N62269.AR.000413
NAWC WARMINSTER
5090.3a

Prepare in quintuplicate (original and 4 copies)

CONTRACTOR DRAWINGS & INFORMATION SUBMITTAL
NORTHNAVFACENGCOM 4335/3 (Rev. 6/80)

CONTROL NO. 10

CONTRACT NO	DELIVERY ORDER #	ACTIVITY LOCATION
N62472-94-D-0398	0018	Warminster, PA

PROJECT TITLE:
Various Remedial Action at NAWC

FROM:	DATE
Foster Wheeler Environmental Corp. - Program QCM: Akram Aziz	December 24, 1996
TO:	DATE
S. Lehman (2 copies)	December 24, 1996

1. THE CONTRACTOR SUBMITTALS LISTED BELOW ARE FORWARDED FOR YOUR REVIEW AND RECOMMENDATIONS.
   (a) APPLY APPROPRIATE STAMP IMPRINT TO EACH SUBMITTAL AND INDICATE REVIEW COMMENTS, AS REQUIRED.
   (b) RETAIN ONE (1) COPY OF THIS TRANSMITTAL FORM AND RETURN REMAINING COPIES WITH REVIEWED SUBMITTALS TO ROICC.
2. THESE SUBMITTALS SHOULD BE RETURNED TO THIS OFFICE BY _____
3. _____

COPY TO:

[X] ROICC [ ] [ ] OTHERS

E. Beatty (2 copies)

SIGNATURE AND DATE 12/24/96

FROM: DESIGNER	DATE
TO: ROICC	DATE

1. THE SUBMITTALS LISTED BELOW HAVE BEEN REVIEWED AND ARE RETURNED, WITH ACTION TAKEN AS INDICATED.
2. _____

COPY TO:

[ ] ROICC [ ] DESIGNER

SIGNATURE AND DATE

FROM: ROICC	DATE
TO: CONTRACTOR	DATE

1. THE SUBMITTALS LISTED BELOW HAVE BEEN REVIEWED AND ARE APPROVED/DISAPPROVED AS SHOWN BELOW AND ON EACH STAMP IMPRINT

COPY TO:
[ ] ROICC [✓] OTHER

c/18/L.M.

FOR COMMANDING OFFICER, NORTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND — DATE

ITEM NO.	SUBMITTAL DESCRIPTION	PREPARED/ SUBMITTED BY	APPROVED	DISAPPROVED	REMARKS
10	SD-10, Test Reports	A. Aziz			
	Site "6" Laboratory Analysis Report				

MISC\96-184.DOC

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

received
12/23/96 CRD

LABORATORY ANALYSIS REPORT

Client: Foster Wheeler Environmental
One Oxford Valley
Suite 200
Langhorne PA 19047

Project Manager: C. Dannenberger
Project:

Laboratory Report: T611436

Date Received: 11/27/96 **Date Reported:** 12/19/96

Lab ID No.	Client Sample ID	Matrix	Collection Date & Time
T611436 - 1	S6-T6A-1	Soil	11/27/96 8:40 AM
T611436 - 2	S6-T6A-1(ASTM)	Water	11/27/96
T611436 - 3	S6-TR6E-1	Soil	11/27/96 9:25 AM
T611436 - 4	S6-TR6E-1(ASTM)	Water	11/27/96 9:25 AM
T611436 - 5	S6-TR6E-2	Soil	11/27/96 10:50 AM
T611436 - 6	S6-TR6E-2(ASTM)	Water	11/27/96 10:50 AM
T611436 - 7	S6-T6F-1	Soil	11/27/96 12:00 PM
T611436 - 8	S6-T6F-1(ASTM)	Water	11/27/96 12:00 PM
T611436 - 9	S6-T6F-2	Soil	11/27/96 12:30 PM
T611436 - 10	S6–T6F-2(AStM)	Water	11/27/96 12:30 PM
T611436 - 11	S6-T6F-3	Soil	11/27/96 1:00 PM
T611436 - 12	S6-T6F-3(ASTM)	Water	11/27/96 1:00 PM

Moe R. Amirsoleymani
Quality Assurance Manager

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

LRI QUOTE # T611436

Laboratory Resources INC
CHAIN OF CUSTODY

PAGE 1 OF 1

CUSTOMER INFORMATION

CUSTOMER: FOSTER WHEELER ENVIRONMENTAL
ADDRESS: ONE OXFORD VALLEY, STE 200
LANGHORNE, PA 19047
TELEPHONE: 215-702-4000
FAX: 215-702-4038

PROJECT INFORMATION

PROJECT: NAVY - SITE 6
PROJECT LOCATION: WARMINSTER STATE: PA
PROJECT MANAGER: C. DANNENBERGER
IN CASE WE HAVE ANY QUESTIONS WHEN SAMPLES ARRIVE WE SHOULD CALL:
NAME: DAN WALSH
TELEPHONE: 215-702-4038
FAX: 215-702-4045

BILLING INFORMATION

BILL TO: CUSTOMER
ADDRESS:
ATTENTION: C. DANNENBERG
TELEPHONE: 215-702-4007
PO #: 1384.0018.0006.90000

LAB ID CODE	SAMPLE IDENTIFICATION	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE: COMPOSITE	SAMPLE TYPE: GRAB	SAMPLE MATRIX	# OF BOTTLES	TCLP VOAS	FULL TCLP	PAINT FILTER	PCB, RCRA & TOC	ANALYSIS	PRESERVATIVES: H2SO4	HCL	HNO3	NAOH	NON-PRES
1	S6-P6A-1	11/27/96	0840	X		SOIL	4	X	X	X	X						X
3	S6-TR6E-1	↓	0925	↓		↓	↓	↓	↓	↓	↓						↓
5	S6-TR6E-2	↓	1050	↓		↓	↓	↓	↓	↓	↓						↓
7	S6-P6F-1	↓	1200	↓		↓	↓	↓	↓	↓	↓						↓
9	S6-P6F-2	↓	1230	↓		↓	↓	↓	↓	↓	↓						↓
11	S6-P6F-3	↓	1300	↓		↓	↓	↓	↓	↓	↓						↓

COOLER TEMP: _____ CUSTODY SEAL#: _____
TURNAROUND (INDICATE IN CALENDAR DAYS): 3 FAX 2 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: Daniel Fiebel / FWEnC	DATE: 11/27/96	
RECEIVED / AFFILIATION: [illegible]	TIME: 1500	
RELINQUISHED / AFFILIATION:	DATE:	
RECEIVED / AFFILIATION:	TIME: 11/29/96 9:20	
RELINQUISHED / AFFILIATION:	DATE:	
RECEIVED / AFFILIATION:	TIME:	

RESIDUAL CHLORINE PRESENT: ☐ YES ☒ NO
☐ 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
FEDEX # 2287488755

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SAMPLE RECEIPT LOG

BOOK Nº _____
PAGE Nº _____

LRI Job Nº T611436 Client Name Foster Wheeler

Date Received 11/29/96 Project MAXY - SITE 6

Sample Custodian _____ LRI Project Manager Mary

Method of shipment: ☐ LRI Courier ☐ Client Courier ☑ FedEx ☐ Other: _____
If an airbill is included with shipment check here ☐ and attach airbill to chain of custody form

EXAMINE THE SAMPLE SHIPMENT FOR THE CONDITIONS LISTED BELOW AND CHECK THE APPROPRIATE BOXES.

YES	NO	
☑	☐	COOLER RECEIVED WITH CUSTODY SEALS INTACT
☑	☐	CHAIN OF CUSTODY (COC) FORMS ARE INCLUDED WITH SHIPMENT
☑	☐	COC FORMS ARE PROPERLY SIGNED AND DATED BY CLIENT
☑	☐	COOLER TEMPERATURE IS 6 °C OR LOWER
		SAMPLES RECEIVED WITH ☐ ICE ☐ ICE PACKS ☐ NEITHER
☑	☐	INFORMATION ON THE COC FORMS MATCHES ACTUAL SAMPLES
☑	☐	NO HOLDING TIMES WERE EXCEEDED AT TIME OF SAMPLE RECEIPT
☑	☐	SAMPLES ARE PROPERLY LABELLED WITH SAMPLE IDENTIFICATION AND PRESERVATIVE
☑	☐	SAMPLES RECEIVED INTACT (NOT BROKEN, LEAKING, ETC.)
NA ☐	☑	VOA VIALS CONTAIN NO HEADSPACE
☑	☐	SAMPLE VOLUMES ARE SUFFICIENT FOR ANALYSES TO BE PERFORMED
☑	☐	SAMPLE CONTAINERS AND PRESERVATIVES ARE CORRECT FOR ANALYSES TO BE PERFORMED
NA ☐	☐	THE pH FOR ACID PRESERVED SAMPLES IS LESS THAN 2
NA ☑	☐	THE pH FOR CAUSTIC (BASE) PRESERVED SAMPLES IS GREATER THAN 12

TEMPERATURE 5-8°C

IF THE RESPONSE TO ONE OR MORE OF THE ABOVE CONDITIONS IS NO, COMPLETE THE FOLLOWING SECTION AND SUBMIT A COPY OF THIS PAGE TO THE LRI PROJECT MANAGER LISTED ABOVE FOR CORRECTIVE ACTION. SAMPLES RECEIVED WITH ANY OF THE ABOVE VARIANCES CANNOT BE LOGGED IN WITHOUT CLIENT APPROVAL.

The following samples were received but not listed on the COC form: _____
The following samples listed on the COC form were not received: _____
The following information on COC form does not match samples: _____

Holding times are exceeded for the following analyses: _____
The following samples were not received intact: _____
VOA vials for the following samples have headspace: _____
Insufficient sample volume was received for the following analyses/samples: _____

The containers received are inappropriate for the following analyses: _____
The preservation is incorrect for the following analyses/samples: _____
Other comments: _____

Supervisor Review: _____ 11/29/96 (Initial/Date) Project Manager Review: MW 11/29 (Initial/Date)

Client notified ☐ in writing ☐ by telephone ☐ by fax ☐ other (explain) _____
by _____ (Name/Date)

Corrective Action: _____

Place copy with completed corrective action in work order folder.

FORM SM-SRL

DEPE-077 NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY . Page ___ of ___

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: Antonio Gonzalez	Location: Teterboro Title: Sample Extraction Supervisor
Field Sample Seal No:	Date Broken ____/____/____	Military Time Seal Broken:
CaseNo:	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO.	SAMPLE NO.	ALIQUOT/EXTRACT NO.
T611436-1	TCLP BNA		
-3			
-5			
-7			
-9			
-11			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/2/96	4:00 PM	PRINTED NAME Josefina P SIGNATURE Josefina Blanco	PRINTED NAME [illegible] SIGNATURE [illegible]	TCLP BNA delivered to GC/MS
		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	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

DEPE-077 NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

Rev 2.0, 2/92

Page ___ of ___

INTERNAL CHAIN OF CUSTODY

INSTRUCTIONS: Use 1 form for each 20 samples or aliquot. 16835 BLKOL

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Laboratory Resources Name: Antonio Gonzalez	Location. Teterboro Title. Sample Extraction Supervisor
Field Sample Seal No:	Date Broken ____/____/____	Military Time Seal Broken.
CaseNo:	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO	SAMPLE NO.	ALIQUOT/EXTRACT NO.
1611436-01	Pg. PCB Soil		
-03			
-05			
-07			
-09			
-11			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/2/96	4:00 ~~3:30~~ PM	PRINTED NAME Francisco Monte SIGNATURE	PRINTED NAME Bhawin Shah SIGNATURE	Pg. PCB Soil GC
		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	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

DEPE-077 NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

Rev 2 0, 2/92

Page ____ of ____

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: Antonio Gonzalez	Location: Teterboro Title: Sample Extraction Supervisor
Field Sample Seal No:	Date Broken ____/____/____	Military Time Seal Broken:
CaseNo:	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO.	SAMPLE NO.	ALIQUOT/EXTRACT NO.
T611436-1	TCLP Pest/PCB.	"	
-3			
-5			
-7			
-9			
-11			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/6/96	4:00 PM	PRINTED NAME Josefina P SIGNATURE Josefina Planell	PRINTED NAME Joan Revolus SIGNATURE	TCLP Pest/PCB delivered to GC.
		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	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	
		PRINTED NAME SIGNATURE	PRINTED NAME SIGNATURE	

DEPE-077 NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

Rev 2.0, 2/92

Page ____ of ____

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: Antonio Gonzalez	Location: Teterboro Title: Sample Extraction Supervisor
Field Sample Seal No:	Date Broken ____/____/____	Military Time Seal Broken:
CaseNo:	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO	SAMPLE NO.	ALIQUOT/EXTRACT NO.
T611436-01	TCLP Herb. soil	"	
-03			
-05			
-07			
-09			
-11			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/3	5:00 pm	PRINTED NAME Antonio Ortiz	PRINTED NAME Bhwinshee	TCLP Herb. soil.
		SIGNATURE [illegible]	SIGNATURE [illegible]	Delivered to GC
		PRINTED NAME	PRINTED NAME	
		SIGNATURE	SIGNATURE	
		PRINTED NAME	PRINTED NAME	
		SIGNATURE	SIGNATURE	
		PRINTED NAME	PRINTED NAME	
		SIGNATURE	SIGNATURE	
		PRINTED NAME	PRINTED NAME	
		SIGNATURE	SIGNATURE	
		PRINTED NAME	PRINTED NAME	
		SIGNATURE	SIGNATURE	
		PRINTED NAME	PRINTED NAME	
		SIGNATURE	SIGNATURE	
		PRINTED NAME	PRINTED NAME	
		SIGNATURE	SIGNATURE	
		PRINTED NAME	PRINTED NAME	
		SIGNATURE	SIGNATURE	000006

DEPE-077 NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

Rev. 2.0, 2/92

Page ___ of ___

INTERNAL CHAIN OF CUSTODY

TCLP 2214

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:
CaseNo:	Analytical Parameter/Fraction	

SAMPLE NO.	ALIQUOT/EXTRACT NO.	SAMPLE NO.	ALIQUOT/EXTRACT NO.
611408-1		611436 - 7	
611408-2		9	
611430-1		11	
2		611427-1	
3		3	
4		4	
5			
611436-1			
3			
5			

Date	Time	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/2/96	4pm	PRINTED NAME SUGUNA SIGNATURE SJ	PRINTED NAME Michael Polidori SIGNATURE Michael Polidori	ICP Analysis
12/2/96	7:30 PM	PRINTED NAME Georgia Hemek SIGNATURE [illegible]	PRINTED NAME Georgia Hemek SIGNATURE [illegible]	CV Analysis
12/3/96	9:30 PM	PRINTED NAME Georgia Hemek SIGNATURE [illegible]	PRINTED NAME Georgia Hemek SIGNATURE [illegible]	CV Analysis
12/3/96		PRINTED NAME SUGUNA SIGNATURE SJ	PRINTED NAME Michael Polidori SIGNATURE Michael Polidori	ICP 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	

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

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.

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 3520B (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.

The Herbicide extraction and analysis is performed according to Method 515.1, cited in the EPA/600/4-88/039 December 1988, Revised 1989.

The Herbicide Extraction and analysis are performed according to Method 8150, SW 846 3rd Edition 1986.

Samples are extracted, derivitized, and then analyzed via a Capilary column 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.

LABORATORY RESOURCES, INC. NEW JERSEY DIVISION
GENERAL CHEMISTRY METHODOLOGY
SOIL MATRIX

PARAMETER	METHOD 1
ACIDITY	305.1
ALKALINITY	310.1
BOD, 5 DAY	507 (4)
BOD, 20 DAY	507 (4)
CHLORIDE	9252
CHLORINE, RESIDUAL	330.5
COD	HACH
CONDUCTIVITY	9050
CYANIDE, TOTAL	9010
CYANIDE, AMENDABLE	9012M
IGNITABILITY	1010
MBAS, SURFACTANTS	512B(4)
NITROGEN, NH3	350.2 (2)
NITROGEN, NO3	9200
NITROGEN, NO2	354.1
NITROGEN, TKN	351.2 (2)
ODOR	140.1
PETTROLEUM HYDROCARBON, SOIL	418.1 (5)
PH	9045
PHENOLICS, TOTAL	9065
PHOSPHORUS, TOTAL	365.2 (2)
SOLIDS, FIXED	2090 (4)
SOLIDS, TOTAL	CLP
SOLIDS, VOLATILES	2090 (4)
SULFATE	9038
SULFIDE	9030
SULFITE	377.1 (2)
TOC	9060
HEXAVALENT CHROMIUM	7196M
TURBIDITY	180.1
TOX	9020

(1) = Solid and Hazardous waste methds approved by NJDEP ECRA and RCRA and listed in EPA SW 846 3rd Edition, 1986.
(2) = Water and Wastewater Methods approved in the Fedaral register in section 40 CFR 136 and listed in EPA 600/4-79-020.
(4) = Methods Cited in Standard Methods 16th edition, 1986.
(5) = NJDEP modification of EPA Method 418.1.
CLP = Contract Laboratory program procedure for total solids determination, SOW 7/88, part F, page D-83.
HACH = Method 8000, Hach Handbook of Water Analysis, 1979, Approved in the Federal Register, April 21, 1980 page 26811.
M = NJDEPE Modified.

Fax: 12/04/96
Report: 12/10/96
Received: 11/29/96
Client: Foster Wheeler - PA
Deliverable: Reduced Deliverables Disk Due:
Regulation: Resource Conservation Recovery Act (Federal)
Special Requirements: NAVY PROJECT--HAND IN BLANK SPIKES.

LRI Laboratory Chronicle
MS Volatiles

Report # T611436

Page: 1
12/5/96
10:15:33 AM

QT	Lb	pH	Sample	mat	Test Type	Collected Date	Collected By	Analysis Date	Analysis By	Batch	Data File	Dil File	Calc	% Sol	# Ht
✓	Y	Y	1A: SG-PGA-1	S	8240VOA-T/TCLP_VOA	11/27		12-04	AA	QB12041	B7371		104	79.3	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
✓	Y	Y	3A: SG-TRGE-1	S	8240VOA-T/TCLP_VOA	11/27		"	"	" -1	B7374		"	82.0	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
✓	Y	Y	5A: SG-TRGE-2	S	8240VOA-T/TCLP_VOA	11/27		"	"	" -1	B7375		"	85.1	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
✓	Y	Y	7A: SG-PGF-1	S	8240VOA-T/TCLP_VOA	11/27		"	"	" -1	B7376		"	78.4	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
✓	Y	Y	9A: S6-PGF-2	S	8240VOA-T/TCLP_VOA	11/27		"	"	" -1	B7377		"	83.5	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
✓	Y	Y	11A: SG-PGF-3	S	8240VOA-T/TCLP_VOA	11/27		"	"	" -1	B7378		"	71.9	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															

QC CHRONICLE

Blanks				Spikes			
	#	mat		sample	M file	MS file	MSD file
QB12041	L	L	B7368	#1	B7371	B7372	B7373
			B7369	TCLP-BK			
QB12111	L	L	B7461				
				TCLP BK	MS	B7463	

Calibration

	Date	File	MS
init	12-04	B	
chk	12-04	B7366	
	12-11	B7460	

DL LIST: TCL PVOA.ERM (TCLP Main) REVIEWED: AA 12/05/96 LAB TAT: CHECKED: 13

Fax: 12/04/96
Report: 12/10/96
Received: 11/29/96
Client: Foster Wheeler - PA
Deliverable: Reduced Deliverables Disk Due:
Regulation: Resource Conservation Recovery Act (Federal)
Special Requirements: NAVY PROJECT--HAND IN BLANK SPIKES.

LRI Laboratory Chronicle
MS Semivolatiles

Report # T611436

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12/4/96
8:30:20 AM

Q T	L b	p H	Sample	mat	Test Type	Extracted Date	Extracted By	Analysis Date	Analysis By	Batch	Data File	Dil File	Calc	% Sol	# Ht
			1A: SG-PGA-1	S	8270SVA-T/TCLP_SV	11/27 12/02	JP	12/2/96	WB	16760 -1	J6204		2.5	79.3	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			3A: SG-TRGE-1	S	8270SVA-T/TCLP_SV	11/27 12/02	JP			-1	J6205			82.0	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			5A: SG-TRGE-2	S	8270SVA-T/TCLP_SV	11/27 12/02	JP			-1	J6206			85.1	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			7A: SG-PGF-1	S	8270SVA-T/TCLP_SV	11/27 12/02	JP			-1	J6207			78.4	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			9A: S6-PGF-2	S	8270SVA-T/TCLP_SV	11/27 12/02	JP			-1	J6208			83.5	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			11A. SG-PGF-3	S	8270SVA-T/TCLP_SV	11/27 12/02	JP			-1	J6209			71.9	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															

QC CHRONICLE

Blanks	#	mat		Spikes sample	M file	MS file	MSD file
OM16760	T3	W	J6203				
OM16760	T1	W	J6091	T611235-02	J6096	J6094	J6095

Calibration

	Date	File	MS
init	11/27/96	J6121 -	J6125
chk		J6192	

DL LIST: Sem. Tcp REVIEWED: V.P. LAB TAT: CHECKED: W. Bryan

Fax: 12/04/96
Report: 12/10/96
Received: 11/29/96
Client: Foster Wheeler - PA
Deliverable: Reduced Deliverables Disk Due:
Regulation: Resource Conservation Recovery Act (Federal)
Special Requirements: NAVY PROJECT--HAND IN BLANK SPIKES..

LRI Laboratory Chronicle
GC Semivolatiles

Report # T611436

Page: 1
12/3/96
6:19:59 PM

Q T	L b	p H	Sample	mat	Test Type	Extracted Date	Extracted By	Analysis Date	Analysis By	Batch	Data File	Dil File	Calc	% Sol	# Ht
			1A: SG-PGA-1	S	8080PBA-T/TCLPPEST	11/27 12/02	JP	1214	RD	16541-1	00546			79.3	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			1A: SG-PGA-1	S	8150_A-T/HERBS	11/27 12/02	OS	1214		16473-1	S8982			79.3	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			3A: SG-TRGE-1	S	8080PBA-T/TCLPPEST	11/27 12/02	JP	1215	RD	16541-1	00547			82.0	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			3A: SG-TRGE-1	S	8150_A-T/HERBS	11/27 12/02	OS	1214		16473-1	S8983			82.0	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			5A. SG-TRGE-2	S	8080PBA-T/TCLPPEST	11/27 12/02	JP	1215	RD	16541-1	00548			85.1	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			5A: SG-TRGE-2	S	8150_A-T/HERBS	11/27 12/02	OS	1214		16473-1	S8984			85.1	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			7A: SG-PGF-1	S	8080PBA-T/TCLPPEST	11/27 12/02	JP	1215	RD	16541-1	00549			78.4	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			7A: SG-PGF-1	S	8150_A-T/HERBS	11/27 12/02	OS	1214		16473-1	S8985			78.4	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			9A: S6-PGF-2	S	8080PBA-T/TCLPPEST	11/27 12/02	JP	1215	RD	16541-1	00550			83.5	0
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			9A S6-PGF-2	S	8150_A-T/HERBS	11/27 12/02	OS	1214		16473-1	S8986			83.5	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			11A. SG-PGF-3	S	8080PBA-T/TCLPPEST	11/27 12/02	JP	1215	RD	16541-1	00551			71.9	0

QC CHRONICLE

Blanks				Spikes			
	#	mat		sample	M file	MS file	MSD file
16541	03	W	0545				
16835	2	S	00528				
16473	04	W	58979				

Calibration

	Date	File	MS
init			
chk			

DL LIST: REVIEWED: Bozer LAB TAT: CHECKED: 12/9/96

Fax: 12/04/96
Report: 12/10/96
Received: 11/29/96
Client: Foster Wheeler - PA
Deliverable: Reduced Deliverables
Disk Due:
Regulation: Resource Conservation Recovery Act (Federal)
Special Requirements: NAVY PROJECT--HAND IN BLANK SPIKES.

LRI Laboratory Chronicle
GC Semivolatiles

Report # T611436

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12/3/96
6:20:01 PM

Q T	L b	p H	Sample	mat	Test Type	Extracted Date	Extracted By	Analysis Date	Analysis By	Batch	Data File	Dil File	Calc	% Sol	# Ht
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			11A. SG-PGF-3	S	8150_A-T/HERBS	11/27 12/02	OS	1214		16493 -1	58989			71.9	
Sample Comments:															
Analysis Comments: ADD Cu,Ni,Zn															
			1A: SG-PGA-1	S	8080PBA-/PCB_STD	11/27 11/30	FM	1214	BS	16835	00529			79.3	1
Sample Comments:															
Analysis Comments:															
			3A: SG-TRGE-1	S	8080PBA-/PCB_STD	11/27 11/30	FM	1214	BS	16835	00530			82.0	0
Sample Comments:															
Analysis Comments:															
			5A: SG-TRGE-2	S	8080PBA-/PCB_STD	11/27 11/30	FM	1214	BS	16835	00533			85.1	1
Sample Comments:															
Analysis Comments:															
			7A: SG-PGF-1	S	8080PBA-/PCB_STD	11/27 11/30	FM	1214	BS	16835	00534			78.4	0
Sample Comments:															
Analysis Comments:															
			9A: S6-PGF-2	S	8080PBA-/PCB_STD	11/27 11/30	FM	1214	BS	16835	00536			83.5	0
Sample Comments:															
Analysis Comments:															
			11A: SG-PGF-3	S	8080PBA-/PCB_STD	11/27 11/30	FM	1214	BS	16835	00535			71.9	1
Sample Comments:															
Analysis Comments:															

16541 - TCLP Blank (Pest) 00222

16493 TCLP HERB Blank M-07502

QC CHRONICLE

Blanks				Spikes			
	#	mat		sample	M file	MS file	MSD file

Calibration

	Date	File	MS
init			
chk			

DL LIST: REVIEWED: LAB TAT: CHECKED:

HOLDING TIMES, PRESERVATION TECHNIQUES, AND REQUIRED TECHNIQUES

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

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).

Note: All holding times mentioned above are based upon the date of sample collection.

Test Method for Evaluating Solid Waste Physical/Chemical Methods SW 846 Final Update-I July 1992.

Standard Method for the Examination of Water and Waste Water 18th Edition 1992.

CASE NARRATIVE

Laboratory Resources, New Jersey Division, received twelve samples for Reduced Deliverables Format on November 27, 1996. The samples were analyzed for the parameters outlined in the chain of custody.

All 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.

All soil, sludge and sediment samples are reported in dry weight.

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

GC/MS CONFORMANCE/NONCONFORMANCE SUMMARY

WORK ORDER NO. T611436

		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 Continuing Calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series		✓
5.	Calibration Requirments		
	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 1,1-Dichloroethene = 158, 154.		
	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:	N	N
11.	Analysis Holding Time Met If not met, list number of days exceeded for each sample:		✓

Laboratory Supervisor: Shaw Date:

1A

TCLP VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

S6-T6A-1

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: T611436-01

Sample wt/vol: 0.5 (g/mL) ML Lab File ID: B7371.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: not dec. 100 Date Analyzed: 12/4/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (mg/L or mg/Kg) mg/L

CAS No.	Compound		Q	REG LIMITS
75-01-4	Vinyl Chloride	0.100	U	0.20
75-35-4	1,1-Dichloroethene	0.050	U	0.70
67-66-3	Chloroform	0.050	U	6.00
107-06-2	1,2-Dichloroethane	0.050	U	0.50
78-93-3	2-Butanone	0.100	U	200.00
56-23-5	Carbon Tetrachloride	0.050	U	0.50
71-43-2	Benzene	0.050	U	0.50
79-01-6	Trichloroethene	0.050	U	0.50
127-18-4	Tetrachloroethene	0.050	U	0.70
108-90-7	Chlorobenzene	0.050	U	100.00

1A

TCLP VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

S6-TR6E-1

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: T611436-03

Sample wt/vol: 0.5 (g/mL) ML Lab File ID: B7374.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: not dec. 100 Date Analyzed: 12/4/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (mg/L or mg/Kg) mg/L

CAS No.	Compound		Q	REG LIMITS
75-01-4	Vinyl Chloride	0.100	U	0.20
75-35-4	1,1-Dichloroethene	0.050	U	0.70
67-66-3	Chloroform	0.050	U	6.00
107-06-2	1,2-Dichloroethane	0.050	U	0.50
78-93-3	2-Butanone	0.100	U	200.00
56-23-5	Carbon Tetrachloride	0.050	U	0.50
71-43-2	Benzene	0.050	U	0.50
79-01-6	Trichloroethene	0.050	U	0.50
127-18-4	Tetrachloroethene	0.050	U	0.70
108-90-7	Chlorobenzene	0.050	U	100.00

1A

TCLP VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

S6-TR6E-2

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: T611436-05

Sample wt/vol: 0.5 (g/mL) ML Lab File ID: B7375.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: not dec. 100 Date Analyzed: 12/4/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (mg/L or mg/Kg) mg/L

CAS No.	Compound		Q	REG LIMITS
75-01-4	Vinyl Chloride	0.100	U	0.20
75-35-4	1,1-Dichloroethene	0.050	U	0.70
67-66-3	Chloroform	0.050	U	6.00
107-06-2	1,2-Dichloroethane	0.050	U	0.50
78-93-3	2-Butanone	0.100	U	200.00
56-23-5	Carbon Tetrachloride	0.050	U	0.50
71-43-2	Benzene	0.050	U	0.50
79-01-6	Trichloroethene	0.050	U	0.50
127-18-4	Tetrachloroethene	0.050	U	0.70
108-90-7	Chlorobenzene	0.050	U	100.00

1A

TCLP VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

S6-T6F-1

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: T611436-07

Sample wt/vol: 0.5 (g/mL) ML Lab File ID: B7376.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: not dec. 100 Date Analyzed: 12/4/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (mg/L or mg/Kg) mg/L

CAS No.	Compound		Q	REG LIMITS
75-01-4	Vinyl Chloride	0.100	U	0.20
75-35-4	1,1-Dichloroethene	0.050	U	0.70
67-66-3	Chloroform	0.050	U	6.00
107-06-2	1,2-Dichloroethane	0.050	U	0.50
78-93-3	2-Butanone	0.100	U	200.00
56-23-5	Carbon Tetrachloride	0.050	U	0.50
71-43-2	Benzene	0.050	U	0.50
79-01-6	Trichloroethene	0.050	U	0.50
127-18-4	Tetrachloroethene	0.050	U	0.70
108-90-7	Chlorobenzene	0.050	U	100.00

1A

TCLP VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

S6-T6F-2

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: T611436-09

Sample wt/vol: 0.5 (g/mL) ML Lab File ID: B7377.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: not dec. 100 Date Analyzed: 12/4/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units: (mg/L or mg/Kg) mg/L

CAS No.	Compound		Q	REG LIMITS
75-01-4	Vinyl Chloride	0.100	U	0.20
75-35-4	1,1-Dichloroethene	0.050	U	0.70
67-66-3	Chloroform	0.050	U	6.00
107-06-2	1,2-Dichloroethane	0.050	U	0.50
78-93-3	2-Butanone	0.100	U	200.00
56-23-5	Carbon Tetrachloride	0.050	U	0.50
71-43-2	Benzene	0.050	U	0.50
79-01-6	Trichloroethene	0.050	U	0.50
127-18-4	Tetrachloroethene	0.050	U	0.70
108-90-7	Chlorobenzene	0.050	U	100.00

1A

TCLP VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

S6-T6F-3

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: T611436-11

Sample wt/vol: 0.5 (g/mL) ML Lab File ID: B7378.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: not dec. 100 Date Analyzed: 12/4/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG LIMITS
75-01-4	Vinyl Chloride	0.100	U	0.20
75-35-4	1,1-Dichloroethene	0.050	U	0.70
67-66-3	Chloroform	0.050	U	6.00
107-06-2	1,2-Dichloroethane	0.050	U	0.50
78-93-3	2-Butanone	0.100	U	200.00
56-23-5	Carbon Tetrachloride	0.050	U	0.50
71-43-2	Benzene	0.050	U	0.50
79-01-6	Trichloroethene	0.050	U	0.50
127-18-4	Tetrachloroethene	0.050	U	0.70
108-90-7	Chlorobenzene	0.050	U	100.00

1A

TCLP VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VBLK04

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: VBLK-QB1204

Sample wt/vol: 5.00000 (g/mL) ML Lab File ID: B7368.D

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

% Moisture: not dec. 100 Date Analyzed: 12/4/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG LIMITS
75-01-4	Vinyl Chloride	0.010	U	0.20
75-35-4	1,1-Dichloroethene	0.005	U	0.70
67-66-3	Chloroform	0.005	U	6.00
107-06-2	1,2-Dichloroethane	0.005	U	0.50
78-93-3	2-Butanone	0.010	U	200.00
56-23-5	Carbon Tetrachloride	0.005	U	0.50
71-43-2	Benzene	0.005	U	0.50
79-01-6	Trichloroethene	0.005	U	0.50
127-18-4	Tetrachloroethene	0.005	U	0.70
108-90-7	Chlorobenzene	0.005	U	100.00

1A

TCLP VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TCLPBLANK

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: TCLP BLAK

Sample wt/vol: 0.5 (g/mL) ML Lab File ID: B7369.D

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

% Moisture: not dec. 100 Date Analyzed: 12/4/96

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG LIMITS
75-01-4	Vinyl Chloride	0.100	U	0.20
75-35-4	1,1-Dichloroethene	0.050	U	0.70
67-66-3	Chloroform	0.050	U	6.00
107-06-2	1,2-Dichloroethane	0.050	U	0.50
78-93-3	2-Butanone	0.100	U	200.00
56-23-5	Carbon Tetrachloride	0.050	U	0.50
71-43-2	Benzene	0.050	U	0.50
79-01-6	Trichloroethene	0.050	U	0.50
127-18-4	Tetrachloroethene	0.050	U	0.70
108-90-7	Chlorobenzene	0.050	U	100.00

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Lab File ID: B7358.D BFB Injection Date: 12/4/96

Instrument ID: MSD/B BFB Injection Time: 0953

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.1
75	30.0 - 60.0% of mass 95	46.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2% of mass 174	0.0 (0.0)1
174	> 50.0 % of mass 95	87.0
175	5.0 - 9.0% of mass 174	6.9 (7.9)1
176	95.0 - 101.0% of mass 174	87.4 (100.4)1
177	5.0 - 9.0% of mass 176	5.4 (6.1)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD020	VSTD020	B7359.D	12/4/96	1024
02	VSTD050	VSTD050	B7360.D	12/4/96	1100
03	VSTD150	VSTD150	B7362.D	12/4/96	1211
04	VSTD200	VSTD200	B7363.D	12/4/96	1247
05	VSTD100	VSTD100	B7364.D	12/4/96	1322
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name : LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Lab File ID: B7365.D BFB Injection Date: 12/4/96

Instrument ID: MSD/B BFB Injection Time: 1354

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.2
75	30.0 - 60.0% of mass 95	45.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2% of mass 174	0.0 (0.0)1
174	> 50.0 % of mass 95	82.9
175	5.0 - 9.0% of mass 174	5.8 (7.0)1
176	95.0 - 101.0% of mass 174	80.7 (97.4)1
177	5.0 - 9.0% of mass 176	5.7 (7.1)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	B7366.D	12/4/96	1455
02	VBLK04	VBLK-QB1204 ✓	B7368.D	12/4/96	1601
03	TCLPBLANK	TCLP BLK ✓	B7369.D	12/4/96	1633
04	VBLK04	VBLK-MEDL BLK	B7370.D	12/4/96	1705
05	S6-T6A-1	T611436-01 ✓	B7371.D	12/4/96	1737
06	S6-T6A-1MS	T611436-01MS ✓	B7372.D	12/4/96	1809
07	S6-T6A-1MSD	T611436-01MSD ✓	B7373.D	12/4/96	1841
08	S6-TR6E-1	T611436-03 ✓	B7374.D	12/4/96	1913
09	S6-TR6E-2	T611436-05 ✓	B7375.D	12/4/96	1945
10	S6-T6F-1	T611436-07 ✓	B7376.D	12/4/96	2018
11	S6-T6F-2	T611436-09 ✓	B7377.D	12/4/96	2050
12	S6-T6F-3	T611436-11 ✓	B7378.D	12/4/96	2122
13	182-B1	T611420-01	B7379.D	12/4/96	2154
14	182-B1MS	T611420-01MS	B7380.D	12/4/96	2226
15	182-B1MSD	T611420-01MSD	B7381.D	12/4/96	2258
16	VARIOUS RAG	T612012-01	B7382.D	12/4/96	2330
17					
18					
19					
20					
21					
22					

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK04

Lab Name: LRI Contract:

Project No.: 8240 Site: Location: Group:

Lab File ID: B7368.D Lab Sample ID: VBLK-QB1204

Date Analyzed: 12/4/96 Time Analyzed: 1601

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: MSD/B

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	TCLPBLANK	TCLP BLK	B7369.D	1633
02	VBLK04	VBLK-MEDL BL	B7370.D	1705
03	S6-T6A-1	T611436-01	B7371.D	1737
04	S6-T6A-1MS	T611436-01MS	B7372.D	1809
05	S6-T6A-1MSD	T611436-01MSD	B7373.D	1841
06	S6-TR6E-1	T611436-03	B7374.D	1913
07	S6-TR6E-2	T611436-05	B7375.D	1945
08	S6-T6F-1	T611436-07	B7376.D	2018
09	S6-T6F-2	T611436-09	B7377.D	2050
10	S6-T6F-3	T611436-11	B7378.D	2122
11	182-B1	T611420-01	B7379.D	2154
12	182-B1MS	T611420-01MS	B7380.D	2226
13	182-B1MSD	T611420-01MSD	B7381.D	2258
14	VARIOUS RAGS	T612012-01	B7382.D	2330
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COMMENTS:

FORM IV VOA

3/90

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VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Instrument ID: MSD/B Calibration Date(s): 12/4/96 12/4/96

Heated Purge: (Y/N) N Calibration Times: 1024 1322

GC Column DB624 ID: 0.53 (mm)

Lab File ID: RRF20= B7359.D RRF50= B7360.D
RRF100= B7364.D RRF150= B7362.D RRF200 B7363.D

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD	
Chloromethane *	0.670	0.702	0.678	1.011	0.742	0.761	18.8	*
Vinyl Chloride	0.694	0.765	0.786	1.231	0.903	0.876	24.3	
Bromomethane	0.472	0.570	0.687	1.156	0.850	0.747	36.0	
Chloroethane	0.457	0.474	0.470	0.729	0.537	0.533	21.3	
Acrolein	0.056	0.055	0.051	0.056	0.049	0.053	5.9	
Trichlorofluoromethane	1.135	1.142	1.085	1.118	1.010	1.098	4.9	
Trichlorotrifluoroethane	1.232	1.245	1.025	2.172	1.148	1.364	33.7	
1,1-Dichloroethene	0.477	0.485	0.447	0.521	0.404	0.467	9.4	
Carbon Disulfide	1.160	1.226	1.429	2.095	1.090	1.400	29.2	
Acetone	0.411	0.286	0.264	0.285	0.260	0.301	20.7	
Acrylonitrile	0.217	0.210	0.205	0.226	0.209	0.213	4.0	
Methylene Chloride	1.332	1.192	1.161	1.241	1.090	1.203	7.5	
trans-1,2-Dichloroethene	1.317	1.282	1.291	1.358	1.195	1.289	4.7	
Methyl tert-butyl ether	2.067	1.884	1.881	2.044	1.787	1.933	6.2	
tert-Butanol	0.086	0.076	0.070	0.082	0.073	0.077	8.9	
Acetonitrile	0.605	0.622	0.597	0.662	0.621	0.622	4.0	
1,1-Dichloroethane *	2.297	2.254	2.269	2.457	2.154	2.286	4.8	*
Diisopropyl Ether								
cis-1,2-Dichloroethene	1.174	1.096	1.120	1.200	1.059	1.130	5.1	
Ethyl Acetate	2.093	2.311	2.460	2.953	2.802	2.524	14.0	
Chloroform	2.567	2.429	2.428	2.584	2.245	2.450	5.6	
1,2-Dichloroethane	1.833	1.599	1.616	1.745	1.552	1.669	7.0	
Vinyl Acetate	0.702	0.484	0.639	0.662	0.649	0.627	13.4	
2-Butanone	0.130	0.119	0.116	0.130	0.116	0.122	5.8	
1,1,1-Trichloroethane	0.513	0.499	0.494	0.524	0.459	0.498	5.0	
Carbon Tetrachloride	0.498	0.475	0.478	0.510	0.457	0.484	4.3	
Benzene	0.784	0.750	0.755	0.795	0.697	0.756	5.1	
Trichloroethene	0.490	0.449	0.452	0.479	0.420	0.458	6.0	
1,2-Dichloropropane	0.367	0.357	0.378	0.408	0.368	0.376	5.2	
Bromodichloromethane	0.693	0.649	0.673	0.738	0.658	0.682	5.2	
2-Chloroethyl vinyl ether	0.203	0.177	0.181	0.201	0.188	0.190	6.1	
trans-1,3-Dichloropropene	0.460	0.389	0.410	0.448	0.419	0.425	6.8	
cis-1,3-Dichloropropene	0.524	0.467	0.491	0.529	0.486	0.499	5.2	
1,1,2-Trichloroethane	0.362	0.341	0.336	0.368	0.330	0.347	4.8	
Dibromochloromethane	0.740	0.686	0.676	0.731	0.653	0.697	5.3	
Bromoform *	0.719	0.676	0.642	0.718	0.640	0.679	5.7	*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Instrument ID: MSD/B Calibration Date(s): 12/4/96 12/4/96

Heated Purge: (Y/N) N Calibration Times: 1024 1322

GC Column DB624 ID: 0.53 (mm)

Lab File ID: RRF20= B7359.D RRF50= B7360.D
RRF100= B7364.D RRF150= B7362.D RRF200 B7363.D

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD	
4-Methyl-2-Pentanone	0.416	0.392	0.399	0.460	0.436	0.420	6.6	
Toluene	1.225	1.128	1.197	1.246	1.118	1.183	4.8	
Tetrachloroethene	0.661	0.598	0.604	0.615	0.544	0.604	6.9	
2-Hexanone	0.262	0.249	0.248	0.291	0.281	0.266	7.2	
1,1,1,2-Tetrachloroethane	0.517	0.447	0.460	0.481	0.417	0.464	8.1	
Chlorobenzene *	0.999	0.915	0.949	1.001	0.898	0.952	5.0	*
Ethylbenzene	0.448	0.415	0.420	0.434	0.384	0.420	5.7	
meta + para-Xylenes	0.558	0.501	0.497	0.511	0.445	0.502	8.0	
ortho-Xylene	0.545	0.496	0.497	0.519	0.460	0.504	6.3	
Styrene	0.893	0.823	0.839	0.876	0.770	0.840	5.7	
Cyclohexanone	0.038	0.034	0.045	0.041	0.040	0.039	9.9	
1,1,2,2-Tetrachloroethane *	0.800	0.748	0.751	0.832	0.778	0.782	4.5	*
1,3-Dichlorobenzene	1.045	0.958	1.009	1.064	0.926	1.000	5.8	
1,4-Dichlorobenzene	1.133	1.026	1.086	1.106	0.969	1.064	6.2	
1,2-Dichlorobenzene	1.027	0.928	0.986	1.024	0.887	0.970	6.3	
Naphthalene	0.360	0.349	0.321	0.456	0.428	0.383	14.8	
1,2-Dichloroethane-d4	1.623	1.231	1.303	1.614	1.343	1.423	12.9	
Toluene-d8	1.193	0.921	1.023	1.237	1.059	1.087	11.9	
Bromofluorobenzene	1.068	0.798	0.870	1.044	0.882	0.932	12.6	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: LRI Contract: _____

Project No. 8240 Site: _____ Location: _____ Group: _____

Instrument ID: MSD/B Calibration Date: 12/4/96 Time: 1455

Lab File ID: B7366.D Init. Calib. Date(s): 12/4/96 12/4/96

Heated Purge: (Y/N) N Init. Calib. Times: 1024 1:22

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.761	0.705	0.300	7.4	
Vinyl Chloride	0.876	0.812		7.3	
Bromomethane	0.747	0.705		5.6	
Chloroethane	0.533	0.501		6.0	
Acrolein	0.053	0.045		15.1	
Trichlorofluoromethane	1.098	1.288		-17.3	
Trichlorotrifluoroethane	1.364	1.256		7.9	
1,1-Dichloroethene	0.467	0.538		-15.2	
Carbon Disulfide	1.400	1.363		2.6	
Acetone	0.301	0.233		22.6	
Acrylonitrile	0.213	0.201		5.6	
Methylene Chloride	1.203	1.390		-15.5	
trans-1,2-Dichloroethene	1.288	1.534		-19.1	
Methyl tert-butyl ether	1.933	1.772		8.3	
tert-Butanol	0.077	0.068		11.7	
Acetonitrile	0.622	0.592		4.8	
1,1-Dichloroethane	2.286	2.692	0.300	-17.8	
Diisopropyl Ether					
cis-1,2-Dichloroethene	1.130	1.332		-17.9	
Ethyl Acetate	2.524	2.490		1.3	
Chloroform	2.450	2.852		-16.4	
1,2-Dichloroethane	1.669	1.935		-15.9	
Vinyl Acetate	0.627	0.794		-26.6	
2-Butanone	0.122	0.133		-9.0	
1,1,1-Trichloroethane	0.498	0.569		-14.3	
Carbon Tetrachloride	0.484	0.566		-16.9	
Benzene	0.756	0.897		-18.7	
Trichloroethene	0.458	0.535		-16.8	
1,2-Dichloropropane	0.376	0.438		-16.5	
Bromodichloromethane	0.682	0.790		-15.8	
2-Chloroethyl vinyl ether	0.190	0.238		-25.3	
trans-1,3-Dichloropropene	0.425	0.524		-23.3	
cis-1,3-Dichloropropene	0.499	0.607		-21.6	
1,1,2-Trichloroethane	0.347	0.398		-14.7	
Dibromochloromethane	0.697	0.804		-15.4	
Bromoform	0.679	0.760	0.250	-11.9	

All other compounds must meet a minimum RRF of 0.010.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: LRI Contract:

Project No. 8240 Site: Location: Group:

Instrument ID: MSD/B Calibration Date: 12/4/96 Time: 1455

Lab File ID: B7366.D Init. Calib. Date(s): 12/4/96 12/4/96

Heated Purge: (Y/N) N Init. Calib. Times: 10:24 1:22

GC Column: DB624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
4-Methyl-2-Pentanone	0.420	0.457		-8.8	
Toluene	1.183	1.373		-16.1	
Tetrachloroethene	0.604	0.719		-19.0	
2-Hexanone	0.266	0.279		-4.9	
1,1,1,2-Tetrachloroethane	0.464	0.428		7.8	
Chlorobenzene	0.952	1.088	0.300	-14.3	
Ethylbenzene	0.420	0.491		-16.9	
meta + para-Xylenes	0.502	0.587		-16.9	
ortho-Xylene	0.503	0.590		-17.3	
Styrene	0.840	0.968		-15.2	
Cyclohexanone	0.039	0.044		-12.8	
1,1,2,2-Tetrachloroethane	0.782	0.865	0.300	-10.6	
1,3-Dichlorobenzene	1.000	1.162		-16.2	
1,4-Dichlorobenzene	1.064	1.227		-15.3	
1,2-Dichlorobenzene	0.970	1.107		-14.1	
Naphthalene	0.421	0.939		-123.0	
1,2-Dichloroethane-d4	1.423	1.408		1.1	
Toluene-d8	1.087	1.059		2.6	
Bromofluorobenzene	0.932	0.904		3.0	

All other compounds must meet a minimum RRF of 0.010.

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

	SAMPLE NO.	SMC1 DCE #	SMC2 TOL #	SMC3 BFB #	OTHER #	TOT OUT
01	VBLK04	96	98	97		
02	TCLPBLANK	94	97	98		
03	S6-T6A-1	97	95	95		
04	S6-T6A-1MS	102	96	99		
05	S6-T6A-1MSD	103	96	99		
06	S6-TR6E-1	99	95	96		
07	S6-TR6E-2	101	96	98		
08	S6-T6F-1	99	95	97		
09	S6-T6F-2	100	94	97		
10	S6-T6F-3	100	94	98		
11	VARIOUS RAGS	92	96	98		
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	QC LIMITS
SMC1 DCE = 1,2-Dichloroethane-d4	(76-114)
SMC2 TOL = Toluene-d8	(88-110)
SMC3 BFB = Bromofluorobenzene	(86-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

TCLP VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: LRI Contract: _____ QC Batch No.: _____

Project No. 8240 Site: _____ Location: _____ Group: _____

Matrix Spike - Sample No.: SG-PGA-1

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC #
Vinyl Chloride	0.500	0	.41	82
1,1-Dichloroethene	0.500	0	.77 *	154 *
Chloroform	0.500	0	.43	86
1,2-Dichloroethane	0.500	0	.46	92
2-Butanone	1.000	0	.89	89
Carbon Tetrachloride	0.500	0	.43	86
Benzene	0.500	0	.40	80
Trichloroethene	0.500	0	.42	84
Tetrachloroethene	0.500	0	.41	82
Chlorobenzene	0.500	0	.43	86

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MS % REC #	% RPD #
Vinyl Chloride	0.500	.41	82	0
1,1-Dichloroethene	0.500	.79 *	158 *	1
Chloroform	0.500	.43	86	0
1,2-Dichloroethane	0.500	.48	96	2
2-Butanone	1.000	.91	91	1
Carbon Tetrachloride	0.500	.44	88	1
Benzene	0.500	.41	82	1
Trichloroethene	0.500	.42	84	0
Tetrachloroethene	0.500	.41	82	0
Chlorobenzene	0.500	.43	86	0

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

*2 out of 20 outside of qc limits

Comments: _____

Lab Name: LRI QC Batch No.: _____

Project No. 8240 Site: _____ Group: _____

Matrix Spike - Sample No.: TCLP BLK MS

COMPOUND	SPIKE ADDED (mg/L)		MS CONCENTRATION (mg/L)	MS % REC #
Vinyl Chloride	0.500		.42	84
1,1-Dichloroethene	0.500		.40	80
Chloroform	0.500		.46	92
1,2-Dichloroethane	0.500		.46	92
2-Butanone	1.000		.99	99
Carbon Tetrachloride	0.500		.43	86
Benzene	0.500		.42	84
Trichloroethene	0.500		.43	86
Tetrachloroethene	0.500		.44	88
Chlorobenzene	0.500		.43	86

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Comments: _____

3/90

36

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LRI Contract: _____

Project No.: 8240 Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7366.D Date Analyzed: 12/4/96

Instrument ID: MSD/B Time Analyzed: 1455

GC Column: DB624 ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 BCM AREA #	RT #	IS2 DFB AREA #	RT #	IS3 CBZ AREA #	RT #
	12 HOUR STD	570957	7.22	2234236	9.16	1764371	14.11
	UPPER LIMIT	1141914	7.72	4468472	9.66	3528742	14.61
	LOWER LIMIT	285479	6.72	1117118	8.66	882186	13.61
	SAMPLE NO.						
01	VBLK04	542206	7.19	2049770	9.16	1635863	14.09
02	TCLPBLANK	502211	7.19	1891968	9.16	1518714	14.09
03	VBLK04	502126	7.21	1867030	9.16	1521991	14.09
04	S6-T6A-1	500459	7.22	1859226	9.16	1522465	14.09
05	S6-T6A-1MS	481776	7.20	1793348	9.15	1455308	14.09
06	S6-T6A-1MSD	471681	7.20	1758319	9.15	1425709	14.09
07	S6-TR6E-1	458851	7.20	1671848	9.15	1378849	14.09
08	S6-TR6E-2	453387	7.19	1706538	9.15	1402542	14.09
09	S6-T6F-1	479587	7.19	1833377	9.16	1500981	14.09
10	S6-T6F-2	491088	7.19	1770247	9.15	1472970	14.09
11	S6-T6F-3	474004	7.20	1712182	9.15	1416266	14.09
12	182-B1	484857	7.23	1786725	9.18	1477644	14.09
13	182-B1MS	461973	7.25	1748628	9.17	1468828	14.10
14	182-B1MSD	512765	7.24	1986499	9.18	1618422	14.11
15	VARIOUS RAGS	536305	7.20	2100602	9.15	1728408	14.09
16							
17							
18							
19							
20							
21							
22							

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

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

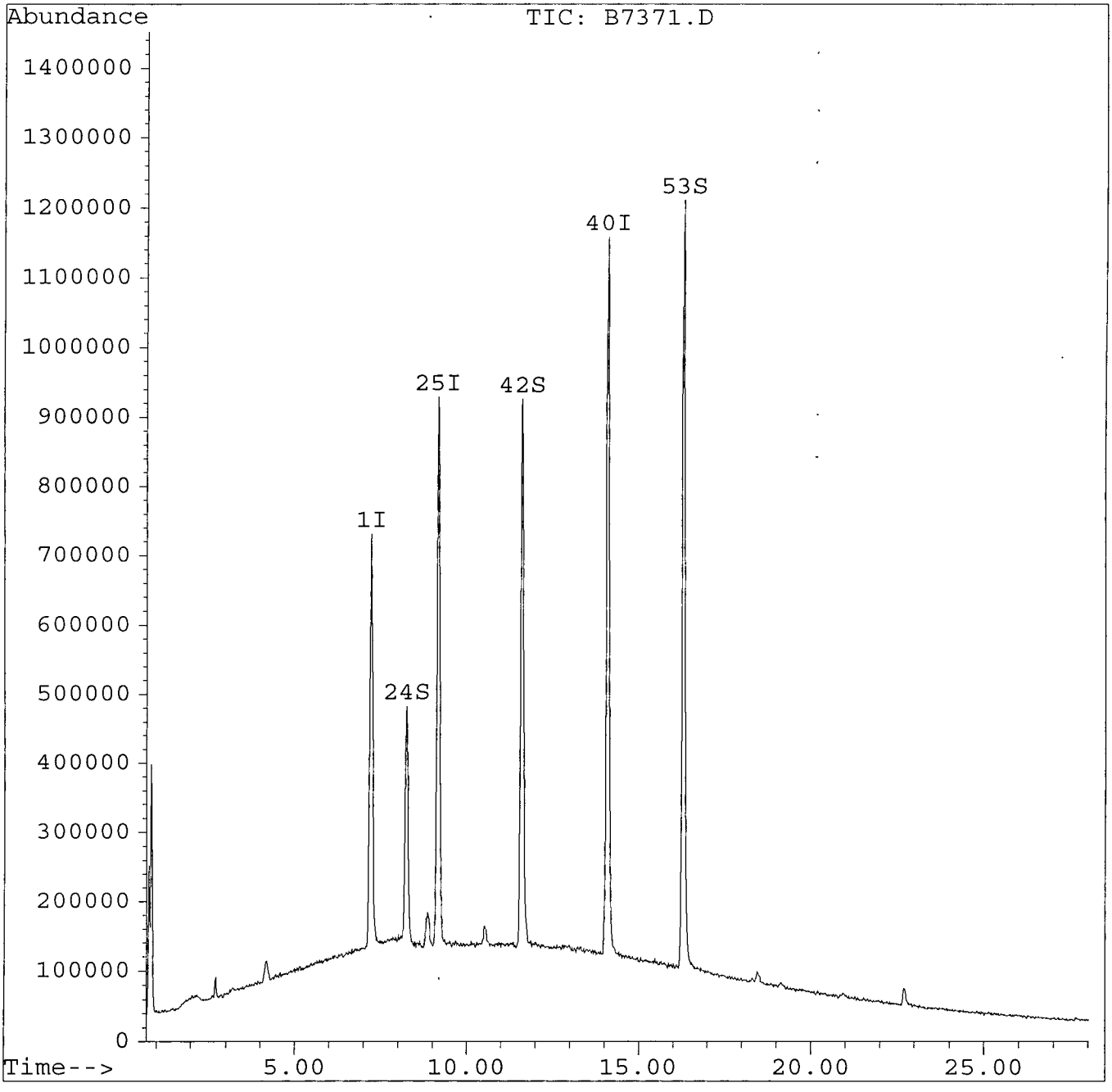
Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7371.D
Acq On : 4 Dec 96 5:37 pm
Sample : T611436-01,L,10X,SG-PGA-1
Misc :
Quant Time: Dec 5 9:26 1996

Vial: 6
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Single Level Calibration



000038

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7371.D
Acq On : 4 Dec 96 5:37 pm
Sample : T611436-01,L,10X,SG-PGA-1
Misc :
Quant Time: Dec 5 9:26 1996

Vial: 6
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\DEC04\B7366.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	7.22	128	500459	50.00 ug/l	0.00
25) 1,4-Difluorobenzene	9.16	114	1859226	50.00 ug/l	0.00
40) Chlorobenzene-d5	14.09	117	1522465	50.00 ug/l	-0.02

System Monitoring Compounds					%Recovery
24) 1,2-Dichloroethane-d4	8.25	65	682992	48.45 ug/l	96.89%
42) Toluene-d8	11.61	98	1537266	47.69 ug/l	95.37%
53) Bromofluorobenzene	16.29	95	1306379	47.44 ug/l	94.88%

