclor 1221	.50	U
11141-16-5	Aroclor 1232	.50	U
53469-21-9	Aroclor 1242	.50	U
12672-29-6	Aroclor 1248	.50	U
11097-69-1	Aroclor 1254	.50	U
11096-82-5	Aroclor 1260	.50	U

SADF: .0

PCB ANALYSIS DATA SHEET

Lab Name: LRI

Client Sample ID No.: H5

Lab Sample ID: T410041-04

Matrix: [soil/water] WATER

Lab File ID: >P0458

Sample wt/vol.: 1000 [g/mL] ML

Extract Vol. 10000 uL

Run Type: 8080PBA

Date Received: 10/04/94

%Moisture: NA

Date Extracted: 10/05/94

Dilution Factor 1

Date Analyzed : 10/07/94

GC Column: RTX5 ID: 0.53

pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/ L	Q
12674-11-2	Aroclor 1016	.50	U
11104-28-2	Aroclor 1221	.50	U
11141-16-5	Aroclor 1232	.50	U
53469-21-9	Aroclor 1242	.50	U
12672-29-6	Aroclor 1248	.50	U
11097-69-1	Aroclor 1254	.50	U
11096-82-5	Aroclor 1260	.50	U

SADF: .0

PCB ANALYSIS DATA SHEET

Lab Name: LRI

Client Sample ID No.: FB

Lab Sample ID: T410041-05

Matrix: [soil/water] WATER

Lab File ID: >P0459

Sample wt/vol.: 1000 [g/mL] ML

Extract Vol. 10000 uL

Run Type: 8080PBA

Date Received: 10/04/94

%Moisture: NA

Date Extracted: 10/05/94

Dilution Factor 1

Date Analyzed : 10/07/94

GC Column: RTX5 ID: 0.53

pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/ L	Q
12674-11-2	Aroclor 1016	.50	U
11104-28-2	Aroclor 1221	.50	U
11141-16-5	Aroclor 1232	.50	U
53469-21-9	Aroclor 1242	.50	U
12672-29-6	Aroclor 1248	.50	U
11097-69-1	Aroclor 1254	.50	U
11096-82-5	Aroclor 1260	.50	U

SADF: .0

PCB ANALYSIS DATA SHEET

METHOD BLANK

Lab Name: LRI

Lab Sample ID: 7758 BLANK

QC BLANK

Matrix: [soil/water] WATER

Lab File ID: >09279

Sample wt/vol.: 1000 [g/mL] ML

Extract Vol. 10000 uL

Run Type: 8080PBA

Date Received:

%Moisture: NA

Date Extracted: 09/26/94

Dilution Factor 1

Date Analyzed : 09/29/94

GC Column: RTX1701 ID: 0.53

pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/ L	Q
12674-11-2	Aroclor 1016	.50	U
11104-28-2	Aroclor 1221	.50	U
11141-16-5	Aroclor 1232	.50	U
53469-21-9	Aroclor 1242	.50	U
12672-29-6	Aroclor 1248	.50	U
11097-69-1	Aroclor 1254	.50	U
11096-82-5	Aroclor 1260	.50	U

SADF: .0

PCB ANALYSIS DATA SHEET

METHOD BLANK

Lab Name: LRI

Lab Sample ID: 7758 BLK-4 | QC BLANK

Matrix: [soil/water] WATER | Lab File ID: >P0452

Sample wt/vol.: 1000 [g/mL] ML | Extract Vol. 10000 uL

Run Type: 8080PBA | Date Received:

%Moisture: NA | Date Extracted: 10/05/94

Dilution Factor 1 | Date Analyzed : 10/07/94

GC Column: RTX5 ID: 0.53 | pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: UG/ L	Q
12674-11-2	Aroclor 1016	.50	U
11104-28-2	Aroclor 1221	.50	U
11141-16-5	Aroclor 1232	.50	U
53469-21-9	Aroclor 1242	.50	U
12672-29-6	Aroclor 1248	.50	U
11097-69-1	Aroclor 1254	.50	U
11096-82-5	Aroclor 1260	.50	U

SADF: .0

METHOD BLANK SUMMARY

Lab Name: LRI

Lab Sample ID: 7758 BLANK

Matrix: [soil/water] WATER

Sample wt/vol: 1000 [g/ml] ML

Run Type: 8080PBA

% Moisture: NA

Dilution Factor: 1

GC Column: RTX1701 ID (mm): 0.53

METHOD BLANK

QC BLANK

Lab File ID: >09279

Extract VoL.: 10000 uL

Date Received:

Date Extracted: 09/26/94

Date Analyzed: 09/29/94

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

LAB FILE ID	CLIENT SAMPLE ID	LAB SAMLPE ID	DATE OF ANALYSIS	TIME OF ANALYSIS
>09280	SS-3D	T409278-17	09/29/94	01:49
>09281	SS-3D MS	T409278-17MS	09/29/94	02:36
>09282	SS-3D MSD	T409278-17MSD	09/29/94	03:23

COMMENTS:

METHOD BLANK SUMMARY

METHOD BLANK

Lab Name: LRI

Lab Sample ID: 7758 BLK-4 | QC BLANK

Matrix: [soil/water] WATER — Lab File ID: >P0452

Sample wt/vol: 1000 [g/ml] ML — Extract VoL.: 10000 uL

Run Type: 8080PBA — Date Received:

% Moisture: NA — Date Extracted: 10/05/94

Dilution Factor: 1 — Date Analyzed: 10/07/94

GC Column: RTX5 ID (mm): 0.53

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

LAB FILE ID	CLIENT SAMPLE ID	LAB SAMLPE ID	DATE OF ANALYSIS	TIME OF ANALYSIS
>P0455	H1	T410041-01	10/07/94	15:18
>P0456	H3	T410041-02	10/07/94	16:05
>P0457	H4	T410041-03	10/07/94	16:52
>P0458	H5	T410041-04	10/07/94	17:39
>P0459	FB	T410041-05	10/07/94	18:27

COMMENTS:

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: 5890D

Contractor: LRI Calibration Date: 09/15/94 11

Contract No: _____

Minimum $\overline{RF}$ for SPCC is _____ Maximum % RSD for CCC is 20.0%

Laboratory ID:	>09044	>09043	>09042	>09041	>09040					
Compound	RF 10.00	RF 20.00	RF 30.00	RF 50.00	RF 75.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Lindane	8811.20	8494.30	8910.87	9165.12	9143.68	7.540	8905.03	3.086		(Conc=5.00,10.0,15.0,25.0
Heptachlor	11429.8	10620.3	10494.7	10133.3	9664.81	8.410	10468.6	6.239		
Aldrin	9108.00	8646.80	8957.07	8948.62	8690.48	9.910	8870.19	2.201		
Heptachlor epoxide	11215.5	9267.05	9438.90	9047.24	8610.23	15.077	9515.79	10.504		
Endosulfan I	9592.10	8662.85	8894.30	8581.20	8177.92	16.960	8781.68	5.940		
Dieldrin	9386.40	8285.20	8663.47	8636.98	8582.83	19.860	8710.98	4.669		
Endosulfan II	8433.15	7591.02	7640.42	7370.34	7152.54	26.830	7637.50	6.353		(Conc=20.0,40.0,60.0,100.
4,4'-DDT	7162.80	6729.02	6881.35	6766.81	6663.91	28.387	6840.78	2.874		(Conc=20.0,40.0,60.0,100.
Endrin aldehyde	5507.00	5115.50	4986.76	4792.82	4338.18	30.143	4948.05	8.681		(Conc=25.0,50.0,75.0,125.
Methoxychlor	4106.17	3487.29	3292.98	2994.59	2810.42	32.800	3338.29	15.057		(Conc=100.0,200.0,300.0,5
alpha-BHC	3126.40	4115.10	4429.33	4654.68	5252.69	5.777	4315.64	18.173		(Conc=5.00,10.0,15.0,25.0
beta-BHC	2230.30	2662.75	2685.60	2570.38	2656.73	13.017	2561.15	7.421		
delta-BHC	2994.30	3864.00	4208.00	4375.84	4889.71	14.367	4066.37	17.319		
gamma-Chlordane	3889.50	4658.00	4697.33	4518.06	4690.01	17.663	4490.58	7.654		
alpha-Chlordane	4107.30	4945.30	5009.77	4833.10	5012.77	18.163	4781.65	8.029		
4,4'-DDE	2985.60	3656.35	3793.03	3798.24	4139.64	19.280	3674.57	11.551		
Endrin	3146.40	3855.20	4041.33	4003.34	4312.64	21.377	3871.78	11.309		
4,4'-DDD	2136.00	2722.60	2893.88	2937.66	3171.57	27.157	2772.34	14.073		(Conc=20.0,40.0,60.0,100.
Endosulfan sulfate	2912.40	3292.17	3323.18	3044.41	3119.93	32.110	3138.42	5.474		(Conc=20.0,40.0,60.0,100.
Endrin ketone	2909.35	3067.85	4361.93	4090.79	3529.27	33.127	3591.84	17.532		(Conc=20.0,40.0,60.0,100.
Chlordane-1	542.320	484.595	521.406	511.713	511.638	17.753	514.326	4.048		(Conc=100.0,200.0,500.0,7
Chlordane-2	408.490	369.675	406.690	402.556	404.605	18.230	398.403	4.069		(Conc=100.0,200.0,500.0,7
Chlordane-3	485.020	435.075	460.434	444.649	434.848	18.517	452.005	4.688		(Conc=100.0,200.0,500.0,7
Toxaphene-1	163.220	111.200	142.944	167.269	155.424	27.770	148.011	15.250		(Conc=100.0,200.0,500.0,7
Toxaphene-2	152.490	146.260	158.312	191.937	179.907	29.857	165.781	11.670		(Conc=100.0,200.0,500.0,7
Toxaphene-3	205.720	161.930	171.144	193.633	182.359	31.527	182.957	9.523		(Conc=100.0,200.0,500.0,7
TCMX (Surr).	7032.35	6939.80	6212.91	5925.57	5557.07	3.373	6353.54	10.109		(Conc=20.0,40.0,100.0,140
DBC (Surr.)	5016.00	4975.63	4904.93	4839.16	4786.33	33.200	4904.41	1.927		(Conc=20.0,40.0,100.0,140
Aroclor 1016-1	92.1600	96.8800	86.1440	123.889	80.4640	4.633	95.9073	17.539		(Conc=100.0,200.0,500.0,7
Aroclor 1016-2	191.520	192.715	167.262	242.876	154.479	5.927	189.770	17.839		(Conc=100.0,200.0,500.0,7

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: 58900

Contractor: LRI Calibration Date: 09/16/94 AM

Contract No: _____

Minimum $\overline{RF}$ for SPCC is Maximum % RSD for CCC is 20.0%

Laboratory ID:	>09044	>09043	>09042	>09041	>09040					
Compound	RF 10.00	RF 20.00	RF 30.00	RF 50.00	RF 75.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Aroclor 1016-3	362.470	381.995	340.242	506.536	319.951	7.927	382.239	19.173		(Conc=100.0,200.0,500.0,7
Aroclor 1016-4	165.440	170.440	156.144	208.237	147.888	8.673	169.630	13.710		(Conc=100.0,200.0,500.0,7
Aroclor 1016-5	109.660	119.080	111.472	157.543	110.296	9.420	121.610	16.808		(Conc=100.0,200.0,500.0,7
Aroclor 1221-1	51.4400	63.1550	50.7500	47.7943	43.8310	2.680	51.3941	14.061		(Conc=100.0,200.0,500.0,7
Aroclor 1221-2	51.8300	59.1200	54.5760	49.8071	49.7040	4.097	53.0074	7.449		(Conc=100.0,200.0,500.0,7
Aroclor 1221-3	145.520	156.155	138.928	125.383	122.344	4.670	137.666	10.213		(Conc=100.0,200.0,500.0,7
Aroclor 1221-4	22.2300	23.5950	22.9760	21.0643	20.7200	6.480	22.1171	5.535		(Conc=100.0,200.0,500.0,7
Aroclor 1221-5	8.08000	7.87500	7.69400	6.99429	7.10400	7.007	7.54946	6.335		(Conc=100.0,200.0,500.0,7
Aroclor 1232-1	104.800	107.840	106.302	97.7257	93.9920	4.667	102.132	5.849		(Conc=100.0,200.0,500.0,7
Aroclor 1232-2	87.5100	91.7150	90.1760	82.9243	79.9630	5.977	86.4577	5.703		(Conc=100.0,200.0,500.0,7
Aroclor 1232-3	158.780	170.200	171.902	159.039	155.023	7.983	162.989	4.634		(Conc=100.0,200.0,500.0,7
Aroclor 1232-4	64.5600	75.4800	77.8560	72.1029	71.4080	8.747	72.2814	6.977		(Conc=100.0,200.0,500.0,7
Aroclor 1232-5	58.1800	65.4400	66.3880	61.0100	61.4640	10.183	62.4964	5.409		(Conc=100.0,200.0,500.0,7
Aroclor 1242-1	85.9200	91.1600	81.5360	75.9757	73.6560	4.667	81.6496	8.763		(Conc=100.0,200.0,500.0,7
Aroclor 1242-2	151.360	157.560	138.158	129.381	122.064	5.970	139.703	10.584		(Conc=100.0,200.0,500.0,7
Aroclor 1242-3	291.600	311.595	280.878	264.897	255.086	7.987	280.811	7.921		(Conc=100.0,200.0,500.0,7
Aroclor 1242-4	129.920	140.320	128.464	123.096	117.768	8.737	127.914	6.592		(Conc=100.0,200.0,500.0,7
Aroclor 1242-5	87.1200	96.4400	90.9100	89.1772	86.4720	9.350	90.0238	4.433		(Conc=100.0,200.0,500.0,7
Aroclor 1248-1	172.710	173.155	203.584	195.736	183.118	7.937	185.661	7.392		(Conc=100.0,200.0,500.0,7
Aroclor 1248-2	193.280	192.160	222.814	213.760	198.704	11.773	204.144	6.628		(Conc=100.0,200.0,500.0,7
Aroclor 1248-3	161.830	157.875	188.048	182.604	173.207	12.450	172.713	7.504		(Conc=100.0,200.0,500.0,7
Aroclor 1248-4	160.430	173.285	200.264	188.076	187.444	14.817	181.900	8.433		(Conc=100.0,200.0,500.0,7
Aroclor 1248-5	86.8800	86.6800	104.734	102.273	96.4390	19.797	95.4012	8.833		(Conc=100.0,200.0,500.0,7
Aroclor 1254-1	336.800	357.080	335.390	302.366	252.800	14.813	316.887	12.889		(Conc=100.0,200.0,500.0,7
Aroclor 1254-2	263.120	274.560	252.640	229.621	194.943	16.260	242.977	12.986		(Conc=100.0,200.0,500.0,7
Aroclor 1254-3	367.270	397.715	390.864	356.136	301.487	19.843	362.694	10.526		(Conc=100.0,200.0,500.0,7
Aroclor 1254-4	258.400	280.840	275.056	252.720	213.368	21.937	256.077	10.358		(Conc=100.0,200.0,500.0,7
Aroclor 1254-5	342.080	371.440	364.052	339.177	286.920	26.893	340.734	9.719		(Conc=100.0,200.0,500.0,7
Aroclor 1260-1	244.640	258.755	230.848	332.700	213.560	21.097	256.101	17.950		(Conc=100.0,200.0,500.0,7
Aroclor 1260-2	291.840	324.080	288.446	416.449	267.512	23.283	317.665	18.514		(Conc=100.0,200.0,500.0,7

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: 58900

Contractor: LRI Calibration Date: 09/15/94 16 NH

Contract No: _____

Minimum $\overline{RF}$ for SPCC is _____ Maximum % RSD for CCC is 20.0%

Laboratory ID:	>09044	>09043	>09042	>09041	>09040					
Compound	RF 10.00	RF 20.00	RF 30.00	RF 50.00	RF 75.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Aroclor 1260-3	336.340	435.260	393.194	548.526	368.000	26.807	416.264	19.775		(Conc=100.0,200.0,500.0,7
Aroclor 1260-4	195.840	208.840	186.128	260.939	177.000	29.627	205.749	16.056		(Conc=100.0,200.0,500.0,7
Aroclor 1260-5	414.880	410.835	374.428	531.956	358.979	31.503	418.216	16.230		(Conc=100.0,200.0,500.0,7

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: 5890P

Contractor: LRI Calibration Date: 09/15/94 16 11

Contract No: _____

Minimum $\overline{RF}$ for SPCC is _____ Maximum % RSD for CCC is 20.0%

Laboratory ID:	>P9044	>P9043	>P9032	>P8991	>P8990					
Compound	RF 10.00	RF 20.00	RF 30.00	RF 50.00	RF 75.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Lindane	46446.6	42106.2	44414.1	46191.3	46701.1	5.093	45171.9	4.283		(Conc=5.00,10.0,15.0,25.0
Heptachlor	58711.0	47494.4	46421.5	44486.4	42088.9	7.677	47840.4	13.410		
Aldrin	46028.4	40112.4	41020.0	41419.1	41137.9	9.483	41943.5	5.568		
Heptachlor epoxide	51906.9	43435.9	42890.9	42067.7	40609.4	12.143	44182.2	10.067		
Endosulfan I	49297.2	42067.6	41621.7	40745.6	39408.2	14.660	42628.1	9.064		
Dieldrin	46866.4	40342.1	40621.7	40795.1	40115.5	16.613	41748.2	6.882		
Endosulfan II	45598.5	38111.4	37353.0	35995.6	34228.7	19.063	38257.4	11.399		(Conc=20.0,40.0,60.0,100.
4,4'-DDT	36692.2	31451.2	31538.6	31041.2	29768.5	23.567	32098.4	8.299		(Conc=20.0,40.0,60.0,100.
Endrin aldehyde	32976.0	27292.7	25938.1	21314.1	13791.7	20.627	24262.5	29.595		(Conc=25.0,50.0,75.0,125.
Methoxychlor	19402.5	15323.0	14255.5	13123.2	11905.0	29.310	14801.8	19.389		(Conc=100.0,200.0,300.0,5
alpha-BHC	30913.6	42320.3	46320.8	46573.8	51078.8	4.213	43441.5	17.630		(Conc=5.00,10.0,15.0,25.0
beta-BHC	22067.2	26412.2	26154.8	24017.9	24374.1	4.917	24605.3	7.186		
delta-BHC	31316.5	42383.6	45127.6	44689.1	47728.4	5.823	42249.0	15.147		
gamma-Chlordane	38166.3	44390.5	43033.0	40766.9	42192.0	13.703	41709.8	5.701		
alpha-Chlordane	40830.6	46563.7	45975.3	42755.2	43947.8	14.813	44014.5	5.337		
4,4'-DDE	30244.0	38206.1	38926.1	38089.5	40854.1	16.747	37264.0	10.942		
Endrin	29918.5	35860.9	35841.9	34013.2	37101.1	18.083	34547.1	8.140		
4,4'-DDD	22991.1	28552.3	29226.4	27772.5	29057.3	20.097	27519.9	9.426		(Conc=20.0,40.0,60.0,100.
Endosulfan sulfate	30089.1	35016.7	34746.8	32385.6	33156.0	22.580	33078.8	6.039		(Conc=20.0,40.0,60.0,100.
Endrin ketone	39588.0	46718.7	46596.4	42987.2	43163.1	26.960	43810.7	6.766		(Conc=20.0,40.0,60.0,100.
Chlordane-1	3342.80	3150.46	3337.07	3067.23	3475.44	7.647	3274.60	5.002		(Conc=100.0,200.0,500.0,7
Chlordane-2	5820.67	5654.04	6150.94	5590.81	6394.66	13.780	5922.22	5.773		(Conc=100.0,200.0,500.0,7
Chlordane-3	4894.59	4637.42	4865.88	4338.39	4864.95	15.267	4720.25	5.027		(Conc=100.0,200.0,500.0,7
Toxaphene-1	472.130	489.075	446.286	493.047	444.401	17.973	468.988	4.900		(Conc=100.0,200.0,500.0,7
Toxaphene-2	551.740	749.080	665.986	763.040	513.687	19.000	648.707	17.420		(Conc=100.0,200.0,500.0,7
Toxaphene-3	1247.21	789.635	1075.87	1154.24	1071.52	24.853	1067.69	16.026		(Conc=100.0,200.0,500.0,7
TCMX (Surr).	37647.7	35361.6	32253.1	31154.5	29695.3	3.467	33222.4	9.732		(Conc=20.0,40.0,100.0,140
DBC (Surr).	27446.9	24601.4	22663.8	22305.7	21148.1	31.350	23633.2	10.442		(Conc=20.0,40.0,100.0,140
Aroclor 1016-1	1080.55	1111.07	958.144	985.846	920.439	4.140	1011.21	8.046		(Conc=100.0,200.0,500.0,7
Aroclor 1016-2	2342.95	2416.05	2004.37	2058.57	1881.74	5.233	2140.74	10.681		(Conc=100.0,200.0,500.0,7

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: 5890P

Contractor: LRI Calibration Date: 09/16/94 (N/A)

Contract No: _____

Minimum $\overline{RF}$ for SPCC is Maximum % RSD for CCC is 20.0%

Laboratory ID:	>P9044	>P9043	>P9032	>P8991	>P8990					
Compound	RF 10.00	RF 20.00	RF 30.00	RF 50.00	RF 75.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Aroclor 1016-3	4166.27	4343.60	3649.56	3776.70	3425.58	6.890	3872.34	9.722		(Conc=100.0,200.0,500.0,7
Aroclor 1016-4	1728.07	1840.13	1546.88	1633.73	1466.47	7.330	1643.06	8.954		(Conc=100.0,200.0,500.0,7
Aroclor 1016-5	1215.70	1258.17	1040.55	1173.92	1097.96	7.683	1157.26	7.609		(Conc=100.0,200.0,500.0,7
Aroclor 1221-1	510.080	542.080	468.464	444.666	428.868	2.547	478.832	9.767		(Conc=100.0,200.0,500.0,7
Aroclor 1221-2	660.570	682.340	573.246	560.932	553.312	3.820	606.080	9.997		(Conc=100.0,200.0,500.0,7
Aroclor 1221-3	1653.43	1714.84	1445.35	1316.74	1294.79	4.180	1485.03	12.920		(Conc=100.0,200.0,500.0,7
Aroclor 1221-4	299.690	280.400	241.584	236.674	213.544	5.380	254.378	13.724		(Conc=100.0,200.0,500.0,7
Aroclor 1221-5	190.950	234.295	200.364	191.457	188.416	6.957	201.096	9.498		(Conc=100.0,200.0,500.0,7
Aroclor 1232-1	1178.72	1201.97	1100.26	1044.96	979.149	4.173	1101.01	8.401		(Conc=100.0,200.0,500.0,7
Aroclor 1232-2	1932.08	1930.00	1817.79	1718.62	1635.59	6.950	1806.82	7.221		(Conc=100.0,200.0,500.0,7
Aroclor 1232-3	867.600	822.275	770.484	745.800	704.326	7.397	782.097	8.194		(Conc=100.0,200.0,500.0,7
Aroclor 1232-4	546.990	565.875	491.958	511.526	466.837	7.753	516.637	7.779		(Conc=100.0,200.0,500.0,7
Aroclor 1232-5	628.400	669.265	673.462	625.196	634.322	10.650	646.129	3.608		(Conc=100.0,200.0,500.0,7
Aroclor 1242-1	1918.23	1970.20	1653.03	1459.16	1418.39	5.267	1683.80	15.108		(Conc=100.0,200.0,500.0,7
Aroclor 1242-2	1100.87	1152.92	1004.07	910.567	877.759	5.900	1009.24	11.733		(Conc=100.0,200.0,500.0,7
Aroclor 1242-3	3307.76	3448.68	2992.85	2702.08	2618.68	6.940	3014.01	12.069		(Conc=100.0,200.0,500.0,7
Aroclor 1242-4	1482.71	1480.79	1285.45	1149.64	1125.72	7.383	1304.86	13.226		(Conc=100.0,200.0,500.0,7
Aroclor 1242-5	1263.64	1354.70	1249.54	1117.29	1083.32	10.633	1213.70	9.207		(Conc=100.0,200.0,500.0,7
Aroclor 1248-1	2097.12	2015.68	2130.14	2090.41	1918.97	6.880	2050.46	4.125		(Conc=100.0,200.0,500.0,7
Aroclor 1248-2	1728.16	1673.32	1733.04	1668.05	1522.45	9.763	1665.00	5.116		(Conc=100.0,200.0,500.0,7
Aroclor 1248-3	1786.96	1722.23	1865.01	1836.28	1686.96	10.567	1779.49	4.209		(Conc=100.0,200.0,500.0,7
Aroclor 1248-4	2059.53	1959.97	2029.04	1959.50	1682.47	12.457	1938.10	7.709		(Conc=100.0,200.0,500.0,7
Aroclor 1248-5	2326.29	2201.44	2326.11	2258.59	1971.77	12.713	2216.84	6.613		(Conc=100.0,200.0,500.0,7
Aroclor 1254-1	2634.32	2637.31	2531.64	2563.31	1976.76	14.497	2388.67	11.383		(Conc=100.0,200.0,500.0,7
Aroclor 1254-2	3363.22	3615.96	3397.27	3446.48	2909.55	17.263	3346.50	7.855		(Conc=100.0,200.0,500.0,7
Aroclor 1254-3	2552.91	2716.35	2481.05	2633.29	2215.84	19.347	2519.89	7.595		(Conc=100.0,200.0,500.0,7
Aroclor 1254-4	2769.92	2894.75	2511.29	2565.00	2053.97	21.243	2558.99	12.581		(Conc=100.0,200.0,500.0,7
Aroclor 1254-5	3499.27	3772.03	3587.71	3683.70	3125.15	23.753	3533.57	7.079		(Conc=100.0,200.0,500.0,7
Aroclor 1260-1	3138.88	3250.48	2686.46	2743.16	2484.41	19.093	2856.68	11.067		(Conc=100.0,200.0,500.0,7
Aroclor 1260-2	4649.44	4729.00	3916.24	4008.43	3616.37	21.153	4183.90	11.577		(Conc=100.0,200.0,500.0,7

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: 5890P

Contractor: LRI Calibration Date: 09/15/94 (16) 9/1

Contract No: _____

Minimum $\overline{RF}$ for SPCC is Maximum % RSD for CCC is 20.0%

Laboratory ID:	>P9044	>P9043	>P9032	>P8991	>P8990					
	RF	RF	RF	RF	RF					
Compound	10.00	20.00	30.00	50.00	75.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Aroclor 1260-3	4437.60	4606.39	3984.97	4165.63	3814.64	23.660	4201.85	7.689		(Conc=100.0,200.0,500.0,7
Aroclor 1260-4	2242.88	2340.16	2046.23	2128.89	1944.89	25.497	2140.61	7.298		(Conc=100.0,200.0,500.0,7
Aroclor 1260-5	4568.53	4876.41	4208.01	4402.88	3999.84	29.747	4411.14	7.618		(Conc=100.0,200.0,500.0,7

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: _____ Calibration Date: 09/28/94

Contractor: LRI Time: 07:01

Contract No: Laboratory ID: >09260

Instrument ID: 58900 Initial Calibration Date: 09/16/94 9/1

Minimum $\overline{RF}$ for SPCC is . Maximum % Diff for CCC is 20.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Lindane	4200.82	-	-			(Conc=25.00)
Heptachlor	5296.15	-	-			
Aldrin	4229.52	-	-			
Heptachlor epoxide	4483.29	-	-			
Endosulfan I	4110.13	-	-			
Dieldrin	3879.82	-	-			
Endosulfan II	3789.90	-	-			(Conc=100.00)
4,4'-DDT	3306.51	-	-			(Conc=100.00)
Endrin aldehyde	2210.78	-	-			(Conc=125.00)
Methoxychlor	1631.48	-	-			(Conc=500.00)
alpha-BHC	4315.64	-	-			(Conc=25.00)
beta-BHC	2561.15	-	-			
delta-BHC	4066.37	-	-			
gamma-Chlordane	4490.58	-	-			
alpha-Chlordane	4781.65	-	-			
4,4'-DDE	3674.57	-	-			
Endrin	3871.78	-	-			
4,4'-DDD	2772.34	-	-			(Conc=100.00)
Endosulfan sulfate	3138.42	-	-			(Conc=100.00)
Endrin ketone	3591.84	-	-			(Conc=100.00)
Chlordane-1	514.326	-	-			(Conc=700.00)
Chlordane-2	398.403	-	-			(Conc=700.00)
Chlordane-3	452.005	-	-			(Conc=700.00)
Toxaphene-1	78.9918	-	-			(Conc=700.00)
Toxaphene-2	81.1302	-	-			(Conc=700.00)
Toxaphene-3	86.0717	-	-			(Conc=700.00)
1CHX (Surr).	3603.24	3756.74	4.26			(Conc=140.00)
DBC (Surr.)	2398.00	2544.04	6.09			(Conc=140.00)
Aroclor 1016-1	95.9073	-	-			(Conc=700.00)
Aroclor 1016-2	189.770	-	-			(Conc=700.00)
Aroclor 1016-3	382.239	-	-			(Conc=700.00)
Aroclor 1016-4	169.630	-	-			(Conc=700.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: _____ Calibration Date: 09/28/94

Contractor: LRI Time: 07:01

Contract No: Laboratory ID: >09260

Instrument ID: 58900 Initial Calibration Date: 09/16/94 9/1

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is 20.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Aroclor 1016-5	121.610	-	-			(Conc=700.00)
Aroclor 1221-1	51.3941	-	-			(Conc=700.00)
Aroclor 1221-2	53.0074	-	-			(Conc=700.00)
Aroclor 1221-3	137.666	-	-			(Conc=700.00)
Aroclor 1221-4	22.1171	-	-			(Conc=700.00)
Aroclor 1221-5	7.54946	-	-			(Conc=700.00)
Aroclor 1232-1	102.132	-	-			(Conc=700.00)
Aroclor 1232-2	86.4577	-	-			(Conc=700.00)
Aroclor 1232-3	162.989	-	-			(Conc=700.00)
Aroclor 1232-4	72.2814	-	-			(Conc=700.00)
Aroclor 1232-5	62.4964	-	-			(Conc=700.00)
Aroclor 1242-1	81.6496	84.1029	3.00			(Conc=700.00)
Aroclor 1242-2	139.703	142.524	2.02			(Conc=700.00)
Aroclor 1242-3	280.811	295.726	5.31			(Conc=700.00)
Aroclor 1242-4	127.914	136.514	6.72			(Conc=700.00)
Aroclor 1242-5	90.0238	98.0914	8.96			(Conc=700.00)
Aroclor 1248-1	185.661	218.137	17.49			(Conc=700.00)
Aroclor 1248-2	204.144	233.309	14.29			(Conc=700.00)
Aroclor 1248-3	172.713	196.434	13.73			(Conc=700.00)
Aroclor 1248-4	181.900	196.794	8.19			(Conc=700.00)
Aroclor 1248-5	95.4012	110.159	15.47			(Conc=700.00)
Aroclor 1254-1	316.887	293.806	7.28			(Conc=700.00)
Aroclor 1254-2	242.977	220.570	9.22			(Conc=700.00)
Aroclor 1254-3	362.694	333.210	8.13			(Conc=700.00)
Aroclor 1254-4	256.077	233.894	8.66			(Conc=700.00)
Aroclor 1254-5	340.734	304.130	10.74			(Conc=700.00)
Aroclor 1260-1	256.101	250.800	2.07			(Conc=700.00)
Aroclor 1260-2	317.665	311.347	1.99			(Conc=700.00)
Aroclor 1260-3	416.264	419.577	.80			(Conc=700.00)
Aroclor 1260-4	205.749	188.940	8.17			(Conc=700.00)
Aroclor 1260-5	418.216	367.269	12.18			(Conc=700.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: _____ Calibration Date: 09/28/94

