



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 661

**SEVERN
TRENT
SERVICES**

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238-1330

Tel 412 820 8380
Fax: 412 820 2080
www.stl-nc.com

ANALYTICAL REPORT

PROJECT NO. UXB 7512-060

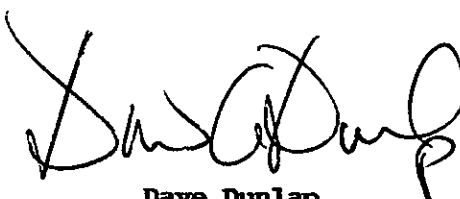
Dunn Field, Def Depot Memphis

Lot #: C0F140185

Frank Johnson

UXB International

SEVERN TRENT LABORATORIES, INC.



Dave Dunlap
Project Manager

June 30, 2000

CASE NARRATIVE
UXB International Inc.
Dunn Field

LOT # C0F140185

Sample Receiving:

STL Pittsburgh received samples on June 14, 2000 in good condition and within the proper temperature range.

Volatiles:

There were no problems associated with the analyses.

Semivolatiles:

There were no problems associated with the analyses.

Pesticides:

Two of the calibration verification standards had compounds outside of the $\pm 15\%$ difference criteria. The average % difference of all compounds in the calibration verification standards were within the $\pm 15\%$ difference criteria. Compounds exceeding these criteria were not detected in the samples. The following table lists the calibration verifications and compounds outside of the $\pm 15\%$ difference criteria.

Column: DB608			
Calibration Verification Date & Times	Affected Compound	% Difference	Average % Difference of All Compounds in Standard
6/21/00 @ 15:45/16:12	endrin	-15.5	4
6/21/00 @ 20:07/20:33	endrin	-16.2	4

Herbicides:

Two of the calibration verification standards had compounds outside of the $\pm 15\%$ difference criteria. The average % difference of all compounds in the calibration verification standards were within the $\pm 15\%$ difference criteria. Compounds exceeding these criteria were not detected in the samples. The following table lists the calibration verifications and compounds outside of the $\pm 15\%$ difference criteria.

Column: DB608			
Calibration Verification Date & Times	Affected Compound	% Difference	Average % Difference of All Compounds in Standard
6/22/00 @ 17:03	dinoseb	-16.0	6
6/23/00 @ 04:11	DCAA	-15.4	14
	dicamba	-15.2	
	dichloroprop	-15.2	
	2,4-D	-18.4	
	2,4-DB	-16.3	

CASE NARRATIVE
UXB International Inc.
Dunn Field

LOT # C0F140185

Metals:

There were no problems associated with the analyses.

TCLP Metals:

There were no problems associated with the analyses.

General Chemistry:

The reactive cyanide and reactive sulfide analyses were completed at the STL North Canton, OH laboratory.

METHODS SUMMARY

COF140185

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Chlorinated Herbicides by GC	SW846 8151A	SW846 1311/8150
Ignitability	SW846 SECTION 7	SW846 SECTION 7
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 1311/3010
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 1311/7470
Organochlorine Pesticides	SW846 8081A	SW846 1311/3510
Reactive Cyanide	SW846 7.3.3	SW846 7.3.3
Reactive Sulfide	SW846 7.3.4	SW846 7.3.4
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 1311/3520
Soil and Waste pH	SW846 9045C	SW846 9045C
Total Residue as Percent Solids	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3050B
Volatile Organics by GC/MS	SW846 8260B	SW846 1311/5030

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical
Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

661 5

COF140185

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DEMQV	001	DF/S1/0165/GRAB/002	06/13/00	08:00
DEMR4	002	DF/S1/0165/SDC/010	06/13/00	08:11
DEMR6	003	DF/S1/0165/SDC/011	06/13/00	08:22
DEMR7	004	DF/S1/0165/SDC/012	06/13/00	08:34

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.



Chain Of Custody Number 67487		Project Manager FRANK JOHNSON		Date 6/13/00	
Telephone Number (Area Code/Fax Number) (901) 745-4999		Lab Number		Page 1 of 1	
Address 6141 Old Poplar Pike		City Memphis, TN		State 38119	
Project Name Dunn Field		Site Contact Jim Moran		Carrier/Waybill Number	
Contract/Purchase Order/Quote No		Total Volume		Containers	
Sample I.D. No. and Description		Sample Type		Type No.	
Date		Time		Condition on Receipt	
DF/51/0165/SDC/010		6/13/00 0811		Soil 48,320z Glass 3	
DF/51/0165/SDC/011		6/13/00 0822		Soil 48,320z Glass 3	
DF/51/0165/SDC/012		6/13/00 0834		Soil 48,320z Glass 3	
Special Instructions		Sample Disposal		Return To Client	
Possible Hazard Identification		Flammable		Skin Irritant	
Non-Hazard		Polison B		Unknown	
Turn Around Time Required		QC Level		I. II. III.	
Normal		Date		Time	
1. Relinquished By J.A. Johnson		6/13/00		0834	
2. Relinquished By		Date		Time	
3. Relinquished By		Date		Time	

Comments

1
DISTRIBUTION: WHITE - Stays with Sample CANARY - Returned to Client with Report PINK - Field Copy

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Cooler Receipt Form STL Pittsburgh

Client: WKB Project: 6/14/00 Quote: [Signature]
Cooler Rec'd & Opened for Temp. Check on: 6/14/00
Coolers Opened and Unpacked on: 6/14/00 By: [Signature]
(Signature)

STL Pittsburgh Lot Number: _____

	Yes	No
1. Were custody seals on the outside of the cooler? _____	☒	☐
If YES, how many and where? Quantity <u>1 front</u> Location <u>1 Back</u>		
Were signatures and date correct? _____	☒	☐
2. Were custody papers included inside the cooler? _____	☒	☐
3. Were custody papers properly filled out (ink, signed, match labels)? _____	☒	☐
4. Did you sign the custody papers in the appropriate place? _____	☒	☐
5. Was shippers packing slip attached to this form? _____	☒	☐
6. Were packing materials used? _____	☒	☐
If YES, what type? <u>Bubble Pack</u>		
7. Were the samples chilled? (Record temperatures on reverse side.) _____	☒	☐
8. Were the samples appropriately preserved? _____	☒	☐
9. Were all bottles sealed in separate plastic bags? _____	☒	☐
10. Did all bottles arrive in good condition (unbroken)? _____	☒	☐
11. Were all bottle labels complete (sample ID, preservatives, etc.)? _____	☒	☐
12. Did all bottle labels and/or tags agree with custody papers? _____	☒	☐
13. Were correct bottles used for tests indicated? _____	☒	☐
14. Were all VOA vials checked for the presence of air bubbles? _____	☒	☐
15. Was a sufficient amount of sample sent in each bottle? _____	☒	☐
16. Samples received by: <u>FEDEX</u> UPS CLIENT DROP-OFF OTHER AIRBORNE		

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

661 9

P: Preserved

UP: Unpreserved

[illegible]

Comments:

[illegible][illegible]

* Please use an asterisk if bottle lot number was covered by the label.

FedEx

FedEx
Tracking Number
821752849249

0200

10

1 From

Date 6/13/00

Sender's Name Jim Thomas

Phone 901 345-4999

Company

MBB Int'l. Inc.

Address

6441 Old Poole Pike

City

Memphis

State

TN, ZIP 38119

2 Your Internal Billing Reference

3 To

Recipient's Name Rusty Vincine

Phone 412 820-2091

Company

Sevens Treat

Address

450 William Pitt Way

To: MAIL AT POST OFFICE BOX 10000
Post Office Box 10000
City Pittsburgh

State PA, ZIP 15238



4a Express Package Service

☒ FedEx Priority Overnight

☐ FedEx Standard Overnight

☐ FedEx First Overnight

☐ FedEx 2Day[®]

☐ FedEx Express Saver[®]

4b Express Freight Service

☐ FedEx 10Day Freight[®]

☐ FedEx 2Day Freight[®]

☐ FedEx 3Day Freight[®]

5 Packaging

☐ FedEx Letter[®]

☐ FedEx Pak[®]

☒ Other Pkg
Includes FedEx Box, FedEx Tube,
and Custom Pkg

6 Special Handling

☐ Sunday Delivery

☐ Sunday Delivery

☐ Hold Weekday

☐ Hold Saturday

☐ Signature Required

☐ Signature Required

☐ Dry Ice

☐ Cargo Aircraft Only

7 Payment Method

☐ Sender's Account

☐ Recipient's Account

☐ Third Party

☐ Credit Card

☐ Cash/Check

8 Release Signature

By signing this invoice, we agree to deliver this shipment without obtaining a signature

Questions? Call 1-800-GO-FedEx (800-463-3339)
Visit our Web site at www.fedex.com
For Office/Residential: 1-800-368-5858; For FedEx Office/Residential: 1-800-368-5858



SBCCOM

Monitoring Branch Laboratory

CLEARANCE REPORT

June-13, 2000

Dunn Field, Memphis Defense Depot

Results for CWM Soil Sample Analysis

Analyst: John L Schwarz

Sample#		1,4- Thioxane	1,4- Dithiane	TDG	Mustard	Lewisite
DF/S1/01 65/SDC/ 010		ND	ND	N/A	ND	ND
DF/S1/01 65/SDC/ 011		ND	ND	N/A	ND	ND
DF/S1/01 65/SDC/ 012		ND	ND	N/A	ND	ND
DF/S1/01 65/GRAB /002		ND	ND	N/A	ND	ND

ND= Not detected at or above the method detection limit (MDL)

MDL= 200 ppb

BDL= Below detection limit, results > 100ppb, but < 200 ppb

MS= matrix spike

MSD= matrix spike duplicate

DUP= duplicate

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMQV102

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 15

QC Batch: 0170096

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMQV10Q

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 15

QC Batch: 0170096

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.462	
78-93-3	2-Butanone	0.367	
56-23-5	Carbon tetrachloride	0.460	
108-90-7	Chlorobenzene	0.460	
67-66-3	Chloroform	0.467	
107-06-2	1,2-Dichloroethane	0.497	
75-35-4	1,1-Dichloroethene	0.412	
127-18-4	Tetrachloroethene	0.441	
79-01-6	Trichloroethene	0.450	
75-01-4	Vinyl chloride	0.472	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID Lab Sample ID: C0F140185 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 06/14/00

Work Order: DEMQV10R Date Extracted: 06/18/00

Dilution factor: 1 Date Analyzed: 06/18/00

Moisture %: 15

QC Batch: 0170096

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.467	
78-93-3	2-Butanone	0.362	
56-23-5	Carbon tetrachloride	0.460	
108-90-7	Chlorobenzene	0.471	
67-66-3	Chloroform	0.476	
107-06-2	1,2-Dichloroethane	0.501	
75-35-4	1,1-Dichloroethene	0.408	
127-18-4	Tetrachloroethene	0.448	
79-01-6	Trichloroethene	0.449	
75-01-4	Vinyl chloride	0.478	

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMR4102

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 15

QC Batch: 0170096

Client Sample Id: DF/S1/0165/SDC/010

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 003

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMR6102

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 14

QC Batch: 0170096

Client Sample Id: DF/S1/0165/SDC/011

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	mg/L	
71-43-2	Benzene	0.050		U
78-93-3	2-Butanone	0.050		U
56-23-5	Carbon tetrachloride	0.050		U
108-90-7	Chlorobenzene	0.050		U
67-66-3	Chloroform	0.050		U
107-06-2	1,2-Dichloroethane	0.050		U
75-35-4	1,1-Dichloroethene	0.050		U
127-18-4	Tetrachloroethene	0.050		U
79-01-6	Trichloroethene	0.050		U
75-01-4	Vinyl chloride	0.050		U

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID Lab Sample ID: C0F140185 004

Method: SW846 8260B

 Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 06/14/00

Work Order: DEMR7102 Date Extracted: 06/18/00

Dilution factor: 1 Date Analyzed: 06/18/00

Moisture %: 14

 QC Batch: 0170096

Client Sample Id: DF/S1/0165/SDC/012

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID Lab Sample ID: C0F180000 096

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 06/14/00

Work Order: DEWWX101 Date Extracted: 06/18/00

Dilution factor: 1 Date Analyzed: 06/18/00

Moisture %: NA

QC Batch: 0170096

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.461	
78-93-3	2-Butanone	0.357	
56-23-5	Carbon tetrachloride	0.470	
108-90-7	Chlorobenzene	0.436	
67-66-3	Chloroform	0.471	
107-06-2	1,2-Dichloroethane	0.491	
75-35-4	1,1-Dichloroethene	0.404	
127-18-4	Tetrachloroethene	0.439	
79-01-6	Trichloroethene	0.444	
75-01-4	Vinyl chloride	0.468	

SW846 8260B SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F140185

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/S1/0165/GRAB/002	104	95	100	100	00
02	DF/S1/0165/SDC/010	100	88	91	93	00
03	DF/S1/0165/SDC/011	101	86	91	93	00
04	DF/S1/0165/SDC/012	103	85	91	94	00
05	METHOD BLK. DERHP101	100	98	101	99	00
06	LCS DEWWX101	97	97	106	99	00
07	DF/S1/0165/GRAB/002 D	98	99	108	101	00
08	DF/S1/0165/GRAB/002 S	99	97	105	99	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(77-120)
 (78-111)
 (80-114)
 (78-110)

- # Column to be used to flag recovery values
 * Values outside of required QC Limits
 D System monitoring Compound diluted out

FORM II

661 22 SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F180000

WO #: DEWWX101

BATCH: 0170096

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
Benzene	0.500	0.461	92	79 - 116	
2-Butanone	0.500	0.357	71	35 - 156	
Carbon tetrachloride	0.500	0.470	94	72 - 133	
Chlorobenzene	0.500	0.436	87	81 - 115	
Chloroform	0.500	0.471	94	81 - 122	
1,2-Dichloroethane	0.500	0.491	98	73 - 127	
1,1-Dichloroethene	0.500	0.404	81	65 - 119	
Tetrachloroethene	0.500	0.439	88	78 - 131	
Trichloroethene	0.500	0.444	89	80 - 122	
Vinyl chloride	0.500	0.468	94	53 - 134	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Level: (low/med) LOW

Lot #: C0F140185

WO #: DEMQV10Q

BATCH: 0170096

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	ND	0.462	92	73 - 123	
2-Butanone	0.500	ND	0.367	73	10 - 151	
Carbon tetrachloride	0.500	ND	0.460	92	61 - 143	
Chlorobenzene	0.500	ND	0.460	92	70 - 122	
Chloroform	0.500	ND	0.467	93	65 - 131	
1,2-Dichloroethane	0.500	ND	0.497	99	67 - 132	
1,1-Dichloroethene	0.500	ND	0.412	82	57 - 138	
Tetrachloroethene	0.500	ND	0.441	88	70 - 130	
Trichloroethene	0.500	ND	0.450	90	58 - 141	
Vinyl chloride	0.500	ND	0.472	94	51 - 133	

NOTES (S) :

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

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 10 outside limits

COMMENTS:

661 24 SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: UXB INTERNATIONAL

Lab Code: QESPIT SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002 Level: (low/med) LOW

Lot #: C0F140185 WO #: DEMQV10R
BATCH: 0170096

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
=====	=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	0.467	93	1.0	20	73 - 123	
2-Butanone	0.500	0.362	72	1.3	34	10 - 151	
Carbon tetrachloride	0.500	0.460	92	0.060	20	61 - 143	
Chlorobenzene	0.500	0.471	94	2.4	20	70 - 122	
Chloroform	0.500	0.476	95	1.8	20	65 - 131	
1,2-Dichloroethane	0.500	0.501	100	0.68	20	67 - 132	
1,1-Dichloroethene	0.500	0.408	82	0.90	20	57 - 138	
Tetrachloroethene	0.500	0.448	90	1.5	20	70 - 130	
Trichloroethene	0.500	0.449	90	0.20	20	58 - 141	
Vinyl chloride	0.500	0.478	96	1.3	20	51 - 133	

NOTES (S) :

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

RPD: 0 out of 10 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

BLANK WORKORDER NO.

SW846 8260B METHOD BLANK SUMMARY

DERHP101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: 4061801.D

Lot Number: C0F140185

Date Analyzed: 06/18/00

Time Analyzed: 07:52

Matrix: SOLID

Date Extracted: 06/18/00

GC Column: RTX-624 ID: .18

Extraction Method: 1311/5030B

Instrument ID: HP4

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DF/S1/0165/GRAB/002	DEMQV10Q S	4061806.D	06/18/00	10:02
02	DF/S1/0165/GRAB/002	DEMQV10R D	4061807.D	06/18/00	10:27
03	DF/S1/0165/GRAB/002	DEMQV102	4061805.D	06/18/00	09:35
04	DF/S1/0165/SDC/010	DEMR4102	4061811.D	06/18/00	12:20
05	DF/S1/0165/SDC/011	DEMR6102	4061812.D	06/18/00	12:48
06	DF/S1/0165/SDC/012	DEMR7102	4061813.D	06/18/00	13:17
07	CHECK SAMPLE	DEWWX101 C	4061803.D	06/18/00	08:41
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
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19					
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24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F160000 097

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DERHP101

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: NA

QC Batch: 0170096

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

661 27

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C0F140185
Lab File ID (Standard): CC40618 Date Analyzed: 06/18/00
Instrument ID: HP4 Time Analyzed: 0717
GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	180708	10.13	263028	12.46	753124	7.00
UPPER LIMIT	361416	10.33	526056	12.66	1506248	7.20
LOWER LIMIT	90354	9.93	131514	12.26	376562	6.80
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	175633	10.12	255303	12.46	807312	7.01
02 INTRA-LAB CH	176722	10.12	261752	12.46	735353	7.01
03 DF/S1/0165/G	170288	10.12	243143	12.45	780438	7.01
04 DF/S1/0165/G	175376	10.12	259735	12.46	724517	7.00
05 DF/S1/0165/G	173895	10.13	264260	12.46	732638	7.00
06 DF/S1/0165/S	136136	10.12	190269	12.46	625738	7.01
07 DF/S1/0165/S	137634	10.12	189139	12.46	624992	7.01
08 DF/S1/0165/S	132769	10.12	186294	12.46	597837	7.01
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 = Fluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.20 minutes of internal standard RT
RT LOWER LIMIT = - 0.20 minutes of internal standard RT

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

GC/MS SEMIVOLATILE SUMMARY

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COF140185 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DEMQV103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0174120

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DEMR4103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0174120

Client Sample Id: DF/S1/0165/SDC/010

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 003

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DEMR6103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 14

QC Batch: 0174120

Client Sample Id: DF/S1/0165/SDC/011

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 004

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DEMR7103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 14

QC Batch: 0174120

Client Sample Id: DF/S1/0165/SDC/012

CAS NO.	COMPOUND	CONCENTRATION UNITS	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F220000 120

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DF44M102

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

QC Batch: 0174120

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.187	
121-14-2	2,4-Dinitrotoluene	0.190	
118-74-1	Hexachlorobenzene	0.187	
87-68-3	Hexachlorobutadiene	0.185	
67-72-1	Hexachloroethane	0.190	
98-95-3	Nitrobenzene	0.190	
87-86-5	Pentachlorophenol	0.218	
110-86-1	Pyridine	0.182	
95-95-4	2,4,5-Trichlorophenol	0.189	
88-06-2	2,4,6-Trichlorophenol	0.183	
1319-77-3	Cresols (total)	0.594	

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F220000 120

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DF44M103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

QC Batch: 0174120

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.180	
121-14-2	2,4-Dinitrotoluene	0.182	
118-74-1	Hexachlorobenzene	0.176	
87-68-3	Hexachlorobutadiene	0.176	
67-72-1	Hexachloroethane	0.184	
98-95-3	Nitrobenzene	0.184	
87-86-5	Pentachlorophenol	0.196	
110-86-1	Pyridine	0.176	
95-95-4	2,4,5-Trichlorophenol	0.181	
88-06-2	2,4,6-Trichlorophenol	0.175	
1319-77-3	Cresols (total)	0.572	

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F140185

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	DF/S1/0165/GRAB/002	68	60	79	56	67	69	00
02	DF/S1/0165/SDC/010	70	62	78	58	69	69	00
03	DF/S1/0165/SDC/011	65	61	76	54	64	69	00
04	DF/S1/0165/SDC/012	70	60	75	54	63	67	00
05	METHOD BLK. DF44M101	68	64	76	60	70	67	00
06	LCS DF44M102	77	72	80	69	78	73	00
07	LCSD DF44M103	74	69	77	67	76	69	00

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = 2-Fluorobiphenyl
 SRG03 = Terphenyl-d14
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(32-112)
 (30-110)
 (10-144)
 (13-110)
 (10-113)
 (21-122)

Column to be used to flag recovery values
 * Values outside of required QC Limits
 D System monitoring Compound diluted out

FORM II

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F220000

WO #: DF44M102

BATCH: 0174120

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.250	0.187	75	28- 110	
2,4-Dinitrotoluene	0.250	0.190	76	47- 131	
Hexachlorobenzene	0.250	0.187	75	57- 128	
Hexachlorobutadiene	0.250	0.185	74	36- 116	
Nitrobenzene	0.250	0.190	76	45- 130	
Pentachlorophenol	0.250	0.218	87	10- 140	
Pyridine	0.250	0.182	73	10- 148	
Hexachloroethane	0.250	0.190	76	30- 110	
2,4,5-Trichlorophenol	0.250	0.189	75	41- 125	
2,4,6-Trichlorophenol	0.250	0.183	73	46- 135	
Cresols (total)	0.750	0.594	79	29- 144	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F220000

WO #: DF44M103

BATCH: 0174120

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	0.180	72	28 - 110	
2,4-Dinitrotoluene	0.250	0.182	73	47 - 131	
Hexachlorobenzene	0.250	0.176	70	57 - 128	
Hexachlorobutadiene	0.250	0.176	71	36 - 116	
Hexachloroethane	0.250	0.184	73	30 - 110	
Nitrobenzene	0.250	0.184	74	45 - 130	
Pentachlorophenol	0.250	0.196	78	10 - 140	
Pyridine	0.250	0.176	70	10 - 148	
2,4,5-Trichlorophenol	0.250	0.181	72	41 - 125	
2,4,6-Trichlorophenol	0.250	0.175	70	46 - 135	
Cresols (total)	0.750	0.572	76	29 - 144	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

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SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DF44M101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID. S0623012.

Lot Number: C0F140185

Date Analyzed: 06/23/00

Time Analyzed: 08:07

Matrix: SOLID

Date Extracted: 06/21/00

GC Column: DB5MS ID: .25

Extraction Method: 1311/3520C

Instrument ID: 71

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DF/S1/0165/GRAB/002	DEMQV103	S0623015.	06/23/00	09:44
02	DF/S1/0165/SDC/010	DEMR4103	S0623016.	06/23/00	10:17
03	DF/S1/0165/SDC/011	DEMR6103	S0623017.	06/23/00	10:49
04	DF/S1/0165/SDC/012	DEMR7103	S0623018.	06/23/00	11:22
05	CHECK SAMPLE	DF44M102 C	S0623013.	06/23/00	08:39
06	DUPLICATE CHECK	DF44M103 L	S0623014.	06/23/00	09:12
07					
08					
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10					
11					
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26					
27					
28					
29					
30					

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix. (soil/water) SOLID

Lab Sample ID: C0F220000 120

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DF44M101

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

QC Batch: 0174120

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

661 40

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT Case No.:

SAS No.:

SDG No.: C0F140185

Lab File ID (Standard): S0623CC1

Date Analyzed: 06/23/00

Instrument ID: 71

Time Analyzed: 0735

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	137984	4.90	528011	6.40	289530	9.38
UPPER LIMIT	275968	5.40	1056022	6.90	579060	9.88
LOWER LIMIT	68992	4.40	264006	5.90	144765	8.88
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	133218	4.90	534874	6.40	299058	9.38
02 INTRA-LAB CH	136510	4.89	549038	6.40	302576	9.38
03 INTRA-LAB CH	142998	4.90	574851	6.41	316157	9.39
04 DF/S1/0165/G	144704	4.90	580361	6.40	320044	9.38
05 DF/S1/0165/S	148702	4.90	597986	6.40	327023	9.38
06 DF/S1/0165/S	138513	4.89	546004	6.39	293935	9.37
07 DF/S1/0165/S	144336	4.90	576936	6.40	321796	9.38
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

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 internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

661 41

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0F140185

Lab File ID (Standard): S0623CC1

Date Analyzed: 06/23/00

Instrument ID: 71

Time Analyzed: 0735

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	530753	12.67	546964	19.29	693837	22.65
UPPER LIMIT	1061506	13.17	1093928	19.79	1387674	23.15
LOWER LIMIT	265377	12.17	273482	18.79	346919	22.15
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	532188	12.67	519505	19.28	612849	22.65
02 INTRA-LAB CH	529895	12.66	493748	19.28	571074	22.64
03 INTRA-LAB CH	567222	12.68	528395	19.30	606288	22.66
04 DF/S1/0165/G	566796	12.66	553163	19.28	629120	22.64
05 DF/S1/0165/S	566644	12.66	539745	19.28	621883	22.64
06 DF/S1/0165/S	516956	12.65	523909	19.27	620637	22.63
07 DF/S1/0165/S	577188	12.66	587753	19.28	680140	22.64
08						
09						
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17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

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 internal standard area values with an asterisk.

* Values outside of QC limits.

PESTICIDE SUMMARY

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc. SDG Number

Matrix: (soil/water) SOLID Lab Sample ID: C0F140185 001
 Method: SW846 8081A
 Pesticides (8081A)

Sample WT/Vol: 100 / mL Date Received: 06/14/00
 Work Order: DEMQV104 Date Extracted: 06/20/00
 Dilution factor: 1 Date Analyzed: 06/21/00
 Moisture %: 15

QC Batch: 0172434

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID Lab Sample ID: C0F140185 001
Method: SW846 8081A
Pesticides (8081A)

Sample WT/Vol: 100 / mL Date Received: 06/14/00
Work Order: DEMQV11D Date Extracted: 06/20/00
Dilution factor: 1 Date Analyzed: 06/21/00
Moisture %: 15

QC Batch: 0172434

Client Sample Id: DF/S1/0165/GRAB/002

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00230	
76-44-8	Heptachlor	0.00193	
1024-57-3	Heptachlor epoxide	0.00195	
58-89-9	Lindane	0.00165	
72-43-5	Methoxychlor	0.00219	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMQV11E

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 15

QC Batch: 0172434

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00225	
76-44-8	Heptachlor	0.00187	
1024-57-3	Heptachlor epoxide	0.00192	
58-89-9	Lindane	0.00158	
72-43-5	Methoxychlor	0.00220	

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COF140185 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR4104

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 15

QC Batch: 0172434

Client Sample Id: DF/S1/0165/SDC/010

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 003

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR6104

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 14

QC Batch: 0172434

Client Sample Id: DF/S1/0165/SDC/011

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 004

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR7104

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 14

QC Batch: 0172434

Client Sample Id: DF/S1/0165/SDC/012

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID Lab Sample ID: C0F200000 434
Method: SW846 8081A
Pesticides (8081A)

Sample WT/Vol: 100 / mL Date Received: 06/14/00
Work Order: DF1LC102 Date Extracted: 06/20/00
Dilution factor: 1 Date Analyzed: 06/21/00
Moisture %: NA

QC Batch: 0172434

Client Sample Id: CHECK SAMPLE

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00237	
76-44-8	Heptachlor	0.00195	
1024-57-3	Heptachlor epoxide	0.00199	
58-89-9	Lindane	0.00167	
72-43-5	Methoxychlor	0.00221	

661 50

SW846 8081A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F140185

	CLIENT ID.	SRG01	SRG02	TOT OUT
	=====	=====	=====	=====
01	DF/S1/0165/GRAB/002	85	73	00
02	DF/S1/0165/SDC/010	93	81	00
03	DF/S1/0165/SDC/011	94	82	00
04	DF/S1/0165/SDC/012	89	74	00
05	METHOD BLK. DF1LC101	93	84	00
06	LCS DF1LC102	91	79	00
07	DF/S1/0165/GRAB/002 D	89	75	00
08	DF/S1/0165/GRAB/002 S	89	78	00

SURROGATES

SRG01 = Decachlorobiphenyl
SRG02 = Tetrachloro-m-xylene

QC LIMITS

(10-147)
(39-130)

Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F200000

WO #: DF1LC102

BATCH: 0172434

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Lindane	0.00250	0.00167	67	49 - 137	
Heptachlor	0.00250	0.00195	78	57 - 124	
Heptachlor epoxide	0.00250	0.00199	80	53 - 135	
Endrin	0.00250	0.00237	95	46 - 137	
Methoxychlor	0.00250	0.00221	88	12 - 154	

NOTES(S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

661 52SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Level: (low/med) LOW

Lot #: C0F140185

WO #: DEMQV11D

BATCH: 0172434

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
Lindane	0.00250	ND	0.00165	66	30 - 148	
Heptachlor	0.00250	ND	0.00193	77	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00195	78	38 - 138	
Endrin	0.00250	ND	0.00230	92	28 - 148	
Methoxychlor	0.00250	ND	0.00219	88	13 - 154	

NOTES (S) :

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

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Level: (low/med) LOW

Lot #: C0F140185

WO #: DEMQV11E

BATCH: 0172434

COMPOUND	SPIKE	MSD	MSD	QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD REC	
Lindane	0.00250	0.00158	63	4.2	22 30 - 148	
Heptachlor	0.00250	0.00187	75	3.3	32 25 - 135	
Heptachlor epoxide	0.00250	0.00192	77	1.8	31 38 - 138	
Endrin	0.00250	0.00225	90	2.1	40 28 - 148	
Methoxychlor	0.00250	0.00220	88	0.45	29 13 - 154	

NOTES (S) :

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

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

661 54

SW846 8081A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DF1LC101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: d-a3517.d

Lot Number: C0F140185

Matrix: SOLID

Extraction Method: 1311/3510

Date Extracted: 06/20/00

Date Analyzed(1): 06/21/00

Date Analyzed(2): N/A

Time Analyzed(1): 16:38

Time Analyzed(2): N/A

Instrument ID(1): G/H

Instrument ID(2): N/A

GC Column(1): DB608/1701 ID: 053 GC Column(2): N/A ID: N/A

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED (1)	DATE ANALYZED (2)
	=====	=====	=====	=====
01	DF/S1/0165/GRAB/002	DEMQV104	06/21/00	N/A
02	DF/S1/0165/GRAB/002	DEMQV11D S	06/21/00	N/A
03	DF/S1/0165/GRAB/002	DEMQV11E D	06/21/00	N/A
04	DF/S1/0165/SDC/010	DEMR4104	06/21/00	N/A
05	DF/S1/0165/SDC/011	DEMR6104	06/21/00	N/A
06	DF/S1/0165/SDC/012	DEMR7104	06/21/00	N/A
07	CHECK SAMPLE	DF1LC102 C	06/21/00	N/A
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID Lab Sample ID: C0F200000 434
Method: SW846 8081A
Pesticides (8081A)

Sample WT/Vol: 100 / mL Date Received: 06/14/00
Work Order: DF1LC101 Date Extracted: 06/20/00
Dilution factor: 1 Date Analyzed: 06/21/00
Moisture %: NA

QC Batch: 0172434

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

HERBICIDE SUMMARY

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMQV105

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0172432

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.040	U
93-72-1	2,4,5-TP (Silvex)	0.010	U

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMQV11A

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0172432

Client Sample Id: DF/S1/0165/GRAB/002

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.193	
93-72-1	2,4,5-TP (Silvex)	0.0430	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID Lab Sample ID: C0F140185 001
Method: SW846 8151A
Herbicides (8151A)

Sample WT/Vol: 100 / mL Date Received: 06/14/00
Work Order: DEMQV11C Date Extracted: 06/20/00
Dilution factor: 1 Date Analyzed: 06/23/00
Moisture %: 15

QC Batch: 0172432

Client Sample Id: DF/S1/0165/GRAB/002

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.188	
93-72-1	2,4,5-TP (Silvex)	0.0445	

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR4105

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0172432

Client Sample Id: DF/S1/0165/SDC/010

		CONCENTRATION UNITS:		
CAS NO.	COMPOUND	(ug/L or ug/kg)	mg/L	Q
94-75-7	2,4-D	0.040		U
93-72-1	2,4,5-TP (Silvex)	0.010		U

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 003

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR6105

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 14

QC Batch: 0172432

Client Sample Id: DF/S1/0165/SDC/011

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.040	U
93-72-1	2,4,5-TP (Silvex)	0.010	U

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 004

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR7105

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 14

QC Batch: 0172432

Client Sample Id: DF/S1/0165/SDC/012

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.040	U
93-72-1	2,4,5-TP (Silvex)	0.010	U

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F200000 432

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DF1L6102

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

QC Batch: 0172432

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.165	
93-72-1	2,4,5-TP (Silvex)	0.0388	

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT QESSDG:

Lot #: C0F140185

	CLIENT ID.	SRG01	TOT OUT
	=====	=====	=====
01	DF/S1/0165/GRAB/002	86	00
02	DF/S1/0165/SDC/010	76	00
03	DF/S1/0165/SDC/011	71	00
04	DF/S1/0165/SDC/012	74	00
05	METHOD BLK. DF1L6101	85	00
06	LCS DF1L6102	98	00
07	DF/S1/0165/GRAB/002 D	98	00
08	DF/S1/0165/GRAB/002 S	97	00

SURROGATES
SRG01 = DCAA

QC LIMITS
(42-125)

Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Lot #: C0F140185

WO #: DEMQV11A

BATCH: 0172432

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
2,4-D	0.160	ND	0.193	121	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0430	108	50 - 131	

NOTES (S) :

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

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Lot #: C0F140185

WO #: DEMQV11C

BATCH: 0172432

COMPOUND	SPIKE	MSD	MSD	QC LIMITS			QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC	
2,4-D	0.160	0.188	118	2.6	20	35 - 133	
2,4,5-TP (Silvex)	0.0400	0.0445	111	3.5	20	50 - 131	

NOTES (S) :

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 2 outside limits

COMMENTS:

FORM III

SW846 8151A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

661 67

DF1L6101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: a-a30553.

Lot Number: C0F140185

Matrix: SOLID

Extraction Method:

Date Extracted: 06/20/00

Date Analyzed(1): 06/23/00

Date Analyzed(2): N/A

Time Analyzed(1): 02:15

Time Analyzed(2): N/A

Instrument ID(1): A/B

Instrument ID(2): N/A

GC Column(1): DB5/DB1701 ID: 053 GC Column(2): N/A ID: N/A

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED (1)	DATE ANALYZED (2)
01	DF/S1/0165/GRAB/002	DEMQV105	06/23/00	N/A
02	DF/S1/0165/GRAB/002	DEMQV11A S	06/23/00	N/A
03	DF/S1/0165/GRAB/002	DEMQV11C D	06/23/00	N/A
04	DF/S1/0165/SDC/010	DEMR4105	06/23/00	N/A
05	DF/S1/0165/SDC/011	DEMR6105	06/23/00	N/A
06	DF/S1/0165/SDC/012	DEMR7105	06/23/00	N/A
07	CHECK SAMPLE	DF1L6102 C	06/23/00	N/A
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

661 68

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F200000 432

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DF1L6101

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

QC Batch: 0172432

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.040	U
93-72-1	2,4,5-TP (Silvex)	0.010	U

FORM I

METALS SUMMARY

661 70

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMQV Client ID: DF/S1/0165/GRAB/002
Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189
Weight: 1.0 Volume: 100 Percent Moisture: 14.77

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	9.7		1	ICPST	6/17/00	14:33

Comments: Lot#: C0F140185 Sample#: 1

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR4 Client ID: DF/S1/0165/SDC/010
 Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189
 Weight: 1.0 Volume: 100 Percent Moisture: 15.31

Element	WL/ Mass	MDL	Report Limit	Conc	O	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	9.7		1	ICPST	6/17/00	14:50

Comments Lot#: C0F140185 Sample#. 2

Version 3.63.4

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR6 Client ID: DF/S1/0165/SDC/011
Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189
Weight: 10 Volume: 100 Percent Moisture: 14.38

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	10.1		1	ICPST	6/17/00	14:54

Comments. Lot#: C0F140185 Sample#: 3

Version 3.63 4

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR7 Client ID: DF/S1/0165/SDC/012
 Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189
 Weight: 1.0 Volume: 100 Percent Moisture: 13.77

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	8.6		1	ICPST	6/17/00	14:58

Comments: Lot#. C0F140185 Sample#: 4

Version 3.63.4

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00617A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICBI 6/17/00 12.39 PM				
			Found O	Found O	Found O	Found O	Found O
Arsenic	189.042	10	2.6 U				

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00617A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 6/17/00 1:31 PM	CCB2 6/17/00 2:21 PM	CCB3 6/17/00 3:06 PM		
			Found O	Found O	Found O	Found O	Found O
Arsenic	189.042	10	2.6 U	2.6 U	2.6 U		

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DERX4BMatrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189Weight: 1.0 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	O	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	0.26	1.0	0.26	U	1	ICPST	6/17/00	14:25

Comments: _____

Version 3 63 4

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DEMQVS
 Original Sample ID: DEMQV Client ID: DF/S1/0165/GRAB/002S
 Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189
 Weight: 1.0 Volume: 100 Percent Moisture: 14.77

Element	WL/ Mass	OS Conc	O	MS Conc	O	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	9.7		214		234.66	87.1	1	1	ICPST	6/17/00	14:33	6/17/00	14:42

Comments: _____

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DEMQVDOriginal Sample ID: DEMQV Client ID: DF/S1/0165/GRAB/002DMatrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189Weight: 10 Volume: 100 Percent Moisture: 14.77

Element	WL/ Mass	OS Conc	O	MSD Conc	O	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189.0	9.7		237		234.66	96.9	1	1	ICPST	6/17/00	14.33	6/17/00	14:46

Comments: _____

Version 3 63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DEMQVD

Matrix Spike Sample ID: DEMQVS **Client ID:** DF/S1/0165/GRAB/002D

Matrix: Soil **Units:** mg/kg **Prep Date:** 6/16/00 **Prep Batch:** 0168189

Weight: 1.0 **Volume:** 100 **Percent Moisture:** 14.77

Element	WL/ Mass	MS Conc	O	MSD Conc	O	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189.042	214		237		10.7 %	1	1	ICPST	6/17/00	14:42	6/17/00	14:46

Comments: _____

Version 3 63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DERX4CMatrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189Weight: 10 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	200	219	109.7		80-120	1	ICPST	6/17/00	14:29

Comments: _____

TCLP METALS SUMMARY

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002
 Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.23	B	1	ICP	6/22/00	16:38
Barium	493.41	0.00041	10.0	1.6	B	1	ICP	6/22/00	16:38
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:38
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:38
Lead	220.35	0.025	0.50	0.025	U	1	ICP	6/22/00	16:38
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/22/00	16:38
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:38

Comments: Lot#: C0F140185 Sample#: 1

Version 3.63.4

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR4T Client ID: DF/S1/0165/SDC/010
 Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	O	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.20	B	1	ICP	6/22/00	16:51
Barium	493.41	0.00041	10.0	1.4	B	1	ICP	6/22/00	16:51
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:51
Chromium	267.72	0.0038	0.50	0.021	B	1	ICP	6/22/00	16:51
Lead	220.35	0.025	0.50	0.033	B	1	ICP	6/22/00	16:51
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/22/00	16:51
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:51

Comments: Lot# C0F140185 Sample# 2

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR6T Client ID: DF/S1/0165/SDC/011
 Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.22	B	1	ICP	6/22/00	16:54
Barium	493.41	0.00041	10.0	1.3	B	1	ICP	6/22/00	16:54
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:54
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:54
Lead	220.35	0.025	0.50	0.025	U	1	ICP	6/22/00	16:54
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/22/00	16:54
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:54

Comments: Lot#: C0F140185 Sample#: 3

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR7T Client ID: DF/S1/0165/SDC/012
 Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.20	B	1	ICP	6/22/00	16:57
Barium	493.41	0.00041	10.0	1.4	B	1	ICP	6/22/00	16:57
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:57
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:57
Lead	220.35	0.025	0.50	0.025	U	1	ICP	6/22/00	16:57
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/22/00	16:57
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:57

Comments: Lot#: C0F140185 Sample#: 4

Version 3.63.4

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002
Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	O	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000093	B	1	CVAA	6/21/00	10:32

Comments: Lot#: C0F140185 Sample#: 1

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEM4T Client ID: DF/S1/0165/SDC/010
 Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	O	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000095	B	1	CVAA	6/21/00	10:38

Comments: Lot# C0F140185 Sample#: 2

Version 3.63 4

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

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STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR6T Client ID: DF/S1/0165/SDC/011
Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000045	U	1	CVAA	6/21/00	10:40

Comments: Lot# C0F140185 Sample#: 3

Version 3.63.4

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR7T Client ID: DF/S1/0165/SDC/012
 Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000045	U	1	CVAA	6/21/00	10:43

Comments: Lot#: C0F140185 Sample#: 4

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0621HGA.PRN

Standard Source: _____

Standard ID: _____

			ICB1 6/21/00 10:19 AM				
Element	WL/ Mass	Report Limit	Found O	Found O	Found O	Found O	Found O
Mercury	253.7	0.2	00 U				

STL-Pittsburgh
Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICP

Units: ug/L

Chart Number: J00622C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICBI 6/22/00 4:08 PM		Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q										
Arsenic	193.696	500	30.3	U										
Barium	493.409	10000	0.4	U										
Cadmium	228.802	100	4.0	B										
Chromium	267.716	500	3.8	U										
Lead	220.353	500	24.6	U										
Selenium	196.026	250	67.4	U										
Silver	328.068	500	3.1	U										

661 92

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0621HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 6/21/00 10:24 AM	CCB2 6/21/00 10:48 AM			
			Found O	Found O	Found O	Found O	Found O
Mercury	253.7	0.2	0.0 U	0.0 B			

STL-Pittsburgh
Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP

Units: ug/L

Chart Number: J00622C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 6/22/00 4:23 PM		CCB2 6/22/00 5:04 PM					
			Found	O	Found	O	Found	O	Found	O
Arsenic	193.696	500	30.3	U	30.3	U				
Barium	493.409	10000	1.0	B	0.4	U				
Cadmium	228.802	100	4.5	B	3.1	B				
Chromium	267.716	500	3.8	U	3.8	U				
Lead	220.353	500	24.6	U	24.6	U				
Selenium	196.026	250	67.4	U	67.4	U				
Silver	328.068	500	3.1	U	-3.6	B				

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DF08VBT

Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153

Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.18	B	1	ICP	6/22/00	16:32
Barium	493.409	0.00041	10.0	0.0072	B	1	ICP	6/22/00	16:32
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:32
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:32
Lead	220.353	0.025	0.50	0.025	U	1	ICP	6/22/00	16:32
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	6/22/00	16:32
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:32

Comments: _____

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DF0C0BT

Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153

Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	O	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.031	B	1	ICP	6/22/00	16:29
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	6/22/00	16:29
Cadmium	228.802	0.0028	0.10	0.0035	B	1	ICP	6/22/00	16:29
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:29
Lead	220.353	0.025	0.50	0.025	U	1	ICP	6/22/00	16:29
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	6/22/00	16:29
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:29

Comments:

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank ResultsLab Sample ID: DF08VBTMatrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000045	U	1	CVAA	6/21/00	10:30

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DF1WXBT

Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091

Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000045	U	1	CVAA	6/21/00	10:26

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DEMQVST

Original Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002S

Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153

Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	O	MS Conc	O	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	193.7	0.23	B	5.0		5	95.3	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Barium	493.4	1.6	B	45.6		50	87.9	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Cadmium	228.8	0.0028	U	0.95		1	95.1	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Chromium	267.7	0.0038	U	4.4		5	88.1	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Lead	220.4	0.025	U	4.6		5	91.2	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Selenium	196.0	0.067	U	1.0		1	103.2	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Silver	328.1	0.0031	U	0.93		1	92.5	1	1	ICP	6/22/00	16:38	6/22/00	16:45

Comments: _____

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DEMQVDT

Original Sample ID: DEMQVT

Client ID: DF/S1/0165/GRAB/002D

Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153

Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	O	MSD Conc	O	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.7	0.23	B	5.0		5	95.4	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Barium	493.4	1.6	B	45.8		50	88.4	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Cadmium	228.8	0.0028	U	0.97		1	96.8	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Chromium	267.7	0.0038	U	4.5		5	89.3	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Lead	220.4	0.025	U	4.6		5	92.7	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Selenium	196.0	0.067	U	1.1		1	105.6	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Silver	328.1	0.0031	U	0.94		1	93.5	1	1	ICP	6/22/00	16:38	6/22/00	16:48

Comments.

Version 3.63 4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

661 100

STL-Pittsburgh
Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DEMQVST
 Original Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002S
 Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	O	MS Conc	O	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.000093	B	0.0052		0.005	101.5	1	1	CVAA	6/21/00	10:32	6/21/00	10:34

Comments: _____

Version 3 63.4

STL Pittsburgh

U Result is less than the MDL
 B Result is between MDL and RL
 N Spike recovery failed
 NC Percent recovery was not calculated

Form 5A Equivalent

100

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DEMQVDT

Original Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002D

Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091

Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	O	MSD Conc	O	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.000093	B	0.0051		0.005	100.5	1	1	CVAA	6/21/00	10:32	6/21/00	10:36

Comments: _____

Version 3.63 4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DEMQVDTMatrix Spike Sample ID: DEMQVST Client ID: DF/S1/0165/GRAB/002DMatrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MS Conc	O	MSD Conc	O	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.696	5.0		5.0		0.1 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Barium	493.409	45.6		45.8		0.6 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Cadmium	228.802	0.95		0.97		1.8 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Chromium	267.716	4.4		4.5		1.4 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Lead	220.353	4.6		4.6		1.6 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Selenium	196.026	1.0		1.1		2.3 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Silver	328.068	0.93		0.94		1.0 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48

Comments _____

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DEMQVDTMatrix Spike Sample ID: DEMQVST Client ID: DF/S1/0165/GRAB/002DMatrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MS Conc	O	MSD Conc	O	RPD	MS DF	MSD DF	Instr.	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.0052		0.0051		1.0 %	1	1	CVAA	6/21/00	10:34	6/21/00	10.36

Comments: _____

Version 3.63.4

- U Result is less than the MDL
 B Result is between MDL and RL
 N Spike recovery failed
 NC Percent recovery was not calculated
 * Duplicate analysis RPD was not within limits

Form 6 Equivalent

661 104

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DF0C0CTMatrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	2.0	2.0	102.2		80-120	1	ICP	6/22/00	16:35
Barium	493.409	2.0	1.7	85.1	B	80-120	1	ICP	6/22/00	16:35
Cadmium	228.802	0.050	0.043	85.3	B	80-120	1	ICP	6/22/00	16:35
Chromium	267.716	0.20	0.18	87.5	B	80-120	1	ICP	6/22/00	16:35
Lead	220.353	0.50	0.46	91.7	B	80-120	1	ICP	6/22/00	16:35
Selenium	196.026	2.0	2.0	97.4		80-120	1	ICP	6/22/00	16:35
Silver	328.068	0.050	0.044	87.9	B	80-120	1	ICP	6/22/00	16:35

Comments: _____

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DF1WXCTMatrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0025	0.0027	106.8		80-120	1	CVAA	6/21/00	10:28

Comments: _____

GENERAL CHEMISTRY SUMMARY

UXB INTERNATIONAL

Client Sample ID: DF/S1/0165/GRAB/002

General Chemistry

Lot-Sample #....: C0F140185-001 Work Order #....: DEMQV Matrix.....: SOLID
 Date Sampled...: 06/13/00 Date Received...: 06/14/00
 % Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.5		No Units	SW846 9045C	06/15/00	0167130
	Dilution Factor: 1		MS Run #.....: 0167030			
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/19/00	0171326
	Dilution Factor: 1		MS Run #.....: 0171158			
Percent Solids	85.2		%	MCAWW 160.3 MOD	06/15-06/16/00	0167129
	Dilution Factor: 1		MS Run #.....: 0167029			
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/20/00	0172319
	Dilution Factor: 1		MS Run #.....: 0172131			
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/20/00	0172316
	Dilution Factor: 1		MS Run #.....: 0172129			

661 108

Client Sample ID: DF/S1/0165/SDC/010

General Chemistry

Lot-Sample #....: C0F140185-002 Work Order #....: DEMR4 Matrix.....: SOLID
 Date Sampled....: 06/13/00 Date Received...: 06/14/00
 % Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.9		No Units	SW846 9045C	06/15/00	0167130
	Dilution Factor: 1		MS Run #.....: 0167030			
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/19/00	0171326
	Dilution Factor: 1		MS Run #.....: 0171158			
Percent Solids	84.7		%	MCAWW 160.3 MOD	06/15-06/16/00	0167129
	Dilution Factor: 1		MS Run #.....: 0167029			
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/20/00	0172319
	Dilution Factor: 1		MS Run #.....: 0172131			
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/20/00	0172316
	Dilution Factor: 1		MS Run #.....: 0172129			

UXB INTERNATIONAL

Client Sample ID: DF/S1/0165/SDC/011

661 109

General Chemistry

Lot-Sample #....: C0F140185-003 Work Order #....: DEMR6 Matrix.....: SOLID
 Date Sampled....: 06/13/00 Date Received...: 06/14/00
 % Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.0		No Units	SW846 9045C	06/15/00	0167130
	Dilution Factor: 1			MS Run #.....: 0167030		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/19/00	0171326
	Dilution Factor: 1			MS Run #.....: 0171158		
Percent Solids	85.6		%	MCAWW 160.3 MOD	06/15-06/16/00	0167129
	Dilution Factor: 1			MS Run #.....: 0167029		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/20/00	0172319
	Dilution Factor: 1			MS Run #.....: 0172131		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/20/00	0172316
	Dilution Factor: 1			MS Run #.....: 0172129		

UXB INTERNATIONAL

661 110

Client Sample ID: DF/S1/0165/SDC/012

General Chemistry

Lot-Sample #....: C0F140185-004 Work Order #....: DEMR7 Matrix.....: SOLID
 Date Sampled...: 06/13/00 Date Received...: 06/14/00
 % Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.0		No Units	SW846 9045C	06/15/00	0167130
	Dilution Factor: 1		MS Run #.....: 0167030			
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/19/00	0171326
	Dilution Factor: 1		MS Run #.....: 0171158			
Percent Solids	86.2		%	MCAWW 160.3 MOD	06/15-06/16/00	0167129
	Dilution Factor: 1		MS Run #.....: 0167029			
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/20/00	0172319
	Dilution Factor: 1		MS Run #.....: 0172131			
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/20/00	0172316
	Dilution Factor: 1		MS Run #.....: 0172129			

General Chemistry

Client Lot #...: C0F140185

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Reactive Cyanide		Work Order #:	DF164101	MB Lot-Sample #:	A0F200000-319	
	ND	200	mg/kg	SW846 7.3.3	06/20/00	0172319
		Dilution Factor:	1			
Reactive Sulfide		Work Order #:	DF15V101	MB Lot-Sample #:	A0F200000-316	
	ND	200	mg/kg	SW846 7.3.4	06/20/00	0172316
		Dilution Factor:	1			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: C0F140185

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH	100	Work Order #: DENWV101 (85 - 115)	LCS Lot-Sample#: C0F150000-130 SW846 9045C	06/15/00	0167130
		Dilution Factor: 1			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F140185

Work Order #...: DEMQV-SMP
DEMQV-DUP

Matrix.....: SOLID

Date Sampled...: 06/13/00

Date Received...: 06/14/00

% Moisture.....: 15

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	85.2	84.7	%	0.66	(0-20)	SD Lot-Sample #: C0F140185-001 MCAWW 160.3 MOD	06/15-06/16/00	0167129

Dilution Factor: 1

Prep Date.....: 0167029

Analysis Date...:

Prep Batch #...:

pH

7.5

7.7

No Units 2.9

(0-20)

SD Lot-Sample #: C0F140185-001
SW846 9045C 06/15/00

0167130

Dilution Factor: 1

Prep Date.....: 0167030

Analysis Date...:

Prep Batch #...:

Ignitability

No Units 0

(0-0.0)

SD Lot-Sample #: C0F140185-001
SW846 SECTION 7.1 06/19/00

0171326

Dilution Factor: 1

Prep Date.....: 0171158

Analysis Date...:

Prep Batch #...:

SAMPLE DUPLICATE EVALUATION REPORT

Client Lot #....: C0F140185	Work Order #....: DF0HH-SMP	Matrix.....: SOLID
	DF0HH-DUP	
Date Sampled....: 06/13/00	Date Received...: 06/14/00	
% Moisture.....: 18		

114

GC/MS VOLATILE DATA

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661 116

**GC/MS VOLATILE
QC SUMMARY**

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F140185

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/S1/0165/GRAB/002	104	95	100	100	00
02	DF/S1/0165/SDC/010	100	88	91	93	00
03	DF/S1/0165/SDC/011	101	86	91	93	00
04	DF/S1/0165/SDC/012	103	85	91	94	00
05	METHOD BLK. DERHP101	100	98	101	99	00
06	LCS DEWWX101	97	97	106	99	00
07	DF/S1/0165/GRAB/002 D	98	99	108	101	00
08	DF/S1/0165/GRAB/002 S	99	97	105	99	00

SURROGATES

SRG01 = 1,2-Dichloroethane-d4
 SRG02 = Toluene-d8
 SRG03 = 4-Bromofluorobenzene
 SRG04 = Dibromofluoromethane

QC LIMITS

(77-120)
 (78-111)
 (80-114)
 (78-110)

Column to be used to flag recovery values
 * Values outside of required QC Limits
 D System monitoring Compound diluted out

FORM II

661 118 SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F180000

WO #: DEWWX101

BATCH: 0170096

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Benzene	0.500	0.461	92	79 - 116	
2-Butanone	0.500	0.357	71	35 - 156	
Carbon tetrachloride	0.500	0.470	94	72 - 133	
Chlorobenzene	0.500	0.436	87	81 - 115	
Chloroform	0.500	0.471	94	81 - 122	
1,2-Dichloroethane	0.500	0.491	98	73 - 127	
1,1-Dichloroethene	0.500	0.404	81	65 - 119	
Tetrachloroethene	0.500	0.439	88	78 - 131	
Trichloroethene	0.500	0.444	89	80 - 122	
Vinyl chloride	0.500	0.468	94	53 - 134	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Level: (low/med) LOW

Lot #: C0F140185

WO #: DEMQV10Q

BATCH: 0170096

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	ND	0.462	92	73 - 123	
2-Butanone	0.500	ND	0.367	73	10 - 151	
Carbon tetrachloride	0.500	ND	0.460	92	61 - 143	
Chlorobenzene	0.500	ND	0.460	92	70 - 122	
Chloroform	0.500	ND	0.467	93	65 - 131	
1,2-Dichloroethane	0.500	ND	0.497	99	67 - 132	
1,1-Dichloroethene	0.500	ND	0.412	82	57 - 138	
Tetrachloroethene	0.500	ND	0.441	88	70 - 130	
Trichloroethene	0.500	ND	0.450	90	58 - 141	
Vinyl chloride	0.500	ND	0.472	94	51 - 133	

NOTES(S) :

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

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 10 outside limits

COMMENTS:

661 120

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Level: (low/med) LOW

Lot #: C0F140185

WO #: DEMQV10R

BATCH: 0170096

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Benzene	0.500	0.467	93	1.0	20	73 - 123	
2-Butanone	0.500	0.362	72	1.3	34	10 - 151	
Carbon tetrachloride	0.500	0.460	92	0.060	20	61 - 143	
Chlorobenzene	0.500	0.471	94	2.4	20	70 - 122	
Chloroform	0.500	0.476	95	1.8	20	65 - 131	
1,2-Dichloroethane	0.500	0.501	100	0.68	20	67 - 132	
1,1-Dichloroethene	0.500	0.408	82	0.90	20	57 - 138	
Tetrachloroethene	0.500	0.448	90	1.5	20	70 - 130	
Trichloroethene	0.500	0.449	90	0.20	20	58 - 141	
Vinyl chloride	0.500	0.478	96	1.3	20	51 - 133	

NOTES (S) :

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

RPD: 0 out of 10 outside limitsSpike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

BLANK WORKORDER NO.

SW846 8260B METHOD BLANK SUMMARY

DERHP101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: 4061801.D

Lot Number: C0F140185

Date Analyzed: 06/18/00

Time Analyzed: 07:52

Matrix: SOLID

Date Extracted: 06/18/00

GC Column: RTX-624 ID: .18

Extraction Method: 1311/5030B

Instrument ID: HP4

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DF/S1/0165/GRAB/002	DEMQV10Q S	4061806.D	06/18/00	10:02
02	DF/S1/0165/GRAB/002	DEMQV10R D	4061807.D	06/18/00	10:27
03	DF/S1/0165/GRAB/002	DEMQV102	4061805.D	06/18/00	09:35
04	DF/S1/0165/SDC/010	DEMR4102	4061811.D	06/18/00	12:20
05	DF/S1/0165/SDC/011	DEMR6102	4061812.D	06/18/00	12:48
06	DF/S1/0165/SDC/012	DEMR7102	4061813.D	06/18/00	13:17
07	CHECK SAMPLE	DEWWX101 C	4061803.D	06/18/00	08:41
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

661 122

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: 40826D

Lab File ID: CF40606

BFB Injection Date: 06/06/00

Instrument ID: HP4

BFB Injection Time: 1058

GC Column: DB624 20M ID: 0.18 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.7
75	30.0 - 60.0% of mass 95	41.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	68.5
175	5.0 - 9.0% of mass 174	4.3 (6.2)1
176	95.0 - 101.0% of mass 174	65.4 (95.5)1
177	5.0 - 9.0% of mass 176	4.3 (6.5)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD5	VSTD5	4A40606	06/06/00	1126
02	VSTD20	VSTD20	4B40606	06/06/00	1153
03	VSTD50	VSTD50	4C40606	06/06/00	1218
04	VSTD100	VSTD100	4D40606	06/06/00	1242
05	VSTD200	VSTD200	4E40606	06/06/00	1309
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C0F140185
Lab File ID: BF40618 BFB Injection Date: 06/18/00
Instrument ID: HP4 BFB Injection Time: 0645
GC Column: DB624 20M ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.7
75	30.0 - 60.0% of mass 95	43.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.3 (0.5)1
174	50.0 - 100.0% of mass 95	68.3
175	5.0 - 9.0% of mass 174	5.1 (7.5)1
176	95.0 - 101.0% of mass 174	65.8 (96.3)1
177	5.0 - 9.0% of mass 176	4.4 (6.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	CC40618	06/18/00	0717
02	INTRA-LAB BL	DERHP101	4061801	06/18/00	0752
03	INTRA-LAB CH	DEWWX101	4061803	06/18/00	0841
04	DF/S1/0165/G	DEMQV102	4061805	06/18/00	0935
05	DF/S1/0165/G	DEMQV10Q	4061806	06/18/00	1002
06	DF/S1/0165/G	DEMQV10R	4061807	06/18/00	1027
07	DF/S1/0165/S	DEMR4102	4061811	06/18/00	1220
08	DF/S1/0165/S	DEMR6102	4061812	06/18/00	1248
09	DF/S1/0165/S	DEMR7102	4061813	06/18/00	1317
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

661 124

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C0F140185
Lab File ID (Standard): CC40618 Date Analyzed: 06/18/00
Instrument ID: HP4 Time Analyzed: 0717
GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 (CBZ)	RT #	IS2 (DCB)	RT #	IS3	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	180708	10.13	263028	12.46	753124	7.00
UPPER LIMIT	361416	10.33	526056	12.66	1506248	7.20
LOWER LIMIT	90354	9.93	131514	12.26	376562	6.80
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	175633	10.12	255303	12.46	807312	7.01
02 INTRA-LAB CH	176722	10.12	261752	12.46	735353	7.01
03 DF/S1/0165/G	170288	10.12	243143	12.45	780438	7.01
04 DF/S1/0165/G	175376	10.12	259735	12.46	724517	7.00
05 DF/S1/0165/G	173895	10.13	264260	12.46	732638	7.00
06 DF/S1/0165/S	136136	10.12	190269	12.46	625738	7.01
07 DF/S1/0165/S	137634	10.12	189139	12.46	624992	7.01
08 DF/S1/0165/S	132769	10.12	186294	12.46	597837	7.01
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DCB) = 1,4-Dichlorobenzene-d4
IS3 = Fluorobenzene

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.20 minutes of internal standard RT
RT LOWER LIMIT = - 0.20 minutes of internal standard RT

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

**GC/MS VOLATILE
SAMPLE DATA**

661 126

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMQV102

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 15

QC Batch: 0170096

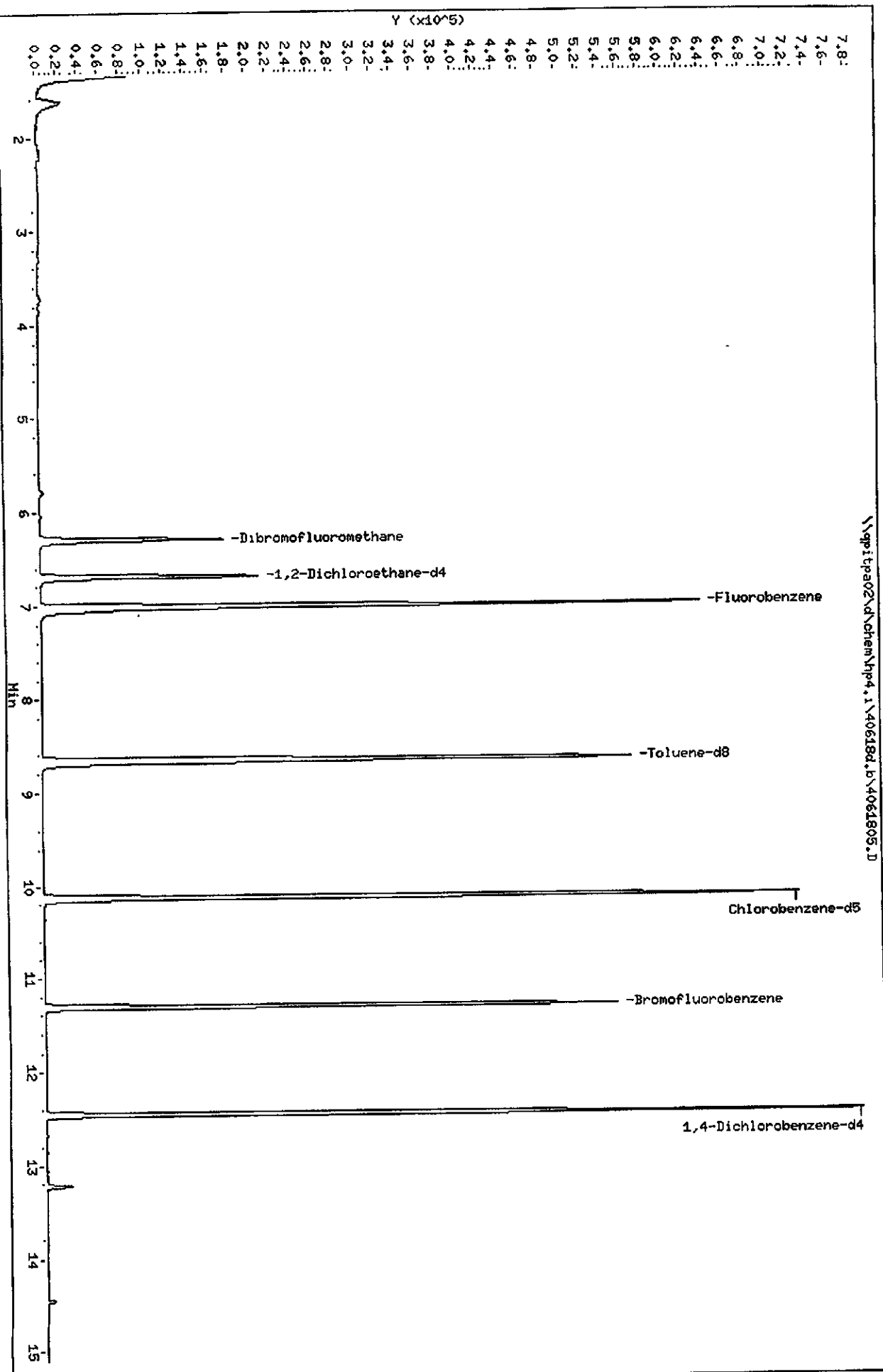
Client Sample Id: DF/S1/0165/GRAB/002

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

FORM I

Data File: \\epitpa02\chem\hp4.1\40618d.b\4061805.D
Date : 18-JUN-2000 09:35
Client ID: DF/SL/0165/CRAB/002
Sample Info: c0f140185-001 (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

Instrument: hp4.1
Operator: 16328
Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp4.i\40618d.b\4061805.D
 Lab Smp Id: DEMQV102 Client Smp ID: DF/S1/0165/GRAB/002
 Inj Date : 18-JUN-2000 09:35 MS Autotune Date: 16-DEC-1999 09:07
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0f140185-001 (1ml/10ml)/5ml
 Misc Info : demqv102,40618d.b
 Comment :
 Method : \\qpitpa02\d\chem\hp4.i\40618d.b\8260bh2o.m
 Meth Date : 18-Jun-2000 07:34 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC077

K_uC₁₂/w

Compound Sublist: tc1p.sub

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	Final Volume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
* 46 Fluorobenzene	96	7.006	7.004	(1.000)	780438	250.000	
* 69 Chlorobenzene-d5	119	10.124	10.128	(1.000)	170288	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.453	12.457	(1.000)	243143	250.000	
\$ 43 1,2-Dichloroethane-d4	65	6.688	6.686	(0.955)	156206	259.541	51.91
\$ 39 Dibromofluoromethane	113	6.291	6.289	(0.898)	142412	250.746	50.15
\$ 59 Toluene-d8	98	8.657	8.655	(0.855)	627614	238.266	47.65
\$ 80 Bromofluorobenzene	95	11.304	11.308	(1.117)	255494	249.344	49.87
3 Vinyl Chloride	62	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					

Data File: \\ppitpa02\d\chem\hp4.i\40618d.b\4061805.D
Report Date: 18-Jun-2000 11:01

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
-----	----	--	-----	-----	-----	-----	-----
65 Tetrachloroethene	164				Compound Not Detected.		
70 Chlorobenzene	112				Compound Not Detected.		

661 130

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMR4102

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 15

QC Batch: 0170096

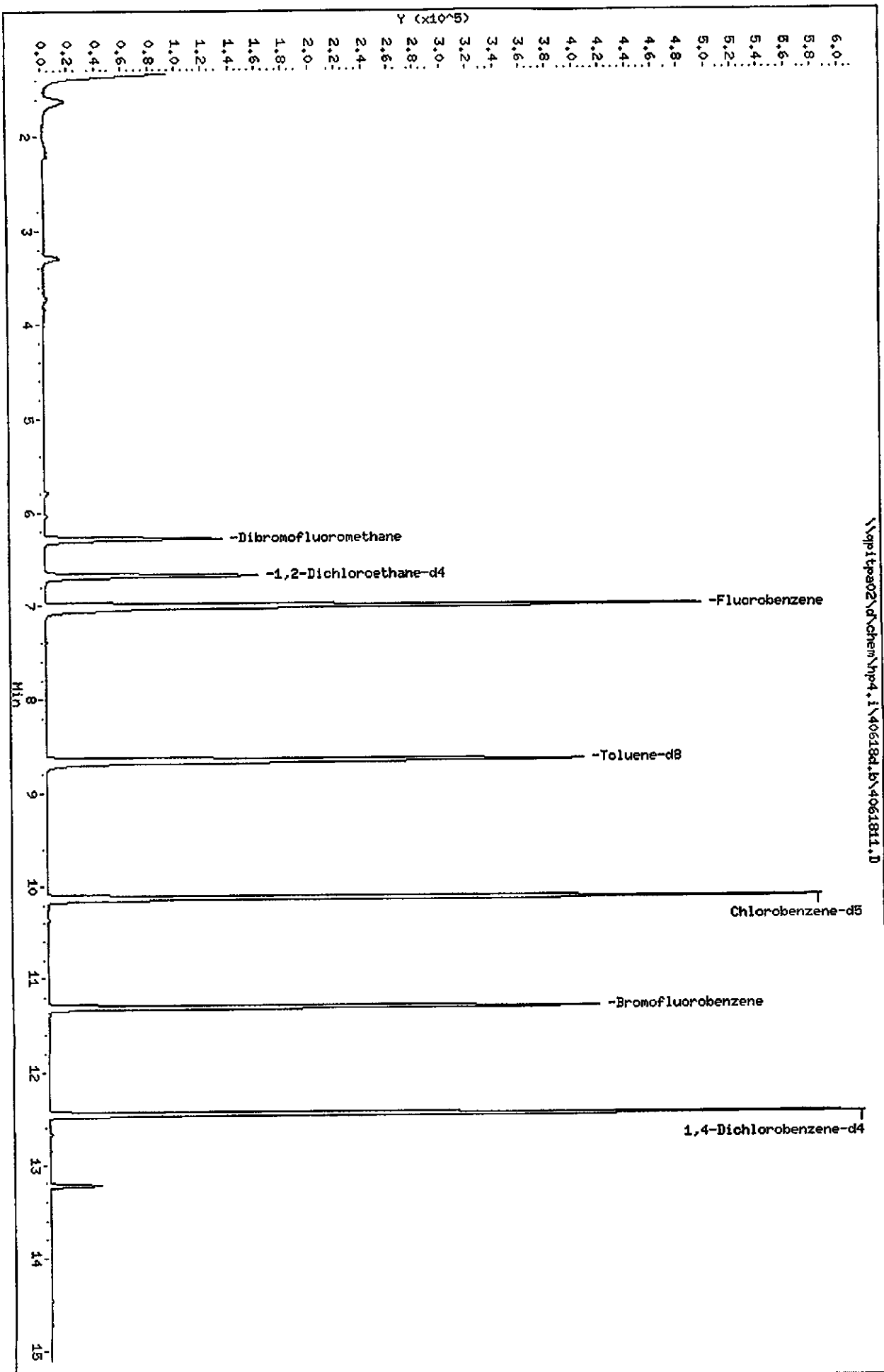
Client Sample Id: DF/S1/0165/SDC/010

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

FORM I

Data File: \\pp1tpa02\chem\hp4.i\406184.b\4061811.D
Date: 18-JUN-2000 12:20
Client ID: DF/S1/0165/SDC/010
Sample Info: c0f140185-002 (1ml/10ml)/5ml
Volume Injected (uL): 5.0
Column phase: DB 624

Instrument: hp4.i
Operator: 16328
Column diameter: 0.18



Report Date: 19-Jun-2000 08:40

STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp4.i\40618d.b\4061811.D
 Lab Smp Id: DEMR4102 Client Smp ID: DF/S1/0165/SDC/010
 Inj Date : 18-JUN-2000 12:20 MS Autotune Date: 16-DEC-1999 09:07
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0f140185-002 (1ml/10ml)/5ml
 Misc Info : demr4102,40618d.b,8260bh2o.m
 Comment :
 Method : \\qpitpa02\d\chem\hp4.i\40618d.b\8260bh2o.m K₂Cl₂/19/2
 Meth Date : 18-Jun-2000 07:34 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 15
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC077

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ng)	FINAL (UG/L)
*****	----	--	-----	-----	-----		-----	-----
* 46 Fluorobenzene	96	7.010	7.004	(1.000)	625738		250.000	
* 69 Chlorobenzene-d5	119	10.121	10.128	(1.000)	136136		250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.457	12.457	(1.000)	190269		250.000	
\$ 43 1,2-Dichloroethane-d4	65	6.692	6.686	(0.955)	120499		249.711	49.94
\$ 39 Dibromofluoromethane	113	6.288	6.289	(0.897)	106070		232.930	46.58
\$ 59 Toluene-d8	98	8.654	8.655	(0.855)	462476		219.619	43.92
\$ 80 Bromofluorobenzene	95	11.307	11.308	(1.117)	185573		226.540	45.31
3 Vinyl Chloride	62	Compound Not Detected						
12 1,1-Dichloroethene	96	Compound Not Detected.						
31 2-Butanone	43	Compound Not Detected						
37 Chloroform	83	Compound Not Detected.						
41 Carbon Tetrachloride	117	Compound Not Detected.						
42 Benzene	78	Compound Not Detected.						
45 1,2-Dichloroethane	62	Compound Not Detected.						
47 Trichloroethene	130	Compound Not Detected.						

Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\4061811.D
Report Date: 19-Jun-2000 08:40

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
-----	----	--	-----	-----	-----	-----	-----
65 Tetrachloroethene	164				Compound Not Detected.		
70 Chlorobenzene	112				Compound Not Detected.		

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 003

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMR6102

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 14

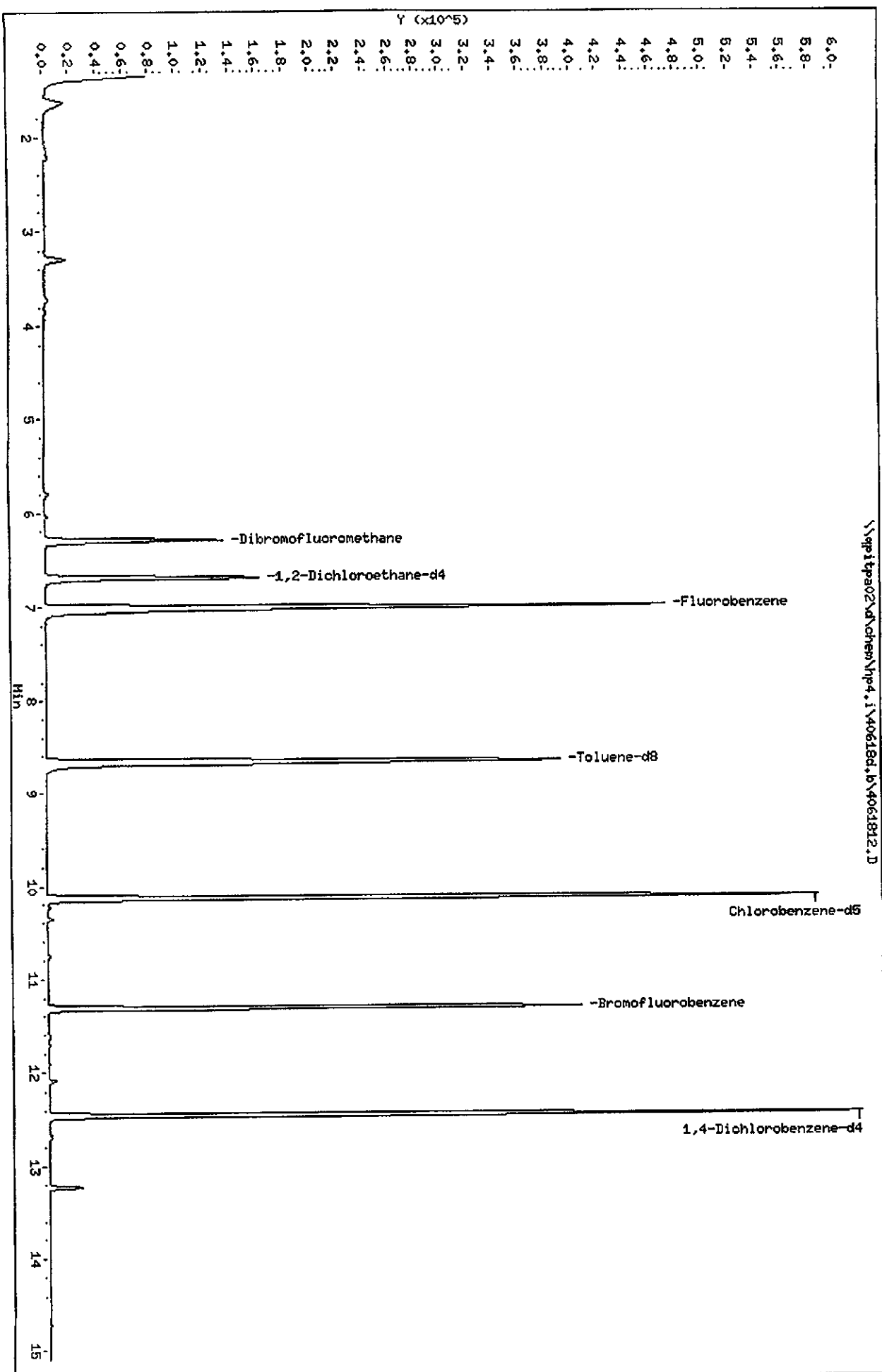
QC Batch: 0170096

Client Sample Id: DF/S1/0165/SDC/011

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

Data File: \\pittpa02\chem\hp4.1\40618d.b\4061812.D
Date: 18-JUN-2000 12:48
Client ID: DF/SL/0165/SDC/011
Sample Info: 60F140185-003 (1ml/10ml)/5ml
Volume Injected (μL): 5.0
Column phases: DB 624

Instrument: hp4.1
Operator: 16328
Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\gpitpa02\d\chem\hp4.i\40618d.b\4061812.D
 Lab Smp Id: DEMR6102 Client Smp ID: DF/S1/0165/SDC/011
 Inj Date : 18-JUN-2000 12:48 MS Autotune Date: 16-DEC-1999 09:07
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0f140185-003 (1ml/10ml)/5ml
 Misc Info : demr6102,40618d.b,8260bh2o.m
 Comment :
 Method : \\gpitpa02\d\chem\hp4.i\40618d.b\8260bh2o.m *K_s/191~*
 Meth Date : 18-Jun-2000 07:34 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 16
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC077

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	7.007	7.004	(1.000)	624992	250.000	
* 69 Chlorobenzene-d5	119	10.124	10.128	(1.000)	137634	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.460	12.457	(1.000)	189139	250.000	
\$ 43 1,2-Dichloroethane-d4	65	6.689	6.686	(0.955)	121886	252.887	50.58
\$ 39 Dibromofluoromethane	113	6.291	6.289	(0.898)	105955	232.955	46.59
\$ 59 Toluene-d8	98	8.657	8.655	(0.855)	455813	214.099	42.82
\$ 80 Bromofluorobenzene	95	11.304	11.308	(1.117)	187732	226.681	45.34
3 Vinyl Chloride	62	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					

Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\4061812.D
Report Date: 19-Jun-2000 08:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
-----	----	--	-----	-----	-----	-----	-----
65 Tetrachloroethene	164				Compound Not Detected.		
70 Chlorobenzene	112				Compound Not Detected.		

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 004

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMR7102

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 14

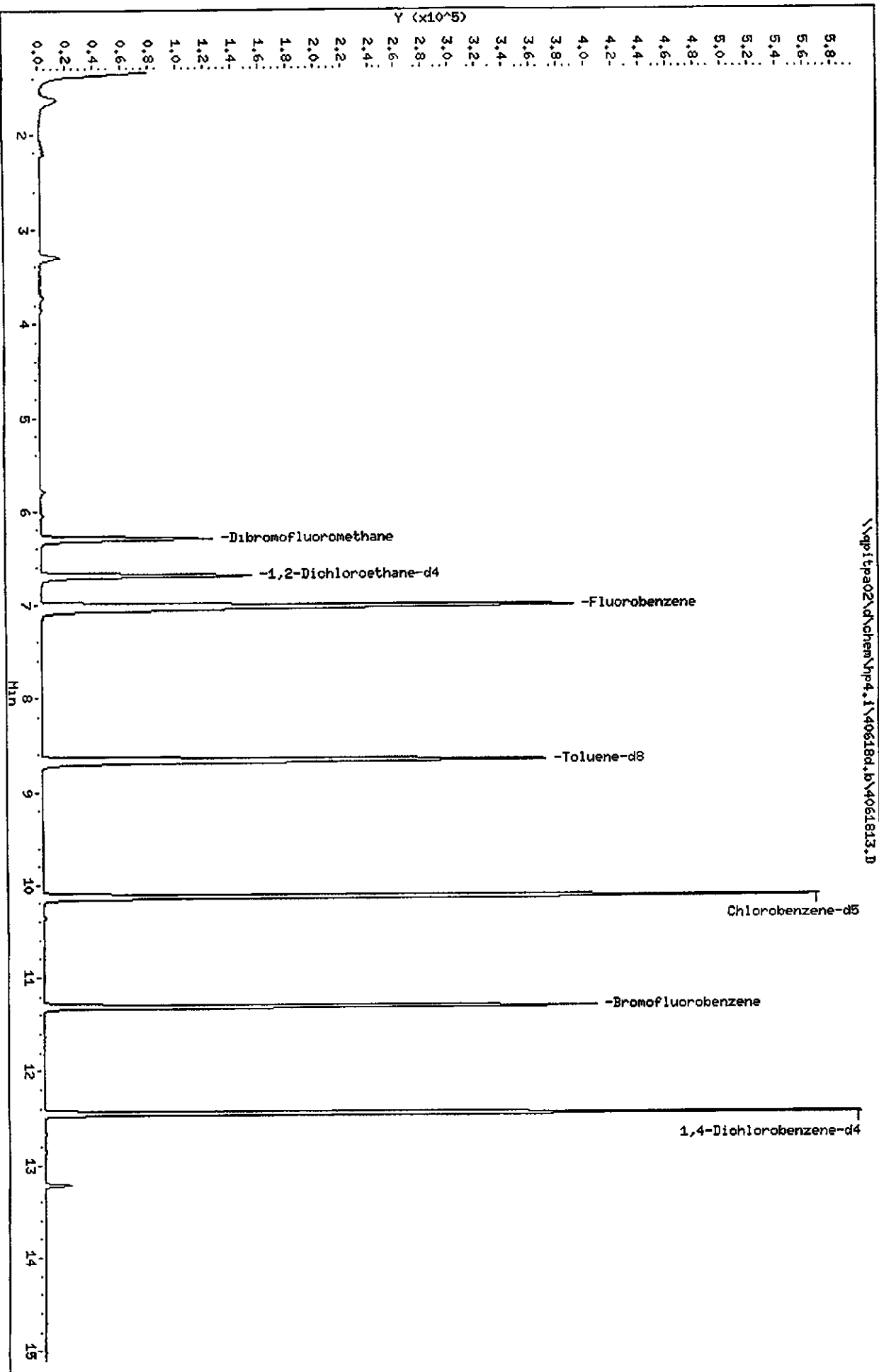
QC Batch: 0170096

Client Sample Id: DF/S1/0165/SDC/012

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

Data File: \\pp1tpa02\chem\hp4.1\40618d.b\4061813.D
Date: 18-JUN-2000 13:17
Client ID: JF/S1/0165/SDC/012
Sample Info: c0f140185-004 (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

Instrument: hp4.1
Operator: 16328
Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp4.i\40618d.b\4061813.D
 Lab Smp Id: DEMR7102 Client Smp ID: DF/S1/0165/SDC/012
 Inj Date : 18-JUN-2000 13:17 MS Autotune Date: 16-DEC-1999 09:07
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0f140185-004 (1ml/10ml)/5ml
 Misc Info : demr7102,40618d.b,8260bh2o.m
 Comment :
 Method : \\qpitpa02\d\chem\hp4.i\40618d.b\8260bh2o.m
 Meth Date : 18-Jun-2000 07:34 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC077

Ks 6/19/00

Compound Sublist: tclp.sub

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	7.012	7.004	(1.000)	597837	250.000	
* 69 Chlorobenzene-d5	119	10.123	10.128	(1.000)	132769	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.459	12.457	(1.000)	186294	250.000	
\$ 43 1,2-Dichloroethane-d4	65	6.694	6.686	(0.955)	119140	258.417	51.68
\$ 39 Dibromofluoromethane	113	6.290	6.289	(0.897)	102558	235.728	47.14
\$ 59 Toluene-d8	98	8.656	8.655	(0.855)	436602	212.590	42.52
\$ 80 Bromofluorobenzene	95	11.309	11.308	(1.117)	181006	226.568	45.31
3 Vinyl Chloride	62	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
=====	====	==	=====	=====	=====	=====	=====
65 Tetrachloroethene	164				Compound Not Detected		
70 Chlorobenzene	112				Compound Not Detected.		

661 142

**GC/MS VOLATILE
CALIBRATION DATA**

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

661 143

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: 40826D

Instrument ID: HP4

Calibration Date(s): 06/06/00

06/06/00

Heated Purge: (Y/N) N

Calibration Time(s): 1126

1309

GC Column: DB 624

ID: 0.18 (mm)

LAB FILE ID: RRF5 =4A40606 RRF20 =4B40606 RRF50 =4C40606 RRF100=4D40606 RRF200=4E40606							
COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
Dichlorodifluoromethane	0.119	0.099	0.107	0.110	0.106	0.108	6.7
Chloromethane	* 0.376	0.268	0.272	0.267	0.261	0.289	17.0*
Vinyl Chloride	0.279	0.218	0.234	0.237	0.240	0.242	9.3
Bromomethane	0.035	0.023	0.025	0.028	0.030	0.028	16.2
Chloroethane	0.048	0.034	0.035	0.035	0.035	0.037	16.5
Trichlorofluoromethane	0.088	0.074	0.073	0.076	0.076	0.077	7.8
1,1-Dichloroethene	0.208	0.163	0.165	0.164	0.147	0.169	13.4
Methylene Chloride	0.253	0.197	0.201	0.199	0.185	0.207	12.8
trans-1,2-Dichloroethene	0.256	0.204	0.211	0.214	0.202	0.217	10.1
1,1-Dichloroethane	* 0.447	0.354	0.372	0.375	0.354	0.380	10.1*
cis-1,2-dichloroethene	0.300	0.230	0.247	0.251	0.237	0.253	10.9
Chloroform	0.416	0.326	0.340	0.345	0.323	0.350	10.8
Bromochloromethane	0.131	0.102	0.108	0.110	0.103	0.111	10.6
1,1,1-Trichloroethane	0.324	0.251	0.269	0.276	0.257	0.275	10.5
Carbon Tetrachloride	0.237	0.192	0.209	0.216	0.201	0.211	8.1
1,2-Dichloroethane	0.304	0.233	0.238	0.238	0.210	0.245	14.4
Benzene	1.197	0.941	0.978	0.983	0.895	0.999	11.7
Trichloroethene	0.283	0.228	0.234	0.240	0.223	0.242	10.0
1,2-Dichloropropane	0.286	0.229	0.239	0.243	0.228	0.245	9.7
Bromodichloromethane	0.277	0.220	0.243	0.253	0.237	0.246	8.6
cis-1,3-Dichloropropene	0.405	0.340	0.371	0.386	0.360	0.372	6.6
Toluene	5.783	4.556	4.692	4.648	4.030	4.742	13.5
trans-1,3-Dichloropropene	1.539	1.263	1.368	1.423	1.278	1.374	8.2
1,1,2-Trichloroethane	1.100	0.837	0.874	0.891	0.782	0.897	13.5
Tetrachloroethene	0.899	0.708	0.727	0.748	0.661	0.749	12.0
Dibromochloromethane	0.771	0.633	0.717	0.774	0.716	0.722	7.9
Chlorobenzene	* 3.751	2.862	2.941	2.977	2.639	3.034	13.9*
Ethylbenzene	2.098	1.640	1.670	1.646	1.374	1.686	15.4
Styrene	3.684	3.158	3.387	3.368	2.740	3.267	10.7
Bromoform	* 0.384	0.329	0.398	0.448	0.406	0.393	11.0*
1,1,2,2-Tetrachloroethane	* 0.915	0.720	0.764	0.787	0.677	0.773	11.7*
1,3-Dichlorobenzene	1.823	1.389	1.444	1.373	1.142	1.434	17.2
1,4-Dichlorobenzene	1.874	1.397	1.431	1.406	1.250	1.472	16.0
1,2-Dichlorobenzene	1.633	1.307	1.350	1.336	1.203	1.366	11.7
Dibromomethane	0.151	0.114	0.122	0.123	0.111	0.124	12.6
1,2-Dibromoethane	1.002	0.800	0.842	0.858	0.750	0.850	11.1
1,1,1,2-Tetrachloroethane	0.976	0.777	0.823	0.831	0.709	0.823	11.9

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

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIIT

Case No. :

SAS No.: 40325

SDG No.: 40826D

Instrument ID: HP4

Calibration Date(s): 06/06/00 06/06/00

Heated Purge: (Y/N) N

Calibration Time(s): 1126 1309

GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
1,2,3-Trichloropropane	0.255	0.206	0.216	0.220	0.183	0.216	12.2
1,2-Dibromo-3-chloropropane	0.079	0.094	0.100	0.115	0.099	0.097	13.3
2,2-Dichloropropane	0.320	0.261	0.279	0.286	0.273	0.284	7.8
1,1-Dichloropropene	0.342	0.270	0.284	0.289	0.263	0.290	10.7
1,3-Dichloropropane	1.960	1.522	1.547	1.577	1.375	1.596	13.6
n-Propylbenzene	1.156	0.924	0.963	0.957	0.828	0.966	12.4
Bromobenzene	0.834	0.649	0.711	0.735	0.692	0.724	9.5
1,3,5-Trimethylbenzene	3.222	2.524	2.628	2.599	2.260	2.647	13.3
2-Chlorotoluene	0.956	0.741	0.786	0.785	0.710	0.796	12.0
4-Chlorotoluene	1.021	0.773	0.812	0.793	0.686	0.817	15.2
tert-Butylbenzene	2.825	2.183	2.337	2.337	2.075	2.351	12.2
1,2,4-Trimethylbenzene	3.322	2.617	2.698	2.664	2.291	2.718	13.8
sec-Butylbenzene	4.352	3.430	3.571	3.512	3.030	3.579	13.4
4-Isopropyltoluene	3.520	2.830	2.890	2.771	2.232	2.849	16.1
n-Butylbenzene	3.650	2.874	2.927	2.937	2.659	3.009	12.5
1,2,4-Trichlorobenzene	0.674	0.588	0.623	0.688	0.667	0.648	6.4
Hexachlorobutadiene	0.382	0.301	0.304	0.335	0.351	0.335	10.1
Naphthalene	1.361	1.153	1.263	1.482	1.264	1.305	9.5
1,2,3-Trichlorobenzene	0.517	0.385	0.423	0.476	0.457	0.452	11.2
Acetone	0.069	0.050	0.052	0.052	0.051	0.055	14.5
Carbon Disulfide	0.491	0.499	0.528	0.531	0.478	0.505	4.6
2-Butanone	0.461	0.189	0.151	0.134	0.130	0.213	66.1
4-Methyl-2-Pentanone	0.728	0.799	0.933	1.008	0.978	0.889	13.5
2-Hexanone	0.497	0.529	0.638	0.700	0.660	0.605	14.4
Methyl tert-butyl ether	0.432	0.464	0.498	0.515	0.469	0.476	6.7
Isopropylbenzene	5.748	4.737	4.932	4.810	3.993	4.844	12.9
1,2-Dichloroethene (total)	0.278	0.218	0.229	0.232	0.220	0.235	10.5
Xylenes (total)	2.351	1.914	2.005	1.996	1.682	1.990	12.1
Dibromofluoromethane	0.178	0.202	0.188	0.176	0.166	0.182	7.5
1,2-Dichloroethane-d4	0.195	0.219	0.195	0.185	0.170	0.193	9.2
Toluene-d8	3.761	4.376	3.971	3.806	3.421	3.867	9.0
Bromofluorobenzene	1.533	1.709	1.559	1.457	1.264	1.504	10.8

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

INITIAL CALIBRATION REPORT

Instrument ID: hp4.i
Lab File ID: 4a40606.d
Analysis Type: WATER

Injection Date: 06-JUN-2000 11:26
Lab Sample ID: vstd5
Method File: /var/chem/hp4.i/40606d.b/8260bh2

COMPOUND	%RSD
Xylenes (total)	12.1
1,2-Dichloroethene (total)	10.5
Dichlorodifluoromethane	6.7
Chloromethane	17.0
Vinyl Chloride	9.3
Bromomethane	16.2
Chloroethane	16.5
Trichlorofluoromethane	7.8
1,1-Dichloroethene	13.4
Carbon Disulfide	4.6
Acetone	14.5
Methylene Chloride	12.8
trans-1,2-Dichloroethene	10.1
Methyl tert-butyl ether	6.7
1,1-Dichloroethane	10.1
2,2-Dichloropropane	7.8
cis-1,2-dichloroethene	10.9
2-Butanone	66.1
Bromochloromethane	10.6
Chloroform	10.8
1,1,1-Trichloroethane	10.5
Dibromofluoromethane	7.5
Carbon Tetrachloride	8.1
1,1-Dichloropropene	10.7
Benzene	11.7
1,2-Dichloroethane-d4	9.2
1,2-Dichloroethane	14.4
Trichloroethene	10.0
1,2-Dichloropropane	9.7
Dibromomethane	12.6
Bromodichloromethane	8.6
cis-1,3-Dichloropropene	6.6
4-Methyl-2-Pentanone	13.5
Toluene-d8	9.0
Toluene	13.5
trans-1,3-Dichloropropene	8.2
1,1,2-Trichloroethane	13.5
Tetrachloroethene	12.0
1,3-Dichloropropane	13.6

INITIAL CALIBRATION REPORT

Instrument ID: hp4.i
 Lab File ID: 4a40606.d
 Analysis Type: WATER

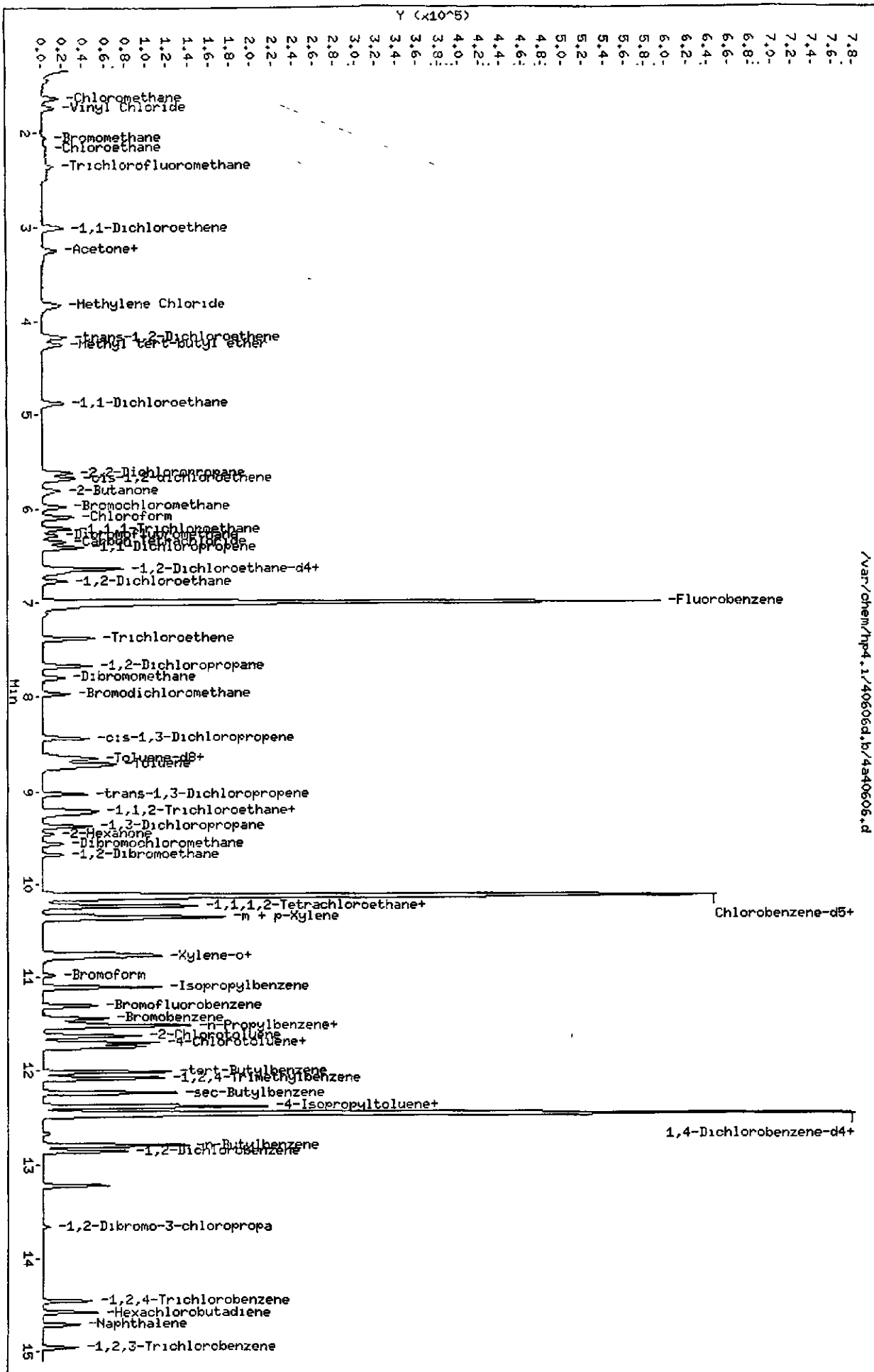
Injection Date: 06-JUN-2000 11:26
 Lab Sample ID: vstd5
 Method File: /var/chem/hp4.i/40606d.b/8260bh2

COMPOUND	%RSD
2-Hexanone	14.4
Dibromochloromethane	7.9
1,2-Dibromoethane	11.1
Chlorobenzene	13.9
Ethylbenzene	15.4
1,1,1,2-Tetrachloroethane	11.9
m + p-Xylene	17.3
Xylene-o	12.1
Styrene	10.7
Bromoform	11.0
Isopropylbenzene	12.9
Bromofluorobenzene	10.8
Bromobenzene	9.5
1,1,2,2-Tetrachloroethane	11.7
n-Propylbenzene	12.4
1,2,3-Trichloropropane	12.2
2-Chlorotoluene	12.0
1,3,5-Trimethylbenzene	13.3
4-Chlorotoluene	15.2
tert-Butylbenzene	12.2
1,2,4-Trimethylbenzene	13.8
sec-Butylbenzene	13.4
4-Isopropyltoluene	16.1
1,3-Dichlorobenzene	17.2
1,4-Dichlorobenzene	16.0
n-Butylbenzene	12.5
1,2-Dichlorobenzene	11.7
1,2-Dibromo-3-chloropropane	13.3
1,2,4-Trichlorobenzene	6.4
Hexachlorobutadiene	10.1
Naphthalene	9.5
1,2,3-Trichlorobenzene	11.2

The average of all %RSD's in the initial calibration is 12.3

Data File: /var/chem/hp4.1/40606d.b/440606.d
 Date: 06-JUN-2000 11:26
 Client ID: vstd5
 Sample Info: vstd5 5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

Instrument: hp4.1
 Operator: 16328
 Column diameter: 0.18



STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40606d.b/4a40606.d
 Lab Smp Id: vstd5 Client Smp ID: vstd5
 Inj Date : 06-JUN-2000 11:26
 Operator : 16328 Inst ID: hp4.1
 Smp Info : vstd5 5ml
 Misc Info : ,40606d.b
 Comment :
 Method : /var/chem/hp4.i/40606d.b/8260bh2o.m
 Meth Date : 06-Jun-2000 13:26 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 11:26 Cal File: 4a40606.d
 Als bottle: 2 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 3.40
 Processing Host: hpuxcs21

Ks 6/6/00

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	Final Volume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	7.001	7.001	(1.000)	698464	
* 69 Chlorobenzene-d5	119	10.124	10.124	(1.000)	160086	
* 92 1,4-Dichlorobenzene-d4	152	12.460	12.460	(1.000)	247278	
\$ 39 Dibromofluoromethane	113	6.285	6.285	(0.898)	12421	25.0000 24.44
\$ 43 1,2-Dichloroethane-d4	65	6.689	6.689	(0.955)	13603	25.0000 25.25
\$ 59 Toluene-d8	98	8.657	8.657	(0.855)	60210	25.0000 24.31
\$ 80 Bromofluorobenzene	95	11.304	11.304	(1.117)	24543	25.0000 25.48
1 Dichlorodifluoromethane	85	1.450	1.450	(0.207)	8306	25.0000 27.52
2 Chloromethane	50	1.639	1.639	(0.234)	26297	25.0000 32.58
3 Vinyl Chloride	62	1.743	1.743	(0.249)	19489	25.0000 28.85
4 Bromomethane	94	2.055	2.055	(0.294)	2437	25.0000 30.88
5 Chloroethane	64	2.165	2.165	(0.309)	3360	25.0000 32.35
6 Trichlorofluoromethane	101	2.354	2.354	(0.336)	6130	25.0000 28.41
12 1,1-Dichloroethene	96	3.002	3.002	(0.429)	14516	25.0000 30.69
13 Acetone	43	3.326	3.326	(0.475)	4819	25.0000 31.47

Data File: /var/chem/hp4.i/40606d.b/4a40606.d
Report Date: 06-Jun-2000 13:26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
15 Carbon Disulfide	76	3 241	3 241	(0.463)	34329	25 0000	24.30
18 Methylene Chloride	84	3 828	3 828	(0.547)	17689	25.0000	30 58
19 trans-1,2-Dichloroethene	96	4 170	4 170	(0.596)	17882	25.0000	29 42
20 Methyl tert-butyl ether	73	4 250	4 250	(0.607)	30209	25 0000	22.73
24 1,1-Dichloroethane	63	4 879	4 879	(0.697)	31234	25 0000	29 39
27 2,2 Dichloropropane	77	5 619	5 619	(0.803)	22381	25 0000	28.21
28 cis-1,2 dichloroethene	96	5 680	5.680	(0.811)	20995	25 0000	29 68
M 29 1,2-Dichloroethene (total)	100				38877	50 0000	59.12
30 Bromochloromethane	128	5 980	5 980	(0.854)	9148	25 0000	29.53
31 2-Butanone	43	5 808	5 808	(0.830)	32231	25 0000	54 14
37 Chloroform	83	6 090	6 090	(0.870)	29027	25 0000	29 69
38 1,1,1-Trichloroethane	97	6 218	6 218	(0.888)	22659	25 0000	29 42
40 1,1-Dichloropropene	75	6 414	6 414	(0.916)	23867	25 0000	29 49
41 Carbon Tetrachloride	117	6 359	6 359	(0.908)	16556	25.0000	28 07
42 Benzene	78	6.646	6 646	(0.949)	83639	25 0000	29 97
45 1,2-Dichloroethane	62	6.774	6 774	(0.968)	21234	25 0000	31.08
47 Trichloroethene	130	7 380	7 380	(1.054)	19773	25 0000	29.30
49 1,2-Dichloropropane	63	7.673	7 673	(1.096)	19963	25.0000	29 18
50 Dibromomethane	93	7.795	7.795	(1.114)	10528	25 0000	30 30
53 Bromodichloromethane	83	7.966	7.966	(1.138)	19356	25.0000	28.15
57 cis-1,3-Dichloropropene	75	8 437	8 437	(1.205)	28262	25.0000	27 16
58 4-Methyl-2 Pentanone	43	8 621	8 621	(0.851)	11660	25 0000	20 48
60 Toluene	91	8 718	8.718	(0.861)	92578	25 0000	30 49
61 trans-1,3-Dichloropropene	75	9 030	9.030	(0.892)	24643	25.0000	28 00
63 1,3-Dichloropropane	76	9.379	9 379	(0.926)	31380	25.0000	30 70
64 1,1,2-Trichloroethane	97	9 207	9.207	(0.909)	17614	25 0000	30 67
65 Tetrachloroethene	164	9 238	9 238	(0.912)	14389	25 0000	30.02
66 2-Hexanone	43	9 458	9 458	(0.934)	7963	25 0000	20.56
67 Dibromochloromethane	129	9 562	9.562	(0.944)	12338	25.0000	26 68
68 1,2-Dibromoethane	107	9 678	9 678	(0.956)	16041	25.0000	29 45
70 Chlorobenzene	112	10 149	10 149	(1.002)	60054	25.0000	30.91
71 1,1,1,2-Tetrachloroethane	131	10.241	10 241	(1.011)	15619	25 0000	29.62
72 Ethylbenzene	106	10.241	10 241	(1.011)	33579	25.0000	31 11
73 m + p-Xylene	106	10 363	10 363	(1.024)	81266	50 0000	63.22
74 Xylene o	106	10.754	10 754	(1.062)	37635	25 0000	29.54
M 75 Xylenes (total)	106				118901	25 0000	93.34
76 Styrene	104	10.779	10.779	(1.065)	58977	25.0000	28 19
77 Bromoform	173	10.980	10 980	(1.085)	6143	25 0000	24 41
78 Isopropylbenzene	105	11 109	11 109	(1.097)	92015	25 0000	29 66
79 Bromobenzene	156	11 445	11.445	(0.919)	20623	25 0000	28.78
81 n-Propylbenzene	120	11 518	11.518	(0.924)	28596	25.0000	29 94
82 2-Chlorotoluene	126	11 628	11 628	(0.933)	23644	25.0000	30 05
83 1,1,2,2-Tetrachloroethane	83	11 488	11 488	(0.922)	22626	25 0000	29 61
84 1,2,3-Trichloropropane	110	11.537	11.537	(0.926)	6316	25.0000	29 57
85 4 Chlorotoluene	126	11 751	11.751	(0.943)	25254	25.0000	31 25
86 1,3,5-Trimethylbenzene	105	11 708	11 708	(0.940)	79680	25 0000	30 44
87 tert-Butylbenzene	119	12 014	12 014	(0.964)	69851	25 0000	30 03

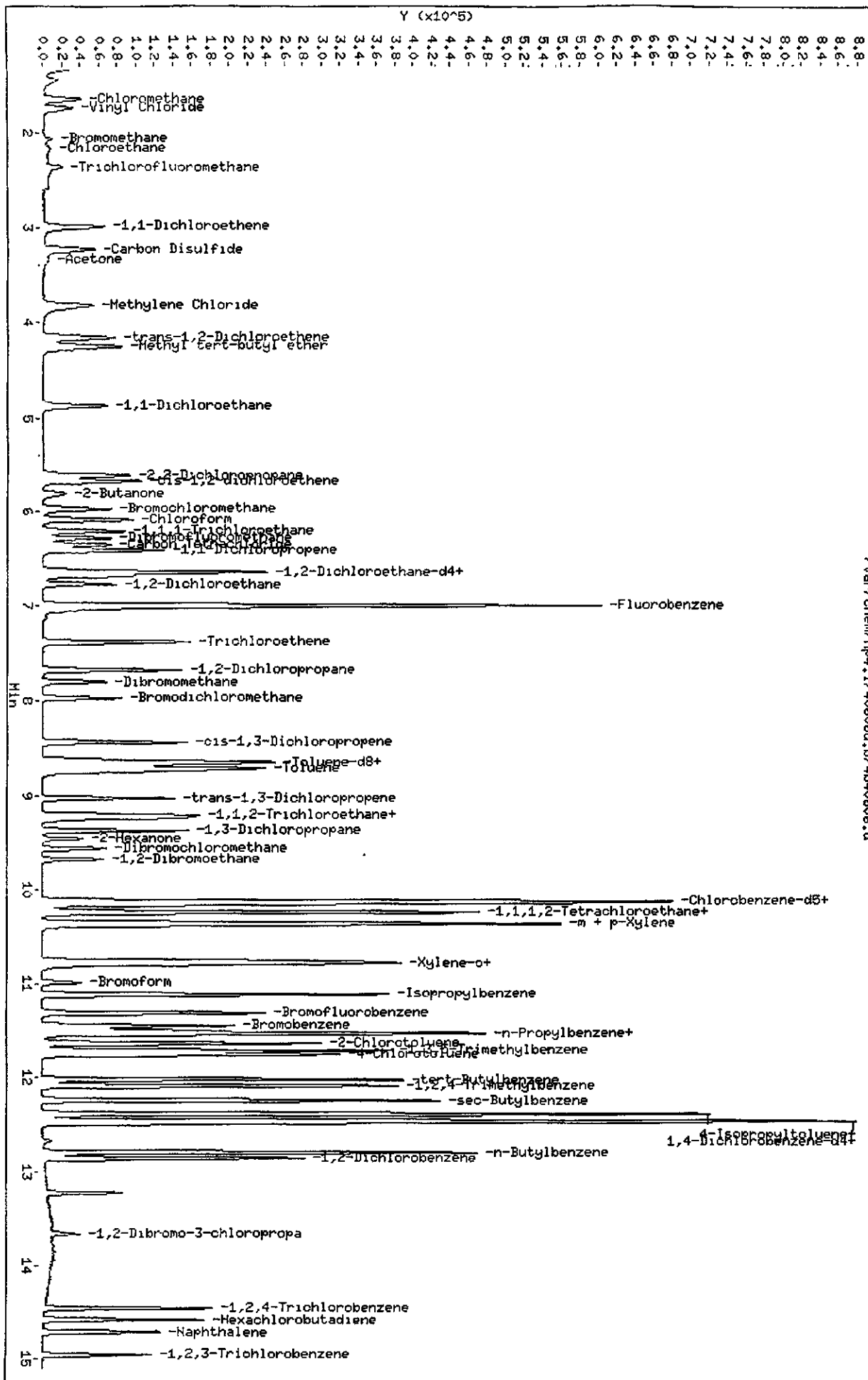
Report Date: 06-Jun-2000 13:26

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	=====	==	=====	=====	=====	(ng)	(ng)
88 1,2,4 Trimethylbenzene	105	12.081	12 081	{0 970}	82149	25 0000	30 55
89 sec-Butylbenzene	105	12 240	12 240	{0.982}	107623	25 0000	30.40
90 4 Isopropyltoluene	119	12 386	12 386	{0 994}	87049	25.0000	30.90
91 1,3-Dichlorobenzene	146	12 386	12 386	{0 994}	45082	25 0000	31 78
93 1,4-Dichlorobenzene	146	12 478	12 478	{1 001}	46351	25 0000	31 84
94 n-Butylbenzene	91	12 796	12 796	{1.027}	90255	25 0000	30.32
95 1,2-Dichlorobenzene	146	12 857	12 857	{1.032}	40377	25 0000	29.88
96 1,2 Dibromo-3-chloropropane	157	13.658	13 658	{1 096}	1958	25 0000	20 28
97 1,2,4-Trichlorobenzene	180	14 459	14.459	{1 160}	16659	25 0000	25 98
98 Hexachlorobutadiene	225	14.581	14 581	{1 170}	9443	25 0000	28.52
99 Naphthalene	128	14.710	14 710	{1 181}	33666	25.0000	26 08
100 1,2,3-Trichlorobenzene	180	14.960	14 960	{1 201}	12794	25 0000	28 63

Data File: /var/chem/hp4.1/40606d.b/4b40606.d
 Date : 06-JUN-2000 11:53
 Client ID: vst020
 Sample Info: vst020 5ml
 Volume Injected (uL): 5.0
 Column phase: DB 624

Instrument: hp4.1
 Operator: 16328
 Column diameter: 0.18

/var/chem/hp4.1/40606d.b/4b40606.d



STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40606d.b/4b40606.d
 Lab Smp Id: vstd20 Client Smp ID: vstd20
 Inj Date : 06-JUN-2000 11:53
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd20 5ml
 Misc Info : ,40606d.b
 Comment : *K_c/i*
 Method : /var/chem/hp4.i/40606d.b/8260bh2o.m
 Meth Date : 06-Jun-2000 13:26 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 11:26 Cal File: 4a40606.d
 Als bottle: 3 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 3.40
 Processing Host: hpuxcs21

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6 998	6 998	(1 000)	713945		
* 69 Chlorobenzene-d5	119	10 122	10 122	(1.000)	164774		
* 92 1,4-Dichlorobenzene-d4	152	12 458	12 458	(1.000)	262689		
\$ 39 Dibromofluoromethane	113	6.283	6 283	(0 898)	57610	100 000	110 9
\$ 43 1,2-Dichloroethane-d4	65	6 687	6 687	(0 955)	62567	100.000	113.6
\$ 59 Toluene d8	98	8 649	8.649	(0.854)	288413	100.000	113 2
\$ 80 Bromofluorobenzene	95	11.308	11.308	(1 117)	112625	100 000	113.6
1 Dichlorodifluoromethane	85	1.448	1.448	(0 207)	28300	100 000	91.75
2 Chloromethane	50	1.649	1 649	(0 236)	76585	100.000	92 82
3 Vinyl Chloride	62	1 747	1 747	(0.250)	62195	100.000	90 07
4 Bromomethane	94	2.065	2 065	(0 295)	6667	100 000	82 65
5 Chloroethane	64	2 157	2 157	(0 308)	9568	100 000	90.13
6 Trichlorofluoromethane	101	2 358	2.358	(0 337)	21049	100 000	95 44
12 1,1-Dichloroethene	96	2 988	2 988	(0 427)	46664	100 000	96 51
13 Acetone	43	3 337	3 337	(0 477)	14321	100 000	91 50

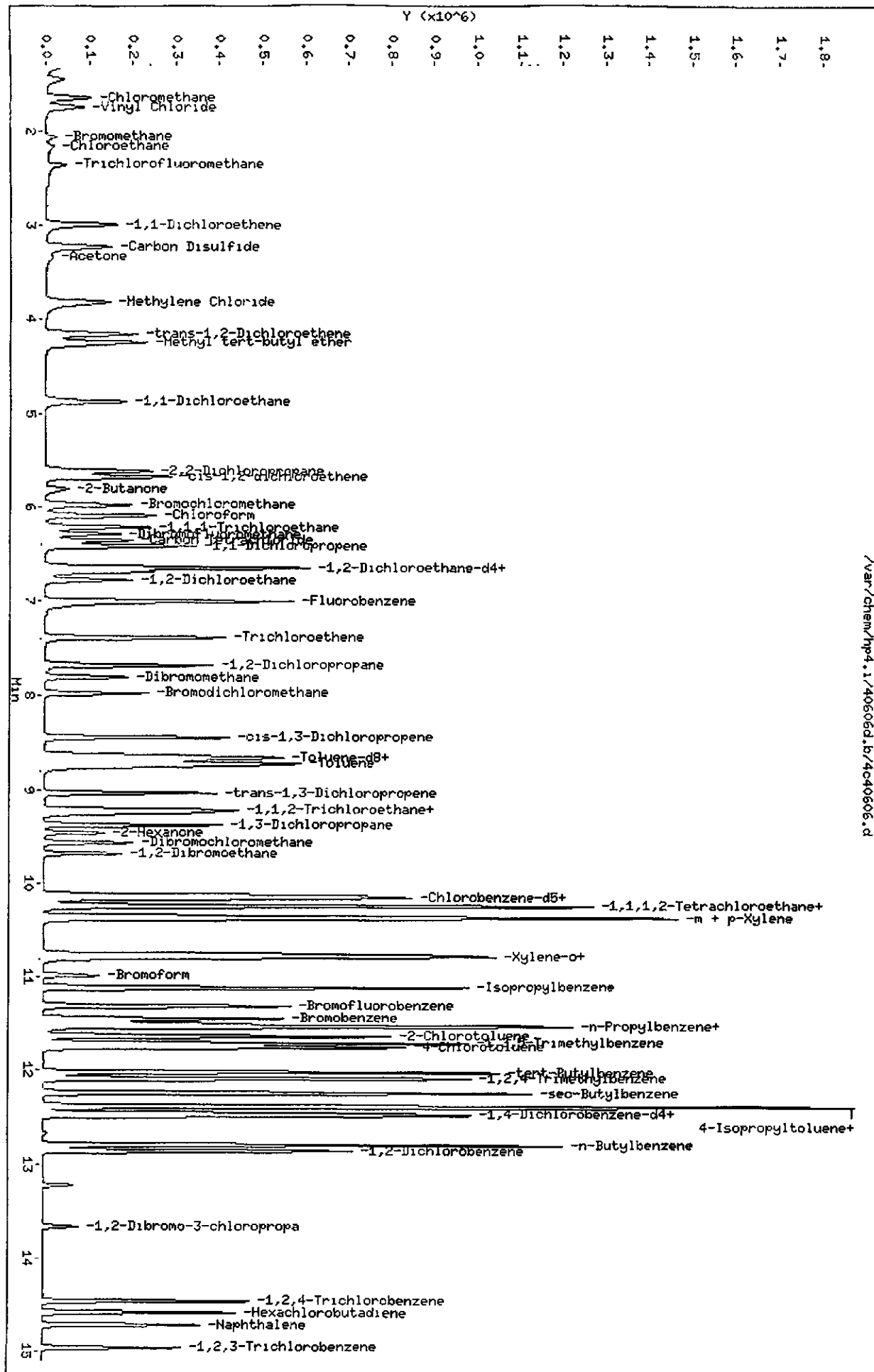
Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
15 Carbon Disulfide	76	3.227	3.227	(0.461)	142555	100.000	98.73
18 Methylene Chloride	84	3.820	3.820	(0.546)	56237	100.000	95.11
19 trans-1,2-Dichloroethene	96	4.156	4.156	(0.594)	58420	100.000	94.02
20 Methyl tert-butyl ether	73	4.247	4.247	(0.607)	132372	100.000	97.45
24 1,1-Dichloroethane	63	4.871	4.871	(0.696)	100985	100.000	92.97
27 2,2 Dichloropropane	77	5.611	5.611	(0.802)	74657	100.000	92.07
28 cis-1,2-dichloroethene	96	5.678	5.678	(0.811)	65848	100.000	91.07
M 29 1,2-Dichloroethene (total)	100				124268	200.000	184.9
30 Bromochloromethane	128	5.978	5.978	(0.854)	29082	100.000	91.85
31 2-Butanone	43	5.806	5.806	(0.830)	53969	100.000	88.69
37 Chloroform	83	6.088	6.088	(0.870)	93226	100.000	93.28
38 1,1,1-Trichloroethane	97	6.210	6.210	(0.887)	71717	100.000	91.11
40 1,1 Dichloropropene	75	6.412	6.412	(0.916)	77215	100.000	93.35
41 Carbon Tetrachloride	117	6.357	6.357	(0.908)	54948	100.000	91.14
42 Benzene	78	6.644	6.644	(0.949)	268831	100.000	94.24
45 1,2-Dichloroethane	62	6.772	6.772	(0.968)	66588	100.000	95.37
47 Trichloroethene	130	7.378	7.378	(1.054)	65077	100.000	94.34
49 1,2-Dichloropropane	63	7.671	7.671	(1.096)	65468	100.000	93.61
50 Dibromomethane	93	7.799	7.799	(1.114)	32677	100.000	92.01
53 Bromodichloromethane	83	7.971	7.971	(1.139)	62777	100.000	89.33
57 cis-1,3-Dichloropropene	75	8.435	8.435	(1.205)	97213	100.000	91.41
58 4 Methyl-2-Pentanone	43	8.619	8.619	(0.851)	52672	100.000	89.87
60 Toluene	91	8.716	8.716	(0.861)	300316	100.000	96.09
61 trans-1,3-Dichloropropene	75	9.028	9.028	(0.892)	83269	100.000	91.92
63 1,3-Dichloropropane	76	9.377	9.377	(0.926)	100317	100.000	95.34
64 1,1,2-Trichloroethane	97	9.205	9.205	(0.909)	55179	100.000	93.34
65 Tetrachloroethene	164	9.236	9.236	(0.912)	46657	100.000	94.57
66 2-Hexanone	43	9.462	9.462	(0.935)	34867	100.000	87.45
67 Dibromochloromethane	129	9.566	9.566	(0.945)	41748	100.000	87.70
68 1,2 Dibromoethane	107	9.682	9.682	(0.957)	52732	100.000	94.07
70 Chlorobenzene	112	10.153	10.153	(1.003)	188666	100.000	94.34
71 1,1,1,2-Tetrachloroethane	131	10.239	10.239	(1.011)	51215	100.000	94.37
72 Ethylbenzene	106	10.232	10.232	(1.011)	108106	100.000	97.31
73 m + p-Xylene	106	10.361	10.361	(1.024)	261213	200.000	197.4
74 Xylene o	106	10.752	10.752	(1.062)	126139	100.000	96.20
M 75 Xylenes (total)	106				387352	100.000	295.4
76 Styrene	104	10.783	10.783	(1.065)	208171	100.000	96.66
77 Bromoform	173	10.984	10.984	(1.085)	21664	100.000	83.64
78 Isopropylbenzene	105	11.107	11.107	(1.097)	312212	100.000	97.79
79 Bromobenzene	156	11.443	11.443	(0.919)	68222	100.000	89.64
81 n-Propylbenzene	120	11.522	11.522	(0.925)	97042	100.000	95.63
82 2-Chlorotoluene	126	11.626	11.626	(0.933)	77845	100.000	93.13
83 1,1,2,2-Tetrachloroethane	83	11.486	11.486	(0.922)	75655	100.000	93.19
84 1,2,3-Trichloropropane	110	11.535	11.535	(0.926)	21629	100.000	95.31
85 4 Chlorotoluene	126	11.749	11.749	(0.943)	81239	100.000	94.62
86 1,3,5-Trimethylbenzene	105	11.706	11.706	(0.940)	265220	100.000	95.37
87 tert-Butylbenzene	119	12.018	12.018	(0.965)	229420	100.000	92.84