Target Compounds Qvalue

O'Hd 12-06-96 pm

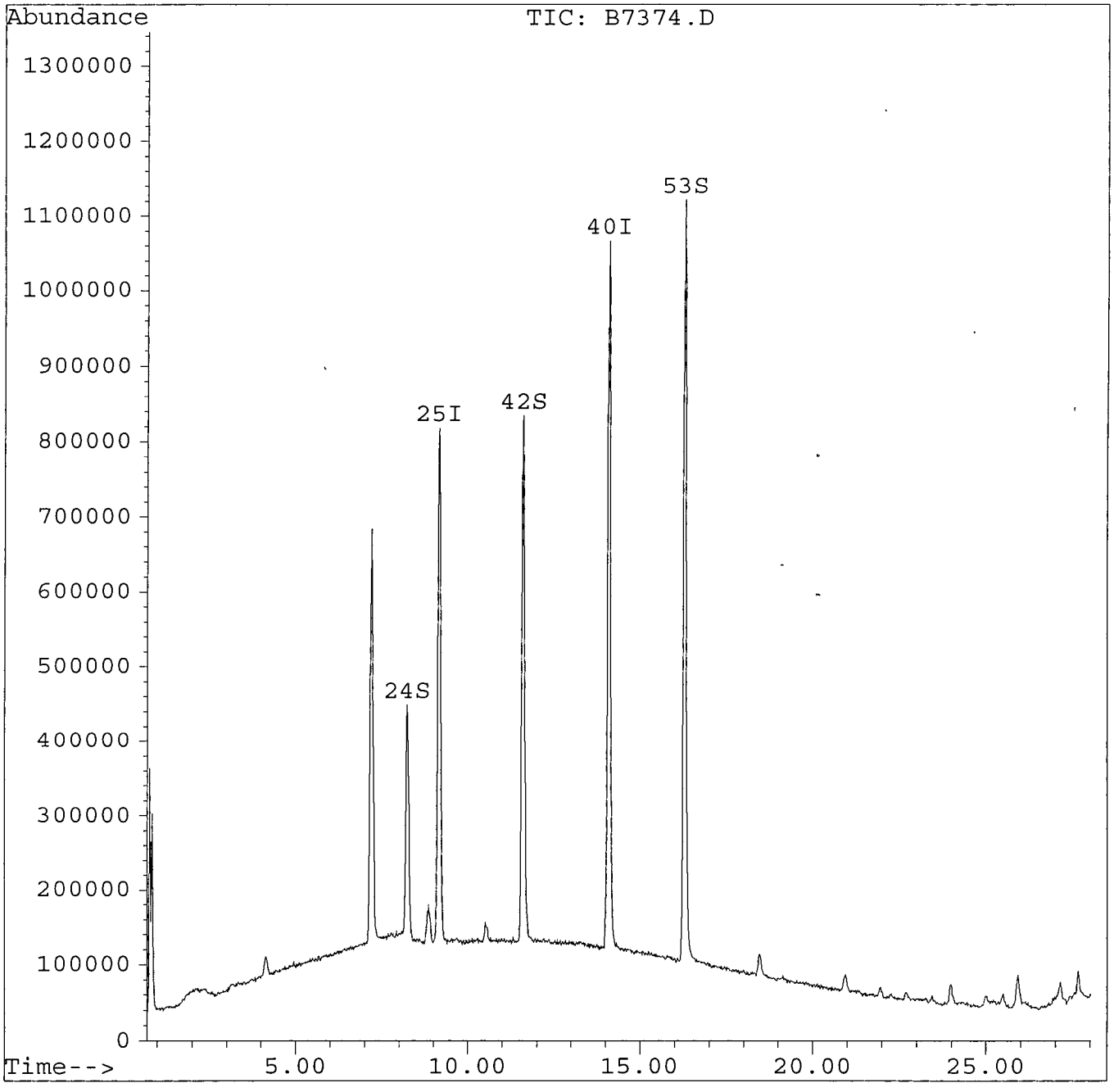
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7374.D
Acq On : 4 Dec 96 7:13 pm
Sample : T611436-03,L,10X,SG-TRGE-1
Misc :
Quant Time: Dec 5 9:30 1996

Vial: 9
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Single Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7374.D Vial: 9
Acq On : 4 Dec 96 7:13 pm Operator:
Sample : T611436-03,L,10X,SG-TRGE-1 Inst : MSD_B
Misc : Multiplr: 1.00
Quant Time: Dec 5 9:30 1996

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\DEC04\B7366.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	7.20	128	458851	50.00 ug/l	-0.02
25) 1,4-Difluorobenzene	9.15	114	1671848	50.00 ug/l	0.00
40) Chlorobenzene-d5	14.09	117	1378849	50.00 ug/l	-0.02

System Monitoring Compounds					%Recovery
24) 1,2-Dichloroethane-d4	8.23	65	640641	49.56 ug/l	99.13%
42) Toluene-d8	11.60	98	1381554	47.32 ug/l	94.64%
53) Bromofluorobenzene	16.29	95	1196351	47.97 ug/l	95.94%

Target Compounds Qvalue

OHE 12-06-96

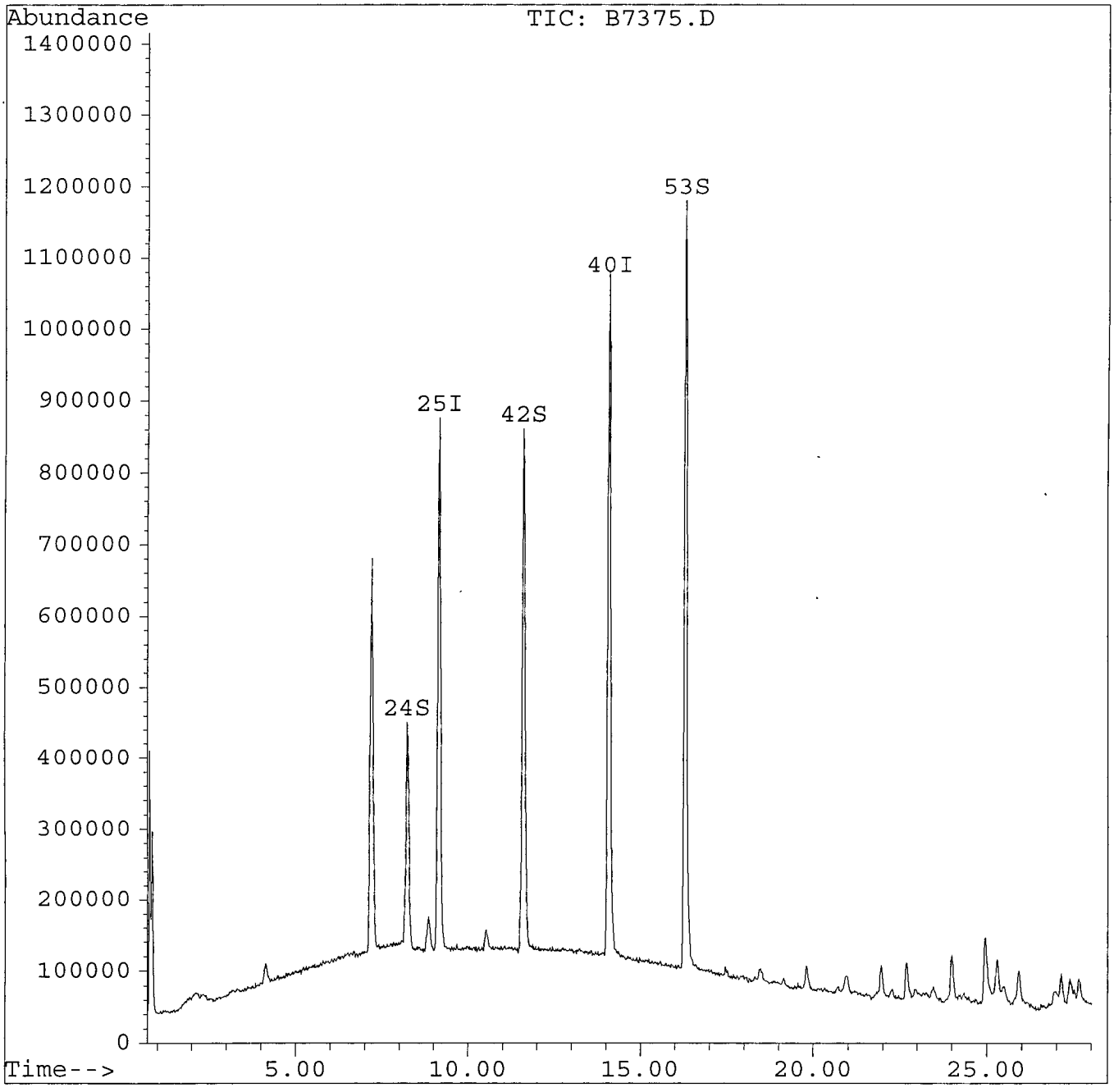
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7375.D
Acq On : 4 Dec 96 7:45 pm
Sample : T611436-05,L,10X,SG-TRGE-2
Misc :
Quant Time: Dec 5 9:31 1996

Vial: 10
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Single Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7375.D Vial: 10
Acq On : 4 Dec 96 7:45 pm Operator:
Sample : T611436-05,L,10X,SG-TRGE-2 Inst : MSD_B
Misc : Multiplr: 1.00
Quant Time: Dec 5 9:31 1996

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\DEC04\B7366.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	7.19	128	453387	50.00 ug/l	-0.03
25) 1,4-Difluorobenzene	9.15	114	1706538	50.00 ug/l	-0.01
40) Chlorobenzene-d5	14.09	117	1402542	50.00 ug/l	-0.01

System Monitoring Compounds					%Recovery
24) 1,2-Dichloroethane-d4	8.22	65	641746	50.25 ug/l	100.50%
42) Toluene-d8	11.60	98	1418020	47.75 ug/l	95.50%
53) Bromofluorobenzene	16.29	95	1248147	49.20 ug/l	98.40%

Target Compounds Qvalue

OHK
12-6-96

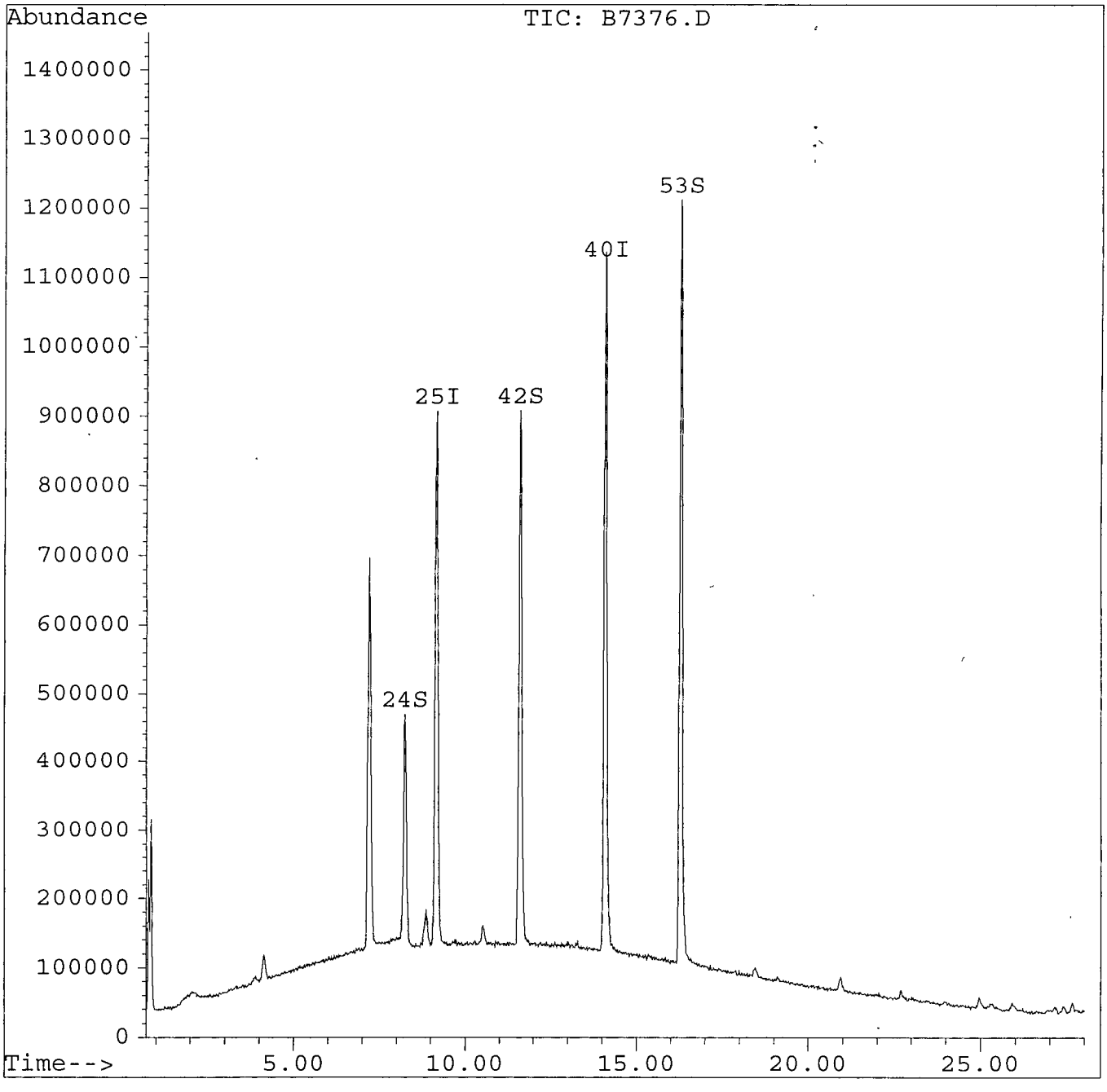
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7376.D
Acq On : 4 Dec 96 8:18 pm
Sample : T611436-07,L,10X,SG-PGF-1
Misc :
Quant Time: Dec 5 9:32 1996

Vial: 11
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Single Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7376.D Vial: 11
Acq On : 4 Dec 96 8:18 pm Operator:
Sample : T611436-07,L,10X,SG-PGF-1 Inst : MSD_B
Misc : Multiplr: 1.00
Quant Time: Dec 5 9:32 1996

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\DEC04\B7366.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	7.19	128	479587	50.00 ug/l	-0.03
25) 1,4-Difluorobenzene	9.16	114	1833377	50.00 ug/l	0.00
40) Chlorobenzene-d5	14.09	117	1500981	50.00 ug/l	-0.02

System Monitoring Compounds					%Recovery
24) 1,2-Dichloroethane-d4	8.24	65	669477	49.56 ug/l	99.11%
42) Toluene-d8	11.59	98	1505927	47.38 ug/l	94.76%
53) Bromofluorobenzene	16.28	95	1314403	48.41 ug/l	96.83%

Target Compounds Qvalue

OHUS 12-6-96

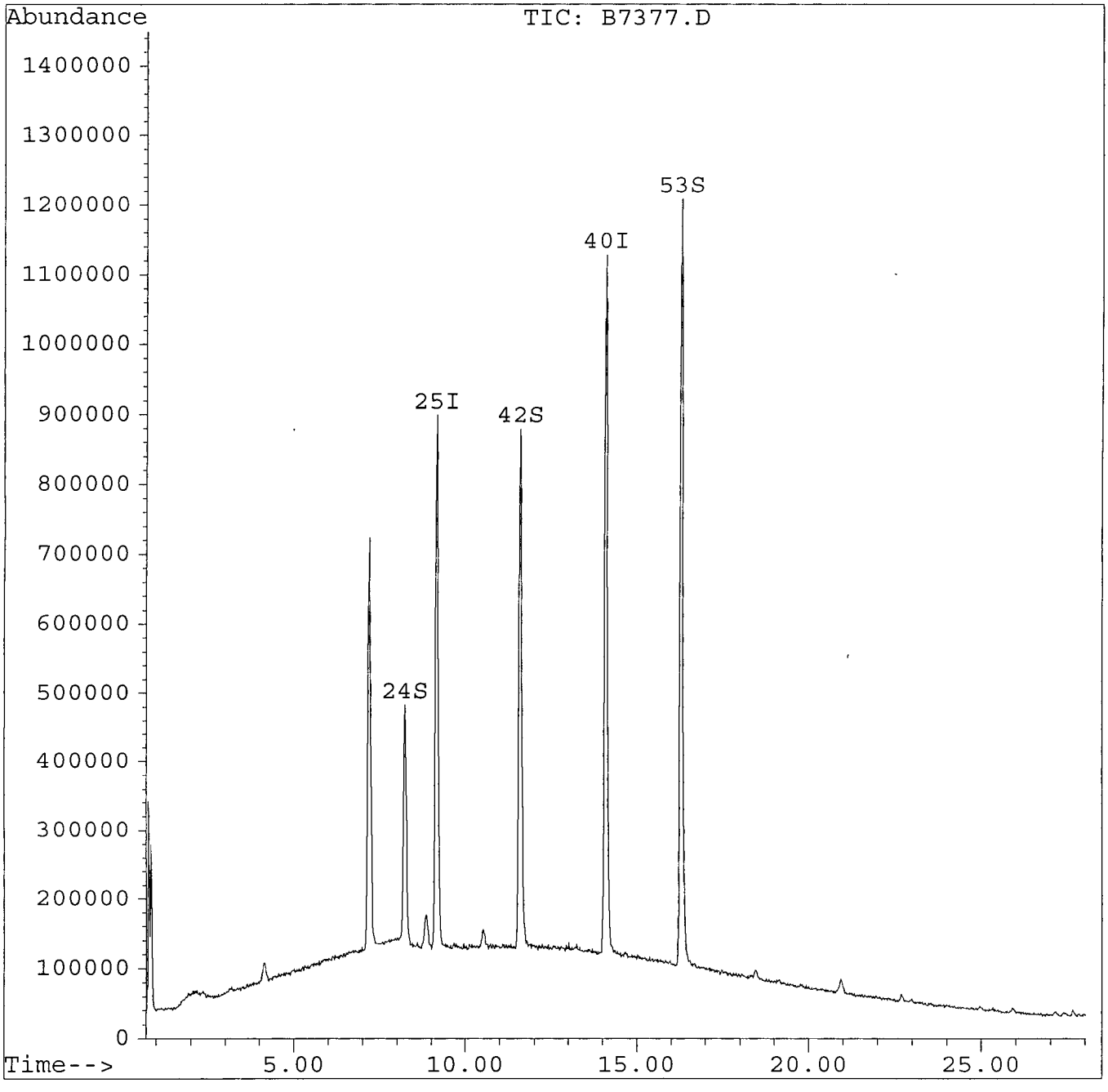
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7377.D
Acq On : 4 Dec 96 8:50 pm
Sample : T611436-09,L,10X,S6-PGF-2
Misc :
Quant Time: Dec 5 9:33 1996

Vial: 12
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Single Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7377.D Vial: 12
Acq On : 4 Dec 96 8:50 pm Operator:
Sample : T611436-09,L,10X,S6-PGF-2 Inst : MSD_B
Misc : Multiplr: 1.00
Quant Time: Dec 5 9:33 1996

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\DEC04\B7366.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	7.19	128	491088	50.00 ug/l	-0.04
25) 1,4-Difluorobenzene	9.15	114	1770247	50.00 ug/l	0.00
40) Chlorobenzene-d5	14.09	117	1472970	50.00 ug/l	-0.02

System Monitoring Compounds					%Recovery
24) 1,2-Dichloroethane-d4	8.23	65	690013	49.88 ug/l	99.76%
42) Toluene-d8	11.59	98	1461302	46.85 ug/l	93.71%
53) Bromofluorobenzene	16.29	95	1293695	48.56 ug/l	97.11%

Target Compounds Qvalue

OHR 12-06-96

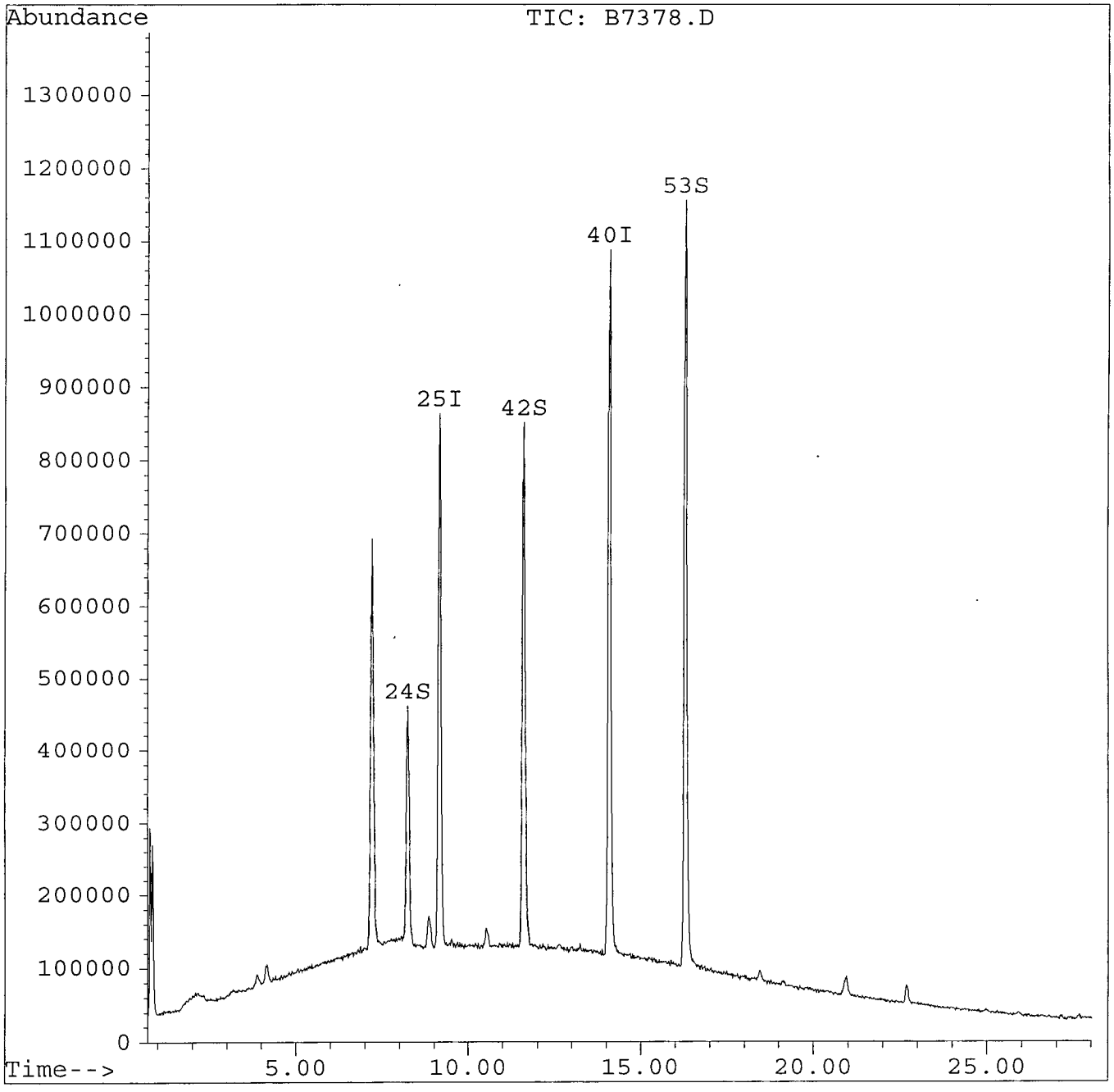
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7378.D
Acq On : 4 Dec 96 9:22 pm
Sample : T611436-11,L,10X,SG-PGF-3
Misc :
Quant Time: Dec 5 9:35 1996

Vial: 13
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Single Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7378.D Vial: 13
Acq On : 4 Dec 96 9:22 pm Operator:
Sample : T611436-11,L,10X,SG-PGF-3 Inst : MSD_B
Misc : Multiplr: 1.00
Quant Time: Dec 5 9:35 1996

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\DEC04\B7366.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	7.20	128	474004	50.00 ug/l	-0.02
25) 1,4-Difluorobenzene	9.15	114	1712182	50.00 ug/l	0.00
40) Chlorobenzene-d5	14.09	117	1416266	50.00 ug/l	-0.02

System Monitoring Compounds					%Recovery
24) 1,2-Dichloroethane-d4	8.23	65	670881	50.24 ug/l	100.49%
42) Toluene-d8	11.60	98	1407452	46.93 ug/l	93.87%
53) Bromofluorobenzene	16.29	95	1258519	49.13 ug/l	98.25%

Target Compounds Qvalue

OHK
12-6-96
✓

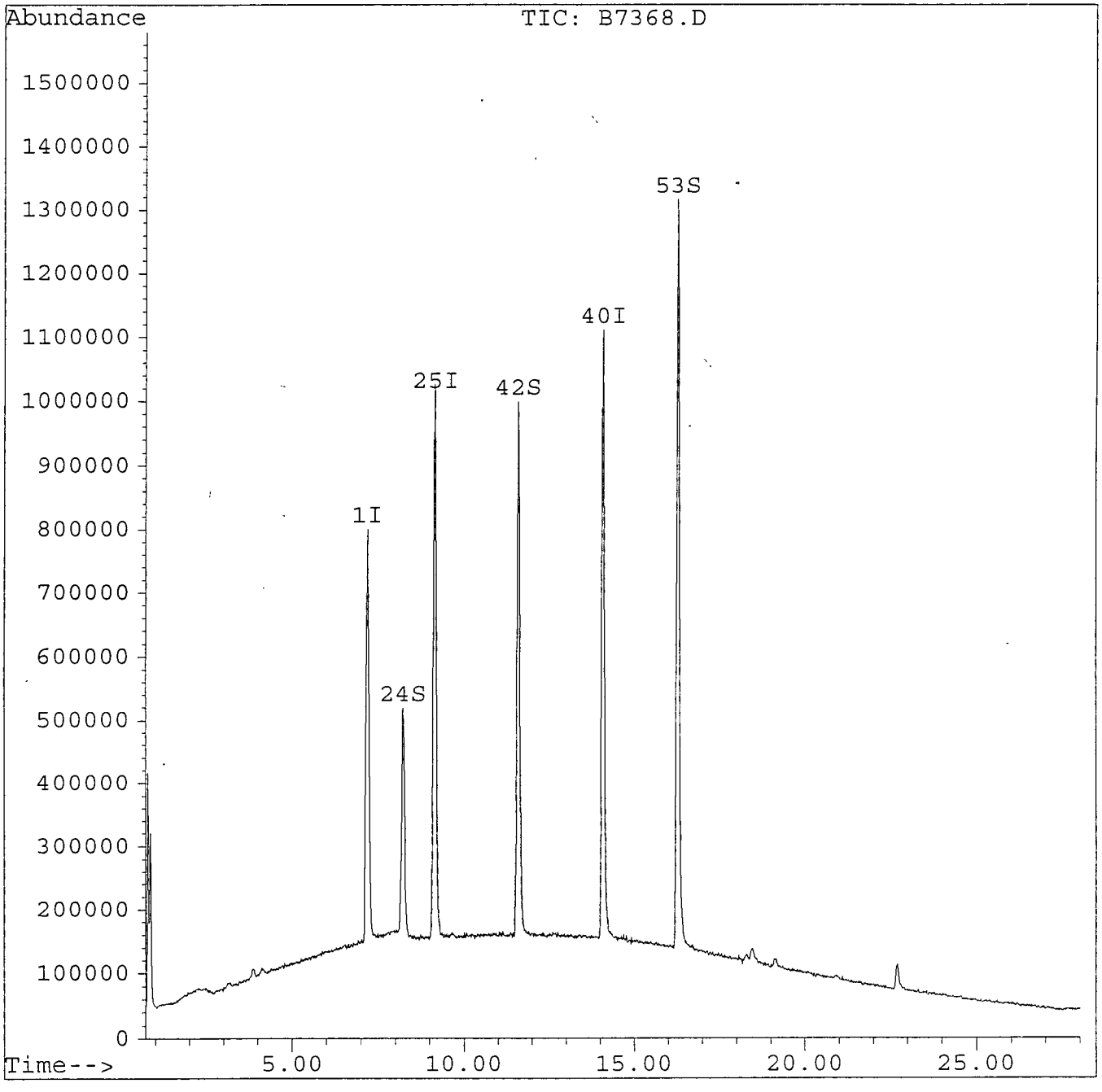
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7368.D
Acq On : 4 Dec 96 4:01 pm
Sample : VBLK-QB1204,L,5.0,VBLK04
Misc :
Quant Time: Dec 5 9:20 1996

Vial: 3
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Single Level Calibration



000150

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7368.D
Acq On : 4 Dec 96 4:01 pm
Sample : VBLK-QB1204,L,5.0,VBLK04
Misc :
Quant Time: Dec 5 9:20 1996

Vial: 3
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\DEC04\B7366.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	7.19	128	542206	50.00 ug/l	-0.03
25) 1,4-Difluorobenzene	9.16	114	2049770	50.00 ug/l	0.00
40) Chlorobenzene-d5	14.09	117	1635863	50.00 ug/l	-0.01

System Monitoring Compounds					%Recovery
24) 1,2-Dichloroethane-d4	8.24	65	729452	47.76 ug/l	95.52%
42) Toluene-d8	11.60	98	1700141	49.08 ug/l	98.16%
53) Bromofluorobenzene	16.28	95	1434772	48.49 ug/l	96.98%

Target Compounds Qvalue

OHt
12-05-96

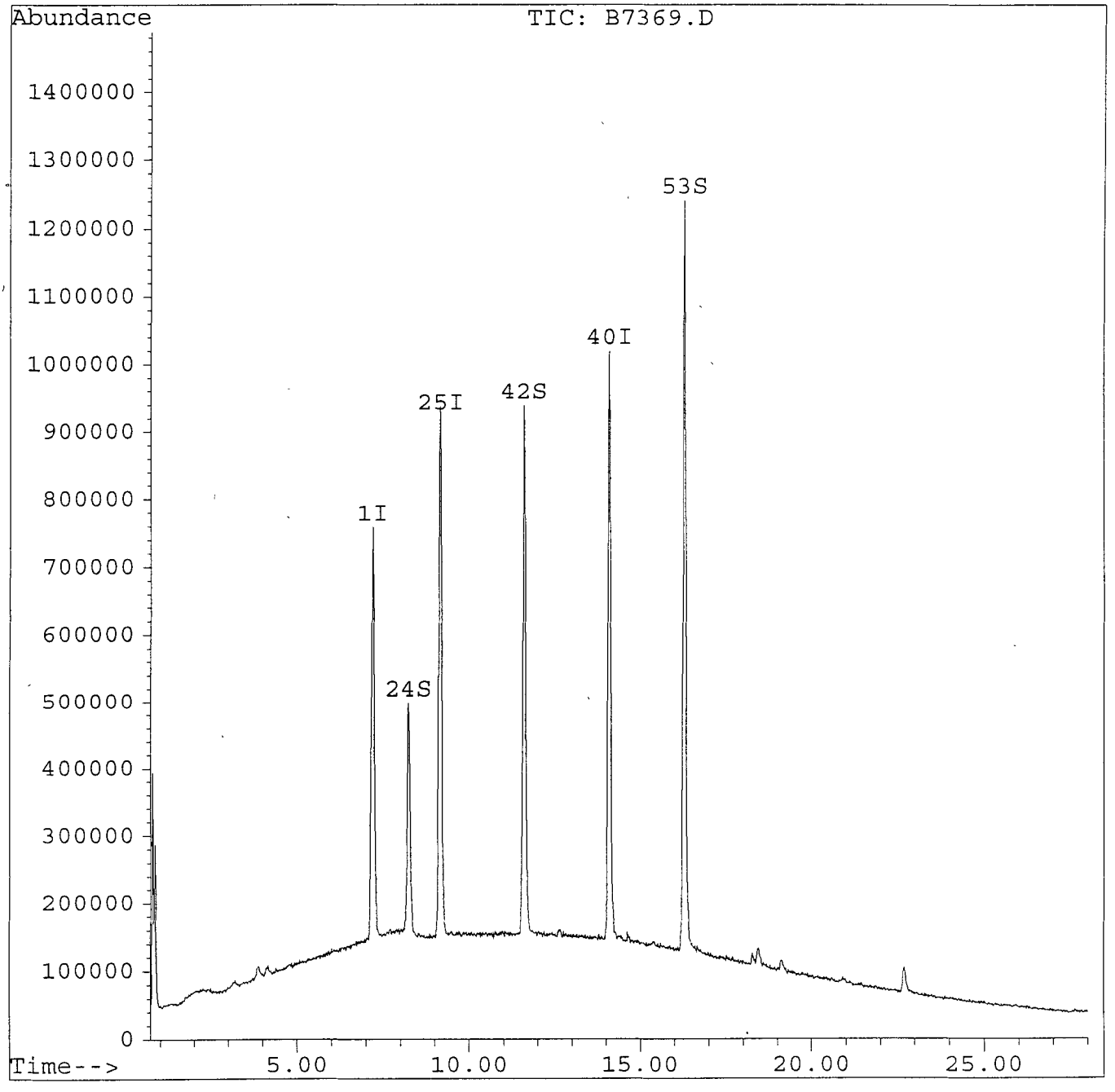
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7369.D
Acq On : 4 Dec 96 4:33 pm
Sample : TCLPBLANK,L,10X,TCLPBLK
Misc :
Quant Time: Dec 5 9:23 1996

Vial: 4
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Single Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\DEC04\B7369.D
Acq On : 4 Dec 96 4:33 pm
Sample : TCLPBLANK,L,10X,TCLPBLK
Misc :
Quant Time: Dec 5 9:23 1996

Vial: 4
Operator:
Inst : MSD_B
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VBL8240.M
Title : EPA METHOD 8240 FOR WATER AND MED LEVEL SOILS
Last Update : Wed Dec 04 15:30:18 1996
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\DEC04\B7366.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Bromochloromethane	7.19	128	502211	50.00 ug/l	-0.03
25) 1,4-Difluorobenzene	9.16	114	1891968	50.00 ug/l	0.00
40) Chlorobenzene-d5	14.09	117	1518714	50.00 ug/l	-0.01

System Monitoring Compounds					%Recovery
24) 1,2-Dichloroethane-d4	8.24	65	665556	47.05 ug/l	94.09%
42) Toluene-d8	11.60	98	1554613	48.34 ug/l	96.69%
53) Bromofluorobenzene	16.28	95	1339673	48.77 ug/l	97.53%

Target Compounds Qvalue

OHE 12-05-96 PM

(#) = qualifier out of range (m) = manual integration
B7369.D VBL8240.M Thu Dec 05 09:23:29 1996 MSD_B Page 1

GC/MS CONFORMANCE/NONCONFORMANCE SUMMARY

MSSV

WORK ORDER NO. T6 11436

		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 Continuing Calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	—	✓
5.	Calibration Requirments		
	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: W. Bry[illegible] Date: 12/12/96

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE ID

SG-PGA-1

Lab Name: Project:8270SVA Client: FOSTER WHEEL

Sample Point: Location: Sampled Date: 11/27/96

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Matrix: (soil/water) WATER LRI Sample ID: T611436-01

Sample wt/vol: 400.0 (g/mL) ML Lab File ID: J6204

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: not dec._____ dec._____ Date Extracted:12/02/96

Final Volume: 1000 UL Date Analyzed: 12/02/96

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg)MG/L	Q
110-86-1	Pyridine	0.025	U
106-46-7	1,4-Dichlorobenzene	0.025	U
95-48-7	2-Methylphenol	0.025	U
67-72-1	Hexachloroethane	0.025	U
106-44-5	4-Methylphenol	0.050	U
98-95-3	Nitrobenzene	0.025	U
87-68-3	Hexachlorobutadiene	0.025	U
88-06-2	2,4,6-Trichlorophenol	0.025	U
95-95-4	2,4,5-Trichlorophenol	0.062	U
121-14-2	2,4-Dinitrotoluene	0.025	U
118-74-1	Hexachlorobenzene	0.025	U
87-86-5	Pentachlorophenol	0.062	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE ID

SG-TRGE-1

Lab Name: Project:8270SVA Client: FOSTER WHEEL

Sample Point: Location: Sampled Date: 11/27/96

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Matrix: (soil/water) WATER LRI Sample ID: T611436-03

Sample wt/vol: 400.0 (g/mL) ML Lab File ID: J6205

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: not dec._____ dec._____ Date Extracted:12/02/96

Final Volume: 1000 UL Date Analyzed: 12/02/96

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg)MG/L	Q
110-86-1	Pyridine	0.025	U
106-46-7	1,4-Dichlorobenzene	0.025	U
95-48-7	2-Methylphenol	0.025	U
67-72-1	Hexachloroethane	0.025	U
106-44-5	4-Methylphenol	0.050	U
98-95-3	Nitrobenzene	0.025	U
87-68-3	Hexachlorobutadiene	0.025	U
88-06-2	2,4,6-Trichlorophenol	0.025	U
95-95-4	2,4,5-Trichlorophenol	0.062	U
121-14-2	2,4-Dinitrotoluene	0.025	U
118-74-1	Hexachlorobenzene	0.025	U
87-86-5	Pentachlorophenol	0.062	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE ID

SG-TRGE-2

Lab Name: Project:8270SVA Client: FOSTER WHEEL

Sample Point: Location: Sampled Date: 11/27/96

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Matrix: (soil/water) WATER LRI Sample ID: T611436-05

Sample wt/vol: 400.0 (g/mL) ML Lab File ID: J6206

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: not dec._____ dec._____ Date Extracted:12/02/96

Final Volume: 1000 UL Date Analyzed: 12/02/96

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg)MG/L	Q
110-86-1	Pyridine	0.025	U
106-46-7	1,4-Dichlorobenzene	0.025	U
95-48-7	2-Methylphenol	0.025	U
67-72-1	Hexachloroethane	0.025	U
106-44-5	4-Methylphenol	0.050	U
98-95-3	Nitrobenzene	0.025	U
87-68-3	Hexachlorobutadiene	0.025	U
88-06-2	2,4,6-Trichlorophenol	0.025	U
95-95-4	2,4,5-Trichlorophenol	0.062	U
121-14-2	2,4-Dinitrotoluene	0.025	U
118-74-1	Hexachlorobenzene	0.025	U
87-86-5	Pentachlorophenol	0.062	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE ID

SG-PGF-1

Lab Name: Project:8270SVA Client: FOSTER WHEEL

Sample Point: Location: Sampled Date: 11/27/96

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Matrix: (soil/water) WATER LRI Sample ID: T611436-07

Sample wt/vol: 400.0 (g/mL) ML Lab File ID: J6207

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: not dec._____ dec._____ Date Extracted:12/02/96

Final Volume: 1000 UL Date Analyzed: 12/02/96

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg)MG/L	Q
110-86-1	Pyridine	0.025	U
106-46-7	1,4-Dichlorobenzene	0.025	U
95-48-7	2-Methylphenol	0.025	U
67-72-1	Hexachloroethane	0.025	U
106-44-5	4-Methylphenol	0.050	U
98-95-3	Nitrobenzene	0.025	U
87-68-3	Hexachlorobutadiene	0.025	U
88-06-2	2,4,6-Trichlorophenol	0.025	U
95-95-4	2,4,5-Trichlorophenol	0.062	U
121-14-2	2,4-Dinitrotoluene	0.025	U
118-74-1	Hexachlorobenzene	0.025	U
87-86-5	Pentachlorophenol	0.062	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE ID

S6-PGF-2

Lab Name: Project:8270SVA Client: FOSTER WHEEL

Sample Point: Location: Sampled Date: 11/27/96

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Matrix: (soil/water) WATER LRI Sample ID: T611436-09

Sample wt/vol: 400.0 (g/mL) ML Lab File ID: J6208

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: not dec._____ dec._____ Date Extracted:12/02/96

Final Volume: 1000 UL Date Analyzed: 12/02/96

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg)MG/L	Q
110-86-1	Pyridine	0.025	U
106-46-7	1,4-Dichlorobenzene	0.025	U
95-48-7	2-Methylphenol	0.025	U
67-72-1	Hexachloroethane	0.025	U
106-44-5	4-Methylphenol	0.050	U
98-95-3	Nitrobenzene	0.025	U
87-68-3	Hexachlorobutadiene	0.025	U
88-06-2	2,4,6-Trichlorophenol	0.025	U
95-95-4	2,4,5-Trichlorophenol	0.062	U
121-14-2	2,4-Dinitrotoluene	0.025	U
118-74-1	Hexachlorobenzene	0.025	U
87-86-5	Pentachlorophenol	0.062	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE ID

SG-PGF-3

Lab Name: Project:8270SVA Client: FOSTER WHEEL

Sample Point: Location: Sampled Date: 11/27/96

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Matrix: (soil/water) WATER LRI Sample ID: T611436-11

Sample wt/vol: 400.0 (g/mL) ML Lab File ID: J6209

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: not dec._____ dec._____ Date Extracted:12/02/96

Final Volume: 1000 UL Date Analyzed: 12/02/96

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg)MG/L	Q
110-86-1	Pyridine	0.025	U
106-46-7	1,4-Dichlorobenzene	0.025	U
95-48-7	2-Methylphenol	0.025	U
67-72-1	Hexachloroethane	0.025	U
106-44-5	4-Methylphenol	0.050	U
98-95-3	Nitrobenzene	0.025	U
87-68-3	Hexachlorobutadiene	0.025	U
88-06-2	2,4,6-Trichlorophenol	0.025	U
95-95-4	2,4,5-Trichlorophenol	0.062	U
121-14-2	2,4-Dinitrotoluene	0.025	U
118-74-1	Hexachlorobenzene	0.025	U
87-86-5	Pentachlorophenol	0.062	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE ID

SBLK03

Lab Name: Project:8270SVA Client:

Sample Point: Location: Sampled Date:

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Matrix: (soil/water) WATER LRI Sample ID: SBLK16760T3

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J6203

Level: (low/med) LOW Date Received:

% Moisture: not dec._____ dec._____ Date Extracted:12/02/96

Final Volume: 1000 UL Date Analyzed: 12/02/96

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (mg/L or mg/Kg)MG/L	Q
110-86-1	Pyridine	0.010	U
106-46-7	1,4-Dichlorobenzene	0.010	U
95-48-7	2-Methylphenol	0.010	U
67-72-1	Hexachloroethane	0.010	U
106-44-5	4-Methylphenol	0.020	U
98-95-3	Nitrobenzene	0.010	U
87-68-3	Hexachlorobutadiene	0.010	U
88-06-2	2,4,6-Trichlorophenol	0.010	U
95-95-4	2,4,5-Trichlorophenol	0.025	U
121-14-2	2,4-Dinitrotoluene	0.010	U
118-74-1	Hexachlorobenzene	0.010	U
87-86-5	Pentachlorophenol	0.025	U

5B

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

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Lab File ID: J6120 DFTPP Injection Date: 11/27/96

Instrument ID: MSDJ DFTPP Injection Time: 1056

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	49.7
70	Less than 2.0% of mass 69	0.0 (0.1)1
127	40.0 - 60.0% of mass 198	44.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	19.0
365	Greater than 1.0% of mass 198	1.6
441	Present, but less than mass 443	8.0
442	Greater than 40.0% of mass 198	52.2
443	17.0 - 23.0% of mass 442	10.1 (19.4)2

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

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

	SAMPLE ID	LRI SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	J6121	11/27/96	1112
02	SSTD020	SSTD020	J6122	11/27/96	1329
03	SSTD080	SSTD080	J6123	11/27/96	1358
04	SSTD120	SSTD120	J6124	11/27/96	1427
05	SSTD160	SSTD160	J6125	11/27/96	1456
06					
07					
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5B

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

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Lab File ID: J6190 DFTPP Injection Date: 12/02/96

Instrument ID: MSDJ DFTPP Injection Time: 1148

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	42.2	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	58.8	
70	Less than 2.0% of mass 69	0.1	(0.1)1
127	40.0 - 60.0% of mass 198	45.5	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 - 9.0% of mass 198	7.0	
275	10.0 - 30.0% of mass 198	18.5	
365	Greater than 1.0% of mass 198	1.6	
441	Present, but less than mass 443	7.1	
442	Greater than 40.0% of mass 198	45.2	
443	17.0 - 23.0% of mass 442	8.4	(18.6)2

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

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

	SAMPLE ID	LRI SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	J6192	12/02/96	1257
02	SBLK03	SBLK16760T3	J6203	12/02/96	1837
03	SG-PGA-1	T611436-01	J6204	12/02/96	1907
04	SG-TRGE-1	T611436-03	J6205	12/02/96	1936
05	SG-TRGE-2	T611436-05	J6206	12/02/96	2005
06	SG-PGF-1	T611436-07	J6207	12/02/96	2034
07	S6-PGF-2	T611436-09	J6208	12/02/96	2104
08	SG-PGF-3	T611436-11	J6209	12/02/96	2133
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22					

FORM V SV

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Lab File ID: J6203 Lab Sample ID: SBLK16760T3

Date Extracted: 12/02/96 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 12/02/96 Time Analyzed: 1837

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

Instrument ID: MSDJ

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

	SAMPLE ID	LRI SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SG-PGA-1	T611436-01	J6204	12/02/96
02	SG-TRGE-1	T611436-03	J6205	12/02/96
03	SG-TRGE-2	T611436-05	J6206	12/02/96
04	SG-PGF-1	T611436-07	J6207	12/02/96
05	S6-PGF-2	T611436-09	J6208	12/02/96
06	SG-PGF-3	T611436-11	J6209	12/02/96
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COMMENTS:

FORM IV SV /chem/msdj.i/611436.b/8270tclp.m TCLP

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Instrument ID: MSDJ Calibration Date(s): 11/27/96

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF1 =J6122.d RRF2 =J6121.d
RRF3 =J6123.d RRF4 =J6124.d RRF5 =J6125.d

COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	$\overline{RRF}$	% RSD
Pyridine	1.533	1.628	1.415	1.462	1.567	1.521	5.5
1,4-Dichlorobenzene *	1.500	1.541	1.336	1.278	1.339	1.399	8.2*
2-Methylphenol	1.543	1.562	1.248	1.253	1.291	1.379	11.5
Hexachloroethane	0.468	0.494	0.416	0.433	0.436	0.449	7.0
4-Methylphenol	1.628	1.542	1.223	1.175	1.219	1.357	15.5
Nitrobenzene	0.429	0.442	0.393	0.357	0.355	0.395	10.1
Hexachlorobutadiene *	0.148	0.170	0.144	0.137	0.132	0.146	10.0*
2,4,6-Trichlorophenol *	0.435	0.424	0.377	0.365	0.335	0.387	10.8*
2,4,5-Trichlorophenol	0.428	0.489	0.381	0.344	0.319	0.392	17.4
2,4-Dinitrotoluene	0.587	0.523	0.426	0.409	0.384	0.466	18.4
Hexachlorobenzene	0.260	0.252	0.206	0.197	0.165	0.216	18.4
Pentachlorophenol *	0.151	0.175	0.144	0.140	0.135	0.149	10.4*
2-Fluorophenol	1.312	1.270	1.301	1.180	1.268	1.266	4.1
Phenol-d5	1.906	1.778	1.692	1.674	1.656	1.741	5.9
Nitrobenzene-d5	0.389	0.446	0.410	0.409	0.363	0.403	7.6
2-Fluorobiphenyl	1.196	1.214	0.996	0.775	0.653	0.967	25.8
2,4,6-Tribromophenol	0.104	0.123	0.107	0.105	0.091	0.106	10.8
Terphenyl-d14	0.898	0.904	0.788	0.737	0.710	0.807	11.1

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Instrument ID: MSDJ Calibration Date(s): 11/27/96

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF1 =J6122.d RRF2 =J6121.d
RRF3 =J6123.d RRF4 =J6124.d RRF5 =J6125.d

COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	$\overline{RRF}$	% RSD

FORM VI SV-2 /chem/msdj.i/611436.b/8270tclp.m TCLP

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Instrument ID: MSDJ Calibration Date: 12/02/96 Time: 1257

Lab File ID: J6192 Init. Calib. Date(s): 11/27/96

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.00%

COMPOUND	$\overline{RRF}$	RRF50	%D	
Pyridine	1.5211	1.7590	15.6	
1,4-Dichlorobenzene	*1.3988	1.5630	11.7	*
2-Methylphenol	1.3795	1.6111	16.8	
Hexachloroethane	0.4496	0.4778	6.27	
4-Methylphenol	1.3573	1.5801	16.4	
Nitrobenzene	0.3953	0.4035	2.07	
Hexachlorobutadiene	*0.1462	0.1578	7.93	*
2,4,6-Trichlorophenol	*0.3874	0.4099	5.81	*
2,4,5-Trichlorophenol	0.3923	0.4341	10.6	
2,4-Dinitrotoluene	0.4658	0.4662	0.0859	
Hexachlorobenzene	0.2162	0.2251	4.12	
Pentachlorophenol	*0.1493	0.1355	9.24	*
2-Fluorophenol	1.2663	1.3854	9.40	
Phenol-d5	1.7411	1.9158	10.0	
Nitrobenzene-d5	0.4033	0.4204	4.24	
2-Fluorobiphenyl	0.9668	1.2277	27.0	<-
2,4,6-Tribromophenol	0.1060	0.1036	2.26	
Terphenyl-d14	0.8076	0.9740	20.6	

FORM VIISV-1 /chem/msdj.i/611436.b/8270tclp.m TCLP

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611436

	SAMPLE ID	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	OTHER	TOT OUT
01	SBLK03	68	59	60	69	67	72		0
02	SG-PGA-1	69	69	65	62	68	73		0
03	SG-TRGE-1	70	65	63	70	71	78		0
04	SG-TRGE-2	67	71	60	70	68	78		0
05	SG-PGF-1	84	76	77	70	75	76		0
06	S6-PGF-2	98	84	73	65	79	76		0
07	SG-PGF-3	81	77	71	68	78	76		0
08									
09									
10									
11									
12									
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30									

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

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

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611275

Matrix Spike - Sample ID: BMSC01

COMPOUND	SPIKE ADDED (MG/L)	SAMPLE CONCENTRATION (MG/L)	MS CONCENTRATION (MG/L)	MS % REC #	QC. LIMITS REC.
Pyridine	0.50	0.00	0.35	70	10-120
1,4-Dichlorobenzene	0.50	0.00	0.33	66	10-120
2-Methylphenol	0.50	0.00	0.46	92	10-120
Hexachloroethane	0.50	0.00	0.32	64	10-120
4-Methylphenol	1.0	0.00	0.85	85	10-120
Nitrobenzene	0.50	0.00	0.33	66	10-120
Hexachlorobutadiene	0.50	0.00	0.29	58	10-120
2,4,6-Trichlorophenol	0.50	0.00	0.32	64	10-120
2,4,5-Trichlorophenol	0.50	0.00	0.37	74	10-120
2,4-Dinitrotoluene	0.50	0.00	0.41	82	10-120
Hexachlorobenzene	0.50	0.00	0.29	58	10-120
Pentachlorophenol	0.50	0.00	0.41	82	10-120

COMPOUND	SPIKE ADDED (MG/L)	MSD CONCENTRATION (MG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Pyridine	0.50	0.31	62	12	20	10-120
1,4-Dichlorobenzene	0.50	0.31	62	6	20	10-120
2-Methylphenol	0.50	0.42	84	9	20	10-120
Hexachloroethane	0.50	0.31	62	3	20	10-120
4-Methylphenol	1.0	0.81	81	5	20	10-120
Nitrobenzene	0.50	0.33	66	0	20	10-120
Hexachlorobutadiene	0.50	0.27	54	7	20	10-120
2,4,6-Trichlorophenol	0.50	0.29	58	10	20	10-120
2,4,5-Trichlorophenol	0.50	0.34	68	8	20	10-120
2,4-Dinitrotoluene	0.50	0.38	76	8	20	10-120
Hexachlorobenzene	0.50	0.25	50	15	20	10-120
Pentachlorophenol	0.50	0.37	74	10	20	10-120

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

RPD: 0 out of 12 outside limits
Spike Recovery: 0 out of 24 outside limits

COMMENTS: _____

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Lab File ID (Standard): J6192 Date Analyzed: 12/02/96

Instrument ID: MSDJ Time Analyzed: 1257

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	992650	5.41	4189999	6.66	2301599	8.42
	UPPER LIMIT	1985300	5.91	8379998	7.16	4603198	8.92
	LOWER LIMIT	496325	4.91	2095000	6.16	1150800	7.92
	EPA SAMPLE NO.						
01	SBLK03	797752	5.41	3145925	6.65	1778232	8.41
02	SG-PGA-1	731985	5.41	2660504	6.64	1814572	8.40
03	SG-TRGE-1	759583	5.41	3126816	6.64	1758701	8.40
04	SG-TRGE-2	789085	5.41	3412922	6.64	1997606	8.40
05	SG-PGF-1	741780	5.41	3000636	6.64	1948920	8.40
06	S6-PGF-2	610596	5.41	2590098	6.64	1737764	8.40
07	SG-PGF-3	800805	5.41	3044530	6.64	1970660	8.41
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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.

FORM VIII SV-1 /chem/msdj.i/611436.b/8270tclp.m TCLP

8C
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Contract: 8270SVA

Lab Code: Case No.: SAS No.: T SDG No.: 611436

Lab File ID (Standard): J6192 Date Analyzed: 12/02/96

Instrument ID: MSDJ Time Analyzed: 1257

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	3536068	9.90	2155505	13.96	2056627	16.95
	UPPER LIMIT	7072136	10.40	4311010	14.46	4113254	17.45
	LOWER LIMIT	1768034	9.40	1077752	13.46	1028314	16.45
	EPA SAMPLE NO.						
01	SBLK03	3082283	9.90	2089167	13.93	1892307	16.92
02	SG-PGA-1	3165963	9.90	1982158	13.93	1857271	16.92
03	SG-TRGE-1	3069268	9.90	1963842	13.93	1862981	16.92
04	SG-TRGE-2	3317635	9.90	2012599	13.93	1897402	16.92
05	SG-PGF-1	3144438	9.90	2098873	13.93	1771853	16.92
06	S6-PGF-2	3062117	9.89	1980524	13.93	1918334	16.91
07	SG-PGF-3	3356740	9.90	2088575	13.93	1954098	16.91
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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.