Contractor: LRI Time: 07:01

Contract No: _____ Laboratory ID: >P9260

Instrument ID: 5890P Initial Calibration Date: 09/29/94 (16)

Minimum $\overline{RF}$ for SPCC is _____ Maximum % Diff for CCC is 20.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Lindane	46435.6	-	-			(Conc=25.00)
Heptachlor	48449.9	-	-			
Aldrin	41207.1	-	-			
Heptachlor epoxide	42729.1	-	-			
Endosulfan I	40188.6	-	-			
Dieldrin	39376.0	-	-			
Endosulfan II	34992.8	-	-			(Conc=100.00)
4,4'-DDT	31548.4	-	-			(Conc=100.00)
Endrin aldehyde	25149.4	-	-			(Conc=125.00)
Methoxychlor	17748.4	-	-			(Conc=500.00)
alpha-BHC	43441.5	-	-			(Conc=25.00)
beta-BHC	24605.3	-	-			
delta-BHC	42249.0	-	-			
gamma-Chlordane	41709.8	-	-			
alpha-Chlordane	44014.5	-	-			
4,4'-DDE	37264.0	-	-			
Endrin	34547.1	-	-			
4,4'-DDD	27519.9	-	-			(Conc=100.00)
Endosulfan sulfate	33078.8	-	-			(Conc=100.00)
Endrin ketone	43810.7	-	-			(Conc=100.00)
Chlordane-1	3274.60	-	-			(Conc=700.00)
Chlordane-2	5922.22	-	-			(Conc=700.00)
Chlordane-3	4720.25	-	-			(Conc=700.00)
Toxaphene-1	414.906	-	-			(Conc=700.00)
Toxaphene-2	587.540	-	-			(Conc=700.00)
Toxaphene-3	923.544	-	-			(Conc=700.00)
TCMX (Surr).	32687.7	38907.6	19.03			(Conc=140.00)
DBC (Surr).	19671.3	24428.5	24.18			(Conc=140.00)
Aroclor 1016-1	1011.21	-	-			(Conc=700.00)
Aroclor 1016-2	2140.74	-	-			(Conc=700.00)
Aroclor 1016-3	3872.34	-	-			(Conc=700.00)
Aroclor 1016-4	1643.06	-	-			(Conc=700.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 09/28/94

Contractor: LRI

Time: 07:01

Contract No:

Laboratory ID: >P9260

Instrument ID: 5890P

Initial Calibration Date: 09/29/94 (16) 9/4

Minimum $\overline{RF}$ for SPCC is

Maximum % Diff for CCC is 20.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Aroclor 1016-5	1157.26	-	-			(Conc=700.00)
Aroclor 1221-1	478.832	-	-			(Conc=700.00)
Aroclor 1221-2	606.080	-	-			(Conc=700.00)
Aroclor 1221-3	1485.03	-	-			(Conc=700.00)
Aroclor 1221-4	254.378	-	-			(Conc=700.00)
Aroclor 1221-5	201.096	-	-			(Conc=700.00)
Aroclor 1232-1	1101.01	-	-			(Conc=700.00)
Aroclor 1232-2	1806.82	-	-			(Conc=700.00)
Aroclor 1232-3	782.097	-	-			(Conc=700.00)
Aroclor 1232-4	516.637	-	-			(Conc=700.00)
Aroclor 1232-5	646.129	-	-			(Conc=700.00)
Aroclor 1242-1	1683.80	1616.58	3.99			(Conc=700.00)
Aroclor 1242-2	1009.24	996.877	1.22			(Conc=700.00)
Aroclor 1242-3	3014.01	3019.50	.18			(Conc=700.00)
Aroclor 1242-4	1304.86	1299.20	.43			(Conc=700.00)
Aroclor 1242-5	1213.70	1219.36	.47			(Conc=700.00)
Aroclor 1248-1	2050.46	2359.82	15.09			(Conc=700.00)
Aroclor 1248-2	1665.00	1864.32	11.97			(Conc=700.00)
Aroclor 1248-3	1779.49	2041.33	14.71			(Conc=700.00)
Aroclor 1248-4	1938.10	2171.46	12.04			(Conc=700.00)
Aroclor 1248-5	2216.84	2416.87	9.02			(Conc=700.00)
Aroclor 1254-1	2388.67	2211.57	7.41			(Conc=700.00)
Aroclor 1254-2	3346.50	3151.35	5.83			(Conc=700.00)
Aroclor 1254-3	2519.89	2391.36	5.10			(Conc=700.00)
Aroclor 1254-4	2558.99	2320.77	9.31			(Conc=700.00)
Aroclor 1254-5	3533.57	3303.92	6.50			(Conc=700.00)
Aroclor 1260-1	2856.68	2605.45	8.79			(Conc=700.00)
Aroclor 1260-2	4183.90	3759.69	10.25			(Conc=700.00)
Aroclor 1260-3	4201.85	3953.85	5.90			(Conc=700.00)
Aroclor 1260-4	2140.61	1958.86	8.49			(Conc=700.00)
Aroclor 1260-5	4411.14	4026.27	8.72			(Conc=700.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 10/07/94

Contractor: LRI Time: 02:05

Contract No: Laboratory ID: 00444

Instrument ID: 5890D Initial Calibration Date: 09/16/94 09/11/94

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is 20.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Lindane	4200.82	4558.68	8.52			(Conc=25.00)
Heptachlor	5296.15	5316.96	.39			
Aldrin	4229.52	4492.64	6.22			
Heptachlor epoxide	4483.29	4615.52	2.95			
Endosulfan I	4110.13	4374.70	6.44			
Dieldrin	3879.82	4241.42	9.32			
Endosulfan II	3789.90	3729.20	1.60			(Conc=100.00)
4,4'-DDT	3306.51	3236.15	2.13			(Conc=100.00)
Endrin aldehyde	2210.78	2384.18	7.84			(Conc=125.00)
Methoxychlor	1631.48	1504.40	7.79			(Conc=500.00)
alpha-BHC	4315.64	4536.28	5.11			(Conc=25.00)
beta-BHC	2561.15	2386.70	6.81			
delta-BHC	4066.37	4170.72	2.57			
gamma-Chlordane	4490.58	4278.54	4.72			
alpha-Chlordane	4781.65	4522.66	5.42			
4,4'-DDE	3674.57	4186.70	13.94			
Endrin	3871.78	3955.52	2.16			
4,4'-DDD	2772.34	2825.21	1.91			(Conc=100.00)
Endosulfan sulfate	3138.42	2940.71	6.30			(Conc=100.00)
Endrin ketone	3591.84	3948.48	9.93			(Conc=100.00)
Chlordane-1	514.326	572.879	11.38			(Conc=700.00)
Chlordane-2	398.403	450.623	13.11			(Conc=700.00)
Chlordane-3	452.005	485.273	7.36			(Conc=700.00)
Toxaphene-1	78.9918	75.9886	3.80			(Conc=700.00)
Toxaphene-2	81.1302	77.5186	4.45			(Conc=700.00)
Toxaphene-3	86.0717	79.3472	7.81			(Conc=700.00)
TCMX (Surr).	3603.24	3213.33	10.82			(Conc=140.00)
DBC (Surr.)	2398.00	2240.73	6.56			(Conc=140.00)
Aroclor 1016-1	95.9073	-	-			(Conc=700.00)
Aroclor 1016-2	189.770	-	-			(Conc=700.00)
Aroclor 1016-3	382.239	-	-			(Conc=700.00)
Aroclor 1016-4	169.630	-	-			(Conc=700.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 10/07/94

Contractor: LRI

Time: 02:05

Contract No:

Laboratory ID: >00444

Instrument ID: 58900

Initial Calibration Date: 09/16/94 9/11

Minimum $\overline{RF}$ for SPCC is

Maximum % Diff for CCC is 20.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Aroclor 1016-5	121.610	-	-			(Conc=700.00)
Aroclor 1221-1	51.3941	-	-			(Conc=700.00)
Aroclor 1221-2	53.0074	-	-			(Conc=700.00)
Aroclor 1221-3	137.666	-	-			(Conc=700.00)
Aroclor 1221-4	22.1171	-	-			(Conc=700.00)
Aroclor 1221-5	7.54946	-	-			(Conc=700.00)
Aroclor 1232-1	102.132	-	-			(Conc=700.00)
Aroclor 1232-2	86.4577	-	-			(Conc=700.00)
Aroclor 1232-3	162.989	-	-			(Conc=700.00)
Aroclor 1232-4	72.2814	-	-			(Conc=700.00)
Aroclor 1232-5	62.4964	-	-			(Conc=700.00)
Aroclor 1242-1	81.6496	84.7514	3.80			(Conc=700.00)
Aroclor 1242-2	139.703	142.773	2.20			(Conc=700.00)
Aroclor 1242-3	280.811	321.709	14.56			(Conc=700.00)
Aroclor 1242-4	127.914	151.354	18.33			(Conc=700.00)
Aroclor 1242-5	90.0238	113.747	26.35			(Conc=700.00)
Aroclor 1248-1	185.661	251.381	35.40			(Conc=700.00)
Aroclor 1248-2	204.144	268.604	31.58			(Conc=700.00)
Aroclor 1248-3	172.713	230.389	33.39			(Conc=700.00)
Aroclor 1248-4	181.900	261.819	43.94			(Conc=700.00)
Aroclor 1248-5	95.4012	129.987	36.25			(Conc=700.00)
Aroclor 1254-1	316.887	313.263	1.14			(Conc=700.00)
Aroclor 1254-2	242.977	250.206	2.98			(Conc=700.00)
Aroclor 1254-3	362.694	344.459	5.03			(Conc=700.00)
Aroclor 1254-4	256.077	316.193	23.48			(Conc=700.00)
Aroclor 1254-5	340.734	375.107	10.09			(Conc=700.00)
Aroclor 1260-1	256.101	274.016	7.00			(Conc=700.00)
Aroclor 1260-2	317.665	381.539	20.11			(Conc=700.00)
Aroclor 1260-3	416.264	476.891	14.56			(Conc=700.00)
Aroclor 1260-4	205.749	216.229	5.09			(Conc=700.00)
Aroclor 1260-5	418.216	482.213	15.30			(Conc=700.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: _____ Calibration Date: 10/07/94

Contractor: LRI Time: 02:05

Contract No: Laboratory ID: >P0444

Instrument ID: 5890P Initial Calibration Date: 09/16/94 4/1

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is 20.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Lindane	46435.6	50100.6	7.89			(Conc=25.00)
Heptachlor	48449.9	48193.6	.53			
Aldrin	41207.1	43307.7	5.10			
Heptachlor epoxide	42729.1	43743.3	2.37			
Endosulfan I	40188.6	41583.2	3.47			
Dieldrin	39376.0	42176.3	7.11			
Endosulfan II	34992.8	35637.3	1.84			(Conc=100.00)
4,4'-DDT	31548.4	31986.9	1.39			(Conc=100.00)
Endrin aldehyde	25149.4	25511.5	1.44			(Conc=125.00)
Methoxychlor	17748.4	14273.0	19.58			(Conc=500.00)
alpha-BHC	43441.5	48598.5	11.87			(Conc=25.00)
beta-BHC	24605.3	23723.5	3.58			
delta-BHC	42249.0	45636.1	8.02			
gamma-Chlordane	41709.8	39595.3	5.07			
alpha-Chlordane	44014.5	41543.4	5.61			
4,4'-DDE	37264.0	37091.9	.46			
Endrin	34547.1	38170.8	10.49			
4,4'-DDD	27519.9	27952.7	1.57			(Conc=100.00)
Endosulfan sulfate	33078.8	30748.4	7.05			(Conc=100.00)
Endrin ketone	43810.7	38194.9	12.82			(Conc=100.00)
Chlordane-1	3274.60	3129.38	4.43			(Conc=700.00)
Chlordane-2	5922.22	5343.74	9.77			(Conc=700.00)
Chlordane-3	4720.25	4124.38	12.62			(Conc=700.00)
Toxaphene-1	414.906	459.444	10.73			(Conc=700.00)
Toxaphene-2	587.540	711.983	21.18			(Conc=700.00)
Toxaphene-3	923.544	1040.69	12.68			(Conc=700.00)
TCMX (Surr).	32687.7	32094.1	1.82			(Conc=140.00)
DBC (Surr).	19671.3	19503.1	.86			(Conc=140.00)
Aroclor 1016-1	1011.21	-	-			(Conc=700.00)
Aroclor 1016-2	2140.74	-	-			(Conc=700.00)
Aroclor 1016-3	3872.34	-	-			(Conc=700.00)
Aroclor 1016-4	1643.06	-	-			(Conc=700.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: _____ Calibration Date: 10/07/94

Contractor: LRI Time: 02:05

Contract No: _____ Laboratory ID: >P0444

Instrument ID: 5890P Initial Calibration Date: 09/16/94

Minimum $\overline{RF}$ for SPCC is _____ Maximum % Diff for CCC is 20.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Aroclor 1016-5	1157.26	-	-			(Conc=700.00)
Aroclor 1221-1	478.832	-	-			(Conc=700.00)
Aroclor 1221-2	606.080	-	-			(Conc=700.00)
Aroclor 1221-3	1485.03	-	-			(Conc=700.00)
Aroclor 1221-4	254.378	-	-			(Conc=700.00)
Aroclor 1221-5	201.096	-	-			(Conc=700.00)
Aroclor 1232-1	1101.01	-	-			(Conc=700.00)
Aroclor 1232-2	1806.82	-	-			(Conc=700.00)
Aroclor 1232-3	782.097	-	-			(Conc=700.00)
Aroclor 1232-4	516.637	-	-			(Conc=700.00)
Aroclor 1232-5	646.129	-	-			(Conc=700.00)
Aroclor 1242-1	1683.80	1577.32	6.32			(Conc=700.00)
Aroclor 1242-2	1009.24	976.809	3.21			(Conc=700.00)
Aroclor 1242-3	3014.01	2944.06	2.32			(Conc=700.00)
Aroclor 1242-4	1304.86	1273.35	2.42			(Conc=700.00)
Aroclor 1242-5	1213.70	1169.65	3.63			(Conc=700.00)
Aroclor 1248-1	2050.46	2297.81	12.06			(Conc=700.00)
Aroclor 1248-2	1665.00	1796.42	7.89			(Conc=700.00)
Aroclor 1248-3	1779.49	1955.92	9.91			(Conc=700.00)
Aroclor 1248-4	1938.10	2117.60	9.26			(Conc=700.00)
Aroclor 1248-5	2216.84	2117.60	4.48			(Conc=700.00)
Aroclor 1254-1	2388.67	2185.71	8.50			(Conc=700.00)
Aroclor 1254-2	3346.50	3084.56	7.83			(Conc=700.00)
Aroclor 1254-3	2519.89	2406.12	4.51			(Conc=700.00)
Aroclor 1254-4	2558.99	2323.79	9.19			(Conc=700.00)
Aroclor 1254-5	3533.57	2899.04	17.96			(Conc=700.00)
Aroclor 1260-1	2856.68	2414.90	15.46			(Conc=700.00)
Aroclor 1260-2	4183.90	3773.41	9.81			(Conc=700.00)
Aroclor 1260-3	4201.85	3924.94	6.59			(Conc=700.00)
Aroclor 1260-4	2140.61	1985.75	7.23			(Conc=700.00)
Aroclor 1260-5	4411.14	4043.36	8.34			(Conc=700.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

LABORATORY
RESOURCES INC.

LAB JOB NO. T410041

QUALITY CONTROL RESULTS
PESTICIDES AND POLYCHLORINATED BIPHENYLS SURROGATE SPIKES

Matrix: Water

	SAMPLE NUMBER	DATA FILE	PERCENT RECOVERY DBC	RETENTION TIME SHIFT (%)	REC. ADV. RANGE
1	7758 BLANK	>09279	93	0.00	24-154
2	T409278-17	>09280	75	.05	24-154
3	T409278-17MS	>09281	85	0.00	24-154
4	T409278-17MSD	>09282	67	.05	24-154

LABORATORY
RESOURCES INC.

LAB JOB NO. T410041

QUALITY CONTROL RESULTS
PESTICIDES AND POLYCHLORINATED BIPHENYLS SURROGATE SPIKES

Matrix: Water

	SAMPLE NUMBER	DATA FILE	PERCENT RECOVERY DBC	RETENTION TIME SHIFT (%)	REC. ADV. RANGE
1	7758 BLK-4	>P0452	101	.11	24-154
2	T410041-01	>P0455	92	.11	24-154
3	T410041-02	>P0456	122	.16	24-154
4	T410041-03	>P0457	102	.21	24-154
5	T410041-04	>P0458	98	.21	24-154
6	T410041-05	>P0459	98	.21	24-154

LABORATORY
RESOURCES INC.

QUALITY CONTROL RESULTS: POLYCHLORINATED BIPHENYLS
MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample ID: T409278-17 Sample Data File: ^09280

Spiked Sample Data File: ^09281 Spike Duplicate Data File: ^09282

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC	QC. LIMITS REC.
Aroclor 1254	83.33	ND	91.74	110	40-150

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor 1254	83.33	97.84	117	6	40	40-150

Comment: _____

REPORT HISTORY

Lab Name: LRI

GC Column: RTX1701/5 ID (mm): 0.53

Instrument ID : 5890D/P

Client Sample ID	Lab Sample ID	Date of Analysis	Time of Analysis
AR1660 1000PPB	AR1660 1000PPB	09/13/94	15:00
AR1660 700PPB	AR1660 700PPB	09/13/94	15:47
AR1660 100PPB	AR1660 100PPB	09/13/94	18:09
AR1221 1000PPB	AR1221 1000PPB	09/13/94	18:56
AR1221 700PPB	AR1221 700PPB	09/13/94	19:43
AR1221 500PPB	AR1221 500PPB	09/13/94	20:30
AR1221 200PPB	AR1221 200PPB	09/13/94	21:17
AR1221 100PPB	AR1221 100PPB	09/13/94	22:04
AR1232 1000PPB	AR1232 1000PPB	09/13/94	22:52
AR1232 700PPB	AR1232 700PPB	09/13/94	23:39
AR1232 500PPB	AR1232 500PPB	09/14/94	00:26
AR1232 200PPB	AR1232 200PPB	09/14/94	01:13
AR1232 100PPB	AR1232 100PPB	09/14/94	02:00
AR1242 1000PPB	AR1242 1000PPB	09/14/94	02:48
AR1242 700PPB	AR1242 700PPB	09/14/94	07:35
AR1242 500PPB	AR1242 500PPB	09/14/94	08:23
AR1242 200PPB	AR1242 200PPB	09/14/94	09:10
AR1242 100PPB	AR1242 100PPB	09/14/94	09:57
AR1248 1000PPB	AR1248 1000PPB	09/14/94	10:44
AR1248 700PPB	AR1248 700PPB	09/14/94	11:31
AR1248 500PPB	AR1248 500PPB	09/14/94	12:19
AR1660 500PPB	AR1660 500PPB	09/14/94	13:08
AR1660 200PPB	AR1660 200PPB	09/14/94	14:28
AR1248 200PPB	AR1248 200PPB	09/14/94	15:24
AR1248 100PPB	AR1248 100PPB	09/14/94	16:26
AR1254 1000PPB	AR1254 1000PPB	09/14/94	17:13
AR1254 700PPB	AR1254 700PPB	09/14/94	18:00
AR1254 500PPB	AR1254 500PPB	09/15/94	07:48
AR1254 200PPB	AR1254 200PPB	09/15/94	08:36
AR1254 100PPB	AR1254 100PPB	09/15/94	09:23

REPORT HISTORY

Lab Name: LRI

GC Column: RTX1701/5 ID (mm): 0.53

Instrument ID : 5890D/P

Client Sample ID	Lab Sample ID	Date of Analysis	Time of Analysis
AR1660 700PPB	AR1660 700PPB	09/28/94	04:39
AR1242 700PPB	AR1242 700PPB	09/28/94	05:26
AR1248 700PPB	AR1248 700PPB	09/28/94	06:13
AR1254 700PPB	AR1254 700PPB	09/28/94	07:01
QC BLANK	7758 BLANK	09/29/94	01:02
SS-3D	T409278-17	09/29/94	01:49
SS-3D MS	T409278-17MS	09/29/94	02:36
SS-3D MSD	T409278-17MSD	09/29/94	03:23

LABORATORY
RESOURCES INC.

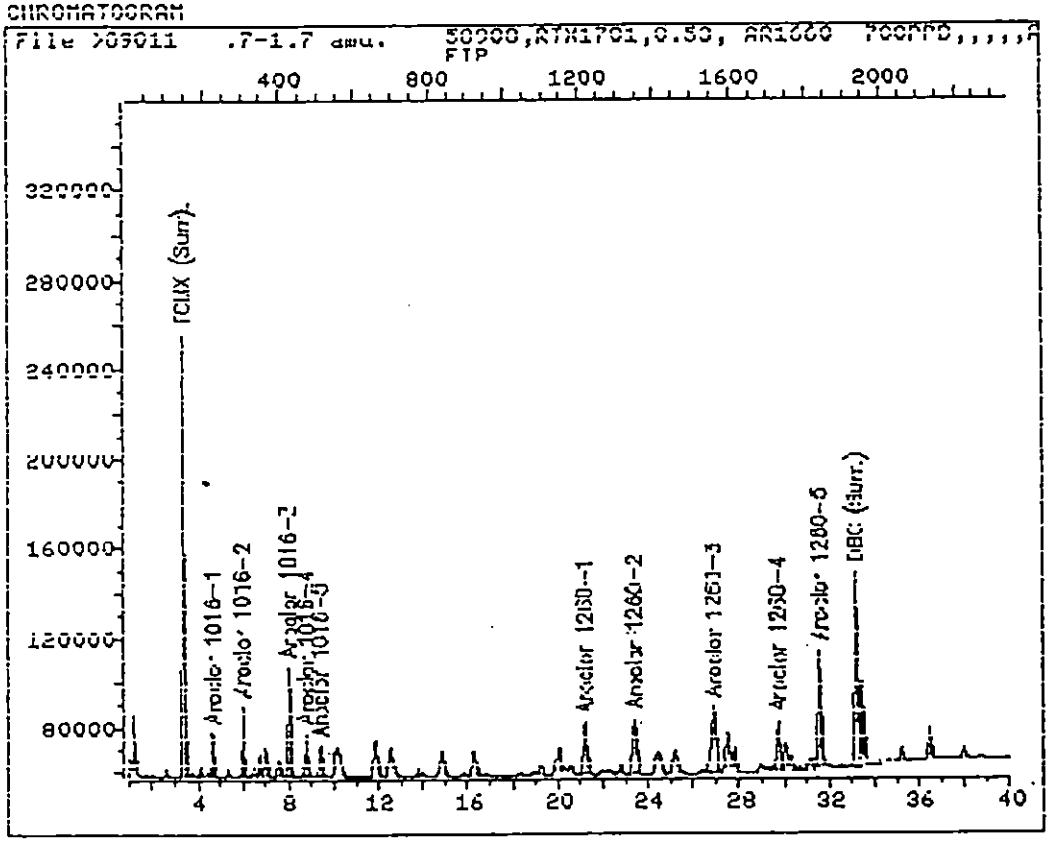
QUALITY CONTROL RESULTS : REPORT HISTORY

JOB NUMBER : T410041

GC COLUMN : RTX1701/5
INSTRUMENT ID : 58900/P

LAB SAMPLE ID.	CLIENT SAMPLE ID.	DATE OF ANALYSIS	TIME OF ANALYSIS
AR1660 700PPB	AR1660 700PPB	941006	23:44
AR1242 700PPB	AR1242 700PPB	941007	00:31
AR1248 700PPB	AR1248 700PPB	941007	01:18
AR1254 700PPB	AR1254 700PPB	941007	02:05
7758 BLK-4	QC BLANK	941007	11:01
T410041-01	H1	941007	15:18
T410041-02	H3	941007	16:05
T410041-03	H4	941007	16:52
T410041-04	H5	941007	17:39
T410041-05	FB	941007	18:27

CHROMATOGRAM



Data File: >09011::01 Quant Output File: ^09011::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1660 700PPB,,,,,AR1660 700PPB,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

Operator ID: GC2
Quant Time : 940914 09:40
Injected at: 940913 15:47

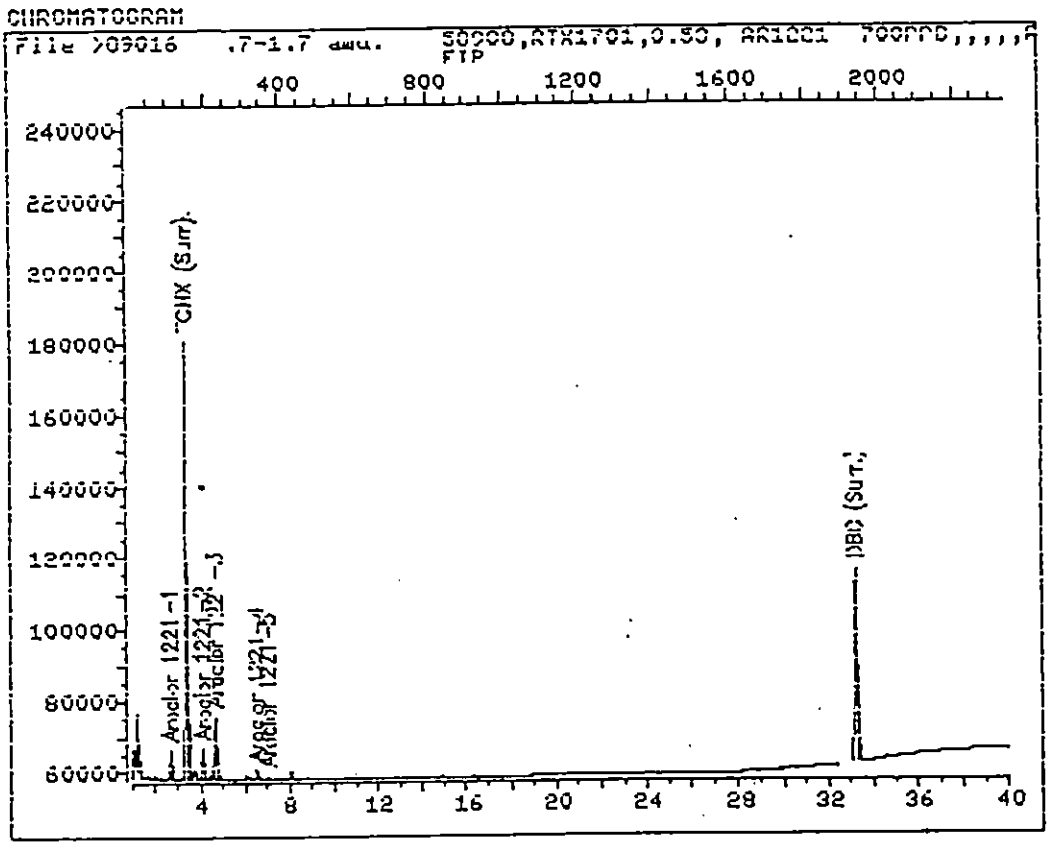
QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 940914 09:40
Output File: ^09011::QT Injected at: 940913 15:47
Data File: >09011::01 Dilution Factor: 1.00000
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1660 700PPB,,,,,AR1660 700PPB,

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.37	143	741691	201.70	UG/L	100
28)	#DBC (Surr.)	33.13	1929	678031	244.45	UG/L	100
29)	#Aroclor 1016-1	4.65	220	86722M	649.90	UG/L	100
30)	#Aroclor 1016-2	5.95	298	170013M	673.19	UG/L	100
31)	#Aroclor 1016-3	7.97	419	354575M	685.37	UG/L	100
32)	#Aroclor 1016-4	8.72	464	145766M	601.37	UG/L	100
33)	#Aroclor 1016-5	9.33	501	110280M	610.11	UG/L	100
59)	#Aroclor 1260-1	21.17	1211	232890M	532.58	UG/L	100
60)	#Aroclor 1260-2	23.37	1343	291514M	530.70	UG/L	100
61)	#Aroclor 1260-3	26.88	1554	383968M	493.92	UG/L	100
62)	#Aroclor 1260-4	29.68	1722	182657M	523.87	UG/L	100
63)	#Aroclor 1260-5	31.55	1834	372369M	531.21	UG/L	100

Compound uses ESTD



Data File: >09016::01 Quant Output File: ^09016::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1221 700PPB,,,,,AR1221 700PPB,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

Operator ID: GC2
Quant Time : 940914 09:46
Injected at: 940913 19:43

QUANT REPORT

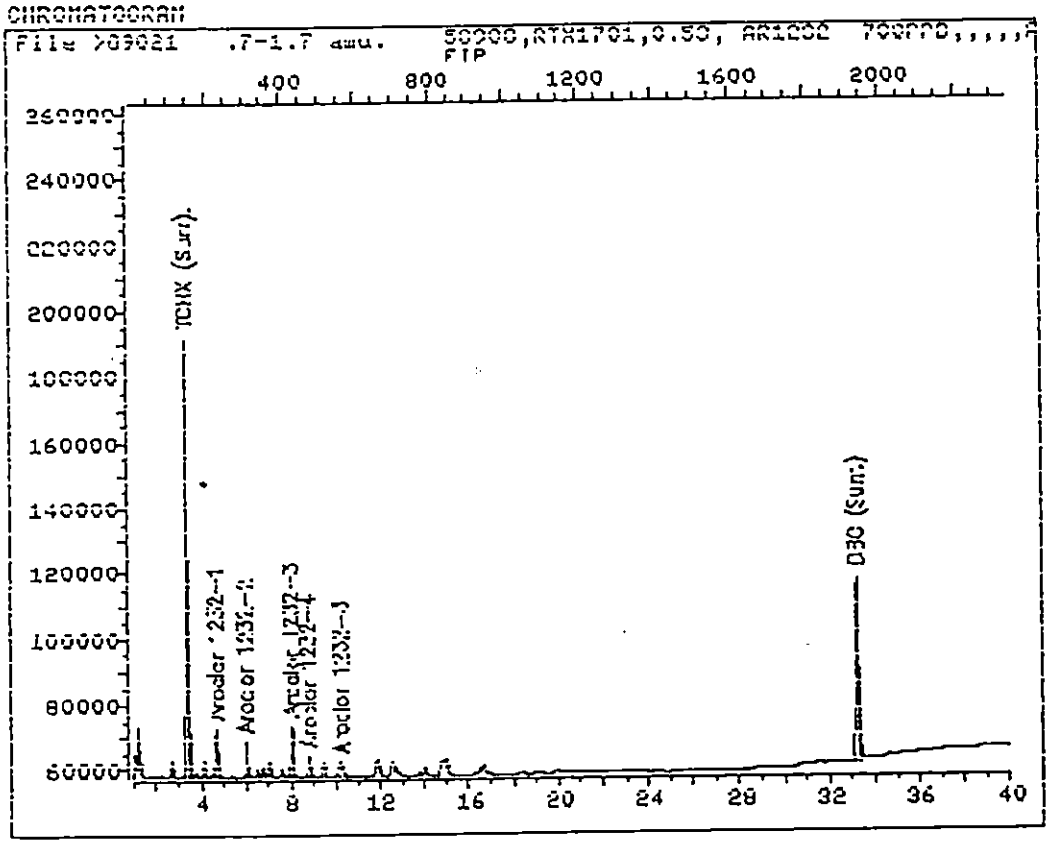
Operator ID: GC2
Output File: ^09016::QT
Data File: >09016::01
Name: 58900,RTX1701,0.53,
Misc: AR1221 700PPB,,,,,AR1221 700PPB,