Report Date: 06-Jun-2000 13:26

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)
=====	=====	==	=====	=====	=====	=====	=====
88 1,2,4-Trimethylbenzene	105	12.079	12.079	(0.970)	274962	100.000	96.26
89 sec-Butylbenzene	105	12.238	12.238	(0.982)	360378	100.000	95.83
90 4-Isopropyltoluene	119	12.384	12.384	(0.994)	297317	100.000	99.33
91 1,3-Dichlorobenzene	146	12.384	12.384	(0.994)	145913	100.000	96.83
93 1,4-Dichlorobenzene	146	12.482	12.482	(1.002)	146826	100.000	94.94
94 n-Butylbenzene	91	12.794	12.794	(1.027)	301969	100.000	95.49
95 1,2-Dichlorobenzene	146	12.855	12.855	(1.032)	137355	100.000	95.70
96 1,2-Dibromo-3-chloropropane	157	13.662	13.662	(1.097)	9908	100.000	96.58
97 1,2,4-Trichlorobenzene	180	14.457	14.457	(1.160)	61836	100.000	90.78
98 Hexachlorobutadiene	225	14.579	14.579	(1.170)	31657	100.000	90.01
99 Naphthalene	128	14.713	14.713	(1.181)	121189	100.000	88.39
100 1,2,3-Trichlorobenzene	180	14.958	14.958	(1.201)	40464	100.000	85.23

Data File: /var/chem/hp4.1/40606d.b/4040606.d
 Date: 06-JUN-2000 12:18
 Client ID: vstd50
 Sample Info: vstd50 5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

Instrument: hp4.1
 Operator: 16328
 Column diameter: 0.18



STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40606d.b/4c40606.d
 Lab Smp Id: vstd50 Client Smp ID: vstd50
 Inj Date : 06-JUN-2000 12:18
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd50 5ml
 Misc Info : ,40606d.b
 Comment : *Kc/d/w*
 Method : /var/chem/hp4.i/40606d.b/8260bh2o.m
 Meth Date : 06-Jun-2000 13:26 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 11:26 Cal File: 4a40606.d
 Als bottle: 4 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 3.40
 Processing Host: hpuxcs21

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96		6.998	6.998	(1.000)	726635		
* 69 Chlorobenzene-d5	119		10.122	10.122	(1.000)	170871		
* 92 1,4-Dichlorobenzene-d4	152		12.457	12.457	(1.000)	265089		
\$ 39 Dibromofluoromethane	113		6.289	6.289	(0.899)	136662	250.000	258.4
\$ 43 1,2-Dichloroethane-d4	65		6.686	6.686	(0.955)	141498	250.000	252.5
\$ 59 Toluene-d8	98		8.655	8.655	(0.855)	678594	250.000	256.7
\$ 80 Bromofluorobenzene	95		11.308	11.308	(1.117)	266355	250.000	259.0
1 Dichlorodifluoromethane	85		1.453	1.453	(0.208)	77470	250.000	246.8
2 Chloromethane	50		1.649	1.649	(0.236)	197770	250.000	235.5
3 Vinyl Chloride	62		1.741	1.741	(0.249)	170377	250.000	242.4
4 Bromomethane	94		2.065	2.065	(0.295)	18065	250.000	220.0
5 Chloroethane	64		2.163	2.163	(0.309)	25199	250.000	233.2
6 Trichlorofluoromethane	101		2.358	2.358	(0.337)	52886	250.000	235.6
12 1,1-Dichloroethene	96		2.994	2.994	(0.428)	119649	250.000	243.1
13 Acetone	43		3.349	3.349	(0.478)	37818	250.000	237.4

Data File: /var/chem/hp4.i/40606d.b/4c40606.d
Report Date: 06-Jun-2000 13:27

Page 2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
15 Carbon Disulfide	76	3.232	3.232	(0.462)	383961	250.000	261.3
18 Methylene Chloride	84	3.819	3.819	(0.546)	145986	250.000	242.6
19 trans 1,2-Dichloroethene	96	4.162	4.162	(0.595)	153324	250.000	242.5
20 Methyl tert butyl ether	73	4.247	4.247	(0.607)	362279	250.000	262.0
24 1,1-Dichloroethane	63	4.877	4.877	(0.697)	270168	250.000	244.4
27 2,2-Dichloropropane	77	5.617	5.617	(0.803)	202514	250.000	245.4
28 cis-1,2 dichloroethene	96	5.678	5.678	(0.811)	179199	250.000	243.5
M 29 1,2-Dichloroethene (total)	100				332523	500.000	486.0
30 Bromochloromethane	128	5.983	5.983	(0.855)	78659	250.000	244.1
31 2-Butanone	43	5.812	5.812	(0.831)	109703	250.000	177.1
37 Chloroform	83	6.093	6.093	(0.871)	246766	250.000	242.6
38 1,1,1 Trichloroethane	97	6.216	6.216	(0.888)	195793	250.000	244.4
40 1,1-Dichloropropene	75	6.411	6.411	(0.916)	206556	250.000	245.4
41 Carbon Tetrachloride	117	6.356	6.356	(0.908)	151879	250.000	247.5
42 Benzene	78	6.644	6.644	(0.949)	710932	250.000	244.9
45 1,2-Dichloroethane	62	6.772	6.772	(0.968)	172761	250.000	243.1
47 Trichloroethene	130	7.383	7.383	(1.055)	169808	250.000	241.9
49 1,2-Dichloropropane	63	7.671	7.671	(1.096)	173794	250.000	244.2
50 Dibromomethane	93	7.799	7.799	(1.114)	89044	250.000	246.3
53 Bromodichloromethane	83	7.970	7.970	(1.139)	176885	250.000	247.3
57 cis-1,3-Dichloropropene	75	8.435	8.435	(1.205)	269631	250.000	249.1
58 4 Methyl-2-Pentanone	43	8.618	8.618	(0.851)	159465	250.000	262.4
60 Toluene	91	8.716	8.716	(0.861)	801711	250.000	247.4
61 trans-1,3-Dichloropropene	75	9.028	9.028	(0.892)	233736	250.000	248.8
63 1,3-Dichloropropane	76	9.376	9.376	(0.926)	264361	250.000	242.3
64 1,1,2-Trichloroethane	97	9.211	9.211	(0.910)	149402	250.000	243.7
65 Tetrachloroethene	164	9.242	9.242	(0.913)	124169	250.000	242.7
66 2-Hexanone	43	9.456	9.456	(0.934)	109074	250.000	263.8
67 Dibromochloromethane	129	9.566	9.566	(0.945)	122505	250.000	248.2
68 1,2-Dibromoethane	107	9.682	9.682	(0.957)	143948	250.000	247.6
70 Chlorobenzene	112	10.153	10.153	(1.003)	502582	250.000	242.3
71 1,1,1,2-Tetrachloroethane	131	10.244	10.244	(1.012)	140698	250.000	250.0
72 Ethylbenzene	106	10.238	10.238	(1.011)	285339	250.000	247.7
73 m + p-Xylene	106	10.361	10.361	(1.024)	690683	500.000	503.4
74 Xylene-o	106	10.758	10.758	(1.063)	342541	250.000	251.9
M 75 Xylenes (total)	106				1033224	250.000	759.9
76 Styrene	104	10.782	10.782	(1.065)	578786	250.000	259.2
77 Bromoform	173	10.984	10.984	(1.085)	68068	250.000	253.4
78 Isopropylbenzene	105	11.106	11.106	(1.097)	842711	250.000	254.5
79 Bromobenzene	156	11.449	11.449	(0.919)	188559	250.000	245.5
81 n-Propylbenzene	120	11.522	11.522	(0.925)	255228	250.000	249.2
82 2-Chlorotoluene	126	11.632	11.632	(0.934)	208404	250.000	247.1
83 1,1,2,2 Tetrachloroethane	83	11.485	11.485	(0.922)	202413	250.000	247.1
84 1,2,3-Trichloropropane	110	11.534	11.534	(0.926)	57138	250.000	249.5
85 4-Chlorotoluene	126	11.748	11.748	(0.943)	215285	250.000	248.5
86 1,3,5-Trimethylbenzene	105	11.705	11.705	(0.940)	696619	250.000	248.2
87 tert-Butylbenzene	119	12.017	12.017	(0.965)	619640	250.000	248.5

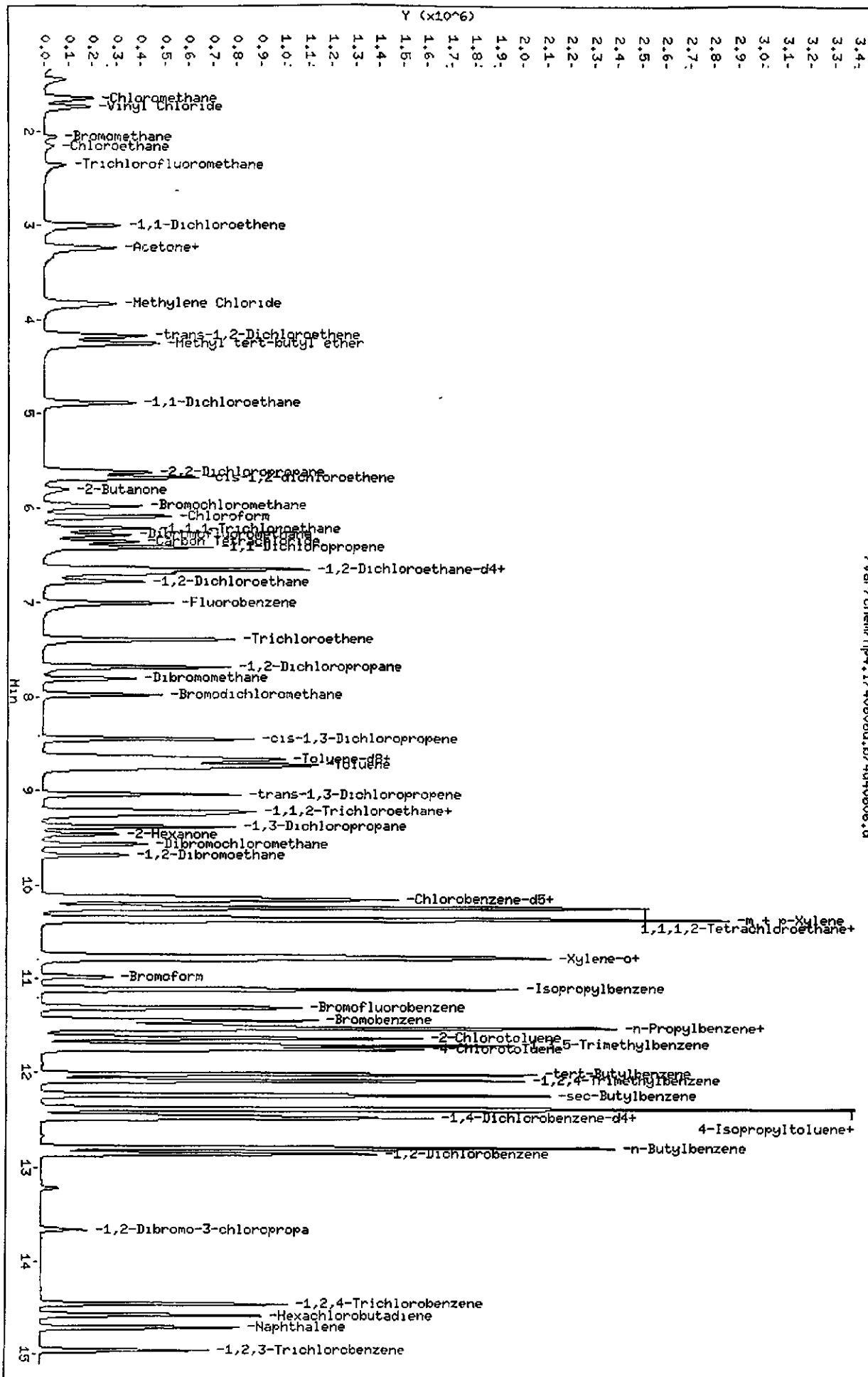
661 158

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
88 1,2,4 Trimethylbenzene	105	12.084	12.084	(0.970)	715351	250.000	248.2
89 sec-Butylbenzene	105	12.237	12.237	(0.982)	946530	250.000	249.4
90 4-Isopropyltoluene	119	12.384	12.384	(0.994)	766024	250.000	253.6
91 1,3-Dichlorobenzene	146	12.384	12.384	(0.994)	382769	250.000	251.7
93 1,4-Dichlorobenzene	146	12.482	12.482	(1.002)	379253	250.000	243.0
94 n-Butylbenzene	91	12.794	12.794	(1.027)	776005	250.000	243.2
95 1,2-Dichlorobenzene	146	12.855	12.855	(1.032)	358029	250.000	247.2
96 1,2-Dibromo-3-chloropropane	157	13.662	13.662	(1.097)	26552	250.000	256.5
97 1,2,4 Trichlorobenzene	180	14.463	14.463	(1.161)	165280	250.000	240.4
98 Hexachlorobutadiene	225	14.579	14.579	(1.170)	80652	250.000	227.2
99 Naphthalene	128	14.713	14.713	(1.181)	334725	250.000	241.9
100 1,2,3-Trichlorobenzene	180	14.958	14.958	(1.201)	112149	250.000	234.1

Data File: /var/chem/hp4.1/40606d.b/440606.d
 Date : 06-JUN-2000 12:42
 Client ID: vstd100
 Sample Info: vstd100 5ml
 Volume Injected (uL): 5.0
 Column phase: DB 624

Instrument: hp4.1
 Operator: 16328
 Column diameter: 0.18

/var/chem/hp4.1/40606d.b/440606.d



STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40606d.b/4d40606.d
 Lab Smp Id: vstd100 Client Smp ID: vstd100
 Inj Date : 06-JUN-2000 12:42
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd100 5ml
 Misc Info : ,40606d.b
 Comment : *K₁ 6/1/00*
 Method : /var/chem/hp4.i/40606d.b/8260bh2o.m
 Meth Date : 06-Jun-2000 13:27 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 11:26 Cal File: 4a40606.d
 Als bottle: 5 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 3.40
 Processing Host: hpuxcs21

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96		7.001	7.001	(1.000)	745026		
* 69 Chlorobenzene d5	119		10.125	10.125	(1.000)	174098		
* 92 1,4 Dichlorobenzene d4	152		12.461	12.461	(1.000)	260775		
\$ 39 Dibromofluoromethane	113		6.286	6.286	(0.898)	262437	500.000	484.0
\$ 43 1,2 Dichloroethane d4	65		6.690	6.690	(0.955)	275963	500.000	480.3
\$ 59 Toluene-d8	98		8.652	8.652	(0.854)	1325209	500.000	492.1
\$ 80 Bromofluorobenzene	95		11.311	11.311	(1.117)	507190	500.000	484.1
1 Dichlorodifluoromethane	85		1.450	1.450	(0.207)	163690	500.000	508.5
2 Chloromethane	50		1.652	1.652	(0.236)	398018	500.000	462.3
3 Vinyl Chloride	62		1.744	1.744	(0.249)	353867	500.000	491.1
4 Bromomethane	94		2.062	2.062	(0.294)	41525	500.000	493.3
5 Chloroethane	64		2.160	2.160	(0.308)	51622	500.000	466.0
6 Trichlorofluoromethane	101		2.361	2.361	(0.337)	112567	500.000	489.1
12 1,1-Dichloroethene	96		3.003	3.003	(0.429)	243830	500.000	483.2
13 Acetone	43		3.333	3.333	(0.476)	77513	500.000	474.6

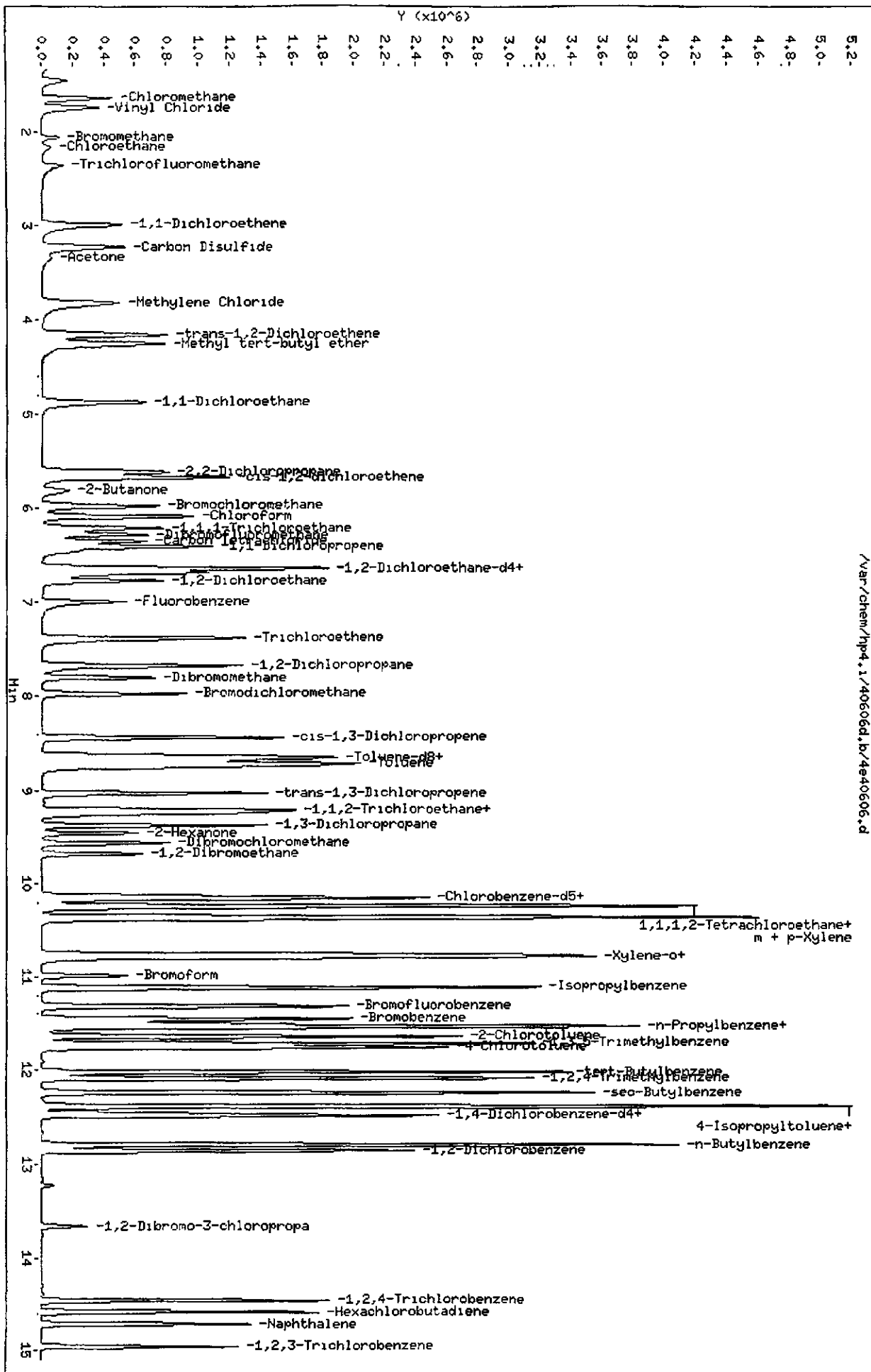
Data File: /var/chem/hp4.i/40606d.b/4d40606.d
Report Date: 06-Jun-2000 13:27

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	====	==	=====	=====	=====	=====	=====
15 Carbon Disulfide	76	3.242	3.242	(0.463)	790980	500.000	525.0
18 Methylene Chloride	84	3.822	3.822	(0.546)	296636	500.000	480.8
19 trans-1,2-Dichloroethene	96	4.165	4.165	(0.595)	318507	500.000	491.2
20 Methyl tert butyl ether	73	4.250	4.250	(0.607)	766930	500.000	541.1
24 1,1-Dichloroethane	63	4.880	4.880	(0.697)	558364	500.000	492.6
27 2,2-Dichloropropane	77	5.620	5.620	(0.803)	426060	500.000	503.5
28 cis 1,2-dichloroethene	96	5.681	5.681	(0.811)	374402	500.000	496.2
M 29 1,2-Dichloroethene (total)	100				692909	1000.00	987.8
30 Bromochloromethane	128	5.980	5.980	(0.854)	163682	500.000	495.4
31 2-Butanone	43	5.809	5.809	(0.830)	200399	500.000	315.6
37 Chloroform	83	6.090	6.090	(0.870)	514240	500.000	493.0
38 1,1,1-Trichloroethane	97	6.219	6.219	(0.888)	411509	500.000	501.0
40 1,1-Dichloropropene	75	6.414	6.414	(0.916)	430454	500.000	498.7
41 Carbon Tetrachloride	117	6.359	6.359	(0.908)	322357	500.000	512.4
42 Benzene	78	6.647	6.647	(0.949)	1464299	500.000	491.9
45 1,2-Dichloroethane	62	6.775	6.775	(0.968)	354464	500.000	486.5
47 Trichloroethene	130	7.386	7.386	(1.055)	357698	500.000	496.9
49 1,2-Dichloropropane	63	7.674	7.674	(1.096)	361701	500.000	495.6
50 Dibromomethane	93	7.796	7.796	(1.113)	183337	500.000	494.7
53 Bromodichloromethane	83	7.967	7.967	(1.138)	376548	500.000	513.4
57 cis-1,3-Dichloropropene	75	8.438	8.438	(1.205)	574516	500.000	517.7
58 4-Methyl-2-Pentanone	43	8.621	8.621	(0.851)	350986	500.000	566.8
60 Toluene	91	8.719	8.719	(0.861)	1618296	500.000	490.1
61 trans-1,3-Dichloropropene	75	9.031	9.031	(0.892)	495569	500.000	517.8
63 1,3-Dichloropropane	76	9.379	9.379	(0.926)	549128	500.000	494.0
64 1,1,2-Trichloroethane	97	9.208	9.208	(0.909)	310195	500.000	496.6
65 Tetrachloroethene	164	9.239	9.239	(0.912)	260364	500.000	499.5
66 2-Hexanone	43	9.459	9.459	(0.934)	243744	500.000	578.6
67 Dibromochloromethane	129	9.569	9.569	(0.945)	269388	500.000	535.6
68 1,2-Dibromoethane	107	9.679	9.679	(0.956)	298846	500.000	504.6
70 Chlorobenzene	112	10.156	10.156	(1.003)	1036501	500.000	490.5
71 1,1,1,2-Tetrachloroethane	131	10.241	10.241	(1.011)	289484	500.000	504.8
72 Ethylbenzene	106	10.235	10.235	(1.011)	573240	500.000	488.4
73 m + p-Xylene	106	10.364	10.364	(1.024)	1344023	1000.00	961.4
74 Xylene o	106	10.755	10.755	(1.062)	694940	500.000	501.6
M 75 Xylenes (total)	106				2038963	500.000	1472
76 Styrene	104	10.785	10.785	(1.065)	1172818	500.000	515.4
77 Bromoform	173	10.981	10.981	(1.085)	155921	500.000	569.7
78 Isopropylbenzene	105	11.109	11.109	(1.097)	1674721	500.000	496.5
79 Bromobenzene	156	11.446	11.446	(0.919)	383204	500.000	507.2
81 n-Propylbenzene	120	11.525	11.525	(0.925)	499384	500.000	495.7
82 2-Chlorotoluene	126	11.635	11.635	(0.934)	409269	500.000	493.2
83 1,1,2,2-Tetrachloroethane	83	11.489	11.489	(0.922)	410671	500.000	509.6
84 1,2,3-Trichloropropane	110	11.537	11.537	(0.926)	114746	500.000	509.4
85 4-Chlorotoluene	126	11.751	11.751	(0.943)	413800	500.000	485.5
86 1,3,5-Trimethylbenzene	105	11.709	11.709	(0.940)	1355604	500.000	491.0
87 tert-Butylbenzene	119	12.014	12.014	(0.964)	1219099	500.000	497.0

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
88 1,2,4 Trimethylbenzene	105	12.081	12.081	(0.970)	1389420	500.000	490.0
89 sec-Butylbenzene	105	12.240	12.240	(0.982)	1831646	500.000	490.6
90 4 Isopropyltoluene	119	12.387	12.387	(0.994)	1445300	500.000	486.4
91 1,3-Dichlorobenzene	146	12.381	12.381	(0.994)	715958	500.000	478.6
93 1,4-Dichlorobenzene	146	12.485	12.485	(1.002)	733582	500.000	477.8
94 n-Butylbenzene	91	12.797	12.797	(1.027)	1531697	500.000	487.9
95 1,2-Dichlorobenzene	146	12.858	12.858	(1.032)	697072	500.000	489.2
96 1,2-Dibromo-3-chloropropane	157	13.659	13.659	(1.096)	60101	500.000	590.1
97 1,2,4-Trichlorobenzene	180	14.460	14.460	(1.160)	359017	500.000	531.0
98 Hexachlorobutadiene	225	14.582	14.582	(1.170)	174599	500.000	500.1
99 Naphthalene	128	14.710	14.710	(1.181)	773235	500.000	568.1
100 1,2,3-Trichlorobenzene	180	14.961	14.961	(1.201)	248361	500.000	527.0

Data File: /var/chem/hp4.1/40606d.b/4e40606.d
 Date: 06-JUN-2000 13:09
 Client ID: vstd200
 Sample Info: vstd200 5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

Instrument: hp4.1
 Operator: 16328
 Column diameter: 0.18



STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40606d.b/4e40606.d
 Lab Smp Id: vstd200 Client Smp ID: vstd200
 Inj Date : 06-JUN-2000 13:09
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd200 5ml
 Misc Info : ,40606d.b
 Comment :
 Method : /var/chem/hp4.i/40606d.b/8260bh2o.m
 Meth Date : 06-Jun-2000 13:27 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 13:09 Cal File: 4e40606.d
 Als bottle: 2 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 3.40
 Processing Host: hpuxcs21

Ks 6/6/00

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	Final Volume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	CAL-AMT (ng)	ON COL (ng)
*****	----	==	=====	=====	=====	=====
* 46 Fluorobenzene	96	7.000	7.000	(1.000)	749614	.
* 69 Chlorobenzene-d5	119	10.130	10.130	(1.000)	178155	
* 92 1,4-Dichlorobenzene-d4	152	12.459	12.459	(1.000)	247348	
\$ 39 Dibromofluoromethane	113	6.290	6.290	(0.899)	497464	1000.00 911.9
\$ 43 1,2-Dichloroethane-d4	65	6.688	6.688	(0.955)	510311	1000.00 882.8
\$ 59 Toluene-d8	98	8.650	8.650	(0.854)	2438053	1000.00 884.7
\$ 80 Bromofluorobenzene	95	11.309	11.309	(1.116)	900917	1000.00 840.4
1 Dichlorodifluoromethane	85	1.455	1.455	(0.208)	316550	1000.00 977.4
2 Chloromethane	50	1.644	1.644	(0.235)	781533	1000.00 902.1
3 Vinyl Chloride	62	1.748	1.748	(0.250)	720178	1000.00 993.3
4 Bromomethane	94	2.066	2.066	(0.295)	90764	1000.00 1072
5 Chloroethane	64	2.158	2.158	(0.308)	104744	1000.00 939.7
6 Trichlorofluoromethane	101	2.366	2.366	(0.338)	228931	1000.00 988.6
12 1,1-Dichloroethene	96	2.989	2.989	(0.427)	440822	1000.00 868.3
13 Acetone	43	3.350	3.350	(0.479)	152391	1000.00 927.3

Data File: /var/chem/hp4.i/40606d.b/4e40606.d
Report Date: 06-Jun-2000 13:27

Page 2

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ng)	ON-COL (ng)
*****	====	==	*****	*****	*****	*****	*****
15 Carbon Disulfide	76	3 228	3 228	(0.461)	1433632	1000 00	945 6
18 Methylene Chloride	84	3 821	3 821	(0.546)	554818	1000.00	893 7
19 trans-1,2-Dichloroethene	96	4 157	4 157	(0.594)	607129	1000 00	930 7
20 Methyl tert-butyl ether	73	4 255	4 255	(0.608)	1405887	1000 00	985 8
24 1,1-Dichloroethane	63	4.878	4 878	(0.697)	1062678	1000 00	931 8
27 2,2-Dichloropropane	77	5.618	5.618	(0.803)	819273	1000.00	962.3
28 cis 1,2-Dichloroethene	96	5 679	5 679	(0.811)	710367	1000.00	935 7
M 29 1,2-Dichloroethene (total)	100				1317496	2000 00	1867
30 Bromochloromethane	128	5 979	5 979	(0.854)	310176	1000 00	933 0
31 2-Butanone	43	5 820	5 820	(0.831)	388408	1000.00	607.9
37 Chloroform	83	6 095	6 095	(0.871)	968957	1000.00	923 3
38 1,1,1-Trichloroethane	97	6 217	6 217	(0.888)	770702	1000 00	932 5
40 1,1-Dichloropropene	75	6 413	6 413	(0.916)	788536	1000.00	907 9
41 Carbon Tetrachloride	117	6 358	6.358	(0.908)	602002	1000 00	951 0
42 Benzene	78	6 645	6 645	(0.949)	2682713	1000 00	895 6
45 1,2 Dichloroethane	62	6 773	6 773	(0.968)	628642	1000 00	857 5
47 Trichloroethene	130	7.385	7 385	(1.055)	668706	1000 00	923 3
49 1,2-Dichloropropane	63	7.672	7 672	(1.096)	682292	1000.00	929.1
50 Dibromomethane	93	7 800	7 800	(1.114)	333083	1000 00	893 2
53 Bromodichloromethane	83	7.972	7 972	(1.139)	711640	1000 00	964 4
57 cis-1,3-Dichloropropene	75	8.436	8 436	(1.205)	1080311	1000 00	967.5
58 4-Methyl-2-Pentanone	43	8.626	8.626	(0.852)	696650	1000 00	1099
60 Toluene	91	8 717	8.717	(0.861)	2871938	1000 00	849 9
61 trans-1,3-Dichloropropene	75	9 035	9.035	(0.892)	910834	1000 00	930 0
63 1,3-Dichloropropane	76	9 378	9 378	(0.926)	980136	1000 00	861.6
64 1,1,2-Trichloroethane	97	9.213	9.213	(0.909)	557381	1000.00	872.0
65 Tetrachloroethene	164	9 243	9.243	(0.912)	471324	1000 00	883 6
66 2-Hexanone	43	9 457	9 457	(0.934)	470160	1000 00	1091
67 Dibromochloromethane	129	9 567	9 567	(0.944)	510437	1000 00	991 8
68 1,2 Dibromoethane	107	9.683	9.683	(0.956)	534214	1000 00	881 4
70 Chlorobenzene	112	10 154	10.154	(1.002)	1880491	1000 00	869 7
71 1,1,1,2-Tetrachloroethane	131	10 246	10 246	(1.011)	505559	1000.00	861 6
72 Ethylbenzene	106	10.240	10 240	(1.011)	979097	1000 00	815.1
73 m + p-Xylene	106	10.362	10 362	(1.023)	2232892	2000 00	1561
74 Xylene-o	106	10.759	10.759	(1.062)	1198279	1000 00	845 2
M 75 Xylenes (total)	106				3431171	1000 00	2420
76 Styrene	104	10 784	10 784	(1.065)	1952281	1000 00	838 4
77 Bromoform	173	10 985	10 985	(1.084)	289624	1000 00	1034
78 Isopropylbenzene	105	11.108	11 108	(1.097)	2845240	1000 00	824 3
79 Bromobenzene	156	11.450	11.450	(0.919)	685004	1000 00	955 8
81 n-Propylbenzene	120	11 523	11 523	(0.925)	819536	1000 00	857 7
82 2-Chlorotoluene	126	11 633	11 633	(0.934)	702067	1000 00	892 0
83 1,1,2,2-Tetrachloroethane	83	11 487	11 487	(0.922)	669838	1000 00	876 3
84 1,2,3-Trichloropropane	110	11.536	11 536	(0.926)	181053	1000 00	847.3
85 4-Chlorotoluene	126	11 750	11 750	(0.943)	678330	1000 00	839 0
86 1,3,5-Trimethylbenzene	105	11 707	11 707	(0.940)	2235634	1000.00	853 8
87 tert-Butylbenzene	119	12 019	12 019	(0.965)	2053222	1000 00	882.4

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
	=====	==	=====	=====	=====	=====	=====
88 1,2,4 Trimethylbenzene	105	12 086	12 086	(0.970)	2266686	1000 00	842 7
89 sec-Butylbenzene	105	12 239	12 239	(0.982)	2998348	1000 00	846 7
90 4-Isopropyltoluene	119	12.385	12.385	(0.994)	2208468	1000.00	783.6
91 1,3 Dichlorobenzene	146	12 385	12 385	(0.994)	1129662	1000.00	796 2
93 1,4-Dichlorobenzene	146	12 483	12.483	(1.002)	1236429	1000 00	849 1
94 n-Butylbenzene	91	12 795	12 795	(1.027)	2631131	1000 00	883 7
95 1,2 Dichlorobenzene	146	12 856	12.856	(1.032)	1190070	1000 00	880 5
96 1,2-Dibromo-3-chloropropane	157	13 663	13 663	(1.097)	98242	1000.00	1017
97 1,2,4 Trichlorobenzene	180	14 458	14 458	(1.160)	660029	1000 00	1029
98 Hexachlorobutadiene	225	14.580	14.580	(1.170)	347670	1000 00	1050
99 Naphthalene	128	14 715	14.715	(1.181)	1250646	1000.00	968.8
100 1,2,3-Trichlorobenzene	180	14 959	14 959	(1.201)	452425	1000 00	1012

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C0F140185

Instrument ID: HP4 Calibration Date: 06/18/00 Time: 0717

Lab File ID: CC40618 Init. Calib. Date(s): 06/06/00 06/06/00

Heated Purge: (Y/N) N Init. Calib. Times: 1126 1309

GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Dichlorodifluoromethane	0.108	0.112	0.01	3.7	50.0
Chloromethane	0.289	0.213	0.1	26.3	50.0
Vinyl Chloride	0.242	0.201	0.01	16.9	20.0
Bromomethane	0.028	0.014	0.01	50.0	50.0
Chloroethane	0.037	0.034	0.01	8.1	50.0
Trichlorofluoromethane	0.077	0.072	0.01	6.5	50.0
1,1-Dichloroethene	0.169	0.142	0.01	16.0	20.0
Methylene Chloride	0.207	0.175	0.01	15.4	50.0
trans-1,2-Dichloroethene	0.217	0.197	0.01	9.2	50.0
1,1-Dichloroethane	0.380	0.336	0.1	11.6	50.0
cis-1,2-dichloroethene	0.253	0.227	0.01	10.3	50.0
Chloroform	0.350	0.315	0.01	10.0	20.0
Bromochloromethane	0.111	0.099	0.01	10.8	50.0
1,1,1-Trichloroethane	0.275	0.258	0.01	6.2	50.0
Carbon Tetrachloride	0.211	0.204	0.01	3.3	50.0
1,2-Dichloroethane	0.245	0.223	0.01	9.0	50.0
Benzene	0.999	0.885	0.01	11.4	50.0
Trichloroethene	0.242	0.218	0.01	9.9	50.0
1,2-Dichloropropane	0.245	0.215	0.01	12.2	20.0
Bromodichloromethane	0.246	0.230	0.01	6.5	50.0
cis-1,3-Dichloropropene	0.372	0.334	0.01	10.2	50.0
Toluene	4.742	4.258	0.01	10.2	20.0
trans-1,3-Dichloropropene	1.374	1.228	0.01	10.6	50.0
1,1,2-Trichloroethane	0.897	0.785	0.01	12.5	50.0
Tetrachloroethene	0.749	0.685	0.01	8.5	50.0
Dibromochloromethane	0.722	0.694	0.01	3.9	50.0
Chlorobenzene	3.034	2.693	0.3	11.2	50.0
Ethylbenzene	1.686	1.497	0.01	11.2	20.0
Styrene	3.267	3.097	0.01	5.2	50.0
Bromoform	0.393	0.375	0.1	4.6	50.0
1,1,2,2-Tetrachloroethane	0.773	0.654	0.3	15.4	50.0
1,3-Dichlorobenzene	1.434	1.336	0.01	6.8	50.0
1,4-Dichlorobenzene	1.472	1.327	0.01	9.8	50.0
1,2-Dichlorobenzene	1.366	1.228	0.01	10.1	50.0
Dibromomethane	0.124	0.111	0.01	10.5	50.0
1,2-Dibromoethane	0.850	0.761	0.01	10.5	50.0
1,1,1,2-Tetrachloroethane	0.823	0.793	0.01	3.6	50.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C0F140185

Instrument ID: HP4 Calibration Date: 06/18/00 Time: 0717

Lab File ID: CC40618 Init. Calib. Date(s): 06/06/00 06/06/00

Heated Purge: (Y/N) N Init. Calib. Times: 1126 1309

GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
1,2,3-Trichloropropane	0.216	0.191	0.01	11.6	50.0
1,2-Dibromo-3-chloropropane	0.097	0.071	0.01	26.8	50.0
2,2-Dichloropropane	0.284	0.261	0.01	8.1	50.0
1,1-Dichloropropene	0.290	0.263	0.01	9.3	50.0
1,3-Dichloropropane	1.596	1.384	0.01	13.3	50.0
n-Propylbenzene	0.966	0.913	0.01	5.5	50.0
Bromobenzene	0.724	0.677	0.01	6.5	50.0
1,3,5-Trimethylbenzene	2.647	2.525	0.01	4.6	50.0
2-Chlorotoluene	0.796	0.740	0.01	7.0	50.0
4-Chlorotoluene	0.817	0.758	0.01	7.2	50.0
tert-Butylbenzene	2.351	2.215	0.01	5.8	50.0
1,2,4-Trimethylbenzene	2.718	2.559	0.01	5.8	50.0
sec-Butylbenzene	3.579	3.337	0.01	6.8	50.0
4-Isopropyltoluene	2.849	2.708	0.01	4.9	50.0
n-Butylbenzene	3.009	2.701	0.01	10.2	50.0
1,2,4-Trichlorobenzene	0.648	0.446	0.01	31.2	50.0
Hexachlorobutadiene	0.335	0.270	0.01	19.4	50.0
Naphthalene	1.305	0.766	0.01	41.3	50.0
1,2,3-Trichlorobenzene	0.452	0.236	0.01	47.8	50.0
Acetone	0.055	0.049	0.01	10.9	50.0
Carbon Disulfide	0.505	0.458	0.01	9.3	50.0
2-Butanone	0.213	0.141	0.01	33.8	50.0
4-Methyl-2-Pentanone	0.889	0.844	0.01	5.1	50.0
2-Hexanone	0.605	0.576	0.01	4.8	50.0
Methyl tert-butyl ether	0.476	0.459	0.01	3.6	50.0
Isopropylbenzene	4.844	4.457	0.01	8.0	50.0
1,2-Dichloroethene (total)	0.235	0.212	0.01	9.8	50.0
Xylenes (total)	1.990	1.787	0.01	10.2	50.0
=====	=====	=====	=====	=====	=====
Dibromofluoromethane	0.182	0.183	0.01	0.5	50.0
1,2-Dichloroethane-d4	0.193	0.187	0.01	3.1	50.0
Toluene-d8	3.867	3.871	0.01	0.1	50.0
Bromofluorobenzene	1.504	1.614	0.01	7.3	50.0

Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\CC40618.D
Report Date: 06/18/2000

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: hp4.i
Lab File ID: CC40618.D
Analysis Type: WATER

Injection Date: 18-JUN-2000 07:17
Lab Sample ID: vstd50
Method File: \\qpitpa02\d\chem\hp4.i\40618d.b\8260bh

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
154 Xylenes (total)	750.0000	680.7700	9.2	50.0
153 1,2-Dichloroethene (total)	500.0000	450.1496	10.0	50.0
1 Dichlorodifluoromethane	250.0000	260.5071	4.2	50.0
2 Chloromethane	250.0000	184.6271	26.1	50.0
3 Vinyl Chloride	250.0000	207.5682	17.0	20.0
4 Bromomethane	250.0000	128.3956	48.6	50.0
5 Chloroethane	250.0000	226.1614	9.5	50.0
6 Trichlorofluoromethane	250.0000	232.4015	7.0	50.0
9 1,1-Dichloroethene	250.0000	209.6971	16.1	20.0
107 Carbon Disulfide	250.0000	226.6858	9.3	50.0
106 Acetone	250.0000	224.5452	10.2	50.0
10 Methylene Chloride	250.0000	211.8561	15.3	50.0
13 trans-1,2-Dichloroethene	250.0000	226.3547	9.5	50.0
134 Methyl tert-butyl ether	250.0000	241.2704	3.5	50.0
15 1,1-Dichloroethane	250.0000	221.0463	11.6	50.0
74 2,2-Dichloropropane	250.0000	230.1796	7.9	50.0
17 cis-1,2-dichloroethene	250.0000	223.9750	10.4	50.0
108 2-Butanone	250.0000	165.3982	33.8	50.0
19 Bromochloromethane	250.0000	224.3306	10.3	50.0
18 Chloroform	250.0000	225.1397	9.9	20.0
20 1,1,1-Trichloroethane	250.0000	234.0744	6.4	50.0
149 Dibromofluoromethane	250.0000	251.7260	0.7	50.0
21 Carbon Tetrachloride	250.0000	242.2140	3.1	50.0
75 1,1-Dichloropropene	250.0000	227.3112	9.1	50.0
24 Benzene	250.0000	221.4882	11.4	50.0
150 1,2-Dichloroethane-d4	250.0000	242.5861	3.0	50.0
23 1,2-Dichloroethane	250.0000	228.2156	8.7	50.0
137 Fluorobenzene	250.0000	250.0000	0.0	50.0
26 Trichloroethene	250.0000	225.6636	9.7	50.0
27 1,2-Dichloropropane	250.0000	219.2367	12.3	20.0
60 Dibromomethane	250.0000	223.0594	10.8	50.0
28 Bromodichloromethane	250.0000	234.2375	6.3	50.0
31 cis-1,3-Dichloropropene	250.0000	224.4452	10.2	50.0
110 4-Methyl-2-Pentanone	250.0000	237.2835	5.1	50.0
151 Toluene-d8	250.0000	250.2407	0.1	50.0
33 Toluene	250.0000	224.5047	10.2	20.0
34 trans-1,3-Dichloropropene	250.0000	223.2861	10.7	50.0
36 1,1,2-Trichloroethane	250.0000	218.9092	12.4	50.0
37 Tetrachloroethene	250.0000	228.8934	8.4	50.0

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 Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\CC40618.D
 Report Date: 06/18/2000

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

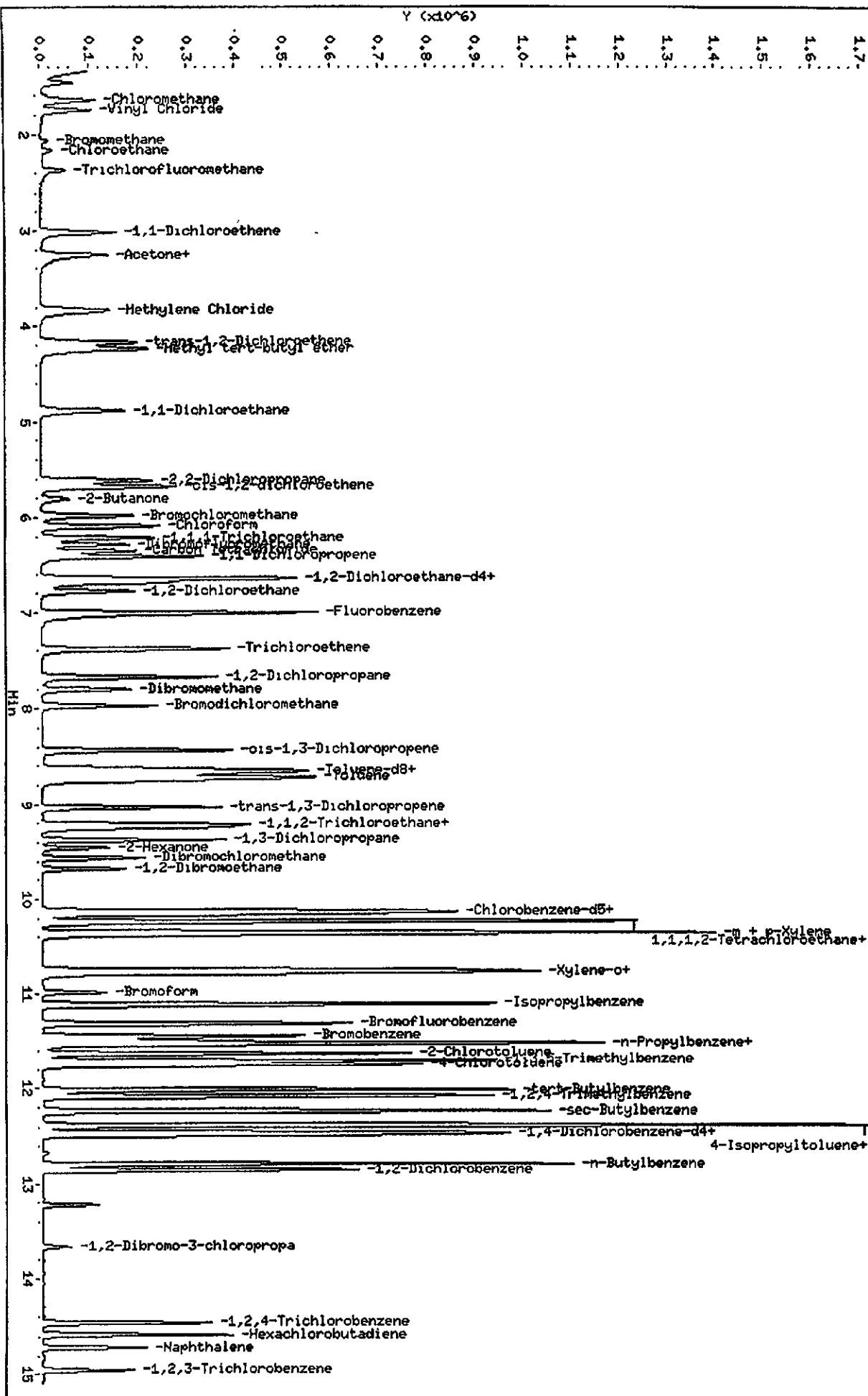
Instrument ID: hp4.i
 Lab File ID: CC40618.D
 Analysis Type: WATER

Injection Date: 18-JUN-2000 07:17
 Lab Sample ID: vstd50
 Method File: \\qpitpa02\d\chem\hp4.i\40618d.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
77 1,3-Dichloropropane	250.0000	216.8304	13.3	50.0
111 2-Hexanone	250.0000	238.0436	4.8	50.0
38 Dibromochloromethane	250.0000	240.2728	3.9	50.0
63 1,2-Dibromoethane	250.0000	223.7190	10.5	50.0
101 Chlorobenzene-d5	250.0000	250.0000	0.0	50.0
40 Chlorobenzene	250.0000	221.8607	11.3	50.0
41 Ethylbenzene	250.0000	222.0192	11.2	20.0
64 1,1,1,2-Tetrachloroethane	250.0000	240.8411	3.7	50.0
0 m + p-Xylene	500.0000	452.0497	9.6	50.0
0 Xylene-o	250.0000	224.5954	10.2	50.0
44 Styrene	250.0000	236.9239	5.2	50.0
45 Bromoform	250.0000	238.4535	4.6	50.0
144 Isopropylbenzene	250.0000	230.0340	8.0	50.0
152 Bromofluorobenzene	250.0000	268.2476	7.3	50.0
84 Bromobenzene	250.0000	233.6110	6.6	50.0
46 1,1,1,2,2-Tetrachloroethane	250.0000	211.7633	15.3	50.0
83 n-Propylbenzene	250.0000	236.4235	5.4	50.0
65 1,2,3-Trichloropropane	250.0000	221.0956	11.6	50.0
86 2-Chlorotoluene	250.0000	232.6314	6.9	50.0
85 1,3,5-Trimethylbenzene	250.0000	238.4962	4.6	50.0
87 4-Chlorotoluene	250.0000	231.8895	7.2	50.0
88 tert-Butylbenzene	250.0000	235.4425	5.8	50.0
89 1,2,4-Trimethylbenzene	250.0000	235.3328	5.9	50.0
90 sec-Butylbenzene	250.0000	233.1238	6.8	50.0
91 4-Isopropyltoluene	250.0000	237.6523	4.9	50.0
48 1,3-Dichlorobenzene	250.0000	232.8548	6.9	50.0
102 1,4-Dichlorobenzene-d4	250.0000	250.0000	0.0	50.0
49 1,4-Dichlorobenzene	250.0000	225.4263	9.8	50.0
94 n-Butylbenzene	250.0000	224.3901	10.2	50.0
50 1,2-Dichlorobenzene	250.0000	224.8412	10.1	50.0
69 1,2-Dibromo-3-chloropropane	250.0000	180.9277	27.6	50.0
95 1,2,4-Trichlorobenzene	250.0000	172.2059	31.1	50.0
96 Hexachlorobutadiene	250.0000	201.4570	19.4	50.0
97 Naphthalene	250.0000	146.7425	41.3	50.0
98 1,2,3-Trichlorobenzene	250.0000	130.5468	47.8	50.0

Data File: \\pptipa02\chem\hp4.1\40618d.b\0040618.D
 Date: 18-JUN-2000 07:17
 Client ID: vstd50
 Sample Info: vstd50 Sm1
 Volume Injected (uL): 5.0
 Column phase: DB 624

Instrument: hp4.1
 Operator: 16328
 Column diameter: 0.18



661 172

Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\CC40618.D
Report Date: 18-Jun-2000 07:34

Page 1

STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp4.i\40618d.b\CC40618.D
 Lab Smp Id: vstd50 Client Smp ID: vstd50
 Inj Date : 18-JUN-2000 07:17 MS Autotune Date: 16-DEC-1999 09:07
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd50 5ml
 Misc Info : ,40618d.b
 Comment :
 Method : \\qpitpa02\d\chem\hp4.i\40618d.b\8260bh2o.m
 Meth Date : 18-Jun-2000 07:34 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 4 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 4.04
 Processing Host: PITPC077

K₆/K₁ω

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	7.004	7.004	(1.000)	753124	250.000	
* 69 Chlorobenzene-d5	119	10.128	10.128	(1.000)	180708	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.457	12.457	(1.000)	263028	250.000	
\$ 39 Dibromofluoromethane	113	6.289	6.289	(0.898)	137965	250.000	251.7
\$ 43 1,2-Dichloroethane-d4	65	6.686	6.686	(0.955)	140891	250.000	242.6
\$ 59 Toluene-d8	98	8.655	8.655	(0.855)	699492	250.000	250.2
\$ 80 Bromofluorobenzene	95	11.308	11.308	(1.116)	291683	250.000	268.2
1 Dichlorodifluoromethane	85	1.453	1.453	(0.208)	84764	250.000	260.5
2 Chloromethane	50	1.643	1.643	(0.235)	160694	250.000	184.6
3 Vinyl Chloride	62	1.741	1.741	(0.249)	151191	250.000	207.6
4 Bromomethane	94	2.059	2.059	(0.294)	10925	250.000	128.4
5 Chloroethane	64	2.163	2.163	(0.309)	25326	250.000	226.2
6 Trichlorofluoromethane	101	2.364	2.364	(0.338)	54069	250.000	232.4
12 1,1-Dichloroethene	96	3.018	3.018	(0.431)	106954	250.000	209.7
13 Acetone	43	3.330	3.330	(0.475)	37073	250.000	224.5

Data File: \\gpitpa02\d\chem\hp4.i\40618d.b\CC40618.D
Report Date: 18-Jun-2000 07:34

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
-----	----	--	-----	-----	-----	-----	-----
15 Carbon Disulfide	76	3.257	3.257	(0.465)	345275	250.000	226.7
18 Methylene Chloride	84	3.825	3.825	(0.546)	132135	250.000	211.8
19 trans-1,2-Dichloroethene	96	4.174	4.174	(0.596)	148356	250.000	226.4
20 Methyl tert-butyl ether	73	4.241	4.241	(0.606)	345703	250.000	241.3
24 1,1-Dichloroethane	63	4.883	4.883	(0.697)	253274	250.000	221.0
27 2,2-Dichloropropane	77	5.623	5.623	(0.803)	196891	250.000	230.2
28 cis-1,2-dichloroethene	96	5.684	5.684	(0.811)	170834	250.000	224.0
M 29 1,2-Dichloroethene (total)	100				319191	500.000	450.1
30 Bromochloromethane	128	5.983	5.983	(0.854)	74926	250.000	224.3
31 2-Butanone	43	5.806	5.806	(0.829)	106173	250.000	165.4
37 Chloroform	83	6.093	6.093	(0.870)	237367	250.000	225.1
38 1,1,1-Trichloroethane	97	6.216	6.216	(0.887)	194366	250.000	234.1
40 1,1-Dichloropropene	75	6.417	6.417	(0.916)	198340	250.000	227.3
41 Carbon Tetrachloride	117	6.356	6.356	(0.907)	154043	250.000	242.2
42 Benzene	78	6.650	6.650	(0.949)	666516	250.000	221.5
45 1,2-Dichloroethane	62	6.772	6.772	(0.967)	168090	250.000	228.2
47 Trichloroethene	130	7.383	7.383	(1.054)	164206	250.000	225.7
49 1,2-Dichloropropane	63	7.671	7.671	(1.095)	161747	250.000	219.2
50 Dibromomethane	93	7.799	7.799	(1.113)	83568	250.000	223.0
53 Bromodichloromethane	83	7.970	7.970	(1.138)	173646	250.000	234.2
57 cis-1,3-Dichloropropene	75	8.435	8.435	(1.204)	251789	250.000	224.4
58 4-Methyl-2-Pentanone	43	8.618	8.618	(0.851)	152524	250.000	237.3
60 Toluene	91	8.722	8.722	(0.861)	769502	250.000	224.5
61 trans-1,3-Dichloropropene	75	9.028	9.028	(0.891)	221827	250.000	223.3
63 1,3-Dichloropropane	76	9.376	9.376	(0.926)	250202	250.000	216.8
64 1,1,2-Trichloroethane	97	9.211	9.211	(0.909)	141931	250.000	218.9
65 Tetrachloroethene	164	9.236	9.236	(0.912)	123842	250.000	228.9
66 2-Hexanone	43	9.456	9.456	(0.934)	104084	250.000	238.0
67 Dibromochloromethane	129	9.566	9.566	(0.944)	125430	250.000	240.3
68 1,2-Dibromoethane	107	9.682	9.682	(0.956)	137533	250.000	223.7
70 Chlorobenzene	112	10.153	10.153	(1.002)	486582	250.000	221.9
71 1,1,1,2-Tetrachloroethane	131	10.244	10.244	(1.011)	143342	250.000	240.8
72 Ethylbenzene	106	10.238	10.238	(1.011)	270508	250.000	222.0
73 m + p-Xylene	106	10.361	10.361	(1.023)	655965	500.000	452.0
74 Xylene-o	106	10.758	10.758	(1.062)	322961	250.000	224.6
M 75 Xylenes (total)	106				978926	250.000	680.8
76 Styrene	104	10.782	10.782	(1.065)	559585	250.000	236.9
77 Bromoform	173	10.984	10.984	(1.084)	67738	250.000	238.4
78 Isopropylbenzene	105	11.106	11.106	(1.097)	805409	250.000	230.0
79 Bromobenzene	156	11.449	11.449	(0.919)	178030	250.000	233.6
81 n-Propylbenzene	120	11.522	11.522	(0.925)	240217	250.000	236.4
82 2-Chlorotoluene	126	11.632	11.632	(0.934)	194702	250.000	232.6
83 1,1,2,2-Tetrachloroethane	83	11.485	11.485	(0.922)	172134	250.000	211.8
84 1,2,3-Trichloropropane	110	11.534	11.534	(0.926)	50236	250.000	221.1
85 4-Chlorotoluene	126	11.748	11.748	(0.943)	199354	250.000	231.9
86 1,3,5-Trimethylbenzene	105	11.705	11.705	(0.940)	664099	250.000	238.5
87 tert-Butylbenzene	119	12.017	12.017	(0.965)	582537	250.000	235.4

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
-----	----	--	-----	-----	-----	-----	-----
88 1,2,4-Trimethylbenzene	105	12.084	12.084	(0.970)	673090	250.000	235.3
89 sec-Butylbenzene	105	12.237	12.237	(0.982)	877833	250.000	233.1
90 4-Isopropyltoluene	119	12.384	12.384	(0.994)	712247	250.000	237.6
91 1,3-Dichlorobenzene	146	12.384	12.384	(0.994)	351326	250.000	232.8
93 1,4-Dichlorobenzene	146	12.482	12.482	(1.002)	349057	250.000	225.4
94 n-Butylbenzene	91	12.794	12.794	(1.027)	710482	250.000	224.4
95 1,2-Dichlorobenzene	146	12.855	12.855	(1.032)	323140	250.000	224.8
96 1,2-Dibromo-3-chloropropane	157	13.662	13.662	(1.097)	18585	250.000	180.9
97 1,2,4-Trichlorobenzene	180	14.456	14.456	(1.160)	117446	250.000	172.2
98 Hexachlorobutadiene	225	14.579	14.579	(1.170)	70944	250.000	201.4
99 Naphthalene	128	14.713	14.713	(1.181)	201451	250.000	146.7
100 1,2,3-Trichlorobenzene	180	14.958	14.958	(1.201)	62055	250.000	130.5

**GC/MS VOLATILE
QC DATA**

661 176

Data File: /var/chem/hp4.i/40606d.b/of40606.d

Page 2

Date : 06-JUN-2000 10:58

Client ID: 50NGBFB

Instrument: hp4.1

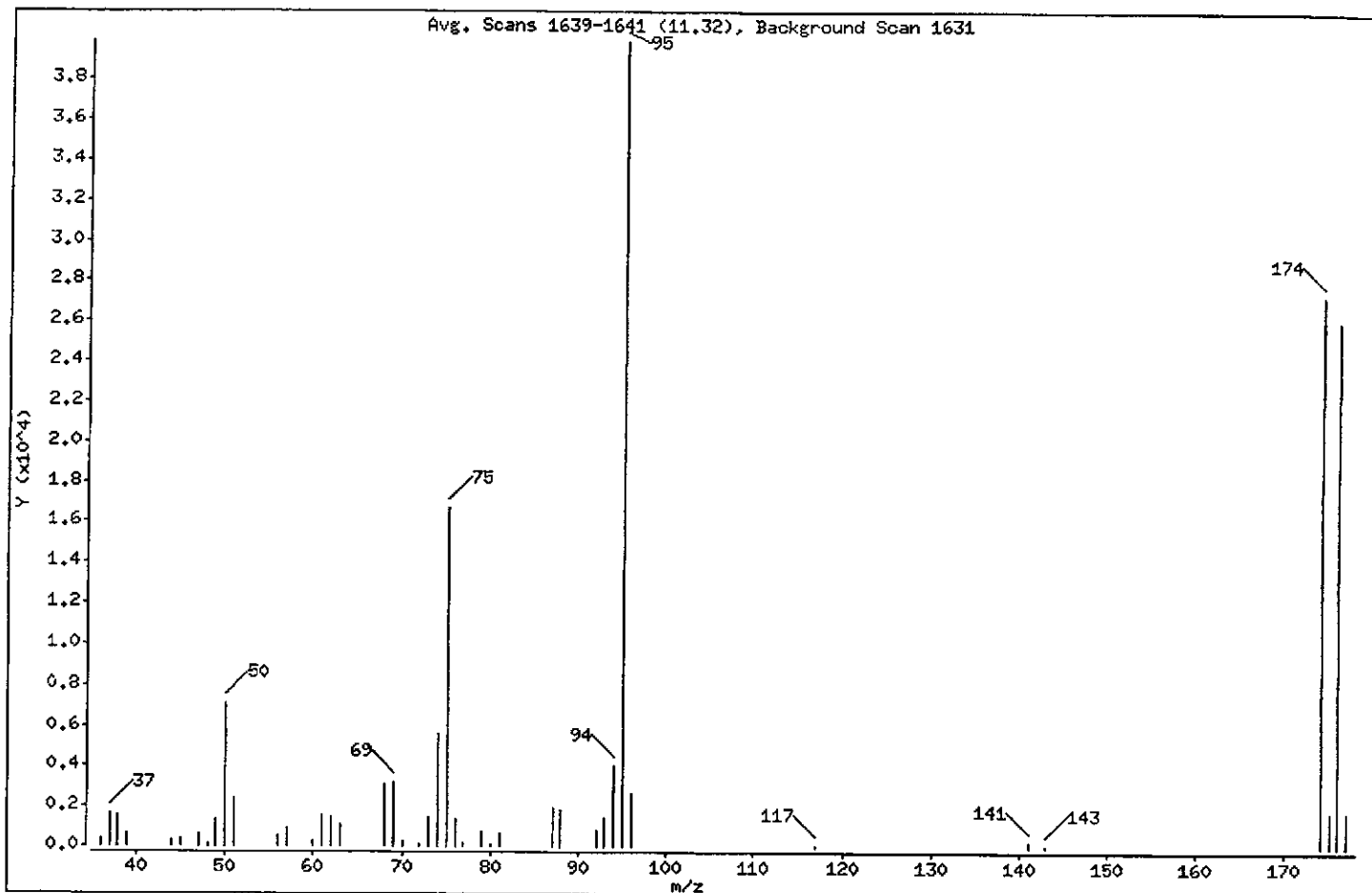
Sample Info: bfb 1ul inj

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.72
75	30.00 - 60.00% of mass 95	41.76
96	5.00 - 9.00% of mass 95	6.64
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	68.51
175	5.00 - 9.00% of mass 174	4.25 (6.21)
176	95.00 - 101.00% of mass 174	65.39 (95.46)
177	5.00 - 9.00% of mass 176	4.26 (6.52)

Data File: /var/chem/hp4.1/40606d.b/cf40606.d

Date : 06-JUN-2000 10:58

Client ID: 50NGBFB

Instrument: hp4.1

Sample Info: bfb 1ul inj

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

Data File: cf40606.d

Spectrum: Avg. Scans 1639-1641 (11.32), Background Scan 1631

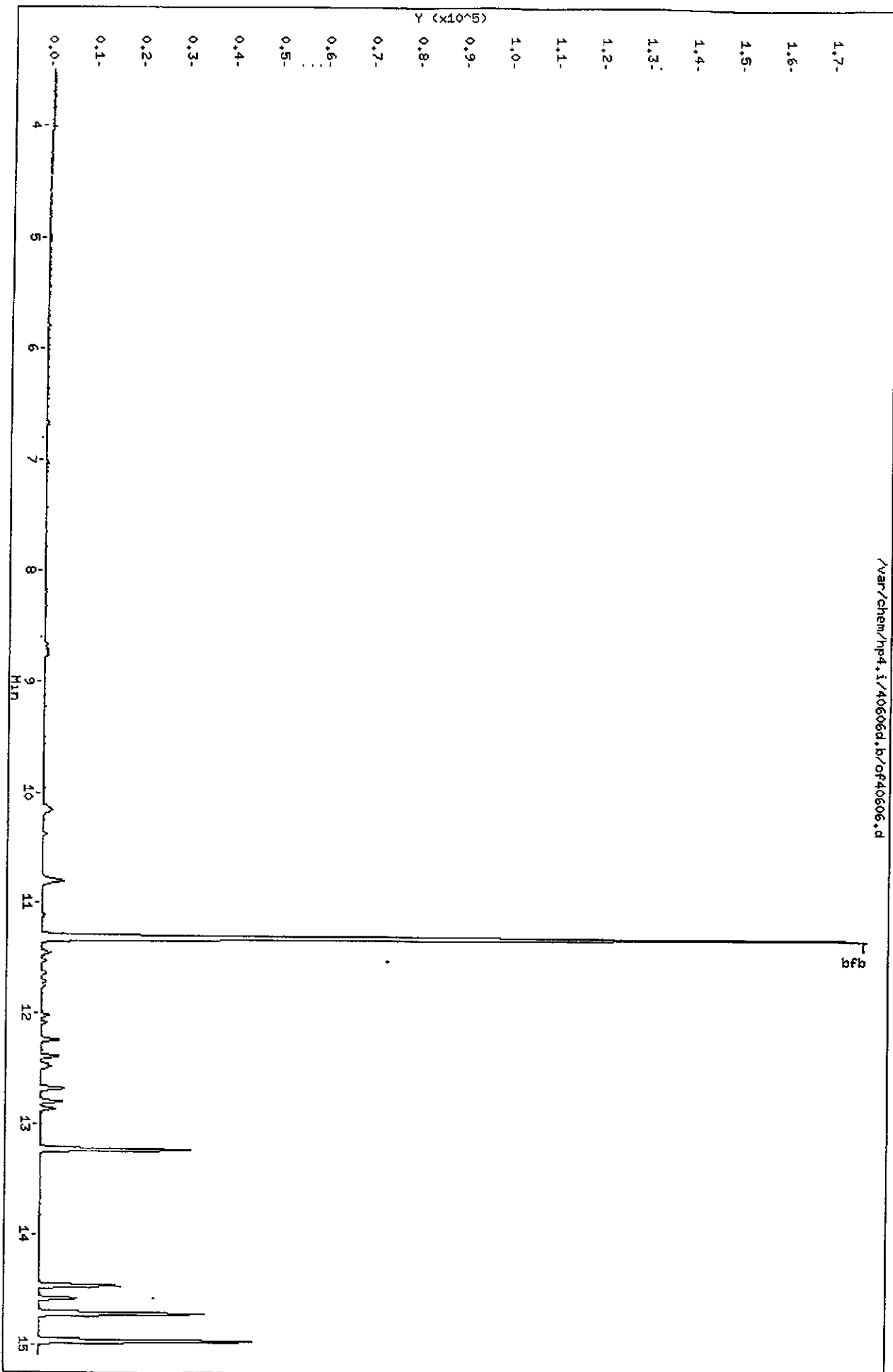
Location of Maximum: 95.00

Number of points: 43

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	331	56.00	563	74.00	5578	94.00	4000
37.00	1616	57.00	959	75.00	16648	95.00	39864
38.00	1599	60.00	233	76.00	1390	96.00	2646
39.00	649	61.00	1567	77.00	188	117.00	88
44.00	315	62.00	1487	79.00	722	141.00	267
45.00	325	63.00	1105	80.00	71	143.00	73
47.00	604	68.00	3097	81.00	617	174.00	27304
48.00	85	69.00	3200	87.00	1968	175.00	1696
49.00	1418	70.00	277	88.00	1796	176.00	26064
50.00	7064	72.00	111	92.00	851	177.00	1700
51.00	2389	73.00	1461	93.00	1464		

Data File: /var/chem/hp4.i/40606d.b/cf40606.d
Date: 06-JUN-2000 10:58
Client ID: 50NCBFB
Sample Info: bfb lwl inj
Column phase: DB624 20m

Instrument: hp4.i
Operator: 16328
Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\BF40618.D

Date : 18-JUN-2000 06:45

Client ID: 50NCBFB

Instrument: hp4.i

Sample Info: bfb 1ul inj

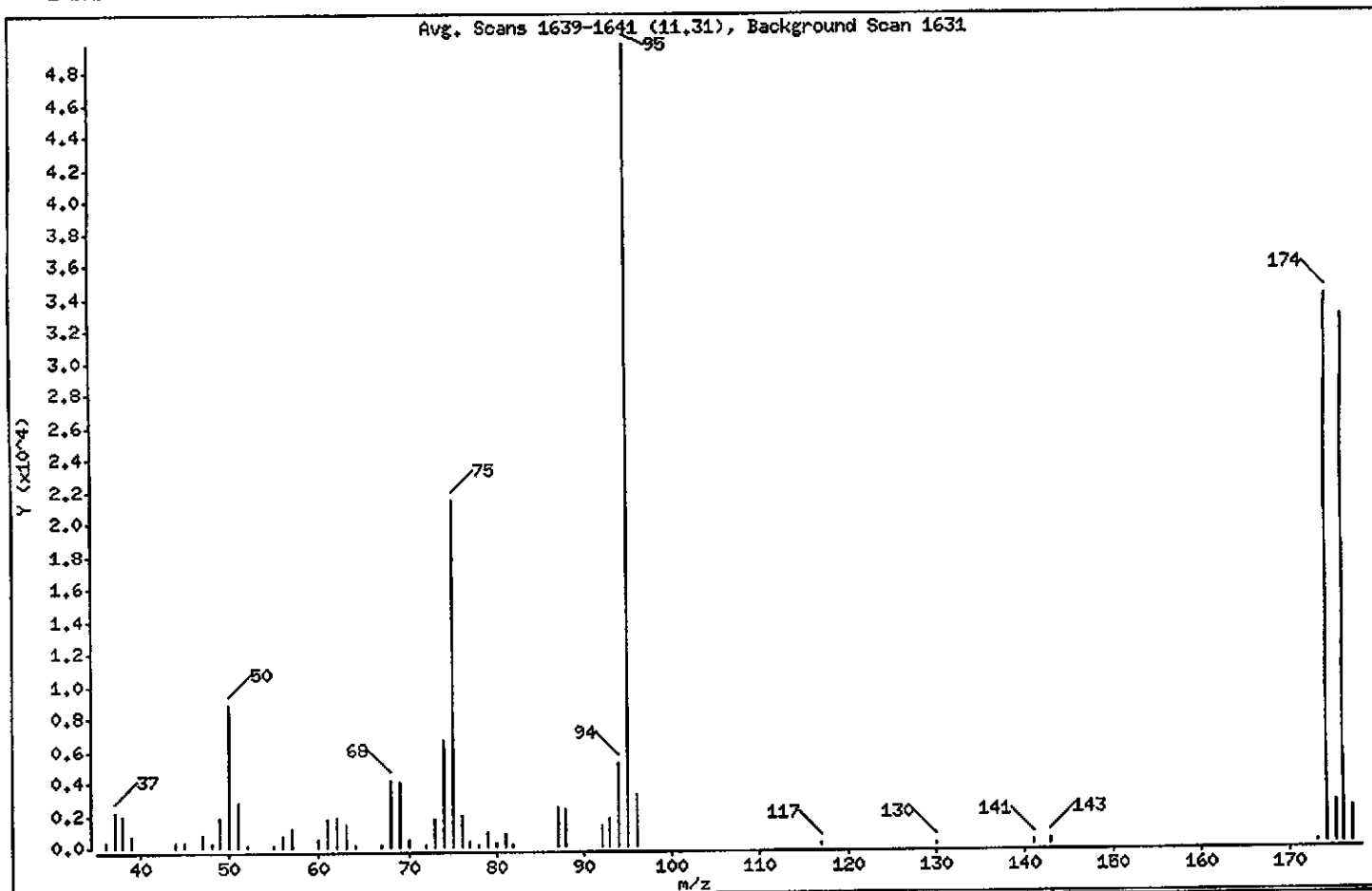
Volume Injected (uL): 1.0

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.68
75	30.00 - 60.00% of mass 95	43.06
96	5.00 - 9.00% of mass 95	6.51
173	Less than 2.00% of mass 174	0.34 (0.50)
174	50.00 - 100.00% of mass 95	68.31
175	5.00 - 9.00% of mass 174	5.13 (7.51)
176	95.00 - 101.00% of mass 174	65.76 (96.27)
177	5.00 - 9.00% of mass 176	4.39 (6.67)

Data File: \\qpitpa02\d\ohem\hp4.i\40618d.b\BF40618.D

Page 3

Date : 18-JUN-2000 06:45

Client ID: 50NGBFB

Instrument: hp4.i

Sample Info: bfb 1ul inj

Volume Injected (uL): 1.0

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

Data File: BF40618.D

Spectrum: Avg. Scans 1639-1641 (11.31), Background Scan 1631

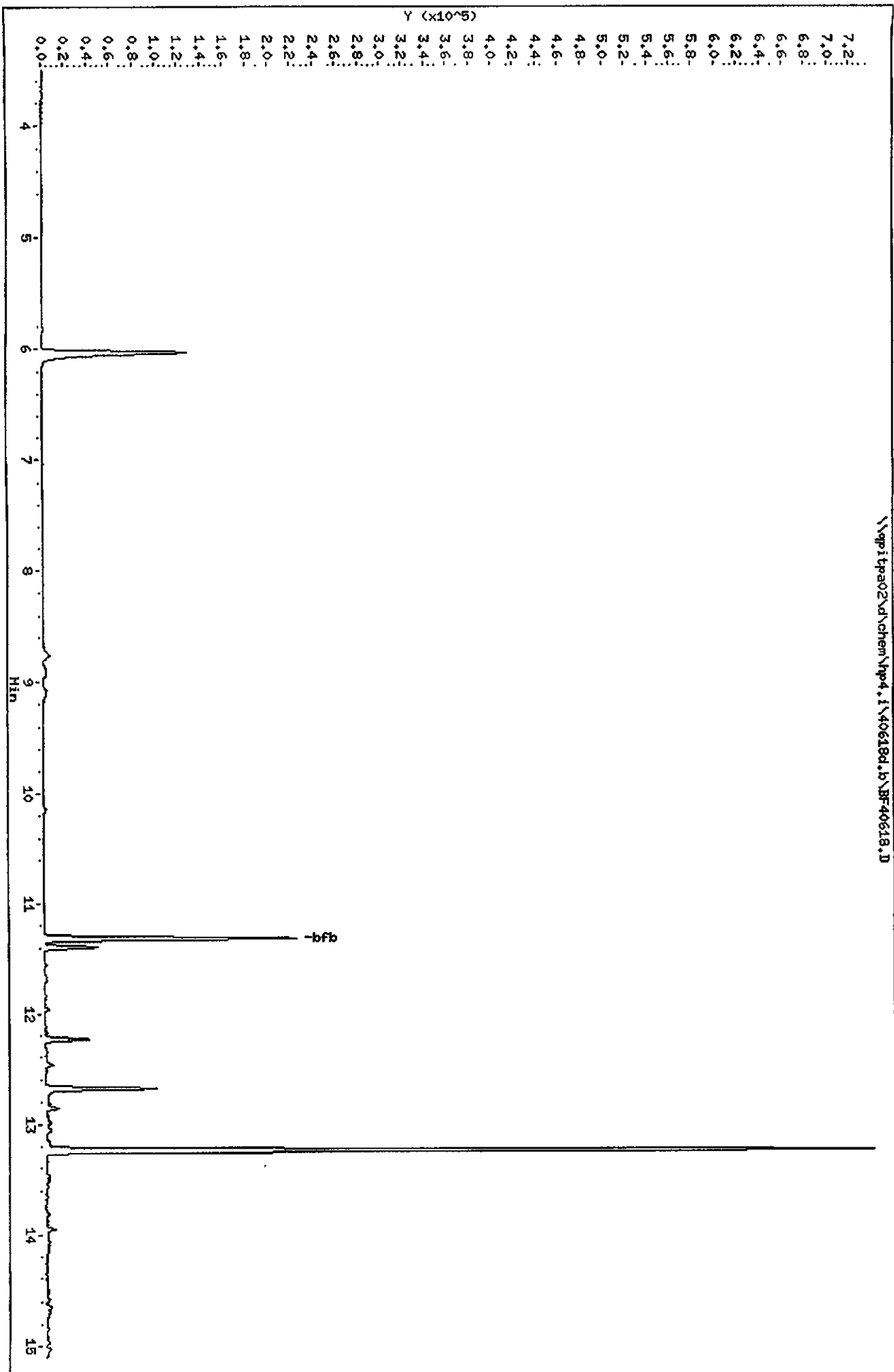
Location of Maximum: 95.00

Number of points: 51

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	357	56.00	654	74.00	6642	94.00	5192
37.00	2211	57.00	1132	75.00	21416	95.00	49736
38.00	1973	60.00	429	76.00	1906	96.00	3238
39.00	697	61.00	1753	77.00	291	117.00	97
44.00	359	62.00	1831	78.00	138	130.00	70
45.00	361	63.00	1322	79.00	875	141.00	280
47.00	825	64.00	78	80.00	200	143.00	341
48.00	285	67.00	82	81.00	838	173.00	169
49.00	1825	68.00	4101	82.00	79	174.00	33976
50.00	8794	69.00	4026	87.00	2377	175.00	2552
51.00	2726	70.00	406	88.00	2309	176.00	32712
52.00	76	72.00	162	92.00	1201	177.00	2182
55.00	78	73.00	1728	93.00	1709		

Data File: \\pittpa02\chem\hp4.1\40618d.b\BF40618.D
Date: 18-JUN-2000 06:45
Client ID: 50NGBFB
Sample Info: bfb 1ul inj
Volume Injected (uL): 1.0
Column phase: DB624 20m

Instrument: hp4.1
Operator: 16328
Column diameter: 0.18



661 182

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID Lab Sample ID: C0F160000 097

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DERHP101

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: NA

QC Batch: 0170096

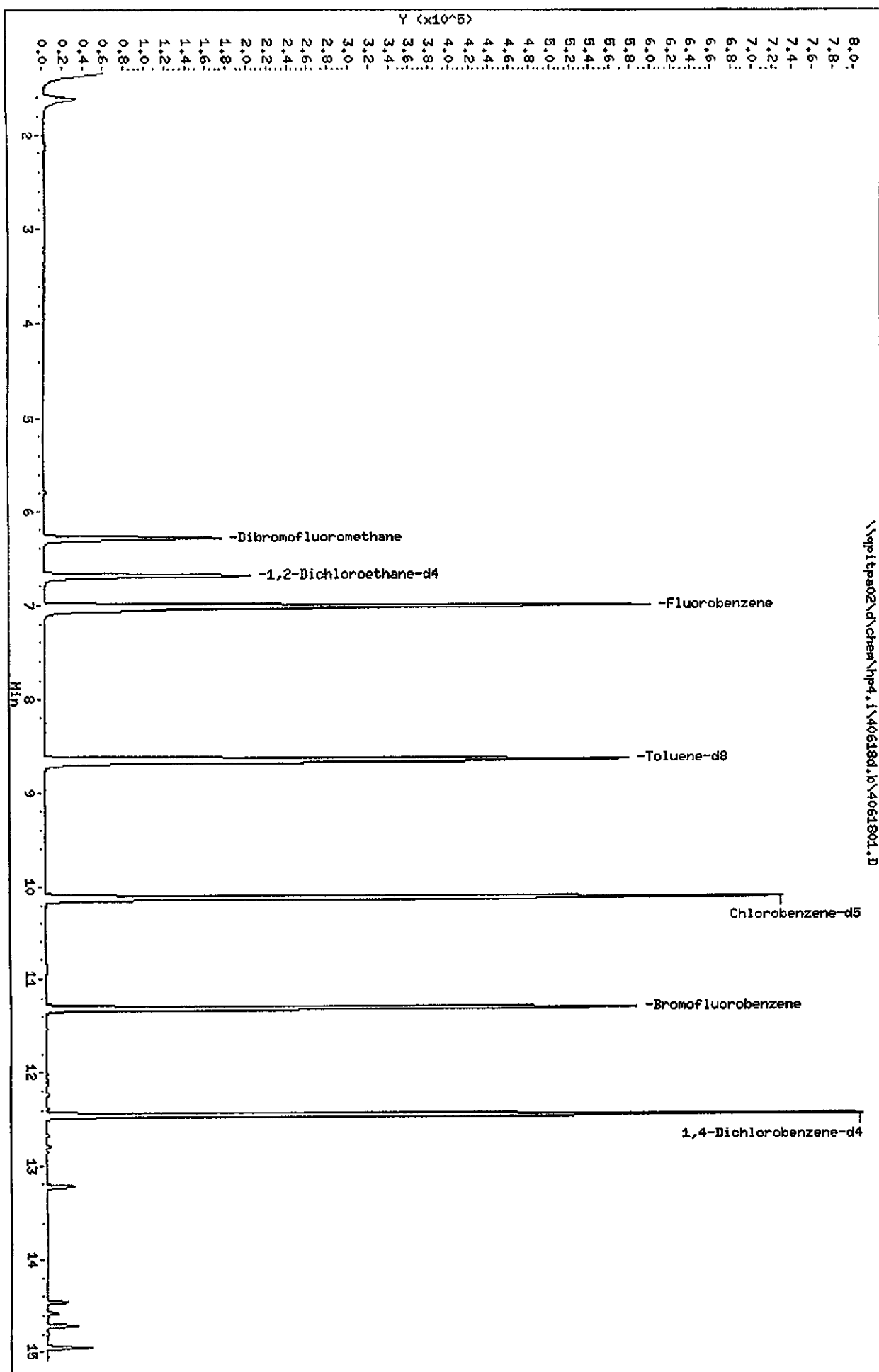
Client Sample Id: INTRA-LAB BLANK

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

FORM I

Data File: \\vpitpa02\chem\hp4.i\40618d.b\4061801.D
Date: 18-JUN-2000 07:52
Client ID: INTR0-L03 BLANK
Sample Info: pb bik (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

Instrument: hp4.i
Operator: 16328
Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp4.i\40618d.b\4061801.D
 Lab Smp Id: DERHP101 Client Smp ID: INTRA-LAB BLANK
 Inj Date : 18-JUN-2000 07:52 MS Autotune Date: 16-DEC-1999 09:07
 Operator : 16328 Inst ID: hp4.i
 Smp Info : pb blk (1ml/10ml)/5ml
 Misc Info : derhp101,40618d.b
 Comment :
 Method : \\qpitpa02\d\chem\hp4.i\40618d.b\8260bh2o.m
 Meth Date : 18-Jun-2000 07:34 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 5 QC Sample: METHOD BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC077

K_c/15/0

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
* 46 Fluorobenzene	96	7.011	7.004	(1.000)	807312	250.000	
* 69 Chlorobenzene-d5	119	10.123	10.128	(1.000)	175633	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.458	12.457	(1.000)	255303	250.000	
\$ 43 1,2-Dichloroethane-d4	65	6.693	6.686	(0.955)	155086	249.102	49.82
\$ 39 Dibromofluoromethane	113	6.290	6.289	(0.897)	145584	247.798	49.56
\$ 59 Toluene-d8	98	8.656	8.655	(0.855)	668989	246.244	49.25
\$ 80 Bromofluorobenzene	95	11.309	11.308	(1.117)	266493	252.163	50.43
3 Vinyl Chloride	62	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					

Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\4061801.D
Report Date: 18-Jun-2000 08:24

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
65 Tetrachloroethene	164				Compound Not Detected.		
70 Chlorobenzene	112				Compound Not Detected.		

661 186

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) SOLID Lab Sample ID: C0F180000 096

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEWWX101

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: NA

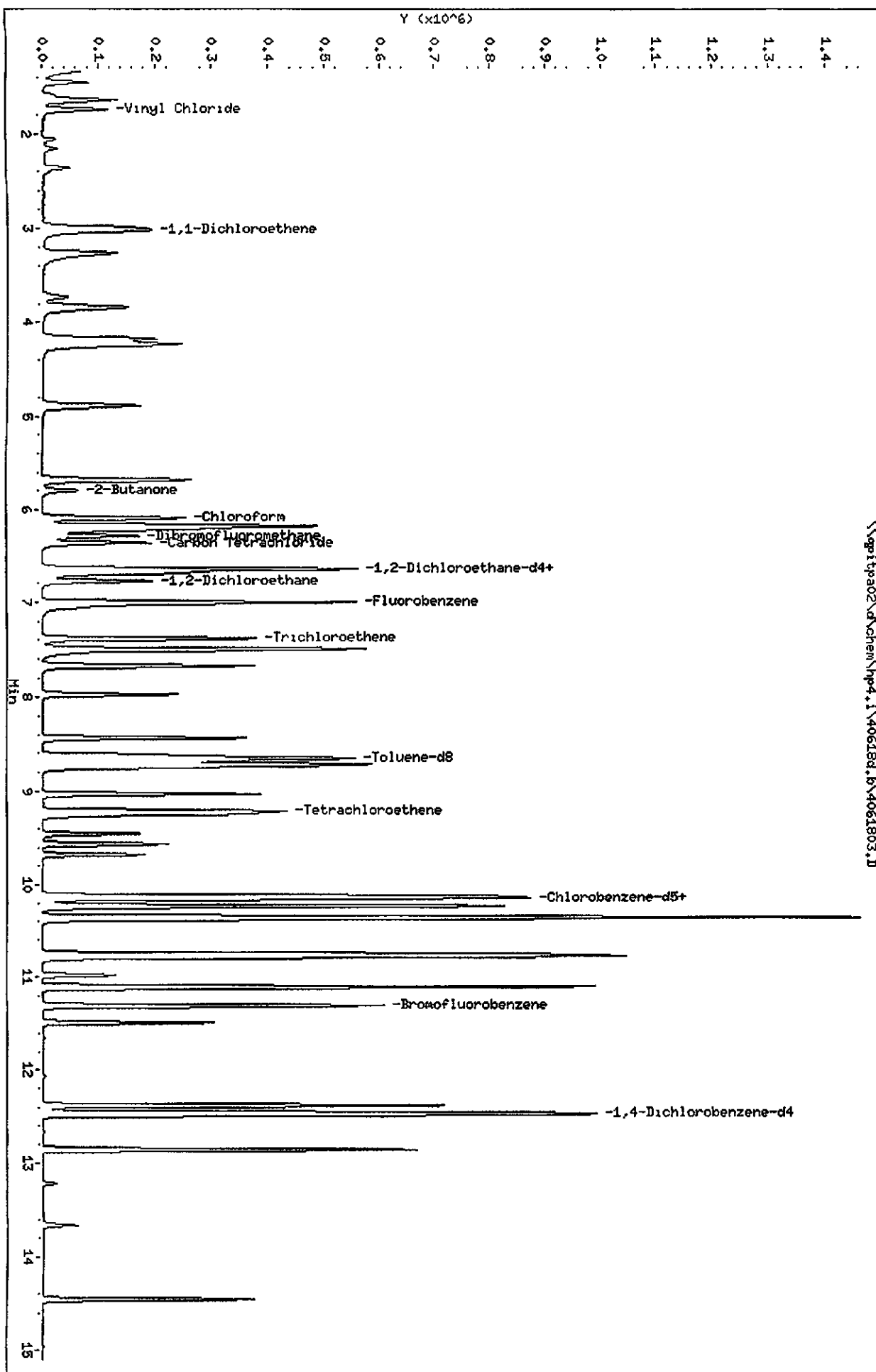
QC Batch: 0170096

Client Sample Id: CHECK SAMPLE

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.461	
78-93-3	2-Butanone	0.357	
56-23-5	Carbon tetrachloride	0.470	
108-90-7	Chlorobenzene	0.436	
67-66-3	Chloroform	0.471	
107-06-2	1,2-Dichloroethane	0.491	
75-35-4	1,1-Dichloroethene	0.404	
127-18-4	Tetrachloroethene	0.439	
79-01-6	Trichloroethene	0.444	
75-01-4	Vinyl chloride	0.468	

Data File: \\apitpa02\chem\hp4.1\406184.b\4061803.D
Date: 18-JUN-2000 08:41
Client ID:
Sample Info: blk ms (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

Instrument: hp4.1
Operator: 16328
Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp4.i\40618d.b\4061803.D

Lab Smp Id:

Inj Date : 18-JUN-2000 08:41

MS Autotune Date: 16-DEC-1999 09:07

Operator : 16328

Inst ID: hp4.i

Smp Info : blk ms (1ml/10ml)/5ml

Misc Info : ,40618d.b

Comment :

Method : \\qpitpa02\d\chem\hp4.i\40618d.b\8260bh2o.m

Meth Date : 18-Jun-2000 07:34 dudeckk

Quant Type: ISTD

Cal Date : 06-JUN-2000 12:18

Cal File: 4c40606.d

Als bottle: 7

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: tclp.sub

Target Version: 4.04

Processing Host: PITPC077

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng)	(ug/L)
* 46 Fluorobenzene	96	7.005	7.004	(1.000)	735353	250.000		
* 69 Chlorobenzene-d5	119	10.123	10.128	(1.000)	176722	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.458	12.457	(1.000)	261752	250.000		
\$ 43 1,2-Dichloroethane-d4	65	6.687	6.686	(0.955)	138033	243.407	48.68	
\$ 39 Dibromofluoromethane	113	6.289	6.289	(0.898)	132393	247.398	49.48	
\$ 59 Toluene-d8	98	8.655	8.655	(0.855)	663404	242.684	48.54	
\$ 80 Bromofluorobenzene	95	11.309	11.308	(1.117)	280589	263.866	52.77	
3 Vinyl Chloride	62	1.741	1.741	(0.249)	166593	234.241	46.85	
12 1,1-Dichloroethene	96	3.025	3.018	(0.432)	100722	202.251	40.45	
31 2-Butanone	43	5.794	5.806	(0.827)	111758	178.307	35.66	
37 Chloroform	83	6.094	6.093	(0.870)	242406	235.475	47.10	
41 Carbon Tetrachloride	117	6.363	6.356	(0.908)	145970	235.067	47.01	
42 Benzene	78	6.650	6.650	(0.949)	677060	230.429	46.08	
45 1,2-Dichloroethane	62	6.779	6.772	(0.968)	176681	245.677	49.14	
47 Trichloroethene	130	7.384	7.383	(1.054)	157681	221.933	44.39	

Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\4061803.D
Report Date: 18-Jun-2000 09:50

Page 2

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(ug/L)
65 Tetrachloroethene	164	9.236	9.236	(0.912)	116145	219.510	43.90
70 Chlorobenzene	112	10.153	10.153	(1.003)	496535	231.506	46.30

661 190

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMQV10Q

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 15

QC Batch: 0170096

Client Sample Id: DF/S1/0165/GRAB/002

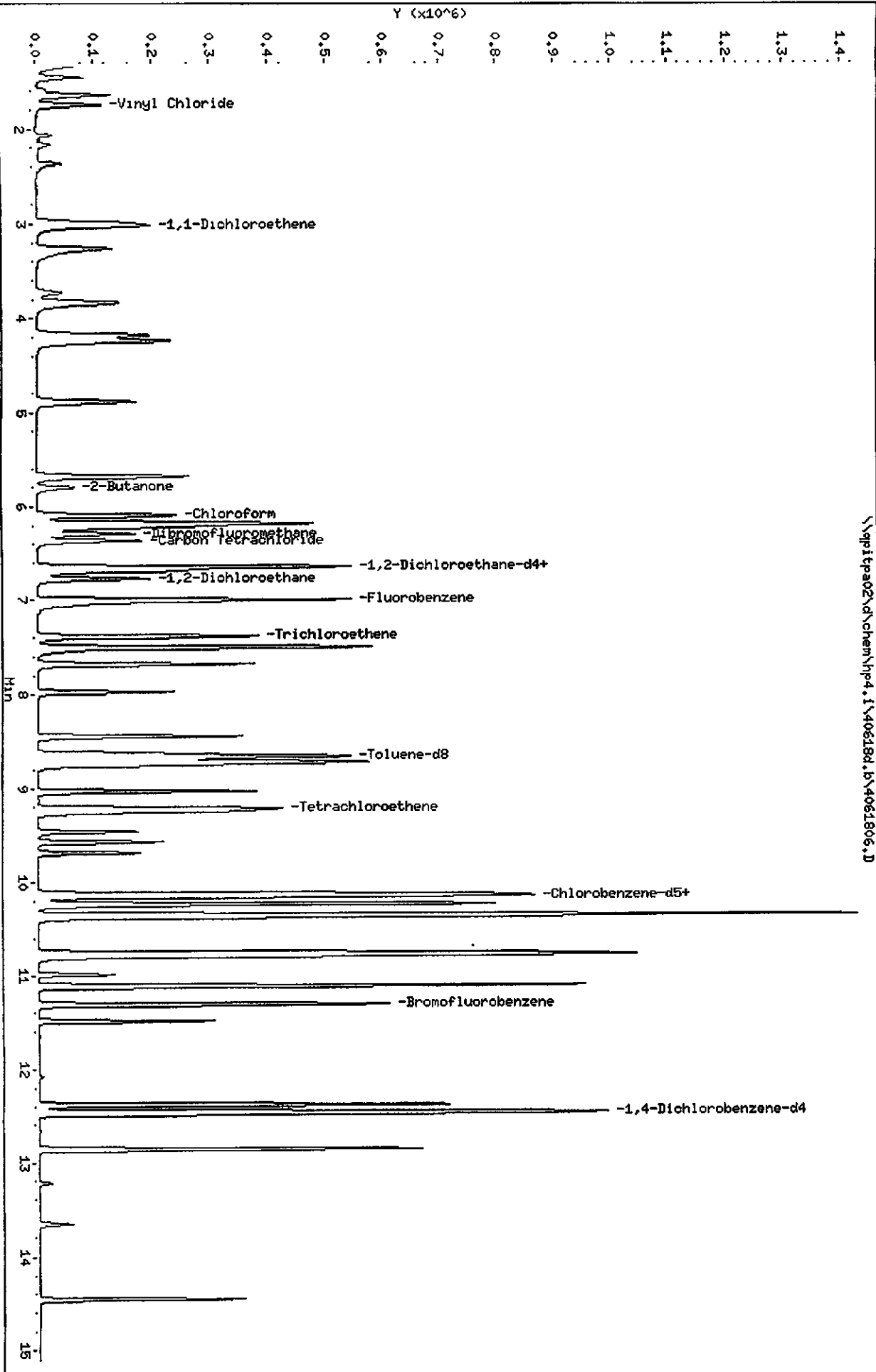
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.462	
78-93-3	2-Butanone	0.367	
56-23-5	Carbon tetrachloride	0.460	
108-90-7	Chlorobenzene	0.460	
67-66-3	Chloroform	0.467	
107-06-2	1,2-Dichloroethane	0.497	
75-35-4	1,1-Dichloroethene	0.412	
127-18-4	Tetrachloroethene	0.441	
79-01-6	Trichloroethene	0.450	
75-01-4	Vinyl chloride	0.472	

FORM I

Data File: \\ppitpa02\chem\hp4.1\406184.b\4061806.D
 Date: 18-JUN-2000 10:02
 Client ID: DF/SI/0165/GRAB/002
 Sample Info: 00140185-001.ms (1ml/10ml)/5ml
 Volume Injected (uL): 5.0
 Column phase: DB 624

Instrument: hp4.1
 Operator: 16328
 Column diameter: 0.18

\\ppitpa02\chem\hp4.1\406184.b\4061806.D



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp4.i\40618d.b\4061806.D
 Lab Smp Id: DEMQV102 Client Smp ID: DF/S1/0165/GRAB/002
 Inj Date : 18-JUN-2000 10:02 MS Autotune Date: 16-DEC-1999 09:07
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0f140185-001 ms (1ml/10ml)/5ml
 Misc Info : demqv102,40618d.b
 Comment :
 Method : \\qpitpa02\d\chem\hp4.i\40618d.b\8260bh2o.m K6/MLW
 Meth Date : 18-Jun-2000 07:34 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC077

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	Final Volume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
* 46 Fluorobenzene	96	7.004	7.004	(1.000)	724517	250.000	
* 69 Chlorobenzene-d5	119	10.122	10.128	(1.000)	175376	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.457	12.457	(1.000)	259735	250.000	
\$ 43 1,2-Dichloroethane-d4	65	6.686	6.686	(0.955)	137633	246.333	49.27
\$ 39 Dibromofluoromethane	113	6.289	6.289	(0.898)	129958	246.479	49.30
\$ 59 Toluene-d8	98	8.655	8.655	(0.855)	656283	241.921	48.38
\$ 80 Bromofluorobenzene	95	11.308	11.308	(1.117)	277507	262.971	52.59
3 Vinyl Chloride	62	1.747	1.741	(0.249)	165202	235.759	47.15
12 1,1-Dichloroethene	96	3.025	3.018	(0.432)	101009	205.860	41.17
31 2-Butanone	43	5.800	5.806	(0.828)	113294	183.460	36.69
37 Chloroform	83	6.093	6.093	(0.870)	236920	233.588	46.72
41 Carbon Tetrachloride	117	6.362	6.356	(0.908)	140796	230.126	46.02
42 Benzene	78	6.650	6.650	(0.949)	668790	231.019	46.20
45 1,2-Dichloroethane	62	6.778	6.772	(0.968)	176156	248.610	49.72
47 Trichloroethene	130	7.383	7.383	(1.054)	157479	224.964	44.99

Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\4061806.D
Report Date: 18-Jun-2000 11:09

Page 2

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
-----	----	==	=====	=====	=====	=====	=====	=====
65 Tetrachloroethene	164	9.242	9.236	(0.913)	115879	220.687	44.14	
70 Chlorobenzene	112	10.153	10.153	(1.003)	489510	229.982	46.00	

661 194

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/14/00

Work Order: DEMQV10R

Date Extracted: 06/18/00

Dilution factor: 1

Date Analyzed: 06/18/00

Moisture %: 15

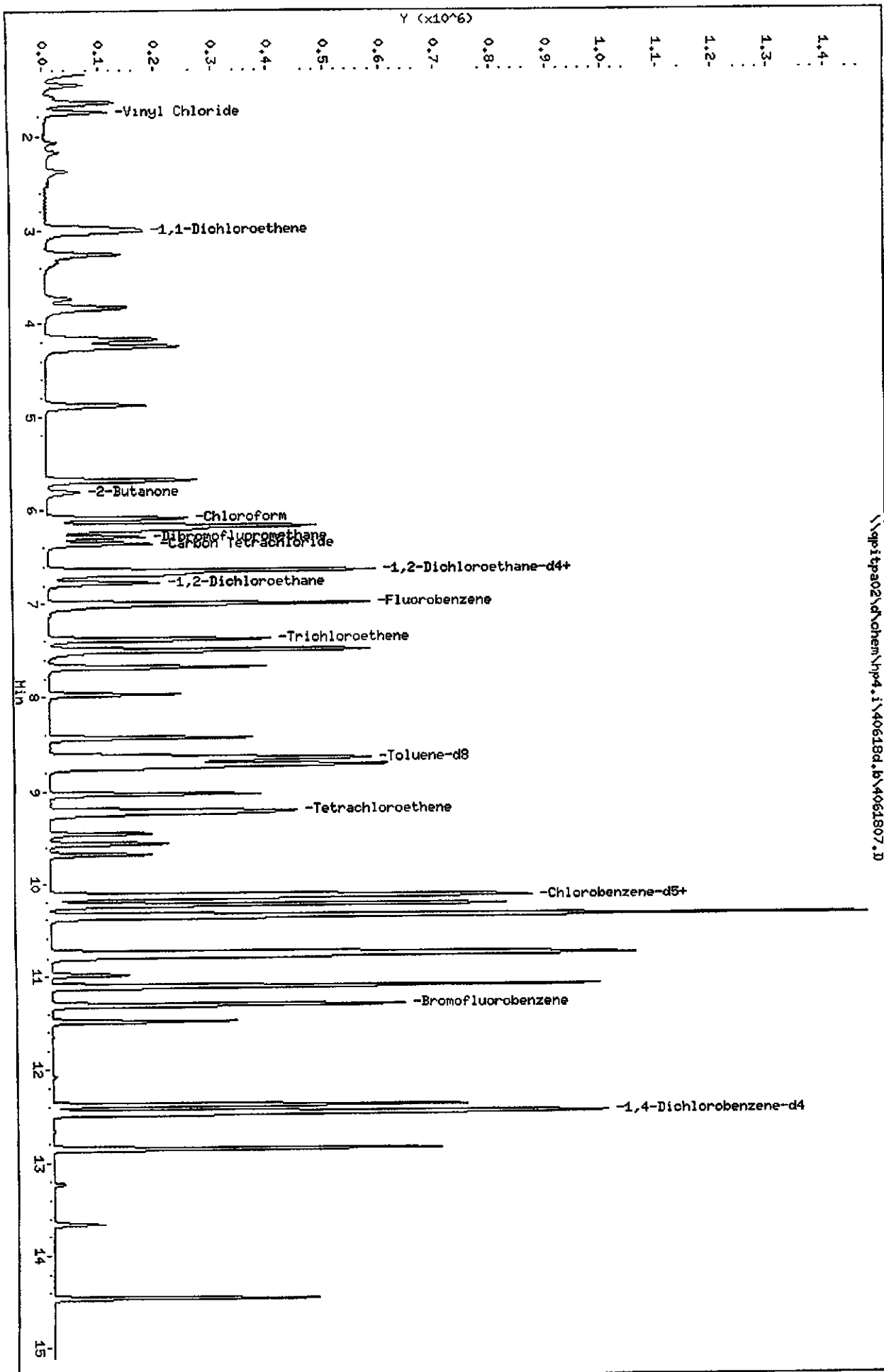
QC Batch: 0170096

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.467	
78-93-3	2-Butanone	0.362	
56-23-5	Carbon tetrachloride	0.460	
108-90-7	Chlorobenzene	0.471	
67-66-3	Chloroform	0.476	
107-06-2	1,2-Dichloroethane	0.501	
75-35-4	1,1-Dichloroethene	0.408	
127-18-4	Tetrachloroethene	0.448	
79-01-6	Trichloroethene	0.449	
75-01-4	Vinyl chloride	0.478	

Data File: \\qpltpa02\chem\hp4.1\40618d.b\4061807.D
Date: 18-JUN-2000 10:27
Client ID: DF/SL/0165/GRAB/002
Sample Info: c0140185-001.msd (1ml/10ml)/5ml
Volume Injected (uL): 5.0
Column phase: DB 624

Instrument: hp4.1
Operator: 16328
Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp4.i\40618d.b\4061807.D
 Lab Smp Id: DEMQV102 Client Smp ID: DF/S1/0165/GRAB/002
 Inj Date : 18-JUN-2000 10:27 MS Autotune Date: 16-DEC-1999 09:07
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0f140185-001 msd (1ml/10ml)/5ml
 Misc Info : demqv102,40618d.b
 Comment :
 Method : \\qpitpa02\d\chem\hp4.i\40618d.b\8260bh2o.m *Kc/flo*
 Meth Date : 18-Jun-2000 07:34 dudeckk Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC077

Concentration Formula: Amt * DF * (Vf/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vf	5.000	FinalVolume
Vo	5.000	Sample Volume
Vi	5.000	Purge Volume

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng)	(ug/L)
* 46 Fluorobenzene		96	7.004	7.004	(1.000)	732638	250.000	
* 69 Chlorobenzene-d5		119	10.128	10.128	(1.000)	173895	250.000	
* 92 1,4-Dichlorobenzene-d4		152	12.457	12.457	(1.000)	264260	250.000	
\$ 43 1,2-Dichloroethane-d4		65	6.686	6.686	(0.955)	138629	245.365	49.07
\$ 39 Dibromofluoromethane		113	6.295	6.289	(0.899)	134858	252.938	50.59
\$ 59 Toluene-d8		98	8.648	8.655	(0.854)	667108	248.005	49.60
\$ 80 Bromofluorobenzene		95	11.307	11.308	(1.116)	283233	270.682	54.14
3 Vinyl Chloride		62	1.752	1.741	(0.250)	169305	238.936	47.79
12 1,1-Dichloroethene		96	3.012	3.018	(0.430)	101232	204.028	40.80
31 2-Butanone		43	5.812	5.806	(0.830)	113053	181.041	36.21
37 Chloroform		83	6.093	6.093	(0.870)	243899	237.803	47.56
41 Carbon Tetrachloride		117	6.362	6.356	(0.908)	142276	229.967	45.99
42 Benzene		78	6.649	6.650	(0.949)	683280	233.408	46.68
45 1,2-Dichloroethane		62	6.777	6.772	(0.968)	179356	250.321	50.06
47 Trichloroethene		130	7.383	7.383	(1.054)	158927	224.516	44.90

Data File: \\qpitpa02\d\chem\hp4.i\40618d.b\4061807.D
Report Date: 18-Jun-2000 11:10

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ng)	FINAL (ug/L)
=====	----	--	-----	-----	-----		-----	-----
65 Tetrachloroethene	164	9.235	9.236	(0.912)	116598		223.947	44.79
70 Chlorobenzene	112	10.152	10.153	(1.002)	497407		235.682	47.14

661 198

**GC/MS VOLATILE
MISCELLANEOUS**

Analyst: Ko Reviewed by: _____ Date: _____

Method No.: 82400-H₂O Instrument ID: _____ Methanol Lot No.: _____

Sid.: 192-140-11 BFD Sid.: 192-140-9 DMT Sid.: 192-140-10 SW Sid.: 192-140-10 K400 Sid.: 192-140-1 C₂H₆

192-140-5 A4

192-140-4 2000

192-140-6 V₁ A400

192-140-5 A400

192-140-2 V₁ A

Date	Run No.	Lot No./ Sample No.	Vol./Wt	pH	Port No.	Comments
6/1/05	1. BF406062	BFD	1.0			905
	2. CC406062	VSTD50	5.0			VC, 11-Dec ↓
	3. 1C406062	VSTD50 6m45	5.0			
	4. 2C406062	VSTD50	5.0			
	5. CF406060	BFD	1.0			1058
	6. 4A406060	VSTD5	5.0			
	7. 4B406060	VSTD20	5.0			
	8. 4C406060	VSTD50	5.0			
	9. 4D406060	VSTD100	5.0			
	10. 4E406060	VSTD200	5.0			
	11.					
	12.					
	13.					
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20.					
	21.					
	22.					

GCMS Volatile Run Log



STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

Method: Volatiles

Inst. ID 11-4

Analyst KW

Reviewed by: _____

Date: _____

Std: 192-180-11 BFA Std: 192-180-16 SW

Std: _____

Std: 192-180-9 DUT Std: 192-180-10 KAL

Std: _____

Date	File ID	Lot No. / Sample No.	Vol. / Wt.	pH	Port#	Comments
6/11/00	1. BF4061F	BFA	1.0L			645
	2. CC4061F	V50050	5.0L			
	3. 4061801	PO BUK	(1.0/1.0L)/5.0	5		
	4. 4061802	V BUK	5.0L			
	5. 4061803	BUKM	(1.0/1.0L)/5.0	5		
	6. 4061804	BUKM	5.0L			
	7. 4061805	CoF140185-001	(0.2/1.0L)/5.0	5		
	8. 4061806	↓ -001 M1	(1.0/1.0L)/5.0	5		
	9. 4061807	↓ -001 M1D	(1.0/1.0L)/5.0	5		
	10. 4061808	CoF170130-009	5.0L	1		
	11. 4061809	↓ -009 M1	5.0L	1		
	12. 4061810	↓ -009 M1D	5.0L	1		
	13. 4061811	CoF140185-002	(1.0/1.0L)/5.0	5		
	14. 4061812	↓ -003	↓	5		
	15. 4061813	↓ -004	↓	5		
	16. 4061814	CoF170130-010	5.0L	1		
	17. 4061815	↓ -008	↓	1		
	18. 4061816	↓ -007	↓	1		
	19. 4061817	↓ -006	↓	1		
	20. 4061818	↓ -004	↓	1		
	21. 4061819	↓ -003	↓	1		
	22. 4061820	↓ -002	↓	1		

PK Buffer	4	4.00
PK Buffer	7	7.01
PK Buffer	10	10.04

P016801

TCLF PK: 4.92

Temp: 23

(Method 1311)

[illegible]

661 201

050003

661 202

PSR024 6/15/00 5:21:12 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: TROUTB

METHOD: QK Volatile Organics, GC/MS (8260B)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SNP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12B CLP1	DEMQV-1-02	___	240463	399411	A-58-QK	COF140185	001		SOLID	0	3
12B CLP1	DEMR4-1-02	___	240464	399411	A-58-QK	COF140185	002		SOLID	0	3
12B CLP1	DEMR6-1-02	___	240465	399411	A-58-QK	COF140185	003		SOLID	0	3
12B CLP1	DEMR7-1-02	___	240466	399411	A-58-QK	COF140185	004		SOLID	0	3

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Ken Seeh
B Trout

B Trout
Ken Seeh

6/15/2000 07:15
6/15/2000 08:50

***** END OF REPORT *****

GC/MS SEMIVOLATILE DATA

661 204

**GC/MS SEMIVOLATILE
QC SUMMARY**

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F140185

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	DF/S1/0165/GRAB/002	68	60	79	56	67	69	00
02	DF/S1/0165/SDC/010	70	62	78	58	69	69	00
03	DF/S1/0165/SDC/011	65	61	76	54	64	69	00
04	DF/S1/0165/SDC/012	70	60	75	54	63	67	00
05	METHOD BLK. DF44M101	68	64	76	60	70	67	00
06	LCS DF44M102	77	72	80	69	78	73	00
07	LCSD DF44M103	74	69	77	67	76	69	00

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = 2-Fluorobiphenyl
 SRG03 = Terphenyl-d14
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol

QC LIMITS

(32-112)
 (30-110)
 (10-144)
 (13-110)
 (10-113)
 (21-122)

- # Column to be used to flag recovery values
 * Values outside of required QC Limits
 D System monitoring Compound diluted out

FORM II

661 206

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F220000

WO #: DF44M102

BATCH: 0174120

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.250	0.187	75	28- 110	
2,4-Dinitrotoluene	0.250	0.190	76	47- 131	
Hexachlorobenzene	0.250	0.187	75	57- 128	
Hexachlorobutadiene	0.250	0.185	74	36- 116	
Hexachloroethane	0.250	0.190	76	30- 110	
Nitrobenzene	0.250	0.190	76	45- 130	
Pentachlorophenol	0.250	0.218	87	10- 140	
Pyridine	0.250	0.182	73	10- 148	
2,4,5-Trichlorophenol	0.250	0.189	75	41- 125	
2,4,6-Trichlorophenol	0.250	0.183	73	46- 135	
Cresols (total)	0.750	0.594	79	29- 144	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F220000

WO #: DF44M103

BATCH: 0174120

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	0.180	72	28 - 110	
2,4-Dinitrotoluene	0.250	0.182	73	47 - 131	
Hexachlorobenzene	0.250	0.176	70	57 - 128	
Hexachlorobutadiene	0.250	0.176	71	36 - 116	
Hexachloroethane	0.250	0.184	73	30 - 110	
Nitrobenzene	0.250	0.184	74	45 - 130	
Pentachlorophenol	0.250	0.196	78	10 - 140	
Pyridine	0.250	0.176	70	10 - 148	
2,4,5-Trichlorophenol	0.250	0.181	72	41 - 125	
2,4,6-Trichlorophenol	0.250	0.175	70	46 - 135	
Cresols (total)	0.750	0.572	76	29 - 144	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

661 208 SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DF44M101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: S0623012.

Lot Number: C0F140185

Date Analyzed: 06/23/00

Time Analyzed: 08:07

Matrix: SOLID

Date Extracted: 06/21/00

GC Column: DB5MS ID: .25

Extraction Method: 1311/3520C

Instrument ID: 71

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DF/S1/0165/GRAB/002	DEMQV103	S0623015.	06/23/00	09:44
02	DF/S1/0165/SDC/010	DEMR4103	S0623016.	06/23/00	10:17
03	DF/S1/0165/SDC/011	DEMR6103	S0623017.	06/23/00	10:49
04	DF/S1/0165/SDC/012	DEMR7103	S0623018.	06/23/00	11:22
05	CHECK SAMPLE	DF44M102 C	S0623013.	06/23/00	08:39
06	DUPLICATE CHECK	DF44M103 L	S0623014.	06/23/00	09:12
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

661 209

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0F140185

Lab File ID: S0623DF2

DFTPP Injection Date: 06/23/00

Instrument ID: 71

DFTPP Injection Time: 0719

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	42.3
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	23.5
365	Greater than 1.0% of mass 198	4.28
441	Present, but less than mass 443	14.1
442	Greater than 40.0% of mass 198	81.5
443	17.0 - 23.0% of mass 442	16.4 (20.1)2

1-Value is % mass 69

2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	SSTD50	S0623CC1	06/23/00	0735
02	INTRA-LAB BL	DF44M101	S0623012	06/23/00	0807
03	INTRA-LAB CH	DF44M102	S0623013	06/23/00	0839
04	INTRA-LAB CH	DF44M103	S0623014	06/23/00	0912
05	DF/S1/0165/G	DEMQV103	S0623015	06/23/00	0944
06	DF/S1/0165/S	DEMR4103	S0623016	06/23/00	1017
07	DF/S1/0165/S	DEMR6103	S0623017	06/23/00	1049
08	DF/S1/0165/S	DEMR7103	S0623018	06/23/00	1122
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

661 210

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT Case No.:

SAS No.:

SDG No.: C0F140185

Lab File ID (Standard): S0623CC1

Date Analyzed: 06/23/00

Instrument ID: 71

Time Analyzed: 0735

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	137984	4.90	528011	6.40	289530	9.38
UPPER LIMIT	275968	5.40	1056022	6.90	579060	9.88
LOWER LIMIT	68992	4.40	264006	5.90	144765	8.88
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	133218	4.90	534874	6.40	299058	9.38
02 INTRA-LAB CH	136510	4.89	549038	6.40	302576	9.38
03 INTRA-LAB CH	142998	4.90	574851	6.41	316157	9.39
04 DF/S1/0165/G	144704	4.90	580361	6.40	320044	9.38
05 DF/S1/0165/S	148702	4.90	597986	6.40	327023	9.38
06 DF/S1/0165/S	138513	4.89	546004	6.39	293935	9.37
07 DF/S1/0165/S	144336	4.90	576936	6.40	321796	9.38
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

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 internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0F140185

Lab File ID (Standard): S0623CC1

Date Analyzed: 06/23/00

Instrument ID: 71

Time Analyzed: 0735

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	530753	12.67	546964	19.29	693837	22.65
UPPER LIMIT	1061506	13.17	1093928	19.79	1387674	23.15
LOWER LIMIT	265377	12.17	273482	18.79	346919	22.15
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	532188	12.67	519505	19.28	612849	22.65
02 INTRA-LAB CH	529895	12.66	493748	19.28	571074	22.64
03 INTRA-LAB CH	567222	12.68	528395	19.30	606288	22.66
04 DF/S1/0165/G	566796	12.66	553163	19.28	629120	22.64
05 DF/S1/0165/S	566644	12.66	539745	19.28	621883	22.64
06 DF/S1/0165/S	516956	12.65	523909	19.27	620637	22.63
07 DF/S1/0165/S	577188	12.66	587753	19.28	680140	22.64
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

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 internal standard area values with an asterisk.

* Values outside of QC limits.

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**GC/MS SEMIVOLATILE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DEMQV103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0174120

Client Sample Id: DF/S1/0165/GRAB/002

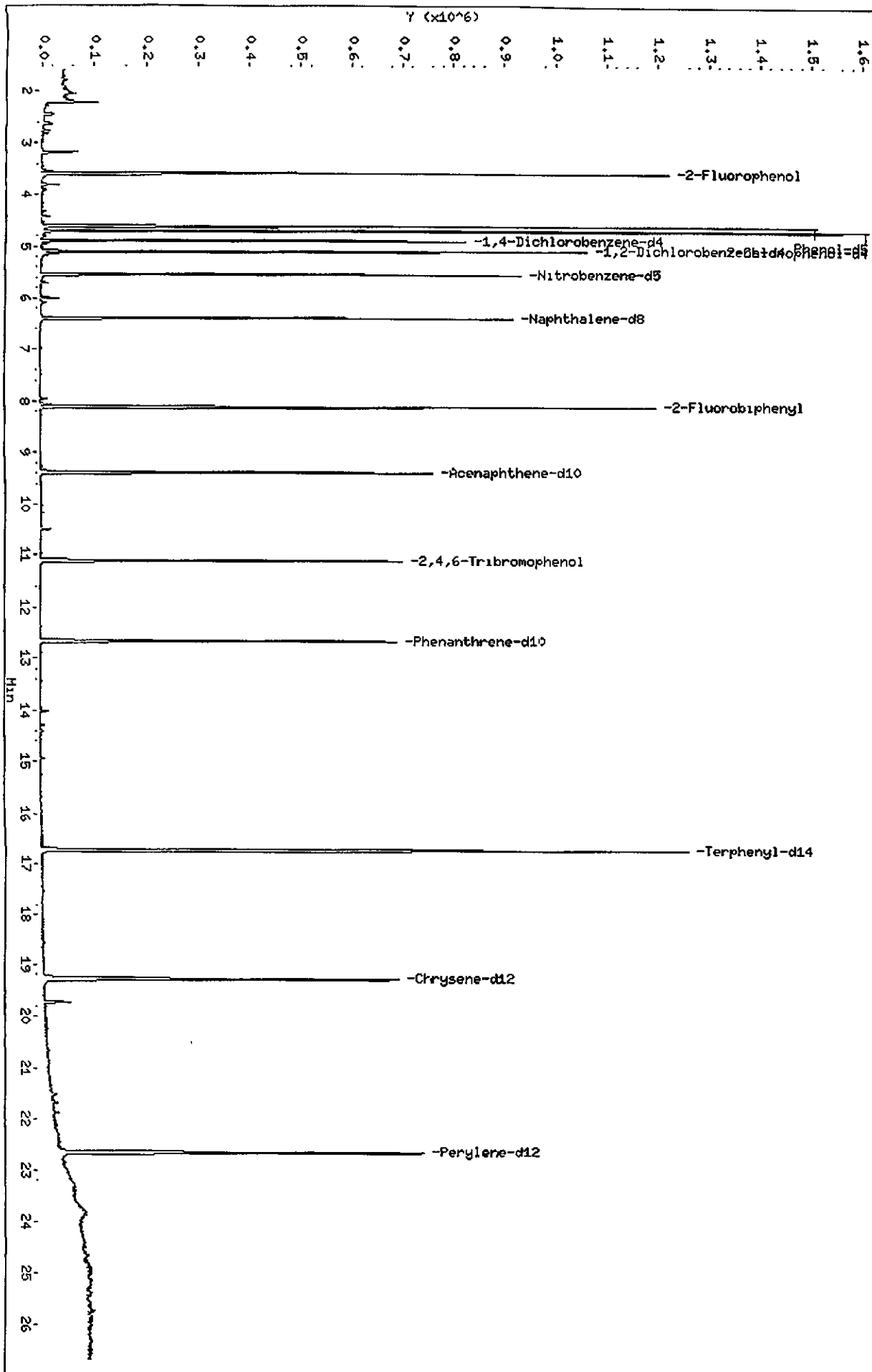
CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

Data File: \\QIPITPA02\chem\71.i\5062300.b\50623015.D
Date: 23-JUN-2000 09:44
Client ID: DF/SL/0165/GRAB/002
Sample Info: ccf140185-001 6/24/00 8270colp
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 71.i
Operator: 045183
Column diameter: 0.25

\\QIPITPA02\chem\71.i\5062300.b\50623015.D



Data File: \\QPITPA02\D\chem\71.i\s062300.b\S0623015.D
Report Date: 23-Jun-2000 10:37

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STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s062300.b\S0623015.D
Lab Smp Id: DEMQV103 Client Smp ID: DF/S1/0165/GRAB/002
Inj Date : 23-JUN-2000 09:44
Operator : 045183 Inst ID: 71.i
Smp Info : c0f140185-001 6/21/00 8270tclp
Misc Info : demqv103,s062300.b,8270clp.m,1-tclp.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s062300.b\8270clp.m
Meth Date : 23-Jun-2000 08:03 bachas Quant Type: ISTD
Cal Date : 01-JUN-2000 12:15 Cal File: S0601CC5.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-tclp.sub
Target Version: 4.04
Processing Host: PITPC050

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi})$

Sc/23/0

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.001	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	200.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	4.897	4.897	(1.000)	144704	40.0000	(a)
* 2 Naphthalene-d8	136	6.398	6.403	(1.000)	580361	40.0000	(a)
* 3 Acenaphthene-d10	164	9.384	9.384	(1.000)	320044	40.0000	(a)
* 4 Phenanthrene-d10	188	12.664	12.670	(1.000)	566796	40.0000	(a)
* 5 Chrysene-d12	240	19.283	19.294	(1.000)	553163	40.0000	(a)
* 6 Perylene-d12	264	22.643	22.654	(1.000)	629120	40.0000	(a)
10 Pyridine	79	Compound Not Detected					
28 1,4-Dichlorobenzene	146	Compound Not Detected.					
M 34 Cresols, total	100	Compound Not Detected					
31 2-Methylphenol	108	Compound Not Detected					
35 4-Methylphenol	108	Compound Not Detected					
38 Hexachloroethane	117	Compound Not Detected.					
39 Nitrobenzene	77	Compound Not Detected.					
59 Hexachlorobutadiene	224	Compound Not Detected.					