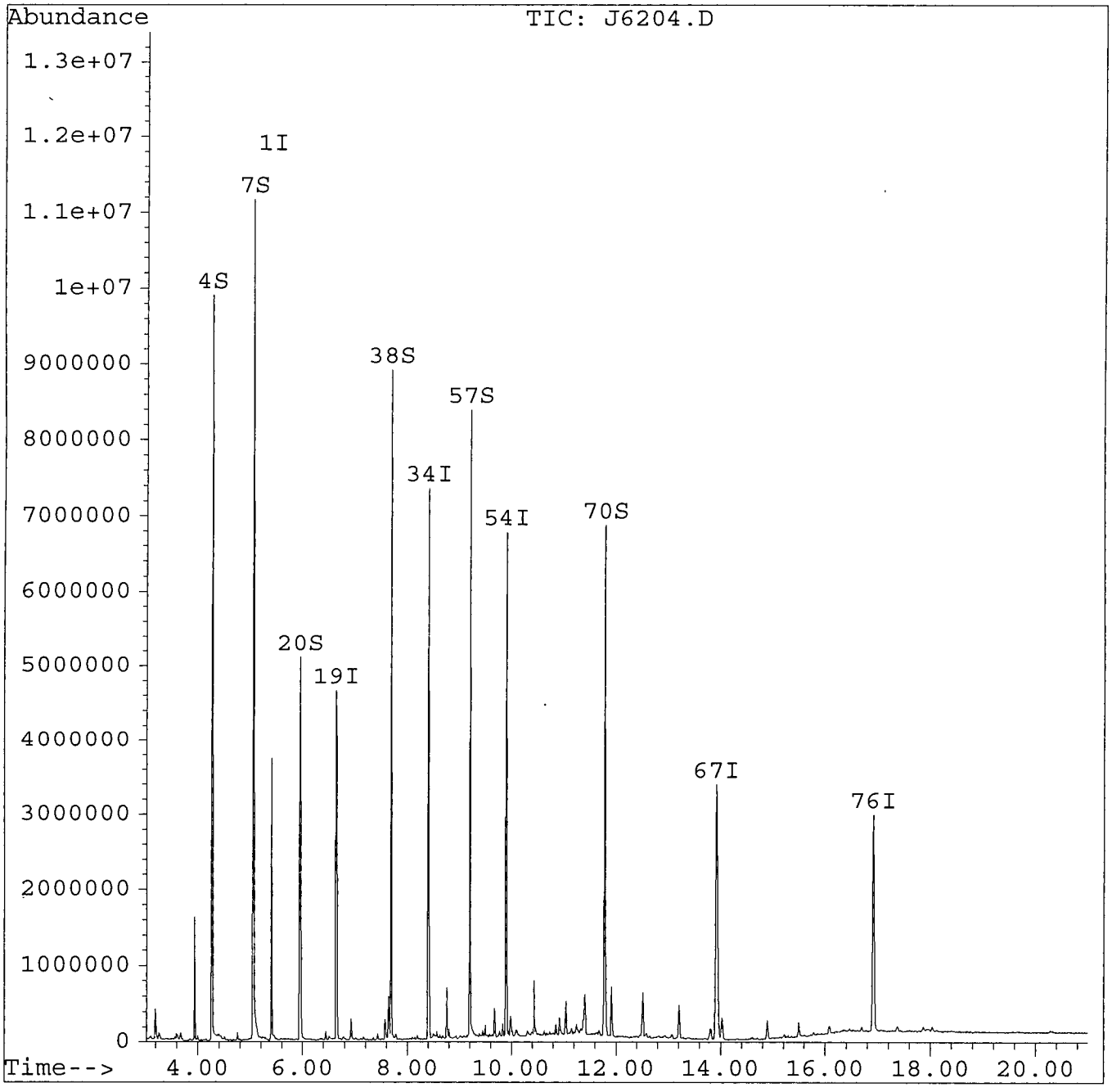
FORM VIII SV-2 /chem/msdj.i/611436.b/8270tclp.m TCLP

Quantitation Report

Data File : d:\dec02\j6204.d
Acq On : 2 Dec 96 7:07 pm
Sample : T611436-01
Misc :
Quant Time: Dec 4 9:35 1996

Vial: 14
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Wed Dec 04 08:05:21 1996
Response via : Single Level Calibration



Quantitation Report

Data File : d:\dec02\j6204.d
Acq On : 2 Dec 96 7:07 pm
Sample : T611436-01
Misc :
Quant Time: Dec 4 9:35 1996

Vial: 14
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Tue Dec 03 08:10:52 1996
Response via : Continuing Cal File: D:\DEC02\J6192.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.41	152	731985	40.00	NG	0.00
19) Naphthalene-d8	6.64	136	2660504	40.00	NG	-0.02
34) Acenaphthene-d10	8.40	164	1814572	40.00	NG	-0.01
54) Phenanthrene-d10	9.90	188	3165963	40.00	NG	0.00
67) Chrysene-d12	13.93	240	1982158	40.00	NG	-0.04
76) Perylene-d12	16.92	264	1857271	40.00	NG	-0.03

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	4.26	112	3504232	138.23	NG	69.11%
7) Phenol-d5	5.05	99	4831219	137.81	NG	68.90%
20) Nitrobenzene-d5	5.95	82	1815392	64.92	NG	64.92%
38) 2-Fluorobiphenyl	7.68	172	3459539	62.12	NG	62.12%
57) 2,4,6-Tribromophenol	9.21	330	1119519	136.58	NG	68.29%
70) Terphenyl-d14	11.79	244	3546842	73.49	NG	73.49%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

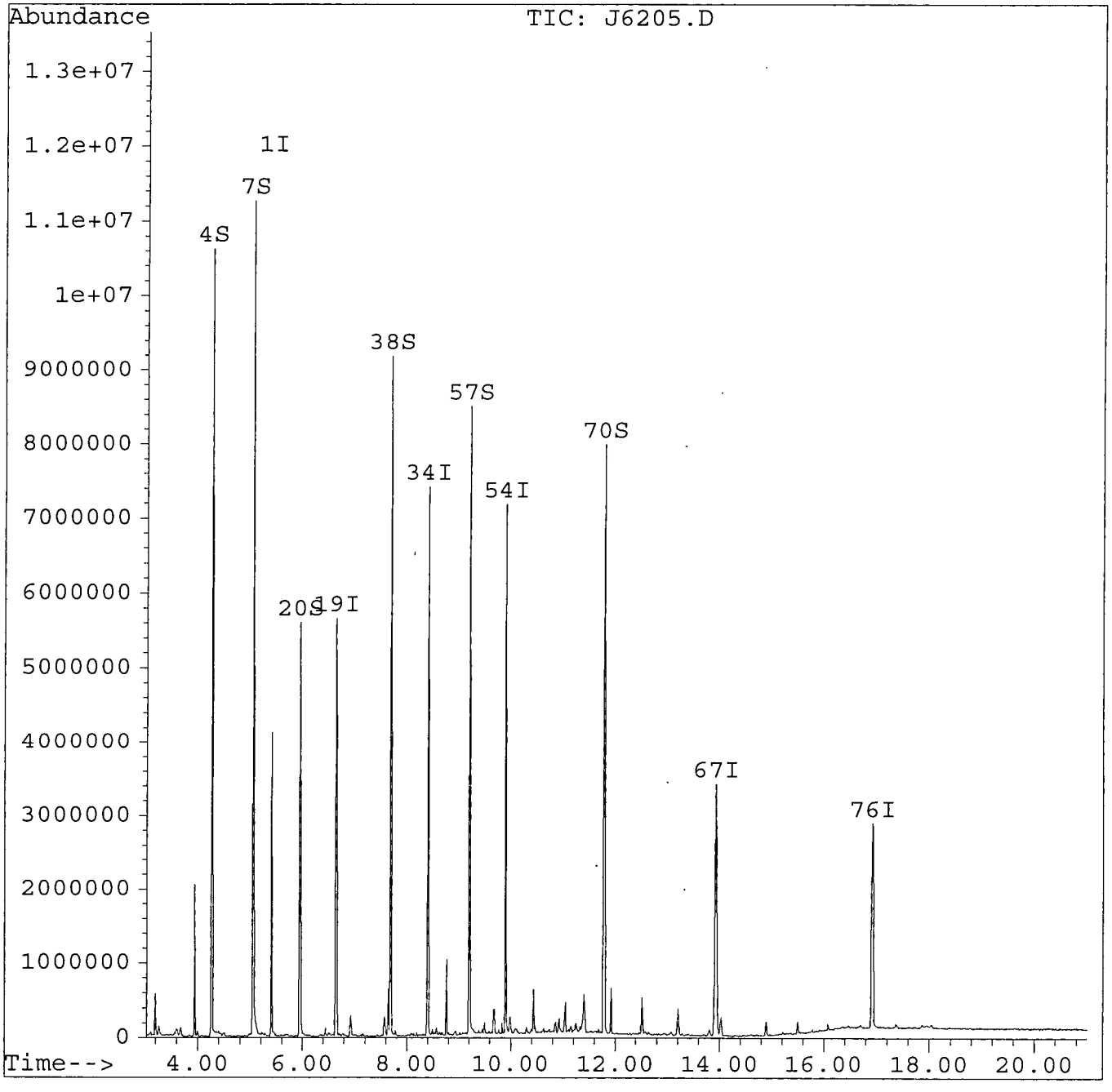
000071

Quantitation Report

Data File : d:\dec02\j6205.d
Acq On : 2 Dec 96 7:36 pm
Sample : T611436-03
Misc :
Quant Time: Dec 4 9:36 1996

Vial: 15
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Wed Dec 04 08:05:21 1996
Response via : Single Level Calibration



Quantitation Report

Data File : d:\dec02\j6205.d
Acq On : 2 Dec 96 7:36 pm
Sample : T611436-03
Misc :
Quant Time: Dec 4 9:36 1996

Vial: 15
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Tue Dec 03 08:10:52 1996
Response via : Continuing Cal File: D:\DEC02\J6192.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.41	152	759583	40.00	NG	0.00
19) Naphthalene-d8	6.64	136	3126816	40.00	NG	-0.02
34) Acenaphthene-d10	8.40	164	1758701	40.00	NG	-0.02
54) Phenanthrene-d10	9.90	188	3069268	40.00	NG	0.00
67) Chrysene-d12	13.93	240	1963842	40.00	NG	-0.03
76) Perylene-d12	16.92	264	1862981	40.00	NG	-0.03

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	4.26	112	3707559	140.93	NG	70.47%
7) Phenol-d5	5.05	99	4730977	130.04	NG	65.02%
20) Nitrobenzene-d5	5.95	82	2070714	63.00	NG	63.00%
38) 2-Fluorobiphenyl	7.68	172	3775793	69.95	NG	69.95%
57) 2,4,6-Tribromophenol	9.20	330	1131674	142.41	NG	71.21%
70) Terphenyl-d14	11.79	244	3719699	77.79	NG	77.79%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

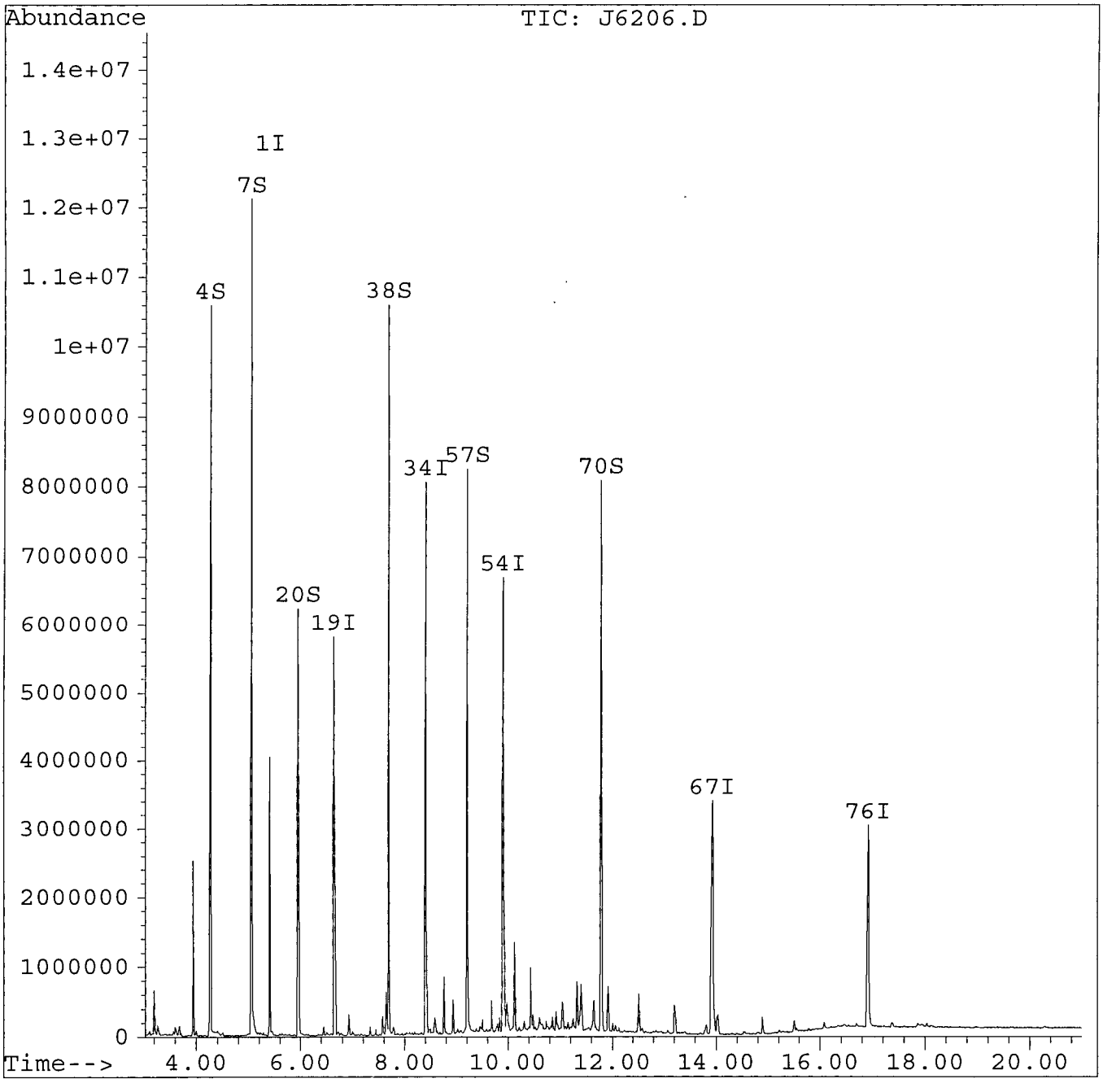
000173

Quantitation Report

Data File : d:\dec02\j6206.d
Acq On : 2 Dec 96 8:05 pm
Sample : T611436-05
Misc :
Quant Time: Dec 4 9:38 1996

Vial: 16
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Wed Dec 04 08:05:21 1996
Response via : Single Level Calibration



Quantitation Report

Data File : d:\dec02\j6206.d
Acq On : 2 Dec 96 8:05 pm
Sample : T611436-05
Misc :
Quant Time: Dec 4 9:38 1996

Vial: 16
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Tue Dec 03 08:10:52 1996
Response via : Continuing Cal File: D:\DEC02\J6192.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.41	152	789085	40.00 NG	0.00
19) Naphthalene-d8	6.64	136	3412922	40.00 NG	-0.02
34) Acenaphthene-d10	8.40	164	1997606	40.00 NG	-0.01
54) Phenanthrene-d10	9.90	188	3317635	40.00 NG	0.00
67) Chrysene-d12	13.93	240	2012599	40.00 NG	-0.03
76) Perylene-d12	16.92	264	1897402	40.00 NG	-0.03
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol	4.26	112	3651446	133.61 NG	66.80%
7) Phenol-d5	5.05	99	5342299	141.36 NG	70.68%
20) Nitrobenzene-d5	5.95	82	2170649	60.51 NG	60.51%
38) 2-Fluorobiphenyl	7.68	172	4267207	69.60 NG	69.60%
57) 2,4,6-Tribromophenol	9.21	330	1174192	136.70 NG	68.35%
70) Terphenyl-d14	11.79	244	3809933	77.75 NG	77.75%
Target Compounds					**Qvalue**

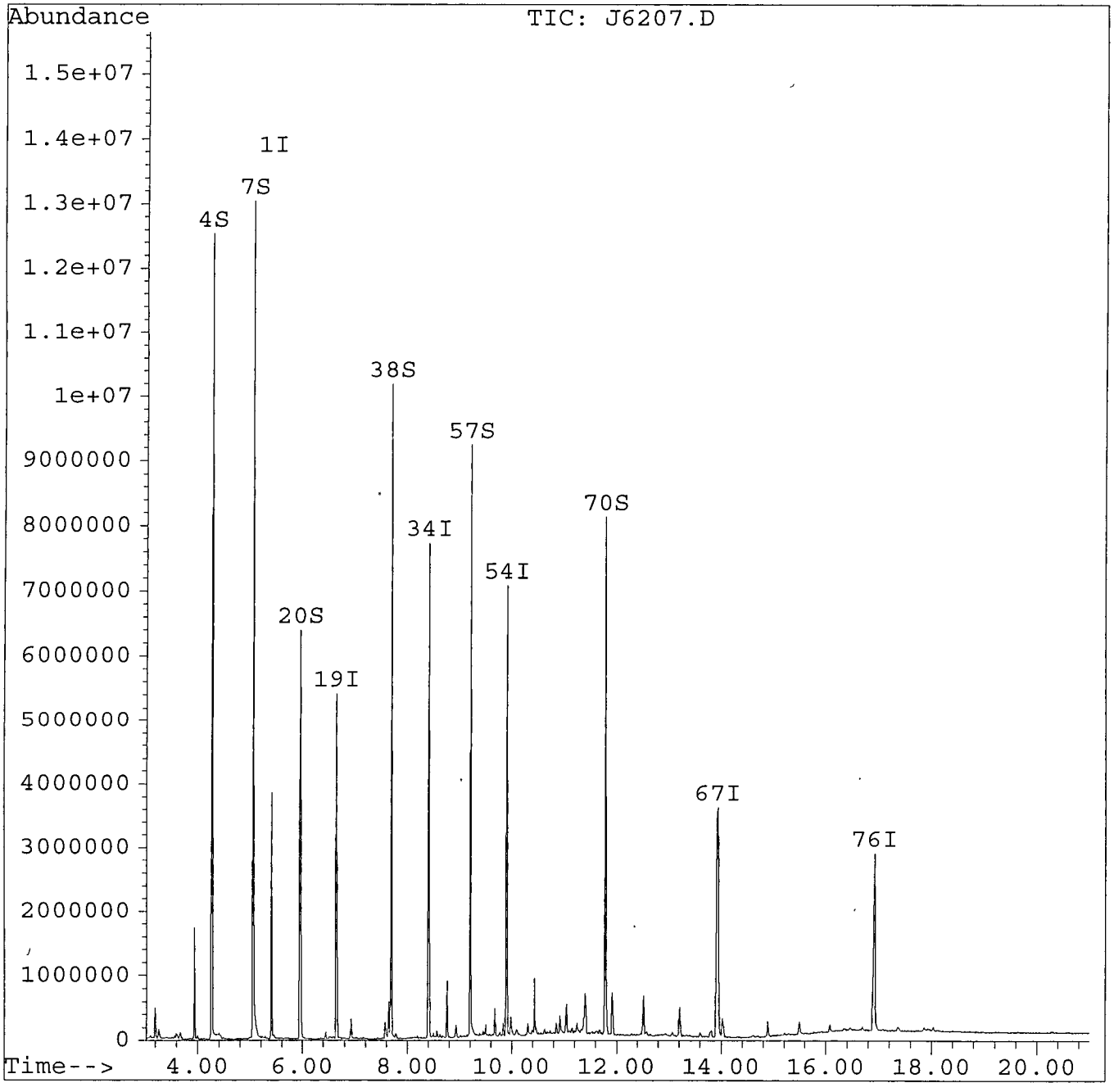
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\dec02\j6207.d
Acq On : 2 Dec 96 8:34 pm
Sample : T611436-07
Misc :
Quant Time: Dec 4 9:39 1996

Vial: 17
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Wed Dec 04 08:05:21 1996
Response via : Single Level Calibration



000075

Quantitation Report

Data File : d:\dec02\j6207.d
Acq On : 2 Dec 96 8:34 pm
Sample : T611436-07
Misc :
Quant Time: Dec 4 9:39 1996

Vial: 17
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Tue Dec 03 08:10:52 1996
Response via : Continuing Cal File: D:\DEC02\J6192.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.41	152	741780	40.00 NG	0.00
19) Naphthalene-d8	6.64	136	3000636	40.00 NG	-0.02
34) Acenaphthene-d10	8.40	164	1948920	40.00 NG	-0.02
54) Phenanthrene-d10	9.90	188	3144438	40.00 NG	0.00
67) Chrysene-d12	13.93	240	2098873	40.00 NG	-0.03
76) Perylene-d12	16.92	264	1771853	40.00 NG	-0.03
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol	4.26	112	4314838	167.95 NG	83.98%
7) Phenol-d5	5.05	99	5397772	151.93 NG	75.97%
20) Nitrobenzene-d5	5.95	82	2426138	76.92 NG	76.92%
38) 2-Fluorobiphenyl	7.68	172	4176861	69.83 NG	69.83%
57) 2,4,6-Tribromophenol	9.20	330	1219492	149.80 NG	74.90%
70) Terphenyl-d14	11.78	244	3900578	76.32 NG	76.32%
Target Compounds					**Qvalue**

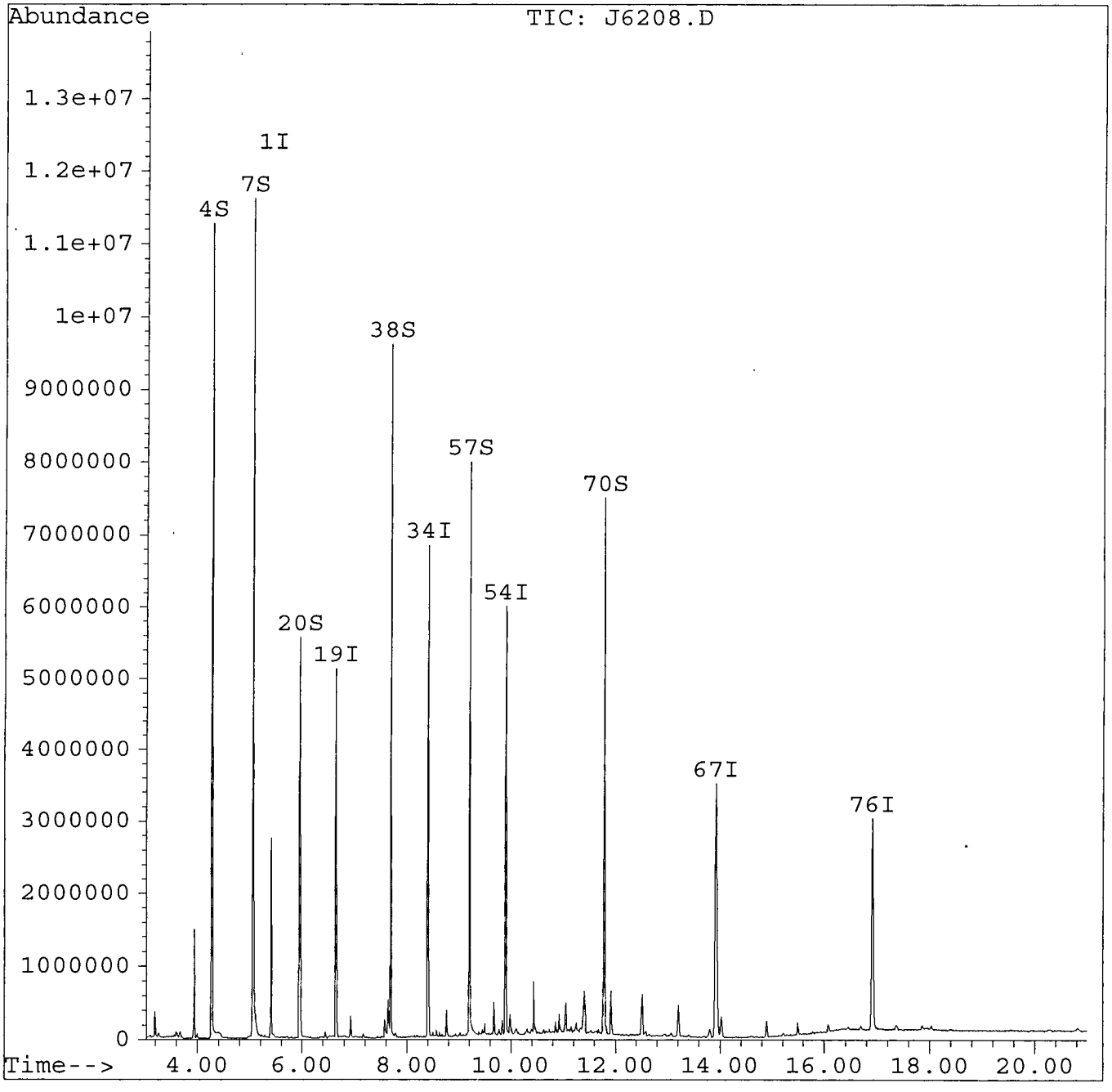
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\dec02\j6208.d
Acq On : 2 Dec 96 9:04 pm
Sample : T611436-09
Misc :
Quant Time: Dec 4 9:40 1996

Vial: 18
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Wed Dec 04 08:05:21 1996
Response via : Single Level Calibration



Quantitation Report

Data File : d:\dec02\j6208.d
Acq On : 2 Dec 96 9:04 pm
Sample : T611436-09
Misc :
Quant Time: Dec 4 9:40 1996

Vial: 18
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Tue Dec 03 08:10:52 1996
Response via : Continuing Cal File: D:\DEC02\J6192.D

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.41	152	610596	40.00	NG	0.00
19) Naphthalene-d8	6.64	136	2590098	40.00	NG	-0.02
34) Acenaphthene-d10	8.40	164	1737764	40.00	NG	-0.01
54) Phenanthrene-d10	9.89	188	3062117	40.00	NG	-0.02
67) Chrysene-d12	13.93	240	1980524	40.00	NG	-0.04
76) Perylene-d12	16.91	264	1918334	40.00	NG	-0.04

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	4.26	112	4151221	196.30	NG	98.15%
7) Phenol-d5	5.05	99	4888232	167.15	NG	83.58%
20) Nitrobenzene-d5	5.95	82	1989763	73.09	NG	73.09%
38) 2-Fluorobiphenyl	7.68	172	3474783	65.15	NG	65.15%
57) 2,4,6-Tribromophenol	9.21	330	1255020	158.31	NG	79.15%
70) Terphenyl-d14	11.78	244	3685595	76.43	NG	76.43%

Target Compounds Qvalue

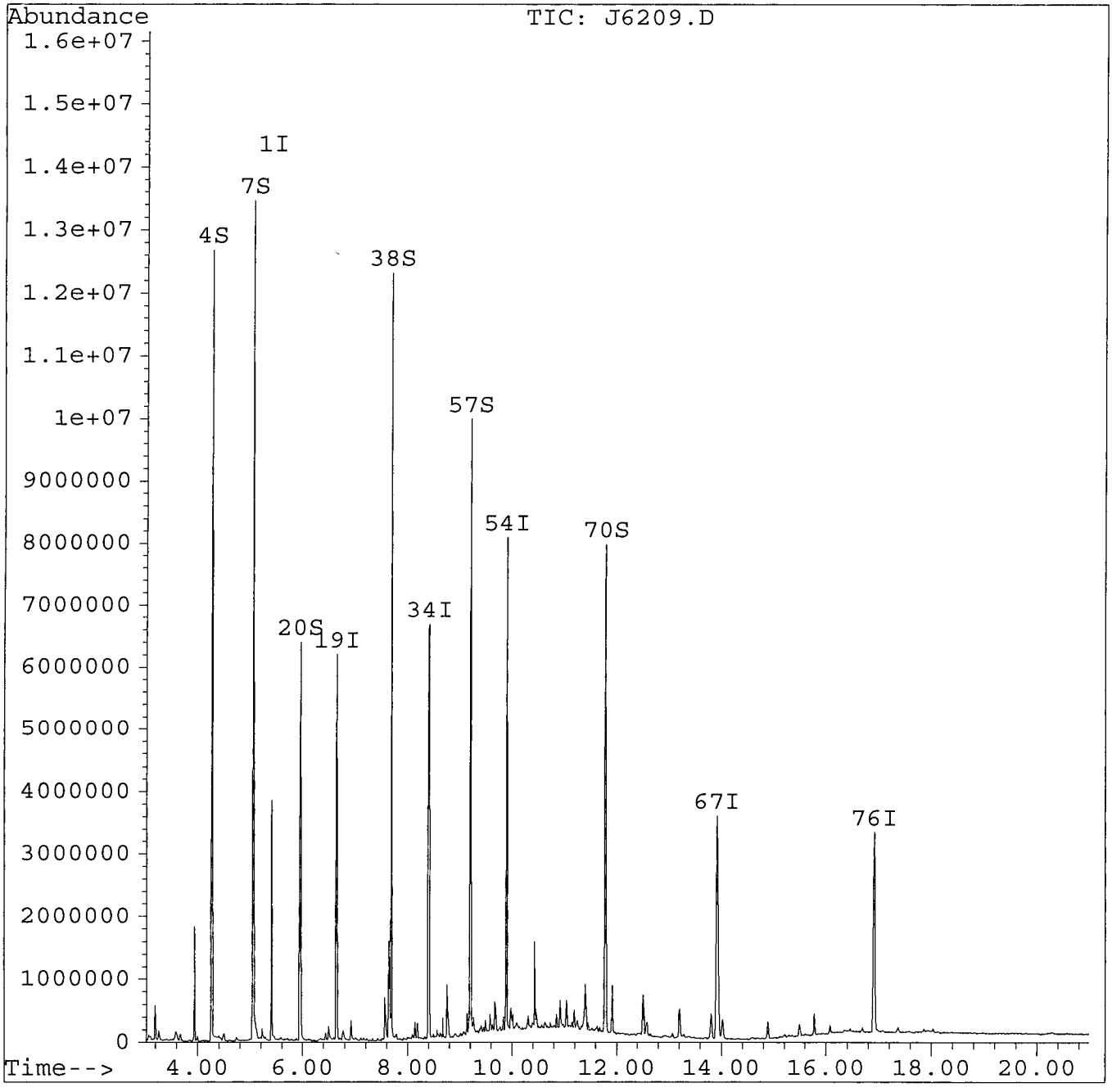
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\dec02\j6209.d
Acq On : 2 Dec 96 9:33 pm
Sample : T611436-11
Misc :
Quant Time: Dec 4 9:41 1996

Vial: 19
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Wed Dec 04 08:05:21 1996
Response via : Single Level Calibration



Quantitation Report

Data File : d:\dec02\j6209.d
Acq On : 2 Dec 96 9:33 pm
Sample : T611436-11
Misc :
Quant Time: Dec 4 9:41 1996

Vial: 19
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Tue Dec 03 08:10:52 1996
Response via : Continuing Cal File: D:\DEC02\J6192.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.41	152	800805	40.00 NG	0.00
19) Naphthalene-d8	6.64	136	3044530	40.00 NG	-0.02
34) Acenaphthene-d10	8.41	164	1970660	40.00 NG	-0.01
54) Phenanthrene-d10	9.90	188	3356740	40.00 NG	0.00
67) Chrysene-d12	13.93	240	2088575	40.00 NG	-0.04
76) Perylene-d12	16.91	264	1954098	40.00 NG	-0.04
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol	4.26	112	4476339	161.40 NG	80.70%
7) Phenol-d5	5.05	99	5941473	154.91 NG	77.46%
20) Nitrobenzene-d5	5.95	82	2287337	71.48 NG	71.48%
38) 2-Fluorobiphenyl	7.69	172	4105338	67.88 NG	67.88%
57) 2,4,6-Tribromophenol	9.20	330	1352985	155.68 NG	77.84%
70) Terphenyl-d14	11.79	244	3845720	75.62 NG	75.62%
Target Compounds					**Qvalue**

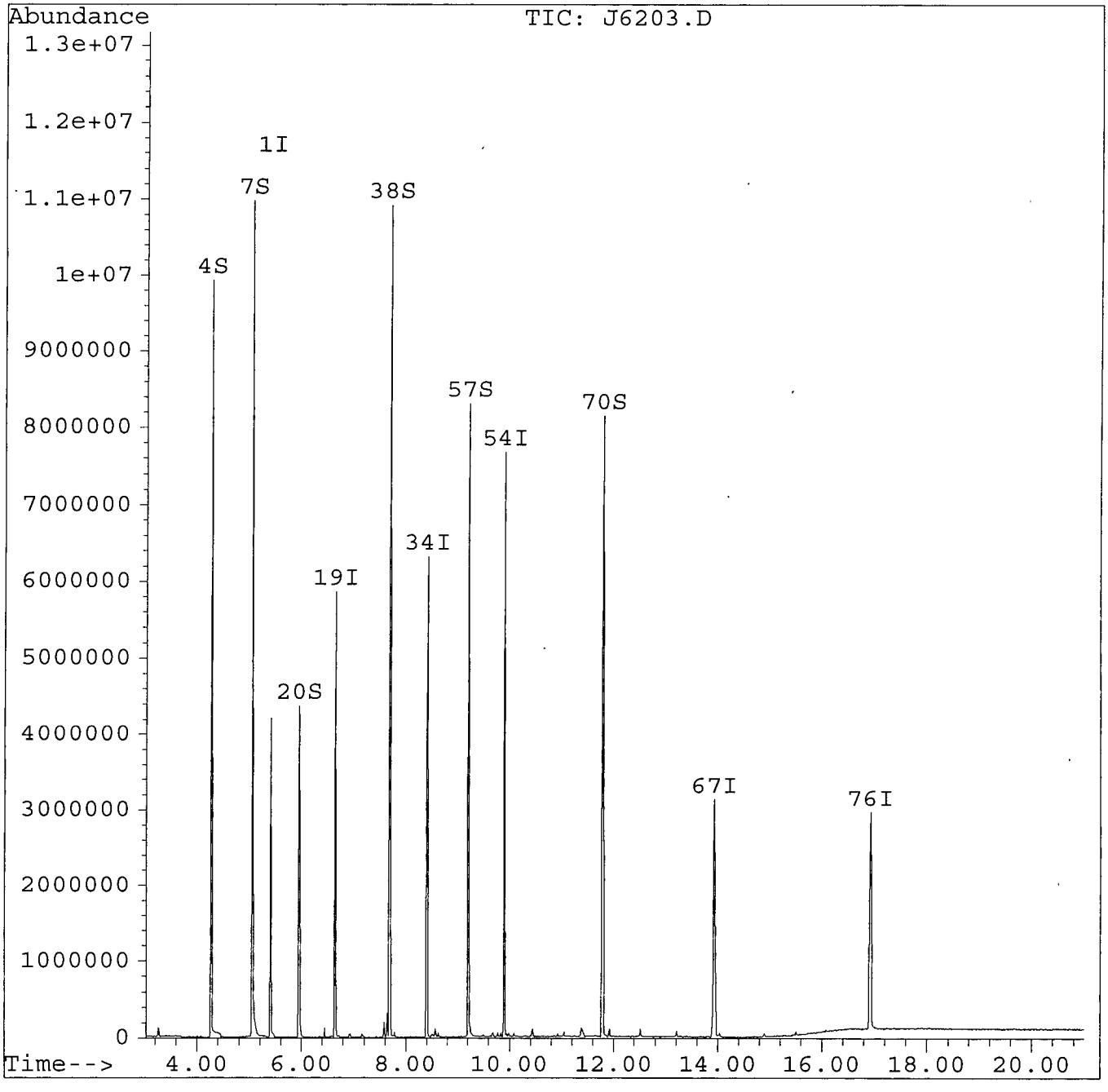
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\dec02\j6203.d
Acq On : 2 Dec 96 6:37 pm
Sample : SBLKQM16760T3
Misc :
Quant Time: Dec 4 9:33 1996

Vial: 13
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Wed Dec 04 08:05:21 1996
Response via : Single Level Calibration



Quantitation Report

Data File : d:\dec02\j6203.d
Acq On : 2 Dec 96 6:37 pm
Sample : SBLKQM16760T3
Misc :
Quant Time: Dec 4 9:33 1996

Vial: 13
Operator:
Inst : MSD_j
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\IDJBNA20.M
Title : GC/MS METHOD 8270 FOR BASE/NEUTRAL&ACID
Last Update : Tue Dec 03 08:10:52 1996
Response via : Continuing Cal File: D:\DEC02\J6192.D

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.41	152	797752	40.00 NG	0.00
19) Naphthalene-d8	6.65	136	3145925	40.00 NG	-0.01
34) Acenaphthene-d10	8.41	164	1778232	40.00 NG	-0.01
54) Phenanthrene-d10	9.90	188	3082283	40.00 NG	0.00
67) Chrysene-d12	13.93	240	2089167	40.00 NG	-0.03
76) Perylene-d12	16.92	264	1892307	40.00 NG	-0.03
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol	4.26	112	3776722	136.69 NG	68.35%
7) Phenol-d5	5.05	99	4515735	118.19 NG	59.09%
20) Nitrobenzene-d5	5.96	82	1989455	60.16 NG	60.16%
38) 2-Fluorobiphenyl	7.69	172	3765095	68.99 NG	68.99%
57) 2,4,6-Tribromophenol	9.20	330	1075418	134.76 NG	67.38%
70) Terphenyl-d14	11.79	244	3648549	71.72 NG	71.72%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

GC CONFORMANCE/NONCONFORMANCE SUMMARY

Work Order No. T611436

	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 concentration in each blank:	✓	—

a. Volatile Fraction _____
b. Pesticides/PCBs _____
c. Herbicide Fraction 16493 TCLP Blank have 2-4-D hit.
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 MS/MSD Recovery out of Acceptable Range for AR 1260
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: _____ Date: 12/09/96

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-PGA-1

Lab Name: LRI Contract : _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Method 8080 Lab Sample ID: T611436-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: O0529.D

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: 21 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor 1016	21	U
11104-28-2	Aroclor 1221	21	U
11141-16-5	Aroclor 1232	21	U
53469-21-9	Aroclor 1242	21	U
12672-29-6	Aroclor 1248	21	U
11097-69-1	Aroclor 1254	66	
11096-82-5	Aroclor 1260	21	U

1B

TCLP SEMIVOLATILE DATA SHEET

Signal 1

SAMPLE NO.

SG-PGA-1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method 8080 Lab Sample ID: T611436-01

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: O0546.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) MG/L	Q	REG.LIM mg/L
58-89-9	gamma-BHC [Lindane]	0.0010	U	0.4
76-44-8	Heptachlor	0.0008	U	0.008
1024-57-3	Heptachlor epoxide	0.0020	U	0.008
72-43-5	Methoxychlor	0.0080	U	10
72-20-8	Endrin	0.0010	U	0.02
00057-74-9	Chlordane	0.0010	U	0.03
8001-35-2	Toxaphene	0.0050	U	0.5

1B

TCLP HERBICIDES ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-PGA-1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method: 8150 Lab Sample ID: T611436-01

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: S8982.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM (mg/L)
120-83-2	2,4-D	0.0005	U	10
93-72-1	2,4,5-TP	0.0002	U	1

FORM I SV

3/90

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-TRGE-1

Lab Name: LRI Contract : _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Method 8080 Lab Sample ID: T611436-03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: O0530.D

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: 18 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor 1016	20	U
11104-28-2	Aroclor 1221	20	U
11141-16-5	Aroclor 1232	20	U
53469-21-9	Aroclor 1242	20	U
12672-29-6	Aroclor 1248	20	U
11097-69-1	Aroclor 1254	20	U
11096-82-5	Aroclor 1260	20	U

1B

TCLP SEMIVOLATILE DATA SHEET

Signal 1

SAMPLE NO.

SG-TRGE-1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method 8080 Lab Sample ID: T611436-03

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: O0547.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/5/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM mg/L
58-89-9	gamma-BHC [Lindane]	0.0010	U	0.4
76-44-8	Heptachlor	0.0008	U	0.008
1024-57-3	Heptachlor epoxide	0.0020	U	0.008
72-43-5	Methoxychlor	0.0080	U	10
72-20-8	Endrin	0.0010	U	0.02
00057-74-9	Chlordane	0.0010	U	0.03
8001-35-2	Toxaphene	0.0050	U	0.5

1B

TCLP HERBICIDES ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-TRGE-1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method: 8150 Lab Sample ID: T611436-03

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: S8983.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM (mg/L)
120-83-2	2,4-D	0.0005	U	10
93-72-1	2,4,5-TP	0.0002	U	1

FORM I SV 3/90

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-TRGE-2

Lab Name: LRI Contract : _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Method 8080 Lab Sample ID: T611436-05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: O0533.D

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: 15 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor 1016	20	U
11104-28-2	Aroclor 1221	20	U
11141-16-5	Aroclor 1232	20	U
53469-21-9	Aroclor 1242	20	U
12672-29-6	Aroclor 1248	20	U
11097-69-1	Aroclor 1254	1100	
11096-82-5	Aroclor 1260	20	U

1B

TCLP SEMIVOLATILE DATA SHEET

Signal 1

SAMPLE NO.

SG-TRGE-2

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method 8080 Lab Sample ID: T611436-05

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: O0548.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/5/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM mg/L
58-89-9	gamma-BHC [Lindane]	0.0010	U	0.4
76-44-8	Heptachlor	0.0008	U	0.008
1024-57-3	Heptachlor epoxide	0.0020	U	0.008
72-43-5	Methoxychlor	0.0080	U	10
72-20-8	Endrin	0.0010	U	0.02
00057-74-9	Chlordane	0.0010	U	0.03
8001-35-2	Toxaphene	0.0050	U	0.5

1B

TCLP HERBICIDES ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-TRGE-2

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method: 8150 Lab Sample ID: T611436-05

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: S8984.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM (mg/L)
120-83-2	2,4-D	0.0005	U	10
93-72-1	2,4,5-TP	0.0002	U	1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-PGF-1

Lab Name: LRI Contract : _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Method 8080 Lab Sample ID: T611436-07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: O0534.D

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: 22 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor 1016	21	U
11104-28-2	Aroclor 1221	21	U
11141-16-5	Aroclor 1232	21	U
53469-21-9	Aroclor 1242	21	U
12672-29-6	Aroclor 1248	21	U
11097-69-1	Aroclor 1254	21	U
11096-82-5	Aroclor 1260	21	U

1B

TCLP SEMIVOLATILE DATA SHEET

Signal 1

SAMPLE NO.

SG-PGF-1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method 8080 Lab Sample ID: T611436-07

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: O0549.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/5/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM mg/L
58-89-9	gamma-BHC [Lindane]	0.0010	U	0.4
76-44-8	Heptachlor	0.0008	U	0.008
1024-57-3	Heptachlor epoxide	0.0020	U	0.008
72-43-5	Methoxychlor	0.0080	U	10
72-20-8	Endrin	0.0010	U	0.02
00057-74-9	Chlordane	0.0010	U	0.03
8001-35-2	Toxaphene	0.0050	U	0.5

1B

TCLP HERBICIDES ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-PGF-1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method: 8150 Lab Sample ID: T611436-07

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: S8985.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM (mg/L)
120-83-2	2,4-D	0.0005	U	10
93-72-1	2,4,5-TP	0.0002	U	1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

S6-PGF-2

Lab Name: LRI Contract : _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Method 8080 Lab Sample ID: T611436-09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: O0536.D

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: 16 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor 1016	20	U
11104-28-2	Aroclor 1221	20	U
11141-16-5	Aroclor 1232	20	U
53469-21-9	Aroclor 1242	20	U
12672-29-6	Aroclor 1248	20	U
11097-69-1	Aroclor 1254	20	U
11096-82-5	Aroclor 1260	20	U

1B

TCLP SEMIVOLATILE DATA SHEET

Signal 1

SAMPLE NO.

SG-PGF-2

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method 8080 Lab Sample ID: T611436-09

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: O0550.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/5/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM mg/L
58-89-9	gamma-BHC [Lindane]	0.0010	U	0.4
76-44-8	Heptachlor	0.0008	U	0.008
1024-57-3	Heptachlor epoxide	0.0020	U	0.008
72-43-5	Methoxychlor	0.0080	U	10
72-20-8	Endrin	0.0010	U	0.02
00057-74-9	Chlordane	0.0010	U	0.03
8001-35-2	Toxaphene	0.0050	U	0.5

1B

TCLP HERBICIDES ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

S6-PGF-2

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method: 8150 Lab Sample ID: T611436-09

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: S8986.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM (mg/L)
120-83-2	2,4-D	0.0005	U	10
93-72-1	2,4,5-TP	0.0002	U	1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-PGF-3

Lab Name: LRI Contract : _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Method 8080 Lab Sample ID: T611436-11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: O0535.D

Level: (low/med) LOW Date Received: 11/29/96

% Moisture: 28 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor 1016	23	U
11104-28-2	Aroclor 1221	23	U
11141-16-5	Aroclor 1232	23	U
53469-21-9	Aroclor 1242	23	U
12672-29-6	Aroclor 1248	1100	
11097-69-1	Aroclor 1254	23	U
11096-82-5	Aroclor 1260	23	U

1B

TCLP SEMIVOLATILE DATA SHEET

Signal 1

SAMPLE NO.

SG-PGF-3

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method 8080 Lab Sample ID: T611436-11

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: O0551.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/5/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM mg/L
58-89-9	gamma-BHC [Lindane]	0.0010	U	0.4
76-44-8	Heptachlor	0.0008	U	0.008
1024-57-3	Heptachlor epoxide	0.0020	U	0.008
72-43-5	Methoxychlor	0.0080	U	10
72-20-8	Endrin	0.0010	U	0.02
00057-74-9	Chlordane	0.0010	U	0.03
8001-35-2	Toxaphene	0.0050	U	0.5

1B

TCLP HERBICIDES ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

SG-PGF-3

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method: 8150 Lab Sample ID: T611436-11

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: S8989.D

Level: (low/med) _____ Date Received: 11/29/96

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM (mg/L)
120-83-2	2,4-D	0.0005	U	10
93-72-1	2,4,5-TP	0.0002	U	1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

16835-SBLK02

Lab Name: LRI Contract : _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) SOIL Method 8080 Lab Sample ID: 16835-BLK02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: O0528.D

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

% Moisture: 0 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2	Aroclor 1016	17	U
11104-28-2	Aroclor 1221	17	U
11141-16-5	Aroclor 1232	17	U
53469-21-9	Aroclor 1242	17	U
12672-29-6	Aroclor 1248	17	U
11097-69-1	Aroclor 1254	17	U
11096-82-5	Aroclor 1260	17	U

1B

TCLP SEMIVOLATILE DATA SHEET

Signal 1

SAMPLE NO.

16541-SBLK01

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method 8080 Lab Sample ID: 16541-BLK03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: O0545.D

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

% Moisture: 100 decanted: (Y/N): N Date Extracted: 12/2/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/4/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM mg/L
58-89-9	gamma-BHC [Lindane]	0.00005	U	0.4
76-44-8	Heptachlor	0.00004	U	0.008
1024-57-3	Heptachlor epoxide	0.0001	U	0.008
72-43-5	Methoxychlor	0.0004	U	10
72-20-8	Endrin	0.00005	U	0.02
00057-74-9	Chlordane	0.00005	U	0.03
8001-35-2	Toxaphene	0.00025	U	0.5

1B
TCLP SEMIVOLATILE DATA SHEET
Signal 1

SAMPLE NO.
16541-TCLP BLANK

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method 8080 Lab Sample ID: 16541-TCLP BLANK

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: O0222.D

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

% Moisture: 100 decanted: (Y/N): N Date Extracted: 11/8/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/18/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM mg/L
58-89-9	gamma-BHC [Lindane]	0.0010	U	0.4
76-44-8	Heptachlor	0.0008	U	0.008
1024-57-3	Heptachlor epoxide	0.0020	U	0.008
72-43-5	Methoxychlor	0.0080	U	10
72-20-8	Endrin	0.0010	U	0.02
00057-74-9	Chlordane	0.0010	U	0.03
8001-35-2	Toxaphene	0.0050	U	0.5

1B

TCLP HERBICIDES ANALYSIS DATA SHEET

Signal 1

SAMPLE NO.

16473-SBLK04

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Method: 8150 Lab Sample ID: SBLK16473T2

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: S8979.D

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

% Moisture: 100 decanted: (Y/N): N Date Extracted: 11/2/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 12/3/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7

CAS No.	Compound	Concentration Units: (mg/L or mg/Kg) mg/L	Q	REG.LIM (mg/L)
120-83-2	2,4-D	0.00003	U	10
93-72-1	2,4,5-TP	0.00001	U	1

1B

SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Signal 1

TCLPBLK16473

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 16473-TCLP BLK

Sample wt/vol: 50.0 (g/mL) ML Lab File ID: M07502.D

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

% Moisture: 100 decanted: (Y/N): N Date Extracted: 11/4/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/8/96

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

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

Concentration Units:

CAS No.	Compound	mg/l	Q
120-83-2	2,4-D	0.0036	
93-72-1	2,4,5-TP	0.0002	U

4B

SAMPLE NO.

16835-SBLK02

SEMIVOLATILE METHOD BLANK SUMMARY

Signal 1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: O0528.D Lab Sample ID: 16835-BLK02

Instrument ID: GC_OP Date Extracted: 12/2/96

Matrix: (soil/water) SOIL Date Analyzed: 12/4/96

Level: (low/med) LOW Time Analyzed: 0638

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SG-PGA-1	T611436-01	O0529.D	12/04/96
02	SG-TRGE-1	T611436-03	O0530.D	12/04/96
03	SG-TRGE-2	T611436-05	O0533.D	12/04/96
04	SG-PGF-1	T611436-07	O0534.D	12/04/96
05	SG-PGF-3	T611436-11	O0535.D	12/04/96
06	S6-PGF-2	T611436-09	O0536.D	12/04/96
07				
08				
09				
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COMMENTS:

4B

TCLP HERBICIDE METHOD BLANK SUMMARY

Signal 1

SAMPLE NO.

16473-SBLK04

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: S8979.D Method: 8150 Lab Sample ID: SBLK16473T2

Instrument ID: GC_ST Date Extracted: 11/2/96

Matrix: (soil/water) WATER Date Analyzed: 12/3/96

Level: (low/med) _____ Time Analyzed: 2334

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SG-PGA-1	T611436-01	S8982.D	12/04/96
02	SG-TRGE-1	T611436-03	S8983.D	12/04/96
03	SG-TRGE-2	T611436-05	S8984.D	12/04/96
04	SG-PGF-1	T611436-07	S8985.D	12/04/96
05	S6-PGF-2	T611436-09	S8986.D	12/04/96
06	SG-PGF-3	T611436-11	S8989.D	12/04/96
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COMMENTS:

Response Factor Report GC_OP

Method : N:\GC_OP\TCLP1015.M
Title : CBOTCLP
Last Update : Mon Oct 21 17:03:26 1996
Response via : Initial Calibration

Calibration Files
7.5 =O9428.D 2 =O9443.D 5 =O9441.D
3 =O9436.D 1 =O9444.D

		Compound	7.5	2	5	3	1	Avg		%RSD
1)	S	TCMX (Surr.)	1.142	1.287	1.201	1.195	1.193	1.204	E7	4.37
2)	S	DBC (Surr.)	8.822	8.409	8.731	8.958	8.361	8.656	E6	3.02
3)	MA	gamma-BHC [Lindane]	9.579	8.988	9.754	8.857	8.736	9.183	E6	4.95
4)	MA	Heptachlor	1.314	1.297	1.375	1.306	1.268	1.312	E7	2.99
5)	MA	Heptachlor epoxide	1.098	1.069	1.136	1.073	1.033	1.082	E7	3.53
6)	MA	Methoxychlor	4.830	5.705	5.367	5.457	5.676	5.407	E6	6.53
7)	MB	Endrin	1.061	0.906	0.968	0.923	0.886	0.949	E7	7.36
8)	L2	Chlordane	1.123	1.070	1.153	1.305	1.084	1.147	E6	8.22
9)	L2	Chlordane-2	0.997	1.091	1.042	1.134	1.216	1.096	E6	7.71
10)	L2	Chlordane-3	7.485	7.725	7.623	9.001	7.719	7.911	E5	7.80
11)	L1	Toxaphene	3.578	3.892	3.662	3.224	4.204	3.712	E4	9.83
12)	L1	Toxaphene-2	6.371	6.882	6.341	6.398	7.044	6.607	E4	5.00
13)	L1	Toxaphene-3	4.767	4.267	4.490	3.974	4.904	4.480	E4	8.37

Signal #2 Calibration Files
7.5 =P9428.D 2 =P9443.D 5 =P9441.D
3 =P9436.D 1 =P9444.D

		Compound	7.5	2	5	3	1	Avg		%RSD
1)	S	TCMX (Surr.)	1.157	1.250	1.222	1.207	1.258	1.219	E7	3.30
2)	S	DBC (Surr.)	1.024	0.984	1.035	1.040	0.975	1.012	E7	2.97
3)	MA	gamma-BHC [Lindane]	1.070	1.048	1.112	1.052	1.019	1.060	E7	3.23
4)	MA	Heptachlor	1.330	1.341	1.398	1.411	1.343	1.365	E7	2.72
5)	MA	Heptachlor epoxide	1.139	1.173	1.189	1.165	1.086	1.150	E7	3.51
6)	MA	Methoxychlor	5.681	6.589	6.276	6.388	6.673	6.321	E6	6.19
7)	MB	Endrin	1.150	0.989	1.051	1.005	0.971	1.033	E7	6.94
8)	L2	Chlordane	1.292	1.173	1.310	1.539	1.159	1.295	E6	11.77
9)	L2	Chlordane-2	1.189	1.158	1.218	1.389	1.096	1.210	E6	9.07
10)	L2	Chlordane-3	7.117	6.520	7.255	8.922	5.753	7.113	E5	16.48
11)	L1	Toxaphene	8.100	7.536	9.027	7.841	7.936	8.088	E4	6.97
12)	L1	Toxaphene-2	9.189	8.759	9.385	9.418	8.068	8.964	E4	6.31
13)	L1	Toxaphene-3	1.161	1.108	1.162	1.138	1.083	1.130	E5	3.02

(#) = Out of Range

Response Factor Report GC_OP

Method : N:\GC_OP\OPCB1015.M
Title : CBOPCB
Last Update : Mon Oct 21 14:33:55 1996
Response via : Initial Calibration

Calibration Files
50 =O9450.D 500 =O9479.D 700 =O9478.D
1000 =O9477.D 5000 =O9476.D

		Compound	50	500	700	1000	5000	Avg		%RSD
1)	S	TCMX (Surr.)	1.114	1.190	1.213	1.194	1.146	1.171	E4	3.45
2)	S	DBC (Surr.)	7.814	7.990	8.310	8.724	8.617	8.291	E3	4.72
3)	L3	Aroclor 1016	6.620	6.156	6.218	5.586	4.129	5.742	E2	16.96
4)	L3	Aroclor 1016-2	1.272	1.850	1.948	1.707	1.369	1.629	E2	18.21
5)	L3	Aroclor 1016-3	0.906	1.022	1.059	0.968	0.754	0.942	E3	12.71
6)	L3	Aroclor 1016-4	3.742	2.916	2.969	2.860	2.307	2.959	E2	17.33
7)	L4	Aroclor 1221	1.848	1.686	1.622	1.553	1.345	1.611	E2	11.44
8)	L4	Aroclor 1221-2	1.521	1.395	1.304	1.295	1.022	1.307	E2	14.05
9)	L4	Aroclor 1221-3	4.696	4.486	4.307	4.204	3.224	4.183	E2	13.58
10)	L5	Aroclor 1232	1.374	1.126	1.101	1.049	0.999	1.130	E2	12.86
11)	L5	Aroclor 1232-2	4.048	3.756	3.629	3.488	2.681	3.521	E2	14.56
12)	L5	Aroclor 1232-3	3.204	2.933	2.780	2.694	2.060	2.734	E2	15.49
13)	L6	Aroclor 1242	5.311	4.900	4.493	4.401	3.311	4.483	E2	16.69
14)	L6	Aroclor 1242-2	7.599	7.736	7.274	7.341	6.019	7.194	E2	9.49
15)	L6	Aroclor 1242-3	3.105	4.494	4.002	3.456	3.009	3.613	E2	17.37
16)	L6	Aroclor 1242-4	3.512	3.910	3.667	3.678	2.987	3.551	E2	9.74
17)	L7	Aroclor 1248	5.259	5.576	5.301	5.148	4.192	5.095	E2	10.38
18)	L7	Aroclor 1248-2	4.891	4.925	4.842	4.549	3.926	4.627	E2	9.05
19)	L7	Aroclor 1248-3	5.673	5.235	4.792	4.742	4.699	5.028	E2	8.34
20)	L7	Aroclor 1248-4	2.942	2.799	2.753	2.700	2.309	2.700	E2	8.77
21)	ML8	Aroclor 1254	3.015	2.961	2.806	2.756	2.130	2.734	E2	12.94
22)	ML8	Aroclor 1254-2	4.827	4.692	4.575	4.409	3.526	4.406	E2	11.70
23)	ML8	Aroclor 1254-3	2.527	2.437	2.426	2.374	1.999	2.353	E2	8.72
24)	ML8	Aroclor 1254-4	4.969	5.143	5.149	5.183	4.620	5.013	E2	4.68
25)	L9	Aroclor 1260	1.168	1.022	1.003	0.907	0.739	0.968	E3	16.36
26)	L9	Aroclor 1260-2	4.387	4.279	4.579	4.021	3.584	4.170	E2	9.22
27)	L9	Aroclor 1260-3	7.857	7.044	7.388	6.512	5.226	6.805	E2	14.84
28)	L9	Aroclor 1260-4	2.980	3.097	2.953	2.386	2.607	2.805	E2	10.58

Signal #2 Calibration Files
50 =P9450.D 500 =P9479.D 700 =P9478.D
1000 =P9477.D 5000 =O9476.D

		Compound	50	500	700	1000	5000	Avg		%RSD
1)	S	TCMX (Surr.)	1.177	1.233	1.260	1.237	1.242	1.230	E4	2.53
2)	S	DBC (Surr.)	0.868	0.940	0.978	1.043	1.001	0.966	E4	6.87
3)	L3	Aroclor 1016	3.714	3.884	4.032	3.632	3.010	3.654	E2	10.73
4)	L3	Aroclor 1016-2	1.274	1.166	1.201	1.085	0.865	1.118	E3	14.05
5)	L3	Aroclor 1016-3	5.777	5.008	5.128	4.615	3.675	4.841	E2	15.99
6)	L3	Aroclor 1016-4	3.523	3.375	3.409	3.008	2.668	3.197	E2	11.03
7)	L4	Aroclor 1221	1.820	1.630	1.571	1.581	1.292	1.579	E2	11.97
8)	L4	Aroclor 1221-2	0.907	1.112	1.069	0.987	0.885	0.992	E2	9.96
9)	L4	Aroclor 1221-3	3.947	4.392	4.159	3.718	3.058	3.855	E2	13.25
10)	L5	Aroclor 1232	8.498	7.110	6.198	6.700	5.211	6.743	E1	17.95

(#) = Out of Range

Response Factor Report GC_OP

Method : N:\GC_OP\OPCB1015.M
Title : CBOPCB
Last Update : Mon Oct 21 14:33:55 1996
Response via : Initial Calibration

Calibration Files
50 =P9450.D 500 =P9479.D 700 =P9478.D
1000 =P9477.D 5000 =O9476.D