Quant Rev: 7 Quant Time: 940914 09:46
Injected at: 940913 19:43
Dilution Factor: 1.00000
Instrument ID: 0

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

Compound	R.T.	Scan#	Area	Conc	Units	q
27) #TCMX (Surr).	3.37	143	463959	126.17	UG/L	100
28) #DBC (Surr.)	33.17	1931	364706	131.49	UG/L	100
34) #Aroclor 1221-1	2.68	102	33456	700.00	UG/L	100
35) #Aroclor 1221-2	4.10	187	34865	700.00	UG/L	100
36) #Aroclor 1221-3	4.67	221	87768	700.00	UG/L	100
37) #Aroclor 1221-4	6.48	330	14745	700.00	UG/L	100
38) #Aroclor 1221-5	7.00	361	4896	700.00	UG/L	100

Compound uses ESTD



Data File: >09021::01 Quant Output File: ^09021::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1232 700PPB,,,,,AR1232 700PPB,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

Operator ID: GC2
Quant Time : 940914 09:49
Injected at: 940913 23:39

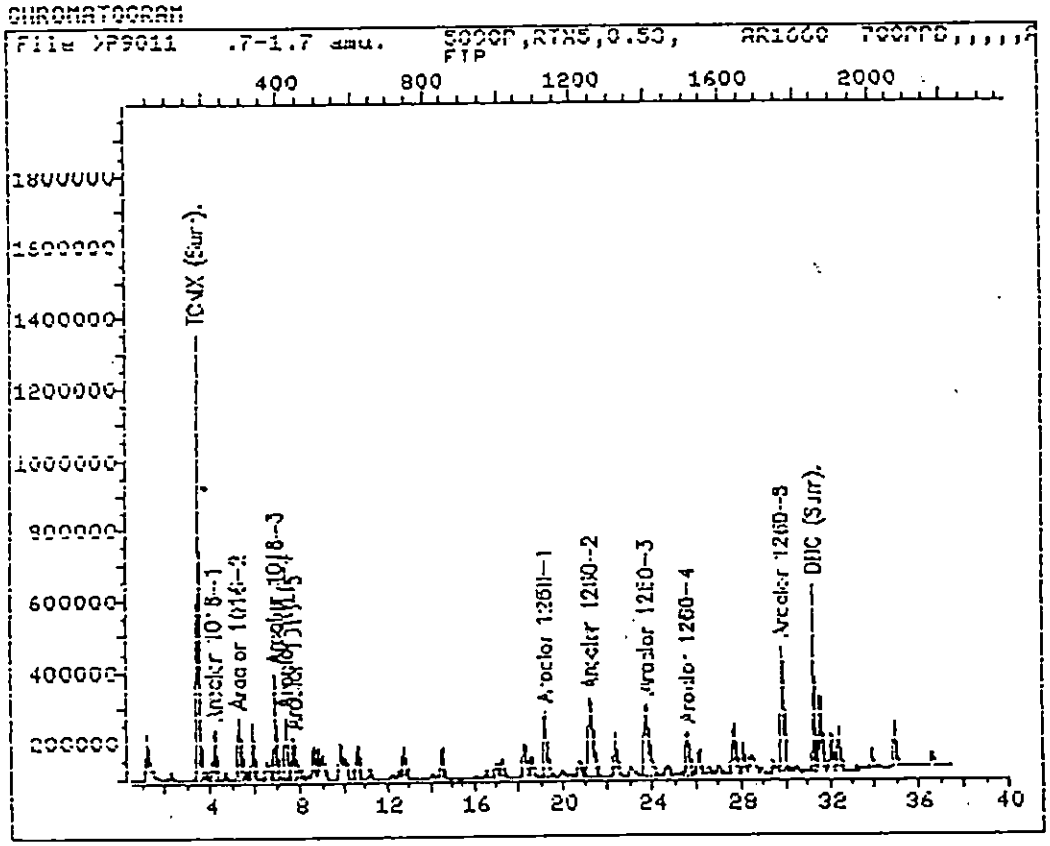
QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 940914 09:49
Output File: ^09021::QT Injected at: 940913 23:39
Data File: >09021::01 Dilution Factor: 1.00000
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1232 700PPB,,,,,AR1232 700PPB,

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP5890O, RTx1701,0.53,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.37	143	474925	129.15	UG/L	100
28)	#DBC (Surr.)	33.17	1931	379946	136.98	UG/L	100
39)	#Aroclor 1232-1	4.67	221	68408	700.00	UG/L	100
40)	#Aroclor 1232-2	5.97	299	58047	700.00	UG/L	100
41)	#Aroclor 1232-3	7.98	420	111327	700.00	UG/L	100
42)	#Aroclor 1232-4	8.73	465	50472	700.00	UG/L	100
43)	#Aroclor 1232-5	10.18	552	42707	700.00	UG/L	100

Compound uses ESTD



Data File: >P9011::01 Quant Output File: ^P9011::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1660 700PPB,,,,,AR1660 700PPB,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940913 15:47

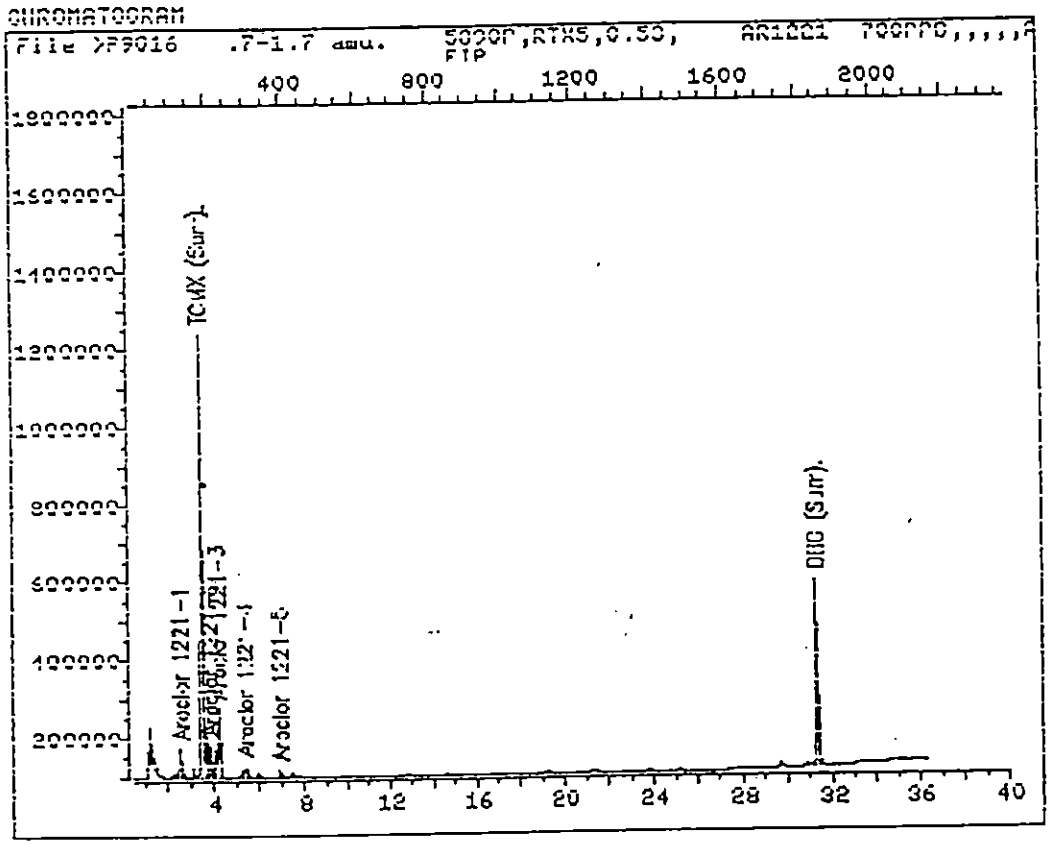
Operator ID: GC2
Quant Time : 940914 11:56
Injected at: 940913 15:47

perator ID: GC2 Quant Rev: 7 Quant Time: 940914 11:56
utput File: ^P9011::QT Injected at: 940913 15:47
ata File: >P9011::01 Dilution Factor: 1.00000
ame: 5890P,RTX5,0.53, Instrument ID: P
isc: AR1660 700PPB,,,,,AR1660 700PPB,

D File: IDPPAP::SC
itle: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
ast Calibration: 940912 11:33 Last Qcal Time: 940913 15:47

Compound	R.T.	Scan#	Area	Conc	Units	q
27) #TCMX (Surr).	3.43	177	5475903	148.68	UG/L	100
28) #DBC (Surr).	31.27	1847	3927674	145.85	UG/L	100
29) #Aroclor 1016-1	4.17	221	690092	700.00	UG/L	100
30) #Aroclor 1016-2	5.27	287	1440996	700.00	UG/L	100
31) #Aroclor 1016-3	6.93	387	2643689	700.00	UG/L	100
32) #Aroclor 1016-4	7.37	413	1143611	700.00	UG/L	100
33) #Aroclor 1016-5	7.73	435	821742	700.00	UG/L	100
59) #Aroclor 1260-1	19.17	1121	1920212	700.00	UG/L	100
60) #Aroclor 1260-2	21.23	1245	2805902	700.00	UG/L	100
61) #Aroclor 1260-3	23.75	1396	2915940	700.00	UG/L	100
62) #Aroclor 1260-4	25.60	1507	1490220	699.35	UG/L	100
63) #Aroclor 1260-5	29.80	1759	3082019	700.00	UG/L	100

Compound uses ESTD



Data File: >P9016::01 Quant Output File: ^P9016::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1221 700PP8,,,,,AR1221 700PP8,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

Operator ID: GC2
Quant Time : 940914 10:02
Injected at: 940913 19:43

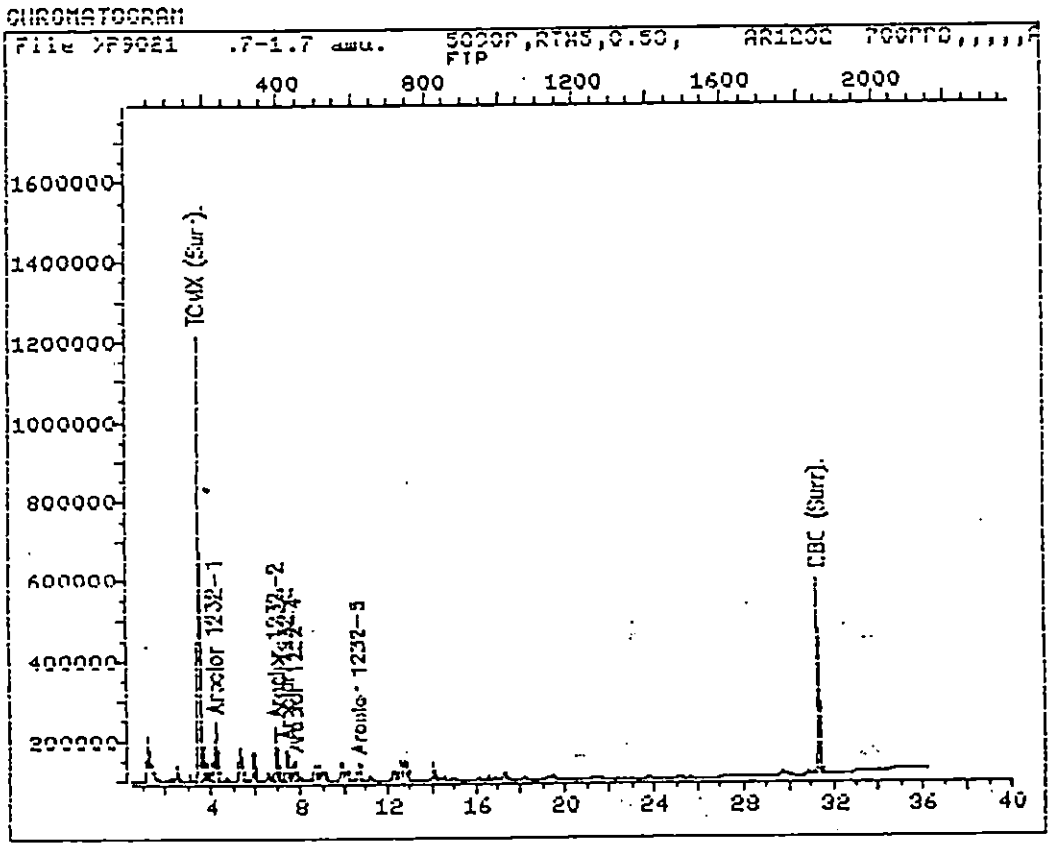
QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 940914 10:02
Output File: ^P9016::QT Injected at: 940913 19:43
Data File: >P9016::01 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1221 700PPB,,,,,AR1221 700PPB,

ID File: IOPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.45	178	5087174	138.12	UG/L	100
28)	#DBC (Surr).	31.30	1849	3570124	132.57	UG/L	100
34)	#Aroclor 1221-1	2.55	124	311266	700.00	UG/L	100
35)	#Aroclor 1221-2	3.82	200	392652	790.15	UG/L	100
36)	#Aroclor 1221-3	4.18	222	921718	695.66	UG/L	100
37)	#Aroclor 1221-4	5.38	294	165672	700.00	UG/L	100
38)	#Aroclor 1221-5	6.95	388	134020	696.47	UG/L	100

Compound uses ESTD



Data File: >P9021::01 Quant Output File: ^P9021::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1232 700PP8,,,,,AR1232 700PP8,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

Operator ID: GC2
Quant Time : 940914 10:05
Injected at: 940913 23:39

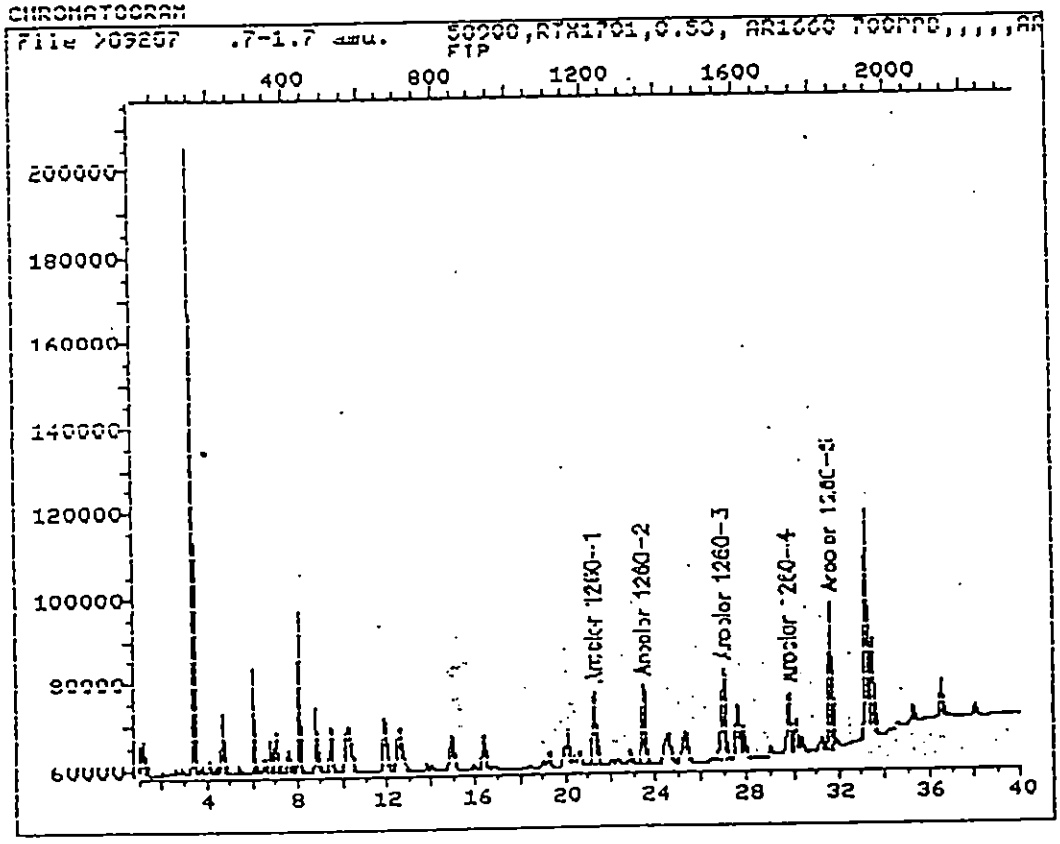
QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 940914 10:05
Output File: ^P9021::QT Injected at: 940913 23:39
Data File: >P9021::01 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1232 700PPB,,,,,AR1232 700PPB,

ID File: IOPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940912 11:33 Last Qcal Time: 940914 07:35

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.45	178	5119667	139.00	UG/L	100
28)	#DBC (Surr).	31.30	1849	3659591	135.90	UG/L	100
39)	#Aroclor 1232-1	4.17	221	731470	700.00	UG/L	100
40)	#Aroclor 1232-2	6.95	388	1203036	700.00	UG/L	100
41)	#Aroclor 1232-3	7.38	414	522060	700.00	UG/L	100
42)	#Aroclor 1232-4	7.75	436	358068	700.07	UG/L	100
43)	#Aroclor 1232-5	10.65	610	437637	700.00	UG/L	100

Compound uses ESTD



Data File: >09257::D5 Quant Output File: ^09257::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1660 700PPB,,,,,AR1660 700PPB,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940927 07:21

Operator ID: GC2
Quant Time : 940928 08:17
Injected at: 940928 04:39

QUANT REPORT

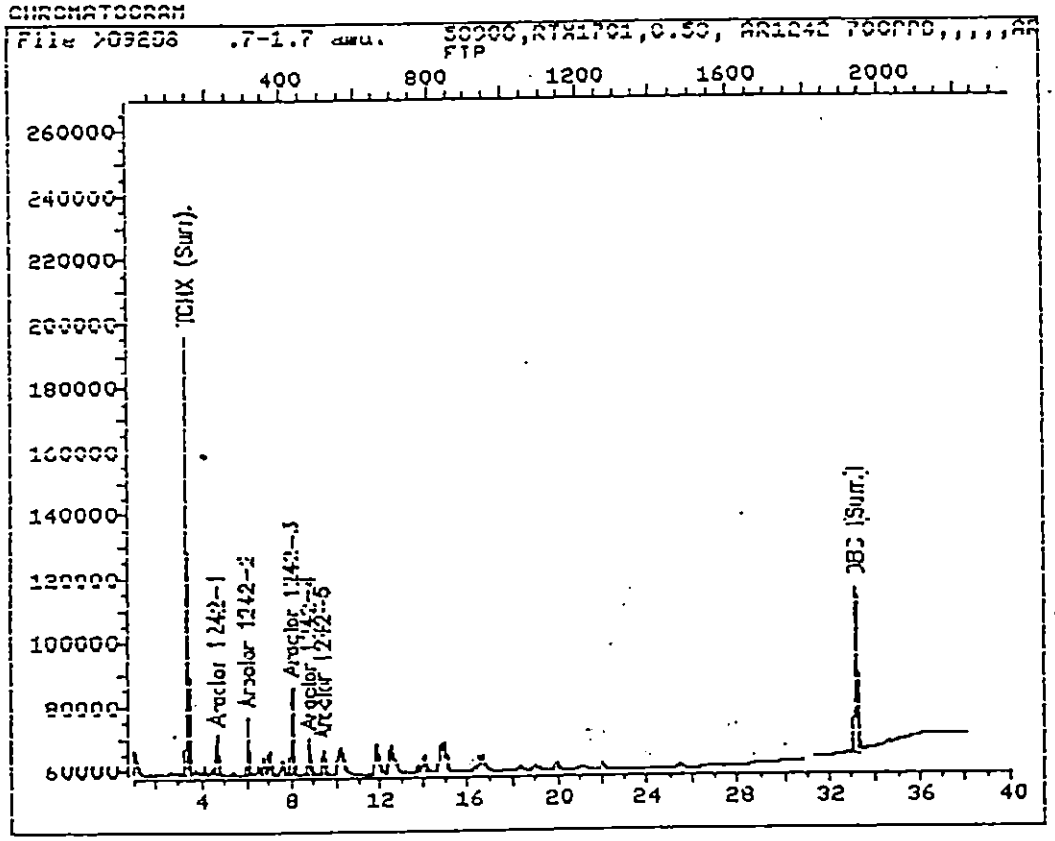
Operator ID: GC2
Output File: ^09257::QT
Data File: >09257::D5
Name: 58900,RTX1701,0.53,
Misc: AR1660 700PPB,,,,,AR1660 700PPB,

Quant Rev: 7 Quant Time: 940928 08:17
Injected at: 940928 04:39
Dilution Factor: 1.00000
Instrument ID: 0

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35
Last Qcal Time: 940927 07:21

	Compound	R.T.	Scan#	Area	Conc	Units	q
59)	#Aroclor 1260-1	21.25	1216	175560	788.05	UG/L	100
60)	#Aroclor 1260-2	23.47	1349	217943	781.08	UG/L	100
61)	#Aroclor 1260-3	26.97	1559	293704	775.52	UG/L	100
62)	#Aroclor 1260-4	29.75	1726	132258	781.71	UG/L	100
63)	#Aroclor 1260-5	31.62	1838	257088	775.51	UG/L	100

Compound uses ESTD



Data File: >09258::D5 Quant Output File: ^09258::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1242 700PPB,,,,,AR1242 700PPB,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940927 07:21

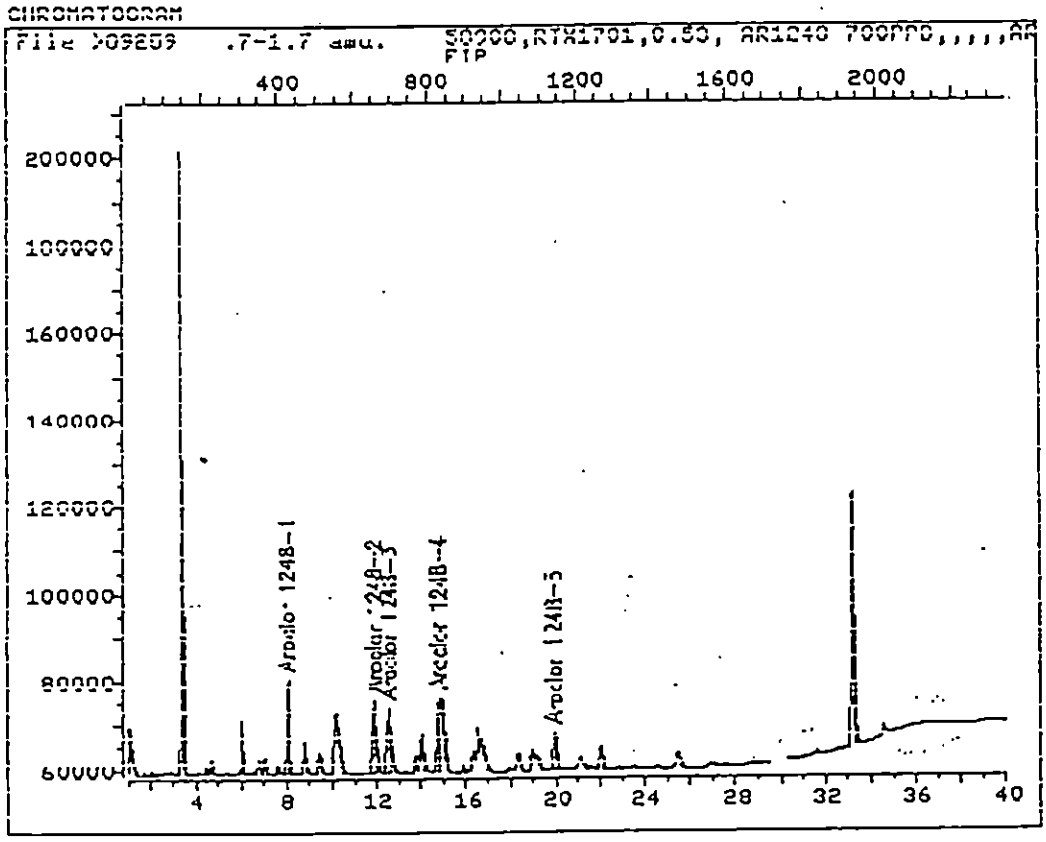
Operator ID: GC2
Quant Time : 940928 08:17
Injected at: 940928 05:26

Operator ID: GC2 Quant Rev: 7 Quant Time: 940928 08:17
Output File: ^09258::QT Injected at: 940928 05:26
Data File: >09258::D5 Dilution Factor: 1.00000
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1242 700PPB,,,,,AR1242 700PPB,

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940927 07:21

Compound	R.T.	Scan#	Area	Conc	Units	q
27) #TCMX (Surr).	3.38	144	525943	155.32	UG/L	100
28) #DBC (Surr.)	33.15	1930	356166	166.49	UG/L	100
44) #Aroclor 1242-1	4.67	221	58872	730.27	UG/L	100
45) #Aroclor 1242-2	5.98	300	99767	722.90	UG/L	100
46) #Aroclor 1242-3	8.00	421	207008	728.61	UG/L	100
47) #Aroclor 1242-4	8.75	466	95560	731.48	UG/L	100
48) #Aroclor 1242-5	9.35	502	68664	731.72	UG/L	100

Compound uses ESTD



Data File: >09259::D5 Quant Output File: ^09259::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1248 700PPB,,,,,AR1248 700PPB,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940927 07:21

Operator ID: GC2
Quant Time : 940928 08:17
Injected at: 940928 06:13

QUANT REPORT

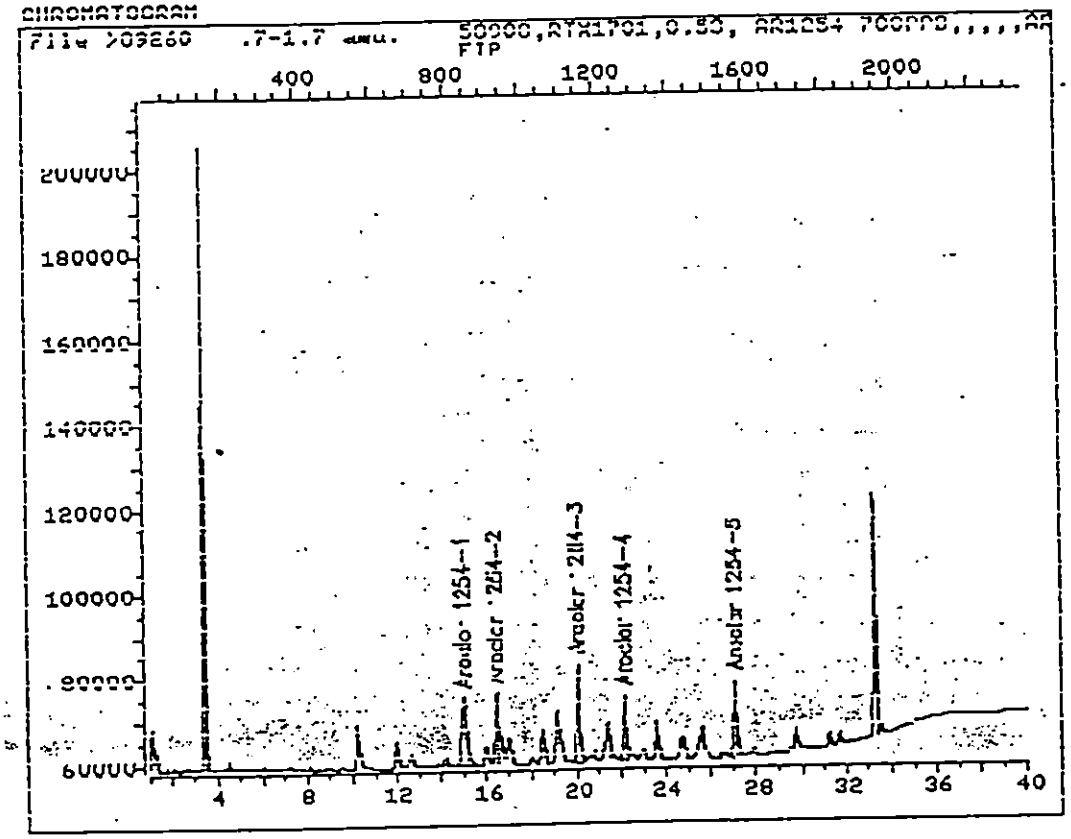
Operator ID: GC2
Output File: ^09259::QT
Data File: >09259::D5
Name: 58900,RTX1701,0.53,
Misc: AR1248 700PPB,,,,,AR1248 700PPB,

Quant Rev: 7 Quant Time: 940928 08:17
Injected at: 940928 06:13
Dilution Factor: 1.00000
Instrument ID: 0

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940927 07:21

Compound	R.T.	Scan#	Area	Conc	Units	q
49) #Aroclor 1248-1	8.00	421	152696M	747.05	UG/L	100
50) #Aroclor 1248-2	11.85	652	163316M	740.96	UG/L	100
51) #Aroclor 1248-3	12.53	693	137504M	649.41	UG/L	100
52) #Aroclor 1248-4	14.75	826	137756M	742.43	UG/L	100
53) #Aroclor 1248-5	19.88	1134	77111	781.39	UG/L	100

Compound uses ESTD



Data File: >09260::D5 Quant Output File: ^09260::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1254 700PPB,,,,,AR1254 700PPB,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940927 07:21

Operator ID: GC2
Quant Time : 940928 08:18
Injected at: 940928 07:01

QUANT REPORT

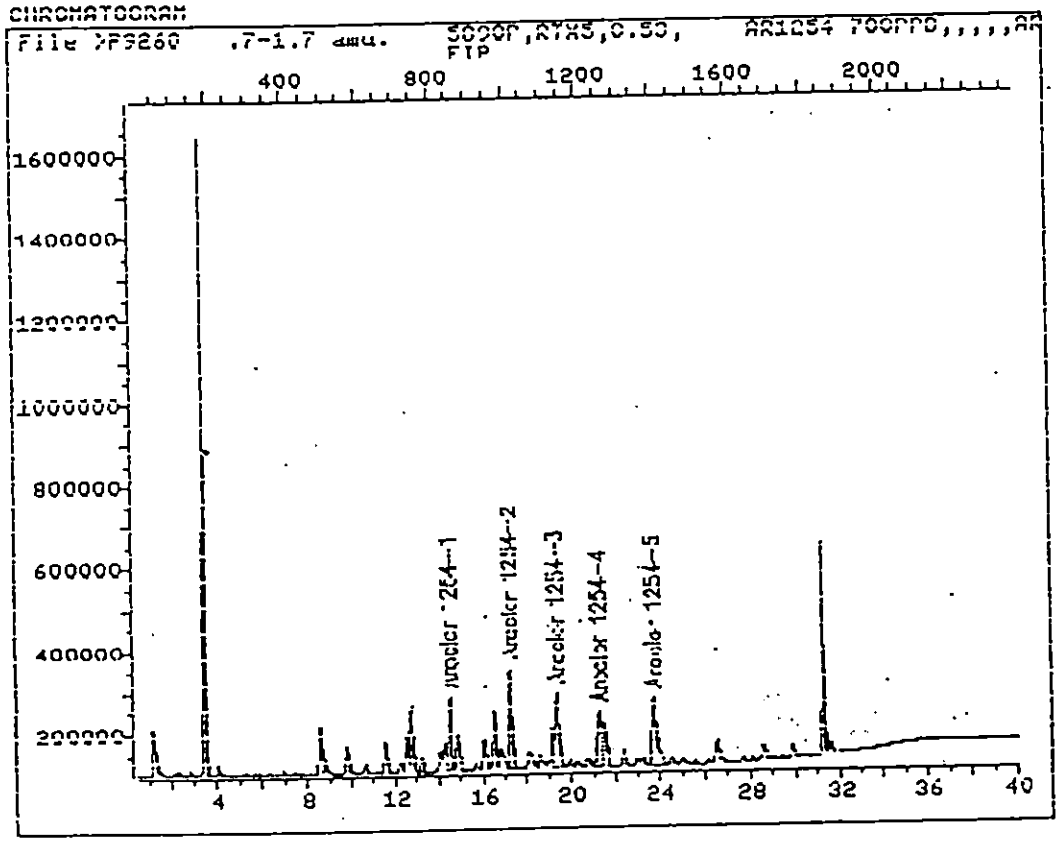
Quant Rev: 7 Quant Time: 940928 08:18
Injected at: 940928 07:01
Dilution Factor: 1.00000
Instrument ID: 0