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
69 2,4,6-Trichlorophenol	196				Compound Not Detected		
70 2,4,5-Trichlorophenol	196				Compound Not Detected.		
91 2,4-Dinitrotoluene	165				Compound Not Detected		
113 Hexachlorobenzene	283				Compound Not Detected		
117 Pentachlorophenol	265				Compound Not Detected		
\$ 172 Nitrobenzene-d5	82	5.543	5.543	(0.866)	401288	68.3804	0.17095(a)
\$ 173 2-Fluorobiphenyl	172	8.113	8.113	(0.865)	609706	60.1298	0.15032(a)
\$ 174 Terphenyl-d14	244	16.735	16.735	(0.868)	933881	78.6884	0.19672(a)
\$ 175 Phenol-d5	99	4.614	4.619	(0.942)	618490	99.9029	0.24976(a)
\$ 176 2-Fluorophenol	112	3.593	3.593	(0.734)	414744	83.8264	0.20957(a)
\$ 177 2,4,6-Tribromophenol	330	11.115	11.120	(0.878)	151024	103.419	0.25855(a)
\$ 178 2-Chlorophenol-d4	132	4.704	4.710	(0.961)	482765	106.526	0.26632(a)
\$ 179 1,2-Dichlorobenzene-d4	152	5.100	5.100	(1.041)	188823	61.6220	0.15405(a)

QC Flag Legend

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DEMR4103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0174120

Client Sample Id: DF/S1/0165/SDC/010

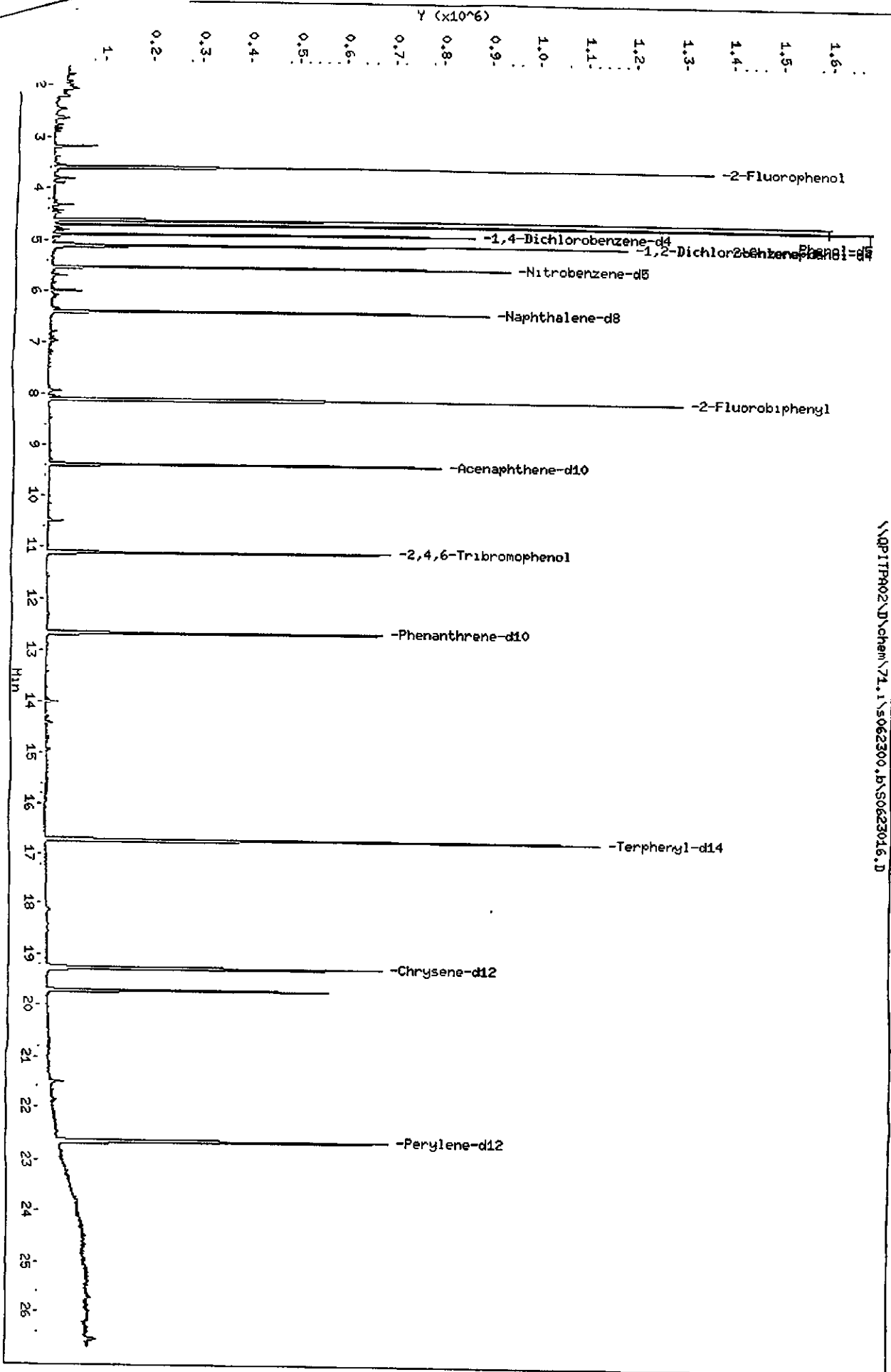
CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

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Data File: \\QPI\IP02\J\chem\71.i\5062300.b\50623016.D
 Date: 23-JUN-2000 10:17
 Client ID: DF/SL/0465/SDC/010
 Sample Info: 60F140185-002 6/21/00 8270c1p
 Volume Injected (uL): 2.0
 Column phases: Hp5-MS

Instrument: 71.i
 Operator: 045183
 Column diameter: 0.25



Data File: \\QPITPA02\D\chem\71.i\s062300.b\S0623016.D
Report Date: 23-Jun-2000 10:47

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STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s062300.b\S0623016.D
Lab Smp Id: DEMR4103 Client Smp ID: DF/S1/0165/SDC/010
Inj Date : 23-JUN-2000 10:17
Operator : 045183 Inst ID: 71.i
Smp Info : c0f140185-002 6/21/00 8270tclp
Misc Info : demr4103,s062300.b,8270clp.m,1-tclp.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s062300.b\8270clp.m
Meth Date : 23-Jun-2000 08:03 bachas Quant Type: ISTD
Cal Date : 01-JUN-2000 12:15 Cal File: S0601CC5.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-tclp.sub
Target Version: 4.04
Processing Host: PITPC050

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi})$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.001	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	200.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

CONCENTRATIONS

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	4.895	4.897	(1.000)	148702	40.0000	(a)
* 2 Naphthalene-d8	136	6.396	6.403	(1.000)	597986	40.0000	(a)
* 3 Acenaphthene-d10	164	9.377	9.384	(1.000)	327023	40.0000	(a)
* 4 Phenanthrene-d10	188	12.657	12.670	(1.000)	566644	40.0000	(a)
* 5 Chrysene-d12	240	19.276	19.294	(1.000)	539745	40.0000	(a)
* 6 Perylene-d12	264	22.641	22.654	(1.000)	621883	40.0000	(a)
10 Pyridine	79	Compound Not Detected					
28 1,4-Dichlorobenzene	146	Compound Not Detected					
M 34 Cresols, total	100	Compound Not Detected					
31 2-Methylphenol	108	Compound Not Detected					
35 4-Methylphenol	108	Compound Not Detected					
38 Hexachloroethane	117	Compound Not Detected					
39 Nitrobenzene	77	Compound Not Detected					
59 Hexachlorobutadiene	224	Compound Not Detected					

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Data File: \\QPITPA02\D\chem\71.i\s062300.b\S0623016.D
Report Date: 23-Jun-2000 10:47

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
69 2,4,6-Trichlorophenol	196		Compound Not Detected				
70 2,4,5-Trichlorophenol	196		Compound Not Detected				
91 2,4-Dinitrotoluene	165		Compound Not Detected				
113 Hexachlorobenzene	283		Compound Not Detected.				
117 Pentachlorophenol	265		Compound Not Detected				
\$ 172 Nitrobenzene-d5	82	5.536	5.543	(0.866)	425573	70.3812	0.17595(a)
\$ 173 2-Fluorobiphenyl	172	8.105	8.113	(0.864)	646813	62.4279	0.15607(a)
\$ 174 Terphenyl-d14	244	16.728	16.735	(0.868)	901693	77.8651	0.19466(a)
\$ 175 Phenol-d5	99	4.612	4.619	(0.942)	655014	102.958	0.25740(a)
\$ 176 2-Fluorophenol	112	3.597	3.593	(0.735)	444431	87.4114	0.21853(a)
\$ 177 2,4,6-Tribromophenol	330	11.108	11.120	(0.878)	151382	103.691	0.25923(a)
\$ 178 2-Chlorophenol-d4	132	4.703	4.710	(0.961)	513749	110.315	0.27579(a)
\$ 179 1,2-Dichlorobenzene-d4	152	5.098	5.100	(1.041)	200575	63.6975	0.15924(a)

QC Flag Legend

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COF140185 003

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DEMR6103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 14

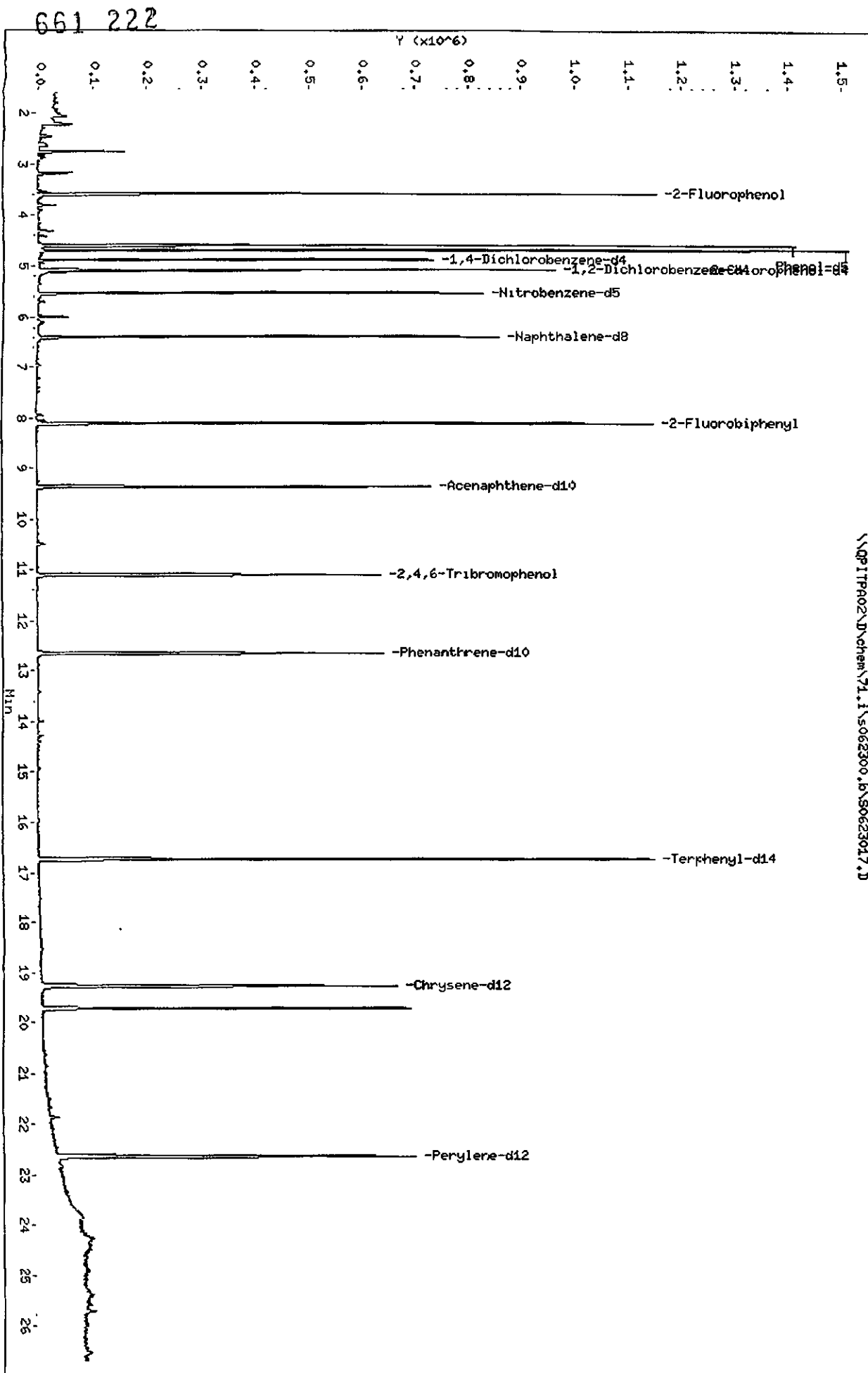
QC Batch: 0174120

Client Sample Id: DF/S1/0165/SDC/011

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

Data File: \\QIPPA02\chem\71.i\5062300.b\50623017.D
 Date: 23-JUN-2000 10:49
 Client ID: DF/SL/0168/SMC/011
 Sample Info: c0f140185-003 6/21/00 8270tolp
 Volume Injected (uL): 2.0
 Column phase: Hp5-MS

Instrument: 71.1
 Operator: 045183
 Column diameter: 0.25



Data File: \\QPITPA02\D\chem\71.i\s062300.b\S0623017.D
Report Date: 23-Jun-2000 11:26

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s062300.b\S0623017.D
Lab Smp Id: DEMR6103 Client Smp ID: DF/S1/0165/SDC/011
Inj Date : 23-JUN-2000 10:49
Operator : 045183 Inst ID: 71.i
Smp Info : c0f140185-003 6/21/00 8270tclp
Misc Info : demr6103,s062300.b,8270clp.m,1-tclp.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s062300.b\8270clp.m
Meth Date : 23-Jun-2000 08:03 bachas Quant Type: ISTD
Cal Date : 01-JUN-2000 12:15 Cal File: S0601CC5.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-tclp.sub
Target Version: 4.04
Processing Host: PITPC050

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi})$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.001	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	200.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

7/6/00

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
*****	=====	==	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4	152	4.894	4.897	(1.000)	138513	40.0000	(a)
* 2 Naphthalene-d8	136	6.390	6.403	(1.000)	546004	40.0000	(a)
* 3 Acenaphthene-d10	164	9.371	9.384	(1.000)	293935	40.0000	(a)
* 4 Phenanthrene-d10	188	12.651	12.670	(1.000)	516956	40.0000	(a)
* 5 Chrysene-d12	240	19.270	19.294	(1.000)	523909	40.0000	(a)
* 6 Perylene-d12	264	22.630	22.654	(1.000)	620637	40.0000	(a)
10 Pyridine	79	Compound Not Detected.					
28 1,4-Dichlorobenzene	146	Compound Not Detected					
M 34 Cresols, total	100	Compound Not Detected					
31 2-Methylphenol	108	Compound Not Detected					
35 4-Methylphenol	108	Compound Not Detected.					
38 Hexachloroethane	117	Compound Not Detected.					
39 Nitrobenzene	77	Compound Not Detected.					
59 Hexachlorobutadiene	224	Compound Not Detected					

Compounds	QUANT SIG							CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
							(ng)	(mg/L)	
=====	=====	=====	=====	=====	=====	=====	=====	=====	
69 2,4,6-Trichlorophenol	196					Compound Not Detected			
70 2,4,5-Trichlorophenol	196					Compound Not Detected			
91 2,4-Dinitrotoluene	165					Compound Not Detected			
113 Hexachlorobenzene	283					Compound Not Detected			
117 Pentachlorophenol	265					Compound Not Detected.			
\$ 172 Nitrobenzene-d5	82		5.535	5.543	(0.866)	360549	65.3044	0.16326 (a)	
\$ 173 2-Fluorobiphenyl	172		8.099	8.113	(0.864)	566114	60.7897	0.15197 (a)	
\$ 174 Terphenyl-d14	244		16.721	16.735	(0.868)	848904	75.5224	0.18880 (a)	
\$ 175 Phenol-d5	99		4.611	4.619	(0.942)	571844	96.4967	0.24124 (a)	
\$ 176 2-Fluorophenol	112		3.590	3.593	(0.734)	382287	80.7196	0.20180 (a)	
\$ 177 2,4,6-Tribromophenol	330		11.101	11.120	(0.878)	137559	103.280	0.25820 (a)	
\$ 178 2-Chlorophenol-d4	132		4.702	4.710	(0.961)	438280	101.033	0.25258 (a)	
\$ 179 1,2-Dichlorobenzene-d4	152		5.097	5.100	(1.041)	168758	57.5356	0.14384 (a)	

QC Flag Legend

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 004

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DEMR7103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 14

QC Batch: 0174120

Client Sample Id: DF/S1/0165/SDC/012

CONCENTRATION UNITS:

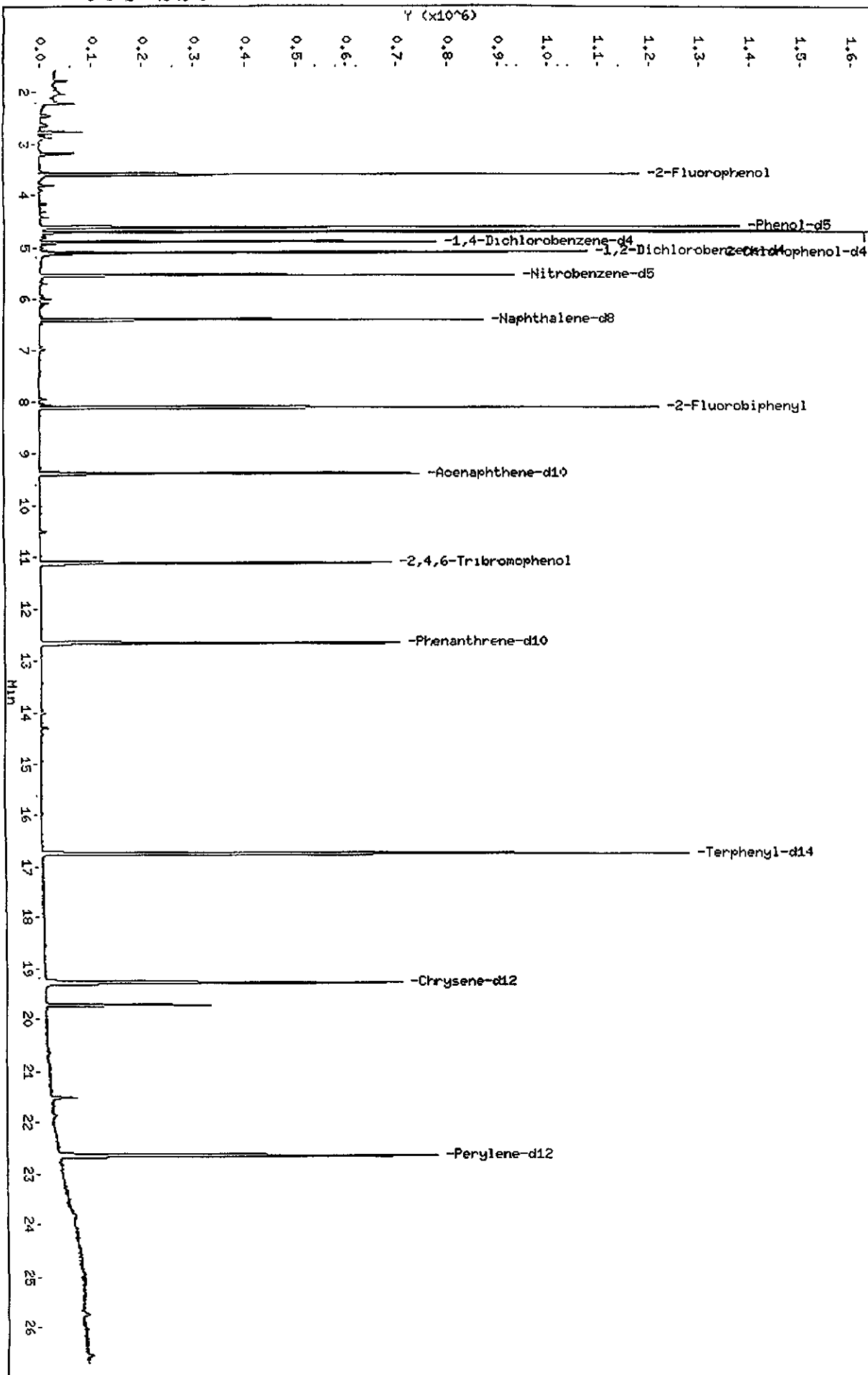
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

661 226

Data File: \NPI\PA02\chem\71.1\5062300.b\50623018.D
Date: 23-JUN-2000 11:22
Client ID: DF/S1/0165/SDC/012
Sample Info: c0f140185-004 6/21/00 8270t01p
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 71.i
Operator: 045183
Column diameter: 0.25

\\NPI\PA02\chem\71.1\5062300.b\50623018.D



STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s062300.b\S0623018.D
Lab Smp Id: DEMR7103 Client Smp ID: DF/S1/0165/SDC/012
Inj Date : 23-JUN-2000 11:22
Operator : 045183 Inst ID: 71.i
Smp Info : c0f140185-004 6/21/00 8270tclp
Misc Info : demr7103,s062300.b,8270clp.m,1-tclp.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s062300.b\8270clp.m
Meth Date : 23-Jun-2000 08:03 bachas Quant Type: ISTD
Cal Date : 01-JUN-2000 12:15 Cal File: S0601CC5.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-tclp.sub
Target Version: 4.04
Processing Host: PITPC050

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi})$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.001	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	200.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

Handwritten signature/initials

						CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(mg/L)
*****		****	==	*****	*****	*****	*****	*****
*	1 1,4-Dichlorobenzene-d4	152	4.899	4.897	(1.000)	144336	40.0000	(a)
*	2 Naphthalene-d8	136	6.400	6.403	(1.000)	576936	40.0000	(a)
*	3 Accnaphthene-d10	164	9.381	9.384	(1.000)	321796	40.0000	(a)
*	4 Phenanthrene-d10	188	12.661	12.670	(1.000)	577188	40.0000	(a)
*	5 Chrysene-d12	240	19.280	19.294	(1.000)	587753	40.0000	(a)
*	6 Perylene-d12	264	22.640	22.654	(1.000)	680140	40.0000	(a)
	10 Pyridine	79	Compound Not Detected.					
	28 1,4-Dichlorobenzene	146	Compound Not Detected					
M	34 Cresols, total	100	Compound Not Detected					
	31 2-Methylphenol	108	Compound Not Detected					
	35 4-Methylphenol	108	Compound Not Detected					
	38 Hexachloroethane	117	Compound Not Detected					
	39 Nitrobenzene	77	Compound Not Detected.					
	59 Hexachlorobutadiene	224	Compound Not Detected					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
69 2,4,6 Trichlorophenol	196		Compound Not Detected				
70 2,4,5-Trichlorophenol	196		Compound Not Detected.				
91 2,4-Dinitrotoluene	165		Compound Not Detected				
113 Hexachlorobenzene	283		Compound Not Detected				
117 Pentachlorophenol	265		Compound Not Detected				
\$ 172 Nitrobenzene-d5	82	5.540	5.543	(0.866)	406995	69.7647	0.17441(a)
\$ 173 2-Fluorobiphenyl	172	8.110	8.113	(0.864)	613481	60.1726	0.15043(a)
\$ 174 Terphenyl-d14	244	16.732	16.735	(0.868)	947733	75.1560	0.18789(a)
\$ 175 Phenol-d5	99	4.616	4.619	(0.942)	583640	94.5143	0.23628(a)
\$ 176 2-Fluorophenol	112	3.596	3.593	(0.734)	397647	80.5759	0.20144(a)
\$ 177 2,4,6 Tribromophenol	330	11.112	11.120	(0.878)	148643	99.9556	0.24989(a)
\$ 178 2-Chlorophenol-d4	132	4.707	4.710	(0.961)	476164	105.338	0.26334(a)
\$ 179 1,2-Dichlorobenzene-d4	152	5.102	5.100	(1.041)	189273	61.9264	0.15482(a)

QC Flag Legend

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

**GC/MS SEMIVOLATILE
CALIBRATION DATA**

661 230

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0F140185

Instrument ID: 71

Calibration Date: 06/23/00 Time: 0735

Lab File ID: S0623CC1

Init. Calib. Date(s): 06/01/00 06/01/00

Init. Calib. Times: 0938 1215

GC Column: HP5-MS ID: 0.25 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.979	1.922	0.01	2.9	20.0
bis(2-Chloroethyl)ether	1.579	1.597	0.01	1.1	50.0
2-Chlorophenol	1.389	1.440	0.01	3.7	50.0
1,3-Dichlorobenzene	1.532	1.619	0.01	5.7	50.0
1,4-Dichlorobenzene	1.541	1.631	0.01	5.8	20.0
1,2-Dichlorobenzene	1.405	1.499	0.01	6.7	50.0
2-Methylphenol	1.276	1.344	0.01	5.3	50.0
2,2'-oxybis(1-Chloropropane)	1.999	2.215	0.01	10.8	50.0
4-Methylphenol	1.346	1.416	0.01	5.2	50.0
Hexachloroethane	0.609	0.652	0.01	7.1	50.0
Nitrobenzene	0.437	0.471	0.01	7.8	50.0
Isophorone	0.689	0.742	0.01	7.7	50.0
2-Nitrophenol	0.197	0.205	0.01	4.1	20.0
2,4-Dimethylphenol	0.349	0.374	0.01	7.2	50.0
bis(2-Chloroethoxy)methane	0.448	0.469	0.01	4.7	50.0
N-Nitroso-di-n-propylamine	1.070	1.148	0.05	7.3	50.0
2,4-Dichlorophenol	0.270	0.290	0.01	7.4	20.0
1,2,4-Trichlorobenzene	0.290	0.306	0.01	5.5	50.0
Naphthalene	1.038	1.108	0.01	6.7	50.0
4-Chloroaniline	0.409	0.441	0.01	7.8	50.0
Hexachlorobutadiene	0.152	0.164	0.01	7.9	20.0
4-Chloro-3-Methylphenol	0.297	0.329	0.01	10.8	20.0
2-Methylnaphthalene	0.662	0.718	0.01	8.4	50.0
Hexachlorocyclopentadiene	0.329	0.303	0.05	7.9	50.0
2,4,6-Trichlorophenol	0.342	0.352	0.01	2.9	20.0
2,4,5-Trichlorophenol	0.361	0.378	0.01	4.7	50.0
2-Chloronaphthalene	1.096	1.138	0.01	3.8	50.0
2-Nitroaniline	0.391	0.429	0.01	9.7	50.0
Dimethylphthalate	1.206	1.340	0.01	11.1	50.0
Acenaphthylene	1.817	1.900	0.01	4.6	50.0
2,6-Dinitrotoluene	0.279	0.306	0.01	9.7	50.0
3-Nitroaniline	0.334	0.367	0.01	9.9	50.0
Acenaphthene	1.129	1.184	0.01	4.9	20.0
2,4-Dinitrophenol	0.129	0.177	0.05	37.2	50.0
4-Nitrophenol	0.166	0.207	0.05	24.7	50.0
Dibenzofuran	1.561	1.675	0.01	7.3	50.0
2,4-Dinitrotoluene	0.371	0.424	0.01	14.3	50.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0F140185

Instrument ID: 71

Calibration Date: 06/23/00 Time: 0735

Lab File ID: S0623CC1

Init. Calib. Date(s): 06/01/00 06/01/00

Init. Calib. Times: 0938 1215

GC Column: HP5-MS ID: 0.25 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.168	1.380	0.01	18.2	50.0
4-Chlorophenyl-phenylether	0.567	0.614	0.01	8.3	50.0
Fluorene	1.230	1.353	0.01	10.0	50.0
4-Nitroaniline	0.333	0.386	0.01	15.9	50.0
4,6-Dinitro-2-methylphenol	0.125	0.135	0.01	8.0	50.0
N-Nitrosodiphenylamine (1)	0.536	0.534	0.01	0.4	20.0
4-Bromophenyl-phenylether	0.186	0.185	0.01	0.5	50.0
Hexachlorobenzene	0.194	0.198	0.01	2.1	50.0
Pentachlorophenol	0.101	0.110	0.01	8.9	20.0
Phenanthrene	1.005	1.064	0.01	5.9	50.0
Anthracene	1.033	1.103	0.01	6.8	50.0
Carbazole	0.970	1.062	0.01	9.5	50.0
Di-n-Butylphthalate	1.200	1.367	0.01	13.9	50.0
Fluoranthene	1.021	1.170	0.01	14.6	20.0
Pyrene	1.132	1.162	0.01	2.6	50.0
Butylbenzylphthalate	0.677	0.684	0.01	1.0	50.0
3,3'-Dichlorobenzidine	0.465	0.478	0.01	2.8	50.0
Benzo(a)Anthracene	1.140	1.198	0.01	5.1	50.0
Chrysene	1.076	1.109	0.01	3.1	50.0
bis(2-ethylhexyl)Phthalate	1.141	1.019	0.01	10.7	50.0
Di-n-octylphthalate	1.672	1.546	0.01	7.5	20.0
Benzo(b)fluoranthene	1.075	1.138	0.01	5.9	50.0
Benzo(k)fluoranthene	0.993	1.104	0.01	11.2	50.0
Benzo(a)pyrene	1.022	1.094	0.01	7.0	20.0
Indeno(1,2,3-cd)pyrene	1.483	1.488	0.01	0.3	50.0
Dibenz(a,h)anthracene	1.270	1.302	0.01	2.5	50.0
Benzo(g,h,i)perylene	1.294	1.318	0.01	1.8	50.0
Pyridine	1.623	1.527	0.01	5.9	50.0
N-Nitrosodimethylamine	0.895	0.912	0.01	1.9	50.0
Aniline	2.403	2.279	0.01	5.2	50.0
Benzyl Alcohol	1.002	1.006	0.01	0.4	50.0
Benzoic Acid	0.152	0.182	0.01	19.7	50.0
1-Methylnaphthalene	0.619	0.645	0.01	4.2	50.0
2,3,4,6-Tetrachlorophenol	0.247	0.275	0.01	11.3	50.0
2,3,5,6-Tetrachlorophenol	0.247	0.271	0.01	9.7	50.0
1,2-Diphenylhydrazine	0.928	0.946	0.01	1.9	50.0
Benzidine	0.612	0.605	0.01	1.1	50.0

661 232

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0F140185

Instrument ID: 71

Calibration Date: 06/23/00 Time: 0735

Lab File ID: S0623CC1

Init. Calib. Date(s): 06/01/00 06/01/00

Init. Calib. Times: 0938 1215

GC Column: HP5-MS ID: 0.25 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Methyl methanesulfonate	0.811	0.679	0.01	16.3	50.0
2-Naphthylamine	1.024	1.049	0.01	2.4	50.0
7,12-dimethylbenz [a] anthrace	0.439	0.466	0.01	6.2	50.0
Nitrobenzene-d5	0.404	0.438	0.01	8.4	50.0
2-Fluorobiphenyl	1.267	1.305	0.01	3.0	50.0
Terphenyl-d14	0.858	0.901	0.01	5.0	50.0
Phenol-d5	1.711	1.746	0.01	2.0	50.0
2-Fluorophenol	1.368	1.354	0.01	1.0	50.0
2,4,6-Tribromophenol	0.103	0.098	0.01	4.8	50.0
2-Chlorophenol-d4	1.253	1.259	0.01	0.5	50.0
1,2-Dichlorobenzene-d4	0.847	0.914	0.01	7.9	50.0

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: 71.i
 Lab File ID: S0623CC1.D
 Analysis Type: NONE

Injection Date: 23-JUN-2000 07:35
 Lab Sample ID: sstd50
 Method File: \\QPITPA02\D\chem\71.i\s062300.b\8270clp

COMPOUND	EXPECTED CONC	MEASURED CONC.	%D	MAX %D
67 N-Nitrosodimethylamine	50.0000	50.9557	1.9	50.0
66 Pyridine	50.0000	47.0264	5.9	50.0
87 Methyl methanesulfonate	50.0000	41.8368	16.3	50.0
185 2-Fluorophenol	50.0000	49.5119	1.0	50.0
68 Aniline	50.0000	47.4262	5.1	50.0
184 Phenol-d5	50.0000	51.0227	2.0	50.0
1 Phenol	50.0000	48.5512	2.9	20.0
2 bis(2-Chloroethyl)ether	50.0000	50.5492	1.1	50.0
187 2-Chlorophenol-d4	50.0000	50.2687	0.5	50.0
3 2-Chlorophenol	50.0000	51.8194	3.6	50.0
4 1,3-Dichlorobenzene	50.0000	52.8193	5.6	50.0
11 1,4-Dichlorobenzene-d4	40.0000	40.0000	0.0	50.0
5 1,4-Dichlorobenzene	50.0000	52.9221	5.8	20.0
69 Benzyl Alcohol	50.0000	50.1794	0.4	50.0
188 1,2-Dichlorobenzene-d4	50.0000	53.9617	7.9	50.0
6 1,2-Dichlorobenzene	50.0000	53.3408	6.7	50.0
7 2-Methylphenol	50.0000	52.6713	5.3	50.0
8 2,2'-oxybis(1-Chloropropane)	50.0000	55.4223	10.8	50.0
9 4-Methylphenol	50.0000	52.5983	5.2	50.0
18 N-Nitroso-di-n-propylamine	50.0000	53.6405	7.3	50.0
12 Hexachloroethane	50.0000	53.5036	7.0	50.0
181 Nitrobenzene-d5	50.0000	54.1661	8.3	50.0
13 Nitrobenzene	50.0000	53.8793	7.8	50.0
14 Isophorone	50.0000	53.8236	7.6	50.0
15 2-Nitrophenol	50.0000	52.1765	4.4	20.0
16 2,4-Dimethylphenol	50.0000	53.6302	7.3	50.0
17 bis(2-Chloroethoxy)methane	50.0000	52.3211	4.6	50.0
71 Benzoic Acid	50.0000	59.8520	19.7	50.0
18 2,4-Dichlorophenol	50.0000	53.8191	7.6	20.0
19 1,2,4-Trichlorobenzene	50.0000	52.7931	5.6	50.0
32 Naphthalene-d8	40.0000	40.0000	0.0	50.0
20 Naphthalene	50.0000	53.3718	6.7	50.0
21 4-Chloroaniline	50.0000	53.8595	7.7	50.0
22 Hexachlorobutadiene	50.0000	54.0373	8.1	20.0
23 4-Chloro-3-Methylphenol	50.0000	55.5388	11.1	20.0
24 2-Methylnaphthalene	50.0000	54.1751	8.4	50.0
72 1-Methylnaphthalene	50.0000	52.1599	4.3	50.0
25 Hexachlorocyclopentadiene	50.0000	46.0112	8.0	50.0
26 2,4,6-Trichlorophenol	50.0000	51.4527	2.9	20.0

661 234

Data File: \\QPITPA02\D\chem\71.i\s062300.b/S0623CC1.D
Report Date: 06/23/2000CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORTInstrument ID: 71.i
Lab File ID: S0623CC1.D
Analysis Type: NONEInjection Date: 23-JUN-2000 07:35
Lab Sample ID: sstd50
Method File: \\QPITPA02\D\chem\71.i\s062300.b\

COMPOUND	EXPECTED CONC	MEASURED CONC.	%D	MAX %D
27 2,4,5-Trichlorophenol	50.0000	52.2954	4.6	50.0
182 2-Fluorobiphenyl	50.0000	51.4813	3.0	50.0
28 2-Chloronaphthalene	50.0000	51.9029	3.8	50.0
29 2-Nitroaniline	50.0000	54.9270	9.9	50.0
30 Dimethylphthalate	50.0000	55.5768	11.2	50.0
31 Acenaphthylene	50.0000	52.2713	4.5	50.0
32 2,6-Dinitrotoluene	50.0000	54.9133	9.8	50.0
33 3-Nitroaniline	50.0000	54.9112	9.8	50.0
52 Acenaphthene-d10	40.0000	40.0000	0.0	50.0
34 Acenaphthene	50.0000	52.4028	4.8	20.0
35 2,4-Dinitrophenol	50.0000	68.4241	36.8	50.0
37 Dibenzofuran	50.0000	53.6451	7.3	50.0
36 4-Nitrophenol	50.0000	62.5508	25.1	50.0
38 2,4-Dinitrotoluene	50.0000	57.1496	14.3	50.0
77 2,3,5,6-Tetrachlorophenol	50.0000	54.8108	9.6	50.0
114 2-Naphthylamine	50.0000	51.2317	2.5	50.0
76 2,3,4,6-Tetrachlorophenol	50.0000	55.5998	11.2	50.0
39 Diethylphthalate	50.0000	59.0921	18.2	50.0
41 Fluorene	50.0000	55.0063	10.0	50.0
40 4-Chlorophenyl-phenylether	50.0000	54.1800	8.4	50.0
42 4-Nitroaniline	50.0000	58.0141	16.0	50.0
43 4,6-Dinitro-2-methylphenol	50.0000	54.4378	8.9	50.0
44 N-Nitrosodiphenylamine (1)	50.0000	49.7972	0.4	20.0
78 1,2-Diphenylhydrazine	50.0000	51.0232	2.0	50.0
186 2,4,6-Tribromophenol	50.0000	47.6506	4.7	50.0
45 4-Bromophenyl-phenylether	50.0000	49.7022	0.6	50.0
46 Hexachlorobenzene	50.0000	50.8715	1.7	50.0
47 Pentachlorophenol	50.0000	54.7186	9.4	20.0
78 Phenanthrene-d10	40.0000	40.0000	0.0	50.0
48 Phenanthrene	50.0000	52.9361	5.9	50.0
49 Anthracene	50.0000	53.3793	6.8	50.0
50 Carbazole	50.0000	54.7452	9.5	50.0
51 Di-n-Butylphthalate	50.0000	56.9791	14.0	50.0
52 Fluoranthene	50.0000	57.2906	14.6	20.0
79 Benzidine	50.0000	49.4216	1.2	50.0
53 Pyrene	50.0000	51.3468	2.7	50.0
183 Terphenyl-d14	50.0000	52.5023	5.0	50.0
54 Butylbenzylphthalate	50.0000	50.4967	1.0	50.0
56 Benzo(a)Anthracene	50.0000	52.5669	5.1	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

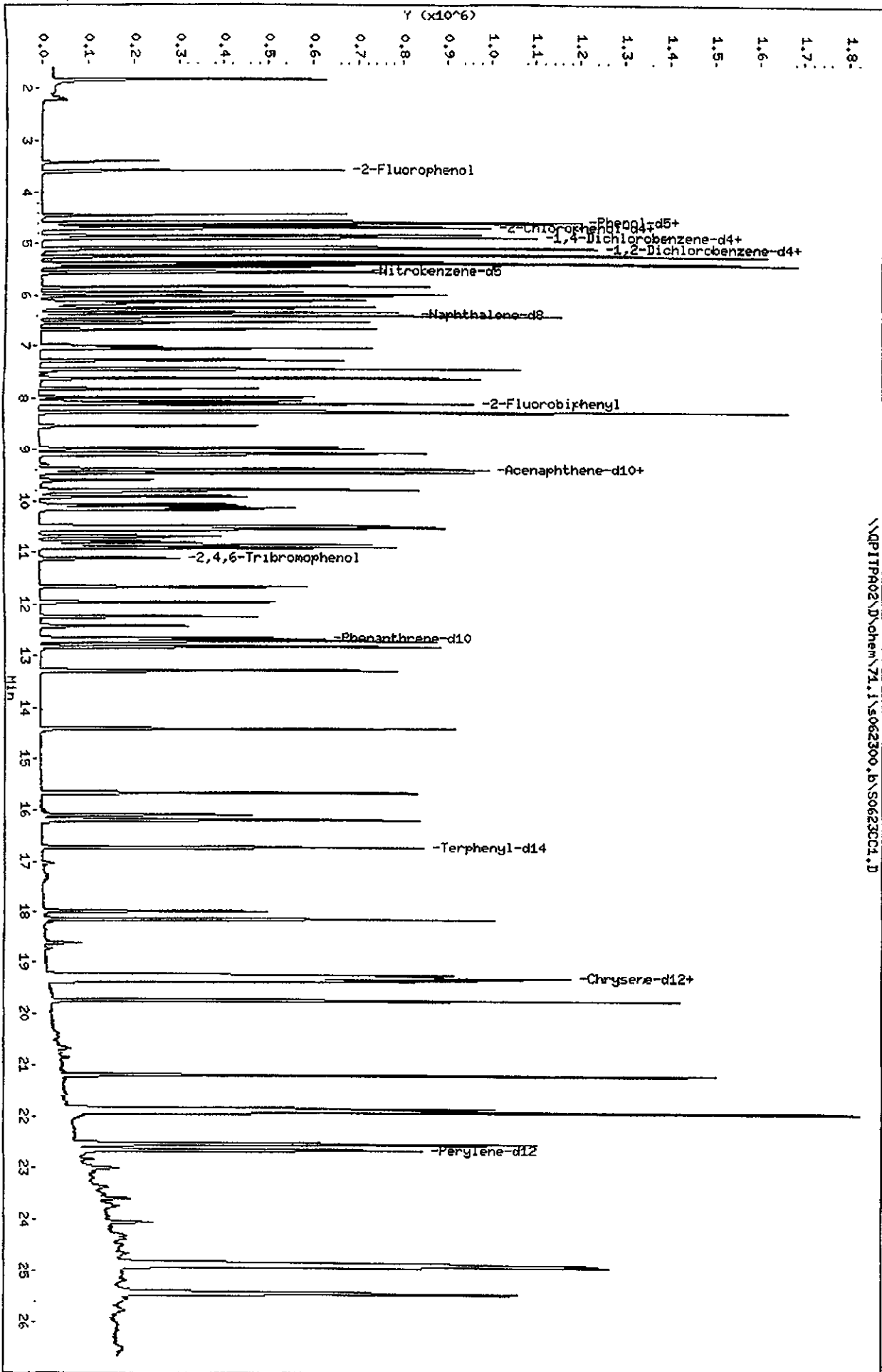
Instrument ID: 71.i
Lab File ID: S0623CC1.D
Analysis Type: NONE

Injection Date: 23-JUN-2000 07:35
Lab Sample ID: sstd50
Method File: \\QPITPA02\D\chem\71.i\s062300.b\

COMPOUND	EXPECTED CONC	MEASURED CONC	%D	MAX %D
90 Chrysene-d12	40.0000	40.0000	0.0	50.0
55 3,3'-Dichlorobenzidine	50.0000	51.3948	2.8	50.0
57 Chrysene	50.0000	51.5351	3.1	50.0
58 bis(2-ethylhexyl)Phthalate	50.0000	44.6654	10.7	50.0
59 Di-n-octylphthalate	50.0000	46.2327	7.5	20.0
60 Benzo(b)fluoranthene	50.0000	52.9192	5.8	50.0
61 Benzo(k)fluoranthene	50.0000	55.5705	11.1	50.0
143 7,12-dimethylbenz(a)anthracen	50.0000	53.1345	6.3	50.0
62 Benzo(a)pyrene	50.0000	53.5244	7.0	20.0
101 Perylene-d12	40.0000	40.0000	0.0	50.0
63 Indeno(1,2,3-cd)pyrene	50.0000	50.1763	0.4	50.0
64 Dibenz(a,h)anthracene	50.0000	51.2461	2.5	50.0
65 Benzo(g,h,i)perylene	50.0000	50.9647	1.9	50.0

Data File: \\QPITPA02\chem\71.1\5062300.b\50623001.D
 Date: 23-JUN-2000 07:35
 Client ID: 55050
 Sample Info: 55050(25 ug/ml) 104-178-12 8270
 Column phase: Hp5-MS

Instrument: 71.1
 Operator: 045183
 Column diameter: 0.25



Data File: \\QPITPA02\D\chem\71.i\s062300.b\S0623CC1.D
Report Date: 23-Jun-2000 08:18

Page 1

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s062300.b\S0623CC1.D
Lab Smp Id: sstd50 Client Smp ID: sstd50
Inj Date : 23-JUN-2000 07:35
Operator : 045183 Inst ID: 71.i
Smp Info : sstd50(25 ug/ml) 194-178-12 8270
Misc Info : sstd50,s062300.b,8270clp.m,1-82701.sub,2,2
Comment :
Method : \\QPITPA02\D\chem\71.i\s062300.b\8270clp.m
Meth Date : 23-Jun-2000 08:03 bachas Quant Type: ISTD
Cal Date : 01-JUN-2000 12:15 Cal File: S0601CC5.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000 Compound Sublist: 1-82701.sub
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC050

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
*****	*****	==	*****	*****	*****	*****	*****
* 1 1,4-Dichlorobenzene-d4	152	4.897	4.897	(1.000)	137984	40 0000	
* 2 Naphthalene-d8	136	6.403	6.403	(1.000)	528011	40 0000	
* 3 Acenaphthene-d10	164	9.384	9.384	(1.000)	289530	40 0000	
* 4 Phenanthrene-d10	188	12.670	12.670	(1.000)	530753	40 0000	
* 5 Chrysene-d12	240	19.294	19.294	(1.000)	546964	40 0000	
* 6 Perylene-d12	264	22.654	22.654	(1.000)	693837	40 0000	
13 N-Nitrosodimethylamine	74	1.820	1.820	(0.372)	157278	50 0000	50 956
10 Pyridine	79	1.825	1.825	(0.373)	263367	50.0000	47 026 (M)
19 Methyl methanesulfonate	80	3.412	3.412	(0.697)	117089	50 0000	41.837
22 Aniline	93	4.608	4.608	(0.941)	393160	50 0000	47.426
23 Phenol	94	4.630	4.630	(0.945)	331436	50 0000	48.551
24 bis(2-Chloroethyl)ether	93	4.672	4.672	(0.954)	275407	50 0000	50 549
25 2-Chlorophenol	128	4.726	4.726	(0.965)	248351	50 0000	51.819
27 1,3-Dichlorobenzene	146	4.859	4.859	(0.992)	279213	50 0000	52.819
28 1,4-Dichlorobenzene	146	4.913	4.913	(1.003)	281276	50.0000	52 922
29 1,2-Dichlorobenzene	146	5.116	5.116	(1.045)	258581	50 0000	53.341
30 Benzyl Alcohol	108	5.084	5.084	(1.038)	173477	50.0000	50.179
31 2-Methylphenol	108	5.244	5.244	(1.071)	231887	50.0000	52.671
32 2,2'-oxybis(1-Chloropropane)	45	5.249	5.249	(1.072)	382095	50.0000	55 422
33 N-Nitroso-di-n-propylamine	70	5.404	5.404	(1.104)	198083	50 0000	53.640
35 4-Methylphenol	108	5.404	5.404	(1.104)	244285	50 0000	52.598
38 Hexachloroethane	117	5.452	5.452	(1.113)	112428	50 0000	53.504
39 Nitrobenzene	77	5.565	5.565	(0.869)	311075	50 0000	53.879
44 Isophorone	82	5.837	5.837	(0.912)	489679	50 0000	53.824
45 2-Nitrophenol	139	5.944	5.944	(0.928)	135503	50.0000	52.176
46 2,4-Dimethylphenol	107	6.013	6.013	(0.939)	247015	50 0000	53.630

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(ng)	(ng)	(ng)	(ng)	(ng)	(ng)	(ng)
47 bis (2-Chloroethoxy)methane	93	6.115	6.115	(0.955)	309845	50.0000	52.321
51 2,4-Dichlorophenol	162	6.248	6.248	(0.976)	191708	50.0000	53.819
52 Benzoic Acid	122	6.168	6.168	(0.963)	120345	50.0000	59.852
53 1,2,4-Trichlorobenzene	180	6.350	6.350	(0.992)	202103	50.0000	52.793
54 Naphthalene	128	6.430	6.430	(1.004)	731381	50.0000	53.372
55 4-Chloroaniline	127	6.537	6.537	(1.021)	290863	50.0000	53.859
59 Hexachlorobutadiene	225	6.676	6.676	(1.043)	108162	50.0000	54.037
62 4-Chloro-3-Methylphenol	107	7.279	7.279	(1.137)	217378	50.0000	55.539
65 2-Methylnaphthalene	142	7.445	7.445	(1.163)	473571	50.0000	54.175
66 1-Methylnaphthalene	142	7.621	7.621	(1.190)	425869	50.0000	52.160
67 Hexachlorocyclopentadiene	237	7.824	7.824	(0.834)	109627	50.0000	46.011
69 2,4,6-Trichlorophenol	196	7.985	7.985	(0.851)	127404	50.0000	51.453
70 2,4,5-Trichlorophenol	196	8.065	8.065	(0.859)	136666	50.0000	52.295
73 2-Chloronaphthalene	162	8.278	8.278	(0.882)	411714	50.0000	51.903
77 2-Nitroaniline	65	8.545	8.545	(0.911)	155315	50.0000	54.927
80 Dimethylphthalate	163	8.978	8.978	(0.957)	485170	50.0000	55.577
82 2,6-Dinitrotoluene	165	9.106	9.106	(0.970)	110722	50.0000	54.913
83 Acenaphthylene	152	9.074	9.074	(0.967)	687500	50.0000	52.271
85 3-Nitroaniline	138	9.374	9.374	(0.999)	132756	50.0000	54.911
86 Acenaphthene	153	9.448	9.448	(1.007)	428364	50.0000	52.403
87 2,4-Dinitrophenol	184	9.587	9.587	(1.022)	64136	50.0000	68.424
89 4-Nitrophenol	109	9.817	9.817	(1.046)	74941	50.0000	62.551
90 Dibenzofuran	168	9.785	9.785	(1.043)	606191	50.0000	53.645
91 2,4-Dinitrotoluene	165	9.913	9.913	(1.056)	153466	50.0000	57.150
95 2,3,5,6-Tetrachlorophenol	232	10.079	10.079	(1.074)	98079	50.0000	54.811
92 2,3,4,6-Tetrachlorophenol	232	10.170	10.170	(1.084)	99507	50.0000	55.600
96 2-Naphthylamine	143	10.132	10.132	(1.080)	379726	50.0000	51.232
97 Diethylphthalate	149	10.495	10.495	(1.118)	499481	50.0000	59.092
98 Fluorene	166	10.527	10.527	(1.122)	489780	50.0000	55.006
99 4-Chlorophenyl-phenylether	204	10.570	10.570	(1.126)	222230	50.0000	54.180
100 4-Nitroaniline	138	10.704	10.704	(1.141)	139776	50.0000	58.014
102 4,6-Dinitro-2-methylphenol	198	10.800	10.800	(0.852)	89894	50.0000	54.438
103 N-Nitrosodiphenylamine (1)	169	10.859	10.859	(0.857)	353946	50.0000	49.797
104 1,2-Diphenylhydrazine	77	10.917	10.917	(0.862)	627892	50.0000	51.023
112 4-Bromophenyl-phenylether	248	11.671	11.671	(0.921)	122478	50.0000	49.702
113 Hexachlorobenzene	284	11.964	11.964	(0.944)	131087	50.0000	50.872
117 Pentachlorophenol	266	12.424	12.424	(0.981)	73195	50.0000	54.719
122 Phenanthrene	178	12.723	12.723	(1.004)	706162	50.0000	52.936
123 Anthracene	178	12.830	12.830	(1.013)	731858	50.0000	53.379
126 Carbazole	167	13.284	13.284	(1.048)	704831	50.0000	54.745
130 Di-n-Butylphthalate	149	14.416	14.416	(1.138)	907254	50.0000	56.979
135 Fluoranthene	202	15.656	15.656	(1.236)	776255	50.0000	57.290
136 Benzidine	184	16.089	16.089	(0.834)	413454	50.0000	49.422
137 Pyrene	202	16.195	16.195	(0.839)	794757	50.0000	51.347
144 Butylbenzylphthalate	149	18.151	18.151	(0.941)	467735	50.0000	50.497
149 3,3'-Dichlorobenzidine	252	19.315	19.315	(1.001)	326917	50.0000	51.395
150 Benzo(a)Anthracene	228	19.256	19.256	(0.998)	819243	50.0000	52.567

Data File: \\QPITPA02\D\chem\71.i\s062300.b\S0623CC1.D
 Report Date: 23-Jun-2000 08:18

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
151 Chrysene	228	19.358	19.358	(1.003)	758152	50.0000	51.535
153 bis(2-ethylhexyl)Phthalate	149	19.727	19.727	(1.022)	696724	50.0000	44.665
155 Di-n-octylphthalate	149	21.201	21.201	(0.936)	1340423	50.0000	46.233
157 Benzo(b)fluoranthene	252	21.842	21.842	(0.964)	987214	50.0000	52.919
158 Benzo(k)fluoranthene	252	21.901	21.901	(0.967)	957386	50.0000	55.570
159 7,12-dimethylbenz(a)anthracen	256	21.901	21.901	(0.967)	404143	50.0000	53.134
167 Benzo(a)pyrene	252	22.531	22.531	(0.995)	948745	50.0000	53.524
169 Indeno(1,2,3-cd)pyrene	276	24.882	24.882	(1.098)	1290932	50.0000	50.176
170 Dibenz(a,h)anthracene	278	24.930	24.930	(1.100)	1129083	50.0000	51.246
171 Benzo(g,h,i)perylene	276	25.448	25.448	(1.123)	1143602	50.0000	50.965
\$ 172 Nitrobenzene-d5	82	5.543	5.543	(0.866)	289199	50.0000	54.166
\$ 173 2-Fluorobiphenyl	172	8.113	8.113	(0.865)	472242	50.0000	51.481
\$ 174 Terphenyl-d14	244	16.735	16.735	(0.867)	616119	50.0000	52.502
\$ 175 Phenol-d5	99	4.619	4.619	(0.943)	301207	50.0000	51.023
\$ 176 2-Fluorophenol	112	3.593	3.593	(0.734)	233591	50.0000	49.512
\$ 177 2,4,6-Tribromophenol	330	11.120	11.120	(0.878)	65160	50.0000	47.650
\$ 178 2-Chlorophenol-d4	132	4.710	4.710	(0.962)	217232	50.0000	50.269
\$ 179 1,2-Dichlorobenzene-d4	152	5.100	5.100	(1.041)	157671	50.0000	53.962

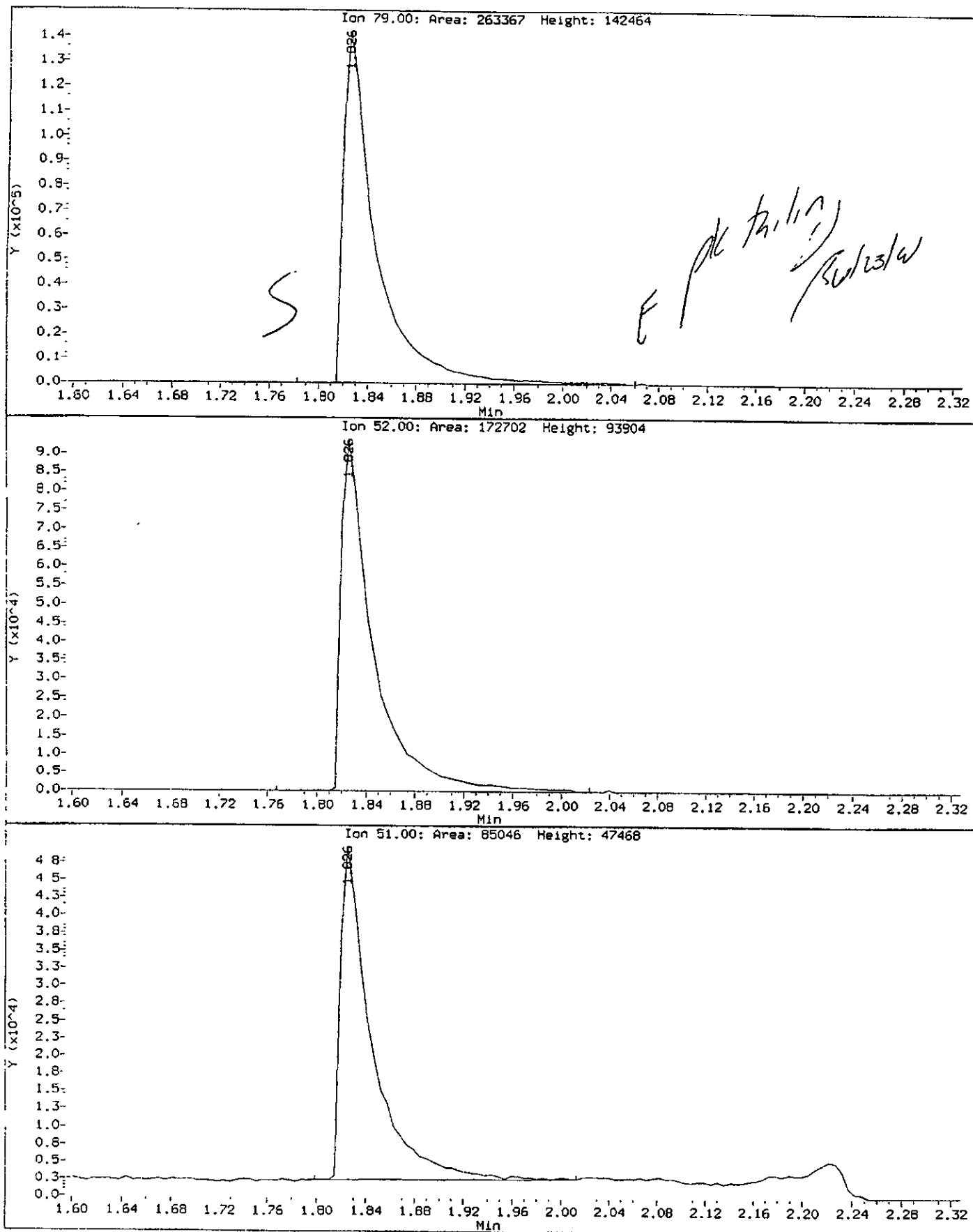
QC Flag Legend

M - Compound response manually integrated.

661 240

Data File: \\QPITPA02\0\chem\71.1\s062300.b\s0623CC1.D
 Injection Date: 23-JUN-2000 07:35
 Instrument: 71.1
 Client Sample ID: sstd50

Compound: Pyridine
 CAS Number: 110-86-1



**GC/MS SEMIVOLATILE
QC DATA**

661 242

Data File: \\QPITPA02\chem\71.i\5062300.b\50623DF2.D

Page 3

Date : 23-JUN-2000 07:19

Client ID: DFTPP02

Instrument: 71.i

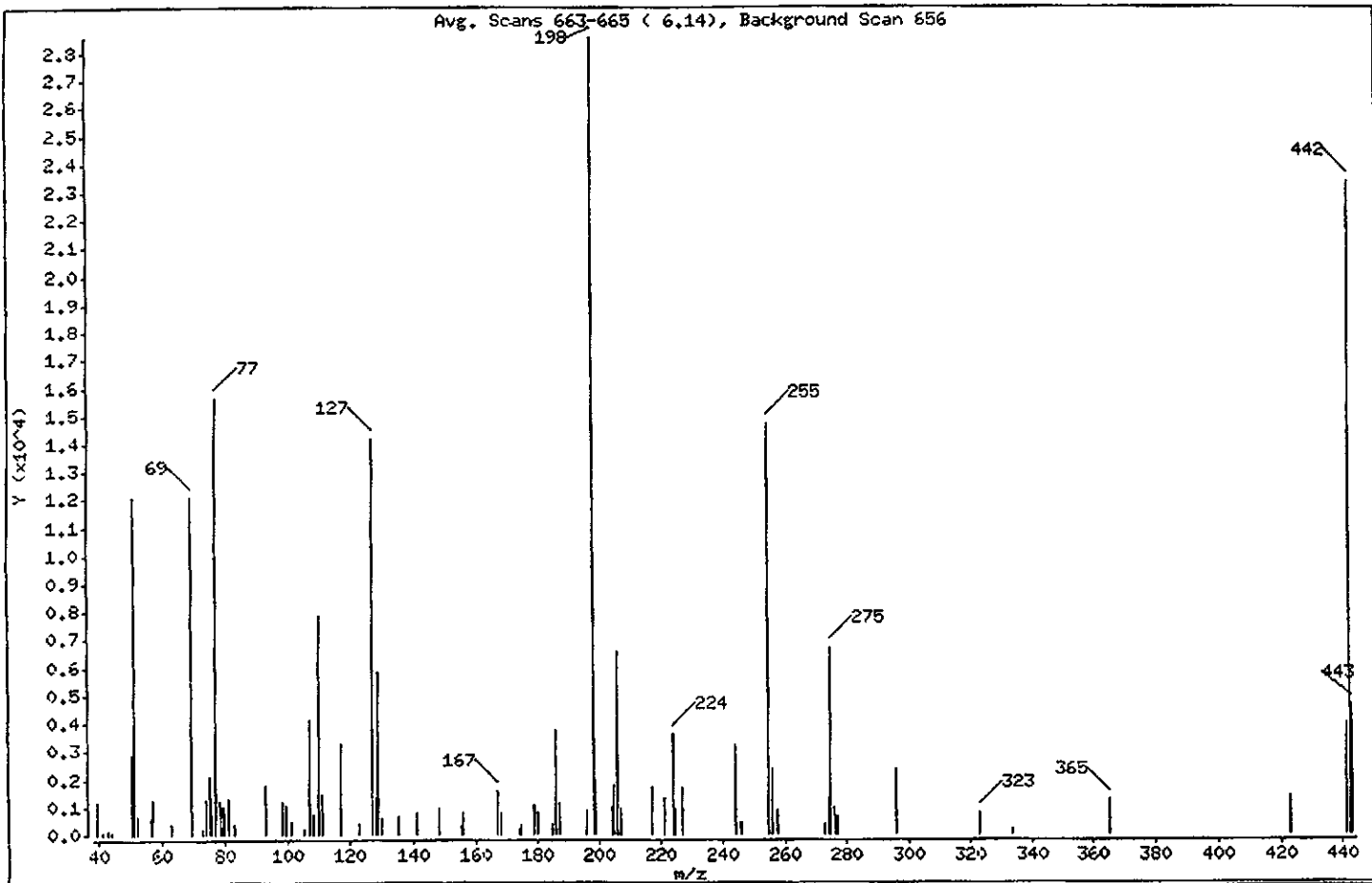
Sample Info: DFTPP050 (25ppb) 194-158-6

Operator: 045183

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	42.24
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	42.32
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	49.67
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.85
275	10.00 - 30.00% of mass 198	23.47
365	Greater than 1.00% of mass 198	4.28
441	Present, but less than mass 443	14.12
442	Greater than 40.00% of mass 198	81.49
443	17.00 - 23.00% of mass 442	16.36 (20.07)

Data File: \\QPITPA02\D\chem\71.i\5062300.b\50623DF2.D

Date : 23-JUN-2000 07:19

Client ID: DFTPP02

Instrument: 71.i

Sample Info: DFTPP050 (25ppb) 194-158-6

Operator: 045183

Column phase:

Column diameter: 2.00

Data File: 50623DF2.D

Spectrum: Avg. Scans 663-665 (6.14), Background Scan 656

Location of Maximum: 198.00

Number of points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	1185	83.00	424	167.00	1563	244.00	3201
41.00	77	93.00	1789	168.00	805	246.00	450
43.00	99	98.00	1170	174.00	172	255.00	14725
44.00	54	99.00	1064	175.00	361	256.00	2347
50.00	2896	101.00	485	179.00	1046	258.00	868
51.00	12077	105.00	188	180.00	769	273.00	388
52.00	666	107.00	4145	185.00	398	274.00	1336
55.00	7	108.00	693	186.00	3733	275.00	6711
56.00	611	110.00	7870	187.00	1116	276.00	969
57.00	1255	111.00	1447	196.00	836	277.00	670
63.00	388	117.00	3275	198.00	28584	296.00	2356
69.00	12099	123.00	372	199.00	1959	323.00	818
73.00	184	127.00	14201	204.00	975	334.00	200
74.00	1247	128.00	1317	205.00	1789	365.00	1225
75.00	2082	129.00	5828	206.00	6598	423.00	1412
76.00	711	130.00	559	207.00	924	441.00	4038
77.00	15622	135.00	648	217.00	1705	442.00	23296
78.00	1209	141.00	780	221.00	1283	443.00	4677
79.00	987	148.00	896	224.00	3631		
80.00	803	155.00	339	225.00	912		
81.00	1295	156.00	791	227.00	1690		

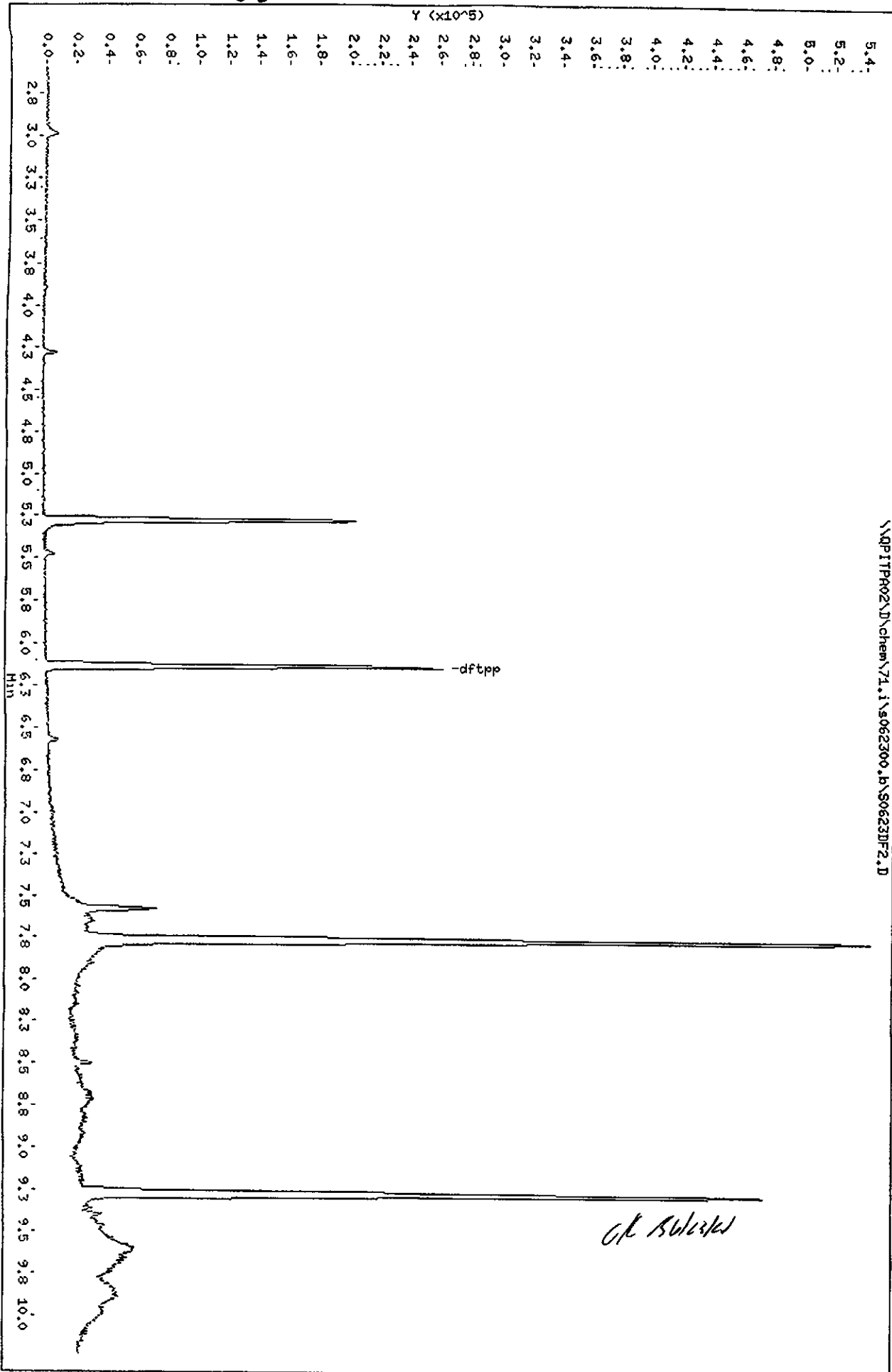
661 244

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Date: 23-JUN-2000 07:19
Client ID: DFTPP02
Sample Info: DFTPP050 (25ppb) 194-188-6

Instrument: 71.i
Operator: 048183
Column diameter: 2.00

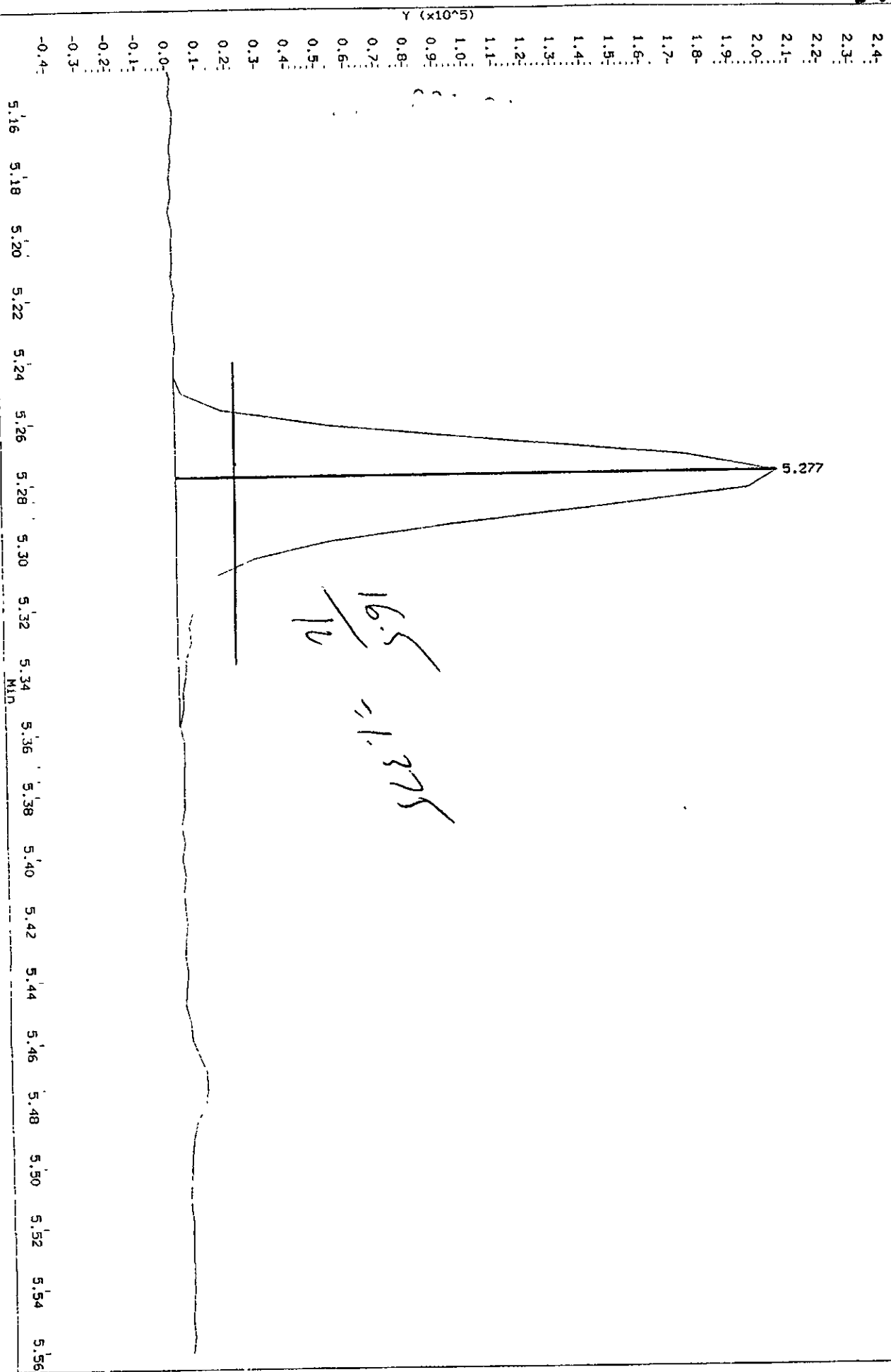
Column phase:

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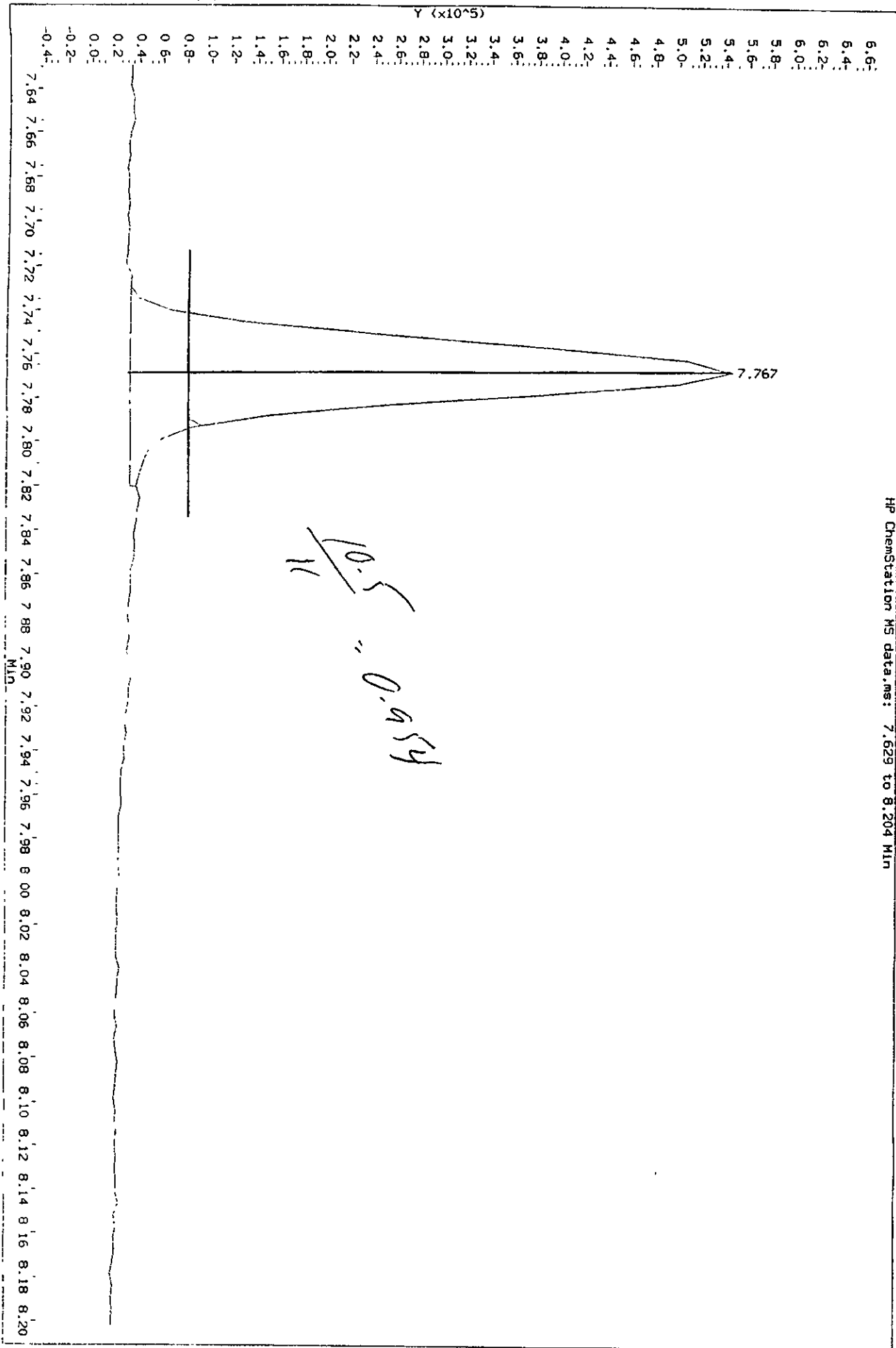
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 Injection Date: 23-JUN-2000 07:19
 Instrument: 71.1
 Client Sample ID: DFTPP02

HP ChemStation MS data.ms: 5.147 to 5.561 Min



Data file: \NPI\FP02\Nchem\71.1\5062300.b\5062300.F2.D
Injection Date: 23-JUN-2000 07:19
Instrument: 71.1
Client Sample ID: DFTFP02

HP ChemStation MS data.ms: 7.629 to 8.204 Min



661 246

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F220000 120

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DF44M101

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

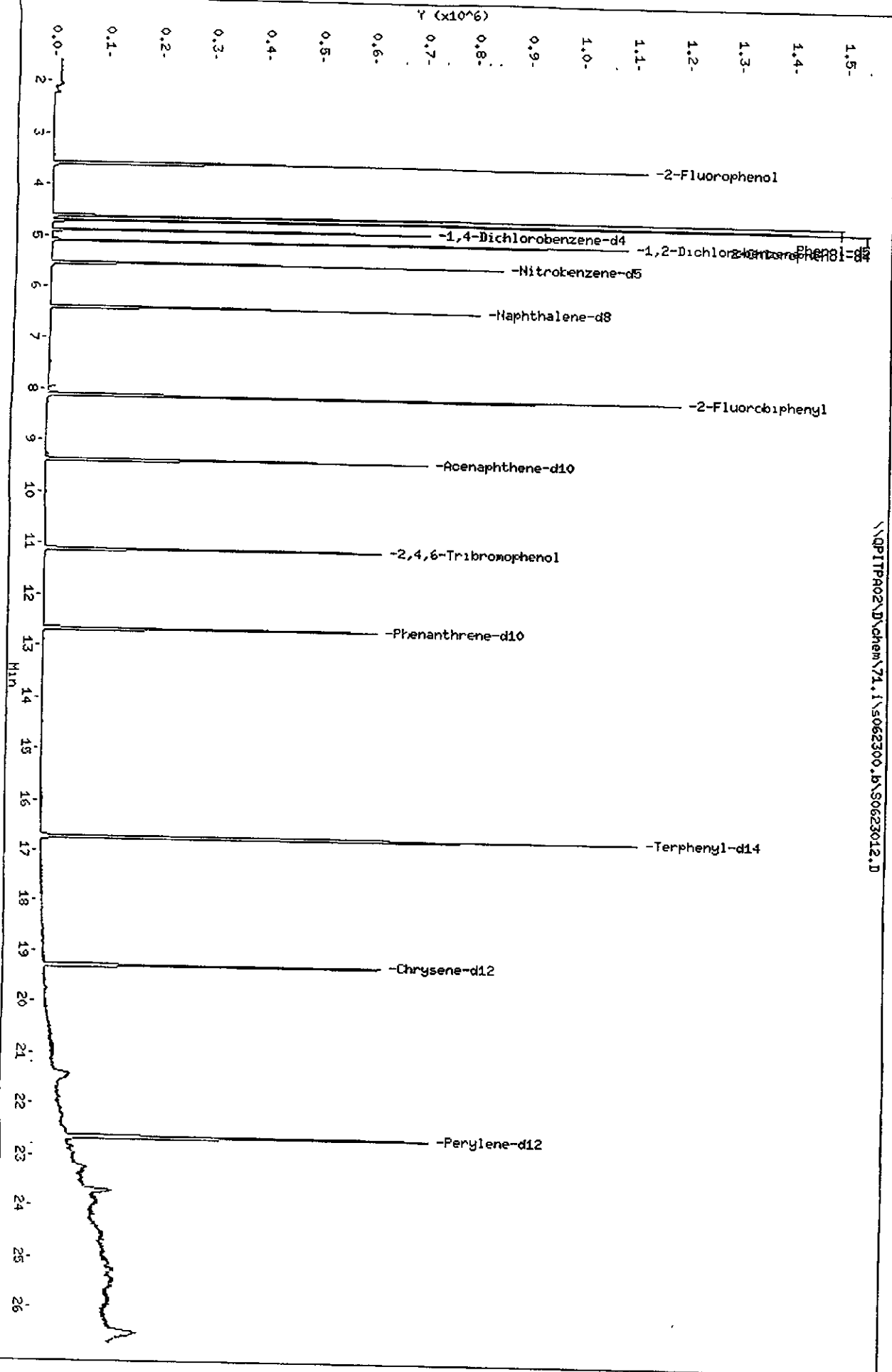
QC Batch: 0174120

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	- U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25	U
110-86-1	Pyridine	0.10	U
95-95-4	2,4,5-Trichlorophenol	0.050	U
88-06-2	2,4,6-Trichlorophenol	0.050	U
1319-77-3	Cresols (total)	0.050	U

Data File: \\QPITP02\chem\71.1\5062300.b\50623012.D
Date: 23-JUN-2000 08:07
Client ID: INTRA-LAB BLANK
Sample Info: c0f140185-sbik 6/21/00 8270tcip
Volume Injected (uL): 2.0
Column Phase: Hp8-MS

Instrument: 71.1
Operator: 045183
Column diameter: 0.25



Data File: \\QPITPA02\D\chem\71.i\s062300.b\S0623012.D
Report Date: 23-Jun-2000 08:42

Page 1

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s062300.b\S0623012.D
Lab Smp Id: DF44M101 Client Smp ID: INTRA-LAB BLANK
Inj Date : 23-JUN-2000 08:07
Operator : 045183 Inst ID: 71.i
Smp Info : c0f140185-sblk 6/21/00 8270tclp
Misc Info : df44m101,s062300.b,8270clp.m,1-tclp.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s062300.b\8270clp.m
Meth Date : 23-Jun-2000 08:03 bachas Quant Type: ISTD
Cal Date : 01-JUN-2000 12:15 Cal File: S0601CCS.D
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-tclp.sub
Target Version: 4.04
Processing Host: PITPC050

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi})$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.001	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	200.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

6/23/00

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng)	(mg/L)
* 1 1,4 Dichlorobenzene-d4		152	4 900	4 897	(1.000)	133218	40 0000	(a)
* 2 Naphthalene-d8		136	6 401	6 403	(1.000)	534874	40.0000	(a)
* 3 Acenaphthene-d10		164	9 382	9 384	(1.000)	299058	40 0000	(a)
* 4 Phenanthrene-d10		188	12 668	12.670	(1.000)	532188	40.0000	(a)
* 5 Chrysene-d12		240	19 281	19 294	(1.000)	519505	40 0000	(a)
* 6 Perylene-d12		264	22 652	22 654	(1.000)	612849	40 0000	(a)
10 Pyridine		79	Compound Not Detected.					
28 1,4-Dichlorobenzene		146	Compound Not Detected					
M 34 Cresols, total		100	Compound Not Detected					
31 2-Methylphenol		108	Compound Not Detected					
35 4-Methylphenol		108	Compound Not Detected.					
38 Hexachloroethane		117	Compound Not Detected					
39 Nitrobenzene		77	Compound Not Detected.					
59 Hexachlorobutadiene		224	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
69 2,4,6-Trichlorophenol	196				Compound Not Detected		
70 2,4,5-Trichlorophenol	196				Compound Not Detected.		
91 2,4 Dinitrotoluene	165				Compound Not Detected		
113 Hexachlorobenzene	283				Compound Not Detected		
117 Pentachlorophenol	265				Compound Not Detected.		
\$ 172 Nitrobenzene-d5	82	5.541	5.543	(0.866)	369414	68.3024	0.17076(a)
\$ 173 2-Fluorobiphenyl	172	8.111	8.113	(0.864)	603648	63.7098	0.15927(a)
\$ 174 Terphenyl-d14	244	16.738	16.735	(0.868)	845457	75.8533	0.18963(a)
\$ 175 Phenol-d5	99	4.617	4.619	(0.942)	598126	104.944	0.26236(a)
\$ 176 2-Fluorophenol	112	3.597	3.593	(0.734)	411774	90.4019	0.22600(a)
\$ 177 2,4,6-Tribromophenol	330	11.119	11.120	(0.878)	138300	100.864	0.25216(a)
\$ 178 2-Chlorophenol-d4	132	4.708	4.710	(0.961)	458578	109.914	0.27478(a)
\$ 179 1,2-Dichlorobenzene-d4	152	5.103	5.100	(1.041)	194072	68.7960	0.17199(a)

QC Flag Legend

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

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F220000 120

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DF44M102

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

QC Batch: 0174120

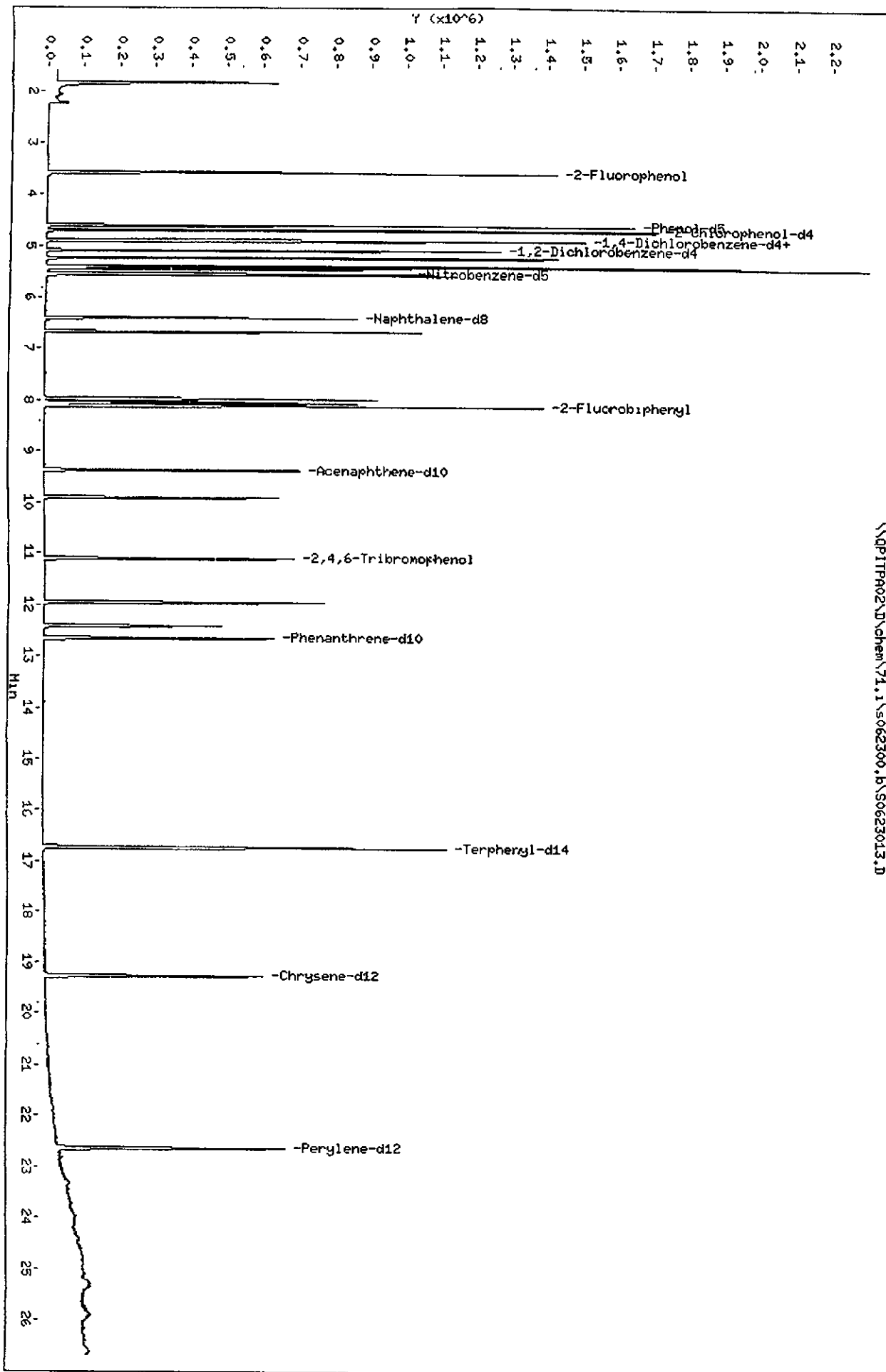
Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.187	
121-14-2	2,4-Dinitrotoluene	0.190	
118-74-1	Hexachlorobenzene	0.187	
87-68-3	Hexachlorobutadiene	0.185	
67-72-1	Hexachloroethane	0.190	
98-95-3	Nitrobenzene	0.190	
87-86-5	Pentachlorophenol	0.218	
110-86-1	Pyridine	0.182	
95-95-4	2,4,5-Trichlorophenol	0.189	
88-06-2	2,4,6-Trichlorophenol	0.183	
1319-77-3	Cresols (total)	0.594	

Data File: \\QPI1P002\J\chem\74.1\5062300.b\50623013.D
 Date: 23-JUN-2000 08:39
 Client ID: INTRA-LAB CHECK
 Sample Info: 00F140485-1os 6/21/00 8270tclp
 Volume Injected (uL): 2.0
 Column Phase: HP5-MS

Instrument: 74.1
 Operator: 045183
 Column diameter: 0.25

\\QPI1P002\J\chem\74.1\5062300.b\50623013.D



Data File: \\QPITPA02\D\chem\71.i\s062300.b\S0623013.D
Report Date: 23-Jun-2000 09:20

Page 1

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s062300.b\S0623013.D
Lab Smp Id: DF44M102 Client Smp ID: INTRA-LAB CHECK
Inj Date : 23-JUN-2000 08:39
Operator : 045183 Inst ID: 71.i
Smp Info : c0f140185-lcs 6/21/00 8270tclp
Misc Info : df44m102,s062300.b,8270clp.m,1-tclp.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s062300.b\8270clp.m
Meth Date : 23-Jun-2000 08:03 bachas Quant Type: ISTD
Cal Date : 01-JUN-2000 12:15 Cal File: S0601CC5.D
Als bottle: 15 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-tclp.sub
Target Version: 4.04
Processing Host: PITPC050

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi})$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.001	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	200.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

Sub/23/00

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng)	(mg/L)
* 1 1,4-Dichlorobenzene-d4		152	4.894	4.897 (1.000)		136510	40.0000	(a)
* 2 Naphthalene-d8		136	6.395	6.403 (1.000)		549038	40.0000	(a)
* 3 Acenaphthene-d10		164	9.381	9.384 (1.000)		302576	40.0000	(a)
* 4 Phenanthrene-d10		188	12.661	12.670 (1.000)		529895	40.0000	(a)
* 5 Chrysene-d12		240	19.275	19.294 (1.000)		493748	40.0000	(a)
* 6 Perylene-d12		264	22.641	22.654 (1.000)		571074	40.0000	(a)
10 Pyridine		79	1.822	1.825 (0.372)		403367	72.8023	0.18200 (aM)
28 1,4-Dichlorobenzene		146	4.910	4.913 (1.003)		393055	74.7518	0.18688 (a)
M 34 Cresols, total		100				1073161	237.793	0.59448 (a)
31 2-Methylphenol		108	5.236	5.244 (1.070)		353865	81.2455	0.20311 (a)
35 4-Methylphenol		108	5.407	5.404 (1.105)		719296	156.548	0.39137 (a)
38 Hexachloroethane		117	5.450	5.452 (1.114)		157926	75.9672	0.18992 (a)
39 Nitrobenzene		77	5.562	5.565 (0.870)		456790	76.0876	0.19022 (a)
59 Hexachlorobutadiene		225	6.673	6.676 (1.043)		153896	73.9412	0.18485 (a)

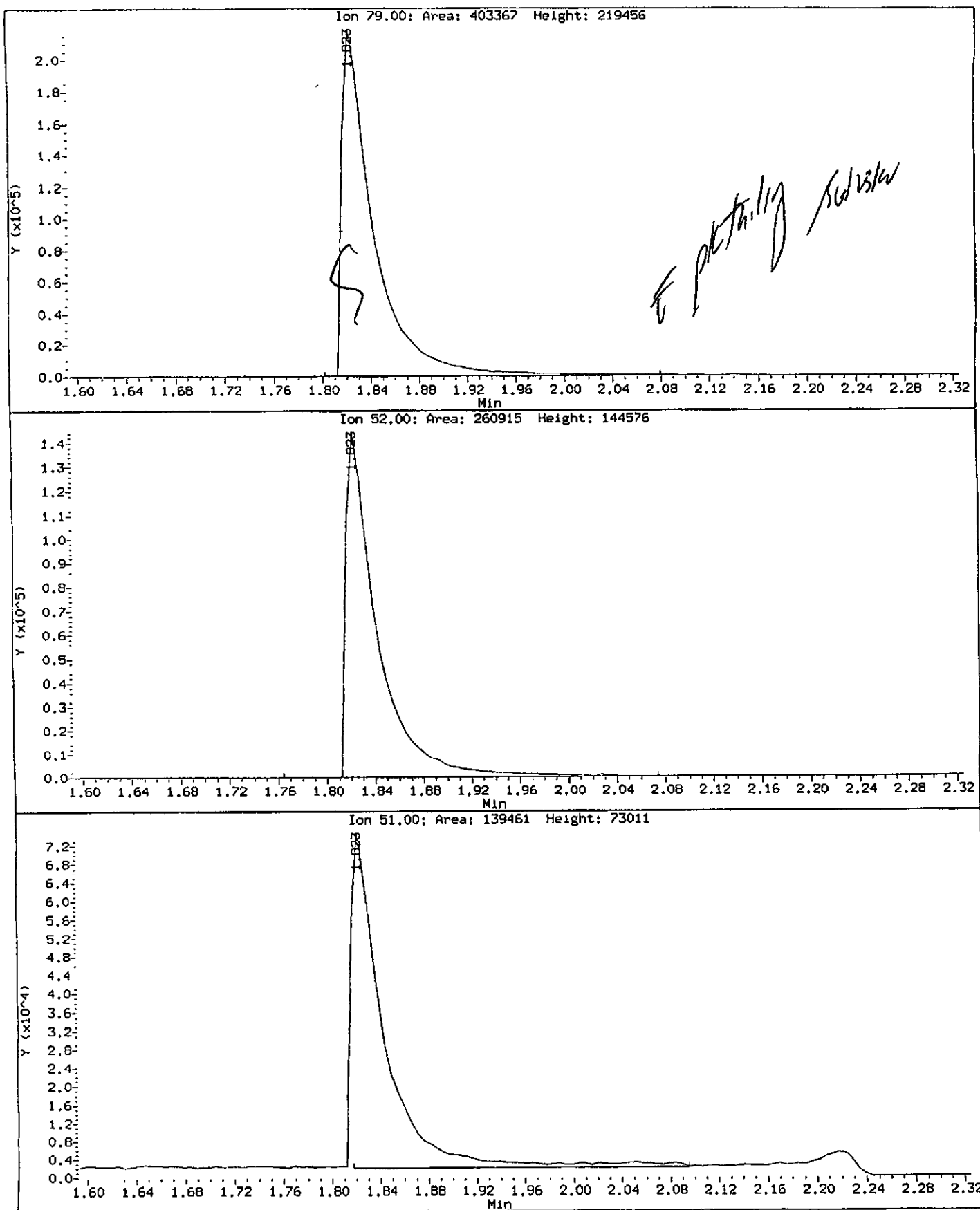
Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ng)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
69 2,4,6-Trichlorophenol	196	7.976	7.985	(0.850)	188990	73 0337	0.18258(a)
70 2,4,5-Trichlorophenol	196	8.051	8.065	(0.858)	206040	75 4421	0.18860(a)
91 2,4-Dinitrotoluene	165	9.910	9.913	(1.056)	213058	75.9203	0.18980(a)
113 Hexachlorobenzene	284	11.962	11.964	(0.945)	192203	74 7099	0.18677(a)
117 Pentachlorophenol	266	12.416	12.424	(0.981)	116712	87.3926	0.21848(aM)
\$ 172 Nitrobenzene-d5	82	5.540	5.543	(0.866)	427771	77.0518	0.19263(a)
\$ 173 2-Fluorobiphenyl	172	8.110	8.113	(0.864)	693997	72.3938	0.18098(a)
\$ 174 Terphenyl-d14	244	16.732	16.735	(0.868)	852747	80.4985	0.20125(a)
\$ 175 Phenol-d5	99	4.616	4.619	(0.943)	687103	117.648	0.29412(a)
\$ 176 2-Fluorophenol	112	3.590	3.593	(0.734)	481288	103 115	0.25779(a)
\$ 177 2,4,6-Tribromophenol	330	11.112	11.120	(0.878)	150272	110 070	0.27517(a)
\$ 178 2-Chlorophenol-d4	132	4.707	4.710	(0.962)	529233	123.790	0.30947(a)
\$ 179 1,2-Dichlorobenzene-d4	152	5.097	5.100	(1.041)	226343	78.3006	0.19575(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\QPITPA02\N\chem\71.1\s062300.b\50623013.D
Injection Date: 23-JUN-2000 08:39
Instrument: 71.1
Client Sample ID: INTRA-LAB CHECK

Compound: Pyridine
CAS Number: 110-86-1



661 256

Data File: \\QPITPA02\ID\chem\71.i\s062300.b\S0623013.D

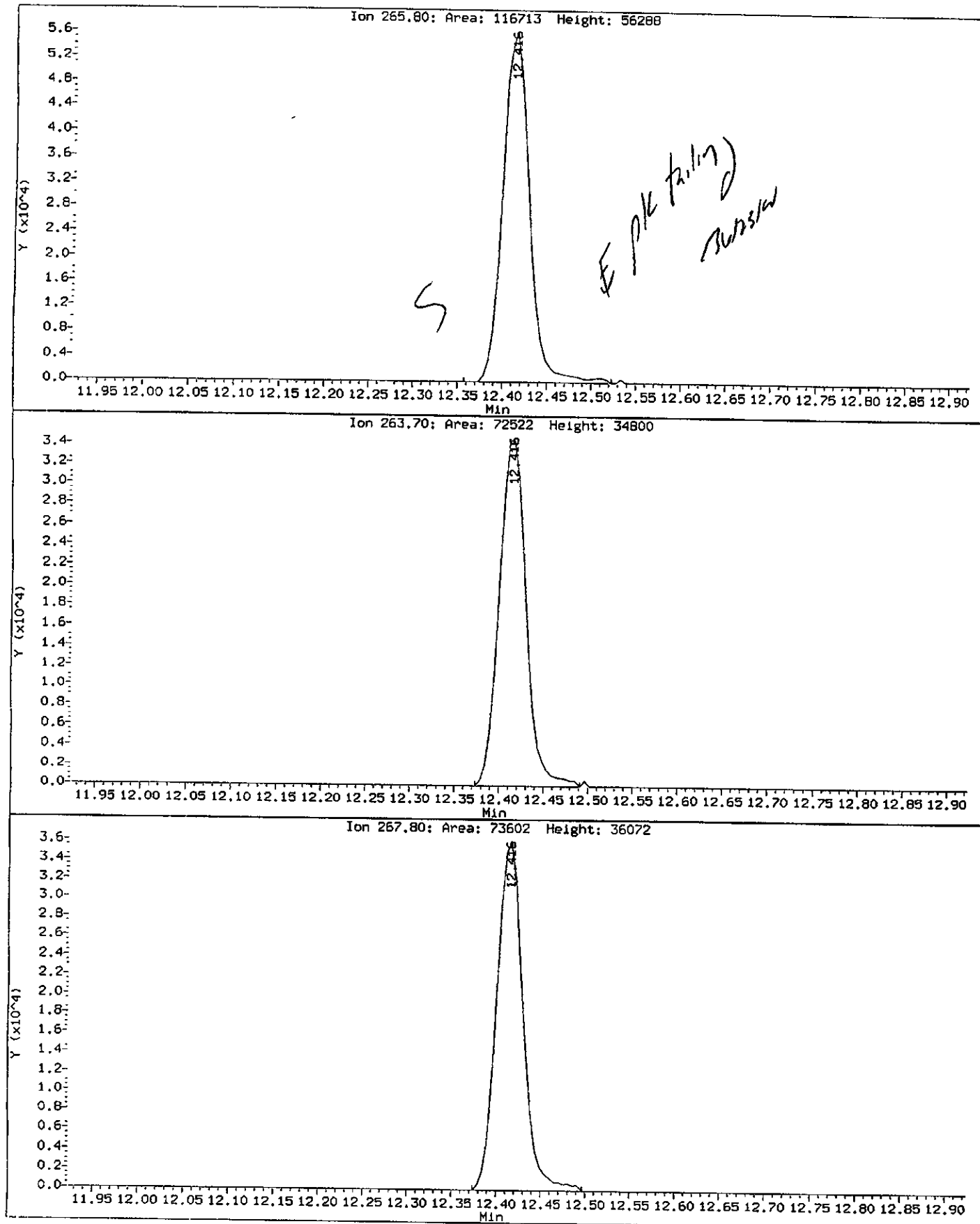
Injection Date: 23-JUN-2000 08:39

Instrument: 71.i

Client Sample ID: INTRA-LAB CHECK

Compound: Pentachlorophenol

CAS Number: 87-86-5



UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COF220000 120

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/14/00

Work Order: DF44M103

Date Extracted: 06/21/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

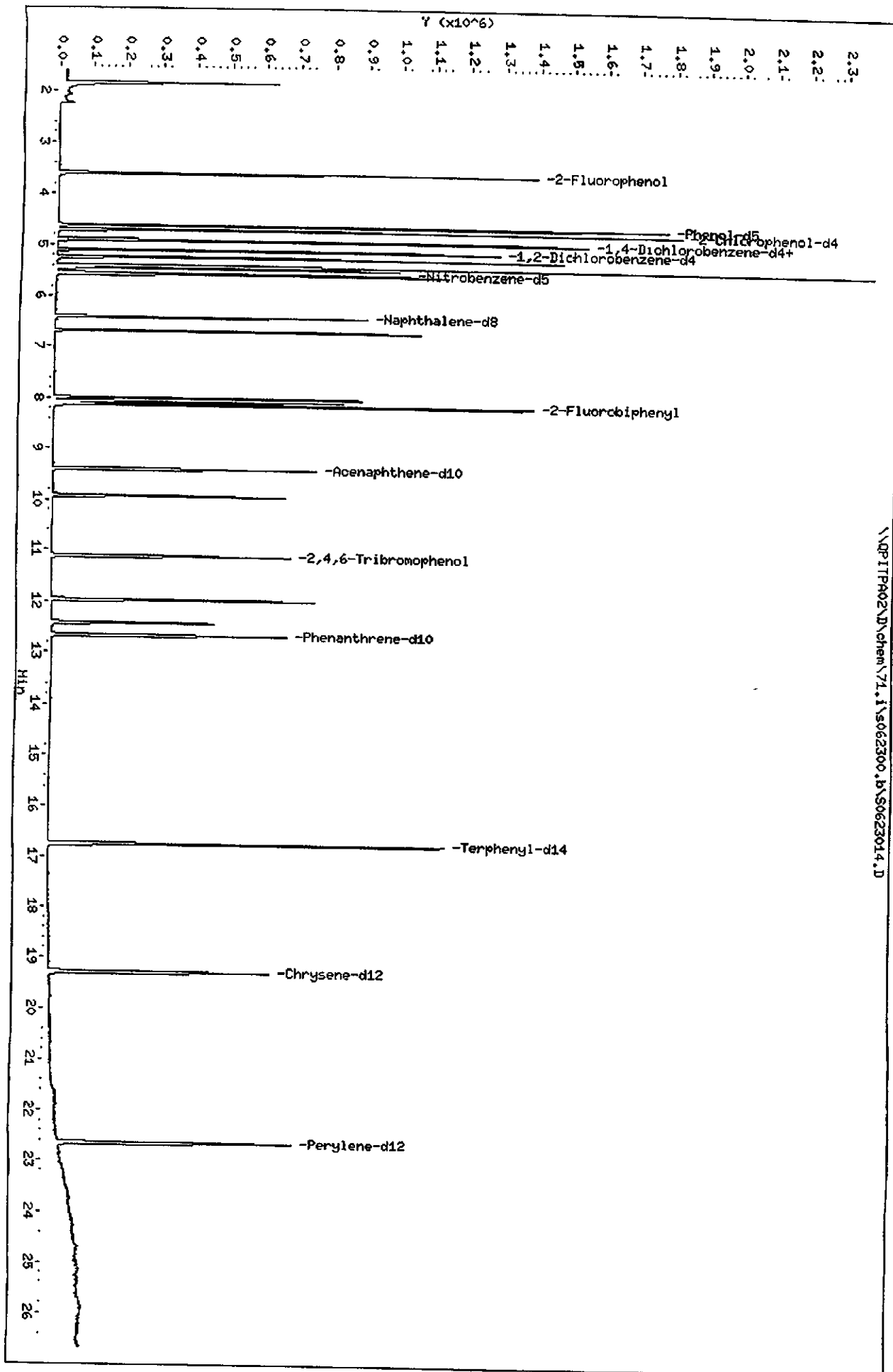
QC Batch: 0174120

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.180	
121-14-2	2,4-Dinitrotoluene	0.182	
118-74-1	Hexachlorobenzene	0.176	
87-68-3	Hexachlorobutadiene	0.176	
67-72-1	Hexachloroethane	0.184	
98-95-3	Nitrobenzene	0.184	
87-86-5	Pentachlorophenol	0.196	
110-86-1	Pyridine	0.176	
95-95-4	2,4,5-Trichlorophenol	0.181	
88-06-2	2,4,6-Trichlorophenol	0.175	
1319-77-3	Cresols (total)	0.572	

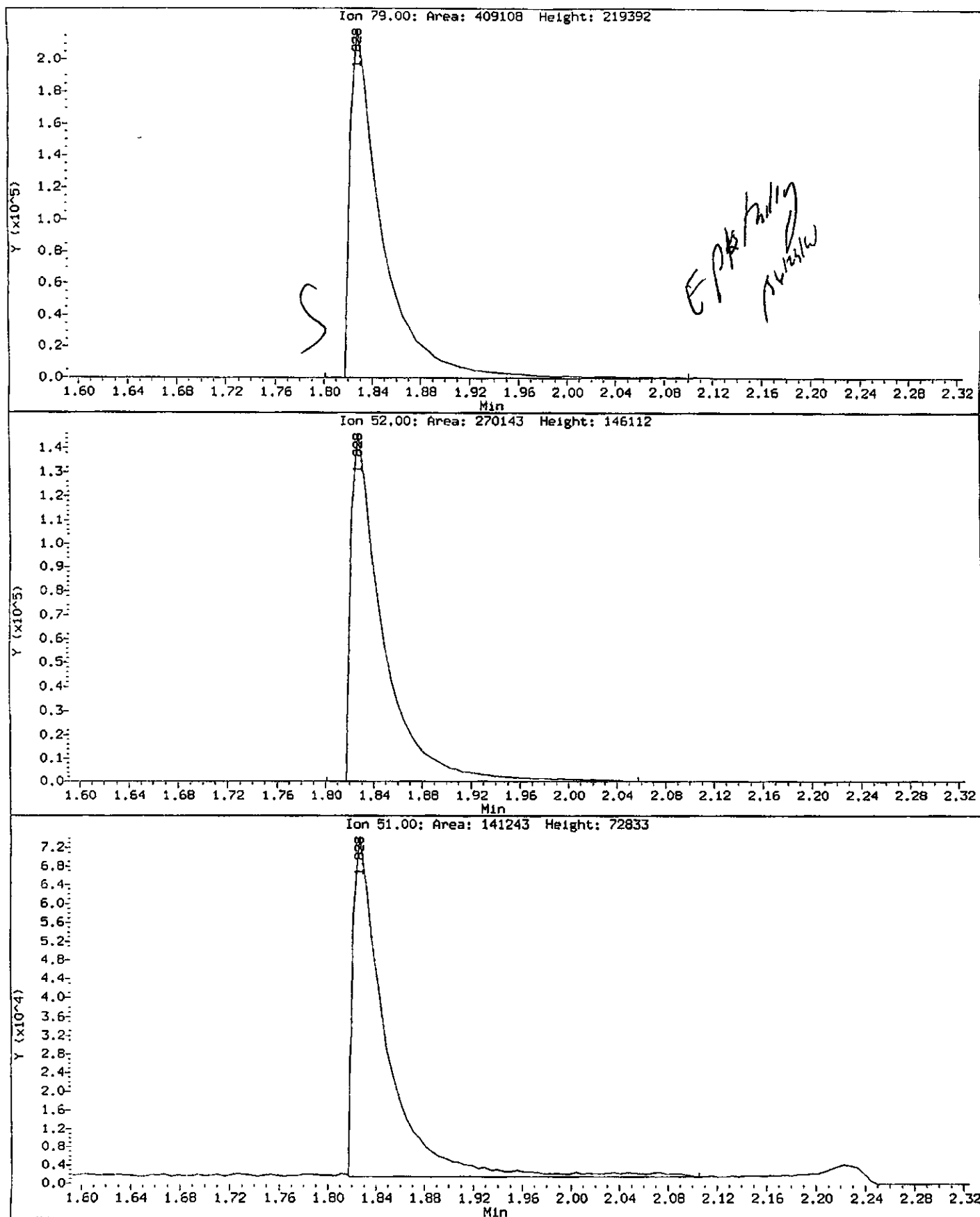
Data File: \QPI7PA02\chem\71.i\5062300.b\50623014.D
 Date: 23-JUN-2000 09:12
 Client ID: INTR-108 CHECK
 Sample Info: c0f140185-10sd 6/24/00 8270b01p
 Volume Injected (uL): 2.0
 Column phase: Hp5-HS

Instrument: 71.1
 Operator: 045183
 Column diameter: 0.25



Data File: \\QPITPA02\N\chem\71.1\s062300.b\S0623014.D
Injection Date: 23-JUN-2000 09:12
Instrument: 71.1
Client Sample ID: INTRA-LAB CHECK

Compound: Pyridine
CAS Number: 110-86-1



STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s062300.b\S0623014.D
 Lab Smp Id: DF44M103 Client Smp ID: INTRA-LAB CHECK
 Inj Date : 23-JUN-2000 09:12
 Operator : 045183 Inst ID: 71.i
 Smp Info : c0f140185-lcsd 6/21/00 8270tclp
 Misc Info : df44m103,s062300.b,8270clp.m,1-tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\71.i\s062300.b\8270clp.m
 Meth Date : 23-Jun-2000 08:03 bachas Quant Type: ISTD
 Cal Date : 01-JUN-2000 12:15 Cal File: S0601CC5.D
 Als bottle: 16 QC Sample: LCSO
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 1-tclp.sub
 Target Version: 4.04
 Processing Host: PITPC050

Concentration Formula: $\text{Amt} * \text{DF} * \text{Uf} * \text{Vt} / (\text{Vo} * \text{Vi})$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	0.001	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	200.000	Volume of sample extracted (mL)
Vi	2.000	Volume injected (uL)

6/23/00

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (mg/L)
*****	***	**	*****	*****	*****	*****	*****
* 1 1,4-Dichlorobenzene-d4	152	4.904	4.897	(1.000)	142998	40.0000	(a)
* 2 Naphthalene-d8	136	6.406	6.403	(1.000)	574851	40.0000	(a)
* 3 Acenaphthene-d10	164	9.392	9.384	(1.000)	316157	40.0000	(a)
* 4 Phenanthrene-d10	188	12.677	12.670	(1.000)	567222	40.0000	(a)
* 5 Chrysene-d12	240	19.296	19.294	(1.000)	528395	40.0000	(a)
* 6 Perylene-d12	264	22.662	22.654	(1.000)	606288	40.0000	(a)
10 Pyridine	79	1.827	1.825	(0.373)	409107	70.4882	0.17622 (aM)
28 1,4-Dichlorobenzene	146	4.920	4.913	(1.003)	397642	72.1930	0.18048 (a)
M 34 Cresols, total	100				1081393	228.749	0.57187 (a)
31 2-Methylphenol	108	5.246	5.244	(1.070)	356904	78.2253	0.19556 (a)
35 4-Methylphenol	108	5.412	5.404	(1.103)	724489	150.524	0.37631 (a)
38 Hexachloroethane	117	5.460	5.452	(1.113)	160041	73.4917	0.18373 (a)
39 Nitrobenzene	77	5.572	5.565	(0.870)	462286	73.5454	0.18386 (a)
59 Hexachlorobutadiene	225	6.683	6.676	(1.043)	153773	70.5645	0.17641 (a)

Data File: \\QPITPA02\D\chem\71.i\s062300.b\S0623014.D
 Report Date: 23-Jun-2000 09:50

Page 2

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng)	(mg/L)	
=====	=====	==	=====	=====	=====	=====	=====	
69 2,4,6-Trichlorophenol	196	7.992	7.985	(0.851)	189596	70.1205	0.17530(a)	
70 2,4,5-Trichlorophenol	196	8.062	8.065	(0.858)	206871	72.4926	0.18123(a)	
91 2,4-Dinitrotoluene	165	9.921	9.913	(1.056)	213967	72.9690	0.18242(a)	
113 Hexachlorobenzene	284	11.977	11.964	(0.945)	193878	70.4017	0.17600(a)	
117 Pentachlorophenol	266	12.426	12.424	(0.980)	112157	78.4548	0.19614(a)	
\$ 172 Nitrobenzene-d5	82	5.551	5.543	(0.867)	428393	73.6989	0.18425(a)	
\$ 173 2-Fluorobiphenyl	172	8.120	8.113	(0.865)	691927	69.0774	0.17269(a)	
\$ 174 Terphenyl-d14	244	16.743	16.735	(0.868)	869424	76.6912	0.19173(a)	
\$ 175 Phenol-d5	99	4.621	4.619	(0.942)	695362	113.660	0.28415(a)	
\$ 176 2-Fluorophenol	112	3.601	3.593	(0.734)	493697	100.975	0.25244(a)	
\$ 177 2,4,6-Tribromophenol	330	11.128	11.120	(0.878)	151608	103.741	0.25935(a)	
\$ 178 2-Chlorophenol-d4	132	4.712	4.710	(0.961)	533271	119.075	0.29769(a)	
\$ 179 1,2-Dichlorobenzene-d4	152	5.107	5.100	(1.041)	229039	75.6383	0.18910(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 M - Compound response manually integrated.