	Compound	50	500	700	1000	5000	Avg		%RSD
11) L5	Aroclor 1232-2	2.673	3.643	3.382	3.288	2.743	3.146	E2	13.38
12) L5	Aroclor 1232-3	1.774	1.657	1.723	1.706	1.390	1.650	E2	9.15
13) L6	Aroclor 1242	1.011	0.927	0.846	0.843	0.688	0.863	E3	13.89
14) L6	Aroclor 1242-2	3.798	4.044	3.724	3.654	2.954	3.635	E2	11.22
15) L6	Aroclor 1242-3	2.335	2.086	1.951	1.960	1.701	2.007	E2	11.51
16) L6	Aroclor 1242-4	1.437	2.251	2.140	2.204	1.930	1.993	E2	16.76
17) L7	Aroclor 1248	3.453	3.754	3.626	3.519	3.022	3.475	E2	7.98
18) L7	Aroclor 1248-2	5.067	4.746	4.526	4.485	3.914	4.547	E2	9.30
19) L7	Aroclor 1248-3	2.612	2.728	2.582	2.470	2.252	2.529	E2	7.12
20) L7	Aroclor 1248-4	4.266	4.523	4.317	4.266	4.065	4.287	E2	3.81
21) ML8	Aroclor 1254	8.498	7.973	7.893	7.512	6.245	7.624	E2	11.12
22) ML8	Aroclor 1254-2	8.887	9.848	9.433	9.049	7.278	8.899	E2	11.00
23) ML8	Aroclor 1254-3	5.656	5.277	5.384	5.404	4.327	5.210	E2	9.84
24) ML8	Aroclor 1254-4	7.200	8.599	7.743	8.825	7.160	7.906	E2	9.81
25) L9	Aroclor 1260	1.523	1.233	1.244	1.118	0.889	1.201	E3	19.10
26) L9	Aroclor 1260-2	5.267	5.380	5.681	5.100	4.350	5.156	E2	9.65
27) L9	Aroclor 1260-3	3.513	3.857	3.952	3.316	2.774	3.482	E2	13.56
28) L9	Aroclor 1260-4	5.897	5.218	5.440	4.837	4.351	5.149	E2	11.42

(#) = Out of Range

Response Factor Report GC_ST

Method : C:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:11:52 1996
Response via : Initial Calibration

Calibration Files
1 =S8960.D 2 =S8961.D 3 =S8962.D
4 =S8963.D 5 =S8964.D

		Compound	1	2	3	4	5	Avg		%RSD
1)	S	2,4,5-T(SURR)	1.217	1.103	0.979	0.920	0.843	1.013	E3	14.69
2)	S	DCAA (SURR)	2.000	2.129	2.046	2.083	1.996	2.051	E2	2.75
3)	TM	Dalapon	3.474	3.498	3.041	2.734	2.479	3.045	E2	14.75
4)	TM	2,4-D	2.946	2.846	2.484	2.357	2.137	2.554	E2	13.23
5)	TM	2,4,5-TP(SILVEX)	1.366	1.319	1.173	1.110	1.021	1.198	E3	11.97
6)	TM	Dinoseb	7.487	7.577	6.895	6.569	6.081	6.922	E2	9.08

Signal #2 Calibration Files
1 =T8960.D 2 =T8961.D 3 =T8962.D
4 =T8963.D 5 =T8964.D

		Compound	1	2	3	4	5	Avg		%RSD
1)	S	2,4,5-T(SURR)	1.214	1.145	1.192	1.158	1.077	1.157	E3	4.52
2)	S	DCAA (SURR)	2.102	2.272	2.181	2.044	1.866	2.093	E2	7.32
3)	TM	Dalapon	3.189	3.194	2.886	2.840	2.614	2.944	E2	8.41
4)	TM	2,4-D	2.295	2.323	2.417	2.159	2.326	2.304	E2	4.03
5)	TM	2,4,5-TP(SILVEX)	1.301	1.418	1.311	1.256	1.158	1.289	E3	7.31
6)	TM	Dinoseb	1.195	1.201	0.974	0.885	0.791	1.009	E3	18.22

(#) = Out of Range

Continuing Calibration Report - GC_OP

Method : C:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Initial Calibration

Continuing Calibration File: O0518.D

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCMX (Surr.)	11.713	13.438	E3	-14.7	113
2	S	DBC (Surr.)	8.291	8.659	E3	-4.4	99
3	L3	Aroclor 1016	574.174	630.289		-9.8	79
4	L3	Aroclor 1016-2	162.907	182.509		-12.0	75
5	L3	Aroclor 1016-3	941.677	1153.406		-22.5#	83
6	L3	Aroclor 1016-4	295.887	313.386		-5.9	77
13	L6	Aroclor 1242	448.321	468.589		-4.5	75
14	L6	Aroclor 1242-2	719.388	773.756		-7.6	74
15	L6	Aroclor 1242-3	361.313	373.457		-3.4	76
16	L6	Aroclor 1242-4	355.065	390.449		-10.0	74
17	L7	Aroclor 1248	509.517	671.590		-31.8#	91
18	L7	Aroclor 1248-2	462.654	549.066		-18.7#	84
19	L7	Aroclor 1248-3	502.802	517.557		-2.9	76
20	L7	Aroclor 1248-4	270.045	295.891		-9.6	77
21	ML8	Aroclor 1254	273.355	281.794		-3.1	72
22	ML8	Aroclor 1254-2	440.596	402.490		8.6	64
23	ML8	Aroclor 1254-3	235.285	233.443		0.8	69
24	ML8	Aroclor 1254-4	501.261	499.743		0.3	67
25	L9	Aroclor 1260	0.968	0.830	E3	14.2	64
26	L9	Aroclor 1260-2	417.022	367.740		11.8	64
27	L9	Aroclor 1260-3	680.549	566.494		16.8#	61
28	L9	Aroclor 1260-4	280.458	273.286		2.6	80

Signal #2
Continuing Calibration File: P0518.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCMX (Surr.)	12.297	12.632	E3	-2.7	102
2	S	DBC (Surr.)	9.663	9.737	E3	-0.8	93
3	L3	Aroclor 1016	365.448	360.340		1.4	69
4	L3	Aroclor 1016-2	1.118	1.068	E3	4.4	69
5	L3	Aroclor 1016-3	484.057	459.986		5.0	70
6	L3	Aroclor 1016-4	319.670	294.906		7.7	69
13	L6	Aroclor 1242	0.863	0.803	E3	7.0	67
14	L6	Aroclor 1242-2	363.463	329.706		9.3	63
15	L6	Aroclor 1242-3	200.658	193.031		3.8	69
16	L6	Aroclor 1242-4	199.255	209.820		-5.3	67
17	L7	Aroclor 1248	347.504	421.323		-21.2#	84
18	L7	Aroclor 1248-2	454.748	493.797		-8.6	77
19	L7	Aroclor 1248-3	252.881	264.600		-4.6	75
20	L7	Aroclor 1248-4	428.734	470.986		-9.9	77
21	ML8	Aroclor 1254	762.408	727.478		4.6	68
22	ML8	Aroclor 1254-2	889.909	770.566		13.4	60
23	ML8	Aroclor 1254-3	520.978	434.886		16.5#	56
24	ML8	Aroclor 1254-4	790.556	718.522		9.1	57
25	L9	Aroclor 1260	1.201	0.889	E3	26.0#	56
26	L9	Aroclor 1260-2	515.553	399.574		22.5#	55
27	L9	Aroclor 1260-3	348.222	406.109		-16.6#	86

(#) = Out of Range SPCC's out = 0 CCC's out = 0

P0518.D OPCB1015.M Wed Dec 04 11:04:42 1996 X

Continuing Calibration Report - GC_OP

Method : C:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 10:50:38 1996
Response via : Initial Calibration

Continuing Calibration File: O0531.D

Min. RRF : 0.000 Min. Rel. Area : 50%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCMX (Surr.)	11.713	11.224	E3	4.2	94
2	S	DBC (Surr.)	8.291	6.353	E3	23.4#	73
17	L7	Aroclor 1248	509.517	641.837		-26.0#	87
18	L7	Aroclor 1248-2	462.654	513.905		-11.1	79
19	L7	Aroclor 1248-3	502.802	541.649		-7.7	80
20	L7	Aroclor 1248-4	270.045	264.543		2.0	69
21	ML8	Aroclor 1254	273.355	249.709		8.7	63
22	ML8	Aroclor 1254-2	440.596	374.674		15.0	59
23	ML8	Aroclor 1254-3	235.285	207.594		11.8	61
24	ML8	Aroclor 1254-4	501.261	445.786		11.1	60

Signal #2
Continuing Calibration File: P0531.D

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCMX (Surr.)	12.297	10.423	E3	15.2#	84
2	S	DBC (Surr.)	9.663	7.095	E3	26.6#	68
17	L7	Aroclor 1248	347.504	420.971		-21.1#	84
18	L7	Aroclor 1248-2	454.748	486.386		-7.0	76
19	L7	Aroclor 1248-3	252.881	253.891		-0.4	72
20	L7	Aroclor 1248-4	428.734	449.863		-4.9	74
21	ML8	Aroclor 1254	762.408	653.680		14.3	61
22	ML8	Aroclor 1254-2	889.909	680.020		23.6#	53
23	ML8	Aroclor 1254-3	520.978	353.083		32.2#	46#
24	ML8	Aroclor 1254-4	790.556	573.206		27.5#	45#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

P0531.D OPCB1015.M Wed Dec 04 10:51:07 1996 X

Continuing Calibration Report GC_OP

Method : C:\HPCHEM\6\METHODS\TCLP1015.M
Title : CBOTCLP
Last Update : Thu Dec 05 13:03:04 1996
Response via : Initial Calibration

Continuing Calibration File: O0542.D RTX1701

Min. RRF : 0.000 Min. Rel. Area : 10%
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCMX (Surr.)	12.036	10.833	E6	10.0	90
2	S	DBC (Surr.)	8.656	7.228	E6	16.5#	83
3	MA	gamma-BHC [Lindane]	9.183	10.848	E6	-18.1#	111
4	MA	Heptachlor	13.122	14.701	E6	-12.0	107
5	MA	Heptachlor epoxide	10.819	12.431	E6	-14.9	109
6	MA	Methoxychlor	5.407	5.507	E6	-1.9	103
7	MB	Endrin	9.491	10.110	E6	-6.5	104
8	L2	Chlordane	1.147	1.176	E6	-2.5	102
9	L2	Chlordane-2	1096.068	996.658	E3	9.1	96
10	L2	Chlordane-3	791.061	781.565	E3	1.2	103

Signal #2
Continuing Calibration File: P0542.D RTX5

		Compound	AvgRF	CCRF		%Dev	Area%
1	S	TCMX (Surr.)	12.188	9.931	E6	18.5#	81
2	S	DBC (Surr.)	10.115	8.291	E6	18.0#	80
3	MA	gamma-BHC [Lindane]	10.604	10.851	E6	-2.3	98
4	MA	Heptachlor	13.648	14.671	E6	-7.5	105
5	MA	Heptachlor epoxide	11.502	12.792	E6	-11.2	108
6	MA	Methoxychlor	6.321	6.220	E6	1.6	99
7	MB	Endrin	10.332	10.801	E6	-4.5	103
8	L2	Chlordane	1.295	1.298	E6	-0.3	99
9	L2	Chlordane-2	1.210	1.167	E6	3.5	96
10	L2	Chlordane-3	711.341	784.686	E3	-10.3	108

(#) = Out of Range SPCC's out = 0 CCC's out = 0

P0542.D TCLP1015.M Thu Dec 05 13:03:29 1996 X

Evaluate Continuing Calibration Report

Signal #1 : N:\GC_ST\DEC0396\S8975.D Vial: 3
Signal #2 : N:\GC_ST\DEC0396\S8975.D\T8975.D
Acq On : 03 Dec 96 10:01 PM Operator: SHAH
Sample : HERB250 Inst : GC_ST
Misc : Multiplr: 1.00

Method : C:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(Min)
1	S	2,4,5-T(SURR)	1.013	0.988	E3	2.4	101	0.00
2	S	DCAA (SURR)	205.087	206.280		-0.6	101	-0.05
3	TM	Dalapon	304.526	303.020		0.5	100	0.00
4	TM	2,4-D	255.401	257.504		-0.8	104	0.00
5	TM	2,4,5-TP(SILVEX)	1.198	1.176	E3	1.8	100	0.00
6	TM	Dinoseb	692.179	693.824		-0.2	101	0.00

Signal #2
Data File : N:\GC_ST\DEC0396\S8975.D\T8975.D Vial: 3
Acq On : 03 Dec 96 10:01 PM Operator: SHAH
Sample : HERB250 Inst : GC_ST
Misc : Multiplr: 1.00

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(Min)
1	S	2,4,5-T(SURR)	1.157	1.224	E3	-5.8	103	0.00
2	S	DCAA (SURR)	209.308	208.416		0.4	96	0.02
3	TM	Dalapon	294.439	308.272		-4.7	107	0.00
4	TM	2,4-D	230.400	254.288		-10.4	105	0.00
5	TM	2,4,5-TP(SILVEX)	1.289	1.339	E3	-3.9	102	0.00
6	TM	Dinoseb	1.009	0.992	E3	1.7	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
T8975.D AM1124.M Wed Dec 04 19:02:34 1996 GC_OP Page 1

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Signal 1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Level: (low/med) LOW

	SAMPLE NO.	S1 #	S2 #	#	#	#	#	#	#	TOT OUT
01	16835-SBLK02	90	74							
02	SG-PGA-1	109	83							
03	SG-TRGE-1	119	97							
04	SG-TRGE-2	110	94							
05	SG-PGF-1	117	95							
06	SG-PGF-3	105	57							
07	S6-PGF-2	109	79							
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
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21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

		QC LIMITS
SMC1	= TCMX (Surr.)	(24-154)
SMC2	= DBC (Surr.)	(24-154)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

2C

TCLP HERBICIDE SURROGATE RECOVERY

Signal 1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	S1 #	#	#	#	#	#	#	#	TOT OUT
01	16473-SBLK04	132								1
02	SG-PGA-1	129								1
03	SG-TRGE-1	123								1
04	SG-TRGE-2	125								1
05	SG-PGF-1	126								1
06	S6-PGF-2	133								1
07	SG-PGF-3	123								1
08										
09										
10										
11										
12										
13										
14										
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25										
26										
27										
28										
29										
30										

SMC1 = 2,4,5-T (Surr.)

QC LIMITS
(24-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3C

TCLP PESTICIDES MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Signal 1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix Spike - Sample No.: LST FEEDER TANK

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC [Lindane]	0.008	0	0.0102	128	(48-158)
Heptachlor	0.008	0	0.0088	110	(33-129)
Heptachlor epoxide	0.008	0	0.0090	113	(43-115)
Methoxychlor	0.008	0	0.0098	123	(28-153)
Endrin	0.008	0	0.0092	115	(29-119)

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC [Lindane]	0.008	0.0096	120	6	20	(48-158)
Heptachlor	0.008	0.0084	105	5	20	(33-129)
Heptachlor epoxide	0.008	0.0084	105	7	20	(43-115)
Methoxychlor	0.008	0.0094	118	7	20	(28-153)
Endrin	0.008	0.0086	108	6	20	(29-119)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 5 outside limits

Spike Recovery: 1 out of 10 outside limits

Comments: _____

3D

SEMIVOLATILE WATER BLANK SPIKE RECOVERY

Signal 1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix Spike - Sample No.: 16835-BLANK/SPIKE Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor 1016	83		89	107	(40-150)
Aroclor 1260	83		84	101	(40-150)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD:

Spike Recovery:

Comments: _____

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Signal 1

Lab Name: LRI Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix Spike - Sample No.: WC-102596

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
2,4-D	0.01	0	0.0079	79	(30-143)
2,4,5-TP	0.01	0	0.0073	73	(30-100)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
2,4-D	0.01	0.0081	81	3	20	(30-143)
2,4,5-TP	0.01	0.0065	65	12	20	(30-100)

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

Comments: _____

Injection Log

GC: O/P
C lumn ID: RTx 1701 / RTx 5
Analyst: BS PCB Only

Subdirectory	Data File	Laboratory ID	Vial #	DF	Inj. Time	Inj. Date	Secondary File Information: Data File	Laboratory ID	Vial #	Inj. Time	Inj. Date
'OCT1196	O9446.D	AR1660 5000 PPB	38		9:52	12-Oct-96	P9446.D	AR1660 5000 PPB	38	9:52	12-Oct-96
'OCT1196	O9447.D	AR1660 1000 PPB	39		10:41	12-Oct-96	P9447.D	AR1660 1000 PPB	39	10:41	12-Oct-96
'OCT1196	O9448.D	AR1660 700 PPB	40		11:31	12-Oct-96	P9448.D	AR1660 700 PPB	40	11:31	12-Oct-96
'OCT1196	O9449.D	AR1660 500 PPB	41		0:20	13-Oct-96	P9449.D	AR1660 500 PPB	41	0:20	13-Oct-96
'OCT1196	O9450.D	AR1660 100 PPB	42		1:09	13-Oct-96	P9450.D	AR1660 100 PPB	42	1:09	13-Oct-96
'OCT1196	O9451.D	AR1660 50 PPB	43		1:58	13-Oct-96	P9451.D	AR1660 50 PPB	43	1:58	13-Oct-96
'OCT1196	O9452.D	AR1242 5000 PPB	44		2:47	13-Oct-96	P9452.D	AR1242 5000 PPB	44	2:47	13-Oct-96
'OCT1196	O9453.D	AR1242 1000 PPB	45		3:37	13-Oct-96	P9453.D	AR1242 1000 PPB	45	3:37	13-Oct-96
'OCT1196	O9454.D	AR1242 700 PPB	46		4:26	13-Oct-96	P9454.D	AR1242 700 PPB	46	4:26	13-Oct-96
'OCT1196	O9455.D	AR1242 500 PPB	47		5:15	13-Oct-96	P9455.D	AR1242 500 PPB	47	5:15	13-Oct-96
'OCT1196	O9456.D	AR1242 100 PPB	48		6:04	13-Oct-96	P9456.D	AR1242 100 PPB	48	6:04	13-Oct-96
'OCT1196	O9457.D	AR1242 50 PPB	49		6:53	13-Oct-96	P9457.D	AR1242 50 PPB	49	6:53	13-Oct-96
'OCT1196	O9458.D	AR1248 5000 PPB	50		7:43	13-Oct-96	P9458.D	AR1248 5000 PPB	50	7:43	13-Oct-96
'OCT1196	O9459.D	AR1248 1000 PPB	51		8:32	13-Oct-96	P9459.D	AR1248 1000 PPB	51	8:32	13-Oct-96
'OCT1196	O9460.D	AR1248 700 PPB	52		9:21	13-Oct-96	P9460.D	AR1248 700 PPB	52	9:21	13-Oct-96
'OCT1196	O9461.D	AR1248 500 PPB	53		10:10	13-Oct-96	P9461.D	AR1248 500 PPB	53	10:10	13-Oct-96
'OCT1196	O9462.D	AR1248 100 PPB	54		10:59	13-Oct-96	P9462.D	AR1248 100 PPB	54	10:59	13-Oct-96
'OCT1196	O9463.D	AR1248 50 PPB	55		11:48	13-Oct-96	P9463.D	AR1248 50 PPB	55	11:48	13-Oct-96
'OCT1196	O9464.D	AR1254 5000 PPB	56		12:38	13-Oct-96	P9464.D	AR1254 5000 PPB	56	12:38	13-Oct-96
'OCT1196	O9465.D	AR1254 1000 PPB	57		1:27	13-Oct-96	P9465.D	AR1254 1000 PPB	57	1:27	13-Oct-96
'OCT1196	O9466.D	AR1254 700 PPB	58		2:16	13-Oct-96	P9466.D	AR1254 700 PPB	58	2:16	13-Oct-96
'OCT1196	O9467.D	AR1254 500 PPB	59		3:05	13-Oct-96	P9467.D	AR1254 500 PPB	59	3:05	13-Oct-96
'OCT1196	O9468.D	AR1254 100 PPB	60		3:55	13-Oct-96	P9468.D	AR1254 100 PPB	60	3:55	13-Oct-96
'OCT1196	O9469.D	AR1254 50 PPB	61		4:44	13-Oct-96	P9469.D	AR1254 50 PPB	61	4:44	13-Oct-96
'OCT1196	O9470.D	AR1221 5000 PPB	62		5:33	13-Oct-96	P9470.D	AR1221 5000 PPB	62	5:33	13-Oct-96
'OCT1196	O9471.D	AR1221 1000 PPB	63		6:22	13-Oct-96	P9471.D	AR1221 1000 PPB	63	6:22	13-Oct-96
'OCT1196	O9472.D	AR1221 700 PPB	64		7:12	13-Oct-96	P9472.D	AR1221 700 PPB	64	7:12	13-Oct-96
'OCT1196	O9473.D	AR1221 500 PPB	65		8:01	13-Oct-96	P9473.D	AR1221 500 PPB	65	8:01	13-Oct-96
'OCT1196	O9474.D	AR1221 100 PPB	66		8:50	13-Oct-96	P9474.D	AR1221 100 PPB	66	8:50	13-Oct-96
'OCT1196	O9475.D	AR1221 50 PPB	67		9:39	13-Oct-96	P9475.D	AR1221 50 PPB	67	9:39	13-Oct-96
'OCT1196	O9476.D	AR1232 5000 PPB	68		10:28	13-Oct-96	P9476.D	AR1232 5000 PPB	68	10:28	13-Oct-96
'OCT1196	O9477.D	AR1232 1000 PPB	69		11:18	13-Oct-96	P9477.D	AR1232 1000 PPB	69	11:18	13-Oct-96
'OCT1196	O9478.D	AR1232 700 PPB	70		0:07	14-Oct-96	P9478.D	AR1232 700 PPB	70	0:07	14-Oct-96
'OCT1196	O9479.D	AR1232 500 PPB	71		0:56	14-Oct-96	P9479.D	AR1232 500 PPB	71	0:56	14-Oct-96

This original is maintained in a bound logbook

Page Number:

Injection Log

GC:
Column ID:
Analyst:

Subdirectory	Data File	Laboratory ID	Vial #	DF	Inj. Time	Inj. Date	Secondary File Information: Data File	Laboratory ID	Vial #	Inj. Time	Inj. Date
'OCT1196	O9480.D	AR1232 100 PPB	72		1:46	14-Oct-96	P9480.D	AR1232 100 PPB	72	1:46	14-Oct-96
'OCT1196	O9481.D	AR1232 50 PPB	73		2:35	14-Oct-96	P9481.D	AR1232 50 PPB	73	2:35	14-Oct-96

This original is maintained in a bound logbook

Page Number:

Injection Log

GC: GC_OP
Column ID: RTX1701/RTX-5
Analyst: RMD

							Secondary File Information				
Subdirectory	Data File	Laboratory ID	Vial #	DF	Inj. Time	Inj. Date	Data File	Laboratory ID	Vial #	Inj. Time	Inj. Date
'DEC0296	O0484.D	HEXANE	1		4:33	2-Dec-96	P0484.D	HEXANE	1	4:33	2-Dec-96
'DEC0296	O0485.D	PEM	2		5:37	2-Dec-96	P0485.D	PEM	2	5:37	2-Dec-96
'DEC0296	O0486.D	INDA-5	3		6:26	2-Dec-96	P0486.D	INDA-5	3	6:26	2-Dec-96
'DEC0296	O0487.D	INDB-5	4		7:23	2-Dec-96	P0487.D	INDB-5	4	7:23	2-Dec-96
'DEC0296	O0488.D	T.CHLORDANE	5		8:13	2-Dec-96	P0488.D	T.CHLORDANE	5	8:13	2-Dec-96
'DEC0296	O0489.D	AR1660 700 PPB	6		10:14	2-Dec-96	P0489.D	AR1660 700 PPB	6	10:14	2-Dec-96
'DEC0296	O0490.D	AR1254 700 PPB	7		11:05	2-Dec-96	P0490 D	AR1254 700 PPB	7	11 05	2-Dec-96
'DEC0296	O0491.D	AR1248 700 PPB	8		11:55	2-Dec-96	P0491.D	AR1248 700 PPB	8	11:55	2-Dec-96
'DEC0296	O0492.D	AR1242 700 PPB	9		0:45	3-Dec-96	P0492.D	AR1242 700 PPB	9	0:45	3-Dec-96
'DEC0296	O0493.D	16581-BLK03	10		1:35	3-Dec-96	P0493.D	16581-BLK03	10	1:35	3-Dec-96
'DEC0296	O0494.D	16471-BLK04	11		2:25	3-Dec-96	P0494.D	16471-BLK04	11	2:25	3-Dec-96
'DEC0296	O0495.D	T611333-05	12		3:14	3-Dec-96	P0495.D	T611333-05	12	3:14	3-Dec-96
'DEC0296	O0496.D	T611333-07	13		4:05	3-Dec-96	P0496.D	T611333-07	13	4:05	3-Dec-96
'DEC0296	O0497.D	T611333-08	14		4:55	3-Dec-96	P0497.D	T611333-08	14	4:55	3-Dec-96
'DEC0296	O0498.D	T611284-01	15		5:45	3-Dec-96	P0498.D	T611284-01	15	5:45	3-Dec-96
'DEC0296	O0499.D	T611284-02	16		6:35	3-Dec-96	P0499.D	T611284-02	16	6:35	3-Dec-96
'DEC0296	O0500.D	T611289-01	17		7:25	3-Dec-96	P0500.D	T611289-01	17	7:25	3-Dec-96
'DEC0296	O0501.D	T611289-03	18		8:15	3-Dec-96	P0501.D	T611289-03	18	8:15	3-Dec-96
'DEC0296	O0502.D	T611333-06	19		9:05	3-Dec-96	P0502.D	T611333-06	19	9:05	3-Dec-96
'DEC0296	O0503.D	HEXANE	20		9:55	3-Dec-96	P0503.D	HEXANE	20	9:55	3-Dec-96
'DEC0296	O0504.D	INDB-5	21		10:51	3-Dec-96	P0504.D	INDB-5	21	10:51	3-Dec-96
'DEC0296	O0505.D	AR1248 700 PPB	22		11:40	3-Dec-96	P0505.D	AR1248 700 PPB	22	11:40	3-Dec-96
'DEC0296	O0506.D	16725-BLK/SPIKE	23		12:29	3-Dec-96	P0506.D	16725-BLK/SPIKE	23	12:29	3-Dec-96
'DEC0296	O0507.D	T611329-01MS	24		1:26	3-Dec-96	P0507.D	T611329-01MS	24	1:26	3-Dec-96
'DEC0296	O0508.D	T611329-01MSD	25		2:14	3-Dec-96	P0508.D	T611329-01MSD	25	2:14	3-Dec-96
'DEC0296	O0509.D	16835-BLK01	26		3:03	3-Dec-96	P0509.D	16835-BLK01	26	3:03	3-Dec-96
'DEC0296	O0510.D	16608-BLK03	27		3:59	3-Dec-96	P0510.D	16608-BLK03	27	3:59	3-Dec-96
'DEC0296	O0511.D	T611363-01	28		4:49	3-Dec-96	P0511.D	T611363-01	28	4:49	3-Dec-96
'DEC0296	O0512.D	T611363-02	29		5:38	3-Dec-96	P0512.D	T611363-02	29	5:38	3-Dec-96
'DEC0296	O0513.D	T611430-03	30		6:27	3-Dec-96	P0513.D	T611430-03	30	6:27	3-Dec-96
'DEC0296	O0514.D	T611430-04	31		7:16	3-Dec-96	P0514.D	T611430-04	31	7:16	3-Dec-96
'DEC0296	O0515.D	T611375-08	32		8:05	3-Dec-96	P0515.D	T611375-08	32	8:05	3-Dec-96
'DEC0296	O0516.D	INDA-5	33		8:53	3-Dec-96	P0516.D	INDA-5	33	8:53	3-Dec-96
'DEC0296	O0517.D	AR1242 700 PPB	34		9:42	3-Dec-96	P0517.D	AR1242 700 PPB	34	9:42	3-Dec-96

Injection Log

GC: GC_OP
Column ID: RTX1701/RTX-5
Analyst: RMD

							Secondary File Information				
Subdirectory	**Data File**	**Laboratory ID**	**Vial #**	**DF**	**Inj. Time**	**Inj. Date**	**Data File**	**Laboratory ID**	**Vial #**	**Inj. Time**	**Inj. Date**
'DEC0296	O0517.D	AR1242 700 PPB	34		9:42	3-Dec-96	P0517.D	AR1242 700 PPB	34	9:42	3-Dec-96
'DEC0296	O0518.D	AR1660 700 PPB	1		10:31	3-Dec-96	P0518.D	AR1660 700 PPB	1	10:31	3-Dec-96
'DEC0296	O0519.D	AR1254 700 PPB	2		11:20	3-Dec-96	P0519.D	AR1254 700 PPB	2	11:20	3-Dec-96
'DEC0296	O0520.D	AR1248 700 PPB	3		0:09	4-Dec-96	P0520.D	AR1248 700 PPB	3	0:09	4-Dec-96
'DEC0296	O0521.D	T611407-10	4		0:57	4-Dec-96	P0521.D	T611407-10	4	0:57	4-Dec-96
'DEC0296	O0522.D	T611363-01	5		1:46	4-Dec-96	P0522.D	T611363-01	5	1:46	4-Dec-96
'DEC0296	O0523.D	T611363-02	6		2:35	4-Dec-96	P0523.D	T611363-02	6	2:35	4-Dec-96
'DEC0296	O0524.D	T611407-10	7		3:23	4-Dec-96	P0524.D	T611407-10	7	3:23	4-Dec-96
'DEC0296	O0525.D	16385-BLK/SPK	8		4:12	4-Dec-96	P0525.D	16385-BLK/SPK	8	4:12	4-Dec-96
'DEC0296	O0526.D	T611430-03MS	9		5:01	4-Dec-96	P0526.D	T611430-03MS	9	5:01	4-Dec-96
'DEC0296	O0527.D	T611430-03MSD	10		5:49	4-Dec-96	P0527.D	T611430-03MSD	10	5:49	4-Dec-96
'DEC0296	O0528.D	16835-BLK02	11		6:38	4-Dec-96	P0528.D	16835-BLK02	11	6:38	4-Dec-96
'DEC0296	O0529.D	T611436-01	12		7:27	4-Dec-96	P0529.D	T611436-01	12	7:27	4-Dec-96
'DEC0296	O0530.D	T611436-03	13		8:16	4-Dec-96	P0530.D	T611436-03	13	8:16	4-Dec-96
'DEC0296	O0531.D	AR1254 700 PPB	14		9:04	4-Dec-96	P0531.D	AR1254 700 PPB	14	9:04	4-Dec-96
'DEC0296	O0532.D	AR1248 700 PPB	15		9:53	4-Dec-96	P0532.D	AR1248 700 PPB	15	9:53	4-Dec-96
'DEC0296	O0533.D	T611436-05	16		10:42	4-Dec-96	P0533.D	T611436-05	16	10:42	4-Dec-96
'DEC0296	O0534.D	T611436-07	17		11:30	4-Dec-96	P0534.D	T611436-07	17	11:30	4-Dec-96
'DEC0296	O0535.D	T611436-11	18		12:19	4-Dec-96	P0535.D	T611436-11	18	12:19	4-Dec-96
'DEC0296	O0536.D	T611436-09	19		1:08	4-Dec-96	P0536.D	T611436-09	19	1:08	4-Dec-96
'DEC0296	O0537.D	AR1254	20		1:57	4-Dec-96	P0537.D	AR1254	20	1:57	4-Dec-96

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Injection Log

GC: GC_OP
Column ID: RTX1701/RTX-5
Analyst: RMD

Subdirectory	Data File	Laboratory ID	Vial #	DF	Inj. Time	Inj. Date	Secondary File Information: Data File	Laboratory ID	Vial #	Inj. Time	Inj. Date
'DEC0496	O0539.D	PEM	2		5:38	4-Dec-96	P0539.D	PEM	2	5:38	4-Dec-96
'DEC0496	O0540.D	INDA-5	3		6:27	4-Dec-96	P0540.D	INDA-5	3	6:27	4-Dec-96
'DEC0496	O0541.D	INDB-5	4		7:15	4-Dec-96	P0541.D	INDB-5	4	7:15	4-Dec-96
'DEC0496	O0542.D	TECH CHLORDANE	5		8.04	4-Dec-96	P0542.D	TECH.CHLORDANE	5	8.04	4-Dec-96
'DEC0496	O0543.D	AR1660 700 PPB	6		8:53	4-Dec-96	P0543.D	AR1660 700 PPB	6	8:53	4-Dec-96
'DEC0496	O0544.D	AR1254 700 PPB	7		9:41	4-Dec-96	P0544.D	AR1254 700 PPB	7	9:41	4-Dec-96
'DEC0496	O0545.D	16541-BLK03	8		10.30	4-Dec-96	P0545 D	16541-BLK03	8	10 30	4-Dec-96
'DEC0496	O0546.D	T611436-01	9		11:19	4-Dec-96	P0546.D	T611436-01	9	11:19	4-Dec-96
'DEC0496	O0547.D	T611436-03	10		0:08	5-Dec-96	P0547.D	T611436-03	10	0:08	5-Dec-96
'DEC0496	O0548.D	T611436-05	11		0:57	5-Dec-96	P0548.D	T611436-05	11	0:57	5-Dec-96
'DEC0496	O0549.D	T611436-07	12		1:45	5-Dec-96	P0549.D	T611436-07	12	1:45	5-Dec-96
'DEC0496	O0550.D	T611436-09	13		2:34	5-Dec-96	P0550.D	T611436-09	13	2:34	5-Dec-96
'DEC0496	O0551.D	T611436-11	14		3:23	5-Dec-96	P0551.D	T611436-11	14	3:23	5-Dec-96
'DEC0496	O0552.D	T611407-08	15		4:11	5-Dec-96	P0552.D	T611407-08	15	4:11	5-Dec-96
'DEC0496	O0553.D	T611407-10	16		5:00	5-Dec-96	P0553.D	T611407-10	16	5:00	5-Dec-96
'DEC0496	O0554.D	16725-BLK03	17		5:49	5-Dec-96	P0554.D	16725-BLK03	17	5:49	5-Dec-96
'DEC0496	O0555.D	INDB-5	18		6:37	5-Dec-96	P0555.D	INDB-5	18	6:37	5-Dec-96
'DEC0496	O0556.D	INDB-5	19		7:26	5-Dec-96	P0556.D	INDB-5	19	7:26	5-Dec-96
'DEC0496	O0557.D	AR1242 700 PPB	20		8:15	5-Dec-96	P0557.D	AR1242 700 PPB	20	8:15	5-Dec-96
'DEC0496	O0558.D	T611351-02	21		9:03	5-Dec-96	P0558.D	T611351-02	21	9:03	5-Dec-96
'DEC0496	O0559.D	T611351-03	22		9:52	5-Dec-96	P0559.D	T611351-03	22	9:52	5-Dec-96
'DEC0496	O0560.D	T611351-04	23		10:41	5-Dec-96	P0560.D	T611351-04	23	10:41	5-Dec-96
'DEC0496	O0561.D	16805-BLK01	24		11:30	5-Dec-96	P0561.D	16805-BLK01	24	11:30	5-Dec-96
'DEC0496	O0562.D	16805-BLK/SPIKE	25		12:18	5-Dec-96	P0562.D	16805-BLK/SPIKE	25	12:18	5-Dec-96
'DEC0496	O0563.D	T611342-01MS	26		1:08	5-Dec-96	P0563.D	T611342-01MS	26	1:08	5-Dec-96
'DEC0496	O0564.D	T611342-01MSD	27		1:58	5-Dec-96	P0564.D	T611342-01MSD	27	1:58	5-Dec-96
'DEC0496	O0565.D	T611342-01	28		2:46	5-Dec-96	P0565.D	T611342-01	28	2:46	5-Dec-96
'DEC0496	O0566.D	16725-BLK04	29		3:35	5-Dec-96	P0566.D	16725-BLK04	29	3:35	5-Dec-96
'DEC0496	O0567.D	T611351-04	30		4:24	5-Dec-96	P0567.D	T611351-04	30	4:24	5-Dec-96
'DEC0496	O0568.D	HEXANE	31		5:12	5-Dec-96	P0568.D	HEXANE	31	5.12	5-Dec-96
'DEC0496	O0569.D	INDA-5	32		6:01	5-Dec-96	P0569.D	INDA-5	32	6:01	5-Dec-96
'DEC0496	O0570.D	AR1660 700 PPB	33		6:50	5-Dec-96	P0570.D	AR1660 700 PPB	33	6:50	5-Dec-96
'DEC0496	O0571.D	T611445-02	34		7:38	5-Dec-96	P0571.D	T611445-02	34	7:38	5-Dec-96
This original is maintained in a bound logbook										Page Number:	

Injection Log

GC: GC_ST
Column ID: RTX1701/5
Analyst: JR

							Secondary File Information				
Subdirectory	**Data File**	**Laboratory ID**	**Vial #**	**DF**	**Inj. Time**	**Inj. Date**	**Data File**	**Laboratory ID**	**Vial #**	**Inj. Time**	**Inj. Date**
'DEC0396	S8960.D	HERB50	1		4:11	3-Dec-96	T8960.D	HERB50	1	4:11	3-Dec-96
'DEC0396	S8961.D	HERB100	2		4:34	3-Dec-96	T8961.D	HERB100	2	4:34	3-Dec-96
'DEC0396	S8962.D	HERB250	3		4:57	3-Dec-96	T8962.D	HERB250	3	4:57	3-Dec-96
'DEC0396	S8963.D	HERB500	4		5:21	3-Dec-96	T8963.D	HERB500	4	5 21	3-Dec-96
'DEC0396	S8964.D	HERB1000	5		5:44	3-Dec-96	T8964.D	HERB1000	5	5:44	3-Dec-96
'DEC0396	S8965.D	SBLK16757MS	6		6:07	3-Dec-96	T8965.D	SBLK16757MS	6	6:07	3-Dec-96
'DEC0396	S8966.D	T611333-05MS	7		6:31	3-Dec-96	T8966.D	T611333-05MS	7	6:31	3-Dec-96
'DEC0396	S8967.D	T611333-05MSD	8		6:54	3-Dec-96	T8967.D	T611333-05MSD	8	6 54	3-Dec-96
'DEC0396	S8968.D	SBLK16761MS	9		7:18	3-Dec-96	T8968.D	SBLK16761MS	9	7:18	3-Dec-96
'DEC0396	S8969.D	T611332-09MS	10		7:41	3-Dec-96	T8969.D	T611332-09MS	10	7:41	3-Dec-96
'DEC0396	S8970.D	T611332-09MSD	11		8:04	3-Dec-96	T8970.D	T611332-09MSD	11	8.04	3-Dec-96
'DEC0396	S8971.D	SBLK16769MS	12		8:28	3-Dec-96	T8971.D	SBLK16769MS	12	8:28	3-Dec-96
'DEC0396	S8972.D	T611365-06MS	13		8:51	3-Dec-96	T8972.D	T611365-06MS	13	8:51	3-Dec-96
'DEC0396	S8973.D	T611365-06MSD	14		9:14	3-Dec-96	T8973.D	T611365-06MSD	14	9:14	3-Dec-96
'DEC0396	S8974.D	SBLK16819MS	15		9:38	3-Dec-96	T8974.D	SBLK16819MS	15	9:38	3-Dec-96
'DEC0396	S8975.D	HERB250	3		10:01	3-Dec-96	T8975.D	HERB250	3	10:01	3-Dec-96
'DEC0396	S8976.D	HERB250	3		10:24	3-Dec-96	T8976.D	HERB250	3	10:24	3-Dec-96
'DEC0396	S8977.D	T611369-10MS	16		10:48	3-Dec-96	T8977.D	T611369-10MS	16	10:48	3-Dec-96
'DEC0396	S8978.D	T611369-10MSD	17		11:11	3-Dec-96	T8978.D	T611369-10MSD	17	11:11	3-Dec-96
'DEC0396	S8979.D	SBLK16473T2	18		11:34	3-Dec-96	T8979.D	SBLK16473T2	18	11:34	3-Dec-96
'DEC0396	S8980.D	T611407-08	19		11:58	3-Dec-96	T8980.D	T611407-08	19	11 58	3-Dec-96
'DEC0396	S8981.D	T611407-10	20		0:21	4-Dec-96	T8981.D	T611407-10	20	0:21	4-Dec-96
'DEC0396	S8982.D	T611436-01	21		0:44	4-Dec-96	T8982.D	T611436-01	21	0:44	4-Dec-96
'DEC0396	S8983.D	T611436-03	22		1:07	4-Dec-96	T8983.D	T611436-03	22	1:07	4-Dec-96
'DEC0396	S8984.D	T611436-05	23		1:31	4-Dec-96	T8984.D	T611436-05	23	1:31	4-Dec-96
'DEC0396	S8985.D	T611436-07	24		1:54	4-Dec-96	T8985.D	T611436-07	24	1:54	4-Dec-96
'DEC0396	S8986.D	T611436-09	25		2:17	4-Dec-96	T8986.D	T611436-09	25	2:17	4-Dec-96
'DEC0396	S8987.D	HERB250	3		2:40	4-Dec-96	T8987.D	HERB250	3	2:40	4-Dec-96
'DEC0396	S8988.D	HERB250	3		3:04	4-Dec-96	T8988.D	HERB250	3	3:04	4-Dec-96
'DEC0396	S8989.D	T611436-11	26		3:27	4-Dec-96	T8989.D	T611436-11	26	3:27	4-Dec-96
'DEC0396	S8990.D	HERB250	3		3:50	4-Dec-96	T8990.D	HERB250	3	3:50	4-Dec-96

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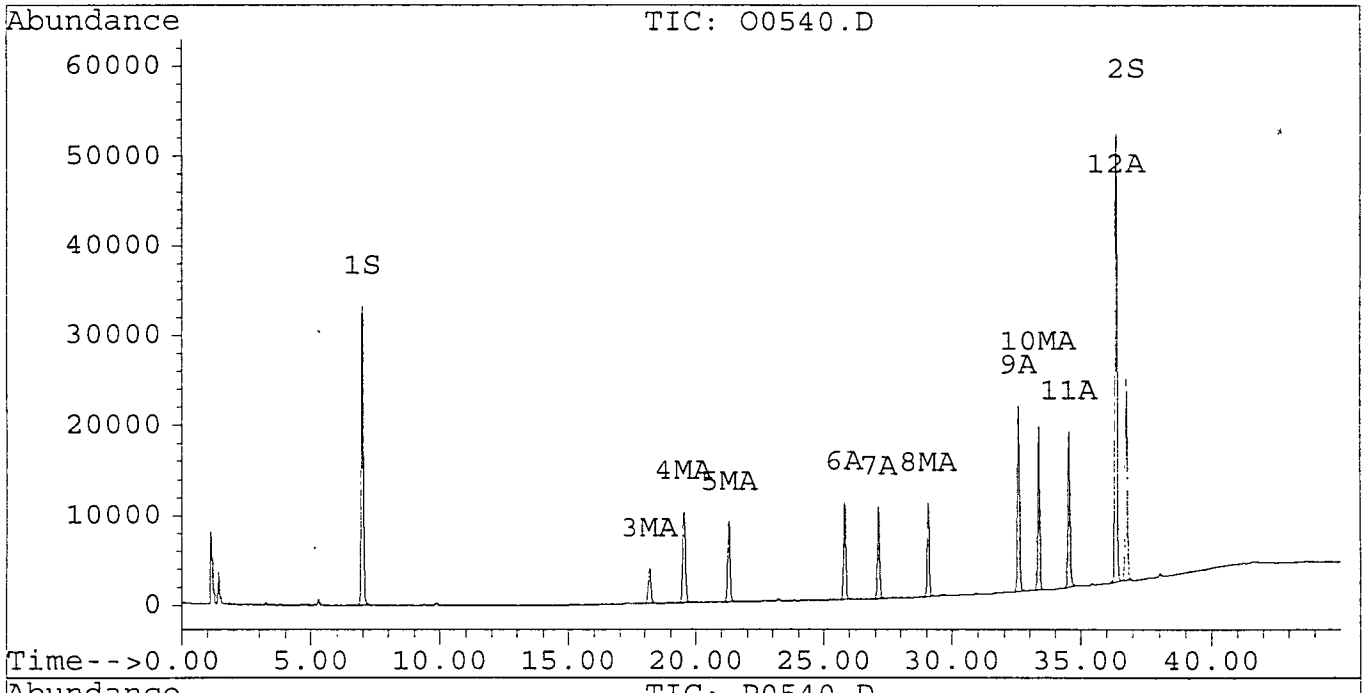
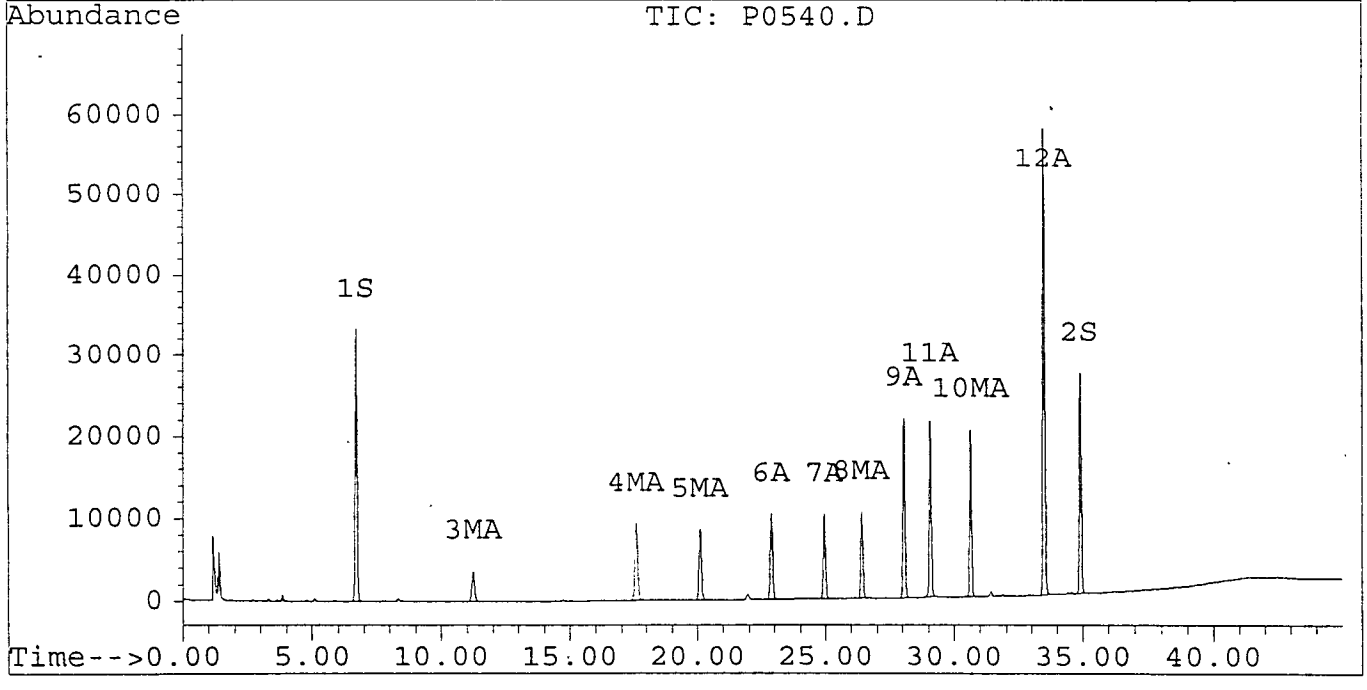
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0496\O0540.D Vial: 3
Signal #2 : C:\HPCHEM\6\DATA\DEC0496\O0540.D\P0540.D
Acq On : 04 Dec 96 06:27 PM Operator:
Sample : INDA-5 Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time:

Method : C:\HPCHEM\6\METHODS\O8081015.M
Title : CBOPAP
Last Update : Thu Dec 05 13:07:49 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0496\O0540.D Vial: 3
Signal #2 : C:\HPCHEM\6\DATA\DEC0496\O0540.D\P0540.D
Acq On : 04 Dec 96 06:27 PM Operator:
Sample : INDA-5 Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time: Dec 4 19:33 1996

Method : C:\HPCHEM\6\METHODS\O8081015.M
Title : CBOPAP
Last Update : Thu Dec 05 13:07:49 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

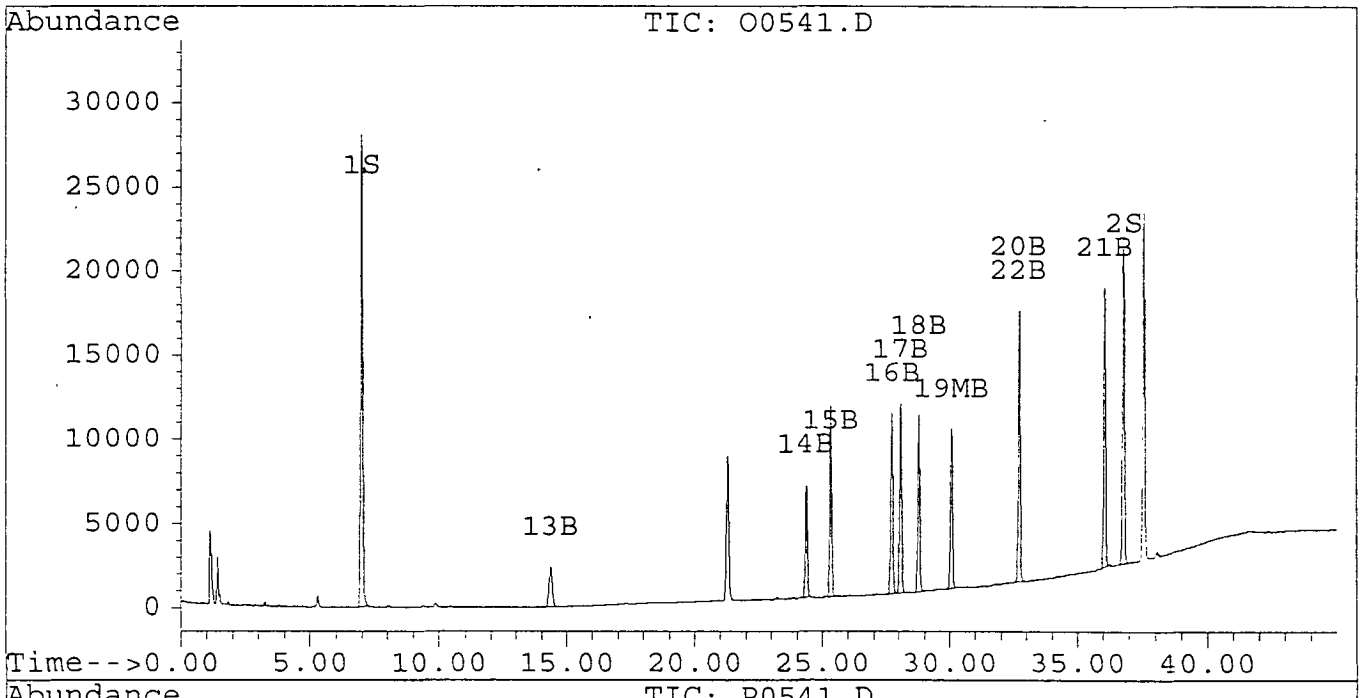
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	6.99	6.70	1804613	1661368	155.478	136.940
			Recovery		= 77.74%	68.47%
2) S DBC (Surr.)	36.75	34.90	1222493	1403571	147.851	146.339
			Recovery		= 73.93%	73.17%
Target Compounds						
3) MA gamma-BHC [Lindane]	18.18	11.24	271199	271276	29.452	25.513
4) MA Heptachlor	19.54	17.60	735054	733539	56.016	53.748
5) MA Aldrin	21.28	20.11	583713	580583	57.336	53.068
6) A Heptachlor epoxide	25.81	22.88	621545	639592	57.450	55.609
7) A Endosulfan I	27.14	24.95	577752	596424	57.068	55.629
8) MA Dieldrin	29.07	26.41	555686	570809	58.650	55.217m
9) A Endosulfan II	32.56	28.07	1083564	1184136	104.532	110.946
10) MA 4,4'-DDT	33.35	30.64	934284	1048593	114.051	103.030
11) A Endrin aldehyde	34.53	29.08	994040	1201381	137.511	134.533
12) A Methoxychlor	36.36	33.49	2753696	3109934	509.288	491.983
Avg. Chlordane			0	0	N.D.	N.D.
Avg. Toxaphene			0	0	N.D.	N.D.
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
Avg. Aroclor 1254			0	0	N.D.	N.D.
Avg. Aroclor 1260			0	0	N.D.	N.D.

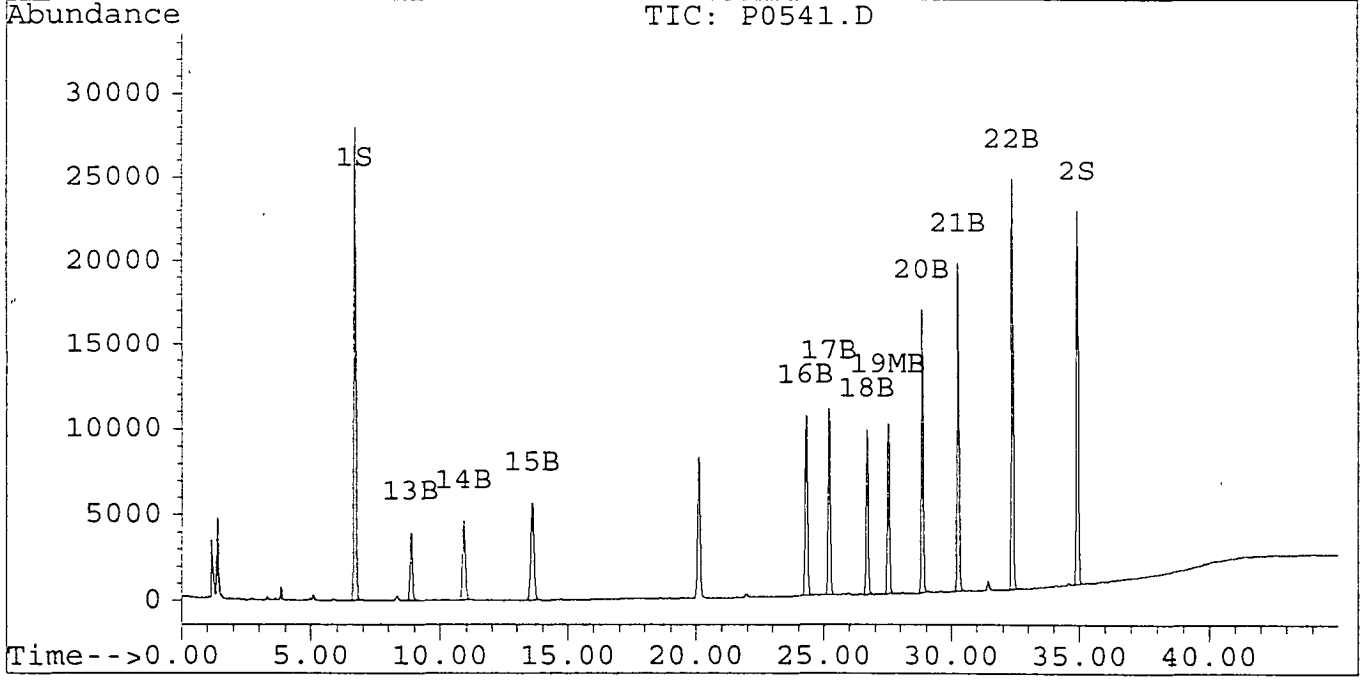
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : C:\HPCHEM\6\DATA\DEC0496\O0541.D Vial: 4
Signal #2 : C:\HPCHEM\6\DATA\DEC0496\O0541.D\P0541.D
Acq On : 04 Dec 96 07:15 PM Operator:
Sample : INDB-5 Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time:

Method : C:\HPCHEM\6\METHODS\O8081015.M
Title : CBOPAP
Last Update : Thu Dec 05 13:07:49 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0496\O0541.D Vial: 4
Signal #2 : C:\HPCHEM\6\DATA\DEC0496\O0541.D\P0541.D
Acq On : 04 Dec 96 07:15 PM Operator:
Sample : INDB-5 Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time: Dec 4 20:17 1996

Method : C:\HPCHEM\6\METHODS\O8081015.M
Title : CBOPAP
Last Update : Thu Dec 05 13:07:49 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
		System Monitoring Compounds							
1)	S	TCMX (Surr.)	6.99	6.70	1516632	1390383	130.667	114.604	
					Recovery		= 65.33%	57.30%	
2)	S	DBC (Surr.)	36.77	34.92	1011863	1160806	122.377	121.028	
					Recovery		= 61.19%	60.51%	
		Target Compounds							
13)	B	alpha-BHC	14.36	8.89	213780	238899	26.672	23.478	
14)	B	beta-BHC	24.37	10.92	369105	352685	55.791	48.007	
15)	B	delta-BHC	25.33	13.60	572566	507990	61.778	48.614	
16)	B	gamma-Chlordane	27.72	24.32	608717	634012	50.186	51.413	
17)	B	alpha-Chlordane	28.07	25.21	623378	643238	48.796	50.851	
18)	B	4,4'-DDE	28.78	26.70	563419	523624	52.964	43.684	
19)	MB	Endrin	30.06	27.53	505508	540073	53.263	52.272	
20)	B	4,4'-DDD	32.70	28.86	807673	845686	93.878	97.698	
21)	B	Endosulfan sulfate	36.03	30.27	845921	1030591	95.168	105.147	
22)	B	Endrin ketone	32.70	32.38	807673	1251077	74.125	99.553	#
Avg.		Chlordane			0	0	N.D.	N.D.	
Avg.		Toxaphene			0	0	N.D.	N.D.	
Avg.		Aroclor 1016			0	0	N.D.	N.D.	
Avg.		Aroclor 1221			0	0	N.D.	N.D.	
Avg.		Aroclor 1232			0	0	N.D.	N.D.	
Avg.		Aroclor 1242			0	0	N.D.	N.D.	
Avg.		Aroclor 1248			0	0	N.D.	N.D.	
Avg.		Aroclor 1254			0	0	N.D.	N.D.	
Avg.		Aroclor 1260			0	0	N.D.	N.D.	