Operator ID: GC2
Output File: ^09260::QT
Data File: >09260::D5
Name: 58900,RTX1701,0.53,
Misc: AR1254 700PPB,,,,,AR1254 700PPB,

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940927 07:21

Compound	R.T.	Scan#	Area	Conc	Units	q
54) #Aroclor 1254-1	14.97	839	205664	745.90	UG/L	100
55) #Aroclor 1254-2	16.42	926	154399	739.63	UG/L	100
56) #Aroclor 1254-3	20.00	1141	233247	748.24	UG/L	100
57) #Aroclor 1254-4	22.13	1269	163726	754.56	UG/L	100
58) #Aroclor 1254-5	27.08	1566	212891	740.85	UG/L	100

Compound uses ESTD



Data File: >P9260::M1 Quant Output File: ^P9260::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1254 700PPB,,,,,AR1254 700PPB,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940927 04:59

Operator ID: GC2
Quant Time : 940928 08:18
Injected at: 940928 07:01

QUANT REPORT Page 1

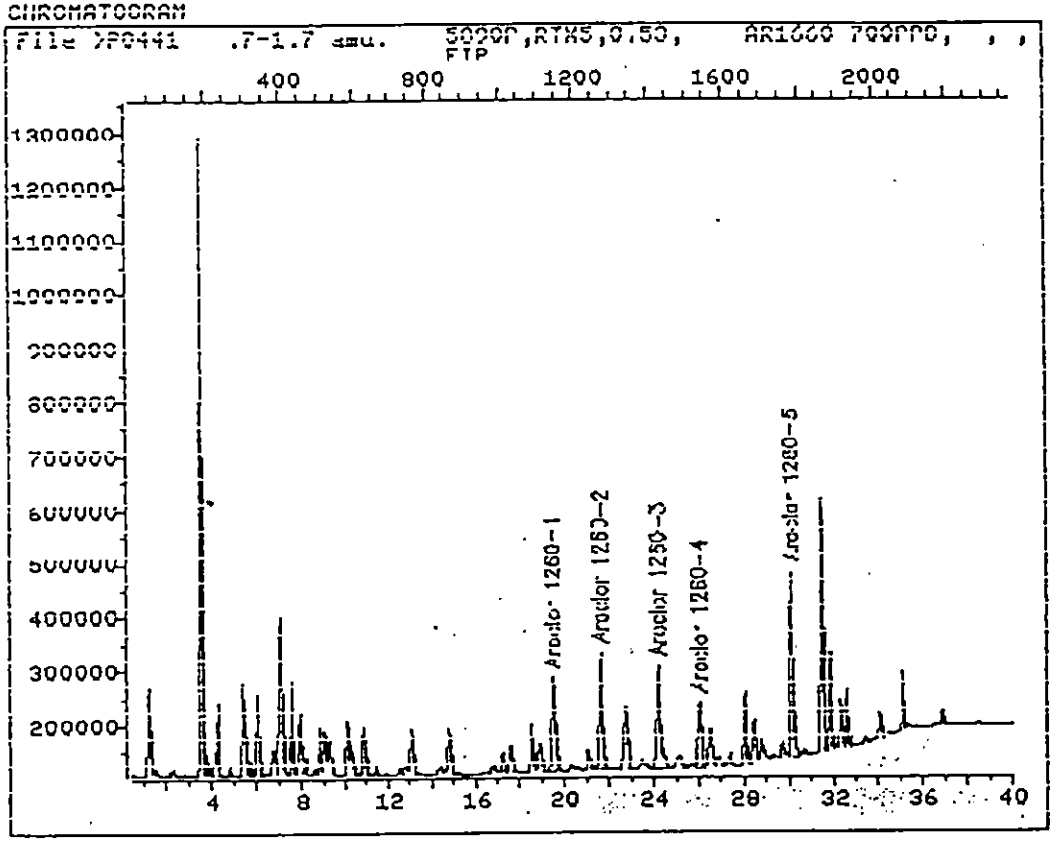
Operator ID: GC2 Quant Rev: 7 Quant Time: 940928 08:18
Output File: ^P9260::QT Injected at: 940928 07:01
Data File: >P9260::M1 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1254 700PPB,,,,,AR1254 700PPB,

ID File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940927 04:59

Compound	R.T.	Scan#	Area	Conc	Units	q
54) #Aroclor 1254-1	14.50	841	1548097	801.04	UG/L	100
55) #Aroclor 1254-2	17.25	1006	2205948	812.20	UG/L	100
56) #Aroclor 1254-3	19.35	1132	1673953	806.13	UG/L	100
57) #Aroclor 1254-4	21.25	1246	1624539	831.85	UG/L	100
58) #Aroclor 1254-5	23.75	1396	2312744	825.22	UG/L	100

Compound uses ESTD

CHROMATOGRAM



Data File: >P0441::01 Quant Output File: ^P0441::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1660 700PPB, , , , ,AR1660 700PPB,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

Operator ID: MANAGER
Quant Time : 941007 07:48
Injected at: 941006 23:44

QUANT REPORT

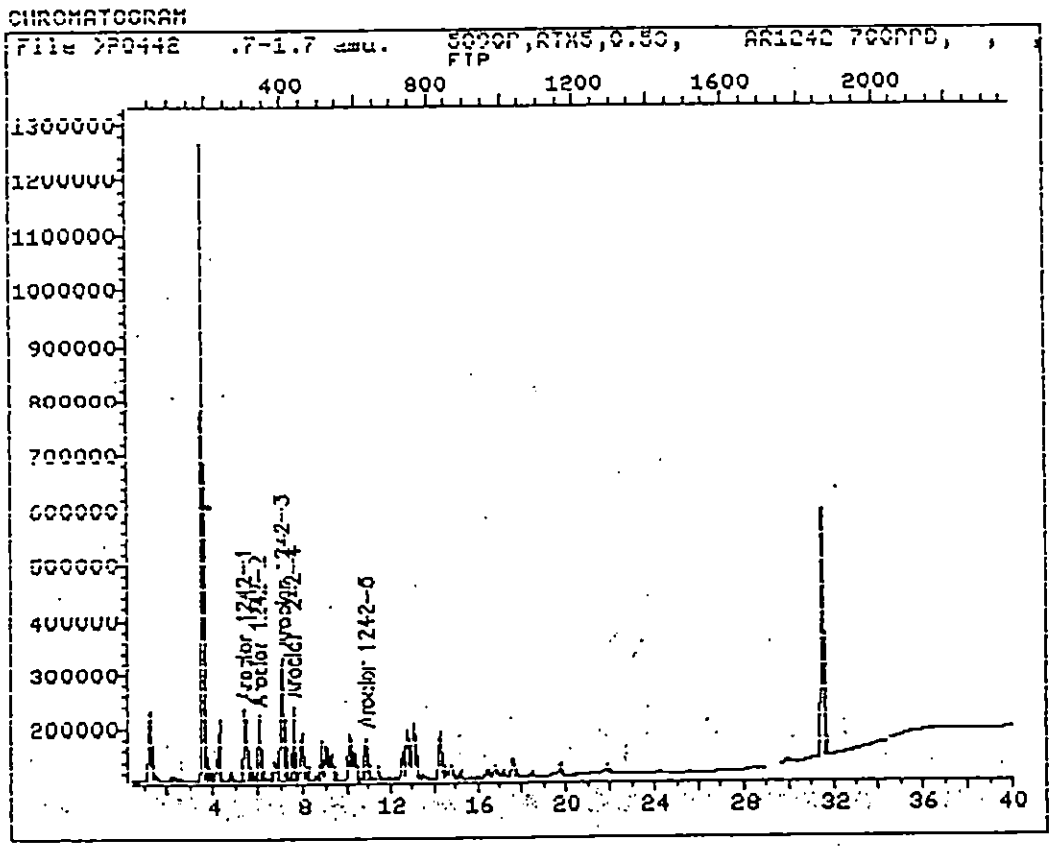
Operator ID: MANAGER
Output File: ^P0441::QT
Data File: >P0441::01
Name: 5890P,RTX5,0.53,
Misc: AR1660 700PPB, , , , ,AR1660 700PPB,

Quant Rev: 7 Quant Time: 941007 07:48
Injected at: 941006 23:44
Dilution Factor: 1.00000
Instrument ID: P

ID File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

	Compound	R.T.	Scan#	Area	Conc	Units	q
59)	#Aroclor 1260-1	19.47	1139	1690430	1036.82	UG/L	100
60)	#Aroclor 1260-2	21.60	1267	2641389	1038.38	UG/L	100
61)	#Aroclor 1260-3	24.18	1422	2747458	1032.01	UG/L	100
62)	#Aroclor 1260-4	26.02	1532	1390022	1107.31	UG/L	100
63)	#Aroclor 1260-5	30.10	1777	2830351	1178.30	UG/L	100

Compound uses ESTD



Data File: >P0442::01 Quant Output File: ^P0442::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1242 700PPB, , , , ,AR1242 700PPB,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

Operator ID: MANAGER
Quant Time : 941007 07:48
Injected at: 941007 00:31

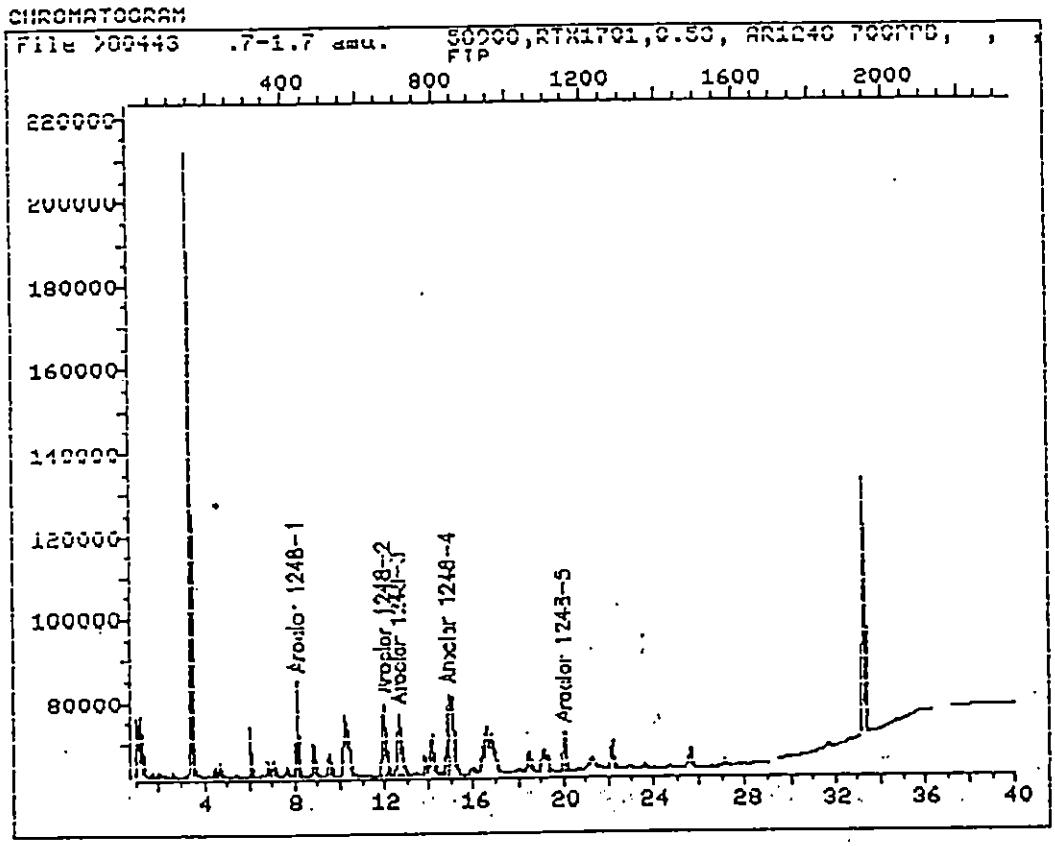
QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 941007 07:48
Output File: ^P0442::QT Injected at: 941007 00:31
Data File: >P0442::01 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1242 700PPB, , , , ,AR1242 700PPB,

ID File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

Compound	R.T.	Scan#	Area	Conc	Units	q
44) #Aroclor 1242-1	5.38	294	1104124	917.50	UG/L	100
45) #Aroclor 1242-2	6.03	333	683766	919.74	UG/L	100
46) #Aroclor 1242-3	7.10	397	2060842	846.10	UG/L	100
47) #Aroclor 1242-4	7.55	424	891344	908.05	UG/L	100
48) #Aroclor 1242-5	10.87	623	818758	927.19	UG/L	100

Compound uses ESTD



Data File: >00443::01 Quant Output File: ^00443::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: AR1248 700PPB, , , , ,AR1248 700PPB,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

Operator ID: MANAGER
Quant Time : 941007 07:49
Injected at: 941007 01:18

QUANT REPORT Page 1

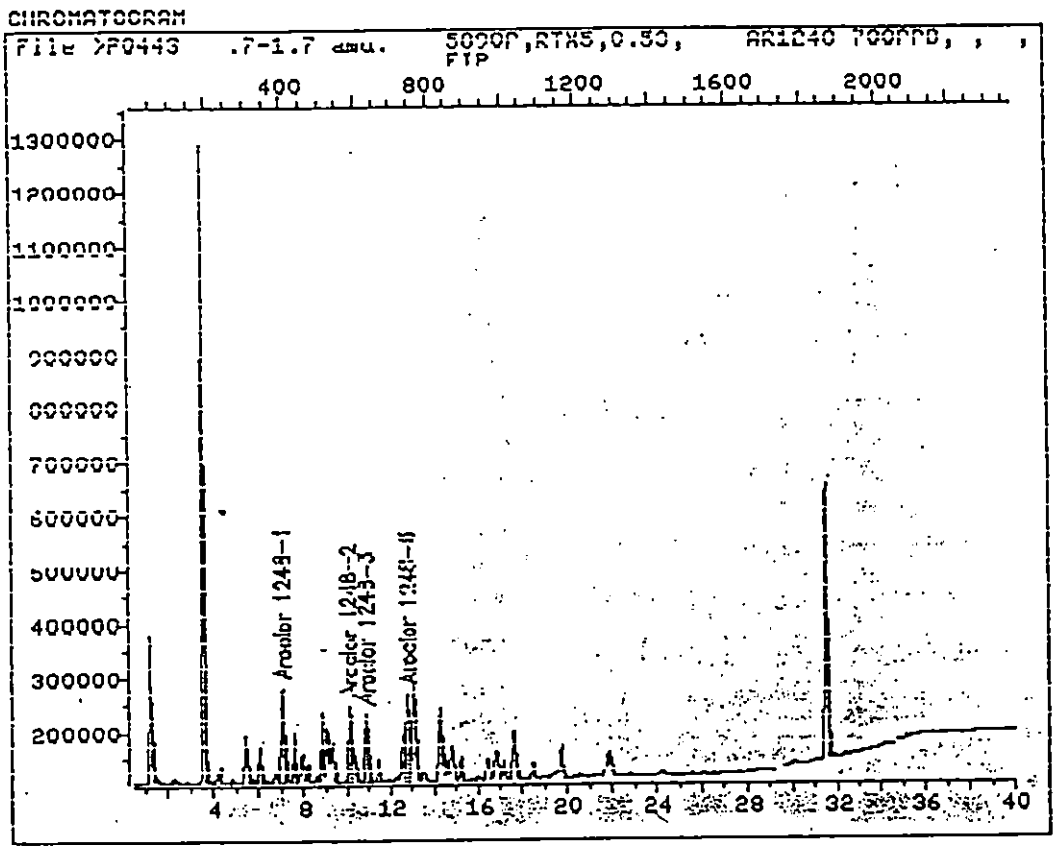
Operator ID: MANAGER
Output File: ^00443::QT
Data File: >00443::01
Name: 58900,RTX1701,0.53,
Misc: AR1248 700PPB, , , , ,AR1248 700PPB,

Quant Rev: 7 Quant Time: 941007 07:49
Injected at: 941007 01:18
Dilution Factor: 1.00000
Instrument ID: 0

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP5890O, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

Compound	R.T.	Scan#	Area	Conc	Units	q
49) #Aroclor 1248-1	8.07	425	175967	747.96	UG/L	100
50) #Aroclor 1248-2	11.93	657	188023	804.77	UG/L	100
51) #Aroclor 1248-3	12.62	698	161272	826.48	UG/L	100
52) #Aroclor 1248-4	14.85	832	183273	858.05	UG/L	100
53) #Aroclor 1248-5	19.98	1140	90991	982.58	UG/L	100

Compound uses ESTD



Data File: >P0443::01 Quant Output File: ^P0443::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1248 700PPB, , , , ,AR1248 700PPB,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5;2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

Operator ID: MANAGER
Quant Time : 941007 07:49
Injected at: 941007 01:18

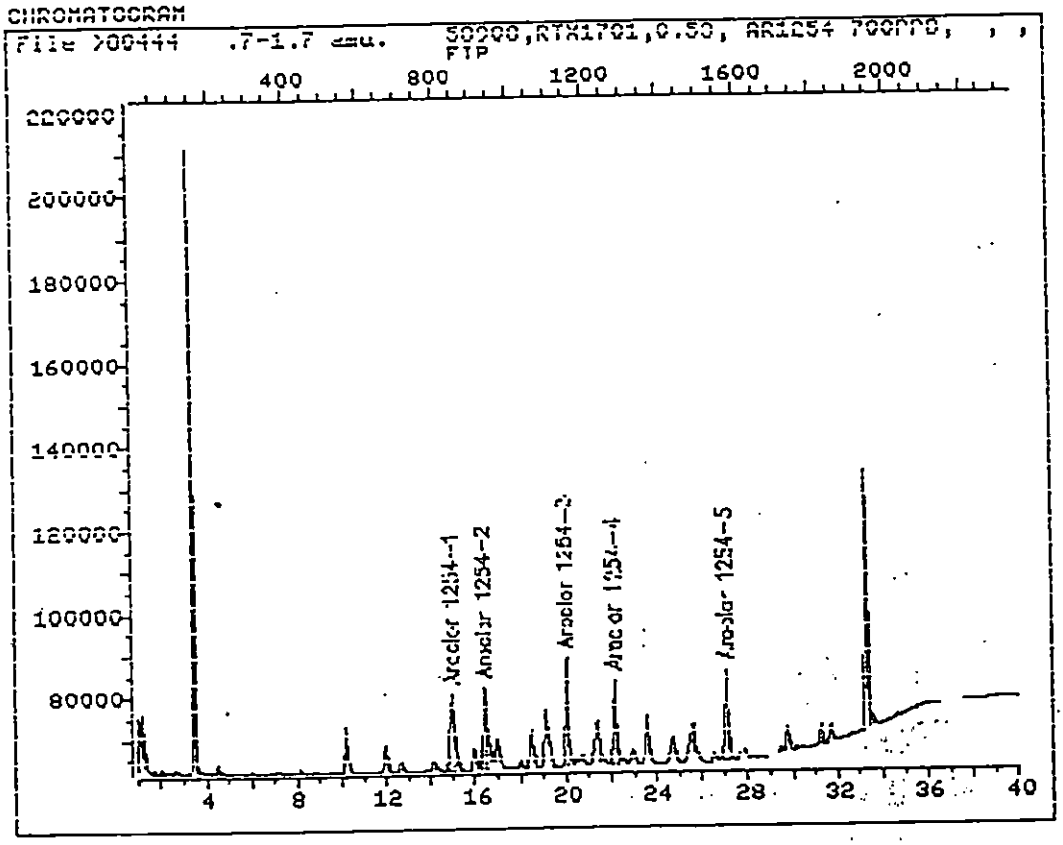
QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 941007 07:49
Output File: ^P0443::QT Injected at: 941007 01:18
Data File: >P0443::01 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1248 700PPB, , , , ,AR1248 700PPB,

ID File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

	Compound	R.T.	Scan#	Area	Conc	Units	q
49)	#Aroclor 1248-1	7.08	396	1608469	817.82	UG/L	100
50)	#Aroclor 1248-2	10.05	574	1257493	826.99	UG/L	100
51)	#Aroclor 1248-3	10.87	623	1369146	827.65	UG/L	100
52)	#Aroclor 1248-4	12.80	739	1482323	846.96	UG/L	100
53)	#Aroclor 1248-5	12.80	739	1482323	846.96	UG/L	100

Compound uses ESTD



Data File: >00444::01 Quant Output File: ^00444::QT
Name: 58900,RTX1701,0.53; Instrument ID: 0
Misc: AR1254 700PPB; ; ; ; ,AR1254 700PPB,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

Operator ID: MANAGER
Quant Time : 941007 07:49
Injected at: 941007 02:05

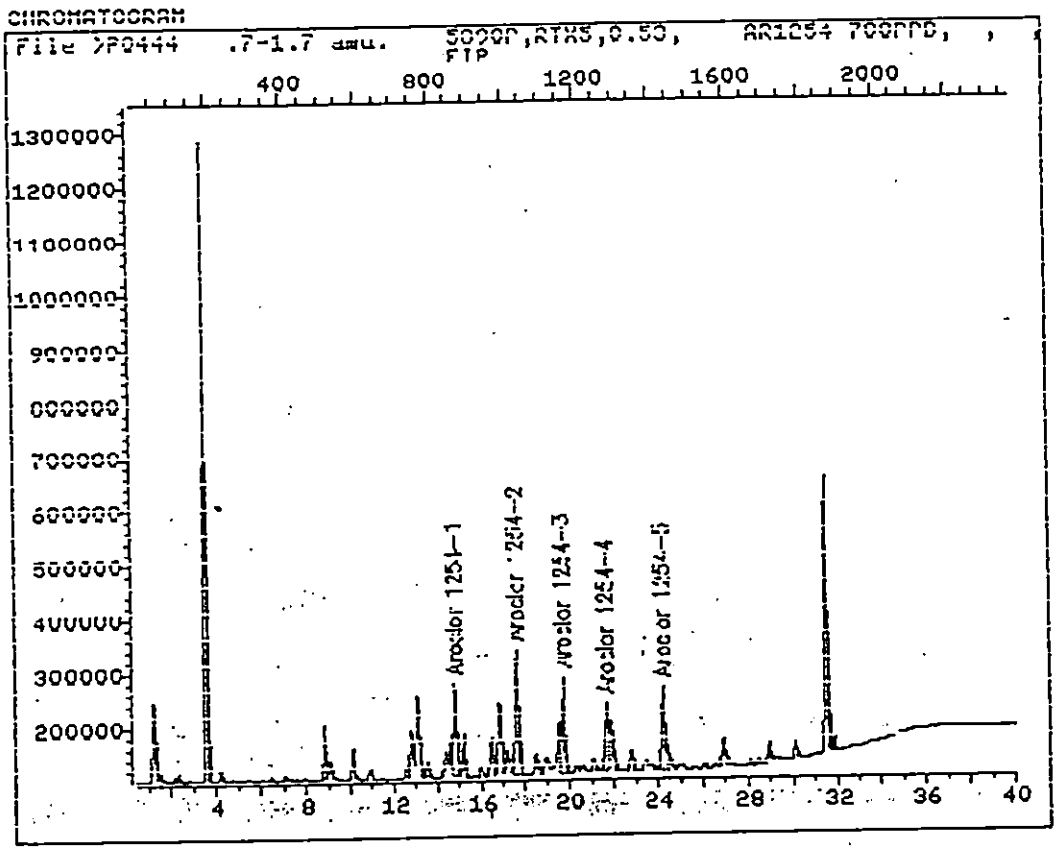
Operator ID: MANAGER
Output File: ^00444::QT
Data File: >00444::01
Name: 58900,RTX1701,0.53,
Misc: AR1254 700PPB, , , , ,AR1254 700PPB,

Quant Rev: 7 Quant Time: 941007 07:49
Injected at: 941007 02:05
Dilution Factor: 1.00000
Instrument ID: 0

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP5890, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

	Compound	R.T.	Scan#	Area	Conc	Units	q
54)	#Aroclor 1254-1	14.95	838	219284M	723.40	UG/L	
55)	#Aroclor 1254-2	16.40	925	175144M	707.58	UG/L	100
56)	#Aroclor 1254-3	20.00	1141	241121M	731.74	UG/L	100
57)	#Aroclor 1254-4	22.13	1269	221335M	795.20	UG/L	100
58)	#Aroclor 1254-5	27.07	1565	262575M	792.65	UG/L	100

Compound uses ESTD



Data File: >P0444::01 Quant Output File: ^P0444::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: AR1254 700PPB, , , , ,AR1254 700PPB,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

Operator ID: MANAGER
Quant Time : 941007 07:49
Injected at: 941007 02:05

QUANT REPORT Page 1

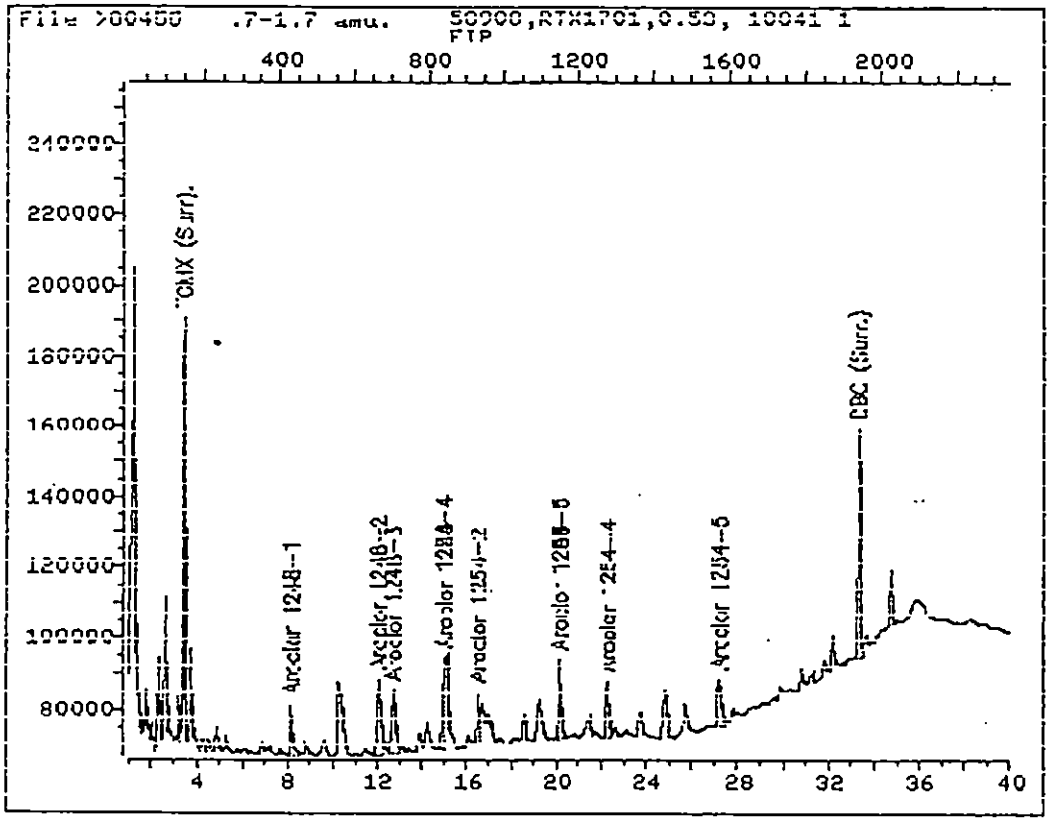
perator ID: MANAGER Quant Rev: 7 Quant Time: 941007 07:49
utput File: ^P0444::QT Injected at: 941007 02:05
Data File: >P0444::01 Dilution Factor: 1.00000
ame: 5890P,RTX5,0.53, Instrument ID: P
isc: AR1254 700PPB, , , , ,AR1254 700PPB,

.D File: IDPPAP::SC
itle: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941006 02:22

	Compound	R.T.	Scan#	Area	Conc	Units	q
54)	#Aroclor 1254-1	14.82	860	1529998	833.91	UG/L	100
55)	#Aroclor 1254-2	17.60	1027	2159192	862.35	UG/L	100
56)	#Aroclor 1254-3	19.70	1153	1684285	918.80	UG/L	100
57)	#Aroclor 1254-4	21.63	1269	1626653	951.25	UG/L	100
58)	#Aroclor 1254-5	24.22	1424	2029331	832.50	UG/L	100

Compound uses ESTD

CHROMATOGRAM



Data File: >00455::01 Quant Output File: ^00455::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: 10041-1

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

Operator ID: GC2
Quant Time : 941010 11:10
Injected at: 941007 15:18

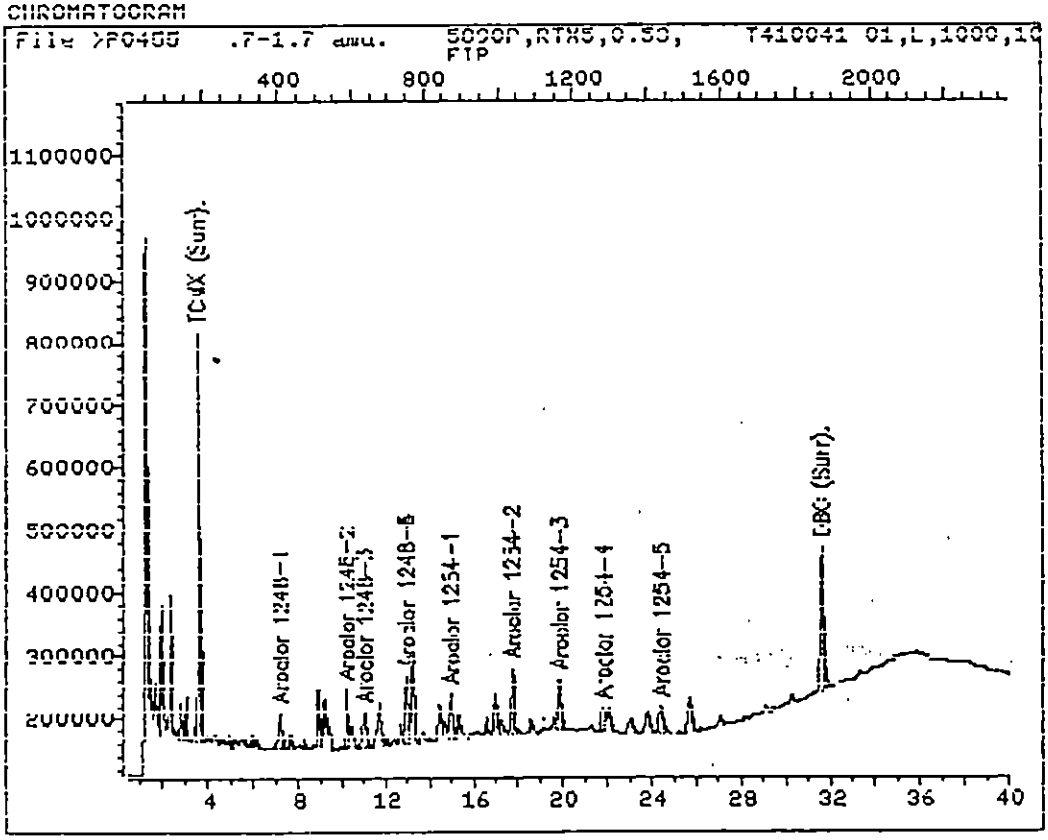
QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 941010 11:10
Output File: ^00455::QT Injected at: 941007 15:18
Data File: >00455::01 Dilution Factor: 1.00000
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: 10041-1