661 262

**GC/MS SEMIVOLATILE
MISCELLANEOUS**

Continuous L-L Extraction Worksheet

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

Committed To Your Success

Began	6/21/2009	Time	14:10	Prep Meth #	3530C	H2SO4	186-15-18	Solvent	MeCl2	Solvent Lot	NaSO4 Lot Number	Clean up Method	
Change over	6-23-00	Time	1030	Analysis	8270	NaOH	0090-04	Solvent Mfg.	Baker	Surrogate	Lot #		
Completed	6-23-00	Time	0800	Client ID		Extract Vol (mL)	Final Volume mL	pH		Surrogate	Lot #		
1.	COF140185	AIK		NA		200	1.0	5/2/11	194-178-1	0.5	N/A	N/A	
2.		LC5						5/2/11					
3.		LC5 Dup						5/2/11					
4.		001						5/2/11					
5.		002						5/2/11					
6.		003						5/2/11					
7.		004					1.0	7/2/11					
8.													
9.													
10.													
11.													
12.													
13.													
14.													
15.													
16.													
17.													
18.													
19.													
20.													
21.													
22.													
23.													
Prep Analyst:	UNT	WT		WT		WT	KG	WT		SM/WT	SM/WT	WT	
Extract(s)													
(Record line number from above)													
Batch Number:	0174120												
Date	6/23/00	Time	0750	Analyst		Location		Date	6/23/00	Time	0800	Analyst	
Reviewed By													

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571

20
Environmental
Services

2062

QUA-4181		Serial Number		056	Log Book Number		96-MT-526
By <u>Jeffrey O. Savant</u>		Date		6-19-00	Checked by		<u>[Signature]</u>
Project Number		Lot Number		COF140185	Client Code		399411
Filter lot # 8320701W		Date		6-20-00	pH Instrument		Accumet 1105
Probe		Solution Number 1 - Log Book Number		004497-12	Balance		C94817
Solution Number 2 - Log Book Number							

Total Determination						TCLP Extraction				
Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Conc. HNO ₃ to Acidity (for Metals)	Sample ID	Wgt (g) Wet/Dry	Fluid Vol.		Final pH After Tumbling
DEMRV	5.00g/46.5ml	3.62	—	Sol#1	5 ml	PR-TCLP G-19-00	—	8000ml	Glass	4.72
DEMR4	/	6.88	1.69	/	6 ml	2. DEMRV	100.00g	/	/	5.23
DEMR6	/	7.46	1.68	/	/	3. DEMR4	/	/	/	4.99
DEMKT	/	9.22	1.69	/	5 ml	4. DEMR4	/	/	/	5.09
/	/	/	/	/	/	5. DEMR6	/	/	/	5.05
/	/	/	/	/	/	6. DEMK1	/	/	/	5.98
/	/	/	/	/	/	7. /	/	/	/	/
/	/	/	/	/	/	8. /	/	/	/	/
/	/	/	/	/	/	9. /	/	/	/	/
/	/	/	/	/	/	10. /	/	/	/	/
/	/	/	/	/	/	11. /	/	/	/	/
/	/	/	/	/	/	12. /	/	/	/	/
/	/	/	/	/	/	13. /	/	/	/	/

[illegible]

= Sample determined to have free-liquid, % solid determination was performed

5.7 mL Glacial Acetic Acid dil 500 mL + 64.3 mL of 1N Na OH dil to 1L (pH 4.93 + 0.05)

5 = Extraction Fluid No 2 5 7 mL Glacial Acetic Acid dil to 1L (pH 2.88 $\pm$ 0.05)

ROOM TEMP 22°

Date/Time On	Date/Time Off	Agitation Apparatus RPMs.		
6-19-00	1200	6-20-00	0645	30 ± 2
Date	pH Calibration	(4.0)	(7.0)	(10.0)
6-19-00		4.00	7.01	10.00
Date				
6-20-00		4.00	7.01	10.04
Comments				

Sequence Name: D:\HPCHEM\1\SEQUENCE\S062300.S

Comment: STL PITT HP597371A LOG 2ul inj (100ul+1ul IS)

661 265

Operator: 045183

Data Path: D:\HPCHEM\1\DATA\s062300.b\

Pre-Seq Cmd:

Post-Seq Cmd:

Method Sections To Run

(X) Full Method

() Reprocessing Only

On A Barcode Mismatch

(X) Inject Anyway

() Don't Inject

JB
6/13/00

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	1	S0623DF1	DFTPP1	DFTPP050 (25ppb) 194-158-6
2	Sample	1	S0623DF2	DFTPP1	DFTPP050 (25ppb) 194-158-6
3	Sample	2	S0623CC1	EARLY	sstd50(25 ug/ml) 194-178-12 8
4	Sample	14	S0623012	EARLY	c0f140185-sblk 6/21/00 8270tc
5	Sample	15	S0623013	EARLY	c0f140185-lcs 6/21/00 8270tcl
6	Sample	16	S0623014	EARLY	c0f140185-lcsd 6/21/00 8270tc
7	Sample	17	S0623015	EARLY	c0f140185-001 6/21/00 8270tcl
8	Sample	18	S0623016	EARLY	c0f140185-002 6/21/00 8270tcl
9	Sample	19	S0623017	EARLY	c0f140185-003 6/21/00 8270tcl
10	Sample	20	S0623018	EARLY	c0f140185-004 6/21/00 8270tcl
11	Sample	21	S0623019	EARLY	c0f170118-001 x2 6/19/00 8270
12	Sample	3	S0623001	EARLY	c0f170147-001 6/19/00 8270w
13	Sample	4	S0623002	EARLY	c0f170147-003 6/19/00 8270w
14	Sample	5	S0623003	EARLY	c0f170147-004 6/19/00 8270w
15	Sample	6	S0623004	EARLY	c0f170147-007 6/19/00 8270w
16	Sample	7	S0623005	EARLY	c0f150183-002 per3 6/19/00 82
17	Sample	8	S0623006	EARLY	c0f150183-003 per3 6/19/00 82
18	Sample	9	S0623007	EARLY	c0f150183-004 per3 6/19/00 82
19	Sample	10	S0623008	EARLY	c0f150183-005 per3 6/19/00 82
20	Sample	11	S0623009	EARLY	c0f150183-006 per3 6/19/00 82
21	Sample	12	S0623010	EARLY	c0f150183-007 per3 6/19/00 82
22	Sample	13	S0623011	EARLY	c0f150183-008 per3 6/19/00 82

AGU

661 266

PSR024 6/21/00 4:41:28 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: TROUTB

METHOD: QL Base/Neutrals and Acids (8270C)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12B CLP1 15E	DEMQV-1-03	— — —	242788	399411	A-59-QL	COF140185	001		SOLID	0	3 1
12B CLP1	DEMR4-1-03	— — —	242789	399411	A-59-QL	COF140185	002		SOLID	0	3 1
12B CLP1	DEMR6-1-03	— — —	242790	399411	A-59-QL	COF140185	003		SOLID	0	3 1
12B CLP1	DEMR7-1-03	— — —	242791	399411	A-59-QL	COF140185	004		SOLID	0	3 1

RELINQUISHED BY

A C
B Trout

RECEIVED BY

B Trout
A C

DATE/TIME

6/21/2000 07:10
6/21/2000 14:00

***** END OF REPORT *****

PESTICIDE DATA

661 268

**PESTICIDE
QC SUMMARY**

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F140185

	CLIENT ID.	SRG01	SRG02	TOT OUT
	=====	=====	=====	=====
01	DF/S1/0165/GRAB/002	85	73	00
02	DF/S1/0165/SDC/010	93	81	00
03	DF/S1/0165/SDC/011	94	82	00
04	DF/S1/0165/SDC/012	89	74	00
05	METHOD BLK. DF1LC101	93	84	00
06	LCS DF1LC102	91	79	00
07	DF/S1/0165/GRAB/002 D	89	75	00
08	DF/S1/0165/GRAB/002 S	89	78	00

SURROGATES

SRG01 = Decachlorobiphenyl
SRG02 = Tetrachloro-m-xylene

QC LIMITS

(10-147)
(39-130)

Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

661 270 SW846 8081A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F200000

WO #: DF1LC102

BATCH: 0172434

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Lindane	0.00250	0.00167	67	49 - 137	
Heptachlor	0.00250	0.00195	78	57 - 124	
Heptachlor epoxide	0.00250	0.00199	80	53 - 135	
Endrin	0.00250	0.00237	95	46 - 137	
Methoxychlor	0.00250	0.00221	88	12 - 154	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Level: (low/med) LOW

Lot #: C0F140185

WO #: DEMQV11D

BATCH: 0172434

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Lindane	0.00250	ND	0.00165	66	30 - 148	
Heptachlor	0.00250	ND	0.00193	77	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00195	78	38 - 138	
Endrin	0.00250	ND	0.00230	92	28 - 148	
Methoxychlor	0.00250	ND	0.00219	88	13 - 154	

NOTES (S) :

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

RPD: 0 out of 0 outside limits
 Spike Recovery: 0 out of 5 outside limits

COMMENTS:

661 272

SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Level: (low/med) LOW

Lot #: C0F140185

WO #: DEMQV11E

BATCH: 0172434

COMPOUND	SPIKE	MSD	MSD	QC LIMITS			QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC	
Lindane	0.00250	0.00158	63	4.2	22	30 - 148	
Heptachlor	0.00250	0.00187	75	3.3	32	25 - 135	
Heptachlor epoxide	0.00250	0.00192	77	1.8	31	38 - 138	
Endrin	0.00250	0.00225	90	2.1	40	28 - 148	
Methoxychlor	0.00250	0.00220	88	0.45	29	13 - 154	

NOTES (S) :

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

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8081A METHOD BLANK SUMMARY

DF1LC101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: d-a3517.d

Lot Number: C0F140185

Matrix: SOLID

Extraction Method: 1311/3510

Date Extracted: 06/20/00

Date Analyzed(1): 06/21/00

Date Analyzed(2): N/A

Time Analyzed(1): 16:38

Time Analyzed(2): N/A

Instrument ID(1): G/H

Instrument ID(2): N/A

GC Column(1): DB608/1701 ID: 053 GC Column(2): N/A ID: N/A

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED (1)	DATE ANALYZED (2)
01	DF/S1/0165/GRAB/002	DEMQV104	06/21/00	N/A
02	DF/S1/0165/GRAB/002	DEMQV11D S	06/21/00	N/A
03	DF/S1/0165/GRAB/002	DEMQV11E D	06/21/00	N/A
04	DF/S1/0165/SDC/010	DEMR4104	06/21/00	N/A
05	DF/S1/0165/SDC/011	DEMR6104	06/21/00	N/A
06	DF/S1/0165/SDC/012	DEMR7104	06/21/00	N/A
07	CHECK SAMPLE	DF1LC102 C	06/21/00	N/A
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

661 274

**PESTICIDE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMQV104

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 15

QC Batch: 0172434

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

661 276

Data File: /var/chem/gc4.i/3130-G.b/d-a3521.d
 Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3521.d
 Lab Smp Id: DEMQV104 Client Smp ID: DF/S1/0165/GRAB/002
 Inj Date : 21-JUN-2000 18:22
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEMQV104,3130-G.b,,PEST.sub,,
 Misc Info : 140185001
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
 Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 3.40

Concentration Formula: $\text{Amt} * \text{DF} * (\text{Vt}/\text{Vo})/\text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
1 Tetrachloro-m-xylene	5.760	5.760	0.000		44752	0.01463	0.001463 (aR)
4 HEXACHLORO BENZENE					Compound Not Detected.		
5 alpha-BHC					Compound Not Detected.		
6 gamma-BHC (Lindane)					Compound Not Detected.		
7 beta-BHC					Compound Not Detected.		
9 Chlordane					Compound Not Detected.		
10 Heptachlor					Compound Not Detected.		
8 delta-BHC					Compound Not Detected.		
11 Aldrin	11 973	11 927	0.046		1580	0.000642	0.00006423 (a)
19 Isodrin					Compound Not Detected.		
12 Heptachlor epoxide					Compound Not Detected.		
13 gamma-Chlordane					Compound Not Detected.		
14 alpha-Chlordane					Compound Not Detected.		
15 Endosulfan I					Compound Not Detected.		
16 4,4'-DDE					Compound Not Detected.		
17 Dieldrin	15 287	15.280	0.007		2128	0.000707	0.00007070 (a)
20 Endrin					Compound Not Detected.		

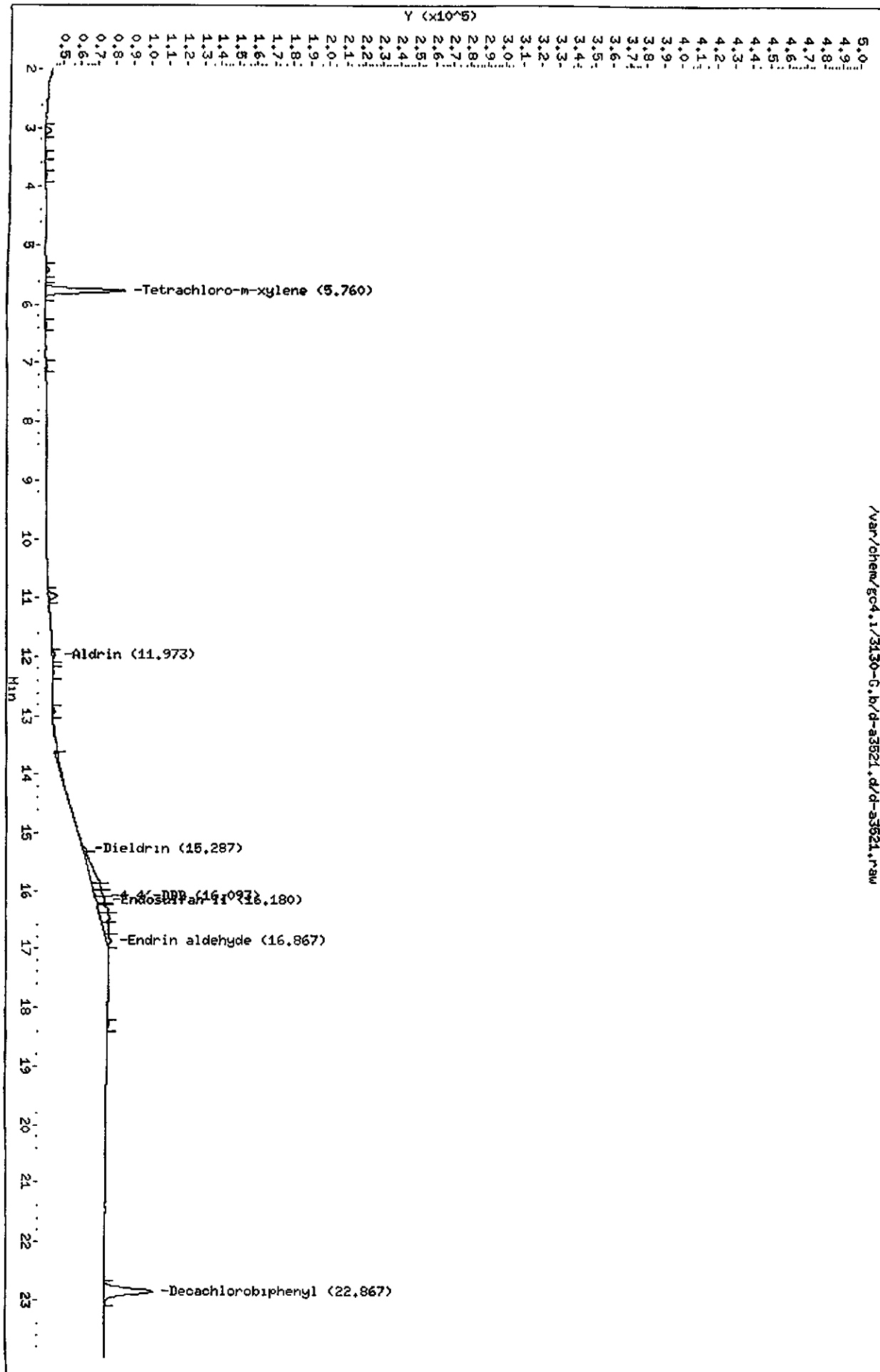
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD	16.093	16.073	0.020	4747	0.00186	0.0001858(a)
18 Toxaphene	Compound Not Detected.					
22 Endosulfan II	16.180	16.227	-0.047	4661	0.00165	0.0001649(a)
23 4,4'-DDT	Compound Not Detected.					
24 Endrin aldehyde	16.867	16.827	0.040	2992	0.00137	0.0001369(a)
26 Endosulfan sulfate	Compound Not Detected.					
25 Methoxychlor	Compound Not Detected.					
27 Endrin ketone	Compound Not Detected.					
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000	26553	0.01695	0.001695(aR)

QC Flag Legend

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

Data File: /var/chem/gc4.1/3130-G.b/d-a3621.d
 Date: 21-JUN-2000 18:22
 Client ID: DF/SI/0165/GRAB/002
 Sample Info: DEMQV104,3130-G.b,,PEST,sub,,,
 Volume Injected (uL): 1.0
 Column phase: DB608

Instrument: gc4.1
 Operator: 1891
 Column diameter: 0.53



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR4104

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 15

QC Batch: 0172434

Client Sample Id: DF/S1/0165/SDC/010

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

661 280

Data File: /var/chem/gc4.i/3130-G.b/d-a3522.d
Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3522.d
Lab Smp Id: DEMR4104 Client Smp ID: DF/S1/0165/SDC/010
Inj Date : 21-JUN-2000 18:48
Operator : 1891 Inst ID: gc4.i
Smp Info : DEMR4104,3130-G.b,,PEST.sub,,,
Misc Info : 140185002
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 3.40

Concentration Formula: Amt * DF * (Vt/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.760	5.760	0.000	49474	0 01617	0.001617(aR)
4 HEXACHLORO BENZENE						
5 alpha-BHC						
6 gamma-BHC (Lindane)						
7 beta-BHC						
9 Chlordane						
10 Heptachlor						
8 delta-BHC						
11 Aldrin	11.973	11.927	0.046	1134	0.000461	0 00004610(a)
19 Isodrin						
12 Heptachlor epoxide						
13 gamma-Chlordane						
14 alpha-Chlordane						
15 Endosulfan I						
16 4,4'-DDB						
17 Dieldrin	15 287	15.280	0.007	2631	0.000874	0 00008741(a)
20 Endrin						

Data File: /var/chem/gc4.i/3130-G.b/d-a3522.d

Report Date: 22-Jun-2000 11:12

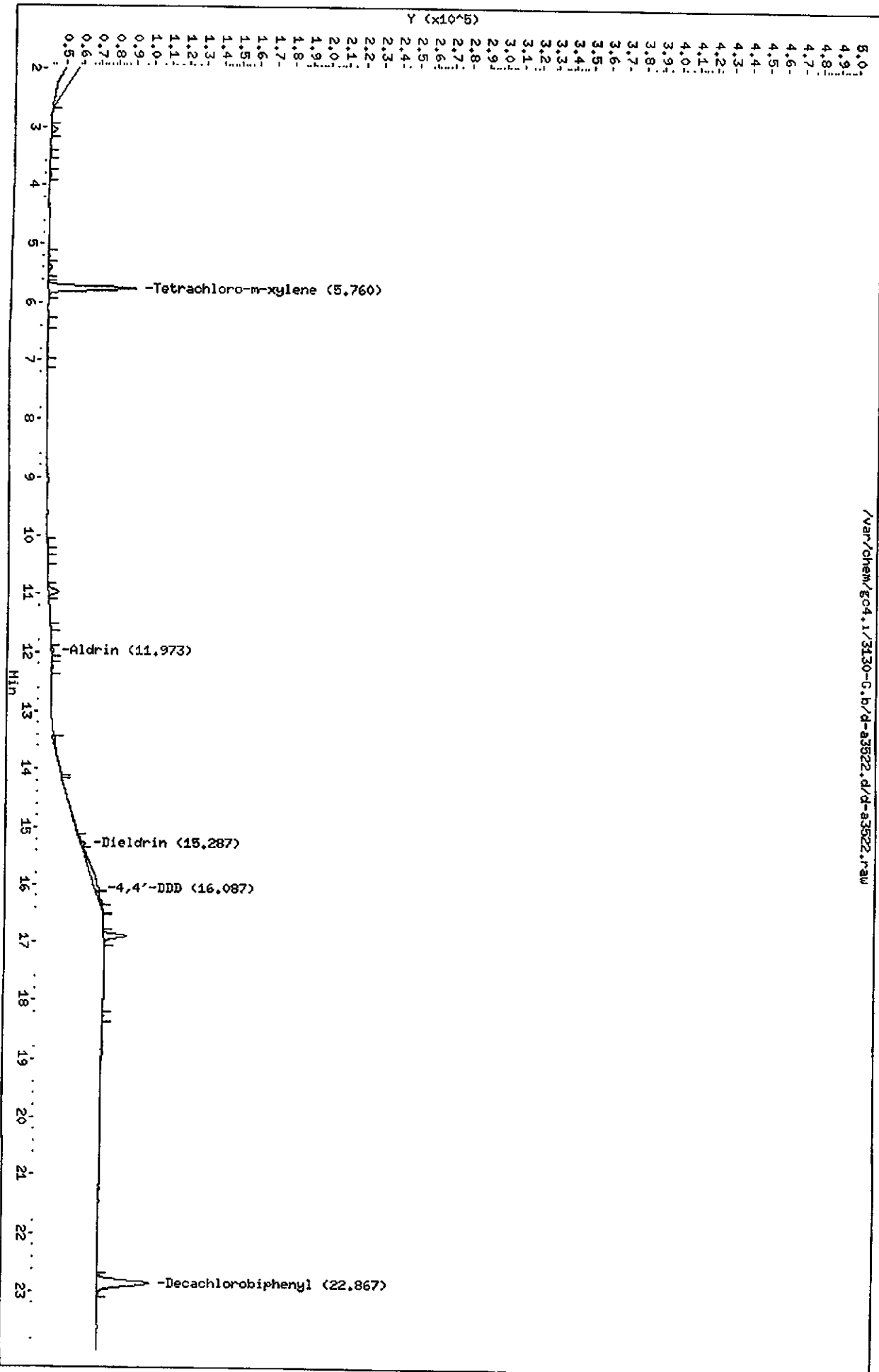
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD	16.087	16.073	0.014	2260	0.000885	0.00008846(a)
18 Toxaphene	Compound Not Detected					
22 Endosulfan II	Compound Not Detected.					
23 4,4'-DDT	Compound Not Detected.					
24 Endrin aldehyde	Compound Not Detected					
26 Endosulfan sulfate	Compound Not Detected.					
25 Methoxychlor	Compound Not Detected					
27 Endrin ketone	Compound Not Detected.					
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000	29223	0.01866	0.001866(aR)

QC Flag Legend

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

Data File: /var/chem/gc04.1/3130-G.b/d-a3522.d
Date: 21-JUN-2000 18:48
Client ID: DF/S1/0165/SDC/010
Sample Info: DEHR4104,3130-G.b,,PEST.sub,,,
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc04.1
Operator: 1891
Column diameter: 0.53



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 003

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR6104

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 14

QC Batch: 0172434

Client Sample Id: DF/S1/0165/SDC/011

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

661 284

Data File: /var/chem/gc4.i/3130-G.b/d-a3523.d
 Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3523.d
 Lab Smp Id: DEMR6104 Client Smp ID: DF/S1/0165/SDC/011
 Inj Date : 21-JUN-2000 19:15
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEMR6104,3130-G.b,,PEST.sub,,
 Misc Info : 140185003
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
 Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 3.40

Concentration Formula: $\text{Amt} * \text{DF} * (\text{Vt}/\text{Vo})/\text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 Tetrachloro-m-xylene	5.767	5.760	0.007	50114	0.01638	0.001638(aR)
4 HEXACHLOROBENZENE				Compound Not Detected.		
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
11 Aldrin	11.973	11.927	0.046	1411	0.000574	0.00005736(a)
19 Isodrin				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin	15.287	15.280	0.007	2664	0.000885	0.00008851(a)
20 Endrin				Compound Not Detected.		

Data File: /var/chem/gc4.i/3130-G.b/d-a3523.d
 Report Date: 22-Jun-2000 11:12

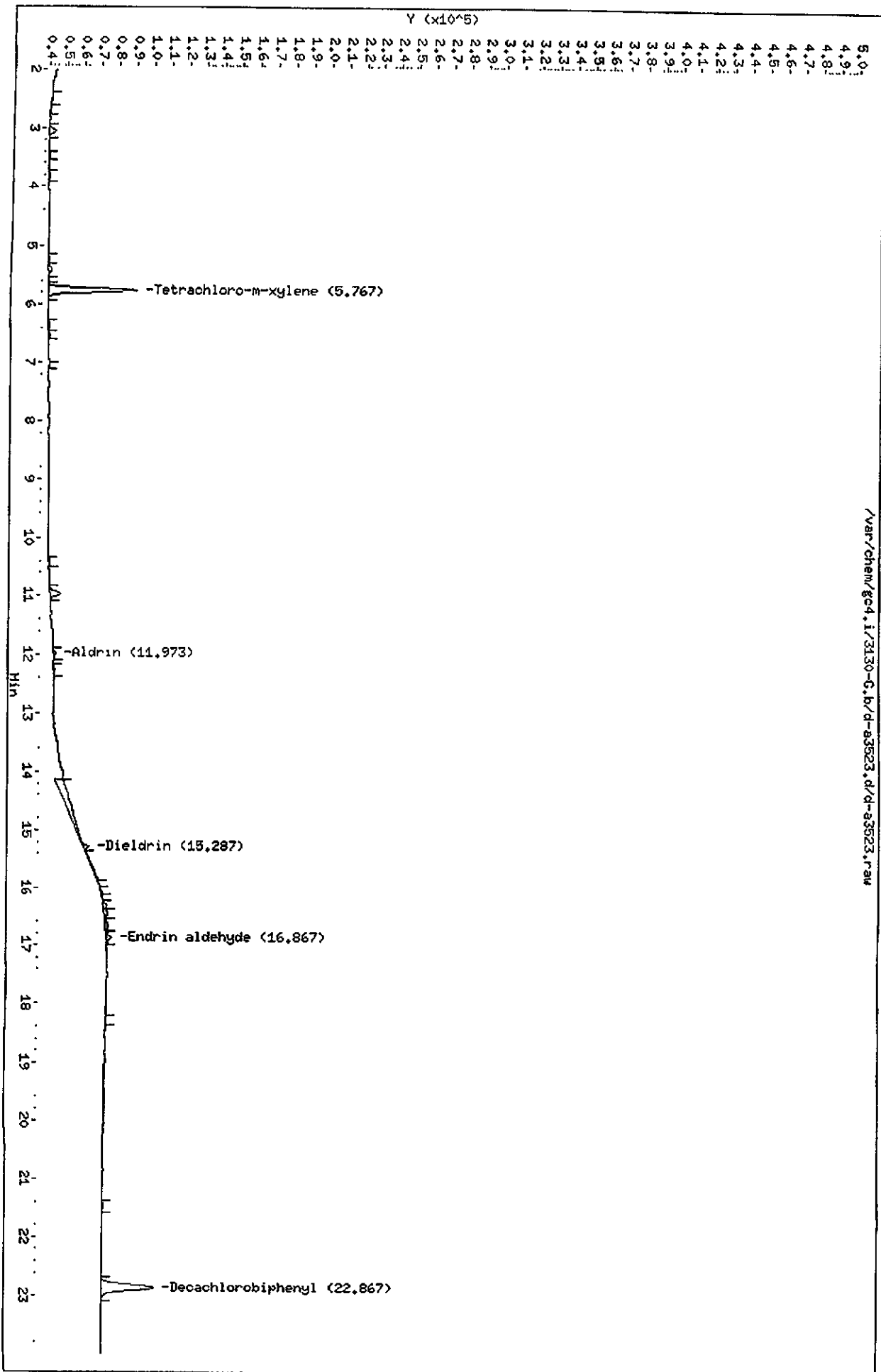
Compounds	RT	EXP RT	DLT RT	RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
						(ng)	(mg/L)
=====	==	=====	=====	=====	=====	=====	=====
21 4,4'-DDD					Compound Not Detected.		
18 Toxaphene					Compound Not Detected.		
22 Endosulfan II					Compound Not Detected.		
23 4,4'-DDT					Compound Not Detected.		
24 Endrin aldehyde	16.867	16.827	0.040		2844	0 00130	0 0001301(a)
26 Endosulfan sulfate					Compound Not Detected.		
25 Methoxychlor					Compound Not Detected.		
27 Endrin ketone					Compound Not Detected.		
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000		29408	0.01878	0.001878(aR)

QC Flag Legend

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

Data File: /var/chem/gc4.i/3130-G.b/d-s3523.d
Date: 21-JUN-2000 19:15
Client ID: DF/S1/0165/SPC/011
Sample Info: DEHR6104,3130-G.b,,PEST,sub,,
Volume Injected (uL): 1.0
Column Phase: DB608

Instrument: gc4.1
Operator: 1891
Column diameter: 0.53



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 004

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR7104

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 14

QC Batch: 0172434

Client Sample Id: DF/S1/0165/SDC/012

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

661 288

Data File: /var/chem/gc4.i/3130-G.b/d-a3524.d
 Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3524.d
 Lab Smp Id: DEMR7104 Client Smp ID: DF/S1/0165/SDC/012
 Inj Date : 21-JUN-2000 19:41
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEMR7104,3130-G.b,,PEST.sub,,,
 Misc Info : 140185004
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
 Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 3.40

Concentration Formula: $\text{Amt} * \text{DF} * (\text{Vt}/\text{Vo})/\text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.767	5.760	0.007	45489	0.01487	0.001487(aR)
4 HEXACHLOROBENZENE				Compound Not Detected.		
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
11 Aldrin	11.973	11.927	0.046	1448	0.000589	0.00005886(a)
19 Isodrin				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin	15.287	15.280	0.007	2970	0.000987	0.00009868(a)
20 Endrin				Compound Not Detected.		

Data File: /var/chem/gc4.i/3130-G.b/d-a3524.d
 Report Date: 22-Jun-2000 11:12

Compounds	RT	EXP RT	DLT RT	RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====	=====
21 4,4'-DDD	16.080	16.073	0.007		2429	0.000951	0.00009508 (a)
18 Toxaphene	Compound Not Detected.						
22 Endosulfan II	16.207	16.227	-0.020		1377	0.000487	0.00004872 (a)
23 4,4'-DDT	Compound Not Detected.						
24 Endrin aldehyde	Compound Not Detected.						
26 Endosulfan sulfate	Compound Not Detected.						
25 Methoxychlor	Compound Not Detected.						
27 Endrin ketone	Compound Not Detected.						
\$ 30 Decachlorobiphenyl	22.860	22.867	-0.007		27974	0.01786	0.001786 (aR)

QC Flag Legend

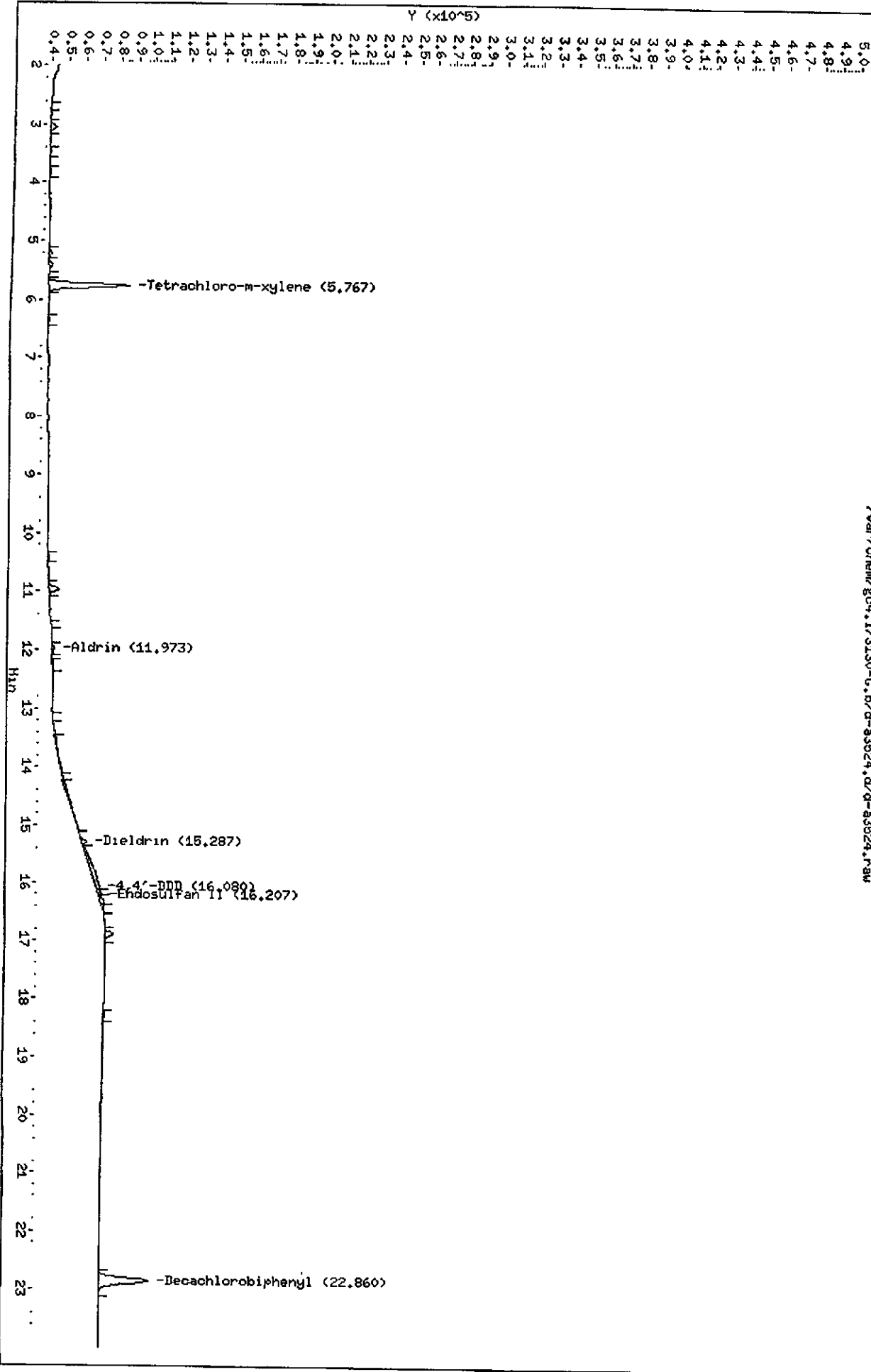
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation (BLOQ).
- R - Spike/Surrogate failed recovery limits.

661 290

Data File: /var/chem/gc04.i/3130-G.b/d-a3524.d
Date: 21-JUN-2000 19:41
Client ID: DF/S1/0165/SDC/012
Sample Info: DEHR7104,3130-G.b.,PEST,sub,,,
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc04.1
Operator: 1891
Column diameter: 0.53

/var/chem/gc04.i/3130-G.b/d-a3524.d/d-a3524.raw



**PESTICIDE
CALIBRATION DATA**

661 292

Report Date : 22-Jun-2000 11:04

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DB608

STL-PITTSBURGH

COMPOUND LISTING

Method file : /var/chem/gc4.i/3130-G.b/PESTA.m
 Quant Method : ESTD Target Version : 3.40
 Last Update : 22-Jun-2000 10:58 Number of Cpnds : 30
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	40.000000
Initial:End Threshold	20.000000
Initial:Area Threshold	1000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	1.000000
Initial:Negative Peaks	ON
Initial:Tension	0.000000

Compound	RT	RT Window	RF
\$ 1 Tetrachloro-m-xylene	5.760	5.710-5.810	3.060e+06
2 Diallate A	6.340	6.290-6.390	
3 Diallate B	6.620	6.570-6.670	
4 HEXACHLOROBENZENE	6.650	6.600-6.700	
5 alpha-BHC	8.080	8.030-8.130	3.509e+06
6 gamma-BHC (Lindane)	9.507	9.457-9.557	3.015e+06
7 beta-BHC	9.780	9.730-9.830	1.659e+06
8 delta-BHC	11.213	11.163-11.263	3.145e+06
9 Chlordane	10.173	10.123-10.223	7.763e+04
	10.787	10.737-10.837	1.390e+05
	14.233	14.183-14.283	2.638e+05
	14.607	14.557-14.657	2.093e+05
10 Heptachlor	10.787	10.737-10.837	2.605e+06
11 Aldrin	11.927	11.877-11.977	2.460e+06
12 Heptachlor epoxide	13.807	13.757-13.857	2.592e+06
13 gamma-Chlordane	14.233	14.183-14.283	2.867e+06
14 alpha-Chlordane	14.607	14.557-14.657	2.974e+06
15 Endosulfan I	14.667	14.617-14.717	2.711e+06
16 4,4'-DDE	15.127	15.077-15.177	3.156e+06
17 Dieldrin	15.280	15.230-15.330	3.010e+06
18 Toxaphene	16.100	16.050-16.150	6.233e+04
	16.267	16.217-16.317	7.480e+04
	16.653	16.603-16.703	5.799e+04
	17.907	17.857-17.957	4.471e+04

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DB608

Report Date : 22-Jun-2000 11:04

STL-PITTSBURGH

COMPOUND LISTING

Method file : /var/chem/gc4.i/3130-G.b/PESTA.m

Compound	RT	RT Window	RF
19 Isodrin	13.467	13.417-13.517	2.199e+06
20 Endrin	15.920	15.870-15.970	2.542e+06
21 4,4'-DDD	16.073	16.023-16.123	2.555e+06
22 Endosulfan II	16.227	16.177-16.277	2.826e+06
23 4,4'-DDT	16.607	16.557-16.657	2.491e+06
24 Endrin aldehyde	16.827	16.777-16.877	2.186e+06
25 Methoxychlor	18.460	18.410-18.510	1.083e+06
26 Endosulfan sulfate	17.060	17.010-17.110	2.271e+06
27 Endrin ketone	18.913	18.863-18.963	2.234e+06
28 Chlorobenzilate	15.313	15.263-15.363	
29 Kepone	15.533	15.483-15.583	
\$ 30 Decachlorobiphenyl	22.867	22.817-22.917	1.566e+06

661 294

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DB608

Report Date : 13-Jun-2000 13:49

STL-PITTSBURGH

INITIAL CALIBRATION DATA

Start Cal Date : 13-JUN-2000 02:00
 End Cal Date : 13-JUN-2000 07:05
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : Falcon
 Method file : /var/chem/gc4.i/3130-G.b/PESTA.m
 Cal Date : 13-Jun-2000 13:48 g
 Curve Type : Average

Calibration File Names:

Level 1: /var/chem/gc4.i/3130-G.b/d-a3277.d
 Level 2: /var/chem/gc4.i/3130-G.b/d-a3278.d
 Level 3: /var/chem/gc4.i/3130-G.b/d-a3279.d
 Level 4: /var/chem/gc4.i/3130-G.b/d-a3280.d
 Level 5: /var/chem/gc4.i/3130-G.b/d-a3281.d

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
2 Diallylate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Diallylate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 HEXACHLOROBENZENE	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 alpha-BHC	3211800	3338700	3521440	3696580	3778470	3509398	6.762
6 gamma-BHC (Lindane)	2853800	2902900	3026160	3124160	3166300	3014664	4.496
7 beta-BHC	1764200	1762100	1626160	1592580	1552340	1659476	5.917
8 delta-BHC	2753400	2960800	3118800	3353660	3537010	3144734	9.868
9 Chlordane(1)	+++++	+++++	77632	+++++	+++++	77632	0.000
(2)	+++++	+++++	138988	+++++	+++++	138988	0.000
(3)	+++++	+++++	263804	+++++	+++++	263804	0.000
(4)	+++++	+++++	209324	+++++	+++++	209324	0.000
10 Heptachlor	2616600	2552300	2562120	2587080	2707960	2605212	2.403
11 Aldrin	2257800	2322000	2380160	2593460	2745960	2459876	8.279
12 Heptachlor epoxide	2404000	2523200	2530760	2688040	2812060	2591612	6.146
13 gamma-Chlordane	2734400	2845200	2782440	2943900	3028390	2866866	4.170
14 alpha-Chlordane	2879400	2981000	2913520	3009840	3088080	2974368	2.760
15 Endosulfan I	2622800	2653200	2662440	2744800	2871770	2711002	3.710
16 4,4'-DDE	2820200	3053000	3086560	3301840	3517640	3155848	8.387
17 Dieldrin	2736000	2850900	2999680	3118560	3344030	3009834	7.860
18 Toxaphene(1)	+++++	+++++	62331	+++++	+++++	62331	0.000
(2)	+++++	+++++	74799	+++++	+++++	74799	0.000
(3)	+++++	+++++	57985	+++++	+++++	57985	0.000
(4)	+++++	+++++	44713	+++++	+++++	44713	0.000
19 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 Endrin	2392200	2506900	2494640	2603360	2713910	2542202	4.787
21 4,4'-DDD	2411800	2476500	2557720	2589480	2738250	2554750	4.851

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Report Date : 13-Jun-2000 13:49

STL-PITTSBURGH

INITIAL CALIBRATION DATA

Start Cal Date : 13-JUN-2000 02:00
 End Cal Date : 13-JUN-2000 07:05
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : Falcon
 Method file : /var/chem/gc4.i/3130-G.b/PESTA.m
 Cal Date : 13-Jun-2000 13:48 g
 Curve Type : Average

	0.00500	0.01000	0.02500	0.05000	0.10000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
=====	=====	=====	=====	=====	=====	=====	=====
22 Endosulfan II	2684400	2799300	2744960	2886640	3014980	2826056	4.570
23 4,4'-DDT	2333800	2442600	2457560	2536940	2681860	2490552	5.185
24 Endrin aldehyde	2156600	2221400	2108960	2196340	2245570	2185774	2.475
25 Methoxychlor	1084400	1097250	1065620	1080950	1088690	1083382	1.075
26 Endosulfan sulfate	2139600	2239100	2180480	2329340	2468130	2271330	5.772
27 Endrin ketone	2127200	2204300	2153240	2291560	2395400	2234340	4.912
28 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++
=====	=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	3358000	3265800	3010760	2904180	2759580	3059664	8.140
\$ 30 Decachlorobiphenyl	1675200	1655100	1566600	1482320	1452140	1566272	6.371
=====	=====	=====	=====	=====	=====	=====	=====

661 296

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: SDGA18738

GC Column: DB608

ID: 0.53

(mm)

Init. Calib. Date(s): 06/13/00 06/13/00

EPA Sample No. (PIBLK): _____

Date Analyzed : _____

Lab Sample ID (PIBLK): _____

Time Analyzed : _____

EPA Sample No. (PEM):

Date Analyzed : 06/13/00

Lab Sample ID (PEM): EVALB

Time Analyzed : 0133

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	15.97	15.92	16.02	0.02467	0.02500	-1.3
4,4'-DDT	16.66	16.60	16.70	0.02491	0.02500	-0.4

4,4'-DDT % breakdown (1): 0.00

Endrin % breakdown (1):

~~8.74~~

Combined % breakdown (1):

~~8.74~~ 7.1

7.1

WY
6/13/00

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: SDGA18738

GC Column: DB608

ID: 0.53

(mm)

Init. Calib. Date(s): 06/13/00 06/13/00

EPA Sample No. (PIBLK): _____

Date Analyzed : _____

Lab Sample ID (PIBLK): _____

Time Analyzed : _____

EPA Sample No. (PEM):

Date Analyzed : 06/13/00

Lab Sample ID (PEM): EVALB

Time Analyzed : 0828

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	15.97	15.92	16.02	0.02421	0.02500	-3.2
4,4'-DDT	16.65	16.60	16.70	0.02514	0.02500	0.6

4,4'-DDT % breakdown (1): 0.00

Endrin % breakdown (1): ~~11.90~~Combined % breakdown (1): ~~11.90~~

9.6

9.6

WM
6/13/00

661 298

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: SDGA18738

GC Column: DB608

ID: 0.53

(mm)

Init. Calib. Date(s): 06/13/00 06/21/00

EPA Sample No. (PIBLK): _____

Date Analyzed : _____

Lab Sample ID (PIBLK): _____

Time Analyzed : _____

EPA Sample No. (PEM):

Date Analyzed : 06/21/00

Lab Sample ID (PEM): EVALB

Time Analyzed : 1427

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	15.92	15.87	15.97	0.02913	0.02500	16.5
4,4'-DDT	16.61	16.56	16.66	0.02704	0.02500	8.2

4,4'-DDT % breakdown (1):

~~1.05~~ 1.2

Endrin % breakdown (1):

~~7.34~~

Combined % breakdown (1):

~~8.38~~ 6.4

5.2

lm 6/22/00

FORM VII PEST-1

OLM03.0

72
58904A
DB608

661 299

Data File: /var/chem/gc4.i/3130-G.b/d-a3513.d
Report Date: 22-Jun-2000 11:00

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-JUN-2000 14:53
Lab File ID: d-a3513.d Init. Calibration Date(s): 06/13/00 06/21/00
Analysis Type: Init. Calibration Times: 02:00 15:19
Lab Sample ID: MEDTOX Method File: /var/chem/gc4.i/3130-G.b/PESTA.m
Quant Type: ESTD

COMPOUND	RRF	RFO	MIN	MAX
=====	=====	=====	=====	=====
19 Toxaphene(1)	62331.000	62291.000	0.010	0.1 15.0
(2)	74799.000	76038.000	0.010	-1.7 15.0
(3)	57985.000	59435.000	0.010	-2.5 15.0
(4)	44713.000	46956.000	0.010	-5.0 15.0
\$ 1 Tetrachloro-m-xylene	3059664.000	2966240.000	0.000	3.1 15.0
\$ 30 Decachlorobiphenyl	1566272.000	1563120.000	0.010	0.2 15.0

661 300

78
58904AData File: /var/chem/gc4.i/3130-G.b/d-a3514.d
Report Date: 22-Jun-2000 11:00

DB608

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-JUN-2000 15:19
Lab File ID: d-a3514.d Init. Calibration Date(s): 06/13/00 06/21/00
Analysis Type: Init. Calibration Times: 02:00 15:19
Lab Sample ID: MEDCHLOR Method File: /var/chem/gc4.i/3130-G.b/PESTA.m
Quant Type: ESTD

COMPOUND	RRF	RPO	MIN	MAX
9 Chlordane (1)	77632.000	78020.000	0.010	-0.5 15.0
(2)	138988.000	142536.000	0.010	-2.6 15.0
(3)	263804.000	266860.000	0.010	-1.2 15.0
(4)	209324.000	217704.000	0.010	-4.0 15.0
\$ 1 Tetrachloro-m-xylene	3059664.000	3066440.000	0.000	-0.2 15.0
\$ 30 Decachlorobiphenyl	1566272.000	1616680.000	0.010	-3.2 15.0

Data File: /var/chem/gc4.i/3130-G.b/d-a3515.d
Report Date: 22-Jun-2000 11:03

72
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661 301

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-JUN-2000 15:45
Lab File ID: d-a3515.d Init. Calibration Date(s): 06/13/0 06/21/0
Analysis Type: Init. Calibration Times: 02:00 15:19
Lab Sample ID: MEDA Method File: /var/chem/gc4.i/3130-G.b/PESTA.m
Quant Type: ESTD

COMPOUND		RRF	RFO	MIN	MAX
		RRF	RFO	RRF	%D
1 Tetrachloro-m-xylene		3059664.000	3148280.000	0.000	-2.9
5 alpha-BHC		3509398.000	3656800.000	0.010	-4.2
6 gamma-BHC (Lindane)		3014664.000	3200640.000	0.010	-6.2
10 Heptachlor		2605212.000	2647840.000	0.010	-1.6
15 Endosulfan I		2711002.000	2834920.000	0.010	-4.6
17 Dieldrin		3009834.000	3165320.000	0.010	-5.2
20 Endrin		2542202.000	2935680.000	0.010	-15.5
21 4,4'-DDD		2554750.000	2635240.000	0.010	-3.2
23 4,4'-DDT		2490552.000	2589920.000	0.010	-4.0
25 Methoxychlor		1083382.000	1165140.000	0.010	-7.5
30 Decachlorobiphenyl		1566272.000	1620600.000	0.010	-3.5

661 302

Data File: /var/chem/gc4.i/3130-G.b/d-a3516.d
 Report Date: 22-Jun-2000 11:04

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 DB608

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i
 Lab File ID: d-a3516.d
 Analysis Type:
 Lab Sample ID: MEDB
 Quant Type: ESTD

Injection Date: 21-JUN-2000 16:12
 Init. Calibration Date(s): 06/13/0 06/21/0
 Init. Calibration Times: 02:00 15:19
 Method File: /var/chem/gc4.i/3130-G.b/PESTA.m

COMPOUND	RRF	RFO	MIN	MAX
=====	=====	=====	=====	=====
11 Aldrin	2459876.000	2534120.000	0.010	-3.0 15.0
7 beta-BHC	1659476.000	1701600.000	0.010	-2.5 15.0
8 delta-BHC	3144734.000	3108960.000	0.010	1.1 15.0
12 Heptachlor epoxide	2591612.000	2625160.000	0.010	-1.3 15.0
13 gamma-Chlordane	2866866.000	2895880.000	0.010	-1.0 15.0
14 alpha-Chlordane	2974368.000	3009280.000	0.010	-1.2 15.0
16 4,4'-DDE	3155848.000	3273200.000	0.010	-3.7 15.0
22 Endosulfan II	2826056.000	2852320.000	0.010	-0.9 15.0
24 Endrin aldehyde	2185774.000	2164960.000	0.010	1.0 15.0
26 Endosulfan sulfate	2271330.000	2120840.000	0.010	6.6 15.0
27 Endrin ketone	2234340.000	2119120.000	0.010	5.2 15.0

AVE= 3.90

Data File: /var/chem/gc4.i/3130-G.b/d-a3525.d
 Report Date: 22-Jun-2000 11:09

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-JUN-2000 20:07
 Lab File ID: d-a3525.d Init. Calibration Date(s): 06/13/0 06/21/0
 Analysis Type: Init. Calibration Times: 02:00 15:19
 Lab Sample ID: MEDA Method File: /var/chem/gc4.i/3130-G.b/PESTA.m
 Quant Type: ESTD

COMPOUND	RRF	RFO	MIN	%D	MAX	%D
-----	-----	-----	-----	-----	-----	-----
\$ 1 Tetrachloro-m-xylene	3059664.000	3055840.000	0.000	0.1	15.0	
5 alpha-BHC	3509398.000	3584600.000	0.010	-2.1	15.0	
6 gamma-BHC (Lindane)	3014664.000	3229720.000	0.010	-7.1	15.0	
10 Heptachlor	2605212.000	2691320.000	0.010	-3.3	15.0	
15 Endosulfan I	2711002.000	2820640.000	0.010	-4.0	15.0	
17 Dieldrin	3009834.000	3148960.000	0.010	-4.6	15.0	
20 Endrin	2542202.000	2953160.000	0.010	-16.2	15.0	<-
21 4,4'-DDD	2554750.000	2663200.000	0.010	-4.2	15.0	
23 4,4'-DDT	2490552.000	2659600.000	0.010	-6.8	15.0	
25 Methoxychlor	1083382.000	1164440.000	0.010	-7.5	15.0	
\$ 30 Decachlorobiphenyl	1566272.000	1635960.000	0.010	-4.4	15.0	

661 304

Data File: /var/chem/gc4.i/3130-G.b/d-a3526.d
 Report Date: 22-Jun-2000 11:09

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STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-JUN-2000 20:33
 Lab File ID: d-a3526.d Init. Calibration Date(s): 06/13/00 06/21/00
 Analysis Type: Init. Calibration Times: 02:00 15:19
 Lab Sample ID: MEDB Method File: /var/chem/gc4.i/3130-G.b/PESTA.m
 Quant Type: ESTD

COMPOUND	RRF	RFD	MIN	MAX
-----	-----	-----	-----	-----
11 Aldrin	2459876.000	2523040.000	0.010	-2.6 15.0
7 beta-BHC	1659476.000	1730000.000	0.010	-4.2 15.0
8 delta-BHC	3144734.000	3148000.000	0.010	-0.1 15.0
12 Heptachlor epoxide	2591612.000	2642720.000	0.010	-2.0 15.0
13 gamma-Chlordane	2866866.000	2892800.000	0.010	-0.9 15.0
14 alpha-Chlordane	2974368.000	3027640.000	0.010	-1.8 15.0
16 4,4'-DDE	3155848.000	3255960.000	0.010	-3.2 15.0
22 Endosulfan II	2826056.000	2827240.000	0.010	0.0 15.0
24 Endrin aldehyde	2185774.000	2228680.000	0.010	-2.0 15.0
26 Endosulfan sulfate	2271330.000	2198960.000	0.010	3.2 15.0
27 Endrin ketone	2234340.000	2185360.000	0.010	2.2 15.0

Ave=3.8

8D
PESTICIDE ANALYTICAL SEQUENCE

661 305

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: C0F140185

GC Column: DB608

ID: 0.53 (mm) Init. Calib. Date(s): 06/13/00 06/21/00

Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
TCX: 5.76			DCB: 22.87		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	EVALB	06/13/00	0133	5.83*	23.02*
02	MEDTOX	06/13/00	0200	5.83*	23.01*
03	MEDCHLOR	06/13/00	0228	5.83*	23.02*
04	IOWA	06/13/00	0256	5.84*	23.01*
05	MLOWA	06/13/00	0323	5.83*	23.01*
06	MEDA	06/13/00	0351	5.83*	23.01*
07	MHIGHA	06/13/00	0419	5.83*	23.01*
08	HIGHA	06/13/00	0447	5.83*	23.01*
09	LOWB	06/13/00	0514		
10	MLOWB	06/13/00	0542		
11	MEDB	06/13/00	0610		
12	MHIGHB	06/13/00	0637		
13	HIGHB	06/13/00	0705		
14	2ND A	06/13/00	0733	5.83*	23.01*
15	2ND B	06/13/00	0800		
16	EVALB	06/13/00	0828	5.83*	23.01*
17	EVALB	06/21/00	1427	5.76	22.87
18	MEDTOX	06/21/00	1453	5.77	22.87
19	MEDCHLOR	06/21/00	1519	5.76	22.87
20	MEDA	06/21/00	1545	5.76	22.87
21	MEDB	06/21/00	1612		
22	PBLK1	DF1LC101	06/21/00	5.77	22.87
23	LCS1	DF1LC102	06/21/00	5.76	22.87
24	DF/S1/0165/G	DEMQV11D	06/21/00	5.77	22.86
25	DF/S1/0165/G	DEMQV11E	06/21/00	5.76	22.87
26	DF/S1/0165/G	DEMQV104	06/21/00	5.76	22.87
27	DF/S1/0165/S	DEMR4104	06/21/00	5.76	22.87
28	DF/S1/0165/S	DEMR6104	06/21/00	5.77	22.87
29	DF/S1/0165/S	DEMR7104	06/21/00	5.77	22.86
30		MEDA	06/21/00	5.77	22.86
31		MEDB	06/21/00		
32					

QC LIMITS

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.05 MINUTES)

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

661 306

Data File: /var/chem/gc4.i/3130-G.b/d-a3269.d
 Report Date: 13-Jun-2000 14:03

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3269.d
 Lab Smp Id: EVALB
 Inj Date : 13-JUN-2000 01:33
 Operator : 1891 Inst ID: gc4.i
 Smp Info : EVALB,3130-G.b,,EVALBR.sub,,3,1
 Misc Info : 190-88-8
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
 Cal Date : 13-JUN-2000 06:10 Cal File: d-a3279.d
 Als bottle: 1 QC Sample: PEM
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: EVALBR.sub
 Target Version: 3.40

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN	FINAL
					(ng)	(ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.833	5.833	0.000	61609	0.02046	0.02046(R)
16 4,4'-DDE	Compound Not Detected					
20 Endrin	15.973	15.973	0.000	62706	0.02514	0.02514
21 4,4'-DDD	Compound Not Detected.					
23 4,4'-DDT	16.660	16.653	0.007	62036	0.02524	0.02524
24 Endrin aldehyde	16.887	16.880	0.007	2547	0.00121	0.001208
27 Endrin ketone	19.007	19.000	0.007	2277	0.00106	0.001057
\$ 30 Decachlorobiphenyl	23.020	23.013	0.007	31831	0.02032	0.02032(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

$$DDT = 0.0$$

$$\text{Endrin} = 7.1$$

$$\text{Endrin Breakdown} = \frac{(2577 + 2277)}{(2577 + 2277 + 62706)} \times 100 = 7.1\%$$

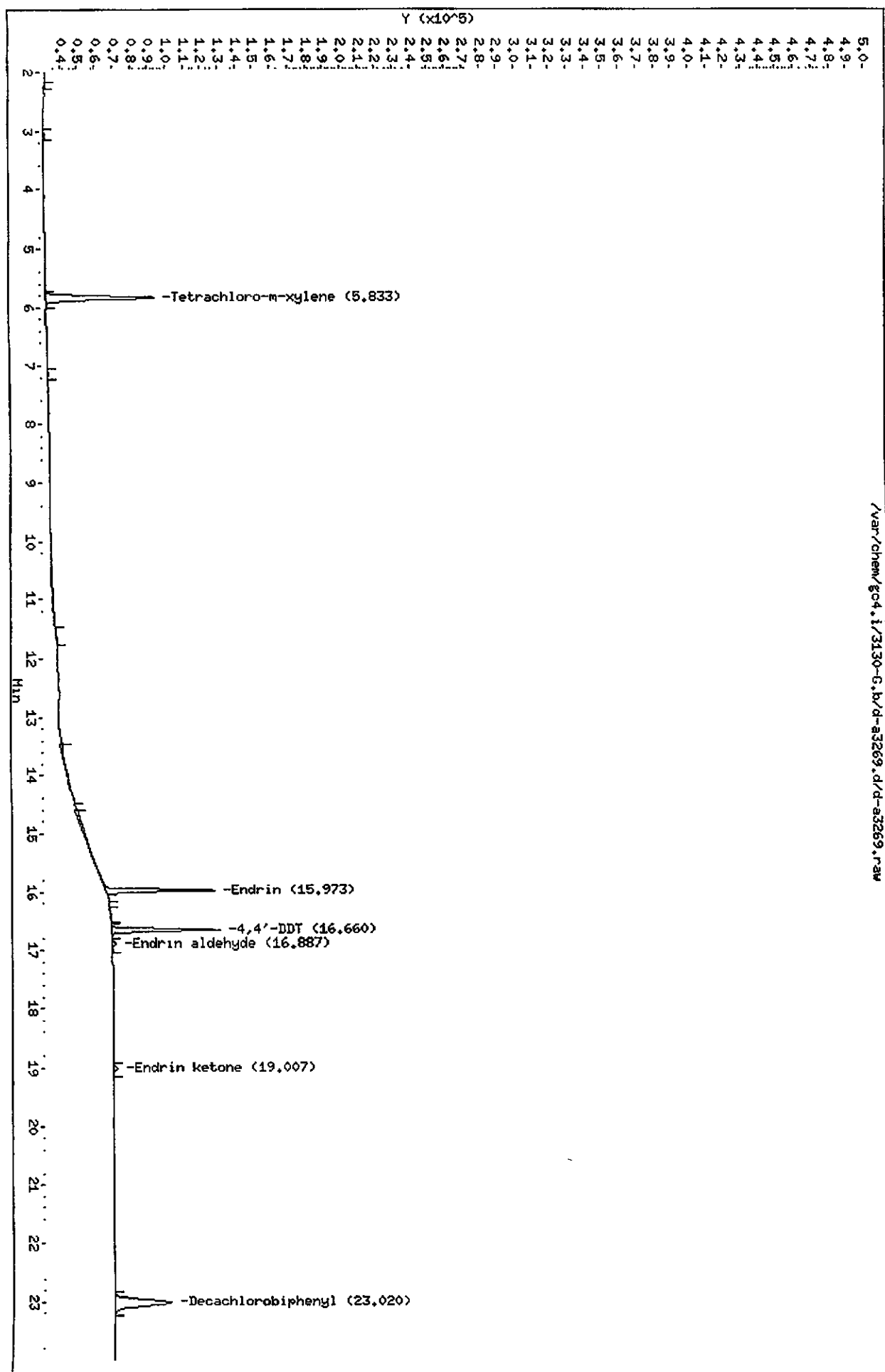
Data File: /var/chem/gc4.i/3130-G.b/d-a3269.d
Date : 13-JUN-2000 01:33
Client ID:
Sample Info: EVALB,3130-G.b,EVALBR.sub,,3,1

Column phase: DB608

Instrument: gc4.i

Operator: 1891

Column diameter: 0.53



661 308

Data File: /var/chem/gc4.i/3130-G.b/d-a3270.d

Report Date: 13-Jun-2000 14:03

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3270.d

Lab Smp Id: MEDTOX

Inj Date : 13-JUN-2000 02:00

Operator : 1891

Inst ID: gc4.i

Smp Info : MEDTOX,3130-G.b,,1-TOX.sub,,1,3

Misc Info : 190-84-13

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 13-Jun-2000 14:02 matkol

Quant Type: ESTD

Cal Date :

Cal File:

Als bottle: 1

Calibration Sample, Level: 3

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 1-TOX.sub

Target Version: 3.40

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
18 Toxaphene	16.153	16.153	0.000	62331	1.00000	1.000 (M)
\$ 1 Tetrachloro-m-xylene	5.833	5.833	0.000	74042	0.02500	0.02500 (M)
\$ 30 Decachlorobiphenyl	23.013	23.013	0.000	38462	0.02500	0.02500 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gc4.i/3130-G.b/d-a3270.d

Date: 13-JUN-2000 02:00

Client ID:

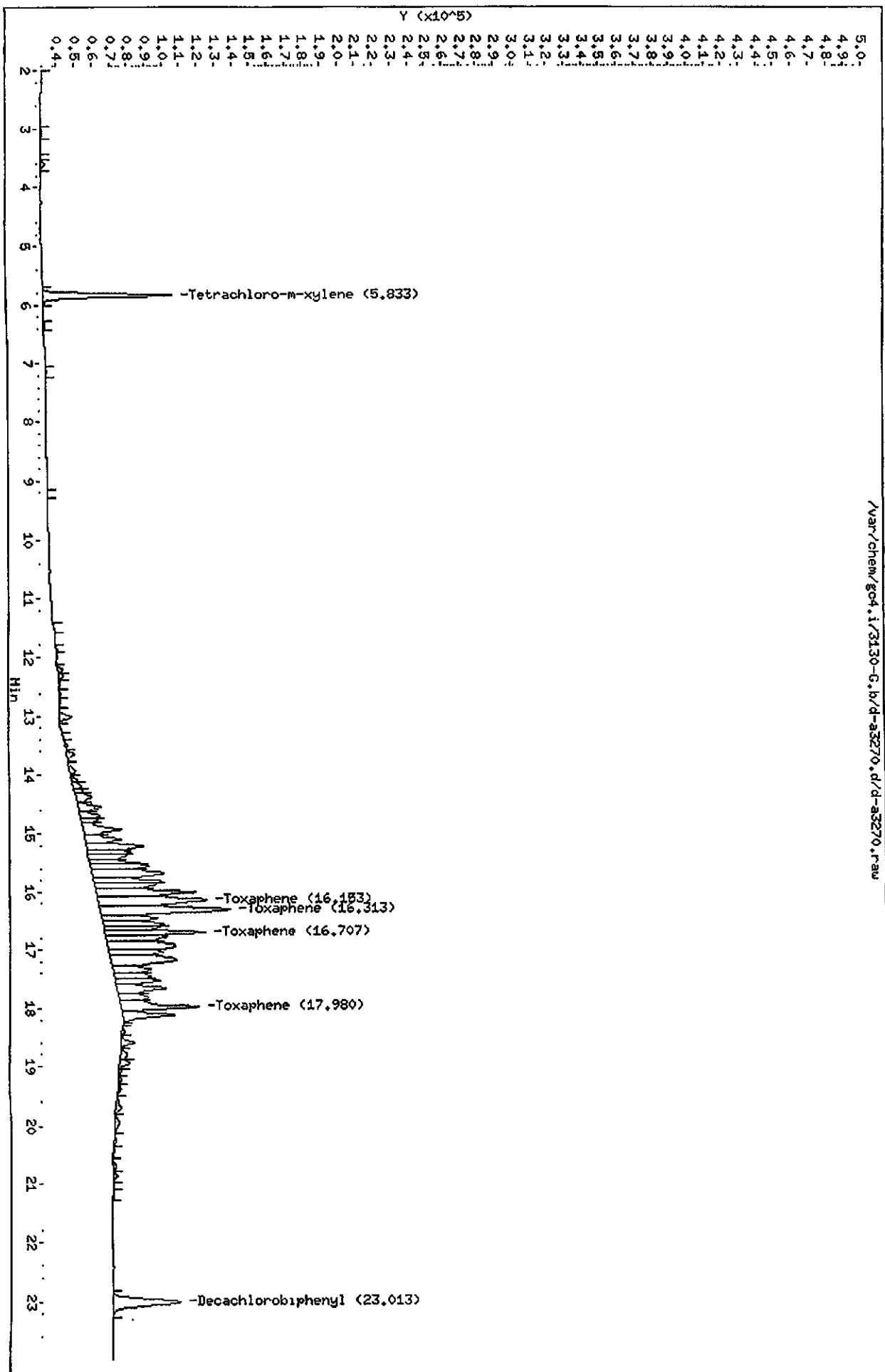
Sample Info: MEDTOX, 3130-G.b, 1-TOX, sub, 1.3

Column phase: DB608

Instrument: gc4.i

Operator: 1891

Column diameter: 0.53



661 310

Data File: /var/chem/gc4.i/3130-G.b/d-a3271.d

Report Date: 13-Jun-2000 14:03

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3271.d

Lab Smp Id: MEDCHLOR

Inj Date : 13-JUN-2000 02:28

Operator : 1891

Inst ID: gc4.i

Smp Info : MEDCHLOR,3130-G.b,,2-CHLO.sub,,1,3

Misc Info : 190-85-10

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 13-Jun-2000 14:02 matkol

Quant Type: ESTD

Cal Date :

Cal File:

Als bottle: 1

Calibration Sample, Level: 3

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 2-CHLO.sub

Target Version: 3.40

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
9 Chlordane	10.287	10.287	0.000	19408	0.25000	0.2500(M)
\$ 1 Tetrachloro-m-xylene	5.833	5.833	0.000	74614	0.02500	0.02500(M)
\$ 30 Decachlorobiphenyl	23.020	23.013	0.007	39114	0.02500	0.02500(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gc4.i/3130-G.b/d-a3271.d

Date: 13-JUN-2000 02:28

Client ID:

Sample Info: MEDCHLOR, 3130-G.b, 2-CHL0.sub, 1,3

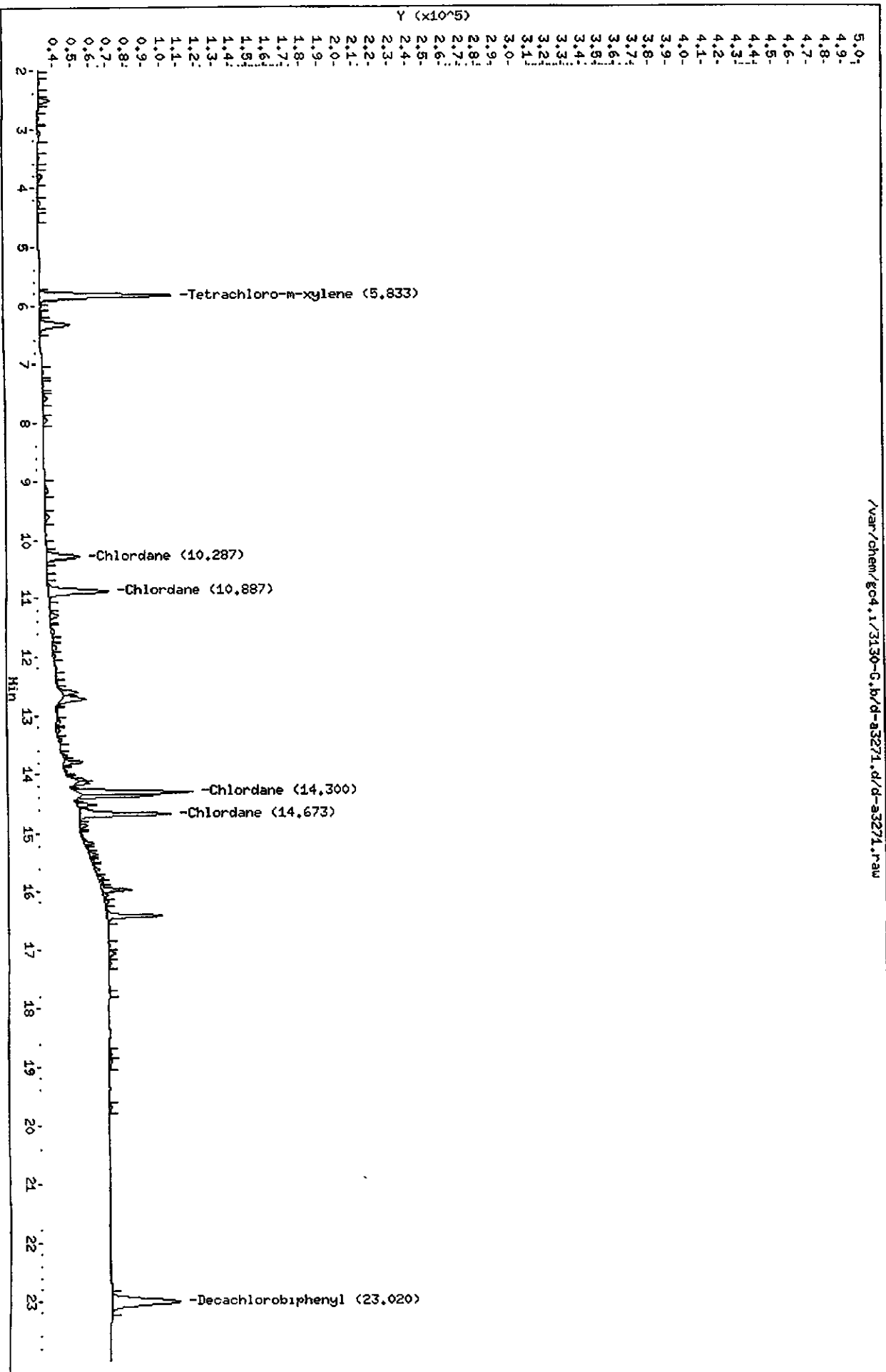
Column phase: DB608

Instrument: gc4.i

Operator: 1891

Column diameter: 0.53

/var/chem/gc4.i/3130-G.b/d-a3271.d/d-a3271.raw



661 312

Data File: /var/chem/gc4.i/3130-G.b/d-a3272.d

Report Date: 13-Jun-2000 14:03

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3272.d

Lab Smp Id: LOWA

Inj Date : 13-JUN-2000 02:56

Operator : 1891

Inst ID: gc4.i

Smp Info : LOWA,3130-G.b,,3-INDA.sub,,1,1

Misc Info : 190-84-1

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 13-Jun-2000 14:02 matkol

Quant Type: ESTD

Cal Date : 13-JUN-2000 06:10

Cal File: d-a3279.d

Als bottle: 1

Calibration Sample, Level: 1

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 3-INDA.sub

Target Version: 3.40

						AMOUNTS	
						CAL-AMT	ON-COL
						(ng)	(ng)
Compounds	RT	EXP RT	DLT RT	RT	RESPONSE		
=====	==	=====	=====		=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.840	5.833	0.007		16790	0.00500	0.005273
5 alpha-BHC	8.173	8.173	0.000		16059	0.00500	0.004770
6 gamma-BHC (Lindane)	9.613	9.613	0.000		14269	0.00500	0.004853
10 Heptachlor	10.887	10.887	0.000		13083	0.00500	0.005052
15 Endosulfan I	14.733	14.733	0.000		13114	0.00500	0.004962
17 Dieldrin	15.340	15.340	0.000		13680	0.00500	0.004770
20 Endrin	15.973	15.973	0.000		11961	0.00500	0.004895
21 4,4'-DDD	16.120	16.120	0.000		12059	0.00500	0.004853
23 4,4'-DDT	16.653	16.653	0.000		11669	0.00500	0.004871
25 Methoxychlor	18.533	18.533	0.000		10844	0.01000	0.01009
\$ 30 Decachlorobiphenyl	23.013	23.013	0.000		8376	0.00500	0.005167

Data File: /var/chem/gc4.1/3130-G.b/d-a3272.d

Date: 13-JUN-2000 02:56

Client ID:

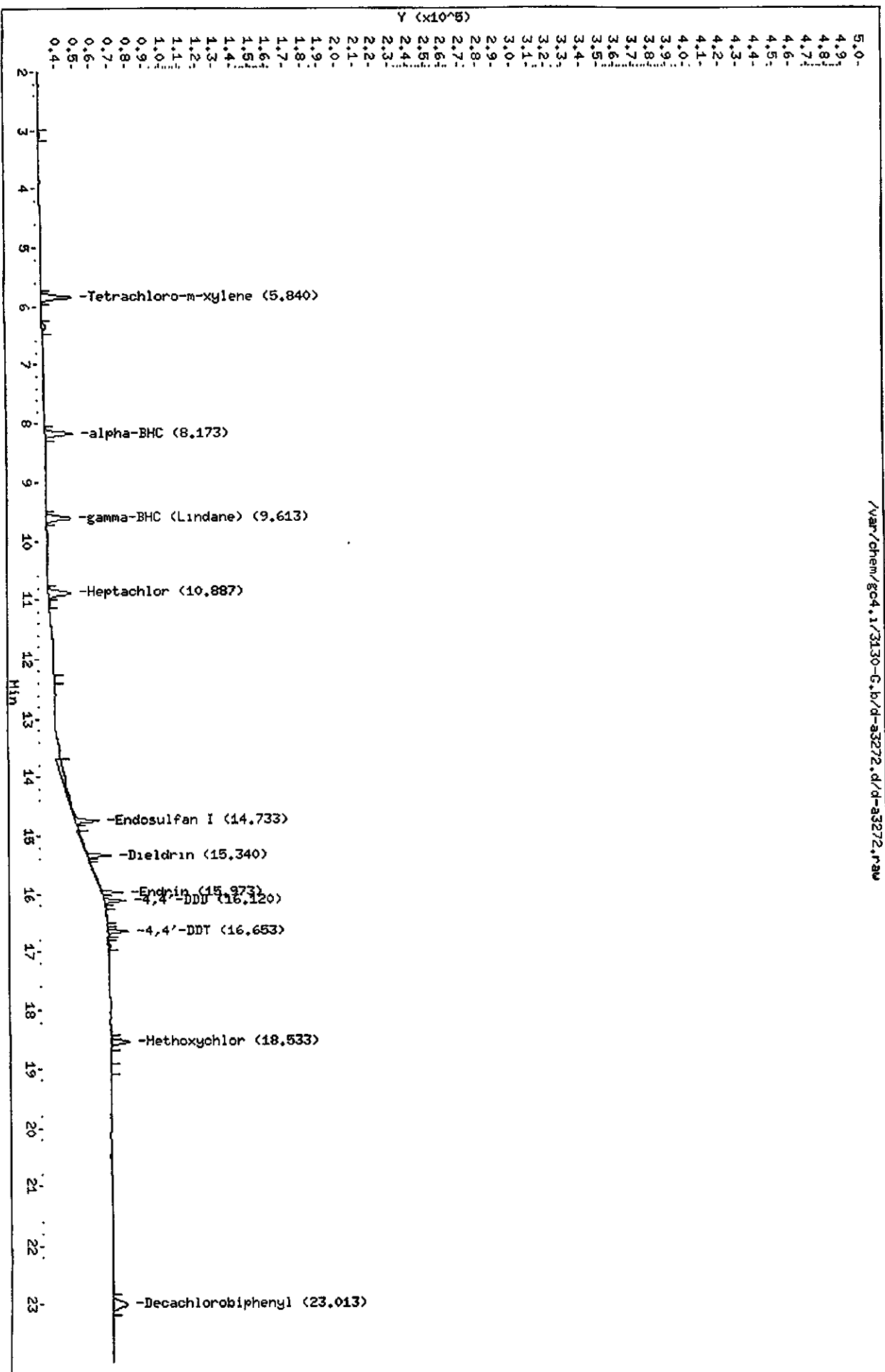
Sample Info: L00A.3130-G.b,3-INDA.sub,1,1

Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



661 314

Data File: /var/chem/gc4.i/3130-G.b/d-a3273.d

Report Date: 13-Jun-2000 14:03

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3273.d

Lab Smp Id: MLOWA

Inj Date : 13-JUN-2000 03:23

Operator : 1891

Inst ID: gc4.i

Smp Info : MLOWA,3130-G.b,,3-INDA.sub,,1,2

Misc Info : 190-84-2

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 13-Jun-2000 14:02 matkol

Quant Type: ESTD

Cal Date : 13-JUN-2000 06:10

Cal File: d-a3279.d

Als bottle: 1

Calibration Sample, Level: 2

Dil Factor: 1.00000

Integrator: Falcon

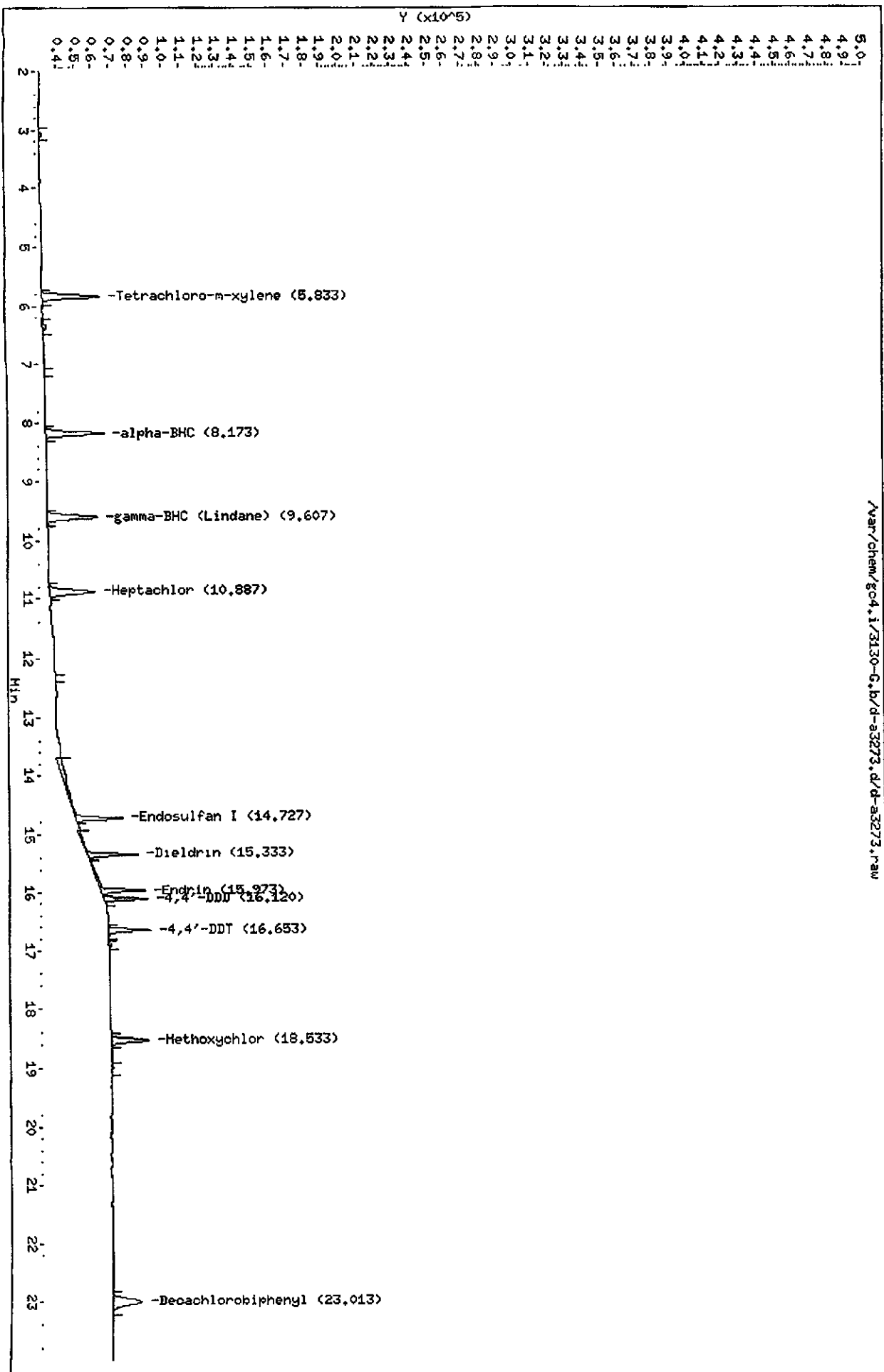
Compound Sublist: 3-INDA.sub

Target Version: 3.40

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
*****	==	*****	*****	*****	*****	*****
\$ 1 Tetrachloro-m-xylene	5.833	5.833	0.000	32658	0.01000	0.01017
5 alpha-BHC	8.173	8.173	0.000	33387	0.01000	0.009944
6 gamma-BHC (Lindane)	9.607	9.613	-0.006	29029	0.01000	0.009916
10 Heptachlor	10.887	10.887	0.000	25523	0.01000	0.009904
15 Endosulfan I	14.727	14.733	-0.006	26532	0.01000	0.01003
17 Dieldrin	15.333	15.340	-0.007	28509	0.01000	0.009960
20 Endrin	15.973	15.973	0.000	25069	0.01000	0.01017
21 4,4'-DDD	16.120	16.120	0.000	24765	0.01000	0.009978
23 4,4'-DDT	16.653	16.653	0.000	24426	0.01000	0.01013
25 Methoxychlor	18.533	18.533	0.000	21945	0.02000	0.02027
\$ 30 Decachlorobiphenyl	23.013	23.013	0.000	16551	0.01000	0.01014

Data File: /var/chem/gc04.1/3130-G.b/d-a3273.d
 Date : 13-JUN-2000 03:23
 Client ID:
 Sample Info: HLOM0, 3130-G.b, 3-INDA.sub, 1,2
 Column phase: DB608

Instrument: gc04.1
 Operator: 1891
 Column diameter: 0.53



661 316

Data File: /var/chem/gc4.i/3130-G.b/d-a3274.d

Report Date: 13-Jun-2000 14:03

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3274.d

Lab Smp Id: MEDA

Inj Date : 13-JUN-2000 03:51

Operator : 1891

Inst ID: gc4.i

Smp Info : MEDA,3130-G.b,,3-INDA.sub,,1,3

Misc Info : 190-84-3

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 13-Jun-2000 14:02 matkol

Quant Type: ESTD

Cal Date : 13-JUN-2000 03:51

Cal File: d-a3274.d

Als bottle: 1

Calibration Sample, Level: 3

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 3-INDA.sub

Target Version: 3.40

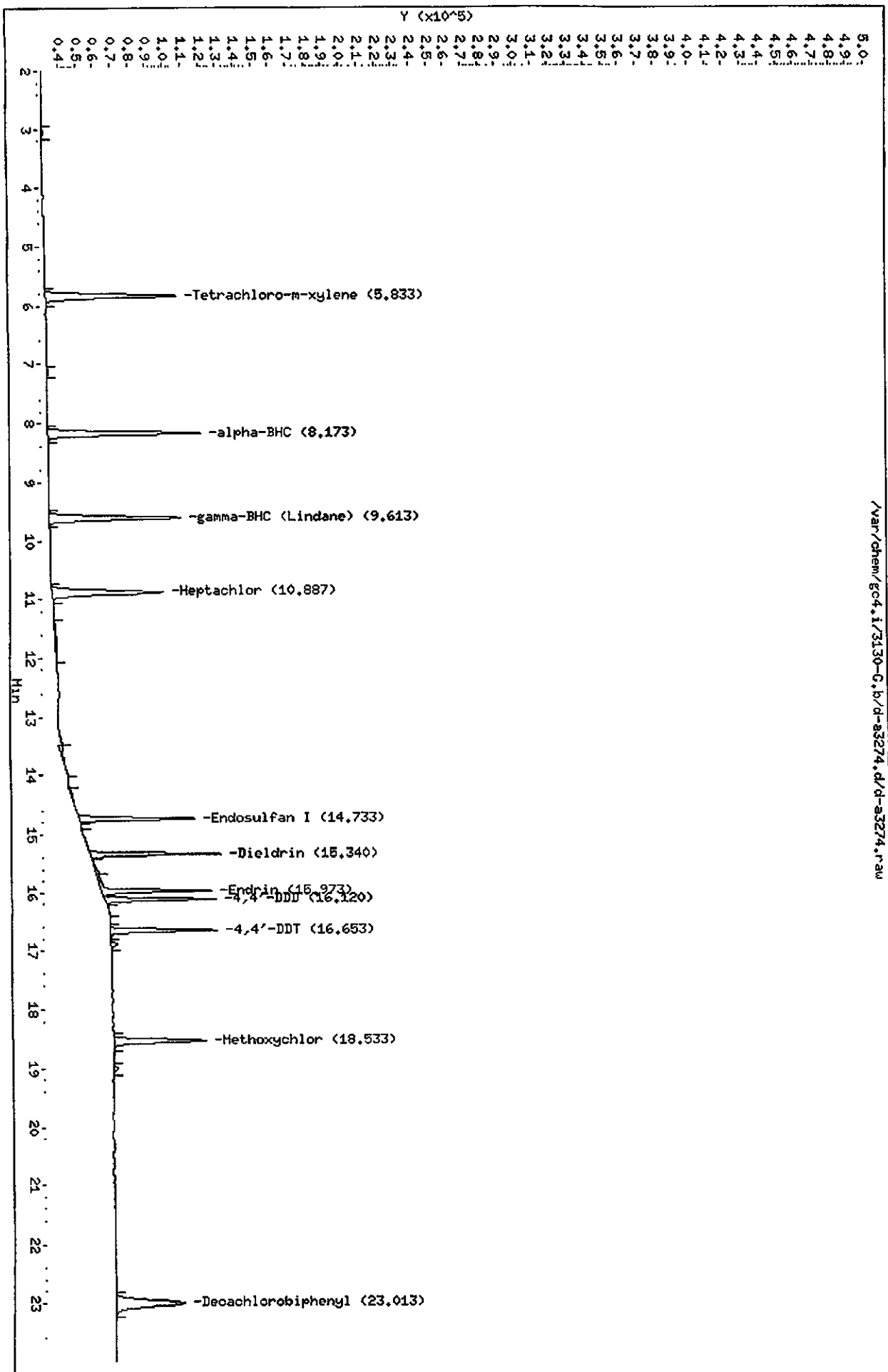
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.833	5.833	0.000	75269	0.02500	0.02500 (M)
5 alpha-BHC	8.173	8.173	0.000	88036	0.02500	0.02500 (M)
6 gamma-BHC (Lindane)	9.613	9.613	0.000	75654	0.02500	0.02500 (M)
10 Heptachlor	10.887	10.887	0.000	64053	0.02500	0.02500 (M)
15 Endosulfan I	14.733	14.733	0.000	66561	0.02500	0.02500 (M)
17 Dieldrin	15.340	15.340	0.000	74992	0.02500	0.02500 (M)
20 Endrin	15.973	15.973	0.000	62366	0.02500	0.02500 (M)
21 4,4'-DDD	16.120	16.120	0.000	63943	0.02500	0.02500 (M)
23 4,4'-DDT	16.653	16.653	0.000	61439	0.02500	0.02500 (M)
25 Methoxychlor	18.533	18.533	0.000	53281	0.05000	0.05000 (M)
\$ 30 Decachlorobiphenyl	23.013	23.013	0.000	39165	0.02500	0.02500 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gc4.1/3130-G.b/d-a3274.d
Date: 13-JUN-2000 03:51
Client ID:
Sample Info: MEUA,3130-G.b,,3-INDR,sub,1,3
Column phase: DB608

Instrument: gc4.1
Operator: 1891
Column diameter: 0.53



661 318

Data File: /var/chem/gc4.i/3130-G.b/d-a3275.d

Report Date: 13-Jun-2000 14:03

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3275.d

Lab Smp Id: MHIGHA

Inj Date : 13-JUN-2000 04:19

Operator : 1891

Inst ID: gc4.i

Smp Info : MHIGHA, 3130-G.b, , 3-INDA.sub, , 1, 4

Misc Info : 190-84-4

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 13-Jun-2000 14:02 matkol

Quant Type: ESTD

Cal Date : 13-JUN-2000 06:10

Cal File: d-a3279.d

Als bottle: 1

Calibration Sample, Level: 4

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 3-INDA.sub

Target Version: 3.40

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.833	5.833	0.000	145209	0.05000	0.04632
5 alpha-BHC	8.173	8.173	0.000	184829	0.05000	0.05370
6 gamma-BHC (Lindane)	9.607	9.613	-0.006	156208	0.05000	0.05248
10 Heptachlor	10.887	10.887	0.000	129354	0.05000	0.05015
15 Endosulfan I	14.733	14.733	0.000	137240	0.05000	0.05138
17 Dieldrin	15.340	15.340	0.000	155928	0.05000	0.05328
20 Endrin	15.973	15.973	0.000	130168	0.05000	0.05208
21 4,4'-DDD	16.120	16.120	0.000	129474	0.05000	0.05161
23 4,4'-DDT	16.653	16.653	0.000	126847	0.05000	0.05193
25 Methoxychlor	18.533	18.533	0.000	108095	0.10000	0.09990
\$ 30 Decachlorobiphenyl	23.013	23.013	0.000	74116	0.05000	0.04647

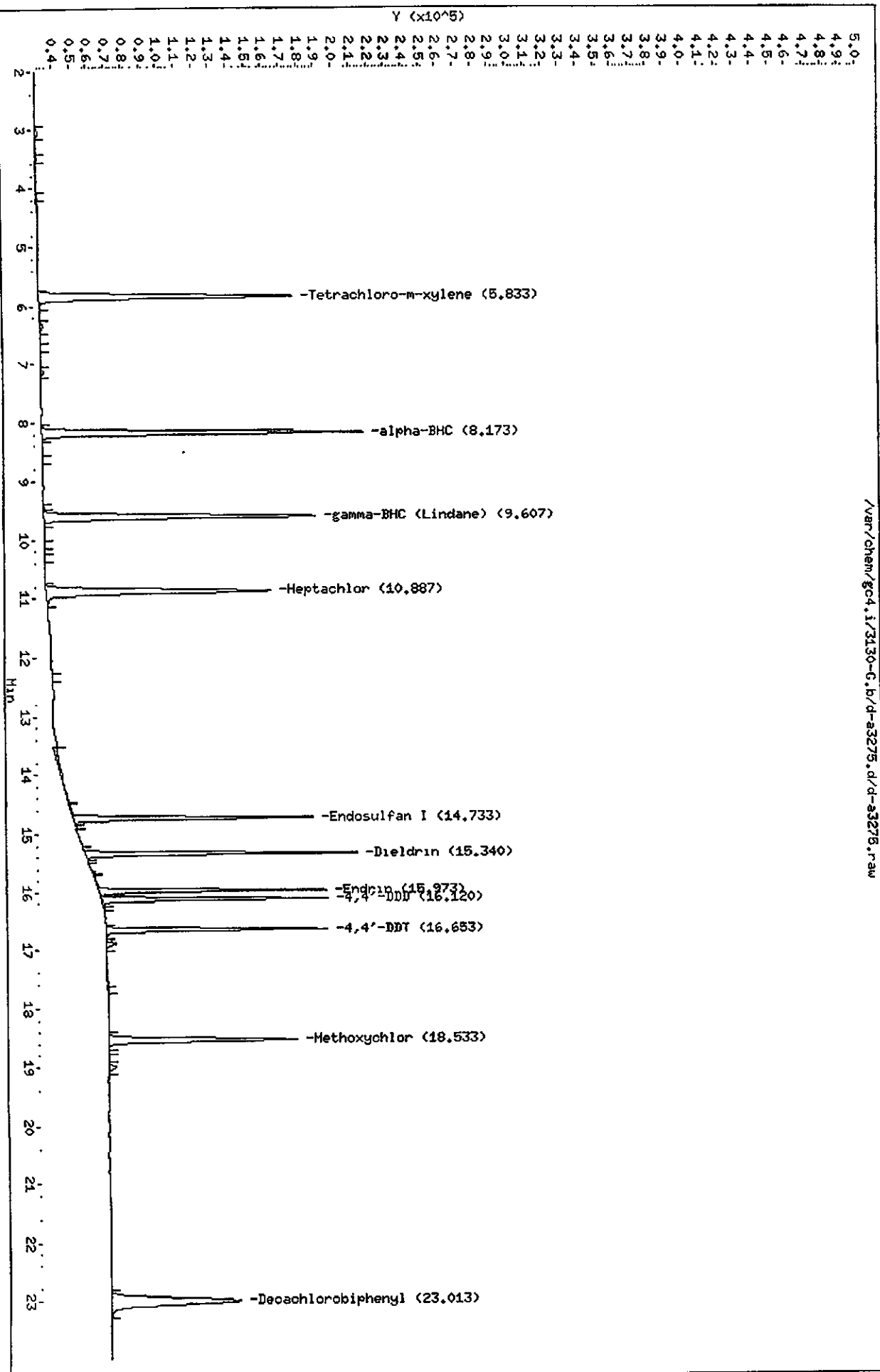
Data File: /var/chem/gc4.i/3130-G.b/d-a3275.d
 Date : 13-JUN-2000 04:19
 Client ID:
 Sample Info: HH1CH0,3130-G.b/,3-IND0,sub,1.4

Column phase: DB608

Instrument: gc4.i

Operator: 1891

Column diameter: 0.53



661 320

Data File: /var/chem/gc4.i/3130-G.b/d-a3276.d
 Report Date: 13-Jun-2000 14:03

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3276.d
 Lab Smp Id: HIGHA
 Inj Date : 13-JUN-2000 04:47
 Operator : 1891 Inst ID: gc4.i
 Smp Info : HIGHA,3130-G.b,,3-INDA.sub,,1,5
 Misc Info : 190-84-5
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
 Cal Date : 13-JUN-2000 06:10 Cal File: d-a3279.d
 Als bottle: 1 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 3-INDA.sub
 Target Version: 3.40

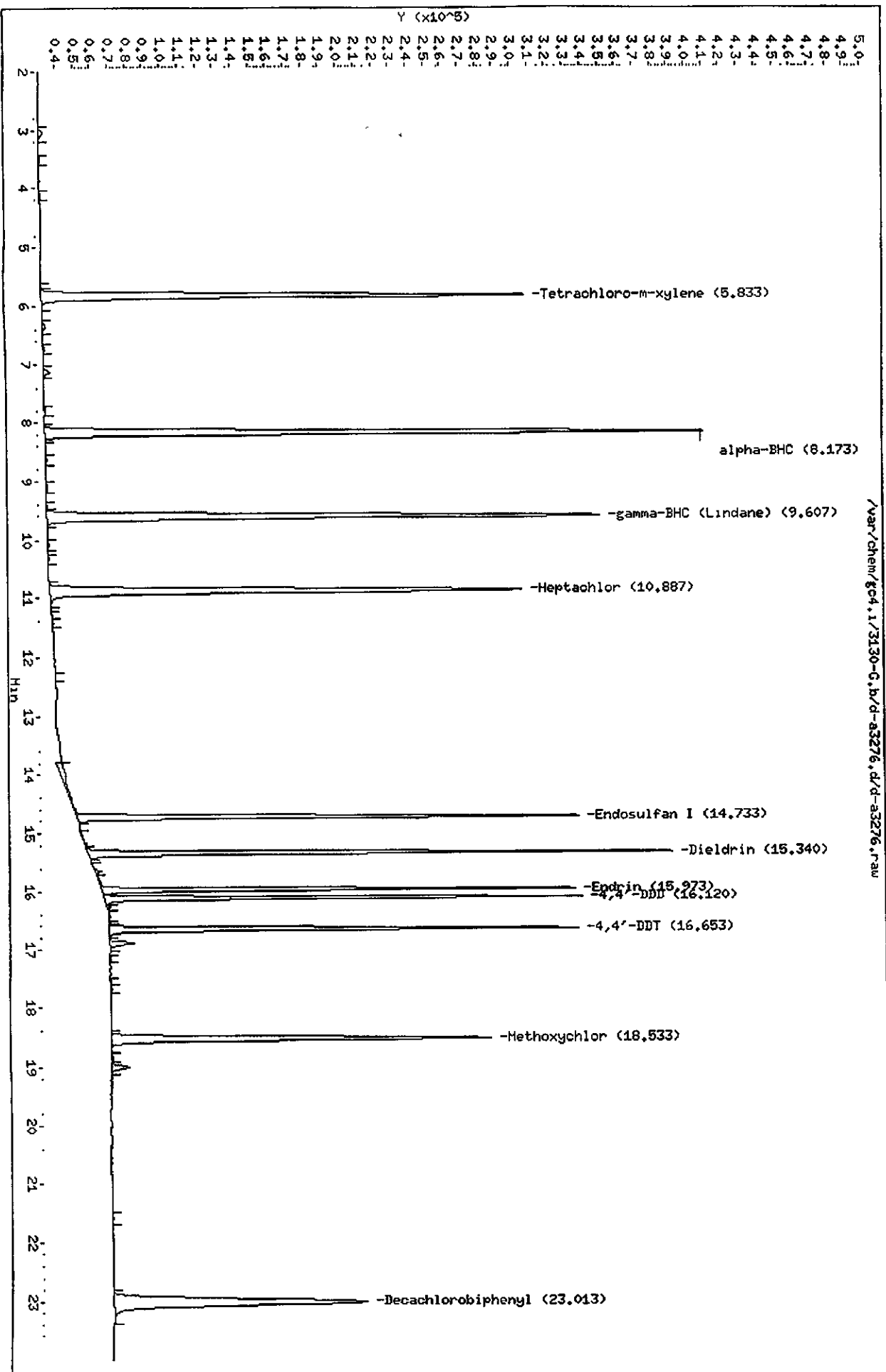
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.833	5.833	0.000	275958	0.10000	0.09019
5 alpha-BHC	8.173	8.173	0.000	377847	0.10000	0.1077(A)
6 gamma-BHC (Lindane)	9.607	9.613	-0.006	316630	0.10000	0.1050(A)
10 Heptachlor	10.887	10.887	0.000	270796	0.10000	0.1039(A)
15 Endosulfan I	14.733	14.733	0.000	287177	0.10000	0.1059(A)
17 Dieldrin	15.340	15.340	0.000	334403	0.10000	0.1111(A)
20 Endrin	15.973	15.973	0.000	271391	0.10000	0.1068(A)
21 4,4'-DDD	16.120	16.120	0.000	273825	0.10000	0.1072(A)
23 4,4'-DDT	16.653	16.653	0.000	268186	0.10000	0.1077(A)
25 Methoxychlor	18.533	18.533	0.000	217738	0.20000	0.2010(A)
\$ 30 Decachlorobiphenyl	23.013	23.013	0.000	145214	0.10000	0.09271

QC Flag Legend

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

Data File: \var\chem\gc4.1\3130-G.b/d-a3276.d
 Date : 13-JUN-2000 04:47
 Client ID:
 Sample Info: HIGH, 3130-G.b., 3-INDA.sub., 1.5
 Column phase: DB608

Instrument: gc4.1
 Operator: 1891
 Column diameter: 0.53



661 322

Data File: /var/chem/gc4.i/3130-G.b/d-a3277.d
 Report Date: 13-Jun-2000 14:03

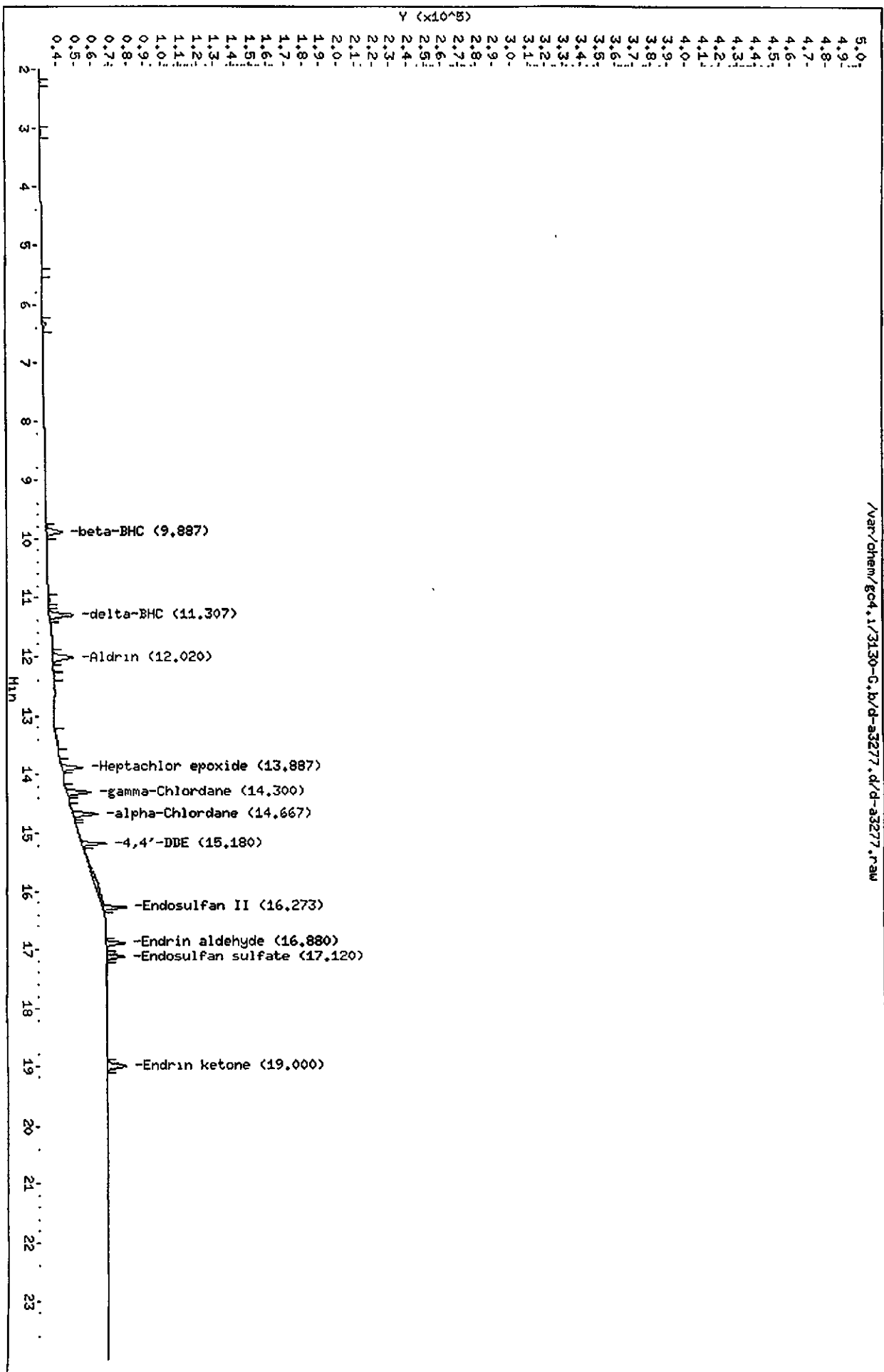
STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3277.d
 Lab Smp Id: LOWB
 Inj Date : 13-JUN-2000 05:14
 Operator : 1891 Inst ID: gc4.i
 Smp Info : LOWB,3130-G.b,,4-INDB.sub,,1,1
 Misc Info : 190-84-7
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
 Cal Date : 13-JUN-2000 06:10 Cal File: d-a3279.d
 Als bottle: 1 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 4-INDB.sub
 Target Version: 3.40

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	12.020	12.020	0.000	11289	0.00500	0.004868
7 beta-BHC	9.887	9.887	0.000	8821	0.00500	0.005204
8 delta-BHC	11.307	11.307	0.000	13767	0.00500	0.004689
12 Heptachlor epoxide	13.887	13.887	0.000	12020	0.00500	0.004872
13 gamma-Chlordane	14.300	14.300	0.000	13672	0.00500	0.004956
14 alpha-Chlordane	14.667	14.667	0.000	14397	0.00500	0.004970
16 4,4'-DDE	15.180	15.180	0.000	14101	0.00500	0.004774
22 Endosulfan II	16.273	16.280	-0.007	13422	0.00500	0.004944
24 Endrin aldehyde	16.880	16.880	0.000	10783	0.00500	0.005056
26 Endosulfan sulfate	17.120	17.120	0.000	10698	0.00500	0.004953
27 Endrin ketone	19.000	19.000	0.000	10636	0.00500	0.004970

Data File: /var/chem/gc4.1/3130-G.b/d-a3277.d
Date : 13-JUN-2000 05:14
Client ID:
Sample Info: LOAB,3130-G.b,,4-INDB.sub,1,1
Column phase: DB608

Instrument: gc4.1
Operator: 1891
Column diameter: 0.53



661 324

Data File: /var/chem/gc4.i/3130-G.b/d-a3278.d
Report Date: 13-Jun-2000 14:04

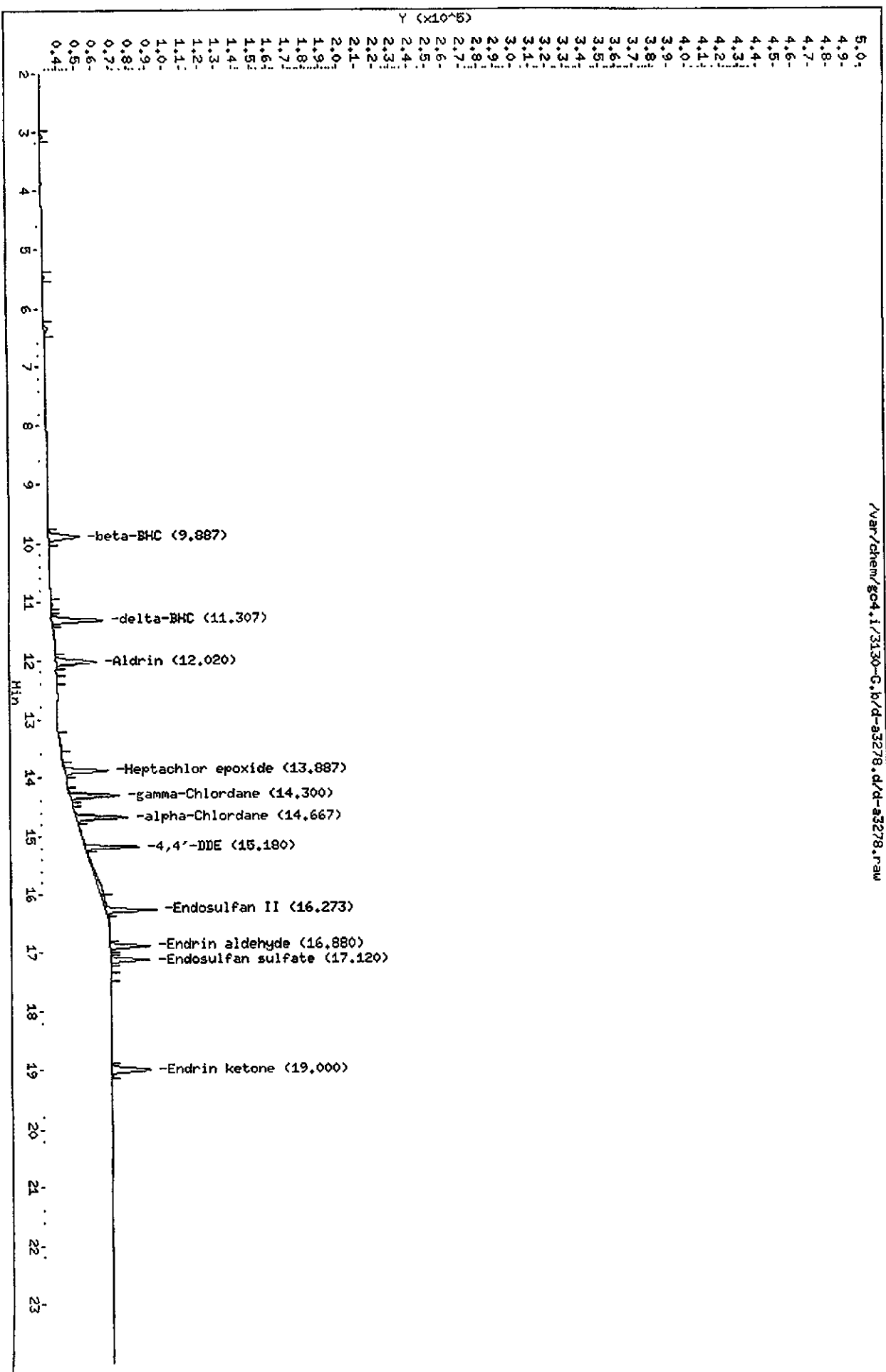
STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3278.d
Lab Smp Id: MLOWB
Inj Date : 13-JUN-2000 05:42
Operator : 1891 Inst ID: gc4.i
Smp Info : MLOWB,3130-G.b,,4-INDB.sub,,1,2
Misc Info : 190-84-8
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
Cal Date : 13-JUN-2000 06:10 Cal File: d-a3279.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 3.40

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	12.020	12.020	0.000	23220	0.01000	0.01001
7 beta-BHC	9.887	9.887	0.000	17621	0.01000	0.01026
8 delta-BHC	11.307	11.307	0.000	29608	0.01000	0.01006
12 Heptachlor epoxide	13.887	13.887	0.000	25232	0.01000	0.01015
13 gamma-Chlordane	14.300	14.300	0.000	28452	0 01000	0.01021
14 alpha-Chlordane	14.667	14.667	0.000	29810	0.01000	0.01019
16 4,4'-DDE	15.180	15.180	0.000	30530	0.01000	0 01022
22 Endosulfan II	16.273	16.280	-0.007	27993	0.01000	0 01020
24 Endrin aldehyde	16.880	16.880	0.000	22214	0.01000	0.01027
26 Endosulfan sulfate	17.120	17.120	0.000	22391	0.01000	0.01024
27 Endrin ketone	19.000	19.000	0.000	22043	0.01000	0.01020

Data File: /var/chem/gc04.1/3130-G.b/d-a3278.d
Date: 13-JUN-2000 05:42
Client ID:
Sample Info: MLOMB,3130-G.b,4-INDB.sub,1,2
Column phase: DB608

Instrument: gc04.1
Operator: 1891
Column diameter: 0.53



661 326

Data File: /var/chem/gc4.i/3130-G.b/d-a3279.d
Report Date: 13-Jun-2000 14:04

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3279.d
Lab Smp Id: MEDB
Inj Date : 13-JUN-2000 06:10
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDB,3130-G.b,,4-INDB.sub,,1,3
Misc Info : 190-84-9
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
Cal Date : 13-JUN-2000 06:10 Cal File: d-a3279.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 3.40

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	12.020	12.020	0.000	59504	0.02500	0.02500 (M)
7 beta-BHC	9.887	9.887	0.000	40654	0.02500	0.02500 (M)
8 delta-BHC	11.307	11.307	0.000	77970	0.02500	0.02500 (M)
12 Heptachlor epoxide	13.887	13.887	0.000	63269	0.02500	0.02500 (M)
13 gamma-Chlordane	14.300	14.300	0.000	69561	0.02500	0.02500 (M)
14 alpha-Chlordane	14.667	14.667	0.000	72838	0.02500	0.02500 (M)
16 4,4'-DDE	15.180	15.180	0.000	77164	0.02500	0.02500 (M)
22 Endosulfan II	16.280	16.280	0.000	68624	0.02500	0.02500 (M)
24 Endrin aldehyde	16.880	16.880	0.000	52724	0.02500	0.02500 (M)
26 Endosulfan sulfate	17.120	17.120	0.000	54512	0.02500	0.02500 (M)
27 Endrin ketone	19.000	19.000	0.000	53831	0.02500	0.02500 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gc4.1/3130-G.b/d-a3279.d

Date : 13-JUN-2000 06:10

Client ID:

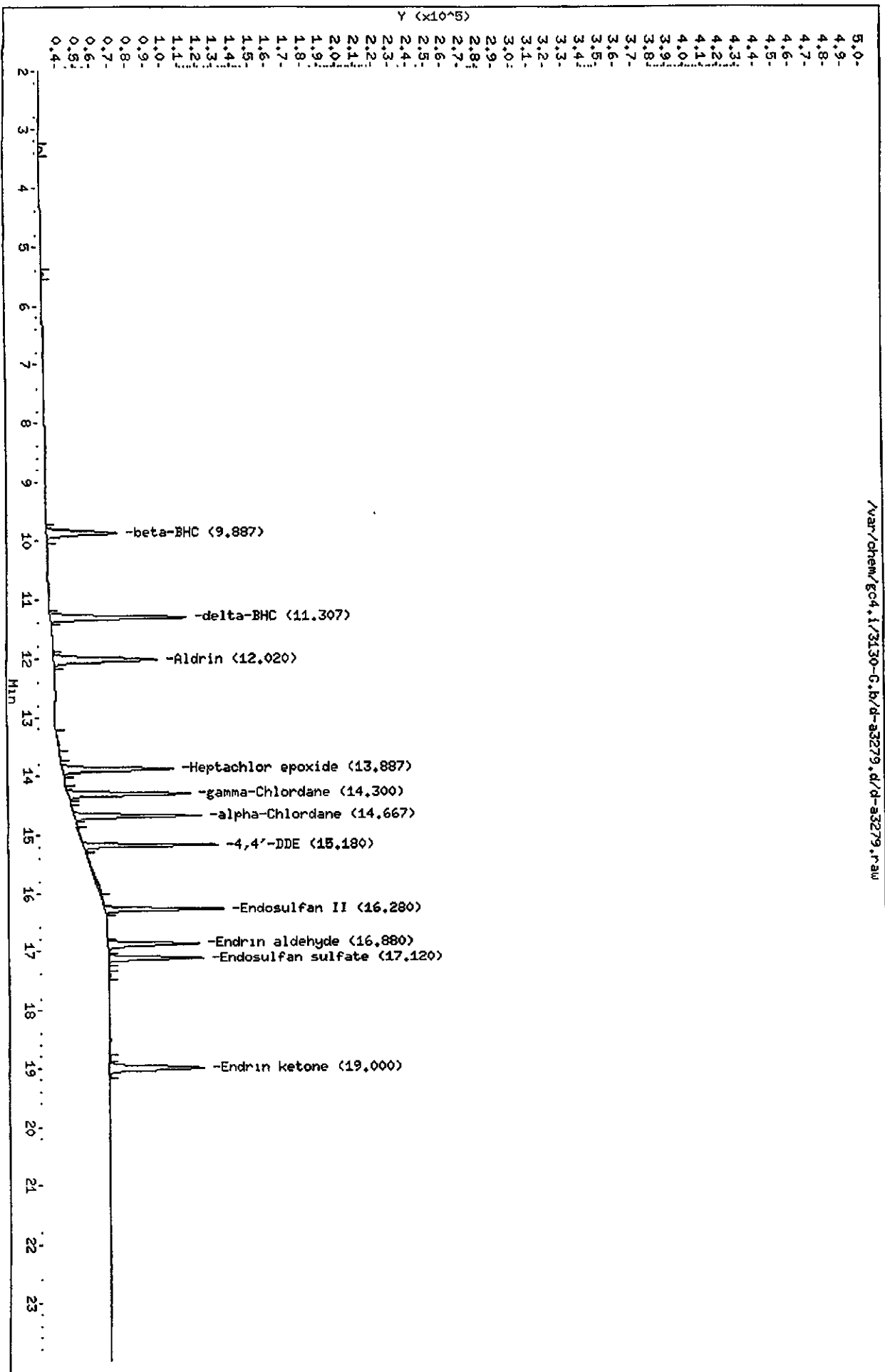
Sample Info: MEDB,3130-G.b.,4-INDB.sub.,1,3

Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



661 328

Data File: /var/chem/gc4.i/3130-G.b/d-a3280.d
Report Date: 13-Jun-2000 14:04

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3280.d
Lab Smp Id: MHIGHB
Inj Date : 13-JUN-2000 06:37
Operator : 1891 Inst ID: gc4.i
Smp Info : MHIGHB,3130-G.b,,4-INDB.sub,,1,4
Misc Info : 190-84-10
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
Cal Date : 13-JUN-2000 06:37 Cal File: d-a3280.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 3.40

Compounds						AMOUNTS	
	RT	EXP RT	DLT RT	RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====	=====
11 Aldrin	12.020	12.020	0.000		129673	0.05000	0.05429
7 beta-BHC	9.887	9.887	0.000		79629	0.05000	0.04722
8 delta-BHC	11.307	11.307	0.000		167683	0.05000	0.05504
12 Heptachlor epoxide	13.887	13.887	0.000		134402	0.05000	0.05299
13 gamma-Chlordane	14.300	14.300	0.000		147195	0.05000	0.05208
14 alpha-Chlordane	14.667	14.667	0.000		150492	0.05000	0.05108
16 4,4'-DDE	15.180	15.180	0.000		165092	0.05000	0.05386
22 Endosulfan II	16.273	16.280	-0.007		144332	0.05000	0.05194
24 Endrin aldehyde	16.880	16.880	0.000		109817	0.05000	0.05059
26 Endosulfan sulfate	17.120	17.120	0.000		116467	0.05000	0.05241
27 Endrin ketone	19.000	19.000	0.000		114578	0.05000	0.05222

Data File: /var/chem/gc4.1/3130-G.b/d-a3280.d

Date: 13-JUN-2000 06:37

Client ID:

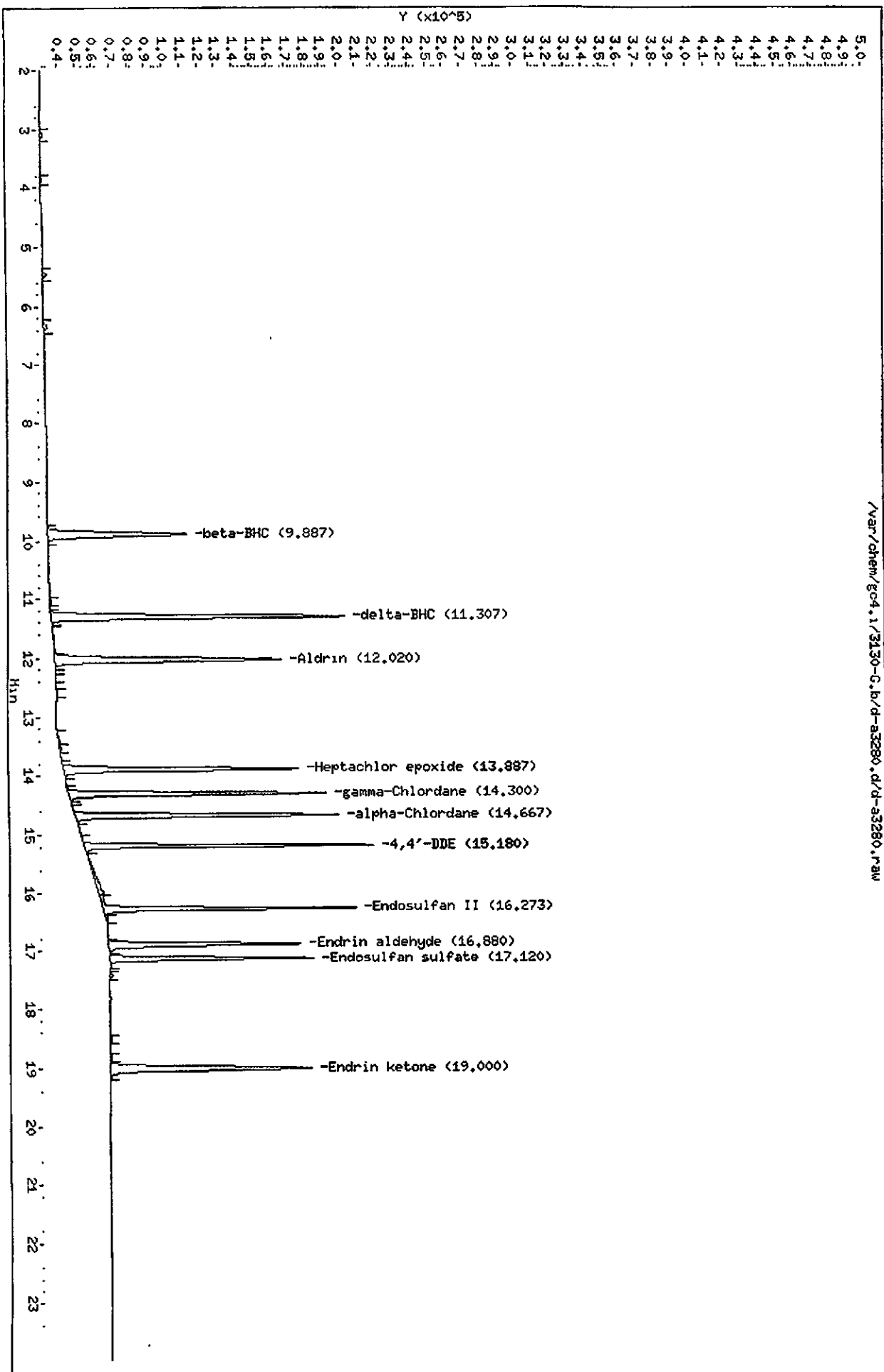
Sample Info: HHIGHB,3130-G.b,,4-INDB.sub,,1,4

Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



661 330

Data File: /var/chem/gc4.i/3130-G.b/d-a3281.d

Report Date: 13-Jun-2000 14:04

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3281.d

Lab Smp Id: HIGHB

Inj Date : 13-JUN-2000 07:05

Operator : 1891

Inst ID: gc4.i

Smp Info : HIGHB, 3130-G.b, , 4-INDB.sub, , 1, 5

Misc Info : 190-84-11

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 13-Jun-2000 14:02 matkol

Quant Type: ESTD

Cal Date : 13-JUN-2000 07:05

Cal File: d-a3281.d

Als bottle: 1

Calibration Sample, Level: 5

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 4-INDB.sub

Target Version: 3.40

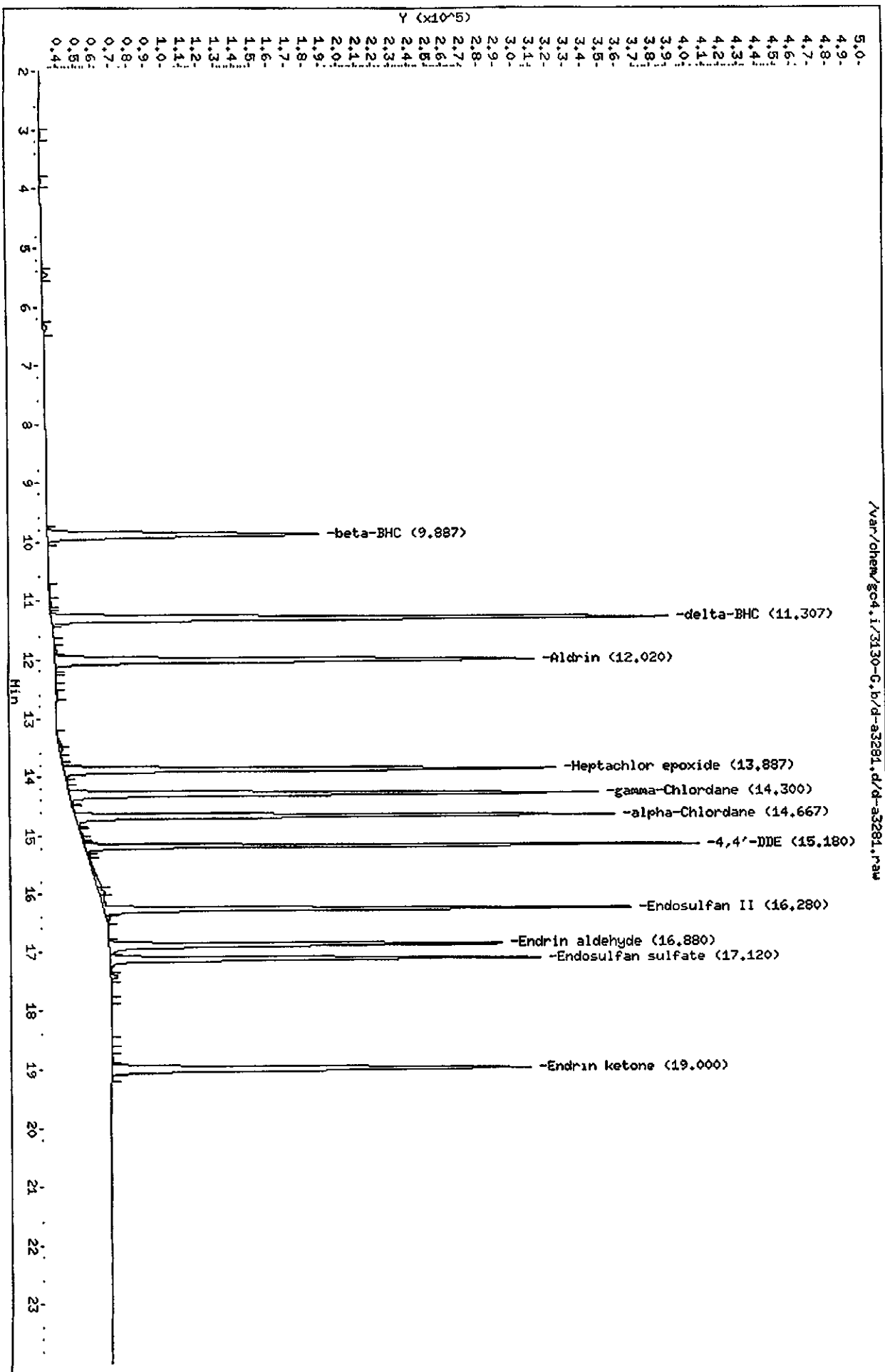
Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	12.020	12.020	0.000	274596	0.10000	0.1116(A)
7 beta-BHC	9.887	9.887	0.000	155234	0.10000	0.09354
8 delta-BHC	11.307	11.307	0.000	353701	0.10000	0.1125(A)
12 Heptachlor epoxide	13.887	13.887	0.000	281206	0.10000	0.1085(A)
13 gamma-Chlordane	14.300	14.300	0.000	302839	0.10000	0.1056(A)
14 alpha-Chlordane	14.667	14.667	0.000	308808	0.10000	0.1038(A)
16 4,4'-DDE	15.180	15.180	0.000	351764	0.10000	0.1115(A)
22 Endosulfan II	16.280	16.280	0.000	301498	0.10000	0.1067(A)
24 Endrin aldehyde	16.880	16.880	0.000	224557	0.10000	0.1027(A)
26 Endosulfan sulfate	17.120	17.120	0.000	246813	0.10000	0.1087(A)
27 Endrin ketone	19.000	19.000	0.000	239540	0.10000	0.1072(A)

QC Flag Legend

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

Data File: /var/chem/gc04.i/3130-G.b/d-a3281.d
 Date : 13-JUN-2000 07:05
 Client ID:
 Sample Info: HIGB, 3130-G.b, 4-INDB.sub, 1,5
 Column phase: DB608

Instrument: gc04.i
 Operator: 1891
 Column diameter: 0.53



661 332

Data File: /var/chem/gc4.i/3130-G.b/d-a3282.d
Report Date: 13-Jun-2000 14:04

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3282.d
Lab Smp Id: 2ND A
Inj Date : 13-JUN-2000 07:33
Operator : 1891 Inst ID: gc4.i
Smp Info : 2ND A,3130-G.b,,INDA.sub,,2,3
Misc Info : 190-82-2
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
Cal Date : 13-JUN-2000 07:05 Cal File: d-a3281.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 3.40

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
*****	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.827	5.833	-0.006	59945	0.02500	0.01959
5 alpha-BHC	8.167	8.173	-0.006	69378	0.02500	0.01977
6 gamma-BHC (Lindane)	9.607	9.613	-0.006	60465	0.02500	0.02006
10 Heptachlor	10.880	10.887	-0.007	50923	0.02500	0.01955
15 Endosulfan I	14.727	14.733	-0.006	53235	0.02500	0.01964
17 Dieldrin	15.333	15.340	-0.007	125923	0.02500	0.04184
20 Endrin	15.967	15.973	-0.006	93759	0.02500	0.03688
21 4,4'-DDD	16.120	16.120	0.000	107204	0.02500	0.04196
23 4,4'-DDT	16.653	16.653	0.000	103961	0.02500	0.04174
25 Methoxychlor	18.533	18.533	0.000	217081	0.05000	0.2004(A)
\$ 30 Decachlorobiphenyl	23.007	23.013	-0.006	61783	0.02500	0.03944

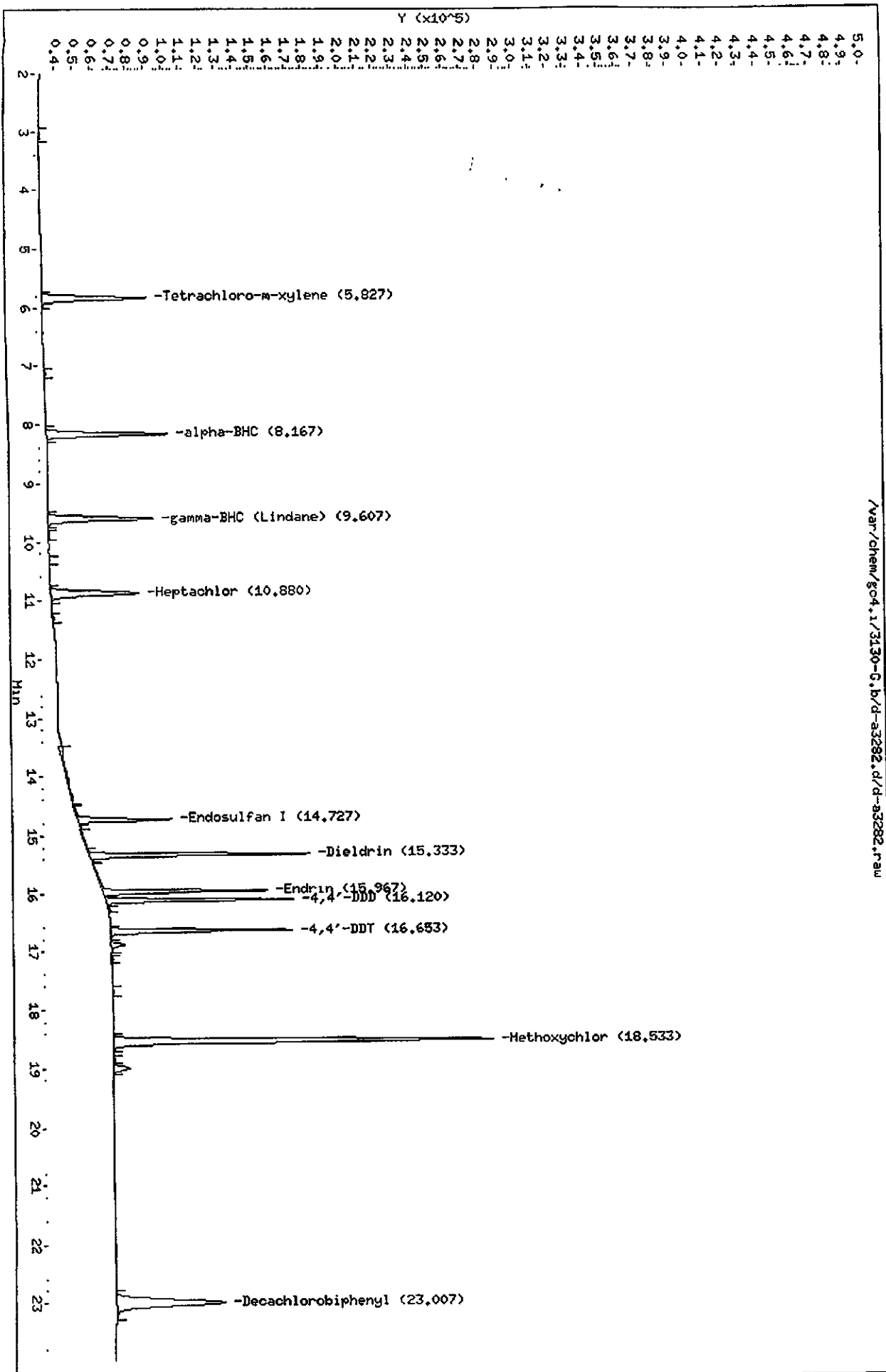
QC Flag Legend

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

Data File: /var/chem/gc04.1/3130-G.b/d-a3282.d
Date: 13-JUN-2000 07:33
Client ID:
Sample Info: 2ND R, 3130-G.b, INDA.sub, 2,3

Column phase: DB608

Instrument: gc04.1
Operator: 1891
Column diameter: 0.53



661 334

Data File: /var/chem/gc4.i/3130-G.b/d-a3283.d
 Report Date: 13-Jun-2000 14:04

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3283.d
 Lab Smp Id: 2ND B
 Inj Date : 13-JUN-2000 08:00
 Operator : 1891 Inst ID: gc4.i
 Smp Info : 2ND B, 3130-G.b, , INDB.sub, , 2, 3
 Misc Info : 190-82-5
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
 Cal Date : 13-JUN-2000 07:05 Cal File: d-a3281.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: INDB.sub
 Target Version: 3.40

Compounds						AMOUNTS	
	RT	EXP RT	DLT RT	RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====	=====
11 Aldrin	12.013	12.020	-0.007		44962	0.02500	0.01828
7 beta-BHC	9.880	9.887	-0.007		31313	0.02500	0.01887
8 delta-BHC	11.300	11.307	-0.007		56225	0.02500	0.01788
12 Heptachlor epoxide	13.880	13.887	-0.007		49582	0.02500	0.01913
13 gamma-Chlordane	14.300	14.300	0.000		53583	0.02500	0.01869
14 alpha-Chlordane	14.667	14.667	0.000		56623	0.02500	0.01904
16 4,4'-DDE	15.180	15.180	0.000		127302	0.02500	0.04034
22 Endosulfan II	16.273	16.280	-0.007		112099	0.02500	0.03967
24 Endrin aldehyde	16.880	16.880	0.000		83702	0.02500	0.03829
26 Endosulfan sulfate	17.120	17.120	0.000		89812	0.02500	0.03954
27 Endrin ketone	19.000	19.000	0.000		89411	0.02500	0.04002

Data File: /var/chem/gc04.1/3130-G.b/d-a3283.d

Date : 13-JUN-2000 08:00

Client ID:

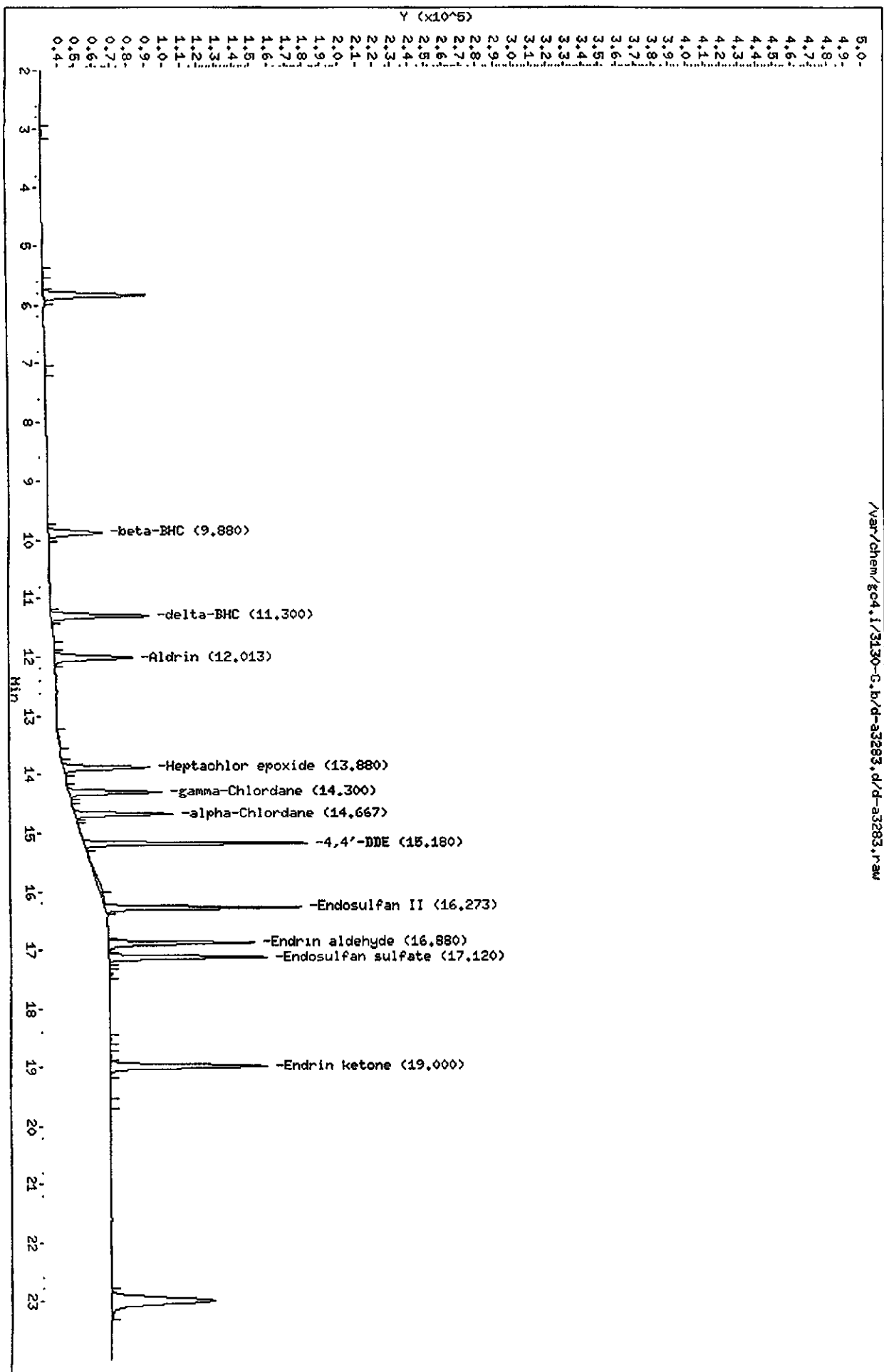
Sample Info: 2ND B,3130-G.b,1INDB.sub,2,3

Column phase: DB608

Instrument: gc04.1

Operator: 1891

Column diameter: 0.53



661 336

Data File: /var/chem/gc4.i/3130-G.b/d-a3284.d
 Report Date: 13-Jun-2000 14:04

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3284.d
 Lab Smp Id: EVALB
 Inj Date : 13-JUN-2000 08:28
 Operator : 1891 Inst ID: gc4.i
 Smp Info : EVALB,3130-G.b,,EVALBR.sub,,3,1
 Misc Info : 190-88-8
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
 Cal Date : 13-JUN-2000 07:05 Cal File: d-a3281.d
 Als bottle: 1 QC Sample: PEM
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: EVALBR.sub
 Target Version: 3.40

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ng)	FINAL (ng)
=====	==	=====	=====		=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.827	5.833	-0.006		61951	0.02025	0.02025 (R)
16 4,4'-DDE	Compound Not Detected						
20 Endrin	15.967	15.973	-0.006		61538	0.02421	0.02421
21 4,4'-DDD	Compound Not Detected						
23 4,4'-DDT	16.653	16.653	0.000		62616	0.02514	0.02514
24 Endrin aldehyde	16.880	16.880	0.000		3745	0.00171	0.001713
27 Endrin ketone	19.000	19.000	0.000		2817	0.00126	0.001261
\$ 30 Decachlorobiphenyl	23.007	23.013	-0.006		32154	0.02053	0.02053 (R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

DDT = 0.0
 Endrin = 9.6

$$\text{Endrin Breakdown} = \frac{(3745 + 2817)}{(3745 + 2817 + 653)} \times 100 = 9.6\%$$

Data File: /var/chem/gc4.i/3130-G.b/d-a3284.d

Date: 13-JUN-2000 08:28

Client ID:

Sample Info: EV9LB, 3130-G.b, EV9LBR.sub, 3,1

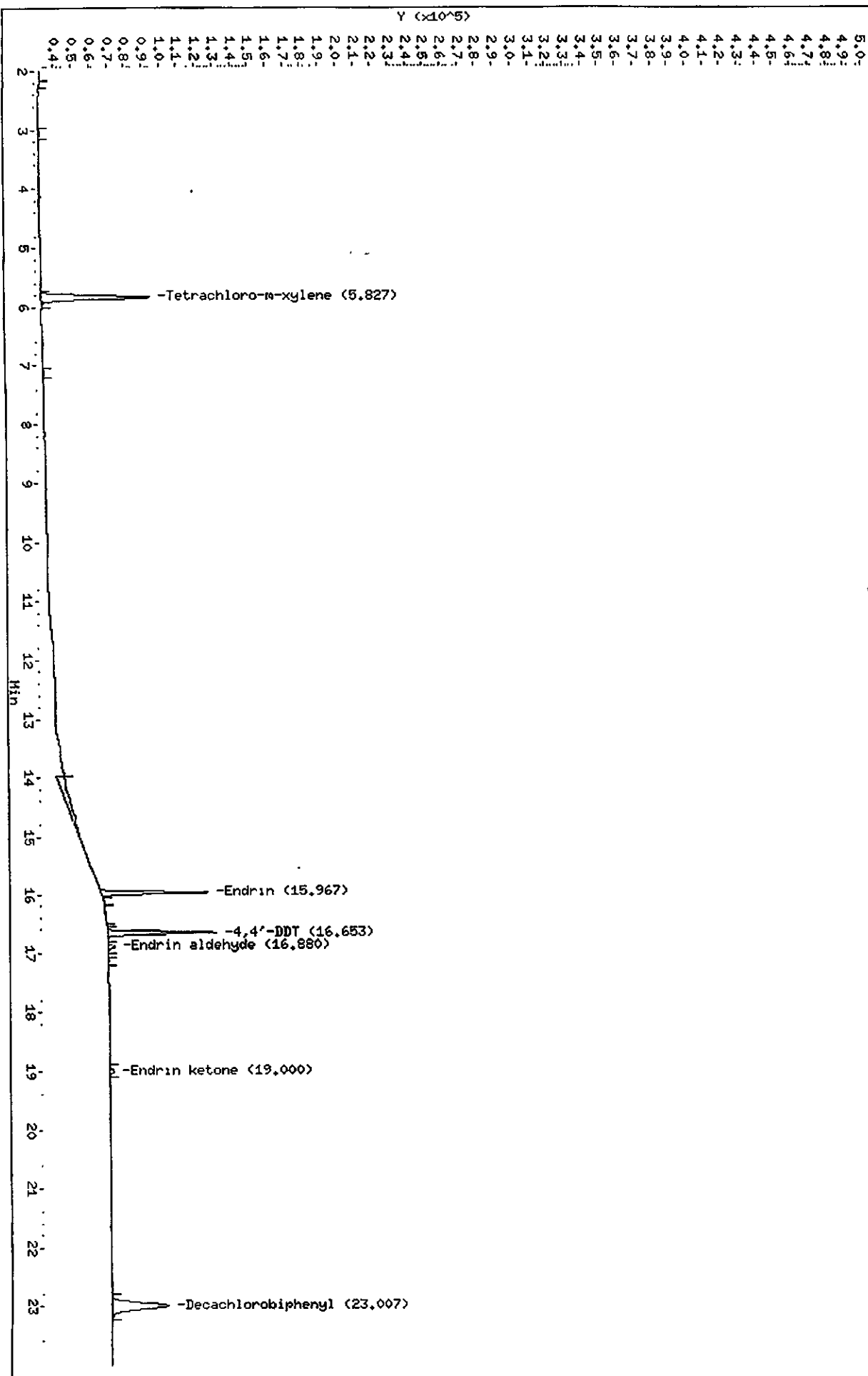
Column phase: DB608

Instrument: gc4.i

Operator: 1891

Column diameter: 0.53

/var/chem/gc4.i/3130-G.b/d-a3284.d/d-a3284.raw



661 338

Data File: /var/chem/gc4.i/3130-G.b/d-a3512.d
Report Date: 22-Jun-2000 11:11

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3512.d
Lab Smp Id: EVALB
Inj Date : 21-JUN-2000 14:27
Operator : 1891 Inst ID: gc4.i
Smp Info : EVALB,3130-G.b,,EVALBR.sub,,3,1
Misc Info : 190-88-8
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: EVALBR.sub
Target Version: 3.40

Compounds	CONCENTRATIONS						
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL	
					(ng)	(ng)	
=====	==	=====	=====	=====	=====	=====	
\$ 1 Tetrachloro-m-xylene	5.760	5.760	0.000	59857	0.01956	0.01956 (R)	
16 4,4'-DDE	15.133	15.127	0.006	826	0.000262	0.0002617	
20 Endrin	15.920	15.920	0.000	74067	0.02913	0.02913	
21 4,4'-DDD	Compound Not Detected						
23 4,4'-DDT	16.607	16.607	0.000	67344	0.02704	0.02704	
24 Endrin aldehyde	16.833	16.827	0.006	2733	0.00125	0.001250	
27 Endrin ketone	18.907	18.913	-0.006	1305	0.000584	0.0005841	
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000	32000	0.02043	0.02043 (R)	

QC Flag Legend

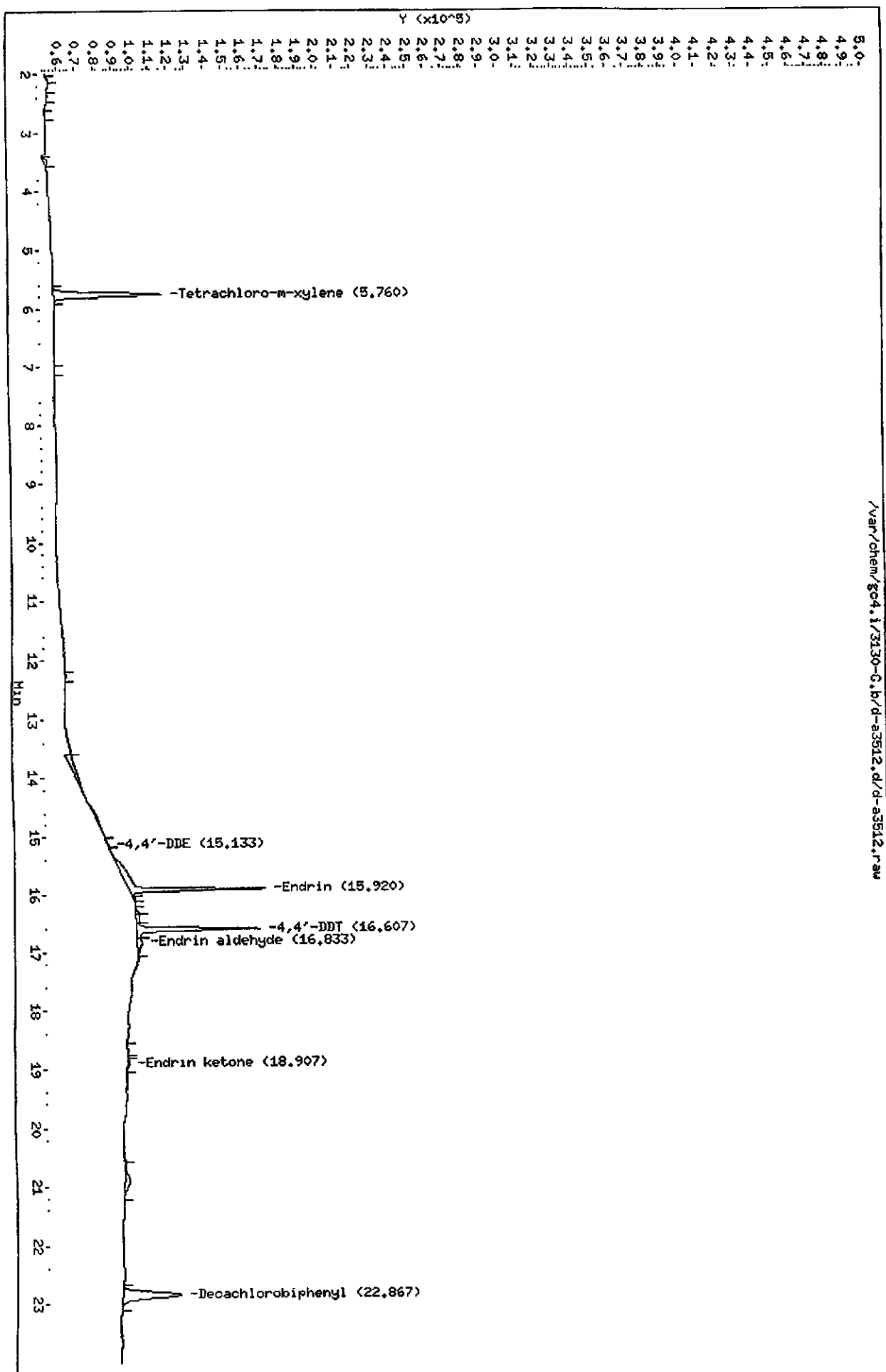
R - Spike/Surrogate failed recovery limits.

DDT = 1.2
Endrin = 5.2

Data File: /var/chem/gc4.i/3130-G.b/d-a3512.d
Date: 21-JUN-2000 14:27
Client ID:
Sample Info: EVOLB, 3130-G.b, EVALBR, sub, 3,1

Column phase: DB608

Instrument: gc4.1
Operator: 1891
Column diameter: 0.53



661 340

Data File: /var/chem/gc4.i/3130-G.b/d-a3513.d

Report Date: 22-Jun-2000 11:11

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3513.d

Lab Smp Id: MEDTOX

Inj Date : 21-JUN-2000 14:53

Operator : 1891

Inst ID: gc4.i

Smp Info : MEDTOX,3130-G.b,,1-TOX.sub,,1,3

Misc Info : 190-84-13

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 22-Jun-2000 11:09 g

Quant Type: ESTD

Cal Date : 16-JUN-2000 06:20

Cal File: d-a3435.d

Als bottle: 1

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 1-TOX.sub

Target Version: 3.40

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
18 Toxaphene	16.100	16.100	0.000	62291	1.00000	0.9994 (M)
\$ 1 Tetrachloro-m-xylene	5.767	5.760	0.007	74156	0.02500	0.02424 (M)
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000	39078	0.02500	0.02495 (M)

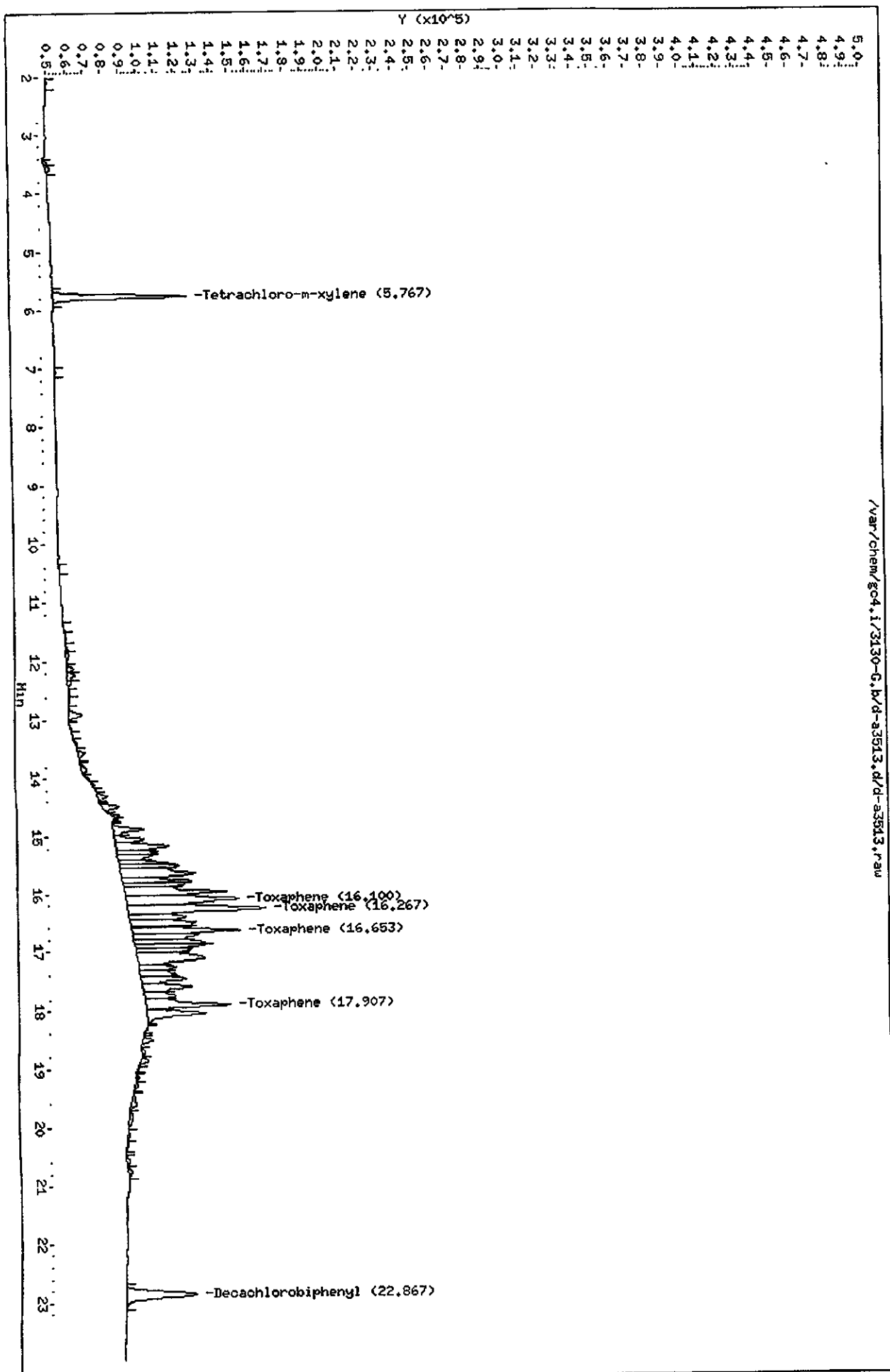
QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gc4.1/3130-G.b/d-a3513.d
Date: 21-JUN-2000 14:53
Client ID:
Sample Info: MEDTOX,3130-G.b,,1-TOX,sub,,1,3

Column phase: JB608

Instrument: gc4.i
Operator: 1891
Column diameter: 0.53



661 342

Data File: /var/chem/gc4.i/3130-G.b/d-a3514.d
Report Date: 22-Jun-2000 11:11

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3514.d
Lab Smp Id: MEDCHLOR
Inj Date : 21-JUN-2000 15:19
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDCHLOR,3130-G.b,,2-CHLO.sub,,1,3
Misc Info : 190-85-10
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-CHLO.sub
Target Version: 3.40

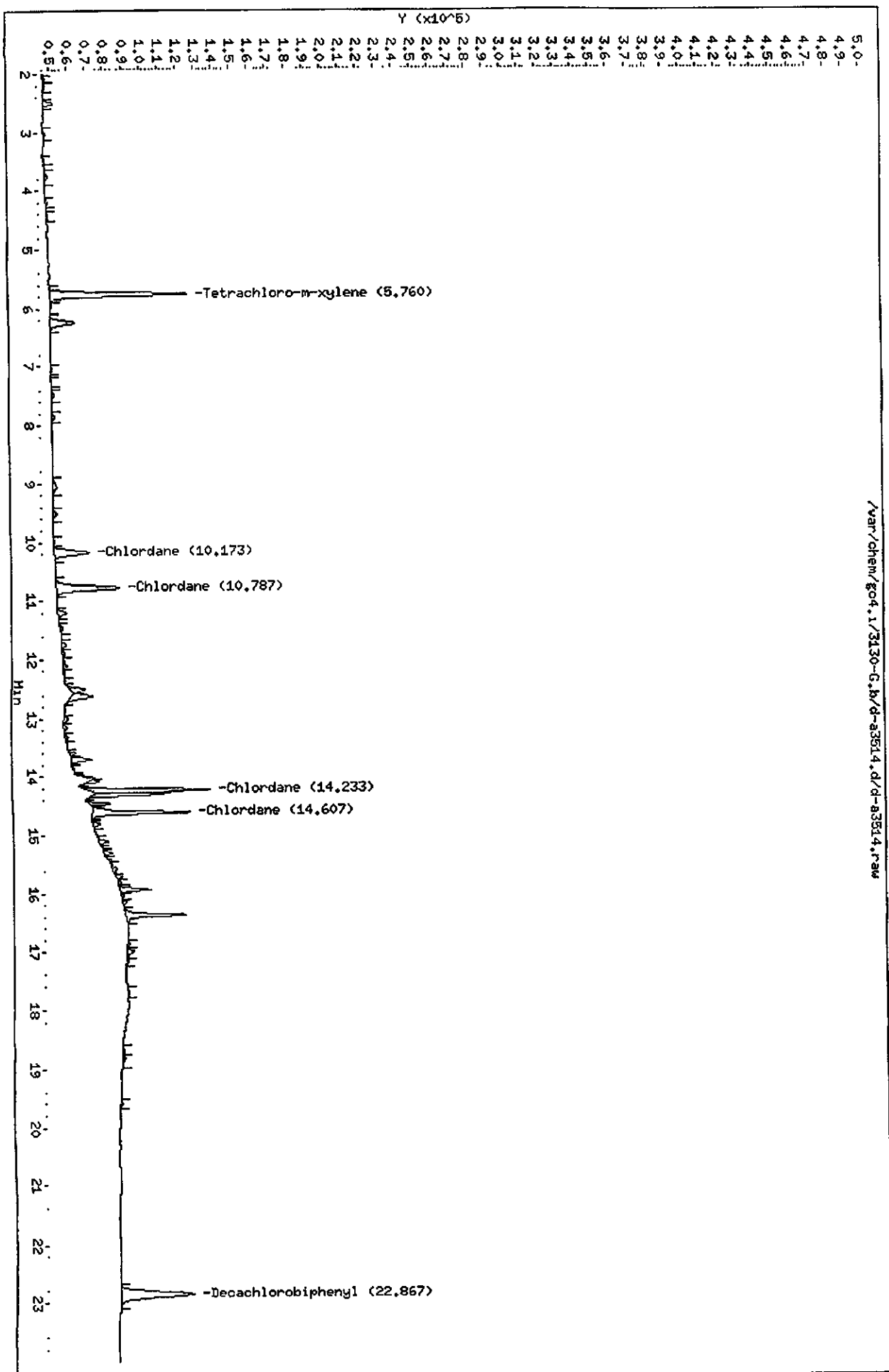
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
9 Chlordane	10.173	10.173	0.000	19505	0.25000	0.2512 (M)
\$ 1 Tetrachloro-m-xylene	5.760	5.760	0.000	76661	0.02500	0.02506
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000	40417	0.02500	0.02580

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gc04.1/3130-G.b/d-a3514.d
Date : 21-JUN-2000 15:19
Client ID:
Sample Info: HEDCHLOR, 3130-G.b, 2-CHLO.sub, 1,3
Column phase: DB608

Instrument: gc04.1
Operator: 1891
Column diameter: 0.53



661 344

Data File: /var/chem/gc4.i/3130-G.b/d-a3515.d

Report Date: 22-Jun-2000 11:11

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3515.d

Lab Smp Id: MEDA

Inj Date : 21-JUN-2000 15:45

Operator : 1891

Inst ID: gc4.i

Smp Info : MEDA,3130-G.b,,INDA.sub,,2,3

Misc Info : 190-84-3

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 22-Jun-2000 11:09 g

Quant Type: ESTD

Cal Date : 16-JUN-2000 06:20

Cal File: d-a3435.d

Als bottle: 1

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: INDA.sub

Target Version: 3.40

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
*****	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.760	5.760	0.000	78707	0.02500	0.02572 (M)
5 alpha-BHC	8.080	8.080	0.000	91420	0.02500	0.02605 (M)
6 gamma-BHC (Lindane)	9.507	9.507	0.000	80016	0.02500	0.02654 (M)
10 Heptachlor	10.787	10.787	0.000	66196	0.02500	0.02541 (M)
15 Endosulfan I	14.667	14.667	0.000	70873	0.02500	0.02614 (M)
17 Dieldrin	15.280	15.280	0.000	79133	0.02500	0.02629 (M)
20 Endrin	15.920	15.920	0.000	73392	0.02500	0.02887 (M)
21 4,4'-DDD	16.073	16.073	0.000	65881	0.02500	0.02579 (M)
23 4,4'-DDT	16.607	16.607	0.000	64748	0.02500	0.02600 (M)
25 Methoxychlor	18.460	18.460	0.000	58257	0.05000	0.05377 (M)
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000	40515	0.02500	0.02587 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gc04.1/3130-G.b/d-a3515.d

Date : 21-JUN-2000 15:45

Client ID:

Sample Info: MEDA, 3130-G.b, INDA, sub, 2,3

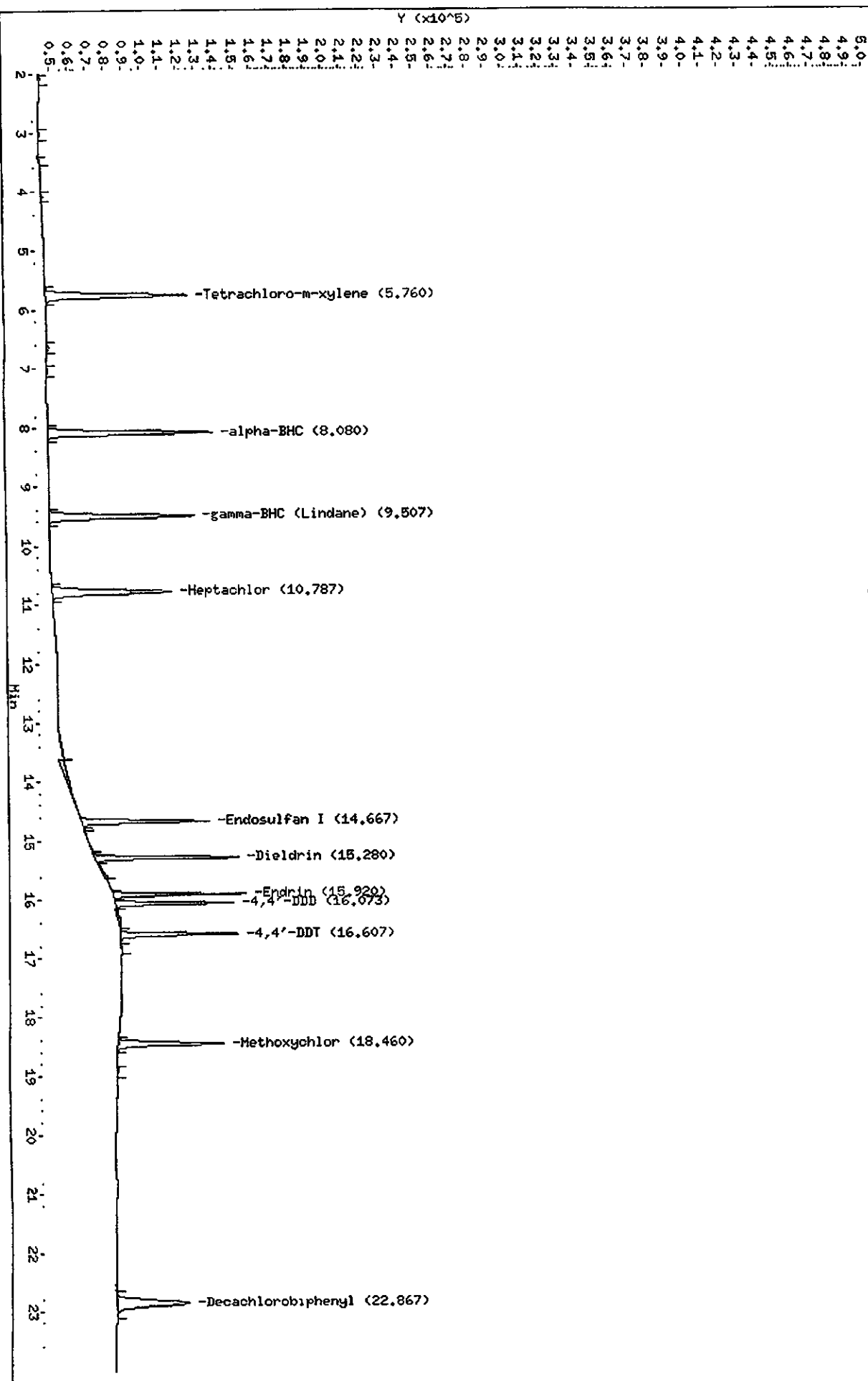
Column phase: DB608

Instrument: gc04.1

Operator: 1891

Column diameter: 0.53

/var/chem/gc04.1/3130-G.b/d-a3515.d/d-a3515.raw



661 346

Data File: /var/chem/gc4.i/3130-G.b/d-a3516.d

Report Date: 22-Jun-2000 11:11

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3516.d

Lab Smp Id: MEDB

Inj Date : 21-JUN-2000 16:12

Operator : 1891

Inst ID: gc4.i

Smp Info : MEDB,3130-G.b,,INDB.sub,,2,3

Misc Info : 190-84-9

Comment :

Method : /var/chem/gc4.i/3130-G.b/PESTA.m

Meth Date : 22-Jun-2000 11:09 g

Quant Type: ESTD

Cal Date : 16-JUN-2000 06:20

Cal File: d-a3435.d

Als bottle: 1

Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: INDB.sub

Target Version: 3.40

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.927	11.927	0.000	63353	0.02500	0 02575 (M)
7 beta-BHC	9.780	9.780	0.000	42540	0.02500	0.02563 (M)
8 delta-BHC	11.213	11.213	0.000	77724	0 02500	0.02472 (M)
12 Heptachlor epoxide	13.807	13.807	0.000	65629	0.02500	0.02532 (M)
13 gamma-Chlordane	14.233	14.233	0.000	72397	0 02500	0.02525 (M)
14 alpha-Chlordane	14.607	14.607	0.000	75232	0.02500	0.02529 (M)
16 4,4'-DDE	15.127	15.127	0.000	81830	0.02500	0.02593 (M)
22 Endosulfan II	16.227	16.227	0.000	71308	0.02500	0.02523 (M)
24 Endrin aldehyde	16.827	16.827	0.000	54124	0.02500	0.02476 (M)
26 Endosulfan sulfate	17.060	17.060	0.000	53021	0.02500	0.02334 (M)
27 Endrin ketone	18.913	18.913	0.000	52978	0.02500	0 02371 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gc04.1/3130-G.b/d-a3516.d

Date: 21-JUN-2000 16:12

Client ID:

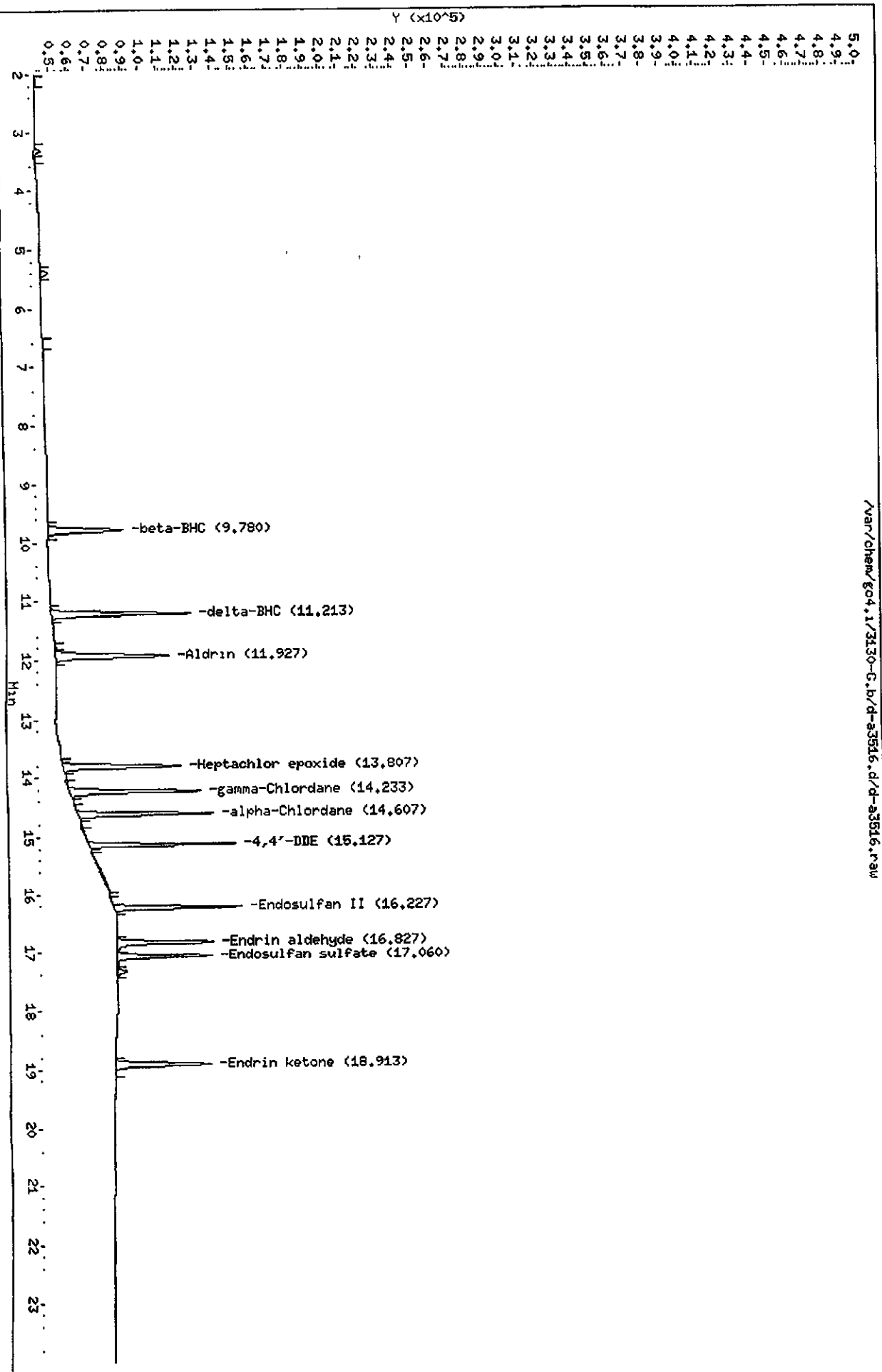
Sample Info: MEND, 3130-G.b, INDB.sub, 2,3

Column phase: DB608

Instrument: gc04.1

Operator: 1891

Column diameter: 0.53



661 348

Data File: /var/chem/gc4.i/3130-G.b/d-a3525.d
 Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3525.d
 Lab Smp Id: MEDA
 Inj Date : 21-JUN-2000 20:07
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA, 3130-G.b, , INDA.sub, , 2, 3
 Misc Info : 190-84-3
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
 Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: INDA.sub
 Target Version: 3.40

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
\$ 1 Tetrachloro-m-xylene	5.767	5.760	0.007	76396	0.02500	0.02497
5 alpha-BHC	8.087	8.080	0.007	89615	0.02500	0.02554
6 gamma-BHC (Lindane)	9.507	9.507	0.000	80743	0.02500	0.02678
10 Heptachlor	10.787	10.787	0.000	67283	0.02500	0.02583
15 Endosulfan I	14.667	14.667	0.000	70516	0.02500	0.02601
17 Dieldrin	15.280	15.280	0.000	78724	0.02500	0.02616
20 Endrin	15.920	15.920	0.000	73829	0.02500	0.02904
21 4,4'-DDD	16.080	16.073	0.007	66580	0.02500	0.02606
23 4,4'-DDT	16.607	16.607	0.000	66490	0.02500	0.02670
25 Methoxychlor	18.460	18.460	0.000	58222	0.05000	0.05374
\$ 30 Decachlorobiphenyl	22.860	22.867	-0.007	40899	0.02500	0.02611

Data File: /var/chem/gc04.i/3130-G.b/d-a3525.d

Date: 21-JUN-2000 20:07

Client ID:

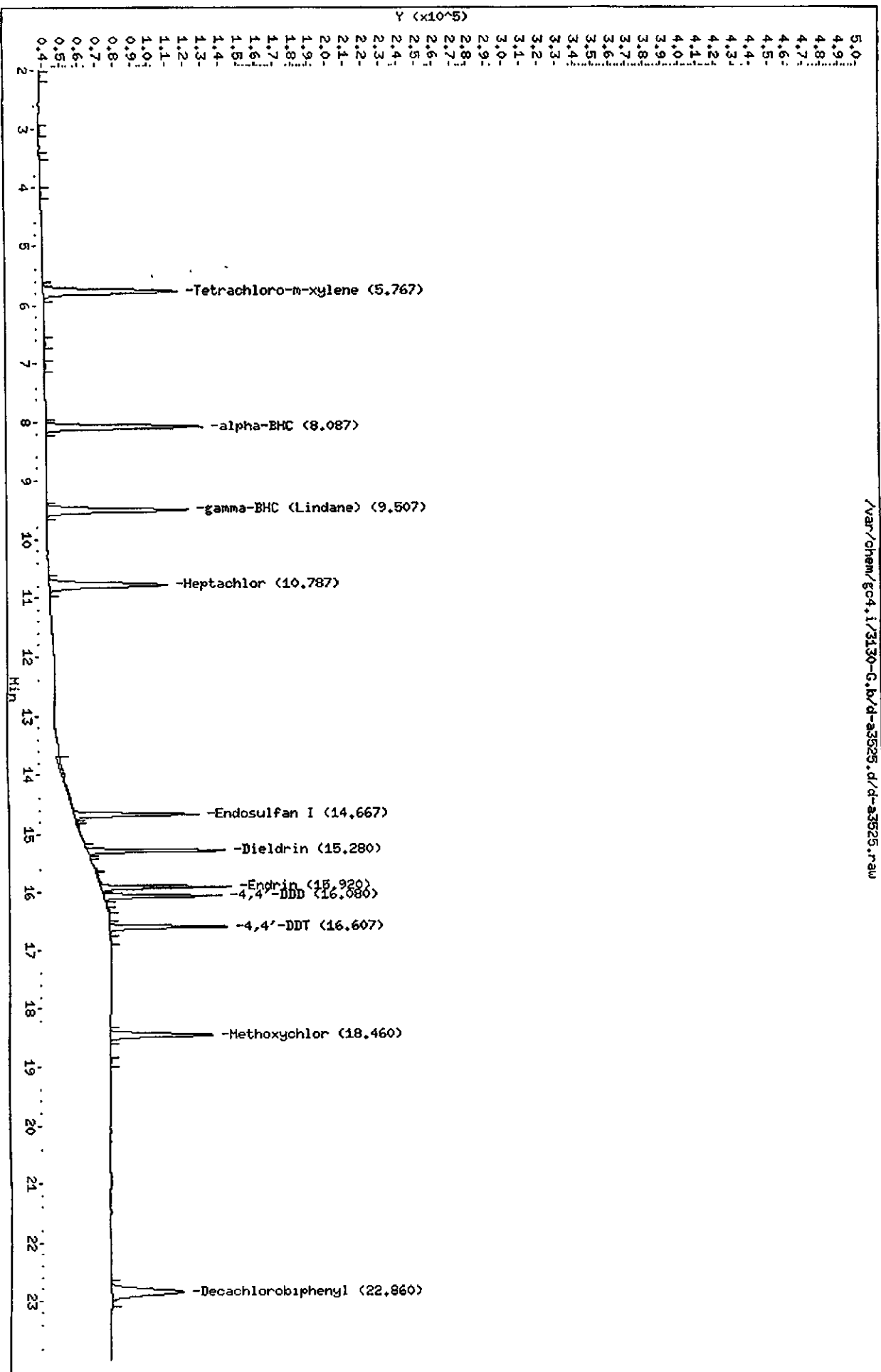
Sample Info: MEHA, 3130-G.b, INDA, sub, 2,3

Column phase: DB608

Instrument: gc04.i

Operator: 1891

Column diameter: 0.53



661 350

Data File: /var/chem/gc4.i/3130-G.b/d-a3526.d
Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3526.d
Lab Smp Id: MEDB
Inj Date : 21-JUN-2000 20:33
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDB,3130-G.b,,INDB.sub,,2,3
Misc Info : 190-84-9
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDB.sub
Target Version: 3.40

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.927	11.927	0.000	63076	0.02500	0.02564
7 beta-BHC	9.780	9.780	0.000	43250	0.02500	0.02606
8 delta-BHC	11.207	11.213	-0.006	78700	0.02500	0.02502
12 Heptachlor epoxide	13.807	13.807	0.000	66068	0.02500	0.02549
13 gamma-Chlordane	14.233	14.233	0.000	72320	0.02500	0.02523
14 alpha-Chlordane	14.607	14.607	0.000	75691	0.02500	0.02545
16 4,4'-DDE	15.127	15.127	0.000	81399	0.02500	0.02579
22 Endosulfan II	16.227	16.227	0.000	70681	0.02500	0.02501
24 Endrin aldehyde	16.820	16.827	-0.007	55717	0.02500	0.02549
26 Endosulfan sulfate	17.060	17.060	0.000	54974	0.02500	0.02420
27 Endrin ketone	18.907	18.913	-0.006	54634	0.02500	0.02445

Data File: /var/chem/gc4.1/3130-G.b/d-a3526.d

Date: 21-JUN-2000 20:33

Client ID:

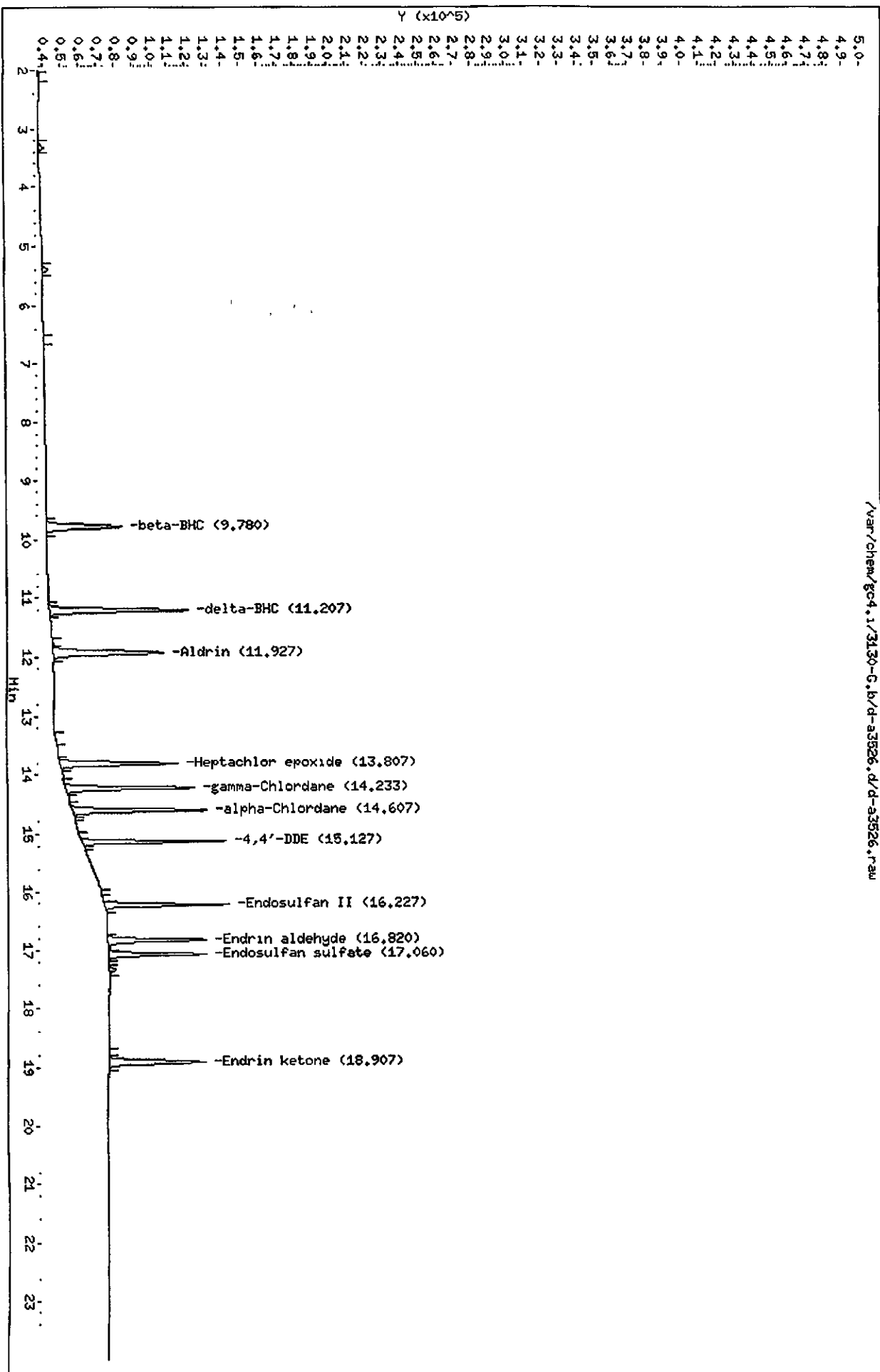
Sample Info: MEDB,3130-G.b, INDB.sub,,2,3

Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



661 352

**PESTICIDE
QC DATA**

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F200000 434

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DF1LC101

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: NA

QC Batch: 0172434

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
57-74-9	Chlordane (technical)	0.0050	U
72-20-8	Endrin	0.00050	U
76-44-8	Heptachlor	0.00050	U
1024-57-3	Heptachlor epoxide	0.00050	U
58-89-9	Lindane	0.00050	U
72-43-5	Methoxychlor	0.0010	U
8001-35-2	Toxaphene	0.020	U

661 354

Data File: /var/chem/gc4.i/3130-G.b/d-a3517.d

Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3517.d
 Lab Smp Id: DF1LC101 Client Smp ID: PBLK1
 Inj Date : 21-JUN-2000 16:38
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DF1LC101,3130-G.b,,PEST.sub,,3,
 Misc Info : 140185BLK
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
 Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
 Als bottle: 1 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 3.40

Concentration Formula: Amt * DF * (Vt/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng)	(mg/L)
\$ 1 Tetrachloro-m-xylene	5.767	S	760	0.007		51476	0.01682	0.001682 (ar)
4 HEXACHLOROBENZENE								
5 alpha-BHC								
6 gamma-BHC (Lindane)								
7 beta-BHC								
9 Chlordane								
10 Heptachlor								
8 delta-BHC								
11 Aldrin								
19 Isodrin								
12 Heptachlor epoxide								
13 gamma-Chlordane								
14 alpha-Chlordane								
15 Endosulfan I								
16 4,4'-DDE								
17 Dieldrin								

Data File: /var/chem/gc4.i/3130-G.b/d-a3517.d
 Report Date: 22-Jun-2000 11:12

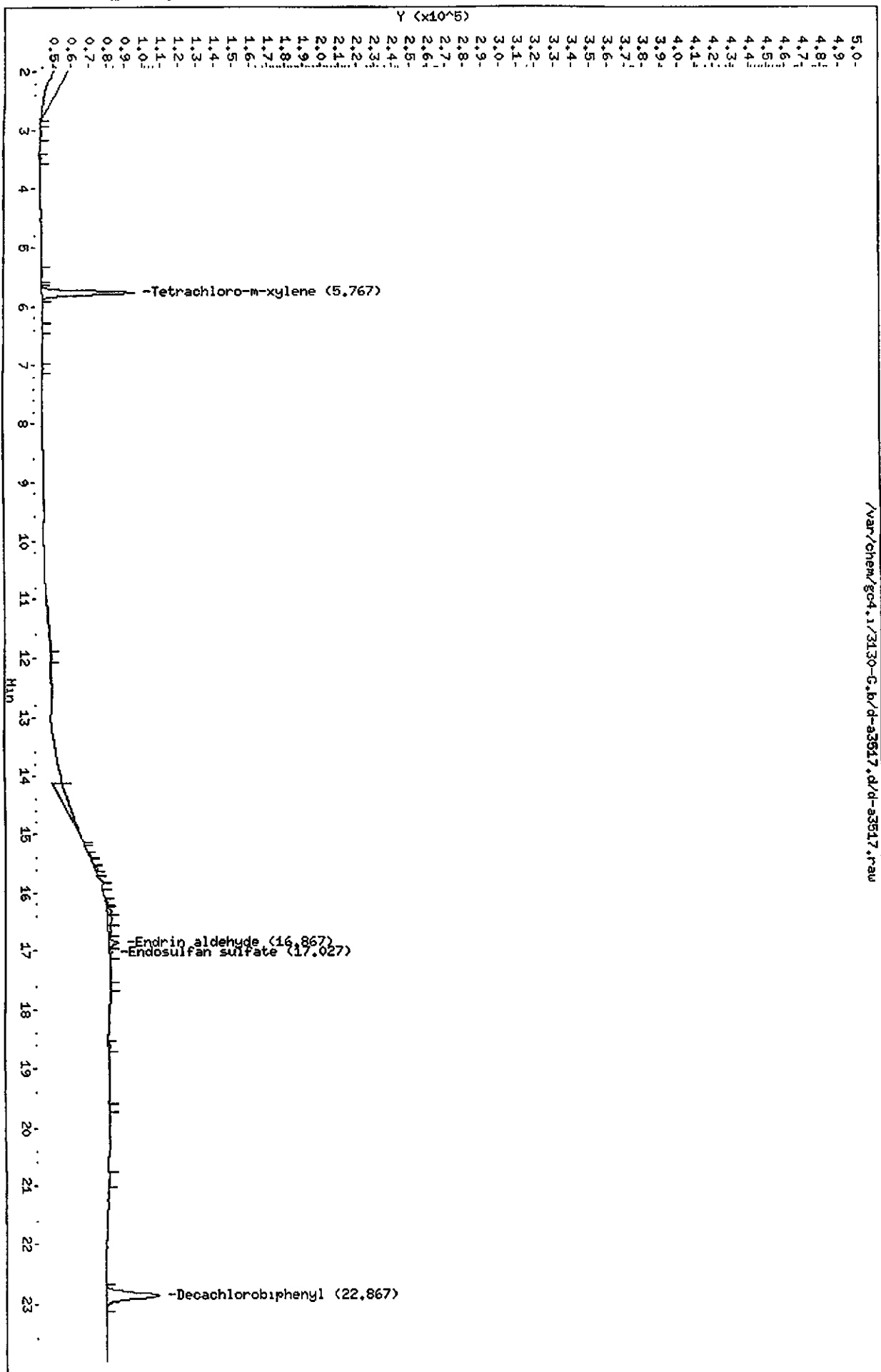
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
*****	==	*****	*****	*****	*****	*****
20 Endrin				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected.		
18 Toxaphene				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected		
24 Endrin aldehyde	16.867	16.827	0.040	5007	0.00229	0.0002291(a)
26 Endosulfan sulfate	17.027	17.060	-0.033	981	0.000432	0.00004319(a)
25 Methoxychlor				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000	29237	0.01867	0.001867(aR)

QC Flag Legend

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

Data File: /var/chem/gc04.1/3130-G.b/d-a3517.d
Date: 21-JUN-2000 16:38
Client ID: PBLK1
Sample Info: DFALC101.3130-G.b, PEST.sub, 3,
Volume Injected (ul): 1.0
Column phase: DB608

Instrument: gc04.1
Operator: 1891
Column diameter: 0.53



UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F200000 434

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DF1LC102

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: NA

QC Batch: 0172434

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00237	
76-44-8	Heptachlor	0.00195	
1024-57-3	Heptachlor epoxide	0.00199	
58-89-9	Lindane	0.00167	
72-43-5	Methoxychlor	0.00221	

661 358

Data File: /var/chem/gc4.i/3130-G.b/d-a3518.d
 Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3518.d
 Lab Smp Id: DF1LC102 Client Smp ID: LCS1
 Inj Date : 21-JUN-2000 17:04
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DF1LC102,3130-G.b,,PEST.sub,,3,
 Misc Info : 140185LCS
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
 Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
 Als bottle: 1 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 3.40

Concentration Formula: $\text{Amt} * \text{DF} * (\text{Vt}/\text{Vo})/\text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.760	5.760	0.000	48211	0.01576	0.001576(aR)
4 HEXACHLORO BENZENE	6.633	6.650	-0.017	6839		(a)
5 alpha-BHC	8.080	8.080	0.000	45816	0.01306	0.001306(a)
6 gamma-BHC (Lindane)	9.507	9.507	0.000	50320	0.01669	0.001669(aR)
7 beta-BHC	9.787	9.780	0.007	32805	0.01977	0.001977(a)
9 Chlordane	Compound Not Detected.					
10 Heptachlor	10.787	10.787	0.000	50811	0.01950	0.001950(aR)
8 delta-BHC	11.207	11.213	-0.006	2740	0.000871	0.00008713(a)
11 Aldrin	11.927	11.927	0.000	47459	0.01929	0.001929(aR)
19 Isodrin	Compound Not Detected.					
12 Heptachlor epoxide	13.807	13.807	0.000	51553	0.01989	0.001989(a)
13 gamma-Chlordane	14.233	14.233	0.000	57699	0.02013	0.002013(a)
14 alpha-Chlordane	14.607	14.607	0.000	61499	0.02068	0.002068(a)
15 Endosulfan I	14.667	14.667	0.000	60677	0.02238	0.002238(a)
16 4,4'-DDE	15.127	15.127	0.000	68617	0.02174	0.002174(a)
17 Dieldrin	15.280	15.280	0.000	62301	0.02070	0.002070(aR)

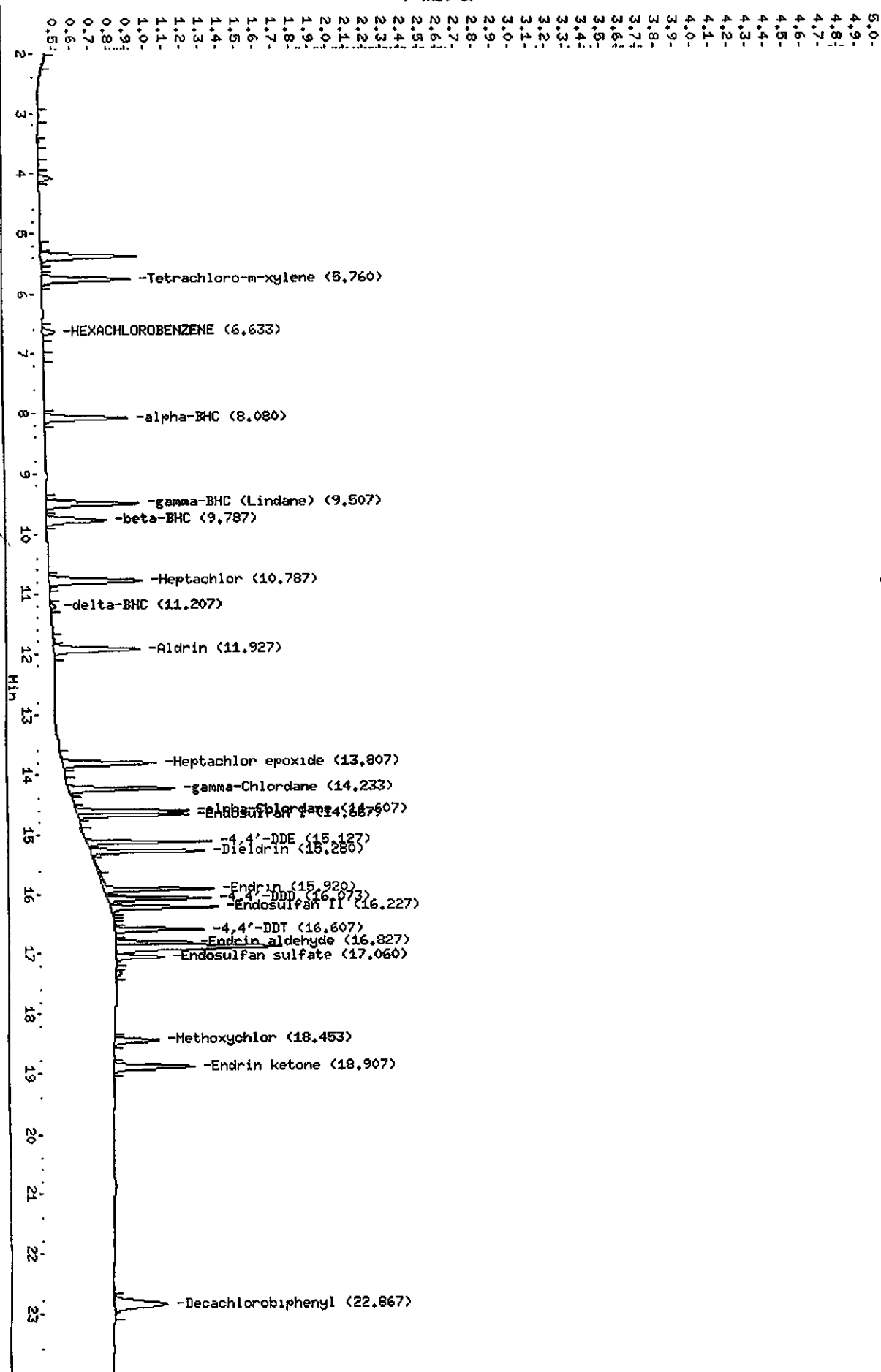
Data File: /var/chem/gc4.i/3130-G.b/d-a3518.d
 Report Date: 22-Jun-2000 11:12

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
20 Endrin	15.920	15.920	0.000	60168	0.02367	0.002367 (aR)
21 4,4'-DDD	16.073	16.073	0.000	56812	0.02224	0.002224 (a)
18 Toxaphene	Compound Not Detected.					
22 Endosulfan II	16.227	16.227	0.000	59083	0.02091	0.002091 (a)
23 4,4'-DDT	16.607	16.607	0.000	49106	0.01972	0.001972 (aR)
24 Endrin aldehyde	16.827	16.827	0.000	41805	0.01913	0.001912 (a)
26 Endosulfan sulfate	17.060	17.060	0.000	25603	0.01127	0.001127 (a)
25 Methoxychlor	18.453	18.460	-0.007	23940	0.02210	0.002210 (a)
27 Endrin ketone	18.907	18.913	-0.006	43898	0.01965	0.001965 (a)
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000	28487	0.01819	0.001819 (aR)

QC Flag Legend

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

661 360

Y (x10⁵)

/var/chem/gc04.1/3130-G.b/d-a3518.raw

Data File: /var/chem/gc04.1/3130-G.b/d-a3518.d
Date: 21-JUN-2000 17:04
Client ID: LCS1
Sample Info: DF1LC102,3130-G.b, PEST.sub,3,
Volume Injected (ul): 1.0
Column phase: DB608

Instrument: gc04.1
Operator: 1891
Column diameter: 0.53

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

661 361

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMQV11D

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 15

QC Batch: 0172434

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00230	
76-44-8	Heptachlor	0.00193	
1024-57-3	Heptachlor epoxide	0.00195	
58-89-9	Lindane	0.00165	
72-43-5	Methoxychlor	0.00219	

661 362

Data File: /var/chem/gc4.i/3130-G.b/d-a3519.d

Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3519.d
 Lab Smp Id: DEMQV11D Client Smp ID: DF/S1/0165/GRAB2S
 Inj Date : 21-JUN-2000 17:30
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEMQV11D,3130-G.b,,PEST.sub,,3,
 Misc Info : 140185001S
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
 Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
 Als bottle: 1 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 3.40

Concentration Formula: Amt * DF * (Vt/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

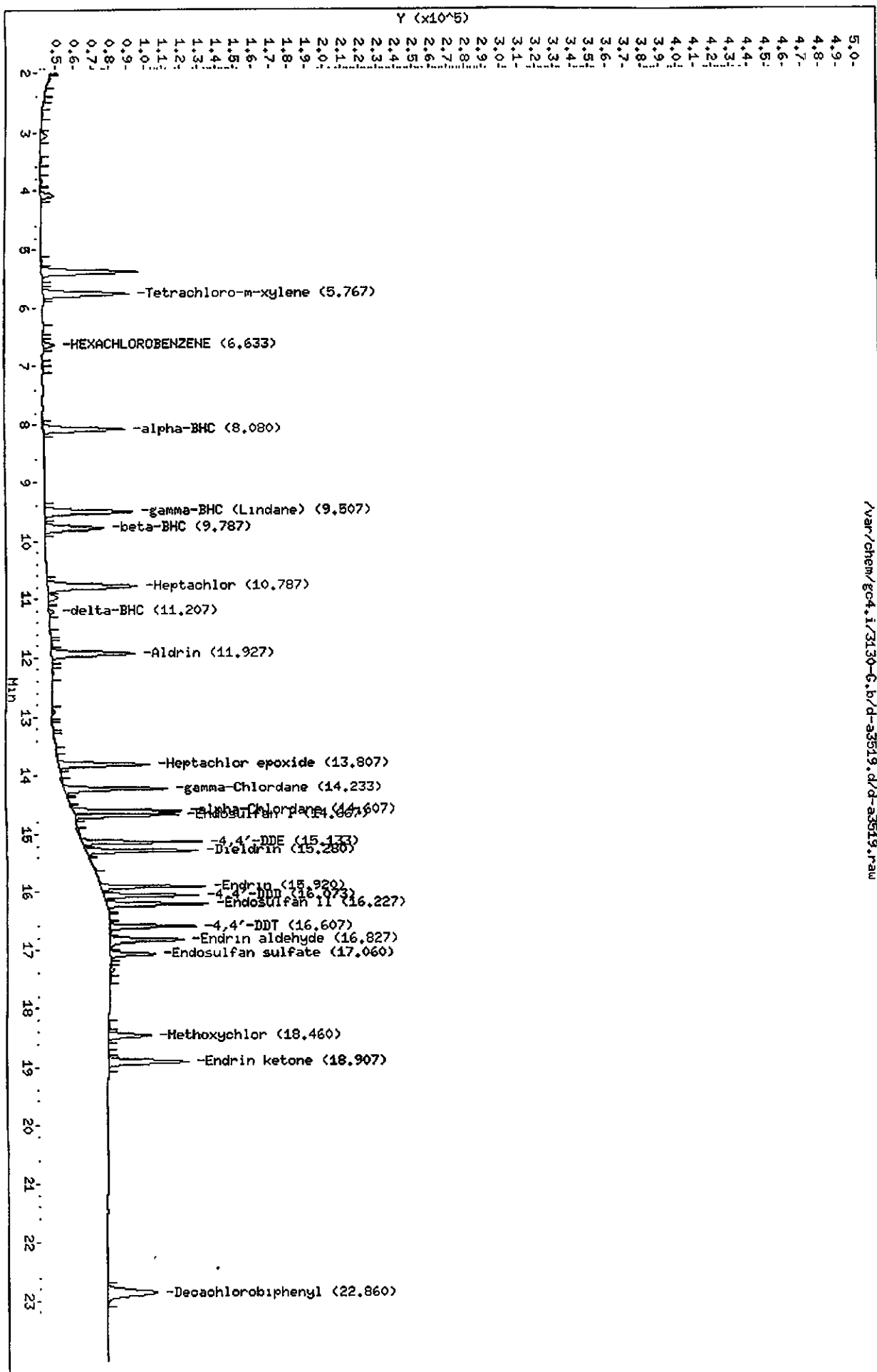
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.767	5.760	0.007	48010	0.01569	0.001569 (aR)
4 HEXACHLORO BENZENE	6.633	6.650	-0.017	6684		(a)
5 alpha-BHC	8.080	8.080	0.000	45579	0.01299	0.001299 (a)
6 gamma-BHC (Lindane)	9.507	9.507	0.000	49665	0.01647	0.001647 (aR)
7 beta-BHC	9.787	9.780	0.007	33006	0.01989	0.001989 (a)
9 Chlordane				Compound Not Detected.		
10 Heptachlor	10.787	10.787	0.000	50268	0.01930	0.001930 (aR)
8 delta-BHC	11.207	11.213	-0.006	2861	0.00091	0.00009098 (a)
11 Aldrin	11.927	11.927	0.000	46830	0.01904	0.001904 (aR)
19 Isodrin				Compound Not Detected.		
12 Heptachlor epoxide	13.807	13.807	0.000	50654	0.01955	0.001954 (a)
13 gamma-Chlordane	14.233	14.233	0.000	57281	0.01998	0.001998 (a)
14 alpha-Chlordane	14.607	14.607	0.000	59609	0.02004	0.002004 (a)
15 Endosulfan I	14.667	14.667	0.000	57534	0.02122	0.002122 (a)
16 4,4'-DDE	15.133	15.127	0.006	67260	0.02131	0.002131 (a)
17 Dieldrin	15.280	15.280	0.000	62750	0.02085	0.002085 (aR)

Data File: /var/chem/gc4.i/3130-G.b/d-a3519.d
 Report Date: 22-Jun-2000 11:12

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
20 Endrin	15.920	15.920	0.000	58413	0.02298	0.002298 (aR)
21 4,4'-DDD	16.073	16.073	0.000	53276	0.02085	0.002085 (a)
18 Toxaphene	Compound Not Detected.					
22 Endosulfan II	16.227	16.227	0.000	57404	0.02031	0.002031 (a)
23 4,4'-DDT	16.607	16.607	0.000	48846	0.01961	0.001961 (aR)
24 Endrin aldehyde	16.827	16.827	0.000	41598	0.01903	0.001903 (a)
26 Endosulfan sulfate	17.060	17.060	0.000	25151	0.01107	0.001107 (a)
25 Methoxychlor	18.460	18.460	0.000	23722	0.02190	0.002190 (a)
27 Endrin ketone	18.907	18.913	-0.006	44910	0.02010	0.002010 (a)
\$ 30 Decachlorobiphenyl	22.860	22.867	-0.007	27899	0.01781	0.001781 (aR)

QC Flag Legend

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

Y (x10⁵)

Data File: /var/chem/gc4.i/3130-G.b/d-a3519.d
 Date: 21-JUN-2000 17:30
 Client ID: DF/SL/0166/CRAB25
 Sample Info: DEHQV11D,3130-G.b.,PEST.sub,,3,
 Volume Injected (uL): 1.0
 Column phase: DB608

/var/chem/gc4.i/3130-G.b/d-a3519.d/d-a3519.raw

Instrument: gc4.i
 Operator: 1891
 Column diameter: 0.53

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMQV11E

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/21/00

Moisture %: 15

QC Batch: 0172434

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00225	
76-44-8	Heptachlor	0.00187	
1024-57-3	Heptachlor epoxide	0.00192	
58-89-9	Lindane	0.00158	
72-43-5	Methoxychlor	0.00220	

661 366

Data File: /var/chem/gc4.i/3130-G.b/d-a3520.d

Report Date: 22-Jun-2000 11:12

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3520.d
 Lab Smp Id: DEMQV11E Client Smp ID: DF/S1/0165/GRAB2D
 Inj Date : 21-JUN-2000 17:56
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEMQV11E, 3130-G.b, , PEST.sub, , 3,
 Misc Info : 140185001D
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 22-Jun-2000 11:09 g Quant Type: ESTD
 Cal Date : 16-JUN-2000 06:20 Cal File: d-a3435.d
 Als bottle: 1 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 3.40

Concentration Formula: Amt * DF * (Vt/Vo)/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

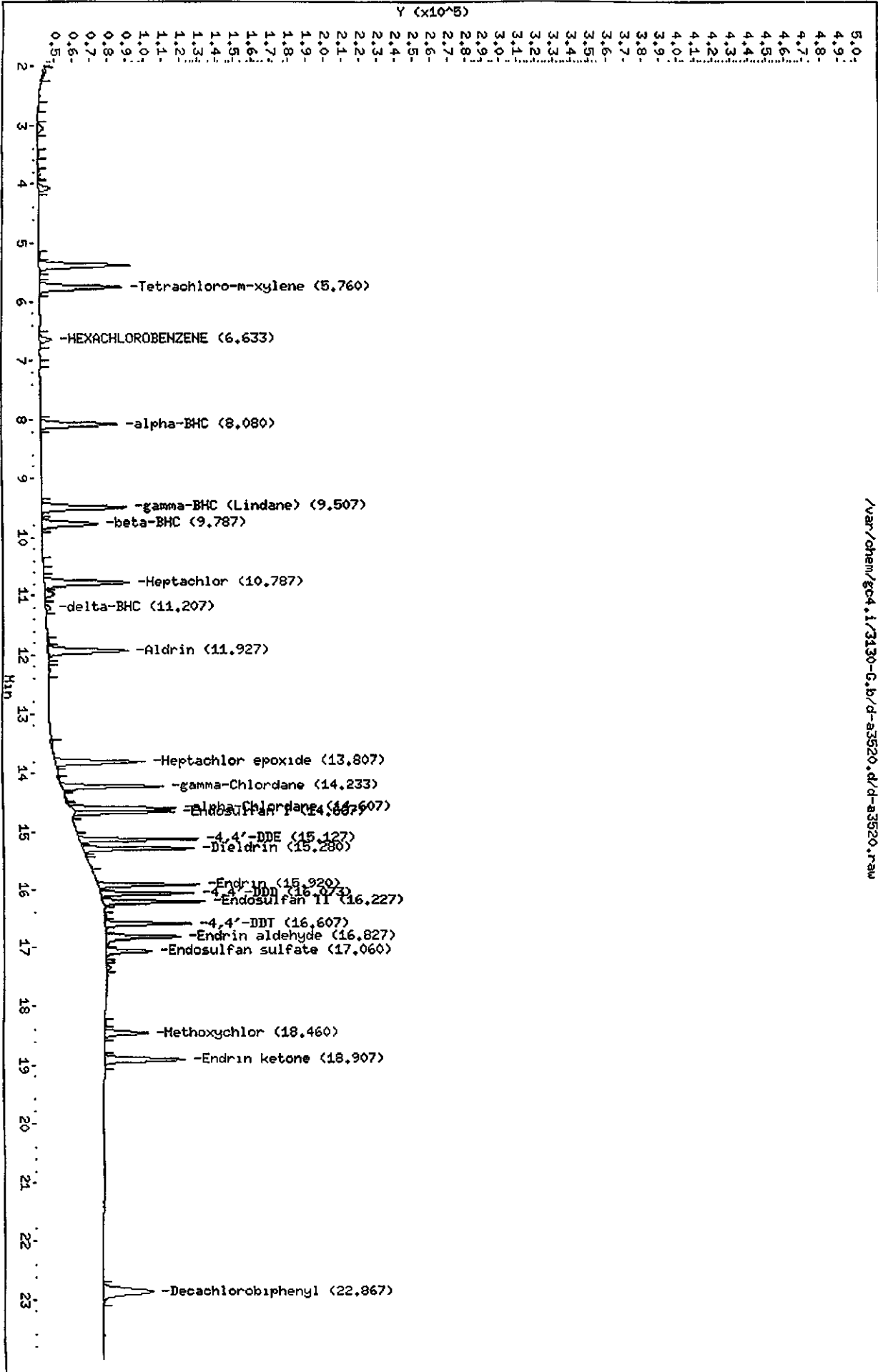
Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.760	5.760	0.000	45828	0.01498	0.001498 (aR)
4 HEXACHLORO BENZENE	6.633	6.650	-0.017	6397		(a)
5 alpha-BHC	8.080	8.080	0.000	43518	0.01240	0.001240 (a)
6 gamma-BHC (Lindane)	9.507	9.507	0.000	47613	0.01579	0.001579 (aR)
7 beta-BHC	9.787	9.780	0.007	31893	0.01922	0.001922 (a)
9 Chlordane	Compound Not Detected.					
10 Heptachlor	10.787	10.787	0.000	48649	0.01867	0.001867 (aR)
8 delta-BHC	11.207	11.213	-0.006	2714	0.000863	0.00008630 (a)
11 Aldrin	11.927	11.927	0.000	45302	0.01842	0.001842 (aR)
19 Isodrin	Compound Not Detected.					
12 Heptachlor epoxide	13.807	13.807	0.000	49756	0.01920	0.001920 (a)
13 gamma-Chlordane	14.233	14.233	0.000	56185	0.01960	0.001960 (a)
14 alpha-Chlordane	14.607	14.607	0.000	57628	0.01937	0.001937 (a)
15 Endosulfan I	14.667	14.667	0.000	56273	0.02076	0.002076 (a)
16 4,4'-DDE	15.127	15.127	0.000	66553	0.02109	0.002109 (a)
17 Dieldrin	15.280	15.280	0.000	61876	0.02056	0.002056 (aR)

Data File: /var/chem/gc4.i/3130-G.b/d-a3520.d
 Report Date: 22-Jun-2000 11:12

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
20 Endrin	15.920	15.920	0.000	57192	0.02250	0.002250 (aR)
21 4,4'-DDD	16.073	16.073	0.000	52546	0.02057	0.002057 (a)
18 Toxaphene	Compound Not Detected.					
22 Endosulfan II	16.227	16.227	0.000	56782	0.02009	0.002009 (a)
23 4,4'-DDT	16.607	16.607	0.000	48200	0.01935	0.001935 (aR)
24 Endrin aldehyde	16.827	16.827	0.000	41866	0.01915	0.001915 (a)
26 Endosulfan sulfate	17.060	17.060	0.000	25159	0.01108	0.001108 (a)
25 Methoxychlor	18.460	18.460	0.000	23833	0.02200	0.002200 (a)
27 Endrin ketone	18.907	18.913	-0.006	45141	0.02020	0.002020 (a)
\$ 30 Decachlorobiphenyl	22.867	22.867	0.000	27904	0.01782	0.001782 (aR)

QC Flag Legend

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

Y (x10⁵)

/var/chem/ec4.1/3130-G.b/d-a3520.d

Data File: /var/chem/ec4.1/3130-G.b/d-a3520.d
 Date : 21-JUN-2000 17:56
 Client ID: DF/S1/0165/GRAB20
 Sample Info: DEMQV11E,3130-G.b,,PEST,sub,,3,
 Volume Injected (uL): 1.0
 Column phase: DB608

Instrument: ec4.i
 Operator: 1891
 Column diameter: 0.53

**PESTICIDE
MISCELLANEOUS**

$$(\pi p)$$

B# 0172434



STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

3104

J. J. Westlake
6-20-08

TCLP (Method 1311)

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



QUA-1181

By Jeffrey D. Savant Date 6-19-00

Checked by [Signature]

Filter lot # 8320701W

Serial Number 056 Log Book Number 96-MT-526

Project Number 604497-12

Lot Number 604497-12

Quant Code 399411

Date 6-20-00

pH Instrument Accumel MP5

Probe 61105020

Balance C94817

Solution Number 1 - Log Book Number 004497-12

Solution Number 2 - Log Book Number

Fluid Determination

TCLP Extraction

Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Conc. HNO ₃ to Acidity (for Metals)	Sample ID	Wgt (g) Weigh Dry	Fluid Vol	Final pH After Tumbling
DEMRV	5.00g/46.5mL	3.62	—	Sol #1	6mL	1. PB-TCLP 6-19-00	—	200mL Glass	4.42
DEMR4	↓	6.88	1.69	↓	6mL	2. DEMRV	100.00g	↓	5.23
DEMR6	↓	7.46	1.66	↓	5mL	3. DEMRV	↓	↓	4.99
DEMR7	↓	9.22	1.69	↓	5mL	4. DEMRV	↓	↓	5.09
						5. DEMR6	↓	↓	5.05
						6. DEMR1	↓	↓	5.98
						7.			
						8.			
						9			
						10.			
						11			
						12.			
						13			

(Record line number from above)

Extract(s) Received

Extract(s) Relinquished

All Above

Date 6-20-00 Time 0910

Analyst Jeffrey D. Savant

Location Metals Rm

Date 6-20-00 Time 0915

Analyst Jeffrey D. Savant

Location 15E

* = Sample determined to have free-liquid, % solid determination was performed.

<5 = Extraction Fluid No. 1 5.7 mL Glacial Acetic Acid dil 500 mL + 64.3 mL of 1N Na OH dil to 1L (pH 4.93 + 0.05)

>5 = Extraction Fluid No. 2 5.7 mL Glacial Acetic Acid dil to 1L (pH 2.88 + 0.05)

ROOM TEMP 22°

Date/Time On	Date/Time Off	Agitation Apparatus RPMs
6-19-00 1200	6-20-00 0645	30 ± 2
6-19-00	pH Calibration	(4.0)
6-20-00		4.00
6-20-00		7.01
6-20-00		10.00
6-20-00		7.01
6-20-00		10.04

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\3130-G.SEQ
 Created by : DE11/02/98 on : 6/13/00 13:11
 Edited by : LM06/13/00 on : 6/16/00 13:57
 Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
 REVIEWED BY:

Number of Times Edited : 6

Sequence File Header Information:

Number of Rows : 191
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

Row	Type	Sample Name	Sample Number	Sequence Sample Descriptions - Channel A				Dil. Factor	Mult	Divisor	Addend	Norm. factor
				Study Name	Sample Amount	ISTD Amount	Sample Volume					
1	Std Check	EVALB, 3130-G.b,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Cal:Replace	MEDTOX, 3130-G.b	190-84-13		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
3	Cal:Replace	MEDCHLOR, 3130-G	190-85-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
4	Cal:Replace	LOWA, 3130-G.b,,	190-84-1		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Cal:Replace	MLOWA, 3130-G.b,	190-84-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Cal:Replace	MEDA, 3130-G.b,,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Cal:Replace	MHIGHA, 3130-G.b	190-84-4		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Cal:Replace	HIGHA, 3130-G.b,	190-84-5		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Cal:Replace	LOWB, 3130-G.b,,	190-84-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Cal:Replace	MLOWB, 3130-G.b,	190-84-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Cal:Replace	MEDB, 3130-G.b,,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Cal:Replace	MHIGHB, 3130-G.b	190-84-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Cal:Replace	HIGHB, 3130-G.b,	190-84-11		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Std Check	2ND A, 3130-G.b,	190-82-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Std Check	2ND B, 3130-G.b,	190-82-5		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
16	Std Check	EVALB, 3130-G.b,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
17	Sample	DE8HK103, 3130-G	060209001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Sample	DE8HK11E, 3130-G	060209001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Sample	DE8HK11F, 3130-G	060209001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Sample	DEE8K101, 3130-G	060209BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Sample	DEE8K102, 3130-G	060209LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
22	Sample	DE3J2101, 3130-G	020126001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
23	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
25	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
27	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
28	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
29	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
30	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
31	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
32	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
33	Sample	DE3JQ101, 3130-G	020126002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
34	Sample	DE3JT101, 3130-G	020126003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
35	Sample	DE3K0101, 3130-G	020126004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
36	Sample	DE3K5101, 3130-G	020126005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
37	Std Check	MEDA, 3130-G.b,,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
38	Std Check	MEDB, 3130-G.b,,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
39	Std Check	EVALB, 3130-G.b,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
40	Sample	DE3K7101, 3130-G	020126006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
41	Sample	DE3KA101, 3130-G	020126007		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
42	Sample	DE3KD101, 3130-G	020126009		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
43	Sample	DE3KF101, 3130-G	020126010		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
44	Sample	DE3KG101, 3130-G	020126011		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
45	Sample	DEEJR101, 3130-G	020113BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
46	Sample	DE3J4102, 3130-G	020113LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
47	Sample	DE3F4104, 3130-G	020113021		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
48	Sample	DE3F412D, 3130-G	020113021S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
49	Sample	DE3F412E, 3130-G	020113021D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
50	Sample	DE906104, 3130-G	020113BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
51	Sample	DE906105, 3130-G	020113LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
52	Sample	DE906106, 3130-G	020113LCD		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
53	Sample	DEK4C101, 3130-G	080328BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
54	Sample	DEK4C102, 3130-G	080328LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
55	Sample	DEEHC10P, 3130-G	080328001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
56	Sample	DEEHC10Q, 3130-G	080328001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
57	Sample	DEEHC104, 3130-G	080328001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
58	Sample	DEEHP104, 3130-G	080328002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
59	Sample	DE9XA103, 3130-G	070184001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

60	Std Check	MEDA, 3130-G.b,,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
61	Std Check	MEDB, 3130-G.b.,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
62	Std Check	EVALB, 3130-G.b.,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
63	Sample	DEA02103, 3130-G	070184002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
64	Sample	DEA04103, 3130-G	070184003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
65	Sample	DEA05103, 3130-G	070184004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
66	Sample	DEA07103, 3130-G	070184005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
67	Sample	DEA09103, 3130-G	070184006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
68	Sample	DEA0A103, 3130-G	070184007		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
69	Sample	DEA0C103, 3130-G	070184008		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
70	Sample	DEA0F103, 3130-G	070184009		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
71	Sample	DEA0G103, 3130-G	070184010		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
72	Sample	DEDMH103, 3130-G	080239001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
73	Sample	DEDP5103, 3130-G	080239002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
74	Sample	DEDPF103, 3130-G	080239003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
75	Sample	DEDQ6103, 3130-G	080239004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
76	Sample	DEDQD103, 3130-G	080239005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
77	Sample	DEDQH103, 3130-G	080239006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
78	Sample	DEDDK103, 3130-G	080239007		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
79	Sample	DEGW2101, 3130-G	080239BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
80	Sample	DEGW2102, 3130-G	080239LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
81	Sample	DEGW2103, 3130-G	080239LCO		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
82	Std Check	MEDA, 3130-G.b.,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
83	Std Check	MEDB, 3130-G.b.,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
84	Std Check	EVALB, 3130-G.b.,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
85	Sample	DEDR6104, 3130-G	080239008		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
86	Sample	DEDR610X, 3130-G	080239008S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
87	Sample	DEDR6110, 3130-G	080239008D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
88	Sample	DEDTD104, 3130-G	080239009		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
89	Sample	DEDTQ104, 3130-G	080239010		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
90	Sample											

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147	Sample	DE3E5104, 3130-G	020113007	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
148	Sample	DE3EC104, 3130-G	020113010	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
149	Sample	DE3EG104, 3130-G	020113012	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
150	Sample	DE3EJ104, 3130-G	020113014	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
151	Sample	DE3EL104, 3130-G	020113015	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
152	Sample	DEFT3103, 3130-G	090198-12	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
153	Sample			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
154	Sample	DEFT5103, 3130-G	090198-13	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
155	Sample			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
156	Sample	DEFT8103, 3130-G	090198-14	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
157	Sample			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
158	Sample	~~DEHAM103, 3130-G~~	~~100129-3~~	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
159	Sample			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
160	Sample	DEHAQ103, 3130-G	100129-6	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
161	Sample			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
162	Std Check	MEDA, 3130-G.b.,	190-84-3	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
163	Std Check	MEDB, 3130-G.b.,	190-84-9	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
164	Std Check	EVALB, 3130-G.b.,	190-88-8	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
165	Cal Replace	LISO, 3130-G.b.,	190-80-6	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
166	Cal Replace	MLISO, 3130-G.b.,	190-80-7	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
167	Cal Replace	MISO, 3130-G.b.,	190-80-8	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
168	Cal Replace	MHISO, 3130-G.b.,	190-80-9	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
169	Cal Replace	HISO, 3130-G.b.,	190-80-10	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
170	Sample	DER5M101, 3130-G	140214b1k	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
171	Sample	DER5M102, 3130-G	140214LCS	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
172	Sample	DEN8811Q, 3130-G	140214007S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
173	Sample	DEN8811R, 3130-G	140214007D	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
174	Sample	DEN7F103, 3130-G	140214001	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
175	Sample	DEN7K103, 3130-G	140214002	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
176	Sample	DEN7M103, 3130-G	140214003	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
177	Sample	DEN7V103, 3130-G	140214004	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
178	Sample	DEN81103, 3130-G	140214005	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
179	Sample	DEN85103, 3130-G	140214006	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
180	Sample	DEN88103, 3130-G	140214007	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
181	Sample	DEN8H103, 3130-G	140214008	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
182	Sample	DEN8L103, 3130-G	140214009	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
183	Sample	DEN8P103, 3130-G	140214010	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
184	Sample	DEN8W103, 3130-G	140214011	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
185	Sample	DEN92103, 3130-G	140214012	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
186	Sample	DEN93103, 3130-G	140214013	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
187	Sample	DEHAM103, 3130-G	100129-3	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
188	Sample			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
189	Sample			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
190	Std Check	MEDA, 3130-G.b.,	190-84-3	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
191	Std Check	MEDB, 3130-G.b.,	190-84-9	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

Sequence Process Information - Channel A

Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw File	Cal Rpt	Level Name	Update RT	Out Dev
1	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3269	D-A3269		D-A3269	-	-	-	LPT1:
2	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A3270	D-A3270		D-A3270	N	MED	N	LPT1:, LPT1
3	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A3271	D-A3271		D-A3271	N	MED	N	LPT1:, LPT1
4	-	1	4	GEN4C	GEN4A	122190A	INDA	D-A3272	D-A3272		D-A3272	N	LOW	N	LPT1:
5	-	1	5	GEN4C	GEN4A	122190A	INDA	D-A3273	D-A3273		D-A3273	N	MLOW	N	LPT1:
6	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A3274	D-A3274		D-A3274	N	MLOW	N	LPT1:
7	-	1	7	GEN4C	GEN4A	122190A	INDA	D-A3275	D-A3275		D-A3275	N	MLOW	N	LPT1:
8	-	1	8	GEN4C	GEN4A	122190A	INDA	D-A3276	D-A3276		D-A3276	N	MLOW	N	LPT1:
9	-	1	9	GEN4C	GEN4A	122190A	INDA	D-A3277	D-A3277		D-A3277	N	LOW	N	LPT1:
10	-	1	10	GEN4C	GEN4A	122190A	INDA	D-A3278	D-A3278		D-A3278	N	MLOW	N	LPT1:
11	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A3279	D-A3279		D-A3279	N	MLOW	N	LPT1:
12	-	1	12	GEN4C	GEN4A	122190A	INDA	D-A3280	D-A3280		D-A3280	N	MLOW	N	LPT1:
13	-	1	13	GEN4C	GEN4A	122190A	INDA	D-A3281	D-A3281		D-A3281	N	MLOW	N	LPT1:
14	-	1	23	GEN4C	GEN4A	122190A	INDA	D-A3282	D-A3282		D-A3282	-	-	-	LPT1:
15	-	1	24	GEN4C	GEN4A	122190A	INDA	D-A3283	D-A3283		D-A3283	-	-	-	LPT1:
16	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3284	D-A3284		D-A3284	-	-	-	LPT1:
17	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3285	D-A3285		D-A3285	-	-	-	LPT1:
18	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3286	D-A3286		D-A3286	-	-	-	LPT1:
19	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3287	D-A3287		D-A3287	-	-	-	LPT1:
20	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3288	D-A3288		D-A3288	-	-	-	LPT1:
21	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3289	D-A3289		D-A3289	-	-	-	LPT1:
22	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3290	D-A3290		D-A3290	-	-	-	LPT1:
23	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3291	D-A3291		D-A3291	-	-	-	LPT1:
24	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3292	D-A3292		D-A3292	-	-	-	LPT1:
25	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3293	D-A3293		D-A3293	-	-	-	LPT1:
26	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3294	D-A3294		D-A3294	-	-	-	LPT1:
27	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3295	D-A3295		D-A3295	-	-	-	LPT1:
28	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3296	D-A3296		D-A3296	-	-	-	LPT1:
29	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3297	D-A3297		D-A3297	-	-	-	LPT1:
30	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3298	D-A3298		D-A3298	-	-	-	LPT1:
31	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3299	D-A3299		D-A3299	-	-	-	LPT1:
32	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3300	D-A3300		D-A3300	-	-	-	LPT1:
33	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3301	D-A3301		D-A3301	-	-	-	LPT1:
34	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3302	D-A3302		D-A3302	-	-	-	LPT1:
35	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3303	D-A3303		D-A3303	-	-	-	LPT1:

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123	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3391	D-A3391	D-A3391	-	-	-	LPT1:
124	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3392	D-A3392	D-A3392	-	-	-	LPT1:
125	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3393	D-A3393	D-A3393	-	-	-	LPT1:
126	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3394	D-A3394	D-A3394	-	-	-	LPT1:
127	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3395	D-A3395	D-A3395	-	-	-	LPT1:
128	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3396	D-A3396	D-A3396	-	-	-	LPT1:
129	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3397	D-A3397	D-A3397	-	-	-	LPT1:
130	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3398	D-A3398	D-A3398	-	-	-	LPT1:
131	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3399	D-A3399	D-A3399	-	-	-	LPT1:
132	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3400	D-A3400	D-A3400	-	-	-	LPT1:
133	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3401	D-A3401	D-A3401	-	-	-	LPT1:
134	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3402	D-A3402	D-A3402	-	-	-	LPT1:
135	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3403	D-A3403	D-A3403	-	-	-	LPT1:
136	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3404	D-A3404	D-A3404	-	-	-	LPT1:
137	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3405	D-A3405	D-A3405	-	-	-	LPT1:
138	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3406	D-A3406	D-A3406	-	-	-	LPT1:
139	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3407	D-A3407	D-A3407	-	-	-	LPT1:
140	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3408	D-A3408	D-A3408	-	-	-	LPT1:
141	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3409	D-A3409	D-A3409	-	-	-	LPT1:
142	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3410	D-A3410	D-A3410	-	-	-	LPT1:
143	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A3411	D-A3411	D-A3411	-	-	-	LPT1:
144	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A3412	D-A3412	D-A3412	-	-	-	LPT1:
145	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3413	D-A3413	D-A3413	-	-	-	LPT1:
146	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3414	D-A3414	D-A3414	-	-	-	LPT1:
147	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3415	D-A3415	D-A3415	-	-	-	LPT1:
148	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3416	D-A3416	D-A3416	-	-	-	LPT1:
149	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3417	D-A3417	D-A3417	-	-	-	LPT1:
150	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3418	D-A3418	D-A3418	-	-	-	LPT1:
151	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3419	D-A3419	D-A3419	-	-	-	LPT1:
152	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3420	D-A3420	D-A3420	-	-	-	LPT1:
153	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3421	D-A3421	D-A3421	-	-	-	LPT1:
154	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3422	D-A3422	D-A3422	-	-	-	LPT1:
155	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3423	D-A3423	D-A3423	-	-	-	LPT1:
156	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3424	D-A3424	D-A3424	-	-	-	LPT1:
157	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3425	D-A3425	D-A3425	-	-	-	LPT1:
158	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3426	D-A3426	D-A3426	-	-	-	LPT1:
159	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3427	D-A3427	D-A3427	-	-	-	LPT1:
160	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3428	D-A3428	D-A3428	-	-	-	LPT1:
161	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3429	D-A3429	D-A3429	-	-	-	LPT1:
162	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A3430	D-A3430	D-A3430	-	-	-	LPT1:
163	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A3431	D-A3431	D-A3431	-	-	-	LPT1:
164	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3432	D-A3432	D-A3432	-	-	-	LPT1:
165	-	1	4	GEN4C	GEN4A	122190A	INDA	D-A3433	D-A3433	D-A3433	N	LOW	N	LPT1:
166	-	1	5	GEN4C	GEN4A	122190A	INDA	D-A3434	D-A3434	D-A3434	N	MLOW	N	LPT1:
167	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A3435	D-A3435	D-A3435	N	MLOW	N	LPT1:
168	-	1	7	GEN4C	GEN4A	122190A	INDA	D-A3436	D-A3436	D-A3436	N	MLOW	N	LPT1:
169	-	1	8	GEN4C	GEN4A	122190A	INDA	D-A3437	D-A3437	D-A3437	N	MLOW	N	LPT1:
170	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3438	D-A3438	D-A3438	-	-	-	LPT1:
171	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3439	D-A3439	D-A3439	-	-	-	LPT1:
172	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3440	D-A3440	D-A3440	-	-	-	LPT1:
173	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3441	D-A3441	D-A3441	-	-	-	LPT1:
174	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3442	D-A3442	D-A3442	-	-	-	LPT1:
175	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3443	D-A3443	D-A3443	-	-	-	LPT1:
176	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3444	D-A3444	D-A3444	-	-	-	LPT1:
177	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3445	D-A3445	D-A3445	-	-	-	LPT1:
178	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3446	D-A3446	D-A3446	-	-	-	LPT1:
179	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3447	D-A3447	D-A3447	-	-	-	LPT1:
180	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3448	D-A3448	D-A3448	-	-	-	LPT1:
181	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3449	D-A3449	D-A3449	-	-	-	LPT1:
182	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3450	D-A3450	D-A3450	-	-	-	LPT1:
183	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3451	D-A3451	D-A3451	-	-	-	LPT1:
184	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3452	D-A3452	D-A3452	-	-	-	LPT1:
185	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3453	D-A3453	D-A3453	-	-	-	LPT1:
186	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3454	D-A3454	D-A3454	-	-	-	LPT1:
187	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3455	D-A3455	D-A3455	-	-	-	LPT1:
188	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3456	D-A3456	D-A3456	-	-	-	LPT1:
189	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3457	D-A3457	D-A3457	-	-	-	LPT1:
190	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A3458	D-A3458	D-A3458	-	-	-	LPT1:
191	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A3459	D-A3459	D-A3459	-	-	-	LPT1:

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\3210-G.SEQ
 Created by : DE11/02/98 on : 6/21/00 12:02
 Edited by : LM06/21/00 on : 6/22/00 10:50
 Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
 REVIEWED BY:

6

Number of Times Edited : 3

Sequence File Header Information:

Number of Rows : 15
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

✓ DE 6/22/00

Sequence Sample Descriptions - Channel A												
Row	Type	Sample Name	Sample Number	Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend	Norm factor
1	Std Check	EVALB,3130-G.b,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Cal:Replace	MEDTOX,3130-G.b	190-84-13		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
3	Cal:Replace	MEDCHLOR,3130-G	190-85-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
4	Std Check	MEDA,3130-G.b,,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Std Check	MEDB,3130-G.b,,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Sample	DF1LC101,3130-G	140185BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Sample	DF1LC102,3130-G	140185LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Sample	DEMQV11D,3130-G	140185001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Sample	DEMQV11E,3130-G	140185001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Sample	DEMQV104,3130-G	140185001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Sample	DEMR4104,3130-G	140185002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Sample	DEMR6104,3130-G	140185003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Sample	DEMR7104,3130-G	140185004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Std Check	MEDA,3130-G.b,,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Std Check	MEDB,3130-G.b,,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

Sequence Process Information - Channel A															
Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw File	Cal Rpt	Level Name	Update RT	Out Dev
1	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3512	D-A3512		D-A3512	-	-	-	LPT1:
2	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A3513	D-A3513		D-A3513	N	MED	N	LPT1, LPT1
3	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A3514	D-A3514		D-A3514	N	MED	N	LPT1, LPT1
4	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A3515	D-A3515		D-A3515	-	-	-	LPT1:
5	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A3516	D-A3516		D-A3516	-	-	-	LPT1:
6	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3517	D-A3517		D-A3517	-	-	-	LPT1:
7	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3518	D-A3518		D-A3518	-	-	-	LPT1:
8	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3519	D-A3519		D-A3519	-	-	-	LPT1:
9	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3520	D-A3520		D-A3520	-	-	-	LPT1:
10	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3521	D-A3521		D-A3521	-	-	-	LPT1:
11	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3522	D-A3522		D-A3522	-	-	-	LPT1:
12	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3523	D-A3523		D-A3523	-	-	-	LPT1:
13	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3524	D-A3524		D-A3524	-	-	-	LPT1:
14	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A3525	D-A3525		D-A3525	-	-	-	LPT1:
15	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A3526	D-A3526		D-A3526	-	-	-	LPT1:

661 378

PSR024 6/20/00 13:40:11 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: YUSHINSC

METHOD: QJ Pesticides (8081A)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12B CLP1	DEMQV-1-04	___	242626	399411	A-36-QJ	COF140185	001		SOLID	0	3 1
12B CLP1	DEMR4-1-04	___	242627	399411	A-36-QJ	COF140185	002		SOLID	0	3 1
12B CLP1	DEMR6-1-04	___	242628	399411	A-36-QJ	COF140185	003		SOLID	0	3 1
12B CLP1	DEMR7-1-04	___	242629	399411	A-36-QJ	COF140185	004		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

P. Yushinski
P. YushinskiP. Yushinski
P. Yushinski6-20-00 154
6-20-00 220

***** END OF REPORT *****

HERBICIDE DATA

661 380

**HERBICIDE
QC SUMMARY**

SW846 8151A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT QESSDG:

Lot #: C0F140185

	CLIENT ID.	SRG01	TOT OUT
	=====	=====	=====
01	DF/S1/0165/GRAB/002	86	00
02	DF/S1/0165/SDC/010	76	00
03	DF/S1/0165/SDC/011	71	00
04	DF/S1/0165/SDC/012	74	00
05	METHOD BLK. DF1L6101	85	00
06	LCS DF1L6102	98	00
07	DF/S1/0165/GRAB/002 D	98	00
08	DF/S1/0165/GRAB/002 S	97	00

SURROGATES
SRG01 = DCAA

QC LIMITS
(42-125)

Column to be used to flag recovery values
* Values outside of required QC Limits
D System monitoring Compound diluted out

FORM II

661 382

SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F200000

WO #: DF1L6102

BATCH: 0172432

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
2,4-D	0.160	0.165	103	28 - 136	
2,4,5-TP (Silvex)	0.0400	0.0388	97	50 - 128	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8151A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Lot #: C0F140185

WO #: DEMQV11A

BATCH: 0172432

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
2,4-D	0.160	ND	0.193	121	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0430	108	50 - 131	

NOTES (S) :

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

RPD: 0 out of 0 outside limitsSpike Recovery: 0 out of 2 outside limits

COMMENTS:

661 384 SW846 8151A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: UXB INTERNATIONAL

Lab Code: QESPIT SDG No:

Matrix Spike ID: DF/S1/0165/GRAB/002

Lot #: C0F140185 WO #: DEMQV11C
BATCH: 0172432

COMPOUND	SPIKE	MSD	MSD		QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC	
2,4-D	0.160	0.188	118	2.6	20	35- 133	
2,4,5-TP (Silvex)	0.0400	0.0445	111	3.5	20	50- 131	

NOTES(S) :

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 2 outside limits

COMMENTS:

FORM III

BLANK WORKORDER NO.

SW846 8151A METHOD BLANK SUMMARY

DF1L6101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: a-a30553.

Lot Number: C0F140185

Matrix: SOLID

Extraction Method:

Date Extracted: 06/20/00

Date Analyzed(1): 06/23/00

Date Analyzed(2): N/A

Time Analyzed(1): 02:15

Time Analyzed(2): N/A

Instrument ID(1): A/B

Instrument ID(2): N/A

GC Column(1): DB5/DB1701 ID: 053 GC Column(2): N/A ID: N/A

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED (1)	DATE ANALYZED (2)
01	DF/S1/0165/GRAB/002	DEMQV105	06/23/00	N/A
02	DF/S1/0165/GRAB/002	DEMQV11A S	06/23/00	N/A
03	DF/S1/0165/GRAB/002	DEMQV11C D	06/23/00	N/A
04	DF/S1/0165/SDC/010	DEMR4105	06/23/00	N/A
05	DF/S1/0165/SDC/011	DEMR6105	06/23/00	N/A
06	DF/S1/0165/SDC/012	DEMR7105	06/23/00	N/A
07	CHECK SAMPLE	DF1L6102 C	06/23/00	N/A
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

661 386

**HERBICIDE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMQV105

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0172432

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.040	U
93-72-1	2,4,5-TP (Silvex)	0.010	U

661 388

Data File: /var/chem/gc1.i/3220.b/a-a30558.d
 Report Date: 23-Jun-2000 09:19

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30558.d
 Lab Smp Id: DEMQV105 Client Smp ID: DF/S1/0165/GRAB/002
 Inj Date : 23-JUN-2000 04:40
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DEMQV105,3220.b
 Misc Info : 140185-1
 Comment :
 Method : /var/chem/gc1.i/3220.b/LONGH.m
 Meth Date : 23-Jun-2000 09:17 matkol Quant Type: ESTD
 Cal Date : 15-JUN-2000 15:14 Cal File: a-a30333.d
 Als bottle: 28
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 3.40

Concentration Formula: $\text{Amt} * \text{DF} * 20 * \text{Vt} / \text{Vo} / \text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON				Compound Not Detected.		
\$ 2 DCAA	10.587	10.586	0.001	14266572	0 04296	0.08593 (a)
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected.		
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				Compound Not Detected.		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP (SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected.		
11 DINOSEB				Compound Not Detected.		
12 2,4-DB				Compound Not Detected.		

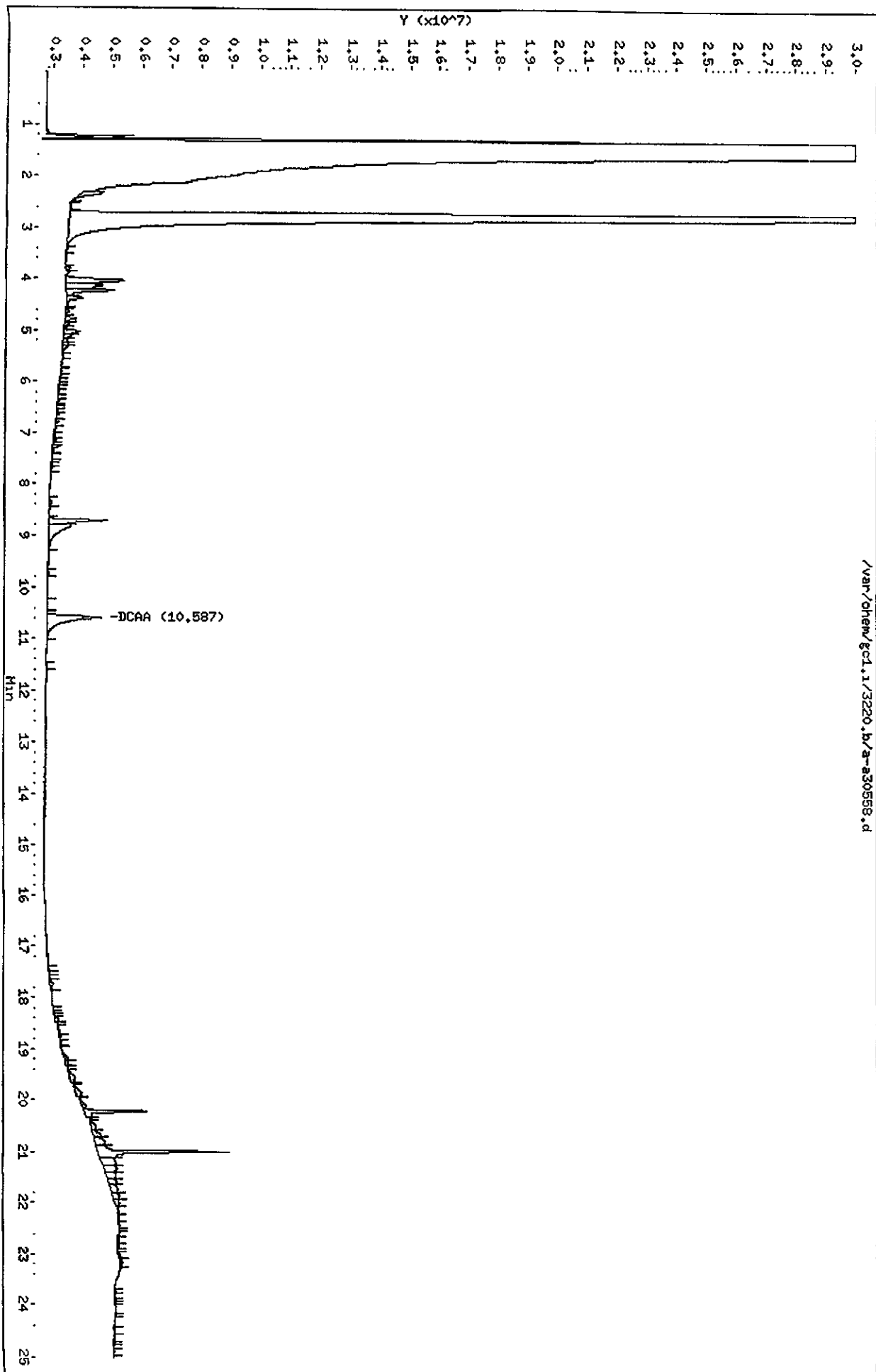
Data File: /var/chem/gc1.i/3220.b/a-a30558.d
Report Date: 23-Jun-2000 09:19

QC Flag Legend

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

Data File: /var/chem/gc1.1/3220.b/a-a30558.d
Date: 23-JUN-2000 04:40
Client ID: DF/SL/0165/GRAB/002
Sample Info: DEMQV105.3220.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc1.1
Operator: 01797
Column diameter: 0.53



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR4105

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0172432

Client Sample Id: DF/S1/0165/SDC/010

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.040	U
93-72-1	2,4,5-TP (Silvex)	0.010	U

661 392

Data File: /var/chem/gc1.i/3220.b/a-a30559.d
 Report Date: 23-Jun-2000 09:19

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30559.d
 Lab Smp Id: DEMR4105 Client Smp ID: DF/S1/0165/SDC/010
 Inj Date : 23-JUN-2000 05:09
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DEMR4105,3220.b
 Misc Info : 140185-2
 Comment :
 Method : /var/chem/gc1.i/3220.b/LONGH.m
 Meth Date : 23-Jun-2000 09:17 matkol Quant Type: ESTD
 Cal Date : 15-JUN-2000 15:14 Cal File: a-a30333.d
 Als bottle: 29
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 3.40

Concentration Formula: $\text{Amt} * \text{DF} * 20 * \text{Vt} / \text{Vo} / \text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
1 DALAPON				Compound Not Detected.		
\$ 2 DCAA	10.584	10.586	-0.002	12606696	0.03796	0.07593 (a)
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected.		
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				Compound Not Detected.		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP (SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected.		
11 DINOSEB				Compound Not Detected.		
12 2,4-DB				Compound Not Detected.		