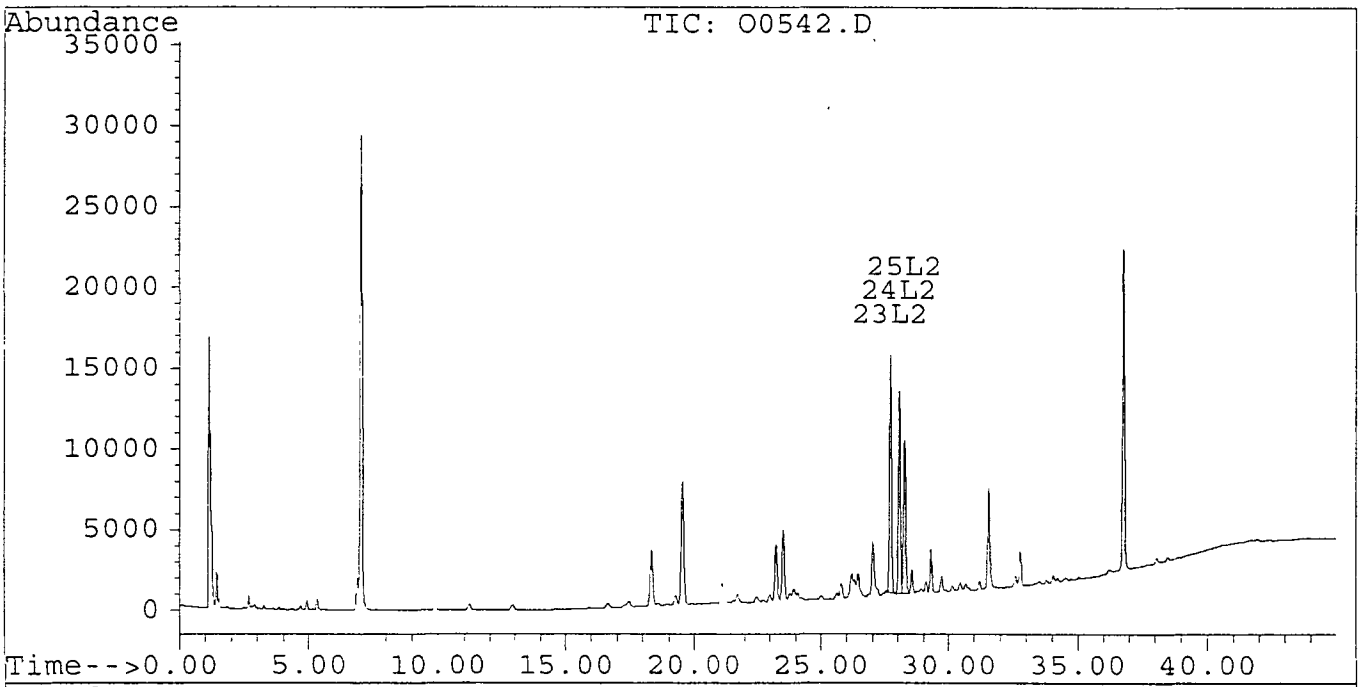
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

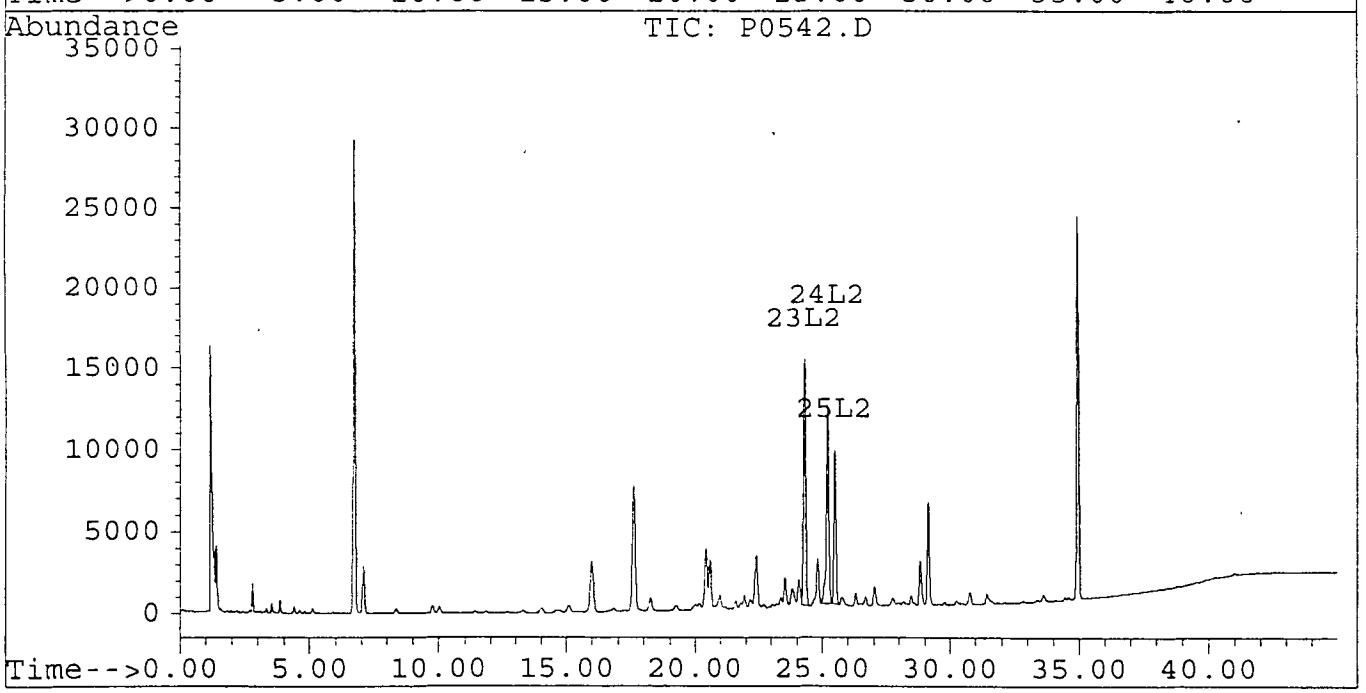
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0496\O0542.D Vial: 5
Signal #2 : C:\HPCHEM\6\DATA\DEC0496\O0542.D\P0542.D
Acq On : 04 Dec 96 08:04 PM Operator:
Sample : TECH.CHLORDANE Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\O8081015.M
Title : CBOPAP
Last Update : Thu Dec 05 13:07:49 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0496\O0542.D Vial: 5
Signal #2 : C:\HPCHEM\6\DATA\DEC0496\O0542.D\P0542.D
Acq On : 04 Dec 96 08:04 PM Operator:
Sample : TECH.CHLORDANE Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time: Dec 5 12:39 1996

Method : c:\HPCHEM\6\METHODS\O8081015.M
Title : CBOPAP
Last Update : Thu Dec 05 13:07:49 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
Target Compounds						
23) L2 Chlordane	27.71	24.31	823330	908461	744.826	729.796
24) L2 Chlordane-2	28.06	25.20	697661	817158	737.512	714.302m
25) L2 Chlordane-3	28.27	25.49	547095	549280	743.085	811.897m
∅Avg. Chlordane			2068086	2274899	741.808	751.998
Avg. Toxaphene			0	0	N.D.	N.D.
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
Avg. Aroclor 1254			0	0	N.D.	N.D.
Avg. Aroclor 1260			0	0	N.D.	N.D.

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

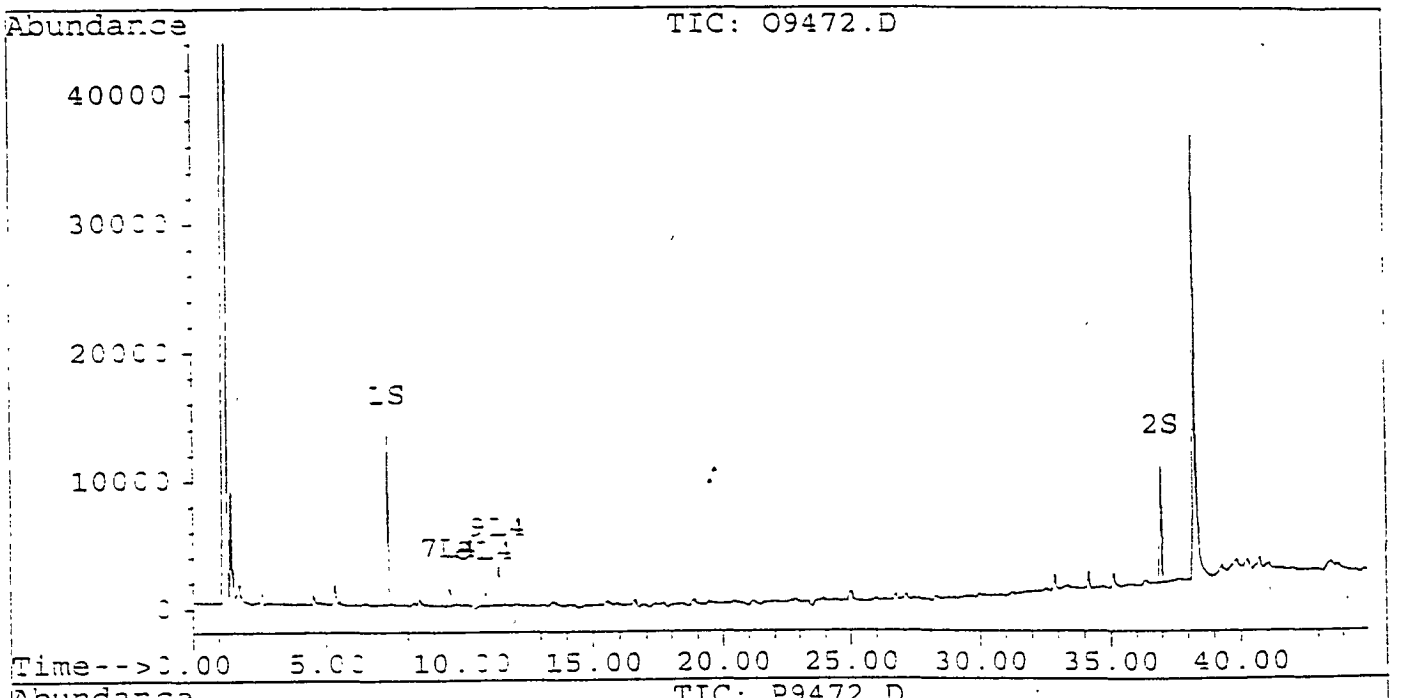
Quantitation Report

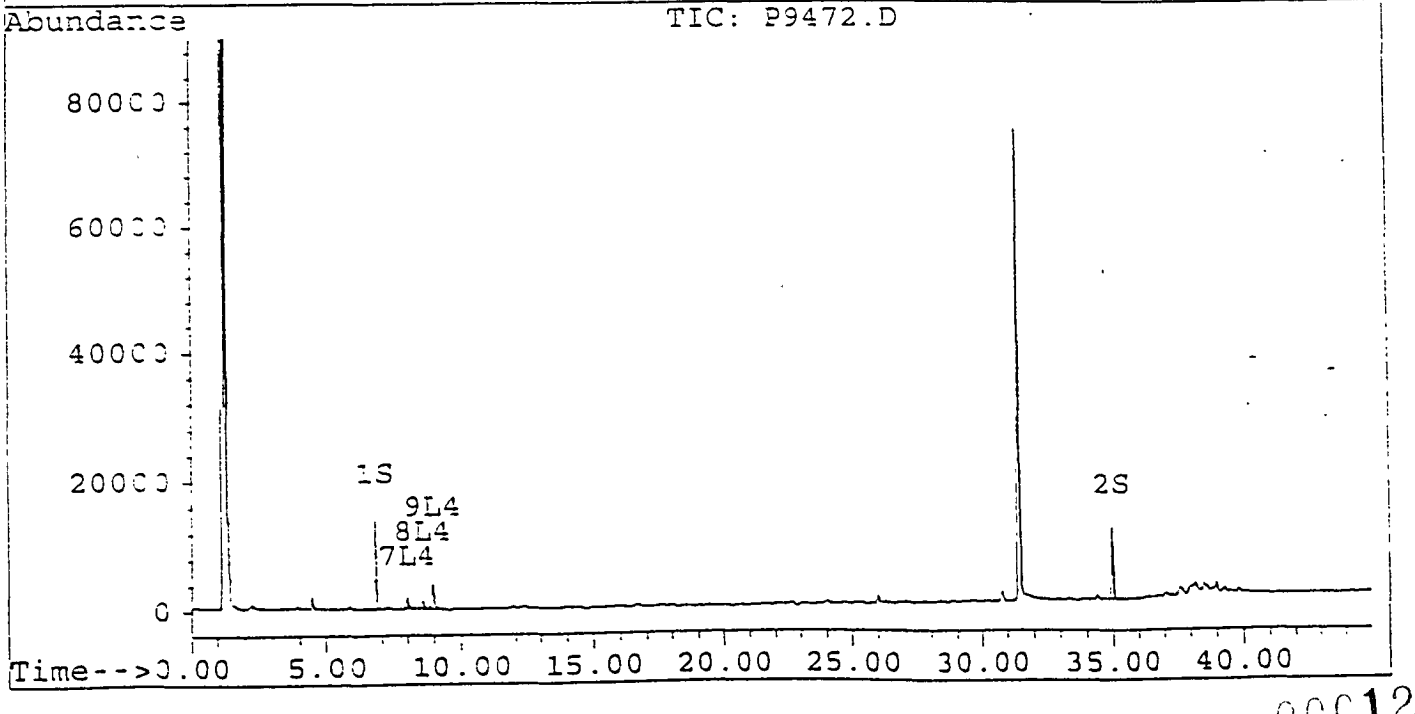
Signal #1 : N:\GC_OP\OCT1196\O9472.D
Signal #2 : N:\GC_OP\OCT1196\O9472.D\P9472.D
Acq On : 13 Oct 96 07:12 PM
Sample : AR1221 700 PPB
Misc : STD
Quant Time:

Vial: 64
Operator:
Inst : GC_OP
Multiplr: 1.00

Method : N:\GC_OP\OPCB1015.M
Title : CBOPCB
Last Update : Tue Oct 29 15:58:08 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701
Signal #1 Info : 0.53
Signal #2 Phase: RTX5
Signal #2 Info : 0.53





Quantitation Report

Signal #1 : N:\GC_OP\OCT1196\09472.D
Signal #2 : N:\GC_OP\OCT1196\09472.D\P9472.D
Acq On : 13 Oct 96 07:12 PM
Sample : AR1221 700 PPB
Misc : STD
Quant Time: Oct 17 17:06 1996

Vial: 64
Operator:
Inst : GC_OP
Multiplr: 1.00

Method : n:\GC_OP\OPCB1015.M
Title : CBOPCB
Last Update : Tue Oct 29 15:56:08 1996
Response via : Multiple Level Calibration

Volume Inj. : 1ul
Signal #1 Phase : RTX1701
Signal #1 Info : 0.53
Signal #2 Phase: RTX5
Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.22	6.77	734090	767528	69.316	67.748
			Recovery	=	34.66%	33.87%
2) S DBC (Surr.)	36.95	34.96	492549	584858	69.512	59.561
			Recovery	=	34.76%	29.78%
Target Compounds						
3) L3 Aroclor 1016	0.00	0.00	0	0	N.D.	N.D.
4) L3 Aroclor 1016-2	0.00	0.00	0	0	N.D.	N.D.
5) L3 Aroclor 1016-3	0.00	0.00	0	0	N.D.	N.D.
6) L3 Aroclor 1016-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1016			0	0	N.D.	N.D.
7) L4 Aroclor 1221	9.59	7.95	113554	109954	744.271m	732.848m
8) L4 Aroclor 1221-2	10.87	8.57	91266	74824	788.288m	746.184m
9) L4 Aroclor 1221-3	11.35	8.94	301486	291150	753.103m	779.990m
Avg. Aroclor 1221			506306	475928	761.887	753.007
10) L5 Aroclor 1232	0.00	0.00	0	0	N.D.	N.D.
11) L5 Aroclor 1232-2	0.00	0.00	0	0	N.D.	N.D.
12) L5 Aroclor 1232-3	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
13) L6 Aroclor 1242	0.00	0.00	0	0	N.D.	N.D.
14) L6 Aroclor 1242-2	0.00	0.00	0	0	N.D.	N.D.
15) L6 Aroclor 1242-3	0.00	0.00	0	0	N.D.	N.D.
16) L6 Aroclor 1242-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
17) L7 Aroclor 1248	0.00	0.00	0	0	N.D.	N.D.
18) L7 Aroclor 1248-2	0.00	0.00	0	0	N.D.	N.D.
19) L7 Aroclor 1248-3	0.00	0.00	0	0	N.D.	N.D.
20) L7 Aroclor 1248-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
21) ML8 Aroclor 1254	0.00	0.00	0	0	N.D.	N.D.
22) ML8 Aroclor 1254-2	0.00	0.00	0	0	N.D.	N.D.
23) ML8 Aroclor 1254-3	0.00	0.00	0	0	N.D.	N.D.

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

Quantitation Report

Signal #1 : N:\GC_OP\OCT1196\O9472.D
Signal #2 : N:\GC_OP\OCT1196\O9472.D\P9472.D
Acq On : 13 Oct 96 07:12 PM
Sample : AR1221 700 PPB
Misc : STD
Quant Time: Oct 17 17:06 1996

Vial: 64
Operator:
Inst : GC_OP
Multiplr: 1.00

Method : N:\GC_OP\OPCB1015.M
Title : CBOPCB
Last Update : Tue Oct 29 15:58:03 1996
Response via : Multiple Level Calibration

Volume Inj. : 1ul
Signal #1 Phase : RTX1701
Signal #1 Info : 0.53
Signal #2 Phase: RTX5
Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
4) ML8 Aroclor 1254-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1254			0	0	N.D.	N.D.
5) L9 Aroclor 1260	0.00	0.00	0	0	N.D.	N.D.
26) L9 Aroclor 1260-2	0.00	0.00	0	0	N.D.	N.D.
27) L9 Aroclor 1260-3	0.00	0.00	0	0	N.D.	N.D.
28) L9 Aroclor 1260-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1260			0	0	N.D.	N.D.

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

Quantitation Report

Signal #1 : N:\GC_OP\OCT1196\09478.D
Signal #2 : N:\GC_OP\OCT1196\09478.D\P9478.D
Acq On : 14 Oct 96 00:07 AM
Sample : AR1232 700 PPB
Misc : STD
Quant Time:

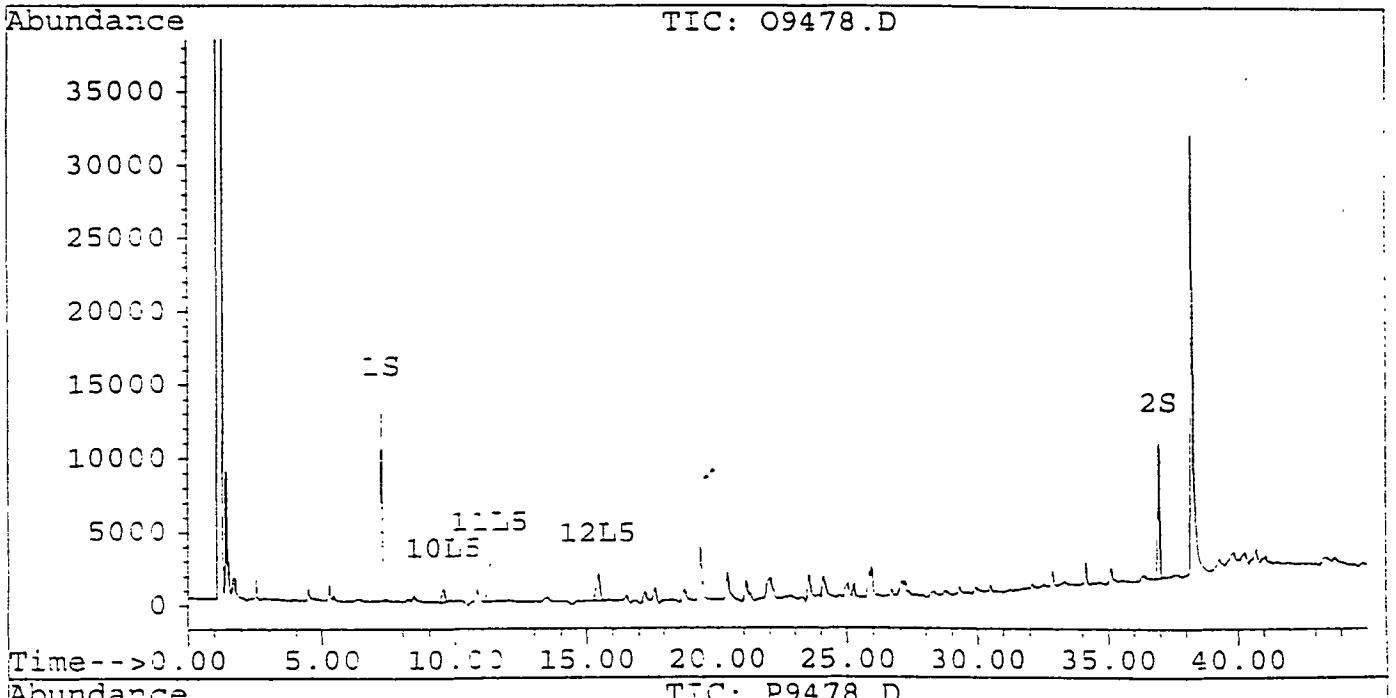
Vial: 70

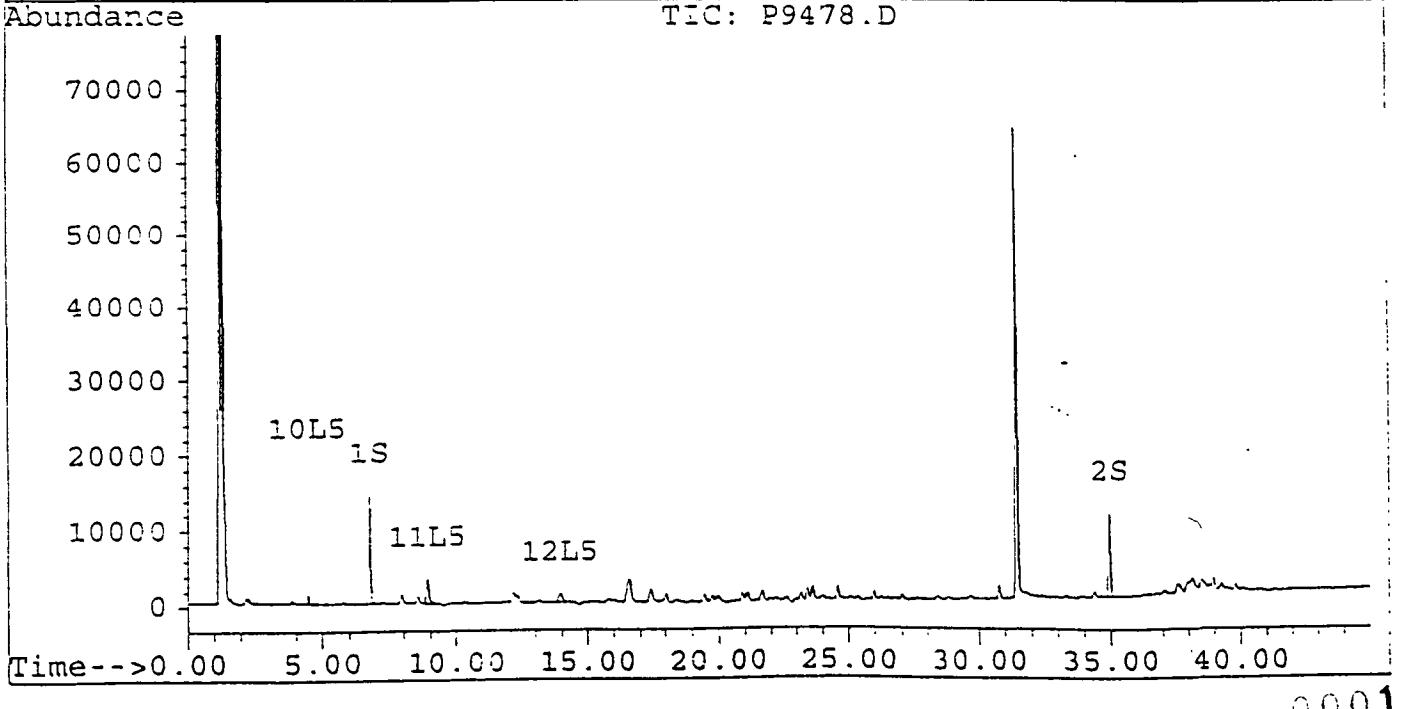
Operator:
Inst : GC_OP
Multiplr: 1.00

Method : n:\GC_OP\OPCB1015.M
Title : CBOPCB
Last Update : Tue Oct 29 15:58:03 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701
Signal #1 Info : 0.53

Signal #2 Phase: RTX5
Signal #2 Info : 0.53





000132

Quantitation Report

Signal #1 : N:\GC_OP\OCT1196\09478.D
Signal #2 : N:\GC_OP\OCT1196\09478.D\P9478.D
Acq On : 14 Oct 96 00:07 AM
Sample : AR1232 700 PPB
Misc : STD
Quant Time: Oct 21 12:31 1996

Vial: 70
Operator:
Inst : GC_OP
Multiplr: 1.00

Method : n:\GC_OP\OPCB1015.M
Title : CBOPCB
Last Update : Tue Oct 29 15:58:08 1996
Response via : Multiple Level Calibration

Volume Inj. : 1ul
Signal #1 Phase : RTX1701
Signal #1 Info : 0.53
Signal #2 Phase: RTX5
Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.18	6.73	727780	755996	68.720	66.730
			Recovery	=	34.36%	33.37%
2) S DBC (Surr.)	36.94	34.95	498601	586996	70.366	59.779
			Recovery	=	35.18%	29.89%
Target Compounds						
3) L3 Aroclor 1016	0.00	0.00	0	0	N.D.	N.D.
4) L3 Aroclor 1016-2	0.00	0.00	0	0	N.D.	N.D.
5) L3 Aroclor 1016-3	0.00	0.00	0	0	N.D.	N.D.
6) L3 Aroclor 1016-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1016			0	0	N.D.	N.D.
7) L4 Aroclor 1221	0.00	0.00	0	0	N.D.	N.D.
8) L4 Aroclor 1221-2	0.00	0.00	0	0	N.D.	N.D.
9) L4 Aroclor 1221-3	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
10) L5 Aroclor 1232	9.54	4.45	77072	43384	750.856m	704.985m
11) L5 Aroclor 1232-2	11.30	8.89	254048	236768	785.881m	756.051m
12) L5 Aroclor 1232-3	15.42	13.94	194614	120592	786.566m	750.281m
Avg. Aroclor 1232			525734	400744	774.434	737.105
13) L6 Aroclor 1242	0.00	0.00	0	0	N.D.	N.D.
14) L6 Aroclor 1242-2	0.00	0.00	0	0	N.D.	N.D.
15) L6 Aroclor 1242-3	0.00	0.00	0	0	N.D.	N.D.
16) L6 Aroclor 1242-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
17) L7 Aroclor 1248	0.00	0.00	0	0	N.D.	N.D.
18) L7 Aroclor 1248-2	0.00	0.00	0	0	N.D.	N.D.
19) L7 Aroclor 1248-3	0.00	0.00	0	0	N.D.	N.D.
20) L7 Aroclor 1248-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
21) ML8 Aroclor 1254	0.00	0.00	0	0	N.D.	N.D.
22) ML8 Aroclor 1254-2	0.00	0.00	0	0	N.D.	N.D.
23) ML8 Aroclor 1254-3	0.00	0.00	0	0	N.D.	N.D.

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

000133

Quantitation Report

Signal #1 : N:\GC_OP\OCT1196\O9478.D
Signal #2 : N:\GC_OP\OCT1196\O9478.D\P9478.D
Acq On : 14 Oct 96 00:07 AM
Sample : AR1232 700 PPB
Misc : STD
Quant Time: Oct 21 12:31 1996

Vial: 70

Operator:
Inst : GC_OP
Multiplr: 1.00

Method : n:\GC_OP\OPCB1015.M
Title : CBOPCB
Last Update : Tue Oct 29 15:58:08 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701
Signal #1 Info : 0.53

Signal #2 Phase: RTX5
Signal #2 Info : 0.53

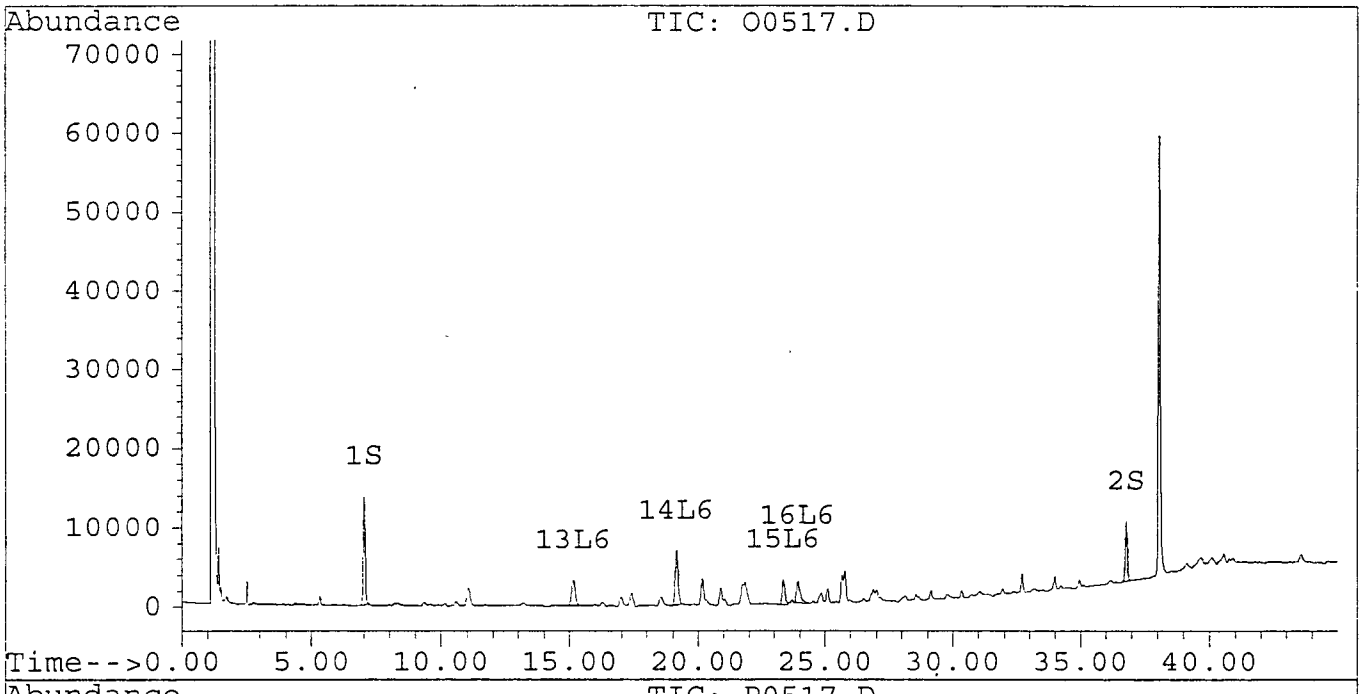
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
4) ML8 Aroclor 1254-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1254			0	0	N.D.	N.D.
5) L9 Aroclor 1260	0.00	0.00	0	0	N.D.	N.D.
6) L9 Aroclor 1260-2	0.00	0.00	0	0	N.D.	N.D.
27) L9 Aroclor 1260-3	0.00	0.00	0	0	N.D.	N.D.
28) L9 Aroclor 1260-4	0.00	0.00	0	0	N.D.	N.D.
Avg. Aroclor 1260			0	0	N.D.	N.D.

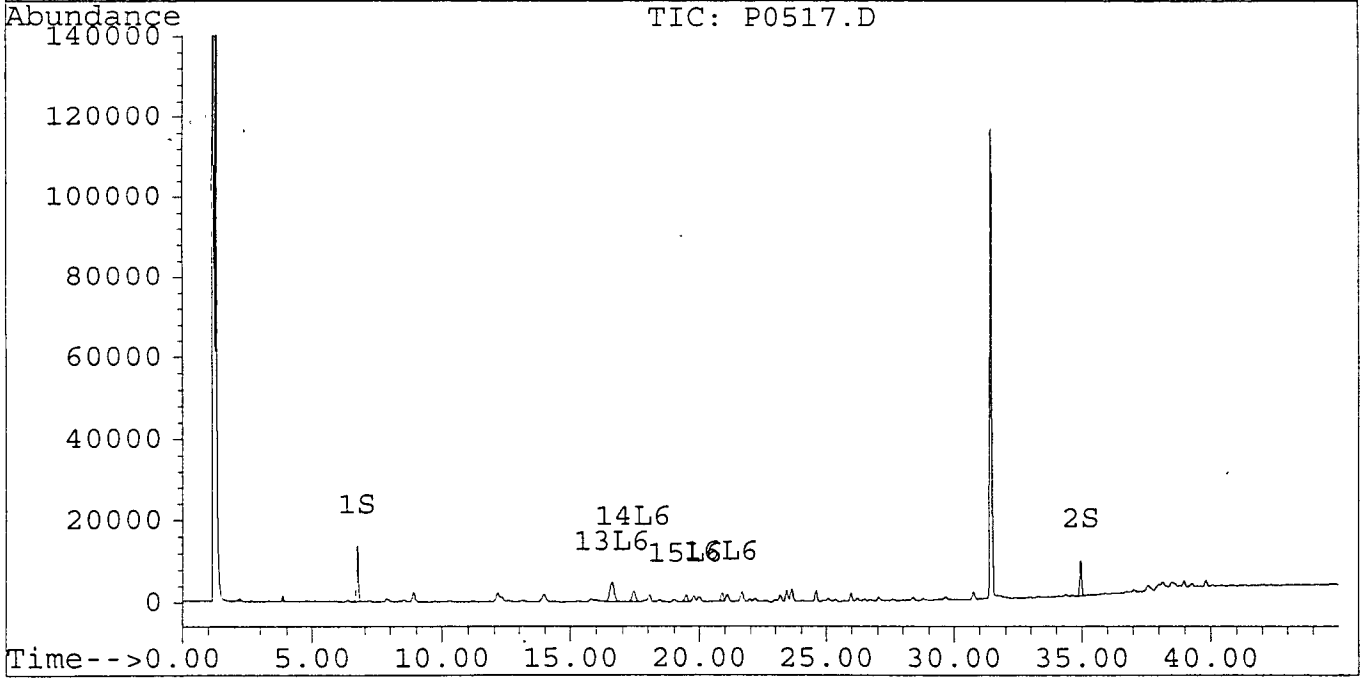
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0517.D Vial: 34
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0517.D\P0517.D
Acq On : 03 Dec 96 09:42 PM Operator:
Sample : AR1242 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time:

Method : C:\HPCHEM\6\METHODS\O6081015.M
Title : CBOPAP
Last Update : Wed Dec 04 11:10:13 1996
Response via : Multiple Level Calibration

Volume Inj. : 1ul
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0517.D Vial: 34
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0517.D\P0517.D
Acq On : 03 Dec 96 09:42 PM Operator:
Sample : AR1242 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time: Dec 4 10:58 1996

Method : C:\HPCHEM\6\METHODS\O6081015.M
Title : CBOPAP
Last Update : Wed Dec 04 11:10:13 1996
Response via : Multiple Level Calibration

Volume Inj. : 1ul
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.02	6.73	699156	666077	59.688	54.164
			Recovery	=	29.84%	27.08%
2) S DBC (Surr.)	36.79	34.94	415597	454888	50.127	47.077
			Recovery	=	25.06%	23.54%
Target Compounds						
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
13) L6 Aroclor 1242	15.15	16.61	328012	562009	731.645m	651.219
14) L6 Aroclor 1242-2	19.15	17.45	541629	230794	752.902	634.987m
15) L6 Aroclor 1242-3	23.35	19.47	261420	135122	723.528m	673.394m
16) L6 Aroclor 1242-4	23.92	20.89	273314	146874	769.758m	737.117m
Avg. Aroclor 1242			1404375	1074799	744.458	674.179
Avg. Aroclor 1248			0	0	N.D.	N.D.
Avg. Aroclor 1254			0	0	N.D.	N.D.
Avg. Aroclor 1260			0	0	N.D.	N.D.

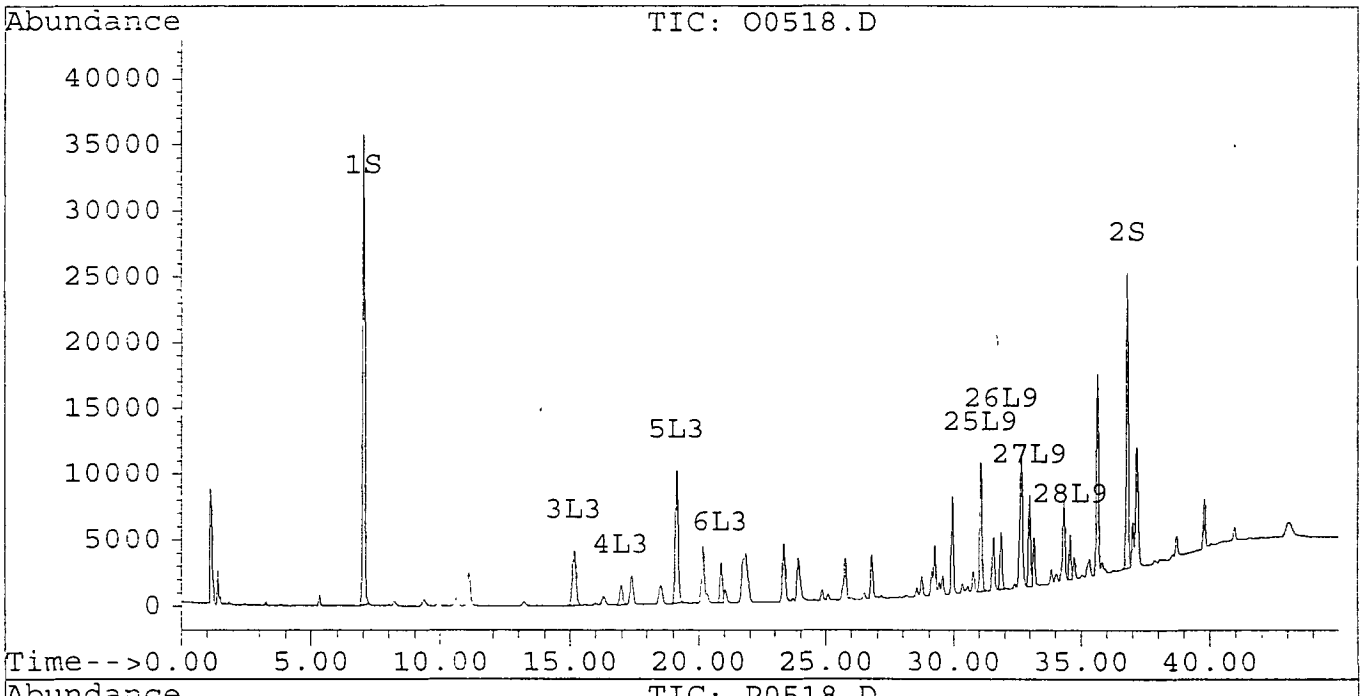
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

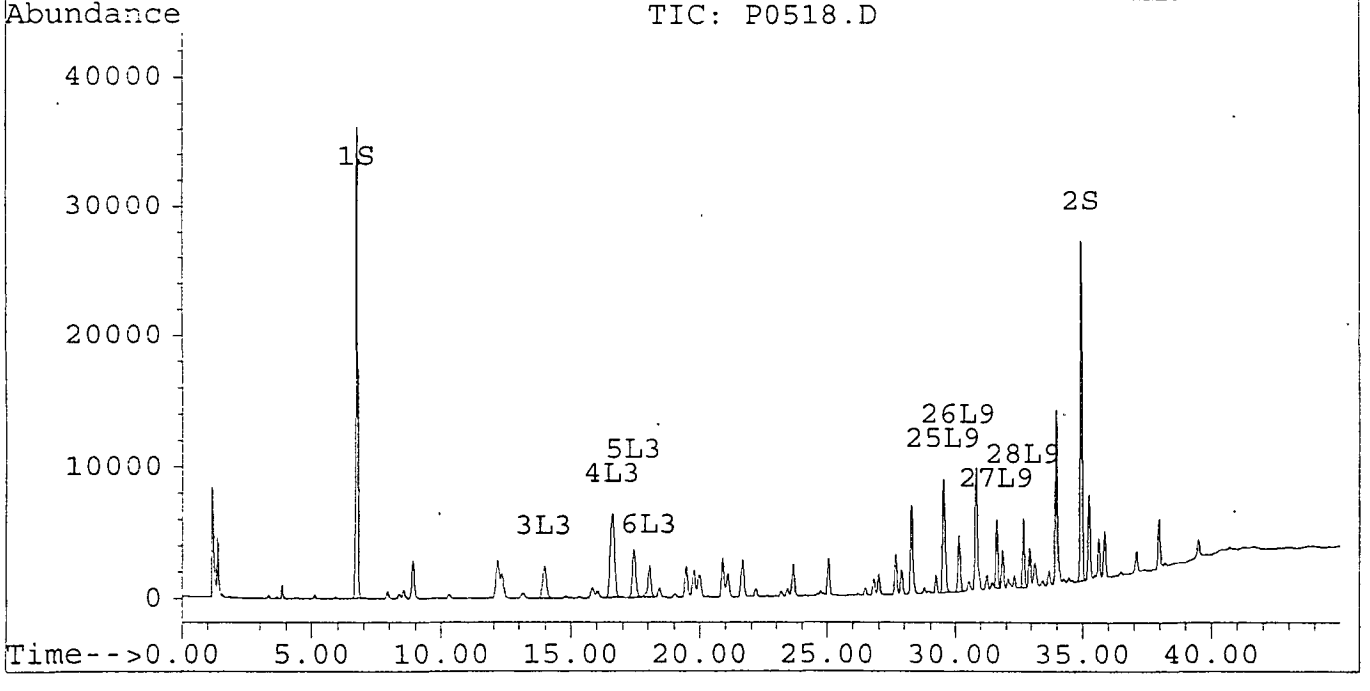
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0518.D Vial: 1
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0518.D\P0518.D
Acq On : 03 Dec 96 10:31 PM Operator:
Sample : AR1660 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time:

Method : C:\HPCHEM\6\METHODS\O6081015.M
Title : CBOPAP
Last Update : Wed Dec 04 11:10:13 1996
Response via : Multiple Level Calibration

Volume Inj. : 1ul
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0518.D Vial: 1
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0518.D\P0518.D
Acq On : 03 Dec 96 10:31 PM Operator:
Sample : AR1660 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time: Dec 4 10:56 1996

Method : C:\HPCHEM\6\METHODS\O6081015.M
Title : CBOPAP
Last Update : Wed Dec 04 11:10:13 1996
Response via : Multiple Level Calibration

Volume Inj. : 1ul
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.03	6.74	1881313	1768465	160.611	143.807
			Recovery		= 80.31%	71.90%
2) S DBC (Surr.)	36.79	34.94	1212326	1363170	146.225	141.075
			Recovery		= 73.11%	70.54%
Target Compounds						
3) L3 Aroclor 1016	15.15	13.97	441202	252238	768.411m	690.216m
4) L3 Aroclor 1016-2	16.99	16.61	127756	747930	784.227m	668.855
5) L3 Aroclor 1016-3	19.14	17.45	807384	321990	857.390	665.191m
6) L3 Aroclor 1016-4	20.86	18.05	219370	206434	741.399m	645.772m
Avg. Aroclor 1016			1595712	1528592	787.857	667.508
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
Avg. Aroclor 1254			0	0	N.D.	N.D.
25) L9 Aroclor 1260	31.06	29.53	581096	622397	600.396m	518.141
26) L9 Aroclor 1260-2	31.87	30.13	257418	279702	617.277m	542.528m
27) L9 Aroclor 1260-3	32.98	31.63	396546	284276	582.686m	816.363m#
28) L9 Aroclor 1260-4	34.56	32.69	191300	289700	682.099m	562.673m
Avg. Aroclor 1260			1426360	1476075	620.615	609.926

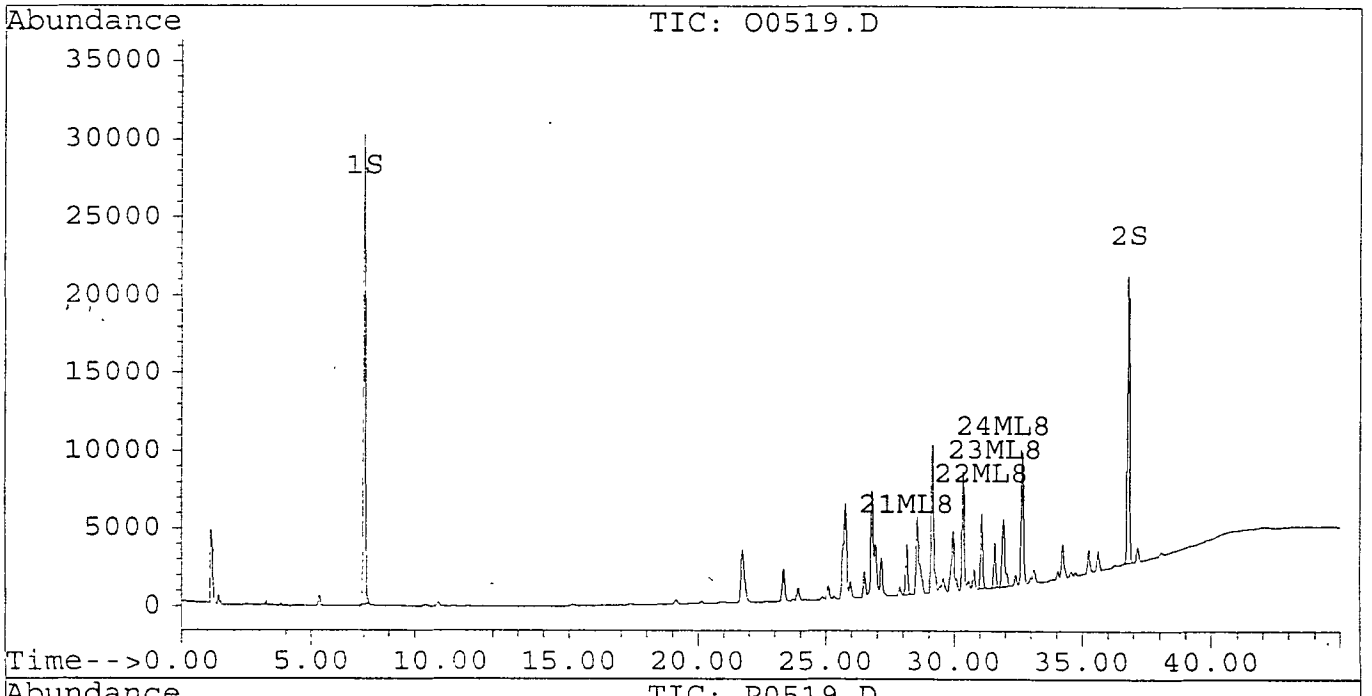
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

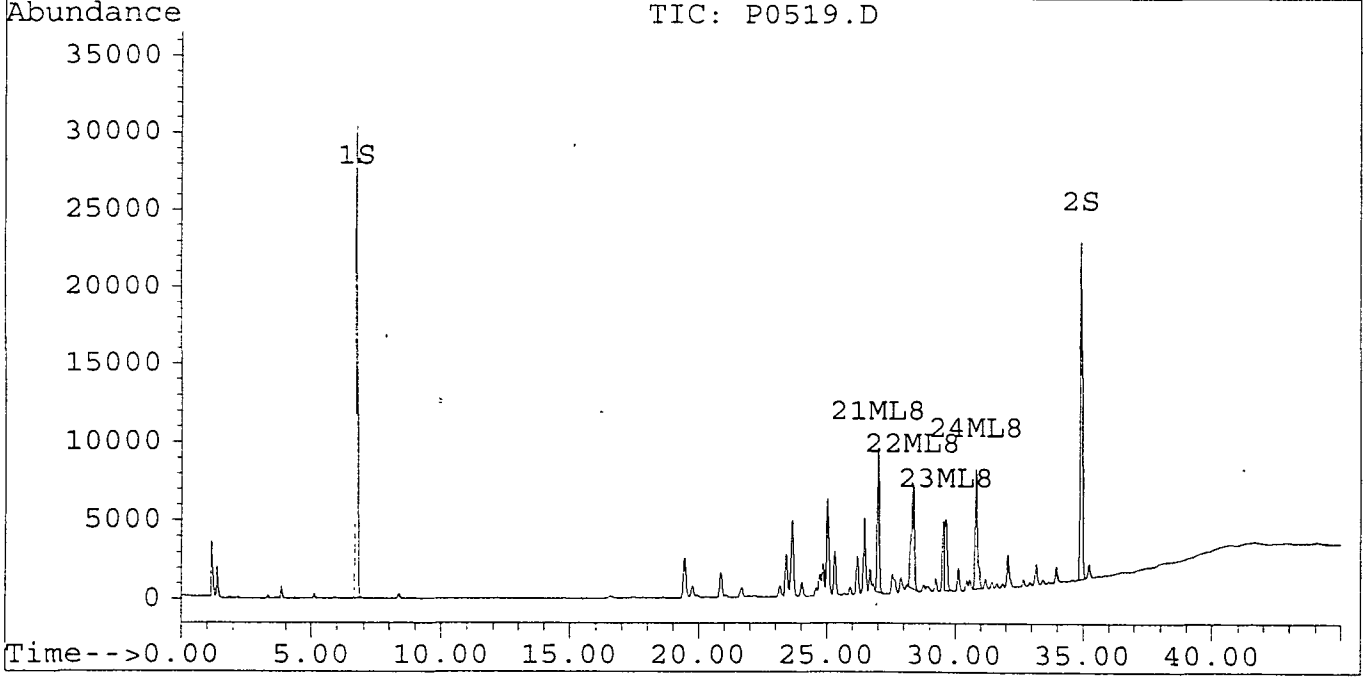
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0519.D Vial: 2
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0519.D\P0519.D
Acq On : 03 Dec 96 11:20 PM Operator:
Sample : AR1254 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0519.D Vial: 2
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0519.D\P0519.D
Acq On : 03 Dec 96 11:20 PM Operator:
Sample : AR1254 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time: Dec 4 11:02 1996

Method : C:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.03	6.73	1576873	1466067	134.620	119.217
			Recovery		= 67.31%	59.61%
2) S DBC (Surr.)	36.78	34.93	993940	1147647	119.884	118.771
			Recovery		= 59.94%	59.39%
Target Compounds						
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
21) ML8 Aroclor 1254	28.14	27.01	197256	509235	721.610m	667.929
22) ML8 Aroclor 1254-2	31.07	28.38	281743	539397	639.459	606.126
23) ML8 Aroclor 1254-3	31.59	29.65	163410	304420	694.520m	584.324m
24) ML8 Aroclor 1254-4	31.93	30.83	349820	502966	697.880m	636.218
Avg. Aroclor 1254			992229	1856017	688.367	623.649
Avg. Aroclor 1260			0	0	N.D.	N.D.

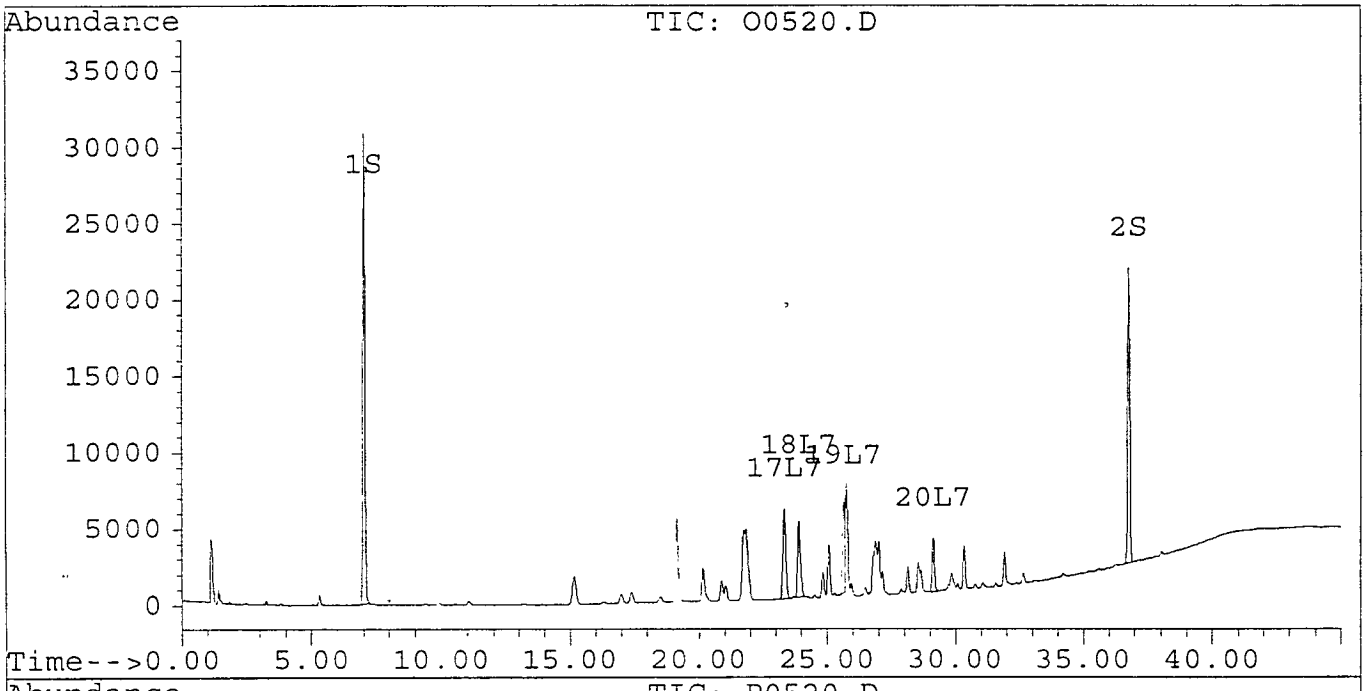
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

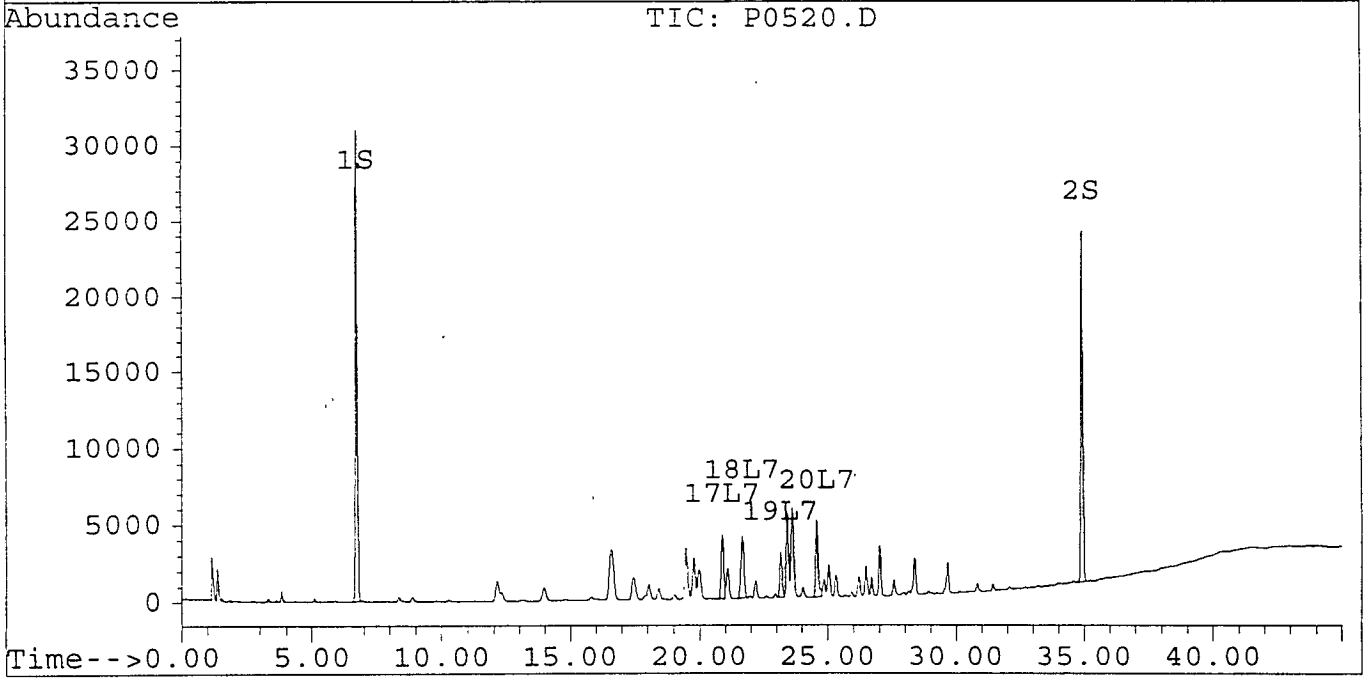
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0520.D Vial: 3
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0520.D\P0520.D
Acq On : 04 Dec 96 00:09 AM Operator:
Sample : AR1248 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\O6081015.M
Title : CBOPAP
Last Update : Wed Dec 04 11:10:13 1996
Response via : Multiple Level Calibration

Volume Inj. : 1ul
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0520.D Vial: 3
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0520.D\P0520.D
Acq On : 04 Dec 96 00:09 AM Operator:
Sample : AR1248 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time: Dec 4 11:01 1996

Method : c:\HPCHEM\6\METHODS\O6081015.M
Title : CBOPAP
Last Update : Wed Dec 04 11:10:13 1996
Response via : Multiple Level Calibration

Volume Inj. : 1ul
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.02	6.73	1629416	1515171	139.106	123.210
			Recovery	=	69.55%	61.61%
2) S DBC (Surr.)	36.77	34.92	1043757	1197889	125.893	123.970
			Recovery	=	62.95%	61.99%
Target Compounds						
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
17) L7 Aroclor 1248	23.34	20.87	470113	294926	922.665	848.698m
18) L7 Aroclor 1248-2	23.91	21.67	384346	345658	830.742	760.110m
19) L7 Aroclor 1248-3	25.65	23.17	362290	185220	720.543	732.438m
20) L7 Aroclor 1248-4	29.12	24.58	207124	329690	766.998m	768.984m
Avg. Aroclor 1248			1423873	1155494	810.237	777.558
Avg. Aroclor 1254			0	0	N.D.	N.D.
Avg. Aroclor 1260			0	0	N.D.	N.D.