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.42	146	519378	161.63	UG/L	100
28)	#DBC (Surr.)	33.30	1939	482236	215.21	UG/L	100
49)	#Aroclor 1248-1	8.13	429	125951	501.04	UG/L	100
50)	#Aroclor 1248-2	12.02	662	231079	860.30	UG/L	100
51)	#Aroclor 1248-3	12.70	703	199279	864.97	UG/L	100
52)	#Aroclor 1248-4	14.97	839	235175	898.24	UG/L	100
53)	#Aroclor 1248-5	20.12	1148	129211M	994.03	UG/L	100
54)	#Aroclor 1254-1	14.97	839	235175	750.73	UG/L	100
55)	#Aroclor 1254-2	16.50	931	147463	589.37	UG/L	100
56)	#Aroclor 1254-3	20.12	1148	241871	702.18	UG/L	100
57)	#Aroclor 1254-4	22.27	1277	169096	534.79	UG/L	100
58)	#Aroclor 1254-5	27.20	1573	163650	436.28	UG/L	100

Compound uses ESTD



Data File: >P0455::01 Quant Output File: ^P0455::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-01,L,1000,10,1,H1,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

Operator ID: GC2
Quant Time : 941010 10:28
Injected at: 941007 15:18

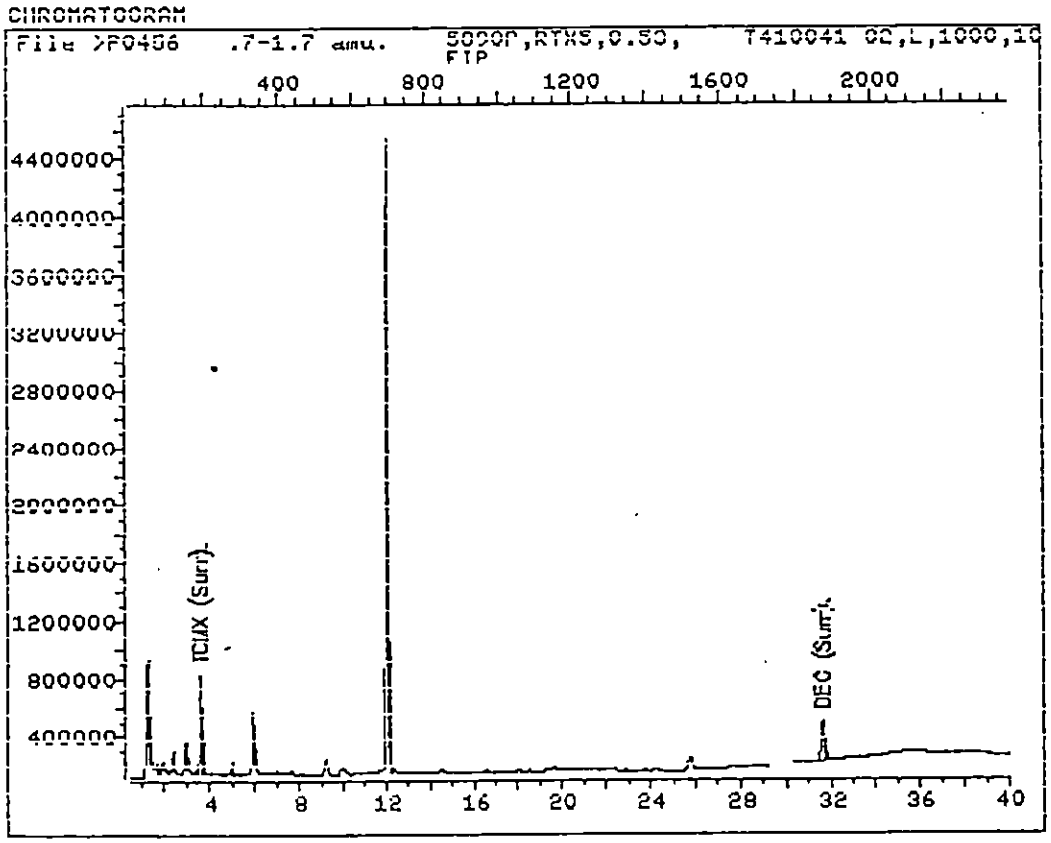
QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 941010 10:28
Output File: ^P0455::QT Injected at: 941007 15:18
Data File: >P0455::01 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-01,L,1000,10,1,H1,

LO File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.55	184	2556313	79.65	UG/L	100
28)	#DBC (Surr).	31.58	1866	1791176	91.84	UG/L	100
49)	#Aroclor 1248-1	7.20	403	482321	209.90	UG/L	100
50)	#Aroclor 1248-2	10.17	581	756109	420.90	UG/L	100
51)	#Aroclor 1248-3	11.00	631	651037	332.85	UG/L	100
52)	#Aroclor 1248-4	12.93	747	896591	423.40	UG/L	100
53)	#Aroclor 1248-5	12.93	747	896591	423.40	UG/L	100
54)	#Aroclor 1254-1	14.93	867	613273	280.58	UG/L	100
55)	#Aroclor 1254-2	17.72	1034	950531	308.16	UG/L	100
56)	#Aroclor 1254-3	19.83	1161	737372	306.46	UG/L	100
57)	#Aroclor 1254-4	21.78	1278	455793	196.14	UG/L	100
58)	#Aroclor 1254-5	24.40	1435	592510	204.38	UG/L	100

Compound uses ESTD



Data File: >P0456::01 Quant Output File: ^P0456::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-02,L,1000,10,1,H3,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

Operator ID: GC2
Quant Time : 941010 10:29
Injected at: 941007 16:05

QUANT REPORT Page 1

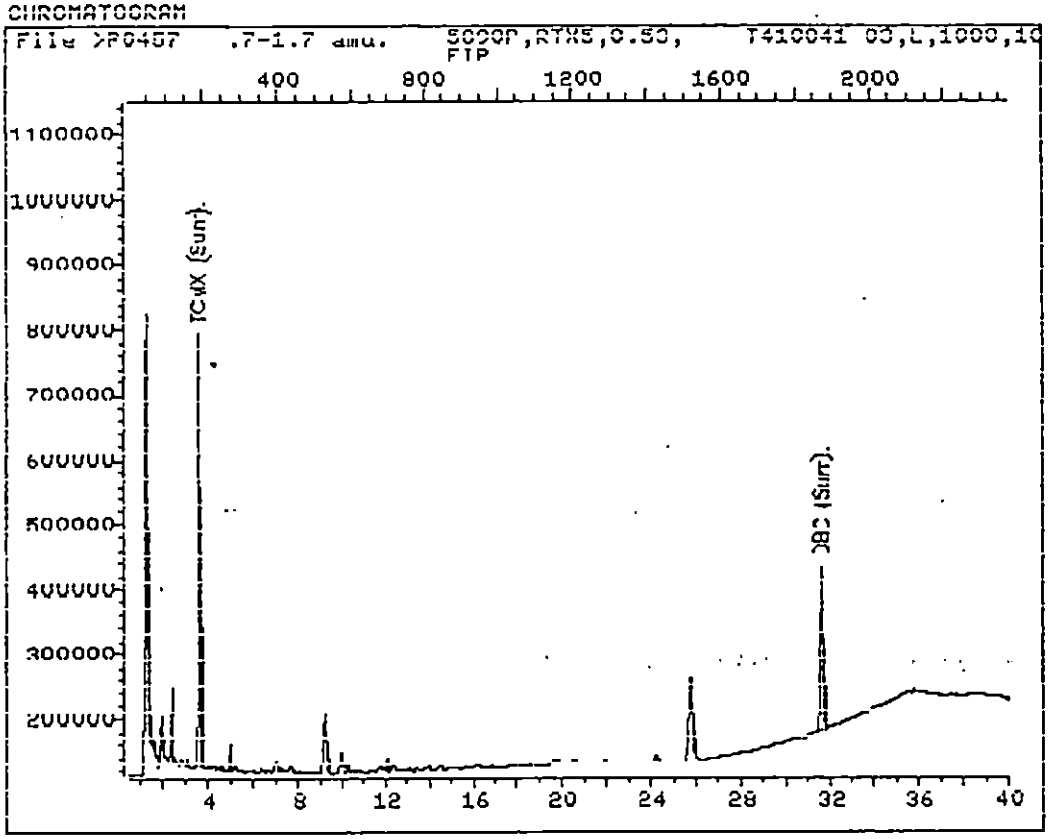
perator ID: GC2 Quant Rev: 7 Quant Time: 941010 10:29
Output File: ^P0456::QT Injected at: 941007 16:05
ata File: >P0456::01 Dilution Factor: 1.00000
ame: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-02,L,1000,10,1,H3,

D File: IDPPAP::SC
itle: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

Compound	R.T.	Scan#	Area	Conc	Units	q
27) #TCMX (Surr).	3.57	185	2817334	87.78	UG/L	100
28) #DBC (Surr).	31.60	1867	2381573	122.11	UG/L	100

Compound uses ESTD

CHROMATOGRAM



Data File: >P0457::01 Quant Output File: ^P0457::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-03,L,1000,10,1,H4,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

Operator ID: GC2
Quant Time : 941010 10:29
Injected at: 941007 16:52

QUANT REPORT Page 1

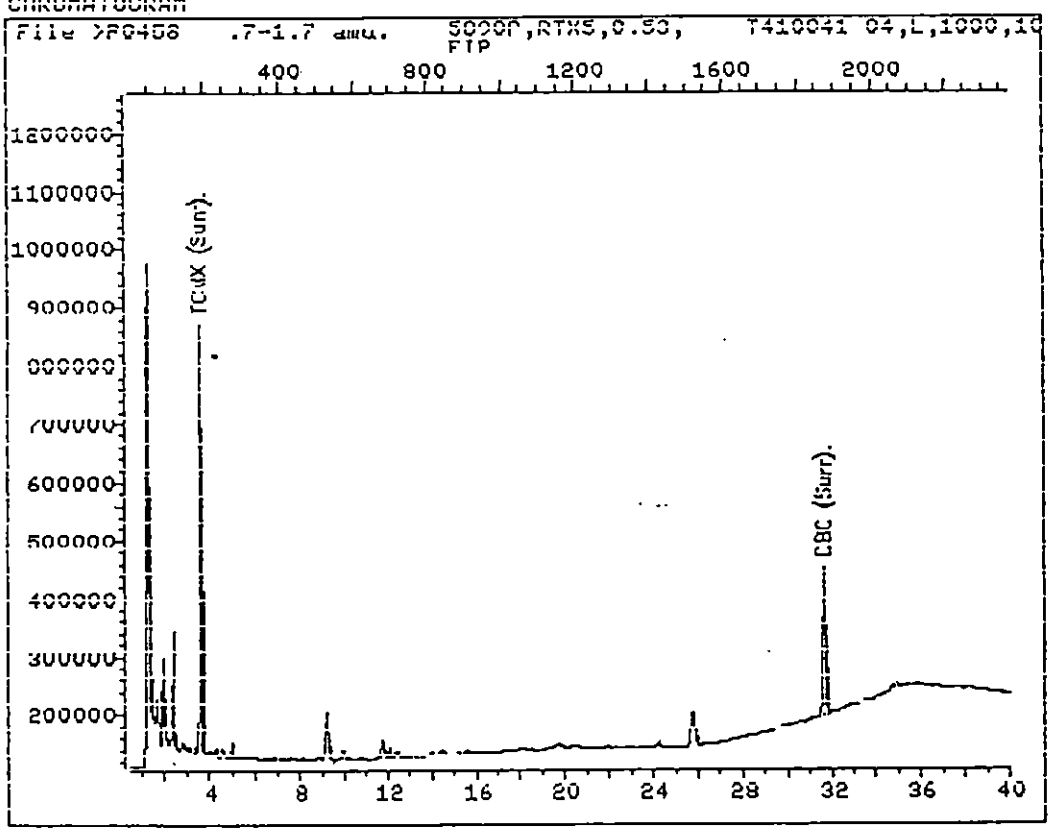
perator ID: GC2 Quant Rev: 7 Quant Time: 941010 10:29
Output File: ^P0457::QT Injected at: 941007 16:52
ata File: >P0457::01 Dilution Factor: 1.00000
ame: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-03,L,1000,10,1,H4,

D File: IDPPAP::SC
itle: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.57	185	2802766	87.33	UG/L	100
28)	#DBC (Surr).	31.62	1868	1998399	102.47	UG/L	100

Compound uses ESTD

CHROMATOGRAM



Data File: >P0458::01 Quant Output File: ^P0458::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-04,L,1000,10,1,H5,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

Operator ID: GC2
Quant Time : 941010 10:29
Injected at: 941007 17:39

QUANT REPORT Page 1

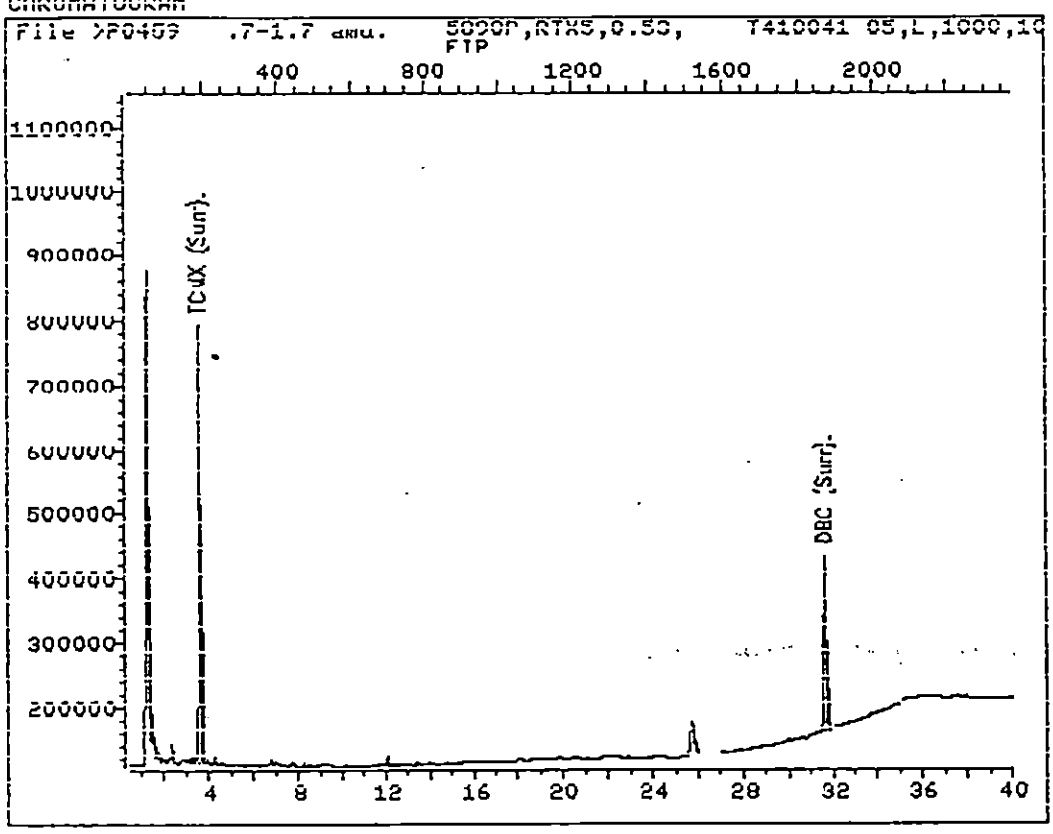
Operator ID: GC2 Quant Rev: 7 Quant Time: 941010 10:29
Output File: ^P0458::QT Injected at: 941007 17:39
Data File: >P0458::01 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-04,L,1000,10,1,H5,

ID File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.57	185	3054657	95.18	UG/L	100
28)	#DBC (Surr).	31.62	1868	1901887	97.52	UG/L	100

Compound uses ESTD

CHROMATOGRAM



Data File: >P0459::01 Quant Output File: ^P0459::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-05,L,1000,10,1,FB,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

Operator ID: GC2
Quant Time : 941010 10:29
Injected at: 941007 18:27

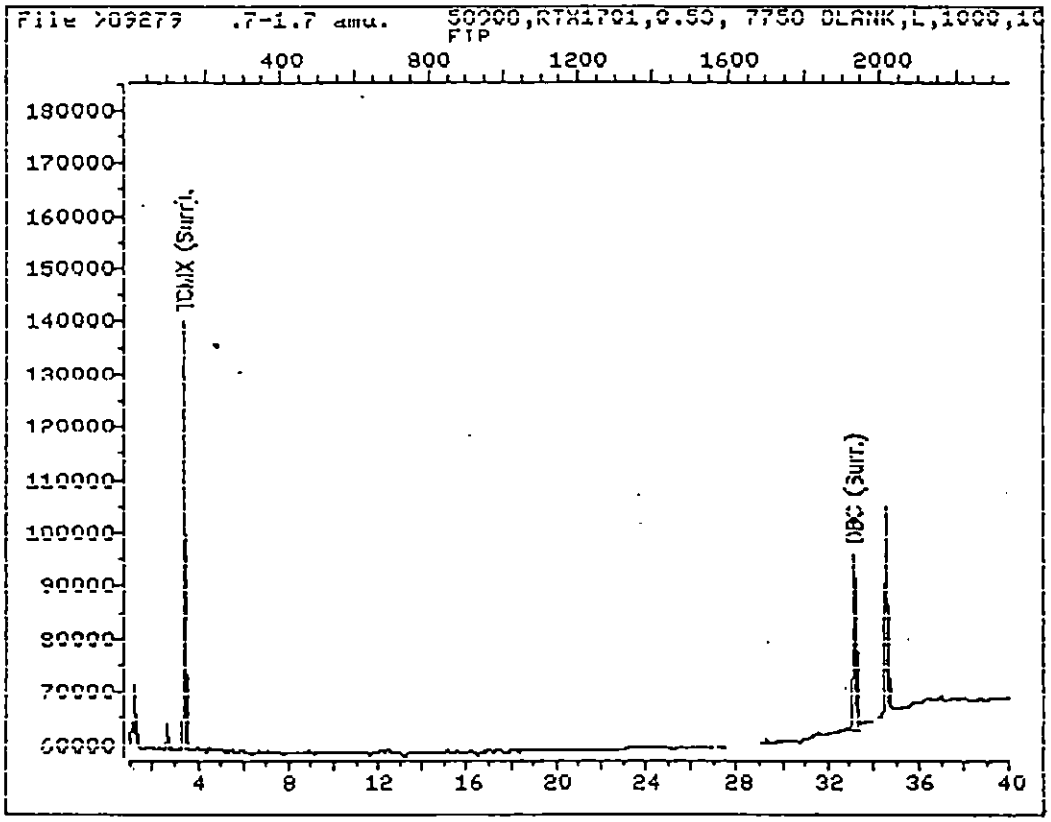
QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 941010 10:29
Output File: ^P0459::QT Injected at: 941007 18:27
Data File: >P0459::01 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: T410041-05,L,1000,10,1,F8,

ID File: IOPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

Compound	R.T.	Scan#	Area	Conc	Units	q
27) #TCMX (Surr).	3.55	184	2896617	90.25	UG/L	100
28) #DBC (Surr).	31.62	1868	1917586	98.32	UG/L	100

Compound uses ESTD



Data File: >09279::D5 Quant Output File: ^09279::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: 7758 BLANK,L,1000,10,1,QC BLANK,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940928 07:01

Operator ID: GC2
Quant Time : 940929 09:22
Injected at: 940929 01:02

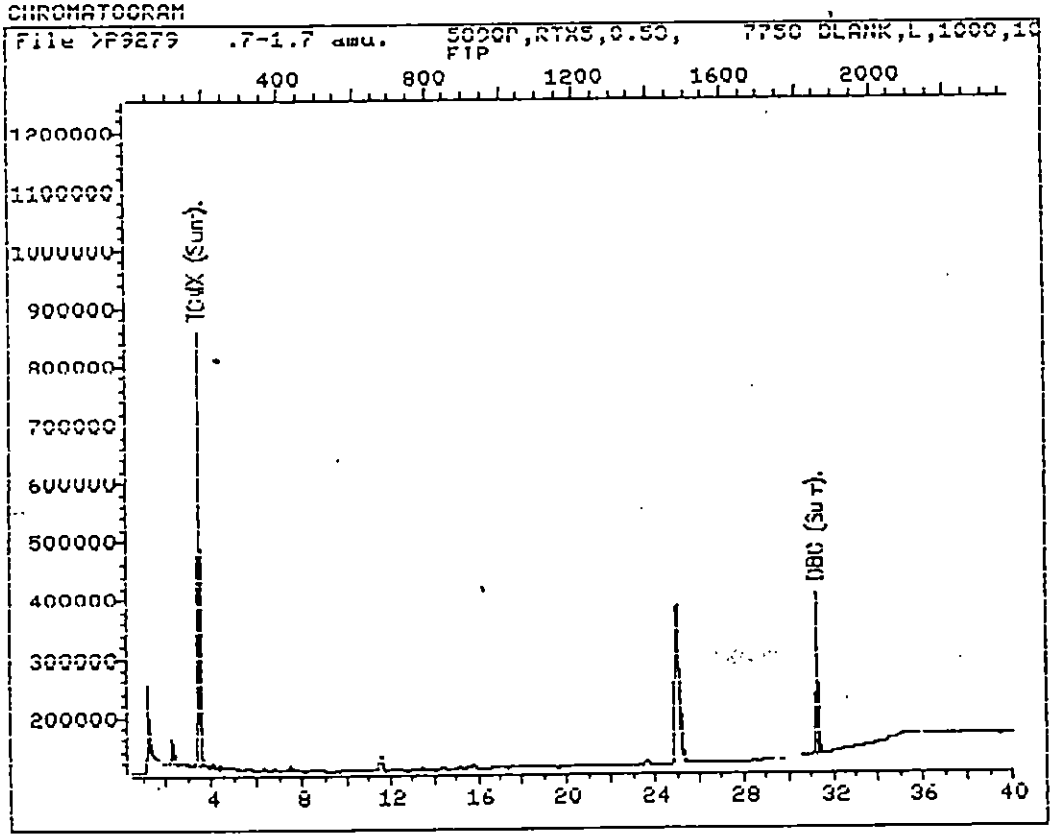
QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 940929 09:22
Output File: ^09279::QT Injected at: 940929 01:02
Data File: >09279::D5 Dilution Factor: 1.00000
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: 7758 BLANK,L,1000,10,1,QC BLANK,

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940928 07:01

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.38	144	304088	80.94	UG/L	100
28)	#DBC (Surr.)	33.15	1930	235753	92.67	UG/L	100

Compound uses ESTD



Data File: >P9279::M1 Quant Output File: ^P9279::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: 7758 BLANK,L,1000,10,1,QC BLANK,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940928 07:01

Operator ID: GC2
Quant Time : 940929 09:23
Injected at: 940929 01:02

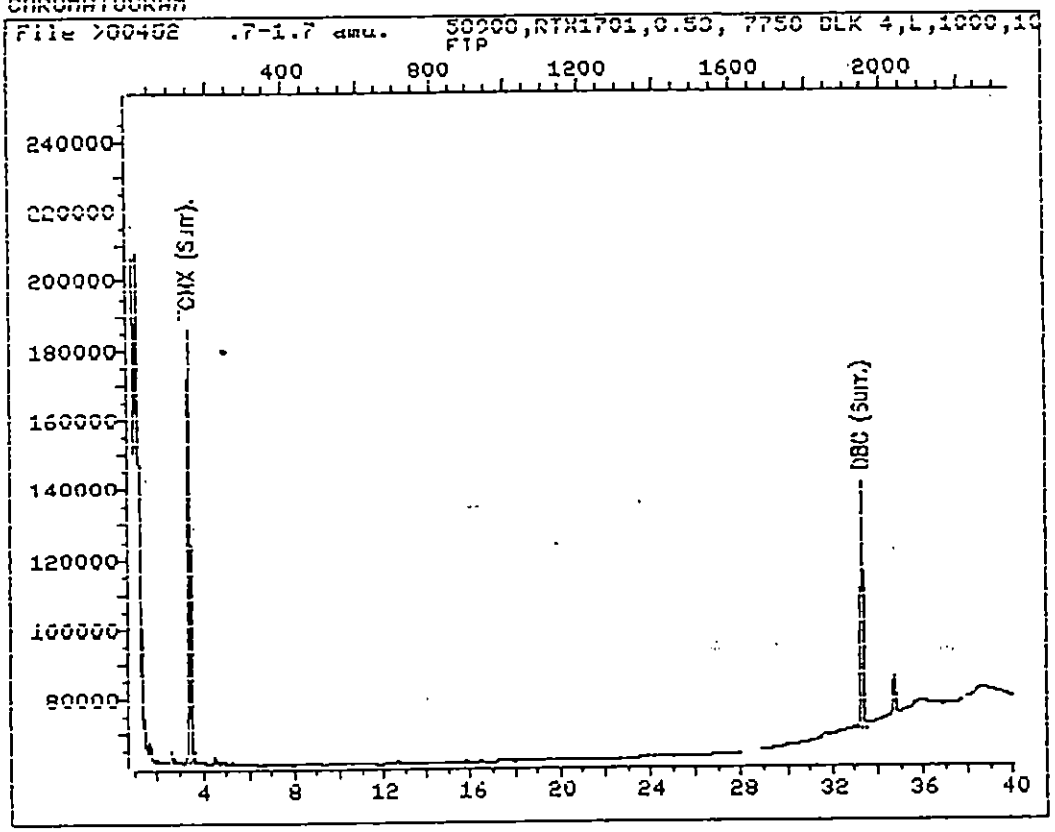
QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 940929 09:23
Output File: ^P9279::QT Injected at: 940929 01:02
Data File: >P9279::M1 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: 7758 BLANK,L,1000,10,1,QC BLANK,

ID File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 940928 07:01

Compound	R.T.	Scan#	Area	Conc	Units	q
27) #TCMX (Surr).	3.43	177	2915981	74.95	UG/L	100
28) #DBC (Surr).	31.22	1844	2028482	83.04	UG/L	100

Compound uses ESTD



Data File: >00452::01 Quant Output File: ^00452::QT
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: 7758 BLK-4,L,1000,10,1,QC BLANK,

Id File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP5890O, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

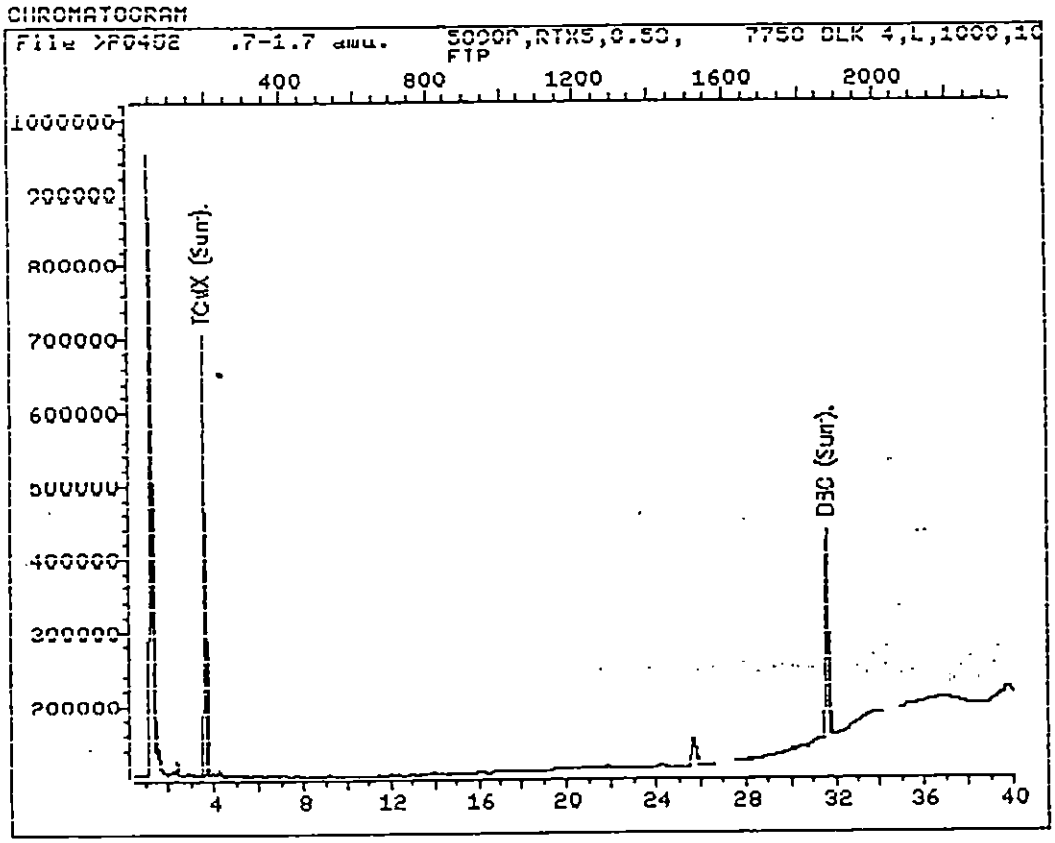
Operator ID: GC2
Quant Time : 941010 10:25
Injected at: 941007 11:01

Operator ID: GC2 Quant Rev: 7 Quant Time: 941010 10:25
Output File: ^00452::QT Injected at: 941007 11:01
Data File: >00452::01 Dilution Factor: 1.00000
Name: 58900,RTX1701,0.53, Instrument ID: 0
Misc: 7758 BLK-4,L,1000,10,1,QC BLANK,

ID File: IDOPAP::SC
Title: PESTICIDES/PCBS, HP58900, RTx1701,0.53,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.42	146	539273	167.82	UG/L	100
28)	#DBC (Surr.)	33.28	1938	498653	222.54	UG/L	100

Compound uses ESTD



Data File: >P0452::01 Quant Output File: ^P0452::QT
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: 7758 BLK-4,L,1000,10,1,QC BLANK,

Id File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

Operator ID: GC2
Quant Time : 941010 10:27
Injected at: 941007 11:01

QUANT REPORT Page 1

Operator ID: GC2 Quant Rev: 7 Quant Time: 941010 10:27
Output File: ^P0452::QT Injected at: 941007 11:01
Data File: >P0452::01 Dilution Factor: 1.00000
Name: 5890P,RTX5,0.53, Instrument ID: P
Misc: 7758 BLK-4,L,1000,10,1,QC BLANK,

ID File: IDPPAP::SC
Title: PESTICIDES/PCBS, HP5890P, RTx5,2uL INJ
Last Calibration: 940915 16:35 Last Qcal Time: 941007 02:05

	Compound	R.T.	Scan#	Area	Conc	Units	q
27)	#TCMX (Surr).	3.55	184	2668915	83.16	UG/L	100
28)	#DBC (Surr).	31.58	1866	1969233	100.97	UG/L	100