Data File: /var/chem/gc1.i/3220.b/a-a30559.d
Report Date: 23-Jun-2000 09:19

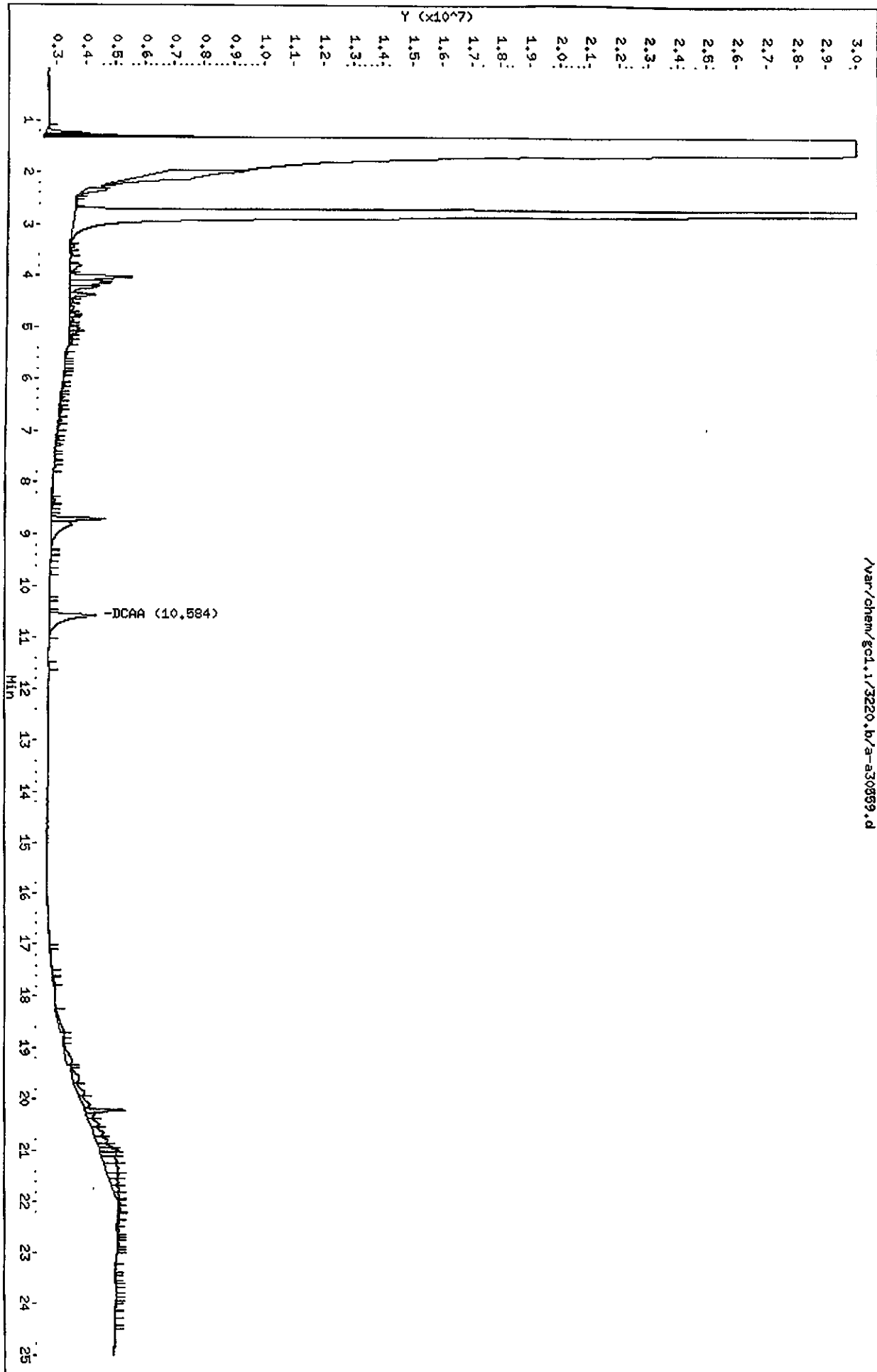
QC Flag Legend

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

661 334

Data File: /var/chem/gc1.1/3220.b/a-a30559.d
 Date : 23-JUN-2000 05:09
 Client ID: DF/SI/0165/SDC/010
 Sample Info: DEMR4105.3220.b
 Volume Injected (uL): 1.0
 Column phase: DB608

Instrument: gc1.1
 Operator: 01797
 Column diameter: 0.53



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 003

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR6105

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 14

QC Batch: 0172432

Client Sample Id: DF/S1/0165/SDC/011

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.040	U
93-72-1	2,4,5-TP (Silvex)	0.010	U

661 336

Data File: /var/chem/gc1.i/3220.b/a-a30560.d

Report Date: 23-Jun-2000 09:19

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30560.d

Lab Smp Id: DEMR6105

Client Smp ID: DF/S1/0165/SDC/011

Inj Date : 23-JUN-2000 05:38

Operator : 01797

Inst ID: gc1.i

Smp Info : DEMR6105,3220.b

Misc Info : 140185-3

Comment :

Method : /var/chem/gc1.i/3220.b/LONGH.m

Meth Date : 23-Jun-2000 09:17 matkol

Quant Type: ESTD

Cal Date : 15-JUN-2000 15:14

Cal File: a-a30333.d

Als bottle: 30

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: all.sub

Target Version: 3.40

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compound	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng)	(mg/L)
1 DALAPON						Compound Not Detected.		
\$ 2 DCAA	10.585	10.586	-0.001		11751036	0.03539	0.07078 (a)	
3 MCPP						Compound Not Detected.		
4 DICAMBA						Compound Not Detected.		
5 MCPA						Compound Not Detected.		
6 DICHLOROPROP						Compound Not Detected.		
7 2,4-D						Compound Not Detected.		
8 PENTACHLOROPHENOL						Compound Not Detected.		
9 2,4,5-TP (SILVEX)						Compound Not Detected.		
10 2,4,5-T						Compound Not Detected.		
11 DINOSBB						Compound Not Detected.		
12 2,4-DB						Compound Not Detected.		

Data File: /var/chem/gc1.i/3220.b/a-a30560.d
Report Date: 23-Jun-2000 09:19

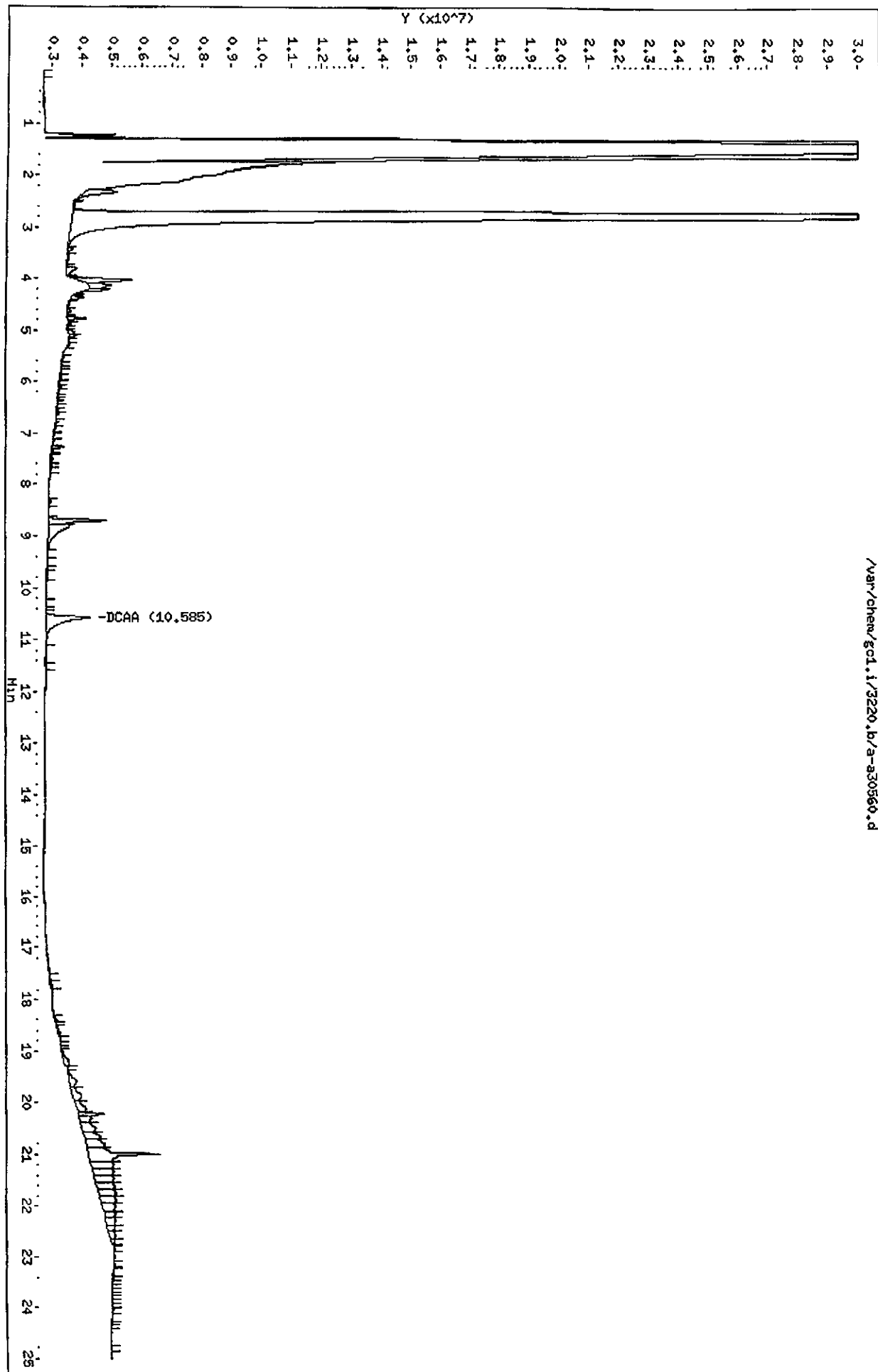
QC Flag Legend

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

661 338

Data File: /var/chem/gc1.1/3220.b/a-a30560.d
 Date : 23-JUN-2000 05:38
 Client ID: DF/S1/0165/SDC/044
 Sample Info: DEHR6105.3220.b
 Volume Injected (uL): 1.0
 Column phase: DB608

Instrument: gc1.1
 Operator: 01797
 Column diameter: 0.53



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 004

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMR7105

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 14

QC Batch: 0172432

Client Sample Id: DF/S1/0165/SDC/012

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.040	U
93-72-1	2,4,5-TP (Silvex)	0.010	U

661 400

Data File: /var/chem/gc1.i/3220.b/a-a30561.d

Report Date: 23-Jun-2000 09:19

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30561.d

Lab Smp Id: DEMR7105

Client Smp ID: DF/S1/0165/SDC/012

Inj Date : 23-JUN-2000 06:07

Operator : 01797

Inst ID: gc1.i

Smp Info : DEMR7105,3220.b

Misc Info : 140185-4

Comment :

Method : /var/chem/gc1.i/3220.b/LONGH.m

Meth Date : 23-Jun-2000 09:17 matkol

Quant Type: ESTD

Cal Date : 15-JUN-2000 15:14

Cal File: a-a30333.d

Als bottle: 31

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: all.sub

Target Version: 3.40

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ng)	FINAL (mg/L)
1 DALAPON					Compound Not Detected.		
\$ 2 DCAA	10.587	10.586	0.001	12369594		0.03725	0.07450(a)
3 MCPP					Compound Not Detected.		
4 DICANBA					Compound Not Detected.		
5 MCPA					Compound Not Detected.		
6 DICHLOROPROP					Compound Not Detected.		
7 2,4-D					Compound Not Detected.		
8 PENTACHLOROPHENOL					Compound Not Detected.		
9 2,4,5-TP(SILVEX)					Compound Not Detected.		
10 2,4,5-T					Compound Not Detected.		
11 DINOSBB					Compound Not Detected.		
12 2,4-DB					Compound Not Detected.		

Data File: /var/chem/gc1.i/3220.b/a-a30561.d
Report Date: 23-Jun-2000 09:19

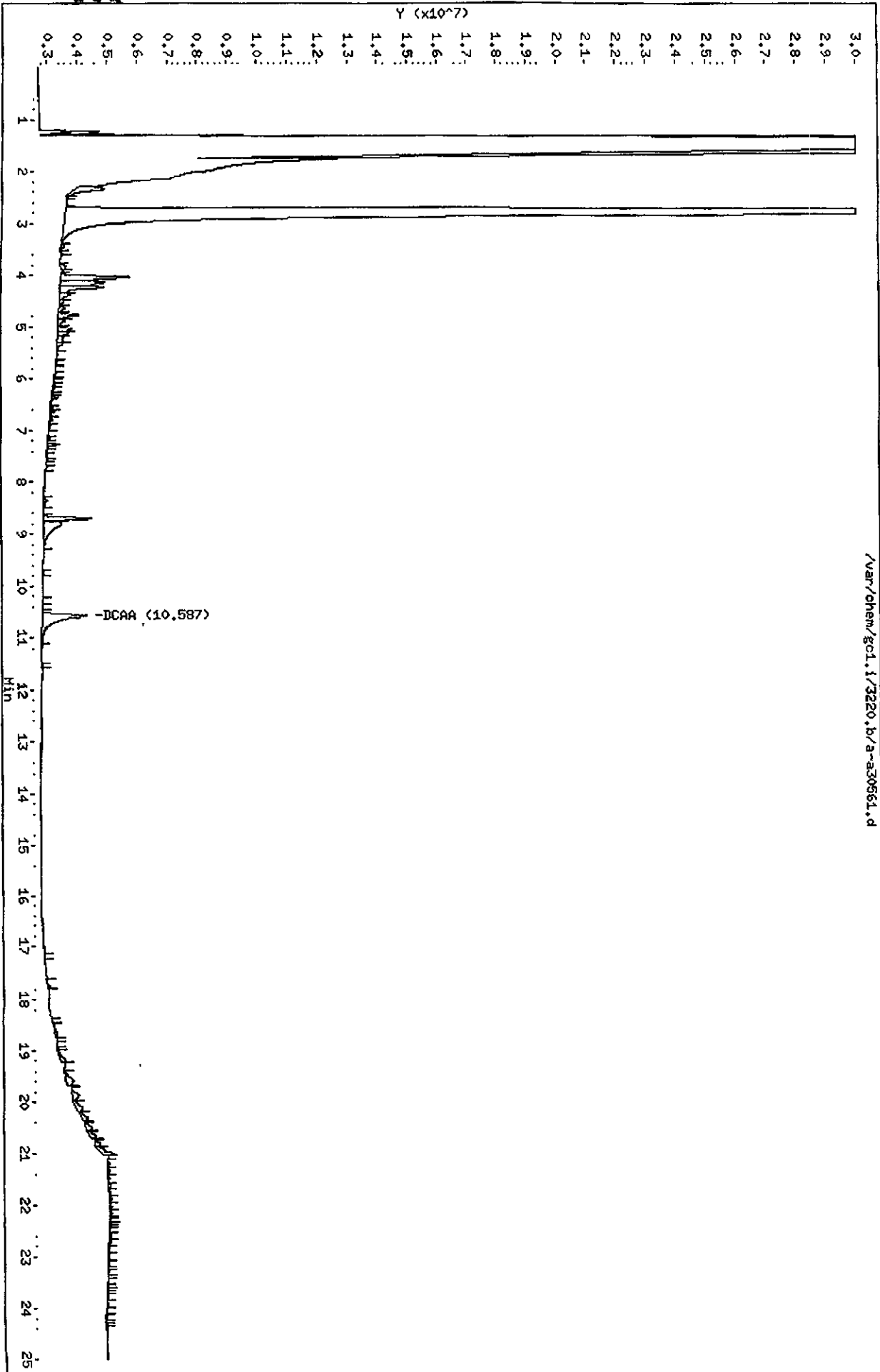
QC Flag Legend

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

661 402

Data File: /var/chem/gc1.i/3220.b/a-s30561.d
Date : 23-JUN-2000 06:07
Client ID: DF/S1/0165/SDC/012
Sample Info: DEMR7105,3220.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc1.i
Operator: 01797
Column diameter: 0.53



**HERBICIDE
CALIBRATION DATA**

661 404

Report Date : 15-Jun-2000 16:00

6D
HP68901A
DB608

STL-PITTSBURGH

COMPOUND LISTING

Method file : /var/chem/gc1.i/3150A.b/LONGH.m
Quant Method : ESTD
Last Update : 15-Jun-2000 15:59
Data Type : GC MULTI COMP

Target Version : 3.40
Number of Cpnds : 12

Global Integrator : Falcon

Chromat Events Values

Initial:Start Threshold 3608.000000
Initial:End Threshold 1804.000000
Initial:Area Threshold 36080.000000
Initial:P-P Resolution 1.000000
Initial:Bunch Factor 10.000000
Initial:Negative Peaks ON
Initial:Tension 0.200000

Compound	RT	RT Window	RF
1 DALAPON	3.734	3.664-3.804	9.561e+07
\$ 2 DCAA	10.582	10.512-10.652	3.321e+08
3 MCPP	11.022	10.952-11.092	4.549e+05
4 DICAMBA	11.201	11.131-11.271	2.423e+08
5 MCPA	11.984	11.914-12.054	5.427e+05
6 DICHLOROPROP	12.818	12.748-12.888	6.325e+07
7 2,4-D	14.322	14.252-14.392	4.008e+08
8 PENTACHLOROPHENOL	15.557	15.487-15.627	6.070e+08
9 2,4,5-TP (SILVEX)	16.773	16.703-16.843	1.867e+09
10 2,4,5-T	17.893	17.823-17.963	1.569e+09
11 DINOSEB	18.072	18.002-18.142	1.401e+09
12 2,4-DB	18.570	18.500-18.640	1.930e+08

Report Date : 15-Jun-2000 16:00

6E
HP68501A
DB608

661 405

STL-PITTSBURGH

INITIAL CALIBRATION DATA

Start Cal Date : 15-JUN-2000 13:19
End Cal Date : 15-JUN-2000 15:14
Quant Method : ESTD
Origin : Disabled
Target Version : 3.40
Integrator : Falcon
Method file : /var/chem/gc1.i/3150A.b/LONGH.m
Cal Date : 15-Jun-2000 15:59 eppinged
Curve Type : Average

Calibration File Names:

Level 1: /var/chem/gc1.i/3150A.b/a-a30329.d
Level 2: /var/chem/gc1.i/3150A.b/a-a30330.d
Level 3: /var/chem/gc1.i/3150A.b/a-a30331.d
Level 4: /var/chem/gc1.i/3150A.b/a-a30332.d
Level 5: /var/chem/gc1.i/3150A.b/a-a30333.d

Compound	0.00500	0.01000	0.02500	0.05000	0.10000		
	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
1 DALAPON	105969273	102407636	91779203	92411196	85481023	95609666	8.767
3 MCPP	680931	584730	424887	339600	244361	454902	39.088<
4 DICAMBA	254235660	260168028	229829529	244774853	222305318	242262678	6.602
5 MCPA	808906	694370	500796	401776	307690	542708	38.066<
6 DICHLOROPROP	69252642	69628090	60379823	62265924	54711168	63247529	9.963
7 2,4-D	447539431	444839247	380619741	390821718	340057294	400775486	11.380
8 PENTACHLOROPHENOL	592115414	626531203	576857707	640420959	599047051	606994466	4.274
9 2,4,5-TP(SILVEX)	1.971e+09	1.991e+09	1.744e+09	1.885e+09	1.742e+09	1.867e+09	6.409
10 2,4,5-T	1.634e+09	1.666e+09	1.476e+09	1.599e+09	1.473e+09	1.569e+09	5.725
11 DINOSEB	1.557e+09	1.526e+09	1.307e+09	1.382e+09	1.234e+09	1.401e+09	9.892
12 2,4-DB	235058294	211615735	176148178	180630917	161303669	192951358	15.455
S 2 DCAA	384214648	374109929	314128590	314733418	273142147	332065746	13.948

Aug 14.107
RSD

661 406

Data File: /var/chem/gc1.i/3220.b/a-a30534.d
 Report Date: 23-Jun-2000 09:03

7E
 68901A
 DB608

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 22-JUN-2000 17:03
 Lab File ID: a-a30534.d Init. Calibration Date(s): 06/15/00 06/15/00
 Analysis Type: Init. Calibration Times: 13:19 15:14
 Lab Sample ID: Mherb Method File: /var/chem/gc1.i/3220.b/LONGH.m
 Quant Type: ESTD

COMPOUND	RRF	RFD	MIN	MAX
1 DALAPON	95609666.090	106351640.091	0.010	-11.2 15.0
2 DCAA	332065746.380	350464982.374	0.010	-5.5 15.0
3 MCPP	454901.729	481841.784	0.010	-5.9 15.0
4 DICAMBA	242262677.744	253180752.941	0.010	-4.5 15.0
5 MCPA	542707.708	556501.051	0.010	-2.5 15.0
6 DICHLOROPROP	63247529.183	65452205.189	0.010	-3.5 15.0
7 2,4-D	400775486.317	425904077.556	0.010	-6.3 15.0
8 PENTACHLOROPHENOL	606994466.497	626584962.406	0.010	-3.2 15.0
9 2,4,5-TP(SILVEX)	1866801769.686	1912536966.825	0.010	-2.4 15.0
10 2,4,5-T	1569409040.573	1519288056.872	0.010	3.2 15.0
11 DINOSEB	1401076686.045	1624951968.504	0.010	-16.0 15.0 <-
12 2,4-DB	192951358.350	187962863.905	0.010	2.6 15.0

AVE = 5.6

7E
689QA
DB608

661 407

Data File: /var/chem/gc1.i/3220.b/a-a30557.d
Report Date: 23-Jun-2000 09:14

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 23-JUN-2000 04:11
Lab File ID: a-a30557.d Init. Calibration Date(s): 06/15/00 06/15/00
Analysis Type: Init. Calibration Times: 13:19 15:14
Lab Sample ID: Mherb Method File: /var/chem/gc1.i/3220.b/LONGH.m
Quant Type: ESTD

COMPOUND	RRP	RPO	MIN	MAX
1 DALAPON	95609666.090	109668496.583	0.010	-14.7
2 DCAA	332065746.380	383256933.020	0.010	-15.4
3 MCPP	454901.729	522842.136	0.010	-14.9
4 DICAMBA	242262677.744	279101717.647	0.010	-15.2
5 MCPA	542707.708	603372.664	0.010	-11.2
6 DICHLOROPROP	63247529.183	72835495.283	0.010	-15.2
7 2,4-D	400775486.317	474360599.295	0.010	-18.4
8 PENTACHLOROPHENOL	606994466.497	677891729.323	0.010	-11.7
9 2,4,5-TP(SILVEX)	1866801769.686	2087182417.062	0.010	-11.8
10 2,4,5-T	1569409040.573	1702252417.062	0.010	-8.5
11 DINOSBB	1401076686.045	1602788661.417	0.010	-14.4
12 2,4-DB	192951358.350	224459431.953	0.010	-16.3

Ave = 14.0

661 408
 Data File: /var/chem/gc1.i/3220.b/a-a30578.d
 Report Date: 23-Jun-2000 14:49

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 68901A
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STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 23-JUN-2000 14:20
 Lab File ID: a-a30578.d Init. Calibration Date(s): 06/15/00 06/15/00
 Analysis Type: Init. Calibration Times: 13:19 15:14
 Lab Sample ID: Mherb Method File: /var/chem/gc1.i/3220.b/LONGH.m
 Quant Type: ESTD

COMPOUND	RRF	RFO	MIN	MAX
1 DALAPON	95609666.090	97087835.991	0.010	-1.5 15.0
2 DCAA	332065746.380	335030364.277	0.010	-0.9 15.0
3 MCPP	454901.729	468267.371	0.010	-2.9 15.0
4 DICAMBA	242262677.744	237638541.176	0.010	1.9 15.0
5 MCPA	542707.708	537579.673	0.010	0.9 15.0
6 DICHLOROPROP	63247529.183	62491568.396	0.010	1.2 15.0
7 2,4-D	400775486.317	405072937.720	0.010	-1.1 15.0
8 PENTACHLOROPHENOL	606994466.497	573115319.549	0.010	5.6 15.0
9 2,4,5-TP (SILVEX)	1866801769.686	1824593554.502	0.010	2.3 15.0
10 2,4,5-T	1569409040.573	1496467393.365	0.010	4.6 15.0
11 DINOSEB	1401076686.045	1467489212.598	0.010	-4.7 15.0
12 2,4-DB	192951358.350	187278662.722	0.010	2.9 15.0

8D
PESTICIDE ANALYTICAL SEQUENCE

661 409

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: C0F140185

GC Column: DB608

ID: 0.53

(mm)

Init. Calib. Date(s): 06/15/00 06/15/00

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 10.58							
EPA SAMPLE NO.		LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #	
01		LHERB	06/15/00	1319	10.58		
02		MLHERB	06/15/00	1348	10.58		
03		MHERB	06/15/00	1417	10.58		
04		MHHERB	06/15/00	1446	10.58		
05		HHERB	06/15/00	1514	10.58		
06		MHERB	06/22/00	1703	10.59		
07	PBLK1	DF1L6101	06/23/00	0215	10.59		
08	LCS1	DF1L6102	06/23/00	0244	10.58		
09	DF/S1/0165/G	DEMQV11A	06/23/00	0313	10.58		
10	DF/S1/0165/G	DEMQV11C	06/23/00	0342	10.58		
11		MHERB	06/23/00	0411	10.58		
12	DF/S1/0165/G	DEMQV105	06/23/00	0440	10.59		
13	DF/S1/0165/S	DEMR4105	06/23/00	0509	10.58		
14	DF/S1/0165/S	DEMR6105	06/23/00	0538	10.58		
15	DF/S1/0165/S	DEMR7105	06/23/00	0607	10.59		
16		MHERB	06/23/00	1420	10.58		
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							

S1 = DCAA

QC LIMITS
(+/- 0.07 MINUTES)

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

661 410

Data File: /var/chem/gc1.i/3150A.b/a-a30329.d
 Report Date: 15-Jun-2000 16:00

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3150A.b/a-a30329.d
 Lab Smp Id: Lherb
 Inj Date : 15-JUN-2000 13:19
 Operator : 01797
 Smp Info : Lherb,3150A.b
 Misc Info : 190-80-1
 Comment :
 Method : /var/chem/gc1.i/3150A.b/LONGH.m
 Meth Date : 15-Jun-2000 16:00 eppinged
 Cal Date : 15-JUN-2000 13:19
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30329.d
 Calibration Sample, Level: 1
 Compound Sublist: 1-all.sub

Compounds					AMOUNTS	
	RT	EXP RT	DLT	RT	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.731	3.734	-0.003	1165662	0.01100	0.01100
\$ 2 DCAA	10.582	10.582	0.000	8183772	0.02130	0.02130
3 MCPP	11.022	11.022	0.000	1443573	2.12000	2.120
4 DICAMBA	11.196	11.201	-0.005	2694898	0.01060	0.01060
5 MCPA	11.986	11.984	0.002	1731058	2.14000	2.140
6 DICHLOROPROP	12.814	12.818	-0.004	1468156	0.02120	0.02120
7 2,4-D	14.324	14.322	0.002	9443082	0.02110	0.02110
8 PENTACHLOROPHENOL	15.552	15.557	-0.005	1575027	0.00266	0.002660
9 2,4,5-TP(SILVEX)	16.772	16.773	-0.001	10347549	0.00525	0.005250
10 2,4,5-T	17.892	17.893	-0.001	8610161	0.00527	0.005270
11 DINOSEB	18.069	18.072	-0.003	4935185	0.00317	0.003170
12 2,4-DB	18.567	18.570	-0.003	4959730	0.02110	0.02110

Data File: /var/chem/gc1.i/3150A.b/a-30329.d

Date: 15-JUN-2000 13:19

Client ID:

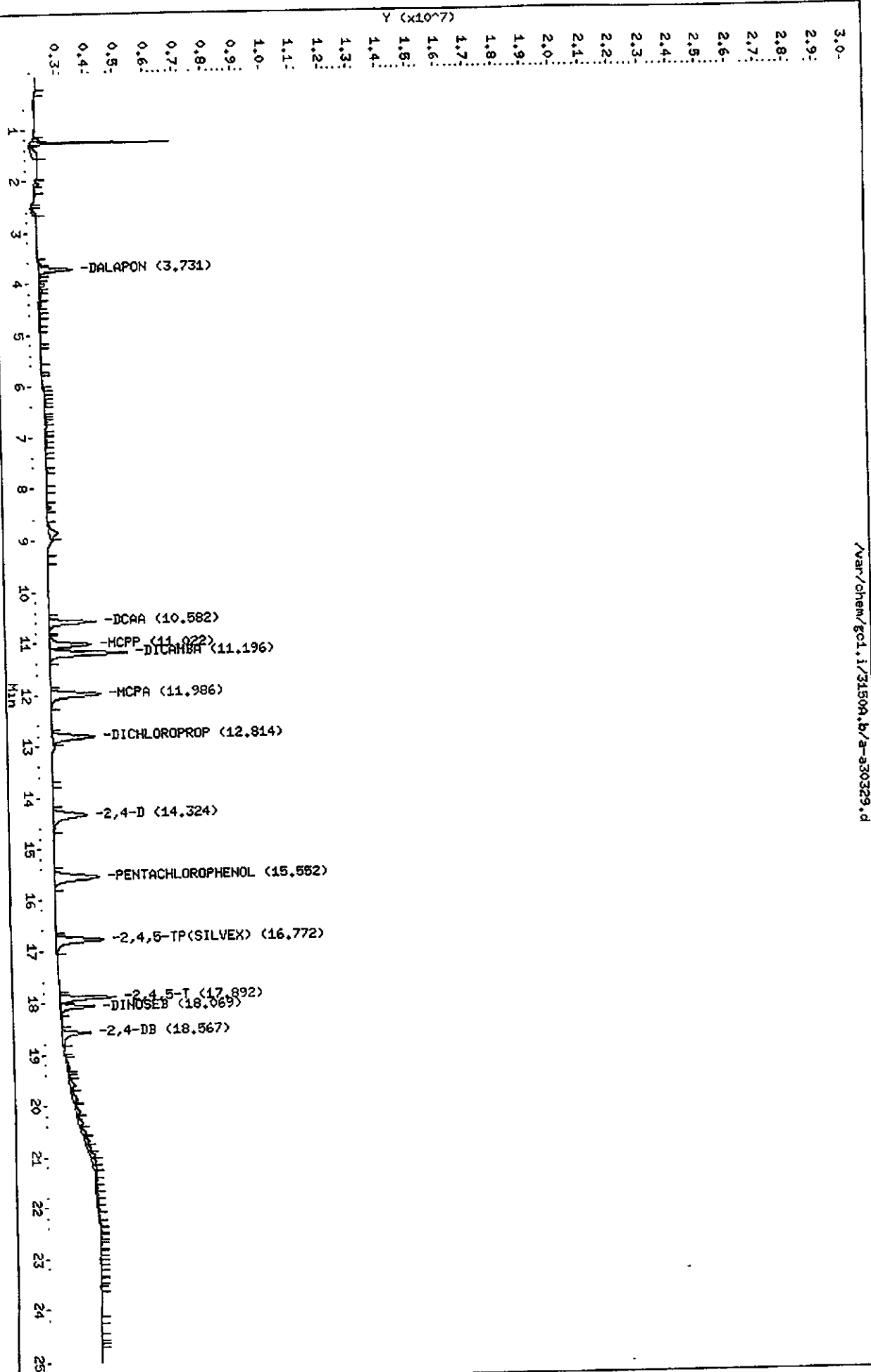
Sample Info: Lherb, 3150A.b

Column phase: DB608

Instrument: gc1.i

Operator: 01797

Column diameter: 0.63



661 412

Data File: /var/chem/gc1.i/3150A.b/a-a30330.d
 Report Date: 15-Jun-2000 16:00

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3150A.b/a-a30330.d
 Lab Smp Id: MLherb
 Inj Date : 15-JUN-2000 13:48
 Operator : 01797
 Smp Info : MLherb,3150A.b
 Misc Info : 190-80-2
 Comment :
 Method : /var/chem/gc1.i/3150A.b/LONGH.m
 Meth Date : 15-Jun-2000 16:00 eppinged
 Cal Date : 15-JUN-2000 13:48
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30330.d
 Calibration Sample, Level: 2
 Compound Sublist: 1-all.sub

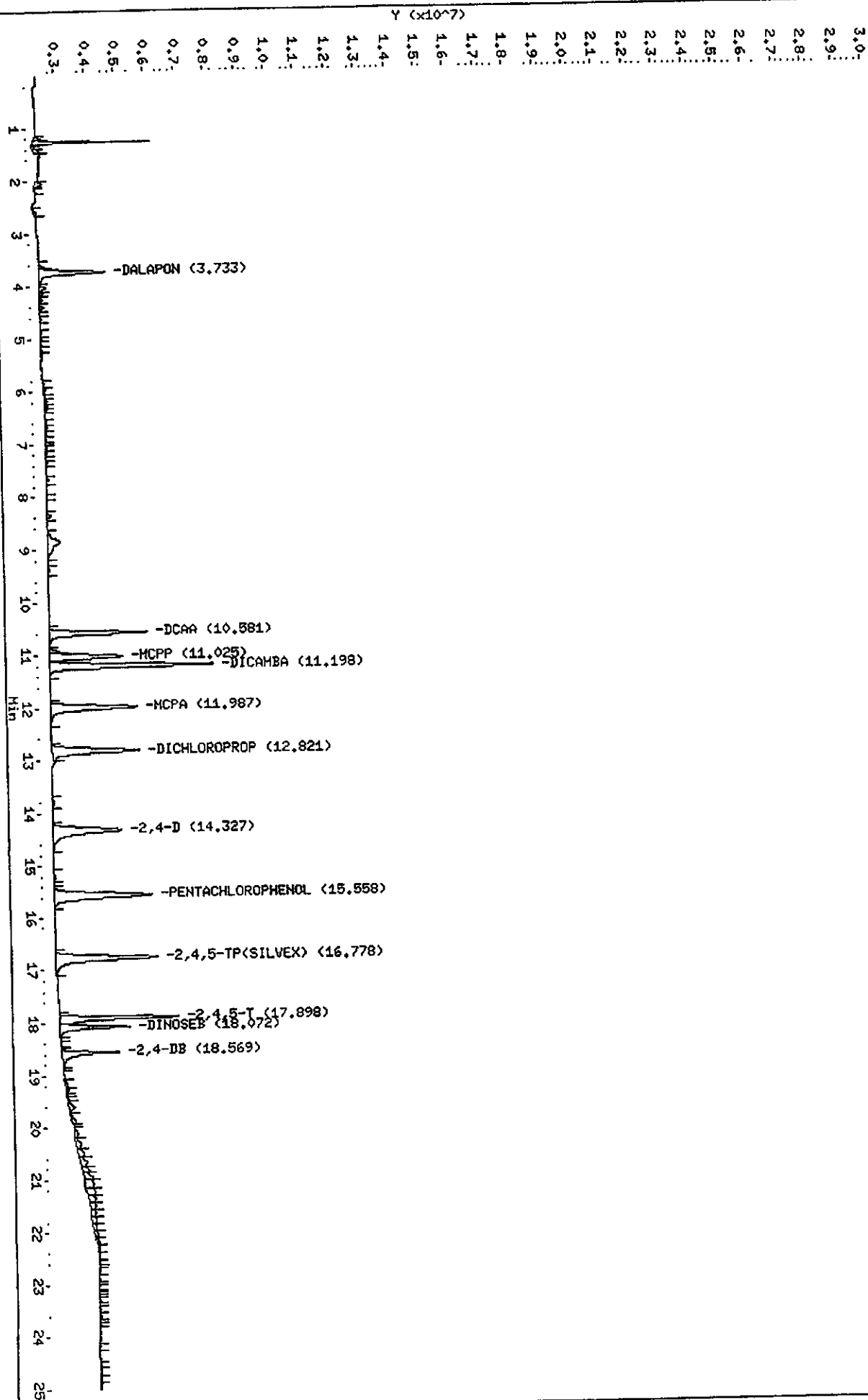
Compounds					AMOUNTS	
	RT	EXP RT	DLT	RT	CAL-AMT	ON-COL
					(ng)	(ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.733	3.734	-0.001	2252968	0.02200	0.02162
§ 2 DCAA	10.581	10.582	-0.001	15899672	0.04250	0.04193
3 MCPP	11.025	11.022	0.003	2490950	4.26000	3.936
4 DICAMBA	11.198	11.201	-0.003	5541579	0.02130	0.02154
5 MCPA	11.987	11.984	0.003	2971904	4.28000	3.954
6 DICHLOROPROP	12.821	12.818	0.003	2952231	0.04240	0.04251
7 2,4-D	14.327	14.322	0.005	18905668	0.04250	0.04237
8 PENTACHLOROPHENOL	15.558	15.557	0.001	3333146	0.00532	0.005470
9 2,4,5-TP(SILVEX)	16.778	16.773	0.005	20908750	0.01050	0.01055
10 2,4,5-T	17.898	17.893	0.005	17488763	0.01050	0.01060
11 DINOSEB	18.072	18.072	0.000	9686941	0.00635	0.006285
12 2,4-DB	18.569	18.570	-0.001	8930184	0.04220	0.03998

Data File: /var/chem/gc1.1/31509.b/a-a30330.d
Date: 15-JUN-2000 13:48
Client ID:
Sample Info: MHerb,31509.b

Column phase: DB608

/var/chem/gc1.1/31509.b/a-a30330.d

Instrument: gc1.1
Operator: 01797
Column diameter: 0.53



661 414

Data File: /var/chem/gc1.i/3150A.b/a-a30331.d
 Report Date: 15-Jun-2000 16:01

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3150A.b/a-a30331.d
 Lab Smp Id: Mherb
 Inj Date : 15-JUN-2000 14:17
 Operator : 01797
 Smp Info : Mherb,3150A.b
 Misc Info : 190-80-3
 Comment :
 Method : /var/chem/gc1.i/3150A.b/LONGH.m
 Meth Date : 15-Jun-2000 16:00 eppinged
 Cal Date : 15-JUN-2000 14:17
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30331.d
 Calibration Sample, Level: 3
 Compound Sublist: 1-all.sub

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	3.734	3.734	0.000	4029107	0.04390	0.04027
\$ 2 DCAA	10.582	10.582	0.000	26732343	0.08510	0.07478
3 MCPP	11.022	11.022	0.000	3620036	8.52000	6.424
4 DICAMBA	11.201	11.201	0.000	9767755	0.04250	0.03937
5 MCPA	11.984	11.984	0.000	4286817	8.56000	6.417
6 DICHLOROPROP	12.818	12.818	0.000	5120209	0.08480	0.07709
7 2,4-D	14.322	14.322	0.000	32390740	0.08510	0.07633
8 PENTACHLOROPHENOL	15.557	15.557	0.000	6137766	0.01064	0.01026
9 2,4,5-TP(SILVEX)	16.773	16.773	0.000	36800559	0.02110	0.01935
10 2,4,5-T	17.893	17.893	0.000	31141987	0.02110	0.01956
11 DINOSEB	18.072	18.072	0.000	16603884	0.01270	0.01135
12 2,4-DB	18.570	18.570	0.000	14884521	0.08450	0.07170

Data File: /var/chem/gcl.i/31508.b/a-a30331.d
Date: 15-JUN-2000 14:17

Client ID:

Sample Info: Herb,31508.b

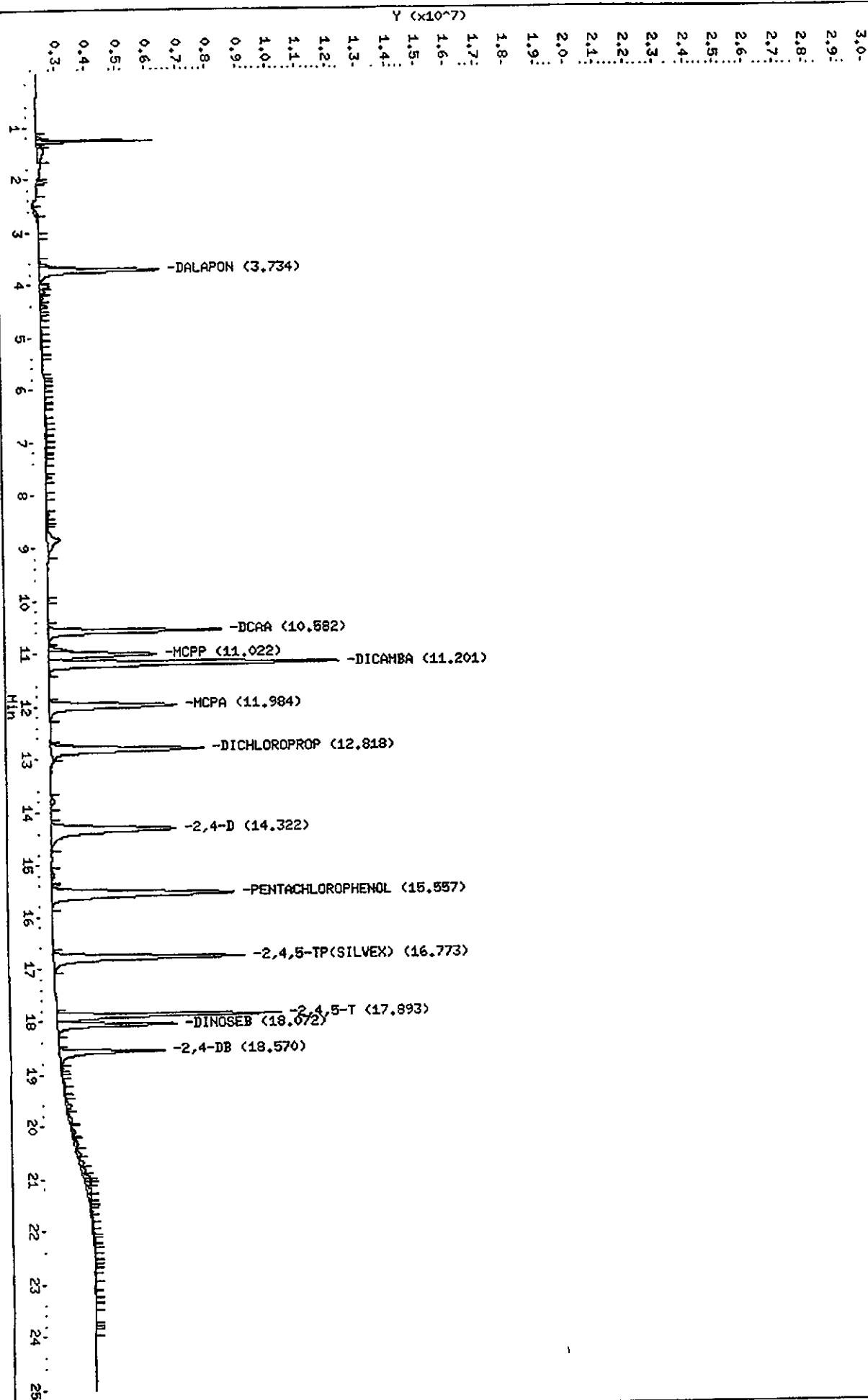
Column phase: DB608

Instrument: gcl.i

Operator: 01797

Column diameter: 0.53

/var/chem/gcl.i/31508.b/a-a30331.d



661 416

Data File: /var/chem/gc1.i/3150A.b/a-a30332.d
Report Date: 15-Jun-2000 16:01

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3150A.b/a-a30332.d
Lab Smp Id: MHherb
Inj Date : 15-JUN-2000 14:46
Operator : 01797
Smp Info : MHherb,3150A.b
Misc Info : 190-80-4
Comment :
Method : /var/chem/gc1.i/3150A.b/LONGH.m
Meth Date : 15-Jun-2000 16:00 eppinged
Cal Date : 15-JUN-2000 14:46
Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.40

Inst ID: gc1.i
Quant Type: ESTD
Cal File: a-a30332.d
Calibration Sample, Level: 4
Compound Sublist: 1-all.sub

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	3.732	3.734	-0.002	8113703	0.08780	0.08267
2 DCAA	10.580	10.582	-0.002	53504681	0.17000	0.1543
3 MCPP	11.022	11.022	0.000	5773198	17.0000	11.37
4 DICAMBA	11.199	11.201	-0.002	20830340	0.08510	0.08425
5 MCPA	11.987	11.984	0.003	6870375	17.1000	11.42
6 DICHLOROPROP	12.816	12.818	-0.002	10585207	0.17000	0.1619
7 2,4-D	14.324	14.322	0.002	66439692	0.17000	0.1597
8 PENTACHLOROPHENOL	15.555	15.557	-0.002	13628158	0.02128	0.02238
9 2,4,5-TP(SILVEX)	16.779	16.773	0.006	79374246	0.04210	0.04182
10 2,4,5-T	17.895	17.893	0.002	67464921	0.04220	0.04234
11 DINOSEB	18.072	18.072	0.000	35096133	0.02540	0.02432
12 2,4-DB	18.567	18.570	-0.003	30526625	0.16900	0.1520

Data File: /var/chem/gc1.1/3150A.b/a-a30332.d
Date: 15-JUN-2000 14:46

Client ID:

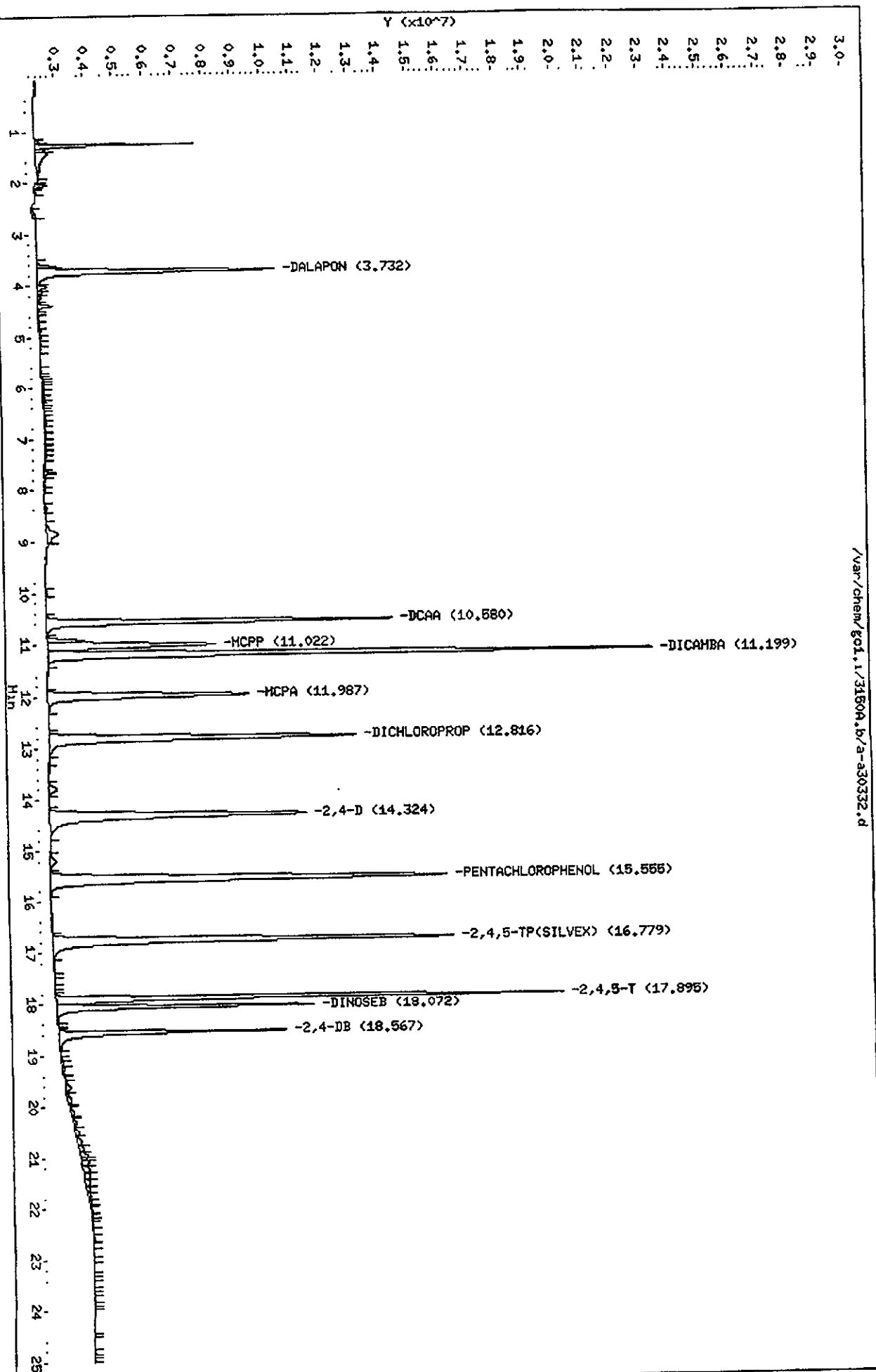
Sample Info: Hlherb,3150A.b

Column phase: DB608

Instrument: gc1.1

Operator: 01797

Column diameter: 0.53



661 418

Data File: /var/chem/gc1.i/3150A.b/a-a30333.d
Report Date: 15-Jun-2000 16:01

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3150A.b/a-a30333.d
Lab Smp Id: Hherb
Inj Date : 15-JUN-2000 15:14
Operator : 01797
Smp Info : Hherb,3150A.b
Misc Info : 190-80-5
Comment :
Method : /var/chem/gc1.i/3150A.b/LONGH.m
Meth Date : 15-Jun-2000 16:00 eppinged
Cal Date : 15-JUN-2000 15:14
Als bottle: 7
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.40

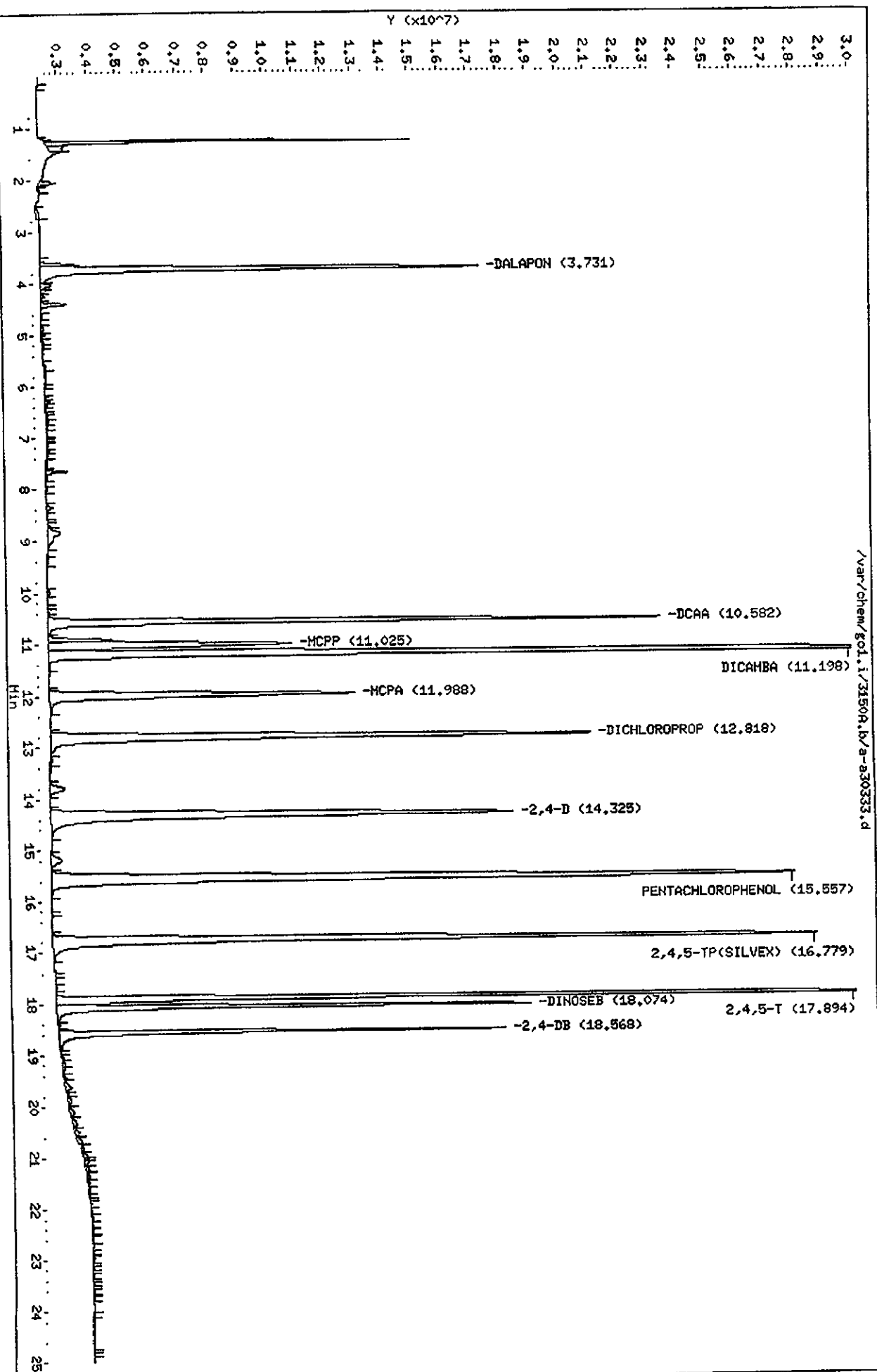
Inst ID: gc1.i
Quant Type: ESTD
Cal File: a-a30333.d
Calibration Sample, Level: 5
Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.731	3.734	-0.003	15044660	0.17600	0.1574
\$ 2 DCAA	10.582	10.582	0.000	92868330	0.34000	0.2797
3 MCPP	11.025	11.022	0.003	8332717	34.1000	18.32
4 DICAMBA	11.198	11.201	-0.003	37791904	0.17000	0.1560
5 MCPA	11.988	11.984	0.004	10461465	34.0000	19.28
6 DICHLOROPROP	12.818	12.818	0.000	18547086	0.33900	0.2932
7 2,4-D	14.325	14.322	0.003	115619480	0.34000	0.2885
8 PENTACHLOROPHENOL	15.557	15.557	0.000	25489452	0.04255	0.04199
9 2,4,5-TP(SILVEX)	16.779	16.773	0.006	146349947	0.08400	0.07840
10 2,4,5-T	17.894	17.893	0.001	124323202	0.08440	0.07922
11 DINOSEB	18.074	18.072	0.002	62682641	0.05080	0.04474
12 2,4-DB	18.568	18.570	-0.002	54520640	0.33800	0.2826

Data File: /var/chem/gc1.1/3150A.b/a-a30333.d
Date: 15-JUN-2000 15:14
Client ID:
Sample Info: Herb, 3150A.b

Column phase: DB608

Instrument: gc1.1
Operator: 01797
Column diameter: 0.53



661 420

Data File: /var/chem/gc1.i/3220.b/a-a30534.d
Report Date: 23-Jun-2000 09:17

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30534.d
Lab Smp Id: Mherb
Inj Date : 22-JUN-2000 17:03
Operator : 01797
Smp Info : Mherb,3220.b
Misc Info : 190-80-3
Comment :
Method : /var/chem/gc1.i/3220.b/LONGH.m
Meth Date : 23-Jun-2000 09:17 matkol
Cal Date : 15-JUN-2000 15:14
Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.40

Inst ID: gc1.i
Quant Type: ESTD
Cal File: a-a30333.d
Continuing Calibration Sample
Compound Sublist: all.sub

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.739	3.739	0.000	4668837	0.04390	0.04883
\$ 2 DCAA	10.586	10.586	0.000	29824570	0.08510	0.08982
3 MCPP	11.030	11.030	0.000	4105292	8.52000	9.024
4 DICAMBA	11.201	11.201	0.000	10760182	0.04250	0.04442
5 MCPA	11.991	11.991	0.000	4763649	8.56000	8.778
6 DICHLOROPROP	12.824	12.824	0.000	5550347	0.08480	0.08776
7 2,4-D	14.334	14.334	0.000	36244437	0.08510	0.09044
8 PENTACHLOROPHENOL	15.556	15.556	0.000	6666864	0.01064	0.01098
9 2,4,5-TP(SILVEX)	16.784	16.784	0.000	40354530	0.02110	0.02162
10 2,4,5-T	17.897	17.897	0.000	32056978	0.02110	0.02043
11 DINOSEB	18.076	18.076	0.000	20636890	0.01270	0.01473
12 2,4-DB	18.572	18.572	0.000	15882862	0.08450	0.08232

Data File: /var/chem/gol.i/3220.b/a-s30534.d

Date: 22-JUN-2000 17:03

Client ID:

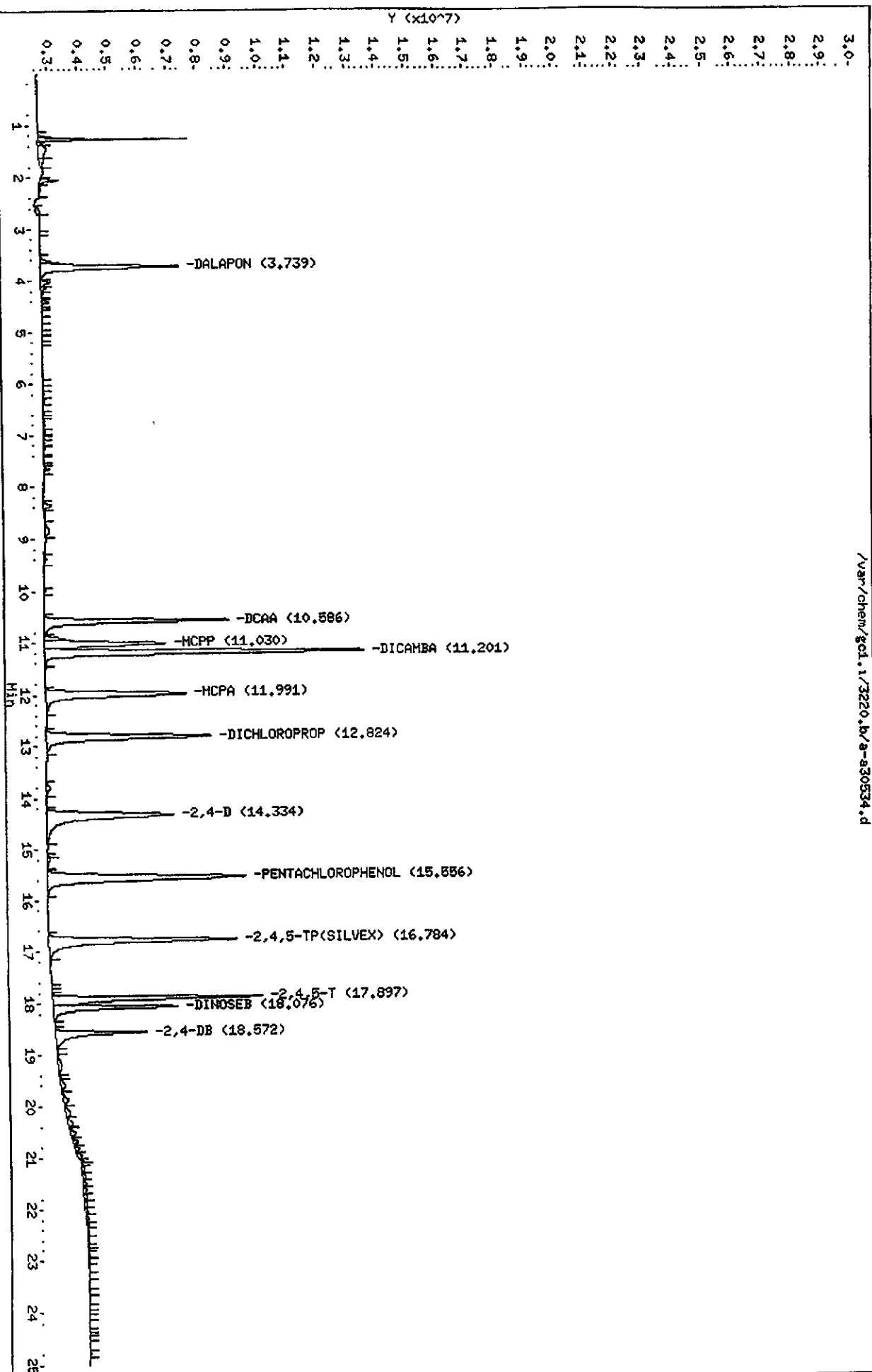
Sample Info: Herb, 3220.b

Column phase: DB608

Instrument: gol.i

Operator: 01797

Column diameter: 0.53



Data File: /var/chem/gc1.i/3220.b/a-a30557.d
 Report Date: 23-Jun-2000 09:19

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30557.d
 Lab Smp Id: Mherb
 Inj Date : 23-JUN-2000 04:11
 Operator : 01797
 Smp Info : Mherb,3220.b
 Misc Info : 190-80-3
 Comment :
 Method : /var/chem/gc1.i/3220.b/LONGH.m
 Meth Date : 23-Jun-2000 09:17 matkol
 Cal Date : 15-JUN-2000 15:14
 Als bottle: 27
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30333.d
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	3.736	3.739	-0.003	4814447	0.04390	0.05036
2 DCAA	10.582	10.586	-0.004	32615165	0.08510	0.09822
3 MCPP	11.023	11.030	-0.007	4454615	8.52000	9.792
4 DICAMBA	11.197	11.201	-0.004	11861823	0.04250	0.04896
5 MCPA	11.987	11.991	-0.004	5164870	8.56000	9.517
6 DICHLOROPROP	12.816	12.824	-0.008	6176450	0.08480	0.09766
7 2,4-D	14.324	14.334	-0.010	40368087	0.08510	0.1007
8 PENTACHLOROPHENOL	15.553	15.556	-0.003	7212768	0.01064	0.01188
9 2,4,5-TP(SILVEX)	16.770	16.784	-0.014	44039549	0.02110	0.02359
10 2,4,5-T	17.898	17.897	0.001	35917526	0.02110	0.02289
11 DINOSEB	18.075	18.076	-0.001	20355416	0.01270	0.01453
12 2,4-DB	18.571	18.572	-0.001	18966822	0.08450	0.09830

Data File: /var/chem/gcl.i/3220.b/a-a30557.d

Date: 23-JUN-2000 04:11

Client ID:

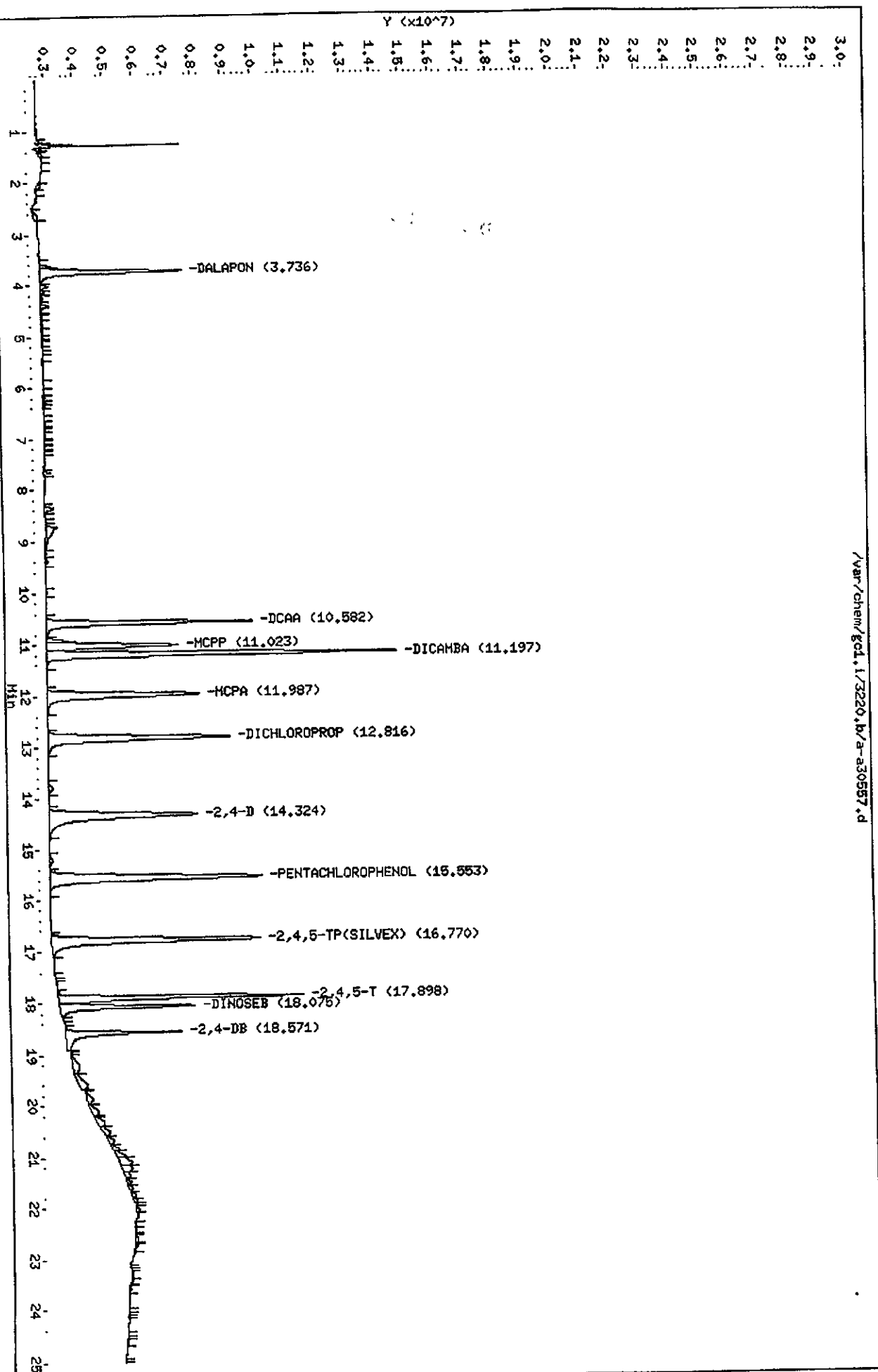
Sample Info: Mherb,3220.b

Column phase: DB608

Instrument: gcl.i

Operator: 01797

Column diameter: 0.53



661 424

Data File: /var/chem/gc1.i/3220.b/a-a30578.d
 Report Date: 23-Jun-2000 14:50

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30578.d
 Lab Smp Id: Mherb
 Inj Date : 23-JUN-2000 14:20
 Operator : 01797
 Smp Info : Mherb,3220.b
 Misc Info : 190-80-3
 Comment :
 Method : /var/chem/gc1.i/3220.b/LONGH.m
 Meth Date : 23-Jun-2000 14:49 g
 Cal Date : 15-JUN-2000 15:14
 Als bottle: 48
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30333.d
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.736	3.739	-0.003	4262156	0.04390	0.04458
\$ 2 DCAA	10.583	10.586	-0.003	28511084	0.08510	0.08586
3 MCPP	11.022	11.030	-0.008	3989638	8.52000	8.770
4 DICAMBA	11.198	11.201	-0.003	10099638	0.04250	0.04169
5 MCPA	11.986	11.991	-0.005	4601682	8.56000	8.479
6 DICHLOROPROP	12.817	12.824	-0.007	5299285	0.08480	0.08379
7 2,4-D	14.322	14.334	-0.012	34471707	0.08510	0.08601
8 PENTACHLOROPHENOL	15.557	15.556	0.001	6097947	0.01064	0.01005
9 2,4,5-TP(SILVEX)	16.778	16.784	-0.006	38498924	0.02110	0.02062
10 2,4,5-T	17.892	17.897	-0.005	31575462	0.02110	0.02012
11 DINOSEB	18.074	18.076	-0.002	18637113	0.01270	0.01330
12 2,4-DB	18.570	18.572	-0.002	15825047	0.08450	0.08202

Data File: /var/chem/gc1.i/3220.b/a-a30578.d

Date: 23-JUN-2000 14:20

Client ID:

Sample Info: Herb, 3220.b

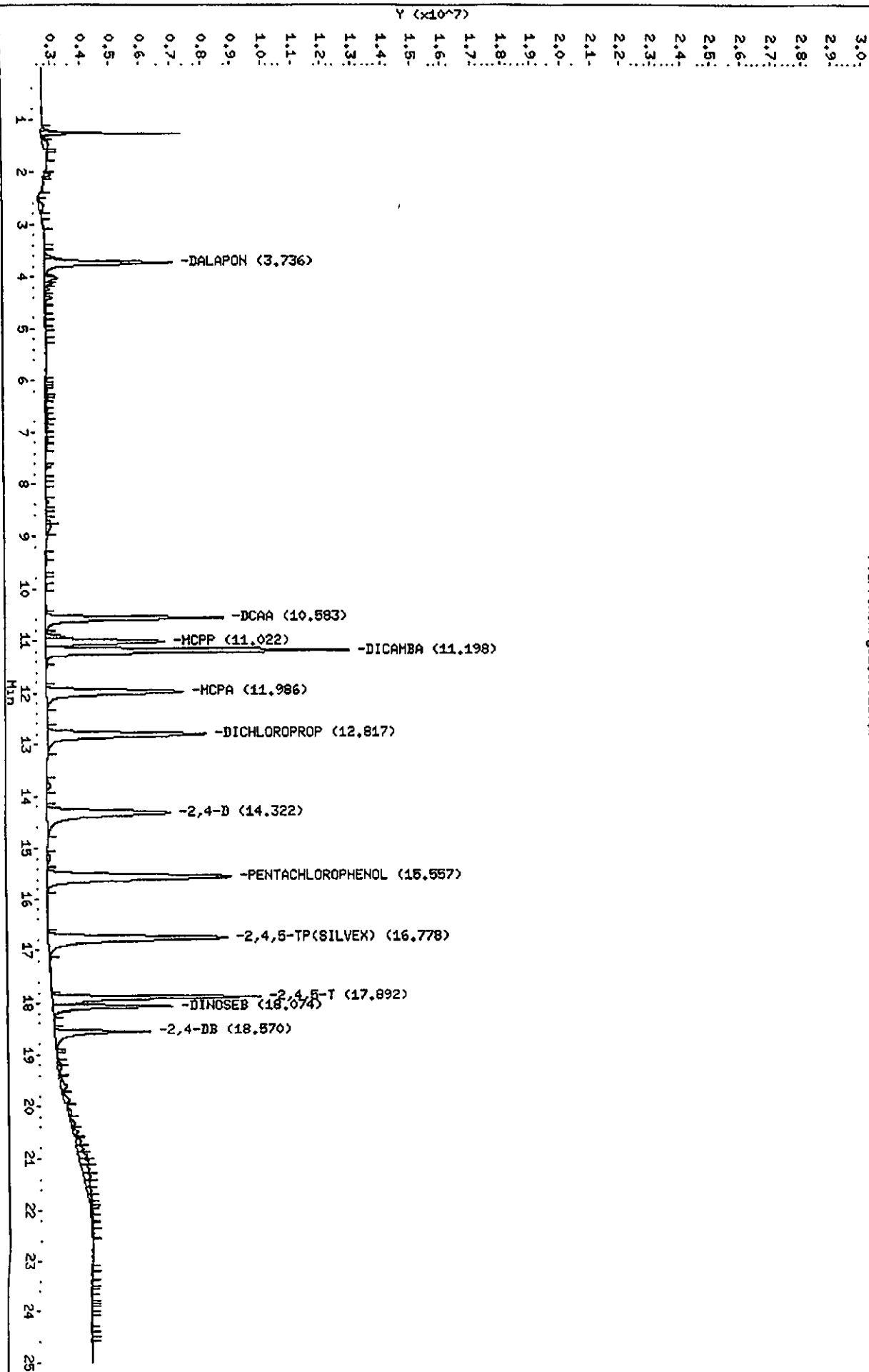
Column phase: DB608

Instrument: gc1.i

Operator: 01797

Column diameter: 0.53

/var/chem/gc1.i/3220.b/a-a30578.d



661 426

**HERBICIDE
QC DATA**

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F200000 432

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DF1L6101

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

QC Batch: 0172432

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.040	U
93-72-1	2,4,5-TP (Silvex)	0.010	U

661 428

Data File: /var/chem/gc1.i/3220.b/a-a30553.d

Report Date: 23-Jun-2000 09:18

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30553.d
 Lab Smp Id: DF1L6101 Client Smp ID: PBLK1
 Inj Date : 23-JUN-2000 02:15
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DF1L6101,3220.b
 Misc Info : 140185BLK
 Comment :
 Method : /var/chem/gc1.i/3220.b/LONGH.m
 Meth Date : 23-Jun-2000 09:17 matkol Quant Type: ESTD
 Cal Date : 15-JUN-2000 15:14 Cal File: a-a30333.d
 Als bottle: 23 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 3.40

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
1 DALAPON				Compound Not Detected		
\$ 2 DCAA	10.588	10.586	0.002	14051451	0.04232	0.08463 (a)
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected		
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				Compound Not Detected		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP (SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected		
11 DINOSEB				Compound Not Detected.		
12 2,4-DB				Compound Not Detected.		

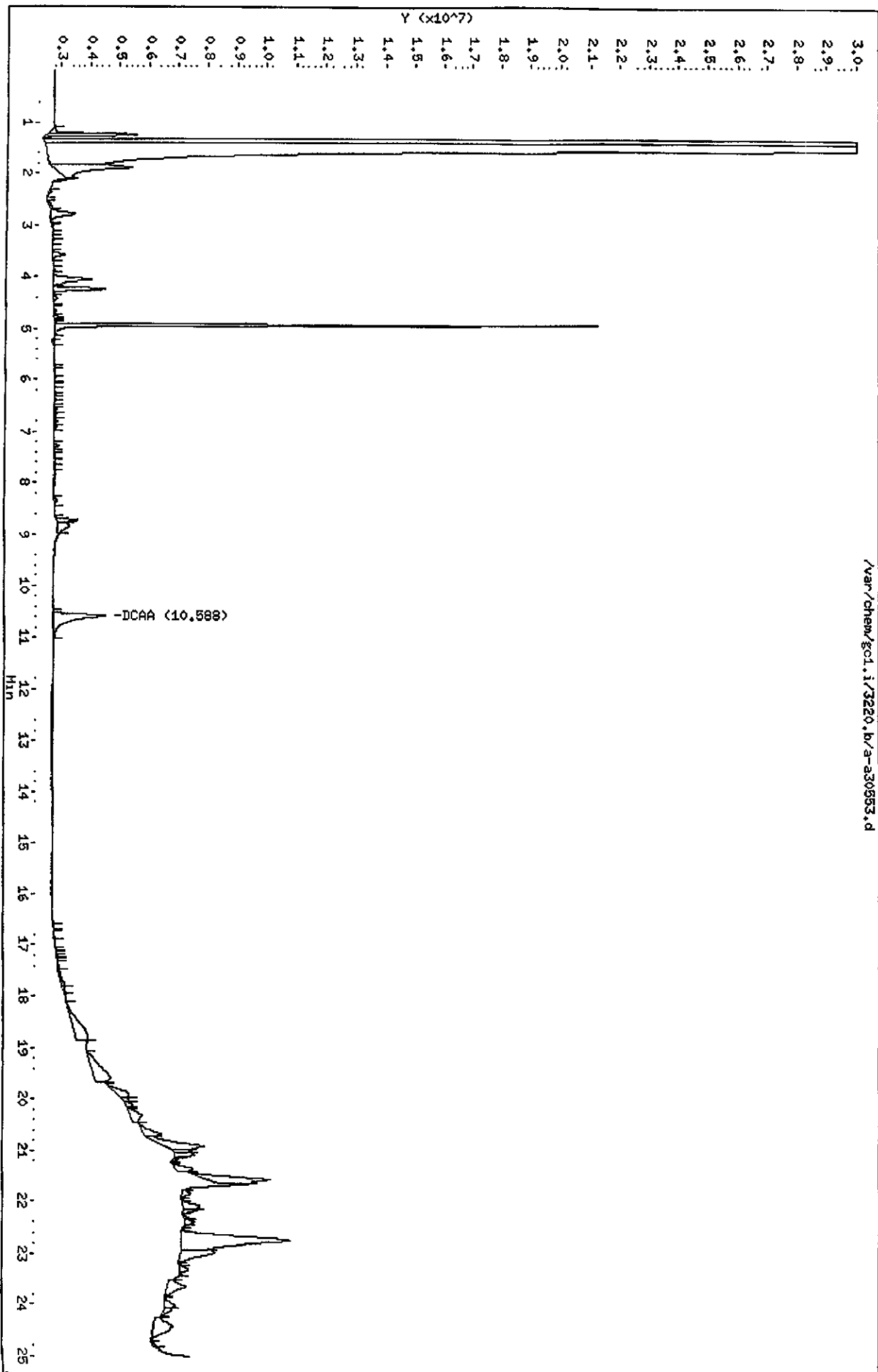
Data File: /var/chem/gc1.i/3220.b/a-a30553.d
Report Date: 23-Jun-2000 09:18

QC Flag Legend

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

Data File: /var/chem/gc1.i/3220.b/a-a30553.d
 Date : 23-JUN-2000 02:15
 Client ID: PRLK1
 Sample Info: DF116101.3220.b
 Volume Injected (uL): 1.0
 Column Phase: DB608

Instrument: gc1.i
 Operator: 01797
 Column diameter: 0.53



661 430

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F200000 432

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DF1L6102

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: NA

QC Batch: 0172432

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.165	
93-72-1	2,4,5-TP (Silvex)	0.0388	

661 432

Data File: /var/chem/gc1.i/3220.b/a-a30554.d
Report Date: 23-Jun-2000 09:18

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30554.d
Lab Smp Id: DF1L6102 Client Smp ID: LCS1
Inj Date : 23-JUN-2000 02:44
Operator : 01797 Inst ID: gc1.i
Smp Info : DF1L6102,3220.b
Misc Info : 140185LCS
Comment :
Method : /var/chem/gc1.i/3220.b/LONGH.m
Meth Date : 23-Jun-2000 09:17 matkol Quant Type: ESTD
Cal Date : 15-JUN-2000 15:14 Cal File: a-a30333.d
Als bottle: 24 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.40

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (mg/L)
1 DALAPON	3.736	3.739	-0.003	2310427	0.02417	0.04833 (aR)
\$ 2 DCAA	10.582	10.586	-0.004	16290386	0.04906	0.09812 (a)
3 MCPP	11.023	11.030	-0.007	3839777	8.44089	16.88
4 DICAMBA	11.199	11.201	-0.002	7435537	0.03069	0.06138 (a)
5 MCPA	11.984	11.991	-0.007	4433177	8.16863	16.34
6 DICHLOROPROP	12.814	12.824	-0.010	5069181	0.08015	0.1603 (a)
7 2,4-D	14.322	14.334	-0.012	33059292	0.08249	0.1650 (aR)
8 PENTACHLOROPHENOL	15.554	15.556	-0.002	5874788	0.00968	0.01936 (a)
9 2,4,5-TP(SILVEX)	16.775	16.784	-0.009	36226989	0.01941	0.03881 (aR)
10 2,4,5-T	17.894	17.897	-0.003	28972274	0.01846	0.03692 (aR)
11 DINOSBB	18.073	18.076	-0.003	5015727	0.00358	0.007160 (a)
12 2,4-DB	18.572	18.572	0.000	13954230	0.07232	0.1446 (a)

Data File: /var/chem/gc1.i/3220.b/a-a30554.d
Report Date: 23-Jun-2000 09:18

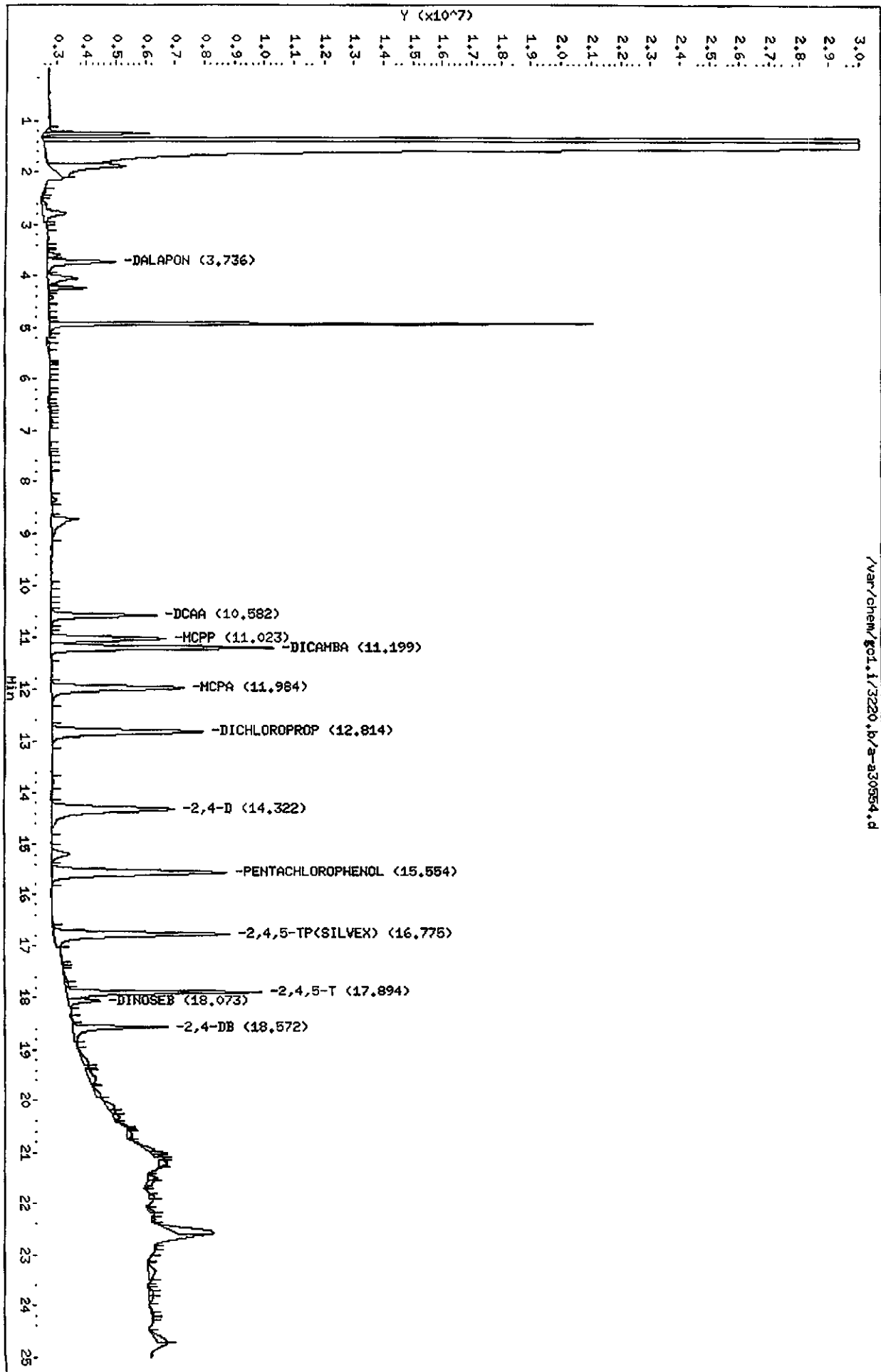
QC Flag Legend

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

661 434

Data File: /var/chem/gc1.1/3220.b/a-a30554.d
Date: 23-JUN-2000 02:44
Client ID: LCS1
Sample Info: DFLL6102.3220.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc1.1
Operator: 01797
Column diameter: 0.53



UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMQV11A

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0172432

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.193	
93-72-1	2,4,5-TP (Silvex)	0.0430	

661 436

Data File: /var/chem/gc1.i/3220.b/a-a30555.d
 Report Date: 23-Jun-2000 09:18

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30555.d
 Lab Smp Id: DEMQV11A Client Smp ID: DF/S1/0165/GRAB2S
 Inj Date : 23-JUN-2000 03:13
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DEMQV11A,3220.b
 Misc Info : 140185-1S
 Comment :
 Method : /var/chem/gc1.i/3220.b/LONGH.m
 Meth Date : 23-Jun-2000 09:17 matkol Quant Type: ESTD
 Cal Date : 15-JUN-2000 15:14 Cal File: a-a30333.d
 Als bottle: 25 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 3.40

Concentration Formula: $\text{Amt} * \text{DF} * 20 * \text{Vt} / \text{Vo} / \text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
1 DALAPON	3.737	3.739	-0.002	3354325	0.03508	0.07017 (aR)
\$ 2 DCAA	10.582	10.586	-0.004	16173664	0.04871	0.09741 (a)
3 MCPP	11.025	11.030	-0.005	4187847	9.20605	18.41
4 DICAMBA	11.199	11.201	-0.002	11229202	0.04635	0.09270 (a)
5 MCPA	11.988	11.991	-0.003	4896399	9.02217	18.04
6 DICHLOROPROP	12.815	12.824	-0.009	5887565	0.09309	0.1862 (a)
7 2,4-D	14.326	14.334	-0.008	38684747	0.09652	0.1930 (aR)
8 PENTACHLOROPHENOL	15.555	15.556	-0.001	2908809	0.00479	0.009584 (a)
9 2,4,5-TP (SILVEX)	16.773	16.784	-0.011	40145747	0.02151	0.04301 (aR)
10 2,4,5-T	17.896	17.897	-0.001	34742636	0.02214	0.04427 (aR)
11 DINOSEB	Compound Not Detected.					
12 2,4-DB	18.570	18.572	-0.002	17319964	0.08976	0.1795 (a)

Data File: /var/chem/gc1.i/3220.b/a-a30555.d
Report Date: 23-Jun-2000 09:18

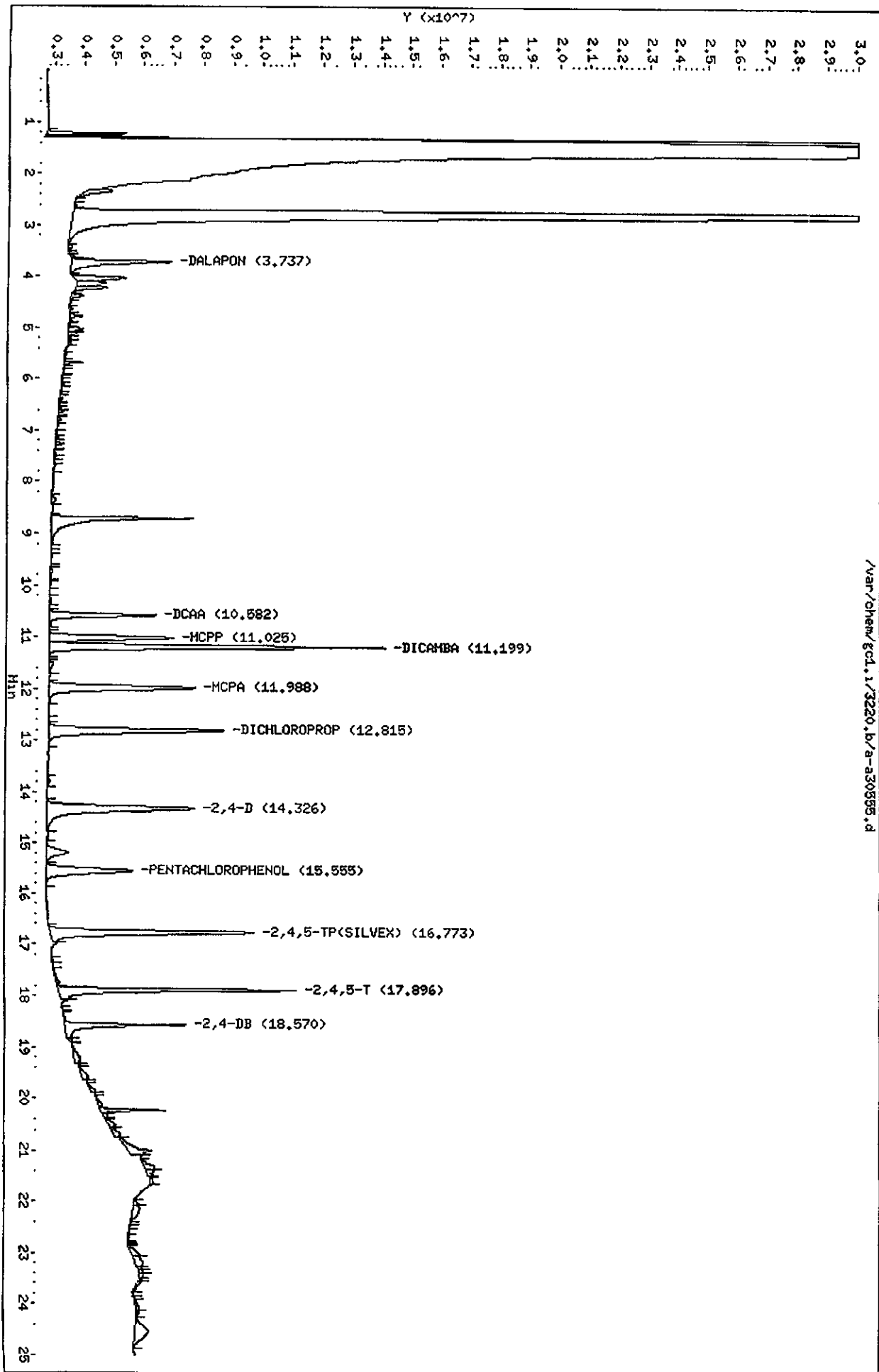
QC Flag Legend

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

661 438

Data File: /var/chem/gcl.i/3220.b/a-a30555.d
 Date : 23-JUN-2000 03:13
 Client ID: DF/SI/0165/GRABES
 Sample Info: DEMQV11A/3220.b
 Volume Injected (uL): 4.0
 Column phase: DB608

Instrument: gcl.i
 Operator: 01797
 Column diameter: 0.53



UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140185 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/14/00

Work Order: DEMQV11C

Date Extracted: 06/20/00

Dilution factor: 1

Date Analyzed: 06/23/00

Moisture %: 15

QC Batch: 0172432

Client Sample Id: DF/S1/0165/GRAB/002

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.188	
93-72-1	2,4,5-TP (Silvex)	0.0445	

661 440

Data File: /var/chem/gc1.i/3220.b/a-a30556.d

Report Date: 23-Jun-2000 09:19

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3220.b/a-a30556.d

Lab Smp Id: DEMQV11C

Client Smp ID: DF/S1/0165/GRAB2D

Inj Date : 23-JUN-2000 03:42

Operator : 01797

Inst ID: gc1.i

Smp Info : DEMQV11C,3220.b

Misc Info : 140185-1D

Comment :

Method : /var/chem/gc1.i/3220.b/LONGH.m

Meth Date : 23-Jun-2000 09:17 matkol

Quant Type: ESTD

Cal Date : 15-JUN-2000 15:14

Cal File: a-a30333.d

Als bottle: 26

QC Sample: MSD

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: all.sub

Target Version: 3.40

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (mg/L)
1 DALAPON	3.736	3.739	-0.003	3143912	0.03288	0.06576 (aR)
\$ 2 DCAA	10.581	10.586	-0.005	16311684	0.04912	0.09824 (a)
3 MCPP	11.025	11.030	-0.005	4067892	8.94235	17.88
4 DICAMBA	11.200	11.201	-0.001	11220822	0.04632	0.09263 (a)
5 MCPA	11.986	11.991	-0.005	4811408	8.86556	17.73
6 DICHLOROPROP	12.824	12.824	0.000	5709424	0.09027	0.1805 (a)
7 2,4-D	14.331	14.334	-0.003	37669273	0.09399	0.1880 (aR)
8 PENTACHLOROPHENOL	15.556	15.556	0.000	2980000	0.00491	0.009819 (a)
9 2,4,5-TP (SILVEX)	16.781	16.784	-0.003	41565909	0.02227	0.04453 (aR)
10 2,4,5-T	17.893	17.897	-0.004	33730365	0.02149	0.04298 (aR)
11 DINOSEB	18.066	18.076	-0.010	2175016	0.00155	0.003105 (a)
12 2,4-DB	18.570	18.572	-0.002	17228450	0.08929	0.1786 (a)

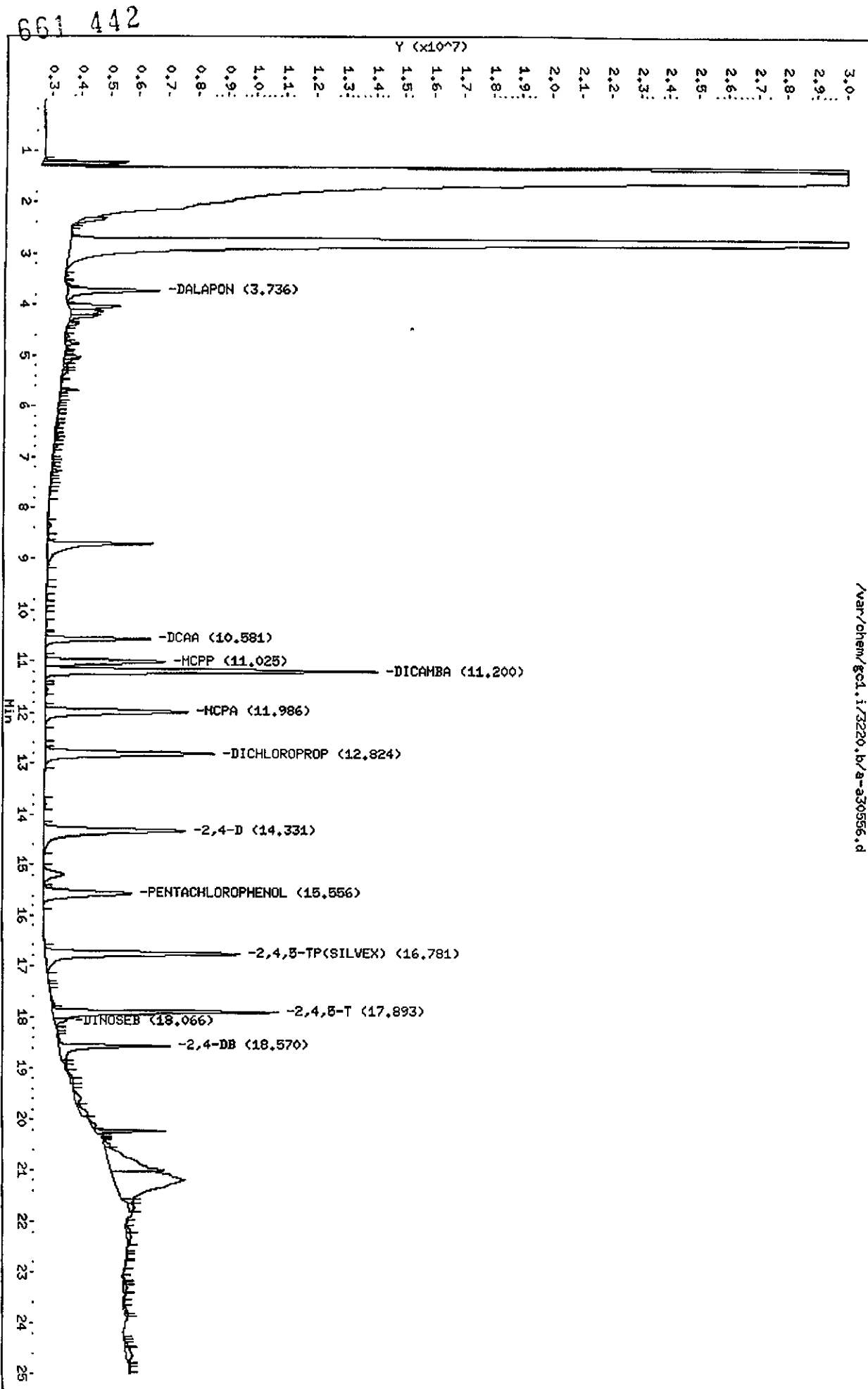
Data File: /var/chem/gc1.i/3220.b/a-a30556.d
Report Date: 23-Jun-2000 09:19

QC Flag Legend

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

Data File: /var/chem/gc1.i/3220.b/a-s30556.d
 Date: 23-JUN-2000 03:42
 Client ID: DF/SL/0165/GRAB2D
 Sample Info: DEHQV11C, 3220.b
 Volume Injected (uL): 1.0
 Column phase: DB608

Instrument: gc1.i
 Operator: 01797
 Column diameter: 0.53



**HERBICIDE
MISCELLANEOUS**

B#0172432

(Tip)

HAIXAVE

1044279

Submitted To Your Nicorette

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412 620-8780

417-830-8780

(Tip)

[illegible]

OP-00-0044

Created: DE 6/16/00

A

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information

1	1	RINSE
2	2	RINSE
3	3	190-80-1 329
4	4	190-80-2
5	5	190-80-3
6	6	190-80-4
7	7	190-80-5
8	8	020113001
9	9	020113001S 335
10	10	020113001D
11	11	020113003
12	12	020113004
13	13	020113005
14	14	020113006 340
15	15	020113008
16	16	020113009
17	17	020113011
18	18	020113013
19	19	020113016 345
20	20	020113017
21	21	020113018
22	22	020113BLK1
23	23	020113LCS1
24	24	020113002 350
25	25	020113007

✓ conf. req'd

Line	Vial	Vial Information
=====	=====	=====
26	26	020113BLK2
27	27	020113LCS2
28	28	190-80-3
29	29	020113007S 355
30	30	020113007D
31	31	020113010
32	32	020113012
33	33	020113014
34	34	020113015 360
35	35	080213001 /
36	36	080213BLK /
37	37	080213LCS
38	38	080213LCD
39	39	190-80-3 365
40	40	080213002
41	41	080213003
42	42	080213004
43	43	080213005
44	44	080213006 370
45	<u>45</u>	080213007
46	46	090143001
47	47	140138001
48	48	140138001S
49	<u>49</u>	140138001D 375
50	50	190-80-3
51	<u>51</u>	140138002
52	52	140138BLK
53	53	140138LCS

Line	Vial	Vial Information	
		=====	=====
661 448	54	54	090143-2 <i>380</i>
	55	55	090143-3
	56	56	090143-4
	57	57	090143-5
	58	58	090143-6
	59	59	100133-1 <i>385</i>
	60	60	100133-2
	61	61	190-80-3
	62	62	100133-3
	63	63	100133-4
	64	64	100133-5 <i>390</i>
	65	65	190-80-3

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
=====	=====	=====	=====	=====	=====	=====	=====
1	1	HEXANE	HERB	1	Sample		
2	2	HEXANE	HERB	1	Sample		
3	3	Lherb,3150A.b	HERB	1	Sample		
4	4	MLherb,3150A.b	HERB	1	Sample		
5	5	Mherb,3150A.b	HERB	1	Sample		
6	6	MHherb,3150A.b	HERB	1	Sample		
7	7	Hherb,3150A.b	HERB	1	Sample		
8	8	DE3DT105,3150A.b	HERB	1	Sample		
9	9	DE3DT134,3150A.b	HERB	1	Sample		
10	10	DE3DT135,3150A.b	HERB	1	Sample		
11	11	DE3DX105,3150A.b	HERB	1	Sample		
12	12	DE3E0105,3150A.b	HERB	1	Sample		
13	13	DE3E1105,3150A.b	HERB	1	Sample		
14	14	DE3E2105,3150A.b	HERB	1	Sample		
15	15	DE3E6105,3150A.b	HERB	1	Sample		
16	16	DE3E9105,3150A.b	HERB	1	Sample		
17	17	DE3EE105,3150A.b	HERB	1	Sample		
18	18	DE3EH105,3150A.b	HERB	1	Sample		
19	19	DE3EM105,3150A.b	HERB	1	Sample		
20	20	DE3EP105,3150A.b	HERB	1	Sample		
21	21	DE3EQ105,3150A.b	HERB	1	Sample		
22	22	DENP8101,3150A.b	HERB	1	Sample		
23	23	DENP8102,3150A.b	HERB	1	Sample		
24	24	DE3DW105,3150A.b	HERB	1	Sample		
25	25	DE3E5105,3150A.b	HERB	1	Sample		
26	26	DENPD101,3150A.b	HERB	1	Sample		
27	27	DENPD102,3150A.b	HERB	1	Sample		

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
28	28	Mherb,3150A.b	HERB	1	Sample		
29	29	DE3E511V,3150A.b	HERB	1	Sample		
30	30	DE3E511W,3150A.b	HERB	1	Sample		
31	31	DE3EC105,3150A.b	HERB	1	Sample		
32	32	DE3EG105,3150A.b	HERB	1	Sample		
33	33	DE3EJ105,3150A.b	HERB	1	Sample		
34	34	DE3EL105,3150A.b	HERB	1	Sample		
35	35	DEDDG101,3150A.b	HERB	1	Sample		
36	36	DENPF101,3150A.b	HERB	1	Sample		
37	37	DENPF102,3150A.b	HERB	1	Sample		
38	38	DENPF103,3150A.b	HERB	1	Sample		
39	39	Mherb,3150A.b	HERB	1	Sample		
40	40	DEDE3101,3150A.b	HERB	1	Sample		
41	41	DEDE8101,3150A.b	HERB	1	Sample		
42	42	DEDFT101,3150A.b	HERB	1	Sample		
43	43	DEDG2101,3150A.b	HERB	1	Sample		
44	44	DEDG5101,3150A.b	HERB	1	Sample		
45	45	DEFG7101,3150A.b	HERB	1	Sample		
46	46	DEF5D101,3150A.b	HERB	1	Sample		
47	47	DEMD6102,3150A.b	HERB	1	Sample		
48	48	DEMD6105,3150A.b	HERB	1	Sample		
49	49	DEMD6106,3150A.b	HERB	1	Sample		
50	50	Mherb,3150A.b	HERB	1	Sample		
51	51	DEMD7102,3150A.b	HERB	1	Sample		
52	52	DER56101,3150A.b	HERB	1	Sample		
53	53	DER56102,3150A.b	HERB	1	Sample		
54	54	DEF5H101,3150A.b	HERB	1	Sample		
55	55	DEF5M101,3150A.b	HERB	1	Sample		
56	56	DEF5Q101,3150A.b	HERB	1	Sample		
57	57	DEF5R101,3150A.b	HERB	1	Sample		
58	58	DEF5T101,3150A.b	HERB	1	Sample		
59	59	DEHC8101,3150A.b	HERB	1	Sample		
60	60	DEHC9101,3150A.b	HERB	1	Sample		
61	61	Mherb,3150A.b	HERB	1	Sample		
62	62	DEHCA101,3150A.b	HERB	1	Sample		
63	63	DEHCD101,3150A.b	HERB	1	Sample		
64	64	DEHCF101,3150A.b	HERB	1	Sample		
65	65	Mherb,3150A.b	HERB	1	Sample		

Sequence Table (Back Injector):

No entries - empty table!

661 450

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information

Line	Vial	Vial Information
1	2	RINSE
2	3	~~190-80-1~~ 532
3	4	~~190-80-2~~ 533
4	5	190-80-3 534
5	6	~~190-80-4~~ 535
6	7	~~190-80-5~~ 536
7	8	✓200146BLK 537
8	9	200146LCS 538
9	10	200146001S 539
10	11	200146001D 540
11	12	200146001 541
12	13	200146002 542
13	14	200146003 543
14	15	210146-1 544
15	16	210146-2 545
16	17	210146-3 546
17	18	210146-4 547
18	19	✓210146-5 548
19	20	210146-6 549
20	21	210146-7 550
21	22	✓170111-1 551
22	2	RINSE 552
23	23	140185BLK 553
24	24	140185LCS 554
25	25	140185001S 555

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✓-CONF

11/11/00

✓
DE
67300

Line	Vial	Vial Information
====	====	=====
26	26	140185001D 556
27	27	190-80-3 557
28	28	140185001 558
29	29	140185002 559
30	30	140185005 560
31	31	140185004 561
32	32	150235-BLK 562
33	33	150235-LCS 563
34	34	150235-LCD 564
35	35	150235-001 565
36	36	150235-003 566
37	37	150235-005 567
38	38	150235-007 568
39	39	150235-009 569
40	40	150235-011 570
41	41	160264BLK 571
42	42	160264LCS 572
43	43	160264LCD 573
44	44	160264001 574
45	45	160264003 575
46	46	160264005
47	47	160264007
48	48	190-80-3
49	51	140214BLK
50	53	140214007S
51	54	140214007D
52	61	140214007
53	62	140214008

661 452

Line Vial Vial Information

```

=====
Line Vial Vial Information
=====
54 48 190-80-3

```

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
=====	=====	=====	=====	=====	=====	=====	=====
1	2	HEXANE	HERB	1	Sample		
2	3	Lherb,3220.b	HERB	1	Sample		
3	4	MLherb,3220.b	HERB	1	Sample		
4	5	Mherb,3220.b	HERB	1	Sample		
5	6	MHherb,3220.b	HERB	1	Sample		
6	7	Hherb,3220.b	HERB	1	Sample		
7	8	DF3XQ101,3220.b	HERB	1	Sample		
8	9	DF3XQ102,3220.b	HERB	1	Sample		
9	10	DF0J5103,3220.b	HERB	1	Sample		
10	11	DF0J5104,3220.b	HERB	1	Sample		
11	12	DF0J5102,3220.b	HERB	1	Sample		
12	13	DF0J7102,3220.b	HERB	1	Sample		
13	14	DF0J9102,3220.b	HERB	1	Sample		
14	15	DF2E0102,3220.b	HERB	1	Sample		
15	16	DF2E6102,3220.b	HERB	1	Sample		
16	17	DF2E7102,3220.b	HERB	1	Sample		
17	18	DF2E8102,3220.b	HERB	1	Sample		
18	19	DF2E9102,3220.b	HERB	1	Sample		
19	20	DF2EA102,3220.b	HERB	1	Sample		
20	21	DF2EC102,3220.b	HERB	1	Sample		
21	22	DEVTW11D,3220.b	HERB	1	Sample		
22	2	HEXANE	HERB	1	Sample		
23	23	DF1L6101,3220.b	HERB	1	Sample		
24	24	DF1L6102,3220.b	HERB	1	Sample		
25	25	DEMQV11A,3220.b	HERB	1	Sample		
26	26	DEMQV11C,3220.b	HERB	1	Sample		
27	27	Mherb,3220.b	HERB	1	Sample		
28	28	DEMQV105,3220.b	HERB	1	Sample		
29	29	DEMR4105,3220.b	HERB	1	Sample		
30	30	DEMR6105,3220.b	HERB	1	Sample		
31	31	DEMR7105,3220.b	HERB	1	Sample		
32	32	DF1KV101,3220.b	HERB	1	Sample		
33	33	DF1KV102,3220.b	HERB	1	Sample		
34	34	DF1KV103,3220.b	HERB	1	Sample		
35	35	DEQHP11P,3220.b	HERB	1	Sample		
36	36	DEQKM11R,3220.b	HERB	1	Sample		
37	37	DEQL011P,3220.b	HERB	1	Sample		
38	38	DEQLE11P,3220.b	HERB	1	Sample		
39	39	DEQLV11P,3220.b	HERB	1	Sample		
40	40	DEQMW11W,3220.b	HERB	1	Sample		
41	41	DF014101,3220.b	HERB	1	Sample		
42	42	DF014102,3220.b	HERB	1	Sample		
43	43	DF014103,3220.b	HERB	1	Sample		
44	44	DEV2H11L,3220.b	HERB	1	Sample		
45	45	DEV3L11L,3220.b	HERB	1	Sample		
46	46	DEV3R11L,3220.b	HERB	1	Sample		
47	47	DEV4311L,3220.b	HERB	1	Sample		
48	48	Mherb,3220.b	HERB	1	Sample		
49	51	DER6G101,3220A.b	HERB	1	Sample		

PSR024 6/20/00 13:39:35 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

REQUESTED BY: YUSHINSC

METHOD: QS Herbicides (8151A)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12B CLP1	DEMQV-1-05	___	242622	399411	A-64-QS	COF140185	001		SOLID	0	3 1
12B CLP1	DEMR4-1-05	___	242623	399411	A-64-QS	COF140185	002		SOLID	0	3 1
12B CLP1	DEMR6-1-05	___	242624	399411	A-64-QS	COF140185	003		SOLID	0	3 1
12B CLP1	DEMR7-1-05	___	242625	399411	A-64-QS	COF140185	004		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>[Signature]</i>	<i>[Signature]</i>	6-20-00 1540
<i>[Signature]</i>	<i>[Signature]</i>	6-20-00 2200

***** END OF REPORT *****

661 454

METALS DATA

**METALS
RESULTS**

STL-Pittsburgh**Cover Page - Inorganic Analysis Data Package**

<u>Client ID</u>	<u>Lab Sample ID:</u>
<u>DF/S1/0165/GRAB/002</u>	<u>DEMOV</u>
<u>DF/S1/0165/GRAB/002D</u>	<u>DEMOVD</u>
<u>DF/S1/0165/GRAB/002S</u>	<u>DEMQVS</u>
<u>DF/S1/0165/SDC/010</u>	<u>DEMR4</u>
<u>DF/S1/0165/SDC/011</u>	<u>DEMR6</u>
<u>DF/S1/0165/SDC/012</u>	<u>DEMR7</u>

Comments: UXB, DUNN FIELD
C0F140185
6010B

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

Signature: _____

Name: _____

Date: _____

Title: _____

Version 3.63.4

Cover Page Equivalent

REVIEWED BY: <u>mrw</u>
DATE: <u>6-19-00</u>

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMQV Client ID: DF/S1/0165/GRAB/002
Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189
Weight: 1.0 Volume: 100 Percent Moisture: 14.77

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	9.7		1	ICPST	6/17/00	14:33

Comments: Lot# C0F140185 Sample#: 1

Version 3 63.4

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

661 458

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMUR4 Client ID: DF/S1/0165/SDC/010
Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189
Weight: 1.0 Volume: 100 Percent Moisture: 15.31

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	9.7		1	ICPST	6/17/00	14:50

Comments: Lot#. C0F140185 Sample#: 2

Version 3.63.4

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR6 Client ID: DF/S1/0165/SDC/011
Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189
Weight: 1.0 Volume: 100 Percent Moisture: 14.38

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	10.1		1	ICPST	6/17/00	14:54

Comments: Lot#: C0F140185 Sample# 3

Version 3 63.4

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

661 460

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR7 Client ID: DF/S1/0165/SDC/012
Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189
Weight: 1.0 Volume: 100 Percent Moisture: 13.77

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	8.6		1	ICPST	6/17/00	14:58

Comments: Lot#: C0F140185 Sample#: 4

Version 3 63.4

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

Metals Data Reporting Form

Initial Calibration Verification StandardInstrument: ICPSTUnits: ug/LChart Number: T00617A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-110-4

Element	WL/ Mass	True Conc	ICV3-1 6/17/00 12:35 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	250.0	251.94	100.8								

661 462

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPSTUnits: ug/LChart Number: T00617A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-131-1

Element	WL/ Mass	True Conc	CCV3-1 6/17/00 1:27 PM		CCV3-2 6/17/00 2:17 PM		CCV3-3 6/17/00 3:02 PM			
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	500.0	511.53	102.3	510.33	102.1	513.44	102.7		

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00617A.ARC

Standard Source: _____

Standard ID: _____

			ICB1 6/17/00 12:39 PM					
Element	WL/ Mass	Report Limit	Found	O	Found	O	Found	O
Arsenic	189.042	10	2.6	U				

661-464

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00617A ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 6/17/00 1:31 PM	CCB2 6/17/00 2:21 PM	CCB3 6/17/00 3:06 PM		
			Found O	Found O	Found O	Found O	Found O
Arsenic	189.042	10	2.6 U	2.6 U	2.6 U		

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DERX4BMatrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189Weight: 10 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	0.26	10	0.26	U	1	ICPST	6/17/00	14:25

Comments: _____

STL-Pittsburgh

661 466

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST

Units: ug/L

Chart Number: T00617A ARC

Acceptable Range: 0% - 0%

Standard Source: Inorganic Ventures

Standard ID: 0014-129-11

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 6/17/00 12:43 PM	Found	Found	Found	Found
				Found				
Arsenic	189.042	10		2				

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPSTUnits: ug/LChart Number: T00617A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-136-3

			ICSAB 6/17/00 12:47 PM							
Element	WL/ Mass	True Conc	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	1007.1	100.7						

STL-Pittsburgh

661 468

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DEMQVS

Original Sample ID: DEMQV Client ID: DF/S1/0165/GRAB/002S

Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189

Weight: 10 Volume: 100 Percent Moisture: 14.77

Element	WL/ Mass	OS Conc	O	MS Conc	O	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	97		214		234.66	87.1	1	1	ICPST	6/17/00	14:33	6/17/00	14:42

Comments _____

Version 3.63.4

- U Result is less than the MDL
- B Result is between MDL and RL
- N Spike recovery failed
- NC Percent recovery was not calculated
- * Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DEMQVDOriginal Sample ID: DEMQV Client ID: DF/S1/0165/GRAB/002DMatrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189Weight: 1.0 Volume: 100 Percent Moisture: 14.77

Element	WL/ Mass	OS Conc	O	MSD Conc	O	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189.0	9.7		237		234.66	96.9	1	1	ICPST	6/17/00	14:33	6/17/00	14:46

Comments _____

Version 3.63 4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

661 470

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DEMQVDMatrix Spike Sample ID: DEMQVS Client ID: DF/S1/0165/GRAB/002DMatrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189Weight: 1.0 Volume: 100 Percent Moisture: 14.77

Element	WL/ Mass	MS Conc	O	MSD Conc	O	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189 042	214		237		10.7 %	1	1	ICPST	6/17/00	14:42	6/17/00	14:46

Comments: _____

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DERX4CMatrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189Weight: 1.0 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	200	219	109.7		80-120	1	ICPST	6/17/00	14:29

Comments: _____

Version 3.63.4

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

STL-Pittsburgh

661 472

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DEMQVPOriginal Sample ID: DEMQV Client ID: DF/S1/0165/GRAB/002Matrix: Soil Units: mg/kg Prep Date: 6/16/00 Prep Batch: 0168189Weight: 1.0 Volume: 100 Percent Moisture: 14.77

Element	WL/ Mass	OS Conc	O	Serial Dilution Conc	O	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	9.7		11.5			1	5	ICPST	6/17/00	14:33	6/17/00	14:37

Comments: _____

Version 3.63.4

- U Result is less than the MDL
 B Result is between MDL and RL
 E Serial dilution percent difference not within limits

Form 9 Equivalent

STL Pittsburgh

5019

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection LimitsInstrument: ICPSTUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	189.04	10	2.6	4/1/00

661 474

STL-Pittsburgh

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPSTDate of IEC's: 6/15/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(0.000457), Se(0.00001), Tl(-0.00002)
Aluminum	308.215	Pb(-0.000157), Se(0.000011)
Chromium	267.716	Sb(0.006664)
Chromium	267.716	As(-0.002441), Sb(0.010481)
Cobalt	228.616	Se(-0.000324)
Cobalt	228.616	Cd(-0.000111), Fe(0.08869), Ni(-0.00066), Se(0.000351), Tl(0.002179)
Iron	271.441	Cd(0.00009), Pb(0.000107), Sb(0.000019), Se(-0.000024), V(-0.000349), Zn(0.000127)
Iron	271.441	Pb(0.000054), Sb(0.000021), Se(-0.000313)
Magnesium	279.078	Fe(-0.000306)
Manganese	257.61	Tl(-0.006029)
Molybdenum	202.03	Pb(-0.00068), Sb(-0.009237)
Molybdenum	202.03	Al(0.011136), As(-0.002441), Cr(-0.000312), Pb(-0.000307), Sb(-0.002657)
Nickel	231.604	Pb(0.000247), Sb(-0.000886), Zn(0.004557)
Nickel	231.604	Pb(0.000124)
Vanadium	292.402	Al(0.02185), Be(-0.0083), Cr(-0.000183), Fe(0.007812), Sb(-0.007991), Se(0.000216), Tl(0.001386)
Vanadium	292.402	Pb(-0.000475), Se(0.000099)

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189 04	10000	6/15/00

STL-Pittsburgh

661 476

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0168189 Instrument: ICP Matrix: Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DERX4B	6/16/00	1.0	100	NA
DERX4C	6/16/00	1.0	100	NA
DEMQV	6/16/00	1.0	100	14.77
DEMQVD	6/16/00	1.0	100	14.77
DEMQVS	6/16/00	1.0	100	14.77
DEMR4	6/16/00	1.0	100	15.31
DEMR6	6/16/00	1.0	100	14.38
DEMR7	6/16/00	1.0	100	13.77

STL-Pittsburgh
Metals Data Reporting Form

661 477

Instrument Runlog

Instrument: ICPST

Chart Number: T00617A.ARC

Sample Name	Date of Analysis	Time of Analysis
STD1	6/17/00	12:18 PM
STD1	6/17/00	12:23 PM
STD6	6/17/00	12:27 PM
STD7	6/17/00	12:31 PM
ICV3-1	6/17/00	12:35 PM
ICB1	6/17/00	12:39 PM
ICSA	6/17/00	12:43 PM
ICSAB	6/17/00	12:47 PM
ZZZZZZ	6/17/00	12:54 PM
ZZZZZZ	6/17/00	12:58 PM
ZZZZZZ	6/17/00	1:02 PM
ZZZZZZ	6/17/00	1:06 PM
ZZZZZZ	6/17/00	1:10 PM
ZZZZZZ	6/17/00	1:14 PM
ZZZZZZ	6/17/00	1:19 PM
ZZZZZZ	6/17/00	1:23 PM
CCV3-1	6/17/00	1:27 PM
CCB1	6/17/00	1:31 PM
ZZZZZZ	6/17/00	1:35 PM
ZZZZZZ	6/17/00	1:39 PM
ZZZZZZ	6/17/00	1:43 PM
ZZZZZZ	6/17/00	1:48 PM
ZZZZZZ	6/17/00	1:52 PM
ZZZZZZ	6/17/00	1:56 PM
ZZZZZZ	6/17/00	2:00 PM
ZZZZZZ	6/17/00	2:04 PM
ZZZZZZ	6/17/00	2:08 PM
ZZZZZZ	6/17/00	2:12 PM
CCV3-2	6/17/00	2:17 PM
CCB2	6/17/00	2:21 PM
DERX4B	6/17/00	2:25 PM
DERX4C	6/17/00	2:29 PM
DEMQV	6/17/00	2:33 PM
DEMQVP	6/17/00	2:37 PM
DEMQVS	6/17/00	2:42 PM
DEMQVD	6/17/00	2:46 PM
DEMR4	6/17/00	2:50 PM
DEMR6	6/17/00	2:54 PM
DEMR7	6/17/00	2:58 PM
CCV3-3	6/17/00	3:02 PM
CCB3	6/17/00	3:06 PM

STL-Pittsburgh

Metals Data Reporting Form

661 478

Instrument Runlog

Instrument: ICPST

Chart Number: T00617A.ARC

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	6/17/00	3:12 PM
ZZZZZZ	6/17/00	3:16 PM
ZZZZZZ	6/17/00	3:20 PM
ZZZZZZ	6/17/00	3:24 PM
ZZZZZZ	6/17/00	3:28 PM
ZZZZZZ	6/17/00	3:32 PM
ZZZZZZ	6/17/00	3:37 PM

**METALS
RAW DATA**

COFIDORS 661 480

Analysis Report WCB Averages

06/17/00 03:47:02 PM

page 2

Sample Name AS
TAMU JED 6-17-00

1	STD1	-.01072
2	STD6	6.71855
3	STD7	
4	ICV3-1 0014-110-4	.25194
5	ICB1	.00089
6	ICSA 0014-129-11	.00202
7	ICSAB 0014-136-3	1.0071
8	DEERHB	.00039
9	DEERHC	2.0039
10	DEE0M	.06050
11	DEE0MP5	.01320
12	DEE0MS	1.9536
13	DEE0MD	1.9491
14	DEE16	.01369
15	DEE18	.02341
16	CCV3-1 0014-131-1	.51153
17	CCB1	.00088
18	DEE1A	.01353
19	DEE1C	.02005
20	DEE1F	.05702
21	DEE1K	.00994
22	DEE1L	.01374
23	DEE1M	.01842
24	DEE1N	.01366
25	DEDR6	.43279
26	DEDTD	.12422
27	DEDTQ	.50845
28	CCV3-2	.51033
29	CCB2	.00172
30	DERX4B	.00089
31	DERX4C	2.1941
32	DEMQV	.08284
33	DEMQVP5	.01962
34	DEMQVS	1.8246
35	DEMQVD	2.0210
36	DEMR4	.08187
37	DEMR6	.08618
38	DEMR7	.07449
39	CCV3-3	.51344
40	CCB3	.00159
41	DEJ6G/2 (Int Std)	.00729
42	DEJ6G/5 (Int Std)	.00498
43	DEDR6/5 Mn	.09300
44	DEDTD/2 Mn	.06539
45	DEDTQ/10 Mn	.05459
46	CCV3-4	.51540
47	CCB4	.00071

R66170

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T00617A	METTRA	06/17/00	12:23		X	IR
2	STD6	T00617A	METTRA	06/17/00	12:27		X	IR
3	STD7	T00617A	METTRA	06/17/00	12:31		X	IR
4	ICV3-1 0014-110-4	T00617A	METTRA	06/17/00	12:35	RJG	S	CONC
5	ICB1	T00617A	METTRA	06/17/00	12:39	RJG	S	CONC
6	ICSA 0014-129-11	T00617A	METTRA	06/17/00	12:43	RJG	Q	CONC
7	ICSAB 0014-136-3	T00617A	METTRA	06/17/00	12:47	RJG	Q	CONC
8	DEERHB	T00617A	METTRA	06/17/00	12:54	RJG	S	CONC
9	DEERHC	T00617A	METTRA	06/17/00	12:58	RJG	S	CONC
10	DEE0M	T00617A	METTRA	06/17/00	13:02	RJG	S	CONC
11	DEE0MP5	T00617A	METTRA	06/17/00	13:06	RJG	S	CONC
12	DEE0MS	T00617A	METTRA	06/17/00	13:10	RJG	S	CONC
13	DEE0MD	T00617A	METTRA	06/17/00	13:14	RJG	S	CONC
14	DEE16	T00617A	METTRA	06/17/00	13:19	RJG	S	CONC
15	DEE18	T00617A	METTRA	06/17/00	13:23	RJG	S	CONC
16	CCV3-1 0014-131-1	T00617A	METTRA	06/17/00	13:27	RJG	S	CONC
17	CCB1	T00617A	METTRA	06/17/00	13:31	RJG	S	CONC
18	DEE1A	T00617A	METTRA	06/17/00	13:35	RJG	S	CONC
19	DEE1C	T00617A	METTRA	06/17/00	13:39	RJG	S	CONC
20	DEE1F	T00617A	METTRA	06/17/00	13:43	RJG	S	CONC
21	DEE1K	T00617A	METTRA	06/17/00	13:48	RJG	S	CONC
22	DEE1L	T00617A	METTRA	06/17/00	13:52	RJG	S	CONC
23	DEE1M	T00617A	METTRA	06/17/00	13:56	RJG	S	CONC
24	DEE1N	T00617A	METTRA	06/17/00	14:00	RJG	S	CONC
25	DEDR6	T00617A	METTRA	06/17/00	14:04	RJG	S	CONC
26	DEDTD	T00617A	METTRA	06/17/00	14:08	RJG	S	CONC
27	DEDTQ	T00617A	METTRA	06/17/00	14:12	RJG	S	CONC
28	CCV3-2	T00617A	METTRA	06/17/00	14:17	RJG	S	CONC
29	CCB2	T00617A	METTRA	06/17/00	14:21	RJG	S	CONC
30	DERX4B	T00617A	METTRA	06/17/00	14:25	RJG	S	CONC
31	DERX4C	T00617A	METTRA	06/17/00	14:29	RJG	S	CONC
32	DEMQV	T00617A	METTRA	06/17/00	14:33	RJG	S	CONC
33	DEMQVP5	T00617A	METTRA	06/17/00	14:37	RJG	S	CONC
34	DEMQVS	T00617A	METTRA	06/17/00	14:42	RJG	S	CONC
35	DEMQVD	T00617A	METTRA	06/17/00	14:46	RJG	S	CONC
36	DEMR4	T00617A	METTRA	06/17/00	14:50	RJG	S	CONC
37	DEMR6	T00617A	METTRA	06/17/00	14:54	RJG	S	CONC
38	DEMR7	T00617A	METTRA	06/17/00	14:58	RJG	S	CONC
39	CCV3-3	T00617A	METTRA	06/17/00	15:02	RJG	S	CONC
40	CCB3	T00617A	METTRA	06/17/00	15:06	RJG	S	CONC
41	DEJ6G/2 (Int Std)	T00617A	METTRA	06/17/00	15:12	RJG	S	CONC
42	DEJ6G/5 (Int Std)	T00617A	METTRA	06/17/00	15:16	RJG	S	CONC
43	DEDR6/5 Mn	T00617A	METTRA	06/17/00	15:20	RJG	S	CONC
44	DEDTD/2 Mn	T00617A	METTRA	06/17/00	15:24	RJG	S	CONC
45	DEDTQ/10 Mn	T00617A	METTRA	06/17/00	15:28	RJG	S	CONC
46	CCV3-4	T00617A	METTRA	06/17/00	15:32	RJG	S	CONC
47	CCB4	T00617A	METTRA	06/17/00	15:37	RJG	S	CONC

Method: METTRA Standard: STD1
Run Time: 06/17/00 12:23:10

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	-.00026	.11315	-.01073	.00063	-.06681	.00388	-.00118
SDev	.00046	.00856	.00244	.00039	.00155	.00037	.00126
%RSD	176.85	7.5641	22.705	61.744	2.3148	9.5498	106.60
#1	-.00058	.11920	-.01245	.00036	-.06571	.00362	-.00029
#2	.00006	.10710	-.00901	.00091	-.06790	.00415	-.00207
Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00197	.00207	.01228	-.00023	-.00074	.00152	.00120
SDev	.00013	.00073	.00127	.00096	.00041	.00014	.00004
%RSD	6.8332	35.470	10.369	425.24	55.235	9.1486	3.7001
#1	-.00207	.00155	.01138	-.00091	-.00103	.00142	.00123
#2	-.00188	.00259	.01318	.00045	-.00045	.00162	.00117
Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	-.00026	.03080	-.01693	-.05519	.01274	-.10776	.08474
SDev	.00037	.01635	.00464	.00652	.01353	.01739	.00779
%RSD	141.42	53.077	27.428	11.817	106.19	16.136	9.1969
#1	-.00052	.04236	-.01365	-.05058	.02231	-.09546	.07923
#2	.00000	.01924	-.02021	-.05980	.00317	-.12006	.09025
Elem	TL	V	ZN				
Avge	-.04399	.00000	-.00010				
SDev	.00175	.00000	.00000				
%RSD	3.9724	.00000	.12221				
#1	-.04275	.00000	-.00010				
#2	-.04522	.00000	-.00010				

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15448	--	--	--	--	--	--
SDev	18.87989	--	--	--	--	--	--
%RSD	.1222169	--	--	--	--	--	--
#1	15461	--	--	--	--	--	--
#2	15434	--	--	--	--	--	--

Method: METTRA Standard: STD6
Run Time: 06/17/00 12:27:21

00140878

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	11.989	6.7186	17.785	7.0382	9.2867	11.142	7.3737
SDev	.029	.0115	.017	.0109	.0046	.017	.0145
%RSD	.23793	.17129	.09698	.15510	.04931	.14832	.19671

#1	11.968	6.7104	17.773	7.0459	9.2899	11.130	7.3634
#2	12.009	6.7267	17.797	7.0304	9.2834	11.153	7.3839

Elem	SE/1	SE/2	TL
Avge	6.3022	6.1034	5.0287
SDev	.0020	.0571	.0085
%RSD	.03168	.93551	.16972

#1	6.3008	6.0630	5.0227
#2	6.3036	6.1438	5.0348

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15498	--	--	--	--	--	--
SDev	50.91169	--	--	--	--	--	--
%RSD	.3285038	--	--	--	--	--	--
#1	15534	--	--	--	--	--	--
#2	15462	--	--	--	--	--	--

Standardization Rpt.