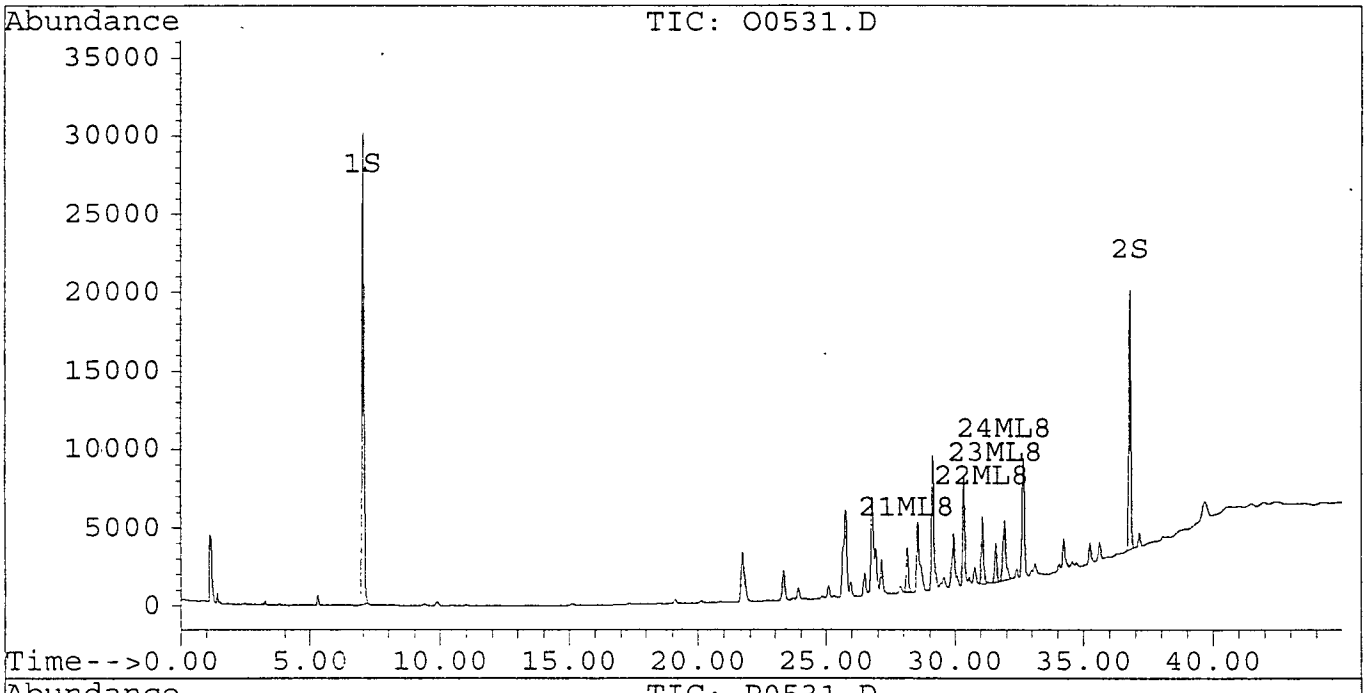
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

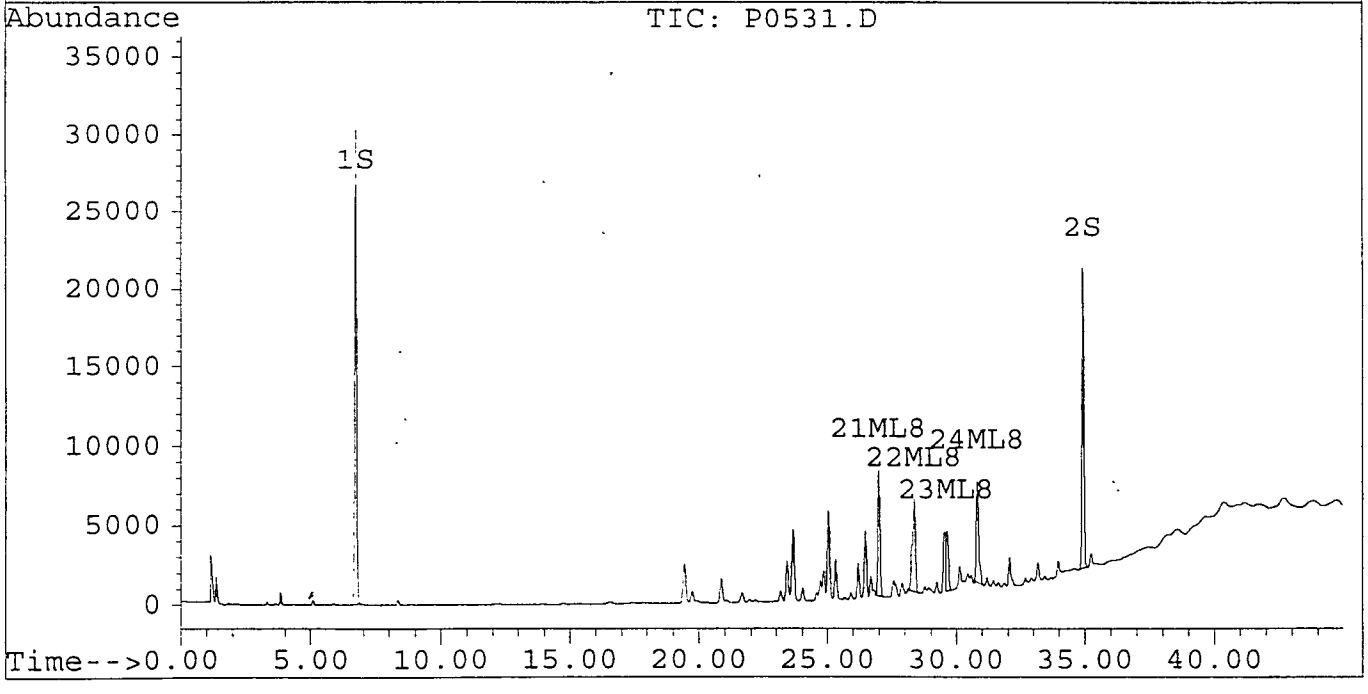
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0531.D Vial: 14
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0531.D\P0531.D
Acq On : 04 Dec 96 09:04 AM Operator:
Sample : AR1254 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time:

Method : C:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0531.D Vial: 14
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0531.D\P0531.D
Acq On : 04 Dec 96 09:04 AM Operator:
Sample : AR1254 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time: Dec 4 10:40 1996

Method : C:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.00	6.71	1571408	1459156	134.154	118.655
Recovery =					67.08%	59.33%
2) S DBC (Surr.)	36.78	34.93	889475	993279	107.284	102.795
Recovery =					53.64%	51.40%
Target Compounds						
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
21) ML8 Aroclor 1254	28.13	27.01	174796	457576	639.446m	600.172
22) ML8 Aroclor 1254-2	31.06	28.37	262272	476014	595.267m	534.902
23) ML8 Aroclor 1254-3	31.58	29.64	145316	247158	617.617m	474.411m
24) ML8 Aroclor 1254-4	31.93	30.83	312050	401244	622.530m	507.547
Avg. Aroclor 1254			894434	1581993	618.715	529.258
Avg. Aroclor 1260			0	0	N.D.	N.D.

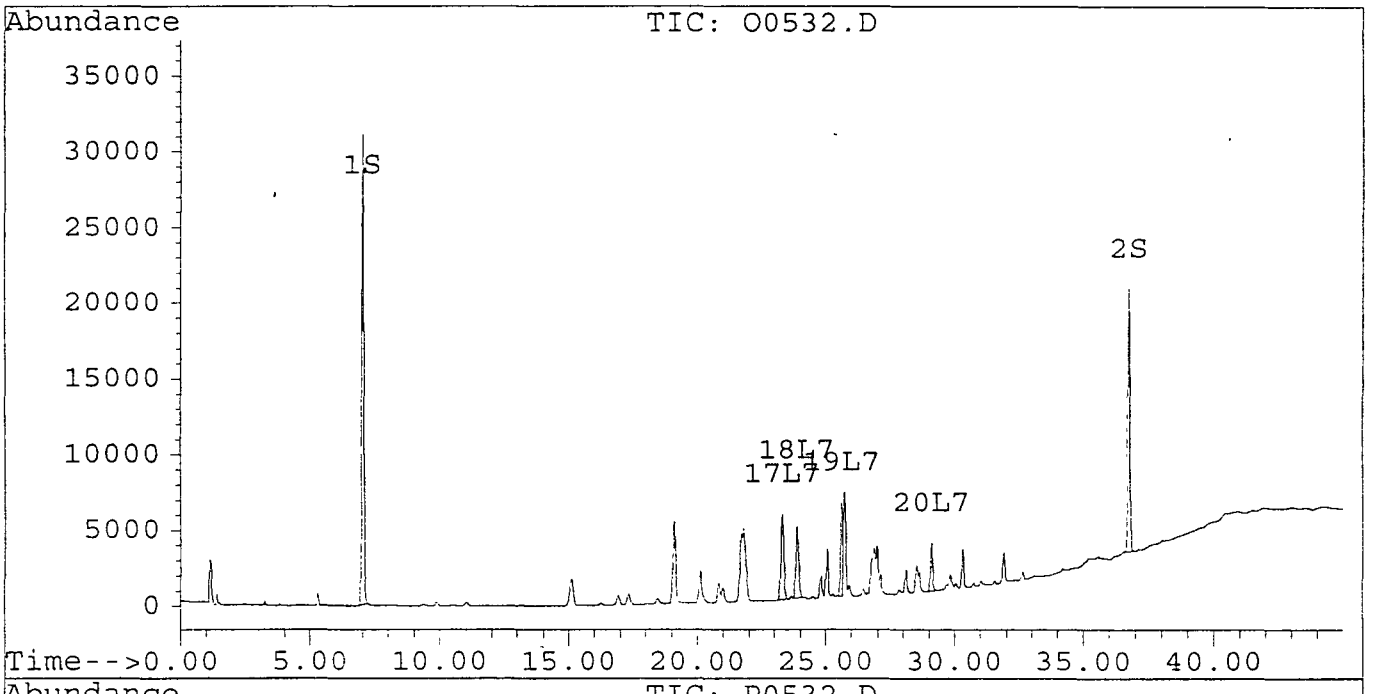
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

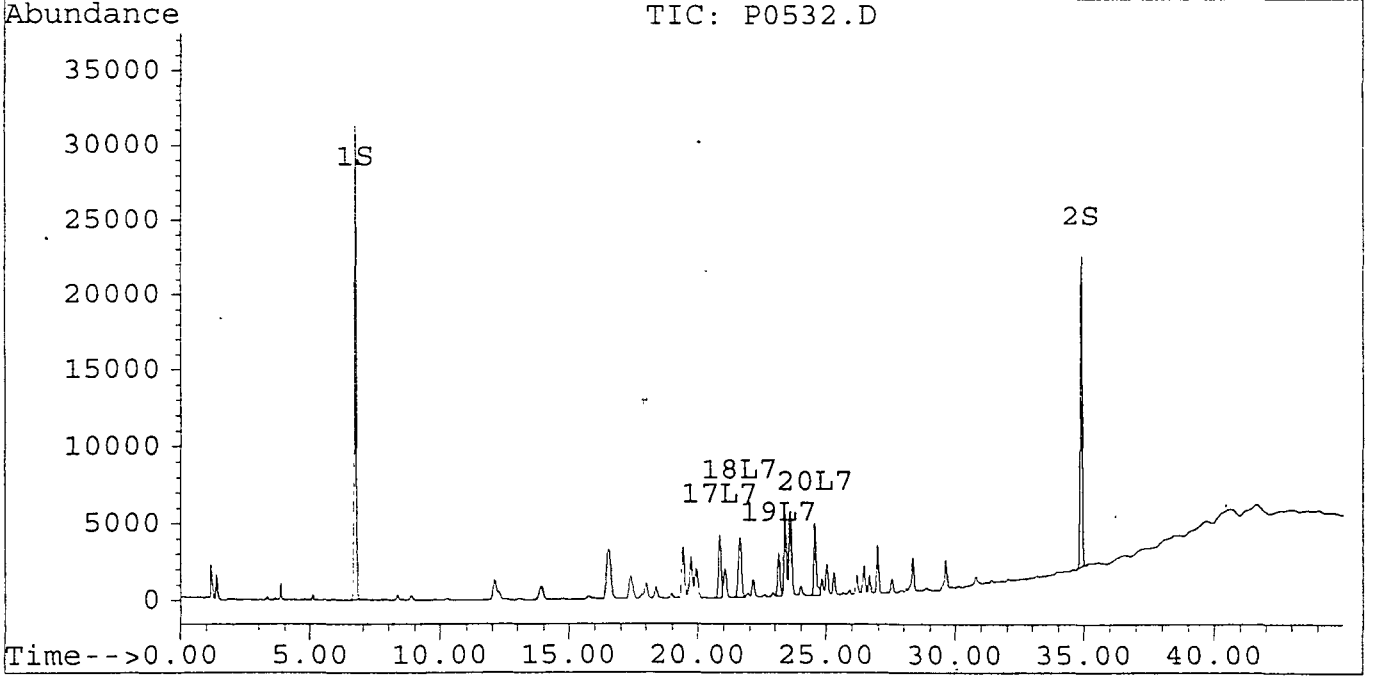
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0532.D Vial: 15
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0532.D\P0532.D
Acq On : 04 Dec 96 09:53 AM Operator:
Sample : AR1248 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time:

Method : C:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0532.D Vial: 15
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0532.D\P0532.D
Acq On : 04 Dec 96 09:53 AM Operator:
Sample : AR1248 700 PPB Inst : GC_OP
Misc : STD Multiplr: 1.00
Quant Time: Dec 4 10:44 1996

Method : C:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.01	6.72	1626536	1504473	138.860	122.340
			Recovery		= 69.43%	61.17%
2) S DBC (Surr.)	36.75	34.90	941715	1058143	113.585	109.508
			Recovery		= 56.79%	54.75%
Target Compounds						
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
17) L7 Aroclor 1248	23.31	20.84	449286	294680	881.789	847.990m
18) L7 Aroclor 1248-2	23.88	21.64	359733	340470	777.544	748.701m
19) L7 Aroclor 1248-3	25.63	23.15	379154	177724	754.082m	702.796m
20) L7 Aroclor 1248-4	29.10	24.56	185180	314904	685.738m	734.497m
Avg. Aroclor 1248			1373354	1127778	774.788	758.496
Avg. Aroclor 1254			0	0	N.D.	N.D.
Avg. Aroclor 1260			0	0	N.D.	N.D.

12/4/96

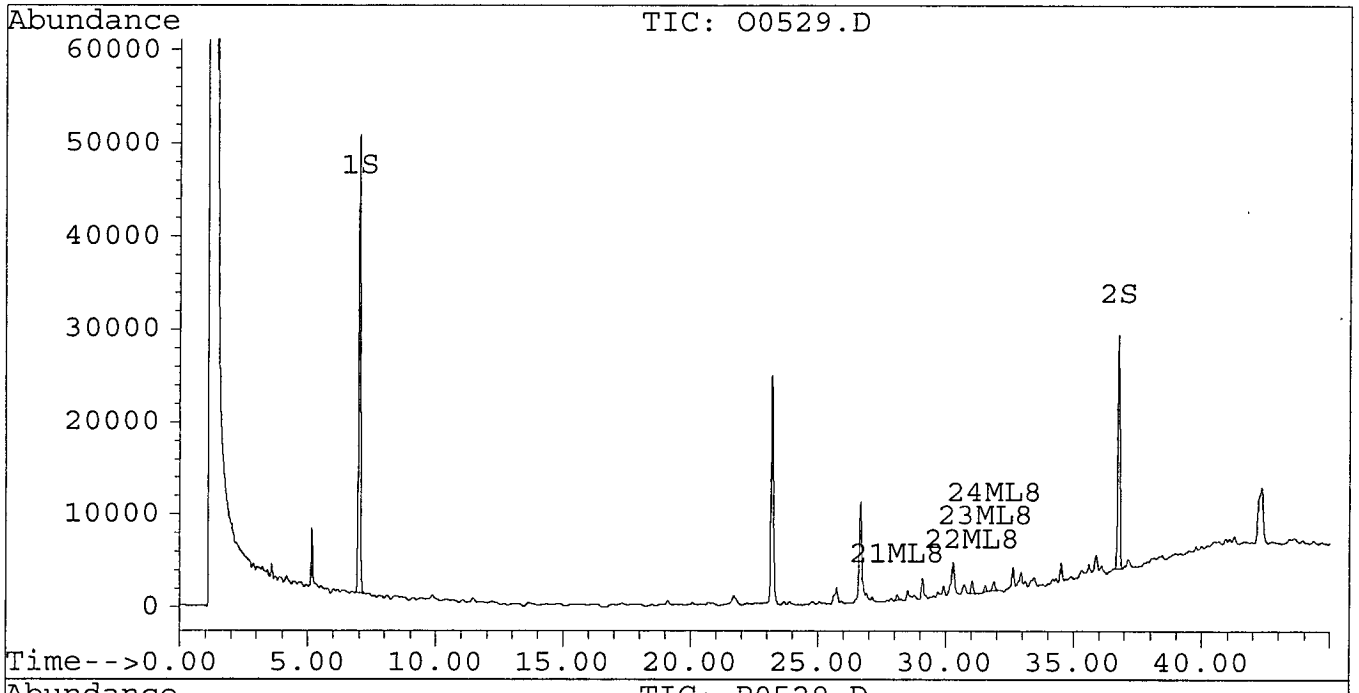
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

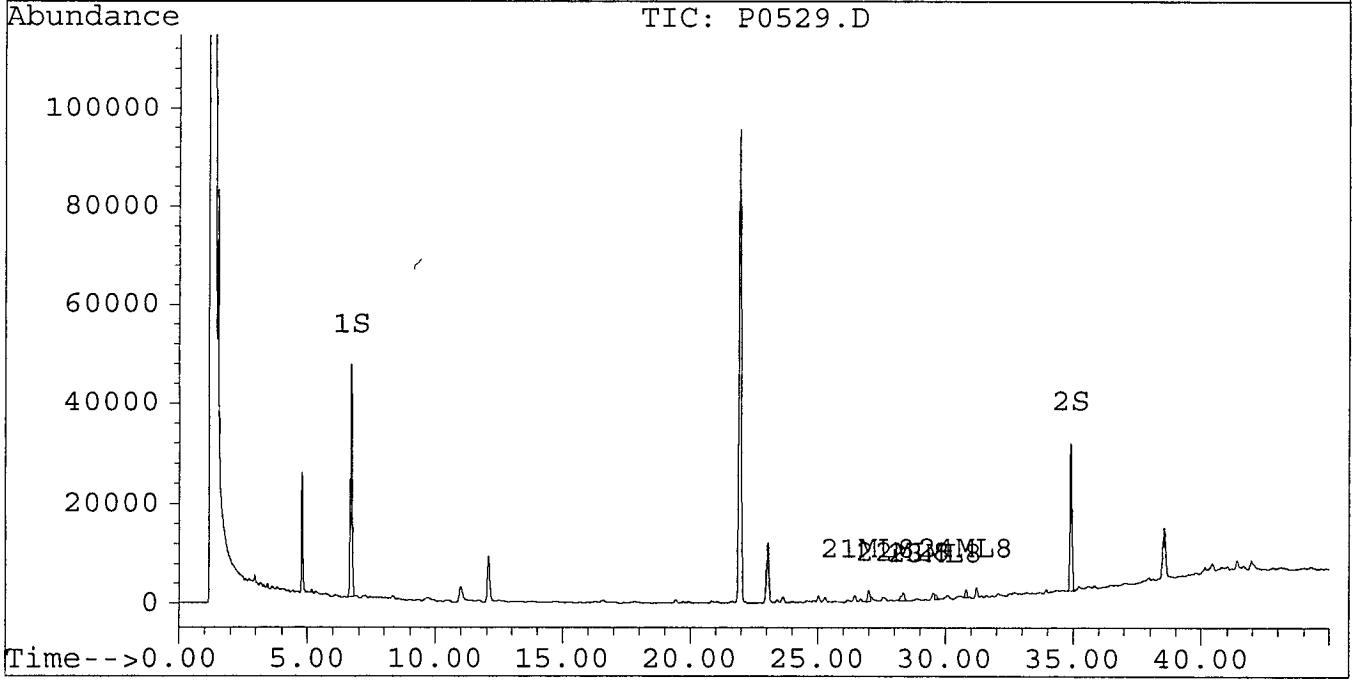
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0529.D Vial: 12
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0529.D\P0529.D
Acq On : 04 Dec 96 07:27 AM Operator:
Sample : T611436-01 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0529.D Vial: 12
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0529.D\P0529.D
Acq On : 04 Dec 96 07:27 AM Operator:
Sample : T611436-01 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time: Dec 5 11:01 1996

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.00	6.71	2556318	2259441	218.237	183.732
			Recovery		= 109.12%	91.87%
2) S DBC (Surr.)	36.76	34.92	1375498	1521129	165.906	157.422
			Recovery		= 82.95%	78.71%
Target Compounds						
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
21) ML8 Aroclor 1254	28.11	26.99	34020	140388	124.453m	184.138m
22) ML8 Aroclor 1254-2	31.04	28.35	84144	129900	190.978m	145.970m
23) ML8 Aroclor 1254-3	31.56	29.62	42502	55914	180.641m	107.325m
24) ML8 Aroclor 1254-4	31.90	30.81	65044	83926	129.761m	106.161m
Avg. Aroclor 1254			225710	410128	156.458	135.898
Avg. Aroclor 1260			0	0	N.D.	N.D.

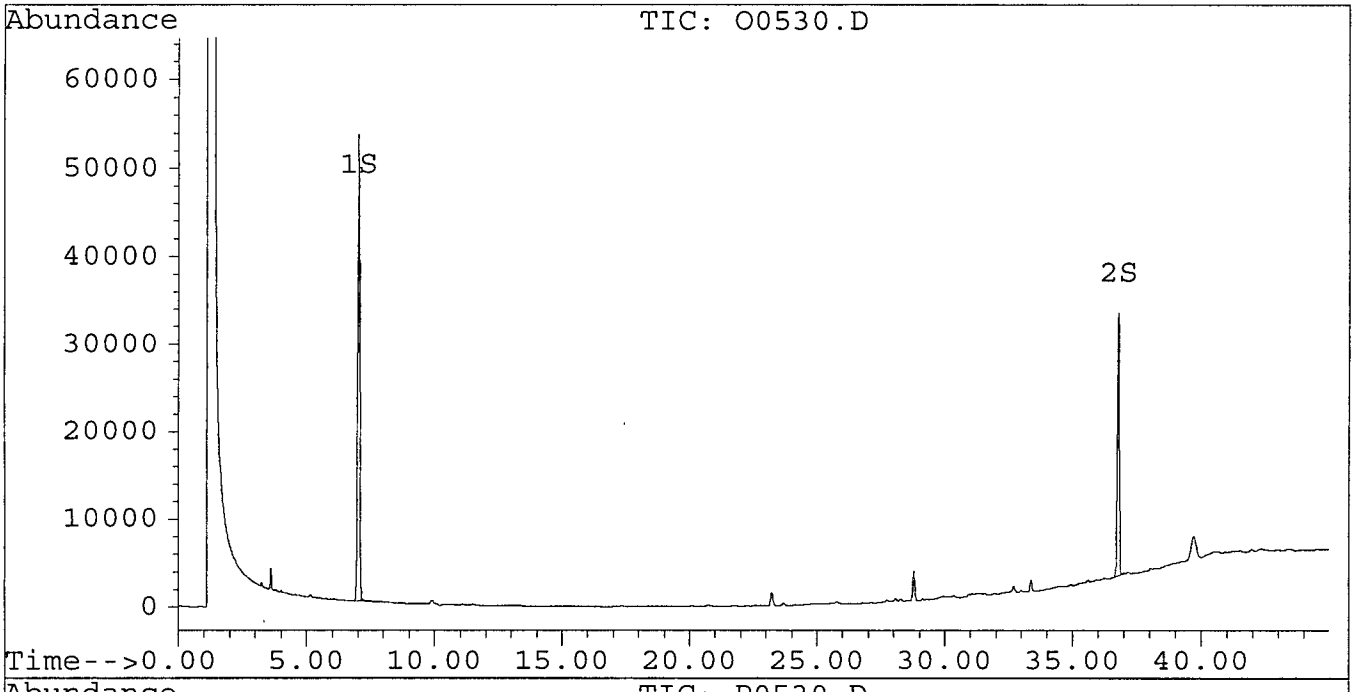
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

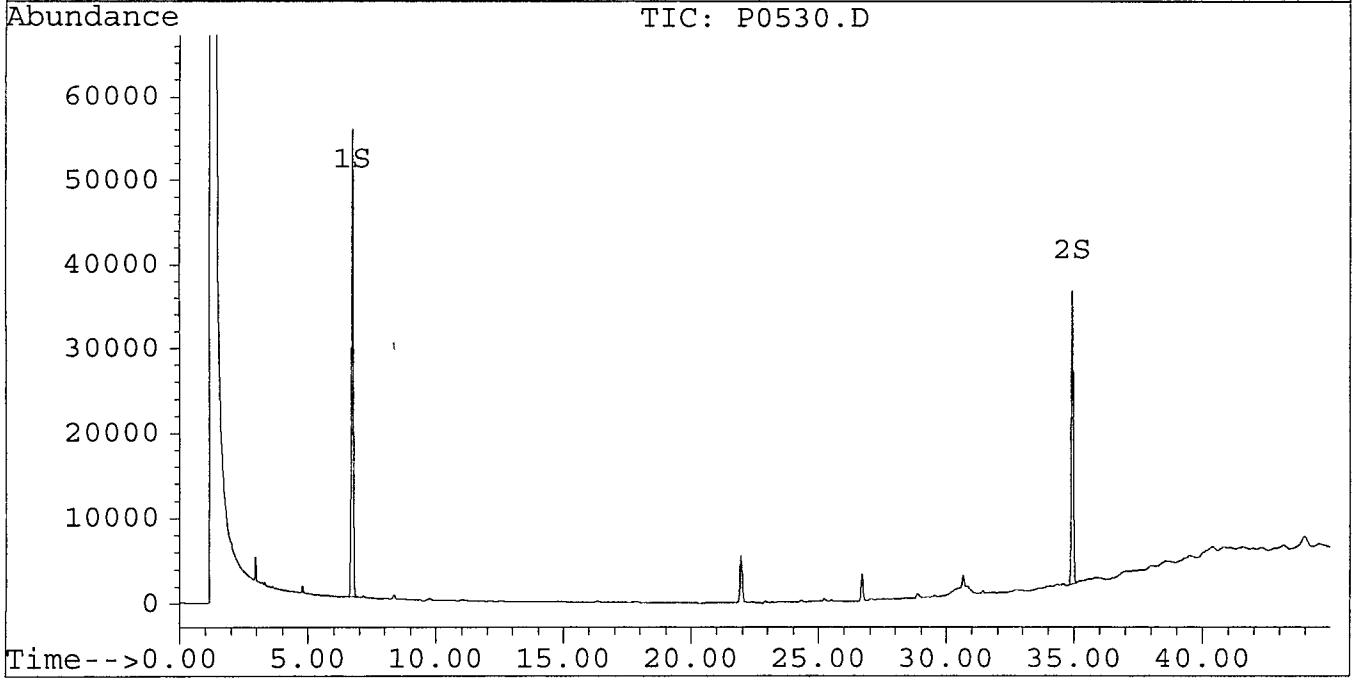
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0530.D Vial: 13
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0530.D\P0530.D
Acq On : 04 Dec 96 08:16 AM Operator:
Sample : T611436-03 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0530.D Vial: 13
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0530.D\P0530.D
Acq On : 04 Dec 96 08:16 AM Operator:
Sample : T611436-03 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time: Dec 4 15:54 1996

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1)	S TCMX (Surr.)	7.02	6.73	2795455	2684949	238.653	218.333	
				Recovery		= 119.33%	109.17%	
2)	S DBC (Surr.)	36.77	34.92	1615632	1815853	194.870	187.924	
				Recovery		= 97.44%	93.96%	
	Target Compounds							
Avg.	Aroclor 1016			0	0	N.D.	N.D.	
Avg.	Aroclor 1221			0	0	N.D.	N.D.	
Avg.	Aroclor 1232			0	0	N.D.	N.D.	
Avg.	Aroclor 1242			0	0	N.D.	N.D.	
Avg.	Aroclor 1248			0	0	N.D.	N.D.	
Avg.	Aroclor 1254			0	0	N.D.	N.D.	
Avg.	Aroclor 1260			0	0	N.D.	N.D.	

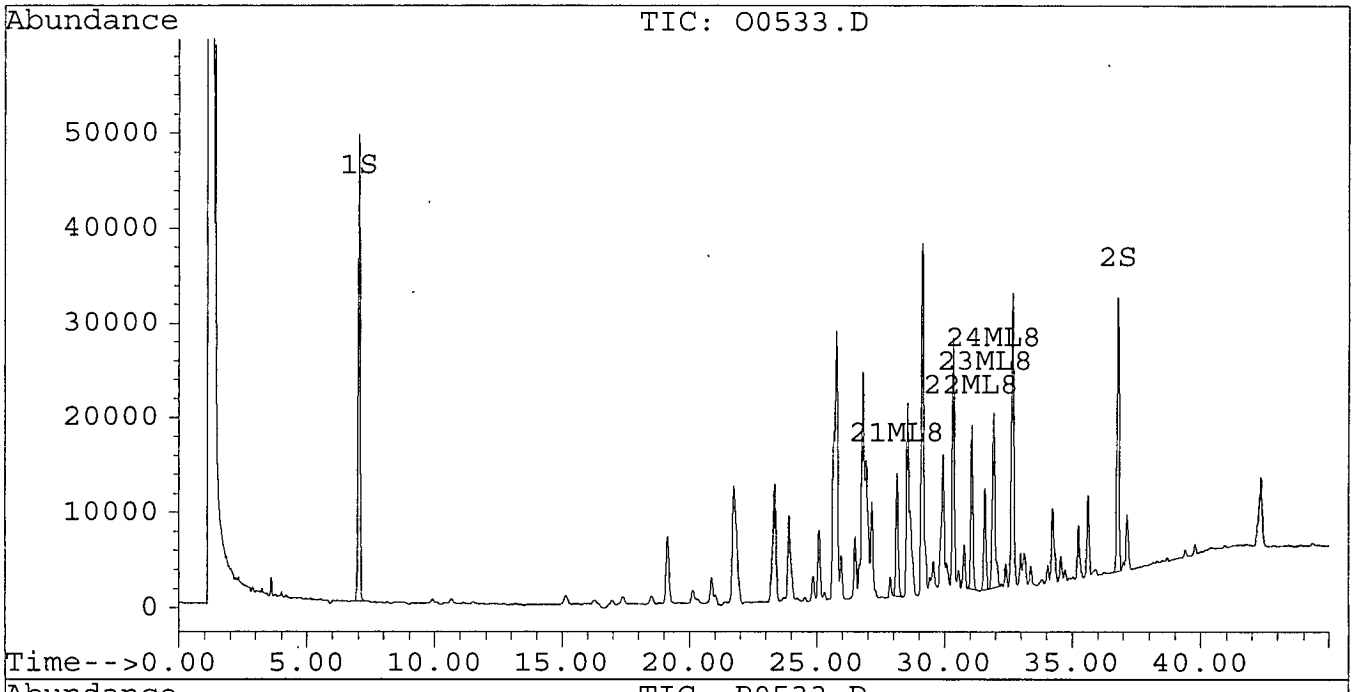
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

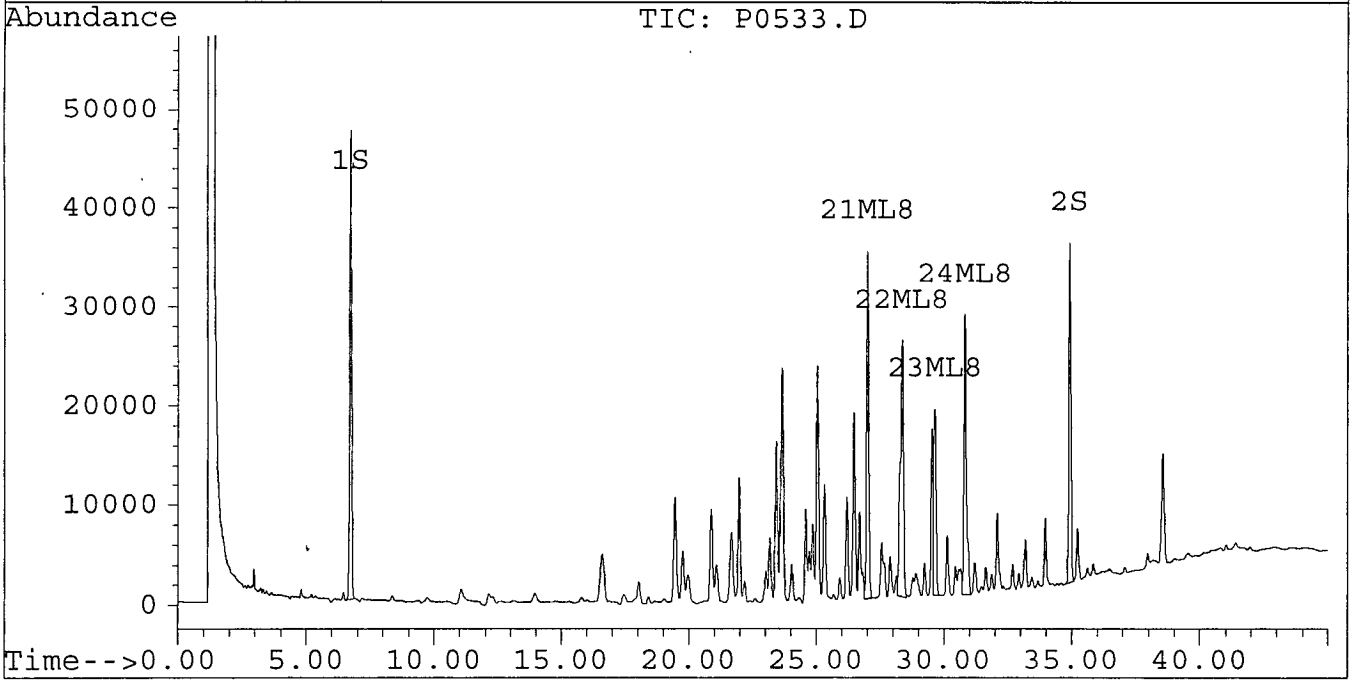
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0533.D Vial: 16
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0533.D\P0533.D
Acq On : 04 Dec 96 10:42 AM Operator:
Sample : T611436-05 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0533.D Vial: 16
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0533.D\P0533.D
Acq On : 04 Dec 96 10:42 AM Operator:
Sample : T611436-05 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time: Dec 4 15:57 1996

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.03	6.73	2567086	2309269	219.156	187.784
			Recovery		= 109.58%	93.89%
2) S DBC (Surr.)	36.78	34.93	1563818	1804774	188.620	186.777
			Recovery		= 94.31%	93.39%
Target Compounds						
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
21) ML8 Aroclor 1254	28.14	27.01	816985	2068336	2988.728	2712.89
22) ML8 Aroclor 1254-2	31.06	28.37	1032504	2169078	2343.427	2437.41
23) ML8 Aroclor 1254-3	31.58	29.65	639759	1249793	2719.084	2398.93
24) ML8 Aroclor 1254-4	31.93	30.83	1420209	1887027	2833.273	2386.96
Avg. Aroclor 1254			3909457	7374234	2721.128	2484.053
Avg. Aroclor 1260			0	0	N.D.	N.D.

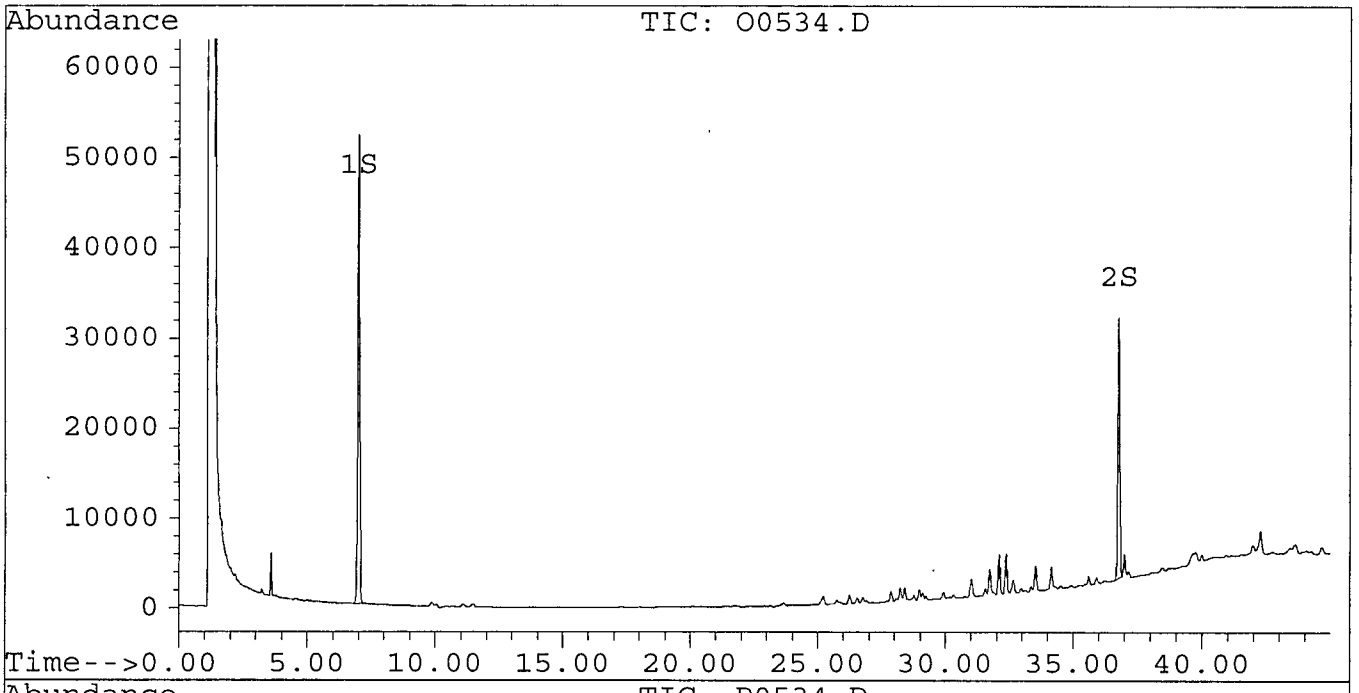
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

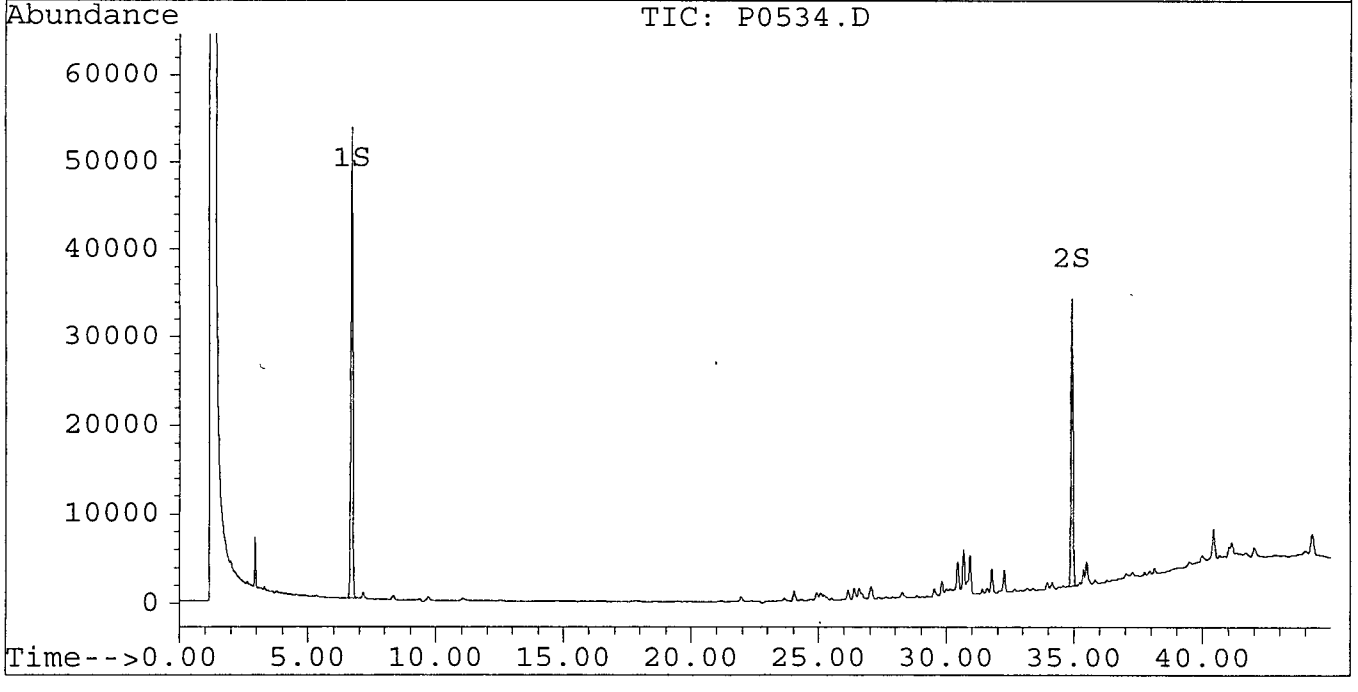
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0534.D Vial: 17
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0534.D\P0534.D
Acq On : 04 Dec 96 11:30 AM Operator:
Sample : T611436-07 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0534.D Vial: 17
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0534.D\P0534.D
Acq On : 04 Dec 96 11:30 AM Operator:
Sample : T611436-07 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time: Dec 4 16:07 1996

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.00	6.71	2731497	2582194	233.192	209.977
			Recovery		= 116.60%	104.99%
2) S DBC (Surr.)	36.76	34.91	1570612	1705411	189.440	176.494
			Recovery		= 94.72%	88.25%
Target Compounds						
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
Avg. Aroclor 1248			0	0	N.D.	N.D.
Avg. Aroclor 1254			0	0	N.D.	N.D.
Avg. Aroclor 1260			0	0	N.D.	N.D.

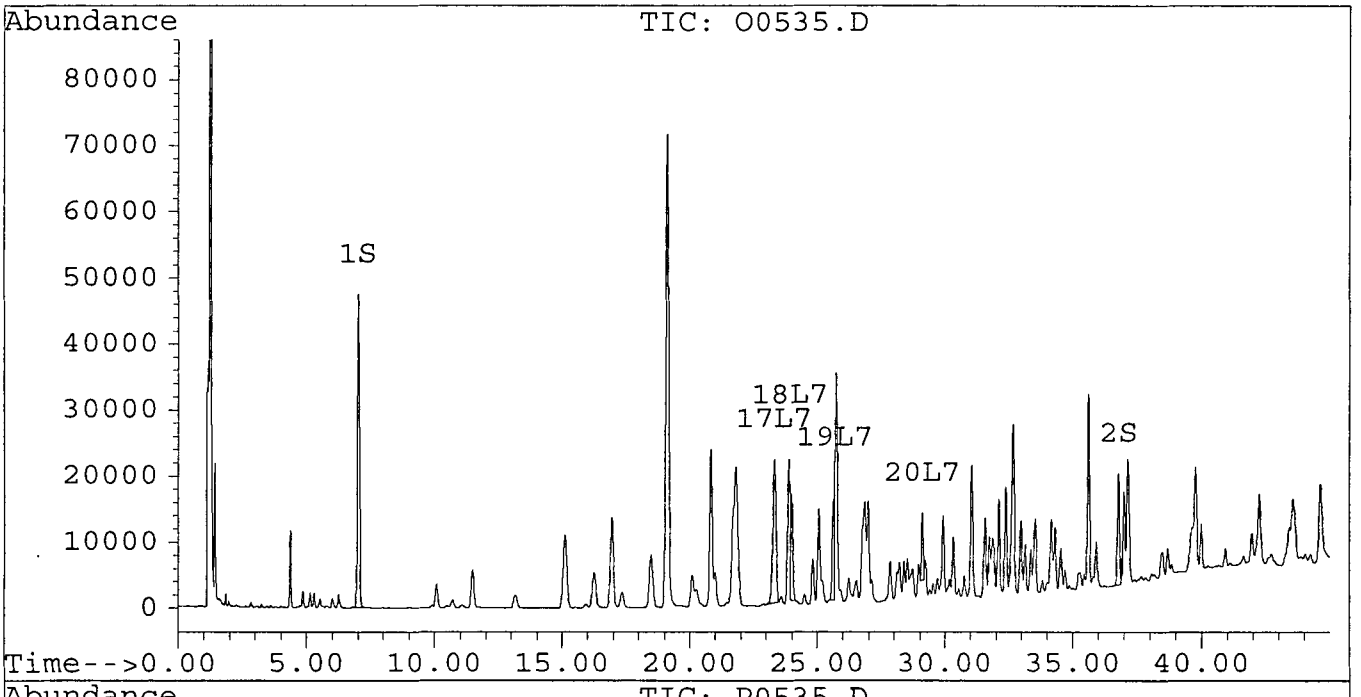
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

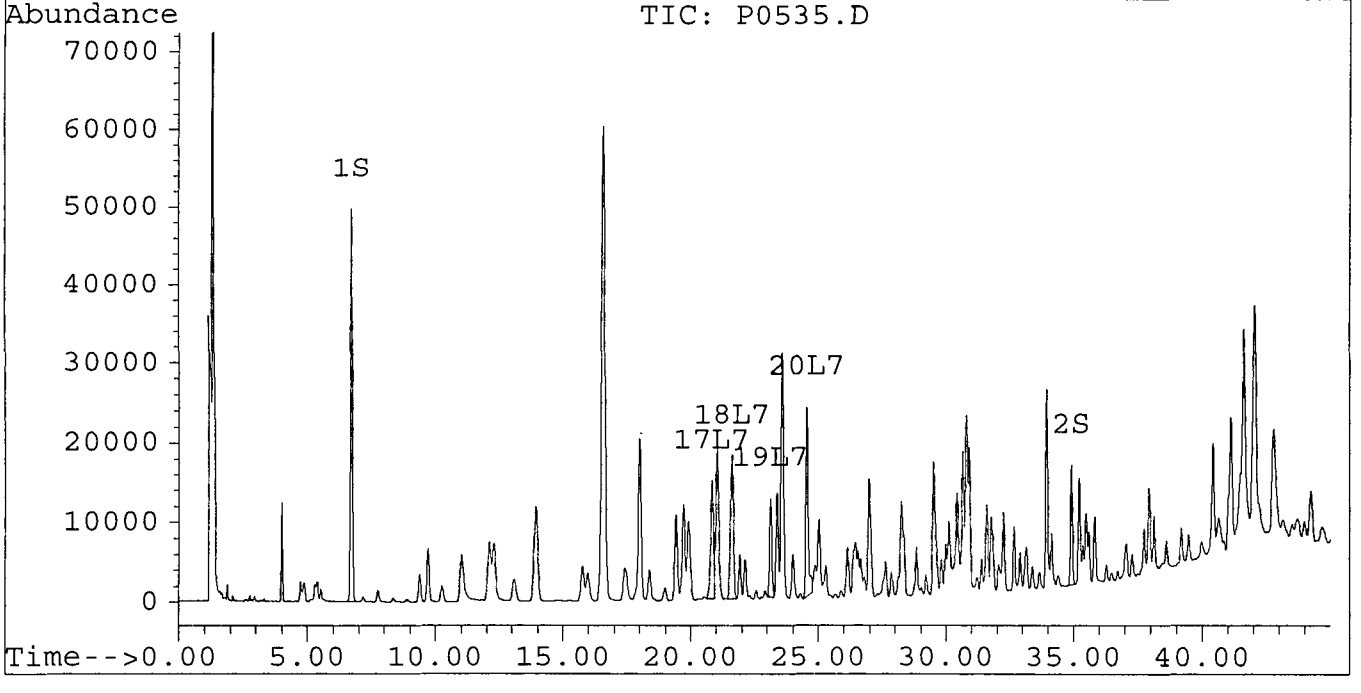
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0535.D Vial: 18
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0535.D\P0535.D
Acq On : 04 Dec 96 12:19 PM Operator:
Sample : T611436-11 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0535.D Vial: 18
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0535.D\P0535.D
Acq On : 04 Dec 96 12:19 PM Operator:
Sample : T611436-11 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time: Dec 4 16:31 1996

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
1) S TCMX (Surr.)	7.01	6.72	2466178	2412816	210.542	196.204
			Recovery		= 105.27%	98.10%
2) S DBC (Surr.)	36.77	34.91	943374	779314	113.785	80.652 #
			Recovery		= 56.89%	40.33%
Target Compounds						
Avg. Aroclor 1016			0	0	N.D.	N.D.
Avg. Aroclor 1221			0	0	N.D.	N.D.
Avg. Aroclor 1232			0	0	N.D.	N.D.
Avg. Aroclor 1242			0	0	N.D.	N.D.
17) L7 Aroclor 1248	23.31	20.83	1916601	1117302	3761.607	3215.220
18) L7 Aroclor 1248-2	23.93	21.63	1052306	1568151	2274.501m	3448.399
19) L7 Aroclor 1248-3	25.67	23.14	885992	774068	1762.110m	3060.991
20) L7 Aroclor 1248-4	29.10	24.56	492872	1580793	1825.148m	3687.115
Avg. Aroclor 1248			4347771	5040314	2405.841	3352.931
Avg. Aroclor 1254			0	0	N.D.	N.D.
Avg. Aroclor 1260			0	0	N.D.	N.D.

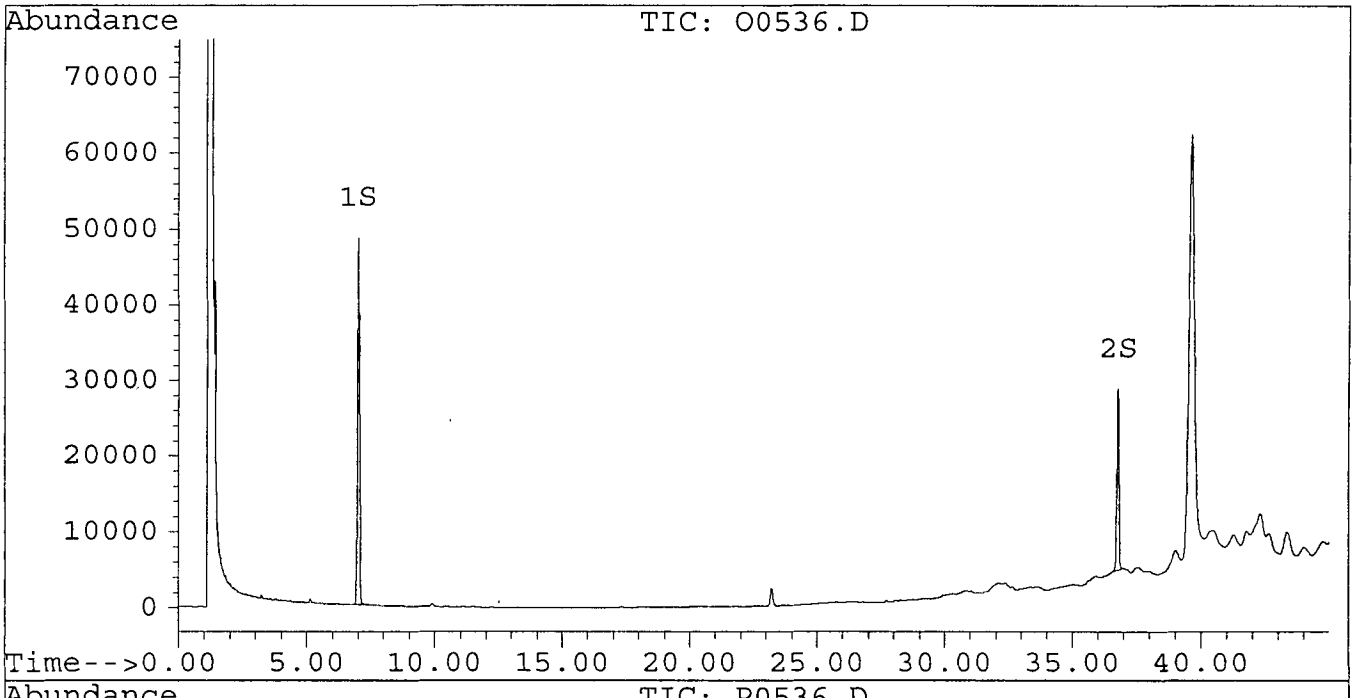
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

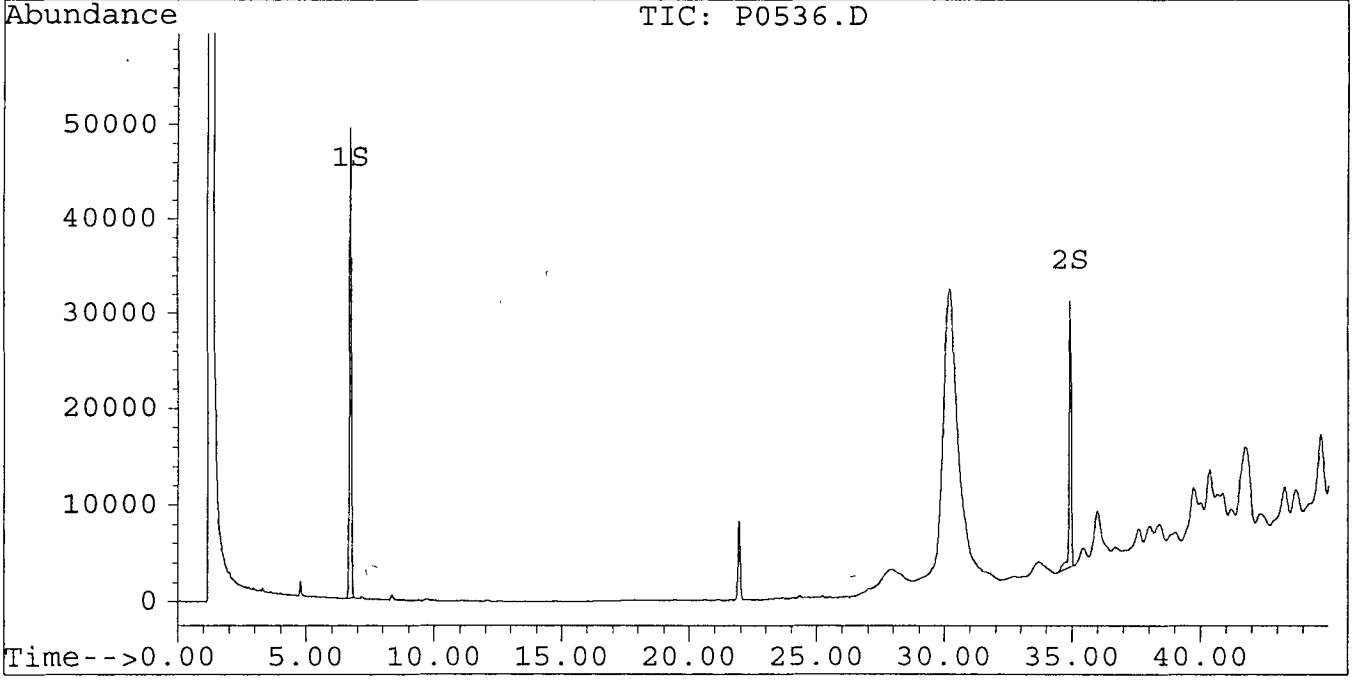
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0536.D Vial: 19
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0536.D\P0536.D
Acq On : 04 Dec 96 01:08 PM Operator:
Sample : T611436-09 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0536.D Vial: 19
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0536.D\P0536.D
Acq On : 04 Dec 96 01:08 PM Operator:
Sample : T611436-09 Inst : GC_OP
Misc : PCB Multiplr: 1.00
Quant Time: Dec 4 16:33 1996

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1) S	TCMX (Surr.)	7.01	6.72	2550441	2398870	217.735	195.070	
				Recovery		= 108.87%	97.54%	
2) S	DBC (Surr.)	36.77	34.92	1315010	1570780	158.610	162.561	
				Recovery		= 79.31%	81.28%	
	Target Compounds							
Avg.	Aroclor 1016			0	0	N.D.	N.D.	
Avg.	Aroclor 1221			0	0	N.D.	N.D.	
Avg.	Aroclor 1232			0	0	N.D.	N.D.	
Avg.	Aroclor 1242			0	0	N.D.	N.D.	
Avg.	Aroclor 1248			0	0	N.D.	N.D.	
Avg.	Aroclor 1254			0	0	N.D.	N.D.	
Avg.	Aroclor 1260			0	0	N.D.	N.D.	