Compound uses ESTD

METALS ANALYSIS CONFORMANCE/NONCONFORMANCE SUMMARY

		No	Yes
1.	Calibration Summaries Meet Criteria		✓
2.	ICP Interference Check Sample (ICS) Results Summary Submitted Meets Criteria (If applicable)		✓
3.	Serial Dilution Summary Submitted Meets Criteria (If applicable)		✓
4.	Laboratory Control Sample (LCS) Summary Submitted Meets Criteria (If applicable)		✓
5.	Blank Contamination If yes, list compounds and concentrations in each blank:	✓	
6.	Matrix Spike Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:	✓	
7.	Sample Duplicate Analyses Meet QC Criteria If not met, list those compounds and their criteria which fall outside the acceptable range:		✓
10.	Digestion and Analysis Holding Time Met If not met, list compounds and number of days exceeded for each sample:		✓

MS			MSD	
Sb = 0% Rec	Hg = 46	Zn = 78	Sb = 0% Rec	Hg = 56
As = 50% Rec	Ni = 69		As = 28	Ni = 59
Be = 76	Se = 43		Be = 68	Se = 39
Cd = 74	Ag 64		Cd = 64	Ag = 59

Laboratory Supervisor: Mark D. Gillespie Date: 10/18/94 06

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T410041
LRI Sample No: 1

Client: U.S. Hydrogeologic Inc.
Location: Long Island, NY
Project: WWO1880
Sample Description: H1

Date Collected: 10/03/94
Date Received: 10/04/94

Matrix: Water
Percent Moisture: N/A

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Arsenic by Furnace by 7060								
Arsenic	84 S	20	ug/L	10/12/94	MG	10/13/94	RS	
Lead by Furnace by 7421								
Lead	1700	150	ug/L	10/12/94	MG	10/14/94	AMB	
Mercury by Cold Vapor by 7470								
Mercury	3.7	0.50	ug/L	10/13/94	RJD	10/13/94	RJD	
Metals by ICP by 6010								
Antimony	80 U	80	ug/L	10/12/94	MG	10/14/94	MP	
Beryllium	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Cadmium	17	5	ug/L	10/12/94	MG	10/14/94	MP	
Chromium	59	10	ug/L	10/12/94	MG	10/14/94	MP	
Copper	60	25	ug/L	10/12/94	MG	10/14/94	MP	
Nickel	100	20	ug/L	10/12/94	MG	10/14/94	MP	
Silver	24	5	ug/L	10/12/94	MG	10/14/94	MP	
Zinc	280	20	ug/L	10/12/94	MG	10/14/94	MP	
Selenium by Furnace by 7740								
Selenium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	
Thallium by Furnace by 7841								
Thallium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T410041
LRI Sample No: 2

Client: U.S. Hydrogeologic Inc.
Location: Long Island, NY
Project: WWO1880
Sample Description: H3

Date Collected: 10/03/94
Date Received: 10/04/94

Matrix: Water
Percent Moisture: N/A

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Arsenic by Furnace by 7060								
Arsenic	10 U	10	ug/L	10/12/94	MG	10/13/94	RS	
Lead by Furnace by 7421								
Lead	230	15	ug/L	10/12/94	MG	10/14/94	AMB	
Mercury by Cold Vapor by 7470								
Mercury	0.50 U	0.50	ug/L	10/13/94	RJD	10/13/94	RJD	
Metals by ICP by 6010								
Antimony	40 U	40	ug/L	10/12/94	MG	10/14/94	MP	
Beryllium	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Cadmium	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Chromium	59	10	ug/L	10/12/94	MG	10/14/94	MP	
Copper	60	25	ug/L	10/12/94	MG	10/14/94	MP	
Nickel	100	20	ug/L	10/12/94	MG	10/14/94	MP	
Silver	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Zinc	280	20	ug/L	10/12/94	MG	10/14/94	MP	
Selenium by Furnace by 7740								
Selenium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	
Thallium by Furnace by 7841								
Thallium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T410041
LRI Sample No: 3

Client: U.S. Hydrogeologic Inc.
Location: Long Island, NY
Project: WWO1880
Sample Description: H4

Date Collected: 10/03/94
Date Received: 10/04/94

Matrix: Water
Percent Moisture: N/A

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Arsenic by Furnace by 7060								
Arsenic	10 U	10	ug/L	10/12/94	MG	10/13/94	RS	
Lead by Furnace by 7421								
Lead	350	30	ug/L	10/12/94	MG	10/14/94	AMB	
Mercury by Cold Vapor by 7470								
Mercury	6.0	0.50	ug/L	10/13/94	RJD	10/13/94	RJD	
Metals by ICP by 6010								
Antimony	80 U	80	ug/L	10/12/94	MG	10/14/94	MP	
Beryllium	28	5	ug/L	10/12/94	MG	10/14/94	MP	
Cadmium	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Chromium	1100	10	ug/L	10/12/94	MG	10/14/94	MP	
Copper	420	25	ug/L	10/12/94	MG	10/14/94	MP	
Nickel	480	20	ug/L	10/12/94	MG	10/14/94	MP	
Silver	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Zinc	490	20	ug/L	10/12/94	MG	10/14/94	MP	
Selenium by Furnace by 7740								
Selenium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	
Thallium by Furnace by 7841								
Thallium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T410041
LRI Sample No: 4

Client: U.S. Hydrogeologic Inc.
Location: Long Island, NY
Project: WWO1880
Sample Description: H5

Date Collected: 10/03/94
Date Received: 10/04/94

Matrix: Water
Percent Moisture: N/A

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Arsenic by Furnace by 7060								
Arsenic	10 U	10	ug/L	10/12/94	MG	10/13/94	RS	
Lead by Furnace by 7421								
Lead	220	12	ug/L	10/12/94	MG	10/14/94	AMB	
Mercury by Cold Vapor by 7470								
Mercury	0.50 U	0.50	ug/L	10/13/94	RJD	10/13/94	RJD	
Metals by ICP by 6010								
Antimony	40 U	40	ug/L	10/12/94	MG	10/14/94	MP	
Beryllium	7.9	5	ug/L	10/12/94	MG	10/14/94	MP	
Cadmium	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Chromium	620	10	ug/L	10/12/94	MG	10/14/94	MP	
Copper	250	25	ug/L	10/12/94	MG	10/14/94	MP	
Nickel	220	20	ug/L	10/12/94	MG	10/14/94	MP	
Silver	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Zinc	230	20	ug/L	10/12/94	MG	10/14/94	MP	
Selenium by Furnace by 7740								
Selenium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	
Thallium by Furnace by 7841								
Thallium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T410041
LRI Sample No: 5

Client: U.S. Hydrogeologic Inc.
Location: Long Island, NY
Project: WWO1880
Sample Description: FB

Date Collected: 10/03/94
Date Received: 10/04/94

Matrix: Water
Percent Moisture: N/A

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Arsenic by Furnace by 7060								
Arsenic	10 U	10	ug/L	10/12/94	MG	10/13/94	RS	
Lead by Furnace by 7421								
Lead	12	3.0	ug/L	10/12/94	MG	10/14/94	AMB	
Mercury by Cold Vapor by 7470								
Mercury	0.50 U	0.50	ug/L	10/13/94	RJD	10/13/94	RJD	
Metals by ICP by 6010								
Antimony	40 U	40	ug/L	10/12/94	MG	10/14/94	MP	
Beryllium	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Cadmium	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Chromium	10 U	10	ug/L	10/12/94	MG	10/14/94	MP	
Copper	25 U	25	ug/L	10/12/94	MG	10/14/94	MP	
Nickel	20 U	20	ug/L	10/12/94	MG	10/14/94	MP	
Silver	5.0 U	5	ug/L	10/12/94	MG	10/14/94	MP	
Zinc	20 U	20	ug/L	10/12/94	MG	10/14/94	MP	
Selenium by Furnace by 7740								
Selenium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	
Thallium by Furnace by 7841								
Thallium	5.0 U	5.0	ug/L	10/12/94	MG	10/13/94	AMB	

Metals Method Blank Analysis

This blank was analyzed concurrent with the analysis of the sample(s):

T410041

Element	Result ug/L		MDL ug/L		Dil.
Antimony ICP	U	X	40		1
Antimony FU	U		10		1
Aluminum	U		100		1
Arsenic ICP	U		100		1
Arsenic FU	U	X	10		1
Barium	U		5.0		1
Beryllium	U	X	5.0		1
Boron	U		50		1
Calcium	U		100		1
Cadmium ICP	U	X	5.0		1
Cadmium FU	U		1.0		1
Cobalt	U		10		1
Chromium	U	X	10		1
Copper	U	X	25		1
Iron	U		100		1
Lead ICP	U		30		1
Lead FU	U	X	3.0		1
Magnesium	U		100		1
Manganese	U		5.0		1
Mercury	U	X	0.50		1
Molybdenum	U		25		1
Nickel	U	X	20		1
Potassium	U		1000		1
Selenium ICP	U		50		1
Selenium FU	U	X	5.0		1
Silver	U	X	5.0		1
Silicon	U		100		1
Sodium	U		200		1
Thallium ICP	U		100		1
Thallium FU	U	X	5.0		1
Titanium	U		50		1
Tin	U		50		1
Vanadium	U		5.0		1
Zinc	U	X	20		1

(*) Elevated MDLs due to dilution for range
(**) Elevated MDLs due to dilution for interferences
X = Undetected analyte of required analysis

METALS CALIBRATION SUMMARY

Laboratory: LABORATORY RESOURCES, INC.
Division: Teterboro
LRI Project Nº: T410041

Client: U.S. Hydrogeologic
Location: Poughkeepsie, NY 12601
Client Project: WW01880

Batch Nº: 966
Source: SPEX
Units: µg/L

		— INITIAL CALIBRATION —			CONTINUING CALIBRATION								
Parameter	Method	True	Found	%R	True	Found	%R	Found	%R	Found	%R	Found	%R
Antimony	P	4000	3860.00	97	4000	3910.00	98	3850.00	96	3800.00	95	3860.00	97
Arsenic	F	40	36.40	91	40	38.30	96	38.50	96	38.30	96		
Beryllium	P	4000	3810.00	95	4000	3910.00	98	3810.00	95	3780.00	95	3840.00	96
Cadmium	P	4000	3900.00	98	4000	3990.00	100	3970.00	99	3950.00	99	4010.00	100
Chromium	P	4000	3950.00	99	4000	3990.00	100	3880.00	97	3860.00	97	3910.00	98
Copper	P	4000	3860.00	97	4000	3930.00	98	3860.00	97	3810.00	95	3870.00	97
Lead	F	40	40.20	101	40	39.90	100	40.10	100	40.10	100		
Mercury	CV	4	4.07	102	4	4.03	101	3.86	97	3.84	96	3.64	91
Nickel	P	4000	3910.00	98	4000	3940.00	99	3920.00	98	3920.00	98	3990.00	100
Selenium	F	40	37.50	94	40	37.90	95	36.10	90				
Silver	P	1000	965.00	97	1000	958.00	96	946.00	95	939.00	94	951.00	95
Thallium	F	40	39.60	99	40	41.60	104	42.60	107				
Zinc	P	4000	3940.00	99	4000	4040.00	101	3990.00	100	3960.00	99	4030.00	101

METALS CALIBRATION SUMMARY

Laboratory: LABORATORY RESOURCES, INC.
Division: Teterboro
LRI Project Nº: T410041

Client: U.S. Hydrogeologic
Location: Poughkeepsie, NY 12601
Client Project: WW01880

Batch Nº: 966
Source: SPEX
Units: µg/L

		— INITIAL CALIBRATION —			CONTINUING CALIBRATION								
Parameter	Method	True	Found	%R	True	Found	%R	Found	%R	Found	%R	Found	%R
Arsenic	F	40	37.70	94	40	40.10	100						

CALIBRATION BLANK SUMMARY

Laboratory: LABORATORY RESOURCES, INC.
Division: Teterboro
LRI Project Nº: T410041

Client: U.S. Hydrogeologic
Location: Poughkeepsie, NY 12601
Client Project: WW01880

Batch Nº: 966

Units: µg/L

Parameter	Method	Initial Found	Continuing Found 1	Continuing Found 2	Continuing Found 3
Antimony	P	ND	ND	ND	ND
Arsenic	F	ND	ND	ND	ND
Beryllium	P	ND	ND	ND	ND
Cadmium	P	ND	ND	ND	ND
Chromium	P	ND	ND	ND	ND
Copper	P	ND	ND	ND	ND
Lead	F	ND	ND	ND	ND
Mercury	CV	ND	ND	ND	ND
Nickel	P	ND	ND	ND	ND
Selenium	F	ND	ND	ND	
Silver	P	ND	ND	ND	ND
Thallium	F	ND	ND	ND	
Zinc	P	ND	ND	ND	ND

CALIBRATION BLANK SUMMARY

Laboratory: LABORATORY RESOURCES, INC.
Division: Teterboro
LRI Project Nº: T410041

Client: U.S. Hydrogeologic
Location: Poughkeepsie, NY 12601
Client Project: WW01880

Batch Nº: 966

Units: µg/L

Parameter	Method	Initial Found	Continuing Found 1	Continuing Found 2	Continuing Found 3
Antimony	P		ND		
Arsenic	F	ND	ND		
Beryllium	P		ND		
Cadmium	P		ND		
Chromium	P		ND		
Copper	P		ND		
Lead	F				
Mercury	CV		ND		
Nickel	P		ND		
Selenium	F				
Silver	P		ND		
Thallium	F				
Zinc	P		ND		

ICP INTERFERENCE CHECK SUMMARY

Laboratory: LABORATORY RESOURCES, INC.
Division: Teterboro
LRI Project Nº: T410041

Client: U.S. Hydrogeologic
Location: Poughkeepsie, NY 12601
Client Project: WW01880

Batch Nº: 966
Source: SPEX
Units: µg/L

	True		Initial Found			Final Found		
Parameter	ICSA	ICSAB	ICSA	ICSAB	% R	ICSA	ICSAB	% R
Aluminum	500000	500000	493000.00	488000.00	98	479000.00	478000.00	96
Beryllium		500		438.00	88		439.00	88
Cadmium		1000		902.00	90		913.00	91
Calcium	500000	500000	470000.00	464000.00	93	450000.00	450000.00	90
Chromium		500		446.00	89		439.00	88
Copper		500		459.00	92		454.00	91
Iron	200000	200000	168000.00	171000.00	86	164000.00	168000.00	84
Magnesium	500000	500000	486000.00	493000.00	99	468000.00	477000.00	95
Nickel		1000		851.00	85		862.00	86
Silver		1000		965.00	97		948.00	95
Zinc		1000		914.00	91		932.00	93

* Recovery outside quality control limits
Control limits for all elements: 80% to 120%

Laboratory Resources, Inc. Metals QC Form

Workorder No: T410041 QC Sample No: T410041-01 Matrix: AQUEOUS

Parameters	Sample Result UG/L	Sample Duplicate UG/L	%RPD	%LIMIT	Spike Added UG/L	Matrix Spike UG/L	% Rec.	Spike Duplicate UG/L	%Rec.	Limits SR %
Aluminum				20	2000					80-120
Antimony ICP	U	U	ND	20	500	U	NA	U	NA	80-120
Antimony FU				20	40					80-120
Arsenic ICP				20	2000					80-120
Arsenic FU	46.7	48.4	4	20	40	66.9	50 N	57.9	28 N	80-120
Barium				20	2000					80-120
Beryllium	23.3	23.5	1	20	50	61.4	76 N	57.2	68 N	80-120
Boron				20	2000					80-120
Cadmium	17.1	10.6	47 *	20	50	53.9	74 N	48.9	64 N	80-120
Calcium				20	10000					80-120
Chromium	884	832	6	20	200	989	NA	905	NA	80-120
Cobalt				20	500					80-120
Copper	1220	1190	2	20	250	1390	NA	1310	NA	80-120
Iron				20	10000					80-120
Lead ICP				20	500					80-120
Lead FU	232	212	9	20	40	269	NA	254	NA	80-120
Magnesium				20	10000					80-120
Manganese				20	500					80-120
Mercury	3.67	3.93	7	20	4.0	5.50	46 N	5.89	56 N	80-120
Molybdenum				20	2000					80-120
Nickel	571	520	9	20	500	916	69 N	864	59 N	80-120
Potassium				20	20000					80-120
Selenium ICP				20	2000					80-120
Selenium FU	U	U	ND	20	40	16.7	43 N	15.6	39 N	80-120
Silicon				20	2000					80-120
Silver	U	U	ND	20	50	31.8	64 N	29.6	59 N	80-120
Sodium				20	10000					80-120
Thallium ICP				20	2000					80-120
Thallium FU	U	U	ND	20	40	41.6	104	40.5	101	80-120
Tin				20	10000					80-120
Titanium				20	2000					80-120
Vanadium				20	500					80-120
Zinc	1920	1900	1	20	500	2310	78 N	2330	82	80-120

* = RPD OUTSIDE OF THE REQUIRED QUALITY CONTROL LIMIT

U = UNDETECTED

N = SPIKE RECOVERY OUTSIDE OF THE REQUIRED QUALITY CONTROL LIMIT.

NA = NOT APPLICABLE; ANALYTE CONC. IS GREATER THAN 4X SPIKE AMOUNT

ND = NOT DETERMINABLE

SAMPLE T410041-02 WAS USED FOR PB QC.

Laboratory Resources, Inc. Metals QC Form

Workorder No: T410041 QC Sample No: T410041-01

Parameters	True Value	LCSW RESULT		LCSWD RESULT			ICP POST SPIKE			ICP SERIAL DILUTION		
	UG/L	UG/L	% REC	UG/L	%REC	%LIMIT	RESULT	% REC	%LIMIT	RESULT	% RPD	%LIMIT
Aluminum	2000					80-120			75-125			10
Antimony ICP	500	465	93	446	89	80-120	443	89	75-125	U	ND	10
Antimony FU	40					80-120			75-125			10
Arsenic ICP	2000					80-120			75-125			10
Arsenic FU	40	38.0	95	39.8	100	80-120			75-125			10
Barium	2000					80-120			75-125			10
Beryllium	50	47.9	96	47.9	96	80-120	68.6	91	75-125	U	ND	10
Boron	2000					80-120			75-125			10
Cadmium	50	56.9	114	54.2	108	80-120	62.4	91	75-125	U	ND	10
Calcium	10000					80-120			75-125			10
Chromium	200	196	98	194	97	80-120	1040	NA	75-125	930	5	10
Cobalt	500					80-120			75-125			10
Copper	250	246	98	248	99	80-120	1430	NA	75-125	1250	2	10
Iron	10000					80-120			75-125			10
Lead ICP	500					80-120			75-125			10
Lead FU	40	43.9	110	38.9	97	80-120			75-125			10
Magnesium	10000					80-120			75-125			10
Manganese	500					80-120			75-125			10
Mercury	4.0	4.30	108	4.15	104	80-120			75-125			10
Molybdenum	2000					80-120			75-125			10
Nickel	500	502	100	499	100	80-120	1010	88	75-125	584	2	10
Potassium	20000					80-120			75-125			10
Selenium ICP	2000					80-120			75-125			10
Selenium FU	40	37.3	93	38.2	96	80-120			75-125			10
Silicon	2000					80-120			75-125			10
Silver	50	43.5	87	42.5	85	80-120	47.8	96	75-125	U	ND	10
Sodium	10000					80-120			75-125			10
Thallium ICP	2000					80-120			75-125			10
Thallium FU	40	42.3	106	42.9	107	80-120			75-125			10
Tin	10000					80-120			75-125			10
Titanium	2000					80-120			75-125			10
Vanadium	500					80-120			75-125			10
Zinc	500	506	101	510	102	80-120	2350	86	75-125	2070	8	10

QUALIFIERS:

N = ICP POST SPIKE OUTSIDE OF CONTROL LIMITS

E = SERIAL DILUTION OUTSIDE OF CONTROL LIMIT

NA=SERIAL DILUTION NOT APPLICABLE; ANALYTE CONC. < 50X PQL

Laboratory Instrumentation Identification Form

#	Instrument Identification	Method	IDL Date	IEC Date	Lin. Date
1	TJA61	P	10/01/91	10/01/91	10/01/91
2	PE5100#1	F	07/01/94		
3	PE5100#2	F	07/01/94		
4	ENVIROP	P	05/27/94	02/24/94	05/27/94
5	TJA1000	CV	08/02/94		
6	MR61	C	06/01/93		
7	PE5100#3	F	07/01/94		
8	PE5100#4	F	07/01/94		
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

Laboratory Instrumentation Elemental Information Form

Instrument Identification ENVIROP

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum	Al	308.200	14.2	10.00	500000	
Antimony	Sb	206.800	14.2	10.00	200000	
Arsenic	As	193.600	19.8	10.00	200000	
Barium	Ba	493.400	0.5	10.00	200000	
Beryllium	Be	313.000	0.1	10.00	100000	
Cadmium	Cd	228.800	3.0	10.00	200000	
Calcium	Ca	317.900	14.9	10.00	500000	
Chromium	Cr	267.700	1.9	10.00	200000	
Cobalt	Co	228.600	2.3	10.00	200000	
Copper	Cu	324.700	3.8	10.00	200000	
Iron	Fe	259.900	4.8	10.00	400000	
Lead	Pb	220.300	15.7	10.00	200000	
Magnesium	Mg	279.000	21.9	10.00	500000	
Manganese	Mn	257.600	0.3	10.00	150000	
Mercury						
Nickel	Ni	231.600	7.7	10.00	200000	
Potassium	K	766.400	1201.9	10.00	1000000	
Selenium	Se	196.000	31.6	10.00	200000	
Silver	Ag	328.000	2.3	10.00	100000	
Sodium	Na	588.900	16.1	10.00	500000	
Thallium	Tl	190.800	31.7	10.00	200000	
Vanadium	V	292.400	2.5	10.00	100000	
Zinc	Zn	213.800	1.3	10.00	200000	
Cyanide						
Boron	B	249.600	5.5	10.00	200000	
Molybdenum	Mo	202.000	3.3	10.00	200000	
Silicon	Si	288.100	33.8	10.00	150000	
Titanium	Ti	334.900	0.8	10.00	200000	
Tin	Sn	189.900	12.0	10.00	200000	

Laboratory Instrumentation Elemental Information Form

Instrument Identification PE5100#1

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum						
Antimony	Sb	217.600			100	2
Arsenic	As	193.700	3.1		100	2
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	0.5		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	2.6		100	2
Silver						
Sodium						
Thallium	Tl	276.800	3.2		100	2
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification PE5100#2

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum						
Antimony	Sb	217.600	6.1		100	2
Arsenic	As	193.700	3.0		100	2
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	1.6		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	1.1		100	2
Silver						
Sodium						
Thallium	Tl	276.800	2.9		100	2
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification PE5100#3

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum						
Antimony	Sb	217.600			100	2
Arsenic	As	193.700	3.2		100	2
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	0.4		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	1.6		100	2
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification PE5100#4

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum						
Antimony	Sb	217.600			100	2
Arsenic	As	193.700	2.9		100	2
Barium						
Beryllium			0.1			
Cadmium			0.1			
Calcium						
Chromium			0.4			
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	0.8		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	0.9		100	2
Silver			0.1			
Sodium						
Thallium	Tl	276.800	0.5		100	2
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification TJA1000

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Mercury	Hg	253.700	0.2		10	1
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Instrumentation Elemental Information Form

Instrument Identification MR61

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						
Cyanide	Cn		10.0			
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Laboratory Resources Inc.
Teterboro Division
100 Hollister Road
Teterboro, New Jersey 07608
FAX: 201-288-5311
201-288-3700

TABLE OF ABBREVIATIONS

ORGANIC QUALIFIERS

B= Compound also detected in method blank
J= Below method detection limit
E= Exceeds calibration range
D= Dilution performed
U= Undetected
RE= Re-analysis performed

INORGANIC QUALIFIERS

EC= Estimated count
TNTC= Too numerous to count
QL= Quantitation limit
U= Undetected
S= Result quantitated by Method of Standard Additions
*= Duplicate analysis outside of required quality control limits
N= Matrix spike recovery outside of required quality control limits
ND= Not determinable
T= True Color
A= Apparent Color

LABORATORY RESOURCES, INC.

EASTERN SCIENTIFIC DIVISION
RTE 205 THE REGIONAL BLDG.
P.O. BOX 700
BROOKLYN, CT 06234
TEL.-(203)774-6814 FAX-(203)774-2689

ORGANICS
ANALYTICAL DATA REPORT

WORK ORDER #

E410174

prepared for

LABORATORY RESOURCES
100 HOLLISTER ROAD
TETERBORO, NJ 07608-1111

PROJECT:
T410041

PO:
T410041

Date Received: 10/07/94

Prepared by

LABORATORY RESOURCES, INC.

T.F. McCommas, Director 10/18/94
Robert LaFerriere, G.M.

ND = None Detected/Below stated detection limit
All soil/sludge samples reported on a dry weight basis

ORGANICS ANALYTICAL RESULTS
TOTAL PETROLEUM HYDROCARBON FINGERPRINT BY
EPA 8015 MODIFIED (LUFT FIELD MANUAL OF CALIFORNIA)

LAB ID: E410174-01
CLIENT ID: H1
CLIENT PROJECT: T410041

SAMPLE MATRIX: AQUEOUS
COLLECTED: 10/03/94
DATE OF ANALYSIS: 10/18/94

EPA 8015 MODIFIED FOR TPH ANALYSIS	RESULT (ug/L)	DETECTION LIMIT (ug/L)
	* SEE SUMMARY	100

SUMMARY: NO PETROLEUM HYDROCARBON PATTERN WAS DETECTED IN THE SUBMITTED SAMPLE.

THE SAMPLE SUBMITTED WAS COMPARED TO THE FOLLOWING PETROLEUM HYDROCARBON STANDARDS: GASOLINE, #2, 4, 6 FUEL, CRUDE OIL, KEROSENE, JET FUEL, DIESEL OIL, MINERAL OIL, NAPTHA, MOTOR OIL, TRANSMISSION FLUID.

* EPA 8015 MODIFIED WAS DEVELOPED TO IDENTIFY AND QUANTIFY GASOLINE AND #2 FUEL IN ENVIRONMENTAL SAMPLES. THIS METHOD IS FURTHER MODIFIED TO INCLUDE OTHER PETROLEUM HYDROCARBONS MOST COMMONLY FOUND.

ORGANICS ANALYTICAL RESULTS
TOTAL PETROLEUM HYDROCARBON FINGERPRINT BY
EPA 8015 MODIFIED (LUFT FIELD MANUAL OF CALIFORNIA)

LAB ID: E410174-02
CLIENT ID: H3
CLIENT PROJECT: T410041

SAMPLE MATRIX: AQUEOUS
COLLECTED: 10/03/94
DATE OF ANALYSIS: 10/18/94

EPA 8015 MODIFIED FOR TPH ANALYSIS	RESULT (ug/L)	DETECTION LIMIT (ug/L)
	* SEE SUMMARY	100

SUMMARY: NO PETROLEUM HYDROCARBON PATTERN WAS DETECTED IN THE SUBMITTED SAMPLE.

THE SAMPLE SUBMITTED WAS COMPARED TO THE FOLLOWING PETROLEUM HYDROCARBON STANDARDS: GASOLINE, #2, 4, 6 FUEL, CRUDE OIL, KEROSENE, JET FUEL, DIESEL OIL, MINERAL OIL, NAPTHA, MOTOR OIL, TRANSMISSION FLUID.

* EPA 8015 MODIFIED WAS DEVELOPED TO IDENTIFY AND QUANTIFY GASOLINE AND #2 FUEL IN ENVIRONMENTAL SAMPLES. THIS METHOD IS FURTHER MODIFIED TO INCLUDE OTHER PETROLEUM HYDROCARBONS MOST COMMONLY FOUND.

ORGANICS ANALYTICAL RESULTS
TOTAL PETROLEUM HYDROCARBON FINGERPRINT BY
EPA 8015 MODIFIED (LUFT FIELD MANUAL OF CALIFORNIA)

LAB ID: E410174-03
CLIENT ID: H4
CLIENT PROJECT: T410041

SAMPLE MATRIX: AQUEOUS
COLLECTED: 10/03/94
DATE OF ANALYSIS: 10/18/94

EPA 8015 MODIFIED FOR TPH ANALYSIS	RESULT (ug/L)	DETECTION LIMIT (ug/L)
	* SEE SUMMARY	100

SUMMARY: NO PETROLEUM HYDROCARBON PATTERN WAS DETECTED IN THE SUBMITTED SAMPLE.

THE SAMPLE SUBMITTED WAS COMPARED TO THE FOLLOWING PETROLEUM HYDROCARBON STANDARDS: GASOLINE, #2, 4, 6 FUEL, CRUDE OIL, KEROSENE, JET FUEL, DIESEL OIL, MINERAL OIL, NAPTHA, MOTOR OIL, TRANSMISSION FLUID.

* EPA 8015 MODIFIED WAS DEVELOPED TO IDENTIFY AND QUANTIFY GASOLINE AND #2 FUEL IN ENVIRONMENTAL SAMPLES. THIS METHOD IS FURTHER MODIFIED TO INCLUDE OTHER PETROLEUM HYDROCARBONS MOST COMMONLY FOUND.

ORGANICS ANALYTICAL RESULTS
TOTAL PETROLEUM HYDROCARBON FINGERPRINT BY
EPA 8015 MODIFIED (LUFT FIELD MANUAL OF CALIFORNIA)

LAB ID: E410174-04
CLIENT ID: H5
CLIENT PROJECT: T410041

SAMPLE MATRIX: AQUEOUS
COLLECTED: 10/03/94
DATE OF ANALYSIS: 10/18/94

EPA 8015 MODIFIED FOR TPH ANALYSIS	RESULT (ug/L)	DETECTION LIMIT (ug/L)
	* SEE SUMMARY	100

SUMMARY: NO PETROLEUM HYDROCARBON PATTERN WAS DETECTED IN THE SUBMITTED SAMPLE.

THE SAMPLE SUBMITTED WAS COMPARED TO THE FOLLOWING PETROLEUM HYDROCARBON STANDARDS: GASOLINE, #2, 4, 6 FUEL, CRUDE OIL, KEROSENE, JET FUEL, DIESEL OIL, MINERAL OIL, NAPTHA, MOTOR OIL, TRANSMISSION FLUID.

* EPA 8015 MODIFIED WAS DEVELOPED TO IDENTIFY AND QUANTIFY GASOLINE AND #2 FUEL IN ENVIRONMENTAL SAMPLES. THIS METHOD IS FURTHER MODIFIED TO INCLUDE OTHER PETROLEUM HYDROCARBONS MOST COMMONLY FOUND.

ORGANICS ANALYTICAL RESULTS
TOTAL PETROLEUM HYDROCARBON FINGERPRINT BY
EPA 8015 MODIFIED (LUFT FIELD MANUAL OF CALIFORNIA)

LAB ID: E410174-05
CLIENT ID: FB
CLIENT PROJECT: T410041

SAMPLE MATRIX: AQUEOUS
COLLECTED: 10/03/94
DATE OF ANALYSIS: 10/18/94

EPA 8015 MODIFIED FOR TPH ANALYSIS	RESULT (ug/L)	DETECTION LIMIT (ug/L)
	* SEE SUMMARY	100

SUMMARY: NO PETROLEUM HYDROCARBON PATTERN WAS DETECTED IN THE SUBMITTED SAMPLE.

THE SAMPLE SUBMITTED WAS COMPARED TO THE FOLLOWING PETROLEUM HYDROCARBON STANDARDS: GASOLINE, #2, 4, 6 FUEL, CRUDE OIL, KEROSENE, JET FUEL, DIESEL OIL, MINERAL OIL, NAPTHA, MOTOR OIL, TRANSMISSION FLUID.

* EPA 8015 MODIFIED WAS DEVELOPED TO IDENTIFY AND QUANTIFY GASOLINE AND #2 FUEL IN ENVIRONMENTAL SAMPLES. THIS METHOD IS FURTHER MODIFIED TO INCLUDE OTHER PETROLEUM HYDROCARBONS MOST COMMONLY FOUND.