06/17/00 12:35:08 PM

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Method: METTRA Standard: STD7
Run Time: 06/17/00 12:31:32

0014.0879

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	7.4480	13.481	15.071	6.0952	3.8435	14.845	3.5772
SDev	.0276	.045	.044	.0266	.0130	.059	.0092
%RSD	.37034	.33680	.29150	.43600	.33741	.40054	.25642
#1	7.4675	13.513	15.103	6.1140	3.8526	14.887	3.5837
#2	7.4285	13.449	15.040	6.0765	3.8343	14.803	3.5708
Elem	FE	MG	MN	MO	NI	V	ZN
Avge	4.9555	17.116	12.267	2.7759	3.1313	.96781	3.7683
SDev	.0174	.070	.049	.0089	.0048	.00348	.0121
%RSD	.35079	.40816	.39611	.32100	.15348	.35987	.32199
#1	4.9678	17.166	12.302	2.7696	3.1347	.97027	3.7769
#2	4.9432	17.067	12.233	2.7822	3.1279	.96534	3.7597
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15389	--	--	--	--	--	--
SDev	62.68529	--	--	--	--	--	--
%RSD	.4073509	--	--	--	--	--	--
#1	15344	--	--	--	--	--	--
#2	15433	--	--	--	--	--	--

Method: METTRA

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.166823	.000043	06/17/00 12:31:32
AL	308.215	STD7	STD1	6.83475	-.773350	06/17/00 12:31:32
AS	189.042	STD6	STD1	.148604	.001594	06/17/00 12:31:32
BA	493.409	STD7	STD1	.296721	-.000187	06/17/00 12:31:32
BE	313.042	STD7	STD1	.262038	.017506	06/17/00 12:31:32
CA	317.933	STD7	STD1	16.4167	-.063767	06/17/00 12:31:32
CD	226.502	STD6	STD1	.056223	.000066	06/17/00 12:31:32
CO	228.616	STD7	STD1	1.04020	.002054	06/17/00 12:31:32
CR	267.716	STD7	STD1	.269350	-.000558	06/17/00 12:31:32
CU	324.753	STD7	STD1	1.12203	-.013783	06/17/00 12:31:32
FE	271.441	STD7	STD1	10.1610	.002296	06/17/00 12:31:32
MG	279.078	STD7	STD1	5.84213	.004348	06/17/00 12:31:32
MN	257.610	STD7	STD1	.326111	-.000496	06/17/00 12:31:32
MO	202.030	STD7	STD1	1.44161	-.001726	06/17/00 12:31:32
NI	231.604	STD7	STD1	1.27646	.000330	06/17/00 12:31:32
PB/1	220.351	STD6	STD1	.142707	-.004396	06/17/00 12:31:32
PB/2	220.352	STD6	STD1	.107485	.001820	06/17/00 12:31:32
PB	220.353	NONE	NONE	.000000	.000000	06/17/00 12:31:32
SB/1	206.831	STD6	STD1	.089311	.004929	*NOT STANDARDIZED
SB/2	206.832	STD6	STD1	.135852	-.001731	06/17/00 12:31:32
SB	220.353	NONE	NONE	.000000	.000000	06/17/00 12:31:32
SE/1	196.021	STD6	STD1	.156007	.016811	*NOT STANDARDIZED
SE/2	196.022	STD6	STD1	.166151	-.014080	06/17/00 12:31:32
SE	220.353	NONE	NONE	.000000	.000000	06/17/00 12:31:32
TL	190.864	STD6	STD1	.394265	.017343	*NOT STANDARDIZED
V	292.402	STD7	STD1	4.11502	.000000	06/17/00 12:31:32
ZN	213.856	STD7	STD1	1.06799	.000104	06/17/00 12:31:32

Analysis Report

06/17/00 12:39:18 PM

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page 1

Method: METTRA Sample Name: ICV3-1 0014-110-4 Operator: RJG
 Run Time: 06/17/00 12:35:12
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50099	11.832	.25194	.98677	.98505	24.954	.24541
SDev	.00454	.113	.00307	.00881	.01070	.256	.00264
%RSD	.90543	.95481	1.2164	.89226	1.0866	1.0276	1.0759
#1	.50420	11.912	.25411	.99300	.99261	25.135	.24728
#2	.49779	11.752	.24977	.98054	.97748	24.773	.24354
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	13.750	.27500	1.1000	1.1000	27.500	.27500
Low	.45000	11.250	.22500	.90000	.90000	22.500	.22500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0118	1.0133	.96169	12.415	24.051	.98408	1.0183
SDev	.0081	.0105	.00931	.101	.230	.00923	.0079
%RSD	.80035	1.0409	.96803	.81150	.95753	.93805	.77530
#1	1.0175	1.0207	.96827	12.486	24.214	.99060	1.0239
#2	1.0061	1.0058	.95511	12.343	23.888	.97755	1.0127
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	13.750	27.500	1.1000	1.1000
Low	.90000	.90000	.90000	11.250	22.500	.90000	.90000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0057	.25202	.24940	.25027	.25397	.25007	.25137
SDev	.0089	.00194	.00303	.00267	.00521	.00049	.00141
%RSD	.88096	.76937	1.2142	1.0650	2.0528	.19602	.56059
#1	1.0119	.25339	.25154	.25216	.25766	.24972	.25237
#2	.99940	.25065	.24726	.24839	.25029	.25042	.25037
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	1.1000			.27500			.27500
Low	.90000			.22500			.22500
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.25431	.25510	.25484	.49984	.99488	1.0219	
SDev	.00092	.00553	.00400	.00590	.01068	.0114	
%RSD	.36183	2.1689	1.5684	1.1794	1.0730	1.1203	
#1	.25496	.25902	.25766	.50401	1.0024	1.0300	
#2	.25366	.25119	.25201	.49567	.98733	1.0138	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.27500	.55000	1.1000	1.1000	
Low			.22500	.45000	.90000	.90000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15670	--	--	--	--	--	--
SDev	74.31664	--	--	--	--	--	--
%RSD	.4742486	--	--	--	--	--	--
#1	15618	--	--	--	--	--	--
#2	15723	--	--	--	--	--	--

Analysis Report

06/17/00 12:43:28 PM

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Method: METTRA Sample Name: ICB1

Operator: RJG

Run Time: 06/17/00 12:39:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	-.05086	.00089	.00047	.00024	.04466	.00012
SDev	.00009	.00760	.00015	.00018	.00016	.00399	.00018
%RSD	38.307	14.953	16.742	38.323	69.291	8.9260	144.35
#1	.00028	-.04548	.00079	.00034	.00012	.04184	-.00000
#2	.00016	-.05623	.00100	.00060	.00035	.04748	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00145	.00009	.00237	.00280	.00907	.00060	.00523
SDev	.00067	.00022	.00046	.00829	.00238	.00008	.00076
%RSD	46.328	246.92	19.513	296.75	26.291	14.006	14.525
#1	.00097	-.00007	.00204	-.00307	.00738	.00054	.00577
#2	.00192	.00024	.00269	.00866	.01076	.00066	.00469
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00112	-.00009	.00097	.00062	.00185	-.00151	-.00039
SDev	.00135	.00066	.00085	.00035	.00097	.00268	.00146
%RSD	120.36	722.66	87.464	56.268	52.752	177.88	375.24
#1	.00207	.00037	.00037	.00037	.00116	.00039	.00064
#2	.00017	-.00056	.00157	.00086	.00253	-.00340	-.00142
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00058	-.00092	-.00081	-.00201	.00173	.00271	
SDev	.00092	.00162	.00077	.00240	.00244	.00012	
%RSD	157.58	176.11	95.881	119.65	141.51	4.2356	
#1	-.00123	.00023	-.00026	-.00031	-.00000	.00263	
#2	.00007	-.00207	-.00136	-.00371	.00346	.00279	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15442	--	--	--	--	--	--
SDev	74.59976	--	--	--	--	--	--
%RSD	.4831059	--	--	--	--	--	--
#1	15389	--	--	--	--	--	--
#2	15494	--	--	--	--	--	--

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Analysis Report

QC Standard

06/17/00 12:47:38 PM

Method: METTRA Sample Name: ICSA 0014-129-11 Operator: RJG
 Run Time: 06/17/00 12:43:32
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	522.08	.00202	.00191	-.00098	488.11	-.00110
SDev	.00004	2.68	.00075	.00006	.00010	2.93	.00013
%RSD	75.127	.51298	37.148	3.2023	10.400	.59989	11.575
#1	-.00008	523.97	.00149	.00196	-.00091	490.18	-.00101
#2	-.00002	520.18	.00256	.00187	-.00105	486.04	-.00119
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		500.00				500.00	
Range		20.000				20.000	
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00129	.00175	.00217	202.51	526.41	.00795	-.00109
SDev	.00007	.00033	.00026	.82	2.81	.00008	.00104
%RSD	5.7139	19.078	12.177	.40553	.53417	1.0391	95.198
#1	.00124	.00199	.00198	203.09	528.40	.00800	-.00036
#2	.00135	.00151	.00236	201.93	524.42	.00789	-.00182
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK	NOCHECK
Value				200.00	500.00		
Range				20.000	20.000		
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00232	.04376	-.02168	.00012	.00451	-.00070	.00103
SDev	.00159	.00098	.00098	.00033	.00311	.00382	.00151
%RSD	68.469	2.2420	4.5363	285.18	68.977	543.26	146.82
#1	.00345	.04307	-.02098	.00035	.00231	.00200	.00210
#2	.00120	.04446	-.02237	-.00012	.00670	-.00341	-.00004
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00140	.00131	.00041	-.00786	.00989	-.00132	
SDev	.00826	.00132	.00187	.00425	.00017	.00011	
%RSD	588.76	100.45	457.22	54.108	1.7325	8.4898	
#1	.00444	.00038	.00173	-.00485	.01002	-.00124	
#2	-.00725	.00225	-.00091	-.01086	.00977	-.00139	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14718	--	--	--	--	--	--
SDev	19.94055	--	--	--	--	--	--
%RSD	.1354864	--	--	--	--	--	--
#1	14732	--	--	--	--	--	--
#2	14704	--	--	--	--	--	--

Analysis Report

QC Standard

06/17/00 12:51:47 PM

Method: METTRA Sample Name: ICSAB 0014-136-3 Operator: RJG
 Run Time: 06/17/00 12:47:41
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0986	526.85	1.0071	.53155	.49007	492.40	.91404
SDev	.0008	.74	.0011	.00056	.00180	2.27	.00332
%RSD	.07267	.14002	.10783	.10522	.36717	.46193	.36280
#1	1.0992	527.37	1.0079	.53194	.49134	494.01	.91638
#2	1.0980	526.32	1.0064	.53115	.48879	490.79	.91169
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	.50000	.50000	500.00	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49256	.50476	.54895	204.90	523.09	.50801	.98735
SDev	.00123	.00124	.00001	.50	1.16	.00119	.00330
%RSD	.25046	.24572	.00152	.24551	.22113	.23467	.33390
#1	.49343	.50564	.54896	205.26	523.91	.50886	.98502
#2	.49169	.50389	.54894	204.55	522.27	.50717	.98969
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00	500.00	.50000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98926	1.0478	.93795	.97453	1.0257	1.0280	1.0272
SDev	.00631	.0062	.00059	.00245	.0067	.0000	.0022
%RSD	.63822	.58933	.06248	.25111	.64898	.00305	.21782
#1	.99372	1.0522	.93836	.97627	1.0210	1.0280	1.0256
#2	.98479	1.0435	.93753	.97280	1.0304	1.0280	1.0288
Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	1.0000			1.0000			1.0000
Range	20.000			20.000			20.000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.0122	1.0242	1.0202	1.0263	.51873	1.0430	
SDev	.0029	.0048	.0022	.0027	.00246	.0034	
%RSD	.28382	.46516	.21771	.26209	.47498	.32619	
#1	1.0142	1.0208	1.0186	1.0283	.52047	1.0454	
#2	1.0102	1.0276	1.0218	1.0244	.51698	1.0406	
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	
Value			1.0000	1.0000	.50000	1.0000	
Range			20.000	20.000	20.000	20.000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14645	--	--	--	--	--	--
SDev	9.651593	--	--	--	--	--	--
%RSD	.0659029	--	--	--	--	--	--
#1	14652	--	--	--	--	--	--
#2	14638	--	--	--	--	--	--

Analysis Report

06/17/00 12:58:13 PM

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Method: METTRA Sample Name: DEERHB Operator: RJG
 Run Time: 06/17/00 12:54:08
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00053	-.05832	.00040	.00040	-.00023	.05619	.00025
SDev	.00008	.01372	.00014	.00004	.00017	.00077	.00023
%RSD	15.023	23.521	35.624	9.2527	74.408	1.3669	93.314
#1	.00059	-.04862	.00030	.00038	-.00035	.05674	.00041
#2	.00048	-.06801	.00050	.00043	-.00011	.05565	.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00058	.00015	.00390	.01252	.02569	.00027	.00265
SDev	.00003	.00009	.00004	.00040	.00094	.00003	.00017
%RSD	5.7916	59.145	1.0804	3.2198	3.6646	12.964	6.4807
#1	.00055	.00022	.00387	.01224	.02502	.00029	.00253
#2	.00060	.00009	.00393	.01281	.02635	.00025	.00277
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00133	.00395	.00083	.00187	-.00081	.00090	.00033
SDev	.00012	.00205	.00044	.00039	.00105	.00089	.00095
%RSD	9.3323	52.074	53.156	20.920	130.22	99.449	285.16
#1	.00142	.00540	.00052	.00214	-.00155	.00027	-.00034
#2	.00124	.00249	.00114	.00159	-.00006	.00153	.00100
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00354	.00167	-.00006	-.00109	.00027	.00624	
SDev	.00014	.00243	.00167	.00099	.00038	.00038	
%RSD	4.0328	145.34	2580.5	91.341	139.11	6.0850	
#1	-.00344	.00339	.00112	-.00038	.00054	.00598	
#2	-.00365	-.00005	-.00124	-.00179	.00000	.00651	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15327	--	--	--	--	--	--
SDev	98.14697	--	--	--	--	--	--
%RSD	.6403347	--	--	--	--	--	--
#1	15258	--	--	--	--	--	--
#2	15397	--	--	--	--	--	--

Analysis Report

06/17/00 01:02:22 PM

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Method: METTRA Sample Name: DEERHC

Operator: RJG

Run Time: 06/17/00 12:58:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05181	2.0821	2.0039	2.0449	.05115	51.004	.04896
SDev	.00031	.0183	.0116	.0101	.00021	.318	.00046
%RSD	.60574	.88122	.58119	.49544	.40741	.62257	.94501
#1	.05203	2.0951	2.0121	2.0521	.05130	51.228	.04928
#2	.05159	2.0691	1.9957	2.0377	.05101	50.779	.04863
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51383	.20638	.26066	.96602	49.640	.50675	1.0414
SDev	.00259	.00080	.00157	.01727	.268	.00254	.0017
%RSD	.50316	.38717	.60387	1.7879	.54035	.50081	.16474
#1	.51566	.20695	.26177	.97823	49.830	.50854	1.0426
#2	.51200	.20582	.25954	.95381	49.451	.50495	1.0402
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51412	.51768	.49692	.50383	.49518	.50539	.50199
SDev	.00399	.00428	.00397	.00407	.00424	.00741	.00636
%RSD	.77657	.82781	.79802	.80821	.85688	1.4660	1.2659
#1	.51694	.52071	.49972	.50671	.49818	.51063	.50648
#2	.51129	.51465	.49412	.50095	.49218	.50015	.49750
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0070	2.0035	2.0047	2.0687	.50952	.52471	
SDev	.0219	.0085	.0130	.0038	.00328	.00346	
%RSD	1.0899	.42437	.64626	.18396	.64333	.65958	
#1	2.0224	2.0095	2.0138	2.0714	.51184	.52716	
#2	1.9915	1.9975	1.9955	2.0660	.50721	.52226	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15343	--	--	--	--	--	--
SDev	138.5929	--	--	--	--	--	--
%RSD	.9032798	--	--	--	--	--	--
#1	15245	--	--	--	--	--	--
#2	15441	--	--	--	--	--	--

06/17/00 01:06:31 PM

Analysis Report

Method: METTRA Sample Name: DEEOM

Operator: RJG

Run Time: 06/17/00 13:02:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00055	42.879	.06050	.29600	.00071	.87561	-.00167
SDev	.00003	.237	.00096	.00137	.00006	.00684	.00028
%RSD	5.0956	.55270	1.5811	.46144	8.1624	.78087	16.477
#1	.00053	43.046	.06118	.29697	.00067	.88045	-.00187
#2	.00057	42.711	.05983	.29504	.00075	.87078	-.00148
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03477	.35572	.12529	230.26	.68765	.88249	.05871
SDev	.00001	.00216	.00050	1.29	.00814	.00483	.00003
%RSD	.01821	.60682	.39928	.55828	1.1835	.54789	.05741
#1	.03476	.35725	.12564	231.17	.69340	.88591	.05869
#2	.03477	.35420	.12493	229.35	.68189	.87907	.05873
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07393	1.9467	1.9093	1.9218	.01518	.00832	.01060
SDev	.00106	.0157	.0188	.0178	.00100	.00072	.00014
%RSD	1.4319	.80466	.98633	.92505	6.5939	8.6064	1.3606
#1	.07468	1.9578	1.9226	1.9343	.01447	.00882	.01070
#2	.07318	1.9357	1.8960	1.9092	.01588	.00781	.01050
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00486	.01485	.01152	.00003	.15238	.32034	
SDev	.00118	.00005	.00043	.00190	.00080	.00220	
%RSD	24.264	.34695	3.7078	5760.0	.52535	.68647	
#1	.00403	.01481	.01122	-.00131	.15294	.32190	
#2	.00570	.01488	.01182	.00138	.15181	.31879	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15493	--	--	--	--	--	--
SDev	75.69564	--	--	--	--	--	--
%RSD	.4885836	--	--	--	--	--	--
#1	15439	--	--	--	--	--	--
#2	15546	--	--	--	--	--	--

06/17/00 01:10:40 PM

Analysis Report

Method: METTRA Sample Name: DEE0MP5 Operator: RJG
Run Time: 06/17/00 13:06:34
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00019	8.1352	.01321	.05855	.00018	.18222	-.00023
SDev	.00002	.0400	.00071	.00007	.00004	.00235	.00018
%RSD	7.6432	.49120	5.3926	.11716	23.941	1.2888	76.946
#1	.00018	8.1635	.01371	.05860	.00015	.18056	-.00036
#2	.00020	8.1070	.01271	.05850	.00021	.18388	-.00011
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00775	.07082	.02493	45.685	.13865	.17493	.01230
SDev	.00044	.00025	.00007	.162	.00072	.00070	.00036
%RSD	5.6568	.35923	.29257	.35362	.51711	.39824	2.8933
#1	.00806	.07100	.02498	45.799	.13814	.17542	.01205
#2	.00744	.07064	.02487	45.571	.13915	.17443	.01256
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01554	.38689	.38469	.38542	.00374	.00271	.00305
SDev	.00146	.00008	.00401	.00270	.00061	.00067	.00065
%RSD	9.4217	.01962	1.0424	.70052	16.378	24.758	21.340
#1	.01450	.38695	.38752	.38733	.00330	.00223	.00259
#2	.01657	.38684	.38185	.38351	.00417	.00318	.00351
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00068	.00259	.00195	-.00175	.03084	.06409	
SDev	.00079	.00277	.00211	.00158	.00028	.00019	
%RSD	115.82	106.75	107.80	90.499	.90971	.29298	
#1	.00012	.00063	.00046	-.00287	.03104	.06422	
#2	.00124	.00454	.00344	-.00063	.03064	.06396	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15617	--	--	--	--	--	--
SDev	39.66911	--	--	--	--	--	--
%RSD	.2540188	--	--	--	--	--	--
#1	15589	--	--	--	--	--	--
#2	15645	--	--	--	--	--	--

Analysis Report

06/17/00 01:14:48 PM

Method: METTRA Sample Name: DEEOMS Operator: RJG
Run Time: 06/17/00 13:10:43
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05089	109.08	1.9536	2.8608	.05044	50.075	.04709
SDev	.00037	.66	.0199	.0197	.00031	.455	.00018
%RSD	.72026	.60774	1.0180	.68880	.62202	.90797	.37394
#1	.05115	109.55	1.9677	2.8747	.05066	50.397	.04722
#2	.05064	108.61	1.9395	2.8468	.05022	49.754	.04697
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51606	.49867	.36943	112.84	50.123	.80891	1.0146
SDev	.00387	.00404	.00283	.82	.396	.00587	.0056
%RSD	.74930	.80950	.76685	.72804	.78990	.72584	.55121
#1	.51879	.50152	.37143	113.42	50.403	.81306	1.0185
#2	.51332	.49581	.36743	112.26	49.843	.80475	1.0106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.55355	1.8867	1.8061	1.8330	.27867	.28480	.28276
SDev	.00430	.0184	.0086	.0118	.00054	.00295	.00179
%RSD	.77647	.97528	.47440	.64609	.19514	1.0367	.63240
#1	.55659	1.8997	1.8122	1.8413	.27828	.28689	.28403
#2	.55051	1.8737	1.8001	1.8246	.27905	.28272	.28150
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.9233	1.9323	1.9293	1.9820	.65363	.92728	
SDev	.0224	.0129	.0161	.0238	.00803	.00874	
%RSD	1.1650	.66848	.83331	1.2025	1.2288	.94218	
#1	1.9391	1.9415	1.9407	1.9988	.65931	.93345	
#2	1.9074	1.9232	1.9179	1.9651	.64795	.92110	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15322	--	--	--	--	--	--
SDev	117.4149	--	--	--	--	--	--
%RSD	.7662948	--	--	--	--	--	--
#1	15239	--	--	--	--	--	--
#2	15405	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DEEOMD

Operator: RJG

Run Time: 06/17/00 13:14:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05037	114.65	1.9491	2.1365	.05053	50.165	.04652
SDev	.00046	.85	.0106	.0177	.00028	.380	.00048
%RSD	.90568	.73851	.54290	.83003	.55433	.75836	1.0274
#1	.05069	115.25	1.9566	2.1490	.05073	50.434	.04685
#2	.05004	114.05	1.9416	2.1239	.05034	49.896	.04618
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51307	.33274	.34468	98.805	50.364	.77926	.98935
SDev	.00383	.00163	.00345	.636	.342	.00534	.00414
%RSD	.74681	.49119	.99942	.64383	.67921	.68590	.41808
#1	.51578	.33389	.34711	99.255	50.606	.78304	.99227
#2	.51036	.33158	.34224	98.355	50.122	.77548	.98642
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54780	1.0742	1.0314	1.0457	.27533	.27403	.27446
SDev	.00348	.0006	.0060	.0042	.00483	.00153	.00263
%RSD	.63560	.05243	.57954	.39922	1.7557	.55982	.95928
#1	.55026	1.0746	1.0356	1.0486	.27875	.27512	.27633
#2	.54534	1.0738	1.0272	1.0427	.27191	.27295	.27260
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.9311	1.9458	1.9409	1.9916	.64748	.81066	
SDev	.0055	.0178	.0137	.0160	.00666	.00545	
%RSD	.28324	.91493	.70564	.80574	1.0293	.67294	
#1	1.9350	1.9584	1.9506	2.0030	.65219	.81451	
#2	1.9273	1.9332	1.9312	1.9803	.64277	.80680	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15370	--	--	--	--	--	--
SDev	71.34666	--	--	--	--	--	--
%RSD	.4641913	--	--	--	--	--	--
#1	15320	--	--	--	--	--	--
#2	15421	--	--	--	--	--	--

Analysis Report

06/17/00 01:23:06 PM

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page 1

Method: METTRA Sample Name: DEE16

Operator: RJG

Run Time: 06/17/00 13:19:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00043	33.776	.01369	.05941	.00051	.42608	-.00011
SDev	.00040	.204	.00052	.00028	.00020	.00418	.00006
%RSD	92.358	.60400	3.8350	.47241	39.365	.98113	54.068
#1	-.00072	33.920	.01332	.05961	.00037	.42904	-.00016
#2	-.00015	33.632	.01406	.05921	.00065	.42313	-.00007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00455	.05223	.03698	39.803	.35659	.03608	.00511
SDev	.00011	.00034	.00044	.293	.00327	.00026	.00124
%RSD	2.4819	.66051	1.1991	.73697	.91668	.70916	24.245
#1	.00463	.05247	.03667	40.011	.35891	.03626	.00599
#2	.00447	.05199	.03729	39.596	.35428	.03589	.00424
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01161	.06855	.05820	.06164	.00304	.00301	.00302
SDev	.00008	.00241	.00083	.00136	.00094	.00008	.00026
%RSD	.68010	3.5171	1.4326	2.2045	30.829	2.7072	8.5335
#1	.01166	.07025	.05878	.06260	.00238	.00307	.00284
#2	.01155	.06685	.05761	.06068	.00371	.00295	.00320
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00315	.00172	.00010	.00034	.09754	.13251	
SDev	.00277	.00254	.00077	.00025	.00106	.00122	
%RSD	87.938	147.67	775.03	73.719	1.0923	.91961	
#1	-.00510	.00352	.00065	.00016	.09829	.13337	
#2	-.00119	-.00008	-.00045	.00051	.09678	.13165	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15400	--	--	--	--	--	--
SDev	107.7281	--	--	--	--	--	--
%RSD	.6995345	--	--	--	--	--	--
#1	15324	--	--	--	--	--	--
#2	15476	--	--	--	--	--	--

Analysis Report

06/17/00 01:27:14 PM

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page 1

Method: METTRA Sample Name: DEE18

Operator: RJG

Run Time: 06/17/00 13:23:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	48.229	.02341	.09778	.00119	1.2861	-.00064
SDev	.00026	.063	.00144	.00006	.00017	.0063	.00031
%RSD	196.97	.13117	6.1646	.05729	14.272	.49291	48.057

#1	.00032	48.273	.02239	.09782	.00107	1.2906	-.00085
#2	-.00005	48.184	.02443	.09774	.00131	1.2816	-.00042

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00773	.07605	.02587	114.29	.74524	.18927	.00415
SDev	.00012	.00052	.00006	.39	.00599	.00030	.00043
%RSD	1.5258	.69027	.25032	.34062	.80326	.15758	10.455

#1	.00781	.07643	.02582	114.56	.74947	.18949	.00384
#2	.00764	.07568	.02591	114.01	.74100	.18906	.00445

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01970	.05072	.04060	.04397	.00418	.00017	.00151
SDev	.00102	.00001	.00229	.00153	.00318	.00035	.00083
%RSD	5.1769	.02134	5.6505	3.4717	75.916	206.23	54.872

#1	.01898	.05071	.04222	.04505	.00643	-.00008	.00209
#2	.02042	.05073	.03897	.04289	.00194	.00041	.00092

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00222	.00793	.00455	-.00520	.13231	.04523
SDev	.00278	.00024	.00109	.00083	.00023	.00002
%RSD	125.28	3.0584	23.919	15.983	.17223	.03372

#1	-.00419	.00776	.00378	-.00579	.13215	.04522
#2	-.00025	.00810	.00532	-.00461	.13247	.04524

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15586	--	--	--	--	--	--
SDev	64.59392	--	--	--	--	--	--
%RSD	.4144482	--	--	--	--	--	--
#1	15540	--	--	--	--	--	--
#2	15631	--	--	--	--	--	--

Analysis Report

06/17/00 01:31:23 PM

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Method: METTRA Sample Name: CCV3-1 0014-131-1 Operator: RJG
 Run Time: 06/17/00 13:27:18
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0349	24.363	.51153	2.0150	2.0292	50.668	.49167
SDev	.0008	.019	.00042	.0001	.0054	.105	.00035
%RSD	.07730	.07774	.08126	.00518	.26426	.20784	.07092
#1	1.0343	24.376	.51183	2.0149	2.0254	50.593	.49142
#2	1.0355	24.349	.51124	2.0151	2.0330	50.742	.49192
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0455	2.0439	1.9791	25.221	49.423	2.0061	2.0469
SDev	.0027	.0052	.0018	.021	.107	.0036	.0159
%RSD	.13349	.25285	.09231	.08454	.21649	.17757	.77589
#1	2.0436	2.0402	1.9804	25.206	49.347	2.0035	2.0357
#2	2.0474	2.0475	1.9778	25.236	49.499	2.0086	2.0582
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0378	.51606	.50243	.50697	.51423	.51352	.51376
SDev	.0048	.00051	.00312	.00191	.00471	.00405	.00113
%RSD	.23601	.09895	.62138	.37720	.91567	.78919	.22096
#1	2.0344	.51570	.50464	.50832	.51756	.51066	.51296
#2	2.0412	.51642	.50022	.50562	.51090	.51639	.51456
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.52099	.52150	.52133	1.0242	2.0319	2.0569	
SDev	.00046	.00210	.00125	.0051	.0012	.0008	
%RSD	.08849	.40265	.23921	.49546	.05789	.03979	
#1	.52066	.52298	.52221	1.0207	2.0311	2.0563	
#2	.52131	.52001	.52045	1.0278	2.0327	2.0575	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15383	--	--	--	--	--	--
SDev	37.65344	--	--	--	--	--	--
%RSD	.2447663	--	--	--	--	--	--
#1	15410	--	--	--	--	--	--
#2	15357	--	--	--	--	--	--

Analysis Report

06/17/00 01:35:32 PM

Method: METTRA Sample Name: CCB1

Operator: RJG

Run Time: 06/17/00 13:31:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00030	-.07404	.00089	.00055	.00045	.01991	.00032
SDev	.00052	.00344	.00026	.00018	.00012	.00176	.00013
%RSD	171.34	4.6450	29.251	33.229	25.780	8.8273	39.891
#1	-.00006	-.07647	.00107	.00042	.00037	.01867	.00023
#2	.00067	-.07160	.00070	.00068	.00053	.02116	.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00118	.00039	.00248	.00966	.01239	.00039	.00706
SDev	.00062	.00036	.00021	.00495	.00393	.00007	.00201
%RSD	52.162	91.730	8.5995	51.281	31.698	17.556	28.478
#1	.00075	.00014	.00233	.00616	.00961	.00034	.00848
#2	.00162	.00065	.00263	.01316	.01517	.00044	.00564
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00168	-.00042	.00058	.00025	.00299	.00212	.00241
SDev	.00121	.00197	.00025	.00049	.00228	.00092	.00137
%RSD	71.995	465.01	43.098	196.29	76.058	43.588	57.013
#1	.00082	-.00181	.00076	-.00010	.00460	.00277	.00338
#2	.00253	.00097	.00041	.00059	.00138	.00147	.00144
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00059	.00041	.00047	.00182	.00158	.00081	
SDev	.00101	.00135	.00056	.00095	.00223	.00004	
%RSD	170.32	331.41	119.78	52.354	141.23	4.6949	
#1	-.00012	.00136	.00087	.00249	.00000	.00079	
#2	.00131	-.00055	.00007	.00115	.00316	.00084	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15596	--	--	--	--	--	--
SDev	88.56512	--	--	--	--	--	--
%RSD	.5678790	--	--	--	--	--	--
#1	15533	--	--	--	--	--	--
#2	15658	--	--	--	--	--	--

Analysis Report

06/17/00 01:39:41 PM

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page 1

Method: METTRA Sample Name: DEE1A

Run Time: 06/17/00 13:35:36

Operator: RJG

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00030	45.540	.01354	.08695	.00067	.99085	-.00042
SDev	.00050	.226	.00114	.00073	.00017	.00707	.00002
%RSD	166.73	.49632	8.4269	.84473	25.759	.71354	4.4451
#1	.00005	45.700	.01273	.08747	.00055	.99585	-.00043
#2	-.00066	45.380	.01434	.08644	.00079	.98585	-.00040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00559	.05543	1.4722	43.277	.82158	.06922	.00389
SDev	.00034	.00024	.0092	.257	.00588	.00044	.00005
%RSD	6.0181	.42924	.62622	.59488	.71609	.63227	1.2723
#1	.00583	.05560	1.4787	43.459	.82574	.06953	.00393
#2	.00536	.05526	1.4656	43.095	.81742	.06891	.00386
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02647	.09071	.08265	.08534	.00642	-.00074	.00165
SDev	.00052	.00122	.00093	.00103	.00271	.00017	.00102
%RSD	1.9602	1.3467	1.1247	1.2033	42.291	23.475	61.900
#1	.02684	.09158	.08331	.08606	.00833	-.00061	.00237
#2	.02611	.08985	.08199	.08461	.00450	-.00086	.00093
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00287	.00332	.00317	.00271	.08741	.08116	
SDev	.00263	.00107	.00159	.00224	.00073	.00039	
%RSD	91.840	32.239	50.206	82.521	.83184	.48198	
#1	.00101	.00256	.00204	.00113	.08792	.08144	
#2	.00473	.00407	.00429	.00429	.08690	.08088	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15653	--	--	--	--	--	--
SDev	137.9570	--	--	--	--	--	--
%RSD	.8813676	--	--	--	--	--	--
#1	15555	--	--	--	--	--	--
#2	15750	--	--	--	--	--	--

Analysis Report

06/17/00 01:43:51 PM

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page 1

Method: METTRA Sample Name: DEE1C

Run Time: 06/17/00 13:39:45

Operator: RJG

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00086	37.189	.02005	H19.041	.00070	1.4528	.00080
SDev	.00046	.124	.00102	.070	.00005	.0055	.00018
%RSD	53.291	.33257	5.0999	.36558	7.5720	.38002	22.323
#1	.00053	37.276	.02077	H19.091	.00066	1.4567	.00092
#2	.00118	37.102	.01933	H18.992	.00074	1.4489	.00067
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00573	.06691	.16152	39.346	.67389	.16372	.00508
SDev	.00028	.00003	.00129	.120	.00264	.00042	.00024
%RSD	4.9348	.04542	.79637	.30595	.39139	.25331	4.6998
#1	-.00592	.06693	.16243	39.432	.67576	.16401	.00491
#2	-.00553	.06689	.16061	39.261	.67203	.16342	.00525
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01250	.21582	.20664	.20970	.00516	.00052	.00206
SDev	.00090	.00159	.00168	.00165	.00130	.00241	.00117
%RSD	7.2141	.73779	.81489	.78847	25.185	463.82	56.823
#1	.01314	.21695	.20783	.21086	.00608	-.00118	.00124
#2	.01186	.21470	.20544	.20853	.00424	.00222	.00289
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00009	.00181	.00124	-.00100	.08932	.26330	
SDev	.00309	.00308	.00103	.00112	.00028	.00097	
%RSD	3268.5	170.14	82.802	111.48	.31380	.36867	
#1	-.00209	.00399	.00197	-.00021	.08952	.26398	
#2	.00228	-.00037	.00051	-.00179	.08912	.26261	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15680	--	--	--	--	--	--
SDev	49.42704	--	--	--	--	--	--
%RSD	.3152255	--	--	--	--	--	--
#1	15645	--	--	--	--	--	--
#2	15715	--	--	--	--	--	--

Analysis Report

06/17/00 01:48:00 PM

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page 1

Method: METTRA Sample Name: DEE1F

Operator: RJG

Run Time: 06/17/00 13:43:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00190	13.821	.05703	.27063	.00021	1.9927	.00035
SDev	.00053	.058	.00066	.00125	.00008	.0099	.00029
%RSD	27.991	.41724	1.1623	.46315	39.355	.49830	83.564
#1	.00152	13.862	.05656	.27152	.00015	1.9997	.00014
#2	.00228	13.780	.05749	.26974	.00027	1.9857	.00055
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00488	.02501	.04122	10.331	.39781	.04669	.00172
SDev	.00016	.00010	.00024	.044	.00210	.00021	.00015
%RSD	3.2028	.39172	.58215	.42422	.52873	.45609	8.6256
#1	.00499	.02494	.04139	10.362	.39632	.04684	.00182
#2	.00477	.02508	.04105	10.300	.39929	.04654	.00161
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00805	.04758	.04152	.04354	.01715	.01473	.01553
SDev	.00091	.00034	.00387	.00247	.00278	.00075	.00142
%RSD	11.335	.70958	9.3166	5.6678	16.188	5.0683	9.1560
#1	.00869	.04734	.04426	.04528	.01911	.01525	.01654
#2	.00740	.04782	.03878	.04179	.01518	.01420	.01453
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.03922	.04298	.04173	.00003	.03764	.74816	
SDev	.00009	.00011	.00011	.00117	.00018	.00361	
%RSD	.23319	.26362	.25409	3770.0	.47724	.48237	
#1	.03915	.04290	.04165	-.00079	.03776	.75071	
#2	.03928	.04306	.04180	.00085	.03751	.74561	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15479	--	--	--	--	--	--
SDev	74.74133	--	--	--	--	--	--
%RSD	.4828563	--	--	--	--	--	--
#1	15426	--	--	--	--	--	--
#2	15532	--	--	--	--	--	--

Analysis Report

06/17/00 01:52:10 PM

page 1

Method: METTRA Sample Name: DEE1K

Operator: RJG

Run Time: 06/17/00 13:48:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	37.218	.00994	.07028	.00066	.58299	-.00014
SDev	.00020	.213	.00151	.00004	.00012	.00258	.00009
%RSD	58.986	.57255	15.195	.05907	17.479	.44283	62.885
#1	-.00049	37.369	.00887	.07025	.00074	.58482	-.00021
#2	-.00020	37.067	.01101	.07031	.00058	.58116	-.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00704	.05293	.01442	47.519	1.1495	.07389	.00238
SDev	.00010	.00040	.00025	.228	.0067	.00029	.00020
%RSD	1.4559	.74684	1.7394	.47901	.58264	.39028	8.5223
#1	.00712	.05321	.01460	47.680	1.1543	.07409	.00252
#2	.00697	.05266	.01424	47.358	1.1448	.07368	.00223
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02356	.04971	.04377	.04574	.00529	-.00131	.00089
SDev	.00137	.00032	.00182	.00111	.00024	.00179	.00111
%RSD	5.8024	.64748	4.1519	2.4153	4.5477	136.51	125.64
#1	.02453	.04948	.04505	.04653	.00546	-.00258	.00010
#2	.02259	.04993	.04248	.04496	.00512	-.00005	.00167
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00364	.00501	.00456	-.00000	.07041	.07236	
SDev	.00203	.00054	.00032	.00058	.00036	.00029	
%RSD	55.594	10.762	6.9078	129510.	.50679	.40211	
#1	.00508	.00463	.00478	-.00041	.07066	.07256	
#2	.00221	.00539	.00433	.00041	.07016	.07215	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15636	--	--	--	--	--	--
SDev	26.51650	--	--	--	--	--	--
%RSD	.1695857	--	--	--	--	--	--
#1	15617	--	--	--	--	--	--
#2	15655	--	--	--	--	--	--

Analysis Report

Method: METTRA Sample Name: DEEL

Operator: RJG

Run Time: 06/17/00 13:52:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00013	45.217	.01375	.08877	.00071	62.876	.00196
SDev	.00034	.127	.00188	.00032	.00005	.260	.00014
%RSD	257.81	.28037	13.660	.35903	6.4855	.41386	6.9815
#1	-.00037	45.306	.01508	.08899	.00068	63.060	.00206
#2	.00011	45.127	.01242	.08854	.00074	62.692	.00186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00759	.07349	.04053	44.902	3.6102	.17738	.00287
SDev	.00014	.00009	.00008	.132	.0092	.00043	.00104
%RSD	1.8910	.11741	.20067	.29338	.25573	.24160	36.298
#1	.00749	.07355	.04059	44.995	3.6167	.17768	.00213
#2	.00769	.07343	.04047	44.809	3.6037	.17707	.00361
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02115	.10274	.08965	.09401	.00470	.00187	.00282
SDev	.00038	.00091	.00048	.00002	.00156	.00114	.00024
%RSD	1.8167	.88392	.53864	.02094	33.107	60.962	8.6357
#1	.02143	.10209	.08999	.09402	.00580	.00107	.00264
#2	.02088	.10338	.08931	.09399	.00360	.00268	.00299
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00117	.00477	.00279	.00049	.09552	4.2082	
SDev	.00053	.00349	.00215	.00140	.00077	.0226	
%RSD	45.316	73.179	77.081	286.12	.80847	.53686	
#1	-.00155	.00724	.00431	-.00050	.09606	4.2242	
#2	-.00080	.00230	.00127	.00148	.09497	4.1922	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15359	--	--	--	--	--	--
SDev	66.82159	--	--	--	--	--	--
%RSD	.4350562	--	--	--	--	--	--
#1	15312	--	--	--	--	--	--
#2	15407	--	--	--	--	--	--

Analysis Report

06/17/00 02:00:29 PM

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page 1

Method: METTRA Sample Name: DEE1M

Operator: RJG

Run Time: 06/17/00 13:56:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00172	36.988	.01843	.06417	.00060	1.0569	-.00018
SDev	.00045	.052	.00013	.00017	.00002	.0025	.00031
%RSD	26.133	.13956	.72346	.26682	2.7326	.24064	167.43
#1	.00203	37.024	.01852	.06429	.00059	1.0587	-.00040
#2	.00140	36.951	.01833	.06405	.00062	1.0551	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00494	.05400	.02712	46.735	.59177	.06574	.00270
SDev	.00042	.00048	.00042	.062	.00189	.00000	.00058
%RSD	8.4438	.88984	1.5357	.13336	.31865	.00079	21.381
#1	.00465	.05366	.02683	46.779	.59043	.06574	.00229
#2	.00524	.05434	.02742	46.691	.59310	.06574	.00311
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01197	.07564	.06754	.07024	.00196	-.00016	.00055
SDev	.00039	.00062	.00030	.00040	.00255	.00172	.00030
%RSD	3.2735	.81671	.44162	.57614	130.59	1099.5	54.405
#1	.01225	.07608	.06775	.07052	.00015	.00106	.00076
#2	.01169	.07521	.06733	.06995	.00376	-.00137	.00034
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00238	.00643	.00350	-.00045	.09426	1.0356	
SDev	.00138	.00218	.00099	.00133	.00007	.0035	
%RSD	57.915	33.853	28.408	296.28	.07762	.33841	
#1	-.00335	.00796	.00420	-.00139	.09420	1.0381	
#2	-.00140	.00489	.00279	.00049	.09431	1.0331	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15470	--	--	--	--	--	--
SDev	55.82622	--	--	--	--	--	--
%RSD	.3608682	--	--	--	--	--	--
#1	15430	--	--	--	--	--	--
#2	15509	--	--	--	--	--	--

Analysis Report

06/17/00 02:04:38 PM

661 527

page 1

Method: METTRA Sample Name: DEE1N

Operator: RJG

Run Time: 06/17/00 14:00:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00002	37.988	.01367	.08288	.00072	1.5194	-.00003
SDev	.00051	.020	.00014	.00010	.00005	.0000	.00003
%RSD	3096.8	.05149	.98577	.12193	6.6087	.00110	95.432
#1	-.00037	38.001	.01376	.08281	.00069	1.5194	-.00001
#2	.00034	37.974	.01357	.08295	.00076	1.5194	-.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00737	.05288	.01442	41.187	1.4079	.26339	.00225
SDev	.00001	.00003	.00041	.009	.0048	.00017	.00001
%RSD	.11568	.06023	2.8452	.02138	.33834	.06470	.50048
#1	.00736	.05286	.01471	41.193	1.4046	.26351	.00225
#2	.00738	.05291	.01413	41.181	1.4113	.26327	.00224
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01694	.04047	.02995	.03345	.00355	.00126	.00202
SDev	.00039	.00103	.00029	.00015	.00068	.00121	.00103
%RSD	2.3259	2.5499	.98059	.44186	19.012	96.355	51.111
#1	.01722	.04120	.02974	.03356	.00308	.00040	.00129
#2	.01666	.03974	.03015	.03335	.00403	.00212	.00275
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00171	.00457	.00362	.00085	.08188	1.5515	
SDev	.00109	.00083	.00019	.00054	.00019	.0027	
%RSD	63.784	18.060	5.1810	62.940	.23703	.17300	
#1	.00094	.00515	.00375	.00123	.08202	1.5534	
#2	.00248	.00399	.00349	.00047	.08174	1.5496	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15606	--	--	--	--	--	--
SDev	44.15896	--	--	--	--	--	--
%RSD	.2829546	--	--	--	--	--	--
#1	15575	--	--	--	--	--	--
#2	15638	--	--	--	--	--	--

Analysis Report

06/17/00 02:08:47 PM

661 529
page 1

Method: METTRA Sample Name: DEDR6

Operator: RJG

Run Time: 06/17/00 14:04:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01225	67.656	.43279	2.1835	.00618	45.540	.01376
SDev	.00021	.020	.00023	.0008	.00005	.042	.00055
%RSD	1.7331	.02906	.05373	.03440	.83043	.09295	3.9750
#1	.01210	67.642	.43296	2.1840	.00614	45.569	.01337
#2	.01240	67.669	.43263	2.1830	.00622	45.510	.01415
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.18303	.54252	.32988	305.07	12.826	H34.939	.05726
SDev	.00026	.00015	.00036	.07	.009	.007	.00031
%RSD	.14107	.02845	.10790	.02186	.07123	.01951	.54134
#1	.18285	.54262	.33013	305.12	12.832	H34.934	.05704
#2	.18321	.54241	.32963	305.03	12.819	H34.944	.05748
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.81156	.62813	.60527	.61288	.00595	.00475	.00515
SDev	.00238	.00077	.00805	.00511	.00293	.00001	.00098
%RSD	.29336	.12309	1.3301	.83416	49.343	.20070	19.095
#1	.81324	.62758	.61096	.61649	.00802	.00476	.00584
#2	.80987	.62868	.59957	.60926	.00387	.00475	.00445
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.02408	.02888	.02729	.03031	.13812	1.1598	
SDev	.00290	.00164	.00206	.00012	.00147	.0021	
%RSD	12.052	5.6749	7.5493	.39584	1.0624	.17736	
#1	.02203	.02773	.02583	.03023	.13708	1.1613	
#2	.02613	.03004	.02874	.03040	.13916	1.1584	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16472	--	--	--	--	--	--
SDev	51.68923	--	--	--	--	--	--
%RSD	.3138101	--	--	--	--	--	--
#1	16435	--	--	--	--	--	--
#2	16508	--	--	--	--	--	--

Analysis Report

06/17/00 02:12:56 PM

661 531
page 1

Method: METTRA Sample Name: DEDTD Operator: RJG
 Run Time: 06/17/00 14:08:50
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02006	51.810	.12423	.83985	.00709	15.566	.04119
SDev	.00030	.023	.00040	.00000	.00010	.012	.00015
%RSD	1.5117	.04426	.32424	.00038	1.3721	.07781	.35171
#1	.02028	51.826	.12451	.83985	.00702	15.557	.04109
#2	.01985	51.794	.12394	.83984	.00716	15.574	.04130
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.17624	.92661	.60628	181.91	9.7203	H10.304	.20262
SDev	.00080	.00014	.00012	.03	.0018	.004	.00005
%RSD	.45103	.01477	.01967	.01512	.01854	.04169	.02412
#1	.17568	.92651	.60637	181.93	9.7190	H10.301	.20266
#2	.17681	.92671	.60620	181.89	9.7216	H10.307	.20259
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.1065	1.0165	.98807	.99755	.01142	.00770	.00894
SDev	.0027	.0033	.00401	.00156	.00172	.00115	.00019
%RSD	.12857	.32860	.40589	.15665	15.084	14.873	2.1303
#1	2.1046	1.0142	.99091	.99865	.01020	.00851	.00908
#2	2.1084	1.0189	.98523	.99644	.01264	.00689	.00881
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.04754	.05226	.05069	.00054	.11920	1.7552	
SDev	.00017	.00140	.00099	.00267	.00047	.0005	
%RSD	.36786	2.6773	1.9560	494.46	.39694	.03097	
#1	.04766	.05325	.05139	-.00135	.11953	1.7556	
#2	.04742	.05127	.04999	.00243	.11886	1.7548	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16628	--	--	--	--	--	--
SDev	33.90660	--	--	--	--	--	--
%RSD	.2039148	--	--	--	--	--	--
#1	16604	--	--	--	--	--	--
#2	16652	--	--	--	--	--	--

Analysis Report

06/17/00 02:17:05 PM

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page 1

Method: METTRA Sample Name: DEDTQ

Operator: RJG

Run Time: 06/17/00 14:12:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00919	49.288	.50845	3.3889	.00502	44.599	.01009
SDev	.00014	.062	.00281	.0038	.00009	.126	.00045
%RSD	1.5587	.12620	.55369	.11070	1.6911	.28140	4.4198
#1	.00929	49.332	.51044	3.3916	.00496	44.687	.00977
#2	.00909	49.244	.50646	3.3863	.00508	44.510	.01040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.17771	.31228	.21622	251.39	10.760	H60.509	.02377
SDev	.00054	.00033	.00011	.71	.026	.119	.00047
%RSD	.30216	.10568	.04989	.28160	.24314	.19714	1.9750
#1	.17809	.31251	.21630	251.89	10.779	H60.593	.02410
#2	.17733	.31205	.21614	250.89	10.742	H60.424	.02343
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.44643	.43671	.42777	.43075	.00716	.00503	.00574
SDev	.00311	.00164	.00362	.00296	.00223	.00259	.00099
%RSD	.69759	.37632	.84525	.68694	31.187	51.497	17.166
#1	.44863	.43787	.43033	.43284	.00874	.00320	.00504
#2	.44423	.43555	.42522	.42866	.00558	.00687	.00644
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.02706	.02997	.02900	.08961	.09817	1.0214	
SDev	.00002	.00017	.00012	.00362	.00022	.0037	
%RSD	.07895	.56944	.41705	4.0410	.22337	.36706	
#1	.02704	.02985	.02891	.08705	.09801	1.0240	
#2	.02707	.03009	.02908	.09217	.09832	1.0187	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16429	--	--	--	--	--	--
SDev	102.5664	--	--	--	--	--	--
%RSD	.6242999	--	--	--	--	--	--
#1	16356	--	--	--	--	--	--
#2	16502	--	--	--	--	--	--

Analysis Report

06/17/00 02:21:14 PM

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page 1

Method: METTRA Sample Name: CCV3-2

Operator: RJG

Run Time: 06/17/00 14:17:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0296	24.253	.51033	2.0081	2.0344	50.942	.49295
SDev	.0064	.176	.00565	.0135	.0131	.394	.00363
%RSD	.62091	.72609	1.1071	.67140	.64500	.77433	.73659
#1	1.0341	24.378	.51433	2.0176	2.0437	51.221	.49552
#2	1.0251	24.129	.50634	1.9986	2.0251	50.663	.49038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0482	2.0463	1.9664	25.272	49.508	1.9917	2.0434
SDev	.0131	.0135	.0143	.153	.342	.0094	.0010
%RSD	.63898	.66030	.72549	.60686	.69166	.47314	.04953
#1	2.0575	2.0559	1.9764	25.380	49.750	1.9984	2.0441
#2	2.0390	2.0368	1.9563	25.163	49.266	1.9851	2.0427
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0556	.50905	.50302	.50503	.51652	.50472	.50865
SDev	.0177	.00355	.00432	.00406	.00484	.00358	.00400
%RSD	.86113	.69805	.85784	.80420	.93735	.70894	.78618
#1	2.0681	.51157	.50607	.50790	.51994	.50725	.51147
#2	2.0431	.50654	.49997	.50216	.51309	.50219	.50582
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.51880	.52212	.52101	1.0241	2.0364	2.0525	
SDev	.00634	.00535	.00568	.0054	.0175	.0139	
%RSD	1.2224	1.0244	1.0901	.52559	.85696	.67947	
#1	.52328	.52590	.52503	1.0279	2.0488	2.0623	
#2	.51432	.51834	.51700	1.0203	2.0241	2.0426	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15713	--	--	--	--	--	--
SDev	38.67888	--	--	--	--	--	--
%RSD	.2461522	--	--	--	--	--	--
#1	15686	--	--	--	--	--	--
#2	15741	--	--	--	--	--	--

Analysis Report

06/17/00 02:25:23 PM

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Method: METTRA Sample Name: CCB2

Operator: RJG

Run Time: 06/17/00 14:21:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00042	-.05750	.00172	.00105	.00049	.06515	.00028
SDev	.00030	.00657	.00049	.00033	.00034	.00942	.00008
%RSD	71.995	11.423	28.330	31.285	69.255	14.459	27.694
#1	.00021	-.05285	.00138	.00082	.00025	.05849	.00023
#2	.00064	-.06214	.00207	.00129	.00073	.07181	.00034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00089	.00043	.00195	.02233	.01644	.00367	.00736
SDev	.00085	.00023	.00094	.00302	.01009	.00104	.00233
%RSD	95.566	52.307	48.487	13.511	61.343	28.374	31.646
#1	.00029	.00027	.00128	.02019	.00931	.00293	.00901
#2	.00148	.00059	.00261	.02446	.02357	.00441	.00571
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00161	-.00083	.00218	.00118	.00158	.00001	.00054
SDev	.00122	.00138	.00068	.00001	.00015	.00007	.00010
%RSD	75.771	165.63	31.060	.64232	9.6843	525.25	18.024
#1	.00075	-.00181	.00266	.00117	.00147	-.00004	.00047
#2	.00247	.00014	.00170	.00118	.00169	.00006	.00060
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00131	-.00031	-.00064	.00244	.00001	.00236	
SDev	.00006	.00032	.00019	.00052	.00000	.00029	
%RSD	4.4797	103.35	30.066	21.142	13.511	12.392	
#1	-.00135	-.00008	-.00050	.00281	.00001	.00216	
#2	-.00127	-.00053	-.00078	.00208	.00001	.00257	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15404	--	--	--	--	--	--
SDev	135.1285	--	--	--	--	--	--
%RSD	.8772244	--	--	--	--	--	--
#1	15309	--	--	--	--	--	--
#2	15500	--	--	--	--	--	--

Analysis Report

06/17/00 02:29:31 PM

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page 1

Method: METTRA Sample Name: DERX4B

Operator: RJG

Run Time: 06/17/00 14:25:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00005	-.05527	.00090	.00057	.00010	.44216	.00034
SDev	.00004	.01451	.00008	.00001	.00004	.00328	.00006
%RSD	78.631	26.243	9.1341	2.0251	40.459	.74132	17.950
#1	-.00002	-.04501	.00084	.00058	.00007	.44448	.00030
#2	-.00007	-.06553	.00096	.00056	.00013	.43984	.00039
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00151	.00254	.00334	.02837	.00825	.00260	.00185
SDev	.00049	.00009	.00042	.00067	.00076	.00005	.00050
%RSD	32.896	3.5166	12.545	2.3650	9.2571	1.9019	26.788
#1	.00116	.00247	.00305	.02884	.00771	.00263	.00150
#2	.00186	.00260	.00364	.02790	.00879	.00256	.00220
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00269	.00118	.00216	.00183	.00051	.00008	.00022
SDev	.00024	.00086	.00013	.00020	.00046	.00052	.00050
%RSD	9.1048	73.192	5.8707	11.109	90.129	623.66	221.57
#1	.00286	.00179	.00207	.00197	.00018	-.00028	-.00013
#2	.00252	.00057	.00225	.00169	.00083	.00045	.00058
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00127	-.00065	-.00001	.00259	.00001	H.04784	
SDev	.00311	.00075	.00054	.00098	.00000	.00043	
%RSD	245.35	114.09	3862.1	37.898	2.3650	.89545	
#1	-.00093	-.00013	-.00039	.00190	.00001	H.04815	
#2	.00346	-.00118	.00037	.00328	.00001	H.04754	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15705	--	--	--	--	--	--
SDev	101.7529	--	--	--	--	--	--
%RSD	.6478830	--	--	--	--	--	--
#1	15634	--	--	--	--	--	--
#2	15777	--	--	--	--	--	--

Analysis Report

06/17/00 02:33:41 PM

page 1

Method: METTRA Sample Name: DERX4C

Operator: RJG

Run Time: 06/17/00 14:29:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05450	1.9468	2.1941	2.1544	.05454	L.61678	.05538
SDev	.00000	.0109	.0070	.0054	.00032	.00274	.00019
%RSD	.00002	.56212	.31842	.24969	.58378	.44415	.34778
#1	.05450	1.9545	2.1990	2.1582	.05477	L.61871	.05552
#2	.05450	1.9391	2.1891	2.1506	.05432	L.61484	.05524
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.57325	.22830	.26769	1.1259	L.01034	.54624	L.00192
SDev	.00178	.00054	.00111	.0124	.00002	.00183	.00018
%RSD	.31066	.23782	.41377	1.1007	.23323	.33528	9.4320
#1	.57451	.22869	.26847	1.1347	L.01035	.54753	L.00179
#2	.57199	.22792	.26690	1.1171	L.01032	.54494	L.00205
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.57518	.55423	.55103	.55210	.00063	.00076	L.00071
SDev	.00625	.00296	.00592	.00493	.00142	.00045	.00017
%RSD	1.0859	.53345	1.0737	.89307	226.41	60.066	23.699
#1	.57959	.55632	.55521	.55558	-.00038	.00108	L.00059
#2	.57076	.55214	.54685	.54861	.00163	.00043	L.00083
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.1705	2.1943	2.1864	2.1747	.54801	H.63233	
SDev	.0157	.0290	.0246	.0108	.00258	.00279	
%RSD	.72474	1.3201	1.1233	.49618	.47108	.44157	
#1	2.1816	2.2148	2.2038	2.1823	.54983	H.63431	
#2	2.1594	2.1739	2.1690	2.1671	.54618	H.63036	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15608	--	--	--	--	--	--
SDev	62.82616	--	--	--	--	--	--
%RSD	.4025351	--	--	--	--	--	--
#1	15563	--	--	--	--	--	--
#2	15652	--	--	--	--	--	--

Analysis Report

06/17/00 02:37:50 PM

page 1

Method: METTRA Sample Name: DEMQV

Operator: RJG

Run Time: 06/17/00 14:33:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00038	176.97	.08284	2.1143	.00770	211.39	-.00058
SDev	.00017	1.42	.00131	.0167	.00010	1.53	.00018
%RSD	46.177	.80375	1.5823	.78904	1.3457	.72558	30.845
#1	.00025	175.97	.08191	2.1025	.00778	210.30	-.00071
#2	.00050	177.98	.08377	2.1261	.00763	212.47	-.00045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09544	.19080	.17491	173.57	27.532	5.9354	.00544
SDev	.00062	.00177	.00072	1.54	.236	.0525	.00019
%RSD	.64808	.92552	.41092	.88476	.85841	.88396	3.5481
#1	.09500	.18955	.17440	172.48	27.365	5.8983	.00531
#2	.09587	.19204	.17542	174.66	27.699	5.9725	.00558
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.17320	.29743	.25902	.27181	.01212	.00320	.00617
SDev	.00134	.00068	.00520	.00370	.00305	.00121	.00182
%RSD	.77611	.22795	2.0091	1.3601	25.168	37.722	29.508
#1	.17225	.29695	.25534	.26920	.01428	.00405	.00745
#2	.17415	.29791	.26270	.27443	.00996	.00234	.00488
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00025	.00944	.00638	.00658	.37799	.61361	
SDev	.00127	.00208	.00181	.00274	.00387	.00504	
%RSD	501.53	22.011	28.325	41.687	1.0230	.82072	
#1	-.00064	.00797	.00510	.00852	.37525	.61005	
#2	.00115	.01091	.00766	.00464	.38072	.61717	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17297	--	--	--	--	--	--
SDev	181.5151	--	--	--	--	--	--
%RSD	1.049411	--	--	--	--	--	--
#1	17425	--	--	--	--	--	--
#2	17168	--	--	--	--	--	--

Analysis Report

06/17/00 02:41:59 PM

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Method: METTRA Sample Name: DEMQVP5

Operator: RJG

Run Time: 06/17/00 14:37:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00041	36.535	.01962	.45622	.00172	46.564	.00008
SDev	.00014	.022	.00024	.00087	.00011	.132	.00011
%RSD	33.800	.06070	1.2109	.18978	6.2296	.28425	145.15
#1	.00051	36.551	.01979	.45684	.00180	46.658	-.00000
#2	.00031	36.519	.01946	.45561	.00165	46.471	.00016
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02253	.04226	.03792	37.795	5.8874	1.2698	.00148
SDev	.00035	.00024	.00033	.092	.0026	.0015	.00045
%RSD	1.5378	.57160	.88134	.24366	.04441	.11593	30.493
#1	.02229	.04209	.03769	37.860	5.8892	1.2709	.00116
#2	.02278	.04243	.03816	37.730	5.8855	1.2688	.00180
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03874	.06630	.05689	.06003	.00249	-.00121	.00002
SDev	.00033	.00037	.00113	.00063	.00027	.00105	.00079
%RSD	.84695	.56466	1.9800	1.0440	10.665	87.133	3260.2
#1	.03850	.06604	.05769	.06047	.00268	-.00046	.00058
#2	.03897	.06657	.05610	.05958	.00230	-.00195	-.00053
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00056	.00120	.00098	.00513	.08235	.13412	
SDev	.00238	.00033	.00101	.00045	.00060	.00025	
%RSD	424.43	27.800	102.89	8.8364	.72365	.18708	
#1	.00224	.00143	.00170	.00481	.08193	.13430	
#2	-.00112	.00096	.00027	.00545	.08277	.13394	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15977	--	--	--	--	--	--
SDev	18.87989	--	--	--	--	--	--
%RSD	.1181721	--	--	--	--	--	--
#1	15990	--	--	--	--	--	--
#2	15963	--	--	--	--	--	--

Analysis Report

06/17/00 02:46:08 PM

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Method: METTRA Sample Name: DEMQVS

Operator: RJG

Run Time: 06/17/00 14:42:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04434	141.43	1.8246	3.6542	.05104	100.43	.04250
SDev	.00002	.60	.0082	.0161	.00014	.54	.00008
%RSD	.05057	.42667	.44909	.44080	.27843	.53705	.19501
#1	.04436	141.85	1.8304	3.6655	.05114	100.81	.04256
#2	.04433	141.00	1.8188	3.6428	.05094	100.05	.04245
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.53030	.35706	.38838	176.16	25.936	6.4217	.00581
SDev	.00277	.00164	.00234	.78	.131	.0303	.00001
%RSD	.52190	.46056	.60361	.44406	.50444	.47163	.10946
#1	.53226	.35822	.39004	176.72	26.029	6.4431	.00581
#2	.52834	.35589	.38673	175.61	25.844	6.4003	.00582
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.63233	.65271	.60561	.62129	.00604	.00440	.00494
SDev	.00435	.00715	.00086	.00296	.00197	.00220	.00081
%RSD	.68823	1.0957	.14194	.47561	32.620	50.043	16.421
#1	.63541	.65777	.60621	.62338	.00464	.00595	.00552
#2	.62926	.64766	.60500	.61920	.00743	.00284	.00437
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.7311	1.7562	1.7479	1.7823	.77698	1.0393	
SDev	.0128	.0122	.0124	.0186	.00341	.0066	
%RSD	.74173	.69483	.71029	1.0440	.43885	.63517	
#1	1.7402	1.7649	1.7566	1.7954	.77939	1.0440	
#2	1.7221	1.7476	1.7391	1.7691	.77456	1.0347	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17304	--	--	--	--	--	--
SDev	120.5962	--	--	--	--	--	--
%RSD	.6969380	--	--	--	--	--	--
#1	17218	--	--	--	--	--	--
#2	17389	--	--	--	--	--	--

Analysis Report

06/17/00 02:50:18 PM

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Method: METTRA Sample Name: DEMQVD

Operator: RJG

Run Time: 06/17/00 14:46:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04555	157.37	2.0210	3.7144	.05615	115.36	.04644
SDev	.00018	.26	.0069	.0078	.00025	.37	.00014
%RSD	.38810	.16361	.33929	.20917	.45086	.31864	.30353
#1	.04568	157.55	2.0258	3.7199	.05633	115.62	.04654
#2	.04543	157.19	2.0161	3.7089	.05597	115.10	.04634
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.57701	.38680	.40533	178.01	26.797	7.0906	.00425
SDev	.00106	.00086	.00107	.37	.077	.0154	.00119
%RSD	.18371	.22179	.26447	.20976	.28713	.21763	28.014
#1	.57776	.38741	.40609	178.27	26.851	7.1015	.00341
#2	.57626	.38620	.40458	177.74	26.742	7.0797	.00509
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.68084	.68472	.65201	.66290	.01028	-.00129	.00256
SDev	.00225	.00022	.01014	.00669	.00143	.00064	.00005
%RSD	.33077	.03225	1.5557	1.0095	13.881	49.682	1.8055
#1	.68243	.68457	.65918	.66763	.01129	-.00175	.00259
#2	.67924	.68488	.64484	.65817	.00927	-.00084	.00253
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0409	2.0573	2.0518	1.9504	.83642	1.1186	
SDev	.0036	.0273	.0194	.0073	.00266	.0037	
%RSD	.17518	1.3267	.94529	.37409	.31843	.33169	
#1	2.0434	2.0766	2.0655	1.9556	.83831	1.1212	
#2	2.0384	2.0380	2.0381	1.9453	.83454	1.1160	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17977	--	--	--	--	--	--
SDev	2.440347	--	--	--	--	--	--
%RSD	.0135748	--	--	--	--	--	--
#1	17975	--	--	--	--	--	--
#2	17979	--	--	--	--	--	--

Analysis Report

06/17/00 02:54:28 PM

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Method: METTRA Sample Name: DEMR4

Operator: RJG

Run Time: 06/17/00 14:50:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	144.06	.08187	1.8585	.00738	110.28	-.00034
SDev	.00034	.25	.00137	.0061	.00008	.17	.00027
%RSD	133.48	.17091	1.6737	.33049	1.1315	.15032	80.094
#1	.00001	144.23	.08284	1.8629	.00732	110.39	-.00053
#2	.00049	143.89	.08090	1.8542	.00744	110.16	-.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07473	.19393	.16313	171.94	25.416	5.6079	.00546
SDev	.00014	.00024	.00020	.23	.048	.0104	.00110
%RSD	.18475	.12148	.12094	.13366	.18992	.18478	20.200
#1	.07463	.19410	.16327	172.10	25.450	5.6152	.00468
#2	.07482	.19377	.16300	171.78	25.382	5.6006	.00624
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17448	.22213	.18933	.20025	.00663	.00078	.00273
SDev	.00017	.00088	.00089	.00089	.00314	.00026	.00122
%RSD	.09916	.39622	.46953	.44245	47.284	33.057	44.577
#1	.17460	.22275	.18995	.20087	.00442	.00060	.00187
#2	.17435	.22151	.18870	.19962	.00885	.00096	.00359
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00336	.00639	.00538	.00230	.33835	.63693	
SDev	.00237	.00208	.00060	.00496	.00061	.00202	
%RSD	70.578	32.569	11.107	215.48	.17920	.31737	
#1	.00168	.00786	.00580	-.00121	.33878	.63835	
#2	.00504	.00492	.00496	.00581	.33792	.63550	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17358	--	--	--	--	--	--
SDev	32.81003	--	--	--	--	--	--
%RSD	.1890158	--	--	--	--	--	--
#1	17335	--	--	--	--	--	--
#2	17382	--	--	--	--	--	--

Analysis Report

Method: METTRA Sample Name: DEMR6

Operator: RJG

Run Time: 06/17/00 14:54:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	164.51	.08618	1.7653	.00794	152.53	-.00021
SDev	.00016	.35	.00129	.0048	.00014	.16	.00024
%RSD	108.78	.21379	1.4940	.26972	1.8140	.10340	113.63
#1	.00026	164.26	.08709	1.7619	.00804	152.42	-.00038
#2	.00003	164.75	.08527	1.7687	.00784	152.64	-.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07447	.20812	.16783	178.52	27.444	5.6690	.00356
SDev	.00010	.00003	.00083	.40	.066	.0136	.00095
%RSD	.13892	.01214	.49447	.22449	.23903	.23994	26.777
#1	.07440	.20810	.16724	178.24	27.397	5.6594	.00288
#2	.07454	.20813	.16842	178.80	27.490	5.6786	.00423
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17383	.23241	.20143	.21174	.00768	-.00072	.00208
SDev	.00104	.00241	.00332	.00141	.00618	.00126	.00122
%RSD	.60072	1.0364	1.6487	.66728	80.420	173.27	58.789
#1	.17457	.23070	.20377	.21274	.01205	-.00161	.00294
#2	.17309	.23411	.19908	.21074	.00331	.00016	.00121
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00586	.00275	.00378	.00945	.37507	.62999	
SDev	.00157	.00011	.00060	.00117	.00019	.00158	
%RSD	26.880	4.0995	15.847	12.330	.04992	.25021	
#1	.00474	.00267	.00336	.01028	.37520	.62888	
#2	.00697	.00283	.00421	.00863	.37494	.63111	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17750	--	--	--	--	--	--
SDev	111.6883	--	--	--	--	--	--
%RSD	.6292275	--	--	--	--	--	--
#1	17829	--	--	--	--	--	--
#2	17671	--	--	--	--	--	--

Analysis Report

06/17/00 03:02:46 PM

page 1

Method: METTRA Sample Name: DEMR7

Operator: RJG

Run Time: 06/17/00 14:58:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00064	146.82	.07450	1.6005	.00669	222.14	-.00021
SDev	.00007	.01	.00172	.0008	.00001	.39	.00002
%RSD	11.736	.01005	2.3115	.04836	.20559	.17451	9.5070
#1	.00069	146.83	.07571	1.6010	.00669	222.41	-.00023
#2	.00059	146.81	.07328	1.5999	.00668	221.87	-.00020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06699	.28320	.17667	166.20	24.713	4.3115	.00436
SDev	.00011	.00013	.00004	.13	.013	.0025	.00056
%RSD	.15725	.04643	.02451	.07740	.05226	.05738	12.805
#1	.06706	.28311	.17670	166.11	24.704	4.3098	.00396
#2	.06692	.28330	.17664	166.29	24.722	4.3133	.00475
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.16306	.44214	.40704	.41873	.00982	.00165	.00437
SDev	.00227	.00014	.00156	.00100	.00127	.00087	.00016
%RSD	1.3945	.03221	.38433	.23787	12.884	52.583	3.6337
#1	.16467	.44204	.40814	.41943	.01072	.00104	.00426
#2	.16145	.44225	.40593	.41802	.00893	.00227	.00449
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00132	.00523	.00305	.00554	.32481	.70934	
SDev	.00292	.00276	.00281	.00126	.00249	.00102	
%RSD	221.55	52.629	92.000	22.719	.76706	.14429	
#1	.00075	.00718	.00504	.00465	.32657	.71007	
#2	-.00338	.00329	.00107	.00643	.32305	.70862	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16944	--	--	--	--	--	--
SDev	46.13872	--	--	--	--	--	--
%RSD	.2723056	--	--	--	--	--	--
#1	16976	--	--	--	--	--	--
#2	16911	--	--	--	--	--	--

Analysis Report

06/17/00 03:06:55 PM

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Method: METTRA Sample Name: CCV3-3

Operator: RJG

Run Time: 06/17/00 15:02:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0344	24.377	.51345	2.0159	2.0373	50.887	.49420
SDev	.0065	.119	.00488	.0095	.0150	.372	.00368
%RSD	.63077	.48707	.95121	.47193	.73830	.73083	.74511
#1	1.0390	24.461	.51690	2.0226	2.0480	51.150	.49680
#2	1.0298	24.293	.50999	2.0091	2.0267	50.624	.49160
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0549	2.0527	1.9781	25.351	49.557	1.9961	2.0517
SDev	.0144	.0158	.0119	.177	.341	.0131	.0038
%RSD	.69939	.76797	.59939	.69996	.68770	.65776	.18498
#1	2.0651	2.0639	1.9865	25.476	49.798	2.0054	2.0543
#2	2.0448	2.0416	1.9697	25.225	49.316	1.9868	2.0490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0501	.51381	.50616	.50871	.52127	.51021	.51389
SDev	.0132	.00572	.00848	.00756	.00799	.00544	.00629
%RSD	.64427	1.1139	1.6752	1.4864	1.5319	1.0664	1.2236
#1	2.0595	.51786	.51216	.51406	.52692	.51405	.51834
#2	2.0408	.50976	.50017	.50336	.51563	.50636	.50945
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.52082	.52375	.52278	1.0269	2.0395	2.0610	
SDev	.00373	.00751	.00625	.0046	.0122	.0138	
%RSD	.71696	1.4332	1.1956	.45019	.59611	.67102	
#1	.52346	.52906	.52719	1.0302	2.0481	2.0707	
#2	.51818	.51844	.51836	1.0237	2.0309	2.0512	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15434	--	--	--	--	--	--
SDev	126.3242	--	--	--	--	--	--
%RSD	.8184814	--	--	--	--	--	--
#1	15345	--	--	--	--	--	--
#2	15523	--	--	--	--	--	--

Analysis Report

06/17/00 03:11:05 PM

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Method: METTRA Sample Name: CCB3

Operator: RJG

Run Time: 06/17/00 15:06:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	-.05448	.00159	.00085	.00036	.03003	.00023
SDev	.00024	.00198	.00065	.00025	.00014	.00555	.00011
%RSD	188.82	3.6380	40.535	29.164	39.902	18.474	46.005
#1	.00030	-.05589	.00114	.00067	.00026	.02611	.00016
#2	-.00004	-.05308	.00205	.00102	.00046	.03396	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00147	.00037	.00253	.01199	.01359	.00086	.00693
SDev	.00003	.00017	.00085	.00462	.00136	.00020	.00208
%RSD	1.7488	47.749	33.408	38.546	10.031	22.957	30.005
#1	.00148	.00024	.00194	.01526	.01263	.00072	.00839
#2	.00145	.00049	.00313	.00872	.01455	.00100	.00546
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00202	-.00077	.00254	.00144	.00024	.00071	.00055
SDev	.00135	.00011	.00097	.00061	.00100	.00068	.00012
%RSD	66.527	14.899	38.215	42.371	410.81	95.236	21.294
#1	.00107	-.00085	.00322	.00187	-.00046	.00119	.00064
#2	.00297	-.00069	.00185	.00101	.00095	.00023	.00047
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00147	.00035	-.00026	-.00043	.00160	.00099	
SDev	.00082	.00118	.00052	.00197	.00226	.00019	
%RSD	55.732	334.80	201.76	460.40	140.95	19.439	
#1	-.00089	-.00048	-.00062	.00096	.00001	.00085	
#2	-.00206	.00119	.00011	-.00182	.00320	.00113	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15490	--	--	--	--	--	--
SDev	49.99190	--	--	--	--	--	--
%RSD	.3227272	--	--	--	--	--	--
#1	15526	--	--	--	--	--	--
#2	15455	--	--	--	--	--	--

Analysis Report

06/17/00 03:16:13 PM

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Method: METTRA Sample Name: DEJ6G/2 (Int Std) Operator: RJG
 Run Time: 06/17/00 15:12:07
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00105	2.5604	.00729	.05122	.00743	.51739	.00022
SDev	.00006	.0056	.00085	.00004	.00002	.00052	.00013
%RSD	5.9620	.21827	11.648	.08469	.25659	.10123	59.694
#1	-.00100	2.5643	.00669	.05119	.00742	.51776	.00013
#2	-.00109	2.5564	.00789	.05125	.00745	.51702	.00032
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01182	.01499	.05257	3.1119	.09665	.01176	.00425
SDev	.00009	.00037	.00033	.0048	.00017	.00001	.00037
%RSD	.77473	2.4693	.62332	.15461	.18084	.09994	8.5988
#1	.01189	.01525	.05234	3.1153	.09678	.01177	.00451
#2	.01176	.01473	.05280	3.1085	.09653	.01175	.00400
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01559	.01392	.01629	.01550	.00115	-.00164	-.00071
SDev	.00002	.00015	.00151	.00096	.00144	.00149	.00051
%RSD	.10200	1.0405	9.2387	6.1645	125.28	90.941	72.362
#1	.01558	.01403	.01523	.01483	.00013	-.00058	-.00035
#2	.01560	.01382	.01736	.01618	.00217	-.00269	-.00107
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00416	.00110	.00212	.00168	.06651	.00876	
SDev	.00417	.00026	.00156	.00075	.00013	.00005	
%RSD	100.38	23.747	73.795	44.486	.18879	.61922	
#1	.00711	.00129	.00323	.00220	.06660	.00880	
#2	.00121	.00092	.00101	.00115	.06642	.00872	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	20127	--	--	--	--	--	--
SDev	38.11195	--	--	--	--	--	--
%RSD	.1893583	--	--	--	--	--	--
#1	20100	--	--	--	--	--	--
#2	20154	--	--	--	--	--	--

Analysis Report

06/17/00 03:20:22 PM

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Method: METTRA Sample Name: DEJ6G/5 (Int Std) Operator: RJG
 Run Time: 06/17/00 15:16:17
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00032	1.1467	.00498	.02370	.00322	.24253	.00017
SDev	.00032	.0057	.00030	.00010	.00007	.00037	.00013
%RSD	100.68	.49408	6.0223	.40397	2.0709	.15264	77.007
#1	-.00055	1.1507	.00477	.02377	.00318	.24279	.00008
#2	-.00009	1.1427	.00520	.02363	.00327	.24226	.00027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00597	.00696	.02573	1.4363	.04463	.00544	.00149
SDev	.00021	.00005	.00007	.0091	.00091	.00007	.00042
%RSD	3.4894	.65875	.27496	.63190	2.0362	1.3426	28.014
#1	.00582	.00693	.02578	1.4299	.04399	.00539	.00178
#2	.00612	.00700	.02568	1.4427	.04527	.00549	.00119
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00714	.00932	.00727	.00795	-.00101	.00043	-.00005
SDev	.00022	.00259	.00018	.00074	.00169	.00017	.00067
%RSD	3.0437	27.788	2.5494	9.2829	167.32	38.493	1350.9
#1	.00729	.01115	.00714	.00848	-.00221	.00031	-.00053
#2	.00699	.00748	.00740	.00743	.00019	.00055	.00043
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00267	-.00134	-.00000	.00029	.03090	.00420	
SDev	.00017	.00088	.00064	.00353	.00054	.00007	
%RSD	6.3975	65.835	28433.	1226.8	1.7454	1.6891	
#1	.00255	-.00196	-.00046	-.00221	.03128	.00425	
#2	.00279	-.00071	.00045	.00278	.03052	.00415	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17259	--	--	--	--	--	--
SDev	20.85965	--	--	--	--	--	--
%RSD	.1208656	--	--	--	--	--	--
#1	17244	--	--	--	--	--	--
#2	17273	--	--	--	--	--	--

Analysis Report

06/17/00 03:24:31 PM

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Method: METTRA Sample Name: DEDR6/5 Mn Operator: RJG
 Run Time: 06/17/00 15:20:26
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00255	13.508	.09301	.45769	.00122	9.6395	.00312
SDev	.00019	.025	.00074	.00039	.00002	.0054	.00002
%RSD	7.4683	.18322	.79471	.08617	1.6779	.05627	.66147
#1	.00241	13.491	.09353	.45741	.00124	9.6357	.00311
#2	.00268	13.526	.09248	.45797	.00121	9.6434	.00314
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03991	.11514	.06709	64.260	2.6753	6.3783	.01276
SDev	.00015	.00013	.00005	.117	.0003	.0061	.00092
%RSD	.37796	.11658	.07376	.18250	.01197	.09617	7.2430
#1	.04002	.11523	.06706	64.177	2.6755	6.3740	.01211
#2	.03980	.11504	.06713	64.343	2.6750	6.3826	.01342
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.17246	.13313	.12918	.13049	.00205	.00064	.00111
SDev	.00133	.00164	.00014	.00045	.00082	.00072	.00020
%RSD	.77247	1.2303	.11148	.34435	40.196	112.51	18.527
#1	.17340	.13197	.12928	.13018	.00263	.00013	.00096
#2	.17152	.13428	.12908	.13081	.00146	.00115	.00125
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00234	.00455	.00381	-.00057	.02959	.24813	
SDev	.00370	.00400	.00143	.00014	.00060	.00022	
%RSD	158.26	87.890	37.612	24.100	2.0404	.08882	
#1	-.00028	.00738	.00483	-.00048	.02916	.24797	
#2	.00496	.00172	.00280	-.00067	.03002	.24828	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15820	--	--	--	--	--	--
SDev	24.39518	--	--	--	--	--	--
%RSD	.1542067	--	--	--	--	--	--
#1	15837	--	--	--	--	--	--
#2	15803	--	--	--	--	--	--

Analysis Report

06/17/00 03:28:40 PM

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Method: METTRA Sample Name: DEDTD/2 Mn Operator: RJG
 Run Time: 06/17/00 15:24:35
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01015	26.342	.06540	.43500	.00378	8.0932	.02182
SDev	.00044	.046	.00008	.00059	.00003	.0272	.00014
%RSD	4.3907	.17490	.12238	.13493	.77541	.33590	.63340
#1	.01046	26.375	.06545	.43541	.00380	8.1124	.02192
#2	.00983	26.309	.06534	.43458	.00376	8.0740	.02172
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09331	.48242	.30786	94.400	5.0301	5.2279	.10557
SDev	.00058	.00204	.00087	.232	.0189	.0151	.00046
%RSD	.62397	.42301	.28235	.24597	.37611	.28948	.43972
#1	.09372	.48387	.30848	94.564	5.0435	5.2386	.10590
#2	.09290	.48098	.30725	94.236	5.0168	5.2172	.10524
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0971	.52634	.51340	.51771	.00752	.00337	.00476
SDev	.0003	.00444	.00429	.00434	.00220	.00115	.00003
%RSD	.02724	.84316	.83611	.83850	29.203	34.045	.73169
#1	1.0973	.52947	.51643	.52077	.00907	.00256	.00473
#2	1.0969	.52320	.51036	.51464	.00597	.00419	.00478
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.02728	.02837	.02801	-.00037	.06473	.92233	
SDev	.00126	.00086	.00015	.00156	.00072	.00103	
%RSD	4.6092	3.0250	.54858	422.94	1.1098	.11172	
#1	.02639	.02898	.02812	-.00147	.06523	.92306	
#2	.02817	.02776	.02790	.00073	.06422	.92160	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16258	--	--	--	--	--	--
SDev	51.33637	--	--	--	--	--	--
%RSD	.3157645	--	--	--	--	--	--
#1	16222	--	--	--	--	--	--
#2	16294	--	--	--	--	--	--

Analysis Report

06/17/00 03:32:50 PM

661 569
page 1

Method: METTRA Sample Name: DEDTQ/10 Mn Operator: RJG
 Run Time: 06/17/00 15:28:44
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00080	4.7557	.05459	.35112	.00045	4.6679	.00107
SDev	.00034	.0293	.00052	.00086	.00012	.0252	.00014
%RSD	42.089	.61569	.95990	.24635	26.491	.53995	12.563
#1	.00104	4.7764	.05496	.35173	.00037	4.6857	.00098
#2	.00056	4.7350	.05422	.35051	.00054	4.6501	.00117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01986	.03272	.02318	26.117	1.1029	4.7644	.00260
SDev	.00024	.00014	.00045	.122	.0023	.0231	.00023
%RSD	1.2323	.41456	1.9394	.46759	.20717	.48391	8.7899
#1	.01969	.03282	.02350	26.203	1.1045	4.7807	.00244
#2	.02003	.03263	.02286	26.031	1.1013	4.7481	.00276
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04812	.04509	.04578	.04555	.00268	.00158	.00195
SDev	.00011	.00021	.00068	.00052	.00238	.00178	.00198
%RSD	.22766	.47335	1.4881	1.1536	88.690	112.56	101.62
#1	.04804	.04524	.04626	.04592	.00100	.00032	.00055
#2	.04820	.04494	.04529	.04518	.00436	.00284	.00335
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00232	.00257	.00249	.00073	.01017	.10841	
SDev	.00198	.00023	.00051	.00121	.00079	.00069	
%RSD	85.520	8.8752	20.437	165.03	7.8029	.63466	
#1	.00092	.00273	.00213	-.00012	.01073	.10890	
#2	.00372	.00241	.00285	.00159	.00961	.10793	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

- 661 570

Analysis Report

06/17/00 03:32:50 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15657	--	--	--	--	--	--
SDev	115.2936	--	--	--	--	--	--
%RSD	.7363887	--	--	--	--	--	--
#1	15575	--	--	--	--	--	--
#2	15738	--	--	--	--	--	--

Analysis Report

06/17/00 03:36:59 PM

page 1

Method: METTRA Sample Name: CCV3-4

Operator: RJG

Run Time: 06/17/00 15:32:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0413	24.541	.51541	2.0315	2.0497	51.276	.49746
SDev	.0073	.178	.00396	.0125	.0171	.409	.00374
%RSD	.70274	.72713	.76872	.61500	.83493	.79730	.75192
#1	1.0465	24.667	.51821	2.0403	2.0618	51.565	.50011
#2	1.0362	24.415	.51261	2.0226	2.0376	50.987	.49482
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0691	2.0667	1.9894	25.433	49.970	2.0120	2.0642
SDev	.0174	.0158	.0156	.221	.402	.0145	.0045
%RSD	.84007	.76480	.78538	.86861	.80359	.72129	.21710
#1	2.0814	2.0779	2.0005	25.589	50.254	2.0223	2.0674
#2	2.0568	2.0555	1.9784	25.277	49.686	2.0017	2.0611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0671	.51962	.51023	.51336	.52543	.51190	.51641
SDev	.0144	.00628	.00840	.00770	.01437	.00514	.00821
%RSD	.69679	1.2096	1.6472	1.4997	2.7352	1.0039	1.5905
#1	2.0773	.52406	.51617	.51880	.53559	.51554	.52221
#2	2.0569	.51517	.50429	.50791	.51526	.50827	.51060
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.52587	.52830	.52749	1.0323	2.0592	2.0722	
SDev	.00391	.00490	.00457	.0050	.0195	.0167	
%RSD	.74314	.92843	.86692	.48179	.94792	.80594	
#1	.52864	.53177	.53073	1.0358	2.0730	2.0840	
#2	.52311	.52484	.52426	1.0288	2.0454	2.0604	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15452	--	--	--	--	--	--
SDev	101.1163	--	--	--	--	--	--
%RSD	.6543790	--	--	--	--	--	--
#1	15381	--	--	--	--	--	--
#2	15524	--	--	--	--	--	--

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Analysis Report

06/17/00 03:41:08 PM

page 1

Method: METTRA Sample Name: CCB4

Operator: RJG

Run Time: 06/17/00 15:37:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00068	-.05610	.00071	.00075	.00023	.02179	.00033
SDev	.00053	.01995	.00008	.00036	.00004	.01036	.00009
%RSD	78.576	35.568	11.221	48.751	16.900	47.547	26.012
#1	.00030	-.07021	.00077	.00049	.00026	.01446	.00027
#2	.00105	-.04199	.00066	.00101	.00020	.02911	.00039
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00175	.00057	.00307	.01471	.01860	.00123	.00755
SDev	.00052	.00026	.00094	.00351	.00845	.00063	.00172
%RSD	29.806	46.271	30.639	23.880	45.416	51.156	22.762
#1	.00138	.00038	.00240	.01720	.01262	.00078	.00876
#2	.00212	.00075	.00373	.01223	.02457	.00167	.00633
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00155	-.00085	.00112	.00047	.00165	.00011	.00063
SDev	.00044	.00232	.00051	.00111	.00137	.00336	.00179
%RSD	28.575	273.15	45.281	238.38	82.942	2992.8	285.43
#1	.00124	-.00249	.00076	-.00032	.00262	-.00227	-.00064
#2	.00186	.00079	.00148	.00125	.00068	.00249	.00189
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00140	.00081	.00008	.00260	.00364	.00097	
SDev	.00054	.00001	.00018	.00056	.00027	.00036	
%RSD	38.623	.83048	228.33	21.604	7.5273	37.516	
#1	-.00178	.00082	-.00005	.00299	.00345	.00071	
#2	-.00102	.00081	.00020	.00220	.00384	.00123	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15277	--	--	--	--	--	--
SDev	357.2305	--	--	--	--	--	--
%RSD	2.338416	--	--	--	--	--	--
#1	15529	--	--	--	--	--	--
#2	15024	--	--	--	--	--	--

Metals Preparation Log

Soil



STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

Method: 3050B	Matrix: Water	Start Time: 1005	SDG: —	Balance# 244817	Reagents: 10M 1:1 HNO ₃ 5M conc. HNO ₃ 10M 30:1 H ₂ O ₂ 5M conc. HCl	004-136-2 602309401 Mallinckrodt 5240015 AGT Mallinckrodt 5870011401 Mallinckrodt					
Analyst: [Signature]	Date: 6-16-00	Lot Number: COF140185	Lab Lot No. (book, page, line): 2014-089-1								
Revised By: [Signature]	Date: 6-16-00										
Sample ID	Init Wt/Vol g/mL	Final Vol mL	Comments	Color		Clarity		Texture		Artifacts	Artifact Codes
				Pre	Post	Pre	Post	Pre	Post		
1 DEMOV	1.0g	100mL	+ 1m MS-BIREV								S-Stones
2 DEMOV S			+ 1m MS-BIREV								O=Organic (plant mat)
3 DEMOV D			+ 1m MS-BIREV								W=free H ₂ O
4 DEMR4											G=Glass
5 DEMR6											M=Metal Fragments
6 DEMR7											R=Rubber/Plastic
7 DEMR8											C=Cloth
8 DEX4 C			+ 1m MS-BIREV								P=Paper
9											I=Insects
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

Digestate(s)

Date

Time

Analyst

Location

Date

Time

Analyst

Location

Hot plate

Block Temp

Correction

Factor

Color

R=Red
BL=Blue
BR=Brown
BLK=Black
Y=Yellow
O=OrangeV=Violet
P=Pink
W=White
GY=Gray
GN=Green
C=Colorless

661 576

PSR024 6/16/00 6:12:57 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: KRANCES

METHOD: QM Inductively Coupled Plasma (6010B Trace)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12B CLP1	DEMQV	___	241066	399411	A-46-QM	COF140185	001		SOLID	0	3
12B CLP1	DEMR4	___	241067	399411	A-46-QM	COF140185	002		SOLID	0	3
12B CLP1	DEMR6	___	241068	399411	A-46-QM	COF140185	003		SOLID	0	3
12B CLP1	DEMR7	___	241069	399411	A-46-QM	COF140185	004		SOLID	0	3

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>AC</i>	<i>Suzanne Franco</i>	6-16-00 0935
<i>Suzanne Franco</i>	<i>AC</i>	6-16-00 1110

***** END OF REPORT *****

**TCLP
METALS DATA**

STL-Pittsburgh**Cover Page - Inorganic Analysis Data Package**

<u>Client ID</u>	<u>Lab Sample ID:</u>
<u>DF/S1/0165/GRAB/002</u>	<u>DEMQVT</u>
<u>DF/S1/0165/GRAB/002D</u>	<u>DEMQVDT</u>
<u>DF/S1/0165/GRAB/002S</u>	<u>DEMQVST</u>
<u>DF/S1/0165/SDC/010</u>	<u>DEMR4T</u>
<u>DF/S1/0165/SDC/011</u>	<u>DEMR6T</u>
<u>DF/S1/0165/SDC/012</u>	<u>DEMR7T</u>

Comments: UXB, DUNN FIELD TCLP'S
COF140185
6010B,7470A

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

Signature: _____

Name: _____

Date: _____

Title: _____

REVIEWED BY: <u>mtw</u>
DATE: <u>6-23-00</u>

**TCLP
METALS
RESULTS**

661 500

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002
 Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.23	B	1	ICP	6/22/00	16:38
Barium	493.41	0.00041	10.0	1.6	B	1	ICP	6/22/00	16:38
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:38
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:38
Lead	220.35	0.025	0.50	0.025	U	1	ICP	6/22/00	16:38
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/22/00	16:38
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:38

Comments: Lot#: C0F140185 Sample#: 1

Version 3.63 4

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR4T Client ID: DF/S1/0165/SDC/010
 Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.20	B	1	ICP	6/22/00	16:51
Barium	493.41	0.00041	10.0	1.4	B	1	ICP	6/22/00	16:51
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:51
Chromium	267.72	0.0038	0.50	0.021	B	1	ICP	6/22/00	16:51
Lead	220.35	0.025	0.50	0.033	B	1	ICP	6/22/00	16:51
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/22/00	16:51
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:51

Comments: Lot#: C0F140185 Sample#: 2

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

661 582

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR6T Client ID: DF/S1/0165/SDC/011
 Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.22	B	1	ICP	6/22/00	16:54
Barium	493.41	0.00041	10.0	1.3	B	1	ICP	6/22/00	16:54
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:54
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:54
Lead	220.35	0.025	0.50	0.025	U	1	ICP	6/22/00	16:54
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/22/00	16:54
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:54

Comments Lot#: C0F140185 Sample#: 3

Version 3.63.4

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR7T Client ID: DF/S1/0165/SDC/012
 Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.20	B	1	ICP	6/22/00	16:57
Barium	493.41	0.00041	10.0	1.4	B	1	ICP	6/22/00	16:57
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:57
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:57
Lead	220.35	0.025	0.50	0.025	U	1	ICP	6/22/00	16:57
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/22/00	16:57
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:57

Comments: Lot# C0F140185 Sample#: 4

Version 3.63.4

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

661 584

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMQVT Client ID: DF/S1/C165/GRAB/002
Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000093	B	1	CVAA	6/21/00	10:32

Comments: Lot#. C0F140185 Sample#: 1

Version 3.63 4

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR4T Client ID: DF/S1/0165/SDC/010
Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000095	B	1	CVAA	6/21/00	10:38

Comments: Lot#: C0F140185 Sample#: 2

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

661 586

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR6T Client ID: DF/SL/0165/SDC/011
Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000045	U	1	CVAA	6/21/00	10:40

Comments: Lot# C0F140185 Sample#: 3

Version 3.63.4

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEMR7T Client ID: DF/S1/0165/SDC/012
 Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000045	U	1	CVAA	6/21/00	10:43

Comments: Lot#: C0F140185 Sample#: 4

661 588

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAAUnits: ug/LChart Number: 0621HGA PRNAcceptable Range: 90% - 110%Standard Source: UltraStandard ID: 0014-145-6

			ICV5-1 6/21/00 10:17 AM							
Element	WL/ Mass	True Conc	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.50	100.0						

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J00622C.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-119-2

Element	WL/ Mass	True Conc	ICV2-1 6/22/00 4.05 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000.0	994.41	99.4								
Barium	493.409	1000.0	1007.16	100.7								
Cadmium	228.802	1000.0	1013.37	101.3								
Chromium	267.716	1000.0	1010.69	101.1								
Lead	220.353	1000.0	1050.74	105.1								
Selenium	196.026	1000.0	1007.05	100.7								
Silver	328.068	500.0	507.31	101.5								

661 590

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA

Units: ug/L

Chart Number: 0621HGA.PRN

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0014-145-7

Element	WL/ Mass	True Conc	CCV5-1 6/21/00 10:21 AM		CCV5-2 6/21/00 10:46 AM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.09	101.8	5.19	103.8						

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J00622C.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-129-12

Element	WL/ Mass	True Conc	CCV2-1 6/22/00 4:20 PM		CCV2-2 6/22/00 5:00 PM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	5071.93	101.4	4927.92	98.6						
Barium	493.409	5000.0	5062.09	101.2	4832.35	96.6						
Cadmium	228.802	5000.0	5019.17	100.4	5005.26	100.1						
Chromium	267.716	5000.0	4935.19	98.7	4892.97	97.9						
Lead	220.353	5000.0	5048.04	101.0	4930.00	98.6						
Selenium	196.026	5000.0	5079.10	101.6	5009.29	100.2						
Silver	328.068	1000.0	1004.54	100.5	988.51	98.9						

661 592

STL-Pittsburgh
Metals Data Reporting Form

Initial Calibration Blank Results**Instrument:** CVAA**Units:** ug/L**Chart Number:** 0621HGA.PRN**Standard Source:** _____**Standard ID:** _____

			ICBI 6/21/00 10:19 AM					
Element	WL/ Mass	Report Limit	Found	O	Found	O	Found	O
Mercury	253.7	0.2	0.0	U				

STL-Pittsburgh
Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00622C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 6/22/00 4:08 PM		Found	O	Found	O	Found	O	Found	O	Found	O
			Found	O										
Arsenic	193.696	500	30.3	U										
Barium	493.409	10000	0.4	U										
Cadmium	228.802	100	4.0	B										
Chromium	267.716	500	3.8	U										
Lead	220.353	500	24.6	U										
Selenium	196.026	250	67.4	U										
Silver	328.068	500	3.1	U										

661 594

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0621HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 6/21/00 10:24 AM	CCB2 6/21/00 10:48 AM	Found	O	Found	O	Found	O
			Found	Found						
Mercury	253.7	0.2	0.0 U	0.0 B						

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00622C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 6/22/00 4:23 PM		CCB2 6/22/00 5:04 PM					
			Found	O	Found	O	Found	O	Found	O
Arsenic	193.696	500	30.3	U	30.3	U				
Barium	493.409	10000	1.0	B	0.4	U				
Cadmium	228.802	100	4.5	B	3.1	B				
Chromium	267.716	500	3.8	U	3.8	U				
Lead	220.353	500	24.6	U	24.6	U				
Selenium	196.026	250	67.4	U	67.4	U				
Silver	328.068	500	3.1	U	-3.6	B				

661 596

STL-Pittsburgh**Metals Data Reporting Form****Preparation Blank Results**Lab Sample ID: DF08VBTMatrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.18	B	1	ICP	6/22/00	16:32
Barium	493.409	0.00041	10.0	0.0072	B	1	ICP	6/22/00	16:32
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	6/22/00	16:32
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:32
Lead	220.353	0.025	0.50	0.025	U	1	ICP	6/22/00	16:32
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	6/22/00	16:32
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:32

Comments: _____

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DF0C0BT

Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153

Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.031	B	1	ICP	6/22/00	16:29
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	6/22/00	16:29
Cadmium	228.802	0.0028	0.10	0.0035	B	1	ICP	6/22/00	16:29
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	6/22/00	16:29
Lead	220.353	0.025	0.50	0.025	U	1	ICP	6/22/00	16:29
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	6/22/00	16:29
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	6/22/00	16:29

661 598

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank ResultsLab Sample ID: DF08VBTMatrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000045	U	1	CVAA	6/21/00	10:30

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank ResultsLab Sample ID: DF1WXBTMatrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000045	U	1	CVAA	6/21/00	10:26

661 600

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPUnits: ug/LChart Number: J00622C.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0014-129-11

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 6/22/00 4:11 PM	Found	Found	Found	Found
				Found				
Arsenic	193.696	500		-87				
Barium	493.409	10000		2				
Cadmium	228.802	100		-2				
Chromium	267.716	500		-3				
Lead	220.353	500		77				
Selenium	196.026	250		-33				
Silver	328.068	500		-3				

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J00622C.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-104-1

Element	WL/ Mass	True Conc	ICSAB 6/22/00 4.14 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000	997.4	99.7								
Barium	493.409	500	463.0	92.6								
Cadmium	228.802	1000	971.2	97.1								
Chromium	267.716	500	443.2	88.6								
Lead	220.353	1000	993.0	99.3								
Selenium	196.026	1000	938.9	93.9								
Silver	328.068	1000	955.7	95.6								

661 602

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DEMQVST

Original Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002S

Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153

Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	O	MS Conc	O	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	193.7	0.23	B	5.0		5	95.3	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Barium	493.4	1.6	B	45.6		50	87.9	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Cadmium	228.8	0.0028	U	0.95		1	95.1	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Chromium	267.7	0.0038	U	4.4		5	88.1	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Lead	220.4	0.025	U	4.6		5	91.2	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Selenium	196.0	0.067	U	1.0		1	103.2	1	1	ICP	6/22/00	16:38	6/22/00	16:45
Silver	328.1	0.0031	U	0.93		1	92.5	1	1	ICP	6/22/00	16:38	6/22/00	16:45

Comments:

Version 3 63 4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DEMQVDTOriginal Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002DMatrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	O	MSD Conc	O	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.7	0.23	B	5.0		5	95.4	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Barium	493.4	1.6	B	45.8		50	88.4	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Cadmium	228.8	0.0028	U	0.97		1	96.8	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Chromium	267.7	0.0038	U	4.5		5	89.3	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Lead	220.4	0.025	U	4.6		5	92.7	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Selenium	196.0	0.067	U	1.1		1	105.6	1	1	ICP	6/22/00	16:38	6/22/00	16:48
Silver	328.1	0.0031	U	0.94		1	93.5	1	1	ICP	6/22/00	16:38	6/22/00	16:48

Comments: _____

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

661 604

STL-Pittsburgh
Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DEMQVST

Original Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002S

Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091

Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.000093	B	0.0052		0.005	101.5	1	1	CVAA	6/21/00	10:32	6/21/00	10:34

Comments: _____

Version 3.63.4

STL Pittsburgh

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

Form 5A Equivalent

6028

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DEMQVDT

Original Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002D

Matrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091

Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	O	MSD Conc	O	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.000093	B	0.0051		0.005	100.5	1	1	CVAA	6/21/00	10:32	6/21/00	10:36

Comments: _____

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

661 606

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DEMQVDTMatrix Spike Sample ID: DEMQVST Client ID: DF/S1/0165/GRAB/002DMatrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MS Conc	O	MSD Conc	O	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.696	5.0		5.0		0.1 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Barium	493.409	45.6		45.8		0.6 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Cadmium	228.802	0.95		0.97		1.8 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Chromium	267.716	4.4		4.5		1.4 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Lead	220.353	4.6		4.6		1.6 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Selenium	196.026	1.0		1.1		2.3 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48
Silver	328.068	0.93		0.94		1.0 %	1	1	ICP	6/22/00	16:45	6/22/00	16:48

Comments: _____

Version 3 63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DEMQVDTMatrix Spike Sample ID: DEMQVST Client ID: DF/S1/0165/GRAB/002DMatrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MS Conc	O	MSD Conc	O	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.0052		0.0051		1.0 %	1	1	CVAA	6/21/00	10:34	6/21/00	10:36

Comments: _____

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 6 Equivalent

661 608

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DF0C0CTMatrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	2.0	2.0	102.2		80-120	1	ICP	6/22/00	16:35
Barium	493.409	2.0	1.7	85.1	B	80-120	1	ICP	6/22/00	16:35
Cadmium	228.802	0.050	0.043	85.3	B	80-120	1	ICP	6/22/00	16:35
Chromium	267.716	0.20	0.18	87.5	B	80-120	1	ICP	6/22/00	16:35
Lead	220.353	0.50	0.46	91.7	B	80-120	1	ICP	6/22/00	16:35
Selenium	196.026	2.0	2.0	97.4		80-120	1	ICP	6/22/00	16:35
Silver	328.068	0.050	0.044	87.9	B	80-120	1	ICP	6/22/00	16:35

Comments: _____

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DF1WXCTMatrix: Water Units: mg/L Prep Date: 6/21/00 Prep Batch: 0173091Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0025	0.0027	106.8		80-120	1	CVAA	6/21/00	10:28

Comments: _____

661 610

STL-Pittsburgh

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DEMQVPTOriginal Sample ID: DEMQVT Client ID: DF/S1/0165/GRAB/002Matrix: Water Units: mg/L Prep Date: 6/20/00 Prep Batch: 0172153Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	O	Serial Dilution Conc	O	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	193.696	0.23	B	0.41	B	5.5 %	1	5	ICP	6/22/00	16:38	6/22/00	16:41
Barium	493.409	1.6	B	1.7	B		1	5	ICP	6/22/00	16:38	6/22/00	16:41
Cadmium	228.802	0.0028	U	0.014	U		1	5	ICP	6/22/00	16:38	6/22/00	16:41
Chromium	267.716	0.0038	U	0.019	U		1	5	ICP	6/22/00	16:38	6/22/00	16:41
Lead	220.353	0.025	U	0.12	U		1	5	ICP	6/22/00	16:38	6/22/00	16:41
Selenium	196.026	0.067	U	0.34	U		1	5	ICP	6/22/00	16:38	6/22/00	16:41
Silver	328.068	0.0031	U	0.016	U		1	5	ICP	6/22/00	16:38	6/22/00	16:41

Comments: _____

Version 3.63.4

U Result is less than the MDL

Form 9 Equivalent

B Result is between MDL and RL

E Serial dilution percent difference not within limits

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAAUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.045	3/20/00

661 612

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection LimitsInstrument: ICPUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	193.70	500	30.3	4/1/00
Barium	493.41	10000	0.41	4/1/00
Cadmium	228.80	100	2.8	4/1/00
Chromium	267.72	500	3.8	4/1/00
Lead	220.35	500	24.6	4/1/00
Selenium	196.03	250	67.4	4/1/00
Silver	328.07	500	3.1	4/1/00

STL-Pittsburgh

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP Date of IEC's: 6/22/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(0.008043), Mn(0.00002), Pb(0.000607)
Antimony	206.838	Ni(-0.000449), Pb(-0.001338), Sn(-0.004668)
Arsenic	193.696	Cd(0.011196)
Barium	493.409	Co(0.000506)
Beryllium	313.042	Cd(0.008625)
Cadmium	228.802	Co(0.002633)
Chromium	267.716	Pb(-0.000686), Sb(0.008213), V(-0.001979)
Cobalt	228.616	Al(-0.014067), B(0.00201), Cd(-0.004523), Cu(-0.00091), Pb(-0.027395), Sb(-0.003935), Tl(0.007862)
Copper	324.754	Zn(0.00466)
Iron	259.94	Ag(-0.000239), As(0.001198), B(-0.001921), Cd(-0.000034), Cu(-0.00008), Mn(-0.000288), Mo(-0.00015), Pb(0.000239), Se(-0.002635), Sn(-0.00019), Tl(0.010326), Zn(0.000098)
Manganese	257.61	Ag(0.000201), Tl(-0.005634)
Molybdenum	202.03	Al(0.008699), Cr(-0.000292), Mn(-0.00033), Sb(0.005808), V(-0.019318)
Nickel	231.604	Cd(-0.000409), Sb(-0.009092), Zn(0.003263)
Tin	189.989	Sb(0.002262)
Titanium	334.941	Co(0.001637), Fe(-0.003475), Sb(0.001696), Sn(0.003624)
Vanadium	292.402	Ag(-0.005069), Al(0.012877), As(0.017242), Be(0.00265), Cd(0.000094), Cr(0.000568), Sb(-0.003793), Si(-0.012762), Tl(0.007148), Zn(-0.004494)

661 614

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253 70	10	1/15/00

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic RangesInstrument: ICPUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	193.70	100000	4/5/00
Barium	493.41	100000	4/5/00
Cadmium	228.80	100000	4/5/00
Chromium	267.72	100000	4/5/00
Lead	220.35	100000	4/5/00
Selenium	196.03	100000	4/5/00
Silver	328.07	2000	4/5/00

STL-Pittsburgh

661 616

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0172153 Instrument: ICP Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DF08VBT	6/20/00	NA	50	NA
DF0C0BT	6/20/00	NA	50	NA
DF0C0CT	6/20/00	NA	50	NA
DEMQVDT	6/20/00	NA	50	NA
DEMQVST	6/20/00	NA	50	NA
DEMQVT	6/20/00	NA	50	NA
DEMR4T	6/20/00	NA	50	NA
DEMR6T	6/20/00	NA	50	NA
DEMR7T	6/20/00	NA	50	NA

Metals Data Reporting Form

Preparation LogPreparation Batch: 0173091 Instrument: CVAA Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DF08VBT	6/21/00	NA	100	NA
DF1WXB	6/21/00	NA	100	NA
DF1WXCT	6/21/00	NA	100	NA
DEMQVDT	6/21/00	NA	100	NA
DEMQVST	6/21/00	NA	100	NA
DEMQVT	6/21/00	NA	100	NA
DEMR4T	6/21/00	NA	100	NA
DEMR6T	6/21/00	NA	100	NA
DEMR7T	6/21/00	NA	100	NA

661 618

STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0621HGA.PRN

Sample Name	Date of Analysis	Time of Analysis
Std1Repl	6/21/00	10:04 AM
Std2Repl	6/21/00	10:06 AM
Std3Repl	6/21/00	10:08 AM
Std4Repl	6/21/00	10:11 AM
Std5Repl	6/21/00	10:13 AM
Std6Repl	6/21/00	10:15 AM
ICV5-1	6/21/00	10:17 AM
ICB1	6/21/00	10:19 AM
CCV5-1	6/21/00	10:21 AM
CCB1	6/21/00	10:24 AM
DF1WXB	6/21/00	10:26 AM
DF1WXCT	6/21/00	10:28 AM
DF08VBT	6/21/00	10:30 AM
DEMQVT	6/21/00	10:32 AM
DEMQVST	6/21/00	10:34 AM
DEMQVDT	6/21/00	10:36 AM
DEMR4T	6/21/00	10:38 AM
DEMR6T	6/21/00	10:40 AM
DEMR7T	6/21/00	10:43 AM
ZZZZZZ	6/21/00	10:44 AM
CCV5-2	6/21/00	10:46 AM
CCB2	6/21/00	10:48 AM
ZZZZZZ	6/21/00	10:50 AM
ZZZZZZ	6/21/00	10:52 AM
ZZZZZZ	6/21/00	10:54 AM
ZZZZZZ	6/21/00	10:56 AM
ZZZZZZ	6/21/00	10:58 AM
ZZZZZZ	6/21/00	11:00 AM
ZZZZZZ	6/21/00	11:02 AM
ZZZZZZ	6/21/00	11:05 AM
ZZZZZZ	6/21/00	11:06 AM
ZZZZZZ	6/21/00	11:08 AM
ZZZZZZ	6/21/00	11:10 AM
ZZZZZZ	6/21/00	11:12 AM
ZZZZZZ	6/21/00	11:15 AM
ZZZZZZ	6/21/00	11:17 AM
ZZZZZZ	6/21/00	11:19 AM
ZZZZZZ	6/21/00	11:21 AM
ZZZZZZ	6/21/00	11:23 AM
ZZZZZZ	6/21/00	11:25 AM
ZZZZZZ	6/21/00	11:27 AM

STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA

Chart Number: 0621HGA.PRN

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	6/21/00	11:30 AM
ZZZZZZ	6/21/00	11:32 AM
ZZZZZZ	6/21/00	11:34 AM
ZZZZZZ	6/21/00	11:36 AM
ZZZZZZ	6/21/00	11:37 AM
ZZZZZZ	6/21/00	11:39 AM
ZZZZZZ	6/21/00	11:41 AM
ZZZZZZ	6/21/00	11:44 AM
ZZZZZZ	6/21/00	11:46 AM
ZZZZZZ	6/21/00	11:48 AM
ZZZZZZ	6/21/00	11:50 AM
ZZZZZZ	6/21/00	11:54 AM
ZZZZZZ	6/21/00	11:56 AM
ZZZZZZ	6/21/00	11:59 AM
ZZZZZZ	6/21/00	12:01 PM
ZZZZZZ	6/21/00	12:03 PM
ZZZZZZ	6/21/00	12:06 PM
ZZZZZZ	6/21/00	12:08 PM
ZZZZZZ	6/21/00	12:10 PM
ZZZZZZ	6/21/00	12:13 PM
ZZZZZZ	6/21/00	12:15 PM
ZZZZZZ	6/21/00	12:18 PM
ZZZZZZ	6/21/00	12:20 PM
ZZZZZZ	6/21/00	12:22 PM
ZZZZZZ	6/21/00	12:25 PM
ZZZZZZ	6/21/00	12:27 PM
ZZZZZZ	6/21/00	12:29 PM
ZZZZZZ	6/21/00	12:31 PM
ZZZZZZ	6/21/00	12:33 PM
ZZZZZZ	6/21/00	12:36 PM
ZZZZZZ	6/21/00	12:38 PM
ZZZZZZ	6/21/00	12:40 PM
ZZZZZZ	6/21/00	12:42 PM
ZZZZZZ	6/21/00	12:44 PM
ZZZZZZ	6/21/00	12:46 PM
ZZZZZZ	6/21/00	12:50 PM
ZZZZZZ	6/21/00	12:52 PM
ZZZZZZ	6/21/00	12:54 PM

661 620

STL-Pittsburgh
Metals Data Reporting Form

Instrument RunlogInstrument: ICPChart Number: J00622C.ARC

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	6/22/00	2 55 PM
ZZZZZZ	6/22/00	2:58 PM
ZZZZZZ	6/22/00	3:01 PM
ZZZZZZ	6/22/00	3:04 PM
ZZZZZZ	6/22/00	3:09 PM
ZZZZZZ	6/22/00	3:12 PM
ZZZZZZ	6/22/00	3:16 PM
ZZZZZZ	6/22/00	3:20 PM
ZZZZZZ	6/22/00	3:23 PM
ZZZZZZ	6/22/00	3:28 PM
ZZZZZZ	6/22/00	3:31 PM
ZZZZZZ	6/22/00	3 34 PM
ZZZZZZ	6/22/00	3 37 PM
STD1	6/22/00	3:56 PM
STD5A	6/22/00	3:59 PM
STD5B	6/22/00	4:02 PM
ICV2-1	6/22/00	4:05 PM
ICB1	6/22/00	4:08 PM
ICSA	6/22/00	4:11 PM
ICSAB	6/22/00	4:14 PM
CCV2-1	6/22/00	4:20 PM
CCB1	6/22/00	4:23 PM
DF0C0BT	6/22/00	4:29 PM
DF08VBT	6/22/00	4:32 PM
DF0C0CT	6/22/00	4:35 PM
DEMQVT	6/22/00	4:38 PM
DEMQVPT	6/22/00	4:41 PM
DEMQVST	6/22/00	4:45 PM
DEMQVDT	6/22/00	4:48 PM
DEMR4T	6/22/00	4:51 PM
DEMR6T	6/22/00	4:54 PM
DEMR7T	6/22/00	4:57 PM
CCV2-2	6/22/00	5:00 PM
CCB2	6/22/00	5:04 PM

**TCLP
METALS
RAW DATA**

mutual TWEV6-hs 6-22-00

#	Sample Name	AG	AS	BA	CD	CR	PB
1	STD1	-.00049	-.00109	.00012	-.00012	.00135	.00019
2	STD5A	.26669	.56234	4.10402	.91613	3.8017	.26034
3	STD5B						
4	ICV2-1 0014-119-2	.50731	.99441	1.0072	1.0134	1.0107	1.0507
5	ICB1	.00074	-.00011	.00000	.00399	.00013	.00383
6	ICSA 0014-129-11	-.00331	-.08675	.00151	-.00180	-.00250	.07700
7	ICSAB 0014-104-1	.95569	.99739	.46302	.97120	.44324	.99296
8	CCV2-1 0014- ~~087-7~~ <i>mtw 129-12 6-22-00</i>	1.0045	5.0719	5.0621	5.0192	4.9352	5.0480
9	CCB1	.00003	-.00302	.00097	.00445	.00092	.01867
10	DF0C0BT	-.00218	.03066	.00004	.00350	-.00065	.02426
11	DF08VBT	.00037	.17773	.00721	-.00263	-.00105	.01118
12	DF0C0CT	.04393	2.0446	1.7021	.04264	.17505	.45844
13	DEMQVT	-.00312	.22778	1.6270	-.00030	-.00197	.00125
14	DEMQVTP5	-.00213	.08230	.34315	.00231	-.00092	.01106
15	DEMQVST	.92506	4.9913	45.564	.95087	4.4034	4.5598
16	DEMQVDT	.93455	4.9973	45.839	.96777	4.4642	4.6343
17	DEMR4T	-.00229	.19494	1.3975	-.00043	.02079	.03296
18	DEMR6T	-.00286	.21557	1.2927	.00012	.00236	.00895
19	DEMR7T	-.00505	.20305	1.4253	.00082	-.00171	-.00763
20	CCV2-2	.98851	4.9279	4.8324	5.0053	4.8930	4.9300
21	CCB2	-.00364	.02803	.00012	.00310	-.00262	.00745

#	Sample Name	SE
1	STD1	-.00059
2	STD5A	.5483
3	STD5B	
4	ICV2-1 0014-119-2	1.0071
5	ICB1	.00456
6	ICSA 0014-129-11	-.03317
7	ICSAB 0014-104-1	.93894
8	CCV2-1 0014- ~~087-7~~ <i>mtw 129-12 6-22-00</i>	5.0791
9	CCB1	.01278
10	DF0C0BT	.03007
11	DF08VBT	.00735
12	DF0C0CT	1.9472
13	DEMQVT	.01555
14	DEMQVTP5	.01315
15	DEMQVST	1.0320
16	DEMQVDT	1.0557
17	DEMR4T	.03108
18	DEMR6T	.02341
19	DEMR7T	.02698
20	CCV2-2	5.0093
21	CCB2	.02459

MTW 6-22-00

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J00622C	QUANMET	06/22/00	15:56		X	IR
2	STD5A	J00622C	QUANMET	06/22/00	15:59		X	IR
3	STD5B	J00622C	QUANMET	06/22/00	16:02		X	IR
4	ICV2-1 0014-119-2	J00622C	QUANMET	06/22/00	16:05	MTW	S	CONC
5	ICB1	J00622C	QUANMET	06/22/00	16:08	MTW	S	CONC
6	ICSA 0014-129-11	J00622C	QUANMET	06/22/00	16:11	MTW	Q	CONC
7	ICSAB 0014-104-1	J00622C	QUANMET	06/22/00	16:14	MTW	Q	CONC
8	CCV2-1 0014- ~~087-7~~	J00622C	QUANMET	06/22/00	16:20	MTW	S	CONC
9	CCB1 129-12	J00622C	QUANMET	06/22/00	16:23	MTW	S	CONC
10	DF0C0BT	J00622C	QUANMET	06/22/00	16:29	MTW	S	CONC
11	DF08VBT	J00622C	QUANMET	06/22/00	16:32	MTW	S	CONC
12	DF0C0CT	J00622C	QUANMET	06/22/00	16:35	MTW	S	CONC
13	DEMQVT	J00622C	QUANMET	06/22/00	16:38	MTW	S	CONC
14	DEMQVTP5	J00622C	QUANMET	06/22/00	16:41	MTW	S	CONC
15	DEMQVST	J00622C	QUANMET	06/22/00	16:45	MTW	S	CONC
16	DEMQVDT	J00622C	QUANMET	06/22/00	16:48	MTW	S	CONC
17	DEMR4T	J00622C	QUANMET	06/22/00	16:51	MTW	S	CONC
18	DEMR6T	J00622C	QUANMET	06/22/00	16:54	MTW	S	CONC
19	DEMR7T	J00622C	QUANMET	06/22/00	16:57	MTW	S	CONC
20	CCV2-2	J00622C	QUANMET	06/22/00	17:00	MTW	S	CONC
21	CCB2	J00622C	QUANMET	06/22/00	17:04	MTW	S	CONC

Method: QUANMET Standard: STD1

Run Time: 06/22/00 15:56:01

Elem	AG	AL	AS	B_	BA	BE	CA
Avge	-.00050	.01030	-.00110	.00155	.00012	.00290	.00083
SDev	.00020	.00068	.00297	.00076	.00014	.00012	.00079
%RSD	40.000	6.6323	269.88	49.140	113.60	3.9817	95.091
#1	-.00040	.01060	-.00180	.00220	.00032	.00300	.00121
#2	-.00040	.01100	-.00220	.00106	.00008	.00280	.00066
#3	-.00080	.00940	-.00360	.00220	.00000	.00300	.00165
#4	-.00040	.01020	.00320	.00074	.00008	.00280	-.00019

Elem	CD	CO	CR	CU	FE	K_	LI
Avge	-.00012	.00000	.00135	.00040	.00135	-.02010	-.00064
SDev	.00008	.00036	.00072	.00028	.00077	.01126	.00072
%RSD	62.406	.00000	53.244	70.711	57.218	56.043	112.84
#1	-.00008	.00040	.00240	.00080	.00060	-.00460	.00029
#2	-.00004	-.00020	.00120	.00020	.00100	-.02180	-.00120
#3	-.00016	.00020	.00100	.00040	.00240	-.02240	-.00120
#4	-.00020	-.00040	.00080	.00020	.00140	-.03160	-.00044

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	.00080	.00000	-.00005	.06110	.00051	.00020	.00005
SDev	.00080	.00000	.00025	.00174	.00052	.00028	.00041
%RSD	100.00	.00000	503.32	2.8474	103.08	141.42	824.62
#1	.00200	.00000	.00000	.06180	.00076	.00040	.00040
#2	.00040	.00000	.00020	.06260	.00018	-.00020	-.00040
#3	.00040	.00000	-.00040	.06140	-.00002	.00020	.00040
#4	.00040	.00000	.00000	.05860	.00111	.00040	-.00020

Elem	SE	SI	SN	SR	TI	TL	V_
Avge	-.00060	.00040	.00125	-.00013	.00215	.00005	-.00015
SDev	.00250	.00028	.00092	.00009	.00019	.00038	.00030
%RSD	416.33	70.711	73.176	73.105	8.9063	757.19	200.00
#1	.00040	.00020	.00180	-.00020	.00220	.00060	.00000
#2	.00240	.00040	.00220	.00000	.00240	-.00020	.00000
#3	-.00320	.00020	.00020	-.00012	.00200	.00000	.00000
#4	-.00200	.00080	.00080	-.00020	.00200	-.00020	-.00060

Elem	ZN
Avge	.00021
SDev	.00016
%RSD	78.655
#1	.00040
#2	.00000
#3	.00024
#4	.00020

Standardization Rpt.