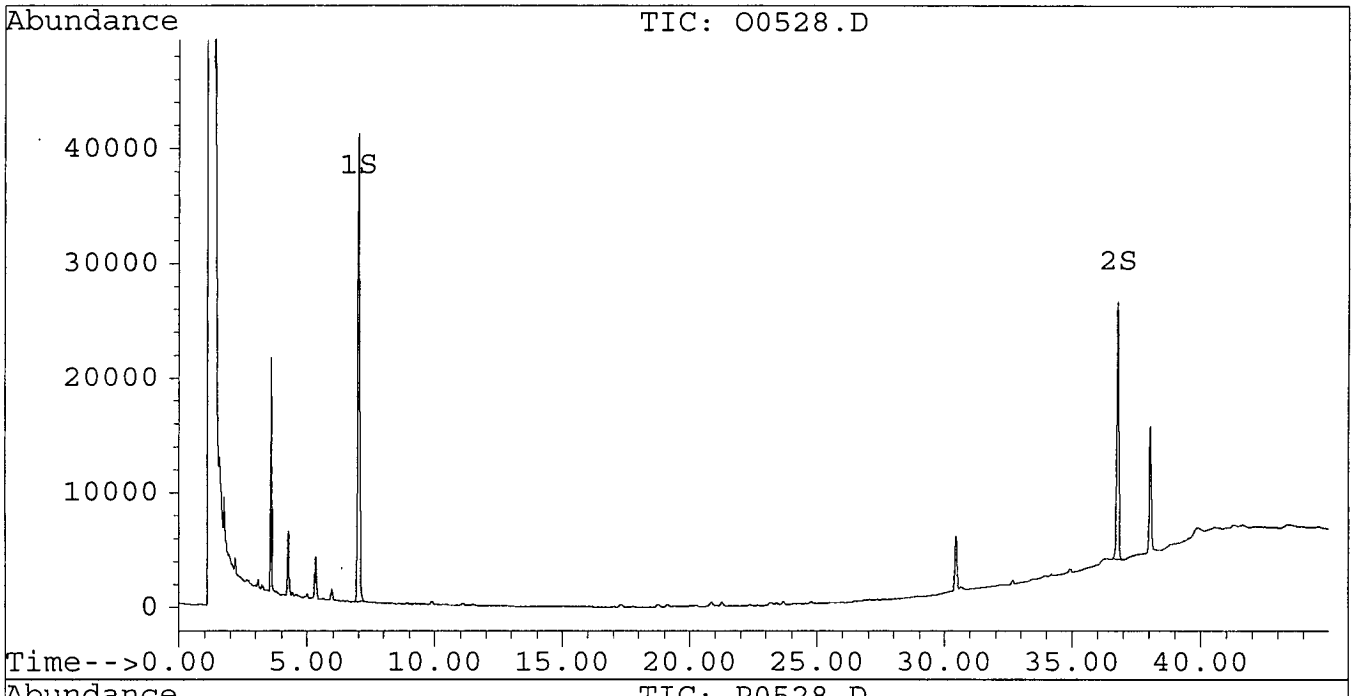
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

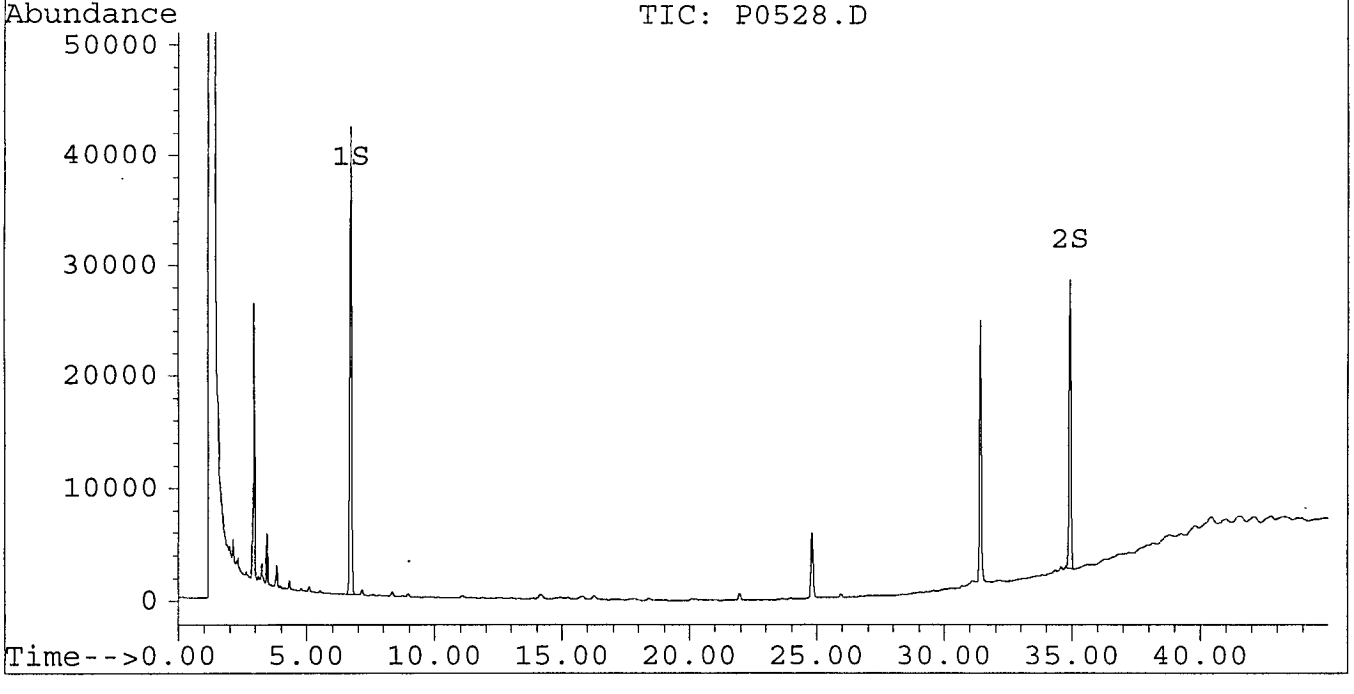
Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0528.D Vial: 11
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0528.D\P0528.D
Acq On : 04 Dec 96 06:38 AM Operator:
Sample : 16835-BLK02 Inst : GC_OP
Misc : BLANK Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





Quantitation Report

Signal #1 : C:\HPCHEM\6\DATA\DEC0296\O0528.D Vial: 11
Signal #2 : C:\HPCHEM\6\DATA\DEC0296\O0528.D\P0528.D
Acq On : 04 Dec 96 06:38 AM Operator:
Sample : 16835-BLK02 Inst : GC_OP
Misc : BLANK Multiplr: 1.00
Quant Time: Dec 4 16:37 1996

Method : c:\HPCHEM\6\METHODS\OPCB1015.M
Title : CBOPCB
Last Update : Wed Dec 04 11:04:10 1996
Response via : Multiple Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
1) S	TCMX (Surr.)	7.00	6.71	2114997	2003557	180.561	162.924	
				Recovery	=	90.28%	81.46%	
2) S	DBC (Surr.)	36.77	34.92	1231917	1352976	148.588	140.020	
				Recovery	=	74.29%	70.01%	
	Target Compounds							
Avg.	Aroclor 1016			0	0	N.D.	N.D.	
Avg.	Aroclor 1221			0	0	N.D.	N.D.	
Avg.	Aroclor 1232			0	0	N.D.	N.D.	
Avg.	Aroclor 1242			0	0	N.D.	N.D.	
Avg.	Aroclor 1248			0	0	N.D.	N.D.	
Avg.	Aroclor 1254			0	0	N.D.	N.D.	
Avg.	Aroclor 1260			0	0	N.D.	N.D.	

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

Quantitation Report

Signal #1 : N:\GC_ST\DEC0396\S8982.D
Signal #2 : N:\GC_ST\DEC0396\S8982.D\T8982.D
Acq On : 04 Dec 96 00:44 AM
Sample : T611436-01
Misc :
Quant Time:

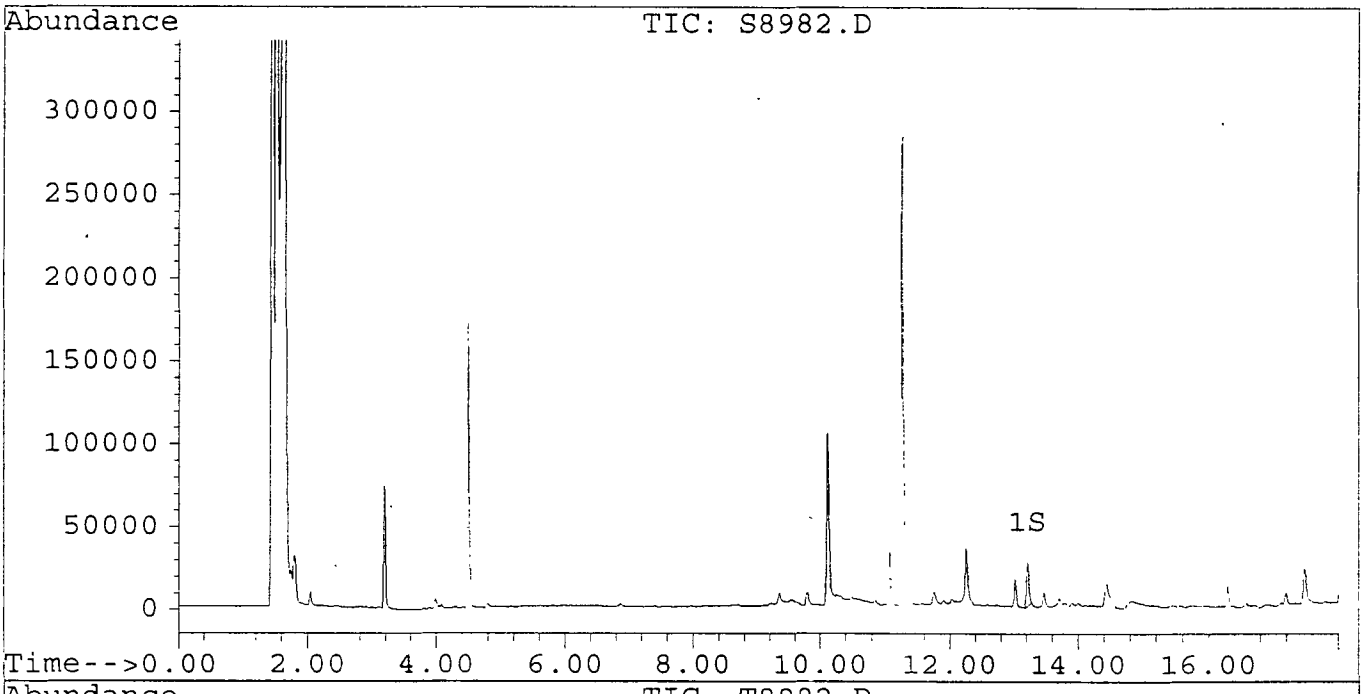
Vial: 21

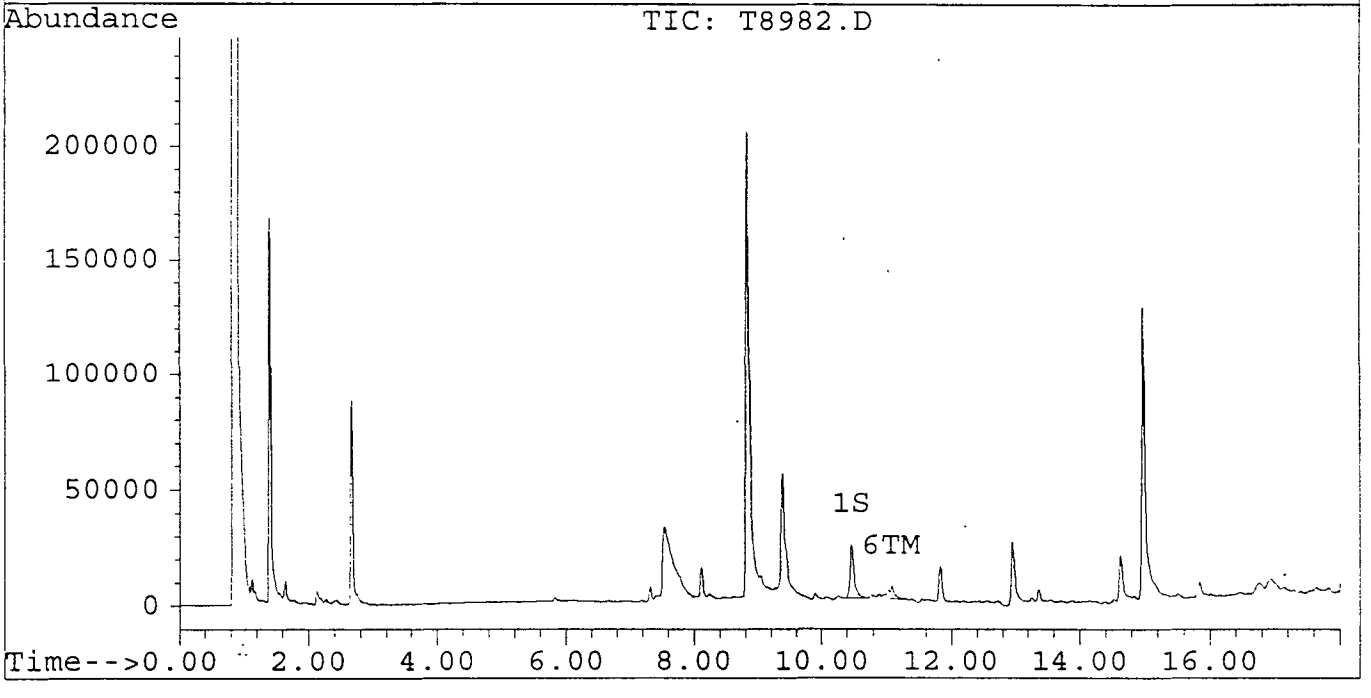
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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

Signal #2 Phase:
Signal #2 Info :





Quantitation Report

Signal #1 : N:\GC_ST\DEC0396\S8982.D Vial: 21
Signal #2 : N:\GC_ST\DEC0396\S8982.D\T8982.D
Acq On : 04 Dec 96 00:44 AM Operator: SHAH
Sample : T611436-01 Inst : GC_ST
Misc : Multiplr: 1.00
Quant Time: Dec 4 19:22 1996

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
1)	S 2,4,5-T(SURR)	13.21	10.47	65379	102363	64.570m	88.453 #
				Recovery	=	129.14%	176.91%
2)	S DCAA (SURR)	0.00	0.00	0	0	N.D.	N.D.
				Recovery	=	0.00%	0.00%
	Target Compounds						
3)	TM Dalapon	0.00	0.00	0	0	N.D. d	N.D.
4)	TM 2,4-D	0.00	0.00	0	0	N.D. d	N.D.
5)	TM 2,4,5-TP(SILVEX)	0.00	0.00	0	0	N.D.	N.D.
6)	TM Dinoseb	0.00	11.08	0	20120	N.D.	19.938 #

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

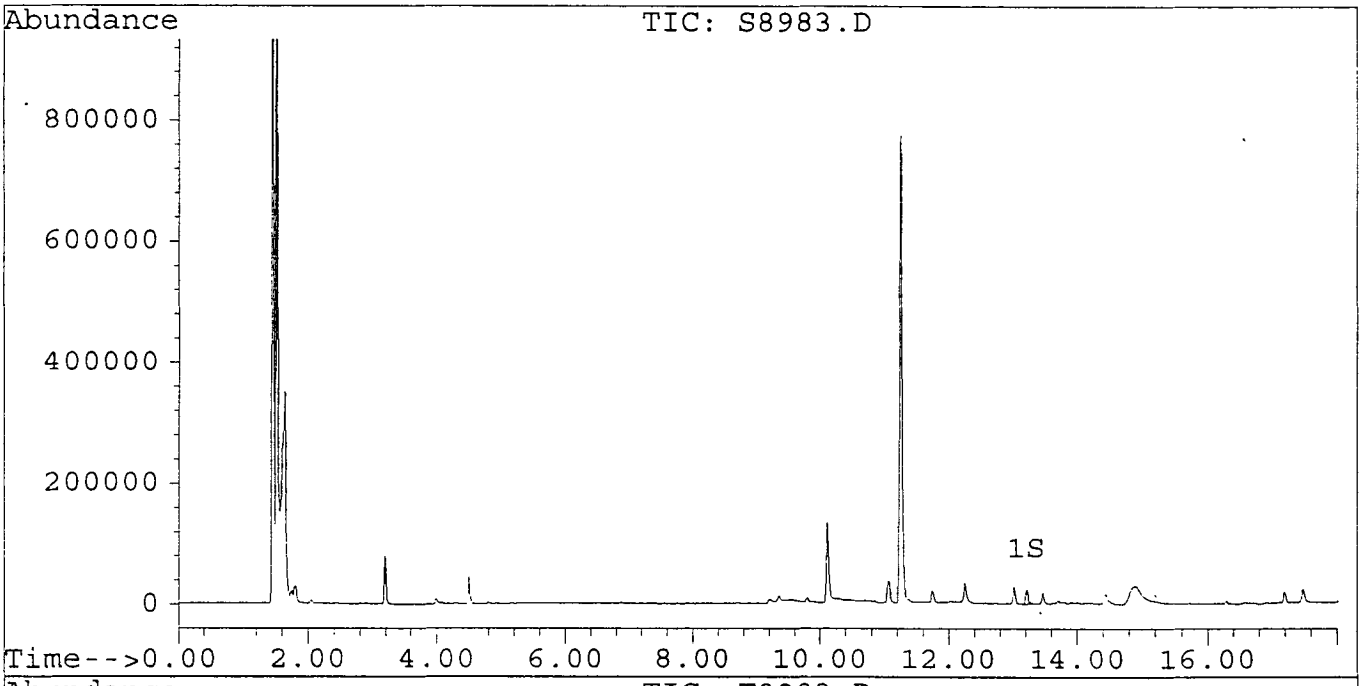
Quantitation Report

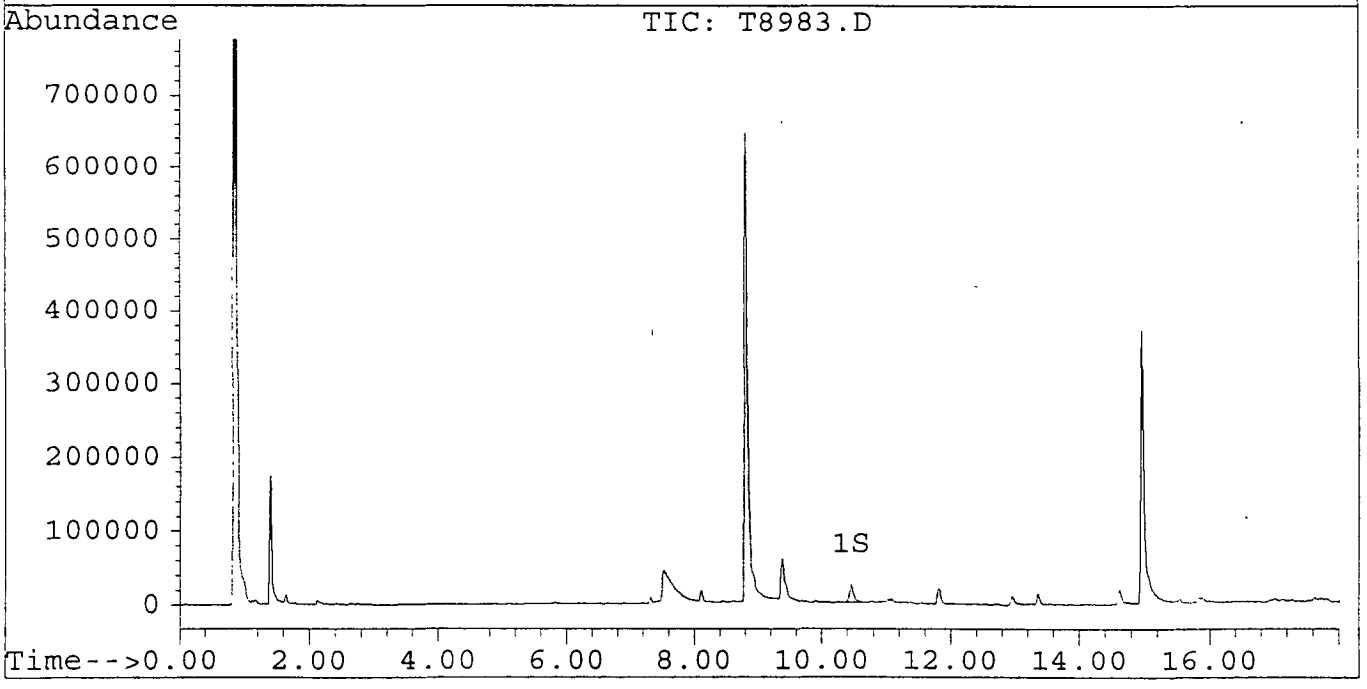
Signal #1 : N:\GC_ST\DEC0396\S8983.D
Signal #2 : N:\GC_ST\DEC0396\S8983.D\T8983.D
Acq On : 04 Dec 96 01:07 AM
Sample : T611436-03
Misc :
Quant Time:

Vial: 22
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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





Quantitation Report

Signal #1 : N:\GC_ST\DEC0396\S8983.D
Signal #2 : N:\GC_ST\DEC0396\S8983.D\T8983.D
Acq On : 04 Dec 96 01:07 AM
Sample : T611436-03
Misc :
Quant Time: Dec 4 19:23 1996

Vial: 22
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
1)	S 2,4,5-T(SURR)	13.21	10.46	62411	108756	61.639m	93.978 #
				Recovery	=	123.28%	187.96%
2)	S DCAA (SURR)	0.00	0.00	0	0	N.D.	N.D.
				Recovery	=	0.00%	0.00%
	Target Compounds						
3)	TM Dalapon	0.00	0.00	0	0	N.D. d	N.D.
4)	TM 2,4-D	0.00	0.00	0	0	N.D.	N.D.
5)	TM 2,4,5-TP(SILVEX)	0.00	0.00	0	0	N.D.	N.D.
6)	TM Dinoseb	0.00	0.00	0	0	N.D.	N.D. d

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

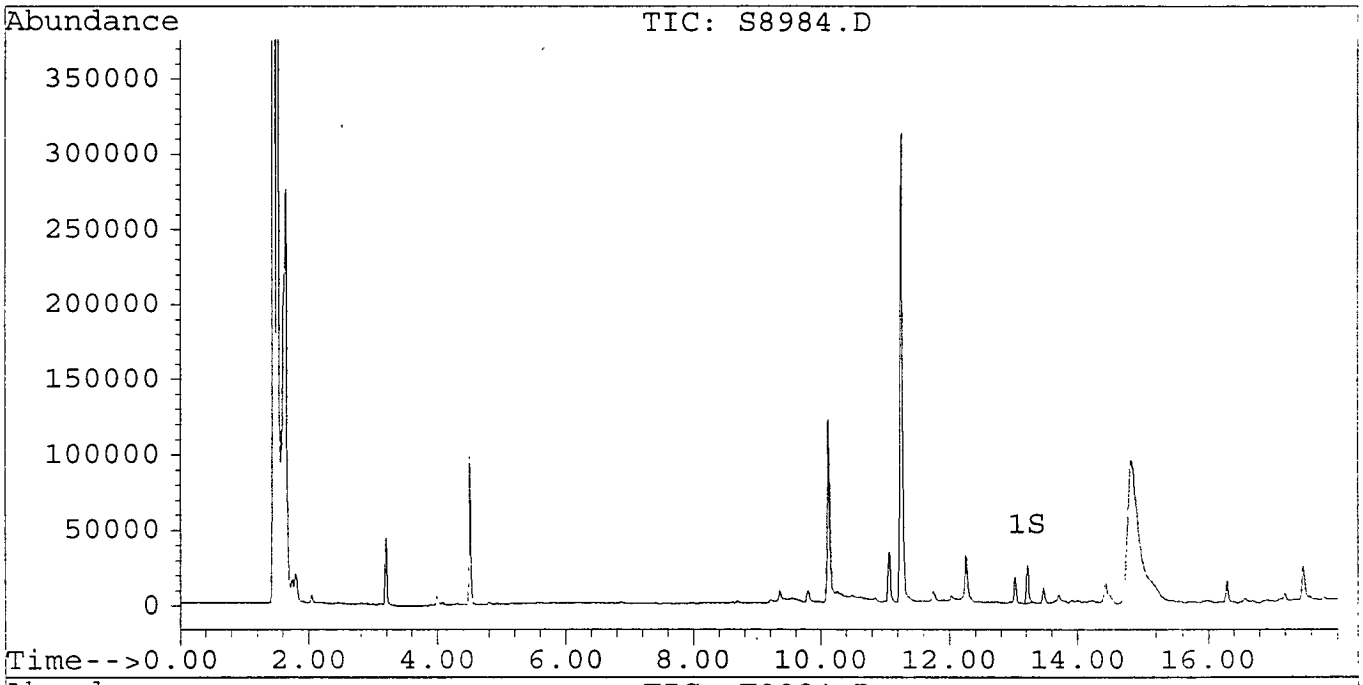
Quantitation Report

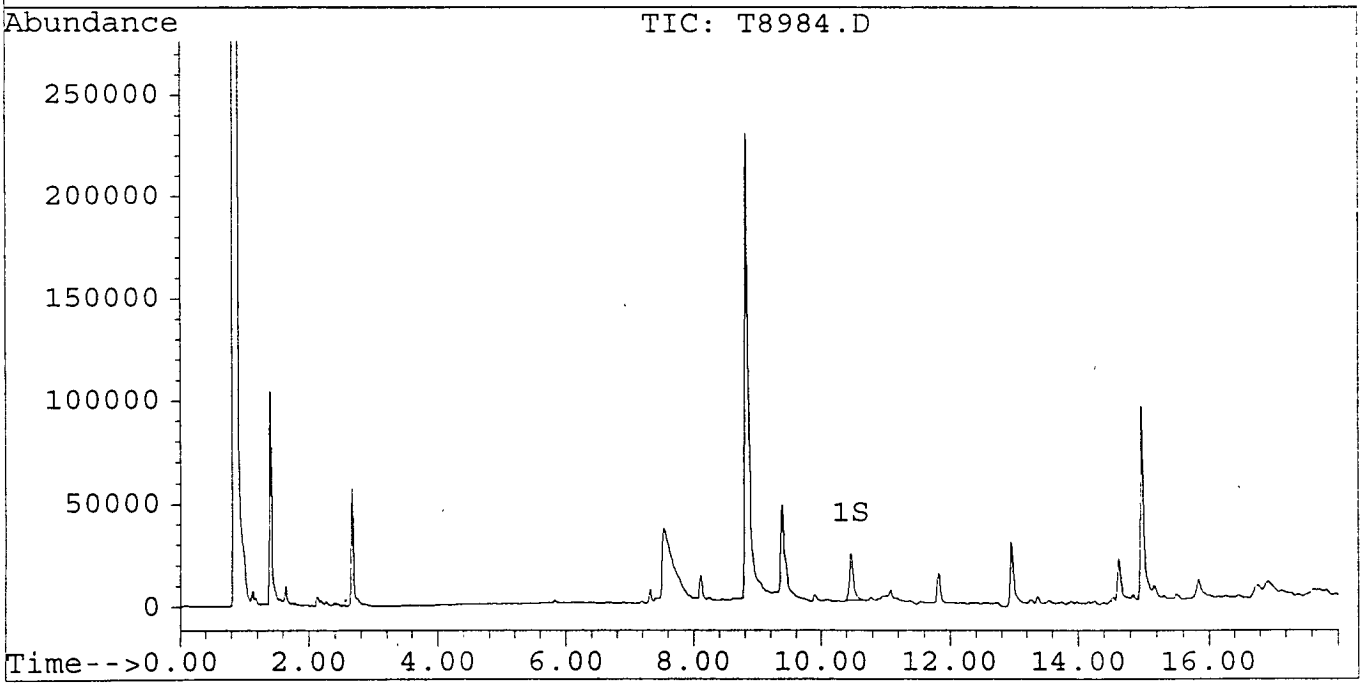
Signal #1 : N:\GC_ST\DEC0396\S8984.D
Signal #2 : N:\GC_ST\DEC0396\S8984.D\T8984.D
Acq On : 04 Dec 96 01:31 AM
Sample : T611436-05
Misc :
Quant Time:

Vial: 23
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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





Quantitation Report

Signal #1 : N:\GC_ST\DEC0396\S8984.D Vial: 23
Signal #2 : N:\GC_ST\DEC0396\S8984.D\T8984.D
Acq On : 04 Dec 96 01:31 AM Operator: SHAH
Sample : T611436-05 Inst : GC_ST
Misc : Multiplr: 1.00
Quant Time: Dec 4 19:24 1996

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
1)	S 2,4,5-T(SURR)	13.21	10.46	63123	97255	62.342m	84.039 #
				Recovery	=	124.68%	168.08%
2)	S DCAA (SURR)	0.00	0.00	0	0	N.D.	N.D.
				Recovery	=	0.00%	0.00%
	Target Compounds						
3)	TM Dalapon	0.00	0.00	0	0	N.D. d	N.D.
4)	TM 2,4-D	0.00	0.00	0	0	N.D.	N.D.
5)	TM 2,4,5-TP(SILVEX)	0.00	0.00	0	0	N.D.	N.D.
6)	TM Dinoseb	0.00	0.00	0	0	N.D.	N.D. d

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

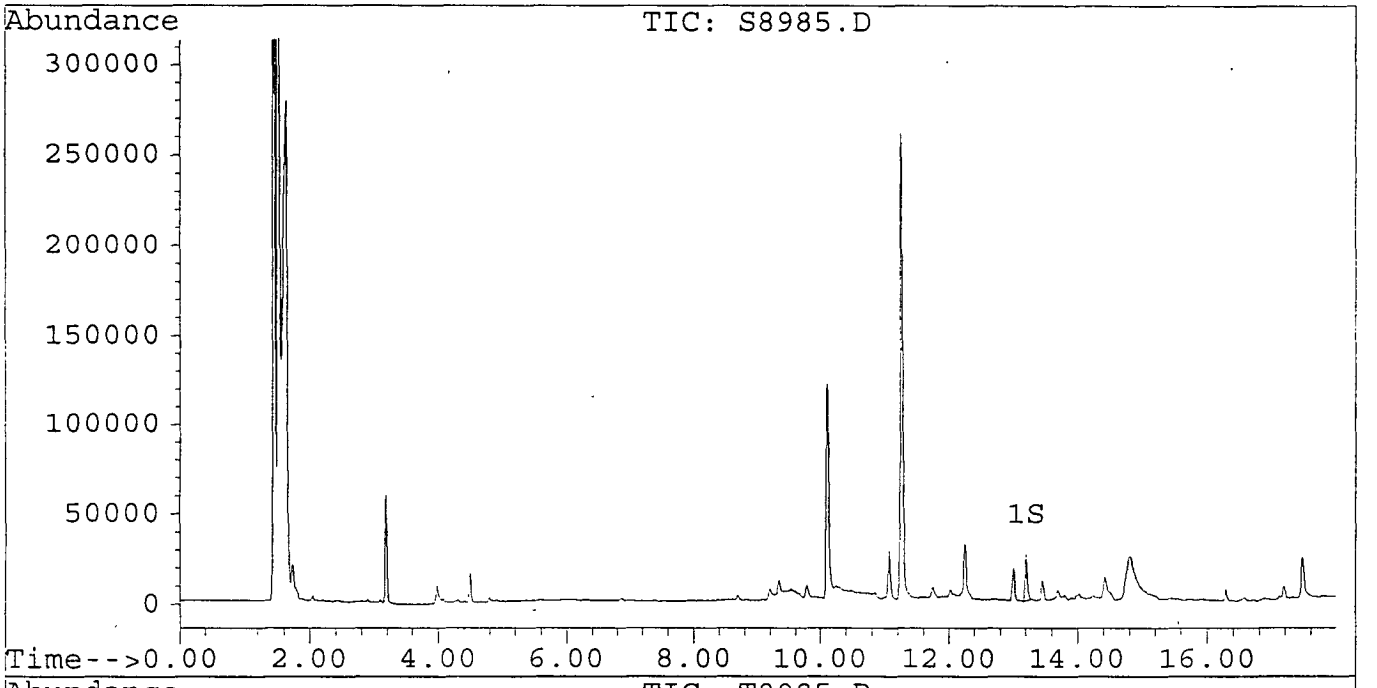
Quantitation Report

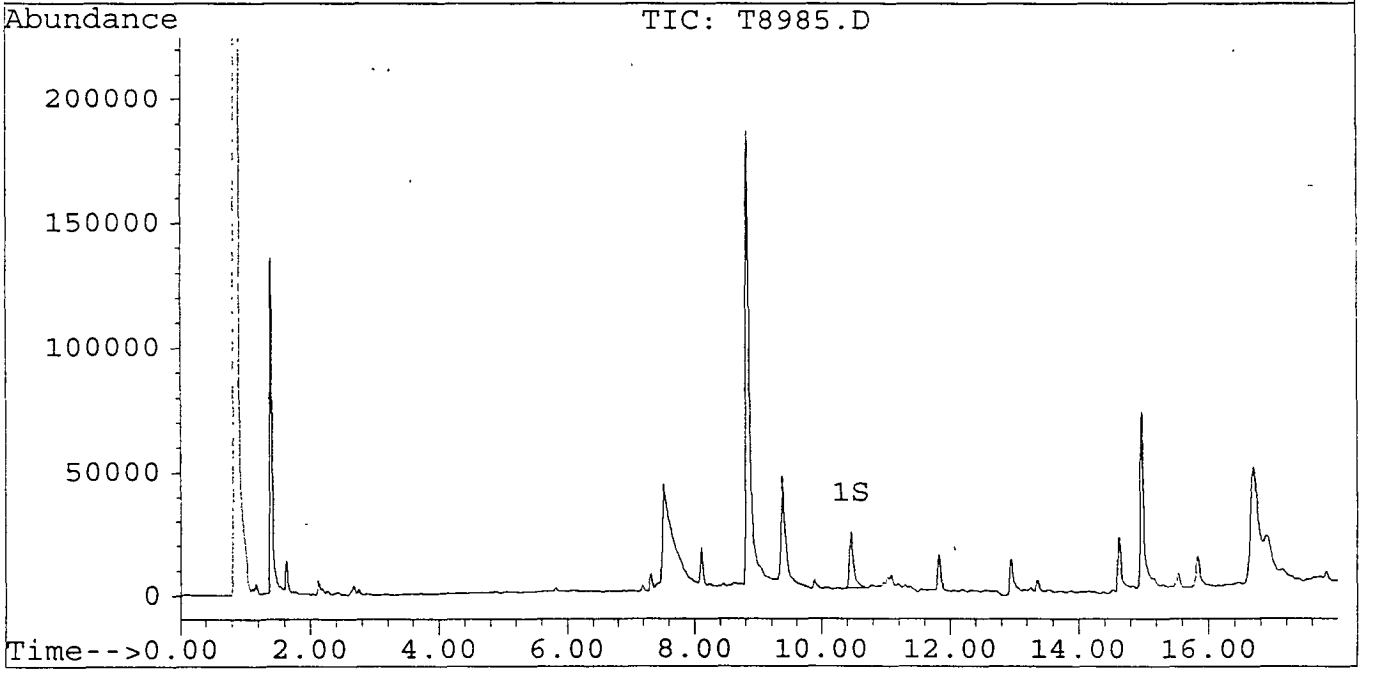
Signal #1 : N:\GC_ST\DEC0396\S8985.D
Signal #2 : N:\GC_ST\DEC0396\S8985.D\T8985.D
Acq On : 04 Dec 96 01:54 AM
Sample : T611436-07
Misc :
Quant Time:

Vial: 24
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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





Quantitation Report

Signal #1 : N:\GC_ST\DEC0396\S8985.D
Signal #2 : N:\GC_ST\DEC0396\S8985.D\T8985.D
Acq On : 04 Dec 96 01:54 AM
Sample : T611436-07
Misc :
Quant Time: Dec 4 19:25 1996

Vial: 24
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
1)	S 2,4,5-T(SURR)	13.21	10.46	63722	102787	62.933m	88.820 #
				Recovery	=	125.87%	177.64%
2)	S DCAA (SURR)	0.00	0.00	0	0	N.D.	N.D.
				Recovery	=	0.00%	0.00%
	Target Compounds						
3)	TM Dalapon	0.00	0.00	0	0	N.D. d	N.D.
4)	TM 2,4-D	0.00	0.00	0	0	N.D.	N.D.
5)	TM 2,4,5-TP(SILVEX)	0.00	0.00	0	0	N.D.	N.D.
6)	TM Dinoseb	0.00	0.00	0	0	N.D.	N.D. d

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

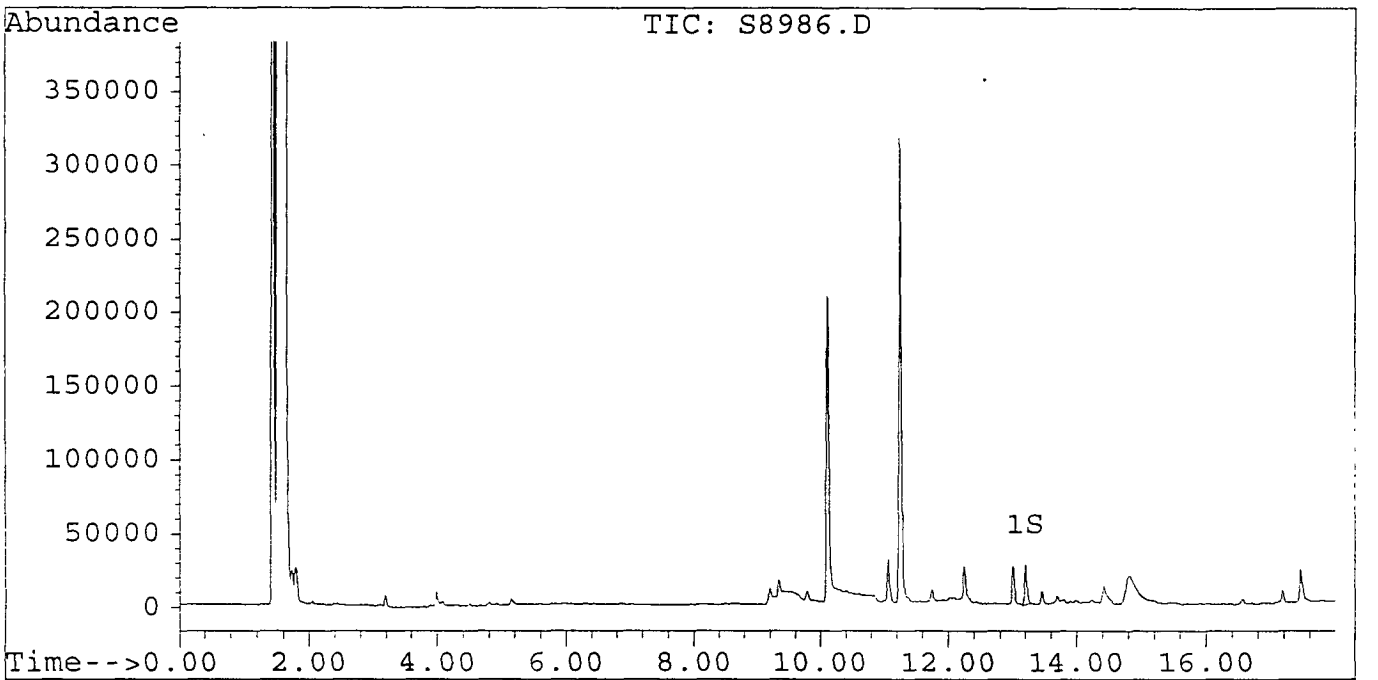
Quantitation Report

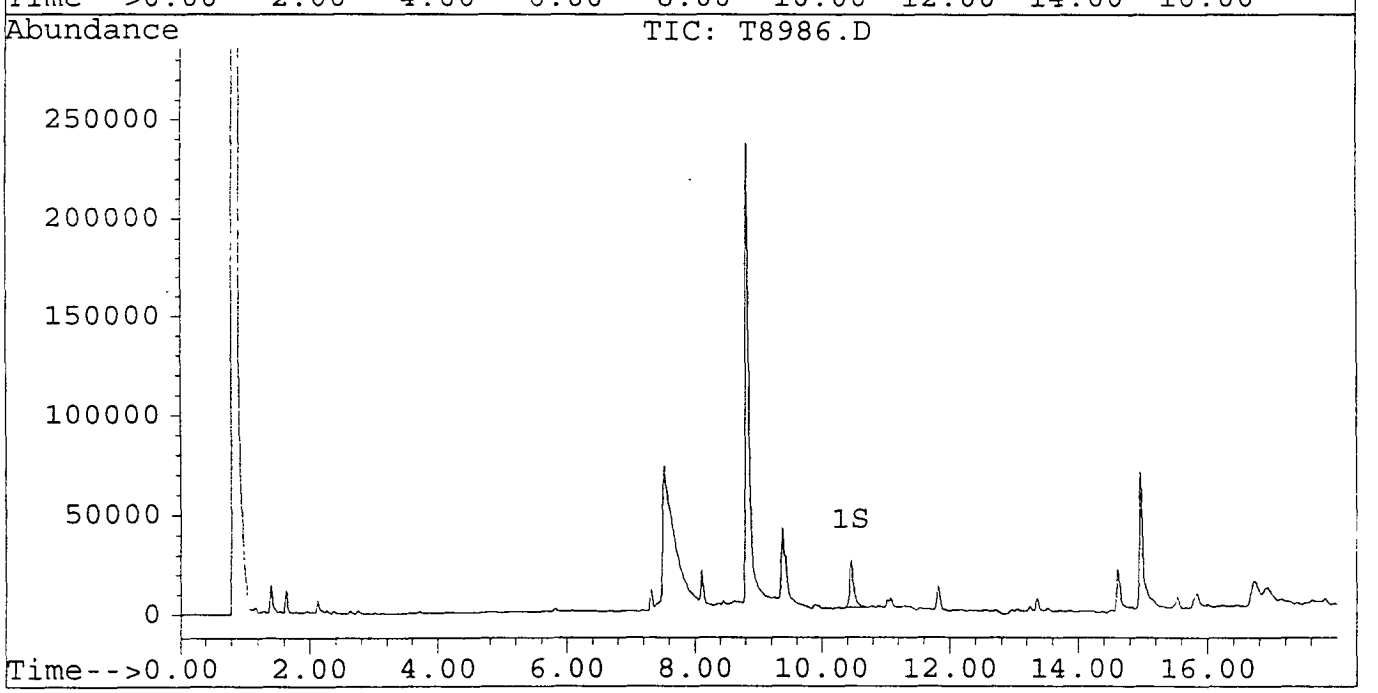
Signal #1 : N:\GC_ST\DEC0396\S8986.D
Signal #2 : N:\GC_ST\DEC0396\S8986.D\T8986.D
Acq On : 04 Dec 96 02:17 AM
Sample : T611436-09
Misc :
Quant Time:

Vial: 25
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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





Quantitation Report

Signal #1 : N:\GC_ST\DEC0396\S8986.D Vial: 25
Signal #2 : N:\GC_ST\DEC0396\S8986.D\T8986.D
Acq On : 04 Dec 96 02:17 AM Operator: SHAH
Sample : T611436-09 Inst : GC_ST
Misc : Multiplr: 1.00
Quant Time: Dec 4 19:26 1996

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
1)	S 2,4,5-T(SURR)	13.20	10.46	67540	109103	66.704m	94.277 #
				Recovery	=	133.41%	188.55%
2)	S DCAA (SURR)	0.00	0.00	0	0	N.D.	N.D.
				Recovery	=	0.00%	0.00%
	Target Compounds						
3)	TM Dalapon	0.00	0.00	0	0	N.D. d	N.D.
4)	TM 2,4-D	0.00	0.00	0	0	N.D.	N.D.
5)	TM 2,4,5-TP(SILVEX)	0.00	0.00	0	0	N.D.	N.D.
6)	TM Dinoseb	0.00	0.00	0	0	N.D.	N.D. d

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

Quantitation Report

Signal #1 : N:\GC_ST\DEC0396\S8989.D
Signal #2 : N:\GC_ST\DEC0396\S8989.D\T8989.D
Acq On : 04 Dec 96 03:27 AM
Sample : T611436-11
Misc :
Quant Time:

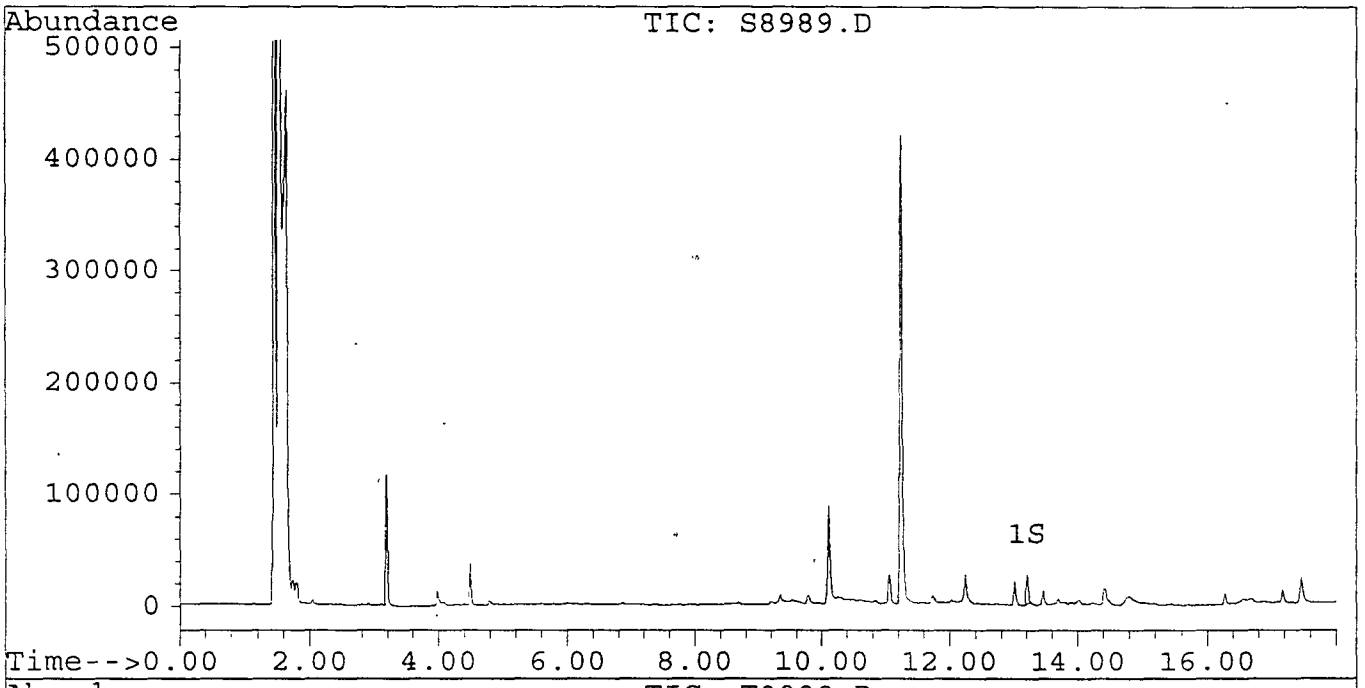
Vial: 26

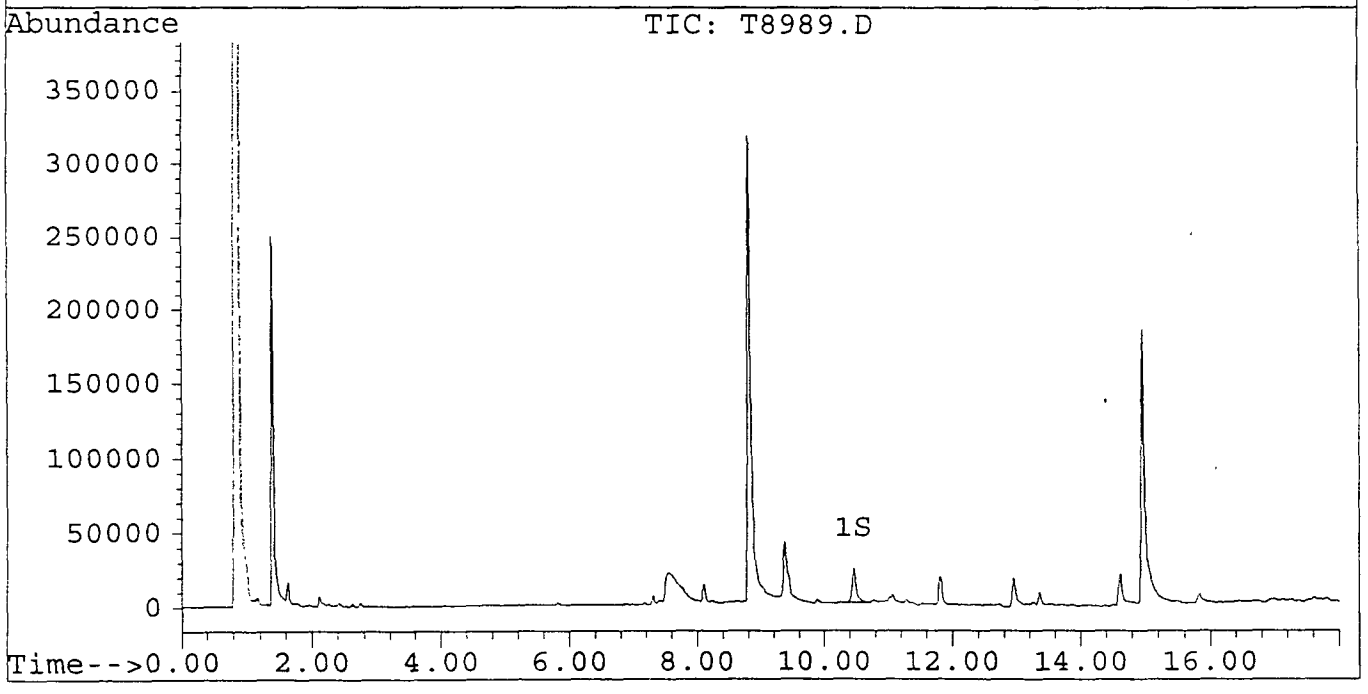
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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

Signal #2 Phase:
Signal #2 Info :





Quantitation Report

Signal #1 : N:\GC_ST\DEC0396\S8989.D
Signal #2 : N:\GC_ST\DEC0396\S8989.D\T8989.D
Acq On : 04 Dec 96 03:27 AM
Sample : T611436-11
Misc :
Quant Time: Dec 4 19:30 1996

Vial: 26
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
System Monitoring Compounds						
1) S 2,4,5-T(SURR)	13.20	10.46	62212	98928	61.442m	85.485 #
			Recovery	=	122.88%	170.97%
2) S DCAA (SURR)	0.00	0.00	0	0	N.D.	N.D.
			Recovery	=	0.00%	0.00%
Target Compounds						
3) TM Dalapon	0.00	0.00	0	0	N.D. d	N.D.
4) TM 2,4-D	0.00	0.00	0	0	N.D.	N.D.
5) TM 2,4,5-TP(SILVEX)	0.00	0.00	0	0	N.D.	N.D.
6) TM Dinoseb	0.00	0.00	0	0	N.D.	N.D. d

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

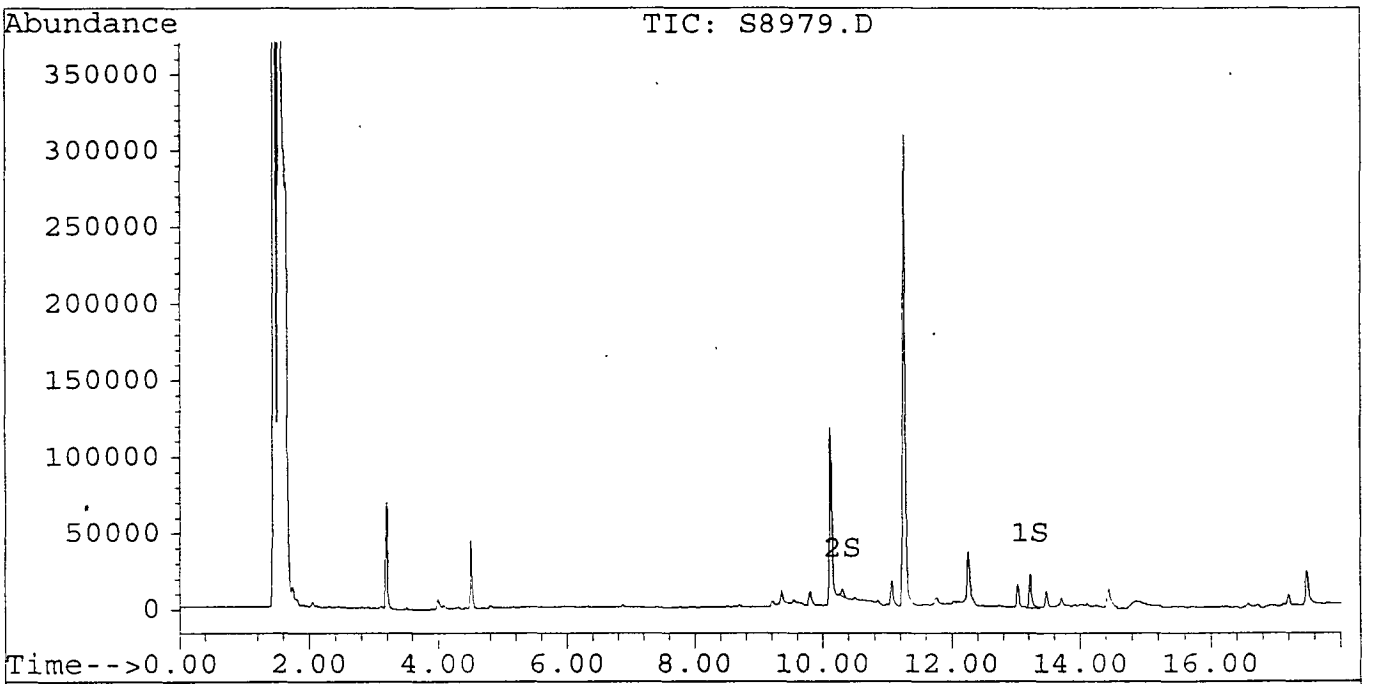
Quantitation Report

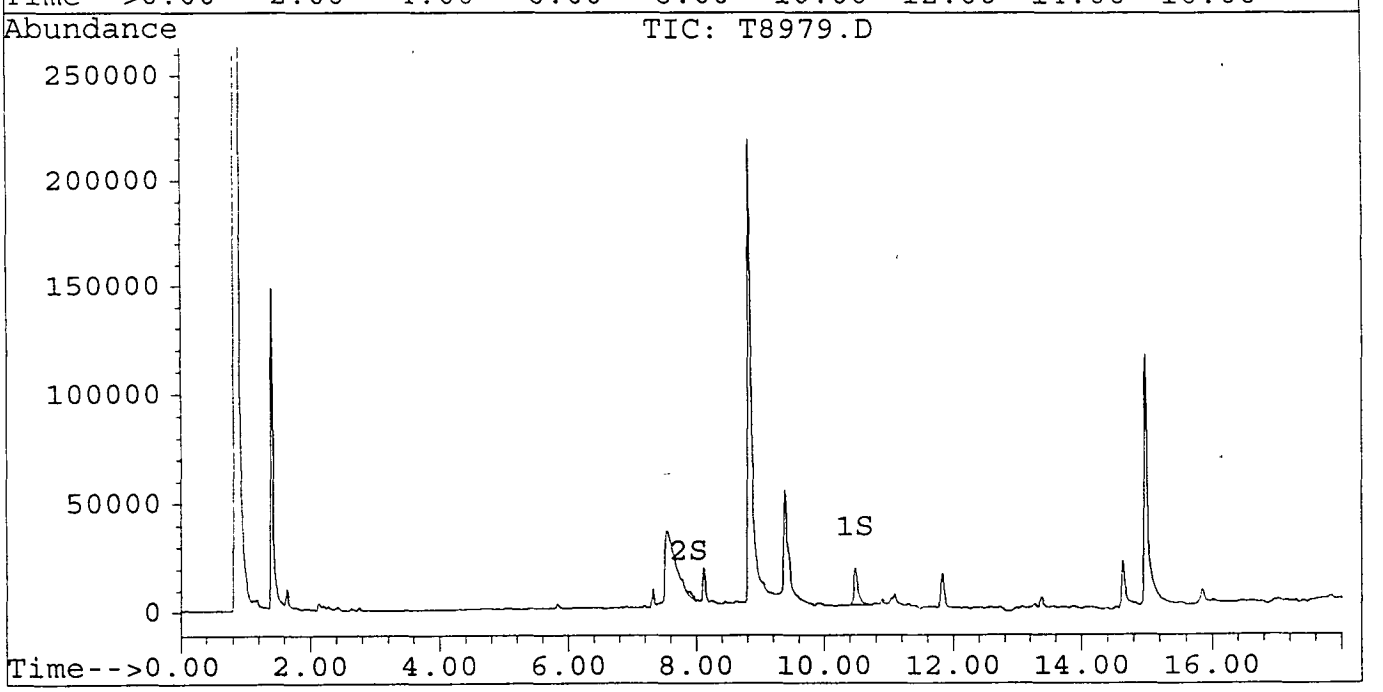
Signal #1 : N:\GC_ST\DEC0396\S8979.D
Signal #2 : N:\GC_ST\DEC0396\S8979.D\T8979.D
Acq On : 03 Dec 96 11:34 PM
Sample : SBLK16473T2
Misc :
Quant Time:

Vial: 18
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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





Quantitation Report

Signal #1 : N:\GC_ST\DEC0396\S8979.D
Signal #2 : N:\GC_ST\DEC0396\S8979.D\T8979.D
Acq On : 03 Dec 96 11:34 PM
Sample : SBLK16473T2
Misc :
Quant Time: Dec 4 19:19 1996

Vial: 18
Operator: SHAH
Inst : GC_ST
Multiplr: 1.00

Method : c:\HPCHEM\5\METHODS\AM1124.M
Title :
Last Update : Wed Dec 04 18:14:06 1996
Response via : Multiple Level Calibration

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

	Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2
	System Monitoring Compounds						
1)	S 2,4,5-T(SURR)	13.22	10.48	66984	77106	66.155	66.628
				Recovery	=	132.31%	133.26%
2)	S DCAA (SURR)	10.30f	7.89	12565	10087	61.267m	48.192m
				Recovery	=	30.63%	24.10%
	Target Compounds						
3)	TM Dalapon	0.00	0.00	0	0	N.D.	N.D.
4)	TM 2,4-D	0.00	0.00	0	0	N.D.	N.D.
5)	TM 2,4,5-TP(SILVEX)	0.00	0.00	0	0	N.D.	N.D.
6)	TM Dinoseb	0.00	0.00	0	0	N.D.	N.D. d

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

Quantitation Report

Signal #1 : C:\HPCHEM\5\DATA\NOV0496\M07502.D Vial: 18
Signal #2 : C:\HPCHEM\5\DATA\NOV0496\M07502.D\N07502.D
Acq On : 08 Nov 96 04:21 AM Operator: DS
Sample : 16473-TCLP BLK Inst : GC_MN
Misc : TCLP HERB SOIL Multiplr: 1.00
Quant Time: Nov 8 13:06 1996

Method : c:\HPCHEM\5\METHODS\THERB.M
Title : SHERB
Last Update : Fri Nov 08 14:59:42 1996
Response via : Single Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53

Compound	RT#1	RT#2	Resp#1	Resp#2	mg/L	mg/L
System Monitoring Compounds						
3) S 2,4,5-T (Surr.)	7.00	6.01	671286	276781	0.037m	0.034
			Recovery	=	37.00%	34.00%
Target Compounds						
1) MT 2,4-D	4.35	3.89	168449	76365	0.036	0.037m
2) MT 2,4,5-TP	0.00	0.00	0	0	N.D.	N.D.