Date: 10/18/94
Method#: ±2D
Parameter: #2 Fuel
Analyst: G-G
Supervisor:

GC#: 7

MS/MSD Sample #: L.C.S Blank

Analyte	Sample Conc.	Spike Conc. mg/L	Spk Result	% Rec.	Dup Result	% Rec.	QC Range %
• #2 Fuel		1000					80 to 120

Analyte	Spike Conc. mg/L	LCS Result	LCS % Rec.	QC Range %
#2 Fuel	1000	808	81	80 - 120

Assoc. Samples
E410-174-01
02
03
04
05

GC7 12 fuel CURVE 10-15-94

SAMPLE NAFILE NAMETIME		%2FUEL
1000PPM#27101811	0	3134236
3000PPM#27101814	250	92754000
5000PPM#27101813	165	1.52E+08

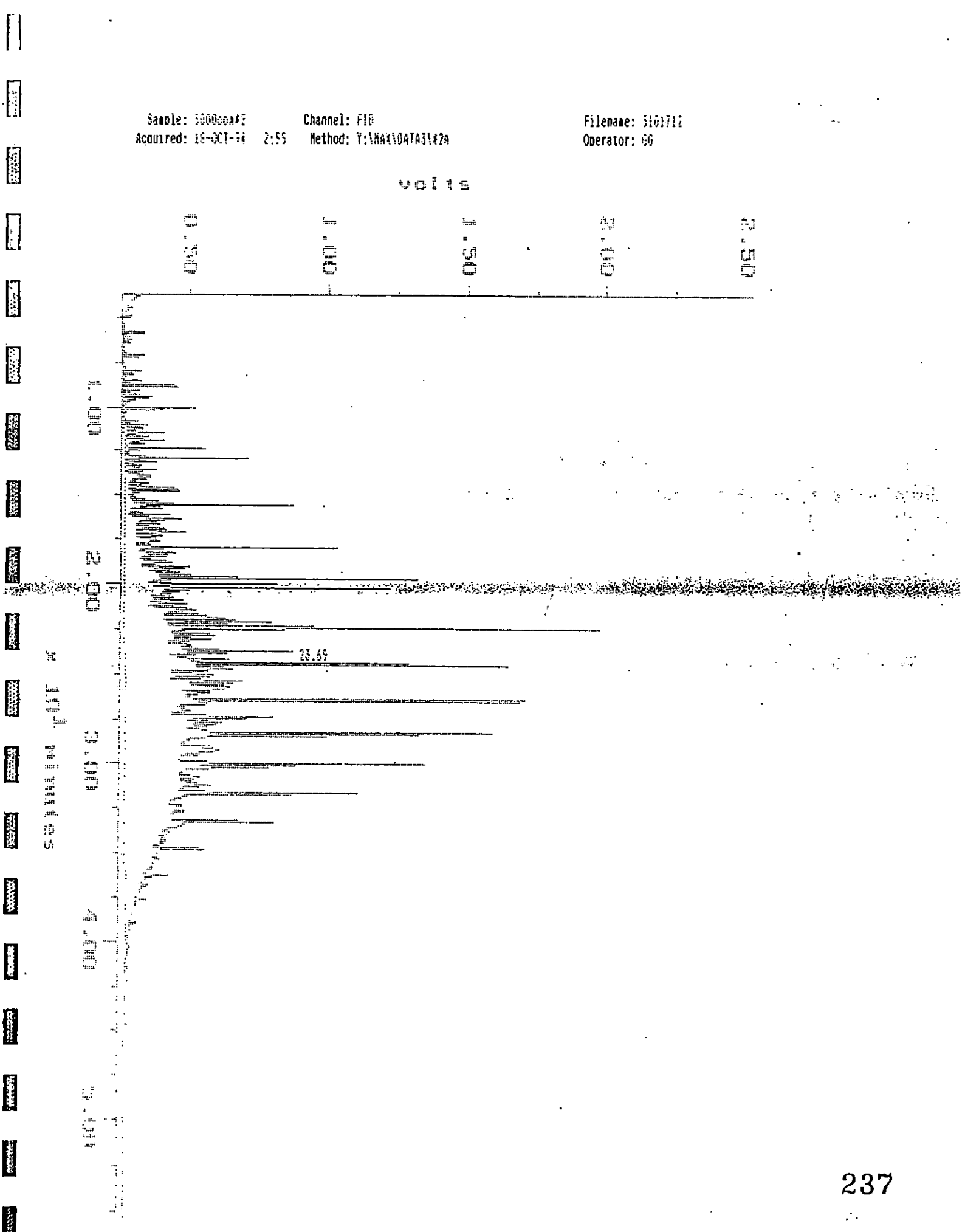
MEAN	92700788
STD	1105291
%RSD	1.192321

/94027096
92754000
91321267

NORMALIZED

1
1
1
POPULATION 0
0
0
0

+3.04E+15
8.8E+15
5.04E+15


Sample: 3000ppm#2
Acquired: 16-OCT-94 2:55
Channel: FID
Method: Y:\NA1\DATA3\#29
Filename: 3101712
Operator: GG
volts
23.69

MAXIMA 820 CUSTOM REPORT

Printed: 18-OCT-1994 8:03:04

SAMPLE: 3000Dona#2 Type: STND
#1 in Method: #2A Instrument: gc3
Acquired: 18-OCT-1994 2:55 Filename: 3101712
Rate: 1.0 points/sec Index: Disk
Duration: 55.497 minutes
Operator: GG

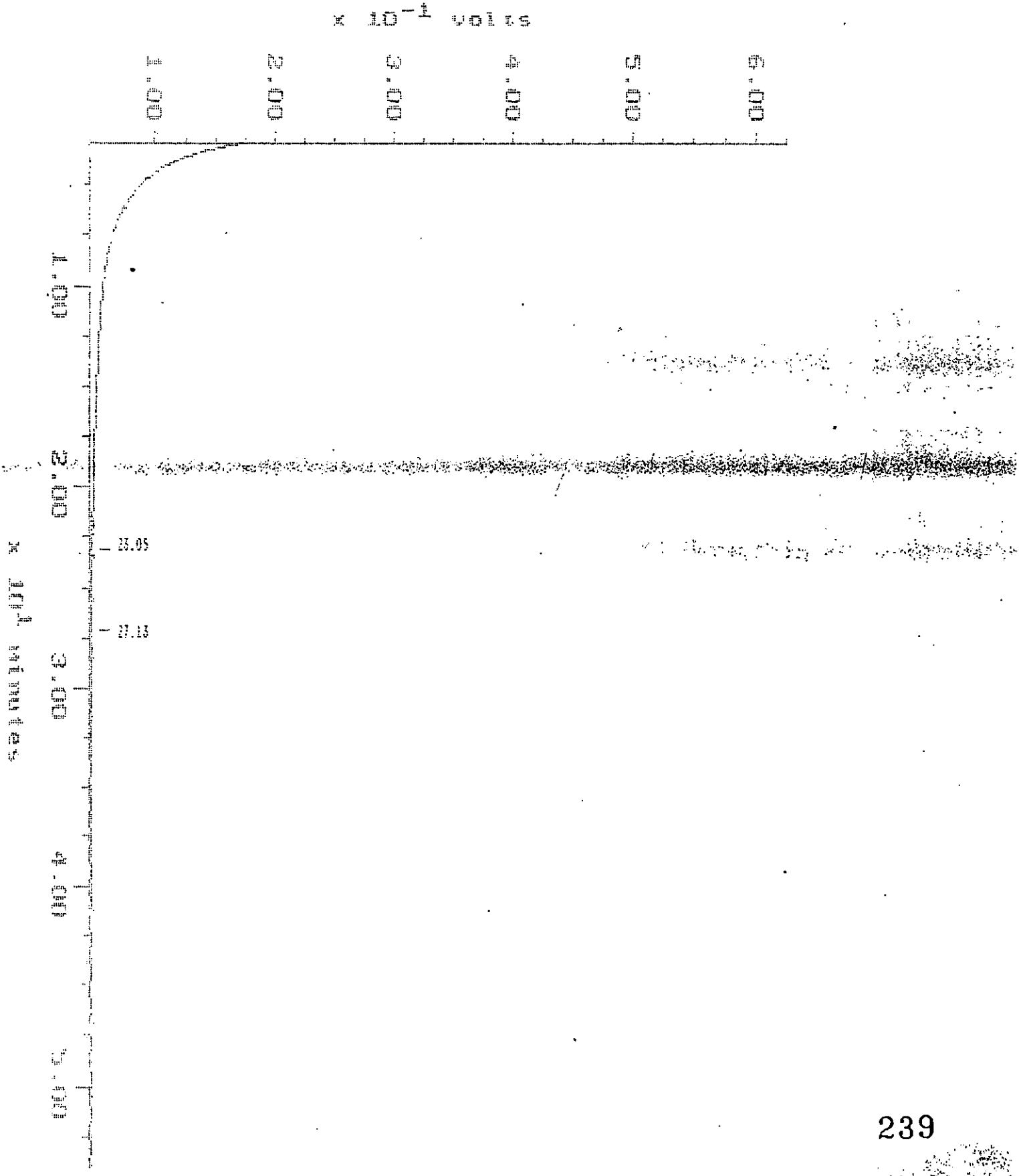
DETECTOR: FID

PK#	ID#	Retention Time (minutes)	Component Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
1		25.668					304702376	
TOTAL				0.00	0.00		304702376	

GROUP SUMMARY: FID

PK#	ID#	Group Center (minutes)	Group Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
	1	25.000	#1fuel	3000.00	3000.00		304702376	0.000
TOTAL				3000.00	3000.00		304702376	

Sample: f1018b1 Channel: F10 Filename: 710183
Acquired: 18-OCT-94 10:14 Method: Y:\MAX\DATA7\F2D Operator: GG



MAXIMA 820 CUSTOM REPORT

Printed: 19-OCT-1994 8:02:48

SAMPLE: F1018b1 Type: UNKN
#4 in Method: #20 Instrument: GC7
Acquired: 18-OCT-1994 10:14 Filename: 710133
Rate: 2.0 points/sec Index: Disk
Duration: 54.000 minutes
Operator: GG

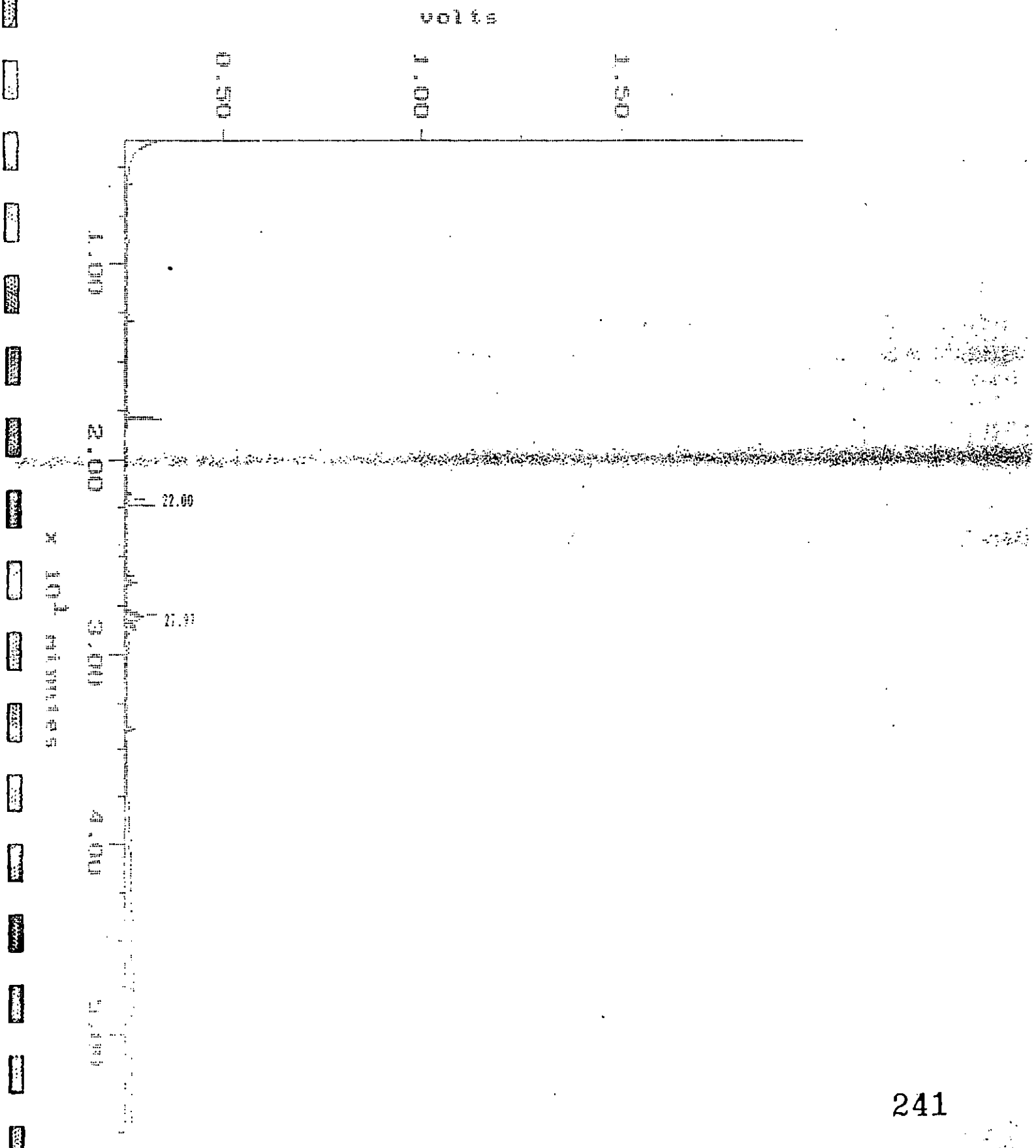
DETECTOR: FID

PK#	ID#	Retention Time (minutes)	Component Name	Original Conc (ug/ml)	Solution Conc (ug/ml)	Group #	Peak Area	Response Factor
1		23.050					34649	
2		27.125					90160	
TOTAL				0.00	0.00		124810	

GROUP SUMMARY: FID

PK#	ID#	Group Center (minutes)	Group Name	Original Conc (ug/ml)	Solution Conc (ug/ml)	Group #	Peak Area	Response Factor
	1	25.190	#2FUEL	2.46	2.46		124810	0.000
TOTAL				2.46	2.46		124810	

Sample: 174-05 Channel: FID Filename: 310175
Acquired: 17-OCT-94 22:19 Method: Y:\HAX\DATA3\#26 Operator: GG



MAXIMA 820 CUSTOM REPORT

Printed: 18-OCT-1994 8:05:29

SAMPLE: 174-05
49 in Method: #2A
Acquired: 17-OCT-1994 22:19
Rate: 1.8 points/sec
Duration: 55.497 minutes
Operator: GG

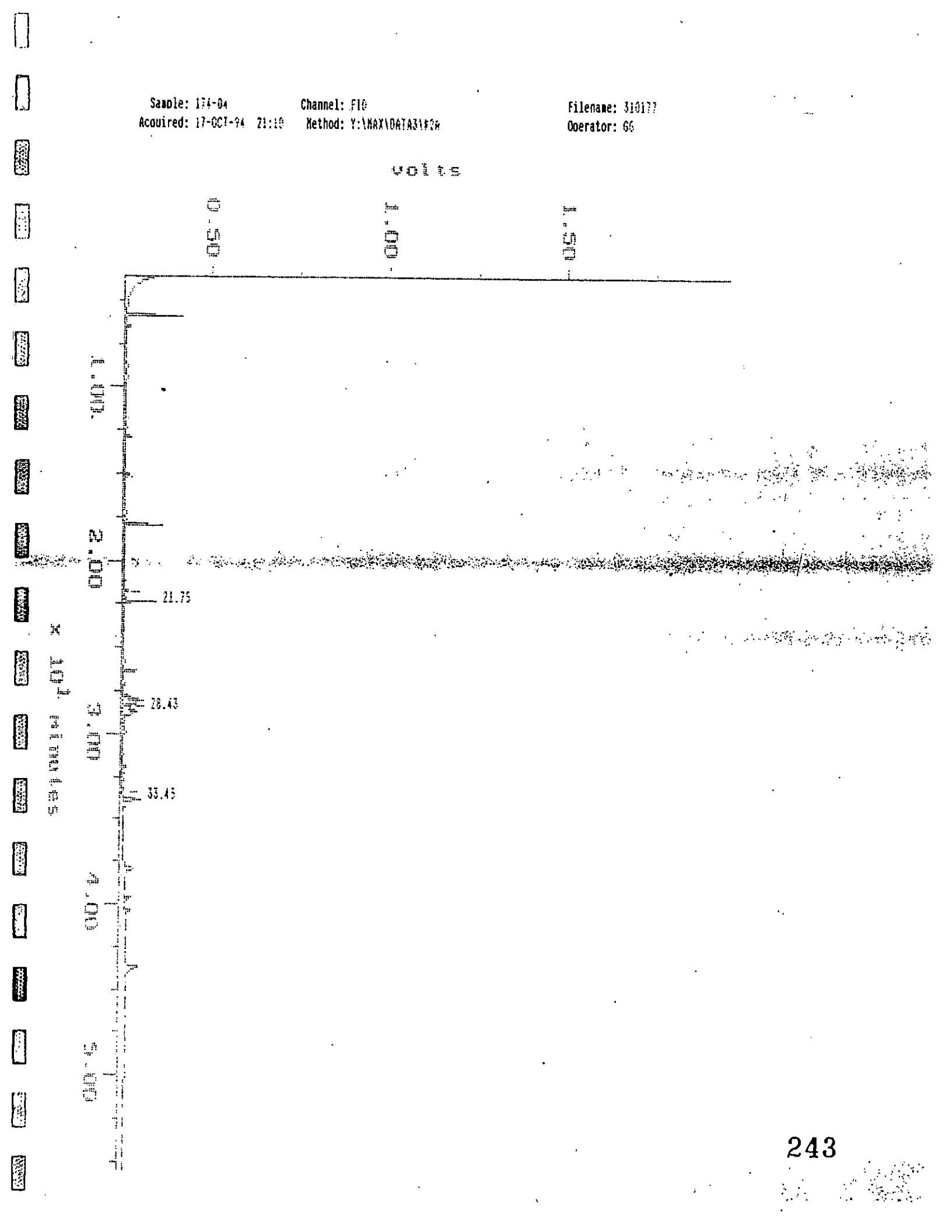
Type: UNKN
Instrument: gc3
Filename: 310178
Index: 91sk

DETECTOR: FID

PK#	ID#	Retention Time (minutes)	Component Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
1		22.903					325387	
2		27.972					1356942	
TOTAL				0.00	0.00		1682329	

GROUP SUMMARY: FID

PK#	ID#	Group Center (minutes)	Group Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
	1	25.000	#2fuel	16.56	16.56		1682329	0.000
TOTAL				16.56	16.56		1682329	


Sample: 174-04
Acquired: 17-OCT-94 21:10
Channel: F10
Method: Y:\MAX\DATA3\F10
Filename: 310177
Operator: GG
volts
21.75
28.43
33.45

MAXIMA 820 CUSTOM REPORT

Printed: 18-OCT-1994 8:05:14

SAMPLE: 174-04
46 in Method: PZA
Acquired: 17-OCT-1994 21:10
Rate: 1.8 points/sec
Duration: 55.497 minutes
Operator: GG

Type: UNKN
Instrument: gc3
Filename: 310177
Index: 0isk

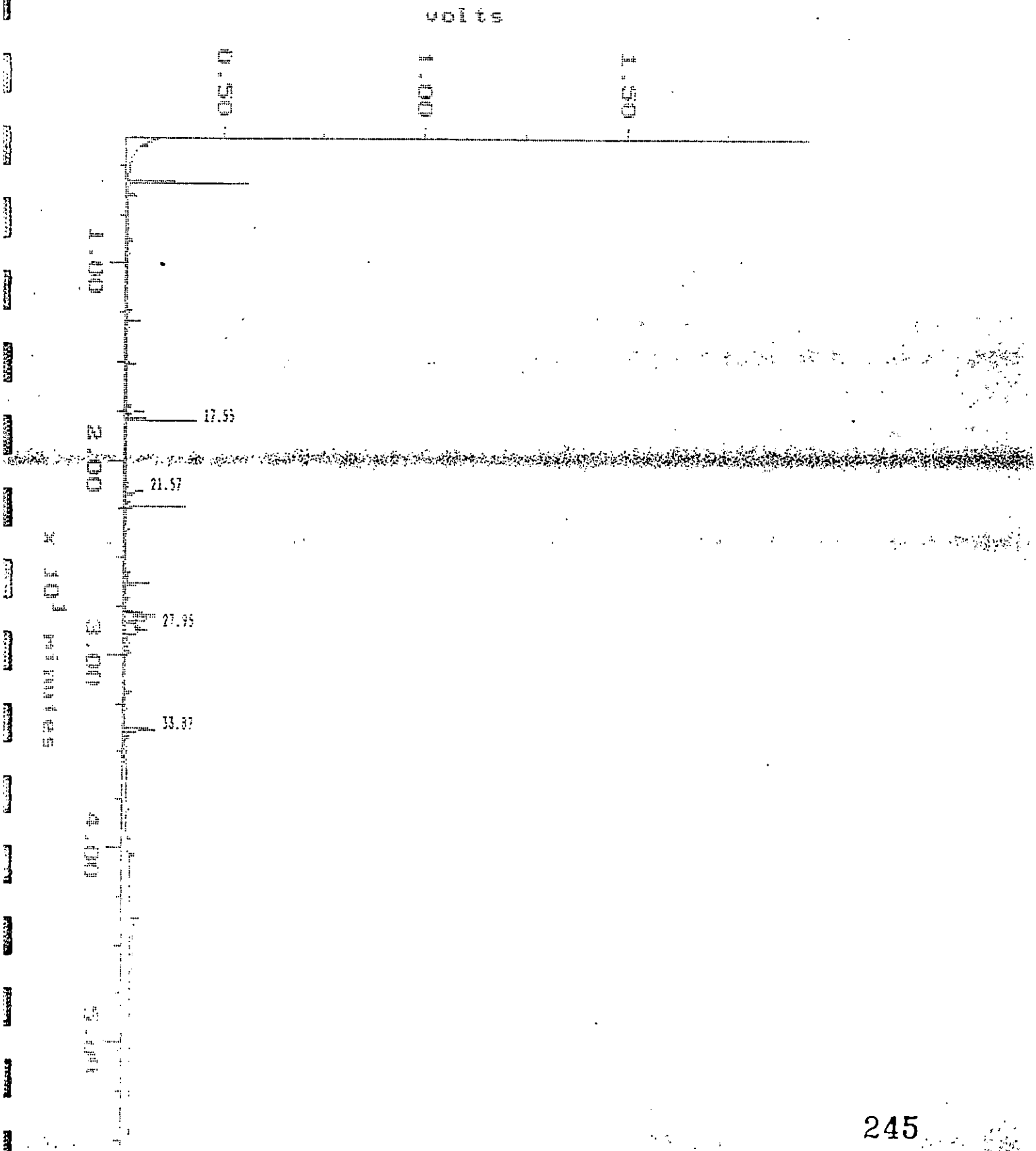
DETECTOR: FID

PK#	ID#	Retention Time (minutes)	Component Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
1		21.746					556083	
2		28.429					2108999	
3		33.441					361601	
TOTAL				0.00	0.00		3026683	

GROUP SUMMARY: FID

PK#	ID#	Group Center (minutes)	Group Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
	1	25.000	Diesel	29.80	29.80		3026683	0.000
TOTAL				29.80	29.80		3026683	

Sample: 174-03 Channel: F1G Filename: 310174
Acquired: 17-OCT-94 20:01 Method: Y:\MAX\DATA3\#2A Operator: GG



MAXIMA 820 CUSTOM REPORT

Printed: 18-OCT-1994 8:04:55

SAMPLE: 174-03 Type: UNKN
Inj in Method: #2A Instrument: gc3
Acquired: 17-OCT-1994 20:01 Filename: 310174
Rate: 1.0 counts/sec Index: Disk
Duration: 55.497 minutes
Operator: GG

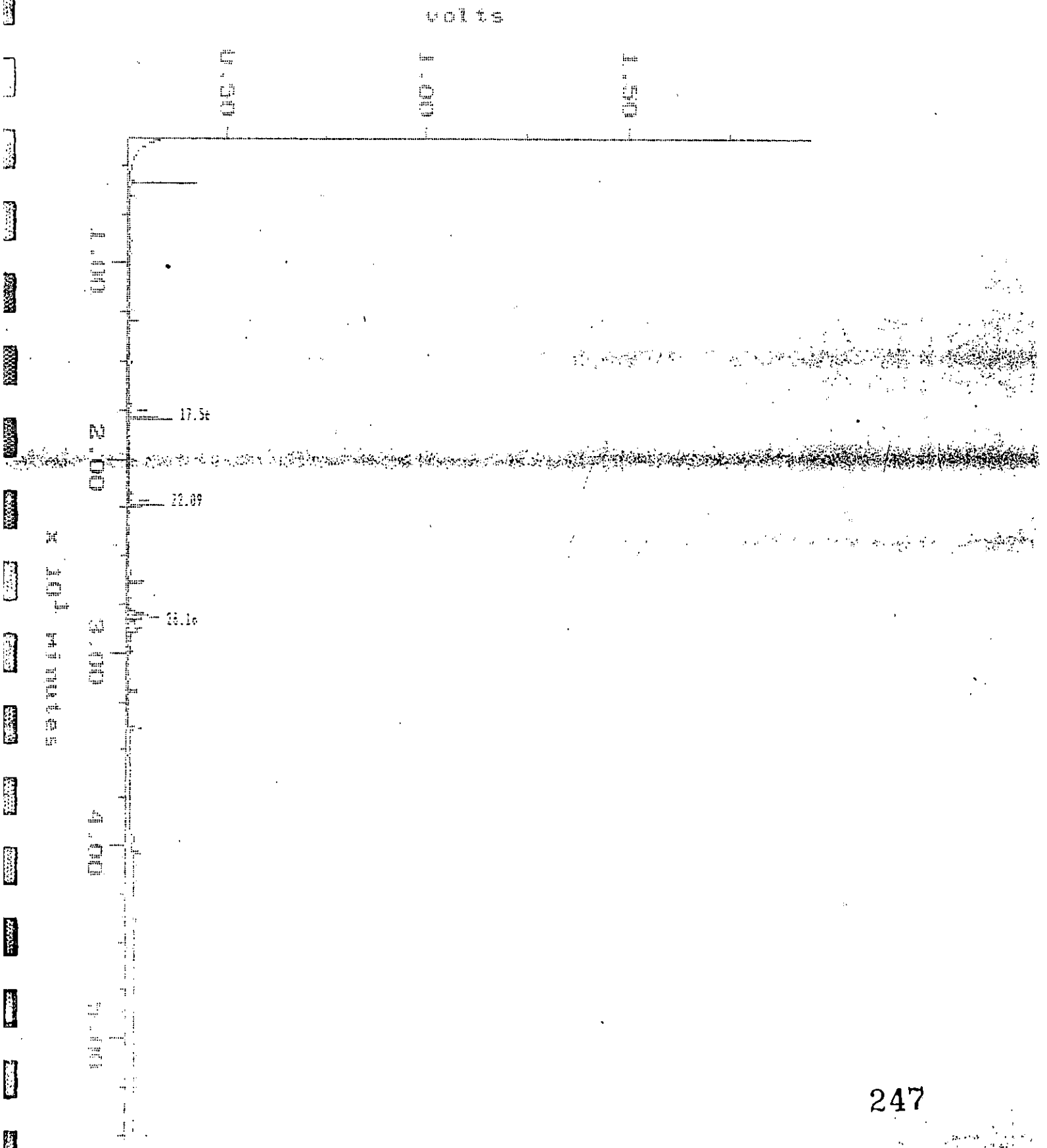
DETECTOR: FID

PK#	ID#	Retention Time (minutes)	Component Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
1		17.547					699786	
2		21.574					834134	
3		27.953					2924019	
4		33.866					603531	
TOTAL				0.00	0.00		5061470	

GROUP SUMMARY: FID

PK#	ID#	Group Center (minutes)	Group Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
	1	25.000	Fuel	49.83	49.83		5061470	0.000
TOTAL				49.83	49.83		5061470	

Sample: 174-92 Channel: FID Filename: 310175
Acquired: 17-OCT-94 18:52 Method: Y:\MAY\DATA3\MJA Operator: GG



MAXIMA 820 CUSTOM REPORT

Printed: 18-OCT-1994 8:04:44

SAMPLE: 174-02 Type: UNKN
%S in Method: #2A Instrument: gc5
Acquired: 17-OCT-1994 18:52 Filename: 310175
Rate: 1.6 points/sec Index: DisK
Duration: 55.497 minutes
*Operator: GG

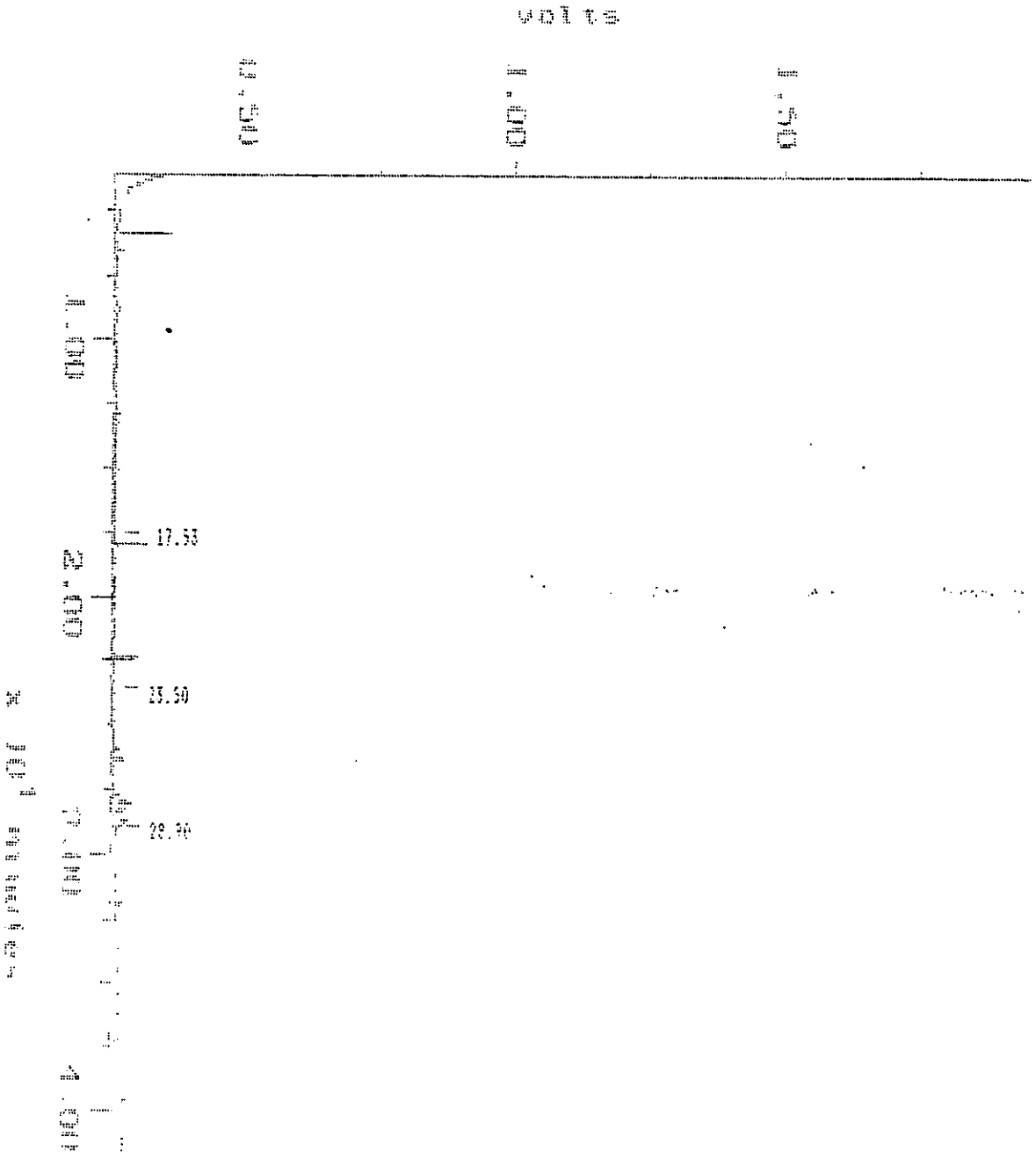
DETECTOR: FID

PK#	ID#	Retention Time (minutes)	Component Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
1		17.556					473373	
2		22.086					405333	
3		28.163					1461433	
TOTAL				0.00	0.00		2340140	