06/22/00 04:02:15 PM

page 1

Method: QUANMET Standard: STD5A 0014-072-2
 Run Time: 06/22/00 15:59:10

Elem	AG	AS	B _u	BA	BE	CD	CO
Avge	.26670	.56235	.61426	4.1040	16.312	.91613	1.4741
SDev	.00058	.00548	.00428	.0335	.100	.00239	.0030
%RSD	.21648	.97372	.69758	.81672	.61549	.26099	.20196

#1	.26660	.55640	.61542	4.1120	16.335	.91304	1.4724
#2	.26600	.56000	.60825	4.0599	16.179	.91862	1.4730
#3	.26680	.56380	.61499	4.1034	16.312	.91720	1.4726
#4	.26740	.56920	.61839	4.1409	16.421	.91567	1.4786

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.8017	2.3331	4.1807	2.0280	.41695	1.8157	.26035
SDev	.0072	.0215	.0591	.0048	.00204	.0061	.00066
%RSD	.18980	.91985	1.4132	.23614	.48976	.33671	.25382

#1	3.7930	2.3408	4.2073	2.0264	.41680	1.8229	.25960
#2	3.8008	2.3028	4.0947	2.0236	.41420	1.8146	.26080
#3	3.8024	2.3360	4.1930	2.0272	.41780	1.8082	.26000
#4	3.8106	2.3530	4.2278	2.0348	.41900	1.8172	.26100

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.20160	.54830	.34585	.99215	8.0474	6.1392	.35745
SDev	.00082	.00595	.00390	.00489	.0595	.0300	.00092
%RSD	.40501	1.0847	1.1286	.49305	.73911	.48925	.25589

#1	.20040	.55240	.34120	.99060	8.0616	6.1436	.35840
#2	.20220	.54180	.34440	.99800	7.9693	6.1018	.35700
#3	.20200	.54480	.34760	.99360	8.0459	6.1366	.35800
#4	.20180	.55420	.35020	.98640	8.1130	6.1750	.35640

Elem	V _u	ZN
Avge	1.6465	1.5575
SDev	.0062	.0023
%RSD	.37915	.14558

#1	1.6454	1.5581
#2	1.6386	1.5542
#3	1.6482	1.5587
#4	1.6536	1.5591

661 626

Standardization Rpt.

06/22/00 04:05:24 PM

page 1

Method: QUANMET Standard: STD5B 0014-072-3
Run Time: 06/22/00 16:02:19

Elem	AL	CA	FE	K	MG	NA
Avge	11.298	24.991	30.107	2.2745	7.6997	48.368
SDev	.076	.101	.104	.0214	.0625	.599
%RSD	.67359	.40484	.34700	.94240	.81204	1.2393
#1	11.360	25.004	30.194	2.2930	7.7458	48.732
#2	11.338	25.006	30.199	2.2900	7.7426	48.650
#3	11.189	25.098	30.002	2.2470	7.6116	47.472
#4	11.304	24.854	30.031	2.2682	7.6988	48.619

Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.30286	.003651	06/22/00 04:02:19
AL	308.215	STD5B	STD1	8.85948	-.091253	06/22/00 04:02:19
AS	193.696	STD5A	STD1	18.0538	.019859	06/22/00 04:02:19
B	249.600	STD5A	STD1	16.3537	-.025348	06/22/00 04:02:19
BA	493.409	STD5A	STD1	2.43670	-.000294	06/22/00 04:02:19
BE	313.042	STD5A	STD1	.614785	-.001783	06/22/00 04:02:19
CA	317.933	STD5B	STD1	4.00164	-.003331	06/22/00 04:02:19
CD	228.802	STD5A	STD1	11.0775	.001336	06/22/00 04:02:19
CO	228.616	STD5A	STD1	6.81597	.000000	06/22/00 04:02:19
CR	267.716	STD5A	STD1	2.63206	-.003553	06/22/00 04:02:19
CU	324.754	STD5A	STD1	4.28288	-.001713	06/22/00 04:02:19
FE	259.940	STD5B	STD1	3.32169	-.004484	06/22/00 04:02:19
K	766.491	STD5B	STD1	43.5796	.875951	06/22/00 04:02:19
LI	670.789	STD5A	STD1	2.39157	.001519	06/22/00 04:02:19
MG	279.079	STD5B	STD1	12.9889	-.010391	06/22/00 04:02:19
MN	257.610	STD5A	STD1	4.92934	.000000	06/22/00 04:02:19
MO	202.030	STD5A	STD1	23.9808	.001199	06/22/00 04:02:19
NA	588.995	STD5B	STD1	2.07009	-.126483	06/22/00 04:02:19
NI	231.604	STD5A	STD1	5.50652	-.002786	06/22/00 04:02:19
PB	220.353	STD5A	STD1	37.3085	-.007462	06/22/00 04:02:19
SB	206.838	STD5A	STD1	49.6730	-.002484	06/22/00 04:02:19
SE	196.026	STD5A	STD1	18.2183	.010931	06/22/00 04:02:19
SI	288.158	STD5A	STD1	28.5783	-.011431	06/22/00 04:02:19
SN	189.989	STD5A	STD1	10.0813	-.012602	06/22/00 04:02:19
SR	409.552	STD5A	STD1	1.24261	.000161	06/22/00 04:02:19
TI	334.941	STD5A	STD1	1.62943	-.003503	06/22/00 04:02:19
TL	190.864	STD5A	STD1	56.2220	-.002811	06/22/00 04:02:19
V	292.402	STD5A	STD1	5.94378	.000892	06/22/00 04:02:19
ZN	213.856	STD5A	STD1	6.44330	-.001346	06/22/00 04:02:19

Method: QUANMET Sample Name: ICV2-1 0014-119-2 Operator: MTW
Run Time: 06/22/00 16:05:27
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG ✓	AL	AS ✓	B_	BA ✓	BE	CA
Units	ppm ✓	ppm	ppm ✓	ppm	ppm	ppm	ppm
Avge	.50732	25.324	.99442	.98867	1.0072	.98550	25.283
SDev	.00369	.206	.01800	.00184	.0131	.00769	.052
%RSD	.72797	.81523	1.8105	.18565	1.3055	.78010	.20643
#1	.51137	25.434	.97622	.98779	1.0119	.98955	25.329
#2	.50847	25.539	.98972	.98794	1.0218	.99250	25.273
#3	.50691	25.071	1.0192	.99141	.99064	.97493	25.317
#4	.50252	25.250	.99250	.98754	1.0043	.98502	25.214
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	27.500	1.1000	1.1000	1.1000	1.1000	27.500
Low	.45000	22.500	.90000	.90000	.90000	.90000	22.500
Elem	CD ✓	CO	CR ✓	CU	FE	K_	LI
Units	ppm ✓	ppm	ppm ✓	ppm	ppm	ppm	ppm
Avge	1.0134	1.0060	1.0107	1.0018	26.119	25.139	1.0145
SDev	.0062	.0100	.0057	.0127	.140	.260	.0201
%RSD	.60912	.99013	.56612	1.2719	.53760	1.0349	1.9777
#1	1.0225	1.0176	1.0148	1.0069	26.200	25.237	1.0247
#2	1.0103	1.0108	1.0164	1.0155	26.269	25.385	1.0356
#3	1.0119	.99991	1.0069	.98548	25.963	25.159	.98963
#4	1.0089	.99581	1.0048	.99919	26.044	24.775	1.0082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	27.500	27.500	1.1000
Low	.90000	.90000	.90000	.90000	22.500	22.500	.90000
Elem	MG	MN	MO	NA	NI	PB ✓	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm ✓	ppm
Avge	25.510	1.0075	.99791	25.138	1.0096	1.0507	.99984
SDev	.195	.0040	.00391	.395	.0163	.0269	.04650
%RSD	.76332	.39891	.39193	1.5708	1.6180	2.5606	4.6502
#1	25.619	1.0110	.99792	25.249	1.0002	1.0453	.95013
#2	25.718	1.0110	.99793	25.594	.99638	1.0676	1.0593
#3	25.287	1.0040	1.0027	24.645	1.0328	1.0750	.98021
#4	25.417	1.0040	.99310	25.065	1.0089	1.0151	1.0098
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	27.500	1.1000	1.1000	27.500	1.1000	1.1000	1.1000
Low	22.500	.90000	.90000	22.500	.90000	.90000	.90000
Elem	SE ✓	SI	SN	SR	TI	TL	V_
Units	ppm ✓	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0071	1.0130	.98090	1.0010	.99143	4.8596	.99844
SDev	.0418	.0047	.01869	.0117	.00768	.0838	.00493
%RSD	4.1499	.46013	1.9051	1.1670	.77461	1.7237	.49388
#1	1.0565	1.0187	.96908	1.0065	.99371	4.8784	1.0017
#2	.97648	1.0073	.99982	1.0133	1.0009	4.8665	1.0029

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#3	1.0267	1.0130	.96115	.98616	.98296	4.7460	.99703
#4	.96860	1.0129	.99354	.99809	.98817	4.9476	.99209

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	1.1000	5.5000	1.1000
Low	.90000	.90000	.90000	.90000	.90000	4.5000	.90000

Elem	ZN
Units	ppm
Avge	1.0015
SDev	.0044
%RSD	.44331

#1	1.0077
#2	.99754
#3	1.0017
#4	.99914

Errors	LC Pass
High	1.1000
Low	.90000

Method: QUANMET Sample Name: ICB1

Operator: MTW

Run Time: 06/22/00 16:08:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	.00074	.00932	-.00012	.00245	-.00000	.00009	.00820
SDev	.00119	.01076	.02600	.01005	.00014	.00006	.00475
%RSD	160.77	115.53	22419.	410.15	114.4e6	73.603	57.922
#1	.00076	-.00265	.00534	-.00150	.00019	.00005	.00406
#2	.00220	.02215	-.03811	-.00995	-.00009	.00006	.00613
#3	.00074	.01332	.01973	.01063	-.00009	.00006	.00764
#4	-.00072	.00444	.01258	.01062	-.00001	.00018	.01498
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	.00399	.00442	.00013	.00065	.00365	.13945	.00092
SDev	.00193	.00232	.00155	.00082	.00175	.46397	.00110
%RSD	48.341	52.580	1182.6	126.75	47.814	332.70	119.39
#1	H.00574	.00680	.00013	.00001	.00216	.32685	-.00039
#2	.00125	.00136	-.00145	.00086	.00349	-.15253	.00152
#3	.00426	.00408	-.00039	.00000	.00614	-.31813	.00048
#4	.00473	.00544	.00224	.00172	.00282	.70163	.00208
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	-.00130	.00099	.00240	.00331	-.00177	.00384	-.00496
SDev	.01415	.00000	.00240	.00500	.00646	.01296	.02209
%RSD	1089.3	.08231	99.974	150.87	365.60	337.67	445.31
#1	.00779	.00099	.00120	-.00311	-.00260	.01509	-.01237
#2	-.00260	.00099	.00120	.00476	.00487	-.00742	.01746
#3	-.02078	.00099	.00120	.00269	.00098	.01504	.00746
#4	.01039	.00099	.00600	.00890	-.01032	-.00736	-.03239
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	.00456	.00431	-.00506	.00019	-.00000	.01397	.00213
SDev	.01528	.01082	.00880	.00018	.00081	.05914	.00236
%RSD	334.81	250.86	173.85	98.665	457e6	423.24	111.08
#1	-.01821	.00579	-.01266	.00006	.00008	.01957	.00567
#2	.01458	.01144	-.00849	.00026	.00106	.04212	.00091

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#3	.01095	.01144	.00760	.00001	-.00024	.06456	.00091
#4	.01094	-.01142	-.00670	.00041	-.00090	-.07035	.00101

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00155
SDev	.00148
%RSD	95.528

#1	-.00033
#2	.00175
#3	.00328
#4	.00149

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICSA 0014-129-11 Operator: MTW
 Run Time: 06/22/00 16:11:44
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem Units	AG ppm ✓	AL ppm	AS ppm ✓	B_ ppm	BA ppm ✓	BE ppm	CA ppm
Avge	-.00332	496.00	-.08675	-.04071	.00151	-.00007	478.76
SDev	.00178	4.95	.10742	.00511	.00017	.00009	2.67
%RSD	53.543	.99797	123.83	12.549	10.945	128.38	.55748
#1	-.00378	495.33	-.20818	-.04756	.00166	-.00006	476.38
#2	-.00500	502.54	.04674	-.03521	.00166	-.00019	476.84
#3	-.00081	490.51	-.06129	-.04041	.00137	.00003	482.09
#4	-.00369	495.61	-.12427	-.03968	.00137	-.00006	479.73
Errors Value Range	NOCHECK	QC Pass 500.00 20.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass 500.00 20.000

Elem Units	CD ppm ✓	CO ppm	CR ppm ✓	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	-.00181	.00992	-.00250	-.00673	183.45	-.51860	.00144
SDev	.00183	.00341	.00227	.00154	.47	.64987	.00105
%RSD	101.07	34.343	90.820	22.931	.25888	125.31	72.753
#1	-.00421	.01095	-.00250	-.00761	183.09	-.97183	.00152
#2	-.00183	.00549	-.00355	-.00839	184.10	-.95439	.00008
#3	-.00141	.01367	.00065	-.00504	183.11	.41401	.00264
#4	.00021	.00958	-.00460	-.00587	183.48	-.56218	.00152
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass 200.00 20.000	NOCHECK	NOCHECK

Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm ✓	SB ppm
Avge	487.09	.00618	.00705	.00062	-.00382	.07701	.00020
SDev	3.22	.00096	.00623	.00162	.01352	.03024	.00487
%RSD	.66119	15.552	88.446	261.05	353.81	39.273	2411.4
#1	486.70	.00535	-.00020	.00104	-.01820	.06634	.00751
#2	491.41	.00550	.00954	-.00021	.00641	.05410	-.00214
#3	483.61	.00742	.00460	.00269	-.01244	.12156	-.00222
#4	486.64	.00645	.01425	-.00104	.00894	.06603	-.00234
Errors Value Range	QC Pass 500.00 20.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem Units	SE ppm ✓	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	-.03317	.10006	-.07343	.01404	-.02306	.24212	.00340
SDev	.08158	.00334	.05148	.00014	.00027	.05937	.00473
%RSD	245.91	3.3340	70.110	1.0219	1.1541	24.520	139.08
#1	-.06782	.09717	-.05028	.01392	-.02338	.31045	.00088
#2	-.05421	.09717	-.11062	.01417	-.02306	.19882	.00107

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QC Standard

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#3	-.09692	.10301	-.12089	.01392	-.02306	.18650	.01049
#4	.08624	.10289	-.01195	.01417	-.02273	.27271	.00116

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem ZN
 Units (ppm)
 Avge .00153
 SDev .00064
 %RSD 42.009

#1	.00212
#2	.00194
#3	.00137
#4	.00069

Errors	NOCHECK
Value	
Range	

Method: QUANMET Sample Name: ICSAB 0014-104-1 Operator: MTW
 Run Time: 06/22/00 16:14:51
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95570	491.24	.99739	.87941	.46302	.45102	477.37
SDev	.00201	2.77	.06993	.00734	.00302	.00220	1.21
%RSD	.21029	.56298	7.0108	.83483	.65139	.48837	.25381
#1	.95798	493.85	.93714	.87792	.46641	.45330	476.73
#2	.95335	487.48	1.0004	.88172	.45930	.44863	477.12
#3	.95657	492.64	.95748	.88777	.46417	.45243	479.15
#4	.95489	490.99	1.0945	.87023	.46222	.44973	476.50
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	1.0000	.50000	.50000	500.00
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97121	.45346	.44325	.47863	182.48	9.7183	.99399
SDev	.00412	.00131	.00270	.00376	.55	.2917	.00941
%RSD	.42426	.28853	.60882	.78631	.30276	3.0019	.94653
#1	.97627	.45241	.44285	.48188	182.87	10.054	1.0030
#2	.97113	.45244	.44074	.47323	181.85	9.5657	.98099
#3	.97125	.45516	.44706	.48018	183.00	9.8534	.99793
#4	.96618	.45381	.44232	.47925	182.18	9.4001	.99402
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	.50000	.50000	200.00	10.000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	481.85	.45634	.90259	9.9252	.88666	.99297	.93070
SDev	2.08	.00230	.01141	.0599	.01200	.02929	.03974
%RSD	.43137	.50359	1.2643	.60358	1.3534	2.9501	4.2696
#1	483.64	.45714	.91104	9.9810	.89475	.97636	.95056
#2	479.16	.45401	.88691	9.8402	.86919	.98036	.87109
#3	483.33	.45918	.91106	9.9416	.89430	1.0368	.95058
#4	481.28	.45503	.90134	9.9379	.88840	.97830	.95057
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	.50000	1.0000	10.000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.93895	1.0861	.82821	.93095	.88266	9.5246	.45756
SDev	.02392	.0203	.01695	.00590	.00327	.4113	.00191
%RSD	2.5474	1.8728	2.0467	.63414	.37090	4.3185	.41679
#1	.94455	1.0575	.83996	.93738	.88617	10.069	.45683
#2	.96371	1.0975	.80514	.92361	.87900	9.3371	.45636

Analysis Report

QC Standard

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#3	.94124	1.0861	.82587	.93351	.88454	9.5838	.46040
#4	.90629	1.1032	.84186	.92928	.88095	9.1088	.45664

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	10.000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	ZN
Units	ppm
Avge	.93490
SDev	.00238
%RSD	.25441

#1	.93502
#2	.93213
#3	.93450
#4	.93793

Errors	QC Pass
Value	1.0000
Range	20.000

Analysis Report

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Method: QUANMET Sample Name: CCV2-1 ~~0014-087-7~~ ⁰⁰¹⁴⁻¹²⁹⁻¹² ₆₋₂₁₋₀₀ Operator: MTW
 Run Time: 06/22/00 16:20:15
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG /	AL	AS /	B	BA /	BE	CA
Units	ppm	ppm	ppm /	ppm	ppm /	ppm	ppm
Avge	1.0045	50.814	5.0719	4.9993	5.0621	4.9864	49.928
SDev	.0014	.500	.0703	.0603	.0743	.0487	.204
%RSD	.13798	.98338	1.3863	1.2068	1.4681	.97610	.40810

#1	1.0058	51.340	5.1456	5.0365	5.1455	5.0345	49.645
#2	1.0054	50.137	4.9872	4.9100	4.9647	4.9196	50.102
#3	1.0043	50.922	5.0445	5.0357	5.0728	5.0046	50.046
#4	1.0027	50.855	5.1104	5.0149	5.0655	4.9869	49.921

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000

Elem	CD	CO	CR /	CU	FE	K	LI
Units	ppm /	ppm	ppm /	ppm	ppm	ppm	ppm
Avge	5.0192	4.9572	4.9352	5.0646	51.461	50.690	5.1866
SDev	.0145	.0106	.0080	.0779	.209	.320	.1180
%RSD	.28896	.21295	.16133	1.5382	.40557	.63152	2.2744

#1	5.0024	4.9625	4.9307	5.1490	51.600	51.132	5.3176
#2	5.0348	4.9477	4.9270	4.9605	51.163	50.391	5.0313
#3	5.0270	4.9694	4.9449	5.0796	51.610	50.539	5.2077
#4	5.0124	4.9490	4.9381	5.0693	51.472	50.696	5.1897

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000

Elem	MG	MN	MO	NA	NI	PB /	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm /	ppm
Avge	50.842	4.9579	4.9969	51.476	4.9397	5.0480	5.0556
SDev	.481	.0164	.0550	.979	.0357	.0189	.0652
%RSD	.94514	.33107	1.1005	1.9025	.72286	.37357	1.2893

#1	51.322	4.9665	5.0017	52.633	4.9243	5.0274	5.0978
#2	50.181	4.9358	4.9297	50.241	4.9013	5.0500	4.9586
#3	51.002	4.9734	5.0641	51.589	4.9848	5.0726	5.0882
#4	50.862	4.9556	4.9921	51.442	4.9484	5.0422	5.0780

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000

Elem	SE /	SI	SN	SR	TI	TL	V
Units	ppm /	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0791	5.0577	5.0065	5.0323	5.0022	9.9636	4.9864
SDev	.0874	.0452	.0793	.0639	.0412	.0809	.0281
%RSD	1.7205	.89331	1.5843	1.2696	.82317	.81188	.56402

#1	5.1241	5.0824	5.0091	5.1026	5.0435	10.066	5.0156
#2	4.9481	4.9901	5.0874	4.9476	4.9454	9.8685	4.9489

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#3	5.1241	5.0821	4.8983	5.0433	5.0142	9.9535	4.9967
#4	5.1201	5.0763	5.0313	5.0358	5.0057	9.9663	4.9846

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9982
SDev	.0098
%RSD	.19621

#1	4.9996
#2	4.9856
#3	5.0095
#4	4.9982

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB1

Operator: MTW

Run Time: 06/22/00 16:23:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.02503	-.00303	.00796	.00097	.00115	.01691
SDev	.00422	.02493	.01880	.00989	.00058	.00052	.00696
%RSD	12701.	99.591	620.66	124.20	59.184	45.292	41.124

#1	.00076	.01482	-.02009	-.00669	.00048	.00054	.01136
#2	.00515	.05918	-.01685	.01067	.00157	.00164	.02633
#3	-.00070	.02544	.01953	.01395	.00137	.00152	.01800
#4	-.00508	.00067	.00530	.01392	.00048	.00091	.01197

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00446	.00101	.00092	.00193	.01346	.10677	.00240
SDev	.00165	.00302	.00101	.00108	.00948	.45642	.00040
%RSD	36.937	299.56	109.28	55.890	70.418	427.48	16.846

#1	.00418	.00408	.00171	.00343	.00283	.66677	.00264
#2	H.00687	.00270	-.00039	.00086	.02210	-.35300	.00250
#3	.00331	-.00274	.00066	.00171	.02077	-.16124	.00264
#4	.00348	-.00001	.00171	.00171	.00814	.27455	.00180

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01559	.00198	.01799	.01035	.00057	.01867	.00736
SDev	.01017	.00081	.00479	.01334	.00210	.01985	.02433
%RSD	65.263	40.692	26.658	128.85	369.10	106.28	330.73

#1	.02598	.00198	.02518	.01387	.00149	.03742	.00729
#2	.02078	.00297	.01559	.02712	-.00251	.02993	.03715
#3	.00260	.00198	.01559	.00435	.00109	-.00759	-.02246
#4	.01299	.00099	.01559	-.00393	.00221	.01493	.00745

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01279	.01865	.00507	.00118	.00122	-.03672	.00600
SDev	.01133	.04131	.02192	.00055	.00111	.07166	.00009
%RSD	88.635	221.50	432.15	46.954	91.084	195.15	1.5626

#1	.01823	-.00564	.02372	.00066	.00073	-.04788	.00614
#2	.02556	.08010	.01176	.00186	.00269	.06438	.00595

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#3	.00734	.00579	.01149	.00140	.00139	-.10424	.00595
#4	.00002	-.00564	-.02668	.00080	.00008	-.05915	.00595

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00219
SDev	.00105
%RSD	47.721

#1	.00351
#2	.00255
#3	.00124
#4	.00147

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DF0C0BT

Operator: MTW

Run Time: 06/22/00 16:29:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00218	.00039	.03067	.00212	.00004	.00006	.01745
SDev	.00120	.01760	.01705	.00620	.00019	.00009	.00476
%RSD	55.047	4545.2	55.590	291.93	446.80	153.03	27.293
#1	-.00219	-.00268	.01264	.00736	.00019	.00006	.01475
#2	-.00364	-.00635	.04155	-.00476	-.00021	.00006	.01800
#3	-.00221	-.01504	.02004	-.00148	-.00001	-.00005	.01315
#4	-.00070	.02562	.04843	.00737	.00019	.00017	.02393
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00350	.00067	-.00066	.00150	.00448	.10023	.00098
SDev	.00108	.00236	.00164	.00129	.00290	.53959	.00074
%RSD	30.941	350.85	249.31	85.768	64.655	538.34	74.724
#1	.00249	-.00001	-.00250	.00086	.00282	-.18739	.00056
#2	.00348	-.00001	.00119	.00257	.00282	.70163	.00169
#3	.00501	-.00137	-.00145	-.00000	.00348	-.49245	.00017
#4	.00302	.00408	.00013	.00257	.00881	.37914	.00152
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00455	.00025	.00600	.03654	-.00821	.02426	-.00506
SDev	.01607	.00049	.00678	.00648	.00624	.03240	.02202
%RSD	353.41	197.59	113.12	17.733	75.992	133.56	435.38
#1	.00520	.00000	.00120	.03747	-.00662	-.00003	-.02236
#2	.01299	.00001	.01559	.03540	-.00065	.05222	-.01251
#3	-.01818	.00000	.00120	.02877	-.01555	.05218	-.01259
#4	.01818	.00099	.00600	.04451	-.01003	-.00733	.02724
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03007	.00573	-.00305	.00029	-.00041	-.04222	.00101
SDev	.02860	.01047	.01074	.00016	.00078	.05241	.00392
%RSD	95.109	182.73	352.62	54.994	190.44	124.12	389.99
#1	.01458	.01144	-.01674	.00016	-.00057	-.03658	.00091
#2	.01823	-.00570	-.00257	.00020	-.00090	-.02534	.00120

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#3	.01458	-.00005	.00952	.00026	-.00090	.00844	-.00384
#4	.07290	.01722	-.00239	.00051	.00073	-.11541	.00576

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00245
SDev	.00153
%RSD	62.434

#1	.00277
#2	.00350
#3	.00020
#4	.00332

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DF08VBT Operator: MTW
 Run Time: 06/22/00 16:32:29
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	.00796	.17773	.00284	.00722	-.00012	.13078
SDev	.00365	.01697	.06088	.00915	.00023	.00007	.00206
%RSD	982.26	213.29	34.256	322.08	3.2433	54.111	1.5752
#1	.00221	.02038	.23627	.01068	.00722	-.00007	.13202
#2	.00220	.01679	.18938	-.00336	.00722	-.00019	.13287
#3	-.00510	-.01692	.09217	.01068	.00750	-.00006	.12995
#4	.00218	.01158	.19312	-.00663	.00693	-.00017	.12830
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00264	.00034	-.00105	.00150	.02641	-.26801	.00030
SDev	.00093	.00204	.00241	.00162	.00295	.45637	.00032
%RSD	35.331	594.16	228.80	108.09	11.169	170.28	104.52
#1	-.00129	.00273	-.00040	.00257	.02741	.04794	.00008
#2	-.00299	.00137	.00171	.00257	.02874	-.07409	.00068
#3	-.00283	-.00136	-.00145	.00171	.02208	-.10023	.00045
#4	-.00344	-.00136	-.00408	-.00086	.02741	-.94568	.00000
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00974	.00099	.00240	S-.12648	.00057	.01119	-.00248
SDev	.00981	.00081	.00459	.00000	.00417	.01881	.02431
%RSD	100.66	81.024	191.16	.00000	736.29	168.16	980.85
#1	-.00260	.00099	.00120	S-.12648	.00350	.03736	-.00241
#2	-.01039	.00198	.00600	S-.12648	-.00331	.00748	-.00259
#3	-.00260	.00001	.00600	S-.12648	.00478	.00739	-.03223
#4	-.02338	.00099	-.00359	S-.12648	-.00271	-.00748	.02731
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00736	.09717	-.00202	.00169	.00024	.05595	.00004
SDev	.04770	.02762	.01492	.00023	.00101	.03228	.00271
%RSD	648.32	28.426	737.44	13.848	414.55	57.693	6106.8
#1	-.01815	.13720	-.01261	.00186	.00041	.06434	.00210
#2	.07659	.08575	.01360	.00186	.00106	.07560	.00101

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#3	.00006	.07432	-.01678	.00170	-.00122	.07568	.00100
#4	-.02908	.09140	.00769	.00136	.00073	.00819	-.00394
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						
Elem	ZN						
Units	ppm						
Avge	.00946						
SDev	.00022						
%RSD	2.3315						
#1	.00971						
#2	.00949						
#3	.00917						
#4	.00949						
Errors	NOCHECK						
High							
Low							

Method: QUANMET Sample Name: DF0C0CT

Operator: MTW

Run Time: 06/22/00 16:35:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04393	1.7424	2.0447	.82404	1.7021	.04141	L.14185
SDev	.00119	.0168	.0354	.01535	.0179	.00026	.00504
%RSD	2.7143	.96562	1.7301	1.8628	1.0505	.62057	3.5531

#1	.04248	1.7239	2.0231	.81421	1.6774	.04110	L.14803
#2	.04391	1.7327	2.0123	.84694	1.7094	.04148	L.13616
#3	.04540	1.7538	2.0915	.81749	1.7023	.04134	L.13993
#4	.04394	1.7592	2.0517	.81751	1.7194	.04171	L.14327

Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04265	.43457	.17505	.22061	.93207	L.18957	.86937
SDev	.00148	.00409	.00184	.00210	.00544	.42224	.01509
%RSD	3.4625	.94227	1.0519	.94981	.58318	222.74	1.7358

#1	.04436	.44071	.17729	.21805	.92957	L.79751	.84726
#2	.04313	.43252	.17308	.22061	.93622	L-.11767	.87683
#3	.04224	.43253	.17571	.22061	.92559	L.15253	.87273
#4	.04085	.43252	.17413	.22318	.93688	L-.07409	.88066

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.00844	.43599	-.00106	S-.12648	.43072	.45845	L.00085
SDev	.01364	.00197	.00277	.00000	.01456	.02664	.01687
%RSD	161.60	.45253	261.30	.00000	3.3800	5.8102	1978.9

#1	L.02858	.43500	-.00346	S-.12648	.44881	.48102	L.00351
#2	L-.00000	.43500	-.00346	S-.12648	.43501	.42106	L-.01644
#3	L-.00000	.43500	.00134	S-.12648	.42400	.45838	L-.00668
#4	L.00520	.43895	.00134	S-.12648	.41507	.47333	L.02302

Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9473	.07977	-.00083	.85738	-.00033	1.7292	.42798
SDev	.1190	.00464	.01564	.00776	.00041	.0781	.00241
%RSD	6.1126	5.8190	1893.2	.90506	125.83	4.5165	.56342

#1	1.9008	.07978	.00574	.84688	-.00024	1.6927	.42913
#2	1.9919	.08543	-.02258	.86079	.00008	1.6590	.42436

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#3	1.8097	.07407	-.00036	.85682	-.00090	1.7265	.42922
#4	2.0866	.07978	.01390	.86502	-.00024	1.8388	.42921

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000

Elem	ZN
Units	ppm
Avge	.46063
SDev	.00268
%RSD	.58122

#1	.46193
#2	.46376
#3	.45866
#4	.45815

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DEMQVT Operator: MTW
 Run Time: 06/22/00 16:38:48
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00312	.85758	.22779	.01364	1.5270	.00033	288.22
SDev	.00386	.01249	.05778	.00188	.0159	.00011	2.08
%RSD	123.53	1.4566	25.366	13.816	.97732	33.771	.72306
#1	-.00055	.87084	.25021	.01201	1.5383	.00042	286.71
#2	.00091	.86027	.19613	.01527	1.5035	.00042	291.08
#3	-.00642	.84072	.29748	.01200	1.5334	.00018	286.63
#4	-.00642	.85848	.16734	.01527	1.5329	.00030	288.47
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00030	.00157	-.00198	.00670	.71748	.69727	.00426
SDev	.00173	.00376	.00467	.00177	.00299	.81705	.00100
%RSD	574.22	239.46	236.25	26.414	.41704	117.18	23.396
#1	-.00105	-.00082	-.00040	.00691	.71897	1.1984	.00476
#2	.00141	.00600	.00381	.00863	.71897	1.3728	.00543
#3	-.00237	-.00218	-.00671	.00434	.71299	-.44015	.00343
#4	.00081	.00327	-.00460	.00691	.71897	.65805	.00343
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.375	.11061	.00131	S-.12648	.01065	.00126	.02995
SDev	.135	.00081	.00392	.00000	.00632	.04505	.05151
%RSD	.53163	.72826	299.77	.00000	59.318	3589.6	171.98
#1	25.513	.11061	-.00349	S-.12648	.00774	-.00062	.07707
#2	25.198	.11159	.00131	S-.12648	.01432	.04425	.00765
#3	25.352	.10962	.00131	S-.12648	.00329	-.06048	-.03213
#4	25.437	.11061	.00610	S-.12648	.01726	.02187	.06723
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01555	5.2942	-.00980	.86894	-.00269	.05502	.00329
SDev	.03423	.0029	.02483	.00715	.00114	.04246	.00270
%RSD	220.06	.05437	253.53	.82252	42.568	77.170	82.082
#1	-.01632	5.2985	.01815	.87432	-.00187	.02409	.00558
#2	.06019	5.2928	-.02855	.85841	-.00155	.09151	.00568

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#3	.02374	5.2927	-.03277	.87127	-.00383	.09165	.00090
#4	-.00539	5.2927	.00399	.87177	-.00350	.01284	.00100

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04601
SDev	.00083
%RSD	1.8033

#1	.04593
#2	.04696
#3	.04495
#4	.04618

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DEMQVTP5

Operator: MTW

Run Time: 06/22/00 16:41:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00214	.17185	.08231	-.01919	.34316	.00005	59.739
SDev	.00168	.00966	.01980	.00395	.00202	.00001	.236
%RSD	78.597	5.6220	24.056	20.572	.58855	12.743	.39578
#1	-.00359	.15856	.05442	-.01333	.34603	.00005	59.637
#2	-.00069	.18164	.08680	-.02178	.34234	.00006	59.967
#3	-.00359	.17446	.10122	-.02044	.34136	.00005	59.456
#4	-.00067	.17274	.08680	-.02121	.34291	.00005	59.898
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00231	.00084	-.00092	.00173	.15197	.14817	.00115
SDev	.00269	.00068	.00043	.00070	.00138	.07063	.00094
%RSD	116.37	81.085	46.436	40.516	.91122	47.668	81.650
#1	.00556	.00118	-.00093	.00258	.15030	.17868	.00017
#2	.00350	-.00018	-.00145	.00173	.15363	.22226	.00217
#3	.00021	.00119	-.00040	.00087	.15163	.05665	.00056
#4	-.00001	.00119	-.00093	.00173	.15230	.13510	.00172
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.3891	.02395	-.00238	276.85	.00348	.01106	-.00738
SDev	.0177	.00049	.00240	1.85	.00455	.00966	.01902
%RSD	.32812	2.0581	100.96	.66715	130.88	87.301	257.85
#1	5.4138	.02370	-.00357	279.54	-.00149	.02229	.00748
#2	5.3826	.02469	-.00357	276.01	.00182	.00732	.00753
#3	5.3722	.02370	.00122	275.39	.00426	-.00015	-.03226
#4	5.3878	.02370	-.00357	276.47	.00932	.01480	-.01225
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01315	1.0889	-.00000	.18328	-.00057	.04913	.00441
SDev	.01846	.0165	.01243	.00102	.00053	.10114	.00239
%RSD	140.37	1.5137	356430.	.55377	93.314	205.87	54.285
#1	.00404	1.0746	.00763	.18478	-.00122	.13065	.00558
#2	.04048	1.1031	-.01052	.18290	.00008	-.04924	.00082

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#3	.00040	1.0746	.01349	.18255	-.00057	-.02678	.00567
#4	.00769	1.1032	-.01061	.18290	-.00057	.14188	.00558

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01352
SDev	.00052
%RSD	3.8340

#1	.01283
#2	.01409
#3	.01358
#4	.01356

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DEMQVST Operator: MTW
 Run Time: 06/22/00 16:45:03
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.92506	.75699	4.9913	.00942	45.564	.00033	259.67
SDev	.00219	.00813	.0805	.00163	.338	.00006	1.08
%RSD	.23633	1.0747	1.6122	17.316	.74182	18.346	.41653
#1	.92397	.74499	5.0933	.00861	45.647	.00042	258.64
#2	.92688	.75921	4.9344	.00861	46.007	.00030	259.45
#3	.92251	.76096	4.9199	.01187	45.277	.00029	259.39
#4	.92689	.76281	5.0174	.00860	45.325	.00029	261.20
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95087	.00309	4.4034	.00627	.65038	.66459	.00369
SDev	.00719	.00206	.0115	.00108	.00226	.31097	.00081
%RSD	.75643	66.713	.26217	17.182	.34753	46.791	21.794
#1	.94835	.00169	4.3915	.00776	.65055	.98054	.00304
#2	.95418	.00150	4.4141	.00605	.65254	.23969	.00343
#3	.95877	.00321	4.3957	.00605	.64722	.76264	.00487
#4	.94219	.00596	4.4125	.00520	.65121	.67548	.00343
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.098	.09975	.00489	S2465.5	.00445	4.5598	.02103
SDev	.144	.00080	.00240	1643.7	.01152	.0336	.02148
%RSD	.62393	.80629	49.005	66.670	258.97	.73701	102.12
#1	23.172	.09876	.00609	S3287.4	-.00868	4.5317	-.00879
#2	23.255	.09975	.00609	S-.12648	.01926	4.5989	.04093
#3	22.931	.09975	.00609	S3287.3	.00513	4.5318	.03095
#4	23.034	.10073	.00130	S3287.3	.00208	4.5766	.02103
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0320	4.7439	-.01187	.78489	-.00212	.00785	.00405
SDev	.0576	.0000	.02452	.00584	.00031	.04985	.00175
%RSD	5.5859	.00048	206.64	.74399	14.730	635.12	43.280
#1	1.0875	4.7440	-.01856	.78572	-.00220	-.00902	.00494
#2	1.0730	4.7439	-.01429	.79283	-.00253	.03597	.00142

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#3	.96727	4.7440	.02195	.78026	-.00187	-.05397	.00495
#4	1.0001	4.7440	-.03657	.78075	-.00187	.05842	.00489

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04166
SDev	.00144
%RSD	3.4449

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#1	.04007
#2	.04255
#3	.04087
#4	.04315

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DEMQVDT Operator: MTW
 Run Time: 06/22/00 16:48:16
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.93456	.78577	4.9973	.01026	45.839	.00030	263.75
SDev	.00183	.00967	.1125	.00188	.215	.00001	.58
%RSD	.19542	1.2306	2.2511	18.362	.47009	2.3559	.21955
#1	.93274	.79281	4.9846	.01190	45.525	.00029	263.15
#2	.93420	.77163	4.8692	.01189	45.938	.00029	263.58
#3	.93420	.79103	5.1435	.00863	45.886	.00029	264.54
#4	.93710	.78761	4.9920	.00863	46.009	.00031	263.73
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96777	.00086	4.4642	.00626	.66068	.74085	.00387
SDev	.00451	.00072	.0151	.00108	.00251	.36444	.00128
%RSD	.46552	83.792	.33853	17.208	.37968	49.192	32.963
#1	.97095	.00033	4.4431	.00605	.65985	.56218	.00574
#2	.96950	.00149	4.4715	.00776	.65785	1.2682	.00343
#3	.96955	.00015	4.4778	.00605	.66383	.68420	.00343
#4	.96109	.00148	4.4646	.00519	.66117	.44887	.00287
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.203	.10123	.00250	S821.57	.01266	4.6343	.02308
SDev	.067	.00057	.00459	1643.4	.00736	.0341	.02480
%RSD	.28710	.56200	183.92	200.03	58.142	.73660	107.46
#1	23.105	.10073	.00609	S3286.7	.02126	4.5839	.03078
#2	23.219	.10172	-.00350	S-.12648	.00487	4.6437	.02051
#3	23.237	.10172	.00609	S-.12648	.01596	4.6511	.05022
#4	23.250	.10073	.00130	S-.12648	.00855	4.6586	-.00921
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0557	4.8354	-.00430	.79238	-.00163	.01339	.00413
SDev	.0311	.0000	.02344	.00456	.00101	.04106	.00264
%RSD	2.9472	.00070	545.47	.57482	61.914	306.62	63.869
#1	1.0256	4.8354	-.01435	.78562	-.00024	-.03158	.00505
#2	1.0657	4.8354	-.00431	.79417	-.00253	-.00909	.00611

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#3	1.0365	4.8354	.02809	.79417	-.00155	.03585	.00511
#4	1.0948	4.8353	-.02662	.79556	-.00220	.05838	.00024

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04099
SDev	.00122
%RSD	2.9772

#1	.04104
#2	.04185
#3	.04182
#4	.03925

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DEMR4T

Operator: MTW

Run Time: 06/22/00 16:51:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00230	1.1784	.19494	-.02195	1.3975	.00042	172.37
SDev	.00301	.0193	.03206	.00110	.0086	.00000	.63
%RSD	131.19	1.6378	16.448	5.0073	.61873	.02917	.36708
#1	-.00485	1.1669	.14991	-.02196	1.3860	.00042	171.92
#2	-.00485	1.1633	.22575	-.02329	1.4069	.00041	172.61
#3	-.00047	1.1775	.20036	-.02195	1.3989	.00042	171.81
#4	.00099	1.2059	.20374	-.02060	1.3984	.00042	173.16
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00044	.01086	.02079	.01080	1.0808	.98054	.00324
SDev	.00247	.00176	.00241	.00050	.0040	.18842	.00096
%RSD	568.22	16.213	11.579	4.5926	.37067	19.216	29.531
#1	-.00026	.01019	.01908	.01037	1.0751	.80622	.00304
#2	.00110	.00881	.02013	.01037	1.0824	.84109	.00208
#3	.00140	.01290	.01961	.01123	1.0811	1.0764	.00343
#4	-.00398	.01155	.02434	.01123	1.0844	1.1984	.00439
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.032	.13116	.00256	S-.12648	.00894	.03296	.03470
SDev	.078	.00094	.00240	.00000	.00523	.00747	.04314
%RSD	.43386	.72022	93.693	.00000	58.504	22.648	124.32
#1	17.951	.13042	.00136	S-.12648	.01347	.03663	-.00245
#2	18.104	.13141	.00616	S-.12648	.00314	.02176	.06683
#3	17.979	.13042	.00136	S-.12648	.00589	.03670	-.00252
#4	18.093	.13239	.00136	S-.12648	.01325	.03675	.07694
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03109	5.8815	.00587	.66959	.01100	.02319	.00574
SDev	.05415	.0471	.02538	.00370	.00056	.08875	.00005
%RSD	174.19	.80137	432.25	.55249	5.1320	382.78	.79662
#1	.06842	5.8415	-.01245	.66468	.01051	.09915	.00571
#2	.02836	5.9329	.04232	.67363	.01084	.09909	.00581

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#3	.07208	5.9101	-.01043	.66965	.01084	-.03587	.00571
#4	-.04451	5.8415	.00405	.67040	.01181	-.06962	.00572

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.06098
SDev	.00212
%RSD	3.4758

#1	.05905
#2	.06242
#3	.06316
#4	.05927

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DEMR6T

Operator: MTW

Run Time: 06/22/00 16:54:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00286	.42786	.21558	-.02045	1.2927	.00036	144.52
SDev	.00189	.01434	.02862	.00220	.0124	.00015	.69
%RSD	66.187	3.3526	13.274	10.780	.96008	42.268	.47669
#1	-.00506	.40667	.22209	-.01833	1.2836	.00018	144.89
#2	-.00214	.43677	.20741	-.02353	1.2969	.00031	144.47
#3	-.00359	.43139	.18215	-.01968	1.3083	.00042	143.57
#4	-.00065	.43660	.25065	-.02025	1.2818	.00054	145.14
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	-.00201	.00237	.00559	.24562	.50117	.00269
SDev	.00244	.00111	.00199	.00111	.00067	.33966	.00082
%RSD	1912.6	55.282	83.936	19.787	.27078	67.774	30.489
#1	.00198	-.00065	.00013	.00516	.24529	.37043	.00295
#2	-.00320	-.00200	.00171	.00430	.24529	.09152	.00287
#3	.00190	-.00202	.00276	.00601	.24529	.68420	.00152
#4	-.00017	-.00337	.00487	.00687	.24662	.85852	.00343
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.256	.05872	.00004	S-.12648	.00876	.00895	-.00239
SDev	.103	.00099	.00459	.00000	.00479	.01274	.00005
%RSD	.63301	1.6799	12502.	.00000	54.725	142.30	2.0648
#1	16.130	.05724	-.00356	S-.12648	.00862	.01460	-.00233
#2	16.275	.05921	-.00356	S-.12648	.00207	-.00784	-.00244
#3	16.379	.05921	.00124	S-.12648	.01153	.00708	-.00238
#4	16.239	.05922	.00603	S-.12648	.01283	.02197	-.00241
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02342	4.4640	-.01154	.66815	-.00448	.07369	.00238
SDev	.07546	.0081	.00745	.00572	.00080	.08057	.00234
%RSD	322.21	.18139	64.564	.85663	17.814	109.34	98.186
#1	-.01757	4.4525	-.02263	.66393	-.00513	-.00502	.00082
#2	-.06130	4.4697	-.00650	.67010	-.00350	.18615	.00083

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#3	.09902	4.4640	-.00852	.67537	-.00513	.05121	.00211
#4	.07352	4.4697	-.00852	.66319	-.00416	.06243	.00577

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04536
SDev	.00168
%RSD	3.7039

#1	.04444
#2	.04371
#3	.04754
#4	.04573

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DEMR7T

Operator: MTW

Run Time: 06/22/00 16:57:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00505	.18640	.20305	.01432	1.4253	.00002	H665.01
SDev	.00316	.00464	.10713	.00000	.0391	.00012	6.16
%RSD	62.528	2.4910	52.762	.02572	2.7460	773.05	.92704
#1	-.00359	.18678	.05772	.01432	1.3858	-.00008	H667.00
#2	-.00505	.18858	.30685	.01432	1.4038	.00005	H669.70
#3	-.00212	.19043	.19488	.01432	1.4369	.00017	H667.39
#4	-.00944	.17980	.25277	.01431	1.4747	-.00008	H655.94
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	-.00202	-.00171	.00515	.21462	.70817	.00188
SDev	.00298	.00193	.00152	.00140	.00302	.46885	.00119
%RSD	362.68	95.183	88.642	27.139	1.4078	66.206	63.506
#1	.00513	-.00202	-.00198	.00515	.21462	.84980	.00343
#2	-.00080	-.00337	-.00145	.00687	.21528	.84109	.00093
#3	.00047	.00070	.00013	.00516	.21794	1.1113	.00219
#4	-.00150	-.00340	-.00356	.00344	.21063	.03051	.00096
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.830	.09840	-.00117	S-.12648	.00743	-.00764	.03495
SDev	.303	.00049	.00619	.00000	.00813	.00009	.04315
%RSD	1.5267	.50326	530.62	.00000	109.35	1.1533	123.43
#1	19.483	.09865	.00603	S-.12648	.01892	-.00769	-.00223
#2	19.699	.09865	.00123	S-.12648	.00133	-.00762	.07709
#3	19.961	.09864	-.00356	S-.12648	.00204	-.00752	.06723
#4	20.177	.09766	-.00836	S-.12648	.00745	-.00772	-.00226
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02698	3.3695	-.00722	1.4575	-.03780	.02361	.00592
SDev	.04555	.0747	.00664	.0341	.00072	.05388	.00058
%RSD	168.82	2.2183	91.907	2.3383	1.9115	228.20	9.7655
#1	-.00308	3.3094	-.00840	1.4217	-.03740	.02924	.00576
#2	.08073	3.3094	-.00199	1.4399	-.03707	-.00449	.00567

Analysis Report

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#3	.04794	3.3952	-.01614	1.4687	-.03805	.09664	.00677
#4	-.01766	3.4638	-.00235	1.4996	-.03870	-.02694	.00548

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03070
SDev	.00132
%RSD	4.2965

#1	.03155
#2	.03084
#3	.03161
#4	.02879

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-2

Operator: MTW

Run Time: 06/22/00 17:00:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98852	49.084	4.9279	4.8401	4.3324	4.8185	50.126
SDev	.00415	.157	.0952	.0244	.0151	.0159	.282
%RSD	.42020	.31907	1.9316	.50325	.31261	.33046	.56352
#1	.98434	48.865	4.9204	4.8165	4.3098	4.8015	49.840
#2	.99036	49.166	4.8523	4.8609	4.3410	4.8251	50.092
#3	.99344	49.221	5.0642	4.8613	4.3407	4.8375	50.516
#4	.98593	49.085	4.8748	4.8215	4.3380	4.8101	50.056
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0053	4.8986	4.8930	4.8118	50.551	48.151	4.8257
SDev	.0201	.0295	.0246	.0113	.218	.172	.0187
%RSD	.40116	.60241	.50229	.23390	.43051	.35686	.38652
#1	4.9782	4.8636	4.8707	4.7950	50.286	48.134	4.8095
#2	5.0027	4.9057	4.8865	4.8173	50.581	47.916	4.8481
#3	5.0164	4.9343	4.9281	4.8157	50.816	48.256	4.8112
#4	5.0238	4.8907	4.8865	4.8190	50.521	48.299	4.8342
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.932	4.8891	4.9068	47.912	4.8550	4.9300	4.9438
SDev	.182	.0203	.0261	.140	.0417	.0104	.0862
%RSD	.37103	.41506	.53216	.29203	.85951	.21055	1.7428
#1	48.732	4.8676	4.8912	47.728	4.8013	4.9293	4.9782
#2	48.937	4.8903	4.8865	47.965	4.8769	4.9449	4.8201
#3	49.171	4.9160	4.9440	47.895	4.8969	4.9235	5.0183
#4	48.890	4.8824	4.9056	48.060	4.8447	4.9224	4.9586
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0093	4.9579	4.9196	4.8340	4.8659	9.6617	4.8895
SDev	.0572	.0413	.0184	.0175	.0194	.0791	.0178
%RSD	1.1413	.83267	.37498	.36198	.39957	.81900	.36450
#1	5.0587	4.8976	4.9042	4.8085	4.8408	9.6535	4.8696
#2	4.9283	4.9779	4.9034	4.8421	4.8695	9.5826	4.8921

Analysis Report

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#3	5.0127	4.9896	4.9386	4.8478	4.8881	9.7711	4.9123
#4	5.0375	4.9664	4.9323	4.8377	4.8652	9.6396	4.8841
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9160
SDev	.0304
%RSD	.61789

#1	4.8833
#2	4.9202
#3	4.9555
#4	4.9050

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB2

Operator: MTW

Run Time: 06/22/00 17:04:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00365	-.00940	.02804	-.00154	.00012	.00030	.00858
SDev	.00207	.00861	.02333	.01077	.00042	.00030	.00730
%RSD	56.651	91.587	83.215	700.13	347.14	98.927	85.083
#1	-.00073	-.00097	.00541	-.00342	-.00009	.00006	.00557
#2	-.00511	-.02048	.05612	.00177	-.00029	.00006	-.00013
#3	-.00365	-.00454	.03793	.01064	.00019	.00043	.01268
#4	-.00511	-.01160	.01271	-.01514	.00068	.00067	.01621
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00310	-.00001	-.00263	-.00064	.00066	-.42272	.00055
SDev	.00065	.00111	.00066	.00043	.00336	.17806	.00021
%RSD	20.865	14712.	25.211	66.785	506.96	42.121	38.032
#1	.00350	.00135	-.00250	.00000	-.00116	-.20482	.00065
#2	.00240	-.00000	-.00250	-.00086	-.00316	-.43144	.00025
#3	.00273	-.00001	-.00197	-.00086	.00349	-.41401	.00056
#4	.00379	-.00137	-.00355	-.00086	.00349	-.64062	.00073
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01753	.00074	.00959	.01511	-.00180	.00745	-.00998
SDev	.00649	.00049	.00240	.01731	.00443	.01830	.00948
%RSD	37.037	66.392	24.997	114.57	245.89	245.64	94.991
#1	-.01039	.00099	.01079	.00559	.00097	.02987	-.01249
#2	-.01559	.00000	.01079	-.00393	-.00065	.01493	-.00254
#3	-.02598	.00099	.01079	.02505	-.00836	-.00746	-.00255
#4	-.01818	.00099	.00600	.03374	.00083	-.00753	-.02235
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02460	-.00999	.00096	.00043	-.00041	.01123	.00107
SDev	.02254	.00286	.01759	.00032	.00068	.01918	.00005
%RSD	91.636	28.613	1826.6	73.406	166.53	170.73	4.4360
#1	.01457	-.01142	.02161	.00016	.00041	.01968	.00110
#2	.01457	-.01142	.00554	.00016	-.00122	-.01403	.00110

Analysis Report

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#3	.01094	-.00570	-.02068	.00076	-.00057	.03088	.00110
#4	.05831	-.01142	-.00262	.00066	-.00024	.00841	.00100

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00077
SDev	.00082
%RSD	105.71

#1	.00123
#2	-.00035
#3	.00150
#4	.00071

Errors	LC Pass
High	.02000
Low	-.02000

Metals Preparation

og

TCLP



STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

Submitted To Your Service

Method: 3010 A	Matrix: Water	Start Time: 1010	SDC: _____	Balance# _____	Reagents: 5ml Conc. HNO ₃ 5ml HCl
Analyst: Suzanne Truitt	Date: 6-20-00	Lot Number: COF140185	Lab Lot No. (Book, page, line): 0014-089-1, 9950-114-13	MS	6023709H07 Mallinckrodt 0014-131-2
Sample ID: DEMAY 3	Init Wt/Vol: 50ml	Final Vol: 50ml	Comments: 10.5ml TCLP Spike	Pre	Color
DEMAY 4			10.5ml TCLD Spike	Post	Clarity
DEMAY 5			5L 6000	Pre	Texture
DEMAY 6			10.5ml MS-BIREV	Post	Artifacts
DEMAY 7			5L 6000	Pre	Artifact Codes
DEMAY 8			10.5ml MS-BIREV	Post	
DEMAY 9			5L 6000	Pre	
DEMAY 10			10.5ml MS-BIREV	Post	
DEMAY 11			5L 6000	Pre	
DEMAY 12			10.5ml MS-BIREV	Post	
DEMAY 13			5L 6000	Pre	
DEMAY 14			10.5ml MS-BIREV	Post	
DEMAY 15			5L 6000	Pre	
DEMAY 16			10.5ml MS-BIREV	Post	
DEMAY 17			5L 6000	Pre	
DEMAY 18			10.5ml MS-BIREV	Post	
DEMAY 19			5L 6000	Pre	
DEMAY 20			10.5ml MS-BIREV	Post	
DEMAY 21			5L 6000	Pre	
DEMAY 22			10.5ml MS-BIREV	Post	
DEMAY 23			5L 6000	Pre	
DEMAY 24			10.5ml MS-BIREV	Post	
DEMAY 25			5L 6000	Pre	
DEMAY 26			10.5ml MS-BIREV	Post	
DEMAY 27			5L 6000	Pre	
DEMAY 28			10.5ml MS-BIREV	Post	
DEMAY 29			5L 6000	Pre	
DEMAY 30			10.5ml MS-BIREV	Post	
DEMAY 31			5L 6000	Pre	
DEMAY 32			10.5ml MS-BIREV	Post	
DEMAY 33			5L 6000	Pre	
DEMAY 34			10.5ml MS-BIREV	Post	
DEMAY 35			5L 6000	Pre	
DEMAY 36			10.5ml MS-BIREV	Post	
DEMAY 37			5L 6000	Pre	
DEMAY 38			10.5ml MS-BIREV	Post	
DEMAY 39			5L 6000	Pre	
DEMAY 40			10.5ml MS-BIREV	Post	
DEMAY 41			5L 6000	Pre	
DEMAY 42			10.5ml MS-BIREV	Post	
DEMAY 43			5L 6000	Pre	
DEMAY 44			10.5ml MS-BIREV	Post	
DEMAY 45			5L 6000	Pre	
DEMAY 46			10.5ml MS-BIREV	Post	
DEMAY 47			5L 6000	Pre	
DEMAY 48			10.5ml MS-BIREV	Post	
DEMAY 49			5L 6000	Pre	
DEMAY 50			10.5ml MS-BIREV	Post	
DEMAY 51			5L 6000	Pre	
DEMAY 52			10.5ml MS-BIREV	Post	
DEMAY 53			5L 6000	Pre	
DEMAY 54			10.5ml MS-BIREV	Post	
DEMAY 55			5L 6000	Pre	
DEMAY 56			10.5ml MS-BIREV	Post	
DEMAY 57			5L 6000	Pre	
DEMAY 58			10.5ml MS-BIREV	Post	
DEMAY 59			5L 6000	Pre	
DEMAY 60			10.5ml MS-BIREV	Post	
DEMAY 61			5L 6000	Pre	
DEMAY 62			10.5ml MS-BIREV	Post	
DEMAY 63			5L 6000	Pre	
DEMAY 64			10.5ml MS-BIREV	Post	
DEMAY 65			5L 6000	Pre	
DEMAY 66			10.5ml MS-BIREV	Post	
DEMAY 67			5L 6000	Pre	
DEMAY 68			10.5ml MS-BIREV	Post	
DEMAY 69			5L 6000	Pre	
DEMAY 70			10.5ml MS-BIREV	Post	
DEMAY 71			5L 6000	Pre	
DEMAY 72			10.5ml MS-BIREV	Post	
DEMAY 73			5L 6000	Pre	
DEMAY 74			10.5ml MS-BIREV	Post	
DEMAY 75			5L 6000	Pre	
DEMAY 76			10.5ml MS-BIREV	Post	
DEMAY 77			5L 6000	Pre	
DEMAY 78			10.5ml MS-BIREV	Post	
DEMAY 79			5L 6000	Pre	
DEMAY 80			10.5ml MS-BIREV	Post	
DEMAY 81			5L 6000	Pre	
DEMAY 82			10.5ml MS-BIREV	Post	
DEMAY 83			5L 6000	Pre	
DEMAY 84			10.5ml MS-BIREV	Post	
DEMAY 85			5L 6000	Pre	
DEMAY 86			10.5ml MS-BIREV	Post	
DEMAY 87			5L 6000	Pre	
DEMAY 88			10.5ml MS-BIREV	Post	
DEMAY 89			5L 6000	Pre	
DEMAY 90			10.5ml MS-BIREV	Post	
DEMAY 91			5L 6000	Pre	
DEMAY 92			10.5ml MS-BIREV	Post	
DEMAY 93			5L 6000	Pre	
DEMAY 94			10.5ml MS-BIREV	Post	
DEMAY 95			5L 6000	Pre	
DEMAY 96			10.5ml MS-BIREV	Post	
DEMAY 97			5L 6000	Pre	
DEMAY 98			10.5ml MS-BIREV	Post	
DEMAY 99			5L 6000	Pre	
DEMAY 100			10.5ml MS-BIREV	Post	

PSR024 6/20/00 8:02:43 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: KRANCES

METHOD: QO Inductively Coupled Plasma (6010B)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12B CLP1	DEMQV	— — —	242480	399411	A-34-QO	COF140185	001		SOLID	0	3 1
12B CLP1	DEMR4	— — —	242481	399411	A-34-QO	COF140185	002		SOLID	0	3 1
12B CLP1	DEMR6	— — —	242482	399411	A-34-QO	COF140185	003		SOLID	0	3 1
12B CLP1	DEMR7	— — —	242483	399411	A-34-QO	COF140185	004		SOLID	0	3 1

RELINQUISHED BYAmber HallSuzanne KranceRECEIVED BYSuzanne KranceAmber HallDATE/TIME6-20-00 10166-20-00 1040

***** END OF REPORT *****

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. HoyleDate of Analysis: 6-21-00File ID: 062146AMatrix: WATER

Lot Number/SDG

Method

<u>COF140185 (TCLP)</u>	<u>7470A</u>
<u>COF170158</u>	
<u>COF200202</u>	
<u>COF150265</u>	
<u>COF170110</u>	
<u>COF170118</u>	
<u>COF190143</u>	
<u>COF170117 YORK29</u>	

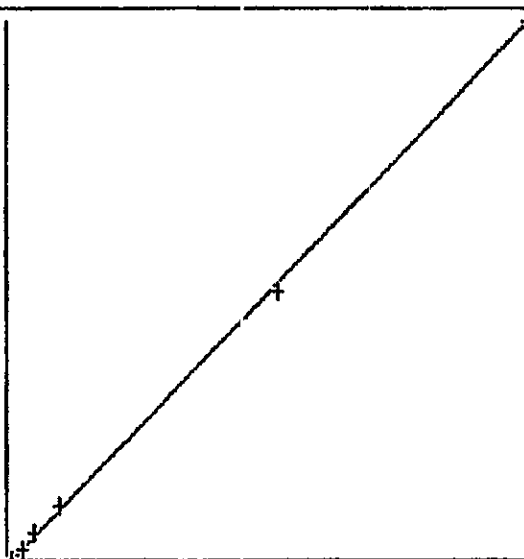
10:04:54 21 Jun 2000 Folder: 0621HGA Page 102B
Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0		10:04:54 21 Jun 2000 HG		
Hg	.000	ppb	21345					
*** Standard: 2 Rep: 1				Seq: 1		10:06:49 21 Jun 2000 HG		
Hg	.200	ppb	66110		0014-145-1			
*** Standard: 3 Rep: 1				Seq: 2		10:08:45 21 Jun 2000 HG		
Hg	.500	ppb	103377		0014-145-2			
*** Standard: 4 Rep: 1				Seq: 3		10:11:11 21 Jun 2000 HG		
Hg	1.00	ppb	200360		0014-145-3			
*** Standard: 5 Rep: 1				Seq: 4		10:13:07 21 Jun 2000 HG		
Hg	5.00	ppb	1030053		0014-145-4			
*** Standard: 6 Rep: 1				Seq: 5		10:15:22 21 Jun 2000 HG		
Hg	10.0	ppb	1979327		0014-145-5			

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0621HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 10:15:35 21 Jun 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET

	Hg	Accepted	
	Conc.	Calc.	Dev. ->linear
S1	.000	.020	.020 Quadratic
S2	.200	.246	.046 Wtdlinear
S3	.500	.435	-.065 C
S4	1.00	.927	-.073 Accept o
S5	5.00	5.13	.131 n
S6	10.0	9.94	-.059 C
A	.0000000	r	.999795
B	5.06709e-6	C	-8.04992e-2



	Mean	SD	
S1	21345	0	21345
S2	66110	0	%RSD 66110
S3	103377	0	%RSD 103377
S4	200360	0	%RSD 200360
S5	1030053	0	%RSD 1030053
S6	1979327	0	%RSD 1979327

New cal coefficients stored

William a Hoyle 6-21-00

10:17:51 21 Jun 2000

Folder: 0621HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	10:17:51 21 Jun 2000 HG			
Hg	2.50	ppb	511738	0014-145-6				
*** Sample ID: ICB1				Seq: 7	10:19:43 21 Jun 2000 HG			
Hg	-.022	ppb	13052					
*** Sample ID: CCV5-1				Seq: 8	10:21:33 21 Jun 2000 HG			
Hg	5.09	ppb	1022415	0014-145-7				
*** Sample ID: CCB1				Seq: 9	10:24:12 21 Jun 2000 HG			
Hg	.005	ppb	18420					
*** Sample ID: DF1WXB				Seq: 10	10:26:10 21 Jun 2000 HG			
Hg	.023	ppb	21914					
*** Sample ID: DF1WXCT				Seq: 11	10:28:13 21 Jun 2000 HG			
Hg	2.67	ppb	544735	0014-145-8				
*** Sample ID: DFOBVB				Seq: 12	10:30:11 21 Jun 2000 HG			
Hg	.010	ppb	19464					
*** Sample ID: DEMQVT				Seq: 13	10:32:22 21 Jun 2000 HG			
Hg	.093	ppb	35786					
*** Sample ID: DEMQVST				Seq: 14	10:34:21 21 Jun 2000 HG			
Hg	5.17	ppb	1038677					SP REC. 103%
*** Sample ID: DEMQVDT				Seq: 15	10:36:11 21 Jun 2000 HG			
Hg	5.12	ppb	1027431					SP REC. 101%
*** Sample ID: DEMR4T				Seq: 16	10:38:01 21 Jun 2000 HG			
Hg	.095	ppb	36185					
*** Sample ID: DEMR6T				Seq: 17	10:40:13 21 Jun 2000 HG			
Hg	.010	ppb	19512					

10:43:00 21 Jun 2000 Folder: 0621H6A Page 1030
Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DEMR7T				Seq: 18	10:43:00 21 Jun 2000 HG			
Hg	.031	ppb	23520					
*** Sample ID: DF1X1B				Seq: 19	10:44:52 21 Jun 2000 HG			
Hg	-.021	ppb	13356					
*** Sample ID: CCV5-2				Seq: 20	10:46:40 21 Jun 2000 HG			
Hg	5.19	ppb	1041605					
*** Sample ID: CCB2				Seq: 21	10:48:31 21 Jun 2000 HG			
Hg	-.049	ppb	7710					
*** Sample ID: DF1X1C				Seq: 22	10:50:25 21 Jun 2000 HG			
Hg	2.52	ppb	515765	0014-145-9				
*** Sample ID: DF1X1L				Seq: 23	10:52:24 21 Jun 2000 HG			
Hg	2.57	ppb	525510	0014-145-10				
*** Sample ID: DEW73				Seq: 24	10:54:13 21 Jun 2000 HG			
Hg	-.025	ppb	12511					
*** Sample ID: DF1X3B				Seq: 25	10:56:14 21 Jun 2000 HG			
Hg	-.029	ppb	11675					
*** Sample ID: DF1X3C				Seq: 26	10:58:18 21 Jun 2000 HG			
Hg	2.59	ppb	527680	0014-145-11				
*** Sample ID: DF15X				Seq: 27	11:00:32 21 Jun 2000 HG			
Hg	2.29	ppb	469824					
*** Sample ID: DF15XS				Seq: 28	11:02:52 21 Jun 2000 HG			
Hg	3.33	ppb	674407					SP.REC. 104%
*** Sample ID: DF15XD				Seq: 29	11:05:03 21 Jun 2000 HG			
Hg	3.35	ppb	678899					SP.REC. 106%

11:06:58 21 Jun 2000

Folder: 0621HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DF168				Seq: 30		11:06:58 21 Jun 2000 HG		
Hg	20.8	H ppb	4125050					
*** Sample ID: DF16G				Seq: 31		11:08:51 21 Jun 2000 HG		
Hg	12.0	H ppb	2381860					
*** Sample ID: CCV5-3				Seq: 32		11:10:50 21 Jun 2000 HG		
Hg	5.17	ppb	1036953					
*** Sample ID: CCB3				Seq: 33		11:12:42 21 Jun 2000 HG		
Hg	-.071	ppb	3471					
*** Sample ID: DF16K				Seq: 34		11:15:16 21 Jun 2000 HG		
Hg	3.27	ppb	662046					
*** Sample ID: DF16M				Seq: 35		11:17:06 21 Jun 2000 HG		
Hg	3.24	ppb	657683					
*** Sample ID: DF17L				Seq: 36		11:19:09 21 Jun 2000 HG		
Hg	.566	ppb	129154					
*** Sample ID: DF1X5B				Seq: 37		11:21:11 21 Jun 2000 HG		
Hg	.008	ppb	19119					
*** Sample ID: DF1X5C				Seq: 38		11:23:37 21 Jun 2000 HG		
Hg	2.50	ppb	511614					
*** Sample ID: DEQTL				Seq: 39		11:25:30 21 Jun 2000 HG		
Hg	-.015	ppb	14500					
*** Sample ID: DEQTO				Seq: 40		11:27:31 21 Jun 2000 HG		
Hg	-.016	ppb	14395					
*** Sample ID: DEQTT				Seq: 41		11:30:22 21 Jun 2000 HG		
Hg	-.028	ppb	11859					

VOID
OVER RANGE
WILL RERUN
FURTHER IN RUN
WAH
6-31-00

0014-145-12

Line	Conc.	Units	SD/RSD	1	2	3	4	5
11:32:18 21 Jun 2000				Folder: 0621HGA Protocol: HGMET				
				Page 1032				
*** Sample ID: DEQTW				Seq: 42	11:32:18 21 Jun 2000 HG			
Hg	.036	ppb	24571					
*** Sample ID: DEQTX				Seq: 43	11:34:10 21 Jun 2000 HG			
Hg	-.026	ppb	12246					
*** Sample ID: CCV5-4				Seq: 44	11:36:03 21 Jun 2000 HG			
Hg	5.16	ppb	1035889					
*** Sample ID: CCB4				Seq: 45	11:37:52 21 Jun 2000 HG			
Hg	-.008	ppb	15875					
*** Sample ID: DEQV9				Seq: 46	11:39:43 21 Jun 2000 HG			
Hg	.002	ppb	17804					
*** Sample ID: DEQV9S				Seq: 47	11:41:40 21 Jun 2000 HG			
Hg	.450	ppb	106293					SP.REC. 45%
*** Sample ID: DEQV9D				Seq: 48	11:44:04 21 Jun 2000 HG			
Hg	.417	ppb	99824					SP.REC. 42%
*** Sample ID: DEQVC				Seq: 49	11:46:25 21 Jun 2000 HG			
Hg	-.008	ppb	15947					
*** Sample ID: DEQVG				Seq: 50	11:48:40 21 Jun 2000 HG			
Hg	-.012	ppb	15025					
*** Sample ID: DEQVQ				Seq: 51	11:50:42 21 Jun 2000 HG			
Hg	-.008	ppb	15980					
*** Sample ID: DEQWC				Seq: 52	11:54:38 21 Jun 2000 HG			
Hg	-.027	ppb	12111					
*** Sample ID: DEQWD				Seq: 53	11:56:33 21 Jun 2000 HG			
Hg	-.008	ppb	15854					

12:27:59 21 Jun 2000

Folder: 0621HGA
Protocol: HGMET

Page 1034

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DF1X7C				Seq: 66	12:27:59 21 Jun 2000	HG		
Hg	.089	ppb	35105					
*** Sample ID: DF1X7L				Seq: 67	12:29:53 21 Jun 2000	HG		
Hg	2.67	ppb	544539					
*** Sample ID: CCV5-6				Seq: 68	12:31:49 21 Jun 2000	HG		
Hg	5.12	ppb	1028827					
*** Sample ID: CCB6				Seq: 69	12:33:54 21 Jun 2000	HG		
Hg	-.041	ppb	9421					
*** Sample ID: DEVWF				Seq: 70	12:36:00 21 Jun 2000	HG		
Hg	-.012	ppb	15029					
*** Sample ID: DEW0E				Seq: 71	12:38:08 21 Jun 2000	HG		
Hg	.041	ppb	25583					
*** Sample ID: DF168/5				Seq: 72	12:40:04 21 Jun 2000	HG		
Hg	4.39	ppb	884642					
*** Sample ID: DF16G/2				Seq: 73	12:42:00 21 Jun 2000	HG		
Hg	6.11	ppb	1223026					
*** Sample ID: CCV5-7				Seq: 74	12:44:07 21 Jun 2000	HG		
Hg	5.12	ppb	1028128					
*** Sample ID: CCB7				Seq: 75	12:46:28 21 Jun 2000	HG		
Hg	-.003	ppb	16933					
*** Sample ID: DF1X7C				Seq: 76	12:50:09 21 Jun 2000	HG		
Hg	2.71	ppb	552480					
*** Sample ID: CCV5-8				Seq: 77	12:52:10 21 Jun 2000	HG		
Hg	5.14	ppb	1031022					

VOID
WRONG SAMPLE
ANALYZED
WAH
6-21-00

0014-145-14

0014-145-13

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



QIA-4169

PIPET# H31609

Serial Number 020 Log Book Number 96-MT-579 Start Time 08:40:28:53

Sample ID	Date Rec'd	Prep Date	Prepared By	WVVol	Sample Type	Run Date	Comments
1. STD0	N/A	6-21-00	WAH	100ml	WATER	6-01-00	N/A
2. STD1							0014-145-1
3. STD2							0014-145-2
4. STD3							0014-145-3
5. STD4							0014-145-4
6. STD5							0014-145-5
7. ICV							0014-145-6
8. ICB							N/A
9. CCV							0014-145-7
10. CCB							N/A
11. DF1WXB							N/A
12. DF1WXB							0014-145-8
13. DF08VB							N/A
14. DEMQNT	6-14-00						N/A
15. DEMQNT							45ml 0014-144-15
16. DEMQNT							45ml 0014-144-15
17. DEMR4T							N/A
18. DEMR6T							N/A
19. DEMR7T							N/A
20. DF1X1B	N/A						N/A
21. DF1X1C							0014-145-9
22. DF1X1L							0014-145-10
23. DEW73	6-17-00						N/A
24. DF1X3B	N/A						N/A
25. DF1X3C							0014-145-11
Reagents		Vol (mL)				Ref. Number	Method
HNO3	2.5ml						
H2SO4	5.0ml						
KMNO4	15.0ml						
K2S2O4	8.0ml						
Extract(s)							
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Location
			WAH	6-21-00			

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



661 675

QUA-4169

PIPER # H31609

Serial Number 021 Log Book Number 96-MT-579 Start Time 08:40:08:5

Sample ID	Date Rec'd	Prep Date	Prepared By	WVVol	Sample Type	Run Date	Comments
1 DE15X	6-20-00	6-21-00	WJAH	100ml	WATER	6-21-00	N/A
2 DE15X5							+1ml 0014.144-15
3 DE15XD							+1ml 0014.144-15
4 DE168							N/A
5 DE16G							
6 DE16K							
7 DE16M							
8 DE17L							
9 DE1X5B	N/A						0014.145-12
10 DE1X5C	6-15-00						N/A
11 DE07L							
12 DE07Q							
13 DE07T							
14 DE07W							
15 DE07X							
16 DE07Y							+1ml 0014.144-15
17 DE09S							+1ml 0014.144-15
18 DE09D							N/A
19 DE09C							
20 DE09G							
21 DE09Q							
22 DE09W							
23 DE09D							
24 DE09F							
25 DE09G							
Reagents		Vol (mL)			Ref. Number		Method
HNO3	2.5ml				MAILBACKBODT 6623 K35058	74704	AUTOCALVE 15PSI 120°C
H2SO4	5.0ml				MAILBACKBODT 4537 N21M13	5014-135-5	
KMNO4	15.0ml				0014-136-2	0014-134-2	
K2S2O4	80ml				0014-133-14		
Extract(s)			Extract(s) Received				Extract(s) Relinquished
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WJAH		6-21-00		

Quanterra

**Environmental
Communications**

Start Time
08:40-308

STL Pittsburgh

661 678

PSR024 6/19/00 5:53:40 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: FAUSTG

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
12B CLP1	DEMQV	___	242034	399411	A-34-QO	COF140185	001		SOLID	0	3 1
12B CLP1	DEMR4	___	242035	399411	A-34-QO	COF140185	002		SOLID	0	3 1
12B CLP1	DEMR6	___	242036	399411	A-34-QO	COF140185	003		SOLID	0	3 1
12B CLP1	DEMR7	___	242037	399411	A-34-QO	COF140185	004		SOLID	0	3 1

RELINQUISHED BY

Geoffrey O. Faust
Geoffrey O. Faust

RECEIVED BY

Geoffrey O. Faust
Geoffrey O. Faust

DATE/TIME

6-19-00 0800
6-19-00 0915

***** END OF REPORT *****

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

GENERAL CHEMISTRY DATA

661 680

UXB INTERNATIONAL

Client Sample ID: DF/S1/0165/GRAB/002

General Chemistry

Lot-Sample #....: C0F140185-001 Work Order #....: DEMQV Matrix.....: SOLID
 Date Sampled....: 06/13/00 Date Received...: 06/14/00
 % Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.5		No Units	SW846 9045C	06/15/00	0167130
	Dilution Factor: 1		MS Run #.....: 0167030			
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/19/00	0171326
	Dilution Factor: 1		MS Run #.....: 0171158			
Percent Solids	85.2		%	MCAWW 160.3 MOD	06/15-06/16/00	0167129
	Dilution Factor: 1		MS Run #.....: 0167029			
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/20/00	0172319
	Dilution Factor: 1		MS Run #.....: 0172131			
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/20/00	0172316
	Dilution Factor: 1		MS Run #.....: 0172129			

Client Sample ID: DF/S1/0165/SDC/010

General Chemistry

Lot-Sample #....: C0F140185-002 Work Order #....: DEMR4 Matrix.....: SOLID
 Date Sampled....: 06/13/00 Date Received...: 06/14/00
 % Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.9		No Units	SW846 9045C	06/15/00	0167130
	Dilution Factor: 1		MS Run #.....: 0167030			
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/19/00	0171326
	Dilution Factor: 1		MS Run #.....: 0171158			
Percent Solids	84.7		%	MCAWW 160.3 MOD	06/15-06/16/00	0167129
	Dilution Factor: 1		MS Run #.....: 0167029			
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/20/00	0172319
	Dilution Factor: 1		MS Run #.....: 0172131			
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/20/00	0172316
	Dilution Factor: 1		MS Run #.....: 0172129			

661 682

UXB INTERNATIONAL

Client Sample ID: DF/S1/0165/SDC/011

General Chemistry

Lot-Sample #....: C0F140185-003

Work Order #....: DEMR6

Matrix.....: SOLID

Date Sampled....: 06/13/00

Date Received...: 06/14/00

% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.0		No Units	SW846 9045C	06/15/00	0167130
	Dilution Factor: 1		MS Run #.....: 0167030			
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/19/00	0171326
	Dilution Factor: 1		MS Run #.....: 0171158			
Percent Solids	85.6		%	MCAWW 160.3 MOD	06/15-06/16/00	0167129
	Dilution Factor: 1		MS Run #.....: 0167029			
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/20/00	0172319
	Dilution Factor: 1		MS Run #.....: 0172131			
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/20/00	0172316
	Dilution Factor: 1		MS Run #.....: 0172129			

Client Sample ID: DF/S1/0165/SDC/012

General Chemistry

Lot-Sample #....: C0F140185-004 Work Order #....: DEMR7 Matrix.....: SOLID
 Date Sampled....: 06/13/00 Date Received...: 06/14/00
 % Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.0		No Units	SW846 9045C	06/15/00	0167130
	Dilution Factor: 1		MS Run #.....: 0167030			
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/19/00	0171326
	Dilution Factor: 1		MS Run #.....: 0171158			
Percent Solids	86.2		%	MCWW 160.3 MOD	06/15-06/16/00	0167129
	Dilution Factor: 1		MS Run #.....: 0167029			
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/20/00	0172319
	Dilution Factor: 1		MS Run #.....: 0172131			
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/20/00	0172316
	Dilution Factor: 1		MS Run #.....: 0172129			

661 684

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0F140185

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Reactive Cyanide	ND	Work Order #: DF164101 200	mg/kg	MB Lot-Sample #: A0F200000-319 SW846 7.3.3	06/20/00	0172319
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DF15V101 200	mg/kg	MB Lot-Sample #: A0F200000-316 SW846 7.3.4	06/20/00	0172316
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F140185

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH	100	Work Order #: DENWV101 (85 - 115)	LCS Lot-Sample#: C0F150000-130 SW846 9045C	06/15/00	0167130
Dilution Factor: 1					

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

661 686

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: C0F140185 Work Order #....: DEMQV-SMP Matrix.....: SOLID

DEMQV-DUP

Date Sampled...: 06/13/00

Date Received...: 06/14/00

* Moisture.....: 15

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	85.2	84.7	%	0.66	(0-20)	SD Lot-Sample #: C0F140185-001 MCAWW 160.3 MOD	06/15-06/16/00	0167129

Dilution Factor: 1

Prep Date.....: 0167029

Analysis Date...:

Prep Batch #....:

pH	7.5	7.7	No Units	2.9	(0-20)	SD Lot-Sample #: C0F140185-001 SW846 9045C	06/15/00	0167130

Dilution Factor: 1

Prep Date.....: 0167030

Analysis Date...:

Prep Batch #....:

Ignitability			No Units	0	(0-0.0)	SD Lot-Sample #: C0F140185-001 SW846 SECTION 7.1	06/19/00	0171326

Dilution Factor: 1

Prep Date.....: 0171158

Analysis Date...:

Prep Batch #....:

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F140185

Work Order #...: DFOHH-SMP
DFOHH-DUP

Matrix.....: SOLID

Date Sampled...: 06/13/00

Date Received...: 06/14/00

% Moisture.....: 18

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	ND	mg/kg	0.0	(0-20)	SD Lot-Sample #: A0F200142-003 SW846 7.3.3	06/20/00	0172319
Dilution Factor: 1								
			Prep Date.....: 0172131	Analysis Date..:		Prep Batch #...:		
Reactive Sulfide	ND	ND	mg/kg	0	(0-20)	SD Lot-Sample #: A0F200142-003 SW846 7.3.4	06/20/00	0172316
Dilution Factor: 1								
			Prep Date.....: 0172129	Analysis Date..:		Prep Batch #...:		

Quanterra Environmental Services
pH LOG SHEET

pH Meter Calibration

Relative Percent Difference =

X₁ =Original Result
X₂ = Duplicate

7010

Method: *Swingability*

ANALYST: <i>[Signature]</i>	DATE: 6-19-00
BATCH: 0171326	TIME: 14:45

SAMPLE ID	RESULT
CoF 140185 - 001	NO
↓ - 002	NO
- 003	NO
↓ - 004	NO
CoF 140185 - 001 X	NO
CoF 170111 - 001	YES
CoF 170104 - 001	YES

[Signature]
6-19-00

COF140243 TS
1-20 0167126
21-39 10167128

COF140147
COF140148 } 0167124
COF140145

1-20 0167426
21-40 0167429
STL Pittsburgh

41-40
COF150163
1-14

01672 (0012

TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

COF130142 TS
COF140131 0167119

Oven Temperature: 103°C±2°C

Analyst: C LLOYDE

Date 6-15-00

Time in 0600/1600

Date 6-16-00

Time out 0415

Balance ID #: C94817

661 690

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COF140243-001	43	1.12	6.88	6.65	COF140243-036	1581	1.17	5.52	5.00
-001D	38	1.14	7.07	6.81	-037	AB	1.16	5.32	4.75
-002	182	1.12	6.33	5.82	-038	51	1.15	5.30	4.84
-003	149	1.15	6.12	5.90	-039	118	1.14	5.51	5.23
-004	1108	1.15	6.40	6.03	COF140185-001	916	1.16	6.78	5.95
-005	C	1.14	6.11	5.84	-001D	40	1.18	6.53	5.71
-006	1151	1.13	6.86	6.84	-002	108	1.18	6.80	5.94
-007	82	1.11	6.75	6.47	-003	B	1.20	6.14	5.43
-008	48	1.16	6.61	6.25	-004	157	1.18	7.28	6.44
-009	PU	1.16	6.43	6.17	COF140147-007	150	1.19	6.27	4.02
-010	25	1.17	6.18	5.83	COF140148-001	181	1.16	6.18	4.22
-011	197	1.13	5.71	5.45	COF140145-001	P7	1.07	6.79	6.54
-012	120	1.15	6.63	6.25	-002	Y16	1.08	6.14	5.91
-013	45	1.16	5.34	4.71	-003	TL	1.04	6.08	5.95
-014	33	1.16	7.46	7.26	-004	124	1.09	8.85	8.66
-015	231	1.17	6.02	5.77	-005	16	1.64	6.02	5.89
-016	123	1.16	5.70	5.46	-006	300	1.06	6.40	6.01
-017	188	1.15	5.38	5.11	-007	B6	1.03	7.16	7.10
-018	36	1.14	5.75	5.47	-008	232	1.12	7.46	7.34
-019	81	1.15	5.51	5.23	-009	Y17	1.06	7.58	7.46
-020	141	1.17	5.59	5.25	-010	P15	1.07	7.06	6.94
-021	44	1.19	4.70	4.42	COF150121-007	S	1.61	6.62	5.95
-021D	115	1.14	4.50	4.23	-001D	172	1.62	6.53	5.79
-022	A	1.15	5.50	5.25	-002	P8	1.04	8.07	6.92
-023	V	1.13	5.49	5.20	-003	129	1.06	6.67	5.64
-024	111	1.17	5.32	5.01	-004	TJ	1.01	6.64	5.97
-025	42	1.15	5.91	5.69	-005	AA	1.00	6.68	5.77
-026	64	1.14	6.20	5.91	-006	HH	1.00	6.26	5.61
-027	96	1.16	6.72	6.41	-007	189	1.57	6.13	5.86
-028	12	1.14	6.03	5.76	-008	205	1.01	6.16	5.71
-029	1551	1.14	5.34	5.04	-009	A64	0.98	7.88	7.17
-030	94	1.14	5.39	5.12	-010	17	1.57	6.90	6.20
-031	118	1.18	5.27	5.03	-011	Y12	1.04	6.88	6.56
-032	105	1.18	5.12	4.66	-012	L6	1.01	6.37	5.80
-033	66	1.15	5.78	5.27	-013	X4	1.05	10.35	9.25
-034	158	1.16	4.53	4.38	-014	J18	1.05	7.33	6.23
-035	46	1.15	5.05	4.82	-015	96	1.04	6.12	5.87

STL Pittsburgh
TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Oven Temperature: 103°C±2°CDate 6-15-00 Time in 1600Analyst: C. ChouhadeDate 6-16-00 Time out 0415Balance ID #: C94817

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COF150121-016					COF150163-005	Y15	1.05	5.47	5.20
-017	74	1.00	8.03	7.41	-006	C8	1.03	6.18	5.71
-018	P26	1.05	6.61	6.13	-007	J1	1.07	5.14	4.88
-019	95	1.04	7.22	6.50	-008	Y14	1.05	5.62	5.21
-020	P11	1.04	6.30	5.92	-009	223	1.03	5.72	5.32
-021	P21	1.08	6.28	5.82	-010	Y8	1.05	5.80	5.55
-021D	P6	1.04	6.61	6.18	-011	Y9	1.08	5.81	5.51
-022	P31	1.05	7.15	6.37	-012	V1	1.00	5.68	5.25
-023	Y19	1.04	7.04	6.81	-013	130	1.03	5.88	5.46
-024					-014	J13	1.07	6.06	5.40
-025	P17	1.04	6.75	6.42	-015	165	1.64	5.86	5.34
-026	116	1.04	7.15	6.80	-015D	31	1.64	6.29	5.77
-027	Y4	1.06	7.82	7.06	-016	127	1.03	5.30	5.12
-028	A31	1.098	7.35	6.85	-017	1811	1.64	6.16	5.92
-029	TH	1.02	6.27	5.56	-018	J17	1.06	5.48	5.21
-030	TF	1.02	6.25	5.67	-019	B8	1.04	5.81	5.42
-031	Y3	1.03	6.26	5.53	-020	208	1.02	5.60	5.25
-032	462	1.06	6.56	5.98	-021	461	1.08	5.76	5.48
-033	Y5	1.07	6.81	6.42	-022	A67	1.03	5.46	5.17
-034	103	1.02	6.39	5.63	-023	X7	1.08	5.72	5.37
-035	A4	1.04	6.63	5.57	-024	X61	1.08	5.63	5.32
-036	P3	1.04	9.06	8.31	-025	J7	1.06	5.00	4.78
-037	J19D	1.07	6.33	5.80	-026	J6	1.06	7.08	6.59
-038	P10	1.06	6.90	6.27	-027	P1	1.06	5.04	4.76
-039	1AA	1.00	6.06	5.49	-028	162	1.58	5.34	5.22
-040	TD	1.01	6.46	6.00	-029	88	1.01	6.44	6.33
-041	E7	1.00	6.54	6.01	-030	J10	1.07	5.70	5.40
-041D	P12	1.07	8.26	7.67	-031	224	1.05	5.47	5.23
-042	X1	1.06	7.07	6.67	-032	A21	1.00	4.75	4.56
-043	P25	1.08	6.68	6.20	-033	C9	1.03	6.72	6.42
-044	C3	1.05	6.18	5.71	-034	X2D	1.07	7.06	6.66
-045	B	1.00	6.73	6.30					
-046	8.26	1.03	6.48	6.18					
-047	1.02	6.48	6.18						
COF150163-001	19	1.58	5.27	5.06					
-002	TH	1.02	5.93	5.62					
-003	Y7	1.05	5.73	5.36					
-004	P30	1.06	5.73	5.38					

STL Pittsburgh
TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Date 12-15-00 Time in 1600

Date 6-16-00 Time out 0415

Balance ID #: C94817

[illegible]

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0006012
 TESTED: CLL 6/15/00
 CHECKED: JMC 6-17-00

CREATED: 6/15/00 6:42:02 AM

REVISED: 6/17/00 11:20:26 AM

COMMENTS:

C0F140243 C0F140185 C0F140147 C0F140148 C0F140145

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0F140243	001	SMP	43	1.12	6.88	6:00	4:15	0.23	3.993	96.007
C0F140243	001D	SMP	38	1.14	7.07	6:00	4:15	0.26	4.384	95.616
C0F140243	002	SMP	182	1.12	6.33	6:00	4:15	0.51	9.789	90.211
C0F140243	003	SMP	149	1.15	6.12	6:00	4:15	0.22	4.427	95.573
C0F140243	004	SMP	1108	1.15	6.4	6:00	4:15	0.37	7.048	92.952
C0F140243	005	SMP	C	1.14	6.11	6:00	4:15	0.27	5.433	94.567
C0F140243	006	SMP	1151	1.13	6.86	6:00	4:15	0.32	5.585	94.415
C0F140243	007	SMP	82	1.11	6.75	6:00	4:15	0.28	4.965	95.035
C0F140243	008	SMP	48	1.16	6.61	6:00	4:15	0.36	6.606	93.394
C0F140243	009	SMP	PU	1.16	6.43	6:00	4:15	0.26	4.934	95.066
C0F140243	010	SMP	25	1.17	6.18	6:00	4:15	0.35	6.986	93.014
C0F140243	011	SMP	177	1.13	5.71	6:00	4:15	0.26	5.677	94.323
C0F140243	012	SMP	120	1.15	6.63	6:00	4:15	0.38	6.934	93.066
C0F140243	013	SMP	45	1.16	5.34	6:00	4:15	0.63	15.072	84.928
C0F140243	014	SMP	33	1.16	7.46	6:00	4:15	0.2	3.175	96.825
C0F140243	015	SMP	231	1.17	6.02	6:00	4:15	0.25	5.155	94.845
C0F140243	016	SMP	123	1.16	5.7	6:00	4:15	0.24	5.286	94.714
C0F140243	017	SMP	188	1.15	5.38	6:00	4:15	0.27	6.383	93.617

661 694

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0006012

ESTED:

CLL

6/15/00

CHECKED:

PMG

6-17-00

CREATED: 6/15/00 6:42:02 AM

REVISED: 6/17/00 11:20:26 AM

COMMENTS:

C0F140243 C0F140185 C0F140147 C0F140148 C0F140145

C0F140243 C0F140185 C0F140147 C0F140143 C0F140142 C0F140141 C0F140140 C0F140139 C0F140138 C0F140137 C0F140136 C0F140135 C0F140134 C0F140133 C0F140132 C0F140131 C0F140130 C0F140129 C0F140128 C0F140127 C0F140126 C0F140125 C0F140124 C0F140123 C0F140122 C0F140121 C0F140120 C0F140119 C0F140118 C0F140117 C0F140116 C0F140115 C0F140114 C0F140113 C0F140112 C0F140111 C0F140110 C0F140109 C0F140108 C0F140107 C0F140106 C0F140105 C0F140104 C0F140103 C0F140102 C0F140101 C0F140100 C0F140099 C0F140098 C0F140097 C0F140096 C0F140095 C0F140094 C0F140093 C0F140092 C0F140091 C0F140090 C0F140089 C0F140088 C0F140087 C0F140086 C0F140085 C0F140084 C0F140083 C0F140082 C0F140081 C0F140080 C0F140079 C0F140078 C0F140077 C0F140076 C0F140075 C0F140074 C0F140073 C0F140072 C0F140071 C0F140070 C0F140069 C0F140068 C0F140067 C0F140066 C0F140065 C0F140064 C0F140063 C0F140062 C0F140061 C0F140060 C0F140059 C0F140058 C0F140057 C0F140056 C0F140055 C0F140054 C0F140053 C0F140052 C0F140051 C0F140050 C0F140049 C0F140048 C0F140047 C0F140046 C0F140045 C0F140044 C0F140043 C0F140042 C0F140041 C0F140040 C0F140039 C0F140038 C0F140037 C0F140036 C0F140035 C0F140034 C0F140033 C0F140032 C0F140031 C0F140030 C0F140029 C0F140028 C0F140027 C0F140026 C0F140025 C0F140024 C0F140023 C0F140022 C0F140021 C0F140020 C0F140019 C0F140018 C0F140017 C0F140016 C0F140015 C0F140014 C0F140013 C0F140012 C0F140011 C0F140010 C0F140009 C0F140008 C0F140007 C0F140006 C0F140005 C0F140004 C0F140003 C0F140002 C0F140001												CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0F140243	018	SMP	36	1.14	5.75	5.47	6:00	4:15	0.28	6.074	93.926											
C0F140243	019	SMP	81	1.15	5.51	5.23	6:00	4:15	0.28	6.422	93.578											
C0F140243	020	SMP	141	1.17	5.59	5.25	6:00	4:15	0.34	7.692	92.308											
C0F140243	021	SMP	47	1.19	4.7	4.42	6:00	4:15	0.28	7.977	92.023											
C0F140243	021D	SMP	115	1.14	4.5	4.23	6:00	4:15	0.27	8.036	91.964											
C0F140243	022	SMP	A	1.15	5.5	5.25	6:00	4:15	0.25	5.747	94.253											
C0F140243	023	SMP	V	1.13	5.49	5.2	6:00	4:15	0.29	6.651	93.349											
C0F140243	024	SMP	111	1.17	5.32	5.01	6:00	4:15	0.31	7.47	92.53											
C0F140243	025	SMP	42	1.15	5.91	5.69	6:00	4:15	0.22	6.622	95.378											
C0F140243	026	SMP	64	1.14	6.2	5.91	6:00	4:15	0.29	5.731	94.269											
C0F140243	027	SMP	96	1.16	6.72	6.41	6:00	4:15	0.31	5.576	94.424											
C0F140243	028	SMP	12	1.14	6.03	5.76	6:00	4:15	0.27	5.521	94.479											
C0F140243	029	SMP	1551	1.14	5.34	5.04	6:00	4:15	0.3	7.143	92.857											
C0F140243	030	SMP	94	1.14	5.39	5.12	6:00	4:15	0.27	6.353	93.647											
C0F140243	031	SMP	11B	1.18	5.27	5.03	6:00	4:15	0.24	5.868	94.132											
C0F140243	032	SMP	105	1.18	5.12	4.66	6:00	4:15	0.46	11.675	88.325											
C0F140243	033	SMP	66	1.15	5.78	5.27	6:00	4:15	0.51	11.015	88.985											
C0F140243	034	SMP	158	1.16	4.53	4.38	6:00	4:15	0.15	4.451	95.54											

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0006012
 TESTED: CLL 6/15/00
 CHECKED: P. G. 6-17-00

CREATED: 6/15/00 6:42:02 AM

REVISED: 6/17/00 11:20:26 AM

COMMENTS:

C0F140243 C0F140185 C0F140147 C0F140148 C0F140145

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0F140243	035	SMP 46	1.15	5.05	4.82	6:00	4:15	0.23	5.897	94.103
C0F140243	036	SMP 1581	1.17	5.52	5	6:00	4:15	0.52	11.954	88.046
C0F140243	037	SMP AB	1.16	5.32	4.75	6:00	4:15	0.57	13.702	86.298
C0F140243	038	SMP 51	1.15	5.3	4.84	6:00	4:15	0.46	11.084	88.916
C0F140243	039	SMP 118	1.14	5.51	5.23	6:00	4:15	0.28	6.407	93.593
C0F140185	001	SMP 916	1.16	6.78	5.95	6:00	4:15	0.83	14.769	85.231
C0F140185	001D	SMP 40	1.18	6.53	5.71	6:00	4:15	0.82	15.327	84.673
C0F140185	002	SMP 108	1.18	6.8	5.94	6:00	4:15	0.86	15.302	84.698
C0F140185	003	SMP B	1.2	6.14	5.43	6:00	4:15	0.71	14.372	85.628
C0F140185	004	SMP 157	1.18	7.28	6.44	6:00	4:15	0.84	13.77	86.23
C0F140147	001	SMP 150	1.19	6.27	4.02	6:00	4:15	2.25	44.291	55.709
C0F140148	001	SMP 181	1.16	6.18	4.22	6:00	4:15	1.96	39.044	60.956
C0F140145	001	SMP P7	1.07	6.79	6.54	6:00	4:15	0.25	4.371	95.629
C0F140145	002	SMP Y16	1.08	6.14	5.91	6:00	4:15	0.23	4.545	95.455
C0F140145	003	SMP TL	1.04	6.08	5.95	6:00	4:15	0.13	2.579	97.421
C0F140145	004	SMP 124	1.09	8.85	8.66	6:00	4:15	0.19	2.448	97.552
C0F140145	005	SMP 16	1.64	6.02	5.89	6:00	4:15	0.13	2.968	97.032
C0F140145	006	SMP 300	1.06	6.4	6.01	6:00	4:15	0.39	7.303	92.697

661 696

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0006012
 TESTED: CLL 6/15/00
 CHECKED PMG 6-17-00

CREATED: 6/15/00 6:42:02 AM

REVISED: 6/17/00 11:20:26 AM

COMMENTS:

COF140243 COF140185 COF140147 COF140148 COF140145

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
COF140145	007	SMP B6	1.03	7.16	7.1	6:00	4:15	0.06	0.979	99.021
COF140145	008	SMP 232	1.12	7.46	7.34	6:00	4:15	0.12	1.893	98.107
COF140145	009	SMP Y17	1.06	7.58	7.46	6:00	4:15	0.12	1.84	98.16
COF140145	010	SMP P15	1.07	7.06	6.94	6:00	4:15	0.12	2.003	97.997
COF130142-001 COF150121	001	SMP 5	1.61	6.62	5.95	16:00	4:15	0.67	13.373	86.627
COF150121	001D	SMP 172	1.62	6.53	5.79	16:00	4:15	0.74	15.071	84.929
COF150121	002	SMP P8	1.04	8.07	6.92	16:00	4:15	1.15	16.358	83.642
COF130142-003 COF150121	003	SMP 129	1.06	6.67	5.64	16:00	4:15	1.03	18.36	81.64
COF150121	004	SMP TJ	1.01	6.64	5.97	16:00	4:15	0.67	11.901	88.099
COF150121	005	SMP AA	1	6.68	5.77	16:00	4:15	0.91	16.021	83.979
COF150121	006	SMP AH	1	6.26	5.61	16:00	4:15	0.65	12.357	87.643
COF150121	007	SMP 189	1.57	6.13	5.86	16:00	4:15	0.27	5.921	94.079
COF150121	008	SMP 205	1.01	6.16	5.71	16:00	4:15	0.45	8.738	91.262
COF150121	009	SMP A64	0.98	7.88	7.17	16:00	4:15	0.71	10.29	89.71
COF150121	010	SMP 17	1.57	6.9	6.2	16:00	4:15	0.7	13.133	86.867
COF150121	011	SMP Y12	1.04	6.88	6.56	16:00	4:15	0.32	5.479	94.521
COF150121	012	SMP C6	1.01	6.37	5.8	16:00	4:15	0.57	10.634	89.366
COF150121	013	SMP X4	1.05	10.35	9.25	16:00	4:15	1.1	11.828	88.172

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0006012
 ESTED: CLL 6/15/00
 CHECKED: PML 6-17-00

CREATED: 6/15/00 6:42:02 AM
 REVISED: 6/17/00 11:20:26 AM

COMMENTS:

C0F140243 C0F140185 C0F140147 C0F140148 C0F140145

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0F150121	014	SMP J18	1.05	7.33	6.23	16:00	4:15	1.1	17.516	82.484
C0F150121	015	SMP 96	1.04	6.12	5.87	16:00	4:15	0.25	4.921	95.079
C0F150121	017	SMP 74	1	8.03	7.41	16:00	4:15	0.62	8.819	91.181
C0F150121	018	SMP P26	1.05	6.61	6.13	16:00	4:15	0.48	8.633	91.367
C0F150121	019	SMP 95	1.04	7.22	6.5	16:00	4:15	0.72	11.65	88.35
C0F150121	020	SMP P11	1.04	6.3	5.92	16:00	4:15	0.38	7.224	92.776
C0F150121	021	SMP P21	1.08	6.28	5.82	16:00	4:15	0.46	8.846	91.154
C0F150121	021D	SMP P6	1.04	6.61	6.18	16:00	4:15	0.43	7.72	92.28
C0F150121	022	SMP P31	1.05	7.15	6.37	16:00	4:15	0.78	12.787	87.213
C0F150121	023	SMP Y19	1.04	7.04	6.81	16:00	4:15	0.23	3.833	96.167
C0F150121	025	SMP P17	1.04	6.75	6.42	16:00	4:15	0.33	5.779	94.221
C0F150121	026	SMP 116	1.04	7.15	6.8	16:00	4:15	0.35	5.728	94.272
C0F150121	027	SMP Y4	1.06	7.82	7.06	16:00	4:15	0.76	11.243	88.757
C0F150121	028	SMP A31	0.98	7.35	6.85	16:00	4:15	0.5	7.849	92.151
C0F150121	029	SMP TA	1.02	6.27	5.56	16:00	4:15	0.71	13.524	86.476
C0F150121	030	SMP TF	1.02	6.25	5.67	16:00	4:15	0.58	11.09	88.91
C0F150121	031	SMP Y3	1.03	6.26	5.53	16:00	4:15	0.73	13.958	86.042
C0F150121	032	SMP 462	1.06	6.56	5.98	16:00	4:15	0.58	10.545	89.455

661 698

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0006012

TESTED: ICLL 6/15/00

CHECKED: PMG 6-17-00

CREATED: 6/15/00 6:42:02 AM

REVISED: 6/17/00 11:20:26 AM

COMMENTS:

C0F140243 C0F140185 C0F140147 C0F140148 C0F140145

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0F150121	033	SMP Y5	1.07	6.81	6.42	16:00	4:15	0.39	6.794	93.206
C0F150121	034	SMP 103	1.02	6.39	5.63	16:00	4:15	0.76	14.153	85.847
C0F150121	035	SMP A4	1.04	6.63	5.57	16:00	4:15	1.06	18.962	81.038
C0F150121	036	SMP P3	1.04	9.06	8.31	16:00	4:15	0.75	9.352	90.648
C0F150121	037	SMP J19D	1.07	6.33	5.8	16:00	4:15	0.53	10.076	89.924
C0F150121	038	SMP P10	1.06	6.9	6.27	16:00	4:15	0.63	10.788	89.212
C0F150121	039	SMP 1AA	1	6.06	5.49	16:00	4:15	0.57	11.265	88.735
C0F150121	040	SMP TD	1.01	6.46	6	16:00	4:15	0.46	8.44	91.56
C0F150121	041	SMP E7	1	6.54	6.01	16:00	4:15	0.53	9.567	90.433
C0F150121	041D	SMP P12	1.07	8.26	7.67	16:00	4:15	0.59	8.206	91.794
C0F150121	042	SMP X1	1.06	7.07	6.67	16:00	4:15	0.4	6.656	93.344
C0F150121	043	SMP P25	1.08	6.68	6.2	16:00	4:15	0.48	8.571	91.429
C0F150121	044	SMP C3	1.05	6.18	5.71	16:00	4:15	0.47	9.162	90.838
C0F150121	045	SMP B	1	6.73	6.3	16:00	4:15	0.43	7.504	92.496
C0F150121	046	SMP K	1.03	6.05	4.94	16:00	4:15	1.11	22.112	77.888
C0F150121	047	SMP C5	1.02	6.48	6.18	16:00	4:15	0.3	5.495	94.505
C0F150163	001	SMP 19	1.58	5.27	5.06	16:00	4:15	0.21	5.691	94.309
C0F150163	002	SMP TH	1.02	5.93	5.62	16:00	4:15	0.31	6.314	93.686

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 10006012
 TESTED: CLL 6/15/00
 CHECKED: PMG 6-17-00

CREATED: 6/15/00 6:42:02 AM

REVISED: 6/17/00 11:20:26 AM

COMMENTS:

C0F140243 C0F140185 C0F140147 C0F140148 C0F140145

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0F150163	003	SMP Y7	1.05	5.73	5.36	16:00	4:15	0.37	7.906	92.094
C0F150163	004	SMP P30	1.06	5.73	5.38	16:00	4:15	0.35	7.495	92.505
C0F150163	005	SMP Y15	1.05	5.47	5.2	16:00	4:15	0.27	6.109	93.891
C0F150163	006	SMP C8	1.03	6.18	5.71	16:00	4:15	0.47	9.126	90.874
C0F150163	007 <i>1000</i>	SMP J1	1.07	5.14	4.88	16:00	4:15	0.26	6.388	93.612
C0F150163	008	SMP Y14	1.05	5.62	5.27	16:00	4:15	0.35	7.659	92.341
C0F150163	009	SMP 223	1.03	5.72	5.32	16:00	4:15	0.4	8.529	91.471
C0F150163	010	SMP Y8	1.05	5.8	5.55	16:00	4:15	0.25	5.263	94.737
C0F150163	011	SMP Y9	1.05	5.81	5.51	16:00	4:15	0.3	6.303	93.697
C0F150163	012	SMP V1	1	5.68	5.25	16:00	4:15	0.43	9.188	90.812
C0F150163	013	SMP 130	1.03	5.88	5.46	16:00	4:15	0.42	8.66	91.34
C0F150163	014	SMP J13	1.07	6.06	5.4	16:00	4:15	0.66	13.226	86.774
C0F150163	015	SMP 165	1.64	5.86	5.34	16:00	4:15	0.52	12.322	87.678
C0F150163	015D	SMP 31	1.64	6.29	5.77	16:00	4:15	0.52	11.183	88.817
C0F150163	016	SMP 127	1.03	5.3	5.12	16:00	4:15	0.18	4.215	95.785
C0F150163	017	SMP 1811	1.64	6.16	5.92	16:00	4:15	0.24	5.31	94.69
C0F150163	018	SMP J17	1.06	5.48	5.21	16:00	4:15	0.27	6.109	93.891
C0F150163	019	SMP B8	1.04	5.81	5.42	16:00	4:15	0.39	8.176	91.824

661 700

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0006012

CREATED: 6/15/00 6:42:02 AM

ESTED: ICLL 6/15/00

CHECKED: *PNL* 6-17-00

REVISED: 6/17/00 11:20:26 AM

COMMENTS:

C0F140243 C0F140185 C0F140147 C0F140148 C0F140145

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.	
C0F150163	020	SMP	208	1.02	5.6	5.25	16:00	4:15	0.35	7.642	92.358
C0F150163	021	SMP	461	1.08	5.76	5.48	16:00	4:15	0.28	5.983	94.017
C0F150163	022	SMP	A67	1.03	5.46	5.17	16:00	4:15	0.29	6.546	93.454
C0F150163	023	SMP	X7	1.08	5.72	5.37	16:00	4:15	0.35	7.543	92.457
C0F150163	024	SMP	X61	1.08	5.63	5.32	16:00	4:15	0.31	6.813	93.187
C0F150163	025	SMP	J7	1.06	5	4.78	16:00	4:15	0.22	5.584	94.416
C0F150163	026	SMP	J6	1.06	7.08	6.59	16:00	4:15	0.49	8.14	91.86
C0F150163	027	SMP	P1	1.06	5.04	4.76	16:00	4:15	0.28	7.035	92.965
C0F150163	028	SMP	162	1.58	5.34	5.22	16:00	4:15	0.12	3.191	96.809
C0F150163	029	SMP	88	1.01	6.44	6.33	16:00	4:15	0.11	2.026	97.974
C0F150163	030	SMP	J10	1.07	5.7	5.4	16:00	4:15	0.3	6.479	93.521
C0F150163	031	SMP	224	1.05	5.47	5.23	16:00	4:15	0.24	5.43	94.57
C0F150163	032	SMP	A21	1	4.75	4.56	16:00	4:15	0.19	5.067	94.933
C0F150163	033	SMP	C9	1.03	6.72	6.42	16:00	4:15	0.3	5.272	94.728
C0F150163	034	SMP	X2D	1.07	7.06	6.66	16:00	4:15	0.4	6.678	93.322

PSR024 6/15/00 2:49:59 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

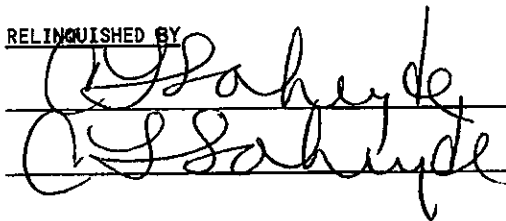
REQUESTED BY: LOHEYDEC

METHOD: OZ pH (9045C) - Non-Aqueous

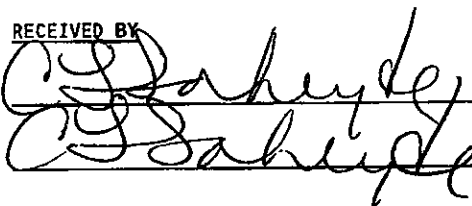
/Sm TOTAL Solids

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12B CLP1	DEMQV-1-OF	___	240261	399411	A-88-OZ	COF140185	001		SOLID	3	1
12B CLP1	DEMR4-1-OF	___	240262	399411	A-88-OZ	COF140185	002		SOLID	3	1
12B CLP1	DEMR6-1-OF	___	240263	399411	A-88-OZ	COF140185	003		SOLID	3	1
12B CLP1	DEMR7-1-OF	___	240264	399411	A-88-OZ	COF140185	004		SOLID	3	1

RELINQUISHED BY



RECEIVED BY



DATE/TIME

6-15-00 0500
6-15-00 0615

***** END OF REPORT *****

661 702

PSR024 6/19/00 12:32:36 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: GROVEP

METHOD: IQ Ignitability (SW7.1.2)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12B CLP1	DEMQV-1-OG	___	242203	399411	A-88-IQ	COF140185	001		SOLID	0	3 1
12B CLP1	DEMR4-1-OG	___	242204	399411	A-88-IQ	COF140185	002		SOLID	0	3 1
12B CLP1	DEMR6-1-OG	___	242205	399411	A-88-IQ	COF140185	003		SOLID	0	3 1
12B CLP1	DEMR7-1-OG	___	242206	399411	A-88-IQ	COF140185	004		SOLID	0	3 1
14C	DEVTW-1-15	___	242207	416241	A-88-IQ	COF170111	001		SOLID	0	7 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

6-19-00 14:35

6-19-00 14:50

***** END OF REPORT *****

STL Pittsburgh

7024

QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEET

661 703

Analysis Reactive Sulfide
Prep/ Anal. Date 6/20/00
Analyst OC

Iodine

Batch Number 0172316
LCS Number
LCS Prep Date
RL

Titrant Name Sodium Thiosulfate

Titrant Normality .02496

Titrant Standardization Date/ Initials 6/19/00 , OC

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
Blank	100 mL	T	22.7 mL	ND	ND	T
DFOH H			22.6			
DFOH H-X			22.6			
DFOH D			22.7			
DFOH G			22.6			
DFOH K			22.7			
DEMR 4			22.6			
DEMR 6			22.8			
DEMR 7			22.7			
DEMR V			22.6			

QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEET

Batch Number 0172319
LCS Number
LCS Prep Date
RL

Titrant Name Silver Nitrate
 Titrant Normality .0192 N
 Titrant Standardization Date/ Initials _____

[illegible]

Rev. 10/30/98
N:\Metals\Wel Log

FINAL PAGE

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PART I

ADMINISTRATIVE RECORD

PART I

FINAL PAGE