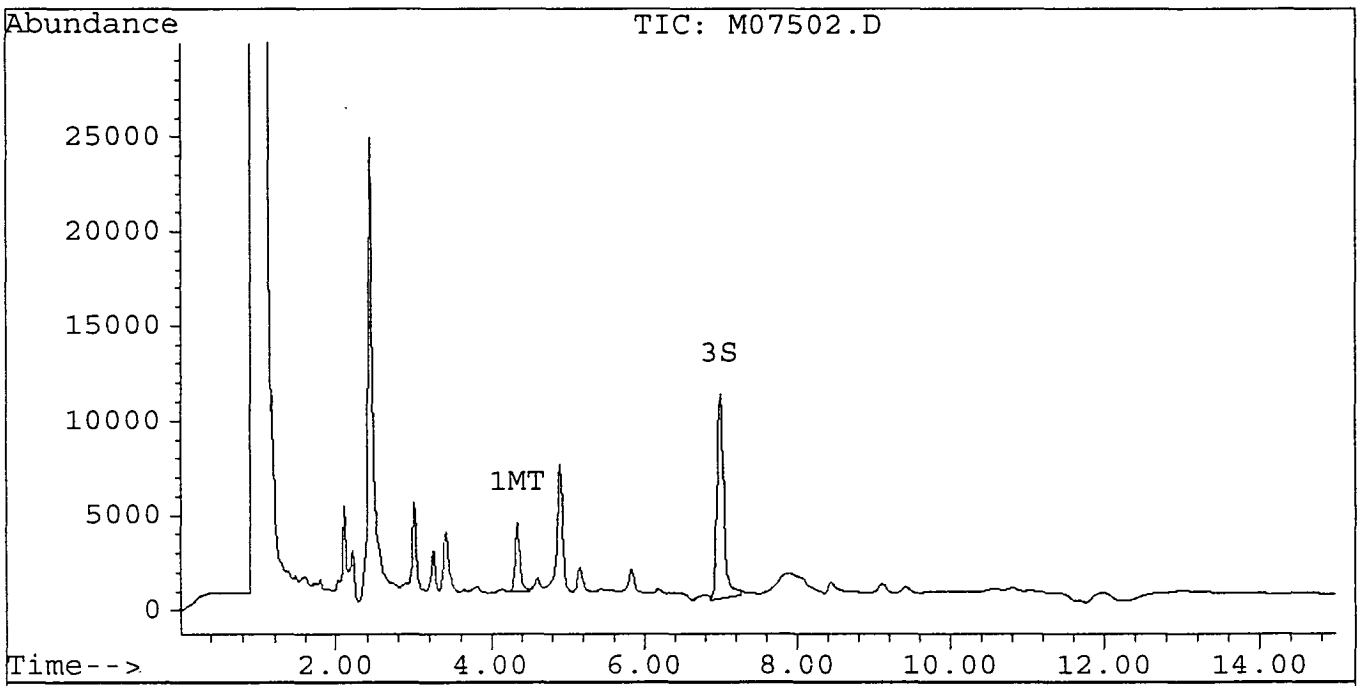
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

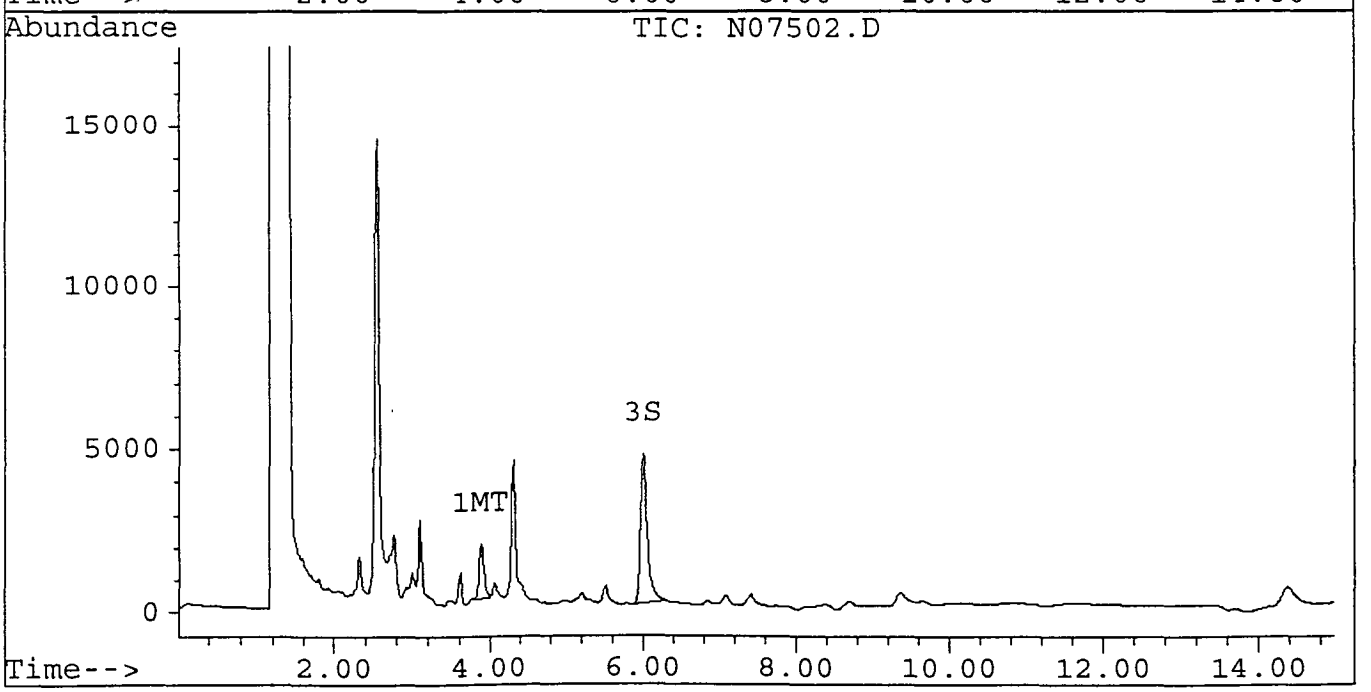
Quantitation Report

Signal #1 : C:\HPCHEM\5\DATA\NOV0496\M07502.D Vial: 18
Signal #2 : C:\HPCHEM\5\DATA\NOV0496\M07502.D\N07502.D
Acq On : 08 Nov 96 04:21 AM Operator: DS
Sample : 16473-TCLP BLK Inst : GC_MN
Misc : TCLP HERB SOIL Multiplr: 1.00
Quant Time:

Method : c:\HPCHEM\5\METHODS\THERB.M
Title : SHERB
Last Update : Fri Nov 08 14:59:42 1996
Response via : Single Level Calibration

Volume Inj. : 1uL
Signal #1 Phase : RTX1701 Signal #2 Phase: RTX5
Signal #1 Info : 0.53 Signal #2 Info : 0.53





METALS ANALYSIS
CONFORMANCE/NONCONFORMANCE SUMMARY

WORK ORDER No. T611436

		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: MS MSD		✓
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:		✓

Laboratory Supervisor: Michael Polidori Date: 12-5-96

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T611436
LRI Sample No: 1

Client: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6A-1

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 20.7%

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Mercury by Cold Vapor by 7470, TCLP								
Mercury	0.0050 U	0.0050	mg/L	12/02/96	VD	12/03/96	VD	1
Metals by ICP by 6010, TCLP								
Arsenic	0.060 U	.06	mg/L	12/02/96	SS	12/03/96	MP	1
Barium	0.13	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Cadmium	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Chromium	0.10 U	.1	mg/L	12/02/96	SS	12/03/96	MP	1
Copper	0.25 U	.25	mg/L	12/02/96	SS	12/03/96	MP	1
Lead	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Nickel	0.20 U	.2	mg/L	12/02/96	SS	12/03/96	MP	1
Selenium	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Silver	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Zinc	0.20 U	.2	mg/L	12/02/96	SS	12/03/96	MP	1

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T611436
LRI Sample No: 3

Client: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-TR6E-1

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 18.0%

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Mercury by Cold Vapor by 7470, TCLP								
Mercury	0.0050 U	0.0050	mg/L	12/02/96	VD	12/03/96	VD	1
Metals by ICP by 6010, TCLP								
Arsenic	0.060 U	.06	ug/L	12/02/96	SS	12/03/96	MP	1
Barium	0.24	.05	ug/L	12/02/96	SS	12/03/96	MP	1
Cadmium	0.030 U	.03	ug/L	12/02/96	SS	12/03/96	MP	1
Chromium	0.10 U	.1	ug/L	12/02/96	SS	12/03/96	MP	1
Copper	0.25 U	.25	ug/L	12/02/96	SS	12/03/96	MP	1
Lead	0.085	.03	ug/L	12/02/96	SS	12/03/96	MP	1
Nickel	0.20 U	.2	ug/L	12/02/96	SS	12/03/96	MP	1
Selenium	0.050 U	.05	ug/L	12/02/96	SS	12/03/96	MP	1
Silver	0.050 U	.05	ug/L	12/02/96	SS	12/03/96	MP	1
Zinc	1.3	.2	ug/L	12/02/96	SS	12/03/96	MP	1

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T611436
LRI Sample No: 5

Client: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-TR6E-2

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 14.9%

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Mercury by Cold Vapor by 7470, TCLP								
Mercury	0.0050 U	0.0050	mg/L	12/02/96	VD	12/03/96	VD	1
Metals by ICP by 6010, TCLP								
Arsenic	0.060 U	.06	mg/L	12/02/96	SS	12/03/96	MP	1
Barium	0.28	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Cadmium	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Chromium	0.10 U	.1	mg/L	12/02/96	SS	12/03/96	MP	1
Copper	0.25 U	.25	mg/L	12/02/96	SS	12/03/96	MP	1
Lead	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Nickel	0.20 U	.2	mg/L	12/02/96	SS	12/03/96	MP	1
Selenium	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Silver	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Zinc	0.20 U	.2	mg/L	12/02/96	SS	12/03/96	MP	1

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T611436
LRI Sample No: 7

Client: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6F-1

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 21.6%

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Mercury by Cold Vapor by 7470, TCLP								
Mercury	0.0050 U	0.0050	mg/L	12/02/96	VD	12/03/96	VD	1
Metals by ICP by 6010, TCLP								
Arsenic	0.060 U	.06	mg/L	12/02/96	SS	12/03/96	MP	1
Barium	0.47	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Cadmium	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Chromium	0.10 U	.1	mg/L	12/02/96	SS	12/03/96	MP	1
Copper	0.25 U	.25	mg/L	12/02/96	SS	12/03/96	MP	1
Lead	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Nickel	0.20 U	.2	mg/L	12/02/96	SS	12/03/96	MP	1
Selenium	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Silver	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Zinc	0.39	.2	mg/L	12/02/96	SS	12/03/96	MP	1

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T611436
LRI Sample No: 9

Client: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6F-2

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 16.5%

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Mercury by Cold Vapor by 7470, TCLP								
Mercury	0.0050 U	0.0050	mg/L	12/02/96	VD	12/03/96	VD	1
Metals by ICP by 6010, TCLP								
Arsenic	0.060 U	.06	mg/L	12/02/96	SS	12/03/96	MP	1
Barium	0.75	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Cadmium	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Chromium	0.10 U	.1	mg/L	12/02/96	SS	12/03/96	MP	1
Copper	0.25 U	.25	mg/L	12/02/96	SS	12/03/96	MP	1
Lead	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Nickel	0.20 U	.2	mg/L	12/02/96	SS	12/03/96	MP	1
Selenium	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Silver	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Zinc	0.37	.2	mg/L	12/02/96	SS	12/03/96	MP	1

METALS ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Order No: T611436
LRI Sample No: 11

Client: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6F-3

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 28.1%

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Mercury by Cold Vapor by 7470, TCLP								
Mercury	0.0050 U	0.0050	mg/L	12/02/96	VD	12/03/96	VD	1
Metals by ICP by 6010, TCLP								
Arsenic	0.060 U	.06	mg/L	12/02/96	SS	12/03/96	MP	1
Barium	0.22	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Cadmium	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Chromium	0.10 U	.1	mg/L	12/02/96	SS	12/03/96	MP	1
Copper	0.25 U	.25	mg/L	12/02/96	SS	12/03/96	MP	1
Lead	0.030 U	.03	mg/L	12/02/96	SS	12/03/96	MP	1
Nickel	0.20 U	.2	mg/L	12/02/96	SS	12/03/96	MP	1
Selenium	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Silver	0.050 U	.05	mg/L	12/02/96	SS	12/03/96	MP	1
Zinc	0.43	.2	mg/L	12/02/96	SS	12/03/96	MP	1

Metals Method Blank Analysis

FOR TCLP

This method blank was analyzed concurrent with the analysis of the sample(s):

T611436

Element	Result mg/L		MDL mg/L		Dil.
Arsenic	U	X	0.006		1
Barium	U	X	0.005		1
Cadmium	U	X	0.003		1
Chromium	U	X	0.010		1
Lead	U	X	0.003		1
Mercury	U	X	0.0005		1
Selenium	U	X	0.005		1
Silver	U	X	0.005		1
Copper	U	X	0.025		1
Nickel	U	X	0.020		1
Zinc	U	X	0.020		1
Beryllium	U		0.005		1
Iron	U		0.100		1
Molybdenum	U		0.025		1
Vanadium	U		0.005		1

(*) Elevated MDLs due to dilution for range

(**) Elevated MDLs due to dilution for interferences

X = Undetected analyte of required analysis

Metals TCLP Blank Analysis

This TCLP blank was analyzed concurrent with the analysis of the sample(s):

T611436

Element	Result mg/L		MDL mg/L		Dil.
Arsenic	U	X	0.06		1
Barium	U	X	0.05		1
Cadmium	U	X	0.03		1
Chromium	U	X	0.10		1
Lead	U	X	0.03		1
Mercury	U	X	0.005		1
Selenium	U	X	0.05		1
Silver	U	X	0.05		1
Copper	U	X	0.25		1
Nickel	U	X	0.20		1
Zinc	U	X	0.20		1
Beryllium	U		0.050		1
Iron	U		1.00		1
Molybdenum	U		0.25		1
Vanadium	U		0.050		1

(*) Elevated MDLs due to dilution for range
(**) Elevated MDLs due to dilution for interferences
X = Undetected analyte of required analysis

Laboratory Resources, Inc. *(TCLP) Trace Metals QC Form*

Workorder #: T611436 **QC Sample #:** T611436-1 **Matrix:** TCLP

Parameters	Matrix	Sample (RAW)	Sample Result mg/L	Sample Dup (RAW)	Sample Dup mg/L	RPD %	out	Spike Added mg/L	Spike (RAW)	Matrix Spike mg/L	MS %REC	out	Spike Dup (RAW)	Spike Dup mg/L	MSD %REC	out	RPD %
Aluminum	TCLP							20.0									
Antimony	TCLP							5.0									
Arsenic	TCLP	U	**U**	U	**U**	NC		20 0	1933	**19.33**	96 7		1986	**19.86**	99 3		2 7
Barium	TCLP	12.88	**0.1288**	15 51	**0.1551**	18 5		20 0	2017	**20.17**	100 2		2073	**20.73**	103 0		2 7
Beryllium	TCLP	U	**U**	U	**U**	NC		0 5	47.07	**0.4707**	94 1		48.59	**0.4859**	97 2		3.2
Boron	TCLP							20 0									
Cadmium	TCLP	U	**U**	U	**U**	NC		0 5	48.3	**0.483**	96.6		49.69	**0.4969**	99 4		2.8
Calcium	TCLP							100									
Chromium	TCLP	U	**U**	U	**U**	NC		2.0	191.8	**1.918**	95.9		197 9	**1.979**	99 0		3 1
Cobalt	TCLP							5.0									
Copper	TCLP	U	**U**	U	**U**	NC		2.5	245.7	**2.457**	98.3		252.6	**2.526**	101 0		2 8
Iron	TCLP							100									
Lead	TCLP	U	**U**	U	**U**	NC		5 0	485.7	**4.857**	97.1		500.9	**5.009**	100 2		3 1
Magnesium	TCLP							100									
Manganese	TCLP							5 0									
Mercury	TCLP	U	**U**	U	**U**	NC		0 04	4.085	**0.04085**	102 1		4.444	**0.04444**	111 1		8.4
Molybdenum	TCLP							20 0									
Nickel	TCLP	U	**U**	U	**U**	NC		5 0	490.1	**4.901**	98 0		507.5	**5.075**	101.5		3 5
Potassium	TCLP							200									
Selenium	TCLP	U	**U**	U	**U**	NC		20 0	1981	**19.81**	99 1		1988	**19.88**	99.4		0 4
Silicon	TCLP							20 0									
Silver	TCLP	U	**U**	U	**U**	NC		0 5	52.1	**0.521**	104 2		53.19	**0.5319**	106 4		2.1
Sodium	TCLP							100									
Thallium	TCLP	U	**U**	U	**U**	NC		20 0	1988	**19.88**	99 4		2044	**20.44**	102 2		2 8
Tin	TCLP							100									
Titanium	TCLP							20 0									
Vanadium	TCLP							5 0									
Zinc	TCLP	U	**U**	U	**U**	NC		5 0	476.9	**4.769**	95.4		496.6	**4.966**	99 3		4 0

QUALIFIERS:
** = OUTSIDE OF CONTROL LIMITS
U = UNDETECTED
NA = NOT APPLICABLE
NC = NOT CALCULATED

Laboratory Resources, Inc.

(TCLP) Trace Metals QC Form

Workorder #: T611436 QC Sample #: T611436-1 Batch #: 2214

Parameters	Matrix	True Value mg/L	LCSW (RAW)	LCSW Result mg/L	%REC	out	LCSWD (RAW)	LCSWD Result mg/L	%REC	out	ICP PS (RAW)	ICP Post Spike mg/L	%REC	out	ICP SD RAW	ICP Serial Dilution mg/L	RPD %	out
Aluminum	TCLP	2 00																
Antimony	TCLP	0 50																
Arsenic	TCLP	2 00	1967.00	**1.967**	98 4		1948	**1.948**	97 4		1833	**18.33**	91 7		U	U	NC	
Barium	TCLP	2 00	2035.00	**2.035**	101 8		2022	**2.022**	101 1		1910	**19.1**	94 9		U	U	NC	
Beryllium	TCLP	0 05	48 41	**0.04841**	96 8		47.98	**0.04798**	96 0		44	**0.4445**	88.9		U	U	NC	
Boron	TCLP	2 00																
Cadmium	TCLP	0 05	49.43	**0.04943**	98.9		49.14	**0.04914**	98 3		46	**0.4582**	91.6		U	U	NC	
Calcium	TCLP	10 00																
Chromium	TCLP	0 20	196.00	**0.196**	98 0		194 6	**0.1946**	97.3		182	**1.818**	90 9		U	U	NC	
Cobalt	TCLP	0 50																
Copper	TCLP	0 25	248.80	**0.2488**	99 5		247 5	**0.2475**	99.0		235	**2.345**	93 8		U	U	NC	
Iron	TCLP	10 00																
Lead	TCLP	0 50	498 60	**0.4986**	99 7		491.1	**0.4911**	98 2		462	**4.617**	92 3		U	U	NC	
Magnesium	TCLP	10 00																
Manganese	TCLP	0 50																
Mercury	TCLP	0 004	4.370	**0.00437**	109 3		4 477	**0.004477**	111.9									
Molybdenum	TCLP	2 00																
Nickel	TCLP	0 50	501.80	**0.5018**	100 4		497.1	**0.4971**	99 4		465	**4.65**	93 0		U	U	NC	
Potassium	TCLP	20 00																
Selenium	TCLP	2 00	1960 00	**1.96**	98 0		1958	**1.958**	97 9		1810	**18.1**	90 5		U	U	NC	
Silicon	TCLP	2 00																
Silver	TCLP	0 05	53 15	**0.05315**	106 3		52.33	**0.05233**	104 7		49	**0.4944**	98 9		U	U	NC	
Sodium	TCLP	10 00																
Thallium	TCLP	2 00	2018.00	**2.018**	100 9		2008	**2.008**	100 4		1885	**18.85**	94 3		U	U	NC	
Tin	TCLP	10 00																
Titanium	TCLP	2 00																
Vanadium	TCLP	0 50																
Zinc	TCLP	0 50	489 40	**0.4894**	97 9		479.7	**0.4797**	95.9		458	**4.581**	91 6		U	U	NC	

QUALIFIERS:
** = OUTSIDE OF CONTROL LIMITS
U = UNDETECTED
NA = NOT APPLICABLE
NC = NOT CALCULATED

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	10/01/95	10/01/91	10/01/91
3	PE5100#2	F	11/04/96	10/01/91	10/01/91
4	TJA61E	P	11/01/96	11/01/96	11/06/96
5	TJA1000	CV	07/31/96	10/01/91	10/01/91
6	TRAACS	C	07/11/96		
7	PE5100#3	F	10/31/96		
8	PE5100#4	F	01/05/95		
9	TRACE	P	09/26/96	03/27/96	09/13/96
10	MEAN LCS TRACE	P	07/19/95		
11	TRACE/REG	P	09/30/95	03/27/96	03/27/96
12	PE/REG	F	07/27/95		
13	TJA1000/REG	CV	06/16/95		
14	PEAS90	CV	10/31/96		08/14/96
15					
16					
17					
18					
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25					
26					

Laboratory Instrumentation Elemental Information Form

Instrument Identification TJA61E

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum	Al	308.200	33.1	10.00	1000000	
Antimony	Sb	206.800	29.3	10.00	100000	
Arsenic	As	193.600	31.6	10.00	100000	
Barium	Ba	493.400	1.8	10.00	100000	
Beryllium	Be	313.000	0.2	10.00	100000	
Cadmium	Cd	228.800	1.5	10.00	100000	
Calcium	Ca	317.900	268.1	10.00	1000000	
Chromium	Cr	267.700	3.9	10.00	100000	
Cobalt	Co	228.600	4.1	10.00	100000	
Copper	Cu	324.700	4.8	10.00	100000	
Iron	Fe	259.900	48.1	10.00	500000	
Lead	Pb	220.300	21.5	10.00	500000	
Magnesium	Mg	279.000	33.0	10.00	1000000	
Manganese	Mn	257.600	1.2	10.00	50000	
Mercury						
Nickel	Ni	231.600	7.4	10.00	100000	
Potassium	K	766.400	846.8	10.00	200000	
Selenium	Se	196.000	53.5	10.00	100000	
Silver	Ag	328.000	4.1	10.00	3000	
Sodium	Na	588.900	32.9	10.00	500000	
Thallium	Tl	190.800	24.3	10.00	100000	
Vanadium	V	292.400	3.3	10.00	50000	
Zinc	Zn	213.800	10.3	10.00	100000	
Cyanide						
Boron	B	249.600	8.4	10.00	100000	
Molybdenum	Mo	202.000	8.0	10.00	100000	
Silicon	Si	288.100		10.00		
Titanium	Ti	334.900		10.00		
Tin	Sn	189.900		10.00		

Detection Limit Summary Data for Instrument : 4

Dates :	11/01/96	11/04/96	11/12/96	11/01/96
Element	1	2	3	Detection Limit
Aluminum	10.09	12.25	10.77	33.1
Antimony	12.10	8.12	9.10	29.3
Arsenic	11.53	5.88	14.22	31.6
Barium	0.42	1.09	0.33	1.8
Beryllium	0.11	0.01	0.08	0.2
Cadmium	0.87	0.23	0.45	1.5
Calcium	194.68	71.90	1.56	268.1
Chromium	1.54	1.29	1.10	3.9
Cobalt	2.14	0.67	1.24	4.1
Copper	1.54	2.23	1.03	4.8
Iron	10.30	36.82	1.01	48.1
Lead	10.89	5.97	4.62	21.5
Magnesium	10.65	11.03	11.33	33.0
Manganese	0.50	0.45	0.26	1.2
Mercury				
Nickel	2.56	2.01	2.78	7.4
Potassium	171.74	365.04	309.98	846.8
Selenium	26.78	10.30	16.47	53.5
Silver	1.78	1.17	1.10	4.1
Sodium	10.88	15.66	6.33	32.9
Thallium	12.01	6.75	5.55	24.3
Vanadium	1.61	0.84	0.86	3.3
Zinc	5.56	4.16	0.58	10.3
Cyanide				
Boron	2.37	3.13	2.92	8.4
Molybdenum	2.97	3.35	1.64	8.0
Silicon				
Titanium				
Tin				

Laboratory Instrumentation Elemental Information Form

Instrument Identification TRACE

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum	Al	308.200	12.1	15.00	500000	
Antimony	Sb	206.800	5.3	15.00	50000	
Arsenic	As	189.000	3.9	15.00	10000	
Barium	Ba	234.600	0.4	15.00	100000	
Beryllium	Be	313.000	0.1	15.00	10000	
Cadmium	Cd	226.500	0.4	15.00	20000	
Calcium	Ca	317.900	22.4	15.00	500000	
Chromium	Cr	267.700	1.1	15.00	50000	
Cobalt	Co	228.600	0.9	15.00	50000	
Copper	Cu	324.700	1.5	15.00	50000	
Iron	Fe	271.400	16.0	15.00	500000	
Lead	Pb	220.300	1.4	15.00	10000	
Magnesium	Mg	279.000	8.1	15.00	500000	
Manganese	Mn	257.600	0.3	15.00	20000	
Mercury						
Nickel	Ni	231.600	2.5	15.00	50000	
Potassium	K	766.400	98.9	15.00	200000	
Selenium	Se	196.000	3.3	15.00	10000	
Silver	Ag	328.000	0.7	15.00	5000	
Sodium	Na	330.200	324.2	15.00	400000	
Thallium	Tl	190.800	4.1	15.00	20000	
Vanadium	V	292.400	0.7	15.00	20000	
Zinc	Zn	206.200	1.7	15.00	20000	
Cyanide						
Boron	B	249.600	4.3	15.00	100000	
Molybdenum	Mo	202.000	2.1	15.00	20000	
Silicon	Si	288.100		15.00	50000	
Titanium	Ti	337.200	0.8	15.00	50000	
Tin	Sn	189.900	4.3	15.00	50000	

Detection Limit Summary Data for Instrument : 9

Dates :	09/30/96	09/26/96	10/04/96	09/26/96
Element	1	2	3	Detection Limit
Aluminum	1.86	3.74	6.53	12.1
Antimony	0.91	1.27	3.10	5.3
Arsenic	0.75	1.30	1.81	3.9
Barium	0.05	0.09	0.25	0.4
Beryllium	0.04	0.02	0.02	0.1
Cadmium	0.13	0.10	0.21	0.4
Calcium	6.94	12.79	2.71	22.4
Chromium	0.30	0.18	0.66	1.1
Cobalt	0.20	0.31	0.37	0.9
Copper	0.44	0.56	0.50	1.5
Iron	2.70	6.01	7.25	16.0
Lead	0.51	0.40	0.47	1.4
Magnesium	2.41	2.91	2.78	8.1
Manganese	0.08	0.09	0.13	0.3
Mercury				
Nickel	0.43	0.70	1.32	2.5
Potassium	11.09	20.66	67.14	98.9
Selenium	1.04	0.87	1.43	3.3
Silver	0.24	0.18	0.33	0.7
Sodium	74.59	103.21	146.38	324.2
Thallium	0.89	1.89	1.32	4.1
Vanadium	0.22	0.26	0.24	0.7
Zinc	0.43	0.76	0.49	1.7
Cyanide				
Boron	0.98	1.13	2.21	4.3
Molybdenum	0.44	0.30	1.35	2.1
Silicon				
Titanium	0.18	0.22	0.36	0.8
Tin	0.93	1.28	2.08	4.3

Laboratory Instrumentation Elemental Information Form

Instrument Identification PE5100#2

Element	Instrument Symbol	Wavelength	Detection Limit	Integration Time	Linearity	Bkg
Aluminum						
Antimony	Sb	217.600			100	2
Arsenic	As	193.700	1.1		100	2
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	0.6		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	1.2		100	2
Silver						
Sodium						
Thallium	Tl	276.800	0.8		100	2
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Detection Limit Summary Data for Instrument : 3

Dates :	11/04/96	11/06/96	11/11/96	11/04/96
Element	1	2	3	Detection Limit
Aluminum				
Antimony				
Arsenic	0.38	0.33	0.40	1.1
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.19	0.21	0.20	0.6
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.62	0.38	0.24	1.2
Silver				
Sodium				
Thallium	0.16	0.41	0.28	0.8
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	0.9		100	2
Barium						
Beryllium						
Cadmium	Cd	228.800			10	2
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	Pb	283.300	0.8		100	2
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium	Se	196.000	1.2		100	2
Silver						
Sodium						
Thallium	Tl	276.800	0.9		100	2
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Detection Limit Summary Data for Instrument : 7

Dates :	10/31/96	11/04/96	11/06/96	10/31/96
Element	1	2	3	Detection Limit
Aluminum				
Antimony				
Arsenic	0.30	0.25	0.37	0.9
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.28	0.25	0.24	0.8
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.34	0.53	0.33	1.2
Silver				
Sodium				
Thallium	0.26	0.34	0.28	0.9
Vanadium				
Zinc				
Cyanide				
Boron				
Molybdenum				
Silicon				
Titanium				
Tin				

Laboratory Instrumentation Elemental Information Form

Instrument Identification PEAS90

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	0.043		10	1
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						
Cyanide						
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Detection Limit Summary Data for Instrument : 14

Dates :	10/31/96	11/04/96	11/15/96	10/31/96
Element	1	2	3	Detection Limit
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.02	0.02	0.01	0.043
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				
Boron				
Molybdenum				
Silicon				
Titanium				
Tin				

Laboratory Instrumentation Elemental Information Form

Instrument Identification TRAACS

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	578.000	3.6		500	1
Boron						
Molybdenum						
Silicon						
Titanium						
Tin						

Detection Limit Summary Data for Instrument : 6

Dates :	07/11/96	07/30/96	08/03/96	07/11/96
Element	1	2	3	Detection Limit
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide	1.87	0.54	1.24	3.7
Boron				
Molybdenum				
Silicon				
Titanium				
Tin				

GENERAL CHEMISTRY CONFORMANCE/NONCONFORMANCE SUMMARY

WORK ORDER No. T611436

	No	Yes
1. Blank Contamination If yes, list compounds and concentrations in each blank:	✓	
2. Matrix Spike Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range:		✓
3. Sample Duplicate Analyses Meet QC Criteria If not met, list those compounds and their criteria which fall outside the acceptable range:		✓
4. Analysis Holding Time Met If not met, list analyses and number of days exceeded for each sample:		✓

Laboratory Supervisor: [signature] Date: 12/17/96

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 1

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6A-1

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 20.7%
Units in Dry Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Cyanide by 9010, Reactive								
Cyanide	0.32 U	0.32	mg/kg	12/02/96	MW	12/02/96	MW	
Ignitability by SW-846 1010								
Ignitability (Flashpoint)	>160	70	°F			12/03/96	AP	
Oil & Grease Gravimetric by 9070								
Oil and Grease, Total Recoverable	0.10 U	0.10	%			12/03/96	JS	
Paint Filter Liquids Test by 9095								
Liquids, Free	0		mL/100 g			12/04/96	AA	
Solids, Total (TS) by 160.3								
Solids, Total	79	0.05	%			11/29/96	MW	
Solids, Total Volatile (TVS) by 160.4								
Solids, Total Volatile (TVS)	3.90	.05	%			12/04/96	MW	
Sulfide by 9030, Reactive								
Sulfide	32	32	mg/kg	12/02/96	MW	12/02/96	MW	
pH by 9040/9045								
pH	7.98		pH Units			12/04/96	JV	
pH in Water by 9040								
Hydrogen Ion (pH)	5.33		pH Units				MAW	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 2

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6A-1(ASTM)

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Water
Percent Moisture: N/A
Units in Wet Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Ammonia Nitrogen by 350.2								
Ammonia, as N	.50 U	.50	mg/L	12/04/96	AA	12/04/96	AA	
COD by HACH 8000								
Chemical Oxygen Demand	10 U	10	mg/L			12/02/96	AP	
Oil & Grease Gravimetric by 413.1								
Oil and Grease, Total Recoverable	8.0 U	8.0	mg/L	12/03/96	JS	12/03/96	JS	
Solids, Total (TS) by 160.3								
Solids, Total	36	5.0	mg/L			12/04/96	AA	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 3

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-TR6E-1

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 18.0%
Units in Dry Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Cyanide by 9010, Reactive								
Cyanide	0.30 U	0.30	mg/kg	12/02/96	MW	12/02/96	MW	
Ignitability by SW-846 1010								
Ignitability (Flashpoint)	>160	70	°F			12/03/96	AP	
Oil & Grease Gravimetric by 9070								
Oil and Grease, Total Recoverable	0.098 U	0.098	%			12/03/96	JS	
Paint Filter Liquids Test by 9095								
Liquids, Free	0		mL/100 g			12/04/96	AA	
Solids, Total (TS) by 160.3								
Solids, Total	82	0.05	%			11/29/96	MW	
Solids, Total Volatile (TVS) by 160.4								
Solids, Total Volatile (TVS)	3.38	.05	%			12/04/96	PMW	
Sulfide by 9030, Reactive								
Sulfide	30	30	mg/kg	12/02/96	MW	12/02/96	MW	
pH by 9040/9045								
pH	7.69		pH Units			12/04/96	JV	
pH in Water by 9040								
Hydrogen Ion (pH)	5.25		pH Units				MAW	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 4

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-TR6E-1(ASTM)

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Water
Percent Moisture: N/A
Units in Wet Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Ammonia Nitrogen by 350.2								
Ammonia, as N	.50 U	.50	mg/L	12/04/96	AA	12/04/96	AA	
COD by HACH 8000								
Chemical Oxygen Demand	10 U	10	mg/L			12/02/96	AP	
Oil & Grease Gravimetric by 413.1								
Oil and Grease, Total Recoverable	8.0 U	8.0	mg/L	12/03/96	JS	12/03/96	JS	
Solids, Total (TS) by 160.3								
Solids, Total	52	5.0	mg/L			12/04/96	AA	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 5

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-TR6E-2

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 14.9%
Units in Dry Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Cyanide by 9010, Reactive								
Cyanide	0.29 U	0.29	mg/kg	12/02/96	MW	12/02/96	MW	
Ignitability by SW-846 1010								
Ignitability (Flashpoint)	>160	70	°F			12/03/96	AP	
Oil & Grease Gravimetric by 9070								
Oil and Grease, Total Recoverable	0.094 U	0.094	%			12/03/96	JS	
Paint Filter Liquids Test by 9095								
Liquids, Free	0		mL/100 g			12/04/96	AA	
Solids, Total (TS) by 160.3								
Solids, Total	85	0.05	%			11/29/96	MW	
Solids, Total Volatile (TVS) by 160.4								
Solids, Total Volatile (TVS)	7.15	.05	%			12/04/96	PMW	
Sulfide by 9030, Reactive								
Sulfide	35	29	mg/kg	12/02/96	MW	12/02/96	MW	
pH by 9040/9045								
pH	9.08		pH Units			12/04/96	JV	
pH in Water by 9040								
Hydrogen Ion (pH)	5.45		pH Units				MAW	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 6

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-TR6E-2(ASTM)

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Water
Percent Moisture: N/A
Units in Wet Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Ammonia Nitrogen by 350.2								
Ammonia, as N	.50 U	.50	mg/L	12/04/96	AA	12/04/96	AA	
COD by HACH 8000								
Chemical Oxygen Demand	10 U	10	mg/L			12/02/96	AP	
Oil & Grease Gravimetric by 413.1								
Oil and Grease, Total Recoverable	8.0 U	8.0	mg/L	12/03/96	JS	12/03/96	JS	
Solids, Total (TS) by 160.3								
Solids, Total	84	5.0	mg/L			12/04/96	AA	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 7

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6F-1

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 21.6%
Units in Dry Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Cyanide by 9010, Reactive								
Cyanide	0.32 U	0.32	mg/kg	12/02/96	MW	12/02/96	MW	
Ignitability by SW-846 1010								
Ignitability (Flashpoint)	>160	70	°F			12/03/96	AP	
Oil & Grease Gravimetric by 9070								
Oil and Grease, Total Recoverable	0.12	0.10	%			12/03/96	JS	
Paint Filter Liquids Test by 9095								
Liquids, Free	0		mL/100 g			12/04/96	AA	
Solids, Total (TS) by 160.3								
Solids, Total	78	0.05	%			11/29/96	MW	
Solids, Total Volatile (TVS) by 160.4								
Solids, Total Volatile (TVS)	2.28	.05	%			12/04/96	PMW	
Sulfide by 9030, Reactive								
Sulfide	32 U	32	mg/kg	12/02/96	MW	12/02/96	MW	
pH by 9040/9045								
pH	7.91		pH Units			12/04/96	JV	
pH in Water by 9040								
Hydrogen Ion (pH)	5.30		pH Units				MAW	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 8

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6F-1(ASTM)

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Water
Percent Moisture: N/A
Units in Wet Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Ammonia Nitrogen by 350.2								
Ammonia, as N	.50 U	.50	mg/L	12/04/96	AA	12/04/96	AA	
COD by HACH 8000								
Chemical Oxygen Demand	660	50	mg/L			12/02/96	AP	
Oil & Grease Gravimetric by 413.1								
Oil and Grease, Total Recoverable	8.0 U	8.0	mg/L	12/03/96	JS	12/03/96	JS	
Solids, Total (TS) by 160.3								
Solids, Total	600	5.0	mg/L			12/04/96	AA	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 9

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6F-2

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 16.5%
Units in Dry Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Cyanide by 9010, Reactive								
Cyanide	0.30 U	0.30	mg/kg	12/02/96	MW	12/02/96	MW	
Ignitability by SW-846 1010								
Ignitability (Flashpoint)	>160	70	°F			12/03/96	AP	
Oil & Grease Gravimetric by 9070								
Oil and Grease, Total Recoverable	0.096 U	0.096	%			12/03/96	JS	
Paint Filter Liquids Test by 9095								
Liquids, Free	0		mL/100 g			12/04/96	AA	
Solids, Total (TS) by 160.3								
Solids, Total	84	0.05	%			11/29/96	MW	
Solids, Total Volatile (TVS) by 160.4								
Solids, Total Volatile (TVS)	2.10	.05	%			12/04/96	PMW	
Sulfide by 9030, Reactive								
Sulfide	30 U	30	mg/kg	12/02/96	MW	12/02/96	MW	
pH by 9040/9045								
pH	5.92		pH Units			12/04/96	JV	
pH in Water by 9040								
Hydrogen Ion (pH)	5.23		pH Units				MAW	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 10

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6--T6F-2(AStM)

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Water
Percent Moisture: N/A
Units in Wet Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Ammonia Nitrogen by 350.2								
Ammonia, as N	.56	.50	mg/L	12/04/96	AA	12/04/96	AA	
COD by HACH 8000								
Chemical Oxygen Demand	10 U	10	mg/L			12/02/96	AP	
Oil & Grease Gravimetric by 413.1								
Oil and Grease, Total Recoverable	8.0 U	8.0	mg/L	12/03/96	JS	12/03/96	JS	
Solids, Total (TS) by 160.3								
Solids, Total	40	5.0	mg/L			12/04/96	AA	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 11

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6F-3

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Soil
Percent Moisture: 28.1%
Units in Dry Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Cyanide by 9010, Reactive								
Cyanide	0.35 U	0.35	mg/kg	12/02/96	MW	12/02/96	MW	
Ignitability by SW-846 1010								
Ignitability (Flashpoint)	>160	70	°F			12/03/96	AP	
Oil & Grease Gravimetric by 9070								
Oil and Grease, Total Recoverable	0.11 U	0.11	%			12/03/96	JS	
Paint Filter Liquids Test by 9095								
Liquids, Free	0		mL/100 g			12/04/96	AA	
Solids, Total (TS) by 160.3								
Solids, Total	72	0.05	%			11/29/96	MW	
Solids, Total Volatile (TVS) by 160.4								
Solids, Total Volatile (TVS)	2.99	.05	%			12/04/96	PMW	
Sulfide by 9030, Reactive								
Sulfide	35 U	35	mg/kg	12/02/96	MW	12/02/96	MW	
pH by 9040/9045								
pH	7.0		pH Units			12/04/96	JV	
pH in Water by 9040								
Hydrogen Ion (pH)	5.36		pH Units				MAW	

GENERAL CHEMISTRY ANALYSIS DATA SHEET

Laboratory: Laboratory Resources, Inc.
Division: New Jersey
LRI Report No: T611436
LRI Sample No: 12

Customer: Foster Wheeler - PA
Location: PA
Project: Warminister-Site #6
Sample Description: S6-T6F-3(ASTM)

Date Collected: 11/27/96
Date Received: 11/29/96

Matrix: Water
Percent Moisture: N/A
Units in Wet Weight

Parameter	Result	QL	Units	Started Date	Started By	Completed Date	Completed By	Dilution
Ammonia Nitrogen by 350.2								
Ammonia, as N	.50 U	.50	mg/L	12/04/96	AA	12/04/96	AA	
COD by HACH 8000								
Chemical Oxygen Demand	10 U	10	mg/L			12/02/96	AP	
Oil & Grease Gravimetric by 413.1								
Oil and Grease, Total Recoverable	16 U	16	mg/L	12/03/96	JS	12/03/96	JS	
Solids, Total (TS) by 160.3								
Solids, Total	50	5.0	mg/L			12/04/96	AA	

General Chemistry Method Blank Analysis

This blank was analyzed concurrent with the analysis of the workorder:
T611436

Element	Result mg/kg		PQL mg/kg		Dil.
Ammonia-NH3	U		250		1
BOD	U		200		1
COD	U		10000		1
Chloride, Total	U		100		1
Chromium Hexavalen	U		2.0		1
Cyanide, Total	U		0.5		1
MBAS	U		5		1
Nitrate	U		10		1
Nitrite	U		1.0		1
Oil & Grease	U	X	0.08%		1
pH	U	X	NA		1
Pet. Hydrocarbons	U		20		1
Phenolics, Total	U		5.0		1
Phosphorus, Total	U		2.5		1
Sulfate	U		500		1
Sulfite	U		100		1
Sulfide	U		100		1
Dissolved Solids	U		5.0		1
Suspended Solids	U		5.0		1
Kjeldahl Nitrogen	U		250		1
TS	U		0.05%		1
Turbidity	U		2		1
Conductivity	U		10		1
Alkalinity	U		100		1
Reactive Cyanide	U	X	0.25		1
Reactive Sulfide	U	X	25		1
Orthophosphate	U		2.5		1
Hardness	U		250		1
Organic Chloride	U		0.01%		1
Sulfur	U		0.08%		1
Ash	U		NA		1
BTU	U		NA		1
Ignitability	U	X	>70°F		1
TS	U	X	0.05%		1
TVS	U	X	0.05%		1
Moisture	U		NA		1

(*) Elevated MDLs due to dilution for range
(**) Elevated MDLs due to dilution for interferences
X = Undetected analyte of required analyses.

General Chemistry Method Blank Analysis

This blank was analyzed concurrent with the analysis of the workorder:

T611436

Element	Result mg/L		PQL mg/L		Dil.
Ammonia-NH3	U	X	0.50		1
BOD	U		NA		1
COD	U	X	10		1
Chloride, Total	U		2.0		1
Chromium Hexavalen	U		0.05		1
Cyanide, Total	U		0.01		1
MBAS	U		0.10		1
Nitrate/Nitrite	U		0.10		1
Nitrite	U		0.01		1
Oil & Grease	U	X	8.0		1
pH	U		NA		1
Pet. Hydrocarbons	U		0.20		1
Phenolics, Total	U		0.05		1
Phosphorus, Total	U		0.025		1
Sulfate	U		5.0		1
Sulfite	U		1.0		1
Sulfide	U		1.0		1
Dissolved Solids	U		5.0		1
Suspended Solids	U		5.0		1
Kjeldahl Nitrogen	U		0.50		1
TOC	U		5.0		1
Turbidity	U		0.20		1
Conductivity	U		1.0		1
Alkalinity asCaCO3	U		2.0		1
Acidity as CaCO3	U		2.0		1
Fluoride	U		0.20		1
Orthophosphate	U		0.025		1
Hardness	U		5.0		1
Color	U		5.0		1
COD HACH 8000	U		10		1
Residual Chlorine	U		0.05		1
TS	U	X	5		1
Formaldehyde	U		0.05		1

(*) Elevated MDLs due to dilution for range
(**) Elevated MDLs due to dilution for interferences
X = Undetected analyte of required analyses.

Laboratory Resources, Inc. General Chemistry QC Form

Work Order: T611436

Matrix : Aqueous

Parameters	Blank Spike %Rec	Matrix Spike Sample Result mg/L	Spike Added mg/L	Spiked Result mg/L	%Rec	Limits	Sample Result mg/L	Dup Result mg/L	RPD	%Limit	Batch #	Batch QC Sample ID
COD by HACH 8000	84.3	20U	150	140	93.3	75 - 125	20U	20U	ND	20	16816	T611407 9 (DS)

Matrix : Non-Aqueous

Parameters	Blank Spike %Rec	Matrix Spike Sample Result mg/Kg	Spike Added mg/Kg	Spiked Result mg/Kg	%Rec	Limits	Sample Result mg/Kg	Dup Result mg/Kg	RPD	%Limit	Batch #	Batch QC Sample ID
Cyanide by 9010	94.5	.26U	105	40	38.0	20 - 103	.26U	.26U	ND	30	16809	T611407 10 (DS)
Ignitability by SW-846 1010	100	-	-	-	-	-	>160	86U	ND	3 " F	16657	T611242 1 (D)
Oil & Grease Gravimetric by 9070											16885	T611436 5A(DS)
Sulfide by 9030	92.5	26U	211	160	75.9	20 - 140	26U	26U	ND	30	16808	T611407 10 (DS)

Note: The QC is based on a batch system in which a sample is chosen at random for matrix spike and/or duplicate analyses for a given matrix and represents all of the samples included in that batch.

* = Duplicate analysis outside of required quality control limits.
** = Results expressed in mg/Kg dry weight.
N = Matrix Spike recovery outside of required quality control limits.
NA = Not applicable since the sample concentration is 4X the amount of spike added.
ND = Not Determinable
The RPD limits for pH is 0.2 pH units.
The RPD limits for Ignitability is 3 degrees Fahrenheit.

Laboratory Resources, Inc. General Chemistry QC Form

Workorder No: T611436 Matrix: Aqueous

Parameters	Ref. Spike	Sample Result	Spike Added	Spiked Sample		Sample Result	Sample Dup.	% Rec.	RPD		Batch QC
	% Rec.	mg/L	mg/L	mg/L	% Rec.	mg/L	mg/L	Limits	%RES	%Limit	Sample ID
Ammonia	97	<0.5	4.0	3.92	98	<0.5	<0.5	75-125	ND	15	T611406-01 DUP
											T611406-02 SPK
COD								20-110		10	
Chloride								75-120		12	
Cr Hexavalent								80-115		10	
Cyanide								70-125		5	
MBAS								60-135		12	
Nitrate + Nitrite								75-125		20	
Nitrite								75-125		20	
Oil & Grease								75-125		20	
pH								NA		0.2 pH	
Pet. Hydrocarbons								60-130		30	
Phenolics								75-125		10	
Phosphorus								75-125		10	
Sulfate								60-140		10	
Sulfide								80-120		10	
Sulfite								75-125		20	
Dissolved Solids								-----		20	
Kjeldahl Nitrogen								65-135		20	
TOC								75-125		20	
Suspended Solids								NA		20	
Conductivity								-----		5	
Turbidity								75-125		5	
Color								-----		5	
Alkalinity								75-125		10	
Fluoride								80-120			
TS						36	35	-----	3	20	T611436-02

Note:The QC is based on a batch system in which a sample is chosen at random for matrix spike and/or duplicate analyses for a given matrix and represents all of the samples included in that batch.

* = Duplicate analysis outside of required quality control limits.

N = Matrix Spike recovery outside of required quality control limits.

NA=Not applicable since the sample concentration is 4X the amount of spike added.

ND=Not Determinable

The RPD limits for pH is 0.1 pH units.

The RPD limits for Color are : 5% (5-50); 10% (51-100) and 20% (greater than 100) color units.

000210

ORGANIC QUALIFIERS

ABBREV	MEANING
A	Tentatively identified compound is suspected to be Aldol-Condensation product.
B	Compound was detected in the blank.
C	Pesticide result was Confirmed by GC/MS.
P	The lower of the two values reported with "P" flag on Pesticides/Aroclor target analyte, when % difference is greater than 25%between two GC columns.
D	Compound was identified in an analysis at a secondary dilution factor.
E	The reported value is estimated because the concentration exceeded the upper level of the calibration range of the instrument for that specific analysis.
GC	Gas Chromatography.
GC/MS	Gas Chromatography/Mass Spectrophotometry.
HPLC	High Performance Liquid Chromatography.
J	Analyte was positively identified, but less than the quantitation limit, the associated numerical value is the approximate concentration.
SVOA	Semivolatile Organics.
U	Not detected above the reported sample quantitation limit. For CLP, not detected above the CRQL.
VOA	Volatile Organics.

REFERENCE: USEPA Contract Laboratory Program SOW for Organic Analysis, OLM03.1.

INORGANIC QUALIFIERS

ABBREV	MEANING
A	Method run was Flame AA.
AM	Flame AA with Microwave digestion.
AS	Semi-Automated Spectrophotometric.
AV	Automated Cold Vapor AA.
B	Reported value was obtained from a reading that was less than the Contract required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL).
C	Manual Spectrophotometric.
CA	Midi-Distillation Spectrophotometric
CV	Manual Cold Vapor AA.
E	The reported value is estimated because of the presence of interference.
F	Method run was Furnace AA.
FM	Furnace as with Microwave Digestion.
ICP	Inductively Coupled (argon) plasma.
M	Duplicate injection precision not met.
N	Spike sample recovery not within control limits.
NR	Analyte is not required to be analyzed:
P	Method run was ICP.
PM	ICP with Microwave Digestion.
S	reported value was determined by the Method of Standard additions (MSA).
T	Titrimetric.
U	Not detected above the report sample quantitation limit. For CLP, not detected above the CRDL.
W	Post-digestion spike for Furnace AA analysis is out of Control Limits (85% - 115%), while sample absorbance is less than 50 % of spike absorbance.
*	Duplicate analysis not within Control Limits.
+	Correlation Coefficient for the MSA is less than 0.995.

REFERENCE: USEPA Contract Laboratory Program SOW for Inorganic Analysis, ILM04.0

TABLE OF ABBREVIATIONS

ABBREV	MEANING
A	Apparent Color
DI	Deionized Water
DL	Dilution
EC	Estimated Count
mg	milligrams
mg/Kg	milligrams per Kilogram (ppm)
mg/L	milligrams per Liter (ppm)
NA	Not Applicable
ND	None Detected
ng	nanogram
NP	Not Provided
PQL	Practical Quantitation Limit
QL	Quantitation Limit
RE	Re-analysis
TC	True Color
TNTC	Too Numerous To Count
ug	micrograms
ug/Kg	micrograms per Kilogram (ppb)
ug/L	micrograms per Liter (ppb)
ug/Wipe	micrograms per Wipe