GROUP SUMMARY: FID

PK#	ID#	Group Center (minutes)	Group Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
	1	25.000	#2fuel	23.04	23.04		2340140	0.000
TOTAL				23.04	23.04		2340140	

Sample: 174-01 Channel: F1B Filename: 3:0174
Acquired: 17-OCT-94 17:45 Method: Y:\MAX\DATA\1F2A Operator: GG



MAXIMA 820 CUSTOM REPORT

Printed: 18-OCT-1994 8:04:29

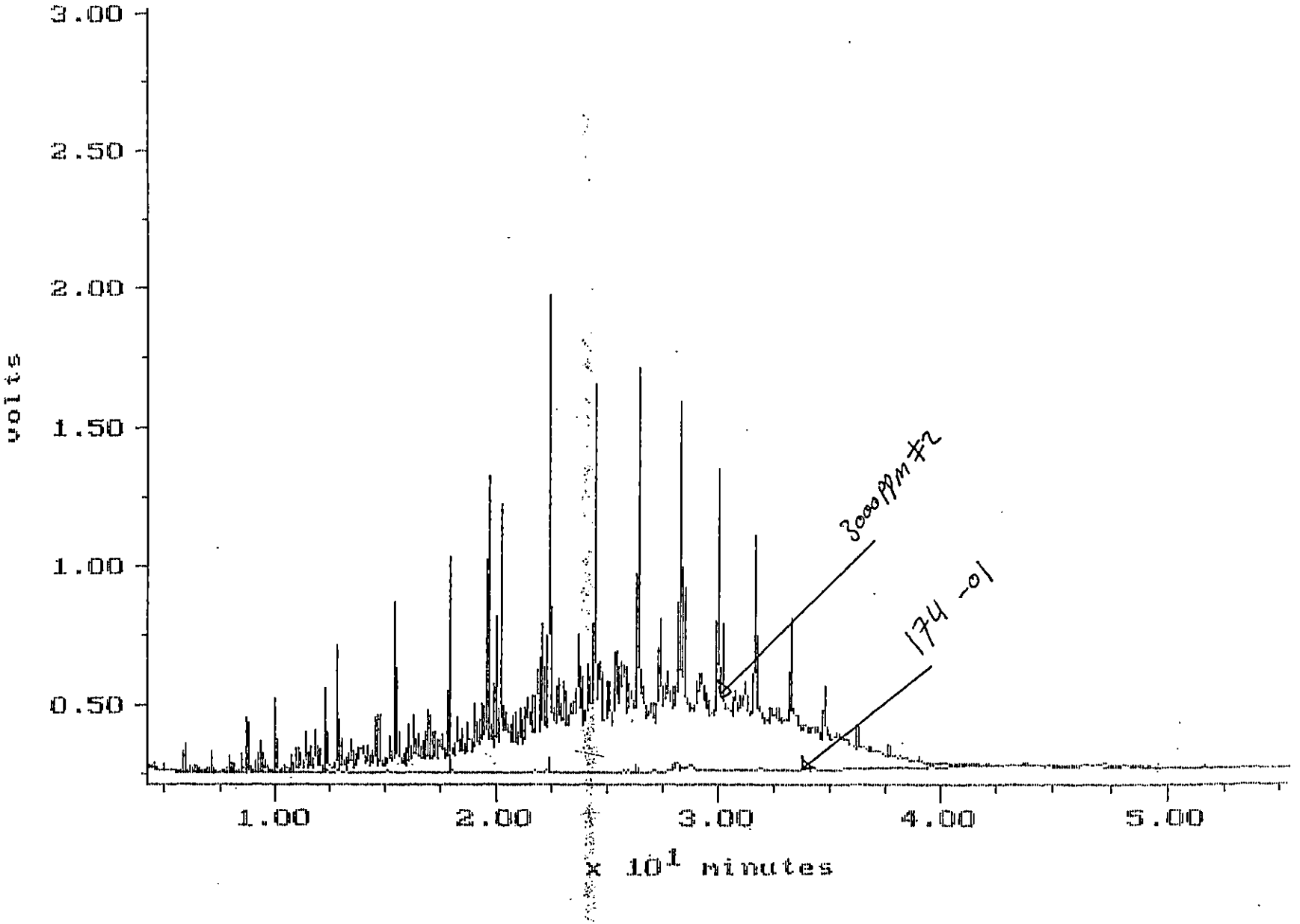
SAMPLE: 174-61 Type: UNKN
IS in method: 82A Instrument: gc3
Acquired: 17-OCT-1994 17:43 Filename: 310174
Rate: 1.0 points/sec Index: Disk
Duration: 55.497 minutes
Operator: GG

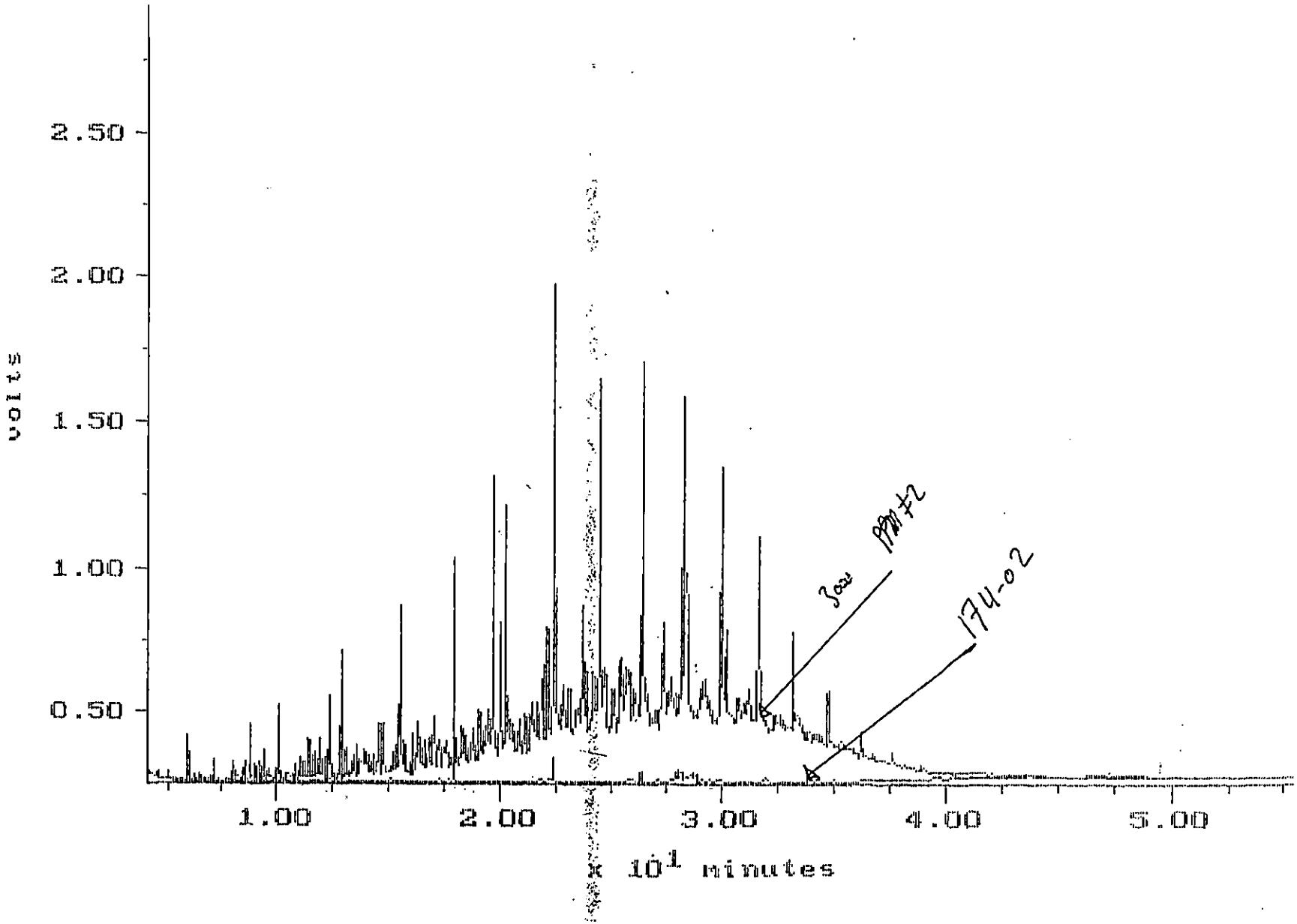
DETECTOR: FID

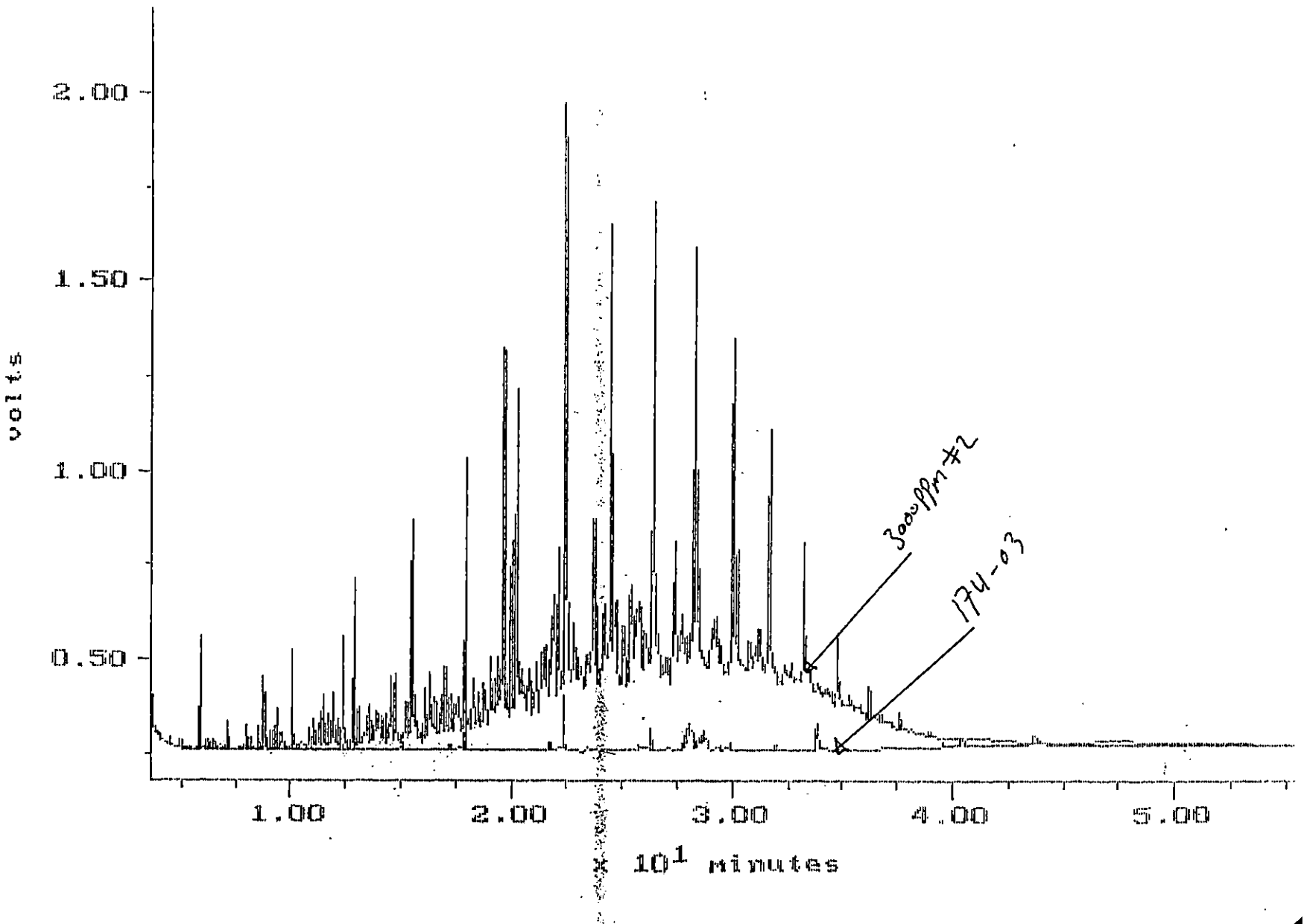
PK#	ID#	Retention Time (minutes)	Component Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
1		17.528					283369	
2		23.497					440923	
3		28.896					1282923	
TOTAL				0.00	0.00		2007216	

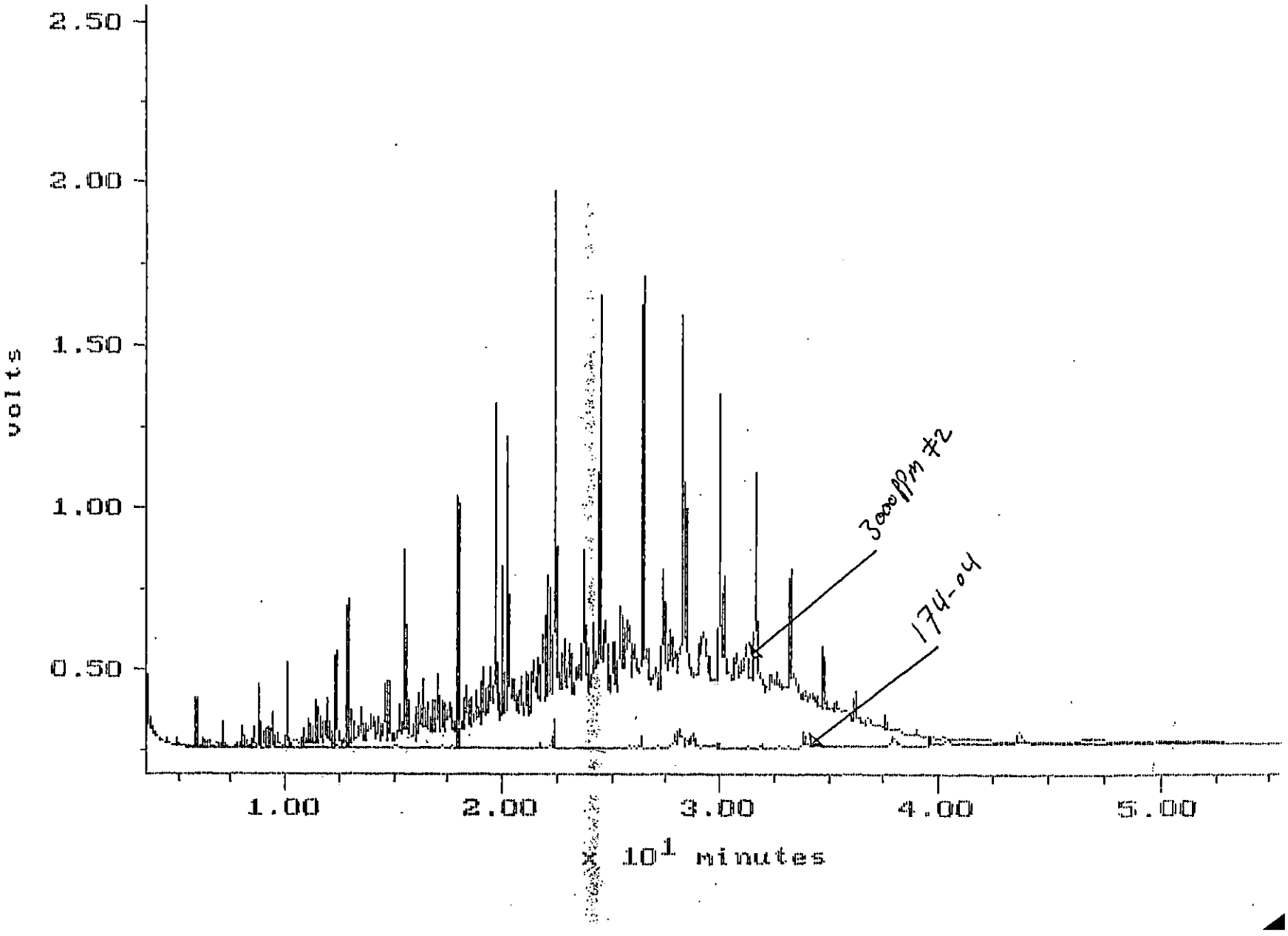
GROUP SUMMARY: FID

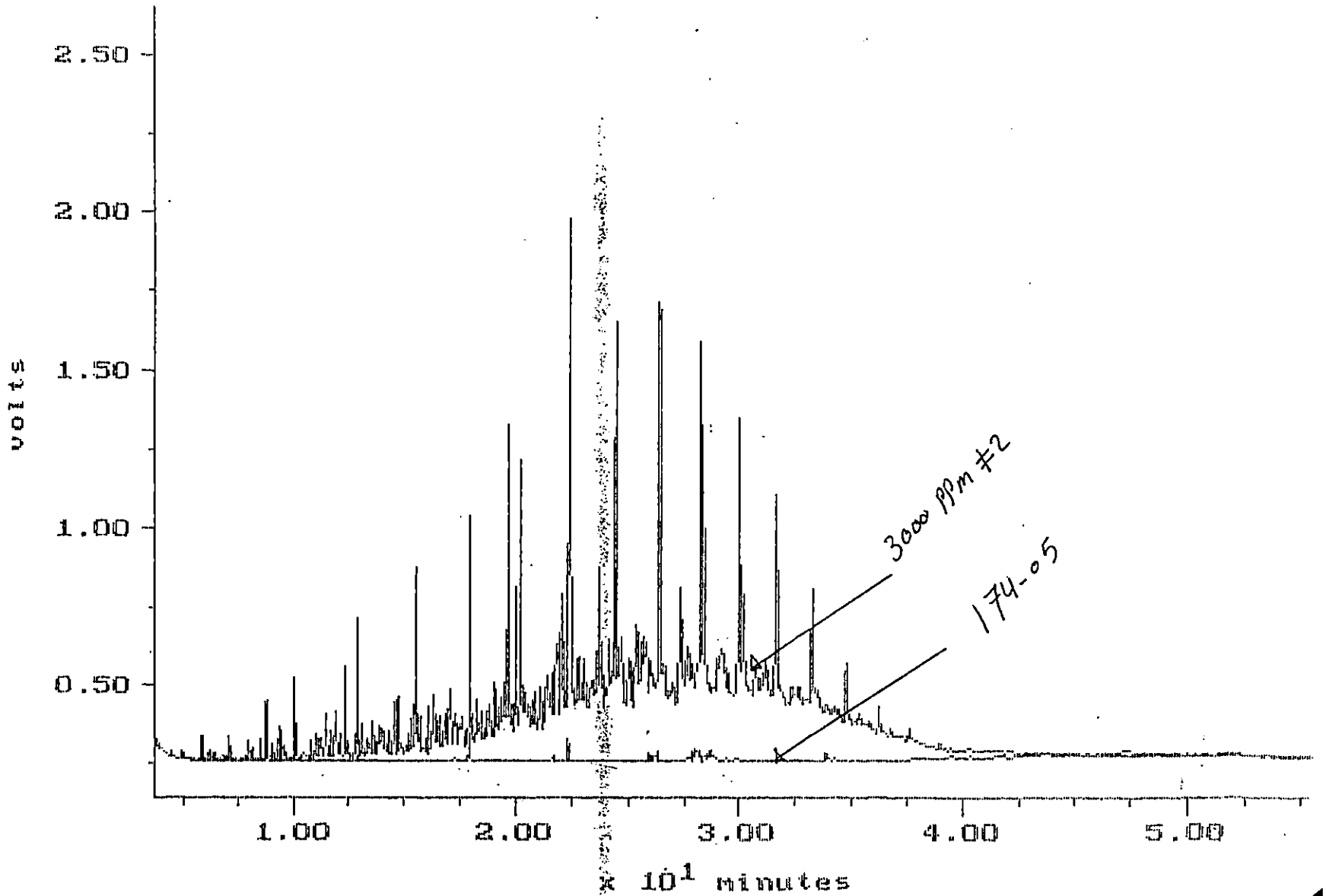
PK#	ID#	Group Center (minutes)	Group Name	ADJUSTED CONC (Ug/ml)	UNADJUSTED CONC (Ug/ml)	Group #	Peak Area	Response Factor
	1	25.000	#2fuel	19.76	19.76		2007216	0.000
TOTAL				19.76	19.76		2007216	

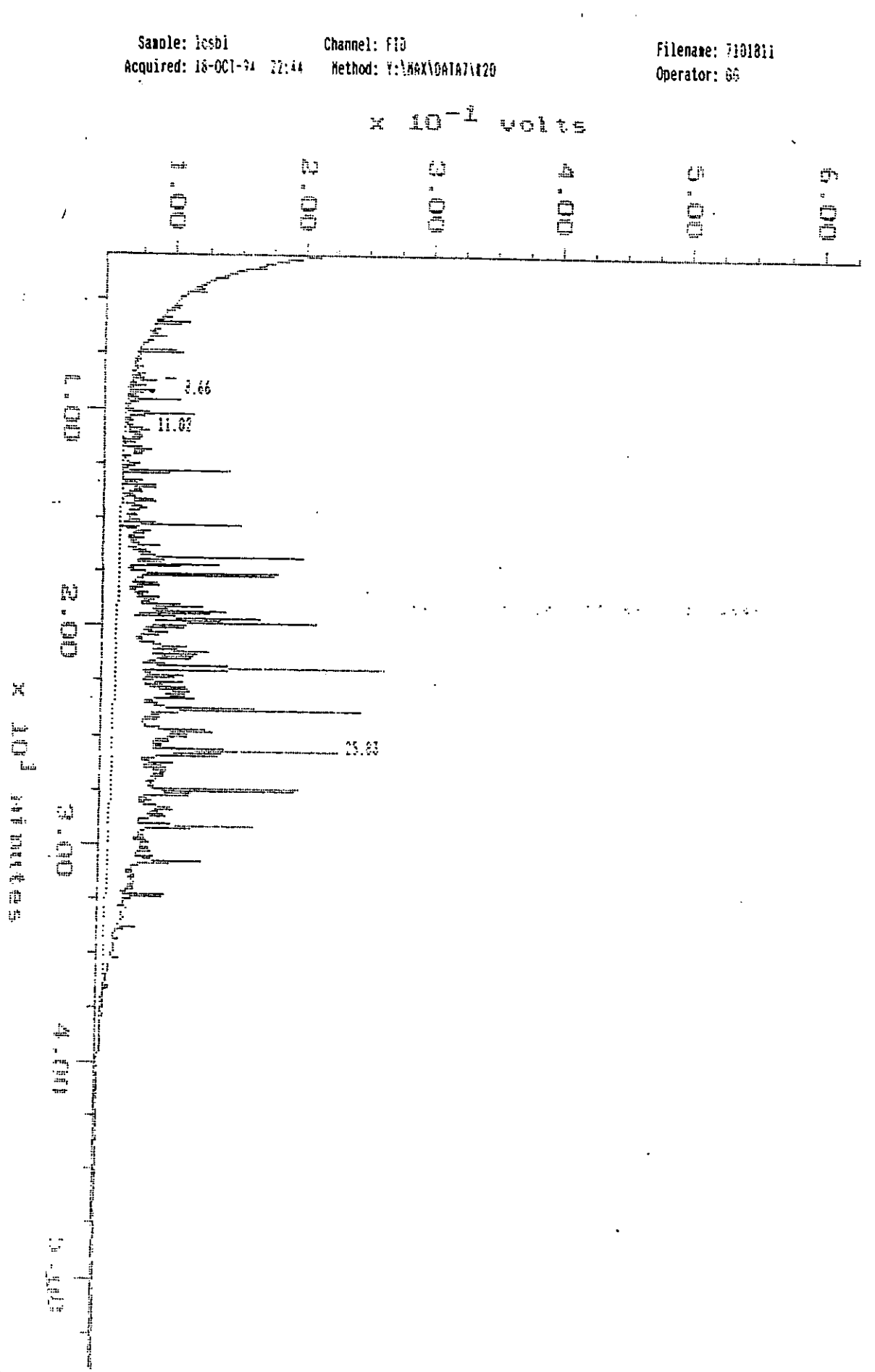

3.00
2.50
2.00
1.50
1.00
0.50
volts
1.00
2.00
3.00
4.00
5.00
x 10^1 minutes
3000ppm+2
174-01


2.50
2.00
1.50
1.00
0.50
volts
1.00
2.00
3.00
4.00
5.00
x 10^1 minutes
Jan PM#2
174-02


2.00
1.50
1.00
0.50
volts
1.00
2.00
3.00
4.00
5.00
x 10^1 minutes
300ppm #2
174-03


2.50
2.00
1.50
1.00
0.50
volts
1.00
2.00
3.00
4.00
5.00
10^1 minutes
3000ppm #2
174-04


2.50
2.00
1.50
1.00
0.50
volts
1.00
2.00
3.00
4.00
5.00
x 10^1 minutes
3000 ppm #2
174-05


Sample: lcsb1
Acquired: 18-OCT-94 22:44
Channel: FID
Method: Y:\HAX\DATA7\820
Filename: 7101811
Operator: 66
x 10⁻¹ volts
00.1
00.2
00.3
00.4
00.5
00.6
00.7
00.8
00.9
3.66
11.03
35.83

MAXIMA 820 CUSTOM REPORT

Printed: 19-OCT-1994 8:05:48

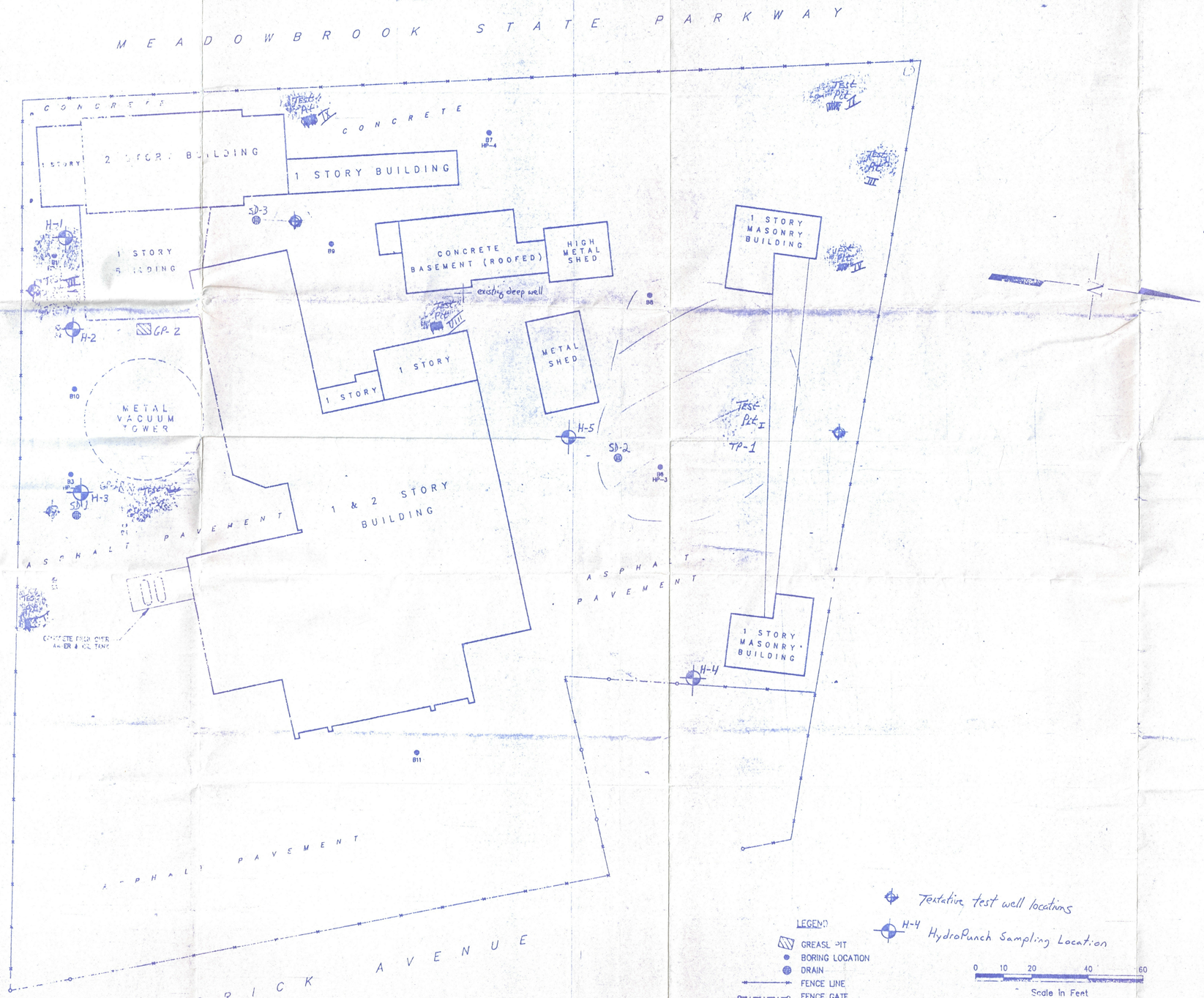
SAMPLE: lcsb1 Type: UNKN
Vial in Method: 120 Instrument: GC7
Acquired: 18-OCT-1994 22:44 Filename: 7101811
Rate: 2.0 points/sec Index: Disk
Duration: 54.000 minutes
Operator: GG

DETECTOR: FID

PK#	ID#	Retention Time (minutes)	Component Name	Original Conc (ug/ml)	Solution Conc (ug/ml)	Group #	Peak Area	Response Factor
1		6.656					598899	
2		11.017					978921	
3		25.633					40040904	
TOTAL				0.00	0.00		41618725	

GROUP SUMMARY: FID

PK#	ID#	Group Center (minutes)	Group Name	Original Conc (ug/ml)	Solution Conc (ug/ml)	Group #	Peak Area	Response Factor
	1	25.190	#2FUEL	808.53	808.53		41019825	0.000
TOTAL				808.53	808.53		41019825	



LEGALLY PRIVILEGED AND CONFIDENTIAL

PRELIMINARY DRAFT- SUBJECT TO REVISION

NO.	DESCRIPTION	DATE	APPV.
	REVISED NO		

MEADOWBROOK REALTY COMPANY

DATE: 9/19/91

SCALE: 1"=20'

PLATE: 1

DRAWING NO: MEADOW1

TITLE: DRAFT

CA RICH CONSULTANTS, INC.
Certified Ground-Water and Environmental Specialists
404 Glen Cove Avenue, Sea Cliff, NY 11579

DRAWN BY: J.W.S.

APPR. BY: B.M.B.